

DARK to LIGHT

Overview of Elte Licht Ranges:

Public lighting catalogue:

- indoor lighting fixtures (functional lighting)
- outdoor lighting fixtures (standard public lighting)
- linear flexible lighting

Custom made items:

- lighting fixtures for external application
- decorative interior lighting
- furniture for exteriors

Foreword

The ELTE Company was established in 1972 in Kleve, Germany. Three partners started a small factory to design, manufacture and import lighting fixtures of indoor and outdoor application. The production program of ELTE's range developed rapidly to include public and amenity lighting.

From 1974 onwards ELTE ensured its annual presence at the World Light Fair in Hannover. During the same period the first shipments to the Middle East also started. ELTE's program continued to develop as such the consumers' range was handed over to a partnering company. ELTE itself concentrated on planning, developing and manufacturing light fixtures exclusively for projects in the EU and some for the Middle East.

Our present goal is to re-position the ELTE brand worldwide following trends of new technologies in lighting industry and demands for energy saving. Therefore, we have developed an extensive range of lighting fixtures for internal and external applications to satisfy latest projects' and end-clients' requirements.

Having had exclusive agreements with a number of factories in several regions such as China, Germany, UK and Russia, all equipped with skilled design teams offering state of the art manufacturing facilities. ELTE is committed to provide a complete lighting solution for the interior or exterior of any project.

ELTE's quality control in manufacturing process starts from raw materials selection and ends with complete products tested and certified to comply with industry standards.

To meet specific requirements of designers and planners a division has been created specializing in design and manufacture of custom-made light fixtures of any shape, dimension or finish required.

All ELTE products either standard or customized are certified according to European Certification laboratories.

We specialize in LED/LES technology and receive their elements from reputed manufacturers such as Bridgelux, OSRAM, SHARP, CREE, Nichia, etc. The performance of LEDs rely on sophisticated designed housings made for efficient heat dissipation. Therefore, the LED drivers are provided by superior quality brands such as Tridonic, HEP, Meanwell, Vossloh Schwabe, etc. as such ELTE offers warranties of between 2 and 10 years in accordance with our terms and conditions, available on request.

In case traditional lamping would be required for a project we can meet our clients' requirements and supply the required light sources.

All items in ELTE's range contain IES and LDT files for easy inserting into lux calculating programs.

The ELTE lighting catalogue contains a variety of internal and external technical LED lighting solutions. We believe it will be a good companion for all specifiers, industry professionals and end users who are looking for superior and reliable luminaires. ELTE lighting stands by its reputation as one of the best and most reliable companies in its class.

(*) Read terms and conditions.

List of abbreviations

Description	Abbreviation
round/circular	RN
square	SQ
dark spot	DKSP
with trim	TM
trimless	TML
fixed	FX
adjustable	ADJ
asymmetric	ASM
symmetric	SYM
recessed	RCS
clips for recessed mounting	RCS-CLP
surface mounted	SFM
casing for surface mounting	SFM-CS
kit for surface mounting	SFM-KT
hanging (suspended)	HNG
suspension kit	HNG-KT
hanging (suspended) direct-indirect	HNG.DR/IND
hanging (suspended) direct only	HNG.DR
with switch	SWT
with socket	SCK
emergency kit	EME

Lens / Diffuser	
glass diffuser	DF.GLS
polycarbonate diffuser	DF.PC
opal	DF.OPL
frosted	DF.FRS
clear/transparent	DF.TNS
semi-opal	DF.SMO
prismatic	DF.PSM
softening lens	DF.SFT
spread lens	DF.SPR

Anti-glare attachments	
honey comb	HYC
linear spread lens	LNS
anti-glare grille	GRL
anti-glare cap	CAP
half lid	LID

Louvers:	
Single Parabolic	LV.SPL
Double Parabolic	LV.DPL
Matte	LV.MTT
Polished (mirror)	LV.MRR
Example: (double parabolic matte)	LV.DPL.MTT

Reflectors (aluminum)	
Mirror Polished	RF.MRR
Matte	RF.MTT
Diamond Faceted	RF.DM.FCT
Faceted	RF.FCT
Anti-glare baffle	RF.ANT.GL
Plain	RF.PLN
Perforated	RF.PRF

General Abbreviations:	
die-cast aluminum	DC
stainless steel	SLS
brass	BRASS
polycarbonate	PLC
diameter	DIA
Cut-Out	CO
Lumen Output	Lm
Height	H
Length	L
Width	W

Description	Abbreviation
Recessed Depth	DP
Net Weight (fixture)	kg
Microwave (motion) Sensor (inductor)	MWS
connection kit (for continuous lighting)	CNKT
side connection	SCN
end connection	ECN
constant current	CC
constant voltage	CV

Color Codes:	
white (matte)	.01
white (glossy)	.02
black (matte)	.11
black (glossy)	.12
grey (matte)	.13
silver grey (glossy)	.14
silver grey (matte)	.15
polished (mirror) chrome	.16
satin nickel (stainless steel)	.17
satin chrome	.18
golden (polished)	.19
golden (matte)	.20
brown	.21
customized color	.00
RAL code	RAL...

Color Temperatures:	
2200K	CT22
3000K	CT30
up to 10,000K	CT100
White	WH
RGB	RGB
RGBW	RGBW
Red	RD
Green	GR
Blue	BL
Yellow	YL
Amber	AMB

Beam Angles:	Coding
10°/15°/20°/30°/45°/60° (etc)	BA10/20/.../60
asymmetric beam angle	ASBA...
symmetric beam angle	SBA...

LED Drivers:	
Non-Dimmable	ND
Phase	PH
0-10V	010V
DALI-compatible	DALI

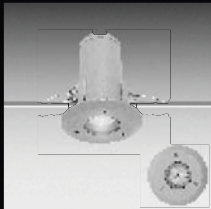
Drive-over lights windows:	
1/2/3/4 windows	WN1/2/3/4

Options:	
Spike	SPK
Aluminum spike	AL.SPK
Plastic spike	PC.SPK
bracket type-1/2/3	BCK1/2/3
mounting box (PC/Steel/Stainless)	BX.PC (ST/SLS)
trim: die-cast aluminum	TM.DC
trim: stainless steel	TM.SLS

Pole	
pole: steel	PL.STEEL
pole: aluminum	PL.ALM
pole: die-cast aluminum	PL.DC.ALM
pole: galvanized steel	PL.GLV.STEEL

Code	Range
20..	recessed mounted outdoor downlights
21..	surface mounted outdoor cylinder/cubic down lights
22..	surface mounted ceiling/wall lights (round/square/oval)
23..	bracket wall lights
24..	buried up-lights (circular/square)
25..	drive-over lights (in-ground)
26..	micro recessed in-ground/wall/ceiling (circular/square) (dia <50)
27..	step lights recessed (symmetric/asymmetric)
28..	linear (short/long) recessed lights (in-ground/in-wall)
29..	super-slim linear lights (surface mounted) (width <50mm)
30..	super-slim linear lights (recessed mounted) (width <50mm)
31..	linear flood lights (surface mounted on brackets)
32..	mini-flood/spike lights (dia/width: <100mm)
33..	flood lights (bigger size)
34..	stadium lights
35..	tunnel lights
36..	utility outdoor lighting
37..	underwater lights recessed mounted
41..	high/low-bays
42..	bollard lights
43..	pole/street lights

outdoor down lights



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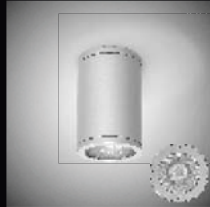
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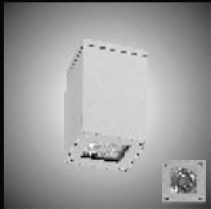
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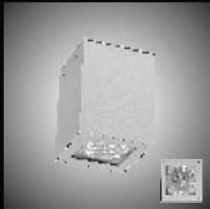
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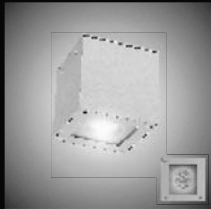
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surface mounted ceiling/wall lights



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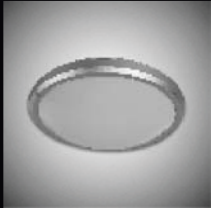
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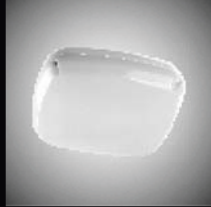
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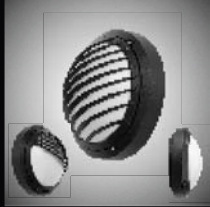
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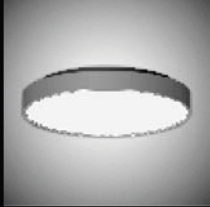
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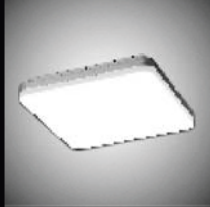
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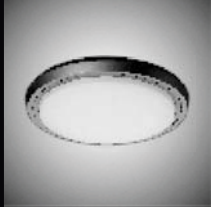
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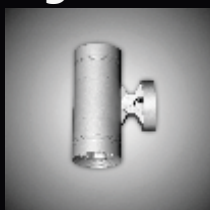


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bracket wall lights



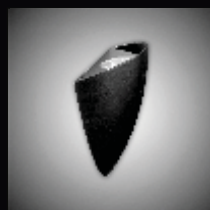
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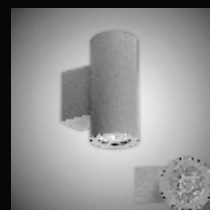
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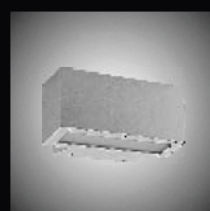
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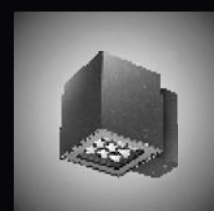
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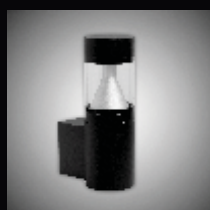
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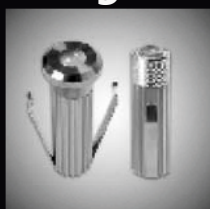


36

micro recessed lights



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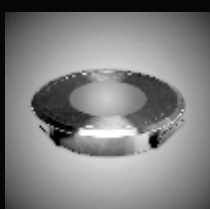
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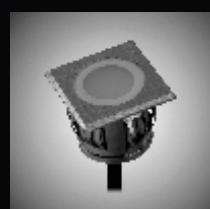
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micro recessed lights



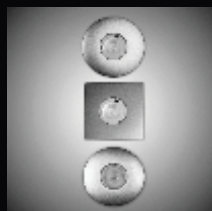
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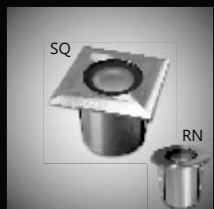


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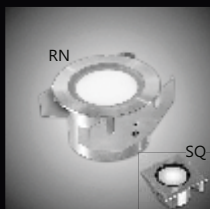
underwater recessed lights



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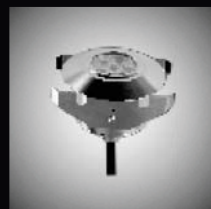
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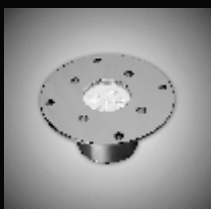
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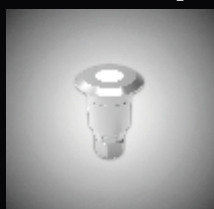


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buried up-lights



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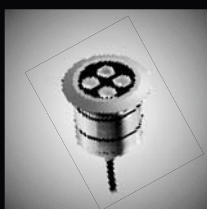
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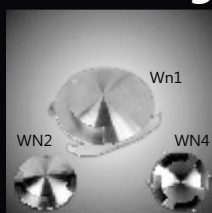
buried up-lights



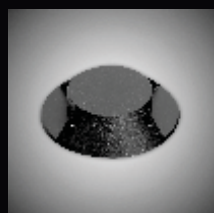
recessed drive-over lights



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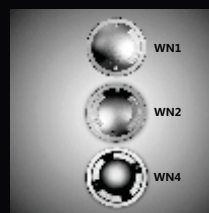
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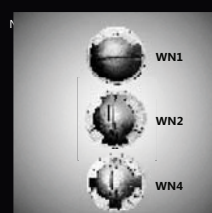
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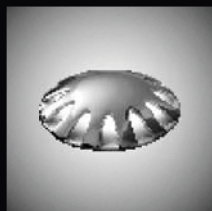
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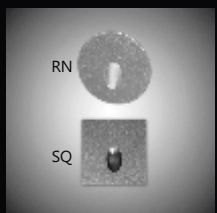


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recessed step lights



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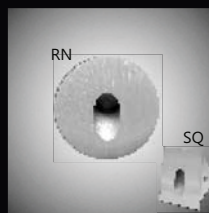
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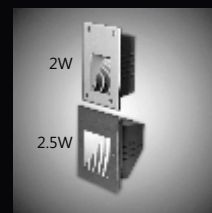
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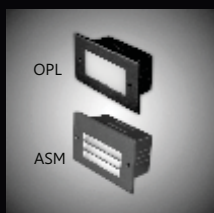
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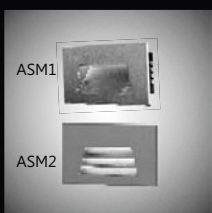
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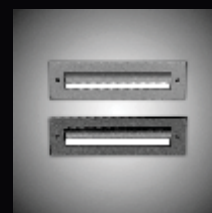
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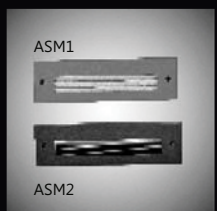
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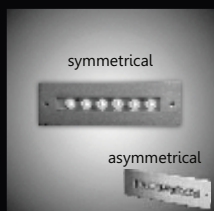
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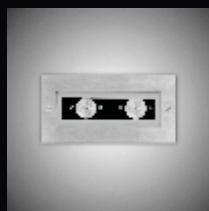
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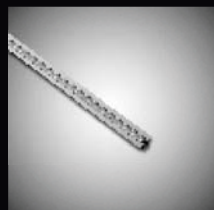


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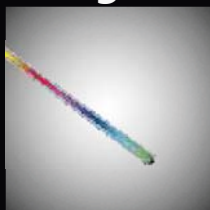


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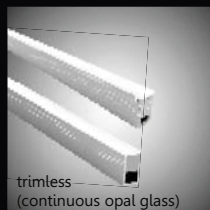
recessed linear lights



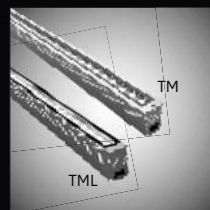
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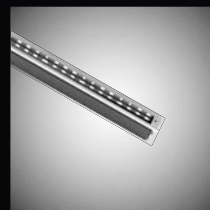
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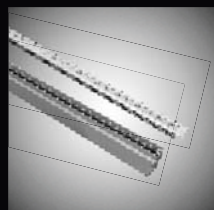
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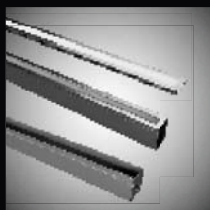
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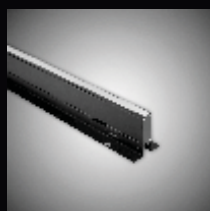
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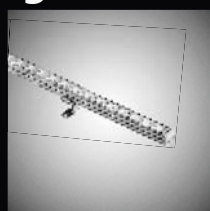
surface mounted linear lights



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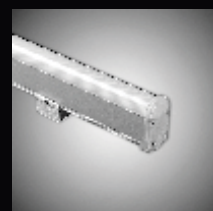
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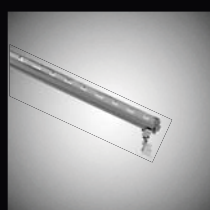
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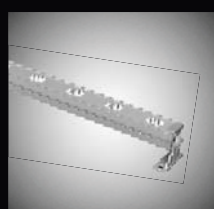
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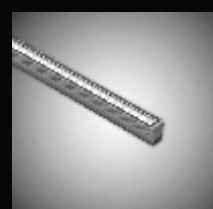
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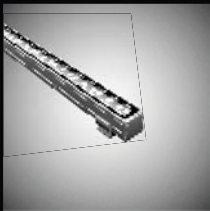


101

surface mounted linear lights



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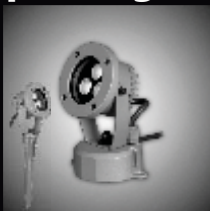


102

mini flood/spike lights



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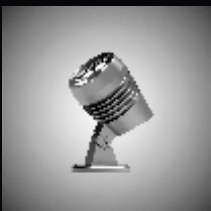
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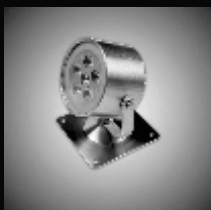
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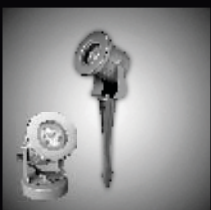
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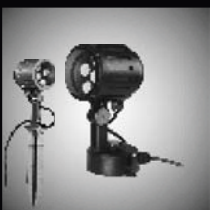
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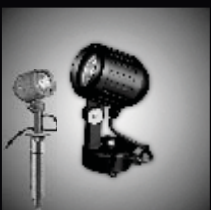
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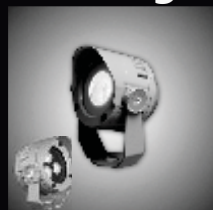


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flood lights



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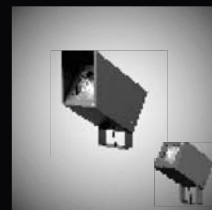
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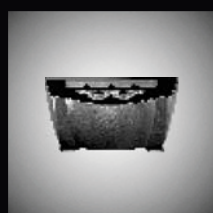
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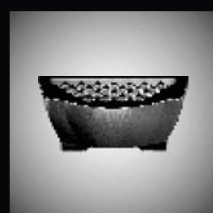
122



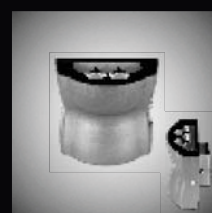
122



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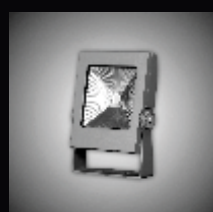
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flood lights



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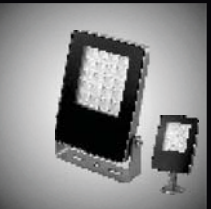
136



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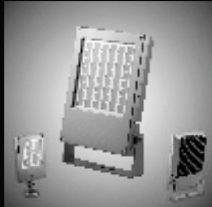
136



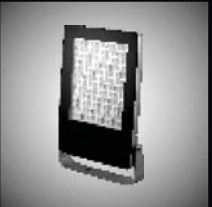
138



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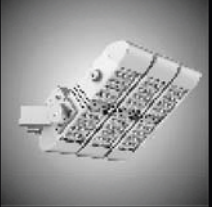


143

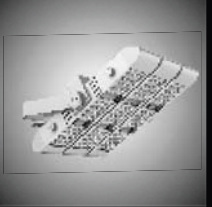
stadium lights



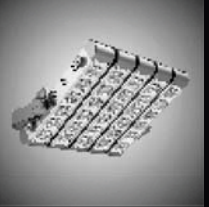
145



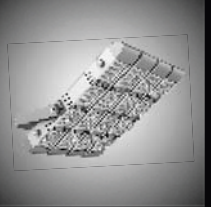
145



145

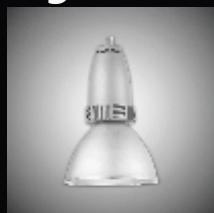


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high/low-bays



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150



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tunnel lights



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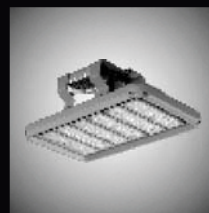
154



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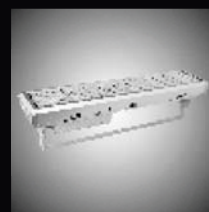
155



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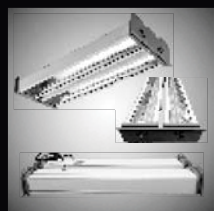
156



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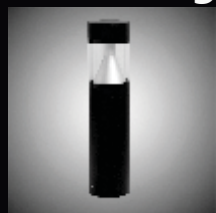
157

utility lights



158

bollard lights



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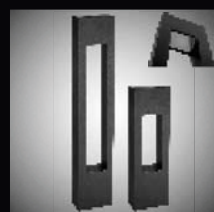
170



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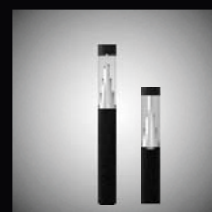
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pole lights



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outdoor ceiling/wall lights

recessed outdoor downlights



surface mounted outdoor downlights



surface mounted ceiling lights



surface mounted wall lights



bracket wall lights

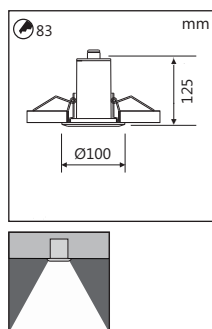


Mounting: recessed into ceiling
Housing: die-cast aluminum, with high corrosion resistance
Diffuser: 8/12mm thick tempered glass
Gasket: fire-resistant silicone
Reflector: pure aluminum (w/ever applicable)
Finish options:
 01-white matte/ 11-black matte
 13-grey matte

LED: CREE XT-E/CREE COB Xlamp
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

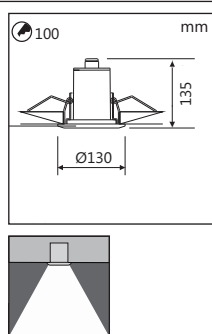
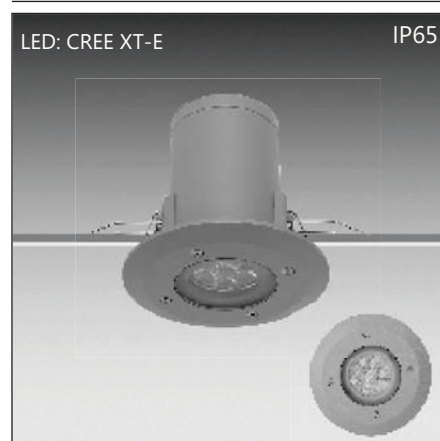
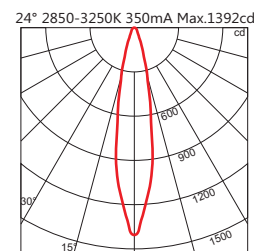
LED driver: integral
Volt AC: 220-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

Application:
 outdoors
 public/private/residential
 canopies, porches, etc.
Ambient Temp: -50°~+60°C



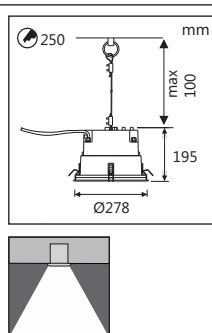
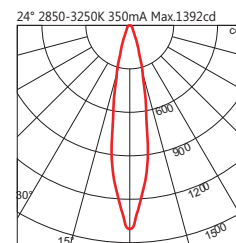
Ref Code 20.32.001.01.3.6
Watt 3x1.2
mA 350
Lm(±) 330

Beam-Angle Code:
 24°-BA24
 36°-BA36



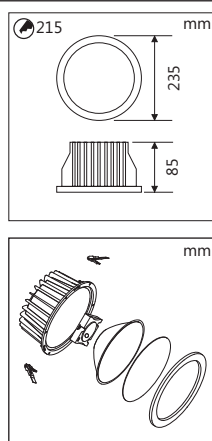
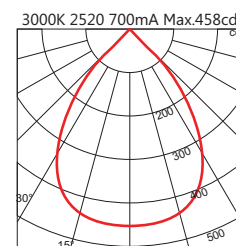
Ref Code 20.32.002.01.8.4
Watt 7x1.2W
mA 350
Lm(±) 750

Beam-Angle Code:
 24°-BA24
 36°-BA36



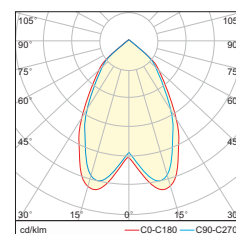
Ref Code
 20.32.003.01.20
 20.32.003.02.30
 20.32.003.03.45
Watt
 20W
 30W
 45W
mA
 500
 700
 1050
Lm(±)
 2000
 2800
 4300

Beam Angle: 75°



Ref Code
 20.21.004.01.25
 20.21.004.02.28
 20.21.004.03.38
 20.21.004.04.43
Watt
 25W
 28W
 38W
 43W
Lm(±)
 1800
 2000
 2700
 3100

Beam Angle: 75°



recessed outdoor downlights

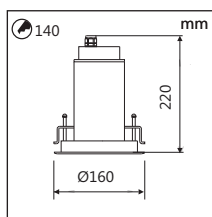
ELTE

Mounting: recessed into ceiling
Housing: die-cast aluminum, with high corrosion resistance
Diffuser: 8/12mm thick tempered glass
Gasket: fire-resistant silicone
Reflector: pure aluminum (w/ever applicable)
Finish options:
 01-white matte/ 11-black matte
 13-grey matte

LED: COB XLamp (CREE)
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

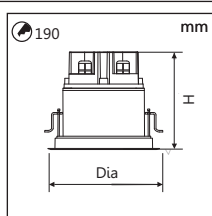
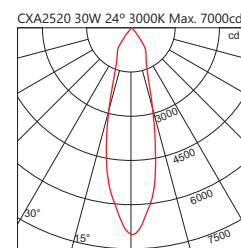
LED driver: integral
Volt AC: 220-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

Application:
 outdoors
 public/private/residential
 canopies, porches, etc.
Ambient Temp: -50°~+60°C



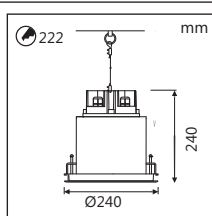
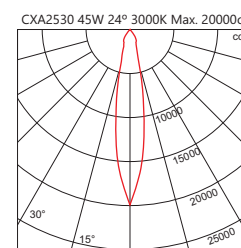
Ref Code 20.32.005.01.20 **Watt** 20W **mA** 500 **Lm(±)** 1900

Beam-Angle Code:
 15°-BA15
 24°-BA24
 36°-BA36



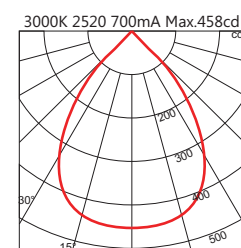
Ref Code 20.32.006.01.30 **Watt** 30W **mA** 700 **Lm(±)** 2500 **DiaxH** 205x180

Beam-Angle Code:
 15°-BA15
 24°-BA24
 36°-BA36



Ref Code 20.32.007.01.45 **Watt** 45W **mA** 1050 **Lm(±)** 4000

Beam-Angle Code:
 15°-BA15
 24°-BA24
 36°-BA36

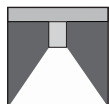
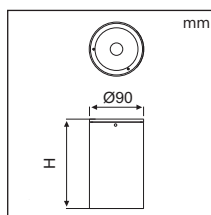


Mounting: surface on ceiling
Housing: extruded and die-cast aluminum, with high corrosion resistance
Diffuser: 4mm thick tempered glass
Gasket: fire-resistant silicone
Reflector: pure aluminum (w/ever applicable)
Finish options:
 01-white matte / 11-black matte
 13-grey matte

LED: CREE XT-E/ CREE COB Xlamp
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

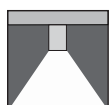
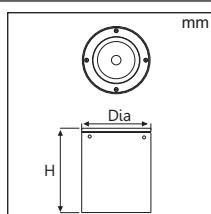
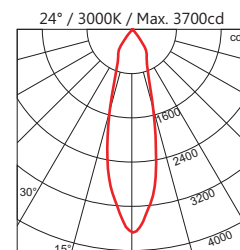
LED driver: integral
Volt AC: 220-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

Application:
 outdoors
 public/private/residential
 canopies, porches, etc.
Ambient Temp: -50°~+60°C



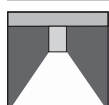
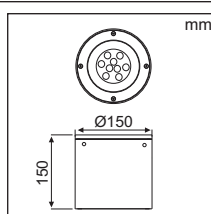
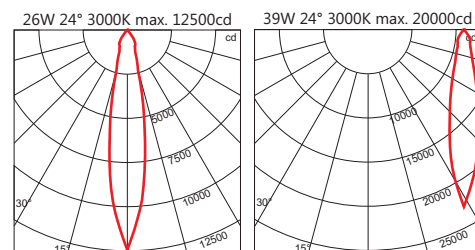
Ref Code	Watt	mA	Lm(±)	H
21.32.001.01.09	9W	350	750	110
21.32.002.01.15	15W	350	1300	180

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



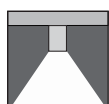
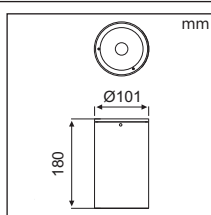
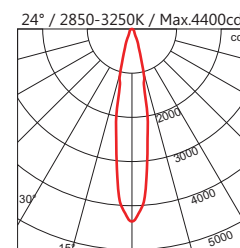
Ref Code	Watt	mA	Lm(±)	Diach
21.32.003.01.30	30W	700	2500	150x200
21.32.004.01.30	30W	700	2500	180x200
21.32.004.02.45	45W	1050	4000	180x300

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



Ref Code	Watt	mA	Lm(±)
21.32.005.01.10.8	9x1.2W	350	970
21.32.005.02.22.5	9x2.5W	700	1800

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



Ref Code	Watt	mA	Lm(±)
21.32.006.01.15	15W	350	1400
21.32.007.01.20	20W	500	1900

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36

surface mounted outdoor down lights

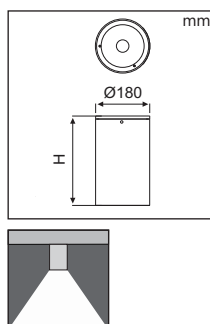
ELTE

Mounting: surface on ceiling
Housing: extruded and die-cast aluminum, with high corrosion resistance
Diffuser: 4mm thick tempered glass
Gasket: fire-resistant silicone
Reflector: pure aluminum (RF.FCT) (w/ever applicable)
Finish options:
 01-white matte / 11-black matte
 13-grey matte

LED: CREE
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

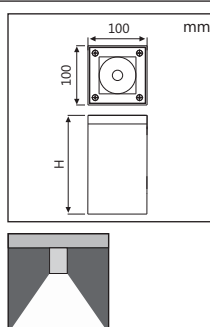
LED driver: integral
Volt AC: 220-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

Application:
 outdoors
 public/private/residential
 canopies, porches, etc.
Ambient Temp: -50°~+60°C



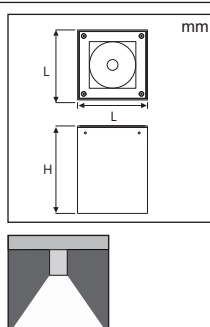
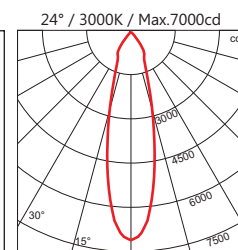
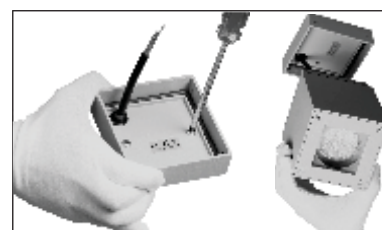
Ref Code	Watt	mA	Lm(±)	H
21.32.008.01.30	30W	700	2500	200
21.32.009.01.45	45W	1050	4000	300

Beam-Angle Code:
 15°-BA15
 24°-BA24
 36°-BA36



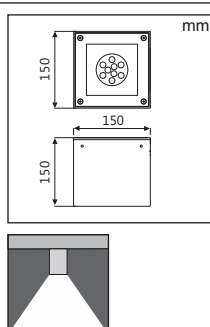
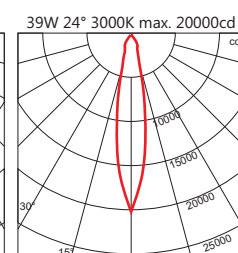
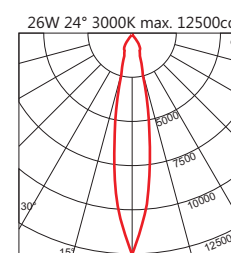
Ref Code	Watt	mA	Lm(±)	H
21.32.010.01.09	9W	350	750	115
21.32.011.01.15	15W	350	1300	180

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



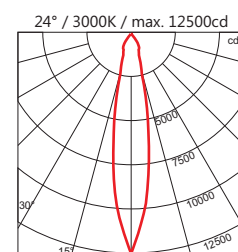
Ref Code	Watt	mA	Lm(±)	LxH	LED
21.32.012.01.30	30W	700	2500	(150x150)x200	CXA 2520
21.32.013.01.45	45W	1050	4000	(150x150)x300	CXA 2530

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



Ref Code	Watt	mA	Lm(±)
21.32.014.01.10.8	9x1.2W	350	970
21.32.014.02.22.5	9x2.5W	700	1800

Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36

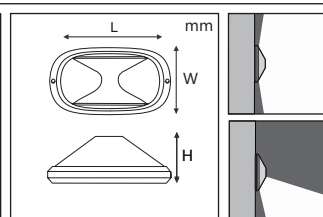


Mounting: wall/ceiling surface
Housing: polycarbonate
Diffuser: opal polycarbonate
Reflector: pre-anodized aluminum
Finish options:
 01-white matte
 11-black matte
 13-grey matte

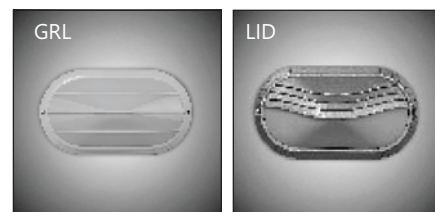
LED: Samsung
CRI: Ra > 80 (±3000k)
CCT:
 CT30-3000k
 CT40-4000k
Note: *Lm given in data is based on 3000k

LED driver: integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

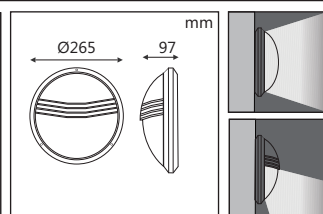
Application:
 outdoors/indoors
 public/private/residential
 staircase areas/parking areas
 utility/service rooms
Ambient Temp: -30°~+50°C



Ref Code	Watt	Lm(±)	LxHxW
22.36.001.01.08	8W	650	270x100x150
22.36.002.01.11.5	11.5W	1050	330x120x180

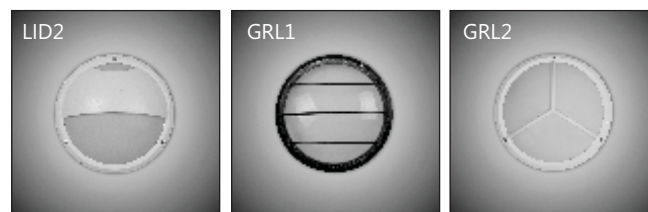


Note:
 * other LED wattage or other lamp types are available on request: E27/G23/G24

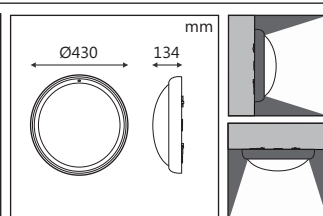


Ref Code	Watt	Lm(±)
22.36.004.01.11	11W	900

Notes:
 * Lm output for types: LID1 and LID2 is ± 650lm
 * any other LED wattage is available on request
 other lamp types on request: E27/G23/G24

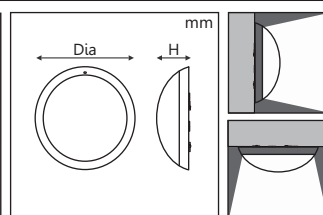
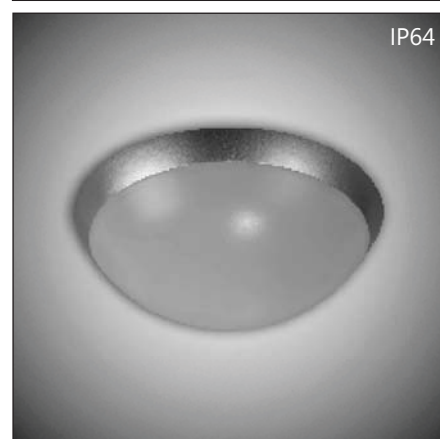


Note:
 integral motion sensor is on request
code: MWS



Ref Code	Watt	Lm(±)
22.36.005.01.27	27W	2200

Notes:
 * integral motion sensor is on request. **Code:** MWS
 * any other LED wattage or other lamp types are available on request: E27/G23/G24



Ref Code	Watt	Lm(±)	DiaxH
22.36.006.01.09	9W	900	275x99
22.36.007.01.22	22W	1700	338x112

Notes:
 * integral motion sensor is on request. **Code:** MWS
 * any other LED wattage or other lamp types are available on request: E27/G23/G24

surface mounted ceiling/wall lights

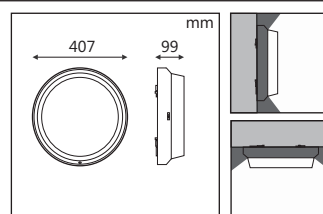
ELTE

Mounting: wall/ceiling surface
Housing: polycarbonate/ die-cast aluminum with high corrosion resistance
Diffuser: opal polycarbonate
Reflector: pre-anodized aluminum
Finish options:
 01-white matte
 11-black matte
 13-grey matte

LED: Samsung
CRI: Ra>80 (±3000k)
CCT:
 CT30-3000k
 CT40-4000k
Note: *Lm given in data is based on 3000k

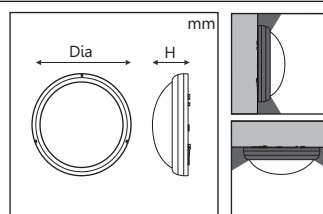
LED driver: integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors/indoors
 public/private/residential
 staircase areas/parking areas
 utility/service rooms
Ambient Temp: -30°~+50°C



Ref Code 22.36.008.01.22 **Watt** 22W **Lm(±)** 2050

Notes:
 * integral motion sensor is on request. **Code:** MWS
 * any other LED wattage or other lamp types are available on request: E27/G23/G24

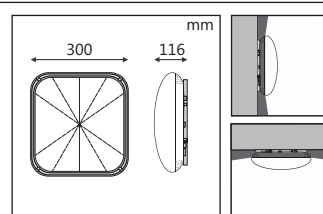


Ref Code	Watt	Lm(±)	DiaxH
22.36.010.01.11	11W	1050	265x90
22.36.011.01.22	22W	2100	335x100
22.36.011.02.25	25W	2400	335x100
22.36.012.01.28	28W	2700	413x124

Mention in the coding while ordering **Housing and Diffuser options:**
 die-cast aluminum housing - **HS.DC.ALU**
 polycarbonate housing - **HS.PC**
 glass diffuser (opal) - **DF.GLS.OPL**
 polycarbonate diffuser (opal) - **DF.PC.OPL**

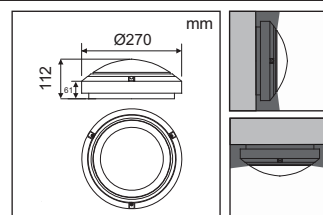
Notes:
 * integral motion sensor is on request. **Code:** MWS
 * other LED wattage or other lamp types are available on request: E27/G23/G24

* options for 22.36.011: 1) HS.DC.ALU + DF.GLS.OPL 2) HS.DC.ALU + DF.PC.OPL	* options for 22.36.010: 1) HS.DC.ALU + DF.PC.OPL 2) HS.PC + DF.PC.OPL	* one option for 22.36.012: HS.PC + DF.PC.OPL
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Ref Code 22.36.013.01.22 **Watt** 22W **Lm(±)** 1800

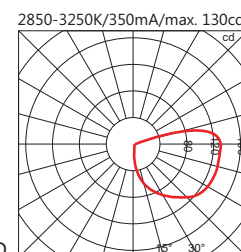
Notes:
 * integral motion sensor is on request. **Code:** MWS
 * any other LED wattage or other lamp types are available on request: E27/G23/G24



Ref Code	Watt	mA	Lm(±)
22.32.014.01.9.6	9.6W (8x1.2W)	350	900
22.32.014.02.13.2	13.2W (11x1.2W)	350	1200

Note: with fire-resistant silicone gasket

Ordering guide: 22.32.014.01.9.6++LID+11+CT30+ND





surface mounted ceiling/wall lights

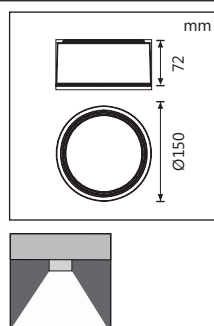
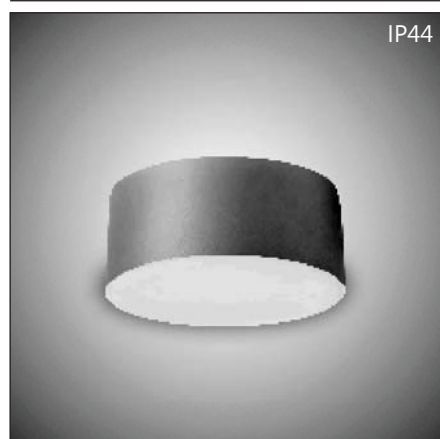
ELTE

Mounting: wall/ceiling surface
Housing: polycarbonate+aluminum
Diffuser: opal polycarbonate
Reflector: pre-anodized aluminum
Finish options:
 01-white matte
 14-silver grey matte

LED: EPISTAR
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

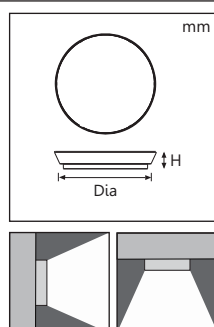
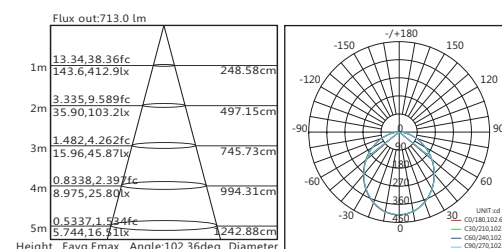
LED driver: integral
Volt AC: 100-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 3000k

Application:
 outdoors/indoors
 public/private/residential
 staircase areas/parking areas
 utility/service rooms
Ambient Temp: -50°~+60°C



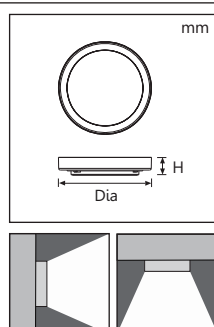
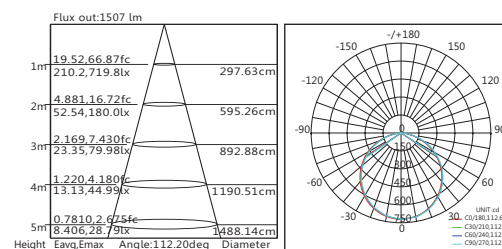
Beam Angle: 110°

Ref Code	Watt	mA	Lm (±)	kg
22.12.015.01.17	17W	80	1100	0.9



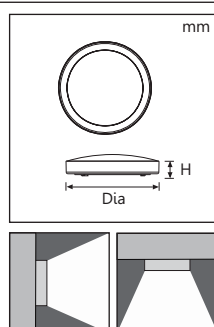
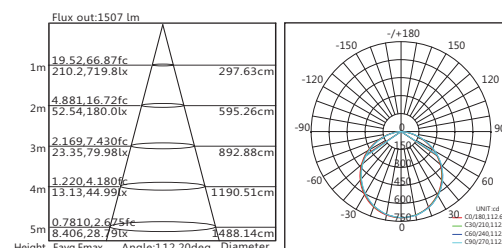
Beam Angle: 110°

Ref Code	Watt	mA	Lm (±)	Diach	kg
22.12.016.01.18	18W	90	1400	290x50	1.35
22.12.017.01.29	29W	135	2200	350x52	1.85



Beam Angle: 110°

Ref Code	Watt	mA	Lm (±)	Diach	kg
22.12.018.01.18	18W	90	1400	290x50	1.35
22.12.019.01.29	29W	135	2200	350x52	1.90



Beam Angle: 110°

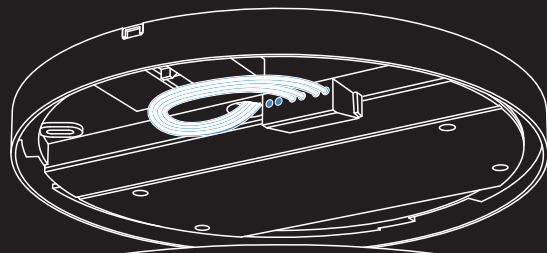
Ref Code	Watt	Lm (±)	Diach	kg
22.38.020.01.08	8W	650	260x95	1.1
22.38.020.02.12	12W	1000	260x95	1.1
22.38.021.01.18	18W	1500	330x95	1.4



22.12.025.01.29



PC housing (base plate)



aluminum trim



PC diffuser



base mounting



plugging-in



twist-n-lock

surface mounted ceiling/wall lights

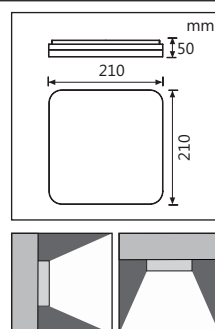
ELTE

Mounting: wall/ceiling surface
Housing: polycarbonate+aluminum
Diffuser: opal polycarbonate
Reflector: pre-anodized aluminum
Finish options:
 01-white matte
 14-silver grey matte

LED: EPISTAR
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

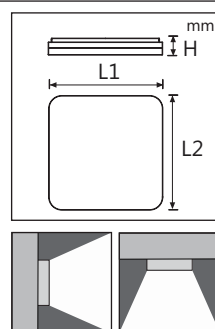
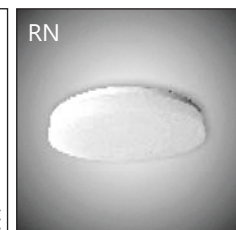
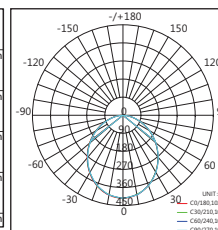
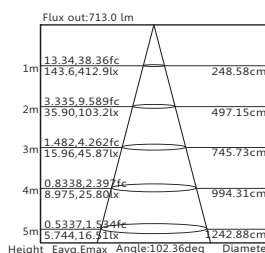
LED driver: integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 3000k

Application:
 outdoors/indoors
 public/private/residential
 staircase areas/parking areas
 utility/service rooms
Ambient Temp: -50°~+60°C

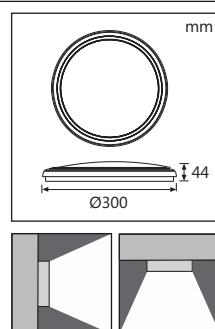
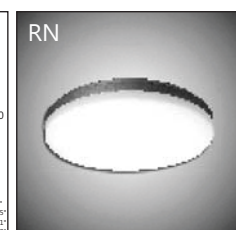
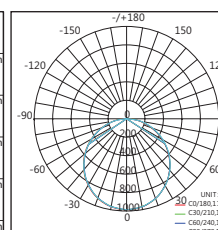
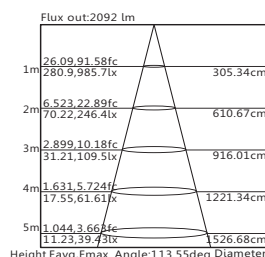


Beam Angle: 110°

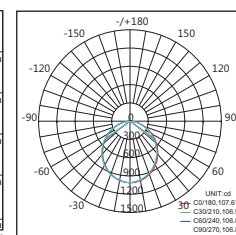
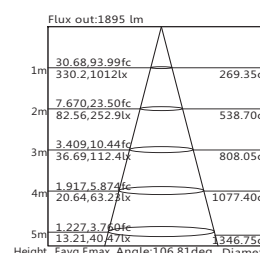
Ref Code	Watt	mA	Lm (±)	kg
22.12.022.01.15	15W	70	1050	0.9



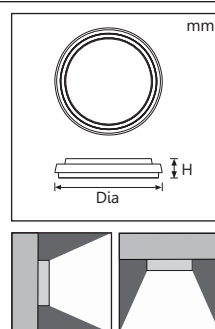
Ref Code	Watt	mA	Lm (±)	L1xL2xH	kg
22.12.023.01.15	15W	90	1150	260x260x44	0.9
22.12.023.02.18	18W	135	2000	260x260x44	1.7
22.12.024.01.29	29W	180	2900	400x400x63	1.7



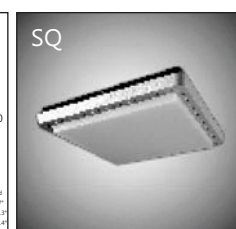
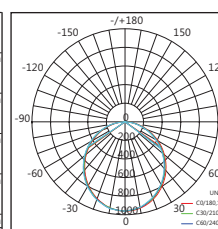
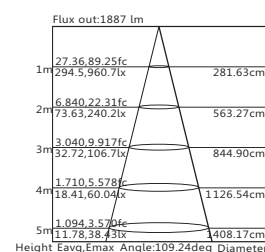
Ref Code	Watt	mA	Lm (±)	kg
22.12.025.01.29	29W	135	2200	1.7
22.12.025.02.38	38W	180	2850	1.7



Beam Angle: 110°



Ref Code	Watt	mA	Lm (±)	DiaxH	kg
22.12.026.01.18	18W	90	1200	200x36	0.9
22.12.027.01.29	29W	150	1900	250x36	1.3
22.12.028.01.38	38W	180	2400	300x40.5	1.8



Beam Angle: 110°

22.12.026.01.18+SQ



22.12.023.01.15+RN/SQ

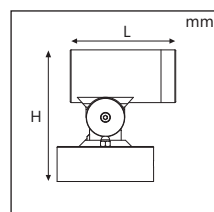
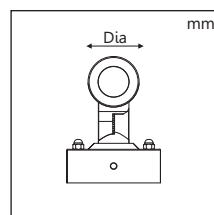


Mounting: wall surface
Housing: die-cast aluminum
Diffuser: polycarbonate/
 tempered glass
Finish options:
 21-brown
 11-black matte
 15-silver matte
 *RAL colors available on request

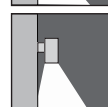
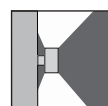
LED: COB/ Osram
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

LED driver: external/integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is
 based on 3000k

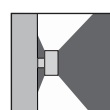
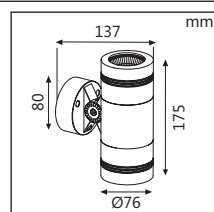
Application:
 outdoors
 public/private/residential
 building facades
 columns
Ambient Temp: -35°~+55°C



Ref Code	Watt	mA	Lm (±)	DiaxHxL
23.27.001.01.01	1x1W	48	100	30x75x61
23.27.002.01.02	2x1W	91		30x75x79

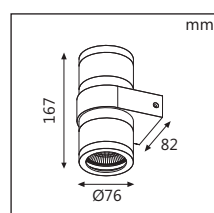
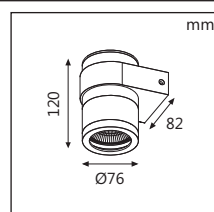


Beam Angle-Code:
 20°-BA20
 30°-BA30

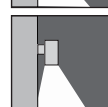
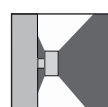


Ref Code	Watt	Volt/ mA	Lm (±)
23.27.003.01.16	2x8W	24V DC/822	850
23.27.003.02.16	2x8W	240V AC/103	850

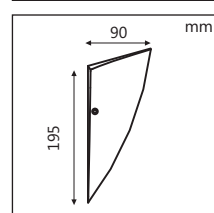
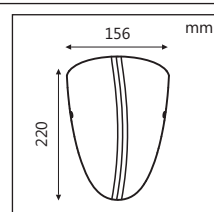
Beam Angle: 24°



Ref Code	Watt	Volt/ mA	Lm (±)
23.27.004.01.10	1x10W	24V DC/480	850
23.27.004.02.10	1x10W	240V AC/60	
23.27.005.01.16	2x8W	24V DC/822	
23.27.005.02.16	2x8W	240V AC/103	



Beam Angle: 24°



Ref Code	Watt	Volt/ mA	Lm (±)
23.27.006.01.12	1x12W	24V DC/ 576	850
23.27.006.01.12	1x12W	240V AC/ 64	



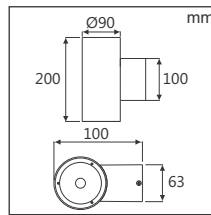
Beam Angle: 25°

Mounting: wall surface
Housing: extruded aluminum, 2mm thick with high corrosion resistance with die-cast aluminum bracket
Diffuser: 4mm thick tempered glass
Gasket: fire-resistant silicone
Reflector: anodized aluminum (faceted R.F.C.T)
Finish options: 11-black matte/13-grey matte

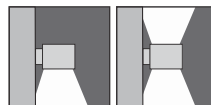
LED: CREE
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

LED driver: integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

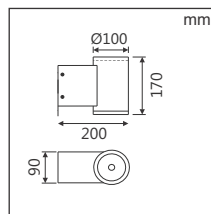
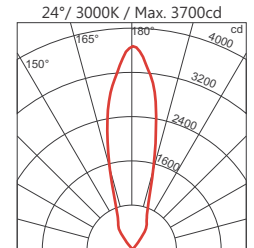
Application:
 outdoors
 public/private/residential
 building facades
 columns
Ambient Temp: -35°~+55°C



Ref Code	Watt	mA	Lm (±)
23.32.007.01.15	1x15W	350	1300
23.32.007.02.30	2x15W	350	



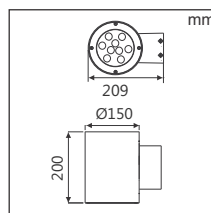
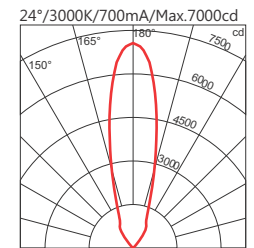
Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



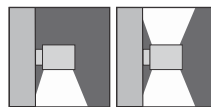
Ref Code	Watt	mA	Lm (±)
23.32.008.01.15	1x15W	350	1300
23.32.008.02.20	1x20W	500	1900
23.32.008.03.30	2x15W	350	
23.32.008.04.40	2x20W	500	



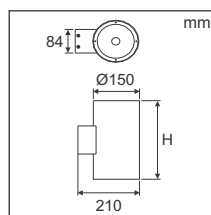
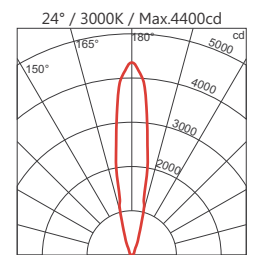
Beam Angle: 30°



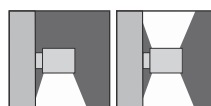
Ref Code	Watt	mA	Lm (±)
23.32.009.01.10.8	1x(9x1.2W)	350	900
23.32.009.02.21.6	2x(9x1.2W)	350	
23.32.009.03.22.5	1x(9x2.5W)	700	1550
23.32.009.04.45	2x(9x2.5W)	700	



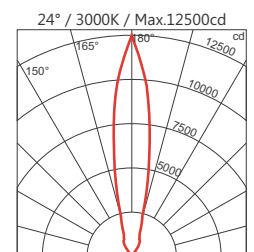
Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



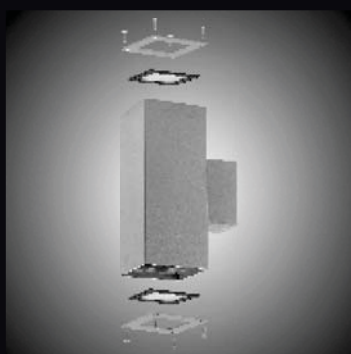
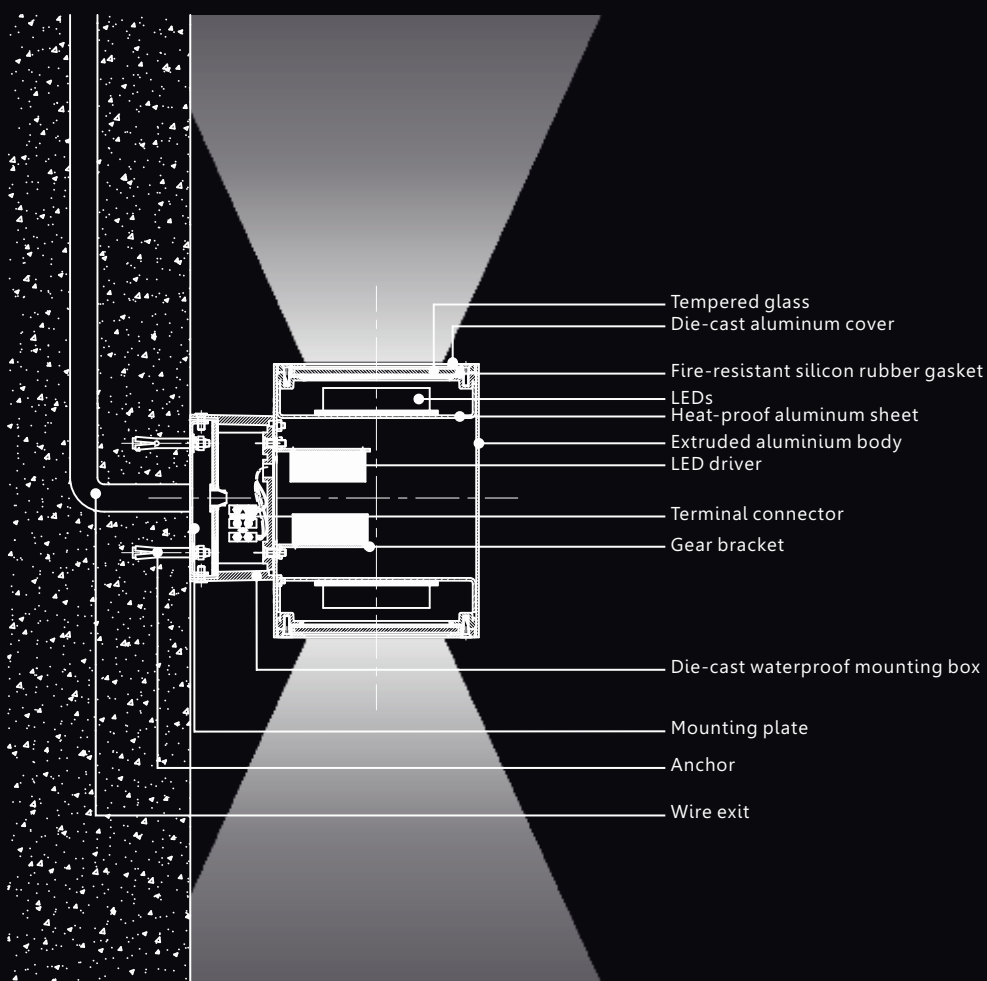
Ref Code	Watt	mA	Lm (±)	H
23.32.010.01.20	1x20W	500	1900	280
23.32.010.02.30	1x30W	700	2500	280
23.32.011.01.40	2x20W	500	350	
23.32.011.02.60	2x30W	700	350	



Beam Angle-Code:
 15°-BA15
 24°-BA24
 36°-BA36



bracket wall lights

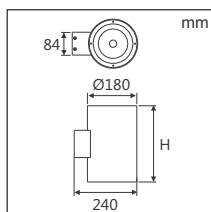


Mounting: wall surface
Housing: extruded aluminum, 2mm thick with high corrosion resistance with die-cast aluminum bracket
Diffuser: 4mm thick tempered glass
Gasket: fire-resistant silicone
Reflector: anodized aluminum (faceted R.F.C.T.)
Finish options: 11-black matte/13-grey matte

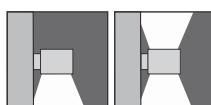
LED: CREE
CRI: Ra>80 (±3000k)
Ra>70 (±4000k)
CCT:
CT30-3000k
CT40-4000k
Lumen range:
93.9-100 lm/w (±3000k)
114-122 lm/w (±4000k)

LED driver: integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
ND - non-dimmable
PH - phase dimmable
010V - 0-10V dimmable
DALI - compatible
Note: *Lm given in data is based on 4000k

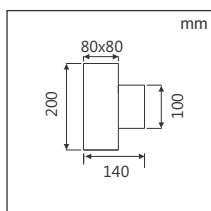
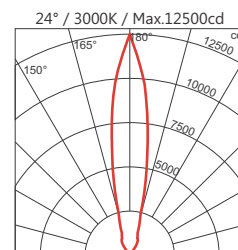
Application:
outdoors
public/private/residential
building facades
columns
Ambient Temp: -35°~+55°C



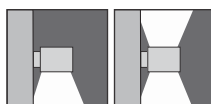
Ref Code	Watt	mA	Lm (±)	H
23.32.012.01.30	1x30W	700	2500	280
23.32.012.02.45	1x45W	1050	4000	280
23.32.013.01.60	2x30W	700	350	350
23.32.013.02.90	2x45W	1050	350	350



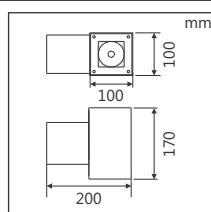
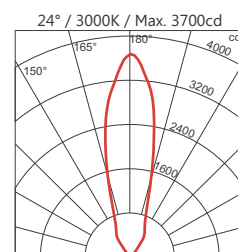
Beam Angle-Code:
15°-BA15
24°-BA24
36°-BA36



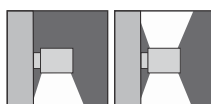
Ref Code	Watt	mA	Lm (±)
23.32.014.01.15	1x15W	350	1300
23.32.014.02.30	2x15W	350	350



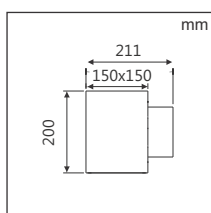
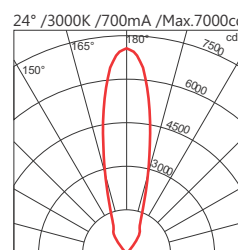
Beam Angle-Code:
15°-BA15
24°-BA24
36°-BA36



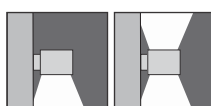
Ref Code	Watt	mA	Lm (±)
23.32.015.01.15	1x15W	350	1300
23.32.015.02.20	1x20W	500	1900
23.32.015.03.30	2x15W	350	350
23.32.015.04.40	2x20W	500	500



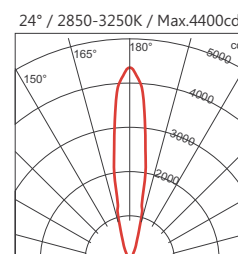
Beam Angle: 30°



Ref Code	Watt	mA	Lm (±)
23.32.016.01.10.8	1x(9x1.2W)	350	850
23.32.016.02.22.5	1x(9x2.5W)	700	1700
23.32.016.03.21.6	2x(9x1.2W)	350	350
23.32.016.04.45	2x(9x2.5W)	700	700



Beam Angle-Code:
15°-BA15
24°-BA24
36°-BA36



bracket wall lights

ELTE

Mounting: wall surface

Housing: extruded aluminum, 2mm thick with high corrosion resistance with die-cast aluminum bracket

Diffuser: 4mm thick tempered glass

Gasket: fire-resistant silicone

Reflector: anodized aluminum

(faceted R.F.C.T)

Finish options: 11-black matte/13-grey matte

LED: CREE

CRI: Ra>80 (±3000k)

Ra>70 (±4000k)

CCT:

CT30-3000k

CT40-4000k

Lumen range:

93.9-100 lm/w (±3000k)

114-122 lm/w (±4000k)

LED driver: integral

Volt AC: 220-240V

Frequency: 50-60Hz

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Note: *Lm given in data is based on 4000k

Application:

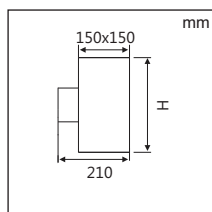
outdoors

public/private/residential

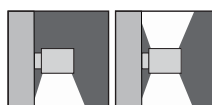
building facades

columns

Ambient Temp: -35°~+55°C



Ref Code	Watt	mA	Lm (±)	H
23.32.017.01.30	1x30W	700	2800	280
23.32.017.02.40	1x40W	1050	4300	280
23.32.018.01.60	2x30W			350
23.32.018.02.80	2x40W			350

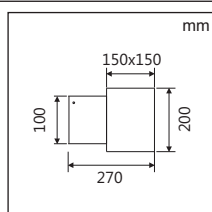
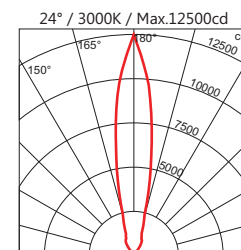


Beam Angle-Code:

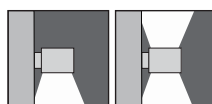
15°-BA15

24°-BA24

36°-BA36



Ref Code	Watt	mA	Lm (±)
23.32.019.01.20	1x20W	500	1900
23.32.019.02.30	1x30W	700	2500
23.32.019.03.40	2x20W	500	
23.32.019.04.60	2x30W	700	

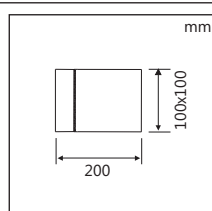
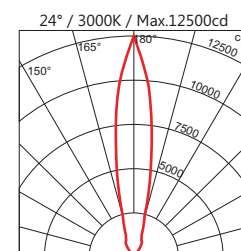


Beam Angle-Code:

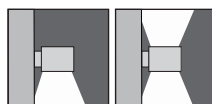
15°-BA15

24°-BA24

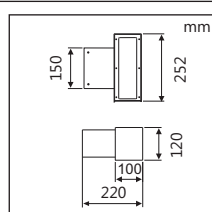
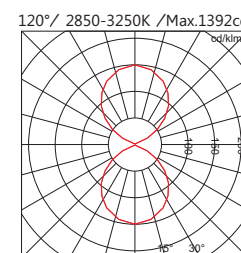
36°-BA36



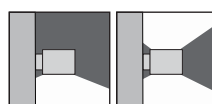
Ref Code	Watt	mA	Lm (±)
23.32.020.01.7.5	1x7.5W	700	650
23.32.020.02.15	2x7.5W	700	1230



Beam Angle: 120°



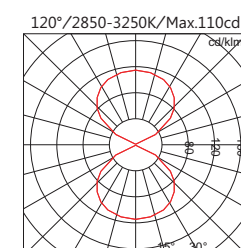
Ref Code	Watt	mA	Lm (±)
23.32.021.01.20	1x20W	500	1900
23.32.021.02.30	2x20W	700	3800
23.32.021.03.40	1x30W	500	
23.32.021.04.60	2x30W	700	



Beam Angle-Code:

120°-BA120

135°-BA135





bracket wall lights

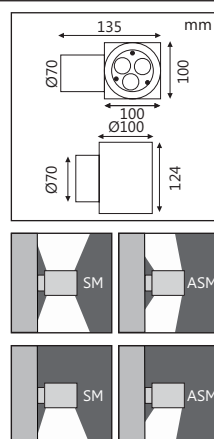
ELTE

Mounting: wall surface
Housing: aluminum with high corrosion resistance
Diffuser: tempered glass
Gasket: fire-resistant silicone
Finish options:
 11- black matte
 15- silver grey matte
 *RAL colors available on request

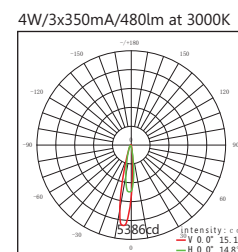
LED: CREE
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT:
 CT22-2200K
 CT27-2700K
 CT30-3000K
 CT40-4000K
 CT50-5000K
 CT65-6500K

LED driver: integral
Volt AC: 220-240V
Frequency: 50-60Hz
LED driver options:
 ND - non-dimmable
 DMX-DMX512
Note: *Lm given in data is based on 3000k

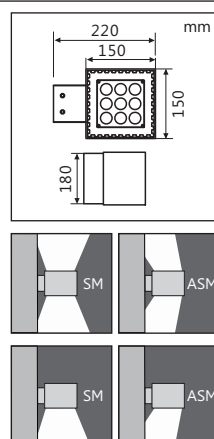
Application:
 outdoors
 public/private/residential
 building facades
 columns
Ambient Temp: -35°~+55°C



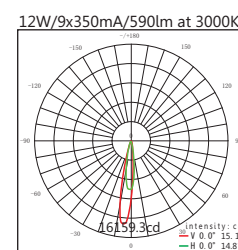
Ref Code	Watt	LED Qty	mA	Lm (4W, single side)
23.35.022.01.04	4W	1x3pcs	350	3000K - 480
23.35.022.02.08	8W	2x3pcs	350	5000K - 520



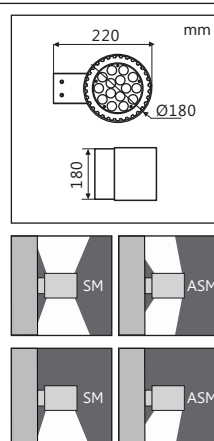
Beam Angle: 13°



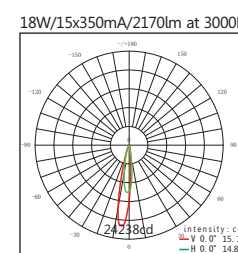
Ref Code	Watt	LED Qty	mA	Lm (12W, single side)
23.35.023.01.12	12W	1x9pcs	350	3000K - 1450
23.35.023.02.21	21W	2x9pcs	350	6500K - 1560



Beam Angle: 13°



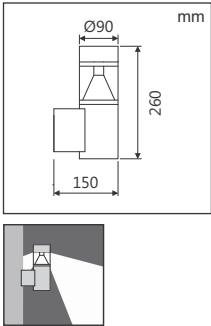
Ref Code	Watt	LED Qty	mA	Lm (18W, single side)
23.35.024.01.18	18W	1x15pcs	350	3000K - 2170
23.35.024.02.36	36W	2x15pcs	350	6000K - 2330



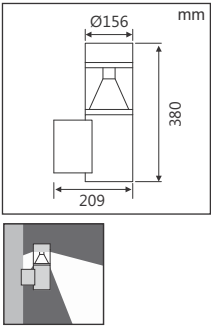
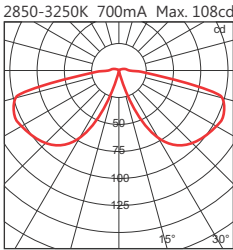
Beam Angle: 13°



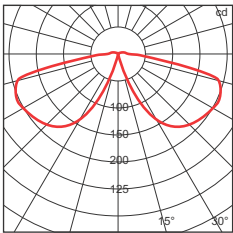
Mounting: wall surface	LED: CREE XTE	LED driver: integral	Application:
Housing: extruded/ die-cast aluminum with high corrosion resistance	CRI: Ra> 80 (±3000k) Ra> 70 (±4000k)	Volt AC: 220-240V	outdoors
Diffuser: PMMA (transparent DF.TNS)	CCT:	Frequency: 50-60Hz	public/private/residential
Gasket: fire-resistant silicone	CT30-3000k	LED driver options:	building facades
Reflector: aluminum	CT40-4000k	ND - non-dimmable	columns
Finish options:	Lumen range:	PH - phase dimmable	Ambient Temp: -35°~+55°C
11- black matte	93.9-100 lm/w (±3000k)	010V - 0-10V dimmable	
15- silver grey matte	114-122 lm/w (±4000k)	DALI - compatible	
		Note: *Lm given in data is based on 4000k	
			5 years warranty IP65



Ref Code	Watt	mA	Lm(±)
23.32.025.01.10	4x2.5W	700	800



Ref Code	Watt	mA	Lm(±)
23.32.026.01.20	8x2.5W	700	1550





outdoor recessed lights (in-ground/ in-wall/ceiling)

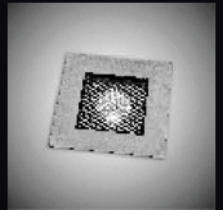
micro recessed lights



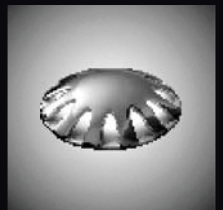
underwater recessed lights



buried up-lights



inground drive-over lights





Mounting: buried in ground/wall/ceiling

Housing: hard chrome-plated
stainless steel - 1.4401 (SUS316)

Diffuser: tough tempered glass

LED: CREE/Edison

CRI: Ra>80

CCT:

CT40-4000k

CT50-5000k

CT60-6000k

RGB/RGBW/Amber

Note: *Other CRI/CCT
available on request

LED driver: external

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Note: *Lm given in data is
based on 3000k

Application:

outdoors/indoors

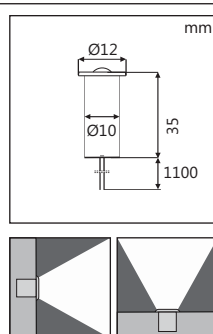
floors/decks/pathways

landscapes

building facades

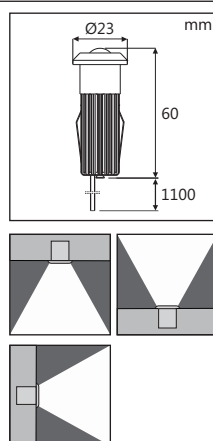
columns

Ambient Temp: -35°~+50°C



Ref Code	Watt	Volt	Lm(±)
26.31.001.01.0.7	0.7W (WH, CREE)	CC, 250mA	50

Beam Angle: 80°

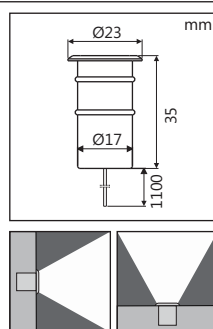


Ref Code	Watt	Volt	Lm(±)
26.31.002.01.01	1W (WH, CREE)	CC, 350mA	90

Notes:

*fixed single colors available:
red, green, blue, amber

Beam Angle: 120°



Ref Code	Watt	Volt	Lm(±)
26.31.003.01.01	1W (WH, CREE)	CC, 350mA	90
26.31.003.02.0.5	0.5W (RGB, Edison)	CV, 12V DC	

Notes:

glass thickness is 3 mm

Beam Angle-Code:

20°-BA20

60°-BA60

RGB: 120°-BA120





micro recessed lights

ELTE

Mounting: buried in ground/wall/ceiling

Housing:

- polycarbonate + aluminum
- hard chrome-plated stainless steel
- 1.4401 (SUS316)

LED: CREE/Epistar

CRI: Ra>80

CCT:

CT40-4000k

CT50-5000k

CT60-6000k

RGB/Amber

Note: *Other CRI/CCT available on request

LED driver: external

LED driver options:

ND - non-dimmable

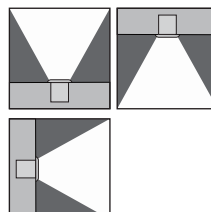
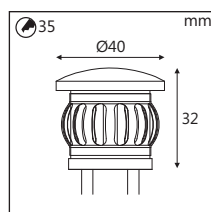
Note: *Lm given in data is based on 3000k

Cable: 2*0.5m pvc connect cable with male and female connector

Application:

- outdoors
- floors/decks/pathways
- landscapes
- building facades
- columns

Ambient Temp: -35°~+55°C

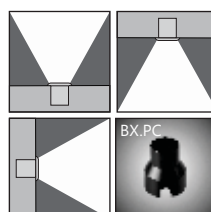
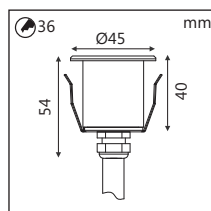


Ref Code	Watt	Lm(±)	Volt DC
26.25.004.01.0.5	0.5W	20	12V

LED Color options:

CCT: 2700-6500K

fixed colors: red, green, blue, amber/RGB



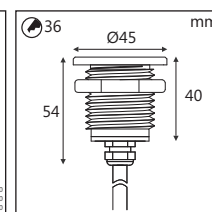
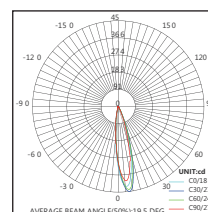
Ref Code	Watt	Lm(±)	Volt DC	Beam Angle-Code:
26.25.006.01.01	1W	80	12V	10°-BA10
26.25.006.02.03	3W(RGB)		12V	25°-BA25
				40°-BA40
				120°-BA120

LED Color options:

CCT: 2700-6500K

single colors: red, green, blue, yellow, amber

RGB (3-in-1) color changing



marker lights



swimming pool lights

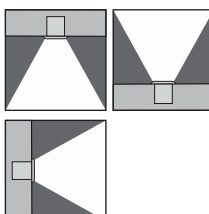
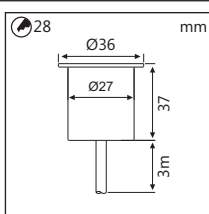


Mounting: buried in ground/wall/ceiling
Housing: hard chrome-plated stainless steel - 1.4401 (SUS316)
Diffuser: tempered glass

LED: CREE/Edison
CRI: Ra>80
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

LED driver: external
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 3000k
Cable: waterproof design

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
 columns
Ambient Temp: -35°~+55°C

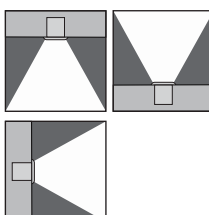
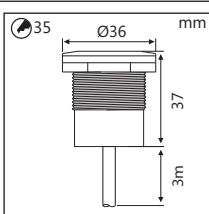


Ref Code	Watt	Volt	Lm(±)	kg
26.31.007.01.01	1W (WH, CREE)	CV, 12/24V DC	30	0.25
26.31.007.02.01	1W (RGB, Edison)	CV, 24V DC		

Note:
 *glass thickness is 3 mm
 *fixed single colors available:
 red, green, blue, amber

Housing options-Code:
 brass-BRASS
 stainless steel-SLS

Beam Angle: 120°

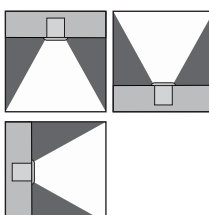
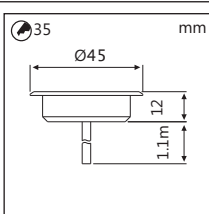


Ref Code	Watt	Volt	Lm(±)	kg
26.31.008.01.01	1W (WH, CREE)	CV, 12/24V DC	50	0.3
26.31.008.02.01	1W (RGB, Edison)	CV, 12V DC		

Note:
 *glass thickness is 3 mm
 *fixed single colors available:
 red, green, blue, amber

Housing options:
 brass-BRASS
 stainless steel-SLS

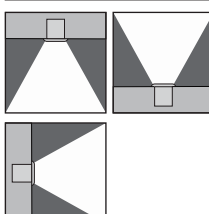
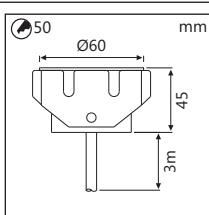
Beam Angle: 120°



Ref Code	Watt	Volt	Lm(±)	kg
26.31.009.01.01	1W (WH, CREE)	CC, 350mA	50	0.07
26.31.009.02.01	1W (Single, Edison)	CV, 12/24V DC		
	1W (RGB, Edison)	CV, 24V DC		

Note:
 fixed single colors available:
 red, green, blue, amber

Beam Angle: 120°



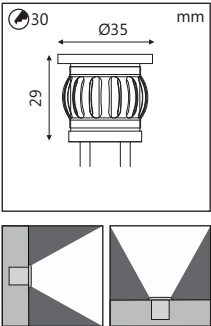
Ref Code	Watt	Volt	Lm(±)	kg
26.31.010.01.01	1W (WH, CREE)	CC, 350mA	70	0.47
26.31.010.02.01	1W (WH, CREE)	CV, 12/24V DC	70	
26.31.010.03.03	3W (RGB, Edison)	CC, 350mA		

Note:
 *glass thickness is 6 mm
 *fixed single colors available:
 red, green, blue, amber

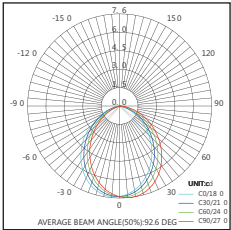
Beam Angle-Code:
 12°-BA12
 45°-BA45



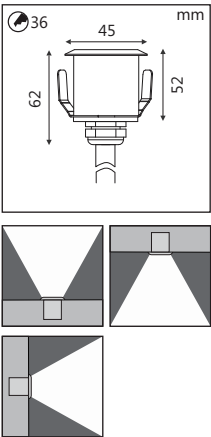
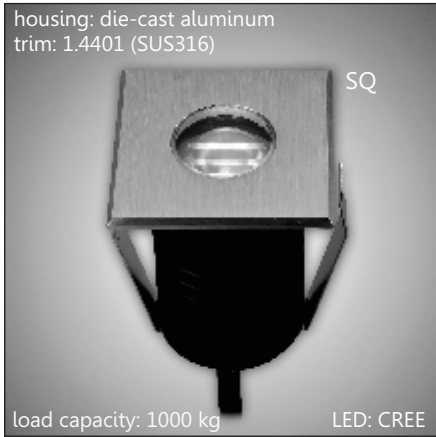
Mounting: buried in ground/wall/ceiling	LED: CREE/Epistar	LED driver: external	Application:
Housing:	CRI: Ra>80	LED driver options:	outdoors/indoors
- stainless steel 1.4401 (SUS316)	LED Color options:	ND - non-dimmable	floors/decks/pathways/columns
- die-cast aluminum	CCT: 2700-6500K	PH - phase dimmable	
Diffuser: tough tempered glass	red (RD), green (GR), blue (BL),	010V - 0-10V dimmable	
	yellow (YL), amber (AMB)	DALI - compatible	
	RGB (3-in-1) color changing	Note: *Lm given in data is	Ambient Temp: -35°~+55°C
	Note: *Other CRI/CCT	based on 3000k	
	available on request	Cable: standard length is 0.5m	
		4m is on request	
			3 years warranty RoHS III CE IK06 IK08 IP67



Ref Code	Watt	Lm(±)	Volt
26.25.011.01.0.5	0.5W	20	12V DC
26.25.011.02.0.5	0.5W(RGB)		12V DC



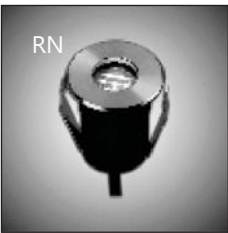
Beam Angle: 120°



Ref Code	Watt	Lm(±)	Volt
26.25.012.01.1.5	1.5W	150	12V DC

Beam Angle-Code:
15°-BA15
25°-BA25
40°-BA40
60°-BA60

Note:
* fully stainless housing and trim
is available on request. **Code:** HS.SLS



micro recessed lights

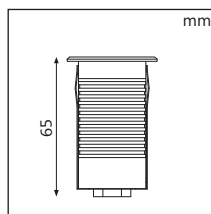
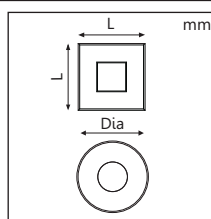
ELTE

Mounting: buried in ground/wall/ceiling
Housing: die-cast powder coated aluminum
Trim: stainless steel - 1.4401 (SUS316)
Diffuser: frosted step tempered glass
Gasket: molding shaped silicon seal

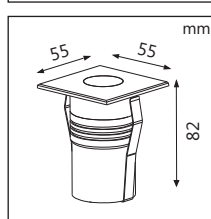
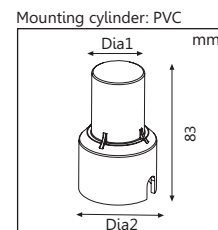
LED: Osram
CRI: Ra>80
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

LED driver: external
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m

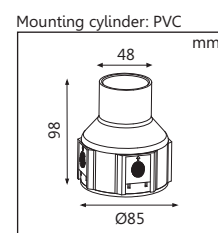
Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
 columns
Ambient Temp: -35°~+55°C



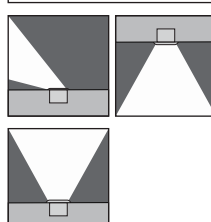
Ref Code	Watt	Volt	mA	Lm (±)	LxDia1xDia2
26.27.014.01.0.5	0.5W	24V DC	26	30	38x34x50
26.27.014.01.0.2	2W	24V DC	87	50	45x42x67



Ref Code	Watt	Volt	mA	Lm (±)
26.27.015.01.0.1	1W	240V AC	10	20
26.27.015.02.1.3	1.3W	24V DC	54	25



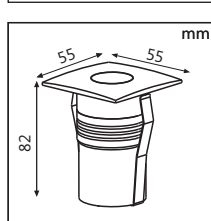
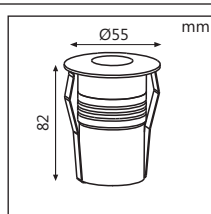
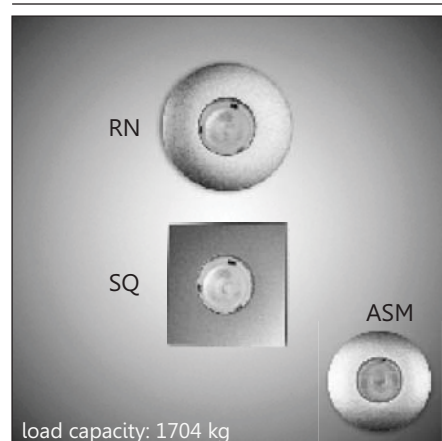
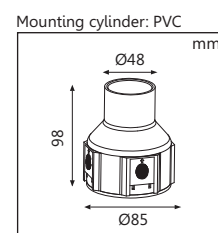
Beam Angle: 120°



Ref Code	Watt	Volt/ mA	mA	Lm (±)
26.27.016.01.0.2	2W	24V DC	105	110
26.27.016.02.0.2	2W	240V AC	28	
26.27.016.03.0.2	2W(RGB 3-in-1)	24V DC(R/G/B)	38/53/54	

Beam Angle-Code:
SYM
 9°-BA9
 15°-BA15
 20°-BA20
 30°-BA30
 35°-BA35
 45°-BA45
ASM
 35°-BA35
 45°-BA45
RGB
 30°-BA30

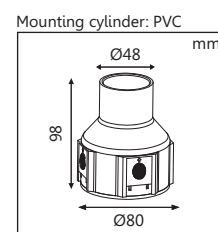
Lens-Code:
 symmetric-SYM
 asymmetric-ASM



Ref Code	Watt	Volt	mA	Lm (±)
26.27.017.01.0.2	2W	24V DC	110	25
26.27.017.02.0.2	2W	240V AC	30	25
26.27.017.03.0.2	2W(RGB 3-in-1)	24V DC(R/G/B)	40/60/60	

Lens-Code:
 symmetric-SYM
 asymmetric-ASM

Beam Angle-Code:
SYM
 9°-BA9
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
ASM
 35°-BA35
 45°-BA45
RGB
 30°-BA30

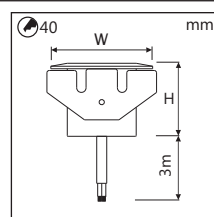


Mounting: buried in ground/wall
Housing: fully stainless steel 1.4401 (SUS316)
 optionally: brass (HS.BRASS)
Diffuser: opal/clear tempered glass
Fixing springs: stainless steel 1.4401 (SUS316)
Optionally: PC installation cylinder (BX.PC)

LED: CREE/EDISON
CRI: Ra>80
CCT: CT27-2700K
 CT30-3000K
 CT40-4000K
 CT60-6000K
Note: *Other CRI/CCT available on request

LED driver: external
Volt AC: 220-240V
Frequency: 50-60Hz
options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoor
 water landscapes
 swimming pools/ponds
 fountain/aquariums
 recreational facilities
Ambient Temp: -20°~+40°C

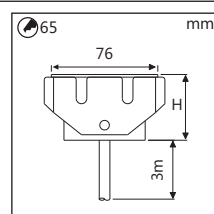


Ref Code	Watt	Volt	WxHxC.O.
37.31.001.01.01	1W (WH, CREE)	CC, 350mA	SQ: (45x45)x40x32
37.31.002.01.01	1W (WH, CREE)	CV, 12/24V DC	RN: 40x40x31

Lumen output: 90 lm/W

Note:
 *glass thickness is 3 mm
 *fixed single colors available:
 red, green, blue, amber

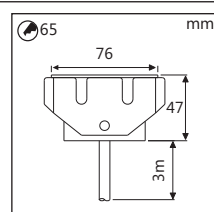
Beam Angle-Code:
 20°-BA20
 60°-BA60



Ref Code	Watt	Volt	Lm(±)	H
37.31.003.01.03	3W (WH, CREE)	CC, 350mA	270	47
37.31.003.02.03	3W (WH, CREE)	CV, 12/24V DC	270	47
37.31.003.03.03	3W (RGB, Edison)	CC, 350mA	47	47
37.31.003.04.06	6W (WH, CREE)	CC, 500mA	500	47
37.31.004.02.09	9W (RGB, Edison)	CC, 350mA	86	

9W (3x3W) fixed single color Lm:
 red: 190lm
 green: 325lm
 blue: 110lm

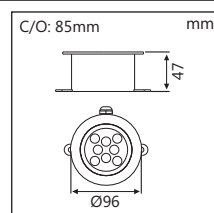
Beam Angle-Code: 1. fixed single colors available:
 red, green, blue, amber
 2. brass housing is optional:
 code: **HS.BRASS**



Ref Code	Watt	Volt	Lm(±)
37.31.005.01.03	3W (WH, CREE)	CC, 350mA	270
37.31.005.02.03	3W (WH, CREE)	CV, 12/24V DC	270
37.31.005.03.07	7W (RGB, Lamina)	CC, 350mA	

Note:
 *glass thickness is 5 mm
 *fixed single colors available:
 red, green, blue, amber

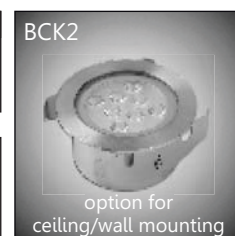
Beam Angle: 120°



Ref Code	Watt	Volt	Lm(±)
37.31.006.01.06	6W (WH, CREE)	CC, 350mA	540
37.31.006.02.06	6W (WH, CREE)	CV, 24V DC	540
37.31.006.03.06	6W (RGB, Edison)	CC, 350mA	540
37.31.006.04.08	8W (WH, CREE)	CC, 350mA	750
37.31.006.05.08	8W (WH, CREE)	CV, 24V DC	750
37.31.006.06.08	8W (RGB, Edison)	CC, 350mA	

Note:
 *glass thickness is 6 mm
 *fixed single colors available:
 red, green, blue, amber

Beam Angle-Code:
 10°-BA10
 40°-BA40



underwater recessed lights

ELTE

Mounting: buried in ground/wall/ceiling

Housing:

fully stainless steel 1.4401 (SUS316)

Diffuser: tough tempered glass

LED: CREE

CRI: Ra>80

CCT:

CT40-4000k

CT50-5000k

CT60-6000k

RGB/RGBW/Amber

Note: *Other CRI/CCT available on request

LED driver: external

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Note: *Lm given in data is based on 3000k

Cable: standard length is 1m
4m is on request

Application:

outdoor

water landscapes

swimming pools/ponds

fountain/aquariums

recreational facilities

Ambient Temp: -20°~+40°C

3 years
warranty

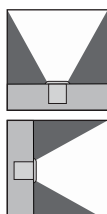
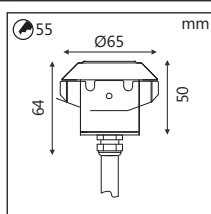


RoHS



IK10

IP68



Beam Angle-Code:

15°-BA15

30°-BA30

60°-BA60

Ref Code

37.25.007.01.06

Watt

6W

Lm(±)

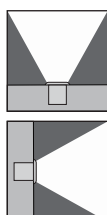
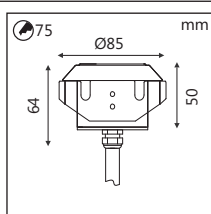
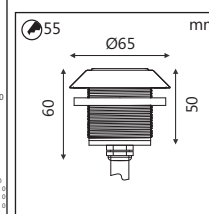
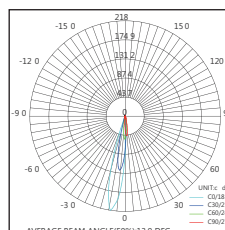
450

LED Color options:

CCT: 2700-6500K

fixed colors: red, green, blue, yellow, amber

RGB color changing



Beam Angle-Code:

15°-BA15

30°-BA30

60°-BA60

Ref Code

37.25.008.01.09

Watt

9W(RGB)

Lm(±)

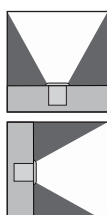
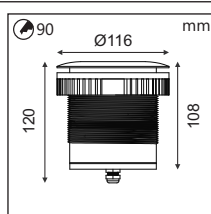
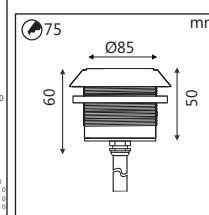
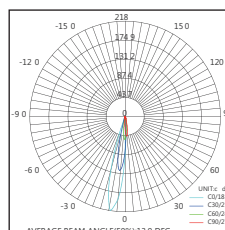
800

LED Color options:

CCT: 2700-6500K

fixed colors: red, green, blue, yellow, amber

RGB color changing



Beam Angle-Code:

25°-BA25

40°-BA40

60°-BA60

Ref Code

37.25.009.01.30

Watt

30W

Lm(±)

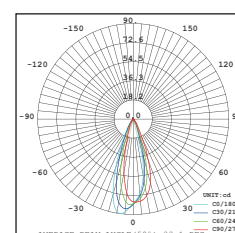
2000

LED Color options:

CCT: 2700-6500K

fixed colors: red, green, blue, yellow, amber

RGB color changing

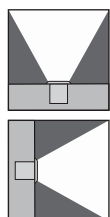
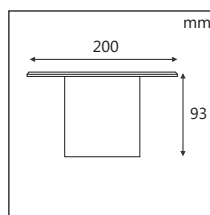


Mounting: buried in ground/wall
Housing and trim:
 fully stainless steel 1.4401 (SUS316)
Diffuser: tough tempered glass
Fixing springs:
 stainless steel 1.4401 (SUS316)
Note:
 * lumen output data
 is based on 3000K

LED: CREE/EDISON (SMD)
CRI: Ra>80
CCT:
 CT27-2700K/CT30-3000K
 CT40-4000K/CT60-6000K
Notes: * Other CRI/CCT
 available on request
 * 1m cable length
 other length is on request

LED driver: integral/external
Volt AC: 220-240V
Frequency: 50-60Hz
options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
 DMX

Application:
 outdoor, yachts
 water landscapes
 swimming pools/ponds
 fountain/aquariums
 recreational facilities
Ambient Temp: -20°~+40°C



Ref Code	Watt	Lm(±)	Volt DC
37.25.013.01.45	45W	2100	24V
37.25.013.02.45	45W(RGB)		700mA

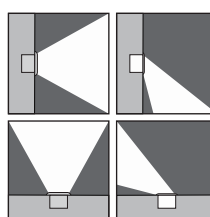
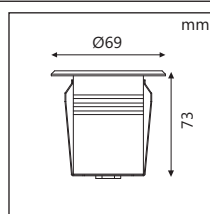
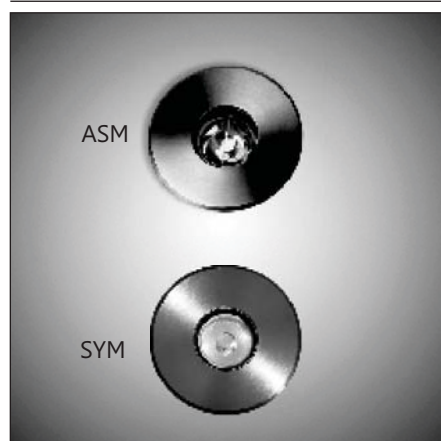
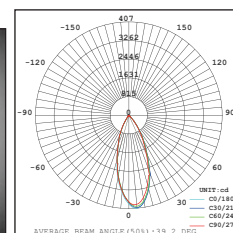
Beam Angle-Code:

8°-BA8
 25°-BA25
 40°-BA40
 60°-BA60

LED Color options:

CCT: 2700-6500K
fixed colors: red, green,
 blue, yellow, amber
RGB color changing

Mounting cylinder: STS



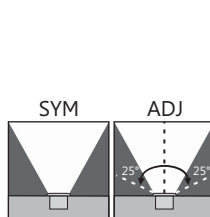
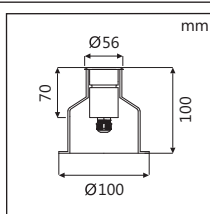
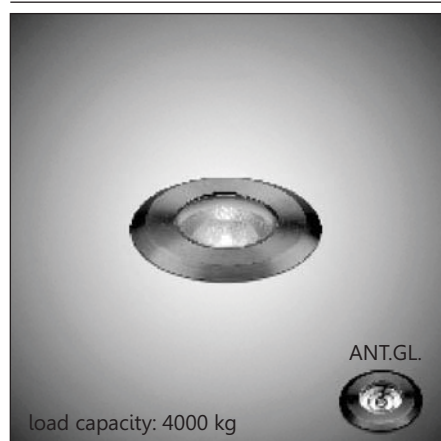
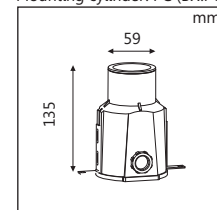
Ref Code	Watt	mA	Lm (±)
37.27.014.01.03	3W	24V DC/110	150
37.27.014.02.03	3W(RGB 3-in-1)	24V DC(R/G/B)=38/53/54	

Beam Angle-Code:

SYM **ASM**
 20°-BA20 35°-BA35
 25°-BA25 45°-BA45
 30°-BA30 **RGB**
 45°-BA45 25°-BA25

Lens-Code:
 symmetric-SYM
 asymmetric-ASM

Mounting cylinder: PC (BX,PC)

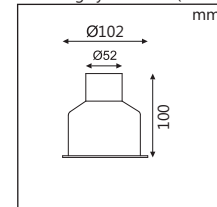


Ref Code	Watt	Lm(±)
37.45.019.01.02	2W	80
37.45.019.02.03	3W	160
37.45.019.03.04	4W	270

Beam Angle-Code:

symmetrical (SYM) **adjustable (ADJ)**
 15°-BA15 10°-BA10
 40°-BA40

Mounting cylinder: PC (BX,PC)



trim option-code:

flush type - TM.FLT
LED color options:
 red (RD)
 green (GR)
 blue (BL)
 amber (AMB)

Notes:

- * **mention while ordering:**
- beam type (SYM/ADJ), LED color (RD/GR/BL/AMB), anti-glare louver (ANT.GL.) (if necessary)
- in case "flush" type of trim is required, please, add TM.FLT
- * anti-glare louver (ANT.GL) comes with symmetric beam only
- * all adjustable versions are 24V DC only and with remote LED drivers
- * 100V-240V AC versions are symmetrical ones, with built-in LED drivers
- * different mounting is optional: walls (RCS.WL) or ceilings (RCS.CL). Mention in order accordingly.



underwater recessed lights

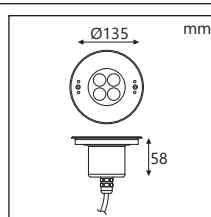
ELTE

Mounting: buried in ground/wall
Housing: hard chrome-plated molded shaped stainless steel 1.4401 (SUS316)
Trim: hard chrome-plated molded shaped stainless steel 1.4401 (SUS316)
Diffuser: 8mm step tempered glass
Gasket: EPDM

LED: COB/Osram
CRI: Ra>70
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

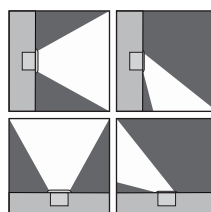
LED driver: integral, constant current
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m

Application:
 outdoor
 water landscapes
 swimming pools/ponds
 fountain/aquariums
 recreational facilities
Ambient Temp: -20°~+40°C

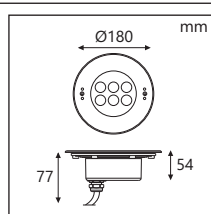
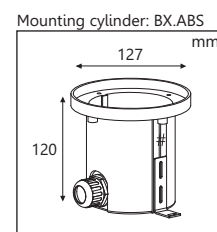


Ref Code	Watt	Volt	mA	Lm (±)
37.27.015.01.08	4x2W (WH)	24V DC	372	500
37.27.015.02.08	4x2W (RGB 3-in-1)	24V DC/(R/G/B)	200/215/215	

Note: fitting should be primarily used under water not more than 1m deep

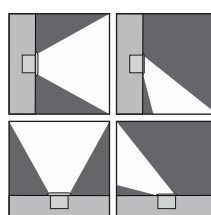


Beam Angle-Code:	Lens-Code:
SYM	ASM
20°-BA20	35°-BA35
25°-BA25	45°-BA45
30°-BA30	RGB
45°-BA45	25°-BA25

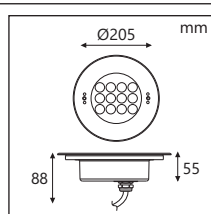
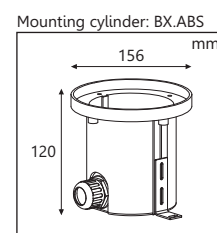


Ref Code	Watt	Volt	mA	Lm (±)
37.27.016.01.12	6x2W (WH)	24V DC/700	700	950
37.27.016.02.18	6x3W (RGB 3-in-1)	24V DC/(R/G/B)	300/350/350	

Note: fitting should be primarily used under water not more than 1m deep

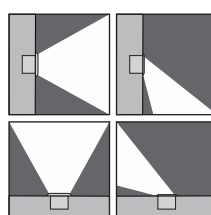


Beam Angle-Code:	Lens-Code:
SYM	ASM
20°-BA20	35°-BA35
25°-BA25	45°-BA45
30°-BA30	RGB
45°-BA45	25°-BA25

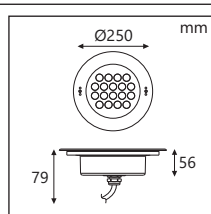
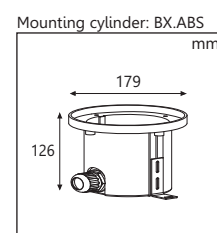


Ref Code	Watt	Volt	mA	Lm (±)
37.27.017.01.24	12x2W (WH)	24V DC	1200	1700
37.27.017.02.24	12x2W (RGB 3-in-1)	D24V C/(R/G/B)	400/500/500	

Note: fitting should be primarily used under water not more than 1m deep

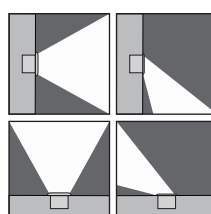


Beam Angle-Code:	Lens-Code:
SYM	ASM
20°-BA20	35°-BA35
25°-BA25	45°-BA45
30°-BA30	RGB
45°-BA45	25°-BA25

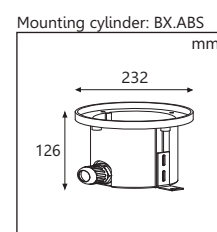


Ref Code	Watt	Volt	mA	Lm (±)
37.27.018.01.36	18x2W (WH)	24V DC/1900	1900	2300
37.27.018.02.36	18x2W (RGB 3-in-1)	24V DC/(R/G/B)	630/770/770	

Note: fitting should be primarily used under water not more than 1m deep



Beam Angle-Code:	Lens-Code:
SYM	ASM
20°-BA20	35°-BA35
25°-BA25	45°-BA45
30°-BA30	RGB
45°-BA45	25°-BA25





buried up-lights

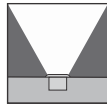
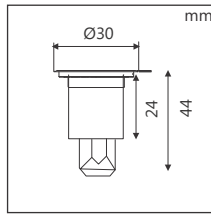
ELTE

Mounting: buried in ground
Housing: high pressure die-cast aluminum
Trim: stainless steel 1.4301/1.4401 (SUS 304/316)
Diffuser: 6mm toughened glass
Finish options:
 *RAL colors available on request

LED: CREE/COB
CRI: Ra>80-(±3000K)
 Ra>70-(±4000K)
 Ra>70-(±6000K)
CCT: CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note: *Other CRI/CCT available on request

LED driver: external
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 3000k

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
 columns
Ambient Temp: -25°~+50°C

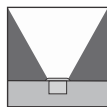
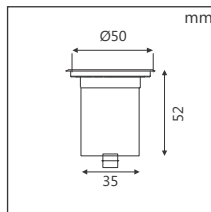


Ref Code	Watt	Volt	LED Qty	LED Color	Lm (±)
26.26.018.01.0.5	0.5W	CC/PWM 12V DC	1Pcs	RGB/Single	65
26.26.018.02.0.5	0.5W	CC/PWM 24V DC		RGB/Single	

Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

Beam Angle: >120°

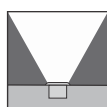
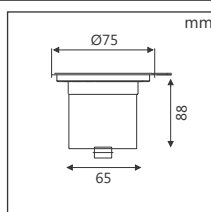


Ref Code	Watt	Volt	LED Qty	LED Color	Lm (±)
26.26.019.01.1.5	1.5W	12V DC	1Pcs	Single	80

Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

Beam Angle: >120°



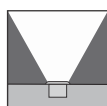
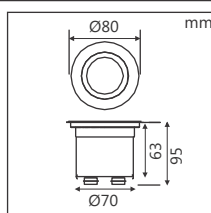
Ref Code	Watt	Volt	LED Qty	LED Color	Lm (±)
24.26.003.01.1.5	1.5W	24V DC/240V AC	1Pcs	Single	80

Beam Angle-Code:

25°-BA25
 120°-BA120

Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Ref Code	Watt	Volt	LED Qty	LED Color	Lm (±)
24.26.004.01.03	3W	DC12V/AC220V	1Pcs	Single	75
24.26.004.02.04	4W	DC24V/12V	3Pcs	RGB	60

Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

Beam Angle: >120°

buried up-lights

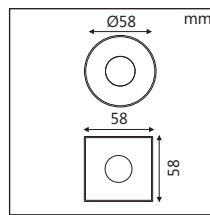
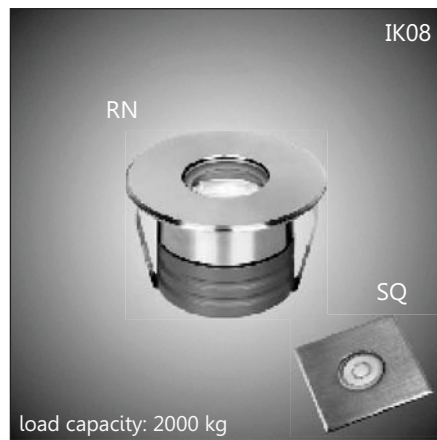
ELTE

Mounting: buried in ground/wall/ceiling
Housing: die-cast aluminum
Trim: hard chrome-plated stainless steel 1.4401 (SUS316)
Diffuser: step tempered glass
Gasket: molding shaped silicon seal

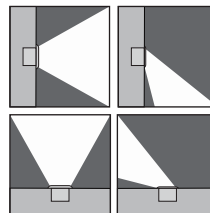
LED: COB/Osram/Bridgelux
CRI: Ra>80
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

LED driver: external constant current
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
 columns
Ambient Temp: -35°~+55°C

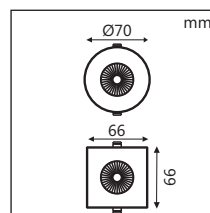
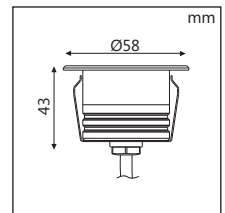


Ref Code	Watt	Volt	mA	Lm(±)
24.27.007.01.02	2W	24V DC	88	120
24.27.007.02.02	2W	240V AC	29	

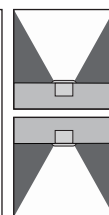
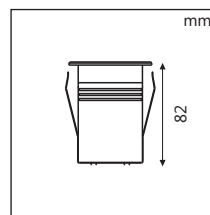


Beam Angle-Code:
SYM
 9°-BA09
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
ASM
 35°-BA35
 45°-BA45

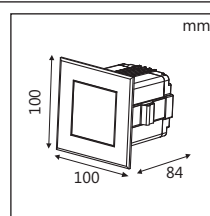
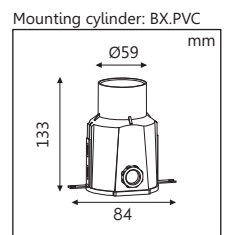
Lens-Code:
 symmetric-SYM
 asymmetric-ASM



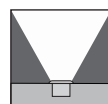
Ref Code	Watt	Volt	mA	Lm(±)
24.27.008.01.05	5W	24V DC	265	400
24.27.008.02.05	5W	240V AC	32	



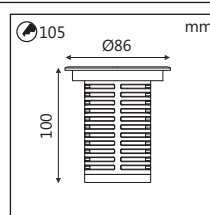
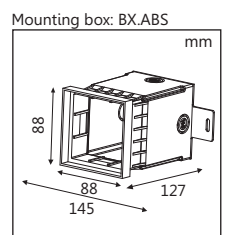
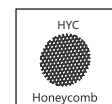
Beam Angle-Code:
 18°-BA18
 24°-BA24
 32°-BA32



Ref Code	Watt	Volt	mA	Lm(±)
24.27.009.01.06	6W	24V DC	72	700
24.27.009.02.06	6W	240V AC	40	

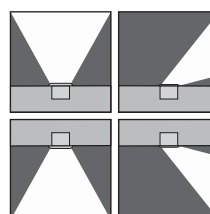


Beam Angle-Code:
 18°-BA18
 25°-BA25
 40°-BA40

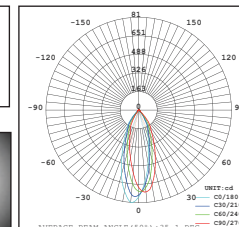
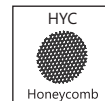


Ref Code	Watt	Lm(±)	Volt
24.25.052.01.07	7W	360	24V DC
24.25.052.02.07	7W	420	240V AC

LED white CCT range:
 2700-6500K



Beam Angle-Code:
 15°-BA15
 25°-BA25
 40°-BA40



Mounting: buried in ground/wall

Housing:

- 1.4401 (SUS316)
- anodized aluminum

Diffuser:

- clear tough tempered glass
- 50% transmittance polycarbonate

Gasket: waterproof rubber seal

LED: COB/Osram

CRI: Ra>80

CCT:

CT40-4000k

CT50-5000k

CT60-6000k

RGB

Note: *Other CRI/CCT available on request

LED driver: external

constant current

Volt AC: 240V

Volt DC: 24V

Frequency: 50/60Hz

Power Cable:

(DC 24V) 2x1.0mm²/L=2.0m

(AC 220V) 3x1.0mm²/L=2.0m

(RGB) 4x0.75mm²/L=0.5m

Application:

outdoors/indoors
floors/decks/pathways
landscapes
building facades
columns

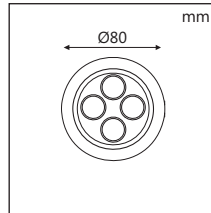
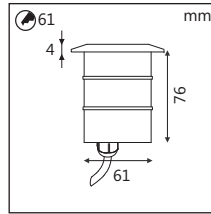
Ambient Temp: -35°~+55°C



kg: 0.6
housing/trim: 1.4401 (SUS316)
diffuser: glass

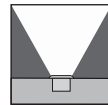


load capacity: 1000 kg



Ref Code	Watt	Volt	mA	Lm(±)
24.42.005.01.07	7W	27V DC	350	500
24.42.005.02.09	9W	27V DC	350	650

Beam Angle: 10°



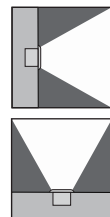
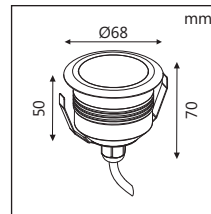
Note: RGB available single fixed color

top: stainless steel 1.4401 (SUS316)
trim/diffuser: tough polycarbonate



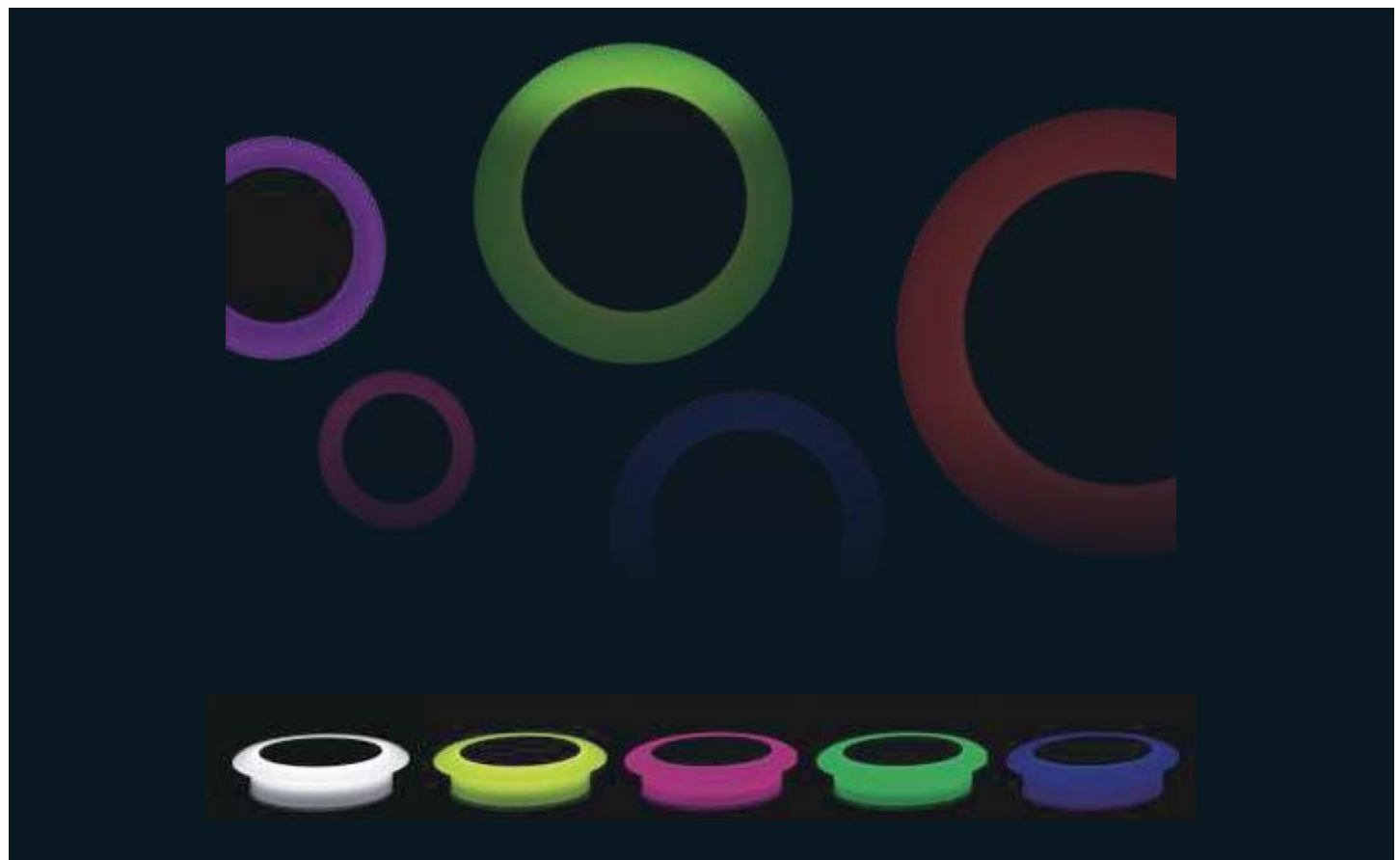
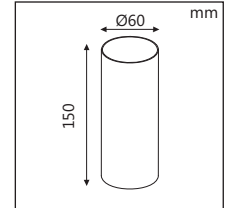
marker light

load capacity: 1000 kg



Ref Code	Watt	Volt	mA	Lm(±)
24.27.006.01.02	2W	24V DC	110	20
24.27.006.02.02	2W	240V AC	26	
24.27.006.03.03	3W(RGB 3-in-1)	24V DC(R/G/B)	38/53/54	

Mounting cylinder: BX.ABS



buried up-lights



buried up-lights

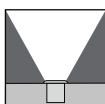
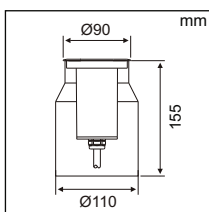
ELTE

Mounting: buried in ground
Housing: die-cast aluminum, 4mm thick with high corrosion resistance with electrostatic powder painting
Installation sleeve: polycarbonate
Diffuser: 8mm thick step tempered glass
Gasket: silicone
Trim: stainless steel 1.4301/1.4401(SUS304/316)
Lens of LED: optical PMMA

LED: CREE XP-E
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT30-3000K
 CT40-4000K
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 100-240V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

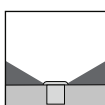
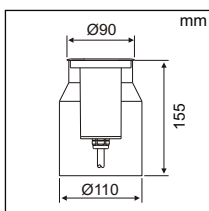
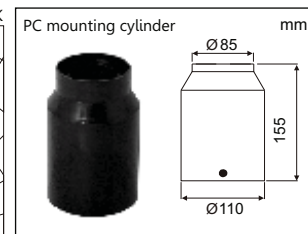
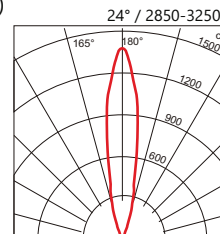
Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
 columns
Ambient Temp: -35°~+55°C



Beam Angle-Code:
 24°-BA24
 36°-BA36

Ref Code **Watt** **mA** **Lm(±)**
 24.32.010.01.3.6 3x1.2W 350 330

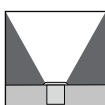
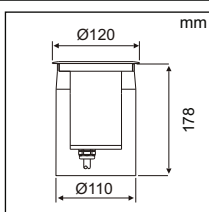
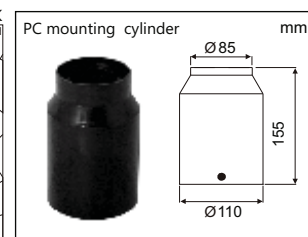
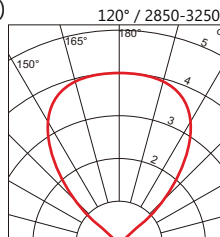
Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Beam Angle: 120°

Ref Code **Watt** **mA** **Lm(±)**
 24.32.011.01.3.6 3.6W 350 110

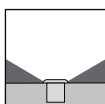
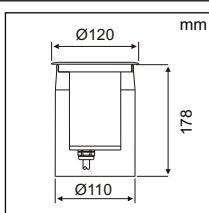
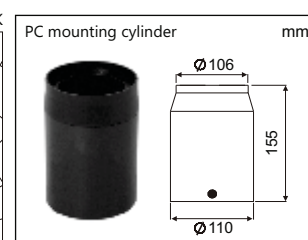
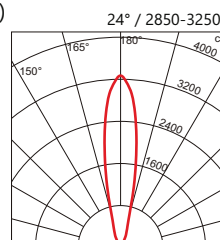
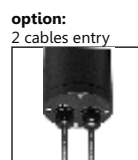
Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Beam Angle-Code:
 24°-BA24
 36°-BA36

Ref Code **Watt** **mA** **Lm(±)**
 24.32.012.01.8.4 7x1.2W 350 750

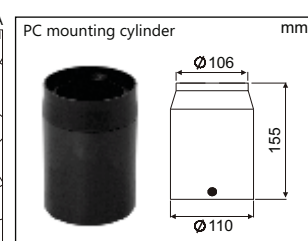
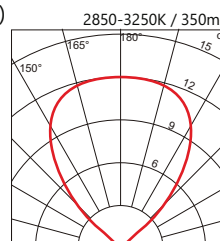
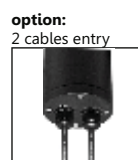
Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Beam Angle: 120°

Ref Code **Watt** **mA** **Lm(±)**
 24.32.013.01.3.6 3x1.2W 350 330

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Mounting: buried in ground
Housing: high pressure die-cast aluminum
Stainless steel trim options:
 TM.SLS.1.4301/1.4401 (SUS304/SUS316)
Diffuser: 8mm tempered glass
Finish options:
 *RAL colors of housing available on request
Note: *Other CRI/CCT available on request

LED: CREE/COB
CRI: Ra>80 (±3000k)
 Ra>75 (±4000k)
CCT:
 CT30-3000K/CT35-3500K
 CT40-4000K/CT45-4500K
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

LED driver: integral,
 constant current
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is
 based on 3000k

Application:
 outdoors, landscapes
 floors/decks/pathways
 building facades, columns
Ambient Temp: -25°C~+55°C
Ambient humidity: 10%~50%

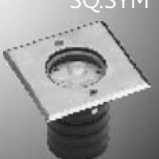


kg: 0.76

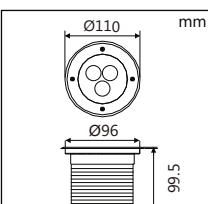
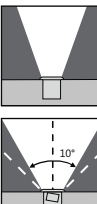
RN.SYM



SQ.SYM



load capacity: 1000 kg

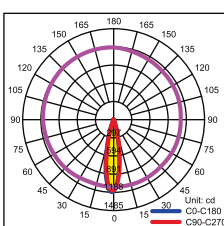
Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)
24.26.014.01.3.5	3.5W	DC12V/AC240V	3Pcs	RGB/Single	75
24.26.014.02.06	6W	DC12V/AC240V	3Pcs	RGB/Single	
24.26.014.03.06	6W	AC240V	1Pcs	Single	

Beam Angle-Code:
 5°-BA5
 12°-BA12
 20°-BA20
 30°-BA30
 45°-BA45
ADJ: 25°

RN.ADJ



24.26.014.03.06



kg: 1.05

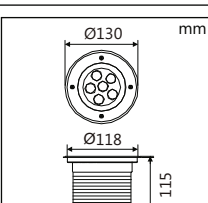
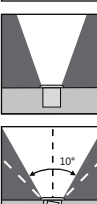
RN.SYM



SQ.SYM



load capacity: 1000 kg

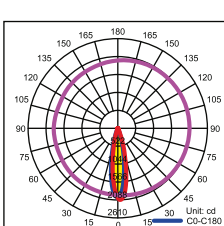
Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)
24.26.015.01.07	7W	AC240V	6Pcs	RGB/Single	75
24.26.015.02.08	8W	AC240V	1Pcs	Single	
24.26.015.03.12	12W	DC12V	6Pcs	RGB/Single	

Beam Angle-Code:
 5°-BA5
 12°-BA12
 20°-BA20
 30°-BA30
 48°-BA48
ADJ: 25°

RN.ADJ



24.26.015.02.08



kg: 1.50

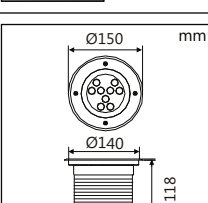
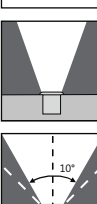
RN.SYM



SQ.SYM



load capacity: 1000 kg

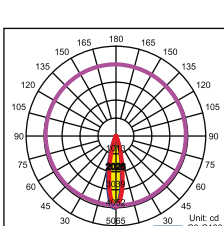
Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)
24.26.016.01.01	11W	AC240V	9Pcs	RGB/Single	75
24.26.016.02.12	12W	AC240V	1Pcs	Single	
24.26.016.03.16	16W	DC24V	9Pcs	RGB/Single	

Beam Angle-Code:
 5°-BA5
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45
ADJ: 25°

RN.ADJ



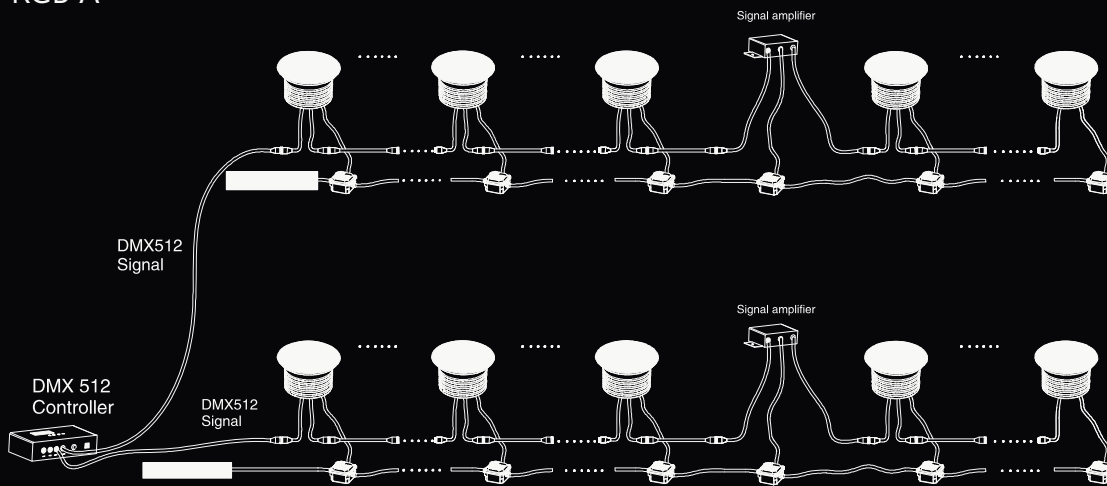
24.26.016.02.12



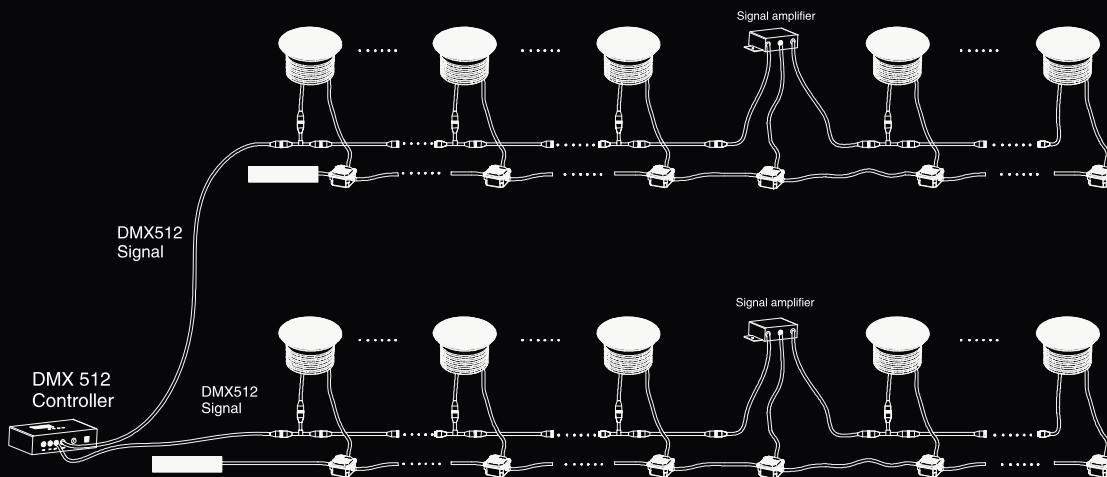


wiring diagramm

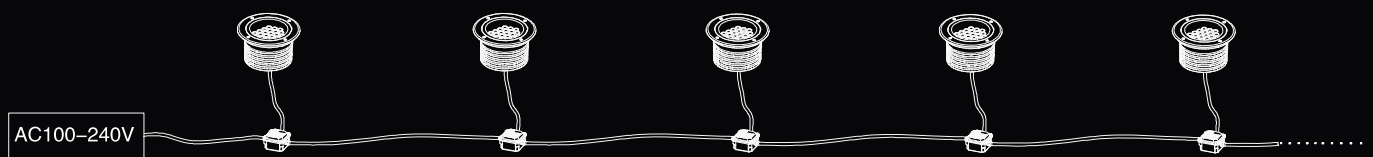
RGB A



RGB B



Single Color

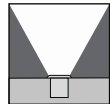
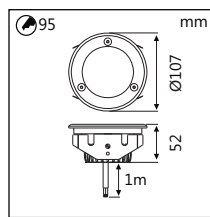


Mounting: buried in ground
Housing: die-cast aluminum
Trim: stainless steel 1.4401 (SUS316)
Fixing springs:
 stainless steel 1.4401 (SUS316)
Diffuser: tempered glass
Note:
 *Other CRI/CCT available on request

LED: CREE/ Edison
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
 RGBW
 Amber

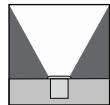
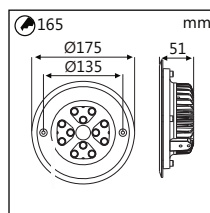
LED driver: integral
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 3000k

Application:
 outdoors
 floors/decks/pathways
 fountains
 landscapes
 building facades
Ambient Temp: -35°~+55°C



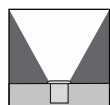
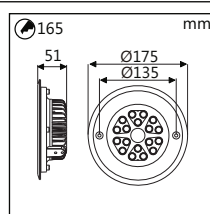
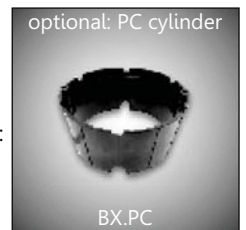
Ref Code	Watt	Volt	Lumen output
24.31.017.01.06	6W (WH, CREE)	CC, 350mA	108 lm/W
24.31.017.02.06	6W (WH, CREE)	CV, 24V DC	
24.31.017.04.06	6W (RGB, Edison)	CC, 350mA	

Note:
 *glass thickness is 8 mm
 *fixed single colors available:
 red, green, blue, amber
Beam Angle-Code:
 10°-BA10
 40°-BA40
 120°-BA120 (with opal glass)



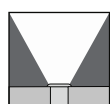
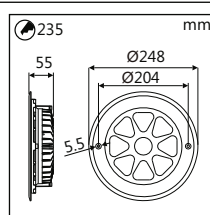
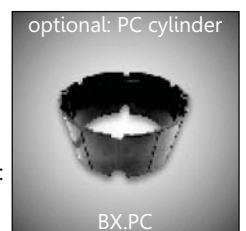
Ref Code	Watt	Volt	Lumen output
24.31.018.01.10	10W (WH, Edison)	CV, 24V DC	108 lm/W
24.31.018.02.12	12W (WH, CREE)	CC, 350mA	
24.31.018.03.12	12W (WH, CREE)	CV, 24V DC	
24.31.018.05.12	12W (RGB, Edison)	CC, 350mA	

Beam Angle-Code:
 10°-BA10
 20°-BA20
 40°-BA40
 60°-BA60
 120°-BA120 (10W, opal glass)
Note:
 *glass thickness is 10 mm
 *fixed single colors available:
 red, green, blue, amber



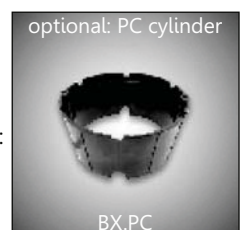
Ref Code	Watt	Volt	Lumen output
24.31.019.01.18	18W (WH, CREE)	CC, 350mA	108 lm/W
24.31.019.02.18	18W (WH, CREE)	CV, 24V DC	
24.31.019.03.18	18W (RGB, Edison)	CC, 350mA	

Beam Angle-Code:
 10°-BA10
 20°-BA20
 40°-BA40
 60°-BA60
Note:
 *glass thickness is 10 mm
 *fixed single colors available:
 red, green, blue, amber



Ref Code	Watt	Volt	Lumen output
24.31.020.01.18	18W (WH, Edison)	CV, 24V DC	108 lm/W
24.31.020.02.24	24W (WH, CREE)	CC, 350mA	
24.31.020.03.24	24W (WH, CREE)	CV, 24V DC	
24.31.020.04.24	24W (RGB, Edison)	CC, 350mA	

Beam Angle-Code:
 10°-BA10
 20°-BA20
 40°-BA40
 60°-BA60
 120°-BA120 (18W, opal glass)
Note:
 *glass thickness is 12 mm
 *fixed single colors available:
 red, green, blue, amber



buried up-lights

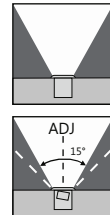
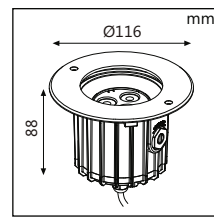
ELTE

Mounting: buried in ground
Housing: die-cast powder coated aluminum
Trim: hard chrome-plated stainless steel 1.4401 (SUS316)
Diffuser: step tempered glass
Gasket: molding shaped silicone seal
Note:
 *Other CRI/CCT available on request

LED: Osram
CRI: Ra > 70
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
 RGBW
 Amber

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
 columns
Ambient Temp: -35°~+55°C



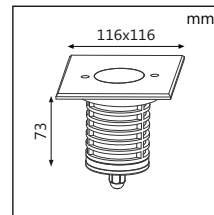
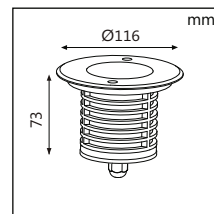
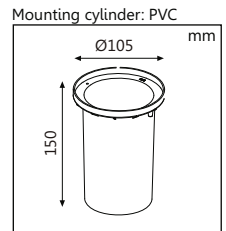
Ref Code	Watt	Volt	mA	Lm(±)
24.27.021.01.03	3x1W	24V DC	131	230
24.27.021.02.03	3x1W	240V AC	40	

Beam Angle-Code:

15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45

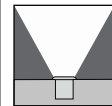
Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



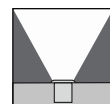
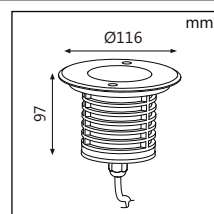
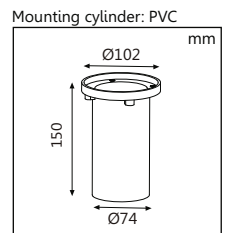
Ref Code	Watt	Volt	mA	Lm(±)
24.27.022.01.1.2	1.2W	24V DC	51	10
24.27.022.02.1.8	1.8W	240V AC	17	
24.27.022.03.1.2	1.2W(3-in-1)	24V DC(R/G/B)	17	

Beam Angle: > 120°



Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



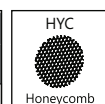
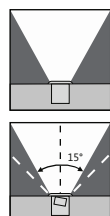
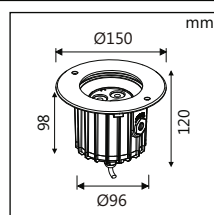
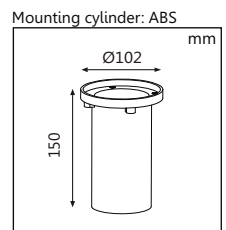
Ref Code	Watt	Volt	mA	Lm(±)
24.27.023.01.06	6W(RGBW 4-in-1)	24V DC	338	220

Beam Angle-Code: RGBW

15°-BA15
 22°-BA22

Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



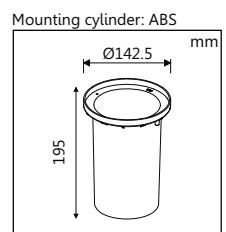
Ref Code	Watt	Volt	mA	Lm(±)
24.27.024.01.06	3x2W	24V DC	236	400
24.27.024.02.06	3x2W	240V AC	30	400
24.27.024.03.06	4x1.5W (RGB 3-in-1)	24V DC(R/G/B)	125	90

Beam Angle-Code: symmetric (SYM)

15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
RGB
 30°-BA30

Stainless steel trim options:

TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

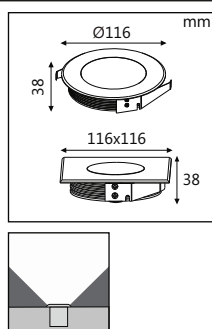
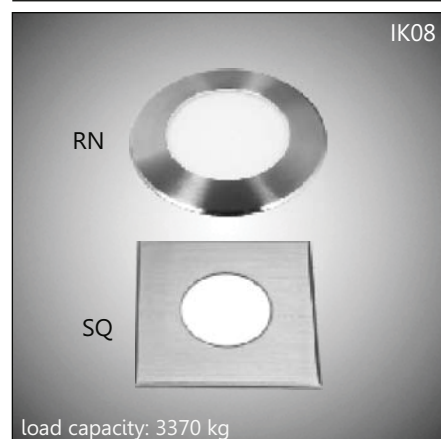


Mounting: buried in ground
Housing: die-cast powder coated aluminum
Trim: hard chrome-plated stainless steel 1.4401 (SUS316)
Diffuser: step tempered glass
Gasket: molding shaped silicone seal
Note:
 *Other CRI/CCT available on request

LED: Osram
CRI: Ra > 70
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
 RGBW
 Amber

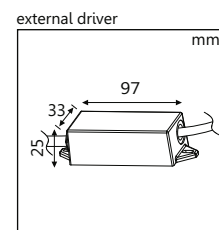
LED driver: integral/external
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
Ambient Temp: -35°~+55°C

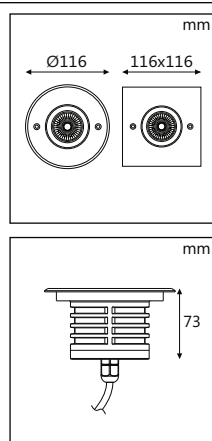
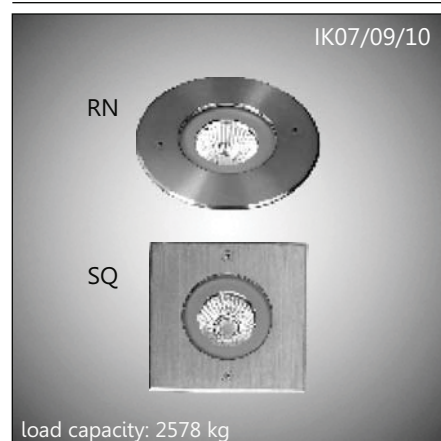


Ref Code	Watt	Volt	mA	Lm(±)
24.27.025.01.1.2	1.2W(12xSMD5050)	24V DC	34	20
24.27.025.02.1.2	1.2W(12xSMD5050)	240V AC	17	
24.27.025.03.1.7	1.7W(24xRGBW)	24V DC(R/G/B/W)	17/18/17/17	

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

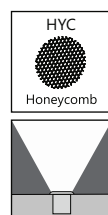


Beam Angle: 120°

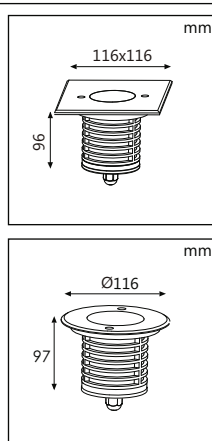
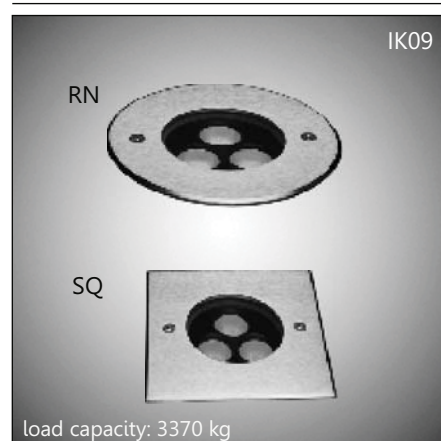
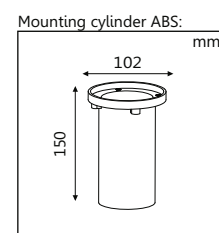


Ref Code	Watt	Volt	mA	Lm(±)
24.27.026.01.06	6W	24V DC	270	530
24.27.026.02.06	6W	240V AC	35	

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

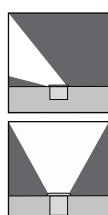


Beam Angle-Code:
 18°-BA18
 25°-BA25
 40°-BA40



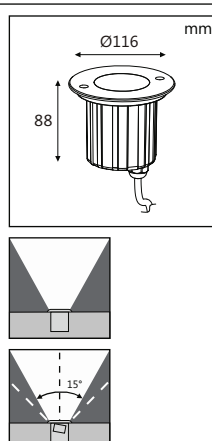
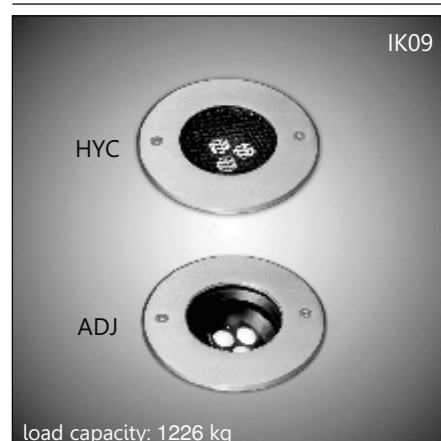
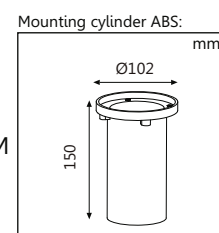
Ref Code	Watt	Volt	mA	Lm(±)
24.27.027.01.06	3x2W	24V DC	236	400
24.27.027.02.06	3x2W	240V AC	30	
24.27.027.03.06	3x2W(RGB 3-in-1)	24V DC(R/G/B)	70/124/124	

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Beam Angle-Code:
SYM
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
ASM
 35°-BA35
 45°-BA45
RGB
 30°-BA30

Lens-Code:
 symmetric-SYM
 asymmetric-ASM

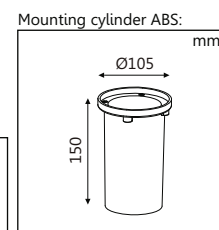
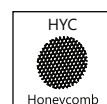


Ref Code	Watt	Volt/mA	mA	Lm(±)
24.27.028.01.03	3x1W	24V DC/131	131	300
24.27.028.02.03	3x1W	240V AC/40	40	

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Beam Angle-Code:
 15°-BA15
 20°-BA20
 30°-BA30



buried up-lights

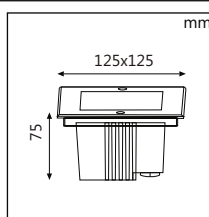
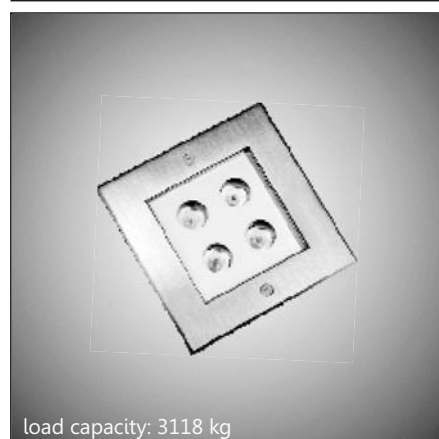
ELTE

Mounting: buried in ground
Housing: die-cast powder coated aluminum
Trim: hard chrome-plated stainless steel 1.4401 (SUS316)
Diffuser: frosted step tempered glass
Gasket: molding shaped silicone seal

LED: COB/SMD/Osram
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

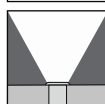
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	mA	Lm(±)
24.27.029.01.04	4x1W	24V DC	188	350
24.27.029.02.04	4x1W	240V AC	42	

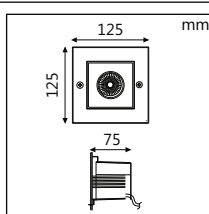
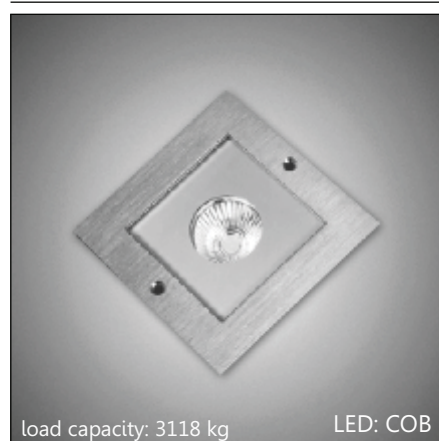
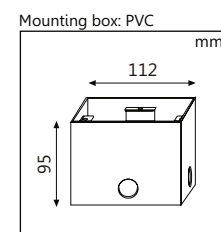
Lens-Code:
 symmetric-SYM
 asymmetric-ASM



Beam Angle-Code:

SYM	ASM
15°-BA15	35°-BA35
20°-BA20	45°-BA45
30°-BA30	
45°-BA45	

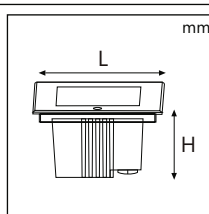
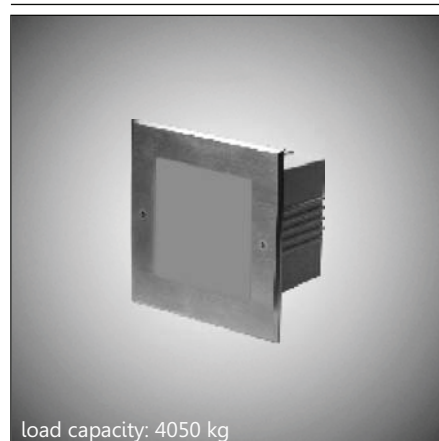
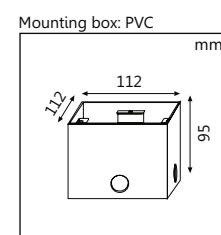
Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Ref Code	Watt	Volt	mA	Lm(±)
24.27.030.01.06	1x6W	24V DC	270	550
		240V AC	60	

Beam Angle-Code:
 18°-BA18
 25°-BA25
 40°-BA40

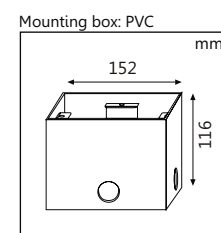
Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Ref Code	Watt	Volt	mA	Lm(±)	LxH
24.27.031.01.3.2	3.2W(25xSMD 3020)	240V AC	30	150	125x75
24.27.032.01.3.3	3.3W(36xSMD 3020)	240V AC	31		160x79

Beam Angle:120°

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)





buried up-lights

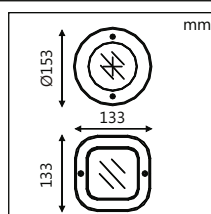
ELTE

Mounting: buried in ground/wall
Housing: die-cast aluminum
Trim: die-cast aluminum
Diffuser: tempered glass
Finish options:
 11-black matte
 *other RAL colors available on request

LED: Lumileds
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5600k
 CT60-6000k
 Amber
Note: *Other CRI/CCT
 available on request

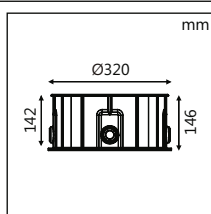
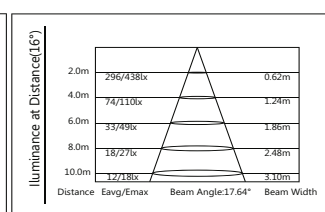
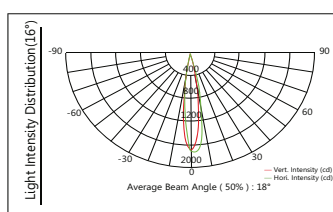
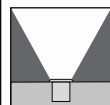
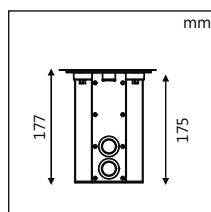
LED driver: integral,
 constant current
Volt AC: 220V-240V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - dimmable by DMX

Application:
 outdoors
 building facades
 monuments
 columns
Ambient Temp: -40°~+55°C



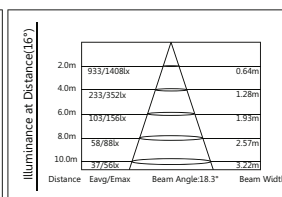
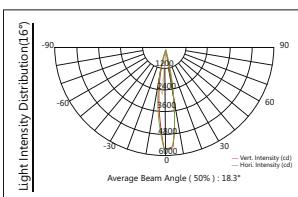
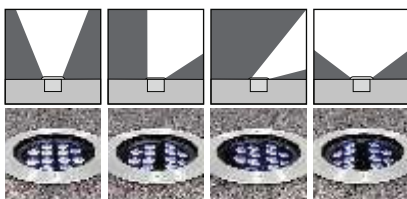
Ref Code	Watt	LED Qty	Lm(±)
24.33.033.01.12	12W	3pcs (WH)	550
24.33.033.02.12	12W	3 pcs (RGB)	

Beam Angle: 16°



Ref Code	Watt	LED Qty	Lm(±)
24.33.034.01.28	28W	12pcs (WH)	1700
24.33.034.02.46	46W	12pcs (RGB)	

Beam Angle: 16°

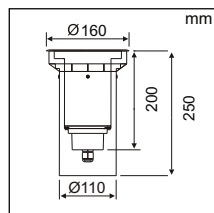


Mounting: buried in ground
Housing: die-cast aluminum 4mm thick with high corrosion resistance with electrostatic powder painting
Installation sleeve: polycarbonate
Reflector: aluminum
Diffuser: 12mm thick step tempered glass
Gasket: fire-resistant silicone
Trim: stainless steel
 1.4301/1.4401 (SUS304/SUS316)

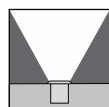
LED: CREE XT-E/COB
 Xlamp CXA (2520/2530)
CRI: Ra>80 (±3000k)
 Ra>75 (±4000k)
CCT: CT30-3000K/CT40-4000K
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 100-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

Application:
 outdoors
 building facades
 monuments
 columns
Ambient Temp: -40°~+55°C

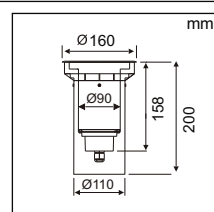
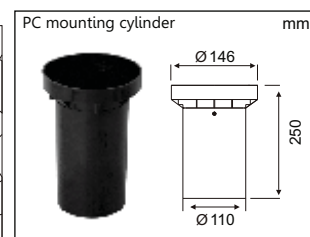
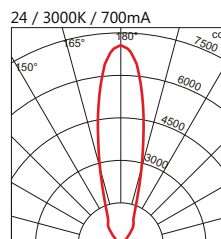


Ref Code 24.32.035.01.20 **Watt** 20W **mA** 500 **Lm(±)** 1900

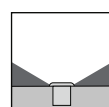


Beam Angle-Code:
 24°-BA24
 36°-BA36

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

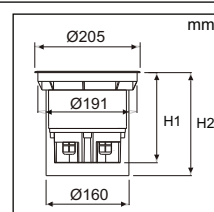
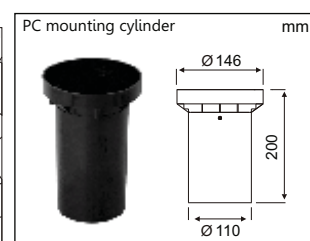
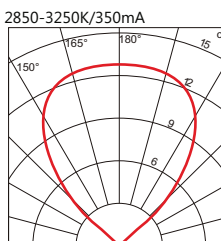


Ref Code 24.32.036.01.4.8 **Watt** 4x1.2W **mA** 350 **Lm(±)** 450

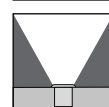


Beam Angle: 120°

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

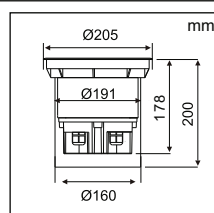
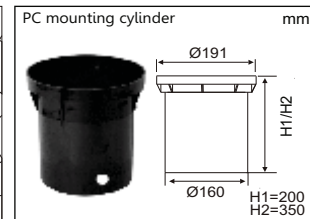
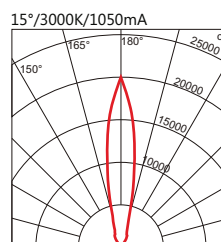


Ref Code 24.32.037.01.30 **Watt** 30W **mA** 700 **Lm(±)** 2800 **Size** H1=178 **LED** CXA 2520
 24.32.038.01.45 **Watt** 45W **mA** 1050 **Lm(±)** 4300 **Size** H1=330 **LED** CXA 2530

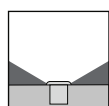


Beam Angle-Code:
 15°-BA15
 36°-BA36

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)

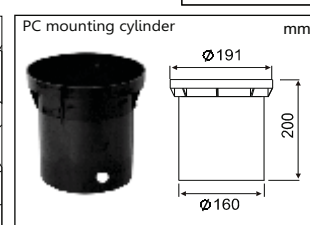
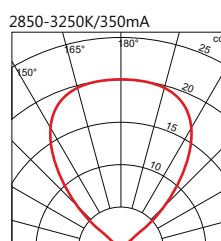


Ref Code 24.32.039.01.9.6 **Watt** 8x1.2W **mA** 350 **Lm(±)** 900



Beam Angle: 120°

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



buried up-lights

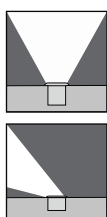
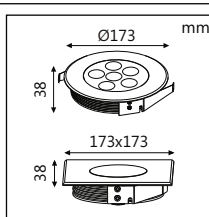
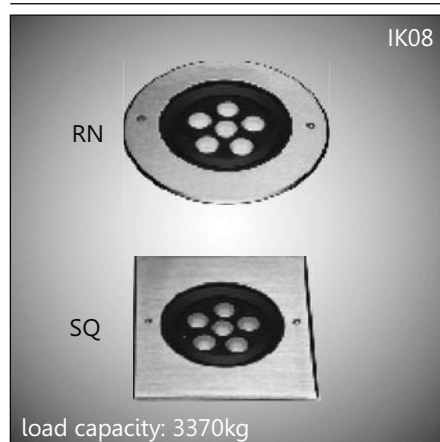
ELTE

Mounting: buried in ground
Housing: die-cast powder coated aluminum
Trim: hard chrome-plated stainless steel 1.4401 (SUS316)
Diffuser: step tempered glass
Gasket: molding shaped silicon seal

LED: COB/Osram
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

LED driver: external/internal
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m
 (RGBW) 5x0.5mm²/L=0.5m

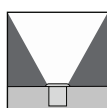
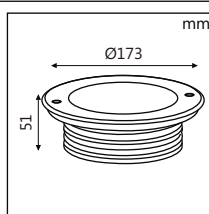
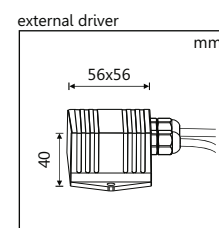
Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	mA	Lm(±)
24.27.040.01.12	6x2W	24V DC	541	800
24.27.040.02.12	6x2W	240V AC	64	
24.27.040.03.12	6x2W(RGB 3-in-1)	24V DC(R/G/B)	221/257/253	

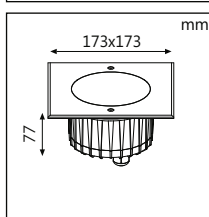
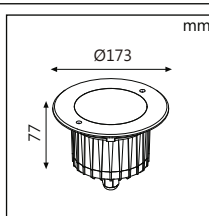
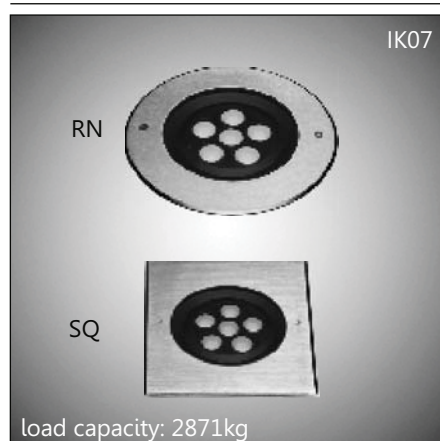
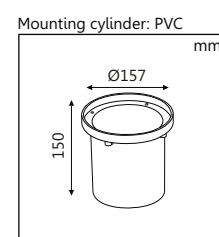
Lens-Code:
 symmetric-SYM
 asymmetric-ASM

Beam Angle-Code:
SYM
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
ASM
 35°-BA35
 45°-BA45
RGB
 30°-BA30



Ref Code	Watt	Volt	mA	Lm(±)
24.27.041.01.12	3x4W(RGBW 4-in-1)	24V DC	583	450

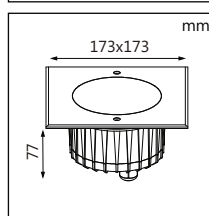
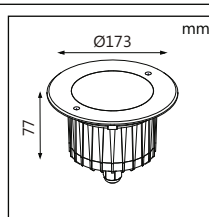
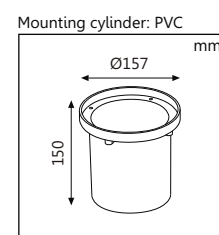
Beam Angle-Code:
RGB
 15°-BA15
 22°-BA22



Ref Code	Watt	Volt	mA	Lm(±)
24.27.042.01.12	6x2W(Single Color)	24V DC2	56	800
24.27.042.02.12	6x2W(Single Color)	240V AC	56	
24.27.042.03.12	6x2W(RGB 3-in-1)	24V DC/R/G/B	200/250/250	

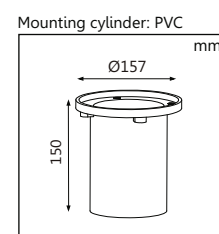
Lens-Code:
 symmetric-SYM
 asymmetric-ASM

Beam Angle-Code:
SYM
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
ASM
 35°-BA35
 45°-BA45
RGB
 30°-BA30



Ref Code	Watt	Volt	mA	Lm(±)
24.27.043.01.3.2	3.2W	24V DC	131	50
24.27.043.02.4.5	4.5W	240V AC	38	
24.27.043.03.3.5	3.5W (RGB 3-in-1)	24V DC(R/G/B)	38/53/54	

Beam Angle: >120°





buried up-lights

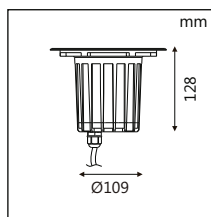
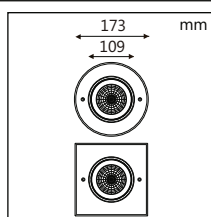
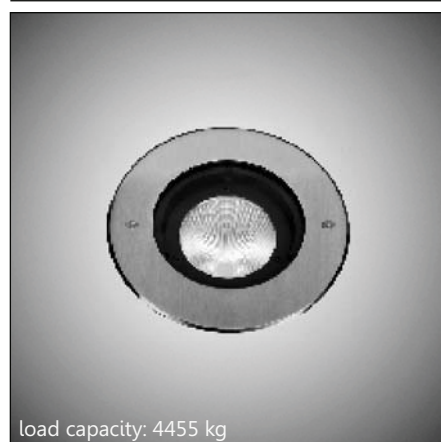
ELTE

Mounting: buried in ground/wall
Housing: die-cast powder coated aluminum
Stainless steel trim options:
 TM.SLS.1.4401 (SUS316)
Reflector: faceted aluminum
Diffuser: 10 mm step tempered glass
Gasket: molding shaped seal

LED: COB (Nichia/Osram)
CRI: Ra>80
CCT:
 CT27-2700K/CT30-3000k
 CT40-4000k/CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note: *Other CRI/CCT available on request

LED driver: integral constant current
Volt AC: 100-240V
Volt DC: 24V
Frequency: 50/60Hz
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
Ambient Temp: -35°~+55°C



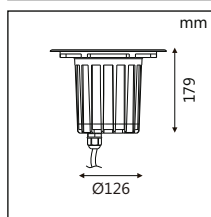
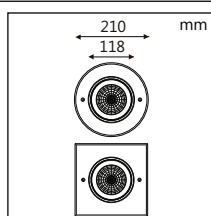
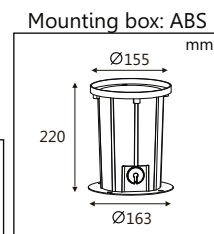
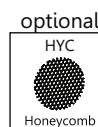
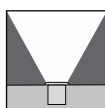
Ref Code	Watt	Volt	mA	Lm(±)
24.27.044.01.13.7	13.7W	24V DC	529	1250
24.27.044.02.13.7	13.7W	240V AC	64	

Beam Angle-Code:

12°-BA12
 22°-BA22
 35°-BA35
 55°-BA55

Power Cable:

(DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m
 (RGBW) 5x0.5mm²/L=0.5m



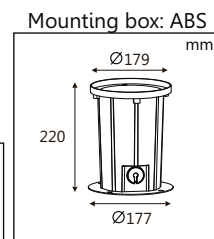
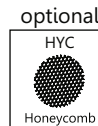
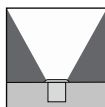
Ref Code	Watt	Volt	mA	Lm(±)
24.27.045.01.18	18W	24V DC	700	1600
24.27.045.02.18	18W	240V AC	85	

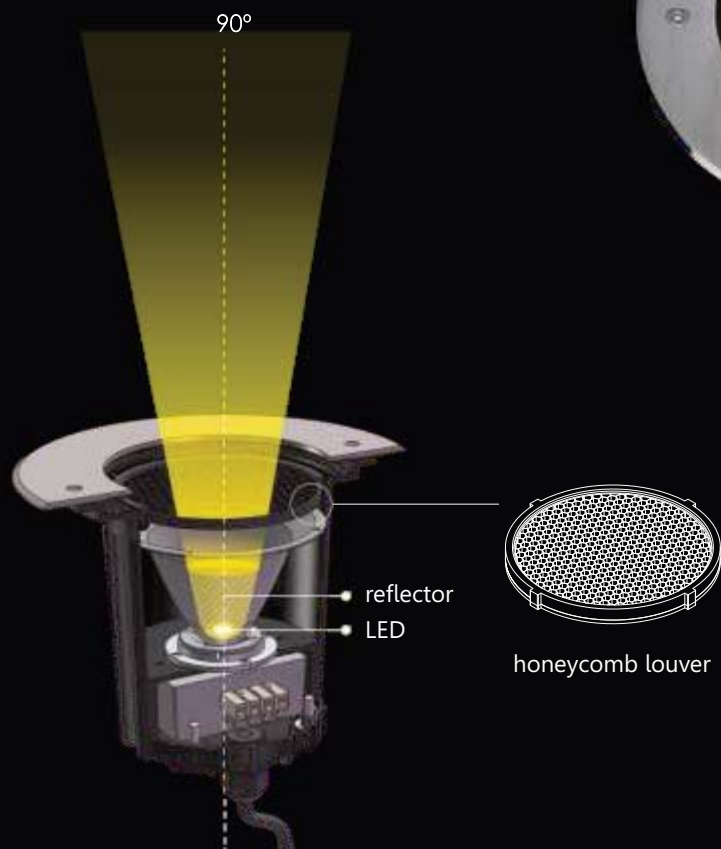
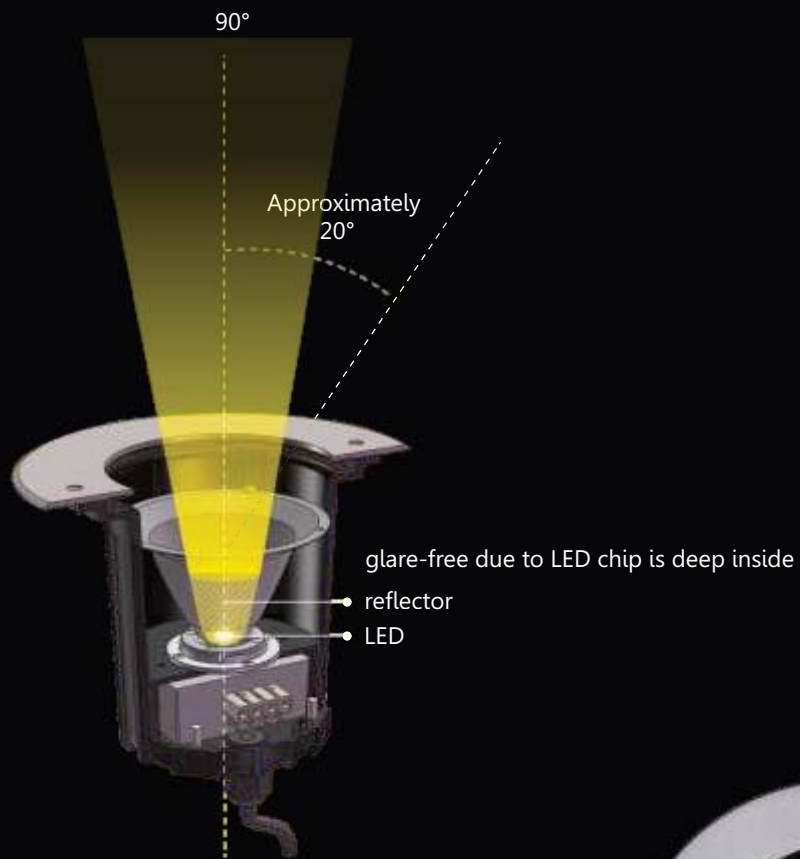
Beam Angle-Code:

10°-BA10
 22°-BA22
 38°-BA38

Power Cable:

(DC 24V) 2x1.0mm²/L=2.0m
 (AC 220V) 3x1.0mm²/L=2.0m
 (RGB) 4x0.75mm²/L=0.5m
 (RGBW) 5x0.5mm²/L=0.5m





buried up-lights

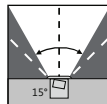
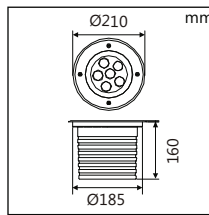
ELTE

Mounting: buried in ground/wall
Housing: high pressure die-cast aluminum
Stainless steel trim options:
 TM.SLS.1.4301/1.4401 (SUS304/SUS316)
Diffuser: 12mm tempered glass
Finish options:
 *RAL colors available on request

LED: CREE
CRI: Ra>80
 Ra>75 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

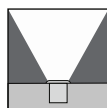
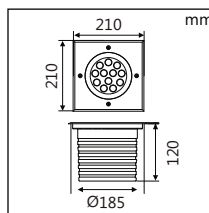
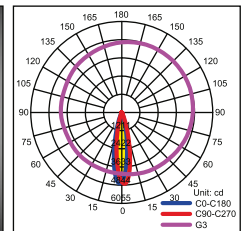
Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	LED Qty	LED Color	Lm(±)
24.26.046.01.14	14W	6Pcs	RGB	75
24.26.046.02.16	16W	7Pcs	Single	

Beam Angle-Code:

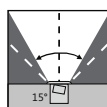
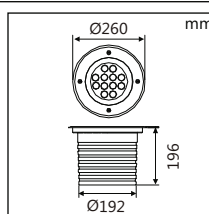
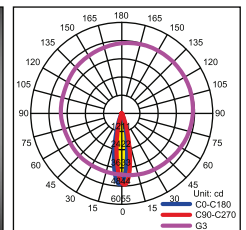
5°-BA5
 12°-BA12
 20°-BA20
 30°-BA30
 45°-BA45



Ref Code	Watt	LED Qty	LED Color	Lm(±)
24.26.047.01.14	14W	12Pcs	RGB/Single	75
24.26.047.02.22	22W	12Pcs	RGB/Single	

Beam Angle-Code:

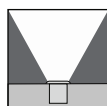
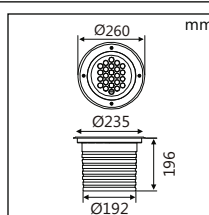
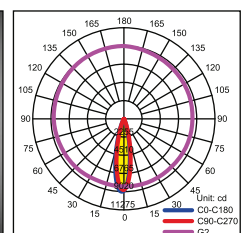
5°-BA5°
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45



Ref Code	Watt	LED Qty	LED Color	Lm(±)
24.26.048.01.14	14W	12Pcs	RGB/Single	75
24.26.048.02.32	32W	12Pcs	RGB/Single	

Beam Angle-Code:

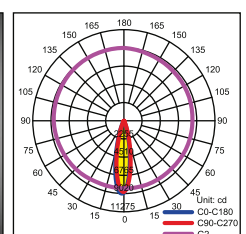
5°-BA5°
 12.5°-BA12.5
 020°-BA20
 030°-BA30
 045°-BA45



Ref Code	Watt	LED Qty	LED Color	Lm(±)
24.26.049.01.21	21W	18Pcs	RGB/Single	75
24.26.049.02.30	30W	18Pcs	RGB/Single	
24.26.049.03.30	30W	24Pcs	RGB/Single	
24.26.049.04.40	40W	24Pcs	RGB/Single	

Beam Angle-Code:

5°-BA5
 12°-BA12
 20°-BA20
 30°-BA30
 48°-BA48

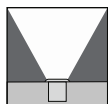
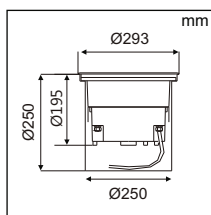


Mounting: buried in ground
Housing: die-cast aluminum 4mm thick with high corrosion resistance with electrostatic powder painting
Reflector: aluminum: matte (RF.MTT)
Diffuser: 12mm thick step tempered glass
Gasket: fire-resistant silicone
Stainless steel trim options:
 TM.SLS.1.4301/1.4401(SUS304/SUS316)

LED: CREE XT-E /COB
 Xlamp CXA (2520/2530)
CRI: Ra>80 (±3000k)
 Ra>75 (±4000k)
CCT: CT30-3000K/CT40-4000K
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

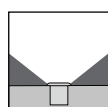
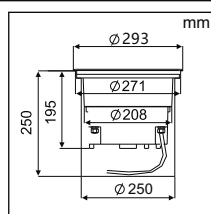
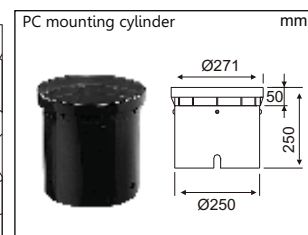
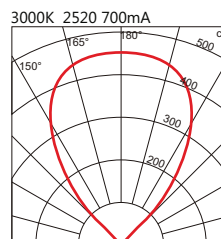
LED driver: integral
Volt AC: 100-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *Lm given in data is based on 4000k

Application:
 outdoors
 floors/decks/pathways
 landscapes
 building facades
Ambient Temp: -50°~+60°C



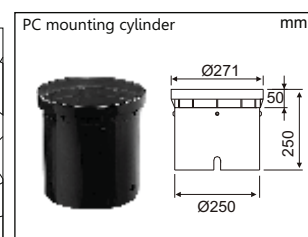
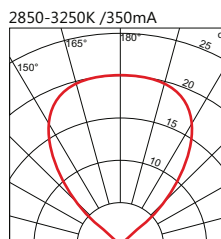
Beam Angle: 75°

Ref Code	Watt	mA	Lm(±)
24.32.050.01.30	30W	700	2800
24.32.050.02.45	45W	1050	4300

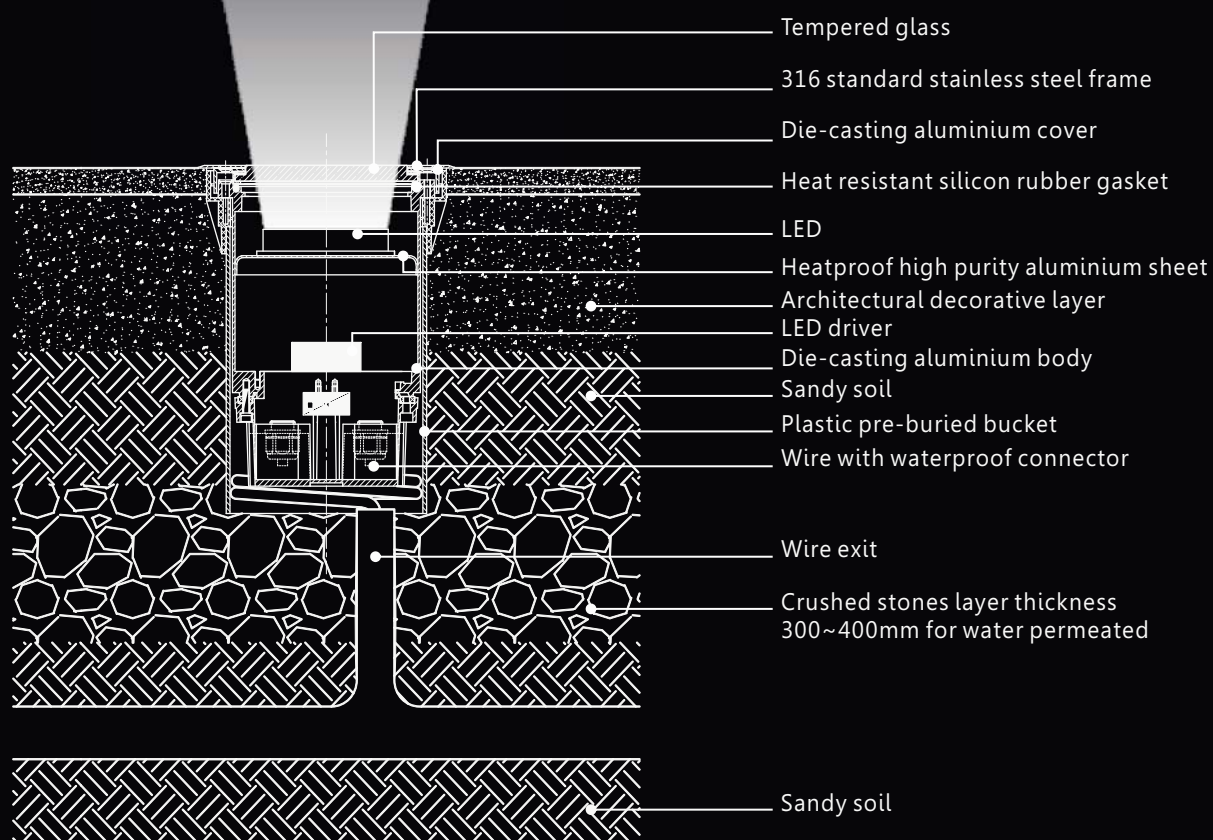


Beam Angle: 120°

Ref Code	Watt	mA	Lm(±)
24.32.051.01.9.6	8x1.2W	350	900



buried up-lights

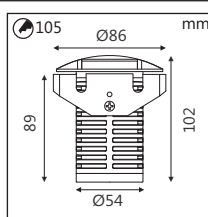


Mounting: buried in ground
Housing:
 - stainless steel 1.4401 (SUS316)
 - die-cast aluminum
Diffuser: polycarbonate
Gasket: silicone

LED: CREE
CRI: Ra>80
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/Amber
Note: *Other CRI/CCT
 available on request

LED driver: integral/ external
Volt DC: 12V/24V
Frequency: 50/60Hz
Power cable:
 Single Color: 2x1.0mm²/L=3.0m
 RGB: 4x0.75mm²/L=3.0m

Application:
 outdoors
 pathways/driveways
 parking areas
Ambient Temp: -35°~+55°C



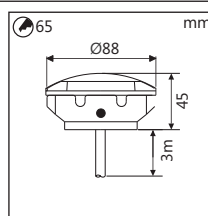
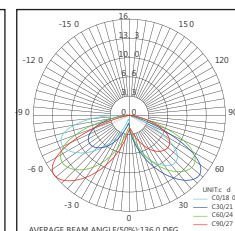
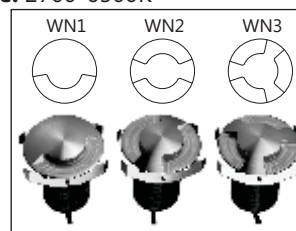
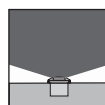
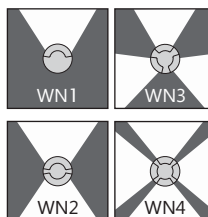
Ref Code
 25.25.001.01.07
 25.25.001.02.07

Watt
 7W
 7W

Volt
 24V DC
 220-240V AC

Lm(±)
 25/50/45

LED white CCT range: 2700-6500K



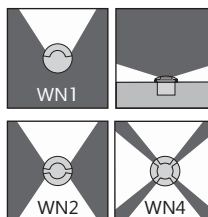
Ref Code
 25.31.002.01.03
 25.31.002.02.03

Watt
 3W (WH, CREE)
 3W (WH, CREE)

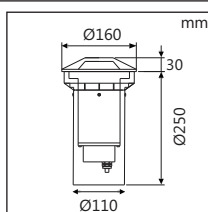
Volt
 CC, 350mA
 CV, 12/24V DC

Lm(±)
 270
 270

Lumen output: 90 lm/W



Note:
 fixed single colors available:
 red, green, blue, amber

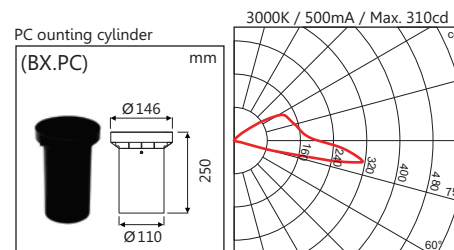
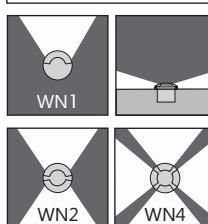


Ref Code
 25.32.003.01.20

Watt
 20W

mA
 500

Lm(±)
 2000



in-ground drive-over lights

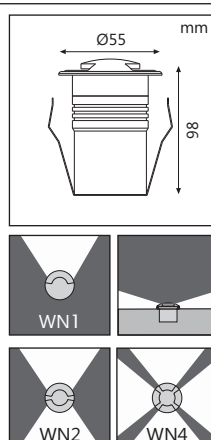
ELTE

Mounting: buried in ground
Housing:
 die-casting powder coated
 aluminum
Front cover:
 hard chrome-plated
 stainless steel 1.4401 (SUS316)

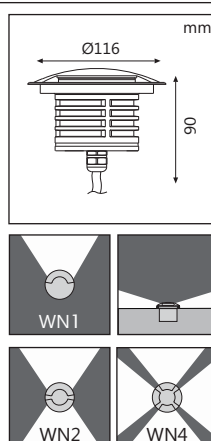
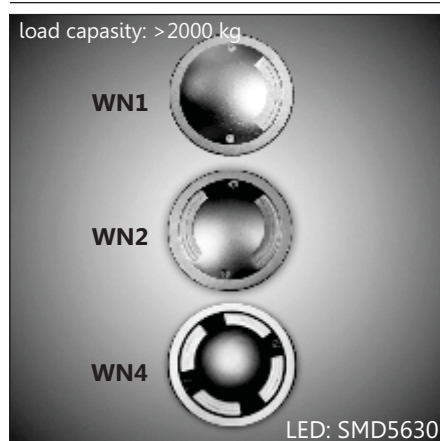
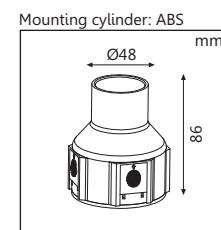
LED: SMD
CRI: Ra>80
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
Note: *Other CRI/CCT
 available on request

LED driver: integral/ external
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (AC240V) 3x1.0mm²/L=0.5m
 (DC24V) 2x1.0mm²/L=0.5m

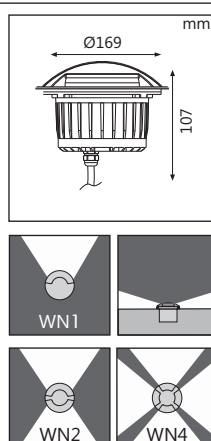
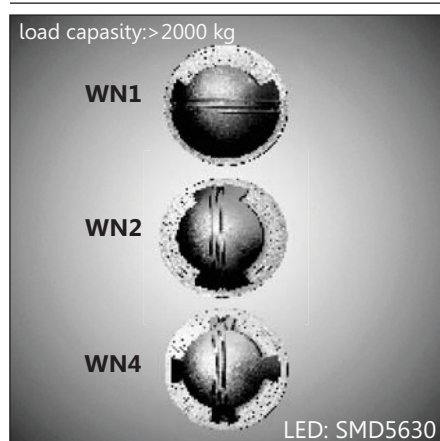
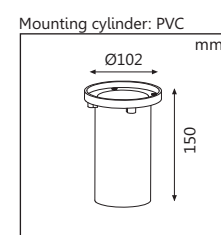
Application:
 outdoors
 pathways/driveways
 parking areas
Ambient Temp: -35°~+55°C



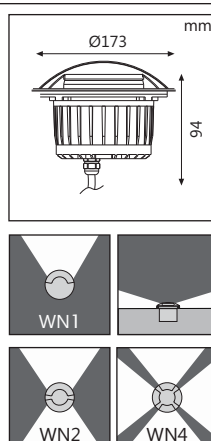
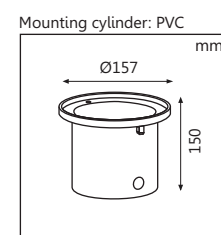
Ref Code	Watt	Volt	mA
25.27.004.01.02	2W	24V DC	110
25.27.004.02.02	2W	240V AC	28



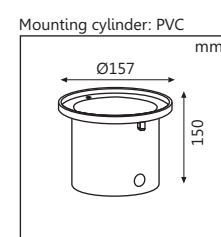
Ref Code	Watt	Volt	mA
25.27.005.01.03	6x0.5W	24V DC	126
25.27.005.02.03	6x0.5W	240V AC	33



Ref Code	Watt	Volt	mA
25.27.006.01.0.8(x1)	0.8W	24V DC	34/17
25.27.006.02.1.4(x1)	1.4W	240V AC	
25.27.006.03.1.6(x2)	1.6W	24V DC	68/27
25.27.006.04.2.9(x2)	2.9W	240V AC	
25.27.006.05.1.7(x4)	1.7W	24V DC	71/28
25.27.006.06.0.3(x4)	3W	240V AC	

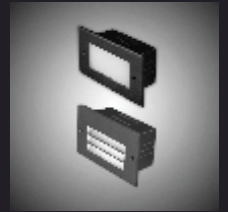


Ref Code	Watt	Volt	mA
25.27.007.01.03	6x0.5W	24V DC	126/33
25.27.007.02.03	6x0.5W	240V AC	126/33







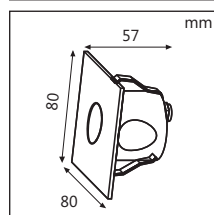
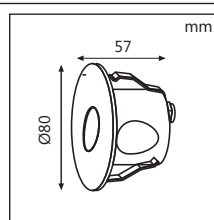
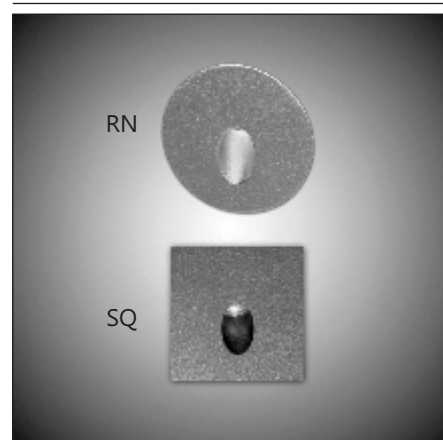


Mounting: recessed in wall
Housing and trim: die-casting aluminum
Fitting's finish options:
 11-black matte
 15- silver grey matte
 17-satin nickel
 21-brown
 *RAL colors available on request

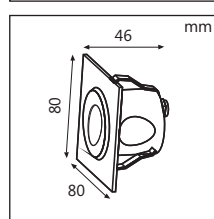
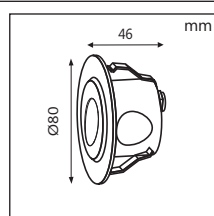
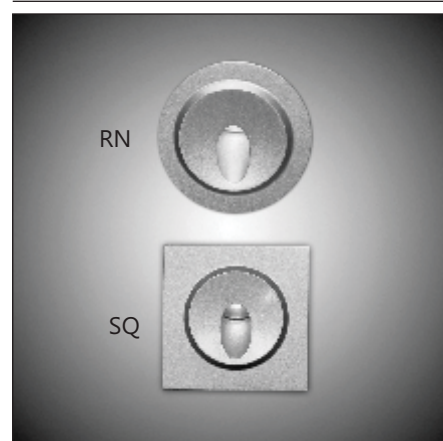
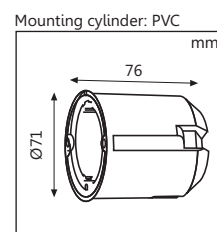
LED: CREE/ NICHIA
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/ Amber
Note: *Other CRI/CCT
 available on request

LED driver: expternal
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC24V) 2x1.0mm²/L=0.3m
 (AC240V) 3x1.0mm²/L=0.3m

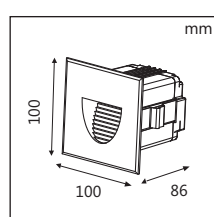
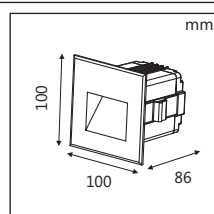
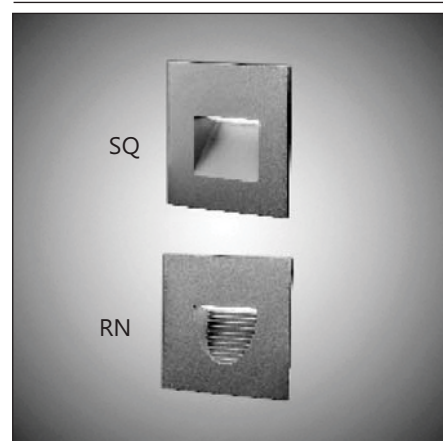
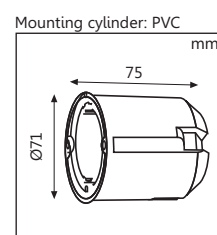
Application:
 outdoors:
 in vertical position
 stairs, walls, steps
Ambient Temp: -35°~+55°C



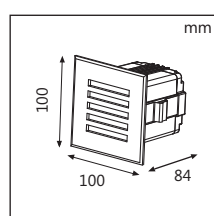
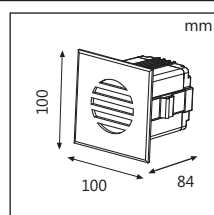
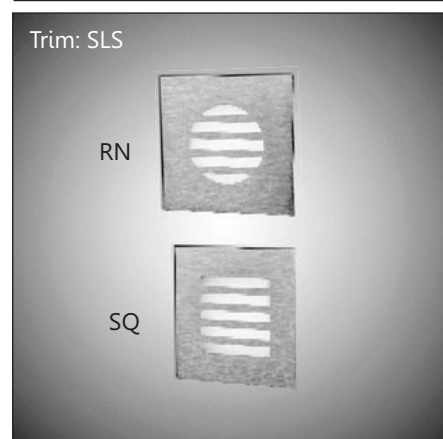
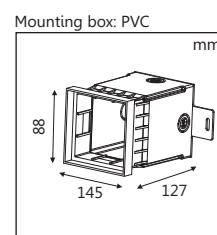
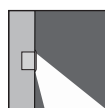
Ref Code	Watt	Volt	mA	Lm(±)
27.27.001.01.01	1W	24V DC	59	40
27.27.001.02.01	1W	240V AC	16	



Ref Code	Watt	Volt	mA	Lm(±)
27.27.002.01.03	3W	24V DC	110	70
27.27.002.02.03	3W	240V AC	28	

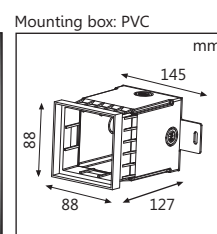
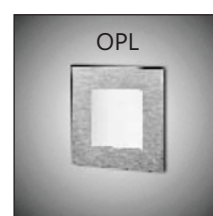
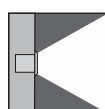


Ref Code	Watt	Volt	mA	Lm (±)
27.27.003.01.02	2W	240V AC	58	120



Ref Code	Watt	Volt	mA	Lm (±)
27.27.004.01.3.2	3.2W	240V AC	55	80

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



recessed wall lights

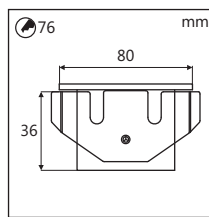
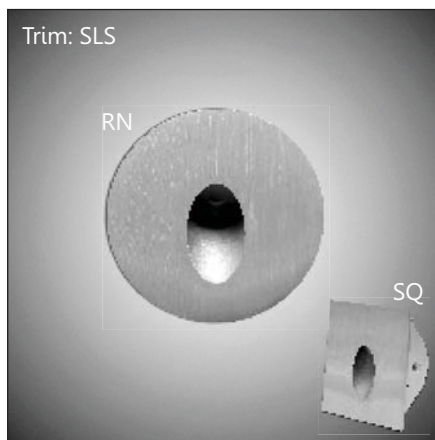
ELTE

Mounting: recessed in wall
Housing: die-cast aluminum
Trim: - 1.4401 (SUS316) (TM.SLS)
 - die-cast aluminum (TM.DC)
Fitting's finish options:
 11-black matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT60-6000k
 Amber
Note: *Other CRI/CCT
 available on request

LED driver: expternal
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
Note: *Lm given in data is
 based on 3000k

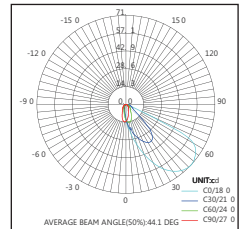
Application:
 outdoors:
 in vertical position
 stairs, walls, steps
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	Lm(±)
27.25.005.01.02	2W	12V DC	82
27.25.006.01.03	3W	24V DC	200

LED white CCT range: 2700-6500K

Stainless steel trim options:
 TM.SLS.1.4301(SUS304)
 TM.SLS.1.4401(SUS316)



Accessories

TM.DC (die-cast aluminum trim)

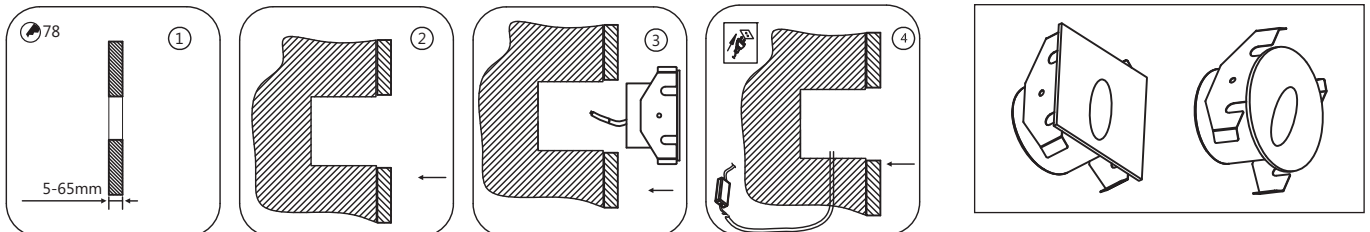


(1) without installation box

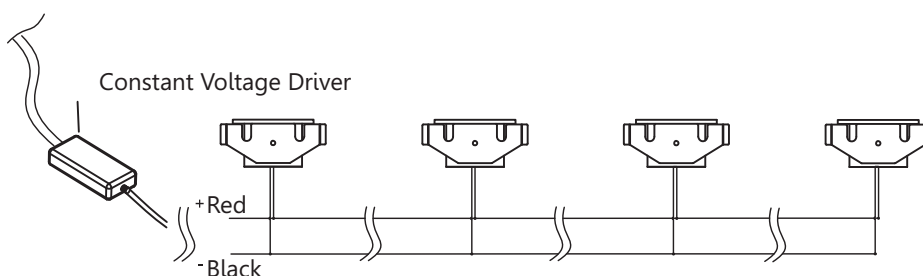
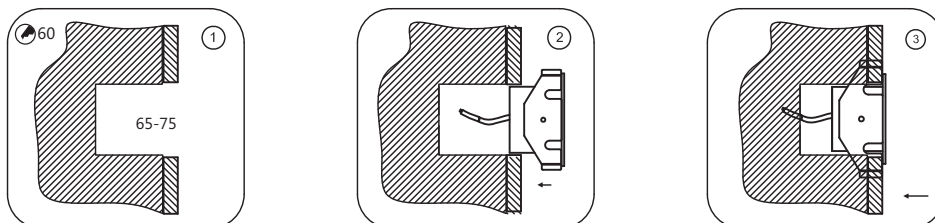


(2) with PC installation box

Installation Instructions (1)



Installation Instructions (2)





recessed wall lights

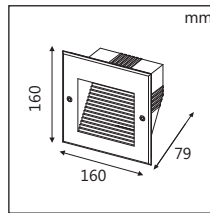
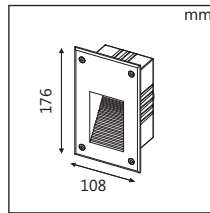
ELTE

Mounting: recessed in wall
Housing: die-cast aluminum, grey powder coated with high corrosion resistance
Trim: die-cast aluminum
Diffuser: tough polycarbonate
Gasket: silicone
 01-white matte
 11-black matte
 15-grey matte

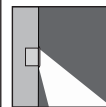
LED: SMD 3528
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/Amber
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 120-240V
LED driver options:
 constant current
 constant voltage

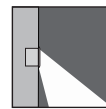
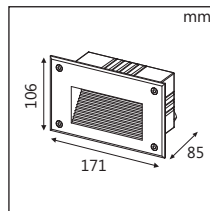
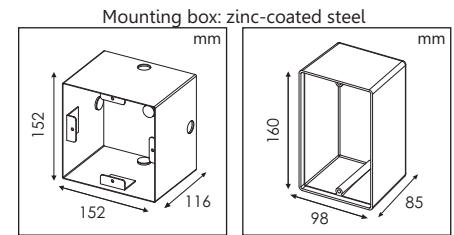
Application:
 outdoors:
 in vertical position
 stairs, walls, steps
Ambient Temp:
 -35°~+55°C



Ref Code	Watt	Volt	mA	Lm(±)
27.27.007.01.02	2W	240V AC	18	50
27.27.008.01.2.5	2.5W	240V AC	23	55

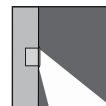
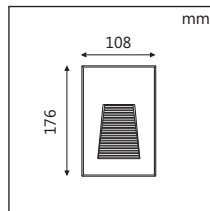
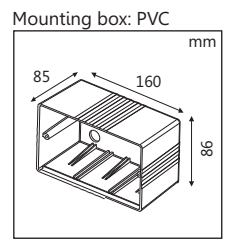


Beam Angle: 120°

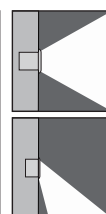
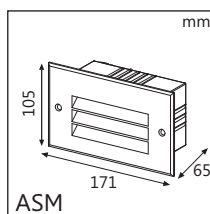
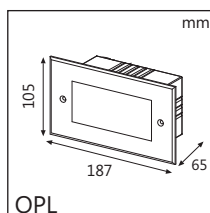
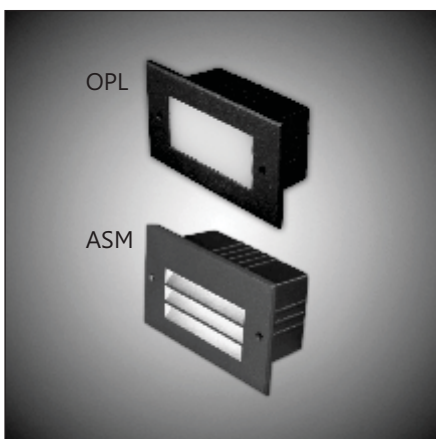
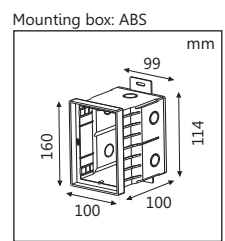


Beam Angle: 120°

Ref Code	Watt	Volt	mA	Lm(±)
27.27.009.01.03	3W	240V AC	28	70

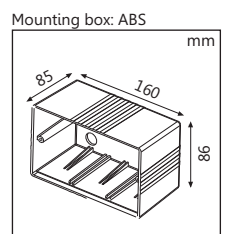


Ref Code	Watt	Volt	mA	Lm(±)
27.27.010.01.3.6	18x0.2W	240V AC	57	55



Beam Angle: >120°

Ref Code	Watt	Volt	mA	Lm(±)
27.27.011.01.03	2.9W	240V AC	25	60

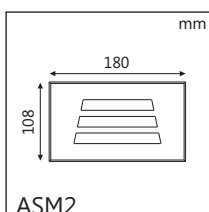
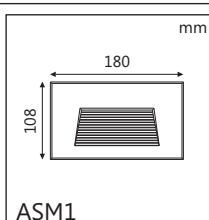
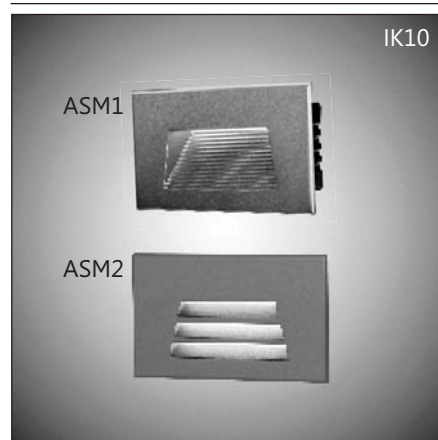


Mounting: recessed in wall
Housing: die-cast aluminum, powder coated with high corrosion resistance
Trim: - stainless steel 1.4401 (SUS316) (TM.SLS)
 - die-cast aluminum powder coated (TM.DC)
Finish options:
 01-white matte/ 11-black matte
 13- grey matte/ 15- silver grey matte
 *RAL colors available on request

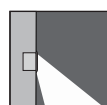
LED: SMD
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/Amber
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Power Cable:
 (DC24V) 2x1.0mm²/L=0.3m
 (AC240V) 3x1.0mm²/L=0.3m
 (RGB) 4x0.75mm²/L=0.5m

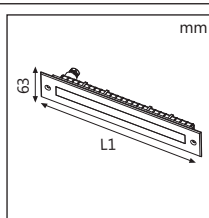
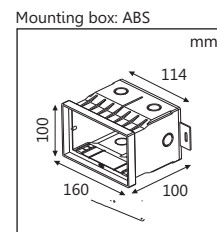
Application:
 outdoors:
 in vertical position
 stairs, walls, steps
Ambient Temp:
 -35°~+55°C



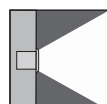
Ref Code	Watt	Volt	mA	Lm(±)
27.27.012.01.04	20x0.2W	240V AC	60	100
27.27.012.02.3.6	36x0.1W	240V AC	55	



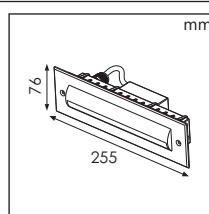
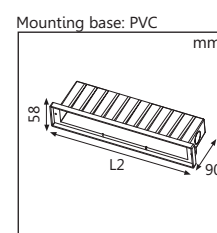
Beam Angle: >120°



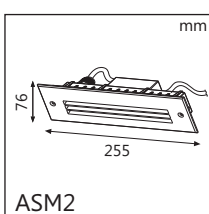
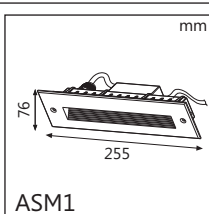
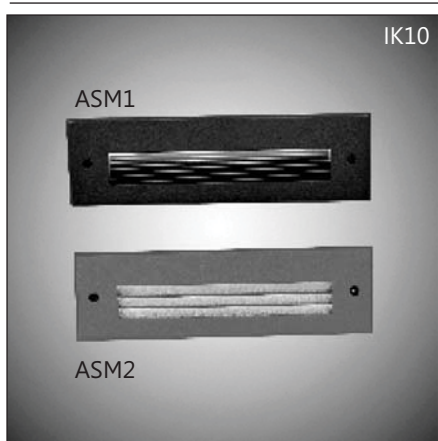
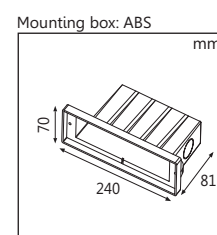
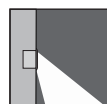
Ref Code	Watt	Volt/mA	mA	LxL1
27.27.013.01.2.4	2.4W	24V DC	100	195x180
27.27.013.02.3.5	3.5W(10xSMD5050)	240V AC	31	
27.27.013.03.2.7	2.7W(RGB 3-in-1)	24V DC/(R/G/B)	38/38/38	
27.27.014.01.4.8	4.8W	24V DC	200	328x313
27.27.014.02.6.4	6.4W(20xSMD5050)	240V AC	51	
27.27.014.03.5.4	5.4W(RGB 3-in-1)	24V DC/(R/G/B)	76/76/76	



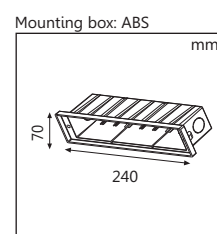
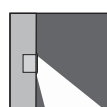
Beam Angle: >120°



Ref Code	Watt	Volt	mA	Lm
27.27.015.01.4.8	4.8W(28xSMD5630)	24V DC	200	Cool white=43
27.27.015.02.6.7	6.7W(28xSMD5630)	240V DC	52	Warm white=42



Ref Code	Watt	Volt/mA	mA	Lm(±)
27.27.016.01.4.8	4.8W(15xSMD5630)	24V DC/200	200	100
27.27.016.02.6.1	6.1W(15xSMD5630)	240V DC/49	49	
27.27.016.03.5.3	5.3W(54xSMD3528)	24V DC/220	220	
27.27.016.04.6.5	6.5W(54xSMD3528)	240V DC/52	52	



recessed wall lights

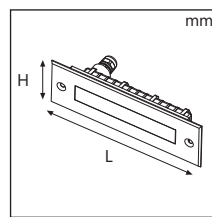
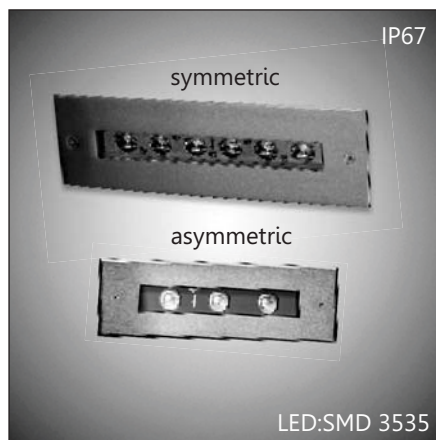
ELTE

Mounting: recessed in wall
Housing: die-cast powder coated aluminum
Trim: stainless steel 1.4401 (SUS316)
Diffuser: tempered glass/ polycarbonate
Gasket: molding shaped silicone
Note:*RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT30-3000k/CT40-4000k
 CT50-5000k/CT60-6000k
 RGB
Note: *Other CRI/CCT
 available on request

LED driver: external
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 (DC24V) 2x1.0mm²/L= 0.5
 (AC240V) 3X1.0mm²/L=0.5m
 (RGB) 4X0.75mm²/L=2.0m

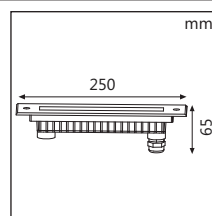
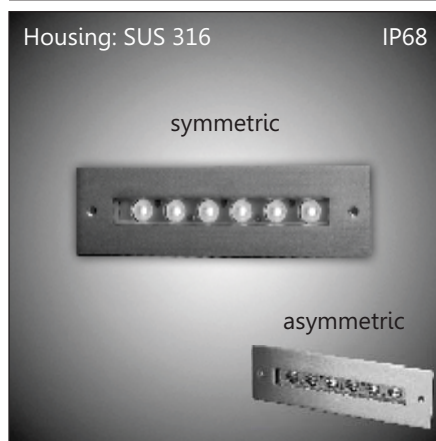
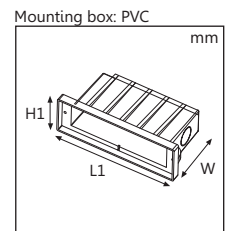
Application:
 outdoors
 in vertical position
 stairs, walls, steps
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	mA	L/L1xH/H1xW
27.27.017.01.06	3x2W	24V DC	260	180/195x58/63x90
27.27.017.02.06	3x2W	240V AC	46	
27.27.017.03.06	3x2W (RGB)	24V DC	70/150/150	
27.27.018.01.12	6x2W	24V DC	550	313/328x58/63x90
27.27.018.02.12	6x2W	240V AC	57	
27.27.018.03.12	6x2W(RGB)	24V DC	200/250/250	

Lumen output: 97 Lm/W

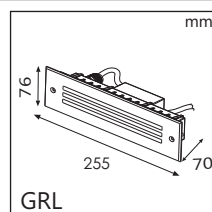
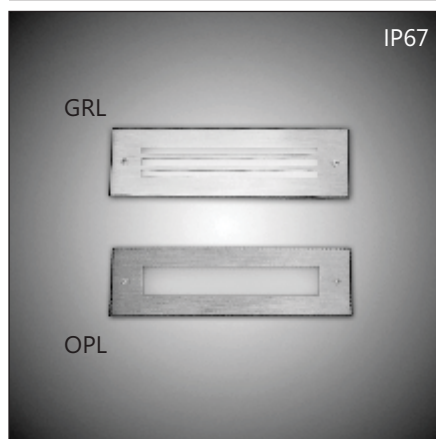
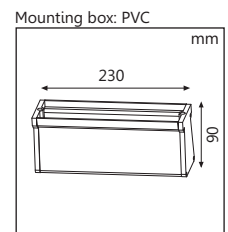
Beam Angle-Code:
symmetric(SYM) 30°-BA30
Asymmetric (ASM): 35°-BA35
 45°-BA45



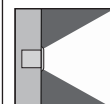
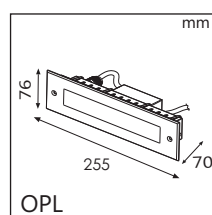
Ref Code	Watt	Volt	mA	Lm(±)
27.27.019.01.12	6x2W	24V DC	491	550
27.27.019.02.12	6x2W(RGB 3-in-1)	24V DC(R/G/B)	200/250/250	

Note: fitting should be primarily used under water
 not more than 1m deep

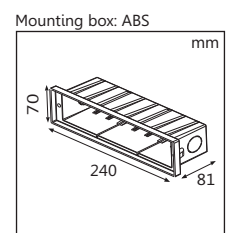
Beam Angle-Code:
symmetric(SYM) 30°-BA30
asymmetric(ASM) 35°-BA35
 50°-BA50
RGB 30°-BA30



Ref Code	Watt	Volt	mA	Lm(±)
27.27.020.01.5.3	5.3W(54xSMD 3528)	24V DC	220	140
27.27.020.02.6.5	6.5W(54xSMD 3528)	240V AC	52	



Beam Angle: >120°





recessed wall lights

ELTE

Mounting: recessed in wall

Housing: extruded aluminum, 1.5mm thick with high corrosion resistance with electrostatic powder painting

Installation box: extruded aluminum

Diffuser: 8mm thick tempered glass

Gasket: silicone

Trim: stainless steel 1.4401 (SUS316)

Lens of LED: optical PMMA

LED: CREE XT-E

CRI: Ra>80 (±3000k)

Ra>70 (±4000k)

CCT: CT30-3000K/CT40-4000K

Lumen range:

93.9-100 lm/w (±3000k)

114-122 lm/w (±4000k)

Note: *Other CRI/CCT available on request

LED driver: integral

Volt AC: 220-240V

Current: 350mA

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Note: *Lm given in data is based on 4000k

Application:

in vertical/horizontal position stairs, walls, steps

Ambient Temp: -50°~+60°C

Fitting's operational temp: <40°(tested at +25°)

3 years warranty

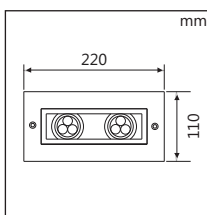
F

⊕

CE

IP67

LED: CREE XT-E



Ref Code

27.32.021.01.7.2

Watt

2x(3x1.2W)

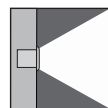
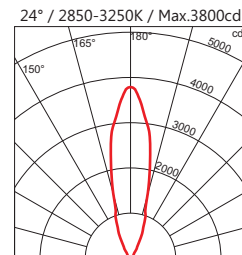
mA

350

Lm(±)

650

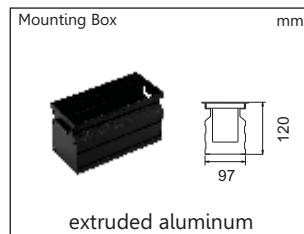
Beam Angle: 24°



Stainless steel trim options:

TM.SLS.1.4301(SUS304)

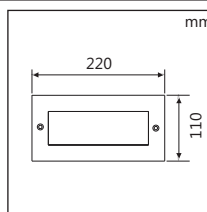
TM.SLS.1.4401(SUS316)



LED: CREE XT-E



opal diffuser



Ref Code

27.32.022.01.4.8

Watt

4x1.2W

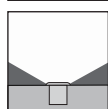
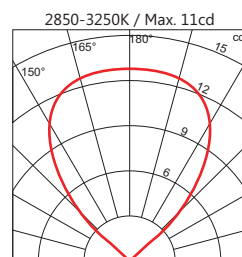
mA

350

Lm(±)

450

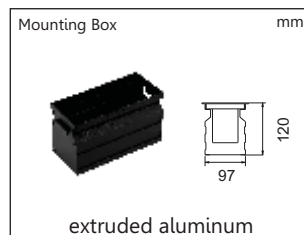
Beam Angle: 120°



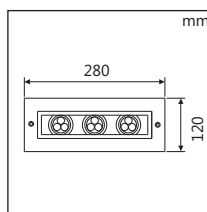
Stainless steel trim options:

TM.SLS.1.4301(SUS304)

TM.SLS.1.4401(SUS316)



LED: CREE XT-E



Ref Code

27.32.023.01.10.8

Watt

3x(3x1.2W)

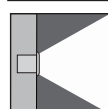
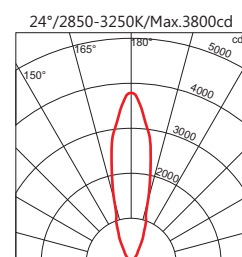
mA

350

Lm(±)

970

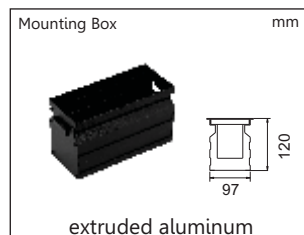
Beam Angle: 24°



Stainless steel trim options:

TM.SLS.1.4301(SUS304)

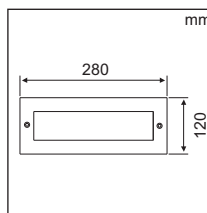
TM.SLS.1.4401(SUS316)



LED: CREE XT-E



opal diffuser



Ref Code

27.32.024.01.7.2

Watt

4x1.8W

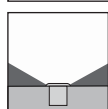
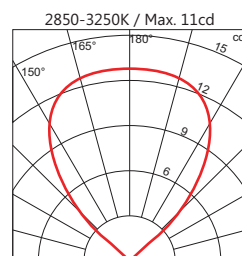
mA

350

Lm(±)

650

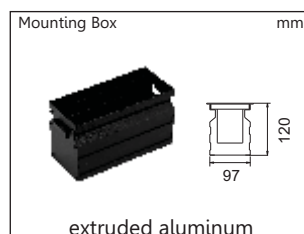
Beam Angle: 120°



Stainless steel trim options:

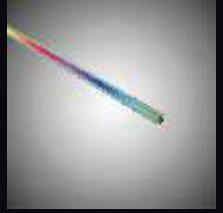
TM.SLS.1.4301(SUS304)

TM.SLS.1.4401(SUS316)

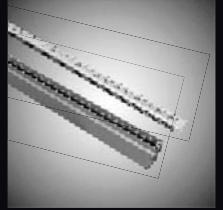




super-slim recessed linear lights



recessed linear lights



super-slim surface mounted linear lights



surface mounted linear lights

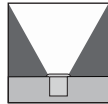
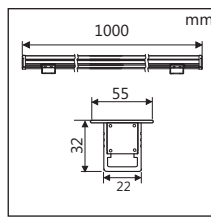
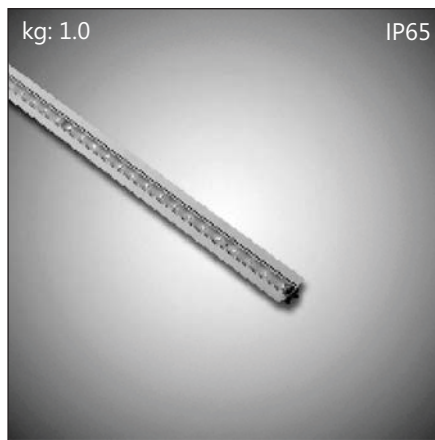


Mounting: buried in ground
Housing: aluminum alloy with anodizing treatment
Diffuser: - PMMA
 - high strength toughened glass
Finish options: 13-grey matte
 * RAL colors available on request
Note: *custom sizes/wattage available on request

LED: CREE/EPISTAR
CRI: Ra>70
CCT: CT40-4000k
 CT50-5000k/CT60-6000k
 RGB
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver: external
Volt AC: 240V
Volt DC: 24-36V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/ private/residential streets
 parks
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)
30.26.001.01.10	10W	24V DC	48Pcs	Single	75

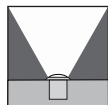
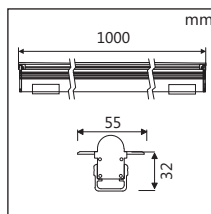
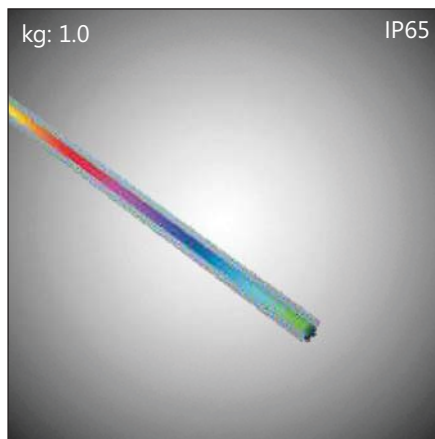
LED color options:

RGB (used with DMX 512)

Single colors: white, red, green, blue

Note: * Other length is available on request

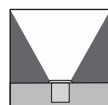
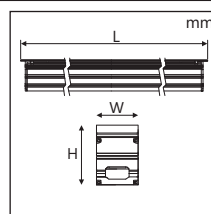
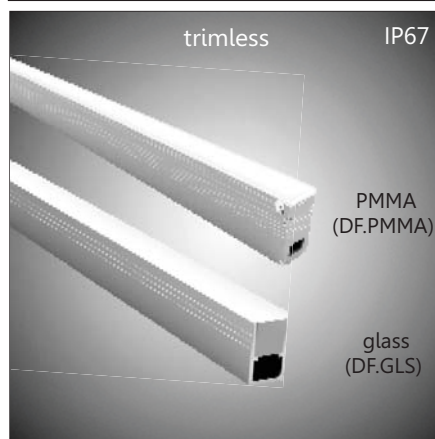
Beam Angle: >120°



Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)
30.26.002.01.10	10W	24V DC	48Pcs	RGB	75

Beam Angle: >170°

Note: * Other length is available on request



Ref Code	Watt	Volt	LED Qty	LED Color	LxWxH	kg
30.26.003.01.08	8W	CC 24V DC	78pcs	Single	500x30x50	1.7
30.26.003.02.15	15W	CC 24V DC	156pcs	Single	1000x30x50	2.0
30.26.003.03.05	5W	CC 24V DC	TBA	Single	500x30x50	1.7
30.26.004.01.08	8W	CC 24V DC	78 pcs	Single	500x50x90	4.0
30.26.004.02.11	11W	CC 24V DC	48 pcs	RGB	1000x50x90	4.0
30.26.004.03.15	15W	CC 24V DC	156 pcs	Single	1000x50x90	4.0
30.26.004.04.10	10W	CC 24V DC	TBA	Single	1000x50x90	4.0

Notes:

* 30.26.003 is with PMMA diffuser only

* 30.26.004 is with glass diffuser only

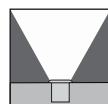
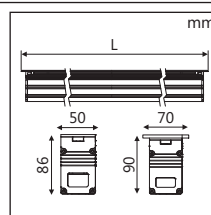
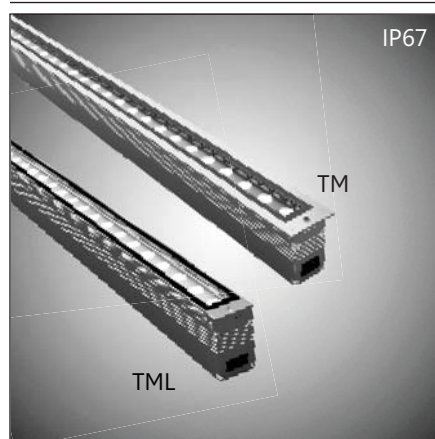
* surface mounted option available on request:
 add **SFM** to the main code

LED color options:

RGB (used with DMX 512)

Single colors: white, red, green, blue

Beam Angle: >120°



Ref Code	Watt	Volt	LED Qty	LED Color	L	kg
30.26.005.01.11	11W	CC 24V DC	9Pcs	Single/RGB	500	3.0
30.26.006.01.11	11W	CC 24V DC	48Pcs	Single/RGB	1000	3.0
30.26.006.02.21	21W	CC 24V DC	18Pcs	Single/RGB	1000	3.8
30.26.006.03.28	28W	CC 36V/24V	24Pcs	Single/RGB	1000	3.5
30.26.006.04.42	42W	CC 24V DC	36Pcs	Single/RGB	1000	4.0

Beam Angle-Code:

5°-BA05

12.5°-BA12.5

20°-BA20

30°-BA30

45°-BA45

60°-BA60

15°x30°-BA15x30

120°-BA120 (11W, 1m)

LED color options:

RGB (used with DMX 512)

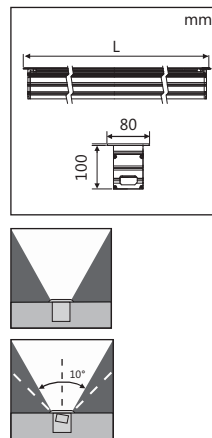
Single colors: white, red, green, blue

Mounting: buried in ground
Housing: extruded powder coated aluminum
 aluminum alloy
 anodizing treatment
Trim: stainless steel 1.4301 (SUS304)
 die-cast aluminum
Gasket: glass and housing silicon
Diffuser: tempered glass
Note: *Other CRI/CCT available on request

LED: CREE/ Epistar
CRI: Ra>80
CCT:
 CT30-3000k/CT40-4000k
 CT50-5000k/CT60-6000k
 RGB
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

LED driver: external
Volt AC: 240V
Volt DC: 24-36V
Frequency: 50/60Hz
Power Cable:
 (DC24V) 2X1.0mm²/L=0.5m
 (RGB) 3X0.75mm²/L=0.5m
Note: *custom sizes/wattage
 available on request

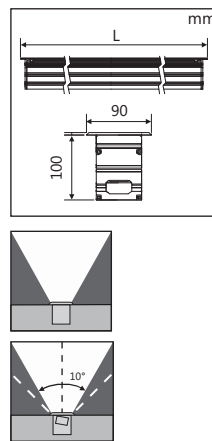
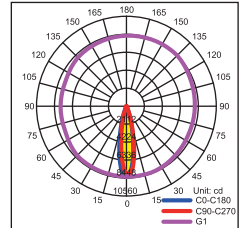
Application:
 outdoors
 public/ private/residential
 streets
 parks
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	LED Qty	LED Color	L	kg
28.26.001.01.11	11W	CC/DMX 24V DC	9Pcs	Single/RGB	500	5.0
28.26.002.01.11	11W	CC/DMX 24V DC	48Pcs	Single/RGB	1000	6.4
28.26.002.02.21	21W	CC/DMX 24V DC	18Pcs	Single/RGB	1000	6.4
28.26.002.03.28	28W	CC/DMX 36V DC	24Pcs	Single/RGB	1000	6.4
28.26.002.04.42	42W	CC/DMX 24V DC	36Pcs	Single/RGB	1000	6.4

Beam Angle-Code:

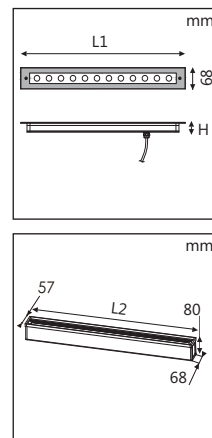
5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45
 60°-BA60
 15°x30°-BA15x30
 120°-BA120 (11W, L-1000mm)



Ref Code	Watt	Volt	LED Qty	LED Color	L	kg
28.26.003.01.11	11W	CC/DMX 24V DC	9Pcs	Single/RGB	500	4.8
28.26.004.01.11	11W	CC/DMX 24V DC	48Pcs	Single/RGB	1000	6.0
28.26.004.02.21	21W	CC/DMX 24V DC	18Pcs	Single/RGB	1000	6.0
28.26.004.03.28	28W	CC/DMX 36V DC	24Pcs	Single/RGB	1000	6.0
28.26.004.04.42	42W	CC/DMX 24V DC	36Pcs	Single/RGB	1000	6.0

Beam Angle-Code:

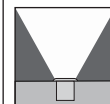
5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45
 60°-BA60
 15°x30°-BA15x30
 120°-BA120 (11W, L-1000mm)



Ref Code	Watt	Volt	mA	Lm(±)
28.27.005.01.18	12x1.5W(Single)	24V DC	910	2100
28.27.005.02.18	12x1.5W(Single)	240V AC	79	
28.27.005.03.18	12x1.5W(RGB 3-in-1)	24V DC(R/G/B)	275/302/303	
28.27.006.01.36	24x1.5W(Single)	24V DC	1826	
28.27.006.02.36	24x1.5W(Single)	240V AC	156	
28.27.006.03.36	24x1.5W(RGB 3-in-1)	24V DC(R/G/B)	537/606/602	

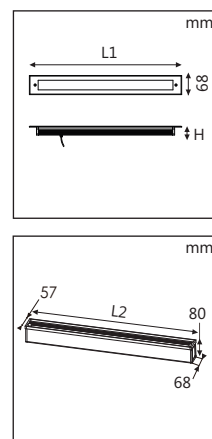
L1xHxL2

549x33x137
 1025x32x138

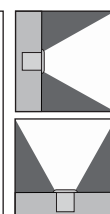


Beam Angle-Code:

symmetric (SYM) RGB
 20°-BA20 30°-BA30



Ref Code	Watt	Volt	mA	Lm(±)	L1xHxL2
28.27.007.01.14.4	48x0.3W	24V DC	555	550	549x33x137
28.27.008.01.28.8	96x0.3W	24V DC	1108		1025x32x138



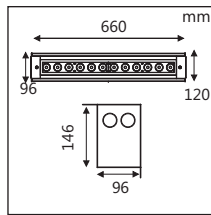
Beam Angle: 120°

Mounting: buried in ground
Housing:
 - stainless steel 1.4401 (SUS316)
 - die-cast powder coated aluminum
 - extruded powder coated aluminum
Diffuser: toughened glass
Gasket: molding shaped silicone
Finish options: *RAL colors available on request
Note: *custom sizes/wattage available on request

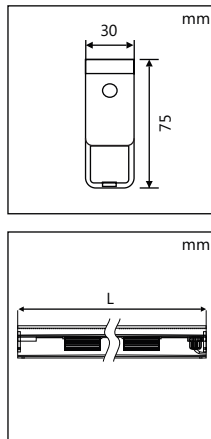
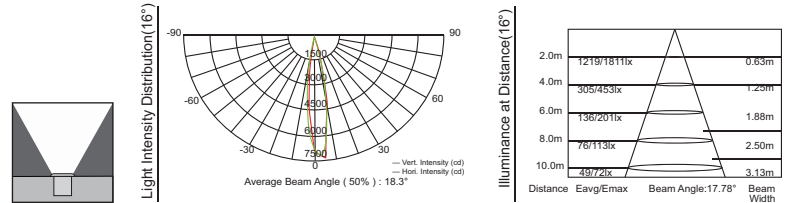
LED: Lumileds/2835SMD
CRI: Ra>80
CCT:
 CT22-2200k/CT30-3000k
 CT40-4000k/CT45-4500k
 CT50-5000k/CT65-6500k
 RGB
Note: *Other CRI/CCT available on request

LED driver: integral, constant current
Volt AC: 240V
Frequency: 50/60Hz
Power Cable:
 (AC240V) 3X1.0mm²/L=0.5m
 (RGB) 4X0.75mm²/L=2.0m

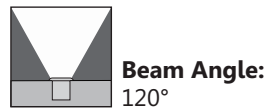
Application:
 outdoors
 public/private/residential streets
 parks
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Lm(±)	LED Qty	kg
28.33.009.01.30	30W	1700	12pcs (WH)	3.5
28.33.009.02.43	43W	1300	12pcs (RGB)	3.5



Ref Code	Watt	Lm(±)	LED color	LED(SMD)	L,mm
30.43.007.01.04	3.78W	115	WH	2835	315
30.43.007.02.08	7.56W	230	WH	2835	315
30.43.008.01.06	6W	180	WH	2835	500
30.43.008.02.12	12W	360	WH	2835	500
30.43.009.01.12	12W	360	WH	2835	1000
30.43.009.02.24	24W	720	WH	2835	1000
30.43.010.01.15	14.4W	440	WH	2835	1200
30.43.010.02.29	28.8W	870	WH	2835	1200
30.43.011.01.05	4.25W		RGB	5050	300
30.43.012.01.08	7.2W		RGB	5050	500
30.43.013.01.15	14.4W		RGB	5050	1000
30.43.014.01.18	17.28W		RGB	5050	1212



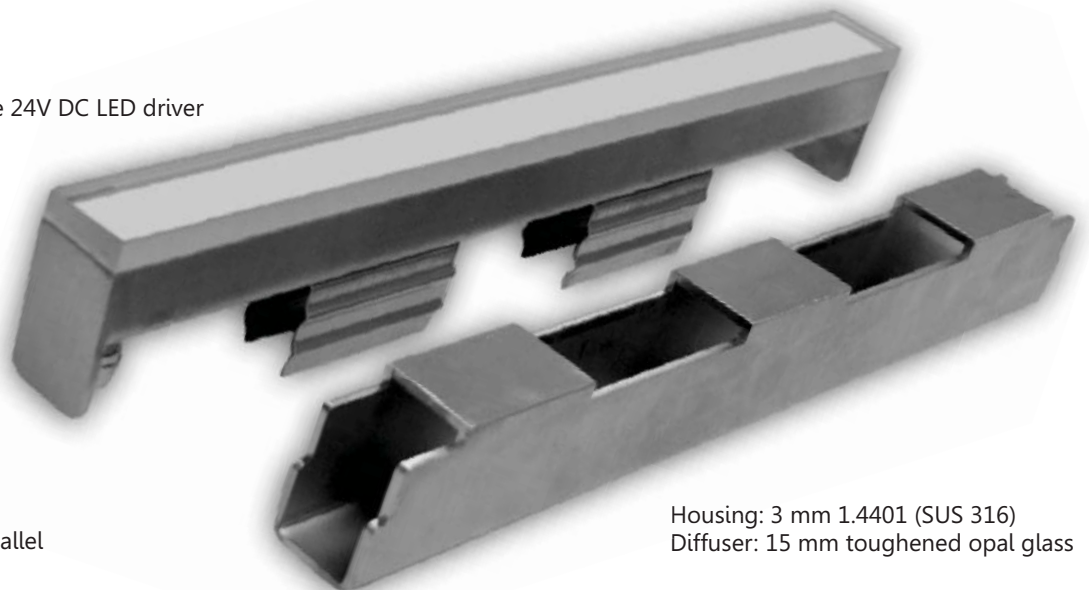
Used with remote constant voltage 24V DC LED driver

LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Notes:
 * can be connected in series or parallel

* Series connection length:
 12W Max-6m
 24W Max-3m
 14.4W Max-8m

* Power of LED drier should be 20% higher than light fixture's power



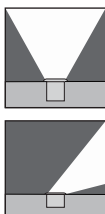
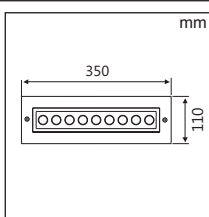
Housing: 3 mm 1.4401 (SUS 316)
 Diffuser: 15 mm toughened opal glass

Mounting: buried in ground
Housing: extruded aluminum, 1.5mm thick
 with high corrosion resistance
 with electrostatic powder painting
Installation box: extruded aluminum
Diffuser: 8mm thick step tempered glass
Gasket: fire-resistant silicone
Trim: stainless steel 1.4301/1.4401 (SUS304/SUS316)
Lens of LED: optical PMMA

LED: CREE XT-E/RGB
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT
 available on request

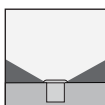
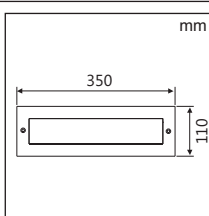
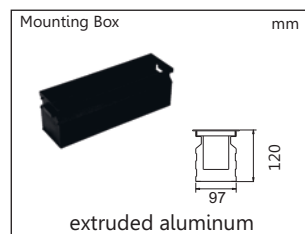
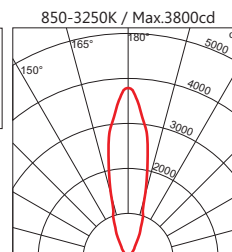
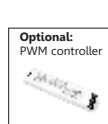
LED driver: integral
Volt AC: 220-240V
Current: 350mA
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *custom sizes/wattage
 available on request

Application:
 outdoors
 public/private/residential
 streets
 parks
 building facades
Ambient Temp: -35°~+55°C



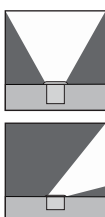
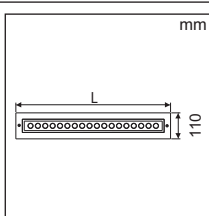
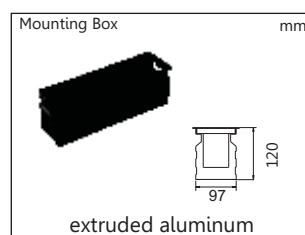
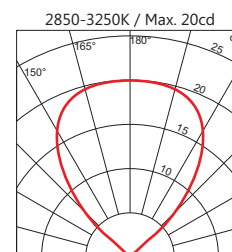
Beam Angle-Code:
symmetric (SYM):
 12°-SBA12
 36°-SBA36
asymmetric (ASM):
 12°x30°-SB12x30
 36°x12°-ASBA36x12

Ref Code 28.32.011.01.10.8 **Watt** 9x1.2W **mA** 350 **Lm(±)** 1000



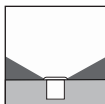
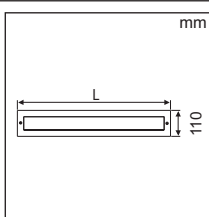
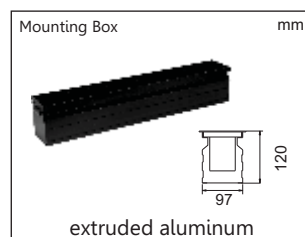
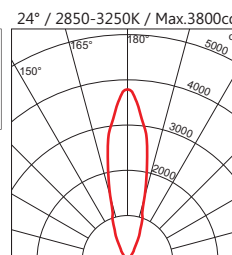
Beam Angle: 120°

Ref Code 28.32.012.01.10.8 **Watt** 9x1.2W **mA** 350 **Lm(±)** 1000



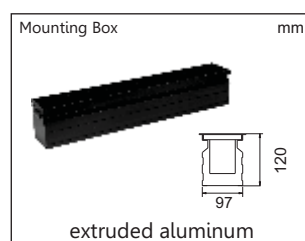
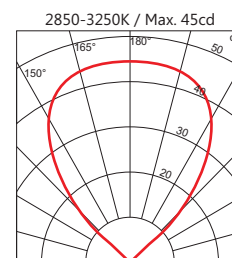
Beam Angle-Code:
symmetric (SYM):
 12°-SBA12
 36°-SBA36
asymmetric (ASM):
 12°x30°-SB12x30
 36°x12°-ASBA36x12

Ref Code 28.32.013.01.21.6 **Watt** 18x1.2W **mA** 350 **Lm(±)** 1950 **L** 650
 28.32.014.01.32.4 **Watt** 27x1.2W **mA** 350 **Lm(±)** 2900 **L** 920



Beam Angle: 120°

Ref Code 28.32.015.01.21.6 **Watt** 18x1.2W **mA** 350 **Lm(±)** 1950 **L** 650
 28.32.016.01.32.4 **Watt** 27x1.2W **mA** 350 **Lm(±)** 2900 **L** 920

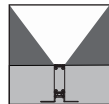
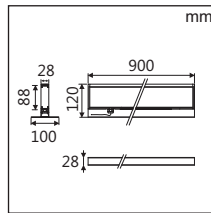


Mounting: buried in ground
Housing: extruded aluminum, 1.5mm thick with high corrosion resistance powder coated with thickness 60 micron
 500 hours salt spray test endurance rating
Diffuser: 6mm thick step tempered opal glass
Load capacity: 500kg
Gasket: silicone
 All wiring, socket and connectors are heat resistant as per IEC.60598, CE, VDE

LED: 3528 SMD
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

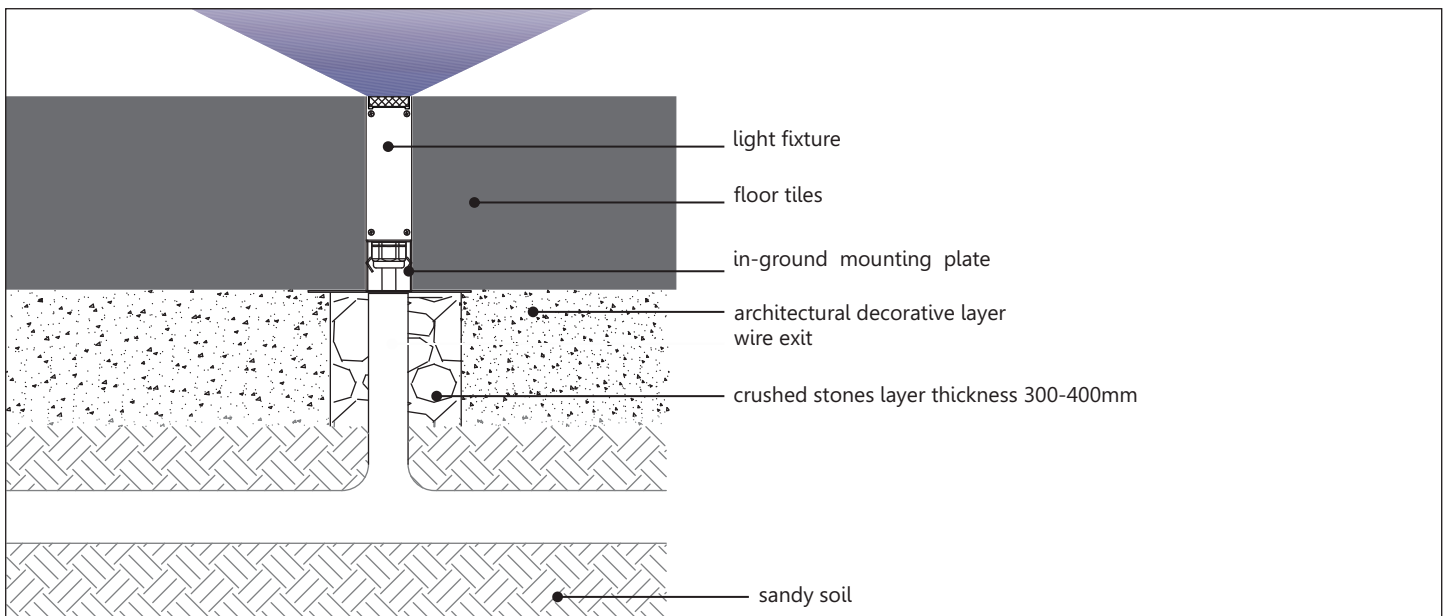
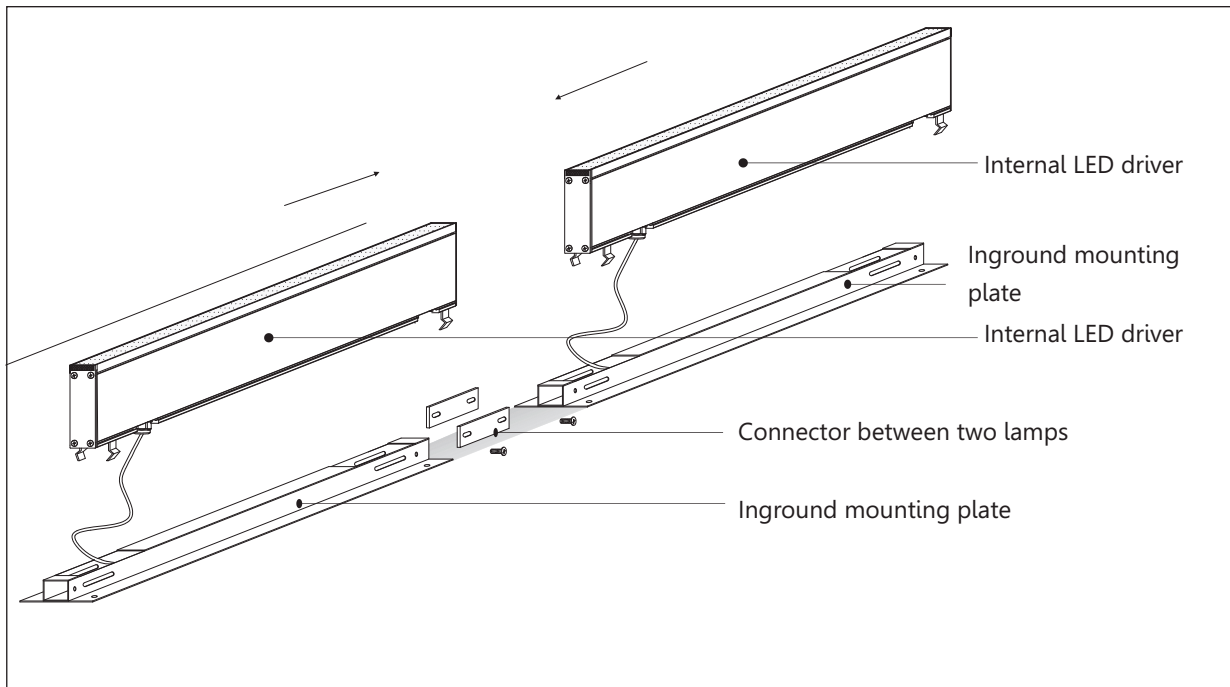
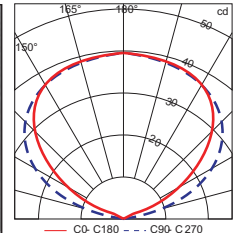
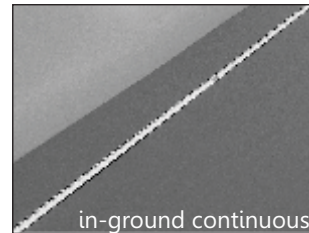
LED driver: integral
Volt AC: 220-240V
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible
Note: *custom sizes/wattage available on request

Application:
 outdoors
 public/private/residential
 Ambient Temp: -50°~+60°C
Fitting's operational temp:
 <40°(tested at 25°)



Beam Angle: 120°

Ref Code 28.32.017.01.10
Watt 10W
Lm(±) 600



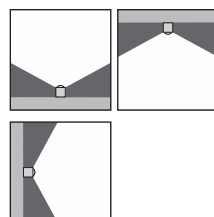
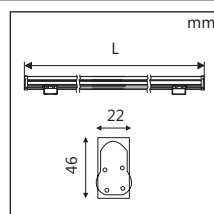
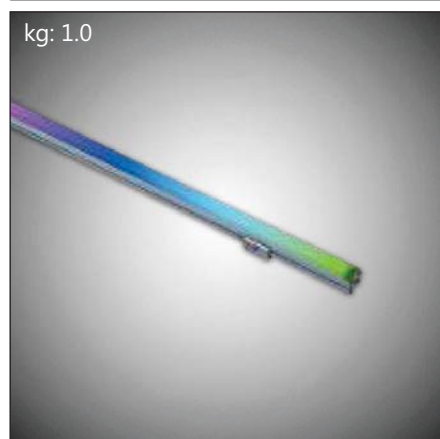


Mounting: surface mounted on bracket
Housing:
 - high pressure die-cast aluminum
 - electrostatic plastic coating
Diffuser: high strength toughened glass
Finish options:
 *RAL colors available on request
Note: *custom sizes/wattage available on request

LED: Epistar
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver:
 remote external
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX512

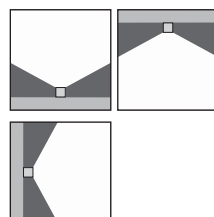
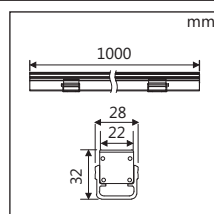
Application:
 outdoors
 public/private/residential
 indirect lighting
 bridges
 building facades
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)	L
29.26.001.01.10	10W	24V DC	48Pcs	WH	750	1000
29.26.001.02.10	10W	24V DC	48Pcs	RGB	750	1000
29.26.001.03.04	4W	24V DC	TBA	WH	300	500
29.26.001.04.7.5	7.5W	24V DC	TBA	WH	565	1000

LED color options:
 RGB (used with DMX 512)
Single colors: white, red, green, blue
Note: other CCT available on request

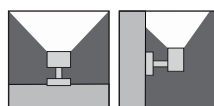
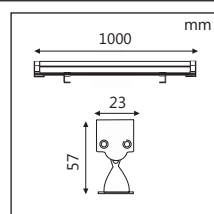
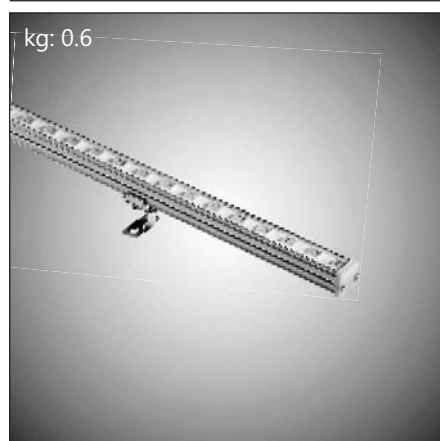
Beam Angle: >120°



Ref Code	Watt	Volt	LED Qty	LED Color	Lm(±)
29.26.002.01.10	10W	24V DC	48Pcs	WH	750

Beam Angle: >120°

Note: other CCT available on request

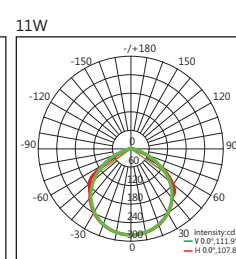
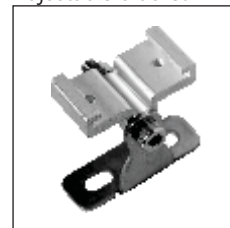


Ref Code	Watt	Color	LED Qty	mA	Lm(±)
29.35.003.01.11	11W	WH	48Pcs	60mA	825
29.35.003.02.11	11W	RGB	48Pcs		

Beam Angle: 120°

Note:
 RGB style fixed color
 available on request

Adjustable bracket



super-slim surface mounted linear lights

ELTE

Mounting: surface mounted on bracket

Housing: - high pressure die-cast aluminum
- electrostatic plastic coating

Diffuser: high strength toughened polycarbonate

Finish options:

*RAL colors available on request

Note: *custom sizes/wattage available on request

*Other CRI/CCT available on request

LED: CREE

CRI: Ra>80 (±3000k)

Ra>70 (±4000k)

CCT: CT28-2850k/CT32-3250k

CT40-4000k/CT45-4500k

Lumen range:

93.9-100 lm/w (±3000k)

114-122 lm/w (±4000k)

LED driver:

remote external

Volt AC: 220-240V

Volt DC: 24V

Frequency: 50/60Hz

LED driver options:

ND - non-dimmable

DMX - DMX 512

Note: *Lm given in data is based on 3000k

Application:

outdoors

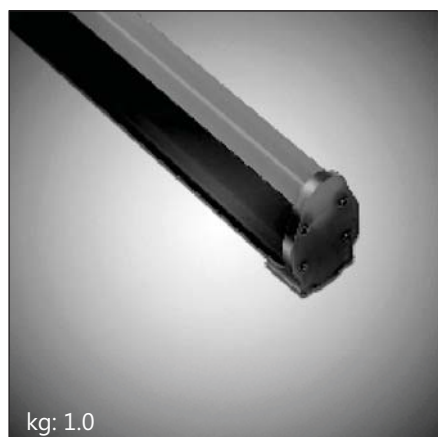
public/private/residential

indirect lighting

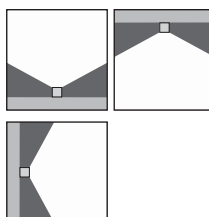
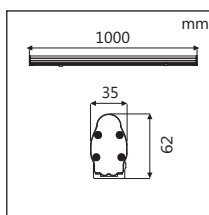
bridges

building facades

Ambient Temp: -35°~+55°C



kg: 1.0



Ref Code

29.35.004.01.12

Watt

12W

Color

WH

LED Qty

48Pcs

mA

48x60mA

Lm(±)

900

29.35.004.02.12

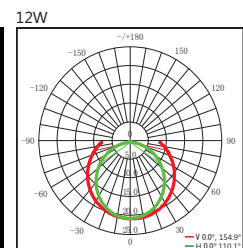
12W

RGB

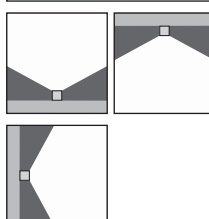
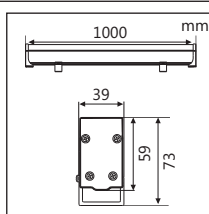
48Pcs

Note:

RGB style fixed color available on request



kg: 1.0



Ref Code

29.35.005.01.03

Watt

3W

Color

WH/RGB

LED Qty

12Pcs

mA

60mA

Lm(±)

825

29.35.005.02.5.5

5.5W

WH/RGB

24Pcs

29.35.005.03.11

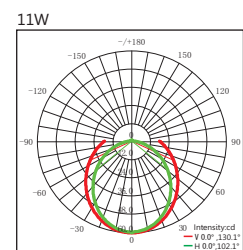
11W

WH/RGB

48Pcs

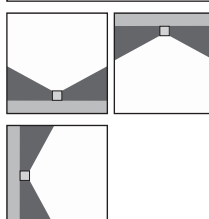
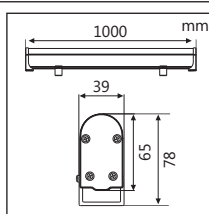
Note:

RGB style fixed color available on request



kg: 1.0

IP65



Ref Code

29.35.006.01.03

Watt

3W

Color

WH/RGB

LED Qty

12Pcs

mA

60mA

Lm(±)

825

29.35.006.02.5.5

5.5W

WH/RGB

24Pcs

29.35.006.03.11

11W

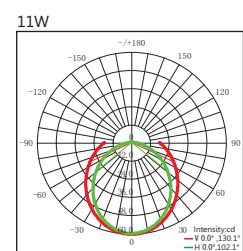
WH/RGB

48Pcs

Note:

RGB style fixed color available on request

Beam Angle: 120°

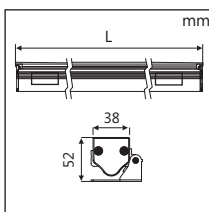


Mounting: surface mounted on bracket
Housing: aluminum alloy
 anodizing treatment
Diffuser: high strength toughened glass
Finish options:
 *RAL colors available on request
Note: *custom sizes/wattage available on request
 *Other CRI/CCT available on request

LED: CREE/Lumileds
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)

LED driver:
 remote external
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 indirect lighting
 bridges
 building facades
Ambient Temp: -35°~+55°C



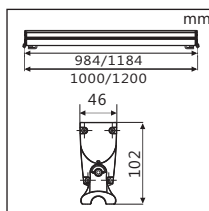
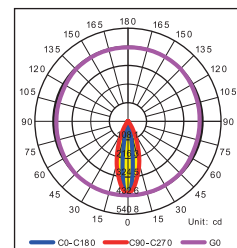
Ref Code	Watt	Volt	LED Qty	L	kg
29.26.007.01.10	10W	CC 24V DC	9Pcs	500	1.0
29.26.008.01.13	13W	CC 24V DC	12Pcs	1000	1.5
29.26.008.02.20	20W	CC 24V DC	18Pcs	1000	1.5
29.26.008.03.26	26W	CC 24V DC	24Pcs	1000	2.0

Beam Angle-Code:

12°-BA12
 30°-BA30
 55°-BA55
 25°x45°-BA25x45

CCT options-Code:

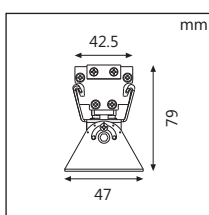
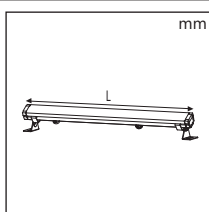
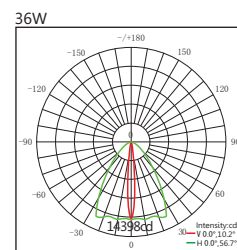
3000K-CT30
 4000K-CT40
 6000K-CT60



Ref Code	Watt	Color	LED Qty	mA	Lm(±)
29.35.009.01.36	36W	RGB	27Pcs	350	1650
29.35.009.02.36	36W	WH	27Pcs		
29.35.009.03.36	36W	RGB	36Pcs		

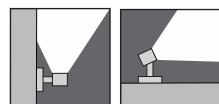
Beam Angle-Code:

15°-BA15
 60°-BA60
 10x60°-BA10x60
 6°x75°-BA6x75



Ref Code	Watt	Volt	mA
29.27.010.01.06	6x1W(Single)	24V DC	305
29.27.010.02.06	6x1W(Single)	240V AC	51
29.27.010.03.09	6x1.5W(RGB 3-in-1)	24V DC(R/G/B)	120/148/145
29.27.011.01.12	12x1W(Single)	24V DC	610
29.27.011.02.12	12x1W(Single)	240V AC	65
29.27.011.03.18	12x1.5W(RGB 3-in-1)	24V DC(R/G/B)	275/302/303
29.27.012.01.24	24x1W(Single)	24V DC	1220
29.27.012.02.24	24x1W(Single)	240V AC	163
29.27.012.03.36	24x1.5W(RGB 3-in-1)	24V DC(R/G/B)	537/606/602

L, mm	Lm(±) at BA20	Standart CCT range:
29.27.010 - 265mm	CT30-432	CT20-2000K
29.27.011 - 510mm	CT50-540	CT30-3000K
29.27.012 - 985mm	CT30-864	CT50-5000K
	CT50-1080	
	CT30-1976	
	CT50-2140	



Beam Angle-Code:
symmetric (SYM) RGB
 15°-BA15
 20°-BA20
 30°-BA30
 50°-BA50
 35°-BA35



surface mounted linear lights

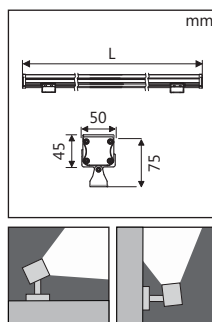
ELTE

Mounting: surface mounted on bracket
Housing: extruded powder coated aluminum
Diffuser: 4 mm tempered glass
Gasket: glass and housing are silicone sealed
Bracket: 1.5mm hard chrome-plated stainless steel 1.4401 (SUS316)
Fitting's finish options:
 11-black matte/ 13-grey matte
 15-silver grey matte

LED: NICHIA
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *custom sizes/ wattage available on request

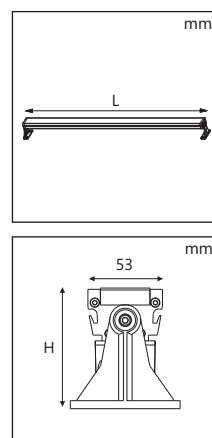
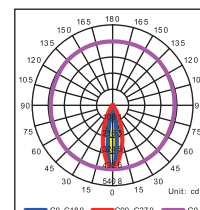
LED driver:
 remote external
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 indirect lighting
 bridges
 building facades
Ambient Temp: -35°~+55°C

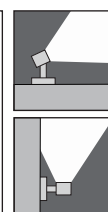


Ref Code	Watt	Volt	LED Qty	LED Color	L	kg
31.26.001.01.10	10W	CC/DMX 24V DC	9Pcs	RGB/Single	500	2.0
31.26.001.02.05	5W	CC/DMX 24V DC	9Pcs	RGB/Single	500	2.0
31.26.002.01.13	13W	CC 24V DC	12Pcs	Single	1000	2.4
31.26.002.02.20	20W	CC/DMX 24V DC	18Pcs	RGB/Single	1000	2.4
31.26.002.03.26	26W	CC/DMX 36V/24V	24Pcs	RGB/Single	1000	2.4
31.26.002.04.40	40W	CC/DMX 24V DC	36Pcs	RGB/Single	1000	2.4
31.26.002.05.10	10W	CC 24V DC	TBA	Single	1000	2.0

Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 15°x30°-BA15x30

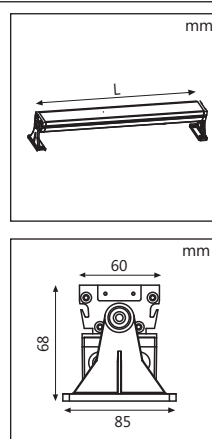


Ref Code	Watt	Volt	mA	Lm(±)
31.27.003.01.20	10x2W	24V DC	1041	2600
31.27.003.02.20	10x2W(RGB 3-in-1)	24V DC(R/G/B)	500/500/500	
31.27.004.01.40	20x2W	24V DC	2056	
31.27.004.02.40	20x2W(RGB 3-in-1)	24V DC(R/G/B)	800/100/100	



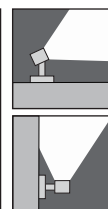
Beam Angle-Code:
symmetric(SYM)
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
RGB:
 30°-BA30

LxH
 500x67 - 10 LEDs
 1000x86 - 20 LEDs



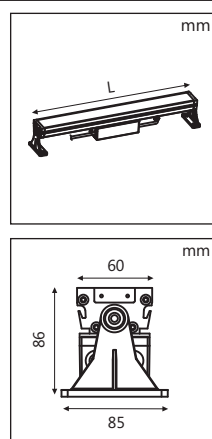
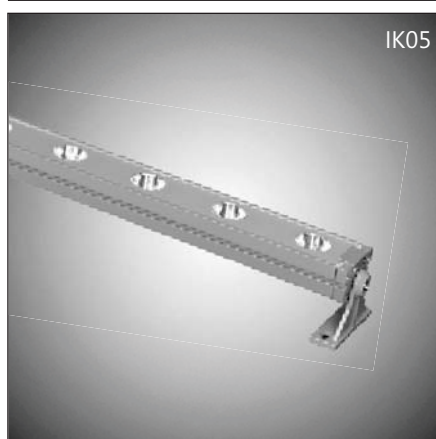
Ref Code	Watt	Volt	mA
31.27.005.01.24	24W(RGBW 4-in-1)	24V DC(R/G/B/W)	321/352/352/350
31.27.006.01.24	24W(RGBW 4-in-1)	24V DC(R/G/B/W)	600/700/700/700

Lm(±)
 1900

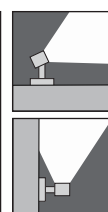


Beam Angle-Code
RGB:
 15°-BA15
 22°-BA22

L
 500
 1003

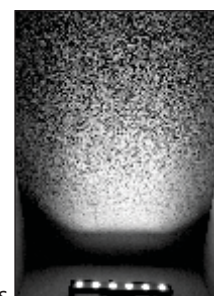


Ref Code	Watt	Volt	mA	Lm(±)
31.27.007.01.24	6x4W	24V DC	1200	3100
31.27.007.02.24	6x4W	240V AC	150	
31.27.008.01.48	12x4W	24V DC	2380	
31.27.008.02.48	12x4W	240V AC	285	



Beam Angle-Code: 24°

L
 500 - 6 LEDs
 1003 - 12 LEDs

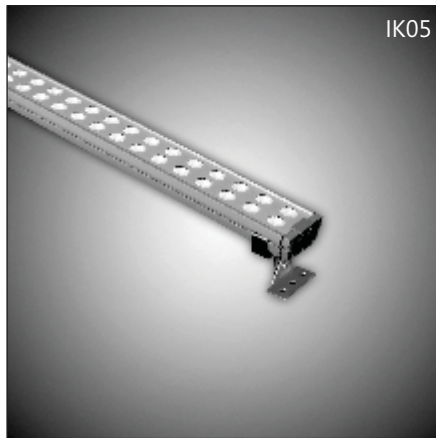


Mounting: surface mounted on bracket
Housing: stretched aluminum
 UV-rays stabilized polyester coating
 UV-rays stabilized acrylic cover
Diffuser: tempered glass
Finish options:
 *RAL colors available on request
Note: *custom sizes/ wattage available on request

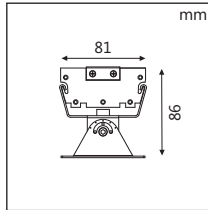
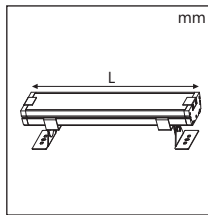
LED: CREE/Osram
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver:
 remote external
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

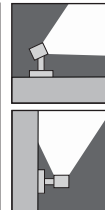
Application:
 outdoors
 public/private/residential
 indirect lighting
 bridges
 building facades
Ambient Temp: -35°~+55°C



IK05



Ref Code	Watt	Volt	mA	Lm(±)
31.27.009.01.24	16X1.5W	24V DC	1050	2750
31.27.009.02.24	16X1.5W	240V AC	124	
31.27.009.03.32	16X2W(RGB 3-in-1)	24V DC(R/G/B)	400/750/750	
31.27.010.01.45	30X1.5W	24V DC	1750	
31.27.010.02.45	30X1.5W	240V AC	219	
31.27.010.03.60	30X2W(RGB 3-in-1)	24V DC(R/G/B)	1000/1250/1250	

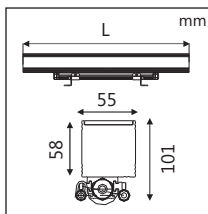


Beam Angle-Code:
symmetric (SYM) RGB
 20°-BA20 30°-BA30

L
 300 - 16 LEDs
 600 - 30 LEDs

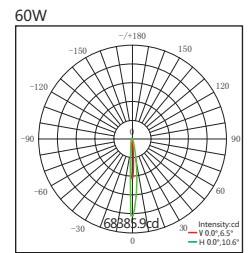
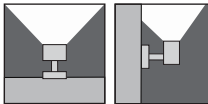


kg: 3.4

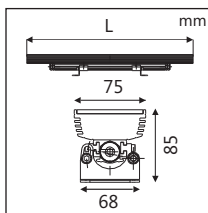


Ref Code	Watt	Lm(±)	L	kg
31.35.011.01.12	12W	975	282	1.08
31.35.012.01.24	24W	1880	530	1.8
31.35.013.01.50	50W	3750	1025	3.9

Beam Angle:
 5x10°

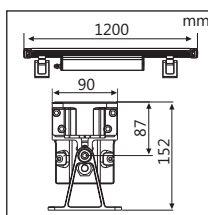
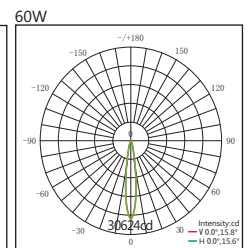
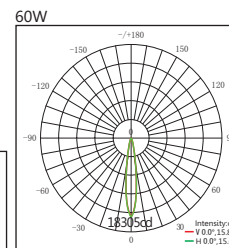
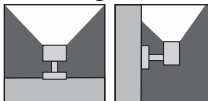


kg: 2.8



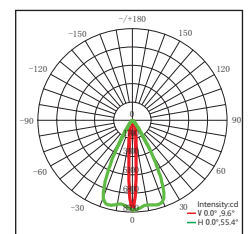
Ref Code	Watt	LED Color	LED Qty	Lm(±)	L	kg
31.35.014.01.20	20W	WH/RGBW	4pcs	1800	300	1.3
31.35.015.01.40	40W	WH/RGBW	8pcs	3600	600	2.4
31.35.016.01.60	60W	WH/RGBW	12pcs	5400	900	3.5

Beam Angle: 15°



Ref Code	Watt	Color	LED Qty	Lm(±)
31.35.017.01.67	67W	WH	27pcs	6030
31.35.017.02.70	70W	RGB	27pcs	
31.35.017.03.85	85W	WH	36pcs	7650
31.35.017.04.87	87W	RGB	36pcs	

Beam Angle: 6°x75°



surface mounted linear lights

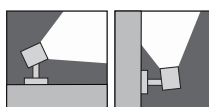
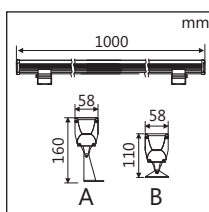
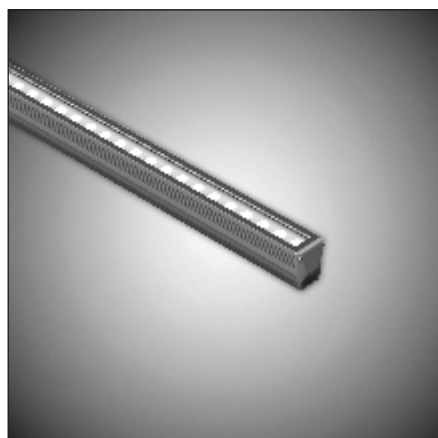
ELTE

Mounting: surface mounted on bracket
Housing: extruded aluminum, 1.5mm thick with high corrosion resistance
 powder coated with thickness 60 micron
 500 hours salt spray test endurance rating
Diffuser: 6mm thick step tempered opal glass
Gasket: silicone
 All wiring, socket and connectors are heat resistant as per IEC.60598, CE, VDE
Finish options: black / white / grey

LED: 3528 SMD/CREE
CRI: Ra>80 (±3000k)
 Ra>70 (±4000k)
CCT: CT28-2850k/CT32-3250k
 CT40-4000k/CT45-4500k
Lumen range:
 93.9-100 lm/w (±3000k)
 114-122 lm/w (±4000k)
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 220-240V
Volt DC: 12-36V
LED driver options:
 ND - non-dimmable
 DMX-DMX512
Note: *custom sizes/wattage available on request

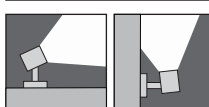
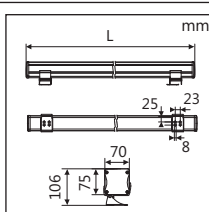
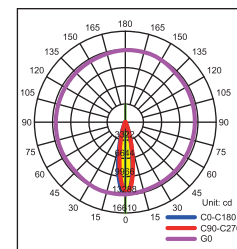
Application:
 outdoors
 public/private/residential
 indirect lighting
 bridges
 building facades
Ambient Temp: -50°~+60°C



Ref Code	Watt	Volt	LED Qty	LED Color	L	kg
31.26.018.01.11	11W	CC/DMX 12V DC	9Pcs	Single/RGB	500	3.0
31.26.019.01.22	22W	CC 24V DC	18Pcs	Single/RGB	1000	3.5
31.26.019.02.32	32W	CC/DMX 36V DC	27Pcs	Single/RGB	1000	3.5
31.26.019.03.36	36W	CC/DMX 24V DC	30Pcs	Single/RGB	1000	3.5
31.26.019.04.42	42W	CC/DMX 24V DC	36Pcs	Single/RGB	1000	3.5

Beam Angle-Code:

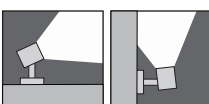
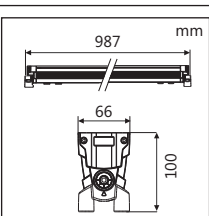
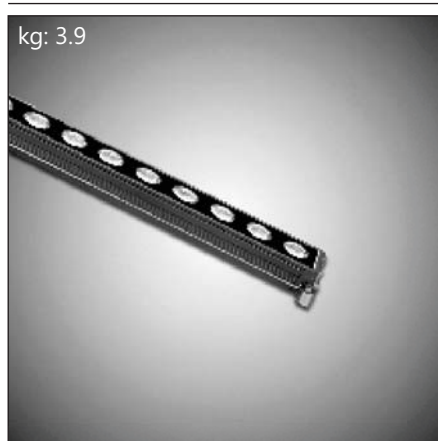
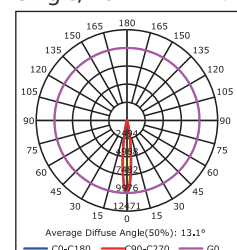
5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45
 60°-BA60
 15°x30°-BA15x30



Ref Code	Watt	Volt	LED Qty	LED Color	L	kg
31.26.020.01.30	30W	24V DC/240V AC	27Pcs	Single/RGB	500	3.5
31.26.020.02.54	54W	24V DC/240V AC	27Pcs	Single/RGB	500	4.2
31.26.021.01.60	60W	24V DC/240V AC	54Pcs	Single/RGB	1000	4.2
31.26.021.02.108	108W	24V DC/240V AC	54Pcs	Single/RGB	1000	4.2
31.26.021.03.40	40W	24V DC/240V AC	36Pcs	Single/RGB	1000	3.5
31.26.021.04.80	80W	24V DC/240V AC	54Pcs	Single/RGB	1000	4.2

Beam Angle-Code:

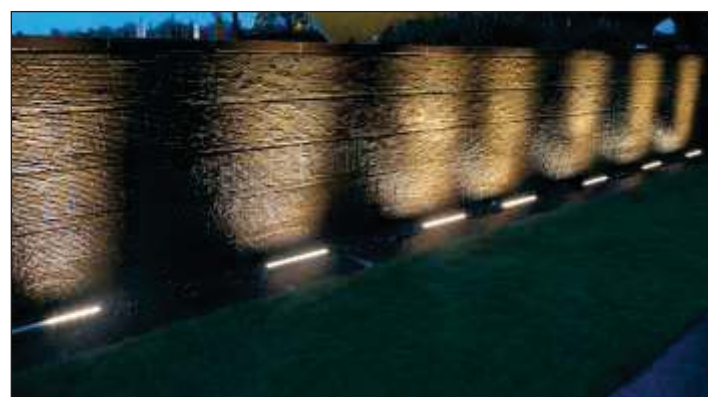
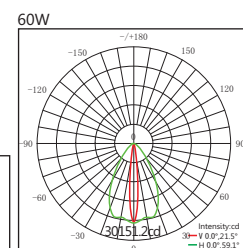
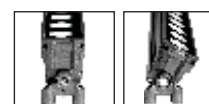
5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 60°-BA60
 15°x30°-BA15x30
 10°x60°-BA10x60



Ref Code	Watt	Color	LED Qty	mA	Lm(±)
29.35.022.01.60	60W	WH/RGBW	12Pcs	500	3400
29.35.022.02.60	60W	WH/RGB	36Pcs		

Beam Angle Code:

13°-BA13
 15°-BA15
 13°x40°-BA13x40

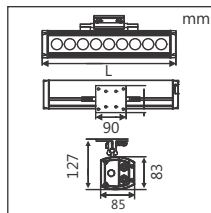


Mounting: surface mounted on bracket
Housing: extruded aluminum
Diffuser: tempered glass
Finish options:
 15-silver matte
 *other RAL colors available on request
Note: *custom sizes/wattage available on request

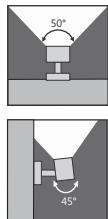
LED: Lumileds
CRI: Ra>80 (±3000k)
 Ra>70 (±5600k)
CCT:
 CT30-3000k
 CT56-5600k
Note: *Other CRI/CCT available on request

LED driver: integral
Volt AC: 220-240V
LED driver options:
 ND - non-dimmable
 DMX - dimmable by DMX

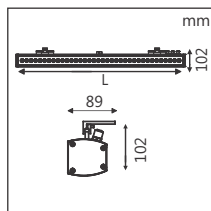
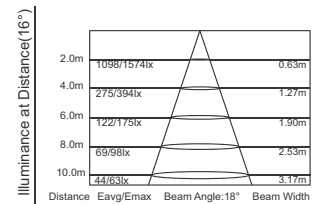
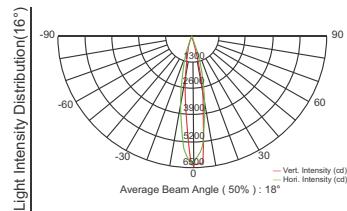
Application:
 outdoors
 public/private/residential
 indirect lighting
 bridges
 building facades
Ambient Temp: -40°~+55°C



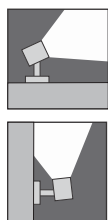
Ref Code	Watt	Lm(±)	LED Qty	L	kg
31.33.023.01.26	26W	1050	9pcs (WH)	400	2.85
31.33.023.02.35	35W		9pcs (RGB)	400	2.85
31.33.024.01.75	75W	3000	27pcs (WH)	1200	6.60
31.33.024.02.105	105W		27pcs (RGB)	1200	6.60



Beam Angle: 16°

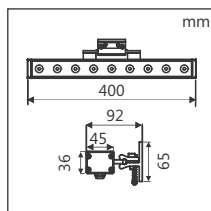
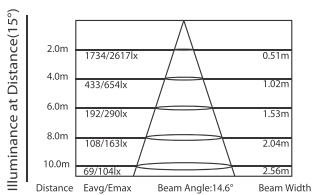
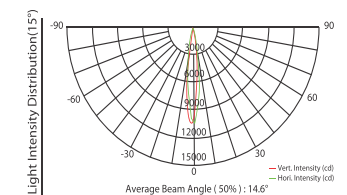


Ref Code	Watt	Lm(±)	LED Qty	L	kg
31.33.025.01.33	33W (WH)	1700	21pcs (WH)	590	3.1
31.33.025.02.33	33W (RGB)		21pcs (7R+7G+7B)	590	3.3
31.33.026.01.48	48W (WH)	2500	36pcs (WH)	980	4.4
31.33.026.02.48	48W (RGB)		36pcs (12R+12G+12B)	980	4.4

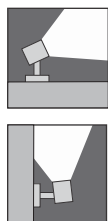


Beam Angle-Code:

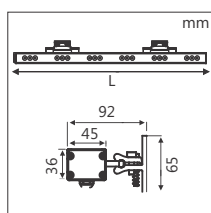
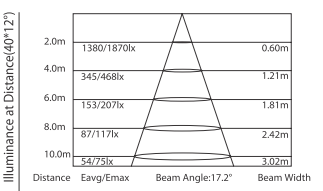
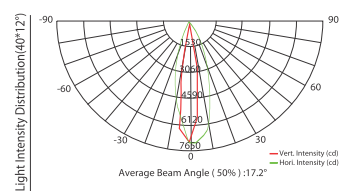
15°-BA15
 30°-BA30
 60°-BA60
 25°x6°-BA25x6
 60°x20°-BA60x20



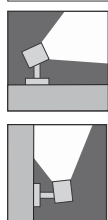
Ref Code	Watt	Lm(±)	LED Qty	kg
31.33.027.01.18.5	18.5W	850	9pcs (WH)	1.5
31.33.027.02.37	37W	1600	18pcs (WH)	1.5



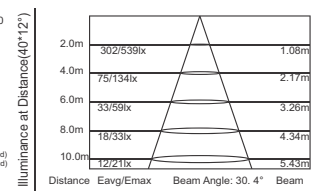
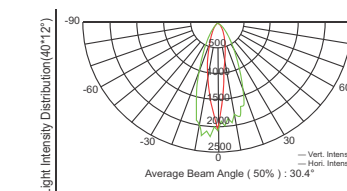
Beam Angle: 40°x12°



Ref Code	Watt	Lm(±)	LED Qty	L	kg
31.33.028.01.16.5	16.5W	400	9pcs (3R+3G+3B)	400	0.8
31.33.029.01.33	33W	850	18pcs (6R+6G+6B)	800	1.5

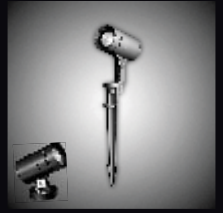


Beam Angle: 40°x12°





mini flood lights



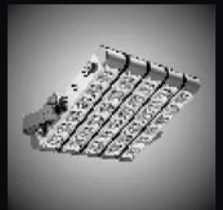
flood lights



flood lights (big sizes)



stadium lights

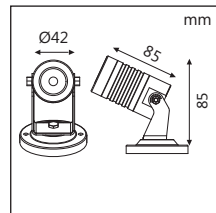
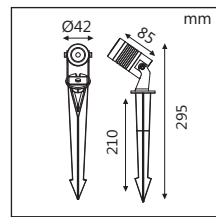


Mounting: surface mounted (bracket/spike)
Housing: die-cast powder coated aluminum
Diffuser: 4 mm tempered glass
Gasket: tooling shaped seal
Fitting's finish options:
 11-black matte
 13-grey matte
 15-silver grey matte
 21-brown

LED: COB/SMD(Osram)
CRI: Ra>80
Binning: 2 MacAdam
CCT:
 CT30-3000k/CT40-4000k
 CT50-5000k/CT60-6000k
 RGB
Note:*Other CRI/CCT available on request

LED driver: integral/external
Volt AC: 100-240V
Volt DC: 12V/24V
Frequency: 50/60Hz
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

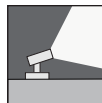
Application:
 outdoors
 public/private/residential
 hotels/parks
 landscapes
 gardens
Ambient Temp: -35°~+55°C



Ref Code	Watt	Volt	mA	Lm(±)
32.27.001.01.02	2W	24V DC	110	160
32.27.001.02.02	2W	240V AC	28	
32.27.001.03.02	2W(RGB 3-in-1)	24V DC(R/G/B)	38/53/54	
32.27.001.04.03	3W	24V DC	110	
32.27.001.05.03	3W	240V AC	28	
32.27.001.06.03	3W(RGB 3-in-1)	24V DC(R/G/B)	38/53/54	

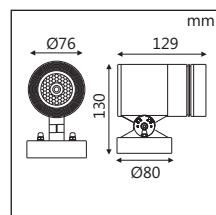
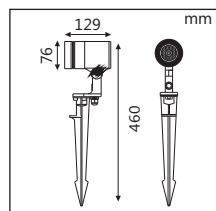
Beam Angle-Code:

4°-BA04
 9°-BA9
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
 RGB
 30°-BA30



Power Cable:

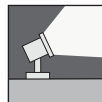
DC 24V 2x1.0mm² / L=2.0m
 AC 240V 3x1.0mm² / L=2.0m
 RGB 4x0.75mm² / L=2.0m



Ref Code	Watt	Volt	mA	Lm(±)
32.27.002.01.08	8W	24V DC	411	850
32.27.002.02.08	8W	240V AC	50	
32.27.002.03.10	10W	24V DC	480	
32.27.002.04.10	10W	240V AC	60	

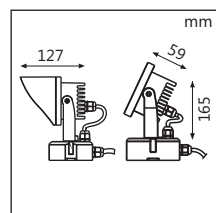
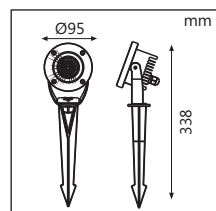
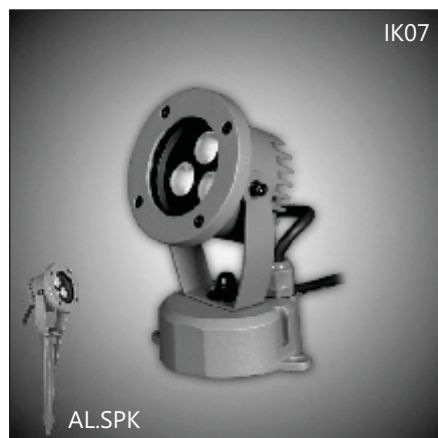
Beam Angle-Code:

15°-BA15
 24°-BA24
 30°-BA30
 38°-BA38
 60°-BA60



Power Cable:

DC 24V 2x1.0mm² / L=2.0m
 AC 240V 3x1.0mm² / L=2.0m
 RGB 4x0.75mm² / L=2.0m

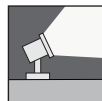


Ref Code	Watt	Volt	mA	Lm(±)
32.27.003.01.06	3x2W	12V DC	1279	480
32.27.003.02.06	3x2W	240V AC	150	
32.27.003.03.06	3x2W	12V DC	490	

Beam Angle-Code:

symmetric (SYM)

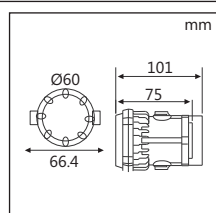
15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
 RGB
 30°-BA30



Power Cable:

DC 24V 2x1.0mm² / L=2.0m
 AC 240V 3x1.0mm² / L=2.0m
 RGB 4x0.75mm² / L=2.0m

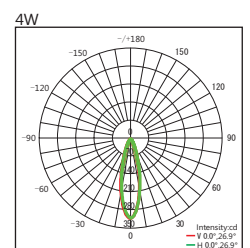
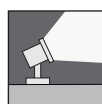
Anti-glare cap (CAP)



Ref Code	Watt	Volt	Color	LED Qty	mA	Lm(±)
32.35.011.01.2.5	2.5W	24V DC	W	1Pcs	350	160

Beam Angle-Code:

8°-BA08
 13°-BA13



mini flood lights

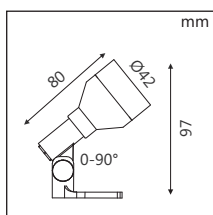
ELTE

Mounting: surface mounted on bracket/ spike
Housing: hard chrome-plated stainless steel 1.4401 (SUS316)
Diffuser: 4 mm tempered glass
Bracket: hard chrome-plated stainless steel 1.4404 (SUS316L)

LED: CREE/Osram
CRI: Ra>80
CCT: CT30-3000k/CT40-4000k CT50-5000k/CT60-6000k RGB/ Amber
Note:*Other CRI/CCT available on request

LED driver: external
Volt AC: 240V
Volt DC: 12V/24V
Frequency: 50/60Hz
Power cable: Single Color:2x0.75mm²/L=3.0m RGB: 4x0.75mm²/L=3.0m

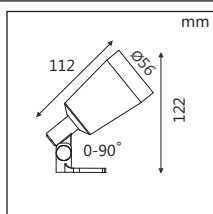
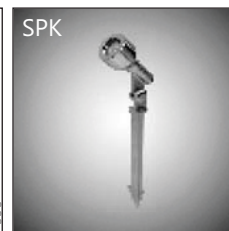
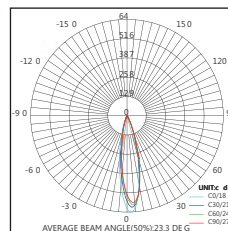
Application: outdoors public/private/residential hotels/parks landscapes gardens
Ambient Temp: -35°~+55°C



Ref Code 32.25.004.01.02 **Watt** 2W **Lm(±)** 200

LED Color options:
CCT: 2700-6500K
fixed colors: red, green, blue, yellow, amber

Beam Angle Code:
 15°-BA15
 30°-BA30
 45°-BA45
 60°-BA60

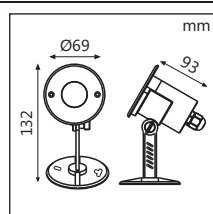
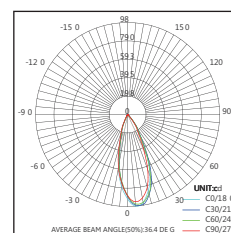


Ref Code 32.25.005.01.06 **Watt** 6W **Lm(±)** 450
 32.25.005.02.09 **Watt** 9W(RGB)

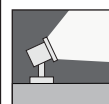
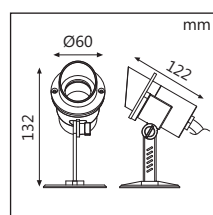
LED Color options:
CCT: 2700-6500K
fixed colors: red, green, blue, yellow, amber
RGB color changing



Beam Angle-Code:
 24°-BA24
 38°-BA38
 60°-BA60



Ref Code 32.27.006.01.03 **Watt** 1x3W **Volt** 24V DC **mA** 110 **Lm(±)** 150
 32.27.006.02.03 **Watt** 1x3W(RGB 3-in-1) **Volt** 24V DC(R/G/B) **mA** 38/53/54



Beam Angle-Code:
symmetric (SYM)
 20°-BA20
 25°-BA25
 30°-BA30
 35°-BA35
RGB
 25°-BA25

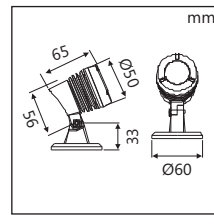


Mounting: surface mounted
on bracket/ spike
Housing: high pressure die-cast
aluminum
Diffuser: toughened glass
Finish options:
*RAL colors available on request

LED: SMD/COB(CREE)
CRI: Ra>80
CCT:
CT30-3000k
CT40-4000k
CT50-5000k
CT60-6000k
Note:*Other CRI/CCT
available on request

LED driver: external (CC)
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
ND - non-dimmable
PH - phase dimmable
010V - 0-10V dimmable
DALI - compatible

Application:
outdoors
public/private/residential
hotels/parks
landscapes
gardens
Ambient Temp: -35°~+55°C



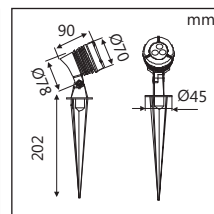
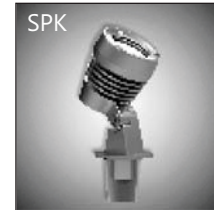
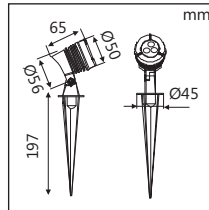
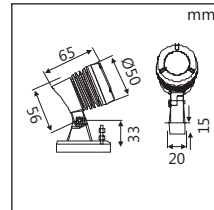
Ref Code
32.26.007.01.15
32.26.007.02.03

Watt
1.5W (COB)
3W (COB)

LED Qty
1Pcs
1Pcs



Beam Angle-Code:
15°-BA15
28°-BA28

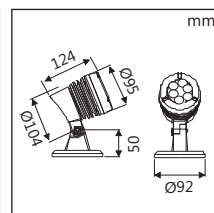
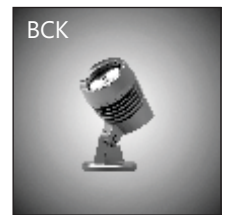
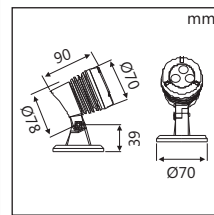


Ref Code
32.26.008.01.3.5
32.26.008.02.06
32.26.008.03.06

Watt
3.5W
6W
6W(COB)

LED Qty
3Pcs
3Pcs
1Pcs

Beam Angle-Code:
5°-BA05
12.5°-BA12.5
20°-BA20(COB)
30°-BA30
45°-BA45
60°-BA60
15°X30°-BA15X30
10°X60°-BA10X60

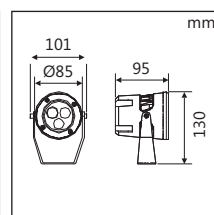
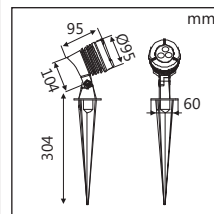
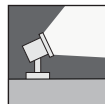


Ref Code
32.26.009.01.07
32.26.009.02.11
32.26.009.03.12

Watt
7W
11W
12W(COB)

LED Qty
6Pcs
6Pcs
1Pcs

Beam Angle-Code:
5°-BA05
12.5°-BA12.5
20°-BA20(COB)
30°-BA30
45°-BA45
60°-BA60
15°X30°-BA15X30
10°X60°-BA10X60

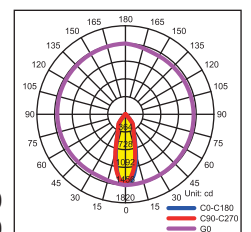
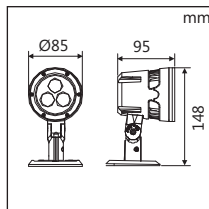


Ref Code
32.26.010.01.3.5
32.26.010.02.06
32.26.010.03.08
32.26.010.04.10

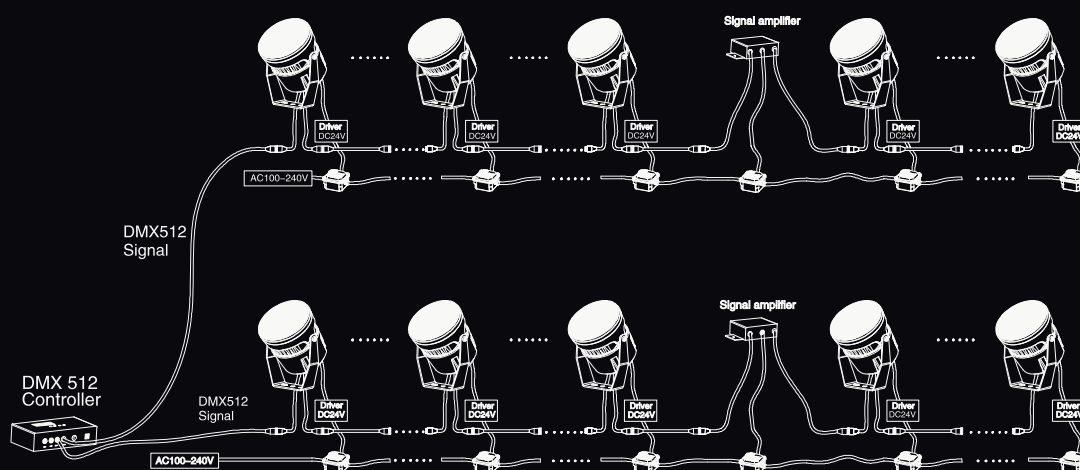
Watt
3.5W
6W
8W
10W(COB)

LED Qty
3Pcs
3Pcs
3Pcs
1Pcs

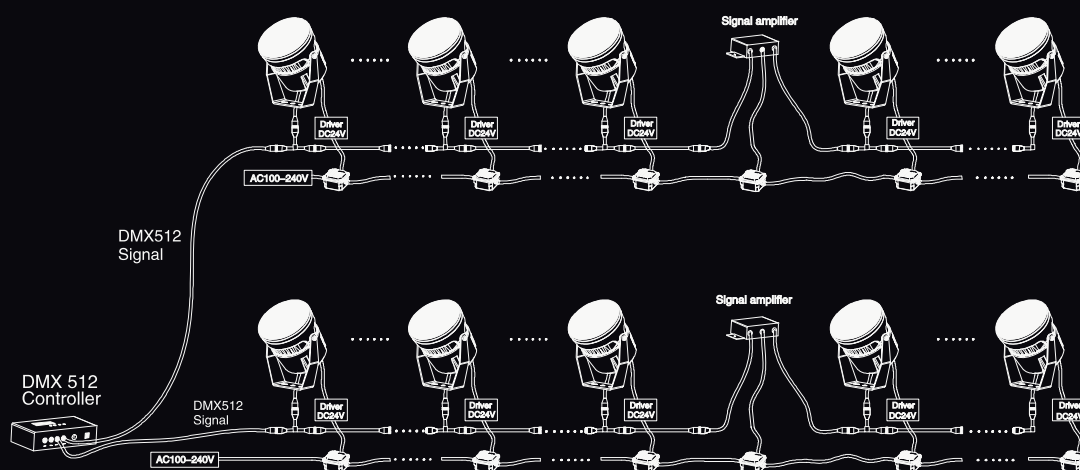
Beam Angle Code:
5°-BA05
12.5°-BA12.5
20°-BA20(COB)
30°-BA30
45°-BA45
60°-BA60
15°X30°-BA15X30
10°X60°-BA10X60



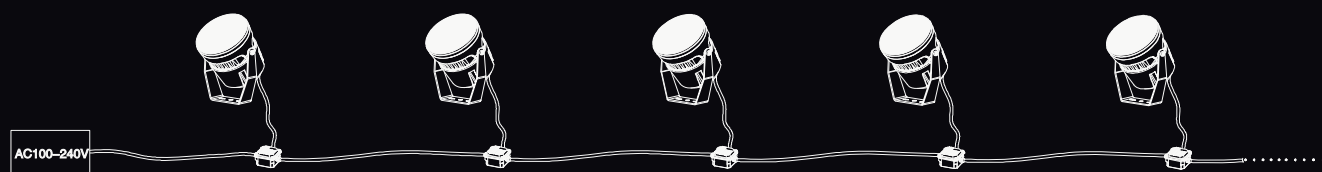
RGB A



RGB B



Single Color





mini flood lights

ELTE

Mounting: surface mounted on bracket

Housing: hard chrome-plated stainless steel 1.4401 (SUS316)

Diffuser: tempered glass

Bracket: hard chrome-plated stainless steel 1.4401 (SUS316)

LED: CREE/Edison

CRI: Ra>80

CCT:

CT30-3000k

CT40-4000k

CT50-5000k

CT60-6000k

RGB/RGBW/Amber

Note:*Other CRI/CCT available on request

LED driver: external

Volt AC: 240V

Volt DC: 24V

Frequency: 50/60Hz

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Application:

outdoor

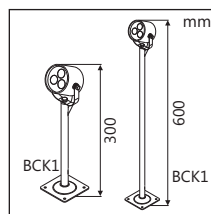
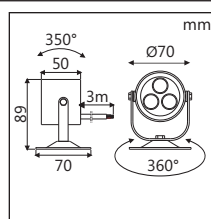
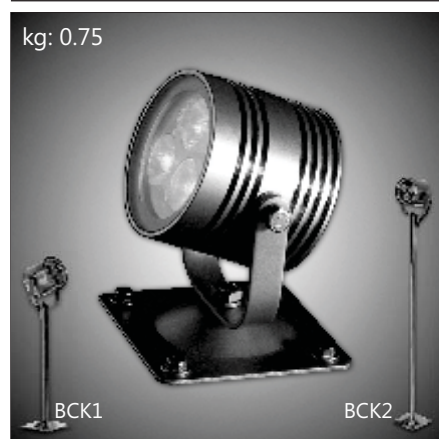
public/private/residential

water landscapes

swimming pools/ponds

fountain/aquariums

Ambient Temp: -35°~+55°C



Ref Code

32.31.015.01.03	3W (WH, CREE)
32.31.015.02.03	3W (WH, CREE)
32.31.015.03.09	9W (RGB, CREE)

Watt

3W (WH, CREE)
3W (WH, CREE)
9W (RGB, CREE)

Volt

CC, 350mA
CV, 12/24V DC
CC, 350mA

Lm(±)

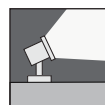
300

Beam Angle-Code:

20°-BA20

60°-BA60

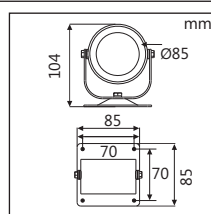
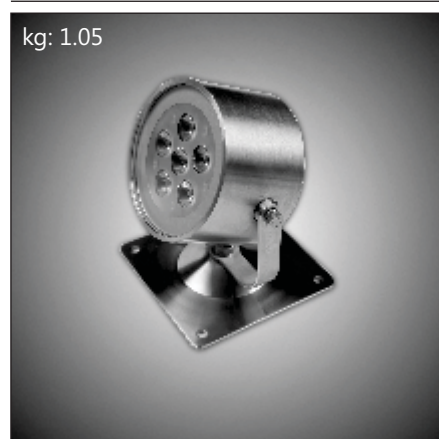
45°-BA45 (RGB only)



Note:

*glass thickness is 5 mm

*fixed single colors available:
red, green, blue, amber



Ref Code

32.31.016.01.06	6W (WH, CREE)
32.31.016.02.06	6W (WH, CREE)
32.31.016.03.06	6W (RGB, CREE)

Watt

6W (WH, CREE)
6W (WH, CREE)
6W (RGB, CREE)

Volt

CC, 350mA
CV, 24V DC
CC, 350mA

Lm(±)

108

Beam Angle-Code:

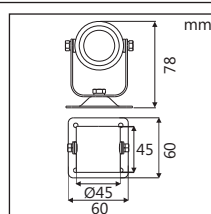
10°-BA10

40°-BA40

Note:

*glass thickness is 6 mm

*fixed single colors available:
red, green, blue, amber



Ref Code

32.31.017.01.01	1W (WH, CREE)
32.31.017.02.01	1W (WH, CREE)
32.31.017.03.03	3W (RGB, Edison)

Watt

1W (WH, CREE)
1W (WH, CREE)
3W (RGB, Edison)

Volt

CC, 350mA
CV, 24V DC
CC, 350mA

Lm(±)

108

Beam Angle-Code:

12°-BA12

45°-BA45

Note:

*glass thickness is 4 mm

*fixed single colors available:
red, green, blue, amber

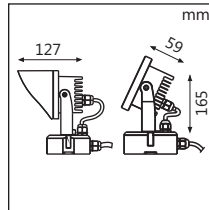
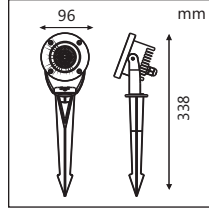


Mounting: surface mounted
on bracket/ spike
Housing: die-cast powder coated aluminum
Diffuser: 4 mm tempered glass
Gasket: molding shaped silicon double seal
Bracket: die-cast aluminum
Fitting's finish options:
11-black matte/ 13-grey matte
15-silver grey matte

LED: SMD/COB
CRI: Ra>80
CCT:
CT30-3000k/CT40-4000k
CT50-5000k/CT60-6000k
RGB
Note:*Other CRI/CCT
available on request

LED driver: integral/external
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
DC 24V 2x1.0mm²/L=2.0m
AC 220V 3x1.0mm²/L=2.0m
Cable gland: IP-68 PG-9 copper
and nickel coated

Application:
outdoors
public/private/residential
hotels/parks
landscapes
gardens
Ambient Temp: -30°~+55°C



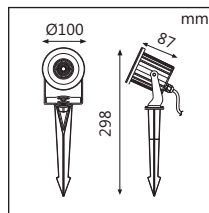
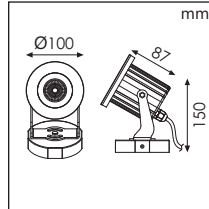
Ref Code	Watt	Volt	mA	Lm(±)
32.27.018.01.06	1x6W	24V DC	270	400
32.27.018.02.06	1x6W	240V AC	60	



Beam Angle-Code:
18°-BA18
25°-BA25

Spike: PVC

Anti-glare cap (CAP)

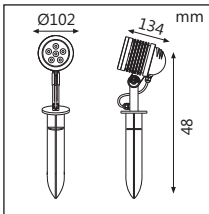
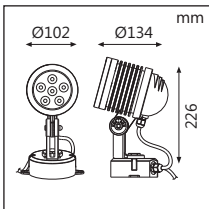
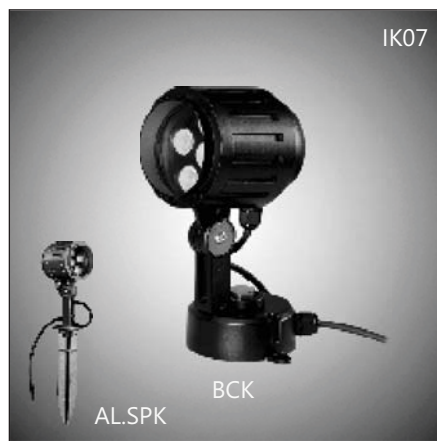


Ref Code	Watt	Volt	mA	Lm(±)
32.27.019.01.06	1x6W	24V DC	270	450
32.27.019.02.06	1x6W	240V AC	35	

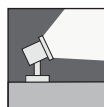
Note: Front cover Stainless steel 1.4401(SUS316L)



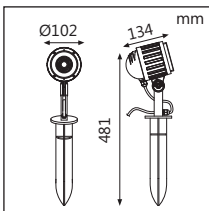
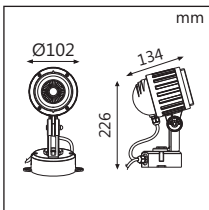
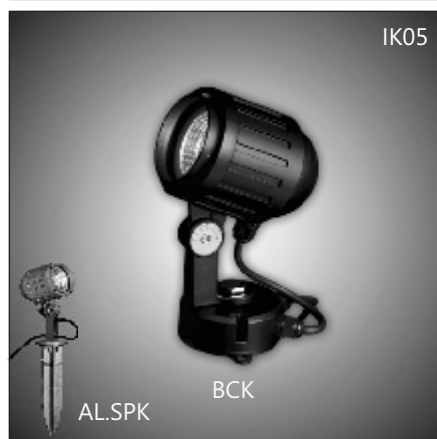
Beam Angle-Code:
18°-BA18
25°-BA25
40°-BA40



Ref Code	Watt	Volt	mA	Lm(±)
32.27.020.01.09	6X1.5W	24V DC	550	1000
32.27.020.02.09	6X1.5W(RGB 3-in-1)	24V DC(R/G/B)	24V DC(R/G/B)	
32.27.020.03.12	6X2W	240V AC	53	



Beam Angle-Code:
symmetric (SYM)
15°-BA15
20°-BA20
30°-BA30
45°-BA45
RGB
30°-BA30



Ref Code	Watt	Volt	mA	Lm(±)
32.27.021.01.10	1x10W	24V DC	411	700
32.27.021.02.10	1x10W	240V AC	48	



Beam Angle: 25°

Anti-glare cap (CAP)



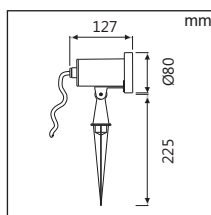


Mounting: surface mounted on bracket/ spike
Housing: extruded aluminum, 2mm thick with high corrosion resistance with die-cast aluminum spike
Diffuser: 4mm thick tempered glass
Gasket: silicone
Finish options: 11-black matte / 13-grey matte

LED: CREE (X-TE/COB)
CRI: Ra>80 (±3000k)
Ra>70 (±4000k)
CCT: CT30-3000k/CT40-4000k
Lumen range: 93.9-100 lm/w (±3000k)
114-122 lm/w (±4000k)
Note:*Other CRI/CCT available on request

LED driver: integral
Volt AC: 240V
Frequency: 50/60Hz
LED driver options: ND - non-dimmable
PH - phase dimmable
010V - 0-10V dimmable
DALI - compatible
Note: *Lm given in data is based on 4000k

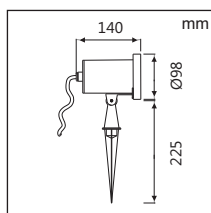
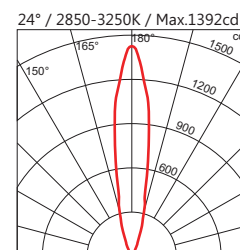
Application: outdoors
public/private/residential
hotels/parks
landscapes
gardens
Ambient Temp: -50°~+60°C



Ref Code 32.32.022.01.3.6
Watt 3x1.2W
mA 350
Lm(±) 350



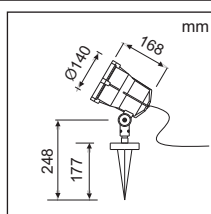
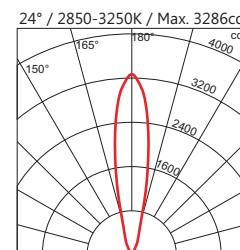
Beam Angle Code:
24°-BA24
36°-BA36



Ref Code 32.32.023.01.8.4
Watt 7x1.2W
mA 350
Lm(±) 750



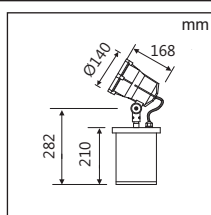
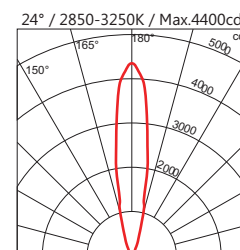
Beam Angle: 24°



Ref Code 32.32.024.01.10.8
Watt 9x1.2W
mA 350
Lm(±) 1000



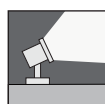
Beam Angle: 24°



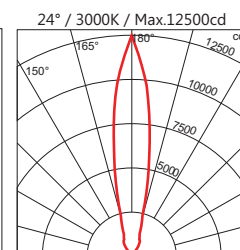
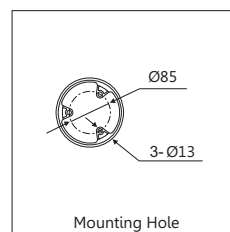
Anti-glare cap (CAP)

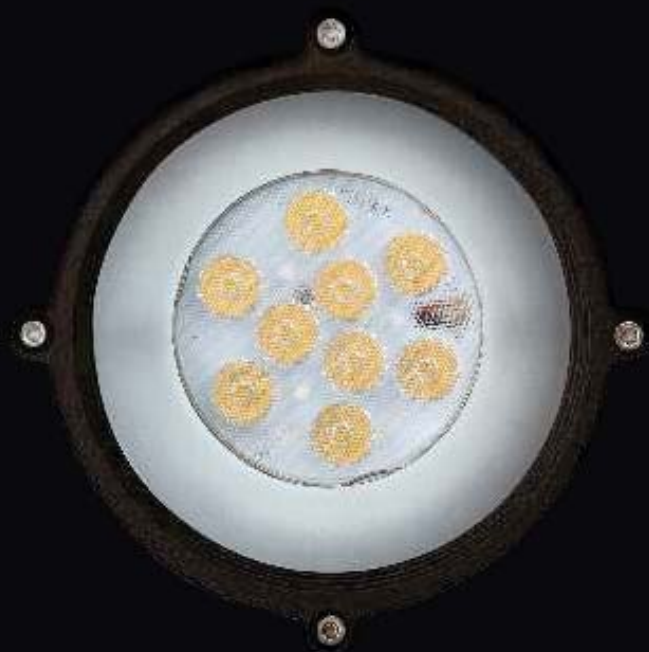


Ref Code 32.32.025.01.30
Watt 30W
mA 700
Lm(±) 2500



Beam Angle Code:
15°-BA15
24°-BA24
36°-BA36





Mounting: surface mounted
on bracket/spike

Housing: extruded aluminum, 2mm thick
with high corrosion resistance
with die-cast aluminum bracket/spike

Diffuser: 4mm thick tempered glass

Gasket: silicone

Finish options:
11-black matte/ 13-grey matte

LED: CREE (X-PE/COB)

CRI: Ra>80 (±3000k)
Ra>70 (±4000k)

CCT:
CT27-2700k
CT30-3000k
CT40-4000k

Lumen range:
93.9-100 lm/w (±3000k)
114-122 lm/w (±4000k)

LED driver: integral

Volt AC: 240V

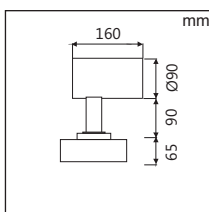
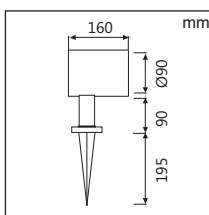
Frequency: 50/60Hz

LED driver options:
ND - non-dimmable
PH - phase dimmable
010V - 0-10V dimmable
DALI - compatible

Note: *Lm given in data is
based on 4000k

Application:
outdoors
public/private/residential
hotels/parks
landscapes
gardens

Ambient Temp: -50°~+60°C



Ref Code	Watt	mA	Lm(±)
32.32.026.01.20	20W	500	1900
32.32.026.02.30	30W	700	2500
32.32.026.03.45	45W	1050	4000

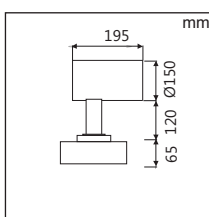
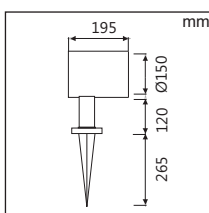
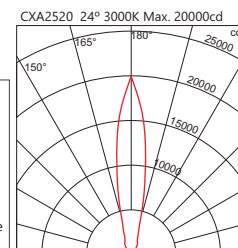
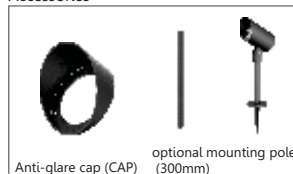
LED
COB XLamp CXA 2520
COB XLamp CXA 2530
COB XLamp CXA 2530

Beam-Angle Code:

24°-BA24
15°-BA15
36°-BA36



Accessories



Ref Code	Watt	mA	Lm(±)
32.32.027.01.20	20W	500	1900
32.32.027.02.30	30W	700	2500
32.32.027.03.45	45W	1050	4000

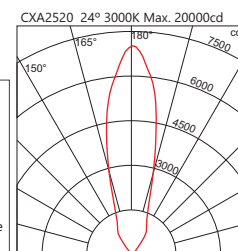
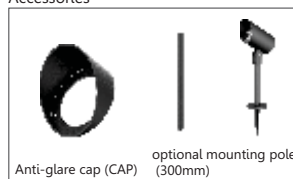
LED
COB XLamp CXA 2520
COB XLamp CXA 2530
COB XLamp CXA 2530

Beam-Angle Code:

24°-BA24
15°-BA15
36°-BA36



Accessories



mini flood lights

ELTE

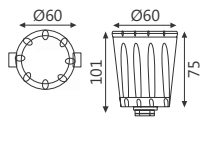
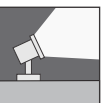
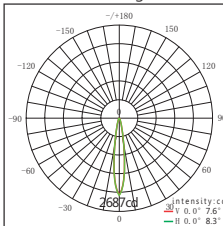
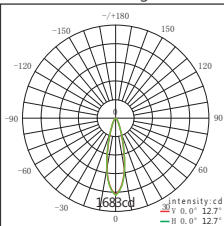
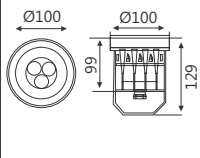
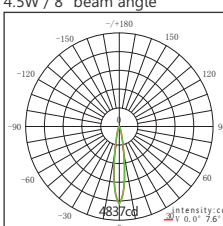
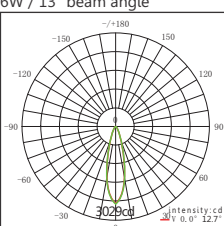
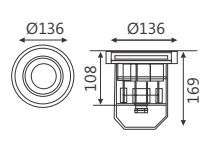
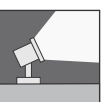
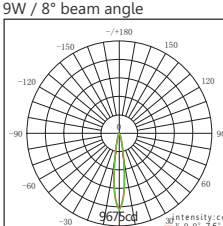
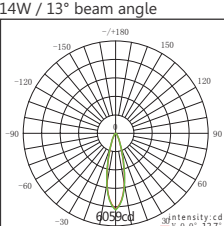
Mounting: surface mounted on bracket
Housing: aluminum alloy,
 UV-rays stabilized powder coated for
 outdoor applications
Diffuser: 4 mm tempered glass
Finish options:
 *RAL colors available on request

LED: CREE/Osram
CRI: Ra>80
CCT:
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW/Amber
Note:*Other CRI/CCT
 available on request

LED driver: integral,
 constant current
Volt AC: 220V
Volt DC: 12V
Frequency: 50/60Hz
Power Cable:
 DC12V: 2mx1.00mm² rubber
 AC220V: 3mx0.75mm² rubber
 DMX cable: 3mx0.5mm² rubber

Application:
 outdoors
 public/private/residential
 hotels/parks
 landscapes
 gardens
Ambient Temp: -35°~+55°C



kg: 0.5 	 	Ref Code 32.35.014.01.06 Watt 6W Color RGB LED Qty 3Pcs mA 550 Lm(±) 160 Beam Angle Code: 8°-BA08 13°-BA13	2.5W / 8° beam angle  2.5W / 13° beam angle 
kg: 1.3 	 	Ref Code 32.35.028.01.4.5 32.35.028.02.06 Watt 4.5W 6W Color WH RGB LED Qty 3Pcs 3Pcs mA 700 Lm(±) 300 Beam Angle Code: 8°-BA08 13°-BA13	4.5W / 8° beam angle  6W / 13° beam angle 
kg: 1.5 	 	Ref Code 32.35.030.01.09 32.35.030.02.14 Watt 9W 14W Color WH RGB LED Qty 6Pcs 6Pcs mA 700 Lm(±) 580 Beam Angle Code: 8°-BA08 13°-BA13	9W / 8° beam angle  14W / 13° beam angle 

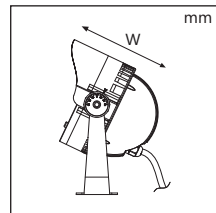
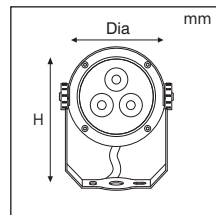


Mounting: surface mounted on bracket/spike
Housing: die-cast powder coated aluminum
Diffuser: tough tempered glass
Gasket: tooling shaped seal
Bracket: steel aluminum
Fitting's finish options:
 11-black matte
 13-grey matte
 15-silver grey matte

LED: SMD/COB(Osram)
CRI: Ra>80
CCT:
 CT30-3000k/CT40-4000k
 CT50-5000k/CT60-6000k
 RGB/RGBW
Note:*Other CRI/CCT
 available on request

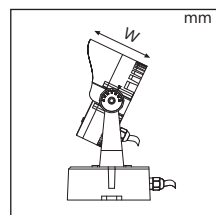
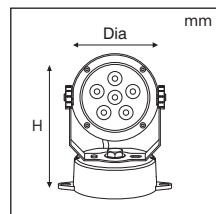
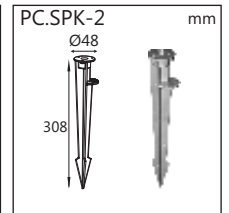
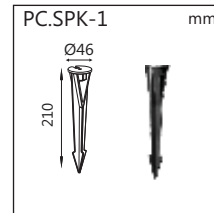
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 H05RN-F 2X1.0mm² L=2.0m(low voltage)
 H05RN-F 3X1.0mm² L=2.0m(high voltage)
 H05RN-F 4X0.75mm² L=2.0m(for RGB)

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C



Ref Code	Watt	Volt/mA	mA	Lm(±)	DiaxHxW
33.27.001.01.06	1x6W(COB)	24V DC	270	1250	105x130x98
33.27.001.02.06	1x6W(COB)	240V AC	35		105x130x98
33.27.002.01.15	3x5W(COB)	240V AC	82		177x197x146

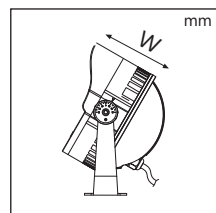
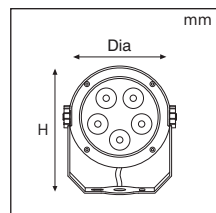
Beam Angle-Code:
 18°-BA18
 25°-BA25
 40°-BA40



Ref Code	Watt	Volt	mA	DiaxHxW
33.27.003.01.06	3x2W	24V DC	240	105x149x62
33.27.003.02.06	3x2W	240V AC	30	
33.27.003.03.06	3x2W(RGB 3-in-1)	24V DC(R/G/B)	70/125/124	
33.27.004.01.12	6x2W	240V AC	530	151x208x75
33.27.004.02.12	6x2W	24V DC(R/G/B)	56	
33.27.004.03.12	6x2W(RGB 3-in-1)	24V DC	200/250/250	
33.27.005.01.18	6x3W	240V AC	850	177x241x89
33.27.005.02.18	6x3W	24V DC(R/G/B)	84	
33.27.005.03.18	6x3W(RGB 3-in-1)		350/350/350	

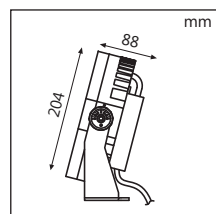
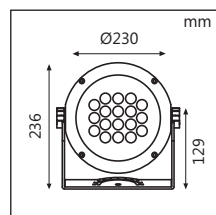
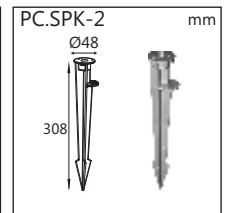
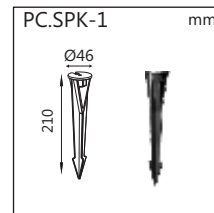
Beam Angle-Code:
 symmetric
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
RGB
 30°-BA30

Lm(±)
 1600



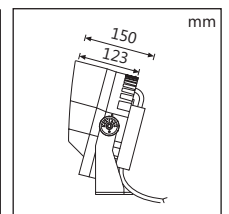
Ref Code	Watt	Volt/mA	mA	DiaxHxW
33.27.006.01.06	1x6W(RGBW 4-in-1)	24V DC/338	338	105x130x98
33.27.007.01.12	3x4W(RGBW 4-in-1)	24V DC/583	583	151x193x145
33.27.008.01.20	5x4W(RGBW 4-in-1)	24V DC/958	958	177x197x146

Beam Angle-Code:
 15°-BA15
 22°-BA22



Ref Code	Watt	Volt	mA	Lm(±)
33.27.009.01.36	18x2W	24V DC	1500	2000
33.27.009.02.36	18x2W	240V AC	155	
33.27.009.03.36	18x2W(RGB 3 in 1)	24V DC(R/G/B)	643/768/759	

Beam Angle-Code:
 6°-BA06
 20°-BA20
 30°-BA30
RGB
 30°-BA30



flood lights

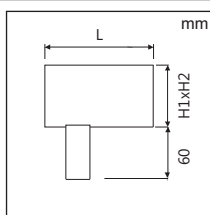
ELTE

Mounting: surface mounted on bracket/ spike
Housing: high pressure die-cast aluminum
Diffuser: toughened glass
Fitting's finish options:
 11-black matte/ 13-grey matte
 15-silver grey matte
 *RAL colors available on request

LED: SMD/COB(CREE)
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB/RGBW
Note:*Other CRI/CCT available on request

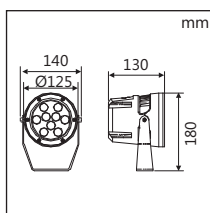
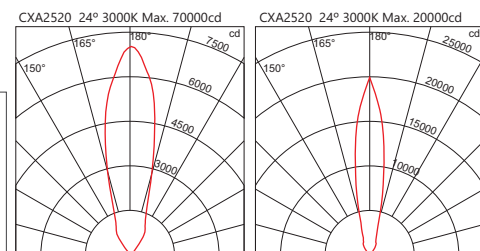
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C



Ref Code	Watt	mA	Lm(±)	LxH1xH2
33.32.077.01.20	20W	500	1900	160x100x100
33.32.078.01.30	30W	700	2500	190x150x150
33.32.078.02.45	45W	1050	4000	190x150x150

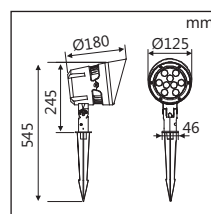
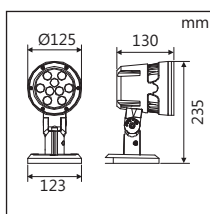
Beam-Angle Code:
 24°-BA24
 15°-BA15
 36°-BA36



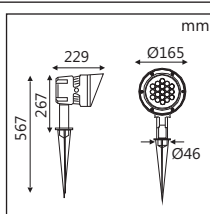
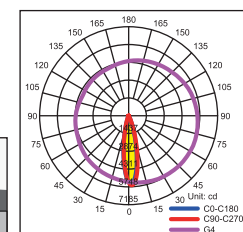
Ref Code	Watt	LED Qty	LED Color
33.26.010.01.11	11W	9Pcs	RGB/Single
33.26.010.02.20	20W	9Pcs	RGB/Single

Note:
 *mention LED color in the code (RGB/Single)

Note:
 RGB-DC 12/24V-DMX512
 Single Color - AC 100/240V

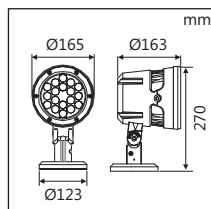
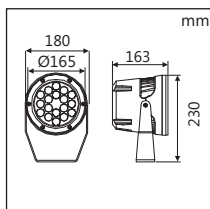


Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45

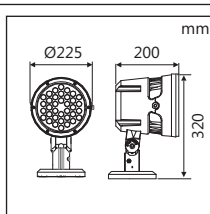
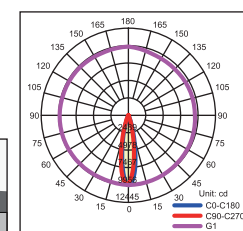
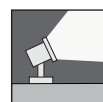


Ref Code	Watt	LED Qty	LED Color
33.26.011.01.21	21W	18Pcs	Single
33.26.011.02.30	30W	18Pcs	Single

Note:
 RGB-DC 12/24V-DMX512
 Single Color - AC 100/240V

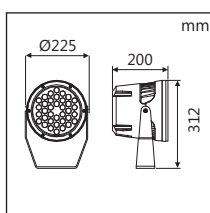


Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45

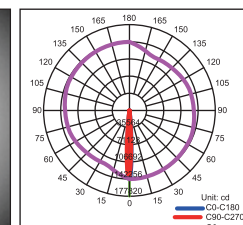
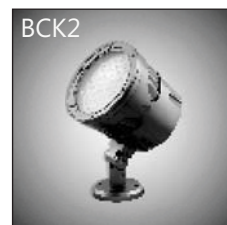


Ref Code	Watt	LED Qty	LED Color
33.26.012.01.50	50W	24Pcs	RGB/Single
33.26.012.02.60	60W	36Pcs	RGB/Single
33.26.012.03.86	86W	36Pcs	RGB/Single

Note:
 RGB-DC 24/36V-DMX512
 Single Color - AC 100/240V



Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45





flood lights

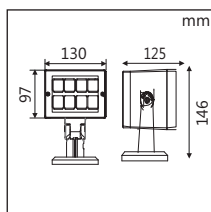
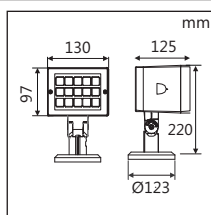
ELTE

Mounting: surface mounted
on bracket/ spike
Housing: high pressure die-cast aluminum
Diffuser: clear tempered glass
Finish options:
13-grey matte (standard)
*RAL colors available on request

LED:CREE/COB
CRI: Ra>80
CCT:
CT30-3000k
CT40-4000k
CT50-5000k
CT60-6000k
RGB
Note:*Other CRI/CCT
available on request

LED driver: integral
Volt AC: 100V-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
ND - non-dimmable
PH - phase dimmable
010V - 0-10V dimmable
DALI - compatible

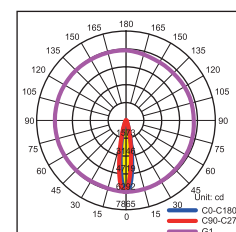
Application:
outdoors
public/private/residential
landscapes
building facades
gardens
Ambient Temp: -35°~+55°C



Ref Code	Watt	LED Color	LED Qty	Lm(±)	kg:
33.26.014.01.21	21W	Single	6Pcs	2100	1.95
33.26.014.02.16	16W(COB)	Single	1Pcs	1600	1.95
33.26.014.03.12	12W	RGB	8Pcs		1.60

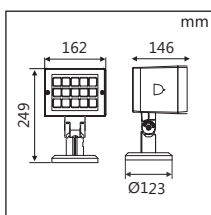
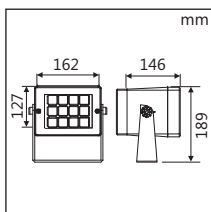
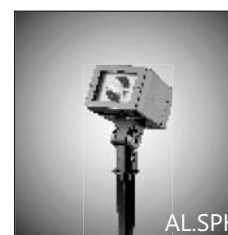
Beam Angle-Code:

6°-BA06
12°-BA12
15°-BA15(COB)
30°-BA30
48°-BA48
12°x48°-BA12x48



Notes:

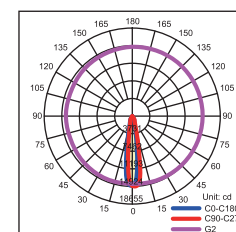
*RGB-DC 12V-DMX512
Single Color - AC 100/240V
*mention LED color in the code (RGB/ Single)



Ref Code	Watt	LED Color	LED Qty	Lm(±)
33.26.015.01.28	28W	Single	15Pcs	2800
33.26.015.02.32	32W(COB)	Single	1Pcs	3200
33.26.015.03.32	32W	RGB	15Pcs	

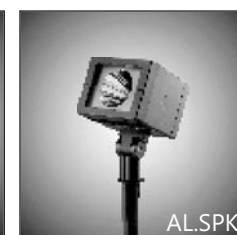
Beam Angle-Code:

6°-BA06
12°-BA12
15°-BA15(COB)
20°-BA20
30°-BA30
48°-BA48
12°x48°-BA12x48



Notes:

*RGB-DC 12V-DMX512
Single Color - AC 100/240V
*mention LED color in the code (RGB/ Single)

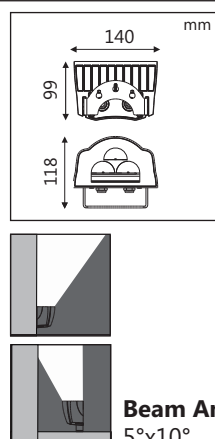


Mounting: surface mounted (ground/wall)
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: 4mm clear tough tempered glass
Finish options:
 13-grey matte
 *RAL colors available on request
Note: beam intensity is up to 10m, 15m, 20m, 25m, 40m

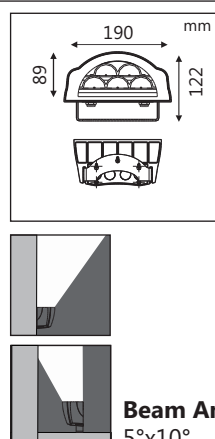
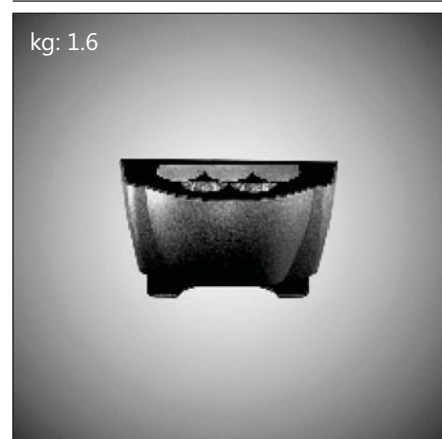
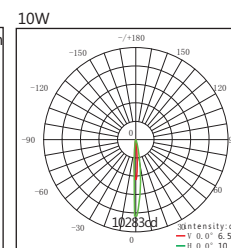
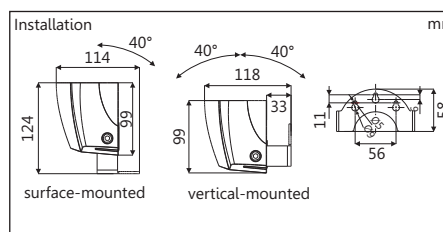
LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512
Power cable:
 3mx1.00mm² rubber

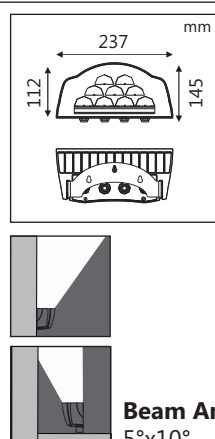
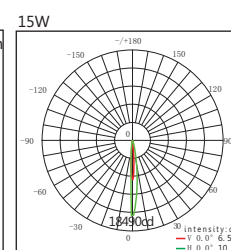
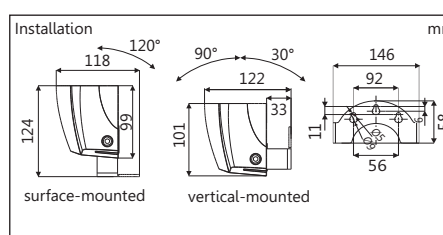
Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C



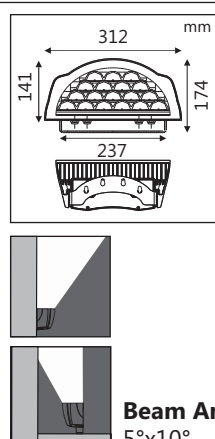
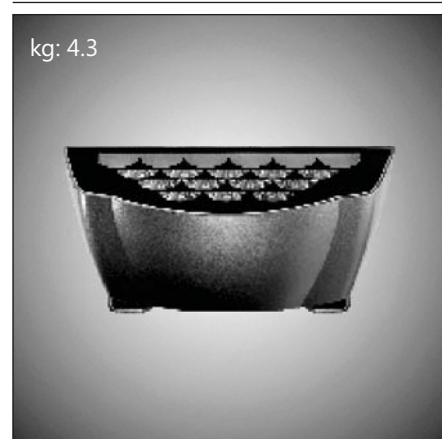
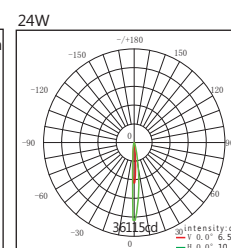
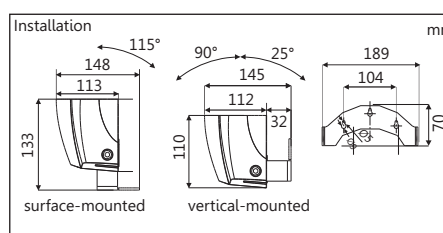
Ref Code 33.35.017.01.10 **Watt** 10W **LED Qty** 3pcs **CCT-Lm**
 3000K-327.4lm
 4000K-376.54lm



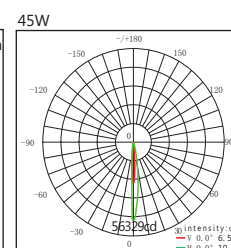
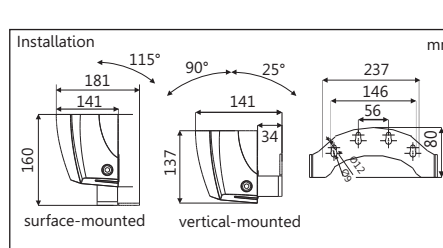
Ref Code 33.35.018.01.15 **Watt** 15W **LED Qty** 5pcs **White LED**
 3000K-524.7lm
 4000K-603.4lm



Ref Code 33.35.019.01.24 **Watt** 24W **LED Qty** 9pcs **White LED**
 3000K-9351lm
 4000K-1075.25lm



Ref Code 33.35.020.01.45 **Watt** 45W **LED Qty** 18pcs **White LED**
 3000K-1349lm
 4000K-1551.35lm



flood lights

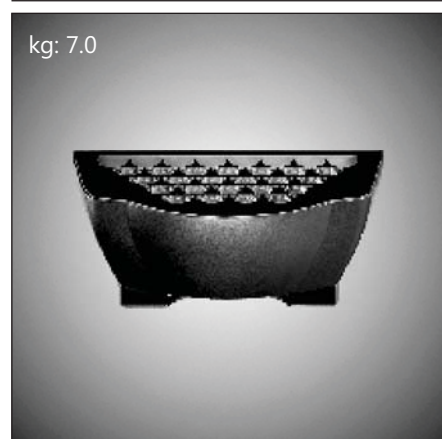
ELTE

Mounting: surface mounted on bracket
Housing: aluminum alloy UV-rays stabilized
Diffuser: 4 mm clear tough tempered glass
Finish options:
 13-grey matte
 *RAL colors available on request
Note: beam intensity is
 up to 10m, 15m, 20m, 25m, 40m

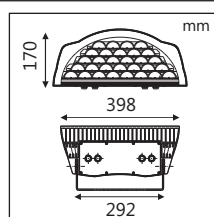
LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512
Power cable:
 3mx1.00mm² rubber

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C

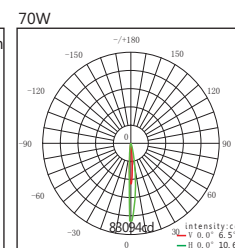
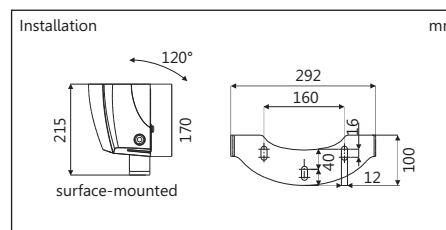


kg: 7.0

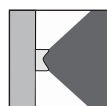
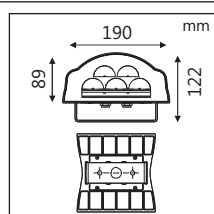


Beam Angle:
 5°x10°

Ref Code 33.35.021.01.70 **Watt** 70W **LED Qty** 30pcs **White LED**
 3000K-2267lm
 4000K-2607lm

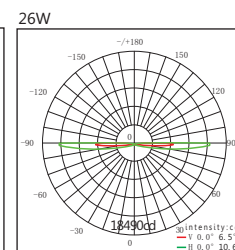
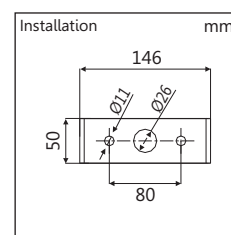


kg: 2.7



Beam Angle:
 5°x10°

Ref Code 33.35.022.01.26 **Watt** 26W **LED Qty** 10pcs **White LED**
 3000K-935lm
 4000K-1057.2lm

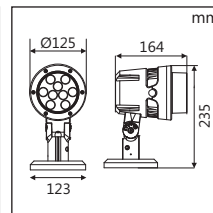


Mounting: surface mounted on bracket
Housing: high pressure die-cast aluminum with electrostatic plastic coating
Diffuser: clear tempered glass
Fitting's finish options:
 11-black matte/ 13-grey matte
 15-silver grey matte
 *RAL colors available on request

LED: CREE/COB/SMD
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT available on request

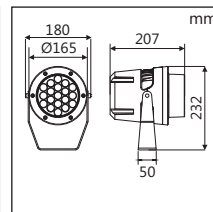
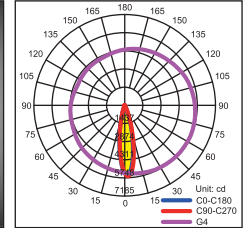
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C



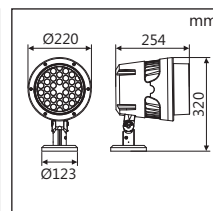
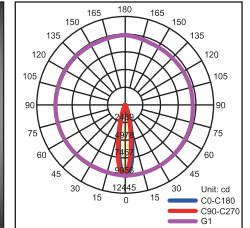
Ref Code	Watt	Volt	LED Qty	LED Color
33.26.023.01.20	20W	240V AC	1 (COB)	Single
33.26.023.02.20	20W	240V AC	9Pcs	Single

Beam Angle-Code:	COB:
5°-BA05	10°-BA10
12.5°-BA12.5	24°-BA24
20°-BA20	38°-BA38
30°-BA30	
45°-BA45	
60°-BA60	
15°x30°-BA15x30	
10°x60°-BA10x60	



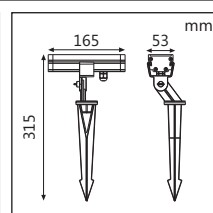
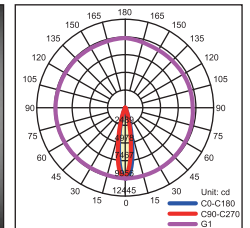
Ref Code	Watt	Volt	LED Qty	LED Color
33.26.024.01.30	30W	240V AC	1Pcs (COB)	Single
33.26.024.02.30	30W	240V AC	18Pcs	Single

Beam Angle-Code:	COB:
5°-BA05	10°-BA10
12.5°-BA12.5	24°-BA24
20°-BA20	38°-BA38
30°-BA30	
45°-BA45	
60°-BA60	
15°x30°-BA15x30	
10°x60°-BA10x60	



Ref Code	Watt	Volt	LED Qty	LED Color
33.26.025.01.60	60W	240V AC	1Pcs (COB)	Single
33.26.025.02.86	86W	240V AC	36Pcs	Single

Beam Angle-Code:	COB:
5°-BA05	10°-BA10
12.5°-BA12.5	24°-BA24
20°-BA20	38°-BA38
30°-BA30	
45°-BA45	
60°-BA60	
15°x30°-BA15x30	
10°x60°-BA10x60	



Ref Code	Watt	Volt	mA	Lm(±)
33.27.026.01.4.5	3x1.5W	24V DC	250	400

Beam Angle-Code:
6°-BA06
13°-BA13
20°-BA20
30°-BA30

Spike: PVC

flood lights

ELTE

Mounting: surface mounted (ground/wall)
Housing:
 high pressure die-cast aluminum
 with electrostatic plastic coating
Diffuser: clear tempered glass
Finish options:
 13-grey matte
 15-silver grey matte
 *RAL colors available on request

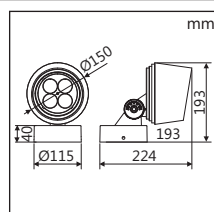
LED: CREE XP-L
 CREE XP-G2
 CREE RGBW 4 in 1
CRI: Ra > 70
CCT:
 CT40-4000k/CT50-5000k
 CT60-6000k
 RGB/RGBW
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C



kg: 2.5

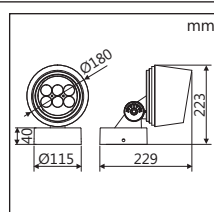


Ref Code	Watt	Volt	LED Qty	LED Color
33.26.027.01.15	15W	240V AC	4Pcs	Single
33.26.027.02.20	20W	240V AC	4Pcs	Single
33.26.027.03.20	20W	24V DC	4Pcs	RGBW

Beam
Angle-Code:
 8°x2°-BA8x2
 12°-BA12
 20°-BA20
 30°-BA30
 10°x70°-BA10x70



kg: 2.7

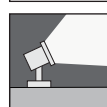
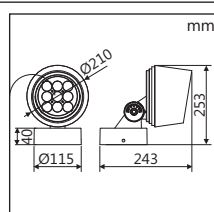


Ref Code	Watt	Volt	LED Qty	LED Color
33.26.028.01.22	22W	90-265V AC	6Pcs	Single
33.26.028.02.30	30W	90-265V AC	6Pcs	Single
33.26.028.03.30	30W	24V DC	6Pcs	RGBW

Beam
Angle-Code:
 8°x2°-BA8x2
 12°-BA12
 20°-BA20
 30°-BA30
 10°x70°-BA10x70

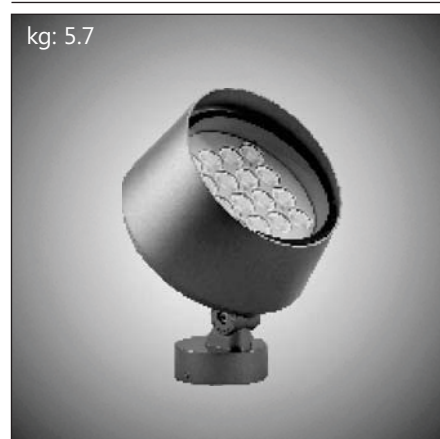


kg: 3.7

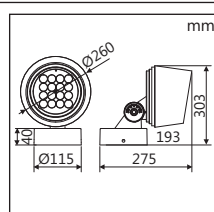


Ref Code	Watt	Volt	LED Qty	LED Color
33.26.029.01.35	35W	90-265V AC	9Pcs	Single
33.26.029.02.45	45W	90-265V AC	9Pcs	Single
33.26.029.03.45	45W	36V DC	9Pcs	RGBW

Beam
Angle-Code:
 8°x2°-BA8x2
 12°-BA12
 20°-BA20
 30°-BA30
 10°x70°-BA10x70



kg: 5.7



Ref Code	Watt	Volt	LED Qty	LED Color
33.26.030.01.60	60W	180-295V AC	16Pcs	Single
33.26.030.02.75	75W	180-295V AC	16Pcs	Single
33.26.030.03.75	75W	36V DC	16Pcs	RGBW

Beam
Angle-Code:
 8°x2°-BA8x2
 12°-BA12
 20°-BA20
 30°-BA30
 10°x70°-BA10x70



flood lights

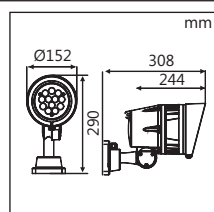
ELTE

Mounting: surface mounted on bracket
Housing: die-cast aluminum
Diffuser: tempered glass
Power cable: 3m
Finish options:
 01-white matte
 *other RAL colors available on request

LED: Lumileds
CRI: Ra>80 (+/- 3000k)
 Ra>70 (+/- 5600k)
CCT:
 CT30-3000k
 CT40-4000k
 CT56-5600k
Note: *Other CRI/CCT
 available on request

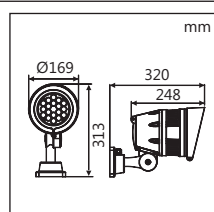
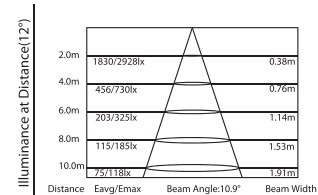
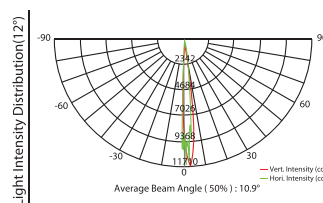
LED driver: integral
Volt AC: 277V
LED driver options:
 ND - non-dimmable
 DMX - dimmable by DMX

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C



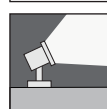
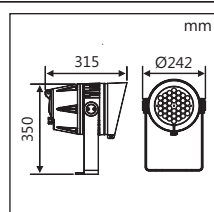
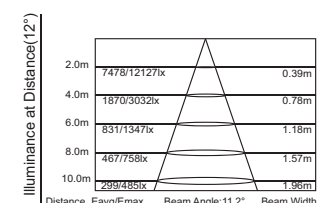
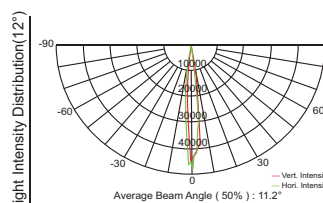
Beam Angle Code:
 5°-BA05
 12°-BA12
 25°-BA25
 45°-BA45

Ref Code	Watt	Lm(±)	LED Qty
33.33.031.01.38	38W	1300	12pcs (WH)
33.33.031.02.38	38W	850	12pcs (4R+4G+4B)



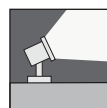
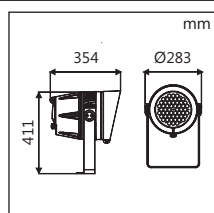
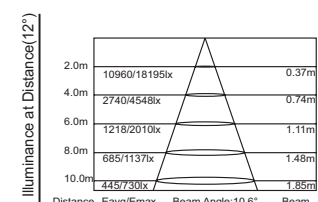
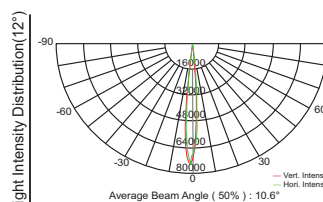
Beam Angle Code:
 5°-BA05
 12°-BA12
 25°-BA25
 45°-BA45

Ref Code	Watt	Lm(±)	LED Qty
33.33.032.01.55	55W	1800	18pcs (WH)
33.33.032.02.55	55W	1120	18pcs (6R+6G+6B)



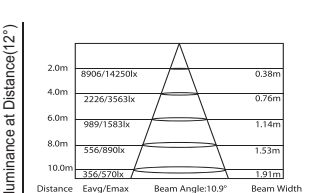
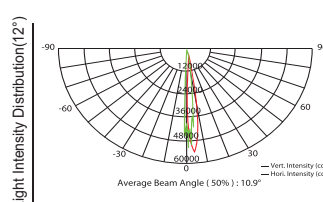
Beam Angle Code:
 5°-BA05
 12°-BA12
 25°-BA25
 45°-BA45

Ref Code	Watt	Lm(±)	LED Qty
33.33.033.01.100	100W	4800	36pcs (WH)
33.33.033.02.120	120W	2700	36pcs (12R+12G+12B)



Beam Angle Code:
 5°-BA05
 12°-BA12
 25°-BA25
 45°-BA45

Ref Code	Watt	Lm(±)	LED Qty
33.33.034.01.150	150W	7800	54pcs (WH)
33.33.034.02.170	170W	3500	54pcs (18R+18G+18B)

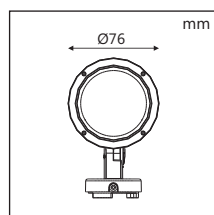
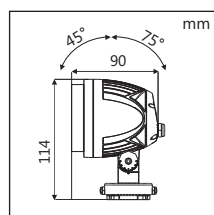


Mounting: surface mounted on bracket
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: 3 mm tempered glass
Power Cable:
 AC 220V: 3mx1.00mm² rubber
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT
 available on request

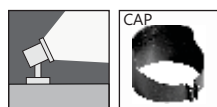
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C

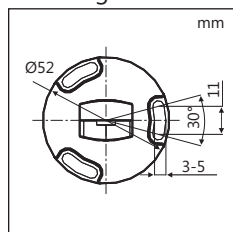


Ref Code	Watt	LED Qty	LED Color	Lumen output:
33.35.035.01.06	6W	1pcs	WH	14W White LED
33.35.035.02.12	12W	12pcs	WH	18°-BA18:
33.35.035.03.12	12W	12pcs	RGBW	3000K-411lm 6500K-442lm
				27°-BA27:
				3000K-414lm 6500K-445lm
				41°-BA41:
				3000K-430lm 6500K-462lm
				70°-BA70:
				3000K-436lm 6500K-468lm

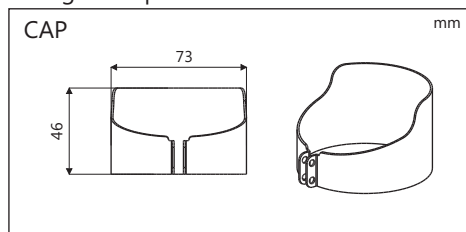
Beam Angle-Code:
 18°-BA18
 27°-BA27
 41°-BA41
 70°-BA70



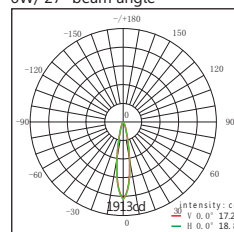
Mounting



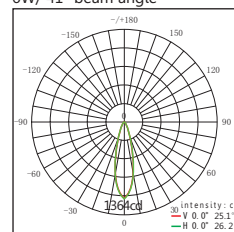
Anti-glare cap



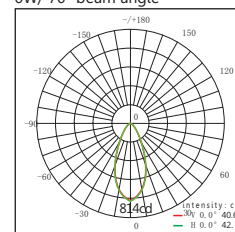
6W/ 27° beam angle



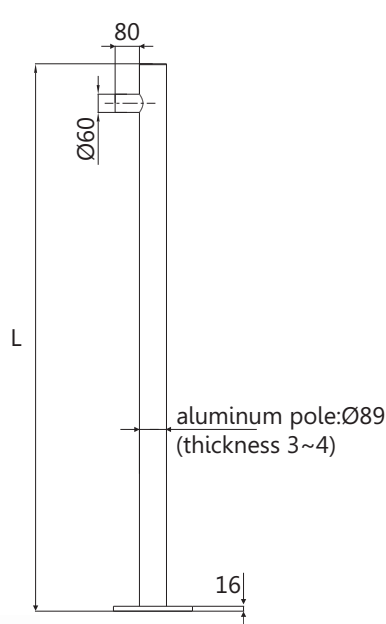
6W/ 41° beam angle



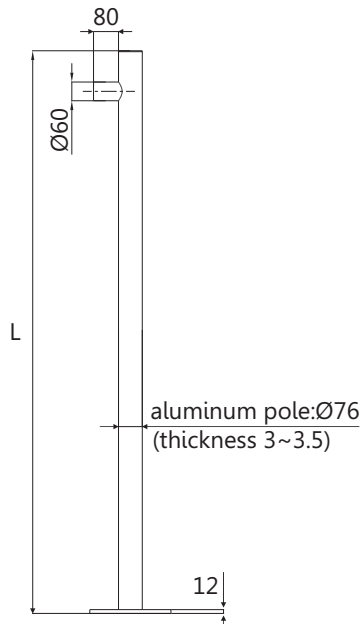
6W/ 70° beam angle



Diameter: 76mm
 Length: customizable
 Material: Q234-A
 Surface finishing: hot galvanizing,
 Akzo powder coating



Diameter: 89mm
 Length: customizable
 Material: Q234-A
 Surface finishing: hot galvanizing,
 Akzo powder coating

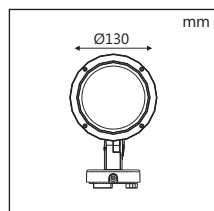
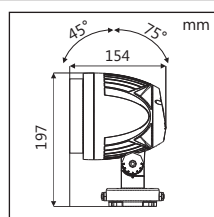
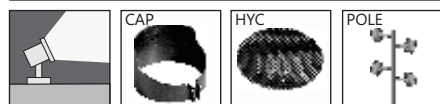


Mounting: surface mounted on bracket
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: 3 mm tempered glass
Power Cable:
 AC 220V: 3mx1.00mm² rubber
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C

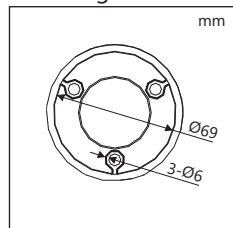


Ref Code	Watt	LED Qty	LED Color
33.35.036.01.12	12W	3pcs	WH
33.35.036.02.15	15W	3pcs	WH
33.35.036.03.20	20W	3pcs	RGBW

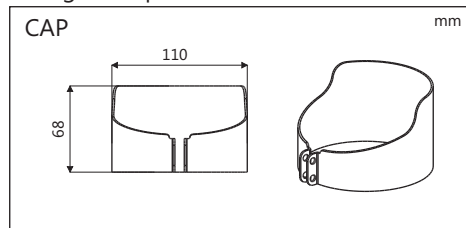
Beam Angle-Code:
 5°-BA05
 8°-BA08
 15°-BA15
 25°-BA25

Lumen output:
RGBW LED
8°-BA8:
 Red:630nm,123lm
 Green:528nm,160lm
 Blue:470nm,36lm
 White:6500k,196lm
15°-BA15:
 Red:630nm,141lm
 Green:528nm,183lm
 Blue:470nm,41lm
 White:6500k,224lm
25°-BA25:
 Red:630nm,138lm
 Green:528nm,179lm
 Blue:470nm, 40lm
 White:6500k,219lm
White LED
5°-BA5:
 3000K-685lm
 6500K-736lm

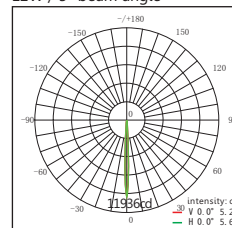
Mounting



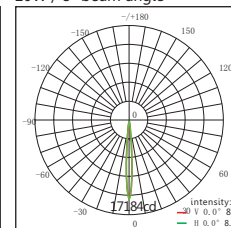
Anti-glare cap



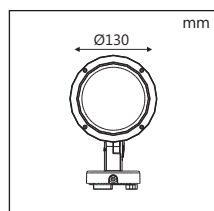
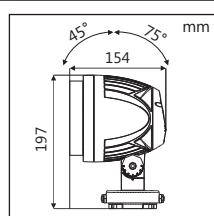
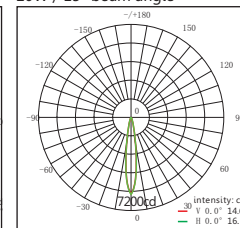
12W / 5° beam angle



20W / 8° beam angle



20W / 15° beam angle

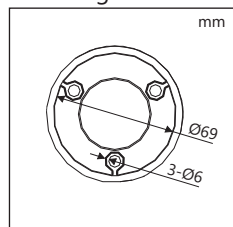


Ref Code	Watt	LED Qty	LED Color
33.35.037.01.18	18W	16pcs	WH
33.35.037.02.18	18W	16pcs	WH
33.35.037.03.18	18W	1pcs	RGBW

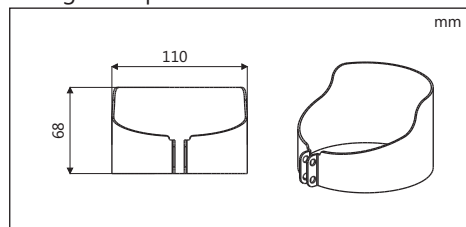
Beam Angle-Code:
 15°-BA15
 36°-BA36
 46°-BA46
 70°-BA70

Lumen output:
White LED
15°-BA15:
 3000K-1754lm
 6500K-1885lm
36°-BA36:
 3000K-1816lm
 6500K-1952lm
46°-BA46:
 3000K-1448lm
 6500K-1599lm
70°-BA70:
 3000K-1899lm
 6500K-2041lm

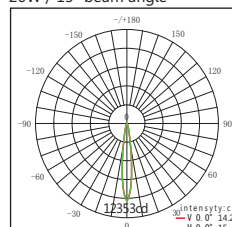
Mounting



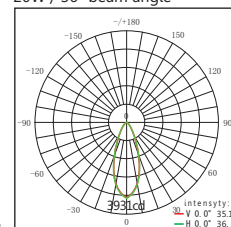
Anti-glare cap



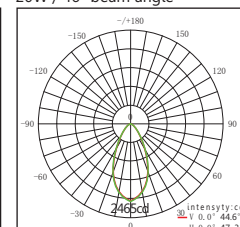
20W / 15° beam angle



20W / 36° beam angle



20W / 46° beam angle

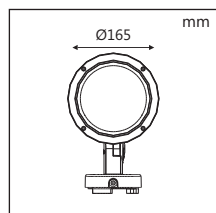
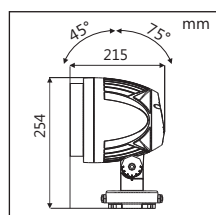


Mounting: surface mounted on bracket
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: 4 mm tempered glass
Power Cable:
 AC 220V: 3mx1.00mm² rubber
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT
 available on request

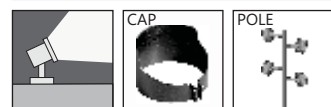
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C

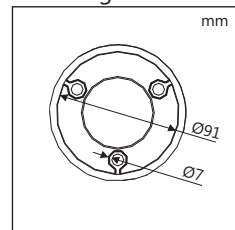


Ref Code	Watt	LED Qty	LED Color	Lumen output:
33.35.038.01.30	30W	32pcs	WH	White LED
33.35.038.02.30	30W	32pcs	WH	11°-BA11:
33.35.038.03.30	30W	1pcs	RGBW	3000K-2919lm 6500K-3138lm
				18°-BA18:
				3000K-2462lm 6500K-2647lm
				38°-BA38:
				3000K-2332lm 6500K-2507lm
				73°-BA73:
				3000K-2691lm 6500K-2893lm

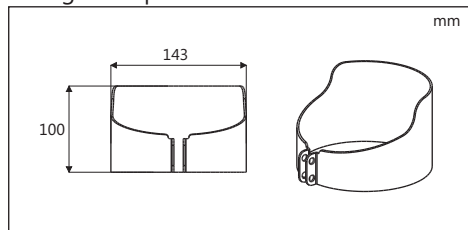
Beam Angle-Code:
 11°-BA11
 18°-BA18
 38°-BA38
 73°-BA73



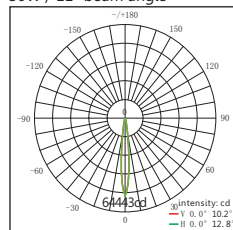
Mounting



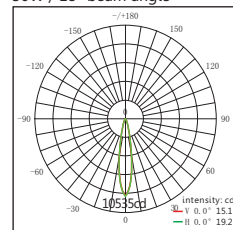
Anti-glare cap



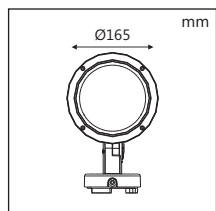
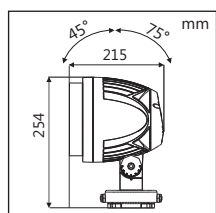
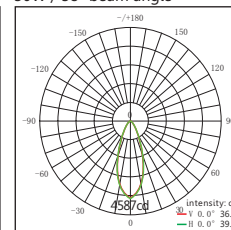
30W / 11° beam angle



30W / 18° beam angle

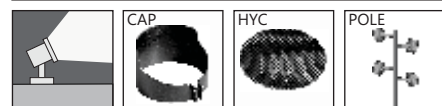


30W / 38° beam angle

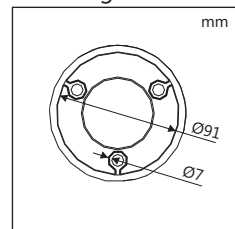


Ref Code	Watt	LED Qty	LED Color	Lumen output:
33.35.039.01.24	24W	6pcs	WH	RGBW LED
33.35.039.02.25	25W	5pcs	WH	8°-BA8:
33.35.039.03.30	30W	6pcs	WH	Red: 630nm, 185lm Green: 528nm, 240lm Blue: 470nm, 54lm White: 6500k-294lm
33.35.039.04.30	30W	5pcs	RGBW	15°-BA15:
33.35.039.05.40	40W	6pcs	RGBW	Red: 630nm, 283lm Green: 528nm, 366lm Blue: 470nm, 82lm White: 6500k-449lm
				25°-BA25:
				Red: 630nm, 277lm Green: 528nm, 358lm Blue: 470nm, 81lm White: 6500k-439lm
				White LED
				5°-BA5:
				3000K-1370lm 4000K-1473lm

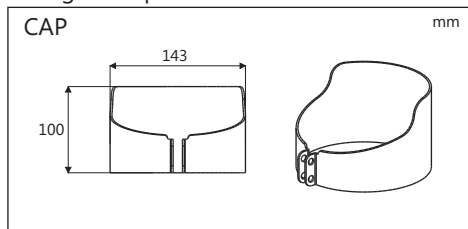
Beam Angle-Code:
 5°-BA05
 8°-BA08
 15°-BA15
 25°-BA25



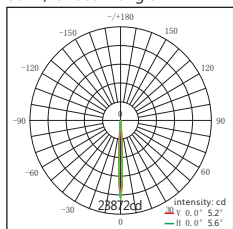
Mounting



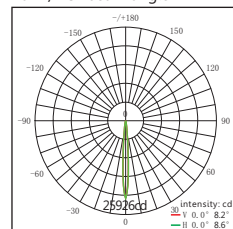
Anti-glare cap



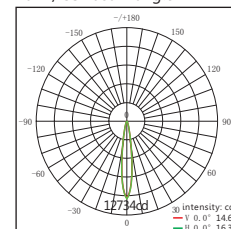
30W / 8° beam angle



40W / 15° beam angle



40W / 35° beam angle

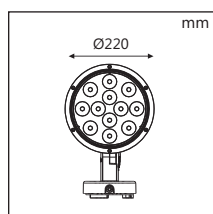
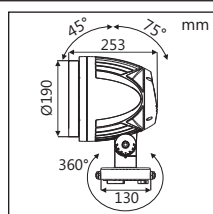
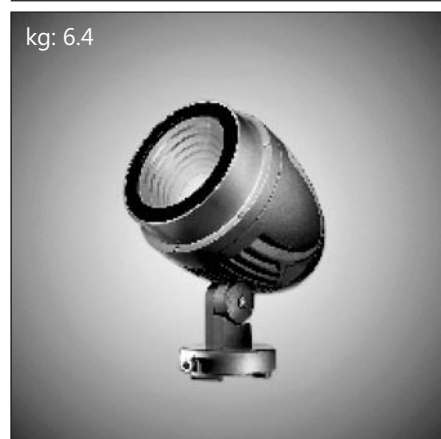


Mounting: surface mounted on bracket
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: 4 mm tempered glass
Power Cable:
 AC 220V: 3mx1.00mm² rubber
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT
 available on request

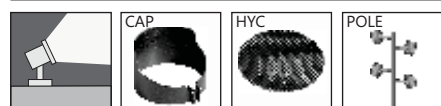
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C

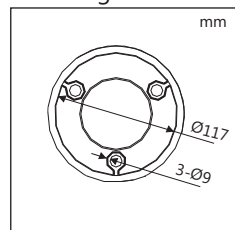


Ref Code	Watt	LED Qty	LED Color	Lumen output:
33.35.040.01.60	60W	1pcs	WH	White LED
33.35.040.02.60	60W	48pcs	RGBW	11°-BA11: 3000K-5424lm 4000K-5830lm
				18°-BA18: 3000K-4141lm 4000K-4453lm
				38°-BA38: 3000K-3916lm 4000K-4209lm
				73°-BA73: 3000K-4457lm 4000K-4791lm

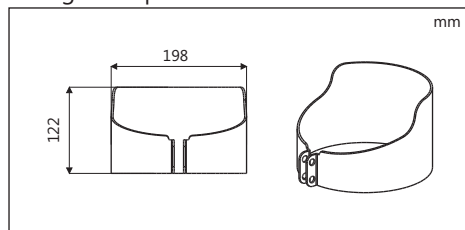
Beam Angle-Code:
 11°-BA11
 18°-BA18
 38°-BA38
 73°-BA73



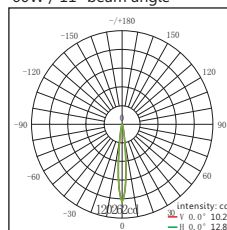
Mounting



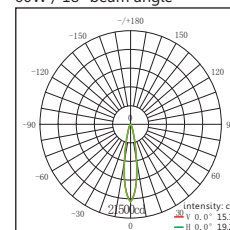
Anti-glare cap



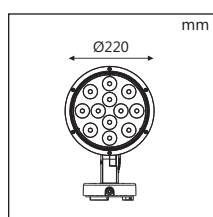
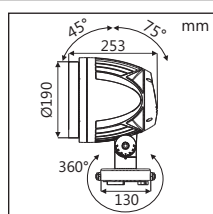
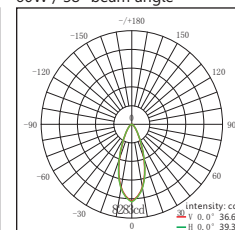
60W / 11° beam angle



60W / 18° beam angle

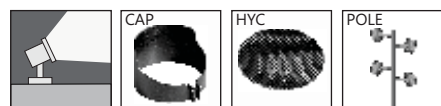


60W / 38° beam angle

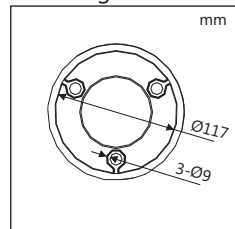


Ref Code	Watt	LED Qty	LED Color	Lumen output:
33.35.041.01.60	60W	12pcs	WH	RGBW LED
33.35.041.02.80	80W	12pcs	RGBW	8°-BA8: Red: 630nm, 371.6lm Green: 528nm, 480lm Blue: 470nm, 1081lm White: 6500k, 588lm
				15°-BA15: Red: 630nm, 556lm Green: 528nm, 719lm Blue: 470nm, 162lm White: 6500k-858lm
				25°-BA25: Red: 630nm, 376lm Green: 528nm, 744lm Blue: 470nm, 168lm White: 6500k-888lm

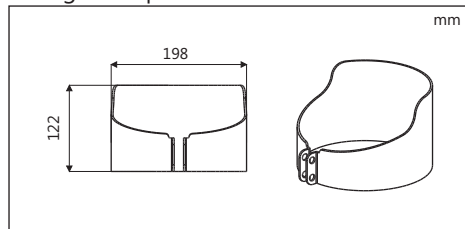
Beam Angle-Code:
 5°-BA05
 8°-BA08
 15°-BA15
 25°-BA25



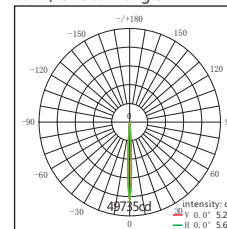
Mounting



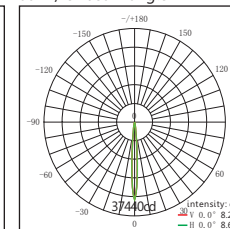
Anti-glare cap



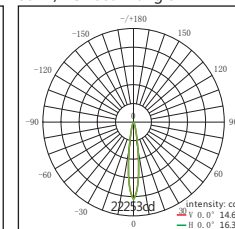
60W / 5° beam angle



60W / 8° beam angle



80W / 15° beam angle

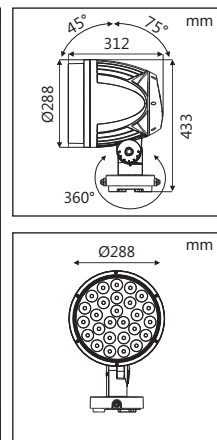


Mounting: surface mounted on bracket
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: 5 mm tempered glass
Power Cable:
 AC 220V: 3mx1.00mm² rubber
Finish options:
 13-grey matte
 *other RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C

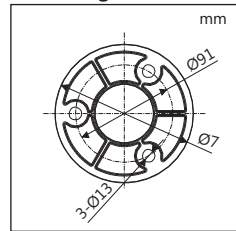


Ref Code	Watt	LED Qty	LED Color
33.35.042.01.120	120W	27pcs	WH
33.35.042.02.150	150W	27pcs	WH
33.35.042.03.180	180W	27pcs	RGBW

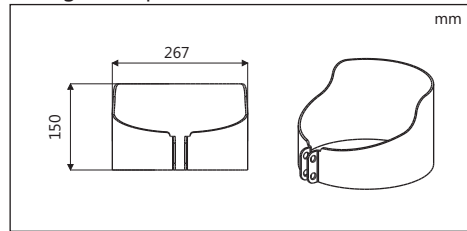
Lumen output:
RGBW LED
8°-BA08:
 Red: 630nm, 743.3lm
 Green: 528nm, 960.1lm
 Blue: 470nm, 216.8lm
 White: 6500k-1176.9lm
15°-BA15:
 Red: 630nm, 1252lm
 Green: 528nm, 1618lm
 Blue: 470nm, 365lm
 White: 6500k-1931lm
25°-BA25:
 Red: 630nm, 1296lm
 Green: 528nm, 1674lm
 Blue: 470nm, 378lm
 White: 6500k-1998lm
White LED
8°-BA08:
 3000K-6853lm
 4000K-7367lm



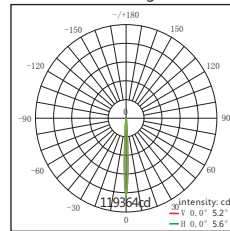
Mounting



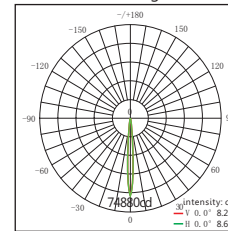
Anti-glare cap



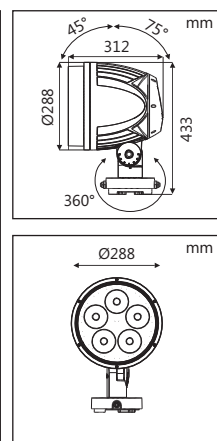
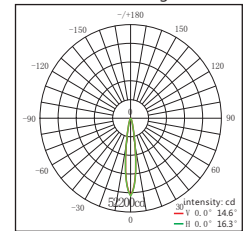
120W / 5° beam angle



120W / 8° beam angle



180W / 15° beam angle

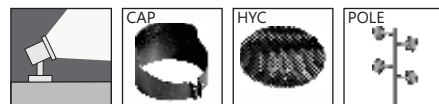


Ref Code	Watt	LED Qty	LED Color
33.35.043.01.120	120W	5pcs	WH

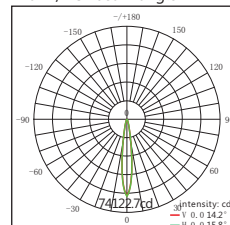
Lumen output:
WHITE LED
15°-BA15:
 2700K/3000K-10524lm
 4000K/6500K-11313.3lm
36°-BA36:
 2700K/3000K-10898.4lm
 4000K/6500K-11715.8lm
46°-BA46:
 2700K/3000K-8928lm
 4000K/6500K-9597.6lm
70°-BA70:
 2700K/3000K-11396.4lm
 4000K/6500K-12251.1lm

Beam Angle-Code:

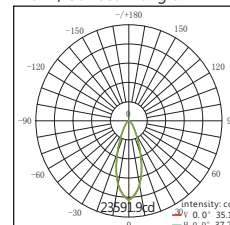
15°-BA15
 36°-BA36
 46°-BA46
 70°-BA70



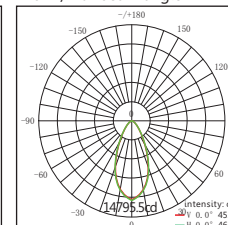
120W / 15° beam angle



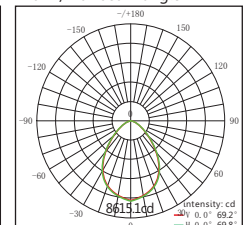
120W / 36° beam angle



120W / 46° beam angle



120W / 70° beam angle



flood lights

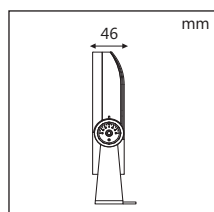
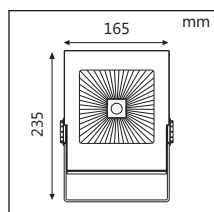


Mounting: surface mounted on bracket
Housing: die-cast powder coated aluminum
Diffuser: 4 mm tempered glass
Gasket: tooling shaped seal
Bracket: aluminum
Fitting's finish options:
 11-black matte/ 13-grey matte
 15-silver grey matte
 *RAL colors available on request

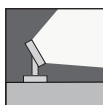
LED: CREE
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral/external
Volt AC: 220-240V
Volt DC: 12V/24V
Frequency: 50/60Hz
Power Cable:
 (DC12V) 2X1.0mm²/L=2.0m
 (AC 240V) 3X1.0mm²/L=2.0m
 (RGB) 4X0.75mm²/L=2.0m

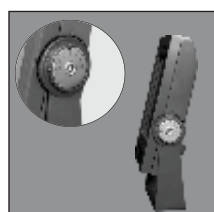
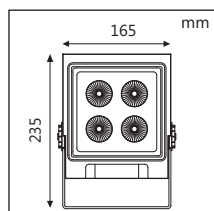
Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C



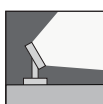
Ref Code	Watt	Volt	mA	Lm(±)
33.27.044.01.20	20W	24V DC	960	1700
33.27.044.02.20	20W	240V AC	105	



Beam Angle: 100°

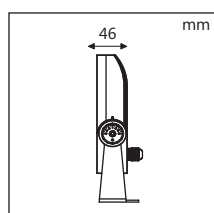
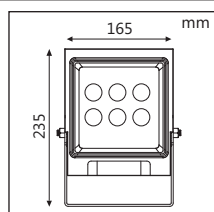


Ref Code	Watt	Volt	mA	Lm(±)
33.27.045.01.20	4x5W	24V DC	1279	1800
33.27.045.02.20	4x5W	240V AC	114	

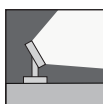


Beam Angle-Code:

18°-BA18
 25°-BA25
 40°-BA40

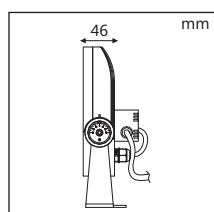
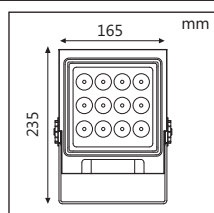


Ref Code	Watt	Volt	mA	Lm(±)
33.27.046.01.24	6x4W (RGBW 4-in-1)	24V DC	299/350/352/349	1000

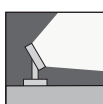


Beam Angle-Code:

15°-BA15
 22°-BA22



Ref Code	Watt	Volt	mA	Lm(±)
33.27.047.01.24	12x2W	24V DC	1051	1400
33.27.047.02.24	12x2W	240V AC	79	
33.27.047.03.24	12x2W(RGB 3 in 1)	24V DC	R/G/B=429/512/506	



Beam Angle-Code:

symmetric
 9°-BA09
 15°-BA15
 20°-BA20
 30°-BA30
 45°-BA45
RGB
 30°-BA30

flood lights

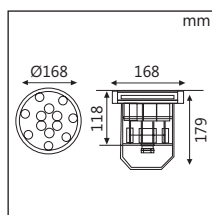
ELTE

Mounting: surface mounted on bracket
Housing: aluminum alloy
 UV-rays stabilized
Diffuser: tempered glass
Finish options:
 11-black matte
 13-grey matte
 *other RAL colors available on request

LED: CREE/Osram
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 220-240V
Volt DC: 12V/24V
Frequency: 50/60Hz
Power Cable:
 DC24V: 2x1.00mm² rubber
 AC220V: 3x0.75mm² rubber
 DMX cable: 3x0.5mm² rubber

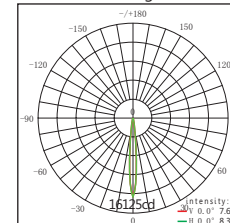
Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C



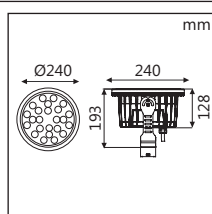
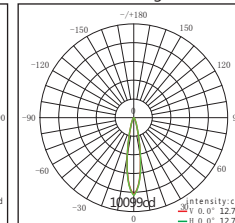
Beam Angle
Code:
 8°-BA08
 13°-BA13

Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.048.01.15	15W	WH	12Pcs	550	905
33.35.048.02.24	24W	RGB	12Pcs		

15W / 8° beam angle



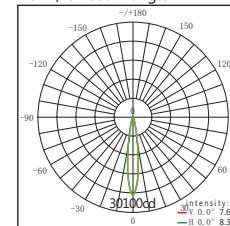
24W / 13° beam angle



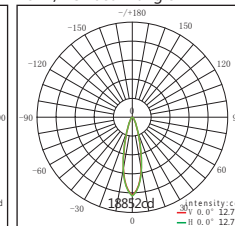
Beam Angle
Code:
 8°-BA08
 13°-BA13

Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.049.01.28	28W	WH	24Pcs	550	1800
33.35.049.02.48	48W	RGB	24Pcs		

28W / 8° beam angle



48W / 13° beam angle



Mounting: surface mounted on bracket
Housing: die-cast aluminum
Diffuser: tempered glass
Power cable: 3m
Finish options:
 01-white matte
 *other RAL colors available on request

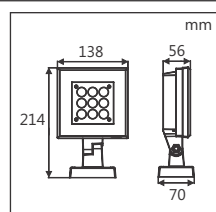
LED: Lumileds
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT56-5600k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - dimmable by DMX

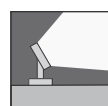
Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C



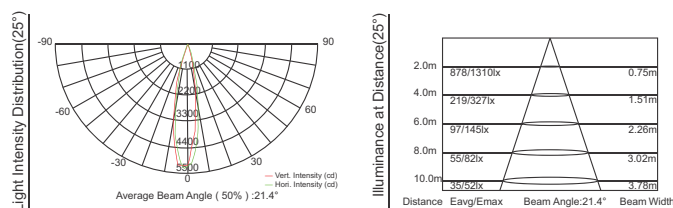
kg: 1.5



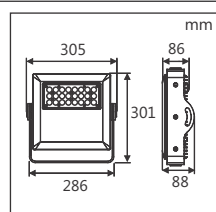
Ref Code	Watt	Lm(±)	LED Qty
33.33.054.01.16.5	16.5W	440	9pcs (3R+3G+3B)
33.33.054.02.18.5	18.5W	950	9pcs (WH)



Beam Angle Code:
 12°-BA12
 25°-BA25
 45°-BA45



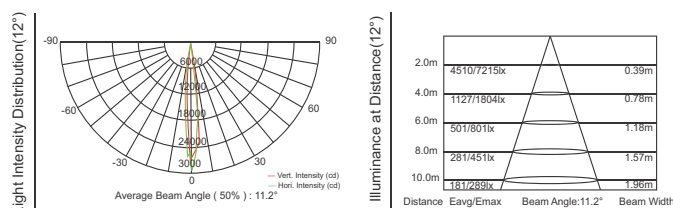
kg: 6.6



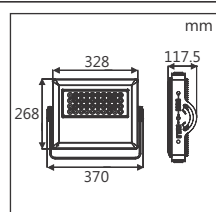
Ref Code	Watt	Lm(±)	LED Qty
33.33.055.01.70	70W	4200	24pcs (WH)
33.33.055.02.70	70W	1600	24pcs (8R+8G+8B)



Beam Angle Code:
 12°-BA12
 25°-BA25
 45°-BA45



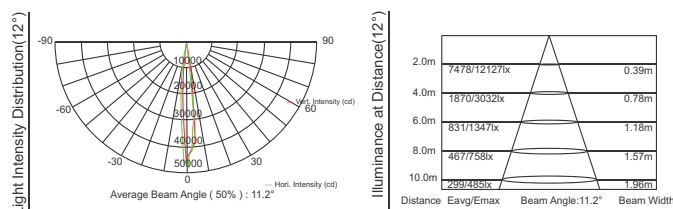
kg: 8.5



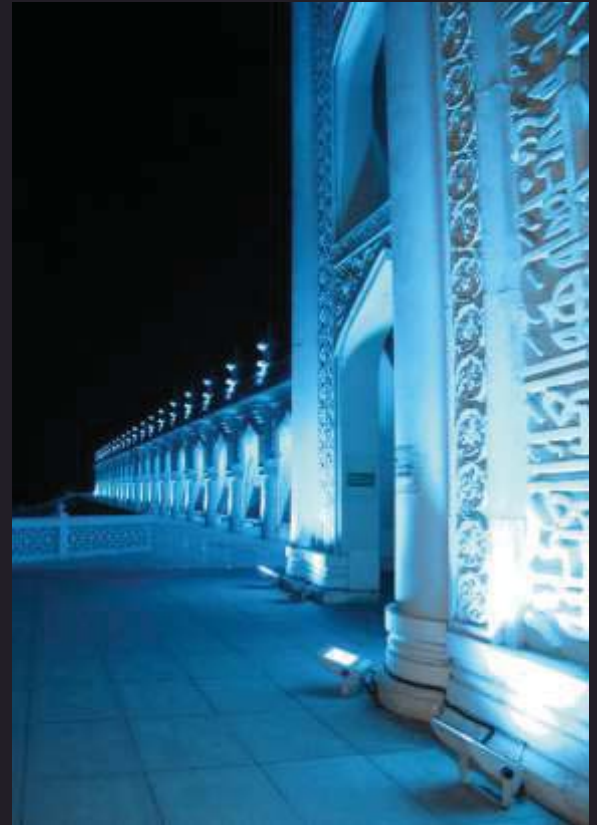
Ref Code	Watt	Lm(±)	LED Qty
33.33.056.01.115	115W	4950	40pcs (WH)
33.33.056.02.115	115W	2600	40pcs (14R+14G+12B)



Beam Angle Code:
 5°-BA5
 12°-BA12
 25°-BA25
 45°-BA45



flood lights

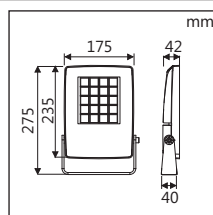


Mounting: surface mounted on bracket
Housing: high pressure die-cast aluminum
Diffuser: tempered glass
Fitting's finish options:
 11-black matte
 13-grey matte
 15-silver grey matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

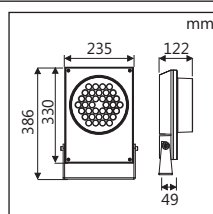
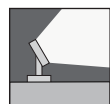
Application:
 outdoors
 public/private/residential landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C



Ref Code	Watt	LED Qty	LED Color
33.26.057.01.22	22W	12Pcs	RGB/Single
33.26.057.02.30	30W	28Pcs	Single
33.26.057.03.30	30W	18Pcs	RGB/Single
33.26.057.04.36	36W	20Pcs	Single

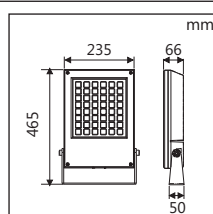
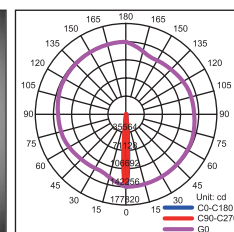
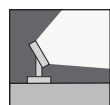
Note:
 RGB-DC 24V-DMX512
 Single Color - AC 100/240V

Beam Angle-Code:
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45
 15°x30°-BA15x30
 120°x70°-BA120x70°



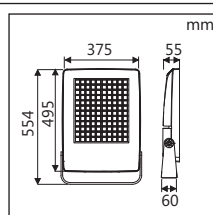
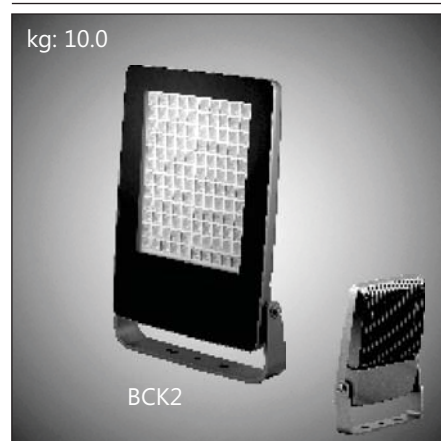
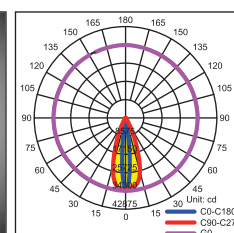
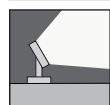
Ref Code	Watt	LED Qty	LED Color
33.26.058.01.60	60W	1Pcs(COB)	Single
33.26.058.02.60	60W	36Pcs	Single

Beam Angle-Code:
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45
 15°x30°-BA15x30
COB:
 12°-BA12
 24°-BA24
 48°-BA48



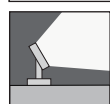
Ref Code	Watt	LED Qty	LED Color
33.26.059.01.60	60W	30Pcs	Single
33.26.059.02.102	102W	48Pcs	Single

Beam Angle Code:
 6°-BA6
 12°-BA12
 30°-BA30
 48°-BA48
 12°x48°-BA12x48



Ref Code	Watt	LED Qty	LED Color
33.26.060.01.150	150W	70Pcs	Single
33.26.060.02.150	150W	160Pcs	Single
33.26.060.03.185	185W	90Pcs	RGB/Single
33.26.060.04.225	225W	120Pcs	RGB/Single

Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 60°-BA60
 15x30°-BA15x30
 10°x60°-BA10x60
 120°x60°-BA120x60°



Note:
 RGB-DC 36V-DMX512
 Single Color - AC 100/240V

flood lights

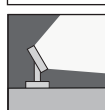
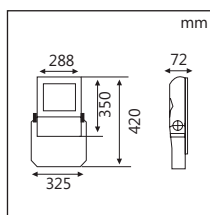
ELTE

Mounting: surface mounted on bracket
Housing: aluminum alloy,
 UV-rays stabilized powder coated for
 outdoor applications
Diffuser: tempered glass
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE/Osram
CRI: Ra>80
CCT:
 CT22-2200k/CT27-2700k
 CT30-3000k/CT35-3500k
 CT40-4000k/CT65-6500k
 RGB
Note:* Other CRI/CCT
 available on request

LED driver: integral,
 constant current
Volt AC: 220V
Volt DC: 24V
Frequency: 50/60Hz
Power Cable:
 DC24V: 3x1.00mm² rubber
 Signal cable: 3x0.5mm² rubber

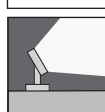
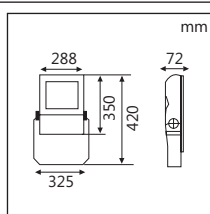
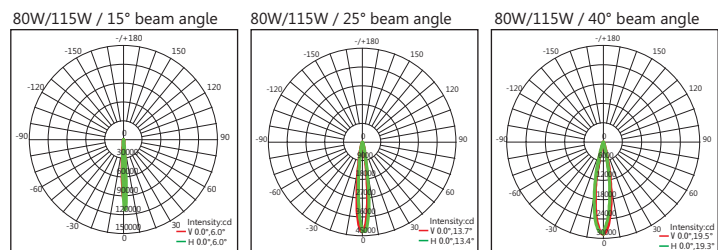
Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40° ~ +55°C



Beam Angle Code:
 15°-BA15
 25°-BA25
 40°-BA40
 60°-BA60

Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.061.01.80	80W	WH	48Pcs	700	5300
33.35.061.02.115	115W	RGB	48Pcs		
33.35.061.03.115	115W	RGBW	48Pcs		

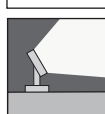
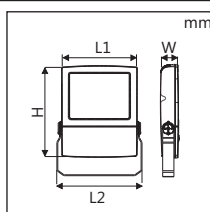
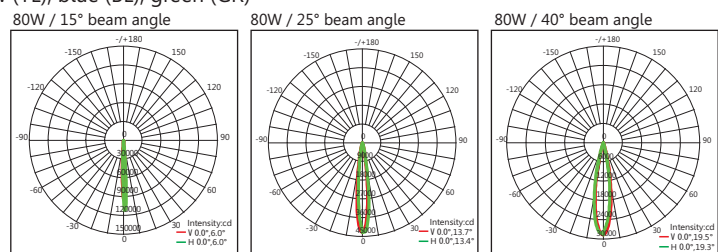
Note: mention in coding single colors (on demand (80W)):
 yellow (YL), blue (BL), green (GR)



Beam Angle Code:
 15°-BA15
 25°-BA25
 40°-BA40
 60°-BA60

Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.062.01.80	80W	WH	36Pcs	700	4000
33.35.062.02.90	90W	RGB	36Pcs		
33.35.062.03.90	90W	RGBW	36Pcs		

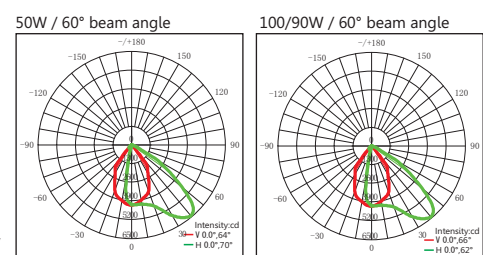
Note: mention in coding single colors (on demand (80W)):
 yellow (YL), blue (BL), green (GR)



Beam Angle:
 60°

Ref Code	Watt	Color	LED Qty	Lm(±)	L1xL2xHxW
33.35.063.01.50	50W	WH/R/G/B/Y	16Pcs	2130	232x260x62
33.35.063.02.90	90W	RGB	36Pcs	5230	288x350x72
33.35.063.03.100	100W	WH/R/G/B/Y	36Pcs		288x350x72

Note:
 RGB-DC 36V-DMX512
 Single Color - AC 100/240V

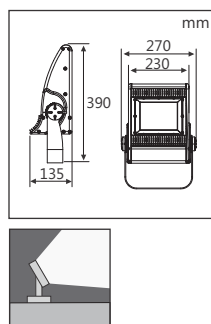
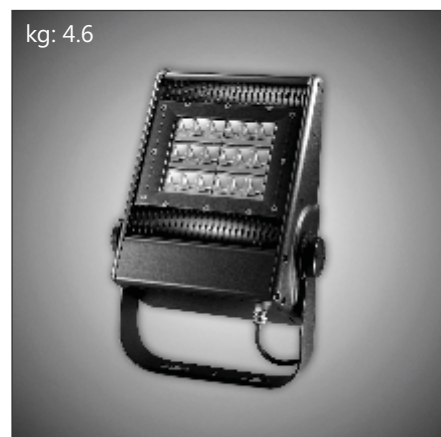


Mounting: surface mounted on bracket
Housing: aluminum alloy,
 UV-rays stabilized powder coated for
 outdoor applications
Diffuser: 4 mm tempered glass
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE/Osram
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT
 available on request

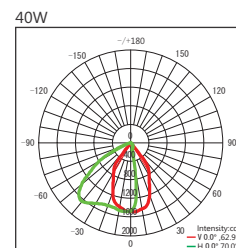
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - DMX 512
Note: *Lm given in data is
 based on 3000k

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -35°~+55°C

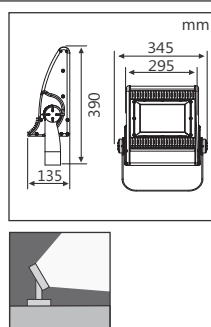
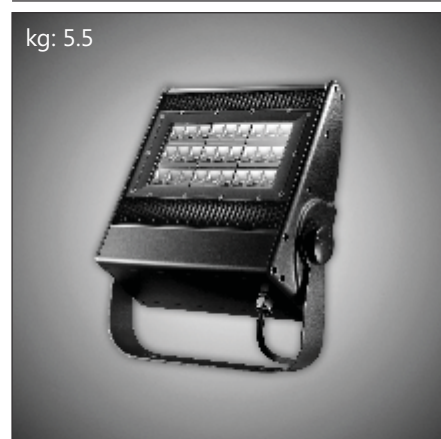


Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.064.01.36	36W	WH	18Pcs	570	1700
33.35.064.02.40	40W	RGB	18Pcs		

Note: mention in coding single colors (on demand (36W)):
 yellow (YL), blue (BL), green (GR)

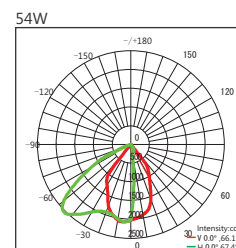


Beam Angle: 60°

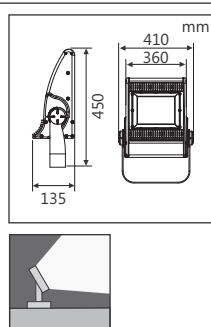
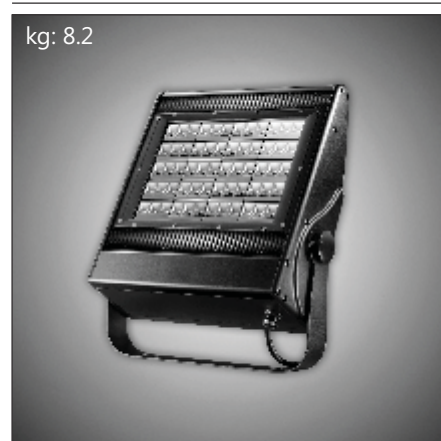


Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.065.01.54	54W	WH	27Pcs	570	2300
33.35.065.02.60	60W	RGB	27Pcs		

Note: mention in coding single colors (on demand (54W)):
 yellow (YL), blue (BL), green (GR)

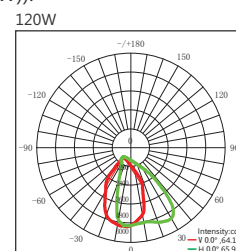


Beam Angle: 60°

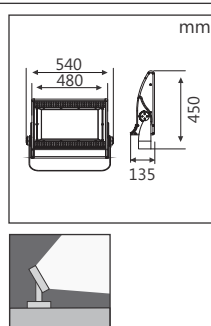


Ref Code	Watt	Color	LED Qty	mA	Lm(±)
33.35.066.01.120	120W	WH	60Pcs	570	5400
33.35.066.02.125	125W	RGB	60Pcs		

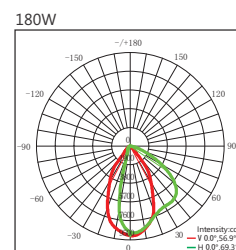
Note: mention in coding single colors (on demand (120W)):
 yellow (YL), blue (BL), green (GR)



Beam Angle: 60°



Ref Code	Watt	Volt	Color	LED Qty	Lm(±)
33.35.067.01.180	180W	AC90-305V	WH	90Pcs	10900
33.35.067.02.200	200W	AC90-305V	RGB	90Pcs	



Beam Angle: 60°

flood lights

ELTE

Mounting: surface mounted on bracket
Housing: aluminum alloy
 anodizing treatment
Diffuser: toughened glass
Finish options:
 13-grey matte
 *RAL colors available on request

LED: CREE
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C

5 years
warranty



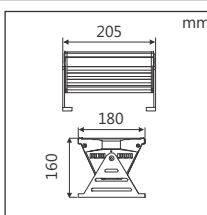
RoHS



IK10

IP66

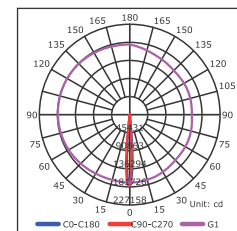
kg: 3.2



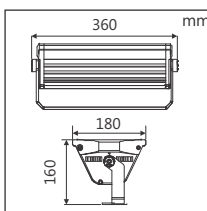
Ref Code	Watt	LED Qty	LED Color
33.26.068.01.21	21W	18Pcs	RGB/Single
33.26.068.02.32	32W	18Pcs	RGB/Single

Note:
 RGB-DC 24V-DMX512
 Single Color - AC 100/240V

Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45



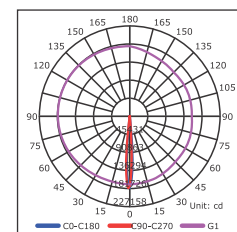
kg: 5.0



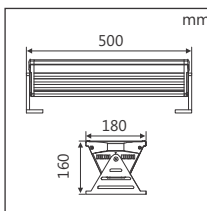
Ref Code	Watt	LED Qty	LED Color
33.26.069.01.42	42W	36Pcs	RGB/Single
33.26.069.02.69	69W	36Pcs	RGB/Single

Note:
 RGB-DC 24V-DMX512
 Single Color - AC 100/240V

Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45



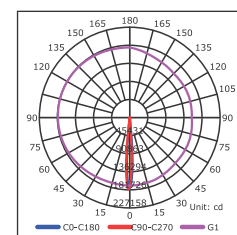
kg: 7.6



Ref Code	Watt	LED Qty	LED Color
33.26.070.01.65	65W	54Pcs	RGB/Single
33.26.070.02.108	108W	54Pcs	RGB/Single

Note:
 RGB-DC 24V-DMX512
 Single Color - AC 100/240V

Beam Angle-Code:
 5°-BA05
 12.5°-BA12.5
 20°-BA20
 30°-BA30
 45°-BA45

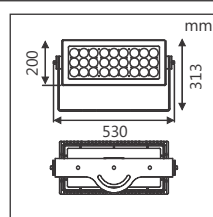


Mounting: surface mounted on bracket
Housing: die-cast aluminum
Diffuser: tempered glass
Power cable: 3m
Finish options:
 01-white matte
 11-black matte
 *other RAL colors available on request

LED: Lumileds
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT56-5600k
 RGB
Note:*Other CRI/CCT available on request

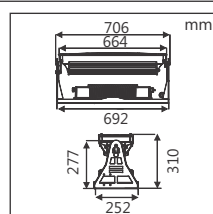
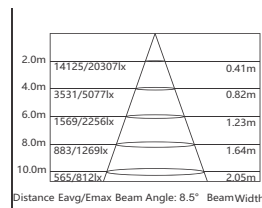
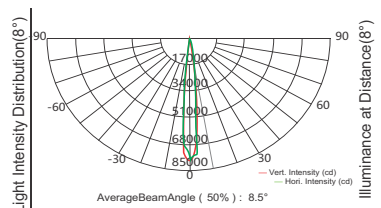
LED driver: integral
Volt AC: 240V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 DMX - dimmable by DMX

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40°~+55°C



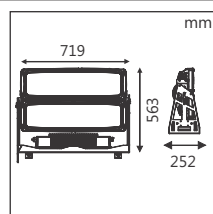
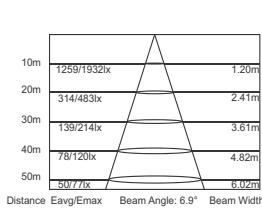
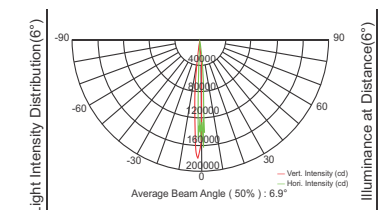
Beam Angle-Code:
 8°-BA08
 30°-BA30

Ref Code	Watt	Lm(±)	LED Qty
33.33.071.01.290	290W	6000	27xMultichip (Warm+Cool)
33.33.071.02.290	290W	5300	27xMultichip RGBW



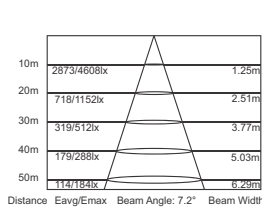
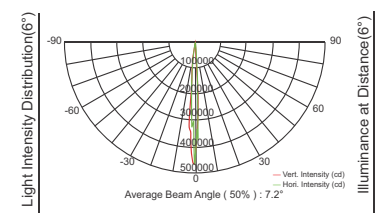
Beam Angle-Code:
 6°-BA06
 12°-BA12
 25°-BA25
 45°-BA45
 40°x12°-BA40x12

Ref Code	Watt	Lm(±)	LED Qty
33.33.072.01.230	230W	15000	90pcs (WH)
33.33.072.02.300	300W	6650	90pcs (30R+30G+30B)



Beam Angle-Code:
 6°-BA06
 12°-BA12
 25°-BA25
 45°-BA45
 40°x12°-BA40x12

Ref Code	Watt	Lm(±)	LED Qty
33.33.073.01.460	460W	25600	180pcs (WH)
33.33.073.02.600	600W	13100	180pcs (60R+60G+60B)

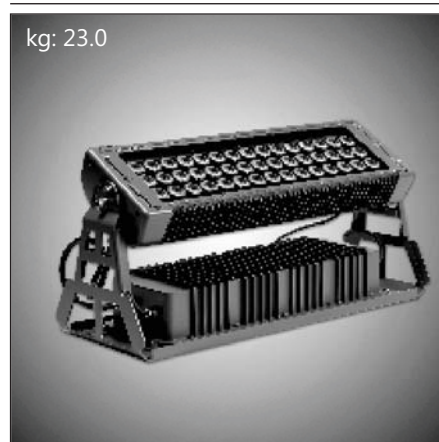


Mounting: surface mounted on bracket
Housing: aluminum alloy,
 UV-rays stabilized powder coated for
 outdoor applications
Diffuser: 4 mm tempered glass
Finish options:
 13-grey matte
 *RAL colors available on request

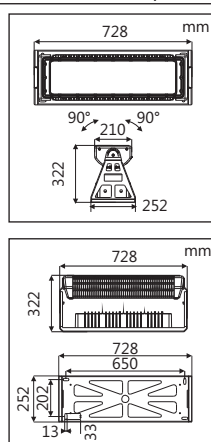
LED: CREE
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 220V
Frequency: 50/60Hz
Power Cable:
 Power cable: 3x1.00mm² rubber
 Signal cable: 3x0.5mm² rubber
LED driver options:
 ND - non-dimmable
 DMX - DMX 512

Application:
 outdoors
 public/private/residential
 landscapes
 building facades
 gardens
Ambient Temp: -40° ~ +55°C



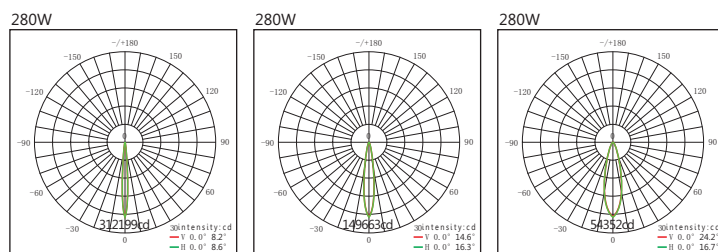
kg: 23.0



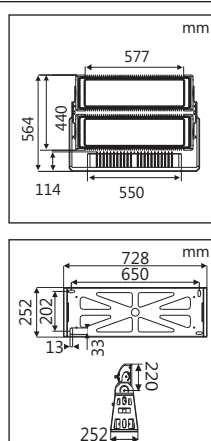
Ref Code	Watt	LED Qty	LED Color
33.35.074.01.250	250W	36pcs	WH
33.35.074.02.280	280W	36pcs	WH
33.35.074.03.280	280W	36pcs	RGBW

Lumen output:
RGBW LED/280W
8°-BA08:
 Red: 630nm, 2535lm
 Green: 528nm, 3274lm
 Blue: 470nm, 739lm
 White: at CCT 6500k-4013lm
15°-BA15:
 Red: 630nm, 2577m
 Green: 528nm, 3329lm
 Blue: 470nm, 752lm
 White: at CCT 6500k-4080lm
25°-BA25:
 Red: 630nm, 2498lm
 Green: 528nm, 3226lm
 Blue: 470nm, 719lm
 White: at CCT 6500k-3955lm

Beam Angle-Code:
 8°-BA08
 15°-BA15
 25°-BA25



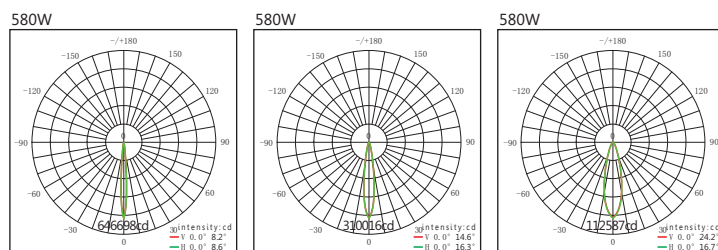
kg: 40.0



Ref Code	Watt	LED Qty	LED Color
33.35.075.01.500	500W	72pcs	WH
33.35.075.02.580	580W	72pcs	WH
33.35.075.03.580	580W	72pcs	RGBW

Lumen output:
RGBW LED/580W
8°-BA08:
 Red: 630nm, 5251lm
 Green: 528nm, 6782lm
 Blue: 470nm, 1531lm
 White: at CCT 6500k, 8314lm
15°-BA15:
 Red: 630nm, 5338lm
 Green: 528nm, 6895lm
 Blue: 470nm, 1557lm
 White: at CCT 6500k-8452lm
25°-BA25:
 Red: 630nm, 5174lm
 Green: 528nm, 6683lm
 Blue: 470nm, 1509lm
 White: at CCT 6500k-8192lm

Beam Angle-Code:
 8°-BA08
 15°-BA15
 25°-BA25





stadium lights

ELTE

Mounting: surface on bracket
Housing: aluminum alloy
 anti-corrosion
 and anti-weathering oxidized surface
Note: light radius is 30-65m

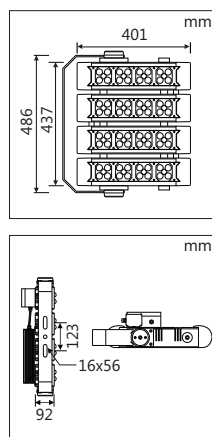
LED: CREE XTE-R4
CRI: Ra>80
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
 RGB
Note:*Other CRI/CCT
 available on request

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 crossroads
 sport grounds
 squares
 wide open areas
Ambient Temp: -40°~+55°C

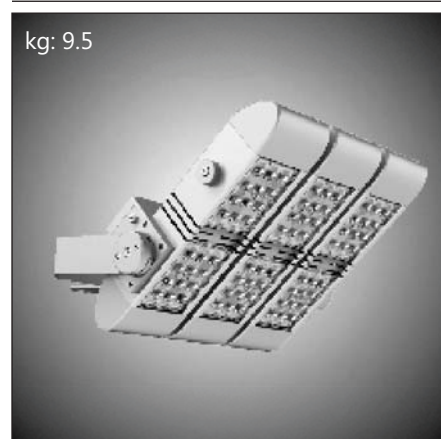
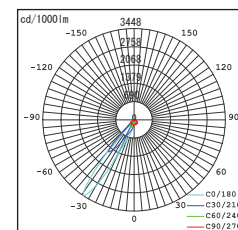


kg: 9.2

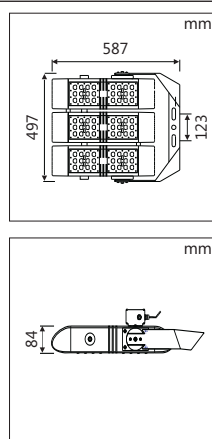


Ref Code	Watt	Volt	Lm(±)	CCT, K
34.40.001.01.160	160W	AC 220V	14500	4500

Beam Angle: 15°x60°

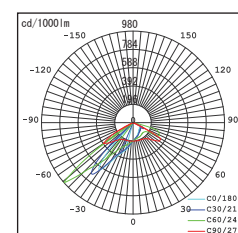


kg: 9.5

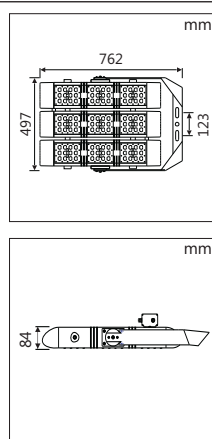


Ref Code	Watt	Volt	Lm(±)	CCT, K
34.40.002.01.180	180W	AC 220V	16500	4500

Beam Angle: 15°x60°

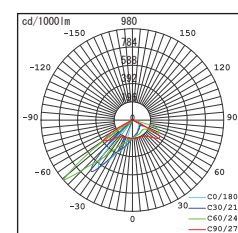


kg: 14.3



Ref Code	Watt	Volt	Lm(±)	CCT, K
34.40.003.01.270	270W	AC 220V	24500	4500

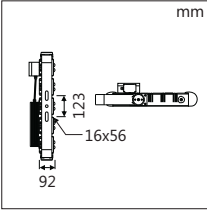
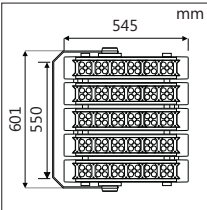
Beam Angle: 15°x60°



Mounting: surface on bracket Housing: aluminum alloy anti-corrosion and anti-weathering oxidized surface Note: light radius is 30-65m	LED: CREE XTE-R4 CRI: Ra>80 CCT: CT30-3000k CT40-4000k CT50-5000k CT60-6000k RGB Note: *Other CRI/CCT available on request	LED driver: integral Volt AC: 240V Volt DC: 24V Frequency: 50/60Hz LED driver options: ND - non-dimmable PH - phase dimmable 010V - 0-10V dimmable DALI - compatible	Application: outdoors crossroads sport grounds squares wide open areas Ambient Temp: -40°~+55°C
			5 years warranty RoHS EN 62471 CE IP65

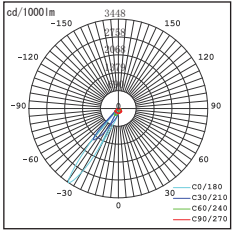
kg: 21.3



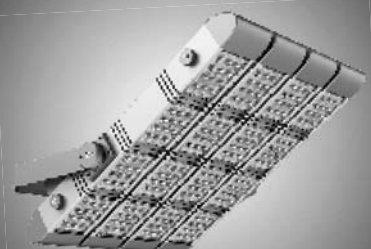


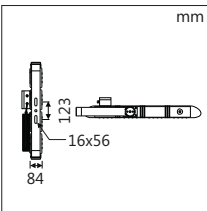
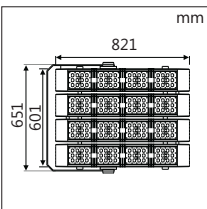
Ref Code	Watt	Volt	Lm(±)	CCT, K
34.40.004.01.300	300	AC 220V	27500	4500

Beam Angle: 15°x60°



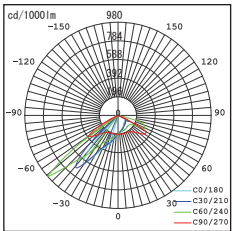
kg: 25.1





Ref Code	Watt	Volt	Lm(±)	CCT, K
34.40.005.01.480	480	AC 220V	44000	4500

Beam Angle: 15°x60°







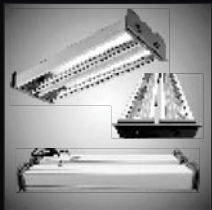
high-bays



low-bays



tunnel lights



utility lights

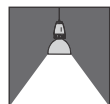
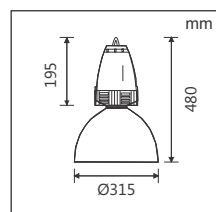


Mounting: suspended (hanging)
Housing: die-cast aluminum
 with cold forged heat sink aluminum
Reflector: aluminum/polycarbonate
Diffuser: polycarbonate (IP40)
Accessories: (optional) steel chain/cable
Fitting's finish options:
 15-silver grey matte
 *other RAL colors available on request

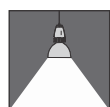
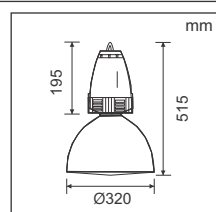
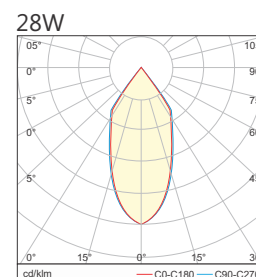
LED: COB (osram/bridgelux)
CRI: Ra>80/90
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
Note: *Lm given in data is based
 on 4000k CCT

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

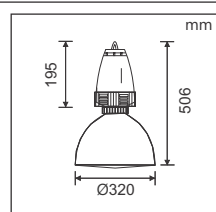
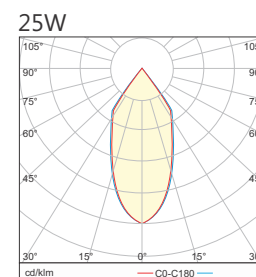
Application:
 indoors/partly outdoors
 with high dust and humidity
 ware-houses, stores, gyms
 wide open areas
 with mid/high ceilings
Ambient Temp: -50°~+60°C



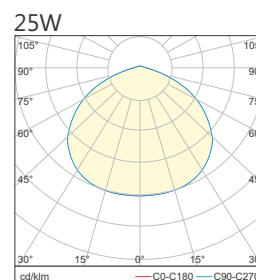
Ref Code	Watt	Lm(±)
41.21.001.01.25	25W	1850
41.21.001.02.28	28W	1850
41.21.001.03.38	38W	2750
41.21.001.04.43	43W	2750



Ref Code	Watt	Lm(±)
41.21.002.01.25	25W	1850
41.21.002.02.28	28W	1850
41.21.002.03.38	38W	2750
41.21.002.04.43	43W	2750



Ref Code	Watt	Lm(±)
41.21.003.01.25	25W	1850
41.21.003.02.28	28W	1850
41.21.003.03.38	38W	2750
41.21.003.04.43	43W	2750



high-bays

ELTE

Mounting: suspended (hanging)
Housing: die-cast aluminum
 with cold forged heat sink aluminum
Reflector: aluminum
Diffuser: glass for LED COB (IP65)
Accessories: (optional) steel chain/cable
Fitting's finish options:
 15-silver grey matte
 *other RAL colors available on request

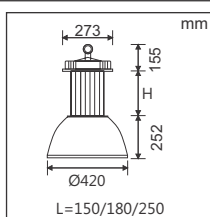
LED: COB/ SMD
CRI: Ra>80/90
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT60-6000k
Note: *Lm given in data is based
 on 4000k CCT

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

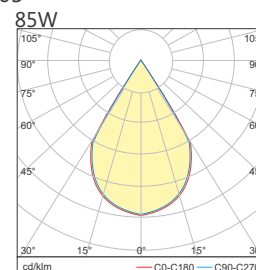
Application:
 indoors/partly outdoors
 with high dust and humidity
 ware-houses, stores, gyms
 wide open areas
 with mid/high ceilings
Ambient Temp: -50°~+60°C



bridgelux LED: CRI: Ra >75



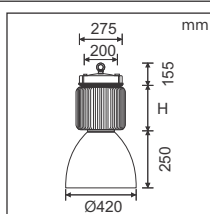
Ref Code	Watt	Lm(±)	H	kg
41.21.004.01.85	85W	8500	150	6.75
41.21.005.01.110	110W	11000	250	7.55
41.21.006.01.130	130W	13500	180	7.55
41.21.006.02.165	165W	17000	180	7.55
41.21.007.01.220	220W	22000	250	8.05



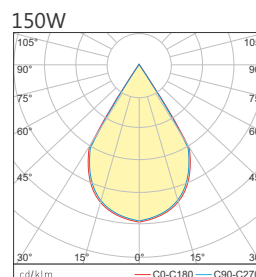
Beam angle: 45°



LED: SMD
 CRI: Ra >70



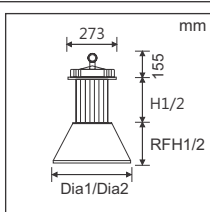
Ref Code	Watt	Lm(±)	H	kg
41.21.008.01.150	150W	15000	140	4.5
41.21.009.01.200	200W	20000	220	5.0
41.21.009.02.250	250W	24000	220	5.0
41.21.010.01.400	400W	39000	280	7.0



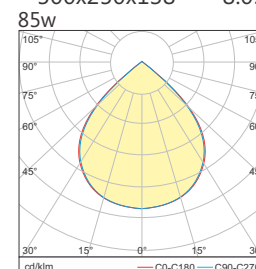
Beam angle: 45°



bridgelux LED: CRI: Ra >75



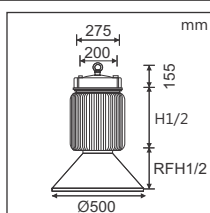
Ref Code	Watt	Lm(±)	Dia1xH1xRFH1	dia2xH2xRFH2	kg
41.21.011.01.85	85W	8500	510x150x200	500x150x138	6.75
41.21.011.02.110	110W	11000	510x150x200	500x150x138	7.55
41.21.012.01.130	130W	13500	510x180x200	500x180x138	7.55
41.21.012.02.165	165W	17000	510x180x200	500x180x138	7.55
41.21.013.01.220	220W	22000	510x250x200	500x250x138	8.05



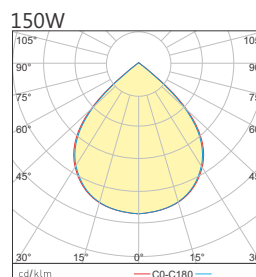
Beam angle-code:
 RFH1: 90°-BA90
 RFH2: 120°-BA120



LED: SMD
 CRI: Ra >70



Ref Code	Watt	Lm(±)	H1xRFH1	H2xRFH2	kg
41.21.014.01.150	150W	15000	140/190	140/140	4.5
41.21.015.01.200	200W	20000	220/190	220/140	5.0
41.21.015.02.250	250W	24000	220/190	220/140	5.0
41.21.016.01.400	400W	39000	280/190	280/140	7.0



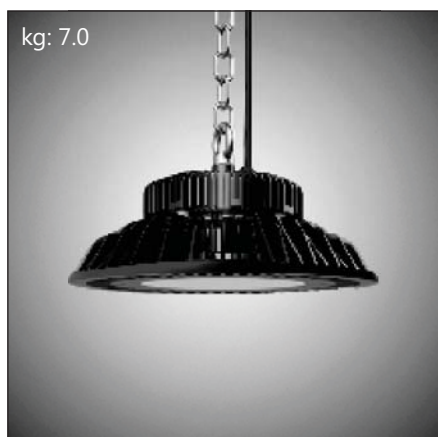
Beam angle-code:
 RFH1: 90°-BA90
 RFH2: 120°-BA120

Mounting: suspended (hanging)
Housing: die-cast aluminum
Diffuser: holographic lights shaping with circular angle 80°
 transparent protection toughened glass
Accessories: die-casting ring
Notes: *dimnable driver on request
 *RAL colors available on request

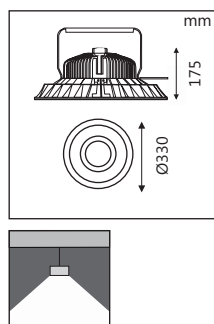
LED: SMD
CRI: Ra>70/73/80/90
CCT:
 CT30-3000k
 CT40-4000k
 CT50-5000k
 CT65-6500k
Note: *Lm given in data is based on 4000k CCT

LED driver: integral/external
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

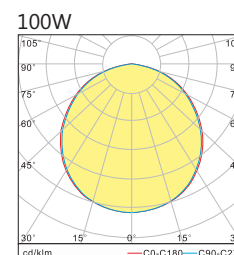
Application:
 indoors/partly outdoors
 with high dust and humidity
 ware-houses, stores, gyms
 wide open areas
 with mid/high ceilings
Ambient Temp: -50°C~+60°C



kg: 7.0



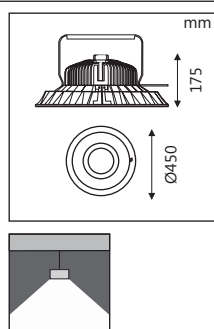
Ref Code	Watt	Lm (6500K)	CRI[>]
41.21.017.01.100	100W	12000	70
41.21.017.02.150	150W	15000	70
41.21.017.03.180	180W	21000	70



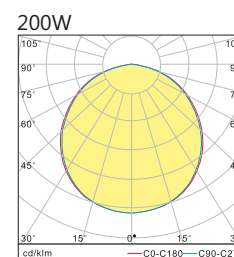
Beam Angle: 110°



kg: 8.7



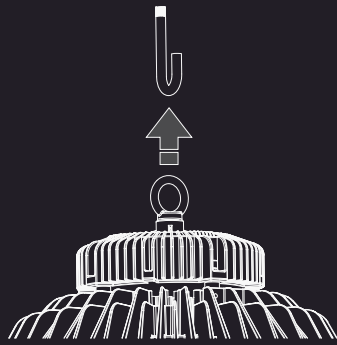
Ref Code	Watt	Lm (4000K)	CRI[>]
41.21.018.01.200	200W	24000	70
41.21.018.02.250	250W	30000	70



Beam Angle-Code:
 80°-BA80
 110°-BA110



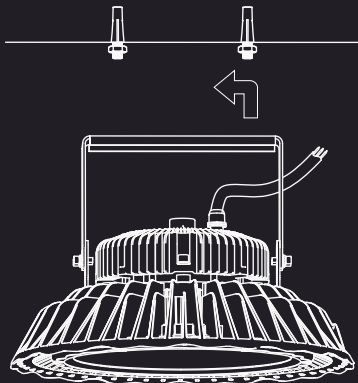
①



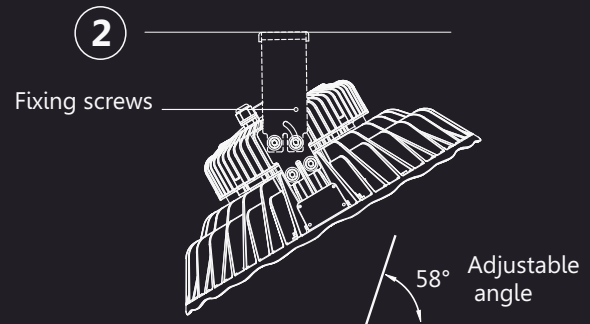
②



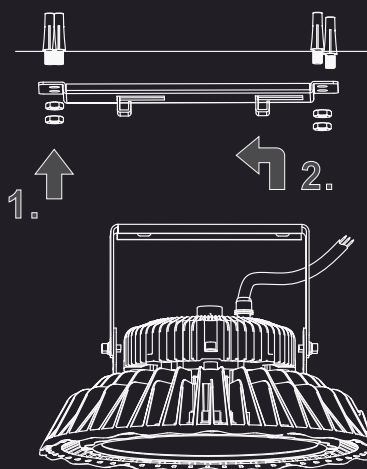
①



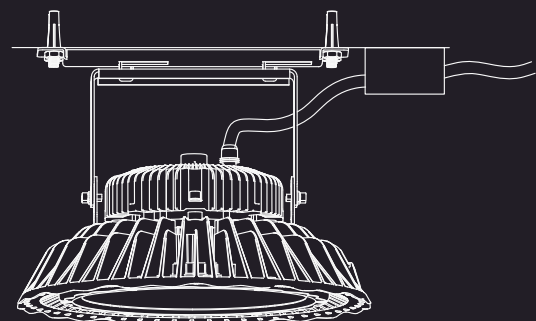
②



①



②



Mounting: surface mounted on bracket

Housing: die-cast aluminum

Gasket: silicone

Notes:

*custom sizes/ wattage available on request

*different degree lens available on request

*IP65 driver with aluminum housing

*RAL colors available on request

LED: CREE SMD

CRI: Ra>70/80/90

CCT:

CT30-3000k

CT40-4000k

CT50-5000k

CT60-6000k

Note: *Lm given in data is based on 4000k CCT

LED driver: integral/external

Volt AC: 240V

Volt DC: 24V

Frequency: 50/60Hz

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Application:

indoors/partly outdoors

ware-houses, stores, gyms

wide open areas

with mid/high ceilings

Ambient Temp: -50°~+60°C

5 years warranty

RoHS

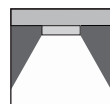
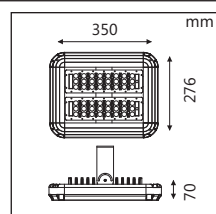
EN 62471

CE

IP65



kg: 3.4



Ref Code

35.21.001.01.60

Watt

60W

Lm (4000K)

6600

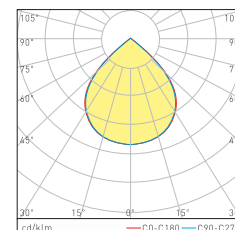
CRI[>]

70

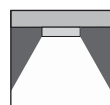
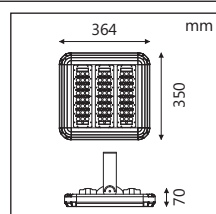
Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



kg: 4.5



Ref Code

35.21.002.01.90

Watt

90W

Lm (4000K)

11000

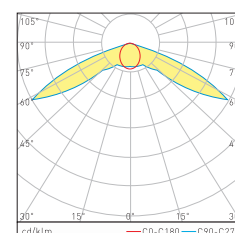
CRI[>]

70

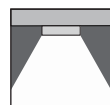
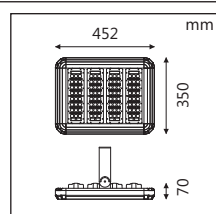
Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



kg: 5.7



Ref Code

35.21.003.01.120

Watt

120W

Lm (4000K)

14300

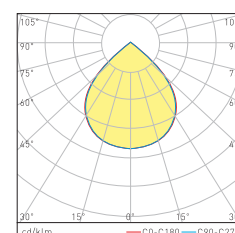
CRI[>]

70

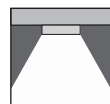
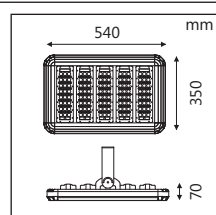
Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



kg: 7.0



Ref Code

35.21.004.01.150

Watt

150W

Lm (4000K)

16000

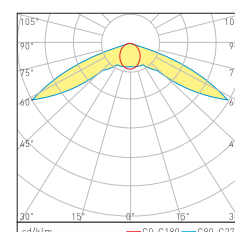
CRI[>]

70

Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



tunnel lights

ELTE

Mounting: surface mounted on bracket

Housing: die-cast aluminum

Gasket: silicone

Notes:

*custom sizes/ wattage available on request

*different degree lens available on request

*IP65 driver with aluminum housing

*RAL colors available on request

LED: CREE SMD

CRI: Ra > 70/80/90

CCT:

CT30-3000k

CT40-4000k

CT50-5000k

CT60-6000k

Note: *Lm given in data is based on 4000k CCT

LED driver: external

Volt AC: 240V

Volt DC: 24V

Frequency: 50/60Hz

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Application:

indoors/partly outdoors

with high dust and humidity

ware-houses, stores, gyms

wide open areas

with mid/high ceilings

Ambient Temp: -50°~+60°C

5 years
warranty

RoHS

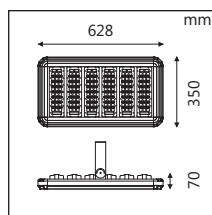
EN
62471

CE

IP65



kg: 3.0

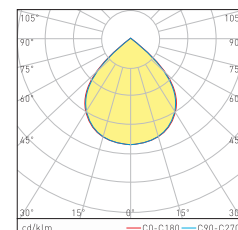


Ref Code 35.21.005.01.180 **Watt** 180W **Lm (4000K)** 24900 **CRI[>]** 70

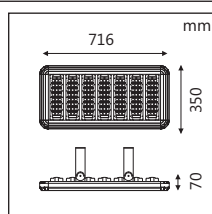
Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



kg: 9.6

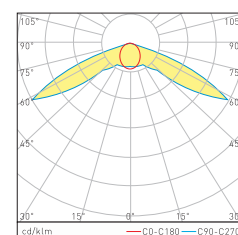


Ref Code 35.21.006.01.210 **Watt** 210W **Lm(4000K)** 26000 **CRI[>]** 70

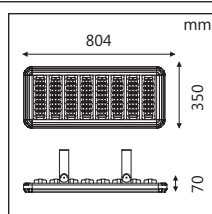
Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



kg: 10.5

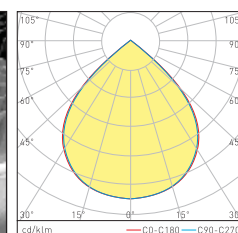
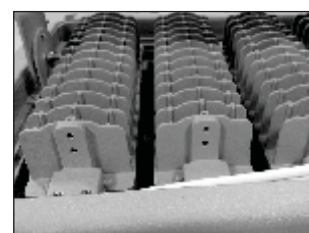


Ref Code 35.21.007.01.240 **Watt** 240W **Lm (4000K)** 30000 **CRI[>]** 70 **CCT [K]** 4000

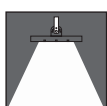
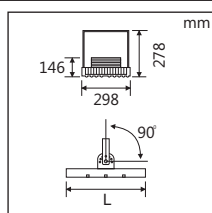
Beam Angle-Code:

80°-BA80

140°x70°-BA140x70



LED: CREE SMD
CRI: Ra > 73



Beam angle-code:

60°-BA60

90°-BA90

120°-BA120

Ref Code	Watt	Lm(±)	L	kg
35.41.008.01.60	60W (2x30W)	7200	200	4.5
35.41.008.02.80	80W (2x40W)	7500	200	4.5
35.41.009.01.90	90W (3x30W)	12000	300	6.2
35.41.009.02.120	120W (3x40W)	14440	300	6.2
35.41.010.01.150	150W (4x37.5W)	18000	400	6.9
35.41.011.01.180	180W (6x30W)	19000	600	10.5



Mounting: surface mounted on bracket

Housing:
aluminum alloy, anti-corrosion
and anti-weathering oxidized surface

Notes:

*custom sizes/ wattage available on request

*RAL colors available on request

LED: CREE XTE-R4

CRI: Ra>80

CCT:

CT30-3000k

CT40-4000k

CT50-5000k

CT60-6000k

Note: *Lm given in data
is based on 4000k CCT

LED driver: integral/external

Volt AC: 240V

Volt DC: 24V

Frequency: 50/60Hz

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

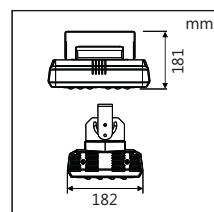
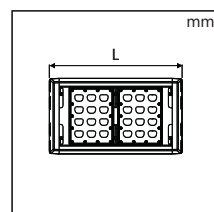
Application:

indoors/partly outdoors
with high dust and humidity
ware-houses, stores, gyms
wide open areas
with mid/high ceilings

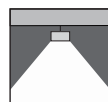
Ambient Temp: -50°~+60°C



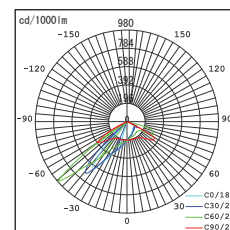
kg: 2.72



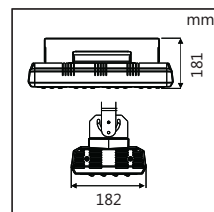
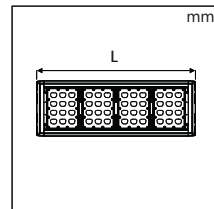
Ref Code	Watt	Lm(±)	CCT, K	L
35.40.012.01.30	30W	2750	4500	220
35.40.013.01.60	60W	5500	4500	320



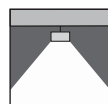
Beam Angle-Code:
90°x120°-BA90x120



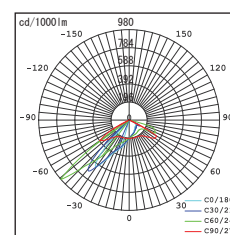
kg: 3.91
5.21



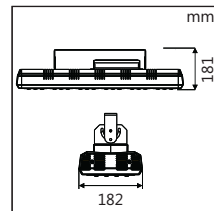
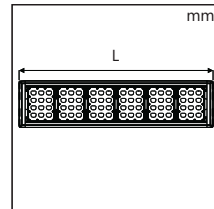
Ref Code	Watt	Lm(±)	CCT, K	L
35.40.014.01.90	90W	8150	4500	424
35.40.015.01.120	120W	11000	4500	524



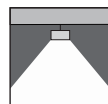
Beam Angle-Code:
90°x120°-BA90x120



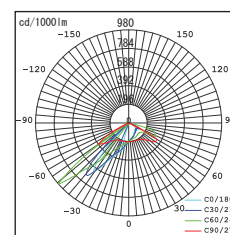
kg: 5.82



Ref Code	Watt	Lm(±)	CCT, K	L
35.40.016.01.150	150W	13600	4500	658
35.40.017.01.180	180W	16500	4500	758



Beam Angle-Code:
90°x120°-BA90x120



tunnel lights

ELTE

Mounting: surface mounted on bracket

Housing: extruded aluminum
anodized high reflective aluminum

Diffuser: transparent toughened glass

Notes:

*custom sizes/ wattage available on request

*adjustable angle

*RAL colors available on request

LED: SMD

CRI: Ra>80

CCT:

CT30-3000k

CT40-4000k

CT50-5000k

CT60-6000k

Note: *Lm given in data
is based on 4000k CCT

LED driver: integral

Volt AC: 240V

Volt DC: 24V

Frequency: 50/60Hz

LED driver options:

ND - non-dimmable

PH - phase dimmable

010V - 0-10V dimmable

DALI - compatible

Application:

indoors/partly outdoors
with high dust and humidity
ware-houses, stores, gyms
wide open areas
with mid/high ceilings

Ambient Temp: -50°~+60°C

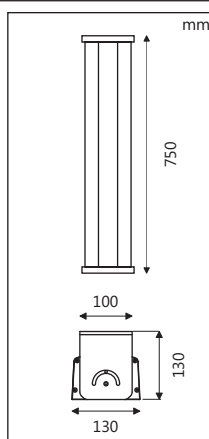
5 years
warranty

RoHS

EN
62471

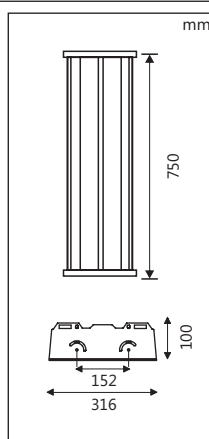
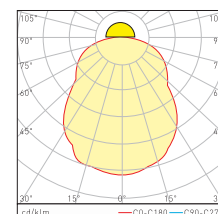
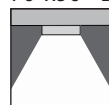
CE

IP65



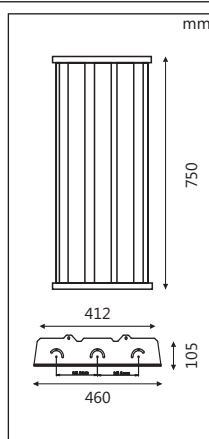
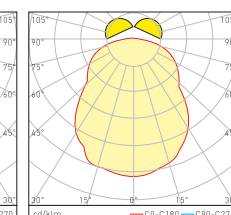
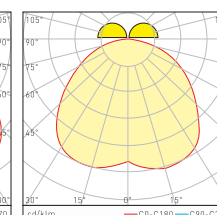
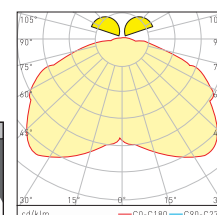
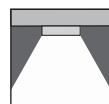
Ref Code 35.21.018.01.75 **Watt** 75W **Lm (4000K)** 7500 **CRI[>]** 70

Beam Angle-Code:
70°x90°-BA70x90



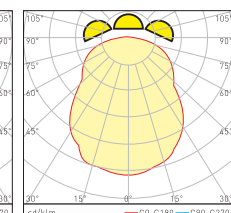
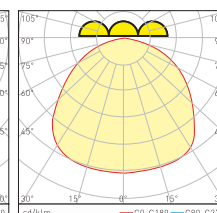
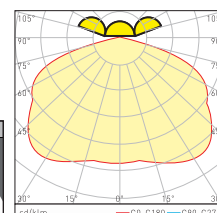
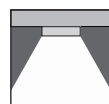
Ref Code 35.21.019.01.2x75 **Watt** 150W (2x75W) **Lm (4000K)** 15000 **CRI[>]** 70

Beam Angle-Code:
70°-BA70
120°x90°-BA120x90



Ref Code 35.21.020.01.225 **Watt** 225W **Lm (4000K)** 22500 **CRI[>]** 70

Beam Angle-Code:
70°-BA70
120°x90°-BA120x90



Mounting: surface mounted / suspended

Housing: polycarbonate with internal aluminum mounting plate

Cable: Flex Cable H05RN-F 2x1.0mm2 or H05W-F2x1.0mm2, 1.5 meter (standard)

Linking serial: max 2000w per signal serial, e.g. 36 pcs of 36.39.005.01.72 - 61W per serial

LED: aluminum PCB / SMD

CRI: >82

CCT range, K: 6400K Standard (optional 2700-6400K)

Note: *Lm given in data is based on 3000k

LED driver: integral

Volt AC: 86-265V

Frequency: 50/60Hz

LED driver options: DIM - SCR Dimming (10%-100%)

Note: * maximum 10m under water

Application: outdoors, underwater with high dust and humidity level

Ambient Temp: -50°~+60°C

5 years warranty



EN 62471

RoHS

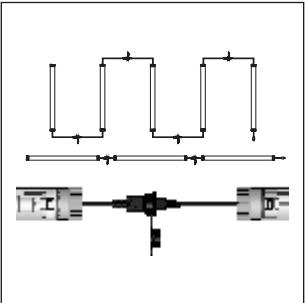
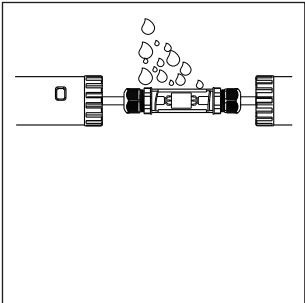
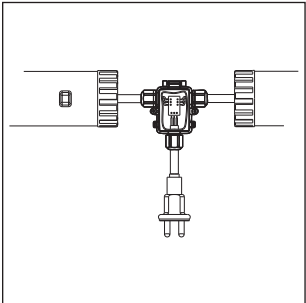
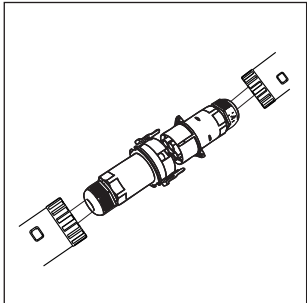
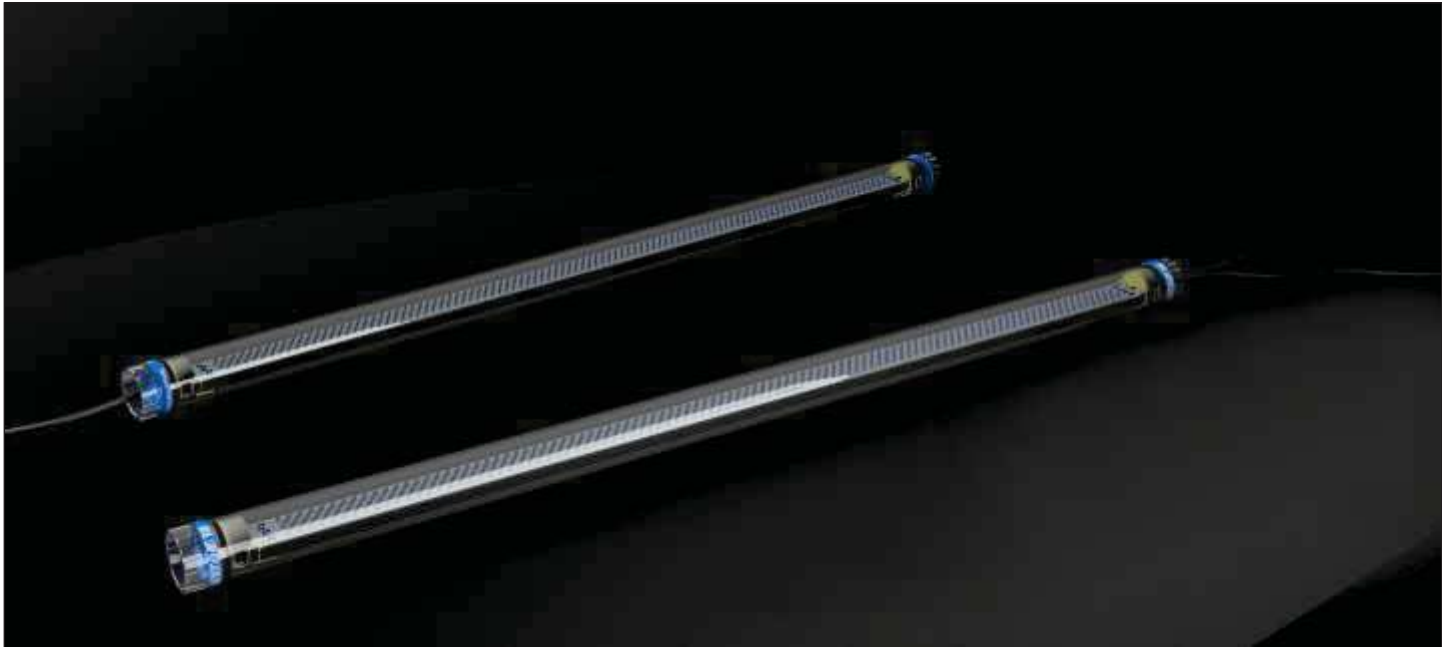
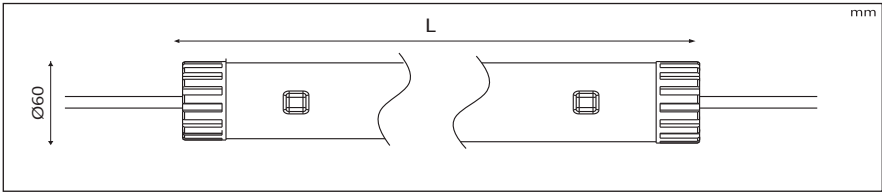


IP68



Ref Code	Watt	Lm	L	kg
36.39.001.01.16	16W	1520	470	0.69
36.39.002.01.28	28W	2660	725	1.06
36.39.003.01.42	42W	3990	1025	1.50
36.39.004.01.56	56W	5320	1325	1.90
36.39.005.01.72	72W	6840	1625	2.30

Beam Angle: 120°



utility outdoor lights

Briefing

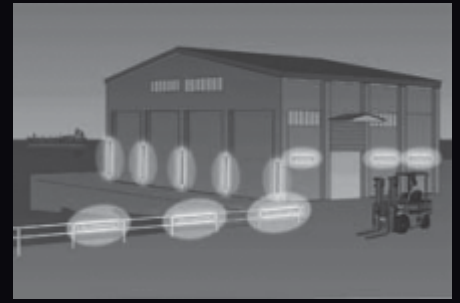
Damp tunnels, Sewers, Subways



Construction sites exposed to harsh environmental conditions



Fuel/gas stations, power stations, warehouses.



Fish markets, live fish-processing markets, fish ponds



Indoor sheds and other high humidity areas



Maintenance illumination



Store decoration



Outdoor facilities, parking lots



Temporary illumination



Construction Site



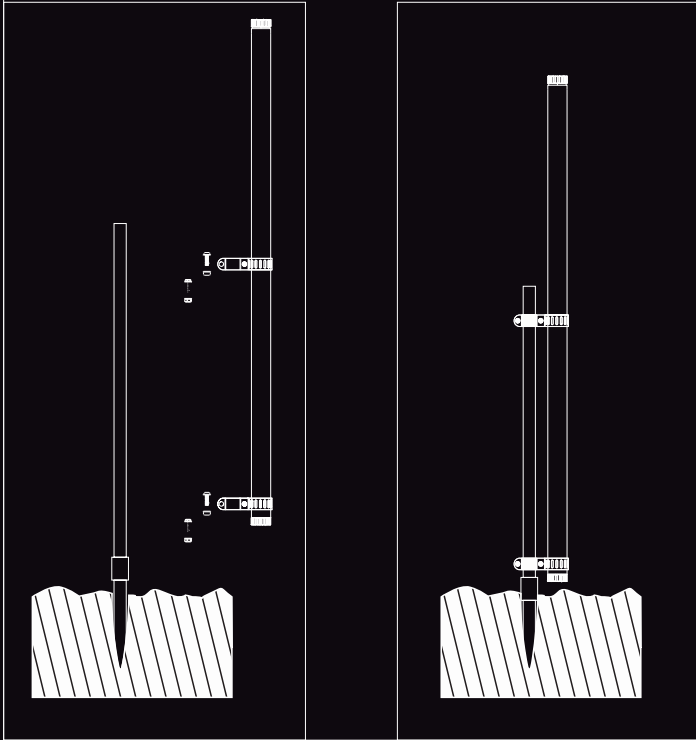
Roads, highways



Installation Steps

①

②



Stainless steel ring lock & holding ring kit (MK907)

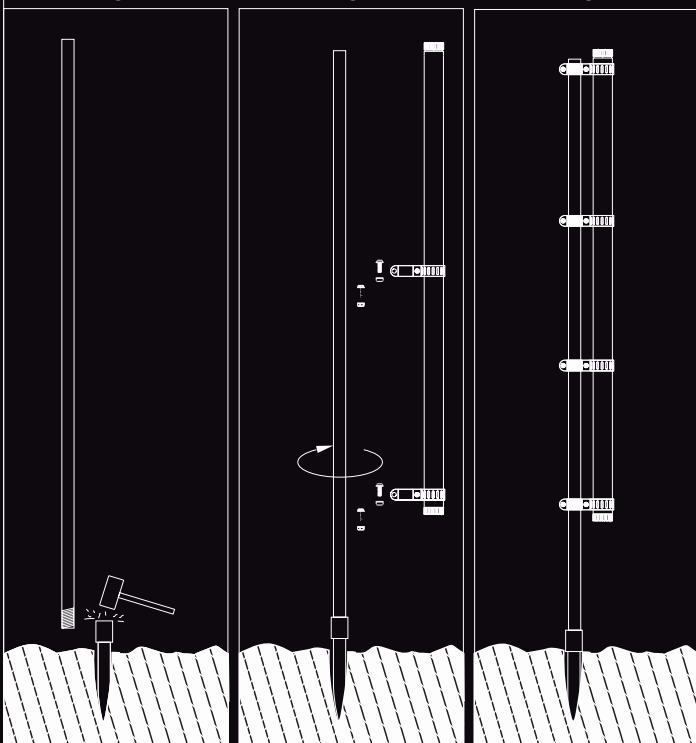


Installation Steps

①

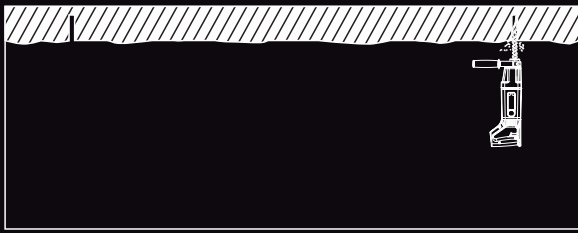
②

③

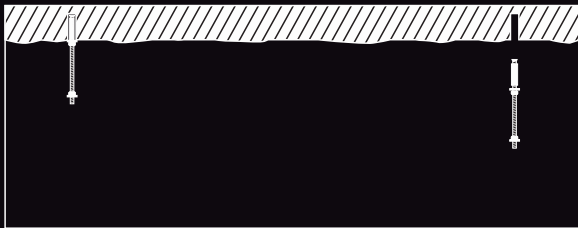


Installation Steps

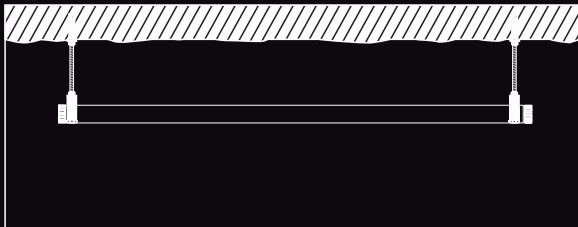
①



②



③



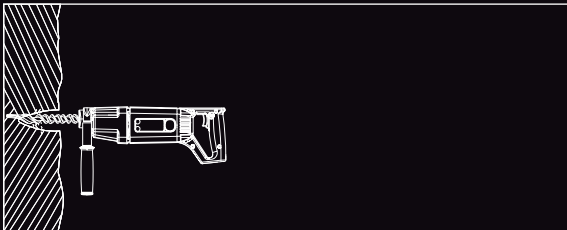
Stainless steel hanging mounting kit(MK901)



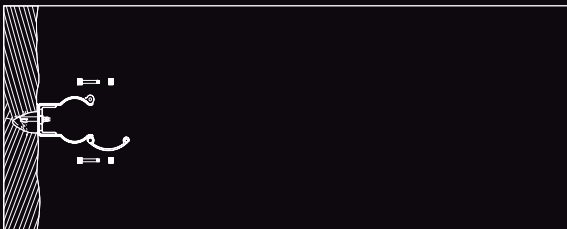
Mounting kit with the air pressure cupula (MK908)

Installation Steps

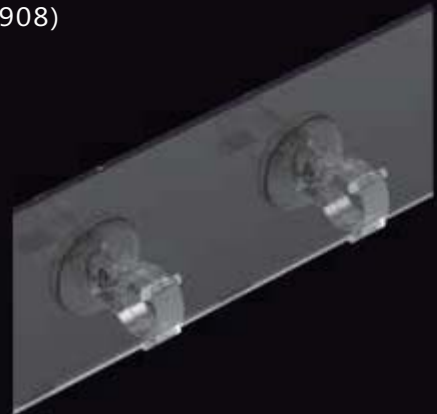
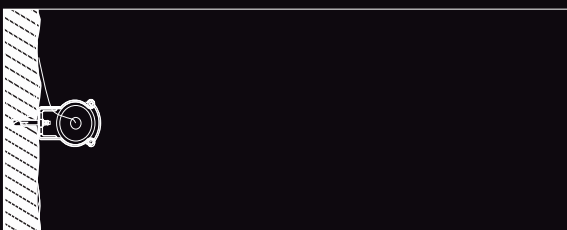
①



②



③

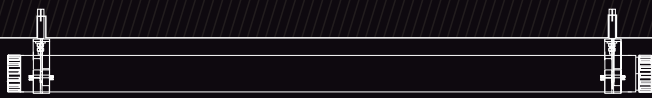


Installation Steps

①



②

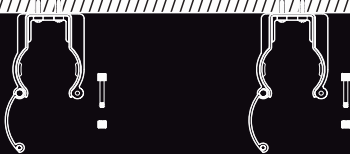


Stainless steel holding ring kit(MK904)

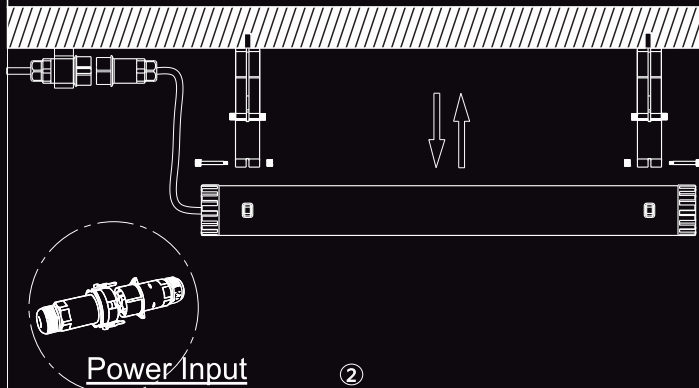


Installation Steps

①



②



PC holding ring lock installation kit(MK903)



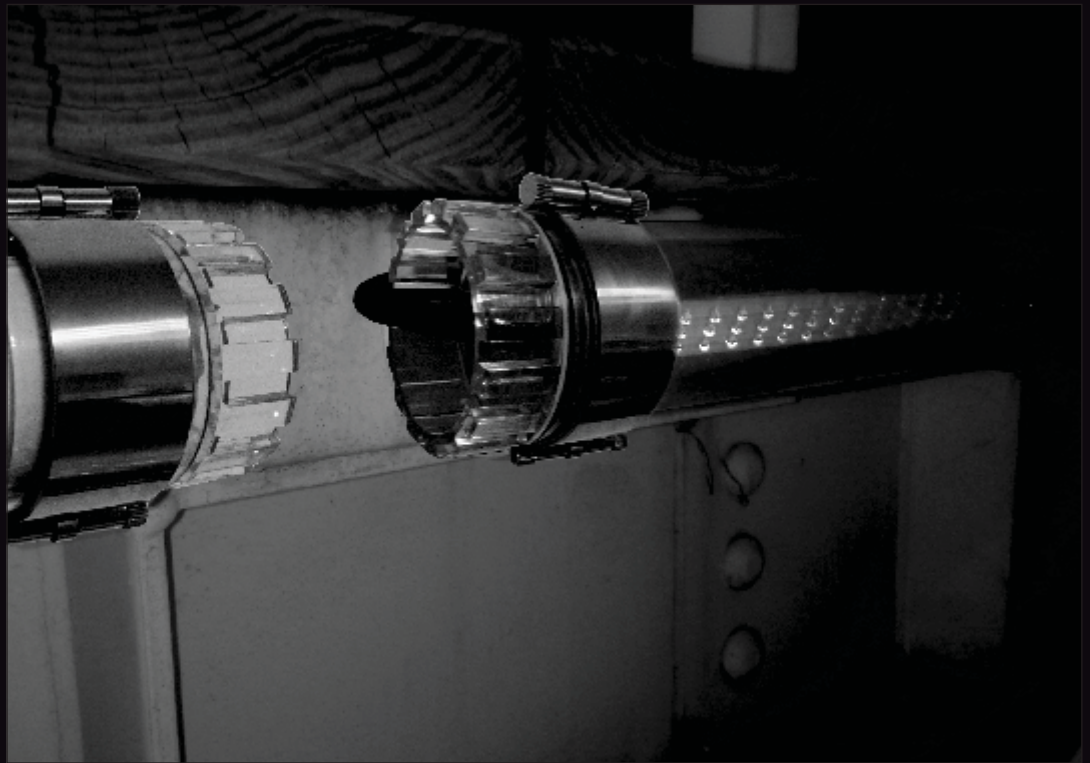
Stainless steel hinge & PC holding
ring kit(MK906)



Stainless steel hook & PC holding ring
kit (MK905)



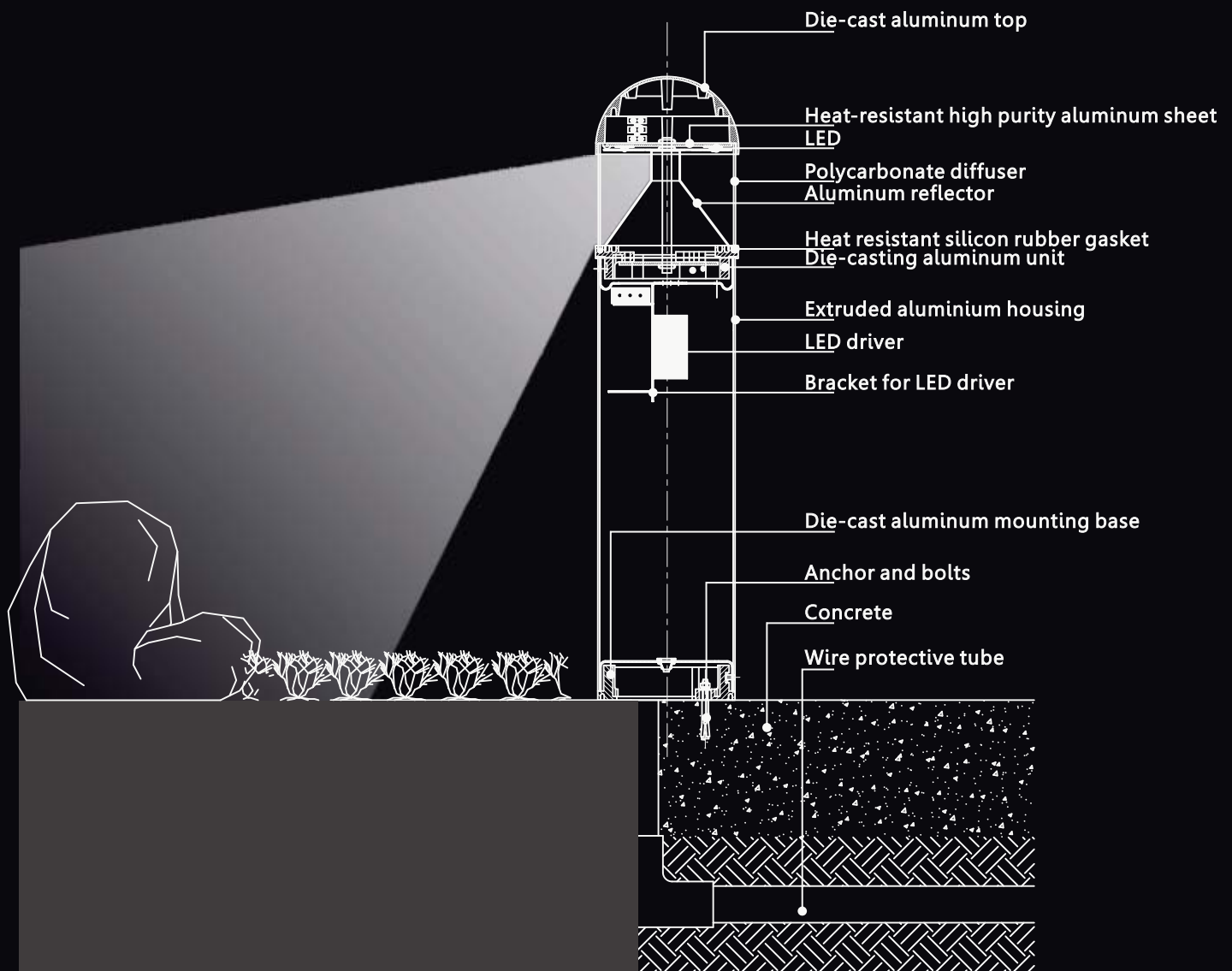




Color filters







bollard lights

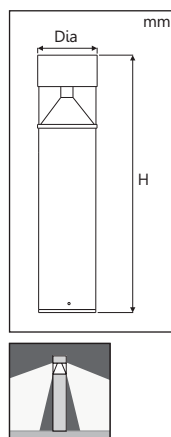
ELTE

Housing: extruded aluminum and die-cast aluminum top with high corrosion resistance
Diffuser: clear (DF.TNS)/ opal (DF.OPL) polycarbonate
Gasket: IP65 waterproof silicone
Reflector: anodized aluminum
Notes:
 *custom sizes/wattage available on request
 *all wiring, socket and connectors are heat resistant

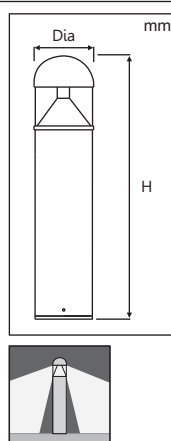
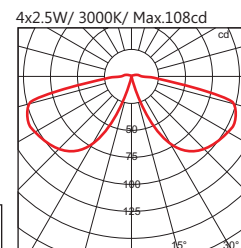
LED: CREE XT-E
CRI: Ra>65
CCT: 2700-6500K
Lumen range: 90-102 lm/w
Optional power supply: centralized DC and remote control
Impulse withstand: 4kv
Note: *Lm given in data is based on 3000K

LED driver: integral
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

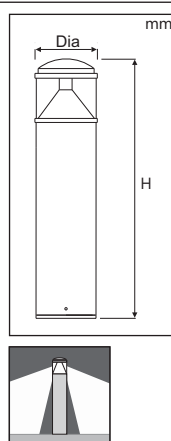
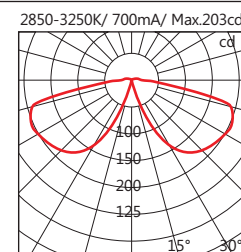
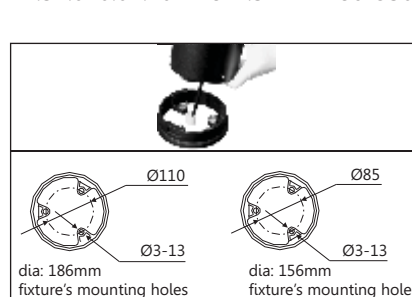
Application:
 outdoors
 public/private/residential streets
 parks/pathways
 gardens
Ambient Temp: -40°~+55°C



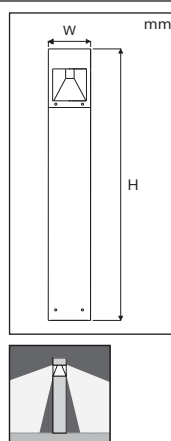
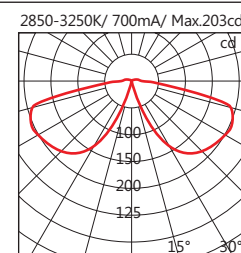
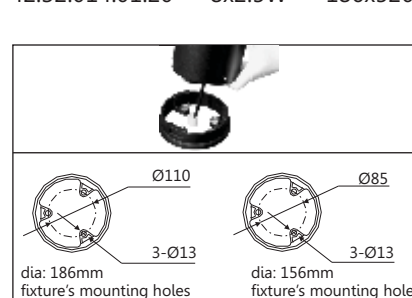
Ref Code	Watt	DiaxH
42.32.001.01.10	4x2.5W	90x380
42.32.002.01.10	4x2.5W	90x680
42.32.003.01.20	8x2.5W	156x380
42.32.004.01.20	8x2.5W	156x680
42.32.005.01.20	8x2.5W	186x520
42.32.006.01.20	8x2.5W	186x950



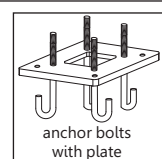
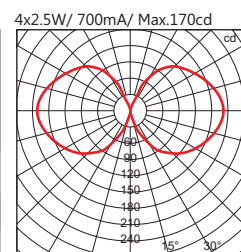
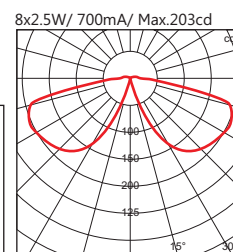
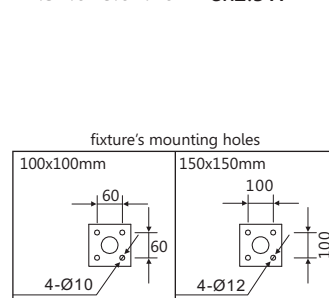
Ref Code	Watt	DiaxH
42.32.007.01.20	8x2.5W	156x380
42.32.008.01.20	8x2.5W	156x680
42.32.009.01.20	8x2.5W	186x520
42.32.010.01.20	8x2.5W	186x950



Ref Code	Watt	DiaxH
42.32.011.01.20	8x2.5W	156x680
42.32.012.01.20	8x2.5W	156x380
42.32.013.01.20	8x2.5W	186x950
42.32.014.01.20	8x2.5W	186x520



Ref Code	Watt	Lm(±)	WxH
42.32.015.01.10	4x2.5W	750	(100x100)x380
42.32.016.01.10	4x2.5W	850	(100x100)x680
42.32.017.01.20	8x2.5W		(150x150)x380
42.32.018.01.20	8x2.5W		(150x150)x680

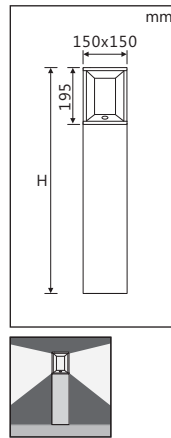


Housing: extruded aluminum and die-cast aluminum top with high corrosion resistance
Diffuser: clear (DF.TNS)/ opal (DF.OPL) polycarbonate/ tempered glass
Gasket: IP65 waterproof silicone
Reflector: anodized aluminum
Notes:
 *custom sizes/wattage available on request
 *all wiring, socket and connectors are heat resistant

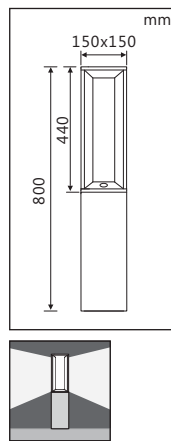
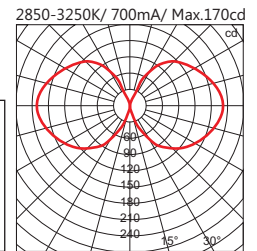
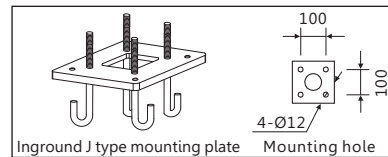
LED: CREE XT-E
CRI: Ra>65
CCT: 2700-6500k
Lumen range: 90-102 lm/w
Optional power supply: centralized DC and remote control
Impulse withstand: 4kv
Note: *Lm given in data is based on 4000K

LED driver: integral
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

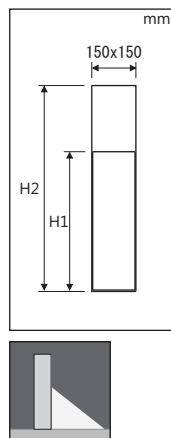
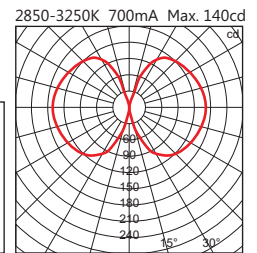
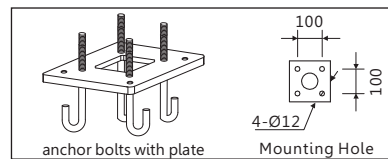
Application:
 outdoors
 public/private/residential streets
 parks/pathways
 gardens
Ambient Temp: -40°~+55°C



Ref Code	Watt	mA	Lm(±)	H
42.32.019.01.22.5	9x2.5W	700	1750	380
42.32.020.01.22.5	9x2.5W	700	1750	800

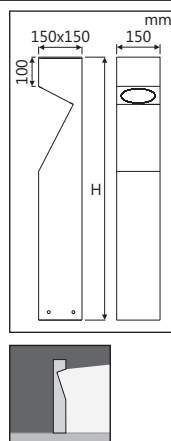
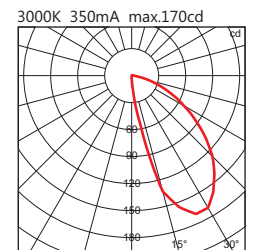


Ref Code	Watt	mA	Lm(±)
42.32.021.01.22.5	9x2.5W	700	1750

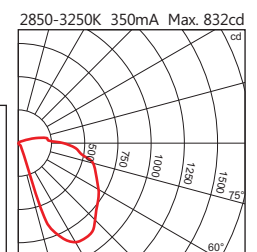
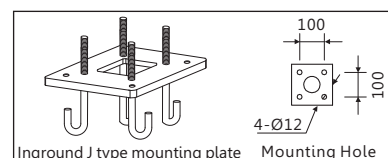


Ref Code	Watt	mA	Lm(±)	H1/H2
42.32.022.01.15	15W	350	1300	155/380
42.32.023.01.15	15W	350	1400	455/680
42.32.024.01.30	30W	700	2500	155/380
42.32.025.01.30	30W	700	2800	455/680

LED
 COB XLamp CXA 1512
 COB XLamp CXA 1512
 COB XLamp CXA 2520
 COB XLamp CXA 2520



Ref Code	Watt	mA	Lm(±)	H
42.32.026.01.22.5	9x2.5W	700	1750	520
42.32.027.01.22.5	9x2.5W	700	1750	680



bollard lights

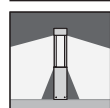
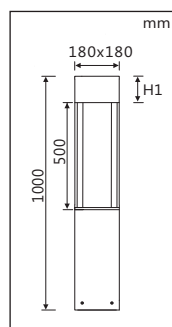
ELTE

Housing: extruded aluminum and die-cast aluminum top with high corrosion resistance
Diffuser: tempered glass
Gasket: IP65 waterproof silicone
Reflector: anodized aluminum
Note:
 *custom sizes/ wattage available on request
 *all wiring, socket and connectors are heat resistant

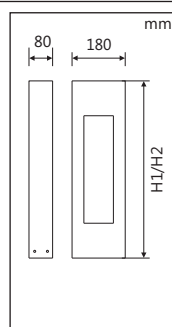
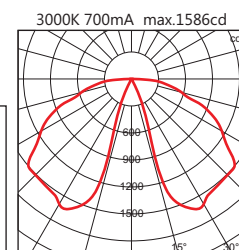
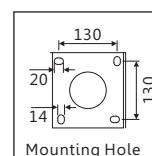
LED: COB XLamp
CRI: Ra>65
CCT: 2700-6500k
Lumen range: 90-102 lm/w
Optional power supply: centralized DC and remote control
Impulse withstand: 4kv

LED driver: integral
Volt AC: 220-240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

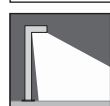
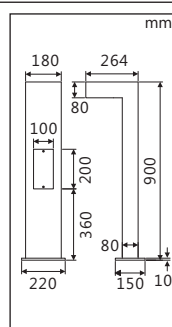
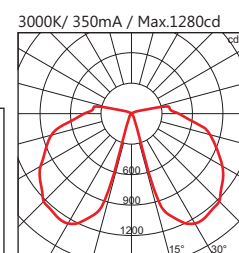
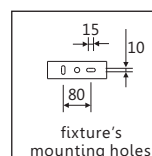
Application:
 outdoors
 public/private/residential streets
 parks/pathways
 gardens
Ambient Temp: -40°~+55°C



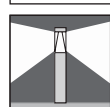
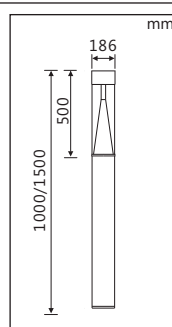
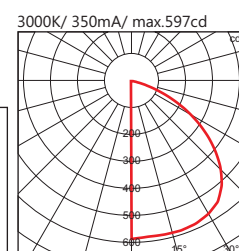
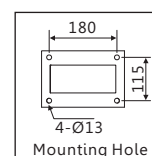
Ref Code	Watt	mA	Lm(±)	H1	LED
42.32.028.01.30	30W	700	2800	100	COB XLamp CXA 2520
42.32.029.01.45	45W	1050	4300	150	COB XLamp CXA 2530



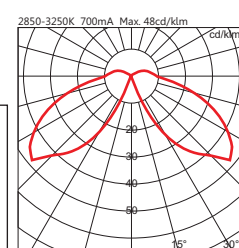
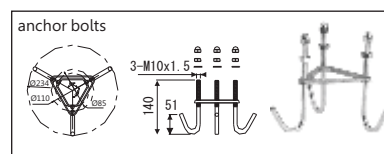
Ref Code	Watt	mA	Lm(±)	H1/H2	LED
42.32.030.01.15	15W	350	1300	600	COB XLamp CXA 1512
42.32.031.01.15	15W	350	1400	900	



Ref Code	Watt	mA	Lm(±)	LED
42.32.032.01.15	15W	350	1300	COB XLamp CXA 1512
42.32.032.02.20	20W	500	1900	COB XLamp CXA 2520
42.32.032.03.30	30W	700	2500	COB XLamp CXA 2520



Ref Code	Watt	mA	Lm(±)	Height options:
42.32.033.01.35	35W	700	2700	1000mm - HT1000
42.32.033.02.35	35W	700	3450	1500mm - HT1500





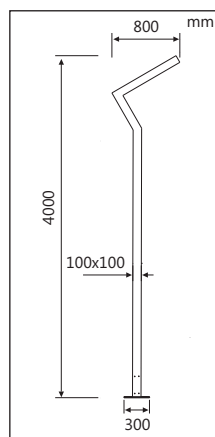


Mounting: on-ground post
Housing: extruded aluminum with high corrosion resistance
Diffuser: 4mm thick tempered glass
Gasket: silicone
Reflector: pure aluminum
Finish options:
 11-black matte/13-grey matte
Note: *custom sizes/wattage available on request

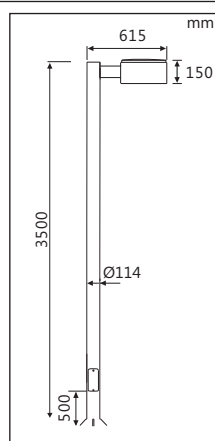
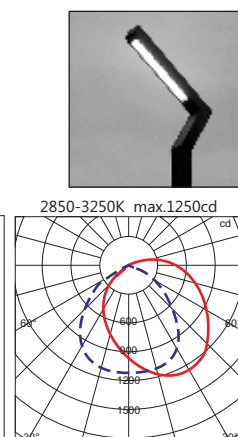
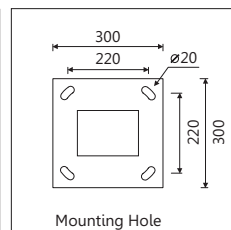
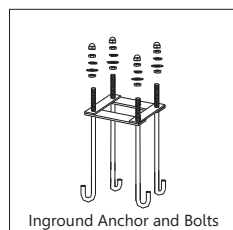
LED: CREE
CRI: Ra>80 (+/- 3000k)
 Ra>70 (+/- 4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (+/- 3000k)
 114-122 lm/w (+/- 4000k)

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

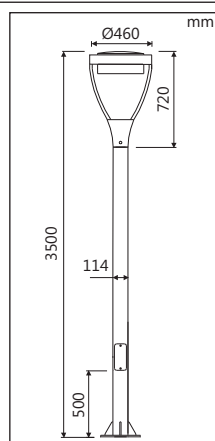
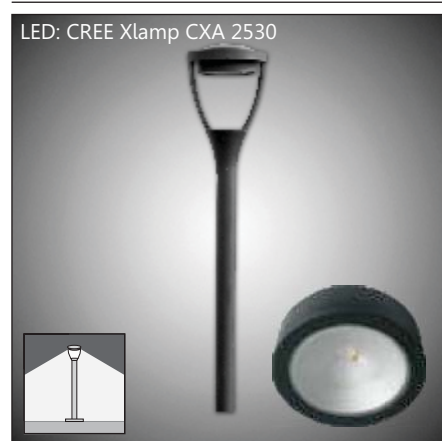
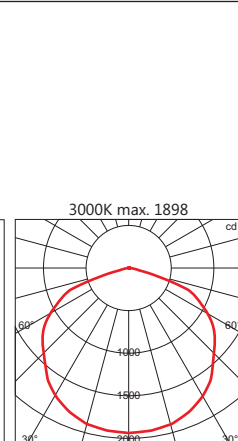
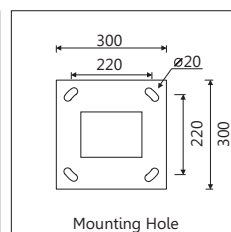
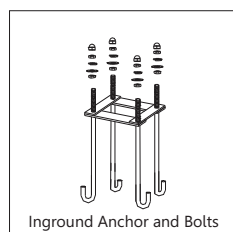
Application:
 outdoors
 public/private/residential streets
 parks/pathways
 gardens
Ambient Temp: -40°~+60°C



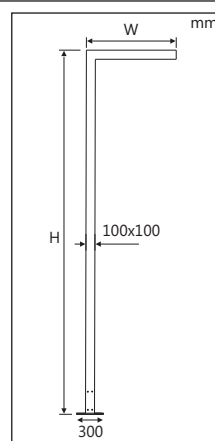
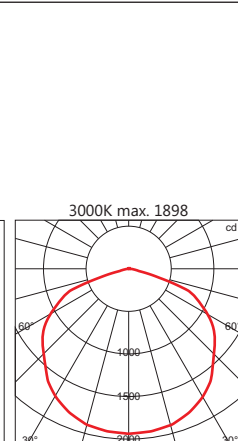
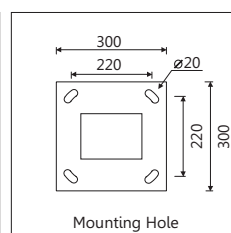
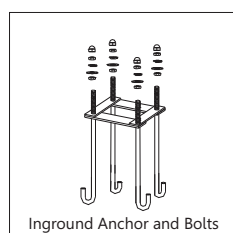
Ref Code 43.32.001.01.45 **Watt** 18x2.5W **mA** 700 **Lm(±)** 3450



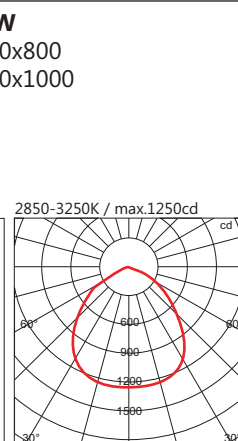
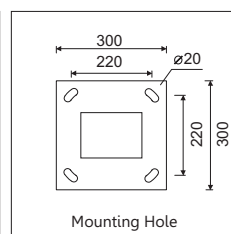
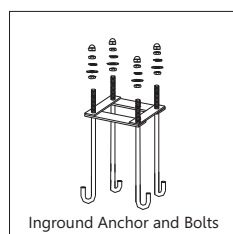
Ref Code 43.32.002.01.45 **Watt** 45W **mA** 1050 **Lm(±)** 4000



Ref Code 43.32.003.01.45 **Watt** 45W **mA** 1050 **Lm(±)** 4000



Ref Code 43.32.004.01.45 **Watt** 18x2.5W **mA** 700 **Lm(±)** 3450 **HxW** 3000x800
 43.32.005.01.45 **Watt** 18x2.5W **mA** 700 **Lm(±)** 3450 **HxW** 4000x1000



pole lights

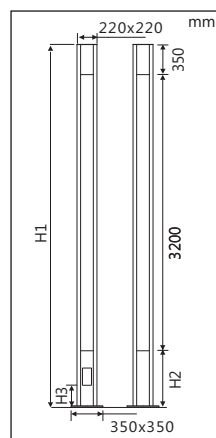
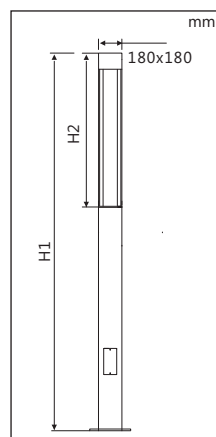
ELTE

Mounting: on-ground post
Housing: extruded aluminum
 with high corrosion resistance
Diffuser: 4mm thick tempered glass
Gasket: silicone
Reflector: pure aluminum
Finish options:
 11-black matte/13-grey matte
Note: *custom sizes/wattage available
 on request

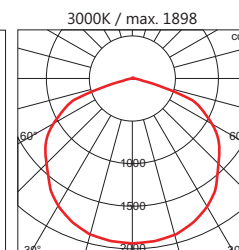
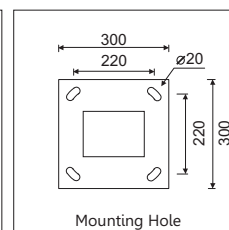
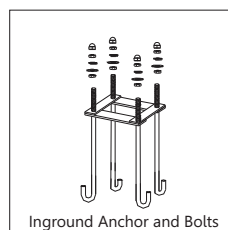
LED: CREE
CRI: Ra>80 (+/- 3000k)
 Ra>70 (+/- 4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (+/- 3000k)
 114-122 lm/w (+/- 4000k)

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 streets
 parks/pathways
 gardens
Ambient Temp: -40°~+60°C



Ref Code	Watt	mA	Lm(±)	H1xH2
43.32.012.01.45	45W	1050	4000	3000x1300
43.32.013.01.45	45W	1050	4300	4000x1600



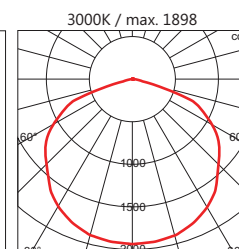
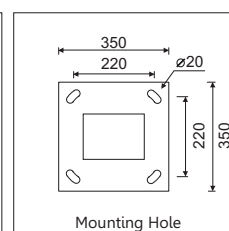
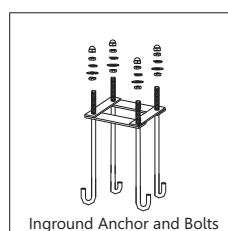
Ref Code	Watt	mA	Lm output(chip)	Lm output(fixture)
43.32.000.01.45	45W	1050	4000	1821
43.32.000.02.60	60W	1050	5300	2354
43.32.000.01.45	45W	1050	4300	1933
43.32.000.02.60	60W	1050	5600	2487

H1xH2xH3

4200x650x250	CREE CXA2530
4400x850x550	CREE CXA2530
4200x650x250	CREE CXA2540
4400x850x550	CREE CXA2540

COB LED

CREE CXA2530
CREE CXA2530
CREE CXA2540
CREE CXA2540

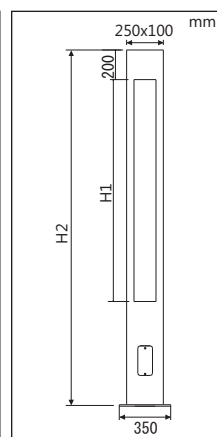


Mounting: on-ground post
Housing: extruded aluminum with high corrosion resistance
Diffuser: 4mm thick tempered glass
Gasket: silicone
Reflector: pure aluminum
Finish options:
 11-black matte/13-grey matte
Note: *custom sizes/wattage available on request

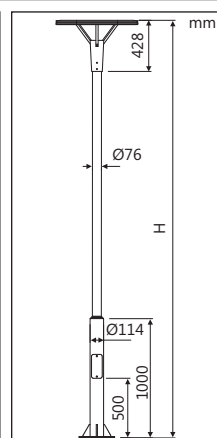
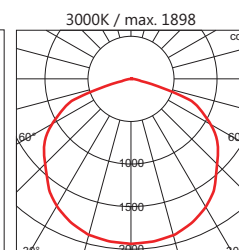
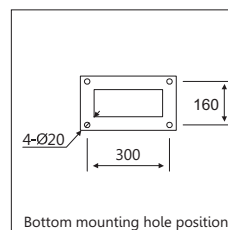
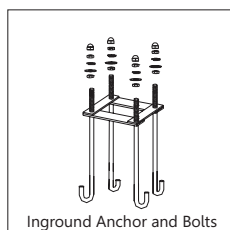
LED: CREE
CRI: Ra>80 (+/- 3000k)
 Ra>70 (+/- 4000k)
CCT:
 CT30-3000k
 CT40-4000k
Lumen range:
 93.9-100 lm/w (+/- 3000k)
 114-122 lm/w (+/- 4000k)

LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

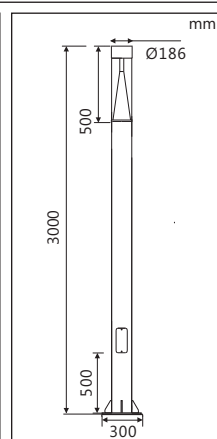
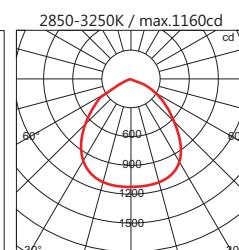
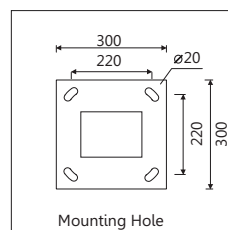
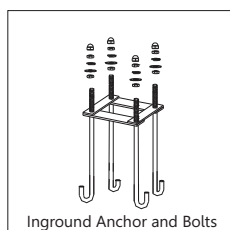
Application:
 outdoors
 public/private/residential streets
 parks/pathways
 gardens
Ambient Temp: -40°~+60°C



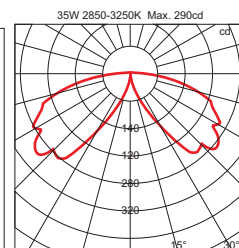
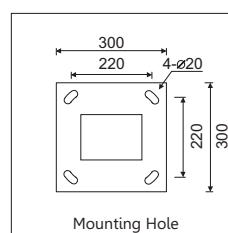
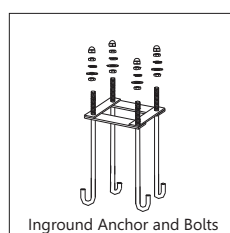
Ref Code	Watt	mA	Lm(±)	H1	H2
43.32.006.01.45	45W	700	4000	1000	1500
43.32.007.01.45	45W	700		1200	2000
43.32.008.01.45	45W	700	4000	1500	2500
43.32.009.01.45	45W	700		1500	3000



Ref Code	Watt	mA	Lm(±)	H
43.32.010.01.60	24x2.5W	1050	4100	3500
43.32.011.01.120	48x2.5W	1050	8200	4000



Ref Code	Watt	mA	Lm(±)
43.32.014.01.35	35W	700	2700
43.32.014.02.45	45W	700	3450

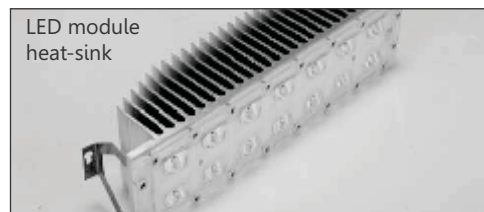
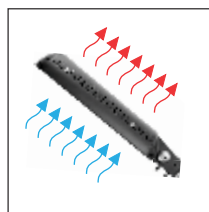
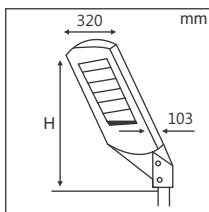


Mounting: pole/wall
Aperture: dia-62mm
Fitting: die-cast aluminum, stainless steel clips
LED module housing: aluminum 6063
Lens: optical PC, anti-glare, uniform light
Beam: various angles
Fitting's finish options:
 11-black matte
 13-grey matte
 *other RAL colors available on request

LED: CREE/aluminum PCB/SMD
CRI: Ra>65
CCT: 2700-6500k
 Lumen range: 90-102 lm/w
Optional power supply:
 centralized DC and remote control
Impulse withstand: 4kv
 *Other CRI/CCT available on request

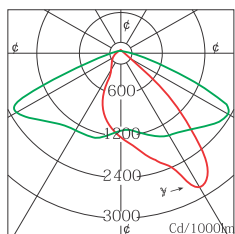
LED driver: integral
Volt AC: 240V
Volt DC: 24V
Frequency: 50/60Hz
LED driver options:
 ND - non-dimmable
 PH - phase dimmable
 010V - 0-10V dimmable
 DALI - compatible

Application:
 outdoors
 public/private/residential
 streets
 parks/pathways
 gardens
Ambient Temp: -40°~+60°C

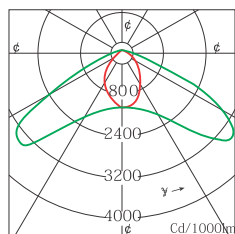


Ref Code	Watt	Lm(±)	Size (H,m)	Weight, kg	Modules, pcs	Mounting Height
43.37.015.01.30	30-60W	3062-4860	470	6.12	2	4-7m
43.37.016.01.45	45-90W	4593-7290	570	6.83	3	7-10m
43.37.017.01.60	60-120W	4593-9720	650	7.54	4	8-12m
43.37.018.01.75	75-150W	7655-12150	730	8.25	5	8-12m
43.37.019.01.90	90-180W	9186-14580	810	9.0	6	8-12m
43.37.020.01.105	105-210W	10717-17010	870	9.67	7	8-12m
43.37.021.01.120	120-240W	12248-19440	970	10.47	8	10-15m
43.37.022.01.135	135-270W	13779-21870	1050	11.27	9	10-15m
43.37.023.01.150	150-300W	15300-27000	1130	12.07	10	10-15m

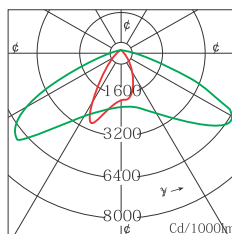
Note: *custom sizes/ wattage available on request



The light distribution curve 1



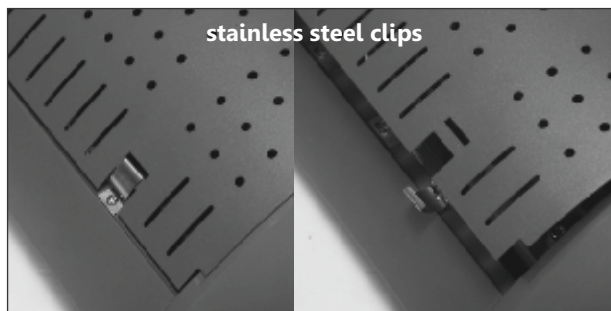
The light distribution curve 2



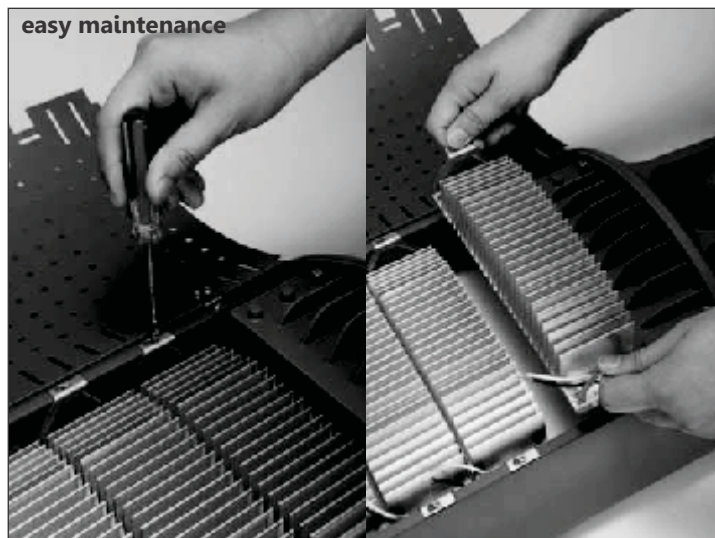
The light distribution curve 3



anti-glare lens



stainless steel clips



easy maintenance

LED

An **LED** is a light-emitting diode (LED) product which is assembled into a lamp (or light bulb) for use in lighting fixtures. LED lamps have a lifespan and electrical efficiency which are several times longer than incandescent lamps, and significantly more efficient than most fluorescent lamps, with some chips able to emit more than 300 lumens per watt (as claimed by Cree and some other LED manufacturers). Like incandescent lamps and unlike most fluorescent lamps (e.g. tubes and compact fluorescent lamps or CFLs), LEDs come to full brightness without need for a warm-up time; the life of fluorescent lighting is also reduced by frequent switching on and off.

LED chips need to be controlled by direct current (DC) electrical power; an appropriate circuit is required to convert alternating current from the supply to the regulated low voltage direct current used by the LEDs. LEDs are adversely affected by high temperature, so LED lamps typically include heat dissipation elements such as heat sinks and cooling fins.

General-purpose lighting needs white light. LEDs emit light in a very narrow band of wavelengths, emitting light of a color characteristic of the energy bandgap of the semiconductor material used to make the LED. To emit white light from LEDs requires either mixing light from red, green, and blue LEDs, or using a phosphor to convert some of the light to other colors.

One method (RGB or trichromatic white LEDs) uses multiple LED chips, each emitting a different wavelength, in close proximity to generate white light. This allows the intensity of each LED to be adjusted to change the overall color.

The second method uses LEDs in conjunction with a phosphor. The CRI (color rendering index) value can range from less than 70 to over 90, and color temperatures in the range of 2700 K (matching incandescent lamps) up to 7000 K are available.

A significant difference from other light sources is that the light is more directional, i.e., emitted as a narrower beam. LED lamps are used for both general and special-purpose lighting. Where colored light is needed, LEDs that inherently emit light of a single color require no energy-absorbing filters.

White-light LED lamps have longer life expectancy and higher efficiency (more light for the same electricity) than most other lighting when used at the proper temperature. LED sources are compact, which gives flexibility in designing lighting fixtures and good control over the distribution of light with small reflectors or lenses. Because of the small size of LEDs, control of the spatial distribution of illumination is extremely flexible, and the light output and spatial distribution of an LED array can be controlled with no efficiency loss.

LEDs using the color-mixing principle can emit a wide range of colors by changing the proportions of light generated in each primary color. This allows full color mixing in lamps with LEDs of different colors. Unlike other lighting technologies, LED emission tends to be directional (or at least lambertian), which can be either advantageous or disadvantageous, depending on requirements. For applications where non-directional light is required, either a diffuser is used, or multiple individual LED emitters are used to emit in different directions.

Advantages

- **Efficiency:** LEDs emit more lumens per watt than incandescent light bulbs. The efficiency of LED lighting fixtures is not affected by shape and size unlike fluorescent light bulbs or tubes.
- **Color:** LEDs can emit light of an intended color without using any color filters as traditional lighting methods need. This is more efficient and can lower initial costs.
- **Size:** LEDs can be very small (smaller than 2 mm³) and are easily attached to printed circuit boards.
- **Warmup time:** LEDs light up very quickly. A typical red indicator LED will achieve full brightness in under a microsecond. LEDs used in communications devices can have even faster response times.
- **Cycling:** LEDs are ideal for uses subject to frequent on-off cycling, unlike incandescent and fluorescent lamps that fail faster when cycled often, or high-intensity discharge lamps (HID lamps) that require a long time before restarting.
- **Dimming:** LEDs can very easily be dimmed either by pulse-width modulation or lowering the forward current. This pulse-width modulation is why LED lights, particularly headlights on cars, when viewed on camera or by some people, appear to be flashing or flickering. This is a type of stroboscopic effect.
- **Cool light:** In contrast to most light sources, LEDs radiate very little heat in the form of IR that can cause damage to sensitive objects or fabrics. Wasted energy is dispersed as heat through the base of the LED.
- **Slow failure:** LEDs mostly fail by dimming over time, rather than the abrupt failure of incandescent bulbs.
- **Lifetime:** LEDs can have a relatively long useful life. One report estimates 35,000 to 50,000 hours of useful life, though time to complete failure may be longer. Fluorescent tubes typically are rated at about 10,000 to 15,000 hours, depending partly on the conditions of use, and incandescent light bulbs at 1,000 to 2,000 hours. Several DOE demonstrations have shown that reduced maintenance costs from this extended lifetime, rather than energy savings, is the primary factor in determining the payback period for an LED product.
- **Shock resistance:** LEDs, being solid-state components, are difficult to damage with external shock, unlike fluorescent and incandescent bulbs, which are fragile.
- **Focus:** The solid package of the LED can be designed to focus its light. Incandescent and fluorescent sources often require an external reflector to collect light and direct it in a usable manner. For larger LED packages total internal reflection (TIR) lenses are often used to the same effect. However, when large quantities of light are needed many light sources are usually deployed, which are difficult to focus or collimate towards the same target.

Disadvantages

- **Temperature dependence:** LED performance largely depends on the ambient temperature of the operating environment – or "thermal management" properties. Over-driving an LED in high ambient temperatures may result in overheating the LED package, eventually leading to device failure. An adequate heat sink is needed to maintain long life. There are some LEDs with an operating temperature range of -40 to 100 °C, which suits the LEDs for both indoor and outdoor use in applications such as lamps, ceiling lighting, street lights, and floodlights.
- **Voltage sensitivity:** LEDs must be supplied with a voltage above their threshold voltage and a current below their rating. Current and lifetime change greatly with a small change in applied voltage. They thus require a current-regulated supply (usually just a series resistor for indicator LEDs).
- **Color rendition:** Most cool-white LEDs have spectra that differ significantly from a black body radiator like the sun or an incandescent light. The spike at 460 nm and dip at 500 nm can cause the color of objects to be perceived differently under cool-white LED illumination than sunlight or incandescent sources, due to metamerism, red surfaces being rendered particularly poorly by typical phosphor-based cool-white LEDs.
- **Area light source:** Single LEDs do not approximate a point source of light giving a spherical light distribution, but rather a lambertian distribution. So LEDs are difficult to apply to uses needing a spherical light field; however, different fields of light can be manipulated by the application of different optics or "lenses". LEDs cannot provide divergence below a few degrees. In contrast, lasers can emit beams with divergences of 0.2 degrees or less.
- **Electrical polarity:** Unlike incandescent light bulbs, which illuminate regardless of the electrical polarity, LEDs will only light with correct electrical polarity. To automatically match source polarity to LED devices, rectifiers can be used.
- **Blue hazard:** There is a concern that blue LEDs and cool-white LEDs are now capable of exceeding safe limits of the so-called blue-light hazard as defined in eye safety specifications such as ANSI/IESNA RP-27.1–05: Recommended Practice for Photobiological Safety for Lamp and Lamp Systems.
- **Light pollution:** Because white LEDs, especially those with high color temperature, emit much more short wavelength light than conventional outdoor light sources such as high-pressure sodium vapor lamps, the increased blue and green sensitivity of scotopic vision means that white LEDs used in outdoor lighting cause substantially more sky glow.
- **Efficiency droop:** The efficiency of LEDs decreases as the electric current increases. Heating also increases with higher currents which compromises the lifetime of the LED. These effects put practical limits on the current through an LED in high power applications.
- **Impact on insects:** LEDs are much more attractive to insects than sodium-vapor lights, so much so that there has been speculative concern about the possibility of disruption to food webs.



A 230-volt LED filament light bulb, with an E27 base. The filament is visible as the eight yellow vertical lines.



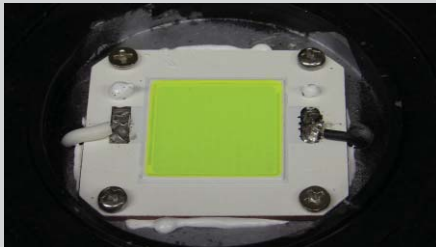
An assortment of LED lamps commercially available as of 2010 as replacements for screw-in bulbs, including floodlight fixtures (left), reading light (center), household lamps (center right and bottom), and low-power accent light (right) applications



LED spotlight using 60 individual diodes for mains voltage usage



LED light bulb to replace G24 compact fluorescent lamp



An 80W Chip-On-Board COB LED Module from an industrial light luminaire, thermally bonded to the heat sink

Some well-known HP-LEDs in this category are the Nichia 19 series, Lumileds Rebel Led, Osram Opto Semiconductors Golden Dragon, and Cree X-lamp. As of September 2009, some HP-LEDs manufactured by Cree now exceed 105 lm/W.

Examples for Haitz's law, which predicts an exponential rise in light output and efficacy of LEDs over time, are the CREE XP-G series LED which achieved 105 lm/W in 2009 and the Nichia 19 series with a typical efficacy of 140 lm/W, released in 2010.

AC driven

LEDs have been developed by Seoul Semiconductor that can operate on AC power without the need for a DC converter. For each half-cycle, part of the LED emits light and part is dark, and this is reversed during the next half-cycle. The efficacy of this type of HP-LED is typically 40 lm/W. A large number of LED elements in series may be able to operate directly from line voltage. In 2009, Seoul Semiconductor released a high DC voltage LED, named as 'Acrich MJT', capable of being driven from AC power with a simple controlling circuit. The low-power dissipation of these LEDs affords them more flexibility than the original AC LED design.

Lumen (unit)



A standard LED lamp producing 470 lumens. It consumes about one sixth the energy of an incandescent light bulb producing the same light.

The **lumen** (symbol: **lm**) is the SI derived unit of luminous flux, a measure of the total quantity of visible light emitted by a source. Luminous flux differs from power (radiant flux) in that radiant flux includes all electromagnetic waves emitted, while luminous flux is weighted according to a model of the human eye's sensitivity to various wavelengths. Lumens are related to lux in that one lux is one lumen per square meter.

The lumen is defined in relation to the candela as $1 \text{ lm} = 1 \text{ cd} \cdot \text{sr}$.

A full sphere has a solid angle of 4π steradians, so a light source that uniformly radiates one candela in all directions has a total luminous flux of $1 \text{ cd} \times 4\pi \text{ sr} = 4\pi \text{ cd} \cdot \text{sr} \sim 12.57$ lumens.

If a light source emits one candela of luminous intensity uniformly across a solid angle of one steradian, the total luminous flux emitted into that angle is one lumen ($1 \text{ cd} \cdot 1 \text{ sr} = 1 \text{ lm}$). Alternatively, an isotropic one-candela light-source emits a total luminous flux of exactly 4π lumens. If the source were partially covered by an ideal absorbing hemisphere, that system would radiate half as much luminous flux—only 2π lumens. The luminous intensity would still be one candela in those directions that are not obscured.

The lumen can be thought of casually as a measure of the total "amount" of visible light in some defined beam or angle, or emitted from some source. The number of candelas or lumens from a source also depends on its spectrum, via the nominal response of the human eye as represented in the luminosity function.

The difference between the units lumen and lux is that the lux takes into account the area over which the luminous flux is spread. A flux of 1000 lumens, concentrated into an area of one square metre, lights up that square metre with an illuminance of 1000 lux. The same 1000 lumens, spread out over ten square metres, produces a dimmer illuminance of only 100 lux. Mathematically, $1 \text{ lx} = 1 \text{ lm/m}^2$.

A source radiating a power of one watt of light in the color for which the eye is most efficient (a wavelength of 555 nm, in the green region of the optical spectrum) has luminous flux of 683 lumens. So a lumen represents at least 1/683 watts of visible light power, depending on the spectral distribution.

Comparison table

	Incandescent	Halogen	CFL	LED (Cree)
Power Factor	1	1	0.5	0.75
Real power used (watts)	60	35	14	9.5
lumens	860	860	775	800
lumens/watt	14.3	24.6	55.4	84
Color Temperature kelvin	2700	2900	2700	2700
CRI	100	100	82	80
Lifespan (hours)	1,000	4,000	10,000	25,000
Bulb lifetime in years @ 6 hours/day	0.46	1.83	4.6	11.4

High-power LEDs (HP-LEDs) or high-output LEDs (HO-LEDs) can be driven at currents from hundreds of mA to more than an ampere, compared with the tens of mA for other LEDs. Some can emit over a thousand lumens. LED power densities up to 300 W/cm² have been achieved. Since overheating is destructive, the HP-LEDs must be mounted on a heat sink to allow for heat dissipation. If the heat from a HP-LED is not removed, the device will fail in seconds. One HP-LED can often replace an incandescent bulb in a flashlight, or be set in an array to form a powerful LED lamp.

Electrical power equivalents for different lamps			
Minimum light output (lumens)	Electrical power consumption (watts)		
	Incandescent (non-halogen)	Compact fluorescent	LED
200	25	3-5	3
450	40	9-11	5-8
800	60	13-15	9-12
1,100	75	18-20	13-16
1,600	100	24-28	18-22
2,400	150	30-52	30
3,100	200	49-75	32
4,000	300	75-100	40.5

Lux

The **lux** (symbol: **lx**) is the SI unit of illuminance and luminous emittance, measuring luminous flux per unit area. It is equal to one lumen per square metre. In photometry, this is used as a measure of the intensity, as perceived by the human eye, of light that hits or passes through a surface. It is analogous to the radiometric unit watts per square metre, but with the power at each wavelength weighted according to the luminosity function, a standardized model of human visual brightness perception. In English, "lux" is used in both singular and plural.



A lux meter for measuring illuminances in work places.

Illuminance

Illuminance is a measure of how much luminous flux is spread over a given area. One can think of luminous flux (measured in lumens) as a measure of the total "amount" of visible light present, and the illuminance as a measure of the intensity of illumination on a surface. A given amount of light will illuminate a surface more dimly if it is spread over a larger area, so illuminance (lux) is inversely proportional to area when the luminous flux (lumens) is held constant.

One lux is equal to one lumen per square metre: $1 \text{ lx} = 1 \text{ lm/m}^2 = 1 \text{ cd} \cdot \text{sr/m}^2$

A flux of 1000 lumens, concentrated into an area of one square metre, lights up that square metre with an illuminance of 1000 lux. However, the same 1000 lumens, spread out over ten square metres, produces a dimmer illuminance of only 100 lux.

Achieving an illuminance of 500 lux might be possible in a home kitchen with a single fluorescent light fixture with an output of 12000 lumens. To light a factory floor with dozens of times the area of the kitchen would require dozens of such fixtures. Thus, lighting a larger area to the same level of lux requires a greater number of lumens.

As with other SI units, SI prefixes can be used, for example a kilolux (klx) is 1,000 lux.

Here are some examples of the illuminance provided under various conditions:

Illuminance	Surfaces illuminated by:
0.0001 lux	Moonless, overcast night sky (starlight)
0.002 lux	Moonless clear night sky with airglow
0.27–1.0 lux	Full moon on a clear night
3.4 lux	Dark limit of civil twilight under a clear sky
50 lux	Family living room lights
80 lux	Office building hallway/toilet lighting
100 lux	Very dark overcast day
320–500 lux	Office lighting
400 lux	Sunrise or sunset on a clear day.
1,000 lux	Overcast day; typical TV studio lighting
10,000–25,000 lux	Full daylight (not direct sun)
32,000–100,000 lux	Direct sunlight

The illuminance provided by a light source, on a surface perpendicular to the direction to the source, is a measure of the strength of that source as perceived from that location. For instance, a star of apparent magnitude 0 provides 2.08 microlux at the earth's surface. A barely perceptible magnitude 6 star provides 8 nanolux. The unobscured sun provides an illumination of up to 100 kilolux on the Earth's surface, the exact value depending on time of year and atmospheric conditions. This direct normal illuminance is related to the solar illuminance constant E_{sc} , equal to 128000 lux (see Sunlight).

Luminous emittance

The lux is also a measure of luminous emittance, the number of lumens given off by a surface per square metre, regardless of how that light is distributed in terms of the directions in which it is emitted. It differs from the luminance (measured in candela per square metre or "nits"), which does depend on the angular distribution of the emission. A perfectly white surface with one lux falling on it will emit one lux.

Residences		
Areas	General/Minimum/Spotted (reading, writing)	lux level
reception (living room)	general	150
	spotted	1,000
	minimum	500
kitchen	general	150
	spotted	500
	minimum	250
bedroom	general	150
	spotted	200
	minimum	70
corridor/staircase/garage	general	150
	spotted	500
	minimum	250

Hotels / Restaurants		
Areas	General/Minimum/Spotted (reading, writing)	lux level
bedroom	general	150
bedroom, bed area	spotted	500
	minimum	250
bedroom, office	spotted	500
	minimum	250
kitchen	general	500
	minimum	250
open areas	general	150
exhibition hall	general	500
	minimum	250
bathroom	general	150
bathroom, mirror	general	500
	minimum	250
staircase	general	150

Shops		
Areas	General/Minimum/Spotted (reading, writing)	lux level
downtown shop window	general	2,000
	minimum	1,000
	spotted (usual)	10,000
	spotted (minimum)	5,000
shop windows in other areas	general	1,000
	minimum	500
	spotted (usual)	5,000
	spotted (minimum)	2,500
indoor lighting for city shops	general	1,000
	minimum	500
indoor lighting for other areas	general	500
	minimum	250

Offices, business		
Areas	General/Minimum/Spotted (reading, writing)	lux level
accounting, typists	general	1,000
	minimum	500
drawing room	general	150
	spotted	1,000
	minimum	500
waiting room	general	400
	minimum	150
conference hall	general	500
	minimum	250

Hospitals		
Areas	General/Minimum/Spotted (reading, writing)	lux level
doctor's office	general	150
	working table (usual)	1,000
	working table (minimum)	500
waiting area	general	150
bathroom	general	200
	minimum	100
	mirror (usual)	400
	mirror (minimum)	200
library	general	500
	minimum	250
first aid ward	spotted (usual)	1,000
	spotted (minimum)	500
	general (usual)	20,000
	general (minimum)	10,000
corridors, staircases	general	150
kitchen	general (usual)	500
	general (minimum)	250
laboratory, research areas	general (usual)	500
	general (minimum)	250
laboratory, working table	general (usual)	1,000
	general (minimum)	500
operation room	general (usual)	1,000
	general (minimum)	500
operation room, working table	general (usual)	40,000
	general (minimum)	20,000
dentist's room	general (usual)	500
	general (minimum)	250
dentist's room (chair)	general (usual)	10,000
	general (minimum)	5,000
maternity ward	general (usual)	500
	general (minimum)	250
delivery bed	general (usual)	10,000
	general (minimum)	5,000

Educational establishments		
Areas	General/Minimum/Spotted (reading, writing)	lux level
nursery	general	200
	minimum	100
elementary school	general	400
	minimum	200
high school		
teaching room	general	500
	minimum	250
research area, lab	general	600
	minimum	300
auxiliary areas	general	300
	minimum	150
technical school		
teaching room	general	500
	minimum	250
drawing room	general	1,000
	minimum	500
lab	general	500
	minimum	250
Educational establishments		
Areas	General/Minimum/Spotted (reading, writing)	lux level
open areas	general	150
supplementary lighting for paintings	general	400
	minimum	200
supplementary lighting for sculptures and other objects	general	1,000
	minimum	500

Bus, train, metro, airport stations		
Areas	General/Minimum/Spotted (reading, writing)	lux level
waiting room	general	150
ticket booth and offices	general	1,000
	minimum	500
canteens	general	150
platforms	general	150

Industrial		
Areas	General/Minimum/Spotted (reading, writing)	lux level
paper industry		
final control		1,000
other works		500
warehouse		150
leather factory		
leather processing		2,000
glass manufacturing		
general lighting		500
controlling areas		2,000
shoe factory		
shoe processing		2,000
soap factory		
general lighting		2,000
packaging		2,000
ceramic industry		
general lighting		150
color works		1,000
chemical industry		
furnace, boilers, kilns, etc.		150-300
food industry		
cleaning, washing, conveyor belts		250-500
inspection, canning area		2,000
general lighting		250-500

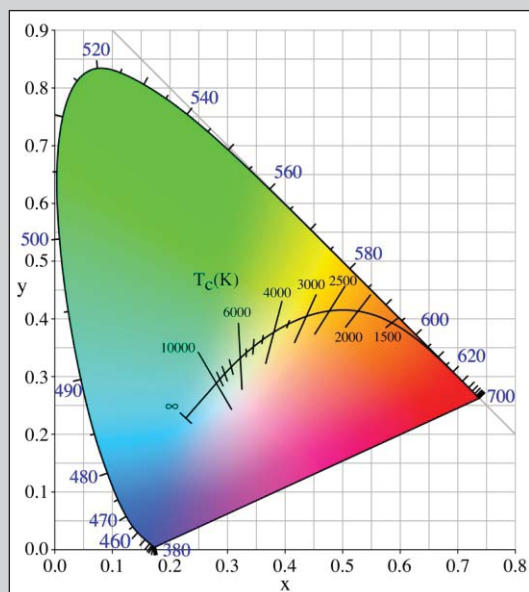
Parking areas		
Areas	General/Minimum/Spotted (reading, writing)	lux level
garage	general	500
	minimum	250
	spotted (usual)	1,000
	spotted (minimum)	500
lubrication area	general	500
	minimum	250
washing area	general	500
	minimum	250
parking area	general	150

Stadium		
Areas	General/Minimum/Spotted (reading, writing)	lux level
football (handball)	general	750
basketball/volleyball	general	750
swimming pool	general	300

Specific Labors areas		
Areas	General/Minimum/Spotted (reading, writing)	lux level
laundry	general	500
	minimum	250
machine areas	general	1,000
	minimum	500
inspection areas	general	2,000
bakeries		
kneading, preparation areas	general	400
	minimum	200
packaging area	general	300
	minimum	150
exhibiting shelves	general	500
	minimum	250
printing		
press preparation, correction	general	1,000
	minimum	500
color checking	general	2,000

Industrial	
milk industry	
sterilization, cooling, cream preparation areas, etc.	500-1,000
bottle washing, bottle filling inspection	500-1,000
weighing areas	250-500
laboratories	500-1,000
foundries	
molding construction (operational works)	500-1,000
molding construction (heavy processing)	250-500
inspection areas for delicate works	1,000-2,000
inspection areas for other works	500-1,000
silk - synthetic industry	
light color fibers	200-400
very dark color fibers	750-1,500
wool industry	
processing areas	200-400
inspection areas	400-800
tobacco industry	
processing and configuration machines areas	400-800
production inspection areas	1,000-2,000
automotive industry	
chassis manufacturing	250-500
components preparation	500-1,000
inspection areas	1,000-2,000
electricity production stations	
cabinets	500-1,000
other areas	150
aeronautics	
aircraft workshops	500-1,000
shipyards	
assembly areas	250-500
transport areas, bridge cranes	150
other works areas	500-1,000
industry ware-houses	
bulk storage	50-100
storage of small items	100-200
storage of very small items	200-400

Workshops		
Areas	General/Minimum/Spotted (reading, writing)	lux level
sewing areas		
light colored fabrics		100-150
dark colored fabrics		250-1,000
dyeing areas		
general lighting		500-1,000
special works and control		1,000-2,000
repair shops		
work with bulk items		100
work with medium sized items		250-500
work with fine items		500-1,000
work with very fine items		1,000-2,000
metallurgical works		
general works		250-500
product control areas		500-1,000
wood works		
operational		500-1,000
common		250-500
sugar labs		
color control		1,000-2,000
centrifuges - purification		500-1,000
various works		250-500
warehouses		150

CCT (Correlated Color Temperature, Kelvin)

The CIE 1931 x,y chromaticity space, also showing the chromaticities of black-body light sources of various temperatures (Planckian locus), and lines of constant correlated color temperature.

The **color temperature** of a light source is the temperature of an ideal black-body radiator that radiates light of comparable hue to that of the light source.

Color temperature is a characteristic of visible light that has important applications in lighting, photography, videography, publishing, manufacturing, astrophysics, horticulture, and other fields. In practice, color temperature is only meaningful for light sources that do in fact correspond somewhat closely to the radiation of some black body, i.e., those on a line from reddish/orange via yellow and more or less white to blueish white; it does not make sense to speak of the color temperature of, e.g., a green or a purple light. Color temperature is conventionally expressed in Kelvin, using the symbol K, a unit of measure for temperature based on the Kelvin scale.

Color temperatures over 5,000K are called cool colors (bluish white), while lower color temperatures (2,700–3,000 K) are called warm colors (yellowish white through red). This relation, however, is a psychological one in contrast to the physical relation implied by Wien's displacement law, according to which the spectral peak is shifted towards shorter wavelengths (resulting in a more blueish white) for higher temperatures.

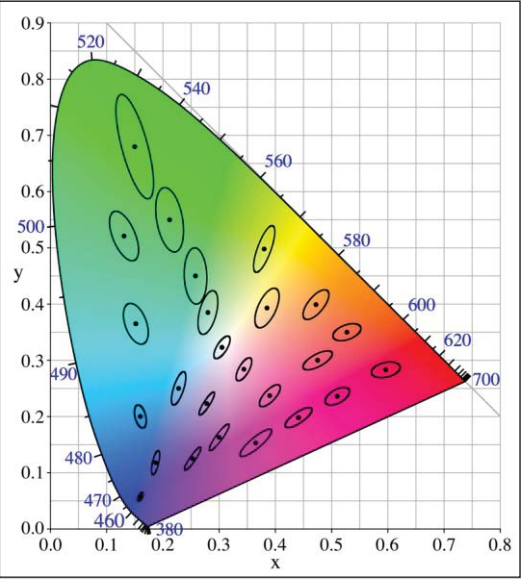
Temperature	Source
1,700 K	Match flame, low pressure sodium lamps (LPS/SOX)
1,850 K	Candle flame, sunset/sunrise
2,400 K	Standard Incandescent lamps
2,550 K	Soft White Incandescent lamps
2,700 K	"Soft White" compact fluorescent and LED lamps
3,000 K	Warm White compact fluorescent and LED lamps
3,200 K	Studio lamps, photofloods, etc.
3,350 K	Studio "CP" light
4,100–4,150 K	Moonlight
5,000 K	Horizon daylight
5,000 K	Tubular fluorescent lamps or cool white/daylight compact fluorescent lamps (CFL)
5,500–6,000 K	Vertical daylight, electronic flash
6,200 K	Xenon short-arc lamp
6,500 K	Daylight, overcast
6,500–9,500 K	LCD or CRT screen
15,000–27,000 K	Clear blue poleward sky
These temperatures are merely characteristic; considerable variation may be present.	

SDCM and MacAdam Ellipses

SDCM is an acronym which stands for Standard Deviation Colour Matching. SDCM has the same meaning as a “MacAdam ellipse”. A 1-step MacAdam ellipse defines a zone in the CIE 1931 2 deg (xy) colour space within which the human eye cannot discern colour difference. Most LEDs are binned at the 4-7 step level, in other words you certainly can see colour differences in LEDs that are ostensibly the same colour.

The science behind colour difference specifications was established by Dr David MacAdam in 1942 [MacAdam, D.L., Visual Sensitivities to Colour Differences in Daylight, J.Opt.Soc.Am. 32, 247 (1942)]. MacAdam’s experiments relied upon visual observation of the so-called Just Noticeable Colour Difference (JND) between two very similar coloured lights. Just Noticeable Difference is defined as the colour difference where 50% of observers see a difference and 50% of observers do not see a difference. The zones with standard deviations of colour matching (SDCM), were found to be elliptical in the CIE 1931 2 deg observer colour space. The size and orientation of the ellipses varied greatly depending upon the location in the colour space diagram. The zones were observed to be largest in the green and smaller in the red and blue.

Due to the variable nature of the colour produced by white light LEDs, a convenient metric for expressing the extent of the colour difference within a batch (or bin) or LEDs is the number of SDCM (MacAdam) ellipses steps in the CIE colour space that the LEDs fall into. If the chromaticity coordinates of a set of LEDs all fall within 1 SDCM (or a “1-step MacAdam ellipse”), most people would fail to see any difference in colour. If the colour variation is such that the variation in chromaticity extends to a zone that is twice as big (2 SDCM or a 2-step MacAdam ellipse), you will start to see some colour difference. A 2-step MacAdam ellipse is better than a 3-step zone, and so on. It should be noted that SDCM ellipses are often shown in the CIE colour space diagram at a ten times magnification (see image below) because they would otherwise be too small to be seen clearly when viewed in the complete CIE diagram.



MacAdam’s experiments demonstrated that the size of an SDCM ellipse is quite small, which means that the human vision system is very good at discriminating colour differences when viewing two light sources at the same time. If we consider the size of the 1-step SDCM ellipse at an arbitrary 3,000K colour temperature, the CCT range is $\pm 30\text{K}$, and the corresponding u’v’ range (the chromaticity coordinates in the 1976 CIE Uniform Colour Space) is ± 0.001 . In other words, if we view two LEDs with a CCT difference of more than 60K, the chances are that we will see a colour difference. The table below relates the number of SDCM ellipse steps to the range of CCT and chromaticity coordinates for a 3000K colour temperature light source.

SDCM	CCT @ 3000K	$\Delta u'v'$
1x	$\pm 30\text{K}$	± 0.0007
2x	$\pm 60\text{K}$	± 0.0010
4x	$\pm 100\text{K}$	± 0.0020
7-8x	$\pm 175\text{K}$	± 0.0060

Within the lighting industry, reference is often made to the standard IES LM-79-08 “Approved Method of Electrical & Photometric Measurements of Solid State Lighting Products” published by the Illuminating Engineering Society of North America (IESNA). This in turn references the American standard ANSI C78.377-2008 “Specification for the Chromaticity of Solid State Lighting Products” which places white light LEDs used for illumination into standard colour groups which all have the same “nominal” correlated colour temperatures (CCTs). The size of the ANSI C78.377 nominal CCT quadrangle is a 7-step MacAdam ellipse. A 7 to 8-step SDCM is currently representative of the variation in chromaticity of high brightness white LEDs used for illumination. So when an LED supplier proudly claims to offer you LEDs binned to a 4-step MacAdam ellipse tolerance (or 4xSDCM), keep in mind that this is better than LEDs that are binned to 5-steps but you will still see a colour difference over the range of LEDs supplied to that specification.

IP Code

The **IP Code, International Protection Marking**, IEC standard 60529, sometimes interpreted as **Ingress Protection Marking**, classifies and rates the degree of protection provided against intrusion (body parts such as hands and fingers), dust, accidental contact, and water by mechanical casings and electrical enclosures. It is published by the International Electrotechnical Commission (IEC). The equivalent British standard is EN 60529.

The standard aims to provide users more detailed information than vague marketing terms such as waterproof. The digits (characteristic numerals) indicate conformity with the conditions summarized in the tables below. Where there is no data available to specify a protection rating with regard to one of the criteria, the digit is replaced with the letter X. The digit 0 is used where no protection is provided.

A rating of X for one or more of the protection criteria can be erroneously misinterpreted as "no protection". To illustrate, a piece of electronic equipment rated IPX7 will almost certainly demonstrate a robust resistance to the ingress of particles, even though a rating for ingress of solids hasn't been formally assigned. Hence, an X designation shouldn't be automatically misconstrued as a lack of protection.

For example, an electrical socket rated IP22 is protected against insertion of fingers and will not be damaged or become unsafe during a specified test in which it is exposed to vertically or nearly vertically dripping water. For example, a particular cellular phone rated at IP58 is "dust resistant" and can be "immersed in 1.5 meters of freshwater for up to 30 minutes". IP22 or 2X are typical minimum requirements for the design of electrical accessories for indoor use.

The ratings for water ingress are not cumulative beyond IPX6. A device which is compliant with IPX7, covering immersion in water, need not be compliant with IPX5 or IPX6, covering exposure to water jets. A device which meets both tests is indicated by listing both tests separated by a slash, e.g. IPX5/IPX7.

Solid particle protection

The first digit indicates the level of protection that the enclosure provides against access to hazardous parts (e.g., electrical conductors, moving parts) and the ingress of solid foreign objects.

Level	Object size protected against	Effective against
0	—	No protection against contact and ingress of objects
1	>50 mm	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	>12.5 mm	Fingers or similar objects
3	>2.5 mm	Tools, thick wires, etc.
4	>1 mm	Most wires, slender screws, ants etc.
5	Dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment.
6	Dust tight	No ingress of dust; complete protection against contact (dust tight). A vacuum must be applied. Test duration of up to 8 hours based on air flow.

Liquid ingress protection

The second digit indicates the level of protection that the enclosure provides against harmful ingress of water.

Level	Protected against	Effective against	Details
0	Not protected	—	—
1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect.	Test duration: 10 minutes Water equivalent to 1 mm rainfall per minute
2	Dripping water when tilted up to 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.	Test duration: 10 minutes Water equivalent to 3 mm rainfall per minute
3	Spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.	Test duration: 5 minutes Water volume: 0.7 litres per minute Pressure: 50–150 kPa
4	Splashing of water	Water splashing against the enclosure from any direction shall have no harmful effect.	Test duration: 5 minutes Water volume: 10 litres per minute Pressure: 50–150 kPa
5	Water jets	Water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects.	Test duration: at least 3 minutes Water volume: 12.5 litres per minute Pressure: 30 kPa at distance of 3 m
6	Powerful water jets	Water projected in powerful jets (12.5 mm nozzle) against the enclosure from any direction shall have no harmful effects.	Test duration: at least 3 minutes Water volume: 100 litres per minute Pressure: 100 kPa at distance of 3 m
6K	Powerful water jets with increased pressure	Water projected in powerful jets (6.3 mm nozzle) against the enclosure from any direction, under elevated pressure, shall have no harmful effects.	Test duration: at least 3 minutes Water volume: 75 litres per minute Pressure: 1000 kPa at distance of 3 m

7	Immersion up to 1 m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).	Test duration: 30 minutes Tested with the lowest point of the enclosure 1000 mm below the surface of the water, or the highest point 150 mm below the surface, whichever is deeper.
8	Immersion 1 m or more	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer. However, with certain types of equipment, it can mean that water can enter but only in such a manner that it produces no harmful effects. The test depth and/or duration is expected to be greater than the requirements for IPx7.	Test duration: continuous immersion in water Depth specified by manufacturer, generally up to 3 m
9K	Powerful high temperature water jets	Protected against close-range high pressure, high temperature spray downs. Smaller specimens rotate slowly on a turntable, larger specimens are tested freehand for a longer time. Smaller specimens are tested from 4 specific angles. There are specific requirements for the nozzle used for the testing.	Test duration: 30 seconds in each of 4 angles (2 minutes total) Water volume: 14–16 litres per minute Pressure: [8000–10000 kPa / 80–100 Bar] at distance of 0.1–0.15 m Water temperature: 80 °C

Mechanical impact resistance

An additional number has sometimes been used to specify the resistance of equipment to mechanical impact. This mechanical impact is identified by the energy needed to qualify a specified resistance level, which is measured in joules (J). This has now been superseded by the separate 'IK code' specified in EN 62262.

Although dropped from the 3rd edition of IEC 60529 onwards, and not present in the EN version, older enclosure specifications will sometimes be seen with an optional third IP digit denoting impact resistance. Newer products are likely to be given an IK rating instead. However, there is not an exact correspondence of values between the old and new standards.

IK number	Impact energy (joules)	Equivalent impact
00	Unprotected	No test
01	0.15	Drop of 200 g object from 7.5 cm height
02	0.2	Drop of 200 g object from 10 cm height
03	0.35	Drop of 200 g object from 17.5 cm height
04	0.5	Drop of 200 g object from 25 cm height
05	0.7	Drop of 200 g object from 35 cm height
06	1	Drop of 500 g object from 20 cm height
07	2	Drop of 500 g object from 40 cm height
08	5	Drop of 1.7 kg object from 29.5 cm height
09	10	Drop of 5 kg object from 20 cm height
10	20	Drop of 5 kg object from 40 cm height

IP20-IP68 IP-rating (ingress protection)
Defines levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt, etc) and moisture

IK00-IK10 IK-rating (impact protection)
Classifies the level of protection that electrical appliances provide against mechanic impacts from outside. It is defined by standard EN/IEC 62262

 class-I
Electrically insulated. Earthing is provided

 class-II
Double insulation. No provision for earthing is provided

 class-III
Protection against electric shock relies on Safety Extra Low Voltage (SELV). Voltages higher than those of SELV are not generated (max. 50V ac rms).

 Luminaire suitable for mounting on normally combustible surfaces (ignition temperature at least 200°C)

 CE-certified. Conforms to EU health and safety standards

 Lead-Free (Restriction of Hazardous Substances) restricts the use of six hazardous materials found in electrical and electronic products (Directive 2002/95/EC)

 Certified on Photobiological Safety of Lamps

 TÜV certified for safety, quality, usability

 GS-certified. Free of harmful substances, safe against breakage or reliable electrics



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ORDERS:

Every order implies full acceptance by the buyer of our current conditions of sale. Orders or markets that are referred to us whether directly or through our agents shall not be valid unless the head office, in writing, has accepted them. All our articles will be installed according to the rules of the art and valid standards. The minimum order threshold amounts to € 1000.-(*) net of taxes. Every first order has to be accompanied by a bank identity statement and the Register Number in the trade register failing that it won't be registered.

(*) or the value of 1000 € in other currencies as UAE-Dirhams, Pounds or Dollars

PRICES:

Prices quoted in our different price lists are invoicing basic prices without VAT or any other tax. If applicable, the amount of VAT or other sales taxes, added to the invoice total amount, will be calculated according to the prevailing rate on shipment day. Unless agreed to the contrary, these prices are revisable in cases where delivery is due to occur within a delay superior to two months and in cases of quantifies or specifications modification and, in general, in cases where our clients dictate when placing the order a constraint unacceptable to us. Our invoices do never contain import duties: custom duties have to be born by the client.

DELIVERY TIME:

Unless an explicit agreement, times of delivery are given for information only and can absolutely not be considered as final deadlines. We accept no responsibility whatsoever for any delay or any delivery restriction. The non-observance of delivery time shall not entail any penalty or compensation. In case of part - delivery, the remaining undelivered quantity shall not delay the payment of the already delivered part of goods. If material's shipment is delayed due to the client, it will be stored end handled at the buyer's expenses. This provision does not affect whatsoever the obligation to pay the supply of goods.

SHIPMENT:

The goods are dispatched at the risk of the buyer, even in cases where they are dispatched "carriage paid". Therefore, the buyer has to: (1) Check on receipt, the state and quantity of products and proceed if necessary to the opening of every dubious, outward appearance, of packages in the presence of the deliverer. (2) Formulate, in cases of damage or discrepancy, accurate reserves detailed on the transport receipt and specify namely the nature and importance of the damage, or missing packages, wet marks, breakages, etc.). Inaccurate or systematic wording of reserves such as "subject to display" or "subject to quality and quantity control" stated on the transport receipt, are null and void and have no legal validity. (2) Confirm these reserves by registered letter with acknowledgment receipt sent to the last Transport Company, within three working days following delivery. The non-compliance with these formalities will prevent any action being against the transport company. Only the buyer has the right to appeal against the transport company in cases of delays, discrepancies and/or damages.

DELIVERY TERMS:

The deliveries of standard materials from our catalogue are understood to be on an ex works basis. For any order below € 1000,- a fixed contractual contribution to the cost of freight, packaging, invoicing and documents is set at € 90.- net of taxes. The client will be charged for any special transport (express, airfreight, etc.) requested by him.

PAYMENT:

Custom-made items are subject to special conditions, to be negotiated between the customer and ELTE, prior to the planning of, and the start of production. In any case, the plan for payment shall be according to the progress of production and maturity of final payment. The complete plan of payment has to be safeguarded and guaranteed by a German Bank.

Our invoiced prices for catalogue items have to be paid net, and without any discount at the day when goods are ready for delivery. If payment fails to be made on this date, we retain the right to suspend the execution of our engagement after ineffective formal notice. In cases where the debtor does not pay amicably, his file will be transmitted to the legal department and the due amount will be automatically increased by 10%. In case of financial difficulties on the part of the buyer, we retain the right to claim guarantees failing which the contract can be cancelled without summons or compensations. Every order corresponding to the opening of a new client account will be paid cash when placing the order.

PROPERTY RIGHT:

The ownership of the goods remains with us until the full and effective payment of corresponding invoices. Upon receipt of the goods, the buyer shall bear the risks pertaining to them and shall take great care in watching over them and preserving them.

RETURNED GOODS:

Return of merchandise shall not be accepted without a previously written approval from us. We will not accept the return of any specially manufactured material or of any goods not mentioned in our catalogues or valid tariffs. In case of an authorized return due to a reason not attributable to our Company, a refund can only reach a maximum of 80% of the invoiced amount, assuming the merchandise has been kept intact and in its original packaging, and after an expert evaluation made by us. Costs of restoration, packaging and transport will also be deducted from any credit note.

GUARANTEES:

The buyer will benefit from the legal guarantee against concealed defect. This guarantee is limited by explicit agreement to the complete product and only the replacement of defective parts, without any compensation for delay, assembling and dismantling. Accidental damage directly or indirectly provoked or presumed likewise, or for any other prejudice whatsoever. Every guarantee is excluded for incidents due to accidental cases or cases of Force Majeure as well as for those due to a replacement or repairing resulting from deterioration due to negligence, lack of monitoring and maintenance or faulty and non-consonant use with our specifications and our agreement.

SAMPLES - SPECIAL DEVICES:

Any sample request for tender will be subject to an order. In the case where this matter cannot be attributed to us, a credit note must be issued to secure the return of the merchandise provided to the latter and assuring the good condition of the returned goods. Special devices or devices not shown in our catalogues but designed according to the technical specifications given by the buyer cannot be returned to us in any way.

STUDIES AND PROJECTS:

The ownership of studies and documents, sent or handed over, shall remain with us. They cannot be copied, communicated, reproduced or executed without our explicit authorization and must be returned to us on our request.

MODIFICATIONS:

As we are concerned with technical improvement, we retain the right to modify and bring improvements to our products. Dimensions indicated in our catalogues or price list can be modified without previous notice and include a certain allowance. We may also stop the production of certain products. In these cases, we shall not be obliged to supply suppressed articles or articles produced according to old specifications.

APPLICABLE LAW - POWER OF JURISDICTION:(*)

German law governs contracts. In case of dispute, litigation shall be in the Commercial Court of Kleve, which will have sole jurisdiction even in the case of multiple defendants or the introduction of a third party. Our bills of exchange, or payment acceptance, cause neither derogation nor renunciation towards the present power of jurisdiction clause.

(*) This clause refers to sales of standard material within the EU except GB, Swiss and Norway, it refers to all material – custom or standard – made in D.

(D):1-71/1602291 Terms of trade for EU

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