



Professional Floodlight



Materials and Components

Housing

Die cast aluminum guarantees long service life and great corrosion resistance.

Diffuser

Impact resistant tempered glass, temperature resistance of upto 250°C.

Gasket

Sulphur-free silicone gasket. Working temperature -40°C to +200°C.

Great weathering and flame retardant properties.



Powder Coating

Extreme weather-resistant in metallic grey.





LED System

High luminous efficacy SSL 162 lm/w.
Configured for optimal light output, high energy savings of upto 70%.



Receptacle

Electrical and mechanical interconnection between an ANSI C136.41-2013 photocontrol cell and luminaire.

Robust twist lock guarantees a reliable power connection.

Ideal Applications for outdoor commercial and utility lighting; photocontrols for roadway and area lighting.

Safety

Auto cut off mains with top opens releasing the knife switch.

Suited for cable with cross section upto 2.5mm^2



Driver

High quality constant current LED driver.

Conforms to safety standard and electromagnetic compatibility standard:

EN61347-1, EN61347-2-13, EN62384, EN55015, EN61547, IEC61000-3-2, IEC61000-3-3, IEC62386-101, IEC62386-102, IEC62386-207

Energy saving via dimming and integration into existing installations.



Streamline design

Minimizes wind exposure surface.



Cable Entry

Weather proof cable gland, suitable for H05RN-F/H07RN-F cable with 6-12mm diameter.



Adjustable bracket

+/-160° with 5° interval locking system.



Flicker Free

Supports real time and slow motion recordings.



Direct replacement of HID floodlight

Ultra thin streamline body.

Light weight housing allows unconcern structural loads alternation.

Mounting bracket for installation.



Optics

16 types of advance optical solutions.

Excellent transparency TIR lens up to 96% efficiency.

IESNA Type I, II, III, IV, V.

Asymmetric, Symmetric, Roto-symmetric, Oval.



Public
Parks



Parking
Lots



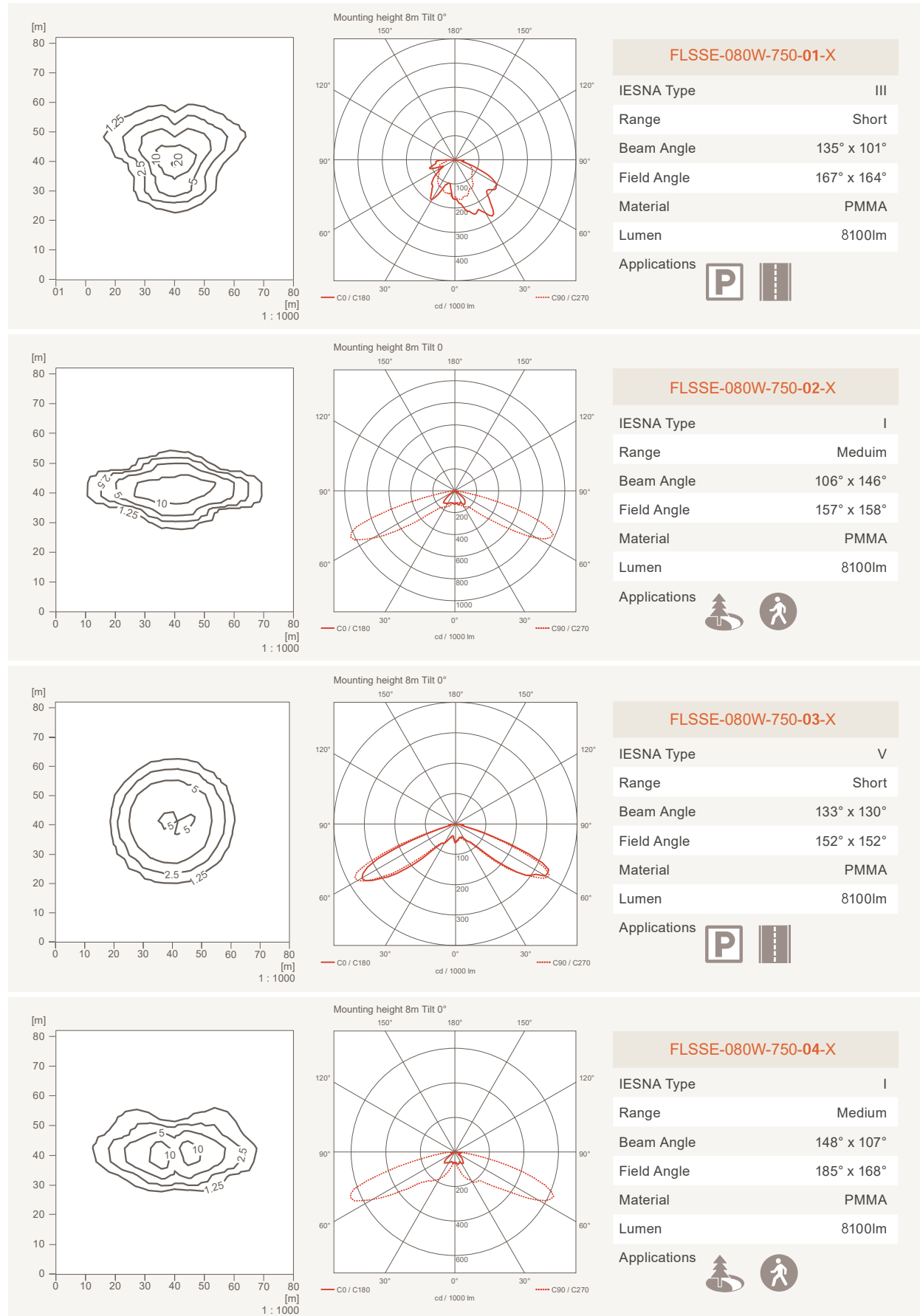
Pedestrian
Walkway

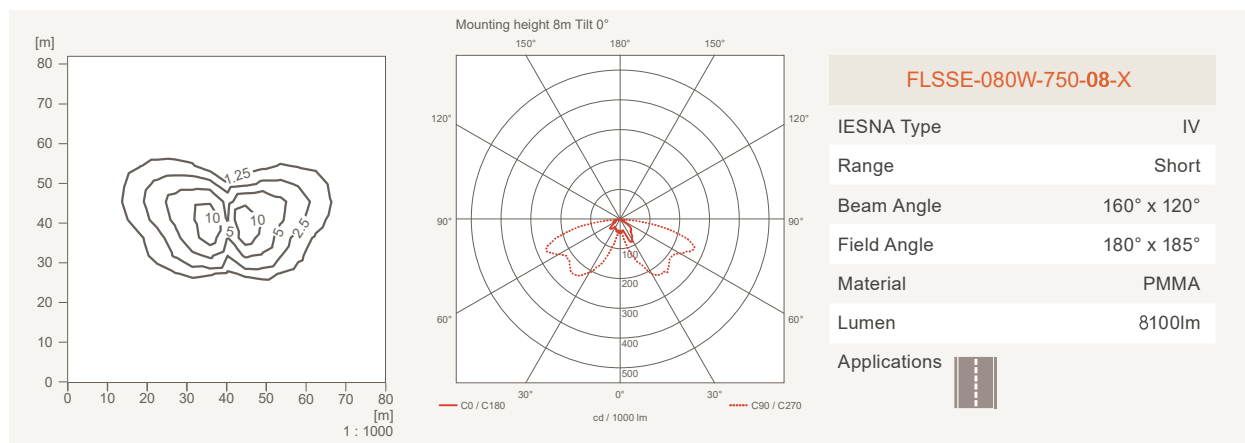
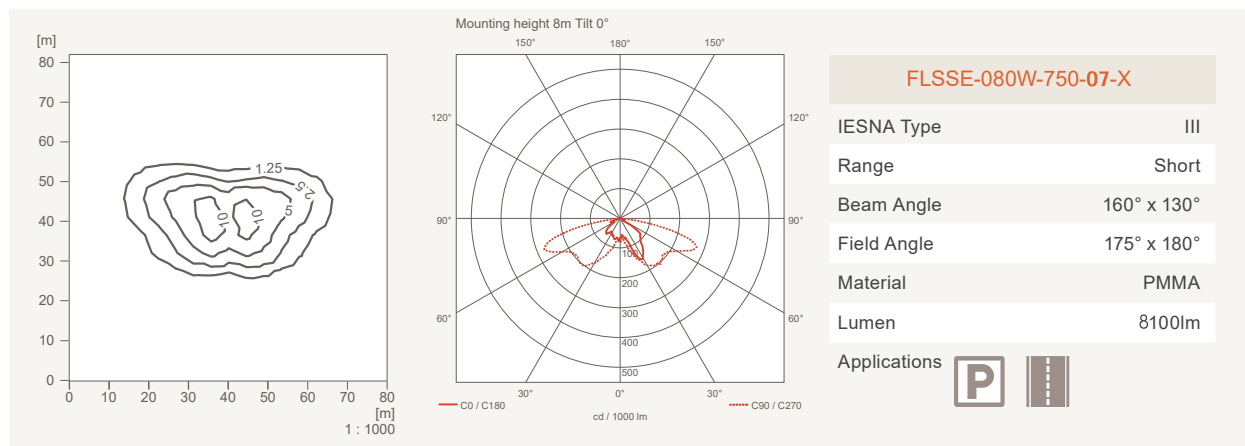
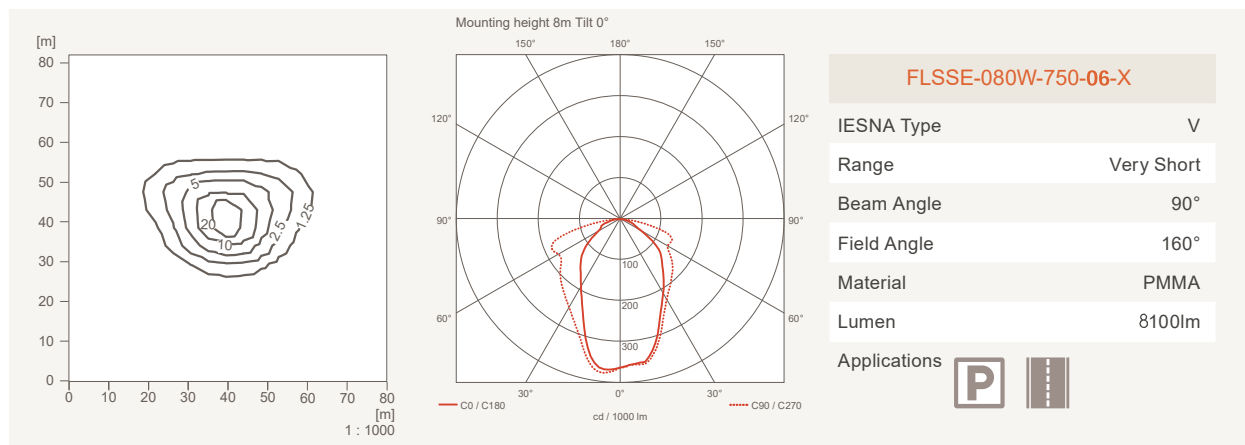
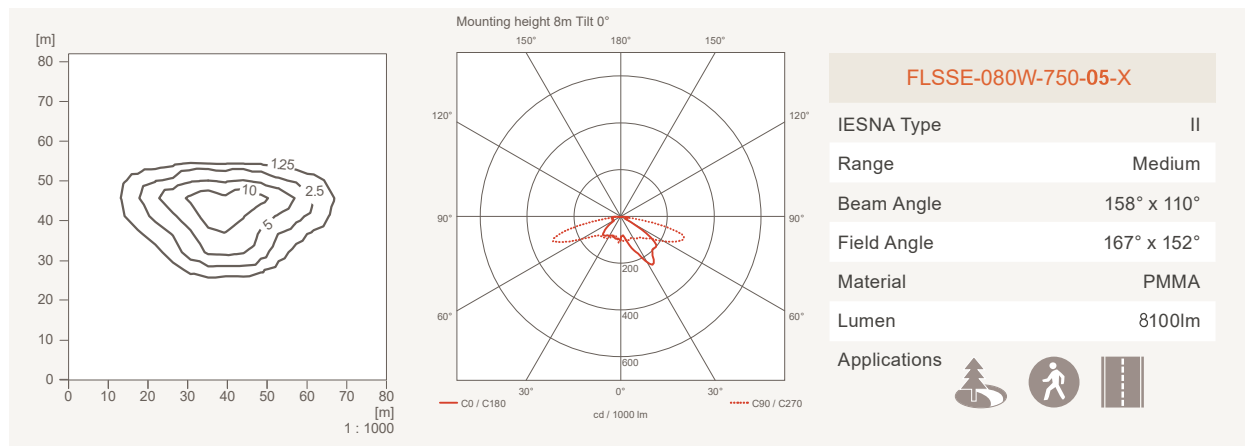


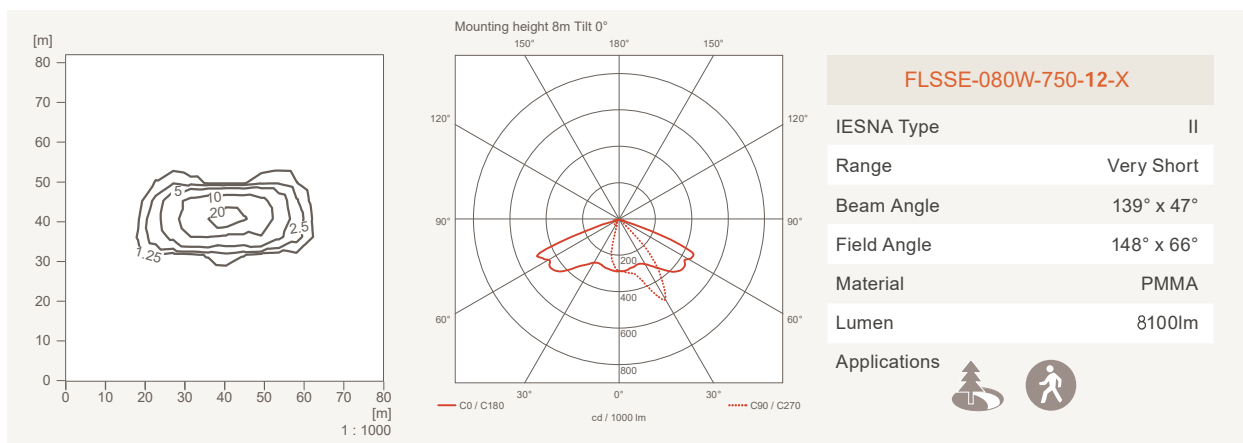
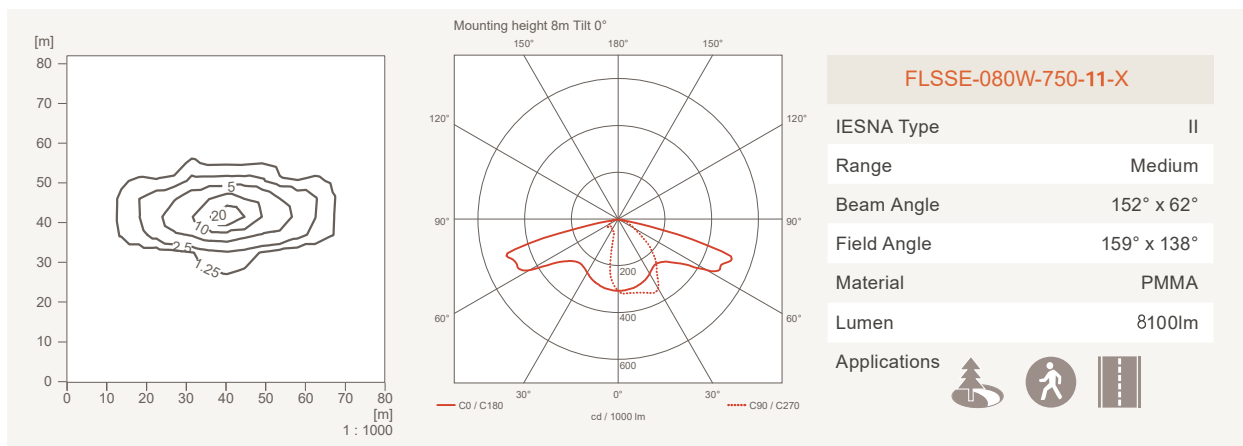
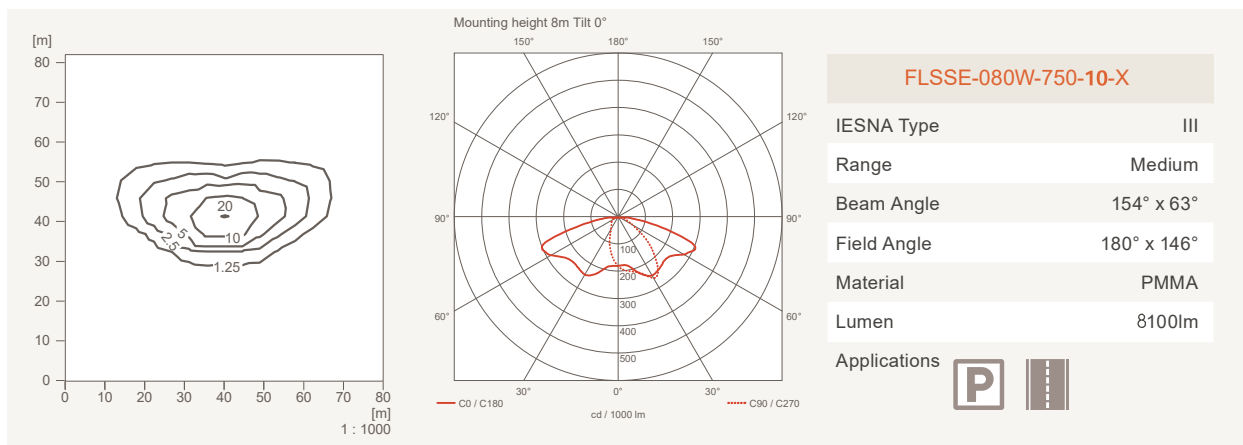
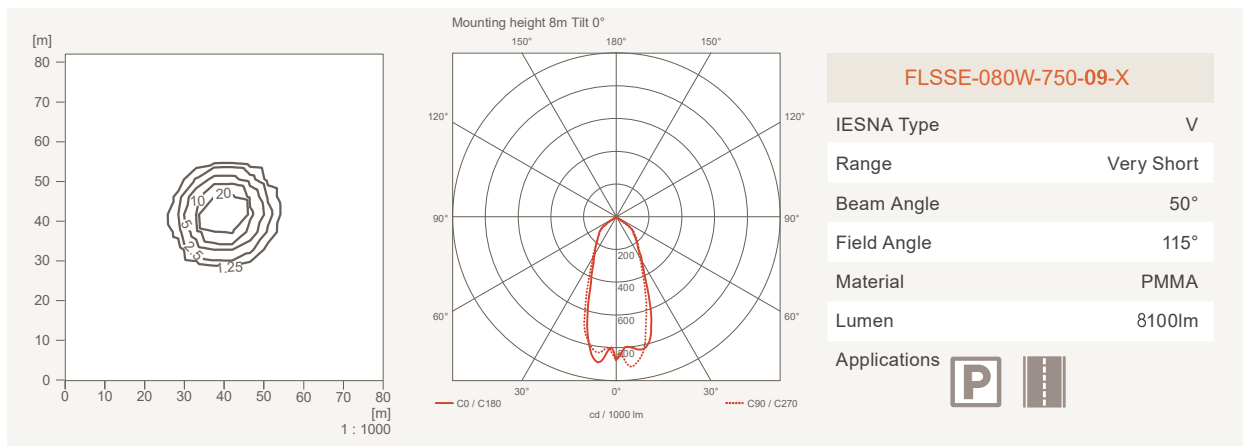
Road

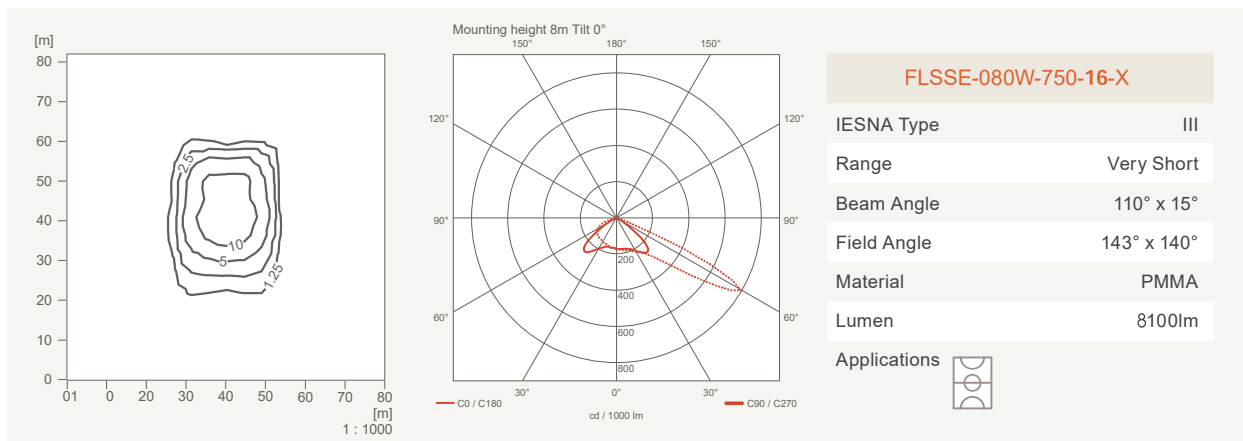
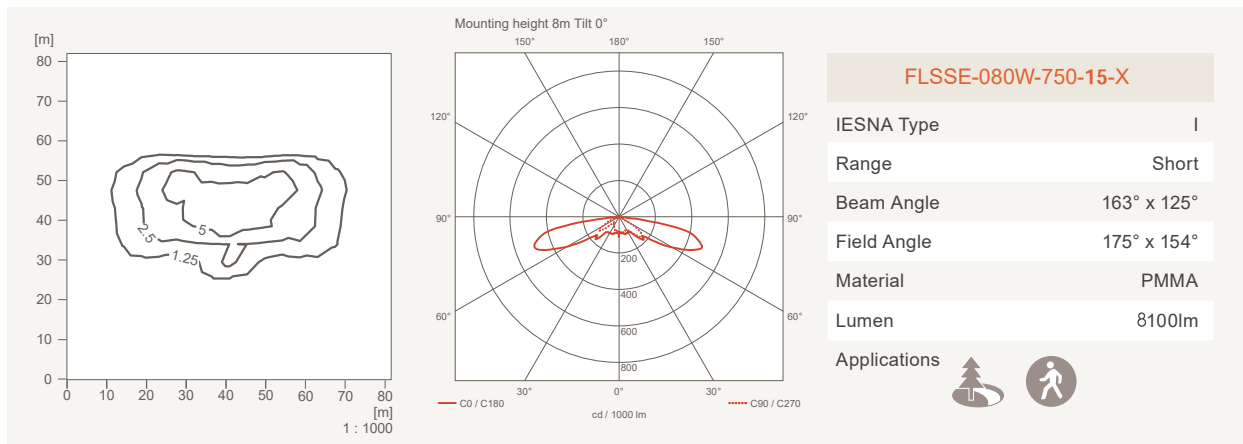
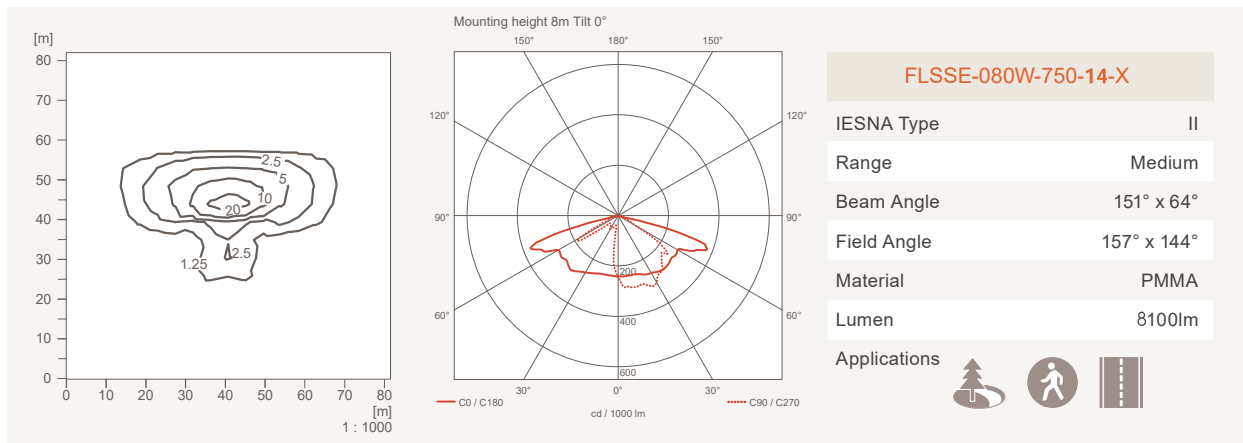
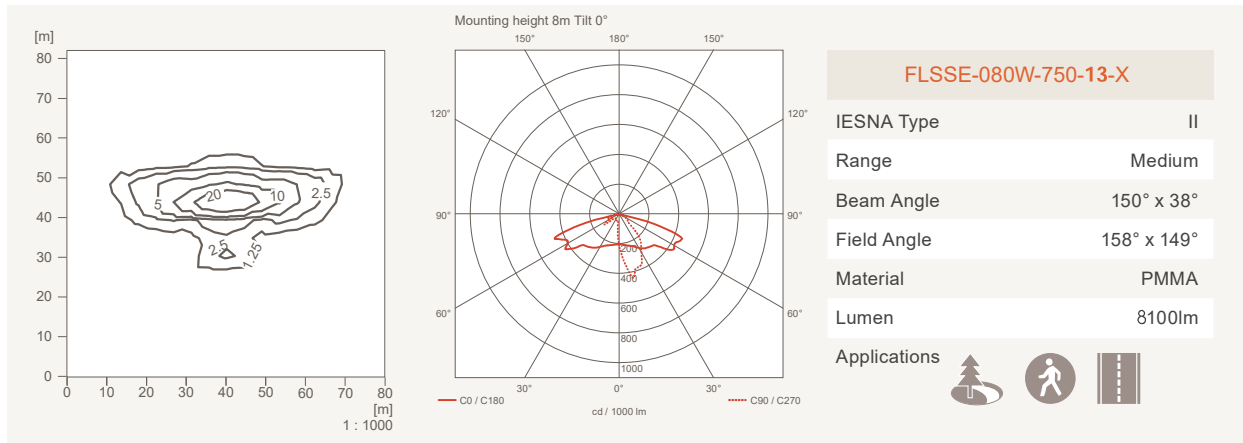


Sports
Court

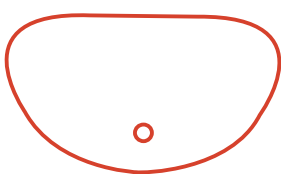
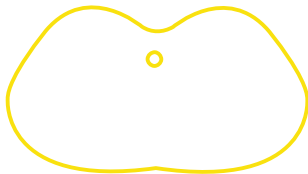
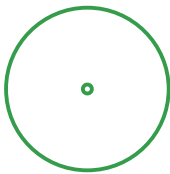








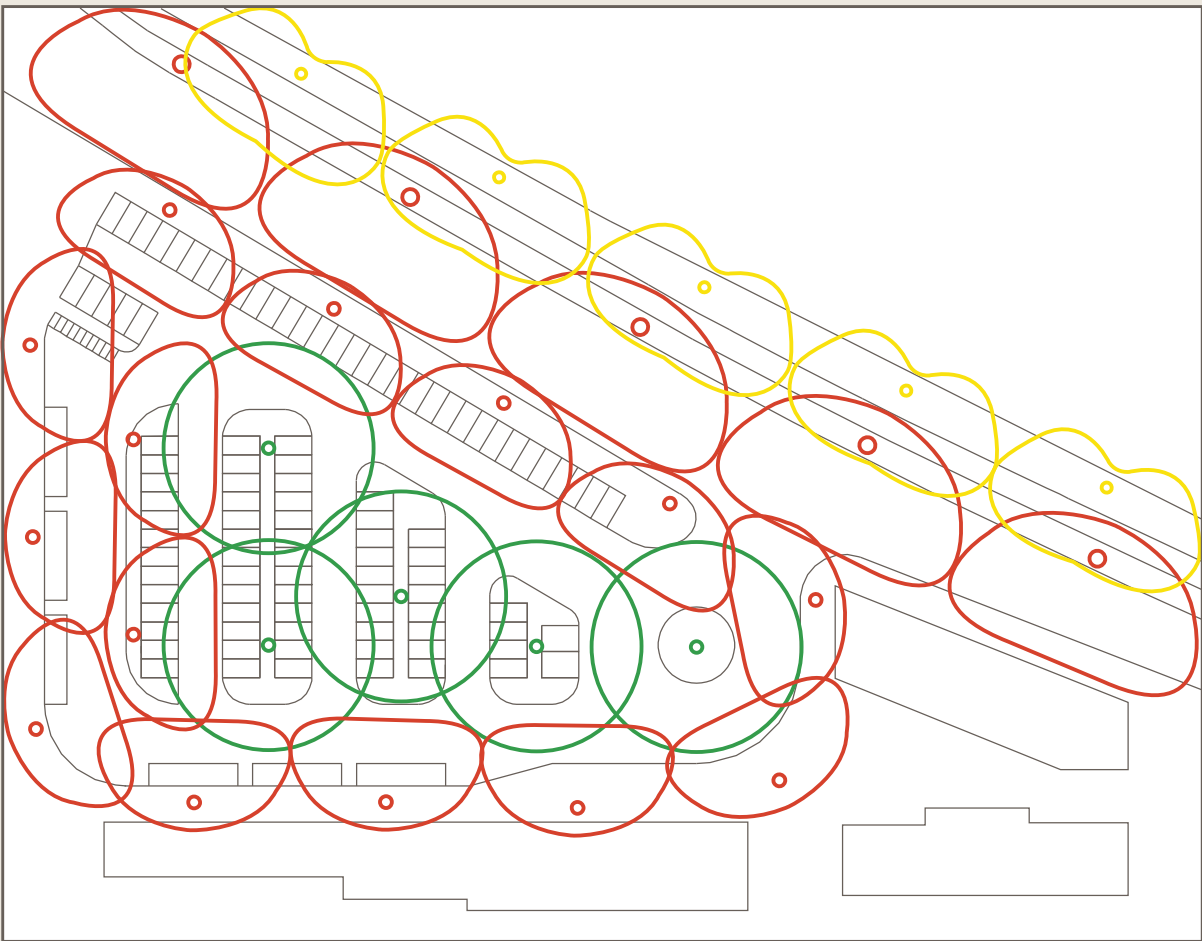
Applications



FLSSE-080W-750-03-X	
IESNA Type	V
Range	Short
Beam Angle	133° x 130°
Field Angle	152° x 152°
Material	PMMA
Lumen	8100lm
Applications	 

FLSSE-080W-750-04-X	
IESNA Type	I
Range	Medium
Beam Angle	148° x 107°
Field Angle	185° x 168°
Material	PMMA
Lumen	8100lm
Applications	 

FLSSE-080W-750-07-X	
IESNA Type	III
Range	Short
Beam Angle	160° x 130°
Field Angle	175° x 180°
Material	PMMA
Lumen	8100lm
Application	 



Thermal Management

Heat dissipation system was designed and manufactured to allow LED operation at adequate temperatures and guarantee excellent performance, efficiency and long life.



Cooling fins

Optimal surface area benefits heat conduction and convection.

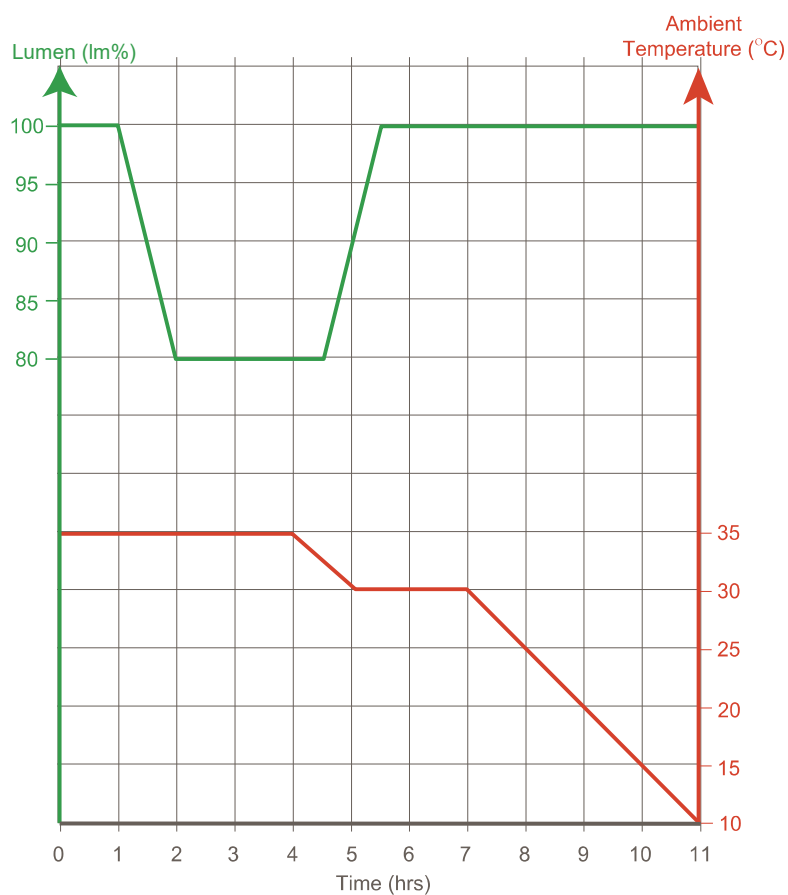
Air recirculation valve

Positive pressure generated by the heat of control gear is released.



NTC (Negative Temperature Coefficient Thermistor)

Dynamic control via NTC to avoid overheating of LEDs and control gear, guarantee service life of up to 100,000 hrs, L80 B10 at Ta 30°C.



After operation for 1 hour at 35°C, the floodlight saturation temperature rises beyond its design.

To guarantee service life of floodlight, NTC starts derating, results 20% lumen output decrement.

When ambient temperature is lowered and floodlight saturation temperature alleviates, NTC stops derating, output lumen resumes to 100%.



Dimming

AstroDIM

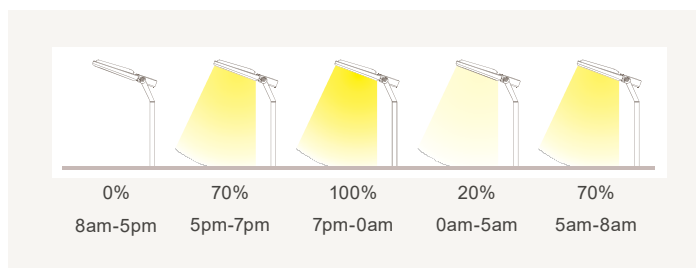
Additional control line is not required.

Five independent dimming levels and zones can be set with software.

Two different modes of AstroDIM: Time-based & Astro-based.

Time-based

Programmable output levels by time slots.



AstroDIM

Astro-based

Programmable output levels by location.

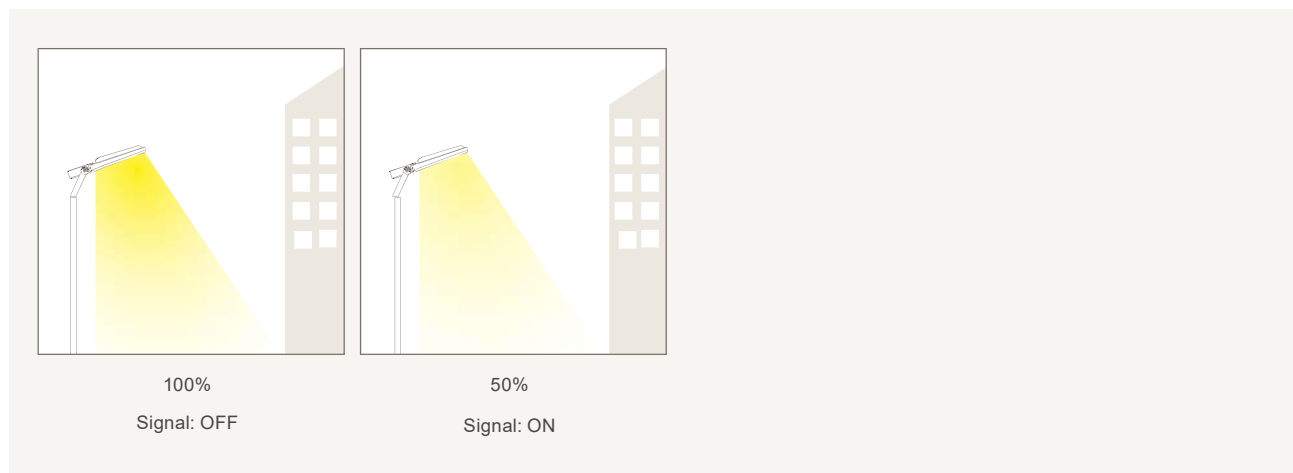
							
New York	Winter Time	16:27	21:54	23:54	01:54	03:54	07:21
	Summer Time	19:25	21:58	23:58	01:58	03:58	04:30
London	Winter Time	15:46	21:58	23:58	01:58	03:58	08:10
	Summer Time	20:14	22:02	00:02	02:02	-	03:49



StepDIM

Additional control line is required.

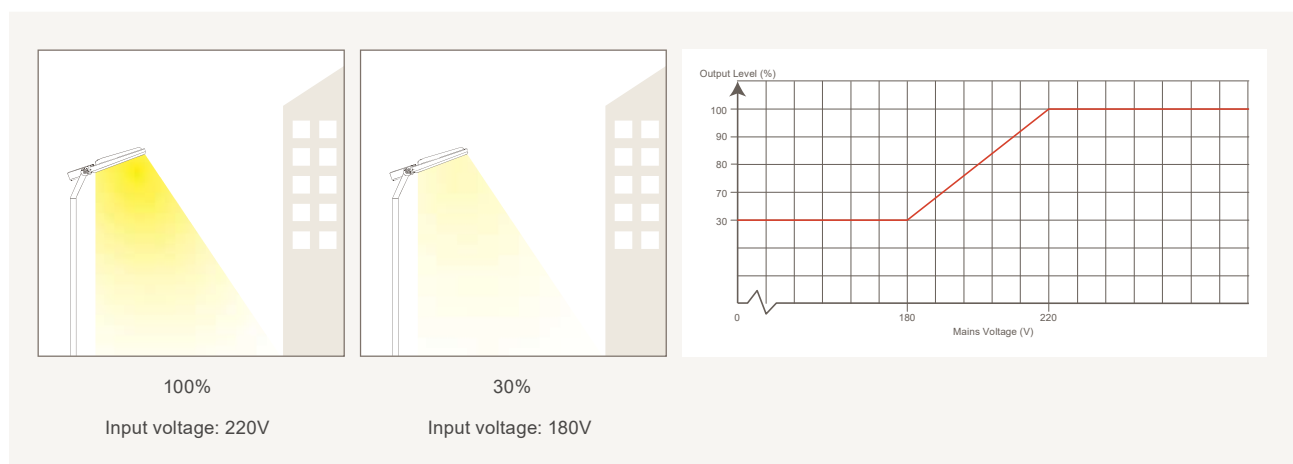
Control one or more light points and set the light output to a desired level.



MainsDIM

Additional control wire is not required.

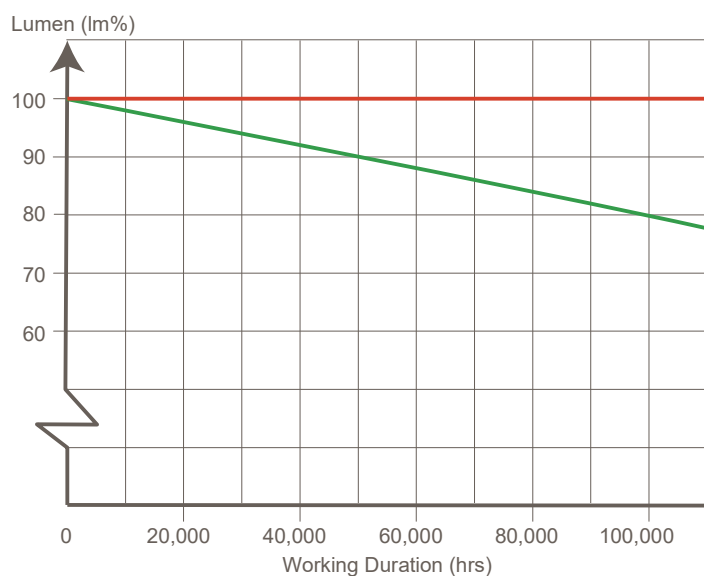
Output current of the LED driver depends on the mains input voltage.





Intelligent Lighting Control

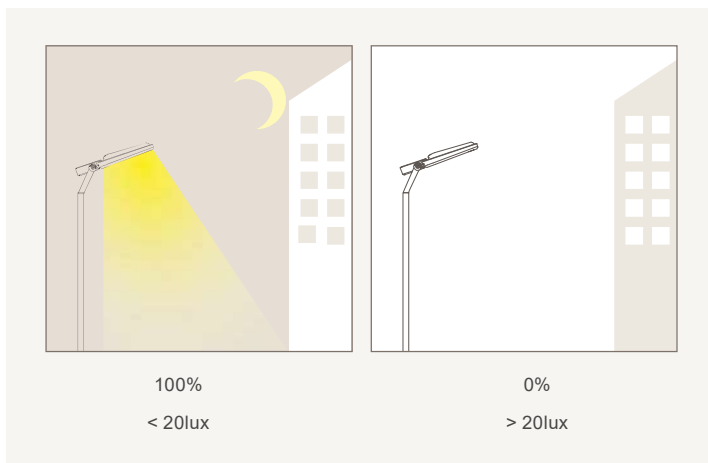
Constant Lumen Output



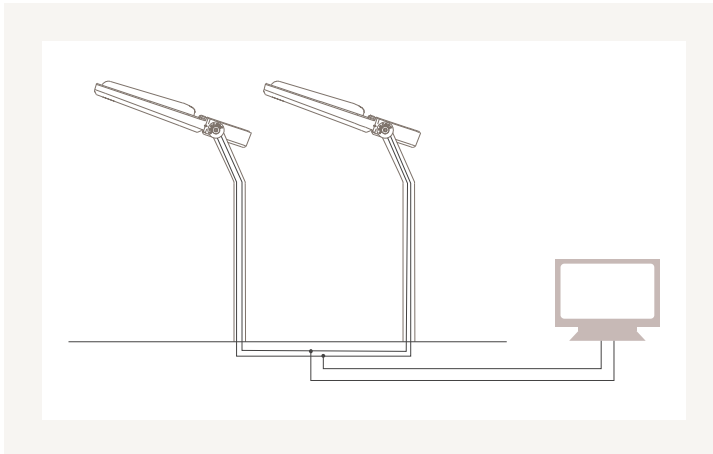
To compensate lumen depreciation overtime, operating hours and lumen maintenance are input. Then control gear delivers the required current output over its entire lifetime for stable lighting.

Daylight Sensor

Programmable output levels by daylight harvesting.



Digital Addressable Lighting Interface (DALI)



Two additional wires are required.

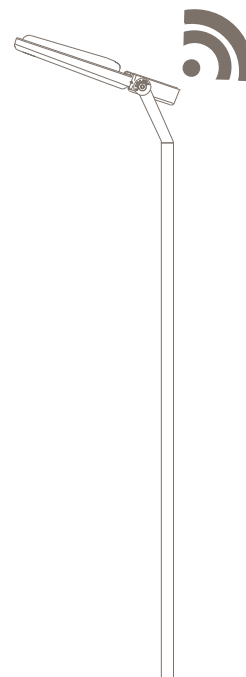
Up to 64 floodlights can be controlled per subnet.

Floodlight can be switched on/off and dimmed via the DALI control line.

Additional status information can be read out and exchanged between the floodlight and the control unit.

Wireless communication

The lighting system can be expanded to become communicating data networks without the need for installing additional control cable. Via remote monitoring, the condition of each luminaire can be monitored at any time. Luminaire failures can be precisely located. Logging of consumption data and error analysis is possible anytime.





Comparison with HID Floodlight

Single Tennis Court

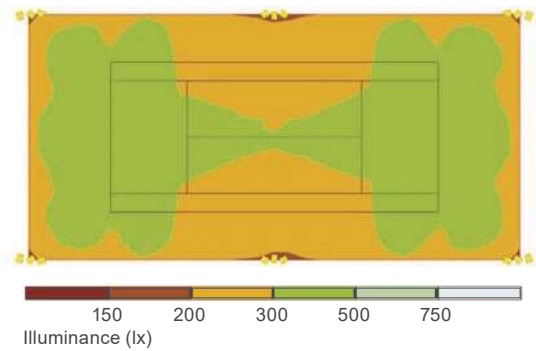
Tennis Court Parameters

Principal Playing Area (PPA): 24 x 11m
Amount of mast: 6
Amount of floodlight per mast: 3

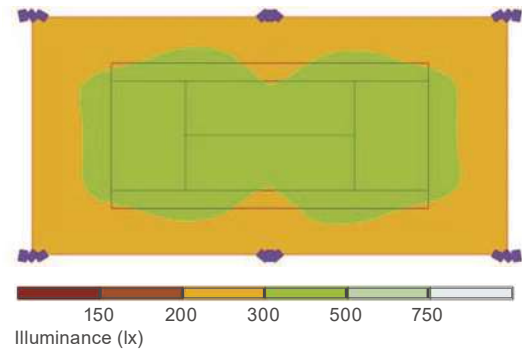
Total Playing Area (TPA): 36 x 18m
Mast height: 8m
Maintenance factor: 0.8(LED), 0.7(HID)

Result

400W HID Lamp

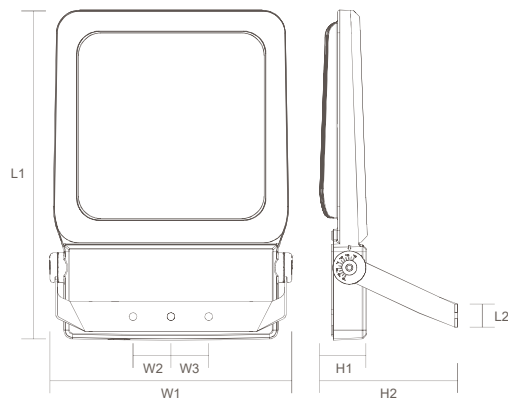


KANDOLite 320W LED



400W HID Lamp		Emitter 320W LED	
7956W	Power	5760W	
306lx	Average Illuminance	303lx	
0.8	Uniformity	0.83	
12,000hrs	Life Time	100,000hrs	

Specifications



	FLS	FLM	FLL
L1	446	622	752
L2	40	50	60
W1	325	453	640
W2	51	51	51
W3	51	51	51
H1	63	66	69
H2	212	275	332



Model	FLS	FLM	FLL
System W	Max 80W	Max 160W	Max 320W
Voltage	100 - 277~ / 220 - 240V~		
Lumen @5000K, ta=30°C	8,100lm	16,200lm	32,400lm
Lumen @4000K, ta=30°C	7,720lm	15,440lm	30,880lm
Lumen @3000K, ta=30°C	7,340lm	14,680lm	29,360lm
CRI	70 / 80		
Optics	01-16 / Flood		
Dimming Option	Non DIM / AstroDIM / StepDim / Mains Dim / DALI		
Receptacle	3 pins / 5 pins / 7pins / No receptacle		
Surge Protection	3kV / 10kV		
Temperature Range	-25 ~ +45°C		
Service Life	100,000h (L80 / B10), ta=30°C		
	85,000h (L80 / B10), ta=35°C		
Inclination	±160°		
HID Floodlight Equivalent	Up to 250W HID	Up to 400W HID	Up to 600W HID
Weight	8.39kg	15.58kg	31.16kg
Standard	IEC 60598-1, IEC 60598-2-5		

Model Number Reference

FLSSE-080W-740-01-3

Fixture Type	Housing Size	Surge Protection	Driver	Wattage	CRI	CCT	Lens	Receptacle
FL = Floodlight	S = Small	S = 10kV	E = Non DIM	080W = 80W	7 = Ra70	30 = 3000K	01 = 01	3 = 3pins
	M = Medium	X = 3kV	A = AstroDIM	160W = 160W	8 = Ra80	40 = 4000K	02 = 02	5 = 5pins
	L = Large		S = StepDIM	320W = 320W		50 = 5000K	03 = 03	7 = 7pins
			M = MainsDIM				04 = 04	X = No receptacle
			D = DALI				05 = 05	
							06 = 06	
							07 = 07	
							08 = 08	
							09 = 09	
							10 = 10	
							11 = 11	
							12 = 12	
							13 = 13	
							14 = 14	
							15 = 15	
							16 = 16	
							XX = No lens	

PROJECTS



