

PrevaLED SKY Outdoor module

Datasheet



The PrevaLED SKY is a high power LED module with integrated heat sink for optimal thermal management and tailored optical design. The modular design concept of PrevaLED SKY allows for design flexibility by varying the module quantity to achieve the best street lighting solution for difference application from Road lighting to Area lighting. The LED module is available in different color temperature (4000K and 6500K), offering very long time lifetime for minimal maintenance. PrevaLED SKY is an IP66 unit ideal for outdoor applications.

BENEFITS

- **Tailored optical design**
 - Special designed lenses optimized the light distribution across the road for different road class requirements and also difference application required Highbay, Lowbay and Area floodlight illumination.
- **IP66 protection**
 - Self-contained housing with heat sink for excellent thermal management, no extra protection is needed
- **High energy efficiency**
 - Constant current driven maximizing system efficiency
- **Stackable & maintainable module**
 - Simple screw fixing module allowing multiple module configuration in luminaires
- **Long life time**
 - Optimized for extended lifetime and lumen maintenance

APPLICATIONS

- Street lighting for ME1 and ME2 road classes
- Area illumination for Highbay, Lowbay, Canopy light, Billboard light and Floodlight

SPECIFICATION

	Parameter	PrevaLED SKY			
		LP		HP	
Light Output *	Typical luminous flux @700mA	3000 lm		6000 lm	
	Luminous flux range @700mA	2590~3319 lm		5179~6637 lm	
	Optical	150° x 80° T40°S (For Staggered / Opposite mount) 150° x 80° T40°C (For Twin-central mount) 60° x 60° (Highbay) 100° x 100° (Lowbay) 100° x 60° Asymmetric (Floodlight)			
	CCT	4000K	6500K	4000K	6500K
	Typical CRI (Ra)	70			
	Lifetime (L70/B50) (Tc @ 90°C)	50,000 hours			
	Electrical	Typical input voltage	34.8V DC		69.6V DC
Input voltage range		33~38.2V DC		66~76.4V DC	
Power @700mA(typical)		25W (12pcs LED x 2W)		50W (24pcs LED x 2W)	
Recommended Driver		OSRAM OPTOTRONIC OT 50/120-277/700 P5 OT 100/120-277/700 P5 OT 180/120-277/700 P5 OT 250/120-277/700 P5			
ESD Protection		contact 4kV and air 8kV			
Mechanical		Dimension	220mmL x 70mmW x 66mmH		
	Mounting	screw fixing at side brackets			
	Optics	polycarbonate lens			
	Weight	350±30g		400±30g	
Temperature	Ambient temp. range	-30 ... 50°C (T _a in free air)			
	Operating (case) temp. range ##	-30 ... 90°C (measure at T _c point)			
	Storage temp. range ##	-30 ... 85°C (measure at T _c point)			
Standard Compliance	IP Rating	IP66			
	Standard	IEC 62471; EN 60529; EN 62031; IEC 60598-1; EN 55015; EN 61547			
	Flammability	IEC 60598-1			
	Environment	RoHS			

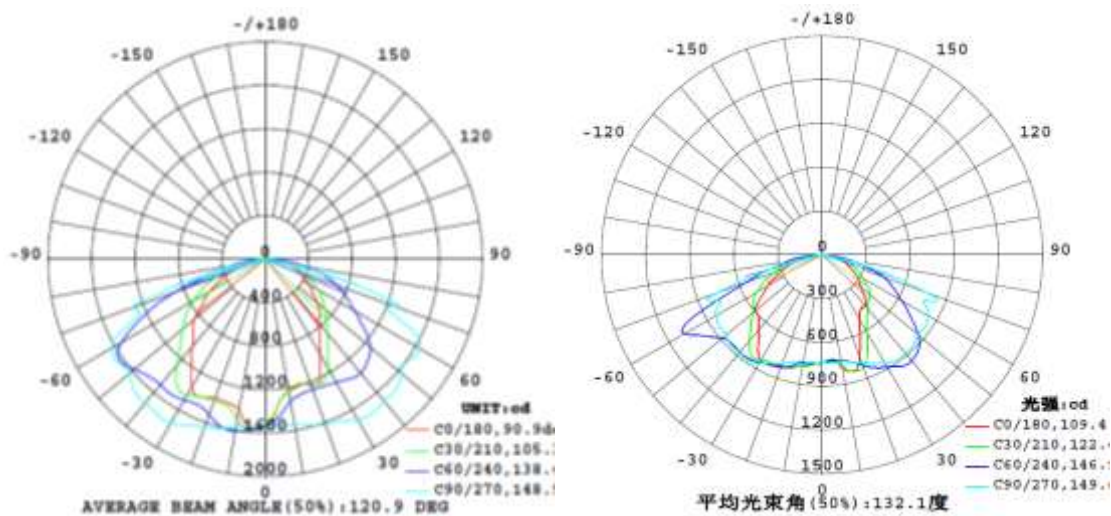


* Due to the special conditions of manufacturing processes of LED, the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. Actual lumen output can be varied due to many factors like lamp factor of LED, input current/voltage, thermal conditions, many other optical tolerance, and measurement tolerance. The data above is for reference only. Please contact Osram sales or marketing staff for advice if customers has any specific demand on particular parameters. Ranking at T_a = 25°. Tolerance of measurements for the colour rendering Ra is ±2.

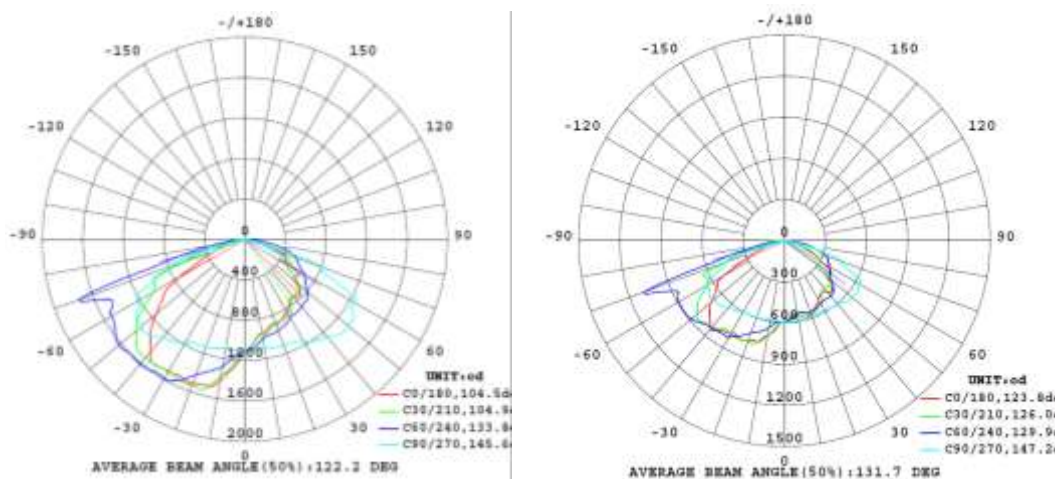
Exceeding maximum ratings for operation and storage temperature will reduce expected life time or destroy the LED module. The temperature of the LED module needs to be measured at the T_c-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

PHOTOMETRICS

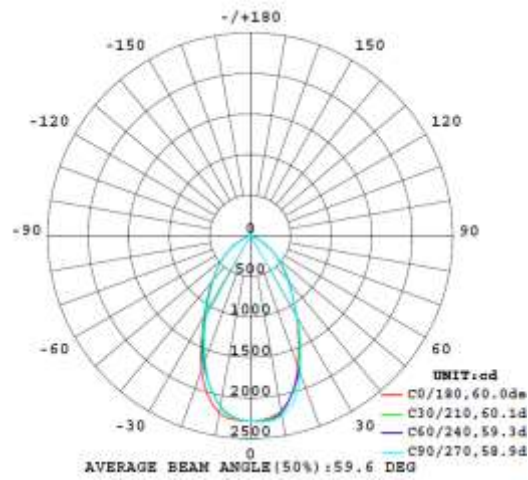
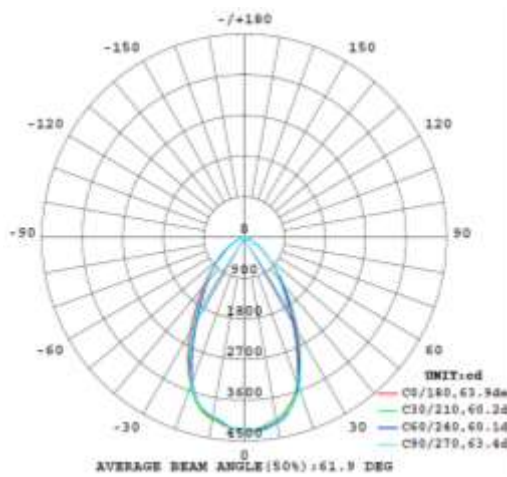
1. Street light-L150X80T40S - HP/LP for Staggered / Opposite Mounting



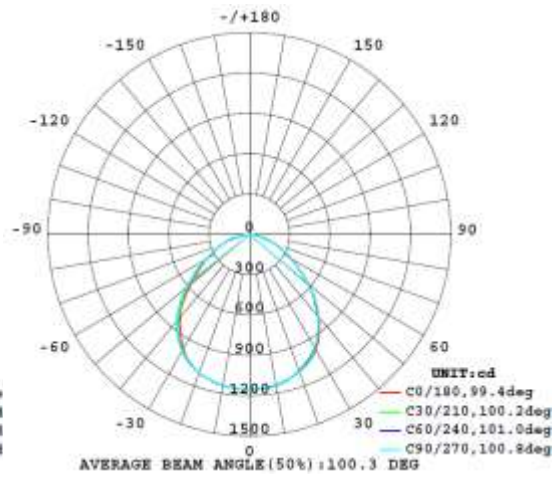
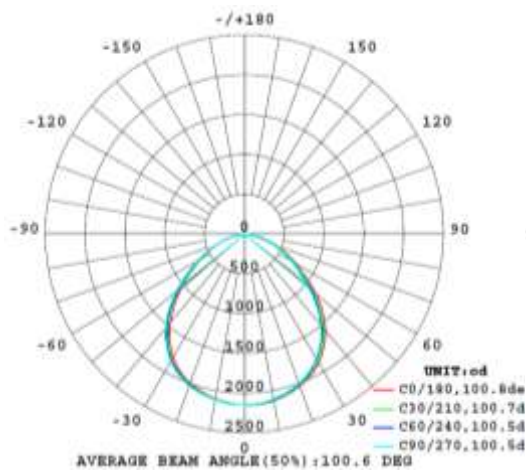
2. Street light on median-L150X80T40C - HP/LP for Central-Twin mounting



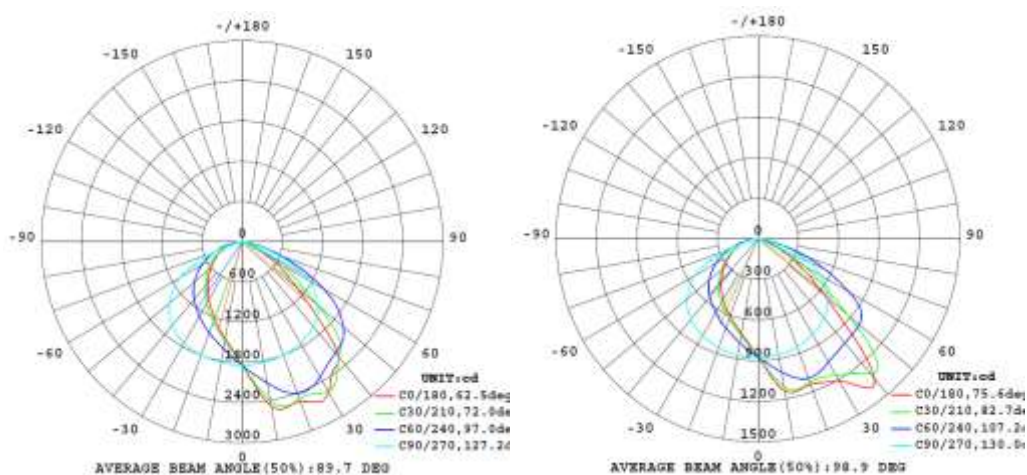
3. High bay-L60X60 - HP/LP



4. Low bay-L100X100 - HP/LP



5. Flood light-L100X60 Asymmetric - HP/LP



Note: The distribute curve is tested by 6500K module with brightness bin: NP.

Due to the special conditions of manufacturing processes of LED, the polar candela distribution and distance illuminance can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. The actual data may differ from the typical data.

SALES & TECHNICAL SUPPORT

1. Application with OT 100/120-277/700 P5:

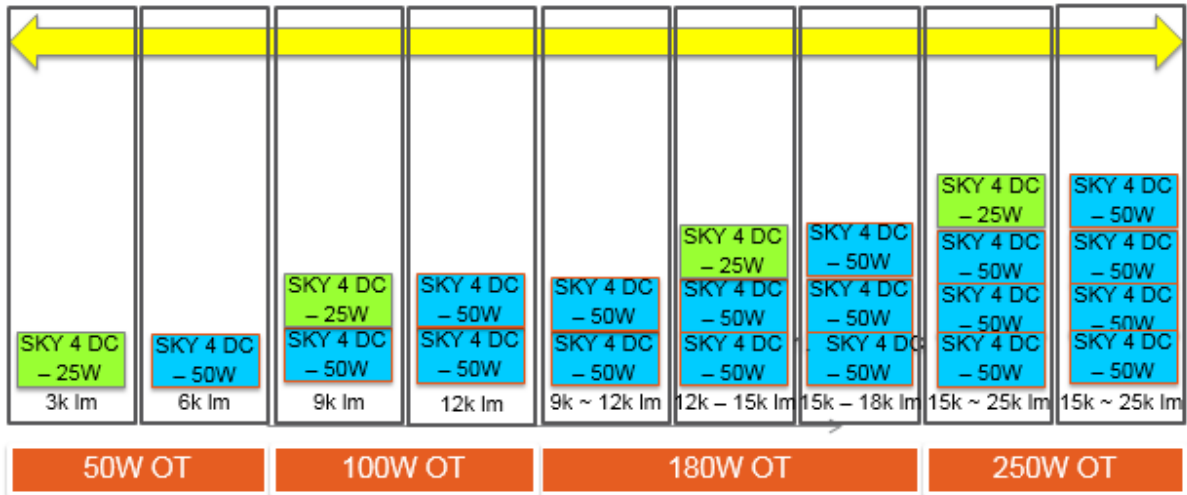
2 pcs PrevaLED Sky Modules Connect with OT 100/120-277/700 P5
(Example just for module series connection):



2. Driver combination matrix.

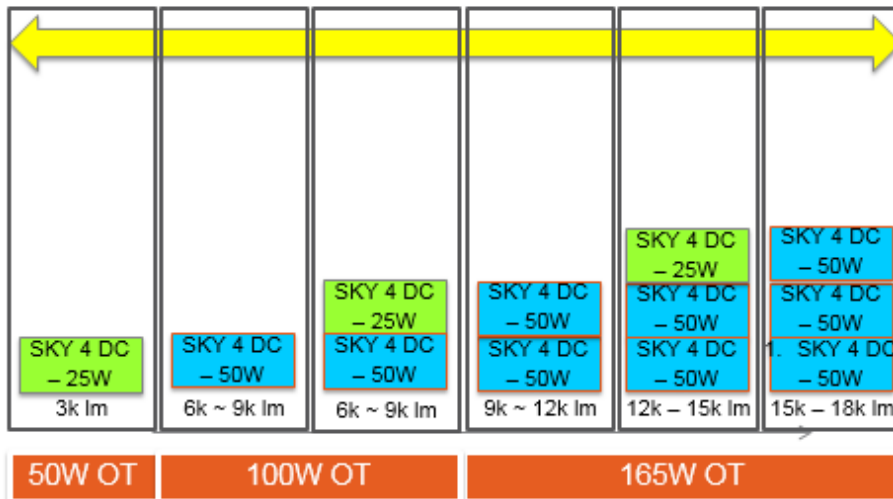
PrevaLED® SKY Module

System matching with OT Outdoor On/Off 700mA IP65 Driver



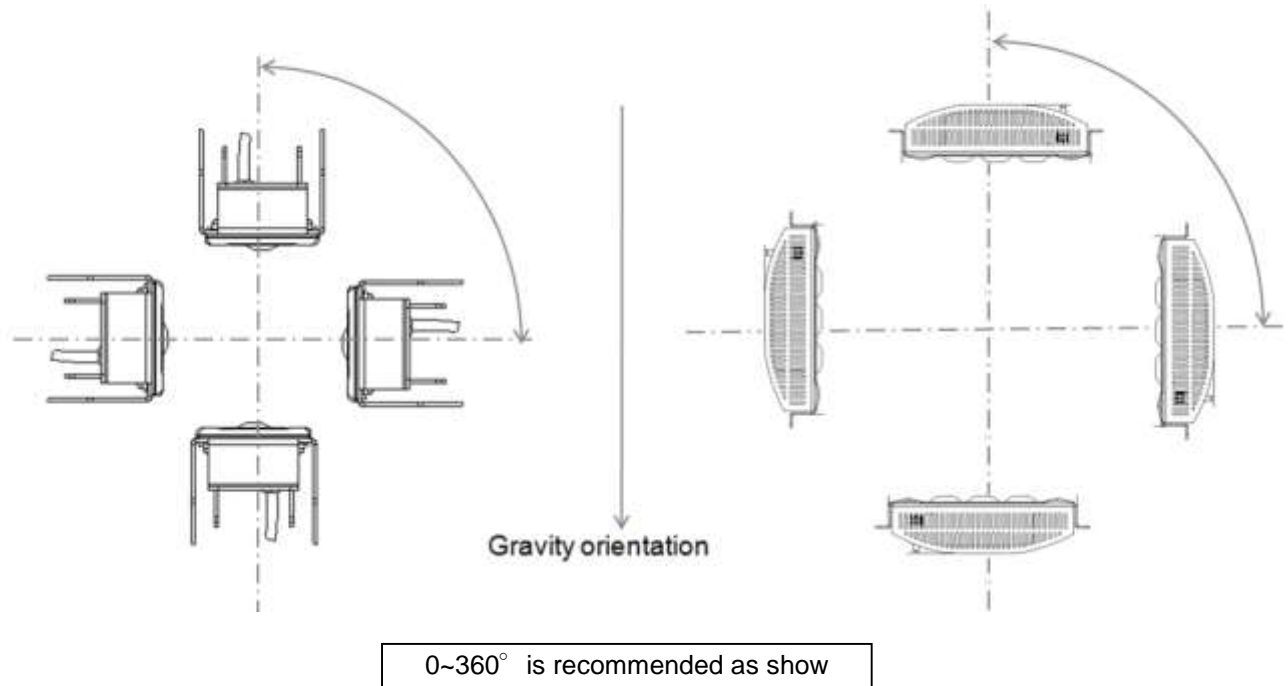
PrevaLED® SKY Module

System matching with OT Outdoor 2-DIM 800mA IP64 Driver

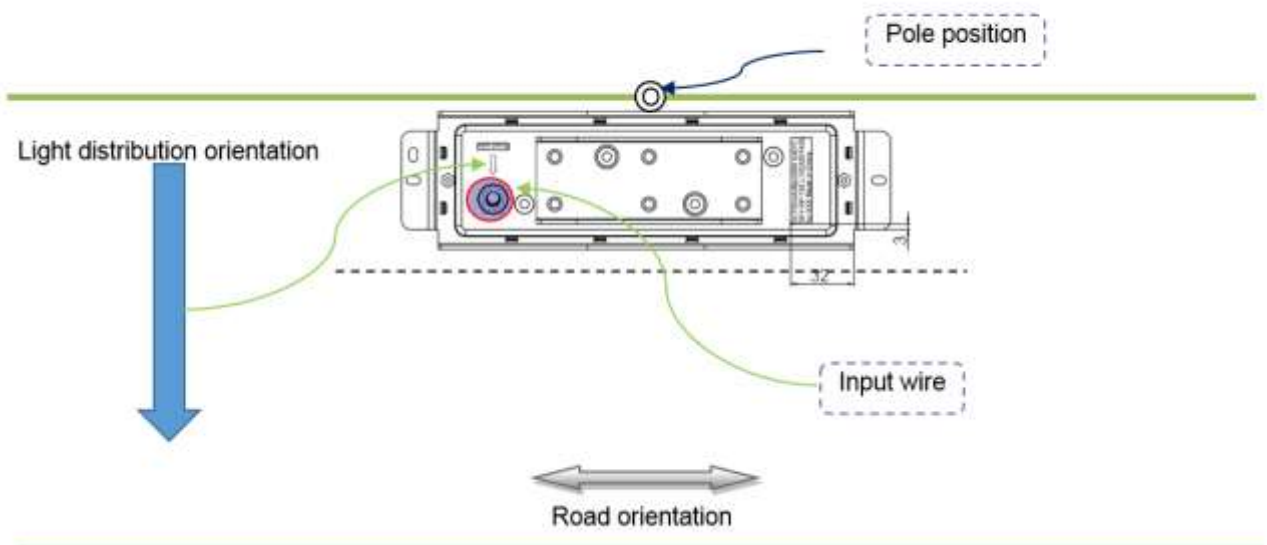


3. Application of installation for module orientation (make sure temperature no exceed tc value)

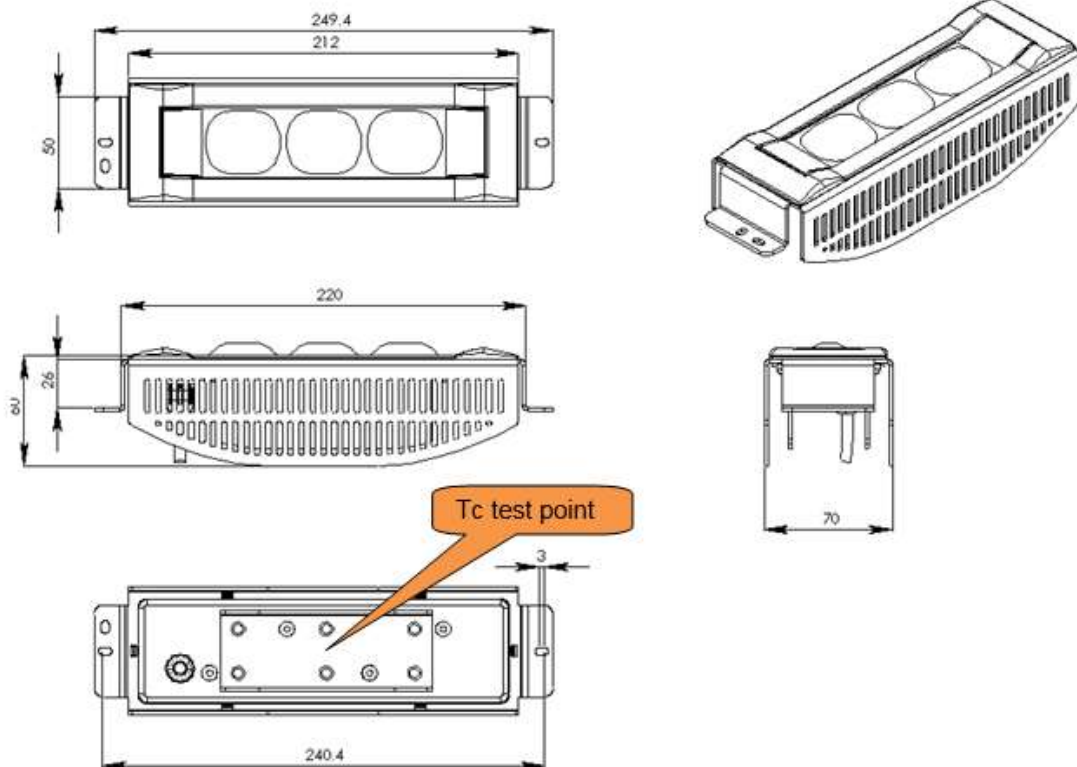
Recommend application:



4. Application of installation sketch map for optics.



DRAWINGS



ORDERING CODE

Product group	Product name	EAN-10	S-Unit	EAN-40	S-Unit
PrevaLED SKY	PL-SKY-HP 740L100X100 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-HP 740L100X60 W/P	4052899367852	1	4052899367869	12
PrevaLED SKY	PL-SKY-HP 740L150X80T40C W/P	4052899367654	1	4052899367661	12
PrevaLED SKY	PL-SKY-HP 740L150X80T40S W/P	4052899367678	1	4052899367685	12
PrevaLED SKY	PL-SKY-HP 740L60X60 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-HP 765L100X100 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-HP 765L100X60 W/P	4052899367838	1	4052899367845	12
PrevaLED SKY	PL-SKY-HP 765L150X80T40C W/P	4052899367616	1	4052899367623	12
PrevaLED SKY	PL-SKY-HP 765L150X80T40S W/P	4052899367630	1	4052899367647	12
PrevaLED SKY	PL-SKY-HP 765L60X60 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-LP 740L100X100 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-LP 740L100X60 W/P	4052899367920	1	4052899367937	12
PrevaLED SKY	PL-SKY-LP 740L150X80T40C W/P	4052899367784	1	4052899367791	12
PrevaLED SKY	PL-SKY-LP 740L150X80T40S W/P	4052899367814	1	4052899367821	12
PrevaLED SKY	PL-SKY-LP 740L60X60 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-LP 765L100X100 W/P	TBC	1	TBC	12
PrevaLED SKY	PL-SKY-LP 765L100X60 W/P	4052899367883	1	4052899367890	12
PrevaLED SKY	PL-SKY-LP 765L150X80T40C W/P	4052899367708	1	4052899367715	12
PrevaLED SKY	PL-SKY-LP 765L150X80T40S W/P	4052899367739	1	4052899367746	12
PrevaLED SKY	PL-SKY-LP 765L60X60 W/P	TBC	1	TBC	12

SAFETY NOTE

- ★ The LED module itself and all its components may not be mechanical stressed.
- ★ The module net weight of HP version is 400 ± 30 g, LP version is 350 ± 30 g.
- ★ Assembly must not damage or destroy conducting paths on the circuit board.
- ★ To avoid mechanical damage to the connecting cables, the module should be attached securely to the fixture. Heavy vibration should be avoided.
- ★ Installation of LED modules with (power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installation.
- ★ Please ensure that the power supply is of adequate power to operate the total load.
- ★ PrevaLED SKY outdoor module needs to be connected with constant current DC driver which must have stable constant current (+/-10% tolerance suggested) output.
- ★ Electrical contact is achieved with the contact cables.
- ★ The design of the housing should be according to the IP standards in the application.
- ★ Pay attention to standard ESD precautions when installing the module.
- ★ If surge protection structure not within power supplier, a lightning protector should be needed additionally for outdoor application.
- ★ The insulation designed working voltage U-out is 500V for this module.
- ★ The product was designed as built-in LED module which can only fulfil basic insulation. It should be applicable to Class I luminaires. If it is used in Class II luminaires, the final user should make sure the safety protection in final luminaires construction.
- ★ tc value is 90 centigrade for HP type LED module, 90 centigrade for LP type LED module, higher tc application is not recommended.
- ★ The module unit has been classified as Exempt Group 2 at measurement conditions (500lx, 200mm) in according to IEC 62471.
- ★ The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 1,86 m is not expected

OSRAM Asia Pacific

5th Floor Hantang Building, OCT,
Shennan Ave, Nan Shan District,
518053, Shenzhen, Guangdong, P.R. China
www.osram.com

Sales and technical support is given by the local OSRAM subsidiaries. Complete subsidiaries listing is available at OSRAM homepage.