

PCB 2 x 6 with 5050 for Street Lighting Applications

Description

S8 Broadpeak 2x6 with 5050 is a PCB level II made especially for Street Lighting and High Bay lamps for outdoor and indoor luminaries. The module includes the best technology available in the market place with the best performance and price. The production in Mexico is key for projects in short notice. The local logistics decrease the services rate cost.

Features and Benefits

- Luminous Flux Typ > 8000 lm without losses at 25°C
- Luminous efficacy typ. 179 lm/W @ 4000 K without losses at 25°C
- Design flexibility through two lumen packages
- Easy wiring with push-in connectors
- Standard and premium efficacy options
- CCT Options (3000K, 4000K, 5000K, 5700K and 6500K)
- Service life greater than 60,000 hours (L70); lifetime warranty depends on the SKYLAB testing to system level
- ESD: 2 kV acc. to ANSI/ESDA/JEDEC JS-001 (HBM)
- Easy to Install
- Compatible with dimming system
- Minimize maintenance due to long life
- Compatible with ASAHI and LEDIL lenses (sold separately)
- PCB and Components with UL certification by manufacturer.

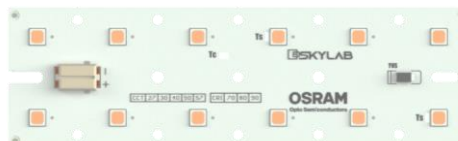
Applications

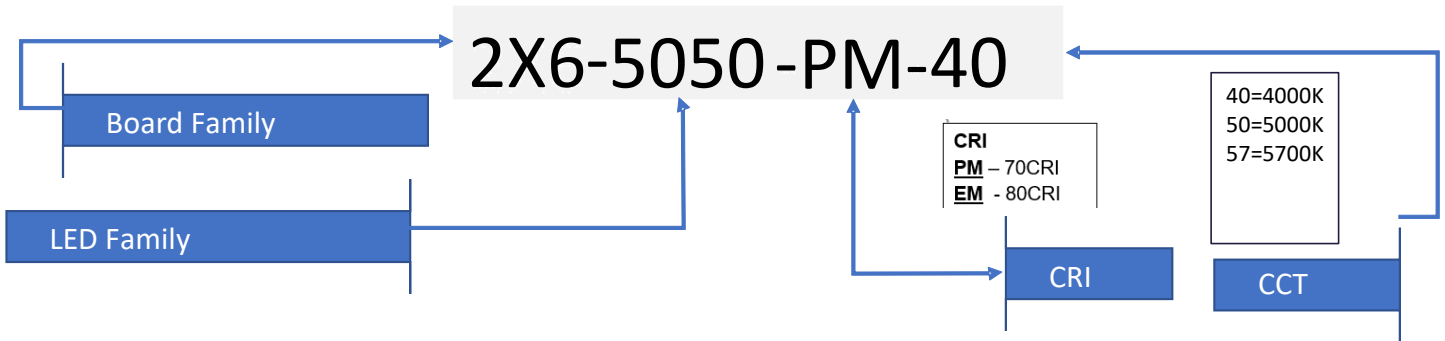
- Road lighting
- Urban street lighting
- Flood and Area lighting
- Tunnel lighting
- High bay



¹Typical current at 640mA

²The values are based on system 4





ORDERING INFORMATION				
Model	CCT	CRI	Dimensions	
2X6- 5050-PM-30	3000	70	5.71" x 1.72" (142*43.6)	
2X6- 5050-PM-40	4000	70	5.71" x 1.72" (142*43.6)	
2X6- 5050-PM-50	5000	70	5.71" x 1.72" (142*43.6)	
2X6- 5050-PM-57	5700	70	5.71" x 1.72" (142*43.6)	
2X6- 5050-PM-65	6500	70	5.71" x 1.72" (142*43.6)	
2X6- 5050-EM-30	3000	80	5.71" x 1.72" (142*43.6)	
2X6- 5050-EM-40	4000	80	5.71" x 1.72" (142*43.6)	
2X6- 5050-EM-50	5000	80	5.71" x 1.72" (142*43.6)	
2X6- 5050-EM-57	5700	80	5.71" x 1.72" (142*43.6)	
2X6- 5050-EM-65	6500	80	5.71" x 1.72" (142*43.6)	

System CRI 70 Ra

System Parameters		
Parameter	Units	Quantities
LED - Solderpoint Temperature	[° C]	25
CCT (Correlative Color Temperature)	K	4000
CRI (Color Rendering Index)	Ra	70
LED - Forward Current	mA	640
SYSTEM - LED QTTY	pcs	12
LED - Forward Voltage	[V]	66
System - Luminous Flux [Ⓜ]	lm	8380.8
System - Luminous Efficacy [Ⓜ]	lm/W	179.1
System - Electrical Power Consumption	W	46.8
LED - Solderpoint Temperature	[° C]	55
CCT (Correlative Color Temperature)	K	4000
CRI (Color Rendering Index)	Ra	70
LED - Forward Current	mA	640
SYSTEM - LED QTTY	pcs	12
LED - Forward Voltage	[V]	66
System - Luminous Flux [Ⓜ]	lm	8034
System - Luminous Efficacy [Ⓜ]	lm/W	174.3
System - Electrical Power Consumption	W	46.1

NOTES:

- OSRAM LED 5050 G5 CRI70 go to 1050A max
- Heatsink is required in order to decrease the Tc and reach these values, the lower the Tc the closer to the above values
- It is critical to consider the Max Tj that would be at the LED at that current >75°C which will definitely affect performance
- All data is related to the entire module. Data reflects statistical mean values. Actual data may differ depending on variances in the manufacturing process
- Performance values were taken at steady state. Instant-on measurements may be higher.
- This calculation was made with a central Brightness BIN.
- Tolerance for flux data is ±7%, LPW ±10%
- Max ΔT (Tambient - Tcase) = or <50°C. (For higher performance)

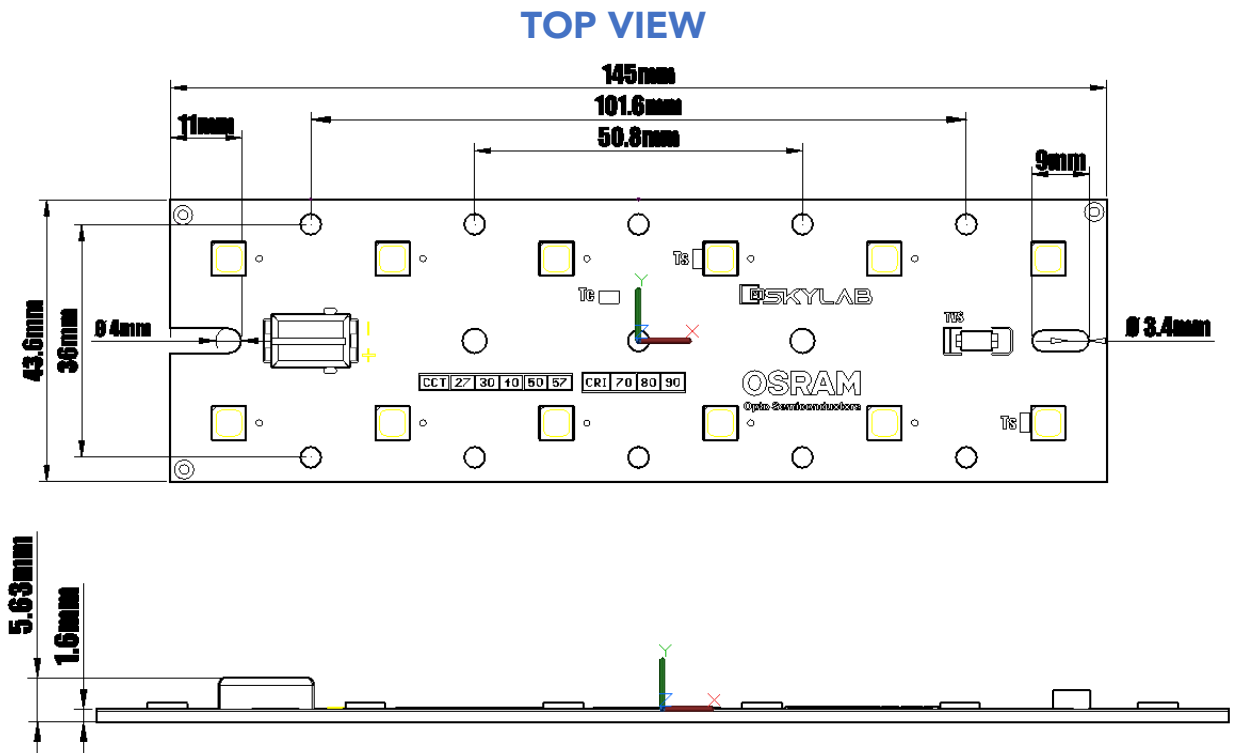
System CRI 80 Ra

System Parameters		
Parámetro	Unidad	Quantities
LED - Solderpoint Temperature	[° C]	25
CCT (Corelative Color Temperature)	K	4000
CRI (Color Rendering Index)	Ra	80
LED - Forward Current	mA	600
SYSTEM - LED QTTY	pcs	12
LED - Forward Voltage	[V]	66
System - Luminous Flux ^②	lm	6810.2
System - Luminous Efficacy ^②	lm/W	156.6
System - Electrical Power Consumption	W	43.5
LED - Solderpoint Temperature	[° C]	55.0
CCT (Corelative Color Temperature)	K	4000
CRI (Color Rendering Index)	Ra	80
LED - Forward Current	mA	600
SYSTEM - LED QTTY	pcs	12
LED - Forward Voltage	[V]	66
System - Luminous Flux ^②	lm	6508.7
System - Luminous Efficacy ^②	lm/W	151.8
System - Electrical Power Consumption	W	42.9

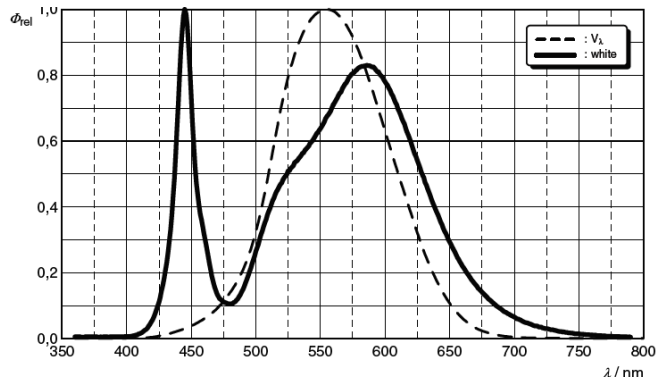
NOTES:

- OSRAM LED 5050 G5 CRI80 go to 800mA max
- Heatsink is required in order to decrease the Tc and reach these values, the lower the Tc the closer to the above values
- It is critical to consider the Max Tj that would be at the LED at that current >75°C which will definitely affect performance
- All data is related to the entire module. Data reflects statistical mean values. Actual data may differ depending on variances in the manufacturing process
- Performance values were taken at steady state. Instant-on measurements may be higher.
- This calculation was made with a central Brightness BIN.
- Tolerance for flux data is ±7%, LPW ±10%
- Max ΔT (Tambient - Tcase) = or <50°C. (For higher performance)

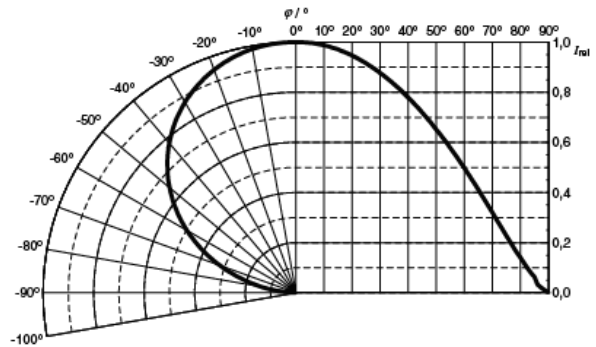
Mechanical Dimensions



Relative Spectral Emission



Radiation angle



Optics 2x6 for 5050

OPTICS FOR 5050

BRAND	MODEL	SIZE	MATERIAL	BEAN ANGLE
ASAHI	ALST173D12LEDT2NB	173 X 71.4mm	PMMA OR PC	TYPE II-M No back light
ASAHI	ALST173D12LEDT2WB	173 X 71.4mm	PMMA OR PC	TYPE II-M With back light
ASAHI	ALST173D12LEDT2WB-H	173 X 71.4mm	PMMA OR PC	TYPE II-M With back light
ASAHI	ALST173D12LED5050T2M	173 X 71.4mm	PMMA OR PC	TYPE II-Medium
ASAHI	ALST173D12LED5050T3M	173 X 71.4mm	PMMA OR PC	TYPE III-Medium

Minimum and Maximum Ratings

Parameter	Values
Operating Temperature at Tc point	-20°C to 85°C
Storage Temperature Range	-40°C to 100°C

NOTES:

1. Exceeding maximum ratings may damage the LED light engine and cause potential safety hazards.
2. Elevated operating temperatures can be expected to negatively impact the service life in terms of lumen output.
3. Incorrect wiring may damage the LED light engine.

Wiring Diagram

