

®

ParaLED

Introduction:

- ParaLED® Series utilizes the latest Chip-on-Board (COB), Driver-on-Board (DOB) packaging technologies and high voltage linear driving technology to provide a true System-on-Board (SOB) lighting solution. This SOB series is industry leading extreme temperature tolerant solid-state lighting source. It is LM80 tested to 145°C (293°F) and MIL-STD-810G tested to -80°C (-112°F)

Features:

- 9,000 hours LM80 tested at 145°C (293°F)
- MIL-STD-810G tested at -80°C(-112°F)
- Power factor > 0.9
- Low THDi option available
- No inrush current
- Low EMI and EMC
- Build in 2KV Surge protection
- Environmentally friendly: RoHS and REACH compliant
- UL recognized

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Applications

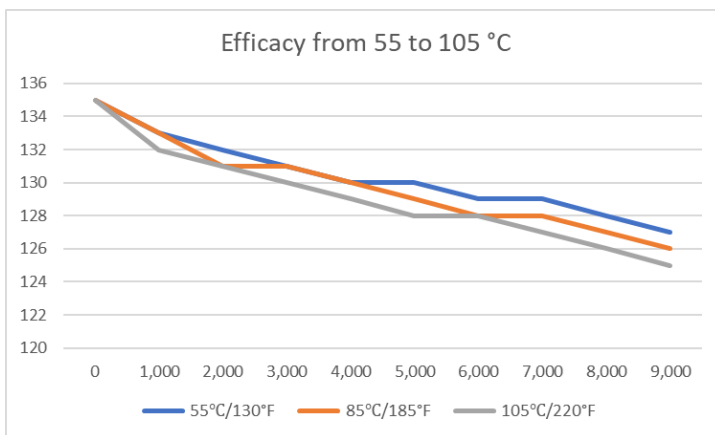
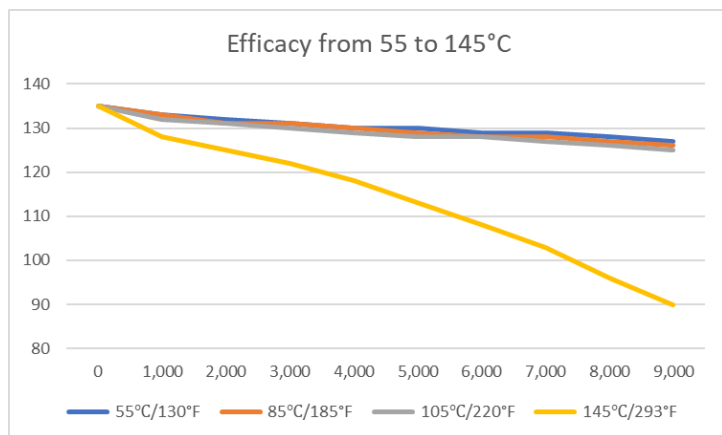
- High bay Lights
- Flooding Lights
- Streetlights
- Explosion proof lights
- Harsh environment lights

Luminous Flux Characteristic

LAC-vvv-7240-35-cct Series						
Product No	CCT	Voltage	Watt	Lm/W	Lumen	CRI
LAC-120-7240-35-27	2700K	120V	35	117	4095	90
	2700K	120V	35	127	4445	80
LAC-120-7240-35-30	3000K	120V	35	117	4095	90
	3000K	120V	35	127	4445	80
LAC-120-7240-35-35	3500K	120V	35	117	4095	90
	3500K	120V	35	127	4445	80
LAC-120-7240-35-40	4000K	120V	35	117	4095	90
	4000K	120V	35	127	4445	80
	4000K	120V	35	132	4620	70
LAC-120-7240-35-45	4500K	120V	35	117	4095	90
	4500K	120V	35	127	4445	80
	4500K	120V	35	132	4620	70
LAC-120-7240-35-50	5000K	120V	35	127	4445	80
	5000K	120V	35	137	4795	70
LAC-120-7240-35-57	5700K	120V	35	127	4445	80
	5700K	120V	35	137	4795	70
LAC-120-7240-35-65	6500K	120V	35	127	4445	80
	6500K	120V	35	137	4795	70

Measured at Tc = 55°C

Efficacy vs. Temperature Characteristic

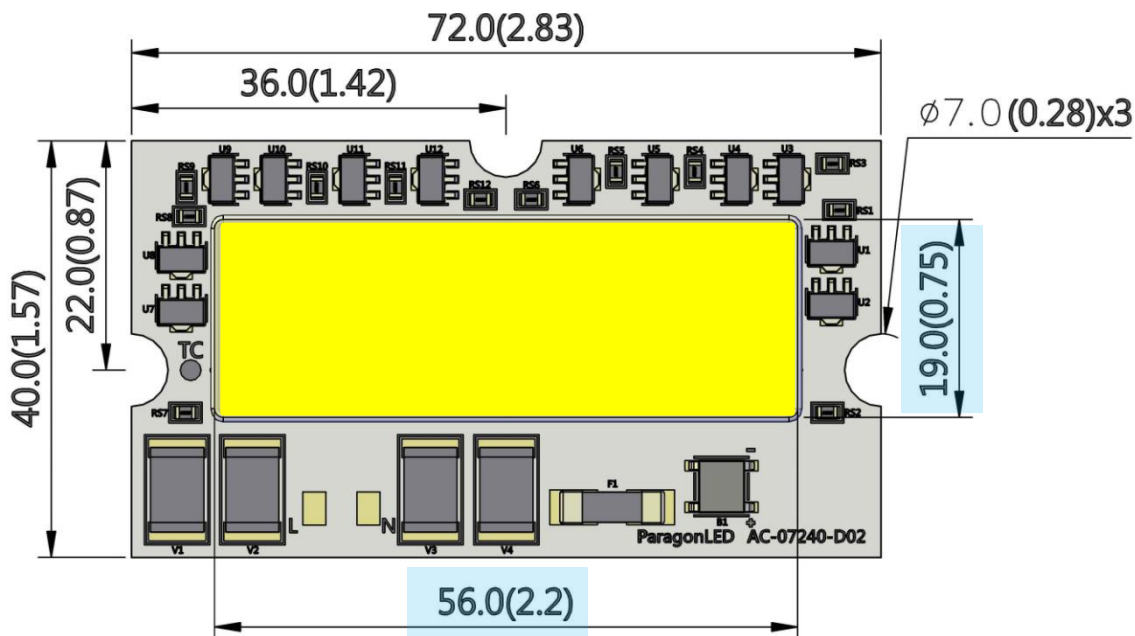


Characteristics

LAC-vvv-7240-35-cct Series

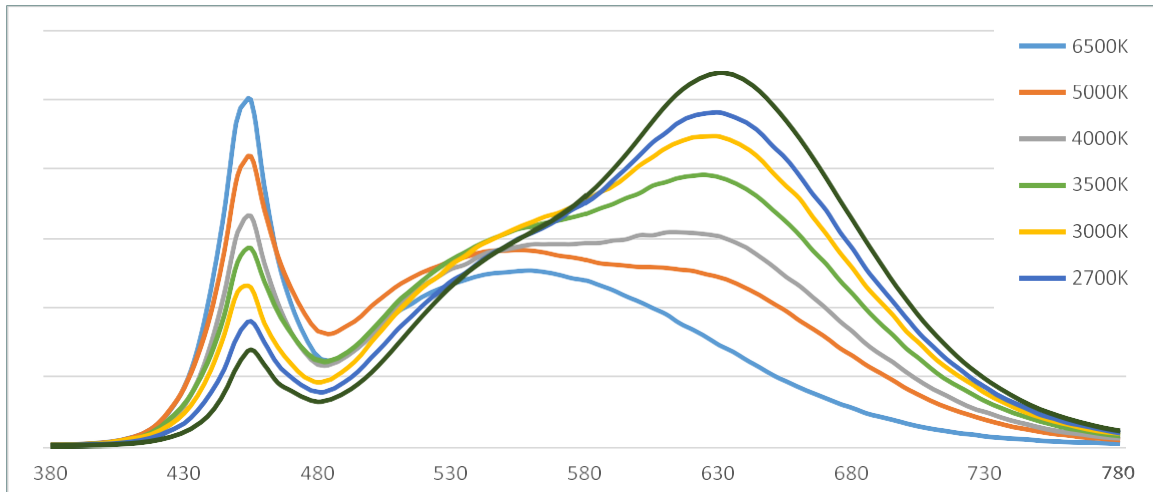
Parameter	Symbol	Value				Unit
Input Voltage	V _F	120V	277V	347V	480V	VAC
Input Voltage Tolerance	V _F	108V-132V	249V-305V	312V-365V	432V-504V	VAC
Operation Frequency	F _{op}	50 / 60				HZ
Typical Power	P	35				W
Operating Temperature	T _C	-80 to +145				°C
Storage Temperature		0 to 50				°C
Surges Protection (L/N)	V _s	2				KV
Power Factor	Pf	0.98				
THD(i)		<20				%
Lowest thermal resistance		1				°C/W
Light Emitting Area		56(2.2)*19(0.75)				mm(inch)

Light Emitting Area

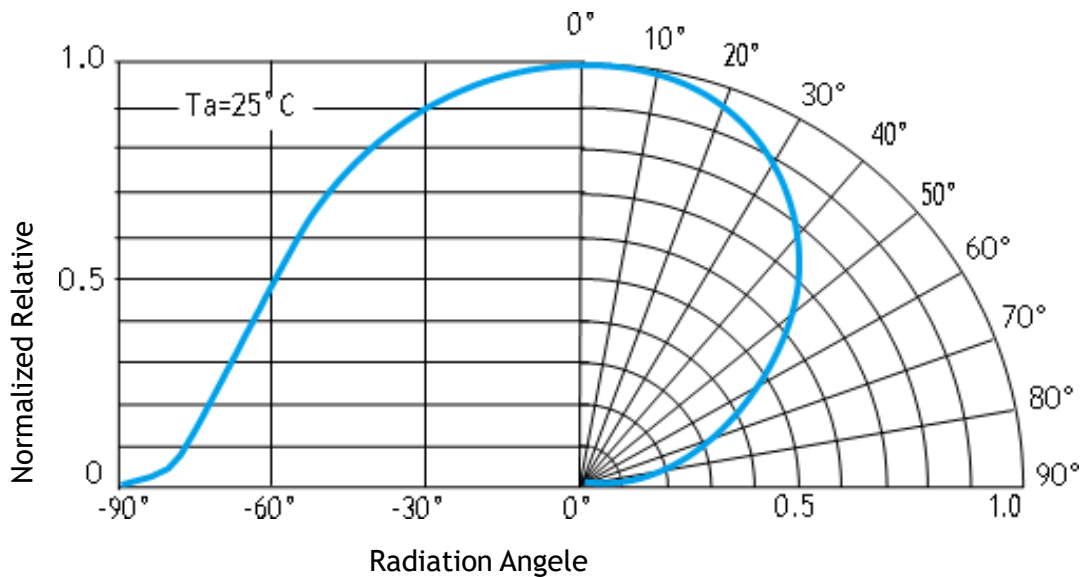


Characteristic curve

Color Spectrum

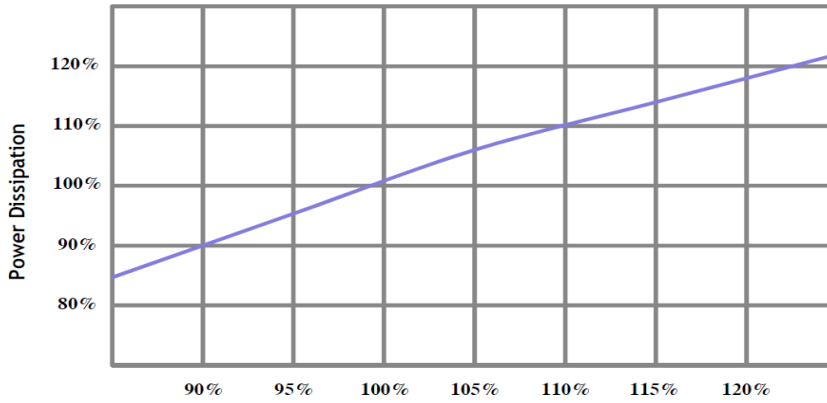


Beam Pattern

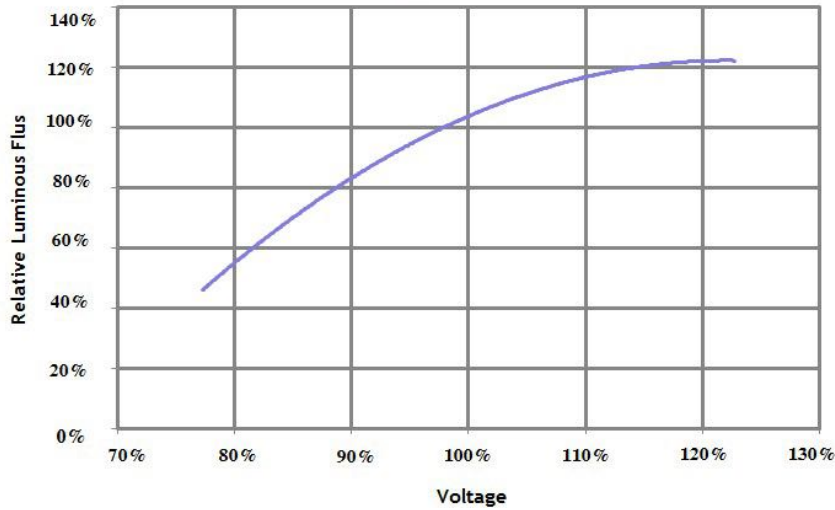


Characteristic Curve

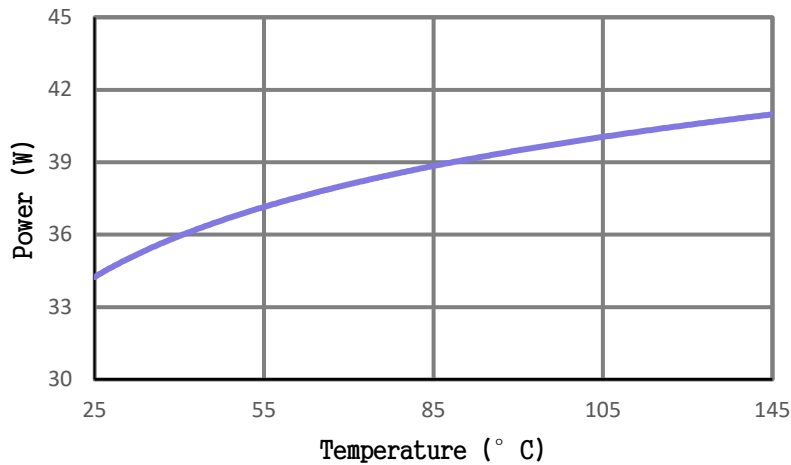
Power Dissipation vs. Voltage



Relative Luminous Flux vs. Voltage



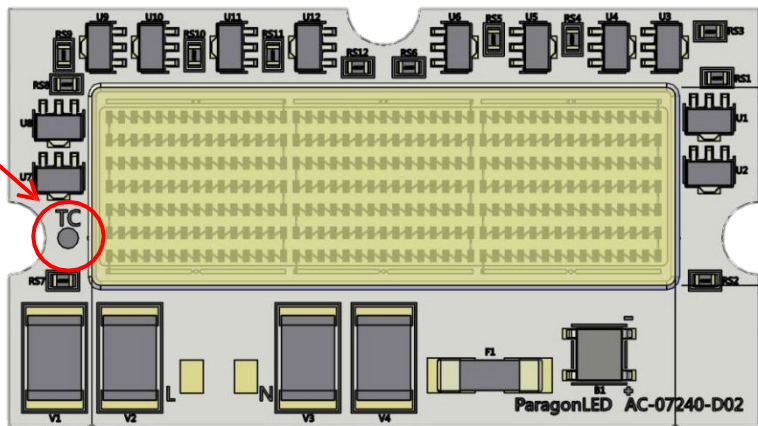
Power vs. Temperature



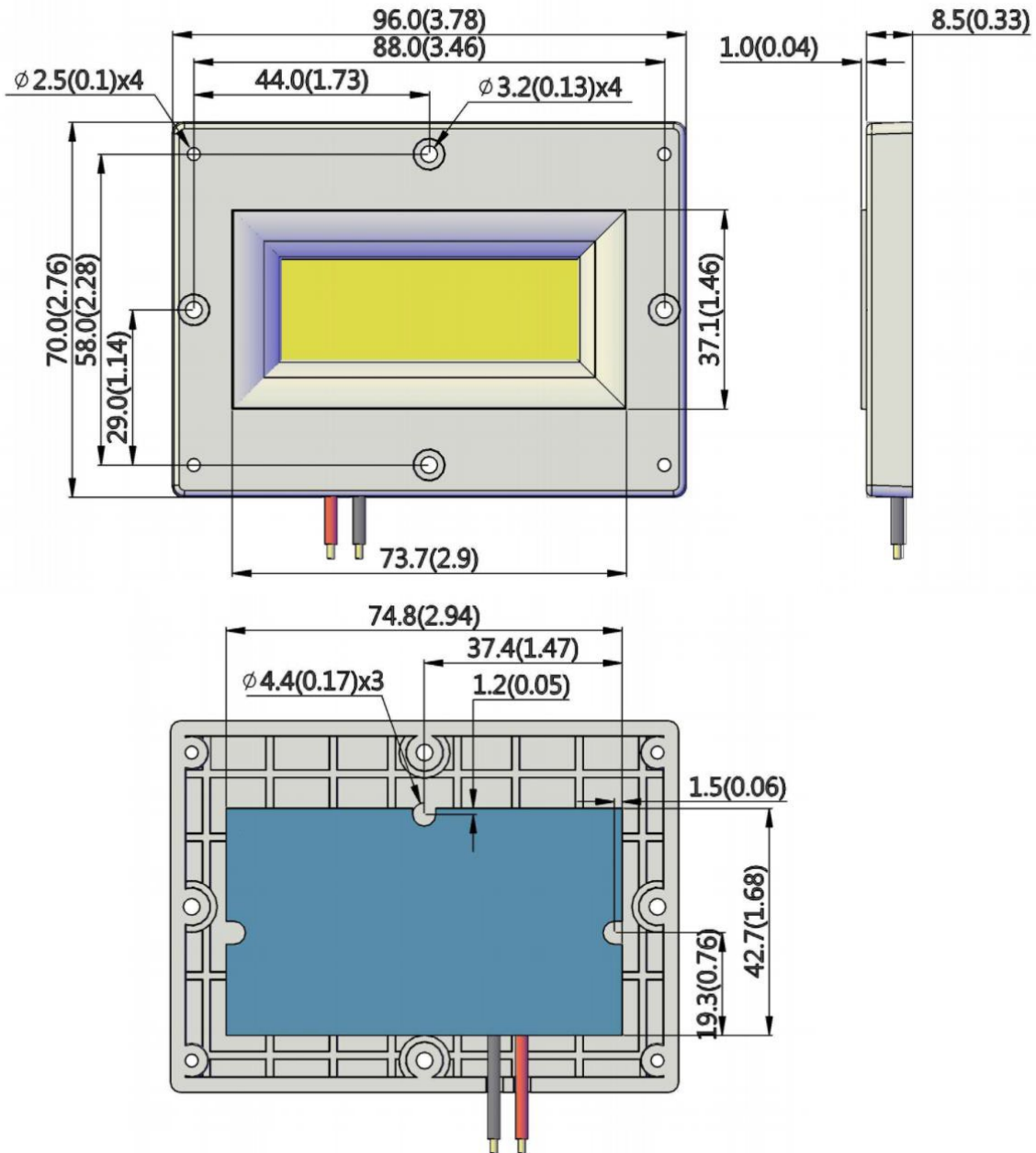
Reliability

LAC-vvv-7240-cct Series				
No.	Test Item	Test Condition	Remark	Number of fail
1	Temperature Cycle	-40°C~100 °C (30 mins / 30 mins)	100 Cycle	0/20
2	Low-Temperature Storage	Ta = -80 °C	1000 hrs	0/20
3	High-Temperature Storage	Ta = 145 °C	1000 hrs	0/20
4	High-Temperature High Humidity Life test	Ta = 85 °C , RH = 85 °C	500 hrs	0/20
5	High-Temperature Operation Life test	Tc = 55 °C / 85 °C / 105 °C / 145 °C	9000 hrs	0/20
6	ON / OFF Test	3 sec ON, 3sec OFF	2 Million times	0/20

Ta : Temperature Ambient
RH : Relative Humidity
Tc Point



Mechanical Dimension



1. All dimensions are measured in mm(inch).
2. Tolerance : ± 0.2 mm.

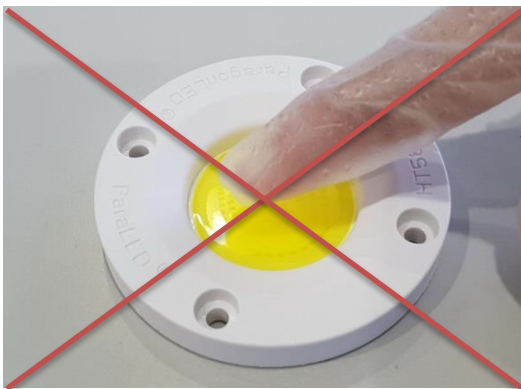
Assembly Notes

Correct

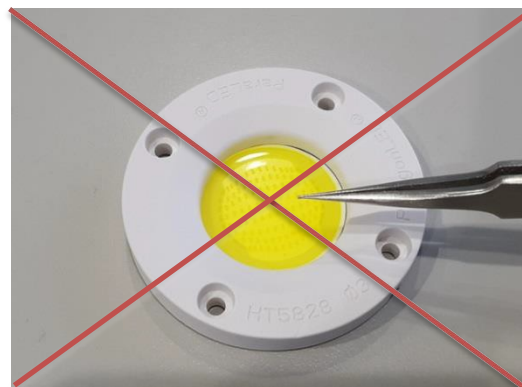
Recommended to use antistatic gloves



Incorrect



Do not touch the emitting area



Do not touch the emitting area

Assembly Notes

Screw M3 Mounting screws with
0.4 N.m (0.3 ft. lb)

Thermal
Dielectric Breakdown
Voltage >4kv

