

PrevaLED® Cube Gen II



High efficacy LED light engines for directional fixtures



Key Features & Benefits

- LED light engine available with and without integrated optics
- Design flexibility through 3 lumen packages (1100, 2000, 3000) and 5 CCTs (2700K, 3000K, 3500K, 4000K and 5000K)
- High module efficacy – up to 123* LPW
- Low profile form factor – 3.2" x 3.3" x 0.8"
- Poke in wire/connectors to ease installation
- Fully dimmable
- Fully compatible with widely available fixture mounting dimensions, heat sinks, reflectors and other accessories of existing popular common form factors
- Energy savings of 45-70% over compact fluorescent lighting
- Long life: up to 50,000 hours (L₇₀) minimizing maintenance frequency so long as max Tc** is below 80°C
- 5 year system warranty when paired with OPTOTRONIC® constant current LED power supplies

The PrevaLED Cube LED module is a square, high-powered light source, ideal for use in recessed downlights, low bay, or surface mount luminaires. The module is available in two versions allowing for design flexibility—with integrated optics and without. This popular, common form factor is fully compatible with widely available heat sinks, fixture mounting holes, reflectors, and other accessories. Available heat sink adapter allows direct replacement of full-height modules into existing fixtures. Low profile design enables new shallow and surface-mount fixtures. The module is available in three lumen packages; 1100, 2000, and 3000, and five color temperatures; 2700K, 3000K, 3500K, 4000K and 5000K.

The PrevaLED Cube provides similar light output to 1x32W, 2x26W, or 2x32W CFL downlights and is optimally paired with OPTOTRONIC Constant Current LED power supplies.

*At lower drive current and with better heat sink solution
 **Tc is on the back in the center of LED light engine

Product Offering

Item	Nominal Lumens	Color Temperature
PrevaLED Cube 350 mA	1100	2700K, 3000K, 3500K, 4000K
PrevaLED Cube 500 mA	2000	2700K, 3000K, 3500K, 4000K, 5000K
PrevaLED Cube 700 mA	3000	2700K, 3000K, 3500K, 4000K, 5000K

Application Information

Applications

- Low bay
- Recessed downlights
- Surface mount luminaires
- Wall pack

Specifications and Certifications



The PrevaLED Cube is UL8750 Recognized for the US and Canada Class 2 Unit. (UL File # E320662)



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Ordering Information

Item Number	Ordering Abbreviation	Initial Lumens (lm) ⁴	Beam Angle	Color Temperature	CRI	Nominal Wattage (W) ⁴	Operating Current (mA) ³			Case Qty.
							Typical	Max.	LPW ⁴	
73145	PL-CUBE-1100-827-0.35A-G2	1110	110°	2700K	>80	11	350	610	95	20
73146	PL-CUBE-1100-830-0.35A-G2	1150	110°	3000K	>80	11	350	610	103	20
73147	PL-CUBE-1100-835-0.35A-G2	1200	110°	3500K	>80	11	350	610	108	20
73148	PL-CUBE-1100-840-0.35A-G2	1240	110°	4000K	>80	11	350	610	111	20
73149	PL-CUBE-2000-827-0.5A-G2	1850	110°	2700K	>80	19	500	760	90	20
73150	PL-CUBE-2000-830-0.5A-G2	1920	110°	3000K	>80	19	500	760	99	20
73151	PL-CUBE-2000-835-0.5A-G2	1990	110°	3500K	>80	19	500	760	105	20
73152	PL-CUBE-2000-840-0.5A-G2	2070	110°	4000K	>80	19	500	760	109	20
73153	PL-CUBE-3000-827-0.7A-G2	2780	110°	2700K	>80	29	700	1080	89	20
73154	PL-CUBE-3000-830-0.7A-G2	2890	110°	3000K	>80	29	700	1080	97	20
73155	PL-CUBE-3000-835-0.7A-G2	3000	110°	3500K	>80	29	700	1080	103	20
73156	PL-CUBE-3000-840-0.7A-G2	3110	110°	4000K	>80	29	700	1080	107	20

Board Option (without housing and optics)

73760	PL-CUBE-1100-827-0.35A-G2-B	1250	110°	2700K	>80	11	350	610	112	40
73761	PL-CUBE-1100-830-0.35A-G2-B	1350	110°	3000K	>80	11	350	610	120	40
73762	PL-CUBE-1100-835-0.35A-G2-B	1410	110°	3500K	>80	11	350	610	126	40
73763	PL-CUBE-1100-840-0.35A-G2-B	1460	110°	4000K	>80	11	350	610	130	40
73764	PL-CUBE-2000-827-0.5A-G2-B	2050	110°	2700K	>80	19	500	760	107	40
73765	PL-CUBE-2000-830-0.5A-G2-B	2200	110°	3000K	>80	19	500	760	115	40
73766	PL-CUBE-2000-835-0.5A-G2-B	2300	110°	3500K	>80	19	500	760	121	40
73767	PL-CUBE-2000-840-0.5A-G2-B	2370	110°	4000K	>80	19	500	760	124	40
73470	PL-CUBE-2000-850-0.5A-G2-B	2440	110°	5000K	>80	20	500	760	123	40
73768	PL-CUBE-3000-827-0.7A-G2-B	3070	110°	2700K	>80	30	700	1080	105	40
73769	PL-CUBE-3000-830-0.7A-G2-B	3280	110°	3000K	>80	30	700	1080	112	40
73770	PL-CUBE-3000-835-0.7A-G2-B	3460	110°	3500K	>80	30	700	1080	118	40
73771	PL-CUBE-3000-840-0.7A-G2-B	3560	110°	4000K	>80	30	700	1080	121	40
73471	PL-CUBE-3000-850-0.7A-G2-B	3630	110°	5000K	>80	30	700	1080	121	40

Notes:

- 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.
- Nominal condition
- Power consumption, lumens, and efficacy at nominal rated output with board Tc of 70°C. See application guide and system performance calculator for specific current, temperature and lumen performance settings. For example, drive current can be adjusted to provide consistent lumen output across CCTs.

Ordering Guide

PL	-	CUBE	-	1100	-	8	-	27	-	0.35A	-	G2	-	B
Family		Shape		Lumen Output		CRI		Color Temperature		Current		2nd Generation		Board Option
PL = PrevaLED®						>80		27 = 2700K						

Power Supply Information

Item	Programmed Drive Current (mA)	OPTOTRONIC® Programmable Compact	
		OT25W	OT40W
PL-CUBE-1100-8XX-0.35A-G2	350	•	•
PL-CUBE-2000-8XX-0.5A-G2	500	•	•
PL-CUBE-3000-8XX-0.7A-G2	700	•	•

Note: Absence of power supply here doesn't mean incompatibility

Accessories



Item Number	Ordering Abbreviation	Description
74799	PL-CUBE HS ADTR	PrevaLED Cube Heat Sink Adaptor

Minimum and Maximum Ratings

Parameter

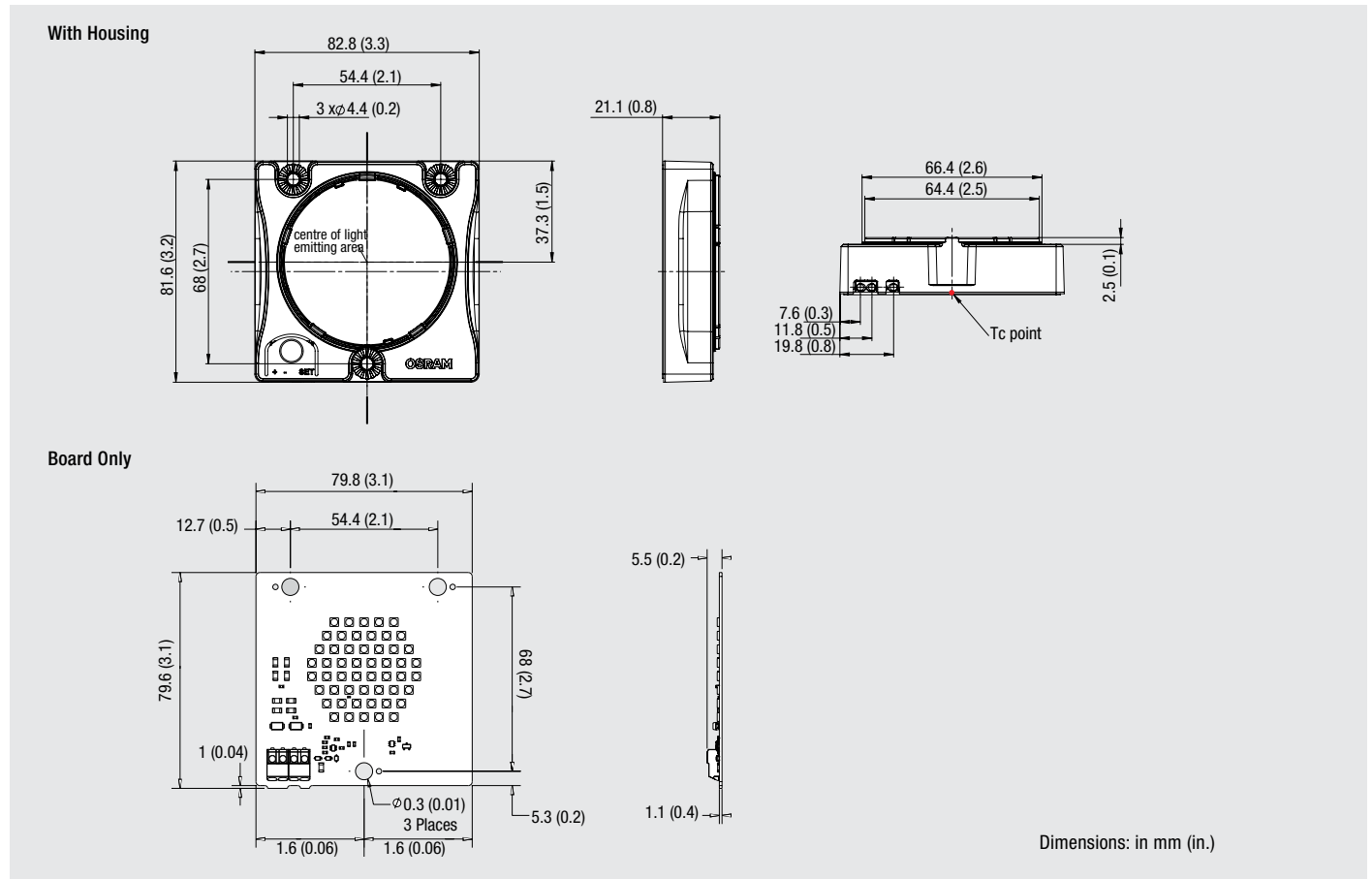
Operating Temperature at Tc point
Storage Temperature Range

Values

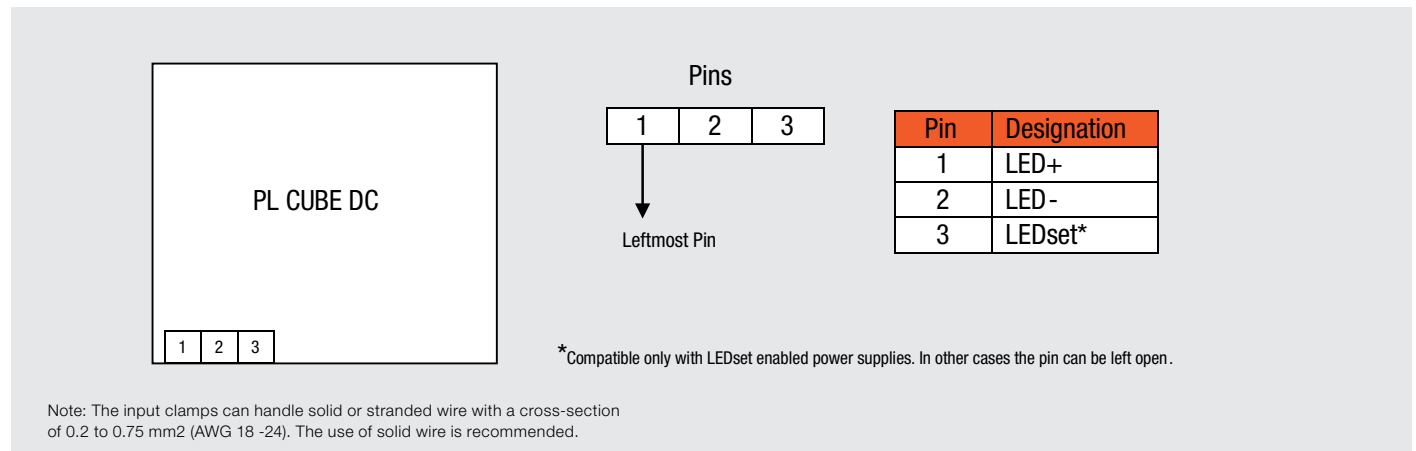
-20 to +100°C (-4 to +212°F)
-20 to +80°C (-4 to +176°F)

Note that maximum temperature at Tc for lumen depreciation is 80°C.

Assembly Diagram



Wiring Diagram



Assembly Information

1. The module should be used only with Constant Current power supplies.
2. Carefully attach the module to heat sink with M4 screws sandwiching appropriate thermal interface material (TIM) to adequately dissipate thermal power.
3. Refer to Application Guide (LED339) for detailed assembly information.

Safety Information

WARNING: ONLY QUALIFIED PERSONNEL SHOULD PERFORM INSTALLATION.

TO AVOID ELECTRICAL SHOCK OR COMPONENT DAMAGE, DISCONNECT POWER BEFORE ATTEMPTING INSTALLATION OF THE POWER SUPPLIES AND/OR MODULES.

Failure to install the power supplies and/or LED modules in accordance with the National Electric Code (NEC), all applicable Federal, State and local electric codes as well as the specific Underwriter's Laboratories (UL) safety standards for the installation, location and application may cause serious personal injury, death, property damage and/or product malfunction.

1. The LED module itself and all its components may not be mechanically stressed.
2. The LED module needs to be mounted on a heat sink providing adequate thermal dissipation.
3. Do not damage or destroy conducting paths on the circuit board.
4. Installation of LED module needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installation.
5. Serial connection of the LED modules violates UL Class 2 system requirements. Parallel connection of the LED modules is not suggested.
6. Damage by corrosion will not be honored as materials defect claim. PrevaLED Cube is recommended for indoor use only (IP 20). It is the user's responsibility to provide suitable protection against corrosive agents, such as moisture, condensation and other harmful elements.
7. Pay attention not to exceed the maximum operation temperature of 80°C at the Tc point when the modules are used in an enclosed environment.
8. The design of the housing/luminaire should be according to the IP standards applicable for the intended application
9. Maximum safe operation per IEC62031 is 100°C. For maximum safe operation per UL refer to Conditions of Acceptability (CoA). Maximum operating temperature for warranty coverage is 90°C.

Warranty

OSRAM LED products are covered by our LED Module, OPTOTRONIC® Power Supply or Control Warranty. The PrevaLED® Cube is covered under warranty as long as the temperature at the Tc point does not exceed 90°; exceeding this temperature will void all warranties.

For additional information or to download the warranty registration form, refer to the latest version of the warranty available in the literature section of www.osram-america.com/LED.

Module Warranty – 3 Years

System Warranty – 5 Years

OSRAM

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