

PURALIGHT[®] 2 WIDE BEAM
LED LIGHT MODULES

SPECIFICATION SHEET



MONOBRIGHT[™]



DUOBRIGHT[™]



TRIOBRIGHT[™]



TILEBRIGHT[™]

OVERVIEW

The PURALIGHT 2 LED Light Modules come in multi-unit strands of water resistant, durable modules that are ready to perform in all environments. Resilience and high performance, combined with simple installation and 80 CRI output, make these compact light sources perfect for back light or channel letter signage, halo illumination, and architectural accents. A 5-year warranty and an IP65 rating promote peace of mind for an installation that stands the test of time.

FEATURES

- Wide beam angle eliminates hot spots
- 80+ CRI*: Superior color rendering
- High lumen output
- Available in square and linear form factors
- IP65 (Indoor/Outdoor)
- 5 Year Warranty

* DUOBRIGHT[™], TRIOBRIGHT[™], & TILEBRIGHT[™] models

Item #	
Project	

SPECIFICATIONS

- Input Voltage: 12VDC Constant Voltage
- Solid Color Chip Type: 3535 SMD (MONOBRIGHT), 2835 SMD (DUOBRIGHT, TRIOBRIGHT, TILEBRIGHT)
- RGB Chip Type: Epistar 5050 RGB Tri-Chip SMD (TRIOBRIGHT RGB)
- LED Chip Beam Angle: 160° (120° for TILEBRIGHT RGB)
- Connections¹: 18 AWG Wire, 20 AWG Wire (TRIOBRIGHT RGB), See Mechanical Diagrams
- Dimmable: Yes
- Ambient Temperature²: -13 ~ 140°F (-25 ~ 60°C)
- Operating Temperature³: -13 ~ 140°F (-25 ~ 60°C)
- Mounting: 3M™ Adhesive Tape, screw mountable (screws not included)
- Environment⁴: Outdoor / wet location

COMPLIANCE & REGULATORY APPROVALS

- UL Recognized Component
- RoHS Compliant
- CE

SINGLE COLOR OPTIONS	ITEM #	LED Chips/Module	CCT ⁵ (K)	Lumens ⁶ /Module	CRI	Wattage per Module/Spool	Max Run ⁷ /Spool Length ⁸	Dimensions
MONOBRIGHT™	DI-12V-P2-MB75	1	7500K	181lm	72	2.1W / 42W	20 modules / ~12.3 ft.	52 x 35 x 7.4 mm 2.05 x 1.38 x 0.3 in.
DUOBRIGHT™	DI-12V-P2-DB**	2	3000K 4000K 5000K 6200K 9000K 11000K Yellow Red Green Blue	56lm (3000K) 64lm (4000K) 63lm (5000K) 65lm (6200K) 59lm (9000K) 58lm (11000K) 31lm† (YL, RD, GN, BL)	84	0.72W / 28.8W	40 modules / ~20.3 ft.	49.2 x 20.5 x 5.5 mm 1.94 x 0.81 x 0.22 in.
TRIOBRIGHT™	DI-12V-P2-TB**	3		78lm (3000K) 94lm (4000K) 87lm (5000K) 88lm (6200K) 87lm (9000K) 85lm (11000K) 45lm† (YL, RD, GN, BL)	84	1.08W / 43.2W	40 modules / ~20.7 ft.	73 x 19 x 5.5 mm 2.88 x 0.75 x 0.22 in.
TILEBRIGHT	DI-12V-P2-TL**	4		105lm (3000K) 121lm (4000K) 114lm (5000K) 128lm (6200K) 114lm (9000K) 110lm (11000K) 60lm† (YL, RD, GN, BL)	84	1.44W / 57.6W	40 modules / ~21.7 ft.	48 x 44.3 x 4.5 mm 1.89 x 1.75 x 0.18 in.

** - Substitute with **30**(3000K), **40**(4000K), **50**(5000K), **62**(6200K), **90**(9000K), **11**(11000K) CCT options, or **YL**(Yellow), **RD**(Red), **GN**(Green), **BL**(Blue) for solid color options. Solid color options are **not** compatible with SWITCHEX.

† - Solid color lumen value is based off Green max lumen output.

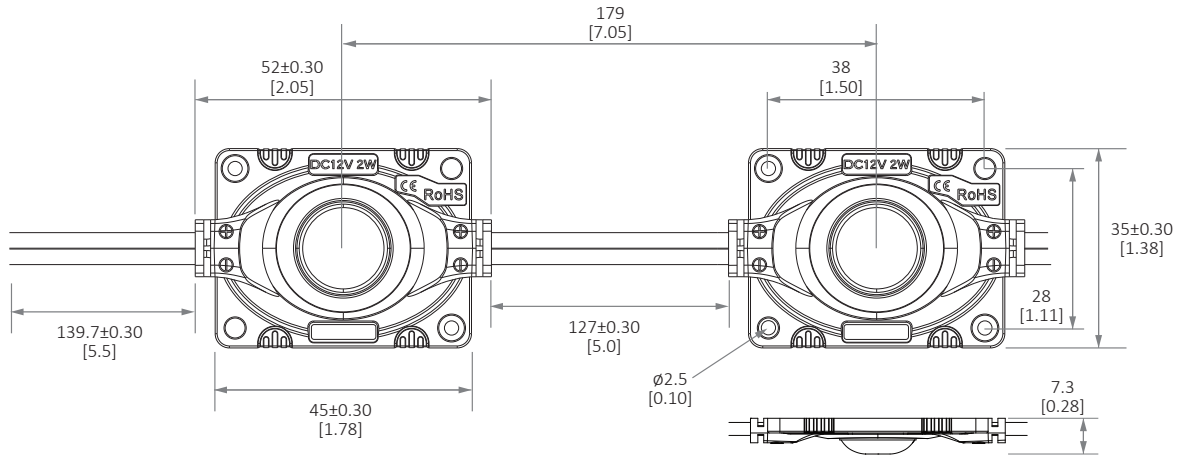
RGB COLOR CHANGING OPTIONS	ITEM #	LEDs/Module	CCT ⁵ (K)	Lumens ⁶ /Module	CRI	Wattage per Module/Spool	Max Run ⁷ /Spool Length ⁸	Dimensions
TRIOBRIGHT™	DI-12V-TRGB	3	N/A	14lm	n/a	0.72W / 18W	25 modules / ~12.6 ft.	71 x 12 x 7.2 mm 2.78 x 0.47 x 0.28 in.

1. Wire leads and accessories are not rated for in-wall installation unless otherwise noted. Attached wire leads and connections are field-cutttable.
2. Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.
3. Operating temperature is measured according to the minimum and maximum ambient temperature environment.
4. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.
5. Chip binning ranges vary based on chip type and CCT.
6. Lumen value varies per CCT and are measured through Elemental LED's Innovation Lab. LED chips have a luminous flux range with a tolerance of +/- 5%.
7. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
8. Spool length is measured from beginning of first module to end of last module and does not factor in beginning and end lead wires. See page 4 for illustration.

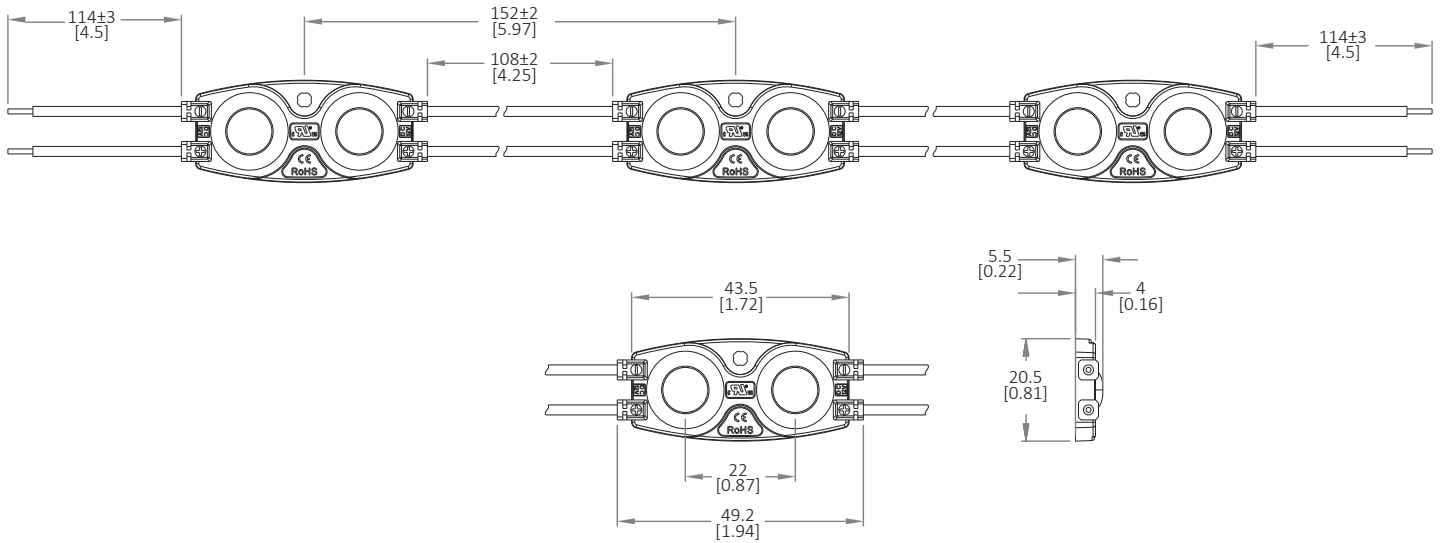
MECHANICAL DIAGRAMS

PURALIGHT 2 - MONOBRIGHT

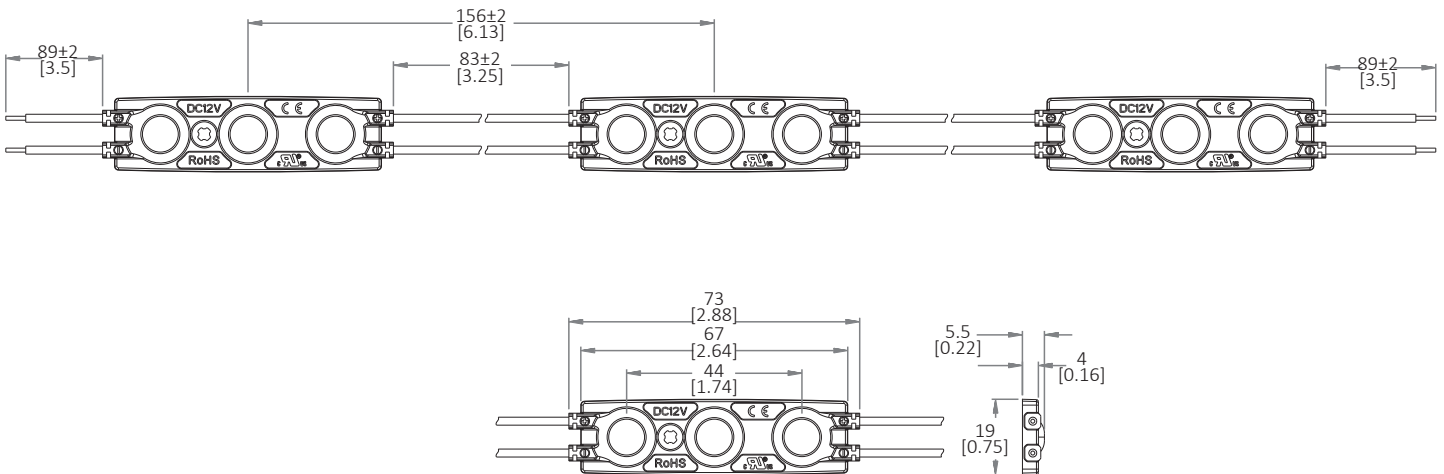
UNITS: mm [in.]



PURALIGHT 2 - DUOBRIGHT



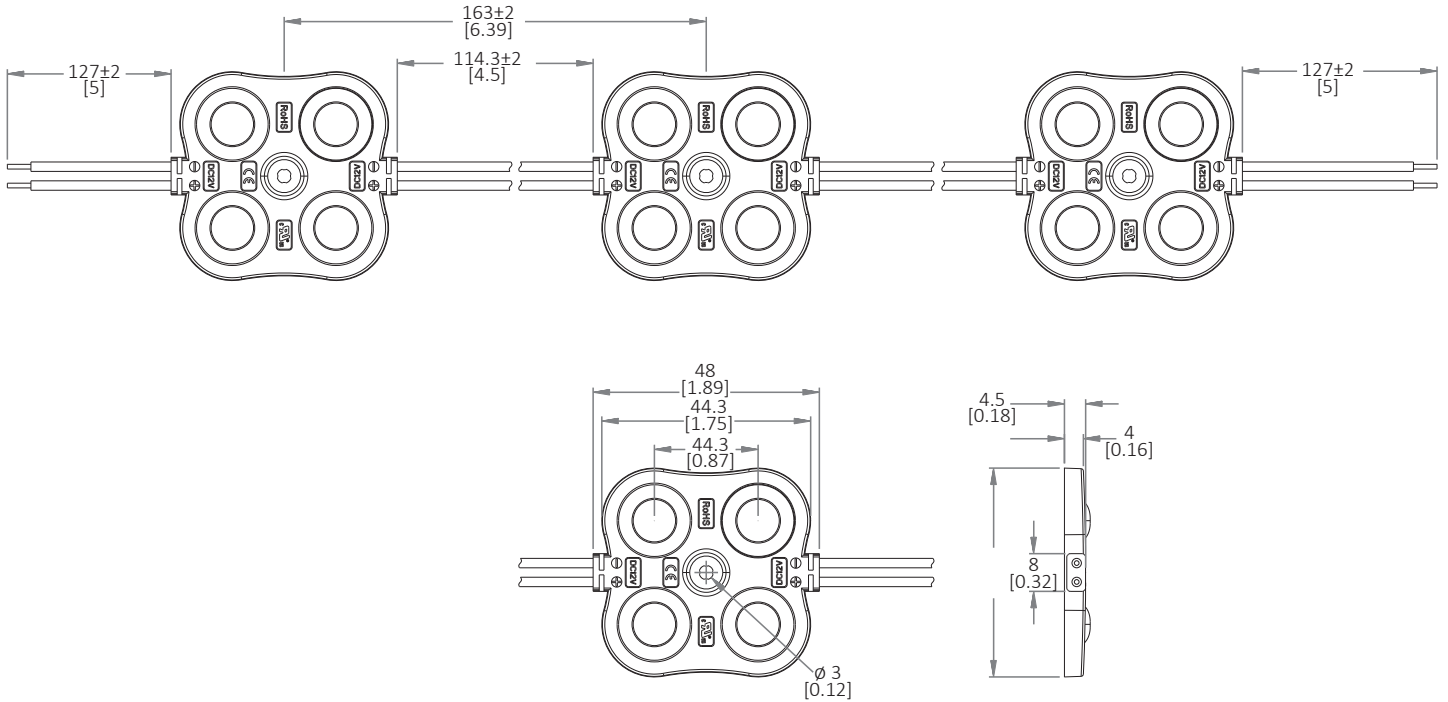
PURALIGHT 2 - TRIOBRIGHT



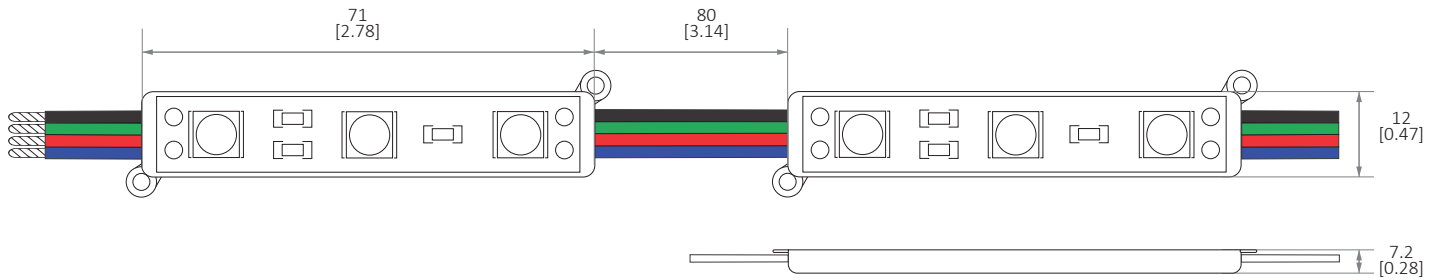
MECHANICAL DIAGRAMS CONT.

PURALIGHT 2 - TILEBRIGHT

UNITS: mm [in.]

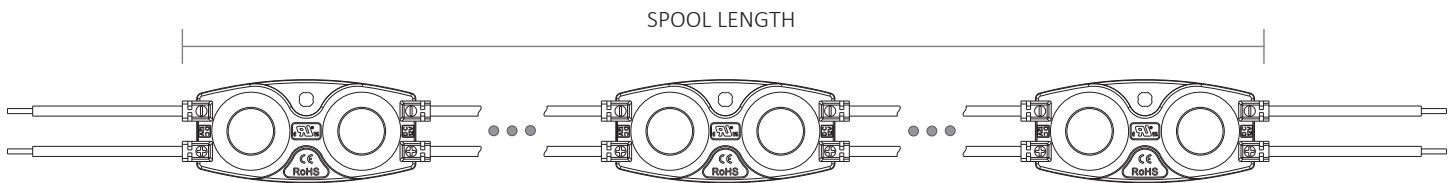


PURALIGHT - TRIOBRIGHT RGB



SPOOL LENGTH ILLUSTRATION EXAMPLE

Spool length is measured from beginning of first module to end of last module and does not factor in beginning and end lead wires.



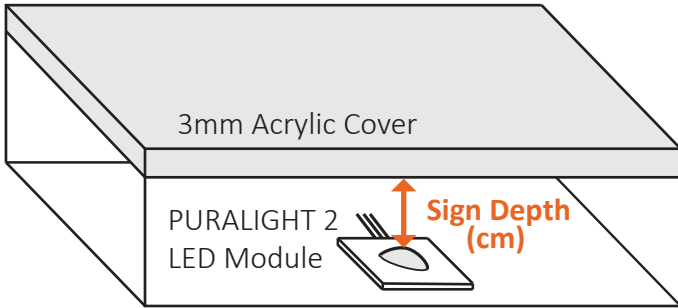
SPACING CRITERIA*

The following charts provide the necessary information to help eliminate hot/dark spots in your installation.

Example:

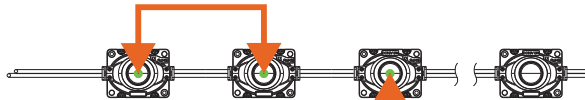
Sign Depth (cm)	Spacing Distance (cm)	Qty/m ²	Illumination (lux)
8	15*7	6*14pcs	2520-3730
10	13*7	7*14pcs	2100-3590
12	10*7	9*14pcs	2170-3660

- Determine interior Sign Depth from top of module to cover, round up to the nearest Sign Depth provided. We will use 10cm as an example.

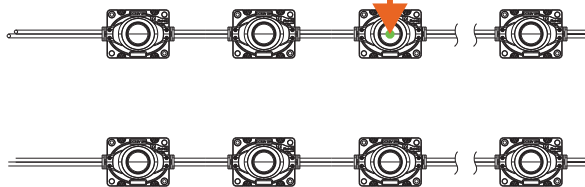


- Once Sign Depth is determined, proceed across to Spacing Distance, 13*7. The first number, 13cm, gives the Spacing Distance between module centers. The second number, 7cm, gives the Spacing Distance between center rows of modules.

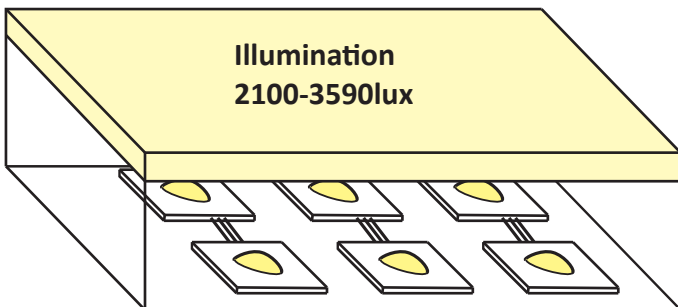
13cm Spacing Distance from Centers of Modules



7cm Spacing Distance Between Center Rows



- At the given Sign Depth and Spacing Distance suggested, the sign Illumination will be 2100-3590lux and will help eliminate hot/dark spots in your installation.



MONOBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m ²	Illumination (lux)
10	12*12	64pcs	3820-4470
15	12*12	64pcs	2380-2940
18	12*12	64pcs	2120-2630

DUOBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m ²	Illumination (lux)
8	15*7	6*14pcs	2520-3730
10	13*7	7*14pcs	2100-3590
12	10*7	9*14pcs	2170-3660
15	13*5	7*20pcs	2010-3040
18	15*5	6*20pcs	1570-2410

TRIOBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m ²	Illumination (lux)
6	11*4	8*24pcs	5840-8420
8	13*6	7*15pcs	4260-6160
10	15*6	6*16pcs	2580-4890
12	15*6	6*16pcs	2440-4630
15	15*6	6*16pcs	2310-3860
18	15*6	6*16pcs	2270-3390

TILEBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m ²	Illumination (lux)
5	7*7	14*14pcs	13470-16150
7	10*10	10*10pcs	6200-8010
9	16*10	7*10pcs	3990-4830
12	16*10	7*10pcs	2820-4670
15	9*9	11*11pcs	3320-5320
18	8*8	12*12pcs	3010-4830

* The Spacing Criteria above is calculated using 3mm Frosted Acrylic cover material. Results can vary for each installation, using this guide will help eliminate hot/dark spots.

SAFETY / WARNINGS / DISCLOSURES

1. Install in accordance with the NEC and local regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. DO NOT Connect to 120VAC Power.
4. This product MUST be powered with a compatible Class 2 12VDC LED driver and has not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limited supplies.
5. Suitable for Wet Locations and outdoors. Do not submerge product in water.
6. Attached wire leads, connectors and accessories are not rated for in-wall installation. Do not route wires through any parts of a building structure.
7. Attached wire leads are field-cuttable.

WARRANTY

Limited Warranty

PURALIGHT 2 has a five (5) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled.com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment

Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.

