



LUMISPOT LED LIGHT ENGINES SINGLE COLOR



Patents pending

OPERATING CONDITIONS

- ▲ Recommended PCB temp=55°C
Maximum PCB temp = 105°C
- ▲ LED Life @ 55°C PCB temp = 50,000 hours
- ▲ For maximum performance efficiency and longevity, all "LumiSpot" LED Light Engines should be screwed or affixed using thermal adhesive to an appropriate heat sink
- ▲ Maximum current = 350mA
- ▲ Thermal conductivity = 1.3W/m-k
- ▲ Breakdown voltage = 2kV

MECHANICAL DIMENSIONS

Height (all models including lens) = 15.5mm (0.61")
 Spot1, Diameter = 21.5mm (0.85")
 Spot3, Diameter = 48.0mm (1.89")
 Spot6, Diameter = 69mm (2.72")
 (inside diameter = 23mm) (0.91")
 Spot9, Diameter = 90mm (3.54")
 Lead wire length 12" (on equipped models)

PART NUMBERS



| # of LEDs (A) |
|---------------------|
| 1 = 1 LED / Spot 1 |
| 3 = 3 LEDs / Spot 3 |
| 6 = 6 LEDs / Spot 6 |
| 9 = 9 LEDs / Spot 9 |

| LED Color (B) |
|-----------------|
| W = Cool White |
| WW = Warm White |
| R = Red |
| G = Green |
| B = Blue |
| A = Amber |

| LENS Type (CCC)** |
|---------------------|
| 005 = 5 Degree |
| 015 = 15 Degree |
| 025 = 25 Degree |
| 520 = 5 X 20 Degree |
| XXX = no lens* |

* This figure indicates half-divergence angle
 ** Lens to be purchased and installed separately

FEATURES / BENEFITS

- ▲ Extremely long life of 50,000 hours at 55°C PCB temperature
- ▲ Durable F-Form optics holder allow for easy changing of 4 lens options (5, 15, 25 degree + 5x20 degree oval)*
- ▲ Available in 6 colors (cool white, warm white, red, blue, green, amber)
- ▲ Aluminium based PCB for easier heat dissipation and more efficient operation
- ▲ Units with production dates of 8/07 or later come with 22 AWG 12" lead wires pre-attached (red+ / black-)

APPLICATIONS

Any application requiring efficiency & long life in a circular, flood, spot or oval light pattern.

MATERIALS/FINISH

- ▲ LUXEON® I LEDS
- ▲ 1.6mm Aluminium clad PCB substrate
- ▲ White solder resist finish

Dialight reserves the right to make changes at any time in order to supply the best product possible.

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MDEXLUMSPOT_D

PHOTOMETRIC DATA



ELECTRICAL SPECIFICATIONS



TYPICAL LED PHOTOMETRIC DATA

| LED | Color | Forward Voltage (Typ) | Max. Current (mA) | Max. Power (Watts) | Dom Wavelength / CCT | | | Min Luminous Flux (lm) / Radiometric Power (mW) | Typ Luminous Flux (lm) / Radiometric Power (mW) |
|------------|------------|-----------------------|-------------------|--------------------|----------------------|--------|---------|---|---|
| | | | | | Min | Typ | Max | | |
| Red | Red | 2.95 | 350 | 1.03 | 620.5 nm | 627 nm | 645 nm | 30.6 lm | 44 lm |
| Green | Green | 3.42 | 350 | 1.20 | 520 nm | 530 nm | 550 nm | 30.6 lm | 53 lm |
| Royal Blue | Royal Blue | 3.42 | 350 | 1.20 | 440 nm | 455 nm | 460 nm | 145 mW | 220 mW |
| White | White | 3.42 | 350 | 1.20 | 4500 K | 5500 K | 10000 K | 30.6 lm | 45 lm |
| Amber | Amber | 2.95 | 350 | 1.03 | 584.5 nm | 590 nm | 597 nm | 23.5 lm | 42 lm |
| W White | W White | 3.42 | 350 | 1.20 | 2850 K | 3300 K | 3800 K | 13.9 lm | 20 lm |

Results are LED manufacturer's test data @ 25°C JTC'. Light output at 55°C PCB temperature will be approximately 15-20% lower. Elevated temperatures will result in further degradation of light output. For maximum performance use appropriate heat sinking.

Maximum current input 350mA
 Maximum power consumption 1.2W per LED for White / Blue / Green / Warm White, 1.0W per LED for Red / Amber.
 Recommended min gauge wire, AWG24

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