



**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)

**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

**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

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

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## 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	2.95	350	1.03	620.5 nm	627 nm	645 nm	30.6 lm	44 lm
	Green	3.42	350	1.20	520 nm	530 nm	550 nm	30.6 lm	53 lm
	Royal Blue	3.42	350	1.20	440 nm	455 nm	460 nm	145 mW	220 mW
	White	3.42	350	1.20	4500 K	5500 K	10000 K	30.6 lm	45 lm
	Amber	2.95	350	1.03	584.5 nm	590 nm	597 nm	23.5 lm	42 lm
	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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