



## LUMISPOT LED LIGHT ENGINES SINGLE COLOR



Patents pending

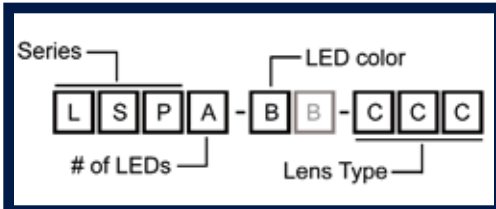
### OPERATING CONDITIONS

- ▲ 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

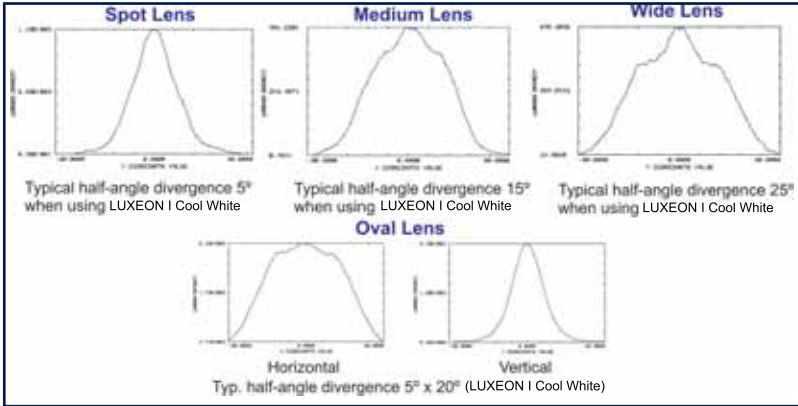
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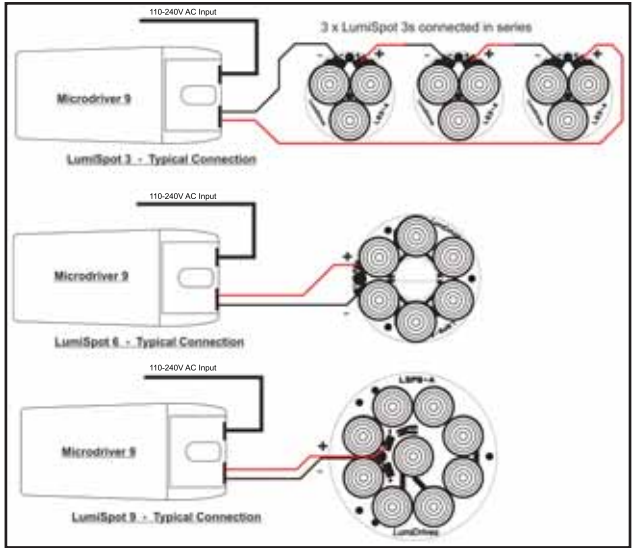


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### PHOTOMETRIC DATA



### 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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