



LUMISPOT K2 LED LIGHT ENGINES



FEATURES / BENEFITS

- ▲ LumiSpot K2 light engines come fitted with OPT-K2 optics specifically designed for K2 LEDs
- ▲ 70% lumen maintenance at 50,000 hours at 55°C PCB temperature
- ▲ Red, Blue and Green LEDs allow for infinite number of color combinations and dynamic color changing
- ▲ Emits no UV or IR radiation
- ▲ Thermally protected to avoid damaging over-temperature operation
- ▲ Available Color Kinetics pass through license, consult factory for details

OPERATING CONDITIONS

- ▲ Recommended PCB temp=55°C (131°F)
Maximum PCB temp =80°C (176°F)
- ▲ LED Life @ 55°C PCB temp = 50,000 hours
- ▲ For maximum performance, all "Lumispot K2" LED Light Engines should be screwed or affixed using thermal adhesive to an appropriate heat sink
- ▲ Thermal conductivity = 1.3W/m-k
- ▲ Breakdown voltage = 2kV
- ▲ Recommended accessories include Colordriver XP (CDU-XP-DMX-CON-IP) & sub-lenses

APPLICATIONS

- ▲ Color washing
- ▲ Architectural lighting
- ▲ Spotlights
- ▲ Floodlights
- ▲ Accent lighting
- ▲ Night clubs, restaurants, bars

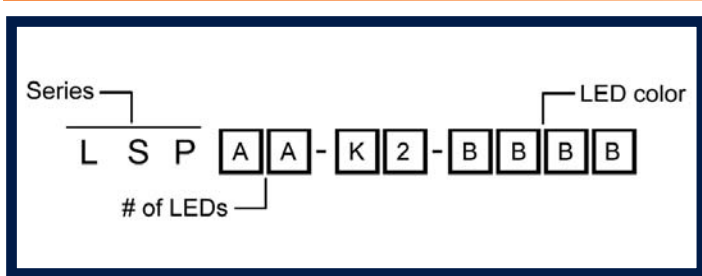
MECHANICAL DIMENSIONS

Height (all models including lens) = 15.5mm (0.61")
 LSP32 = 180mm x 180mm (7.09" x 7.09")
 LSP12 = 127mm x 100mm (5.00" x 3.94")

MATERIALS/FINISH

- ▲ K2 LEDs
- ▲ 3 degree spot lenses
- ▲ 1.6mm aluminum clad PCB substrate
- ▲ 3m (9.8') lead cable included

ORDERING INFORMATION



of LEDs (AA)
12 = LumiSpot K2 12 LEDs
32 = LumiSpot K2 32 LEDs

LED Color (BBBB)
RGBW = Red, green, blue & white
RGBA = Red, green, blue & amber
WWWW = 4x cool white

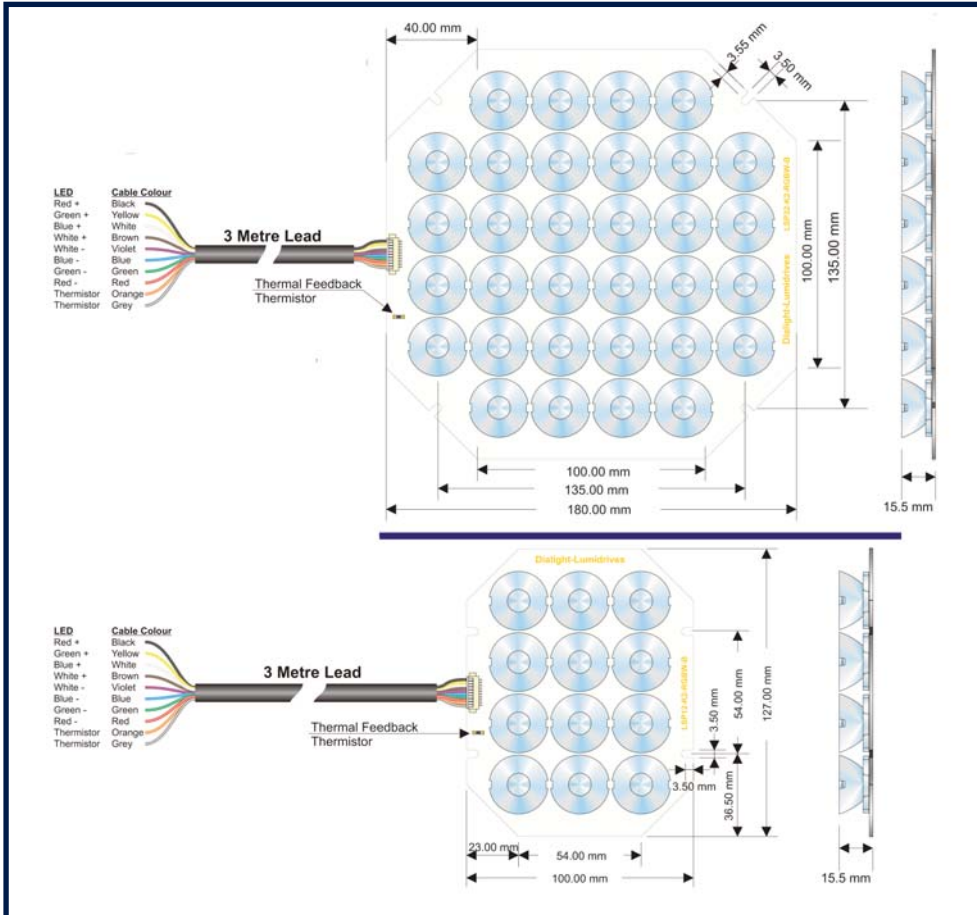
Optics Sub-Lenses (Purchased Separately)	
↳ OPAA-1-DF	6° Diffused Sub-lens
↳ OPAA-1-WSL	12° Wide Sub-lens
↳ OPAA-1-OSL	4° x 27° Oval Sub-lens

All angles are half divergence

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WIRING INFORMATION



APPLICATION NOTES

1. When used with Dialight-Lumidrives Colordriver XP, over-temperature operation is prevented with the on-board thermistor feedback to the driver.
2. OEMs who wish to use their own driver solution should consult the datasheet for the Luxeon K2 emitters together with the thermal design guide.
3. The LumiSpot K2 light engines require secondary heatsinking.
4. The red & amber channels should not be driven at more than 700mA.

TYPICAL LED PHOTOMETRIC DATA

LED	Color	Wavelength / CCT		Luminous Flux or Radiometric Power (lm or mW)					
		Min	Max	LumiSpot 12 (flux per 3 of each color)			LumiSpot 32 (flux per 8 of each color)		
				350mA	700mA	1000mA	350mA	700mA	1000mA
Red	Red	620nm	645nm	108lm	180lm	-----	288lm	480lm	-----
Green	Green	520nm	550nm	108lm	180lm	240 lm	288lm	480lm	640 lm
Royal Blue	Royal Blue	440nm	460nm	528mW	882mW	1140mW	1408mW	2352mW	3040mW
White	White	4500°K	10000°K	108lm	180lm	240lm	288lm	480lm	640lm
Amber	Amber	584nm	597nm	108lm	180lm	-----	288lm	480lm	-----

Results are LED manufacturer's test data @ 25°C JTC'. Light output at 55°C PCB temperature will be approximately 10-15% lower. Elevated temperatures will result in further degradation of light output. For maximum performance use appropriate heat sinking.