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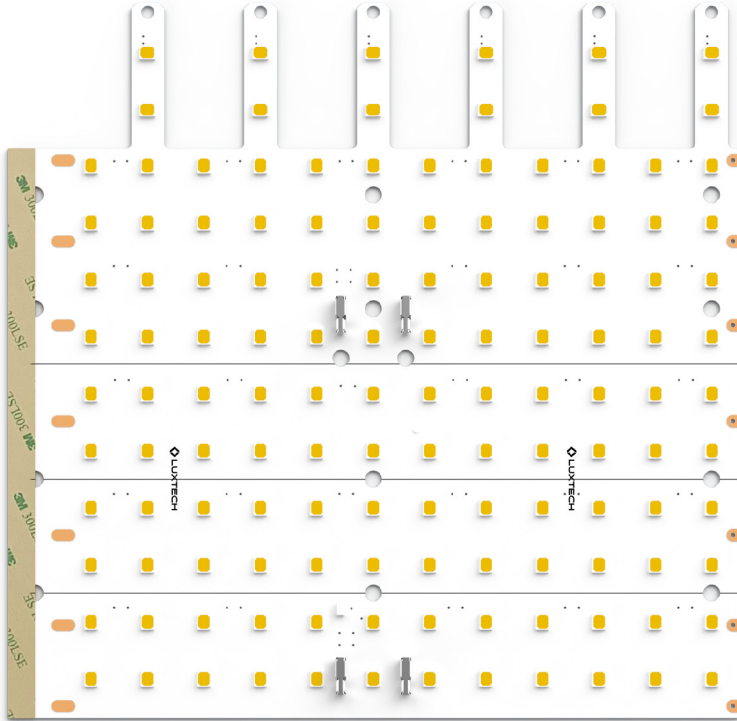
LUXsphere Pro

DATA SHEET

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PRODUCT DESCRIPTION

LUXsphere enables luminaire manufacturers to create perfect Globe illumination with a single LED module, minimizing complex assembly and maximizing versatility across product sizes. Each LUXsphere module includes the latest Pro 9 LED technology to provide 90CRI quality at 80CRI performance.



TECHNICAL SPECIFICATIONS

Mechanical Information

- Flexible IP20 LED module
- Cuttable Every 2 LEDs
- Assembled Diameter: 1.8"
- Assembled Length: 6"
- Specification-Grade 3M 300LSE Adhesive Backing

Photometric Performance

- Nominal Lumen Output: 5,000 lm (4000K, 90CRI)
- Nominal Efficacy: 200 lm/W (4000K, 90CRI)
- CCT Range: 2700K - 4000K
- 90+ CRI Standard
- 3-Step MacAdam Ellipse Color Binning

Electrical Information

- Poke-In Connectors
- Forward Voltage: 32.2V (4000K, 90CRI)
- Compatible with Industry-Standard 36V Drivers (0-2.8A)
- On Board ESD Protection
- Connector Wire Size: 18-24 AWG, solid or stranded

Lifetime Information

- LM-80 Tested LEDs
- L70 > 102,000 Hrs for $T_s = 85^\circ\text{C}$, 60mA Per LED
- L70 > 102,000 Hrs for $T_s = 105^\circ\text{C}$, 60mA Per LED
- 5-Year Warranty

LUXsphere Pro

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REQUESTING SAMPLES & PRICING

1	2	3	4	5	6	7	8	9
		-						-

1: SERIES	2: PRODUCT FAMILY	3: PRODUCT LINE	4: TAPE	5: OPTICS
LT Luxtech	17 LUXsphere	06 Pro	0 No	A No
6: PROTECTION	7: RESERVED	8: RESERVED	9: COLOR	
0 No	0 blank	0 blank	2790 2700K 90 CRI 3090* 3000K 90 CRI 3590* 3500K 90 CRI 4090* 4000K 90 CRI 5090 5000K 90 CRI 6590 6500K 90 CRI *normally stocked	

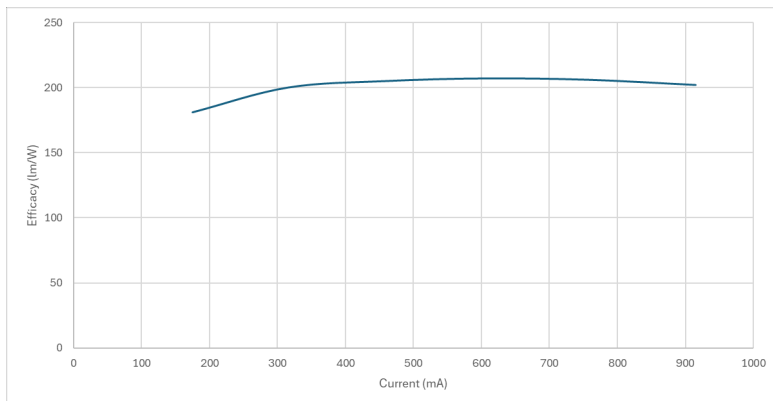
ELECTRICAL CHARACTERISTICS

Assuming 40K, 90 CRI, 25°C

PER EACH	1000	2000	3000	4000	5000	6000
Flux Output (lm)	1000	2000	3000	4000	5000	6000
Current (mA)	175	315	460	605	755	915
Voltage (V)	31.5	31.7	31.8	32.0	32.2	32.4
Power (W)	5.5	10.0	14.6	19.4	24.3	29.6
Efficiency (lm/W)	181	200	205	207	206	202

LUXsphere Pro Product Calculator can be used to evaluate performance at various lengths, color temperatures, and drive currents.

EFFICACY VS. CURRENT



*LUXTECH maintains a tolerance of $\pm 7.5\%$ on flux measurements.

*Performances will vary based on specific installation and thermal conditions.

*LEDs naturally exhibit slight variations in performance due to their material properties and manufacturing processes. These variations may affect performance parameters like brightness, voltage, and color.

*The product is sensitive to moisture. It's not good to use for outdoor application or damp environment.

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ABSOLUTE MAXIMUM RATINGS

Assuming 40K, 90 CRI

PER EACH	
Current (mA)	1150
Temperature (°C)	105

COMPONENTS	
Max Connector Current (A)	9

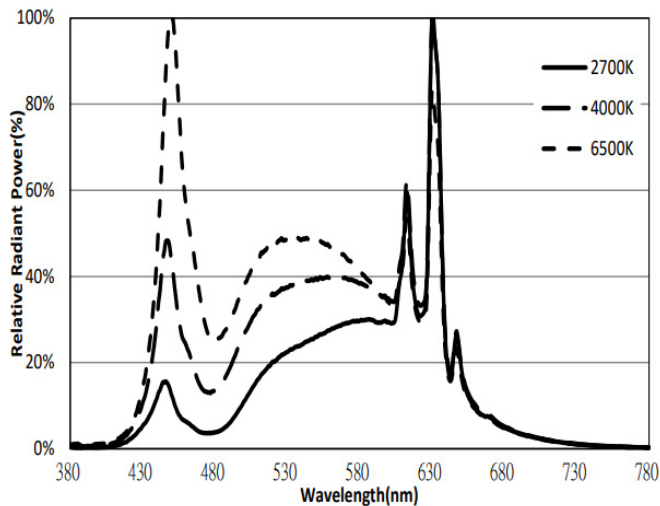
DERATING

COLOR TEMPERATURE (90CRI)	LIGHT OUTPUT
2700K	95%
3000K	97%
3500K	97%
4000K	100%
5000K	100%
6500K	100%

CRI	LIGHT OUTPUT
90	100%

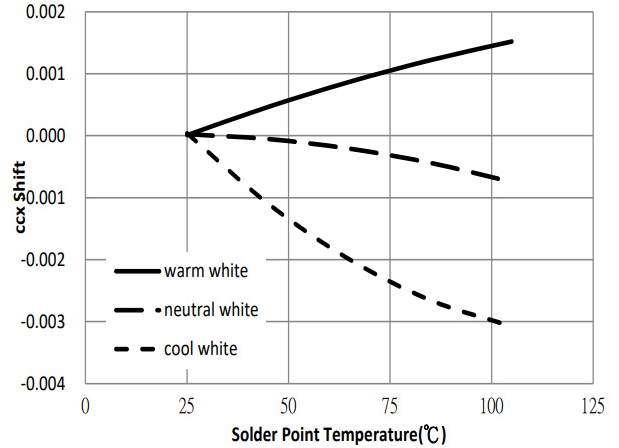
OPTICAL SPECIFICATIONS

Spectral Power Distribution

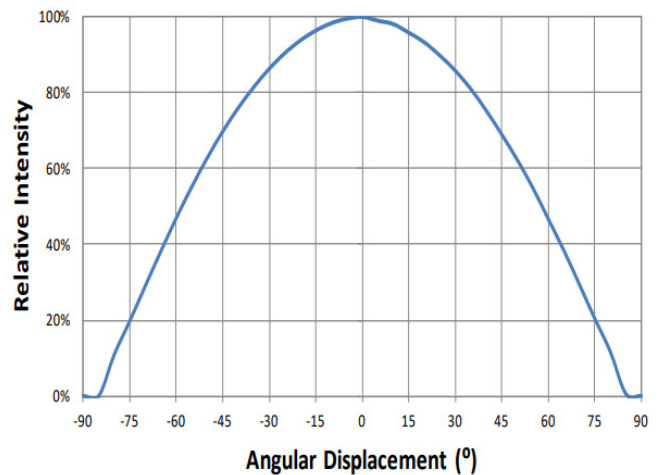
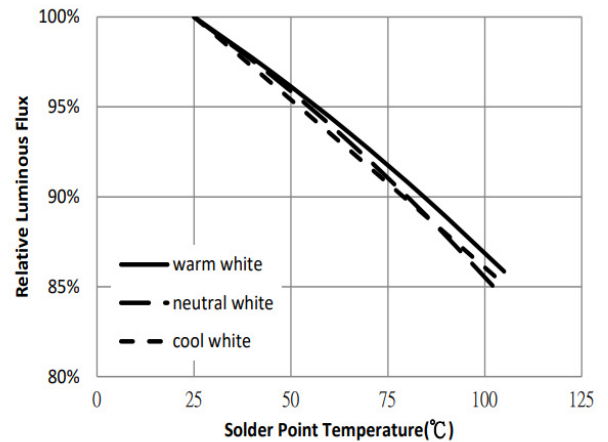


CHROMATICITY VS. TEMPERATURE

Chromaticity binned @ 85 °C



FLUX VS. TEMPERATURE



LUXsphere Pro

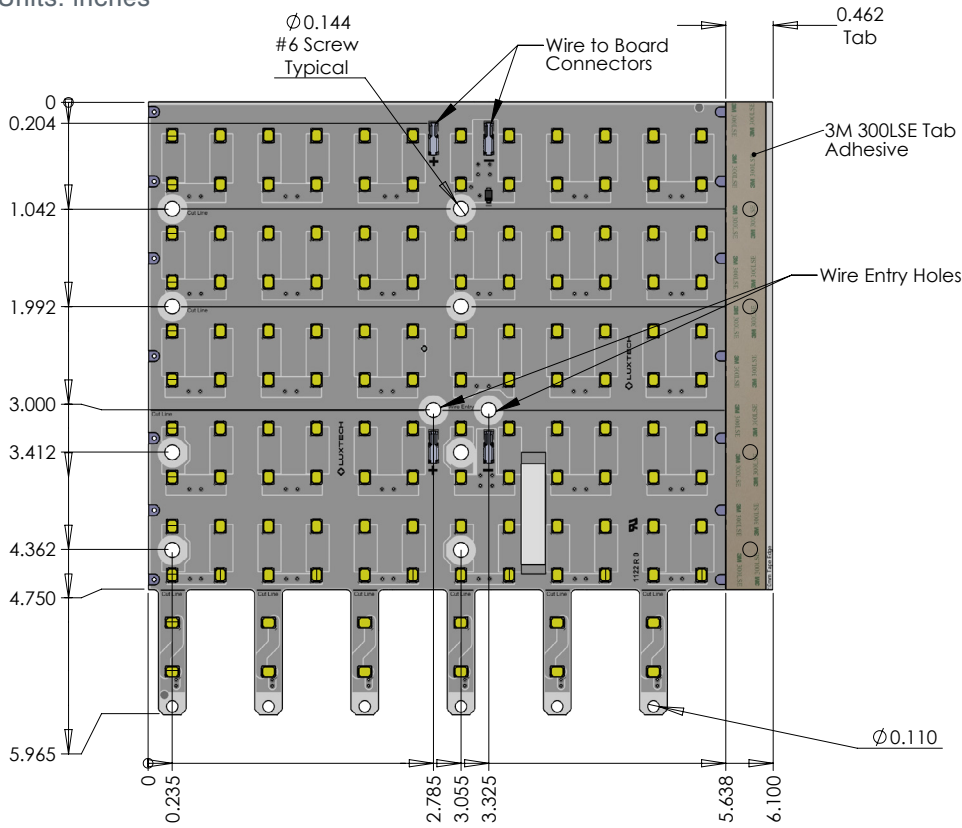
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MECHANICAL CHARACTERISTICS

Technical Drawing

Units: inches



Product Dimensions

PARAMETER	SPECIFICATION (IN)
Assembled Length	6"
Assembled Diameter	1.8"
Cutable Every	2 LEDs
PCB Thickness	0.009"

Wiring

PARAMETER	SPECIFICATION
Wire Size	18-24 AWG

RECOMMENDED COMPATIBLE DRIVERS

BRAND	MODEL	PROGRAMMABLE DRIVE CURRENT (MA)	OUTPUT VOLTAGE (V)	DIMMING
AC Electronics	AC-50CD1.4APC7	400-1400	15-55	0-10V
EldoLED	SOLOdrive 566/U (A/S/L)	150-1400	15-55	0-10V
Osram	OPTOTRONIC Intelligent	150-1400	10-56	DALI/DEXAL

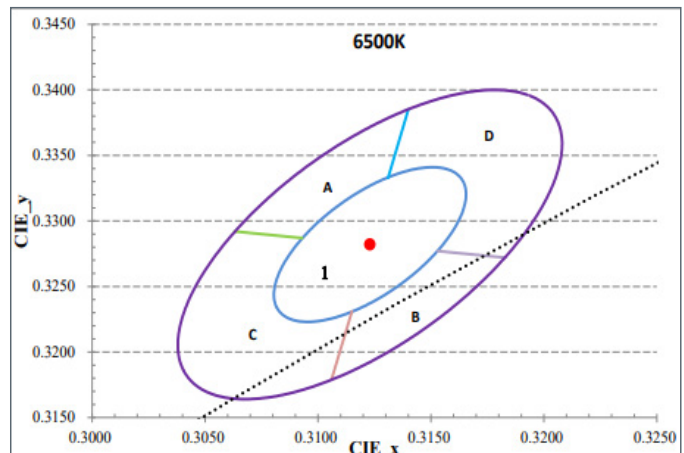
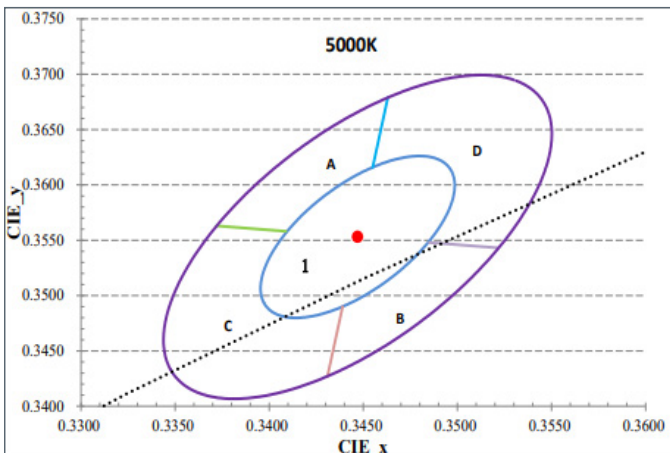
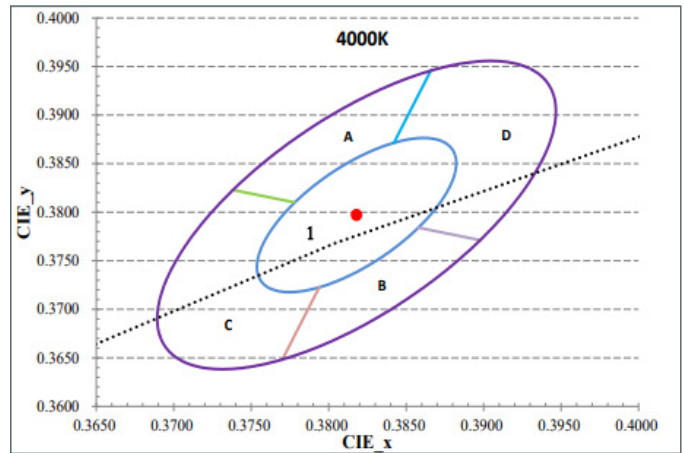
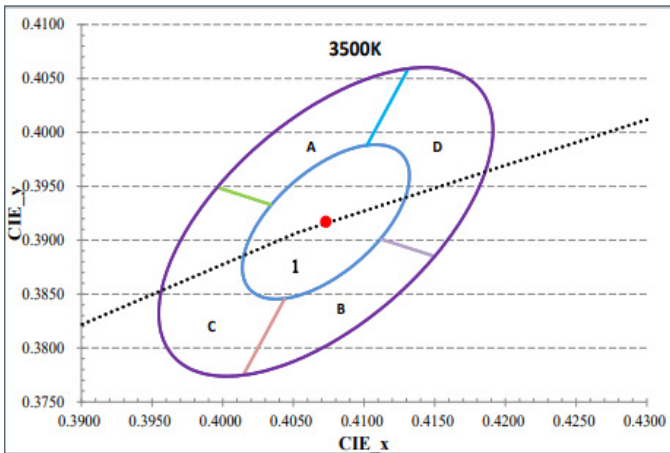
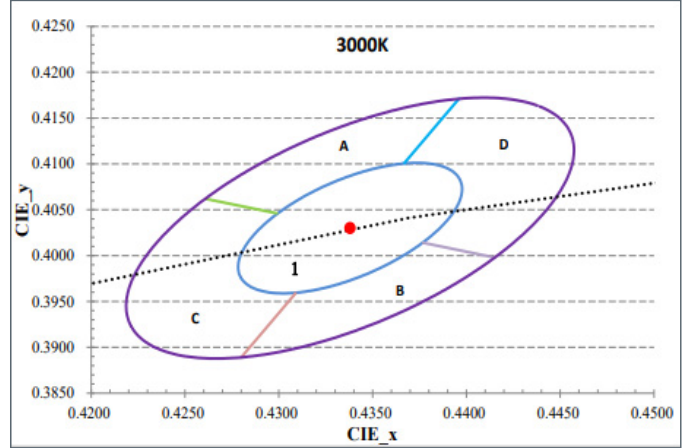
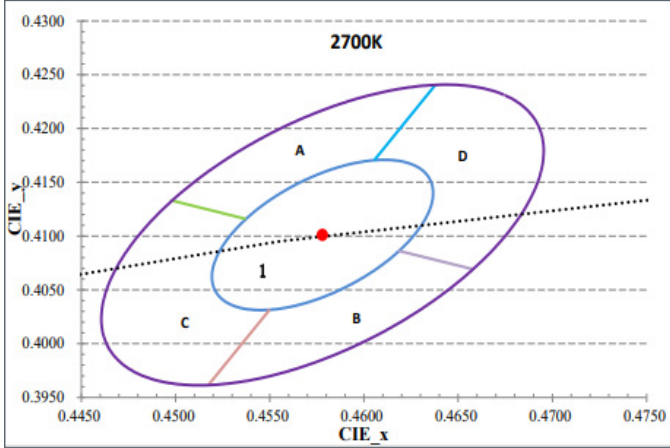
Design resources: Performance Calculator and CAD files available at LUXTECH.com

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COLOR BINNING INFORMATION



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If customization is required, contact sales: sales@LUXTECH.COM

Prototyping

- 3.5 week lead time for new design prototypes

Single Order

- MOQ: 250 pieces per SKU
- Typical lead time: 6-8 weeks

Blanket Order

- MOQ: 1,000 pieces per SKU
 - Minimum release size: 250 pieces
 - Quantity per SKU must be specified
- 2.5 week lead time for blanket releases
 - 6-8 week set up time for first release
 - 6 month term for first release
 - Shipment of balance at end of term

Expedite Services

- Dedicated expedite facility can turn jobs in as little as 1 week