



# LUXEON SunPlus Series for Horticulture

LEDs engineered to deliver the precise wavelengths of light needed to improve crop yield



The LUXEON SunPlus Series is purpose-built to enable ease of system design for Horticulture applications. The LUXEON SunPlus Series offers the only LEDs available today that are binned and tested based on Photosynthetic Photon Flux (PPF). The LUXEON SunPlus Series includes two different packages: LUXEON SunPlus 20 Line, which is 2.0mm x 2.0mm and LUXEON SunPlus 35 Line, which is 3.5mm x 3.5mm. The LUXEON SunPlus Series includes options for single driver solutions and multi-channel, color tunable solutions.

## FEATURES AND BENEFITS

- 150° angle for uniform light distribution for greenhouse applications
- Two package options 2.0mm x 2.0mm and 3.5mm x 3.5mm for design freedom

## PRIMARY APPLICATIONS

- Horticulture

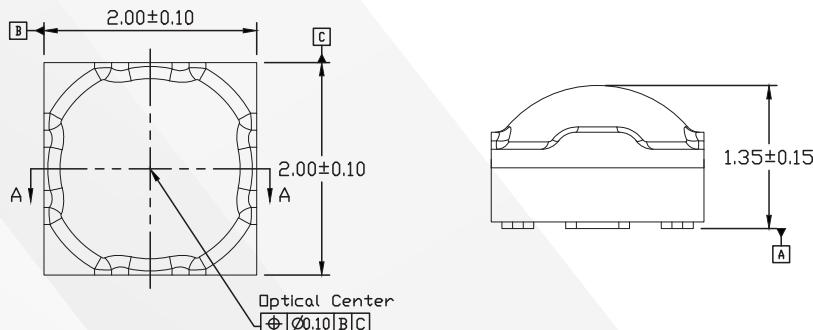
## LUXEON SunPlus Series product performance at test conditions.

PRODUCT	COLOR	PEAK WAVELENGTH (nm)		PPF (μmol/s) <sup>[1]</sup> in PAR (400 to 700nm) <sup>[2]</sup>		PPF/W TYPICAL (μmol/J)	PART NUMBER
		MINIMUM	MAXIMUM	MINIMUM	TYPICAL		
LUXEON SunPlus 20 Line	Far Red	720	750	1.10	1.37 <sup>[3]</sup>	2.26	L1SP-FRD0002000000
	Deep Red	655	670	1.60	1.81	2.65	L1SP-DRD0002000000
	Royal Blue	445	455	1.90	2.04	2.11	L1SP-RYL0002000000
	Lime	—	—	1.50	1.59	1.66	L1SP-LME0002000000
	Cool White	—	—	1.40	1.51	1.57	L1SP-CW90002000000
LUXEON SunPlus 35 Line	Purple (2.5% Blue) <sup>[4]</sup>	—	—	0.45	0.51	1.80	L1SP-PRP0003500000
	Purple (12.5% Blue) <sup>[5]</sup>	—	—	0.50	0.58	2.02	L1SP-PRP1003500000
	Purple (25% Blue) <sup>[6]</sup>	—	—	0.55	0.63	2.24	L1SP-PRP2003500000
	Royal Blue	440	455	0.55	0.61	2.00	L1SP-RYL0003500000
	Lime	—	—	0.60	0.65	2.13	L1SP-LME0003500000

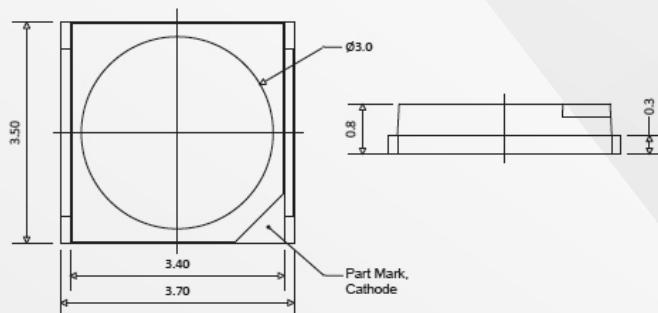
### Notes:

1. Lumileds maintains a tolerance of  $\pm 6.5\%$  on  $\mu\text{mol/s}$  for LUXEON SunPlus 20 Line and  $\pm 7.5\%$  on  $\mu\text{mol/s}$  measurements for LUXEON SunPlus 35 Line.
2. PAR is the photosynthetic active radiation from 400 to 700nm.
3. Far Red typical PPF is measured from 700 to 800nm.
4. PPF in blue spectrum (420–480nm) ranges from 0–5% of total PPF in PAR (400–700nm). Typical PPF in the blue spectrum is 2.5%.
5. PPF in blue spectrum (420–480nm) ranges from 10–15% of total PPF in PAR (400–700nm). Typical PPF in the blue spectrum is 12.5%.
6. PPF in blue spectrum (420–480nm) ranges from 20–30% of total PPF in PAR (400–700nm). Typical PPF in the blue spectrum is 25%.

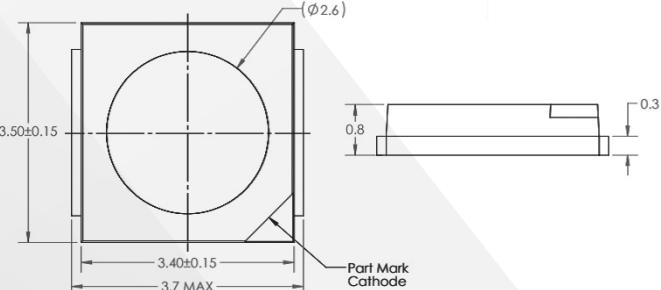
### Mechanical Dimensions.



LUXEON SunPlus 20 Line.



L1SP-PRPx03500000



L1SP-RYL0003500000 and L1SP-LME0003500000

### Notes:

1. Drawings are not to scale.
2. All dimensions are in millimeters.

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