



Cree Horticulture Starboards

Industry Leading High Powered LED Starboards

Data Sheet

Version 1.0

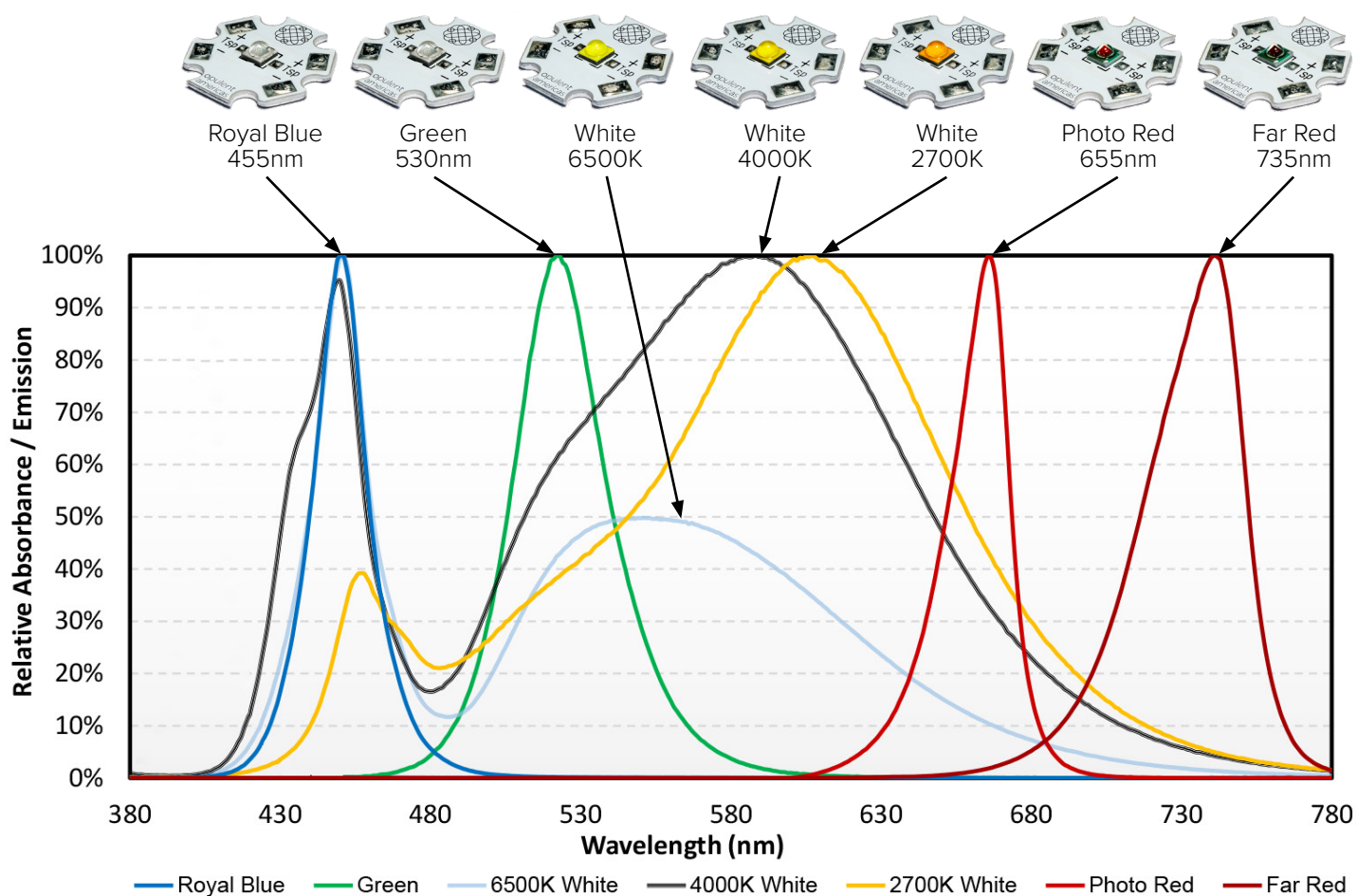
Lean & Fast

- Industry leading efficiency across the spectrum of high power color and white LEDs
- Horticulture LEDs specifically selected for the highest performance at a given color
- Light output and efficiency evaluated at elevated drive current and temperature
- Specific wavelengths targeted within the PAR range for optimized plant growth
- Create multiple spectral configurations quickly and easily

Made Smarter

Ideal for horticulture lighting applications, the Opulent Americas starboards, built with high power white and color LED technology, deliver high efficacy across the PAR range. Specifically selected from a portfolio of color options for various stages of plant growth, including white light to achieve a similar outcome to natural sunlight. The variety of color options and easy set-up allow for flexibility, quick adjustments to support different growth phases, rapid prototyping and sampling of the latest LEDs in an easy to use footprint.

Spectral Power Distribution



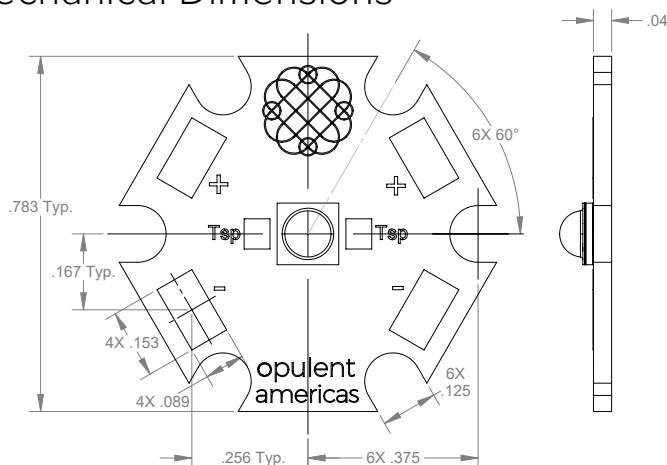
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Product Selection Guide

Color	Part Number	Description	Beam Angle	Dominant Wave length	Vf	Flux (mW)	uMol/s	uMol/J	uMol/s	uMol/J
					@ 350mA, Tj 25C				@700mA, Tj 85C	
 Royal Blue 455nm	XPGDRY-L1-0000-00601-SB01	Starboard, Cree Xlamp XP-G3, Royal Blue	130°	455nm	2.82	730	2.75	2.78	4.84	2.42
	XQEROY-00-0000-000000Q01-SB01	Starboard, Cree Xlamp XQ-E, Royal Blue	130°	455nm	3.10	588	2.21	2.04	3.62	1.68
 Green 530nm	XPEBGR-L1-0000-00F03-SB01	Starboard, Cree Xlamp XPE-E2, Green	135°	530nm	3.20	126	1.06	0.95	1.47	0.64
 White 2700K to 6500K	XPGDWT-H1-0000-00H8E-SB01	Starboard, Cree Xlamp XP-G3, 2700K / 80CRI	125°	na	2.81	500	2.47	2.42	4.10	2.07
	XPGDWT-B1-0000-00L5E-SB01	Starboard, Cree Xlamp XP-G3, 4000K / 70CRI	125°	na	2.81	545	2.57	2.52	4.27	2.16
	XPGDWT-01-0000-00LE1-SB01	Starboard, Cree Xlamp XP-G3, 6500K / 70CRI	125°	na	2.81	595	2.69	2.64	4.47	2.26
 Photo Red 665nm	XPEEPR-L1-0000-00C01-SB01	Starboard, Cree Xlamp XPE-E HE, Photo Red	130°	665nm	2.10	437	2.40	3.27	4.16	2.67
	XQEEPR-00-0000-000000A01-SB01	Starboard, Cree Xlamp XQ-E, Photo Red	130°	665nm	2.10	375	2.06	2.81	3.42	2.10
 Far Red 735nm	XPEFAR-L1-0000-00601-SB01	Starboard, Cree Xlamp XPE-E, Far Red	130°	735nm	1.90	230	1.30	1.96	2.27	1.59

All values shown above are typical.
Do not look into the light emitting from these LEDs as it is harmful to the human eye.
Eye injury may result. Use skin and eye protection as necessary.

Mechanical Dimensions



About Opulent Americas

Opulent Americas, part of Singapore based Opulent Group, is a fully integrated, global manufacturer for the lighting, automotive and medical industries. Through 30 years of manufacturing experience and state-of-the-art facilities, the company offers leading solid state lighting components and modules. The NC-based office provides quick engineering & sales support with an R&D lab to provide prototype development and custom solutions. See Opulent-Americas.com for more information.

