


CULTIVAIRE™ LED HORTICULTURAL LIGHT

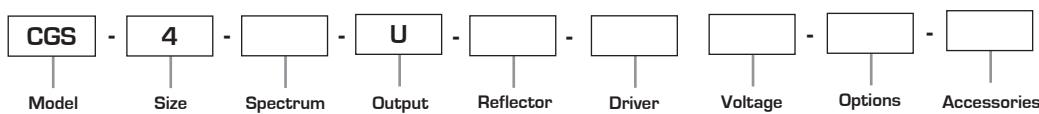


HUBBELL
Industrial Lighting

CAT.#	APPROVALS
JOB	TYPE
<p>SPECIFICATIONS</p> <p>Applications -</p> <ul style="list-style-type: none"> Indoor grow house Greenhouse <p>Construction:</p> <ul style="list-style-type: none"> Code gauge steel construction for durability to withstand shipping and raising/lowering of fixtures during the growth cycle End caps include hemmed edges for ease of handling Fixture provides easy access to electrical components via removal of channel cover Tool-less access with one quarter-turn fastener Oversized access plate conveniently mounted on back of channel for easy access to wiring compartment <p>Electrical / Optics -</p> <ul style="list-style-type: none"> Optical design provides one-for-one replacement of a 600 Watt high pressure sodium/metal halide with substantial energy savings; see Comparison CGS to HPS table for additional details Available in narrow 84° or wide 100° distribution Easy center driver cover allows tool-less access to electrical components for modular replaceability Access cover in channel for easy wiring access Voltage options: 120V-277V <p>Watts -</p> <ul style="list-style-type: none"> 368 W <p>Amps -</p> <ul style="list-style-type: none"> 3.07 Amps @ 120 VAC 1.33 Amps @ 277 VAC <p>LEDs -</p> <ul style="list-style-type: none"> Full spectrum white LED contains wavelengths from 400 nm to 800 nm Three spectra for vegetative, flowering and general growth: See Horticulture Spectrum Reference Guide <p>Performance -</p> <ul style="list-style-type: none"> Photosynthetic Photon Flux (PPF) output (est.) Vegetative fixture: 751 μmol/s General fixture: 730 μmol/s Flowering fixture: 703 μmol/s 	<div data-bbox="909 310 1266 430" style="text-align: center;"> </div>  <p>Thermal -</p> <ul style="list-style-type: none"> Up to 55°C ambient operation; see table provided for details <p>Listings -</p> <ul style="list-style-type: none"> Listed to UL 1598 standard for light fixtures Damp Location Standard <p>Warranty -</p> <ul style="list-style-type: none"> Five years from date of purchase <div data-bbox="1485 1123 1567 1186" style="text-align: right;"> </div>

ORDERING INFORMATION

ORDERING EXAMPLE: CGS4-FSFU-W-EDU



MODEL

CGS	Cultivaire Grow System
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SIZE

4	4'
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SPECTRUM

FSF	Full Spectrum Flowering
FSG	Full Spectrum General
FSV	Full Spectrum Vegetative

LUMEN OUTPUT

U	Ultra High
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REFLECTOR

N	Narrow Distribution
W	Wide Distribution

DRIVER

E	Fixed Output
ED	0-10V Dimming

VOLTAGE

U	120-277V
347	347V ³
480	480V ³

OPTIONS

C6TL15_	6' Cord and Twist-Lock™ Plug 15A
C6TL20_	6' Cord and Twist-Lock™ Plug 20A
C6P151	6' Cord and Straight Blade Plug 15A, 120V
SP	Side Panels Installed ¹
ELL14	Emergency Battery Pack, 1400 Lumens, 90 Min. ^{2,4}
F4C5	4-Conductor Cord
GLR	Fast Blow Fuse

ACCESSORIES

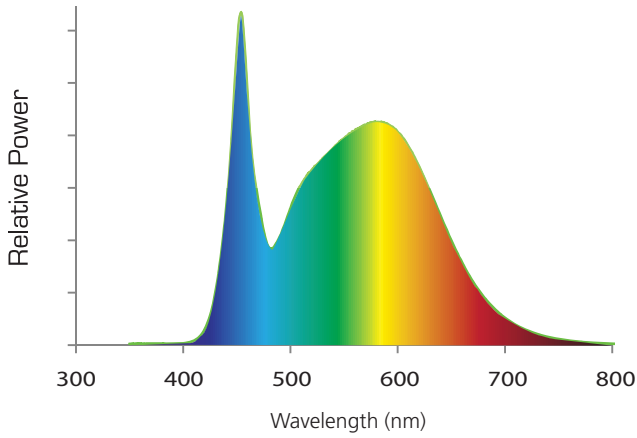
LHWTH	Wide Tong Hanger (pair) ⁵
LHWG4-6	Wireguard, White ⁶
LHVGM5	Aircraft Cable, 5' (Pair)
LHVGM10	Aircraft Cable, 10' (Pair)
LHVSP	Side Panels (Pair)

Notes:

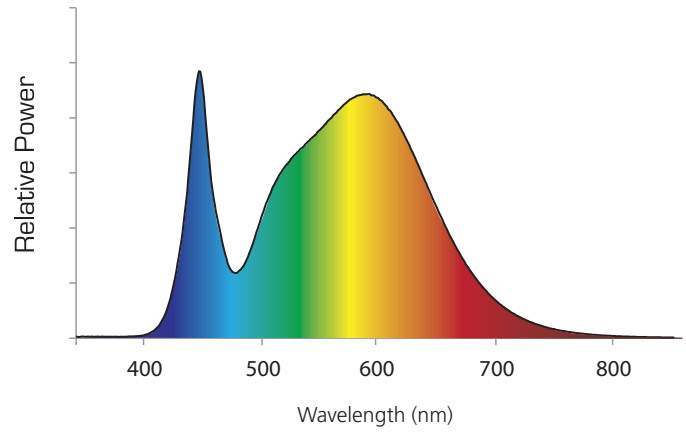
- ¹ Side panels only; does not include lens or wire guard options.
- ² ELL14 reduces maximum ambient operating temperature [see table].
- ³ for 347V or 480V, please consult factory
- ⁴ ELL14 not available with 347V or 480V
- ⁵ LHWTH not available with ELL14
- ⁶ Using a wire guard may cause shadowing

SPECTRAL DISTRIBUTION

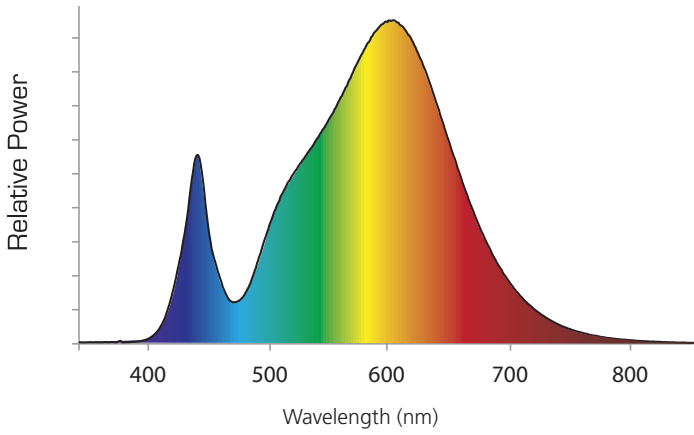
FULL-SPECTRUM VEGETATIVE (FSV) DISTRIBUTION



FULL-SPECTRUM GENERAL (FSG) DISTRIBUTION

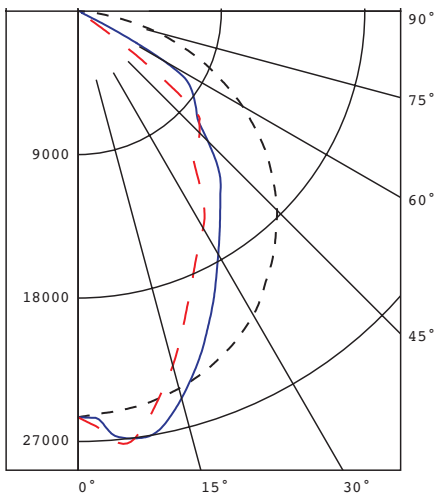


FULL-SPECTRUM FLOWERING (FSF) DISTRIBUTION

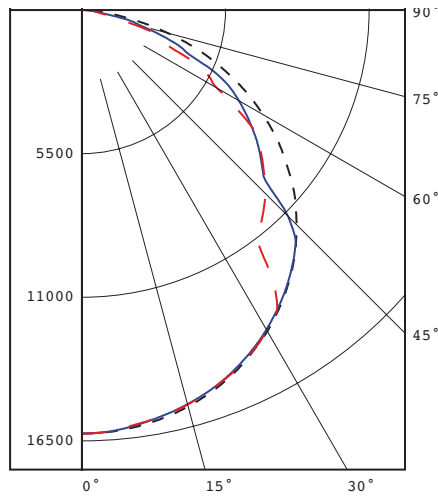


PHOTOMETRY: INDOOR CANDELA PLOTS

Narrow Distribution



Wide Distribution



LEGEND:
0-deg: - - - - -
45-deg: ————
90-deg: - . - . - .

COMPARISON: CGS TO HPS

Product	Fixture Watts	PPF ¹ Output(est.) (μmol/s)	Efficiency (μmol/s/W)	Distance to plant canopy	Avg. PPF ² (μmol/m ² /s)
CGS-4-FSV-U-W-EDU	368	751	2.04	1.2'	507
600W HPS	682	716	0.99	1.5'	510

Notes:

¹ PPF (Photosynthetic Photon Flux): Metric used to identify how much Photosynthetically Active Radiation is emitted from a source or fixture for plant growth

² PPF² (Photosynthetic Photon Flux Density): Measurement of Photosynthetically Active Radiation taken at a given point on a work surface for plant growth; in this case, taken at a 4'x4' surface

OPERATING TEMPERATURE BATTERY PACK/LENS	
NO LENS	
No ELL14	ELL14
-20° to 55°C	0° to 50°C

ELL14: Factory installed emergency battery pack, 1400 lumens

CGS PREDICTED LIFE			LUMEN MAINTENANCE		
CALCULATED HOURS	NOMINAL LUMENS	AMBIENT OPERATING TEMPERATURE	L90	L80	L70
			48,000	25°C	94,000
		55°C	45,000	135,000	219,000

DIMENSIONS

