

# VBBG LED Residential Grow Luminaires

## STANDARD



The VBBG series includes commercial-grade, premium-performance LED luminaires for horticultural settings. Provides a full spectrum of PAR (photosynthetically active radiation) for full-cycle cultivation. High-efficacy LEDs (PPF/J of 2.4) reduce energy costs compared to traditional grow luminaires. Long-life LEDs (Q90 of 38,000 hours) virtually eliminates expensive relamping. High-gloss, painted aluminum housings withstand demanding environments. A variety of mounting options simplify height adjustments. Dimming levels are controlled by three-way switch Hi/Lo/Off.



## FEATURES

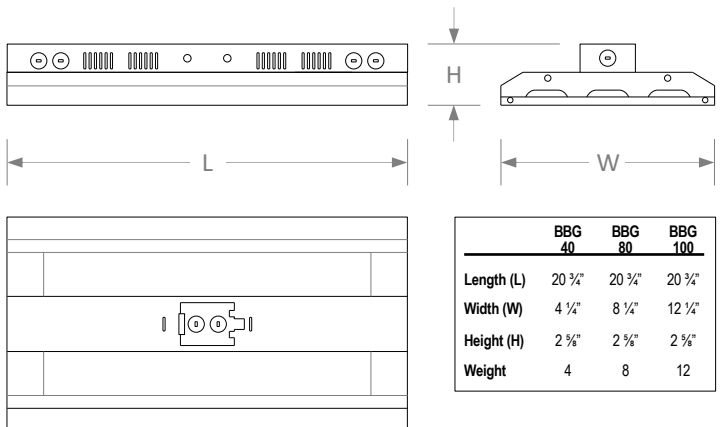
- Complete luminaire comes with the following standard equipment: Fully-functional LED luminaire, one set of V-hooks with hanging chains. Can be mounted with S-hooks.
- AC cordsets (factory-installed) with grounded NEMA 5-15P.
- Three position switch lets user pick High/Low intensities.
- Full spectrum distribution of PAR (photosynthetically active radiation) for full-cycle cultivation US Patent 10,785,921.\*
- Long-life LEDs provide 38,000 hours of operation with at least 90% (Q90) of initial PPF (photosynthetic photon flux).\*\*
- Delivers from 90 micromols (μmols) of PPF from a single luminaire to accommodate a variety of growing areas. For increased PPF levels, use multiple luminaires.\*
- Delivers photosynthetic photon efficacy (PPE) of 2.4.
- Universal 120-277 AC voltage (50-60Hz) is standard with 5-15P wall plug and 6' UL Listed power cord.
- 0-10vdc dimming drivers are standard.
- Power factor > 0.90.
- Total harmonic distortion < 20%.
- Painted aluminum housing.
- Standard mounting options include:
  - Chain mounting with V-hooks that attach to luminaire.
  - S-hooks and surface mount options available.

\* Contact factory for other color spectra and PPF packages.  
 \*\* L70 hours are IES TM-21-11 calculated hours.

## WARRANTY & LISTINGS

- US Patent No. 9,820,447, 10,785,921
- cULus listed for damp locations in ambient temperatures from -20°C to 35°C (-4°F to 95°F).
- Complies with RoHS (Restriction on Hazardous Substances) requirements
- Complies with FCC Part 15, class A.
- Complies with IEEE C.62.41-1991, input transient protection (5kV).
- 5-year warranty of all electronics and housing.

## DIMENSIONS



## ORDERING INFORMATION

Example: VBBG-040-FS-UNV-AC5M120

Series	Input Power (Joules)	Color Spectrum		Input Voltage	Cordsets <sup>3</sup> (Length = 5 Meters)		Accessories (Order Separately)	
		FS	Full Spectrum <sup>1</sup>		UNV	120-277V	AC5M120	120V (NEMA 5-15P)
VBBG	40 80 100						BBG40-CRLENS-4X20 BBG80-CRLENS-8X20 BBG100-CRLENS-12X20  BBG40-DIFLENS-4X20 BBG80-DIFLENS-8X20 BBG100-DIFLENS-12X20  BBG-CMK3 BBG-CMK5 GL-TETHER	Clear lens – 40J Clear lens – 80J Clear lens – 100J  Diffuse lens – 40J Diffuse lens – 80J Diffuse lens – 100J  Cable-mounting kit, 6' Cable-mounting kit, 8' of ratcheting hanging tethers

<sup>1</sup> See Spectral Power Distributions, page 3.  
<sup>2</sup> Cordsets are used only with UNV (120-277V) models – contact factory for other cordset options.

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## ELECTRICAL DATA

Model	Photosynthetic Photon Flux (PPF) ( $\mu\text{mol}/\text{second}$ )	Input Power (Joules <sup>1</sup> )	Photosynthetic Photon Efficiency (PPE)	Input Current (A) <sup>2</sup>			Power Factor	THD <sup>3</sup>	Q <sub>90</sub> <sup>4</sup>
				120V	240V	277V			
VBBG-40	90	40	2.4	0.43	0.24	0.23	> 90%	< 20%	38,000
VBBG-80	180	80	2.4	0.85	0.43	0.40	> 90%	< 20%	38,000
VBBG-100	270	100	2.4	1.2	0.55	0.48	> 90%	< 20%	38,000

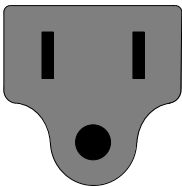
<sup>1</sup> Joules equal watts per second.

<sup>2</sup> All 50-60Hz.

<sup>3</sup> Total harmonic distortion.

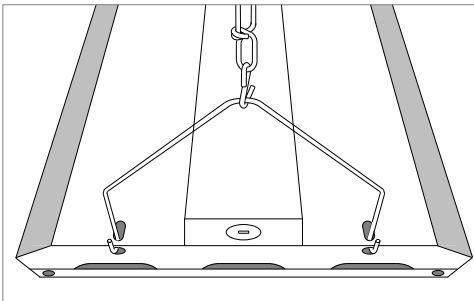
<sup>4</sup> Q<sub>90</sub> refers to the number of hours at which lumen output declines to 90% of the initial level. Q<sub>90</sub> hours are IES TM-21-11 calculated hours.

## AC PLUGS

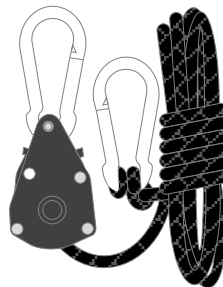


**NEMA 5-15P  
(120V)**

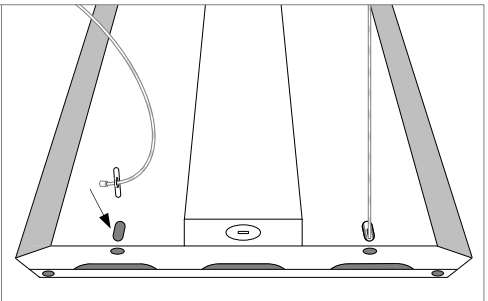
## HANGING OPTIONS



**V-Hooks & Chains  
(Standard)**



**Ratcheting Tethers  
GL-TETHER  
(Standard)**



**Cable-Mounting Kits  
GLLED-CMK3 (3 meters)  
GLLED-CMK5 (5 meters)  
(Optional)**