



Horticulture Lighting Benchmark Report

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Luminaire Description: Rectangular white metal housing with specular reflectors

Lamp: Four Lamps

Mounting: Pendant

Ballast/Driver: Fulham Workhouse WH7-120-L

Note: Data presented in this summary was tested in accordance with the appropriate standards in UL tests 11854719.03A and 11934065.01

Sample



TopGrow LED T5

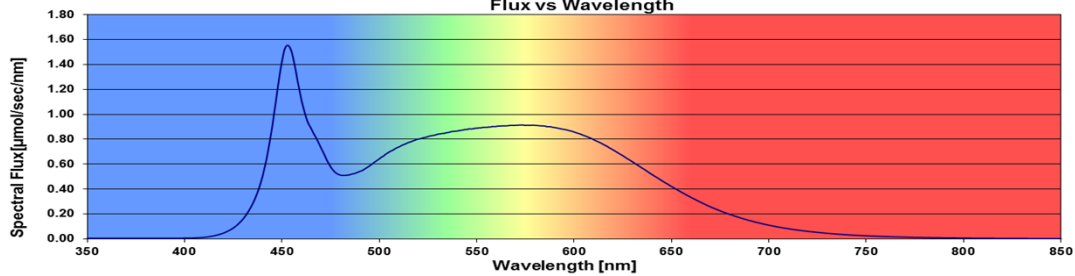
Stock Fluorescent T5 Vegetative Grow Lamp

Input Voltage:	120.1 VAC
Input Power:	102.4 W
Current:	0.9 A
PAR:	183.9 $\mu\text{mol}/\text{sec}$
PAR Efficacy:	1.8 $\mu\text{mol}/\text{sec}/\text{W}$
Blue Spectrum (400-500nm)	53.4 $\mu\text{mol}/\text{sec}$
Red Spectrum (600-700nm)	45.2 $\mu\text{mol}/\text{sec}$

Input Voltage:	120.0 VAC
Input Power:	215.6 W
Current:	1.9 A
PAR:	198.9 $\mu\text{mol}/\text{sec}$
PAR Efficacy:	0.9 $\mu\text{mol}/\text{sec}/\text{W}$
Blue Spectrum (400-500nm)	61.2 $\mu\text{mol}/\text{sec}$
Red Spectrum (600-700nm)	43.0 $\mu\text{mol}/\text{sec}$

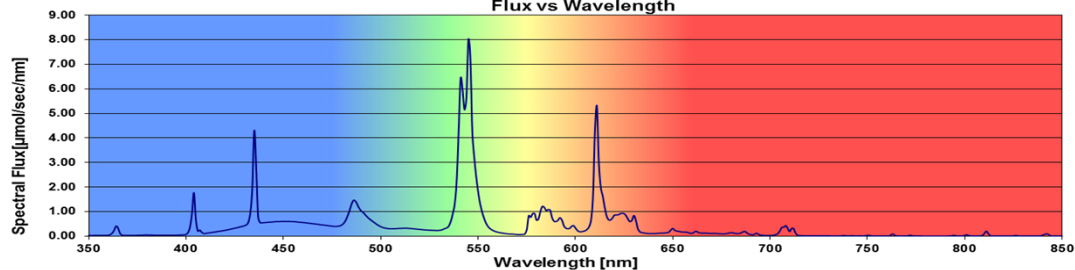
TopGrow LED T5

Flux vs Wavelength



Stock Fluorescent T5 Vegetative Grow Lamp

Flux vs Wavelength





Horticultural Lighting - Definition of Terms

PAR : Photosynthetically Active Radiation - Photosynthetically active radiation designates the spectral range (waveband) of radiation, from 400 to 700nm, which by definition photosynthetic organisms are able to use in the process of photosynthesis. The measure result of PAR can be reported as PPF or PPFD.

PAR Efficacy: The ratio of photosynthetic photon flux to electrical input power in watts expressed in $\mu\text{mol}/\text{sec}/\text{W}$.

PPF: Photosynthetic Photon Flux - Photosynthetic photon flux is the rate of flow of within the PAR waveband from a radiation source.