



The role of light in the growth and development of plants

Horticulture

Plant growth (photosynthesis) is not determined by lux or energy, but by the photons from the blue to red (400–700 nm) part of the spectrum. This is called growth light! For horticulture, natural daylight (global radiation) is in most cases measured in terms of energy (J or W) with a solar meter. This meter is generally positioned on top of the greenhouse. The value of global radiation is important for climate and humidity control in the greenhouse. Agrolite XT lamps are specially developed for maximum growth light and are among the most efficient light sources available for horticulture.

Benefits

- Control the light period by extending the natural day length with artificial light.
- Supplements daylight in greenhouses with "growth-light".
- Replaced daylight with artificial light for ultimate climate control (cultivation without daylight).

Features

- High lumen and growth light maintenance safeguards a constant crop quality and quantity over life.
- Ceramic discharge tube with PIA technology for long and reliable lifetime.
- Simple and robust construction for enhanced reliability and longer life.
- Available in 400 and 600 watt (230V, 347V, 480V) versions.

Application

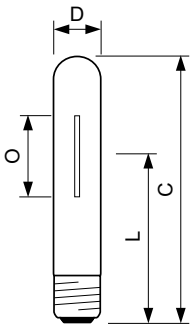
- Ideal for growing vegetables and flowers.

Versions



Agro/GreenPower, 250W/400W/600W

Dimensional drawing



Product	D (max)	D	O	L	C (max)	A
MASTER GreenPower Plus 600W EL Mogul	47 mm	1.81 in	120 mm	168 mm	283 mm	205 mm
MASTER GreenPower 600W 480V E40 1SL/12	47 mm	1.81 in	120 mm	168 mm	283 mm	205 mm
MASTER GreenPower CG T 600W Mogul 1SL/12	47 mm	1.75 in	102 mm	166 mm	275 mm	205 mm

Approval and Application	
Energy Efficiency Label (EEL)	A++
General Information	
Operating Position	Universal
Luminaire Design Requirements	
Bulb Temperature (Max)	400 °C
Light Technical	
Color Code	220
Mechanical and Housing	
Bulb Finish	Clear

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
427146	MASTER GreenPower Plus 600W EL Mogul	676 kWh	41.8 mg
156448	MASTER GreenPower 600W 480V E40 1SL/12	710 kWh	42 mg

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
404889	MASTER GreenPower CG T 600W Mogul 1SL/12	680 kWh	30.0 mg

Controls and Dimming

Order Code	Full Product Name	Dimmable	Order Code	Full Product Name	Dimmable
427146	MASTER GreenPower Plus 600W EL Mogul	No	404889	MASTER GreenPower CG T 600W Mogul 1SL/12	Yes
156448	MASTER GreenPower 600W 480V E40 1SL/12	Yes			

Operating and Electrical

Order Code	Full Product Name	Lamp Current		Power (Rated)			Power (Rated)	Re-Ignition Time
		(EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)	(Min)	(Nom)	(Min) (Max)
427146	MASTER GreenPower Plus 600W EL Mogul	-	244 V	210 V	228 V	615.0 W	600 W	5 min
156448	MASTER GreenPower 600W 480V E40 1SL/12	3.620 A	223 V	193 V	208 V	595.0 W	645.0 W	1 min
404889	MASTER GreenPower CG T 600W Mogul 1SL/12	6.3 A	145 V	115 V	130 V	618.0 W	618.0 W	1 min

General Information

Order Code	Full Product Name	Life To 10% Failures		Life To 20% Failures	Life To 50% Failures	Life To 5% Failures	System Description
		Cap-Base	(Nom)	(Nom)	(Nom)	(Nom)	
427146	MASTER GreenPower Plus 600W EL Mogul	E39	10000 h	-	18000 h	-	Electronic
156448	MASTER GreenPower 600W 480V E40 1SL/12	E40	-	16000 h	-	12000 h	System 480V
404889	MASTER GreenPower CG T 600W Mogul 1SL/12	E39	14000 h	20000 h	32000 h	9500 h	External Ignitor (E)

Light Technical (1/2)

Order Code	Full Product Name	Chromaticity	Chromaticity	Correlated Color	Color	Color	Luminous Efficacy	Design Mean
		Coordinate X	Coordinate Y		Rendering	Rendering		
		(Nom)	(Nom)	Temperature (Nom)	Index (Max)	Index (Nom)	(rated) (Nom)	Lumens
427146	MASTER GreenPower Plus 600W EL Mogul	533	416	2000 K	-	36	144 lm/W	82000 lm
156448	MASTER GreenPower 600W 480V E40 1SL/12	526	420	2040 K	-	33	142 lm/W	-
404889	MASTER GreenPower CG T 600W Mogul 1SL/12	533	432	2000 K	-	26	142.4 lm/W	80960 lm

Light Technical (2/2)

Order Code	Full Product Name	Luminous	Photosynthetic	PPF	PPF	PPF	PPF	PPF	PPF
		Flux (Rated)		Maintenance	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance
		(Nom)	Photon Flux (PPF)	10000 h	12000 h	2000 h	4000 h	5000 h	6000 h
427146	MASTER GreenPower Plus 600W EL Mogul	89250 lm	1190 µmol/s	93 %	-	98 %	97 %	-	-
156448	MASTER GreenPower 600W 480V E40 1SL/12	84500 lm	1200 µmol/s	94 %	92 %	99 %	98 %	-	96 %
404889	MASTER GreenPower CG T 600W Mogul 1SL/12	88000 lm	1100 µmol/s	91 %	89 %	97 %	-	93 %	-

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
427146	MASTER GreenPower Plus 600W EL Mogul	T40
156448	MASTER GreenPower 600W 480V E40 1SL/12	T14 /2
404889	MASTER GreenPower CG T 600W Mogul 1SL/12	T14 /2



