



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.

Horticulture

Versions

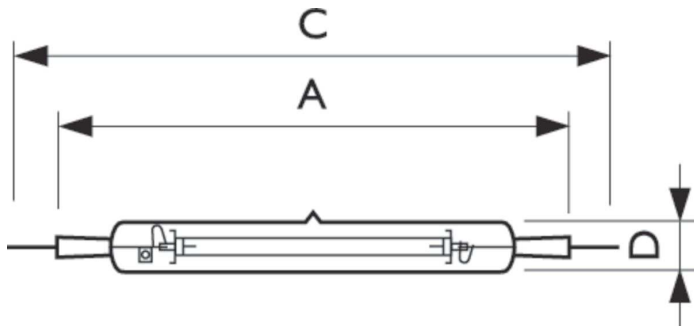
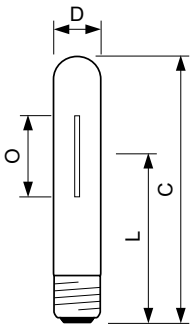


Agro/GreenPower, 250W/400W/600W



GreenPower, 1000W

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

Product	D (max)	O	C (max)	A
MASTER GreenPower Plus 1000W EL/5X6CT	33.5 mm	147 mm	394 mm	325 mm

Approval and Application	
Energy Efficiency Label (EEL)	A++
Light Technical	
Color Code	220
Mechanical and Housing	
Bulb Finish	Clear

Approval and Application

Horticulture

Order Code	Full Product Name	Energy Consumption	Mercury (Hg)
		kWh/1000 h	Content (Nom)
928152219207	MASTER GreenPower Plus 600W EL Mogul	676 kWh	41.8 mg
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	710 kWh	42 mg

Order Code	Full Product Name	Energy Consumption	Mercury (Hg)
		kWh/1000 h	Content (Nom)
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	680 kWh	30.0 mg
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	1116 kWh	42.0 mg

Controls and Dimming

Order Code	Full Product Name	Dimmable
928152219207	MASTER GreenPower Plus 600W EL Mogul	No
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	Yes

Order Code	Full Product Name	Dimmable
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	Yes
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	Yes

Operating and Electrical

Order Code	Full Product Name	Lamp Current		Power (Rated)			Re-Ignition Time	
		(EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)	(Min)	(Nom)	(Min) (Max)
928152219207	MASTER GreenPower Plus 600W EL Mogul	-	244 V	210 V	228 V	615.0 W	600 W	5 min
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	3.620 A	223 V	193 V	208 V	595.0 W	645.0 W	1 min
928197709207	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
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	-	270 V	230 V	250 V	1015.0 W	1000 W	5 min

General Information

Order Code	Full Product Name	Cap-Base	Life To 10%		Life To 20%		Life To 50%		Life To 5%		Operating	System
			Failures (Nom)	Failures (Nom)	Failures (Nom)	Failures (Nom)	Failures (Nom)	Failures (Nom)	Position	Description		
928152219207	MASTER GreenPower Plus 600W EL Mogul	E39	10000 h	-	18000 h	-	UNIVERSAL	Electronic				
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	E40	-	16000 h	-	12000 h	UNIVERSAL	System 480V				
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	E39	14000 h	20000 h	32000 h	9500 h	UNIVERSAL	External Ignitor				
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	K12X30S	10000 h	-	-	-	P	Electronic				

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928152219207	MASTER GreenPower Plus 600W EL Mogul	400 °C
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	400 °C
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	400 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	700 °C

Light Technical (1/2)

Horticulture

Order Code	Full Product Name	Chromaticity	Chromaticity	Correlated Color Temperature (Nom)	Color	Color	Luminous Efficacy (rated) (Nom)	Design Mean Lumens
		Coordinate X (Nom)	Coordinate Y (Nom)		Rendering Index (Max)	Rendering Index (Nom)		
928152219207	MASTER GreenPower Plus 600W EL Mogul	533	416	2000 K	-	36	144 lm/W	82000 lm
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	526	420	2040 K	-	33	142 lm/W	-
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	533	432	2000 K	-	26	142.4 lm/W	80960 lm
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	529	416	2000 K	-	38	141 lm/W	-

Light Technical (2/2)

Order Code	Full Product Name	Luminous	PPF	PPF	PPF	PPF	PPF	PPF	
		Flux (Rated) (Nom)	Photosynthetic Photon Flux (PPF)	Maintenance 10000 h	Maintenance 12000 h	Maintenance 2000 h	Maintenance 4000 h	Maintenance 5000 h	Maintenance 6000 h
928152219207	MASTER GreenPower Plus 600W EL Mogul	89250 lm	1190 µmol/s	93 %	-	98 %	97 %	-	-
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	84500 lm	1200 µmol/s	94 %	92 %	99 %	98 %	-	96 %
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	88000 lm	1100 µmol/s	91 %	89 %	97 %	-	93 %	-
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	143000 lm	2100 µmol/s	95 %	-	-	98 %	-	-

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
928152219207	MASTER GreenPower Plus 600W EL Mogul	T40
928161409227	MASTER GreenPower 600W 480V E40 1SL/12	T46
928197709207	MASTER GreenPower CG T 600W Mogul 1SL/12	T46
928196305116	MASTER GreenPower Plus 1000W EL/5X6CT	T40

