



Product Description

HORTI

High Pressure Sodium lamp with clear outer bulb, optimized growthlight output and maintenance

Benefits

- Optimized performance for horticultural applications
- High growthlight maintenance safeguards a constant crop quality and quantity over life

Features

- Clear tubular outer bulb
- Ceramic discharge tube with Philips Integrated Antenna (PIA) for a long and reliable lifetime
- Advanced getter ensures high growthlight maintenance and few early failures
- "GreenPower" concept with optimized micromol output (growth light)
- "Plus" concept with high efficacy translated into high light output
- "Agro" concept with optimized light spectrum

Application

- Horticultural applications, plant irradiation, assimilation lighting

Related products

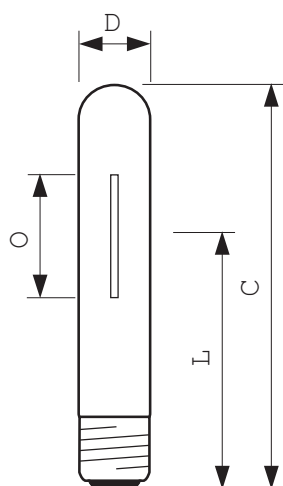


Agro/GreenPower, 250W/400W/600W



GreenPower, 1000W

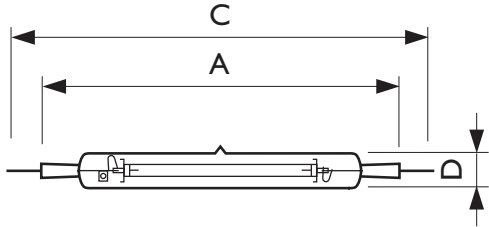
Dimensional drawing



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

Product	A (Min)	A (Norm)	A (Max)	C (Max)	D (Max)	L (Norm)	O (Norm)
SON Agro 400W E40	-	-	-	278	47	175	83
SON GreenPower Plus 600W EL E40	200	205	210	283	46	168	120
SON GreenPower Plus 600W EL E40	200	205	210	283	46	168	120
SON GreenPower CG T 400W E40	-	-	-	283	47	175	118.6
SON GreenPower CG T 400W E40	-	-	-	283	47	175	118.6
SON GreenPower CG T 400W E40	-	-	-	283	47	175	118.6
SON GreenPower CG T 600W E40	-	-	-	283	47	166	151
SON GreenPower CG T 600W E40	-	-	-	283	47	166	151
SON GreenPower CG T 600W E40	-	-	-	283	47	166	151
SON GreenPower 600W 400V E40	-	-	-	283	47	164	102
SON GreenPower 600W 400V E40	-	-	-	283	47	164	102
SON GreenPower 600W 400V E40	-	-	-	283	47	164	102
SON GreenPower 600W 480V E40	-	-	-	283	47	168	120
SON GreenPower 600W EL E40	-	-	-	283	47	168	120
SON GreenPower 600W EL E40	-	-	-	283	47	168	120
SON GreenPower 600W EL E40	-	-	-	283	47	168	120
SON GreenPower CG T 250W E40	-	-	-	257	47	158	94.2

Dimensional drawing



GreenPower, 1000W

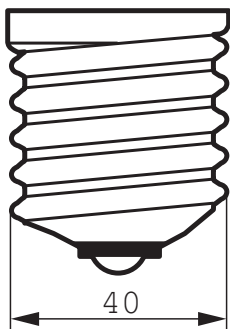
Product	A (Min)	A (Norm)	A (Max)	C (Max)	D (Max)	L (Norm)	O (Norm)
SON GreenPower 1000W EL 400V K-FIT	320	325	330	394	33.5	-	175
SON GreenPower 1000W EL 400V K-FIT	320	325	330	394	33.5	-	175
SON GreenPower Plus 1000W	320	325	330	394	33.5	-	175
SON GreenPower Plus 1000W	320	325	330	394	33.5	-	175

General Characteristics

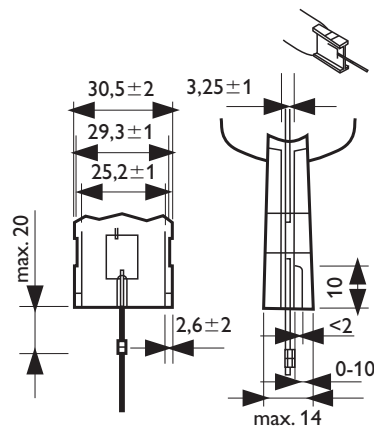
Order code	Full product name	Bulb	Bulb Finish	Cap-Base	Operating Position	System Description	Life to 10% failures	Life to 20% failures	Life to 5% failures	Life to 50% failures
928144609201	MASTER Agro 400W E40 1SL	T46	Clear	E40	any	External Ignitor	hr	9500 hr	5000 hr	18000 hr
928151219214	MASTER GreenPower Plus 600W EL E40 UNP	T40	Clear	E40	any	Electronic	10000 hr	hr	hr	-
928151219227	MASTER GreenPower Plus 600W EL E40 1SL	T40	Clear	E40	any	Electronic	10000 hr	hr	hr	-
928158709214	MASTER GreenPower CG T 400W E40	T46	Clear	E40	any	External Ignitor	hr	16000 hr	12500 hr	hr
928158709215	MASTER GreenPower CG T 400W E40 UNP	T46	Clear	E40	any	External Ignitor	hr	16000 hr	12500 hr	hr
928158709227	MASTER GreenPower CG T 400W E40 1SL	T46	Clear	E40	any	External Ignitor	hr	16000 hr	12500 hr	hr
928158809214	MASTER GreenPower CG T 600W E40	T46	Clear	E40	any	External Ignitor	hr	24000 hr	16000 hr	hr
928158809215	MASTER GreenPower CG T 600W E40 UNP	T46	Clear	E40	any	External Ignitor	hr	24000 hr	16000 hr	hr
928158809227	MASTER GreenPower CG T 600W E40 1SL	T46	Clear	E40	any	External Ignitor	hr	24000 hr	16000 hr	hr
928159209214	MASTER GreenPower 600W 400V E40	T46	Clear	E40	any	System 400V	hr	24000 hr	16000 hr	hr
928159209215	MASTER GreenPower 600W 400V E40 UNP	T46	Clear	E40	any	System 400V	hr	24000 hr	16000 hr	hr
928159209227	MASTER GreenPower 600W 400V E40 1SL	T46	Clear	E40	any	System 400V	hr	24000 hr	16000 hr	hr
928161409227	MASTER GreenPower 600W 480V E40 1SL	T46	Clear	E40	any	System 480V	hr	16000 hr	12000 hr	hr
928161809214	MASTER GreenPower 600W EL E40	T40	Clear	E40	any	Electronic	10000 hr	hr	hr	hr
928161809215	MASTER GreenPower 600W EL E40 UNP	T40	Clear	E40	any	Electronic	10000 hr	hr	hr	hr

Order code	Full product name	Bulb	Bulb Finish	Cap-Base	Operating Position	System Description	Life to 10% failures	Life to 20% failures	Life to 5% failures	Life to 50% failures
928161809227	MASTER GreenPower 600W EL E40 1SL	T40	Clear	E40	any	Electronic	10000 hr	hr	hr	hr
928197109227	MASTER GreenPower CG T 250W E40 1SL	T46	Clear	E40	any	System 230V	hr	26000 hr	16000 hr	32000 hr
928162105115	MASTER GreenPower 1000W EL K-FIT UNP	T40	Clear	K12x30s	p	Electronic	8000 hr	hr	hr	hr
928162105116	MASTER GreenPower 1000W 400V K-FIT	T40	Clear	K12x30s	p	Electronic	8000 hr	hr	hr	hr
928196305115	MASTER GreenPower Plus 1000W EL UNP	T40	Clear	K12x30s	p	Electronic	10000 hr	hr	hr	hr
928196305116	MASTER GreenPower Plus 1000W EL	T40	Clear	K12x30s	p	Electronic	10000 hr	hr	hr	hr

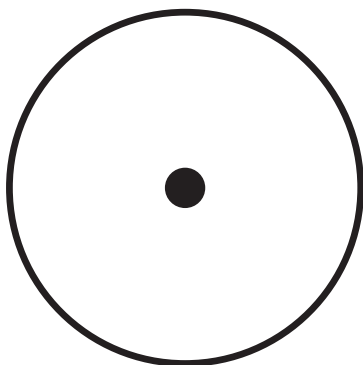
Installation diagrams



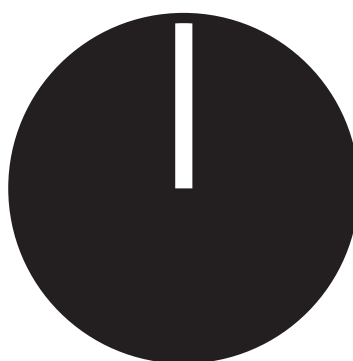
E40



K12x30s



any



p

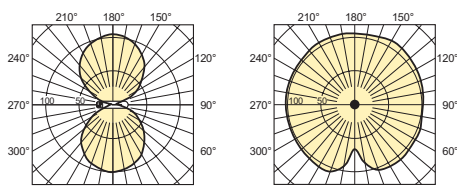
Light Technical Characteristics (1/2)

Order code	Full product name	Color Code	Chromaticity Coordinate X	Chromaticity Coordinate Y	Color Rendering Index	Color Temperature	Design Mean Lumens	Photosynthetic Photon Flux PPF	Lum Efficacy Rated EM 25°C	Luminous Flux EM 25°C, Rated	Luminous Flux EL 25°C, Rated
928144609201	MASTER Agro 400W E40 1SL	220	520 -	415 -	25 (max) Ra8	2100 K	Lm	665 umol/s	128.2 Lm/W	55000 Lm	Lm
928151219214	MASTER GreenPower Plus 600W EL E40 UNP	220	533 -	416 -	Ra8	1960 K	Lm	1190 umol/s	144 Lm/W	Lm	89250 Lm
928151219227	MASTER GreenPower Plus 600W EL E40 1SL	220	533 -	416 -	Ra8	1960 K	Lm	1190 umol/s	144 Lm/W	Lm	89250 Lm
928158709214	MASTER GreenPower CG T 400W E40	220	-	-	25 (max) Ra8	K	Lm	725 umol/s	136.7 Lm/W	58500 Lm	Lm
928158709215	MASTER GreenPower CG T 400W E40 UNP	220	-	-	25 (max) Ra8	K	Lm	725 umol/s	136.7 Lm/W	58500 Lm	Lm
928158709227	MASTER GreenPower CG T 400W E40 1SL	220	-	-	25 (max) Ra8	K	Lm	725 umol/s	136.7 Lm/W	58500 Lm	Lm
928158809214	MASTER GreenPower CG T 600W E40	220	533 -	432 -	26 Ra8	K	Lm	1100 umol/s	142.4 Lm/W	88000 Lm	Lm
928158809215	MASTER GreenPower CG T 600W E40 UNP	220	533 -	432 -	26 Ra8	K	Lm	1100 umol/s	142.4 Lm/W	88000 Lm	Lm
928158809227	MASTER GreenPower CG T 600W E40 1SL	220	533 -	432 -	26 Ra8	K	Lm	1100 umol/s	142.4 Lm/W	88000 Lm	Lm
928159209214	MASTER GreenPower 600W 400V E40	220	526 -	420 -	26 Ra8	2040 K	Lm	1120 umol/s	144 Lm/W	87500 Lm	Lm
928159209215	MASTER GreenPower 600W 400V E40 UNP	220	526 -	420 -	26 Ra8	2040 K	Lm	1120 umol/s	144 Lm/W	87500 Lm	Lm
928159209227	MASTER GreenPower 600W 400V E40 1SL	220	526 -	420 -	26 Ra8	2040 K	Lm	1120 umol/s	144 Lm/W	87500 Lm	Lm
928161409227	MASTER GreenPower 600W 480V E40 1SL	220	526 -	420 -	33 Ra8	2040 K	Lm	1200 umol/s	142 Lm/W	84500 Lm	Lm
928161809214	MASTER GreenPower 600W EL E40	220	533 -	416 -	Ra8	1960 K	Lm	1150 umol/s	Lm/W	Lm	85850 Lm
928161809215	MASTER GreenPower 600W EL E40 UNP	220	533 -	416 -	Ra8	1960 K	Lm	1150 umol/s	Lm/W	Lm	85850 Lm
928161809227	MASTER GreenPower 600W EL E40 1SL	220	533 -	416 -	Ra8	1960 K	Lm	1150 umol/s	Lm/W	Lm	85850 Lm
928197109227	MASTER GreenPower CG T 250W E40 1SL	220	-	-	20 Ra8	2000 K	Lm	422 umol/s	124.7 Lm/W	33300 Lm	Lm
928162105115	MASTER GreenPower 1000W EL K-FIT UNP	-	529 -	416 -	Ra8	1975 K	Lm	umol/s	Lm/W	Lm	135000 Lm
928162105116	MASTER GreenPower 1000W 400V K-FIT	-	529 -	416 -	Ra8	1975 K	Lm	umol/s	Lm/W	Lm	135000 Lm
928196305115	MASTER GreenPower Plus 1000W EL UNP	220	529 -	416 -	Ra8	1975 K	Lm	2100 umol/s	Lm/W	Lm	135000 Lm
928196305116	MASTER GreenPower Plus 1000W EL	220	529 -	416 -	Ra8	1975 K	Lm	2100 umol/s	Lm/W	Lm	135000 Lm

Light Technical Characteristics (2/2)

Order code	Full product name	Lum Efficacy Rated EL 25°C	PPF maintenance 2000h	PPF maintenance 4000h	PPF maintenance 6000h	PPF maintenance 5000h	PPF maintenance 10000h	PPF maintenance 15000h	PPF maintenance 12000h	PPF maintenance 16000h
928144609201	MASTER Agro 400W E40 1SL	Lm/W	100 %	%	%	96 %	89 %	83 %	%	%
928151219214	MASTER GreenPower Plus 600W EL E40 UNP	144 Lm/W	98 %	97 %	%	%	93 %	%	%	%
928151219227	MASTER GreenPower Plus 600W EL E40 1SL	144 Lm/W	98 %	97 %	%	%	93 %	%	%	%
928158709214	MASTER GreenPower CG T 400W E40	Lm/W	100 %	100 %	100 %	100 %	%	%	97 %	%
928158709215	MASTER GreenPower CG T 400W E40 UNP	Lm/W	100 %	100 %	100 %	100 %	%	%	97 %	%
928158709227	MASTER GreenPower CG T 400W E40 1SL	Lm/W	100 %	100 %	100 %	100 %	%	%	97 %	%
928158809214	MASTER GreenPower CG T 600W E40	Lm/W	100 %	%	%	98 %	97 %	%	97 %	%
928158809215	MASTER GreenPower CG T 600W E40 UNP	Lm/W	100 %	%	%	98 %	97 %	%	97 %	%
928158809227	MASTER GreenPower CG T 600W E40 1SL	Lm/W	100 %	%	%	98 %	97 %	%	97 %	%
928159209214	MASTER GreenPower 600W 400V E40	Lm/W	100 %	100 %	97 %	%	94 %	%	92 %	%
928159209215	MASTER GreenPower 600W 400V E40 UNP	Lm/W	100 %	100 %	97 %	%	94 %	%	92 %	%
928159209227	MASTER GreenPower 600W 400V E40 1SL	Lm/W	100 %	100 %	97 %	%	94 %	%	92 %	%
928161409227	MASTER GreenPower 600W 480V E40 1SL	Lm/W	99 %	98 %	96 %	%	94 %	%	92 %	%
928161809214	MASTER GreenPower 600W EL E40	139 Lm/W	98 %	97 %	%	%	93 %	%	%	%
928161809215	MASTER GreenPower 600W EL E40 UNP	139 Lm/W	98 %	97 %	%	%	93 %	%	%	%
928161809227	MASTER GreenPower 600W EL E40 1SL	139 Lm/W	98 %	97 %	%	%	93 %	%	%	%
928197109227	MASTER GreenPower CG T 250W E40 1SL	Lm/W	%	%	%	%	%	%	%	%
928162105115	MASTER GreenPower 1000W EL K-FIT UNP	135 Lm/W	%	%	%	%	%	%	%	%
928162105116	MASTER GreenPower 1000W 400V K-FIT	135 Lm/W	%	%	%	%	%	%	%	%
928196305115	MASTER GreenPower Plus 1000W EL UNP	135 Lm/W	%	98 %	%	%	95 %	%	%	%
928196305116	MASTER GreenPower Plus 1000W EL	135 Lm/W	%	98 %	%	%	95 %	%	%	%

Light technical



MASTER GreenPower & Agro 250W - 600W

not used
for double ended
lamps

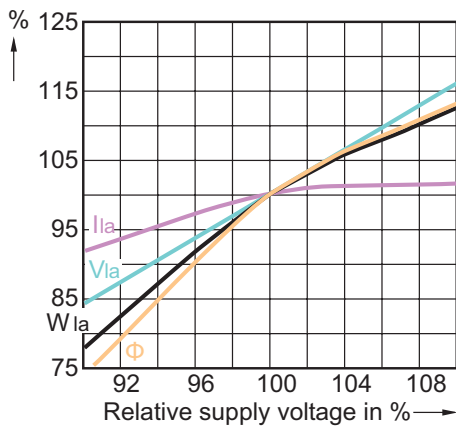
not used for double ended lamps

Electrical Characteristics

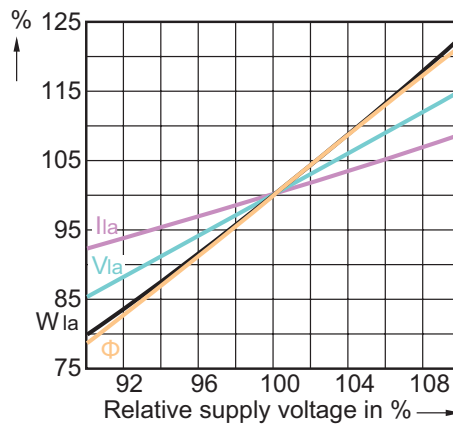
Order code	Full product name	Voltage	Lamp Wattage	Lamp Voltage	Lamp Current EM	Lamp Current EL	Dimmable	Lamp Wattage EM 25°C, Rated	Lamp Wattage EL 25°C, Rated	Lamp Wattage EL 25°C, Nominal	Lamp Wattage EM 25°C, Nominal
928144609201	MASTER Agro 400W E40 1SL	230 V	400 W	128 V	4.13 A	A	No	429 W	W	W	400 W
928151219214	MASTER GreenPower Plus 600W EL E40 UNP	400 V	600 W	228 V	A	2.7 A	No	W	615 W	600 W	W
928151219227	MASTER GreenPower Plus 600W EL E40 1SL	400 V	600 W	228 V	A	2.7 A	No	W	615 W	600 W	W
928158709214	MASTER GreenPower CG T 400W E40	230 V	400 W	126 V	4.230 A	A	Yes	428 W	W	W	400 W
928158709215	MASTER GreenPower CG T 400W E40 UNP	230 V	400 W	126 V	4.230 A	A	Yes	428 W	W	W	400 W
928158709227	MASTER GreenPower CG T 400W E40 1SL	230 V	400 W	126 V	4.230 A	A	Yes	428 W	W	W	400 W
928158809214	MASTER GreenPower CG T 600W E40	230 V	600 W	130 V	6.3 A	A	Yes	618 W	W	W	600 W
928158809215	MASTER GreenPower CG T 600W E40 UNP	230 V	600 W	130 V	6.3 A	A	Yes	618 W	W	W	600 W
928158809227	MASTER GreenPower CG T 600W E40 1SL	230 V	600 W	130 V	6.3 A	A	Yes	618 W	W	W	600 W
928159209214	MASTER GreenPower 600W 400V E40	400 V	600 W	191 V	3.620 A	A	Yes	608 W	W	W	W
928159209215	MASTER GreenPower 600W 400V E40 UNP	400 V	600 W	191 V	3.620 A	A	Yes	608 W	W	W	W
928159209227	MASTER GreenPower 600W 400V E40 1SL	400 V	600 W	191 V	3.620 A	A	Yes	608 W	W	W	W
928161409227	MASTER GreenPower 600W 480V E40 1SL	480 V	600 W	208 V	3.620 A	A	Yes	595 W	W	W	W
928161809214	MASTER GreenPower 600W EL E40	400 V	600 W	228 V	A	2.70 A	Yes	W	615 W	600 W	W
928161809215	MASTER GreenPower 600W EL E40 UNP	400 V	600 W	228 V	A	2.70 A	Yes	W	615 W	600 W	W
928161809227	MASTER GreenPower 600W EL E40 1SL	400 V	600 W	228 V	A	2.70 A	Yes	W	615 W	600 W	W
928197109227	MASTER GreenPower CG T 250W E40 1SL	230 V	250 W	114 V	3 A	A	Yes	267 W	W	W	W
928162105115	MASTER GreenPower 1000W EL K-FIT UNP	400 V	1000 W	250 V	A	4 A	Yes	W	1000 W	1000 W	W
928162105116	MASTER GreenPower 1000W 400V K-FIT	400 V	1000 W	250 V	A	4 A	Yes	W	1000 W	1000 W	W
928196305115	MASTER GreenPower Plus 1000W EL UNP	400 V	1000 W	250 V	A	4 A	Yes	W	1000 W	1000 W	W

Order code	Full product name	Voltage	Lamp Wattage	Lamp Voltage	Lamp Current EM	Lamp Current EL	Dimmable	Lamp Wattage EM 25°C, Rated	Lamp Wattage EL 25°C, Rated	Lamp Wattage EL 25°C, Nominal	Lamp Wattage EM 25°C, Nominal
928196305116	MASTER GreenPower Plus 1000W EL	400 V	1000 W	250 V	A	4 A	Yes	W	1000 W	1000 W	W

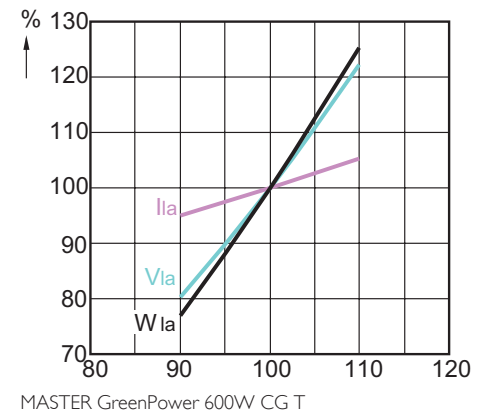
Performance diagrams



MASTER GreenPower 600W EL system



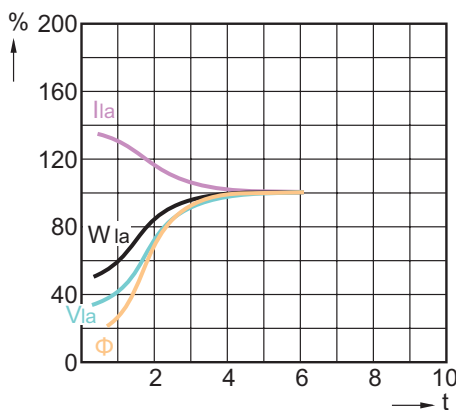
MASTER GreenPower 400W CG T



MASTER GreenPower 600W CG T

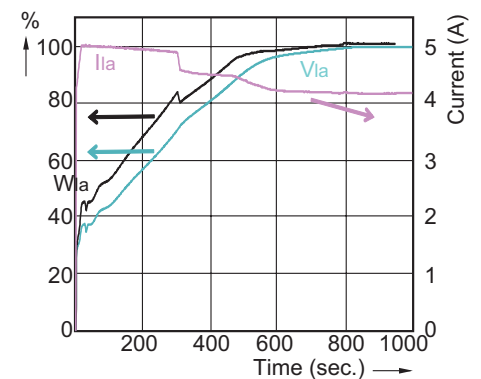
Not required
for
Electronic Gear

MASTER GreenPower Plus 1000W

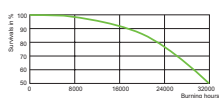
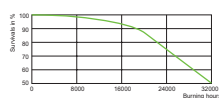
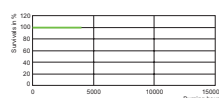


MASTER GreenPower 600W EL system

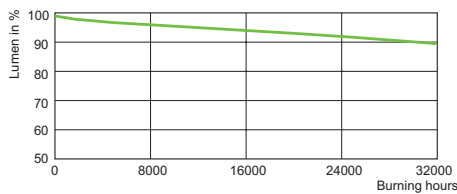
Dummy Visual
This product
should not be
published



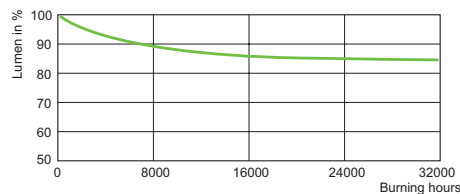
MASTER GreenPower Plus 1000W

MASTER GreenPower
250W, 400WMASTER GreenPower
600WMASTER GreenPower
1000W

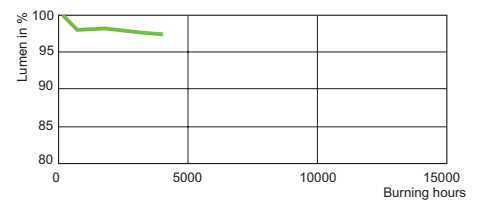
Performance diagrams



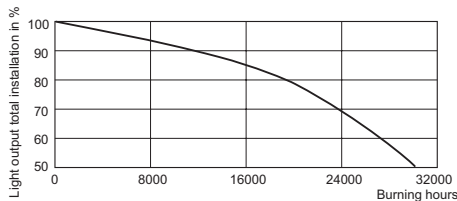
MASTER GreenPower 250W, 400W



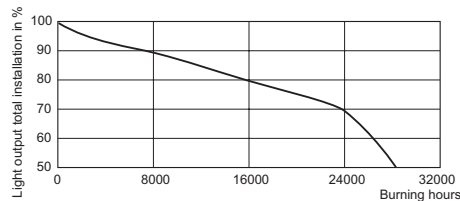
MASTER GreenPower 600W



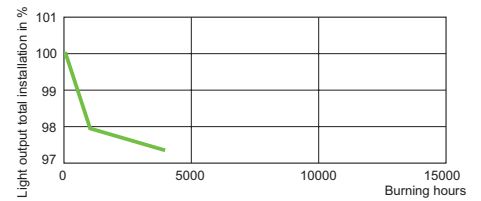
MASTER GreenPower 1000W



MASTER GreenPower 250W, 400W



MASTER GreenPower 600W



MASTER GreenPower 1000W

Environmental Characteristics

Order code	Full product name	Mercury (Hg) Content
928144609201	MASTER Agro 400W E40 1SL	22 mg
928151219214	MASTER GreenPower Plus 600W EL E40 UNP	41.8 mg
928151219227	MASTER GreenPower Plus 600W EL E40 1SL	41.8 mg
928158709214	MASTER GreenPower CG T 400W E40	20 mg
928158709215	MASTER GreenPower CG T 400W E40 UNP	20 mg
928158709227	MASTER GreenPower CG T 400W E40 1SL	20 mg
928158809214	MASTER GreenPower CG T 600W E40	30 mg
928158809215	MASTER GreenPower CG T 600W E40 UNP	30 mg
928158809227	MASTER GreenPower CG T 600W E40 1SL	30 mg
928159209214	MASTER GreenPower 600W 400V E40	42 mg
928159209215	MASTER GreenPower 600W 400V E40 UNP	42 mg
928159209227	MASTER GreenPower 600W 400V E40 1SL	42 mg
928161409227	MASTER GreenPower 600W 480V E40 1SL	42 mg
928161809214	MASTER GreenPower 600W EL E40	42 mg
928161809215	MASTER GreenPower 600W EL E40 UNP	42 mg
928161809227	MASTER GreenPower 600W EL E40 1SL	42 mg
928197109227	MASTER GreenPower CG T 250W E40 1SL	15 mg
928162105115	MASTER GreenPower 1000W EL K-FIT UNP	42 mg
928162105116	MASTER GreenPower 1000W 400V K-FIT	42 mg
928196305115	MASTER GreenPower Plus 1000W EL UNP	42 mg
928196305116	MASTER GreenPower Plus 1000W EL	42 mg

Order code	Full product name	Cap-Base Temperature	Bulb Temperature
928158709215	MASTER GreenPower CG T 400W E40 UNP	250 (max) C	450 (max) C
928158709227	MASTER GreenPower CG T 400W E40 1SL	250 (max) C	450 (max) C
928158809214	MASTER GreenPower CG T 600W E40	250 (max) C	450 (max) C
928158809215	MASTER GreenPower CG T 600W E40 UNP	250 (max) C	450 (max) C
928158809227	MASTER GreenPower CG T 600W E40 1SL	250 (max) C	450 (max) C
928159209214	MASTER GreenPower 600W 400V E40	250 (max) C	450 (max) C
928159209215	MASTER GreenPower 600W 400V E40 UNP	250 (max) C	450 (max) C
928159209227	MASTER GreenPower 600W 400V E40 1SL	250 (max) C	450 (max) C
928161409227	MASTER GreenPower 600W 480V E40 1SL	250 (max) C	450 (max) C
928161809214	MASTER GreenPower 600W EL E40	250 (max) C	450 (max) C
928161809215	MASTER GreenPower 600W EL E40 UNP	250 (max) C	450 (max) C
928161809227	MASTER GreenPower 600W EL E40 1SL	250 (max) C	450 (max) C
928197109227	MASTER GreenPower CG T 250W E40 1SL	250 (max) C	450 (max) C
928162105115	MASTER GreenPower 1000W EL K-FIT UNP	C	700 (max) C
928162105116	MASTER GreenPower 1000W 400V K-FIT	C	700 (max) C
928196305115	MASTER GreenPower Plus 1000W EL UNP	C	700 (max) C
928196305116	MASTER GreenPower Plus 1000W EL	C	700 (max) C

Luminaire Design Requirements

Order code	Full product name	Cap-Base Temperature	Bulb Temperature
928144609201	MASTER Agro 400W E40 1SL	250 (max) C	450 (max) C
928151219214	MASTER GreenPower Plus 600W EL E40 UNP	250 (max) C	450 (max) C
928151219227	MASTER GreenPower Plus 600W EL E40 1SL	250 (max) C	450 (max) C
928158709214	MASTER GreenPower CG T 400W E40	250 (max) C	450 (max) C



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