



## The complete solution for your horticulture projects

The complete solution for your horticulture projects. Following the invention of the world's first light sources for plant growth in 1962, Sylvania have maintained a passion for excellence and are now introducing the Gro-Lux® LED Top Lighting luminaire.

Used as an alternative to sodium lamps or as an additional top lighting solution, the Gro-Lux® LED luminaire offers a high efficacy

system and full flexibility with modules that can be easily attached to the fixture or used on their own.

Gro-Lux® LED helps optimise vegetative growth and flowering, making it the ideal solution for top lighting, indoor farming, photoperiodic and consumer installations.



## Gro-Lux® Modular System

Plant growers need flexibility from their horticulture lighting systems to meet plant growth needs and to maximise yields.

For any type of installation, from small greenhouse facilities to large scale installations or for indoor farming projects, the modularity of the Gro-Lux® LED solution will cover your needs at the right cost.

The Gro-Lux® LED modules can be used on their own, or fixed to the Gro-Lux® LED frames for a maximum output on top lighting installations.

## Product information

Code	Description	Voltage (V)	Module Wattage (W)	Power Factor (λ)	Frequency (Hz)	Output Current (mA)	Beam Angle (°)	Phytosynthetic Flux (plm)	Photosynthetic Photon Flux - PPF (μmol/s)	Photosynthetic Efficacy (μmol/J)	Ingress Protection Rating	Average Life (hrs) At Ta 25°C	Packing Qty
<b>Gro-Lux® LED Linear</b>													
0020913	Gro-Lux® LED Linear Vegetative R85%	42	59	1.0	DC	1400	120	34,000	180	3.06	IP66	30,000	1
0020914	Gro-Lux® LED Linear Universal	47	66	1.0	DC	1400	120	27,000	150	2.51	IP66	30,000	1
0020915	Gro-Lux® LED Linear Vegetative R85%	42	59	1.0	DC	1400	120	34,000	180	3.06	IP66	30,000	3
0020916	Gro-Lux® LED Linear Universal	47	66	1.0	DC	1400	120	27,000	150	2.51	IP66	30,000	3

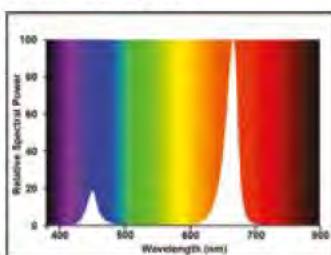
Code	Description
<b>Gro-Lux® LED Frames</b>	
0020909	Gro-Lux® 4x
0020910	Gro-Lux® 6x

### Comments

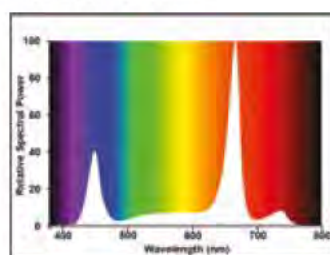
Vegetative spectrum Narrow spectrum Red/Blue (85%/15%). Optimised for maximum efficacy vegetative growth, only for supplementary lighting with natural sunlight.  
 Universal spectrum Wide Spectrum Red/Blue/White/Far Red. A Universal light source for all stages of plant growth, optimised for applications without natural sunlight.

## Spectral Data

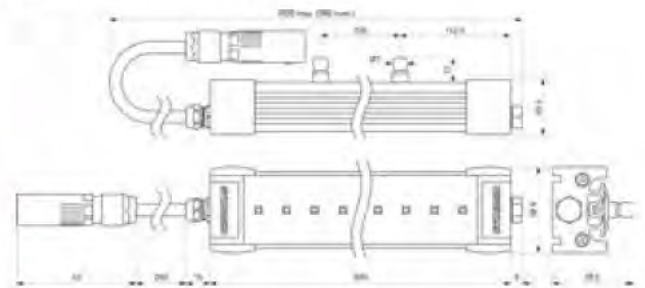
Gro-Lux® LED Vegetative



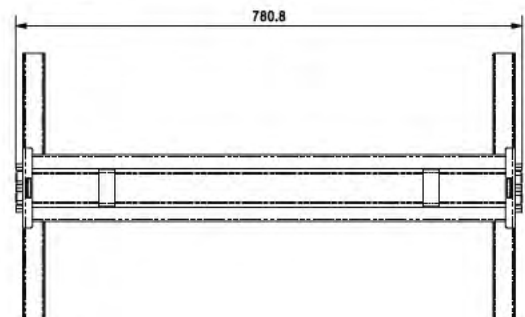
Gro-Lux® LED Universal



## Dimensions (mm)



## Additional Images



Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Current details should therefore be checked with Fello Sylvania Europe Limited. Copyright Fello Sylvania Europe Limited February 2018

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## Gro-Lux® LED E27

The original plant growth lamp



Following Sylvania's invention of the world's first light sources for plant growth in 1962, we have maintained a passion for excellence. Our **Gro-Lux®** lamps have achieved among the highest sustained photosynthetic efficacies in the world, and that same technical leadership has now been applied to our **Gro-Lux® LED** lamps.

by **FEILO SYLVANIA**

## Gro-Lux® LED

### Flowering and vegetative lamps

#### IMPORTANCE OF LIGHT

Light is the energy that is needed by plants to produce food and other nutrients required for growth and flowering. Plants are unique in that they are the only organisms that can convert light into food. The process is called photosynthesis.

#### GRO-LUX® IS A PLANT GROWTH LAMP

A plant growth lamp is a lamp that produces the proper balance of blue and red energy needed for plant growth, and has its major output in these two regions. It is designed to provide this energy for plants, and for no other purpose.

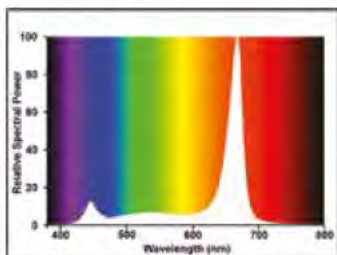
#### MAIN FEATURES

- E27 base / 120-240V
- IP44 rated
- 17W for both spectrum
- Photosynthetic efficacy up to 2.3 $\mu\text{mol/J}$
- 25,000hrs L<sub>70</sub>B<sub>50</sub> flux maintenance

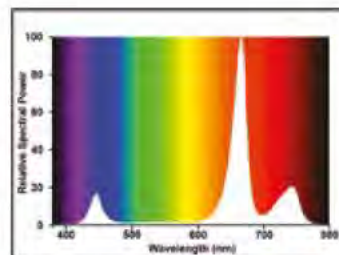


Item number	Description	Spectrum	Lamp Wattage (W)	Voltage (V)	Frequency (Hz)	Beam Angle (°)	Photosynthetic Photon Flux - PPF ( $\mu\text{mol/s}$ )	Photosynthetic Efficacy ( $\mu\text{mol/J}$ )	Photosynthetic Photon Flux Density - PPFD at 1m ( $\mu\text{mol/s/m}^2$ )	Lifetime at Ta 25°C (hrs)
0020965	Gro-Lux® LED E27 Vegetative	White and Deep Red	17	120-240	50-60	115	39	2.3	13	25,000 L <sub>70</sub> B <sub>50</sub>
0020966	Gro-Lux® LED E27 Flowering	White, Blue, Deep Red and Far Red	17	120-240	50-60	115	31	1.8	10	25,000 L <sub>70</sub> B <sub>50</sub>

#### Spectral Data



Gro-Lux® LED Vegetative



Gro-Lux® LED Flowering

#### Dimensions (mm)



## Grolux LED E27

### GROLUX LED E27 VEGETATIVE

#### 0020965



#### Product features

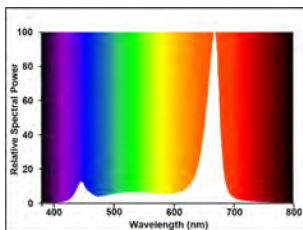
- Gro-Lux® LED grow lamps for photoperiodic applications • E27 base • 17W/120-240V • IP44 rated • Two main spectrum and high PPF efficacy up to 2.3 mol/J • Life time 25,000Hrs L70B50.



## PRODUCT OVERVIEW

Product code	0020965
Product name	GROLUX LED E27 VEGETATIVE
Technology	LED
Watt (Rated) (W)	17
Type	R125
Cap/Base	E27
Fixture rating	Open
General application	Logistics & Industry, Residential & Consumer,
Certifications	00
ETIM Class	EC001959
Luminous flux (lm)	1100
Colour temperature (K)	2400
Light colour	Grolux
CRI (Ra)	60
Beam Angle (°)	115
Wattage (W)	17
Product Voltage (V)	230
Average life (Nominal) (h)	25000
IP rating	IP44
Product EAN number	5410288209654

## PHOTOMETRY



## TECHNICAL DRAWINGS

Grolux LED E27  
*GROLUX LED E27 VEGETATIVE*  
0020965

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## Grolux LED E27

### GROLUX LED E27 FLOWERING

#### 0020966



#### Product features

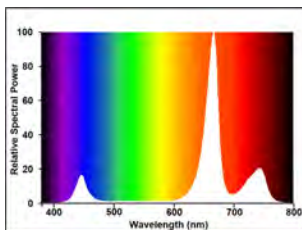
- Gro-Lux LED grow lamps for photoperiodic applications • E27 base • 17W/120-240V • IP44 rated • Two main spectrum and high PPF efficacy up to 2.3 mol/J.



## PRODUCT OVERVIEW

Product code	0020966
Product name	GROLUX LED E27 FLOWERING
Technology	LED
Watt (Rated) (W)	17
Type	R125
Cap/Base	E27
Fixture rating	Open
General application	Hospitality, Logistics & Industry, Residential & Consumer,
Certifications	00
ETIM Class	EC001959
Luminous flux (lm)	400
Light colour	Grolux
CRI (Ra)	3
Beam Angle (°)	115
Wattage (W)	17
Product Voltage (V)	230
Average life (Nominal) (h)	25000
IP rating	IP44
Product EAN number	5410288209661

## PHOTOMETRY



## TECHNICAL DRAWINGS

Grolux LED E27  
*GROLUX LED E27 FLOWERING*  
0020966

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## SHP-T GroLux

*SHP-TS 250W GROLUX E40 SLV*

0020819



### Product features

- Patented arc tube delivers the highest photosynthetic efficiency, - Performance maintained at an exceptional level due to improved structure of the outer bulb, - Optimised for the highest Phytolumens or PAR output, - GroLux light spectrum maximises red output essential for plant growth, - Industry leading lumen maintenance of 95% at the end of life, - For use as complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



### PRODUCT OVERVIEW

Product code	0020819
Product name	SHP-TS 250W GROLUX E40 SLV
Technology	HID
Watt (Rated) (W)	265
Lamp shape	Tubular
Type	SHP-TS
Cap/Base	E40

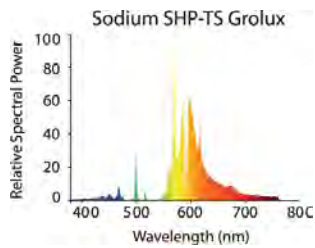
## SHP-T Grolux

*SHP-TS 250W GROLUX E40 SLV*

0020819

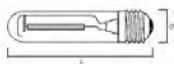
Lamp finish	Clear
Fixture rating	Open
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
E-number Finland	4844460
Luminous flux (lm)	34000
Efficacy (lm/w)	128
Colour temperature (K)	2050
Light colour	Grolux
Wattage (W)	265
Product Voltage (V)	115
Dimmable	Yes
Average life (Nominal) (h)	26000
Product EAN number	5410288208190

## PHOTOMETRY



## TECHNICAL DRAWINGS

SHP-TS GROLUX



SHP-TS GROLUX	250W	400W	600W
L	260	292	292
D	48	48	48

## SHP-T GroLux

*SHP-TS 400W GROLUX E40 SLV*

0020807



### Product features

- Patented arc tube delivers the highest photosynthetic efficiency, - Performance maintained at an exceptional level due to improved structure of the outer bulb, - Optimised for the highest Phytolumens or PAR output, - GroLux light spectrum maximises red output essential for plant growth, - Industry leading lumen maintenance of 95% at the end of life, - For use as complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



### PRODUCT OVERVIEW

Product code	0020807
Product name	SHP-TS 400W GROLUX E40 SLV
Technology	HID
Watt (Rated) (W)	425
Lamp shape	High Pressure Sodium
Type	SHP-TS
Cap/Base	E40

## SHP-T Grolux

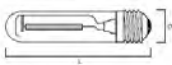
*SHP-TS 400W GROLUX E40 SLV*

0020807

Lamp finish	clear
Fixture rating	Open
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
E-number Finland	4844454
E-number Sweden	8358018
E-number Norway	3800733
Luminous flux (lm)	58000
Efficacy (lm/w)	136
Colour temperature (K)	2050
Light colour	Grolux
Wattage (W)	425
Product Voltage (V)	120
Average life (Nominal) (h)	26000
Product EAN number	5410288208077

## TECHNICAL DRAWINGS

SHP-TS GROLUX



SHP-TS GROLUX	250W	400W	600W
L	260	292	292
D	48	48	48

## SHP-T GroLux

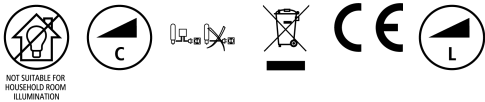
*SHP-TS GROLUX 600W EL E40 400V*

0020826



### Product features

- Patented arc tube delivers the highest photosynthetic efficiency, - Performance maintained at an exceptional level due to improved structure of the outer bulb, - Optimised for the highest Phytolumens or PAR output, - GroLux light spectrum maximises red output essential for plant growth, - Industry leading lumen maintenance of 95% at the end of life, - For use as complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



## PRODUCT OVERVIEW

Product code	0020826
Product name	SHP-TS GROLUX 600W EL E40 400V
Technology	HID
Watt (Rated) (W)	605
Lamp shape	High Pressure Sodium
Type	SHP-TS
Cap/Base	E40

## SHP-T Grolux

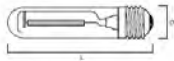
*SHP-TS GROLUX 600W EL E40 400V*

0020826

Lamp finish	clear
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
Luminous flux (lm)	88000
Efficacy (lm/w)	146
Colour temperature (K)	1950
Light colour	Grolux
Wattage (W)	605
Product Voltage (V)	210
Average life (Nominal) (h)	26000
Product EAN number	5410288208268

## TECHNICAL DRAWINGS

SHP-TS GROLUX



SHP-TS GROLUX	250W	400W	600W
L	260	292	292
D	48	48	48

## SHP-T GroLux

*SHP-TS 600W GROLUX E40 SLV*

0020808



### Product features

- Patented arc tube delivers the highest photosynthetic efficiency, - Performance maintained at an exceptional level due to improved structure of the outer bulb, - Optimised for the highest Phytolumens or PAR output, - GroLux light spectrum maximises red output essential for plant growth, - Industry leading lumen maintenance of 95% at the end of life, - For use as complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



NOT SUITABLE FOR  
HOUSEHOLD ROOM  
ILLUMINATION

### PRODUCT OVERVIEW

Product code	0020808
Product name	SHP-TS 600W GROLUX E40 SLV
Technology	HID
Watt (Rated) (W)	615
Lamp shape	High Pressure Sodium
Type	SHP-TS
Cap/Base	E40

## SHP-T Grolux

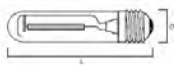
*SHP-TS 600W GROLUX E40 SLV*

0020808

Lamp finish	clear
Fixture rating	Open
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
E-number Finland	4844455
E-number Sweden	8358019
E-number Norway	3800734
Luminous flux (lm)	90000
Efficacy (lm/w)	146
Colour temperature (K)	2050
Light colour	Grolux
Wattage (W)	615
Product Voltage (V)	125
Average life (Nominal) (h)	26000
Product EAN number	5410288208084

## TECHNICAL DRAWINGS

SHP-TS GROLUX



SHP-TS GROLUX	250W	400W	600W
L	260	292	292
D	48	48	48



## SHP-T GroLux

*SHP-TS 600W / 400V GROLUX*  
0020809



### Product features

- Patented arc tube delivers the highest photosynthetic efficiency, - Performance maintained at an exceptional level due to improved structure of the outer bulb, - Optimised for the highest Phytolumens or PAR output, - GroLux light spectrum maximises red output essential for plant growth, - Industry leading lumen maintenance of 95% at the end of life, - For use as complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



NOT SUITABLE FOR  
HOUSEHOLD ROOM  
ILLUMINATION



## PRODUCT OVERVIEW

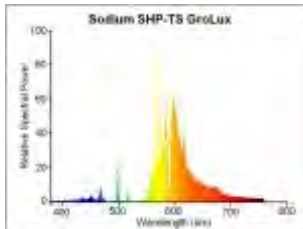
Product code	0020809
Product name	SHP-TS 600W / 400V GROLUX
Technology	HID
Watt (Rated) (W)	620

## SHP-T GroLux

*SHP-TS 600W / 400V GROLUX*  
0020809

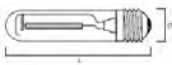
Lamp shape	High Pressure Sodium
Type	SHP-TS
Cap/Base	E40
Lamp finish	clear
Fixture rating	Open
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
E-number Finland	4844456
E-number Norway	3802875
Luminous flux (lm)	88000
Efficacy (lm/w)	142
Colour temperature (K)	1950
Light colour	GroLux
Wattage (W)	620
Product Voltage (V)	200
Dimmable	Yes
Average life (Nominal) (h)	24000
Product EAN number	5410288208091

## PHOTOMETRY



## TECHNICAL DRAWINGS

SHP-TS GROLUX



SHP-TS GroLux	250W	400W	600W
L	260	292	292
D	48	48	48

## SHP-T GroExpress

### SHP-T 250W GROXPRESS E40

0020816



#### Product features

- Arc tube delivers high photosynthetic efficiency, - Optimised for High Phytolumens or PAR output, - For complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



### PRODUCT OVERVIEW

Product code	0020816
Product name	SHP-T 250W GROXPRESS E40
Technology	HID
Watt (Rated) (W)	250
Lamp shape	High Pressure Sodium
Type	SHP-T
Cap/Base	E40
Lamp finish	Clear
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
Luminous flux (lm)	33000
Efficacy (lm/w)	132
Colour temperature (K)	2000
Wattage (W)	250
Product Voltage (V)	100
Dimmable	Yes
Average life (Nominal) (h)	24000
Product EAN number	5410288208169

## SHP-T GroExpress

*SHP-T 400W GROXPRESS E40*  
0020817



### Product features

- Arc tube delivers high photosynthetic efficiency, - Optimised for High Phytolumens or PAR output, - For complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



## PRODUCT OVERVIEW

Product code	0020817
Product name	SHP-T 400W GROXPRESS E40
Technology	HID
Watt (Rated) (W)	400
Lamp shape	High Pressure Sodium
Type	SHP-T
Cap/Base	E40
Lamp finish	Clear
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
Luminous flux (lm)	55000
Efficacy (lm/w)	137
Colour temperature (K)	2000
Wattage (W)	400
Product Voltage (V)	100
Dimmable	Yes
Average life (Nominal) (h)	24000
Product EAN number	5410288208176

## SHP-T GroExpress SHP-T 600W GROXPRESS E40 0020818



### Product features

- Arc tube delivers high photosynthetic efficiency, - Optimised for High Phytolumens or PAR output, - For complete or additional artificial lighting of plants, - Recommended for use in greenhouses and indoor gardens



## PRODUCT OVERVIEW

Product code	0020818
Product name	SHP-T 600W GROXPRESS E40
Technology	HID
Watt (Rated) (W)	600
Lamp shape	Tubular
Type	SHP-T
Cap/Base	E40
Lamp finish	Clear
General application	Logistics & Industry
Certifications	EUTIE061
ETIM Class	EC000821
Luminous flux (lm)	90000
Efficacy (lm/w)	145
Colour temperature (K)	2050
Light colour	Grolux
Wattage (W)	600
Product Voltage (V)	115
Dimmable	Yes
Average life (Nominal) (h)	24000
Product EAN number	5410288208183