

## HO ES 45 W/840

LUMILUX T5 HO ES | Tubular fluorescent lamps 16 mm, high output, energy saver, with G5 base



### Areas of application

- Industry
- Public buildings
- Offices
- Tunnels, underpasses
- Outdoor applications only in suitable luminaires

### Product benefits

- Up to 10 % energy savings compared to standard T5 HO LUMILUX lamps
- Good economy and efficiency
- Pay-back time less than 1 year
- High luminous flux

### Product features

- Luminous efficacy: up to 96 lm/W
- Very good lumen maintenance: 90 % throughout the service lifetime of the lamp
- Long average lifetime: up to 24,000 h (with QUICKTRONIC ECG)
- Good color rendering group: 1B ( $R_a$ : 80...89)
- Dimmable



Technical data

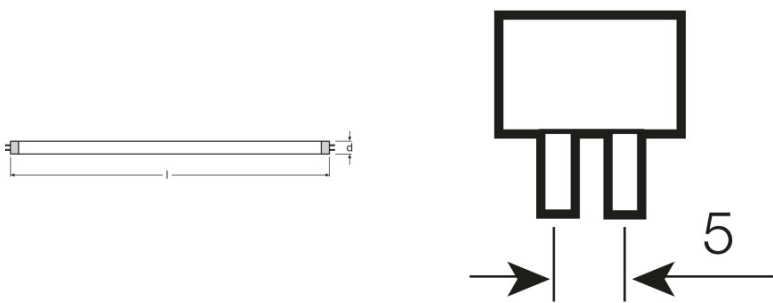
Electrical data

Nominal voltage	169 V
Nominal wattage	45.00 W
Rated lamp efficacy (HF data 25 °C)	97 lm/W
Rated wattage	44.40 W
Rated luminous flux	4310 lm

Photometrical data

Color rendering index Ra	≥80
Luminous flux at 25 °C	4310 lm
Luminous flux at 35 °C	4900 lm
Light color	840
Color temperature	4000 K
Nominal luminous flux	4310 lm
Light color (designation)	LUMILUX Cool White
Rated LLMF at 2,000 h	0.95
Rated LLMF at 4,000 h	0.93
Rated LLMF at 6,000 h	0.92
Rated LLMF at 8,000 h	0.90
Rated LLMF at 12,000 h	0.90
Rated LLMF at 16,000 h	0.90
Rated LLMF at 20,000 h	0.89

Dimensions & weight



Tube diameter	16 mm
Length	1449 mm
Length with base excl. base pins/connection	1449.00 mm

## Product datasheet

Diameter	16.0 mm
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### Temperatures & operating conditions

Rated ambient temp.w.max.luminous flux	35.0 °C
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### Lifespan

Service life	19000 h <sup>1)</sup>
Lifespan	24000 h <sup>1)</sup>
Rated lamp survival factor at 2,000 h	0.99
Rated lamp survival factor at 4,000 h	0.99
Rated lamp survival factor at 6,000 h	0.99
Rated lamp survival factor at 8,000 h	0.99
Rated lamp survival factor at 12,000 h	0.99
Rated lamp survival factor at 16,000 h	0.97
Rated lamp survival factor at 20,000 h	0.85
Operation mode LLMF/LSF	HF
Rated lamp life time	24000 h
Nominal lamp life time	24000 h

<sup>1)</sup> With preheat ECG

### Additional product data

Base (standard designation)	G5
Lamp mercury content	1.7 mg
Appropriate disposal acc. to WEEE	Yes
Product remark	For ECG operation only/Lamp designed for internal luminaire temperatures of 30...40 °C; optimum luminous flux achieved at 35 °C

### Capabilities

Dimmable	Yes
Suitable for indoor	Yes

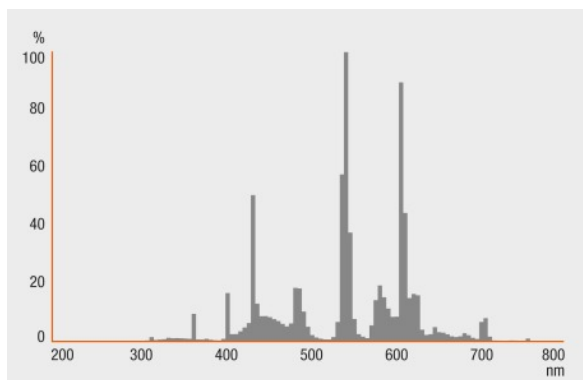
### Certificates & standards

Energy efficiency class	A+
Energy consumption	49 kWh/1000h

## Product datasheet

### Light Distribution

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### Spectral power distribution

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### System guarantee

OSRAM System+ Guarantee in combination with OSRAM ECGs



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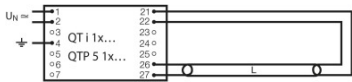
### Guarantee

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### Safety advice

In case of lamp breakage: [www.osram.com/brokenlamp](http://www.osram.com/brokenlamp)

Product datasheet



Circuit diagram



Circuit diagram

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321515148	HO ES 45 W/840	Shipping carton box 20	1482 mm x 83 mm x 104 mm	12.79 dm <sup>3</sup>	3450.00 g
4008321958143	HO ES 45 W/840	Shipping carton box 40	1500 mm x 83 mm x 194 mm	24.15 dm <sup>3</sup>	4077.67 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

For more information on the system guarantee and the terms and conditions of the guarantee visit  
▶ [www.osram.com/system-guarantee](http://www.osram.com/system-guarantee)

For more information on QUICKTRONIC electronic control gear go to  
▶ [www.osram.com/QUICKTRONIC](http://www.osram.com/QUICKTRONIC)

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

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Product name	Product name ECG	EAN	Nominal current	Nominal wattage + Power loss	Luminous flux at 35 °C	Number of lighting outlets
HO ES 45 W/840	QT 1x49 DIM	4008321640352	0.23 A	52.30 W	4300 lm	1
	QT 2x49 DIM	4008321640451	0.46 A	103.90 W	4300 lm	2
	QT-FIT 5 1x49	4008321832139	0.21 A	49.00 W	4300 lm	1
	QT-FIT 5 2x49	4008321832153	0.43 A	98.00 W	4300 lm	2
	QTi 1x28/54/35/49 GII	4008321383358	0.21 A	48.00 W	4300 lm	1
	QTi 1x35/49/80 DIM	4050300870540	0.24 A	53.40 W	4600 lm	1
	QTi 1x35/49/80 GII	4008321383372	0.21 A	48.00 W	4300 lm	1
	QTi 2x28/54/35/49 GII	4008321383419	0.42 A	98.00 W	4300 lm	2
	QTi 2x35/49/80 DIM	4050300870984	0.45 A	101.00 W	4600 lm	2
	QTi 2x35/49/80 GII	4008321658951	0.43 A	95.00 W	4300 lm	2
	QTi DALI 1x35/49/80 DIM	4050300870342	0.24 A	53.40 W	4600 lm	1
	QTi DALI 2x35/49/80 DIM	4050300870441	0.45 A	101.00 W	4600 lm	2
	QTP5 1x49	4008321329370	0.22 A	49.00 W	4300 lm	1
	QTP5 2x49	4008321329431	0.44 A	100.00 W	4300 lm	2