

165W Induction Lighting System

QL induction lighting is used for professional, general and special lighting applications because of its unmatched durability and high luminous efficacy with excellent light quality. QL offers a nearly maintenance free operation and superior energy saving. Induction lighting systems have a unique long performance life up to 100,000 hours because there is no use of electrodes in the induction system. In many cases the systems lifetime is determined at 60,000 hours, which equals approximately 15 years based on 4000 burning hours per year.

The major features of QL lamp systems, and their related benefits for the user, are:

Benefits

- Easy installation
- Good color rendering (Ra > 80) and choice of color temperature
- Useful light immediately after switch on
- Easy to use as retrofit or in new construction applications
- Economic, environment-friendly lighting in situations with long burning hours
- Lowest maintenance costs

Features

- Dimmable to 50%
- Crisp white light with no color shift.
- Operates in hot and cold environments - amalgam control.
- High lumen efficiency - 165W QL features 12,000 initial lumens.
- Also available in 55 and 85 watts.

Application

Ideal for street lighting, bridges and tunnels, hazardous areas, cold storage warehouses and hard-to-reach applications.

Compliances and approvals

- **Safety**
IEC 62532, IEC 61347-1, IEC 62471
- **Performance**
IEC 62639 (in prep.), IEC 60929
- **Quality standard**
ISO 9001
- **Environmental management system**
ISO 14001
- **Electromagnetic Compatibility**
EN 55015, EN 55022
- **Vibration and (thermal)shocks**
IEC 60068

QL 165W Lamp



PRODUCT DATA

Product number

Full product name

Pieces/sleeve

Sleeves per box

Net weight

Light Technical

Characteristics

Chromaticity Coordinate X

Chromaticity Coordinate Y

RA

Luminous Flux System

Luminous Efficacy

Luminance Average EL

P.E.T.(NIOSH)

Damage Factor (Dfc)

QL16500027

QL Twist Base

165W 827

1

6

0.195 kg per piece

QL16500030

QL Twist Base

165W 830

QL16500040

QL Twist Base

165W 840

QL16500050

QL Twist Base

165W 850

2700K

472

418

>80

11000 lm

67 lm/W

7.0 cd/cm²

>24h

<0.6

3000K

435

398

>80

12000 lm

70 lm/W

7.5 cd/cm²

>24h

<0.6

4000K

388

380

>80

12000 lm

70 lm/W

7.5 cd/cm²

>24h

<0.6

5000K

346

359

>80

11000 lm

67 lm/W

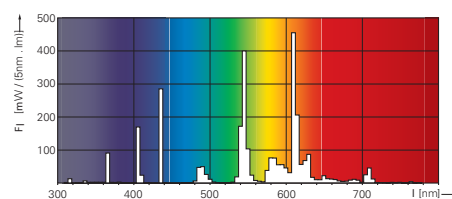
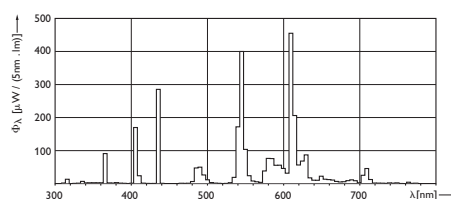
7.0 cd/cm²

>24h

<0.6

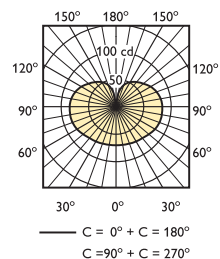
PHOTOMETRIC DATA

Spectral energy distribution

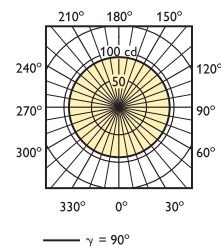


Typical Spectral energy distribution of QL 165W 3000K.

LIGHT DISTRIBUTION



Typical light distribution of QL 165W



Typical light distribution of QL 165W,
Azimuth angle

QL 165W Power coupler

PRODUCT DATA

Product number

Product description

Pieces per box

Net weight

Characteristics

Storage temperature

Operating temperature

Operating Position

Safety approvals

EMC approvals

Cable length

Connectors

Net Weight

PC16500000

QL Power Coupler 165W

6

0.277 kg per piece

-40°C to +85°C

-40°C to +55°C ambient

Universal

C-UL-US and CE

Complies with all international EMC requirements

555 mm / 21.9 inch

N/A

0,277 kg per piece



For detailed information and guiding concerning the development of appropriate luminaire designs please visit our website www.qlcompany.com; "Information for Original Equipment" (OEM Guide).

Specifications subject to change without notice.



QL 165W Generator



PRODUCT DATA

Product number

Product description

Pieces per box

Net weight

Dimmable

Product number

Product description

Pieces per box

Net weight

Features

General Characteristics

Lifetime system

Efficiency

Cooling

Tcase

Storage

Operating temp.

Operating position

Safety approvals

EMC approvals

Electrical Characteristics

Input line freq.

Power Factor

Current THD

Output Voltage

Switching freq.

Current nom.

Run-up/short

Ignition

Dimming

Product Dimensions

Dimensions (L x W x H)

Connectors

GE16523000

QL Generator 165W 200-277V

6

0.703 kg per piece

GE16512000

QL Generator 165W 100-120V

6

0.703 kg per piece

GE16523001

QL Generator 165W 200-277V

6

0.703 kg per piece

GE16512001

QL Generator 165W 100-120V

6

0.703 kg per piece

High Reliability

Operates in hot and cold environments

Dimmable to 50%

L 70 >70.000 hrs

Power Factor Correction included

Limited inrush current

Output Power Stabilized

Protections

- Open/short output

- Thermal

- Lamp end of life

Extended protection against mains faults and deviations

100.000 hrs at Tc=72°C

> 90%, max. load

convection, dependent on system set-up, heat sinking required

82°C max (72°C for full life)

-40°C to +85°C

-40°C to +55°C_{ambient}

Universal

C-UL-US and CE

Complies with all international EMC requirements

45 - 66Hz

> 0.92

ANSI C82.11-2002

130 – 220 V_{ac}

2.67 MHz ± 8%

Depending on lamp

< 1.8 x I_{nom}

1.2 kVp

EN60929, 1-10 V_{dc} analog

50-100% output power

190 x 112 x 41 mm / 7.5 x 4.4 x 1.6 inch

Cage clamp terminals

QL 165W System



DIMENSIONAL DRAWING

Product dimensions

Overall length C (Max)

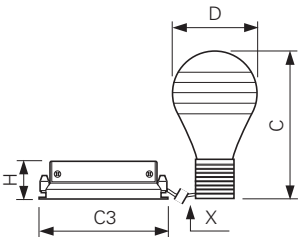
Length gear C3 (Norm)

Diameter D (Max)

Height gear H (Norm)

Cable length X (Norm)

205.5 mm / 8.09 inch
190 mm
131 mm / 5.12 inch
42.3 mm
555 mm



SYSTEM DATA

General Characteristics

Operating Position

Life System to 5% failures

Life System to 10% failures

Life System to 20% failures

Life System to 50% failures

Universal
40,000 hr
60,000 hr
80,000 hr
100,000 hr

Electrical Characteristics

System Power

Watts

Operating Frequency

Ignition Time

Run-up time 70%

Re-ignition Time

165 W
165 W
2.650 MHz
0.5 sec
10 min
0.5 sec

Environmental Characteristics

Mercury (Hg) Content 7.0 mg
