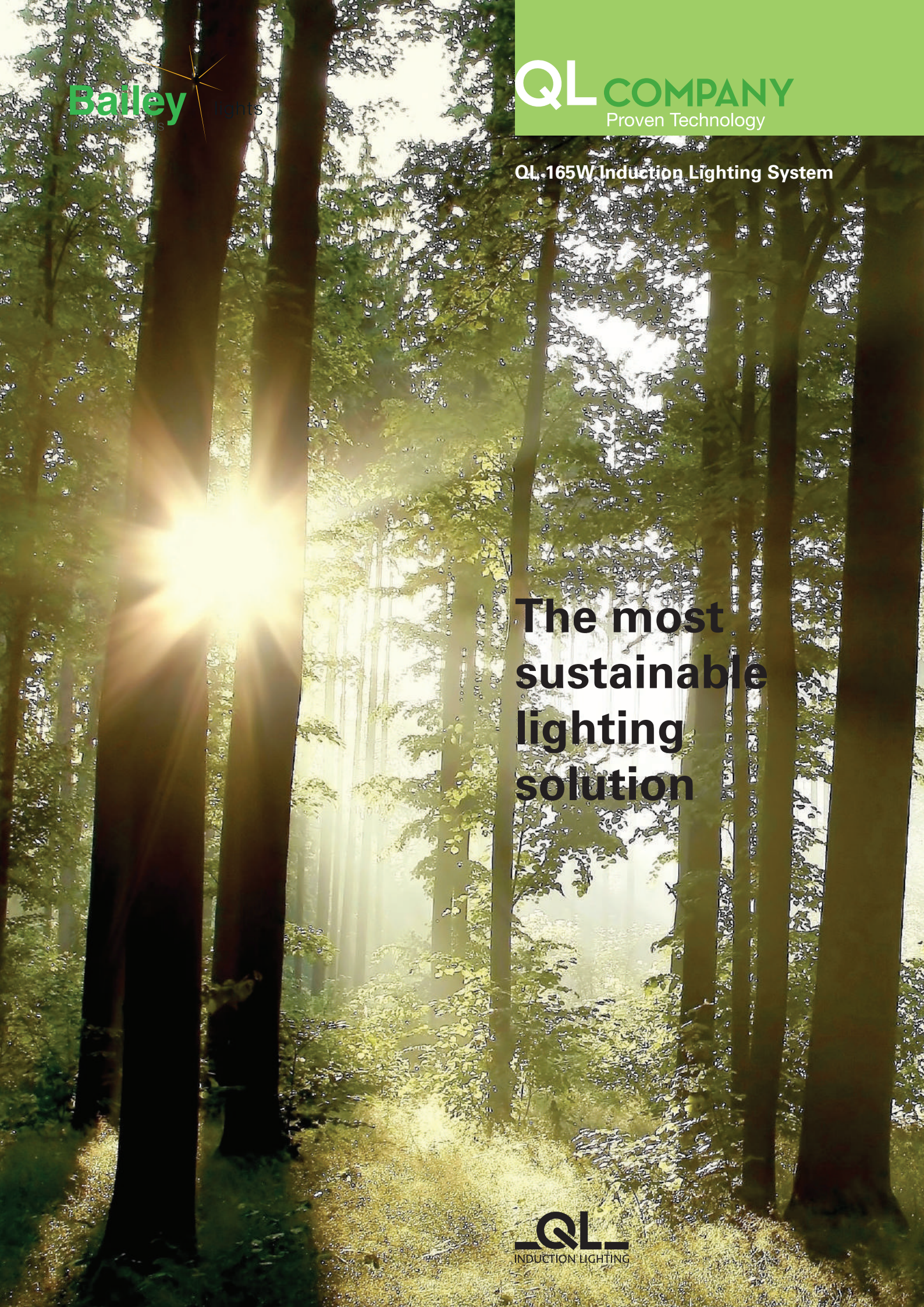
Bailey lights
QL COMPANY
Proven Technology
QL 165W Induction Lighting System
The most sustainable lighting solution
QL
INDUCTION LIGHTING

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QL Induction Lighting Systems

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 lamps have an unique long performance life up to 100,000 hours because there is no use of electrodes in the bulb. The lifetime of the system is determined at 80,000 hours, which equals approximately 20 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 61000, EN 55015, EN 55022
- **Vibration and (thermal)shocks**
  IEC 60068

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QL 165W Lamp

PRODUCT DATA

Product number	QL16500130	QL16500140
Full product name	QL Alu Base	QL Alu Base
	165W 830	165W 840
Pieces/sleeve	1	
Sleeves per box	6	
Net weight	0.452 kg per piece	
Cable length power coupler	555 mm / 21.9 inch	
Operating temperature	-40°C to +55°C	
Safety approvals	C-UL-US and CE	

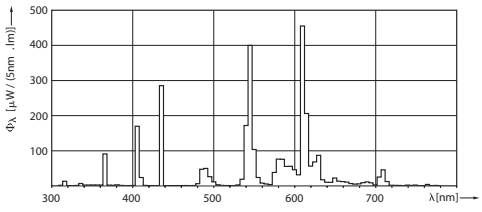
Light Technical Characteristics

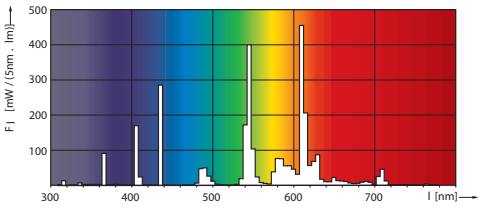
	3000K*	4000K
Chromaticity Coordinate X	435	388
Chromaticity Coordinate Y	398	380
RA	>80	>80
Luminous Flux System	12000 lm	12000 lm
Luminous Efficacy System	70 lm/W	70 lm/W
Luminous Efficacy Lamp	86 lm/W	86 lm/W
Luminance Average EL	7.5 cd/cm2	7.5 cd/cm2
P.E.T.(NIOSH)	>24h	>24h
Damage Factor (Dfc)	<0.6	<0.6

* Other color temperatures available upon request.

PHOTOMETRIC DATA

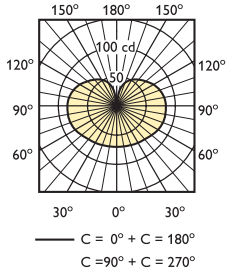
Spectral energy distribution



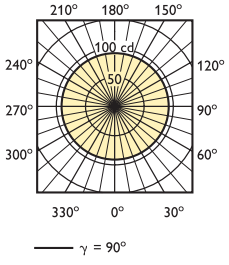


Typical Spectral energy distribution of QL 165W 3000K.

LIGHT DISTRIBUTION



Typical light distribution of QL 165W



Typical light distribution of QL 165W, Azimuth angle

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QL 165W Generator

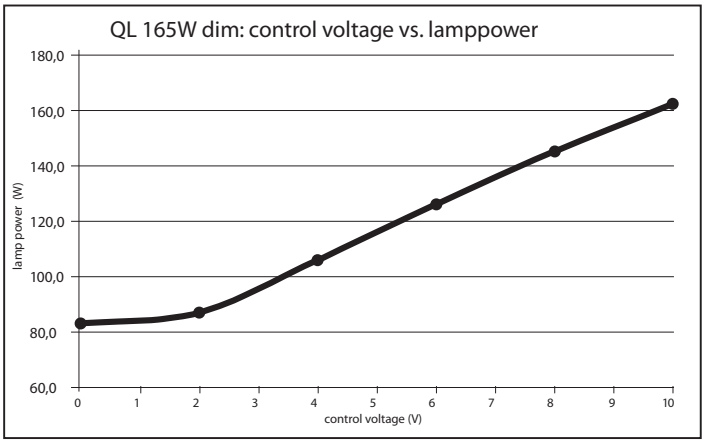
PRODUCT DATA

Product number	GE16523001	GE16512001
Product description	QL Generator 165W 200-277V	QL Generator 165W 100-120V
Pieces per box	6	6
Net weight	0.703 kg per piece	0.703 kg per piece
Dimensions (L x W x H)	190 x 112 x 41 mm	190 x 112 x 41 mm
Connectors	Cage clamp terminals	Cage clamp terminals

Features

- High Reliability
- Instant hot and cold (re) start
- Operates in hot and cold environments
- Dimmable to 50%
- L 70 >70.000 hrs
- Power Factor Correction and limited inrush current
- Protection lamp end of life
- Extended protection against mains faults and deviations

Dimming behavior



General Characteristics

Lifetime system	80.000 hrs at Tc=72°C
Efficiency	> 90%, max. load
Cooling	convection, dependent on system set-up, heat sinking required
Tcase	82°C max (72°C for full life)
Storage	-40°C to +85°C
Operating temp.	-40°C to +55°C $_{ambient}$
Operating position	Universal
Safety approvals	C-UL-US and CE
EMC approvals	Complies with all international EMC requirements

Electrical Characteristics

Input line freq.	45 - 66Hz
Power Factor	> 0.98
Current THD	ANSI C82.11-2002
Output Voltage	130 – 220 V $_{ac}$
Switching freq.	2.67 MHz ± 8%
Current nom.	Depending on lamp
Run-up/short	< 1.8 x I $_{nom}$
Ignition	1.2 kVp
Dimming	EN60929, 1-10 V $_{dc}$ analog, 50-100% output power

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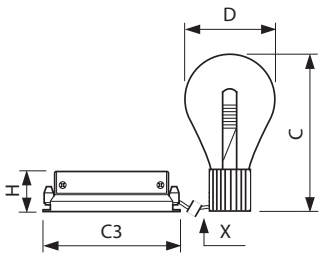
QL 165W System

DIMENSIONAL DRAWING



Product dimensions	
Overall length C (Max)	208 mm / 8.19 inch
Length gear C3 (Norm)	190 mm
Diameter D (Max)	130 mm / 5.12 inch
Height gear H (Norm)	42.3 mm
Cable length X (Norm)	555 mm

SYSTEM DATA

General Characteristics	
Operating Position	Universal
Life System to 5% failures	40,000 hr
Life System to 10% failures	60,000 hr
Life System to 20% failures	80,000 hr
Life System to 50% failures	100,000 hr

Electrical Characteristics	
System Power	165 W
Operating Frequency	2.650 MHz
Ignition Time	0.5 sec
Run-up time 70%	10 min
Re-ignition Time	0.5 sec

Environmental Characteristics	
Mercury (Hg) Content	8.0 mg