

630-38480



July 27th, 2011

Mr. Carrico,

This letter is to respond to questions presented in Docket No. 030-38448 Mail No. 575111 dated July 20th, 2011 for additional requested information for the exempt distribution application for ARC Electronics Inc. The questions are numbered to coincide with the questions in the response letter to ARC Electronics Inc's Exempt Distribution Application.

1. Prototype testing

QL tested batches of bulbs by conducting drop tests from a height of 1 meter onto a concrete surface. The Bulbs are placed in their inner packaging sleeves and six bulb shipping packages. With the bulbs in these configurations they are dropped onto the bottoms, sides, and tops to look for breakage that could occur during accidents likely for normal shipping of the product. Damage during shipping is the most likely source of breakage during the life span of the bulb.

In addition to this in house testing these Light Bulbs are tested to conform to the International Electro-technical Commission Electrical Equipment (IECEE) standard No. 61199 for single capped fluorescent light bulbs. This standard provides criteria for various attributes that include strain testing, burn in times, wear on labeling, seal integrity, and heat resistance. Appendix 1 provides the different tests that the bulbs were subject to in order to meet the IECEE standards. All bulb designs have met the IEC 61199 standard for safety as shown by the certificates in Appendix 2.

The results of the drop tests indicate that there were no breakages of the glass bulbs resulting in the containment of the gasses (including Kr-85) inside the bulb. This can be concluded that unless the packages experience an accident or unusual circumstance during the shipping or distribution processes, the byproduct material will remain inside the glass bulb. Dropping of any glass vessel onto a concrete surface without the protection of the manufacturer's packaging will result in damage; typically this will only happen during installation of the bulbs and therefore are only going to happen to a single unit. In this case the amount of byproduct material will escape and mix instantaneously and dilute with the surrounding air resulting in a negligible external dose.

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2. Quality control procedures

Quality control criteria are provided in Appendix 3 for 55, 85, and 165 wattage bulbs. These are the same tests that are performed in IEC60601-1 for safety to ensure that the bulb will not perform in an adverse way under normal usage. The results are documented and have statistical analyses performed to ensure that the sample size is appropriate. Appendix 3 has the QC testing results.

3. Labeling

Labeling of the Bulbs will be done by way of the inner most containers, the cardboard sleeve containing an individual bulb. Appendix 4 is a rendering of the proposed individual container for each light bulb. This label contains the Initial Distributor listed by the wording: "Distributed by ARC Electronics Inc. for Nedap Light Controls 14A Industrial Way, Atkinson NH North America".

The Etching area for labeling each unit contains limited space available for information that is occupied by the product identification, manufacturer codes, and required mercury warnings. Expanding of the etching would require additional modification for the manufacturing process that is already established for this product for safe distribution in European Union and a handful of Licensees in the US. The amount of krypton-85 present inside presents a negligible dose from internal and external pathways. The Mercury content is of far greater biological risk. Etchings also include manufactures codes that provide electrical characteristics such as coupling style for the bulb since the power systems are very different from that of conventional light bulbs and improper installation could result in personnel injury. The etching that is currently in use in the European Union and with other exempt distributors in the US for this product is shown in Appendix 4. This is also consistent with other licensees that currently perform exempt distribution of the same product line.

4. Possession of product

To establish initial possession of this product prior to exempt distribution, ARC Electronics will establish an area within the American Warehouse facility that will be dedicated to be used to receive and store incoming product. This area will be secured by a chain link fence with lockable gate to establish ARC Electronics' ownership and control of the area and product contained within. Appendix 5 contains a map that shows the planned location of the fencing Access to the area is granted to employees of ARC electronics and personnel that are designated by ARC Electronics to conduct themselves according to their procedures and radioactive material licenses.

When Product is to be received at the warehouse an ARC employee or an Authorized User for ARC Electronics will be present to receive and process the inventory according

to ARC Electronics Inc's Procedures and License requirements. That person will receive the product and place it in the locked fenced area belonging to ARC Electronics.

The individual that can act as designee for ARC Electronics is Robert Gibbs. Mr. Gibbs is president of American Warehouse and is listed as an Authorized User on ARC Electronics' New Hampshire Possession License No. 474R and has received 40 hour RSO training. Mr. Gibbs is designated as a responsible individual for ARC Electronics Inc concerning radioactive material and to assist Tracey Durfee, RSO for ARC Electronics. Included are copies of RSO training certificates and New Hampshire Possession License 474R indicating Robert Gibbs as an authorized user in Appendix 6.

If there are any additional questions or information required Nasser Rashidifard can be contacted at 603-778-2871 x40 or at nbrashidifard@radsafety.com.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Tracey Durfee', with a stylized flourish at the end.

Tracey Durfee,
RSO, ARC Electronics

Appendix 1 –Prototype testing



IEC 61199 Ed 2 (1999)
TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING
Single capped fluorescent lamps – Safety specifications

R=Required by Lab
S=May be subcontracted

Clause	Measurement/testing	Testing / measuring equipment / material needed
2.2	Marking shall be durable and easily legible	Water, piece of cloth
2.3.1	Construction and assembly	Test finger, timer, pull test apparatus, pressure device, heating cabinet, bending moment apparatus
2.3.2	Dimensions	Gauges according IEC 60061-1 and 60061-3
2.3.3.1	Pin connections	Visual inspections, ohmmeter
2.3.3.2	Key configurations	Visual inspections, data sheet of IEC 60901
2.4	Insulation resistance	Mega ohmmeter
2.5	Electric strength test	High voltage transformer
2.7	Resistance to heat and fire	Heating cabinet, ball pressure apparatus (see also CTL D.S. N. 391.r), glow-wire test apparatus, timer
2.8	Creepage distances	Digital calliper (or equivalent)
2.9	Lamp cap temperature rise	Draught-proof enclosure, thermocouples, temperature measurement device, reference ballast, voltmeter
2.10.1	Moisture resistance of capacitor	Humidity cabinet, high voltage transformer (dc)
2.10.2	Resistance to flame and ignition of capacitor	Voltage source (short circuit power 1kVA), inductive ballast

Note: The presence of equipment alone does not indicate a satisfactory situation. Assessors must evaluate the equipment design and documentation to ensure compliance with the directions of the standard. The requirements of ISO Guide 25 regarding validation are not standardised tests.

Appendix 2- Prototype testing results



PHILIPS

Philips Lighting



EC Declaration of Conformity

Product family: QL

Document NR CE 9280 605 080 QL55

File CE decl. DE QL55W SLV6.doc

page 1 of 1

We,

Philips Lighting BV
Industriekade 44
6006 SJ Weert
The Netherlands

declare under our responsibility that the electrical product,

Product type: QL 55W Twist base SLV/6

Product code: 9280 605 08000

EOC code: t.b.d

And any product started with the
same 10 digits supplied by us

to which this declaration relates is in conformity with our internal safety standard comparable with the European standard EN 61199 and additional internal QL safety measures.

following and identical to the international standard:

International standard IEC 61199 date of issue 1999-10 second edition.

Single-capped fluorescent lamps safety specifications.

following the provisions of EC-Directive

Directive 73/23/EEG date of issue: February 1973 and the amendment

Directive 93/68/EEG date of issue: July 1993

This declaration is based on the product file with code:

CE 9280 605 080 PF QL 55W SLV6 - page 1, 2 and 3 of 3

Responsible and authorized for this product:

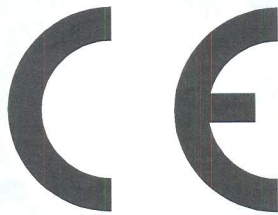
Dr. Ir. J.W.F.Dorleijn.
Product Manager QL.

Signature, 



PHILIPS

Philips Lighting



EC Declaration of Conformity

Product family: QL

Document NR CE 9280 690 080 QL165

File CE decl. DE QL165W SLV6.doc

page 1 of 1

We,

Philips Lighting BV
Industriekade 44
6006 SJ Weert
The Netherlands

declare under our responsibility that the electrical product,

Product type: QL 165W Twist base SLV/6

Product code: 9280 690 08000

EOC code: t.b.d

And any product started with the
same 10 digits supplied by us

to which this declaration relates is in conformity with our internal safety standard comparable with the European standard EN 61199 and additional internal QL safety measures.

following and identical to the international standard:

International standard IEC 61199 date of issue 1999-10 second edition.

Single-capped fluorescent lamps safety specifications.

following the provisions of EC-Directive

Directive 73/23/EEG date of issue: February 1973 and the amendment

Directive 93/68/EEG date of issue: July 1993

This declaration is based on the product file with code:

CE 9280 690 080 PF QL 165W SLV6 - page 1, 2 and 3 of 3

Responsible and authorized for this product:

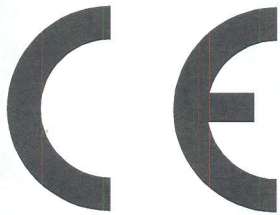
Dr. Ir. J.W.F.Dorleijn.
Product Manager QL.

Signature,



PHILIPS

Philips Lighting



EC Declaration of Conformity

Product family: QL

Document NR CE 9280 606 080 QL85

File CE decl. DE QL85W SLV6.doc

page 1 of 1

We,

Philips Lighting BV
Industriekade 44
6006 SJ Weert
The Netherlands

declare under our responsibility that the electrical product,

Product type: QL 85W Twist base SLV/6

Product code: 9280 606 08000

EOC code: t.b.d

And any product started with the
same 10 digits supplied by us

to which this declaration relates is in conformity with our internal safety standard comparable with the European standard EN 61199 and additional internal QL safety measures.

following and identical to the international standard:

International standard IEC 61199 date of issue 1999-10 second edition.

Single-capped fluorescent lamps safety specifications.

following the provisions of EC-Directive

Directive 73/23/EEG date of issue: February 1973 and the amendment

Directive 93/68/EEG date of issue: July 1993

This declaration is based on the product file with code:

CE 9280 606 080 PF QL 85W SLV6 - page 1, 2 and 3 of 3

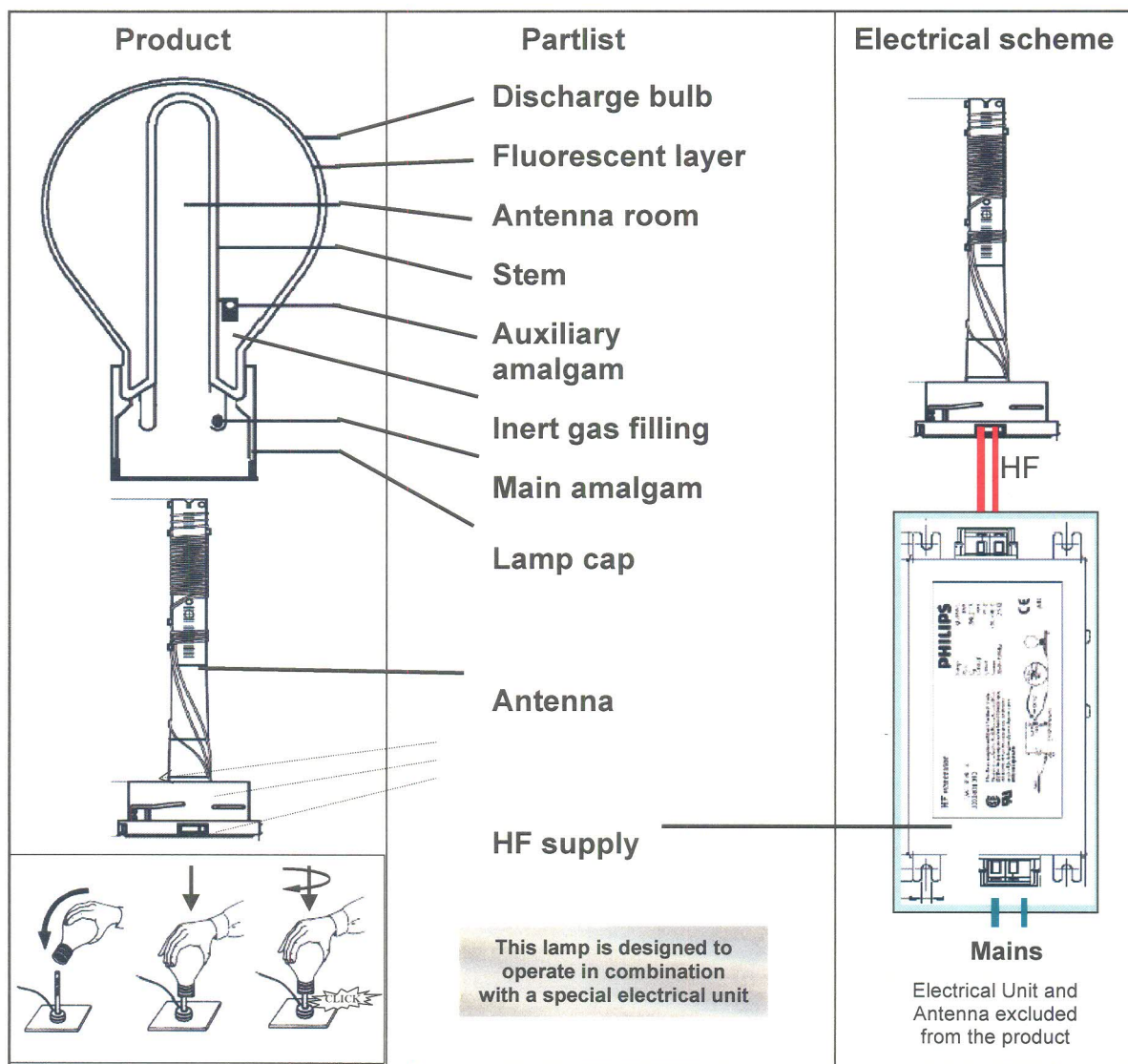
Responsible and authorized for this product:

Dr. Ir. J.W.F.Dorleijn.
Product Manager QL.

Signature,

Appendix 3 – QC testing

Product description for CE marking



Product description

The product is a low pressure mercury discharge lamp emitting visible light. During operation the discharge emits ultra-violet radiation which is transmitted by the fluorescent layer to visible light. The discharge is maintained by an alternating magnetic (induction) field generated by a special designed antenna located in the center of the discharge. The antenna can only operate if the lamp cap is connected to the antenna cap and connected to a special designed HF supply unit suitable for mains voltage. **Discharge bulb contains mercury and shall be disposed as chemical waste.** All electronic components have to be housed in a well grounded metal box to avoid radio frequency interference (RFI) and to improve heat conduction.

Dimensions*

Length : 140 mm
 Diameter : 85 mm
 Cap : Twist base SLV 6

Electrical and luminous flux properties*

Lamp wattage : 55 W
 Mains voltage : 230V
 HF supply output : 2.6 MHz
 Luminous flux : 3500 lm

*** Values are only for product description purpose. No rights can be claimed for these values.**

Survey of safety requirements according IEC 61199

According table 1 - Grouping of test records IEC 61199

Sub-clause	Test	Details on page ¹	Short description of the test	AQL level
2.2.2 a	Marking - Legibility	11	100% By visual end-inspection	1
2.2.2 b	Marking - Durability	11	Marking shall be rubbed with smooth cloth damped with water for a period of 15 s. UT-D 1424 → 500 lamps/year.	1
2.3.1	Construction and assembly of cap/bulb (unused) – Pull & bending test	11	Pull & bending shall be increased progressively to required value. Pull=150N & Bending=3Nm UT-D 1424 → 500 lamps/year.	0
2.3.1	Construction and assembly of cap/bulb (after heating) - Pull & bending test	11 QL-issue	Pull & bending shall be increased progressively to required value. Same pull & bending test after 2.000hr at 160°C. Type test: 5 lamps/year	0
Particular QL	Construction and assembly of cap/bulb (by end of life time) – Pull & bending test	11 QL-issue	Pull & bending shall be increased progressively to required value. Same pull & bending test after 60.000hr burning.	0
Particular QL	Construction and assembly of cap/bulb included moisture resistance – Pull & bending test	11 QL-issue	Pull & bending shall be increased progressively to required value. Same pull & bending test after 168 hrs in at 60°C & 95% relative humidity IEC 68-2-3,Ca. Type test: 5 lamps/year	0
2.3.2.2	Dimensional requirements for lamp	13	1 lamp/type/day will be checked by measurement on height by end-inspection.	1
2.7.2	Resistance to heat	15	Test after 168 hr. at 160°C heating on electric strength and dimensions. Dimensions shall comply with requirements of 2.3.2. Supplier Elhi will deliver confirmations.	See D3
2.7.2.2	Ball pressure test	15	5 mm ball pressed with 20N Test report supplier Elhi is needed.	2 mm
2.7.4	Resistance to fire	15	Glow wire test at 650 C Test report supplier Elhi is needed	See D3
2.11	Information for Luminaire design	QL-issue	Additional information	-
Particular QL	PET value	QL-issue	Additional information	-
Particular QL	Damage factor	QL-issue	Additional information	-

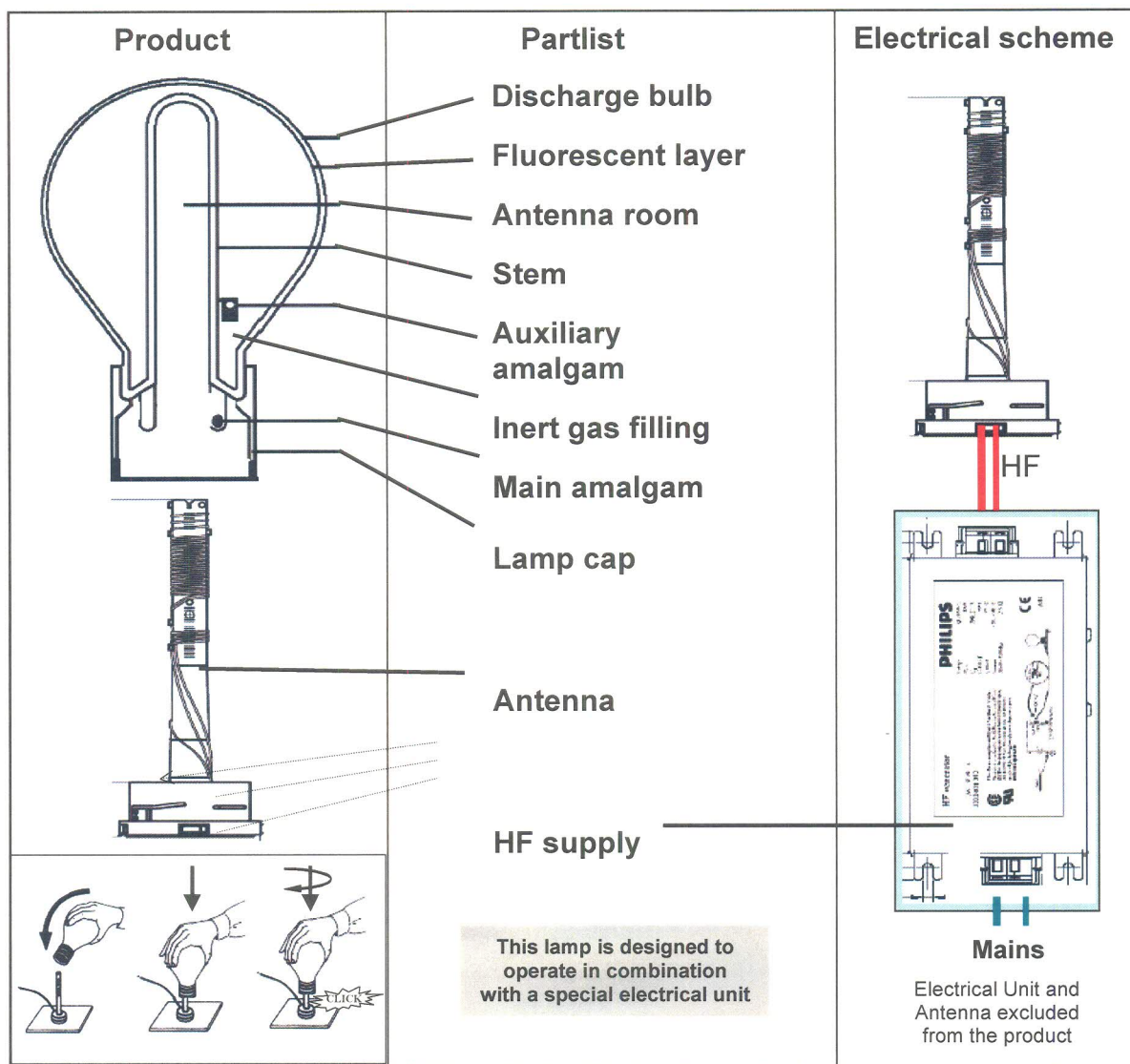
Survey of safety tests and results according IEC 61199

According table 1 - Grouping of test records IEC 61199

Sub-clause	Test	Type of test	Permitted accumulation of test records between lamps	Document with instruction	Document with test results	Results agree to standard
2.2.2 a	Marking - Legibility	Running	All families with same method of marking	100% by visual end inspection	Reject Registration list of QL	yes
2.2.2 b	Marking - Durability	Periodic	All families with same method of marking	LV241-060-010	t.b.d	
2.3.1	Construction and assembly of cap/bulb (unused) - Pull test	Periodic or Design	All families using the same method of attachment and same tube diameter	LV200-604-301	t.b.d	
2.3.1	Construction and assembly of cap/bulb (after heating) - Pull test	Periodic or Design	All families using the same method of attachment and same tube diameter	LV200-604-301	t.b.d	
Particular QL	Construction and assembly of cap/bulb by end of life time	Design	All families using the same method of attachment and same tube diameter	LV200-604-301	t.b.d	
Particular QL	Construction and assembly of cap/bulb included moisture resistance	Design	All families using the same method of attachment and same tube diameter	LV200-604-301	t.b.d	
2.3.2.2	Dimensional requirements for caps	Periodic	All families using the same method of attachment and same tube diameter	Sop,s Eendcontrol and Packaging	Reject Registration list of QL	
2.7.2	Resistance to heat	Design	All families		Test report supplier Elhi	
2.7.2.2	Ball pressure test	Design	All families		Test report supplier Elhi	
2.7.4	Resistance to fire	Design	All families		Test report supplier Elhi	
2.11	Information for Luminaire design	Design	All QL Lamps	Information for OEM	Report Development QL	Yes / no
Particular QL	PET value	Design	By type	All QL lamps refer 190 sheet	Measurement report QDL	
Particular QL	Damage factor	Design	By type	All QL lamps refer 190 sheet	Measurement report QDL	

Test results can be part of the controlling system of the factory. Latest results are available in the production department.

Product description for CE marking



Product description

The product is a low pressure mercury discharge lamp emitting visible light. During operation the discharge emits ultra-violet radiation which is transmitted by the fluorescent layer to visible light. The discharge is maintained by an alternating magnetic (induction) field generated by a special designed antenna located in the center of the discharge. The antenna can only operate if the lamp cap is connected to the antenna cap and connected to a special designed HF supply unit suitable for mains voltage. **Discharge bulb contains mercury and shall be disposed as chemical waste.**

All electronic components have to be housed in a well grounded metal box to avoid radio frequency interference (RFI) and to improve heat conduction.

Dimensions*

Length : 140 mm
 Diameter : 85 mm
 Cap : Twist base SLV 6

Electrical and luminous flux properties*

Lamp wattage : 85 W
 Mains voltage : 230V
 HF supply output : 2.6 MHz
 Luminous flux : 6000 lm

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2.3.1	Construction and assembly of cap/bulb (after heating) - Pull & bending test	11 QL-issue	Pull & bending shall be increased progressively to required value. Same pull & bending test after 2.000hr at 160°C. Type test: 5 lamps/year	0
Particular QL	Construction and assembly of cap/bulb (by end of life time) – Pull & bending test	11 QL-issue	Pull & bending shall be increased progressively to required value. Same pull & bending test after 60.000hr burning.	0
Particular QL	Construction and assembly of cap/bulb included moisture resistance – Pull & bending test	11 QL-issue	Pull & bending shall be increased progressively to required value. Same pull & bending test after 168 hrs in at 60°C & 95% relative humidity IEC 68-2-3,Ca. Type test: 5 lamps/year	0
2.3.2.2	Dimensional requirements for lamp	13	1 lamp/type/day will be checked by measurement on height by end-inspection.	1
2.7.2	Resistance to heat	15	Test after 168 hr. at 160°C heating on electric strength and dimensions. Dimensions shall comply with requirements of 2.3.2. Supplier Elhi will deliver confirmations.	See D3
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2.7.4	Resistance to fire	15	Glow wire test at 650 C Test report supplier Elhi is needed	See D3
2.11	Information for Luminaire design	QL-issue	Additional information	-
Particular QL	PET value	QL-issue	Additional information	-
Particular QL	Damage factor	QL-issue	Additional information	-

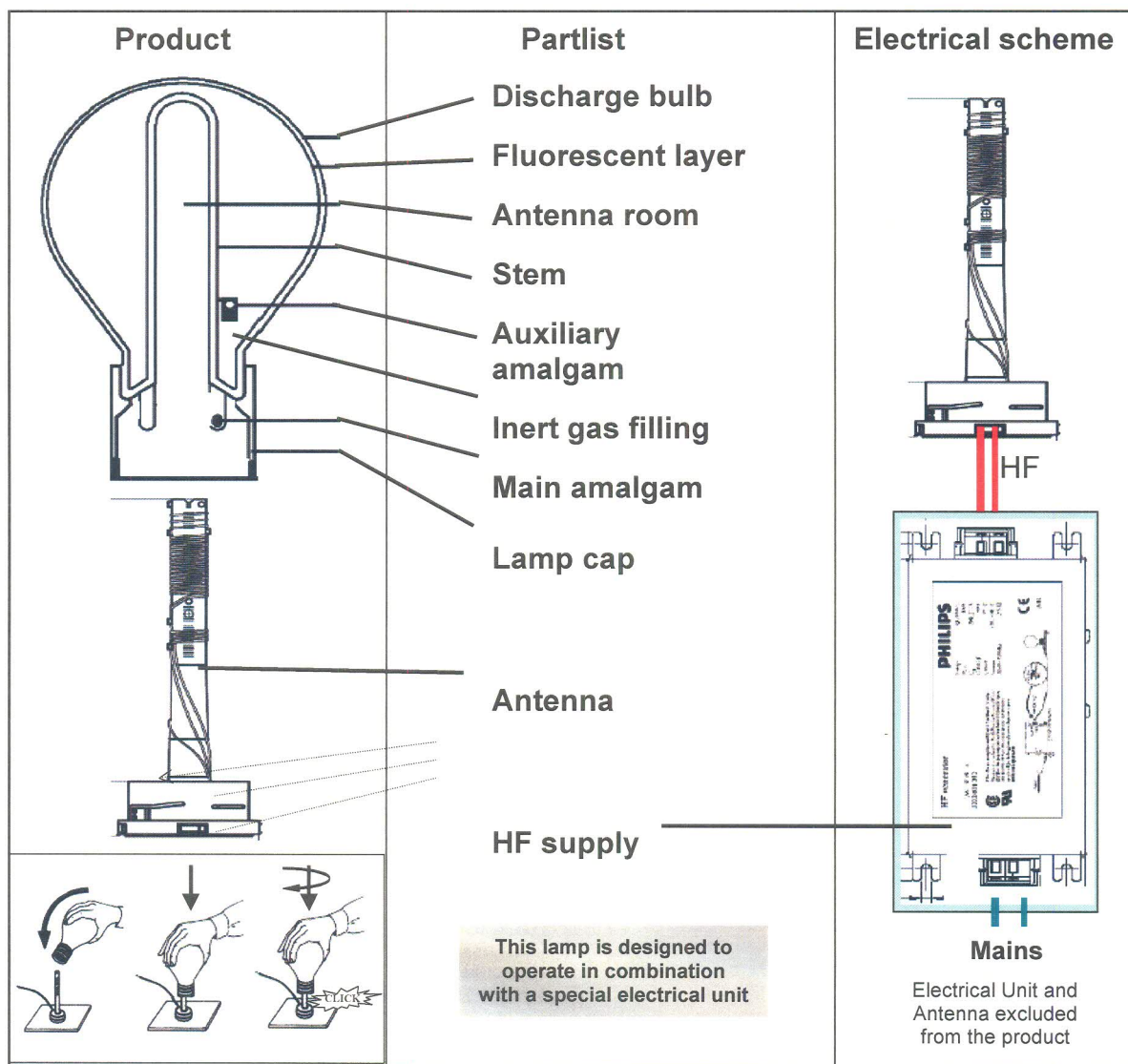
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2.7.2.2	Ball pressure test	Design	All families		Test report supplier Elhi	
2.7.4	Resistance to fire	Design	All families		Test report supplier Elhi	
2.11	Information for Luminaire design	Design	All QL Lamps	Information for OEM	Report Development QL	Yes / no
Particular QL	PET value	Design	By type	All QL lamps refer 190 sheet	Measurement report QDL	
Particular QL	Damage factor	Design	By type	All QL lamps refer 190 sheet	Measurement report QDL	

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The product is a low pressure mercury discharge lamp emitting visible light. During operation the discharge emits ultra-violet radiation which is transmitted by the fluorescent layer to visible light. The discharge is maintained by an alternating magnetic (induction) field generated by a special designed antenna located in the center of the discharge. The antenna can only operate if the lamp cap is connected to the antenna cap and connected to a special designed HF supply unit suitable for mains voltage. **Discharge bulb contains mercury and shall be disposed as chemical waste.** All electronic components have to be housed in a well grounded metal box to avoid radio frequency interference (RFI) and to improve heat conduction.

Dimensions*

Length : 140 mm
 Diameter : 85 mm
 Cap : Twist base SLV 6

Electrical and luminous flux properties*

Lamp wattage : 165 W
 Mains voltage : 230V
 HF supply output : 2.6 MHz
 Luminous flux : 12000 lm

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2.3.2.2	Dimensional requirements for caps	Periodic	All families using the same method of attachment and same tube diameter	Sop,s Eendcontrol and Packaging	Reject Registration list of QL	
2.7.2	Resistance to heat	Design	All families		Test report supplier Elhi	
2.7.2.2	Ball pressure test	Design	All families		Test report supplier Elhi	
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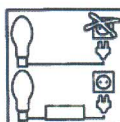
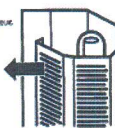
Appendix 4 - Labeling

PHILIPS

3

PHILIP

- ① Instructions pour l'utilisateur / l'utilisateur.
- ② Hinweise für den Installations/Bediener.
- ③ Instructies voor installatie/bediening.
- ④ Istruzioni di installazione ed uso.
- ⑤ Instrucciones para instalación/uso.
- ⑥ Anwijzingen für Installationsbediener.



Royal Philips, Holland
 Made in Holland
 3222 618 53791
 Изготовитель: Philips Lighting B.V.
 5600 JM Эйндховен, 80020 Нидерланды
 Сделано в Голландии

QL COMPANY
 Proven Technology

QL Company BV
 Philipsweg 1
 6026 RA Maarheeze
 The Netherlands
 info@qlcompany.com
 www.qlcompany.com
 Made in Holland

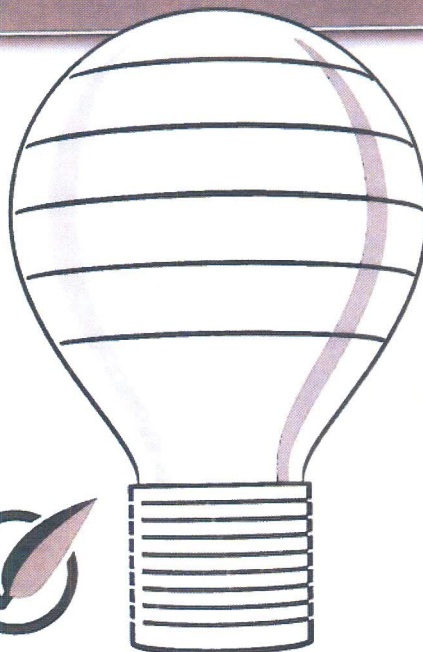
North America distributed
 by Arc Electronics, Inc.
 Nedap Light Controls
 14A Industrial Way, Attleboro
 North America



OEM PACK

QL Twist Base

OEM PACK



GENERAL INFORMATION **PHILIPS**

- 1 Use only these three symbols**

			Q1 55W
			Q1 65W
			Q1 165W

2 For detailed information

→ → **Police Q1 lamp signified.**
 → → **Police Lighting**
 → → **info.q1@police.com**

Prings offers a free of charge Q1, Luminaire iterations with remote maintenance for improvement. Please contact info.q1@police.com for further details.

3 No making during assembly	4. Protected eyes	5. Beware of high output voltage

6 General aspects






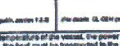
The manufacturer accepts no liability for injury or damage resulting from incorrect use of the lamp or from use not in accordance with the operating instructions.

This device complies with Part 19 of the EMC Directive. This product may cause interference to other equipment and should not be installed near sensitive electronic equipment or equipment of critical importance or communication equipment operating between 9 kHz-10 MHz.

7 eg - LAMP CONTAINING MERCURY
 Mercury in Accordance: Chemical waste, does not require special handling or 1-800-055-0150

Q1 55W lamp contains less than 200µg of Hg
 Q1 65W lamp contains less than 200µg of Hg
 Q1 165W lamp contains less than 1000µg of Hg

INSTRUCTIONS FOR QL LUMINAIRE DESIGNERS CONCERNING HEAT TRANSFER

- | | | |
|--|---|--|
| <p>1 Introduction</p> <p>Components of a DC lamp system:</p> <ul style="list-style-type: none"> 1 HP generator 1 power amplifier 1 vessel  | <p>2 Assembling system</p> <p>The vessel is mounted on the power amplifier.</p> <p>The power amplifier is connected to the HP generator.</p> <p>The HP generator is connected to the main power supply.</p>  | <p>3 When the lamp system is switched on, the vessel and the power amplifier produce heat.</p> <p>NOTE</p> <p>If the vessel becomes too hot, the lamp system will be reduced.</p> <p>If the temperature of the power amplifier exceeds a maximum, the life of the lamp system and the burner required will be reduced.</p>  |
| <p>4 When the lamp system is switched on, the HP generator produces heat.</p> <p>NOTE</p> <p>If the temperature of the HP generator, mounted in a container, exceeds a maximum temperature (275°C or 525°F), the life of the lamp system will be much shorter!</p>  | <p>5 To reduce the temperature of the vessel, the power amplifier and the HP generator, the heat must be transferred to the luminance.</p> <p>Important note!</p> <p>The luminance must dissipate the heat to the environment (to the air).</p>  | <p>6 The lamp system will be reduced.</p> <p>NOTE</p> <p>If the temperature of the lamp system exceeds a maximum, the life of the lamp system and the burner required will be reduced.</p>  |

(For details: QL OEM guide)

PHILIPS



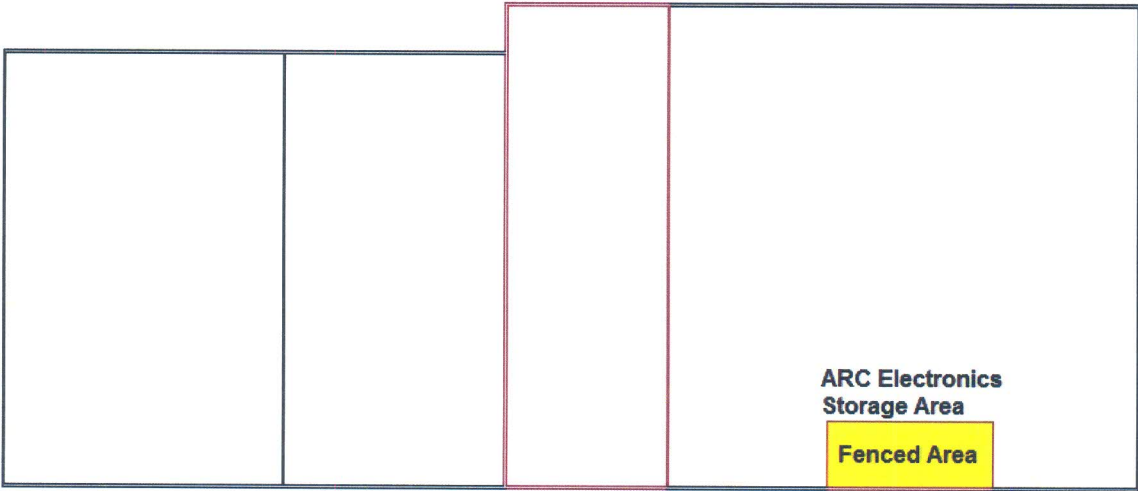
55W/830

MADE IN HOLLAND

Hg

□ F04

Appendix 5 – Receipt and Storage Area



Appendix 6 – Authorized User Naming and Training

STATE OF NEW HAMPSHIRE
 DEPARTMENT OF HEALTH AND HUMAN SERVICES
 DIVISION OF PUBLIC HEALTH SERVICES
 RADIOLOGICAL HEALTH SECTION
RADIOACTIVE MATERIAL LICENSE

Pursuant to the State of New Hampshire, Department of Health and Human Services' Radiological Health Section ("Agency") regulations and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders of the Department of Health and Human Services' Radiological Health Section now or hereafter in effect and to any conditions specified below.

LICENSEE		3. LICENSE NO. 474R	AMENDMENT NO. 01
1. NAME	ARC Electronics, Inc. d/b/a Nedap Light Controls North America	4. EXPIRATION DATE	May 31, 2012
2. ADDRESS	16 Peaslee Court Hampstead, New Hampshire 03841	5. CATEGORY	Possession Incident to Exempt Distribution
		In accordance with letters dated May 27, 2011, and May 31, 2011, signed by, Ken Sturgess, President New Hampshire Radioactive Material License No. 474R is hereby amended as stated herein. PREVIOUS AMENDMENTS ARE VOID	
6. RADIOACTIVE MATERIAL (ELEMENT AND MASS NUMBER)	7. CHEMICAL AND/OR PHYSICAL FORM	8. MAXIMUM AMOUNT OF RADIOACTIVITY WHICH LICENSEE MAY POSSESS AT ONE TIME	
A. Krypton 85	A. Gas in QL bulbs (manufactured by QL Company, Holland)	A. No single source to exceed 625 nanocuries; Total: 200 millicuries	
9. AUTHORIZED USE			

A. For receipt, possession, and storage incident to distribution as exempt products (as licensed by the United States Nuclear Regulatory Commission (NRC) E License) of QL bulbs containing Krypton 85 as a filling gas.

CONDITIONS

10. The licensee shall comply with the provisions of Parts He-P 4019, 4020, 4021, 4022, 4023, New Hampshire Rules for the Control of Radiation (NHRCR).
11. This license is subject to an annual fee in accordance with Part He-P 4070, NHRCR, for the applicable amount specified in Table 4070.1 of that Part.
12. Radioactive material shall be stored only at American Warehouse, 8 Industrial Way, Hudson, New Hampshire.
13. Radioactive material shall be used **by, or under the supervision of** Tracey Durfee or Robert Gibbs. **Individuals may be designated as supervised users only after having been instructed in the licensee's routine operating, radiation safety, and emergency procedures as stated in letter dated May 31, 2011. The licensee shall maintain records of individuals trained as supervised users.**
14. The individual designated to perform the duties and functions of Radiation Safety Officer (RSO) for activities covered by this license is Tracey Durfee.
15. Radioactive material shall not be used in or on human beings.
16. This license does not authorize the commercial distribution of exempt quantities of licensed material.

State of New Hampshire
Department of Health and Human Services
Division of Public Health Services
Radiological Health Section

Page 2 of 2 pages

License No. 474R
Amendment No. 01

Radioactive Material License

Supplementary Sheet

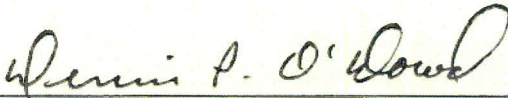
17. The licensee shall conduct a running physical inventory to account for all licensed material received, possessed and transferred or disposed under the license. The record of the inventory shall be maintained for three (3) years from the date of the inventory for inspection by the Agency, and shall include the quantities and kinds of radioactive material, location of sealed sources, the date of the inventory, and the name and initials of the person conducting the inventory.
18. Sealed sources containing radioactive material shall not be opened.
19. Except as specifically provided otherwise by this license, the licensee shall possess and use the radioactive material authorized by this license in accordance with statements, representations, and procedures contained in the documents, including any enclosures, listed below:

application dated April 22, 2011
letter dated May 11, 2011
application dated May 18, 2011
letters dated May 24, 2011
May 27, 2011
May 31, 2011

The New Hampshire Rules for the Control of Radiation shall prevail over the statements contained in the above documents unless such statements are more restrictive than the Rules.

For the Department of Health and Human Services
Division of Public Health Services

DATE OF ISSUANCE June 6, 2011


Dennis P. O'Dowd, Administrator
Radiological Health Section

Radiation Safety & Control Service

Awards this certificate to

Tracey Durfee

in recognition of satisfactory completion of the

Radiation Safety Officer Training Course
Stratham, NH

May 10th – 12th 2011



Gregory M. Babineau

Gregory M. Babineau, Sr. HP

Nasser B. Rashidifard

Nasser B. Rashidifard, Sr. HP



*This course has been approved for 40, Category A, CE credits (reference number NHZ0183001) by the ASRT De
NOTE: This class satisfies the Department of Transportation requirements listed in Title 49 CFR parts 172 st
and expires three years from the date listed above.*

Radiation Safety & Control Service

Awards this certificate to

Robert Gibbs

in recognition of satisfactory completion of the

Radiation Safety Officer Training Course
Stratham, NH

May 10th – 12th 2011



Gregory M. Babineau, Sr. HP

Nasser B. Rashidifard, Sr. HP



This course has been approved for 40, Category A, CE credits (reference number NHZ0183001) by the ASRT De

*NOTE: This class satisfies the Department of Transportation requirements listed in Title 49 CFR parts 172 s
and expires three years from the date listed above.*