

# EU Declaration of Conformity

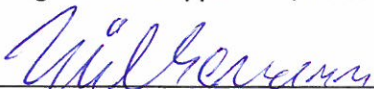

Document number: 2016 / 41 / 1D  
Manufacturer or representative: Radium Lampenwerk GmbH  
Address: Dr. Eugen-Kersting-Str. 6  
D-51688 Wipperfürth  
Germany  
Brand name or trade mark: Radium  
Product type: Halogen lamp  
Product designation: Halogenlampen high voltage G9  
 See attached list

The designated product(s) is (are) in conformity with the relevant Union harmonisation legislation:

- |                                     |                                      |   |
|-------------------------------------|--------------------------------------|---|
| <input checked="" type="checkbox"/> | <b>2014/35/EU:</b>                   | Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits; Official Journal of the EU L96, 29/03/2014, p. 357-374)  |
| <input type="checkbox"/>            | <b>2014/30/EU:</b>                   | Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility; Official Journal of the EU L96, 29/03/2014, p. 79-106  |
| <input checked="" type="checkbox"/> | <b>2009/125/EC</b><br>and amendments | Directive of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products   |
| <input checked="" type="checkbox"/> | <b>244/2009</b><br>and amendments    | Commission Regulation (EC) implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps  |
| <input type="checkbox"/>            | <b>245/2009</b><br>and amendments    | Commission Regulation (EC) implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council |
|                                     | <b>1194/2012</b><br>and amendments   | Commission Regulation (EU) No 1194/2012 of 12 December 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment  |
| <input checked="" type="checkbox"/> | <b>2011/65/EU</b><br>and amendments  | Directive of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment; Official Journal of the EU L174, 1/07/2011, p. 88-110  |
| <input type="checkbox"/>            | <b>1999/5/EC</b><br>and amendments   | Directive of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity   |

Last two digits of the year in which the CE marking was affixed: 13

Place and date of signatures: Wipperfürth, 28.06.2016

Signatures:    
Quality Management Quality Assurance

Names: Michael Hülsemann Bernhard Kläser

Customer service contact: Radium GmbH, Dr. Eugen-Kersting-Strasse 6, 51688 Wipperfürth, Deutschland

This declaration of conformity is issued under the sole responsibility of the manufacturer or representative. It certifies compliance with the indicated Directives, but implies no warranty of properties.

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## Annex

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The conformity of the designated product(s) with the provisions of the European **Low Voltage Directive** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- |                                     |   |   |
|-------------------------------------|---|---|
| <input type="checkbox"/>            | <b>EN 60155:</b><br>1995 + A1:1995 + A2:2007      | Glow-starters for fluorescent lamps   |
| <input type="checkbox"/>            | <b>EN 60432-1:</b><br>2000 + A1:2005 + A2:2012    | Incandescent lamps — Safety specifications — Part 1: Tungsten filament lamps for domestic and similar general lighting purposes |
| <input type="checkbox"/>            | <b>EN 60432-2:</b><br>2000 + A1:2005 + A2:2012    | Incandescent lamps — Safety specifications — Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes  |
| <input checked="" type="checkbox"/> | <b>EN 60432-3:</b><br>2013                        | Incandescent lamps — Safety specifications — Part 3: Tungsten halogen lamps (non-vehicle)                                       |
| <input type="checkbox"/>            | <b>EN 60598-1:</b><br>2008 + A11:2009             | Luminaires — Part 1: General requirements and tests   |
| <input type="checkbox"/>            | <b>EN 60598-2-1:</b><br>1989                      | Luminaires — Part 2-1: Particular requirements — Fixed general purpose luminaires   |
| <input type="checkbox"/>            | <b>EN 60598-2-2:</b><br>2012                      | Luminaires — Part 2-2: Particular requirements — Recessed luminaires  |
| <input type="checkbox"/>            | <b>EN 60598-2-3:</b><br>2003 + A1:2011            | Luminaires — Part 2-3: Particular requirements — Luminaires for road and street lighting  |
| <input type="checkbox"/>            | <b>EN 60598-2-4:</b><br>1997                      | Luminaires — Part 2-4: Particular requirements — Portable general purpose luminaires  |
| <input type="checkbox"/>            | <b>EN 60598-2-5:</b><br>1998                      | Luminaires — Part 2-5: Particular requirements — Floodlights  |
| <input type="checkbox"/>            | <b>EN 60598-2-6:</b><br>1994 + A1:1997            | Luminaires — Part 2-6: Particular requirements — Luminaires with built-in transformers for filament lamps                       |
| <input type="checkbox"/>            | <b>EN 60598-2-7:</b><br>1989 + A2:1996 + A13:1997 | Luminaires — Part 2-7: Particular requirements — Portable luminaires for garden use   |
| <input type="checkbox"/>            | <b>EN 60598-2-8:</b><br>2013                      | Luminaires — Part 2-8 : Particular requirements — Handlamps   |
| <input type="checkbox"/>            | <b>EN 60598-2-10:</b><br>2003                     | Luminaires — Part 2-10: Particular requirements — Portable luminaires for children  |
| <input type="checkbox"/>            | <b>EN 60598-2-12:</b><br>2013                     | Luminaires — Part 2-12: Particular requirements — Mains socket-outlet mounted nightlights                                       |
| <input type="checkbox"/>            | <b>EN 60598-2-13:</b><br>2006 + A1:2012           | Luminaires — Part 2-13: Particular requirements — Ground recessed luminaires  |
| <input type="checkbox"/>            | <b>EN 60598-2-20:</b><br>2010                     | Luminaires — Part 2-20: Particular requirements — Lighting chains   |
| <input type="checkbox"/>            | <b>EN 60598-2-22:</b><br>2014                     | Luminaires — Part 2-22: Particular requirements — Luminaires for emergency lighting   |
| <input type="checkbox"/>            | <b>EN 60968:</b><br>2013 + A11:2014               | Self-ballasted lamps for general lighting services — Safety requirements  |
| <input type="checkbox"/>            | <b>EN 61195:</b><br>1999 + A1:2013                | Double-capped fluorescent lamps — Safety specifications   |

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<input type="checkbox"/>	<b>EN 61199:</b> 2011 + A1:2013	Single-capped fluorescent lamps — Safety specifications
<input type="checkbox"/>	<b>EN 61347-1:</b> 2008 + A1:2011 + A2:2013	Lamp controlgear — Part 1: General and safety requirements
<input type="checkbox"/>	<b>EN 61347-2-1:</b> 2001 + Corr. 2003 + A1:2006 + Corr. 2006 + Corr. 2010 + A2:2014	Lamp controlgear — Part 2-1: Particular requirements for starting devices (other than glow starters)
<input type="checkbox"/>	<b>EN 61347-2-2:</b> 2012	Lamp controlgear — Part 2-2: Particular requirements for d. c. or a. c. supplied electronic step-down converters for filament lamps
<input type="checkbox"/>	<b>EN 61347-2-3:</b> 2011 + Corr. 2011	Lamp controlgear — Part 2-3: Particular requirements for a. c. and/or d. c. supplied electronic ballasts for fluorescent lamps
<input type="checkbox"/>	<b>EN 61347-2-7:</b> 2012	Lamp controlgear — Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)
<input type="checkbox"/>	<b>EN 61347-2-8:</b> 2001 + Corrigendum: 2003+ A1:2006 + Corrigendum:2010	Lamp controlgear — Part 2-8: Particular requirements for ballasts for fluorescent lamps
<input type="checkbox"/>	<b>EN 61347-2-9:</b> 2013	Lamp controlgear — Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)
<input type="checkbox"/>	<b>EN 61347-2-10:</b> 2001 + A1:2009 + Corrigendum:2010	Lamp controlgear — Part 2-10: Particular requirements for electronic invertors and converters for high-frequency operation of cold start tubular discharge lamps (neon tubes)
<input type="checkbox"/>	<b>EN 61347-2-11:</b> 2001 + Corrigendum:2002 + Corrigendum:2010	Lamp controlgear — Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires
<input type="checkbox"/>	<b>EN 61347-2-12:</b> 2005 + A1:2010 + Corr.2010	Lamp controlgear — Part 2-12: Particular requirements for d. c. or a. c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)
<input type="checkbox"/>	<b>EN 61347-2-13:</b> 2014	Lamp controlgear — Part 2-13: Particular requirements for d. c. or a. c. supplied electronic controlgear for LED modules
<input type="checkbox"/>	<b>EN 61549:</b> 2003 + A1:2005 + A2:2010 + A3:2012	Miscellaneous lamps
<input type="checkbox"/>	<b>EN 62031:</b> 2008 + A1:2013	LED modules for general lighting — Safety specifications
<input type="checkbox"/>	<b>EN 62034:</b> 2012	Automatic test systems for battery powered emergency escape lighting
<input type="checkbox"/>	<b>EN 62035:</b> 2000 + A1:2003 + A2:2012	Discharge lamps (excluding fluorescent lamps) — Safety specifications

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The conformity of the designated product(s) with the provisions of the European **Low Voltage Directive Directive 2006/95/EC** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

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- |                                     |                                     |   |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/>            | <b>EN 62493:</b><br>2010            | Assessment of lighting equipment related to human exposure to electromagnetic fields  |
| <input type="checkbox"/>            | <b>EN 62532:</b><br>2011            | Fluorescent induction lamps — Safety specifications   |
| <input type="checkbox"/>            | <b>EN 62560:</b><br>2012            | Self-ballasted LED-lamps for general lighting services by voltage > 50 V — Safety specifications  |
| <input type="checkbox"/>            | <b>EN 60669-2-1:</b><br>2004+A12009 | Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches (IEC 60669-2-1:2002, modified) / Corrected and reprinted in 2007-12 |
| <input checked="" type="checkbox"/> | <b>EN 62471:</b><br>2008            | Photobiological safety of lamps and lamp systems  |
| <input type="checkbox"/>            |                                     | 34A/1631/CDV (blue light hazard requirements only)  |

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The conformity of the designated product(s) with the provisions of the European **EMC Directive** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

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- |                          |                              |   |
|--------------------------|------------------------------|---|
| <input type="checkbox"/> | <b>EN 55015:</b><br>2013     | Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment   |
| <input type="checkbox"/> | <b>EN 61000-3-2:</b><br>2014 | Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)  |
| <input type="checkbox"/> | <b>EN 61000-3-3:</b><br>2013 | Electromagnetic compatibility (EMC) — Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subjected to conditional connection |
| <input type="checkbox"/> | <b>EN 61547:</b><br>2009     | Equipment for general lighting purposes — EMC immunity requirements   |
| <input type="checkbox"/> | <b>EN 50498:</b> 2010        | Electromagnetic compatibility (EMC) –<br>Product family standard for aftermarket electronic equipment in vehicles   |
| <input type="checkbox"/> |                              |   |

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The conformity of the designated product(s) with the provisions of the European Directive **2009/125/EC** is given by the compliance with the following European Standard(s). If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- EN 50294:**  
1998 + A1:2001 + A2:2003 Measurement method of total input power of ballast-lamp circuits
  - EN 62442-1:** 2011 Energy performance of lamp controlgear - Part 1: Controlgear for fluorescent lamps - Method of measurement to determine the total input power of controlgear circuits and the efficiency of the controlgear
  - EN 62442-2:** 2014 Energy performance of lamp controlgear – Part 2: Controlgear for high intensity discharge lamps (excluding fluorescent lamps) – Method of measurement to determine the efficiency of the controlgear
  - EN 62442-3:**  
2014 Energy performance of lamp controlgear – Part 3: Controlgear for halogen lamps and LED modules – Method of measurement to determine the efficiency of the controlgear
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The conformity of the designated product(s) with the provisions of the European Directive **2011/65/EU** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- EN 50581:** 2012 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
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The conformity of the designated product(s) with the provisions of the European Directive **1999/5/EC** is given by the compliance with the following European Standard(s). If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

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- ETSI EN 300 220-1 V2.1.1:** Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 1: Technical characteristics and test methods
- ETSI EN 300 220-2 V2.1.2:** Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
- ETSI EN 301 489-1 V1.8.1** Electromagnetic compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
- ETSI EN 301 489-3 V1.4.1** Electromagnetic compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz
- EN 60590-1: 2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013** Information technology equipment – Safety – Part 1: General requirements
- EN 60825-1: 2014** Safety of laser products - Part 1: Equipment classification and requirements (IEC 60825-1:2014) / Endorsement notice
- EN 60065: 2002 + A1:2006 + Cor.:2007 + A11:2008 + A2:2010 + A12:2011** Audio, video and similar electronic apparatus - Safety requirements
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## Attached list

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RJH-PIN 20W/230/C/XE/G9  
RJH-PIN 33W/230/C/XE/G9  
RJH-PIN 48W/230/C/XE/G9  
RJH-PIN 60W/230/C/XE/G9