### **EU Declaration of Conformity**



Document number:		2017 / 01 / 1D	
Manufacturer or representative:		Radium Lampenwerk Gn	nbH
Addres	s:	Dr. Eugen-Kersting-Str. 6 D-51688 Wipperfürth Germany	
Brand r	name or trade mark:	Radium	
Produc	t type:	Incandescent lamp	
Produc	t designation:	Signal lamps	
		See attached list	
The des	ignated product(s) is (are) in	conformity with the relevant I	Inion harmonisation legislation:
⊠	2014/35/EU	Directive of the European Par harmonisation of the laws of	liament and of the Council of 26 February 2014 on the the Member States relating to the making available on ment designed for use within certain voltage limits:
	2014/30/EU	harmonisation of the laws of	liament and of the Council of 26 February 2014 on the he Member States relating to electromagnetic of the EU L96, 29/03/2014, p. 79-106
	2009/125/EC and amendments	Directive of the European Par establishing a framework for related products	liament and of the Council of 21 October 2009 he setting of ecodesign requirements for energy-
	244/2009 and amendments	Commission Regulation (EC) Parliament and of the Council directional household lamps	implementing Directive 2005/32/EC of the European with regard to ecodesign requirements for non-
	245/2009 and amendments	Parliament and of the Council lamps without integrated balls	implementing Directive 2005/32/EC of the European with regard to ecodesign requirements for fluorescent ist, for high intensity discharge lamps, and for ballasts such lamps, and repealing Directive 2000/55/EC of the de Council
	1194/2012 and amendments	Directive 2009/125/EC of the E	No 1194/2012 of 12 December 2012 implementing uropean Parliament and of the Council with regard to rectional lamps, light emitting diode lamps and related
$\boxtimes$	2011/65/EU and amendments	restriction of the use of certain	iament and of the Council of 8 June 2011 on the n hazardous substances in electrical and electronic the EU L174, 1/07/2011, p. 88-110
	1999/5/EC and amendments	Directive of the European Pari equipment and telecommunic of their conformity (applicable	iament and of the Council of 9 March 1999 on radio ations terminal equipment and the mutual recognition until 2017-06-12)
	2014/53EU	harmonisation of the laws of t	iament and of the Council of 16 April 2014 on the ne Member States relating to the making available on and repealing Directive 1999/5/EC (applicable from
		Official Journal of the 2015/ Ca	
Last two	digits of the year in which	n the CE marking was affixed	ed: 16
Place ar	nd date of signatures: Wip	perfürth, 12.01.2017	
Signatur		remy	B. Waso
	Quality Managen	nent	Quality Assurance
Names:	Michael Hülsema	ınn	Bernhard Kläser

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.

## EU Declaration of Conformity 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.

	EN 60155: 1995 + A1:1995 + A2:2007	Glow-starters for fluorescent lamps
$\boxtimes$	EN 60432-1: 2000 + A1:2005 + A2:2012	Incandescent lamps — Safety specifications — Part 1: Tungsten filament lamps for domestic and similar general lighting purposes
	EN 60432-2: 2000 + A1:2005 + A2:2012	Incandescent lamps — Safety specifications — Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes
	EN 60432-3: 2013	Incandescent lamps — Safety specifications — Part 3: Tungsten halogen lamps (non-vehicle)
	EN 60598-1: 2015	Luminaires — Part 1: General requirements and tests
	EN 60598-2-1: 1989	Luminaires — Part 2-1: Particular requirements — Fixed general purpose luminaires
	EN 60598-2-2: 2012	Luminaires — Part 2-2: Particular requirements — Recessed luminaires
	EN 60598-2-3: 2003 + A1:2011	Luminaires — Part 2-3: Particular requirements — Luminaires for road and street lighting
	EN 60598-2-4: 1997	Luminaires — Part 2-4: Particular requirements — Portable general purpose luminaires
	EN 60598-2-5: 1998	Luminaires — Part 2-5: Particular requirements — Floodlights
	EN 60598-2-6: 1994 + A1:1997	Luminaires — Part 2-6: Particular requirements — Luminaires with built-in transformers for filament lamps
	<b>EN 60598-2-7:</b> 1989 + A2:1996 + A13:1997	Luminaires — Part 2-7: Particular requirements — Portable luminaires for garden use
	EN 60598-2-8: 2013	Luminaires — Part 2-8 : Particular requirements — Handlamps
	EN 60598-2-10: 2003	Luminaires — Part 2-10: Particular requirements — Portable luminaires for children
	EN 60598-2-12: 2013	Luminaires — Part 2-12: Particular requirements — Mains socket-outlet mounted nightlights
	EN 60598-2-13: 2012	Luminaires — Part 2-13: Particular requirements — Ground recessed luminaires
	EN 60598-2-20: 2010	Luminaires — Part 2-20: Particular requirements — Lighting chains
	EN 60598-2-22: 2014	Luminaires — Part 2-22: Particular requirements — Luminaires for emergency lighting
	EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013	Information technology equipment – Safety – Part 1: General requirements
	EN 60968: 2013 + A11:2014	Self-ballasted lamps for general lighting services — Safety requirements
	EN 61195: 1999 + A1:2013	Double-capped fluorescent lamps — Safety specifications

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EN 61199: 2011 + A1:2013	Single-capped fluorescent lamps — Safety specifications
EN 61347-1: 2015	Lamp controlgear — Part 1: General and safety requirements
EN 61347-2-1: 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)
EN 61347-2-2: 2012	Lamp controlgear — Part 2-2: Particular requirements for d. c. or a. c. supplied electronic step-down convertors for filament lamps
EN 61347-2-3: 2011 + Corr. 2011	Lamp controlgear — Part 2-3: Particular requirements for a. c. and/or d. c. supplied electronic ballasts for fluorescent lamps
EN 61347-2-7: 2012	Lamp controlgear — Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)
EN 61347-2-8: 2001 + Corrigendum: 2003+ A1:2006	Lamp controlgear — Part 2-8: Particular requirements for ballasts for fluorescent lamps
+ Corrigendum:2010	
EN 61347-2-9: 2013	Lamp controlgear — Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)
EN 61347-2-10: 2001 + A1:2009 + Corrigendum:2010	Lamp controlgear — Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)
EN 61347-2-11: 2001 + Corrigendum:2002 + Corrigendum:2010	Lamp controlgear — Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires
EN 61347-2-12: 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)
EN 61347-2-13: 2014	Lamp controlgear — Part 2-13: Particular requirements for d. c. or a. c. supplied electronic controlgear for LED modules
EN 61549: 2003 + A1:2005 + A2:2010 + A3:2012	Miscellaneous lamps
EN 62031: 2008 + A1:2013 + A2:2015	LED modules for general lighting — Safety specifications
<b>EN 62034</b> : 2012	Automatic test systems for battery powered emergency escape lighting
EN 62035: 2000 + A1:2003 + A2:2012	Discharge lamps (excluding fluorescent lamps) — Safety specifications
EN 62368-1: 2014 + AC: 2015	Audio/video, information and communication technology equipment - Part 1: Safety requirements

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The conformity of the designated product(s) with the provisions of the European Low Voltage Directive 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.

EN 62493: 2015	Assessment of lighting equipment related to human exposure to electromagnetic fields
EN 62532: 2011	Fluorescent induction lamps — Safety specifications
EN 62560:	Self-ballasted LED-lamps for general lighting services by voltage > 50 V — Safety
2012 + A1:2015 + AC:2015	specifications
EN 60669-2-1:	Switches for household and similar fixed electrical installations - Part 2-1:
2004+A12009	Particular requirements - Electronic switches (IEC 60669-2-1:2002, modified) / Corrected and reprinted in 2007-12
EN 62471: 2008	Photobiological safety of lamps and lamp systems
EN 62733: 2015	Programmable components in eletronic lamp controlgear

# **EU Declaration of Conformity Annex**

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Th	given by the compliance	signated product(s) with the provisions of the European <b>EMC Directive</b> is e with the following European Standard(s) or other specifications. If not ise indicated the edition/amendment as referenced below applies.
	EN 55015: 2013 + A1:2015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
	EN 61000-3-2: 2014	Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
	EN 61000-3-3: 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 ≤ 16 A per phase and not subjected to conditional connection
	EN 61547: 2009	Equipment for general lighting purposes — EMC immunity requirements
	EN 50498: 2010	Electromagnetic compatibility (EMC) –
		Product family standard for aftermarket electronic equipment in vehicles

#### EU Declaration of Conformity Annex

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The conformity of the designated product(s) with the provisions of the European eco design (ERP) Directive 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: Measurement method of total input power of ballast-lamp circuits 1998 + A1:2001 + A2:2003 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 Energy performance of lamp controlgear -EN 62442-2: 2014 Part 2: Controlgear for high intensity discharge lamps (excluding lamps) - Method of measurement to determine the efficiency of the controlgear Energy performance of lamp controlgear -EN 62442-3: Part 3: Controlgear for halogen lamps and LED modules - Method of 2014 measurement to determine the efficiency of the controlgear 

## EU Declaration of Conformity Annex

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The conformity of the designated product(s) with the provisions of the European Directive **RoHS** 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.

$\boxtimes$	EN 50581: 2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

## **EU Declaration of Conformity Annex**

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The conformity of the designated product(s) with the provisions of the European radio equipment Directive is given by the compliance with the following European Standard(s). If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.			
	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 60950-1: 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: 2014	Audio, video and similar electronic apparatus - Safety requirements	
	EN 60432-1: 2000 + A1:2005 + A2:2012	Incandescent lamps — Safety specifications — Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	
	EN 60432-2: 2000 + A1:2005 + A2:2012	Incandescent lamps — Safety specifications — Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	
	EN 60432-3: 2013	Incandescent lamps — Safety specifications — Part 3: Tungsten halogen lamps (non-vehicle)	
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	EN 60598-2-3: 2003 + A1:2011	Luminaires — Part 2-3: Particular requirements — Luminaires for road and street lighting	
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EN 60598-2-22: 2014	Luminaires — Part 2-22: Particular requirements — Luminaires for emergency lighting
EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013	Information technology equipment – Safety – Part 1: General requirements
EN 60968: 2013 + A11:2014	Self-ballasted lamps for general lighting services — Safety requirements
EN 61195: 1999 + A1:2013	Double-capped fluorescent lamps — Safety specifications
EN 61199: 2011 + A1:2013	Single-capped fluorescent lamps — Safety specifications
EN 61347-1: 2015	Lamp controlgear — Part 1: General and safety requirements
EN 61347-2-1: 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)
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	EN 60669-2-1:	Switches for household and similar fixed electrical installations - Part 2-1:
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	EN 61547: 2009	Equipment for general lighting purposes — EMC immunity requirements
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SVA - NUE 20W / 10 / BA20S

SVA 40W / 220-240/ C / E27

SVA - K 60W / 230 - 240/ C / E27 SVA - K 75W / 230 - 240/ C / E27