



TEST REPORT
IEC 60598-2-5
Luminaire
Part 2: Particular requirements
Section 5: Floodlights

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Name of Testing Laboratory preparing the Report.....: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch

Applicant's name Schröder S.A
Address Rue de Lusambo 67, 1190 Brussels, BELGIUM

Test specification:

Standard IEC 60598-2-5:2015 used in conjunction with IEC 60598-1:2020
Test procedure.....: ENEC
Non-standard test method.....: N/A

TRF template used IECEE OD-2020-F1:2021, Ed.1.4

Test Report Form No.: IEC60598_2_5G

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Test item description..... :	Flood lights (LED Flood Light)
Trade Mark(s)..... :	Schröder
Manufacturer..... :	Same as applicant
Model/Type reference..... :	BRITEL2a-bcc-dx-ye-f-g ('a' represents product input power, can be 1, 1(600W), 2 or 2(1200W). 1=700W, 1(600W)=600W, 2=1400W, 2(1200W)=1200W; 'b' represents product CRI, can be 7, 8 or 9. 7=70, 8=80, 9=90; 'cc' represents product LED CCT, can be 27, 30, 35, 40, 50, 57. E.g. 27=2700K, 57=5700K; 'd' represents company internal code, can be combined by any numbers or letters from '0-9' and 'A-Z' except d=V1 or V2. E.g. d=A1; 'x' represents the reflector, can be V1, V2 or Blank, when x=blank, means product without reflector; 'y' represents the LED driver position, can be blank or INT, when y=INT, means LED driver is mounting on the LED module enclosure, when y=blank, means LED driver is mounting on the luminaire mounting bracket or separated mounting with luminaire; 'e' represents input voltage, can be L, H or E. L=120-277VAC, H=277-480VAC, E=220-400VAC; 'f' represents luminaire dimming function, can be N, A, D or DMX. N=no dimming function, A=0-10V dimming, D=DALI dimming, DMX=DMX dimming function) 'g' represents with or without socket, can be NEMA7 or Blank. NEMA7= with socket, Blank= no socket, when 'g' is blank, the whole '-g' shall be removed.)
Ratings..... :	Rated Voltage: See 'General product information' for details Rated Frequency: 50/60Hz Rated Power: See 'General product information' for details Protection Class: I Degree of Protection: IP66 Blue Light Risk Group: RG2 ta: 40°C

IEC 60598-2-5			
Clause	Requirement + Test	Result - Remark	Verdict
5.2 (0)	GENERAL TEST REQUIREMENTS		—
5.2 (0.3)	More sections applicable	Yes ☐ No ☒	—
5.2 (0.5)	Components	(see Annex 1)	—
5.2 (0.7)	Information for luminaire design in light sources standards		—
5.2 (0.7.2)	Light source safety standard	IEC 62031; EN IEC 62031	—
	Luminaire design in the light source safety standard		—

5.4 (2)	Classification of luminaires		—
5.4 (2.2)	Type of protection	Class I	—
5.4 (2.3)	Degree of protection	IP66	—
5.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ☒ No ☐	—
5.4 (2.5)	Luminaire for normal use	Yes ☒ No ☐	—
	Luminaire for rough service	Yes ☐ No ☒	—

5.5 (3)	MARKING		—
5.5 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
5.5 (3.3)	Additional information		P
	Language of instructions	English	P
5.5 (3.3.1)	Combination luminaires		N/A
5.5 (3.3.2)	Nominal frequency in Hz	50/60Hz	P
5.5 (3.3.3)	Operating temperature		N/A
5.5 (3.3.5)	Wiring diagram		N/A
5.5 (3.3.6)	Special conditions		N/A
5.5 (3.3.7)	Metal halide lamp luminaire – warning		N/A
5.5 (3.3.8)	Limitation for semi-luminaires		N/A
5.5 (3.3.9)	Power factor and supply current		N/A
5.5 (3.3.10)	Suitability for use indoors		P
5.5 (3.3.11)	Luminaires with remote control		N/A
5.5 (3.3.12)	Clip-mounted luminaire – warning		N/A
5.5 (3.3.13)	Specifications of protective shields		N/A
5.5 (3.3.14)	Symbol for nature of supply		P

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Clause	Requirement + Test	Result - Remark	Verdict
	Comply with IEC 61643-11		P
	External to controlgear and connected to earth:		P
	- only in fixed luminaires		P
	- only connected to protective earth		P
5.6 (4.33)	Luminaire powered via information technology communication cabling		N/A
	Requirements for Class III luminaire		N/A
	Rated voltage within the range of ES1 and does not exceed maximum voltage of used connector		N/A
	Luminaire does not create any hazard from overvoltage	(see Annex 2)	N/A
5.6 (4.34)	Electromagnetic fields (EMF)		P
	No harmful electromagnetic fields		P
5.6 (4.35)	Protection against moving fan blades		N/A
	Test with a standard test finger		N/A
	Test with test probe acc. to Figure 13 (IEC 61032) for portable luminaire		N/A
	Blades rounded with radius ≥ 0.5 mm and:		N/A
	-hardness less than D60 Shore		N/A
	-peripheral speed less than 15 m/s		N/A
	-input power of fan ≤ 2 W at rated voltage		N/A
5.6 (4.36)	Track-mounted luminaires		N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A
5.6.1 (-)	At least IPX3 if for outdoor use	IP66	P
5.6.2 (-)	Lampholder brackets and lamp supports		N/A
5.6.3 (-)	Adjusting means		N/A
5.6.4 (-)	Controlling components		N/A
5.6.5 (-)	Fixing device		P
	Wind force test		P
5.6.6 (-)	Locking of angular adjustment		P
5.6.7 (-)	Vibration resistance		P
5.6.8 (-)	Requirement on glass cover if mounting height > 5 m		N/A
	Method of protection		—
5.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		—
5.7 (11.2)	Creepage distances and clearances	See Table 5.7 (11.2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.11 (8.2.7)	Luminaire other than below with capacitor > 0,5 μ F not exceed 50 V 1 min after disconnection		P
	Portable luminaire with capacitor > 0,1 μ F (0.25) not exceed 34 V 1 s after disconnection		N/A
	Other luminaires with capacitor > 0,1 μ F (0.25) with plug and track adaptors not exceed 60 V 5 s after disconnection		N/A

5.12 (12)	ENDURANCE TEST AND THERMAL TEST		—
5.12 (-)	If IP > IP 20 relevant test of (12.4), (12.5), (12.6) and (12.7) after (9.2) before (9.3) as specified in 5.13		—
5.12 (12.2)	Selection of lamps and ballasts		—
	Lamp used according Annex B	(Lamp used see Annex 2)	—
	Control gear if separate and not supplied	(Control gear used see Annex 2)	—
5.12 (12.3)	Endurance test		P
	a) mounting-position	As normal used	—
	b) test temperature (°C).....	50	—
	c) total duration (h)	240	—
	d) supply voltage (V).....	264	—
	d) if not equipped with control gear, constant voltage/current (V) or (A)	--	—
	e) luminaire ceases to operate	--	—
5.12 (12.3.1d)	d) Class III luminaires powered via information technology communication cable:		N/A
	- voltage under normal operation (V).....		—
	- voltage under abnormal operation (V).....		—
	e) luminaire ceases to operate		—
	f) luminaire with constant light output function		—
5.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P
	- no damage to track system		N/A
	- marking legible		P
	- no cracks, deformation etc.		P
5.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
5.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	P
5.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
5.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)		—
	- case of abnormal conditions		—
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un		—
	- measured mounting surface temperature (°C) at 1,1 Un		N/A
	- calculated mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
5.12 (12.6.2)	Temperature sensing control		N/A
	- case of abnormal conditions		—
	- thermal link		N/A
	- manual reset cut-out		N/A
	- auto reset cut-out		N/A
	- measured mounting surface temperature (°C)		N/A
	- track-mounted luminaires		N/A
5.12 (12.7)	Thermal test (failed lamp control gear in plastic luminaires):		N/A
5.12 (12.7.1)	Luminaire without temperature sensing control		N/A
5.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W		N/A
	Test method 12.7.1.1 or Annex W		—
	Test according to 12.7.1.1:		N/A
	- case of abnormal conditions		—
	- Ballast failure at supply voltage (V)		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
	Test according to Annex W:		N/A
	- case of abnormal conditions		—
	- measured winding temperature (°C): at 1,1 Un		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un		—
	- calculated temperature of fixing point/exposed part (°C)		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Ball-pressure test..... :	See Test Table 5.15 (13.2.1)	N/A
5.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N/A
	- case of abnormal conditions		—
	- measured winding temperature (°C): at 1,1 Un		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un		—
	- calculated temperature of fixing point/exposed part (°C)		—
	Ball-pressure test..... :	See Test Table 5.15 (13.2.1)	N/A
5.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA		N/A
	- case of abnormal conditions		—
	- Components retained in place after the test		N/A
	- Test with standard test finger after the test		N/A
5.12 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link..... :	Yes ☐ No ☐	—
	- manual reset cut-out..... :	Yes ☐ No ☐	—
	- auto reset cut-out	Yes ☐ No ☐	—
	- case of abnormal conditions		—
	- highest measured temperature of fixing point/exposed part (°C):		—
	Ball-pressure test..... :	See Test Table 5.15 (13.2.1)	N/A
5.12.1 (-)	Reduction 10°C of measured temperatures if for outdoor use		—
5.12.2 (-)	Glass covers used within the thermal limits		N/A

5.13 (9)	RESISTANCE TO DUST AND MOISTURE		—
5.13.1 (-)	If IP > IP 20 the order of tests as specified in clause 5.12		P
5.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP..... :	IP66	—
	- mounting position during test..... :	As in normal used	—
	- fixing screws tightened; torque (Nm)..... :	2/3x1,2Nm for screw fixing junction box/LED lens 2/3x6,25Nm for metal gland	—
	- tests according to clauses	Clause 9.2.2 and 9.2.7	—

Attachment No. 1

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IEC60598_2_5G ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT			
IEC 60598-2-5			
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES			
Luminaires			
Part 2: Particular requirements			
Section 5: Floodlights			
Differences according to		EN 60598-2-5:2015 used in conjunction with EN IEC 60598-1:2021 + A11:2022	
TRF template used		IECEE OD-2020-F2:2020, Ed. 1.1	
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Attachment Originator		UL(Demko)	
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	CENELEC COMMON MODIFICATIONS (EN)		—
5.5 (3)	MARKING		—
5.5 (3.2.12)	Note 4 deleted		N/A
5.6 (4)	CONSTRUCTION		—
5.6 (4.11.6)	Electro-mechanical contact systems: electric strength test at 1 500 V		N/A
5.10 (5)	EXTERNAL AND INTERNAL WIRING		—
5.10 (5.2.2)	Cables equal to EN 50525 (all parts)		P
	Paragraph 2 deleted		P
	Replace table 5.1 – Supply cord		P
5.12 (12)	ENDURANCE TESTS AND THERMAL TESTS		—
5.12 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring		P
ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)		—
(3.3)	DK: power supply cords of class I luminaires with label		N/A
(5.2.1)	CY, DK, FI, UK: type of plug		N/A
(5.2.18)	DK: socket-outlets		N/A
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		—
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A

Attachment No. 1

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Clause	Requirement + Test	Result - Remark	Verdict
	FR: Safety requirements for high buildings <i>(Decree of 30 December 2011 on safety regulations for the construction of high-rise buildings and their protection against fire and panic risks; Section VIII; Article GH 48, Lighting)</i> Glow-wire test for outer parts of luminaires:		N/A
	- 850°C for luminaires in stairways and horizontal travel paths		N/A
	- 650°C for indoor luminaires		N/A
	UK: Requirements according to United Kingdom Building Regulation		N/A