



TEST REPORT IEC 60598-2-1 Luminaires

Part 2: Particular requirements Section 1: Fixed general purpose luminaires

Report Number. GZES210301485801

Date of issue 2021-06-23

Total number of pages 39

Name of Testing Laboratory SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou

preparing the Report...... Branch

Applicant's name...... Blueview Elec-optic Tech Co., Ltd.

Industrial Development Zone, Chengdu, Sichuan, China

Test specification:

Standard.....: IEC 60598-2-1:2020 used in conjunction with IEC 60598-1:2014,

AMD1:2017

Test procedure CB Scheme

Non-standard test method.....: N/A

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Test item description: Fixed			luminaire		
Trade Mark(s): Bluevi			ew		
Man	ufacturer:	Same	as applicant		
Mod	el/Type reference:	ABS30	00-0610, ABS300-0915		
Rati	ngs:	230 V;	50/60 Hz; IP20; Class I		
		ABS30	00-0610: 23,0 W;		
		ABS30	00-0915: 32,0 W		
Res	ponsible Testing Laboratory (as a	pplical	ble), testing procedure and tes	ting location(s):	
	CB Testing Laboratory:		SGS-CSTC Standards Technic Guangzhou Branch	al Services Co., Ltd.	
Test	ing location/ address	:	198 Kezhu Road, Science City, Development Area, Guangzhou	ı, Guangdong, China	
Test	ed by (name, function, signature)	:	Ivan Zhang / Project Engineer	Tuan Thomas	
App	roved by (name, function, signatu	ıre):	Mon Liang / Reviewer	prolig	
	Testing procedure: CTF Stage 1	:			
Test	ing location/ address	:			
Test	ed by (name, function, signature)	:			
Арр	roved by (name, function, signatu	ıre):			
	To diamond of Otonia	_			
H.	Testing procedure: CTF Stage 2				
	ing location/ address				
	ed by (name + signature)				
Witn	nessed by (name, function, signat	ure):			
App	roved by (name, function, signatu	ıre):			
	Testing procedure: CTF Stage 3				
H	Testing procedure: CTF Stage 4				
Toot					
	Testing location/ address				
	Tested by (name, function, signature):				
	Witnessed by (name, function, signature):				
<u> </u>	roved by (name, function, signatu				
Sup	ervised by (name, function, signa	ture) :			

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List of Attachments (including a total number of pages in each attachment):

Attachment 1: European Group differences and National differences of IEC 60598-2-1 (Total: 2 pages)

Attachment 2: Additional test for IEC/EN IEC 62031 (Total: 7 pages)

Attachment 3: EN 62493: 2015 (Total: 1 page)

Attachment 4: Circuit diagram and PCB layout (Total: 1 page)

Attachment 5: Photo documentations (Total: 6 pages)

Summary of testing:

- The submitted sample was found to be in compliance with the standard IEC 60589-2-1: 2020, IEC 60598-1: 2014 + A1: 2017, IEC 62031: 2018, EN IEC 62031: 2020, EN IEC 60598-2-1: 2021 and EN 60598-1: 2015 + A1: 2018.
- 2. The LED module was tested according to the standard IEC 62031: 2018, and the test result was positive.
- 3. The submitted appliances were found to be in compliance to with the standard EN 62493: 2015 according to the clause 4.2.2.
- 4. Retinal blue light hazard measurements have been tested according to Technical report IEC/TR 62778: 2014 (Ed 2). According to the test results, the product belongs to RG2.
- 5. The model ABS300-0915 was selected to perform the full tests as it has the maximum power consumption. Another model was performed the construction check.

Tests performed (name of test and test clause):

- 1.5 Marking
- 1.6 Construction
- 1.7 Creepage distances and clearance
- 1.8 Provision for earthing
- 1.9 Terminals
- 1.10 External and internal wiring
- 1.11 Protection against electric shock
- 1.12 Endurance tests and thermal tests
- 1.13 Resistance to dust and moisture
- 1.14 Insulation resistance and electric strength
- 1.15 Resistance to heat, fire and tracking

All applicable tests as described in the compliance checklist were performed.

Testing location:

198 Kezhu Road, Science City, Economic & Technology Development Area, Guangzhou, Guangdong, China

Summary of compliance with National Differences (List of countries addressed):

European Group Differences and National differences were considered.

☑ The product fulfils the requirements of EN IEC 60598-2-1: 2021, EN IEC 62031: 2020, EN 62493: 2015 and EN 60598-1: 2015 + A1: 2018.

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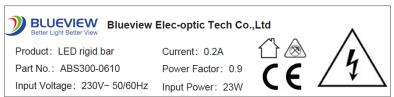
Statement concerning the uncertainty of the measurement systems used for the tests (may be required by the product standard or client)
☐ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established: Procedure number, issue date and title:
Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.
Statement not required by the standard used for type testing
(Note: When IEC or ISO standard requires a statement concerning the uncertainty of the measurement systems used for tests, this should be reported above. The informative text in parenthesis should be delete in both cases after selecting the applicable option)

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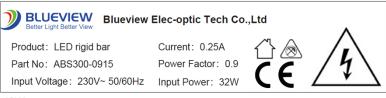
Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

Representative:



85*20mm



85*20mm

Remark:

- 1. The height of graphical symbols and CE logo are not less than 5 mm;
- 2. The height of letters and numerals is not less than 2 mm;
- 3. The height of risk of electric shock symbol is not less than 15 mm;
- 4. According to the standard, warning and text required by the standard should be written in the official language(s) of the country in which the appliance is to be sold. The applicant should ensure that the samples in future production fulfill the requirement;
- 5. As declared by the applicant, the importer (and manufacturer, if it is different)'s name, registered trade name or registered trade mark and the postal address will be marked on the products before being place on the market. The contact details shall be in a language easily understood by end-users and market surveillance authorities;
- 6. Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.

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Test item particulars:				
Classification of installation and use Fixed				
Supply Connection Input coupler				
.				
Possible test case verdicts:				
- test case does not apply to the test object: N/A				
- test object does meet the requirement P (Pass)				
- test object does not meet the requirement F (Fail)				
Testing				
Date of receipt of test item 2021-03-30				
Date (s) of performance of tests 2021-03-30 to 2021-04-28				
General remarks:				
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.				
Throughout this report a $oxtimes$ comma / $oxtimes$ point is used as the decimal separator.				
Clause numbers between brackets refer to clauses in IEC 60598-1.				
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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.				
Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:				
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided				
When differences exist; they shall be identified in the General product information section.				

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Name and address of factory (ies) Same as applicant				
General product information:				
The fixed luminaire, connected to the main supply via input coupler, can't be interconnected, Class I, IP20, non-user replaceable LEDs.				
Both models have the same electrical connecting and mechanical construction, only different in size and rated power.				

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	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.2 (0)	GENERAL TEST REQUIREMENTS		
1.2 (0.3)	More sections applicable	Yes No Section/s:	
1.2 (0.5)	Components	(see Annex 1)	_
1.2 (0.7)	Information for luminaire design in light sources s	standards	_
1.2 (0.7.2)	Light source safety standard	IEC 62031: 2018 EN IEC 62031: 2020	_
	Luminaire design in the light source safety standard		Р
1.4 (2)	CLASSIFICATION OF LUMINAIRES	_	
1.4 (2.2)	Type of protection:	Class I	Р
1.4 (2.3)	Degree of protection	IP20	_
1.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ⊠ No □	_
1.4 (2.5)	Luminaire for normal use:	Yes ⊠ No □	_
	Luminaire for rough service	Yes □ No ⊠	_
	I		
1.5 (3)	MARKING		
1.5 (3.2)	Mandatory markings		Р
	Position of the marking		Р
	Format of symbols/text		Р
1.5 (3.3)	Additional information		Р
	Language of instructions	English	Р
1.5 (3.3.1)	Combination luminaires		N/A
1.5 (3.3.2)	Nominal frequency in Hz		N/A
1.5 (3.3.3)	Operating temperature		N/A
1.5 (3.3.5)	Wiring diagram		N/A
1.5 (3.3.6)	Special conditions		N/A
1.5 (3.3.7)	Metal halide lamp luminaire – warning		N/A
1.5 (3.3.8)	Limitation for semi-luminaires		N/A
1.5 (3.3.9)	Power factor and supply current		Р
1.5 (3.3.10)	Suitability for use indoors		N/A
1.5 (3.3.11)	Luminaires with remote control		N/A
1.5 (3.3.12)	Clip-mounted luminaire – warning		N/A
1.5 (3.3.13)	Specifications of protective shields		N/A

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IEC 60598-2-1					
Clause	Requirement + Test	Result - Remark	Verdict		
1.5 (3.3.14)	Symbol for nature of supply		N/A		
1.5 (3.3.15)	Rated current of socket outlet		N/A		
1.5 (3.3.16)	Rough service luminaire		N/A		
1.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N/A		
1.5 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A		
1.5 (3.3.19)	Protective conductor current in instruction if applicable		N/A		
1.5 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		Р		
1.5 (3.3.21)	Non replaceable and non-user replaceable light sources information provided	Non-replaceable LEDs	Р		
1.5 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A		
1.5 (3.3.23)	Luminaire without controlgear provided with necessary information for selection of appropriate component		Р		
1.5 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A		
1.5 (3.4)	Test with water		Р		
	Test with hexane		Р		
	Legible after test		Р		
	Label attached		Р		

1.6 (4)	CONSTRUCTION		
1.6 (4.2)	Components replaceable without difficulty		Р
1.6 (4.3)	Wireways smooth and free from sharp edges		Р
1.6 (4.4)	Lampholders		N/A
1.6 (4.4.1)	Integral lampholder		N/A
1.6 (4.4.2)	Wiring connection		N/A
1.6 (4.4.3)	Lampholder for end-to-end mounting		N/A
1.6 (4.4.4)	Positioning		N/A
	- pressure test (N)		_
	After test the lampholder comply with relevant standard sheets and show no damage		N/A
	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation		N/A

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	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	- bending test (N)		_
	After test the lampholder have not moved from its position and show no permanent deformation		N/A
1.6 (4.4.5)	Peak pulse voltage		N/A
1.6 (4.4.6)	Centre contact		N/A
1.6 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
1.6 (4.4.8)	Lamp connectors		N/A
1.6 (4.4.9)	Caps and bases correctly used		N/A
1.6 (4.4.10)	Light source for lampholder or connection according IEC 60061 not connected another way		N/A
1.6 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
1.6 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
1.6 (4.7)	Terminals and supply connections		Р
1.6 (4.7.1)	Contact to metal parts		N/A
1.6 (4.7.2)	Test 8 mm live conductor		Р
	Test 8 mm earth conductor		Р
1.6 (4.7.3)	Terminals for supply conductors		Р
1.6 (4.7.3.1)	Welded method and material		N/A
	- stranded or solid conductor		N/A
	- spot welding		N/A
	- welding between wires		N/A
	- Type Z attachment		N/A
	- mechanical test according to 15.6.2		N/A
	- electrical test according to 15.6.3		N/A
	- heat test according to 15.6.3.2.3 and 15.6.3.2.4		N/A
1.6 (4.7.4)	Terminals other than supply connection		Р
1.6 (4.7.5)	Heat-resistant wiring/sleeves		N/A
1.6 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A
1.6 (4.8)	Switches	1	N/A
	- adequate rating		N/A

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		IEC 60598-2-1	
Clause	Requirement + Test	Result - Remark	Verdict
	- adequate fixing		N/A
	- polarized supply		N/A

1.6 (4.11.1)	Contact pressure		Р
1.6 (4.11)	Electrical connections and current-carrying parts		Р
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A
	Y1 or Y2 capacitors comply with IEC 60384-14		N/A
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N/A
1.6 (4.10.4)	Protective impedance device		N/A
	- lining in lampholder		N/A
	- sleeves retained in position		N/A
	- unable to be replaced; luminaire inoperative		N/A
	- fixed		Р
1.6 (4.10.3)	Retainment of insulation:	1	Р
	- no straight access with test probe		Р
	- not coincidental		N/A
1.6 (4.10.2)	Assembly gaps:		Р
	Interference suppression capacitors according to IEC 60384-14		N/A
	Capacitors and switches		N/A
	Safe installation fixed luminaires		N/A
1.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		Р
1.6 (4.10)	Double or reinforced insulation		Р
	b) Ageing test. Temperature (°C)		N/A
	a) & c) Insulation resistance and electric strength		N/A
	Resistant to a temperature > 20 °C to the wire temperature or		N/A
1.6 (4.9.2)	Insulated linings and sleeves:		N/A
	Method of fixing:		N/A
1.6 (4.9.1)	Retainment		N/A
1.6 (4.9)	Insulating lining and sleeves		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
	- polarized supply		N/A
	- adequate fixing		N/A
Clause	Requirement + Test	Result - Remark	Verdic
	T T T T T T T T T T T T T T T T T T T		

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.11.2)	Screws:		N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
1.6 (4.11.3)	Screw locking:		Р
	- spring washer		Р
	- rivets		N/A
1.6 (4.11.4)	Material of current-carrying parts		Р
1.6 (4.11.5)	No contact to wood or mounting surface		Р
1.6 (4.11.6)	Electro-mechanical contact systems		N/A
1.6 (4.12)	Screws and connections (mechanical) and glands		Р
1.6 (4.12.1)	Screws not made of soft metal		Р
	Screws of insulating material		N/A
	Torque test: torque (Nm); part	Fixed coupler; 0,5	Р
	Torque test: torque (Nm); part	Fixed the cover of coupler; 0,5	Р
	Torque test: torque (Nm); part		N/A
1.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		Р
1.6 (4.12.4)	Locked connections:	,	N/A
	- fixed arms; torque (Nm)		N/A
	- lampholder; torque (Nm)		N/A
	- push-button switches; torque 0,8 Nm		N/A
1.6 (4.12.5)	Screwed glands; force (Nm)		N/A
1.6 (4.13)	Mechanical strength	,	Р
1.6 (4.13.1)	Impact tests:		Р
	- fragile parts; energy (Nm)	Transparent diffuser; 0,2	Р
	- other parts; energy (Nm)	Metal enclosure; 0,35	Р
	1) live parts		Р
	2) linings		N/A
	3) protection		Р
	4) covers		Р
1.6 (4.13.2)	Metal parts have adequate mechanical strength		Р
1.6 (4.13.3)	Straight test finger		Р
1.6 (4.13.4)	Rough service luminaires		N/A
	- IP54 or higher		N/A
	a) fixed		N/A

Ρ

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	b) hand-held		N/A
	c) delivered with a stand		N/A
	d) for temporary installations and suitable for mounting on a stand		N/A
1.6 (4.13.6)	Tumbling barrel		N/A
1.6 (4.14)	Suspensions, fixings and means of adjusting		Р
1.6 (4.14.1)	Mechanical load:		Р
	A) four times the weight	Max. 0,59 kg x 4 = 2,36 kg	Р
	B) torque 2,5 Nm		N/A
	C) bracket arm; bending moment (Nm)		N/A
	D) load track-mounted luminaires		N/A
	E) clip-mounted luminaires, glass-shelve. Thickness (mm)		N/A
	Metal rod. diameter (mm)		N/A
	Fixed luminaire or independent control gear without fixing devices		N/A
1.6 (4.14.2)	Load to flexible cables		N/A
	Mass (kg)		_
	Stress in conductors (N/mm²)		N/A
	Mass (kg) of semi-luminaire		N/A
	Bending moment (Nm) of semi-luminaire		N/A
1.6 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles		N/A
	- strands broken:		N/A
	- electric strength test afterwards		N/A
1.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
1.6 (4.14.5)	Guide pulleys		N/A
1.6 (4.14.6)	Strain on socket-outlets		N/A
1.6 (4.15)	Flammable materials		Р
	- glow-wire test 650°C	See Test Table 1.15 (13.3.2)	Р
	- spacing ≥30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	1		+

- no fiercely burning material

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	IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict	
	- thermal protection		N/A	
	- electronic circuits exempted		N/A	
1.6 (4.15.2)	Luminaires made of thermoplastic material with lamp	control gear	N/A	
	a) construction		N/A	
	b) temperature sensing control		N/A	
	c) surface temperature		N/A	
1.6 (4.16)	Luminaires for mounting on normally flammable	surfaces	Р	
	No lamp control gear	(compliance with Section 12)	Р	
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A	
1.6 (4.16.1)	Lamp control gear spacing:		N/A	
	- spacing 35 mm		N/A	
	- spacing 10 mm		N/A	
1.6 (4.16.2)	Thermal protection:		N/A	
	- in lamp control gear		N/A	
	- external		N/A	
	- fixed position		N/A	
	- temperature marked lamp control gear		N/A	
1.6 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A	
1.6 (4.17)	Drain holes		N/A	
	Clearance at least 5 mm		N/A	
1.6 (4.18)	Resistance to corrosion		Р	
1.6 (4.18.1)	- rust-resistance		N/A	
1.6 (4.18.2)	- season cracking in copper		Р	
1.6 (4.18.3)	- corrosion of aluminium		N/A	
1.6 (4.19)	Ignitors compatible with ballast		N/A	
1.6 (4.20)	Rough service vibration		N/A	
1.6 (4.21)	Protective shield		N/A	
1.6 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A	
	Shield of glass if tungsten halogen lamps		N/A	
1.6 (4.21.2)	Particles from a shattering lamp not impair safety		N/A	
1.6 (4.21.3)	No direct path		N/A	
1.6 (4.21.4)	Impact test on shield		N/A	

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	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Glow-wire test on lamp compartment	See Test Table 1.15 (13.3.2)	N/A
1.6 (4.22)	Attachments to lamps not cause overheating or damage		N/A
1.6 (4.23)	Semi-luminaires comply Class II		N/A
1.6 (4.24)	Photobiological hazards		Р
1.6 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		N/A
1.6 (4.24.2)	Retinal blue light hazard		Р
	Class of risk group assessed according to IEC/TR 62778	RG2	_
	Luminaires with E _{thr:}		N/A
	a) Fixed luminaires		Р
	- distance x m, borderline between RG1 and RG2:	2,26 m	Р
	- marking and instruction according 3.2.23		Р
	b) Portable and handheld luminaires		N/A
	- marking according 3.2.23 if RG1 exceeded at 200 mm according to IEC/TR 62778		N/A
	Portable luminaires for children IEC 60598-2-10 and Mains socket outlet nightlights IEC 60598-2-12 not exceed RG1 at 200 mm according to IEC/62778		N/A
1.6 (4.25)	Mechanical hazard		Р
	No sharp point or edges		Р
1.6 (4.26)	Short-circuit protection		N/A
1.6 (4.26.1)	Adequate means of uninsulated accessible SELV parts		N/A
1.6 (4.26.2)	Short-circuit test with test chain according 4.26.3		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
1.6 (4.27)	Terminal blocks with integrated screwless earthing	g contacts	N/A
	Test according Annex V		N/A
	Pull test of terminal fixing (20 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Pull test of mechanical connection (50 N)		N/A
	After test, resistance < 0,05 Ω		N/A
	Voltage drop test, resistance < 0,05 Ω		N/A
1.6 (4.28)	Fixing of thermal sensing control	1	N/A

	•	.90 10 01 00	
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Clause	Requirement + Test	Result - Remark	Verdict
	Not plug-in or easily replaceable typ	e	N/A

Clause	Requirement + Test	Result - Remark	Verdict
	Not plug-in or easily replaceable type		N/A
	Reliably kept in position		N/A
	No adhesive fixing if UV radiations from a lamp can degrade the fixing		N/A
	Not outside the luminaire enclosure		N/A
	Test of adhesive fixing:		N/A
	Max. temperature on adhesive material (°C)		_
	100 cycles between t min and t max		N/A
	Temperature sensing control still in position		N/A
1.6 (4.29)	Luminaires with non-replaceable light source		N/A
	Not possible to replace light source		N/A
	Live part not accessible after parts have been opened by hand or tools		N/A
1.6 (4.30)	Luminaires with non-user replaceable light source		Р
	If protective cover provide protection against electric sho electric shock risk" symbol:	ck and marked with "caution,	Р
	Minimum two fixing means		Р
1.6 (4.31)	Insulation between circuits		N/A
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
	Controllable luminaires requiring same level of insulation for all components, the insulation between control terminals and LV supply fulfil requirements according 4.31.1 – 4.31.3		N/A
1.6 (4.31.1)	SELV circuits		N/A
	Used SELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of SELV circuits from LV supply		N/A
	Insulating of SELV circuits from other non SELV circuits		N/A
	Insulating of SELV circuits from FELV		N/A
	Insulating of SELV circuits from other SELV circuits		N/A
	SELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Plugs and socket-outlets does not have protective conductor contact		N/A
1.6 (4.31.2)	FELV circuits		N/A
	Used FELV source		N/A
	Voltage ≤ ELV		N/A
	Insulating of FELV circuits from LV supply		N/A
	FELV circuits insulated from accessible parts according Table X.1		N/A
	Plugs not able to enter socket-outlets of other voltage systems		N/A
	Socket outlets does not admit plugs of other voltage systems		N/A
	Socket-outlets does not have protective conductor contact		N/A
1.6 (4.31.3)	Other circuits		N/A
	Other circuits insulated from accessible parts according Table X.1		N/A
	Class II construction with equipotential bonding for protection against indirect contacts with live parts:		N/A
	- conductive parts are connected together		N/A
	- test according 7.2.3		N/A
	- conductive part not cause an electric shock in case of an insulation fault		N/A
	- equipotential bonding in master/slave applications		N/A
	- master luminaire provided with terminal for accessible conductive parts of slave luminaires		N/A
	- slave luminaire constructed as class I		N/A
1.6 (4.32)	Overvoltage protective devices	I	N/A
	Comply with IEC 61643-11		N/A
	External to controlgear and connected to earth:		N/A
	- only in fixed luminaires		N/A
	- only connected to protective earth		N/A

1.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		
1.7 (11.2.1)	Impulse withstand category (Normal category II)	Category II Category III	_
	Category III according Annex U		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
1.7 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 1.7 (11.2) I	Р
	Creepage distances for frequency over 30 kHz:		N/A
	- Controlgear marked with \hat{U}_{OUT} and f_{UOUT} according IEC 61347-1, clause 7.1, item w	See Test Table 1.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N/A
1.7 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 1.7 (11.2) I	Р
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with $U_{ m P}$	See Test Table 1.7 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.7 (11.2) II	N/A

1.8 (7)	PROVISION FOR EARTHING	
1.8 (7.2.1 + 7.2.3)	Accessible metal parts	Р
	Metal parts in contact with supporting surface	Р
	Resistance < 0,5 Ω	Р
	Self-tapping screws used	Р
	Thread-forming screws	Р
	Thread-forming screw used in a grove	N/A
	Earth makes contact first	Р
	Terminal blocks with integrated screwless earthing contacts tested according Annex V	N/A
	Protective earthing of the luminaire not via built-in control gear	N/A
1.8 (7.2.2 + 7.2.3)	Earth continuity in joints, etc.	Р
1.8 (7.2.4)	Locking of clamping means	Р
	Compliance with 4.7.3	Р
	Terminal blocks with integrated screwless earthing contacts tested according Annex V	N/A
1.8 (7.2.5)	Earth terminal integral part of connector socket	N/A
1.8 (7.2.6)	Earth terminal adjacent to mains terminals	Р
1.8 (7.2.7)	Electrolytic corrosion of the earth terminal	N/A
1.8 (7.2.8)	Material of earth terminal	Р

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Clause	Requirement + Test	Result - Remark	Verdict	
	Contact surface bare metal		Р	
1.8 (7.2.10)	Class II luminaire for looping-in		N/A	
	Double or reinforced insulation to functional earth		N/A	
1.8 (7.2.11)	Earthing core coloured green-yellow		N/A	
	Length of earth conductor		N/A	

1.9 (14)	SCREW TERMINALS		
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 3)	N/A

1.9 (15)	SCREWLESS TERMINALS AND ELECTRICAL CONNECTIONS		
	Separately approved; component list	(see Annex 1)	N/A
	Part of the luminaire	(see Annex 4)	N/A

1.10 (5)	EXTERNAL AND INTERNAL WIRING		
1.10 (5.2) 1.10 (5.2.1)	Supply connection and external wiring		Р
	Means of connection	Input coupler	Р
	Outdoor luminaire has not PVC insulated external wiring if not class III or SELV ≤ 25 V a.c./60 V d.c. or protected from outdoor environment		N/A
1.10 (5.2.2)	Type of cable		N/A
	Nominal cross-sectional area (mm²)		N/A
	Cables equal to IEC 60227 or IEC 60245		N/A
1.10 (5.2.3)	Type of attachment, X, Y or Z		N/A
1.10 (5.2.5)	Type Z not connected to screws		N/A
1.10 (5.2.6)	Cable entries:		N/A
	- suitable for introduction		N/A
	- adequate degree of protection		N/A
1.10 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
1.10 (5.2.8)	Insulating bushings:		N/A
	- suitably fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- tubes or guards made of insulating material		N/A

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Clause	Requirement + Test		Result - Remark	Verdict			
1.10 (5.2.9)	Locking of screwed bushings			N/A			
1.10 (5.2.10)	Cord anchorage:			N/A			

Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5.2.9)	Locking of screwed bushings		N/A
1.10 (5.2.10)	Cord anchorage:		N/A
	- covering protected from abrasion		N/A
	- clear how to be effective		N/A
	- no mechanical or thermal stress		N/A
	- no tying of cables into knots etc.		N/A
	- insulating material or lining		N/A
1.10 (5.2.10.1)	Cord anchorage for type X attachment:		N/A
	a) at least one part fixed		N/A
	b) types of cable		N/A
	c) no damaging of the cable		N/A
	d) whole cable can be mounted		N/A
	e) no touching of clamping screws		N/A
	f) metal screw not directly on cable		N/A
	g) replacement without special tool		N/A
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
1.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		N/A
1.10 (5.2.10.3)	Tests:		N/A
	- impossible to push cable; unsafe		N/A
	- pull test: 25 times; pull (N)		N/A
	- torque test: torque (Nm)		N/A
	- displacement ≤ 2 mm		N/A
	- no movement of conductors		N/A
	- no damage of cable or cord		N/A
	- function independent of electrical connection		N/A
1.10 (5.2.11)	External wiring passing into luminaire		N/A
1.10 (5.2.12)	Looping-in terminals		N/A
1.10 (5.2.13)	Wire ends not tinned		N/A

N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Wire ends tinned: no cold flow		N/A
1.10 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A
1.10 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Other appliance inlet or connector according relevant IEC standard		N/A
1.10 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
1.10 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
1.10 (5.3)	Internal wiring		N/A
1.10 (5.3.1)	Internal wiring of suitable size and type		N/A
	Through wiring		N/A
	- not delivered/ mounting instruction		N/A
	- factory assembled		N/A
	- socket outlet loaded (A):		N/A
	- temperatures:	(see Annex 2)	N/A
	Green-yellow for earth only		N/A
1.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring		N/A
	Cross-sectional area (mm²):		N/A
	Insulation thickness (mm):		N/A
	Extra insulation added where necessary		N/A
1.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal cu	rrent-limiting device	N/A
	Cross-sectional area (mm²)		N/A
1.10 (5.3.1.3)	Double or reinforced insulation for class II		N/A
4.40	0 1 1 11 11		

Conductors without insulation

1.10

(5.3.1.4)

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Clause	Requirement + Test	Result - Remark	Verdict
1.10 (5.3.1.5)	SELV current-carrying parts		N/A
1.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
1.10 (5.3.2)	Sharp edges etc.		N/A
	No moving parts of switches etc.		N/A
	Joints, raising/lowering devices		N/A
	Telescopic tubes etc.		N/A
	No twisting over 360°		N/A
1.10 (5.3.3)	Insulating bushings:		N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
1.10 (5.3.4)	Joints and junctions effectively insulated		N/A
1.10 (5.3.5)	Strain on internal wiring		N/A
1.10 (5.3.6)	Wire carriers		N/A
1.10 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
1.10 (5.4)	Test to determine suitability of conductors having area	a reduced cross-sectional	N/A
	Under test the temperature of the luminaire wiring insulation not exceed the limits stated in Table 12.2	(see Annex 2)	N/A
	No damage to luminaire wiring after test		N/A

1.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK	
1.11 (8.2.1)	Live parts not accessible	Р
	Basic insulated parts not used on the outer surface without appropriate protection	Р
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires	N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, other types of luminaires	Р
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements	N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
	Basic insulation only accessible under lamp or starter replacement		N/A	
	Protection in any position		Р	
	Double-ended tungsten filament lamp		N/A	
	Insulation lacquer not reliable		N/A	
	Double-ended high-pressure discharge lamp		N/A	
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A	
1.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A	
1.11 (8.2.3.a)	Class II luminaire:		N/A	
	- basic insulated metal parts not accessible during starter or lamp replacement		N/A	
	- basic insulation not accessible other than during starter or lamp replacement		N/A	
	- glass protective shields not used as supplementary insulation		N/A	
1.11 (8.2.3.b)	BC lampholder of metal in class I luminaires shall be earthed		N/A	
1.11 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A	
	Ordinary luminaire:		N/A	
	- voltage under load (V)		N/A	
	- no-load voltage (V)		N/A	
	- touch current if applicable (mA)		N/A	
	One conductive part insulated if required		N/A	
	Other than ordinary luminaire:		N/A	
	- nominal voltage (V)		N/A	
	Class III luminaire only for connection to SELV		N/A	
	Class III luminaire not provided with means for protective earthing		N/A	
1.11 (8.2.4)	Portable luminaire has protection independent of supporting surface		N/A	
1.11 (8.2.5)	Compliance with the standard test finger or relevant probe		Р	
1.11 (8.2.6)	Covers reliably secured		N/A	

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Clause	Requirement + Test	Result - Remark	Verdict
1.11 (8.2.7)	Luminaire other than below with capacitor $> 0.5~\mu F$ not exceed 50 V 1 min after disconnection	16 V	Р
	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

ENDURANCE TEST AND THERMAL TEST		
If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 1.13		_
2) Selection of lamps and ballasts		_
Lamp used according Annex B	(Lamp used see Annex 2)	_
Controlgear if separate and not supplied	(Controlgear used see Annex 2)	_
Endurance test		Р
a) mounting-position	As normal use	
b) test temperature (°C)	35	_
c) total duration (h)	240	_
d) supply voltage (V)	1,1 x 230 V = 253 V	
d) if not equipped with controlgear, constant voltage/current (V) or (A):	_	_
e) luminaire ceases to operate		
After endurance test:		Р
- no part unserviceable		Р
- luminaire not unsafe		Р
- no damage to track system		N/A
- marking legible		Р
- no cracks, deformation etc.		Р
Thermal test (normal operation)	(see Annex 2)	Р
Thermal test (abnormal operation)	(see Annex 2)	Р
Thermal test (failed lamp control gear condition):		N/A
Through wiring or looping-in wiring loaded by a current of (A):		
- case of abnormal conditions:		
- electronic lamp control gear		N/A
	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) at 1.13 Selection of lamps and ballasts Lamp used according Annex B Controlgear if separate and not supplied Endurance test a) mounting-position	If IP > IP 20 relevant test of (12.4), (12.5) and (12.6) after (9.2) before (9.3) specified in 1.13 Selection of lamps and ballasts Lamp used according Annex B (Lamp used see Annex 2) Controlgear if separate and not supplied (Controlgear used see Annex 2) Endurance test a) mounting-position

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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
1.12 (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
1.12 (12.7)	Thermal test (failed lamp control gear in plastic lur	minaires):	N/A
1.12 (12.7.1)	Luminaire without temperature sensing control		N/A
1.12 (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:	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)		_
	Ball-pressure test:	See Test Table 1.15 (13.2.1)	N/A
1.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70\	` ,	N/A
	- case of abnormal conditions:		_
	- measured winding temperature (°C): at 1,1 Un:		

See Test Table 1.15 (13.2.1)

N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- 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 1.15 (13.2.1)	N/A
1.12 (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
1.12 (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/		_

1.13 (9)	RESISTANCE TO DUST AND MOISTURE		
1.13 (-)	If IP > IP 20 the order of tests as specified in clause 1.	.12	Р
1.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		Р
	- classification according to IP	IP20	_
	- mounting position during test	As normal use	_
	- fixing screws tightened; torque (Nm)	_	_
	- tests according to clauses	9.2.0 of IEC 60598-1	_
	- electric strength test afterwards		Р
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		N/A
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		N/A
	c.1) For luminaires without drain holes – no water entry		N/A
	c.2) For luminaires with drain holes – no hazardous water entry		N/A

Ball-pressure test:

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Clause	Requirement + Test	Result - Remark	Verdict	
	d) no water in watertight or pressure watertight luminaire		N/A	
	e) no contact with live parts (IP 2X)		Р	
	e) no entry into enclosure (IP 3X and IP 4X)		N/A	
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N/A	
	f) no trace of water on part of lamp requiring protection from splashing water		N/A	
	g) no damage of protective shield or glass envelope		N/A	
1.13 (9.3)	Humidity test 48 h	25 °C; 93% Rh	Р	

1.14 (10)	INSULATION RESISTANCE AND ELECTRIC STREN	GTH	
1.14 (10.2.1)	Insulation resistance test		Р
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø	Covered by metal foil	_
	Insulation resistance (M Ω)	As below	_
	SELV		N/A
	- between current-carrying parts of different polarity:		N/A
	- between current-carrying parts and mounting surface		N/A
	- between current-carrying parts and metal parts of the luminaire		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5:		N/A
	Other than SELV		Р
	- between live parts of different polarity	20 ΜΩ	Р
	- between live parts and mounting surface	20 ΜΩ	Р
	- between live parts and metal parts	20 ΜΩ	Р
	- between live parts of different polarity through action of a switch		N/A
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts		N/A
	- Insulation bushings as described in Section 5:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict	
1.14 (10.2.2)	Electric strength test		Р	
	Dummy lamp		N/A	
	Luminaires with ignitors after 24 h test		N/A	
	Luminaires with manual ignitors		N/A	
	Test voltage (V)	As below	Р	
	SELV		N/A	
	- between current-carrying parts of different polarity:		N/A	
	- between current-carrying parts and mounting surface		N/A	
	- between current-carrying parts and metal parts of the luminaire		N/A	
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts:		N/A	
	- Insulation bushings as described in Section 5:		N/A	
	Other than SELV		Р	
	- between live parts of different polarity	1460 V	Р	
	- between live parts and mounting surface	1460 V	Р	
	- between live parts and metal parts	1460 V	Р	
	- between live parts and the outer accessible surface of insulating parts	2920 V	Р	
	- between live parts of different polarity through action of a switch		N/A	
	- between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal parts:		N/A	
	- Insulation bushings as described in Section 5:		N/A	
1.14 (10.3)	Touch current or protective conductor current (mA).:		N/A	

1.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		
1.15 (13.2.1)	Ball-pressure test:	See Test Table 1.15 (13.2.1)	Р
1.15 (13.3.1)	Needle-flame test (10 s)	See Test Table 1.15 (13.3.1)	Р
1.15 (13.3.2)	Glow-wire test (650°C)	See Test Table 1.15 (13.3.2)	Р
1.15 (13.4)	Proof tracking test (IEC 60112)	See Test Table 1.15 (13.4)	N/A

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Clause	Requirement + Test	Result - Remark	Verdict

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Clause	Requirement + Test		Result - Remark	Verdict

1.7 (11.2)	TABLE I: C	reepage dista	nces and clea	rances			Р	
	Minimum d	istances (mm) for a.c. up to	30 kHz sinu	soidal voltage	es	Р	
	Applicable part of IEC 60598-1 Table 11.1.A*, 11.1.B* and 11.2*							
	Insulation	Measured	Requ	uired	Measured	Requ	uired	
	type **	clearance	clearance	*Table	creepage	creepage	*Table	
Distance 1:	В	2,7	1,5	11.1.B	2,7	2,5	11.1.A	
Working vol	tage (V)				230 V		_	
PTI				:	< 600 ⊠	≥ 600 □	_	
Pulse voltag	ge or <i>U</i> ⊵ if app	olicable (kV)		:	_		_	
Supplement	ary informatio	n: measured a	it approved cou	pler & input te	erminal L/N & L	'E & L/E	,	
Distance 2:	В	3,3	1,5	11.1.B	3,3	2,5	11.1.A	
Working vol	tage (V)				230 V		_	
PTI				:	< 600 ⊠	≥ 600 □	_	
Pulse voltag	ge or <i>U</i> _P if app	olicable (kV)		:	_		_	
Supplement	ary informatio	n: Measured a	t live part and r	netal enclosui	re			
Distance 3:	R	6,5	3,0	11.1.B	6,5	5,0	11.1.A	
Working voltage (V)				230 V		_		
PTI				:	< 600 ⊠	≥ 600 □	_	
Pulse voltag	ge or <i>U</i> ⊵ if app	olicable (kV)		:	_		_	
Supplement	ary informatio	n: Measured a	t live part and t	ransparent co	ver (accessible	part)		

^{**} Insulation type: B – Basic; S – Supplementary; R – Reinforced. See also IEC 60598-1 Annex M.

4 = (44.0)	TABLE !! 6							N1/A
1.7 (11.2)	1.7 (11.2) TABLE II: Creepage distances and clearances							N/A
	Minimum distances (mm) for a.c. higher than 30 kHz sinusoidal voltages							
	Applicable	e part of IEC	61347-1 Tabl	e 7 and 8* or	IEC 60664-4 1	Table 1 and 2		
Distances	Insulation	Measured	Requ	uired	Measured	Requ	uire	d
	type **	clearance	clearance	*Table	creepage	creepage		*Table
Distance 1:								
Working volta	age (V)			:				_
Frequency if	Frequency if applicable (kHz)							_
ЭΤΙ					< 600 🗌	≥ 600 □		_
Peak value o	f the working	voltage Û _{out}	if applicable (k	V):				_

< 600 🗌

≥ 600 □

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			IEC (60598-2-1				
Clause	Requirement	+ Test			Result - Rem	ark		Verdict
Supplementa	ary information):						
Distance 2:								
Working volt	age (V)			:				
Frequency if	applicable (kl	Hz)		·····:				_
PTI				·····:	< 600 🗌	≥ 600 □		_
Peak value of	of the working	voltage Û _{out}	if applicable (k	(V)				_
Supplementa	ary information	1:					·	
Distance 3:								
Working volt	age (V)			:				_

Supplementary information:

Frequency if applicable (kHz).....

Peak value of the working voltage \hat{U}_{out} if applicable (kV)

1.15 (13.2.1)	TABLE: Ball Pressure Test of Thermoplastics				
Allowed impression diameter (mm):			2		_
Object/ Part	No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter	er (mm)
Transp	parent diffuser	Dongguan Xuda Plastic Products Co., Ltd.	82	0,4	
Fixing co	over for coupler	Blueview Elec-optic Tech Co., Ltd.	75	0,9	
Supplement	ary information: —				

1.15 (13.3.1)	TABLE:	ABLE: Needle-flame test (IEC 60695-11-5)					
Object/ Part Material	pject/ Part No./ Iterial Manufacturer/ trademark Duration of application of test flame (ta); (s) Yes/No Duration of burning (tb)				Verdict		
Coup	ler	Blueview Elec-optic Tech Co., Ltd.	10	No	0	Р	
_		_	_		_	_	

^{**} Insulation type: B – Basic; S – Supplementary; R – Reinforced.

			IEC 60598-2-1			
Clause	Requiren	nent + Test		Result - Remark		Verdict
					1	
-				_		
Suppleme	ntary inform	ation: —				

1.15 (13.3.2)	TABLE:	Glow-wire test (IEC 60695-2-11)				
Glow wire t	emperatu	re:	650°C			_
Object/ Part Material	No./	Manufacturer/ trademark		Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
Transparent diffuser Dor		Dongguan Xuda Plastic Products Co., Ltd.		No	0	Р
Fixing cover for coupler Blueview Elec-optic Tech Co		Blueview Elec-optic Tech Co.,	Ltd.	No	0	Р
LED lens		Dongguan huawang photoelec	tric co., LTD.	No	0	Р
Transparent insulation sh		Zhongshan Fuqun Hardware Plastic Products Co., Ltd.		No	0	Р
Heat shrinkable tube Shenzhen Woer Heat-Shrinkable Material No 0 Co., Ltd.				Р		
Supplement	ary inform	ation: —			1	

1.15 (13.4) TABLE: Proof tracking test (IEC 60112)					
Test voltage PTI	175 V			_	
Object/ Part No./ Material	Withstand 50 drops without failure on three places or on three specimens		Verdict		
_	_	_	_	_	_
_	_	_	_	_	_
_	_	_	_	_	_
Supplementary information: —					

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1 TAB	LE: Cr	itical components	information			Р
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Varistor (RV1)	В	Guangxi New Future Information Industry Co., Ltd.	07D561K	8/20 µs; 1200 A; 40/85/21	IEC 61051-1: 2007 IEC 61051-2: 1991/AMD1: 2009 IEC 61051-2-2: 1991	VDE 40030322
Fuse resistor (F2)	В	Anhui Changsheng Electronics Co., Ltd.	RXF21-1W	1 W; 10R ±5%	IEC 62368-1: 2018	VDE 40024768
Inductor (LF2)	В	Chengdu Lisheng Soft Magnetic Device Co., Ltd.	EE15	20 mHz±10%	IEC 62031 EN IEC 62031	Tested with appliance
Winding of inductor (LF2)	В	Zhejiang Hongbo Technology Co., Ltd.	QA@-X/155	155 °C	IEC 62031 EN IEC 62031	UL E221719 & Tested with appliance
	D	Guangzhou Wanbao Enamelled Wire Co., Ltd.	xUEW-155	155 °C	IEC 62031 EN IEC 62031	UL & E167402 Tested with appliance
Bobbin of inductor (LF2)	В	Changchun Plastic Co., Ltd.	T375HF	150 °C	IEC 62031 EN IEC 62031	UL E59481 & Tested with appliance
Insulation tape of inductor (LF2)	В	Jingjiang Yahua Pressure Sensitive Glue Co Ltd	CT-280B	130 °C	IEC 62031 EN IEC 62031	UL & E165111 Tested with appliance
X cap (CX)	В	Guangdong JURCC electronics Co., Ltd.	MPX/MKP	275 VAC; 0,22 µf 10%; 40/100/56/B	IEC 60384-14	VDE 40034920
L/N wire	В	Shenzhen City Weidaxuan Wire & Cable Co., Ltd.	3135, 3239	20 AWG; PVC	IEC 60598-1 IEC 60598-2-1	UL E472430 & Tested with appliance

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	IEC 60598-2-1						
Clause	Requirement + Test	Result - Remark	Verdict				

Heat shrinkable tube	В	Shenzhen Woer Heat-Shrinkable Material Co., Ltd.	RSFR-H	125 °C; 600 V; VW-1	IEC 60598-1 IEC 60598-2-1	UL E203950 & Tested with appliance
Coupler	В	Blueview Elecoptic Tech Co., Ltd.	40x16.5x23.4 mm (with 3 copper needles)	230 W; AC 230 V;1 A; PC	IEC 60320-1: 2015+A1: 2018	Tested with Appliance (SZES21040 02620CO)
LED Lens	В	Dongguan Huawang Photoelectric Co., Ltd.	PC-1250Z	PC; 8 x15 \(\phi \) 25\(\pm 0,10 \) x H12,5	IEC 60598-1 IEC 60598-2-1	Tested with appliance
Transparent diffuser materiel	В	Dongguan Xuda Plastic Products Co., Ltd.	face shield	PC; L569xH2,7xW32. 3mm	IEC 60598-1 IEC 60598-2-1	Tested with appliance
Transparent insulation sheet	В	Zhongshan Fuqun Hardware Plastic Products Co., Ltd.	Myra	L592 x W31,7 x H5mm	IEC 60598-1 IEC 60598-2-1	Tested with appliance
LED	В	Guangdong XinruiLiuming Photoelectric Co., Ltd.	LPE2AW	V _F : 2,8-3,4 V; I _F : 1000 mA; Tc: 6500-7000 K	IEC 62031	Tested with appliance

Supplementary information:

The codes above have the following meaning:

- A The component is replaceable with another one, also certified, with equivalent characteristics
- B The component is replaceable if authorised by the test house
- C Integrated component tested together with the appliance
- D Alternative component

¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.

	IEC 60598-2-1						
Clause	Requirement + Test		Result - Remark		Verdict		

ANNEX 2	TABLE: Thermal tests of Section 12					
	Type reference	ABS300-0915	_			
	Lamp used	Non-user replaceable LEDs	_			
	Lamp control gear used	_	_			
	Mounting position of luminaire	As normal use	_			
	Supply wattage (W)	33,6	_			
	Supply current (A)	0,148	_			
	Temperatures in test 1 - 4 below are corrected for ta (°C)	25	_			
	- abnormal operating mode	LED short-circuited	_			
1.12 (12.4)	- test 1: rated voltage	_	_			
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current:	1,06 x 230 V = 243,8 V	_			
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage	_	_			
	Through wiring or looping-in wiring loaded by a current of A during the test	_	_			
1.12 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current:	1,1 x 230 V = 253 V	_			

Temperature measurements (°C)

Dort	Ambient	Cl. 12.4 – normal				Cl. 12.5 – abnormal	
Part	Ambient	test 1	test 2	test 3	limit	test 4	limit
Enclosure of coupler	25,0	_	46,7	_	Ref.		
L/N wire	25,0	_	55,8	_	90		
LED Lens	25,0	_	102,0	_	Ref.	_	
Diffuser	25,0	_	57,0	_	Ref.	_	
Heat shrinkable tube	25,0	_	60,1	_	125	_	_
Bobbin of LF1	25,0	_	80,6	_	150	_	_
Winding of LF1	25,0	_	75,2	_	120	74,6	175
X cap	25,0	_	57,5	_	100	50,8	110
Varistor (RV1)	25,0	_	58,8	_	85	_	_
Electrical cap (C4)	25,0	_	60,4	_	105	59,9	115
Mounting surface	25,0		47,7	_	90	46,3	130
Object lighted (0,1 m)	25,0	_	38,8	_	90	40,4	175

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IEC 60598-2-1						
Clause	Requirement + Test	Result - Remark	Verdict			
Supplementary information: —						

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	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	Screw terminals (part of the luminaire)			
(14)	SCREW TERMINALS	N	N/A	
(14.2)	Type of terminal	-	_	
	Rated current (A)	-	_	
(14.3.2.1)	One or more conductors	N	l/A	
(14.3.2.2)	Special preparation	N	l/A	
(14.3.2.3)	Terminal size	N	l/A	
	Cross-sectional area (mm²)	_	_	
(14.3.3)	Conductor space (mm)	N	l/A	
(14.4)	Mechanical tests	N	l/A	
(14.4.1)	Minimum distance	N	l/A	
(14.4.2)	Cannot slip out	N	l/A	
(14.4.3)	Special preparation	N	l/A	
(14.4.4)	Nominal diameter of thread (metric ISO thread):	M N	l/A	
	External wiring	N	l/A	
	No soft metal	N	l/A	
(14.4.5)	Corrosion	N	l/A	
(14.4.6)	Nominal diameter of thread (mm)	N	l/A	
	Torque (Nm)	N	l/A	
(14.4.7)	Between metal surfaces	N	l/A	
	Lug terminal	N	l/A	
	Mantle terminal	N	l/A	
	Pull test; pull (N)	N	l/A	
(14.4.8)	Without undue damage	N	l/A	

	120 00030-2-1				
Clause	Requirement + Test	Result - Remark	Verdict		

ANNEX 4	Screwless terminals (part of the luminaire)			
(15)	SCREWLESS TERMINALS			
(15.2)	Type of terminal	_		
	Rated current (A)	_		
(15.3.1)	Material	N/A		
(15.3.2)	Clamping	N/A		
(15.3.3)	Stop	N/A		
(15.3.4)	Unprepared conductors	N/A		
(15.3.5)	Pressure on insulating material	N/A		
(15.3.6)	Clear connection method	N/A		
(15.3.7)	Clamping independently	N/A		
(15.3.8)	Fixed in position	N/A		
(15.3.10)	Conductor size	N/A		
	Type of conductor	N/A		
(15.5)	Terminals and connections for internal wiring	N/A		
(15.5.1)	Mechanical tests	N/A		
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples):	N/A		
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples):	N/A		
	Insertion force not exceeding 50 N	N/A		
(15.5.1.2)	Permanent connections: pull-off test (20 N)	N/A		
(15.5.2)	Electrical tests	N/A		
	Voltage drop (mV) after 1 h (4 samples)	N/A		
	Voltage drop of two inseparable joints	N/A		
	Number of cycles:	_		
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples)	N/A		
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples)	N/A		
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples):	N/A		
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples):	N/A		
(15.6)	Terminals and connections for external wiring	N/A		
(15.6.1)	Conductors	N/A		

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						IEC 605	98-2-1					
Clause	Requi	rem	nent + Te	est				Resu	lt - Rema	ırk		Verdict
	Termin	nal	size and	d rating								N/A
15.6.2	Mecha	anic	cal tests					'				Р
(15.6.2.1)	Pull test spring-type terminals (4 samples); pull (N)											N/A
(15.6.2.2)					als (4 sar			:				N/A
(15.6.3)	Electri	cal	tests									N/A
	Tests	acc	cording '	15.6.3.1	+ 15.6.3.	2 in IEC	60598-1					N/A
(15.6.3.1) (15.6.3.2)	TABL	E: (Contact	resista	nce test	/ Heating	g tests					N/A
	Voltag	je d	lrop (m\	/) after 1	h							_
terminal 1 2		3	4	5	6	7	8	9	10			
voltage drop	voltage drop (mV)											
Voltage drop of two insepara					insepara	able joints	3					
	,	Vol	tage dro	p after 1	0th alt. 2	5th cycle	;					
	!	Ma	x. allowe	ed voltag	e drop (r	nV)						_
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop	o (mV)											
	,	Vol	tage dro	p after 5	0th alt. 1	00th cyc	le					
		Ma	x. allowe	ed voltag	e drop (r	nV)						_
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop	o (mV)											
		Cor	ntinued	ageing: v	oltage d	rop after	10th alt.	25th cyc	le			
	!	Ma	x. allowe	ed voltag	e drop (r	nV)						
terminal 1 2		3	4	5	6	7	8	9	10			
voltage drop	o (mV)											
	(Cor	ntinued	ageing: v	oltage d	rop after	50th alt.	100th cy	cle			
		Ma	x. allowe	ed voltag	e drop (r	nV)						—
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop (mV)												

Supplementary information:

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Attac	chment 1: European Group differences and Natio	nal differences of IEC 60598-2-7	1			
Clause	Requirement + Test	Result - Remark	Verdict			
	CENELEC COMMON MODIFICATIONS (EN)					
1.5 (3)	MARKING		Τ			
1.5 (3.3.101)	For luminaires not supplied with terminal block: Adequate warning on the package					
1.6 (4)	CONSTRUCTION					
1.6 (4.11.6)	Electro-mechanical contact systems		N/A			
1.10 (5)	EXTERNAL AND INTERNAL WIRING	T				
1.10 (5.2.1)	Connecting leads		N/A			
	- without a means for connection to the supply		N/A			
	- terminal block specified		N/A			
	- relevant information provided		N/A			
	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1		N/A			
1.10 (5.2.2)	Cables equal to EN 50525		N/A			
	Replace table 5.1 – Supply cord		N/A			
1.12 (12)	ENDURANCE TESTS AND THERMAL TESTS					
1.12 (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 CONDITION	NS (EN)				
(3.3)	DK: power supply cords of class I luminaires with label		N/A			
(4.5.1)	DK: socket-outlets		N/A			
(5.2.1)	CY, DK, FI, GB: type of plug		N/A			
	ANNEY TO MATIONAL DEVIATIONS (EN)		<u> </u>			
ZC (4.0.5)	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N1/A			
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A			
	FR: Safety requirements for high buildings (Arrêté du 30 décembre 2011 portant règlemer construction des immeubles de grande hauteurisques d'incendie et de panique; Section VIII;	r et leur protection contre les	N/A			
	Glow-wire test for outer parts of luminaires:					

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А	Attachment 1: European	Group differences and Natio	nal c	differences of IEC 60598-2-	1
Clause	Requirement + Tes	st	Result - Remark		Verdict
	- 850°C for luminal horizontal travel pa	ires in stairways and aths			N/A
	- 650°C for indoor	luminaires			N/A
(13.3)	GB: Requirements Kingdom Building	according to United Regulation			N/A

⁻⁻⁻ End of Attachment 1 ---

Attachment 2: Additional test of EN IEC 62031 Requirement + Test Result - Remark Verdict Clause GENERAL REQUIREMENTS 4.2 Classification \bowtie Built-in module Yes No \boxtimes Independent module..... Yes No Yes 🖂 No \square Integral module: 4.6 Independent modules comply with requirements in N/A IEC 60598-1:2014/AMD1:2017 4.8 Modules with integrated controlgear providing SELV (see Annex 1) N/A comply with requirements according to IEC 61347-1:2015/AMD1:2017 clause L.5 to L.11. 6 **MARKING** N/A 7 **TERMINALS** N/A 8 (9) **EARTHING** N/A 9 (10) PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS - (10.1) Controlgear protected against accidental contact with Ρ live parts N/A - (A2) Voltage measured with 50 kΩ (see Annex A) Voltage > 35 V peak or > 60 V d.c. or protective N/A - (A3) (see Annex A) impendance device Lacquer or enamel not used for protection or - (10.1) N/A insulation Adequate mechanical strength on parts providing N/A protection Р - (10.2) Capacitors > 0.5 μF: voltage after 1 min (V): < 50 V See main test report . N/A -(10.3)Controlgear providing SELV Accessible conductive parts are insulated from live N/A parts by double or reinforced insulation in SELV controlgear No connection between output circuit and the body or N/A protective earthing circuit No possibility of connection between output circuit N/A and the body or protective earthing circuit through other conductive parts SELV outputs separated from earth by at least basic N/A insulation ELV conductive parts insulated as live parts N/A

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	Attachment 2: Additional test of EN IEC 62031					
Clause	Requirement + Test	Result - Remark	Verdict			
	T- :					
	Tests according Annex L of IEC 61347-1		N/A			
- (10.4)	Accessible conductive parts in SELV circuits		N/A			
	Output voltage under load \leq 25 V r.m.s. or \leq 60 V d.c.		N/A			
	If output voltage > 25 V r.m.s. or > 60 V d.c.;		N/A			
	No load output \leq 35 V peak or \leq 60 V d.c and touch current does not exceed 0,7 mA (peak) or 2 mA d.c.					
	One conductive part is insulated if output voltage or current exceeding the values above and withstand test voltage 500 V		N/A			
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor		N/A			
	Y1 or Y2 capacitors comply with IEC 60384-14		N/A			
	Resistors comply with test (a) in 14.1 of IEC 60065		N/A			

10 (11)	MOISTURE RESISTANCE AND INSULATION				
	After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V (M Ω):				
	For basic insulation \geq 2 M Ω				
	For double or reinforced insulation \geq 4 M Ω				
	Between primary and secondary circuits in controlgear providing SELV, values in Annex L in IEC 61347-1		N/A		

11 (12)	ELECTRIC STRENGTH		
	Immediately after clause 11 electric strength test for 1 min		Р
	Basic insulation for SELV, test voltage 500 V		N/A
	Working voltage ≤ 50 V, test voltage 500 V		N/A
	Working voltage > 50 V ≤ 1000 V, test voltage (V):		
	Basic insulation, 2U + 1000 V	1460 V	Р
	Supplementary insulation, 2U + 1000 V		N/A
	Double or reinforced insulation, 4U + 2000 V		N/A
	No flashover or breakdown		Р
	Solid or thin sheet insulation for double or reinforced insulation fulfil the requirements in Annex N in IEC 61347-1		N/A

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	Attachment 2: Additional test of EN	IEC 62031	
Clause	Requirement + Test	Result - Remark	Verdict
12 (14)	FAULT CONDITIONS		
- (14.1)	When operated under fault conditions the controlgear:		Р
<u> </u>	- does not emit flames or molten material		Р
	- does not produce flammable gases		Р
	- protection against accidental contact not impaired		Р
	Thermally protected controlgear does not exceed the marked temperature value		N/A
	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected		Р
- (14.2)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (after any reduction in 14.2 - 14.5)		N/A
- (14.3)	Short-circuit or interruption of semiconductor devices		Р
- (14.4)	Short-circuit across insulation consisting of lacquer, enamel or textile		N/A
- (14.5)	Short-circuit across electrolytic capacitors		Р
	Short-circuit or interruption of SPDs		N/A
- (14.6)	After the tests has been carried out on three samples:		Р
	The insulation resistance \geq 1 M Ω	20 ΜΩ	Р
	No flammable gases		Р
	No accessible parts have become live		Р
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		Р
- (14.7)	Relevant fault condition tests with high-power a.c. supply and in turn to a d.c. supply		_
12.2	Overpower condition		Р
	Module withstands overpower condition >15 min.		Р
	Module with automatic protective device or power limiter, test performed 15 min. at limit.		N/A
	No fire, smoke or flammable gas is produced		Р
	Molten material does not ignite tissue paper, spread below the module		Р
14 (15)	CONSTRUCTION		
- (15.1)	Wood, cotton, silk, paper and similar fibrous mate	rial	Р
	Wood, cotton, silk, paper and similar fibrous material not used as insulation		Р
- (15.2)	Printed circuits		Р

Attachment 2: Additional test of EN IEC 62031				
Clause	Requirement + Test	Result - Remark	Verdict	
	Printed circuits used as internal connections complies with clause 14		Р	

15 (16)	CREEPAGE DISTANCES AND CLEARANCES		P
- (16.1)	General		Р
	Creepage distances and clearances according to 16.2 and 16.3		Р
	Controlgears providing SELV comply with additional requirements in Annex L		N/A
	Insulating lining of metallic enclosures		N/A
	Controlgear protected against pollution comply with Annex P		N/A
- (16.2)	Creepage distances		Р
- (16.2.2)	Minimum creepage distances for working voltages		Р
	Creepage distances according to Table 7	(see appended table)	Р
- (16.2.3)	Creepage distances for working voltages with frequer	ncies above 30 kHz	N/A
	Creepage distances according to Table 8	(see appended table)	N/A
- (16.3)	Clearances		Р
- (16.3.2)	Clearances for working voltages		Р
	Clearances distances according to Table 9	(see appended table)	Р
- (16.3.3)	Clearances for ignition voltages and working voltages	with higher frequencies	N/A
	Clearances distances for basic or supplementary insulation according to Table 10		N/A
	Clearances distances for reinforced insulation according to Table 11		N/A

16 (17)	SCREWS, CURRENT-CARRYING PARTS AND CONNECTIONS		
	Screws, current-carrying parts and connections in compliance with IEC 60598-1 (clause numbers between parentheses refer to IEC 60598-1)		
(4.11)	Electrical connections		
(4.11.1)	Contact pressure	Р	
(4.11.2)	Screws:		
	- self-tapping screws	N/A	
	- thread-cutting screws	N/A	
(4.11.3)	Screw locking:		
	- spring washer	N/A	
	- rivets	N/A	

Hazard

Clause	Requirement + Test	Result - Remark	Verdict	
Clause	Requirement Fest	Nesuit - Nemaik	Verdici	
(4.11.4)	Material of current-carrying parts		Р	
(4.11.5)	No contact to wood or mounting surface		Р	
(4.11.6)	Electro-mechanical contact systems		N/A	
(4.12)	Mechanical connections and glands			
(4.12.1)	Screws not made of soft metal		N/A	
	Screws of insulating material		N/A	
	Torque test: torque (Nm); part		N/A	
	Torque test: torque (Nm); part		N/A	
	Torque test: torque (Nm); part		N/A	
(4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A	
(4.12.4)	Locked connections:		N/A	
	- fixed arms; torque (Nm)		N/A	
	- lampholder; torque (Nm)		N/A	
	- push-button switches; torque 0,8 Nm		N/A	
(4.12.5)	Screwed glands; force (Nm)		N/A	
47 (40)	DESIGNATION TO LIFAT FIRE AND TRACKING		N/A	
17 (18)	RESISTANCE TO HEAT, FIRE AND TRACKING		N/A	
18	RESISTANCE TO CORROSION		N/A	
22	LUEAT MANA OFMENT		N/A	
20	HEAT MANAGEMENT		N/A	
22	PHOTOBIOLOGICAL SAFETY			
22.1	UV radiation		Р	
	Luminous radiation not exceed 2mW/klm		Р	
22.2	Blue light hazard	,	Р	
	Assessed according to IEC TR 62778	RG2	Р	
22.3	Infrared radiation	<u>'</u>	N/A	
	Requirements for infrared radiation when required		N/A	
A	ANNEX A - TESTS			
	All tests performed in accordance with the advice		Р	

12 (14)

Part

TABLE: tests of fault conditions

Simulated fault

Report No:	GZES210301485801
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	Attachment 2: Additional test of EN IEC 62031				
Clause	Requirement + Test	Result - Remark	Verdict		
LED	Open-circuited; no damaged		NO		
LED	Short-circuited; no damaged		NO		
BD1 Open-circuited; no damaged,			NO		
BD1 Short-circuited; no damaged, fuse resistor was broken			NO		
D1 Short-circuited; no damaged, circuit protected			NO		
D3	D3 Short-circuited; no damaged, circuit protected				
Q1 Short-circuited; no damaged, circuit protected			NO		
C4	Short-circuited; no damaged, circuit protected		NO		

15 (16)	TABLE: clearance and creepage distance measurements (mm)						Р
		Applic	able part of IE	C 61347-1 Ta	ble 7 – 11*		
Distances	· · · · · · · · · · · · · · · · · · ·		Measured	Require	ed		
	type **	clearance	clearance	*Table	creepage	creepage	*Table
Distance 1:	В	2,7	2,5	9	2,7	1,5	7
Working voltage (V)					230 V		_
Frequency if	applicable (kl	-lz)		······	_		_
PTI				:	< 600 ⊠	≥ 600 □	_
Peak value of	of the working	voltage Û _{out} i	if applicable (k	V)	_		_
Pulse voltag	e if applicable	(kV)		:	_		_
Supplementa	ary information	: Measured a	nt approved cou	ıpler & input te	rminal L/N		
Distance 2:	В	2,7	2,5	9	2,7	1,5	7
Working volt	age (V)			······	230 V		_
Frequency if	applicable (kl	-lz)			_		
PTI				:	< 600 ⊠	≥ 600 □	_
Peak value of	of the working	voltage Û _{out} i	if applicable (k	V)	_		_
Pulse voltag	e if applicable	(kV)		:			_
Supplementa	ary information	: Measured a	nt live parts to a	ccessible meta	al		•
Distance 3:							N/A
Working volt	age (V)						_
Frequency if	applicable (kl	-lz)					_
PTI				:	< 600 🗌	≥ 600 □	_
Peak value of	Peak value of the working voltage \hat{U}_{out} if applicable (kV):						_
Pulse voltag	e if applicable	(kV)		:			_
Supplementa	ary information	:					

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	Attachment 2: Additional test of EN IEC 62031				
Clause	Requirement + Test	Result - Remark	Verdict		

^{**} Insulation type: B – Basic; S – Supplementary; R – Reinforced

Attachment 2: Additional test of EN IEC 62031				
Clause	Requirement + Test Result - Remark	Verdict		
(A)	ANNEX A - TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK	N/A		
(A)		N/A		

- - - End of attachment 2 - - -

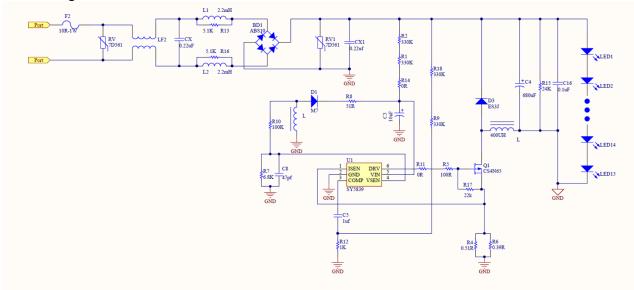
Page 1 of 1 Report No: GZES2103014			01485801		
Attachment 3: EN 62493:2015					
Clause	Clause Requirement + Test Result - Remark Ver				

4	LIMITS (Test summary)		
4.2.2	Lighting equipment deemed to comply with the Van der Hoofden test without testing		Р
4.2.3	Unintentional radiating part of lighting equipment	factor F ≤ 1	N/A
4.3	Intentional radiating part of lighting equipment	No intentional radiating from EUT	N/A

⁻⁻⁻ End of Attachment 3 ---

Attachment 4: Circuit diagram and PCB layout

Circuit diagram:



Blueview Elec-optic Tech Co., Ltd.

PCB layout:



- - - End of attachment 4 - - -

Attachment 5: Photo documentations

Details of: General front view for ABS300-0915 with transparent diffuser



Details of: General rear view for ABS300-0915



Attachment 5: Photo documentations

Details of: Coupler view (connected to main supply) for ABS300-0915, same as anther model



Details of: Coupler view for ABS300-0915, same as anther model



Attachment 5: Photo documentations

Details of: End of coupler by covered for ABS300-0915, same as anther model

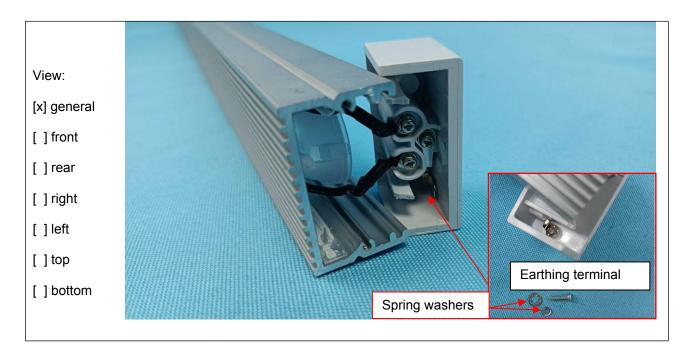


Details of: Internal view for ABS300-0915, same as anther model

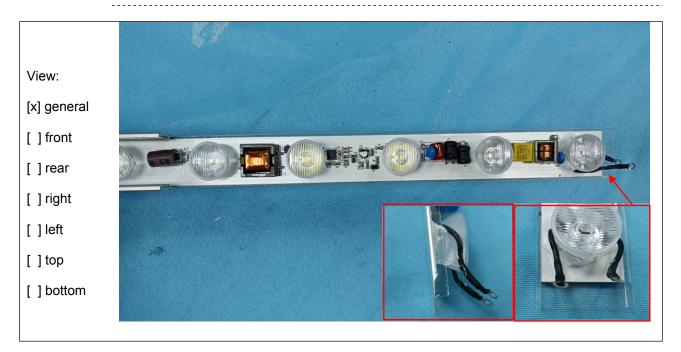


Attachment 5: Photo documentations

Details of: Connected to main supply part view for ABS300-0915, same as anther model



Details of: Internal view for ABS300-0915, similar as anther model



Attachment 5: Photo documentations

Details of: LED view (anther side is blank) for ABS300-0915, same as anther model

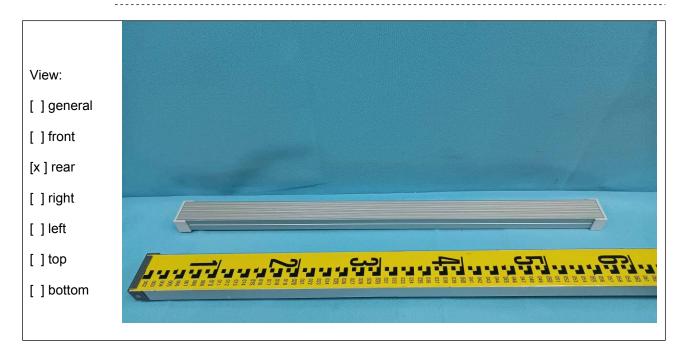


Details of: General front view for ABS300-0610 with transparent diffuser



Attachment 5: Photo documentations

Details of: General rear view for ABS300-0610



- - - End of attachment 5 - - -