







TEST REPORT IEC 60598-2-1 Luminaires

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

Report Number. : 633699.01

Date of issue..... : 2024-03-11

Total number of pages: 45

Name of Testing Laboratory

SGS Belgium NV - Division SGS CEBEC

preparing the Report:

Applicant's name....::

BuzziSpace

Address....::

Italiëlei 8 2000 Antwerpen

Belgium

Test specification:

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

Test procedure: CB Scheme

Non-standard test method: N/A

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

Test Report Form No.: IEC60598_2_11

Test Report Form(s) Originator...: Intertek Semko AB

Master TRF.....: Dated 2022-08-26

Copyright © 2022 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved IECEE Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing NCB. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Page 2 of 45

Report No. 633699.01

Test	item description:	Fixed	wall LED luminaire	
Trad	e Mark(s):	BuzziS	Space	
Man	ufacturer:	BuzziS	Space	
Mod	el/Type reference:	BuzziF	Pebl Light M & BuzziPebl	Light L
Ratir	ngs:	220-24	10 V 50/60 Hz 34W, M: 34	4W, L: 51W
Resp	oonsible Testing Laboratory (as a	pplical	ole), testing procedure	and testing location(s):
\boxtimes	CB Testing Laboratory:		SGS Belgium NV - Div	ision SGS CEBEC
Test	ing location/ address	:	Riverside Business Pa Build. A 1070 BRUSSE	rk Bld. Internationalelaan 55, LS Belgium
Test	ed by (name, function, signature)	:	Marc Meert (Laboratory Technician)	ment
Аррі	roved by (name, function, signatu	ıre) :	Christian Maes (Project Leader)	g Mige
	Testing procedure: CTF Stage 1:	<u> </u>		
Test	ing location/ address			
1000	ing roodion, address initialism			
Test	ed by (name, function, signature)	:		
Appı	oved by (name, function, signatu	ıre):		
	Testing procedure: CTF Stage 2	:		
Test	ing location/ address			
Test	ed by (name + signature)	:		
Witn	essed by (name, function, signat	ure).:		
Аррі	oved by (name, function, signatu	ıre):		
	Testing procedure: CTF Stage 3	•		
	Testing procedure: CTF Stage 4			
Test	ing location/ address			
Test	ed by (name, function, signature)	:		
Witn	essed by (name, function, signat	ure).:		
Appı	oved by (name, function, signatu	ıre):		
Supe	ervised by (name, function, signa	ture) :		

List of Attachments (including a total number of pages in each attachment):				
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES (2 pages)				
Summary of testing:				
Tests performed (name of test and test clause):	Testing location:			
	SGS Belgium NV - Division SGS CEBEC			
IEC 60598-2-1:2020 used in conjunction with IEC 60598-1:2020	Riverside Business Park Bld. Internationalelaan 55, Build. A 1070 BRUSSELS Belgium			
EN IEC 60598-2-1:2021 used in conjunction with EN IEC 60598-1:2021 + AMD11:2022				
Full test performed on model BuzziPebl Light L & BuzziPebl Light M				
Summary of compliance with National Difference	es (List of countries addressed):			
☐ The product fulfils the requirements of EN IEC	C 60598-2-1:2021 used in conjunction with			
EN IEC 60598-1:2021 + AMD11:2022				
Use of uncertainty of measurement for decisions	s on conformity (decision rule) :			
applicable limit according to the specification in th	ard, when comparing the measurement result with the nat standard. The decisions on conformity are made mple acceptance" decision rule, previously known as			
☑ Other: (to be specified, for example when requaccreditation requirements apply)	ired by the standard or client, or if national			
Information on uncertainty of measurement:				

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

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.





Test item particulars:				
Classification of installation and use Class I				
Supply Connection Terminal block				
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: 2023-08-31				
Date (s) of performance of tests: November 2023				
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 comma / point is used as the decimal separator. Unless otherwise agreed, all orders and documents are executed and issued in accordance with our General Conditions. Upon simple request the conditions will again be sent to you. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects SGS' findings at the time of its				
intervention only and within the limits of client's instructions, if any. SGS' sole responsibility is to its client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.				
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.				
Name and address of factory (ies): BuzziSpace Manufacturing NL				
Industrieweg, 7a 5531 AD BLADEL				
Netherlands				

	IEC 60598-2-1	·	
Clause	Requirement + Test	Result - Remark	Verdict
1.4 (0)	GENERAL TEST REQUIREMENTS		Р
1.4 (0.3)	More sections applicable:	Yes ⊠ No □ Section/s:	_
1.4 (0.5)	Components	(see Annex 1)	_
1.4 (0.7)	Information for luminaire design in light sources s	standards	_
1.4 (0.7.2)	Light source safety standard:		_
	Luminaire design in the light source safety standard		Р
		1	
1.5 (2)	CLASSIFICATION OF LUMINAIRES		Р
1.5 (2.2)	Type of protection:	Class I	Р
1.5 (2.3)	Degree of protection:	IPX0	
1.5 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces	Yes ⊠ No □	_
1.5 (2.5)	Luminaire for normal use:	Yes ⊠ No □	
	Luminaire for rough service:	Yes □ No ⊠	_
4.0 (2)	MA DIVING		Р
1.6 (3)	MARKING Mandatan markings		-
1.6 (3.2)	Mandatory markings		Р
	Position of the marking		P
	Format of symbols/text		P
1.6 (3.3)	Additional information		P
	Language of instructions	English	Р
1.6 (3.3.1)	Combination luminaires		N/A
1.6 (3.3.2)	Nominal frequency in Hz		N/A
1.6 (3.3.3)	Operating temperature		N/A
1.6 (3.3.5)	Wiring diagram		N/A
1.6 (3.3.6)	Special conditions		N/A
1.6 (3.3.7)	Metal halide lamp luminaire – warning		N/A
1.6 (3.3.8)	Limitation for semi-luminaires		N/A
1.6 (3.3.9)	Power factor and supply current		N/A
1.6 (3.3.10)	Suitability for use indoors		N/A
1.6 (3.3.11)	Luminaires with remote control		N/A
1.6 (3.3.12)	Clip-mounted luminaire – warning		N/A
1.6 (3.3.13)	Specifications of protective shields		N/A
1 6 (3 3 14)	Symbol for nature of supply		N/A

	IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict	
1.6 (3.3.15)	Rated current of socket outlet		N/A	
1.6 (3.3.16)	Rough service luminaire		N/A	
1.6 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments		N/A	
1.6 (3.3.18)	Non-ordinary luminaires with PVC cable		N/A	
1.6 (3.3.19)	Protective conductor current in instruction if applicable		N/A	
1.6 (3.3.20)	Provided with information if not intended to be mounted within arm's reach		N/A	
1.6 (3.3.21)	Non replaceable and non-user replaceable light sources information provided		Р	
1.6 (3.3.22)	Controllable luminaires, classification of insulation provided		N/A	
1.6 (3.3.23)	Luminaires without control gear provided with necessary information for selection of appropriate component		N/A	
1.6 (3.3.24)	If not supplied with terminal block, information on the packaging		N/A	
1.6 (3.3.25)	Luminaires employing light sources emitting UV on mains wiring, information provided		N/A	
1.6 (3.3.26)	Wall mounted luminaire using external flexible cable or cord longer than 0.3 m, information provided		N/A	
1.6 (3.4)	Test with water		Р	
	Test with hexane		Р	
	Legible after test		Р	
	Label attached		Р	

1.7 (4)	CONSTRUCTION	Р
1.7 (4.2)	Components replaceable without difficulty	Р
1.7 (4.3)	Wireways smooth and free from sharp edges	Р
1.7 (4.4)	Lamp holders	N/A
1.7 (4.4.1)	Integral lamp holder	N/A
1.7 (4.4.2)	Wiring connection	N/A
1.7 (4.4.3)	Lamp holder for end-to-end mounting	N/A
1.7 (4.4.4)	Positioning	N/A
	- pressure test (N):	_
	After test the lamp holder comply with relevant standard sheets and show no damage	N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	After test on single-capped lamp holder the lamp holder has not moved from its position and show no permanent deformation		N/A
	- bending test (N)		_
	After test the lamp holder has not moved from its position and show no permanent deformation		N/A
1.7 (4.4.5)	Peak pulse voltage		N/A
1.7 (4.4.6)	Centre contact		N/A
1.7 (4.4.7)	Parts in rough service luminaires resistant to tracking		N/A
1.7 (4.4.8)	Lamp connectors		N/A
1.7 (4.4.9)	Caps and bases correctly used		N/A
1.7 (4.4.10)	Light source for lamp holder or connection according IEC 60061 not connected another way		N/A
1.7 (4.5)	Starter holders		N/A
	Starter holder in luminaires other than class II		N/A
	Starter holder class II construction		N/A
1.7 (4.6)	Terminal blocks		N/A
	Tails		N/A
	Unsecured blocks		N/A
1.7 (4.7)	Terminals and supply connections		Р
1.7 (4.7.1)	Contact to metal parts		Р
1.7 (4.7.2)	Test 8 mm live conductor		Р
	Test 8 mm earth conductor		Р
1.7 (4.7.3)	Terminals for supply conductors		N/A
1.7 (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
1.7 (4.7.4)	Terminals other than supply connection		N/A
1.7 (4.7.5)	Heat-resistant wiring/sleeves		N/A
1.7 (4.7.6)	Multi-pole plug		N/A
	- test at 30 N		N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (4.8)	Switches		N/A
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with IEC 61058-1 for electronic switches		N/A
1.7 (4.9)	Insulating lining and sleeves	•	N/A
1.7 (4.9.1)	Retainment		N/A
	Method of fixing:		N/A
1.7 (4.9.2)	Insulated linings and sleeves:	•	N/A
	Resistant to a temperature > 20 °C to the wire temperature or		N/A
	a) & c) Insulation resistance and electric strength		N/A
	b) Ageing test. Temperature (°C)		N/A
1.7 (4.10)	Double or reinforced insulation	•	N/A
1.7 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		N/A
	Safe installation fixed luminaires		N/A
	Capacitors and switches		N/A
1.7 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
1.7 (4.10.3)	Retainment of insulation:	•	N/A
	- fixed		N/A
	- unable to be replaced; luminaire inoperative		N/A
	- sleeves retained in position		N/A
	- lining in lamp holder		N/A
1.7 (4.10.4)	Protective impedance device		N/A
	Basic and supplementary insulation bridged by resistor(s) or appropriate capacitor		N/A
	Double or reinforced insulation bridged by at least two separate resistors in series or appropriate capacitor(s)		N/A
	Capacitors comply with IEC 60384-14		N/A
	Resistors comply with test (a) in 14.2 of IEC 60065		N/A
1.7 (4.11)	Electrical connections and current-carrying parts		Р

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (4.11.1)	Contact pressure		Р
1.7 (4.11.2)	Screws:		Р
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
1.7 (4.11.3)	Screw locking:	1	Р
	- spring washer		Р
	- rivets		N/A
1.7 (4.11.4)	Material of current-carrying parts		Р
1.7 (4.11.5)	No contact to wood or mounting surface		Р
1.7 (4.11.6)	Electro-mechanical contact systems		N/A
1.7 (4.12)	Screws and connections (mechanical) and glands		Р
1.7 (4.12.1)	Screws not made of soft metal		Р
	Screws of insulating material		N/A
	Torque test: torque (Nm); part:	1.2 Nm; Cover attachment screw, screw attachment metal enclosure, screw cover metal enclosure, earthing screw (Model : BuzziPebl Light Two Medium & Two Large)	Р
	Torque test: torque (Nm); part:	8.5 Nm; earthing continuity cord anchorage (Model : BuzziPebl Light Two Medium & Two Large)	Р
	Torque test: torque (Nm); part:	0.5 Nm; Cord anchorage (Model : BuzziPebl Light Two Large)	Р
1.7 (4.12.2)	Screws with diameter < 3 mm screwed into metal		Р
1.7 (4.12.4)	Locked connections:		N/A
	- fixed arms; torque (Nm)		N/A
	- lamp holder; torque (Nm):		N/A
	- push-button switches; torque 0,8 Nm		N/A
1.7 (4.12.5)	Screwed glands; force (Nm)		N/A
1.7 (4.13)	Mechanical strength		Р
1.7 (4.13.1)	Impact tests:		Р
	- fragile parts; energy (Nm)		N/A
	- other parts; energy (Nm):	0.35 (Model : BuzziPebl Light Two Medium)	Р
	1) live parts		Р
	2) linings		Р

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	3) protection		Р
	4) covers		Р
1.7 (4.13.2)	Metal parts have adequate mechanical strength		Р
1.7 (4.13.3)	Straight test finger		Р
1.7 (4.13.4)	Rough service luminaires		N/A
	- IP54 or higher		N/A
	a) fixed		N/A
	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
1.7 (4.13.6)	Tumbling barrel		N/A
1.7 (4.14)	Suspensions, fixings and means of adjusting		Р
1.7 (4.14.1)	Mechanical load:		Р
	A) four times the weight	4 x 17.4 Kg = 69.6 Kg (BuzziPebl Light Two Large)	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
1.7 (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
1.7 (4.14.3)	Adjusting devices:		N/A
	- flexing test; number of cycles:		N/A
	- strands broken:		N/A
	- electric strength test afterwards		N/A
1.7 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors		N/A
1.7 (4.14.5)	Guide pulleys		N/A
1.7 (4.14.6)	Strain on socket-outlets		N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (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
	- no fiercely burning material		N/A
	- thermal protection		N/A
	- electronic circuits exempted		N/A
1.7 (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
1.7 (4.16)	Luminaires for mounting on normally flammable s	surfaces	N/A
	No lamp control gear:	(compliance with Section 12)	N/A
	Provided with adaptor for a track meet the requirements for direct mounting on normally flammable surfaces		N/A
1.7 (4.16.1)	Lamp control gear spacing:		N/A
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
1.7 (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
1.7 (4.16.3)	Design to satisfy the test of 12.6	(see clause 12.6)	N/A
1.7 (4.17)	Drain holes		N/A
	Clearance at least 5 mm		N/A
1.7 (4.18)	Resistance to corrosion		N/A
1.7 (4.18.1)	- rust-resistance		N/A
1.7 (4.18.2)	- season cracking in copper		N/A
1.7 (4.18.3)	- corrosion of aluminium		N/A
1.7 (4.19)	Ignitors compatible with ballast		N/A
1.7 (4.20)	Rough service vibration		N/A
1.7 (4.21)	Protective shield		N/A

	1 age 14 61 46		000000.01
	IEC 60598-2-1	,	
Clause	Requirement + Test	Result - Remark	Verdict
1.7 (4.21.1)	Shield fitted if tungsten halogen lamps or metal halide lamps		N/A
	Shield of glass if tungsten halogen lamps		N/A
1.7 (4.21.2)	Particles from a shattering lamp not impair safety		N/A
1.7 (4.21.3)	No direct path		N/A
1.7 (4.21.4)	Impact test on shield		N/A
	Glow-wire test on lamp compartment:	See Test Table 1.15 (13.3.2)	N/A
1.7 (4.22)	Attachments to lamps not cause overheating or damage		N/A
1.7 (4.23)	Semi-luminaires comply Class II		N/A
1.7 (4.24)	Photobiological hazards		Р
1.7 (4.24.1)	No excessive UV radiation if tungsten halogen lamps and metal halide lamps (Annex P)		Р
1.7 (4.24.2)	Retinal blue light hazard		Р
	Class of risk group assessed according to IEC/TR 62778	RG1 : 60379102 001	_
	Luminaires with E _{thr} :		N/A
	a) Fixed luminaires		N/A
	- distance x m, borderline between RG1 and RG2:		N/A
	- marking and instruction according 3.2.23		N/A
	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
1.7 (4.25)	Mechanical hazard		Р
	No sharp point or edges		Р
1.7 (4.26)	Short-circuit protection		N/A
1.7 (4.26.1)	Adequate means of uninsulated accessible SELV / PELV parts		N/A
1.7 (4.26.2)	Short-circuit test with test chain according 4.26.3:		N/A
	Supply source ES1 PSE		N/A
	Test chain not melt through		N/A
	Test sample not exceed values of Table 12.1 and 12.2		N/A
1.7 (4.27)	Terminal blocks with integrated screwless protect	ive earthing contacts	N/A
	Test according Annex V		N/A

	IEC 60598-2-1	<u> </u>	00000.01
Clause		Result - Remark	Verdict
			N 1/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 $< 0.05 \Omega$		N/A
1.7 (4.28)	Fixing of thermal sensing control		N/A
	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
1.7 (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
1.7 (4.30)	Luminaires with non-user replaceable light source		N/A
	If protective cover provide protection against electric sho electric shock risk" symbol:	ock and marked with "caution,	N/A
	At least one fixing means requiring use of tool		N/A
1.7 (4.31)	Insulation between circuits		Р
	Circuits insulated from LV supply fulfil requirements according 4.31.1 – 4.31.3		Р
	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		Р
1.7 (4.31.1)	SELV or PELV circuits		Р
	Used SELV/PELV source		Р
	Voltage ≤ ELV		N/A
	Insulating of SELV/PELV circuits from LV supply		N/A
	Insulating of SELV/PELV circuits from other non SELV/PELV circuits		N/A
	Insulating of SELV/PELV circuits from FELV		N/A

	IEC 60598-2-1	
Clause	Requirement + Test Result - Remark	Verdict
	Insulating of SELV/PELV circuits from other SELV/PELV circuits	N/A
	SELV/PELV circuits insulated from accessible parts according Table X.1	N/A
	Plugs not able to make any electrical contact with socket-outlets of other voltage systems	N/A
	Socket outlets does not admit plugs of other voltage systems	N/A
	Plugs and socket-outlets does not have protective conductor contact	N/A
1.7 (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 make any electrical contact with socket-outlets of other voltage systems	N/A
	Socket outlets does not admit plugs of other voltage systems	N/A
	Socket-outlets have protective conductor contact	N/A
1.7 (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:	s 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
1.7 (4.32)	Overvoltage protective devices	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

	9	!	
	IEC 60598	2-1	
Clause	Requirement + Test	Result - Remark	Verdict

1.7 (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
1.7 (4.34)	Electromagnetic fields (EMF)		N/A
	No harmful electromagnetic fields	LED module	N/A
1.7 (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
1.7 (4.36)	Track-mounted luminaires	<u>'</u>	N/A
	Test in accordance with Annex A of IEC60570:2003/AMD2:2019		N/A

1.8 (11)	CREEPAGE DISTANCES AND CLEARANCES		Р
1.8 (11.2.1)	Impulse withstand category (Normal category II)	Category II ⊠ Category III □	_
	Category III according Annex U		N/A
	Protected against pollution, reduced creepage and clearance according Annex P of IEC 61347-1		N/A
1.8 (11.2.2)	Creepage distances for frequency up to 30 kHz	See Test Table 1.8 (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 1.8 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.8 (11.2) II	N/A
1.8 (11.2.3)	Clearances for frequency up to 30 kHz	See Test Table 1.8 (11.2) I	Р
	Clearances distances for frequency over 30 kHz:		N/A
	- Controlgear marked with <i>U</i> _P	See Test Table 1.8 (11.2) II	N/A
	- Requirements according IEC 60664-4 for controlgear not covered by IEC 61347	See Test Table 1.8 (11.2) II	N/A

1.9 (7)	PROVISION FOR EARTHING	Р	
---------	------------------------	---	--

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.9 (7.2.1 + 7.2.3)	Accessible metal parts		Р
	Metal parts in contact with supporting surface		N/A
	Resistance < 0,5 Ω:	0.022 (Model : BuzziPebl Light Two Medium)	Р
	Self-tapping screws used		N/A
	Thread-forming screws		N/A
	Thread-forming screw used in a grove		N/A
	Protective earth makes contact first		N/A
	Terminal blocks with integrated screwless protective earthing contacts tested according Annex V		N/A
	Protective earthing of the luminaire not via built-in control gear		Р
1.9 (7.2.2 + 7.2.3)	Protective earth continuity in joints, etc.		N/A
1.9 (7.2.4)	Locking of clamping means		Р
	Compliance with 4.7.3		Р
1.9 (7.2.5)	Protective earth terminal integral part of connector socket		N/A
1.9 (7.2.6)	Protective earth terminal adjacent to mains terminals		Р
1.9 (7.2.7)	Electrolytic corrosion of the protective earth terminal		N/A
1.9 (7.2.8)	Material of protective earth terminal		Р
	Contact surface bare metal		Р
1.9 (7.2.10)	Class II luminaire for looping-in		N/A
	Double or reinforced insulation to functional earth		N/A
1.9 (7.2.11)	Protective earthing core coloured green-yellow		N/A
	Length of protective earthing conductor		N/A
1.9 (7.2.12)	PELV circuit connected to protective earth for functional purpose		N/A

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

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

	3	<u>'</u>	
	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict

1.11 (5)	EXTERNAL AND INTERNAL WIRING	AL WIRING	
1.11 (5.2)	Supply connection and external wiring		Р
1.11 (5.2.1)	Means of connection:	Terminal block	Р
	Outdoor luminaire has not PVC insulated external wiring if not Class III or SELV/PELV circuits ≤ 25 V AC/60 V DC/25 V peak interrupted DC voltage with frequency 10Hz -200 Hz or protected from outdoor environment		N/A
1.11 (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
1.11 (5.2.3)	Type of attachment, X, Y or Z		N/A
1.11 (5.2.5)	Type Z not connected to screws		N/A
1.11 (5.2.6)	Cable entries:		Р
	- suitable for introduction		Р
	- adequate degree of protection		Р
1.11 (5.2.7)	Cable entries through rigid material have rounded edges		N/A
1.11 (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
1.11 (5.2.9)	Locking of screwed bushings		N/A
1.11 (5.2.10)	Cord anchorage:		Р
	- covering protected from abrasion		Р
	- clear how to be effective		Р
	- no mechanical or thermal stress		Р
	- no tying of cables into knots etc.		Р
	- insulating material or lining		Р
1.11 (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

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	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
1.11 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment		N/A
1.11 (5.2.10.3)	Tests:		Р
	- impossible to push cable; unsafe		Р
	- pull test: 25 times; pull (N)	60 (Model : BuzziPebl Light Two Medium)	Р
	- torque test: torque (Nm)	0.25 (Model : BuzziPebl Light Two Medium)	Р
	- displacement ≤ 2 mm		Р
	- no movement of conductors		Р
	- no damage of cable or cord		Р
	- function independent of electrical connection		Р
1.11 (5.2.10.4)	Luminaire with/designed for use with supply cord with	maximum current of 2A:	N/A
	- Ordinary Class III luminaire supplied with SELV ≤ 25V RMS/60V DC		N/A
	- Ordinary Class III luminaire supplied with PELV ≤12V RMS/30V DC		N/A
	- Other than ordinary Class III luminaire supplied with voltage ≤12V RMS/30V DC		N/A
	Pull test of 30N		N/A
1.11 (5.2.11)	External wiring passing into luminaire		N/A
1.11 (5.2.12)	Looping-in terminals		N/A
1.11 (5.2.13)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
1.11 (5.2.14)	Mains plug same protection		N/A
	Class III luminaire plug		N/A
	No unsafe compatibility		N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.11 (5.2.15)	Connectors for Class III luminaires (IEC 60603 or IEC 62680)		N/A
1.11 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Installation couplers (IEC 61535)		N/A
	Appliance inlet or connector systems (IEC 61984)		N/A
1.11 (5.2.17)	No standardized interconnecting cables properly assembled		N/A
1.11 (5.2.18)	Used plug in accordance with		N/A
	- IEC 60083		N/A
	- other standard		N/A
1.11 (5.3)	Internal wiring		Р
1.11 (5.3.1)	Internal wiring of suitable size and type		Р
	Through wiring		Р
	- not delivered/ mounting instruction		N/A
	- factory assembled		Р
	- socket outlet loaded (A)		N/A
	- temperatures:	(see Annex 2)	N/A
	Green-yellow for protective earth only		Р
1.11 (5.3.1.1)	Internal wiring connected directly to fixed wiring		Р
	Cross-sectional area (mm²):	0.75 (Model : BuzziPebl Light Two Medium & Two Large) & 20 AWG (0.518mm²) (Model : BuzziPebl Light Two Large)	Р
	Insulation thickness (mm)		Р
	Extra insulation added where necessary		N/A
1.11 (5.3.1.2)	Internal wiring connected to fixed wiring via internal cu	urrent-limiting device	Р
	Cross-sectional area (mm²):	20 AWG (0.518mm²) (Model : BuzziPebl Light Two Medium)	Р
1.11 (5.3.1.3)	Double or reinforced insulation for class II		N/A
1.11 (5.3.1.4)	Conductors without insulation		N/A
1.11 (5.3.1.5)	SELV/PELV current-carrying parts		Р
1.11 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A

	1 age 22 of 40		000000.01
	IEC 60598-2-1	_	
Clause	Requirement + Test	Result - Remark	Verdict
1.11 (5.3.2)	Sharp edges etc.		Р
	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
1.11 (5.3.3)	Insulating bushings:	1	N/A
	- suitable fixed		N/A
	- material in bushings		N/A
	- material not likely to deteriorate		N/A
	- cables with protective sheath		N/A
1.11 (5.3.4)	Joints and junctions effectively insulated		Р
1.11 (5.3.5)	Strain on internal wiring		N/A
1.11 (5.3.6)	Wire carriers		N/A
1.11 (5.3.7)	Wire ends not tinned		N/A
	Wire ends tinned: no cold flow		N/A
1.11 (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

1.12 (8)	1.12 (8) PROTECTION AGAINST ELECTRIC SHOCK		Р
1.12 (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 starter holders in portable and adjustable luminaires comply with double or reinforced insulation requirements		N/A
	Basic insulation only accessible under lamp or starter replacement		N/A
	Protection in any position		N/A
	Double-ended tungsten filament lamp		N/A
	Insulation lacquer not reliable		N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Double-ended high-pressure discharge lamp		N/A
	Relevant warning according to 3.2.18 fitted to the luminaire		N/A
1.12 (8.2.2)	Portable luminaire adjusted in most unfavourable position		N/A
1.12 (8.2.3.a)	Class II luminaire:		N/A
	- basic insulated metal parts not accessible		N/A
	- required insulation from live parts in compliance with Table X.1		N/A
			N/A
	- glass protective shields not used as supplementary insulation		N/A
1.12 (8.2.3.b)	BC lamp holder of metal in class I luminaires shall be connected to protective earth		N/A
1.12 (8.2.3.c)	SELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)		N/A
	- voltage under load/ no-load DC (V)		N/A
	- interrupted DC 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
	- voltage under load/ no-load AC (V)		N/A
	- voltage under load/ no-load DC (V)		N/A
	- interrupted DC voltage (V)		N/A
	Class III luminaire only for connection to SELV/PELV		N/A
1.12 (8.2.3.d)	PELV circuits with exposed current carrying parts:		N/A
	Ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V)		N/A
	- voltage under load/ no-load DC (V)		N/A
	Other than ordinary luminaire:		N/A
	- voltage under load/ no-load AC (V):		N/A
	- voltage under load/ no-load DC (V)		N/A
	One pole insulated if required		N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
1.12 (8.2.4)	Portable luminaire has protection independent of supporting surface		N/A
1.12 (8.2.5)	Compliance with the standard test finger or relevant probe		N/A
1.12 (8.2.6)	Covers reliably secured		N/A
1.12 (8.2.7)	Luminaire other than below with capacitor $> 0.5~\mu F$ not exceed 50 V 1 min after disconnection		N/A
	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

1.13 (12)	ENDURANCE TEST AND THERMAL TEST		
1.13 (-)	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 1.14		_
1.13 (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)	
1.13 (12.3)	Endurance test		Р
	a) mounting-position	Wall mounting	_
	b) test temperature (°C):	35	_
	c) total duration (h)	240	_
	d) supply voltage (V)	264	_
	d) if not equipped with control gear, constant voltage/current (V) or (A):		_
1.13 (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		N/A
1.13 (12.3.2)	After endurance test:		Р
	- no part unserviceable		Р
	- luminaire not unsafe		Р
	- no damage to track system		N/A

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	- marking legible	No marking plate present on the luminaire	Р
	- no cracks, deformation etc.		Р
1.13 (12.4)	Thermal test (normal operation)	(see Annex 2)	Р
1.13 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
1.13 (12.6)	Thermal test (failed lamp control gear condition):		N/A
1.13 (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
1.13 (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
1.13 (12.7)	Thermal test (failed lamp control gear in plastic lu	minaires):	N/A
1.13 (12.7.1)	Luminaire without temperature sensing control		N/A
1.13 (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		_

	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	- 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
1.13 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70	W, 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 1.15 (13.2.1)	N/A
1.13 (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
1.13 (12.7.2)	Luminaire with temperature sensing control		N/A
	- thermal link	Yes No No	_
	- manual reset cut-out:	Yes No No	_
	- auto reset cut-out	Yes No No	_
	- case of abnormal conditions:		_
	- highest measured temperature of fixing point/ exposed part (°C)::		_
	Ball-pressure test::	See Test Table 1.15 (13.2.1)	N/A
			- 1
1.14 (9)	RESISTANCE TO DUST AND MOISTURE		Р
1.14 (-)	If IP > IP 20 the order of tests as specified in clause 1	.12	N/A
1.14 (9.2)	Tests for ingress of dust, solid objects and moisture:		N/A
	- classification according to IP	IPX0	_
	- mounting position during test		_
	- fixing screws tightened; torque (Nm)		_
	- tests according to clauses:		_

	· · · · · · · · · · · · · · · · · · ·	•	
	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
	- electric strength test afterwards		N/A
	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
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold water jet-proof luminaire		N/A
	e) no contact with live parts (IP 2X)		N/A
	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
1.14 (9.3)	Humidity test 48 h		Р

1.15 (10)	INSULATION RESISTANCE AND ELECTRIC STRENGTH	Р
1.15 (10.2.1)	Insulation resistance test	Р
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø:	_
	Insulation resistance (MΩ):	Р
	SELV/PELV:	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/PELV:	Р
	- between live parts of different polarity:	N/A
	- between live parts and mounting surface:	N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- between live parts and metal parts:	>200 MΩ (Model : BuzziPebl Light Two Large)	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
1.15 (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):		N/A
	SELV/PELV:		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/PELV:		Р
	- between live parts of different polarity:		N/A
	- between live parts and mounting surface:		N/A
	- between live parts and metal parts	1480 V (Model : BuzziPebl Light Two Large)	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
1.15 (10.3)	Touch current (mA)		N/A
	Protective conductor current (mA)	0.035 (Model : BuzziPebl Light Two Large)	Р

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

1.16 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING		Р
1.16 (13.2.1)	Ball-pressure test	See Test Table 1.16 (13.2.1)	Р
1.16 (13.3.1)	Needle-flame test (10 s)	See Test Table 1.16 (13.3.1)	Р
1.16 (13.3.2)	Glow-wire test (650°C)	See Test Table 1.16 (13.3.2)	Р
1.16 (13.4)	Proof tracking test (IEC 60112)	See Test Table 1.16 (13.4)	N/A

Page 30 of 45

Report No. 633699.01

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

1.8 (11.2)	TABLE I: C	TABLE I: Creepage distances and clearances							
	Minimum d	istances (mm) for a.c. up to	30 kHz sinu	soidal voltage	es			
	Applicable	part of IEC 60	598-1 Table 1	1.1.A*, 11.1.B	s* and 11.2*				
	Insulation	Insulation Measured Required Measured							
	type **	clearance	clearance	*Table	creepage	creepage	*Table		
Distance 1:	В	21	1.5	11.1.B	>21	2.4	11.1.A		
Working volt	tage (V)			:	240		_		
PTI				:	< 600 ⊠	<u>></u> 600 □	_		
Pulse voltage or <i>U</i> _P if applicable (kV):									
Supplementa	ary informatio	n: Between live	es parts & meta	al enclosure (M	lodel : BuzziPe	bl Light Two M	edium)		
Distance 2:	В	23	1.5	11.1.B	>23	2.4	11.1.A		
Working volt	tage (V)			:			_		
PTI				:	< 600 🗌	<u>></u> 600 □	_		
Pulse voltag	e or <i>U</i> ⊵ if app	licable (kV)		:					
Supplementa	ary informatio	n: Between live	es parts & meta	al enclosure (M	lodel : BuzziPe	bl Light Two La	arge)		
Distance 3:									
Working vol	tage (V)				_				
PTI:					< 600 🗌	≥ 600 □	_		
Pulse voltag	e or <i>U</i> ⊵ if app	licable (kV)		:			_		
Supplementa	ary informatio	n:			•				

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

			IEC 6	60598-2-1				
Clause	Requiremen	t + Test			Result - Rem	ark		Verdict
1.8 (11.2)	TABLE II: C	reepage dis	stances and c	learances				N/A
	Minimur	n distances	(mm) for a.c.	higher than 3	0 kHz sinusoi	dal voltages	•	
	Applicab	le part of IE	C 61347-1 Tab	ole 7 and 8* or	IEC 60664-4	Table 1 and 2		
Distances	Insulation	uired	Measured	Requ	uired	I		
	type **	clearance	clearance	*Table	creepage	creepage	,	*Table
Distance 1:								
Working volt	tage (V)			:				_
Frequency if	f applicable (k	(Hz)		:				_
PTI				:	< 600 🗌	<u>></u> 600 □		_
Peak value	of the workir	ng voltage Û	J _{out} if applicab	le (kV):				_
Supplementa	ary informatio	n:						
Distance 2:								
Working volt	tage (V)			:				_
Frequency if	f applicable (k	(Hz)		:				_
PTI				:	< 600 🗌	<u>></u> 600 🗌		_
Peak value	of the workir	ng voltage Û	J _{out} if applicab	le (kV):				_
Supplementa	ary informatio	n:						
Distance 3:								
Working volt	tage (V)			:				_
Frequency if	f applicable (k	(Hz)		:				_
PTI				:	< 600 🗌	<u>></u> 600 □		_
Peak value	of the workir	ng voltage Û	J _{out} if applicab	le (kV):				_
Supplement	ary informatio	n.			•			

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

		rage	32 01 43		Report No. 6	33099.01	
		IEC 60	0598-2-1				
Clause	Requirement + Tes	st		Result - Ren	nark	Verdict	
1.16 (13.2.1)	I ARI F. Rall Procelled 1964 of Ingremoniactics						
Allowed im	pression diameter	(mm):	2			_	
Object/ Part	: No./ Material	Manufacturer/ trademark	Test tempera	ature (°C)	Impression diameter	er (mm)	
Terminal blo	ock enclosure (1)	-	75		1.2		
Supplement	ary information: (1)	Tested on model : Buz	zziPebl Light 1	wo Medium.			

1.16 (13.3.1)	TABLE:	ABLE: Needle-flame test					
Object/ Part Material	No./	Manufacturer/ trademark	Duration of application of test flame (ta); (s)	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
LED Module	(1)	-	10	Yes	6	Pass	
Supplement	ary inform	ation: (1) Tested on mode	I : BuzziPebl Light Tv	wo Medium.			

1.16 (13.3.2)	TABLE: R	Resistance to heat and fire - Glow wire tests						
Object		Manufacturer/ GWT (°C		GWT (°C) : 65	0			
Part No./ Material		trademark	t _E (s)	t _i (s)	t _R (s)	P Verdict Pass Pass Pass Pass		
Terminal block (1)	enclosure	-	No flame	No flame	No flame	Pass		
Gray cloth	(1)	-	No flame	No flame	No flame	Pass		
insulating foa	am (1)	-	No flame	No flame	No flame	Pass		
Wood (1	1)	-	No flame	No flame	No flame	Pass		
gnition of the sp	ecified layer	placed underneath the	_ test specimen (`	 Yes/No)	:	No		

Page 33 of 45

Report No. 633699.01

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

1.16 (13.4) TABLE: Proof tracking test					
Test voltage PTI 175 V				_	
Object/ Part No./ Material Manufacturer/ Withstand 50 drops without fail places or on three specimens		lure on three	Verdict		
Supplementary information:	1	1	1	1	ı

		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		rk(s) of nformity ¹⁾
Description:		Gener	al components					
Terminal bloc	k	A	ADELS- CONTACT	LK980-01	450V 24A T85	EN 60998-2-2	EN 400	EC)21343
Internal wiring	g	A	RS PRO	H03VV-F	6A 300V	IEC 60598-2-1		sted in the bliance
Internal wiring	g	Α	CHUANGXU	20 AWG	300V 80°C	IEC 60598-2-1		sted in the bliance
LED Module		В	Bluevision	S2835L140V2 4WW27K85IP 67-10	24Vdc 14.4W/M	IEC 62031	CB DE 2_0	
Description:		Buzzi	Pebl Light (Two M	edium)				
LED Driver		В	SNAPPY	SS40-24VF	Prim: 100- 240VAC, 50/60Hz Sec: 24VDC, Max 1.67A, Max 40W tc=85°c	EN 61347-2-13	TU' 141	V 19071120
Description:		Buzzi	Pebl Light (Two La	arge)				
LED Driver			SNAPPY	SNP60- 24VF(UE)	Prim: 100- 240VAC, 50/60Hz, Max 0.8A, Max 72W Sec: 24VDC, Max 2.5A, Max 60W tc=90°c	EN 61347-2-13	TU'	V 19064798

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		Р
	Type reference:	BuzziPebl Light (Two Large)	_
	Lamp used:	S2835L140V24WW27K85IP67- 10	_
	Lamp control gear used:	ArtNo.SNP60-24VF(UE)	_
	Mounting position of luminaire	Wall mounting	_
	Supply wattage (W)	49.82	_
	Supply current (A)	0.213	_
	Temperatures in test 1 - 4 below are corrected for ta (°C)	25	_
	- abnormal operating mode		
1.13 (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:	240Vx1.06=254.5 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		
1.13 (12.5)	- test 4: 1,1 times rated voltage or 1,05 times rated wattage or 1,1 times constant voltage/current or 130/150% of rated input voltage:		_

Temperature measurements (°C)

Part	Ambient	Cl. 12.4 – normal			Cl. 12.5 – abnormal		
rait	Ambient	test 1	test 2	test 3	limit	test 4	limit
Internal wiring	25		51.2		90		
Test corner	25		36.0		90		
Test corner	25		36.6		90		
Terminal block	25		32.9		85		
LED Driver	25		68.8		90		
Supply cord	25		41.3		90		
LED Module tc	25		46.1		85		

Supplementary information:

		·		
Clause	Requirement + Test		Result - Remark	Verdict

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

	IEC 60598-2-1					
1EC 00390-2-1						
Clause	Requirement + Test		Result - Remark	Verdict		

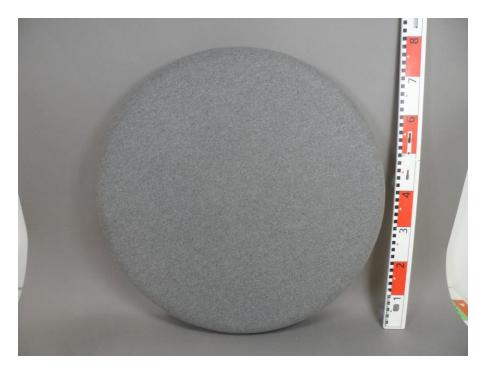
ANNEX 4	Screwless terminals (part of the luminaire)	N/A
(15)	SCREWLESS TERMINALS	N/A
(15.2)	Type of terminal:	_
	Rated current (A)	_
(15.3.1)	Material	N/A
(15.3.2)	Clamping	N/A
(15.3.3)	Stop	N/A
(15.3.4)	Unprepared conductors	N/A
(15.3.5)	Pressure on insulating material	N/A
(15.3.6)	Clear connection 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
	Terminal size and rating	N/A

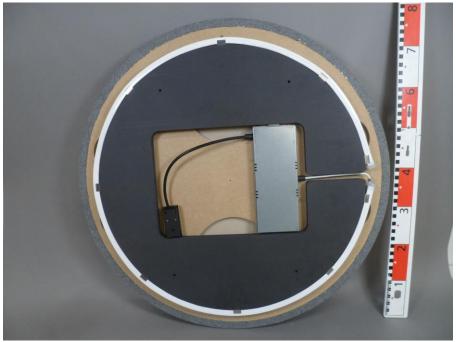
	. age 22 c2		report no occools
	IEC 60598-2-1		
Clause	Requirement + Test	Result - Remark	Verdict
15.6.2	Mechanical tests		N/A
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N)		N/A
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N):		N/A
(15.6.3)	Electrical tests	•	N/A
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-1		N/A

(15.6.3.1) (15.6.3.2)	TABL	E: Contac	t resista	nce test	/ Heatin	g tests					N/A
	Volta	ge drop (m\	/) after 1	h							_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Voltage dro	p of two	insepara	able joints	s	1	•	•		
		Voltage dro	p after 1	0th alt. 2	25th cycle)					
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Voltage dro	p after 5	0th alt. 1	00th cyc	le	·I				
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Continued	ageing: \	oltage d	rop after	10th alt.	25th cyc	le			
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)										
		Continued	ageing: v	oltage d	rop after	50th alt.	100th cy	cle			
		Max. allow	ed voltag	e drop (r	nV)	:					_
terminal		1	2	3	4	5	6	7	8	9	10
	(m)/)										
voltage drop	(IIIV)										

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

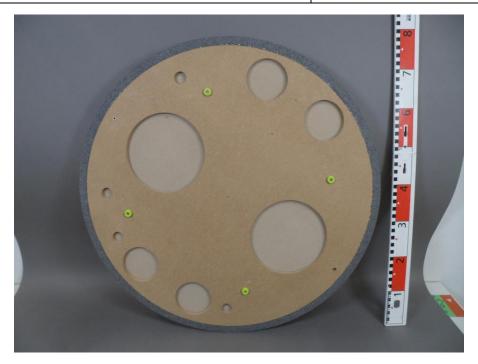
Photos:

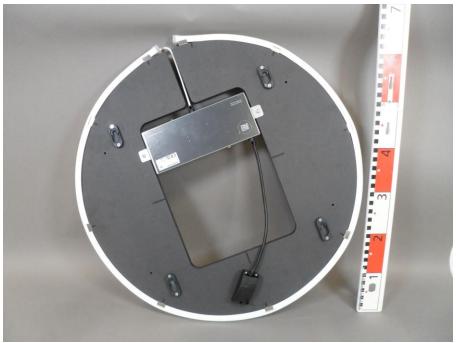




BuzziPebl Light Two Medium

Clause	Requirement + Test		Result - Remark	Verdict





BuzziPebl Light Two Medium

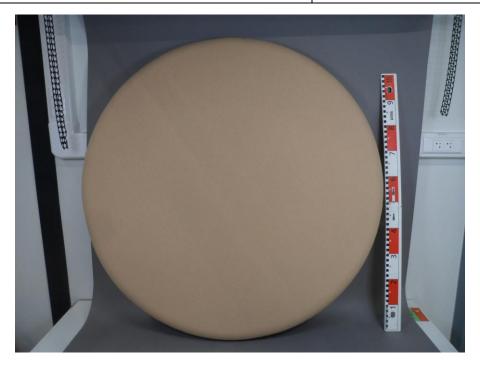
		·		
Clause	Requirement + Test		Result - Remark	Verdict

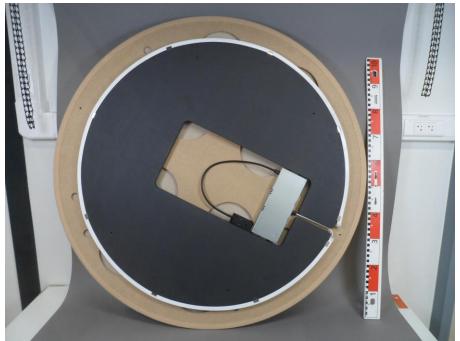




BuzziPebl Light Two Medium

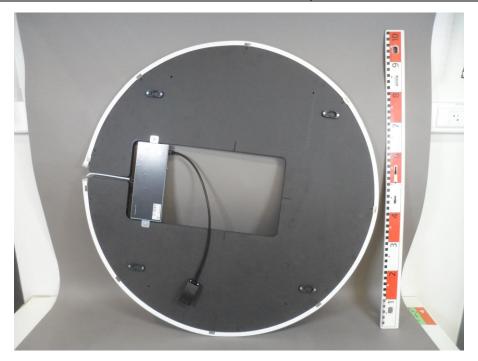
Clause	Requirement + Test		Result - Remark	Verdict





BuzziPebl Light Two Large

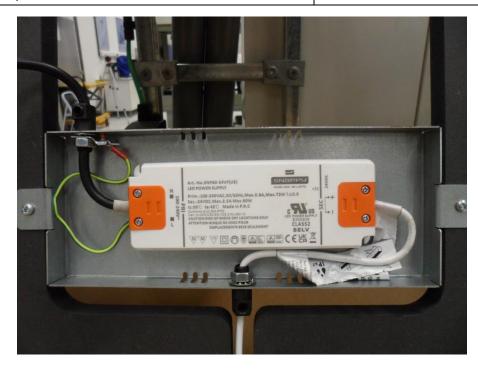
	IEC 60598-2-1				
Clause	Requirement + Test		Result - Remark	Verdict	



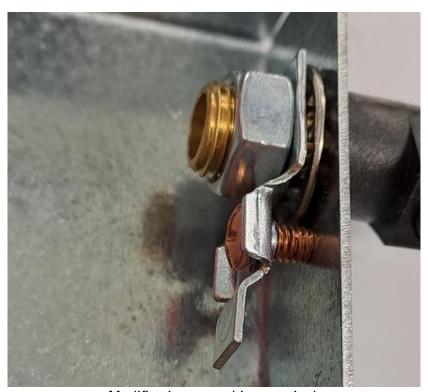


BuzziPebl Light Two Large

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



BuzziPebl Light Two Large



Modification to earthing terminal.

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



Cord anchorage replacement.



Page 1 of 2

Report No.: 633699.01

IEC60598_2_1I ATTACHMENT				
Clause	Requirement + Test		Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 60598-2-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES

Luminaires

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

Differences according to EN IEC 60598-2-1:2021 used in conjunction with

EN IEC 60598-1:2021 + AMD11:2022

TRF template used IECEE OD-2020-F2:2020, Ed. 1.1

Attachment Form No...... EU_GD_IEC60598_2_11

Attachment Originator: UL(Demko)

Master Attachment...... 2022-05-13

Copyright © 2022 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.

	CENELEC COMMON MODIFICATIONS (EN)	
1.6 (3)	MARKING	
1.6 (3.2.12)	Note 4 deleted	Р
1.7 (4)	CONSTRUCTION	
1.7 (4.11.6)	Electro-mechanical contact systems: electric strength test at 1 500 V	
1.11 (5)	EXTERNAL AND INTERNAL WIRING"	Р
1.11 (5.2.2)	Cables equal to EN 50525 (all parts)	Р
	Paragraph 2 deleted	N/A
	Replace table 5.1 – Supply cord	N/A
1.13 (12)	ENDURANCE TESTS AND THERMAL TESTS	
1.13 (12.4.2c)	Thermal test (normal operation) see footnote c to table 12.2 relating to unsleeved fixed wiring	Р
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



Page **2** of **2**

Report No.: **633699.01**

IEC60598_2_1I ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	FR: Safety requirements for high buildings (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) Glow-wire test for outer parts of luminaires:		Р
	- 850°C for luminaires in stairways and horizontal travel paths		N/A
	- 650°C for indoor luminaires		Р
	UK: Requirements according to United Kingdom Building Regulation		N/A