



**TEST REPORT**  
**IEC 60598-2-1**  
**Luminaires**  
**Part 2: Particular requirements:**  
**Section One – Fixed general purpose luminaires**

**Report Reference No**.....: 2170798.50  
**Date of issue**.....: 2014-08-14  
**Total number of pages** ..... 44

**Applicant's name** .....: Sheenly Lighting Co., Ltd.  
**Address** .....: No.2755 Sanlu Road, Bldg1, Minhang District, Shanghai, China

**Test specification:**  
**Standard**.....: IEC 60598-2-1:1979+A1:1987 used in conjunction with  
IEC 60598-1:2008  
**Test procedure**.....: Type test  
**Non-standard test method**.....: N/A

**Test Report Form No**.....: IEC60598\_2\_1C  
**Test Report Form(s) Originator**.....: Intertek Semko AB  
**Master TRF**.....: 2012-11



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**Test item description** .....: LED HIGH BAY  
**Trade Mark** .....: SHEENLY  
**Manufacturer**.....: Sheenly Lighting Co., Ltd.  
No.2755 Sanlu Road, Bldg1, Minhang District, Shanghai, China  
**Model/Type reference** .....: SL-BAY-xxW-yy-AN  
See General Product information for more details  
**Ratings** .....: 100 - 240 V~, 50/60 Hz, 40 - 230 W, Class I, IP65  
For details please see page 36.

<b>Testing procedure and testing location:</b>	
<input checked="" type="checkbox"/> <b>CB Testing Laboratory:</b>	DEKRA Testing and Certification..
Testing location/ address .....	Meander 1025, 6826 MJ Arnhem, The Netherlands
<input type="checkbox"/> <b>Associated CB Laboratory:</b>	
Testing location/ address .....	
Tested by (name + signature).....	L.N.H. Huynh 
Approved by (+ signature) .....	T.H.J.M. Michels 
<hr/>	
<input type="checkbox"/> Testing procedure: TMP	
Testing location/ address .....	
Tested by (name + signature).....	
Approved by (+ signature) .....	
<hr/>	
<input type="checkbox"/> Testing procedure: WMT	
Testing location/ address .....	
Tested by (name + signature).....	
Witnessed by (+ signature).....	
Approved by (+ signature) .....	
<hr/>	
<input type="checkbox"/> Testing procedure: SMT	
Testing location/ address .....	
Tested by (name + signature).....	
Approved by (+ signature) .....	
Supervised by (+ signature).....	
<hr/>	

<b>Summary of testing:</b>	
<b>Tests performed (name of test and test clause):</b>	<b>Testing location:</b>
Full type testing according to EN/IEC 60598-2-1:1989 Appendix 1: IEC 62031 – LED Module	DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem The Netherlands
<b>Summary of compliance with National Differences:</b>	
List of countries addressed: European national different were considered.	
<input checked="" type="checkbox"/> The product fulfils the requirements of the standards EN 60598-2-1:1989	
<b>Copy of marking plate:</b>	
On the enclosure	
	
Note:	
<ol style="list-style-type: none"> <li>1. The height of graphical symbols shall not be less than 5 mm. The height of letters and numerals either shown separately or with or as part of symbols shall not be less than 2 mm.</li> <li>2. The CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.</li> <li>3. The symbol combination of WEEE logo shall have a minimum height of 7 mm.</li> </ol>	

<b>Test item particulars</b> .....	
Classification of installation and use .....	Class I, IP65
Supply Connection .....	Connecting leads
<b>Possible test case verdicts:</b>	
- 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)
<b>Testing</b> .....	
Date of receipt of test item .....	2014-05
Date (s) of performance of tests .....	2014-05~2014-06
<b>General remarks</b>	
<p>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 testing laboratory.          "(See Enclosure #)" refers to additional information appended to the report.          "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</p> <p>Clause numbers between brackets refer to clauses in IEC 60598-1</p> <p>The following standards are considered:          EN 60598-1:2008 +A11: 2009          EN 60598-2-1:1989          EN 62471:2008          IEC/TR 62471-2:2009          IEC/TR 62778:2012          EN 62493:2010</p>	
<b>Name and address of factory (ies)</b> .....	Sheenly Lighting Co., Ltd. No.2755 Sanlu Road, Bldg1, Minhang District, Shanghai, China

**General product information:**

Type reference product key code: **SL-BAY-xxW-yy-AN**

SL-BAY = product name  
xx = rated power (40, 60, 80, 100, 120, 160, 200 or 230 W)  
yy = color temperature (WW, NW, PW, CW)  
    WW = Warm White  
    NW = Natural White  
    PW = Pink White  
    CW = Cool White  
AN = part of product name

The products are LED high bays. They have class I construction. They have the same construction except rated power. LED driver is SELV independent driver.

The full tests were performed on SL-BAY-230W-NW-AN with maximum rated power.

All products are tested according to IEC 62471:2006, IEC/TR 62471-2:2009, IEC/TR 62778:2012 and classified as risk 1 group and for the test report refer to 3147410.50A and 3147410.50B.

The products comply with EMF requirements according to EN 62493: 2010. The test results for were laid down in DEKRA test report 3147411.10.

This report is based on report no.: 3147409.50A and 3147409.51A

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

1.2 (0)	GENERAL TEST REQUIREMENTS		P
1.2 (0.1)	Information for luminaire design considered	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—
1.2 (0.3)	More sections applicable.....:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—

1.4 (2)	CLASSIFICATION		P
1.4 (2.2)	Type of protection (Class 0 excluded).....:	Class I	—
1.4 (2.3)	Degree of protection (Requirement: Ordinary) .....	IP65	—
1.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
1.4 (2.5)	Luminaire for normal use .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
	Luminaire for rough service .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—

1.5 (3)	MARKING		P
1.5 (3.2)	Mandatory markings		P
	Position of the marking		P
	Format of symbols/text		P
1.5 (3.3)	Additional information		P
	Language of instructions	English	P
1.5 (3.3.1)	Combination luminaires		N/A
1.5 (3.3.2)	Nominal frequency in Hz	50/60 Hz	P
1.5 (3.3.3)	Operating temperature		N/A
1.5 (3.3.4)	Symbol or warning notice		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		P
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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.5 (3.3.14)	Symbol for nature of supply	ac	P
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	Type Z attachment	P
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 arms reach		N/A
1.5 (3.4)	Test with water		P
	Test with hexane		P
	Legible after test		P
	Label attached		P

<b>1.6 (4)</b>	<b>CONSTRUCTION</b>		<b>P</b>
1.6 (4.2)	Components replaceable without difficulty		P
1.6 (4.3)	Wireways smooth and free from sharp edges		P
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) .....		N/A
	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
	- bending test (N) .....		N/A
	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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
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 (4.5)	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		P
1.6 (4.7.1)	Contact to metal parts		N/A
1.6 (4.7.2)	Test 8 mm live conductor		N/A
	Test 8 mm earth conductor		N/A
1.6 (4.7.3)	Terminals for supply conductors		P
1.6 (4.7.3.1)	Welded connections:		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 15.8.2		N/A
	- electrical test according to 15.9		N/A
	- heat test according to 15.9.2.3 and 15.9.2.4		N/A
1.6 (4.7.4)	Terminals other than supply connection		P
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:		N/A
	- adequate rating		N/A
	- adequate fixing		N/A
	- polarized supply		N/A
	- compliance with 61058-1 for electronic switches		N/A



IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.9)	Insulating lining and sleeves		N/A
1.6 (4.9.1)	Retainment		N/A
	Method of fixing..... :		N/A
1.6 (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
1.6 (4.10)	Insulation of Class II luminaires		N/A
1.6 (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
	Interference suppression capacitors according to IEC 60384-14		N/A
1.6 (4.10.2)	Assembly gaps:		N/A
	- not coincidental		N/A
	- no straight access with test probe		N/A
1.6 (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 lampholder		N/A
1.6 (4.11)	Electrical connections		P
1.6 (4.11.1)	Contact pressure		P
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:		N/A
	- spring washer		N/A
	- rivets		N/A
1.6 (4.11.4)	Material of current-carrying parts		P

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Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.11.5)	No contact to wood or mounting surface		P
1.6 (4.11.6)	Electro-mechanical contact systems		N/A
1.6 (4.12)	Mechanical connections and glands		P
1.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		N/A
	Torque test: torque (Nm); part ..... :	Screw for fixing driver 2,0 Nm	P
	Torque test: torque (Nm); part ..... :		N/A
	Torque test: torque (Nm); part ..... :		N/A
1.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal		N/A
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) ..... :	3,25 Nm	P
1.6 (4.13)	Mechanical strength		P
1.6 (4.13.1)	Impact tests:		P
	- fragile parts; energy (Nm)..... :	Glass cover – 0,2 Nm	P
	- other parts; energy (Nm) ..... :	Enclosure – 0,35 Nm	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		N/A
1.6 (4.13.3)	Straight test finger		P
1.6 (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
1.6 (4.13.6)	Tumbling barrel		N/A
1.6 (4.14)	Suspensions and adjusting devices		P

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Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.14.1)	Mechanical load:		P
	A) four times the weight		P
	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) .....		N/A
	Stress in conductors (N/mm <sup>2</sup> ) .....		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:		P
	- glow-wire test 650 °C		P
	- spacing ≥ 30 mm		N/A
	- screen withstanding test of 13.3.1		N/A
	- screen dimensions		N/A
	- no fiercely burning material		P
	- thermal protection		N/A
	- electronic circuits exempted		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
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		P
	No lamp control gear		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 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:		P
1.6 (4.18.1)	- rust-resistance		P
1.6 (4.18.2)	- season cracking in copper		N/A
1.6 (4.18.3)	- corrosion of aluminium		N/A
1.6 (4.19)	Igniters 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		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
	Glow-wire test on lamp compartment		N/A

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.22)	Attachments to lamps		N/A
1.6 (4.23)	Semi-luminaires comply Class II		N/A
1.6 (4.24)	UV radiation for tungsten halogen lamps and metal halide lamps (Annex P)		N/A
1.6 (4.25)	No sharp point or edges		P
1.6 (4.26)	Short-circuit protection:		N/A
1.6 (4.26.1)	Uninsulated accessible SELV parts		N/A
1.6 (4.26.2)	Short-circuit test		N/A
1.6 (4.26.3)	Test chain according to Figure 29		N/A
1.6 (4.27)	Terminal blocks with integrated screwless earthing contacts tested 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

1.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		P
	Working voltage (V)..... :	100-240 V~ (supply voltage) 62 Vdc (driver output)	—
	Voltage form	Sinusoidal <input checked="" type="checkbox"/> Non-sinusoidal <input type="checkbox"/>	—
	PTI	< 600 <input type="checkbox"/> ≥ 600 <input checked="" type="checkbox"/>	—
	Impulse withstand category (Normal category II) (Category III Annex U)	Category II <input checked="" type="checkbox"/> Category III <input type="checkbox"/>	—
	Rated pulse voltage (kV) .....	-	—
	(1) Current-carrying parts of different polarity: cr (mm); cl (mm)..... :		N/A
	(2) Current-carrying parts and accessible parts: cr (mm); cl (mm)..... :	Live parts on LED module – enclosure: Cr= 0,8 mm > 0,62 mm Cl= 0,8 mm > 0,27 mm	P

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Clause	Requirement + Test	Result - Remark	Verdict
	(3) Parts becoming live due to breakdown of basic insulation and metal parts: cr (mm); cl (mm)..... :		N/A
	(4) Outer surface of cable where it is clamped and metal parts: cr (mm); cl (mm)..... :		N/A
	(6) Current-carrying parts and supporting surface: cr (mm); cl (mm)..... :	Live parts on LED module – enclosure: Cr= 0,8 mm > 0,62 mm Cl= 0,8 mm > 0,27 mm	P

1.8 (7)	PROVISION FOR EARTHING		P
1.8 (7.2.1 + 7.2.3)	Accessible metal parts		P
	Metal parts in contact with supporting surface		P
	Resistance < 0,5 Ω		P
	Self-tapping screws used		N/A
	Thread-forming screws		N/A
	Thread-forming screw used in a groove		N/A
	Earth makes contact first		N/A
1.8 (7.2.2 + 7.2.3)	Earth continuity in joints etc.		N/A
1.8 (7.2.4)	Locking of clamping means		P
	Compliance with 4.7.3		P
	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		P
1.8 (7.2.7)	Electrolytic corrosion of the earth terminal		P
1.8 (7.2.8)	Material of earth terminal		P
	Contact surface bare metal		P
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		P
	Length of earth conductor		P

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Clause	Requirement + Test	Result - Remark	Verdict

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

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

<b>1.10 (5)</b>	<b>EXTERNAL AND INTERNAL WIRING</b>		<b>P</b>
1.10 (5.2)	Supply connection and external wiring		P
1.10 (5.2.1)	Means of connection .....	Connecting leads	P
1.10 (5.2.2)	Type of cable.....	H05RN-F	P
	Nominal cross-sectional area (mm <sup>2</sup> ) .....	Driver input wire 3 x 1,0 mm <sup>2</sup> ; Wire for dimmer 2 x 1,0 mm <sup>2</sup> ;	P
	Cables equal to IEC 60227 or IEC 60245		P
1.10 (5.2.3)	Type of attachment, X, Y or Z	Type Z attachment	P
1.10 (5.2.5)	Type Z not connected to screws		N/A
1.10 (5.2.6)	Cable entries:		P
	- suitable for introduction		P
	- adequate degree of protection		P
1.10 (5.2.7)	Cable entries through rigid material have rounded edges		P
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
1.10 (5.2.9)	Locking of screwed bushings		N/A
1.10 (5.2.10)	Cord anchorage:		P
	- covering protected from abrasion		P
	- clear how to be effective		P

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Clause	Requirement + Test	Result - Remark	Verdict
	- no mechanical or thermal stress		P
	- no tying of cables into knots etc.		P
	- insulating material or lining		P
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		P
1.10 (5.2.10.3)	Tests:		P
	- impossible to push cable; unsafe		P
	- pull test: 25 times; pull (N) ..... : 60 N		P
	- torque test: torque (Nm) ..... : 0,25 Nm		P
	- displacement $\leq 2$ mm		P
	- no movement of conductors		P
	- no damage of cable or cord		P
1.10 (5.2.11)	External wiring passing into luminaire		P
1.10 (5.2.12)	Looping-in terminals		N/A
1.10 (5.2.13)	Wire ends not tinned		P
	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
1.10 (5.2.16)	Appliance inlets (IEC 60320)		N/A
	Appliance couplers of class II type		N/A



IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
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		P
1.10 (5.3.1)	Internal wiring of suitable size and type		P
	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		P
	Cross-sectional area (mm <sup>2</sup> ) ..... :		N/A
	Insulation thickness		N/A
	Extra insulation added where necessary		N/A
1.10 (5.3.1.2)	Internal wiring connected to fixed wiring via internal current-limiting device		P
	Adequate cross-sectional area and insulation thickness	2 x 1,0 mm <sup>2</sup>	P
1.10 (5.3.1.3)	Double or reinforced insulation for class II		N/A
1.10 (5.3.1.4)	Conductors without insulation		N/A
1.10 (5.3.1.5)	SELV current-carrying parts		P
1.10 (5.3.1.6)	Insulation thickness other than PVC or rubber		N/A
1.10 (5.3.2)	Sharp edges etc.		P
	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

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

<b>1.11 (8)</b>	<b>PROTECTION AGAINST ELECTRIC SHOCK</b>		<b>P</b>
1.11 (8.2.1)	Live parts not accessible with standard test finger		P
	Basic insulated parts not used on the outer surface without appropriate protection		P
	Basic insulated parts not accessible with standard test finger on portable and adjustable luminaires		N/A
	Basic insulated parts not accessible with Ø 50 mm probe from outside, within arms reach, on wall-mounted luminaires		N/A
	Lamp and starterholders 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		P
	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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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)	Class III luminaires with exposed SELV parts:		N/A
	Ordinary luminaire:		N/A
	- touch current .....		N/A
	- no-load voltage.....		N/A
	Other than ordinary luminaire:		N/A
	- nominal voltage .....		N/A
1.11 (8.2.4)	Portable luminaire:		N/A
	- protection independent of supporting surface		N/A
	- terminal block completely covered		N/A
1.11 (8.2.5)	Compliance with the standard test finger or relevant probe		P
1.11 (8.2.6)	Covers reliably secured		P
1.11 (8.2.7)	Discharging of capacitors $\geq 0,5 \mu\text{F}$		P
	Portable plug connected luminaire with capacitor		N/A
	Other plug connected luminaire with capacitor		N/A
	Discharge device on or within capacitor		N/A
	Discharge device mounted separately		N/A

<b>1.12 (12)</b>	<b>ENDURANCE TEST AND THERMAL TEST</b>		<b>P</b>
1.12 (12.3)	Endurance test:		P
	- mounting-position.....	Normal mounting position	—
	- test temperature (°C).....	35 °C	—
	- total duration (h).....	240 h	—
	- supply voltage: Un factor; calculated voltage (V):	264 V	—
	- lamp used .....	LEDs as delivered	—
1.12 (12.3.2)	After endurance test:		P
	- no part unserviceable		P
	- luminaire not unsafe		P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- no damage to track system		N/A
	- marking legible		P
	- no cracks, deformation etc.		P
1.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
1.12 (12.5)	Thermal test (abnormal operation)	(see Annex 2)	N/A
1.12 (12.6)	Thermal test (failed lamp control gear condition):		N/A
1.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A) .....		—
	- case of abnormal conditions .....		—
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un ..		—
	- measured mounting surface temperature (°C) at 1,1 Un .....		N/A
	- calculated mounting surface temperature (°C) ..		N/A
	- track-mounted luminaires		N/A
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 luminaires):		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 V .....		—
	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

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Test according to Annex V:		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:		N/A
	- part tested; temperature (°C) .....		N/A
	- part tested; temperature (°C) .....		N/A
1.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp > 70W, transformer > 10 VA		N/A
	- case of abnormal conditions		—
	- measured winding temperature (°C): at 1,1 Un . :		—
	- measured temperature of fixing point/exposed part (°C): at 1,1 Un .....		—
	- calculated temperature of fixing point/exposed part (°C) .....		—
	Ball-pressure test:		N/A
	- part tested; temperature (°C) .....		N/A
	- part tested; temperature (°C) .....		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 <input type="checkbox"/> No <input type="checkbox"/>	—
	- manual reset cut-out	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- auto reset cut-out	Yes <input type="checkbox"/> No <input type="checkbox"/>	—
	- case of abnormal conditions		—
	- highest measured temperature of fixing point/exposed part (°C):.....		—

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

	Ball-pressure test:		N/A
	- part tested; temperature (°C) .....		N/A
	- part tested; temperature (°C) .....		N/A

<b>1.13 (9)</b>	<b>RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE</b>		<b>P</b>
1.13 (9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP .....	IP65	—
	- mounting position during test.....	Normal mounting position	—
	- fixing screws tightened; torque (Nm).....	Gland; 2,17 Nm	—
	- tests according to clauses .....	9.2.2 and 9.2.7	—
	- electric strength test afterwards		P
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire		P
	c) no trace of water on current-carrying parts or SELV parts or where it could become a hazard		P
	d) i) For luminaires without drain holes – no water entry		P
	d) ii) For luminaires with drain holes – no hazardous water entry		N/A
	e) no water in watertight luminaire		N/A
	f) no contact with live parts (IP 2X)		N/A
	f) no entry into enclosure (IP 3X and IP 4X)		N/A
	f) no contact with live parts (IP3X and IP4X)		N/A
	g) no trace of water on part of lamp requiring protection from splashing water		N/A
	h) no damage of protective shield or glass envelope		P
1.13 (9.3)	Humidity test 48 h	25 °C; 93 %	P

<b>1.14 (10)</b>	<b>INSULATION RESISTANCE AND ELECTRIC STRENGTH</b>		<b>P</b>
1.14 (10.2.1)	Insulation resistance test		P
	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø .....		—

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Insulation resistance (MΩ)		—
	SELV:		P
	- between current-carrying parts of different polarity .....		N/A
	- between current-carrying parts and mounting surface .....	100 MΩ	P
	- between current-carrying parts and metal parts of the luminaire.....	100 MΩ	P
	Other than SELV:		P
	- between live parts of different polarity.....		N/A
	- between live parts and mounting surface .....	5000 MΩ	P
	- between live parts and metal parts .....	5000 MΩ	P
	- between live parts of different polarity through action of a switch.....		N/A
1.14 (10.2.2)	Electric strength test		P
	Dummy lamp		N/A
	Luminaires with ignitors after 24 h test		N/A
	Luminaires with manual ignitors		N/A
	Test voltage (V):		P
	SELV:		P
	- between current-carrying parts of different polarity .....		N/A
	- between current-carrying parts and mounting surface .....	500 V	P
	- between current-carrying parts and metal parts of the luminaire.....	500 V	P
	Other than SELV:		P
	- between live parts of different polarity.....		N/A
	- between live parts and mounting surface .....	1480 V	P
	- between live parts and metal parts .....	1480 V	P
	- between live parts of different polarity through action of a switch.....		N/A
1.14 (10.3)	Touch current (mA) .....	0,01 mA	P

IEC 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
<b>1.15 (13)</b>	<b>RESISTANCE TO HEAT, FIRE AND TRACKING</b>		<b>P</b>
1.15 (13.2.1)	Ball-pressure test:		N/A
	- part tested; temperature (°C) .....		N/A
	- part tested; temperature (°C) .....		N/A
1.15 (13.3.1)	Needle flame test (10 s):		P
	- part tested ..... : MC PCB		P
	- part tested ..... :		N/A
1.15 (13.3.2)	Glow-wire test (650 °C):		P
	- part tested ..... : Reflector		P
	- part tested ..... : Gasket		P
	- part tested ..... : MC PCB		P
1.15 (13.4.1)	Tracking test: part tested ..... :		N/A
	- part tested .....		N/A



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

ANNEX 1: components	P
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object/part No.	code	manufacturer/ trademark	type/ model	technical data	standard	mark(s) of conformity
Supply cord	B	Zheng Yu	H05RN-F	3×1,0 mm <sup>2</sup> , 300/500 V	DIN VDE 0282-4	VDE
Wire for dimmer	B	Zheng Yu	H05RN-F	2×1,0 mm <sup>2</sup> , 300/500 V	DIN VDE 0282-4	VDE
Wire for LED module	B	Zheng Yu	H05RN-F	2×1,0 mm <sup>2</sup> , 300/500 V	DIN VDE 0282-4	VDE
LED Driver	B	MEAN WELL	HBG-240 -60B	Input: 100-240 Vac, 50/60 Hz Output: Max 62 Vdc, 4 A, Tc: 75 °C, IP67 Independent SELV	IEC61347-2-13 IEC61347-1	ENEC
LED Driver	B	MEAN WELL	HBG-160 -60B	Input: 100-240 Vac, 50/60 Hz Output: Max 62 Vdc, 2,6 A Tc: 85°C, IP65 Independent SELV	IEC61347-2-13 IEC61347-1	TUV Rheinland CB JPTUV-051 550-M1 IP test was tested in appliance
LED Driver	B	MEAN WELL	HBG-100 -60B	Input: 100-240 Vac, 50/60 Hz Output: Max 62 Vdc, 1,6 A Tc: 85°C, IP65 Independent SELV	IEC61347-2-13 IEC61347-1	ENEC
LED module	B	Sheeny	--	62 Vdc	IEC62031	*
Reflector	C	Changshigd	225	PET	IEC60598-2-1	*
Gasket	C	Sheeny	--	Silicon rubber	IEC60598-2-1	*
MC PCB	C	Zhuhai lianjian	--	V-0, 120 °C	IEC 60598-2-1	*
LED	C	Smalite seoulsemicon	3030	6-6,5 V, 1,2 W	IEC60598-2-1	*

\*) Tested as part of the appliance.

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

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

<b>ANNEX 2: temperature measurements, thermal tests of Section 12</b>	<b>P</b>
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Type reference .....	SL-BAY-230W-NW-AN	—
Lamp used.....	LEDs as delivered	—
Lamp control gear used .....	HBG-240-60B	—
Mounting position of luminaire.....	Normal mounting position	—
Supply wattage (W) .....	212,2 W (at 240 V)	—
Supply current (A).....	0,916 A (at 240 V)	—
Calculated power factor .....	0,964	—
Table: measured temperatures corrected for $t_a = 25\text{ °C}$ :		P
- abnormal operating mode .....	The LED driver will shut down under output short-circuited	—
- test 1: rated voltage .....		—
- test 2: 1,06 times rated voltage or 1,05 times rated wattage .....	212,3 W (at 254,4 V)	—
- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage .....		—
- test 4: 1,1 times rated voltage or 1,05 times rated wattage .....		—
Through wiring or looping-in wiring loaded by a current of A during the test .....		—

temperature (°C) of part	Clause 12.4 – normal				Clause 12.5 – abnormal	
	test 1	test 2	test 3	limit	test 4	limit
Mounting surface	--	51,5	--	90	--	--
Driver input wire	--	43,4	--	90	--	--
Tc on LED driver	52,9	--	--	75	--	--
MCPCB	--	84,1	--	130	--	--
Wire for LED module	--	83,1	--	90	--	--
LED	--	76,3	--	ref	--	--
Gasket	--	60,1	--	170	--	--
Reflector	--	67,1	--	90	--	--
Glass	--	61,6	--	ref	--	--

<b>IEC 60598-2-1</b>			
<b>Clause</b>	<b>Requirement + Test</b>	<b>Result - Remark</b>	<b>Verdict</b>
	<b>ANNEX 3: screw terminals (part of the luminaire)</b>		<b>N/A</b>
	<b>ANNEX 4: screwless terminals (part of the luminaire)</b>		<b>N/A</b>
	<b>ANNEX 5: EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES</b>		<b>P</b>

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

<b>ATTACHMENT TO TEST REPORT IEC 60598-2-1</b> <b>EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES</b> Luminaires Part 2: Particular requirements: Section One – Fixed general purpose luminaires			
<b>Differences according</b> ..... : EN 60598-2-1:1989 used in conjunction with EN 60598-1:2008 + A11:2009			
<b>Annex Form No.</b> ..... : EU_GD_IEC60598_2_1C Annex Form Originator ..... : IMQ S.p.A. Master Annex Form ..... : 2013-02			
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	<b>CENELEC COMMON MODIFICATIONS (EN)</b>	<b>P</b>
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<b>1.5 (3)</b>	<b>MARKING</b>	<b>N/A</b>
1.5 (3.3.101)	Adequate warning on the package	N/A

<b>1.6 (4)</b>	<b>CONSTRUCTION</b>	<b>N/A</b>
1.6 (4.11.6)	Electro-mechanical contact systems	N/A

<b>1.10 (5)</b>	<b>EXTERNAL AND INTERNAL WIRING</b>	<b>P</b>
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 HD21 S2 or HD22 S2	P

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

<b>1.12 (12)</b>	<b>ENDURANCE TEST AND THERMAL TEST</b>		<b>N/A</b>
1.12 (12.4.2c)	Thermal test (normal operation)		N/A
<b>ZB</b>	<b>ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)</b>		<b>N/A</b>
(3.3)	DK: power supply cord with label		N/A
	IT: warning label on Class 0 luminaire		N/A
(4.5.1)	DK: socket-outlets		N/A
(5.2.1)	CY, DK, FI, SE, GB: type of plug		N/A

<b>ZC</b>	<b>ANNEX ZC, NATIONAL DEVIATIONS (EN)</b>		<b>N/A</b>
(4 & 5)	FR: Shuttered socket-outlets 10/16A		N/A
(13.3)	FR: Glow-wire test 850°C alt. 750°C for luminaires in premises open to public or 960°C for luminaires in emergency exits		N/A
(13.3)	GB: Requirements according to United Kingdom Building Regulation		N/A

IEC 62031			
Clause	Requirement + Test	Result - Remark	Verdict

**Appendix 1: IEC 62031 – LED module**

<b>4</b>	<b>GENERAL REQUIREMENTS</b>		<b>P</b>
4.4	Integral modules tested assembled in the luminaire		P
4.5	Independent modules complies with requirements in IEC 60598-1		N/A

<b>5</b>	<b>GENERAL TEST REQUIREMENTS</b>		<b>P</b>
5.5	SELV-operated LED modules comply with Annex I of IEC 61347-2-13	(see Annex 1)	N/A
	General conditions for tests in Annex A	(see Annex A)	P

<b>6</b>	<b>CLASSIFICATION</b>		<b>P</b>
	Built-in module .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—
	Independent module .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—
	Integral module .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
	For Integral module; Note to 1.2.1 in IEC 60598-1 applies.		—

<b>7</b>	<b>MARKING</b>		<b>N/A</b>
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<b>8</b>	<b>TERMINALS</b>		<b>N/A</b>
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<b>9 (9)</b>	<b>PROVISION FOR PROTECTIVE EARTHING</b>		<b>N/A</b>
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IEC 62031			
Clause	Requirement + Test	Result - Remark	Verdict
<b>10 (10)</b>	<b>PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS</b>		<b>P</b>
- (10.1)	Controlgear protected against accidental contact with live parts		P
- (A2)	The current flowing between the part concerned and earth is measured and does not exceed 0,7 mA (peak) or 2 mA d.c. ....:	0,1 mA	P
- (A2)	For frequencies above 1 kHz, the current does not exceed 0,7 mA (peak) multiplied by the value of the frequency in kilohertz or 70 mA (peak) .....		N/A
- (A3)	The voltage between the part concerned and any accessible part is measured and does not exceed 34 V (peak) .....		N/A
- (10.1)	Lacquer or enamel not used for protection or insulation		N/A
	Adequate mechanical strength on parts providing protection		N/A
- (10.2)	Capacitors > 0,5 $\mu$ F: voltage after 1 min (V): < 50 V .....		N/A
- (10.3)	Controlgear providing SELV		N/A
	Accessible conductive parts are insulated from live parts by double or reinforced insulation in SELV controlgear		N/A
	No connection between output circuit and the body or protective earthing circuit		N/A
	No possibility of connection between output circuit and the body or protective earthing circuit through other conductive parts		N/A
	SELV outputs separated by at least basic insulation		N/A
	ELV conductive parts insulated as live parts		N/A
	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

IEC 62031			
Clause	Requirement + Test	Result - Remark	Verdict
	If output voltage > 25 V r.m.s. or > 60 V d.c.; No load output ≤ 35 V peak or ≤ 60 V d.c and touch current does not exceed 0,7 mA (peak) or 2 mA d.c. ....:		N/A
	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

11 (11)	MOISTURE RESISTANCE AND INSULATION	P
	After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V (MΩ):	P
	For basic insulation ≥ 2 MΩ .....: >1000 MΩ	P
	For double or reinforced insulation ≥ 4 MΩ .....:	N/A
	Between primary and secondary circuits in controlgear providing SELV, values in Annex L in IEC 61347-1	N/A

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



IEC 62031			
Clause	Requirement + Test	Result - Remark	Verdict

<b>13 (14)</b>	<b>FAULT CONDITIONS</b>		<b>P</b>
- (14)	When operated under fault conditions the controlgear:		P
	- does not emit flames or molten material		P
	- does not produce flammable gases		P
	- protection against accidental contact not impaired		P
	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	(see appended table)	N/A
- (14.1)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (except between live parts and accessible metal parts)	(see appended table)	N/A
	Creepage distances on printed boards less than specified in clause 16 in Part 1 provided with coating according to IEC 60664-3		N/A
- (14.2)	Short-circuit or interruption of semiconductor devices	(see appended table)	P
- (14.3)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table)	N/A
- (14.4)	Short-circuit across electrolytic capacitors	(see appended table)	N/A
- (14.5)	After the tests has been carried out on three samples:		P
	The insulation resistance $\geq 1 \text{ M}\Omega$ .....: > 500 M $\Omega$		P
	No flammable gases		P
	No accessible parts have become live		P
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		P
- (14.6)	Relevant fault condition tests with high-power supply		—

<b>IEC 62031</b>			
Clause	Requirement + Test	Result - Remark	Verdict
13.2	Module withstands overpower condition >15 min.		P
	Module with automatic protective device or power limiter, test performed 15 min. at limit.		N/A
	During the tests, tissue paper, spread below module, does not ignite		P
<b>19 (19)</b>	<b>RESISTANCE TO CORROSION</b>		<b>N/A</b>
<b>20</b>	<b>INFORMATION FOR LUMINAIRE DESIGN</b>		<b>N/A</b>
	Information in Annex D		—
<b>21</b>	<b>HEAT MANAGEMENT</b>		<b>N/A</b>
<b>14</b>	<b>TABLE: tests of fault conditions</b>		<b>P</b>
Part	Simulated fault		Hazard
LED	Short-circuited		NO

IEC 62031			
Clause	Requirement + Test	Result - Remark	Verdict

	<b>ANNEX 2: components</b>	<b>P</b>
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object/part No.	code	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity
LED Driver	B	Mean Well	See page 33	-	-	TÜV
Internal wire	B	Zheng Yu	H05RN-F	2×1,0 mm <sup>2</sup> , 300/500 V	DIN VDE 0282-4	VDE
LED	C	Smalite seoulsemicon	3030	6-6,5 V, 1,2 W	EN 62031	*
MC PCB	C	Zhuhai lianjian	--	V-0, 120 °C	EN 62031	*

\*) Tested as part of the appliance.

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

Annex model list

Type	Rated voltage	Rated Power	LED driver
SL-BAY-40W-WW/NW/PW/CW-AN	220-240 V~	40 W	HBG100-60B
SL-BAY-60W-WW/NW/PW/CW-AN		60 W	HBG100-60B
SL-BAY-80W-WW/NW/PW/CW-AN		80 W	HBG100-60B
SL-BAY-100W-WW/NW/PW/CW-AN		100 W	HBG100-60B
SL-BAY-120W-WW/NW/PW/CW-AN		120 W	HBG160-60B
SL-BAY-160W-WW/NW/PW/CW-AN		160 W	HBG160-60B
SL-BAY-200W-WW/NW/PW/CW-AN		200 W	HBG240-60B
SL-BAY-230W-WW/NW/PW/CW-AN		230 W	HBG240-60B

WW/NW/PW/CW means color temperature:

WW=warm white, NW=natural white, PW=pink white, CW=cool white

Annex mounting instruction:

**SHEENLY**

[Technical Datasheet]


[V1\_2013]

100W, 250W HID Replacement



## IP65 LED HIGH BAYS

### Frame Finishing

Black/ White 

### Applications

Workshops/ Storehouses

Factories / Gas stations

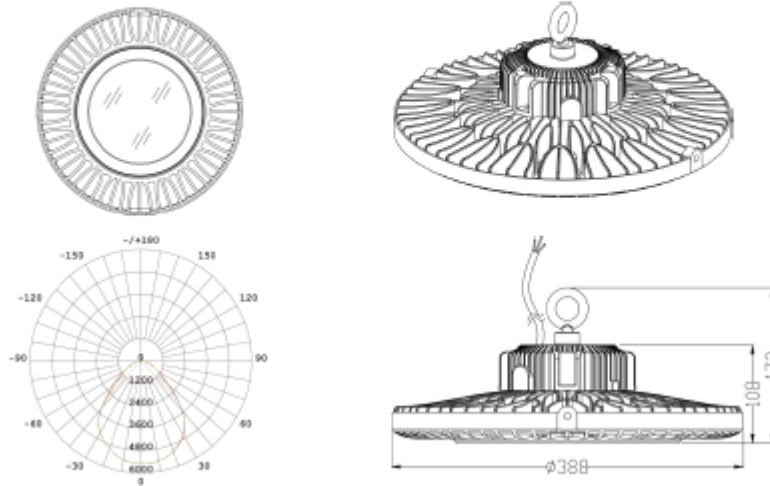
other Industrial lighting places

### Features

- Wattage: 100W/ 160W/ 200W
- High performance 90LM/W
- 0-10V dimmable
- Beam: 60°/ 90°/ 120°
- Input voltage: 100-240VAC
- Special heat sink
- 5 years Guarantee(Including driver)
- PF up to 0.99, efficiency up to 93%

Visit [www.sheenly.com](http://www.sheenly.com) for more details

### Specifications & Dimensions



It is recommended to use a supply box with a minimum IP rating of IP 65.  
 The requirement of connect light Using 3P terminal. The terminal's rated voltage is 450 V, rated capacity (current) is 15 A, the capacity wire of terminal cannot less than 2\*1.0mm<sup>2</sup>.

The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

\* XW (WW-3000K/ NW-4000K/ PW-6000K)

Part Number	Power (w)	Lumen (lm)	LEDs (pcs)	Dimensions (mm)	Beam Spread
SL-BAY-100W-XW*-AN	100	9000	128	Ø388	60°/ 90°/ 120°
SL-BAY-160W-XW*-AN	160	14500	198	Ø388	60°/ 90°/ 120°

Sheenly Lighting Co., Ltd.  
 No. 2755 Sanlu Road, Minhang District  
 Shanghai 201112, China  
 Tel: (+86)-21-6411 3138  
 Fax:(+86)-21-6411 3138 - 632

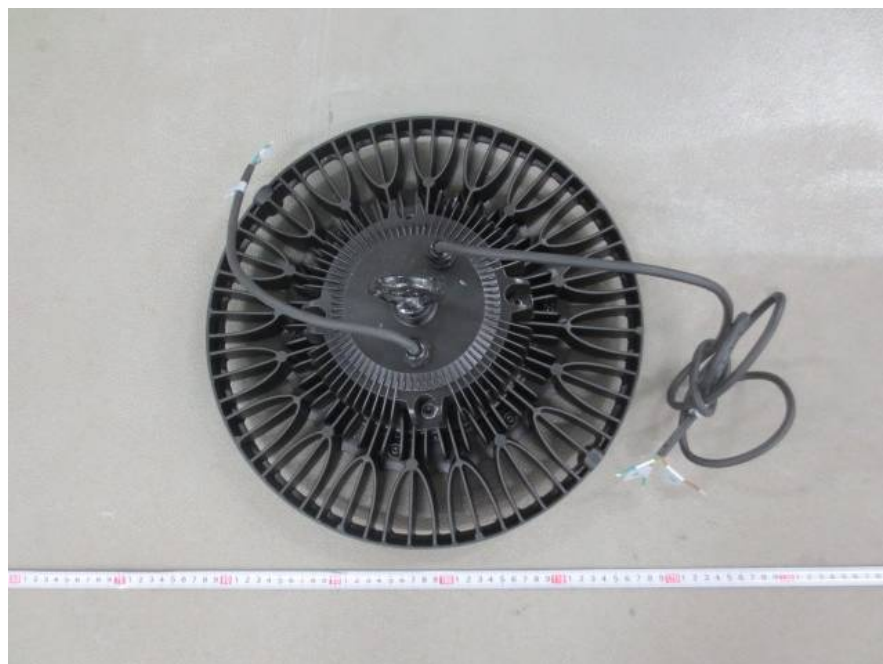
\*All specifications subject to change without notice.  
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Visit [www.sheenly.com](http://www.sheenly.com) for more details

Annex pictures:



Overview

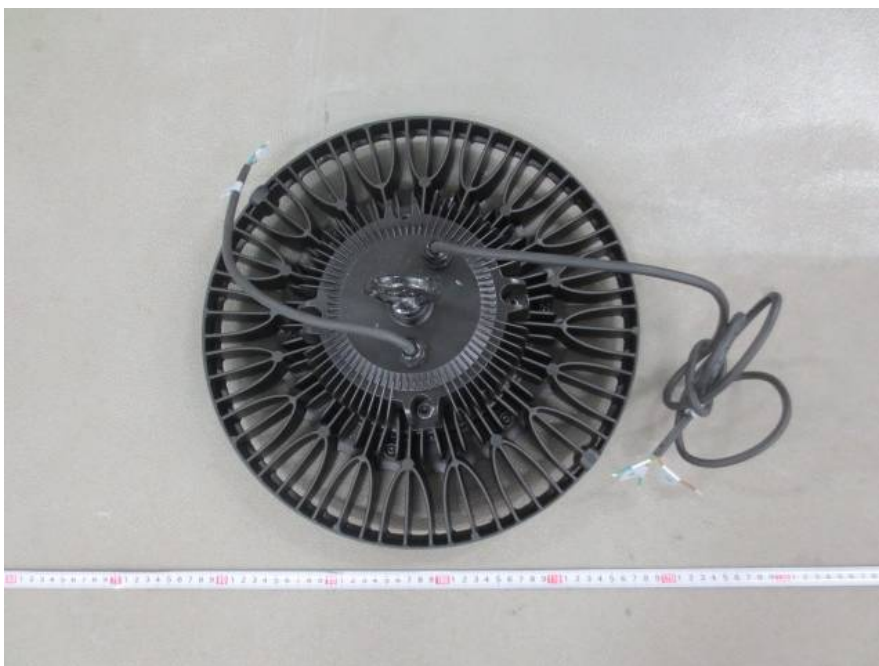


Bottom view

Annex pictures:



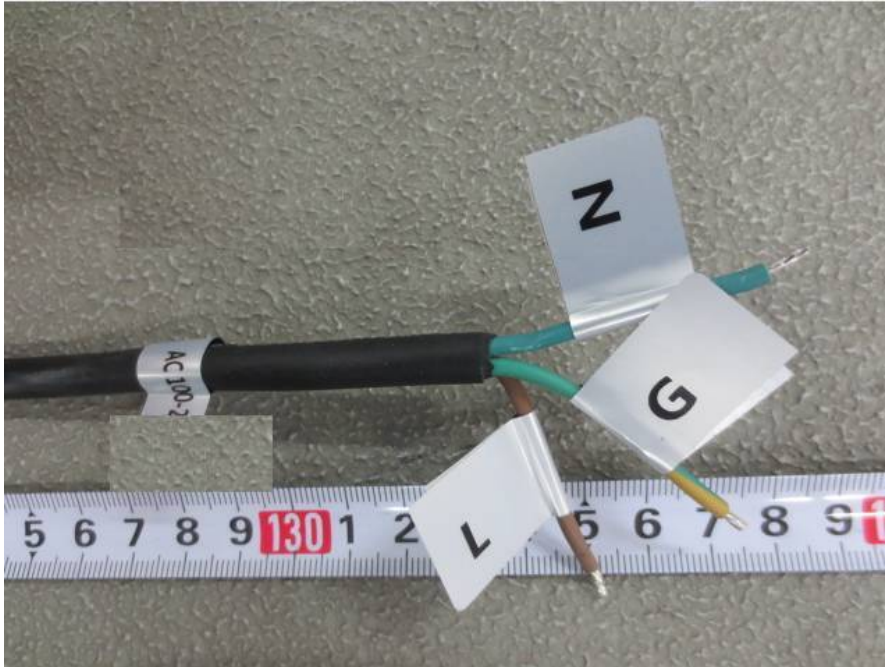
Overview



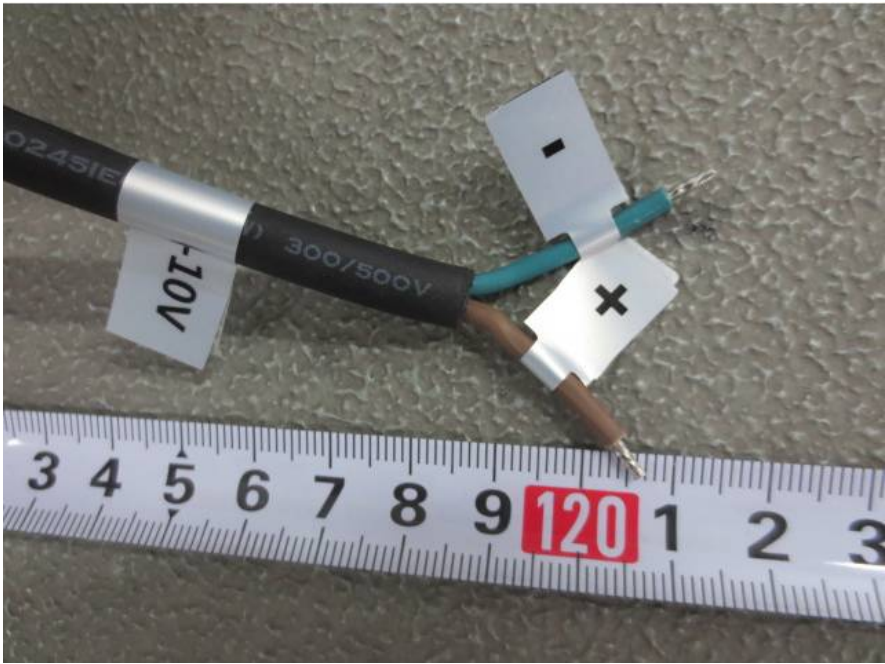
Bottom view



Annex pictures:



Supply cord



Wire for dimmer

Annex pictures:

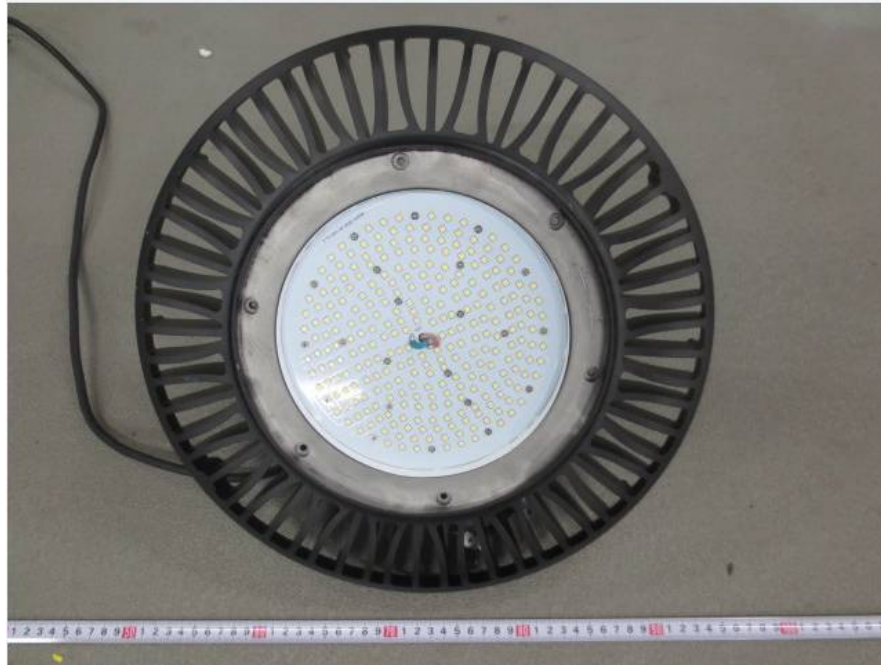


Detail view

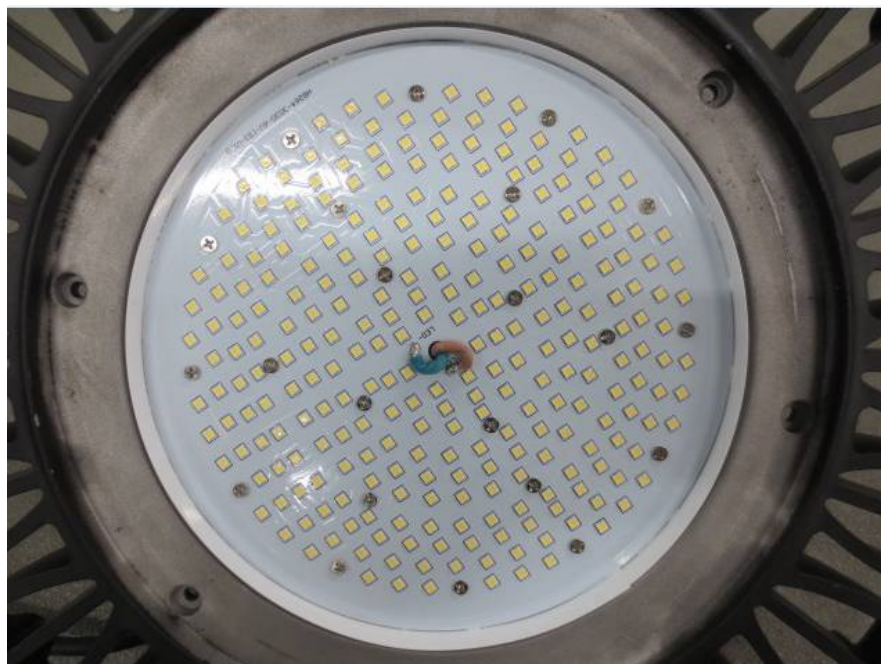


Gland for LED module

Annex pictures:



Internal view



LED module

Annex pictures:



Reflector

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