



TEST REPORT IEC/EN 60598-2-1 Luminaires Part 2: Particular requirements: Section One – Fixed general purpose luminaires	
Report Reference No.	HZ10120073-001
Date of issue	January 20, 2011; Amendment 3: October 14, 2014
Total number of pages	20 pages
Testing Laboratory	Intertek Testing Services Hangzhou Limited
Address	16 No. 1 Ave., Xiasha Economic Development District, Hangzhou 310018, China
Applicant's name	Ningbo Hede Lighting Co., Ltd.
Address	NO.388 YONG AN XI LU, KAN DUN STREET, CIXI, NINGBO, P. R. China
Test specification:	
Standard	EN 60598-2-1:1989 used in conjunction with EN 60598-1:2008 + A11:2009
Test procedure	-
Non-standard test method	EK1-AG2:2014-04
Test Report Form No.	TTRF_IECEN60598_2_1A"
Test Report Form(s) Originator	Intertek Semko AB
Master TRF	2009-06
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Test item description	Outdoor Lighting, fixed
Trade Mark	N/A
Manufacturer	Same as applicant above
Model/Type reference	CIE013-*, CIE013-*S, CIE013, CIE013S, CIE007P (* = A, B, C, D, E, F, Z, means the shape of Enclosure, S means with sensor.) (More details see page 2)
Ratings	220-240V~, 50Hz, Class II, IP44, E27, Max.60W (More details see page 2)

Model	Wattage	Fixed mode	Sensor	Remarks
CIE013	60W	Wall mounted	-	Plastic lampshade
CIE013-A	60W	Wall mounted	-	Plastic lampshade
CIE013-B	60W	Wall mounted	-	Plastic lampshade
CIE013-C	60W	Wall mounted	-	Plastic lampshade
CIE013-D	60W	Wall mounted	-	Plastic lampshade
CIE013-E	60W	Wall mounted	-	Plastic lampshade
CIE013-F	60W	Wall mounted	-	Plastic lampshade
CIE013-Z	60W	Wall mounted	-	Glass lampshade, with candle type or small ball bulb
CIE013S	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-AS	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-BS	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-CS	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-DS	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-ES	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-FS	60W	Wall mounted	RSY020	Plastic lampshade
CIE013-ZS	60W	Wall mounted	RSY020	Glass lampshade, with candle type or small ball bulb
CIE007P	40W	Wall mounted	-	Plastic lampshade

Testing procedure and testing location:
☒ **Testing Laboratory:**

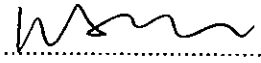
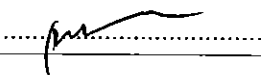
Testing location/ address..... : Intertek Testing Services Hangzhou Limited
16 No. 1 Ave., Xiasha Economic Development District,
Hangzhou 310018, China

☐ **Associated Laboratory:**

Testing location/ address..... :

Tested by (name + signature) : Robert Huang

Approved by (+ signature)..... : Patrick Chen



☐ Testing procedure: TMP N/A

Tested by (name + signature) :

Approved by (+ signature)..... :

Testing location/ address..... :

☐ Testing procedure: WMT N/A

Tested by (name + signature) :

Witnessed by (+ signature)..... :

Approved by (+ signature)..... :

Testing location/ address..... :

☐ Testing procedure: SMT N/A

Tested by (name + signature) :

Approved by (+ signature)..... :

Supervised by (+ signature)..... :

Testing location/ address..... :

☐ Testing procedure: RMT N/A

Tested by (name + signature) :

Approved by (+ signature)..... :

Supervised by (+ signature)..... :

Testing location/ address..... :

Summary of testing:

From the result of our inspection and tests on the submitted samples, we conclude that they comply with the requirements of the standards.

Tests performed (name of test and test clause):

1.6. CONSTRUCTION,
1.12. THERMAL TEST

Testing location:

Same as previous page

Summary of compliance with National Differences:

CENELEC Common Modifications (EN) and National differences for Germany have been checked.

Copy of marking plate
Sample:

Modell: CIE013-Z

220-240V~ 50Hz

Max. 60W E27

IP44, Ohne Sensor

Ningbo Hede Lighting Co., Ltd.



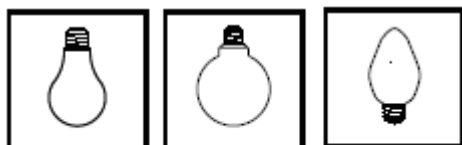
Modell: CIE013S

220-240V~ 50Hz

Max. 60W E27

IP44, mit Sensor

Ningbo Hede Lighting Co., Ltd.


Lampen Typ:


Typ A

Typ G

Typ C

Label of all models are the same except the information as above page.

Test item particulars	Outdoor Lighting, fixed
Classification of installation and use	IP44, Class II
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	September 30, 2014
Date (s) of performance of tests.....	September 30, 2014– October 14, 2014
General remarks:	
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. Note: EN Group Differences together with National Differences and Special National Conditions, if any, are in the Appendix to the main body of this TRF. Throughout this report a comma is used as the decimal separator. Clause numbers between brackets refer to clauses in IEC 60598-1. Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods. PAH test according to ZEK 01.4-08 is considered and passed, please refer to PAH test report 140900721HZH-PAH1 for detail	
General product information:	
The products covered in this report are fixed outdoor lighting for outdoor use. All the models are of the similar construction, it is just different of size, shape and with or without sensor. The models CIE013-Z and CIE013-ZS with Glass lampshade and candle type or small ball bulb, others with Plastic lampshade and original bulb. All tests of these types are applied to models CIE013S, CIE013-ZS and CIE007P which are considered typical and contain all relevant components. IP test is applied for all the models. A representative sample of the product covered by this report has been tested and complies with the applicable requirements of this standard. Factory: Ningbo Hede Lighting Co., Ltd. Address: NO.388 YONG AN XI LU, KAN DUN STREET, CIXI, NINGBO, P. R. China	

Amendment 3:

This report is based on the report Ref. No. HZ10120073-001 (dated on January 20, 2011) and Ref. No. HZ10120073-001+A1 (dated on June 22, 2011), HZ10120073-001+A2(dated on December 01, 2011, GS Certificate NO: 11HZL0256-01) issued by Intertek Testing Services Hangzhou Limited include the following changes and/or additions:

1. The applicant's and factory's name changed from "Ningbo CIE Industry Co., Ltd." to "Ningbo Hede Lighting Co., Ltd.". The address of applicant and factory changed from "CIE Industry Zone, Sun Tang Bei Road, Cixi, Ningbo, P. R. China" to "NO.388 YONG AN XI LU, KAN DUN STREET, CIXI, NINGBO, P. R. China".
2. EN62493: 2010 is considered. The EMF test refers to report 140800349HZH-EMF1.
3. EK1-AG2:2014-04 is considered. The temperature for surface of luminaires are below 90°C, it comply with this decision.
4. PAH evaluation was updated.
5. Component list updated, more details see bolded font in the component list.
6. Label and manual were updated.

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

1.6 (4)	CONSTRUCTION		
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		
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
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		
	Tails		N/A
	Unsecured blocks		N/A
1.6 (4.7)	Terminals and supply connections		
1.6 (4.7.1)	Contact to metal parts		P
1.6 (4.7.2)	Test 8 mm live conductor		P
	Test 8 mm earth conductor		N/A

IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.7.3)	Terminals for supply conductors		P
1.6 (4.7.3.1)	Welded connections:		
	- 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		N/A
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:		
	- adequate rating		P
	- adequate fixing		P
	- polarized supply		N/A
	- compliance with 61058-1 for electronic switches		N/A
1.6 (4.9)	Insulating lining and sleeves		
1.6 (4.9.1)	Retainment		P
	Method of fixing : Shrinkable and fixed		P
1.6 (4.9.2)	Insulated linings and sleeves		
	Resistant to a temperature > 20 °C to the wire temperature or	Approved	P
	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		
1.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation		P
	Safe installation fixed luminaires		P
	Capacitors and switches		N/A
	Interference suppression capacitors according to IEC 60384-14		N/A

IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.10.2)	Assembly gaps:		
	- not coincidental		P
	- no straight access with test probe		P
1.6 (4.10.3)	Retention of insulation:		
	- fixed		P
	- unable to be replaced; luminaire inoperative		P
	- sleeves retained in position		N/A
	- lining in lampholder		N/A
1.6 (4.11)	Electrical connections		
1.6 (4.11.1)	Contact pressure		P
1.6 (4.11.2)	Screws:		
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
1.6 (4.11.3)	Screw locking:		
	- spring washer		N/A
	- rivets		N/A
1.6 (4.11.4)	Material of current-carrying parts		P
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		
1.6 (4.12.1)	Screws not made of soft metal		P
	Screws of insulating material		P
	Torque test: torque (Nm); part.....: 0,8; Fixing of lampholder		P
	Torque test: torque (Nm); part.....: 0,6; Fixing of enclosure		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:		
	- fixed arms; torque (Nm).....:		N/A
	- lampholder; torque (Nm).....: 2,0Nm		P
	- push-button switches; torque 0,8 Nm.....:		N/A
1.6 (4.12.5)	Screwed glands; force (Nm):		N/A

IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.13)	Mechanical strength		
1.6 (4.13.1)	Impact tests:		
	- fragile parts; energy (Nm)..... :	Glass lampshade; 0,2	P
	- other parts; energy (Nm) :	Plastic lampshade & enclosure; 0,35	P
	1) live parts		P
	2) linings		N/A
	3) protection		P
	4) covers		P
1.6 (4.13.3)	Straight test finger		P
1.6 (4.13.4)	Rough service luminaires		
	- 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		
1.6 (4.14.1)	Mechanical load:		
	A) four times the weight	4x0,97kg=3,88kg(CIE013-ZS)	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		
	Mass (kg) :		N/A
	Stress in conductors (N/mm ²) :		N/A
	Mass (kg) of semi-luminaire :		N/A

IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Bending moment (Nm) of semi-luminaire :		N/A
1.6 (4.14.3)	Adjusting devices:		
	- 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:		
	- glow-wire test 650 °C		P
	- spacing $\geq$ 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
1.6 (4.15.2)	Luminaires made of thermoplastic material with lamp control gear		
	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		
	No lamp control gear	(compliance with Section 12)	P
1.6 (4.16.1)	Lamp control gear spacing:		
	- spacing 35 mm		N/A
	- spacing 10 mm		N/A
1.6 (4.16.2)	Thermal protection:		
	- 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

IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.6 (4.17)	Drain holes		P
	Clearance at least 5 mm		P
1.6 (4.18)	Resistance to corrosion:		
1.6 (4.18.1)	- rust-resistance		N/A
1.6 (4.18.2)	- season cracking in copper		P
1.6 (4.18.3)	- corrosion of aluminium		N/A
1.6 (4.19)	Ignitors compatible with ballast		N/A
1.6 (4.20)	Rough service vibration		N/A
1.6 (4.21)	Protective shield:		
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
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:		
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

1.12 (12)	ENDURANCE TEST AND THERMAL TEST		
1.12 (12.3)	Endurance test:		
	- mounting-position	Wall mounted	—
	- test temperature (°C)	35°C	—
	- total duration (h)	240h	—

IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
	- supply voltage: Un factor; calculated voltage (V):	1,05 x 60W=63W (for CIE013S and CIE013-ZS) 1,05 x 40W=42W (for CIE007P)	—
	- lamp used	incandescent lamp	—
1.12 (12.3.2)	After endurance test:		
	- no part unserviceable		P
	- luminaire not unsafe		P
	- 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):		
1.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)	N/A	—
	- case of abnormal conditions.....	N/A	—
	- electronic lamp control gear		N/A
	- measured winding temperature (°C): at 1,1 Un ..	N/A	—
	- 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		
	- case of abnormal conditions.....	N/A	—
	- 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):		
1.12 (12.7.1)	Luminaire without temperature sensing control		



IEC/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict
1.12 (12.7.1.1)	Luminaire with fluorescent lamp $\leq 70W$		
	Test method 12.7.1.1 or Annex V:	N/A	—
	Test according to 12.7.1.1:		
	- case of abnormal conditions	N/A	—

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

	ANNEX 1: components	
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object/part No.	code	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity
Lampholder	B	VLM S.P.A.	79/QS	250V, 4A, T210°C, E27	EN 60238	IMQ/ EH371
	D	Zhongshan City Xiaolan Town Zhanyang Lampholder Factory	K23	250V, 4A, T210°C, E27	DIN EN 60238	VDE/ 40027136
Lampholder(for CIE007P)	B	Kangrong Fine Ceramic Co., Ltd.	K327E	250V, 4A, T180°C, E27	DIN EN 60238	VDE/ 40026630
	D	Fuzhou Bonle Electrical Appliances Co., Ltd.	F6M	250V, 4A, T180°C, E27	DIN EN 60238	VDE/ 40025093
	D	Fujian Mingqing Mewong Ceramics & Electronic Co. Ltd.	F519	500V, 4A, T180°C, E27	DIN EN 60238	VDE/ 121802
	D	Yuyao Ming Cheng Lightings Co., Ltd.	PA200	250V, 4A, T210°C, E27	DIN EN 60238	VDE/ 40031040
Terminal block	B	Yuyao Ming Cheng Lightings Co., Ltd.	PA8	AC 450V, 17,5A, 0,75...1,5mm ² , T110°C	DIN EN 60998-1 DIN EN 60998-2-1	VDE/ 40019113
	D	Shenzhen Hongyu Electrical Co., Ltd.	HYT230	AC 450V, 17,5A, 0,75...1,5mm ² , T110°C	DIN EN 60998-1 DIN EN 60998-2-1	VDE/ 40020423
	D	Heavy Power Co., Ltd.	PA9	AC 450 V, 24A, 1,0...2,5mm ² , T110°C	DIN EN 60998-1 DIN EN 60998-2-1	VDE/ 40016425
	D	Yuyao Ming Cheng Lightings Co., Ltd.	PA10	AC 450 V, 32A, 1,0...4,0mm ² , T110°C	DIN EN 60998-1 DIN EN 60998-2-1	VDE/ 40018352

IEC/EN 60598-2-1						
Clause	Requirement + Test			Result - Remark		Verdict
	D	Shenzhen Hongyu Electrical Co., Ltd.	HYT500	AC 450 V, 24A, 1,0...2,5mm ² , T110°C	DIN EN 60998-1 DIN EN 60998-2-1	VDE/ 40020423
Internal wire	B	MAINLAND ELECTRIC WIRE & CABLE CO.,LTD	H03VVH2-F H05VVH2-F	2x0,75mm ²	DIN VDE 0281-5	VDE/ 40010355
	D	Ningbo Qiaopu Electric Co., Ltd.	H03VVH2-F	2x0,75mm ²	DIN VDE 0281-5	VDE/ 136970
	D	Ningbo Liansheng Wire & Cable Co., Ltd.	H03VVH2-F H05VVH2-F	2x0,75mm ²	DIN VDE 0281-5	VDE/ 40022054
	D	Yuyao Yonglian Electrical Industry Co., Ltd.	H03VVH2-F H05VVH2-F	2x0,75mm ²	DIN VDE 0281-5	VDE/ 40008992
	D	Ningbo Jiajie Electronic Co., Ltd.	H03VVH2-F H05VVH2-F	2x0,75mm ²	DIN VDE 0281-5	VDE/ 40028223
	D	Yuyao Jin Ma Electronics	H03VVH2-F	2x0,75mm ²	DIN VDE 0281-5	VDE/ 115932
Heat shrinkable tube	C	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR-H	600V, 125 °C UL(E203950)	EN 60598-1	Test with appliance
	C	QIFURUI ELECTRONICS CO	QFR-h	600V, 125°C UL(E225897)	EN 60598-1	Test with appliance
	C	DONGGUAN SALIPT CO LTD	SALIPT S-901-600	600V, 125°C UL(E209436)	EN 60598-1	Test with appliance
Sensor	B	Aurolite Electrical Ltd.	RSY020	220-240V~, 50Hz, Max.200W, IP44	EN 61058-1	TUV/ R 50171911
Lampshade (except CIE007P, CIE013-Z and CIE013-ZS)	C	Ningbo Hede Lighting Co., Ltd.	-	PC Min. Thickness: 1mm	EN 60598-1	Test with appliance
Material of lampshade (except CIE007P, CIE013-Z and CIE013-ZS)	C	Taiwan Qimei Industry Co.,Ltd.	-	PC	EN 60598-1	Test with appliance
Lampshade (for CIE007P)	C	Ningbo Hede Lighting Co., Ltd.	-	PMMA Min. Thickness: 1,5mm	EN 60598-1	Test with appliance

IEC/EN 60598-2-1						
Clause	Requirement + Test			Result - Remark		Verdict
Material of lampshade (for CIE007P)	C	Taiwan Qimei Industry Co.,Ltd.	-	PMMA	EN 60598-1	Test with appliance
Enclosure	C	Ningbo Hede Lighting Co., Ltd.	-	PC Min. Thickness: 1mm	EN60598-1	Test with appliance
Material of enclosure	C	Taiwan Qimei Industry Co.,Ltd.		PC	EN60598-1	Test with appliance
Gasket	C	Ningbo Hede Lighting Co., Ltd.	-	Rubber Min. Thickness: 1mm	EN 60598-1	Test with appliance
Material of gasket	C	Hangzhou boyang chemical industry Co.,Ltd.	-	Rubber	EN 60598-1	Test with appliance
Mounting base	C	Ningbo Hede Lighting Co., Ltd.	--	ABS Min. Thickness: 1,7mm	EN 60598-1	Test with appliance
Material of mounting base	C	Taiwan Qimei Industry Co.,Ltd.	--	ABS	EN 60598-1	Test with 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/EN 60598-2-1			
Clause	Requirement + Test	Result - Remark	Verdict

	ANNEX 2: temperature measurements, thermal tests of Section 12		
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	Type reference	CIE013S	—
	Lamp used.....	Incandescent lamp	—
	Lamp control gear used	N/A	—
	Mounting position of luminaire	Wall mounted	—
	Supply wattage (W)	63W	—
	Supply current (A)	0,278	—
	Calculated power factor	-	—
	Table: measured temperatures corrected for $t_a = 25\text{ }^{\circ}\text{C}$:		
	- abnormal operating mode	N/A	—
	- test 1: rated voltage	N/A	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage.....	1,05 x 60W = 63W	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage	N/A	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage.....	N/A	—
	Through wiring or looping-in wiring loaded by a current of A during the test	N/A	—

temperature ($^{\circ}\text{C}$) of part	Clause 12.4 – normal				Clause 12.5 – abnormal	
	test 1	test 2	test 3	limit	test 4	limit
Lampholder rim	N/A	122	N/A	210	N/A	N/A
Lampholder Screw	N/A	114	N/A	210	N/A	N/A
Wire near lampholder	N/A	68	N/A	90	N/A	N/A
Terminal block	N/A	78	N/A	110	N/A	N/A
Mounting surface	N/A	73	N/A	90	N/A	N/A
Enclosure	N/A	80	N/A	90	N/A	N/A

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

	Type reference	CIE013-ZS	—
	Lamp used.....	E27, small ball bulb, 60W	—
	Lamp control gear used	N/A	—
	Mounting position of luminaire	Wall mounted	—
	Supply wattage (W)	63W	—
	Supply current (A)	0,27	—
	Calculated power factor	-	—
	Table: measured temperatures corrected for $t_a = 25\text{ }^{\circ}\text{C}$:		
	- abnormal operating mode	N/A	—
	- test 1: rated voltage	N/A	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage.....	$1,05 \times 60\text{W} = 63\text{W}$	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage	N/A	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage.....	N/A	—
	Through wiring or looping-in wiring loaded by a current of A during the test	N/A	—

temperature ($^{\circ}\text{C}$) of part	Clause 12.4 – normal				Clause 12.5 – abnormal	
	test 1	test 2	test 3	limit	test 4	limit
Lampholder rim	N/A	161	N/A	210	N/A	N/A
Lampholder Screw	N/A	165	N/A	210	N/A	N/A
Wire near lampholder	N/A	84	N/A	90	N/A	N/A
Terminal block	N/A	73	N/A	110	N/A	N/A
Mounting surface	N/A	82	N/A	90	N/A	N/A
Enclosure	N/A	71	N/A	90	N/A	N/A

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

	Type reference	CIE007P	—
	Lamp used.....	Incandescent lamp	—
	Lamp control gear used	N/A	—
	Mounting position of luminaire	Wall mounted	—
	Supply wattage (W)	42W	—
	Supply current (A)	0,182	—
	Calculated power factor	-	—
	Table: measured temperatures corrected for $t_a = 25\text{ }^{\circ}\text{C}$:		
	- abnormal operating mode	N/A	—
	- test 1: rated voltage	N/A	—
	- test 2: 1,06 times rated voltage or 1,05 times rated wattage.....	1,05x40W=42W	—
	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage	N/A	—
	- test 4: 1,1 times rated voltage or 1,05 times rated wattage.....	N/A	—
	Through wiring or looping-in wiring loaded by a current of A during the test	N/A	—

temperature ($^{\circ}\text{C}$) of part	Clause 12.4 – normal				Clause 12.5 – abnormal	
	test 1	test 2	test 3	limit	test 4	limit
Lampholder screwshell	N/A	64	N/A	180	N/A	N/A
Lampholder rim	N/A	62	N/A	180	N/A	N/A
Bifurcation of wiring	N/A	43	N/A	90	N/A	N/A
Mounting surface	N/A	26	N/A	90	N/A	N/A
Lampshade	N/A	49	N/A	*	N/A	N/A
Internal wire	N/A	47	N/A	90	N/A	N/A
Terminal block	N/A	28	N/A	110	N/A	N/A
Enclosure	N/A	38	N/A	90	N/A	N/A

* measured for ball pressure test