V04



Prüfbericht-Nr.: Auftrags-Nr.: 50157122 001 Seite 1 von 9 174053547 Test Report No.: Order No.: Page 1 of 9 Kunden-Referenz-Nr.: Auftragsdatum: N/A 2016-07-29 Client Reference No.: Order date: Auftraggeber: Senbe lighting Co., Ltd Client: Building B6, Huachuang Industrial Park, Shiji Town, Panyu District, Guangzhou Prüfgegenstand: LED Rope Light Test item: Bezeichnung / Typ-Nr.: S-FR-F15B Identification / Type No.: Auftrags-Inhalt: Type examination Order content: Prüfgrundlage: Clause 9.2 of standard EN 60598-1:2015 and client's special requirements Test specification: Wareneingangsdatum: 2018-06-08 Date of receipt: Detaillierte Fotodokumentation Prüfmuster-Nr.: A000746583-001, 002, 003 siehe Anlage zu diesem Bericht Test sample No.: Prüfzeitraum: 2018-06-13 to 2018-06-19 Testing period: Ort der Prüfung: Waltek Services (Foshan) Place of testing: Co., Ltd. Prüflaboratorium: TÜV Rheinland Detailed photo documentation Testing laboratory: (Guangdong) Ltd. see appendix to this report Prüfergebnis*: **Pass** Test result*: geprüft von / tested by: kontrolliert von / reviewed by: Dere Zhang / Project End 2018-06-27 2018-06-27 Mars Yan / Reviewer Jack Li / Project Manager Datum Name / Stellung Unterschrift Datum Name / Stellung Name / Position Date Signature Date Name / Position Signature Sonstiges / Others: According to client's application, this report and test result is for IP68 test only. Further tests should be

evaluated if the products are required to fulfill the requirements of the whole standard EN 60598-1:2015.

Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:				Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende:	1 = sehr gut	2 = gut	3 = befriedigend		4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)		N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory		4 = sufficient	5 = poor
	P(ass) = passed a.m. test specification(s)		F(ail) = failed a.m. test specification(s)		N/A = not applicable	N/T = not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.



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Summary of testing:

The tested samples fulfilled the requirements clause 9.2 of standard EN 60598-1:2015.

Tests performed (name of test and test clause):

9.2 Resistance to dust, solid objects and moisture

Testing location:

Waltek Services (Foshan) Co., Ltd.

2/F, 2nd Building, Sunlink International Machinery City, Chencun Town, Shunde District, Foshan 528313, Guangdong, China.

Summary of compliance with National Differences:

No national differences were considered.

Copy of marking plate:

Not provided.

Test item particulars...... LED Rope Light

Supply Connection...... Non-detachable supply cord

Model and/or type reference...... S-FR-F15B

Manufacturer..... Same as client

Factory...... Same as client

Rating(s)...... DC 24V, 30mA, 12W, ta=25°C, Max. 3m under water

according to client's requirement.

Test case verdicts

Test case does not apply to the test object: N/A

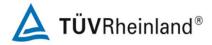
Test item does meet the requirement...... P(ass)

Test item does not meet the requirement...... F(ail)

Testing

Date of receipt of test item 2018-06-08

Date(s) of performance of test 2018-06-13 to 2018-06-19



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General remarks

This test report shall not be reproduced except in full without the written approval of the testing laboratory.

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

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.

Remark:

- 1) The product is LED Rope Light, suitable for indoor and outdoor use.
- 2) The product have three construction for waterproof, details see product photo.
- 3) The test samples' length is 1m.

LED specification:

Model	Manufacturer	Parameters
US-2835ALNY-A-	nzhen Unionlight Opto- onics Technology Co., Ltd	Vf=(2.8-3.4)V @ If=60mA; CCT: (2800-3200)K; View angle: 120°; Size: (2.80*3.50*1.05)mm; Emitted colour: white



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	EN 60598-1		
Clause	Requirement + Test	Result - Remark	Verdict

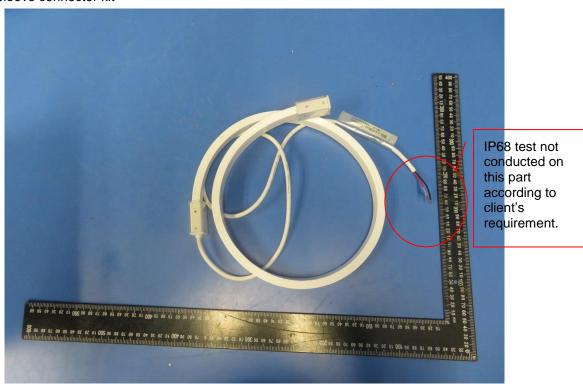
9	RESISTANCE TO DUST, SOLID OBJECTS AND	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE				
9.2	Tests for ingress of dust, solid objects and moisture					
	- Classification according to IP	IP68	_			
	- Mounting position during test	As normal use	_			
	- Fixing screws tightened; torque (Nm)	0.40Nm (for screw connector kit)	_			
	- Tests according to clauses:	Cl. 9.2.2 and Cl. 9.2.9	_			
	- Electric strength test afterwards	500V	Р			
	a) no deposit in dust-proof luminaire		N/A			
	b) no talcum in dust tight luminaire		Р			
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		Р			
	d) i) For luminaires without drain holes – no water entry		Р			
	d) ii) For luminaires with drain holes – no hazardous water entry		N/A			
	e) no water in watertight luminaire		Р			
	f) no contact with live parts (IP2X)		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		N/A			



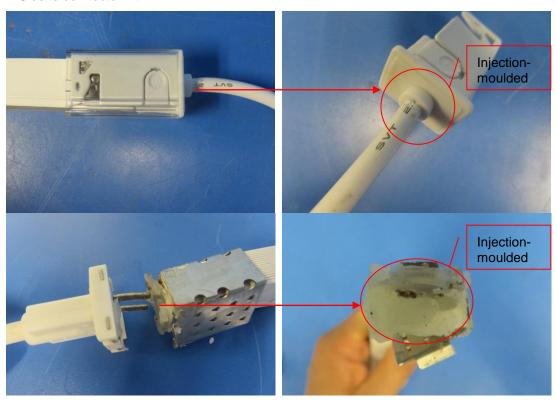
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Appendix: Product Photo

Picture 1: Sleeve connector kit



Picture 2: Sleeve connector kit

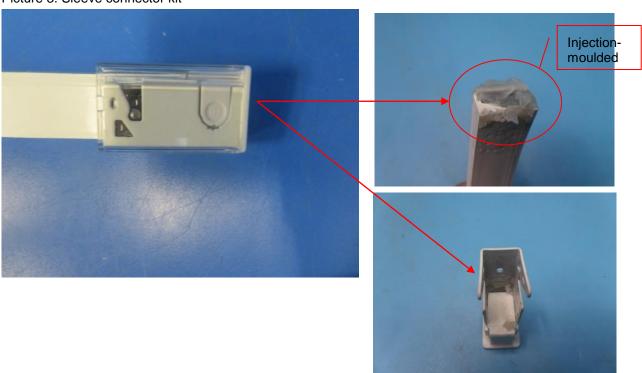




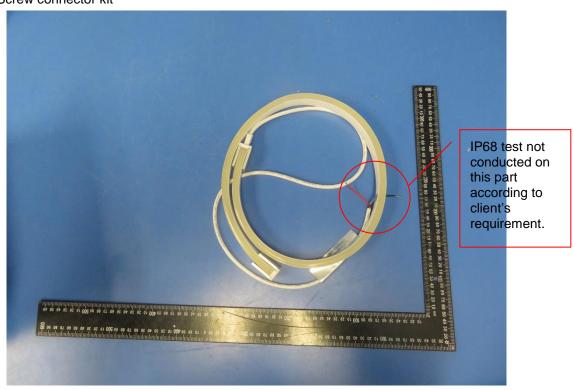
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Picture 3: Sleeve connector kit



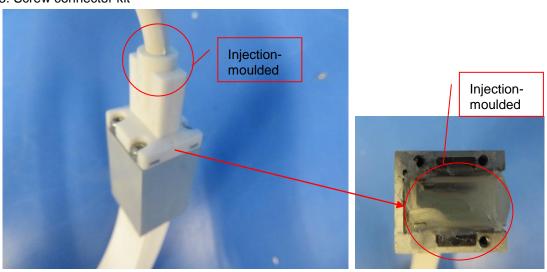
Picture 4: Screw connector kit



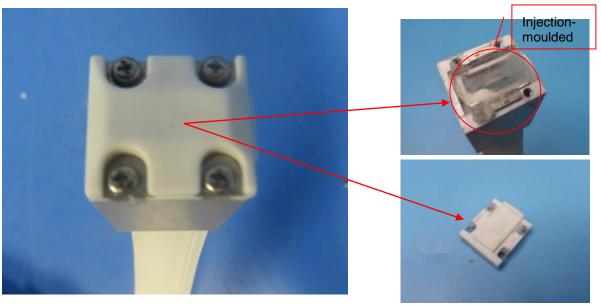


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Picture 5: Screw connector kit



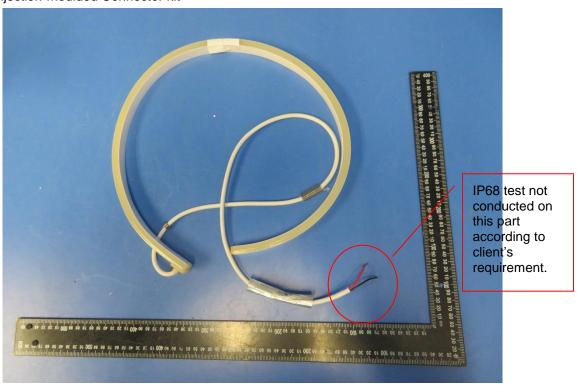
Picture 6: Screw connector kit



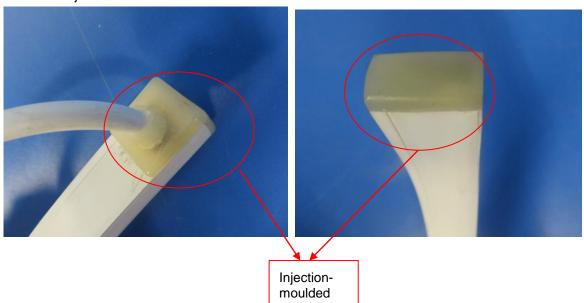


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Picture 7: Injection-moulded Connector kit



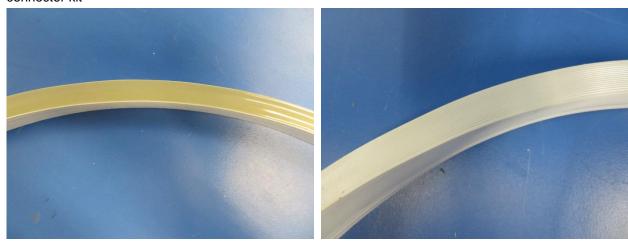
Picture 8: Injection-moulded Connector kit





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Picture 9: Injection-moulded body for Sleeve connector kit, Screw connector kit and Injection-moulded connector kit



---End of Test Report---