



ANOVA LIGHTING CO., LTD.

CE EMF REPORT


Prepared For :	ANOVA LIGHTING CO., LTD. NO. 2 Heng Gui Xi Road,Lianhe Industrial Park,Luocun,Shishan Town,Nanhai,Foshan,Guangdong province,China
Product Name:	Aluminium SMD LED strip with IP67 constant voltage LED driver
Trade Name:	
Model :	D-L3013 (with D-T1230A) , D-L3001WW(with D-T1230A) , D-L3014(with D-T1230A)
Prepared By :	BST Testing (Shenzhen) Co.,Ltd. No.7,New Era Industrial Zone, Guantian, Bao'an District, Shenzhen, Guangdong, China
Test Date:	May. 26 - May.27, 2020
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Report No.:	BSTXD200514834202ER



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TEST REPORT DECLARATION

Applicant	: ANOVA LIGHTING CO., LTD. NO. 2 Heng Gui Xi Road,Lianhe Industrial Park,Luocun,Shishan Town,Nanhai,Foshan,Guangdong province,China
Manufacturer	: ANOVA LIGHTING CO., LTD. NO. 2 Heng Gui Xi Road,Lianhe Industrial Park,Luocun,Shishan Town,Nanhai,Foshan,Guangdong province,China
EUT Description	: Aluminium SMD LED strip with IP67 constant voltage LED driver
Model Number	: D-L3013 (with D-T1230A) , D-L3001WW(with D-T1230A) , D-L3014(with D-T1230A) (Note: The series products have the same circuit diagram, PCB layout and functionality. The differences are the model name and appearance, so, we select D-L3013 (with D-T1230A) , to test.)
Power Supply:	: AC170-265V 50/60HZ

Test Standards:

EN 62493: 2015

[Assessment of lighting equipment related to human exposure to electromagnetic fields]

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Approved & Authorized Signer :



Salon/Manager



1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	Test Results
Disturbance Voltage Mains Terminals 20 kHz – 30 MHz	PASS
Radiated Electromagnetic Disturbances 100 kHz – 30 MHz	PASS
Radiated Electromagnetic Disturbances 30 MHz-30MHz	PASS
Induced Current Density Due to Electric Field 20 kHz-10MHz	PASS



2. TEST EQUIPMENT USED

2.1. For Induced Current Density Due to Electric Field 20 kHz-10MHz Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Oct. 08, 19	1 Year
	Van der Hoofden Test-Head	SCHWARZBECK	VDHH 9502	056	Oct. 08, 19	1 Year



3. GENERAL INFORMATION

3.1. Report information

- 3.1.1.This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BST approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BST in any way guarantees the later performance of the product/equipment.
- 3.1.2.The sample/s mentioned in this report is/are supplied by Applicant, BST therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 3.1.3.Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through BST, unless the applicant has authorized BST in writing to do so.

3.2. Measurement Uncertainty

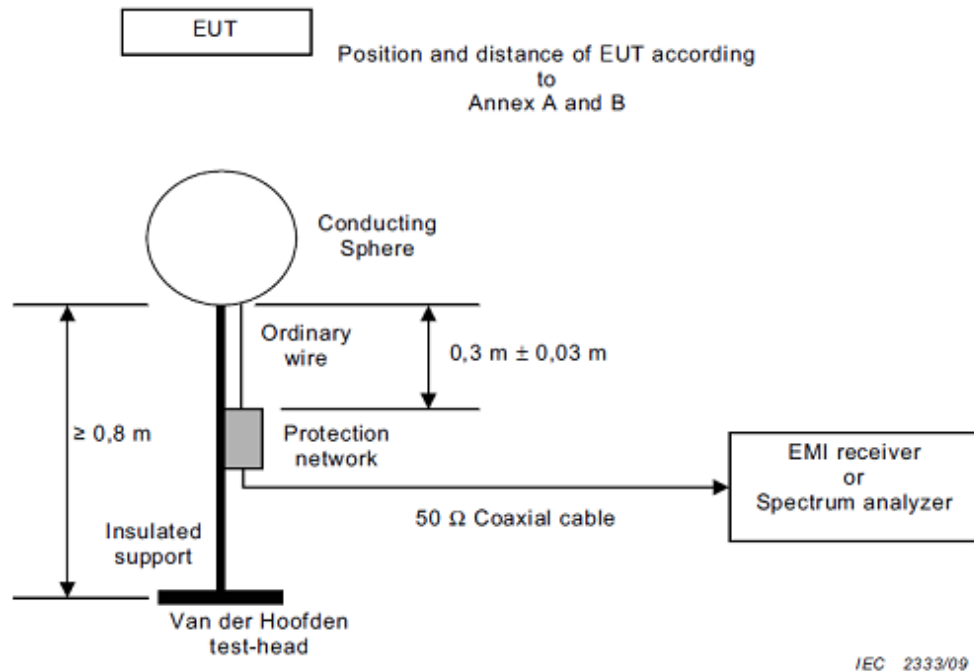
Test Item	Uncertainty
Induced Current Density Due to Electric Field expanded uncertainty	U=25%, k=2

3.3. Test Conditions

Temperature: 20-26°C
Relative Humidity: 55-60 %

4. INDUCED CURRENT DENSITY MEASUREMENT

4.1. Block Diagram of ESD Test Setup



EUT = Equipment under test.

NOTE The EMI receiver or spectrum analyzer must be powered by mains including protective earth.

4.2. Test Standard

EN 62493: 2015

4.3. Limits

Factor (F) 0.85

4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT as shown in Section 4.1.
- 4.4.2. Turn on the power of all equipments.
- 4.4.3. Let the EUT work in test mode (On) and test it.



4.5. Test Procedure

The EUT is placed on a table, which is 0.8 meter high above the ground. The measurement Point is set 50cm away from the top of Van der Hoofden test-head.

An electromagnetic interference (EMI) test receiver or spectrum analyzer according to CISPR 16-1-1 is required, with the settings given in Table 1:

Table 1 – Receiver or spectrum analyser settings

Frequency range	B_6 according to CISPR 16-1-1	Measurement time	f_{step}	Detector
20 kHz – 150 kHz	200 Hz	100 ms	220 Hz	Peak
150 kHz – 10 MHz	9 kHz	20 ms	10 kHz	Peak

4.6. Test Results

PASS.

Frequency range	20kHz-10MHz	
Test voltage	170-265V AC	
Lighting Equipment Type	Table lighting equipment	
Measurement procedure	clause 6 of EN 62493: 2015	
Measuring distance	30cm	
Measurement Point	Central to the point of intended illumination At a distance mid-way along the cable harness	
Operating Mode	On	
Ambient temperature	25°C	
Measured F	265V: 0.017 Note: Record the worst value around EUT	Limit: 0.85
Uncertainty U_{lab} (%)	25	U_{basic} : 30



APPENDIX I (PHOTOS)

Photo 1 General Appearance of the EUT



Photo 2 General Appearance of the EUT

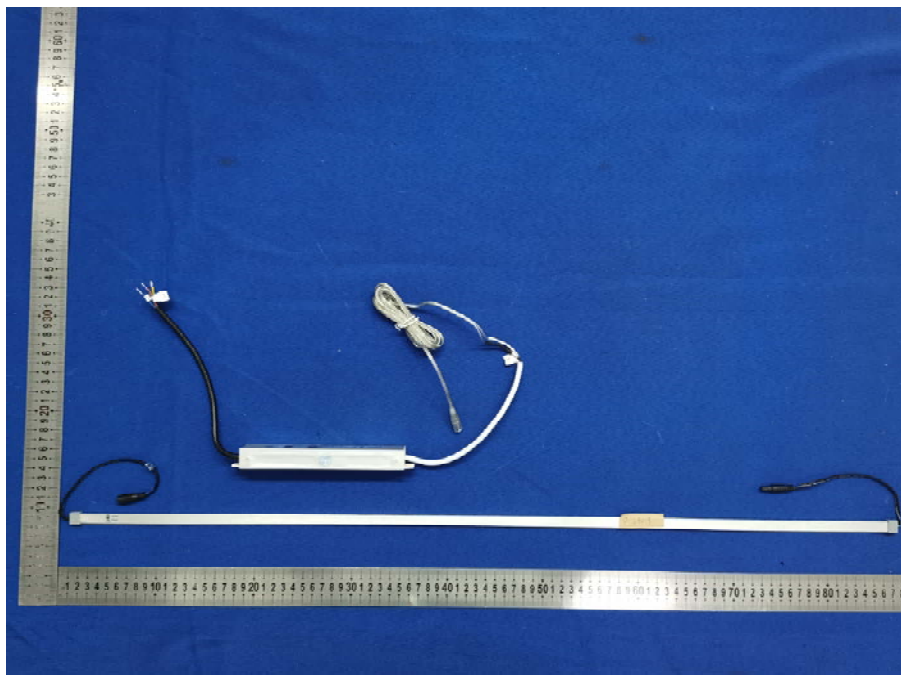


Photo 3 General Appearance of the EUT



Photo 4 General Appearance of the EUT

