AUSTRALIA TEST REPORT

For

Shenzhen Huayu Lighting Manufacture Co.,Ltd

LED STRIP

Test Model: HL-283516VXY0

Prepared for	:	Shenzhen Huayu Lighting Manufacture Co.,Ltd
Address	:	FLOOR 2, B BLOG, F BUILDING, SHUOTAI ROAD, SHIFENG TECHNICAL PARK, GUANG MING AREA, SHENZHEN OF CHINA
Prepared by	:	Shenzhen AOCE Electronic Technology Service Co., Ltd
Address	:	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Tel	:	(86)755-29799330
Fax	:	(86)755-23705230
Web	:	//www.aoc-cert.com
Mail	:	postmaster@aoc-cert.com
Date of receipt of test sample	:	September 16, 2025
Number of tested samples	:	1
Date of Test	:	September 16, 2025 ~ September 26, 2025
Date of Report	:	September 26, 2025

AUSTRALIA TEST REPORT
AS/NZS CISPR 14.1:2021
Electromagnetic Compatibility - Requirements for household appliances, electrical tools and similar apparatus - Emission

Report Reference No. ..... :	**AOC250926102E**
Date Of Issue.....:	September 26, 2025
Testing Laboratory Name.....:	**Shenzhen AOCE Electronic Technology Service Co., Ltd**
Address.....:	Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China
Testing Location/ Procedure.....:	Full application of Harmonised standards ■ Partial application of Harmonised standards ☐ Other standard testing method ☐
Applicant's Name.....:	**Shenzhen Huayu Lighting Manufacture Co.,Ltd**
Address.....:	FLOOR 2, B BLOG, F BUILDING, SHUOTAI ROAD, SHIFENG TECHNICAL PARK, GUANG MING AREA, SHENZHEN OF CHINA
Test Specification:	
Standard.....:	AS/NZS CISPR 14.1:2021

Test Item Description..... :	**LED STRIP**
Trade Mark.....:	N/A
Test Model.....:	HL-283516VXY0
Ratings.....:	24V, 20W
Result .....:	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
David Liu	Kevin Huang	Jackson Fang
David Liu/ File administrators	Kevin Huang/ Technique principal	Jackson Fang/ Manager

AUSTRALIA -- TEST REPORT

Test Report No. : AOC250926102E	September 26, 2025 Date of issue

Test Model.....	:	HL-283516VXY0
EUT.....	:	LED STRIP
Applicant.....	**:**	**Shenzhen Huayu Lighting Manufacture Co.,Ltd**
Address.....	:	FLOOR 2, B BLOG, F BUILDING, SHUOTAI ROAD, SHIFENG TECHNICAL PARK, GUANG MING AREA, SHENZHEN OF CHINA
Manufacturer.....	:	**Shenzhen Huayu Lighting Manufacture Co.,Ltd**
Address.....	:	FLOOR 2, B BLOG, F BUILDING, SHUOTAI ROAD, SHIFENG TECHNICAL PARK, GUANG MING AREA, SHENZHEN OF CHINA
Factory.....	**:**	**Shenzhen Huayu Lighting Manufacture Co.,Ltd**
Address.....	:	FLOOR 2, B BLOG, F BUILDING, SHUOTAI ROAD, SHIFENG TECHNICAL PARK, GUANG MING AREA, SHENZHEN OF CHINA

Test Result according to the standards on page 6:	**Positive**

Revision History

Revision	Issue Date	Revisions	Revised By
000	September 26, 2025	Initial Issue	Gavin Liang

TABLE OF CONTENTS

Test Report Description Page

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	AS/NZS CISPR 14.1:2021	--------	PASS
Clicks measurement	AS/NZS CISPR 14.1:2021	--------	PASS
Disturbance Power	AS/NZS CISPR 14.1:2021	--------	PASS
Radiated disturbance	AS/NZS CISPR 14.1:2021	--------	N/A
N/A is an abbreviation for Not Applicable.			

Test mode:		
Mode 1	Normal operation	Record

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

EUT : LED STRIP

Test Model : HL-283516VXY0

Additional Model : HL-283506VXY0, HL-283509VXY0, HL-283512VXY0, HL-283514VXY0, HL-283518VXY0, HL-283524VXY0

Model Declaration : /

Power Supply : 24V, 20W

EUT Clock Frequency : ＜30MHz

2.3.Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the AOCE quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

2.4.Measurement Uncertainty

Test	**Parameters**	**Expanded uncertainty (Ulab)**	**Expanded uncertainty (Ucispr)**
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	± 2.63 dB ± 2.35 dB	± 3.8 dB ± 3.4 dB
Power disturbance	Level accuracy (30MHz to 300MHz)	± 2.90dB	± 4.5 dB

Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	± 3.60 dB	± 3.3 dB
Radiated Emission	Level accuracy (9kHz to 30MHz)	± 3.68 dB	N/A
Radiated Emission	Level accuracy (30MHz to 1000MHz)	± 3.48 dB	± 5.3 dB
Radiated Emission	Level accuracy (above 1000MHz)	± 3.90 dB	± 5.2 dB
Mains Harmonic	Voltage	± 0.510%	N/A
Voltage Fluctuations & Flicker	Voltage	± 0.510%	N/A
EMF		± 21.59%	N/A

(1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.

(2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%

3. MEASURING DEVICES AND TEST EQUIPMENT

3.1. Conducted Disturbance

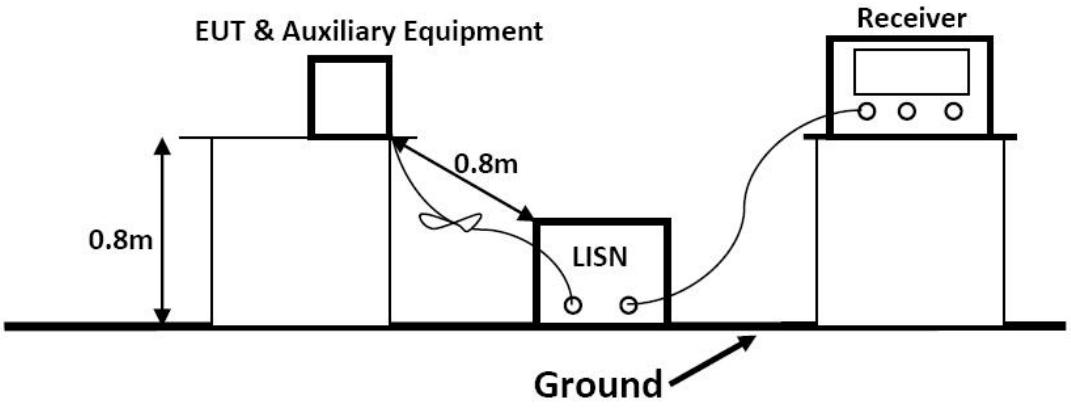
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	EMI Test Software	AUDIX	E3	/	N/A
2	EMI Test Receiver	R&S	ESPI	101840	2025-06-10
3	Artificial Mains	R&S	ENV216	101288	2025-06-10
4	10dB Attenuator	SCHWARZBECK	MTS-IMP-136	261115-001-0032	2025-06-10
5	Impedance Stabilization Network	TESEQ	ISN T800	45130	2025-06-10

3.2. Disturbance Power

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.
1	Power Absorbing Clamp	R&S	MDS21	4033	2025-06-10
2	10dB Attenuator	Mini-circuits	HAT-10	15542	2025-06-10
3	EMI Test Software	AUDIX	E3	/	N/A
4	EMI Test Receiver	R&S	ESPI	101840	2025-06-10

4. POWER LINE CONDUCTED MEASUREMENT

4.1.Block Diagram of Test Setup



4.2.Conducted Power Line Emission Measurement Standard and Limits

4.2.1.Standard:

AS/NZS CISPR 14.1:2021

4.2.2.Limits

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	59.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0

1. At the transition frequency the lower limit applies.
2. * decreasing linearly with logarithm of the frequency.

4.3.EUT Configuration on Test

The configuration of the EUT is same as Section 2.1.

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 1 and measure it.

4.5.Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground and connected to the AC mains through a Line Impedance Stabilization Network (L.I.S.N.). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission according to the CISPR 14.1 regulations during conducted emission measurement. And the voltage probe had been used for the load terminals measurement according to the CISPR 14.1 standard.

The bandwidth of the field strength meter is set at 9kHz.

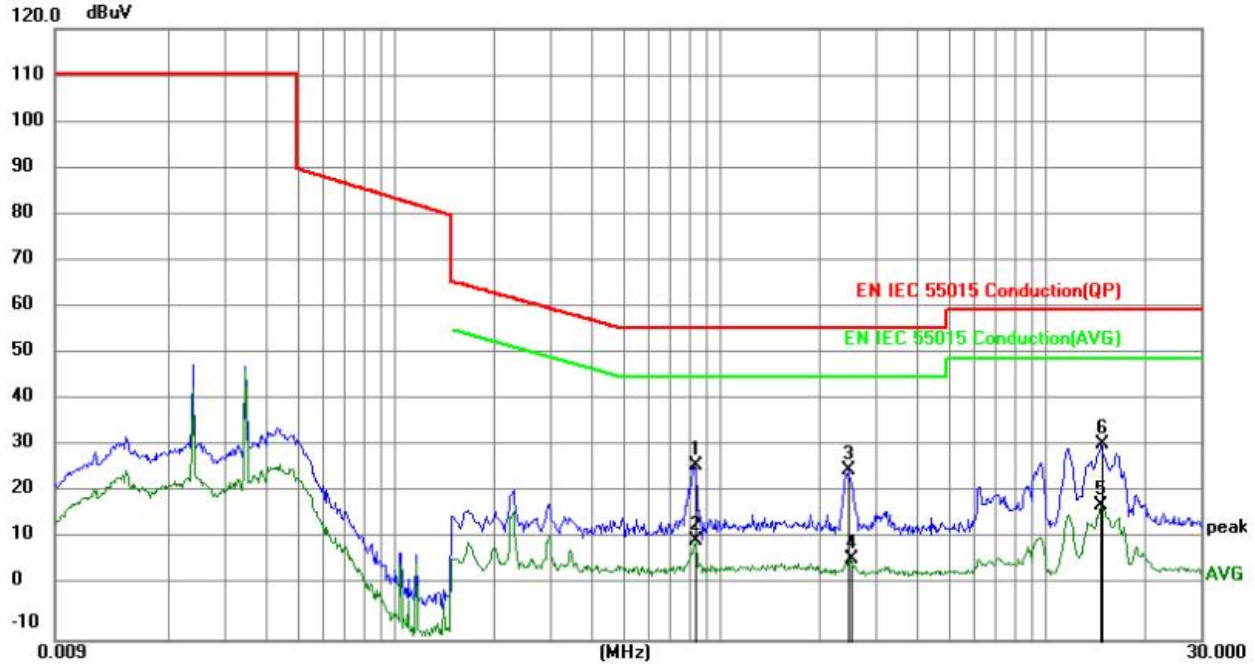
The frequency range from 150kHz to 30MHz is investigated. The scanning waveform please refer to the next page.

4.6.Test Results

PASS.

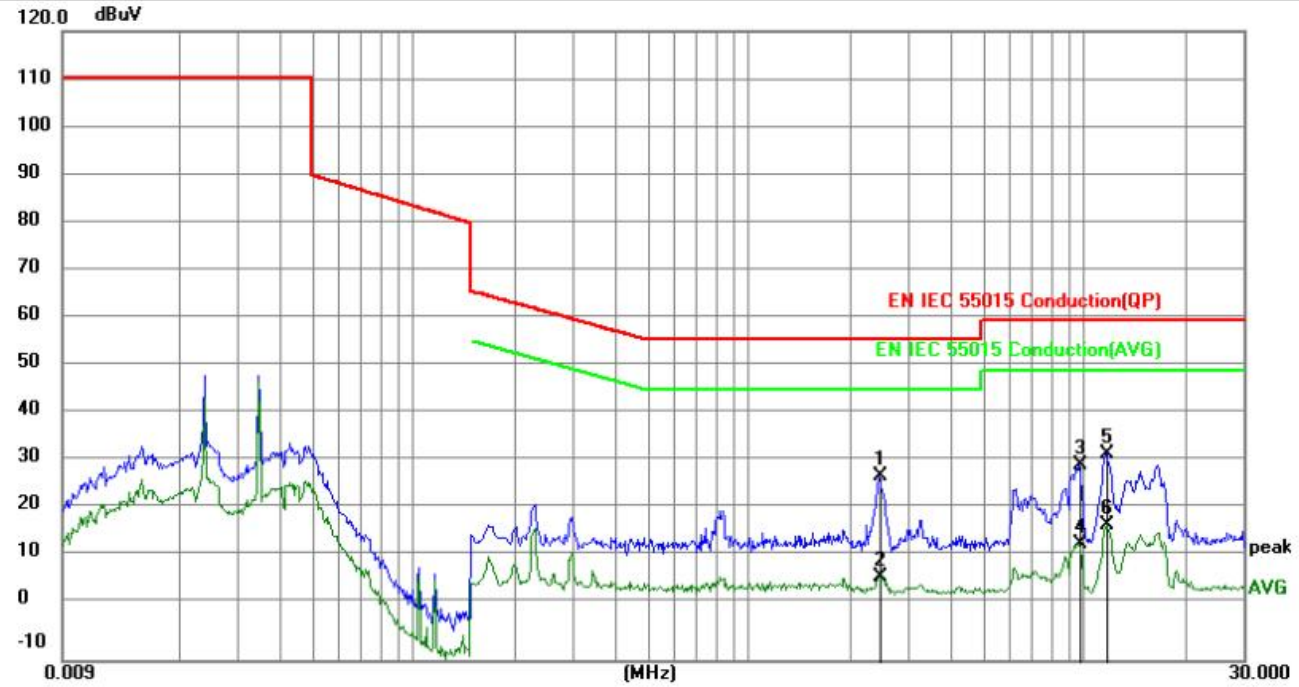
All the scanning waveform is in next page.

Test Model	HL-283516VXY0	**Test Mode**	Mode 1
Environmental Conditions	22.6℃, 52.9% RH	**Test Engineer**	Andy Liu
Pol	Line	**Test Voltage**	AC 240V/50Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.8340	17.32	9.96	27.28	56.00	-28.72	peak	P	
2	0.8385	1.31	9.96	11.27	46.00	-34.73	AVG	P	
3	2.4766	16.36	9.84	26.20	56.00	-29.80	peak	P	
4	2.5126	-2.60	9.85	7.25	46.00	-38.75	AVG	P	
5	14.7436	8.85	9.76	18.61	50.00	-31.39	AVG	P	
6	14.8381	21.90	9.75	31.65	60.00	-28.35	peak	P	

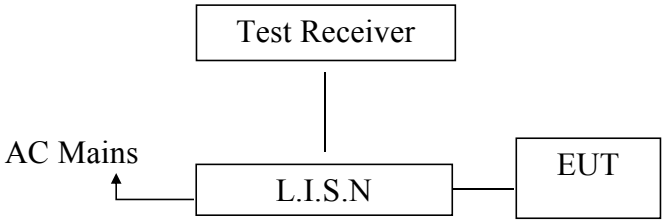
Test Model	HL-283516VXY0	**Test Mode**	Mode 1
Environmental Conditions	22.6℃, 52.9% RH	**Test Engineer**	Andy Liu
Pol	Neutral	**Test Voltage**	AC 240V/50Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	2.4631	18.30	9.84	28.14	56.00	-27.86	peak	P	
2	2.4631	-2.37	9.84	7.47	46.00	-38.53	AVG	P	
3	9.7306	20.65	9.84	30.49	60.00	-29.51	peak	P	
4	9.7306	4.48	9.84	14.32	50.00	-35.68	AVG	P	
5	11.6971	22.88	9.82	32.70	60.00	-27.30	peak	P	
6	11.7916	8.25	9.81	18.06	50.00	-31.94	AVG	P	

5. CLICKS MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: LED STRIP)

5.2.Clicks Measurement Standard and limit

5.2.1.Test Standard

AS/NZS CISPR 14.1:2021

5.2.2.Test Limit

According to standard CISPR 14.1, if click rate (N) less 5/min and the time of this discontinuous disturbances does not exceed 10ms, then the limit value are omitted.

5.3.EUT Configuration on Test

The configuration of EUT is same as Section 2.1.

5.4.Operating Condition of EUT

5.4.1.Setup the EUT as shown Section 5.1.

5.4.2.Turn on the power of all equipments.

5.4.3.After that, let EUT work in test Mode 1 and measure it.

5.5. Test Procedure

This test is done when switch operations in thermostatically controlled appliances, automatic program controlled machines and other electrically controlled or operated appliances may generate discontinuous disturbance (Click). The measurement of disturbance shall be performed at the following restricted number of frequencies: 150kHz, 500kHz, 1.4MHz and 30MHz. At each frequency, for appliances which stop automatically, duration of the minimum number of complete programs necessary to produce 40 counted clicks or, where relevant, 40 counted clicks have not been produced, the test is stopped at the end of the program in course. The relevant click rate N. The appliance under test shall be deemed to comply with the limit if not more than a quarter of the number of the counted click registered during the observation time.

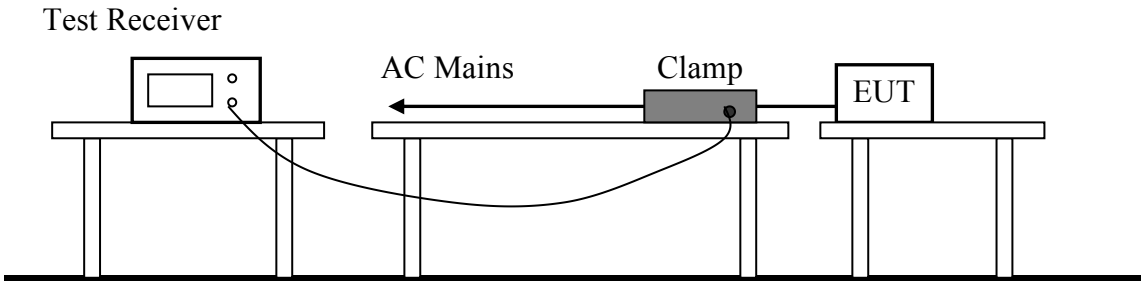
5.6. Test Results

PASS.

The click rate (N=1/2.1=0.48<5) of the EUT is less than 5/min and the time of this discontinuous disturbances (△T=4ms<10ms) does not exceed 10ms.According to EN 55014-1, the limit values are omitted.

6. DISTURBANCE POWER MEASUREMENT

6.1.Block Diagram of Test Setup



6.2.Test Standard

AS/NZS CISPR 14.1:2021

6.3.Disturbance Power Limits

All emanations from devices or system including any network of conductors and apparatus connected there to, shall not exceed the level of field strengths specified below:

Frequency MHz	Limits dB(pW)	
	Quasi-peak Value	Average Value
30 ~ 300	45 Increasing Linearly with Frequency to 55	35 Increasing Linearly with Frequency to 45

	Household and similar appliances		Tools					
1	2	3	4	5	6	7	8	9
Frequenc y range			Rated motor power not exceeding 700 W		Rated motor power above 700 W and not exceeding 1000 W		Rated motor power above 1000 W	
(MHz)	dB (pW) Quasi-peak	dB (pW) Average	dB (pW) Quasi-peak	dB (pW) Average	dB (pW) Quasi-peak	dB (pW) Average	dB (pW) Quasi-pea k	dB (pW) Average
Increasing linearly with the frequency from:								
200 to 300	0 to 10 dB	-	0 to 10 dB	-	0 to 10 dB	-	0 to 10 dB	-
NOTE 1 This table only applies if specified in 4.1.2.3.2. NOTE 2 The measured result at a particular frequency shall be less than the relevant limit minus the corresponding margin (at that frequency).								

6.4.EUT Configuration on Test

The CISPR 14.1 Regulations test method must be used to find the maximum emission during radiated emission measurement. The configuration of the EUT is the same as used in conducted emission measurement.

6.5.Operating Condition of EUT

Same as conducted emission measurement, which is listed in Section 4.4, except the test set up replaced as Section 6.1.

6.6.Test Procedure

The EUT is placed on the plane 0.8m high above the ground by insulating support and away from other metallic surface at least 0.4m. It is connected to the power mains through an extension cord of 6m min. The absorber clamp clamps the cord and moves from the far end to the EUT to measure the disturbing energy emitted from the cord.

The bandwidth of the field strength meter is set at 120kHz.

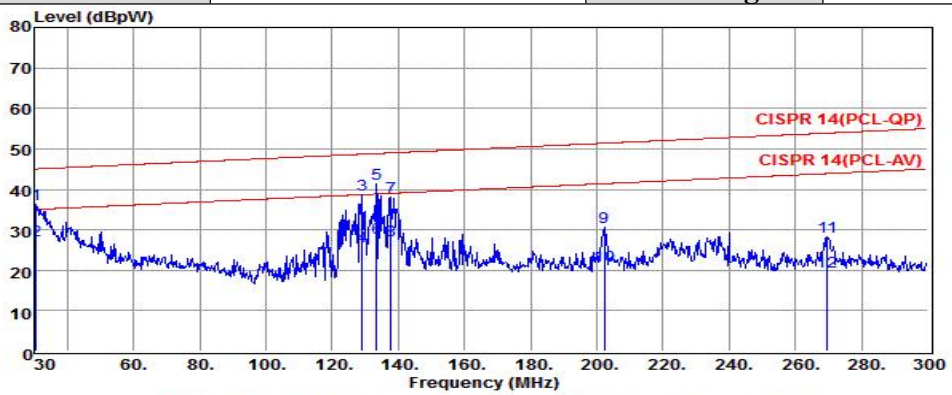
All the test results are listed in Section 6.7.

6.7.Test Results

PASS.

The frequency spectrum from 30 MHz to 300 MHz is investigated.

Test Model	HL-283516VXY0	**Test Mode**	Mode 1
Environmental Conditions	22.6℃, 52.9% RH	**Test Engineer**	Andy Liu
Pol	AC	**Test Voltage**	AC 240V/50Hz

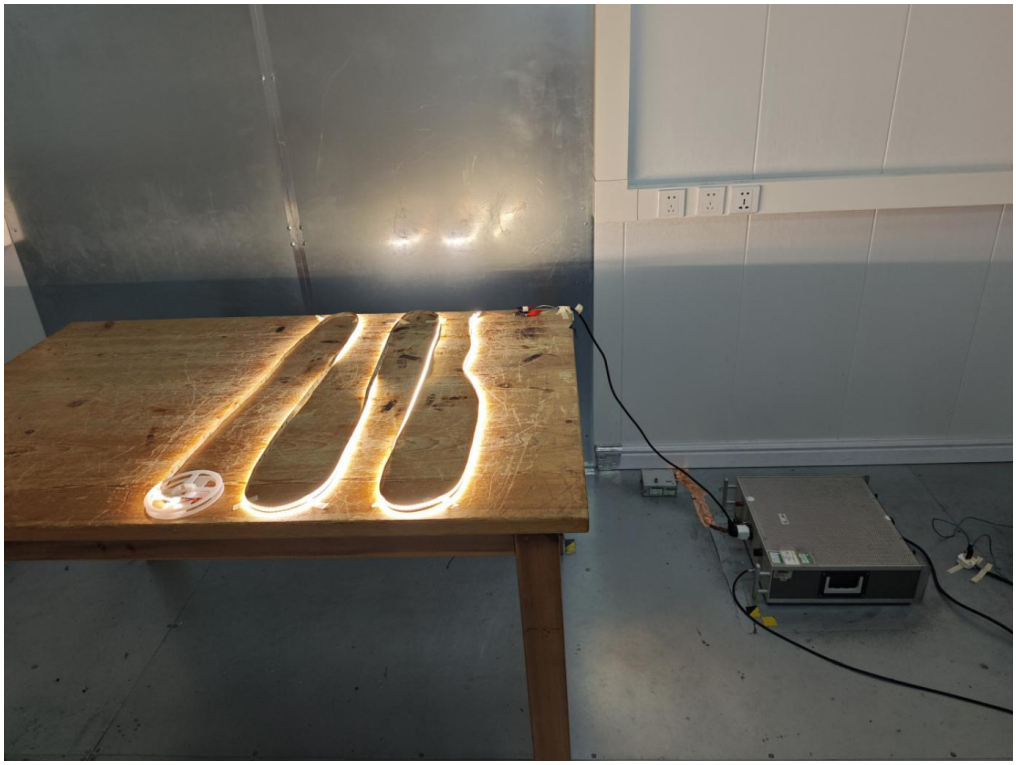


	Freq	Reading	LisnFac	CabLos	Measured	Limit	Over	Remark
	MHz	dBpW	dB	dB	dBpW	dBpW	dB	
1	30.54	15.62	-3.35	23.90	36.17	45.03	-8.86	QP
2	30.54	6.75	-3.35	23.90	27.30	35.03	-7.73	Average
3	129.09	12.05	1.94	24.76	38.75	48.68	-9.93	QP
4	129.09	-0.82	1.94	24.76	25.88	38.68	-12.80	Average
5	133.41	14.51	2.14	24.79	41.44	48.84	-7.40	QP
6	133.41	0.99	2.14	24.79	27.92	38.84	-10.92	Average
7	137.73	11.14	2.25	24.81	38.20	49.00	-10.80	QP
8	137.73	0.38	2.25	24.81	27.44	39.00	-11.56	Average
9	202.26	1.29	4.01	25.25	30.55	51.39	-20.84	QP
10	202.26	-8.13	4.01	25.25	21.13	41.39	-20.26	Average
11	269.76	-0.85	3.42	25.71	28.28	53.89	-25.61	QP
12	269.76	-9.40	3.42	25.71	19.73	43.89	-24.16	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.

7. PHOTOGRAPH

7.1. Photo of Power Line Conducted Measurement



8. EXTERNAL AND INTERNAL PHO TOS OF THE EUT

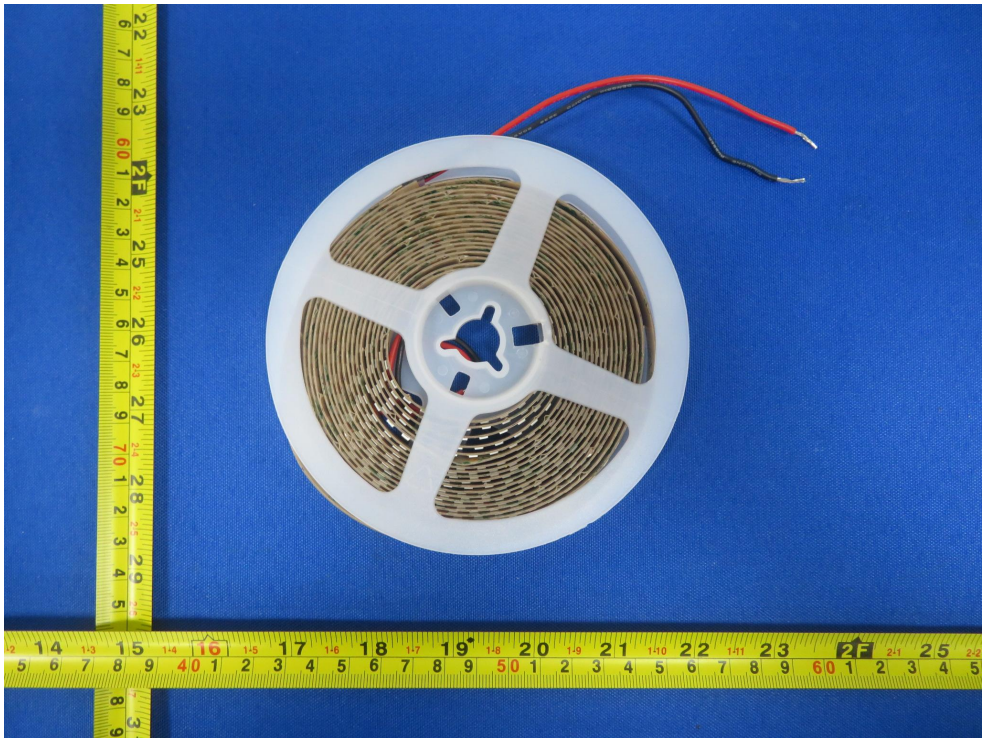


Fig.1

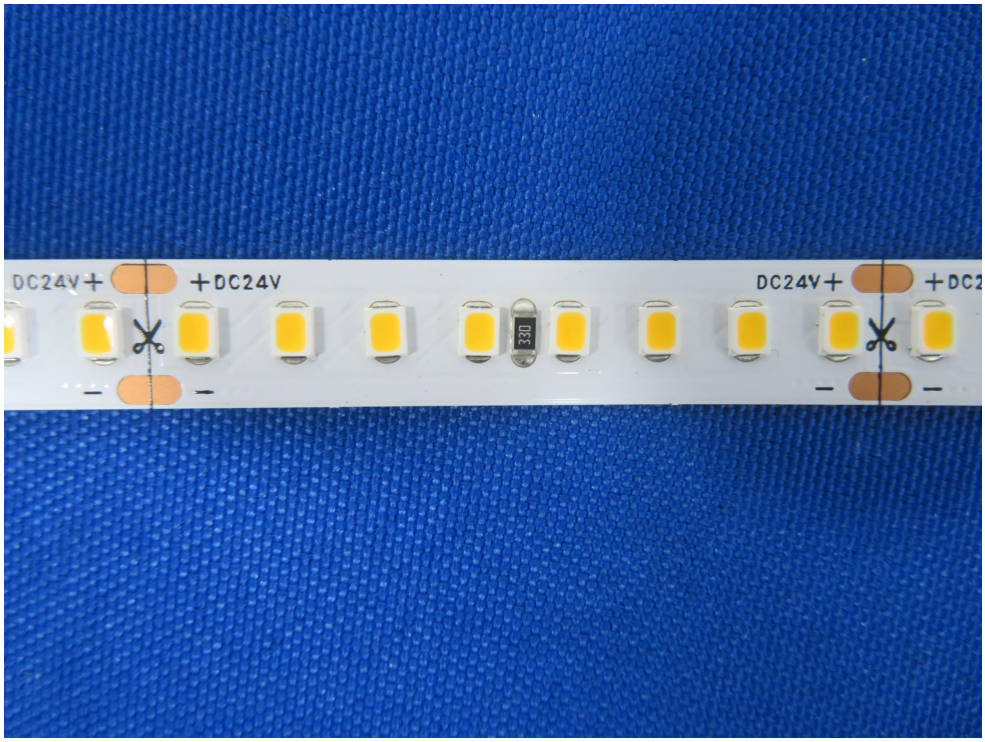


Fig.2

----------THE END OF TEST REPORT----------