TEST REPORT

Reference No......	:	WTN20F12094902E
Applicant.....	:	Artika for Living Inc.
Address.....	:	1756, 50th Avenue Lachine, QC H8T 2V5 Canada
Manufacturer	:	Prosperous(Ningbo)Lighting Appliance Co.,Ltd
Address.....	:	No.299,Wancheng Road,Shiqi,Yinzhou district, Ningbo 315153 P.R.China
Product Name.....	:	Vanity Mirror
Trade Mark.....	:	Ganpe and Artika
Model No.....	:	Refer to section 3.2
Standards	:	47 CFR PART 15 SUBPART B (Oct.,2019)
Date of Receipt sample	:	2020-10-13
Date of Test	:	2020-10-15
Date of Issue.....	:	2020-12-14
Test Report Form No.	:	WEO-FCC15A-01B
Test Result.....	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Compiled by:

Roy Hong / Project Engineer

Approved by:

Danny Zhou / Manager

1 Test Summary

Test Item	Test Requirement	Class	Test Method	Test Result
Conducted Emission	47 CFR PART 15 SUBPART B (Oct.,2019)	Class B	ANSI C63.4: 2014	Pass
Radiated Emission	47 CFR PART 15 SUBPART B (Oct.,2019)	Class B	ANSI C63.4: 2014	Pass

Remark:

Pass Test item meets the requirement

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

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3 General Information

3.1 General Description of E.U.T.

Product Name ..... : Vanity Mirror

Model No. ..... : Refer to section 3.2

Protection Class ..... : Class II

Remark ..... :
1. The EUT (equipment under test) is an ordinary Vanity Mirror for Lighting and similar use. For the further information, refer to the user's manual.
2. In electrical characteristics, all models are same circuit principle and PCB layout , except for model name. For details information, refer to the section 3.2.
3. For the test results, the EUT had been tested in the all conditions of rated input. But only the worst case was shown in test report.

3.2 Details of E.U.T.

Technical Data ..... :

No.	Model	Rated Input	Rated Power
1.	**HCL-55U-2432-EDD-4**	120V~, 60Hz	46W
2.	WMIRH-SACH-2431-C	120V~, 60Hz	46W
3.	WMIRH-SACH-2431-D14	120V~, 60Hz	46W
4.	WMIRH-SACH-2431-XXXXXX	120V~, 60Hz	46W

Remark:
1. HCL-55U-2432-EDD-4, WMIRH-SACH-2431-C, WMIRH-SACH-2431-D14 and WMIRH-SACH-2431-XXXXXX are totally the same.
2. "XXXXXX" can be A to Z and/or 0 to 9 and/or Blank , represent a commercial code.

3.3 Description of Support Units

The EUT has been tested as an independent unit. HCL-55U-2432-EDD-4 is the test sample. Both tests were performed in the condition of AC 120V/60Hz input.

3.4 Standards Applicable for Testing

The tests were performed according to following standards:

47 CFR PART 15 SUBPART B (Oct.,2019) Radio frequency devices

3.5 Test Facility

The test facility has a test site registered with the following organizations:

- **ISED – Registration No.: 21895**

Waltek Testing Group (Foshan) Co., Ltd. has been registered and fully described in a report filed with the Innovation, Science an Economic Development Canada(ISED). The acceptance letter from the ISED is maintained in our files. Registration ISED number:21895, March 12, 2019

- **FCC – Registration No.: 820106**

Waltek Testing Group (Foshan) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 820106, August 16, 2018

- **FCC – Designation No.: CN5034**

Waltek Testing Group (Foshan) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation No. CN5034.

- **NVLAP – Lab Code: 600191-0**

Waltek Testing Group (Foshan) Co., Ltd. EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 600191-0.
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

3.6 Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:

☐ Yes ☒ No

If Yes, list the related test items and lab information:

Test items: --

Lab information: --

3.7 Abnormalities from Standard Conditions

None.

3.8 Other

This report is based on report No. WTN20F11083378E for adding a new applicant. It does not affect the EMC test items. Therefore the EUT is deemed to fulfill all the requirements and no further test has been performed.

4 Equipment Used during Test

Mains Terminal Disturbance Voltage 1#(Conducted Emission)						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal Date**	**Due Date**
1.	EMI Test Receiver	R&S	ESR3	102423	2020-01-09	2021-01-08
2.	LISN	R&S	ENV216	101343	2020-01-09	2021-01-08
3.	Cable	HUBER+SUHNER	CBL2-NN-6M	223NN624	2020-01-09	2021-01-08
4.	Switch	CD	RSU-A4 18G	RSUA4008	2020-01-07	2021-01-06
Mains Terminal Disturbance Voltage 2#(Conducted Emission)						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal Date**	**Due Date**
1.	EMI Test Receiver	R&S	ESCI	101178	2020-01-09	2021-01-08
2.	LISN	R&S	ENV216	101215	2020-01-09	2021-01-08
3.	Cable	HUBER+SUHNER	CBL2-NN-6M	6102701	2020-01-09	2021-01-08
4.	Switch	ESE	RSU/M2	---	2020-01-09	2021-01-08
Radiated Emission						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal Date**	**Due Date**
1.	EMI Test Receiver	R&S	ESR7	101566	2020-01-09	2021-01-08
2.	Active Loop Antenna	SCHWARZBECK	FMZB1519B	00004	2020-01-10	2021-01-09
3.	Trilog Broadband Antenna	SCHWARZBECK	VULB 9162	9162-117	2020-02-21	2021-02-20
4.	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	01561	2020-01-10	2021-01-09
5.	Preamplifier	Lunar E M	LNA1G18-40	20160501002	2020-01-07	2021-01-06

4.1 Software List

Description	Manufacturer	Model	Version
EMI Test Software (Conducted Emission1#)	FARATRONIC	EZ-EMC	EMEC-3A1
EMI Test Software (Conducted Emission2#)	FARATRONIC	EZ-EMC	CON-03A1
EMI Test Software (Radiated Emission)	FARATRONIC	EZ-EMC	RA-03A1-1

4.2 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conducted Emission	150kHz~30MHz	±2.7dB	(1)
Radiated Emission	30MHz~1GHz	±4.1dB	(1)
Radiated Emission	1GHz~6GHz	±5.0dB	(1)
Radiated Emission	6GHz~18GHz	±5.0dB	(1)

(1)This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

4.3 Special Accessories and Auxiliary Equipment

Item	Equipment	Technical Data	Manufacturer	Model No.	Serial No.
1.	/	/	/	/	/

4.4 Decision Rule

Compliance or non-compliance with a disturbance limit shall be determined in the following manner.

If U_{LAB} is less than or equal to U_{cispr}, then

-Compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

-Non-compliance is deemed to occur is any measured disturbance level exceeds the disturbance limt.

If U_{LAB} is greater than U_{cispr}, then

-Compliance is deemed to occur if no measured disturbance level, increased by(U_{LAB}-U_{cispr}) , exceeds the disturbance limit;

-Non-compliance is deemed to occur if any measured disturbance level, increased by(U_{LAB}-U_{cispr}) , exceeds the disturbance limit.

5 Emission Test Results

5.1 Conducted Emission

Test Requirement..... : 47 CFR PART 15, SUBPART B

Test Method..... : ANSI C63.4

Test Result..... : Pass

Test Limit..... : 47 CFR PART 15, SUBPART B Section 15.107

Frequency Range..... : 150kHz to 30MHz

Class..... : Class B

5.1.1 E.U.T. Operation

Operating Environment:

Temperature ..... : 21.6°C

Humidity..... : 50%RH

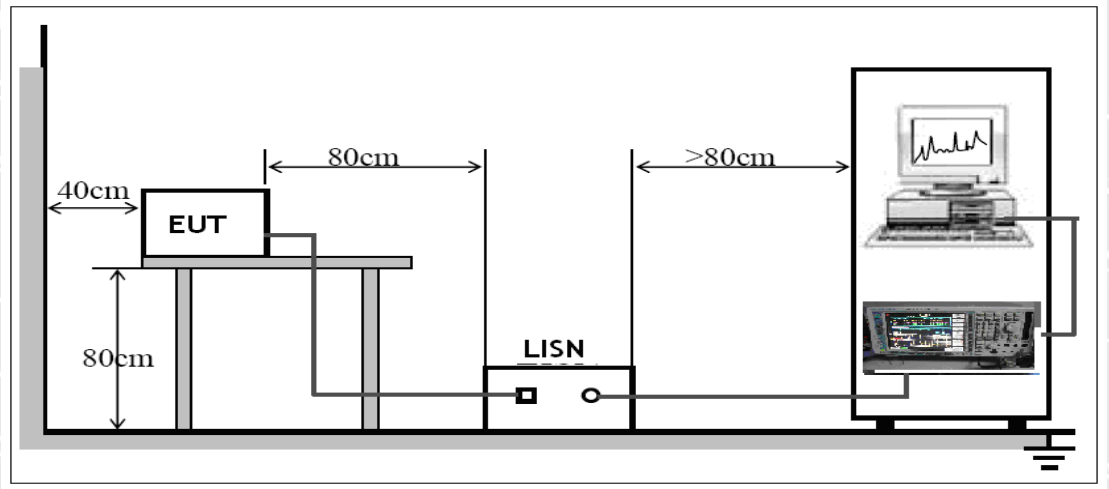
EUT Operation:

Input Voltage ..... : AC 120V/60Hz

Operating Mode..... : Heating and lighting mode

5.1.2 Block Diagram of Test Setup

The Conducted Emission tests were performed in accordance with the ANSI C63.4.



5.1.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

5.1.4 Corrected Amplitude & Margin Calculation

The Corrected factor is calculated by adding LISN VDF(Voltage Division Facotr), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Measurement=Reading Level+Correct Factor

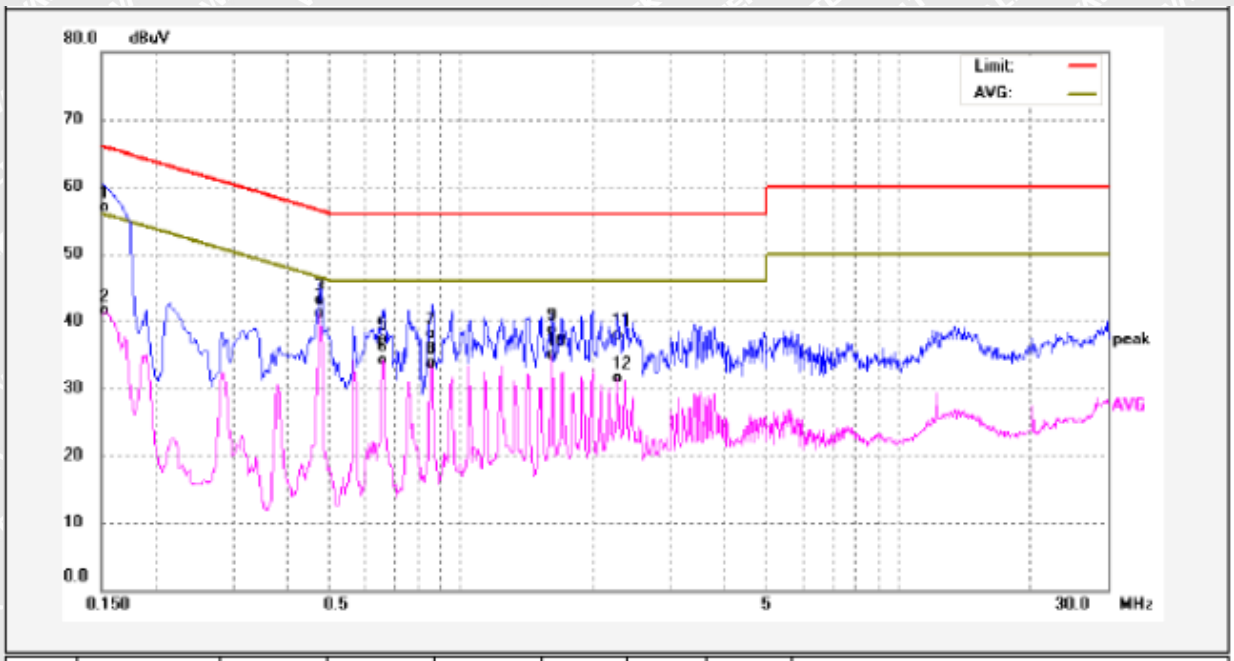
Correct Facotor=LISN VDF+Cable Loss

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin=Limit-Measurement

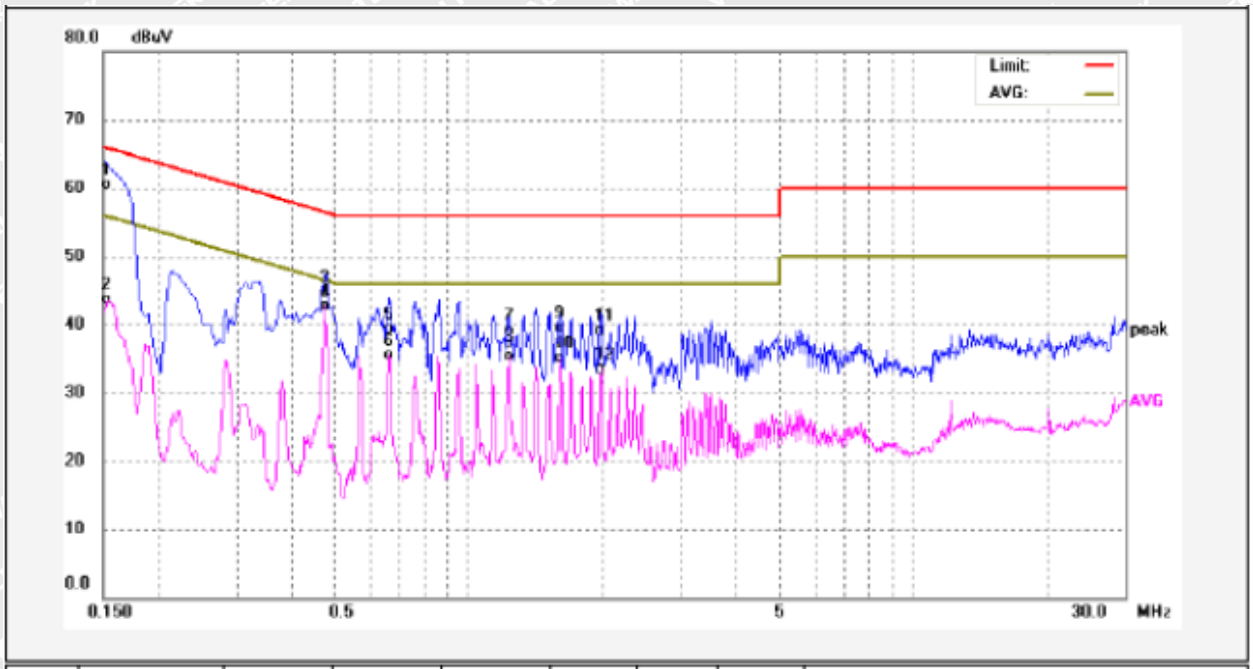
5.1.5 Conducted Emission Test Data

Live Line



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1539	47.34	9.64	56.98	65.78	-8.80	QP	
2	0.1539	31.88	9.64	41.52	55.78	-14.26	AVG	
3	0.4740	33.56	9.63	43.19	56.44	-13.25	QP	
4	0.4740	31.54	9.63	41.17	46.44	-5.27	AVG	
5	0.6580	27.73	9.65	37.38	56.00	-18.62	QP	
6	0.6580	24.37	9.65	34.02	46.00	-11.98	AVG	
7	0.8500	28.47	9.66	38.13	56.00	-17.87	QP	
8	0.8500	24.01	9.66	33.67	46.00	-12.33	AVG	
9	1.6060	29.08	9.69	38.77	56.00	-17.23	QP	
10	1.6060	25.30	9.69	34.99	46.00	-11.01	AVG	
11	2.2659	28.15	9.71	37.86	56.00	-18.14	QP	
12	2.2659	21.74	9.71	31.45	46.00	-14.55	AVG	

Neutral Line



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1539	50.77	9.64	60.41	65.78	-5.37	QP	
2	0.1539	34.10	9.64	43.74	55.78	-12.04	AVG	
3	0.4740	35.13	9.63	44.76	56.44	-11.68	QP	
4	0.4740	33.07	9.63	42.70	46.44	-3.74	AVG	
5	0.6580	29.62	9.65	39.27	56.00	-16.73	QP	
6	0.6580	25.89	9.65	35.54	46.00	-10.46	AVG	
7	1.2260	29.51	9.67	39.18	56.00	-16.82	QP	
8	1.2260	25.57	9.67	35.24	46.00	-10.76	AVG	
9	1.6060	29.78	9.69	39.47	56.00	-16.53	QP	
10	1.6060	25.50	9.69	35.19	46.00	-10.81	AVG	
11	1.9900	29.46	9.70	39.16	56.00	-16.84	QP	
12	1.9900	23.82	9.70	33.52	46.00	-12.48	AVG	

5.2 Radiated Emission

Test Requirement..... : 47 CFR PART 15, SUBPART B

Test Method..... : ANSI C63.4

Test Limit..... : 47 CFR PART 15, SUBPART B Section 15.109

Test Result..... : Pass

Frequency Range..... : 30MHz to 1000MHz

Class..... : Class B

5.2.1 E.U.T. Operation

Operating Environment:

Temperature ..... : 22.4°C

Humidity..... : 52%RH

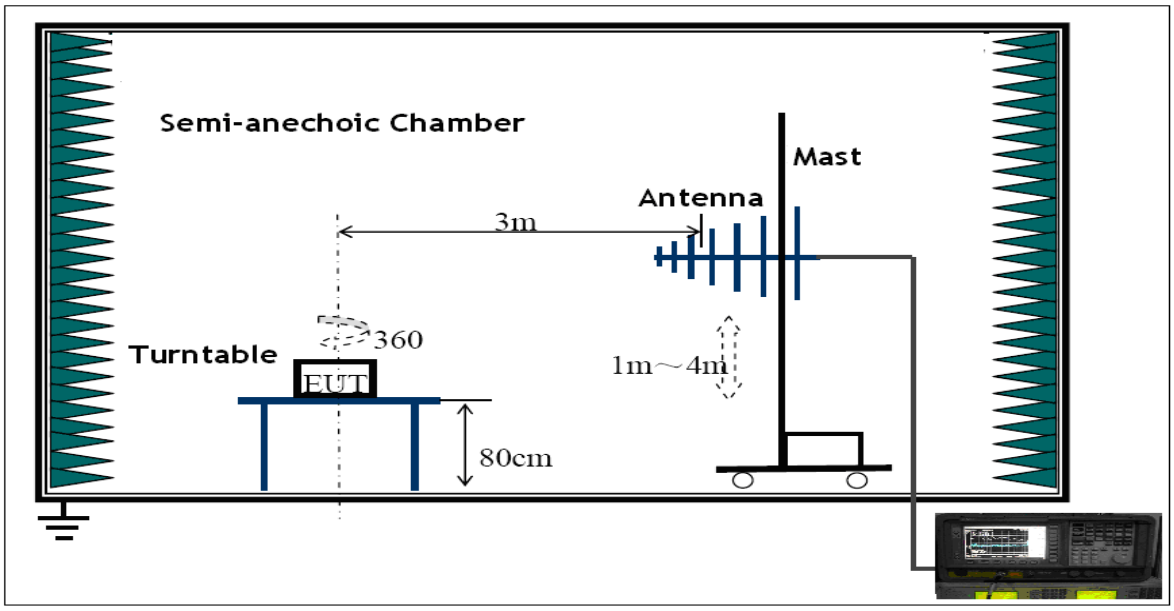
EUT Operation:

Input Voltage ..... : AC 120V/60Hz

Operating Mode..... : Heating and lighting mode

5.2.2 Block Diagram of Test Setup

The Radiated Emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.



5.2.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

5.2.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Corr. Factor

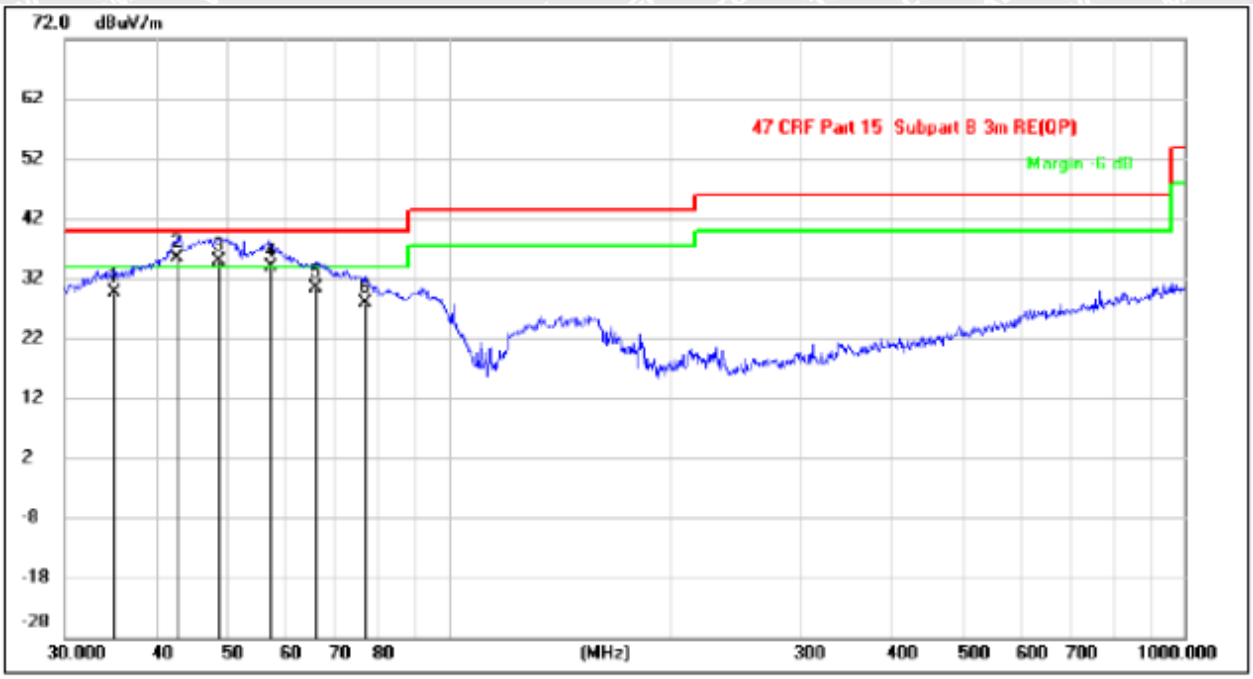
Corr.Factor=Antenna Factor + Cable Factor - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – Limit

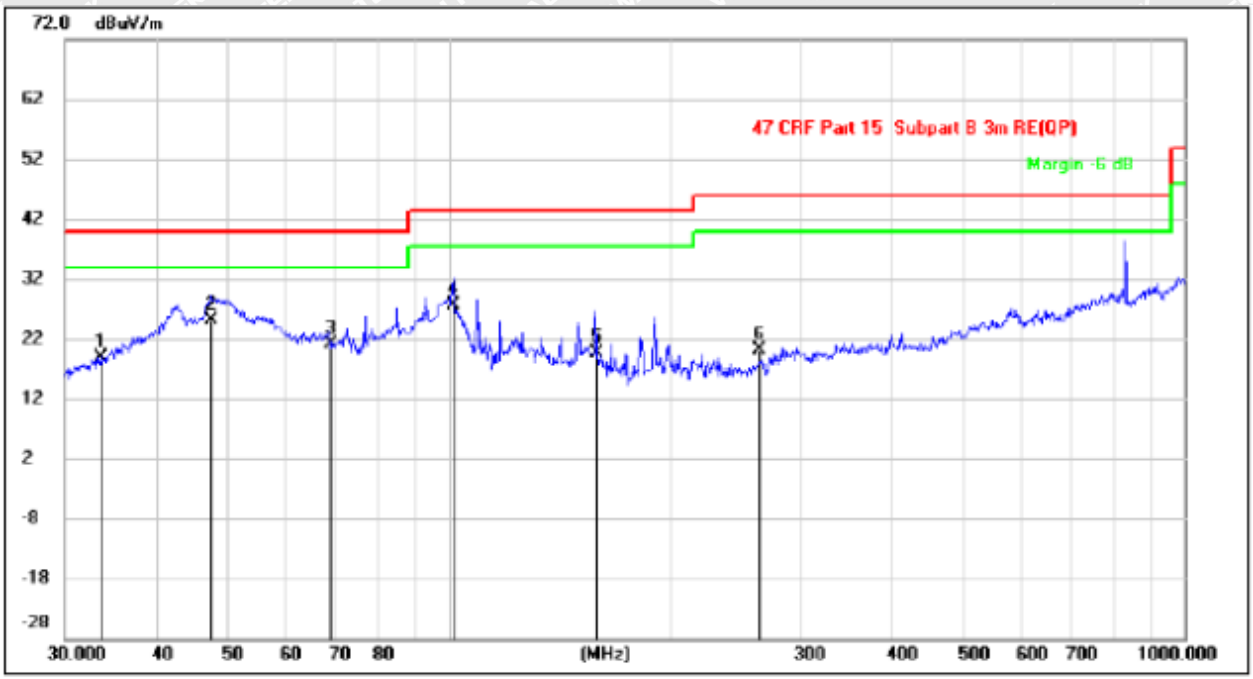
5.2.5 Radiated Emission Test Data

Vertical Polarization



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	35.1278	18.47	11.06	29.53	40.00	-10.47	QP
2	42.7496	23.03	12.32	35.35	40.00	-4.65	QP
3	48.6719	21.24	13.66	34.90	40.00	-5.10	QP
4	56.9911	21.32	12.58	33.90	40.00	-6.10	QP
5	66.0340	19.81	10.52	30.33	40.00	-9.67	QP
6	76.7806	19.75	8.24	27.99	40.00	-12.01	QP

Horizontal Polarization



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	33.5623	7.37	11.40	18.77	40.00	-21.23	QP
2	47.4917	10.58	14.50	25.08	40.00	-14.92	QP
3	68.8721	10.17	11.05	21.22	40.00	-18.78	QP
4	101.2883	14.74	12.95	27.69	43.50	-15.81	QP
5	158.1123	10.84	8.67	19.51	43.50	-23.99	QP
6	263.8190	7.23	12.99	20.22	46.00	-25.78	QP

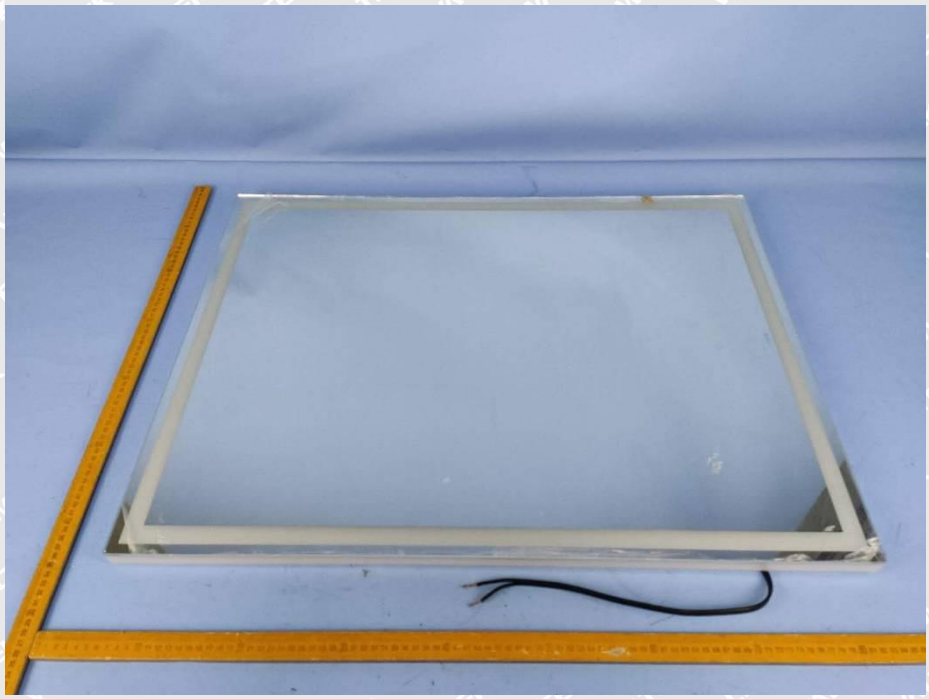
6 Photographs – Test Setup

6.1 Photograph – Conducted Emission Test Setup

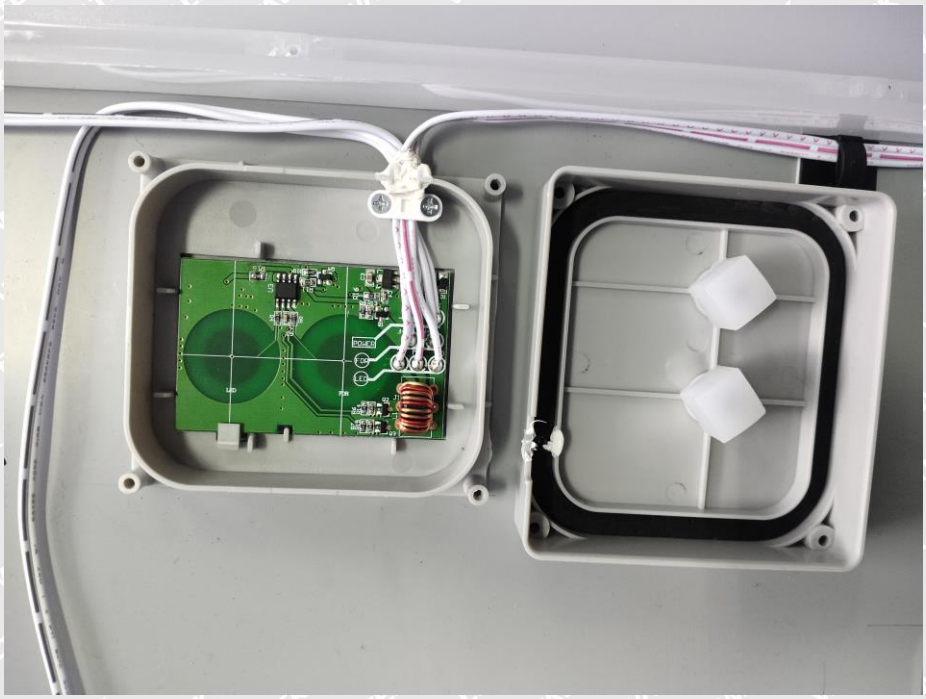
6.2 Photograph – Radiated Emission Test Setup

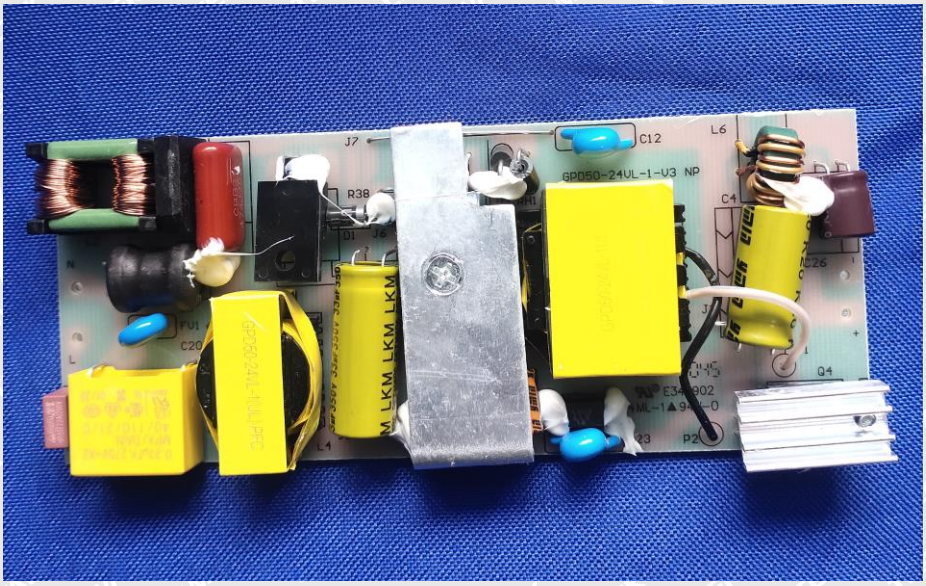
7 Photographs – Constructional Details

7.1 EUT – External Photos



7.2 EUT – Internal Photos

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C12
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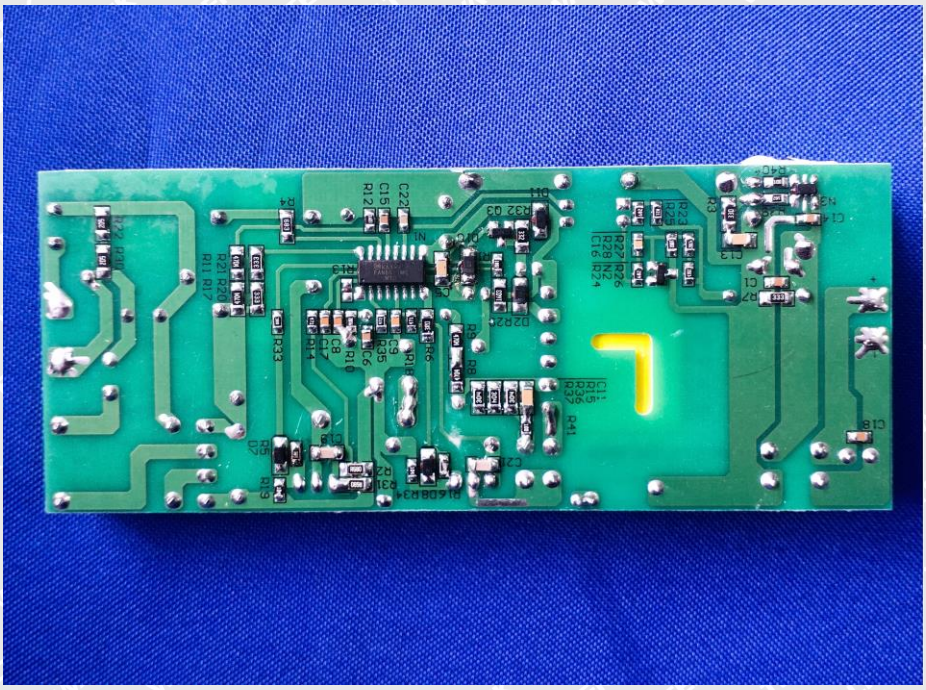
J7
R38
C4
Q4
P2



====== End of Report ======