Report No.: ET-22070602E01

TEST REPORT

Applicant:	DONGGUAN YI RUI ELECTRONIC TECHNOLOGY CO.,LTD
Address of Applicant:	ROOM NO. 202, BUILDING 2, NO. 11, NIULING ROAD,CHANGPING TOWN, DONGGUAN CITY, CHINA
Manufacturer/Factory:	DONGGUAN YI RUI ELECTRONIC TECHNOLOGY CO.,LTD
Address of Manufacturer/Factory:	ROOM NO. 202, BUILDING 2, NO. 11, NIULING ROAD,CHANGPING TOWN, DONGGUAN CITY, CHINA
Product Name:	Wireless charging desk lamp
Model No.:	WXCTD-3-15W,WXCTD-3-5W
Trade Mark:	N/A
FCC ID:	2A6HU-WXCTD-3-15W
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C
Date of Test:	Jul.20,2022- Aug.03,2022
Date of report issued:	Aug.04,2022
Test Result :	PASS

Remark:

* In the configuration tested, the EUT complied with the standards specified above.

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

Prepared By

Shenzhen ETR Standard Technology Co., Ltd.

Address: No.103, No.10, Phase I, Zone 3, Xinxing Industrial Park, Xinhe, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Compiled by:	Reviewed by:	Approved by:
Project Engineer	Project Manager	Authorized Signature

Report Revision History		
Report No.	Description	Issue Date
ET-22070602E01	Original	Aug.04,2022

Contents

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1 Test Summary

Test Item	Section in CFR 47	Result	Test by
Antenna requirement	15.203	Pass	/
AC Power Line Conducted Emission	15.207	Pass	Qiao Li
Radiated Emission	15.209	Pass	Qiao Li
20dB Occupied Bandwidth	2.1049&15.215	Pass	Yvan Fan

Remarks:

1. *Pass: The EUT complies with the essential requirements in the standard.*
2. *Test according to ANSI C63.10:2013*

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz-30MHz	±3.98 dB	(1)
Radiated Emission	30MHz-1000MHz	±4.30 dB	(1)
Radiated Emission	1GHz-18GHz	±4.35 dB	(1)
Radiated Emission	18GHz-40GHz	±4.59 dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	± 3.02 dB	(1)
Occupied Channel Bandwidth	/	±0.55%	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

2 General Information

2.1 General Description of EUT

Product Name:	Wireless charging desk lamp
Model No.:	WXCTD-3-15W, WXCTD-3-5W
Model of difference:	Only the appearance color and output power are different, others are the same
Test model:	WXCTD-3-15W
Sample(s) Status:	Engineer sample
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	115~205KHz
Modulation type:	ASK
Antenna Type:	Induction coil Antenna
Power supply:	Input: DC 5V/9V/12V from adapter Output: wireless 15W

Operation channel list

Channel	Frequency
01	115KHz
02	126KHz
03	205KHz

Test channel

Channel	Frequency
02	126KHz
/	/
/	/

2.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode.

Test mode	Description
Mode 1	Wireless Charging(15W)

2.3 Description of Support Units

Equipment	Model	S/N	Manufacturer
Adapter	HW-050200CH0	/	HUAWEI
Load	/	/	/

2.4 Deviation from Standards

None.

2.5 Abnormalities from Standard Conditions

None.

2.6 Test Facility

Test laboratory:	Shenzhen ETR Standard Technology Co., Ltd.
CNAS Registration Number:	L11864
A2LA Certificate Number:	6640.01
FCC Designation Number:	CN1326
FCC Test Firm Registration:	183064

2.7 Test Location

All tests were performed at:

Laboratory location:	No.103, No.10, Phase I, Zone 3, Xinxing Industrial Park, Xinhe, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	+86 755 85259392
Fax:	+86 755 27219460

2.8 Additional Instructions

Test Software	/
Power level setup	Default

3 Test Instruments list

Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESPI7	100605	2022.3.09	2023.3.08
2	EMI Test Receiver	Rohde&schwarz	ESCI3	102696	2022.3.09	2023.3.08
3	Broadband antenna	schwarabeck	VULB9168	1064	2022.3.11	2024.3.10
4	amplifier	EMtrace	RP01A	50117	2022.3.09	2023.3.08
5	Artificial power network	schwarabeck	NSLK8127	8127483	2022.3.09	2023.3.08
6	Artificial power network	ETS	3186/2NM	1132	2022.3.09	2023.3.08
7	10dB attenuator	HUBER+SUHNER	10dB	/	2022.3.09	2023.3.08
8	Spectrum analyzer	KEYSIGHT	N9020A	MY55370280	2022.3.09	2023.3.08
9	loop antenna	schwarabeck	FMZB 1519 B	FMZB 1519 B	2022.3.11	2024.3.10

Note: the calibration interval of the above test instruments is 12 or 24 months and the calibrations are traceable to international system unit (SI).

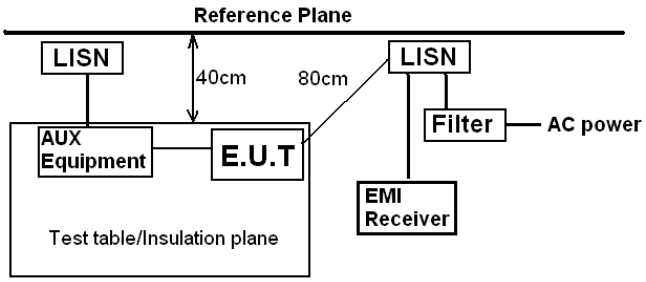
Software Name	Manufacturer	Model	Version
Conducted test software	EZ-EMC	Farad	Ver.EMC-CON 3A1.1
Radiated test software	EZ-EMC	Farad	Ver.FA-03A2 RE

4 Test results and Measurement Data

4.1 Antenna requirement

Standard requirement:
FCC part 15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
RSS-Gen 6.8: The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list. For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).
EUT Antenna:
The EUT antenna is Coil Antenna. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used.

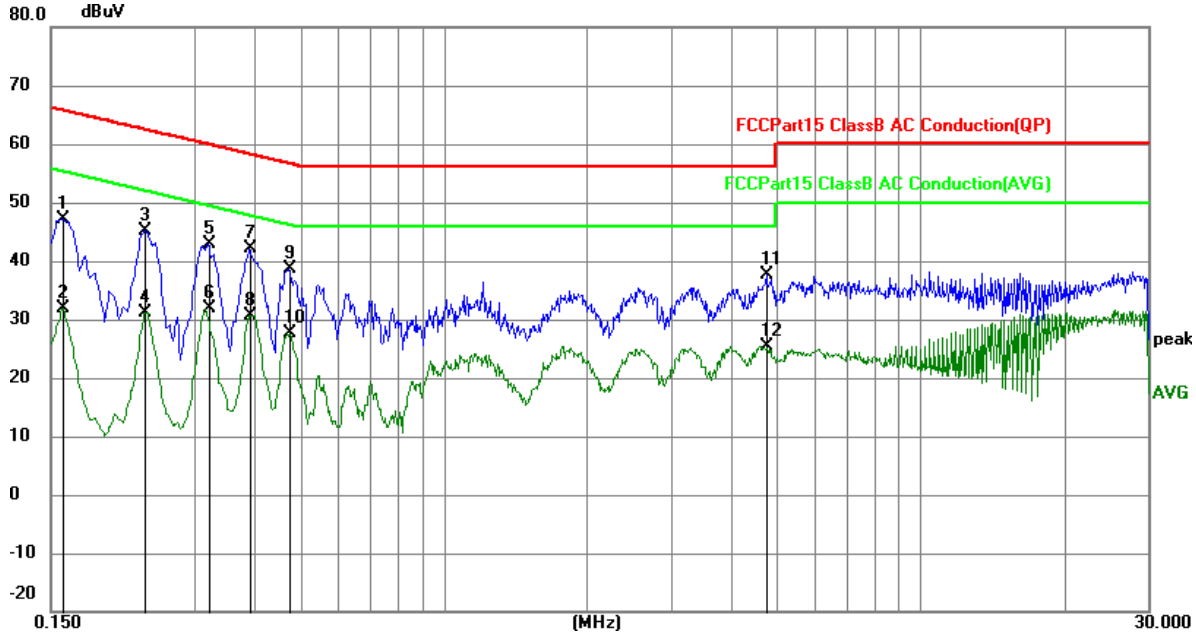
4.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207,
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test environment:	Temp.: 25.6 °C / Humid.: 55% / Press.: 1012mbar
Test voltage:	AC 120V/60Hz

Note: Output 5V/9V/12V modes has tested, the worst mode (output 12V) data show in report.

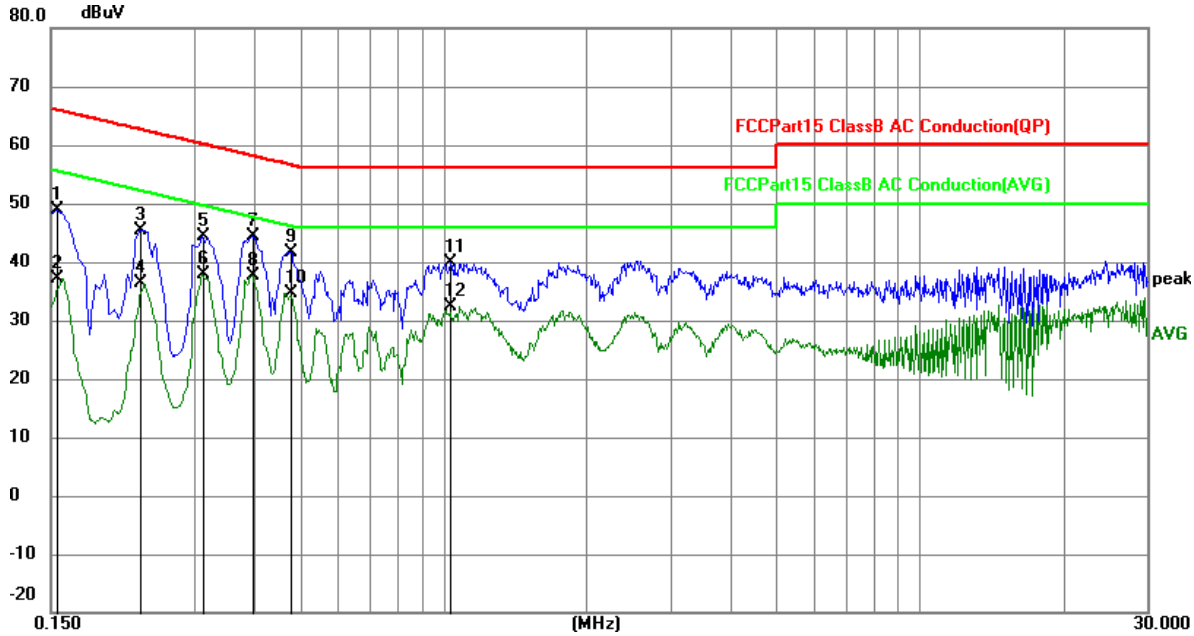
Measurement data

Line:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1590	34.72	12.48	47.20	65.52	-18.32	QP
2	0.1590	19.51	12.48	31.99	55.52	-23.53	AVG
3	0.2355	32.78	12.43	45.21	62.25	-17.04	QP
4	0.2355	18.70	12.43	31.13	52.25	-21.12	AVG
5	0.3209	30.45	12.39	42.84	59.68	-16.84	QP
6	0.3209	19.43	12.39	31.82	49.68	-17.86	AVG
7	0.3930	29.71	12.38	42.09	58.00	-15.91	QP
8	0.3930	18.31	12.38	30.69	48.00	-17.31	AVG
9	0.4740	26.20	12.36	38.56	56.44	-17.88	QP
10	0.4740	15.30	12.36	27.66	46.44	-18.78	AVG
11	4.7715	25.17	12.34	37.51	56.00	-18.49	QP
12	4.7715	13.12	12.34	25.46	46.00	-20.54	AVG

Neutral:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1545	36.41	12.49	48.90	65.75	-16.85	QP
2	0.1545	24.56	12.49	37.05	55.75	-18.70	AVG
3	0.2310	33.02	12.44	45.46	62.41	-16.95	QP
4	0.2310	23.90	12.44	36.34	52.41	-16.07	AVG
5	0.3120	32.08	12.39	44.47	59.92	-15.45	QP
6	0.3120	25.49	12.39	37.88	49.92	-12.04	AVG
7	0.3975	31.92	12.38	44.30	57.91	-13.61	QP
8	0.3975	25.27	12.38	37.65	47.91	-10.26	AVG
9	0.4785	29.35	12.36	41.71	56.37	-14.66	QP
10	0.4785	22.34	12.36	34.70	46.37	-11.67	AVG
11	1.0365	27.53	12.29	39.82	56.00	-16.18	QP
12	1.0365	20.01	12.29	32.30	46.00	-13.70	AVG

Notes:

1. *An initial pre-scan was performed on the line and neutral lines with peak detector.*
2. *Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.*
3. *Final Level =Receiver Read level + LISN Factor + Cable Loss*
4. *If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.*

4.3 Radiated Emission measurement

Test Requirement:	FCC Part15 C Section 15.209 & 15.249 (a) &(d). RSS-210 B10(a)& RSS-210 B10(b)& RSS-Gen Clause 8.9&8.10
Test Method:	ANSI C63.10: 2013 & RSS-Gen
Test Frequency Range:	9kHz to 30MHz
Test site:	Measurement Distance: 3m

Receiver setup:

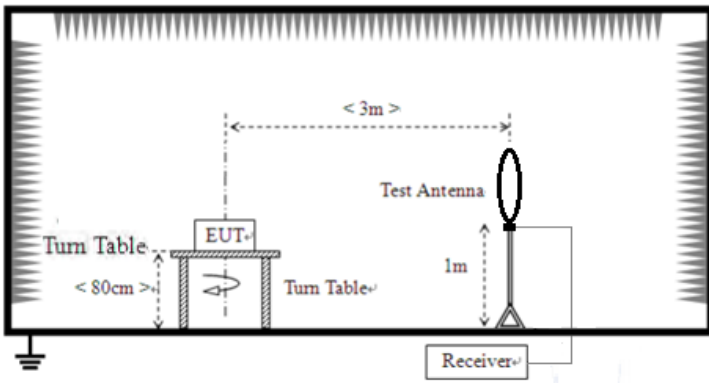
Frequency	Detector	RBW	VBW	Remark
9kHz-150kHz	Quasi-peak	200Hz	300Hz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	10kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value

Limit:

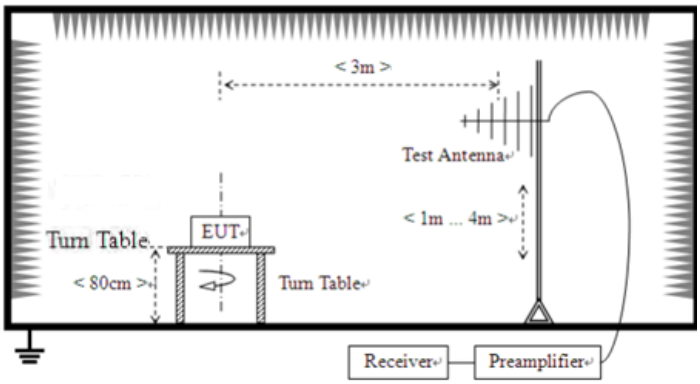
Frequency	Limit (uV/m)	Remark
0.009MHz-0.490MHz	2400/F(kHz) @300m	Quasi-peak Value
0.490MHz-1.705MHz	24000/F(kHz) @30m	Quasi-peak Value
1.705MHz-30.0MHz	30 @30m	Quasi-peak Value
30MHz-88MHz	100 @3m	Quasi-peak Value
88MHz-216MHz	150 @3m	Quasi-peak Value
216MHz-960MHz	200 @3m	Quasi-peak Value
960MHz-1GHz	500 @3m	Quasi-peak Value

Test setup:

For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to1GHz



Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.					
Test Instruments:	Refer to section 3.0 for details					
Test mode:	Refer to section 2.2 for details					
Test environment:	Temp.:	25.3 °C	Humid.:	55%	Press.:	1012mbar
Test voltage:	DC 12 V					
Test results:	Pass					

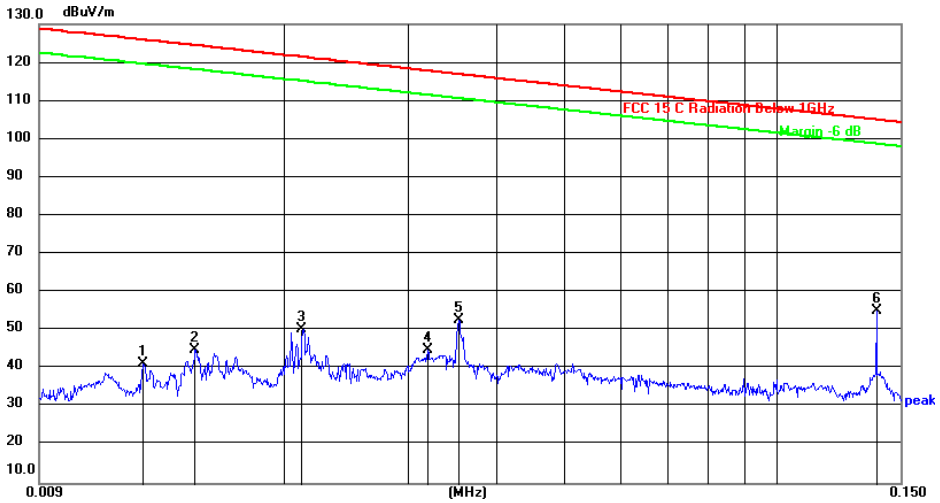
■ **Measurement data:**

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80

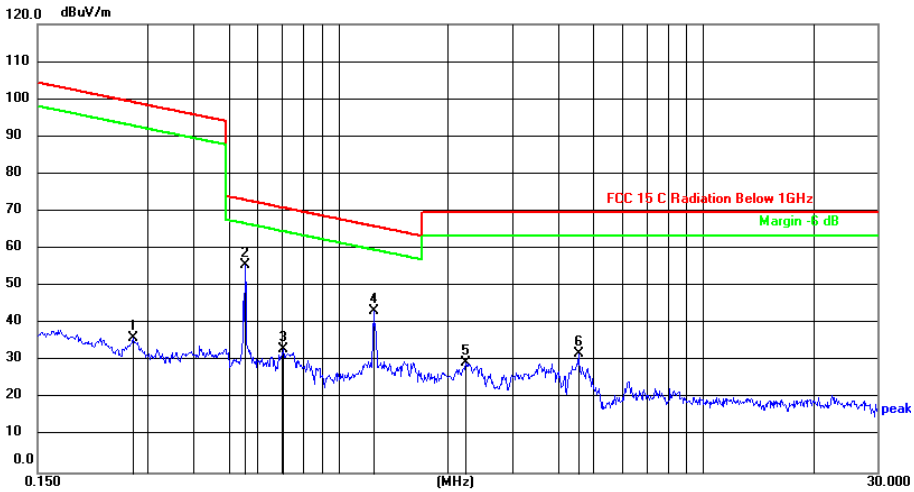
Limit dBuV/m @3m = Limit dBuV/m @30m + 40

Output 5V/9V/12V modes has tested, the worst mode (output 12V) data show in report

Below 30MHz



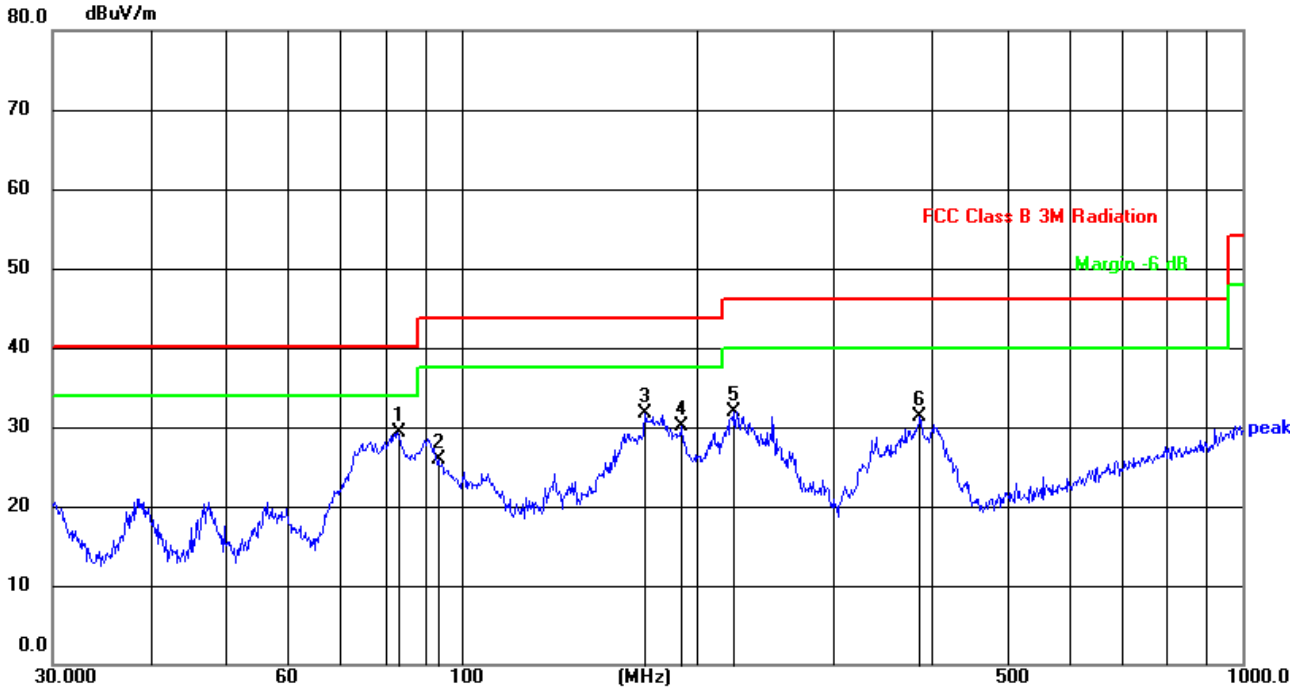
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0126	67.19	-25.88	41.31	125.60	-84.29	peak
2	0.0149	70.81	-25.88	44.93	124.14	-79.21	peak
3	0.0212	76.26	-25.88	50.38	121.08	-70.70	peak
4	0.0320	70.91	-25.88	45.03	117.50	-72.47	peak
5	0.0354	78.63	-25.88	52.75	116.62	-63.87	peak
6	0.1386	81.04	-25.92	55.12	104.77	-49.65	peak



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.2741	16.33	19.79	36.12	98.85	-62.73	peak
2	0.5551	36.00	19.79	55.79	72.72	-16.93	peak
3	0.7084	13.30	19.95	33.25	70.61	-37.36	peak
4	1.2479	23.20	20.20	43.40	65.70	-22.30	peak
5	2.2366	9.47	20.02	29.49	69.50	-40.01	peak
6	4.5494	11.61	20.22	31.83	69.50	-37.67	peak

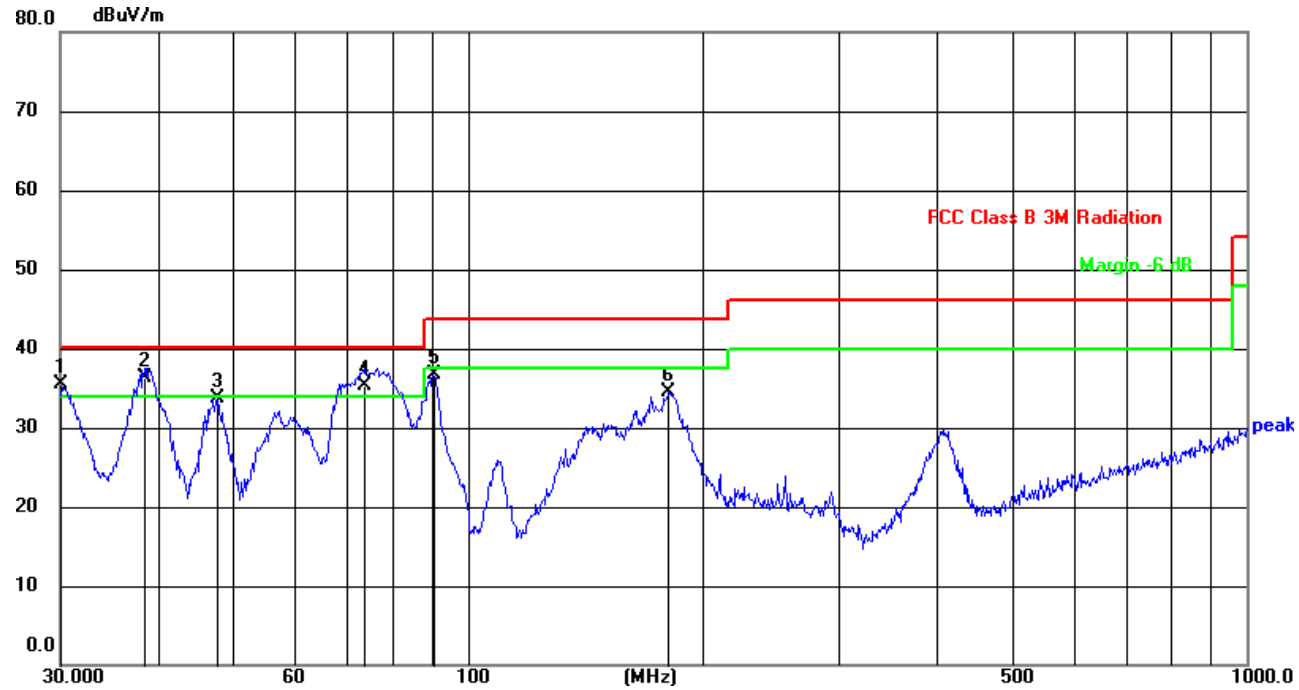
Below 1GHz

Horizontal:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	82.9385	49.67	-20.41	29.26	40.00	-10.74	QP
2	93.4402	46.02	-20.18	25.84	43.50	-17.66	QP
3	171.9946	49.82	-18.18	31.64	43.50	-11.86	QP
4	191.7450	48.25	-18.06	30.19	43.50	-13.31	QP
5	222.9502	50.27	-18.45	31.82	46.00	-14.18	QP
6	386.6338	48.07	-16.74	31.33	46.00	-14.67	QP

Vertical:

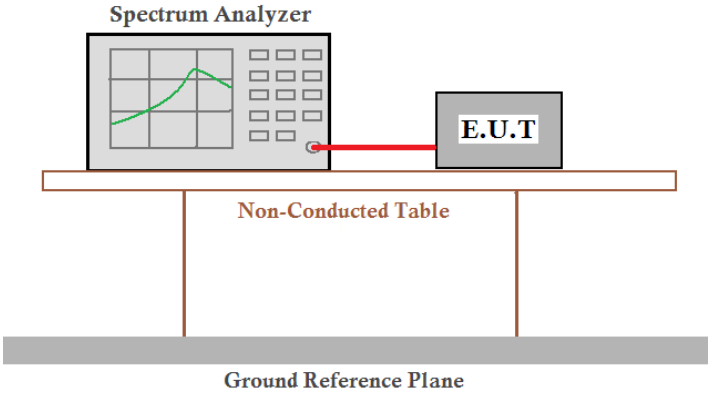


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.0000	56.99	-21.52	35.47	40.00	-4.53	QP
2	38.4809	57.05	-20.80	36.25	40.00	-3.75	QP
3	47.8260	54.70	-20.98	33.72	40.00	-6.28	QP
4	73.6170	55.74	-20.46	35.28	40.00	-4.72	QP
5	90.2205	56.76	-20.06	36.70	43.50	-6.80	QP
6	181.2834	52.83	-18.40	34.43	43.50	-9.07	QP

Remark:

1. *Final Level =Receiver Read level +Correction Factor(Antenna Factor + Cable Loss – Preamplifier Factor)*
2. *The emission levels of other frequencies are more than 20 dB below the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

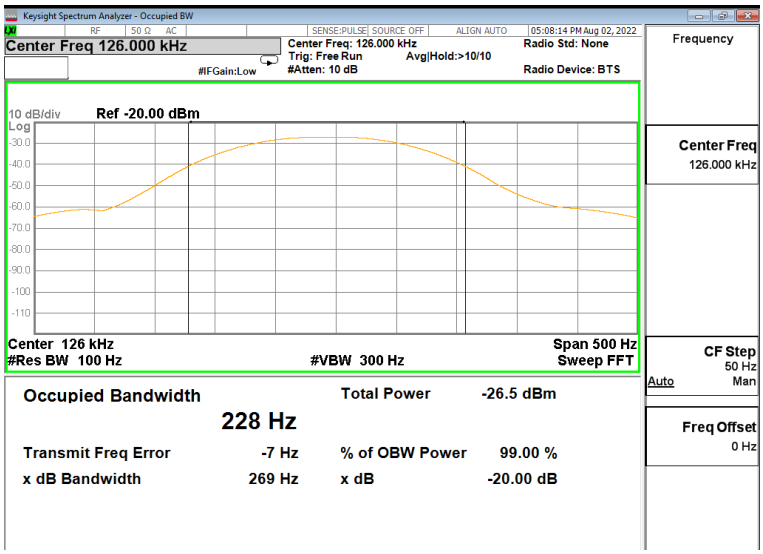
4.4 20dB Bandwidth

Test Requirement:	FCC Part15 C Section 15.215 RSS-Gen Section 6.7					
Test Method:	ANSI C63.10:2013 and RSS-Gen					
Limit:	Only appliance report					
Test setup:						
Test Instruments:	Refer to section 3.0 for details					
Test mode:	Refer to section 2.2 for details					
Test environment:	Temp.:	25.3 °C	Humid.:	55%	Press.:	1012mbar
Test voltage:	DC 12 V					
Test Mode:	TX					

Measurement Data

Test frequency (KHz)	20dB Bandwidth (KHz)
126.0	0.269

Test plot as follows:



5 Test Setup Photo

Reference to the **appendix I** for details.

6 EUT Constructional Details

Reference to the **appendix II** for details.

------End------