

TEST REPORT

Applicant: Aura Smart Air LTD
Address of Applicant: Ha-Aliya ha-Shinya St 43, Azor, Israel
Manufacturer: Aura Smart Air LTD
Address of Manufacturer: Ha-Aliya ha-Shinya St 43, Azor, Israel
Equipment Under Test (EUT)

Product Name: All in one smart air management system with unique sensors, air purifying abilities and connectives

Model No.: Aura Air

Trade Mark: Aura Air

Applicable standards: AS/NZS 61000-6-3:2007+A1:2011

Date of sample receipt: May 07, 2020

Date of Test: May 08-22, 2020

Date of report issued: May 22, 2020

Test Result : PASS *

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

Authorized Signature:



Robinson Lo
Laboratory Manager



This 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

2 Version

Version No.	Date	Description
00	May 22, 2020	Original

Prepared By:



Date:

May 22, 2020

Project Engineer

Check By:



Date:

May 22, 2020

Reviewer

3 Contents

1	COVER PAGE.....	1
2	VERSION.....	2
3	CONTENTS.....	3
4	TEST SUMMARY.....	4
5	GENERAL INFORMATION.....	5
5.1	GENERAL DESCRIPTION OF EUT.....	5
5.2	TEST MODE AND TEST VOLTAGE.....	5
5.3	DESCRIPTION OF SUPPORT UNITS.....	5
5.4	DEVIATION FROM STANDARDS.....	5
5.5	ABNORMALITIES FROM STANDARD CONDITIONS.....	5
5.6	MONITORING OF EUT FOR ALL IMMUNITY TEST.....	5
5.7	TEST FACILITY.....	6
5.8	TEST LOCATION.....	6
6	TEST INSTRUMENTS LIST.....	7
7	EMISSION TEST RESULTS.....	9
7.1	RADIATED EMISSION.....	9
7.2	CONDUCTED EMISSION.....	12
8	TEST SETUP PHOTO.....	15
9	EUT CONSTRUCTIONAL DETAILS.....	15

4 Test Summary

Test item	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission	AS/NZS 61000-6-3	CISPR 16-2-3	Table 1 of EN61000-6-3	Pass
Conducted Emission	AS/NZS 61000-6-3	CISPR 16-2-1	Table 2 of EN61000-6-3	Pass

Remark:

1. *Pass: Comply with the essential requirements in the standard.*
2. *N/A: not applicable*
3. *U_T : the nominal supply voltage;*

5 General Information

5.1 General Description of EUT

Product Name:	All in one smart air management system with unique sensors, air purifying abilities and connectives
Model No.:	Aura Air
Power Supply:	Class 2 Power Supply MODEL: A653-1205000I INPUT: AC 100-240V, 50/60Hz, OUTPUT: DC 12V, 5A, 60W

5.2 Test mode and Test voltage

Test mode:	
On mode	Power on and keep the EUT work on air purifying status
Test voltage:	
AC 230V/50Hz	

5.3 Description of Support Units

N/A

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Monitoring of EUT for All Immunity Test

Visual:	Monitor the status of the EUT.
Audio:	Monitor the sound of the EUT.

5.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen 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 files. Registration 381383.

- **IC —Registration No.: 9079A**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A.

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0.

5.8 Test Location

RS test was performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Address: No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

All other tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

6 Test Instruments List

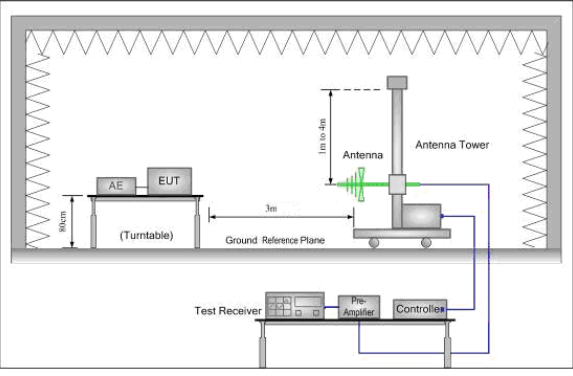
Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 26 2019	June. 25 2020
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 26 2019	June. 25 2020
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 26 2019	June. 25 2020
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 26 2019	June. 25 2020
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 26 2019	June. 25 2020
9	Coaxial Cable	GTS	N/A	GTS211	June. 26 2019	June. 25 2020
10	Coaxial cable	GTS	N/A	GTS210	June. 26 2019	June. 25 2020
11	Coaxial Cable	GTS	N/A	GTS212	June. 26 2019	June. 25 2020
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 26 2019	June. 25 2020
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 26 2019	June. 25 2020
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 26 2019	June. 25 2020
15	Band filter	Amindeon	82346	GTS219	June. 26 2019	June. 25 2020
16	Power Meter	Anritsu	ML2495A	GTS540	June. 26 2019	June. 25 2020
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 26 2019	June. 25 2020
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 26 2019	June. 25 2020
19	Splitter	Agilent	11636B	GTS237	June. 26 2019	June. 25 2020
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 26 2019	June. 25 2020
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 19 2019	Oct. 18 2020
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 19 2019	Oct. 18 2020
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 19 2019	Oct. 18 2020
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 26 2019	June. 25 2020

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2019	May.14 2022
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 26 2019	June. 25 2020
4	ENV216 2-L-V-NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	June. 26 2019	June. 25 2020
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 26 2019	June. 25 2020
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	June. 26 2019	June. 25 2020
9	ISN	SCHWARZBECK	NTFM 8158	GTD565	June. 26 2019	June. 25 2020

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 26 2019	June. 25 2020
2	Barometer	ChangChun	DYM3	GTS255	June. 26 2019	June. 25 2020

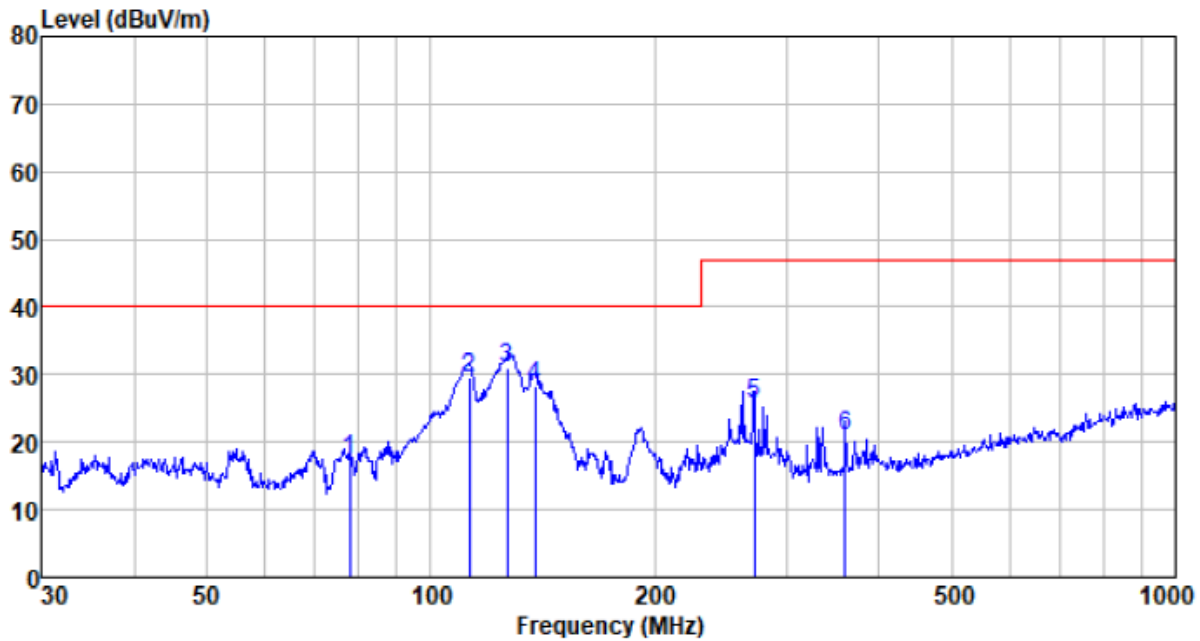
7 Emission Test Results

7.1 Radiated Emission

Test Requirement:	AS/NZS 61000-6-3													
Test Method:	CISPR 16-2-3													
Test Frequency Range:	30MHz to1GHz													
Class / Severity:	Class B													
Test site:	Measurement Distance: 3m													
Receiver setup:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Detector</th> <th>RBW</th> <th>VBW</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>30MHz-1GHz</td> <td>Quasi-peak</td> <td>120KHz</td> <td>300KHz</td> <td>Quasi-peak</td> </tr> </tbody> </table>				Frequency	Detector	RBW	VBW	Value	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
Frequency	Detector	RBW	VBW	Value										
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak										
Limit:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Limit (dBμV/m @3m)</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>30MHz-230MHz</td> <td>40.00</td> <td>Quasi-peak</td> </tr> <tr> <td>230MHz-1GHz</td> <td>47.00</td> <td>Quasi-peak</td> </tr> </tbody> </table>				Frequency	Limit (dB μ V/m @3m)	Value	30MHz-230MHz	40.00	Quasi-peak	230MHz-1GHz	47.00	Quasi-peak	
Frequency	Limit (dB μ V/m @3m)	Value												
30MHz-230MHz	40.00	Quasi-peak												
230MHz-1GHz	47.00	Quasi-peak												
Test setup:														
Test Procedure:	<ol style="list-style-type: none"> 1. The radiated emissions test was conducted in a semi-anechoic chamber. 2. The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation. 3. Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT. 4. The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization. 													
Test environment:	Temp.:	25 °C	Humid.:	52%										
	Press.:	1 012mbar												
Measurement Record:	Uncertainty: ± 3.9679 dB													
Test Instruments:	Refer to section 6 for details													
Test mode:	Refer to section 5.2 for details													
Test results:	Pass													

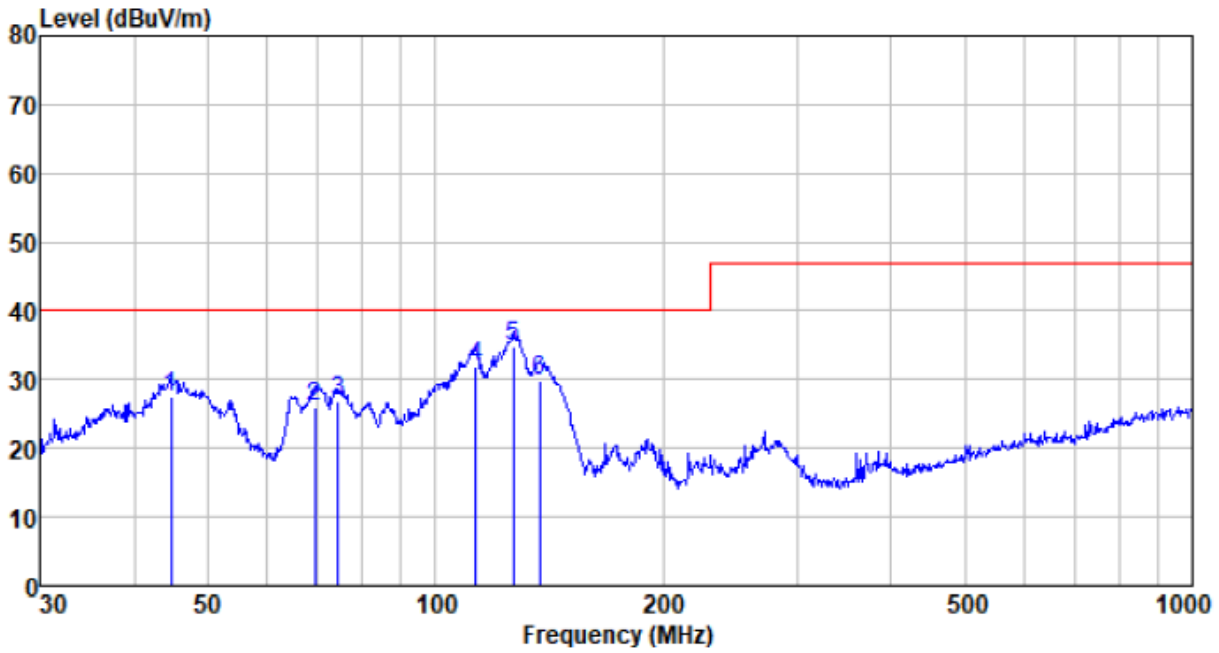
Measurement Data

Test mode:	On mode	Antenna Polarity:	Horizontal
------------	---------	-------------------	------------



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
77.865	45.65	7.42	1.01	36.53	17.55	40.00	-22.45	QP
112.524	54.47	10.68	1.30	36.82	29.63	40.00	-10.37	QP
126.772	57.96	8.58	1.41	36.93	31.02	40.00	-8.98	QP
137.903	56.28	7.59	1.49	37.00	28.36	40.00	-11.64	QP
272.278	47.92	12.84	2.24	37.40	25.60	47.00	-21.40	QP
360.448	41.07	14.70	2.67	37.48	20.96	47.00	-26.04	QP

Test mode:	On mode	Antenna Polarity:	Vertical
------------	---------	-------------------	----------



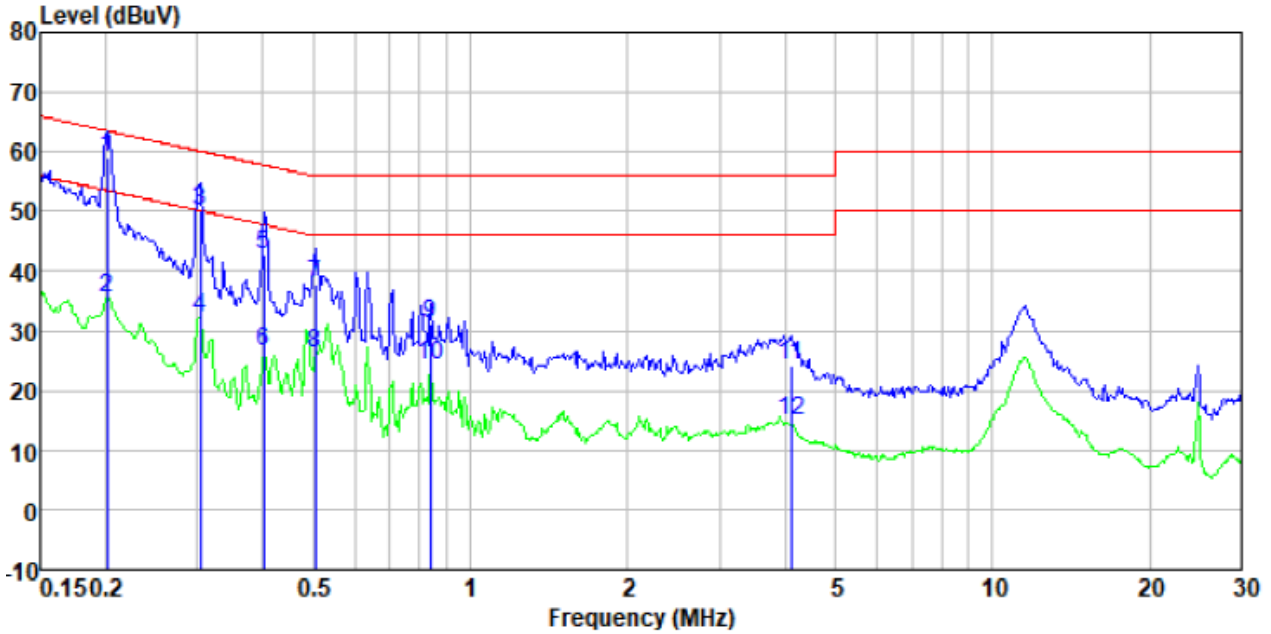
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
44.743	50.35	12.25	0.72	35.92	27.40	40.00	-12.60	QP
69.357	53.83	7.73	0.94	36.43	26.07	40.00	-13.93	QP
74.396	54.81	7.46	0.98	36.49	26.76	40.00	-13.24	QP
112.920	56.86	10.59	1.30	36.83	31.92	40.00	-8.08	QP
126.772	61.70	8.58	1.41	36.93	34.76	40.00	-5.24	QP
137.420	57.70	7.64	1.49	37.00	29.83	40.00	-10.17	QP

7.2 Conducted Emission

Test Requirement:	AS/NZS 61000-6-3														
Test Method:	CISPR 16-2-1														
Test Frequency Range:	150kHz to 30MHz														
Class / Severity:	Class B														
Receiver setup:	RBW=9kHz, VBW=30kHz														
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBμV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> <p>* Decreases with the logarithm of the frequency.</p>	Frequency range (MHz)	Limit (dB μ V)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dB μ V)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test setup:	<p>Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
Test procedure:	<ol style="list-style-type: none"> 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(LISN). The provide 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 refers 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 EN55022 Class B on conducted measurement. 														
Test environment:	Temp.: 24 °C Humid.: 51% Press.: 1012mbar														
Measurement Record:	Uncertainty: ± 3.44 dB														
Test Instruments:	Refer to section 6 for details														
Test mode:	Refer to section 5.2 for details														
Test results:	Pass														

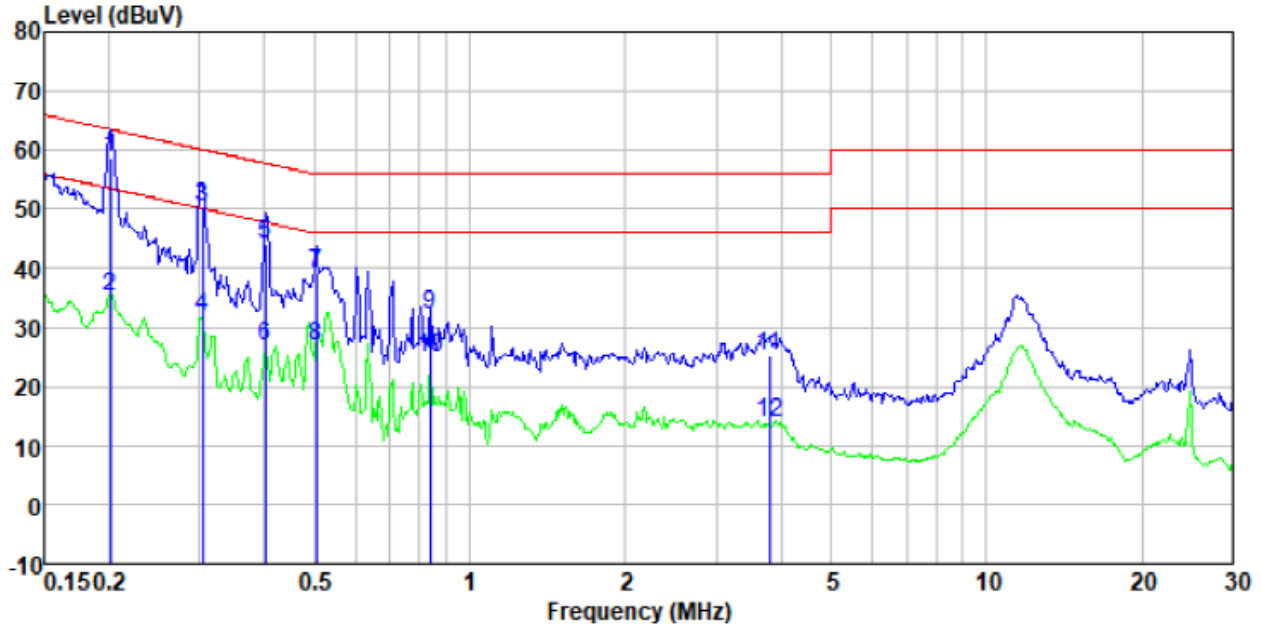
Measurement Data

Test mode:	On mode	Phase Polarity:	Line
------------	---------	-----------------	------



Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.20	38.40	20.40	0.11	58.91	63.54	-4.63	QP
0.20	14.93	20.40	0.11	35.44	53.54	-18.10	Average
0.30	29.65	20.40	0.10	50.15	60.15	-10.00	QP
0.30	11.65	20.40	0.10	32.15	50.15	-18.00	Average
0.40	22.45	20.35	0.11	42.91	57.81	-14.90	QP
0.40	6.23	20.35	0.11	26.69	47.81	-21.12	Average
0.50	17.31	20.31	0.11	37.73	56.00	-18.27	QP
0.50	5.92	20.31	0.11	26.34	46.00	-19.66	Average
0.84	10.88	20.23	0.14	31.25	56.00	-24.75	QP
0.84	3.81	20.23	0.14	24.18	46.00	-21.82	Average
4.11	3.98	20.20	0.18	24.36	56.00	-31.64	QP
4.11	-5.44	20.20	0.18	14.94	46.00	-31.06	Average

Test mode:	On mode	Phase Polarity:	Neutral
------------	---------	-----------------	---------



Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.20	38.27	20.40	0.11	58.78	63.54	-4.76	QP
0.20	14.79	20.40	0.11	35.30	53.54	-18.24	Average
0.30	29.83	20.40	0.10	50.33	60.15	-9.82	QP
0.30	11.50	20.40	0.10	32.00	50.15	-18.15	Average
0.40	23.76	20.35	0.11	44.22	57.81	-13.59	QP
0.40	6.55	20.35	0.11	27.01	47.81	-20.80	Average
0.50	18.69	20.31	0.11	39.11	56.00	-16.89	QP
0.50	6.42	20.31	0.11	26.84	46.00	-19.16	Average
0.84	11.85	20.23	0.14	32.22	56.00	-23.78	QP
0.84	4.53	20.23	0.14	24.90	46.00	-21.10	Average
3.80	4.70	20.20	0.18	25.08	56.00	-30.92	QP
3.80	-6.59	20.20	0.18	13.79	46.00	-32.21	Average

Notes:

1. An initial pre-scan was performed on the live 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.

8 Test Setup Photo

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

9 EUT Constructional Details

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

-----End-----