

ATC



# TEST REPORT

Applicant Name : Axtel sp. z o.o. sp. k.  
Address : Woloska 16 st. Warsaw Poland 02-675  
Report Number : RA221116-54358E-EM  
FCC ID: 2A9UU-PRXDM

## Test Standard (s)

FCC PART 15B

## Sample Description

Product Type: AXP-BASE-X3SE  
Model No.: Axtel Prime X3 Duo Base  
Trade Mark: Axtel  
Date Received: 2022-12-12  
Date of Test: 2023-04-07  
Report Date: 2023-04-10

Test Result:	Pass*
--------------	-------

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

## Prepared and Checked By:

Lipa Wu  
EMC Engineer

## Approved By:

Candy Li  
EMC Engineer

**Note:** This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk “\*”.

Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk “\*”. Customer model name, addresses, names, trademarks etc. are not considered data. This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

## Shenzhen Accurate Technology Co., Ltd.

1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: +86 755-26503290

Fax: +86 755-26503290

Web: [www.atc-lab.com](http://www.atc-lab.com)

## **TABLE OF CONTENTS**

<b>DOCUMENT REVISION HISTORY .....</b>	<b>3</b>
<b>GENERAL INFORMATION.....</b>	<b>4</b>
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) .....	4
OBJECTIVE .....	4
TEST METHODOLOGY .....	4
MEASUREMENT UNCERTAINTY.....	5
TEST FACILITY .....	5
<b>SYSTEM TEST CONFIGURATION.....</b>	<b>6</b>
JUSTIFICATION .....	6
EUT EXERCISE SOFTWARE .....	6
SPECIAL ACCESSORIES.....	6
EQUIPMENT MODIFICATIONS .....	6
SUPPORT EQUIPMENT LIST AND DETAILS .....	6
BLOCK DIAGRAM OF RADIATED TEST SETUP.....	7
<b>SUMMARY OF TEST RESULTS .....</b>	<b>9</b>
<b>TEST EQUIPMENT LIST .....</b>	<b>10</b>
<b>FCC §15.107 – CONDUCTED EMISSIONS .....</b>	<b>11</b>
APPLICABLE STANDARD .....	11
EUT SETUP .....	11
EMI TEST RECEIVER SETUP.....	11
TEST PROCEDURE .....	12
FACTOR & OVER LIMIT CALCULATION.....	12
TEST DATA .....	12
<b>FCC §15.109 - RADIATED EMISSIONS .....</b>	<b>21</b>
APPLICABLE STANDARD .....	21
EUT SETUP .....	21
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP .....	22
TEST PROCEDURE .....	22
FACTOR & OVER LIMIT CALCULATION.....	22
TEST DATA .....	22

## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RA221116-54358E-EM	Original Report	2023-04-10

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Product	AXP-BASE-X3SE
Tested Model	Axtel Prime X3 Duo Base
Highest Operation Frequency	2480 MHz (It is provided by the applicant.)
Voltage Range	DC 12V from adapter
Sample number	RA221116-54358E-EM-S1 (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter Information	Mode: MLP-A251201000DP Input: 100-240V 50/60Hz, 0.4A max Output: 12V=1A

### Objective

This report is in accordance with Part 2-Subpart J, and Part 15-Subparts A and B of the Federal Communication Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15, Class B device.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## Measurement Uncertainty

Parameter	Uncertainty	
AC Power Lines Conducted Emissions	2.74dB	
Emissions, Radiated	9kHz - 30MHz	2.06dB
	30MHz - 1GHz	5.08dB
	1GHz - 18GHz	4.96dB
Temperature	1°C	
Humidity	6%	
Supply voltages	0.4%	

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189.

Accredited by American Association for Laboratory Accreditation (A2LA). The Certificate Number is 4297.01

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0016. The Registration Number is 30241.

## SYSTEM TEST CONFIGURATION

### Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

Test mode 1: Charging for headset

Test mode 2: Playing via Phone

Test mode 3: Playing via EHS

Test mode 4: Playing via PC

### EUT Exercise Software

No exercise software.

### Special Accessories

No special accessory was used.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

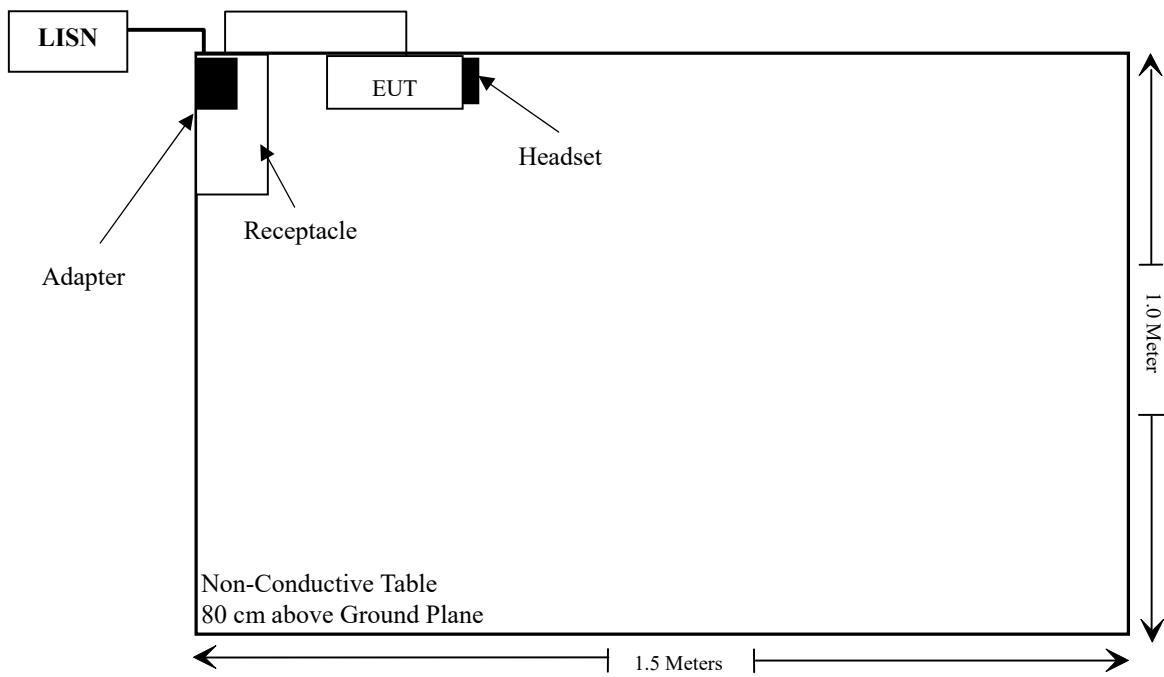
Manufacturer	Description	Model	Serial Number
Redmi	Phone	K20Pro	Unknown
Jabra	Mechanical Hook Switch Lifter	GN1000	Unknown
DELL	Laptop	Latitude E7450	84205952149
GRANDSTREAM	IP Phone	GXP1628	Unknown
Axtel	Headset	Prime X3 Mono	Unknown

### External I/O Cable

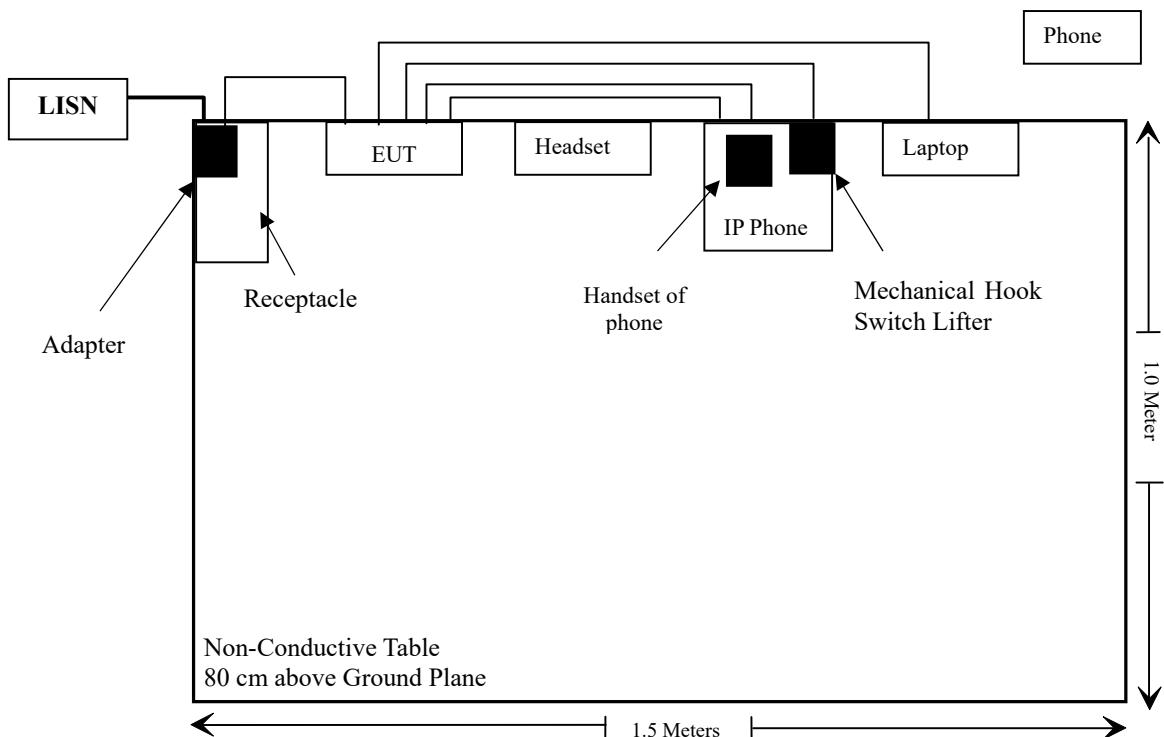
Cable Description	Length (m)	From Port	To Port
Un-shielding Detachable DC Cable	2.2	EUT	Adapter
Unshielded Un-detachable AC cable	1.2	Receptacle	LISN
Un-shielding Detachable Power Cable	1.2	Phone	LISN2
Un-shielding Detachable Micro USB/USB-A cable	0.6	EUT	Laptop
Un-shielding Detachable RJ45 cable	2	EUT	Mechanical Hook Switch Lifter
Un-shielding Detachable RJ9 cable	0.3	EUT	IP Phone
Un-shielding Detachable RJ9 cable	0.6	EUT	Handset of IP Phone

**Block Diagram of Radiated Test Setup****For Conducted Emission:**

For test mode 1:

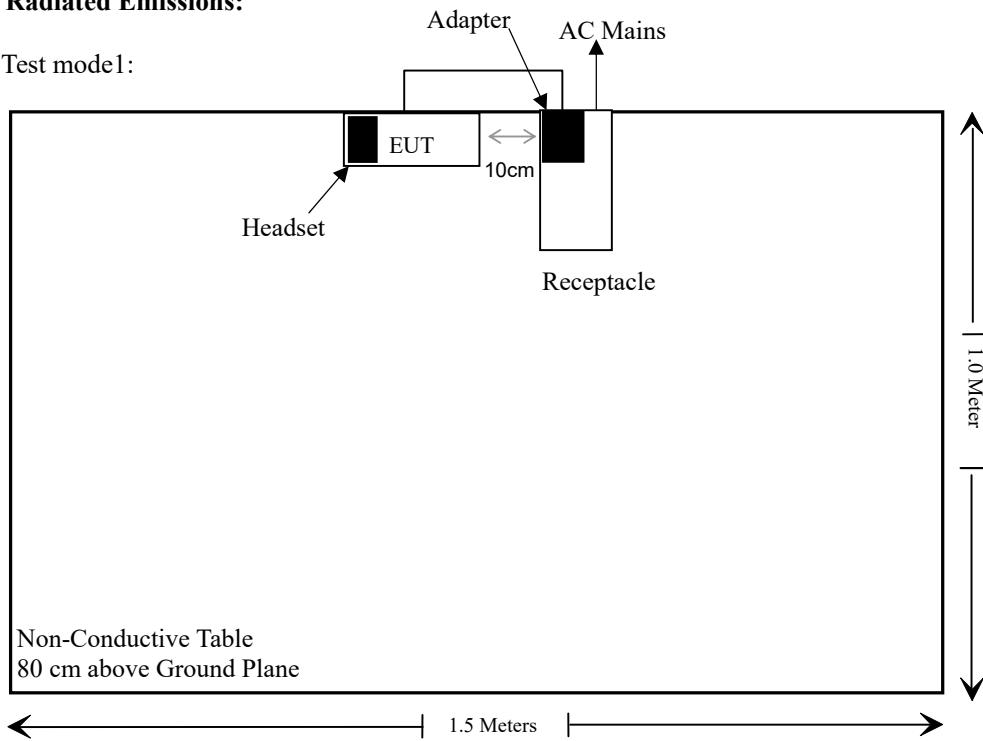


For Test mode 2/3/4:

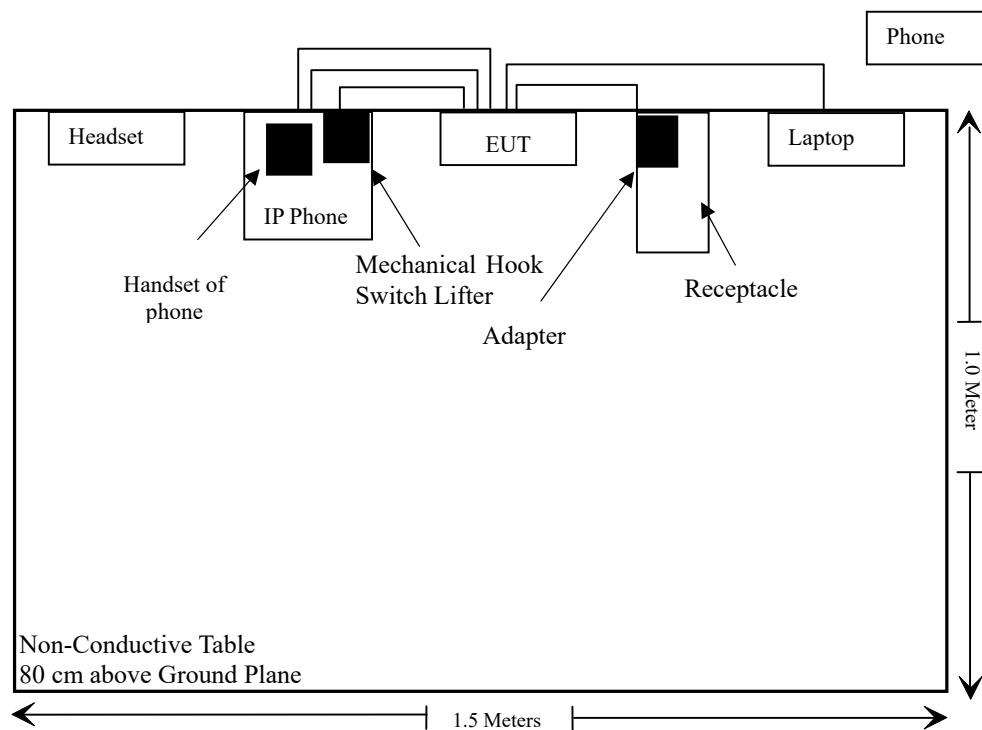


**For Radiated Emissions:**

For Test mode1:



For Test mode2/3/4:



**SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Results
§15.107	Conducted Emissions	Compliant
§15.109	Radiated Emissions	Compliant

## TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Conducted emission</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	100784	2022/11/25	2023/11/24
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2022/11/25	2023/11/24
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2022/12/07	2023/12/06
Unknown	RF Coaxial Cable	No.17	N0350	2022/11/25	2023/11/24
Conducted Emission Test Software: e3 191218 (V9)					
<b>Radiated Emissions Test</b>					
Rohde & Schwarz	Test Receiver	ESR	102725	2022/11/25	2023/11/24
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2022/11/25	2023/11/24
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24
Radiated Emission Test Software: e3 191218 (V9)					

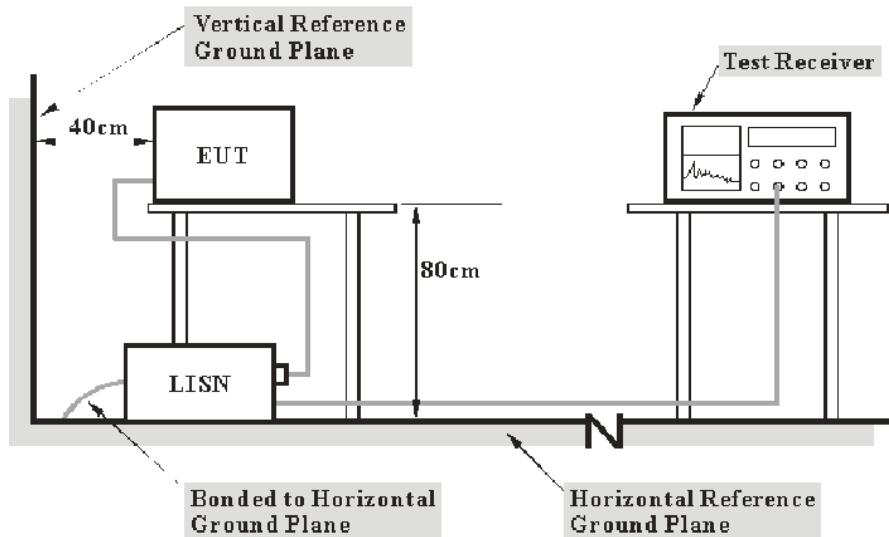
**\* Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## FCC §15.107 – CONDUCTED EMISSIONS

### Applicable Standard

According to FCC§15.107

### EUT Setup



Note: 1. Support units were connected to second LISN.  
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.4-2014. The related limit was specified in FCC Part 15.107 Class B.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

## Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Factor & Over Limit Calculation

The factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

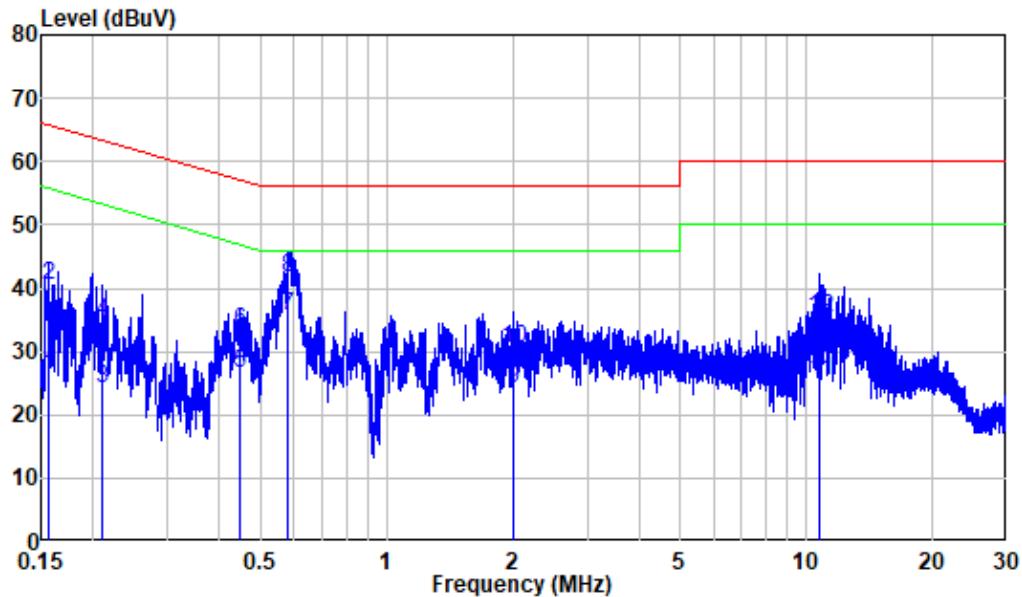
$$\text{Level} = \text{Read Level} + \text{Factor}$$

## Test Data

### Environmental Conditions

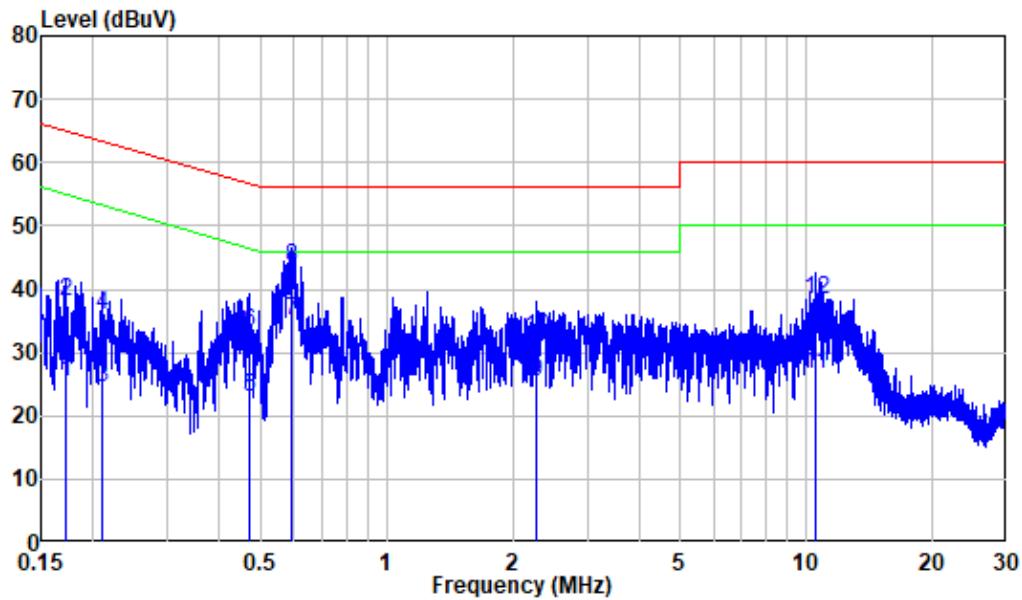
<b>Temperature:</b>	23 °C
<b>Relative Humidity:</b>	52 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Lipa Wu on 2023-04-07.*

**Test mode 1:****AC 120V/60Hz, Line:**

Site : Shielding Room  
Condition: Line  
Job No. : RA221116-54358E-EM  
Mode : Charging

Freq	Factor	Read		Limit		Over Limit	Remark
		MHz	dB	dBuV	dBuV		
1	0.156	9.80	16.32	26.12	55.65	-29.53	Average
2	0.156	9.80	30.51	40.31	65.65	-25.34	QP
3	0.210	9.80	14.34	24.14	53.19	-29.05	Average
4	0.210	9.80	24.92	34.72	63.19	-28.47	QP
5	0.446	9.80	16.82	26.62	46.94	-20.32	Average
6	0.446	9.80	23.34	33.14	56.94	-23.80	QP
7	0.581	9.81	25.80	35.61	46.00	-10.39	Average
8	0.581	9.81	31.74	41.55	56.00	-14.45	QP
9	2.003	9.82	14.44	24.26	46.00	-21.74	Average
10	2.003	9.82	20.60	30.42	56.00	-25.58	QP
11	10.761	9.91	15.48	25.39	50.00	-24.61	Average
12	10.761	9.91	25.39	35.30	60.00	-24.70	QP

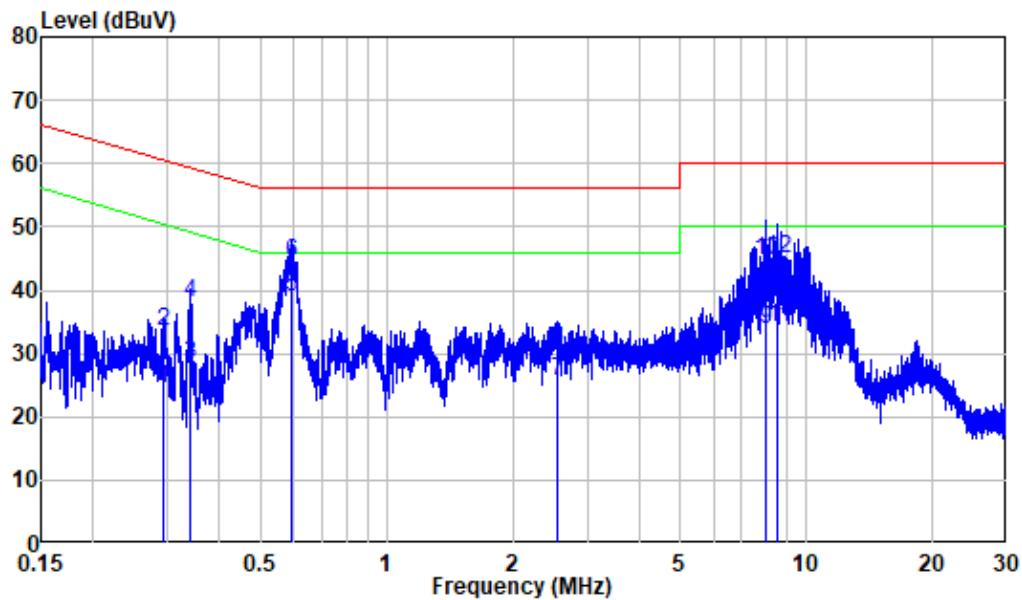
**AC 120V/60Hz, Neutral:**

Site : Shielding Room  
Condition: Neutral  
Job No. : RA221116-54358E-EM  
Mode : Charging

Freq	Factor	Read		Limit		Over Limit	Remark
		MHz	dB	dBuV	dBuV		
1	0.172	9.80	15.63	25.43	54.86	-29.43	Average
2	0.172	9.80	28.12	37.92	64.86	-26.94	QP
3	0.209	9.80	14.57	24.37	53.24	-28.87	Average
4	0.209	9.80	25.98	35.78	63.24	-27.46	QP
5	0.469	9.89	13.12	23.01	46.53	-23.52	Average
6	0.469	9.89	23.22	33.11	56.53	-23.42	QP
7	0.594	9.86	25.29	35.15	46.00	-10.85	Average
8	0.594	9.86	33.73	43.59	56.00	-12.41	QP
9	2.271	9.82	15.47	25.29	46.00	-20.71	Average
10	2.271	9.82	22.53	32.35	56.00	-23.65	QP
11	10.515	10.01	16.43	26.44	50.00	-23.56	Average
12	10.515	10.01	28.31	38.32	60.00	-21.68	QP

**Test mode 2:**

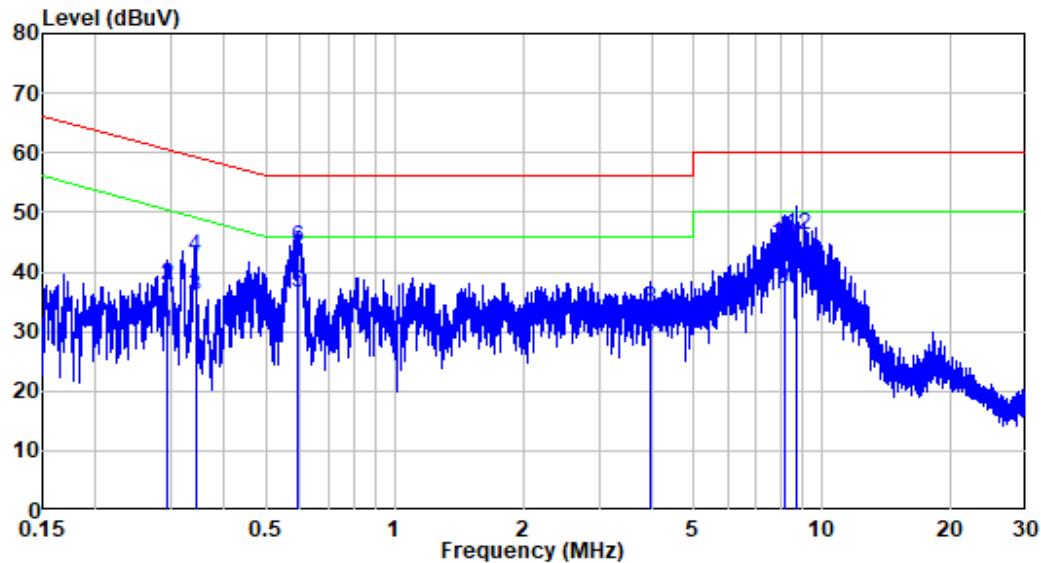
AC 120V/60Hz, Line:



Site : Shielding Room  
Condition: Line  
Job No. : RA221116-54358E-EM  
Mode : Playing via Phone

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	0.295	9.86	14.58	24.44	50.39 -25.95 Average
2	0.295	9.86	23.58	33.44	60.39 -26.95 QP
3	0.340	9.84	18.63	28.47	49.20 -20.73 Average
4	0.340	9.84	28.10	37.94	59.20 -21.26 QP
5	0.596	9.86	29.15	39.01	46.00 -6.99 Average
6	0.596	9.86	34.67	44.53	56.00 -11.47 QP
7	2.562	9.93	15.78	25.71	46.00 -20.29 Average
8	2.562	9.93	20.97	30.90	56.00 -25.10 QP
9	7.977	9.98	23.83	33.81	50.00 -16.19 Average
10	7.977	9.98	34.71	44.69	60.00 -15.31 QP
11	8.546	9.99	24.18	34.17	50.00 -15.83 Average
12	8.546	9.99	35.07	45.06	60.00 -14.94 QP

## AC 120V/60Hz, Neutral:

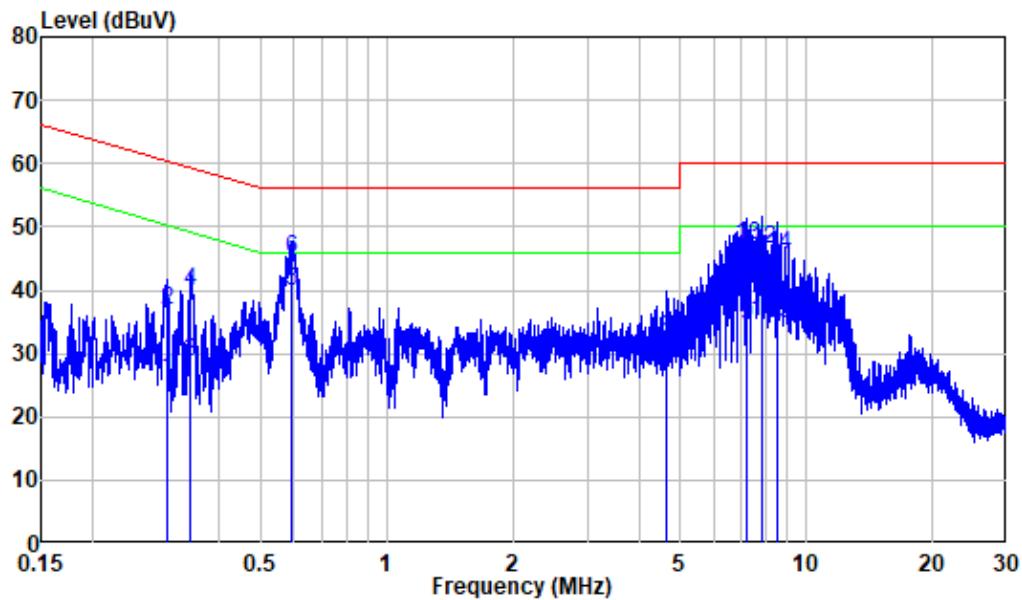


Site : Shielding Room  
Condition: Neutral  
Job No. : RA221116-54358E-EM  
Mode : Playing via Phone

Freq	Factor	Read		Limit	Over	Remark	
		MHz	dB	dBuV	dBuV	Line	Limit
1	0.292	9.84	19.95	29.79	50.46	-20.67	Average
2	0.292	9.84	27.90	37.74	60.46	-22.72	QP
3	0.342	9.86	26.08	35.94	49.16	-13.22	Average
4	0.342	9.86	32.62	42.48	59.16	-16.68	QP
5	0.596	9.86	26.62	36.48	46.00	-9.52	Average
6	0.596	9.86	34.22	44.08	56.00	-11.92	QP
7	3.959	9.84	17.96	27.80	46.00	-18.20	Average
8	3.959	9.84	23.93	33.77	56.00	-22.23	QP
9	8.127	10.04	27.16	37.20	50.00	-12.80	Average
10	8.127	10.04	34.65	44.69	60.00	-15.31	QP
11	8.672	10.03	27.22	37.25	50.00	-12.75	Average
12	8.672	10.03	36.05	46.08	60.00	-13.92	QP

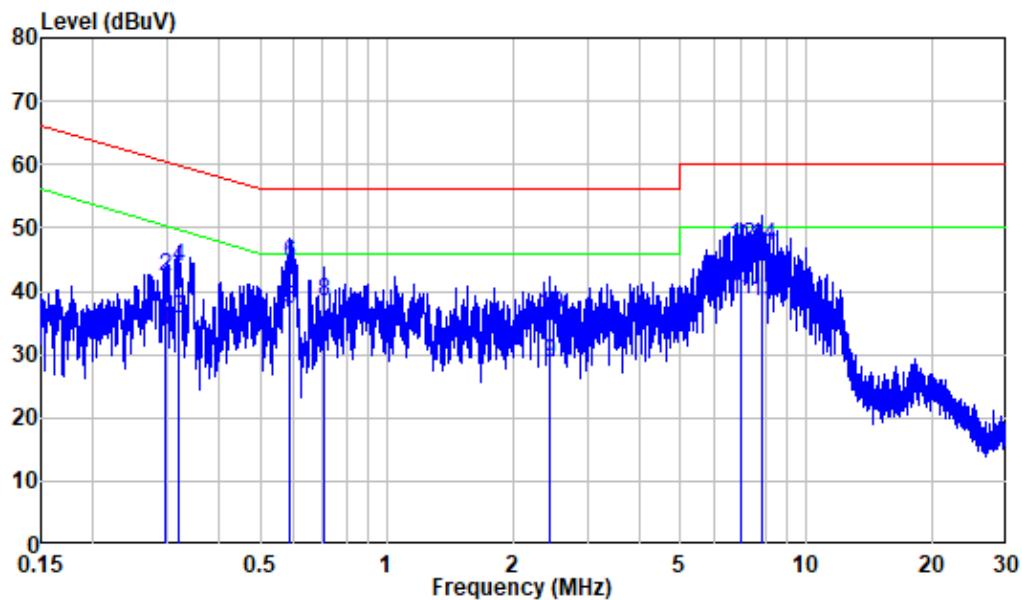
**Test mode 3:**

AC 120V/60Hz, Line:



Site : Shielding Room  
Condition: Line  
Job No. : RA221116-54358E-EM  
Mode : Playing via EHS

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.299	9.86	16.06	25.92	50.26	-24.34	Average
2	0.299	9.86	26.98	36.84	60.26	-23.42	QP
3	0.339	9.84	18.92	28.76	49.22	-20.46	Average
4	0.339	9.84	29.91	39.75	59.22	-19.47	QP
5	0.594	9.86	30.11	39.97	46.00	-6.03	Average
6	0.594	9.86	35.22	45.08	56.00	-10.92	QP
7	4.628	9.95	16.85	26.80	46.00	-19.20	Average
8	4.628	9.95	22.47	32.42	56.00	-23.58	QP
9	7.194	9.97	24.55	34.52	50.00	-15.48	Average
10	7.194	9.97	37.05	47.02	60.00	-12.98	QP
11	7.831	9.98	25.00	34.98	50.00	-15.02	Average
12	7.831	9.98	36.47	46.45	60.00	-13.55	QP
13	8.552	9.99	24.65	34.64	50.00	-15.36	Average
14	8.552	9.99	35.67	45.66	60.00	-14.34	QP

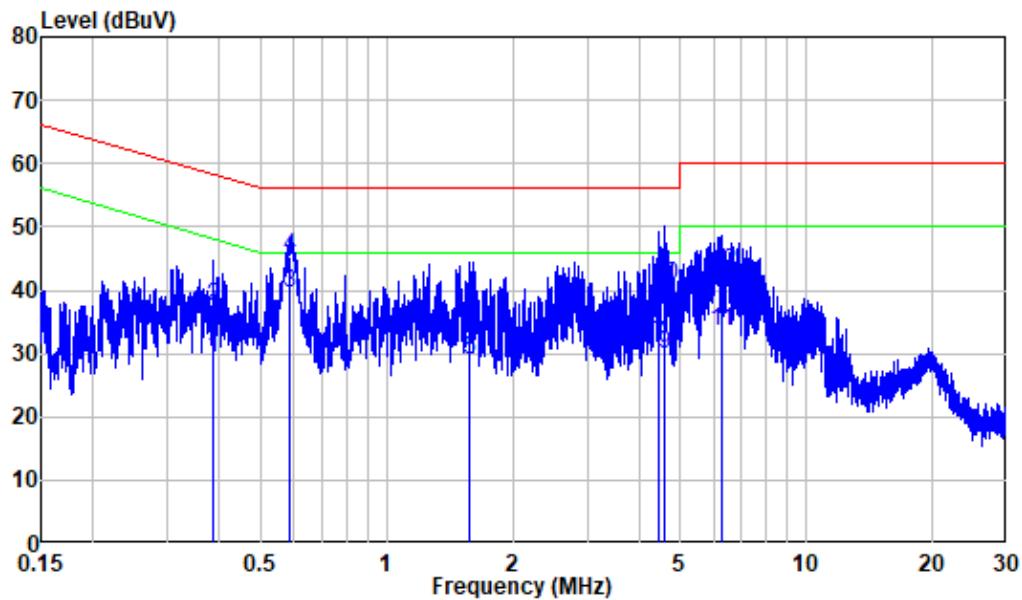
**AC 120V/60Hz, Neutral:**

Site : Shielding Room  
Condition: Neutral  
Job No. : RA221116-54358E-EM  
Mode : Playing via EHS

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
	MHz	dB	dBuV	dBuV	dB
1	0.296	9.84	24.07	33.91	50.35 -16.44 Average
2	0.296	9.84	32.36	42.20	60.35 -18.15 QP
3	0.318	9.85	25.90	35.75	49.75 -14.00 Average
4	0.318	9.85	33.85	43.70	59.75 -16.05 QP
5	0.589	9.86	27.33	37.19	46.00 -8.81 Average
6	0.589	9.86	34.64	44.50	56.00 -11.50 QP
7	0.708	9.81	21.53	31.34	46.00 -14.66 Average
8	0.708	9.81	28.50	38.31	56.00 -17.69 QP
9	2.439	9.82	18.74	28.56	46.00 -17.44 Average
10	2.439	9.82	26.48	36.30	56.00 -19.70 QP
11	6.951	10.07	28.47	38.54	50.00 -11.46 Average
12	6.951	10.07	37.00	47.07	60.00 -12.93 QP
13	7.810	10.05	28.27	38.32	50.00 -11.68 Average
14	7.810	10.05	37.01	47.06	60.00 -12.94 QP

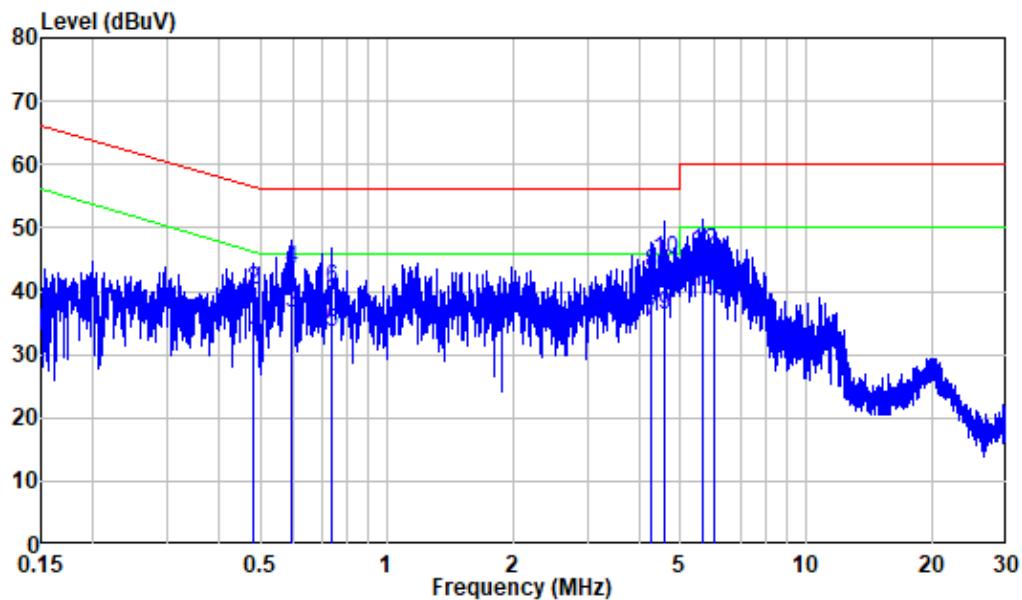
**Test mode 4:**

AC 120V/60Hz, Line:



Site : Shielding Room  
Condition: Line  
Job No. : RA221116-54358E-EM  
Mode : Playing via PC

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	0.385	9.83	19.43	29.26	-18.92 Average
2	0.385	9.83	27.64	37.47	58.18 -20.71 QP
3	0.590	9.86	29.71	39.57	46.00 -6.43 Average
4	0.590	9.86	35.52	45.38	56.00 -10.62 QP
5	1.579	9.89	19.18	29.07	46.00 -16.93 Average
6	1.579	9.89	26.65	36.54	56.00 -19.46 QP
7	4.454	9.94	21.42	31.36	46.00 -14.64 Average
8	4.454	9.94	30.66	40.60	56.00 -15.40 QP
9	4.589	9.95	20.06	30.01	46.00 -15.99 Average
10	4.589	9.95	30.73	40.68	56.00 -15.32 QP
11	6.281	9.96	23.69	33.65	50.00 -16.35 Average
12	6.281	9.96	32.98	42.94	60.00 -17.06 QP

**AC 120V/60Hz, Neutral:**

Site : Shielding Room  
Condition: Neutral  
Job No. : RA221116-54358E-EM  
Mode : Playing via PC

Freq	Factor	Read		Limit		Over Limit	Remark
		MHz	dB	dBuV	dBuV	dBuV	dB
1	0.479	9.90	21.98	31.88	46.36	-14.48	Average
2	0.479	9.90	30.33	40.23	56.36	-16.13	QP
3	0.590	9.86	26.80	36.66	46.00	-9.34	Average
4	0.590	9.86	33.55	43.41	56.00	-12.59	QP
5	0.738	9.81	23.69	33.50	46.00	-12.50	Average
6	0.738	9.81	30.63	40.44	56.00	-15.56	QP
7	4.261	9.86	25.33	35.19	46.00	-10.81	Average
8	4.261	9.86	32.92	42.78	56.00	-13.22	QP
9	4.604	9.90	26.39	36.29	46.00	-9.71	Average
10	4.604	9.90	35.22	45.12	56.00	-10.88	QP
11	5.649	9.98	29.90	39.88	50.00	-10.12	Average
12	5.649	9.98	36.24	46.22	60.00	-13.78	QP
13	6.048	10.01	28.33	38.34	50.00	-11.66	Average
14	6.048	10.01	34.47	44.48	60.00	-15.52	QP

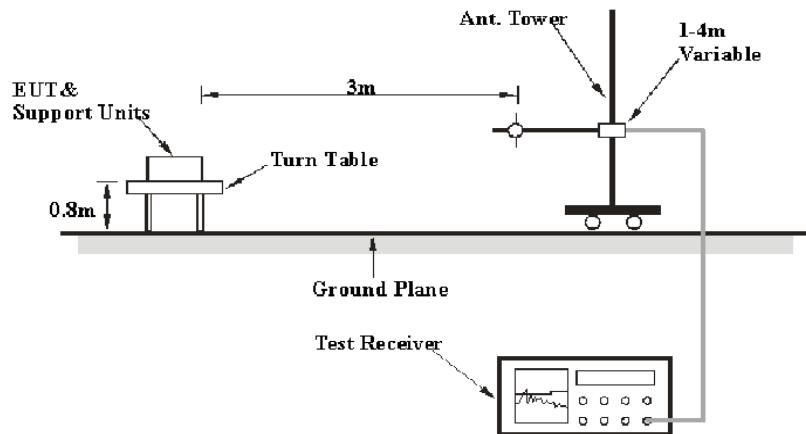
## FCC §15.109 - RADIATED EMISSIONS

### Applicable Standard

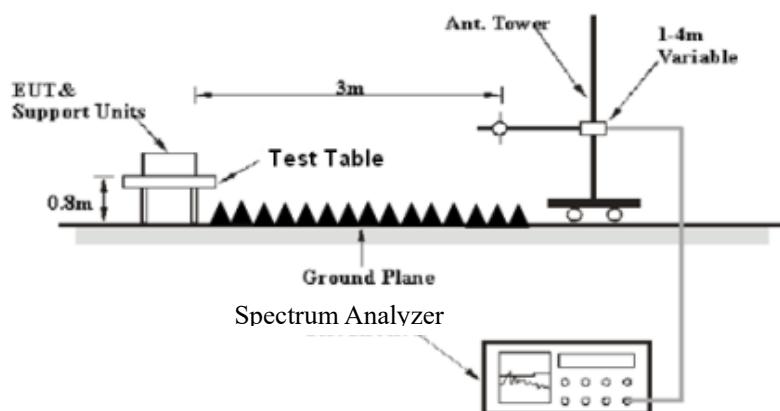
FCC §15.109

### EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

## EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 13 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30MHz – 1000 MHz	120 kHz	300 kHz	120kHz	QP
Above 1 GHz	1MHz	3 MHz	/	Peak
	1MHz	10Hz	/	AV

All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz, Peak and average detection mode above 1 GHz.

## Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

## Factor & Over Limit Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\begin{aligned} \text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Reading} + \text{Factor} \end{aligned}$$

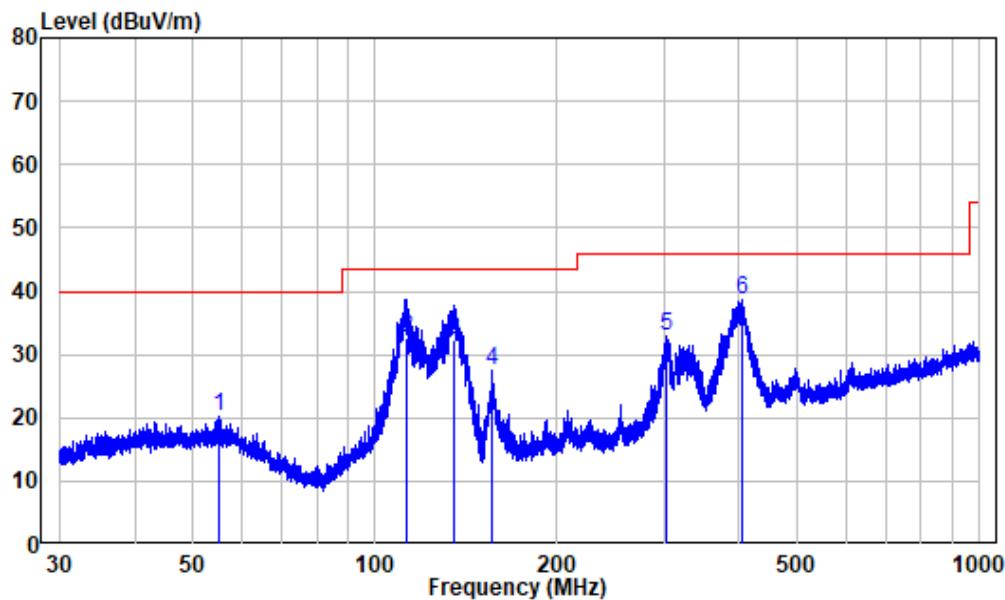
## Test Data

### Environmental Conditions

<b>Temperature:</b>	25 °C
<b>Relative Humidity:</b>	53 %
<b>ATM Pressure:</b>	101.0 kPa

The testing was performed by Jason Liu on 2023-04-07.

Note: Pre-scan in the X, Y and Z axes of orientation, the worst case of orientation was photo and recorded.

**30MHz-1GHz:****Test mode 1****Horizontal**

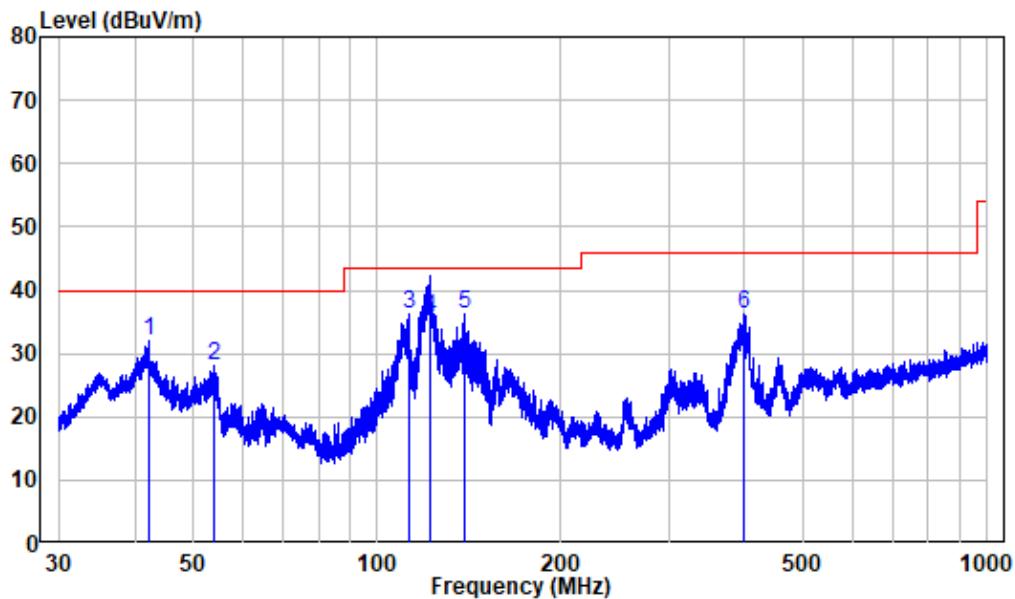
Site : chamber

Condition: 3m HORIZONTAL

Job No. : RA221116-54358E-EM

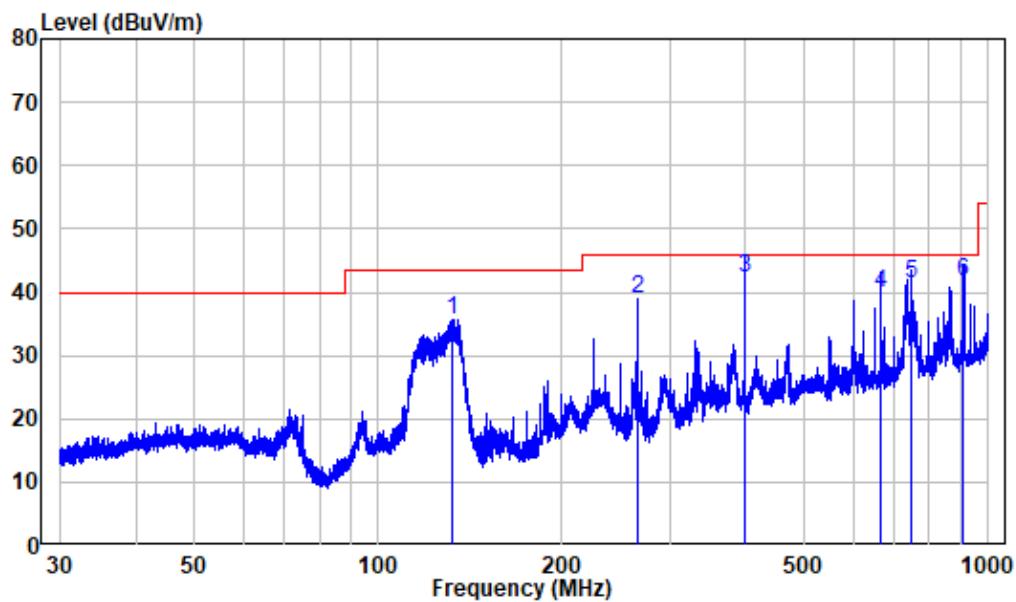
Test Mode: Charging

	Freq	Read Factor	Level	Limit Level	Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	55.293	-10.26	30.46	20.20	40.00	-19.80	Peak
2	112.722	-12.37	44.90	32.53	43.50	-10.97	QP
3	134.736	-15.01	47.20	32.19	43.50	-11.31	QP
4	155.910	-14.83	42.22	27.39	43.50	-16.11	Peak
5	302.349	-9.14	42.14	33.00	46.00	-13.00	Peak
6	403.427	-6.73	45.37	38.64	46.00	-7.36	Peak

**Vertical**

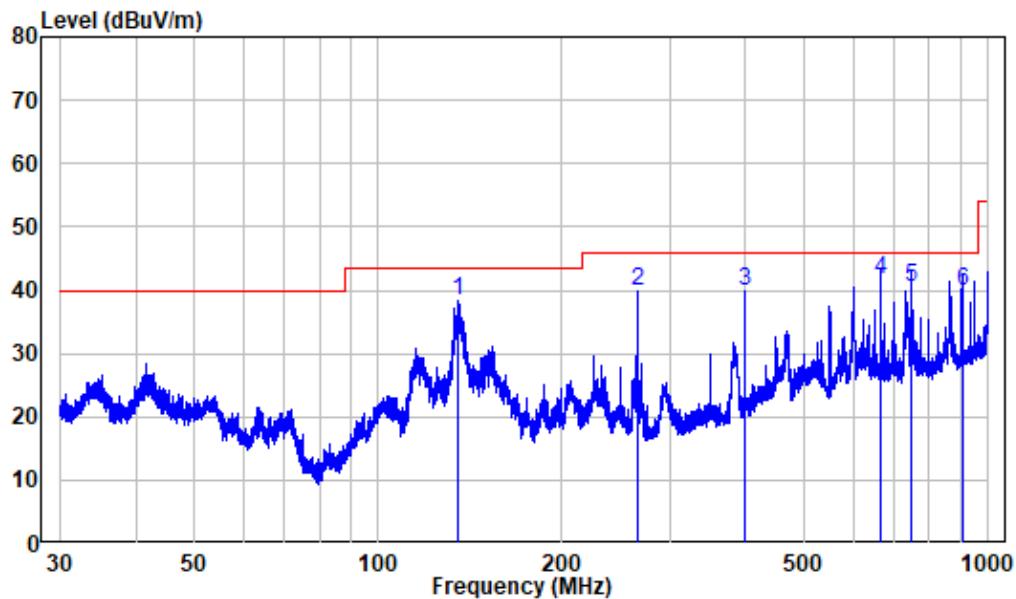
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Charging

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	Level	dBuV			
1	42.173	-10.01	41.88	31.87	40.00	-8.13	Peak	
2	54.142	-10.34	38.33	27.99	40.00	-12.01	Peak	
3	112.821	-12.38	48.65	36.27	43.50	-7.23	Peak	
4	121.869	-13.90	49.50	35.60	43.50	-7.90	QP	
5	138.630	-15.38	51.70	36.32	43.50	-7.18	Peak	
6	399.730	-6.74	42.99	36.25	46.00	-9.75	Peak	

**Test mode 2****Horizontal**

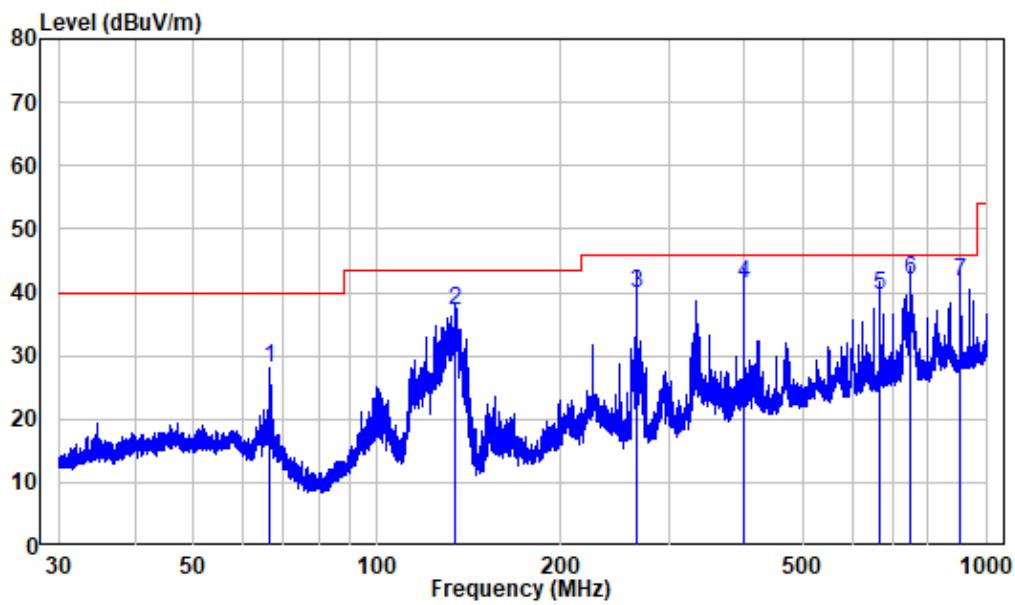
Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via Phone

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	132.221	-14.98	50.73	35.75	43.50	-7.75	Peak
2	266.726	-10.37	49.33	38.96	46.00	-7.04	Peak
3	400.081	-6.73	49.02	42.29	46.00	-3.71	QP
4	666.680	-1.66	41.36	39.70	46.00	-6.30	QP
5	750.108	-0.87	42.33	41.46	46.00	-4.54	QP
6	908.073	1.67	39.96	41.63	46.00	-4.37	QP

**Vertical**

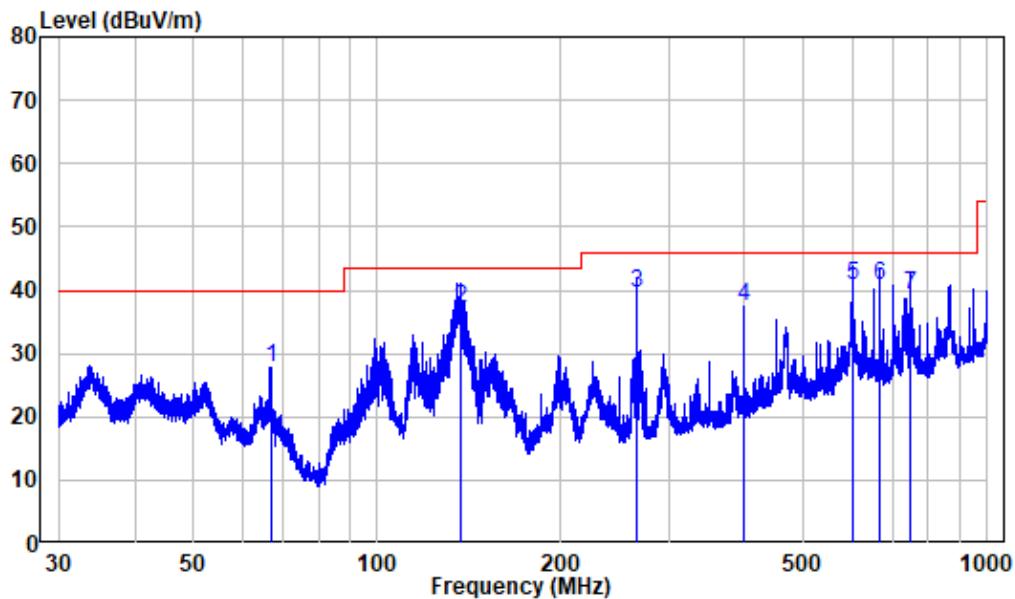
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via Phone

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	Level	dBuV			
1	135.447	-15.04	53.53	38.49	43.50	-5.01	Peak	
2	266.726	-10.37	50.30	39.93	46.00	-6.07	Peak	
3	400.081	-6.73	46.61	39.88	46.00	-6.12	Peak	
4	666.680	-1.66	43.36	41.70	46.00	-4.30	QP	
5	750.108	-0.87	41.36	40.49	46.00	-5.51	QP	
6	908.870	1.66	38.11	39.77	46.00	-6.23	QP	

**Test mode 3****Horizontal**

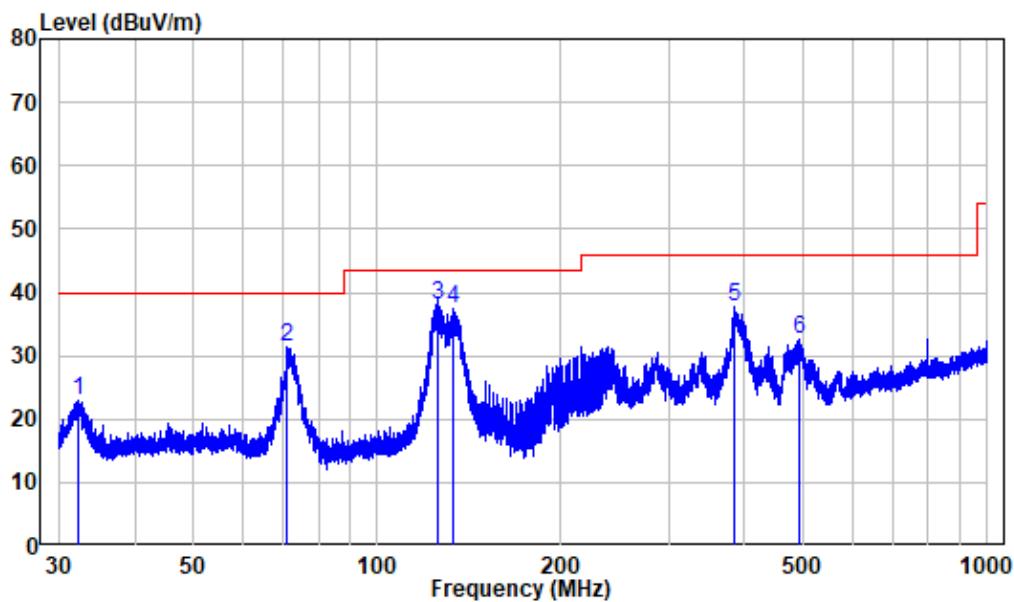
Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via EHS

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	66.645	-13.19	41.21	28.02	40.00	-11.98	Peak
2	133.795	-14.98	52.02	37.04	43.50	-6.46	QP
3	266.726	-10.37	50.21	39.84	46.00	-6.16	QP
4	400.081	-6.73	48.01	41.28	46.00	-4.72	QP
5	666.680	-1.66	41.23	39.57	46.00	-6.43	QP
6	750.108	-0.87	42.74	41.87	46.00	-4.13	QP
7	904.895	1.69	40.11	41.80	46.00	-4.20	QP

**Vertical**

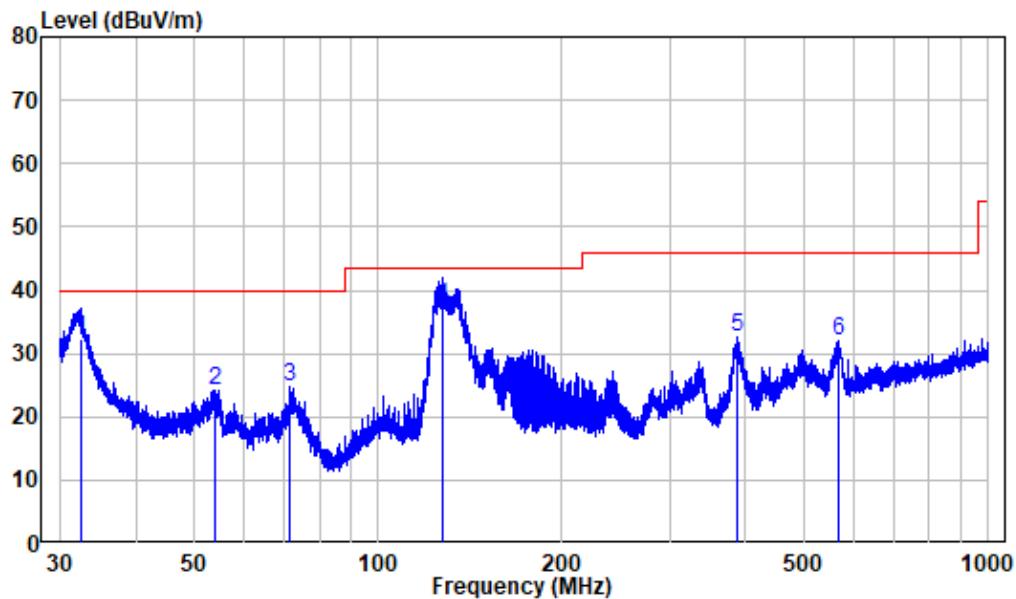
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via EHS

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	66.791	-13.26	41.14	27.88	40.00	-12.12	Peak
2	136.999	-15.21	52.36	37.15	43.50	-6.35	QP
3	266.609	-10.38	49.89	39.51	46.00	-6.49	QP
4	400.081	-6.73	44.16	37.43	46.00	-8.57	Peak
5	600.110	-2.43	43.12	40.69	46.00	-5.31	QP
6	666.680	-1.66	42.36	40.70	46.00	-5.30	QP
7	750.108	-0.87	40.23	39.36	46.00	-6.64	QP

**Test mode 4****Horizontal**

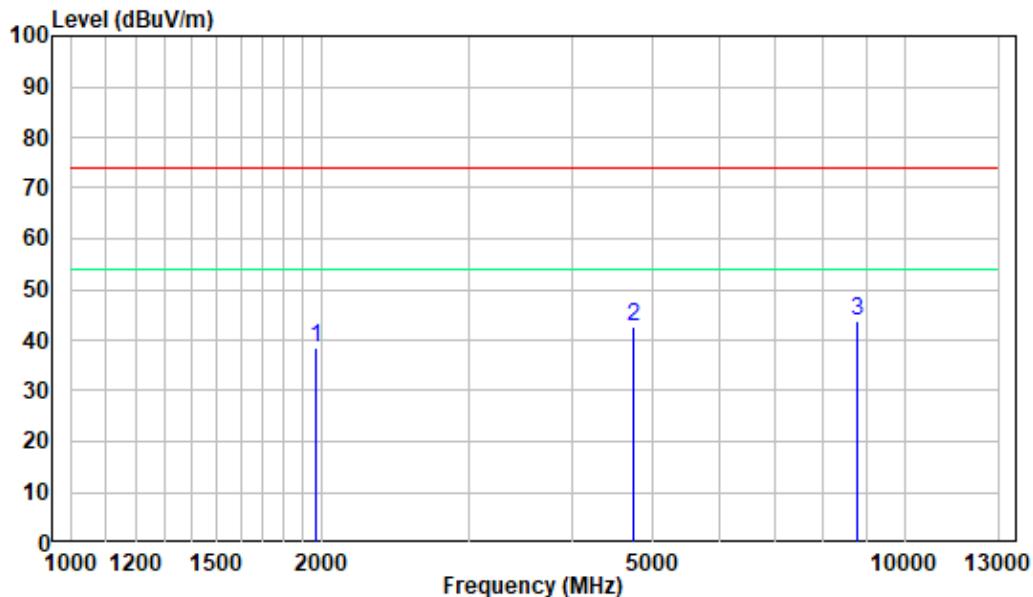
Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via PC

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.307	-12.12	34.93	22.81	40.00	-17.19	Peak
2	71.236	-15.30	46.74	31.44	40.00	-8.56	Peak
3	125.281	-14.34	52.30	37.96	43.50	-5.54	QP
4	133.034	-14.98	52.32	37.34	43.50	-6.16	Peak
5	384.943	-7.06	44.88	37.82	46.00	-8.18	Peak
6	491.606	-4.61	37.26	32.65	46.00	-13.35	Peak

**Vertical**

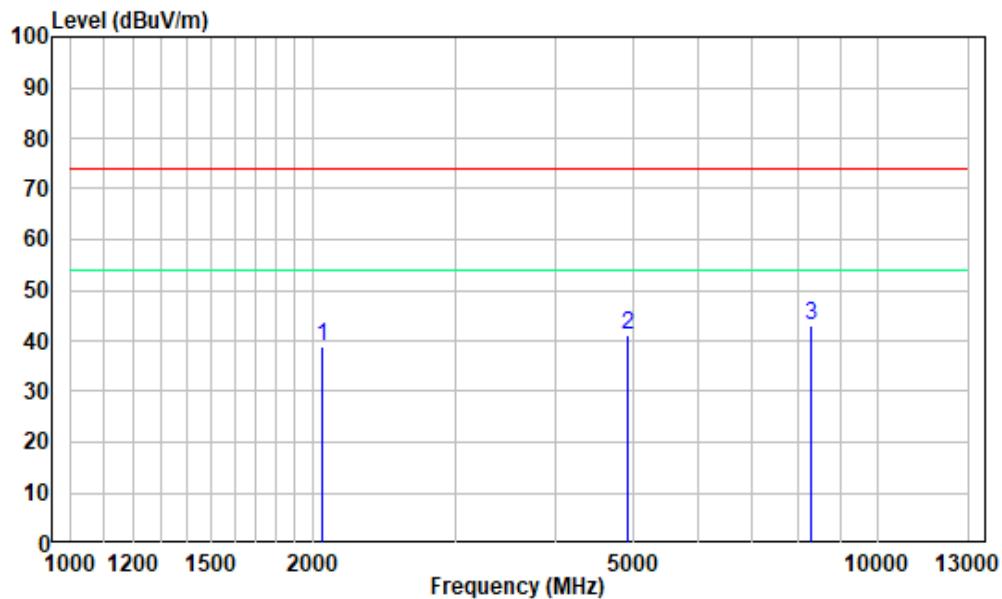
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via PC

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	Level	dBuV			
1	32.491	-12.10	44.50	32.40	40.00	-7.60	QP	
2	54.142	-10.34	34.55	24.21	40.00	-15.79	Peak	
3	71.487	-15.40	40.02	24.62	40.00	-15.38	Peak	
4	127.051	-14.56	52.00	37.44	43.50	-6.06	QP	
5	386.803	-7.00	39.63	32.63	46.00	-13.37	Peak	
6	566.622	-3.88	36.02	32.14	46.00	-13.86	Peak	

**1MHz-13GHz:****Test mode 1****Horizontal**

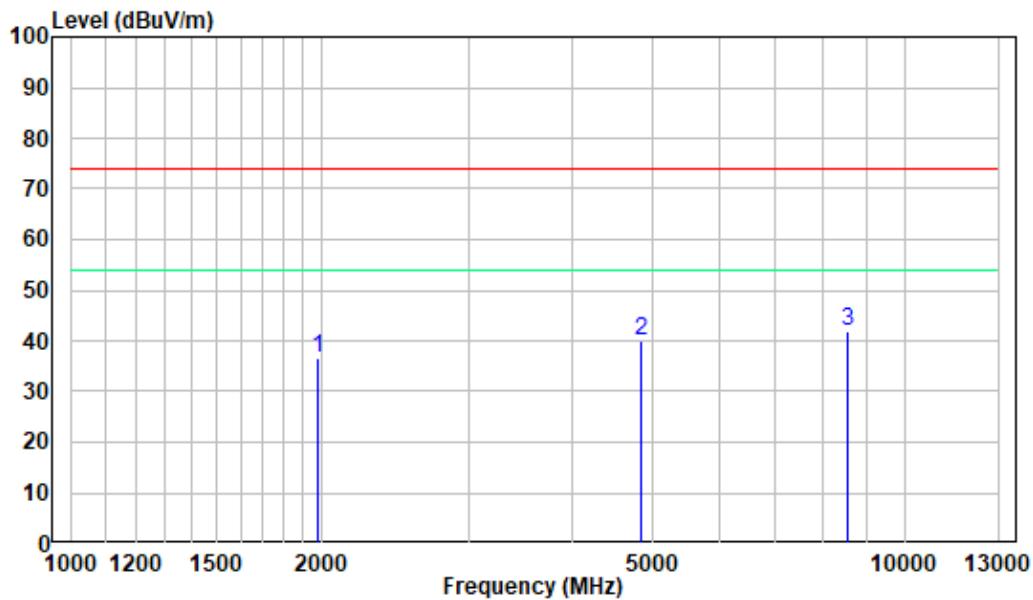
Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Charing

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	dBuV	dBuV/m			
1	1970.500	-7.49	46.14	38.65	74.00	-35.35	Peak	
2	4721.500	-3.86	46.34	42.48	74.00	-31.52	Peak	
3	8797.000	5.05	38.58	43.63	74.00	-30.37	Peak	

**Vertical**

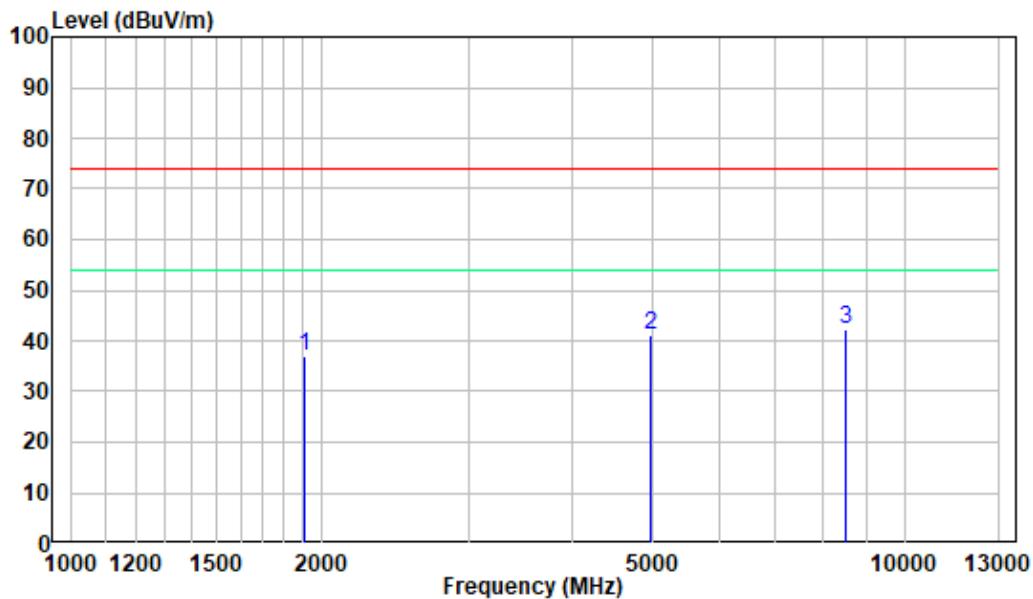
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Charing

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2057.500	-7.28	46.21	38.93	74.00	-35.07	Peak
2	4903.000	-3.26	44.49	41.23	74.00	-32.77	Peak
3	8269.000	4.65	38.47	43.12	74.00	-30.88	Peak

**Test mode 2****Horizontal**

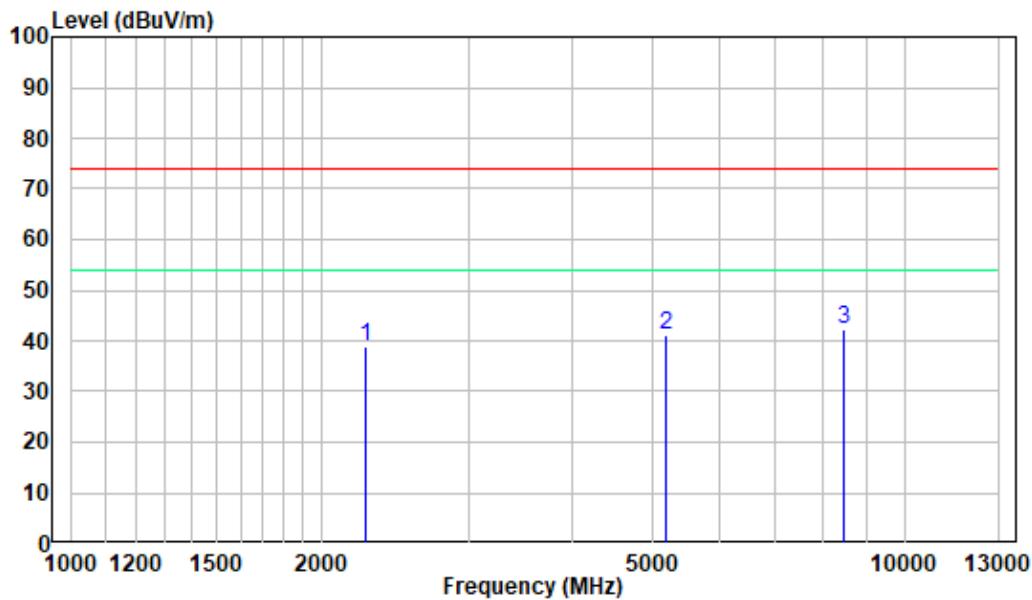
Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via Phone

	Freq	Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1978.000	-7.43	44.12	36.69	74.00	-37.31	Peak
2	4829.500	-3.53	43.52	39.99	74.00	-34.01	Peak
3	8552.500	4.91	37.10	42.01	74.00	-31.99	Peak

**Vertical**

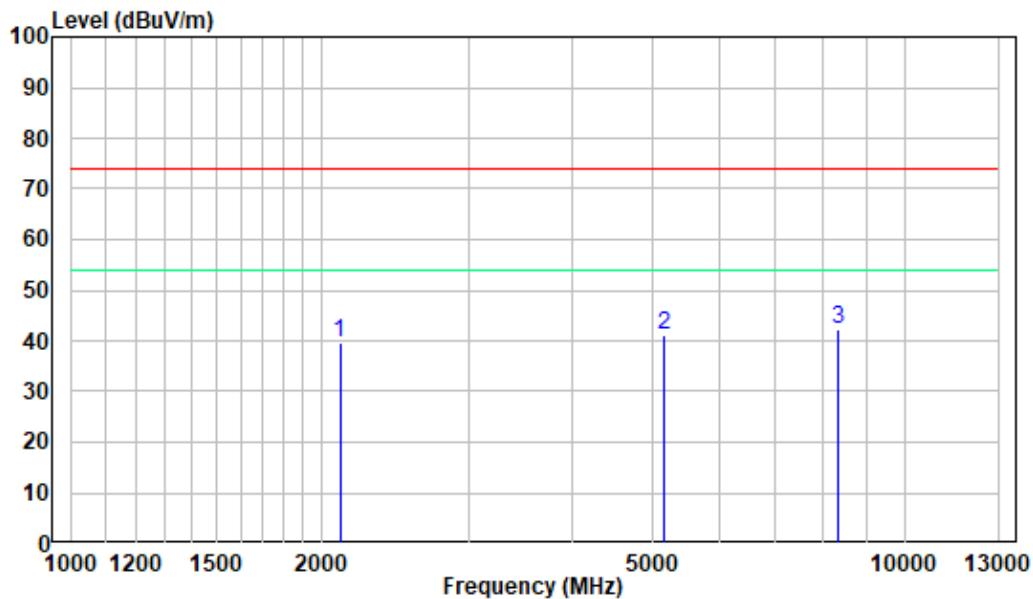
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via Phone

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	Level	dBuV			
1	1907.500	-7.97	44.97	37.00	74.00	74.00	-37.00	Peak
2	4958.500	-3.01	44.07	41.06	74.00	74.00	-32.94	Peak
3	8489.500	4.83	37.62	42.45	74.00	74.00	-31.55	Peak

**Test mode 3****Horizontal**

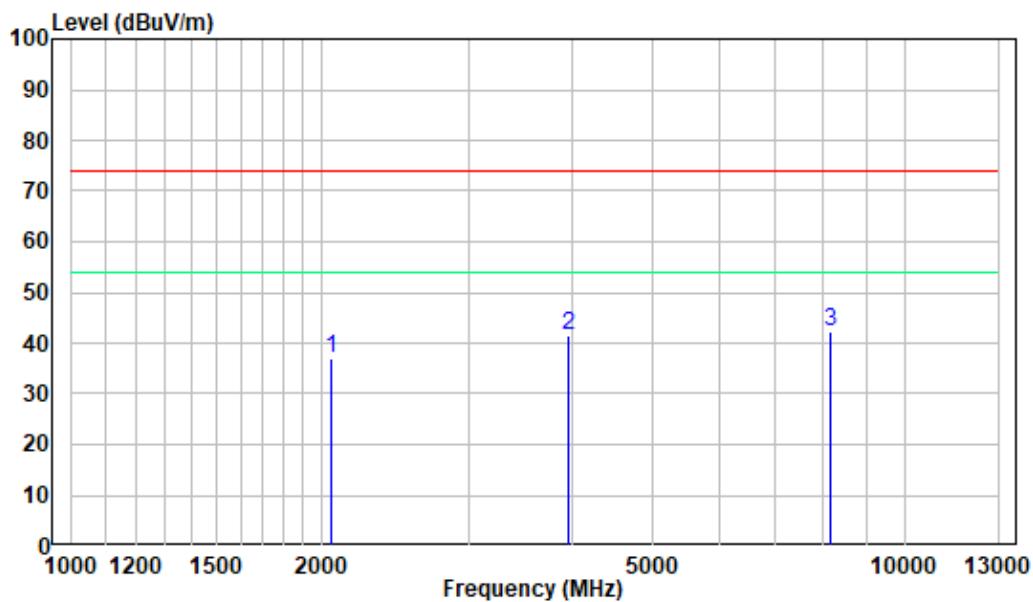
Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via EHS

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	2255.500	-7.21	46.20	38.99	74.00	-35.01	Peak
2	5168.500	-2.69	43.80	41.11	74.00	-32.89	Peak
3	8473.000	4.83	37.53	42.36	74.00	-31.64	Peak

**Vertical**

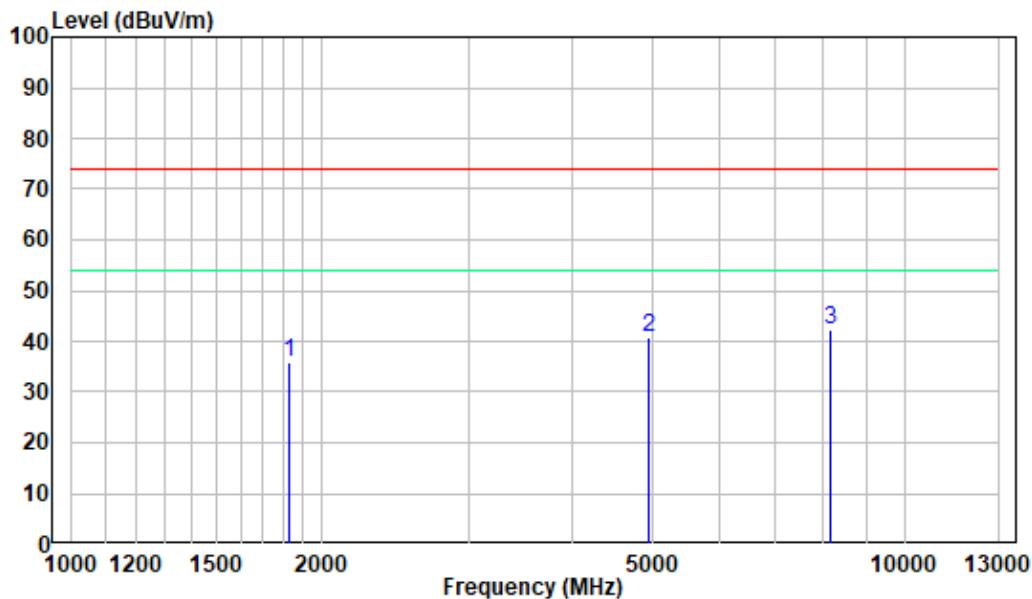
Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via EHS

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	Level	dBuV	dBuV/m	dBuV/m	dB
1	2104.000	-7.23	46.79	39.56	74.00	74.00	-34.44	Peak
2	5149.000	-2.73	43.82	41.09	74.00	74.00	-32.91	Peak
3	8315.500	4.67	37.69	42.36	74.00	74.00	-31.64	Peak

**Test mode 4****Horizontal**

Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via PC

Freq	Factor	Read		Limit		Over Line	Over Limit	Remark
		MHz	dB/m	dBuV	dBuV/m			
1	2057.500	-7.28	44.20	36.92	74.00	-37.08	Peak	
2	3956.500	-5.48	46.84	41.36	74.00	-32.64	Peak	
3	8144.500	4.32	38.00	42.32	74.00	-31.68	Peak	

**Vertical**

Site : chamber  
Condition: 3m VERTICAL  
Job No. : RA221116-54358E-EM  
Test Mode: Playing via PC

Freq	Factor	Read		Limit		Over	Remark
		MHz	dB/m	dBuV	dBuV/m		
1	1828.000	-8.54	44.25	35.71	74.00	-38.29	Peak
2	4949.500	-3.04	43.93	40.89	74.00	-33.11	Peak
3	8161.000	4.42	37.69	42.11	74.00	-31.89	Peak

**Note:**

The other spurious emission which is in the noise floor level was not recorded.

For below 1GHz, If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform QP/Average measurement.

For above 1GHz, the test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, so just peak value was recorded.

\*\*\*\*\*END OF REPORT\*\*\*\*\*