



FCC PART 15B, CLASS B

TEST REPORT

For

Grandstream Networks, Inc.

126 Brookline Ave, 3rd Floor Boston, MA 02215, USA

FCC ID: YZZUCM6304A

Report Type: Original Report	Product Type: IP PBX
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Report Number:	SZ1210429-14564E-EM-00
Report Date:	2021-05-21
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	IP PBX
Tested Model	UCM6304A
Voltage Range	DC 12V from adapter or DC 48V from POE
Highest operating frequency	1300MHz
Date of Test	2021-05-11
Sample serial number	SZ1210429-14564E-EM-S_4AU (Assigned by BACL, Shenzhen)
Received date	2021-04-29
Sample/EUT Status	Good condition
Adapter 1 Information	Model:GQ24-120200-AU Input: AC 100-240V~, 50/60Hz, 1.0A Output: DC 12V, 2.0A
Adapter 2 Information	Model:NBS24J120200HU Input: AC 100-240V~, 50/60Hz, 0.6A Output: DC 12V, 2.0A
Adapter 3 Information	Model:RD1202000-C55-154MG Input: AC 100-240V~, 50/60Hz, 1.0A Output: DC 12V, 2.0A
Manufacturer Address	126 Brookline Ave, 3rd Floor Boston, MA 02215, USA

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A, B of the Federal Communication Commissions rules.

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

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 emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters. Each test item follows test standards and with no deviation.

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of test at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown as below. And the uncertainty will be taken into consideration for the test data recorded in the report

Parameter		uncertainty
Conducted Emissions		±1.95dB
Radiated Emissions	Below 1GHz	±4.75dB
	Above 1GHz	±4.88dB

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 Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, 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.: 342867, the FCC Designation No.: CN1221.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062B.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a manufacturer testing fashion.

EUT Exercise Software

No exercise software was used.

Special Accessories

No special accessory.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
HIKVISION	Router	DS-3WR03-E	10023522939
Grandstream	IP Phone	GXV3380	23568321
DELL	Notebook	Latitude 5430	Set up computer 6#-RF room 2-S1
Grandstream	IP PBX	UCM6300A	53135
Unknown	POE	VX-PI1000GB	1712083039

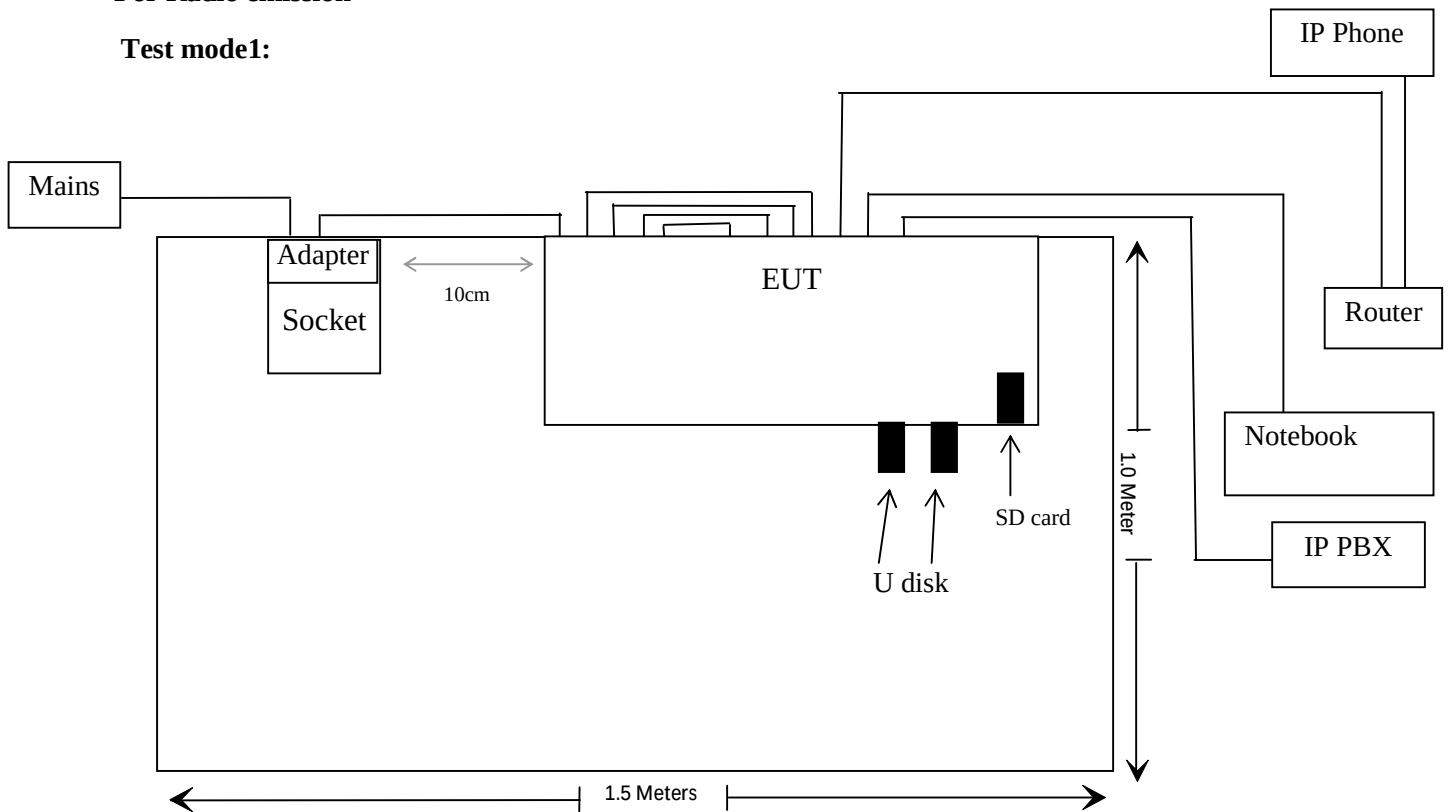
External I/O Cable

Cable Description	Length (m)	From/Port	To
Unshielded detachable RJ45 cable	1.5	EUT	IP PBX
Unshielded detachable RJ45 cable	1.5	EUT	Notebook
Unshielded detachable RJ45 cable	1.5	EUT	Router
Unshielded detachable RJ45 cable	1.2	POE	Router
Unshielded detachable RJ45 cable	1.2	POE	EUT
Unshielded detachable RJ45 cable	1.5	Router	IP phone
Unshielded detachable RJ11 cable	0.8	EUT	EUT
Unshielded detachable RJ11 cable	0.8	EUT	EUT
Unshielded detachable RJ11 cable	0.8	EUT	EUT
Unshielded detachable RJ11 cable	0.8	EUT	EUT

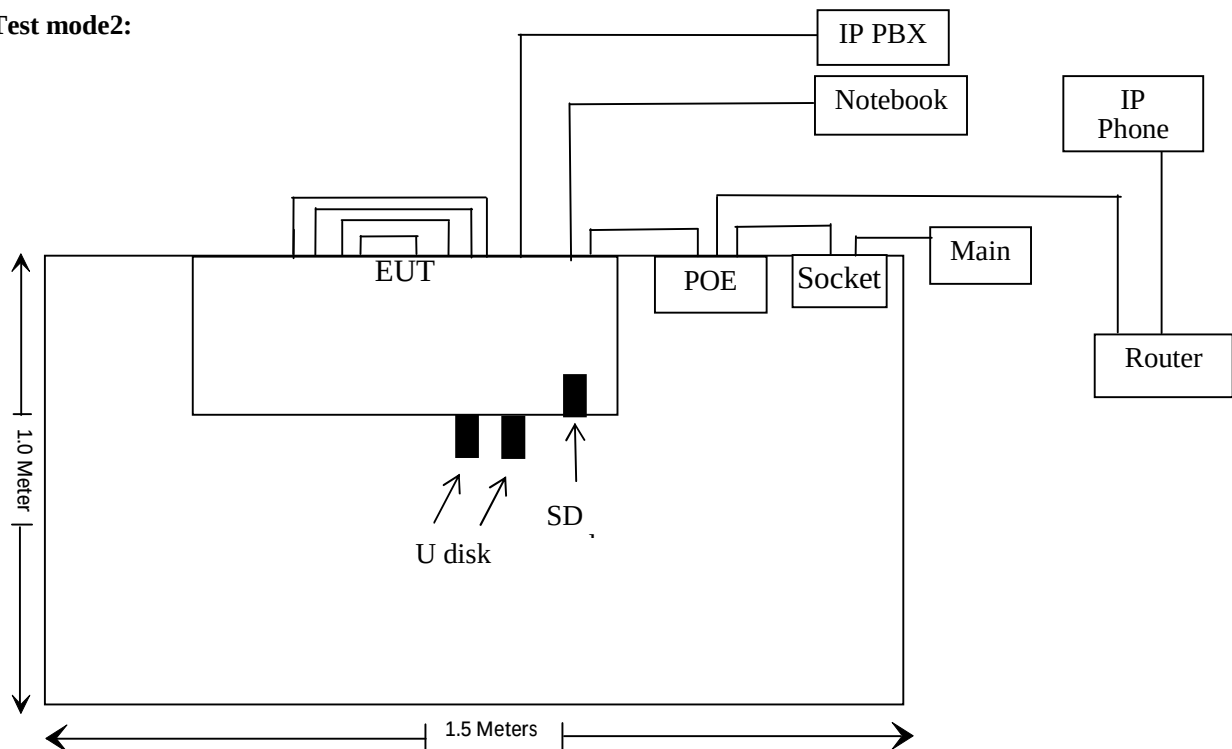
Block Diagram of Test Setup

For Radio emission

Test mode1:

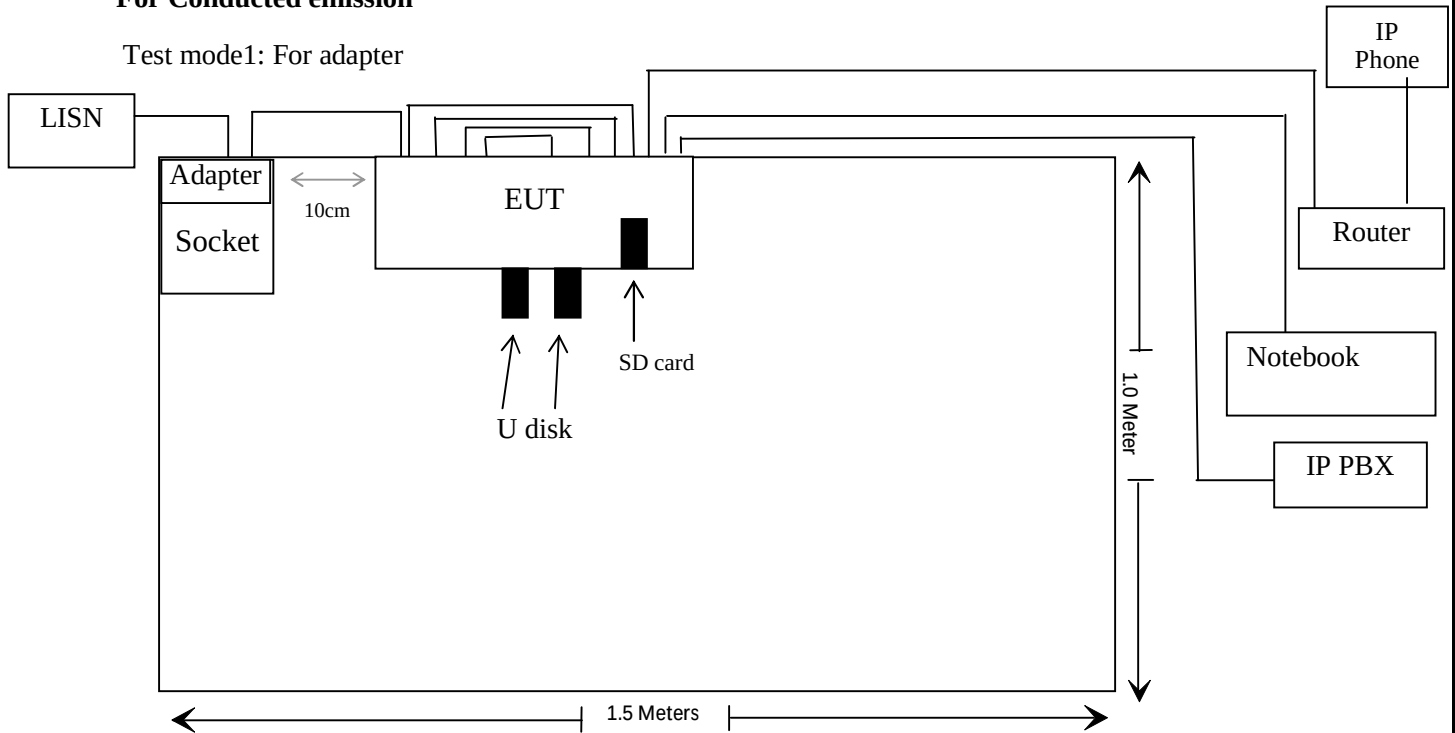


Test mode2:

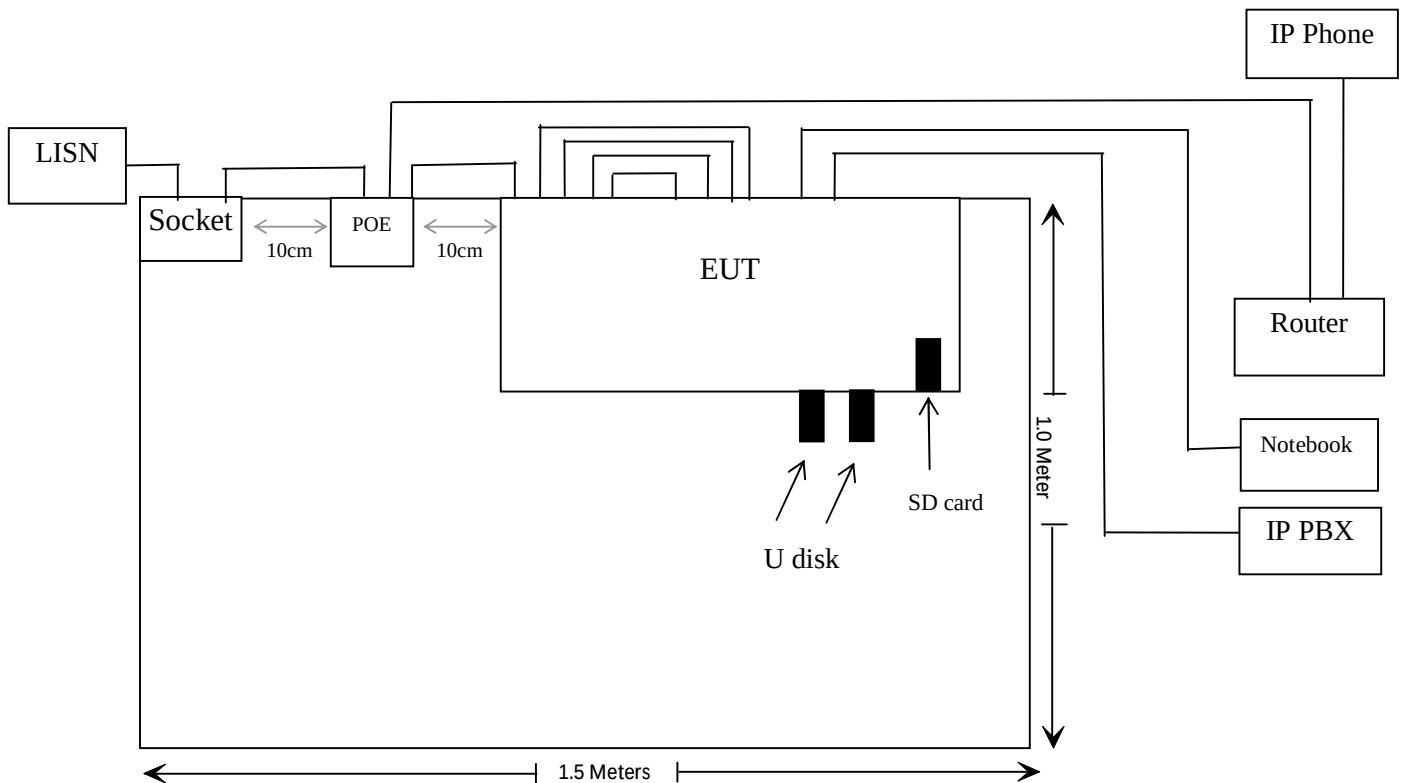


For Conducted emission

Test mode1: For adapter



Test mode2:



SUMMARY OF TEST RESULTS

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

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2020/08/04	2021/08/03
Rohde & Schwarz	LISN	ENV216	101613	2020/08/04	2021/08/03
Rohde & Schwarz	Transient Limitor	ESH3Z2	DE25985	2020/11/29	2021/11/28
Unknown	CE Cable	CE Cable	UF A210B-1-0720-504504	2020/11/29	2021/11/28
Rohde & Schwarz	CE Test software	EMC 32	V8.53.0	NCR	NCR
Radiated Emission Test					
R&S	EMI Test Receiver	ESR3	102455	2020/08/04	2021/08/03
Sonoma instrument	Pre-amplifier	310 N	186238	2020/08/04	2021/08/03
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2020/12/22	2023/12/21
Unknown	Cable 2	RF Cable 2	F-03-EM197	2020/11/29	2021/11/28
Unknown	Cable	Chamber Cable 1	F-03-EM236	2020/11/29	2021/11/28
Unknown	Cable	Chamber Cable 4	EC-007	2020/11/29	2021/11/28
Rohde & Schwarz	Auto test software	EMC 32	V9.10	NCR	NCR
CHIGO	Temperature & Humidity Meter	HTC-1S	N/A	2021/04/07	2022/04/06
Rohde & Schwarz	Spectrum Analyzer	FSV40-N	102259	2020/08/04	2021/08/03
COM-POWER	Pre-amplifier	PA-122	181919	2020/11/29	2021/11/28
Sunol Sciences	Horn Antenna	3115	9107-3694	2021/01/15	2024/01/14
CHIGO	Temperature & Humidity Meter	HTC-1S	N/A	2021/04/07	2022/04/06
Insulted Wire Inc.	RF Cable	SPS-2503-3150	02222010	2020/11/29	2021/11/28
Unknown	RF Cable	W1101-EQ1 OUT	F-19-EM005	2020/11/29	2021/11/28
Unknown	Signal Cable	RG-214	2	2020/11/29	2021/11/28

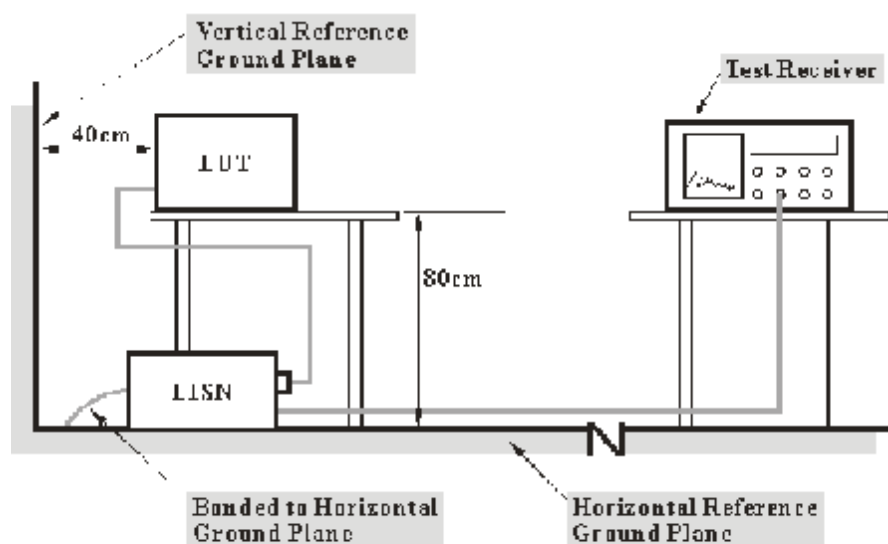
*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.107 – AC LINE 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 30 cm from other units and other metal planes support units.

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

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

During the conducted emission test, the device was connected to the AC LISN

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

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

Corrected Factor & Margin Calculation

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

$$\text{Correction Factor} = \text{LISN VDF} + \text{Cable Loss} + \text{Transient Limiter Attenuation}$$

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

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Data**Environmental Conditions**

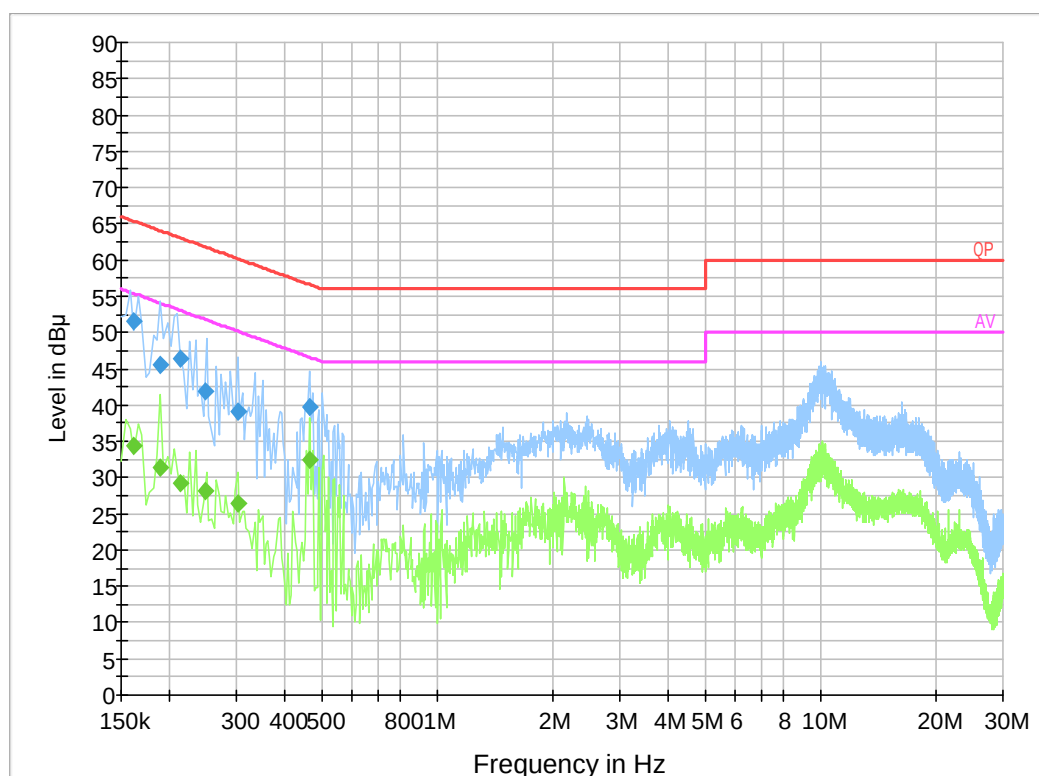
Temperature:	25 °C
Relative Humidity:	65 %
ATM Pressure:	101.0 kPa

The testing was performed by Haiguo Li on 2021-05-11.

Test mode 1

For Adapter 1

AC 120V/60 Hz, Line

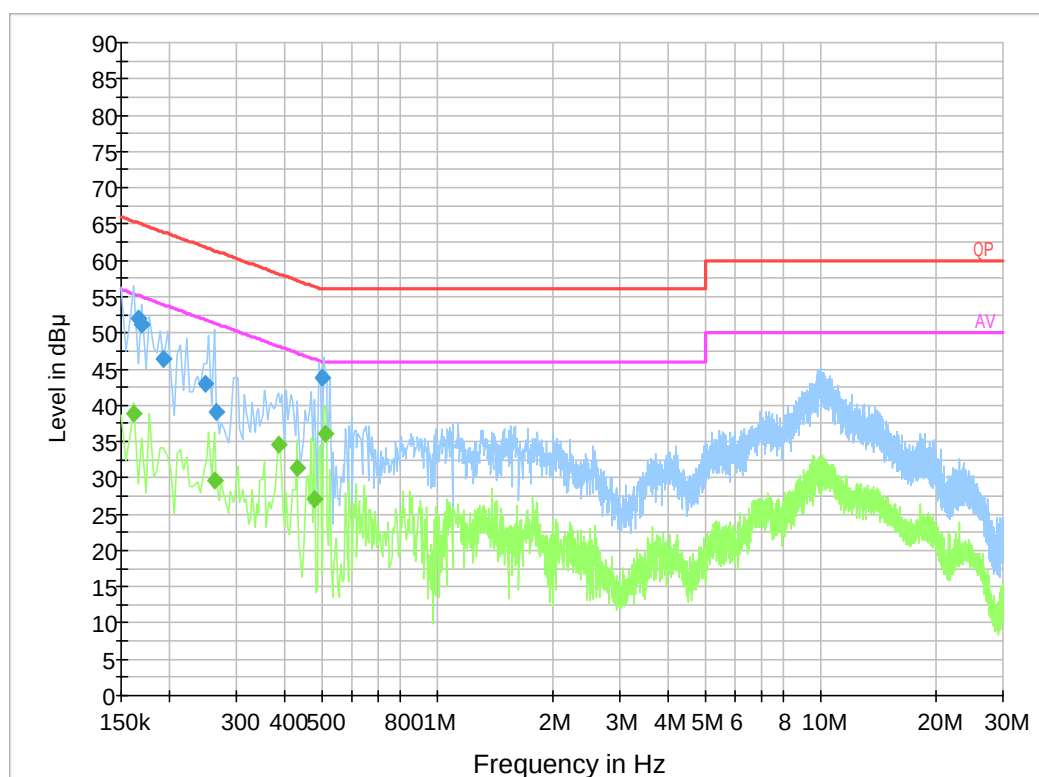


Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.161500	51.6	9.000	L1	19.9	13.8	65.4
0.189500	45.5	9.000	L1	19.8	18.6	64.1
0.214501	46.4	9.000	L1	19.8	16.6	63.0
0.249500	42.0	9.000	L1	19.8	19.8	61.8
0.301470	39.1	9.000	L1	19.7	21.1	60.2
0.467010	39.8	9.000	L1	19.8	16.8	56.6

Final Result 2

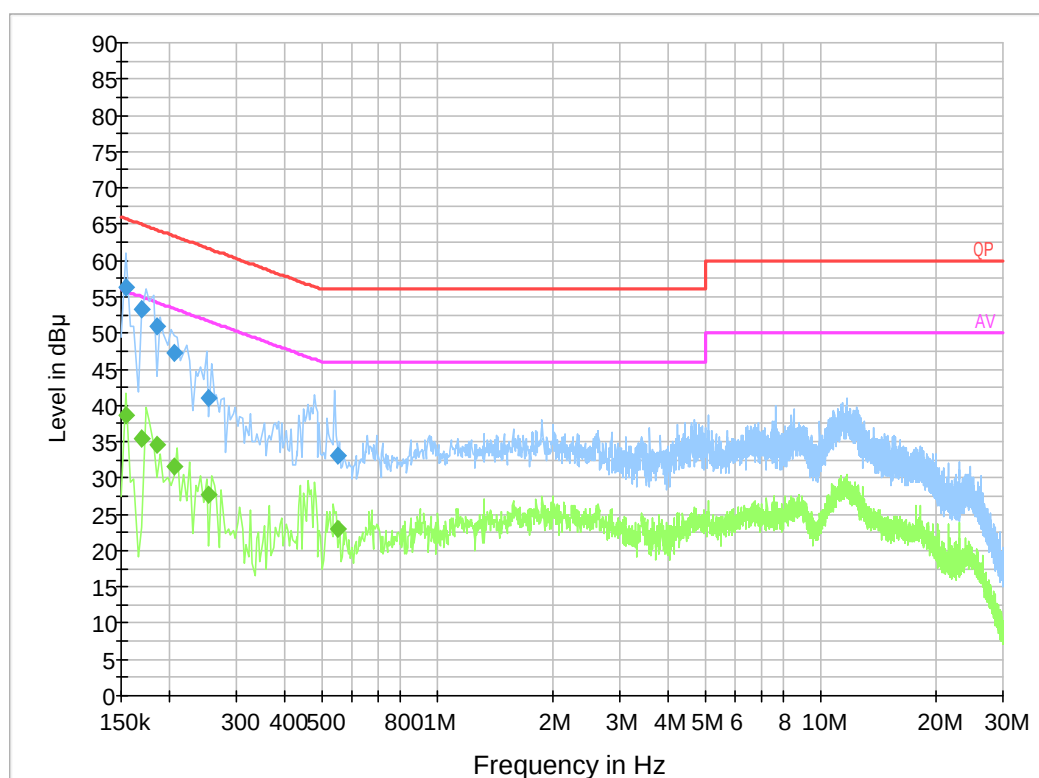
Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.161500	34.3	9.000	L1	19.9	21.1	55.4
0.189500	31.3	9.000	L1	19.8	22.8	54.1
0.214501	29.2	9.000	L1	19.8	23.8	53.0
0.249500	28.1	9.000	L1	19.8	23.7	51.8
0.301470	26.5	9.000	L1	19.7	23.7	50.2
0.467010	32.5	9.000	L1	19.8	14.1	46.6

AC 120V/60 Hz, Neutral**Final Result 1**

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.165500	52.0	9.000	N	19.8	13.2	65.2
0.169500	51.2	9.000	N	19.8	13.8	65.0
0.193500	46.5	9.000	N	19.8	17.4	63.9
0.249500	43.0	9.000	N	19.8	18.8	61.8
0.266500	39.2	9.000	N	19.7	22.0	61.2
0.502410	43.8	9.000	N	19.8	12.2	56.0

Final Result 2

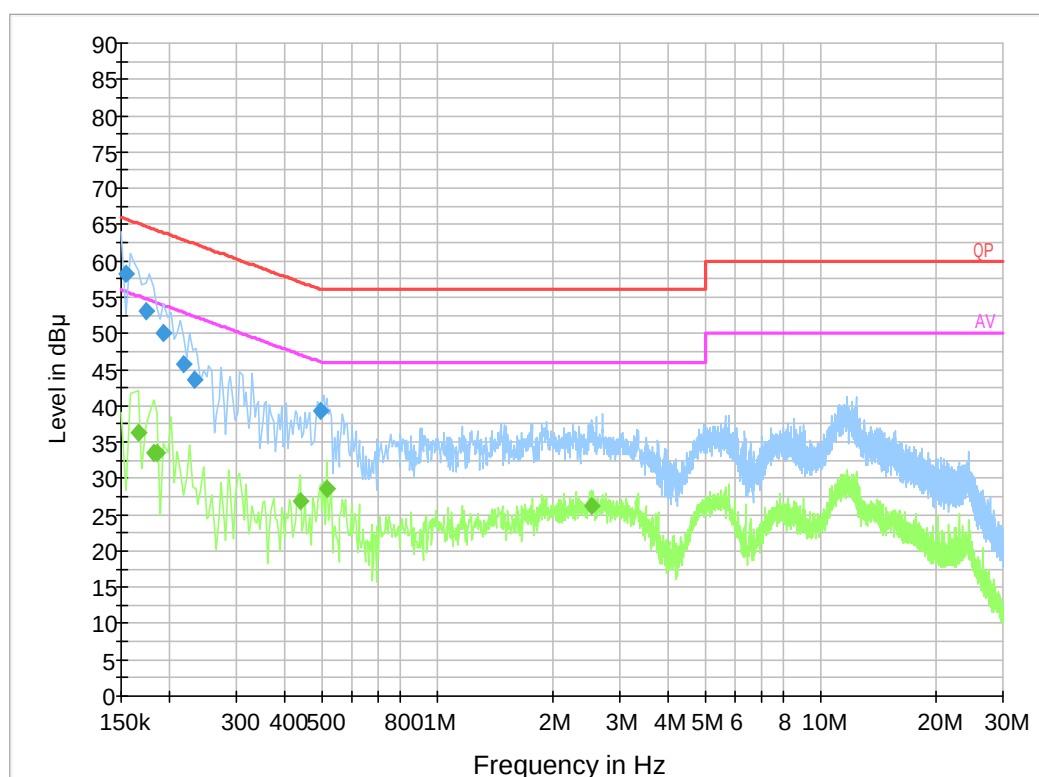
Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.162000	38.8	9.000	N	19.8	16.6	55.4
0.262000	29.7	9.000	N	19.8	21.7	51.4
0.386000	34.6	9.000	N	19.8	13.5	48.1
0.430000	31.4	9.000	N	19.8	15.9	47.3
0.478000	27.2	9.000	N	19.8	19.2	46.4
0.510000	36.1	9.000	N	19.8	9.9	46.0

*For Adapter 2***AC 120V/60 Hz, Line****Final Result 1**

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.154000	56.2	9.000	L1	19.8	9.6	65.8
0.169500	53.4	9.000	L1	19.9	11.6	65.0
0.185500	50.9	9.000	L1	19.8	13.3	64.2
0.205500	47.3	9.000	L1	19.8	16.1	63.4
0.254500	41.0	9.000	L1	19.8	20.6	61.6
0.550130	33.0	9.000	L1	19.8	23.0	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.154000	38.7	9.000	L1	19.8	17.1	55.8
0.169500	35.4	9.000	L1	19.9	19.6	55.0
0.185500	34.5	9.000	L1	19.8	19.7	54.2
0.205500	31.6	9.000	L1	19.8	21.8	53.4
0.254500	27.7	9.000	L1	19.8	23.9	51.6
0.550130	23.0	9.000	L1	19.8	23.0	46.0

AC 120V/60 Hz, Neutral**Final Result 1**

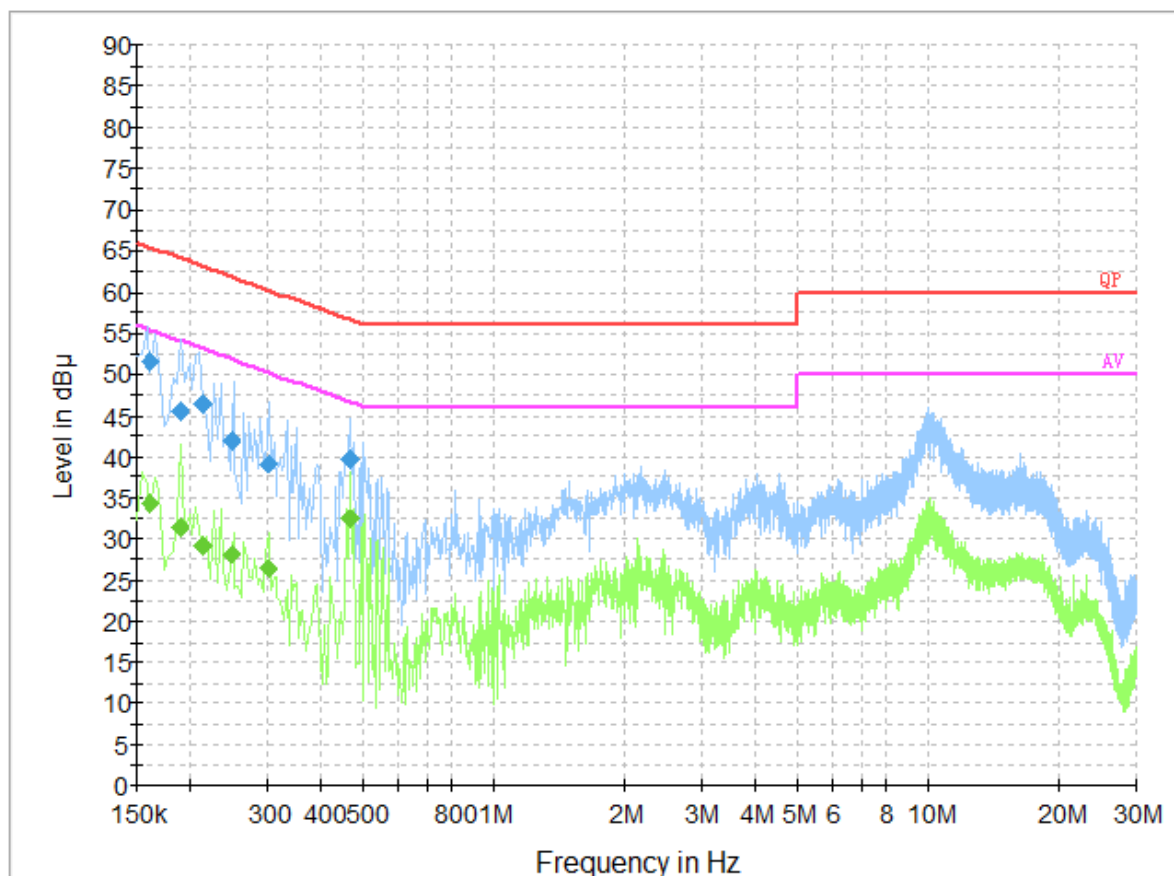
Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.154000	58.1	9.000	N	19.8	7.7	65.8
0.173500	53.1	9.000	N	19.8	11.7	64.8
0.193500	50.1	9.000	N	19.8	13.8	63.9
0.218501	45.8	9.000	N	19.8	17.1	62.9
0.233500	43.6	9.000	N	19.8	18.7	62.3
0.498410	39.2	9.000	N	19.8	16.8	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.166000	36.2	9.000	N	19.8	19.0	55.2
0.182000	33.5	9.000	N	19.8	20.9	54.4
0.186000	33.5	9.000	N	19.8	20.7	54.2
0.442000	26.8	9.000	N	19.8	20.2	47.0
0.514000	28.6	9.000	N	19.8	17.4	46.0
2.538000	26.3	9.000	N	19.8	19.7	46.0

For Adapter 3

AC 120V/60 Hz, Line

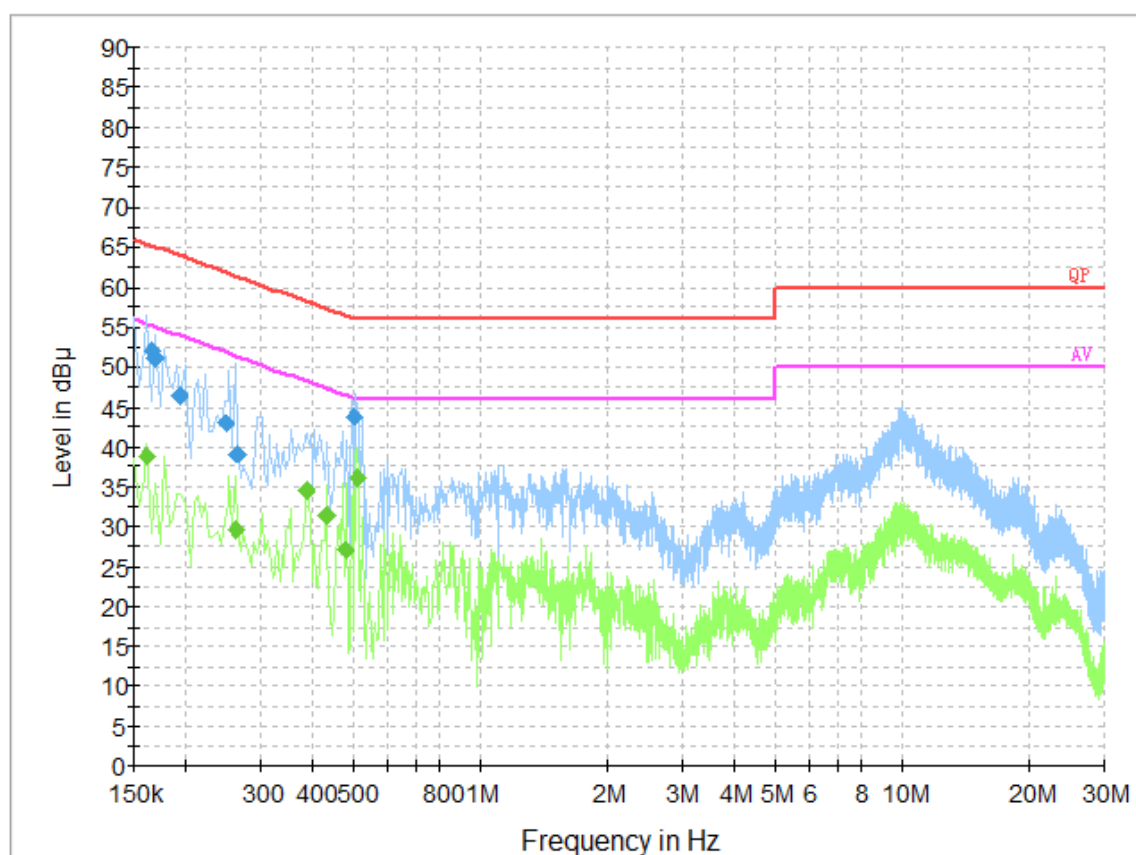


Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.161500	51.6	9.000	L1	19.9	13.8	65.4
0.189500	45.5	9.000	L1	19.8	18.6	64.1
0.214501	46.4	9.000	L1	19.8	16.6	63.0
0.249500	42.0	9.000	L1	19.8	19.8	61.8
0.301470	39.1	9.000	L1	19.7	21.1	60.2
0.467010	39.8	9.000	L1	19.8	16.8	56.6

Final Result 2

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.161500	34.3	9.000	L1	19.9	21.1	55.4
0.189500	31.3	9.000	L1	19.8	22.8	54.1
0.214501	29.2	9.000	L1	19.8	23.8	53.0
0.249500	28.1	9.000	L1	19.8	23.7	51.8
0.301470	26.5	9.000	L1	19.7	23.7	50.2
0.467010	32.5	9.000	L1	19.8	14.1	46.6

AC 120V/60 Hz, Neutral**Final Result 1**

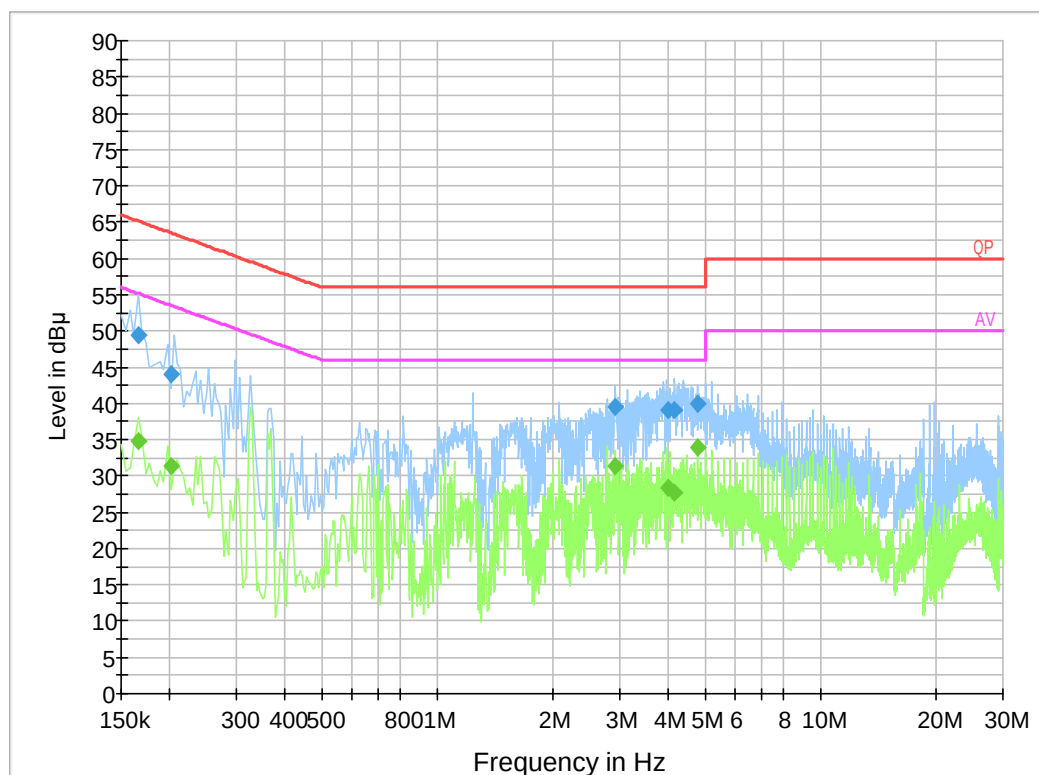
Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.165500	52.0	9.000	N	19.8	13.2	65.2
0.169500	51.2	9.000	N	19.8	13.8	65.0
0.193500	46.5	9.000	N	19.8	17.4	63.9
0.249500	43.0	9.000	N	19.8	18.8	61.8
0.266500	39.2	9.000	N	19.7	22.0	61.2
0.502410	43.8	9.000	N	19.8	12.2	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.162000	38.8	9.000	N	19.8	16.6	55.4
0.262000	29.7	9.000	N	19.8	21.7	51.4
0.386000	34.6	9.000	N	19.8	13.5	48.1
0.430000	31.4	9.000	N	19.8	15.9	47.3
0.478000	27.2	9.000	N	19.8	19.2	46.4
0.510000	36.1	9.000	N	19.8	9.9	46.0

Test mode 2

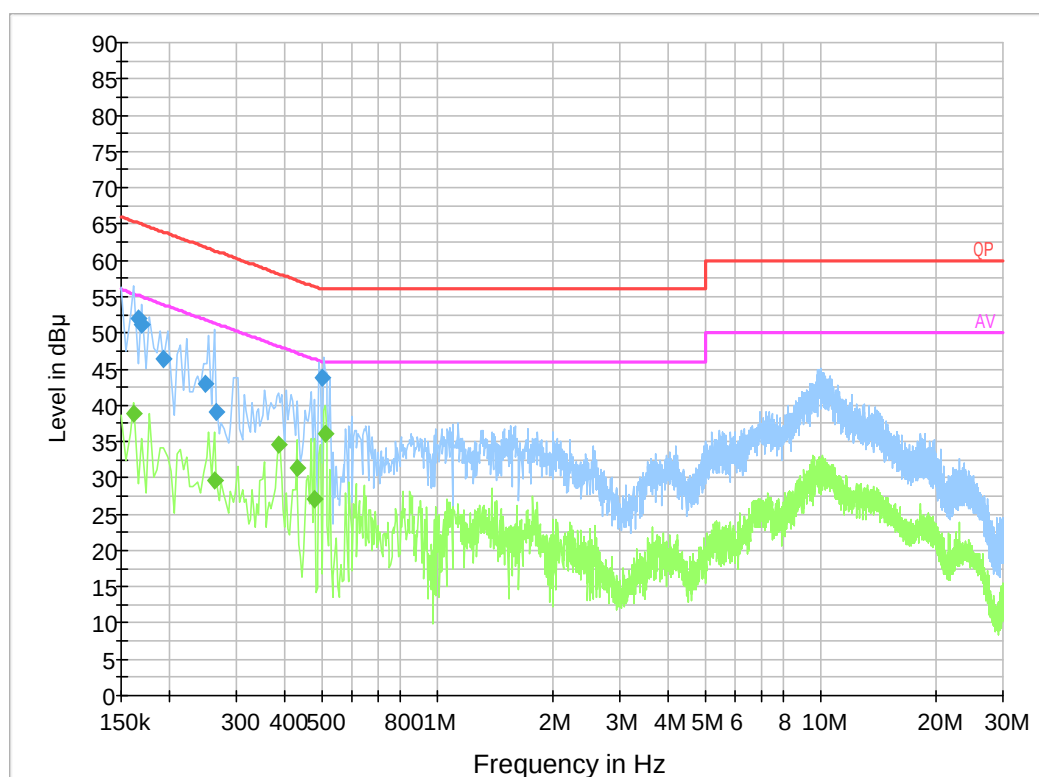
AC 120V/60 Hz, Line

**Final Result 1**

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.165500	49.3	9.000	L1	19.9	15.9	65.2
0.201500	44.0	9.000	L1	19.8	19.5	63.5
2.922110	39.4	9.000	L1	19.9	16.6	56.0
4.018510	39.0	9.000	L1	19.9	17.0	56.0
4.147330	39.2	9.000	L1	19.9	16.8	56.0
4.801910	40.0	9.000	L1	19.9	16.0	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.165500	34.8	9.000	L1	19.9	20.4	55.2
0.201500	31.4	9.000	L1	19.8	22.1	53.5
2.922110	31.3	9.000	L1	19.9	14.7	46.0
4.018510	28.4	9.000	L1	19.9	17.6	46.0
4.147330	27.8	9.000	L1	19.9	18.2	46.0
4.801910	33.9	9.000	L1	19.9	12.1	46.0

AC 120V/60 Hz, Neutral**Final Result 1**

Frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.165500	52.0	9.000	N	19.8	13.2	65.2
0.169500	51.2	9.000	N	19.8	13.8	65.0
0.193500	46.5	9.000	N	19.8	17.4	63.9
0.249500	43.0	9.000	N	19.8	18.8	61.8
0.266500	39.2	9.000	N	19.7	22.0	61.2
0.502410	43.8	9.000	N	19.8	12.2	56.0

Final Result 2

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.162000	38.8	9.000	N	19.8	16.6	55.4
0.262000	29.7	9.000	N	19.8	21.7	51.4
0.386000	34.6	9.000	N	19.8	13.5	48.1
0.430000	31.4	9.000	N	19.8	15.9	47.3
0.478000	27.2	9.000	N	19.8	19.2	46.4
0.510000	36.1	9.000	N	19.8	9.9	46.0

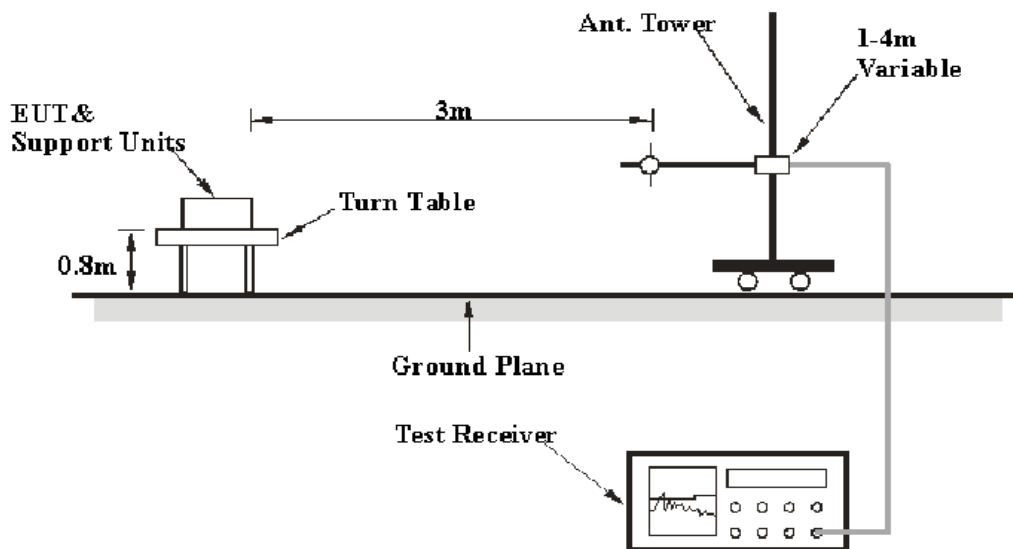
FCC §15.109 - RADIATED SPURIOUS EMISSIONS

Applicable Standard

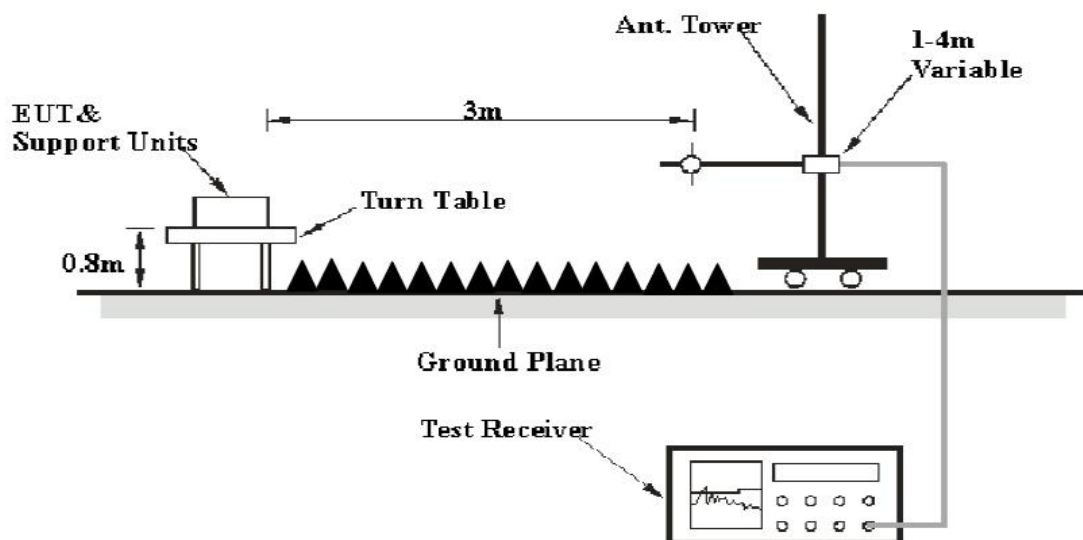
FCC §15.109

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 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 Setup

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

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

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

All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude 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:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Data

Environmental Conditions

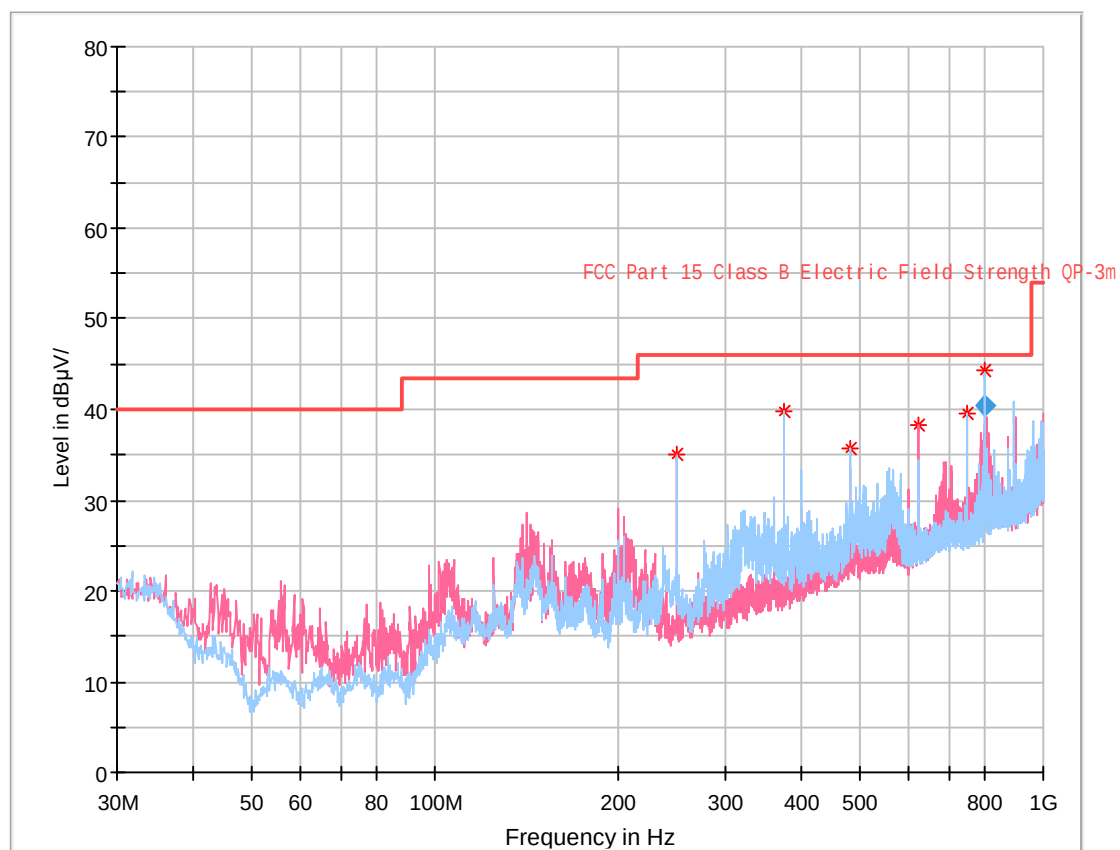
Temperature:	23~29.3 °C
Relative Humidity:	49~55%
ATM Pressure:	100.9~101.0 kPa

The testing was performed by Zero Yan on 2021-05-11 for below 1GHz and Alan He on 2021-05-11 for above 1GHz.

Test mode 1

For Adapter 1

30 MHz – 1 GHz:



Final_Result

Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
799.991750	40.46	46.00	5.54	112.0	H	161.0	-0.6

Critical_Freqs

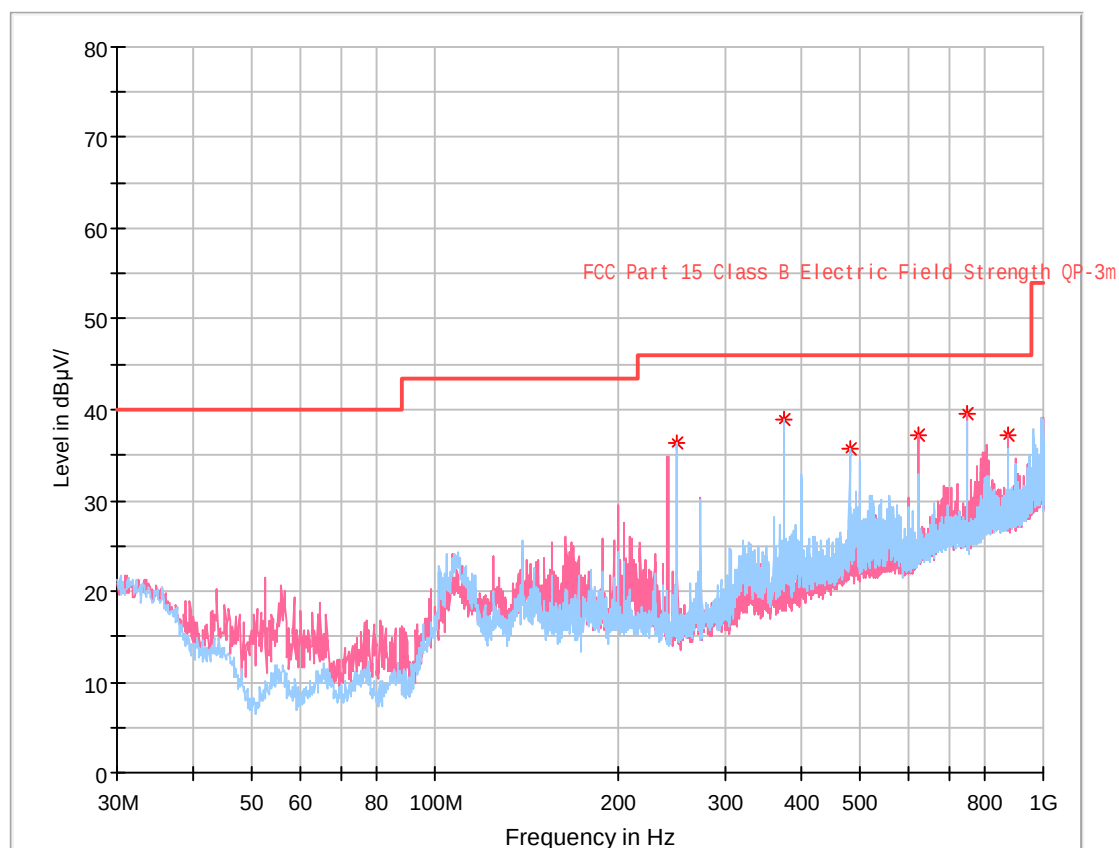
Frequency (MHz)	MaxPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
249.947500	34.95	46.00	11.05	100.0	V	346.0	-11.8
374.956250	39.79	46.00	6.21	100.0	H	142.0	-8.1
479.958750	35.69	46.00	10.31	100.0	H	293.0	-5.3
624.973750	38.19	46.00	7.81	100.0	V	54.0	-3.4
749.982500	39.63	46.00	6.37	100.0	H	133.0	-1.7

1-7 GHz:

Frequency (MHz)	Measurement		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15B	
	Reading (dBμV)	PK/QP/Ave.		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
1095.87	66.94	PK	310	1.4	H	-5.63	61.31	74	12.69
1095.87	43.58	Ave.	310	1.4	H	-5.63	37.95	54	16.05
1095.87	60.28	PK	35	1.3	V	-5.63	54.65	74	19.35
1095.87	38.69	Ave.	35	1.3	V	-5.63	33.06	54	20.94
1402.84	58.11	PK	352	1.5	H	-3.32	54.79	74	19.21
1402.84	43.58	Ave.	352	1.5	H	-3.32	40.26	54	13.74
1402.84	55.68	PK	176	1.3	V	-3.32	52.36	74	21.64
1402.84	40.28	Ave.	176	1.3	V	-3.32	36.96	54	17.04

For Adapter 2

30 MHz – 1 GHz:



Critical_Freqs

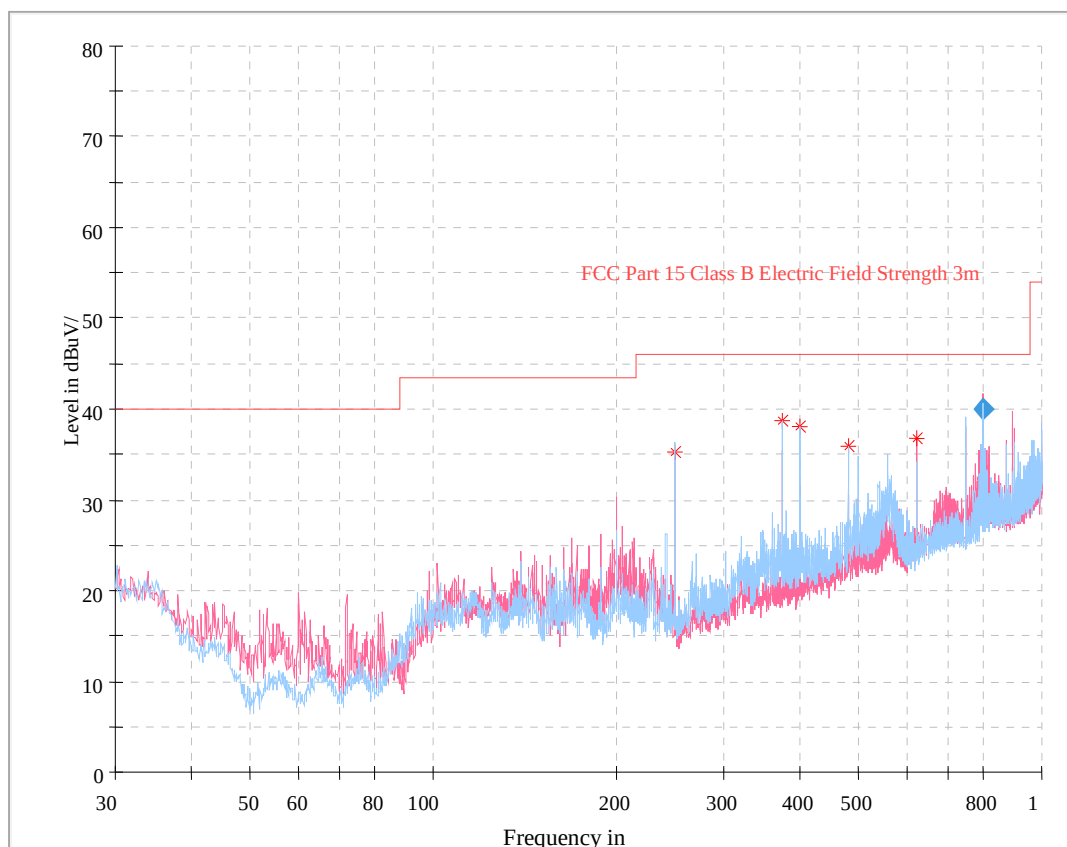
Frequency (MHz)	MaxPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
374.956250	38.92	46.00	7.08	100.0	H	157.0	-8.1
480.080000	35.74	46.00	10.26	100.0	H	308.0	-5.3
249.947500	36.26	46.00	9.74	200.0	H	302.0	-11.8
874.991250	37.16	46.00	8.84	100.0	V	24.0	0.6
624.973750	37.30	46.00	8.70	100.0	V	215.0	-3.4
749.982500	39.55	46.00	6.45	100.0	V	235.0	-1.7

1-7GHz:

Frequency (MHz)	Measurement		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15B	
	Reading (dBμV)	PK/QP/Ave.		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
1094.53	67.58	PK	208	2.0	H	-5.63	61.95	74	12.05
1094.53	43.55	Ave.	208	2.0	H	-5.63	37.92	54	16.08
1094.53	59.67	PK	281	2.2	V	-5.63	54.04	74	19.96
1094.53	39.51	Ave.	281	2.2	V	-5.63	33.88	54	20.12
1403.28	58.33	PK	339	1.1	H	-3.32	55.01	74	18.99
1403.28	42.58	Ave.	339	1.1	H	-3.32	39.26	54	14.74
1403.28	56.39	PK	130	1.9	V	-3.32	53.07	74	20.93
1403.28	41.57	Ave.	130	1.9	V	-3.32	38.25	54	15.75

For Adapter 3

30 MHz – 1 GHz:



Final Result

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
799.983500	40.09	46.00	5.91	161.0	V	215.0	-0.6

Critical Freqs

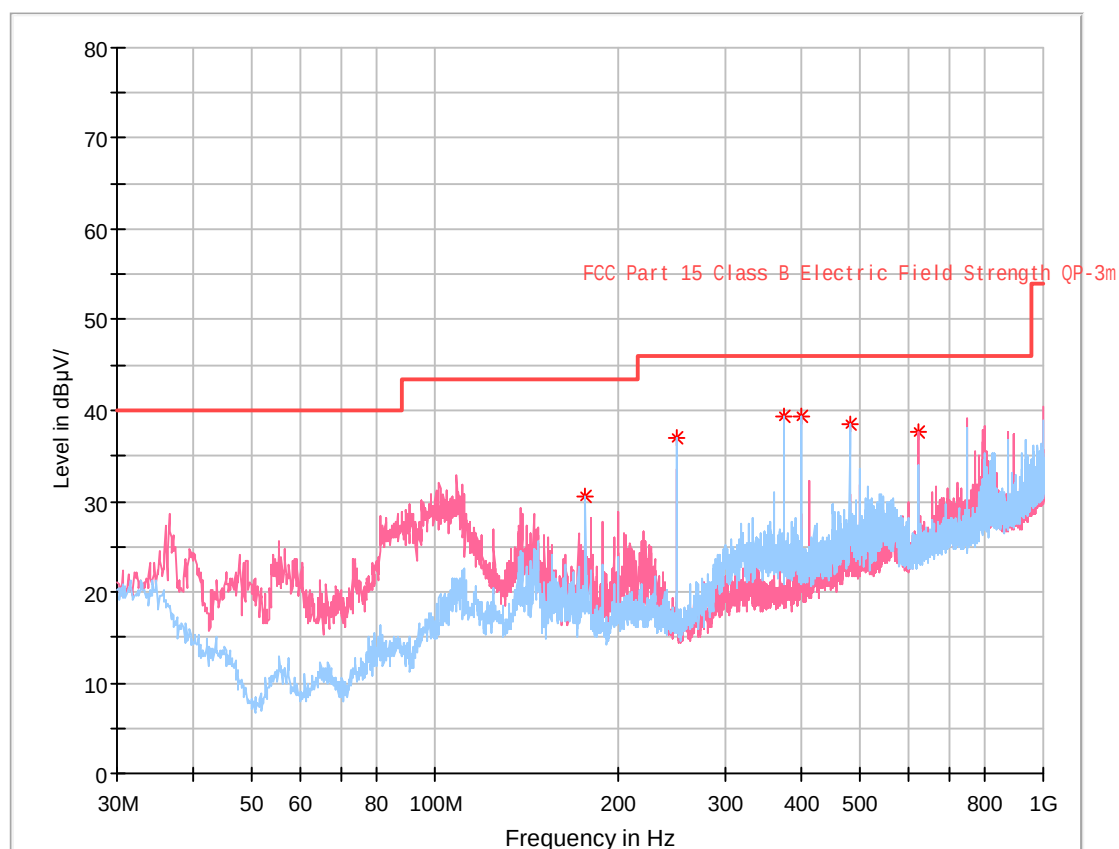
Frequency (MHz)	MaxPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
249.947500	35.21	46.00	10.79	100.0	V	334.0	-11.8
374.956250	38.76	46.00	7.24	100.0	H	333.0	-8.1
399.933750	38.06	46.00	7.94	100.0	H	345.0	-7.4
479.958750	35.83	46.00	10.17	100.0	H	299.0	-5.3
624.973750	36.69	46.00	9.31	100.0	V	14.0	-3.4

1-7 GHz:

Frequency (MHz)	Measurement		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15B	
	Reading (dBμV)	PK/QP/Ave.		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
1095.91	65.17	PK	177	1.6	H	-5.63	59.54	74	14.46
1095.91	42.19	Ave.	177	1.6	H	-5.63	36.56	54	17.44
1095.91	60.91	PK	244	1.5	V	-5.63	55.28	74	18.72
1095.91	39.67	Ave.	244	1.5	V	-5.63	34.04	54	19.96
1408.37	59.49	PK	50	2.1	H	-3.32	56.17	74	17.83
1408.37	42.88	Ave.	50	2.1	H	-3.32	39.56	54	14.44
1408.37	56.27	PK	136	1.1	V	-3.32	52.95	74	21.05
1408.37	38.84	Ave.	136	1.1	V	-3.32	35.52	54	18.48

Test mode 2

30 MHz – 1 GHz:



Critical_Freqs

Frequency (MHz)	MaxPeak (dB μV/m)	Limit (dB μV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
176.955000	30.48	43.50	13.02	200.0	H	0.0	-12.2
249.947500	36.92	46.00	9.08	200.0	H	272.0	-11.8
374.956250	39.41	46.00	6.59	100.0	H	163.0	-8.1
400.055000	39.38	46.00	6.62	100.0	H	163.0	-7.4
479.958750	38.40	46.00	7.60	100.0	H	299.0	-5.3
624.973750	37.65	46.00	8.35	100.0	V	15.0	-3.4

1-7GHz

Frequency (MHz)	Measurement		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	FCC Part 15B	
	Reading (dBμV)	PK/QP/Ave.		Height (m)	Polar (H / V)			Limit (dBμV/m)	Margin (dB)
1095.91	65.17	PK	177	1.6	H	-5.63	59.54	74	14.46
1095.91	42.19	Ave.	177	1.6	H	-5.63	36.56	54	17.44
1095.91	60.91	PK	244	1.5	V	-5.63	55.28	74	18.72
1095.91	39.67	Ave.	244	1.5	V	-5.63	34.04	54	19.96
1405.31	59.69	PK	290	2.3	H	-3.32	56.37	74	17.63
1405.31	42.86	Ave.	290	2.3	H	-3.32	39.54	54	14.46
1405.31	57.33	PK	255	1.8	V	-3.32	54.01	74	19.99
1405.31	39.87	Ave.	255	1.8	V	-3.32	36.55	54	17.45

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