TEST REPORT

Applicant Name:	Grandstream Networks, Inc.
Address:	126 Brookline Ave., 3rd Floor Boston, MA 02215, USA
Report Number:	2401A59460E-EM-00
FCC ID:	YZZGWN7813PM1

Test Standard (s)

FCC Part 15, Subpart B (Class A)

Sample Description

Product Type:	Enterprise Layer 3 Managed Network Switch
Model No.:	GWN7813P
Multiple Model(s) No.:	N/A
Trade Mark:	GRANDSTREAM
Date Received:	2024/12/13
Issue Date:	2025/03/07

Test Result:	Pass▲

▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Carl Lu

EMC Engineer

Approved By:

Moon Liu

EMC Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401A59460E-EM-00	Original Report	2025/03/07

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Enterprise Layer 3 Managed Network Switch
Tested Model	GWN7813P
Multiple Model(s)	N/A
Voltage Range	AC 100-240 50/60Hz
Highest operating frequency#	800MHz (Provided by the applicant)
Equipment Class	Class A
Sample number	Sample1(G1766-0400W): 2VXO-1 Sample2(D1602-F420S54-A): 2VXO-2 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

Objective

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

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

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

Item	Frequency Range		Expanded Measurement uncertainty
Conducted Emissions	AC Mains	150 kHz ~30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Disturbance	30MHz~200MHz	Horizontal	5.32dB(k=2, 95% level of confidence)
	30MHz~200MHz	Vertical	5.43dB(k=2, 95% level of confidence)
	200MHz~1000MHz	Horizontal	5.77dB(k=2, 95% level of confidence)
	200MHz~1000MHz	Vertical	5.73dB(k=2, 95% level of confidence)
	1GHz~6GHz	/	5.34dB(k=2, 95% level of confidence)
	6GHz~18GHz	/	5.40dB(k=2, 95% level of confidence)
	18GHz~40GHz	/	5.64dB(k=2, 95% level of confidence)

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 lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

Each test item follows test standards and with no deviation.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in worst case condition.

Test Mode1: Data transmitting+ Full load +Sample1

Test Mode2: Data transmitting+ Full load +Sample2

Test Mode3: Data transmitting+ Full load +Sample1+ External power supply

Note: Connect the POE port to a POE load to make the POE reach its maximum power, and then short-circuit them in pairs. Leave two network ports connected to computers, and short-circuit the remaining ports in pairs to enter storm mode for testing.

EUT exercise software

No exercise software was used.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
TP-link	POE load	PPEL-24	N/A
DELL	PC1	Latitude E6520	DL0ZCS1
DELL	PC2	Latitude E5570	GNDLKC2
LITEON	Adapter	PA-1301-66C3	N/A
TP-Link	Fiber module*4	N/A	N/A

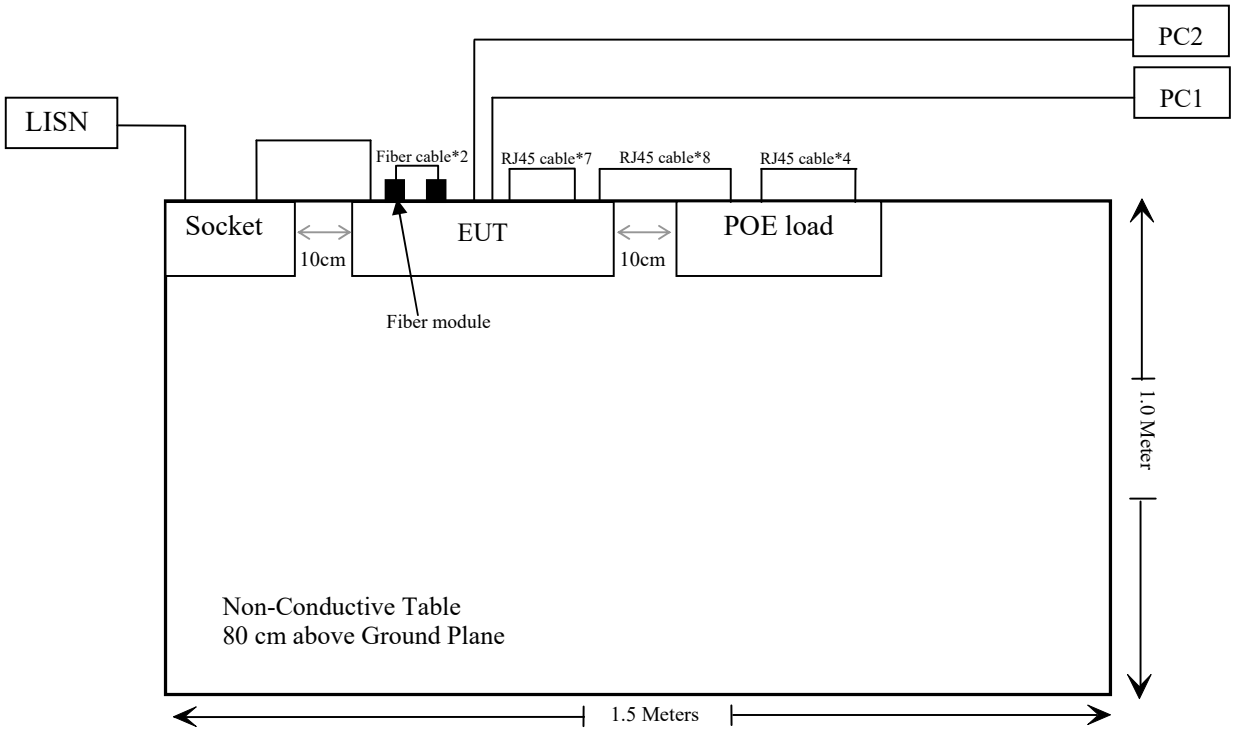
External I/O Cable

Cable Description	Length (m)	From/Port	To
Un-shielded detachable AC cable	1.2	EUT	Mains
Un-shielded detachable AC cable	1.5	Socket	LISN
Un-shielded detachable AC cable	1.2	Socket	Adapter
Unshielded detachable DC cable	1.8	Adapter	EUT
Un-shielded detachable RJ45 cable*8	1.0	EUT	POE load
Un-shielded detachable Fiber cable*2	1.0	Fiber module	Fiber module
Un-shielded detachable RJ45 cable	10.0	EUT	PC1
Un-shielded detachable RJ45 cable	10.0	EUT	PC2

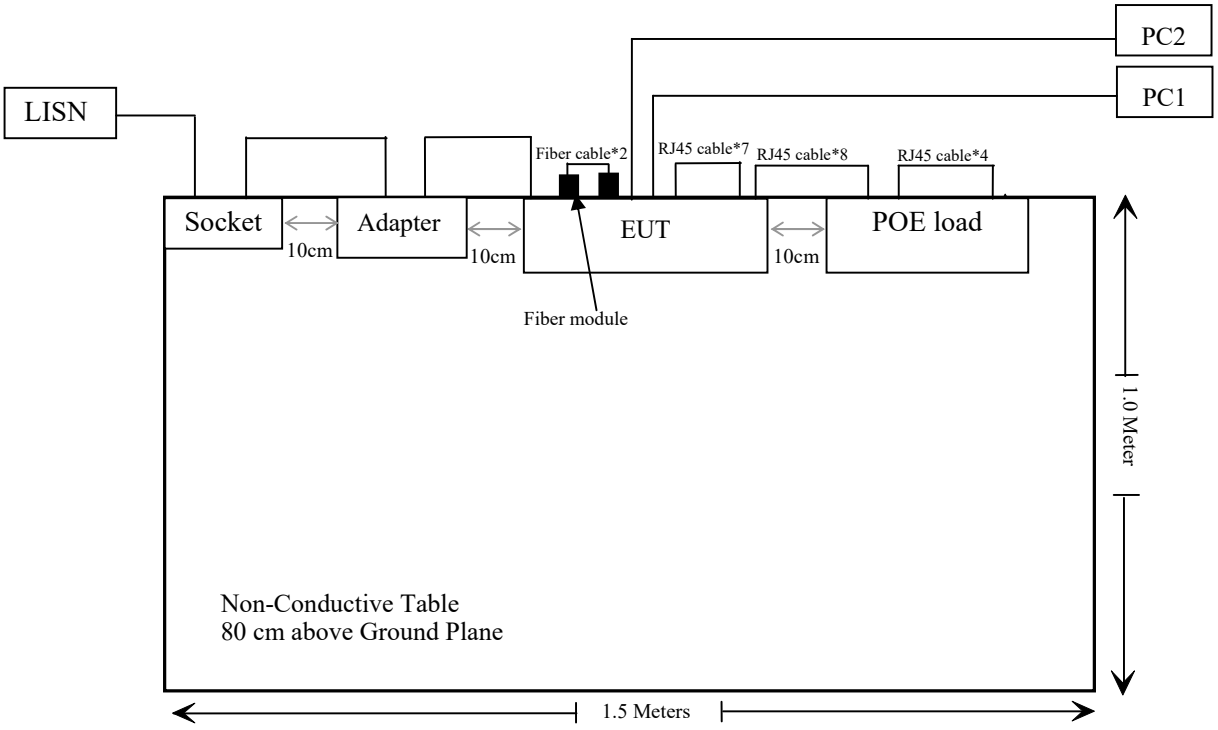
Block Diagram of Test Setup

For Conducted Emission:

Test Mode1&2

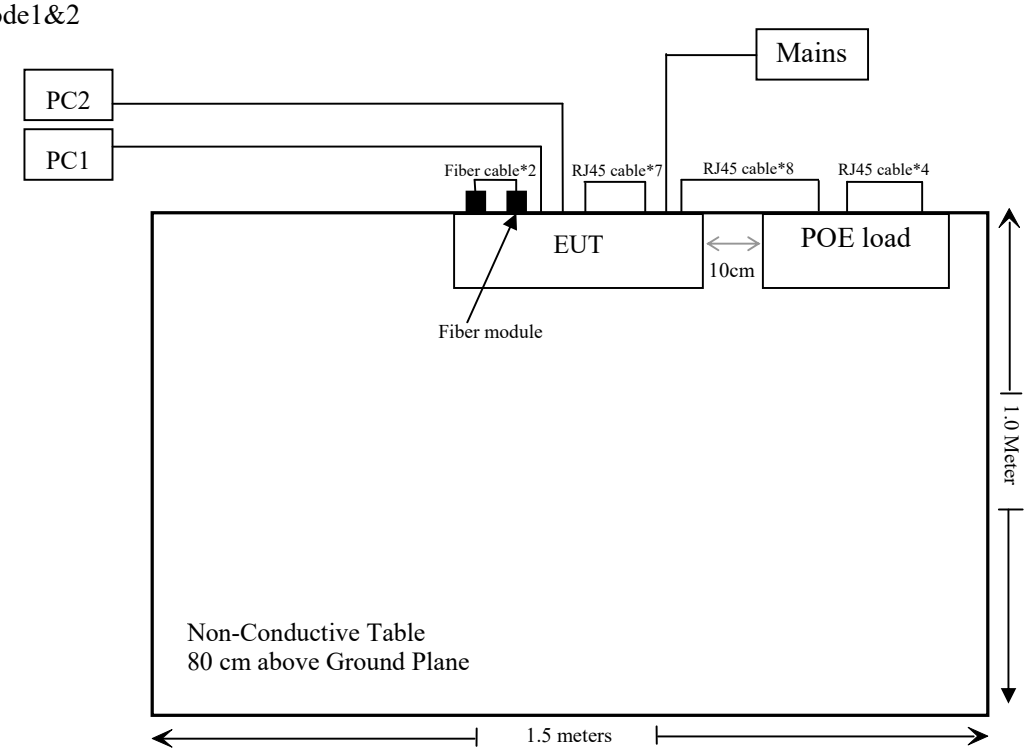


Test Mode3

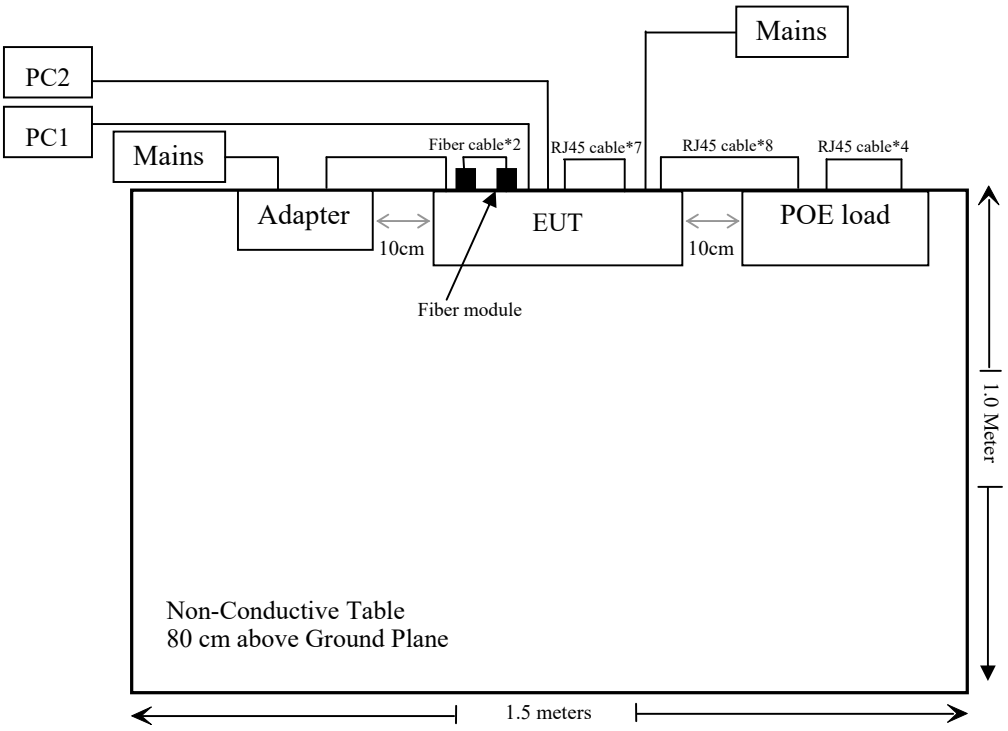


For Radiated Emission:

Test Mode1&2



Test Mode3


Mains
PC2
PC1
Mains
Fiber cable*2
RJ45 cable*7
RJ45 cable*8
RJ45 cable*4
Adapter
10cm
EUT
10cm
POE load
Fiber module
1.0 Meter
Non-Conductive Table
80 cm above Ground Plane
1.5 meters

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliant
§15.109	Radiated 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	2024/12/04	2025/12/03
Rohde & Schwarz	LISN	ENV216	101613	2024/12/04	2025/12/03
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2024/05/21	2025/05/20
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2024/05/21	2025/05/20
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/12/04	2025/12/03
Sonoma instrument	Pre-amplifier	310 N	186238	2024/05/21	2025/05/20
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber A Cable 1	N/A	2024/06/18	2025/06/17
Unknown	Cable	XH500C	J-10M-A	2024/06/18	2025/06/17
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
A.H.System	Preamplifier	PAM-0118P	489	2024/11/15	2025/11/14
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
Unknown	RF Cable	KMSE	735	2024/12/06	2025/12/05
Unknown	RF Cable	UFA147	219661	2024/12/06	2025/12/05
Audix	EMI Test software	E3	191218(V9)	NCR	NCR

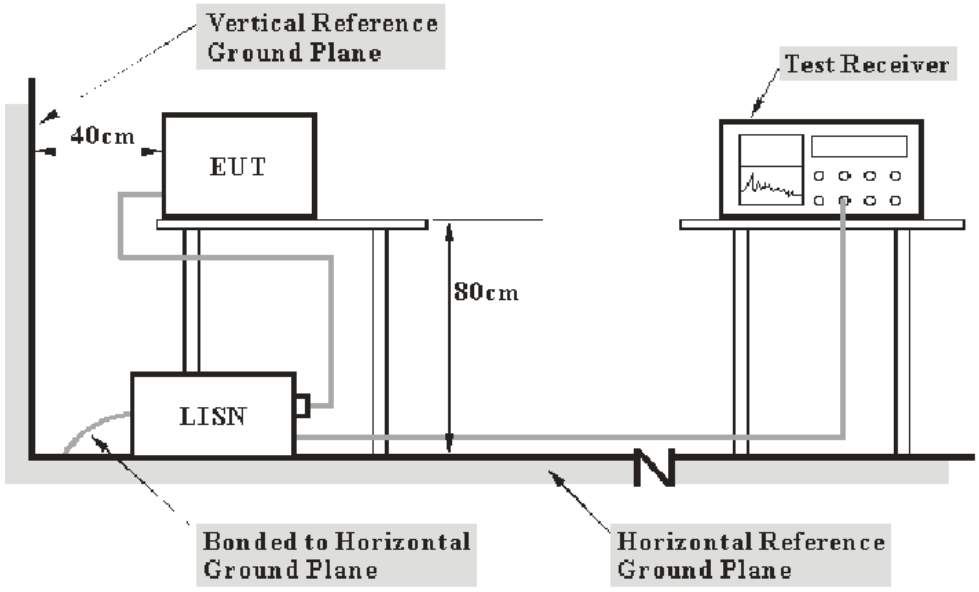
*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

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 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.

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.

Level & Over Limit Calculation

The Level is calculated by adding the LISN Factor, Cable Loss and the Read Level. The basic equation is as follows:

Level (dBuV) =Read Level (dBuV) +LISN Factor +Cable Loss

The "**Over limit**" column of the following data tables indicates the degree of compliance with the applicable limit.

Over Limit (dB) =Level (dBuV) -Limit Line (dBuV)

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

Test Data

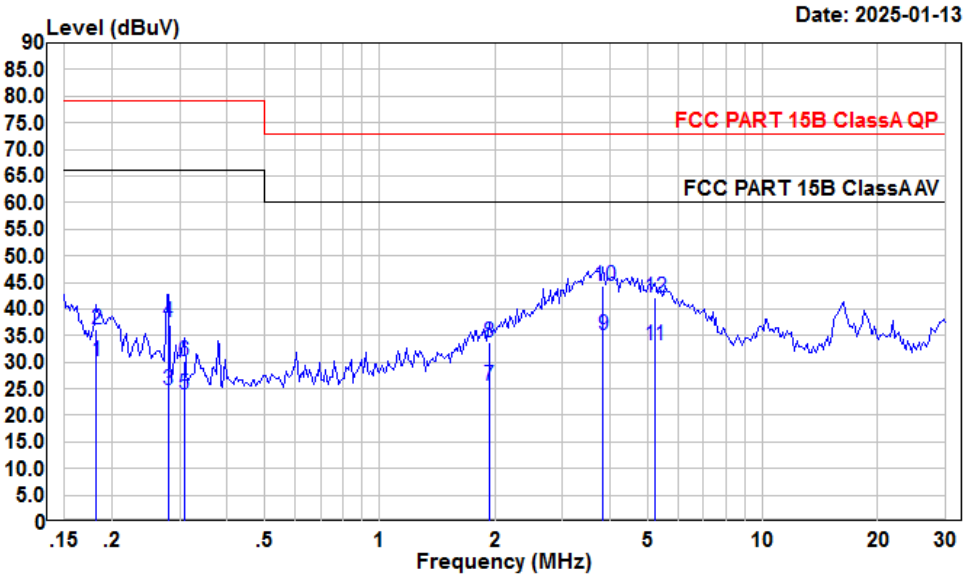
Environmental Conditions

Temperature:	21.3~24.1 ℃
Relative Humidity:	30~47 %
ATM Pressure:	101.4~102.2 kPa

The testing was performed by Macy Shi from 2025-01-11to 2025-03-07.

Test Mode1

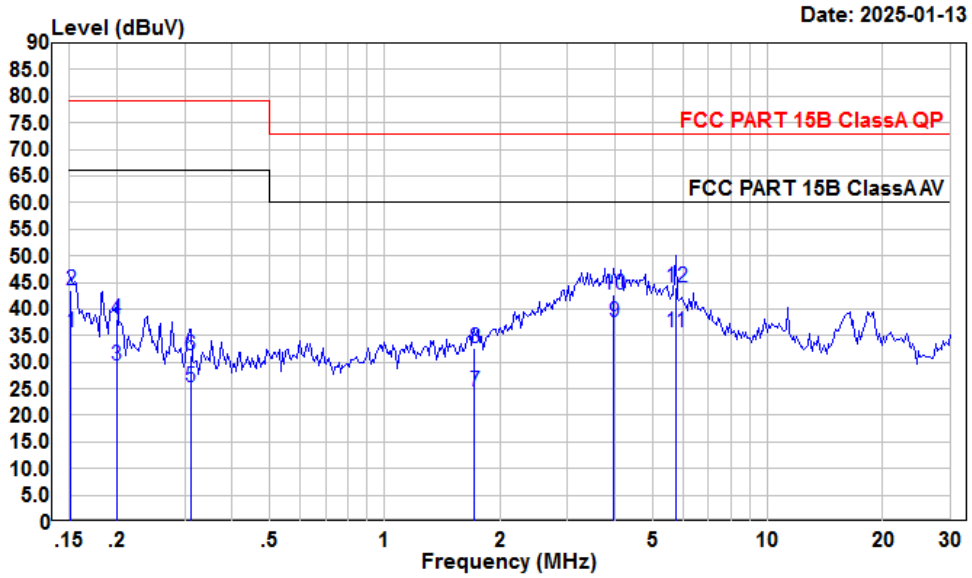
AC 120V/60 Hz, Line



Condition: Line
Project : 2401A59460E-EM
test Mode: Mode1
tester : Macy.shi
Setting : RBW:9kHz VBW:30KHz

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.182	9.56	30.26	10.60	10.10	66.00	-35.74	Average
2	0.182	15.45	36.15	10.60	10.10	79.00	-42.85	QP
3	0.280	4.09	24.82	10.63	10.10	66.00	-41.18	Average
4	0.280	16.87	37.60	10.63	10.10	79.00	-41.40	QP
5	0.308	3.24	23.96	10.61	10.11	66.00	-42.04	Average
6	0.308	9.42	30.14	10.61	10.11	79.00	-48.86	QP
7	1.928	4.42	25.68	11.07	10.19	60.00	-34.32	Average
8	1.928	12.40	33.66	11.07	10.19	73.00	-39.34	QP
9	3.840	13.84	34.96	10.91	10.21	60.00	-25.04	Average
10	3.840	23.15	44.27	10.91	10.21	73.00	-28.73	QP
11	5.221	12.16	33.10	10.76	10.18	60.00	-26.90	Average
12	5.221	21.09	42.03	10.76	10.18	73.00	-30.97	QP

AC 120V/60 Hz, Neutral

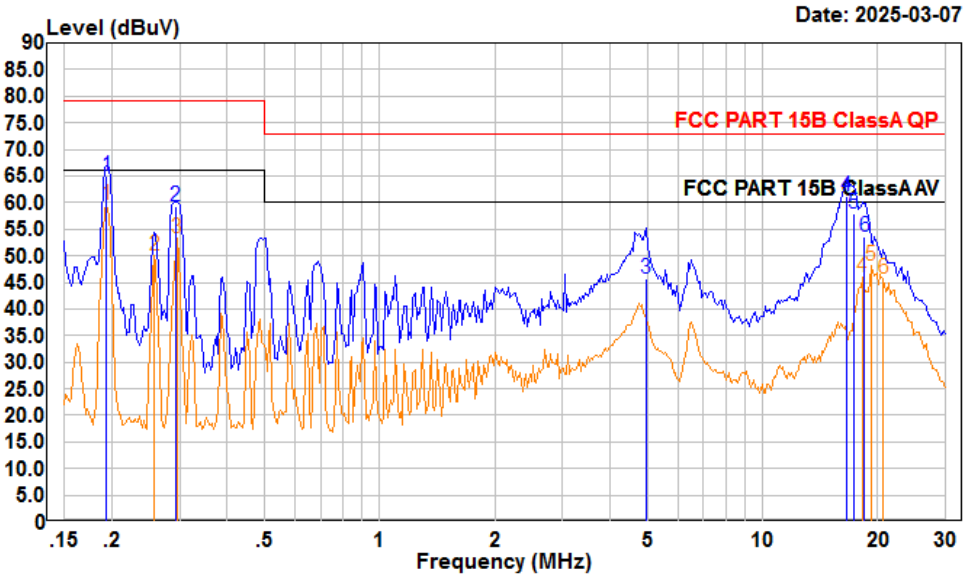


Condition: Neutral
Project : 2401A59460E-EM
test Mode: Mode1
tester : Macy.shi
Setting : RBW:9kHz VBW:30KHz

	Freq	Read Level	LISN Level	Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.152	15.14	35.68	10.41	10.13	66.00	-30.32	Average
2	0.152	23.04	43.58	10.41	10.13	79.00	-35.42	QP
3	0.200	8.40	29.29	10.80	10.09	66.00	-36.71	Average
4	0.200	17.13	38.02	10.80	10.09	79.00	-40.98	QP
5	0.312	4.49	25.25	10.65	10.11	66.00	-40.75	Average
6	0.312	10.39	31.15	10.65	10.11	79.00	-47.85	QP
7	1.716	3.59	24.48	10.72	10.17	60.00	-35.52	Average
8	1.716	11.62	32.51	10.72	10.17	73.00	-40.49	QP
9	3.964	16.41	37.62	11.00	10.21	60.00	-22.38	Average
10	3.964	21.54	42.75	11.00	10.21	73.00	-30.25	QP
11	5.744	14.61	35.53	10.74	10.18	60.00	-24.47	Average
12	5.744	23.19	44.11	10.74	10.18	73.00	-28.89	QP

Test Mode2

AC 120V/60 Hz, Line



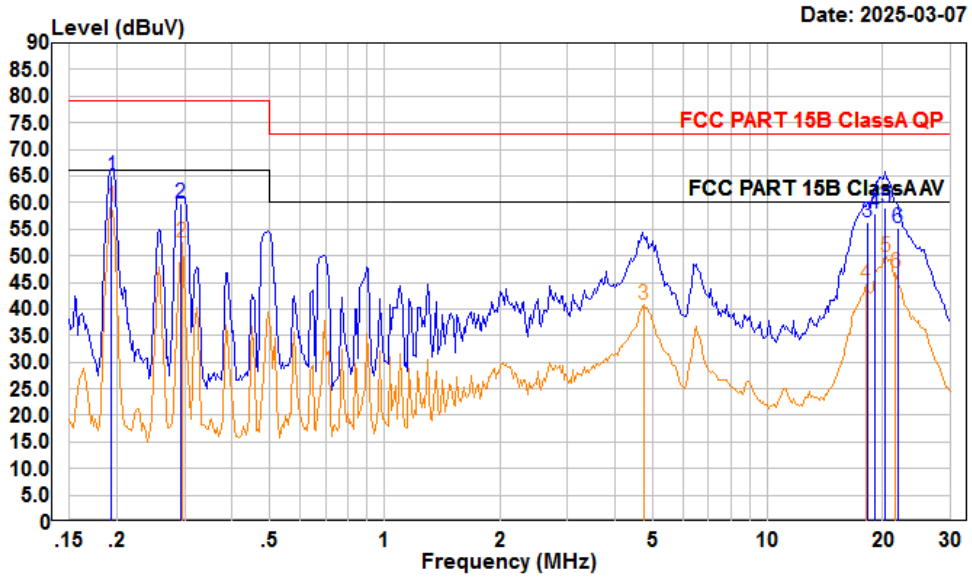
Trace: 1

Condition: Line
Project : 2401A59460E-EM
test Mode: Mode2 tester:Macy.shi
Setting : RBW:9kHz VBW:30KHz

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	43.70	65.08	11.29	10.09	79.00	-13.92	QP
2	0.292	37.99	59.28	11.18	10.11	79.00	-19.72	QP
3	4.952	24.30	45.63	11.15	10.18	73.00	-27.37	QP
4	16.573	39.80	61.10	11.10	10.20	73.00	-11.90	QP
5	17.291	36.60	57.90	11.10	10.20	73.00	-15.10	QP
6	18.426	32.20	53.49	11.10	10.19	73.00	-19.51	QP

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	38.19	59.57	11.29	10.09	66.00	-6.43	Average
2	0.258	28.79	50.09	11.22	10.08	66.00	-15.91	Average
3	0.296	31.92	53.20	11.17	10.11	66.00	-12.80	Average
4	18.232	24.61	45.90	11.10	10.19	60.00	-14.10	Average
5	19.224	26.77	48.05	11.10	10.18	60.00	-11.95	Average
6	20.704	24.40	45.60	11.03	10.17	60.00	-14.40	Average

AC 120V/60 Hz, Neutral



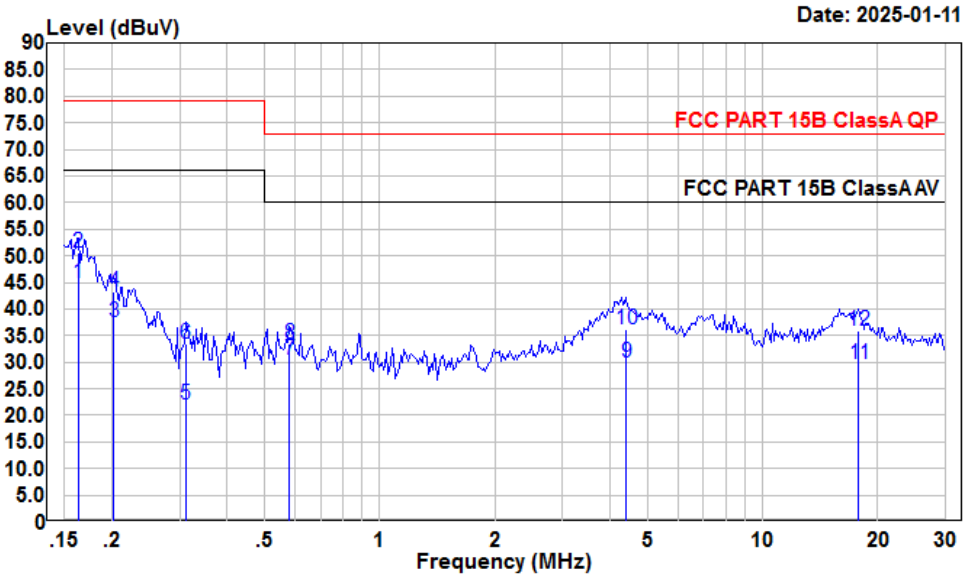
Condition: Neutral
Project : 2401A59460E-EM
test Mode: Mode2 tester:Macy.shi
Setting : RBW:9kHz VBW:30KHz

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	44.20	64.91	10.62	10.09	79.00	-14.09	QP
2	0.292	39.40	59.96	10.45	10.11	79.00	-19.04	QP
3	18.232	36.20	56.39	10.00	10.19	73.00	-16.61	QP
4	19.021	37.60	57.83	10.05	10.18	73.00	-15.17	QP
5	20.270	38.70	58.94	10.07	10.17	73.00	-14.06	QP
6	21.830	35.19	55.30	9.93	10.18	73.00	-17.70	QP

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	38.59	59.30	10.62	10.09	66.00	-6.70	Average
2	0.296	31.90	52.45	10.44	10.11	66.00	-13.55	Average
3	4.746	20.32	40.79	10.28	10.19	60.00	-19.21	Average
4	18.039	24.33	44.51	9.99	10.19	60.00	-15.49	Average
5	20.270	29.52	49.76	10.07	10.17	60.00	-10.24	Average
6	21.600	26.64	46.77	9.95	10.18	60.00	-13.23	Average

Test Mode3

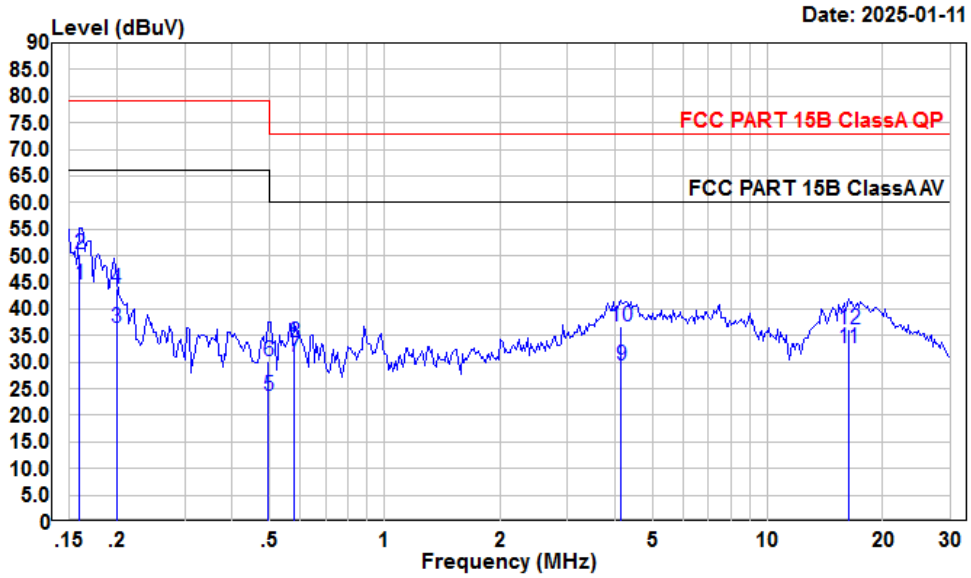
AC 120V/60 Hz, Line



Condition: Line
Project : 2401A59460E-EM
test Mode: Mode3
tester : Macy.shi
Setting : RBW:9kHz VBW:30KHz

	Freq	Read Level	LISN Level	Cable Factor	Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.163	24.74	44.96	10.11	10.11	66.00	-21.04	Average
2	0.163	30.45	50.67	10.11	10.11	79.00	-28.33	QP
3	0.202	17.52	37.52	9.91	10.09	66.00	-28.48	Average
4	0.202	23.16	43.16	9.91	10.09	79.00	-35.84	QP
5	0.312	1.63	21.93	10.19	10.11	66.00	-44.07	Average
6	0.312	13.05	33.35	10.19	10.11	79.00	-45.65	QP
7	0.582	9.67	30.38	10.59	10.12	60.00	-29.62	Average
8	0.582	12.66	33.37	10.59	10.12	73.00	-39.63	QP
9	4.407	9.68	29.98	10.10	10.20	60.00	-30.02	Average
10	4.407	15.77	36.07	10.10	10.20	73.00	-36.93	QP
11	17.849	9.15	29.66	10.32	10.19	60.00	-30.34	Average
12	17.849	15.45	35.96	10.32	10.19	73.00	-37.04	QP

AC 120V/60 Hz, Neutral



Condition: Neutral
Project : 2401A59460E-EM
test Mode: Mode3
tester : Macy.shi
Setting : RBW:9kHz VBW:30KHz

	Freq	Read Level	LISN Level	Cable Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.160	24.26	44.64	10.26	10.12	66.00	-21.36	Average
2	0.160	30.02	50.40	10.26	10.12	79.00	-28.60	QP
3	0.200	16.34	36.53	10.10	10.09	66.00	-29.47	Average
4	0.200	23.57	43.76	10.10	10.09	79.00	-35.24	QP
5	0.497	3.04	23.78	10.60	10.14	66.00	-42.22	Average
6	0.497	9.37	30.11	10.60	10.14	79.00	-48.89	QP
7	0.582	10.42	31.09	10.55	10.12	60.00	-28.91	Average
8	0.582	13.06	33.73	10.55	10.12	73.00	-39.27	QP
9	4.136	9.03	29.37	10.13	10.21	60.00	-30.63	Average
10	4.136	16.33	36.67	10.13	10.21	73.00	-36.33	QP
11	16.226	12.34	32.68	10.13	10.21	60.00	-27.32	Average
12	16.226	15.75	36.09	10.13	10.21	73.00	-36.91	QP

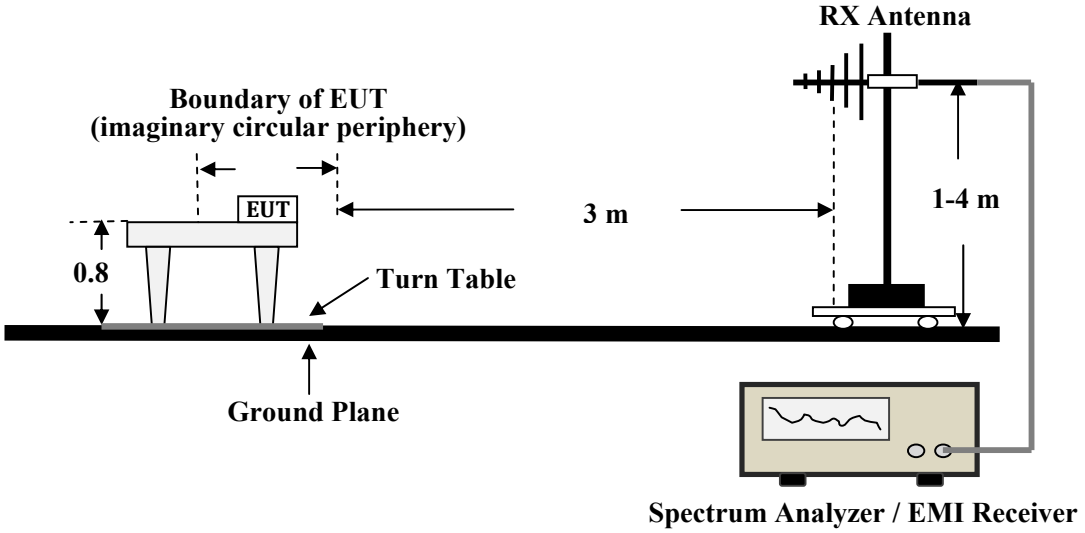
FCC §15.109 - RADIATED EMISSIONS

Applicable Standard

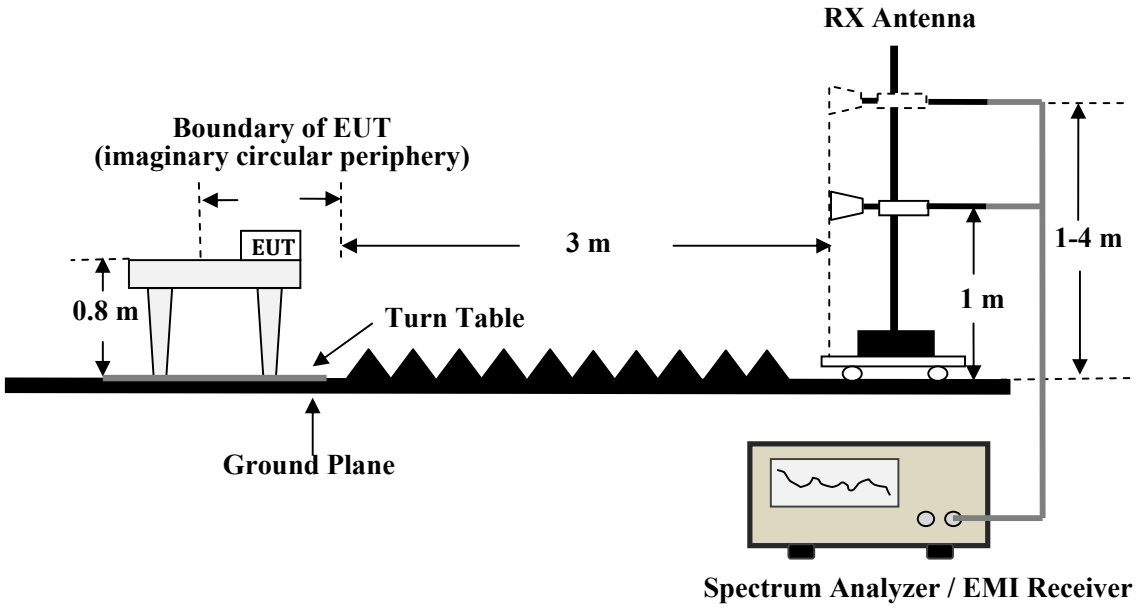
FCC §15.109

EUT Setup

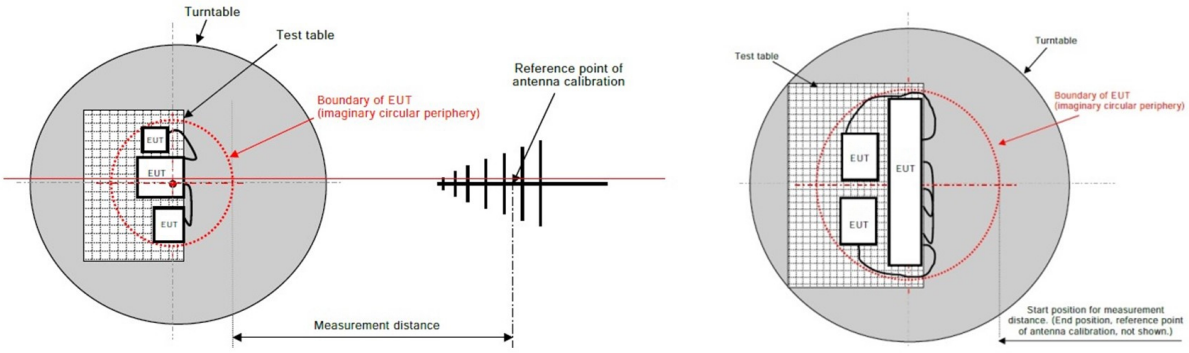
Below 1GHz for Radiated Emissions



Above 1GHz for Radiated Emissions



Radiated Emissions Setup Configuration



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The related limit was specified in FCC Part 15B.

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 and Spectrum analyzer Setup

During the radiated emission test, the EMI test receiver and spectrum analyzer setup 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.

If emission level of the EUT in Peak measurement mode is 20dB lower than peak limit line (that means the emission level in Peak measurement mode complies with both Peak and average limit lines) then only Peak measurement result is reported .Otherwise, Emission in average measurement mode shall be measured, and reported for frequency range above 1GHz.

Level & Over Limit Calculation

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

Factor = Antenna Factor + Cable Loss - Amplifier Gain

Level = Read Level + Factor

The "Over limit" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -6 dB means the emission is 6dB below the limit for Class A. The equation for Over Limit calculation is as follows:

Over limit = Level– Limit

Test Data

Environmental Conditions

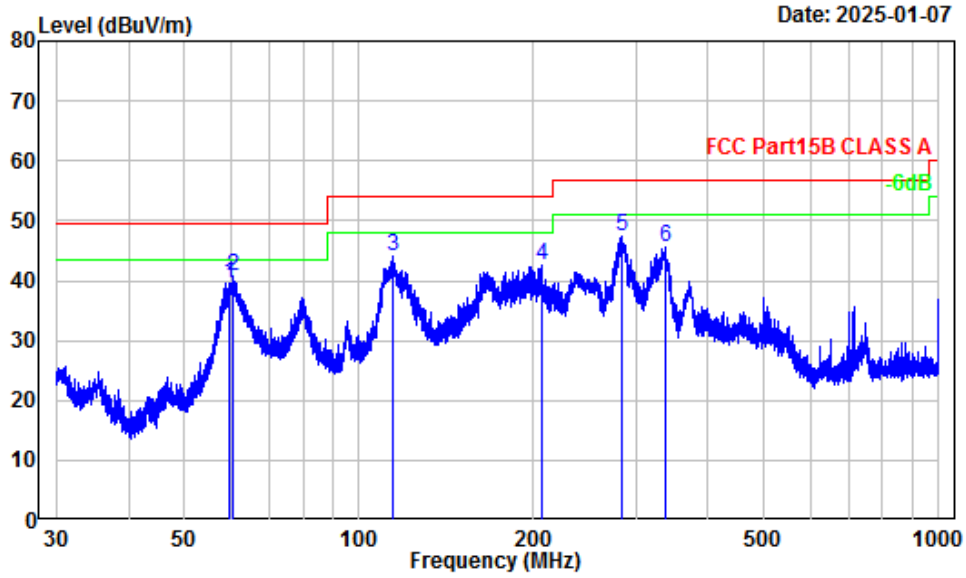
Temperature:	18~23.3 ℃
Relative Humidity:	40~48 %
ATM Pressure:	101.2~101.4 kPa

The testing was performed by Jack Liu from 2025-01-07 to 2025-02-07 for below 1GHz and Dylan Yang on 2025-01-13 for above 1GHz.

Test Mode1

30 MHz~1 GHz

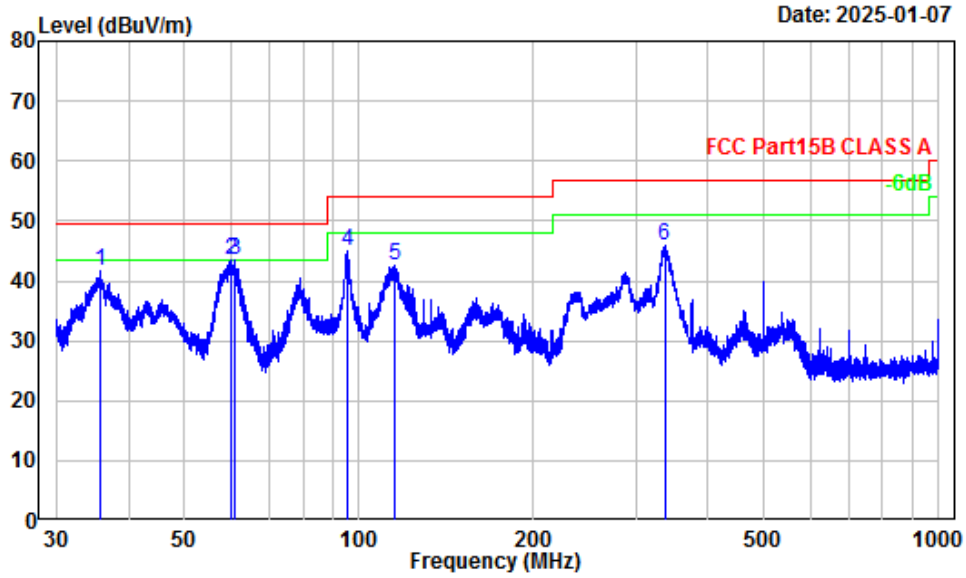
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2401A59460E-EM
Test Mode : Mode1
Detector: Peak RBW/VBW: 100/300kHz
Tester : Jack Liu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	59.89	-18.13	57.81	39.68	49.54	-9.86	Peak
2	60.60	-18.12	59.02	40.90	49.54	-8.64	Peak
3	114.21	-12.29	56.43	44.14	53.98	-9.84	Peak
4	207.12	-13.69	56.35	42.66	53.98	-11.32	Peak
5	284.23	-11.23	58.75	47.52	56.90	-9.38	Peak
6	338.10	-10.46	55.97	45.51	56.90	-11.39	Peak

Vertical

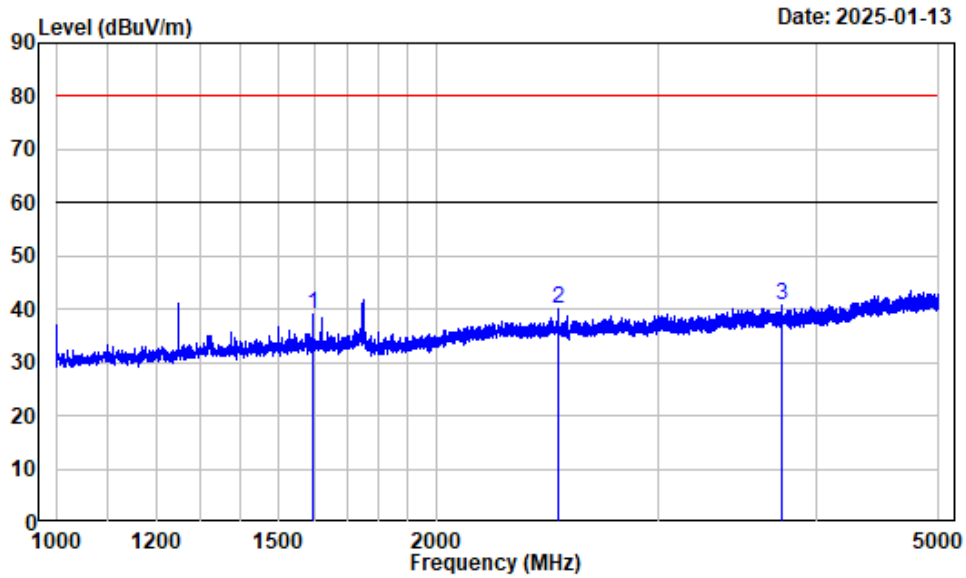


Site : Chamber A
Condition : 3m Vertical
Project Number : 2401A59460E-EM
Test Mode : Mode1
Detector: Peak RBW/VBW: 100/300kHz
Tester : Jack Liu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	35.81	-9.37	50.92	41.55	49.54	-7.99	Peak
2	60.04	-18.12	61.59	43.47	49.54	-6.07	Peak
3	61.08	-18.12	61.48	43.36	49.54	-6.18	Peak
4	95.59	-17.15	62.27	45.12	53.98	-8.86	Peak
5	114.97	-12.13	54.57	42.44	53.98	-11.54	Peak
6	336.62	-10.49	56.35	45.86	56.90	-11.04	Peak

1 ~ 5 GHz

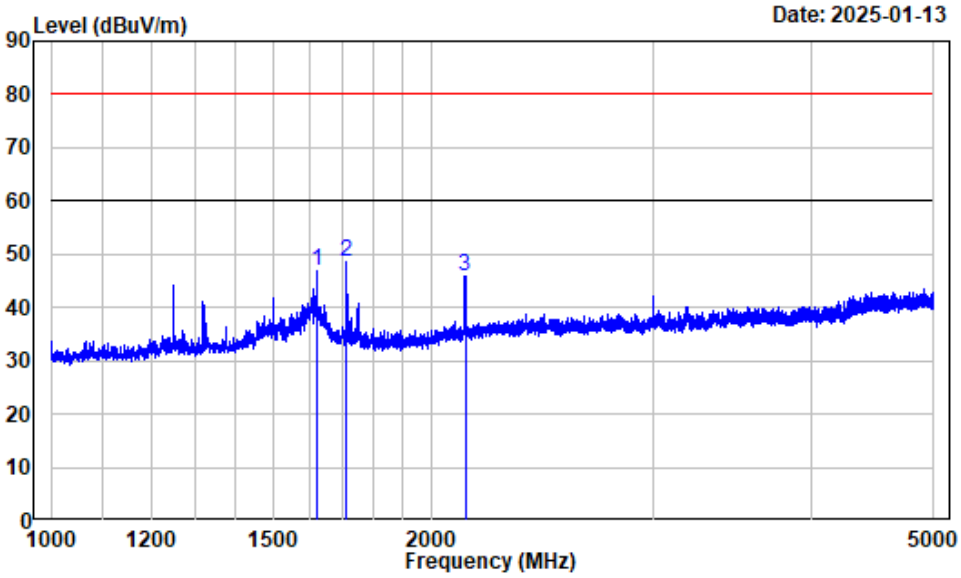
Horizontal



Site : chamber B
Condition : Horizontal
Project Number : 2401A59460E-EM
Test mode : Mode1
Tester : Dylan Yang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1598.075	-14.33	53.32	38.99	80.00	-41.01	Peak
2	2500.188	-11.00	51.20	40.20	80.00	-39.80	Peak
3	3753.844	-9.61	50.33	40.72	80.00	-39.28	Peak

Vertical



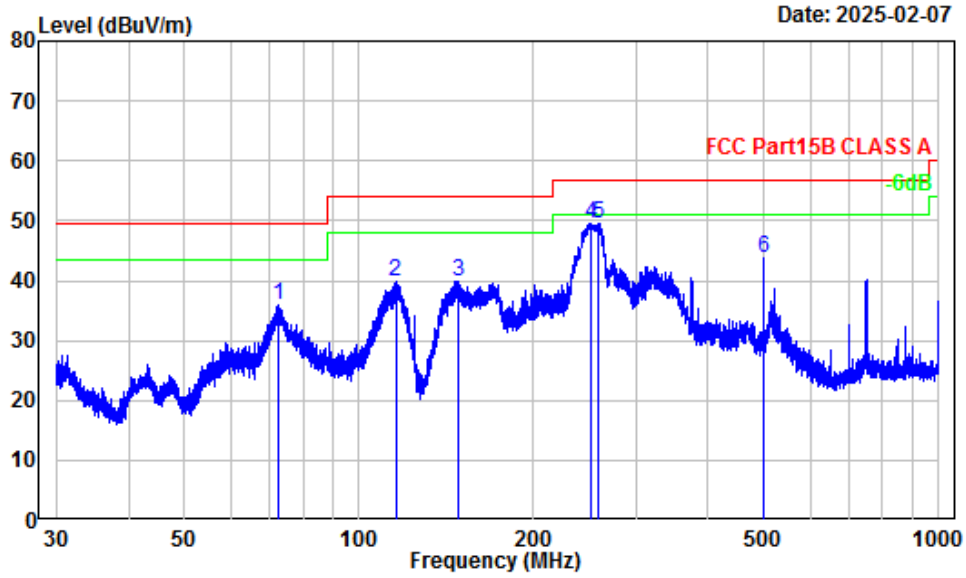
Site : chamber B
Condition : Vertical
Project Number : 2401A59460E-EM
Test mode : Mode1
Tester : Dylan Yang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1624.578	-14.18	60.95	46.77	80.00	-33.23	Peak
2	1711.089	-13.92	62.53	48.61	80.00	-31.39	Peak
3	2127.641	-11.60	57.44	45.84	80.00	-34.16	Peak

Test Mode2

30 MHz~1 GHz

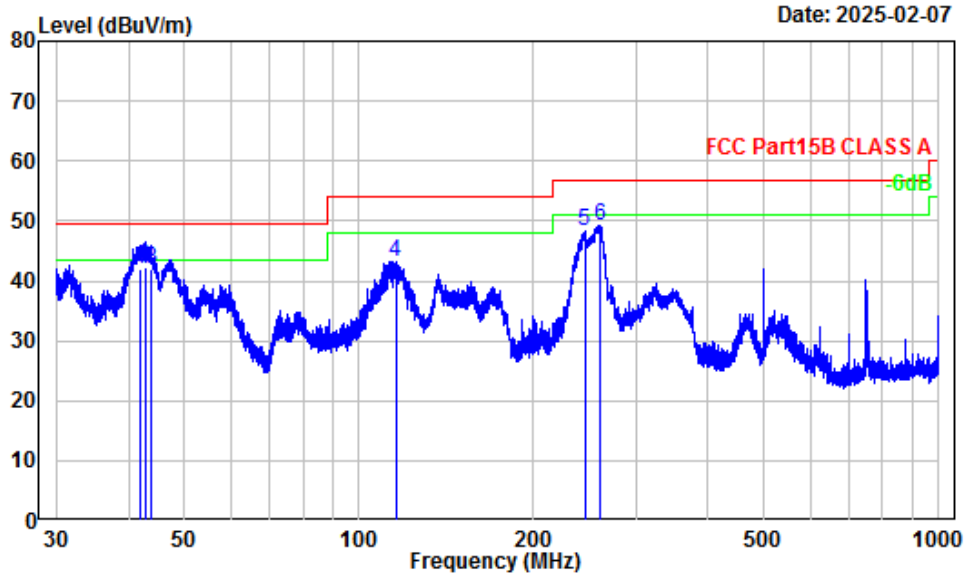
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2401A59460E-EM
Test Mode : Mode2
Detector: Peak RBW/VBW: 100/300kHz
Tester : Jack Liu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	72.34	-17.85	53.76	35.91	49.54	-13.63	Peak
2	115.62	-12.05	51.83	39.78	53.98	-14.20	Peak
3	148.51	-12.36	52.34	39.98	53.98	-14.00	Peak
4	250.74	-13.09	62.58	49.49	56.90	-7.41	Peak
5	258.89	-12.85	62.33	49.48	56.90	-7.42	Peak
6	500.08	-5.76	49.65	43.89	56.90	-13.01	Peak

Vertical

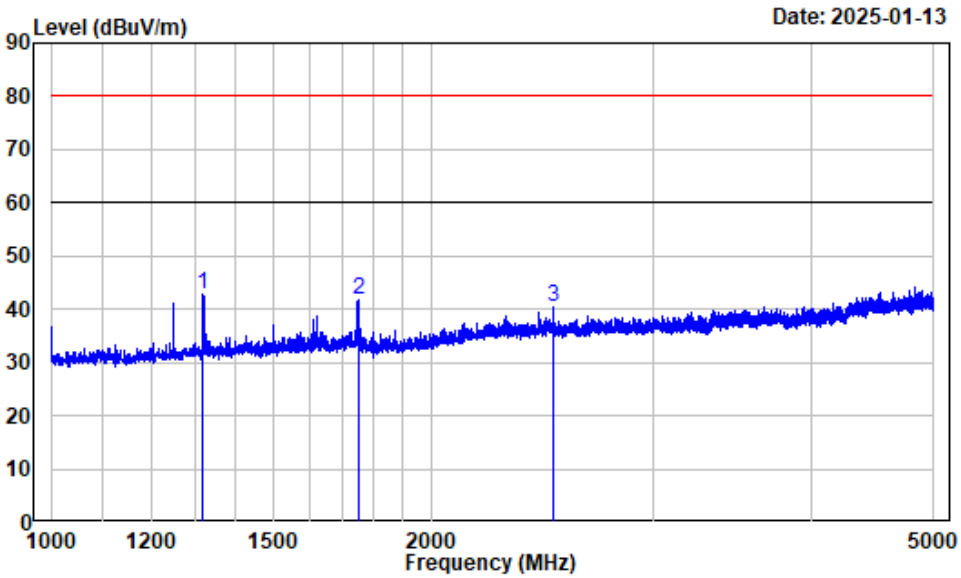


Site : Chamber A
Condition : 3m Vertical
Project Number : 2401A59460E-EM
Test Mode : Mode2
Detector: Peak RBW/VBW: 100/300kHz
Tester : Jack Liu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	41.97	-13.85	55.90	42.05	49.54	-7.49	QP
2	42.67	-14.35	56.70	42.35	49.54	-7.19	QP
3	43.62	-14.94	56.79	41.85	49.54	-7.69	QP
4	115.62	-12.05	55.18	43.13	53.98	-10.85	Peak
5	244.98	-13.21	61.42	48.21	56.90	-8.69	Peak
6	260.26	-12.74	62.01	49.27	56.90	-7.63	Peak

1 ~ 5 GHz

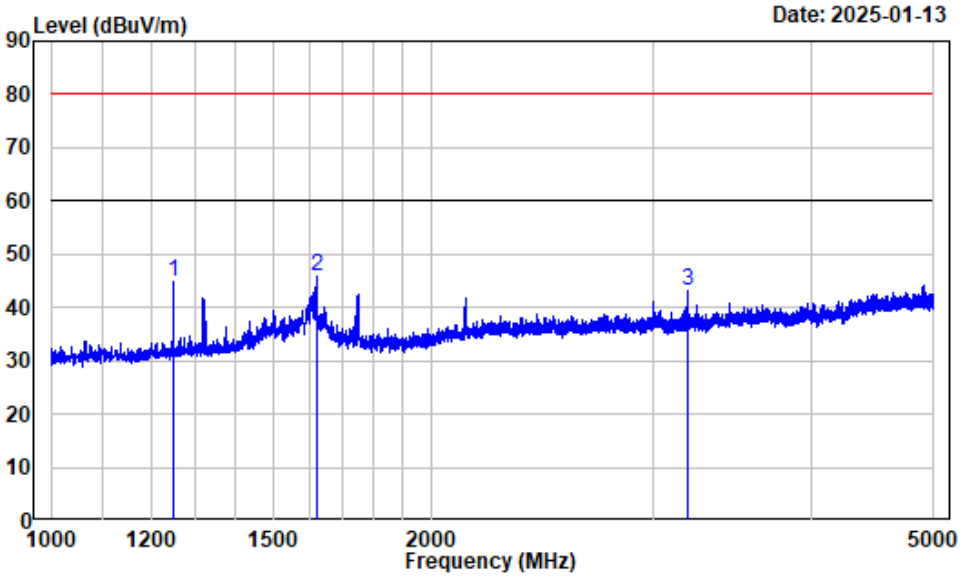
Horizontal



Site : chamber B
Condition : Horizontal
Project Number : 2401A59460E-EM
Test mode : Mode2
Tester : Dylan Yang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1320.040	-14.38	57.34	42.96	80.00	-37.04	Peak
2	1750.094	-14.01	55.89	41.88	80.00	-38.12	Peak
3	2500.188	-11.00	51.26	40.26	80.00	-39.74	Peak

Vertical



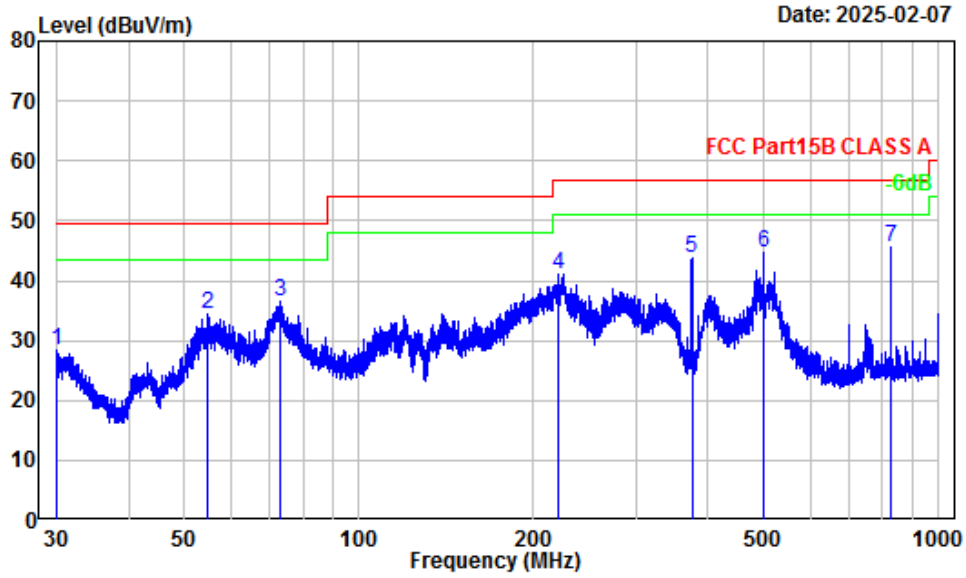
Site : chamber B
Condition : Vertical
Project Number : 2401A59460E-EM
Test mode : Mode2
Tester : Dylan Yang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1250.031	-14.59	59.25	44.66	80.00	-35.34	Peak
2	1625.078	-14.17	60.01	45.84	80.00	-34.16	Peak
3	3194.274	-10.59	53.81	43.22	80.00	-36.78	Peak

Test Mode3

30 MHz~1 GHz

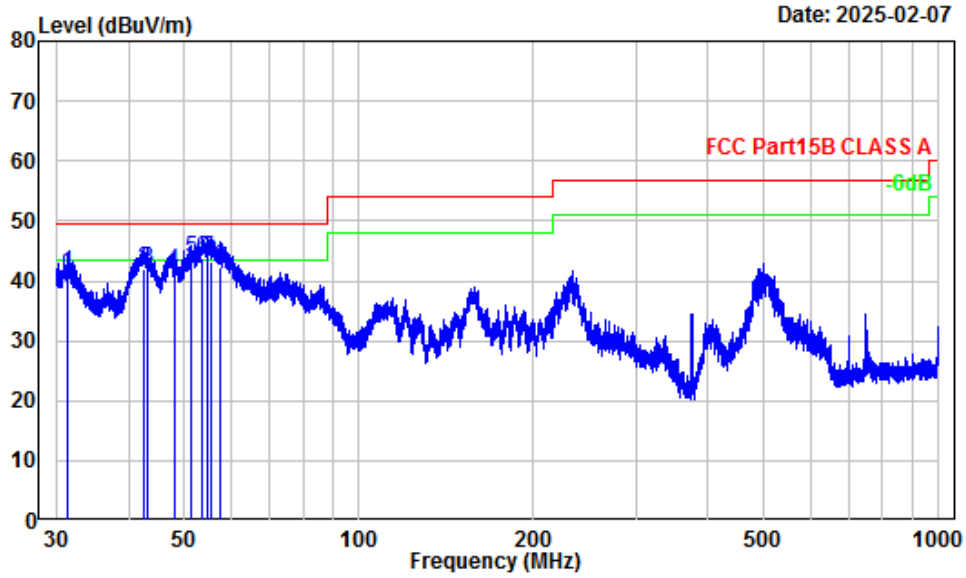
Horizontal




```
Site                    : Chamber A
Condition               : 3m Horizontal
Project Number          : 2401A59460E-EM
Test Mode               : Mode3
Detector: Peak RBW/VBW: 100/300kHz
Tester                  : Jack Liu
```

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.07	-5.99	34.49	28.50	49.54	-21.04	Peak
2	54.83	-18.31	52.73	34.42	49.54	-15.12	Peak
3	72.88	-17.85	54.31	36.46	49.54	-13.08	Peak
4	220.13	-14.20	55.36	41.16	56.90	-15.74	Peak
5	375.12	-9.28	52.93	43.65	56.90	-13.25	Peak
6	500.08	-5.76	50.50	44.74	56.90	-12.16	Peak
7	824.96	-1.93	47.52	45.59	56.90	-11.31	Peak

Vertical

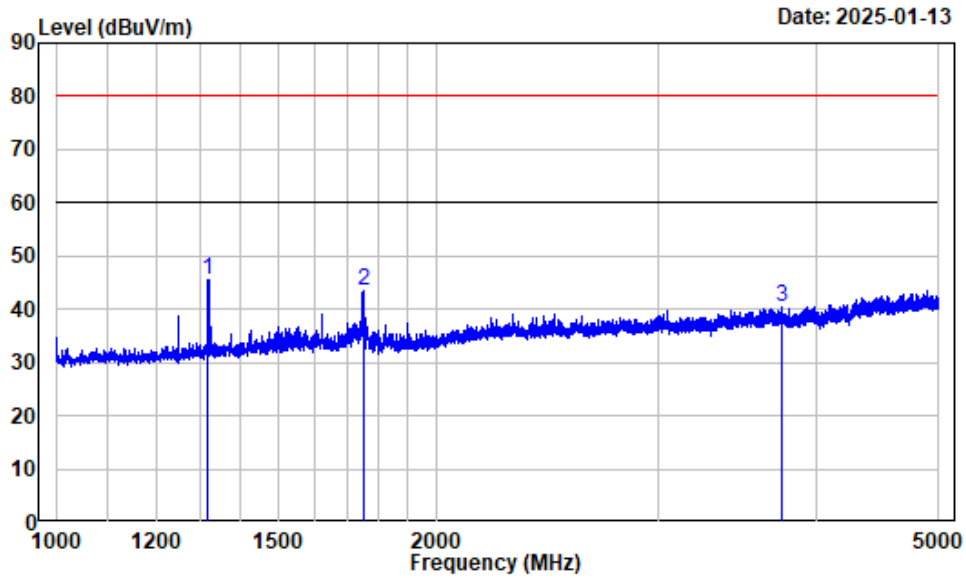


Site : Chamber A
Condition : 3m Vertical
Project Number : 2401A59460E-EM
Test Mode : Mode3
Detector: Peak RBW/VBW: 100/300kHz
Tester : Jack Liu

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	31.36	-6.68	47.95	41.27	49.54	-8.27	QP
2	42.49	-14.21	56.13	41.92	49.54	-7.62	QP
3	43.07	-14.62	56.64	42.02	49.54	-7.52	QP
4	47.91	-17.30	58.91	41.61	49.54	-7.93	QP
5	51.26	-18.15	61.91	43.76	49.54	-5.78	QP
6	53.55	-18.32	62.00	43.68	49.54	-5.86	QP
7	54.67	-18.31	62.19	43.88	49.54	-5.66	QP
8	55.73	-18.32	61.40	43.08	49.54	-6.46	QP
9	57.59	-18.26	60.50	42.24	49.54	-7.30	QP

1 ~ 6 GHz

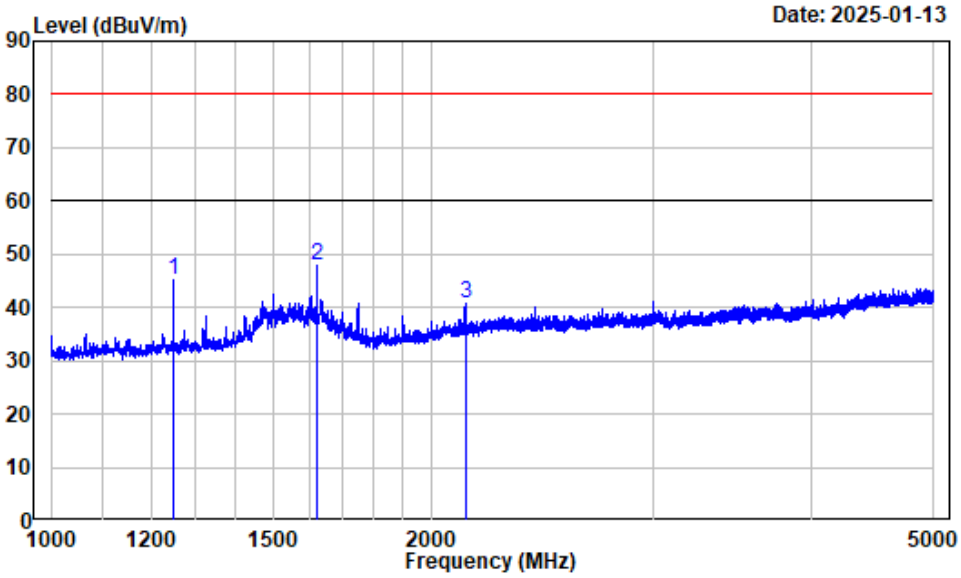
Horizontal



Site : chamber B
Condition : Horizontal
Project Number : 2401A59460E-EM
Test mode : Mode3
Tester : Dylan Yang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1320.040	-14.38	60.06	45.68	80.00	-34.32	Peak
2	1750.094	-14.01	57.57	43.56	80.00	-36.44	Peak
3	3750.844	-9.61	49.97	40.36	80.00	-39.64	Peak

Vertical



Site : chamber B
Condition : Vertical
Project Number : 2401A59460E-EM
Test mode : Mode3
Tester : Dylan Yang
Spectrum setting: Peak reading: RBW:1MHz VBW:3MHz Detector:Peak

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1250.031	-14.59	59.80	45.21	80.00	-34.79	Peak
2	1625.078	-14.17	61.99	47.82	80.00	-32.18	Peak
3	2132.642	-11.60	52.22	40.62	80.00	-39.38	Peak

EUT PHOTOGRAPHS

Please refer to the attachment 2401A59460E-EM External photo and 2401A59460E-EM Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401A59460E-EM Test Setup photo.

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