

TEST REPORT

Applicant Name: JEM ACCESSORIES,INC.
Address: 32 Brunswick Avenue, Edison, New Jersey, United States,08817
Report Number: 2401A68348E-RF-00
FCC ID: 2AHAS-XBB81027

Test Standard (s)

FCC Part 15C

Sample Description

Product Type: 15W PD USB-C+QC USB-A+USB-A Wireless Charger Power Bank
Model No.: XBB8-1027-BLK
Multiple Model(s) No.: N/A
Trade Mark: N/A
Date Received: 2024/12/04
Issue Date: 2025/09/26

Test Result:

Pass▲

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

Prepared and Checked By:

Bruce Lin

Bruce Lin
RF Engineer

Approved By:

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Jimmy Xiao
EMC Manager

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.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401A68348E-RF-00	Original Report	2025/09/26

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	15W PD USB-C+QC USB-A+USB-A Wireless Charger Power Bank
Tested Model	XBB8-1027-BLK
Multiple Model(s)	N/A
Frequency Range	110.5-205kHz
Antenna Type	Coil
Input Voltage	DC 5V/3A, 9V/2A, 12V/1.5A from Adapter or DC 3.7V from Battery
Output Power	5W,7.5W,10W,15W
Sample serial number	2WHP-1 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A
Note: The manufacturer claims that the wireless charging function can be immediately activated when the product is completely out of battery and connected to an external power source	

Objective

This test report is in accordance with Part 2, Subpart J, and Part 15, Subparts A and C of the Federal Communications Commission's rules.

The objective is to determine the compliance of EUT with FCC rules, section 15.203, 15.205, 15.207 and 15.209.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020, American National Standard of Procedures for Compliant Testing of Unlicensed Wireless Devices and KDB 680106 D01 Wireless Power Transfer v04.

Measurement Uncertainty

Parameter		Uncertainty
AC Power Lines Conducted Emissions	9kHz-150kHz	3.63dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.66dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz – 30MHz	3.60dB(k=2, 95% level of confidence)
	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)
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%
Nerve Simulation	H-Field	0.74dB(k=2, 95% level of confidence)
	E-Field	1.14dB(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 a test mode.

Test Mode: Wireless Charging (Maximum output power)

Input Voltage: 5V_{DC}, Output Power: 15W

EUT Exercise Software

No software used in test.

Local Support Equipment

Manufacturer	Description	Model	Serial Number
OUPU	SOCKET	PDU-OP1606K	6971041358020
APPLE	IPhone 15	MTLJ3CH/A	GW10RR4RTW
TECNO	Adapter	U700TSA	/
YBZ	Load1	V3.1	/
BACL	Load2	/	/
BACL	Load3	/	/
BACL	Load4	/	/

External I/O Cable

Cable Description	Length (m)	From Port	To
Unshielded detachable AC cable	1.2	AC mains	SOCKET/LISN
Shielded detachable USB cable	0.8	EUT	Adapter
Shielded detachable USB cable	0.2	EUT	Load2
Shielded detachable USB cable	0.3	EUT	Load3
Shielded detachable USB cable	0.4	EUT	Load4

For Conducted Emission:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §1.1310 & §2.1093	MAXIMUM PERMISSIBLE EXPOSURE (MPE)	Compliant
FCC§15.203	Antenna Requirement	Compliant
FCC§15.207	AC Line Conducted Emission	Compliant
§15.209 §15.205	Radiated Emission Test	Compliant
§15.215 (c)	20dB Bandwidth	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions 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
RF Radiated 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
BACL	Active Loop Antenna	1313-1A	4031911	2024/05/14	2027/05/13
Unknown	Cable	2Y194	0735	2024/12/04	2025/12/03
Unknown	Cable	PNG214	1354	2024/12/04	2025/12/03
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
MPE					
SPEAG	Probe	MAGPy-8H3D-E3D	3106	2025/04/29	2026/04/28
SPEAG	Data Acquisition System	MAPGPY-DAS	3089	2025/04/29	2026/04/28

* **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§15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Antenna Connected Construction

The EUT has one coil antenna arrangement which was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

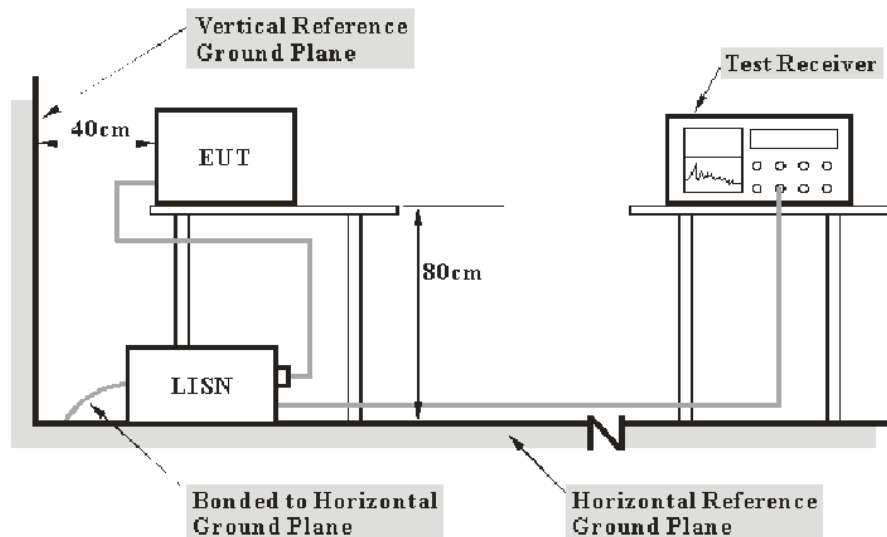
Result: Compliant.

FCC §15.207 - AC LINE CONDUCTED EMISSION

Applicable Standard

FCC§15.207

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 setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

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	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

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:

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

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

Test Data

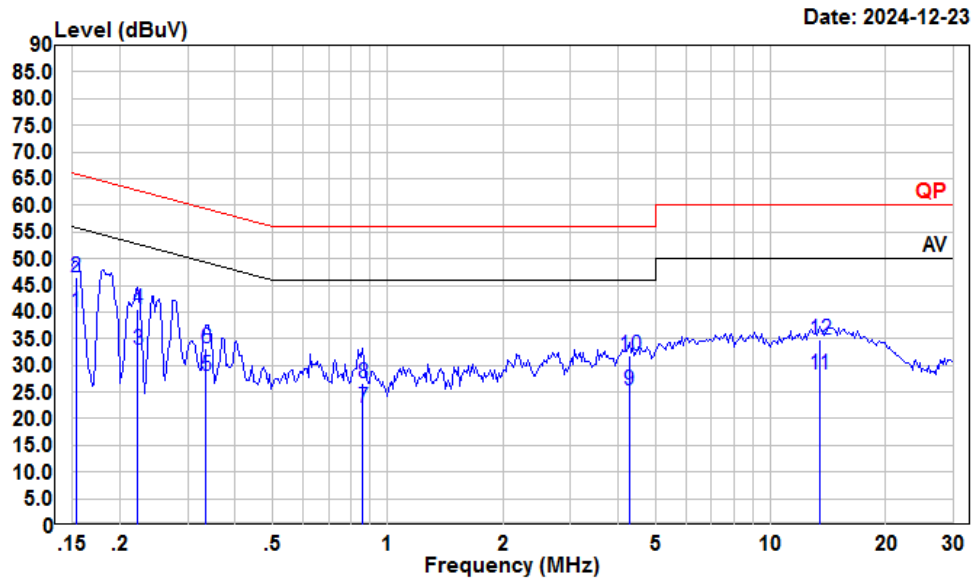
Environmental Conditions

Temperature:	21.4 °C
Relative Humidity:	39 %
ATM Pressure:	101kPa

The testing was performed by Macy Shi on 2024-12-23.

Test Mode: Wireless Charging

For Micro-USB

AC 120 V/60 Hz, Line

Condition: Line

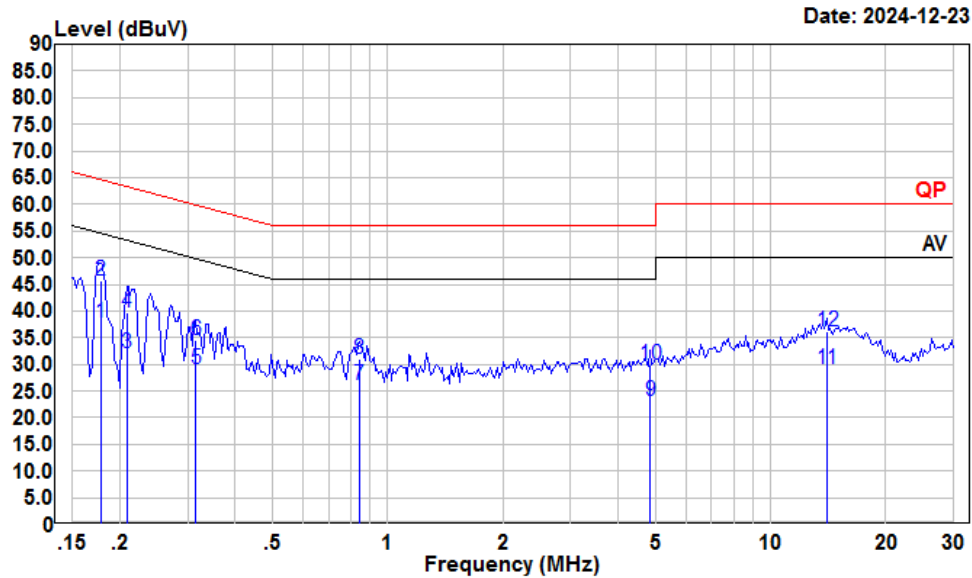
Project : 2401A68348E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:Auto SWT:Auto

		Read		LISN	Cable	Limit	Over	
	Freq	Level	Level	Factor	Loss	Line	Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.153	18.95	39.97	10.89	10.13	55.82	-15.85	Average
2	0.153	25.59	46.61	10.89	10.13	65.82	-19.21	QP
3	0.222	12.00	32.86	10.77	10.09	52.74	-19.88	Average
4	0.222	19.55	40.41	10.77	10.09	62.74	-22.33	QP
5	0.336	7.14	27.89	10.63	10.12	49.31	-21.42	Average
6	0.336	12.42	33.17	10.63	10.12	59.31	-26.14	QP
7	0.862	1.60	22.15	10.44	10.11	46.00	-23.85	Average
8	0.862	6.10	26.65	10.44	10.11	56.00	-29.35	QP
9	4.269	4.77	25.29	10.32	10.20	46.00	-20.71	Average
10	4.269	11.24	31.76	10.32	10.20	56.00	-24.24	QP
11	13.408	7.43	28.25	10.60	10.22	50.00	-21.75	Average
12	13.408	14.11	34.93	10.60	10.22	60.00	-25.07	QP

AC 120V/ 60 Hz, Neutral



Condition: Neutral

Project : 2401A68348E-RF

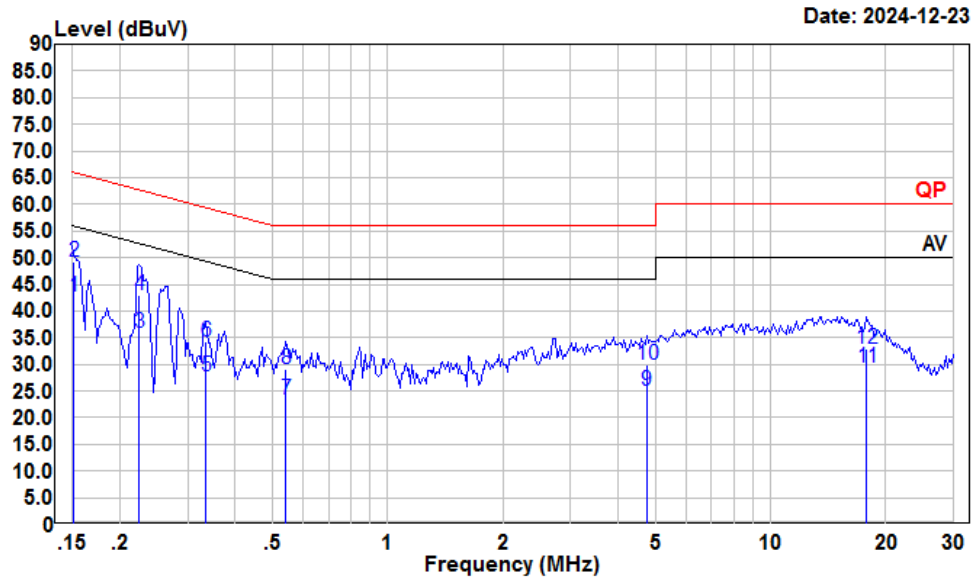
tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:Auto SWT:Auto

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.178	17.09	37.67	10.48	10.10	54.59	-16.92	Average
2	0.178	24.98	45.56	10.48	10.10	64.59	-19.03	QP
3	0.208	11.52	32.02	10.41	10.09	53.27	-21.25	Average
4	0.208	19.14	39.64	10.41	10.09	63.27	-23.63	QP
5	0.315	8.31	28.97	10.55	10.11	49.84	-20.87	Average
6	0.315	13.88	34.54	10.55	10.11	59.84	-25.30	QP
7	0.844	5.20	26.11	10.80	10.11	46.00	-19.89	Average
8	0.844	10.19	31.10	10.80	10.11	56.00	-24.90	QP
9	4.848	2.43	23.11	10.50	10.18	46.00	-22.89	Average
10	4.848	9.19	29.87	10.50	10.18	56.00	-26.13	QP
11	13.989	8.01	29.03	10.80	10.22	50.00	-20.97	Average
12	13.989	15.28	36.30	10.80	10.22	60.00	-23.70	QP

For USB-C

AC 120 V/60 Hz, Line



Condition: Line

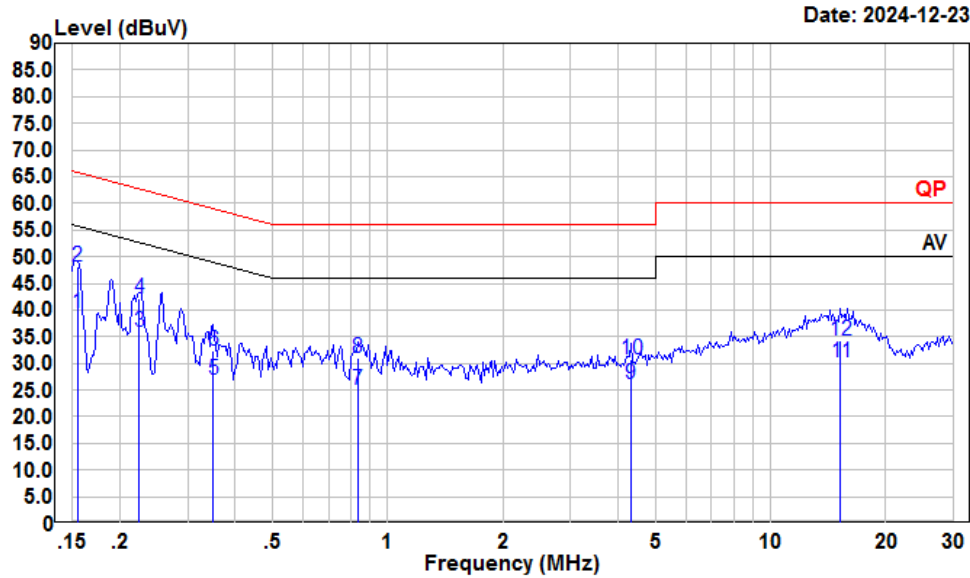
Project : 2401A68348E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:Auto SWT:Auto

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.152	21.56	42.59	10.90	10.13	55.91	-13.32	Average
2	0.152	28.26	49.29	10.90	10.13	65.91	-16.62	QP
3	0.224	15.00	35.85	10.76	10.09	52.66	-16.81	Average
4	0.224	22.06	42.91	10.76	10.09	62.66	-19.75	QP
5	0.336	7.05	27.80	10.63	10.12	49.31	-21.51	Average
6	0.336	13.58	34.33	10.63	10.12	59.31	-24.98	QP
7	0.541	2.83	23.46	10.50	10.13	46.00	-22.54	Average
8	0.541	8.59	29.22	10.50	10.13	56.00	-26.78	QP
9	4.746	4.51	25.06	10.36	10.19	46.00	-20.94	Average
10	4.746	9.38	29.93	10.36	10.19	56.00	-26.07	QP
11	17.849	8.40	29.37	10.78	10.19	50.00	-20.63	Average
12	17.849	12.07	33.04	10.78	10.19	60.00	-26.96	QP

AC 120V/ 60 Hz, Neutral



Condition: Neutral

Project : 2401A68348E-RF

tester : Macy.shi Note:Transmitting

Setting : RBW:9kHz VBW:Auto SWT:Auto

	Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.155	18.85	39.55	10.58	10.12	55.74	-16.19	Average
2	0.155	27.32	48.02	10.58	10.12	65.74	-17.72	QP
3	0.224	15.29	35.82	10.44	10.09	52.66	-16.84	Average
4	0.224	21.76	42.29	10.44	10.09	62.66	-20.37	QP
5	0.350	6.30	27.00	10.58	10.12	48.96	-21.96	Average
6	0.350	11.64	32.34	10.58	10.12	58.96	-26.62	QP
7	0.835	4.17	25.08	10.80	10.11	46.00	-20.92	Average
8	0.835	9.98	30.89	10.80	10.11	56.00	-25.11	QP
9	4.315	5.51	26.15	10.44	10.20	46.00	-19.85	Average
10	4.315	10.04	30.68	10.44	10.20	56.00	-25.32	QP
11	15.226	9.16	30.17	10.79	10.22	50.00	-19.83	Average
12	15.226	13.39	34.40	10.79	10.22	60.00	-25.60	QP

FCC §1.1310 & §2.1093 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE)

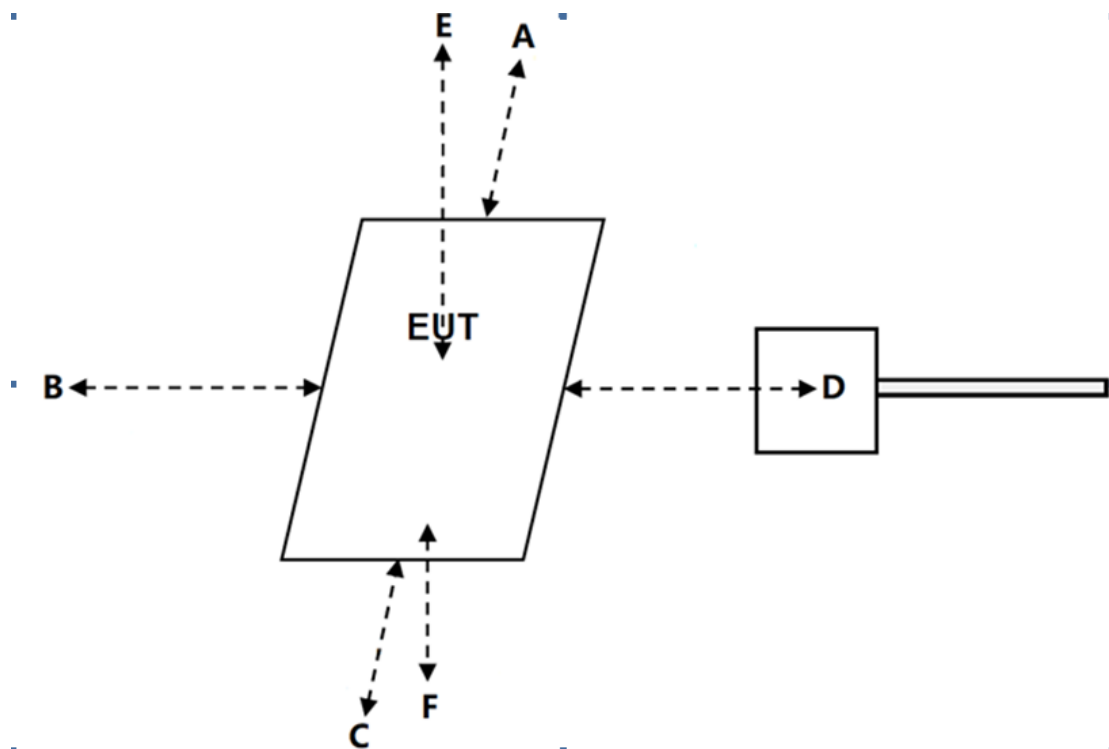
(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According with 680106 D01 Wireless Power Transfer v04 clause 3.2

Accordingly, for § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

Block Diagram of Test Setup



MAGPy Probe Information

The full MAGPy-8H3D+E3D V2 probe consists of eight isotropic H-field subprobes and one isotropic E-field subprobe that are all integrated inside the probe head with a flat tip. Each isotropic H-field subprobe comprises three concentric orthogonal loop coil sensors. The isotropic E-field subprobe is composed of three orthogonal sensors (x and y sensors are dipoles and the sensor measuring the z component is a monopole). In total, the MAGPy-8H3D+E3D V2 probe is thus composed of nine subprobes and 27 single sensors that measure in the time-domain. The flat-tip probe design brings the sensors closer to the tip (e.g., the closest H-field sensors are now 7.5mm from the tip). The probe specifications are provided in Table 2.1.

Parameter	Specs
PROBE DESIGN	
Diameter	60 mm
8 isotropic <i>H</i> -field sensors	concentric loops of 1 cm ² arranged at the corner of a cube of 22 mm side length
1 isotropic <i>E</i> -field sensor	orthogonal dipole/monopole (arm length: 50 mm)
Measurement center	18.5 mm from the probe tip
Temperature range	0–40 °C
Dimensions	110 × 635 × 35 mm (MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)
<i>H</i>-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.1–3200 A/m, 0.12 μT–4 mT
Gradient range	0–80 T/m/T
<i>E</i>-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.08–2000 V/m

Table 2.1: MAGPy-8H3D+E3D V2 probe specifications

Test Procedures

- 1) The measuring distance from the center of the probe to the tip of the probe is 1.85cm, so the minimum measurement distance is 1.85cm. To obtain the H-field and E-field at 0cm, perform the following steps.
- 2) Perform H-field and E-field measurements for each all sides of the EUT surface at 3cm, along all the principal axes defined with respect to the orientation of the transmitting element (e.g., coil or antenna). Compare the test data of all the sides to get the worst position.
- 3) At the worst position, test the H-field and E-field at the distance from 2cm to 6cm. If the worst position is the top side, then test from 3cm to 7cm. As the load (Phone) has some thickness. The test step is 1cm.
- 4) The highest emission level was recorded.
- 5) According to the measurement data, the curve is fitted with the measured distance as the horizontal coordinate and the measured H-field or E- field as the vertical coordinate.
- 6) The fitted curve needs to be validated through the probe measurements for the two closest points to the device surface. The difference needs to be less than 30%.
- 7) The H-field or E-field at 0cm is estimated from the fitted curve and compared with limit.

Test Data

Environmental Conditions

Temperature:	26.5 °C
Relative Humidity:	55 %
ATM Pressure:	100.2 kPa

The testing was performed by Rainbow Zhu on 2025-08-08.

Test mode: Wireless charging at the maximum output power

H-Field Strength

Test Frequency (kHz)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Position F (A/m)	Limit (A/m)
110.5-205	0.44	0.58	0.28	0.2	0.56	0.52	1.63

Note 1: The test distance is 30mm from the center of the probe to the EUT edge.

Note 2: The worst position is B side according to the above data table. So we perform the curve fitting at the position B.

E-Field Strength

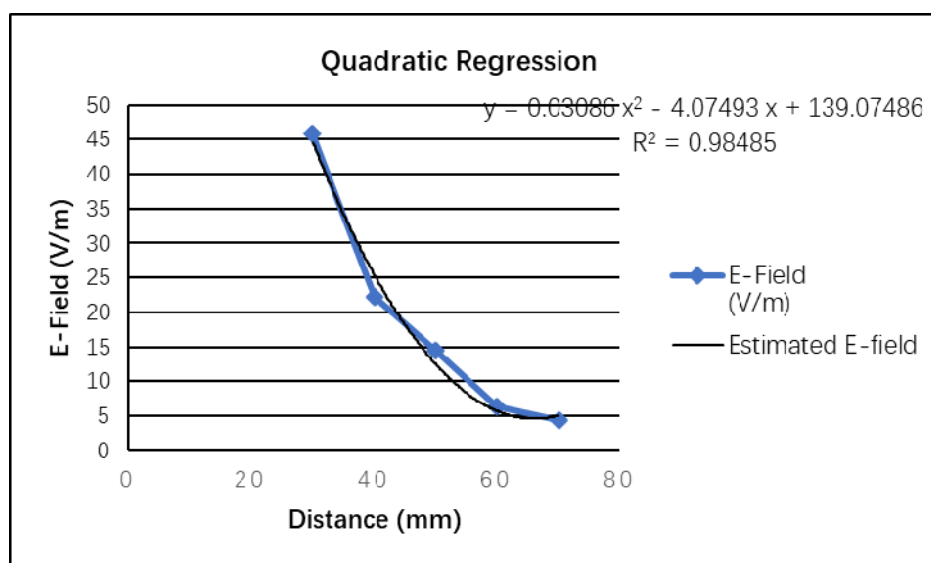
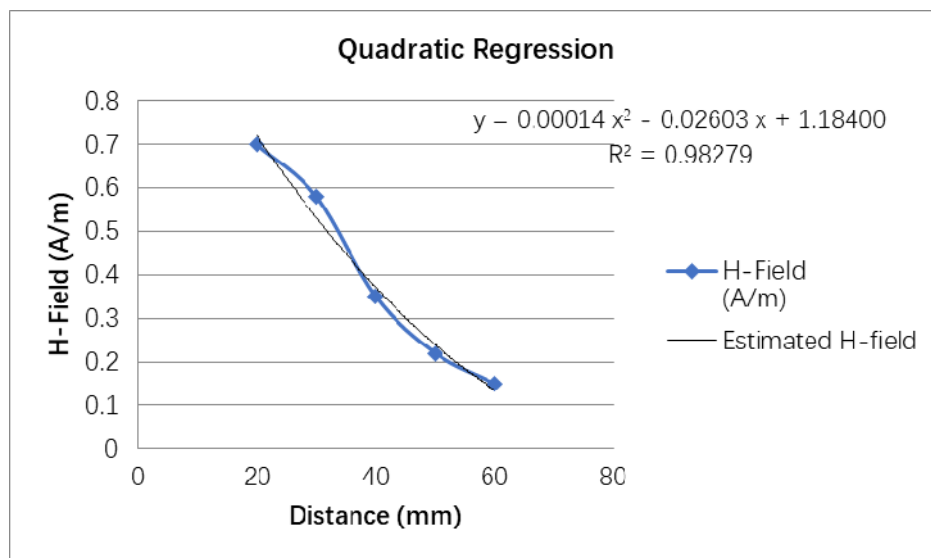
Test Frequency (kHz)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Position F (V/m)	Limit (V/m)
110.5-205	9.18	8.83	16.7	17.4	45.9	19.7	614

Note 1: The test distance is 30mm from the center of the probe to the EUT edge.

Note 2: The worst position is E side according to the above data table. So we perform the curve fitting at the position E.

Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	Measuring Position	Measuring Distance (mm)	E-Field (V/m)
110.5-205	B	20	0.7	E	30	45.9
		30	0.58		40	22.2
		40	0.35		50	14.5
		50	0.22		60	6.27
		60	0.15		70	4.44

Curve Fitting



Verify the fitting curve

Measuring Position	Measuring Distance (mm)	Estimated H-Field (A/m)	Measured H-Field (A/m)	Agreement Between Estimated and Measured (%)	Limit (%)
B	20	0.72	0.7	2.86	±30
	30	0.53	0.58	-8.62	±30

Measuring Position	Measuring Distance (mm)	Estimated E-Field (V/m)	Measured E-Field (V/m)	Agreement Between Estimated and Measured (%)	Limit (%)
E	30	44.6	45.9	-2.83	±30
	40	25.45	22.2	14.64	±30

Conclusion: The validation is considered sufficient, because within 30% agreement between the estimated model and the (E-Field and H-Field) probe measurements is demonstrated.

Result: The estimated result at 0mm is **1.184A/m (H-field), 139.075V/m(E-Field)**, which below the limit: 1.63A/m (H-field), 614V/m (E-Field). So it is compliance.

FCC §15.205 & §15.209 - RADIATED EMISSIONS TEST

Applicable Standard

As per FCC Part 15.209

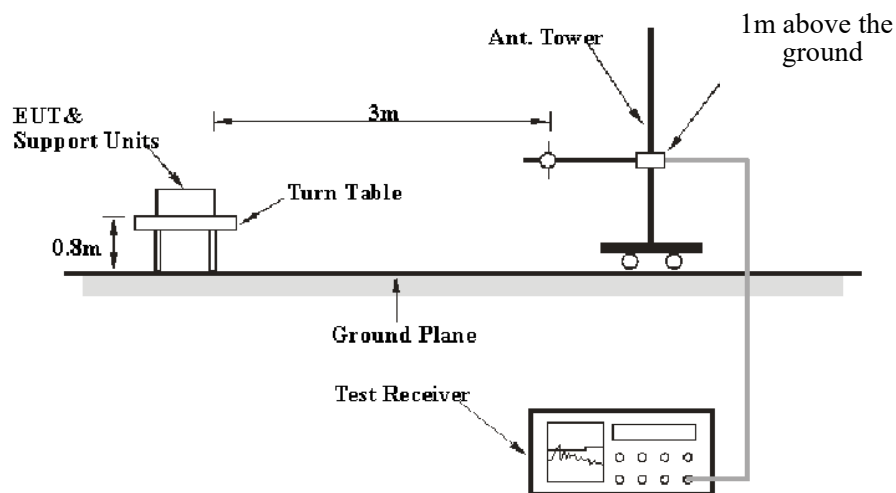
(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

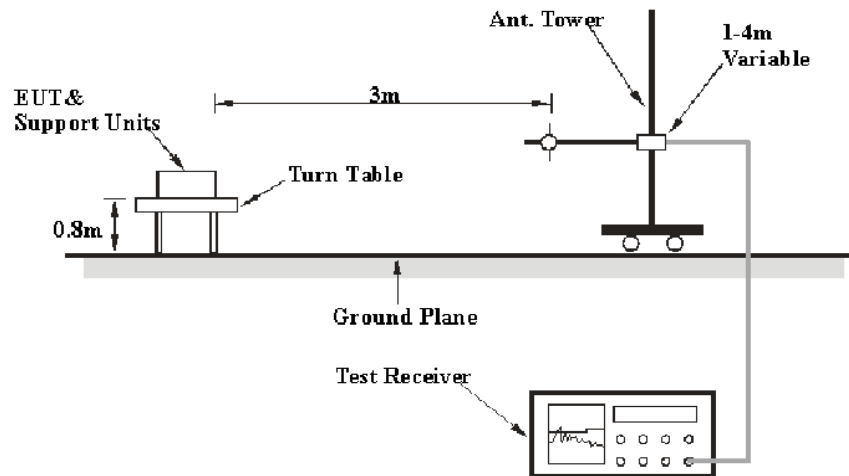
**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

EUT Setup

9 kHz-30MHz:



30MHz-1GHz:



The radiated emission tests were performed in the 3-meter chamber test site, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC Part Subpart C limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated from 9 kHz to 1000MHz.

Frequency Range	RBW	Video B/W	IF B/W	Detector	Measurement
9 kHz – 150 kHz	/	/	200 Hz	QP	QP
	300 Hz	1 kHz	/	PK	PK
150 kHz – 30 MHz	/	/	9 kHz	QP	QP
	10 kHz	30 kHz	/	PK	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP	QP
	100 kHz	300 kHz	/	PK	PK

Note 1: For the frequency bands 9–90 kHz, 110–490 kHz are based on measurements employing an average detector.

Note 2: If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

For 9 kHz-30MHz, the report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground-parallel) unless the margin is greater than 20 dB.

Factor & Over Limit/Margin Calculation

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

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

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

$$\begin{aligned}\text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor}\end{aligned}$$

Test Data

Environmental Conditions

Temperature:	22.4 °C
Relative Humidity:	44 %
ATM Pressure:	101.4 kPa

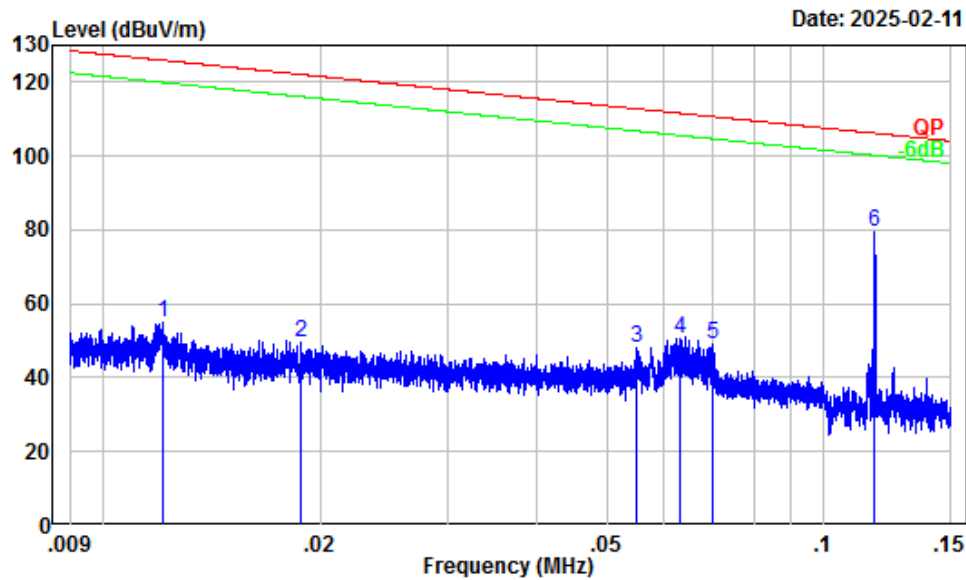
The testing was performed by Anson Su on 2025-02-11.

Test Mode: Wireless Charging

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

For Micro-USB

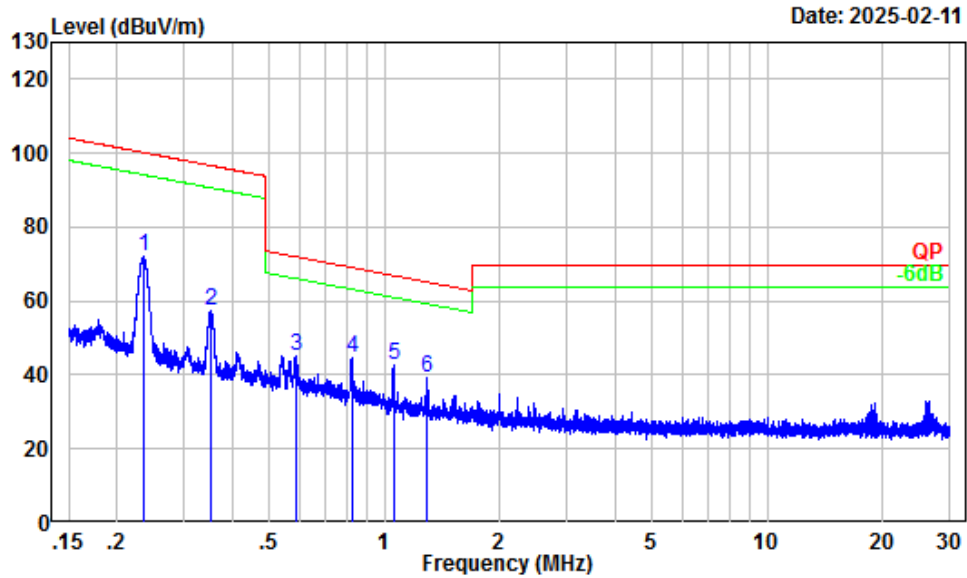
Parallel:
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	31.90	23.06	54.96	125.95	-70.99	Peak
2	0.02	30.62	18.93	49.55	122.09	-72.54	Peak
3	0.05	25.91	22.28	48.19	112.81	-64.62	Peak
4	0.06	25.10	25.55	50.65	111.62	-60.97	Peak
5	0.07	24.41	24.41	48.82	110.71	-61.89	Peak
6	0.12	20.97	58.61	79.58	106.20	-26.62	Peak

150 kHz~30 MHz

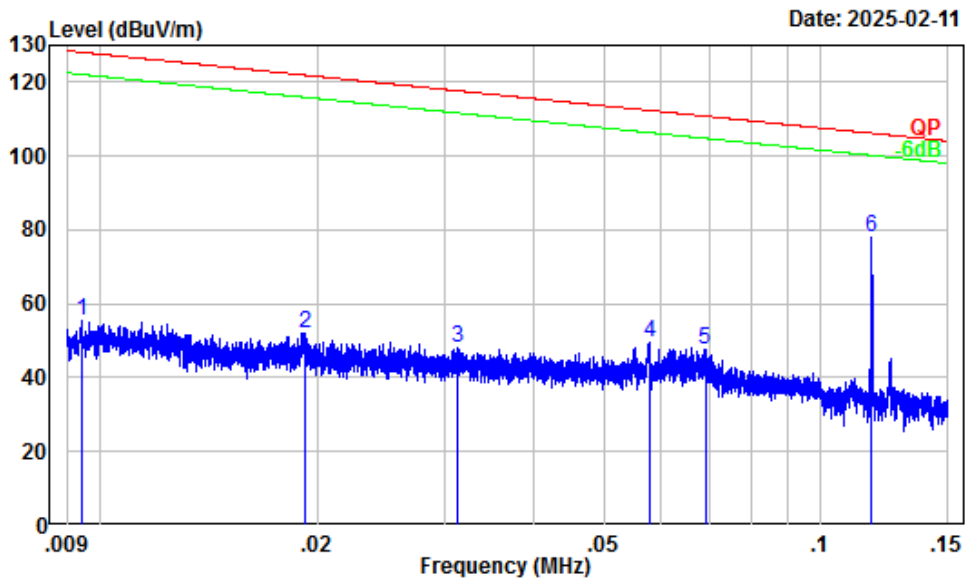


Site : Chamber A
 Condition : 3m
 Project Number : 2401A68348E-RF
 Test Mode : Transmitting
 Note : Parallel
 Detector: Peak RBW/VBW: 10/30kHz
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.24	14.02	57.99	72.01	100.18	-28.17	Peak
2	0.35	9.23	48.23	57.46	96.70	-39.24	Peak
3	0.59	5.33	39.72	45.05	72.20	-27.15	Peak
4	0.82	2.52	42.01	44.53	69.20	-24.67	Peak
5	1.06	1.04	41.44	42.48	66.99	-24.51	Peak
6	1.30	0.37	38.88	39.25	65.18	-25.93	Peak

Ground-parallel:

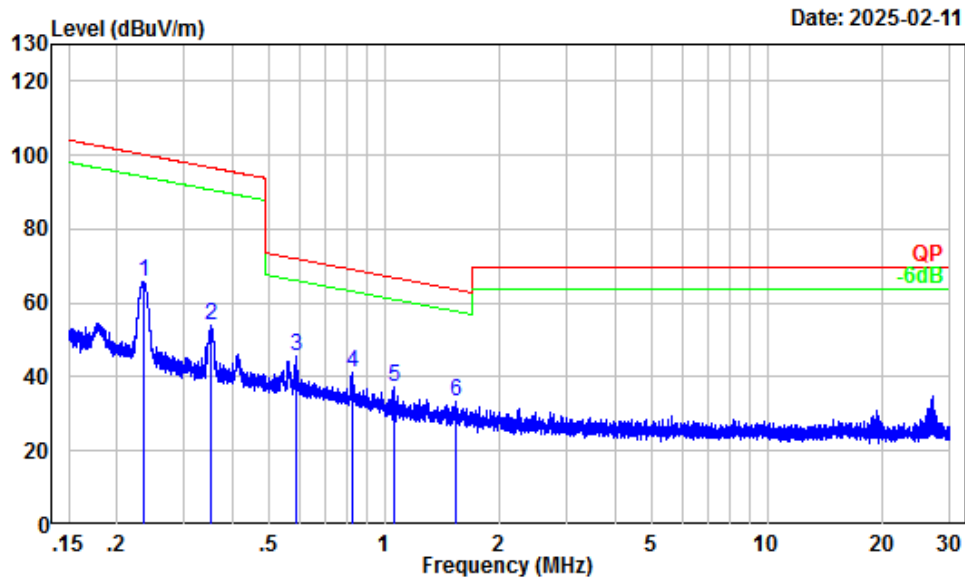
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Ground-parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	32.42	22.96	55.38	128.12	-72.74	Peak
2	0.02	30.54	21.66	52.20	121.92	-69.72	Peak
3	0.03	28.36	19.70	48.06	117.67	-69.61	Peak
4	0.06	25.62	24.04	49.66	112.37	-62.71	Peak
5	0.07	24.49	23.15	47.64	110.81	-63.17	Peak
6	0.12	20.96	56.90	77.86	106.20	-28.34	Peak

150 kHz~30 MHz

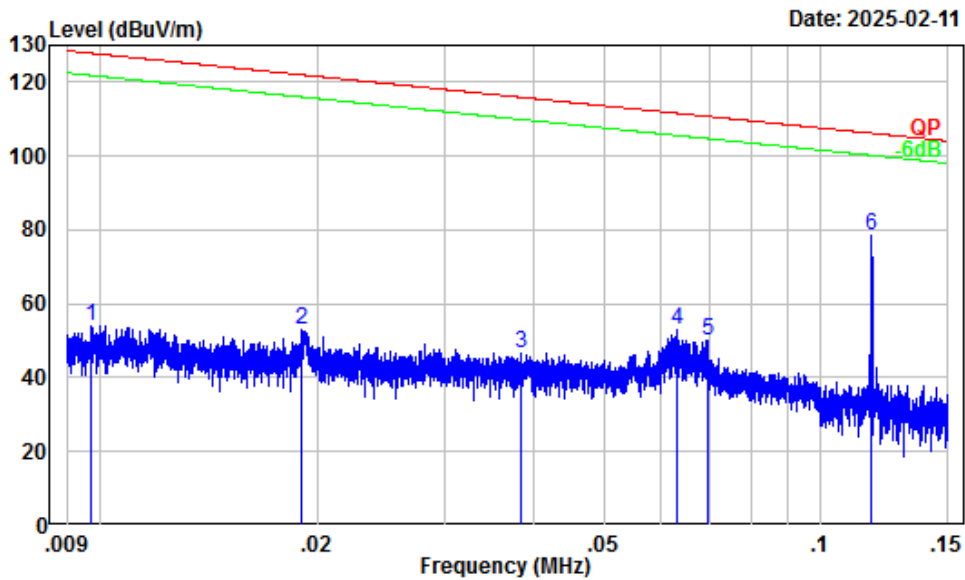


Site : Chamber A
 Condition : 3m
 Project Number : 2401A68348E-RF
 Test Mode : Transmitting
 Note : Ground-parallel
 Detector: Peak RBW/VBW: 10/30kHz
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.23	14.04	51.92	65.96	100.19	-34.23	Peak
2	0.35	9.18	44.98	54.16	96.63	-42.47	Peak
3	0.59	5.33	40.21	45.54	72.20	-26.66	Peak
4	0.82	2.53	38.64	41.17	69.20	-28.03	Peak
5	1.06	1.04	36.30	37.34	66.98	-29.64	Peak
6	1.53	-0.29	33.43	33.14	63.70	-30.56	Peak

Perpendicular:

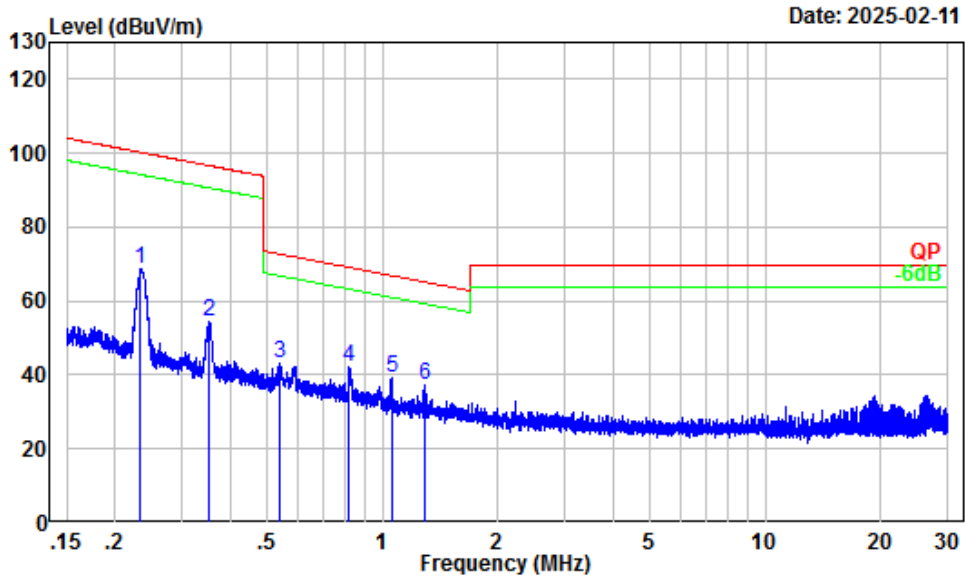
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Perpendicular
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	32.35	21.77	54.12	127.84	-73.72	Peak
2	0.02	30.58	22.38	52.96	122.00	-69.04	Peak
3	0.04	27.61	19.08	46.69	115.91	-69.22	Peak
4	0.06	25.08	27.66	52.74	111.59	-58.85	Peak
5	0.07	24.42	25.72	50.14	110.73	-60.59	Peak
6	0.12	20.96	57.36	78.32	106.20	-27.88	Peak

150 kHz~30 MHz



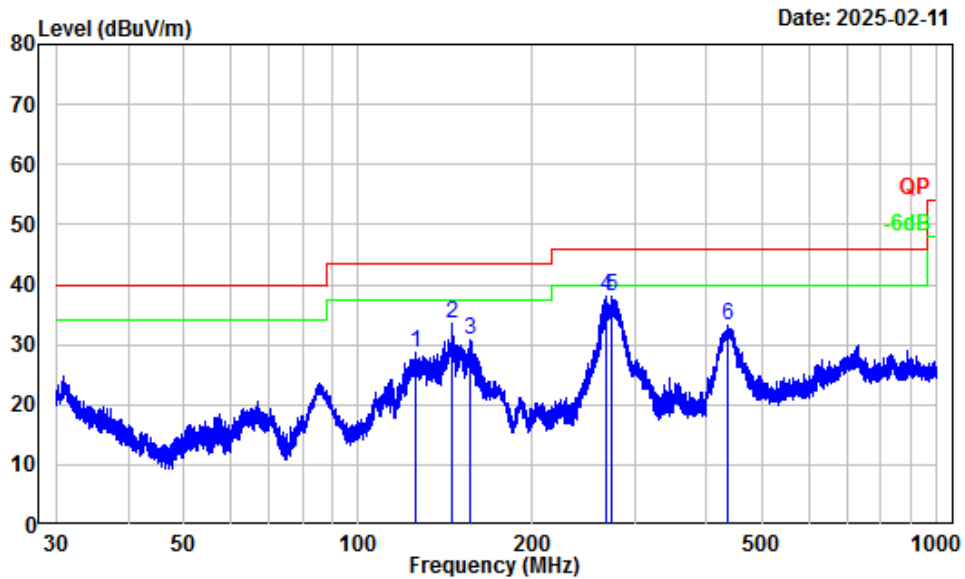
Site : Chamber A
 Condition : 3m
 Project Number : 2401A68348E-RF
 Test Mode : Transmitting
 Note : Perpendicular
 Detector: Peak RBW/VBW: 10/30kHz
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.23	14.10	54.60	68.70	100.22	-31.52	Peak
2	0.35	9.23	45.01	54.24	96.70	-42.46	Peak
3	0.54	5.94	37.27	43.21	72.98	-29.77	Peak
4	0.82	2.55	39.46	42.01	69.23	-27.22	Peak
5	1.06	1.04	38.19	39.23	66.97	-27.74	Peak
6	1.29	0.38	36.74	37.12	65.20	-28.08	Peak

30MHz~1GHz:

Note: when the result of Peak below the limit of QP more than 6dB, just the peak value was record

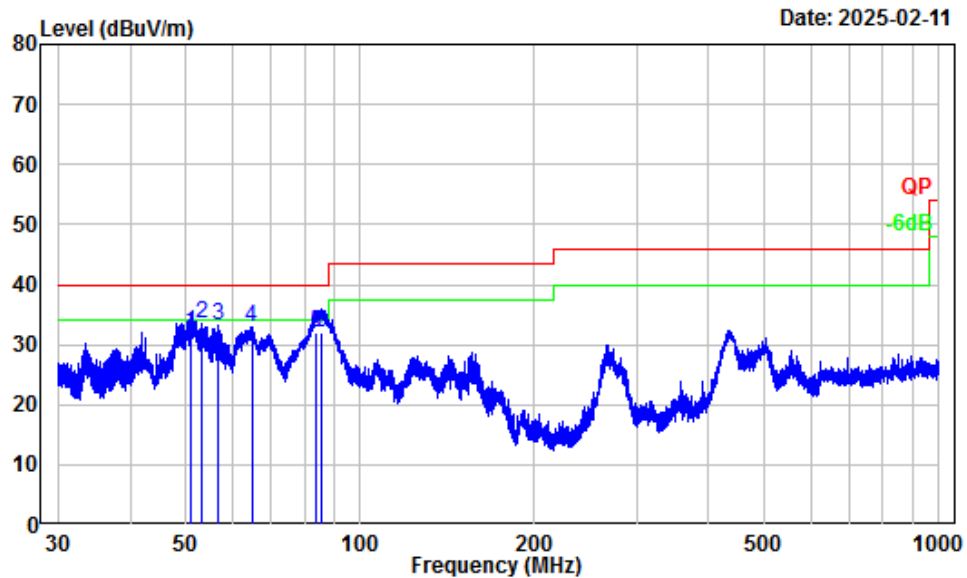
Horizontal



Site : Chamber A
 Condition : 3m Horizontal
 Project Number : 2401A68348E-RF
 Test Mode : Transmitting
 Detector: Peak RBW/VBW: 100/300kHz
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	125.72	-11.12	39.69	28.57	43.50	-14.93	Peak
2	145.35	-12.21	45.67	33.46	43.50	-10.04	Peak
3	155.50	-12.64	43.35	30.71	43.50	-12.79	Peak
4	267.66	-12.04	50.01	37.97	46.00	-8.03	Peak
5	273.95	-11.45	49.43	37.98	46.00	-8.02	Peak
6	435.40	-7.73	40.83	33.10	46.00	-12.90	Peak

Vertical



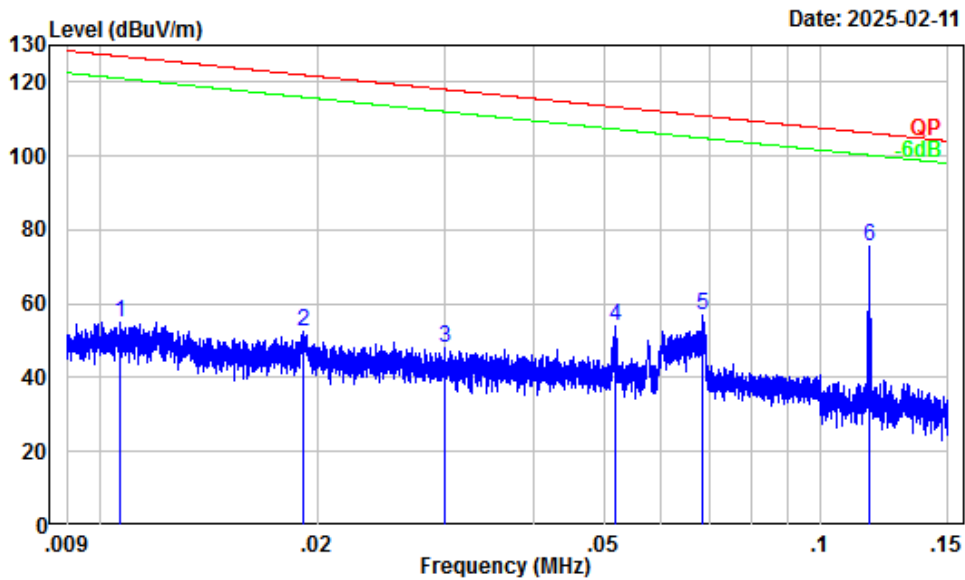
Site : Chamber A
Condition : 3m Vertical
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq Factor		Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	50.99	-18.11	50.00	31.89	40.00	-8.11	QP
2	53.32	-18.32	51.74	33.42	40.00	-6.58	Peak
3	56.59	-18.32	51.38	33.06	40.00	-6.94	Peak
4	64.89	-18.00	50.78	32.78	40.00	-7.22	Peak
5	83.67	-18.09	50.05	31.96	40.00	-8.04	QP
6	85.75	-18.09	50.01	31.92	40.00	-8.08	QP

For USB-C

Parallel:

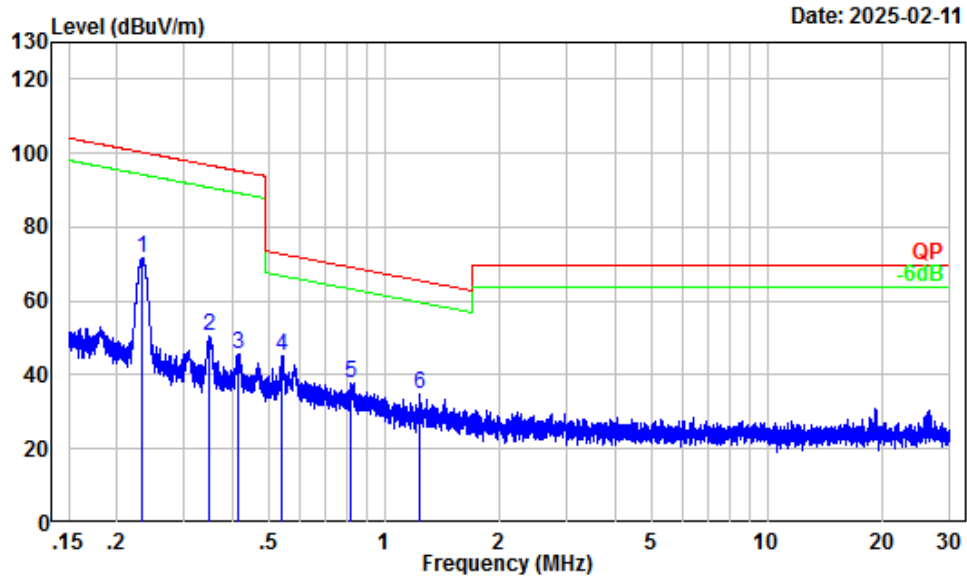
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	32.18	22.83	55.01	127.06	-72.05	Peak
2	0.02	30.56	21.75	52.31	121.95	-69.64	Peak
3	0.03	28.48	19.74	48.22	118.02	-69.80	Peak
4	0.05	26.22	27.64	53.86	113.32	-59.46	Peak
5	0.07	24.54	32.53	57.07	110.88	-53.81	Peak
6	0.12	21.01	54.64	75.65	106.26	-30.61	Peak

150 kHz~30 MHz

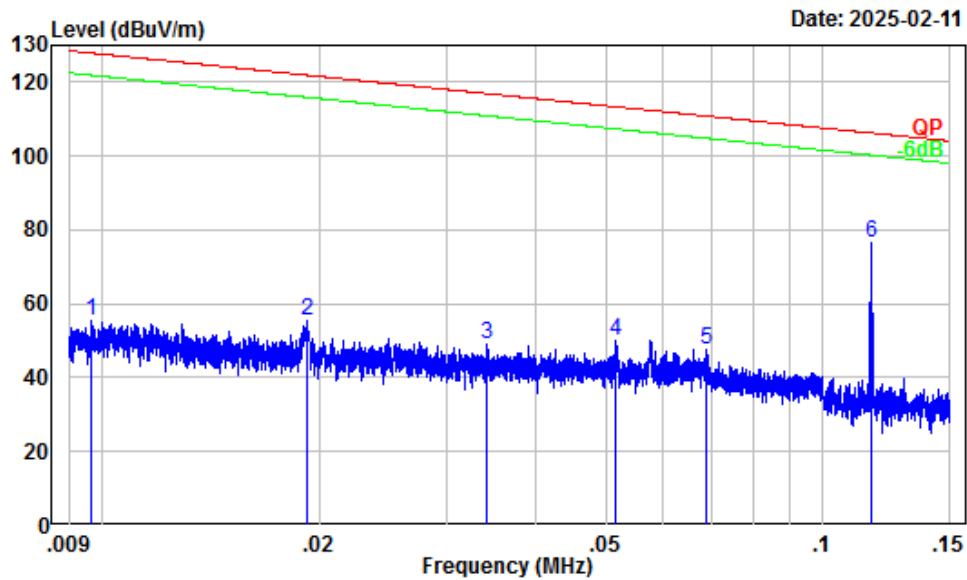


Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.23	14.13	57.73	71.86	100.24	-28.38	Peak
2	0.35	9.27	41.21	50.48	96.75	-46.27	Peak
3	0.41	8.02	37.84	45.86	95.25	-49.39	Peak
4	0.54	5.93	39.32	45.25	72.97	-27.72	Peak
5	0.82	2.55	35.31	37.86	69.23	-31.37	Peak
6	1.24	0.53	34.32	34.85	65.57	-30.72	Peak

Ground-parallel:

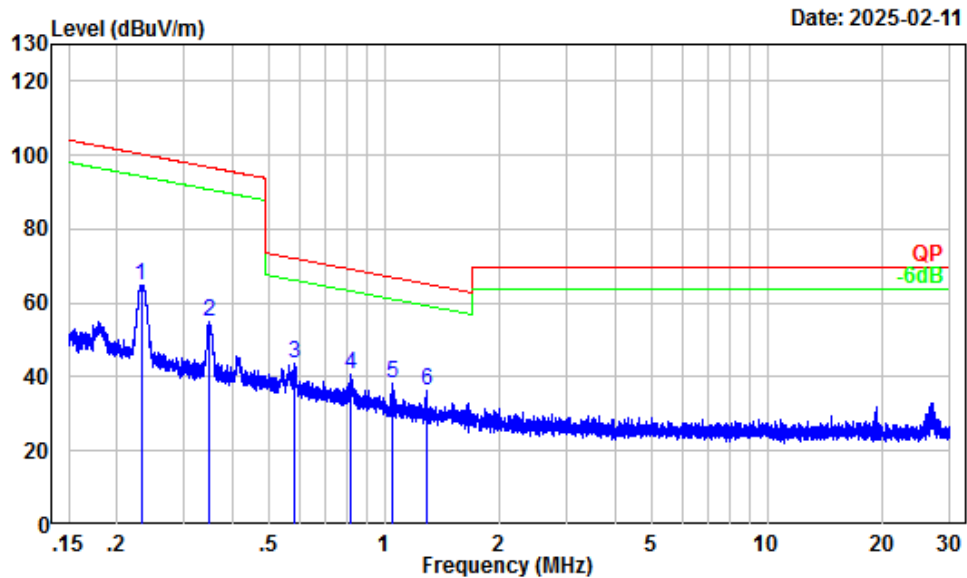
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Ground-parallel
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	32.37	23.11	55.48	127.90	-72.42	Peak
2	0.02	30.53	25.05	55.58	121.90	-66.32	Peak
3	0.03	28.07	21.17	49.24	116.94	-67.70	Peak
4	0.05	26.23	23.59	49.82	113.34	-63.52	Peak
5	0.07	24.49	22.89	47.38	110.82	-63.44	Peak
6	0.12	21.01	55.62	76.63	106.25	-29.62	Peak

150 kHz~30 MHz

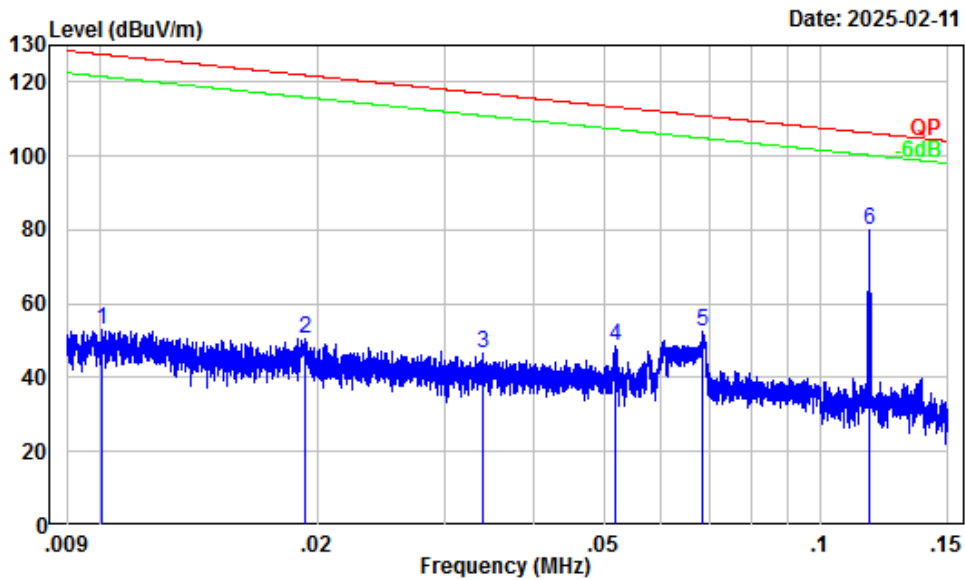


Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Ground-parallel
Detector: Peak RBW/VBW: 10/30kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.23	14.23	50.67	64.90	100.31	-35.41	Peak
2	0.35	9.26	45.57	54.83	96.74	-41.91	Peak
3	0.58	5.36	38.33	43.69	72.24	-28.55	Peak
4	0.82	2.56	38.32	40.88	69.25	-28.37	Peak
5	1.05	1.06	37.33	38.39	67.05	-28.66	Peak
6	1.29	0.40	35.98	36.38	65.24	-28.86	Peak

Perpendicular:

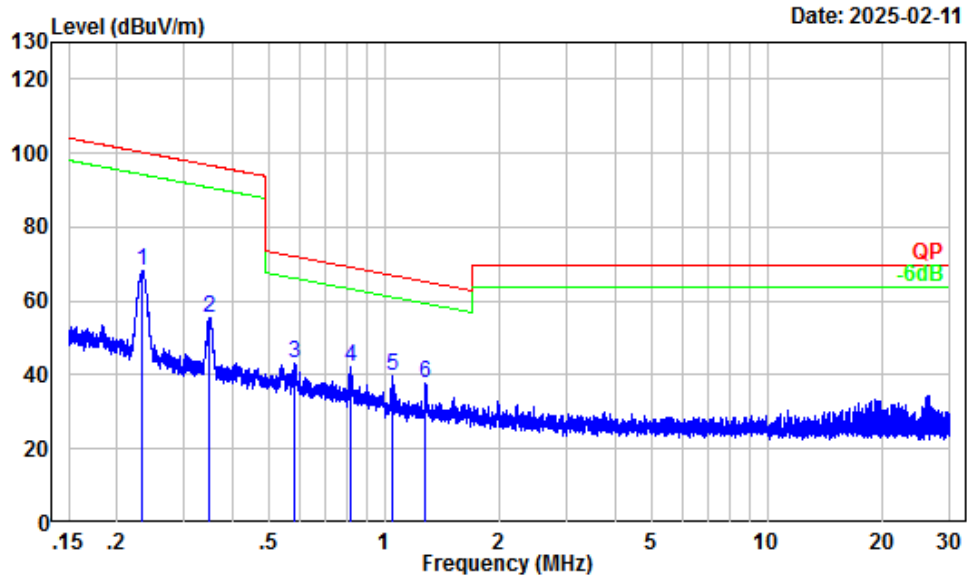
9 kHz~150 kHz



Site : Chamber A
Condition : 3m
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Note : Perpendicular
Detector: Peak RBW/VBW: 0.3/1kHz
Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	32.28	20.94	53.22	127.53	-74.31	Peak
2	0.02	30.54	19.83	50.37	121.92	-71.55	Peak
3	0.03	28.07	18.37	46.44	116.96	-70.52	Peak
4	0.05	26.21	22.43	48.64	113.30	-64.66	Peak
5	0.07	24.54	28.01	52.55	110.87	-58.32	Peak
6	0.12	21.01	58.87	79.88	106.26	-26.38	Peak

150 kHz~30 MHz



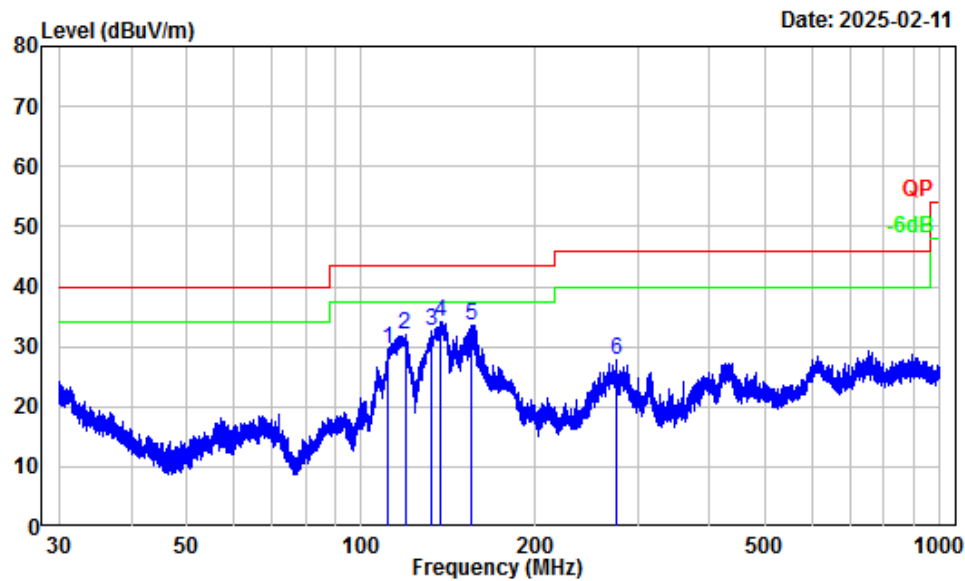
Site : Chamber A
 Condition : 3m
 Project Number : 2401A68348E-RF
 Test Mode : Transmitting
 Note : Perpendicular
 Detector: Peak RBW/VBW: 10/30kHz
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.23	14.18	54.00	68.18	100.27	-32.09	Peak
2	0.35	9.26	46.36	55.62	96.74	-41.12	Peak
3	0.58	5.39	37.81	43.20	72.28	-29.08	Peak
4	0.82	2.57	39.63	42.20	69.26	-27.06	Peak
5	1.05	1.06	38.84	39.90	67.03	-27.13	Peak
6	1.28	0.41	37.46	37.87	65.27	-27.40	Peak

30MHz~1GHz:

Note: when the result of Peak below the limit of QP more than 6dB, just the peak value was record

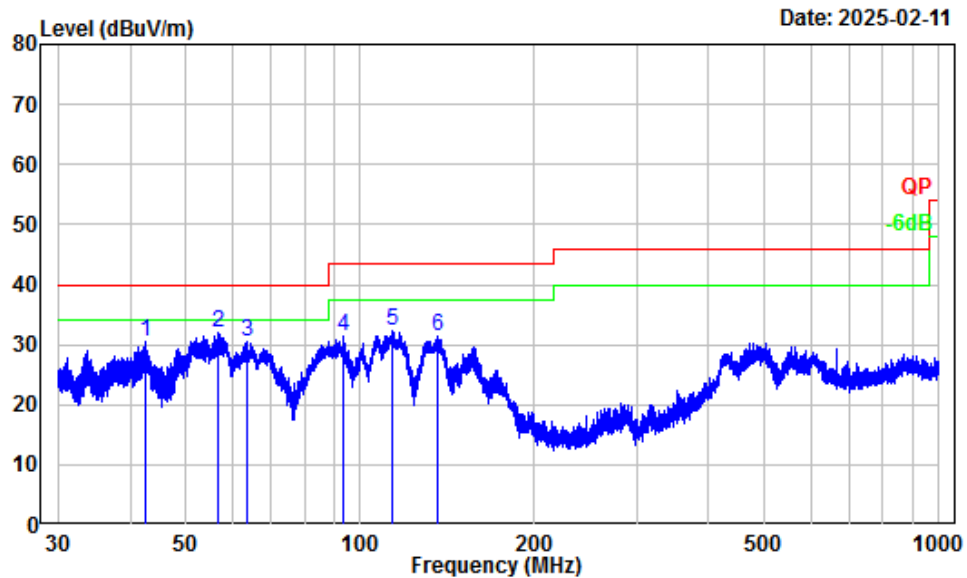
Horizontal



Site : Chamber A
Condition : 3m Horizontal
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq Factor		Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	111.01	-12.88	42.47	29.59	43.50	-13.91	Peak
2	119.02	-11.56	43.67	32.11	43.50	-11.39	Peak
3	131.82	-11.30	43.98	32.68	43.50	-10.82	Peak
4	137.30	-11.63	45.77	34.14	43.50	-9.36	Peak
5	155.23	-12.64	46.21	33.57	43.50	-9.93	Peak
6	276.49	-11.31	38.95	27.64	46.00	-18.36	Peak

Vertical



Site : Chamber A
Condition : 3m Vertical
Project Number : 2401A68348E-RF
Test Mode : Transmitting
Detector: Peak RBW/VBW: 100/300kHz
Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	42.56	-14.27	44.65	30.38	40.00	-9.62	Peak
2	56.89	-18.31	50.32	32.01	40.00	-7.99	Peak
3	63.87	-18.01	48.39	30.38	40.00	-9.62	Peak
4	93.73	-17.57	48.82	31.25	43.50	-12.25	Peak
5	113.71	-12.40	44.61	32.21	43.50	-11.29	Peak
6	135.74	-11.57	42.98	31.41	43.50	-12.09	Peak

FCC §15.215 (c) - 20 dB EMISSION BANDWIDTH

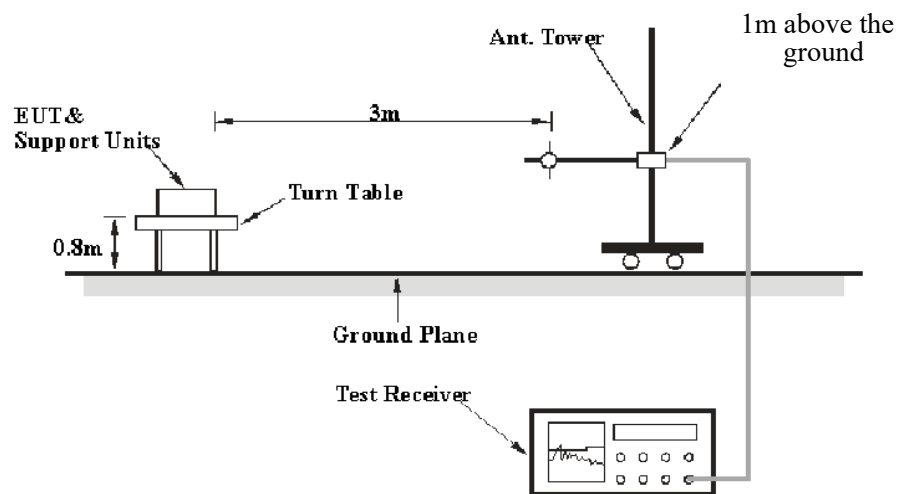
Applicable Standard

According to § 15.215 (c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. In the case of intentional radiators operating under the provisions of subpart E, the emission bandwidth may span across multiple contiguous frequency bands identified in that subpart. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

Test Procedure

Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.



Test Data

Environmental Conditions

Temperature:	25.3 °C
Relative Humidity:	52 %
ATM Pressure:	100.2kPa

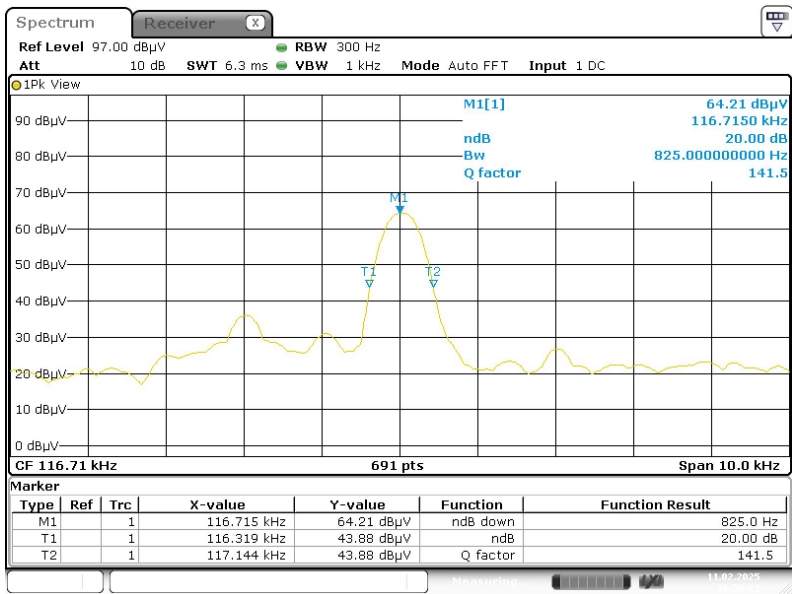
The testing was performed by Anson Su on 2025-02-11.

EUT operation mode: Transmitting

Test Result: Compliant. Please refer to following table and plot.

For Micro-USB

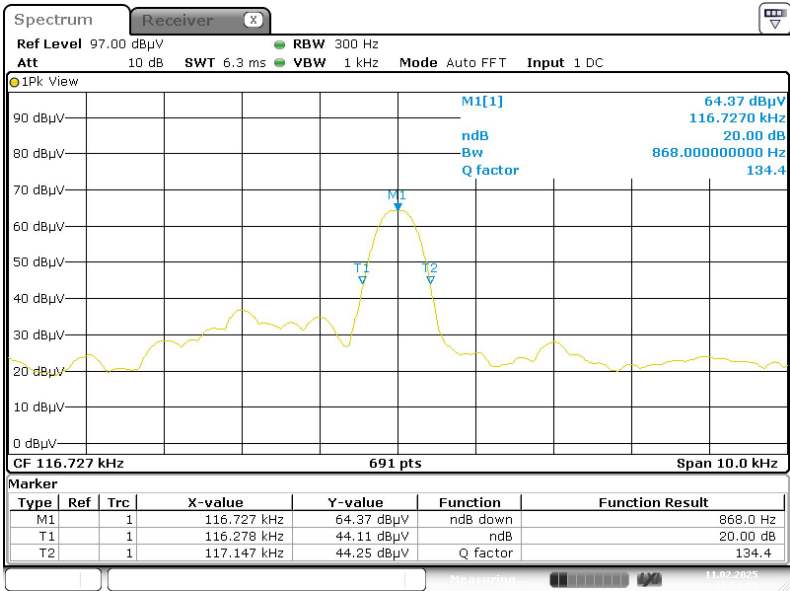
Channel Frequency (kHz)	20 dB Emission Bandwidth (kHz)
117	0.825



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For USB-C

Channel Frequency (kHz)	20 dB Emission Bandwidth (kHz)
117	0.868



ProjectNo.:2401A68348E-RF Tester:Anson Su
Date: 11.FEB.2025 16:54:02

EUT PHOTOGRAPHS

Please refer to the attachment 2401A68348E-RF-EXP External photo and 2401A68348E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401A68348E-RF-TSP Test Setup photo.

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