

TEST REPORT

Applicant Name: TECNO MOBILE LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Report Number: 2401S72615E-RF-00
FCC ID: 2ADYY-TW1501

Test Standard (s)

FCC Part 15C

Sample Description

Product Type: Wireless Charger
Model No.: TW1501
Multiple Model(s) No.: N/A
Trade Mark: TECNO
Date Received: 2024/04/26
Issue Date: 2024/06/20

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Brace Lin

Brace Lin
RF Engineer

Approved By:

Nancy Wang

Nancy Wang
RF 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.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401S72615E-RF-00	Original Report	2024/06/20

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Wireless Charger
Tested Model	TW1501
Multiple Model(s)	N/A
Frequency Range	110-205kHz
Antenna Type	Coil
Input	DC 5.0V/2.0A, 9.0V/2.0A, 11.0V/2.0A
Maximum Wireless Output Power	5Watts/7.5Watts/10Watts//15Watts
Sample serial number	2M9P-1 (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, 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.

Measurement Uncertainty

Parameter		Uncertainty
AC Power Lines Conducted Emissions	9kHz-150kHz	3.94dB(k=2, 95% level of confidence)
	150kHz-30MHz	3.84dB(k=2, 95% level of confidence)
Radiated Emissions	9kHz – 30MHz	3.30dB(k=2, 95% level of confidence)
	30MHz~200MHz (Horizontal)	4.48dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	4.55dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	4.85dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.05dB(k=2, 95% level of confidence)
Temperature		±1°C
Humidity		±1%
Supply voltages		±0.4%
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.

EUT Exercise Software

No software used in test.

Local Support Equipment

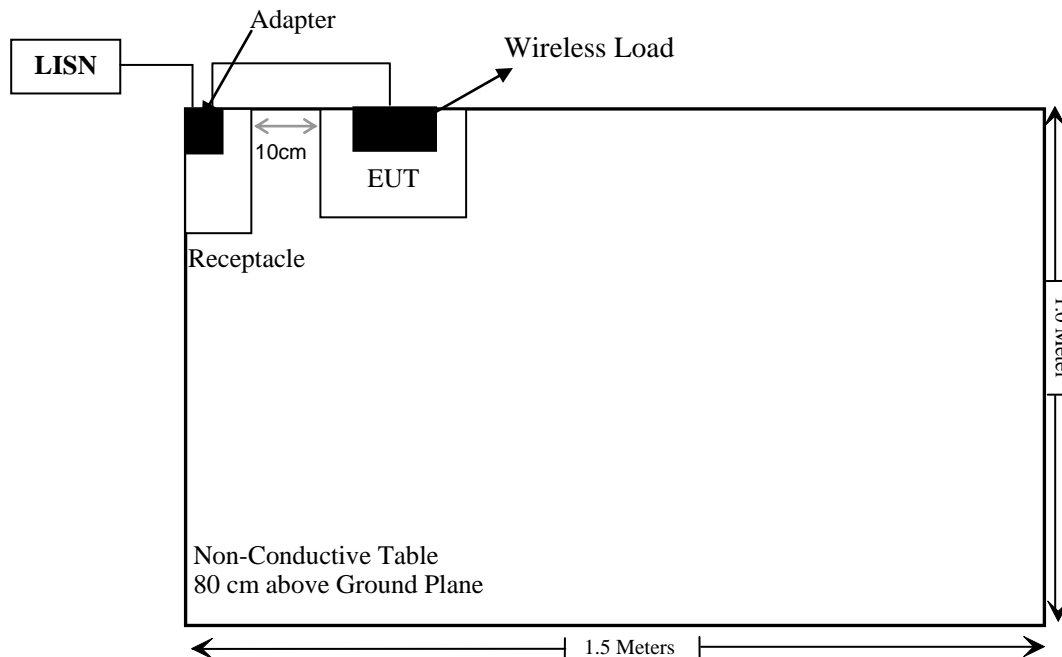
Manufacturer	Description	Model	Serial Number
EESON	Wireless test load	Unknown	Unknown

External I/O Cable

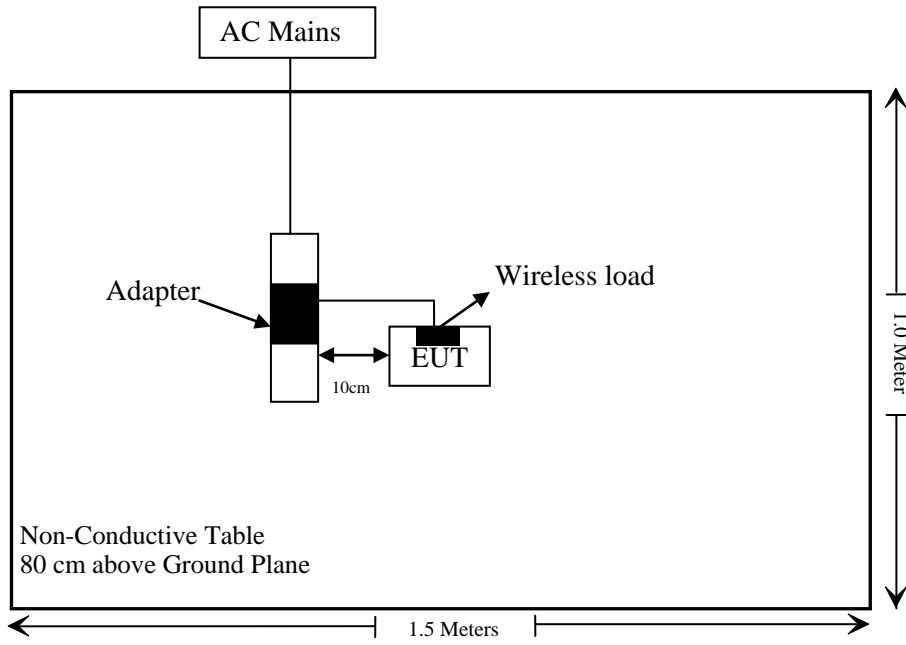
Cable Description	Length (m)	From Port	To
USB Cable	0.5	Adapter	EUT

Block Diagram of Test Setup

For Conducted Emission:



For Radiated Emission:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §1.1310	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	2024/01/16	2025/01/15
Rohde & Schwarz	LISN	ENV216	101613	2024/01/16	2025/01/15
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2023/08/03	2024/08/02
Unknown	CE Cable	CE Cable	UF A210B-1-0720-504504	2023/08/03	2024/08/02
Audix	EMI Test software	E3	191218(V9)	NCR	NCR
RF Radiated Test					
R&S	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sonoma instrument	Pre-amplifier	310 N	186238	2023/06/08	2024/06/07
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
BACL	Active Loop Antenna	1313-1A	4031911	2024/03/21	2025/03/20
Unknown	Cable	Chamber Cable 1	F-03-EM236	2023/08/03	2024/08/02
Unknown	Cable	Chamber Cable 4	EC-007	2023/08/03	2024/08/02
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
MPE					
SPEAG	Probe	MAGPy-8H3D-E3D	3106	2024/03/04	2025/03/03
SPEAG	Data Acquisition System	MAPGPY-DAS	3089	2024/03/04	2025/03/03

* **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

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.

Antenna Connected Construction

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

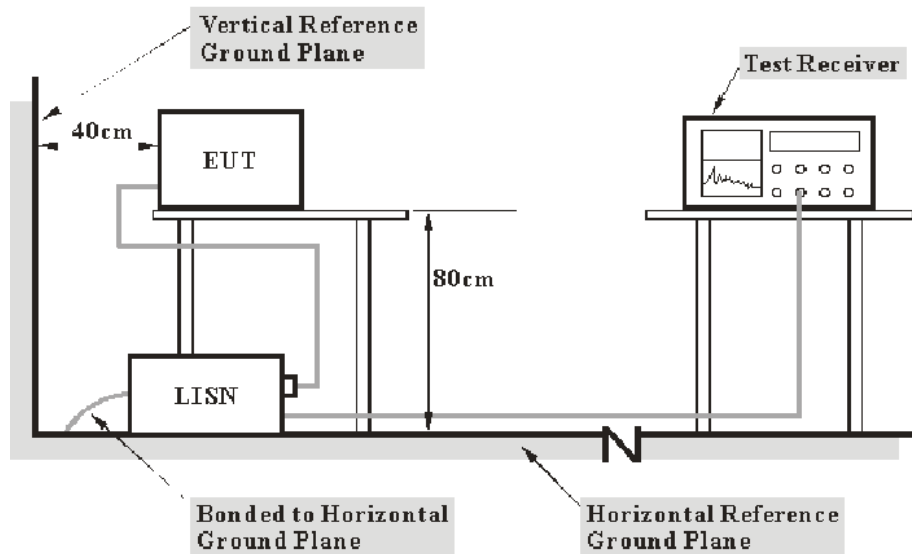
Result: Compliant.

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 C63.10-2013 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	IF B/W
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

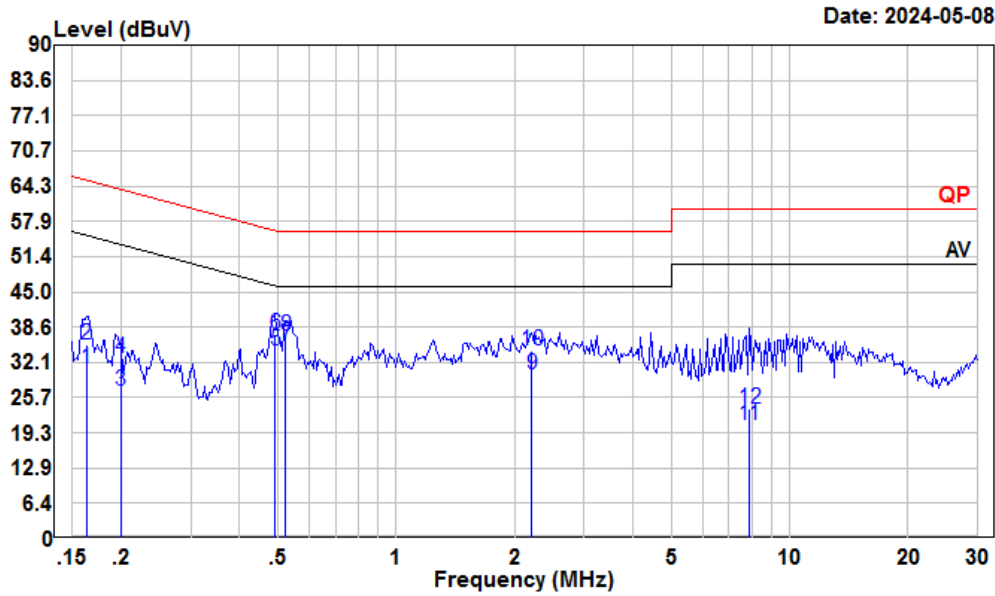
Environmental Conditions

Temperature:	24 °C
Relative Humidity:	64 %
ATM Pressure:	101 kPa

The testing was performed by Macy Shi on 2024-05-08.

Test Mode: Transmitting (Wireless charging at Maximum output power)

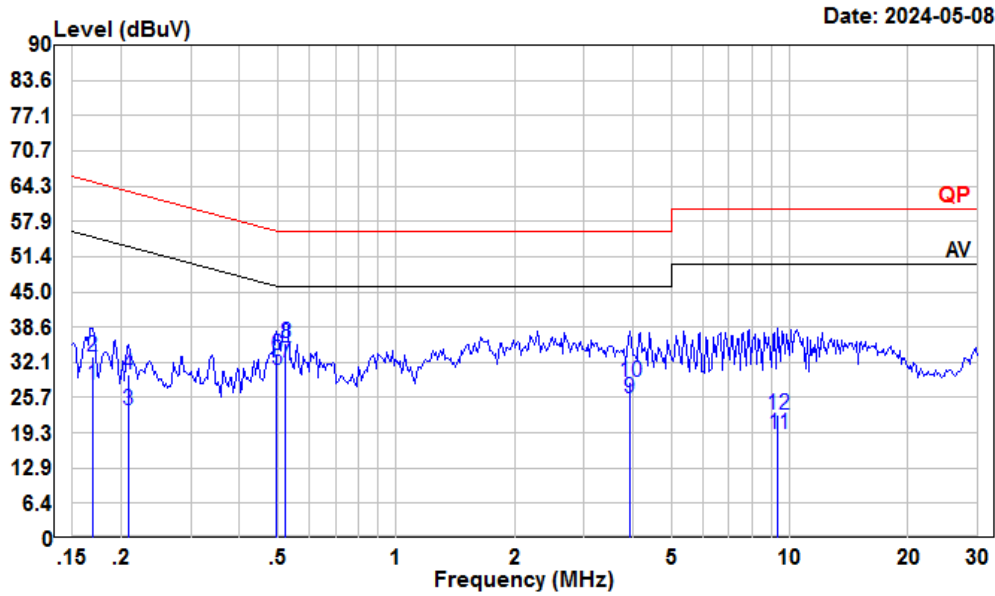
AC 120 V/60 Hz, Line



Condition: Line
 Project : 2401S72615E-RF
 Tester : Macy shi
 Note : Transmitting

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.16	9.97	30.99	10.87	10.15	55.30	-24.31	Average
2	0.16	14.35	35.37	10.87	10.15	65.30	-29.93	QP
3	0.20	6.16	27.05	10.80	10.09	53.62	-26.57	Average
4	0.20	11.90	32.79	10.80	10.09	63.62	-30.83	QP
5	0.49	13.73	34.40	10.51	10.16	46.14	-11.74	Average
6	0.49	16.70	37.37	10.51	10.16	56.14	-18.77	QP
7	0.52	14.48	35.15	10.50	10.17	46.00	-10.85	Average
8	0.52	16.23	36.90	10.50	10.17	56.00	-19.10	QP
9	2.21	9.10	29.86	10.56	10.20	46.00	-16.14	Average
10	2.21	13.41	34.17	10.56	10.20	56.00	-21.83	QP
11	7.89	-0.04	20.72	10.53	10.23	50.00	-29.28	Average
12	7.89	3.01	23.77	10.53	10.23	60.00	-36.23	QP

AC 120V/ 60 Hz, Neutral



Condition: Neutral
 Project : 2401S72615E-RF
 Tester : Macy shi
 Note : Transmitting

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.17	7.40	28.07	10.52	10.15	55.03	-26.96	Average
2	0.17	12.51	33.18	10.52	10.15	65.03	-31.85	QP
3	0.21	3.00	23.52	10.41	10.11	53.27	-29.75	Average
4	0.21	9.50	30.02	10.41	10.11	63.27	-33.25	QP
5	0.50	9.84	30.69	10.70	10.15	46.05	-15.36	Average
6	0.50	12.64	33.49	10.70	10.15	56.05	-22.56	QP
7	0.52	11.20	32.07	10.70	10.17	46.00	-13.93	Average
8	0.52	14.72	35.59	10.70	10.17	56.00	-20.41	QP
9	3.92	4.88	25.54	10.40	10.26	46.00	-20.46	Average
10	3.92	7.87	28.53	10.40	10.26	56.00	-27.47	QP
11	9.35	-1.94	19.09	10.78	10.25	50.00	-30.91	Average
12	9.35	1.47	22.50	10.78	10.25	60.00	-37.50	QP

FCC §1.1310 - 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)

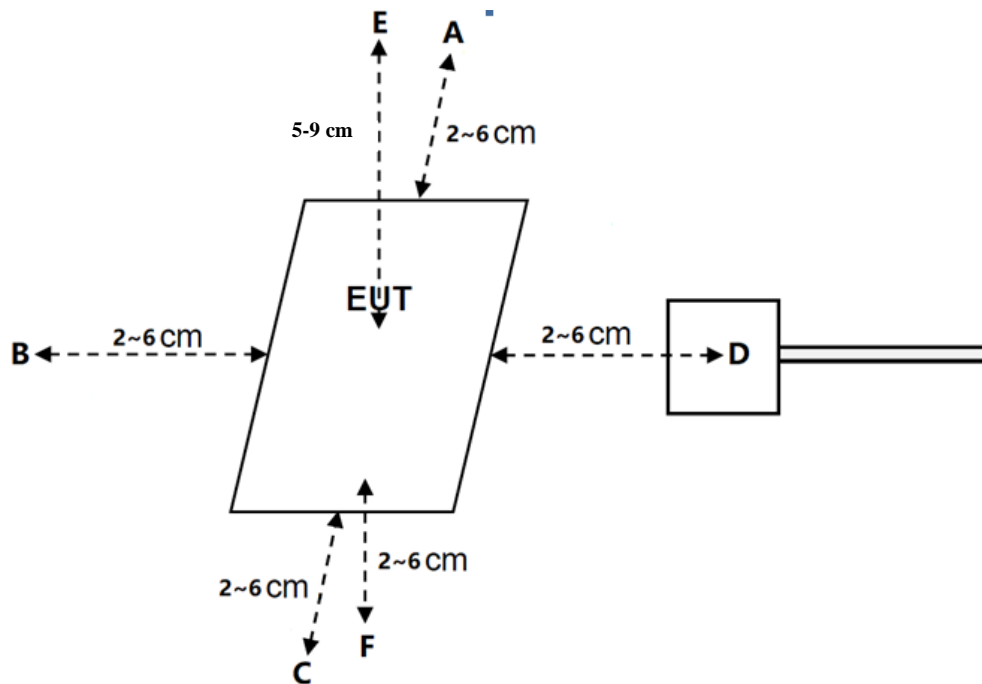
(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ³)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
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 2~6cm, along all the principal axes defined with respect to the orientation of the transmitting element (e.g., coil or antenna). Step is 1cm. For top side, the measuring distance is 5~9cm, because the wireless charging load has a thickness.
- 3) The highest emission level was recorded.
- 4) 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.

- 5) 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%.
- 6) The H-field or E-field at 0cm is estimated from the fitted curve and compared with limit.

Test Data

Environmental Conditions

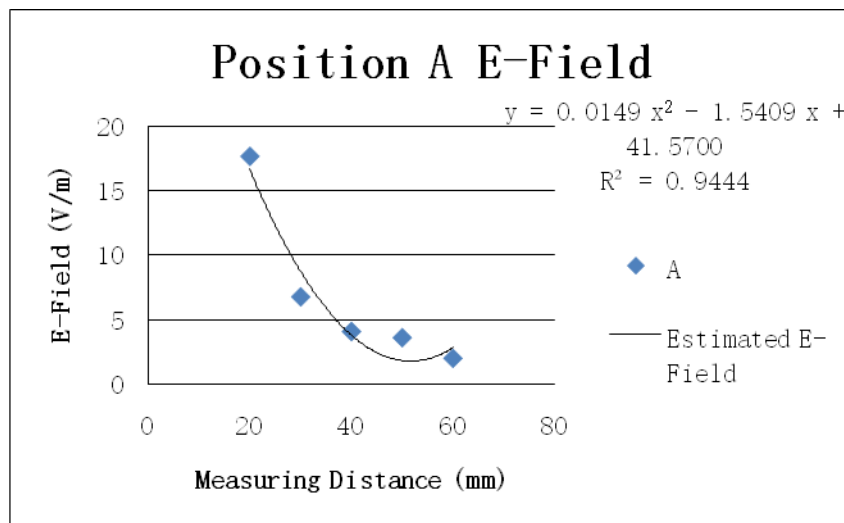
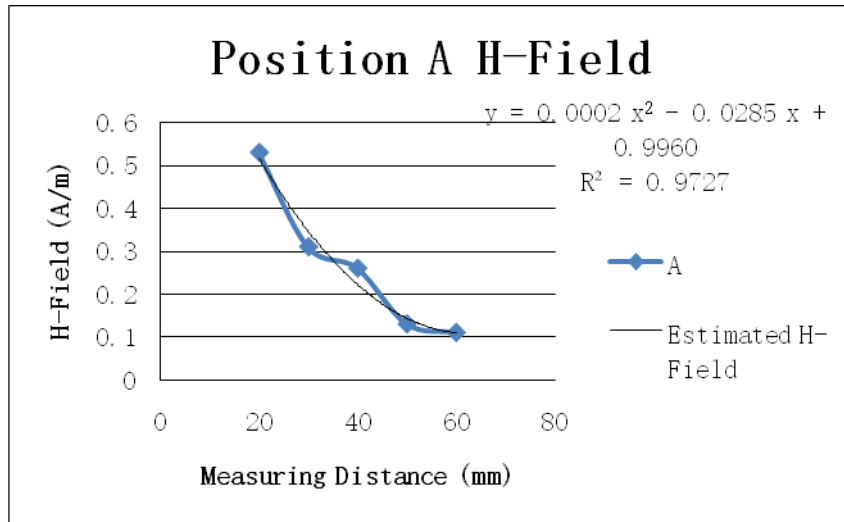
Temperature:	26 °C
Relative Humidity:	67 %
ATM Pressure:	101 kPa

The testing was performed by Bamboo Zhan on 2024-05-31.

Test Mode: Transmitting (Wireless charging at Maximum output power)

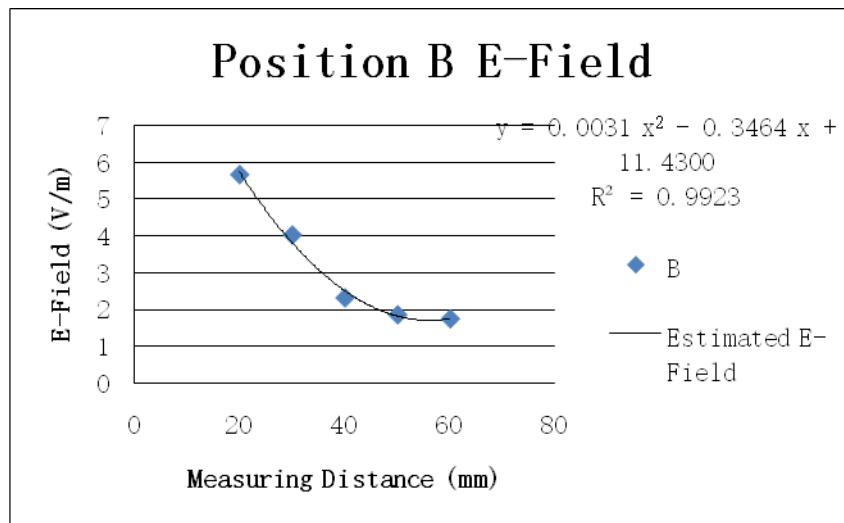
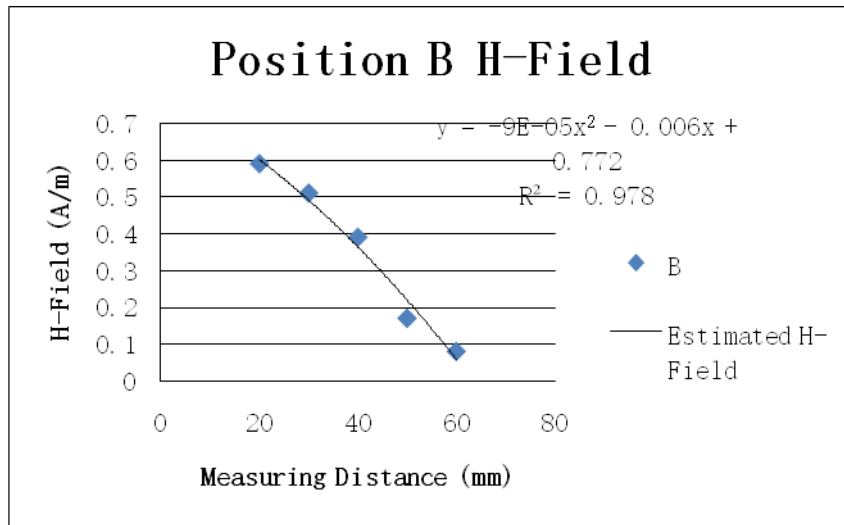
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
110-205	A	20	0.53	17.7
		30	0.31	6.75
		40	0.26	4.05
		50	0.13	3.57
		60	0.11	1.96

Curve Fitting



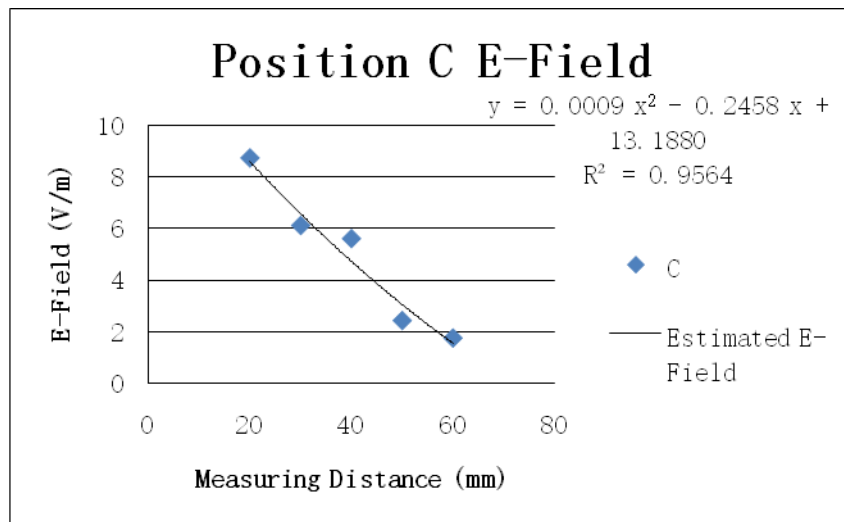
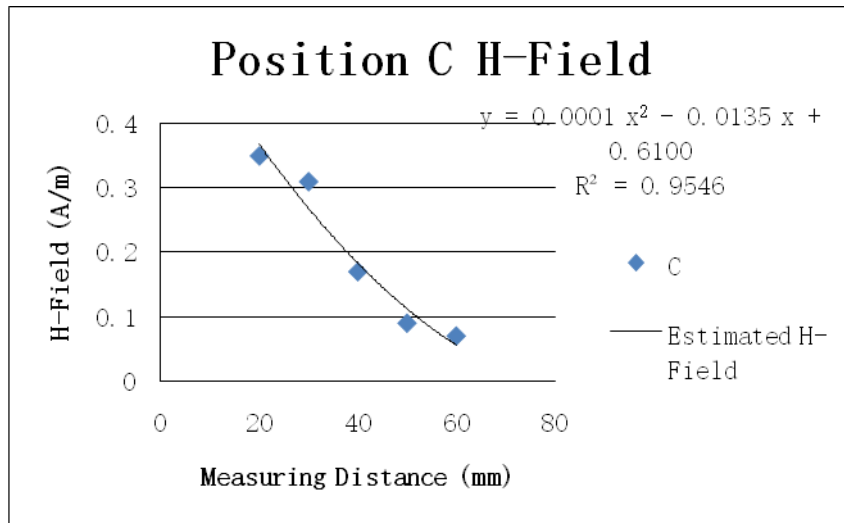
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
110-205	B	20	0.59	5.66
		30	0.51	4.02
		40	0.39	2.31
		50	0.17	1.85
		60	0.08	1.74

Curve Fitting



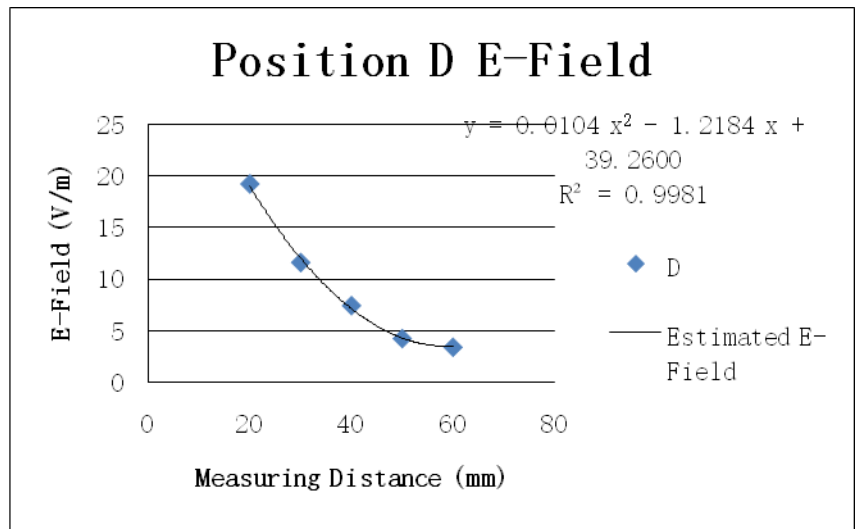
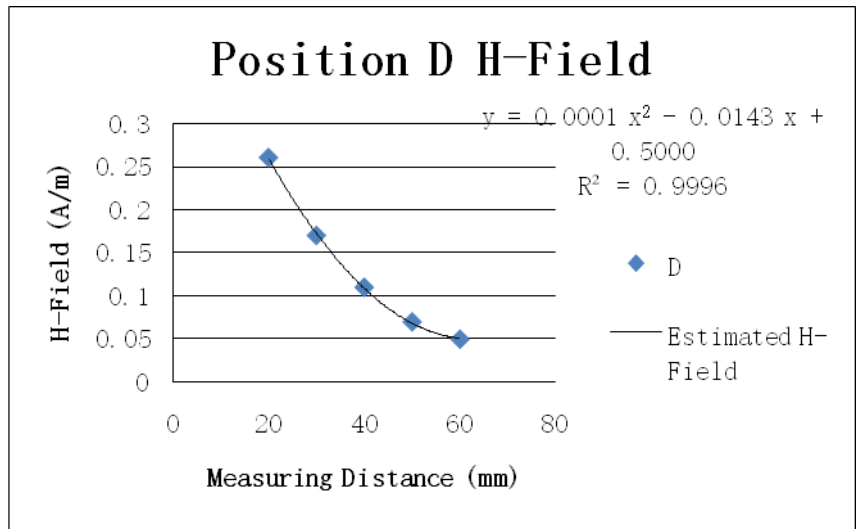
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
110-205	C	20	0.35	8.72
		30	0.31	6.1
		40	0.17	5.59
		50	0.09	2.41
		60	0.07	1.73

Curve Fitting



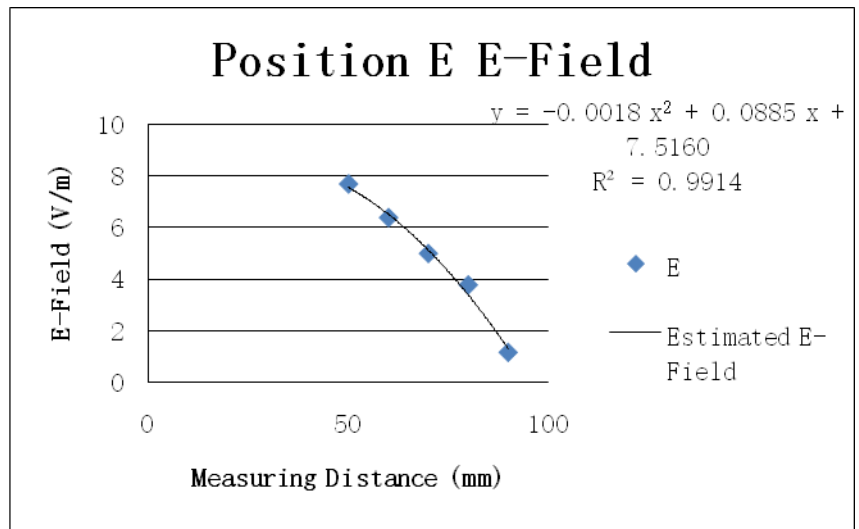
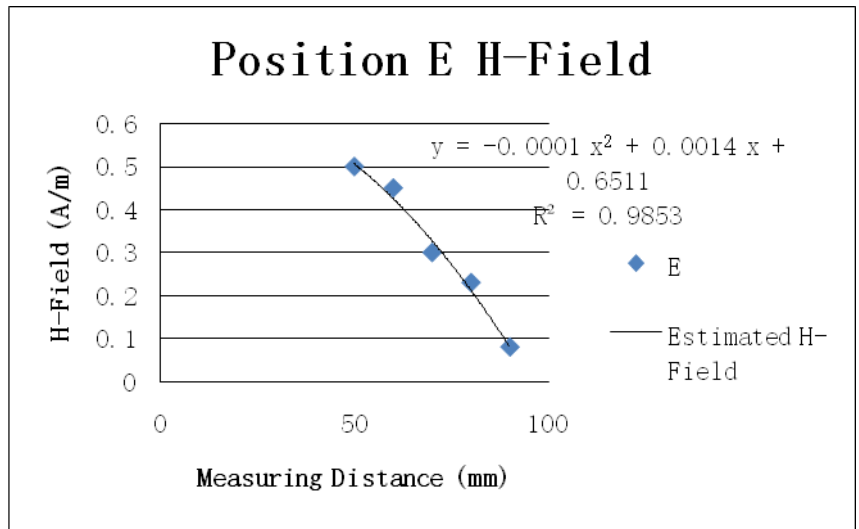
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
110-205	D	20	0.26	19.2
		30	0.17	11.6
		40	0.11	7.43
		50	0.07	4.25
		60	0.05	3.41

Curve Fitting



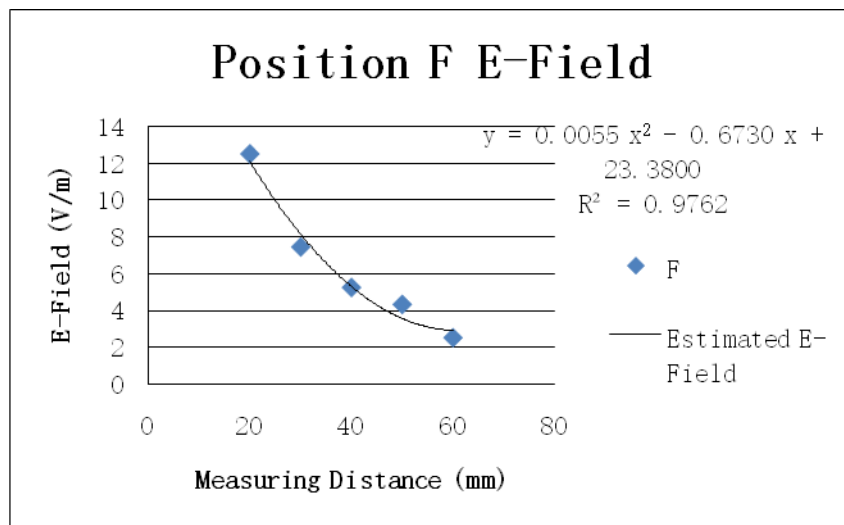
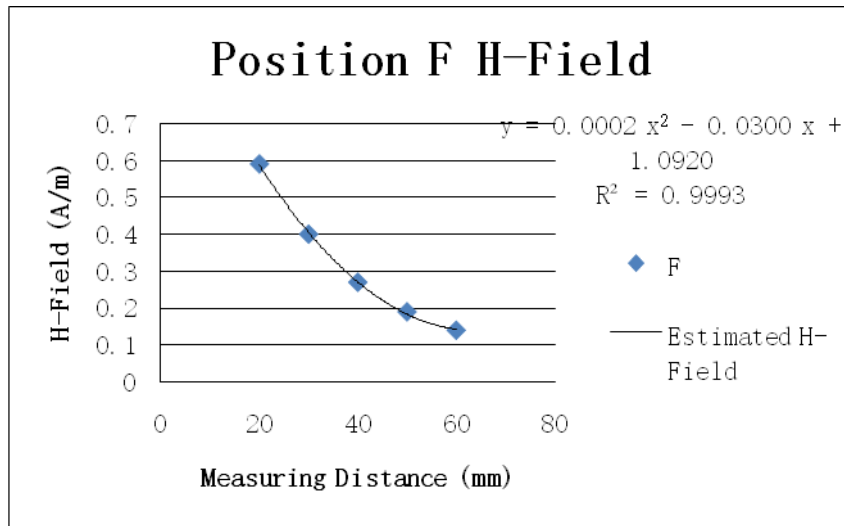
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
110-205	E	50	0.5	7.67
		60	0.45	6.37
		70	0.3	4.98
		80	0.23	3.76
		90	0.08	1.15

Curve Fitting



Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
110-205	F	20	0.59	12.5
		30	0.4	7.46
		40	0.27	5.27
		50	0.19	4.35
		60	0.14	2.55

Curve Fitting



Verify The Fitted Curve

Measuring Position	Measuring Distance (mm)	Estimated H-Field (A/m)	Measured H-Field (A/m)	Agreement Between Estimated and Measured (%)	Limit (%)
A	20	0.51	0.53	-3.77	±30
	30	0.32	0.31	3.23	±30
B	20	0.6	0.59	1.69	±30
	30	0.48	0.51	-5.88	±30
C	20	0.38	0.35	8.57	±30
	30	0.3	0.31	-3.23	±30
D	20	0.25	0.26	-3.85	±30
	30	0.16	0.17	-5.88	±30
E	50	0.47	0.5	-6.00	±30
	60	0.38	0.45	-15.56	±30
F	20	0.57	0.59	-3.39	±30
	30	0.37	0.4	-7.50	±30

Measuring Position	Measuring Distance (mm)	Estimated E-Field (V/m)	Measured E-Field (V/m)	Agreement Between Estimated and Measured (%)	Limit (%)
A	20	16.71	17.7	-5.59	±30
	30	8.75	6.75	29.63	±30
B	20	5.74	5.66	1.41	±30
	30	3.83	4.02	-4.73	±30
C	20	8.63	8.72	-1.03	±30
	30	6.62	6.1	8.52	±30
D	20	19.05	19.2	-0.78	±30
	30	12.07	11.6	4.05	±30
E	50	7.44	7.67	-3.00	±30
	60	6.35	6.37	-0.31	±30
F	20	12.12	12.5	-3.04	±30
	30	8.14	7.46	9.12	±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

Test Distance: 0cm(estimated from the fitted curve)

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)
110-205	1.00	0.77	0.61	0.50	0.65	1.09	1.63

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)
110-205	41.57	11.43	13.19	39.26	7.52	23.38	614

FCC §15.205 & §15.209 - RADIATED EMISSIONS TEST

Applicable Standard

As per FCC Part 15.209

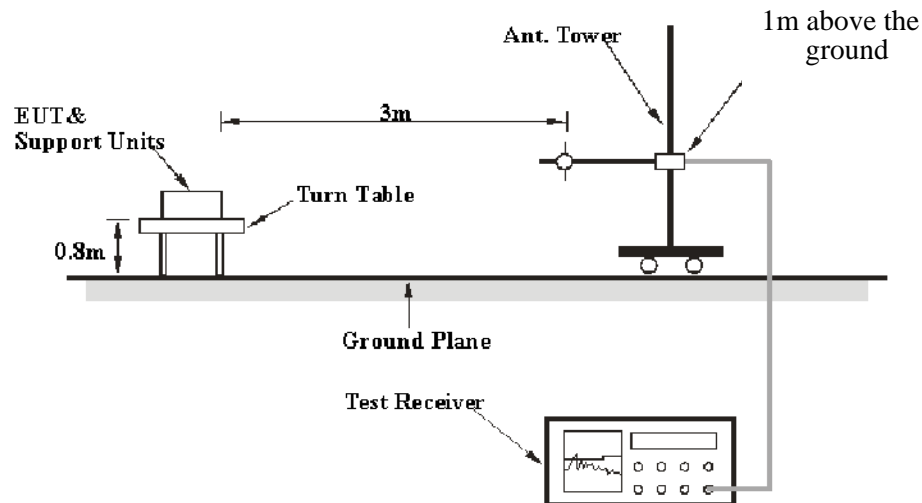
(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

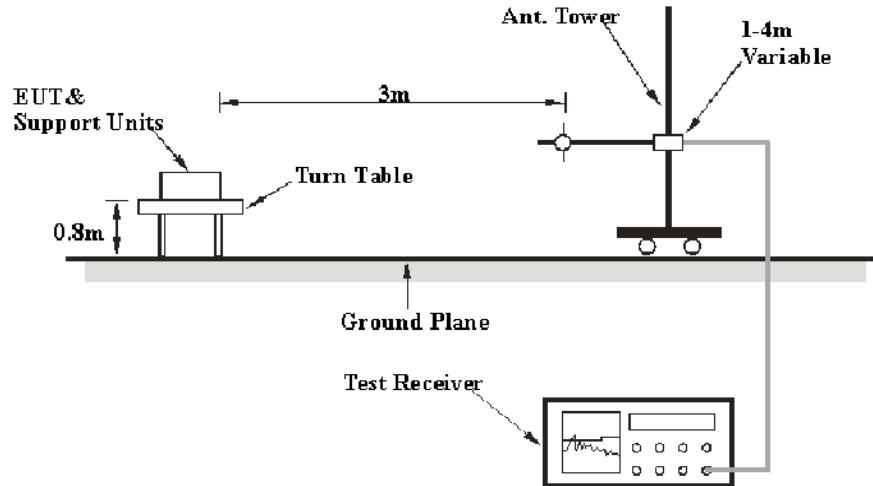
**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this 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 C63.10-2013. 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	Measurement
9 kHz – 150 kHz	/	/	200 Hz	QP
	300 Hz	1 kHz	/	PK
150 kHz – 30 MHz	/	/	9 kHz	QP
	10 kHz	30 kHz	/	PK
30 MHz – 1000 MHz	/	/	120 kHz	QP
	100 kHz	300 kHz	/	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 °C
Relative Humidity:	54 %
ATM Pressure:	101 kPa

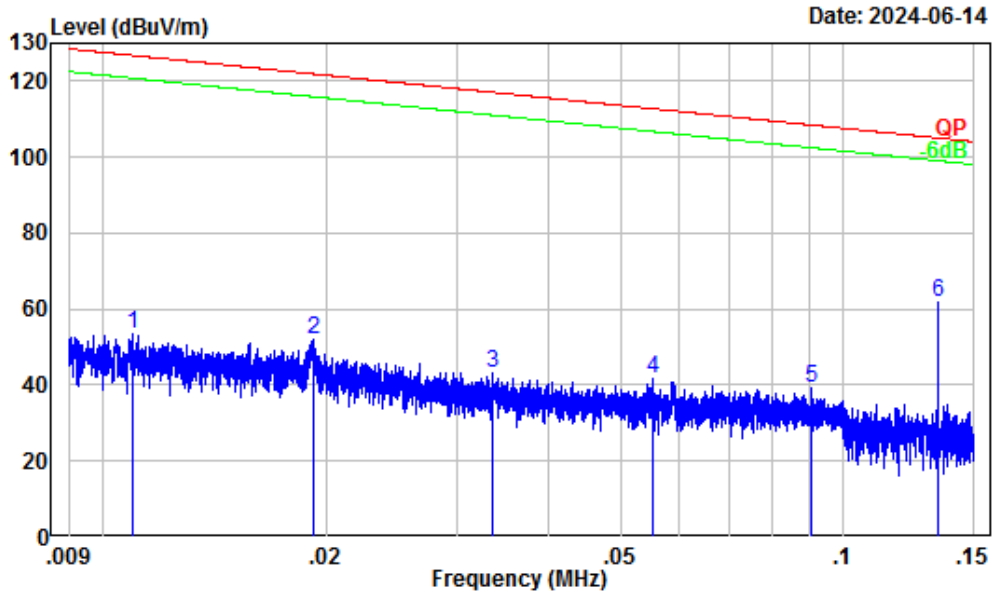
The testing was performed by Anson Su on 2024-05-10 and 2024-06-14.

Test Mode: Transmitting (Wireless charging at Maximum output power)

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

Parallel:

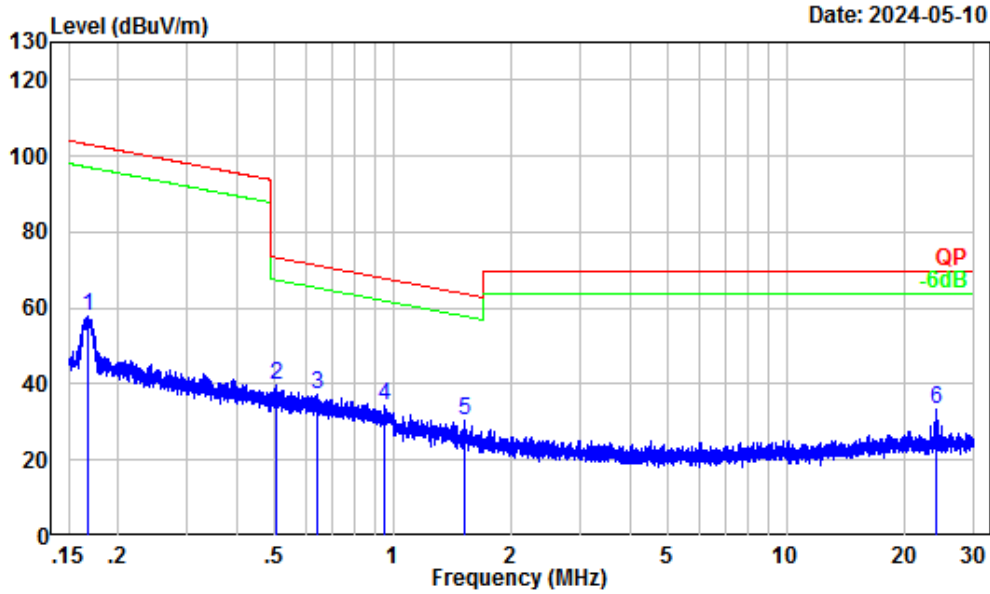
9 kHz~150 kHz



Site : Chamber A
 Condition : 3m
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Note : Parallel
 Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	0.01	37.18	16.38	53.56	126.78	-73.22 Peak
2	0.02	32.95	19.07	52.02	121.90	-69.88 Peak
3	0.03	26.68	16.25	42.93	117.07	-74.14 Peak
4	0.06	22.38	19.25	41.63	112.78	-71.15 Peak
5	0.09	18.01	21.10	39.11	108.49	-69.38 Peak
6	0.13	15.46	46.39	61.85	105.06	-43.21 Peak

150 kHz~30 MHz

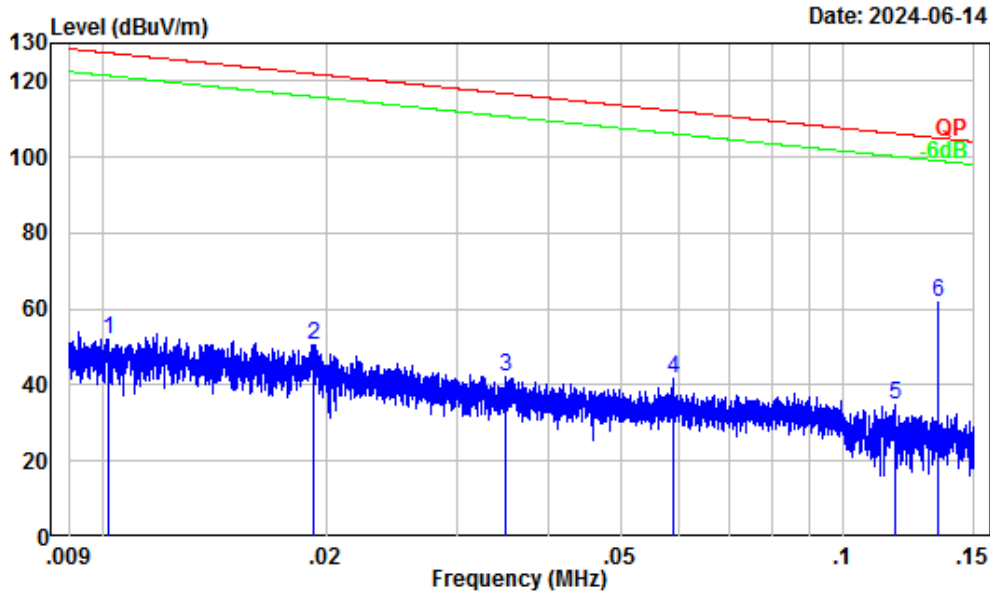


Site : Chamber A
 Condition : 3m
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Note : Parallel
 Tester : Anson Su

	Read	Limit	Over				
Freq	Level	Level	Line	Limit Remark			
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB		
1	0.17	13.92	43.74	57.66	103.14	-45.48	Peak
2	0.50	3.44	36.43	39.87	73.56	-33.69	Peak
3	0.65	1.74	35.32	37.06	71.35	-34.29	Peak
4	0.95	-1.25	35.67	34.42	67.89	-33.47	Peak
5	1.51	-3.38	33.70	30.32	63.79	-33.47	Peak
6	24.05	-4.95	38.09	33.14	69.54	-36.40	Peak

Ground-parallel:

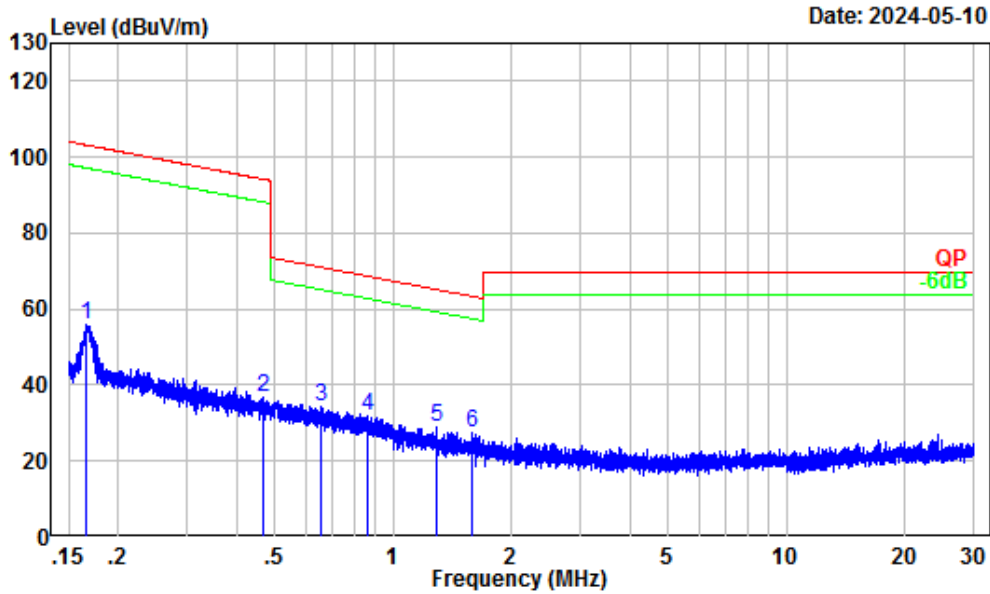
9 kHz~150 kHz



Site : Chamber A
 Condition : 3m
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Note : Ground-parallel
 Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	0.01	37.61	14.57	52.18	127.46	-75.28 Peak
2	0.02	32.96	17.70	50.66	121.91	-71.25 Peak
3	0.03	26.38	15.62	42.00	116.73	-74.73 Peak
4	0.06	21.87	19.97	41.84	112.20	-70.36 Peak
5	0.12	16.24	18.61	34.85	106.21	-71.36 Peak
6	0.13	15.46	46.54	62.00	105.06	-43.06 Peak

150 kHz~30 MHz



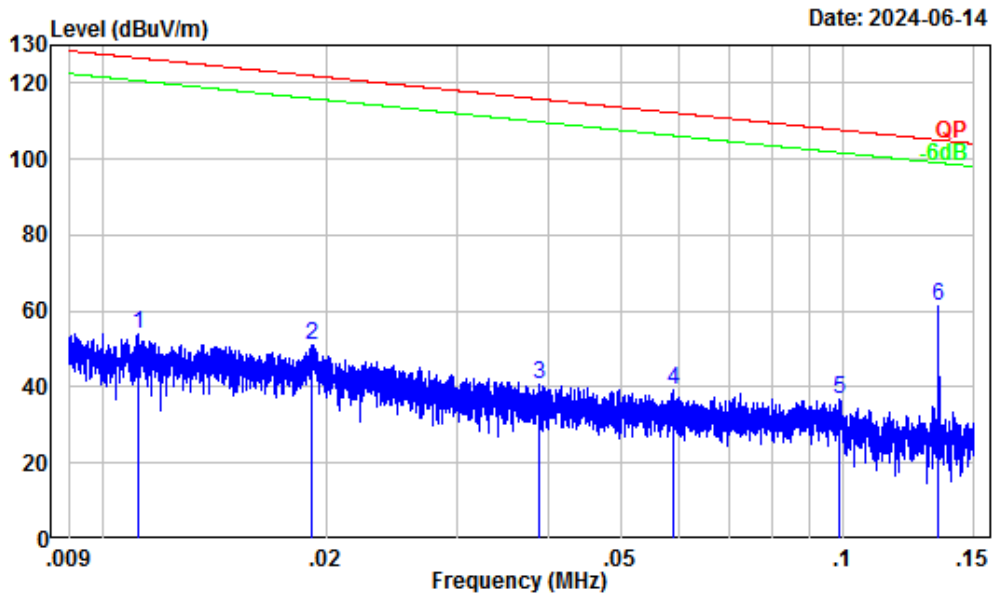
Date: 2024-05-10

Site : Chamber A
 Condition : 3m
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Note : Ground-parallel
 Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	0.17	13.94	41.84	55.78	103.16	-47.38 Peak
2	0.47	4.15	32.86	37.01	94.19	-57.18 Peak
3	0.65	1.63	32.86	34.49	71.24	-36.75 Peak
4	0.87	-0.60	32.61	32.01	68.75	-36.74 Peak
5	1.29	-2.59	31.46	28.87	65.23	-36.36 Peak
6	1.60	-3.66	31.19	27.53	63.33	-35.80 Peak

Perpendicular:

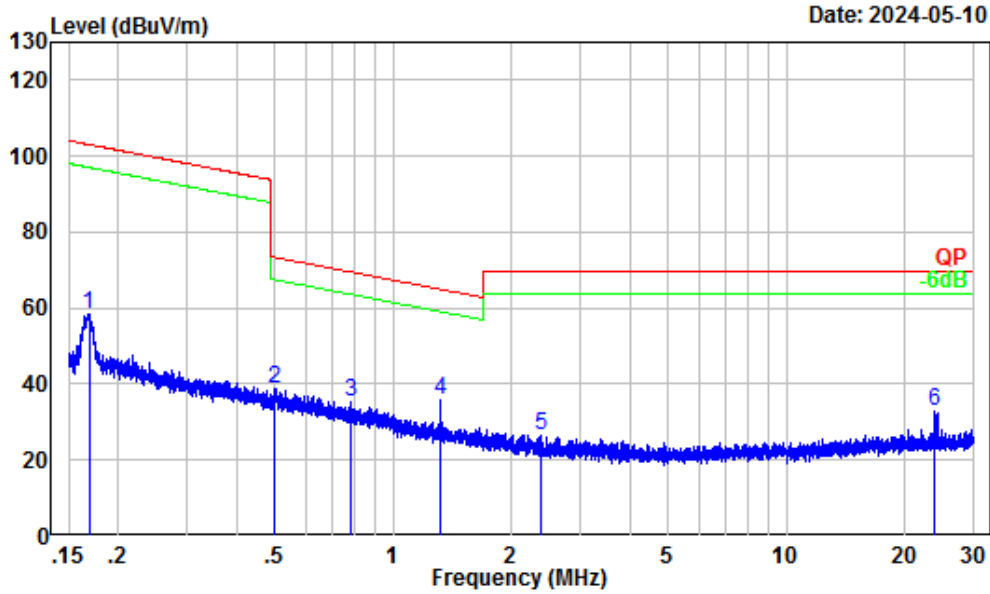
9 kHz~150 kHz



Site : Chamber A
 Condition : 3m
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Note : Perpendicular
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	37.11	16.99	54.10	126.66	-72.56	Peak
2	0.02	33.02	17.87	50.89	121.96	-71.07	Peak
3	0.04	25.55	15.40	40.95	115.83	-74.88	Peak
4	0.06	21.89	17.38	39.27	112.22	-72.95	Peak
5	0.10	17.20	19.41	36.61	107.74	-71.13	Peak
6	0.13	15.44	46.06	61.50	105.03	-43.53	Peak

150 kHz~30 MHz



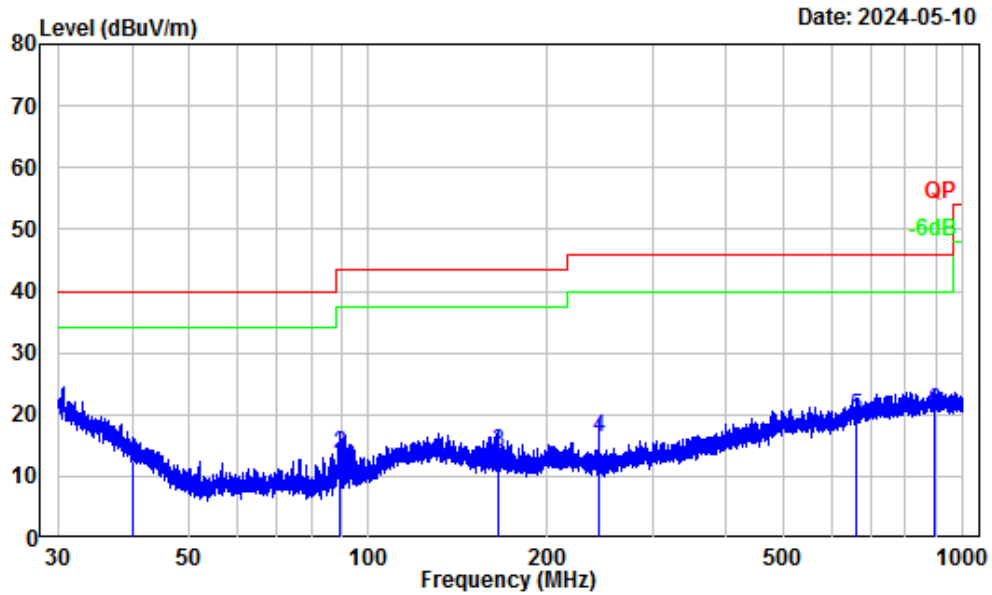
Site : Chamber A
 Condition : 3m
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Note : Perpendicular
 Tester : Anson Su

	Read	Limit	Over				
Freq	Level	Level	Line	Limit Remark			
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB		
1	0.17	13.84	44.47	58.31	103.06	-44.75	Peak
2	0.50	3.48	35.20	38.68	73.61	-34.93	Peak
3	0.78	0.11	35.06	35.17	69.66	-34.49	Peak
4	1.32	-2.71	38.38	35.67	65.00	-29.33	Peak
5	2.39	-5.39	32.05	26.66	69.54	-42.88	Peak
6	23.71	-4.94	38.03	33.09	69.54	-36.45	Peak

30MHz~1GHz:

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

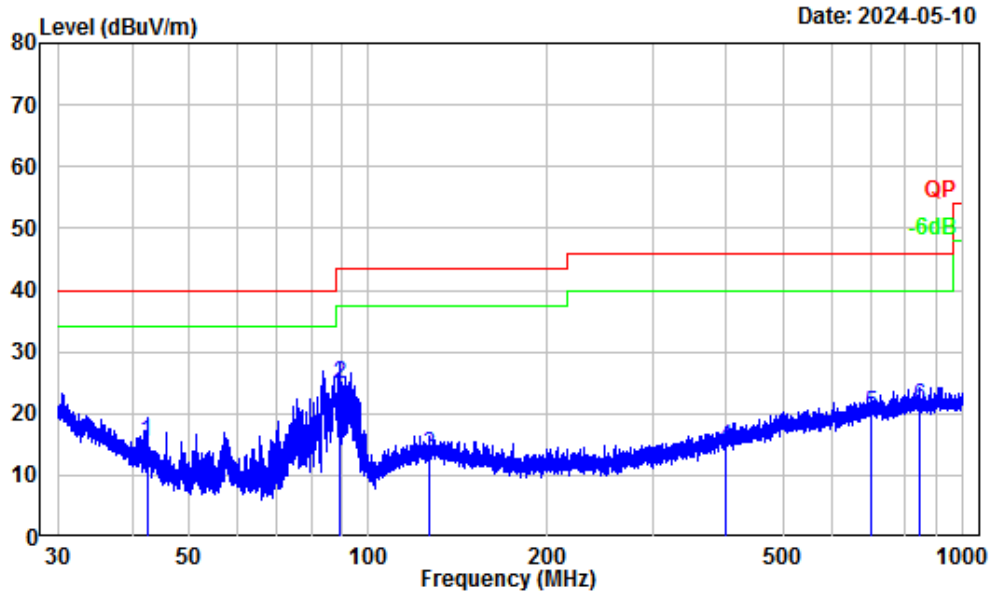
Horizontal



Site : Chamber A
 Condition : 3m Horizontal
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Tester : Anson Su

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	40.24	-11.67	23.91	12.24	40.00	-27.76	QP
2	89.47	-18.11	31.58	13.47	43.50	-30.03	QP
3	165.34	-14.14	28.18	14.04	43.50	-29.46	QP
4	244.34	-14.41	30.77	16.36	46.00	-29.64	QP
5	663.47	-6.53	26.29	19.76	46.00	-26.24	QP
6	898.57	-4.45	25.12	20.67	46.00	-25.33	QP

Vertical



Site : Chamber A
 Condition : 3m Vertical
 Project Number: 2401S72615E-RF
 Note : Transmitting
 Tester : Anson Su

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	42.38	-14.36	29.72	15.36	40.00	-24.64	QP
2	89.20	-18.89	43.64	24.75	43.50	-18.75	QP
3	126.55	-12.63	25.92	13.29	43.50	-30.21	QP
4	398.16	-10.85	25.49	14.64	46.00	-31.36	QP
5	698.39	-6.59	26.51	19.92	46.00	-26.08	QP
6	843.61	-5.15	26.28	21.13	46.00	-24.87	QP

FCC §15.215 (c) - 20 dB EMISSION BANDWIDTH

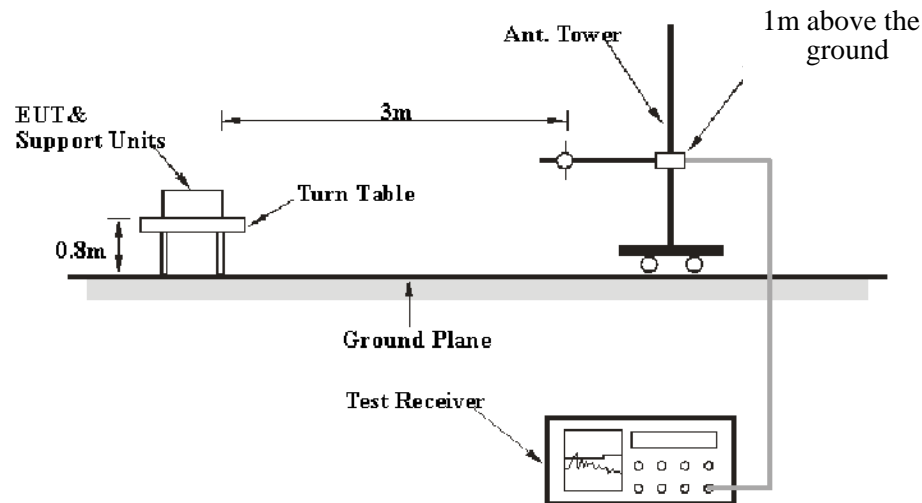
Applicable Standard

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

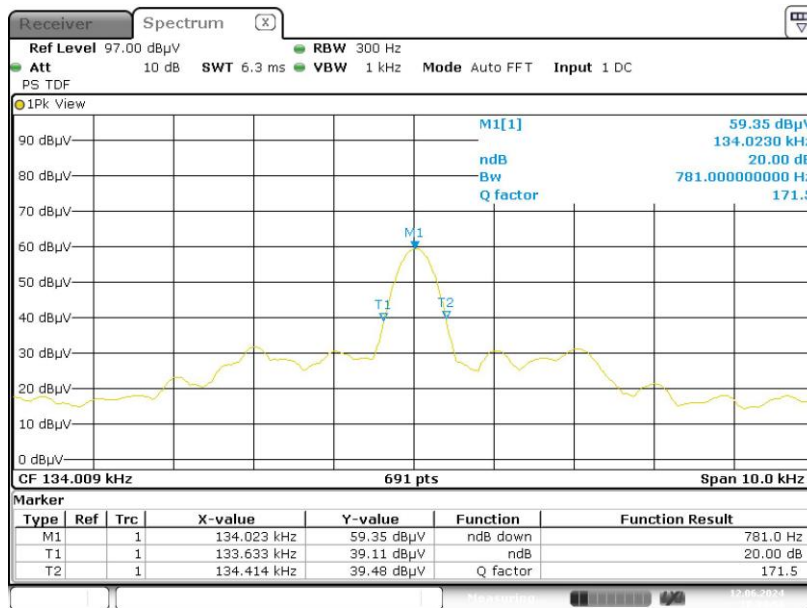
Temperature:	22 °C
Relative Humidity:	54 %
ATM Pressure:	101 kPa

The testing was performed by Anson Su on 2024-06-12.

EUT operation mode: Transmitting

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

Frequency (kHz)	20 dB Emission Bandwidth (Hz)
110-205	781



ProjectNo.:2401S72615E-RF Tester:Anson Su
Date: 12.JUN.2024 18:34:50

EUT PHOTOGRAPHS

Please refer to the attachment 2401S72615E-RF External photo and 2401S72615E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401S72615E-RF Test Setup photo.

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