中认信通
CHINA CERTIFICATION ICT CO.,LTD (DONGGUAN)

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: SP United China

Address: No.3 LANE 19 QIAN RD KENGKOU VILLAGE TINGSHAN DIST HOUJIE TOWN GUANGDONE PROVINCE China

FCC ID: **2ASMH-PCB025**
Product Name: **Wireless power bank**

Standard(s): **47 CFR Part 15, Subpart C**
ANSI C63.10-2013

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: **2403V85427E-00B**

Date Of Issue: **2024/9/14**

Reviewed By: **Calvin Chen**

Title: RF Engineer

Approved By: **Sun Zhong**

Title: Manager

Test Laboratory: **China Certification ICT Co., Ltd (Dongguan)**
No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China
Tel: +86-769-82016888

Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, 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. : 442868, the FCC Designation No. : CN1314.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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Each test item follows the test standard(s) without deviation.

CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2403V85427E-00B	Original Report	2024/9/14

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Wireless power bank
Trade Name:	SP™
EUT Model:	PCB025
Operation Frequency:	126.7 kHz
Rated Input Voltage:	DC 5V 2.5A/ 9V 2A/12V 1.5A from USB
Wireless Output:	10 Watts
Serial Number:	2OBV-1
EUT Received Date:	2024/7/16
EUT Received Status:	Good

Antenna Information Detail▲:

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
Coil	Unknown	Unknown	Unknown

The Method of §15.203 Compliance:

☒Antenna was permanently attached to the unit.

☐Antenna use a unique type of connector to attach to the EUT.

☐Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Accessory Information:

Accessory Description	Manufacturer	Model
/	/	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in normal use Mode, which was provided by the manufacturer. The EUT support max 18 Watts input and max 10 Watts wireless output. When USB-C port input or USB-C port output and Wireless output work together, the wireless output only support 5 Watts, the USB-C port input is up to 6 Watts and USB-C port output is up to 5 Watts. So select the following modes to test. Test Mode: M1: USB-C Port Input (6W) +Wireless Charging (5W) M2: USB-C Port Output (5W) + Wireless Charging (5W) M3: Wireless Charging (10W)
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
HUAJIN	Adapter	HJ-PD33W-US	Unknown
SiLiYuan	Wireless Charging Load	MX15W	211013003
DongFeng	Phone	P3	UP3_BSGF187E000165

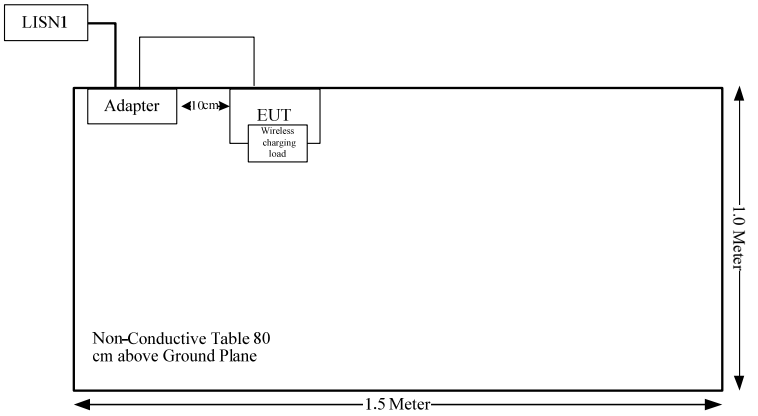
1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
USB Cable	No	No	0.12	Adapter/Phone	EUT

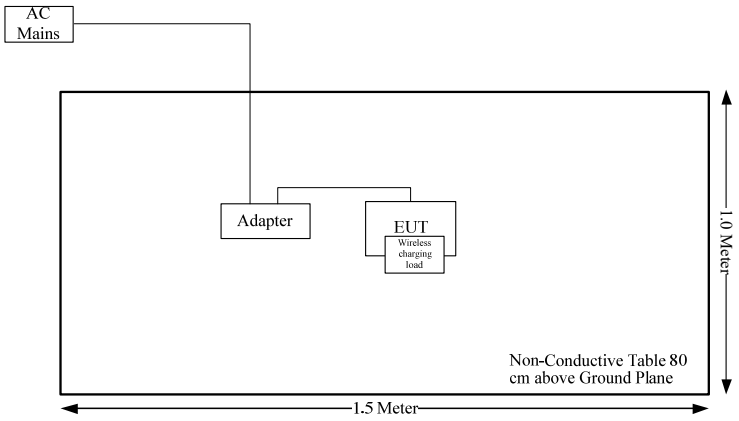
1.2.4 Block Diagram of Test Setup

AC line conducted emissions:

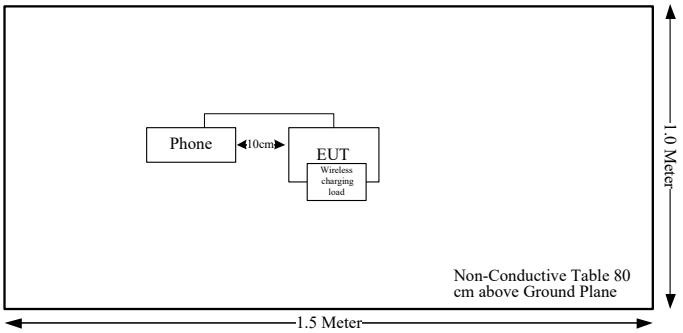
M1:



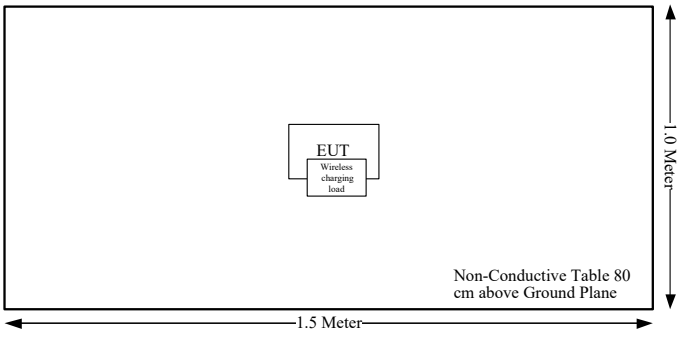
Radiated Emission:
M1:



M2:



M3:



1.3 Measurement Uncertainty

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

Parameter	Measurement Uncertainty
radiated Emissions	9kHz~30MHz: 4.12dB 30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
FCC§15.207	AC Line Conducted Emission	Compliant
FCC§15.209 §15.205	Radiated Emission Test	Compliant
FCC§15.215	20 dB Emission Bandwidth	Compliant
FCC§15.203	Antenna Requirement	Compliant
FCC§1.1310 §2.1093	Maximum Permissible Exposure (MPE)	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

	Conducted limit (dBμV)	
Frequency of emission (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

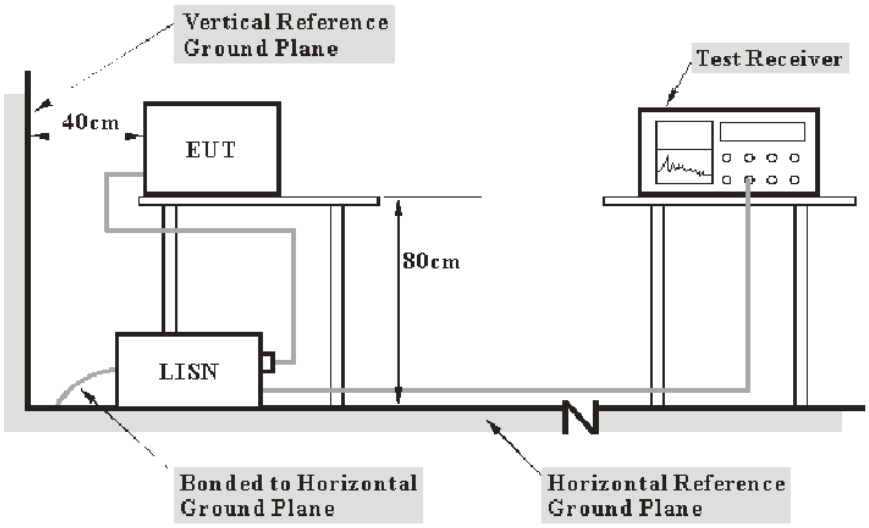
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μV within the frequency band 535-1705 kHz, as measured using a 50 μH/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtainig their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

3.1.2 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.

3.1.3 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

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase ("hot") line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor
Factor = attenuation caused by cable loss + voltage division factor of AMN

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiation Spurious Emissions

3.2.1 Applicable Standard

FCC §15.209

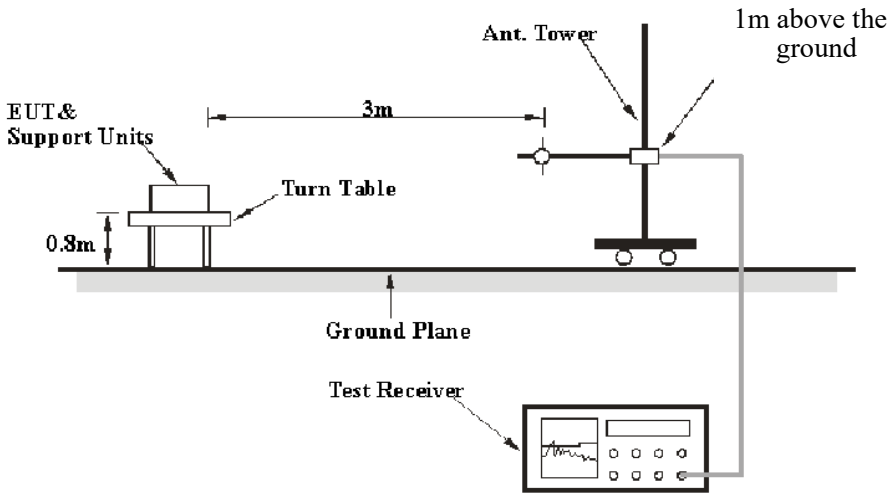
(a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

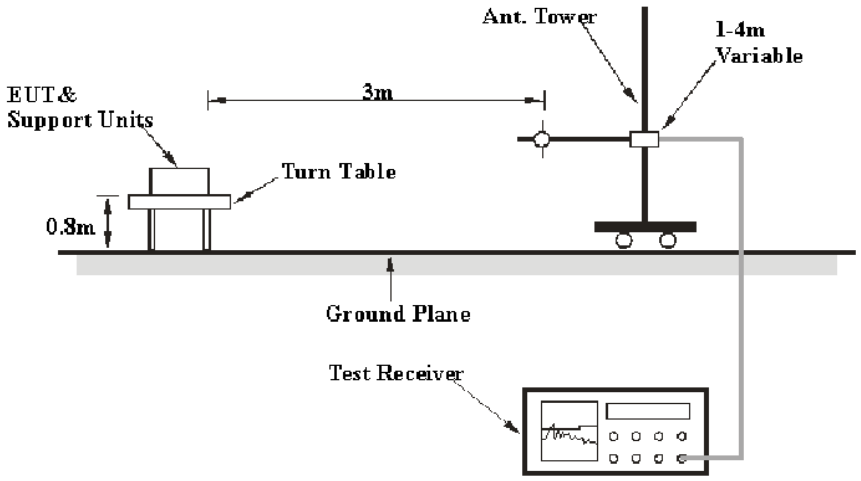
**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permItted under other sections of this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

3.2.2 EUT Setup

9kHz-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 15.209 limits.

The spacing between the peripherals was 10 cm.

For 9kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 1 GHz.

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

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

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz, employing an average detector.

If the maximized peak measured value complies with the limit, then it is unnecessary to perform an QP/Average measurement

3.2.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:
Result = Reading + Factor
Factor = Antenna Factor + Cable Loss- Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:
Margin = Limit – Result

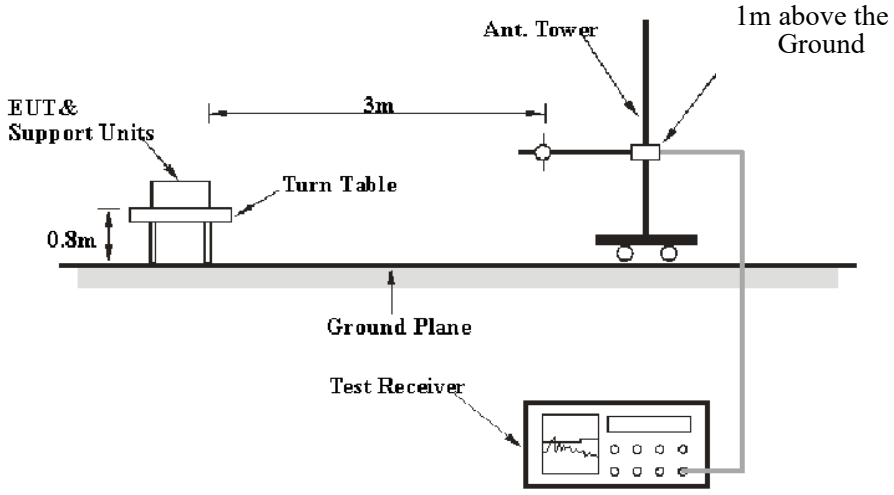
3.3 20 dB Emission Bandwidth:

3.3.1 Applicable Standard

FCC §15.215

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. 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.

3.3.2 EUT Setup



3.3.3 Test Procedure

1. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
2. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
3. Measure the 99% Occupied bandwidth use the 99% Occupied bandwidth function of the test equipment.

3.4 Antenna Requirement

3.4.1 Applicable Standard

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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. 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.

3.4.2 Judgment

Compliant. Please refer to the Antenna Information detail in Section 1.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2OBV-1	Test Date:	2024/9/13
Test Site:	CE	Test Mode:	USB-C Port Input (6W) +Wireless Charging (5W)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.6

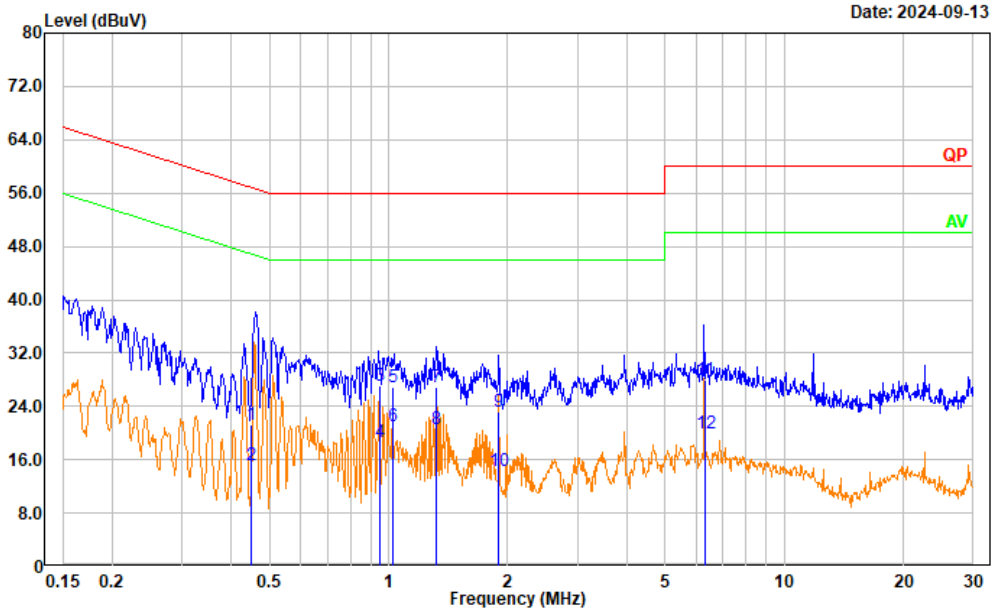
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2024/4/1	2025/3/31
R&S	EMI Test Receiver	ESR3	103104	2024/5/10	2025/5/9
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2024/1/15	2025/1/14
Audix	Test Software	E3	191218 (V9)	N/A	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

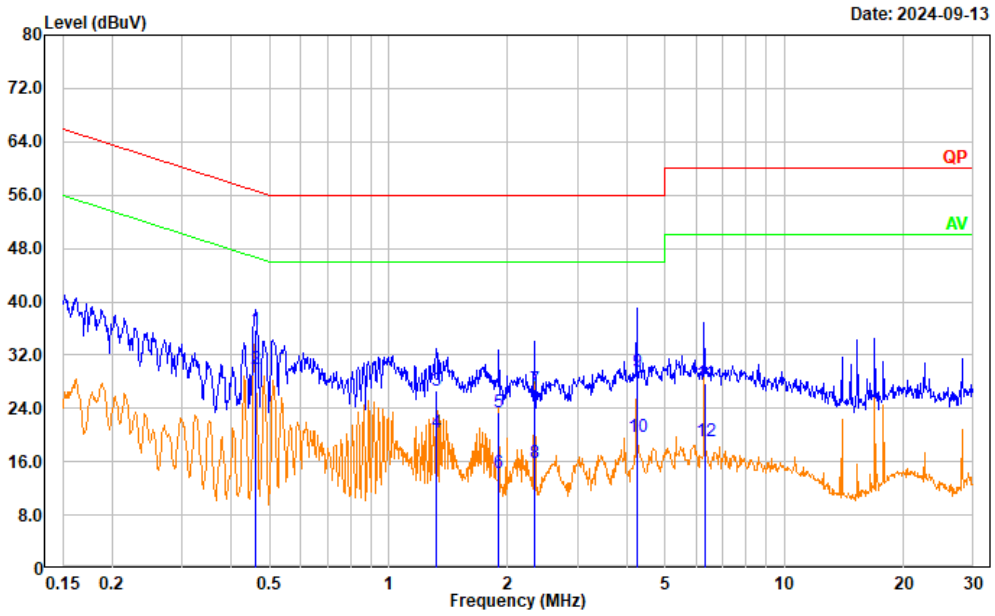
M1:

Project No.: 2403V85427E-RF
Tester: David Huang
Port: Line
Note: USB-C Port Input (6W) +Wireless Charging (5W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.450	10.74	10.43	21.17	56.87	35.70	QP
2	0.450	4.82	10.43	15.25	46.87	31.62	Average
3	0.951	16.36	10.70	27.06	56.00	28.94	QP
4	0.951	7.90	10.70	18.60	46.00	27.40	Average
5	1.023	16.21	10.71	26.92	56.00	29.08	QP
6	1.023	10.35	10.71	21.06	46.00	24.94	Average
7	1.318	16.26	10.62	26.88	56.00	29.12	QP
8	1.318	9.97	10.62	20.59	46.00	25.41	Average
9	1.900	12.80	10.46	23.26	56.00	32.74	QP
10	1.900	3.76	10.46	14.22	46.00	31.78	Average
11	6.287	17.56	10.50	28.06	60.00	31.94	QP
12	6.287	9.35	10.50	19.85	50.00	30.15	Average

Project No.: 2403V85427E-RF
Tester: David Huang
Port: neutral
Note: USB-C Port Input (6W) +Wireless Charging (5W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.463	25.14	10.60	35.74	56.64	20.90	QP
2	0.463	19.41	10.60	30.01	46.64	16.63	Average
3	1.317	16.31	10.42	26.73	56.00	29.27	QP
4	1.317	9.95	10.42	20.37	46.00	25.63	Average
5	1.901	12.88	10.43	23.31	56.00	32.69	QP
6	1.901	3.94	10.43	14.37	46.00	31.63	Average
7	2.339	16.42	10.41	26.83	56.00	29.17	QP
8	2.339	5.40	10.41	15.81	46.00	30.19	Average
9	4.241	19.09	10.34	29.43	56.00	26.57	QP
10	4.241	9.46	10.34	19.80	46.00	26.20	Average
11	6.287	17.45	10.29	27.74	60.00	32.26	QP
12	6.287	8.73	10.29	19.02	50.00	30.98	Average

4.2 Radiation Spurious Emissions

Serial Number:	2OBV-1	Test Date:	2024/8/2
Test Site:	966-2	Test Mode:	M1, M2, M3
Tester:	Carl Xue	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	54	ATM Pressure: (kPa)	100.8

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
BACL	Loop Antenna	1313-1A	3110611	2023/12/4	2026/12/3
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0300-01	2024/1/11	2025/1/10
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0500-01	2024/1/11	2025/1/10
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
R&S	EMI Test Receiver	ESR3	102724	2024/2/29	2025/2/28
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2023/12/4	2024/12/3
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2023/12/4	2024/12/3
XQY	Coaxial Cable	XQY-CMR400UF-NJ-NJ-7M	24056379	2024/6/11	2025/6/10
Sonoma	Amplifier	310N	186165	2023/12/4	2024/12/3
Audix	Test Software	E3	191218 (V9)	N/A	N/A

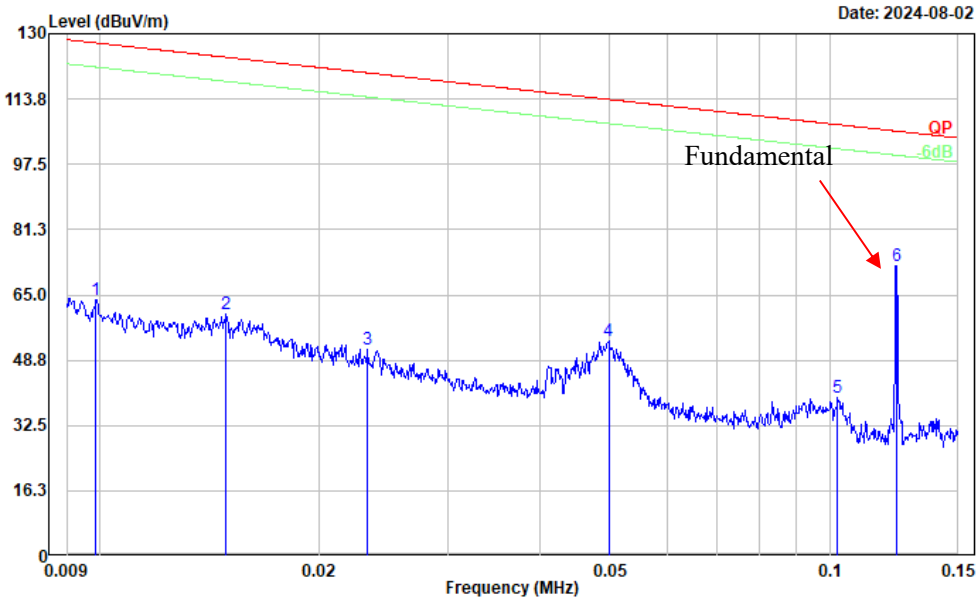
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

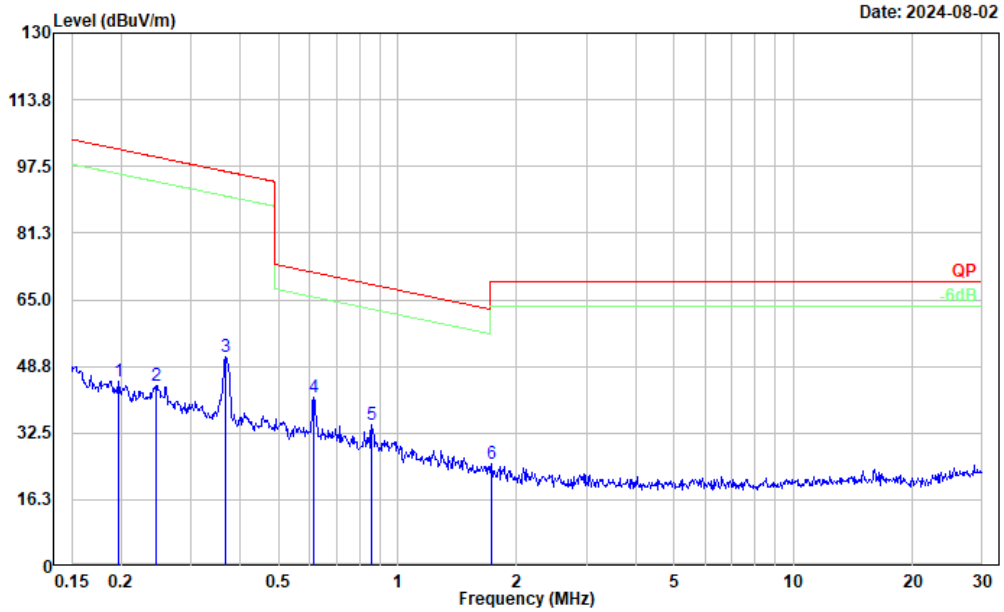
M1:
1)9k-30MHz
Parallel

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Parallel
Note: USB-C Port Input(6W)+Wireless Charging(5W) Parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.010	29.09	34.59	63.68	127.71	64.03	Peak
2	0.015	28.23	32.03	60.26	124.15	63.89	Peak
3	0.023	23.37	27.92	51.29	120.26	68.97	Peak
4	0.050	33.11	20.47	53.58	113.66	60.08	Peak
5	0.103	24.86	14.52	39.38	107.38	68.00	Peak
6	0.124	58.65	13.55	72.20	105.77	33.57	Peak

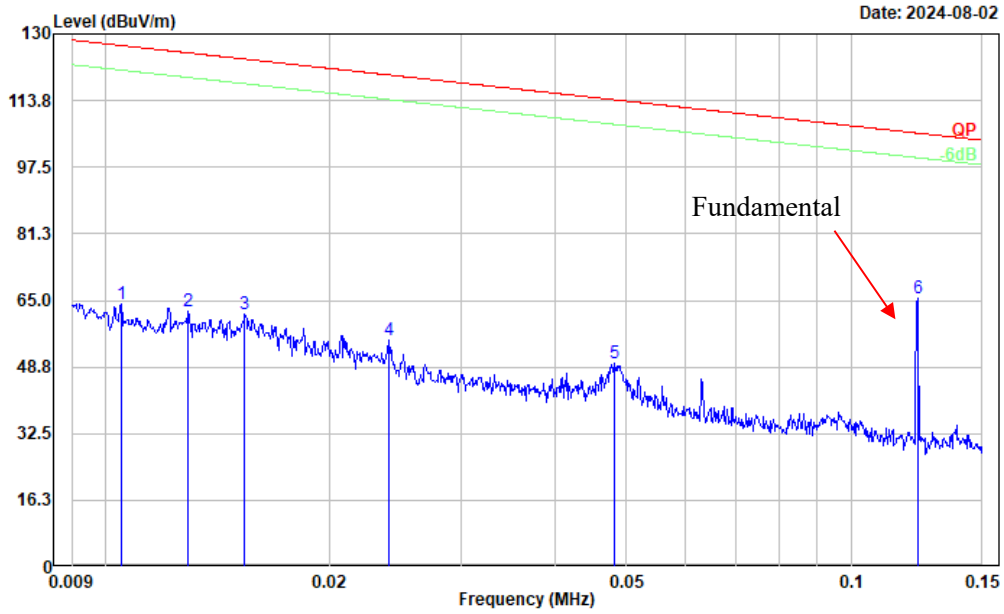
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Parallel
Note: USB-C Port Input(6W)+Wireless Charging(5W) Parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.197	35.10	10.15	45.25	101.74	56.49	Peak
2	0.246	36.25	7.87	44.12	99.80	55.68	Peak
3	0.367	47.04	3.87	50.91	96.30	45.39	Peak
4	0.614	41.48	-0.36	41.12	71.80	30.68	Peak
5	0.857	37.47	-3.00	34.47	68.84	34.37	Peak
6	1.725	31.86	-6.78	25.08	69.54	44.46	Peak

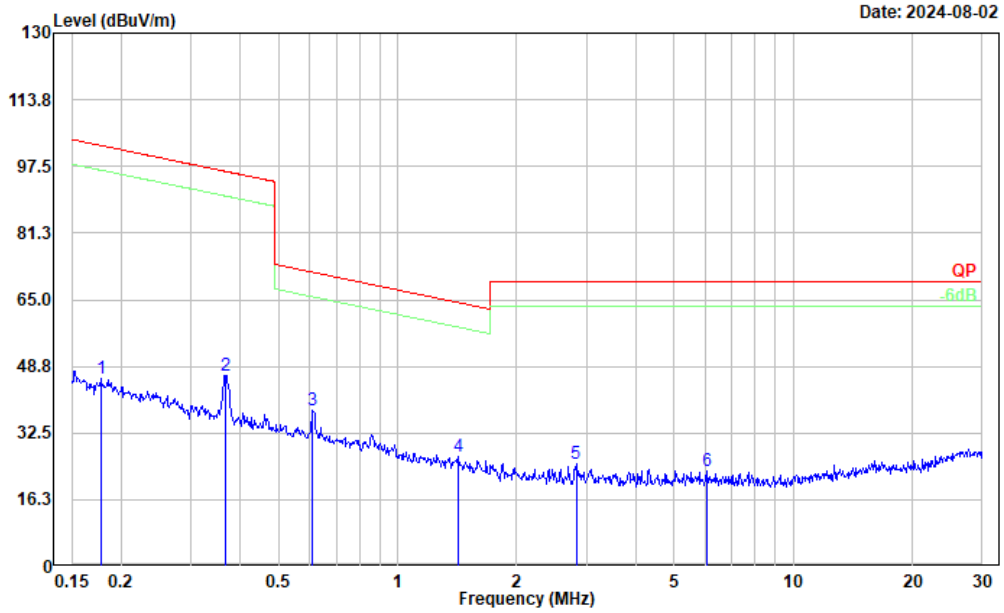
Perpendicular

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Perpendicular
Note: USB-C Port Input(6W)+Wireless Charging(5W) Perpendicular



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.010	29.91	34.20	64.11	127.20	63.09	Peak
2	0.013	29.19	33.01	62.20	125.39	63.19	Peak
3	0.015	29.77	31.80	61.57	123.88	62.31	Peak
4	0.024	27.77	27.56	55.33	119.99	64.66	Peak
5	0.048	28.90	20.82	49.72	113.96	64.24	Peak
6	0.123	52.04	13.58	65.62	105.82	40.20	Peak

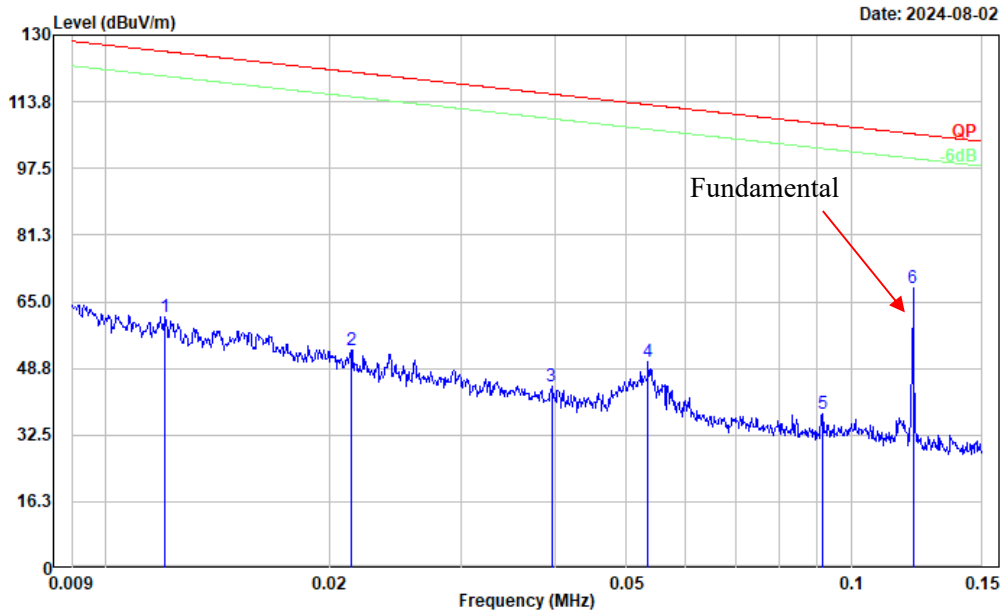
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Perpendicular
Note: USB-C Port Input(6W)+Wireless Charging(5W) Perpendicular



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.178	34.65	11.03	45.68	102.61	56.93	Peak
2	0.367	42.81	3.87	46.68	96.30	49.62	Peak
3	0.611	38.44	-0.32	38.12	71.85	33.73	Peak
4	1.426	32.46	-5.72	26.74	64.33	37.59	Peak
5	2.824	33.22	-8.21	25.01	69.54	44.53	Peak
6	6.024	32.15	-8.93	23.22	69.54	46.32	Peak

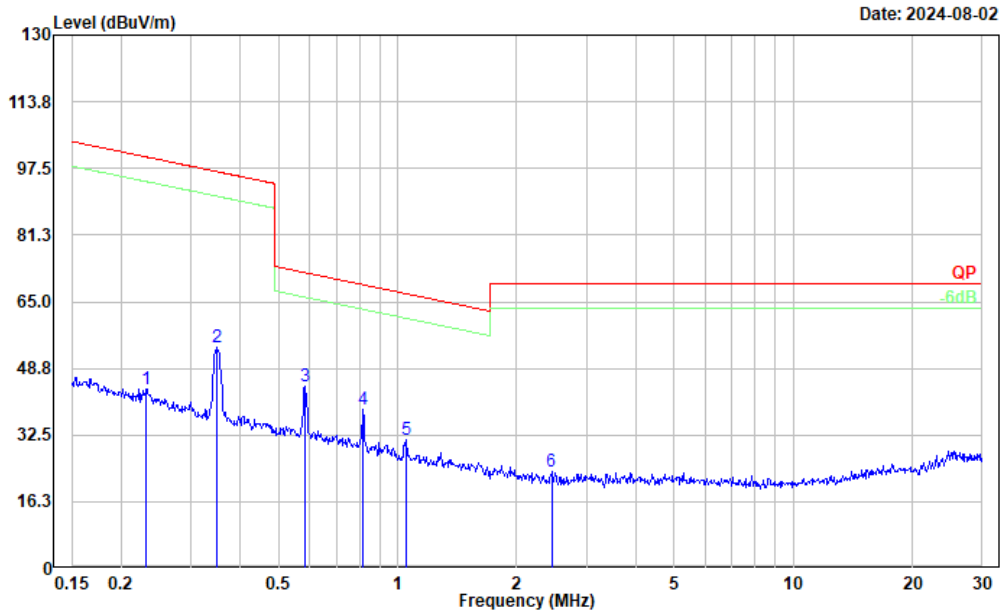
Ground-parallel

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Ground-parallel
Note: USB-C Port Input(6W)+Wireless Charging(5W)Ground-parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.012	27.81	33.44	61.25	126.00	64.75	Peak
2	0.021	24.50	28.87	53.37	121.02	67.65	Peak
3	0.040	21.63	22.61	44.24	115.64	71.40	Peak
4	0.053	30.58	19.96	50.54	113.05	62.51	Peak
5	0.092	22.27	15.34	37.61	108.36	70.75	Peak
6	0.121	54.68	13.66	68.34	105.94	37.60	Peak

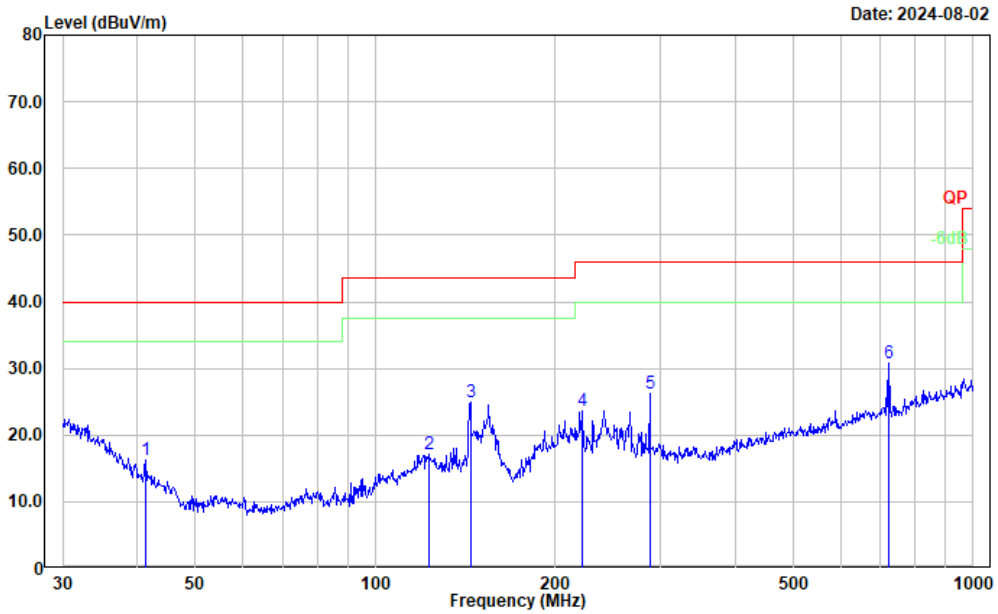
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Ground-parallel
Note: USB-C Port Input(6W)+Wireless Charging(5W)Ground-parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.232	35.25	8.52	43.77	100.31	56.54	Peak
2	0.350	49.66	4.25	53.91	96.72	42.81	Peak
3	0.582	44.31	0.01	44.32	72.27	27.95	Peak
4	0.817	41.33	-2.67	38.66	69.26	30.60	Peak
5	1.054	35.82	-4.40	31.42	67.01	35.59	Peak
6	2.448	31.69	-8.01	23.68	69.54	45.86	Peak

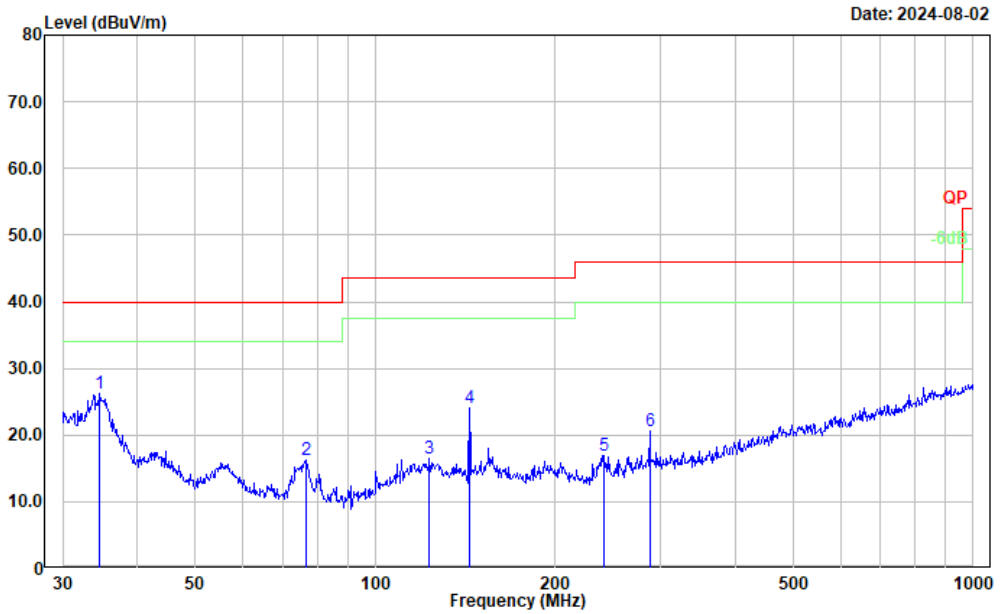
2)30MHz- 1GHz

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: horizontal
Note: USB-C Port Input(6W)+Wireless Charging(5W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	41.277	28.37	-12.18	16.19	40.00	23.81	Peak
2	123.266	27.99	-10.86	17.13	43.50	26.37	Peak
3	144.335	36.97	-12.07	24.90	43.50	18.60	Peak
4	221.392	37.24	-13.58	23.66	46.00	22.34	Peak
5	287.990	36.60	-10.36	26.24	46.00	19.76	Peak
6	724.261	33.50	-2.71	30.79	46.00	15.21	Peak

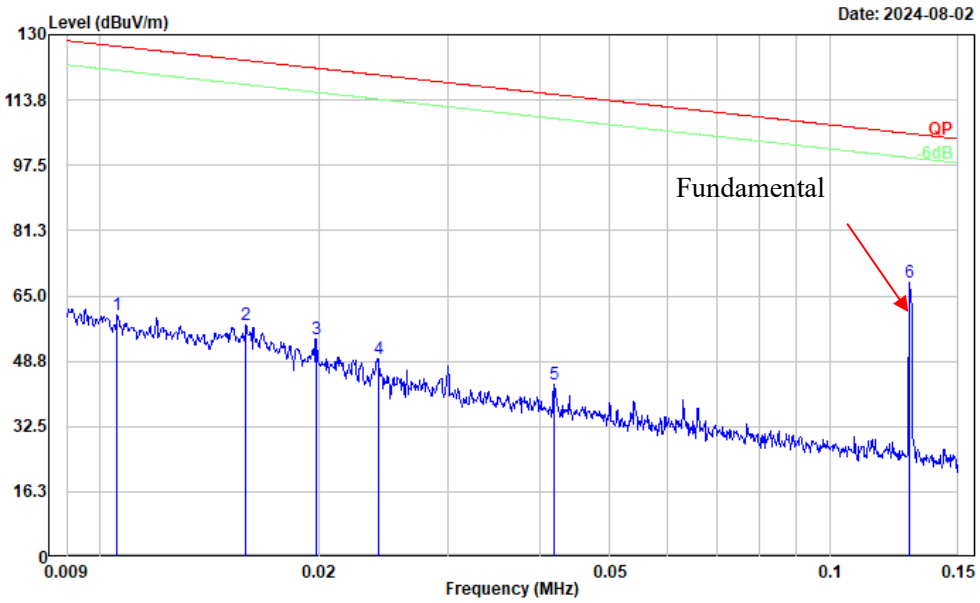
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: vertical
Note: USB-C Port Input(6W)+Wireless Charging(5W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	34.639	33.41	-7.21	26.20	40.00	13.80	Peak
2	76.512	33.29	-17.09	16.20	40.00	23.80	Peak
3	123.266	27.40	-10.86	16.54	43.50	26.96	Peak
4	143.830	36.13	-12.05	24.08	43.50	19.42	Peak
5	241.676	29.76	-12.80	16.96	46.00	29.04	Peak
6	287.990	31.04	-10.36	20.68	46.00	25.32	Peak

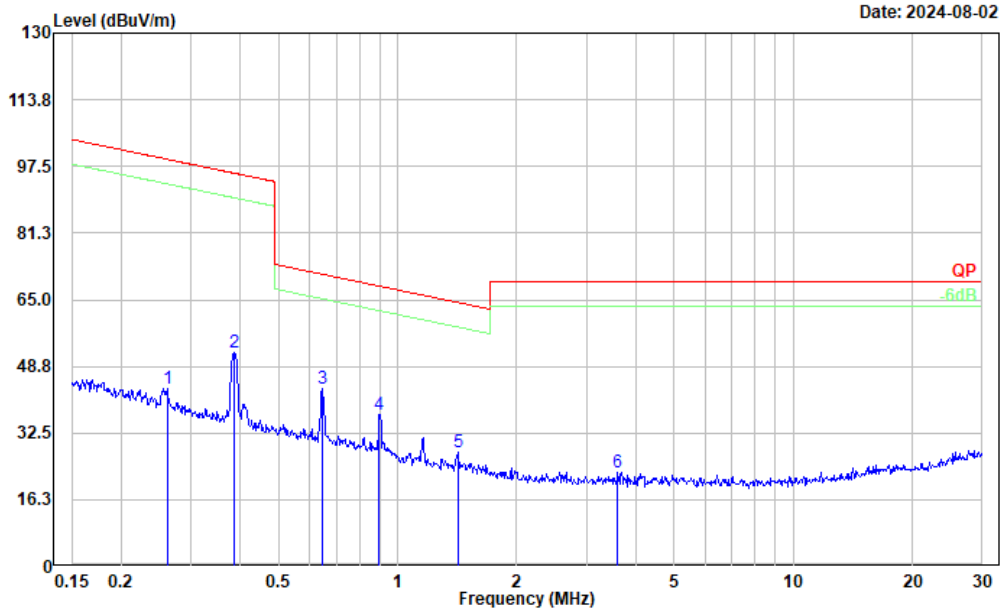
M2:
1)9k-30MHz
Parallel

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Parallel
Note: USB-C Port Output(5W)+Wireless Charging(5W)Parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.011	26.01	34.15	60.16	127.13	66.97	Peak
2	0.016	26.21	31.57	57.78	123.61	65.83	Peak
3	0.020	24.79	29.63	54.42	121.68	67.26	Peak
4	0.024	21.83	27.52	49.35	119.97	70.62	Peak
5	0.042	20.79	22.12	42.91	115.15	72.24	Peak
6	0.129	54.96	13.30	68.26	105.40	37.14	Peak

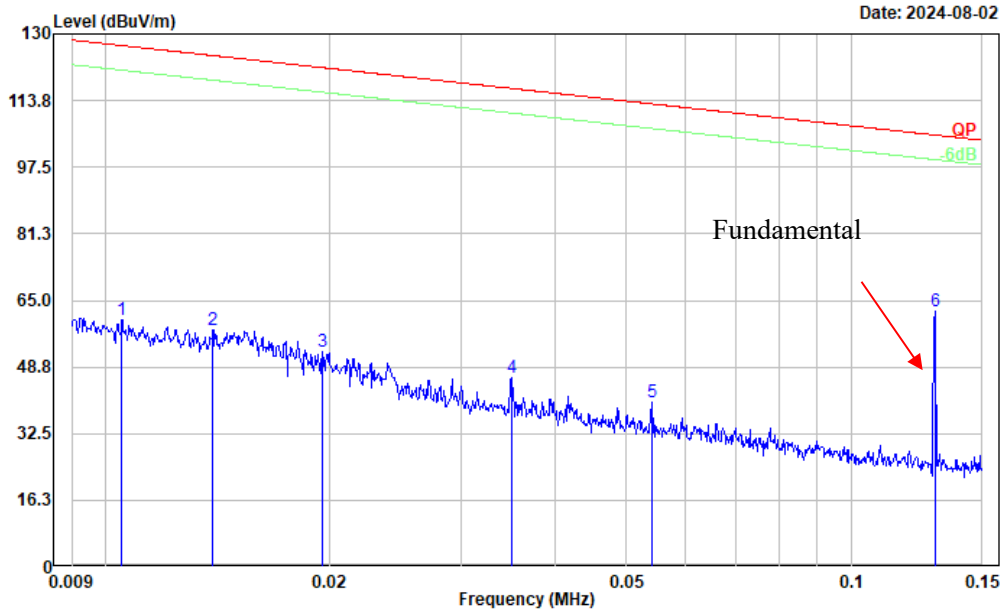
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Parallel
Note: USB-C Port Output(5W)+Wireless Charging(5W)Parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.262	36.31	7.13	43.44	99.25	55.81	Peak
2	0.385	48.68	3.48	52.16	95.89	43.73	Peak
3	0.644	43.92	-0.71	43.21	71.38	28.17	Peak
4	0.899	40.24	-3.35	36.89	68.42	31.53	Peak
5	1.418	33.42	-5.70	27.72	64.37	36.65	Peak
6	3.603	31.46	-8.65	22.81	69.54	46.73	Peak

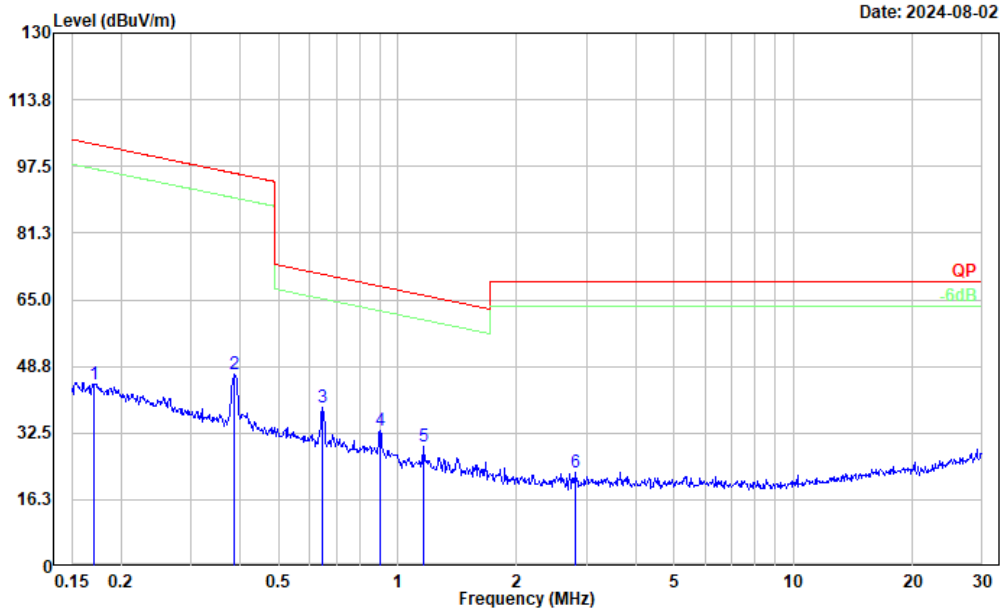
Perpendicular

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Perpendicular
Note: USB-C Port Output(5W)+Wireless Charging(5W)Perpendicular



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.011	26.19	34.18	60.37	127.18	66.81	Peak
2	0.014	25.26	32.51	57.77	124.73	66.96	Peak
3	0.020	22.87	29.74	52.61	121.78	69.17	Peak
4	0.035	22.50	23.57	46.07	116.72	70.65	Peak
5	0.054	20.29	19.86	40.15	112.93	72.78	Peak
6	0.130	49.10	13.26	62.36	105.35	42.99	Peak

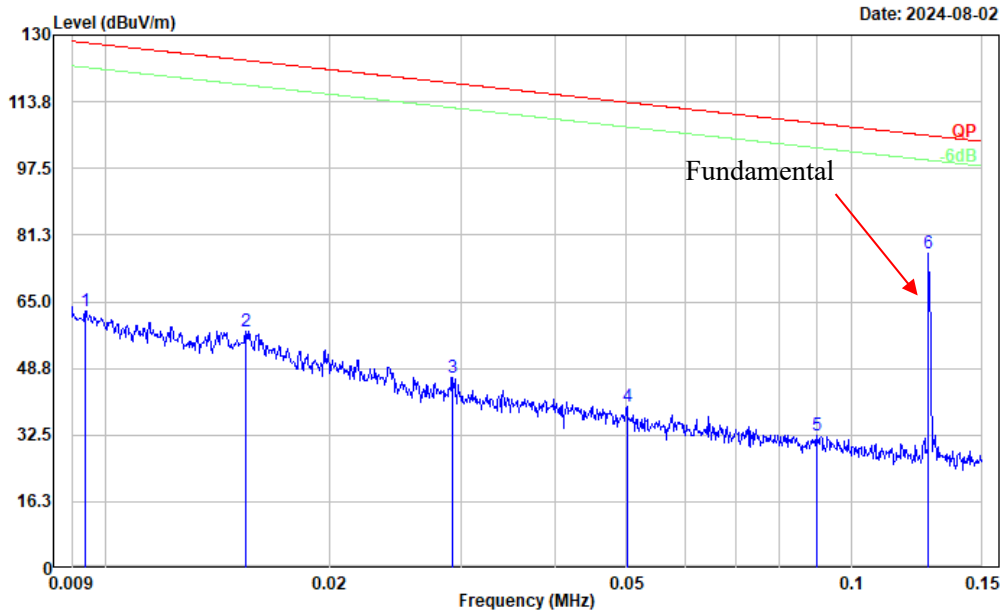
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Perpendicular
Note: USB-C Port Output(5W)+Wireless Charging(5W)Perpendicular



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.171	33.16	11.33	44.49	102.93	58.44	Peak
2	0.387	43.37	3.43	46.80	95.84	49.04	Peak
3	0.647	39.55	-0.75	38.80	71.33	32.53	Peak
4	0.904	36.49	-3.39	33.10	68.37	35.27	Peak
5	1.160	34.01	-4.77	29.24	66.16	36.92	Peak
6	2.809	30.98	-8.21	22.77	69.54	46.77	Peak

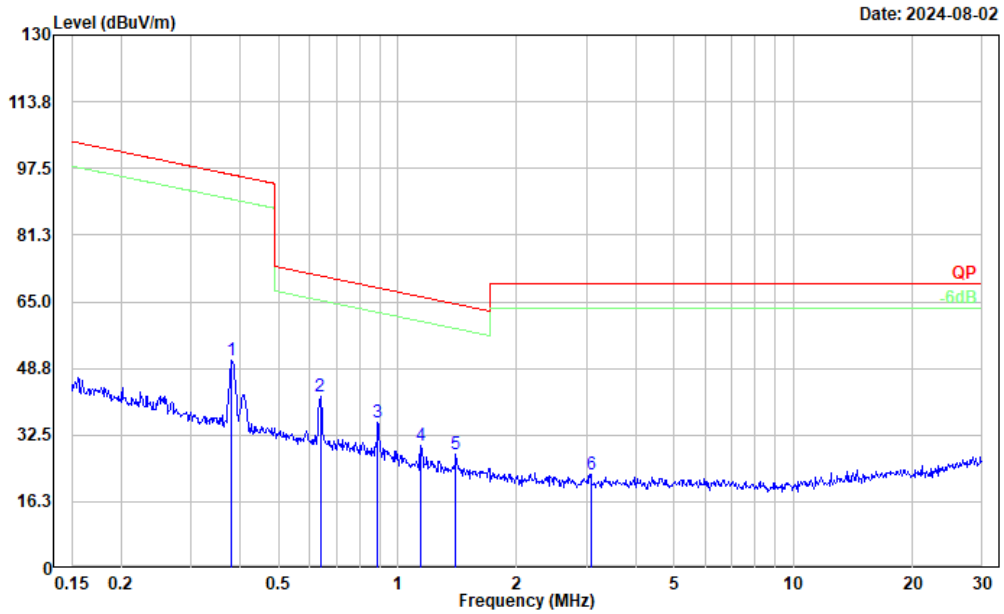
Ground-parallel

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Ground-parallel
Note: USB-C Port Output(5W)+Wireless Charging(5W)Ground-parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.009	27.42	35.23	62.65	128.15	65.50	Peak
2	0.015	26.16	31.78	57.94	123.85	65.91	Peak
3	0.029	21.43	25.04	46.47	118.31	71.84	Peak
4	0.050	18.87	20.42	39.29	113.61	74.32	Peak
5	0.090	17.06	15.47	32.53	108.51	75.98	Peak
6	0.127	63.38	13.38	76.76	105.52	28.76	Peak

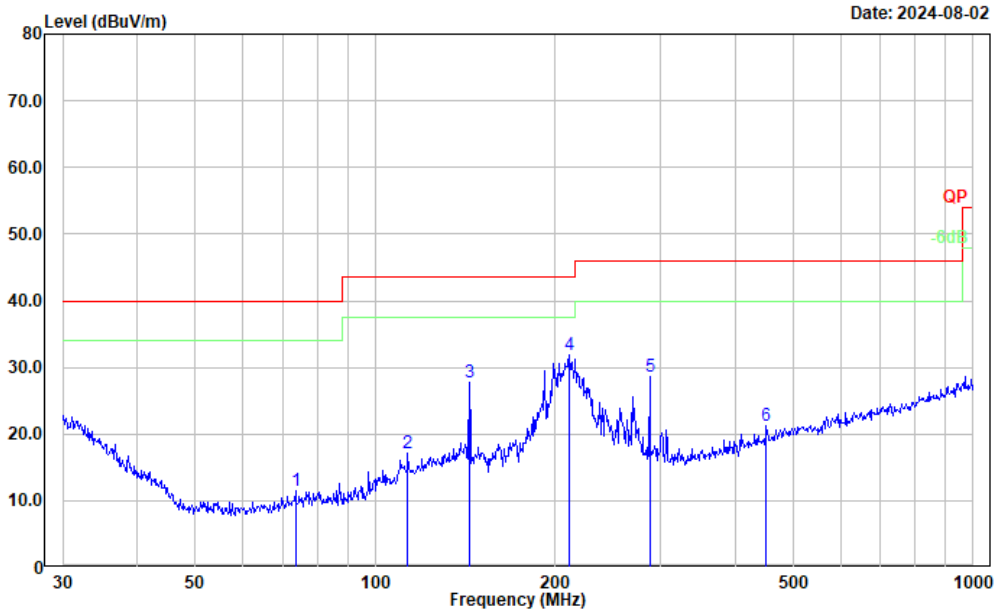
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Ground-parallel
Note: USB-C Port Output(5W)+Wireless Charging(5W)Ground-parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.381	47.08	3.57	50.65	95.98	45.33	Peak
2	0.637	42.66	-0.63	42.03	71.47	29.44	Peak
3	0.890	38.93	-3.27	35.66	68.51	32.85	Peak
4	1.147	34.53	-4.73	29.80	66.25	36.45	Peak
5	1.403	33.63	-5.64	27.99	64.47	36.48	Peak
6	3.074	31.24	-8.35	22.89	69.54	46.65	Peak

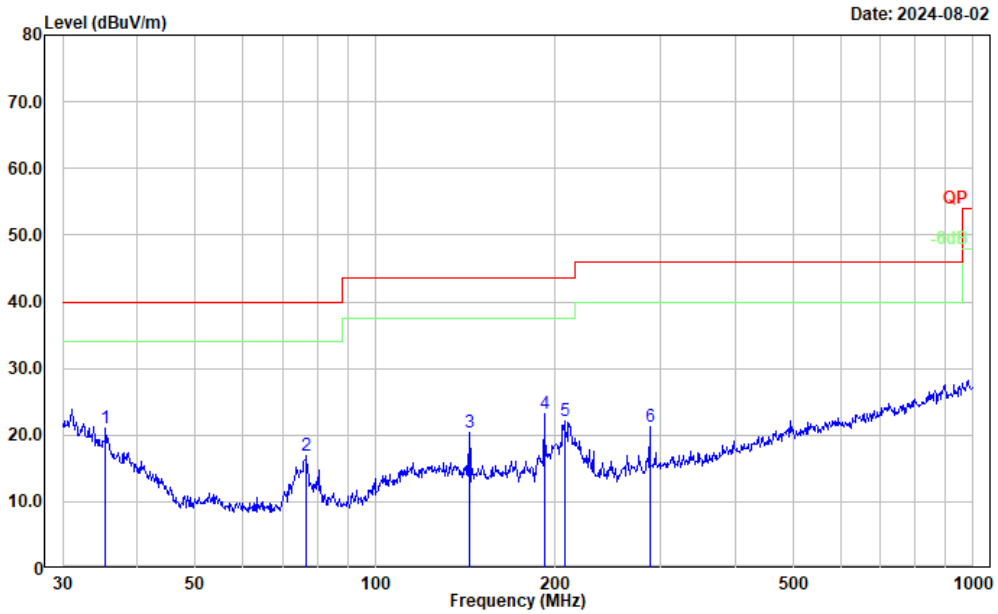
2)30MHz- 1GHz

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: horizontal
Note: USB-C Port Output(5W)+Wireless Charging(5W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	73.617	28.63	-17.13	11.50	40.00	28.50	Peak
2	113.316	28.90	-11.77	17.13	43.50	26.37	Peak
3	143.830	39.83	-12.05	27.78	43.50	15.72	Peak
4	211.527	45.78	-13.93	31.85	43.50	11.65	Peak
5	287.990	38.89	-10.36	28.53	46.00	17.47	Peak
6	451.135	28.18	-6.85	21.33	46.00	24.67	Peak

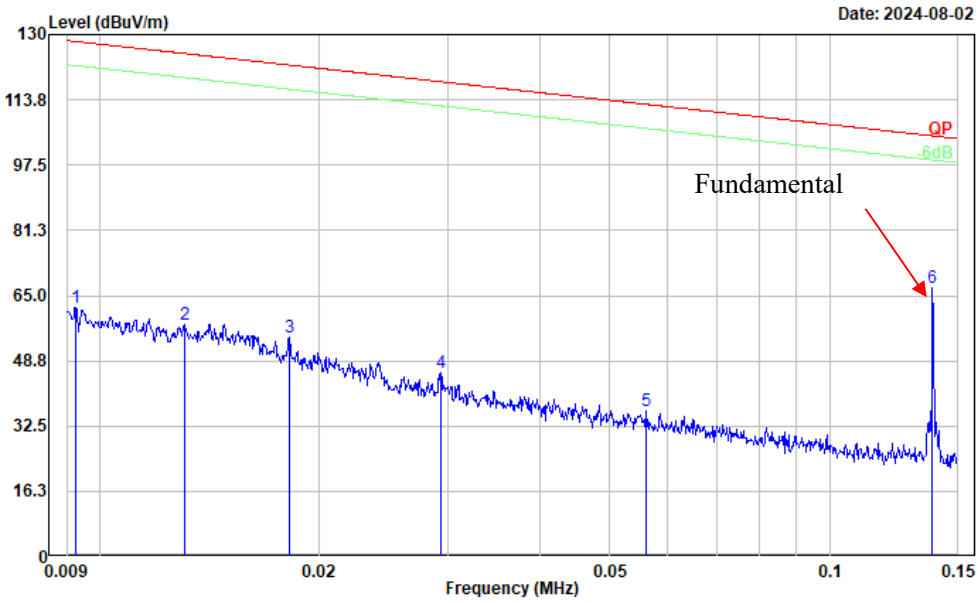
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: vertical
Note: USB-C Port Output(5W)+Wireless Charging(5W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	35.375	28.78	-7.69	21.09	40.00	18.91	Peak
2	76.781	34.01	-17.09	16.92	40.00	23.08	Peak
3	143.830	32.37	-12.05	20.32	43.50	23.18	Peak
4	191.745	36.77	-13.50	23.27	43.50	20.23	Peak
5	207.123	35.72	-13.58	22.14	43.50	21.36	Peak
6	287.990	31.57	-10.36	21.21	46.00	24.79	Peak

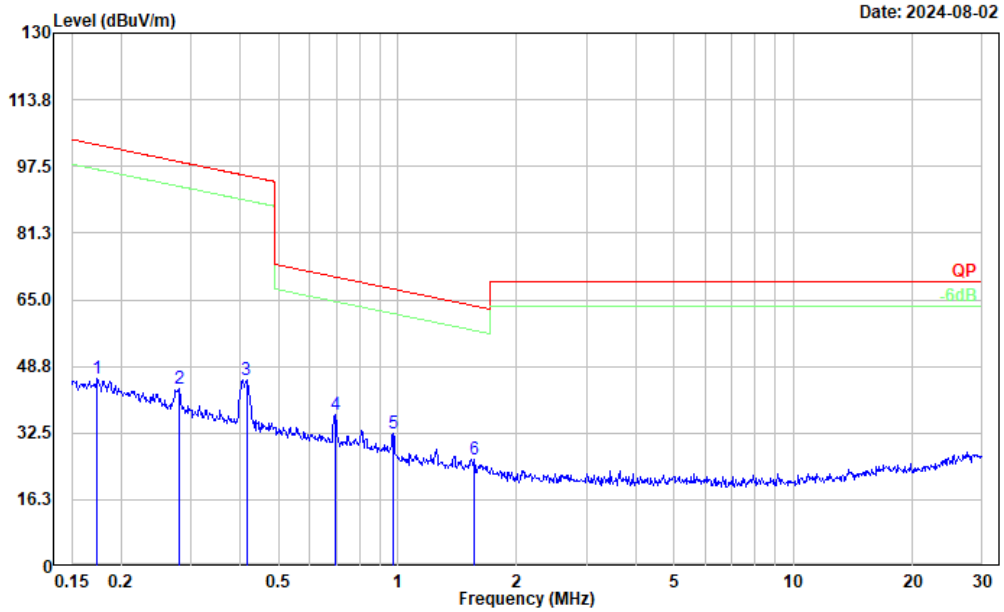
M3
1)9k-30MHz:
Parallel

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Parallel
Note: Wireless Charging(10W)Parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.009	26.75	35.39	62.14	128.27	66.13	Peak
2	0.013	24.98	32.94	57.92	125.29	67.37	Peak
3	0.018	24.17	30.42	54.59	122.41	67.82	Peak
4	0.029	20.82	24.95	45.77	118.26	72.49	Peak
5	0.056	16.74	19.61	36.35	112.64	76.29	Peak
6	0.138	54.10	12.86	66.96	104.79	37.83	Peak

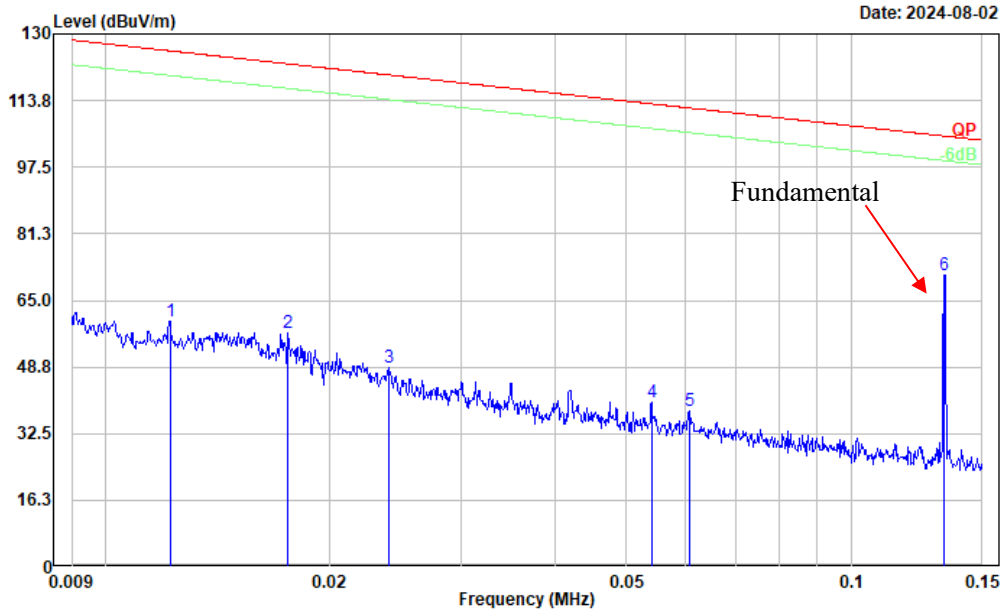
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Parallel
Note: Wireless Charging(10W)Parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.174	34.55	11.20	45.75	102.79	57.04	Peak
2	0.280	37.16	6.27	43.43	98.65	55.22	Peak
3	0.415	42.75	2.82	45.57	95.25	49.68	Peak
4	0.694	38.27	-1.29	36.98	70.72	33.74	Peak
5	0.974	36.34	-3.99	32.35	67.71	35.36	Peak
6	1.560	32.35	-6.20	26.15	63.53	37.38	Peak

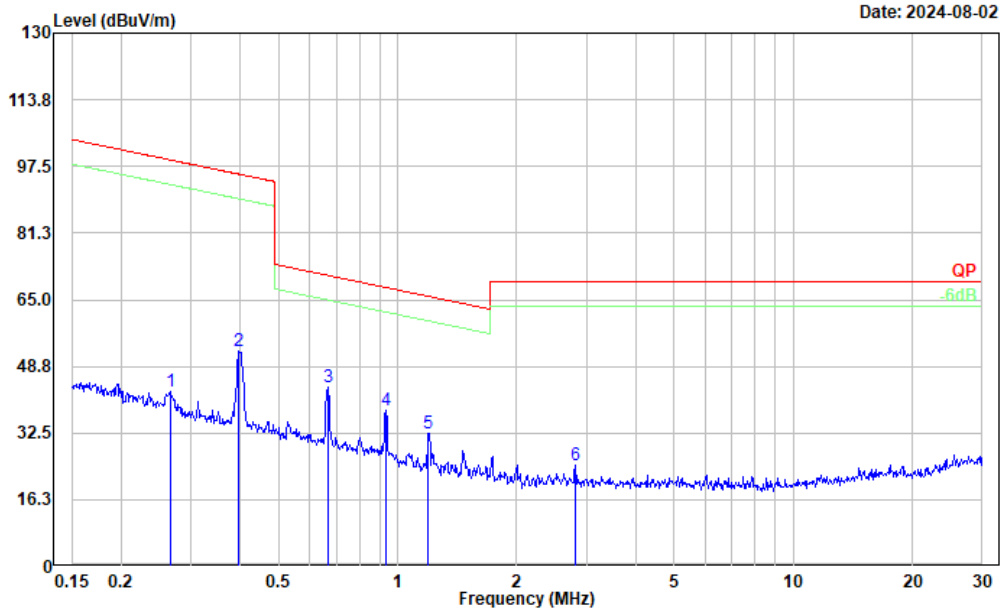
Perpendicular

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Perpendicular
Note: Wireless Charging(10W)Perpendicular



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.012	26.54	33.35	59.89	125.88	65.99	Peak
2	0.018	26.42	30.72	57.14	122.70	65.56	Peak
3	0.024	21.19	27.59	48.78	120.01	71.23	Peak
4	0.054	20.34	19.88	40.22	112.95	72.73	Peak
5	0.061	18.90	18.98	37.88	111.95	74.07	Peak
6	0.133	58.16	13.09	71.25	105.11	33.86	Peak

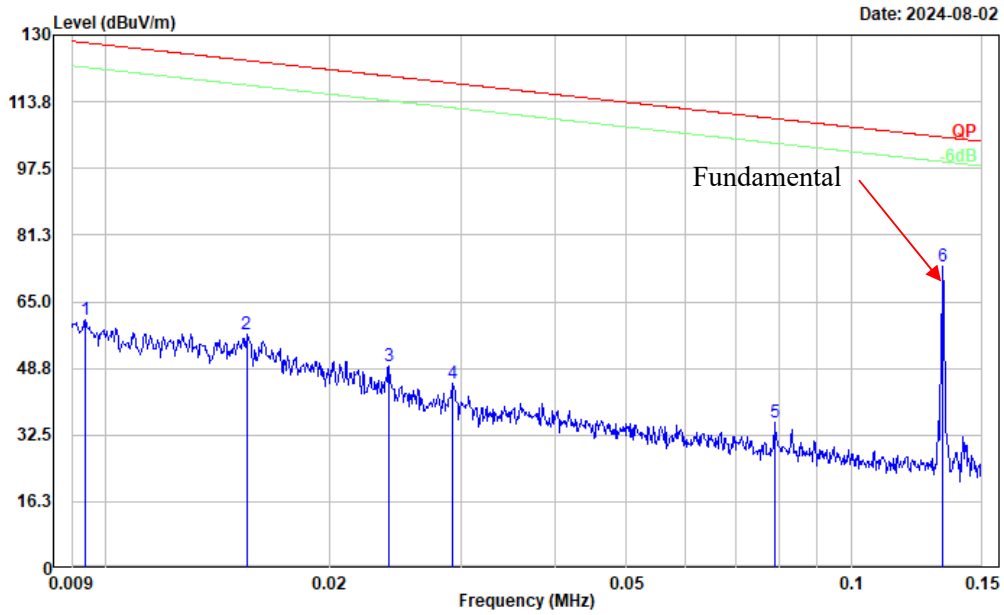
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Perpendicular
Note: Wireless Charging(10W)Perpendicular



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.266	35.85	6.94	42.79	99.11	56.32	Peak
2	0.398	49.13	3.20	52.33	95.61	43.28	Peak
3	0.665	44.79	-0.95	43.84	71.09	27.25	Peak
4	0.933	41.53	-3.64	37.89	68.09	30.20	Peak
5	1.197	37.43	-4.91	32.52	65.88	33.36	Peak
6	2.809	32.88	-8.21	24.67	69.54	44.87	Peak

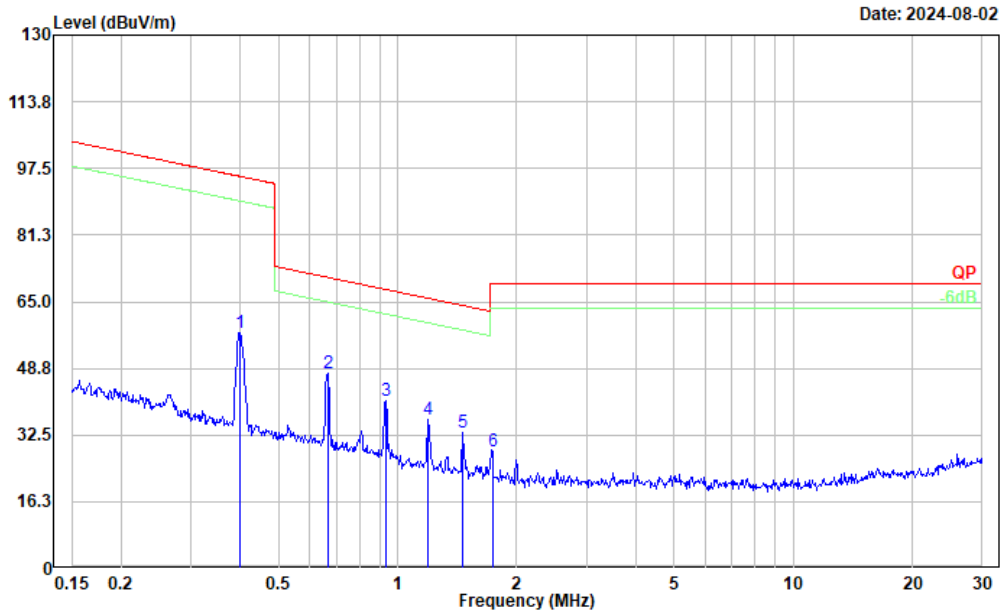
Ground-parallel

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Ground-parallel
Note: Wireless Charging(10W)Ground-parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.009	25.39	35.23	60.62	128.15	67.53	Peak
2	0.015	25.24	31.76	57.00	123.83	66.83	Peak
3	0.024	21.82	27.59	49.41	120.02	70.61	Peak
4	0.029	19.92	25.00	44.92	118.28	73.36	Peak
5	0.079	19.16	16.47	35.63	109.65	74.02	Peak
6	0.133	60.62	13.11	73.73	105.13	31.40	Peak

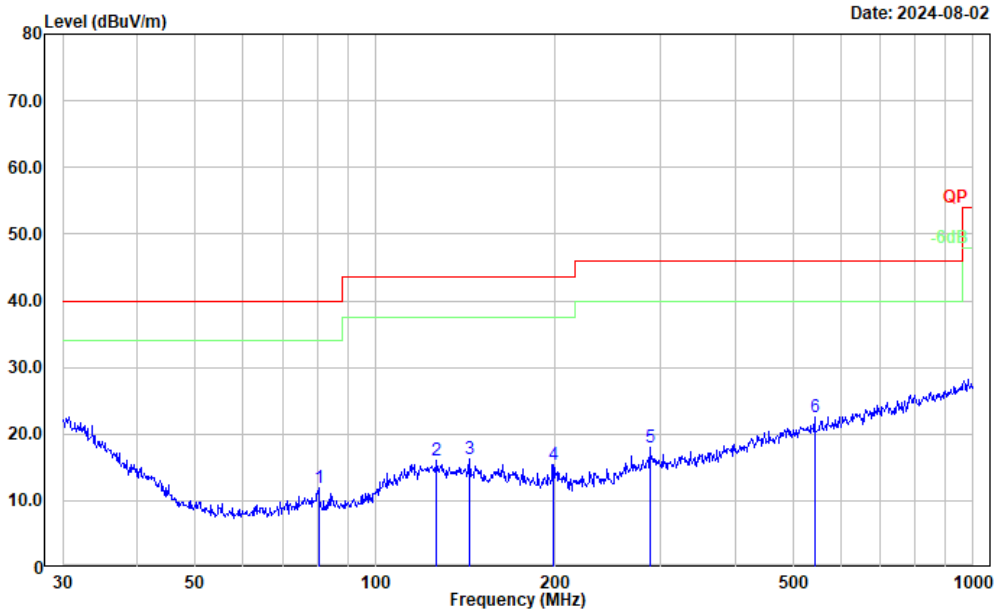
Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: Ground-parallel
Note: Wireless Charging(10W)Ground-parallel



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.400	54.27	3.16	57.43	95.57	38.14	Peak
2	0.665	48.61	-0.95	47.66	71.09	23.43	Peak
3	0.933	44.40	-3.64	40.76	68.09	27.33	Peak
4	1.197	41.09	-4.91	36.18	65.88	29.70	Peak
5	1.464	39.07	-5.86	33.21	64.09	30.88	Peak
6	1.734	35.30	-6.81	28.49	69.54	41.05	Peak

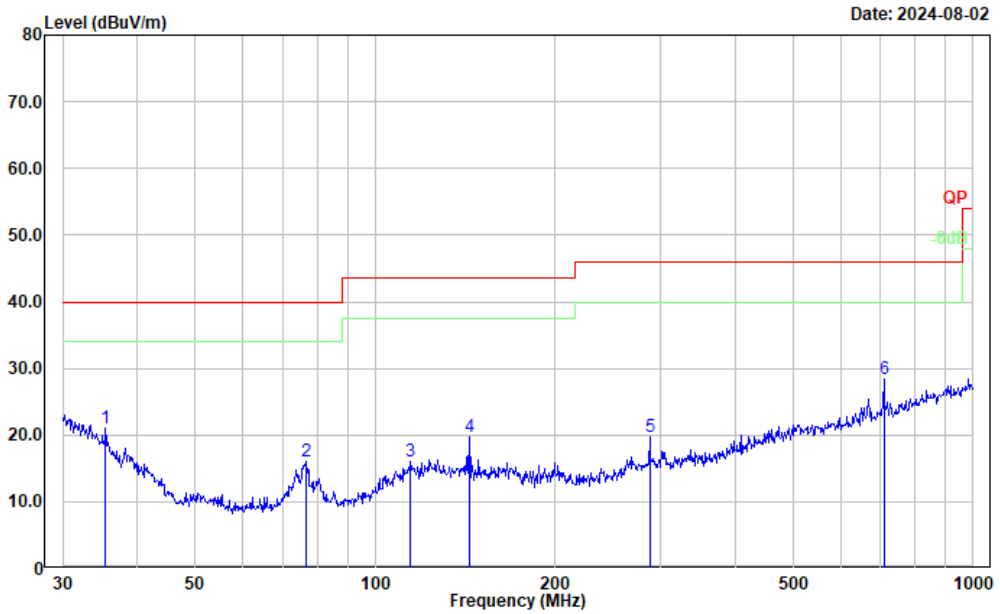
2)30MHz- 1GHz

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: horizontal
Note: Wireless Charging(10W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	80.362	29.19	-17.26	11.93	40.00	28.07	Peak
2	126.772	27.11	-11.03	16.08	43.50	27.42	Peak
3	143.830	28.41	-12.05	16.36	43.50	27.14	Peak
4	198.588	28.00	-12.59	15.41	43.50	28.09	Peak
5	287.990	28.35	-10.36	17.99	46.00	28.01	Peak
6	543.274	27.84	-5.35	22.49	46.00	23.51	Peak

Project No.: 2403V85427E-RF
Tester: Carl Xue
Polarization: vertical
Note: Wireless Charging(10W)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	35.375	28.70	-7.69	21.01	40.00	18.99	Peak
2	76.512	33.17	-17.09	16.08	40.00	23.92	Peak
3	114.515	27.72	-11.65	16.07	43.50	27.43	Peak
4	143.830	31.84	-12.05	19.79	43.50	23.71	Peak
5	287.990	30.04	-10.36	19.68	46.00	26.32	Peak
6	709.182	31.27	-2.77	28.50	46.00	17.50	Peak

4.3 20 dB Emission Bandwidth

Serial Number:	2OBV-1	Test Date:	2024/8/2
Test Site:	966-2	Test Mode:	Transmitting
Tester:	Carl Xue	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	54	ATM Pressure: (kPa)	100.8

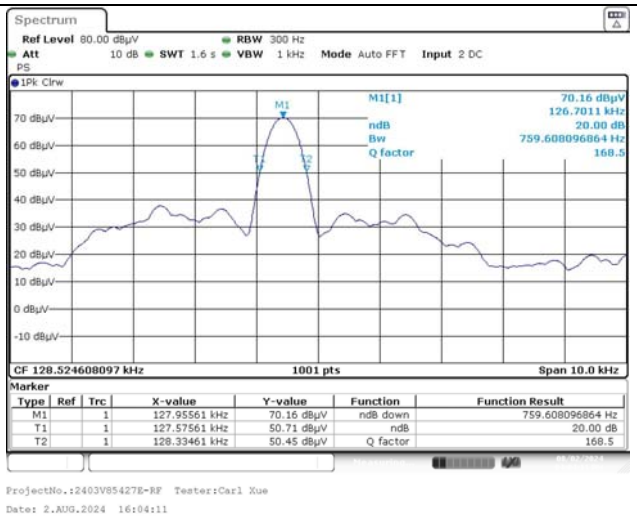
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
BACL	Loop Antenna	1313-1A	3110611	2023/12/4	2026/12/3
R&S	EMI Test Receiver	ESR3	102724	2024/2/29	2025/2/28
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0300-01	2024/1/11	2025/1/10
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0500-01	2024/1/11	2025/1/10

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Test Frequency (kHz)	20 dB Emission Bandwidth (Hz)
126.7	760

20 dB Bandwidth	
126.7 kHz	

5 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

5.1 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) (§1.1310, §2.1091)

(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.

According to 680106 D01 Wireless Power Transfer v04 clause 5.2

There might be situations where the WPT RF emissions are limited enough that even operations in a "crowded" environment, where many similar WPT devices are present, do not pose significant EMC and RF exposure concerns. In this scenario, and for devices operating within a one-meter distance from the receiver, as defined above, a manufacturer will not have to submit an "Equipment Compliance Review" KDB, and receive FCC concurrence before proceeding with equipment authorization. This exception to the requirement of submitting the ECR to obtain FCC concurrence only applies when all the following criteria (1) through (6) are met:

(1) The power transfer frequency is below 1 MHz.

(2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.

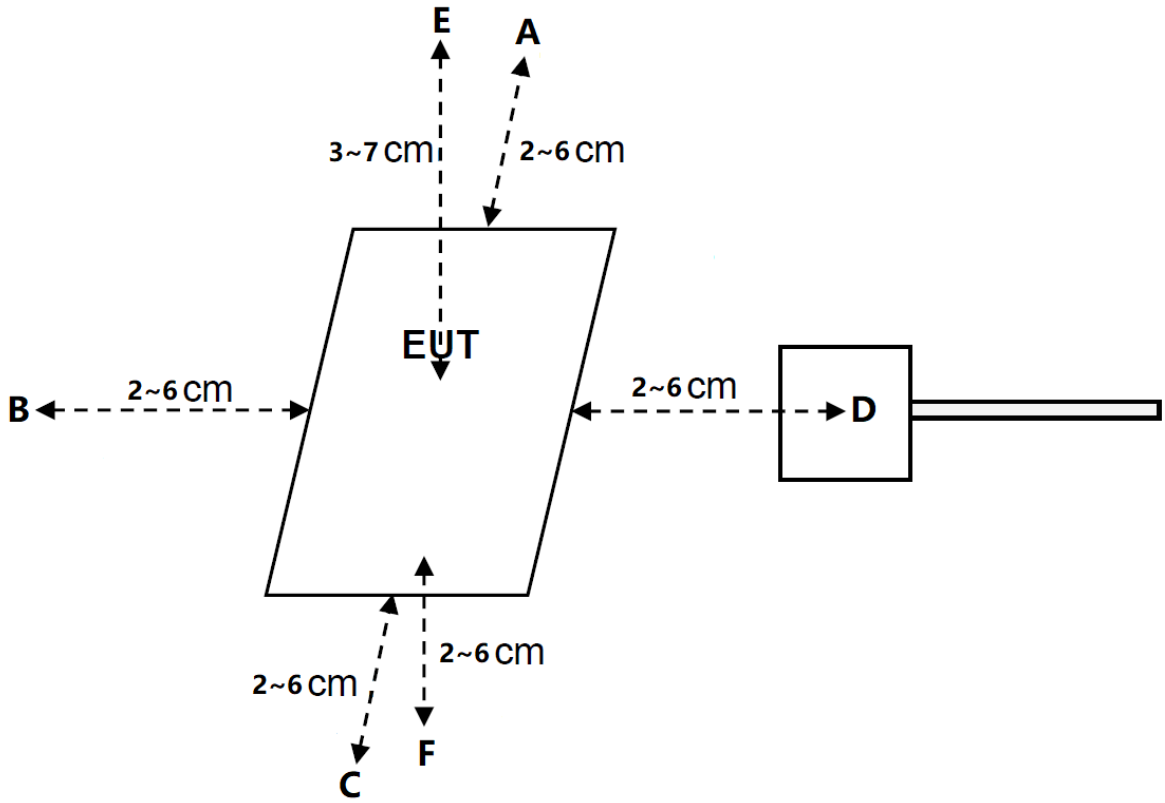
(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)

(4) Only § 2.1091-*Mobile* exposure conditions apply (i.e., this provision does not cover § 2.1093-*Portable* exposure conditions).

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/*d* (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.

(6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

5.2 Block Diagram of Test Setup



5.3 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 H-field sensors	concentric loops of 1 cm^2 arranged at the corner of a cube of 22 mm side length
1 isotropic E-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)
H-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
E-FIELD SPECIFICATION	
Frequency range	3 kHz–10 MHz
Measurement range	0.08–2000 V/m

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

5.4 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 3~7cm, because the wireless charging load has a thickness, and the measuring distance cannot be set to 2cm.
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.

5.5 Test Data:

Serial Number:	2OBV-1	Test Date:	2024/8/16
Test Site:	MPE	Test Mode:	M1, M2, M3
Tester:	David Huang	Test Result:	Fail

Environmental Conditions:					
Temperature: (℃)	25.9	Relative Humidity: (%)	57	ATM Pressure: (kPa)	100.1

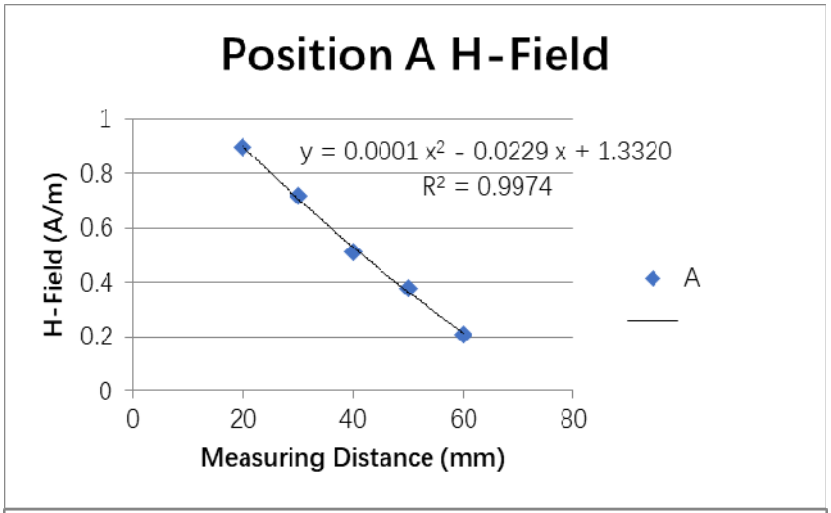
Test Equipment List and Details:

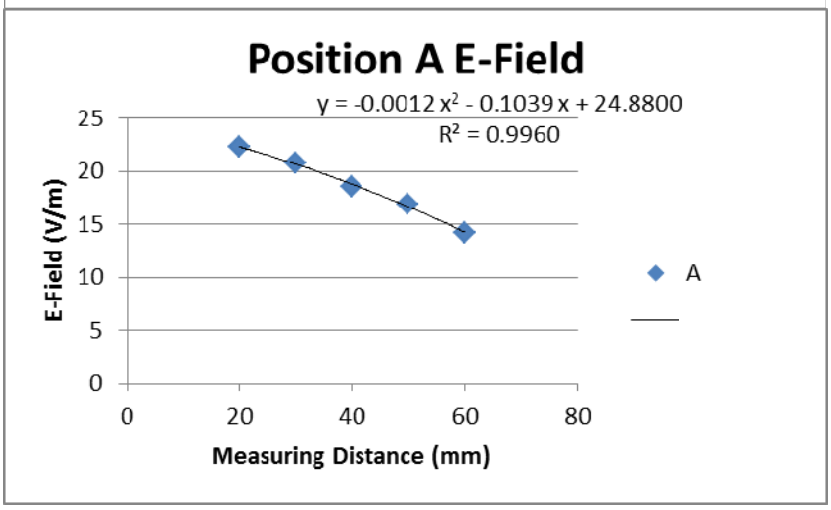
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
speag	Probe	MAGPY-8H3D+E3D	3081	2023/9/15	2024/9/14
speag	Data Acquisition System	MAPGPY-DAS	1018	2023/9/15	2024/9/14

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

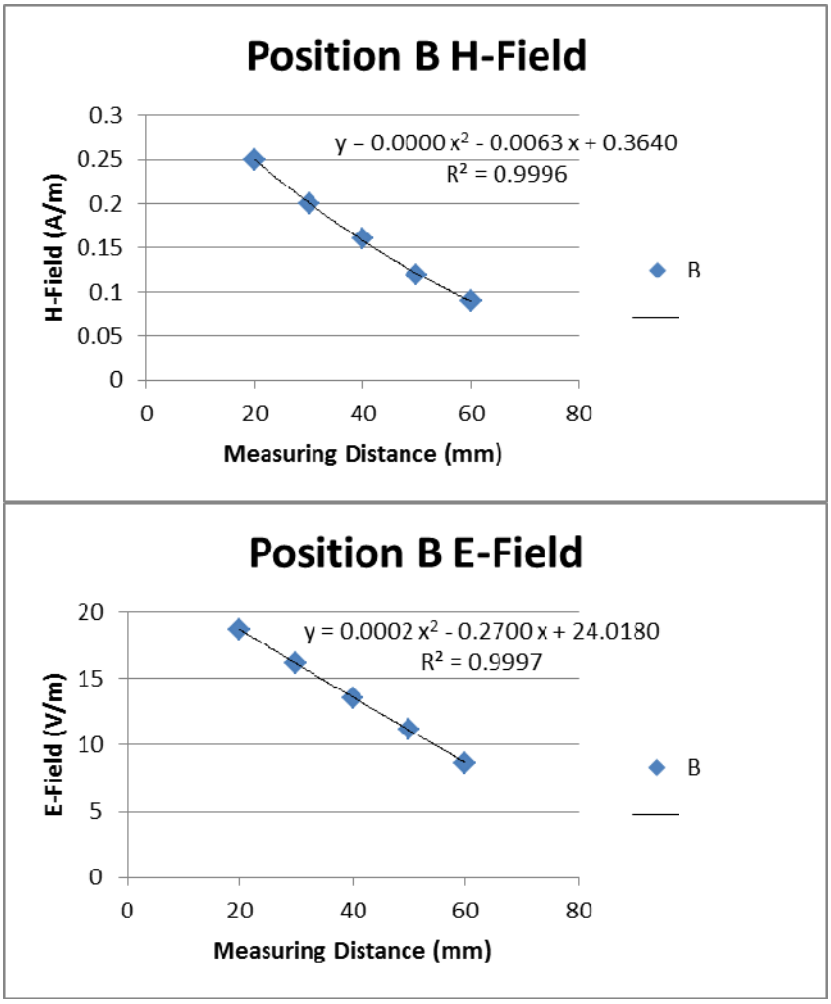
Test Data:
M1:

Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	A	20	0.9	22.3
		30	0.72	20.8
		40	0.51	18.5
		50	0.38	16.9
		60	0.21	14.2

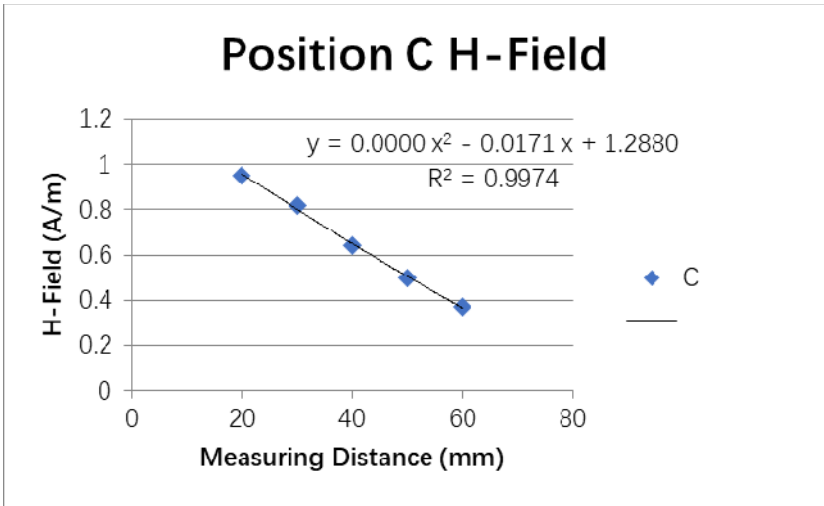


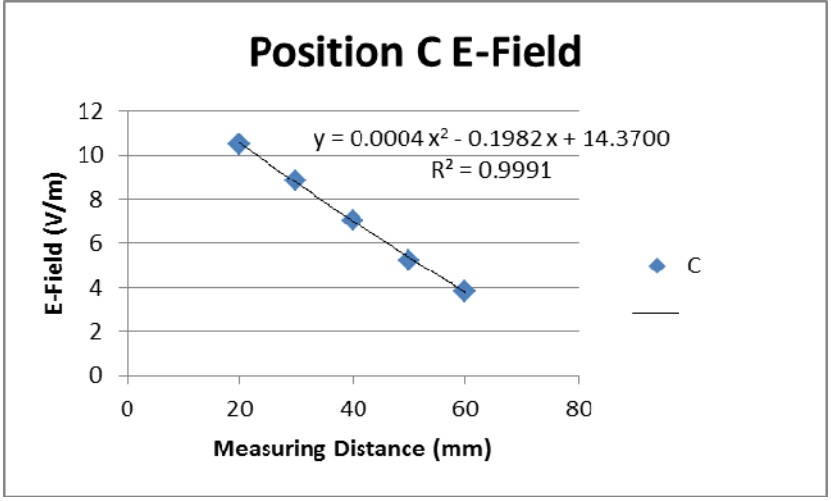


Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	B	20	0.25	18.7
		30	0.2	16.2
		40	0.16	13.5
		50	0.12	11.2
		60	0.09	8.67

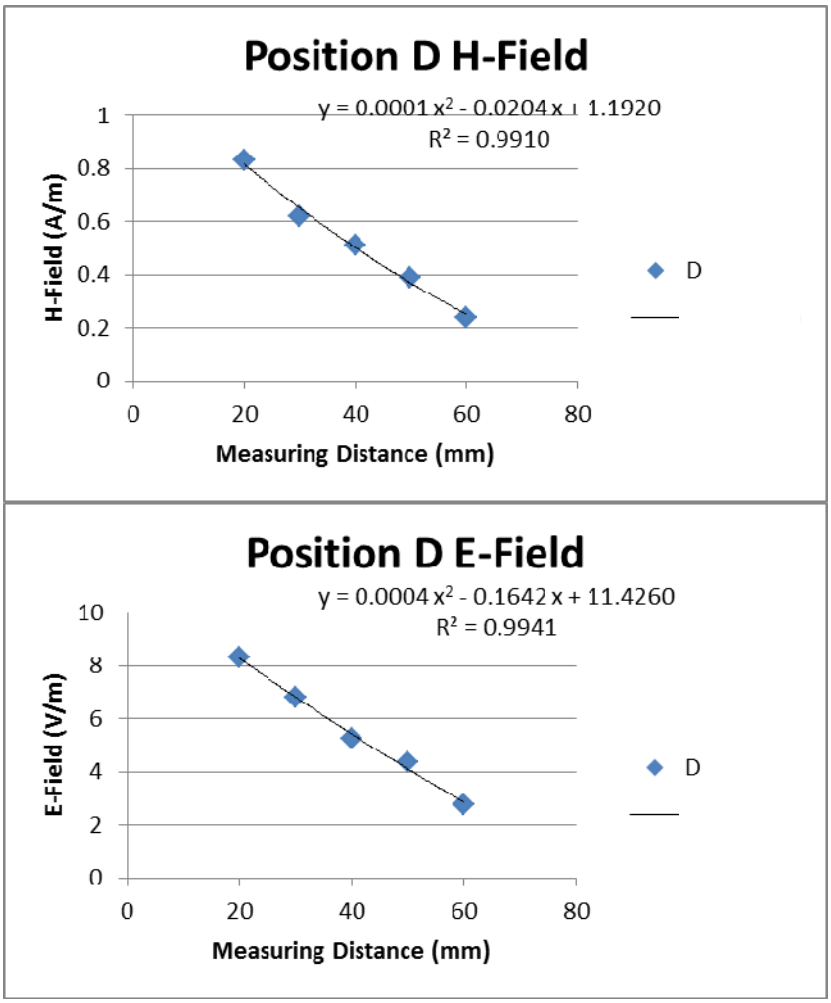


Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	C	20	0.95	10.5
		30	0.82	8.85
		40	0.64	7.03
		50	0.5	5.26
		60	0.37	3.84

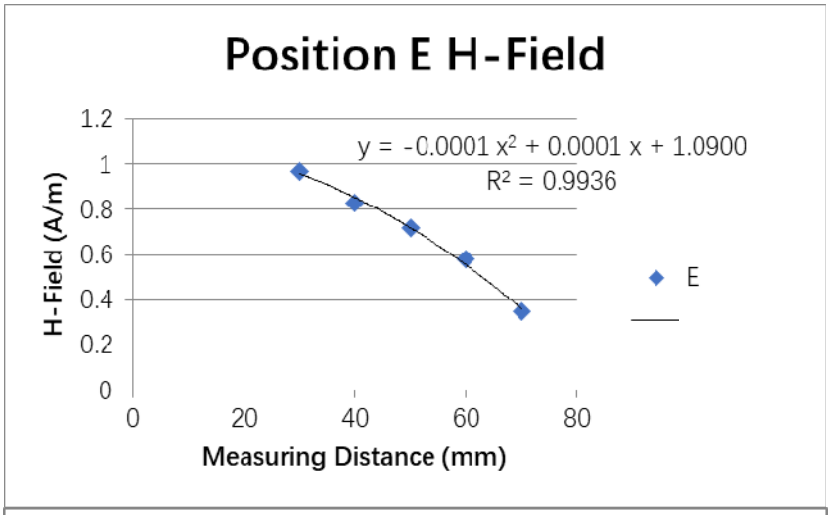


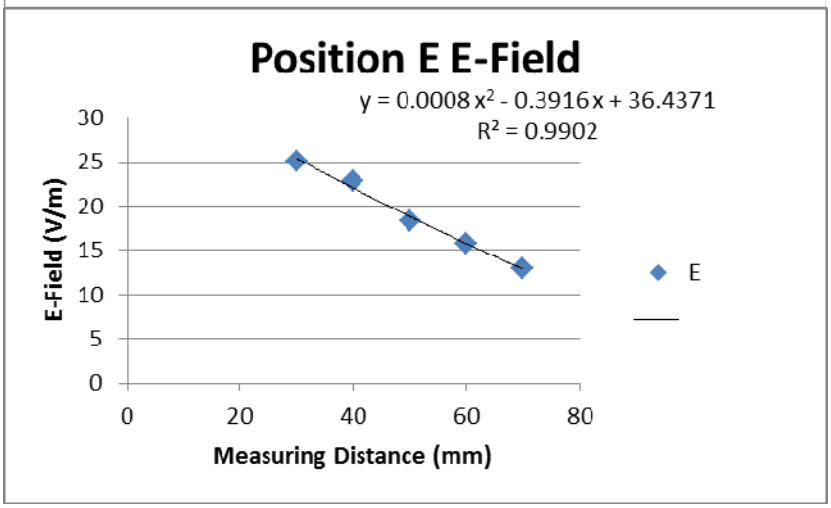


Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	D	20	0.83	8.33
		30	0.62	6.79
		40	0.51	5.26
		50	0.39	4.37
		60	0.24	2.76

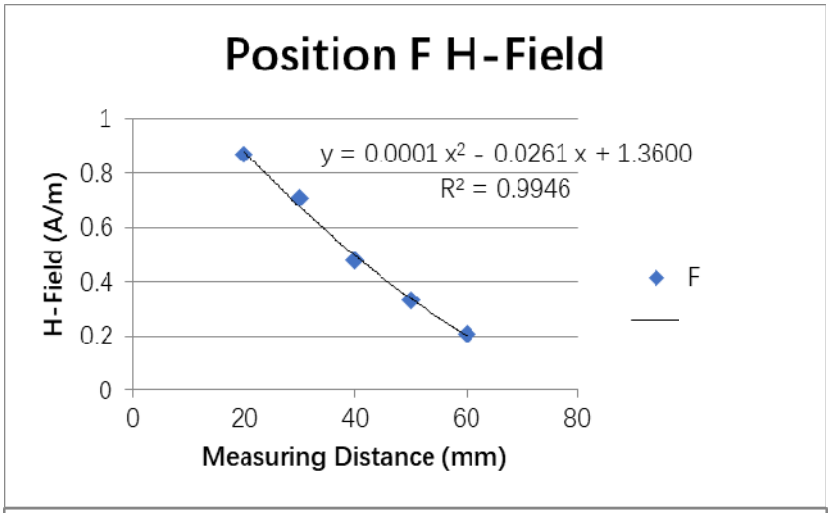


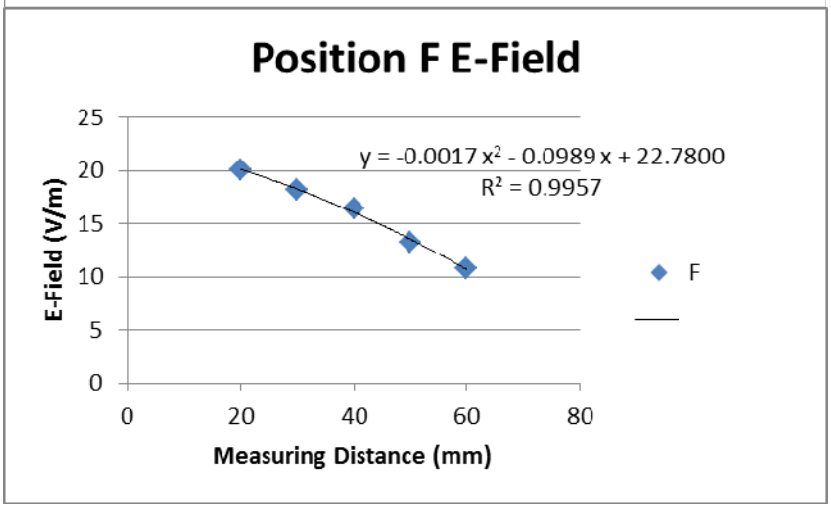
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	E	30	0.97	25.1
		40	0.83	22.8
		50	0.72	18.3
		60	0.58	15.7
		70	0.35	13





Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	F	20	0.87	20.1
		30	0.71	18.2
		40	0.48	16.4
		50	0.33	13.2
		60	0.21	10.8





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	0.91	0.9	1.11	±30
	30	0.74	0.72	2.78	±30
B	20	0.24	0.25	-4.00	±30
	30	0.18	0.2	-10.00	±30
C	20	0.95	0.95	0.00	±30
	30	0.78	0.82	-4.88	±30
D	20	0.82	0.83	-1.20	±30
	30	0.67	0.62	8.06	±30
E	30	0.91	0.97	-6.19	±30
	40	0.77	0.83	-7.23	±30
F	20	0.88	0.87	1.15	±30
	30	0.67	0.71	-5.63	±30

Note: Agreement Between Estimated and Measured(%) = (Estimated H-Field (A/m) - Measured H-Field (A/m)) / Measured E-Field (V/m) x 100

Measuring Position	Measuring Distance (mm)	Estimated E-Field (V/m)	Measured E-Field (V/m)	Agreement Between Estimated and Measured (%)	Limit (%)
A	20	22.32	22.3	0.09	±30
	30	20.68	20.8	-0.58	±30
B	20	18.7	18.7	0.00	±30
	30	16.1	16.2	-0.62	±30
C	20	10.57	10.5	0.67	±30
	30	8.78	8.85	-0.79	±30
D	20	8.3	8.33	-0.36	±30
	30	6.86	6.79	1.03	±30
E	30	25.41	25.1	1.24	±30
	40	22.05	22.8	-3.29	±30
F	20	20.12	20.1	0.10	±30
	30	18.28	18.2	0.44	±30

Note: Agreement Between Estimated and Measured(%) = (Estimated E-Field (V/m) - Measured E-Field (V/m)) / Measured E-Field (V/m) x 100

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: 0 cm (estimated from the fitted curve)

H-Field Strength:

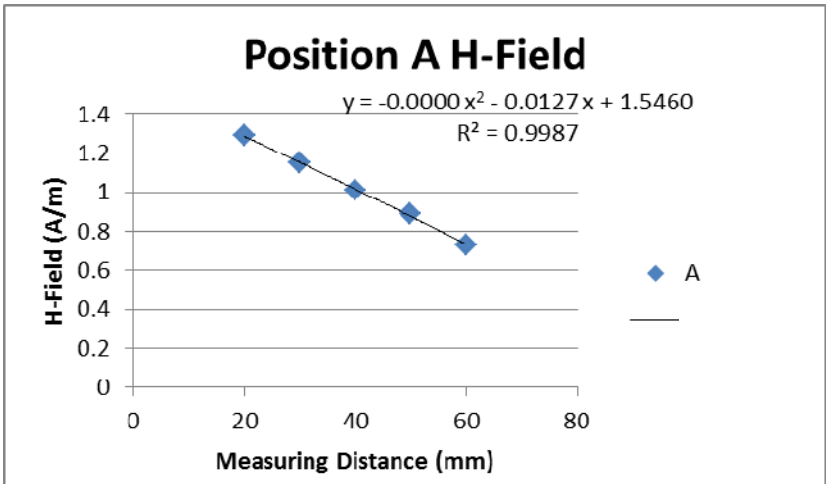
Test Frequency (kHz)	Test Position (A/m)						Limit (A/m)
	A	B	C	D	E	F	
126.7	1.33	0.36	1.29	1.19	1.09	1.36	1.63

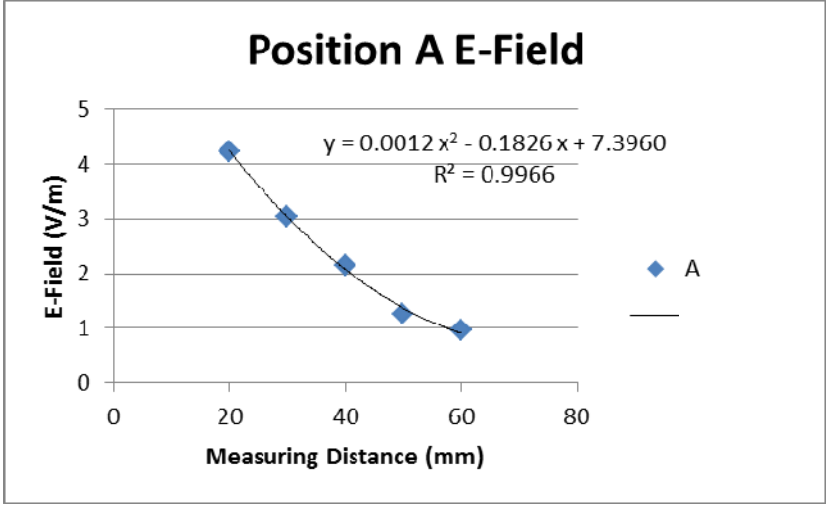
E-Field Strength:

Test Frequency (kHz)	Test Position (V/m)						Limit (V/m)
	A	B	C	D	E	F	
126.7	24.88	24.02	14.37	11.43	36.44	22.78	614

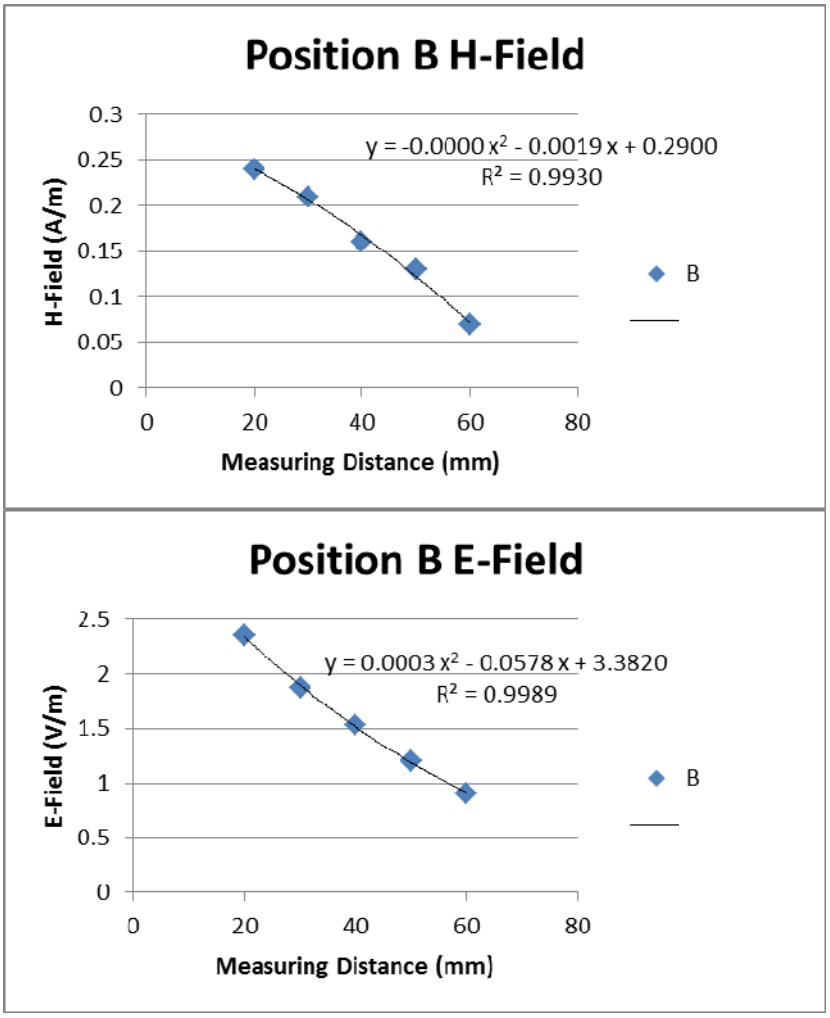
M2:

Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	A	20	1.29	4.22
		30	1.15	3.05
		40	1.01	2.16
		50	0.89	1.25
		60	0.73	0.96

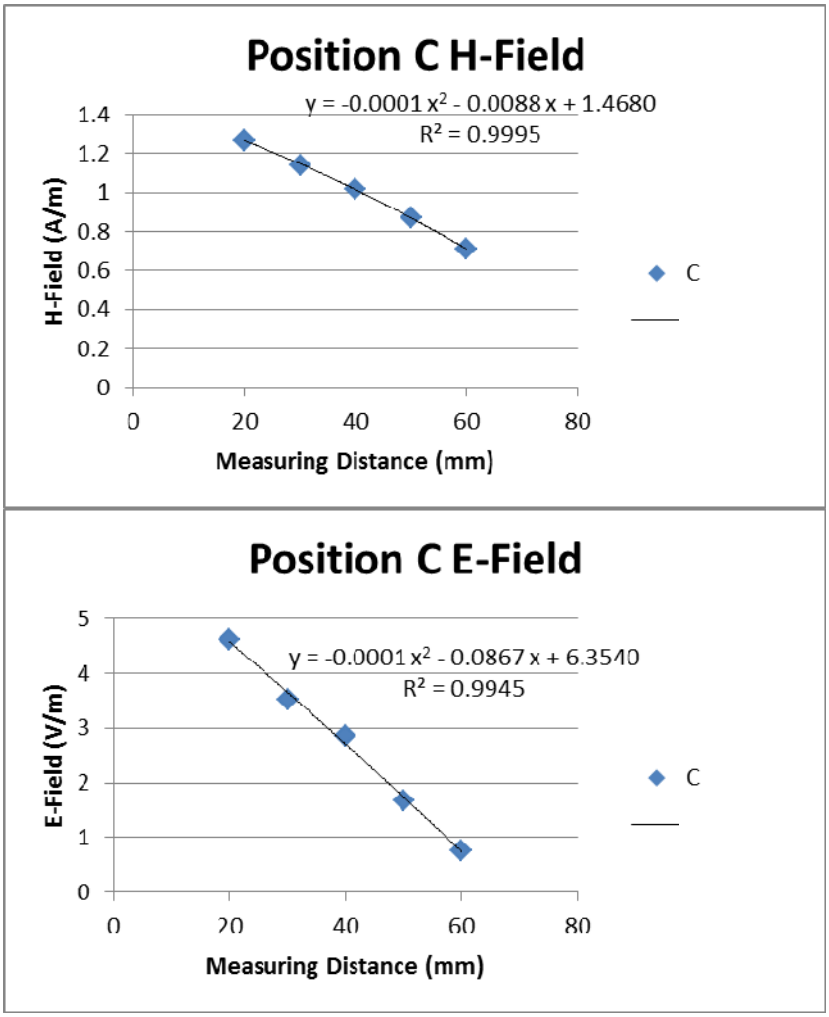




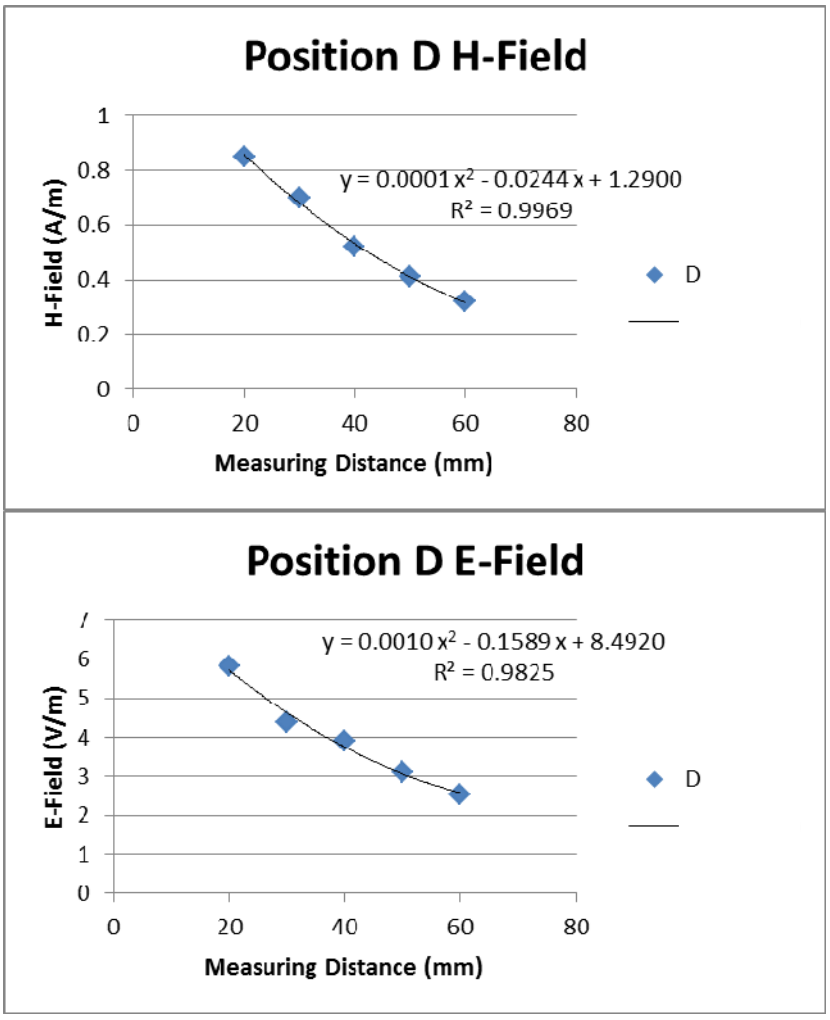
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	B	20	0.24	2.35
		30	0.21	1.87
		40	0.16	1.53
		50	0.13	1.2
		60	0.07	0.91



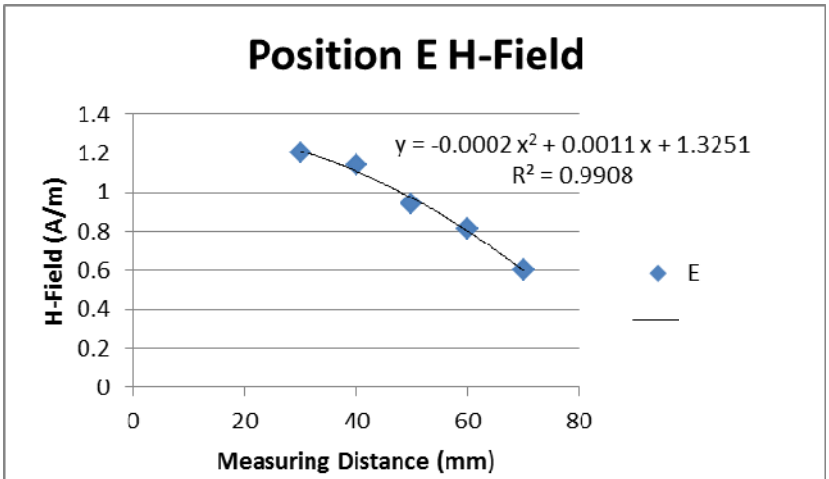
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	C	20	1.27	4.62
		30	1.14	3.51
		40	1.02	2.86
		50	0.87	1.67
		60	0.71	0.75

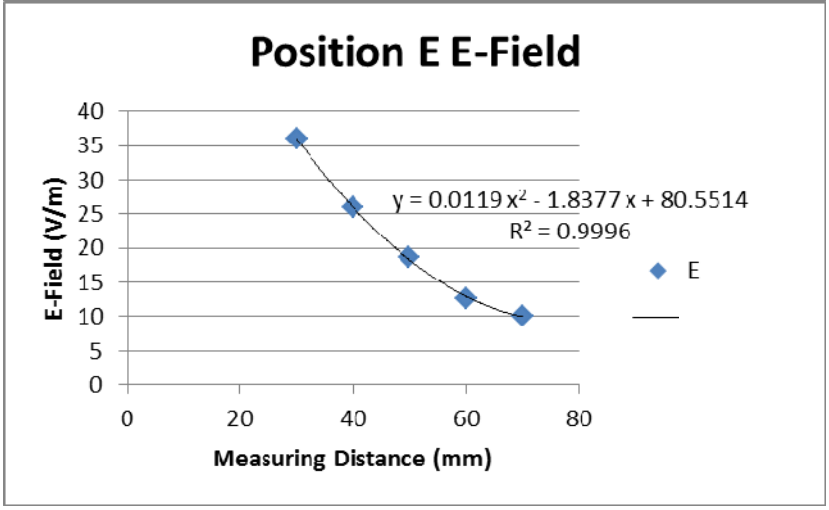


Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	D	20	0.85	5.82
		30	0.7	4.37
		40	0.52	3.92
		50	0.41	3.1
		60	0.32	2.54

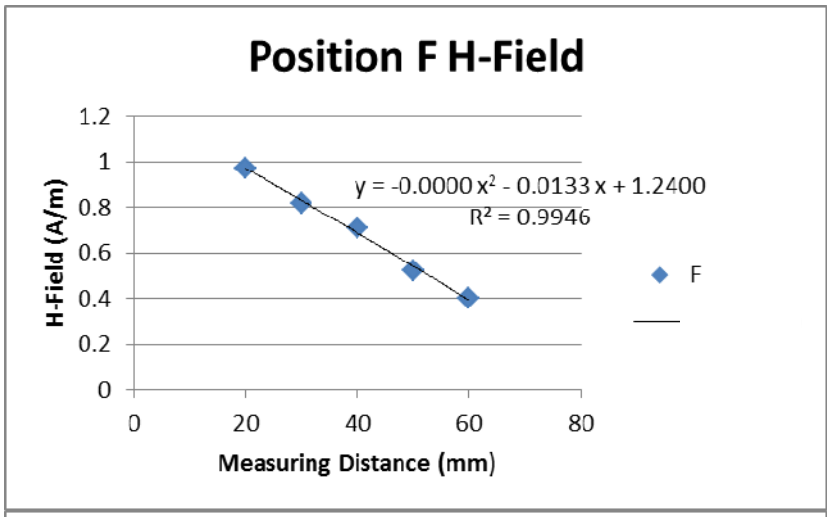


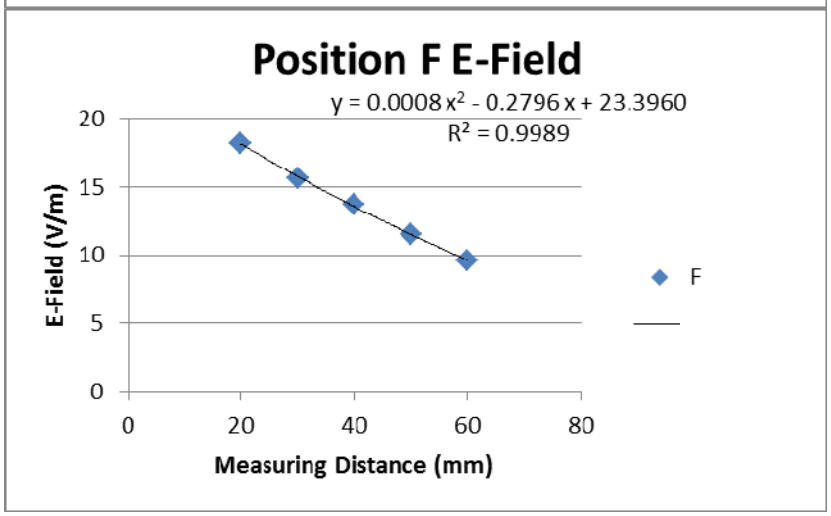
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	E	30	1.2	36.1
		40	1.14	25.9
		50	0.94	18.6
		60	0.81	12.7
		70	0.6	10.1





Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	F	20	0.97	18.2
		30	0.82	15.6
		40	0.71	13.7
		50	0.52	11.5
		60	0.4	9.64





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	1.29	1.29	0.00	±30
	30	1.17	1.15	1.74	±30
B	20	0.25	0.24	4.17	±30
	30	0.23	0.21	9.52	±30
C	20	1.25	1.27	-1.57	±30
	30	1.11	1.14	-2.63	±30
D	20	0.84	0.85	-1.18	±30
	30	0.65	0.7	-7.14	±30
E	30	1.18	1.2	-1.67	±30
	40	1.05	1.14	-7.89	±30
F	20	0.97	0.97	0.00	±30
	30	0.84	0.82	2.44	±30

Note: Agreement Between Estimated and Measured(%) = (Estimated H-Field (A/m) - Measured H-Field (A/m)) / Measured E-Field (V/m) x 100

Measuring Position	Measuring Distance (mm)	Estimated E-Field (V/m)	Measured E-Field (V/m)	Agreement Between Estimated and Measured (%)	Limit (%)
A	20	4.22	4.22	0.00	±30
	30	3	3.05	-1.64	±30
B	20	2.35	2.35	0.00	±30
	30	1.92	1.87	2.67	±30
C	20	4.58	4.62	-0.87	±30
	30	3.66	3.51	4.27	±30
D	20	5.71	5.82	-1.89	±30
	30	4.63	4.37	5.95	±30
E	30	36.13	36.1	0.08	±30
	40	26.08	25.9	0.69	±30
F	20	18.12	18.2	-0.44	±30
	30	15.73	15.6	0.83	±30

Note: Agreement Between Estimated and Measured(%) = (Estimated E-Field (V/m) - Measured E-Field (V/m)) / Measured E-Field (V/m) x 100

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: 0 cm (estimated from the fitted curve)

H-Field Strength:

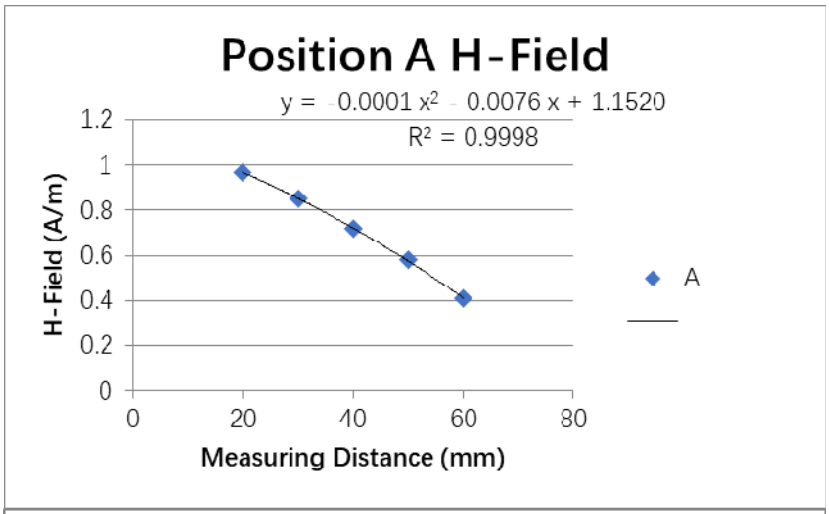
Test Frequency (kHz)	Test Position (A/m)						Limit (A/m)
	A	B	C	D	E	F	
126.7	1.55	0.29	1.47	1.29	1.33	1.24	1.63

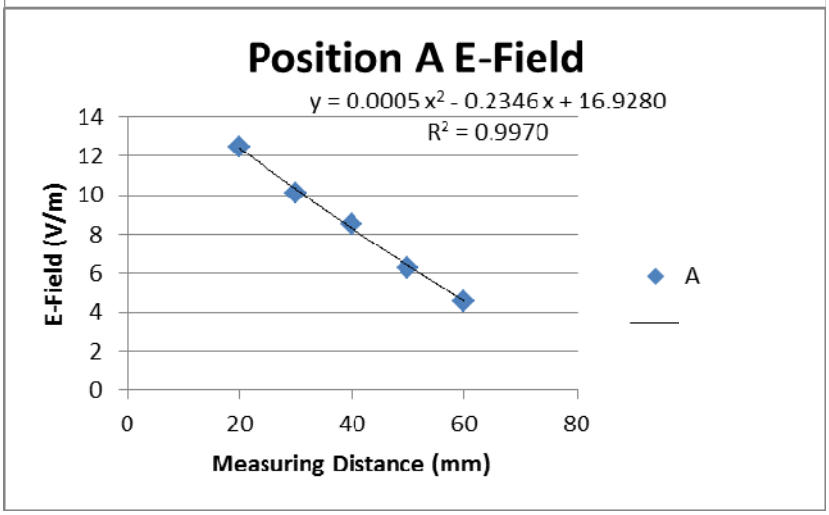
E-Field Strength:

Test Frequency (kHz)	Test Position (V/m)						Limit (V/m)
	A	B	C	D	E	F	
126.7	7.4	3.38	6.35	8.49	80.55	23.4	614

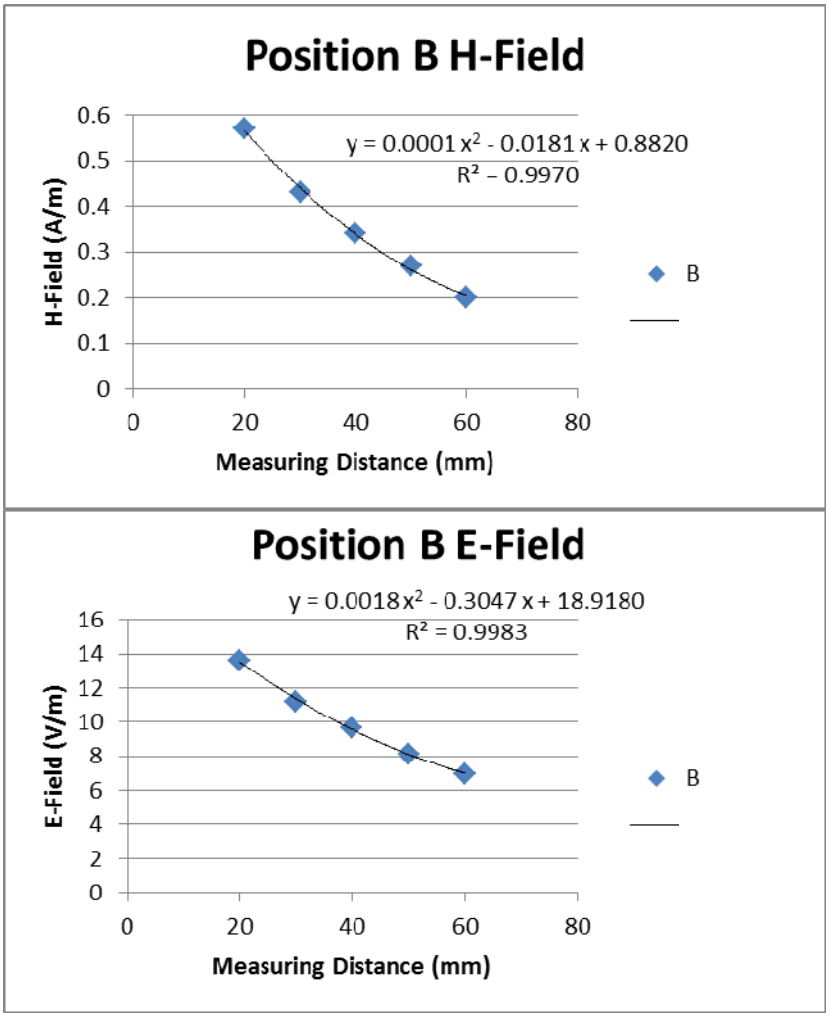
M3:

Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	A	20	0.97	12.5
		30	0.85	10.1
		40	0.72	8.54
		50	0.58	6.31
		60	0.41	4.58

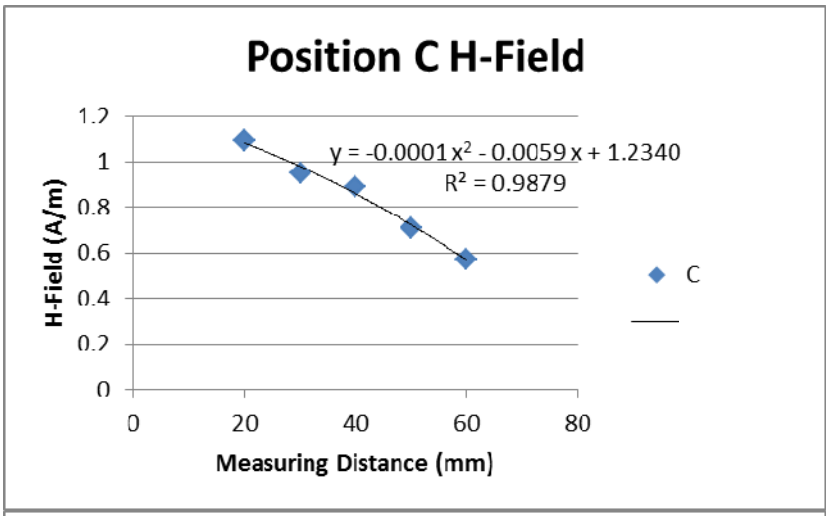


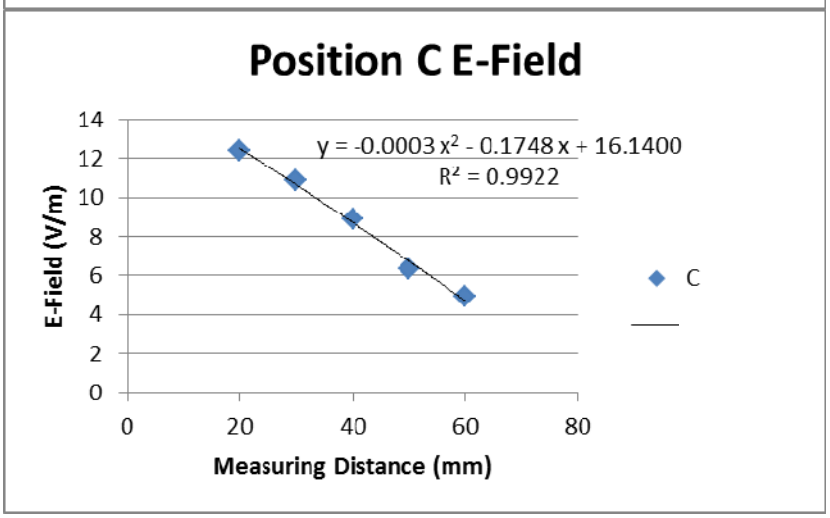


Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	B	20	0.57	13.6
		30	0.43	11.2
		40	0.34	9.67
		50	0.27	8.14
		60	0.2	6.98

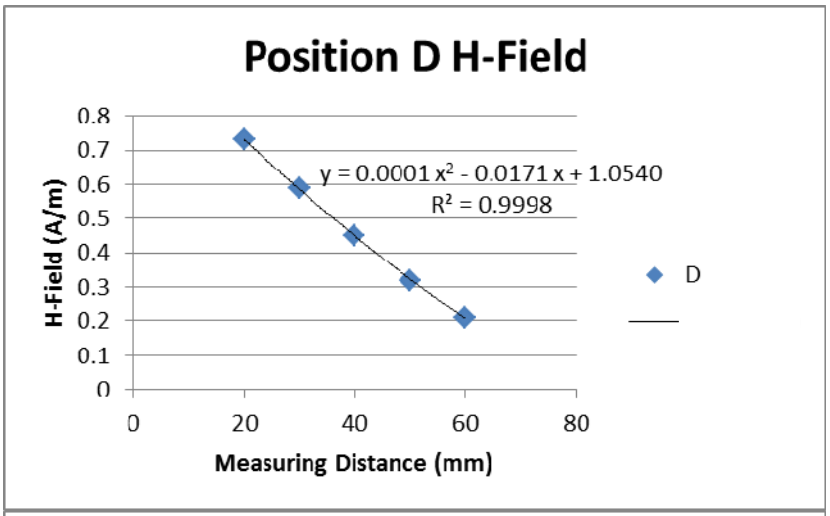


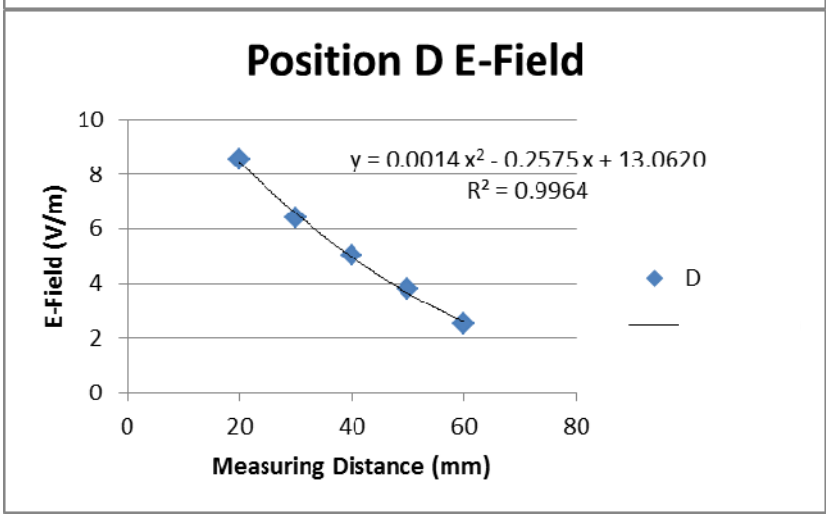
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	C	20	1.09	12.4
		30	0.95	10.9
		40	0.89	8.87
		50	0.71	6.34
		60	0.57	4.91



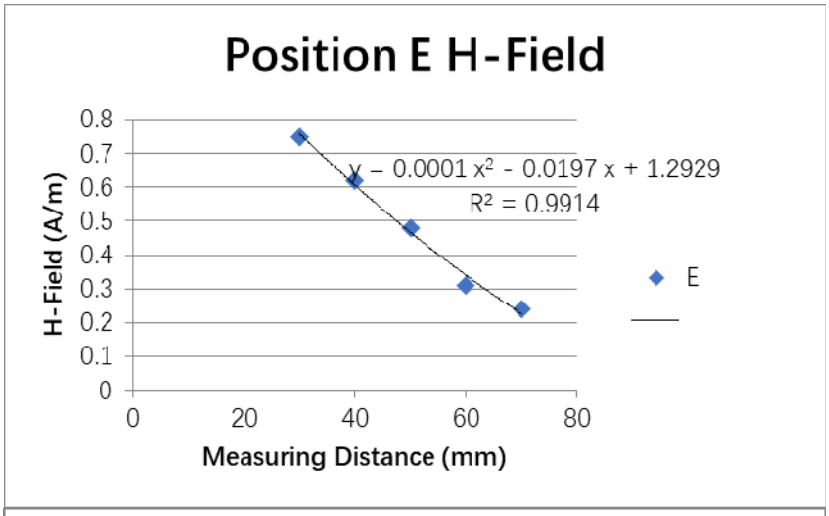


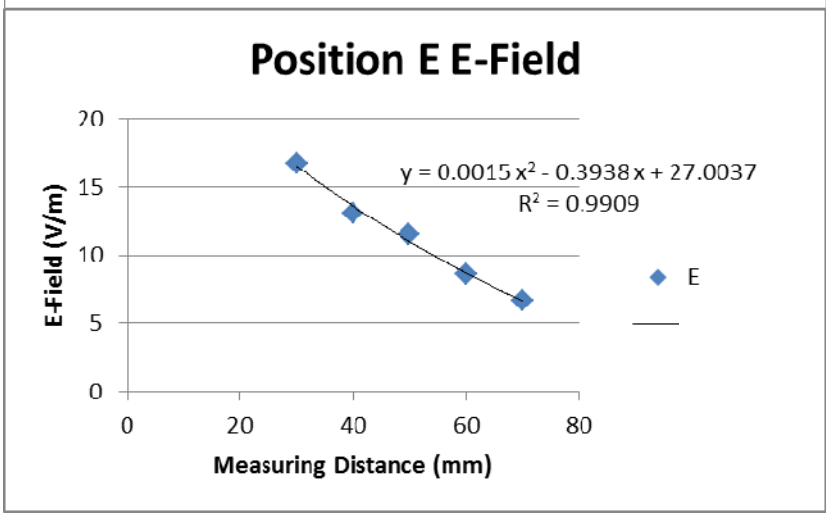
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	D	20	0.73	8.56
		30	0.59	6.39
		40	0.45	5.01
		50	0.32	3.81
		60	0.21	2.52



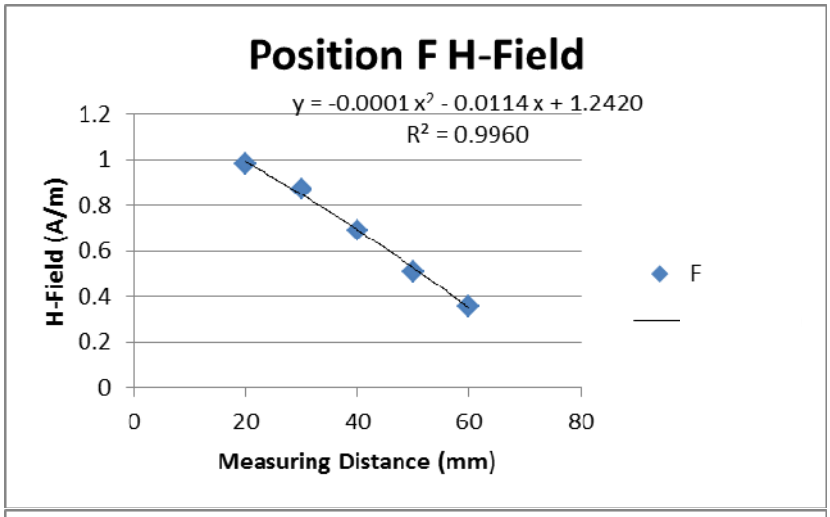


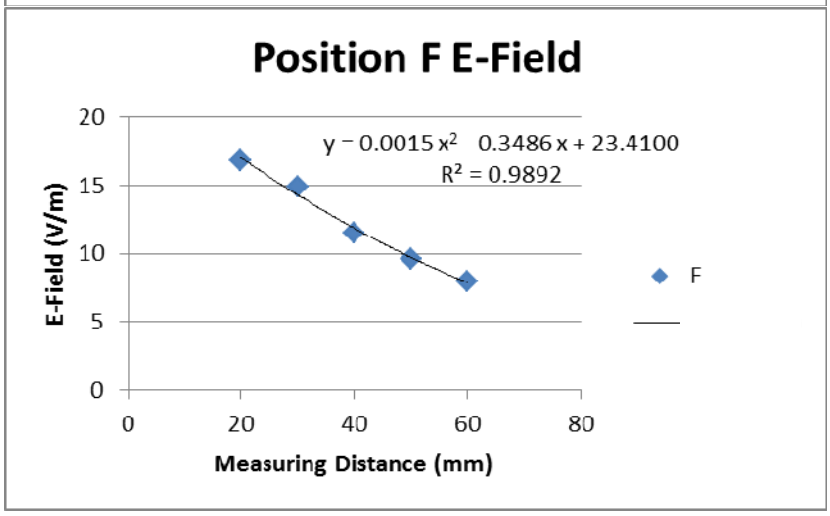
Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	E	30	0.75	16.7
		40	0.62	13.1
		50	0.48	11.5
		60	0.31	8.57
		70	0.24	6.67





Test Frequency (kHz)	Measuring Position	Measuring Distance (mm)	H-Field (A/m)	E-Field (V/m)
126.7	F	20	0.98	16.8
		30	0.87	14.9
		40	0.69	11.5
		50	0.51	9.62
		60	0.36	8.01





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	0.96	0.97	-1.03	±30
	30	0.83	0.85	-2.35	±30
B	20	0.56	0.57	-1.75	±30
	30	0.43	0.43	0.00	±30
C	20	1.08	1.09	-0.92	±30
	30	0.97	0.95	2.11	±30
D	20	0.75	0.73	2.74	±30
	30	0.63	0.59	6.78	±30
E	30	0.79	0.75	5.33	±30
	40	0.66	0.62	6.45	±30
F	20	0.97	0.98	-1.02	±30
	30	0.81	0.87	-6.90	±30

Note: Agreement Between Estimated and Measured(%) = (Estimated H-Field (A/m) - Measured H-Field (A/m)) / Measured E-Field (V/m) x 100

Measuring Position	Measuring Distance (mm)	Estimated E-Field (V/m)	Measured E-Field (V/m)	Agreement Between Estimated and Measured (%)	Limit (%)
A	20	12.44	12.5	-0.48	±30
	30	10.34	10.1	2.38	±30
B	20	13.54	13.6	-0.44	±30
	30	11.4	11.2	1.79	±30
C	20	12.52	12.4	0.97	±30
	30	10.63	10.9	-2.48	±30
D	20	8.47	8.56	-1.05	±30
	30	6.6	6.39	3.29	±30
E	30	16.54	16.7	-0.96	±30
	40	13.65	13.1	4.20	±30
F	20	17.04	16.8	1.43	±30
	30	14.3	14.9	-4.03	±30

Note: Agreement Between Estimated and Measured(%) = (Estimated E-Field (V/m) - Measured E-Field (V/m)) / Measured E-Field (V/m) x 100

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: 0 cm (estimated from the fitted curve)

H-Field Strength:

Test Frequency (kHz)	Test Position (A/m)						Limit (A/m)
	A	B	C	D	E	F	
126.7	1.15	0.88	1.23	1.05	1.29	1.24	1.63

E-Field Strength:

Test Frequency (kHz)	Test Position (V/m)						Limit (V/m)
	A	B	C	D	E	F	
126.7	16.93	18.92	16.14	13.06	27	23.41	614

Considerations of compliance 680106 D01 Wireless Power Transfer v04 clause 5.2:

(1) Power transfer frequency is less than 1 MHz

Yes, the operation frequency is 126.7kHz.

(2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.

Yes, the maximum output power of primary coil is 1**0 Watts**.

(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)

Yes, client device is placed directly in contact with the transmitter

(4) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).

No, portable exposure conditions.

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.

No, the test result for H-field strength not less than 50% of the MPE limit.

(6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

Yes,. all the radiating structures operating at maximum power at the same time.

6. EUT PHOTOGRAPHS

Please refer to the attachment 2403V85427E-EXP EUT EXTERNAL PHOTOGRAPHS and 2403V85427E-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2403V85427E-00B-TSP TEST SETUP PHOTOGRAPHS.

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