TEST REPORT

Product Name	:	3 IN 1 MAGNETIC WIRELESS CHARGING PAD
Brand Name	:	ionix
Model	:	740743
Series Model	:	MSWC-65/24
FCC ID	:	2BBSP-TW-15W-02
Applicant	:	**Shenzhen Taineng Technology Co., Ltd.**
Address	:	301, No12, Yaming Road, Dongkeng Community, Fenghuang Street, Guangming Region, Shenzhen, Guangdong, China
Manufacturer	:	**Shenzhen Taineng Technology Co., Ltd.**
Address	:	301, No12, Yaming Road, Dongkeng Community, Fenghuang Street, Guangming Region, Shenzhen, Guangdong, China
Standard(s)	:	FCC CFR Title 47 Part 15 Subpart C
Date of Receipt	:	Feb. 28, 2025
Date of Test	:	Feb. 28, 2025~ Mar. 10, 2025
Issued Date	:	Mar. 11, 2025

Issued By: **Guangdong Asia Hongke Test Technology Limited**
B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
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Report Revise Record

Report Version	Issued Date	Notes
M1	Mar. 11, 2025	Initial Release

Contents

1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:
FCC Rules Part 15.207,15.209, 15.215(c)

ANSI C63.10: 2013: American National Standard for Testing Unlicensed Wireless Devices

1.2 Test Summary

Test Item	Section in CFR 47	Test Result
Electric Field Radiated Emissions	FCC Part 15 C (Section15.209)	PASS
20dB Bandwidth/99% Bandwidth	FCC Part 15 C (Section15.215(c))	PASS
AC Power Line Conducted Emission	FCC Part 15 C (Section15.207)	PASS
Antenna Requirement	FCC Part 15 C (Section15.203	PASS

1.3 Test Facility

Test Laboratory:

Guangdong Asia Hongke Test Technology Limited
B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

The test facility is recognized, certified or accredited by the following organizations:
FCC-Registration No.: 251906 Designation Number: CN1376
Guangdong Asia Hongke Test Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 31737 CAB identifier: CN0165
The 3m Semi-anechoic chamber of Guangdong Asia Hongke Test Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 31737

A2LA-Lab Cert. No.: 7133.01
Guangdong Asia Hongke Test Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

1.4 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the Guangdong Asia Hongke Test Technology Limited’s quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.
Hereafter the best measurement capability for Asia Hongke laboratory is reported:

Test	Measurement Uncertainty	Notes
Power Line Conducted Emission	150KHz~30MHz ±1.20 dB	(1)
Radiated Emission	9KHz~30Hz ±3.10dB	(1)
Radiated Emission	9KHz~1GHz ±3.75dB	(1)
Radiated Emission	1GHz~18GHz ±3.88 dB	(1)
Radiated Emission	18GHz-40GHz ±3.88dB	(1)
RF power, conducted	30MHz~6GHz ±0.16dB	(1)
RF power density, conducted	±0.24dB	(1)
Spurious emissions, conducted	±0.21dB	(1)
Temperature	±1℃	(1)
Humidity	±3%	(1)
DC and low frequency voltages	±1.5%	(1)
Time	±2%	(1)
Duty cycle	±2%	(1)

The report uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty Multiplied by a coverage factor of k=2 , providing a level of confidence of approximately 95%

2 GENGENERAL INFORMATION

2.1 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2 General Description of EUT

Product Name:	3 IN 1 MAGNETIC WIRELESS CHARGING PAD
Model/Type reference:	740743
Serial Model:	MSWC-65/24
Power Supply:	Input: 5V/3A; 9V/2A; 12V/1.67A Output: For Phone 15W; AirPods 3W; Apple Watch 2.5W
Hardware Version:	N/A
Software Version:	N/A
Sample(s) Status:	AiTSZ-250228008-1(Normal sample) AiTSZ-250228008-2(Engineer sample)
Wireless Charger:	
Operation frequency:	For Phone: 110kHz-205kHz For Earphone: 110kHz-205kHz For Watch: 300kHz-350kHz
Modulation Technology:	ASK
Antenna Type:	Loop coil Antenna
Antenna gain:	0dBi
Remark: The above DUT's information was declared by manufacturer. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	

2.3 Description of the test mode

Equipment under test was operated during the measurement under the following conditions:
☒ Charging and communication mode

Test Modes:		
Mode 1	AC/DC Adapter+ EUT + phone(Battery Status:< 1%)	Record
Mode 2	AC/DC Adapter+ EUT + phone(Battery Status:< 50%)	Pre-tested
Mode 3	AC/DC Adapter+ EUT + phone(Battery Status:< 99%)	Pre-tested
Mode 4	AC/DC Adapter+ EUT + AirPods	Record
Mode 5	AC/DC Adapter+ EUT + Apple Watch	Record
Mode 6	Stand-by mode	Pre-tested
Note: All test modes were pre-tested, but we only recorded the worst case in this report.		

2.4 Special Accessories

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

Description	Manufacturer	Model	Serial No.	Provided by	Other
Adapter	HNT	HNT-QC530	/	Test lab	/
Phone	YBZ	15W	/	Test lab	/
Watch	Apple	S6	/	Test lab	/
Earphone	PocBuds	K6	/	Test lab	/

2.5 Equipment List for the Test

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	EMI Measuring Receiver	R&S	ESR	101160	2024.09.25	2025.09.24
2	Spectrum Analyzer	R&S	FSV40	101470	2024.09.23	2025.09.22
3	Low Noise Pre Amplifier	SCHWARZBECK	BBV 9745	00282	2024.09.25	2025.09.24
4	Low Noise Pre Amplifier	CESHENG	CSKJLNA231016A	CSKJLNA231016A	2024.09.25	2025.09.24
5	Passive Loop	ETS	6512	00165355	2024.08.29	2027.08.28
6	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9168	01434	2024.08.29	2027.08.28
7	Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	452	2024.08.29	2027.08.28
8	Horn Antenna 15-40GHz	SCHWARZBECK	BBHA9170	BBHA9170367	2024.08.28	2027.08.27
9	6dB Attenuator	JFW	50FPE-006	4360846-949-1	2024.09.24	2025.09.23
10	EMI Test Receiver	R&S	ESPI	100771	2024.09.25	2025.09.24
11	LISN	R&S	NNLK 8129	8130179	2024.09.24	2025.09.23
12	LISN	R&S	ESH3-Z5	892785/016	2024.09.23	2025.09.22
13	Pulse Limiter	R&S	ESH3-Z2	102789	2024.09.24	2025.09.23

14	RF Automatic Test system	TST	TSTPASS	21033016	2024.09.25	2025.09.24
15	Vector Signal Generator	Agilent	N5182A	MY50143009	2024.09.25	2025.09.24
16	Analog signal generator	Agilent	E8257	MY51554256	2024.09.25	2025.09.24
17	Spectrum Analyzer	Agilent	N9020A	MY51289843	2024.09.25	2025.09.24
18	Spectrum Analyzer	Agilent	N9020A	MY53421570	2024.09.25	2025.09.24
19	Power Sensor	Agilent	8481A	MY41097697	2024.09.25	2025.09.24
20	Wideband Radio communication tester	R&S	CMW500	1201.0002K50	2024.09.24	2025.09.23
21	DC power supply	ZHAOXIN	RXN-305D-2	28070002559	N/A	N/A
22	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A	N/A	N/A
23	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A	N/A	N/A
24	RF Software	TST	TSTPASS	Version 2.0	N/A	N/A
25	RF Software	cesheng	WCS-WCN	Version 2024.6.20	N/A	N/A
26	temporary antenna connector(Note)	NTS	R001	N/A	N/A	N/A
Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.						

3 TEST CONDITIONS AND RESULTS

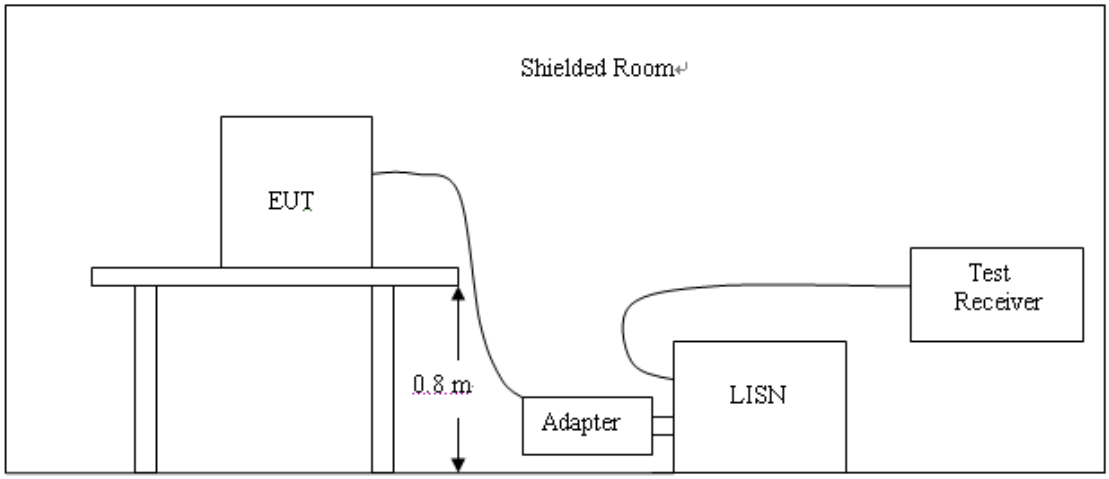
3.1 Conducted Emissions Test

LIMIT

Frequency range (MHz)	Limit (dBuV)	
	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.

TEST CONFIGURATION



TEST PROCEDURE

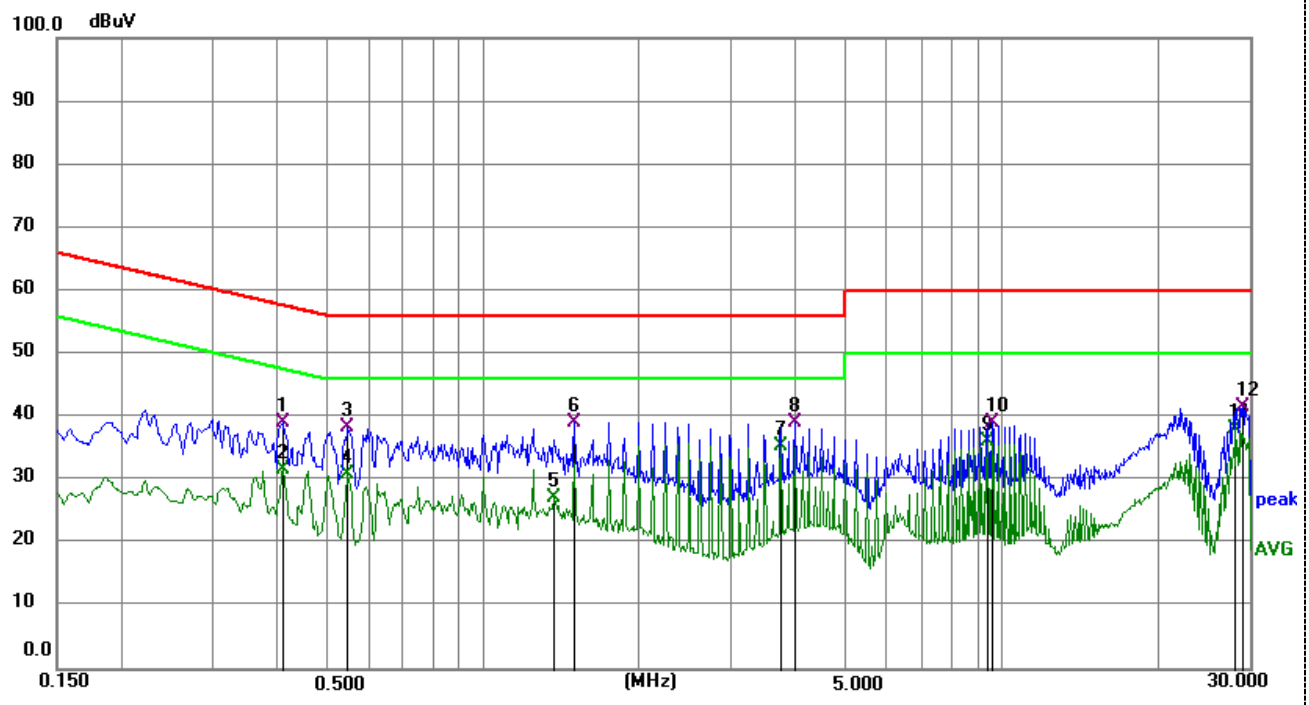
1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10:2013.
2. Support equipment, if needed, was placed as per ANSI C63.10:2013.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2013.
4. The adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST RESULTS

Remark:

1. Both 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below:
2. All test modes descripted in section 2.3 has been tested, only the worst result of Mode 1 is recorded as below:

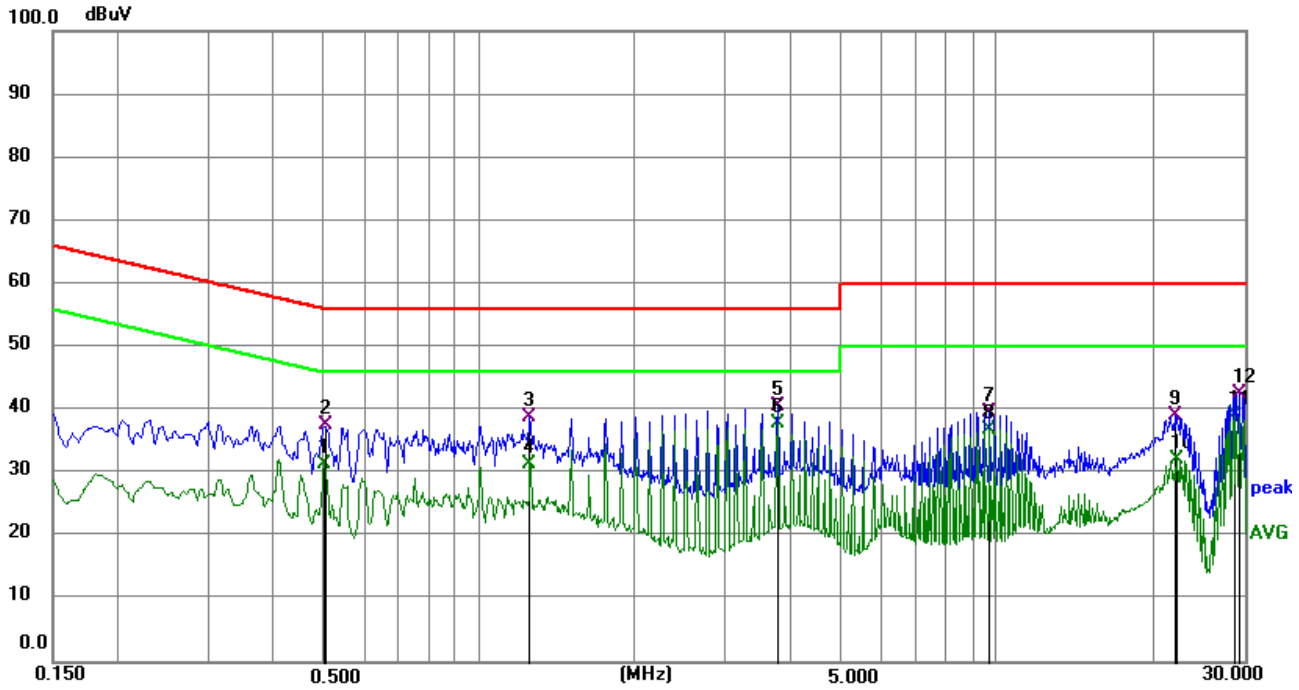
Test Mode	Mode 1	Line:	L



Remark: Correct Factor = Insertion loss of LISN + Cable loss + Insertion loss of Pulse Limiter;
Measurement Result = Reading Level +Correct Factor;
Margin = Measurement Result- Limit

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.4065	28.27	10.69	38.96	57.72	-18.76	QP
2	0.4065	20.93	10.69	31.62	47.72	-16.10	AVG
3	0.5460	27.78	10.68	38.46	56.00	-17.54	QP
4	0.5460	20.27	10.68	30.95	46.00	-15.05	AVG
5	1.3695	16.57	10.69	27.26	46.00	-18.74	AVG
6	1.4955	28.42	10.71	39.13	56.00	-16.87	QP
7	3.7410	24.30	11.00	35.30	46.00	-10.70	AVG
8	3.9885	28.15	11.00	39.15	56.00	-16.85	QP
9	9.3525	25.22	11.00	36.22	50.00	-13.78	AVG
10	9.6000	28.11	10.97	39.08	60.00	-20.92	QP
11	28.1850	26.44	11.64	38.08	50.00	-11.92	AVG
12	29.1840	29.92	11.70	41.62	60.00	-18.38	QP

Test Mode	Mode 1	Line:	N



Remark: Correct Factor = Insertion loss of LISN + Cable loss + Insertion loss of Pulse Limiter;
Measurement Result = Reading Level +Correct Factor;

Margin = Measurement Result- Limit

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.5010	20.72	10.69	31.41	46.00	-14.59	AVG
2	0.5055	26.78	10.69	37.47	56.00	-18.53	QP
3	1.2525	28.27	10.67	38.94	56.00	-17.06	QP
4	1.2525	20.84	10.67	31.51	46.00	-14.49	AVG
5	3.7635	29.52	11.00	40.52	56.00	-15.48	QP
6	3.7635	26.81	11.00	37.81	46.00	-8.19	AVG
7	9.6585	28.63	10.95	39.58	60.00	-20.42	QP
8	9.6585	25.93	10.95	36.88	50.00	-13.12	AVG
9	21.9615	27.33	11.67	39.00	60.00	-21.00	QP
10	22.2135	20.41	11.67	32.08	50.00	-17.92	AVG
11	28.7250	27.45	11.58	39.03	50.00	-10.97	AVG
12	29.2290	30.89	11.60	42.49	60.00	-17.51	QP

3.2 Radiated Emissions

Limit

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission out of authorized band shall not exceed the following table at a 3 meters measurement distance.

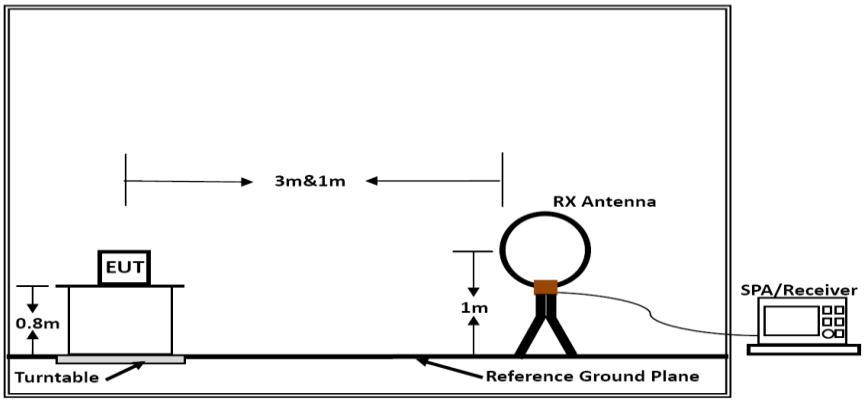
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
0.009-0.49	3	20log(2400/F(KHz))+40log(300/3)	2400/F(KHz)
0.49-1.705	3	20log(24000/F(KHz))+ 40log(30/3)	24000/F(KHz)
1.705-30	3	20log(30)+ 40log(30/3)	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

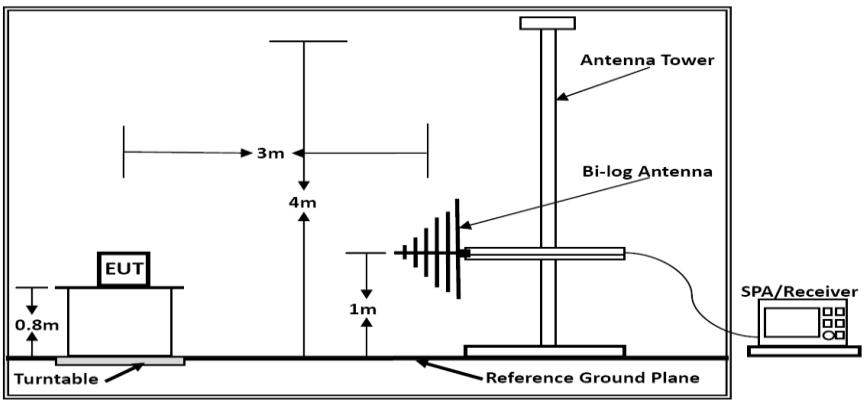
TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



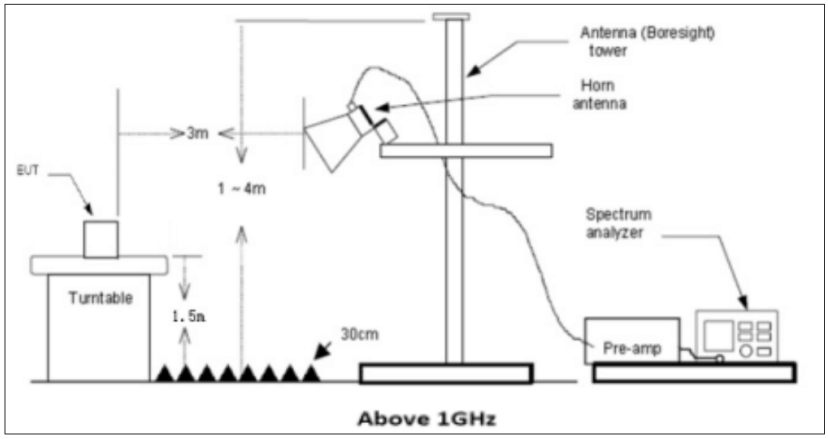
Below 30MHz

(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



Below 1GHz

(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



Test Procedure

1. Below 1GHz measurement the EUT is placed on a turntable which is 0.8m above ground plane, and above 1GHz measurement EUT was placed on a low permittivity and low loss tangent turn table which is 1.5m above ground plane.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0℃ to 360℃ to acquire the highest emissions from EUT
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.
5. Radiated emission test frequency band from 9KHz to 1000MHz.
6. The distance between test antenna and EUT as following table states:

Test Frequency range	Test Antenna Type	Test Distance
9KHz-30MHz	Active Loop Antenna	3
30MHz-1GHz	Bilog Antenna	3

7. Setting test receiver/spectrum as following table states:

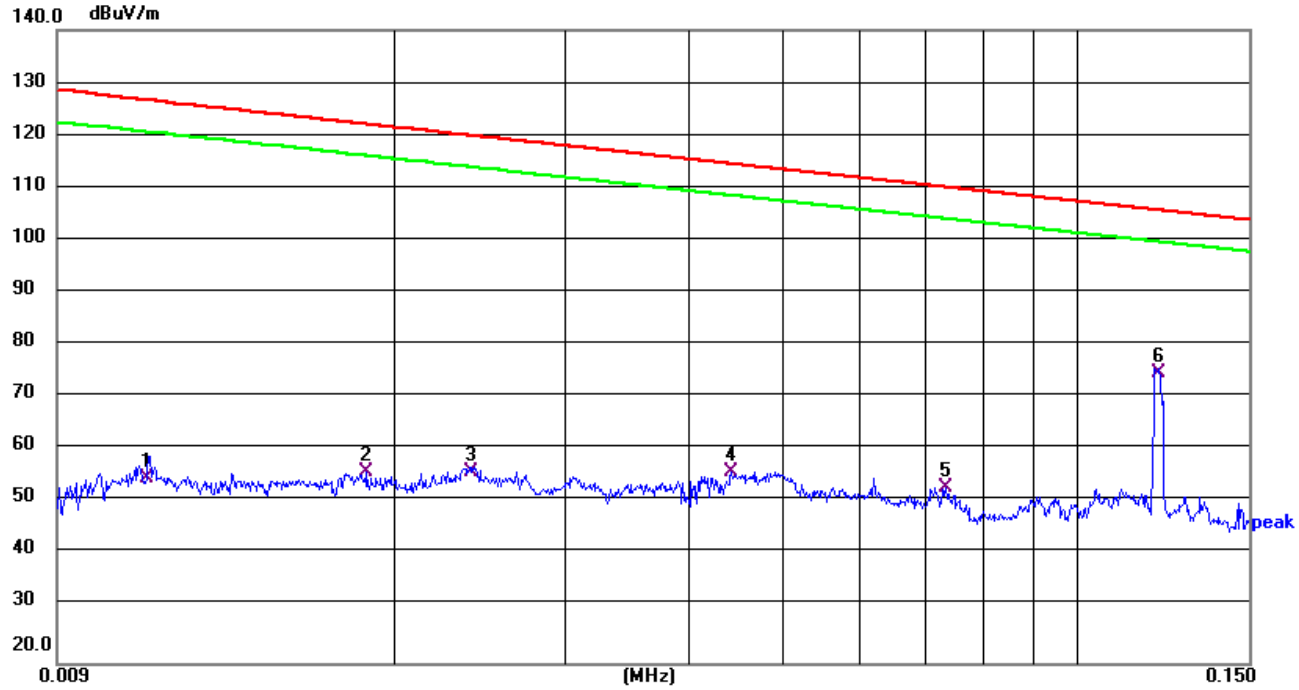
Test Frequency range	Test Receiver/Spectrum Setting	Detector
9KHz-150KHz	RBW=200Hz/VBW=3KHz,Sweep time=Auto	QP
150KHz-30MHz	RBW=9KHz/VBW=100KHz,Sweep time=Auto	QP
30MHz-1GHz	RBW=120KHz/VBW=1000KHz,Sweep time=Auto	QP

TEST RESULTS

Remark:
All test modes descripted in section 2.3 has been tested, only the worst result of Mode 1/4/5 is recorded as below:

For 9KHz-150KHz

Test mode:	Mode 1

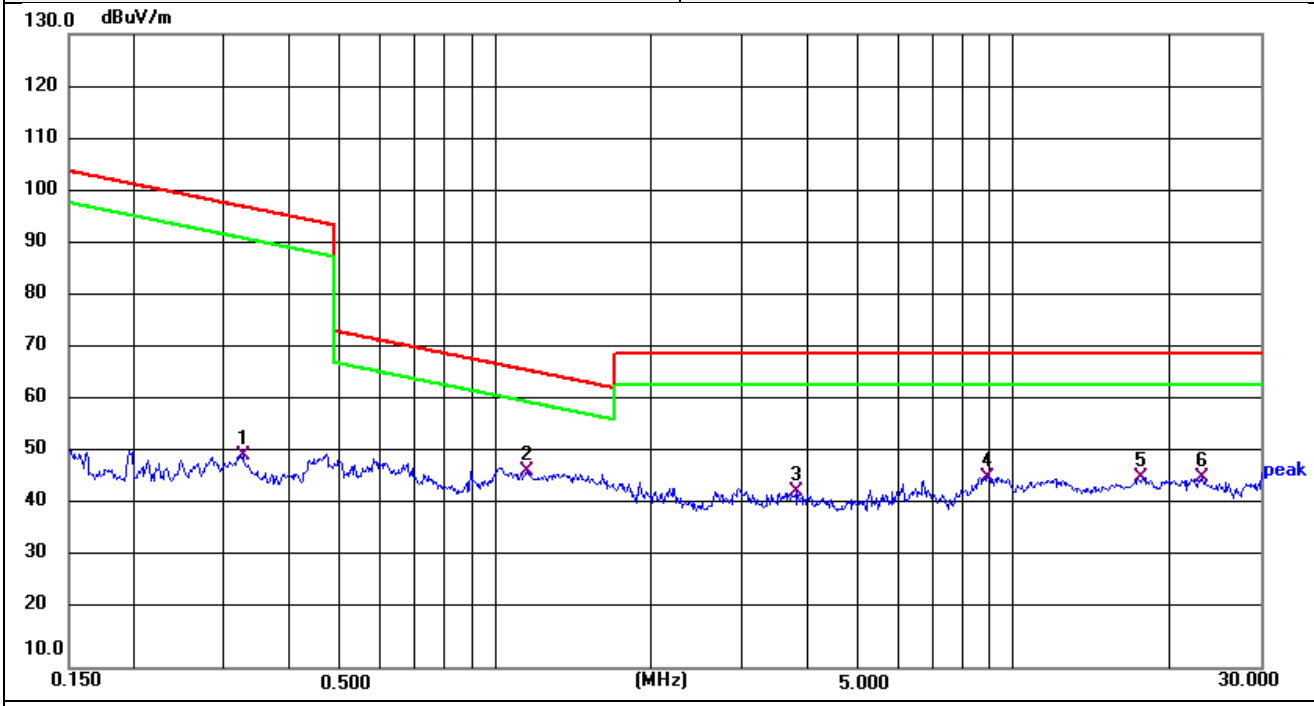


Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.0111	33.75	21.36	55.11	126.70	-71.59	QP
2	0.0187	35.39	20.88	56.27	122.17	-65.90	QP
3	0.0240	35.28	21.04	56.32	120.00	-63.68	QP
4	0.0442	34.12	22.25	56.37	114.70	-58.33	QP
5	0.0734	30.62	22.68	53.30	110.29	-56.99	QP
6	0.1216	52.82	22.18	75.00	105.91	-30.91	QP

For 150KHz-30MHz

Test mode:	Mode 1



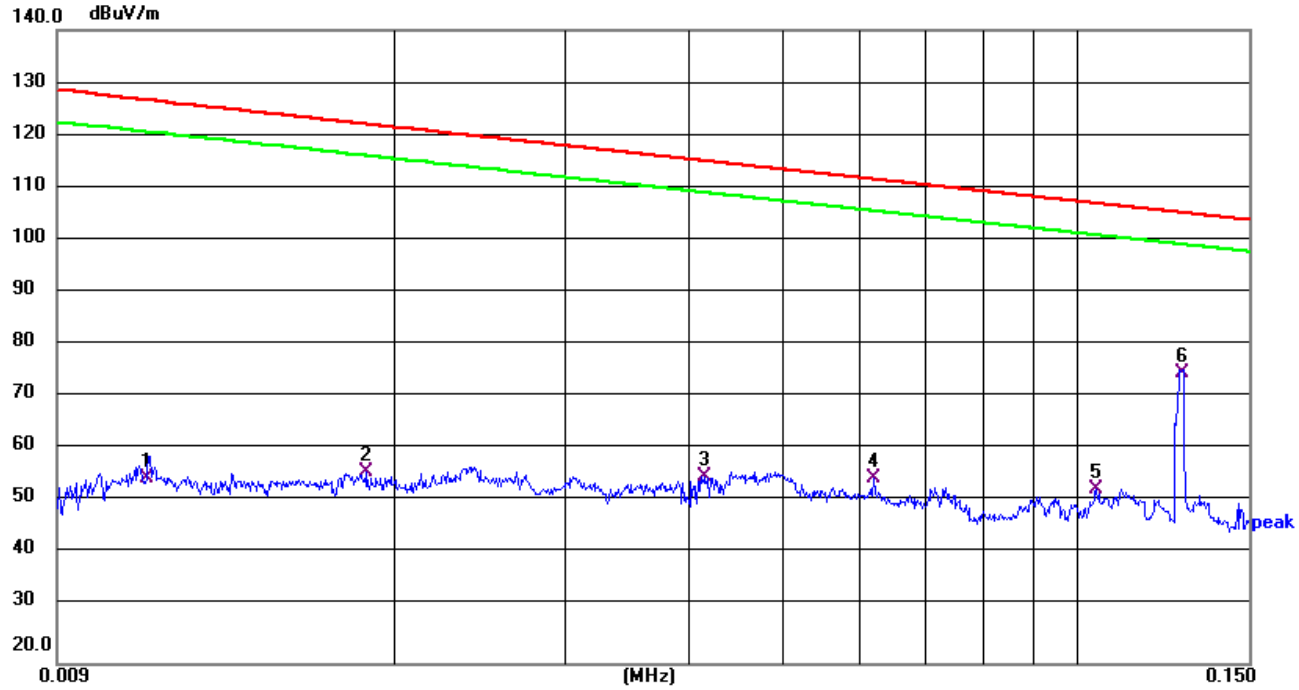
Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.3251	28.73	21.52	50.25	97.36	-47.11	QP
2	1.1471	24.64	22.57	47.21	66.41	-19.20	QP
3	3.7993	20.64	22.84	43.48	69.54	-26.06	QP
4	8.9161	23.47	22.75	46.22	69.54	-23.32	QP
5	17.7549	22.63	23.49	46.12	69.54	-23.42	QP
6	23.1402	4.35	41.68	46.03	69.54	-23.51	QP

Note: Pre-scan in the all of mode, the worst case in of was recorded.

For 9KHz-150KHz

Test mode:	Mode 4

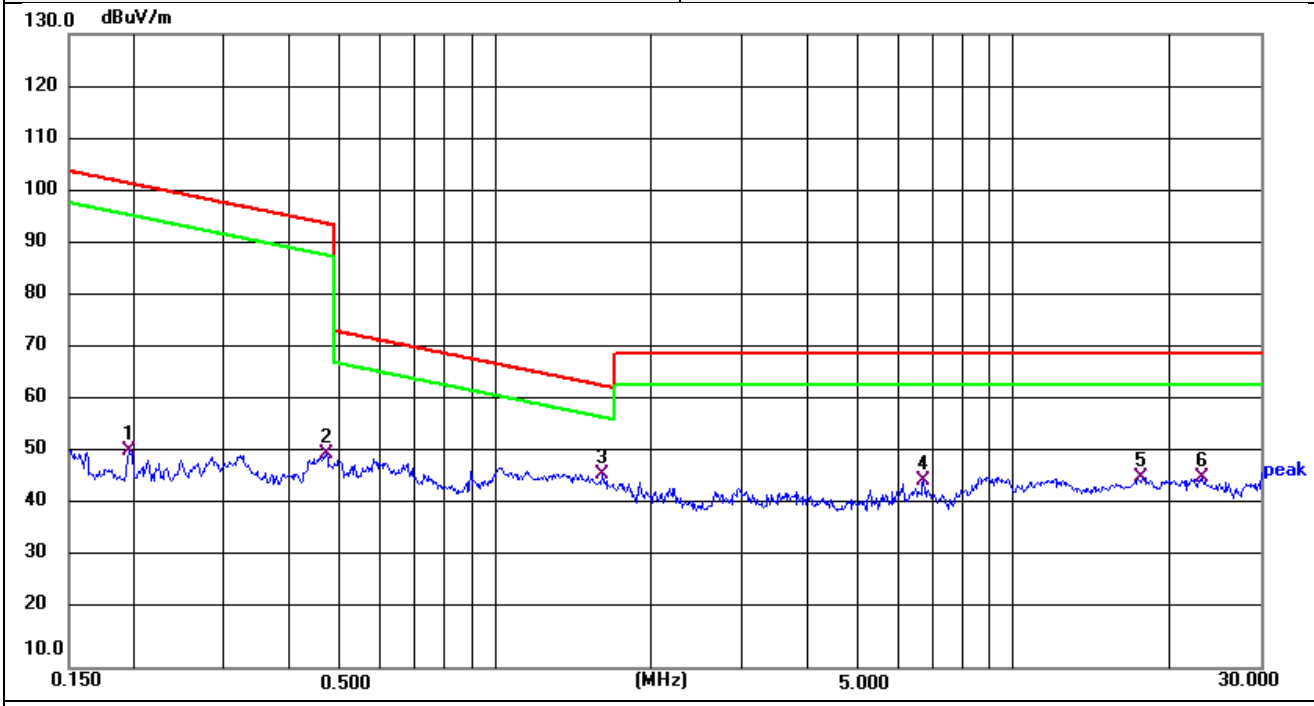


Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.0111	33.75	21.36	55.11	126.70	-71.59	QP
2	0.0187	35.39	20.88	56.27	122.17	-65.90	QP
3	0.0415	33.40	22.09	55.49	115.24	-59.75	QP
4	0.0618	32.52	22.64	55.16	111.78	-56.62	QP
5	0.1044	30.64	22.36	53.00	107.23	-54.23	QP
6	0.1280	52.88	22.12	75.00	105.46	-30.46	QP

For 150KHz-30MHz

Test mode:	Mode 4



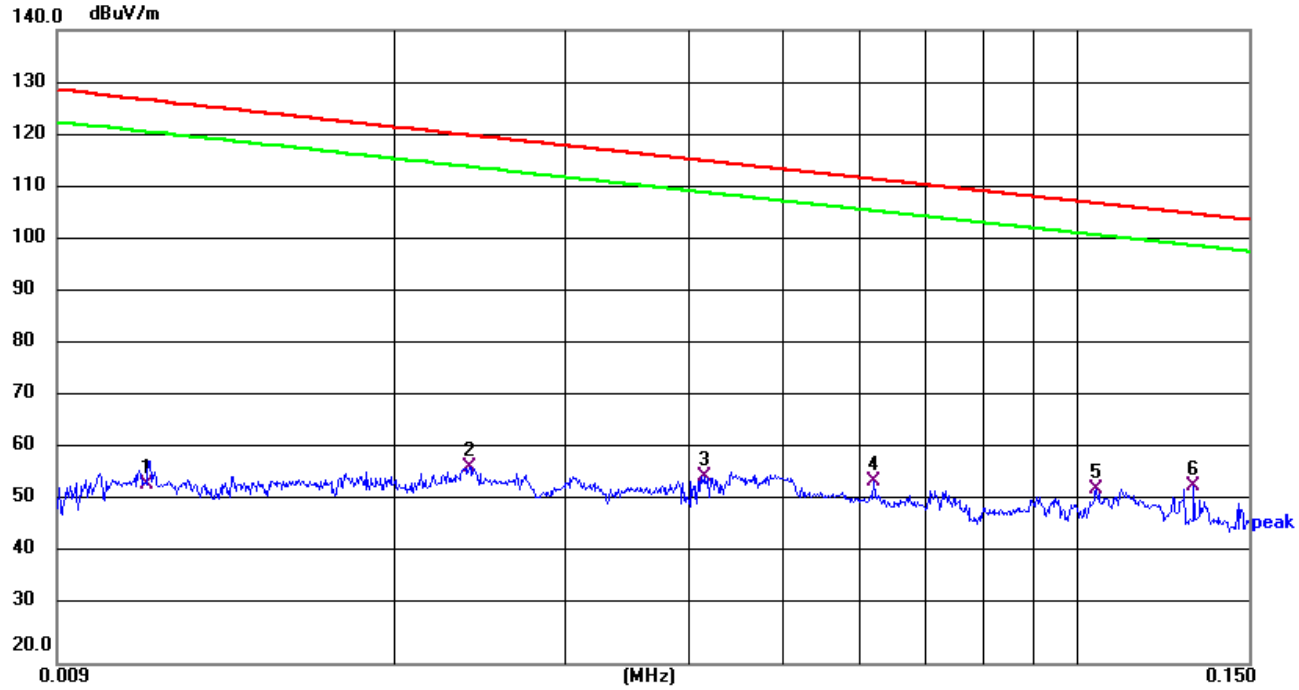
Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.1965	29.41	21.67	51.08	101.74	-50.66	QP
2	0.4711	28.69	21.75	50.44	94.14	-43.70	QP
3	1.6104	24.32	22.48	46.80	63.47	-16.67	QP
4	6.6977	22.42	23.06	45.48	69.54	-24.06	QP
5	17.7549	22.63	23.49	46.12	69.54	-23.42	QP
6	23.1402	4.35	41.68	46.03	69.54	-23.51	QP

Note: Pre-scan in the all of mode, the worst case in of was recorded.

For 9KHz-150KHz

Test mode:	Mode 5

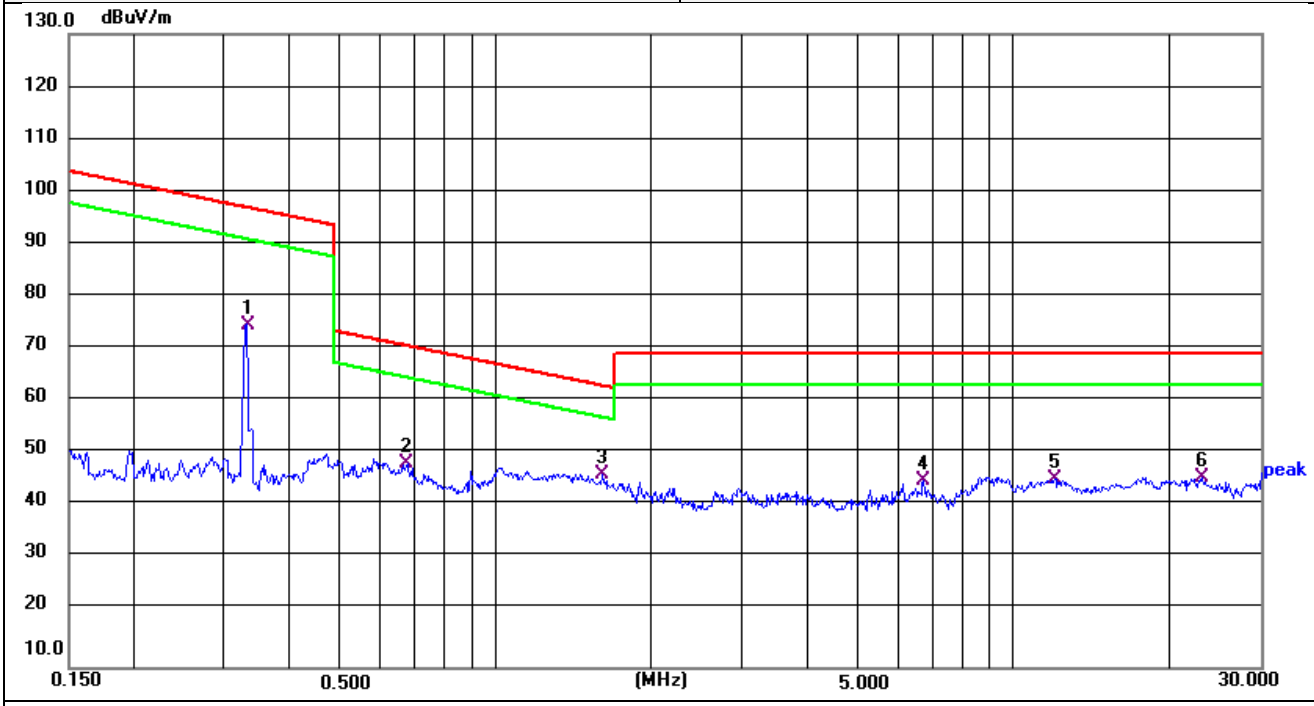


Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.0111	32.75	21.36	54.11	126.70	-72.59	QP
2	0.0238	36.28	21.03	57.31	120.07	-62.76	QP
3	0.0415	33.40	22.09	55.49	115.24	-59.75	QP
4	0.0618	32.02	22.64	54.66	111.78	-57.12	QP
5	0.1044	30.64	22.36	53.00	107.23	-54.23	QP
6	0.1317	31.69	22.08	53.77	105.21	-51.44	QP

For 150KHz-30MHz

Test mode:	Mode 5



Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss;
Margin= Emission Level - Limit.

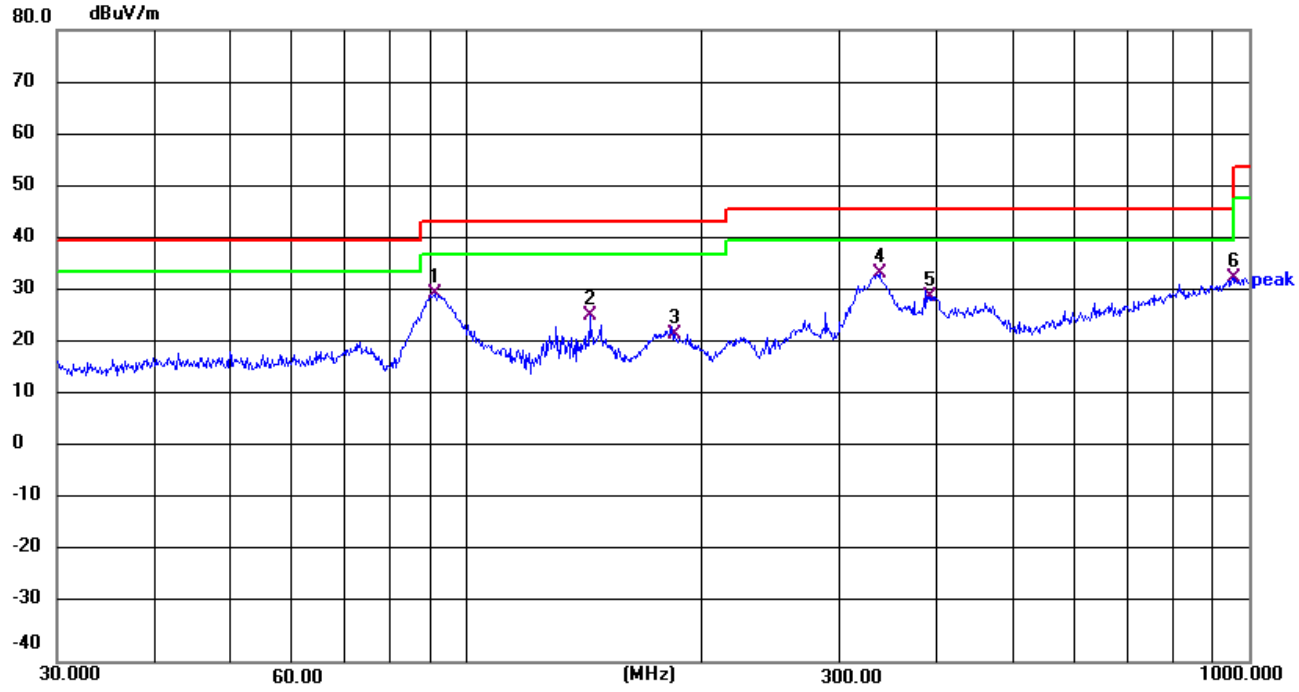
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	0.3342	53.47	21.53	75.00	97.12	-22.12	QP
2	0.6753	26.42	22.29	48.71	71.01	-22.30	QP
3	1.6104	24.32	22.48	46.80	63.47	-16.67	QP
4	6.6977	22.42	23.06	45.48	69.54	-24.06	QP
5	11.9961	22.92	23.00	45.92	69.54	-23.62	QP
6	23.1402	4.35	41.68	46.03	69.54	-23.51	QP

Note: Pre-scan in the all of mode, the worst case in of was recorded.

For 30MHz-1GHz

Remark: All test modes descripted in section 2.3 has been tested, only the worst result of Mode 1 is recorded as below:

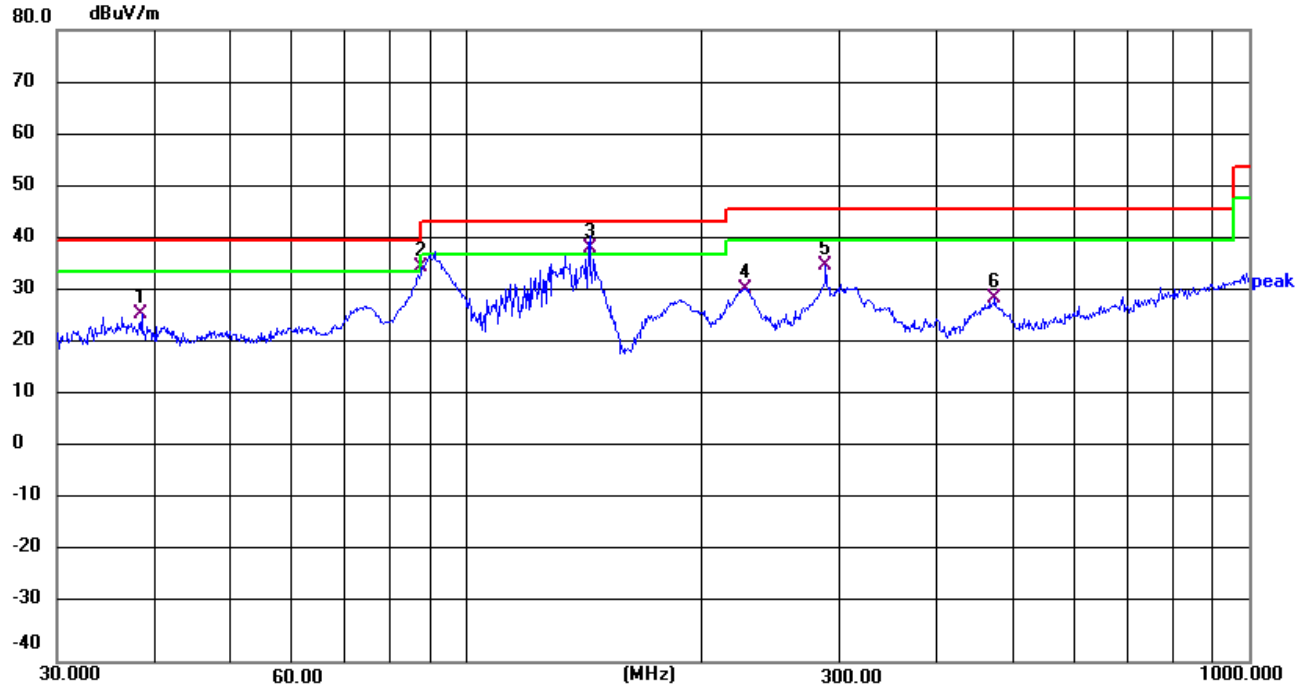
Test mode:	Mode 1	Polarization:	Horizontal



Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss – Pre-amplifier;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	91.1746	50.89	-20.91	29.98	43.50	-13.52	QP
2	143.8295	42.90	-17.00	25.90	43.50	-17.60	QP
3	185.1379	41.28	-18.91	22.37	43.50	-21.13	QP
4	337.2155	49.80	-16.00	33.80	46.00	-12.20	QP
5	392.0951	44.08	-14.74	29.34	46.00	-16.66	QP
6	958.7943	36.46	-3.48	32.98	46.00	-13.02	QP

Test mode:	Mode 1	Polarization:	Vertical



Remark:
Emission Level = Reading + Factor;
Factor = Antenna Factor + Cable Loss – Pre-amplifier;
Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	38.4809	42.80	-16.67	26.13	40.00	-13.87	QP
2	87.7248	55.89	-20.98	34.91	40.00	-5.09	QP
3	143.9794	55.45	-16.99	38.46	43.50	-5.04	QP
4	226.8936	50.97	-20.00	30.97	46.00	-15.03	QP
5	287.9904	52.45	-17.28	35.17	46.00	-10.83	QP
6	473.8347	41.87	-12.88	28.99	46.00	-17.01	QP

3.3 20dB Bandwidth

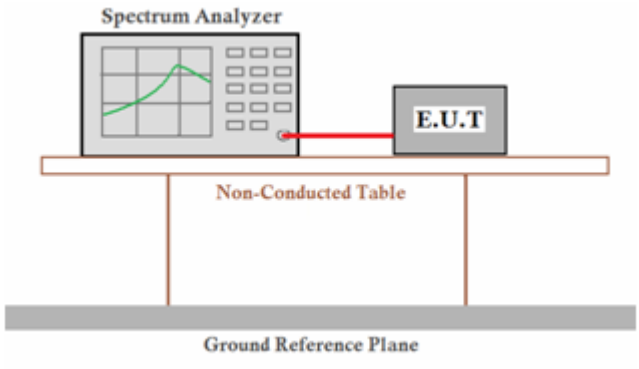
Limit

The 20dB bandwidth shall be less than 80% of the permitted frequency band.

Test Procedure

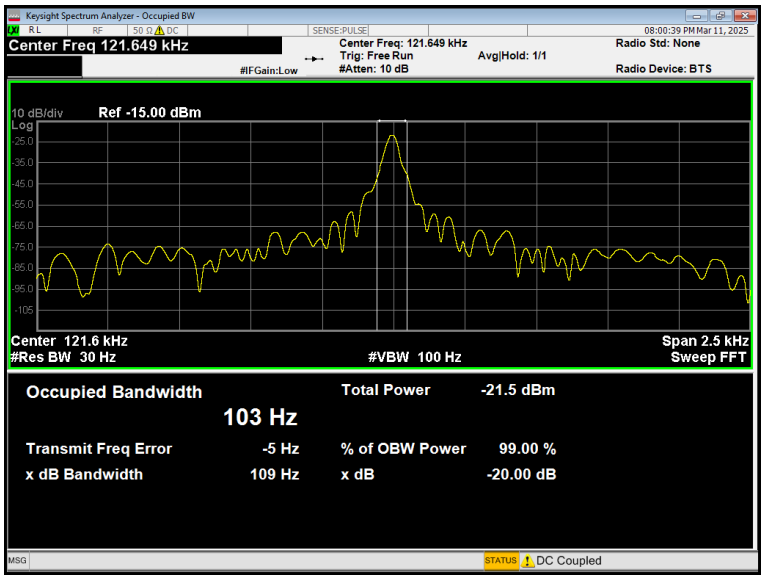
1. Set RBW = 3Hz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

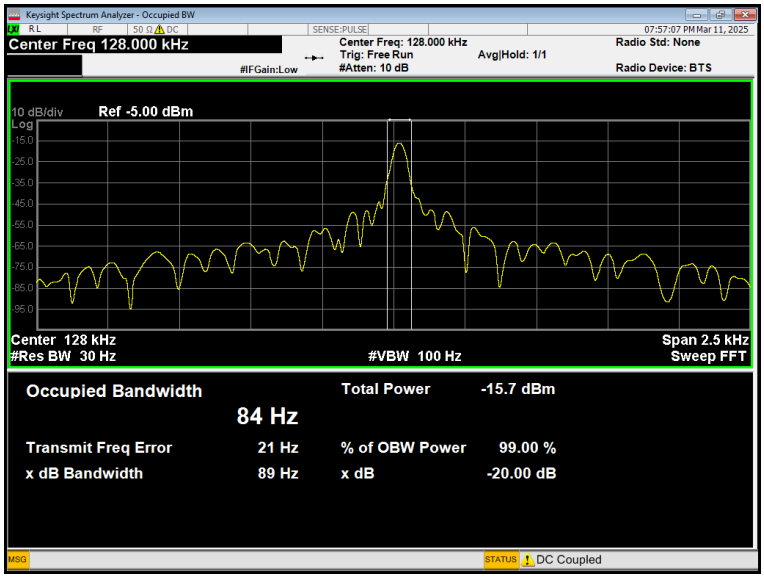
Test setup

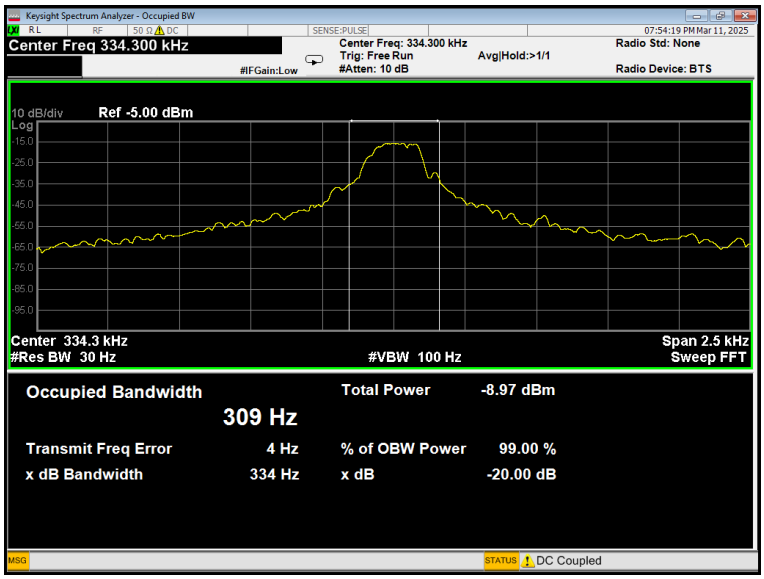


Test Results

Mode	Frequency (KHz)	20dB Bandwidth (KHz)	99% OBW (KHz)	Conclusion
Test Mode 1	121.649	0.109	0.103	PASS
Test Mode 4	128.000	0.089	0.084	PASS
Test Mode 5	334.300	0.334	0.309	PASS


Keysight Spectrum Analyzer - Occupied BW
Center Freq 121.649 kHz
Center Freq: 121.649 kHz
Trig: Free Run
Avg|Hold: 1/1
#Atten: 10 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
08:00:39 PM Mar 11, 2025
10 dB/div
Ref -15.00 dBm
Log
Center 121.6 kHz
#Res BW 30 Hz
#VBW 100 Hz
Span 2.5 kHz
Sweep FFT
Occupied Bandwidth
103 Hz
Total Power
-21.5 dBm
Transmit Freq Error
-5 Hz
% of OBW Power
99.00 %
x dB Bandwidth
109 Hz
x dB
-20.00 dB
MSG
STATUS
DC Coupled


Keysight Spectrum Analyzer - Occupied BW
Center Freq 128.000 kHz
Center Freq: 128.000 kHz
Trig: Free Run
Avg|Hold: 1/1
#Atten: 10 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
07:57:07 PM Mar 11, 2025
10 dB/div
Ref -5.00 dBm
Log
Center 128 kHz
#Res BW 30 Hz
#VBW 100 Hz
Span 2.5 kHz
Sweep FFT
Occupied Bandwidth
84 Hz
Total Power
-15.7 dBm
Transmit Freq Error
21 Hz
% of OBW Power
99.00 %
x dB Bandwidth
89 Hz
x dB
-20.00 dB
MSG
STATUS
DC Coupled


Keysight Spectrum Analyzer - Occupied BW
Center Freq 334.300 kHz
Center Freq: 334.300 kHz
Trig: Free Run
Avg|Hold:>1/1
#Atten: 10 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
07:54:19 PM Mar 11, 2025
10 dB/div
Ref -5.00 dBm
Log
Center 334.3 kHz
#Res BW 30 Hz
#VBW 100 Hz
Span 2.5 kHz
Sweep FFT
Occupied Bandwidth
309 Hz
Total Power
-8.97 dBm
Transmit Freq Error
4 Hz
% of OBW Power
99.00 %
x dB Bandwidth
334 Hz
x dB
-20.00 dB
MSG
STATUS
DC Coupled

3.4 Antenna Requirement

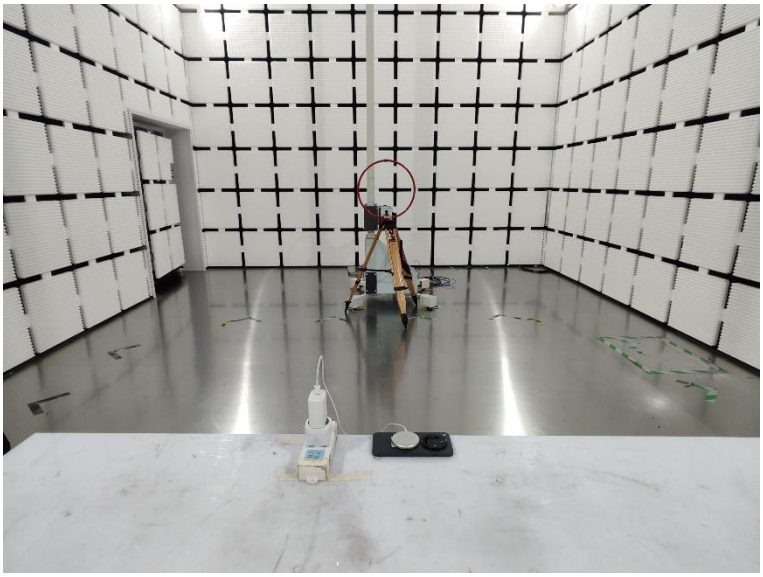
Standard Applicable

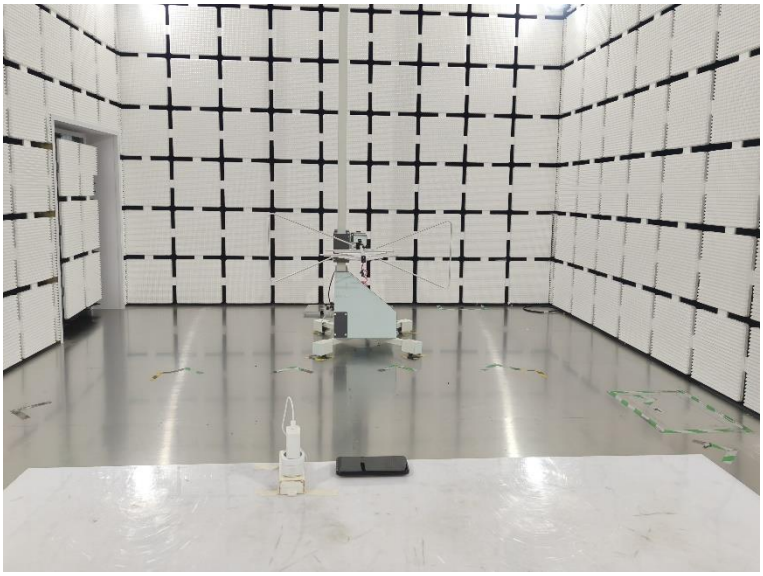
For intentional device, according to FCC 47 CFR Section 15.203:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, 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

Confirmation

The EUT's antenna is an Inductive Loop coil Antenna, the best case gain of the antenna is 0dBi.

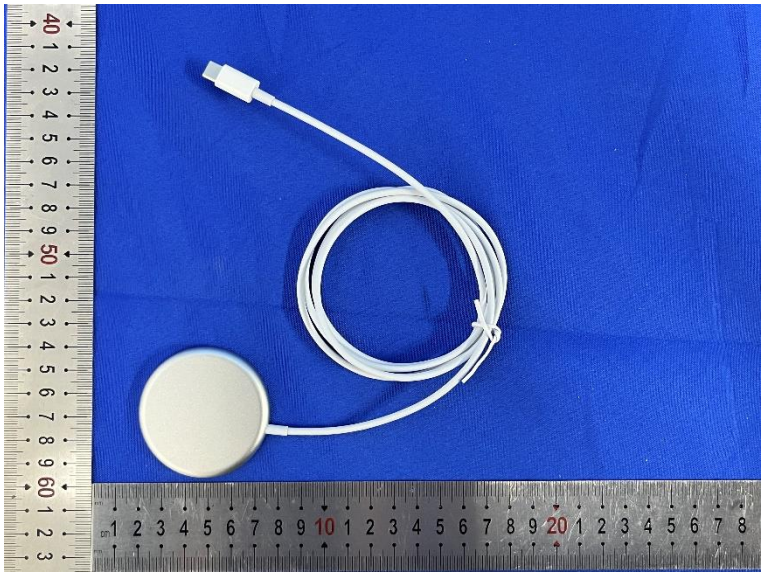
4 Test Setup Photographs of EUT

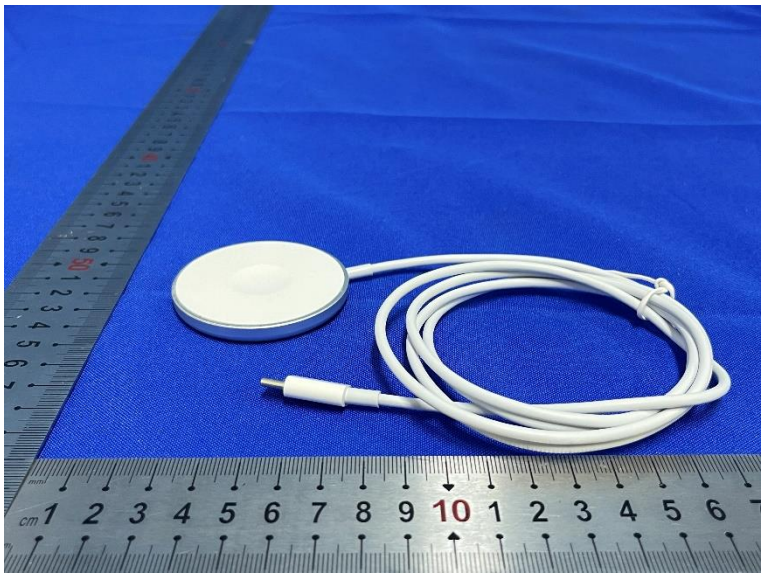




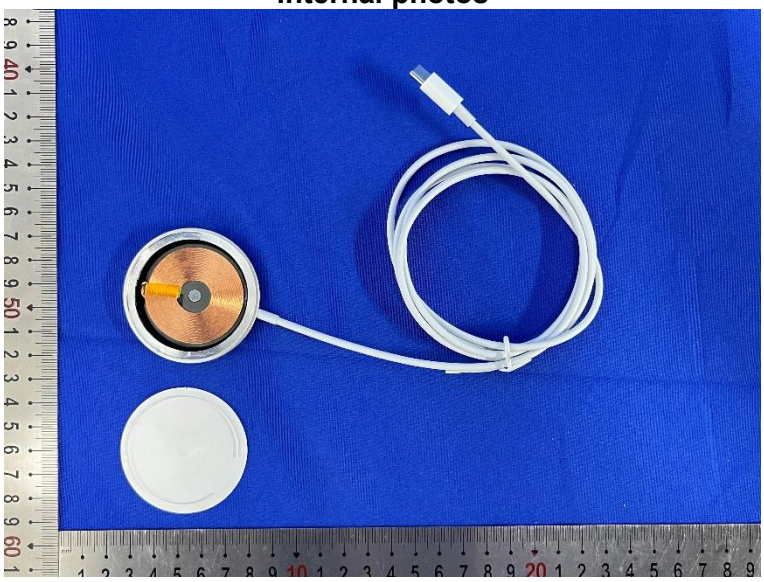
5 Photographs of EUT

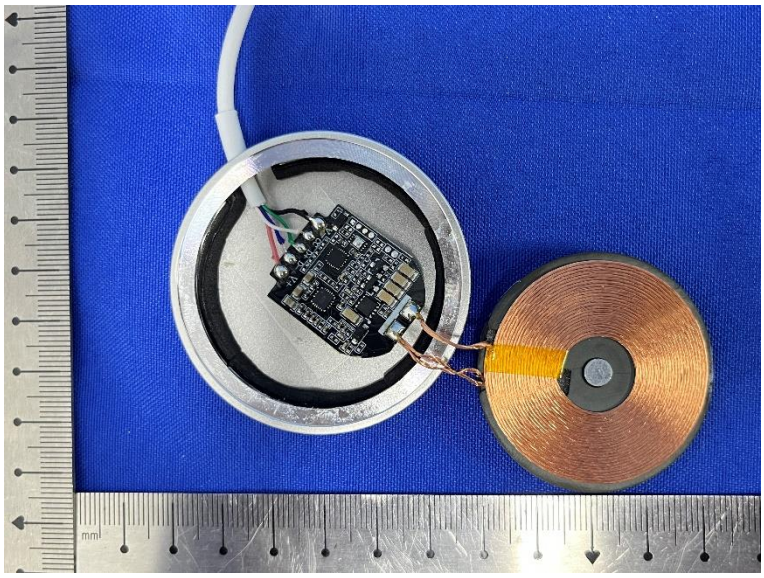
External photos

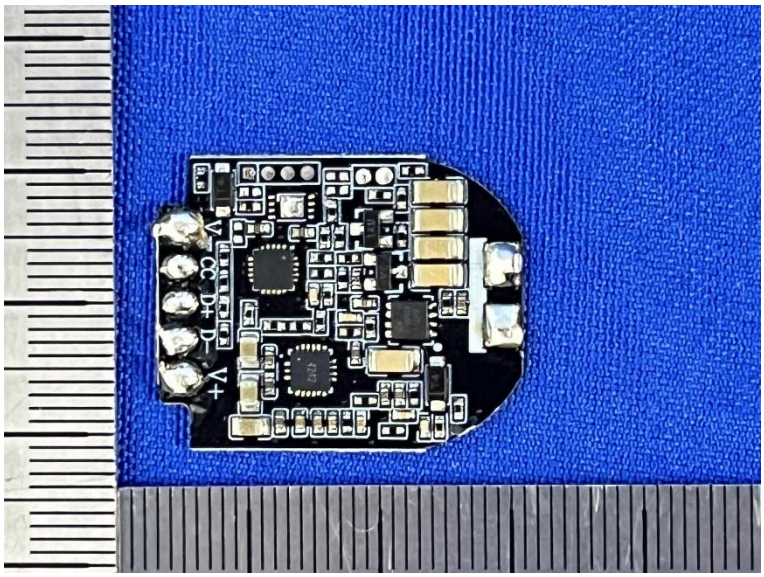


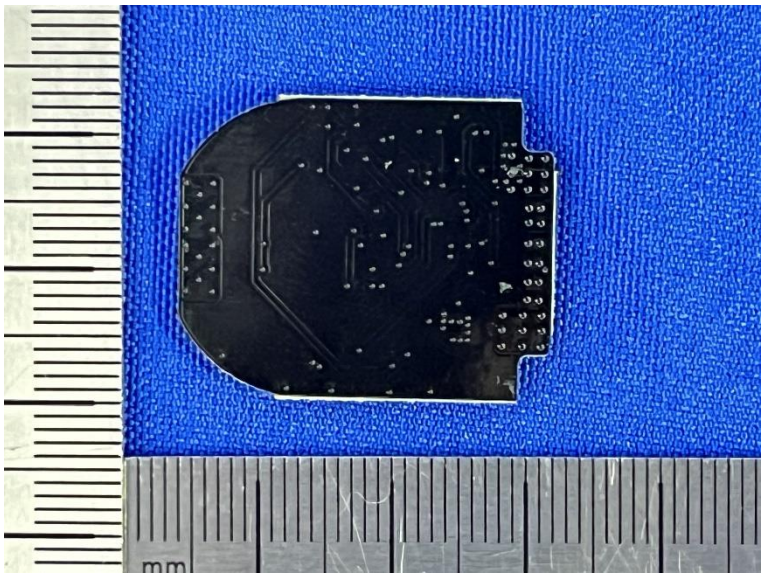


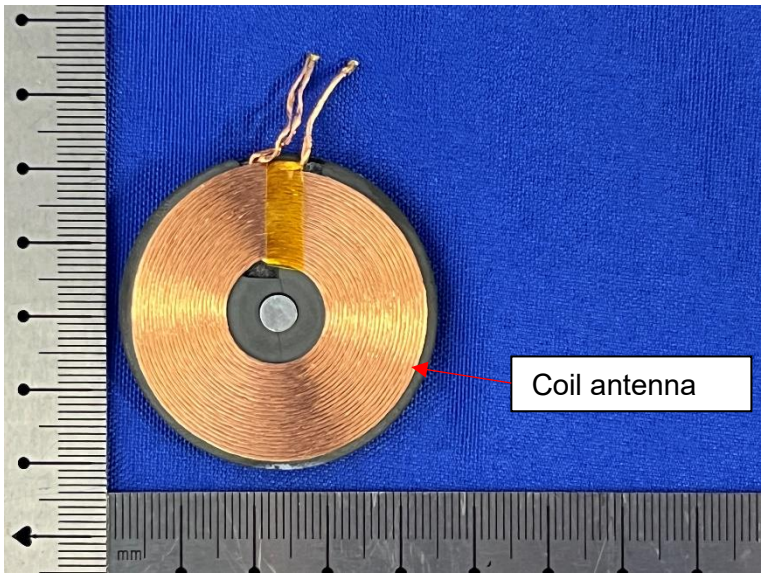
Internal photos











********** **End of Report** **********