



Product Name: Massage Chair	Report No: FCC022022-1038RF0
Product Model: EC-3209K, AM-Juno II	Security Classification: Open
Version: V1.0	Total Page: 35

TIRT Testing Report

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RF TEST REPORT

FCC ID: YMX-EC3209K1

According to

47 CFR FCC Part 15, Subpart C

ANSI C63.10:2013

Equipment : Massage Chair
Model No. : EC-3209K, AM-Juno II
Trademark : /
Product No. : 20220311003340
Applicant : XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD.
Address : (5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA

- The test result referred exclusively to the presented test model /sample.
- Without written approval of TIRT Inc. the test report shall not reproduced except in full.
- Test Date: 2022.03.10-2022.03.21
- Receipt Date: 2022.03.10

Lab: Beijing TIRT Technology Service Co.,Ltd Shenzhen
Add: 101, 3 # Factory Building, Gongjin Electronics Shatin Community, Kengzi Street,
Pingshan District, Shenzhen, China
TEL: +86-0755-27087573

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History of this test report

Original Report Issue Date: 2022.05.18

- ☒ No additional attachment
- ☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General Information

1.1 Applicant

XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD.

(5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA

1.2 Manufacturer

XIAMEN HEALTHCARE ELECTRONIC CO.,LTD

65-66#, 62-63# BUILDING, SIMING ZONE, TONGAN INDUSTRIAL DISTRICT, XIAMEN
CITY, FUJIAN PROVINCE, P.R.CHINA

1.3 Factory

XIAMEN HEALTHCARE ELECTRONIC CO.,LTD

65-66#, 62-63# BUILDING, SIMING ZONE, TONGAN INDUSTRIAL DISTRICT, XIAMEN
CITY, FUJIAN PROVINCE, P.R.CHINA

1.4 Basic Description of Equipment Under Test

Items	Description
Equipment Name	Massage Chair
Model Number	EC-3209K, AM-Juno II
Trademark	/
Power supply	110-120V~ 60Hz
Max output power	10W
Standby power	<0.5W
Effective Charging Distance	3.5mm max from Tx-coil to Rx-coil
Efficiency	70% Min
Charge area	10mm*10mm
Modulation type	ASK
Operating frequency	110kHz~205kHz
Antenna type	Coil Antenna
Hardware Vision	1.0
Software Vision	1.0

Note:

All model: EC-3209K, AM-Juno II

Only the model EC-3209K was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being model name.

1.5 Application of Standard

47 CFR FCC Part 15, Subpart C and ANSI C63.10:2013

1.6 Operating Modes of EUT

The EUT was tested under the following modes the final worst mode was marked in boldface and recorded in this report.

Test frequency	Test mode	Test voltage
111~130kHz	Wireless charging + Transmitting	120 AC
140~160kHz	Standby + Transmitting	

2. Summary of Test Results

2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart C			
Test Item	FCC Clause	Results	Remarks
AC Power Conducted Emission	15.207	Pass	Meet the requirement of the limit
Radiated Emission	15.209	Pass	Meet the requirement of the limit
Antenna Requirement	15.203	Pass	Meet the requirement of the limit
20dB Bandwidth	15.215(c)	Pass	Meet the requirement of the limit
Note: NA denotes Not Applicable in this part			

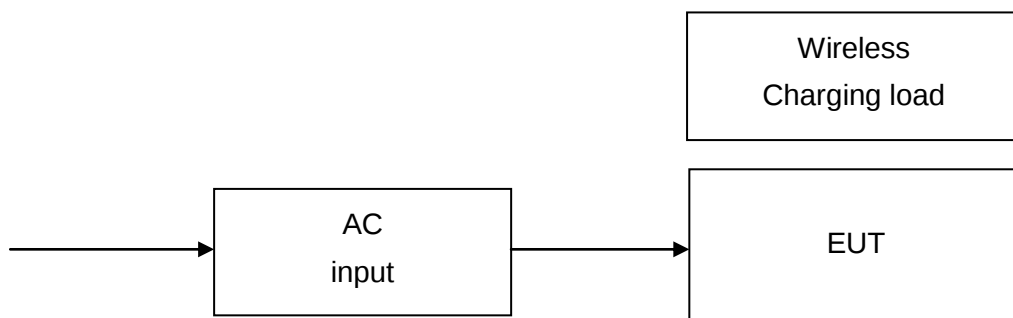
2.2 Test Instruments

No.	Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
Conducted Emission					
1	EMI Receiver	Rohde&Schwarz	ESCI	1166.5950.03	2022/11/09
2	AMN	Rohde&Schwarz	ENV216	3560.6550.05	2022/11/09
3	AMN	Schwarzbeck	NSLK8127	#829	2022/11/09
4	ECSI RF IN RF Cable	Rohde&Schwarz	RP-X1	\	2022/11/09
5	ECSI RF IN RF Cable	Rohde&Schwarz	Sapre sm	\	2022/11/09
6	Testing Software	EZ-EMC	TW-03A2	\	\
Radiated Emission					
1	EMI Receiver	Rohde&Schwarz	ESR7	102013	2022/11/09
2	Spectrum analyzer	Rohde&Schwarz	FSV30	103741	2022/11/09
3	Spectrum analyzer	KEYSIGHT	N9010A-44	MY51440158	2022/11/09
4	Integral Antenna	Schwarzbeck	VULB 9163	VULB 9163-361	2022/11/20
5	Integral Antenna	Schwarzbeck	FMZB 1519B	FMZB 1519B-00029	2022/11/04
6	Integral Antenna	Schwarzbeck	BBHA 9170	9170#685	2022/11/20
7	Preamplifier	CD Systems Inc	PAP-03036-30	85060000	2022/11/09
8	Preamplifier	Schwarzbeck	BBV9721	9721-019	2022/11/09
9	Preamplifier	emci	EMC01263 0SE	980417	2022/11/09
10	ECSI RF IN RF Cable	Rohde&Schwarz	AP-X1	\	2022/11/09
11	ECSI RF IN RF Cable	HAOXUN	Z-108	\	2022/11/09

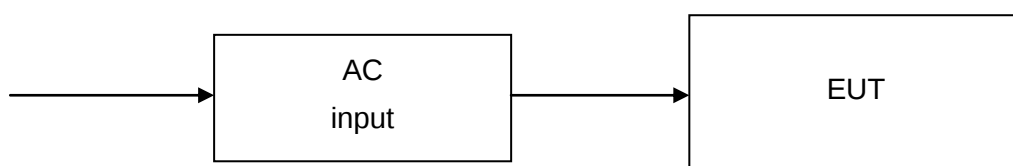
12	Testing Software	EZ-EMC	TW-03A2	\	\
20dB Bandwidth					
1	Spectrum analyzer	Agilent	N9010A	MY52221119	2022/11/09
2	Temp&Humidity Recorder	Anymetre	JR900	NA	2022/11/03

2.3 Configuration and Connections with EUT

Charging Mode with Load:



Standby Mode:



No.	Equipment	Model	Brand	FCC ID	Series No
1	Mobile phone	Phone13	Apple	DoC	/

Note:

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

2.4 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
AC Power Conducted Emission	24.6°C, 56 % RH	120Vac, 60Hz	Stone Tang
Radiated Emission	24.2°C, 55 % RH	120Vac, 60Hz	Stone Tang
Antenna Requirement	24.6°C, 56 % RH	120Vac, 60Hz	Stone Tang
20dB Bandwidth	24.6°C, 56 % RH	120Vac, 60Hz	Stone Tang

2.5 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Uncertainty	
Parameter	Uncertainty
Bandwidth	± 142.12 KHz
Spurious emissions, radiated (9KHz~30MHz)	± 2.56 dB
Spurious emissions, radiated (30MHz~1GHz)	± 4.6 dB
Spurious emissions, radiated (1GHz ~ 18GHz)	± 4.9 dB
Conduction Emissions(9kHz~30MHz)	± 3.1 dB
Humidity	$\pm 4.6\%$
Temperature	$\pm 0.7^{\circ}\text{C}$
Time	$\pm 1.25\%$

2.6 Test Location

Company:	Beijing TIRT Technology Service Co.,Ltd Shenzhen
Address:	101, 3 # Factory Building, Gongjin Electronics Shatin Community, Kengzi Street, Pingshan District, Shenzhen, China
CNAS Registration Number:	CNAS L14158
A2LA Registration Number	6049.01
Telephone:	+86-0755-27087573

2.7 Deviation from Standards

None

2.8 Abnormalities from Standard Conditions

None

3. Test Procedure And Results

3.1 AC Power Line Conducted Emission

3.1.1 Limit

FREQUENCY (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15 ~ 0.50	66 - 56	56 - 46
0.50 ~ 5.00	56	46
5.00 ~ 30.0	60	50

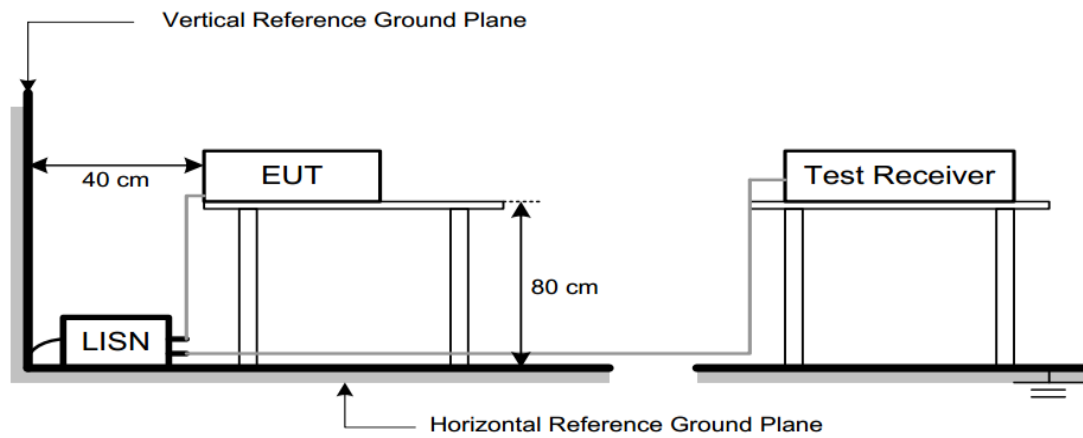
Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.1.2 Test Procedure

- a) The EUT was placed 0.8 m from the horizontal ground plane and 0.4 m from the vertical groundplane with EUT being connected to the power mains through a line impedance stabilization network (AMN). All other support equipment powered from additional AMN. The AMN provide 50 Ohm/ 50 uH of coupling impedance for the measuring instrument.
- b) Interconnecting cables that hang closer than 0.4 m to the ground plane shall be folded back and forth in the center forming a bundle 0.3 m to 0.4 m long.
- c) The frequency range from 150 kHz to 30 MHz was searched.
- d) Actual test configuration, please refer to the related Item – EUT Test Photos.
- e) The thickness of the insulation shall not be more than 150 mm.

3.1.3 Test Setup

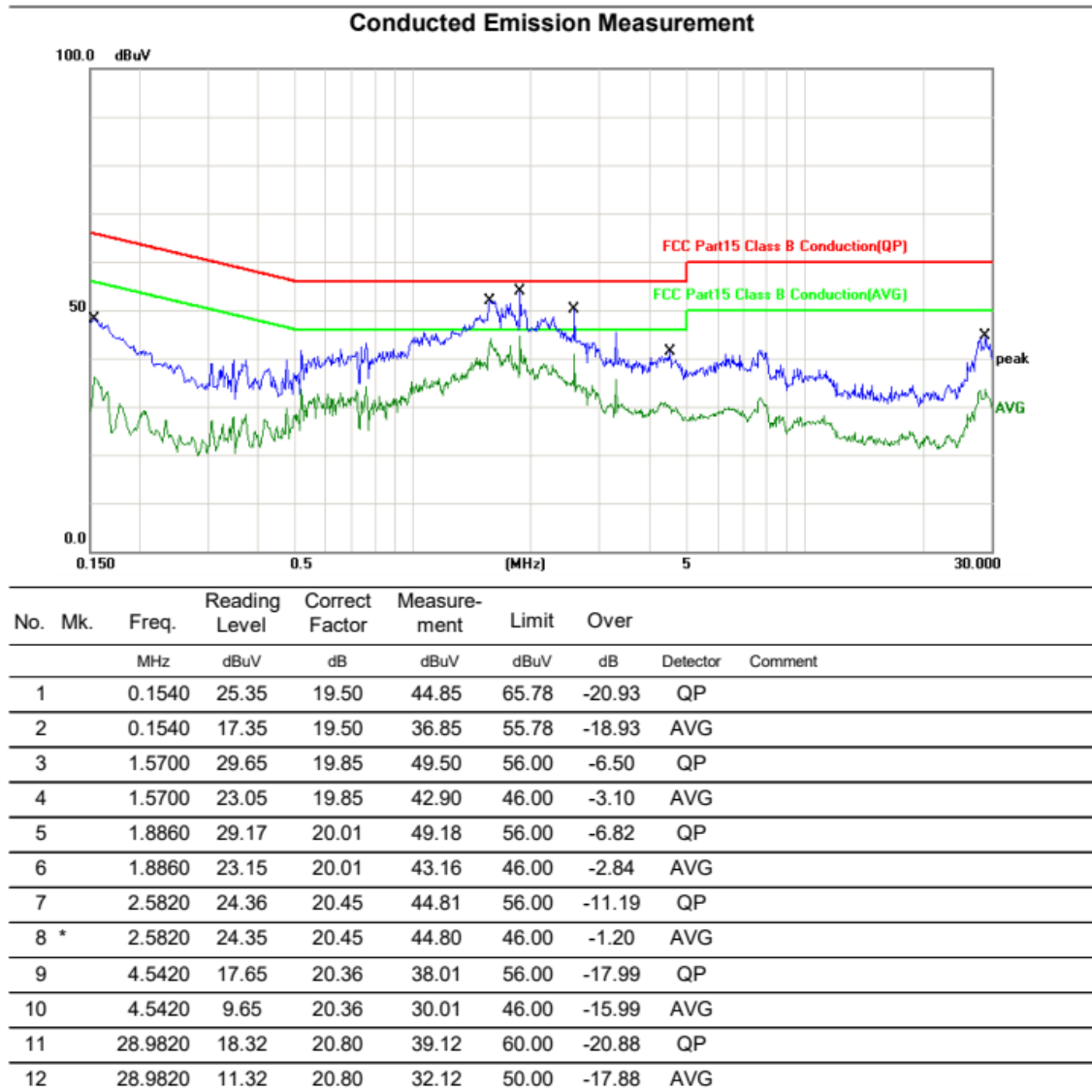


Note: For the actual test configuration, please refer to the related item – Photographs of the test configuration

3.1.4 Test Result of AC Power Line Conducted Emission

150kHz~30MHz	Test mode: AC 120V/60Hz
--------------	-------------------------

Line



Note:

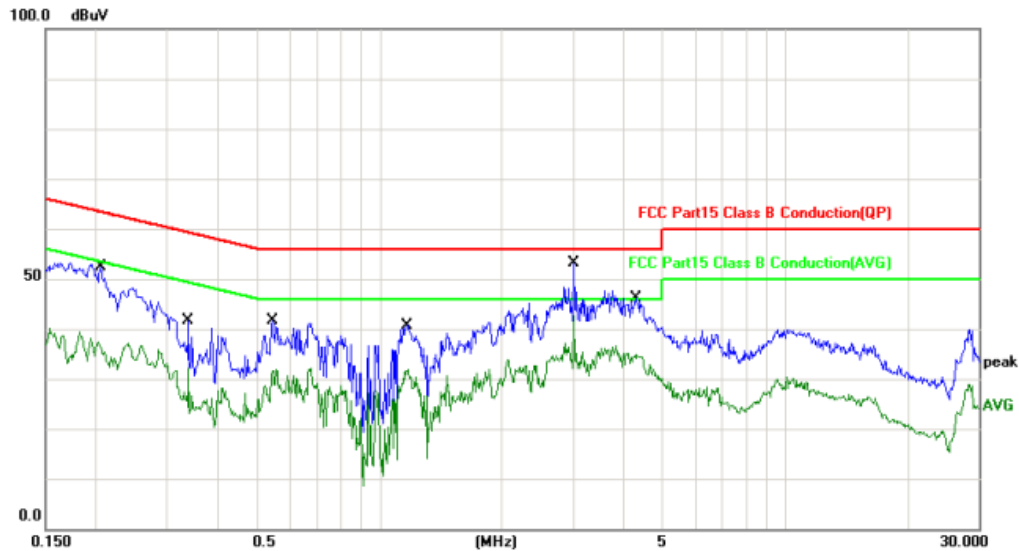
1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result - Limit

150kHz~30MHz

Test mode: AC 120V/60Hz

Neutral

Conducted Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2060	30.54	19.70	50.24	63.37	-13.13	QP	
2		0.2060	20.32	19.70	40.02	53.37	-13.35	AVG	
3		0.3380	19.36	19.70	39.06	59.25	-20.19	QP	
4		0.3380	12.65	19.70	32.35	49.25	-16.90	AVG	
5		0.5460	19.65	19.75	39.40	56.00	-16.60	QP	
6		0.5460	10.32	19.75	30.07	46.00	-15.93	AVG	
7		1.1660	18.22	19.94	38.16	56.00	-17.84	QP	
8		1.1660	10.35	19.94	30.29	46.00	-15.71	AVG	
9		3.0180	31.64	20.23	51.87	56.00	-4.13	QP	
10	*	3.0180	23.35	20.23	43.58	46.00	-2.42	AVG	
11		4.2740	22.95	20.31	43.26	56.00	-12.74	QP	
12		4.2740	15.97	20.31	36.28	46.00	-9.72	AVG	

Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result - Limit

3.2 Radiated Emissions up to 1 GHz

3.2.1 Limit

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

Frequencies (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

- Note:
- (1) The lower limit shall apply at the transition frequencies.
 - (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).
 - (3) As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
 - (4) The measured field strength was extrapolated to distance 30 meters, using the formula that the limit of field strength varies as the inverse distance square (40dB per decade of distance)

3.2.2 Test Procedure

Below 30MHz

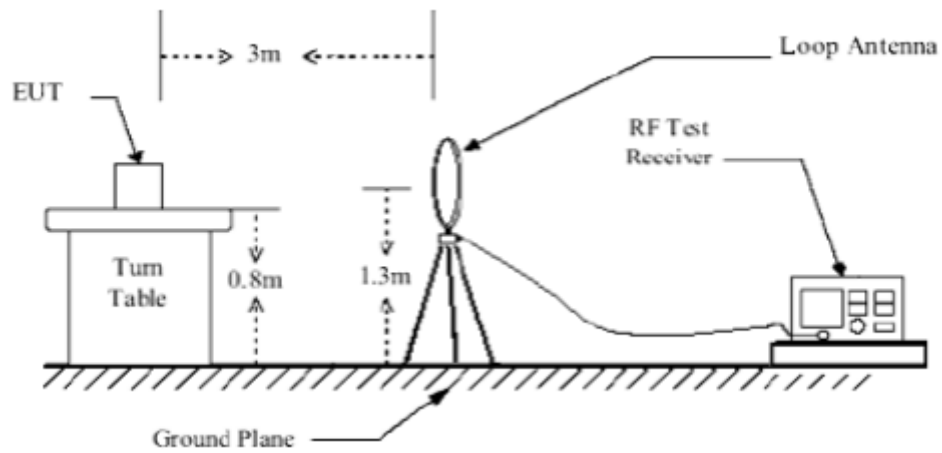
- a) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meters Semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c) The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1.3 meter and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e) The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

30MHz~1GHz

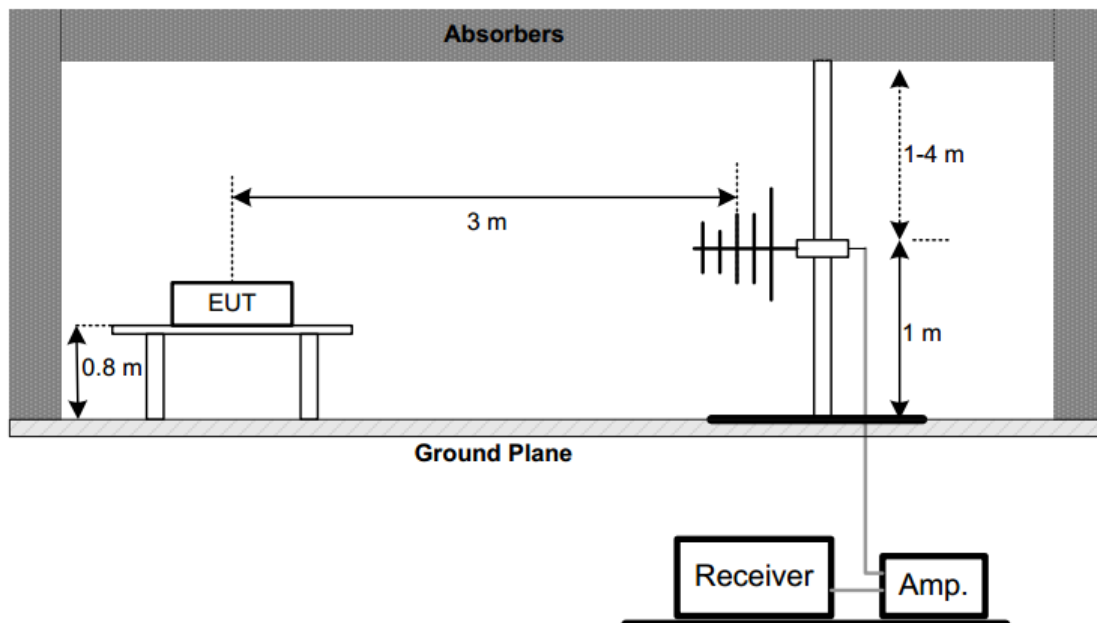
- a) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c) The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

3.2.3 Test Setup

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



(B) Radiated Emission Test Set-Up Frequency Below 1 GHz

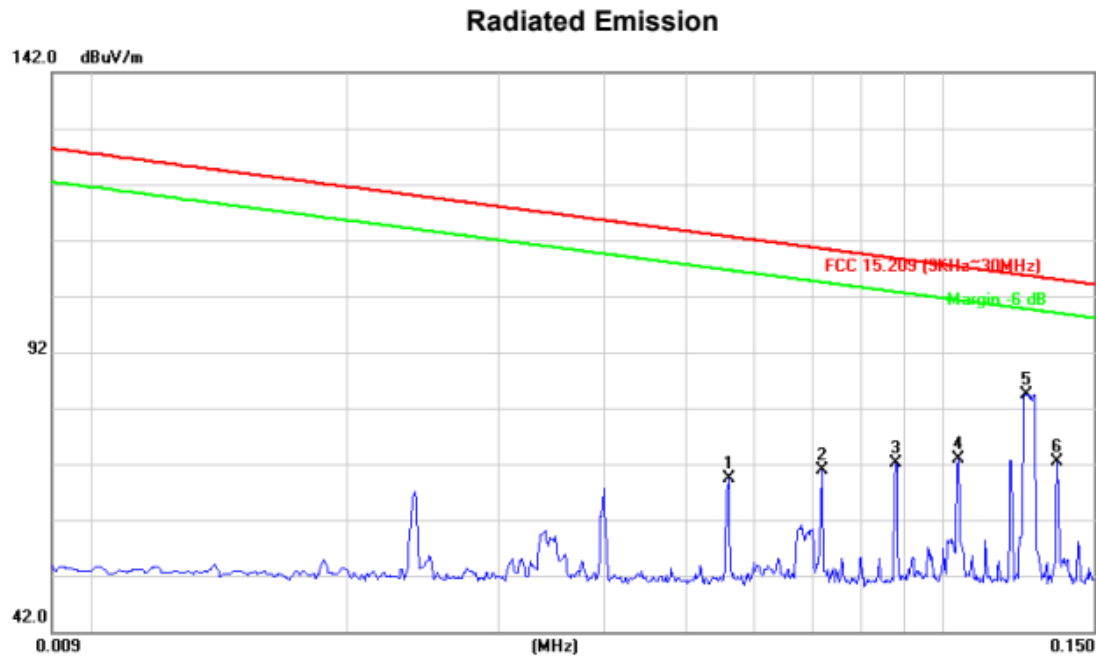


3.2.4 Test Result of Radiated Emission

0.009MHz~0.150MHz

Test mode: Wireless charging + Transmitting

Parallel

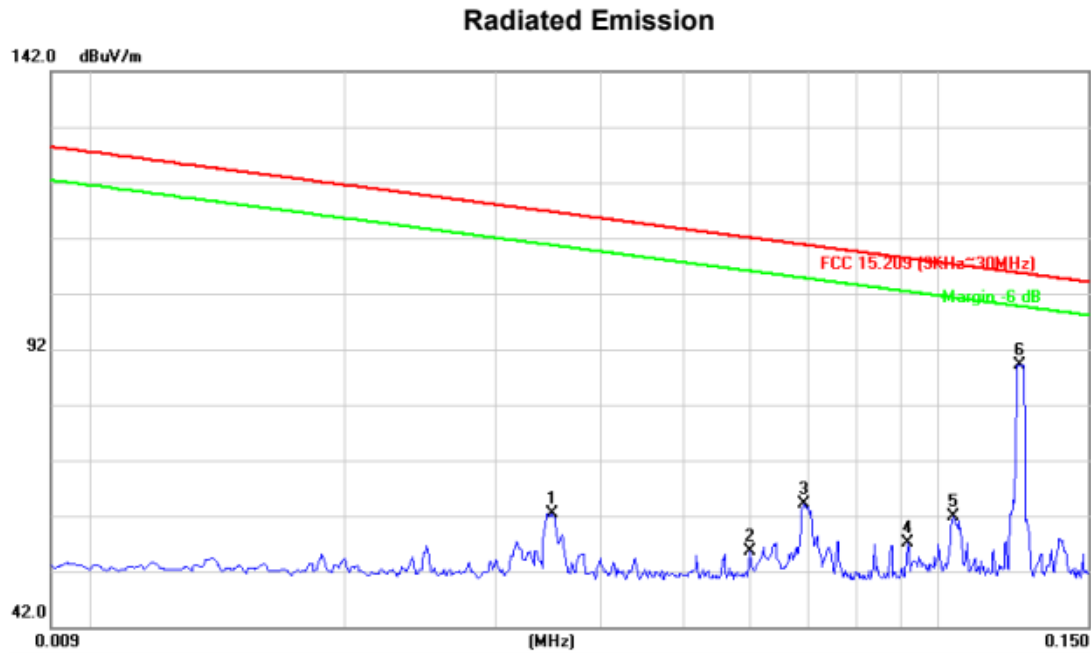


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(cm)	Table Angle (Degree)
1	0.0560	47.63	21.67	69.30	112.62	-43.32	100	122
2	0.0720	48.93	21.89	70.82	110.45	-39.63	100	254
3	0.0880	50.08	21.93	72.01	108.71	-36.7	100	241
4	0.1041	50.75	22.06	72.81	107.26	-34.45	100	147
5	0.1252	62.27	22.19	84.46	105.66	-21.2	100	193
6	0.1361	49.9	22.38	72.28	104.93	-32.65	100	209

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Perpendicular



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(cm)	Table Angle (Degree)
1	0.0351	40.69	21.75	62.44	116.66	-54.22	100	201
2	0.0600	33.76	21.84	55.60	112.02	-56.42	100	38
3	0.0694	42.25	21.89	64.14	110.77	-46.63	100	126
4	0.0921	35.00	22.02	57.02	108.32	-51.3	100	289
5	0.1041	39.92	22.06	61.98	107.26	-45.28	100	39
6	0.1248	66.75	22.37	89.12	105.68	-16.56	100	218

Note:

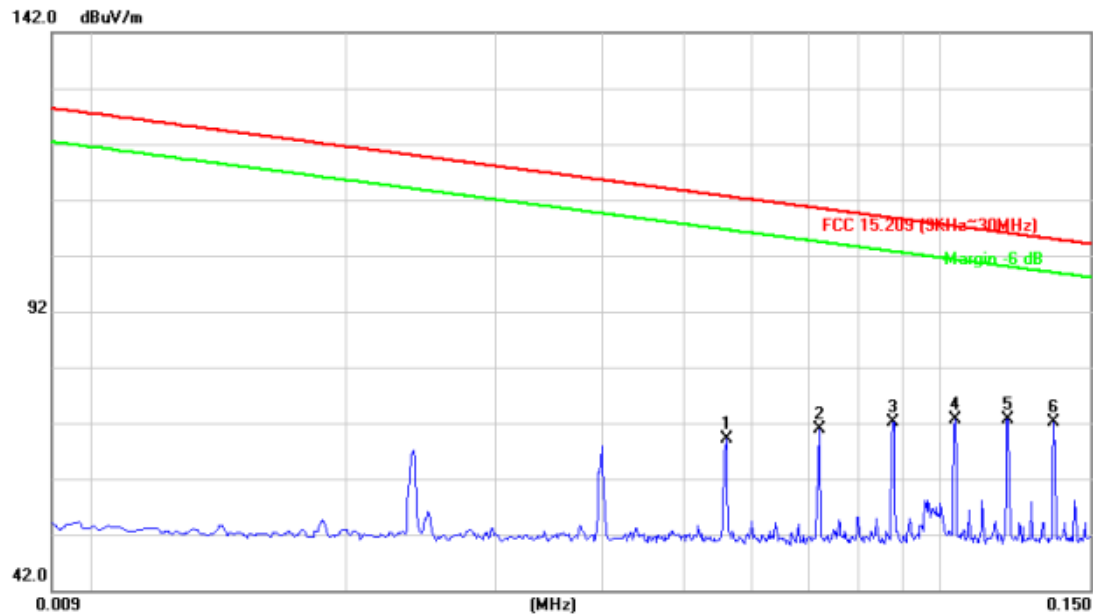
1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

0.009MHz~0.150MHz

Test mode: Standby + Transmitting

Parallel

Radiated Emission



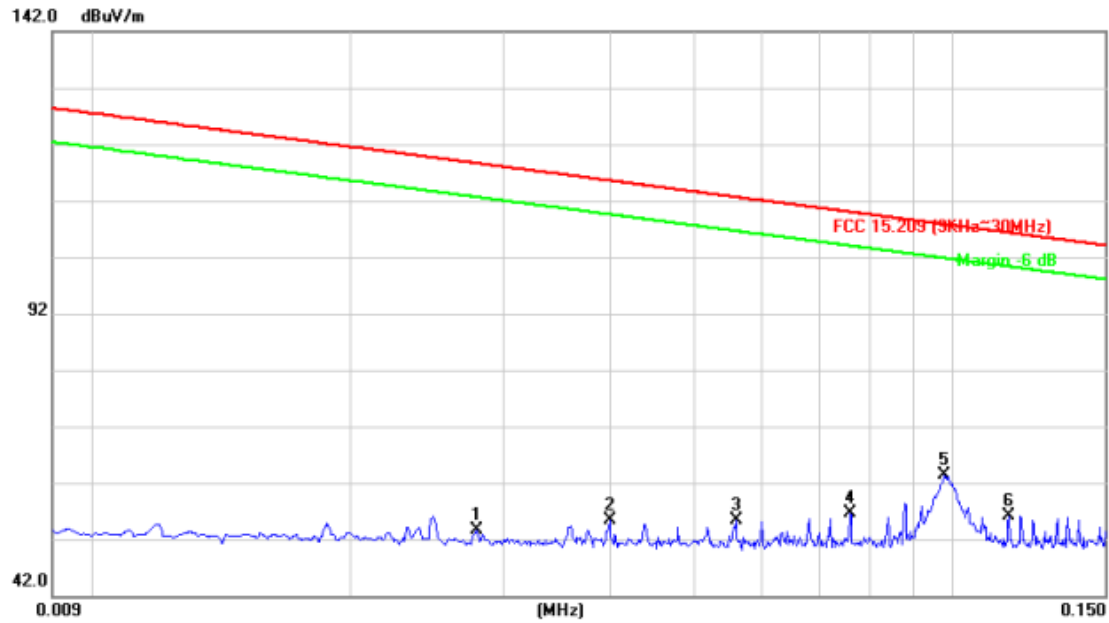
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(cm)	Table Angle (Degree)
1	0.0560	47.48	21.67	69.15	112.62	-43.47	100	120
2	0.0720	48.89	21.89	70.78	110.45	-39.67	100	251
3	0.0880	50.23	21.93	72.16	108.71	-36.55	100	248
4	0.1041	50.66	22.06	72.72	107.26	-34.54	100	144
5	0.1202	50.59	22.12	72.71	106.01	-33.3	100	195
6	0.1361	49.85	22.38	72.23	104.93	-32.7	100	209

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Perpendicular

Radiated Emission



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(cm)	Table Angle (Degree)
1	0.0280	31.99	21.57	53.56	118.61	-65.05	100	117
2	0.0400	33.75	21.65	55.40	115.53	-60.13	100	234
3	0.0560	33.64	21.79	55.43	112.62	-57.19	100	28
4	0.0760	34.53	22.08	56.61	109.98	-53.37	100	102
5	0.0980	41.22	22.28	63.50	107.78	-44.28	100	94
6	0.1161	33.74	22.39	56.13	106.31	-50.18	100	189

Note:

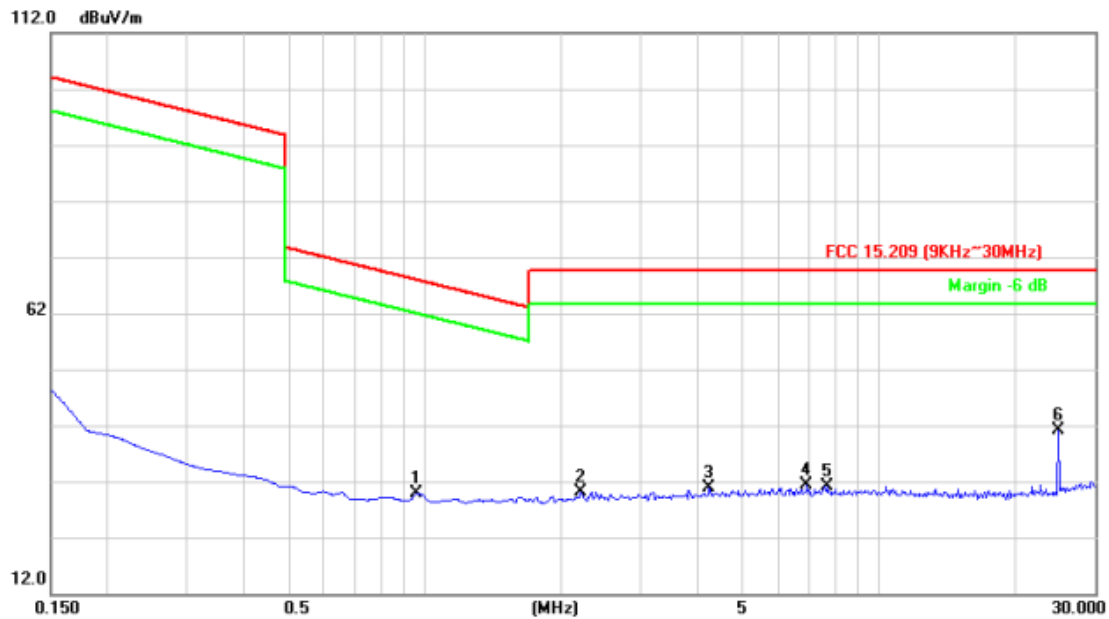
- Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
- Result = Reading + Correct Factor.
- Margin = Result – Limit

0.150MHz~30MHz

Test mode: Wireless charging + Transmitting

Parallel

Radiated Emission



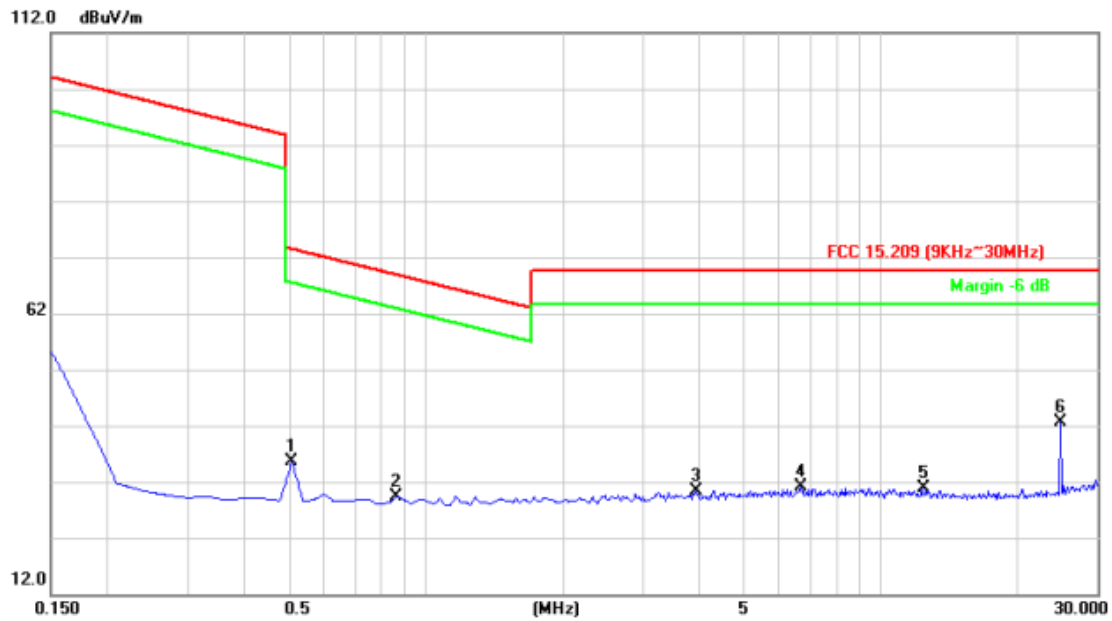
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(cm)	Table Angle (Degree)
1	0.9567	6.91	22.89	29.80	67.99	-38.19	100	56
2	2.2117	6.87	23.29	30.16	69.54	-39.38	100	114
3	4.2435	7.36	23.46	30.82	69.54	-38.72	100	208
4	6.9626	7.55	23.75	31.30	69.54	-38.24	100	175
5	7.6797	7.22	23.88	31.10	69.54	-38.44	100	32
6	25.0100	17.14	23.97	41.11	69.54	-28.43	100	287

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Perpendicular

Radiated Emission



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(cm)	Table Angle (Degree)
1	0.5085	12.72	22.82	35.54	73.78	-38.24	100	64
2	0.8671	6.17	23.30	29.47	68.84	-39.37	100	157
3	3.9447	6.91	23.41	30.32	69.54	-39.22	100	175
4	6.6936	7.44	23.76	31.20	69.54	-38.34	100	202
5	12.4604	6.95	23.89	30.84	69.54	-38.7	100	81
6	25.0100	18.67	23.97	42.64	69.54	-26.9	100	300

Note:

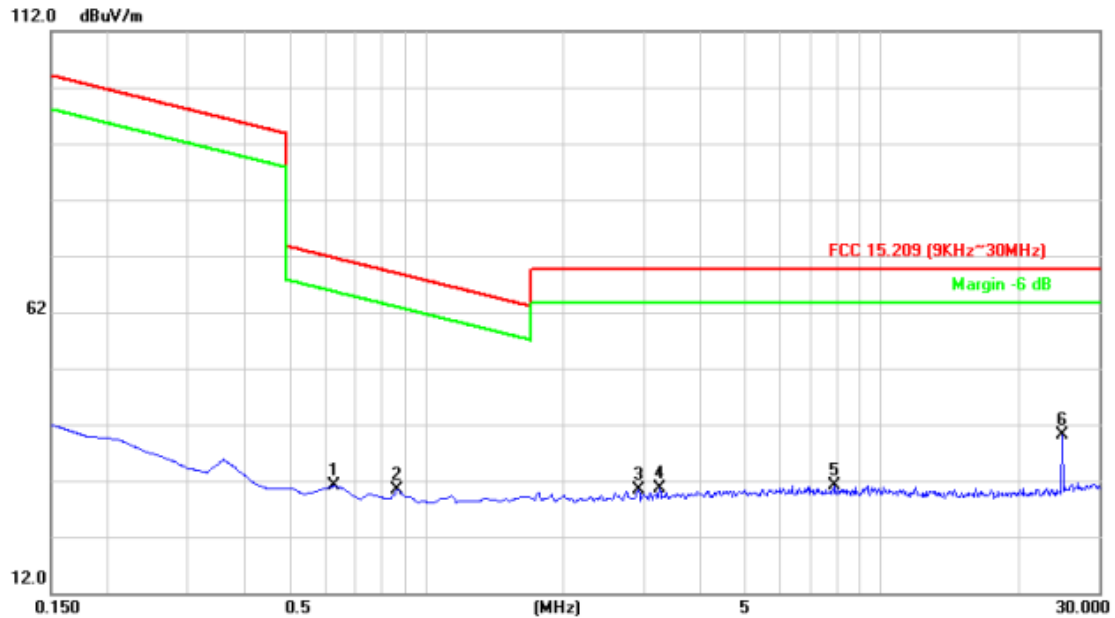
- Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
- Result = Reading + Correct Factor.
- Margin = Result – Limit

0.150MHz~30MHz

Test mode: Standby + Transmitting

Parallel

Radiated Emission



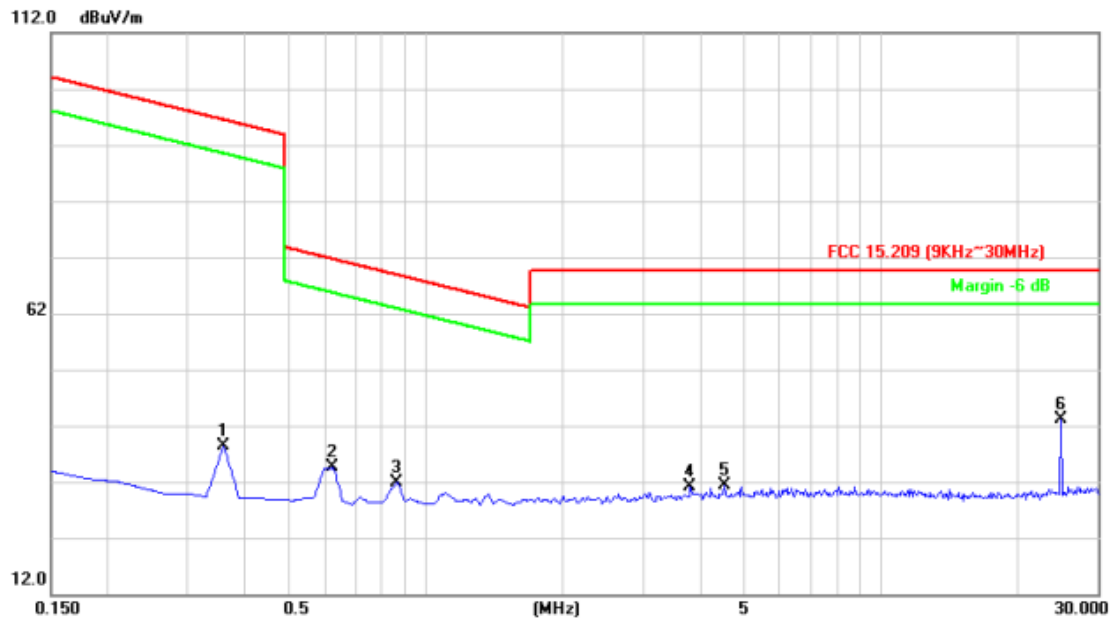
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(m)	Table Angle (Degree)
1	0.6280	8.24	22.83	31.07	71.64	-40.57	100	24
2	0.8671	7.25	23.05	30.30	68.84	-38.54	100	157
3	2.9288	7.08	23.28	30.36	69.54	-39.18	100	205
4	3.2575	7.34	23.36	30.70	69.54	-38.84	100	62
5	7.8888	7.67	23.47	31.14	69.54	-38.4	100	180
6	25.0100	16.15	23.97	40.12	69.54	-29.42	100	288

Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Perpendicular

Radiated Emission



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height(m)	Table Angle (Degree)
1	0.3591	15.68	22.82	38.50	96.50	-58.00	100	34
2	0.6280	11.47	23.04	34.51	71.64	-37.13	100	141
3	0.8671	8.67	23.32	31.99	68.84	-36.85	100	218
4	3.8252	7.86	23.29	31.15	69.54	-38.39	100	102
5	4.5423	7.87	23.48	31.35	69.54	-38.19	100	169
6	25.0100	19.14	23.97	43.11	69.54	-26.43	100	273

Note:

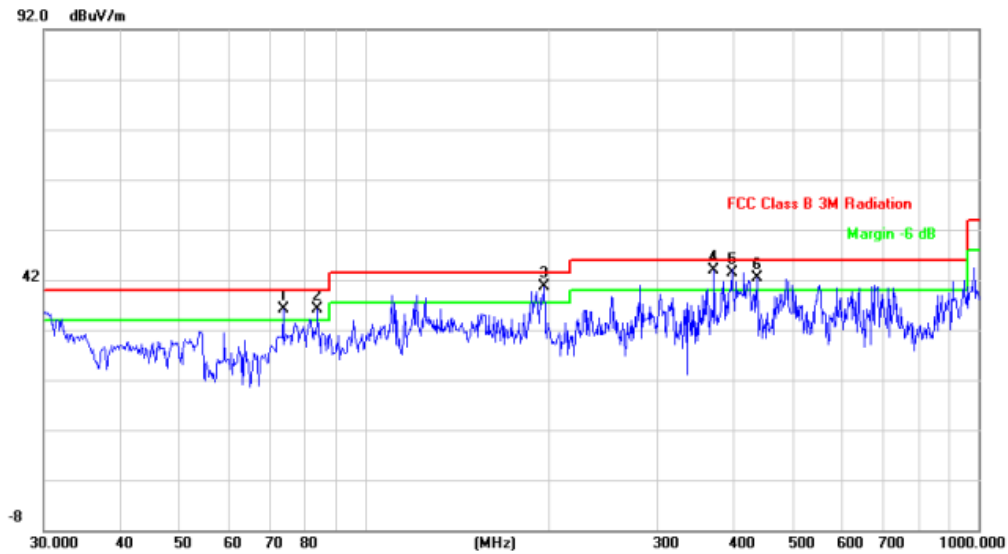
1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

30MHz~1GHz

Test mode: Wireless charging + Transmitting

Vertical

Radiated Emission

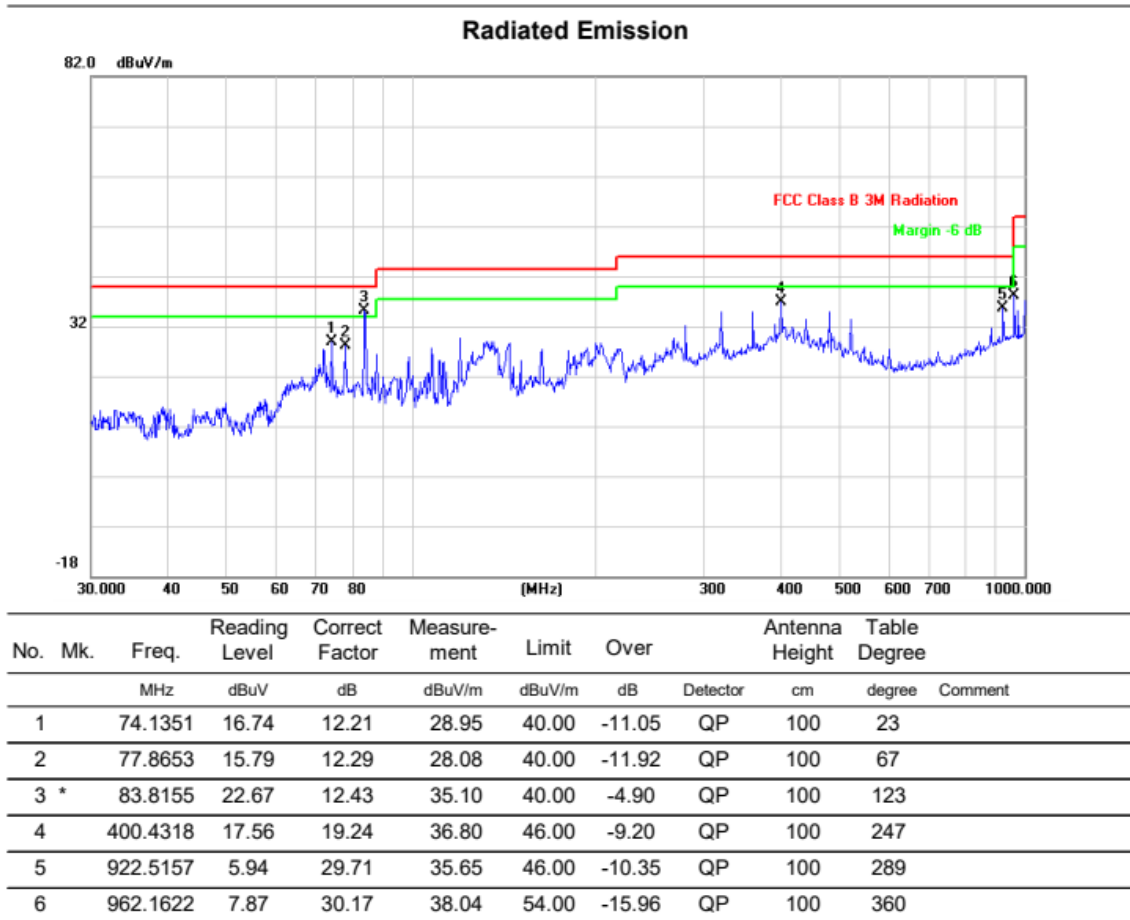


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	!	73.6170	21.37	14.71	36.08	40.00	-3.92	QP	100	35
2	!	83.8155	21.44	14.75	36.19	40.00	-3.81	QP	100	65
3	!	195.8220	24.91	15.61	40.52	43.50	-2.98	QP	100	128
4	*	370.7022	25.04	18.90	43.94	46.00	-2.06	QP	100	189
5	!	396.2412	24.15	19.21	43.36	46.00	-2.64	QP	100	360
6	!	435.5898	22.68	19.58	42.26	46.00	-3.74	QP	100	358

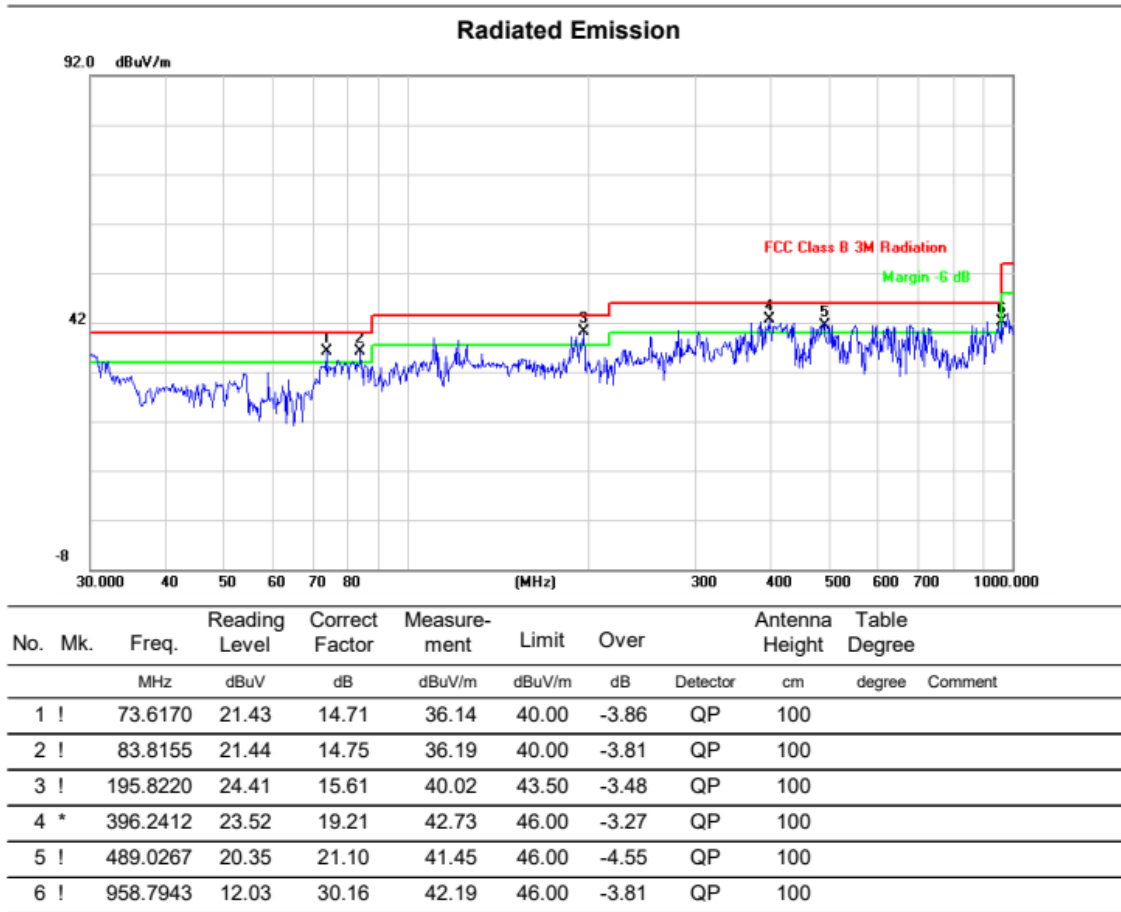
Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Horizontal


Note:

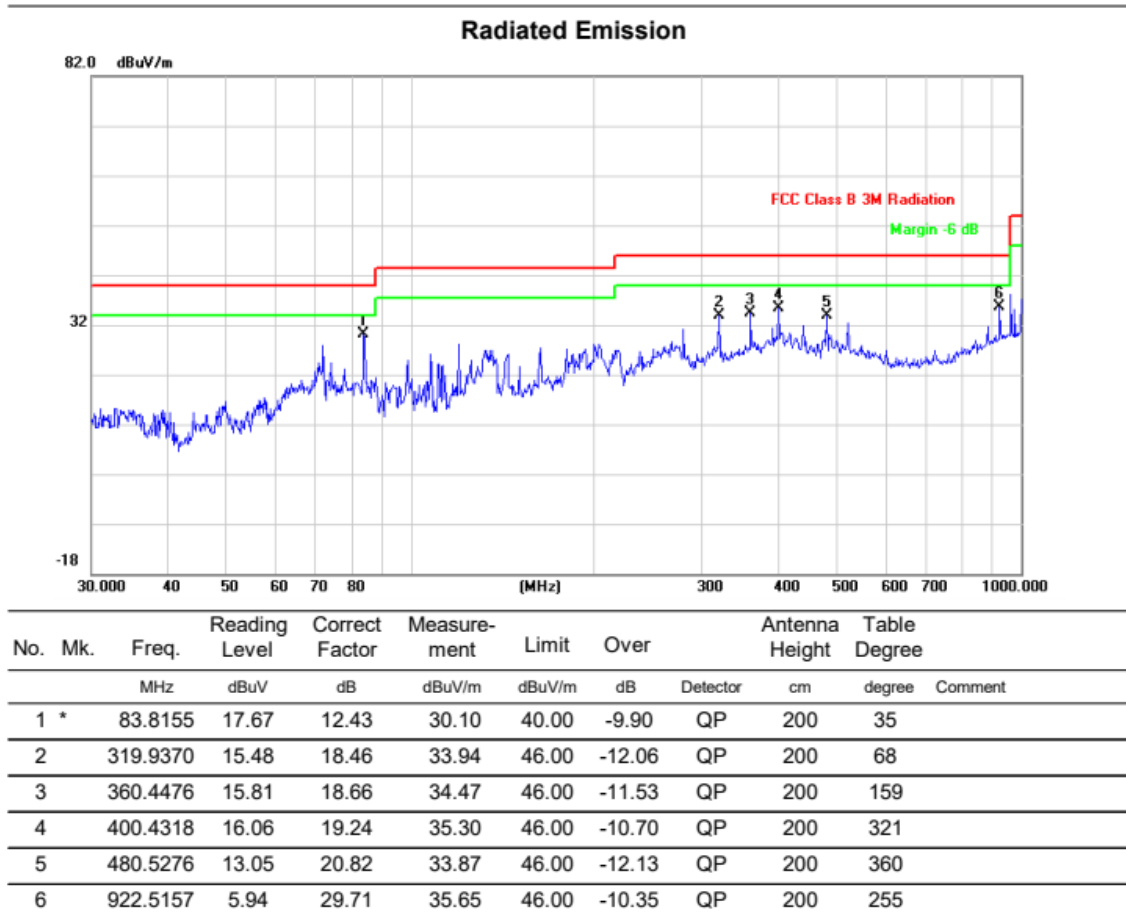
1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit



Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Horizontal


Note:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

3.3 20dB bandwidth measurement

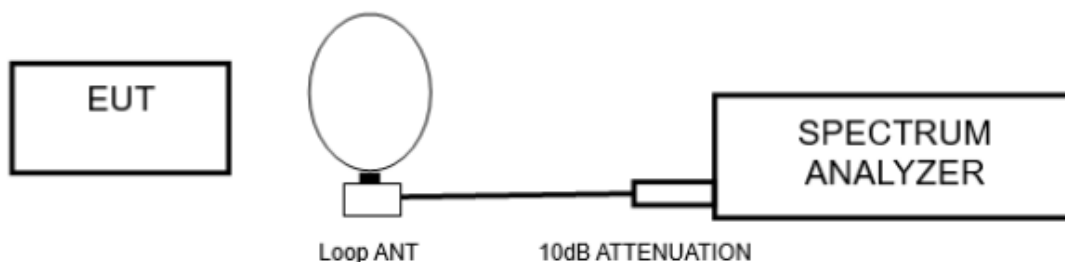
3.3.1 Limit

The field strength of any emissions appearing between the band edges and out of band shall be attenuated at least 20 dB below the level of the unmodulated carrier or to the general limits in Section 15.209

3.3.2 Test Procedure

Test Method	
☐ Conducted Measurement	☒ Radiated Measurement
Test Mode	
☒ Wireless charging + Transmitting	☒ Standby + Transmitting
Environmental Conditions	
☒ Normal	☐ Normal and Extreme
Note: ☒ : Test ☐ : No Test	

3.3.3 Test Setup



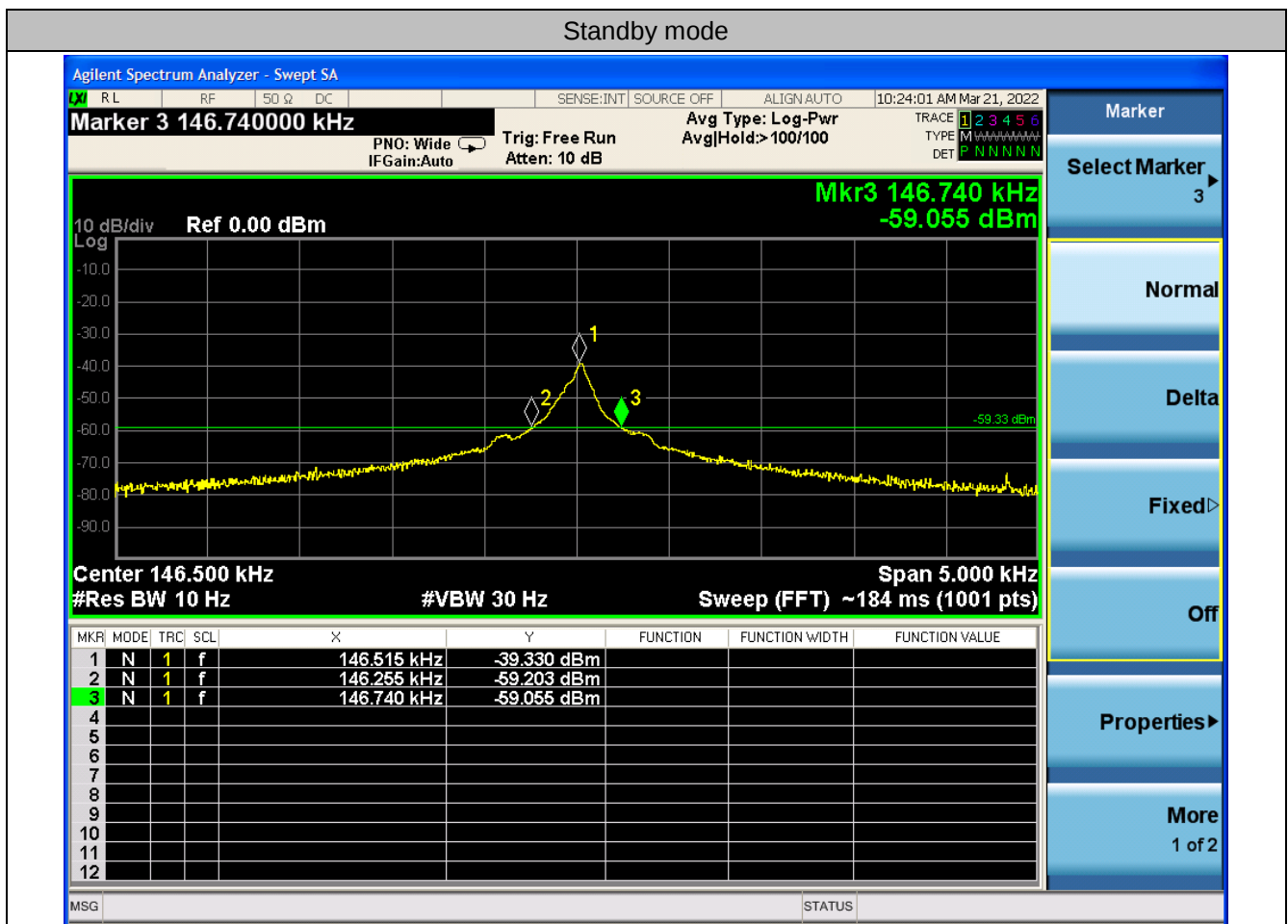
3.3.4 EUT operating condition

- Turn on the EUT.
- The EUT tested in charging mode and standby mode respectively.

3.3.5 Test results

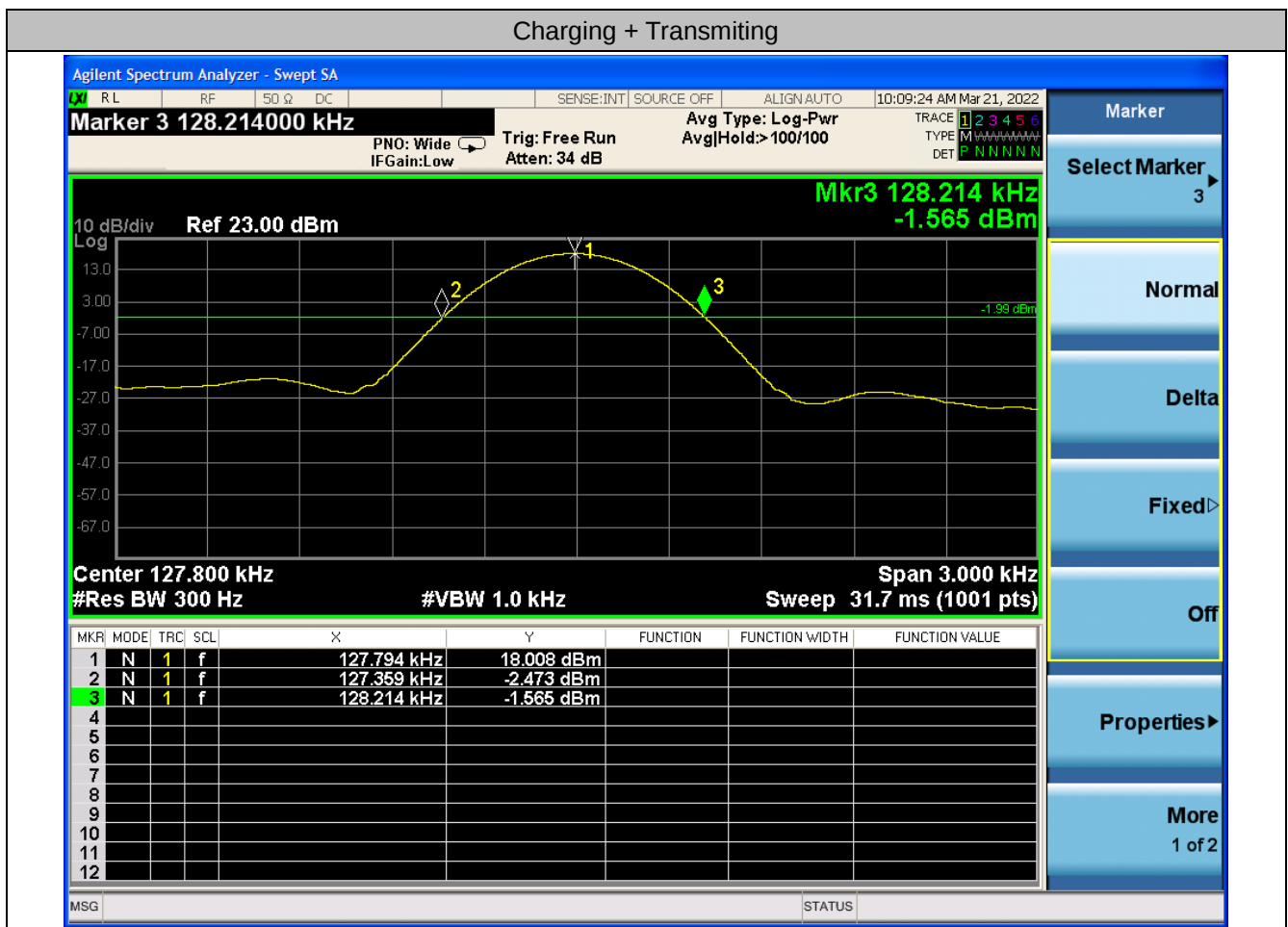
Test mode	Channel frequency (kHz)	20dB bandwidth (kHz)
Standby mode	140~160	0.485

Lower & Upper Test Frequency Point (MHz)	Test Frequency (KHz)	P/F
Lower	146.255	Pass
Upper	146.740	Pass



Test mode	Channel frequency (kHz)	20dB bandwidth (kHz)
Charging + Transmitting	111~130	0.855

Lower & Upper Test Frequency Point (MHz)	Test Frequency (KHz)	P/F
Lower	127.359	Pass
Upper	128.214	Pass



3.4 Antenna Requirement

3.4.1 Limit

15.203 requirement:

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.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.4.2 Conclusion

The antenna is Induction coil. The best case gain of the antenna is 0dBi.

4. Photographs of Test Set-up

See the Appendix of Radiated Test setup Photographs.

5. Photographs of EUT

See the Appendix of External Photographs and Internal Photographs.

(END OF REPORT)