TEST REPORT

Product Name : WII Switch Joy-Con controller for iPhone
Model Number : WII-20581
FCC ID : SQOWII20581

Prepared for	:	Ever Sparkle Technologies Ltd.
Address	:	Unit 403, Nan Fung Commercial Centre, 19 Lam Lok St., Kowloon Bay, Kowloon, Hong Kong.
Prepared by	:	EMTEK (SHENZHEN) CO., LTD.
Address	:	Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China Tel: (0755) 26954280 Fax: (0755) 26954282

Report Number	:	ENS2301030014W00201R
Date(s) of Tests	:	January 03, 2023 to January 31, 2023
Date of issue	:	January 31, 2023

$二维码$

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TEST RESULT CERTIFICATION

Applicant	:	Ever Sparkle Technologies Ltd.
Address	:	Unit 403, Nan Fung Commercial Centre, 19 Lam Lok St., Kowloon Bay, Kowloon, Hong Kong.
Manufacturer	:	Ever Sparkle Technologies Ltd.
Address	:	Unit 403, Nan Fung Commercial Centre, 19 Lam Lok St., Kowloon Bay, Kowloon, Hong Kong.
EUT	:	WII Switch Joy-Con controller for iPhone
Model Name	:	WII-20581
Trademark	:	VypaGear

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart C	PASS

The above equipment was tested by EMTEK(SHENZHEN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207&15.209.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : January 03, 2023 to January 31, 2023

Prepared by : Luo Pei Ye
Luo peiye /Editor

Reviewer : Joe Xia
Joe Xia/Editor

Approve & Authorized Signer :
Lisa Wang/Manager

EMTEK (SHENZHEN) CO., LTD. TESTING

1 EUT TECHNICAL DESCRIPTION

Product:	WII Switch Joy-Con controller for iPhone
Model Number:	WII-20581
Power Supply	Input: DC 5V/2A Output: DC 5V/0.5A Wireless output: DC 5V/1A
Operating Frequency	110-205KHz
Modulation	ASK
Antenna Type	Induction coil antenna
Antenna Gain	0 dBi
Temperature Range	0°C ~ +60°C

Note: *for more details, please refer to the User's manual of the EUT.*

2 SUMMARY OF TEST RESULT

FCC Part Clause	Test Parameter	Verdict	Remark
2.1049	Occupied Bandwidth	PASS	
15.209	Radiated Spurious Emissions	PASS	
15.207	Conducted Emission	PASS	
NOTE1: N/A (Not Applicable)			

RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for FCC ID: SQOWII20581 filing to comply with Section 15.225 of the FCC Part 15, Subpart C Rules.

3 TEST METHODOLOGY

3.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards:
FCC 47 CFR Part 2, Subpart J
FCC 47 CFR Part 15, Subpart C

3.2 MEASUREMENT EQUIPMENT USED

Conducted Emission Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	DUE CAL.
EMI Test Receiver	Rohde & Schwarz	ESCI	101384	May 14, 2022	1Year
AMN	Rohde & Schwarz	ENV216	5	May 14, 2022	1Year
AMN	Kyoritsu	KNW-407	8-1492-9	May 14, 2022	1Year

Radiated Emission Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	DUE CAL.
EMI Test Receiver	Rohde & Schwarz	ESU 26	100154	May 14, 2022	1 Year
Pre-Amplifie	Lunar EM	LNA30M3G-25	J10100000070	May 14, 2022	1 Year
Bilog Antenna	Schwarzbeck	VULB9163	661	Aug. 22, 2021	2 Year
Horn antenna	Schwarzbeck	BBHA9120D	9120D-1177	Jun. 12, 2021	2 Year
Pre-Amplifie	SKET	LNPA_0118G-45	SK2019051801	May 14, 2022	1 Year
Loop Antenna	Schwarzbeck	FMZB1519	1519-012	Jun. 12, 2021	2 Year
Spectrum Analyzer	Rohde & Schwarz	FSV40	100967	May 14, 2022	1 Year
Horn antenna	Schwarzbeck	BBHA9120D	9120D-1178	Aug. 22, 2021	2 Year
Band reject Filter(50dB)	WI/DE	WRCGV-2400(2400-2485MHz)	2	May 14, 2022	1 Year

Radio Frequency Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	DUE CAL.
Wideband Radio Communication Tester	R&S	CMW500	171168	May. 3, 2022	1Year
Frequency Extender	R&S	CMW-Z800A	100430	May. 16, 2022	1Year
Spectrum Analyzer	R&S	FSV3044	MY60242456	Apr. 11, 2022	1Year
Analog Signal Generator	R&S	SMB100A	MY61252625	Apr. 22, 2022	1Year
Vector Signal Generator	R&S	SMM100A	MY61252674	May. 9, 2022	1Year
RF Control Unit	Tonscend	JS0806-2	22C8060567	N/A	N/A
Temperature&Humidity Chamber	ESPEC	EL-02KA	12107166	Jul. 02, 2022	1 Year

3.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its charging mode condition.
The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.
The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting mode is programmed.

3.4 INDEPENDENT OPERATION MODES

Test ModeA	Description	Remark
Mode A Charging(5W)	100% Load	With dummy load
	50% Load	With dummy load
	10% Load	With dummy load

3.5 TEST MANNER

Test Items	Test Voltage	Operation Modes	Worst case
Occupied Bandwidth	AC 120V/60Hz	Mode A	Mode A(100% Load)
Radiated Spurious Emissions	AC 120V/60Hz	Mode A	Mode A(100% Load)
Conducted Emission	AC 120V/60Hz	Mode A	Mode A(100% Load)

Notes: The EUT supports charging the load while charging itself.

All wireless charging modes have been tested, and the worst mode is shown below.

4 FACILITIES AND ACCREDITATIONS

4.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

Building 69, Majialong Industry Zone District, Nanshan District, Shenzhen, China
The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

4.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description EMC Lab.	:	**Accredited by CNAS** The Certificate Registration Number is L2291. The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017) **Accredited by FCC** Designation Number: CN1204 Test Firm Registration Number: 882943 **Accredited by A2LA** The Certificate Number is 4321.01. **Accredited by Industry Canada** The Conformity Assessment Body Identifier is CN0008
Name of Firm	:	EMTEK (SHENZHEN) CO., LTD.
Site Location	:	Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

5 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

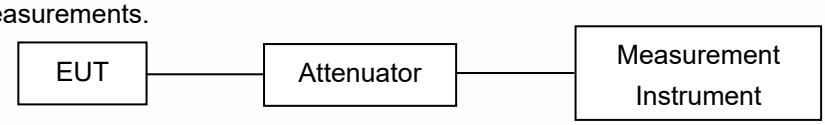
Parameter	Uncertainty
Radio Frequency	±1x10^-5
Conducted Emissions Test	±2.0dB
Radiated Emission Test	±2.0dB
Occupied Bandwidth Test	±1.0dB
All emission, radiated	±3dB
Temperature	±0.5℃
Humidity	±3%

Measurement Uncertainty for a level of Confidence of 95%

6 SETUP OF EQUIPMENT UNDER TEST

6.1 RADIO FREQUENCY TEST SETUP 1

The component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



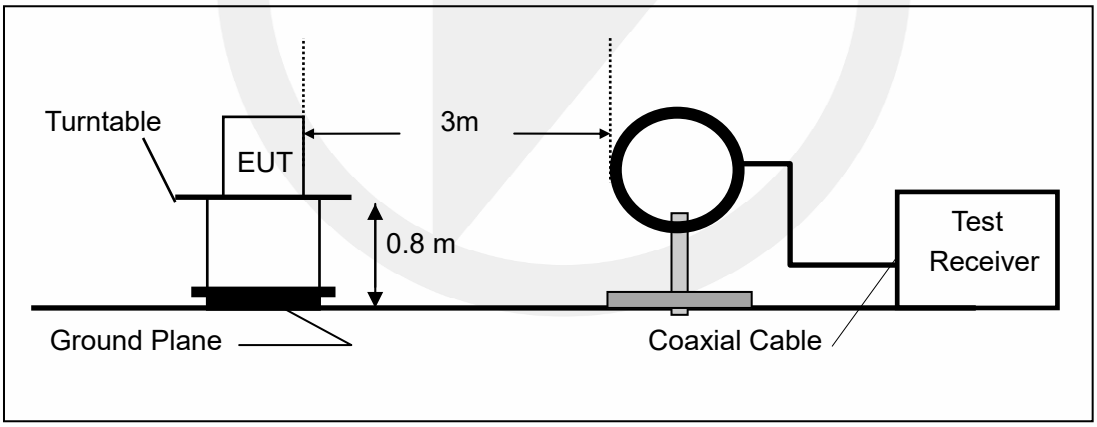
6.2 RADIO FREQUENCY TEST SETUP 2

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

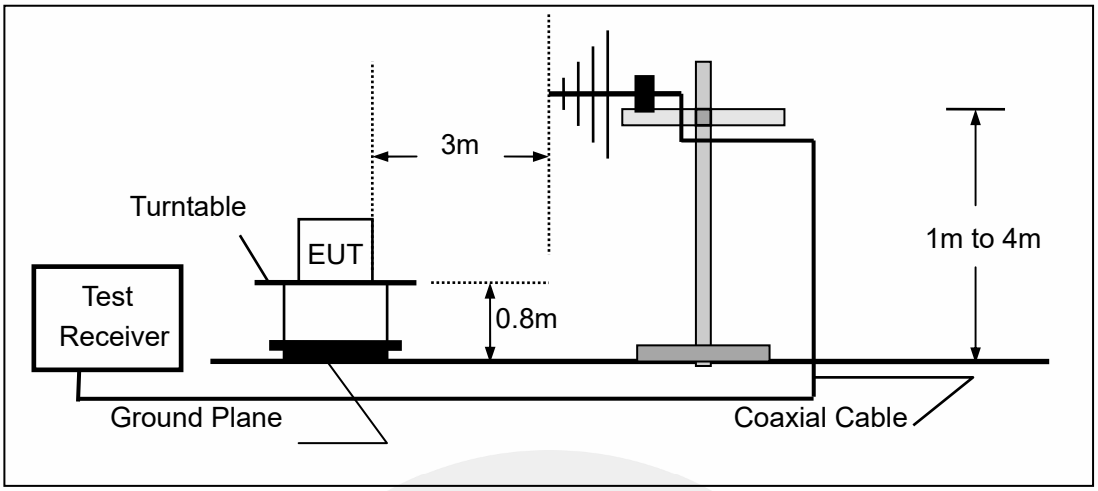
Below 30MHz：
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

Above 30MHz：
The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

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

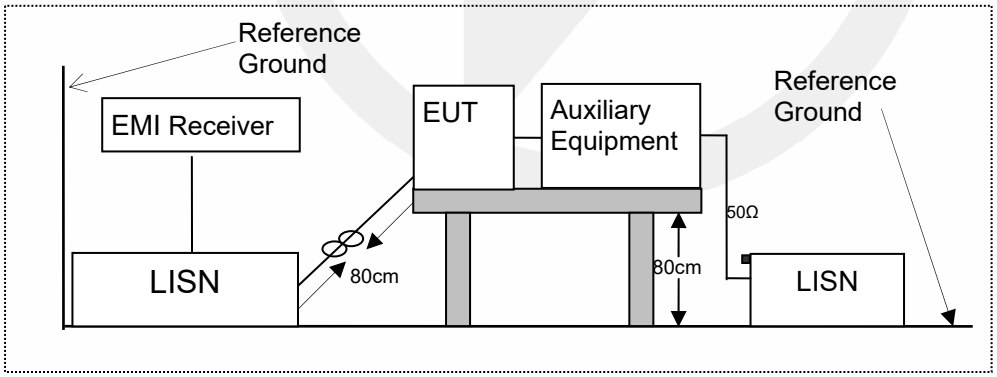


(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz

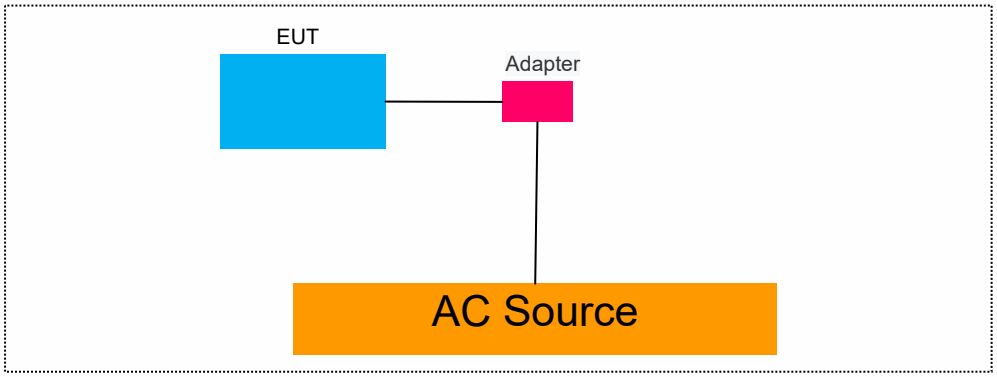


6.3 CONDUCTED EMISSION TEST SETUP

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.
Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.
According to the requirements in ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.



6.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM



6.5 SUPPORT EQUIPMENT

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Dummy Load	HFJ-AR	ME47562021	/
Joy-Con(R)	Ntitendo	H/C-015	/
Joy-Con(L)	Ntitendo	H/C-016	/
Adapter	Yateks	PS45B200K2250UC	/

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. Unless otherwise denoted as EUT in『Remark』column, device(s) used in tested system is a support equipment

7 TEST REQUIREMENTS

7.1 OCCUPIED BANDWIDTH

7.1.1 Applicable Standard

According to FCC Part 2.1049

7.1.2 Conformance Limit

No limit requirement.

7.1.3 Test Configuration

Test according to clause 6.1 radio frequency test setup 1

7.1.4 Test Procedure

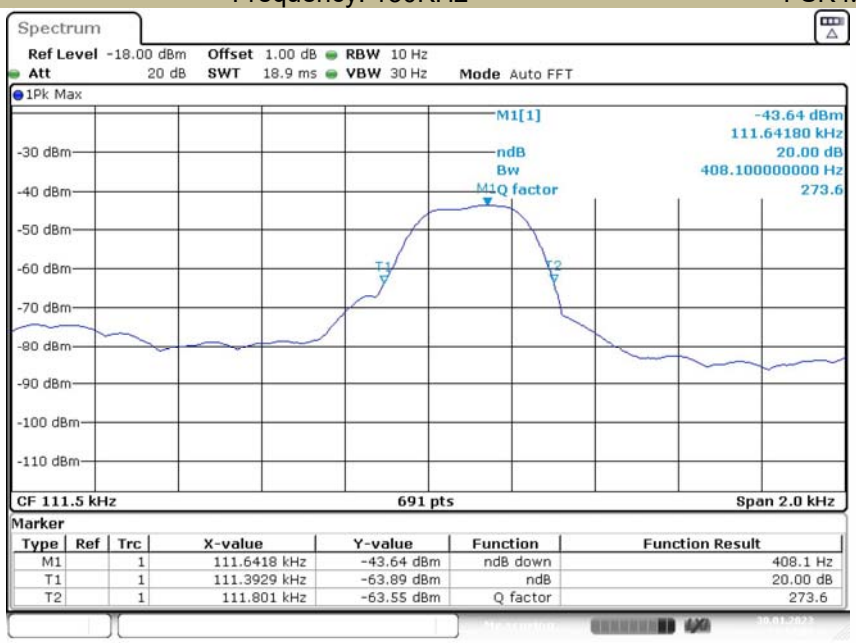
The EUT was operating in transmit mode and controlled its channel. Printed out the test result from the spectrum by hard copy function.
The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously
Set RBW = 1% occupied bandwidth (10Hz).
Set the video bandwidth (VBW) =3 times RBW .
Set Span= approximately 2 to 3 times the occupied bandwidth
Set Detector = Peak.
Set Trace mode = max hold.
Set Sweep = auto couple.
The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 99% down one side of the emission. Reset the markerdelta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 99% bandwidth of the emission.
If this value varies with different modes of operation (e.g., data rate, modulation format, etc.), repeat this test for each variation.
Measure and record the results in the test report.

7.1.5 Test Results

Temperature :	25℃	Test Date :	January 30, 2023
Humidity :	65 %	Test By:	XXH

Modulation Mode	Channel Number	Channel Frequency (KHz)	-20dB Measurement Bandwidth (kHz)	Limit (kHz)	Verdict
ASK	/	111.5KHz	0.408	N/A	PASS
Note: N/A (Not Applicable)					

Test Model	-20dB Bandwidth Frequency: 130KHz	FSK Modulation



Date: 30.JAN.2023 17:34:01

7.2 RADIATED SPURIOUS EMISSION

7.2.1 Applicable Standard

According to FCC Part 15.209

7.2.2 Conformance Limit

FCC Part 15.209				
Frequency (MHz)	Field Strength Limitation		Field Strength Limitation Frequency tion at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
0.009 – 0.490	2400 / F(KHz)	300m	10000 * 2400/F(KHz)	20log 2400/F(KHz) + 80
0.490 – 1.705	24000 / F(KHz)	30m	100 * 24000/F(KHz)	20log 24000/F(KHz) + 40
1.705 – 30.00	30	30m	100* 30	20log 30 + 40
30.0 – 88.0	100	3m	100	20log 100
88.0 – 216.0	150	3m	150	20log 150
216.0 – 960.0	200	3m	200	20log 200
Above 960.0	500	3m	500	20log 500

According to FCC Part15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

7.2.3 Test Configuration

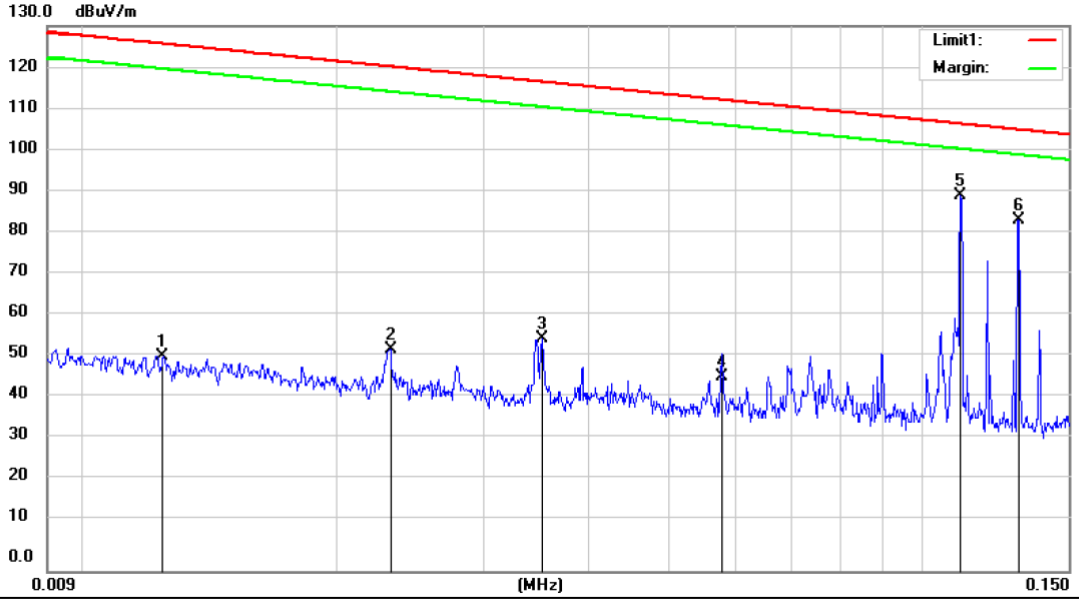
Test according to clause 6.2 radio frequency test setup 2

7.2.4 Test Procedure

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:
The EUT was placed on a turn table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Span = wide enough to fully capture the emission being measured
RBW = 100 kHz for f < 1 GHz(30MHz to 1GHz), 200Hz for f<150KHz(9KHz to 150KHz), 9KHz for f<30MHz(150KHz to 30KHz)
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold
Follow the guidelines in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.
Now set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the dwell time per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a “duty cycle correction factor”, derived from 20log(dwell time/100 ms), in an effort to demonstrate compliance with the 15.209 limit. Submit this data.
Repeat above procedures until all frequency measured was complete.

7.2.5 Test Results

■ Spurious Emission below 150kHz (9KHz to 150kHz)



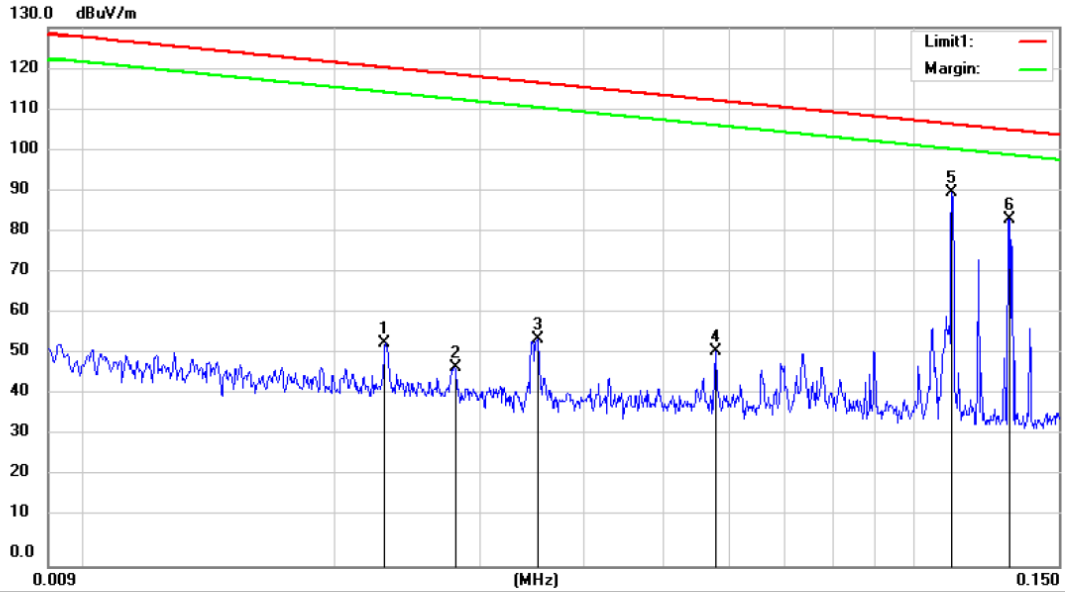
Site 3m Chamber #3 Polarization: X Temperature: 26 C

Limit: (RE)FCC PART 15.209(9K-30M) Power: AC 120V/60Hz Humidity: 60 %

Mode:Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0123	30.77	20.40	51.17	125.79	-74.62	peak			
2		0.0231	32.53	20.40	52.93	120.32	-67.39	peak			
3		0.0352	35.06	20.48	55.54	116.66	-61.12	peak			
4		0.0575	25.83	20.63	46.46	112.40	-65.94	peak			
5	*	0.1113	69.08	20.38	89.46	106.67	-17.21	peak			
6		0.1307	63.73	20.10	83.83	105.27	-21.44	peak			



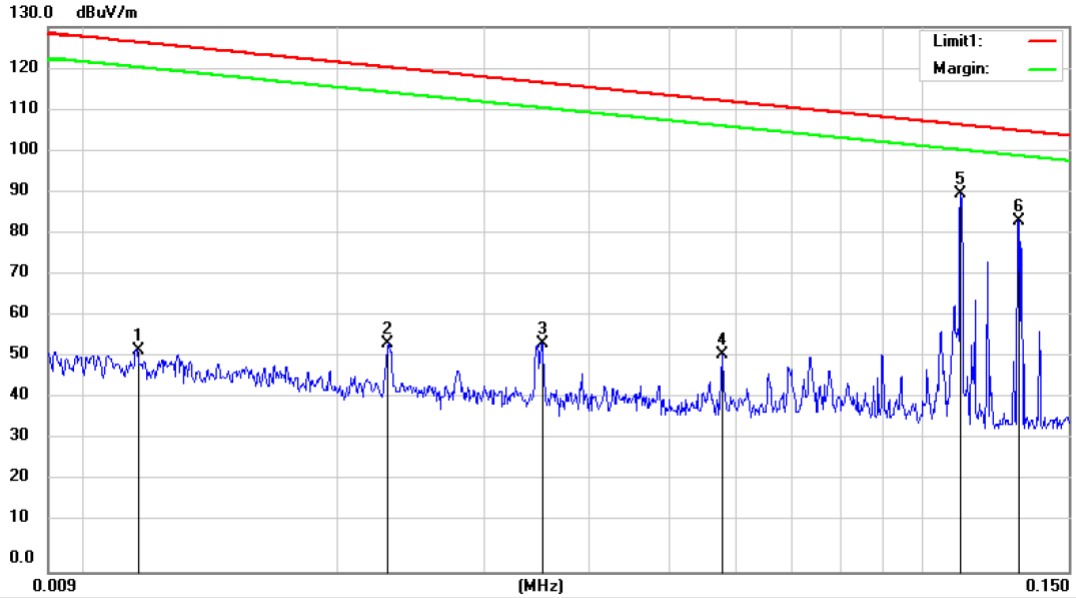
Site 3m Chamber #3 Polarization: Y Temperature: 26 C

Limit: (RE)FCC PART 15.209(9K-30M) Power: AC 120V/60Hz Humidity: 60 %

Mode:Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0230	33.42	20.40	53.82	120.35	-66.53	peak			
2		0.0280	27.64	20.40	48.04	118.65	-70.61	peak			
3		0.0352	34.43	20.48	54.91	116.66	-61.75	peak			
4		0.0576	31.37	20.62	51.99	112.39	-60.40	peak			
5	*	0.1113	69.67	20.38	90.05	106.67	-16.62	peak			
6		0.1307	63.73	20.10	83.83	105.27	-21.44	peak			



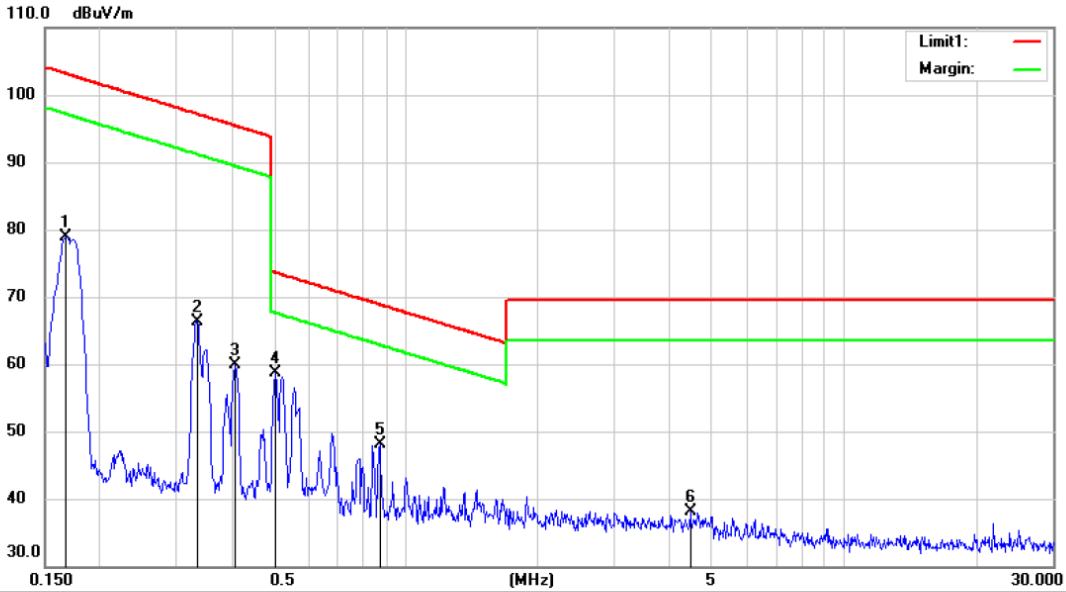
Site 3m Chamber #3 Polarization: Z Temperature: 26 C

Limit: (RE)FCC PART 15.209(9K-30M) Power: AC 120V/60Hz Humidity: 60 %

Mode:Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0115	32.42	20.40	52.82	126.37	-73.55	peak			
2		0.0230	33.99	20.40	54.39	120.35	-65.96	peak			
3		0.0351	33.88	20.48	54.36	116.69	-62.33	peak			
4		0.0576	31.37	20.62	51.99	112.39	-60.40	peak			
5	*	0.1113	69.67	20.38	90.05	106.67	-16.62	peak			
6		0.1307	63.73	20.10	83.83	105.27	-21.44	peak			



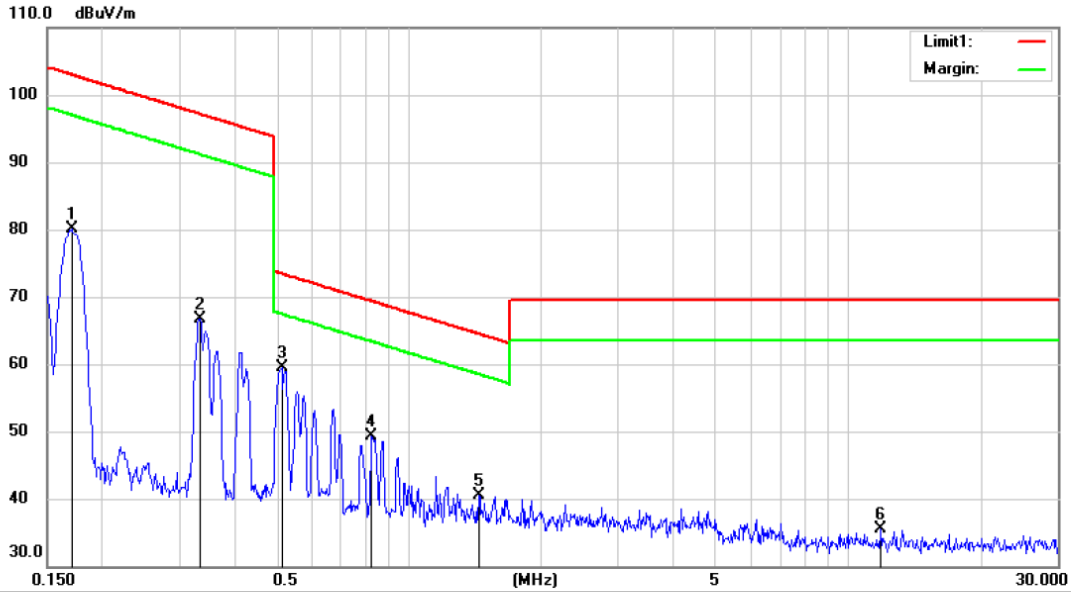
Site 3m Chamber #3 Polarization: X Temperature: 26 C

Limit: (RE)FCC PART 15.209(9K-30M) Power: AC 120V/60Hz Humidity: 60 %

Mode: Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.1677	58.82	20.14	78.96	103.11	-24.15	peak			
2		0.3338	45.83	20.47	66.30	97.13	-30.83	peak			
3		0.4061	39.29	20.61	59.90	95.43	-35.53	peak			
4	*	0.5047	38.00	20.80	58.80	73.54	-14.74	peak			
5		0.8710	27.28	20.80	48.08	68.82	-20.74	peak			
6		4.4540	17.77	20.33	38.10	69.50	-31.40	peak			



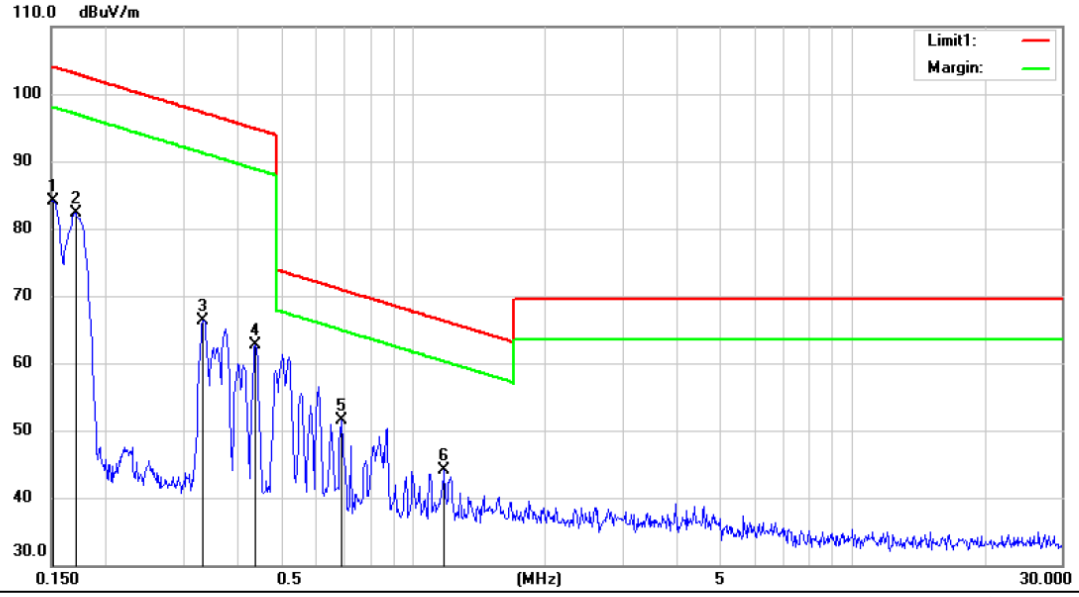
Site 3m Chamber #3 Polarization: Y Temperature: 26 C

Limit: (RE)FCC PART 15.209(9K-30M) Power: AC 120V/60Hz Humidity: 60 %

Mode:Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.1703	59.87	20.14	80.01	102.97	-22.96	peak			
2		0.3338	46.20	20.47	66.67	97.13	-30.46	peak			
3	*	0.5128	38.71	20.80	59.51	73.41	-13.90	peak			
4		0.8217	28.51	20.80	49.31	69.32	-20.01	peak			
5		1.4410	19.84	20.71	40.55	64.46	-23.91	peak			
6		11.8697	15.48	20.07	35.55	69.50	-33.95	peak			



Site 3m Chamber #3 Polarization: Z Temperature: 26 C

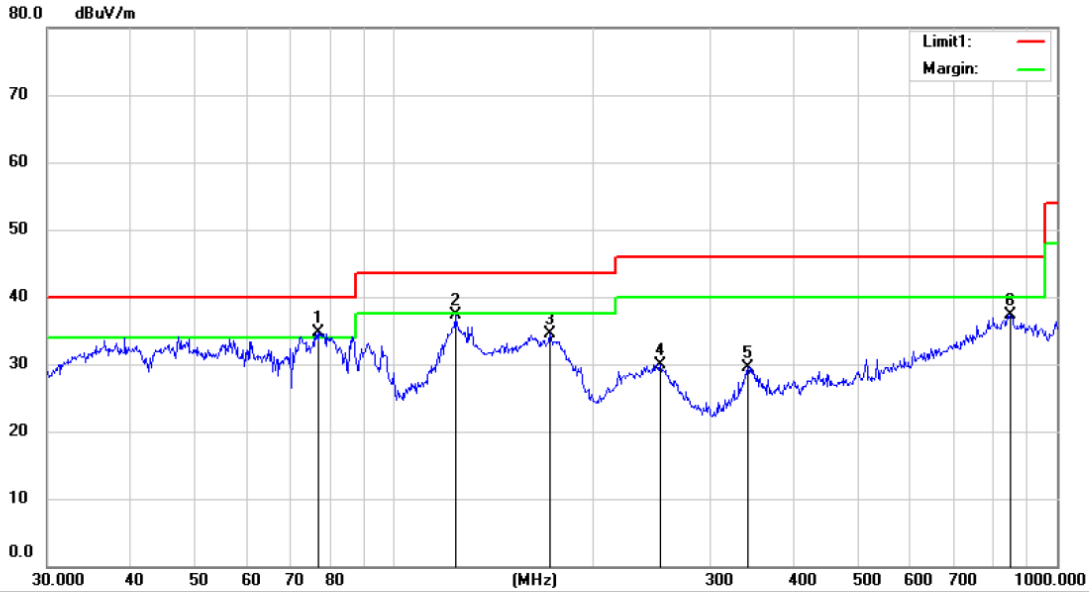
Limit: (RE)FCC PART 15.209(9K-30M) Power: AC 120V/60Hz Humidity: 60 %

Mode:WPT

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.1508	64.06	20.10	84.16	104.03	-19.87	peak			
2		0.1703	62.17	20.14	82.31	102.97	-20.66	peak			
3		0.3321	45.93	20.46	66.39	97.18	-30.79	peak			
4		0.4374	41.96	20.67	62.63	94.79	-32.16	peak			
5	*	0.6863	30.66	20.80	51.46	70.88	-19.42	peak			
6		1.1781	23.43	20.76	44.19	66.20	-22.01	peak			

■ Spurious Emission Above 30MHz (30MHz to 1GHz)



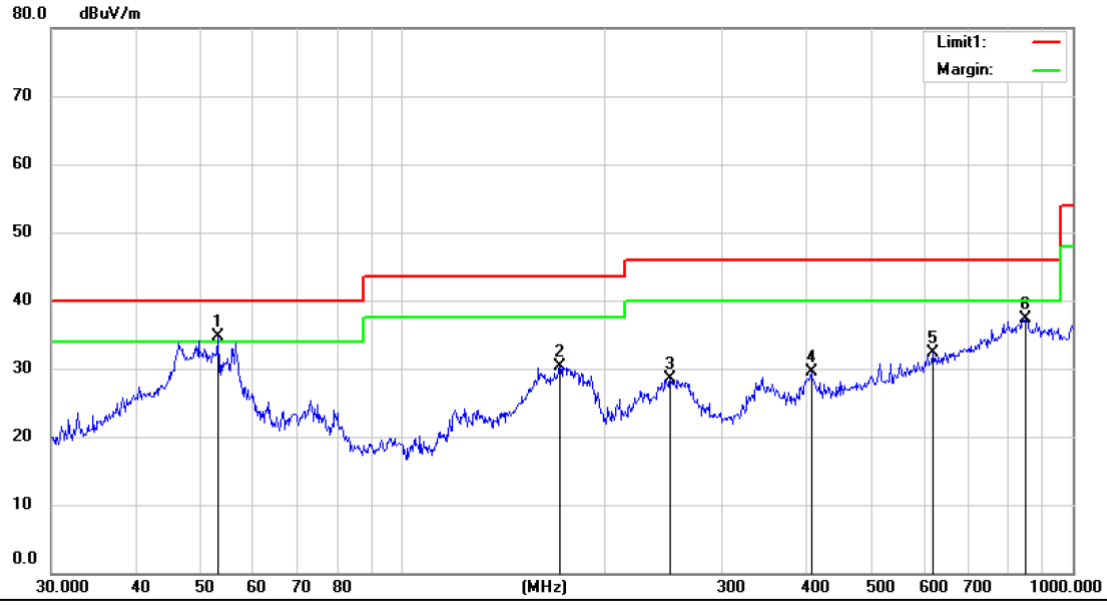
Site 3m Chamber #3 Polarization: ***Vertical*** Temperature: 26 C

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %

Mode:Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	76.7808	45.01	-10.32	34.69	40.00	-5.31	QP			
2		123.6984	47.63	-10.37	37.26	43.50	-6.24	QP			
3		171.9946	44.83	-10.33	34.50	43.50	-9.00	QP			
4		252.0627	37.51	-7.57	29.94	46.00	-16.06	QP			
5		341.9786	34.27	-4.67	29.60	46.00	-16.40	QP			
6		851.0353	28.99	8.38	37.37	46.00	-8.63	QP			



Site 3m Chamber #3 Polarization: ***Horizontal*** Temperature: 26 C

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 60 %

Mode: Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	53.1313	42.59	-7.82	34.77	40.00	-5.23	QP			
2		171.9946	40.65	-10.33	30.32	43.50	-13.18	QP			
3		251.1804	36.14	-7.59	28.55	46.00	-17.45	QP			
4		407.5145	32.04	-2.58	29.46	46.00	-16.54	QP			
5		618.5370	29.96	2.40	32.36	46.00	-13.64	QP			
6		851.0353	28.99	8.38	37.37	46.00	-8.63	QP			

7.3 CONDUCTED EMISSION TEST

7.3.1 Applicable Standard

According to FCC Part 15.207(a)

7.3.2 Conformance Limit

Conducted Emission Limit		
Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	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 0.50MHz.		

7.3.3 Test Configuration

Test according to clause 7.3 conducted emission test setup

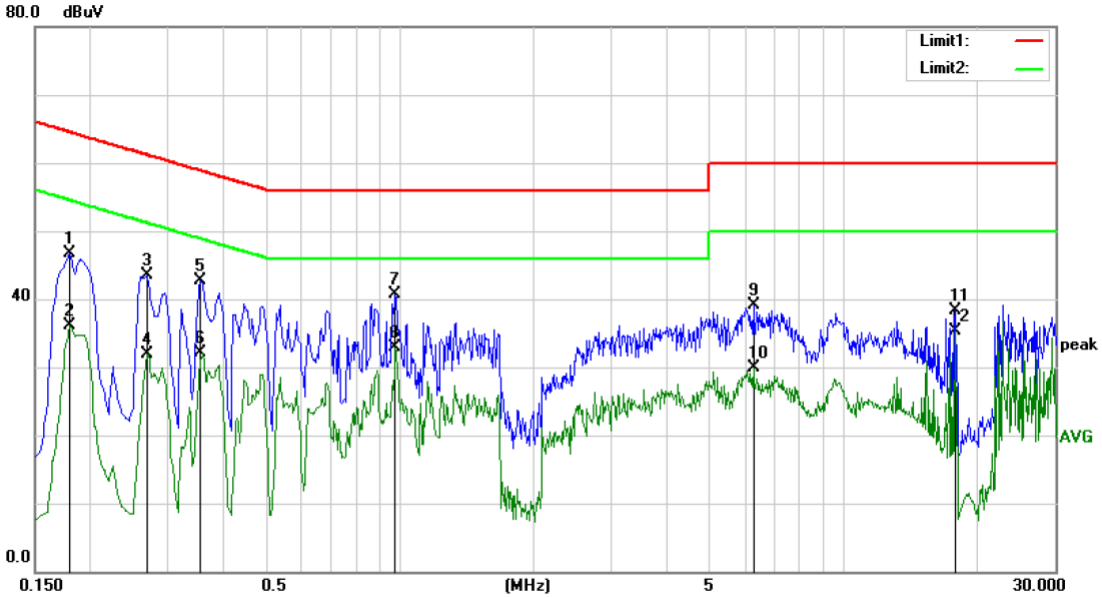
7.3.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

7.3.5 Test Results

Pass

The 120V &240V voltagehave been tested, and the worst result recorded was report as below:



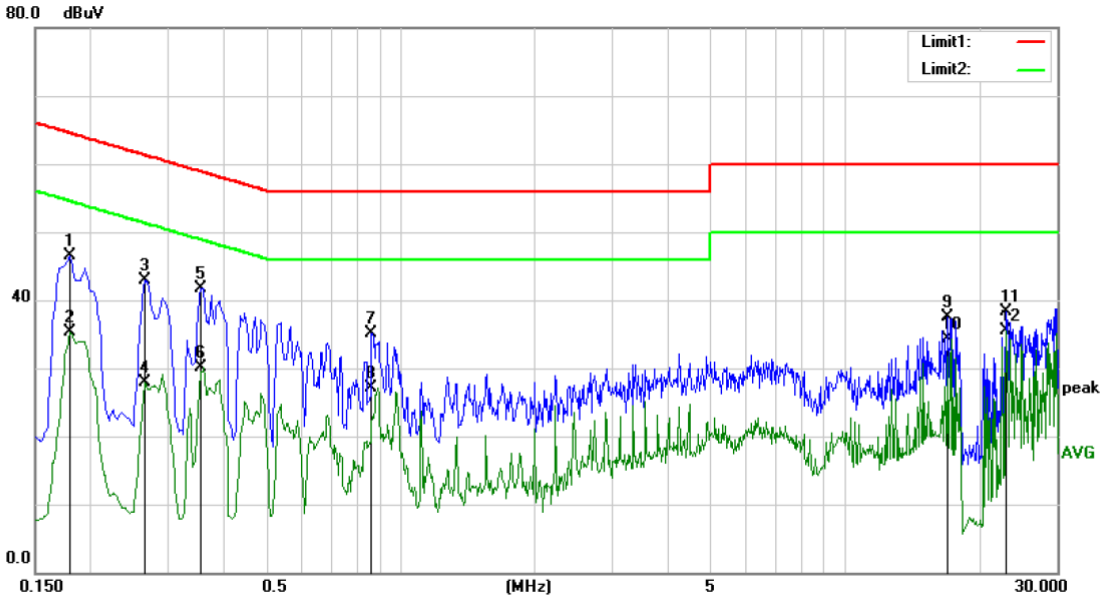
Site Conduction #1 Phase: *L1* Temperature: 21.9

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 58 %

Mode: Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1800	37.27	9.53	46.80	64.49	-17.69	QP	
2		0.1800	26.52	9.53	36.05	54.49	-18.44	AVG	
3		0.2700	33.88	9.53	43.41	61.12	-17.71	QP	
4		0.2700	22.35	9.53	31.88	51.12	-19.24	AVG	
5		0.3550	33.16	9.54	42.70	58.84	-16.14	QP	
6		0.3550	22.51	9.54	32.05	48.84	-16.79	AVG	
7		0.9750	31.12	9.55	40.67	56.00	-15.33	QP	
8	*	0.9750	23.38	9.55	32.93	46.00	-13.07	AVG	
9		6.2800	29.49	9.60	39.09	60.00	-20.91	QP	
10		6.2800	20.31	9.60	29.91	50.00	-20.09	AVG	
11		17.9050	28.50	9.90	38.40	60.00	-21.60	QP	
12		17.9050	25.47	9.90	35.37	50.00	-14.63	AVG	



Site Conduction #1 Phase: *N* Temperature: 21.9

Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 58 %

Mode: Charging(5W)100% Load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1800	36.88	9.53	46.41	64.49	-18.08	QP	
2		0.1800	25.75	9.53	35.28	54.49	-19.21	AVG	
3		0.2650	33.42	9.53	42.95	61.27	-18.32	QP	
4		0.2650	18.33	9.53	27.86	51.27	-23.41	AVG	
5		0.3550	32.13	9.54	41.67	58.84	-17.17	QP	
6		0.3550	20.53	9.54	30.07	48.84	-18.77	AVG	
7		0.8600	25.57	9.55	35.12	56.00	-20.88	QP	
8		0.8600	17.53	9.55	27.08	46.00	-18.92	AVG	
9		17.0050	27.62	9.87	37.49	60.00	-22.51	QP	
10		17.0050	24.41	9.87	34.28	50.00	-15.72	AVG	
11		23.0300	28.18	10.10	38.28	60.00	-21.72	QP	
12	*	23.0300	25.33	10.10	35.43	50.00	-14.57	AVG	

8 ANTENNA APPLICATION

8.1.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 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, or §15.221. 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.

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. if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.1.2 Result

PASS.

The EUT has 1 antenna: a Induction Coil Antenna for WPT, the gain is 0 dBi;

Note: ☒ Antenna use a permanently attached antenna which is not replaceable.
☐ Not using a standard antenna jack or electrical connector for antenna replacement
☐ The antenna has to be professionally installed (please provide method of installation)

Please refer to the attached document Internal Photos to show the antenna connector.

**** End of Report ****