TEST REPORT NUMBER: (8522)005-0207(B)

TEST REPORT

Applicant:	Jakks Pacific (HK) Ltd.	Fax:	---
		E-mail:	---
Address :	12/F., Wharf T&T Centre, 7 Canton Road. Tsim Sha Tsui Hongkong		
Test Date :	2022-01-07 to 2022-01-21		

Manufacturer or Supplier :	Jakks Pacific, Inc.
Address :	22619 PCH Malibu CA 90265 United States Of America (Excluding The States Of Alaska)
Sample Description:	AirTitans Jurassic World Massive Attack T-Rex R/C
Model number:	15423RX
Additional Model :	N/A
Rated Voltage:	lithium battery:9.6V 2000mAh, by DC5V form adapter
FCC ID :	OTA15423RX
IC :	7783A-15423RX
The submitted sample of the above equipment has been tested according to following standard(s)	
47 CFR Part 15, Subpart C 249 RSS-210 Issue 10 December 2019 RSS-Gen Issue 5 March 2019	
CONCLUSION: The submitted sample was found to COMPLY with the test requirement	

Assistant Manager

Name: Nick Lung

Date: FEB 23,2022

1 Test Summary

Test Item	IC Test Requirement	Test method	Result
Antenna Requirement	RSS-Gen Section 6.8 47 CFR Part 15, Subpart C Section 15.203	ANSI C63.10-2013	PASS
AC Power Line Conducted Emission	RSS-Gen Section 8.8 47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10-2013	PASS
Field Strength of the Fundamental Signal	RSS 210 B 10(a) 47 CFR Part 15, Subpart C Section 15.249 (a)	RSS-Gen section 6.12 & ANSI C63.10-2013	PASS
Spurious Emissions	RSS 210 B 10 (b) 47 CFR Part 15, Subpart C Section 15.249 (a)/15.209	RSS-Gen section 6.13 & ANSI C63.10-2013	PASS
Restricted bands around fundamental frequency	RSS 210 B 10 (b) 47 CFR Part 15, Subpart C Section 15.249(a)/15.205	RSS-Gen section 6.13 & ANSI C63.10-2013	PASS
20dB Occupied Bandwidth	RSS-Gen section 6.7 47 CFR Part 15, Subpart C Section 15.215 (c)	RSS-Gen section 6.7 & ANSI C63.10-2013	PASS
99% Occupied Bandwidth	RSS-Gen section 6.7	RSS-Gen section 6.7	PASS

2 Contents

3 General Information

3.1 Client Information

Applicant:	Jakks Pacific (HK) Ltd.
Address of Applicant:	12/F., Wharf T&T Centre, 7 Canton Road. Tsim Sha Tsui Hongkong
Manufacturer:	Jakks Pacific, Inc.
Address of Manufacturer:	22619 PCH Malibu CA 90265 United States Of America (Excluding The States Of Alaska)

3.2 General Description of EUT

Name:	AirTitans Jurassic World Massive Attack T-Rex R/C
Tset Model No.:	15423RX
Model No.:	15423RX
Trade Mark :	N/A
Serial No:	---
Software Version:	MFU260-009RX
Hardware Version:	DL1012-RX3
Frequency Range:	2407-2475MHz
Modulation Type:	OFDM
Number of Channels:	33
Sample Type:	Portable product
Antenna Type:	Internal antenna
Antenna Gain:	-0.58dBi
Power Supply:	lithium battery:9.6V 2000mAh, by DC5V form adapter

Operation Frequency each of channel					
Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2407MHz	12	2429MHz	23	2455MHz
2	2409MHz	13	2431MHz	24	2457MHz
3	2411MHz	14	2433MHz	25	2459MHz
4	2413MHz	15	2435MHz	26	2461MHz
5	2415MHz	16	2437MHz	27	2463MHz
6	2417MHz	17	2439MHz	28	2465MHz
7	2419MHz	18	2445MHz	29	2467MHz
8	2421MHz	19	2447MHz	30	2469MHz
9	2423MHz	20	2449MHz	31	2471MHz
10	2425MHz	21	2451MHz	32	2473MHz
11	2427MHz	22	2453MHz	33	2475MHz

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The Lowest channel	2407MHz
The Middle channel	2445MHz
The Highest channel	2475MHz

3.3 Test Environment and Mode

Operating Environment:	
Temperature:	29 °C
Humidity:	59 % RH
Atmospheric Pressure:	1001mbar
Test mode:	
Test Mode:	Use test software (RF test) to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT.

3.4 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.	Remark	FCC certification
Adapter	HUAWEI	HW-0502000C01	/	CQA

3.5 Statement of the 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 acc. 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 **Shenzhen Huaxia Testing Technology Co., Ltd.** quality system acc. 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 **CQA** laboratory is reported:

No.	Item	Uncertainty
1	Radiated Emission (Below 1GHz)	5.12dB
2	Radiated Emission (Above 1GHz)	4.60dB
3	Conducted Disturbance (0.15~30MHz)	3.34dB
4	Radio Frequency	3×10^{-8}
5	Duty cycle	0.6 %
6	Occupied Bandwidth	1.1%
7	RF conducted power	0.86dB
8	RF power density	0.74
9	Conducted Spurious emissions	0.86dB
10	Temperature test	0.8℃
11	Humidity test	2.0%
12	Supply voltages	0.5 %
13	time	0.6 %.
14	Frequency Error	5.5 Hz

3.6 Test Location

All tests were performed at:

Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

3.7 Test Facility

• ISED No.: 22984

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements

• A2LA (Certificate No. 4742.01)

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4742.01.

• FCC Registration No.: 522263

Shenzhen Huaxia Testing Technology Co., Ltd., Shenzhen EMC Laboratory 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. Registration No.:522263

3.8 Deviation from Standards

None.

3.9 Abnormalities from Standard Conditions

None.

3.10 Other Information Requested by the Customer

None.

3.11 Equipment List

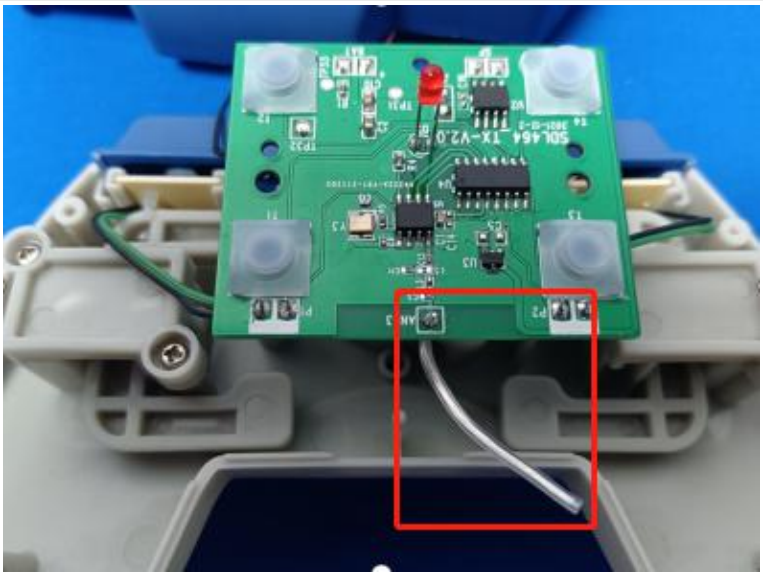
Test Equipment	Manufacturer	Model No.	Instrument No.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR7	CQA-005	2021/9/10	2022/9/9
Spectrum analyzer	R&S	FSU26	CQA-038	2021/9/10	2022/9/9
Preamplifier	MITEQ	AFS4-00010300-18-10P-4	CQA-035	2021/9/10	2022/9/9
Preamplifier	MITEQ	AMF-6D-02001800-29-20P	CQA-036	2021/9/10	2022/9/9
Loop antenna	Schwarzbeck	FMZB1516	CQA-060	2021/9/16	2024/9/15
Bilog Antenna	R&S	HL562	CQA-011	2021/9/16	2024/9/15
Horn Antenna	R&S	HF906	CQA-012	2021/9/16	2024/9/15
Horn Antenna	Schwarzbeck	BBHA 9170	CQA-088	2021/9/16	2024/9/15
Coaxial Cable (Above 1GHz)	CQA	N/A	C019	2021/9/10	2022/9/9
Coaxial Cable (Below 1GHz)	CQA	N/A	C020	2021/9/10	2022/9/9
Antenna Connector	CQA	RFC-01	CQA-080	2021/9/10	2022/9/9
RF cable(9KHz~40GHz)	CQA	RF-01	CQA-079	2021/9/10	2022/9/9
Power divider	MIDWEST	PWD-2533-02-SMA-79	CQA-067	2021/9/10	2022/9/9

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.

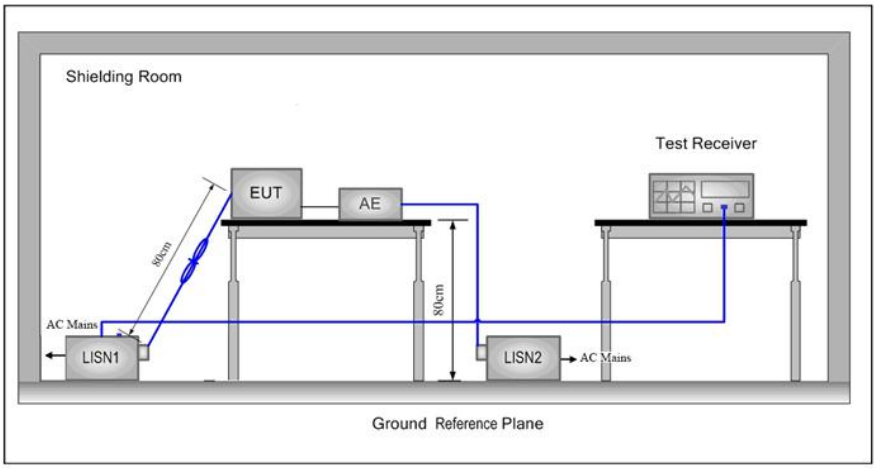
4 Test results and Measurement Data

4.1 Antenna Requirement

Standard requirement:	RSS-Gen Section 6.8 47 CFR Part 15C Section 15.203
EUT Antenna:	
The antenna is soldered on the PCB, no need to consider replacement. best case gain Antenna is -0.58dBi.	

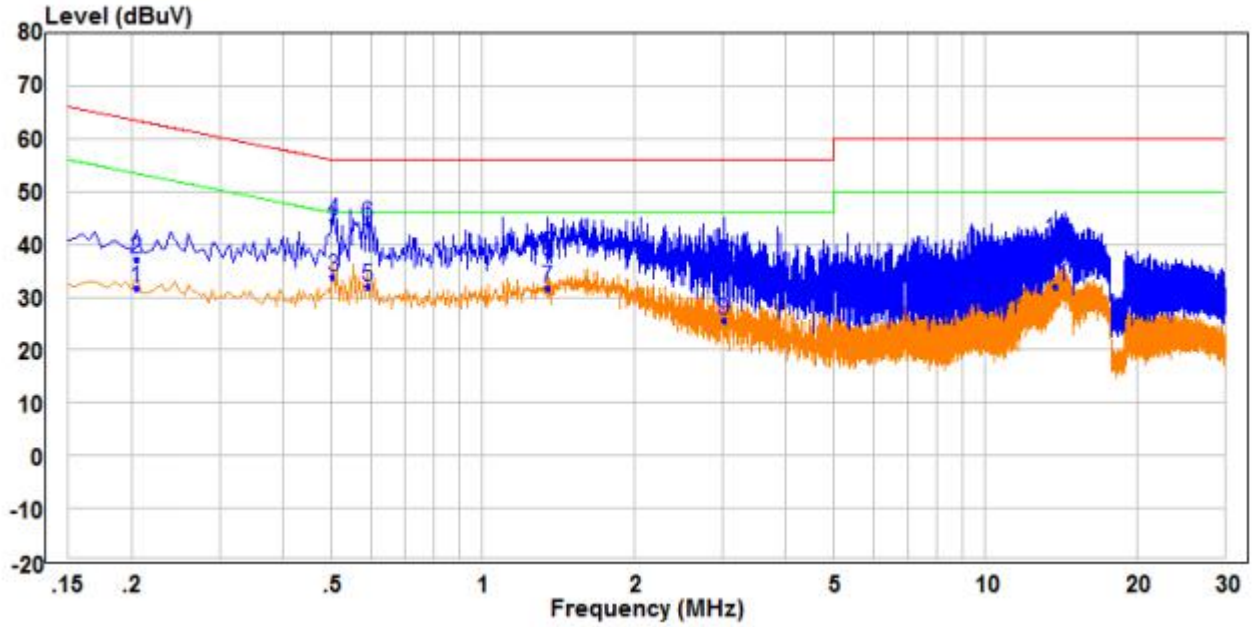
4.2 Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	150kHz to 30MHz
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 Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.

Test Setup:	
Final Test Mode:	Pretest the EUT at Transmitting mode, For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Test Voltage:	lithium battery:9.6V 2000mAh, by DC5V form adapter
Test Results:	Pass

Measurement Data:

Live line:

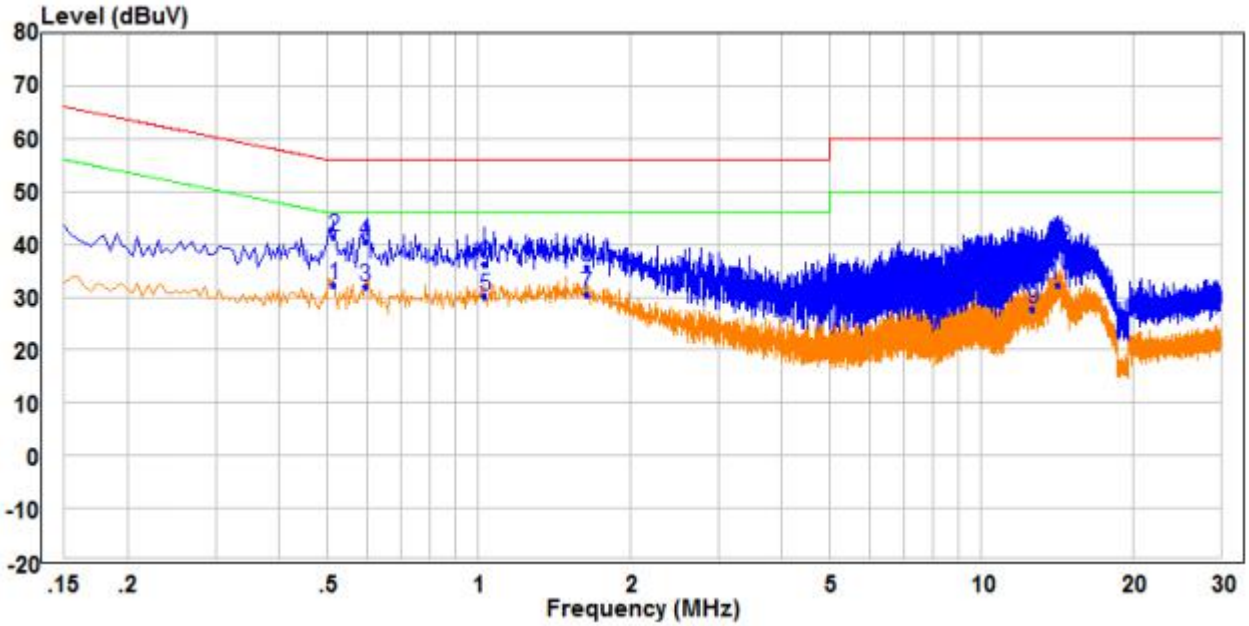


	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.205	22.01	9.61	31.62	53.41	-21.79	Average	Line
2	0.205	27.54	9.61	37.15	63.41	-26.26	QP	Line
3 AV	0.505	23.96	9.71	33.67	46.00	-12.33	Average	Line
4 PP	0.505	34.73	9.71	44.44	56.00	-11.56	QP	Line
5	0.590	22.18	9.79	31.97	46.00	-14.03	Average	Line
6	0.590	34.06	9.79	43.85	56.00	-12.15	QP	Line
7	1.345	21.29	10.53	31.82	46.00	-14.18	Average	Line
8	1.345	27.42	10.53	37.95	56.00	-18.05	QP	Line
9	3.020	14.76	10.77	25.53	46.00	-20.47	Average	Line
10	3.020	25.15	10.77	35.92	56.00	-20.08	QP	Line
11	13.820	22.35	9.77	32.12	50.00	-17.88	Average	Line
12	13.820	31.00	9.77	40.77	60.00	-19.23	QP	Line

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Neutral line:



		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	PP	0.515	22.58	9.72	32.30	46.00	-13.70	Average	Neutral
2	QP	0.515	31.60	9.72	41.32	56.00	-14.68	QP	Neutral
3		0.595	22.04	9.80	31.84	46.00	-14.16	Average	Neutral
4		0.595	30.67	9.80	40.47	56.00	-15.53	QP	Neutral
5		1.030	20.46	9.70	30.16	46.00	-15.84	Average	Neutral
6		1.030	26.53	9.70	36.23	56.00	-19.77	QP	Neutral
7		1.645	20.73	9.73	30.46	46.00	-15.54	Average	Neutral
8		1.645	26.06	9.73	35.79	56.00	-20.21	QP	Neutral
9		12.640	17.87	9.80	27.67	50.00	-22.33	Average	Neutral
10		12.640	26.22	9.80	36.02	60.00	-23.98	QP	Neutral
11		14.240	22.45	9.75	32.20	50.00	-17.80	Average	Neutral
12		14.240	29.61	9.75	39.36	60.00	-20.64	QP	Neutral

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

4.3 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td>RSS 210 B 10 (a)
47 CFR Part 15, Subpart C Section 15.205/15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10 & RSS-Gen section 6.12/6.13</td></tr>
<tr><td>Test Site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver Setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr>
<tr><td>0.009MHz-0.090MHz</td><td>Peak</td><td>10kHz</td><td>30KHz</td><td>Peak</td></tr>
<tr><td>0.009MHz-0.090MHz</td><td>Average</td><td>10kHz</td><td>30KHz</td><td>Average</td></tr>
<tr><td>0.090MHz-0.110MHz</td><td>Quasi-peak</td><td>10kHz</td><td>30KHz</td><td>Quasi-peak</td></tr>
<tr><td>0.110MHz-0.490MHz</td><td>Peak</td><td>10kHz</td><td>30KHz</td><td>Peak</td></tr>
<tr><td>0.110MHz-0.490MHz</td><td>Average</td><td>10kHz</td><td>30KHz</td><td>Average</td></tr>
<tr><td>0.490MHz -30MHz</td><td>Quasi-peak</td><td>10kHz</td><td>30kHz</td><td>Quasi-peak</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100 kHz</td><td>300KHz</td><td>Quasi-peak</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average</td></tr>
</table>
Note: For fundamental frequency, RBW=5MHz, VBW=5MHz, Peak detector is for PK value, RMS detector is for Average value.
</td></tr>
<tr><td>Limit:
(Spurious Emissions and band edge)</td><td>
<table>
<tr><th>Frequency</th><th>Field strength (microvolt/meter)</th><th>Limit (dBuV/m)</th><th>Remark</th><th>Measurement distance (m)</th></tr>
<tr><td>0.009MHz-0.490MHz</td><td>2400/F(kHz)</td><td>-</td><td>-</td><td>300</td></tr>
<tr><td>0.490MHz-1.705MHz</td><td>24000/F(kHz)</td><td>-</td><td>-</td><td>30</td></tr>
<tr><td>1.705MHz-30MHz</td><td>30</td><td>-</td><td>-</td><td>30</td></tr>
<tr><td>30MHz-88MHz</td><td>100</td><td>40.0</td><td>Quasi-peak</td><td>3</td></tr>
<tr><td>88MHz-216MHz</td><td>150</td><td>43.5</td><td>Quasi-peak</td><td>3</td></tr>
<tr><td>216MHz-960MHz</td><td>200</td><td>46.0</td><td>Quasi-peak</td><td>3</td></tr>
<tr><td>960MHz-1GHz</td><td>500</td><td>54.0</td><td>Quasi-peak</td><td>3</td></tr>
<tr><td>Above 1GHz</td><td>500</td><td>54.0</td><td>Average</td><td>3</td></tr>
</table>
Note: 1) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.
2) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr>
</table>
</td></tr>
</table>

(Field strength of the fundamental signal)	2400MHz-2483.5MHz	94.0	Average Value
		114.0	Peak Value
Test Setup:			

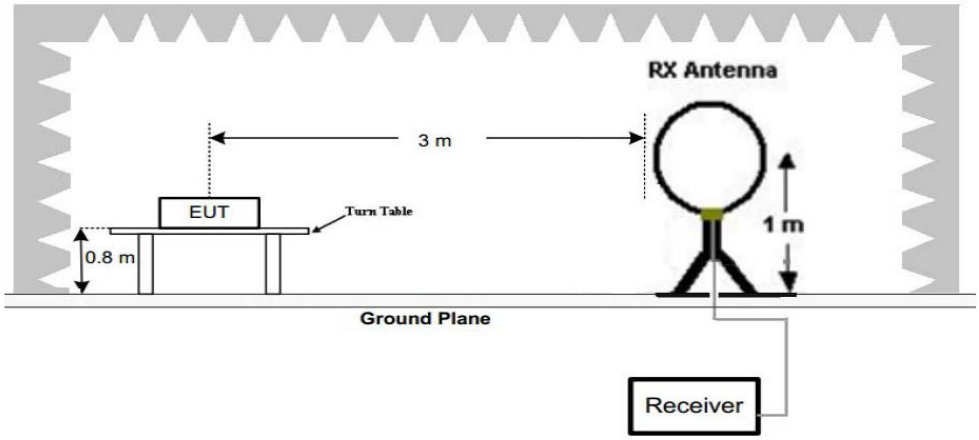


Figure 1. Below 30MHz

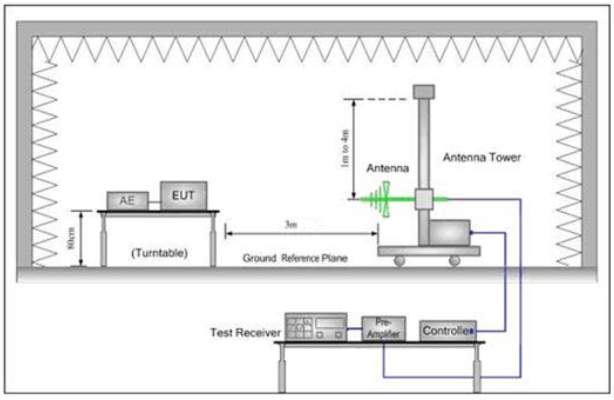


Figure 2. 30MHz to 1GHz

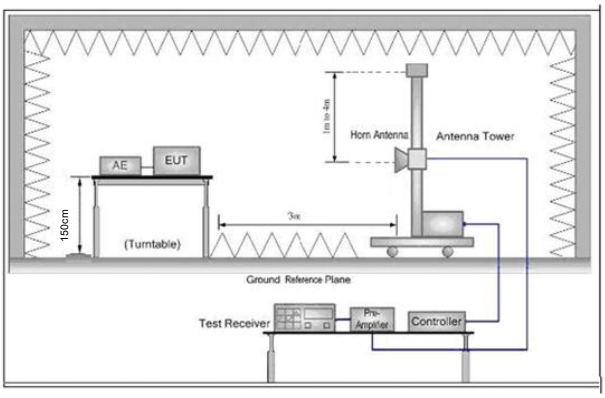


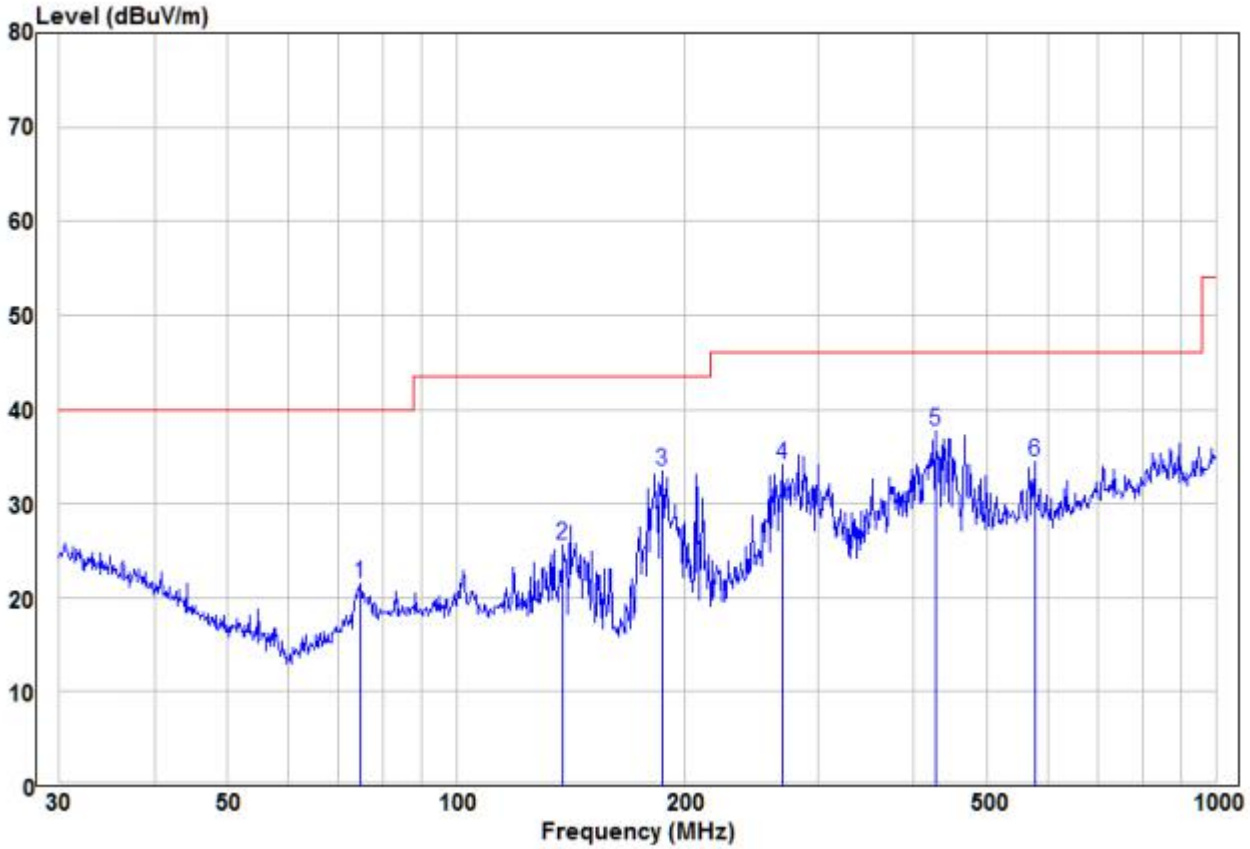
Figure 3. Above 1 GHz

Test Procedure:	a. 1) Below 1G: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2) Above 1G: The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. Note: For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

	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 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel,the middle channel,the Highest channel h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case. i. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with OFDM at lowest, middle and highest channel.
Final Test Mode:	Pretest the EUT at Transmitting mode, For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Test Voltage:	lithium battery:9.6V 2000mAh
Test Results:	Pass

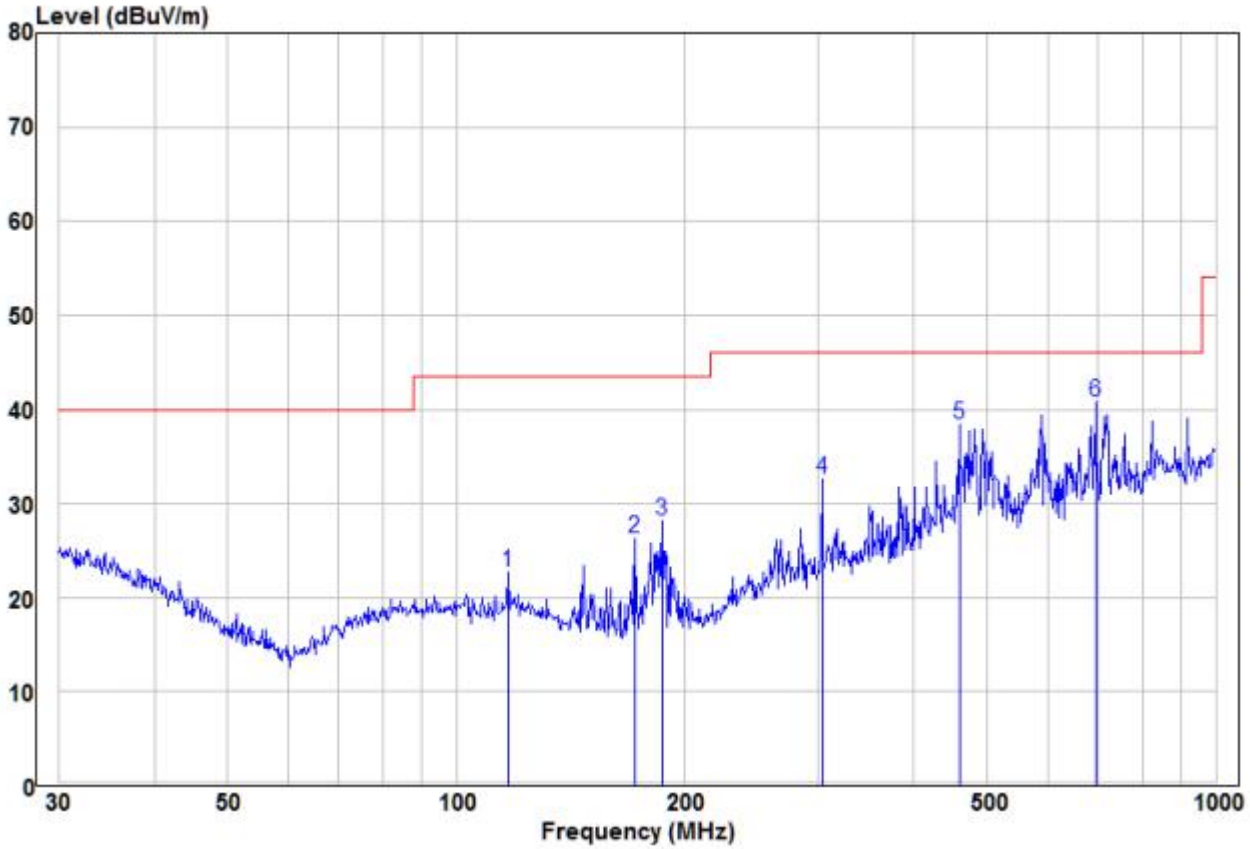
Measurement Data

30MHz~1GHz (the worst case)		
Test mode:	Transmitting (Lowest channel)	Vertical



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	74.92	12.49	8.96	21.45	40.00	-18.55	Peak	VERTICAL
2	138.39	17.26	8.41	25.67	43.50	-17.83	Peak	VERTICAL
3	187.10	25.33	8.08	33.41	43.50	-10.09	Peak	VERTICAL
4	268.49	21.39	12.69	34.08	46.00	-11.92	Peak	VERTICAL
5 pp	426.52	21.71	15.99	37.70	46.00	-8.30	Peak	VERTICAL
6	576.64	15.56	18.91	34.47	46.00	-11.53	Peak	VERTICAL

30MHz~1GHz (the worst case)		
Test mode:	Transmitting (Lowest channel)	Horizontal



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	116.95	12.22	10.54	22.76	43.50	-20.74	Peak	HORIZONTAL
2	171.99	18.57	7.76	26.33	43.50	-17.17	Peak	HORIZONTAL
3	187.10	20.01	8.08	28.09	43.50	-15.41	Peak	HORIZONTAL
4	303.54	18.81	13.81	32.62	46.00	-13.38	Peak	HORIZONTAL
5	459.11	21.40	17.01	38.41	46.00	-7.59	Peak	HORIZONTAL
6 pp	694.42	19.79	20.99	40.78	46.00	-5.22	Peak	HORIZONTAL

Above 1GHz			
Test mode:	Transmitting	Test channel:	Lowest

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2390	58.30	-9.2	49.10	74	-24.90	Peak	H
2390	44.84	-9.2	35.64	54	-18.36	AVG	H
2400	60.17	-9.39	50.78	74	-23.22	Peak	H
2400	46.37	-9.39	36.98	54	-17.02	AVG	H
2407	99.57	-9.33	90.24	114	-23.76	peak	H
2407	85.59	-9.33	76.26	94	-17.74	AVG	H
4814	54.79	-4.28	50.51	74	-23.49	peak	H
4814	42.59	-4.28	38.31	54	-15.69	AVG	H
7221	53.07	1.13	54.20	74	-19.80	peak	H
7221	37.54	1.13	38.67	54	-15.33	AVG	H
2390	58.25	-9.2	49.05	74	-24.95	peak	V
2390	44.28	-9.2	35.08	54	-18.92	AVG	V
2400	59.36	-9.39	49.97	74	-24.03	peak	V
2400	46.54	-9.39	37.15	54	-16.85	AVG	V
2407	95.61	**-9.33**	86.28	114	-27.72	peak	V
2407	81.62	-9.34	72.28	94	-21.72	AVG	V
4814	55.56	-4.28	51.28	74	-22.72	peak	V
4814	40.75	-4.28	36.47	54	-17.53	AVG	V
7221	52.88	1.13	54.01	74	-19.99	peak	V
7221	37.21	1.13	38.34	54	-15.66	AVG	V

Test mode:	Transmitting	Test channel:	Middle

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2445	99.01	-9.37	89.64	114	-24.36	peak	H
2445	87.30	-9.37	77.93	94	-16.07	AVG	H
4890	56.07	-4.14	51.93	74	-22.07	peak	H
4890	42.29	-4.14	38.15	54	-15.85	AVG	H
7335	52.29	0.56	52.85	74	-21.15	peak	H
7335	37.00	0.56	37.56	54	-16.44	AVG	H
2445	95.78	-9.36	86.42	114	-27.58	peak	V
2445	84.01	-9.36	74.65	94	-19.35	AVG	V
4890	56.97	-4.14	52.83	74	-21.17	peak	V
4890	43.37	-4.14	39.23	54	-14.77	AVG	V
7335	52.83	0.56	53.39	74	-20.61	peak	V
7335	36.57	0.56	37.13	54	-16.87	AVG	V

Test mode:	Transmitting	Test channel:	Highest

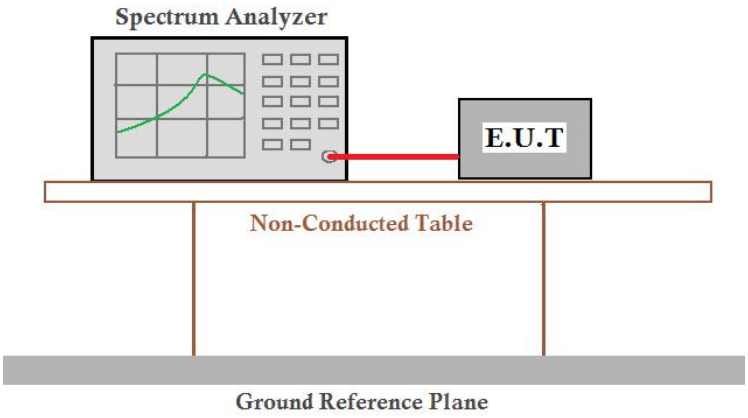
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2475	100.19	-9.23	90.96	114	-23.04	peak	H
2475	85.93	-9.23	76.70	94	-17.30	AVG	H
2483.5	60.68	-9.29	51.39	74	-22.61	Peak	H
2483.5	43.84	-9.29	34.55	54	-19.45	AVG	H
4950	57.65	-4.03	53.62	74	-20.38	peak	H
4950	42.94	-4.03	38.91	54	-15.09	AVG	H
7425	53.27	1.68	54.95	74	-19.05	peak	H
7425	36.79	1.68	38.47	54	-15.53	AVG	H
2475	97.50	-9.23	88.27	114	-25.73	peak	V
2475	83.71	-9.23	74.48	94	-19.52	AVG	V
2483.5	60.82	-9.29	51.53	74	-22.47	peak	V
2483.5	42.76	-9.29	33.47	54	-20.53	AVG	V
4950	55.92	-4.03	51.89	74	-22.11	peak	V
4950	43.65	-4.03	39.62	54	-14.38	AVG	V
7425	53.24	1.68	54.92	74	-19.08	peak	V
7425	37.82	1.68	39.50	54	-14.50	AVG	V

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

2) Scan from 9kHz to 25GHz,The disturbance above 8GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .

4.4 20dB Bandwidth

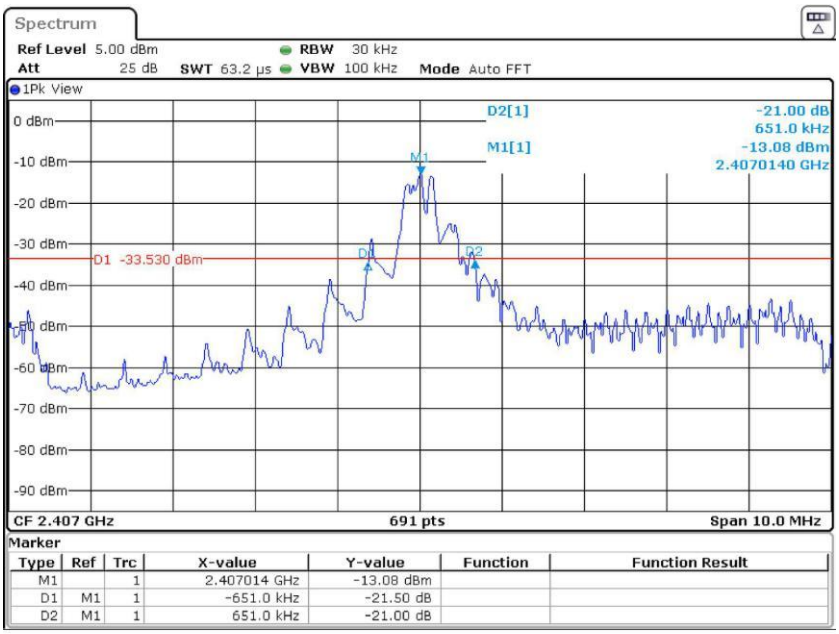
Test Requirement:	RSS-Gen Section 6.7 47 CFR Part 15C Section 15.215
Test Method:	ANSI C63.10:2013 & RSS-Gen Section 6.7
Test Setup:	
Test Mode:	Transmitting with OFDM at lowest, middle and highest channel.
Limit:	N/A
Test Results:	Pass

Measurement Data

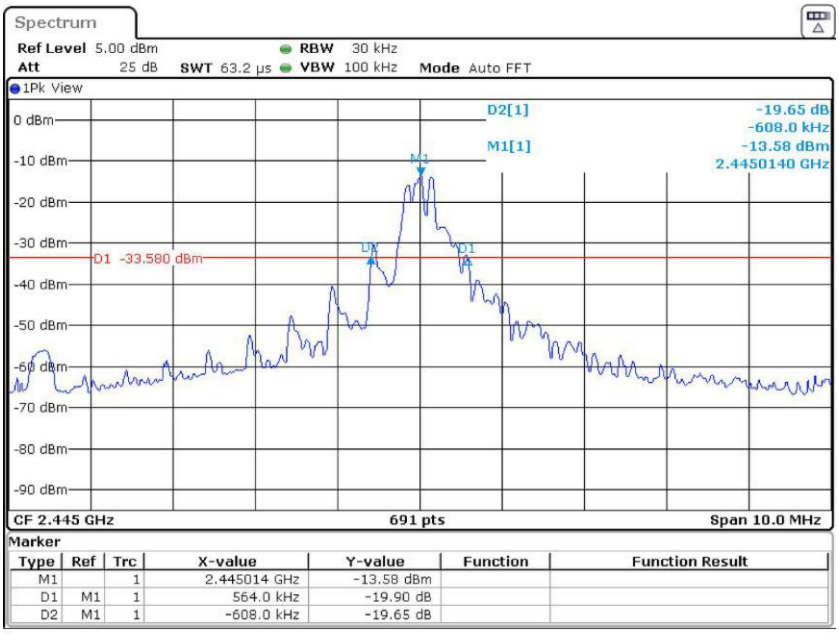
Test channel	20dB bandwidth (MHz)	Results
Lowest	0.651	Pass
Middle	0.608	Pass
Highest	0.608	Pass

Test plot as follows:

Test channel:	Lowest

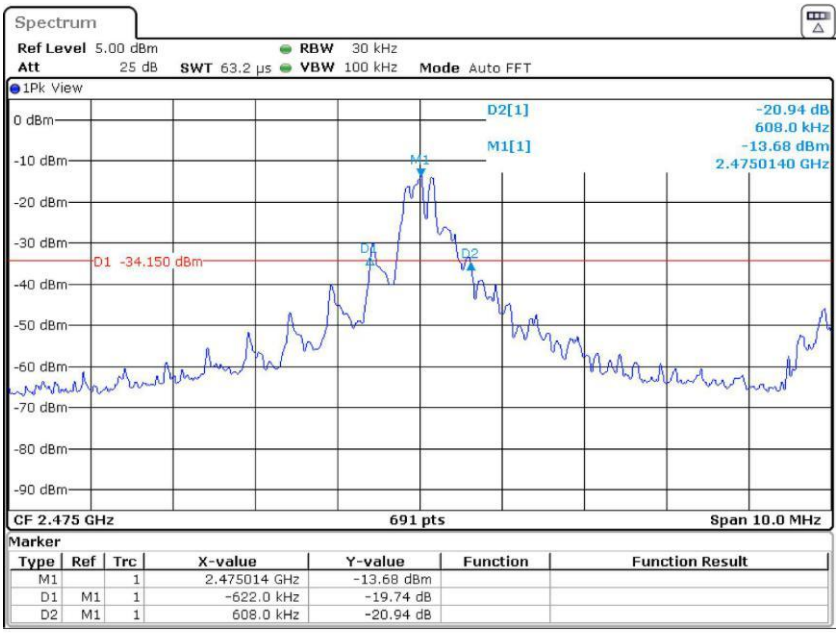


Test channel:	Middle



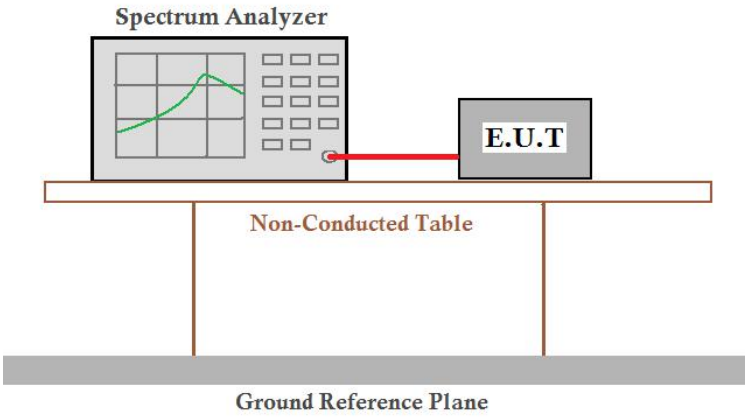
Date: 12.JAN.2022 07:04:56

Test channel:	Highest



Date: 12.JAN.2022 07:06:07

4.5 99% Occupy Bandwidth

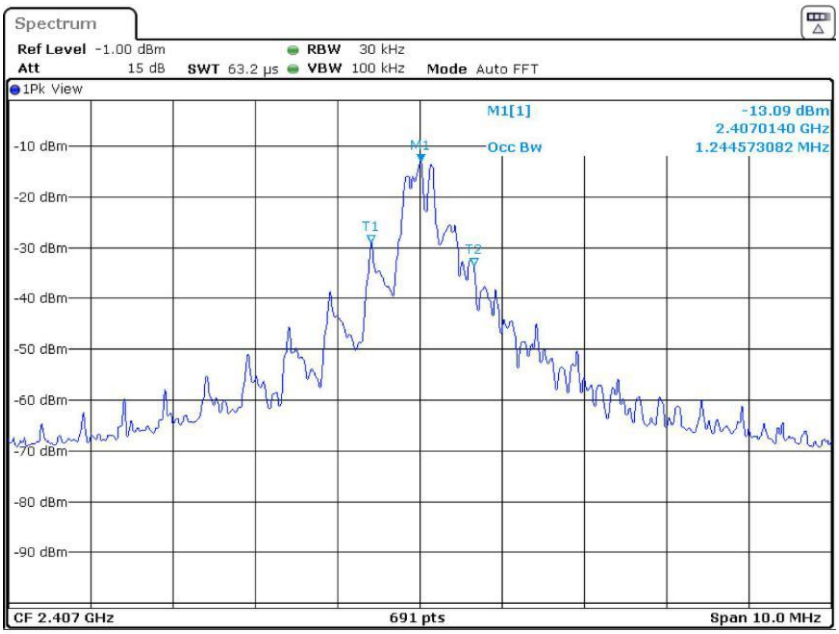
Test Requirement:	RSS-Gen Section 6.7
Test Method:	RSS-Gen Section 6.7
Test Setup:	
Test Mode:	Transmitting with OFDM at lowest, middle and highest channel.
Limit:	N/A
Test Results:	Pass

Measurement Data

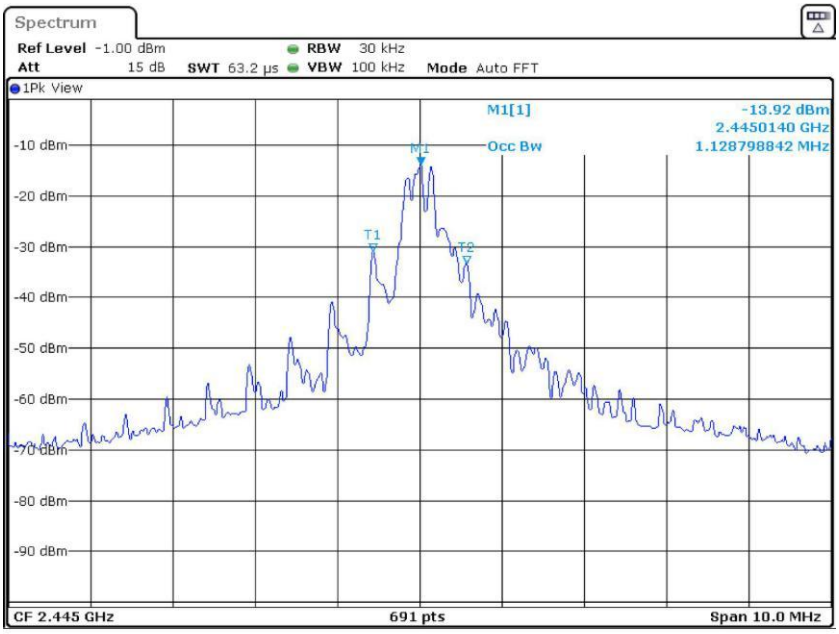
Test channel	99% Occupy Bandwidth (MHz)	Results
Lowest	1.245	Pass
Middle	1.288	Pass
Highest	1.172	Pass

Test plot as follows:

Test channel:	Lowest

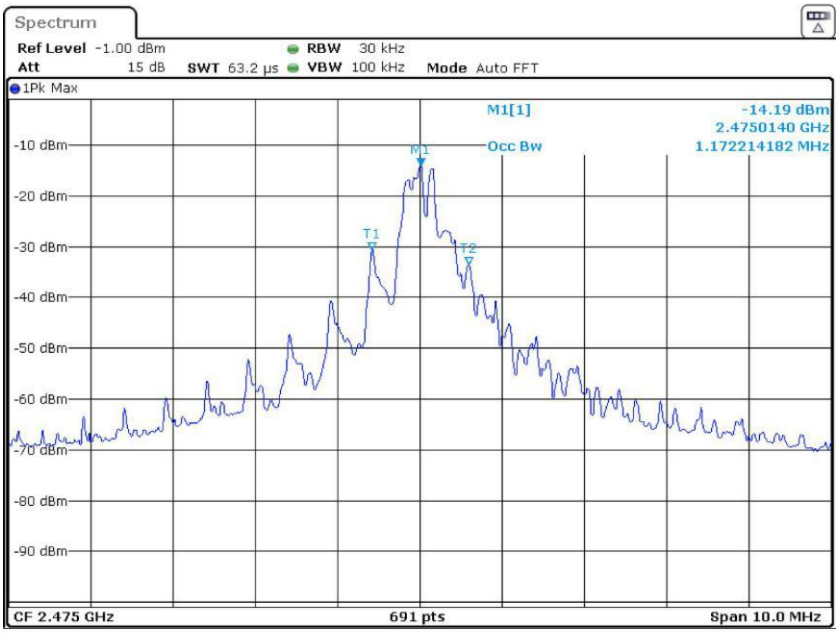


Test channel:	Middle



Date: 20.JAN.2022 12:47:30

Test channel:	Highest



Date: 20.JAN.2022 12:46:14

5 Photographs

5.1 Radiated Emission Test Setup

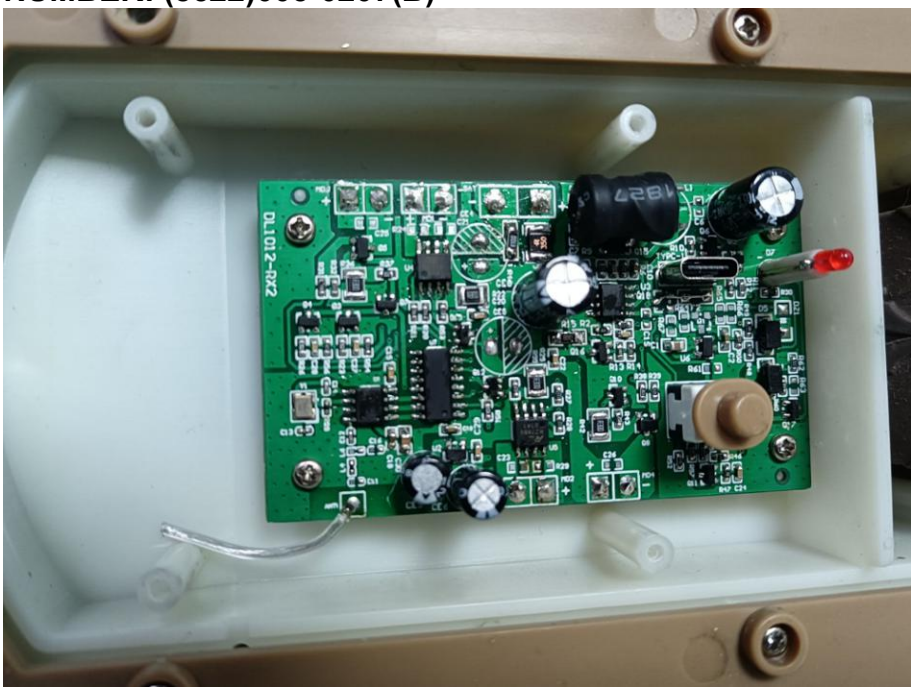
9KHz~30MHz:

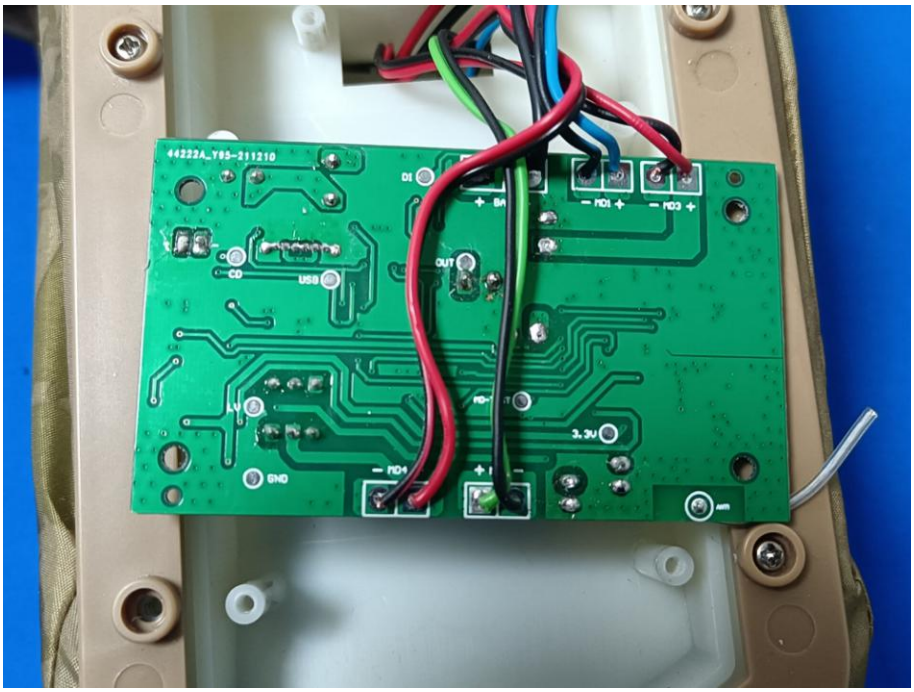
30MHz~1GHz:

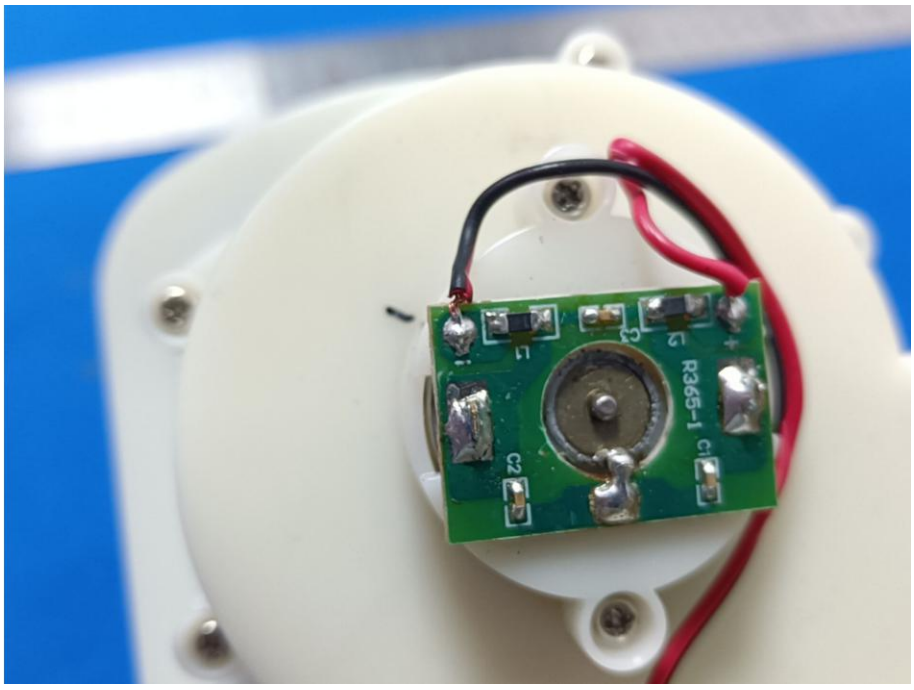
Above 1GHz:

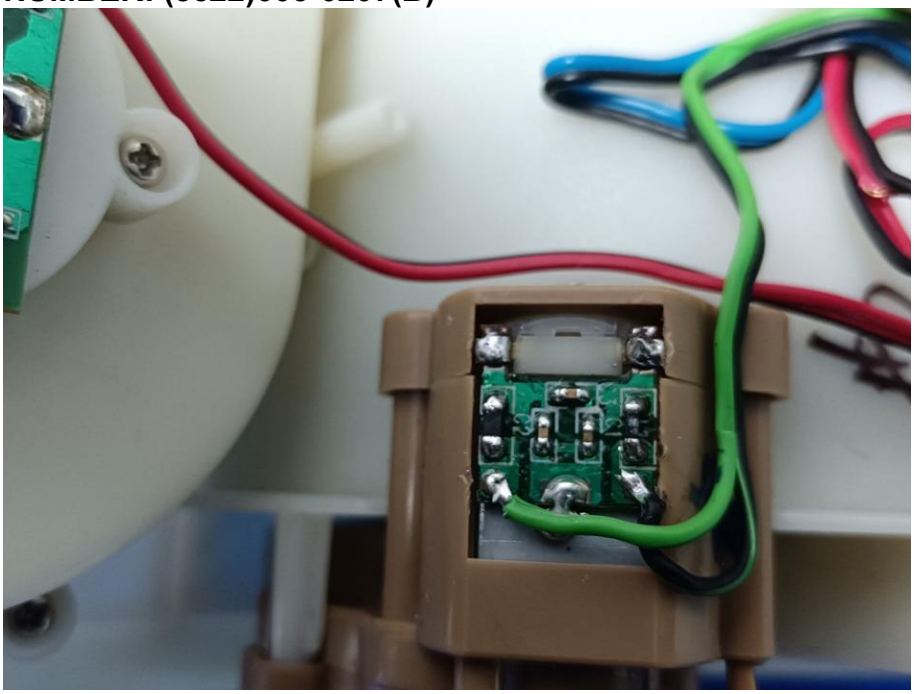
5.2 Conducted Emission Test Setup

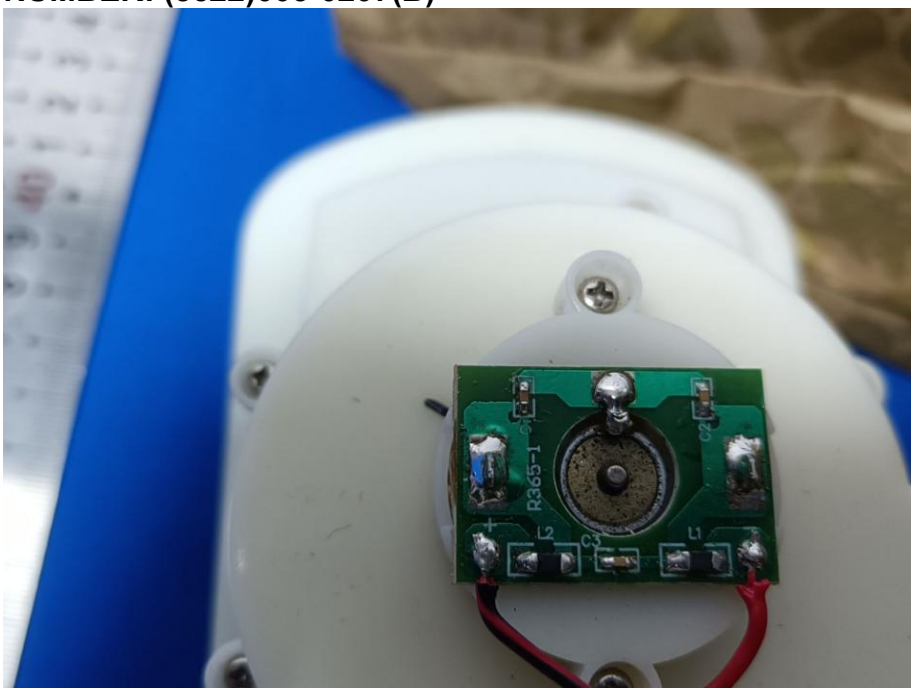
5.3 EUT Constructional Details

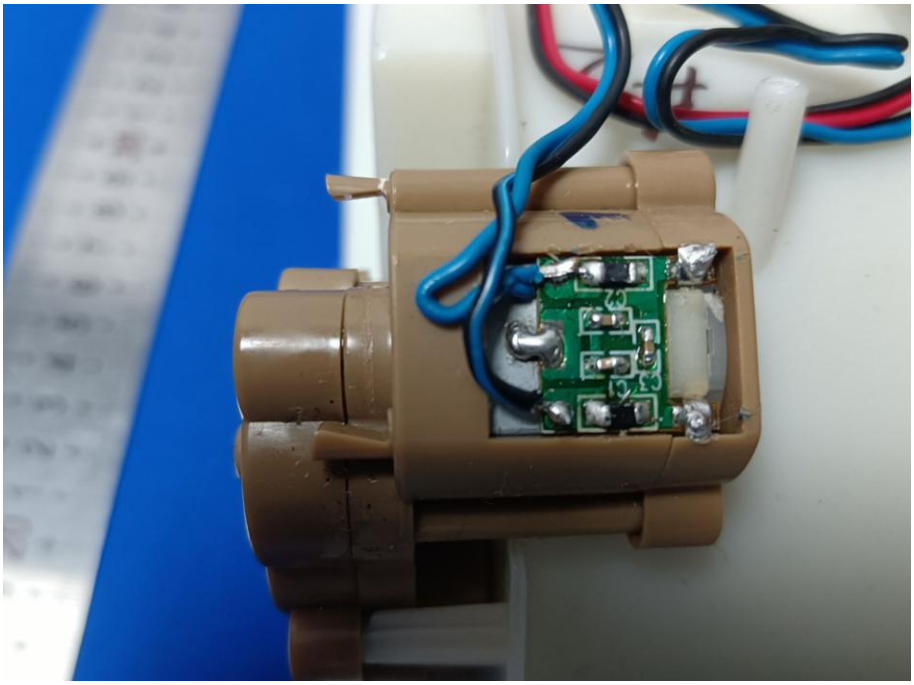

DL1012-RX2


44222A_Y05-211210
OUT
3.3V
GND


R365-1
C2







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