



## Shenzhen Centre Quality Accreditation Technology Co., Ltd.

Address: 1 F., Block B of Complex Building, Baisha Logistics Park, No.3011  
Shahe West Road, Nanshan District, Shenzhen, China

Telephone: +86-755-26648640  
Fax: +86-755-26648637  
Website: [www.cqa-cert.com](http://www.cqa-cert.com)

Report No.: CQASZ160601314E-01  
Report Version: V01

# MEASUREMENT REPORT

## Test Report

**Applicant:** Shenzhen Redfox Intelligent Technology Co., Ltd.

**Address of Applicant:** NO.522, Block 5E, Software industry Base, Nanshan District, Shenzhen, China

**Manufacturer:** Shenzhen Redfox Intelligent Technology Co., Ltd.

**Address of Manufacturer:** NO.522, Block 5E, Software industry Base, Nanshan District, Shenzhen, China

**Equipment Under Test (EUT):**

**Product:** Wireless Remote Control

**Model No.:** RF-C01

**Brand Name:** N/A

**FCC ID:** 2AGLS-RFI-C0001-CH

**Standards:** 47 CFR Part 15, Subpart C

**Date of Test:** 2016-07-01 to 2016-07-12

**Date of Issue:** 2016-07-12

**Test Result :** **PASS\***

**Reviewed By:**



**Approved By:**

\* In the configuration tested, the EUT complied with the standards specified above.

## 2 Version

### Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ160601314E-01	Rev.01	Initial report	2016-07-12

### 3 Test Summary

Test Item	Test Requirement	Test method	Result
<b>Antenna Requirement</b>	47 CFR Part 15, Subpart C Section 15.203	ANSI C63.10 (2013)	PASS
<b>AC Power Line Conducted Emission</b>	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 (2013)	PASS
<b>Field Strength of the Fundamental Signal</b>	47 CFR Part 15, Subpart C Section 15.249 (a)	ANSI C63.10 (2013)	PASS
<b>Spurious Emissions</b>	47 CFR Part 15, Subpart C Section 15.249 (a)/15.209	ANSI C63.10 (2013)	PASS
<b>Restricted bands around fundamental frequency (Radiated Emission)</b>	47 CFR Part 15, Subpart C Section 15.249(a)/15.205	ANSI C63.10 (2013)	PASS
<b>20dB Occupied Bandwidth</b>	47 CFR Part 15, Subpart C Section 15.215 (c)	ANSI C63.10 (2013)	PASS

## 4 Contents

	Page
<b>1 COVER PAGE.....</b>	<b>1</b>
<b>2 VERSION.....</b>	<b>2</b>
<b>3 TEST SUMMARY .....</b>	<b>3</b>
<b>4 CONTENTS.....</b>	<b>4</b>
<b>5 GENERAL INFORMATION .....</b>	<b>5</b>
5.1 CLIENT INFORMATION .....	5
5.2 GENERAL DESCRIPTION OF EUT.....	5
5.3 TEST ENVIRONMENT AND MODE .....	7
5.4 DESCRIPTION OF SUPPORT UNITS .....	7
5.5 TEST LOCATION.....	7
5.6 STATEMENT OF THE MEASUREMENT UNCERTAINTY .....	7
5.7 TEST FACILITY.....	8
5.8 DEVIATION FROM STANDARDS .....	8
5.9 ABNORMALITIES FROM STANDARD CONDITIONS.....	8
5.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	8
5.11 EQUIPMENT LIST.....	9
<b>6 TEST RESULTS AND MEASUREMENT DATA.....</b>	<b>10</b>
6.1 ANTENNA REQUIREMENT .....	10
6.2 CONDUCTED EMISSIONS .....	11
6.3 RADIATED EMISSION .....	14
6.4 20dB BANDWIDTH .....	21
<b>7 PHOTOGRAPHS.....</b>	<b>24</b>
7.1 RADIATED EMISSION TEST SETUP.....	24
7.2 CONDUCTED EMISSION .....	25
7.3 EUT CONSTRUCTIONAL DETAILS .....	25
<b>END OF THE REPORT.....</b>	<b>30</b>

## 5 General Information

### 5.1 Client Information

Applicant:	Shenzhen Redfox Intelligent Technology Co., Ltd.
Address of Applicant:	NO.522, Block 5E, Software industry Base, Nanshan District, Shenzhen, China
Manufacturer:	Shenzhen Redfox Intelligent Technology Co., Ltd.
Address of Manufacturer:	NO.522, Block 5E, Software industry Base, Nanshan District, Shenzhen, China

### 5.2 General Description of EUT

Name:	Wireless Remote Control
Model No.:	RF-C01
Trade Mark :	N/A
Hardware Version:	V1.0
Software Version:	V1.0
Frequency Range:	2402 MHz ~ 2480MHz
Modulation Type:	GFSK
Number of Channels:	40 (declared by the client)
Sample Type:	Portable production
Test Software of EUT:	RF test (manufacturer declare )
Antenna Type:	Ceramic Antennal
Antenna Gain:	0dBi
Power Supply:	Rechargeable battery: DC4.2V

Note: The rechargeable battery is fully-charged batter.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

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(CH1)	2402MHz
The Middle channel(CH20)	2440MHz
The Highest channel(CH39)	2480MHz

### 5.3 Test Environment and Mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1008 mbar
Test Mode:	Use test software (RF test) to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT.

### 5.4 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
Adapter	TIANYIN	TPA-915200CU
Notebook	Lenovo	Lenovo ideapad 100-14IBY

### 5.5 Test Location

All tests were performed at:

Shenzhen CTL Testing Technology Co., Ltd., Shenzhen EMC Laboratory,

1/F.-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, Guangdong, China

### 5.6 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 CTL 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 CTL laboratory is reported:

Test	Range	Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	1~12.75GHz	4.32dB	(1)
Radiated Emission	12.75GHz-25GHz	4.68dB	(1)
Conducted Disturbance	0.15~30MHz	3.20dB	(1)

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

## 5.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

### FCC – Registration No.: 970318

Shenzhen CTL Testing Technology Co., Ltd. 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 970318

## 5.8 Deviation from Standards

None.

## 5.9 Abnormalities from Standard Conditions

None.

## 5.10 Other Information Requested by the Customer

None.

## 5.11 Equipment List

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Due Date
1	Bilog Antenna	Sunol Sciences Corp.	JB1	A061713	2017/06/01
2	EMI Test Receiver	ROHDE & SCHWARZ	ESCI3	103710	2017/06/01
3	Spectrum Analyzer	Agilent	E4407B	MY45108355	2017/05/20
4	Controller	EM Electronics	Controller EM 1000	N/A	2017/05/20
5	Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2017/05/18
6	Ultra-Broadband Antenna	ShwarzBeck	BBHA9170	25841	2017/05/18
7	Active Loop Antenna	Daze	ZN30900A	N/A	2017/05/18
8	Spectrum Analyzer	R&S	FSU	MY41440676	2017/05/18
9	LISN	R&S	ENV216	101316	2017/06/01
10	LISN	SCHWARZBECK	NSLK8127	8127687	2017/06/01
11	Microwave Preamplifier	HP	8349B	3155A00882	2017/05/18
12	Preamplifier	HP	8447D	3113A07663	2017/05/18
13	Transient Limiter	Com-Power	LIT-153	532226	2017/06/01
14	Temperature/Humidity Meter	Gangxing	CTH-608	02	2017/05/19
15	Climate Chamber	ESPEC	EL-10KA	A20120523	2017/05/19
16	High-Pass Filter	K&L	9SH10-2700/X12750-O/O	N/A	2017/05/19
17	High-Pass Filter	K&L	41SH10-1375/U12750-O/O	N/A	2017/05/19
18	RF Cable(0-1GHz)	HUBER+SUHNER	RG174	N/A	2017/05/19
19	RF Cable(1-25GHz)	HUBER+SUHNER	RG214	N/A	2017/05/19
20	The temporary antenna Connector	MMCX-SMA	1547	23657478	2017/05/19

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.

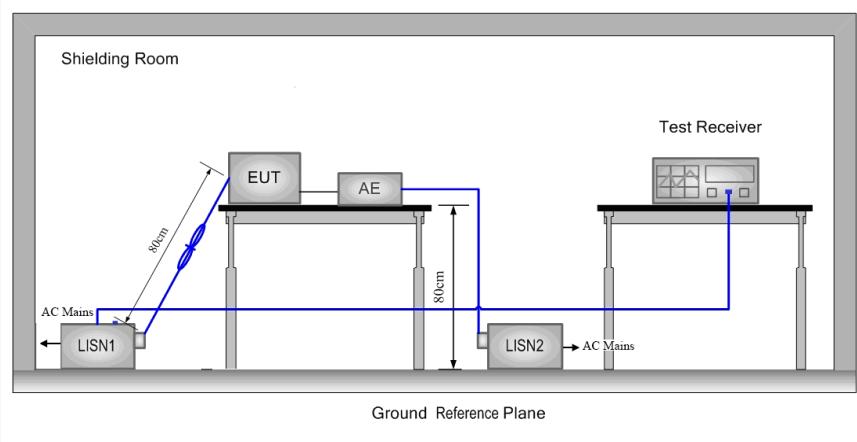
## 6 Test results and Measurement Data

### 6.1 Antenna Requirement

<b>Standard requirement:</b>	47 CFR Part 15C Section 15.203
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.	
<b>EUT Antenna:</b>	

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.

## 6.2 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:	<ol style="list-style-type: none"> <li>1) The mains terminal disturbance voltage test was conducted in a shielded room.</li> <li>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a <math>50\Omega/50\mu\text{H} + 5\Omega</math> 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.</li> <li>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,</li> <li>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.</li> <li>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.</li> </ol>		
Test Setup:			

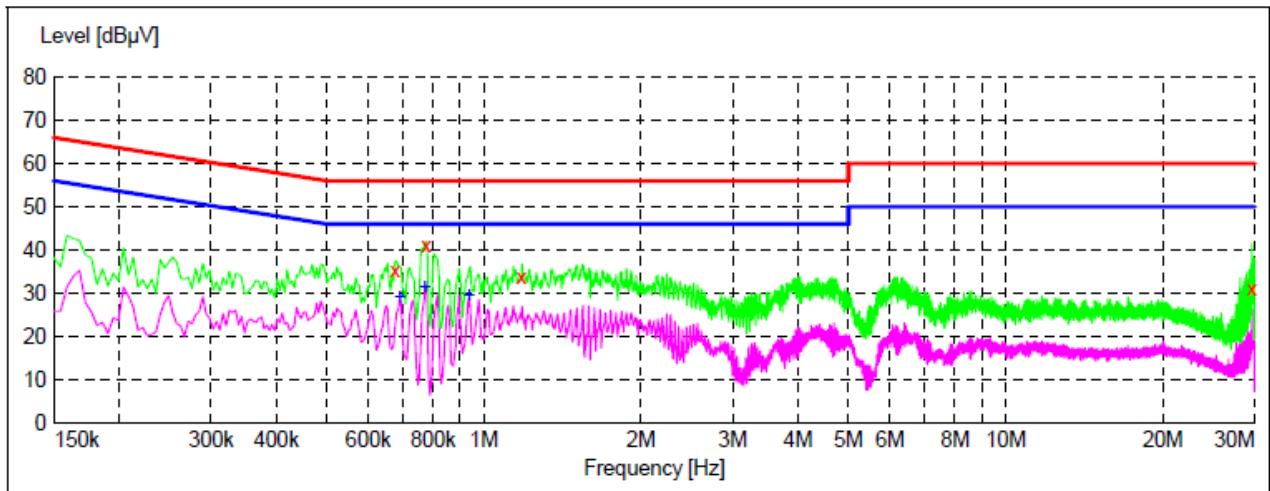
Test Mode:	Charge+Keep the EUT in transmitting mode
Final Test Mode:	Through Pre-scan, find at the lowest channel is the worst case. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Voltage:	AC 120V/60Hz
Test Results:	Pass

### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:

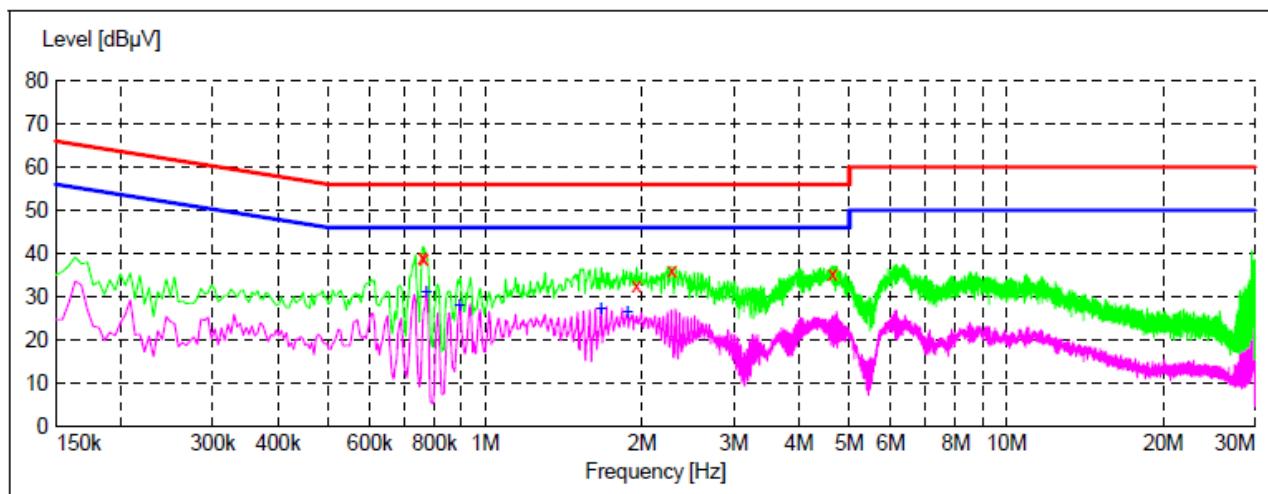


Frequency MHz	Level dB $\mu$ V	Transd dB	Limit dB $\mu$ V	Margin dB	Detector	Line	PE
0.676501	35.30	10.2	56	20.7	QP	L1	GND
0.775501	41.20	10.2	56	14.8	QP	L1	GND
1.180501	33.60	10.3	56	22.4	QP	L1	GND
29.656501	31.00	11.3	60	29.0	QP	L1	GND

Frequency MHz	Level dB $\mu$ V	Transd dB	Limit dB $\mu$ V	Margin dB	Detector	Line	PE
0.690001	29.00	10.2	46	17.0	AV	L1	GND
0.771001	31.60	10.2	46	14.4	AV	L1	GND
0.937501	29.40	10.3	46	16.6	AV	L1	GND

## Neutral Line:



Frequency MHz	Level dB $\mu$ V	Transd dB	Limit dB $\mu$ V	Margin dB	Detector	Line	PE
------------------	---------------------	--------------	---------------------	--------------	----------	------	----

0.757501	39.30	10.2	56	16.7	QP	N	GND
0.762001	38.90	10.2	56	17.1	QP	N	GND
1.950001	32.60	10.3	56	23.4	QP	N	GND
2.278501	36.20	10.4	56	19.8	QP	N	GND
4.641001	35.40	10.4	56	20.6	QP	N	GND

Frequency MHz	Level dB $\mu$ V	Transd dB	Limit dB $\mu$ V	Margin dB	Detector	Line	PE
------------------	---------------------	--------------	---------------------	--------------	----------	------	----

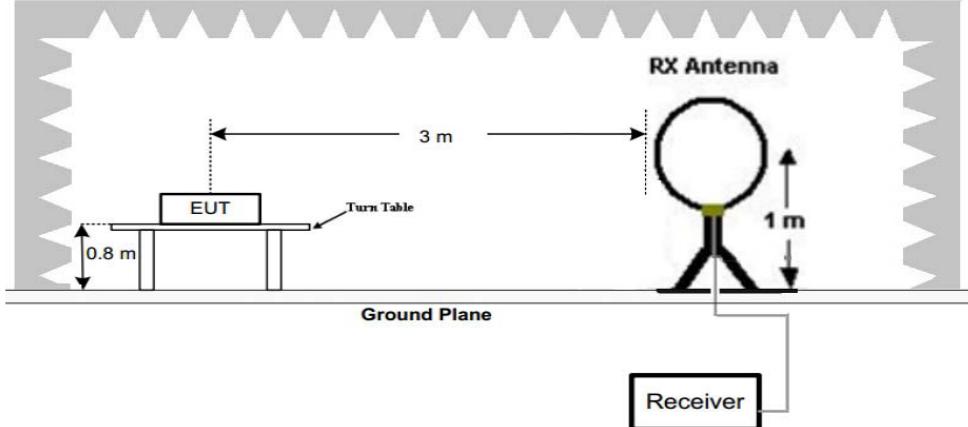
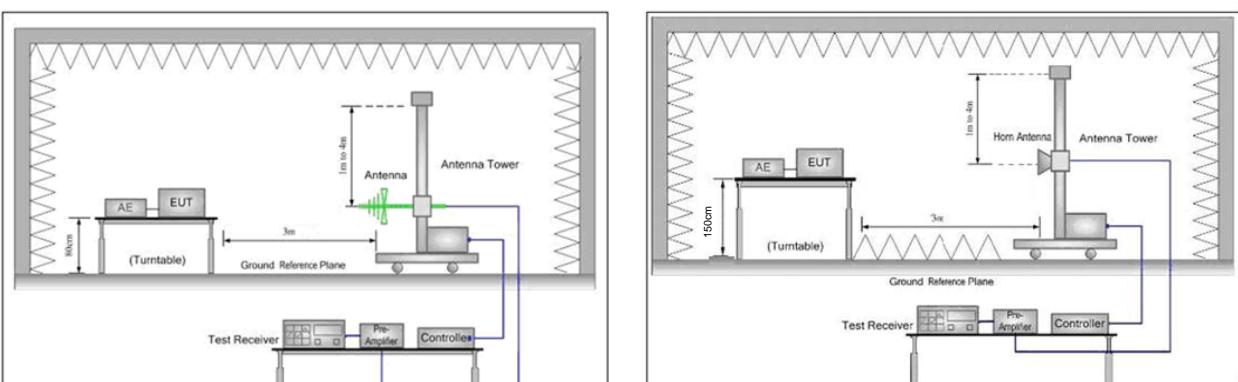
0.771001	31.10	10.2	46	14.9	AV	N	GND
0.892501	28.10	10.2	46	17.9	AV	N	GND
1.666501	27.30	10.3	46	18.7	AV	N	GND
1.873501	26.50	10.3	46	19.5	AV	N	GND

## Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

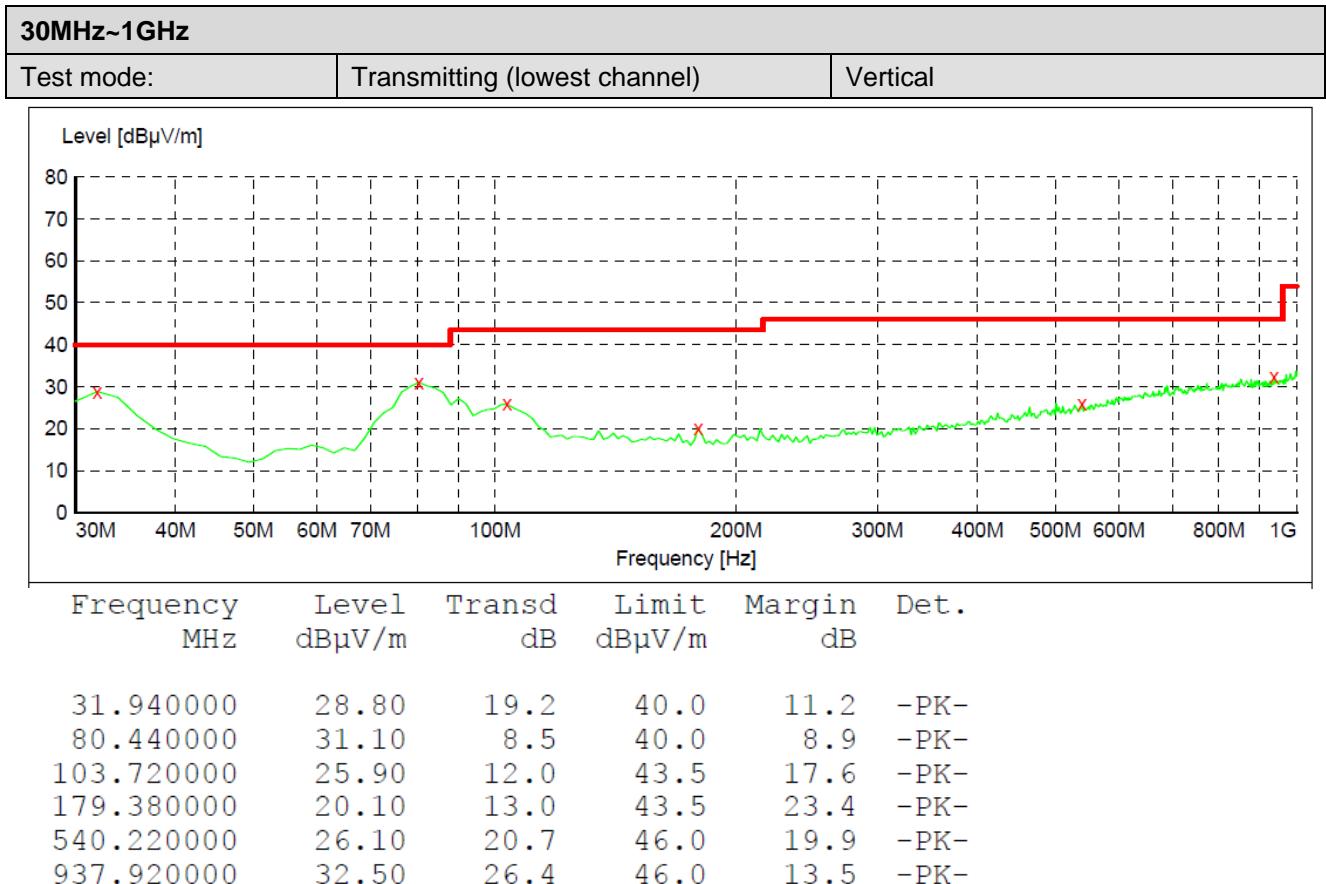
### 6.3 Radiated Emission

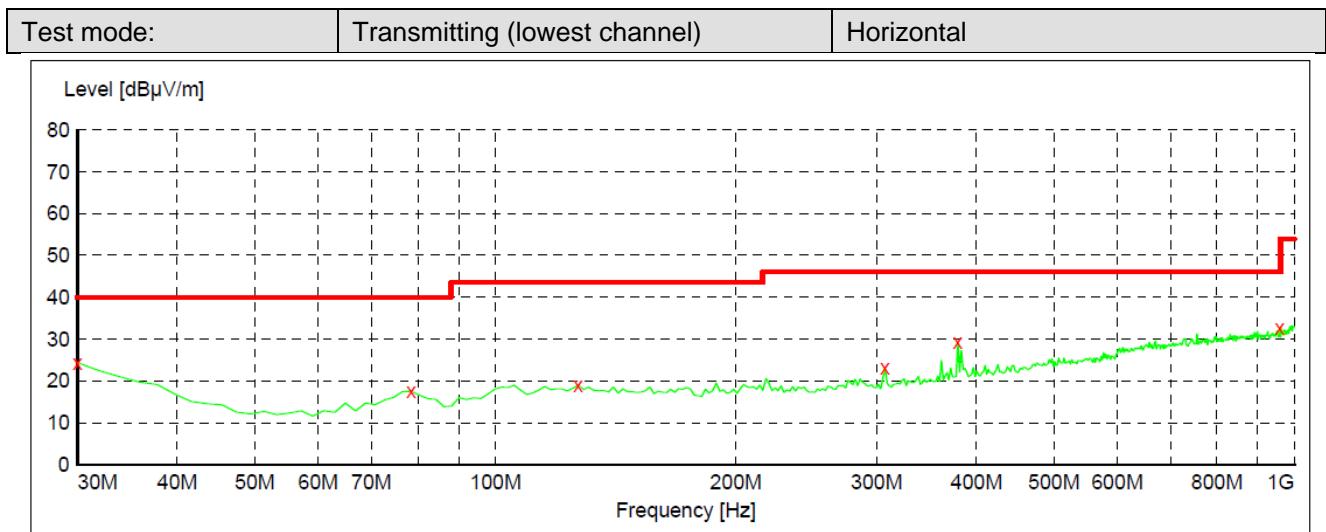
Test Requirement:	47 CFR Part 15C Section 15.249 and 15.209 and 15.205				
Test Method:	ANSI C63.10: 2013				
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30KHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30KHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30KHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30KHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30KHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100 kHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Limit: (Spurious Emissions and band edge)	Frequency	Field strength (microvolt/meter )	Limit (dBuV/m )	Remark	Measuremen t distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	<p>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.</p> <p>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.</p>				
Limit: (Field strength of the fundamental signal)	Frequency	Limit (dBuV/m @3m)		Remark	
	2400MHz-2483.5MHz	94.0		Average Value	
		114.0		Peak Value	

Test Setup:	
	<p>Figure 1. Below 30MHz</p> 
Test Procedure:	<p>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 chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>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 chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

	<ul style="list-style-type: none"> <li>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>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.</li> <li>g. Test the EUT in the lowest channel, the middle channel, the Highest channel</li> <li>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.</li> <li>i. Repeat above procedures until all frequencies measured was complete.</li> </ul>
Instruments Used:	Refer to section 5.10 for details
Exploratory Test Mode:	Transmitting mode
Final Test Mode:	<p>Pretest the EUT at Transmitting mode, found the Transmitting mode which it is worse case</p> <p>Pretest the EUT at Transmitting mode, For below 1GHz part, through pre-scan, the worst case is the lowest channel.</p> <p>Only the worst case is recorded in the report.</p>
Test Voltage:	DC4.2V
Test Results:	Pass

### Measurement Data





Frequency MHz	Level dB $\mu$ V/m	Transd dB	Limit dB $\mu$ V/m	Margin dB	Det.
30.000000	24.40	20.8	40.0	15.6	-PK-
78.500000	17.50	8.4	40.0	22.5	-PK-
127.000000	19.00	14.6	43.5	24.5	-PK-
307.420000	23.30	15.4	46.0	22.7	-PK-
379.200000	29.40	17.6	46.0	16.6	-PK-
959.260000	32.60	26.6	46.0	13.4	-PK-

Above 1GHz							
Test mode:		Transmitting	Test channel:	Lowest			
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB $\mu$ V)	(dB)	(dB $\mu$ V/m)	(dB $\mu$ V/m)	(dB)		H/V
2390	45.99	-4.36	41.63	74	-32.37	peak	H
2390	34.35	-4.36	29.99	54	-24.01	AVG	H
<b>2402</b>	<b>93.04</b>	<b>-4.37</b>	<b>88.67</b>	<b>114</b>	<b>-25.33</b>	<b>peak</b>	<b>H</b>
2402	80.03	-4.37	75.66	94	-18.34	AVG	H
4804	49.16	-5.18	43.98	74	-30.02	peak	H
4804	36.83	-5.18	31.65	54	-22.35	AVG	H
7206	49.48	-6.45	43.03	74	-30.97	peak	H
7206	35.92	-6.45	29.47	54	-24.53	AVG	H
2390	48.91	-4.36	44.55	74	-29.45	peak	V
2390	35.43	-4.36	31.07	54	-22.93	AVG	V
2402	92.97	-4.37	88.60	114	-25.40	peak	V
2402	79.40	-4.37	75.03	94	-18.97	AVG	V
4804	48.40	-5.18	43.22	74	-30.78	peak	V
4804	37.44	-5.18	32.26	54	-21.74	AVG	V
7206	49.93	-6.45	43.48	74	-30.52	peak	V
7206	36.17	-6.45	29.72	54	-24.28	AVG	V

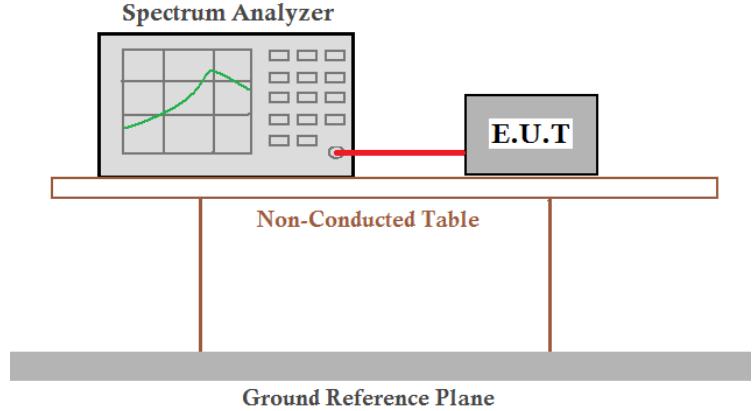
Test mode:		Transmitting		Test channel:		Middle	
Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2440	92.29	-4.39	87.90	114	-26.10	peak	H
2440	78.76	-4.39	74.37	94	-19.63	AVG	H
4880	49.85	-5.19	44.66	74	-29.34	peak	H
4880	36.11	-5.19	30.92	54	-23.08	AVG	H
7320	50.17	-6.47	43.70	74	-30.30	peak	H
7320	36.32	-6.47	29.85	54	-24.15	AVG	H
2440	91.69	-4.39	87.30	114	-26.70	peak	V
2440	78.21	-4.39	73.82	94	-20.18	AVG	V
4880	48.48	-5.19	43.29	74	-30.71	peak	V
4880	37.79	-5.19	32.60	54	-21.40	AVG	V
7320	49.66	-6.47	43.19	74	-30.81	peak	V
7320	36.78	-6.47	30.31	54	-23.69	AVG	V

Test mode:		Transmitting		Test channel:		Highest		
Frequency (MHz)	Meter Reading (dB $\mu$ V)	Factor (dB)	Emission Level (dB $\mu$ V/m)	Limits	Over (dB)	Detector Type	Ant. Pol.	
							H/V	
2480	91.46	-4.22	87.24	114	-26.76	peak	H	
2480	77.45	-4.22	73.23	94	-20.77	AVG	H	
2483.5	55.75	-4.22	51.53	74	-22.47	peak	H	
2483.5	45.75	-4.22	41.53	54	-12.47	AVG	H	
4960	49.77	-5.2	44.57	74	-29.43	peak	H	
4960	38.48	-5.2	33.28	54	-20.72	AVG	H	
7440	50.91	-6.47	44.44	74	-29.56	peak	H	
7440	36.60	-6.47	30.13	54	-23.87	AVG	H	
2480	91.19	-4.22	86.97	114	-27.03	peak	H	
2480	76.90	-4.22	72.68	94	-21.32	AVG	H	
2483.5	55.92	-4.22	51.70	74	-22.30	peak	H	
2483.5	44.93	-4.22	40.71	54	-13.29	AVG	H	
4960	49.55	-5.2	44.35	74	-29.65	peak	V	
4960	38.43	-5.2	33.23	54	-20.77	AVG	V	
7440	49.57	-6.47	43.10	74	-30.90	peak	V	
7440	36.33	-6.47	29.86	54	-24.14	AVG	V	

Remark:

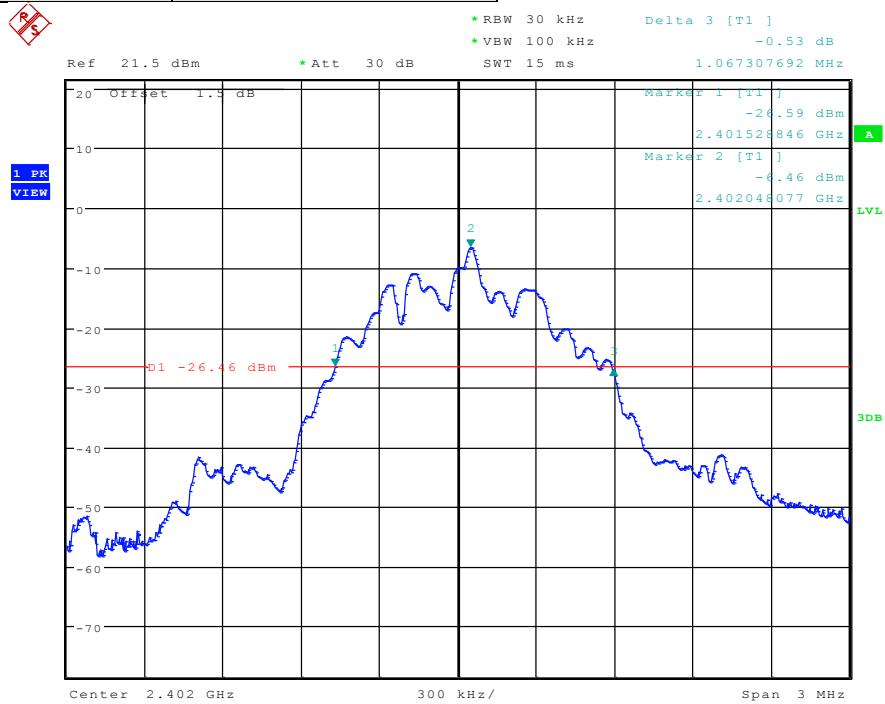
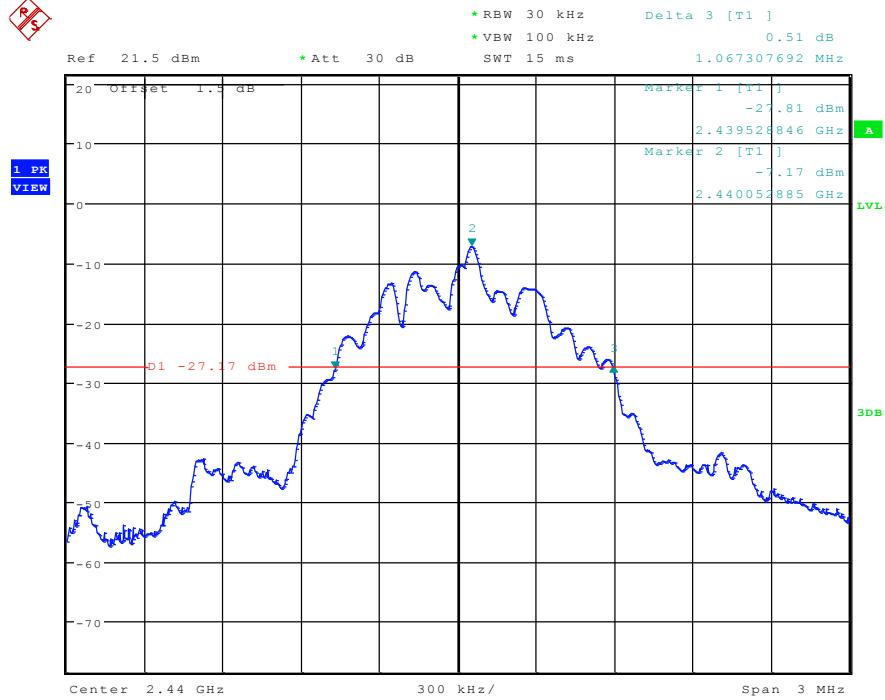
- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, The disturbance above 10GHz 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 .

## 6.4 20dB Bandwidth

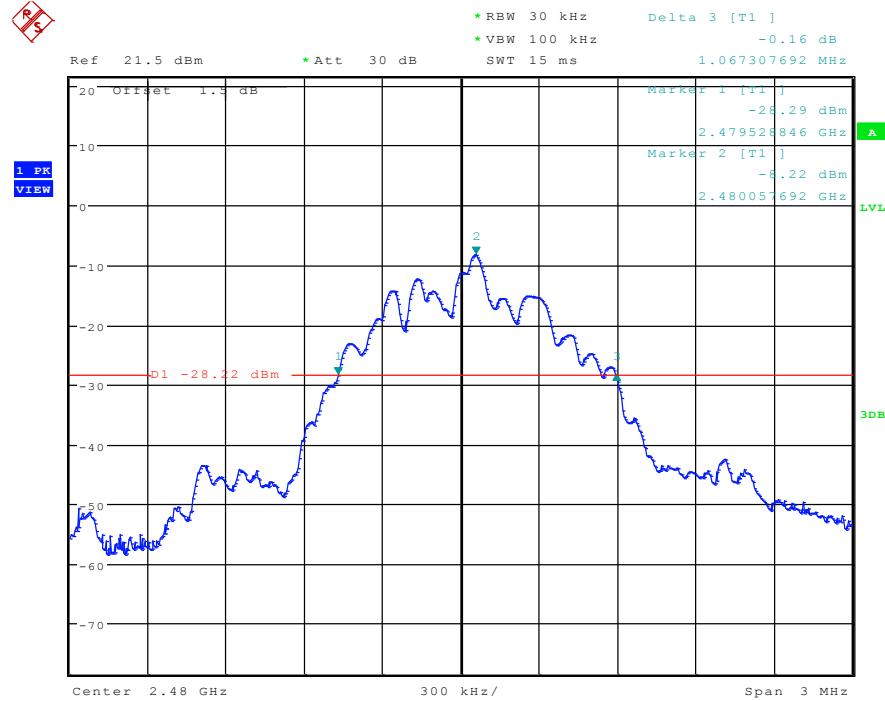
Test Requirement:	47 CFR Part 15C Section 15.215
Test Method:	ANSI C63.10:2013
Test Setup:	
Instruments Used:	Refer to section 5.10 for details
Test Mode:	Transmitting with GFSK modulation.
Limit:	N/A
Test Results:	Pass

### Measurement Data

Test channel	20dB bandwidth (MHz)	Results
Lowest	1.0673	Pass
Middle	1.0673	Pass
Highest	1.0673	Pass

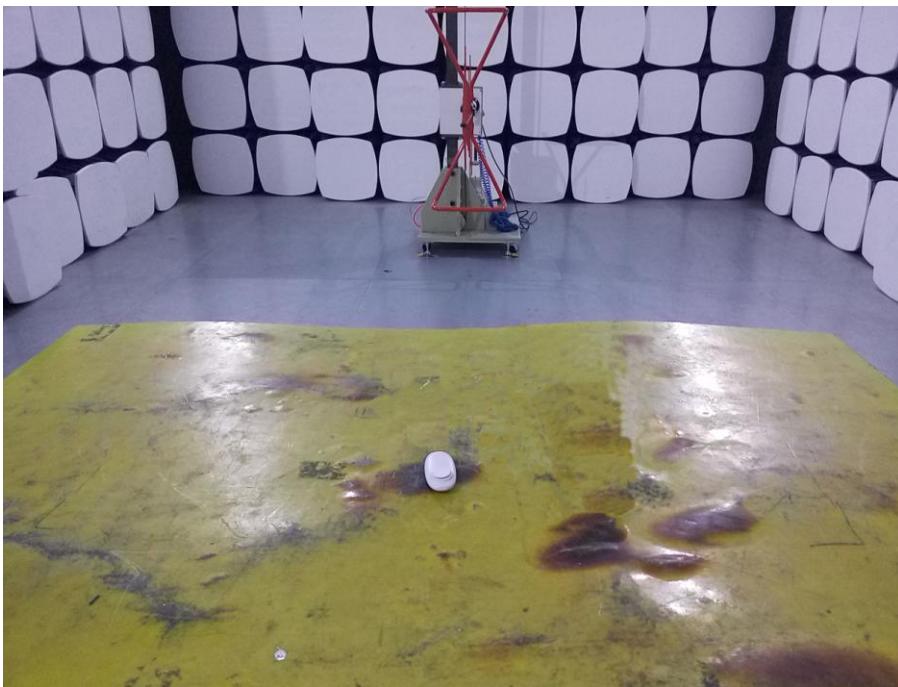
**Test plot as follows:**
**Test channel:** Lowest

**Test channel:** Middle


Test channel: **Highest**



## 7 Photographs

### 7.1 Radiated Emission Test Setup



Below 1GHz: The EUT is placed in the 0.8 m high test table

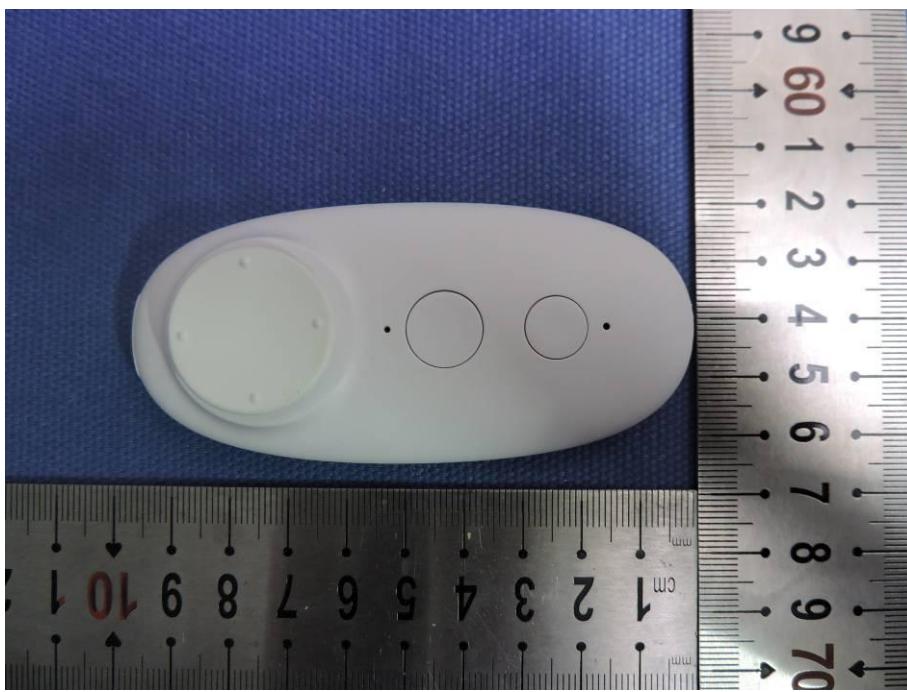


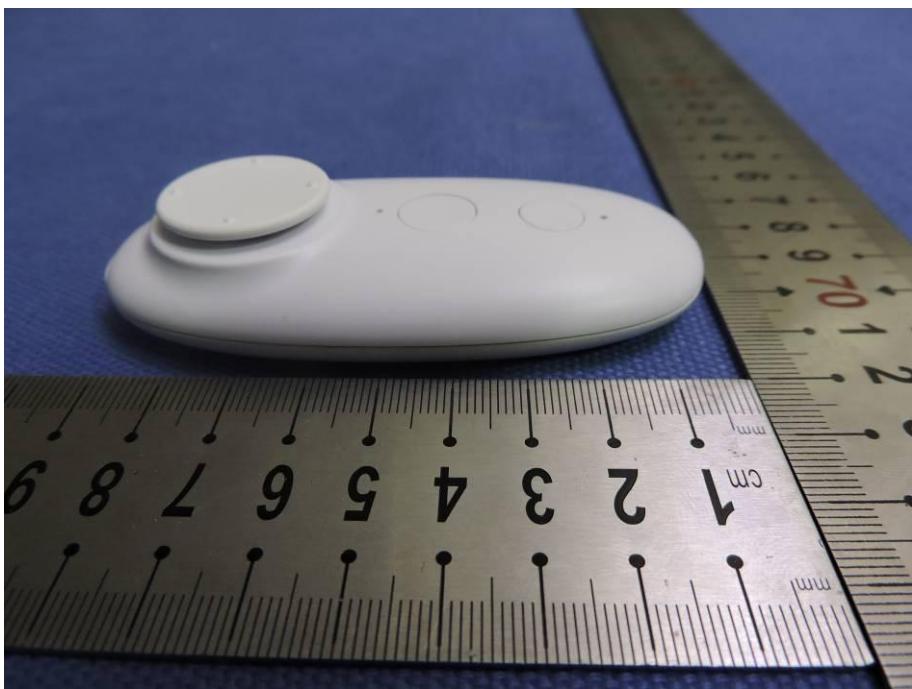
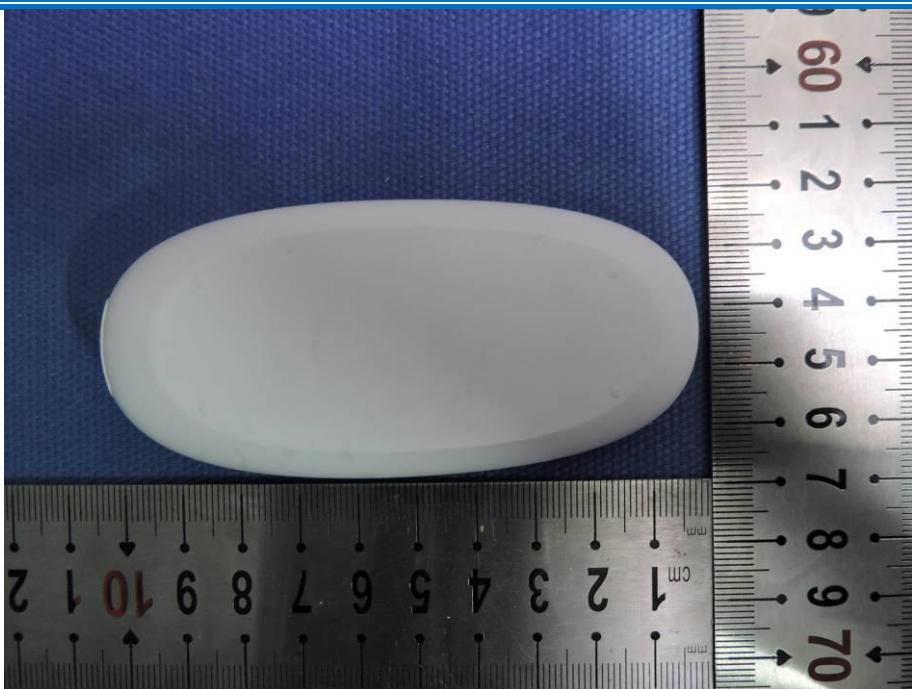
Above 1GHz: Test height 1.5m, the styrofoam block placed in the 0.8 m high test table

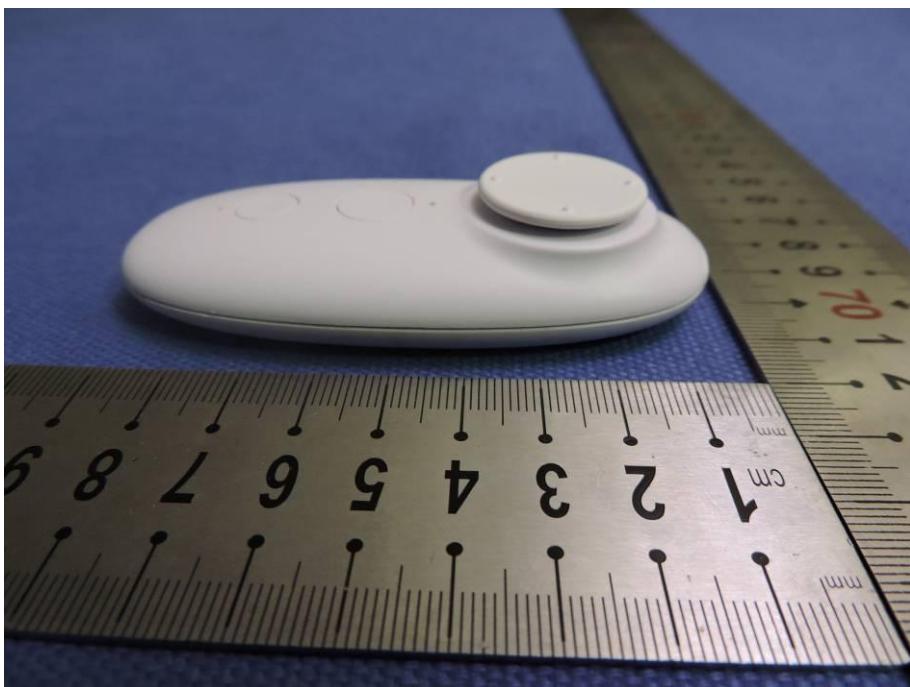
## 7.2 Conducted Emission

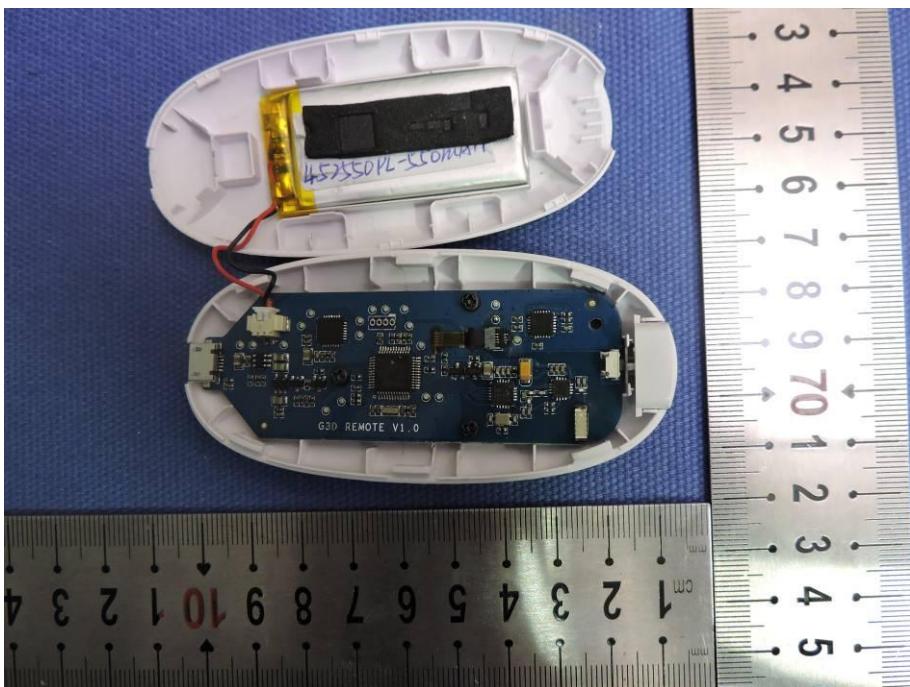


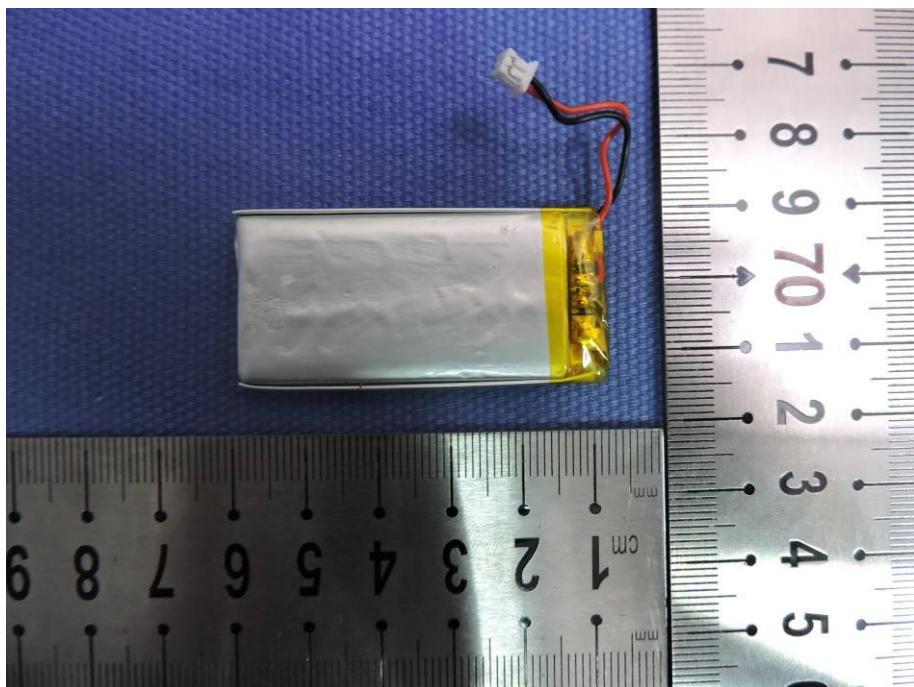
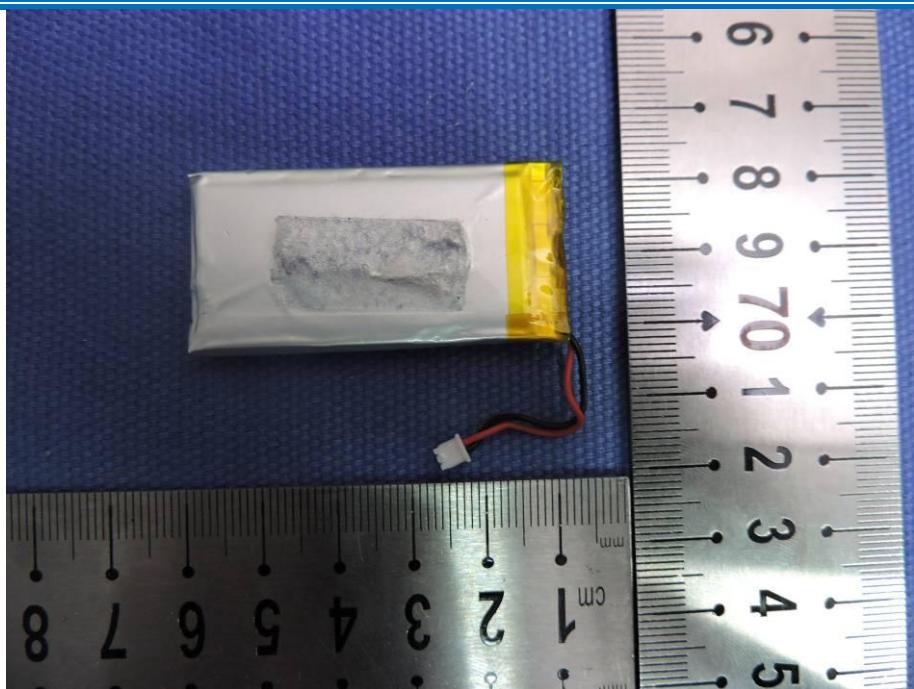
## 7.3 EUT Constructional Details

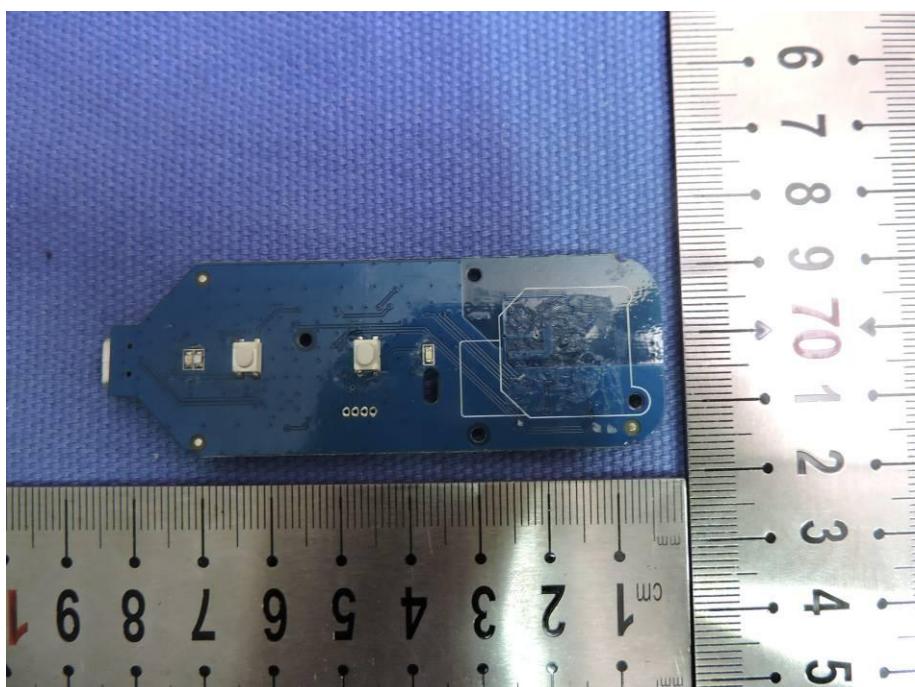
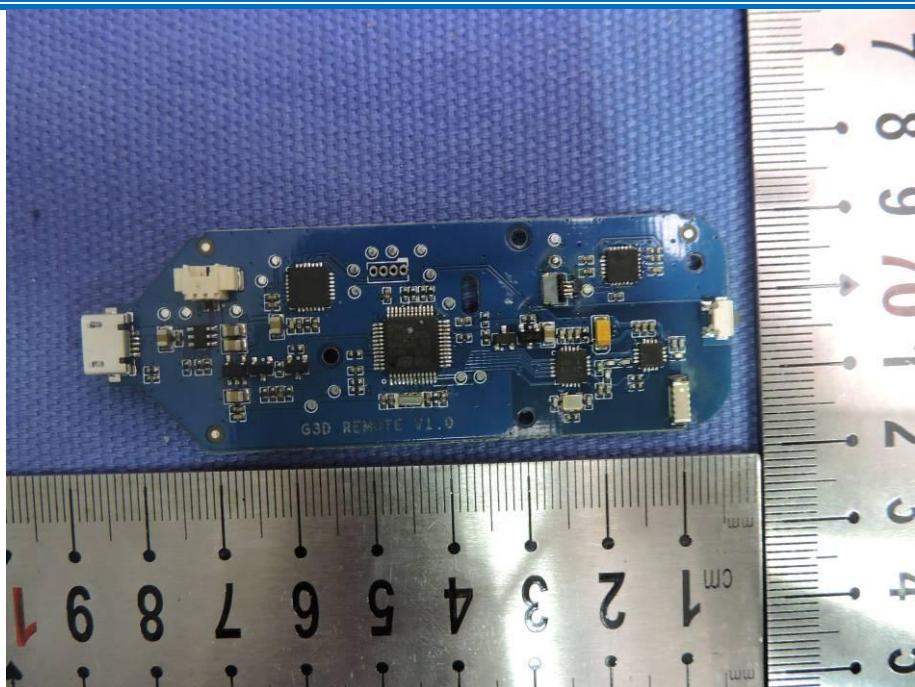












**END OF THE REPORT**