Test Report

Client Information:

Applicant:	SHAN TOU SUBO TECHTOY CO.,LTD.
Applicant add.:	XIN XINGHUA ROAD, CHENGHUA DISTRICT, CHENGHAI OF SHANTOU, CHINA

Product Information:

Product Name:	Remote control car
Model No.:	BG1513
Derivative model No.:	Refer to page 5 for detail.
Brand Name:	N/A
FCC ID:	2A4PA-BGSUBO

Standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249

FCC ID:

Prepared By:

Dongguan Yaxu (AiT) Technology Limited

Add. : No.22, Jinqianling Third Street, Jitigang, Huangjiang, Dongguan, Guangdong, China

Date of Receipt:	Feb. 19, 2022	Date of Test:	Feb. 19~ Feb. 22, 2022
Date of Issue:	Feb. 22, 2022	Test Result:	Pass

This device has been tested and found to comply with the stated standard(s), which is (are) indicated in the test report and are applicable only to the tested sample identified in the report.

Reviewed by: Gimba Huang **Approved by:** Seal-Chen

1 Contents

2 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Remarks:

1. Test according to ANSI C63.10: 2013.

2. Pass: The EUT complies with the essential requirements in the standard.

2.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties, the maximum value of the uncertainty as below:

No.	Item	Uncertainty
1	Conducted Emission Test	1.20dB
2	Radiated Emission Test	3.75dB
3	RF power,conducted	0.16dB
4	RF power density,conducted	0.24dB
5	Spurious emissions,conducted	0.21dB
6	All emissions,radiated(<1G)	4.68dB
7	All emissions,radiated(>1G)	4.89dB

3 Test Facility

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

.CNAS- Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2017 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on Aug.04, 2020

FCC-Registration No.: 703111 Designation Number: CN1313

Dongguan Yaxu (AiT) technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 6819A CAB identifier: CN0122

The 3m Semi-anechoic chamber of Dongguan Yaxu (AiT) technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6819A

A2LA-Lab Cert. No.: 6317.01

Dongguan Yaxu (AiT) technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

3.1 Deviation from standard

None

3.2 Abnormalities from standard conditions

None

4 General Information

4.1 General Description of EUT

Manufacturer:	SHAN TOU SUBO TECHTOY CO.,LTD.
Manufacturer Address:	XIN XINGHUA ROAD, CHENGHUA DISTRICT, CHENGHAI OF SHANTOU, CHINA
EUT Name:	Remote control car
Model No.:	BG1513
Derivative model No.:	BG1502, BG1503, BG1504, BG1505, BG1506, BG1507, BG1508, BG1509, BG1510, BG1511, BG1512, ,BG1515, BG1516, BG1518, BG1520, BG1521, BG1522, BG1525, BG1526, BG1527, BG1528, BG1531, BG1532, BG1533, BG1535, BG1536, BG1537, BG1538, BG1540
Brand Name:	N/A
Operation frequency:	2412~2474MHz
Channel Number:	63 channels
Modulation Type and Antenna Type:	GFSK Integrated antenna
Antenna Gain:	2 dBi
H/W No.:	N/A
S/W No.:	N/A
Power Supply Range:	DC 7.4V from battery(for telecar) DC 4.5V(3*1.5V “AAA” battery)（for remote control） DC 5V from adapter (for telecar)
Power Supply:	The same as above.
Model difference description:	All above models are identical in the same PCB layout, interior structure and electrical circuits. The difference is product appearance colours and model name for commercial purpose.

4.2 Test Location

All tests were performed at:

Dongguan Yaxu (AiT) Technology Limited
No.22, Jinqianling Third Street, Jitigang, Huangjiang, Dongguan, Guangdong, China.

Tel.: +86.769.82020499 Fax.: +86.769.82020495

EUT channels and frequencies list

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	23	2434	45	2456
2	2413	24	2435	46	2457
3	2414	25	2436	47	2458
4	2415	26	2437	48	2459
5	2416	27	2438	49	2460
6	2417	28	2439	50	2461
7	2418	29	2440	51	2462
8	2419	30	2441	52	2463
9	2420	31	2442	53	2464
10	2421	32	2443	54	2465
11	2422	33	2444	55	2466
12	2423	34	2445	56	2467
13	2424	35	2446	57	2468
14	2425	36	2447	58	2469
15	2426	37	2448	59	2470
16	2427	38	2449	60	2471
17	2428	39	2450	61	2472
18	2429	40	2451	62	2473
19	2430	41	2452	63	2474
20	2431	42	2453		
21	2432	43	2454		
22	2433	44	2455		

Test frequencies are the lowest channel: 1 channel(2412MHz), middle channel: 35 channel(2446 MHz) and highest channel: 63channel(2474 MHz)

5 Description of Test conditions

5.1 E.U.T. Operation

Power supply: 3*1.5V from “AAA” battery (New battery)

Temperature: 20.0 -25.0 °C

Humidity: 38-50 % RH

Atmospheric Pressure: 1000 -1010 mbar

Transmitting mode Keep the EUT in continuously transmitting mode.

Number of fundamental frequencies to be tested in EUT transmit band

Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
1 MHz or less	1	Middle
1 MHz to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle and 1 near bottom

Frequency range of radiated emission measurements

Lowest frequency generated in the device	Upper frequency range of measurement
9 kHz to below 10 GHz	10th harmonic of highest fundamental frequency or to 40 GHz, whichever is lower
At or above 10 GHz to below 30 GHz	5th harmonic of highest fundamental frequency or to 100 GHz, whichever is lower
At or above 30 GHz	5th harmonic of highest fundamental frequency or to 200 GHz, whichever is lower, unless otherwise specified

5.2 EUT Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	signal cable
1	N/A	N/A	N/A	N/A	N/A	N/A

5.3 Test Peripheral List

No.	Equipment	Manufacturer	EMC Compliance	Model No.	Serial No.	Power cord	Remark
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

6 Equipments List for All Test Items

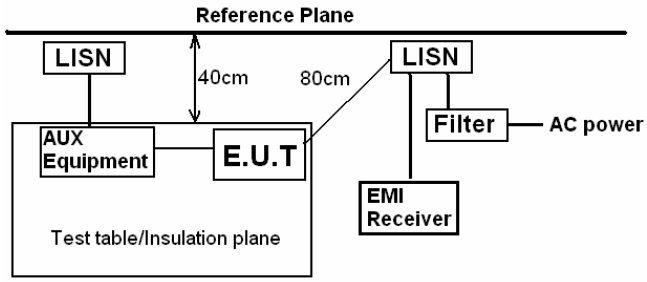
No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	Spectrum Analyzer	R&S	FSV40	101470	2021.08.30	2022.08.29
2	EMI Measuring Receiver	R&S	ESR	101660	2021.08.30	2022.08.29
3	Low Noise Pre Amplifier	HP	HP8447E	1937A01855	2021.08.30	2022.08.29
4	Low Noise Pre Amplifier	Tsj	MLA-0120-A02-34	2648A04738	2021.08.30	2022.08.29
5	Passive Loop	ETS	6512	00165355	2020.09.05	2022.09.04
6	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9160	9160-3206	2021.08.29	2024.08.28
7	Broadband Horn Antenna	SCHWARZBECK	BBHA9120D	452	2021.08.29	2024.08.28
8	SHF-EHF Horn Antenna 15-40GHz	SCHWARZBECK	BBHA9170	BBHA9170367d	2020.11.24	2023.11.23
9	EMI Test Receiver	R&S	ESCI	100124	2021.08.30	2022.08.29
10	LISN	Kyoritsu	KNW-242	8-837-4	2021.08.30	2022.08.29
11	LISN	R&S	ESH3-Z2	0357.8810.54-101161-S2	2021.08.30	2022.08.29
12	Pro.Temp&Humi.chamber	MENTEK	MHP-150-1C	MAA08112501	2021.08.30	2022.08.29
13	RF Automatic Test system	MW	MW100-RFCB	21033016	2021.08.30	2022.08.29
14	Signal Generator	Agilent	N5182A	MY50143009	2021.08.30	2022.08.29
15	Wideband Radio communication tester	R&S	CMW500	1201.0002K50	2021.08.30	2022.08.29
16	RF Automatic Test system	MW	MW100-RFCB	21033016	2021.08.30	2022.08.29
17	DC power supply	ZHAOXIN	RXN-305D-2	28070002559	N/A	N/A
18	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A	N/A	N/A
19	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A	N/A	N/A
20	RF Software	MW	MTS 8310	2.0.0.0	N/A	N/A
21	temporary antenna connector(Note)	NTS	R001	N/A	N/A	N/A
Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.						

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	FCC Part15 C 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. **15.247(c) (1)(i) requirement:** (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.	
EUT Antenna:	
The antenna is Integrated antenna, the best case gain of the antenna is 2dBi, reference to the appendix II for details	

7.2 Conducted Emissions

<table>
<tr><td>Test Requirement:</td><td colspan="6">FCC Part15 C Section 15.207</td></tr>
<tr><td>Test Method:</td><td colspan="6">ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="6">150KHz to 30MHz</td></tr>
<tr><td>Receiver setup:</td><td colspan="6">RBW=9KHz, VBW=30KHz, Sweep time=auto</td></tr>
<tr><td>Limit:</td><td colspan="6">
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBuV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* Decreases with the logarithm of the frequency.
</td></tr>
<tr><td>Test setup:</td><td colspan="6">


Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m
</td></tr>
<tr><td>Test procedure:</td><td colspan="6">1. The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.
2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).
3. Both sides of A.C. line are checked for maximum conducted interference. 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.</td></tr>
<tr><td>Test Instruments:</td><td colspan="6">Refer to section 6.0 for details</td></tr>
<tr><td>Test mode:</td><td colspan="6">Refer to section 5.2 for details</td></tr>
<tr><td>Test environment:</td><td>Temp.:</td><td>25 °C</td><td>Humid.:</td><td>52%</td><td>Press.:</td><td>1012mbar</td></tr>
<tr><td>Test results:</td><td colspan="6">Pass</td></tr>
</table>

Remark: Both high and low voltages have been tested to show only the worst low voltage test data.

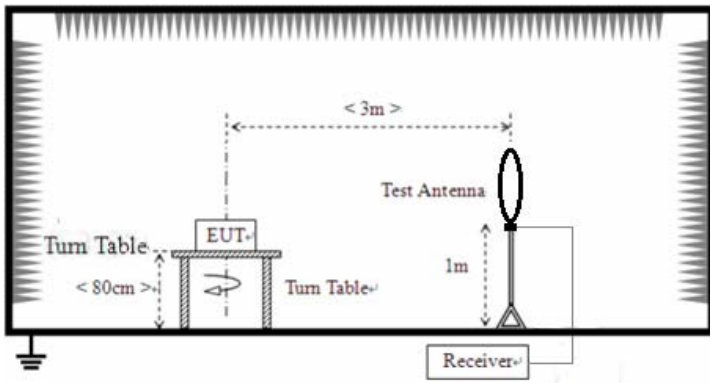
Measurement data

N/A

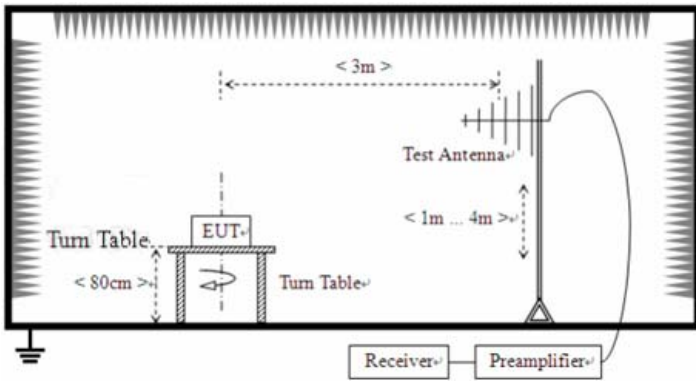
The EUT powered by battery.

7.3 Radiated Emission Method

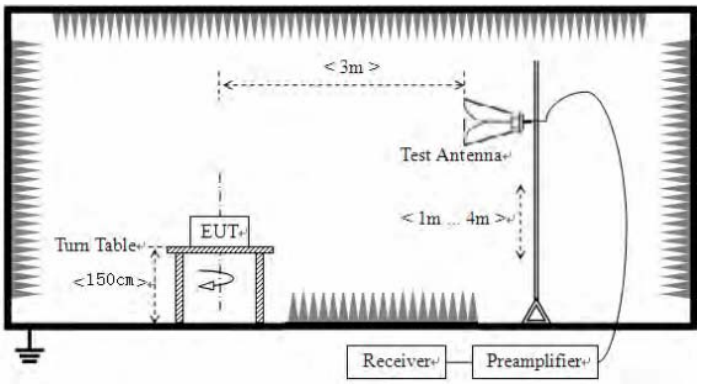
<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>9kHz to 25GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr>
<tr><td>9kHz-150kHz</td><td>Quasi-peak</td><td>200Hz</td><td>300Hz</td><td>Quasi-peak Value</td></tr>
<tr><td>150kHz-30MHz</td><td>Quasi-peak</td><td>9kHz</td><td>10kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(Field strength of the fundamental signal)</td><td>
<table>
<tr><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr>
<tr><td rowspan="2">2400MHz-2483.5MHz</td><td>94.00</td><td>Average Value</td></tr>
<tr><td>114.00</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(Spurious Emissions)</td><td>
<table>
<tr><th>Frequency</th><th>Limit (uV/m)</th><th>Remark</th></tr>
<tr><td>0.009MHz-0.490MHz</td><td>2400/F(kHz) @300m</td><td>Quasi-peak Value</td></tr>
<tr><td>0.490MHz-1.705MHz</td><td>24000/F(kHz) @30m</td><td>Quasi-peak Value</td></tr>
<tr><td>1.705MHz-30.0MHz</td><td>30 @30m</td><td>Quasi-peak Value</td></tr>
<tr><td>30MHz-88MHz</td><td>100 @3m</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>150 @3m</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>200 @3m</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>500 @3m</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>500 @3m</td><td>Average Value</td></tr>
<tr><td>5000 @3m</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(band edge)</td><td>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>Test setup:</td><td>For radiated emissions from 9kHz to 30MHz</td></tr>
</table>



For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. 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. 4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. 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.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1012mbar
Test voltage:	DC 4.5V
Test results:	Pass

Measurement data:

7.3.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2412	87.25	-5.60	81.65	114.00	-32.35	Vertical
2412	95.43	-5.60	89.83	114.00	-32.35	Horizontal
2446	84.14	-5.30	78.84	114.00	-32.05	Vertical
2446	91.35	-5.30	86.05	114.00	-32.05	Horizontal
2474	83.64	-5.05	78.59	114.00	-31.80	Vertical
2474	90.88	-5.05	85.83	114.00	-31.80	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2412	81.22	-5.60	75.62	114.00	-32.35	Vertical
2412	89.40	-5.60	83.80	114.00	-32.35	Horizontal
2446	78.11	-5.30	72.81	114.00	-32.05	Vertical
2446	85.32	-5.30	80.02	114.00	-32.05	Horizontal
2474	77.61	-5.05	72.56	114.00	-31.80	Vertical
2474	84.85	-5.05	79.80	114.00	-31.80	Horizontal

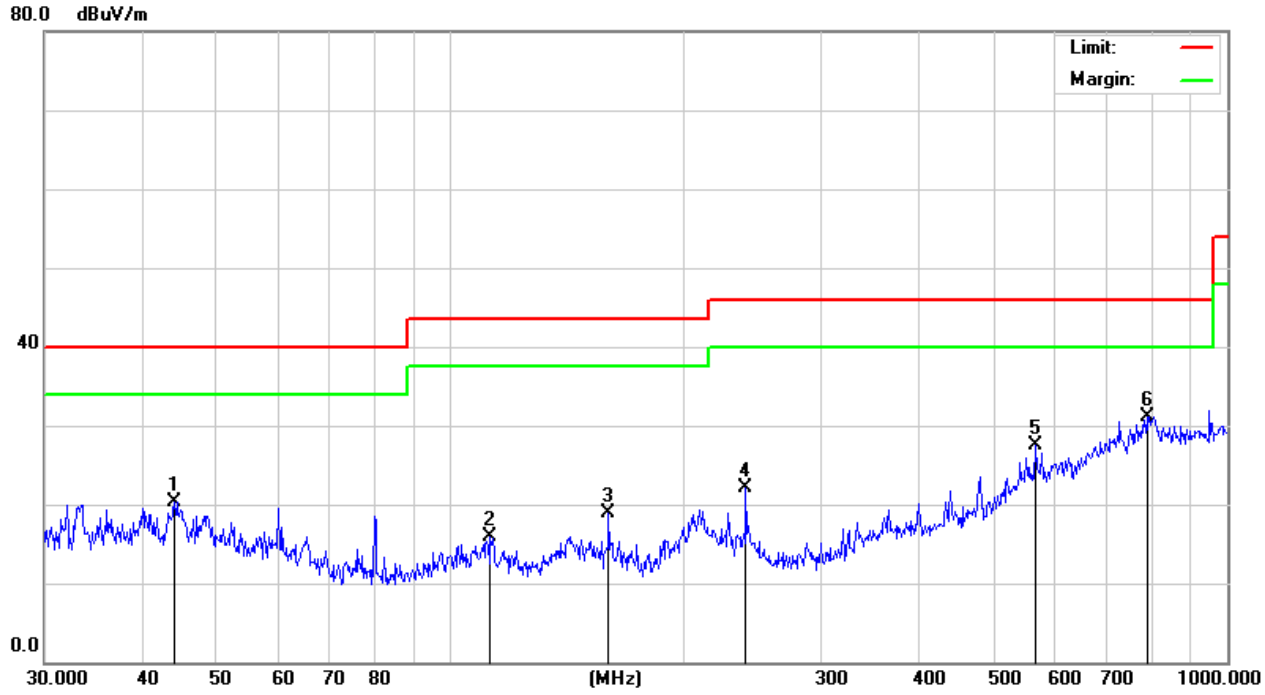
7.3.2 Spurious emissions

■ **Below 30MHz**

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o), the test result no need to reported.

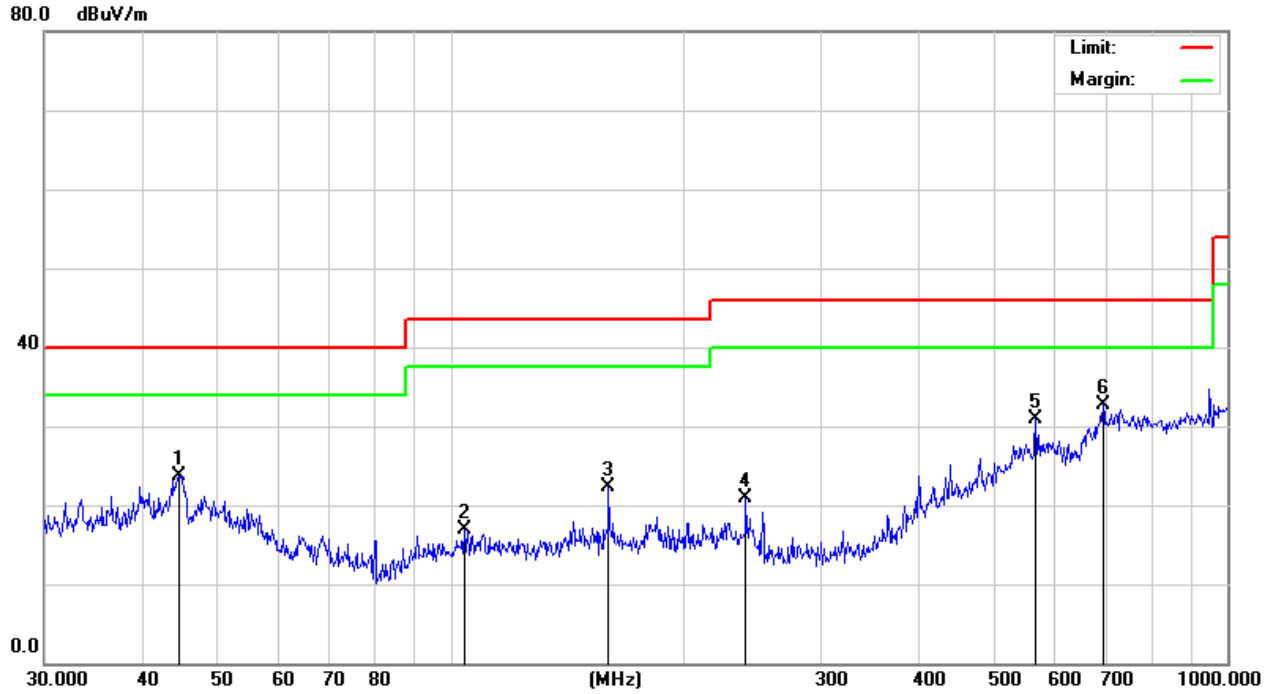
■ **Below 1GHz**

Horizontal:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		44.1200	24.82	-4.48	20.34	40.00	-19.66	peak
2		112.5243	23.80	-7.99	15.81	43.50	-27.69	peak
3		159.7844	27.54	-8.61	18.93	43.50	-24.57	peak
4		239.9874	28.72	-6.52	22.20	46.00	-23.80	peak
5		566.6221	25.72	1.80	27.52	46.00	-18.48	peak
6	*	787.8513	23.71	7.41	31.12	46.00	-14.88	peak

Vertical:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		44.7433	25.97	-2.25	23.72	40.00	-16.28	peak
2		104.1701	24.20	-7.32	16.88	43.50	-26.62	peak
3		159.7844	28.83	-6.54	22.29	43.50	-21.21	peak
4		239.9874	27.42	-6.52	20.90	46.00	-25.10	peak
5		566.6221	26.53	4.33	30.86	46.00	-15.14	peak
6	*	691.9867	25.80	6.97	32.77	46.00	-13.23	peak

■ Above 1GHz

Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.000	51.35	5.06	52.78	74.00	-17.59	Vertical
7236.000	50.45	7.10	53.85	74.00	-16.45	Vertical
4824.000	55.77	5.08	57.53	74.00	-13.15	Horizontal
7236.000	51.23	7.10	53.75	74.00	-15.67	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.000	52.78	-6.53	46.75	54.00	-7.92	Vertical
7236.000	53.85	-6.53	47.82	54.00	-4.82	Vertical
4824.000	57.53	-6.53	51.50	54.00	-2.15	Horizontal
7236.000	53.75	-6.53	47.72	54.00	-5.01	Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4892.000	49.24	5.13	54.37	74.00	-19.63	Vertical
7338.000	45.99	7.55	53.54	74.00	-20.46	Vertical
4892.000	51.58	5.13	56.71	74.00	-17.29	Horizontal
7338.000	47.23	7.55	54.78	74.00	-19.22	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4892.000	54.37	-6.03	48.34	54.00	-5.66	Vertical
7338.000	53.54	-6.03	47.51	54.00	-6.49	Vertical
4892.000	56.71	-6.03	50.68	54.00	-3.32	Horizontal
7338.000	54.78	-6.03	48.75	54.00	-5.25	Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4948.000	47.52	5.13	52.65	74.00	-21.35	Vertical
7422.000	42.56	7.55	50.11	74.00	-23.89	Vertical
4948.000	51.20	5.13	56.33	74.00	-17.67	Horizontal
7422.000	44.27	7.55	51.82	74.00	-22.18	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4948.000	52.65	-6.03	46.62	54.00	-7.38	Vertical
7422.000	50.11	-6.03	44.08	54.00	-9.92	Vertical
4948.000	56.33	-6.03	50.30	54.00	-3.70	Horizontal
7422.000	51.82	-6.03	45.79	54.00	-8.21	Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

7.3.3 Bandedge emissions

All of the restriction bands were tested, and only the data of worst case was exhibited.

Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2310.000	43.52	-5.92	37.60	74.00	-36.40	Vertical
2390.000	43.35	-5.79	37.56	74.00	-36.44	Vertical
2310.000	43.21	-5.92	37.29	74.00	-36.71	Horizontal
2390.000	42.04	-5.79	36.25	74.00	-37.75	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2310.000	30.37	-5.92	24.45	54.00	-29.55	Vertical
2390.000	30.14	-5.79	24.35	54.00	-29.65	Vertical
2310.000	30.15	-5.92	24.23	54.00	-29.77	Horizontal
2390.000	31.18	-5.79	25.39	54.00	-28.61	Horizontal

Test channel:	Highest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2483.500	46.86	-4.98	41.88	74.00	-32.12	Vertical
2500.000	46.30	-4.83	41.47	74.00	-32.53	Vertical
2483.500	45.18	-4.98	40.20	74.00	-33.80	Horizontal
2500.000	46.94	-4.83	42.11	74.00	-31.89	Horizontal

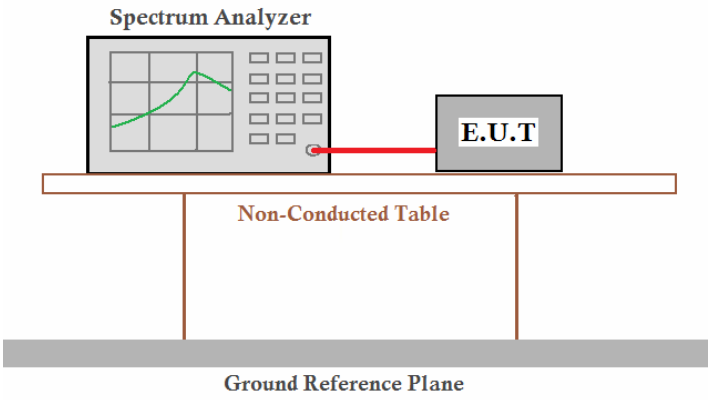
Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2483.500	29.14	-4.98	24.16	54.00	-29.84	Vertical
2500.000	30.71	-4.83	25.88	54.00	-28.12	Vertical
2483.500	30.57	-4.98	25.59	54.00	-28.41	Horizontal
2500.000	28.03	-4.83	23.20	54.00	-30.80	Horizontal

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

7.4 20dB Occupy Bandwidth

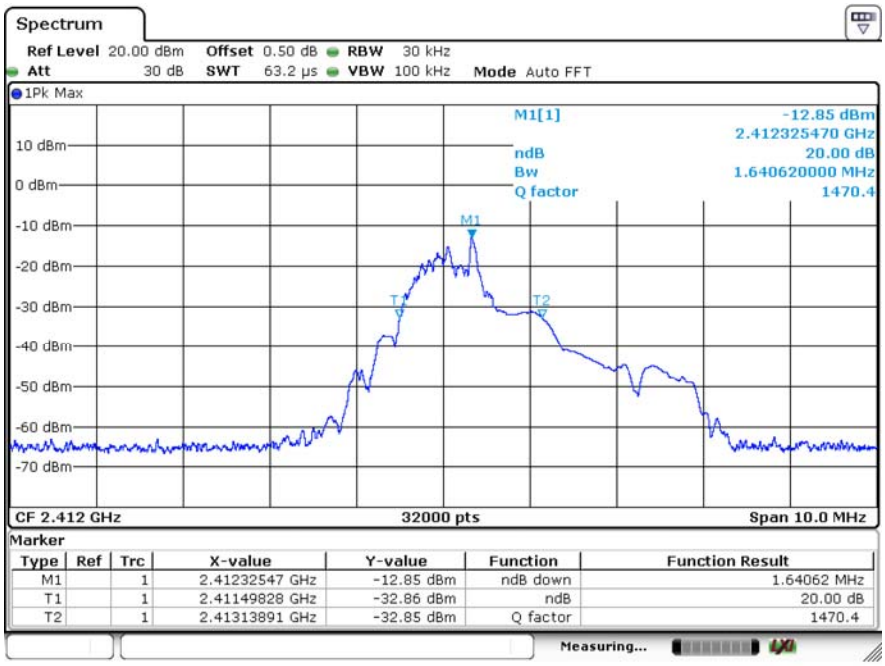
Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.10:2013
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

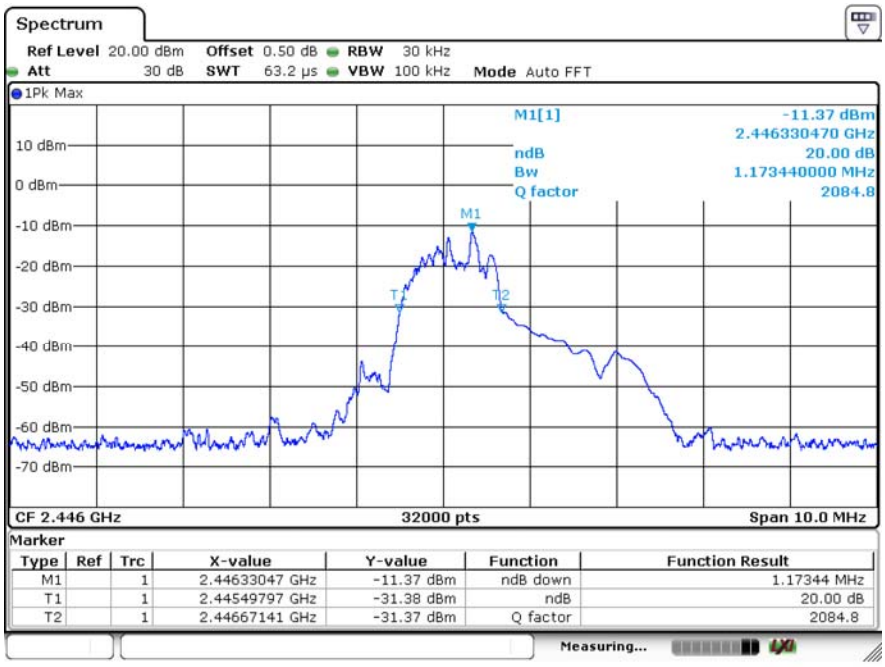
Test channel	20dB bandwidth(MHz)	Result
Lowest	1.64062	Pass
Middle	1.17344	Pass
Highest	1.29094	Pass

Test plot as follows:

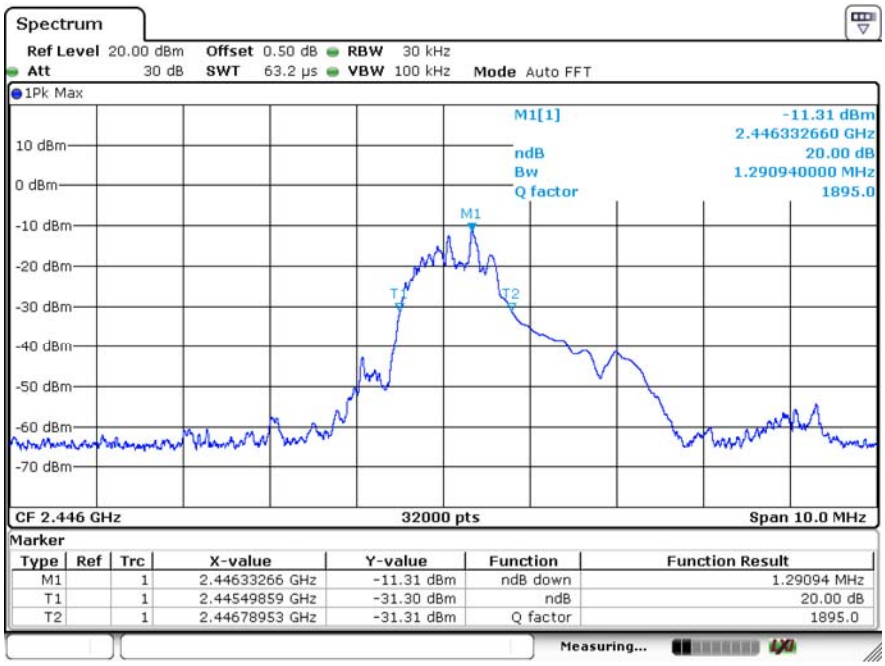
Lowest channel



Middle channel



High channel



****End of Report****