

TEST REPORT

Applicant:	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
Address:	NO.2 West Xingye Road Laimei Industrial Area Chenghai Shantou Guangdong China

Manufacturer or Supplier	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
Address	NO.2 West Xingye Road Laimei Industrial Area Chenghai Shantou Guangdong China
Product:	DRONE
Brand Name:	Syma
Model:	X20T
Additional Models & Model Difference	UK-F7MINI, DE-F7MINI, F11MINI2, F11MINI-3B, F11MINI-4B, UK-F11MINI, DE-F11MINI, W4, see item 3.1
Date of tests:	May 23, 2022 ~ May 31, 2022

the tests have been carried out according to the requirements of the following standard:

☒ FCC Part 15, Subpart C, Section 15.249

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Andy Zhu Supervisor / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	
	Date: Jul. 01, 2022

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2205WDG0195	Original release	Jul. 01, 2022

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.249)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
§15.203	Antenna Requirement	PASS	No antenna connector is used
§15.207 (a)	Conducted Emission	N/A	Powered from battery
§15.205	Restricted Band of Operation	PASS	Compliant
§15.209 §15.249(a)	Radiated Emission	PASS	Compliant
§15.215(c)	20dB Bandwidth Test	PASS	Compliant

2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Radiated emissions	9KHz ~ 30MHz	2.16dB
	30MHz ~ 1GMHz	3.63dB
	1GHz ~ 18GHz	4.96dB
	18GHz ~ 40GHz	4.37dB
20dB Bandwidth	1GHz ~ 18GHz	1.132x10 ⁻⁴ %

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

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	DRONE
MODEL NO.	X20T
ADDITIONAL MODELS	UK-F7MINI, DE-F7MINI, F11MINI2, F11MINI-3B, F11MINI-4B, UK-F11MINI, DE-F11MINI, W4
FCC ID	QV7-GC88752-78
NOMINAL VOLTAGE	DC 6V(1.5V*AAA*4) from battery;
MODULATION TECHNOLOGY	GFSK
OPERATING FREQUENCY	2408MHz -2472MHz
ANTENNA TYPE	Wire Antenna, with 1dBi gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB Line: Unshielded, Detachable, 0.75m

NOTES:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions, but only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 2205WDG0195) for detailed product photo.
4. Additional models (see above table) are identical with the test model X20T except the color of the appearance and model number for trading purpose.
5. The EUT Can't normal working while charging.

3.2 DESCRIPTION OF TEST MODES

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and packet type. The worst case was found when the EUT was positioned on X/Y axis for radiated emission. The EUT was tested under the following mode.

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE<1G	RE≥1G	PLC	BW	
A	√	√	-	√	DC 6V from New Battery

Where **RE<1G**: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission

RE≥1G: Radiated Emission above 1GHz
BW: 20db bandwidth

NOTE: No need to concern of Conducted Emission due to the EUT is powered by battery.

Following channel(s) was (were) selected for the test as listed below.

TESTED CHANNEL	TESTED FREQUENCY
Low	2408 MHz
Middle	2440 MHz
High	2472 MHz

Channel List

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
1	2408	18	2425	35	2442	52	2459
2	2409	19	2426	36	2443	53	2460
3	2410	20	2427	37	2444	54	2461
4	2411	21	2428	38	2445	55	2462
5	2412	22	2429	39	2446	56	2463
6	2413	23	2430	40	2447	57	2464
7	2414	24	2431	41	2448	58	2465
8	2415	25	2432	42	2449	59	2466
9	2416	26	2433	43	2450	60	2467
10	2417	27	2434	44	2451	61	2468
11	2418	28	2435	45	2452	62	2469
12	2419	29	2436	46	2453	63	2470
13	2420	30	2437	47	2454	64	2471
14	2421	31	2438	48	2455	65	2472
15	2422	32	2439	49	2456		
16	2423	33	2440	50	2457		
17	2424	34	2441	51	2458		

Note: The more detailed channel, please refer to the product specifications

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE	25deg. C, 55%RH	DC 6V from Battery	Vincent
BW	25deg. C, 56%RH	DC 6V from Battery	Vincent
PLC	-	-	-

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C, Section 15.249

ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together without any other necessary accessories or support units

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field strength of fundamental (milli-volts/meter)	Field strength of harmonics (micro-volts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply.

NOTES:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Spectrum Analyzer	Rohde&Schwarz	FSV40-N	101817	July 04, 22
Bilog Antenna	SCHWARZBECK	VULB 9168	01281	July 30, 22
Pre-Amplifier	Agilent	8447D	2944A10488	Aug.08, 22
3m Semi-anechoic Chamber	ETS-Lindgren	9m*6m*6m	D3040003DG-1	July 30, 24
Coaxial RF Cable	Joinfront	JFAA6-NMNM-8000	2100033742	Aug.08, 22
Coaxial RF Cable	Joinfront	JFAR-NMBNCM-2000	2100033742	Aug.08, 22
Coaxial RF Cable	Joinfront	JFAR-BNCMSMM-500	2100033742	Aug.08, 22
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
Horn Antenna	ETS-Lindgren	3117	00240041	July 22, 22
Horn Antenna	SCHWARZBECK	BBHA 9170	01024	Dec. 25, 22
Pre-Amplifier (1GHz-18GHz)	SCHWARZBECK	BBV 9718C	00142	Aug. 06, 22
Pre-Amplifier (18GHz-40GHz)	Rohde&Schwarz	SCU40	100437	Nov. 16, 22
Coaxial RF Cable	Joinfront	JFAA6-NMNM-8000	2100033742	Aug.08, 22
Coaxial RF Cable	Joinfront	JFAA6-NMSMM-2000	2100033742	Aug.08, 22
Coaxial RF Cable	Joinfront	JFAA6-NMSMM-800	2100033742	Aug.08, 22

- NOTES:**
1. The test was performed at 966 Chamber-3. (Baodun)
 2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GREGT/CHINA and NIM/CHINA.
 3. The FCC Site Registration No. is 749762.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.
- g. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

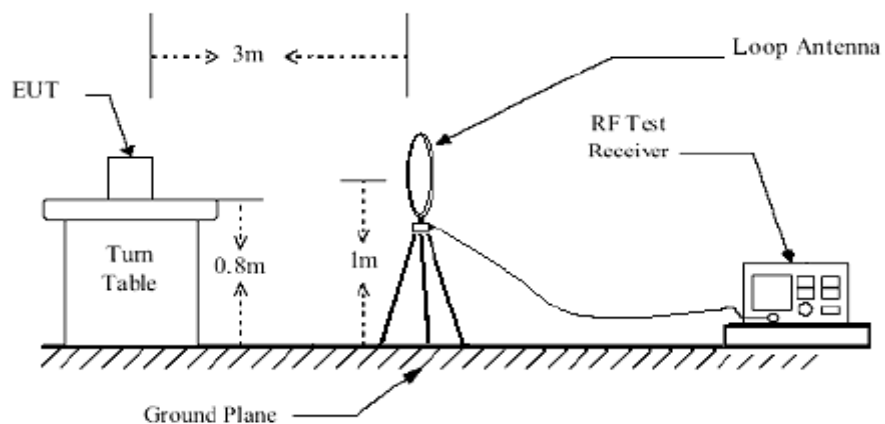
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

4.1.4 DEVIATION FROM TEST STANDARD

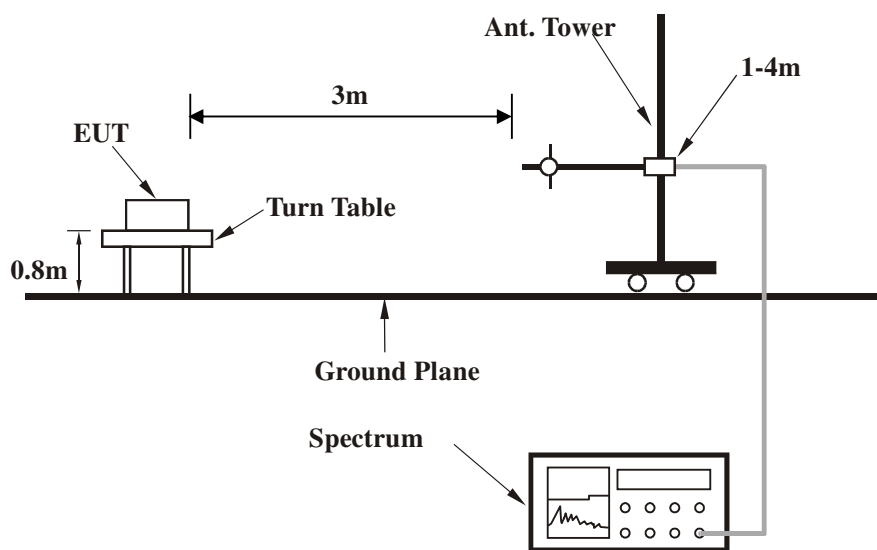
No deviation.

4.1.5 TEST SETUP

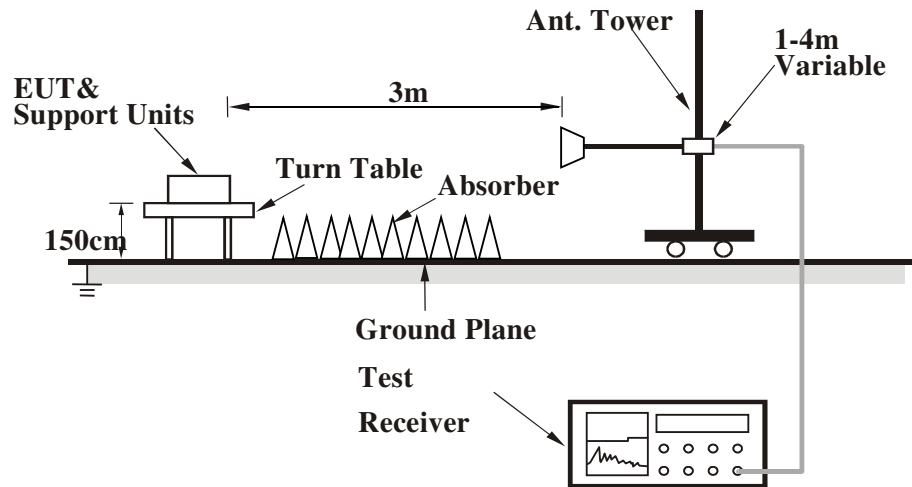
Below 30MHz test setup



Below 1GHz test setup



Above 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- Turned on the power of all equipment.
- EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

4.1.7 TEST RESULTS

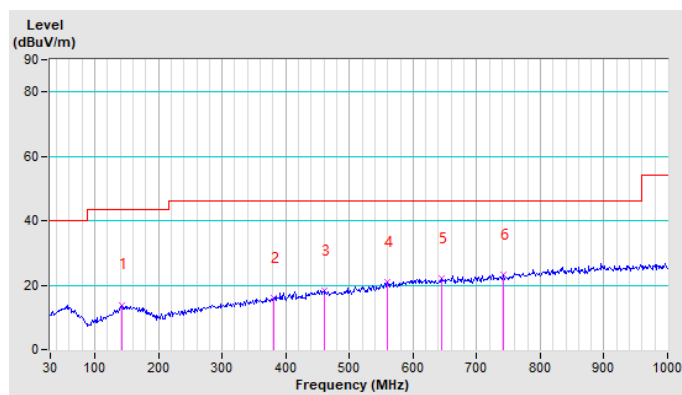
BELOW 1GHz WORST-CASE DATA

CHANNEL	TX Middle Channel	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	142.46	13.88 QP	43.50	-29.62	1.00 H	189	27.73	-13.85
2	381.45	16.09 QP	46.00	-29.91	1.00 H	173	27.08	-10.99
3	460.17	18.38 QP	46.00	-27.62	1.00 H	104	28.12	-9.74
4	559.99	20.88 QP	46.00	-25.12	1.00 H	158	28.57	-7.69
5	644.33	22.25 QP	46.00	-23.75	1.00 H	158	28.28	-6.03
6	742.74	23.40 QP	46.00	-22.60	1.00 H	108	27.85	-4.45

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.

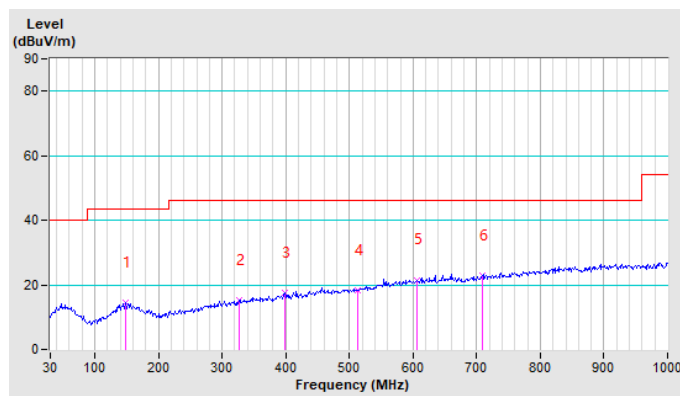


CHANNEL	TX Middle Channel	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	148.09	14.39 QP	43.50	-29.11	1.00 V	291	28.12	-13.73
2	326.62	15.18 QP	46.00	-30.82	1.00 V	239	27.15	-11.97
3	398.32	17.45 QP	46.00	-28.55	1.00 V	27	28.17	-10.72
4	513.59	18.23 QP	46.00	-27.77	1.00 V	244	27.05	-8.82
5	606.38	21.52 QP	46.00	-24.48	1.00 V	345	27.97	-6.45
6	709.00	22.97 QP	46.00	-23.03	1.00 V	48	28.15	-5.18

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.



ABOVE 1GHz WORST-CASE DATA:

CHANNEL	TX Low Channel	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

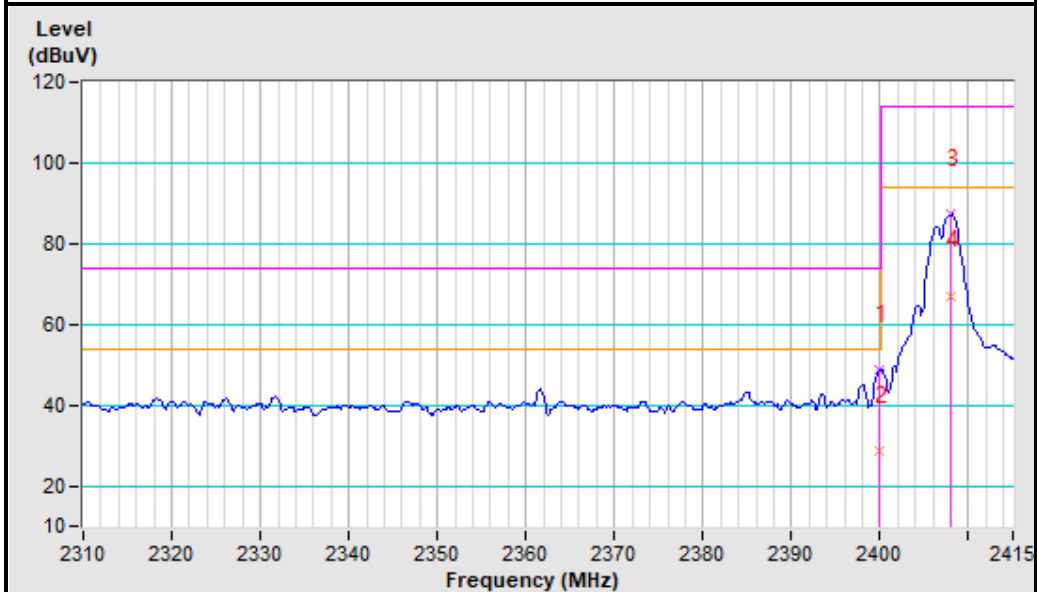
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#2400.00	48.49 PK	74.00	-25.51	1.00 H	124	47.92	0.57
2	#2400.00	28.47 AV	54.00	-25.53	1.00 H	124	27.90	0.57
3	*2408.00	87.22 PK	114.00	-26.78	1.00 H	124	86.61	0.61
4	*2408.00	66.80 AV	94.00	-27.20	1.00 H	124	66.19	0.61
5	4816.00	48.36 PK	74.00	-25.64	1.02 H	219	43.04	5.32
6	4816.00	27.94 AV	54.00	-26.06	1.02 H	219	22.62	5.32
7	#7224.00	50.12 PK	74.00	-23.88	1.00 H	256	40.41	9.71
8	#7224.00	29.70 AV	54.00	-24.30	1.00 H	256	19.99	9.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#2400.00	50.04 PK	74.00	-23.96	1.20 V	126	49.47	0.57
2	#2400.00	29.62 AV	54.00	-24.38	1.20 V	126	29.05	0.57
3	*2408.00	84.90 PK	114.00	-29.10	1.20 V	126	84.29	0.61
4	*2408.00	64.48 AV	94.00	-29.52	1.20 V	126	63.87	0.61
5	4816.00	49.51 PK	74.00	-24.49	1.00 V	217	44.19	5.32
6	4816.00	29.09 AV	54.00	-24.91	1.00 V	217	23.77	5.32
7	#7224.00	51.02 PK	74.00	-22.98	1.04 V	159	41.31	9.71
8	#7224.00	30.60 AV	54.00	-23.40	1.04 V	159	20.89	9.71
9	7254.00	50.44 PK	74.00	-23.56	1.00 V	97	40.68	9.76
10	7254.00	32.61 AV	54.00	-21.39	1.00 V	97	22.85	9.76

REMARKS:

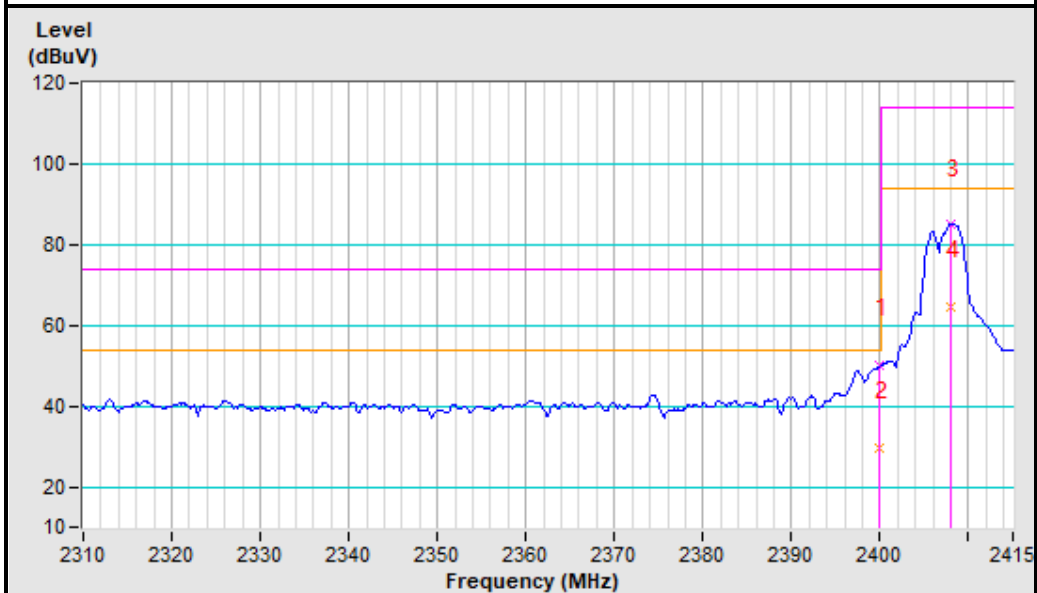
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Band edge Plot

2408MHz Horizontal



2408MHz Vertical



CHANNEL	TX Middle Channel	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	88.51 PK	114.00	-25.49	1.00 H	214	87.79	0.72
2	*2440.00	68.09 AV	94.00	-25.91	1.00 H	214	67.37	0.72
3	4880.00	49.36 PK	74.00	-24.64	1.00 H	75	43.97	5.39
4	4880.00	28.94 AV	54.00	-25.06	1.00 H	75	23.55	5.39
5	7320.00	51.20 PK	74.00	-22.80	1.00 H	36	41.42	9.78
6	7320.00	30.78 AV	54.00	-23.22	1.00 H	36	21.00	9.78
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	84.21 PK	114.00	-29.79	1.00 V	218	83.49	0.72
2	*2440.00	63.79 AV	94.00	-30.21	1.00 V	218	63.07	0.72
3	4880.00	48.68 PK	74.00	-25.32	1.08 V	51	43.29	5.39
4	4880.00	28.26 AV	54.00	-25.74	1.08 V	51	22.87	5.39
5	7320.00	50.77 PK	74.00	-23.23	1.00 V	128	40.99	9.78
6	7320.00	30.35 AV	54.00	-23.65	1.00 V	128	20.57	9.78

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

CHANNEL	TX High Channel	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

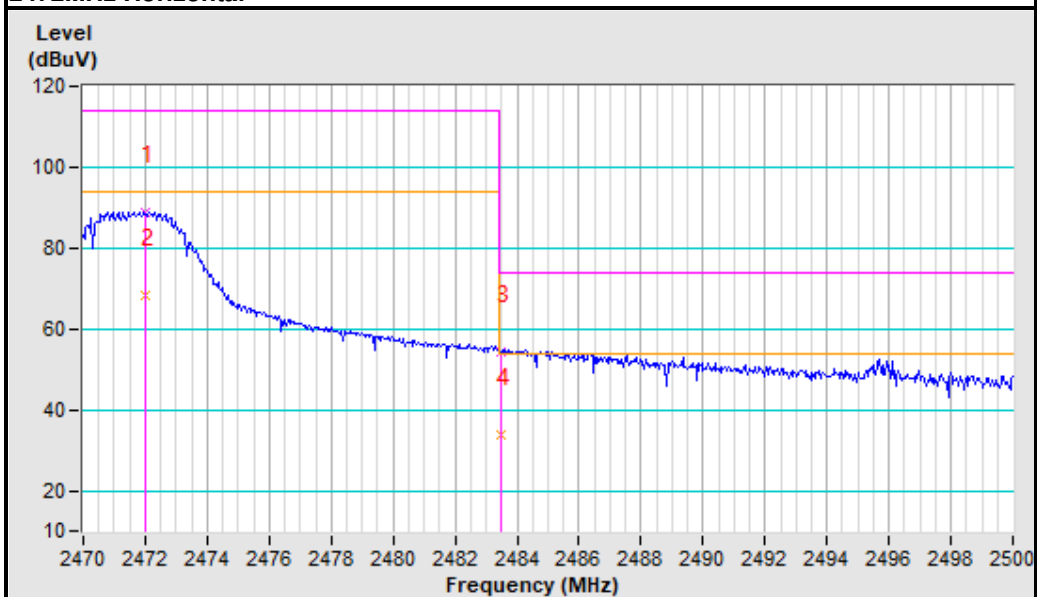
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2472.00	88.70 PK	114.00	-25.30	1.00 H	169	87.85	0.85
2	*2472.00	68.28 AV	94.00	-25.72	1.00 H	169	67.43	0.85
3	2483.50	54.30 PK	74.00	-19.70	1.00 H	169	53.41	0.89
4	2483.50	33.88 AV	54.00	-20.12	1.00 H	169	32.99	0.89
5	4944.00	50.24 PK	74.00	-23.76	1.00 H	248	44.78	5.46
6	4944.00	29.82 AV	54.00	-24.18	1.00 H	248	24.36	5.46
7	7416.00	52.69 PK	74.00	-21.31	1.00 H	169	42.84	9.85
8	7416.00	32.27 AV	54.00	-21.73	1.00 H	169	22.42	9.85
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2472.00	84.56 PK	114.00	-29.44	1.05 V	199	83.71	0.85
2	*2472.00	64.14 AV	94.00	-29.86	1.05 V	199	63.29	0.85
3	2483.50	51.76 PK	74.00	-22.24	1.05 V	199	50.87	0.89
4	2483.50	31.34 AV	54.00	-22.66	1.05 V	199	30.45	0.89
5	4944.00	49.36 PK	74.00	-24.64	1.00 V	215	43.90	5.46
6	4944.00	28.94 AV	54.00	-25.06	1.00 V	215	23.48	5.46
7	7416.00	50.75 PK	74.00	-23.25	1.05 V	123	40.90	9.85
8	7416.00	30.33 AV	54.00	-23.67	1.05 V	123	20.48	9.85

REMARKS:

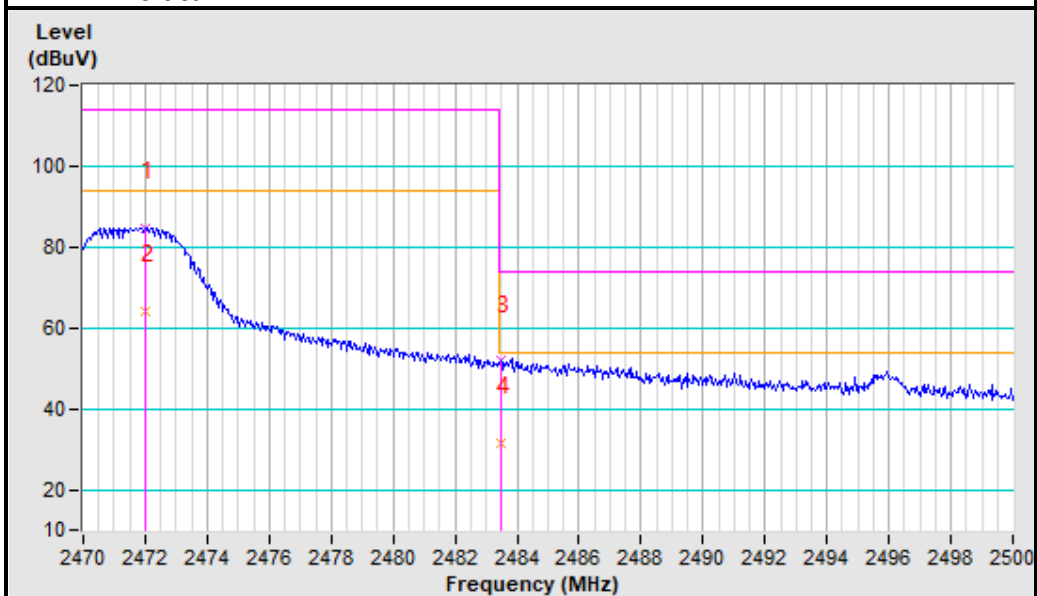
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Band edge Plot

2472MHz Horizontal



2472MHz Vertical



4.2 20dB BANDWIDTH MEASUREMENT

4.2.1 LIMITS OF 20dB BANDWIDTH MEASUREMENT

According to FCC 15.215(c), must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Wireless Connectivity Tester	Rohde&Schwarz	CMW270	101601	Nov. 21, 22
MXA signal analyzer	Agilent	N9020A	MY49100060	Apr. 18, 23
Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Jan. 16, 23
Frequency Analyzer	Keysight	N9010B	MY60240432	Nov. 25, 22
Programmable Temperature&Humidity Chamber	Hongjin	HYC-TH-225DH	DG-180746	Feb. 16, 23
DC Source	Agilent	E3640A	MY40004013	Feb. 23, 23
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A
Test software	ADT	ADT_RF Test Software V6.6.5.4	N/A	N/A

NOTES:

1. The test was performed in RF Test Shielded Room. (Baodun)
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA

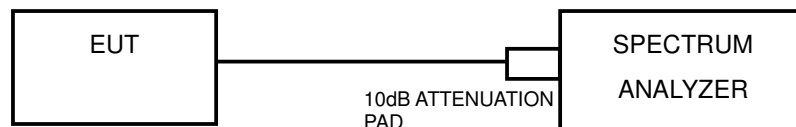
4.2.3 TEST PROCEDURE

- a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
- d. Repeat above procedures until all frequencies measured were complete.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



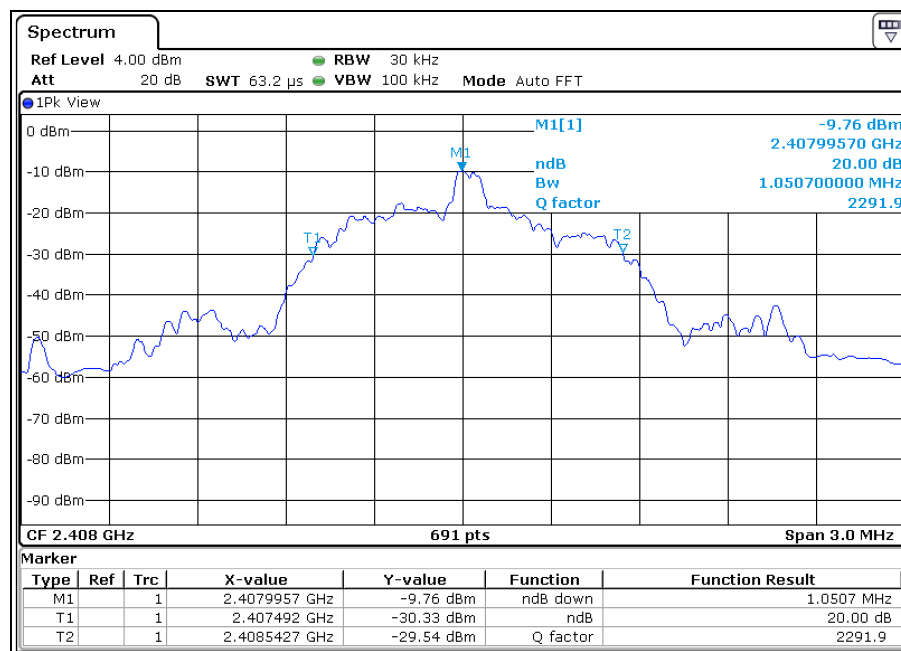
4.2.6 EUT OPERATING CONDITIONS

- a) Turned on the power of all equipment.
- b) EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

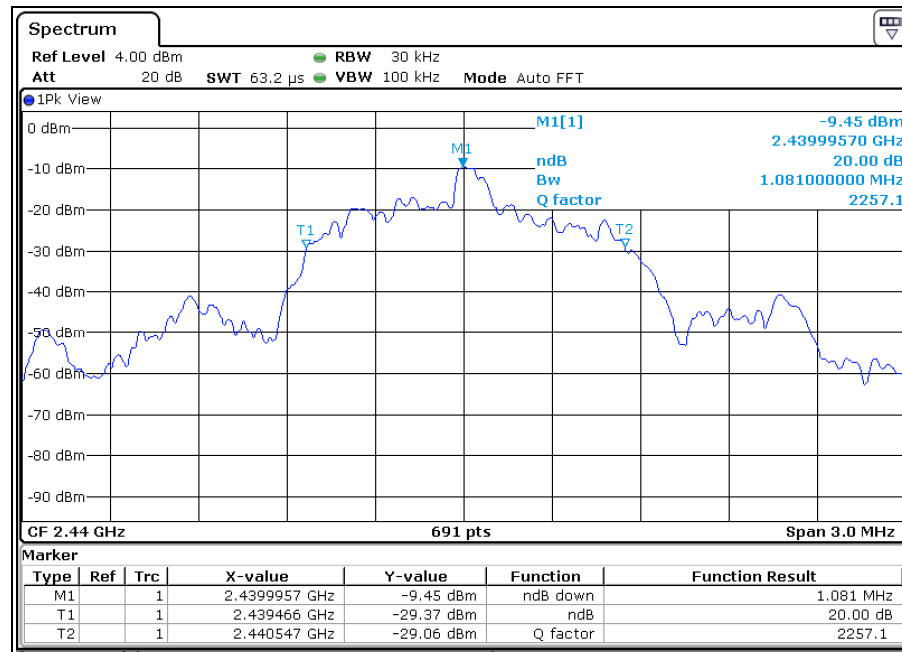
4.2.7 TEST RESULTS

CHANNEL	CHANNEL FREQUENCY (MHz)	20dB BANDWIDTH (MHz)
Low	2408	1.051
Middle	2440	1.081
High	2472	1.033

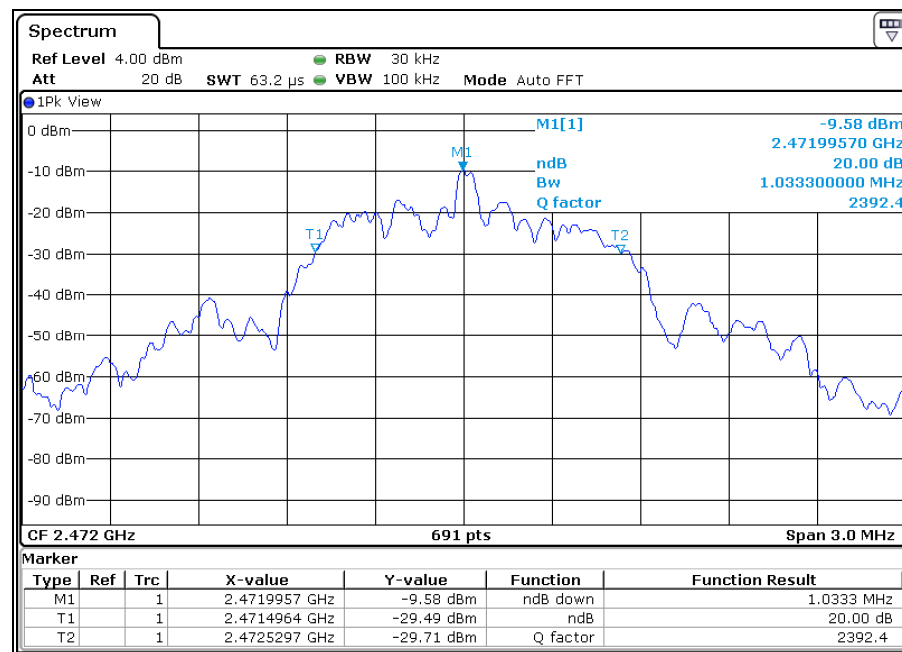
Test Data: Low channel



Test Data: Middle channel



Test Data: High channel



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---