

TEST REPORT



Applicant:	MINDSCOPE PRODUCTS INC.
Address:	P.O. BOX 9525, Glendale, California, United States, CA91226.

Manufacturer or Supplier	MINDSCOPE PRODUCTS INC.
Address	P.O. BOX 9525, Glendale, California, United States, CA91226.
Product:	REMOTE CONTROL STUNT CAR TURBO TWISTER CRASHNETIX
Brand Name:	N/A
Model:	TTCRSHA
Additional Model & Model Difference	TTCRSHB; See items 3.1
Date of tests:	May 24, 2021 ~ Jul. 24, 2021

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 Eric Fang Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	
Date: Aug. 02, 2021	

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1 SUMMARY OF TEST RESULTS.....	4
2 MEASUREMENT UNCERTAINTY	4
3 GENERAL INFORMATION	5
3.1 GENERAL DESCRIPTION OF EUT	5
3.2 DESCRIPTION OF TEST MODES	6
3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS	8
3.4 DESCRIPTION OF SUPPORT UNITS	8
4. TEST TYPES AND RESULTS.....	9
4.1 RADIATED EMISSION MEASUREMENT	9
4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT	9
4.1.2 TEST INSTRUMENTS.....	10
4.1.3 TEST PROCEDURES	11
4.1.4 DEVIATION FROM TEST STANDARD	11
4.1.5 TEST SETUP.....	12
4.1.6 EUT OPERATING CONDITIONS	13
4.1.7 TEST RESULTS	14
4.2 20DB BANDWIDTH MEASUREMENT	21
4.2.1 LIMITS OF 20DB BANDWIDTH MEASUREMENT.....	21
4.2.2 TEST INSTRUMENTS	21
4.2.3 TEST PROCEDURE	22
4.2.4 DEVIATION FROM TEST STANDARD.....	22
4.2.5 TEST SETUP	22
4.2.6 EUT OPERATING CONDITIONS	22
4.2.7 TEST RESULTS.....	23
5. PHOTOGRAPHS OF THE TEST CONFIGURATION.....	25
6. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	26



**BUREAU
VERITAS**

Test Report No.: RF2105WDG0283

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2105WDG0283	Original release	Aug. 02, 2021

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	3.05dB
	30MHz ~ 1GMHz	4.00dB
	1GHz ~ 18GHz	5.17dB
	18GHz ~ 40GHz	5.07dB

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	REMOTE CONTROL STUNT CAR TURBO TWISTER CRASHNETIX
MODEL NO.	TTCRSHA
ADDITIONAL MODEL	TTCRSHB
FCC ID	YKGCRAASH
NOMINAL VOLTAGE	Remote Control: DC 3V(1.5V*AA*2) from Battery
MODULATION TECHNOLOGY	GFSK
OPERATING FREQUENCY	2403-2478MHz
ANTENNA TYPE	Wire Antenna, with 0dBi Gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

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.: 2105WDG0283) for detailed product photo.
4. Additional model TTCRSHB is identical with test model except the appearance, brand name and model no. for trading purpose.

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 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 3V from 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	2403 MHz
Middle	2440 MHz
High	2478 MHz

Channel List

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
1	2403	20	2420	39	2439	58	2461
2	2404	21	2421	40	2440	59	2462
3	2405	22	2422	41	2441	60	2463
4	2406	23	2423	42	2442	61	2464
5	2407	24	2424	43	2443	62	2465
6	2408	25	2425	44	2444	63	2466
7	2409	26	2426	45	2445	64	2467
8	2410	27	2427	46	2446	65	2468
9	2411	28	2428	47	2447	66	2469
10	2412	29	2429	48	2448	67	2470
11	2413	30	2430	49	2449	68	2471
12	2414	31	2431	50	2450	69	2472
13	2415	32	2432	51	2451	70	2473
14	2416	33	2433	52	2452	71	2474
15	2415	34	2434	53	2456	72	2475
16	2416	35	2435	54	2457	73	2476
17	2417	36	2436	55	2758	74	2477



**BUREAU
VERITAS**

Test Report No.: RF2105WDG0283

18	2418	37	2437	56	2459	75	2478
19	2419	38	2438	57	2460		

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 3V from Battery	yoyo
BW	25deg. C, 56%RH	DC 3V from Battery	yoyo
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.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 07, 22
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	May 09, 22
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	May 29, 22
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Mar. 13, 22
Bilog Antenna (20MHz -2GHz)	Teseq	CBL 6111D	30643	May 29, 22
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 29, 22
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	May 09, 22
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 22, 22
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	May 08, 22
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Mar. 13, 22
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A

NOTES:

1. The test was performed in 966 Chamber.
2. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. 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.

NOTES:

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.

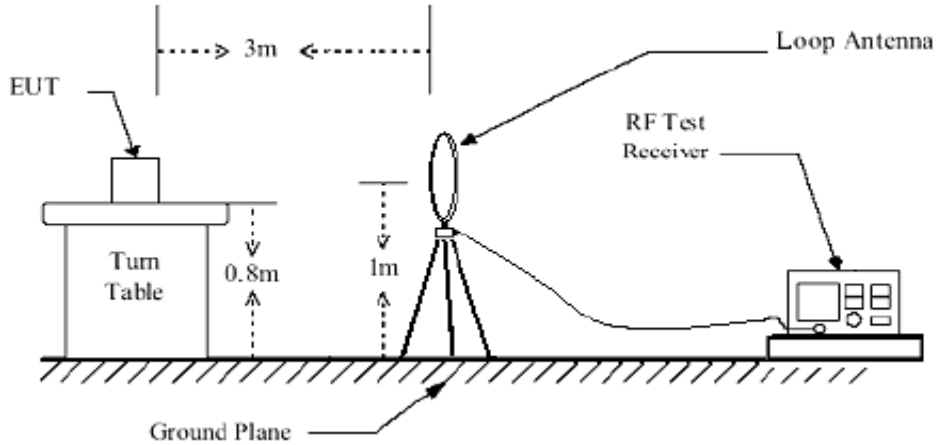
4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

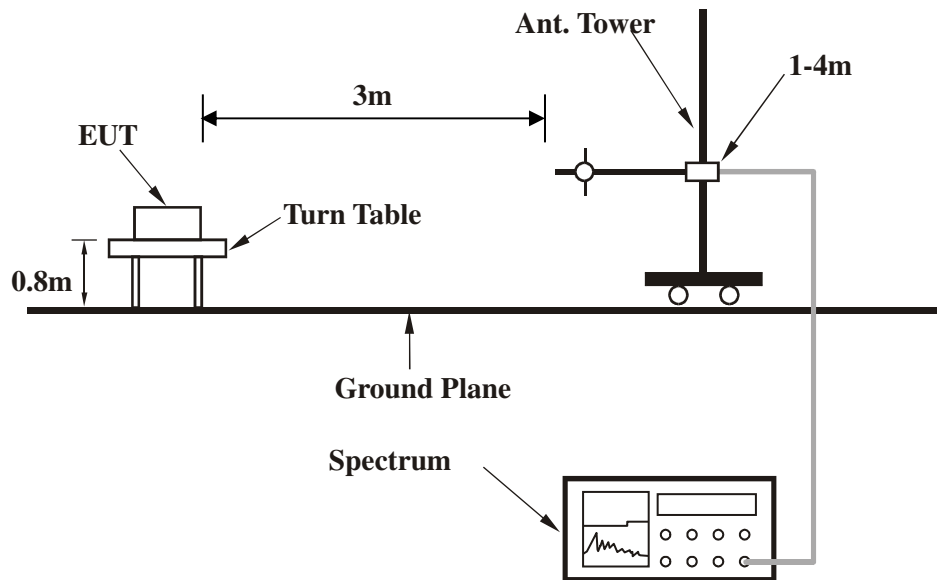


4.1.5 TEST SETUP

Below 30MHz test setup

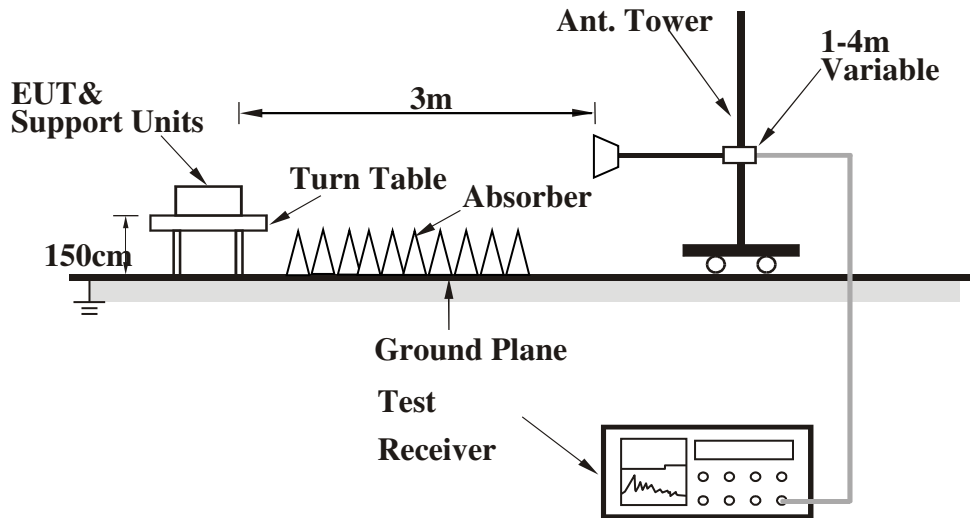


Below 1GHz test setup





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

- 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.



4.1.7 TEST RESULTS

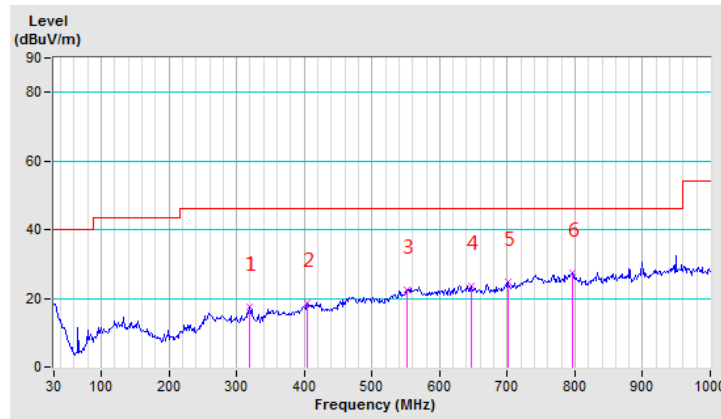
BELOW 1GHz WORST-CASE DATA

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	319.13	17.59 QP	46.00	-28.41	1.00 H	294	30.63	-13.04
2	404.63	18.57 QP	46.00	-27.43	1.00 H	304	29.51	-10.94
3	552.31	22.52 QP	46.00	-23.48	1.00 H	315	28.88	-6.36
4	647.13	23.61 QP	46.00	-22.39	1.00 H	324	28.81	-5.20
5	701.54	24.64 QP	46.00	-21.36	1.00 H	282	29.20	-4.56
6	796.36	27.29 QP	46.00	-18.71	1.00 H	271	29.59	-2.30

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.



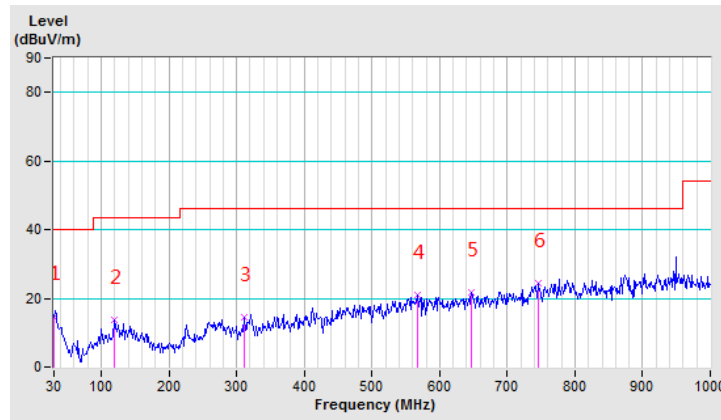


CHANNEL	TX Middle Channel	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

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	30.00	14.67 QP	40.00	-25.33	1.00 V	16	25.93	-11.26
2	120.16	13.72 QP	43.50	-29.78	1.00 V	129	30.83	-17.11
3	311.36	14.61 QP	46.00	-31.39	1.00 V	55	28.45	-13.84
4	567.85	20.81 QP	46.00	-25.19	1.00 V	142	26.93	-6.12
5	647.13	21.87 QP	46.00	-24.13	1.00 V	114	27.07	-5.20
6	745.06	24.52 QP	46.00	-21.48	1.00 V	100	27.02	-2.50

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	52.17 PK	74.00	-21.83	1.00 H	200	47.05	5.12
2	2400.00	15.89 AV	54.00	-38.11	1.00 H	200	10.77	5.12
3	*2403.00	72.71 PK	114.00	-41.29	1.00 H	200	67.57	5.14
4	*2403.00	36.43 AV	94.00	-57.57	1.00 H	200	31.29	5.14
5	4806.00	50.37 PK	74.00	-23.63	1.00 H	0	39.76	10.61
6	4806.00	14.09 AV	54.00	-39.91	1.00 H	0	3.48	10.61
7	7209.00	59.26 PK	74.00	-14.74	1.00 H	0	42.38	16.88
8	7209.00	22.98 AV	54.00	-31.02	1.00 H	0	6.10	16.88

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	59.91 PK	74.00	-14.09	1.00 V	287	54.79	5.12
2	2400.00	23.63 AV	54.00	-30.37	1.00 V	287	18.51	5.12
3	*2403.00	80.71 PK	114.00	-33.29	1.00 V	287	75.57	5.14
4	*2403.00	44.43 AV	94.00	-49.57	1.00 V	287	39.29	5.14
5	4806.00	51.06 PK	74.00	-22.94	1.00 V	0	40.45	10.61
6	4806.00	14.78 AV	54.00	-39.22	1.00 V	0	4.17	10.61
7	7209.00	58.72 PK	74.00	-15.28	1.00 V	0	41.84	16.88
8	7209.00	22.44 AV	54.00	-31.56	1.00 V	0	5.56	16.88

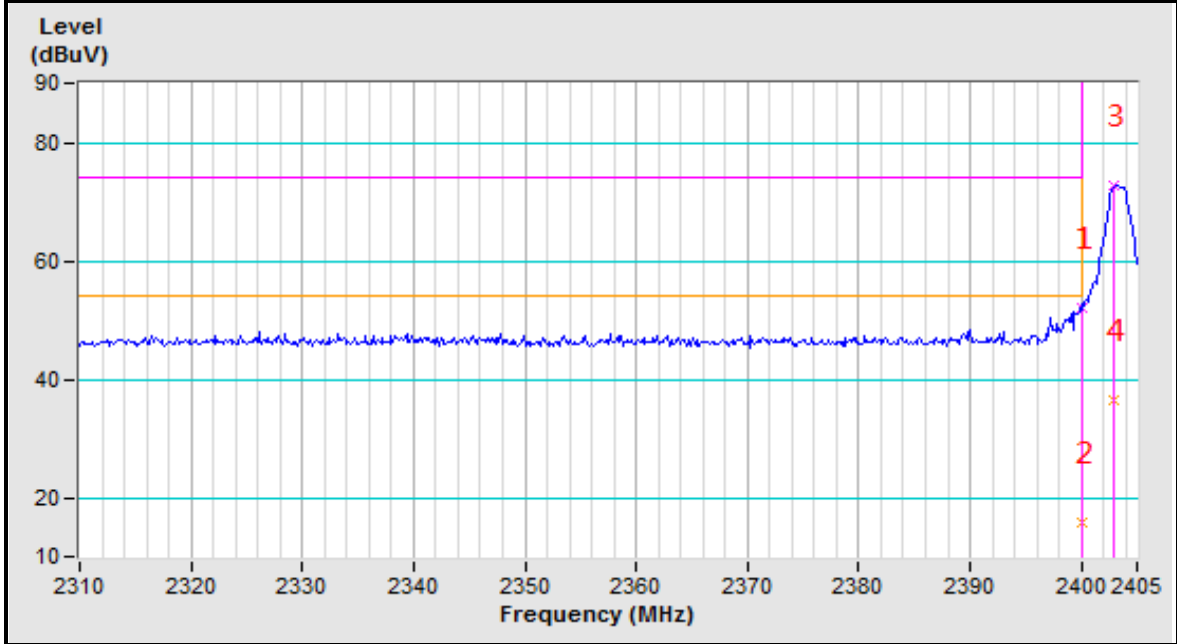
REMARK:

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.

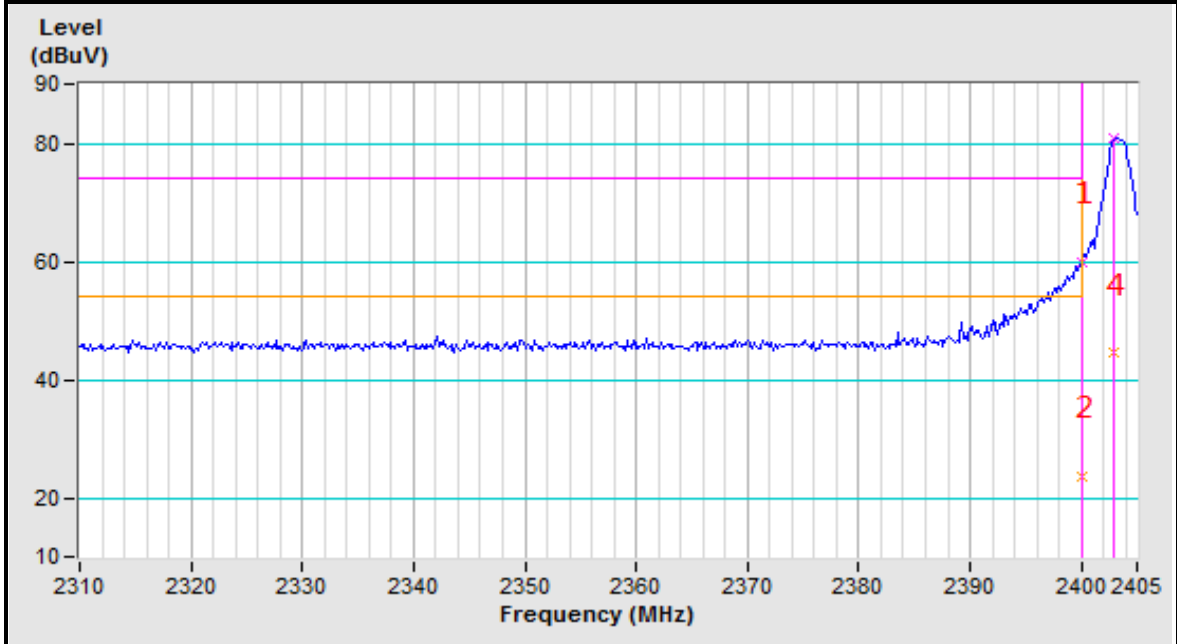


Band edge Plot

2403MHz Horizontal



2403MHz 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	79.33 PK	114.00	-34.67	1.00 H	206	74.00	5.33
2	*2440.00	43.05 AV	94.00	-50.95	1.00 H	206	37.72	5.33
3	4880.00	51.46 PK	74.00	-22.54	1.00 H	126	40.54	10.92
4	4880.00	15.18 AV	54.00	-38.82	1.00 H	147	4.26	10.92
5	7320.00	60.26 PK	74.00	-13.74	1.00 H	198	43.07	17.19
6	7320.00	23.98 AV	54.00	-30.02	1.00 H	198	6.79	17.19
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	80.16 PK	114.00	-33.84	1.00 V	154	74.83	5.33
2	*2440.00	43.88 AV	94.00	-50.12	1.00 V	154	38.55	5.33
3	4880.00	52.65 PK	74.00	-21.35	1.00 V	126	41.73	10.92
4	4880.00	16.37 AV	54.00	-37.63	1.00 V	147	5.45	10.92
5	7320.00	61.74 PK	74.00	-12.26	1.00 V	198	44.55	17.19
6	7320.00	25.46 AV	54.00	-28.54	1.00 V	198	8.27	17.19

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	*2478.00	75.89 PK	114.00	-38.11	1.00 H	155	70.35	5.54
2	*2478.00	39.61 AV	94.00	-54.39	1.00 H	155	34.07	5.54
3	2483.50	48.93 PK	74.00	-25.07	1.00 H	155	43.36	5.57
4	2483.50	12.65 AV	54.00	-41.35	1.00 H	155	7.08	5.57
5	4956.00	54.37 PK	74.00	-19.63	1.00 H	0	43.15	11.22
6	4956.00	18.09 AV	54.00	-35.91	1.00 H	0	6.87	11.22
7	7434.00	59.23 PK	74.00	-14.77	1.00 H	0	41.74	17.49
8	7434.00	22.95 AV	54.00	-31.05	1.00 H	0	5.46	17.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

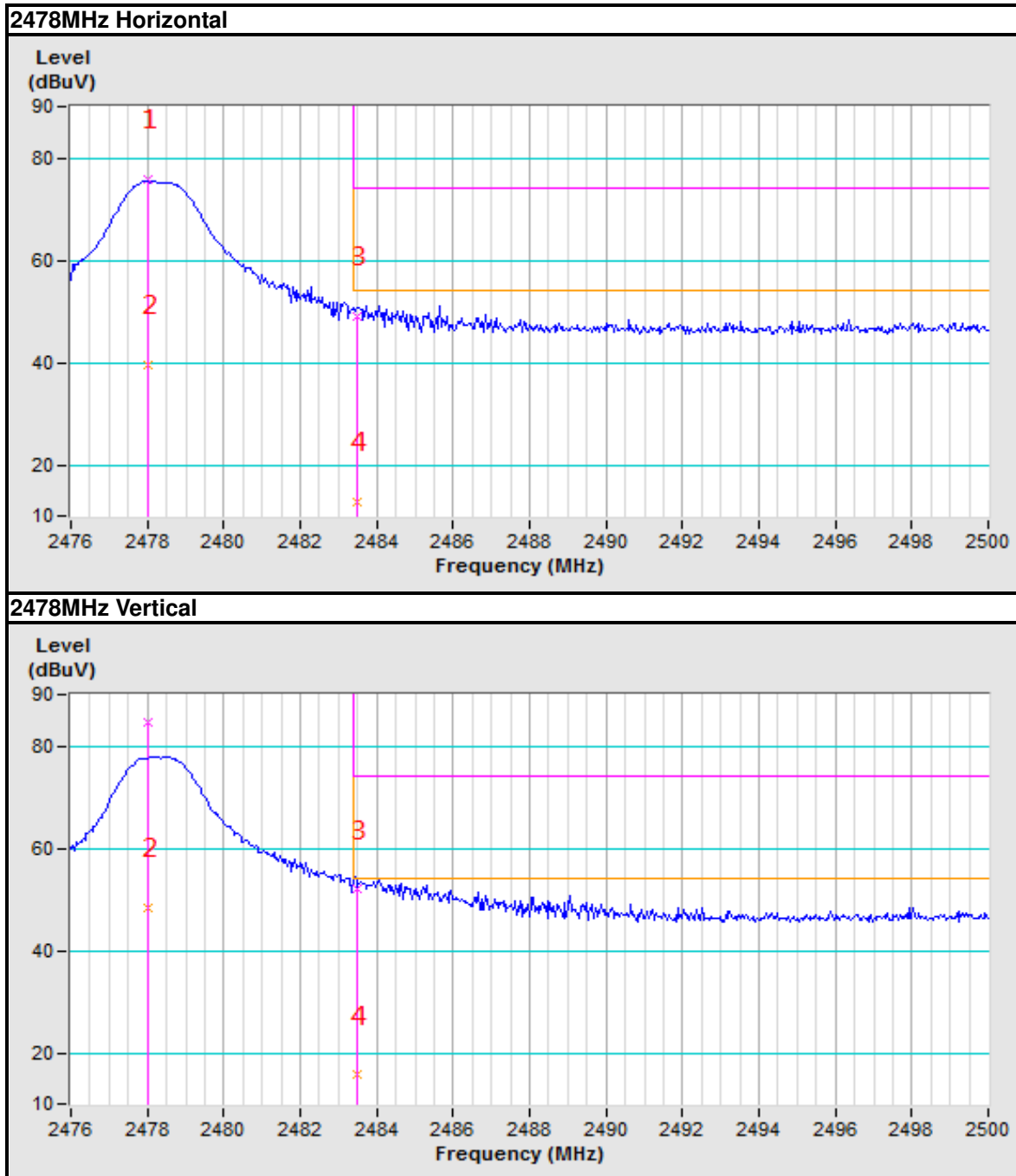
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2478.00	84.56 PK	114.00	-29.44	1.00 V	155	79.02	5.54
2	*2478.00	48.28 AV	94.00	-45.72	1.00 V	155	42.74	5.54
3	2483.50	51.92 PK	74.00	-22.08	1.00 V	155	46.35	5.57
4	2483.50	15.64 AV	54.00	-38.36	1.00 V	155	10.07	5.57
5	4956.00	55.68 PK	74.00	-18.32	1.00 V	0	44.46	11.22
6	4956.00	19.40 AV	54.00	-34.60	1.00 V	0	8.18	11.22
7	7434.00	59.76 PK	74.00	-14.24	1.00 V	0	42.27	17.49
8	7434.00	23.48 AV	54.00	-30.52	1.00 V	0	5.99	17.49

REMARK:

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



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.
Power Sensor	Keysight	U2021XA	MY55060016	N/A
Power Sensor	Keysight	U2021XA	MY55060018	May 09, 22
Power Meter	Anritsu	ML2495A	1139001	Feb. 24, 22
Power Sensor	Anritsu	MA2411B	1531155	Feb. 24, 22
Digital Multimeter	FLUKE	15B	A1220010DG	N/A
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Nov. 03, 21
Oscilloscope	Agilent	DSO9254A	MY51260160	Aug. 10, 21
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Feb. 24, 22
Signal Generator	Agilent	N5183A	MY50140980	Aug. 10, 21
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Sep. 04, 21
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A
DC Source	Keysight	E3642A	MY56146098	N/A

NOTES:

1. The test was performed in RF Oven room.
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.

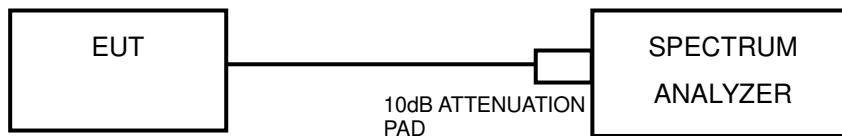
4.2.3 TEST PROCEDURE

- 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



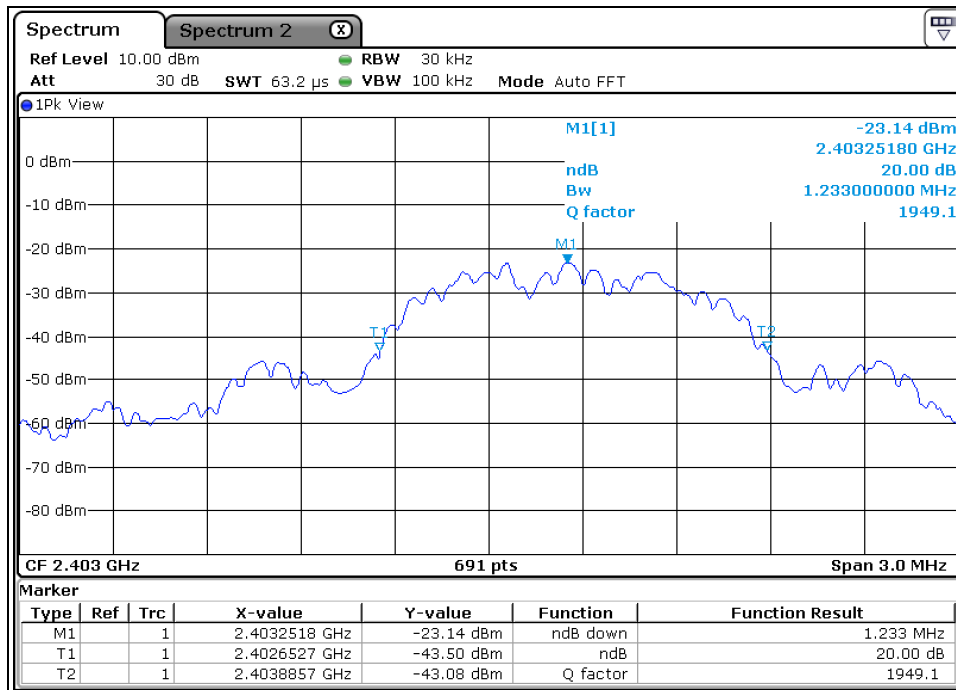
4.2.6 EUT OPERATING CONDITIONS

- 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

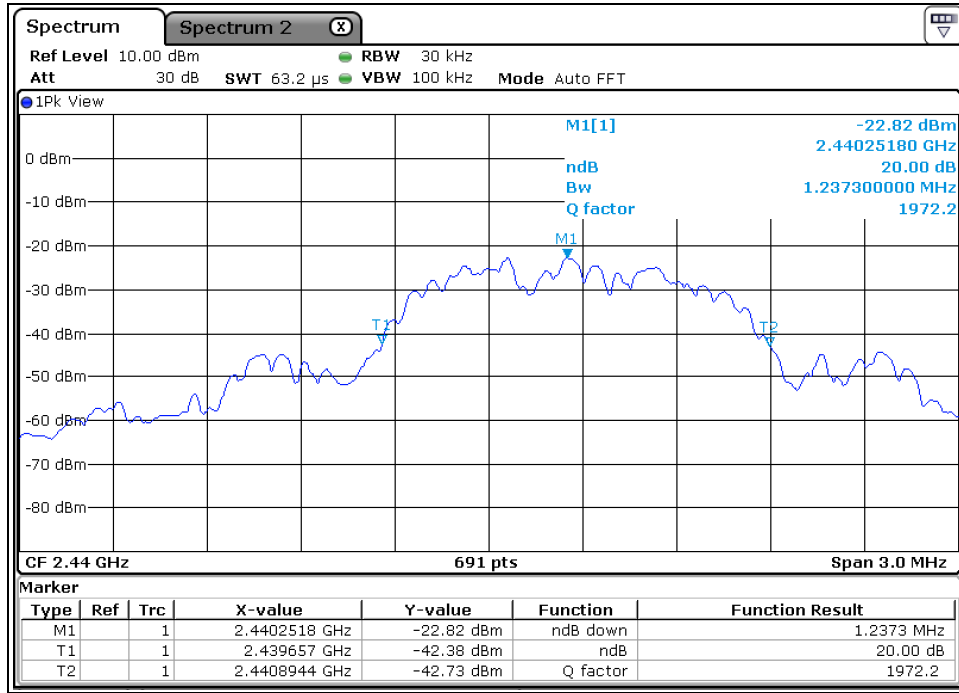
CHANNEL	CHANNEL FREQUENCY (MHz)	20dB BANDWIDTH (MHz)
Low	2403	1.233
Middle	2440	1.237
High	2478	1.246

Test Data: Low channel

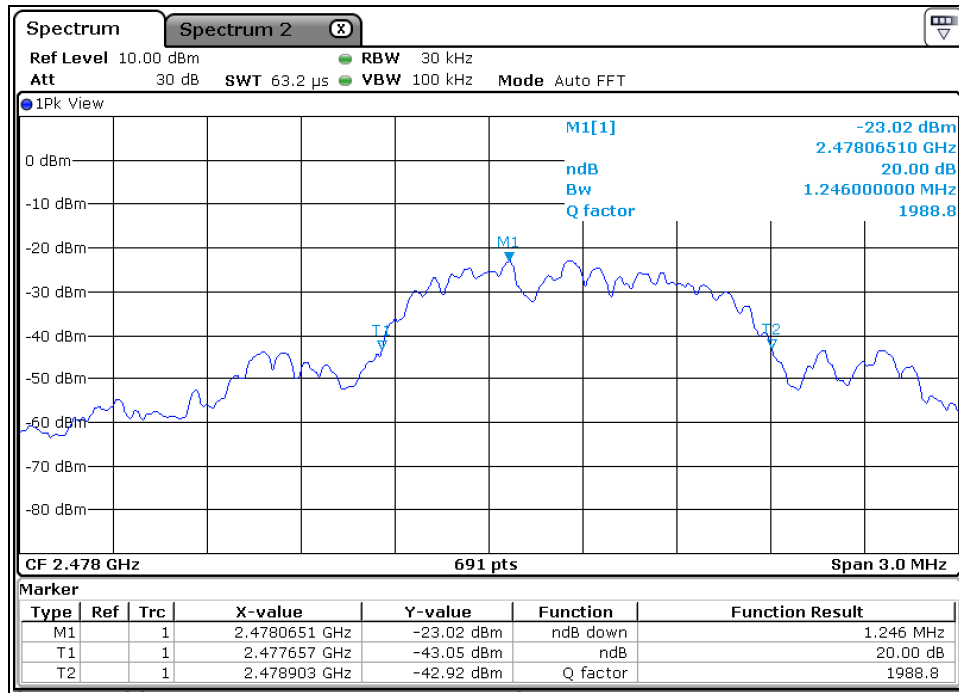




Test Data: Middle channel



Test Data: High channel





Test Report No.: RF2105WDG0283

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



**BUREAU
VERITAS**

Test Report No.: RF2105WDG0283

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---