TEST REPORT

Applicant:	QIANKUN TOYS FACTORY
Address:	CHENG HAI DISTRICT,SHANTOU CITY,GUANGDONG PROVINCE,CHINA

Manufacturer or Supplier	QIANKUN TOYS FACTORY
Address	CHENG HAI DISTRICT,SHANTOU CITY,GUANGDONG PROVINCE,CHINA
Product:	Remote Control Car
Brand Name:	N/A
Model:	11616
Additional Model & Model Difference	11610, 11611 etc. See item 3.1
Date of tests:	Aug. 13 to Nov. 20, 2019

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 Evans He Project Engineer / EMC Department	Approved by David Huang Supervisor / EMC Department
Evans He	David Huang Date: Nov. 21, 2019

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF190823N036	Original release	Nov. 21, 2019

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

NOTE: Test Lab Information:

Lab: Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch
Test Lab Address: Zone A, Floor 1, Building 2 Wan Ye Long Technology Park South Side of Zhoushi Road, Bao'an District Shenzhen, Guangdong, 518108, People's Republic of China

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	3.74dB
	1GHz ~ 18GHz	4.66dB
	18GHz ~ 40GHz	4.67dB

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 Car
MODEL NO.	11616
ADDITIONAL MODELS	11610，11611，11612，11613，11802，11601，11603，11604，11803，QK091，QK092，11804，11805，11806，11602，11605，11606，112407，112408，112409，112410，112411，112412，112413，112415，112416，112417，112418，112419，112420，112421，112422，112423，112425，112426，112427，112428，112429，112430，11607，11608，11609，11615，11616，11617，11618，11619，11620，11621，11622，11623，11625，11626，11627，11628，11629，11630，11631，11632，11633，11634，11635，11636，11637，11638，11639，11207，11208，11209，11210，11211，11213，11215，11216，11217，11218，11219，11220 ，11221，11222,1223，11807，11808，11809，11810，11811，11812，11813，11815，11816，11817，11818，11819，11820，11821，11822，11823，11824，11825，11826，11827，11828，11829，11830，11831，11832，11833，11834，11835，11836，TH-466，TH-422，TH-433，TH-477
FCC ID	2AT4G11616
NOMINAL VOLTAGE	Remote Control(TX): DC 3V from Battery
MODULATION TECHNOLOGY	GFSK
OPERATING FREQUENCY	2415-2470MHz
ANTENNA TYPE	Single wire,0dBi Gain for Remote Control
I/O PORTS	Refer to user’s manual
CABLE SUPPLIED	USB Line : Unshielded, Detachable 54cm

NOTE:

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.: 190823N036) for detailed product photo.
4. Additional models (see about table) are identical with the test model 11616 except the color of the appearance and model name 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 **RE≥1G:** Radiated Emission above 1GHz
PLC: Power Line Conducted Emission **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	2415 MHz
Middle	2445 MHz
High	2470 MHz

Channel List

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

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

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE	26deg. C, 56%RH	DC 3V from Battery	Caden
BW	26deg. C, 56%RH	DC 3V from Battery	Aaron
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 with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	-	-	-	-	-

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	-

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.

NOTE:

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.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESL6	1300.5001K06-100262-eQ	Apr. 04, 19	Apr. 03, 20
Bilog Antenna	Sunol Sciences	JB6	A110712	Apr. 08, 19	Apr. 07, 20
Active Antenna	CMO-POWER	AL-130	121031	Mar. 27, 19	Mar. 26, 20
Signal Amplifier	HP	8447E	443008	Mar. 28, 19	Mar. 27, 20
Spectrum	Agilent	E4446A	MY46180622	May. 08,19	May. 07,20
MXA signal analyzer	Agilent	N9020A	MY49100060	Mar. 28, 19	Mar. 27, 20
Horn Antenna	COM-POWER	HAH-118	71259	Mar. 22, 19	Mar. 21, 20
Horn Antenna	COM-POWER	HAH-118	71283	Mar. 20, 19	Mar. 19, 20
SHF-EHF Horn	Schwarzbeck	BBHA9170	BBHA9170147	Jun. 30, 19	Jun. 29, 20
SHF-EHF Horn	Schwarzbeck	BBHA9170	BBHA9170242	Jun. 30, 19	Jun. 29, 20
AMPLIFIER	EM Electornic Corporation	EM01G26G	60613	Mar. 28, 19	Mar. 27, 20
AMPLIFIER	Emc Instruments Corporation	Emc012645	980077	Jan. 04, 19	Jan. 03,20
3m Semi-anechoic Chamber	SAEMC	9m*6m*6m	N/A	Oct. 18,18	Oct. 17,21
Test Software	EZ-EMC	ICP-03A1	N/A	N/A	N/A

NOTE:

1. The test was performed in 966 Chamber (a 3m Semi-anechoic chamber).
2. The calibration interval of the above test instruments is 12 months (Except 3m Semi-anechoic Chamber).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 above1GHz 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.

NOTE:

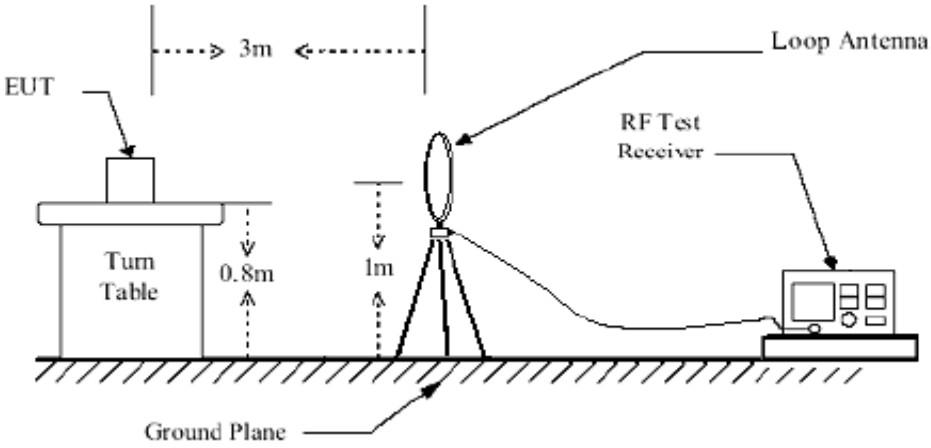
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution 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

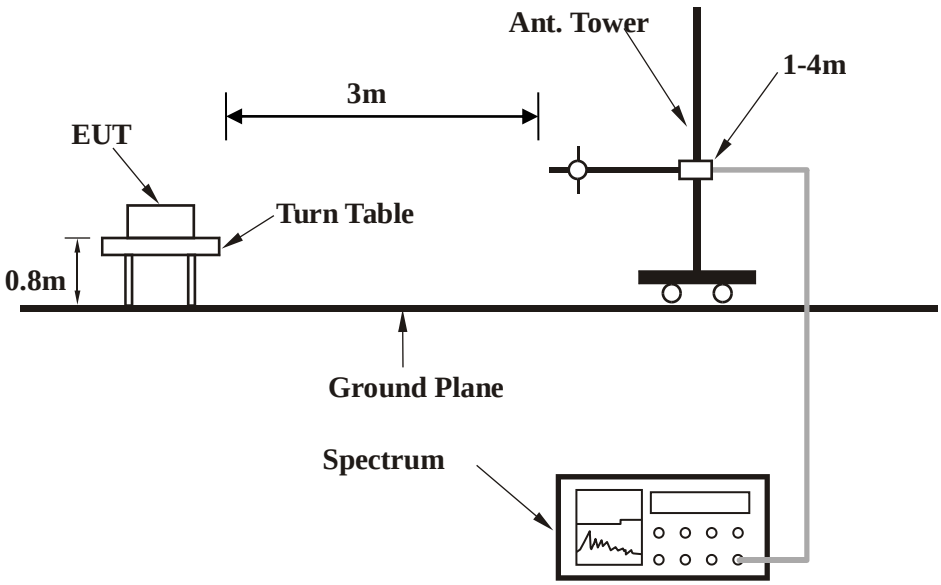
No deviation.

4.1.5 TEST SETUP

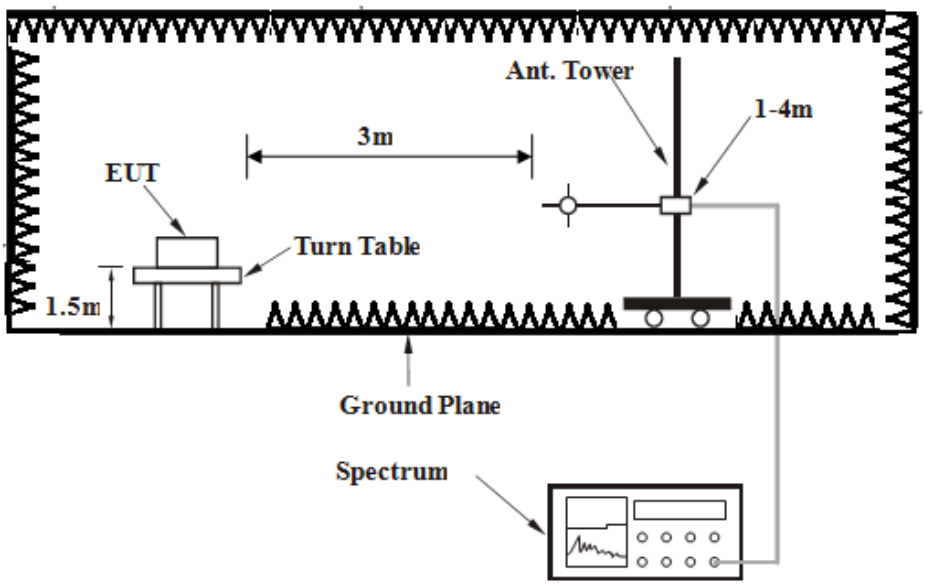
Below 30MHz test setup



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

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

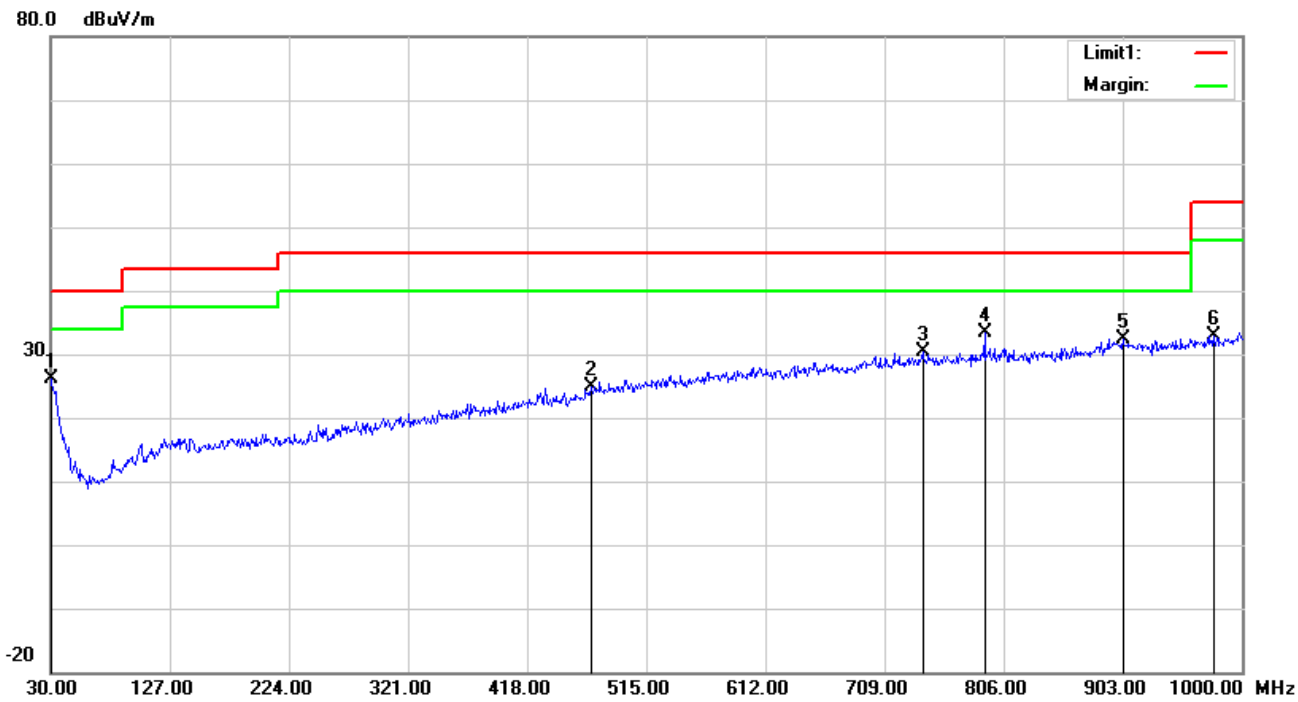
BELOW 1GHz WORST-CASE DATA

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

ANTENNA POLARITY & test distance: HORIZONTAL at 3 m										
No.	Frequency	Reading	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	30.0000	28.18	20.10	22.28	0.13	26.13	40.00	-13.87	100	313
2	470.3800	26.53	18.16	21.87	2.06	24.88	46.00	-21.12	100	299
3	740.0400	27.45	21.72	21.28	2.47	30.36	46.00	-15.64	100	88
4	790.4800	30.01	22.11	21.17	2.54	33.49	46.00	-12.51	100	246
5	903.0000	26.65	23.84	20.87	2.65	32.27	46.00	-13.73	100	319
6	976.7200	27.21	23.75	20.73	2.73	32.96	54.00	-21.04	100	75

REMARKS:

1. Result (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Gain (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Result level – Limit value

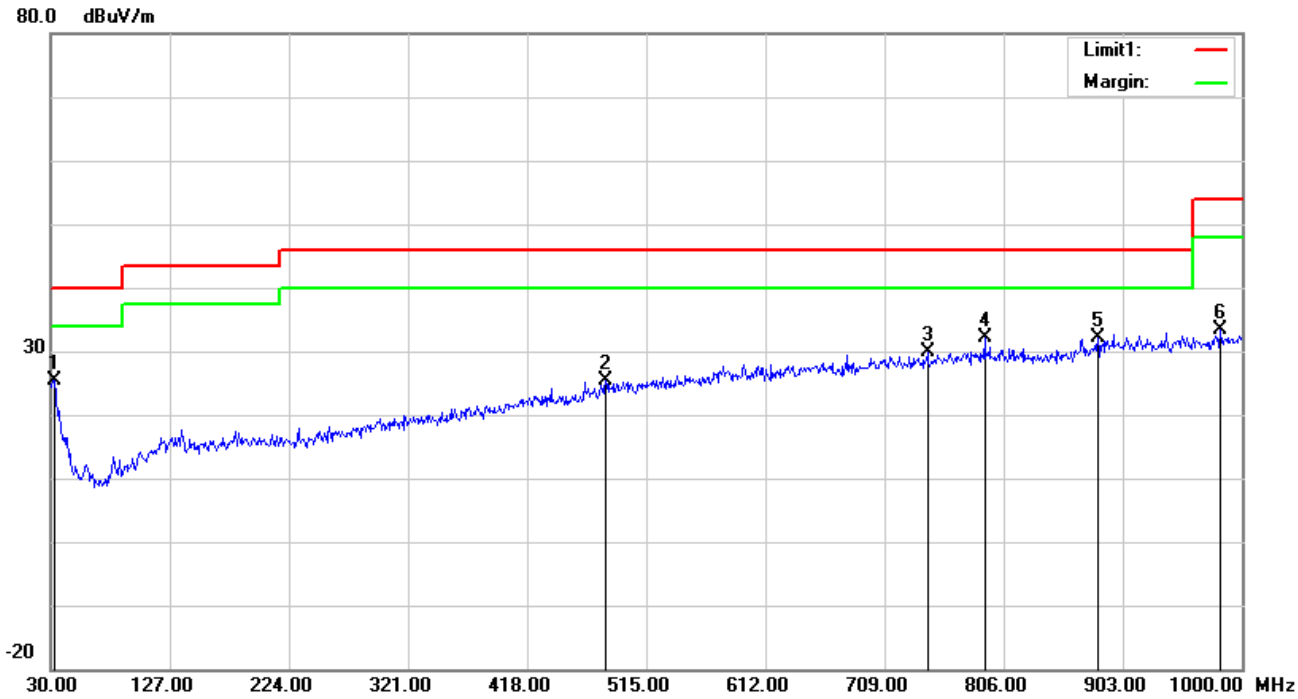


CHANNEL	TX Middle Channel	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & test distance: Vertical at 3 m										
No.	Frequency	Reading	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dBuV/m)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	32.9100	29.22	18.24	22.26	0.14	25.34	40.00	-14.66	100	7
2	482.0200	26.55	18.48	21.85	2.09	25.27	46.00	-20.73	100	97
3	743.9200	26.98	21.75	21.27	2.47	29.93	46.00	-16.07	100	253
4	790.4800	28.63	22.11	21.17	2.54	32.11	46.00	-13.89	100	285
5	882.6300	27.29	23.14	20.93	2.64	32.14	46.00	-13.86	100	70
6	982.5400	27.35	23.91	20.72	2.74	33.28	54.00	-20.72	100	96

REMARKS:

1. Result (dBuV/m) = Reading (dBuV/m) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Gain (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Result level – Limit value



ABOVE 1GHz WORST-CASE DATA:

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

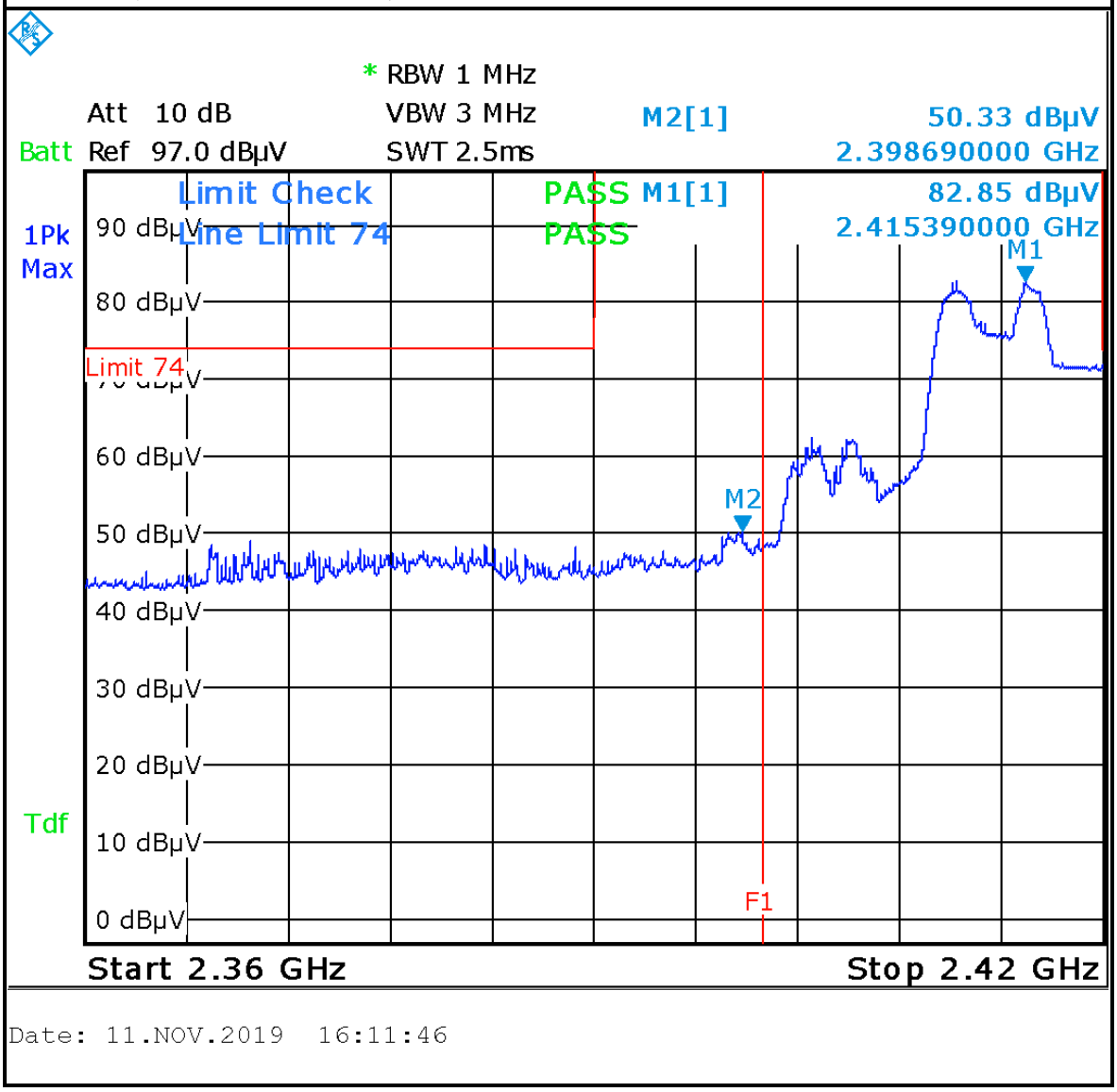
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	DETECTOR(PK/AV)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2400	49.43	PK	74	-24.57	100	356	63.13	-13.7
2	2400	27.06	AV	54	-26.94	100	147	46.39	-13.7
3	*2415	82.2	PK	114	-31.8	100	169	95.9	-13.7
4	*2415	59.83	AV	94	-34.17	100	171	79.16	-13.7
5	4830	50.05	PK	74	-23.95	100	91	56.43	-6.38
6	4830	27.68	AV	54	-26.32	100	0	39.69	-6.38
7	1906	45.52	PK	74	-28.48	200	306	60.5	-14.98
8	1906	23.15	AV	54	-30.85	100	208	43.76	-14.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	DETECTOR(PK/AV)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2398.69	50.33	PK	74	-23.67	100	193	64.03	-13.7
2	2398.69	27.96	AV	54	-26.04	100	284	47.29	-13.7
3	*2415	82.85	PK	114	-31.15	100	223	96.55	-13.7
4	*2415	60.48	AV	94	-33.52	100	310	79.81	-13.7
5	4830	50.19	PK	74	-23.81	100	320	56.57	-6.38
6	4830	27.82	AV	54	-26.18	200	132	39.83	-6.38
7	1906	46.18	PK	74	-27.82	100	358	61.16	-14.98
8	1906	23.81	AV	54	-30.19	100	161	44.42	-14.98

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) - Pre-amplifier Gain (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Band edge Plot

2415MHz（Horizontal & Vertical）



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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**DETECTOR(PK/AV)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*2445	81.54	PK	114	-32.46	100	120	95.24	-13.7
2	*2445	59.17	AV	94	-34.83	100	337	78.5	-13.7
3	4890	52.19	PK	74	-21.81	100	79	58.13	-5.94
4	4890	29.82	AV	54	-24.18	200	204	41.39	-5.94
5	2717	45.21	PK	74	-28.79	100	187	58.18	-12.97
6	2717	22.84	AV	54	-31.16	100	219	41.44	-12.97
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**DETECTOR(PK/AV)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*2445	81.35	PK	114	-32.65	100	42	95.05	-13.7
2	*2445	58.98	AV	94	-35.02	100	216	78.31	-13.7
3	4890	51.46	PK	74	-22.54	100	148	57.4	-5.94
4	4890	29.09	AV	54	-24.91	200	36	40.66	-5.94
5	2703	45.38	PK	74	-28.62	200	343	58.35	-12.97
6	2703	23.01	AV	54	-30.99	100	157	41.61	-12.97

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) - Pre-amplifier Gain (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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

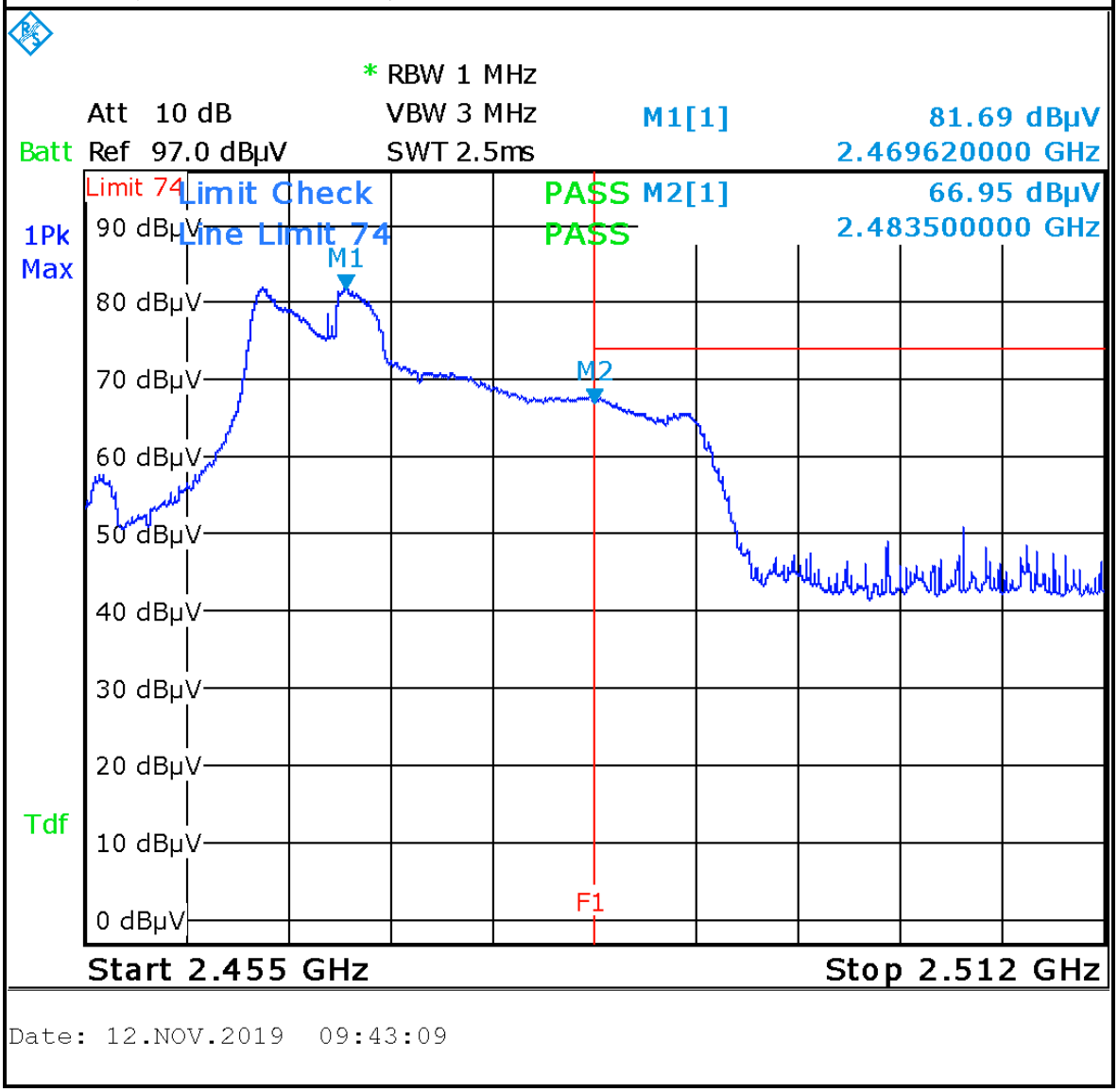
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	DETECTOR(PK/AV)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2483.5	66.95	PK	74	-7.05	100	146	80.79	-13.5
2	2483.5	44.58	AV	54	-9.42	100	16	64.05	-13.5
3	*2470	81.69	PK	114	-32.31	100	120	95.19	-13.5
4	*2470	59.32	AV	94	-34.68	100	23	78.45	-13.5
5	4940	51.05	PK	74	-22.95	100	303	56.99	-5.94
6	4940	28.68	AV	54	-25.32	100	167	40.25	-5.94
7	3536	47.16	PK	74	-26.84	100	120	57.98	-10.82
8	3536	24.79	AV	54	-29.21	100	167	41.24	-10.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	DETECTOR(PK/AV)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2483.5	65.43	PK	74	-8.57	100	184	81.55	-13.5
2	2483.5	43.06	AV	54	-10.94	100	233	64.81	-13.5
3	*2470	81.57	PK	114	-32.43	100	98	95.07	-13.5
4	*2470	59.2	AV	94	-34.8	100	268	78.33	-13.5
5	4940	50.5	PK	74	-23.5	100	179	56.44	-5.94
6	4940	28.13	AV	54	-25.87	200	274	39.7	-5.94
7	3698	48.07	PK	74	-25.93	100	350	58.53	-10.46
87	3698	25.7	AV	54	-28.3	100	125	41.79	-10.46

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) - Pre-amplifier Gain (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

Band edge Plot

2470MHz（Horizontal & 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.	Last Cal.	Next Cal.
Wireless Connectivity Tester	R&S	CMW270	1201.0002K75	Nov. 29, 18	Nov. 28, 19
MXA VEXTOR SIGNAL	Agilent	n5182a	MY50140530	Mar. 28,19	Mar. 27,20
MXA signal analyzer	Agilent	n9020a	MY49100060	Mar. 28,19	Mar. 27,20
RF Control Unit	Tonscend	JS0806-2	188060112	Mar. 28,19	Mar. 27,20
Signal Generation	Agilent	E4421B	US40051152	Nov. 29, 18	Nov. 28, 19
DC Power Supply	Agilent	E3640A	MY40004013	Mar. 28,19	Mar. 27,20
Programmable Temperature & Humidity Chamber	Hongjin	HYC-TH-225 DH	DG-180746	Mar. 28,19	Mar. 27,20
Test System	Tonscend	JS 1120-3	N/A	N/A	N/A
Power Splitter	Weinschel	1580-1	TL177	Mar. 20,19	Mar. 19,20

NOTE:

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.

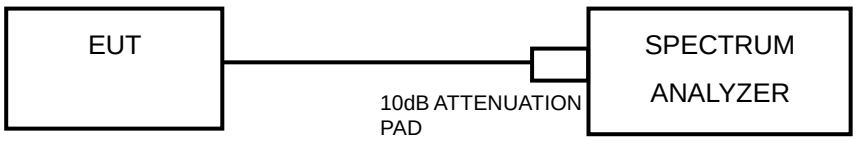
c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.

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

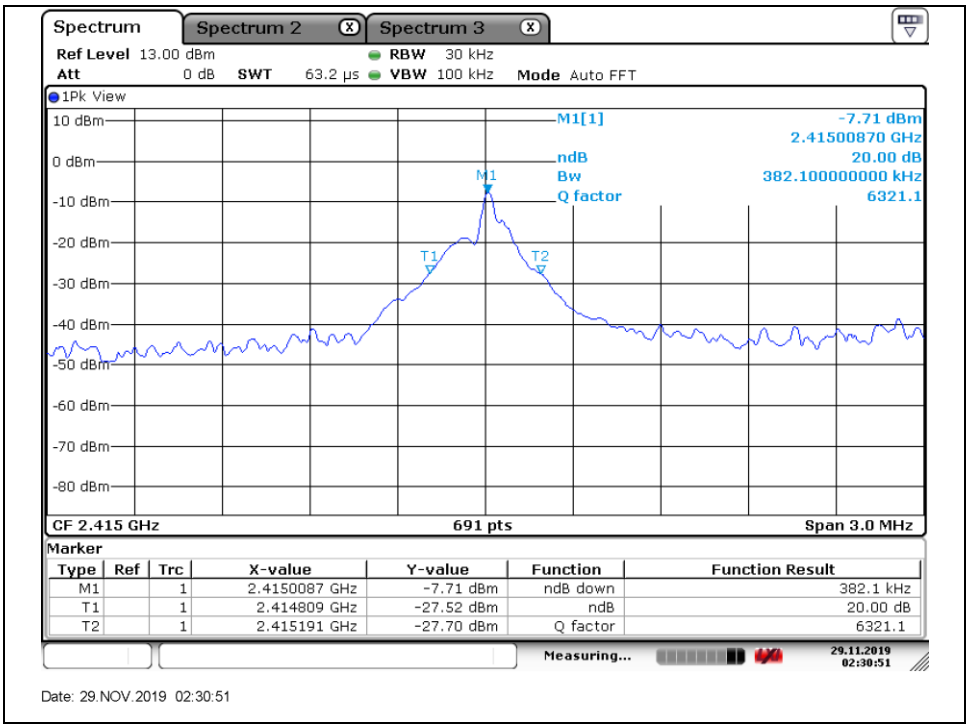
a) Turned on the power of all equipment.

b) EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

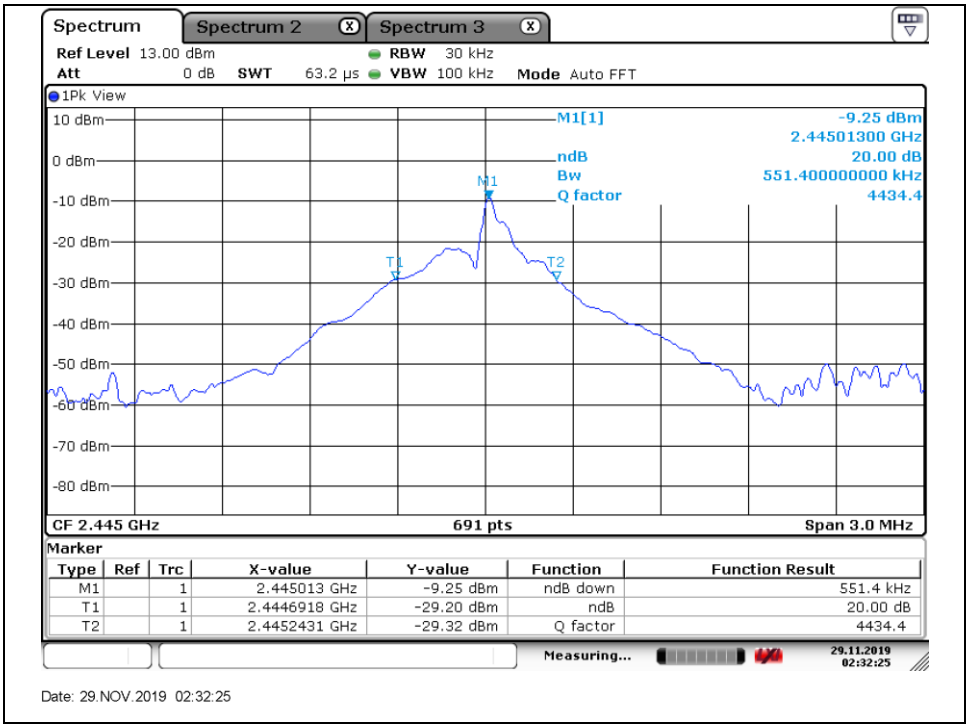
4.2.7 TEST RESULTS

CHANNEL	CHANNEL FREQUENCY (MHz)	20dB BANDWIDTH (MHz)
Low	2415	0.3821
Middle	2445	0.5514
High	2470	0.6816

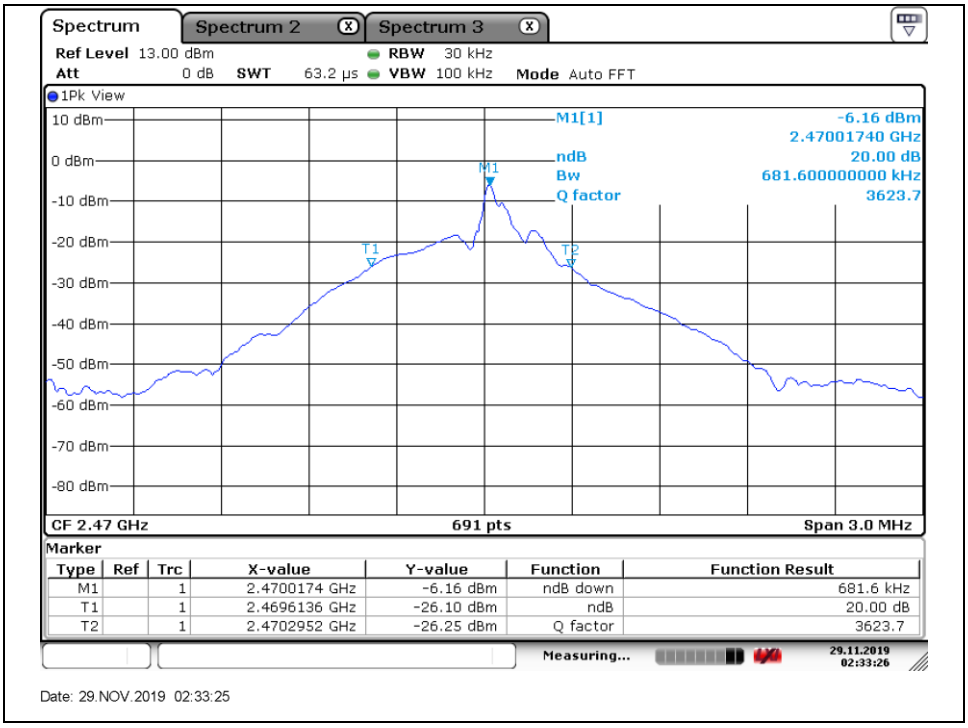
Test Data: Low channel



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---