FCC RADIO TEST REPORT
FCC ID: YIZRT-MWK12

Product：	Keyboard+Touchpad
Trade Name：	N/A
Model Name：	RT-MWK12
Serial Model：	RT-MWK12BT,RT-MWK12RF,i12,K12,RiiK12, Rii12,R650,ZW-51012,ZW-51012BT
Report No.：	NTEK-2013NT0717741F

Prepared for

ShenZhen Riitek Technology Co.,Ltd

A1-4,A Zone,Baoyunda Logistic Center, Avenue Xixiang, BaoAn District, Shenzhen, China

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name ..... ShenZhen Riitek Technology Co.,Ltd

Address ..... A1-4,A Zone,Baoyunda Logistic Center, Avenue Xixiang, BaoAn District, Shenzhen, China

Manufacture's Name..... ShenZhen Riitek Technology Co.,Ltd

Address ..... A1-4,A Zone,Baoyunda Logistic Center, Avenue Xixiang, BaoAn District, Shenzhen, China

Product description

Product name ..... Keyboard+Touchpad

Model and/or type reference RT-MWK12

Serial Model： RT-MWK12BT,RT-MWK12RF,i12,K12,RiiK12, Rii12,R650,ZW-51012,ZW-51012BT

Standards ..... FCC Part15.249

Test procedure ..... ANSI C63.4-2003

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test .....

Date (s) of performance of tests ..... 17 Jul. 2013 ~01 Apr. 2013

Date of Issue..... 02 Apr. 2013

Test Result..... **Pass**

Testing Engineer : Polo cha

(Polo Cha)

Technical Manager : Brown Lu

(Brown Lu)

Authorized Signatory : Bovey Yang

(Bovey Yang)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.249)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	
15.203	Antenna Requirement	Pass	
15.249	Radiated Spurious Emission	Pass	
15.205	Band Edge Emission	Pass	
15.249	Occupied Bandwidth	Pass	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd
Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
FCC Registration No.:238937; IC Registration No.:9270A-1
CNAS Registration No.:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y ± U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95** %。

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Keyboard+Touchpad
Trade Name	N/A
Model Name	RT-MWK12
Serial Model	RT-MWK12BT,RT-MWK12RF,i12,K12,RiiK12, Rii12,R650,ZW-51012,ZW-51012BT
Model Difference	All the models are the same circuit and RF module, except the model names.
Product Description	The EUT is a Keyboard+Touchpad Operation Frequency: 2401~2480MHz Modulation Type: GFSK Antenna Designation: PCB Antenna Antenna Gain(Peak) 0.35 dBi EIRP 78.88 dBμV/m Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Channel List	Please refer to the Note 2.
Adapter	N/A
Battery	DC 3.7V

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel	Frequency (MHz)
01	2401
02	2407
03	2408
04	2410
05	2414
06	2421
07	2428
08	2435
09	2437
10	2440
11	2441
12	2442
13	2445
14	2467
15	2468
16	2469
17	2477
18	2480

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	PCB Antenna	N/A	0.35	Antenna

`

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Link Mode
Mode 2	TX CH 01
Mode 3	TX CH 10
Mode 4	TX CH 18

For Conducted Emission	
Final Test Mode	Description
Mode 1	Link Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	Link Mode
Mode 2	TX CH 01
Mode 3	TX CH 10
Mode 4	TX CH 18

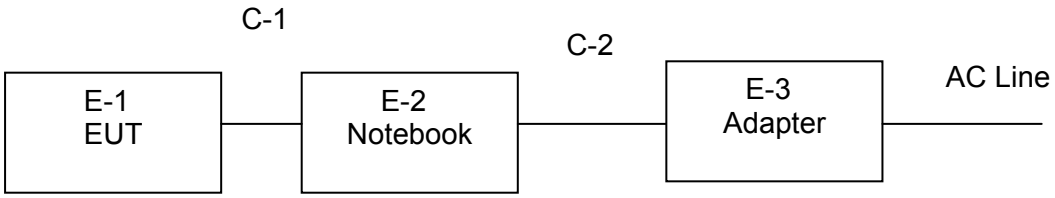
Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

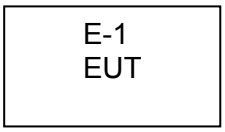
(2) The EUT use new battery.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission Test:



Radiated Spurious Emission Test:



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	Keyboard+Touchpad	N/A	RT-MWK12	N/A	EUT
E-2	Notebook	DELL	PP10L	N/A	
E-3	Adapter	DELL	HA65NS1-00	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	0.8m	
C-2	NO	NO	1.5m	

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2013.07.06	2014.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2013.06.07	2014.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2013.07.06	2014.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2013.06.07	2014.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2013.06.07	2014.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2013.07.06	2014.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2013.07.06	2014.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2012.12.22	2013.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2013.06.08	2014.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2013.07.06	2014.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2013.07.06	2014.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2013.06.06	2014.06.05	1 year
2	LISN	R&S	ENV216	101313	2012.08.24	2013.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2012.08.24	2013.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2013.06.07	2014.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2013.06.07	2014.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2013.06.08	2014.06.07	1 year

3. ANTENNA REQUIREMENT

3.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

3.2 EUT ANTENNA

The EUT antenna is integral Antenna. It comply with the standard requirement.

3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5			66 - 56 *	56 - 46 *	CISPR
0.50 -5.0			56.00	46.00	CISPR
5.0 -30.0			60.00	50.00	CISPR

0.15 -0.5			66 - 56 *	56 - 46 *	LP002.
0.50 -5.0			56.00	46.00	LP002.
5.0 -30.0			60.00	50.00	LP002.

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

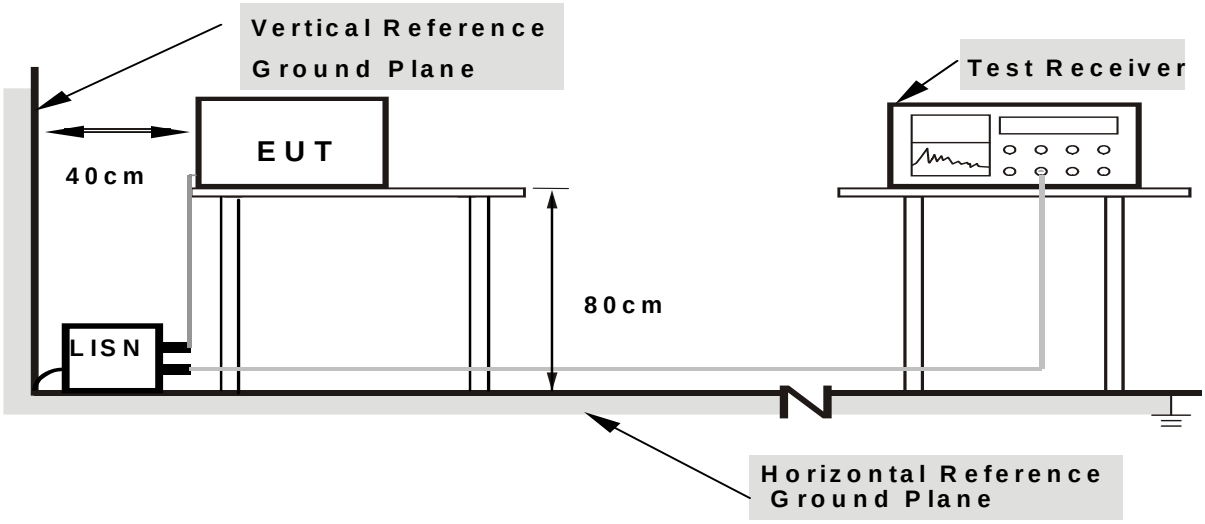
3.3.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

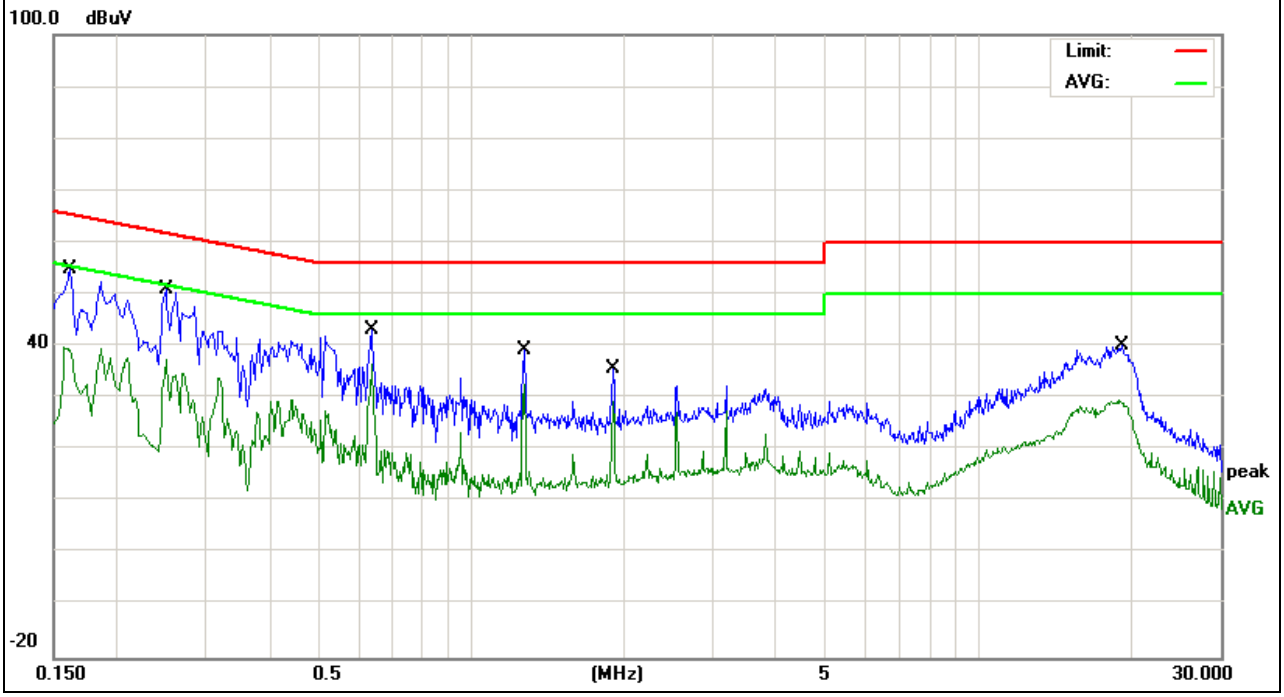
3.2.5 TEST RESULT

EUT：	Keyboard+Touchpad	Model Name. ：	RT-MWK12
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5.0V from notebook AC 120V/60Hz
Test Mode ：	Mode 1	Phase：	L

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Detector Type
0.1620	43.63	11.29	54.92	65.36	-10.44	QP
0.1620	28.39	11.29	39.68	55.36	-15.68	AVG
0.2500	40.21	10.81	51.02	61.75	-10.73	QP
0.2500	26.49	10.81	37.30	51.75	-14.45	AVG
0.6340	32.64	10.54	43.18	56.00	-12.82	QP
0.6340	26.05	10.54	36.59	46.00	-9.41	AVG
1.2700	28.80	10.52	39.32	56.00	-16.68	QP
1.2700	22.23	10.52	32.75	46.00	-13.25	AVG
1.9059	25.27	10.52	35.79	56.00	-20.21	QP
1.9059	18.69	10.52	29.21	46.00	-16.79	AVG
19.1899	29.03	11.05	40.08	60.00	-19.92	QP
19.1899	18.63	11.05	29.68	50.00	-20.32	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

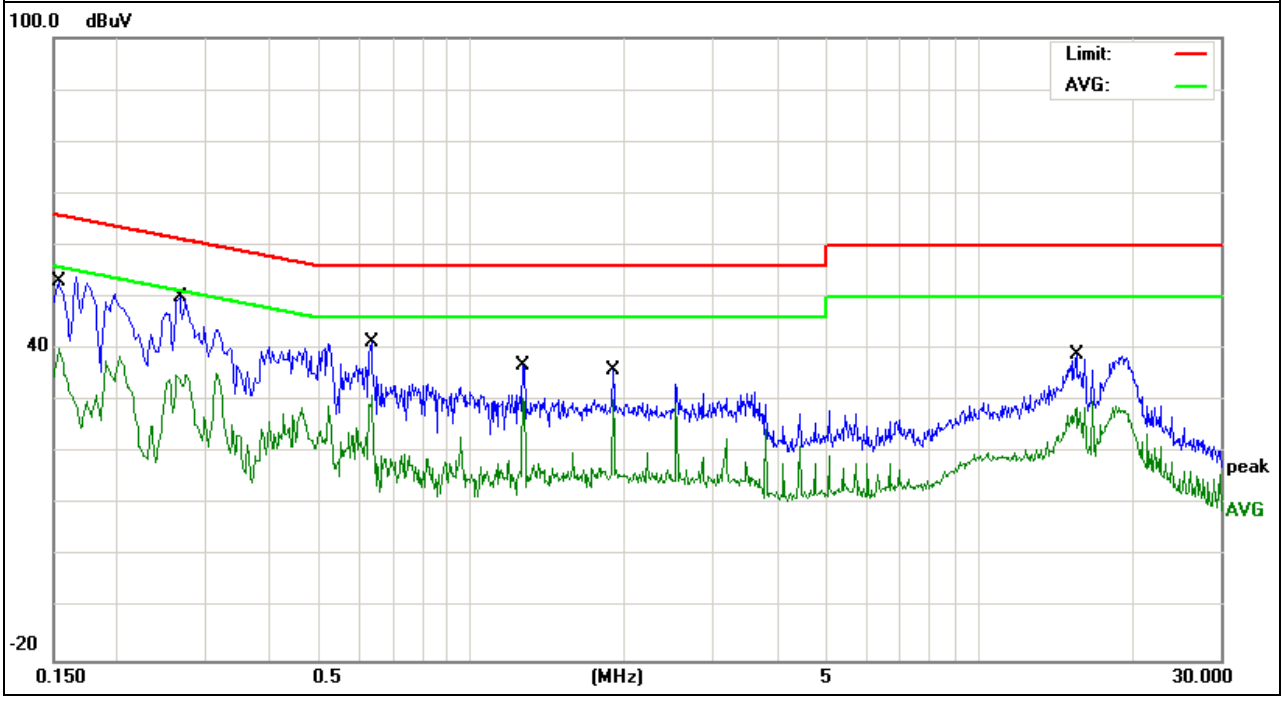


EUT：	Keyboard+Touchpad	Model Name. ：	RT-MWK12
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5.0V from notebook AC 120V/60Hz
Test Mode ：	Mode 1	Phase：	N

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Detector Type
0.1539	42.36	11.59	53.95	65.78	-11.83	QP
0.1539	28.57	11.59	40.16	55.78	-15.62	AVG
0.2660	38.98	10.94	49.92	61.24	-11.32	QP
0.2660	24.33	10.94	35.27	51.24	-15.97	AVG
0.6340	30.94	10.54	41.48	56.00	-14.52	QP
0.6340	20.73	10.54	31.27	46.00	-14.73	AVG
1.2660	26.22	10.52	36.74	56.00	-19.26	QP
1.2660	20.13	10.52	30.65	46.00	-15.35	AVG
1.9059	25.56	10.52	36.08	56.00	-19.92	QP
1.9059	19.60	10.52	30.12	46.00	-15.88	AVG
15.5618	27.89	10.93	38.82	60.00	-21.18	QP
15.5618	18.95	10.93	29.88	50.00	-20.12	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.4 RADIATED EMISSION MEASUREMENT

3.4.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/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

Note:

(1) The tighter limit applies at the band edges.

(2) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.249)

Frequency of Emission (MHz)	Field Strength of fundamental ((millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
2400 - 2483.5	50	500

Notes:

(1) 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.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.4.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

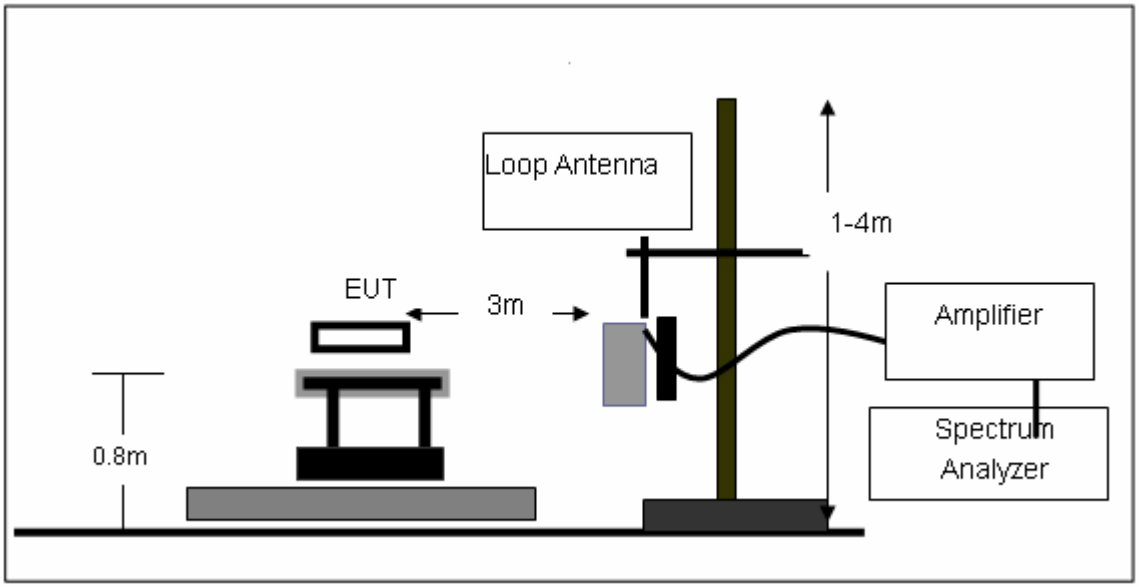
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.4.3 DEVIATION FROM TEST STANDARD

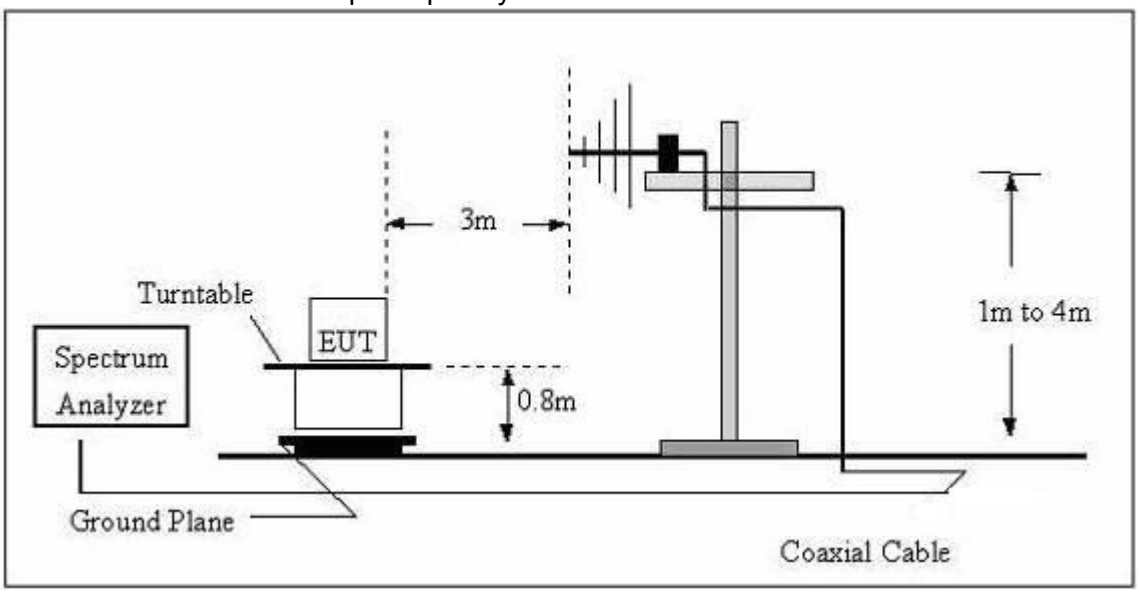
No deviation

3.4.4 TEST SETUP

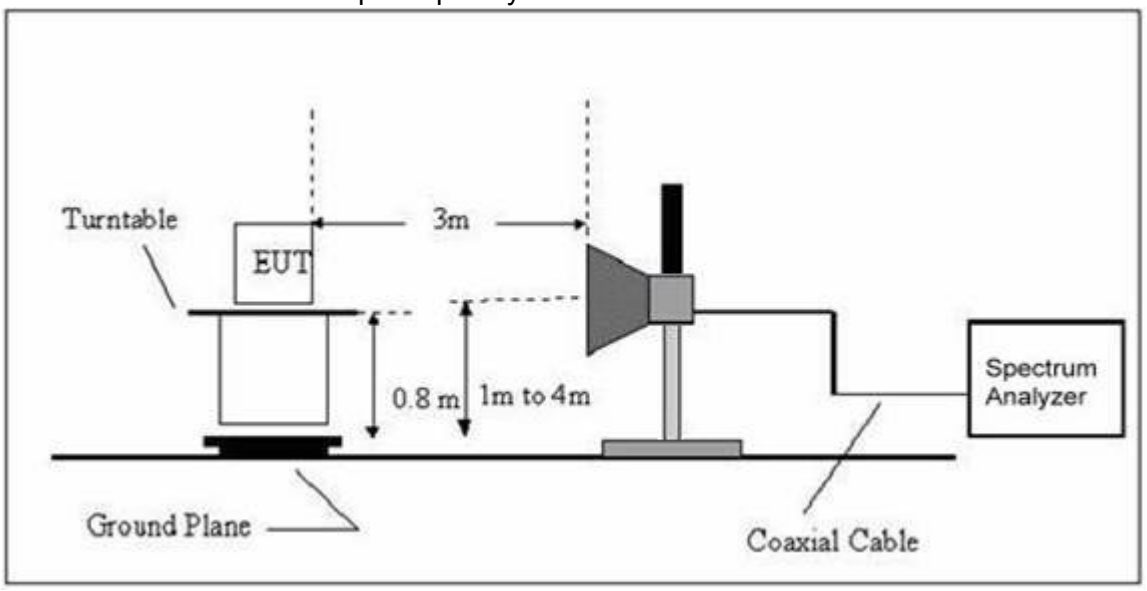
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.4.5 TEST RESULTS (BELOW 30MHz)

EUT：	Keyboard+Touchpad	Model Name. ：	RT-MWK12
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

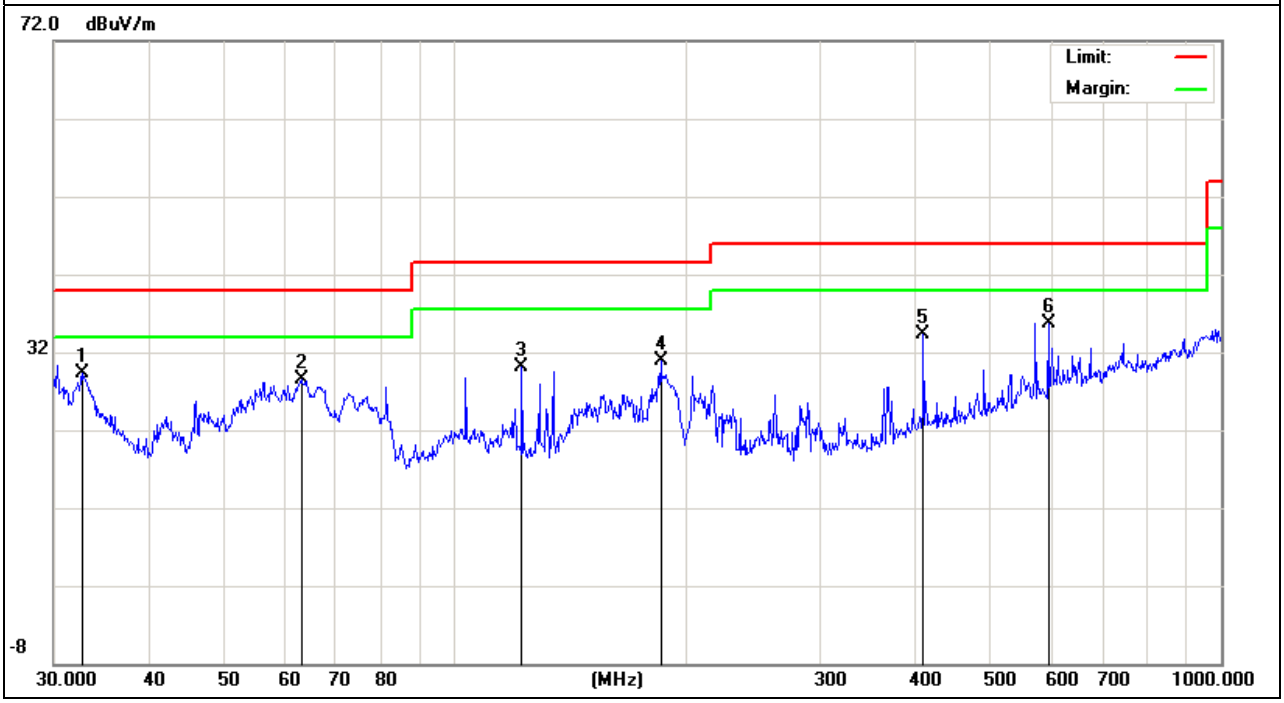
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =20 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.4.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
32.6340	12.28	16.99	29.27	40.00	-10.73	QP
63.0915	23.19	5.25	28.44	40.00	-11.56	QP
122.4038	18.25	11.84	30.09	43.50	-13.41	QP
185.7880	21.68	9.26	30.94	43.50	-12.56	QP
408.9460	16.76	17.61	34.37	46.00	-11.63	QP
595.1326	14.77	20.92	35.69	46.00	-10.31	QP

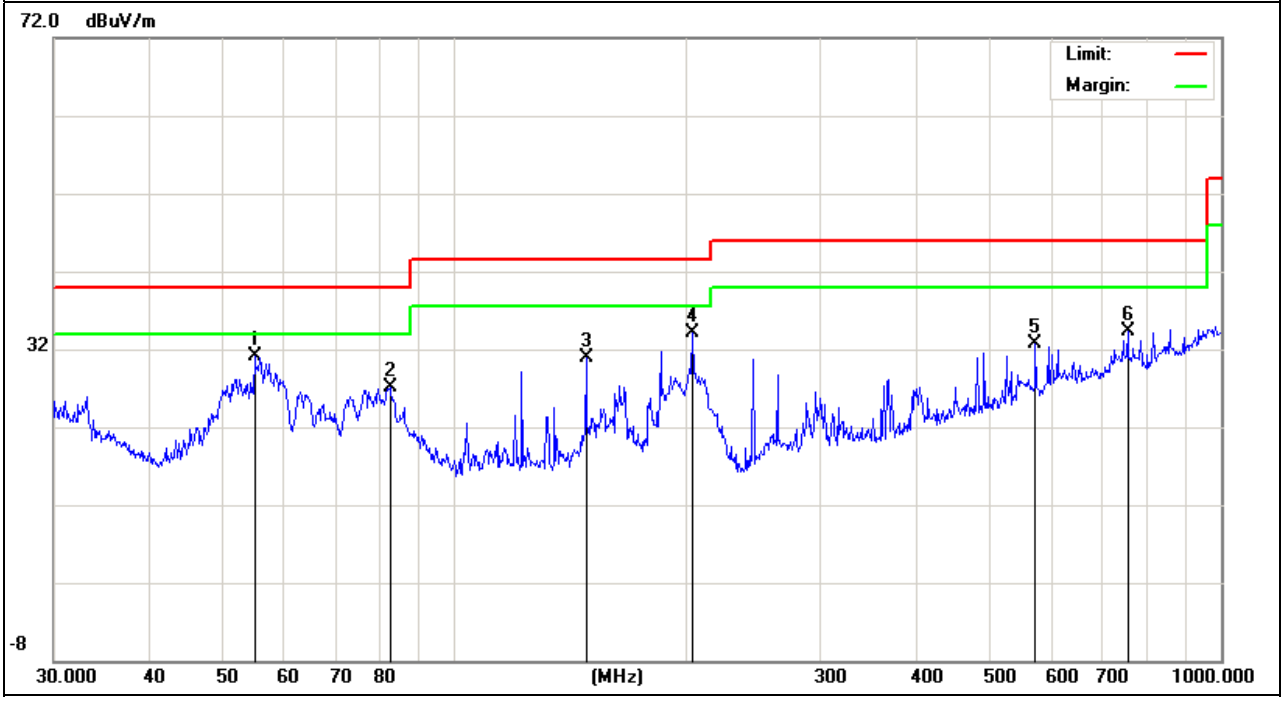
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
54.8348	24.97	6.13	31.10	40.00	-8.90	QP
82.3588	18.99	8.16	27.15	40.00	-12.85	QP
148.4410	19.15	11.83	30.98	43.50	-12.52	QP
204.2375	25.20	8.87	34.07	43.50	-9.43	QP
572.6144	11.73	20.92	32.65	46.00	-13.35	QP
755.3872	9.90	24.33	34.23	46.00	-11.77	QP

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

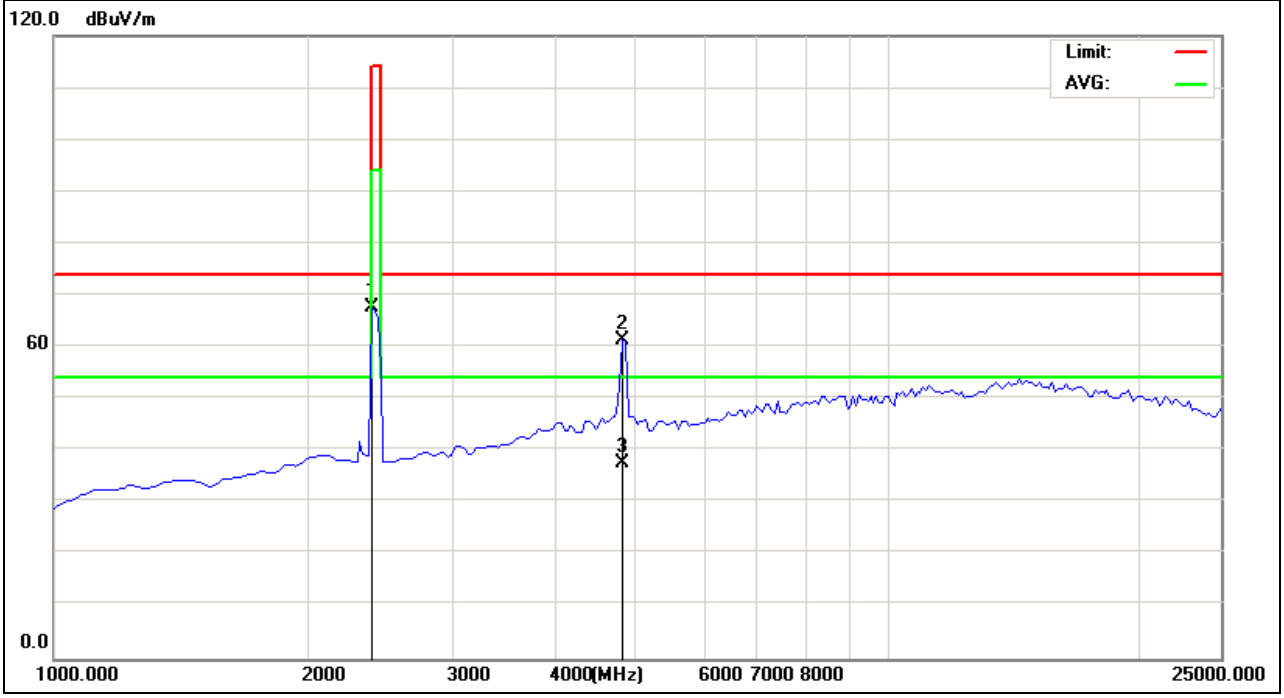


3.4.7 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2401MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2401.0000	89.56	-12.99	76.57	114	-37.43	peak
4803.000	65.09	-3.65	61.44	74.00	-12.56	peak
4803.000	41.23	-3.65	37.58	54.00	-16.42	AVG

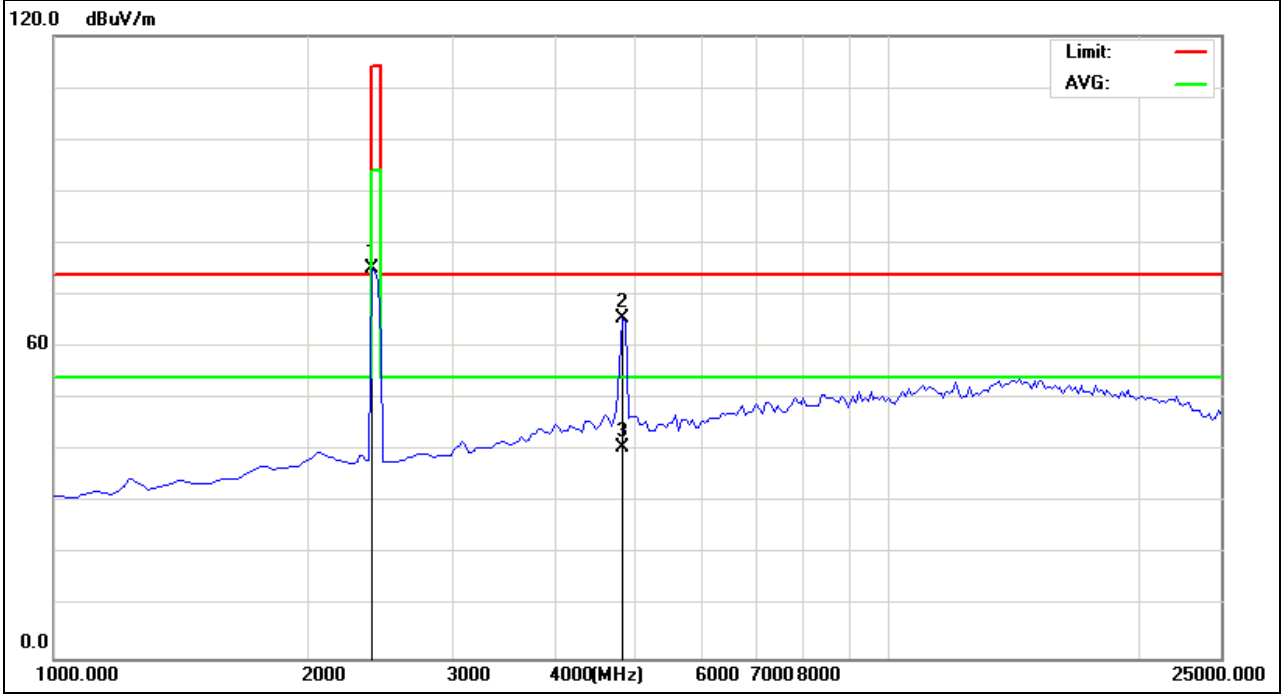
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected above 18GHz.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2401MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2401.0000	83.68	-12.99	70.69	114	-43.31	peak
4803.000	69.24	-3.65	65.59	74.00	-8.41	peak
4803.000	44.24	-3.65	40.59	54.00	-13.41	AVG

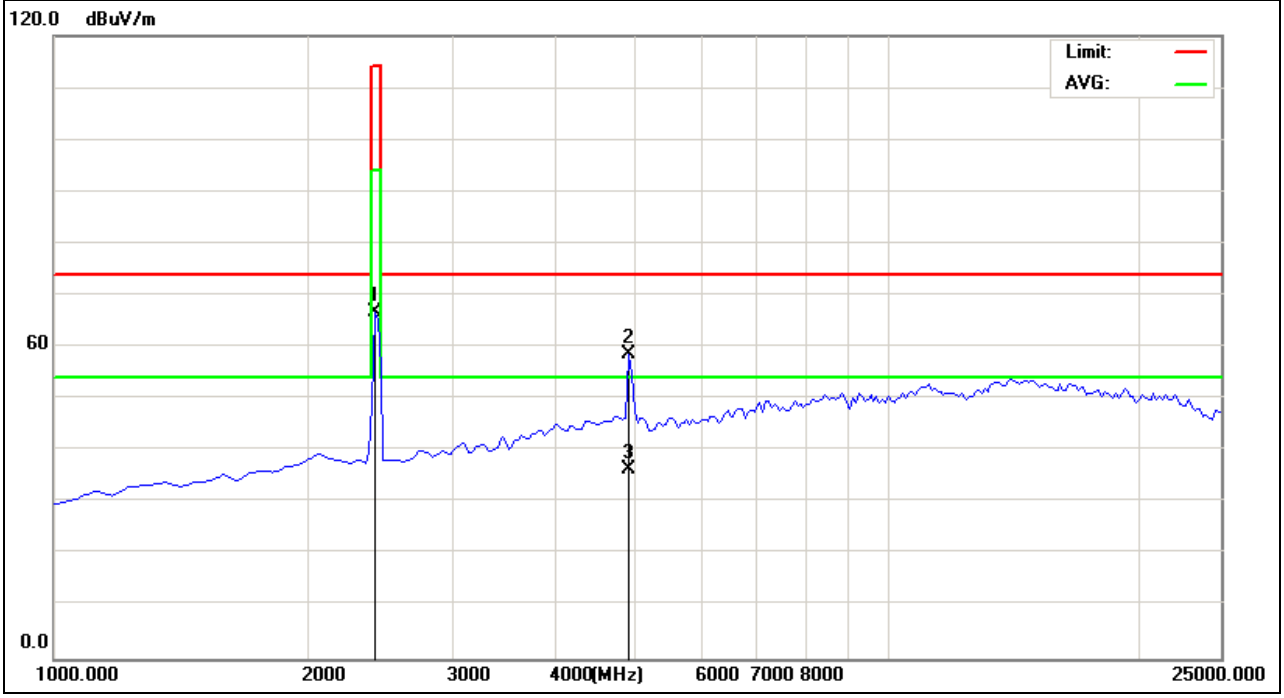
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected above 18GHz.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2440MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2440.0000	86.83	-12.94	73.89	114	-40.11	peak
4881.000	62.19	-3.67	58.52	74.00	-15.48	peak
4881.000	40.06	-3.67	36.39	54.00	-17.61	AVG

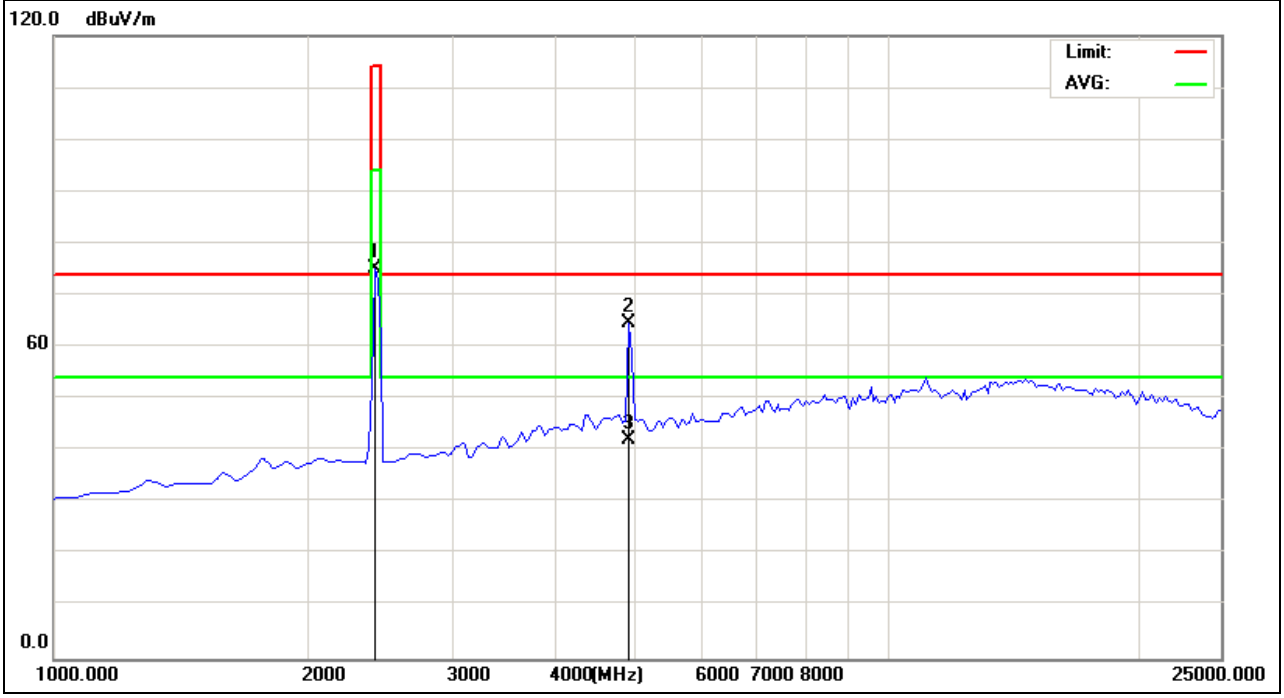
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected above 18GHz.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2440MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2440.0000	84.26	-12.94	71.32	114	-42.68	peak
4881.000	68.19	-3.67	64.52	74.00	-9.48	peak
4881.000	45.81	-3.67	42.14	54.00	-11.86	AVG

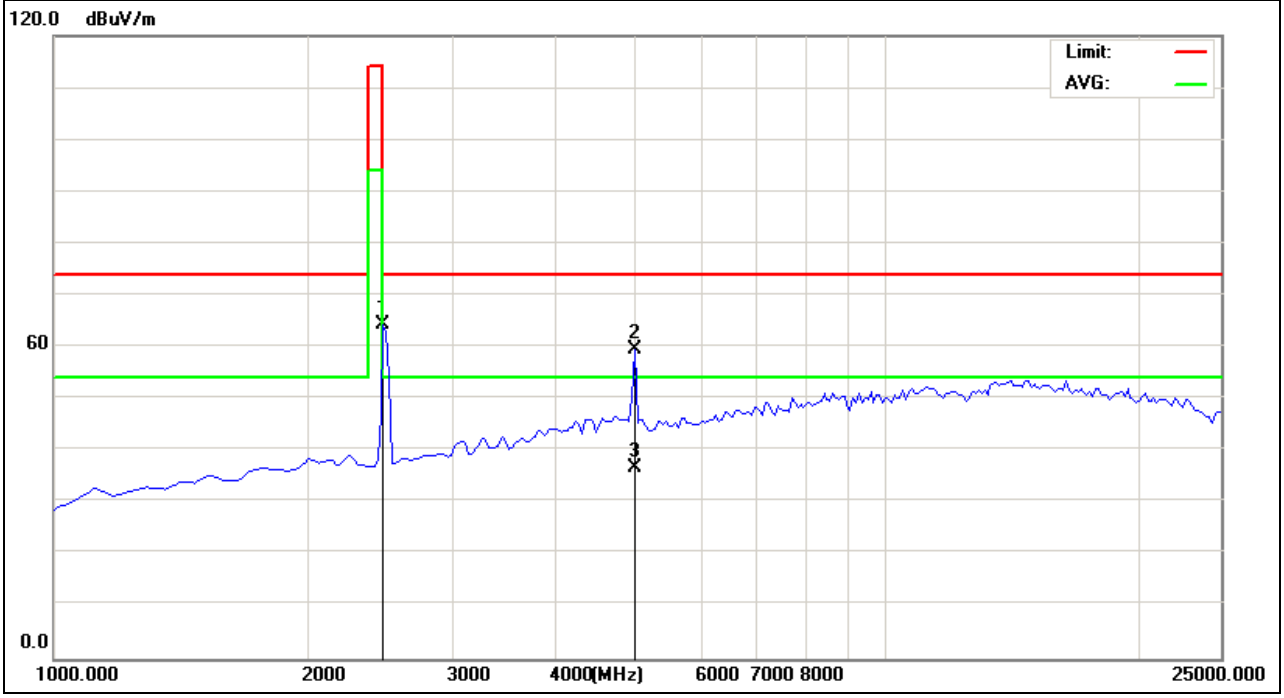
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected above 18GHz.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2480MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2480.0000	91.67	-12.79	78.88	114	-35.12	peak
4960.000	63.19	-3.59	59.60	74.00	-14.40	peak
4960.000	40.36	-3.59	36.77	54.00	-17.23	AVG

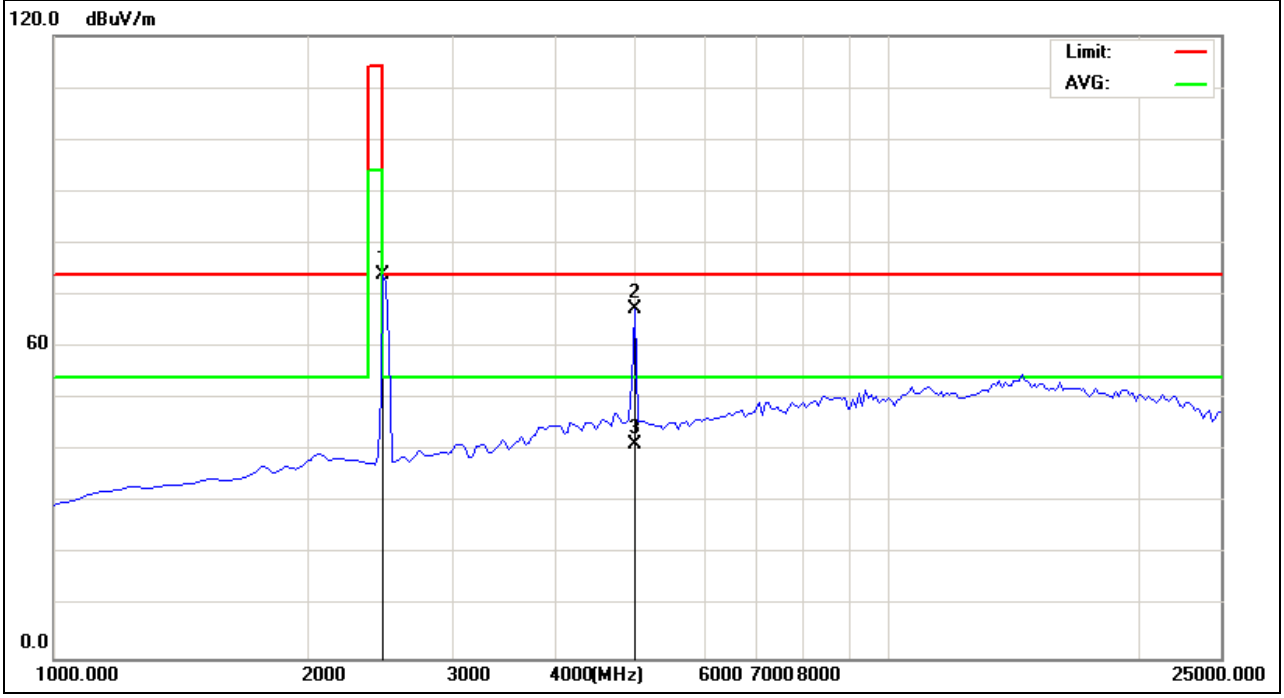
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected above 18GHz.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2480MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2480.0000	85.73	-12.79	72.94	114	-41.06	peak
4960.000	70.85	-3.59	67.26	74.00	-6.74	peak
4960.000	44.72	-3.59	41.13	54.00	-12.87	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected above 18GHz.

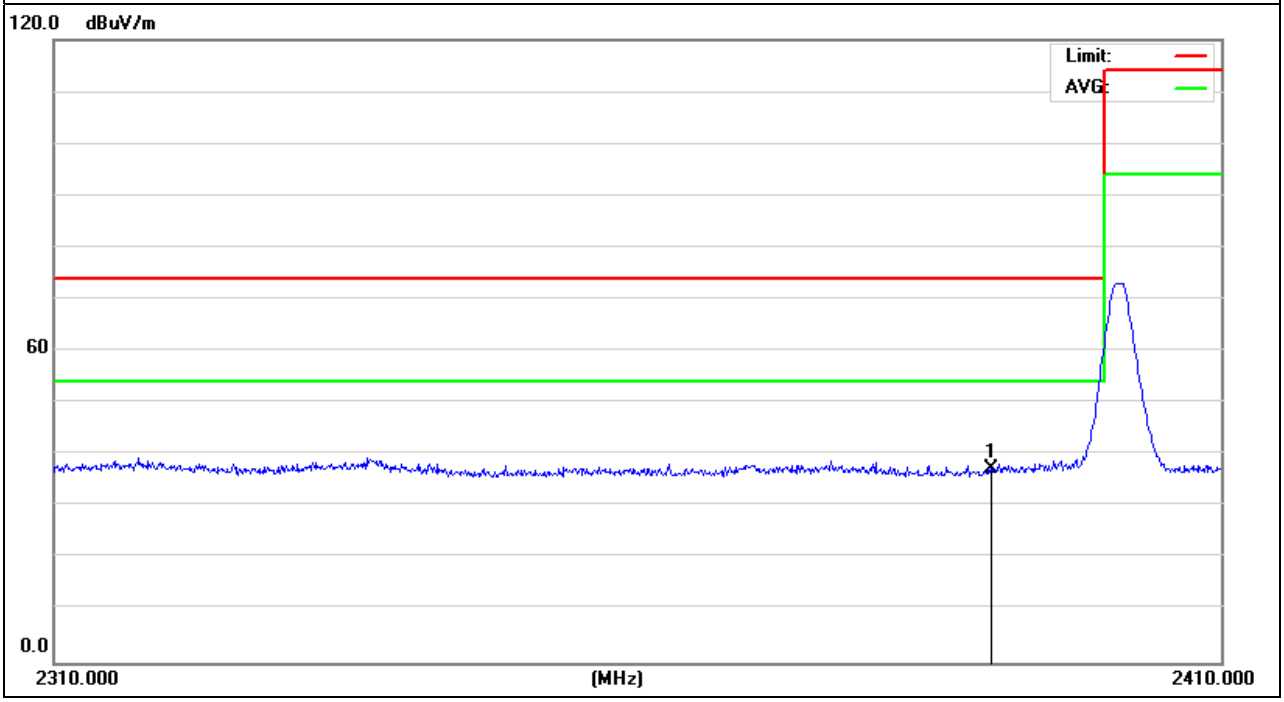


3.4.8 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2401MHz	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390.000	50.36	-13.06	37.30	74.00	-36.70	peak

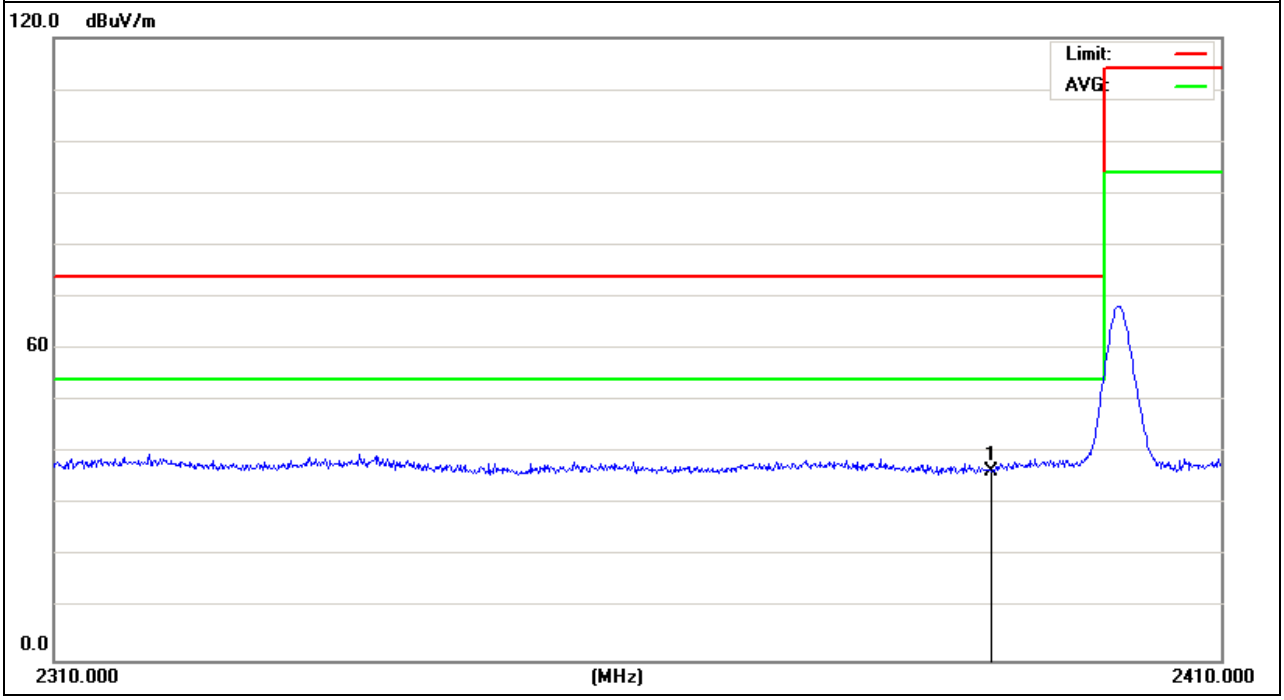
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2401MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390.000	49.62	-13.06	36.56	74.00	-37.44	peak

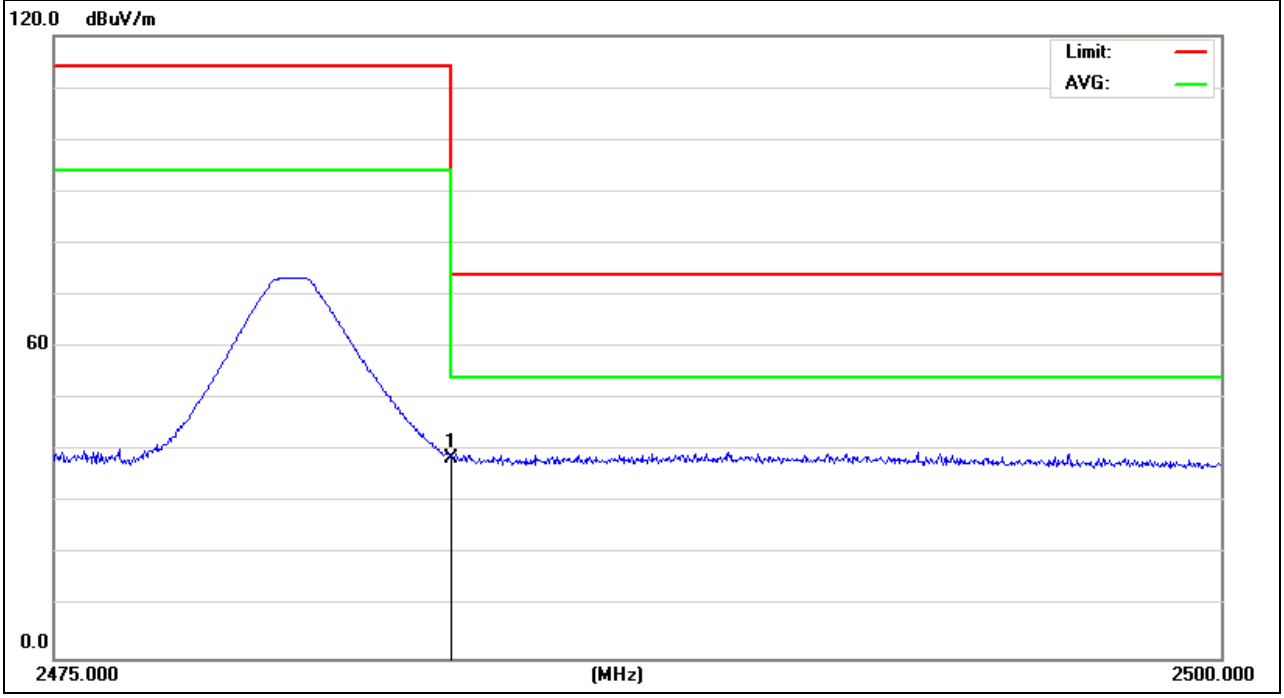
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2480MHz	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.500	51.32	-12.78	38.54	74.00	-35.46	peak

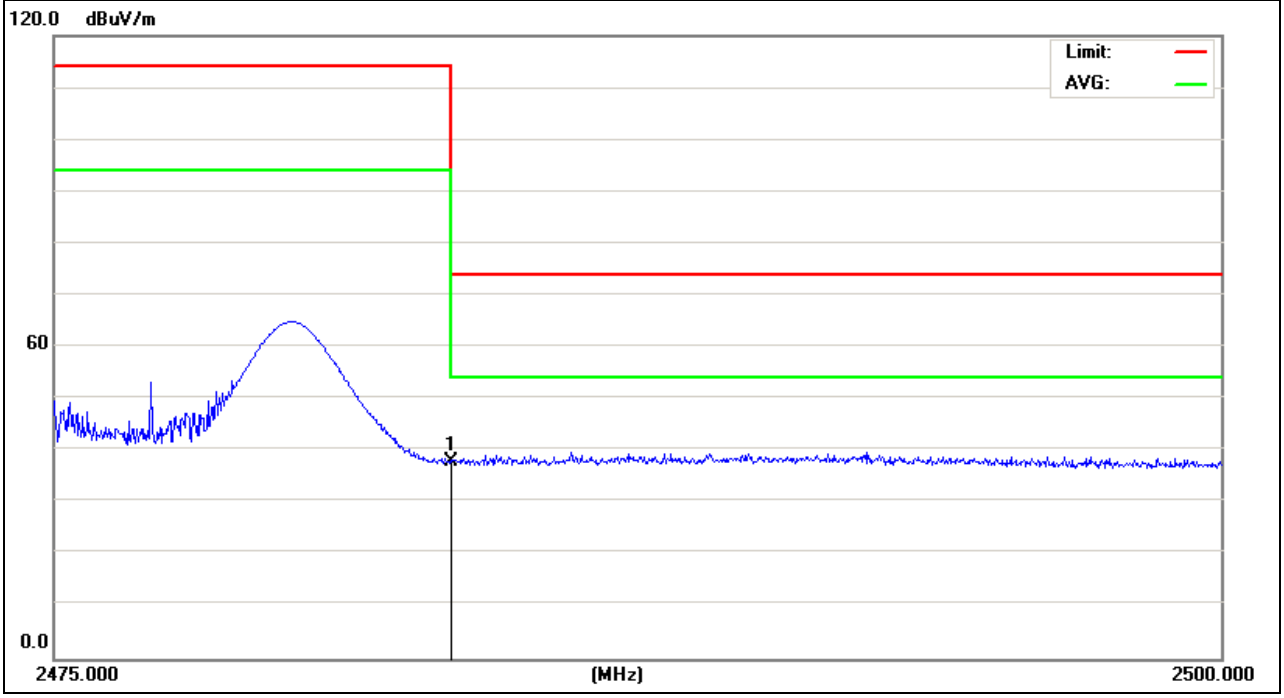
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX /2480MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.500	50.85	-12.78	38.07	74.00	-35.93	peak

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



4. BANDWIDTH TEST

4.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 100KHz, VBW≧RBW, Sweep time = Auto.

4.2 DEVIATION FROM STANDARD

No deviation.

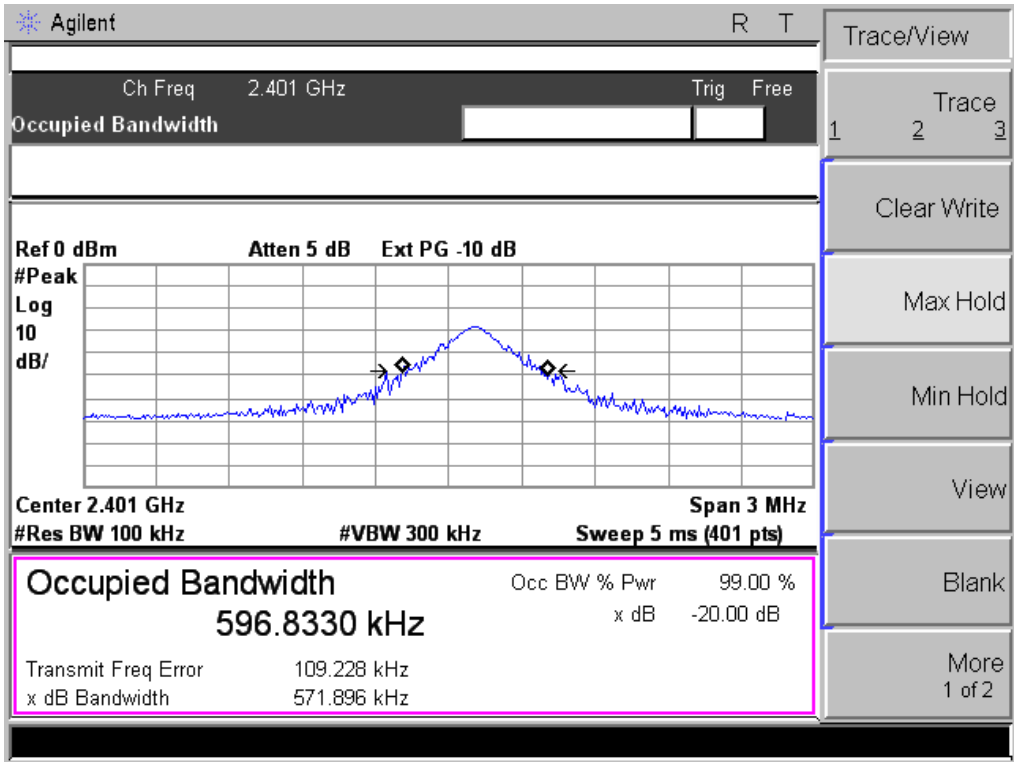
4.3 TEST SETUP

4.4 TEST RESULTS

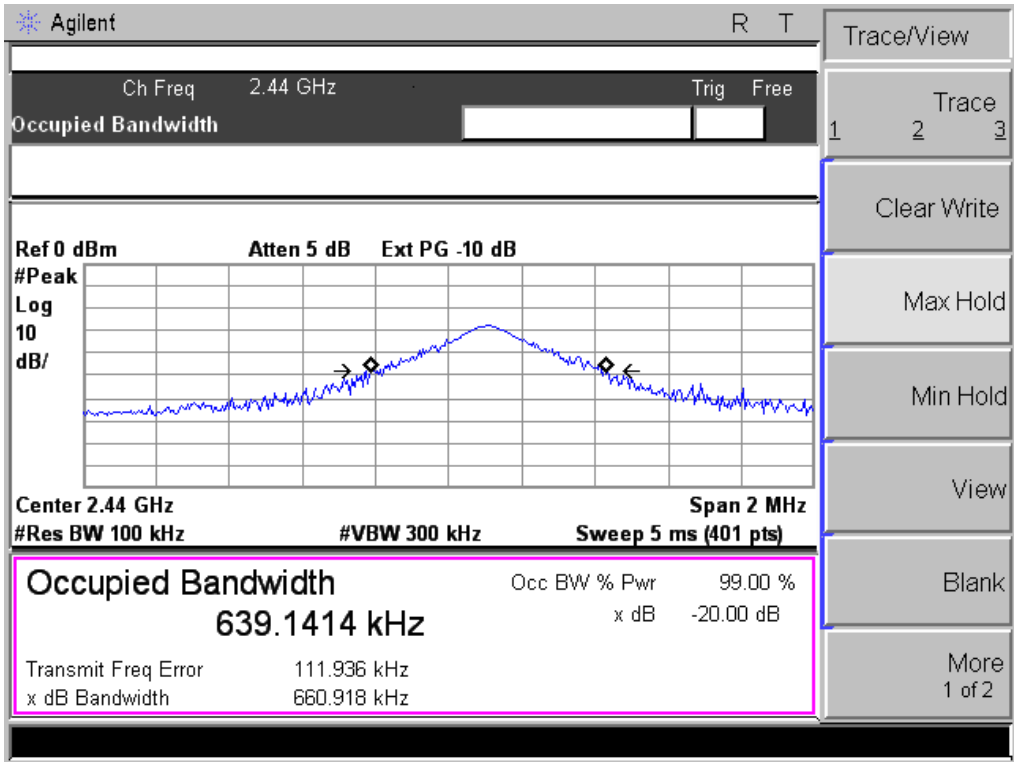
EUT：	Keyboard+Touchpad	Model Name ：	RT-MWK12
Temperature：	26 ℃	Relative Humidity：	53%
Pressure：	1020 hPa	Test Power ：	DC 3.7V
Test Mode ：	TX CH 01/10/18		

Test Channel	Frequency (MHz)	20 dBc Bandwidth (MHz)	99% Bandwidth (MHz)
CH01	2401	0.572	0.597
CH10	2440	0.661	0.639
CH18	2480	0.722	0.725

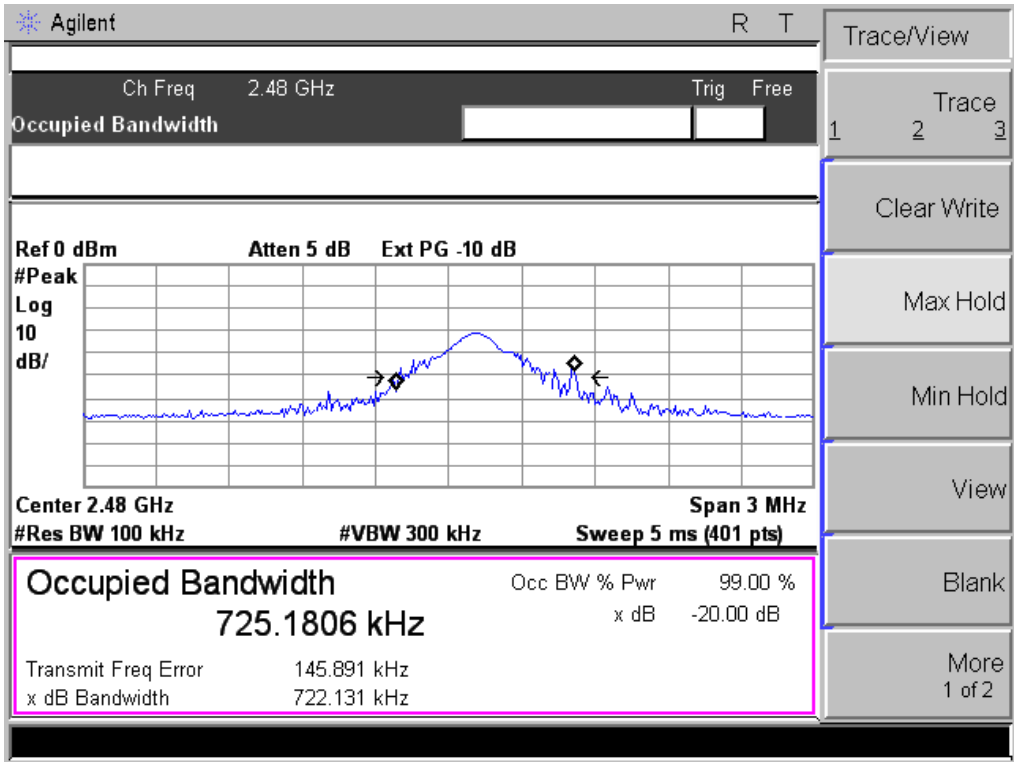
The Lowest Channel:2401MHz



The Middle Channel: 2440MHz

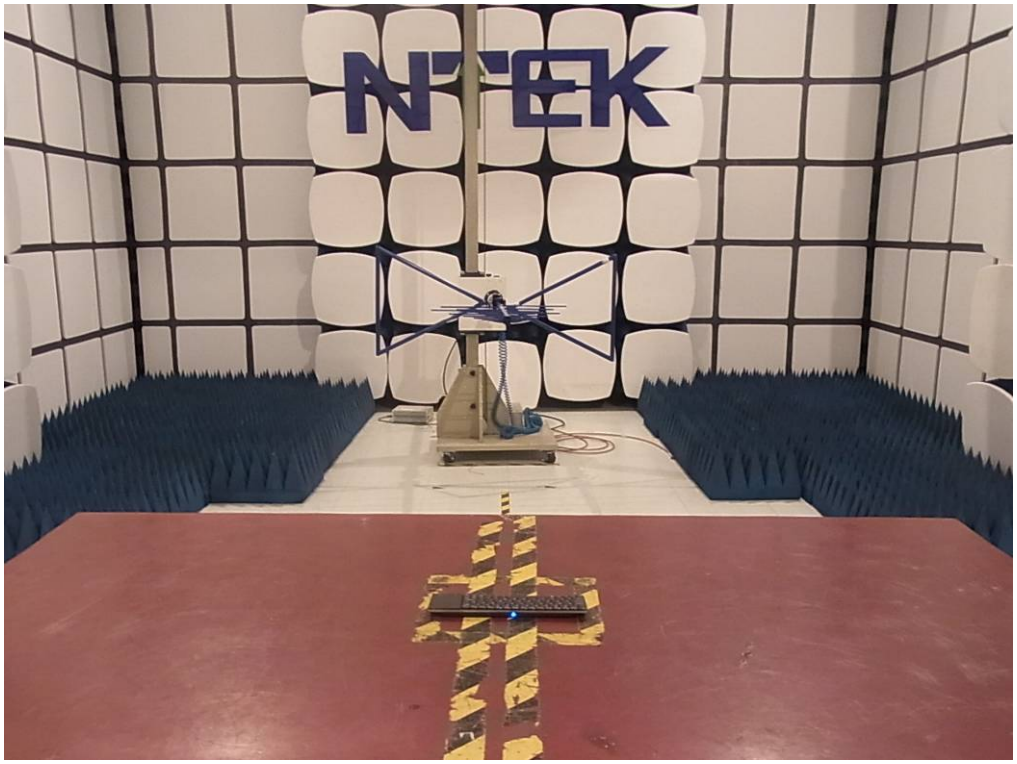


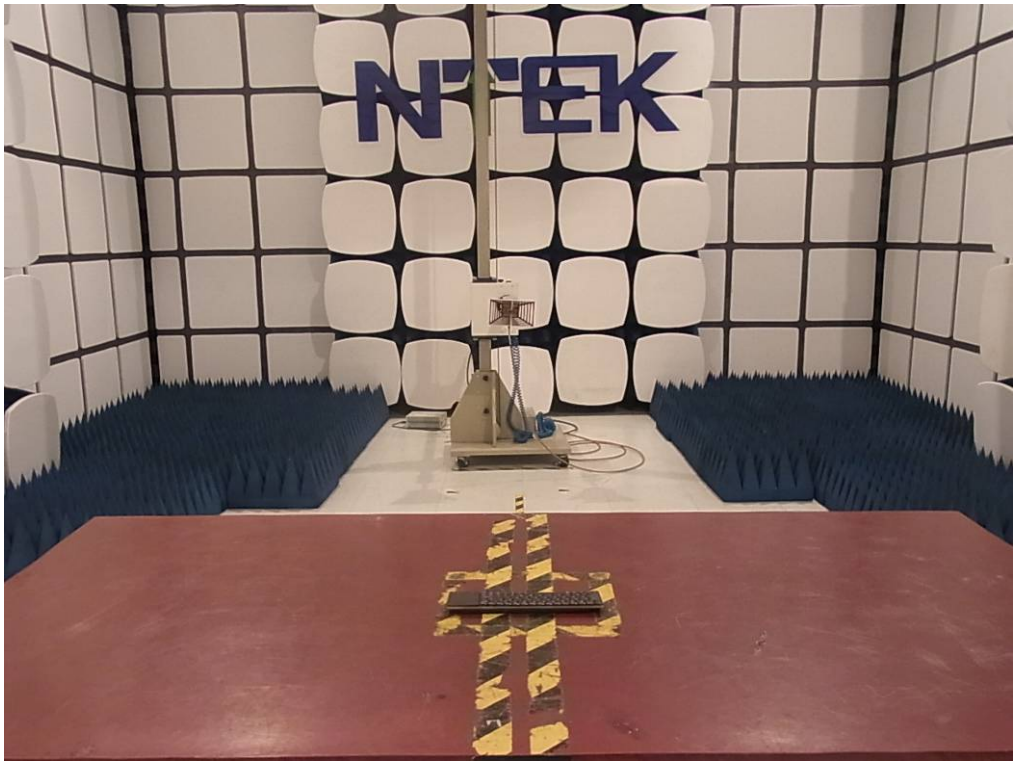
The High Channel:2480MHz



5. EUT TEST PHOTO

Radiated Measurement Photos





Conducted Measurement Photos