FCC RADIO TEST REPORT
FCC ID:2AGLG-M003

Product：	M003 WIRELESS MOUSE
Trade Name：	TECKNET
Model Name：	M003
Serial Model：	N/A
Report No.：	NTEK-2015NT1022965F

Prepared for

DONGGUAN TOGRAN ELECTRONICS TECHNOLOGY CO.,LTD.

262 shidan Rd.,3rd industrial Area,Juzhou,Shijie Town,Dongguan city,China

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community,Xixiang Street
Bao'an District, Shenzhen P.R. China
Tel.: +86-0755-61156588 Fax.: +86-0755-61156599
Website:www.ntek.org.cn

TEST RESULT CERTIFICATION

Applicant's name	:	DONGGUAN TOGRAN ELECTRONICS TECHNOLOGY CO.,LTD
Address	:	262 shidan Rd.,3rd industrial Area,Juzhou,Shijie Town,Dongguan city,China
Manufacture's Name	:	DONGGUAN TOGRAN ELECTRONICS TECHNOLOGY CO.,LTD
Address	:	262 shidan Rd.,3rd industrial Area,Juzhou,Shijie Town,Dongguan city,China

Product description

Product name	:	M003 WIRELESS MOUSE
Model and/or type reference	:	M003
Serial Model：		N/A
Rating(s)	:	DC 3.0V
Standards	:	FCC Part15.249 01 Oct. 2015
Test procedure		ANSI C63.10-2013

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.

This report shall not be reproduced except in full, without the written approval of NTEK, this document may be altered or revised by NTEK, personnel only, and shall be noted in the revision of the document.

Date of Test	:	
Date (s) of performance of tests	:	22 Oct. 2015 ~04 Nov. 2015
Date of Issue	:	04 Nov. 2015
Test Result	:	**Pass**

Testing Engineer : Susan

(Susan Su)

Technical Manager : Brown Lu

(Brown Lu)

Authorized Signatory : Sam . Chen

(Sam Chen)

Table of Contents Page

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	N/A	
15.203	Antenna Requirement	Pass	
15.249	Radiated Spurious Emission	Pass	
15.205	Band Edge Emission	Pass	
15.249	Occupied Bandwidth	Pass	

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 FRN 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	M003 WIRELESS MOUSE
Trade Name	TECKNET
Model Name	M003
Serial Model	N/A
Model Difference	N/A
Product Description	The EUT is a M003 WIRELESS MOUSE Operation Frequency: 2408-2474MHz Modulation Type: FSK Antenna Designation: PCB Antenna Antenna Gain(Peak) -1.56 dBi 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 3.0V*2 cell ”AA” alkaline battery

Note:

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

`

2.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2408	23	2431	45	2454
02	2410	24	2432	46	2455
03	2411	25	2433	47	2456
04	2412	26	2434	48	2457
05	2413	27	2435	49	2458
06	2414	28	2436	50	2459
07	2415	29	2437	51	2460
08	2416	30	2438	52	2461
09	2417	31	2440	53	2462
10	2418	32	2441	54	2463
11	2419	33	2442	55	2464
12	2420	34	2443	56	2465
13	2421	35	2444	57	2466
14	2422	36	2445	58	2467
15	2423	37	2446	59	2468
16	2424	38	2447	60	2469
17	2425	39	2448	61	2470
18	2426	40	2449	62	2471
19	2427	41	2450	63	2472
20	2428	42	2451	64	2474
21	2429	43	2452		
22	2430	44	2453		

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	PCB Antenna	N/A	-1.56	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	CH 01
Mode 2	CH 31
Mode 3	CH 64
Mode 4	Link Mode

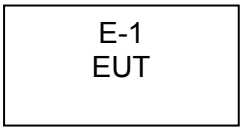
Note:

(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

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	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	M003 WIRELESS MOUSE	TECKNET	M003	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

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.	Calibrated until
1	Spectrum Analyzer	Agilent	E4407B	160400005	Jul. 06. 2016
2	Test Receiver	R&S	ESPI	101318	Jul. 06. 2016
3	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06. 2016
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	Jul. 06. 2016
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	Jul. 06. 2016
6	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06. 2016
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	Jul. 06. 2016
8	Amplifier	EM	EM-30180	060538	Jul. 06. 2016
9	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06. 2016
10	Power Meter	R&S	NRVS	100696	Jul. 06. 2016

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Test Receiver	R&S	ESCI	101160	Jul. 06. 2016
2	LISN	R&S	ENV216	101313	Jul. 06. 2016
3	LISN	EMCO	3816/2	00042990	Jul. 06. 2016
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	Jul. 06. 2016
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	Jul. 06. 2016
6	Absorbing clamp	R&S	MOS-21	100423	Jul. 06. 2016

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 permanent attached 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

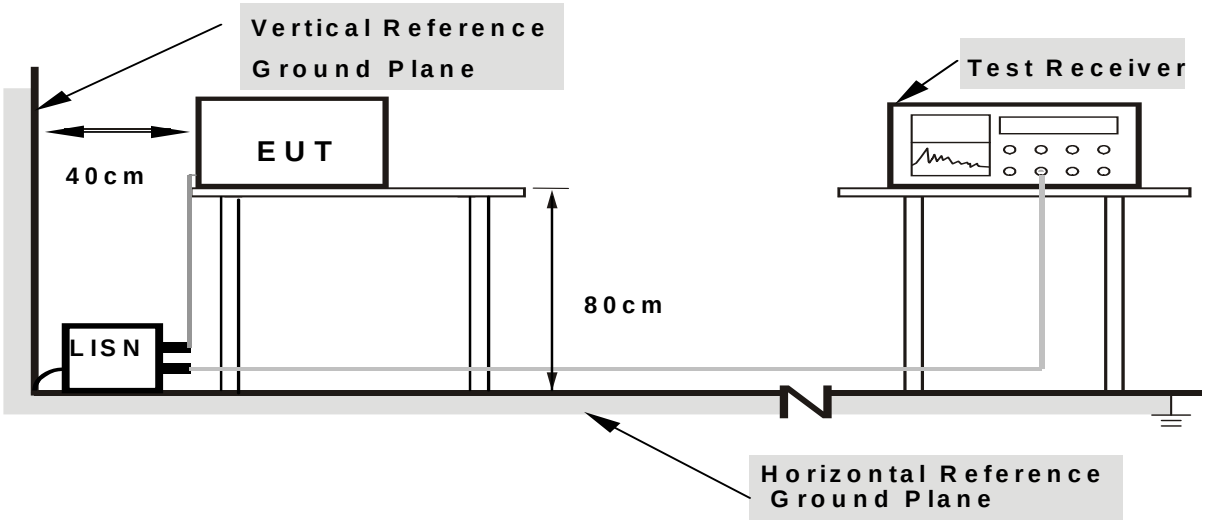
3.3.2 TEST PROCEDURE

a. The EUT was placed 0.4 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：	M003 WIRELESS MOUSE	Model Name. ：	M003
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N/A
Test Voltage ：	N/A	Test Mode：	N/A

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
Frequency (MHz)	Limit (dBuV)	
30~88	40	3
88~216	43.5	3
216~960	46	3
960 -10000	54.00	3
*902 - 928	94.00	3

Note:

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

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

(3) *Note: This is the limit for the fundamental frequency.

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.249)

Frequency of Emission (MHz)	Field Strength of fundamental ((millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
902-928	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 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 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 for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
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:

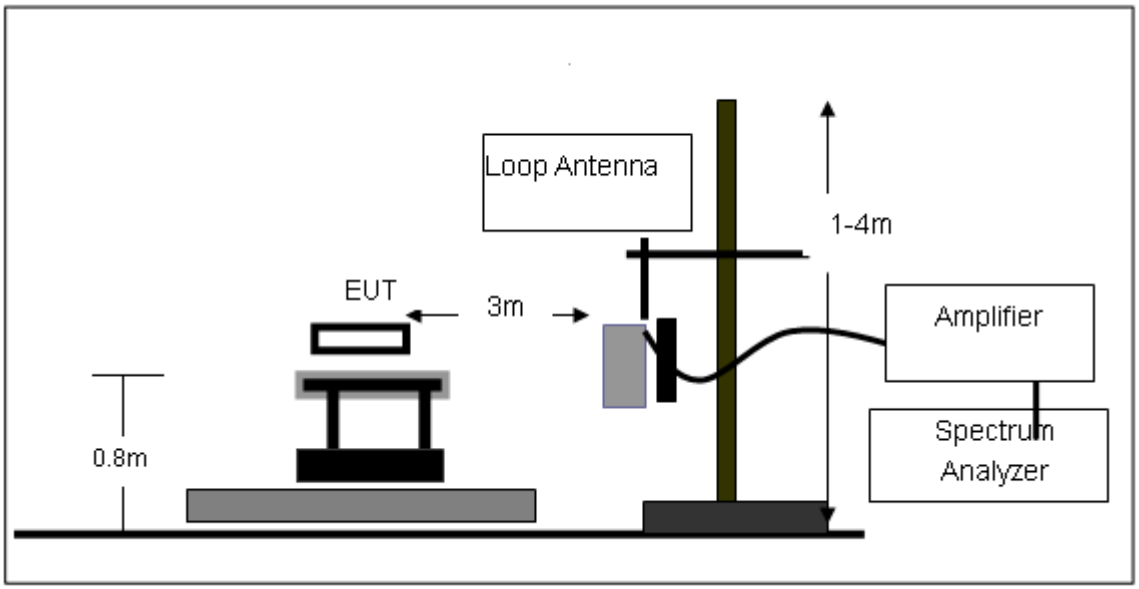
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.4.3 DEVIATION FROM TEST STANDARD

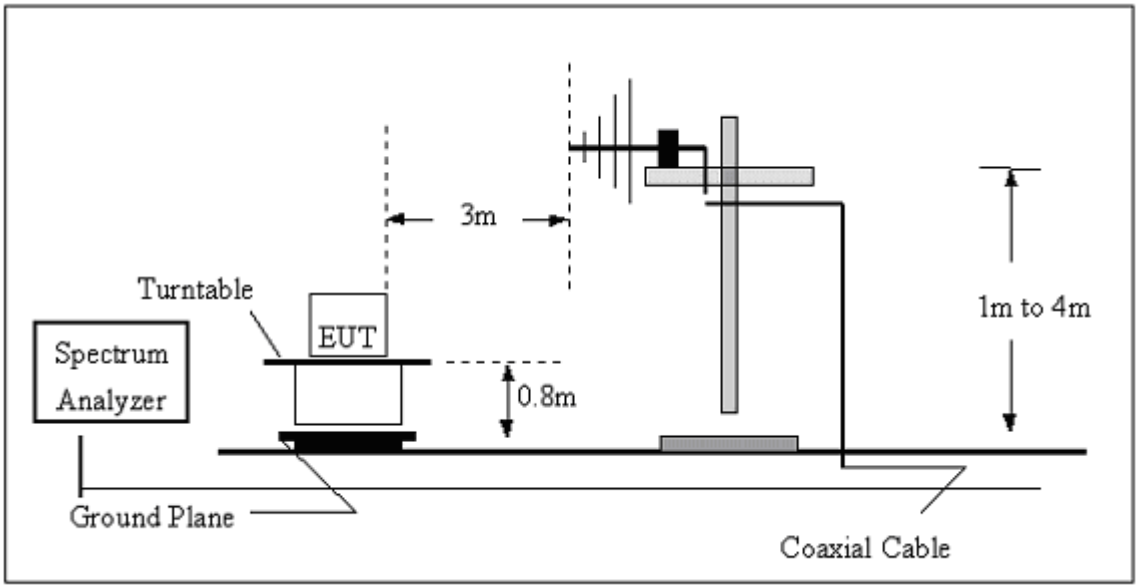
No deviation

3.4.4 TEST SETUP

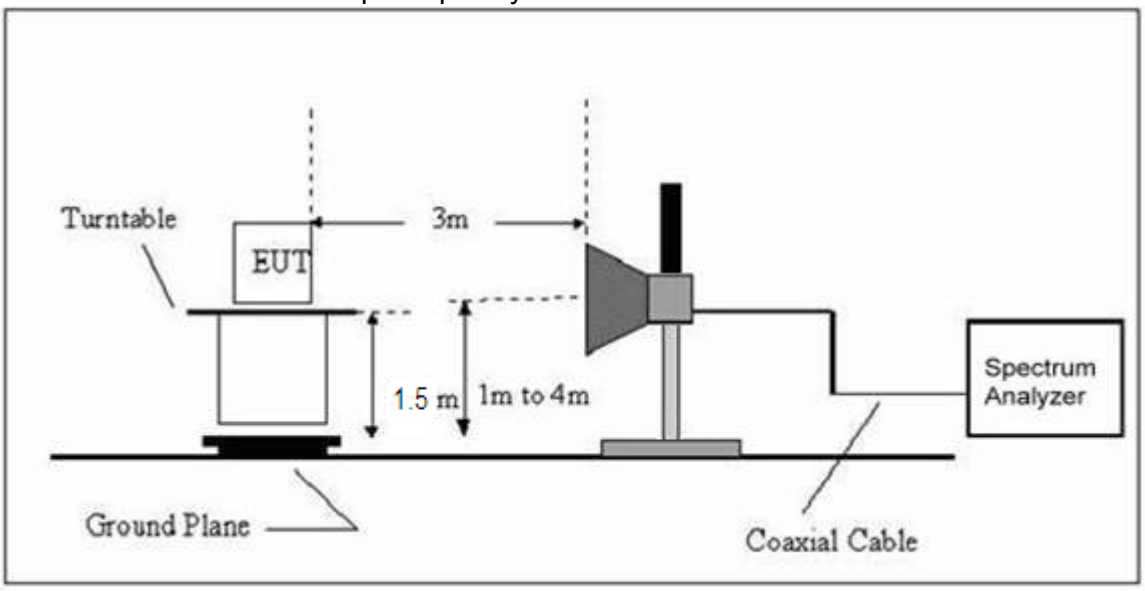
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.4.5 TEST RESULTS (BLOW 30MHz)

EUT：	M003 WIRELESS MOUSE	Model Name. ：	M003
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX	Polarization :	--

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

NOTE:

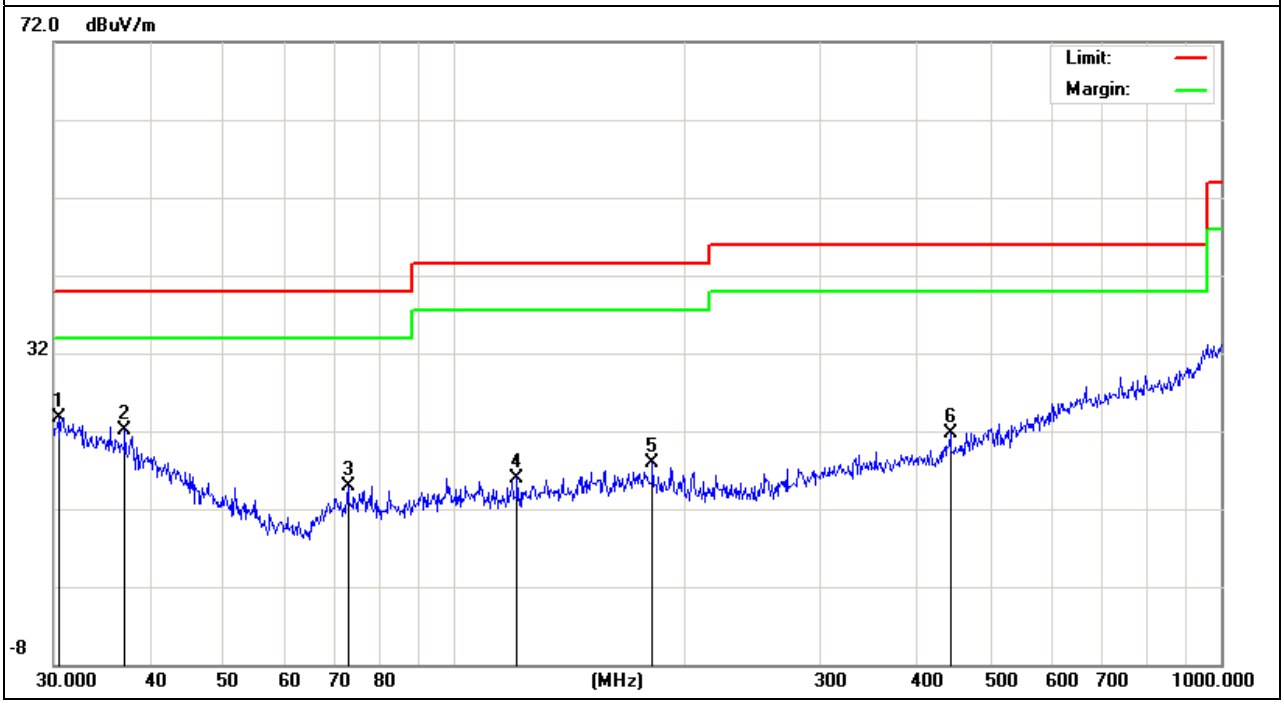
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =20 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.4.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
30.4238	4.34	19.42	23.76	40.00	-16.24	QP
37.1550	5.87	16.25	22.12	40.00	-17.88	QP
72.5916	5.15	9.70	14.85	40.00	-25.15	QP
120.6991	5.46	10.54	16.00	43.50	-27.50	QP
181.2834	6.07	11.89	17.96	43.50	-25.54	QP
443.2943	5.84	15.82	21.66	46.00	-24.34	QP

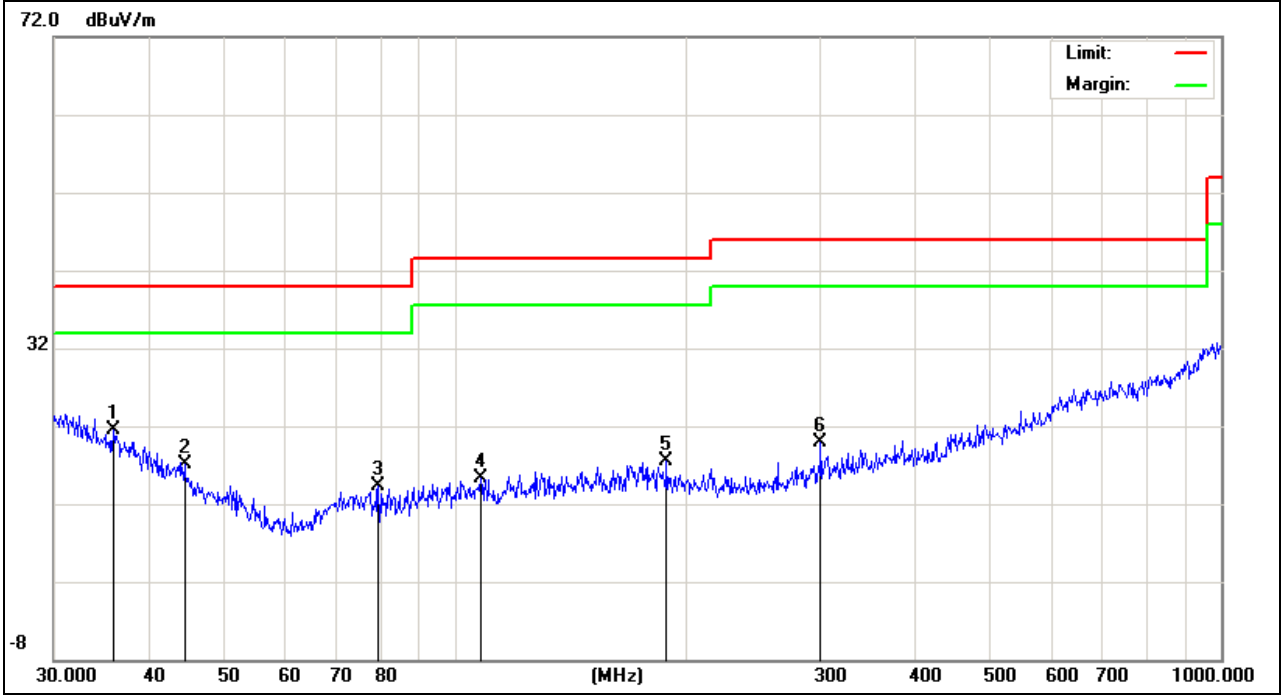
Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
35.8746	4.43	17.00	21.43	40.00	-18.57	QP
44.4308	4.97	12.22	17.19	40.00	-22.81	QP
79.5209	5.18	9.06	14.24	40.00	-25.76	QP
108.2667	4.98	10.24	15.22	43.50	-28.28	QP
189.0743	6.16	11.38	17.54	43.50	-25.96	QP
300.3672	7.35	12.60	19.95	46.00	-26.05	QP

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

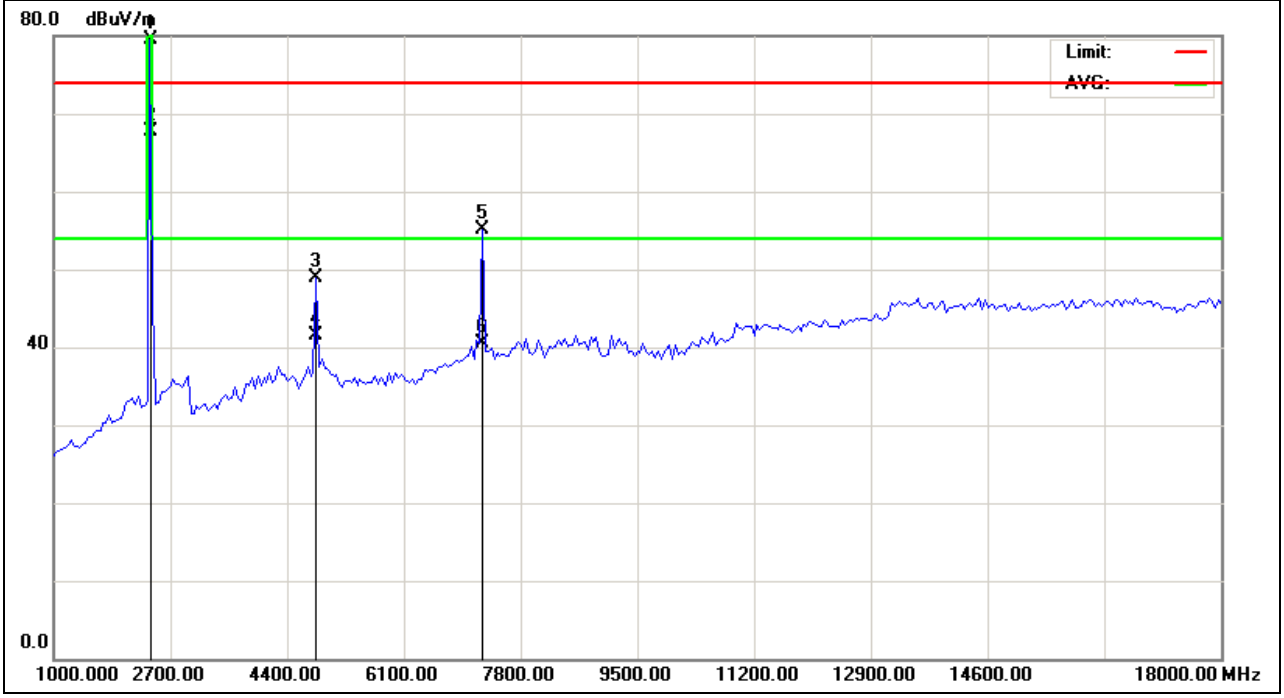


3.4.7 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2408MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2408.00	88.66	-9.21	79.45	114.00	-34.55	peak
2408.00	76.85	-9.21	67.64	94.00	-26.36	AVG
4825.00	48.64	0.18	48.82	74.00	-25.18	peak
4825.00	41.23	0.18	41.41	54.00	-12.59	AVG
7247.50	52.89	2.25	55.14	74.00	-18.86	peak
7247.50	38.24	2.25	40.49	54.00	-13.51	AVG

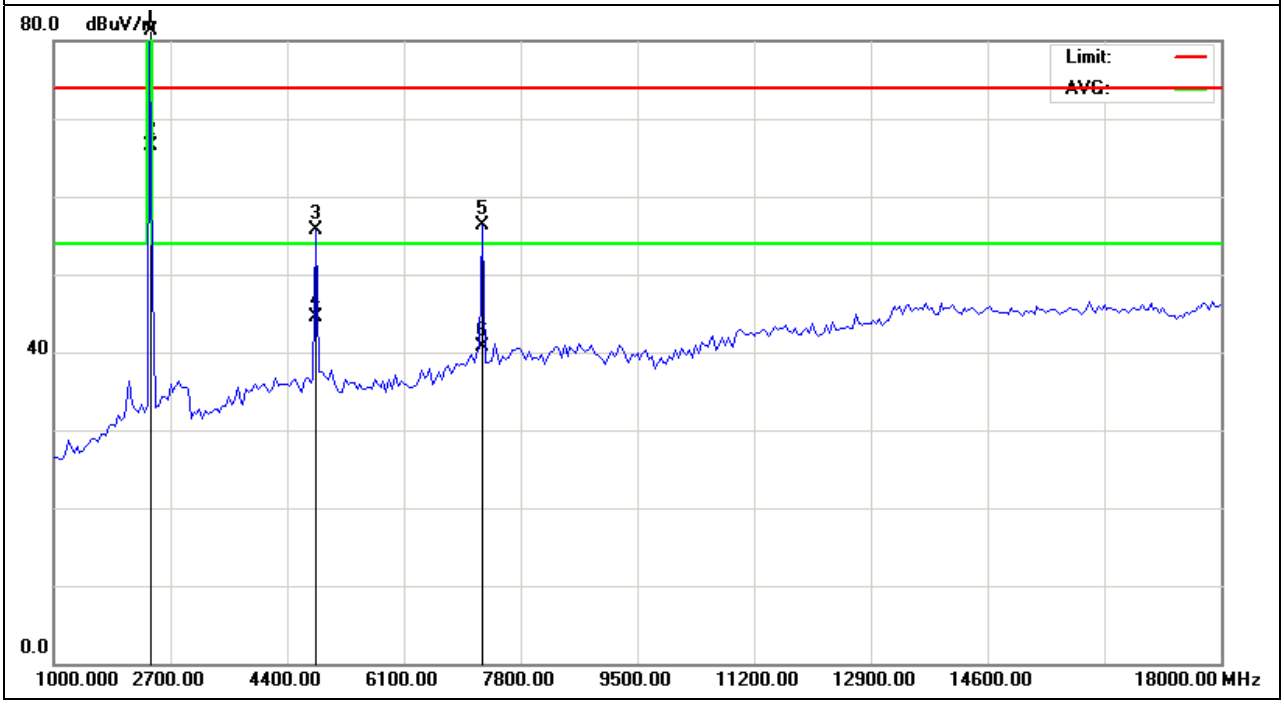
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2408MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2408.00	90.56	-9.21	81.35	114.00	-32.65	peak
2408.00	75.65	-9.21	66.44	94.00	-27.56	AVG
4825.00	55.47	0.18	55.65	74.00	-18.35	peak
4825.00	44.38	0.18	44.56	54.00	-9.44	AVG
7247.50	54.01	2.25	56.26	74.00	-17.74	peak
7247.50	38.49	2.25	40.74	54.00	-13.26	AVG

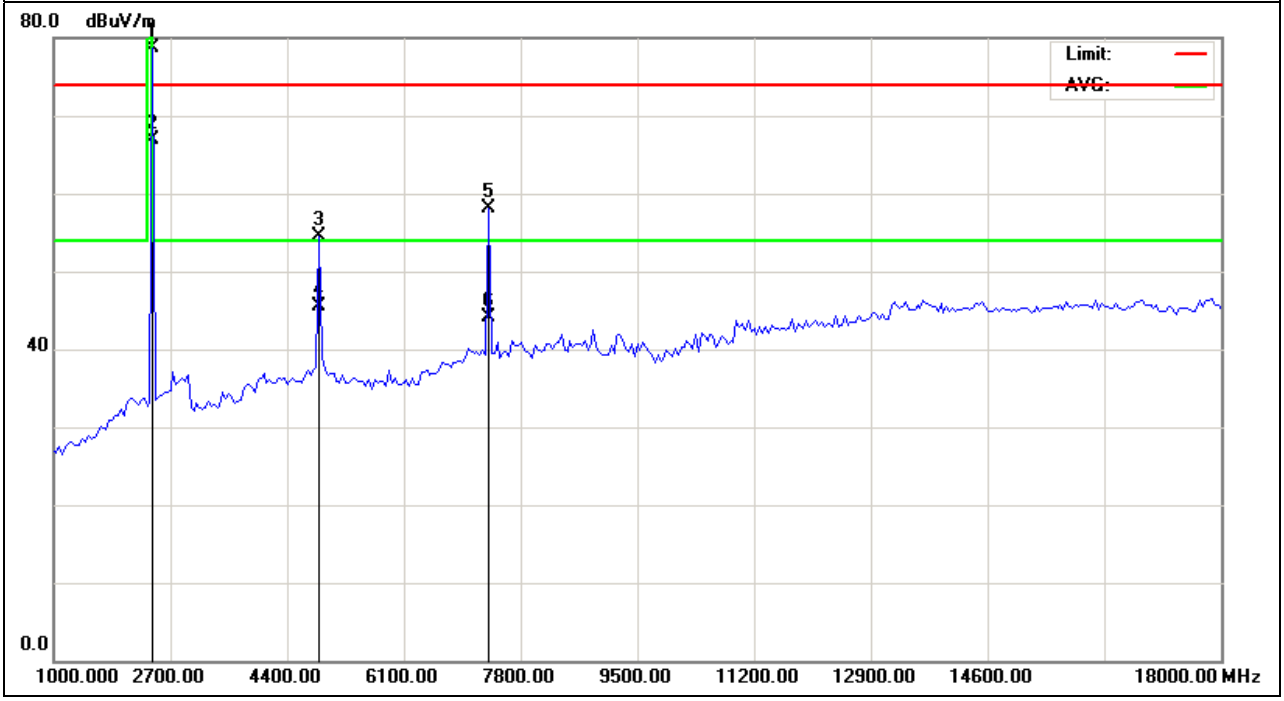
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2440MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2440.00	87.91	-9.15	78.76	114.00	-35.24	peak
2440.00	75.99	-9.15	66.84	94.00	-27.16	AVG
4867.50	54.43	0.15	54.58	74.00	-19.42	peak
4867.50	45.32	0.15	45.47	54.00	-8.53	AVG
7332.50	55.51	2.62	58.13	74.00	-15.87	peak
7332.50	41.58	2.62	44.20	54.00	-9.80	AVG

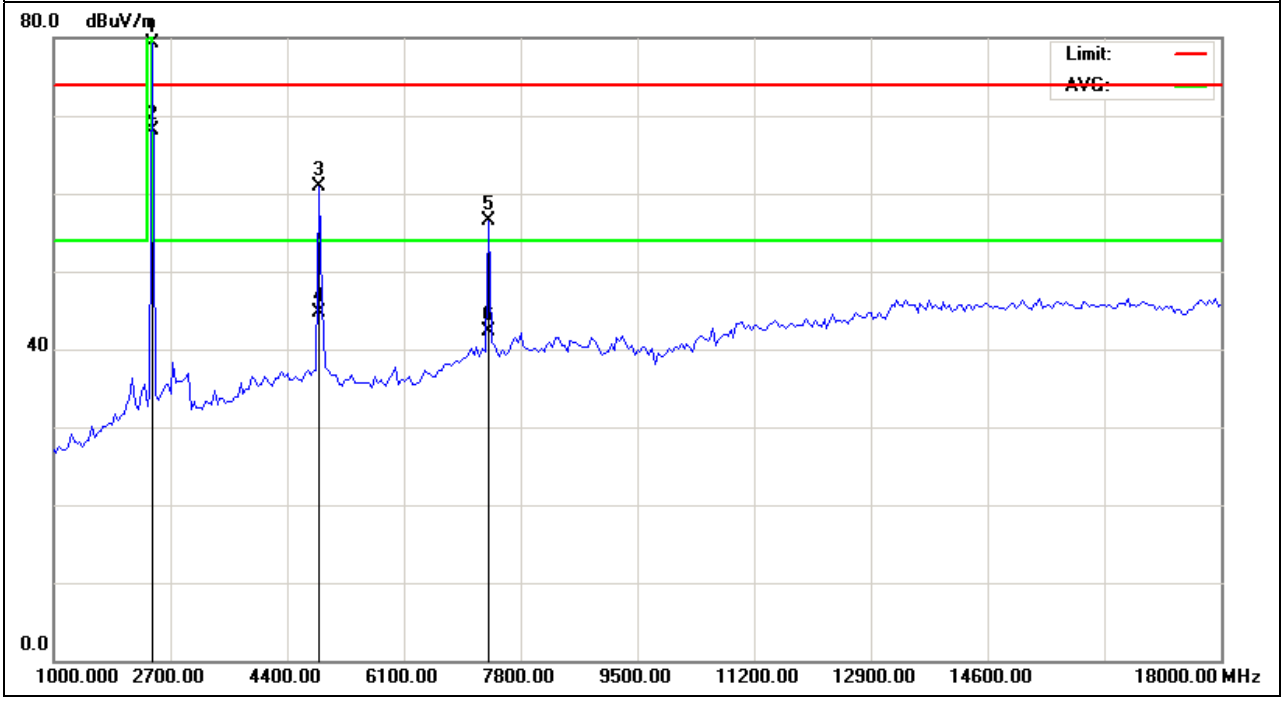
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2440MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2440.00	88.42	-9.15	79.27	114.00	-34.73	peak
2440.00	77.26	-9.15	68.11	94.00	-25.89	AVG
4867.50	60.74	0.15	60.89	74.00	-13.11	peak
4867.50	44.58	0.15	44.73	54.00	-9.27	AVG
7332.50	53.80	2.62	56.42	74.00	-17.58	peak
7332.50	39.69	2.62	42.31	54.00	-11.69	AVG

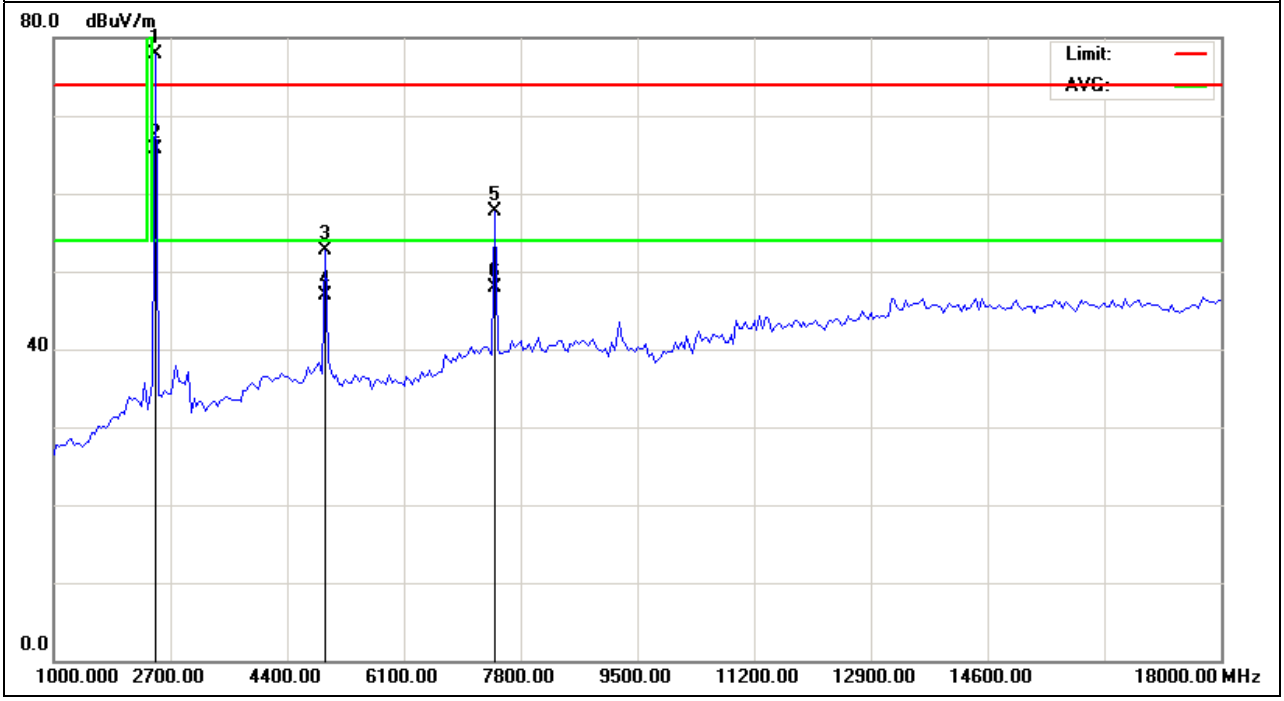
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2474MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2474.00	86.97	-9.03	77.94	114.00	-36.06	peak
2474.00	74.74	-9.03	65.71	94.00	-28.29	AVG
4952.50	52.61	0.16	52.77	74.00	-21.23	peak
4952.50	46.78	0.16	46.94	54.00	-7.06	AVG
7417.50	55.00	2.68	57.68	74.00	-16.32	peak
7417.50	45.23	2.68	47.91	54.00	-6.09	AVG

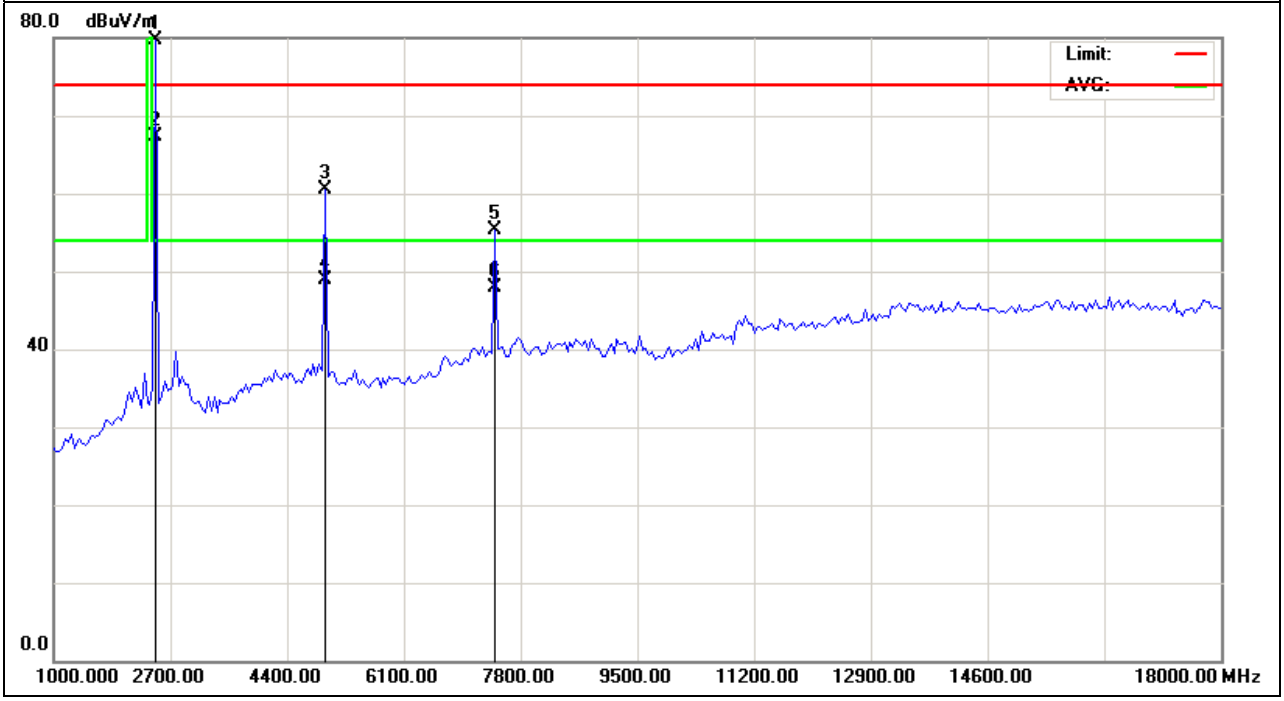
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2474MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2474.00	88.78	-9.03	79.75	114.00	-34.25	peak
2474.00	76.40	-9.03	67.37	94.00	-26.63	AVG
4952.50	60.36	0.16	60.52	74.00	-13.48	peak
4952.50	48.78	0.16	48.94	54.00	-5.06	AVG
7417.50	52.65	2.68	55.33	74.00	-18.67	peak
7417.50	45.28	2.68	47.96	54.00	-6.04	AVG

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



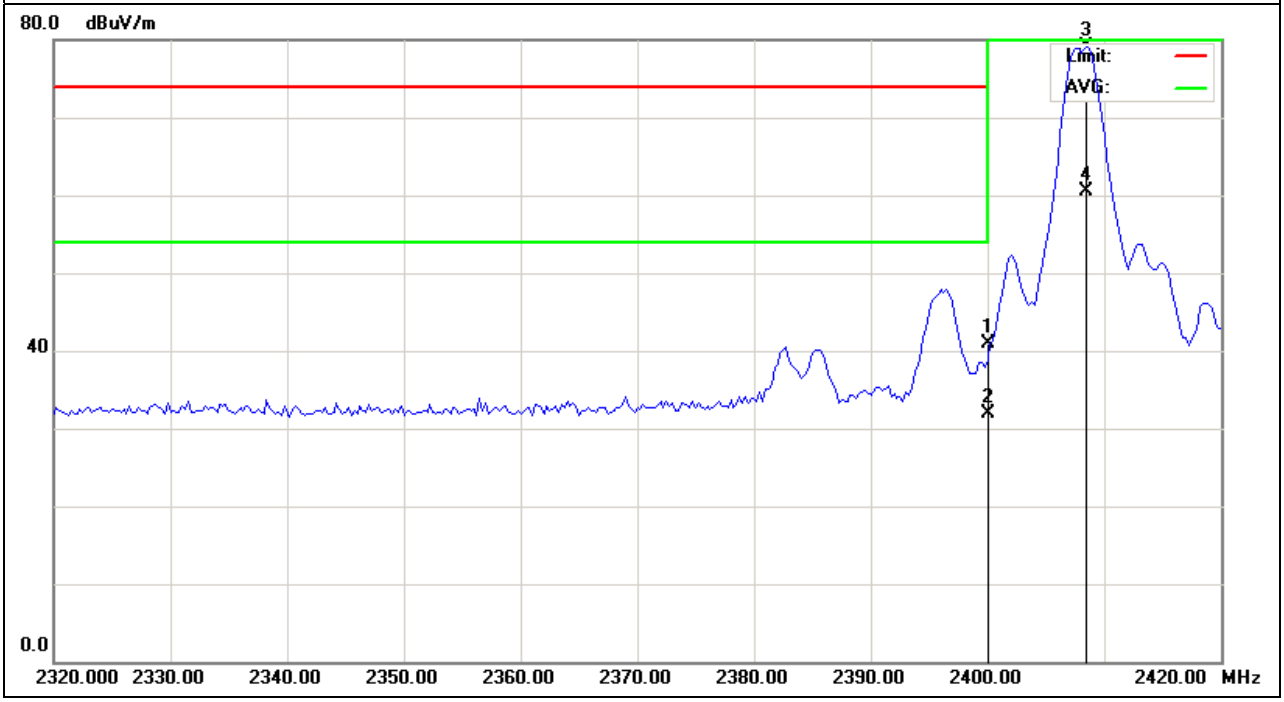
Note: EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report(X orientation).

3.4.8 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2408MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2400.00	50.04	-9.22	40.82	74.00	-33.18	peak
2400.00	41.09	-9.22	31.87	54.00	-22.13	AVG
2408.50	88.26	-9.20	79.06	114.00	-34.94	peak
2408.50	69.74	-9.20	60.54	94.00	-33.46	AVG

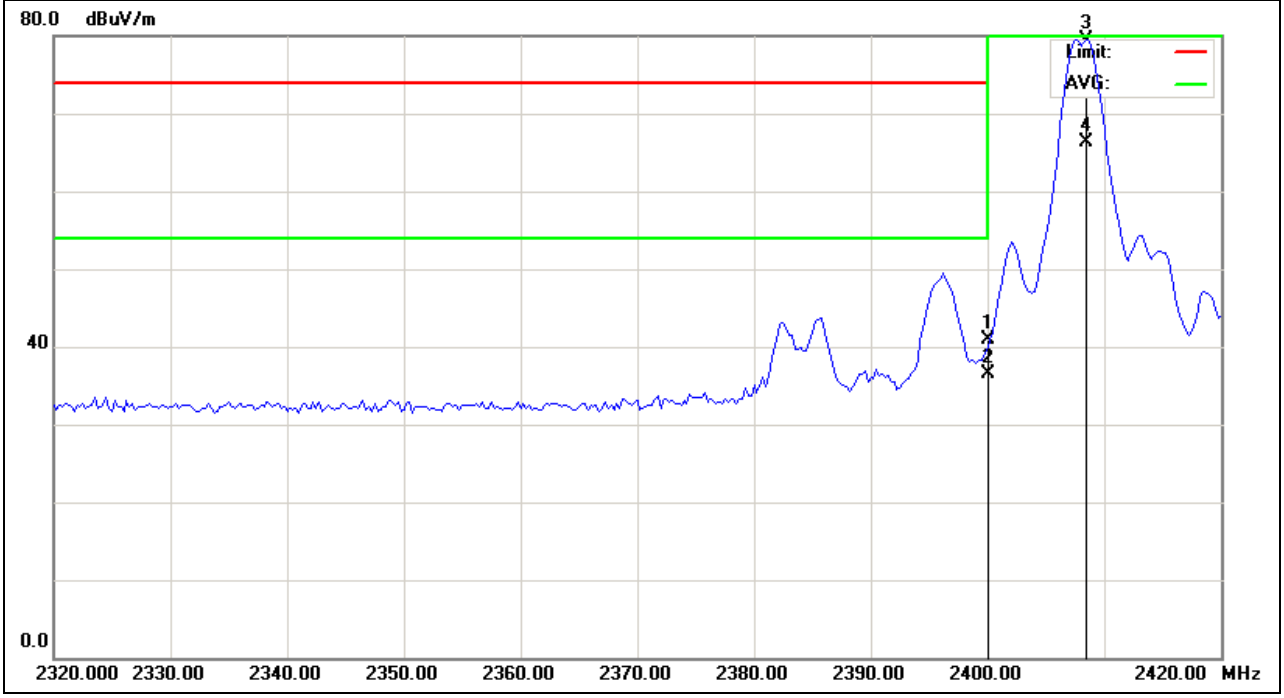
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2408MHz	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2400.00	50.16	-9.22	40.94	74.00	-33.06	peak
2400.00	45.75	-9.22	36.53	54.00	-17.47	AVG
2408.50	88.67	-9.20	79.47	114.00	-34.53	peak
2408.50	75.59	-9.20	66.39	94.00	-27.61	AVG

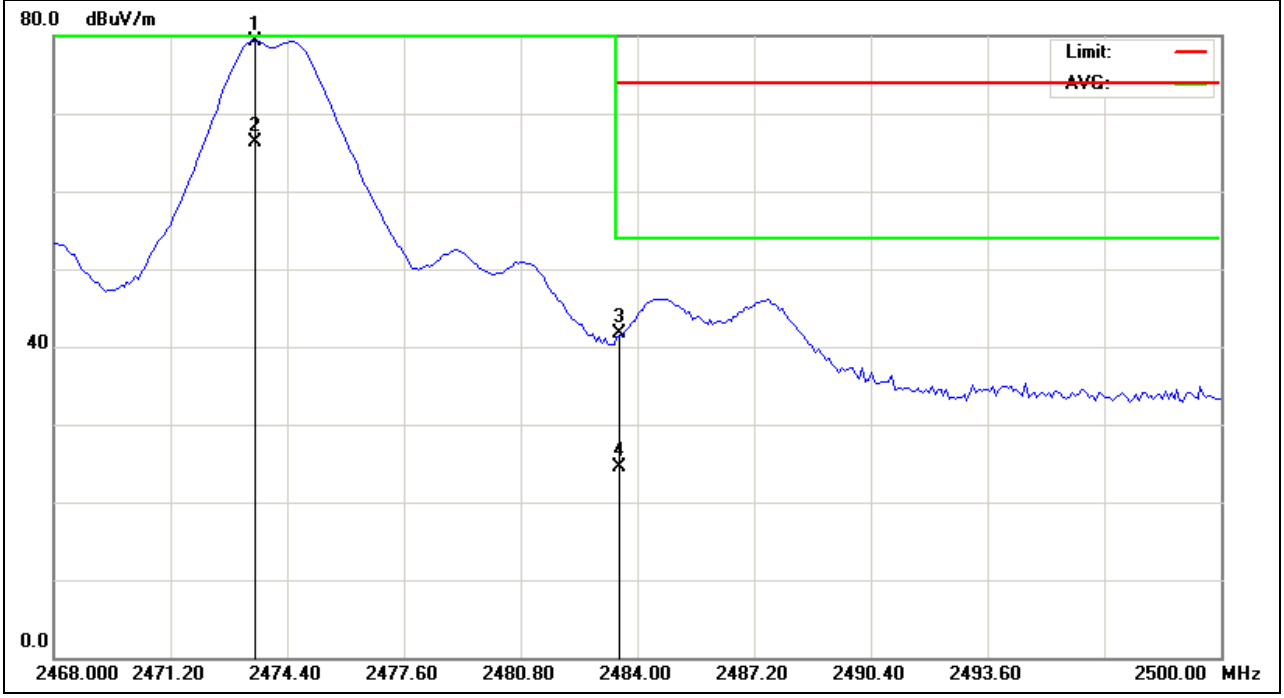
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2474MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2473.52	88.36	-9.03	79.33	114.00	-34.67	peak
2473.52	75.35	-9.03	66.32	94.00	-27.68	AVG
2483.50	50.61	-8.99	41.62	74.00	-32.38	peak
2483.50	33.45	-8.99	24.46	54.00	-29.54	AVG

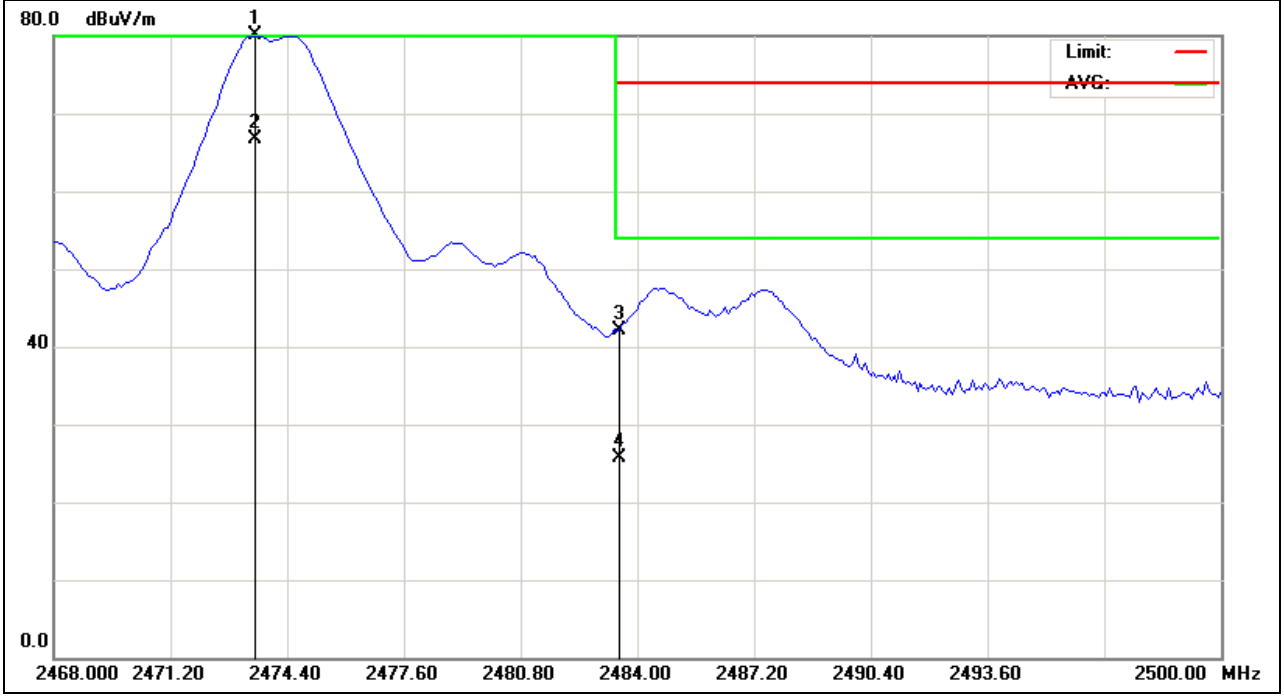
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.0V
Test Mode ：	TX-2474MHz	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2473.52	89.24	-9.04	80.20	114.00	-33.80	peak
2473.52	75.77	-9.04	66.73	94.00	-27.27	AVG
2483.50	51.16	-8.99	42.17	74.00	-31.83	peak
2483.50	34.79	-8.99	25.80	54.00	-28.20	AVG

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.

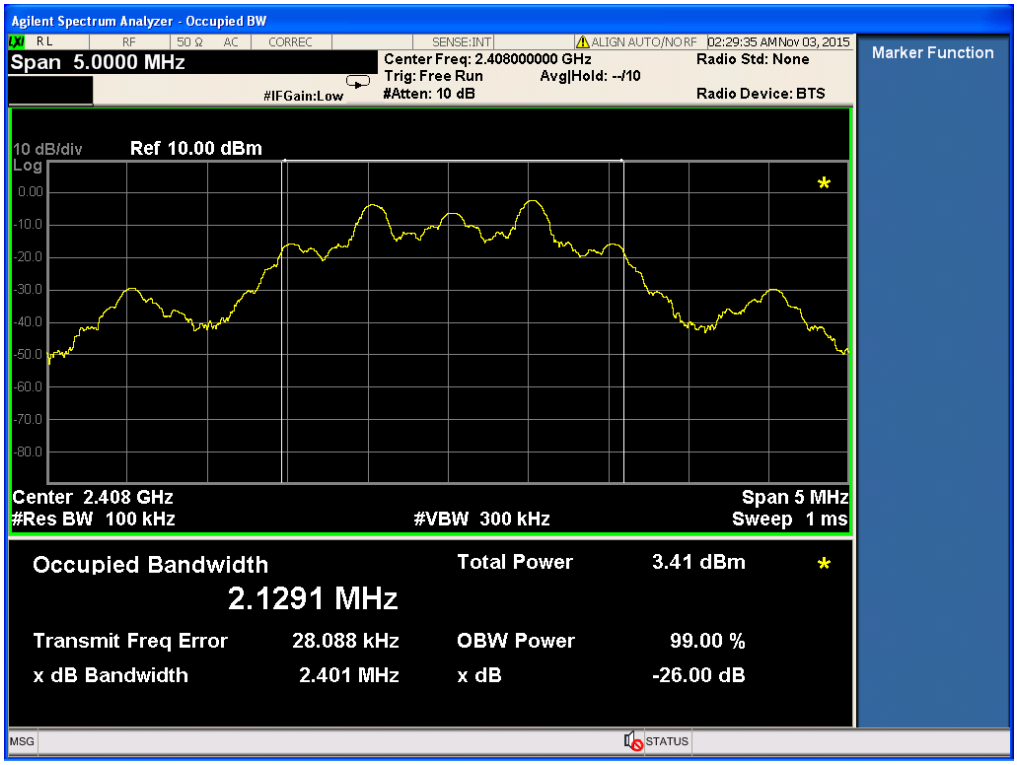
4.3 TEST SETUP

4.4 TEST RESULTS

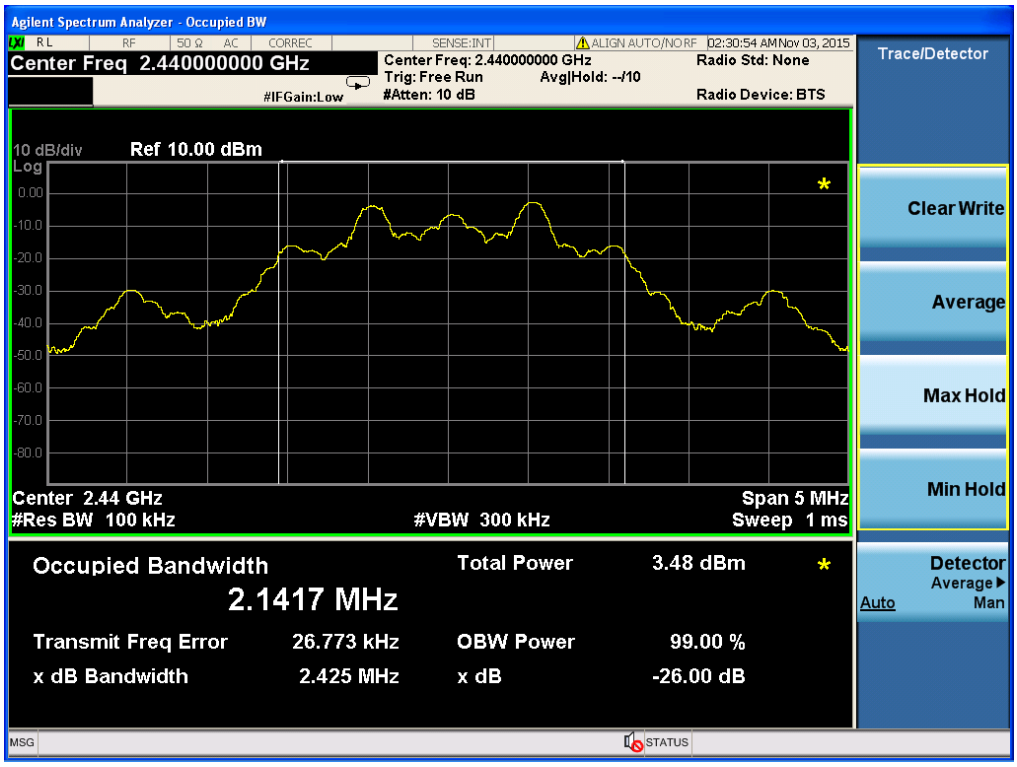
EUT：	M003 WIRELESS MOUSE	Model Name ：	M003
Temperature：	26 ℃	Relative Humidity：	53%
Pressure：	1020 hPa	Test Power ：	DC 3.0V
Test Mode ：	TX		

Test Channel	Frequency (MHz)	20 dBc Bandwidth (MHz)
CH01	2408	2.401
CH31	2440	2.425
CH64	2474	2.432

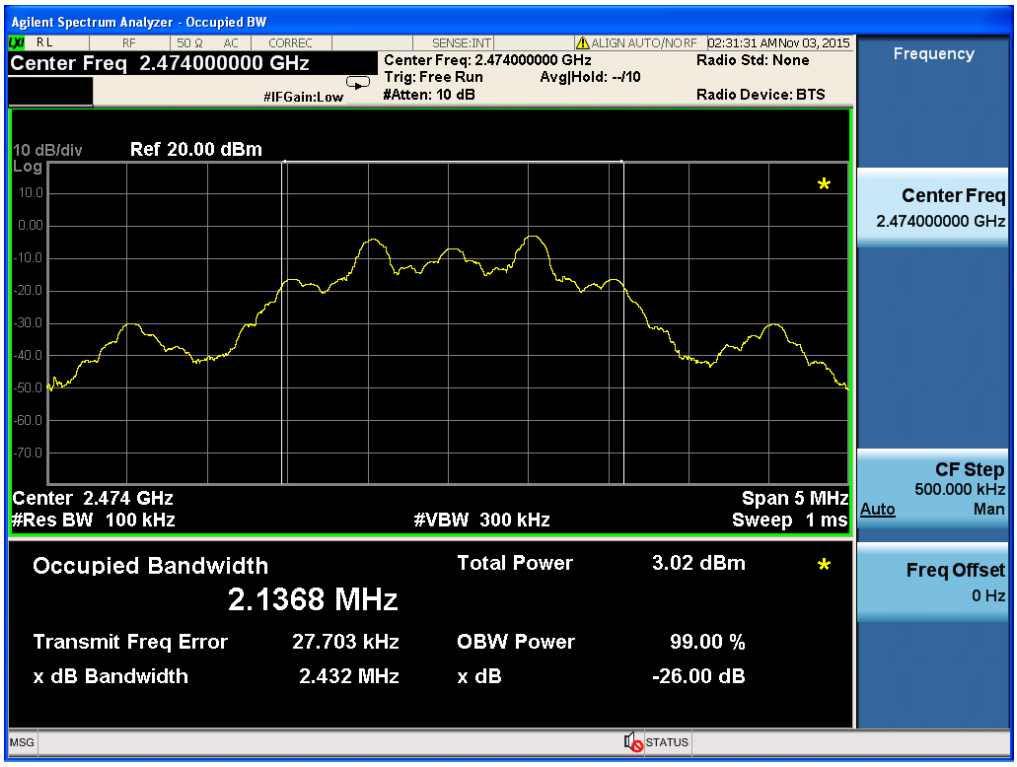
2408 MHz



2440MHz



2474 MHz



5. EUT TEST PHOTO

Radiated Measurement Photos