FCC RADIO TEST REPORT
FCC ID: 2AFVEG52W

Product： wireless mouse

Trade Name： N/A

Model Name： G52W

Addition Model： N/A

Prepared for

Guangzhou Maipai Electronics Co.,Ltd.

Room 202,No.94,Shinan Road,Xianchong Village,Qiaonan Street,
Panyu District of Guangzhou.

Prepared by

Shenzhen Asia Test Technology Co.,Ltd.

7 / F, Xinwei Building, Gushu Village, Xixiang Town, Baoan District,
Shenzhen, China

TEST RESULT CERTIFICATION

Manufacture's Name..... : Guangzhou Maipai Electronics Co.,Ltd.

Address ..... : Room 202,No.94,Shinan Road,Xianchong Village,Qiaonan Street,Panyu District of Guangzhou.

Product description

Product name ..... : wireless mouse

Model and/or type reference : G52W

Rating(s) ..... : DC 3.7V

Standards ..... : FCC Part15.249

Test procedure ..... ANSI C63.10-2013

This device described above has been tested by ATT, 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 ATT, this document may be altered or revised by ATT, personal only, and shall be noted in the revision of the document.

Date of Test.....:

Date (s) of performance of tests .....: 03 Aug. 2016 ~22 Aug. 2016

Date of Issue.....: 22 Aug. 2016

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

Testing Engineer : Eric Wang

(Eric Wang)

Technical Manager : Jerry You

(Jerry You)

Authorized Signatory : Jack yu

(Jack yu)

Table of Contents **Page**

`

Table of Contents **Page**

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Test	Test Requirement	Standard Paragraph	Result
Field Strength of Fundamental	FCC PART 15 C section 15.249 (a)	ANSI C63.10: Clause 6.6	PASS
Field Strength of Unwanted Emissions	FCC PART 15 C section 15.249 (a) section 15.249 (d)	ANSI C63.10: Clause 6.4, 6.6 and 6.7	PASS
Band Edges	FCC PART 15 C section 15.249 (d)	ANSI C63.10: Clause 6.9.2	PASS
Occupied Bandwidth	FCC PART 15 C section 15.215(c)	ANSI C63.10: Clause 6.9.1	PASS
Conducted Emissions at Mains Terminals	FCC PART 15 C section 15.207	ANSI C63.10: Clause 6.2	PASS
Antenna Requirement	FCC PART 15 C section 15.203	FCC PART 15 C section 15.203	PASS

1.1 TEST FACILITY

Shenzhen Asia Test Technology Co.,Ltd.
7 / F, Xinwei Building, Gushu Village, Xixiang Town, Baoan District, Shenzhen, China
FCC Registration No.: 348715; IC Registration No.: 12198A

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

EUT Name:	wireless mouse
Model No.:	G52W
Addition Model:	N/A
Model Differences:	All models are identical except model name.
Operation frequency:	2402 MHz to 2480 MHz
Number of channel:	16 channels
Modulation Type and Antenna Type:	GFSK PCB antenna
H/W No.:	1.1
S/W No.:	00
Antenna Gain:	2 dBi
Brand Name:	N/A
Derivative model No.:	N/A
Power Supply Range:	DC 3.7V by Li-battery, DC 5V for charge via USB
Power Cord:	N/A
Signal Cable:	N/A

Description of Channel:					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402	07	2436	13	2463
02	2407	08	2439	14	2466
03	2414	09	2441	15	2473
04	2419	10	2445	16	2480
05	2422	11	2453		
06	2426	12	2459		

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	CH1
Mode 2	CH9
Mode 3	CH16
Mode 4	Link

For Conductted Emission	
Final Test Mode	Description
Mode 4	Link

For Radiated Emission	
Final Test Mode	Description
Mode 1	CH1
Mode 2	CH9
Mode 3	CH16
Mode 4	Link

Note:

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

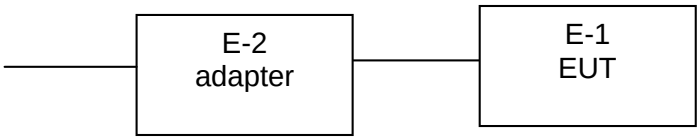
(2) The EUT use Full charge battery.

(3) For Conductted Emission EMI test. We test powered by PC and powered by charger, record the worst case powered by charger in the report. The charger provide by test lab. And the information as below:

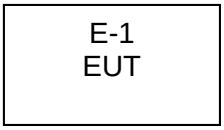
M/N: MS05001000US, INPUT:AC 100-240V,50/60Hz, 0.35A, OUTPUT:DC 5V, 1A

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Spurious 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	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	wireless mouse	N/A	G52W	N/A	EUT
E-2	Adapter	N/A	MS05001000US	N/A	

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

Equipment No.	Instrument	Manufacturer	Model Name	Serial Number	Specification	Cal. Data
1	Semi-anechoic chamber	Changzhou Chengyu	EC3088	N/A	9*6*6m	10/25/2015
2	Broadband antenna	R&S	VULB 9160	VULB91 60-516	30MHz-1500 MHz	10/25/2015
3	Horn antenna	R&S	BBHA 9120D	10087	1GHz-18GH z	06/05/2016
4	Test receiver	R&S	ESCI	101686	9KHz-3GHz	10/25/2015
5	EMI Measuring Receiver	R&S	ESR	101660	9KHz-40GHz	10/25/2015
6	Multi-device controller	MF	MF-7868	MF78680 8762	N/A	10/25/2015
7	Amplifier	EM	EM-30180	060538	1GHz-18GH z	10/25/2015
8	Amplifier	Schwarzbeck	BBV 9475	BBV 9475-663	1GHz-18GH z	06/05/2016
9	Spectrum Analyzer	agilent	E4440B	US44300368	1GHz-26.5GH z	06/05/2016
10	Test receiver	R&S	ESCI	101689	9KHz-3GHz	10/25/2015
11	LISN	R&S	NSLK81 26	8126466	9k-30MHz	10/25/2015
12	LISN	Narda	L2-16B	5589756	9k-30MHz	10/25/2015
13	Power Meter	Anritsu	ML2495A	N/A	40MHz	10/25/2015
14	Power sensor	Anritsu	MA2411B	N/A	40MHz	10/25/2015
15	Radiated Cable 1#	FUJIKURA	5D-2W	01	30MHz-1GHz	10/25/2015
16	Radiated Cable 2#	FUJIKURA	10D2W	02	1GHz -25GHz	10/25/2015
17	Conducted Cable 1#	FUJIKURA	1D-2W	01	9KHz-30MHz	10/25/2015

18	SMA Antenna connector	Dosin	Dosin-SMA	N/A	N/A	10/25/2015
Note: The SMA antenna connector is soldered on the PCB board in order to perform conducted tests and this SMA antenna connector is listed in the equipment list. The Cal.Interval was one 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 PCB 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

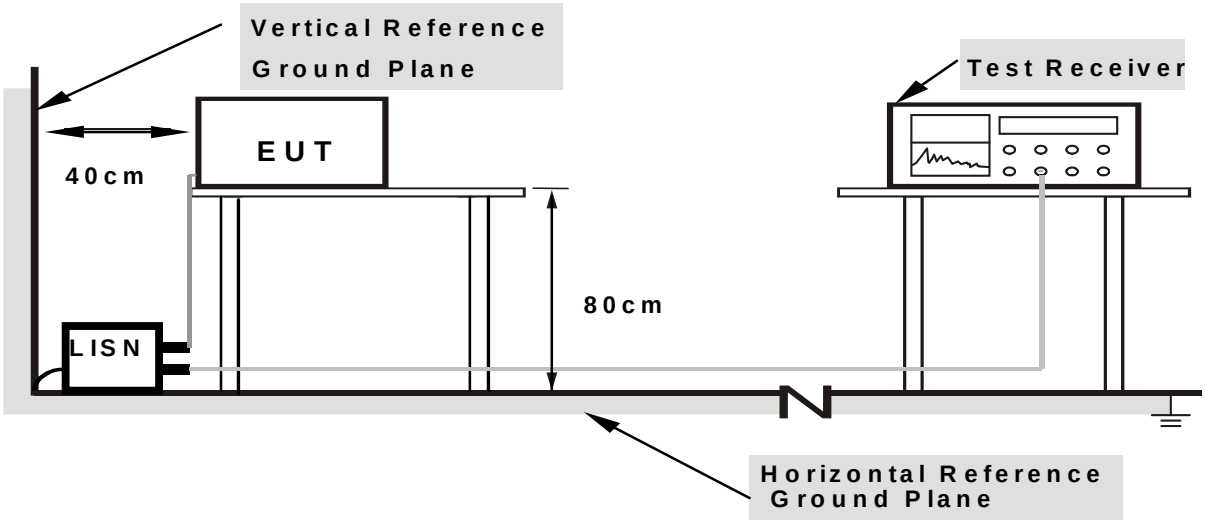
3.3.2 TEST PROCEDURE

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



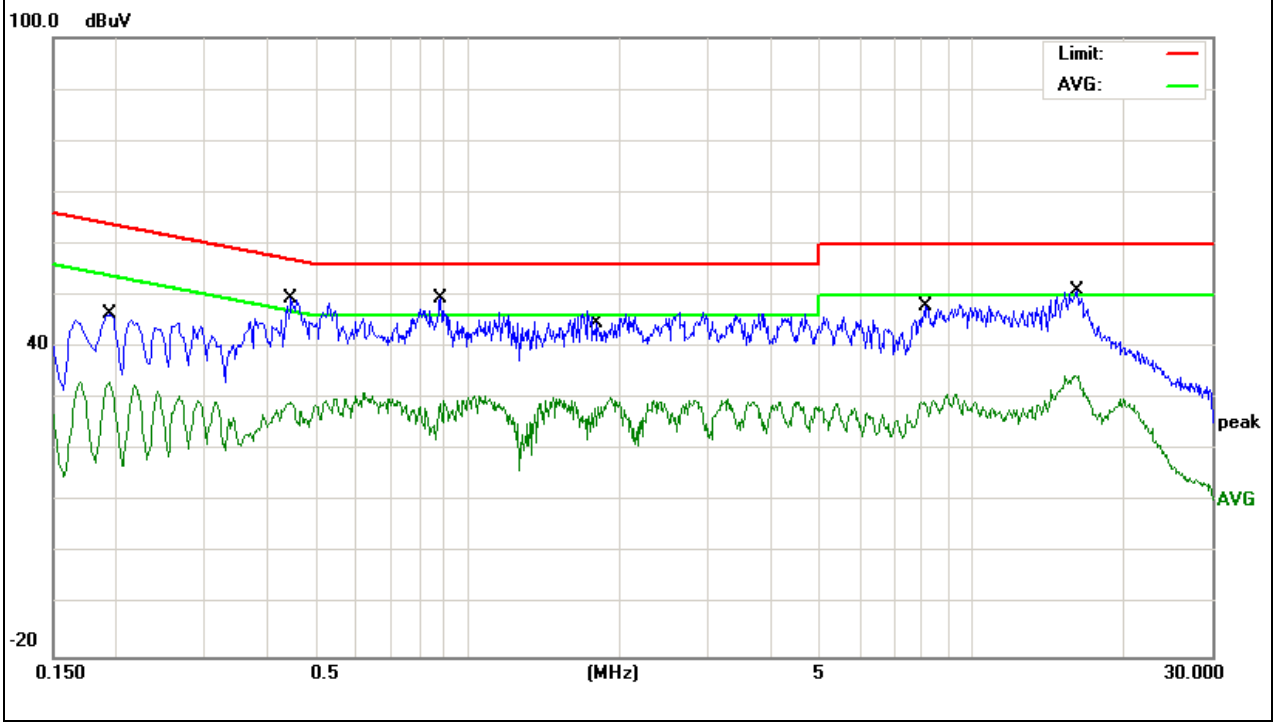
Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.2.5 TEST RESULT

EUT：	wireless mouse	Model Name. ：	G52W
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2016-08-18
Test Mode：	Link	Phase：	L
Test Voltage ：	DC 5V from charger AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Detector
0.1940	36.96	9.51	46.47	63.86	-17.39	QP
0.1940	23.85	9.51	33.36	53.86	-20.50	AVG
0.4460	40.03	9.51	49.54	56.95	-7.41	QP
0.4460	19.71	9.51	29.22	46.95	-17.73	AVG
0.8820	39.93	9.53	49.46	56.00	-6.54	QP
0.8820	20.21	9.53	29.74	46.00	-16.26	AVG
1.8100	37.42	9.55	46.97	56.00	-9.03	QP
1.8100	18.93	9.55	28.48	46.00	-17.52	AVG
8.1178	38.21	9.69	47.90	60.00	-12.10	QP
8.1178	20.08	9.69	29.77	50.00	-20.23	AVG
16.2139	40.94	9.95	50.89	60.00	-9.11	QP
16.2139	24.62	9.95	34.57	50.00	-15.43	AVG

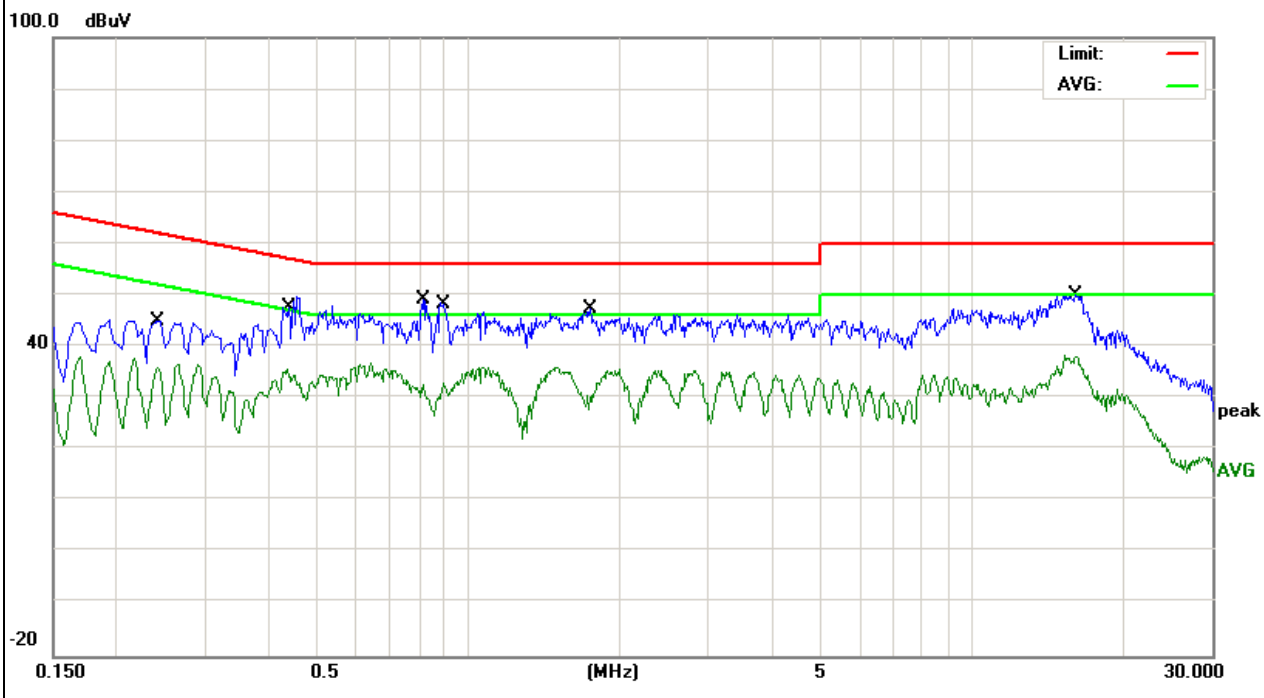
Remark:
Factor = Insertion Loss + Cable Loss.



EUT：	wireless mouse	Model Name. ：	G52W
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Test Date：	2016-08-18
Test Mode：	Link	Phase：	N
Test Voltage ：	DC 5V from charger AC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Detector
0.2420	35.52	9.50	45.02	62.02	-17.00	QP
0.2420	26.55	9.50	36.05	52.02	-15.97	AVG
0.4420	38.15	9.52	47.67	57.02	-9.35	QP
0.4420	26.05	9.52	35.57	47.02	-11.45	AVG
0.8139	39.61	9.54	49.15	56.00	-6.85	QP
0.8139	23.20	9.54	32.74	46.00	-13.26	AVG
0.8980	38.88	9.55	48.43	56.00	-7.57	QP
0.8980	23.48	9.55	33.03	46.00	-12.97	AVG
1.7500	37.90	9.56	47.46	56.00	-8.54	QP
1.7500	23.50	9.56	33.06	46.00	-12.94	AVG
16.1459	40.17	9.91	50.08	60.00	-9.92	QP
16.1459	28.15	9.91	38.06	50.00	-11.94	AVG

Remark:
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

1)9 kHz to 30 MHz emissions:
For testing performed with the loop antenna, testing was performed in accordance to ANSI C63.10. The centre of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT, During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane.

2)30 MHz to 1 GHz emissions:
For testing performed with the bi-log type antenna, testing was performed in accordance to ANSI C63.10. The measurement is performed with the EUT rotated 360º, the antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurement for both the horizontal and vertical antenna polarizations.

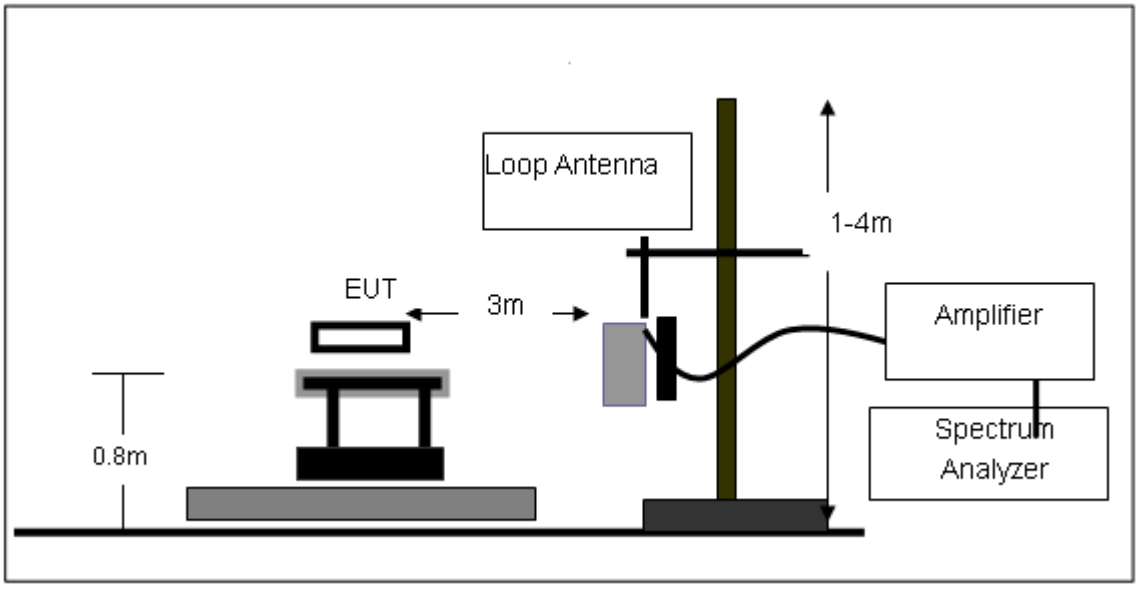
3)1 GHz to 25 GHz emissions:
Test site with RF absorbing material covering the ground plane that met the site validation criterion called out in CISPR 16-1-4:2007 was used to perform radiated emission test above 1 GHz.
For testing performed with the horn antenna, testing was performed in accordance to ANSI C63.10. The measurement is performed with the EUT rotated 360º, the antenna height scan between 1m and 4m, and the antenna rotated to repeat the measurement for both the horizontal and vertical antenna polarizations.
For the radiated emission test above 1GHz:
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

3.4.3 DEVIATION FROM TEST STANDARD

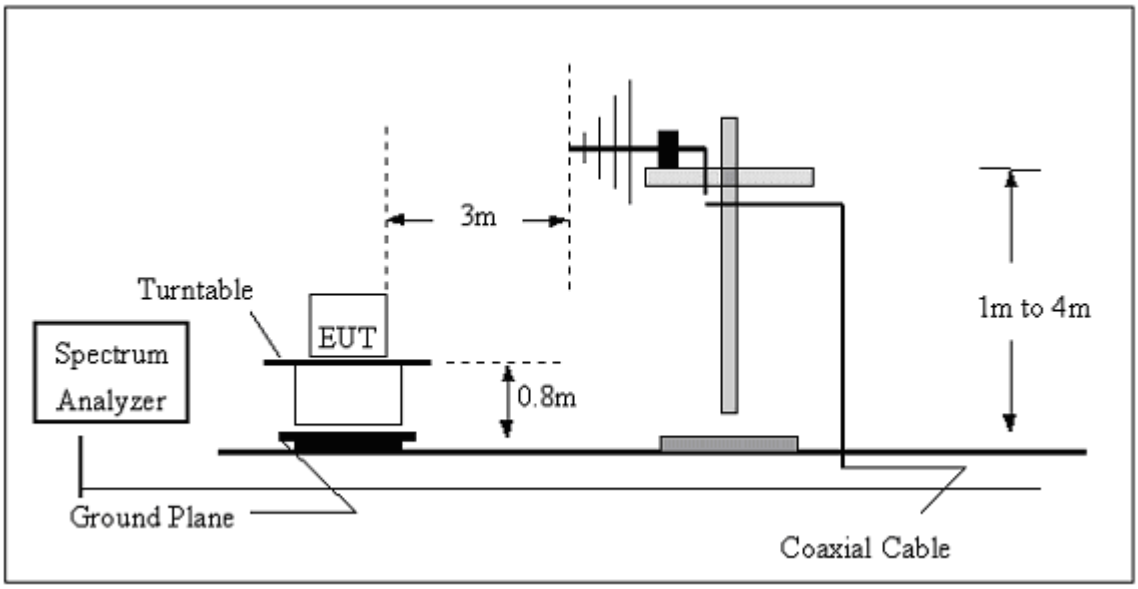
No deviation

3.4.4 TEST SETUP

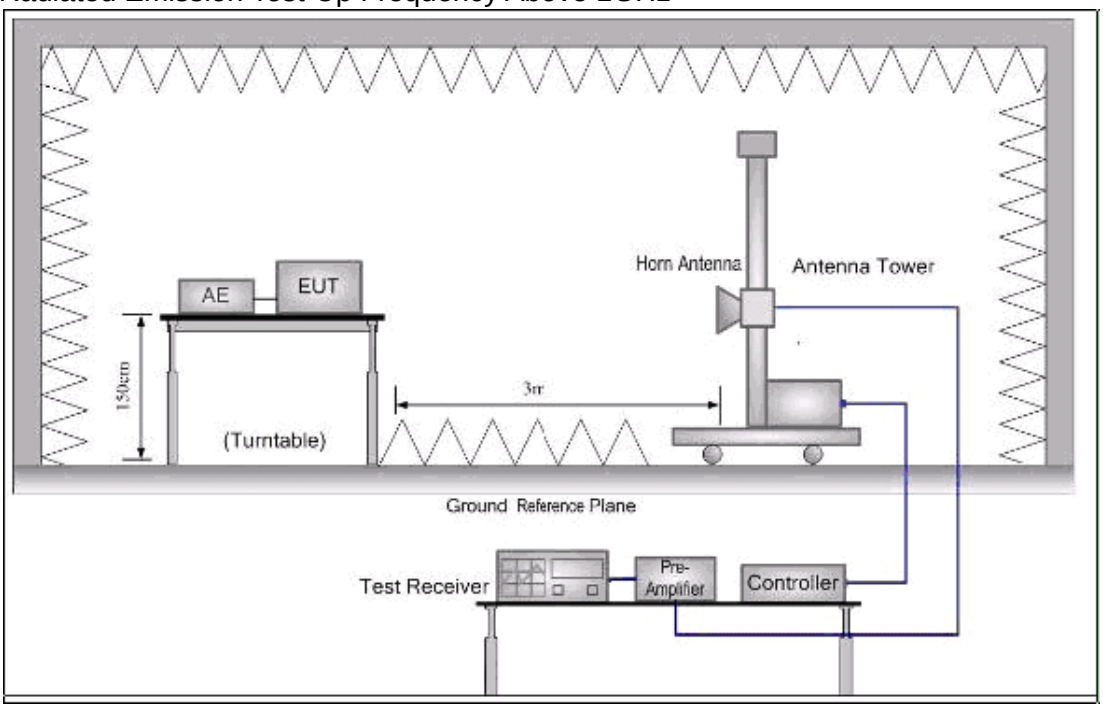
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.4.5 TEST RESULTS (BELOW 30MHz)

EUT：	wireless mouse	Model Name. ：	G52W
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.

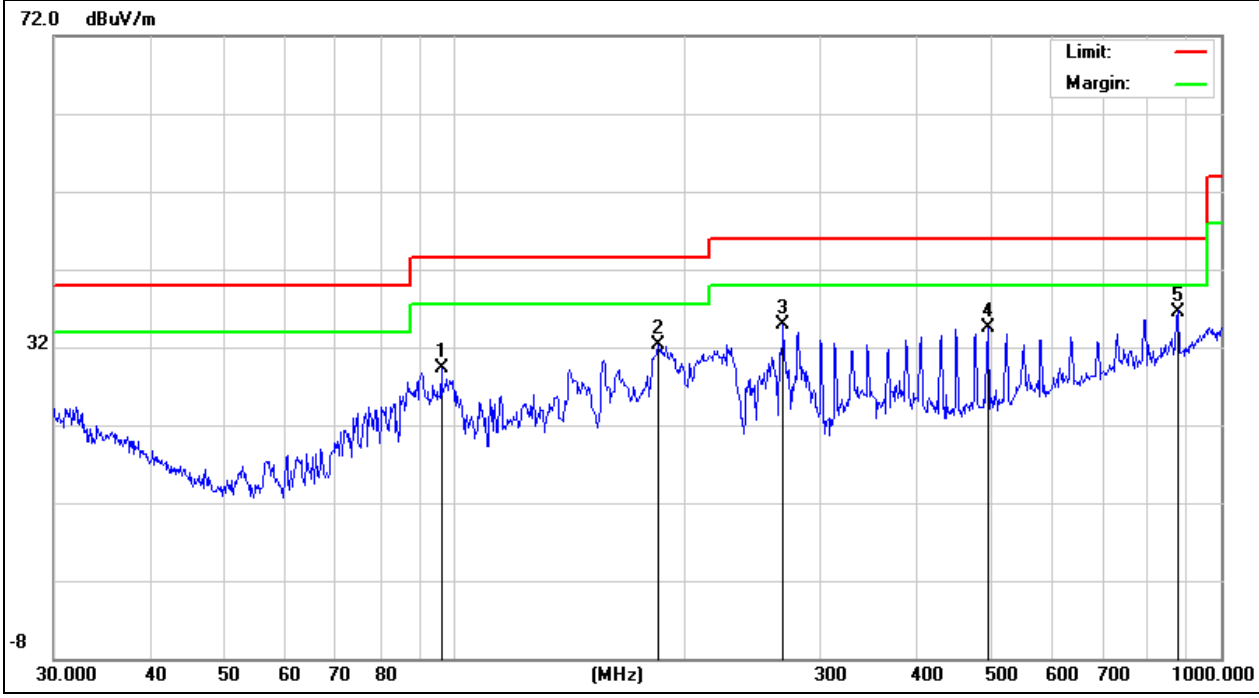
`

3.4.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX	Polarization：	Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		96.0986	19.27	10.03	29.30	43.50	-14.20	QP			
2		184.4898	22.87	9.39	32.26	43.50	-11.24	QP			
3		268.4852	21.32	13.58	34.90	46.00	-11.10	QP			
4		497.6764	15.15	19.35	34.50	46.00	-11.50	QP			
5	*	878.3214	11.39	25.21	36.60	46.00	-9.40	QP			

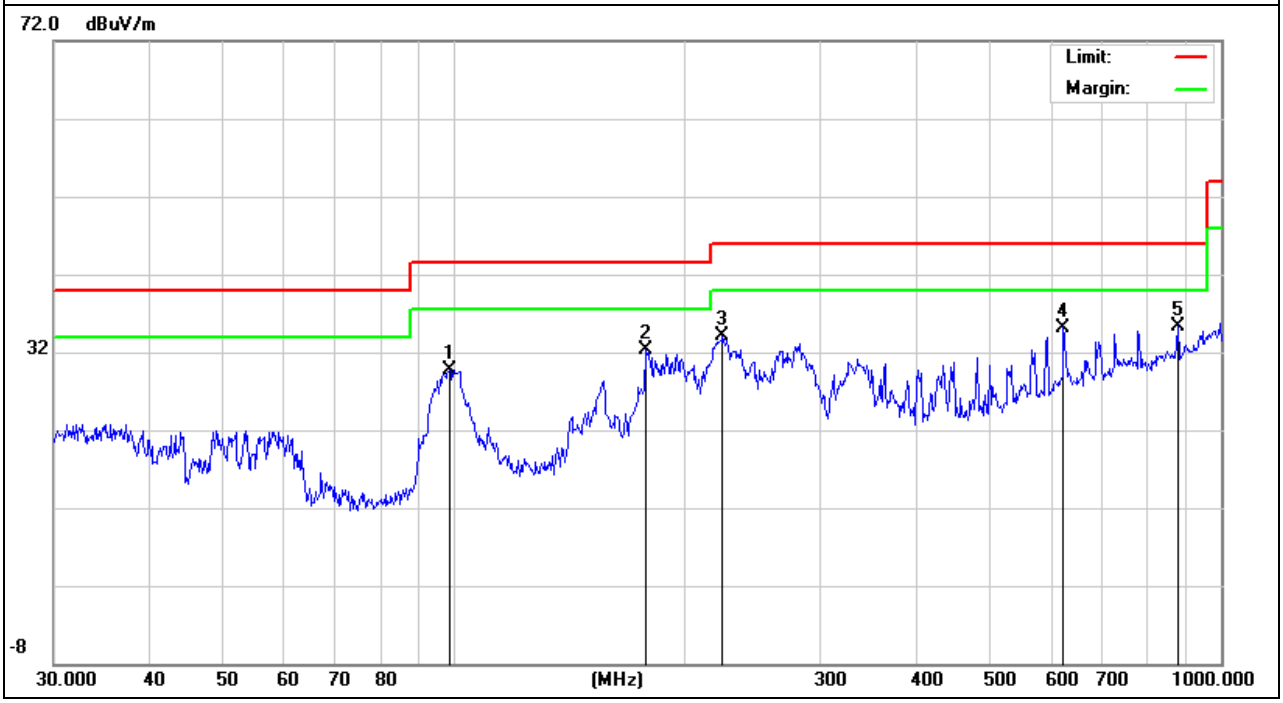
Remark:
Factor = Antenna Factor + Cable Loss.



EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX	Polarization：	Horizontal

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		98.4865	19.34	10.37	29.71	43.50	-13.79	QP			
2		177.5091	22.72	9.68	32.40	43.50	-11.10	QP			
3		223.7333	23.95	10.18	34.13	46.00	-11.87	QP			
4		622.8899	13.17	22.03	35.20	46.00	-10.80	QP			
5	*	878.3214	10.09	25.21	35.30	46.00	-10.70	QP			

Remark:
Factor = Antenna Factor + Cable Loss.



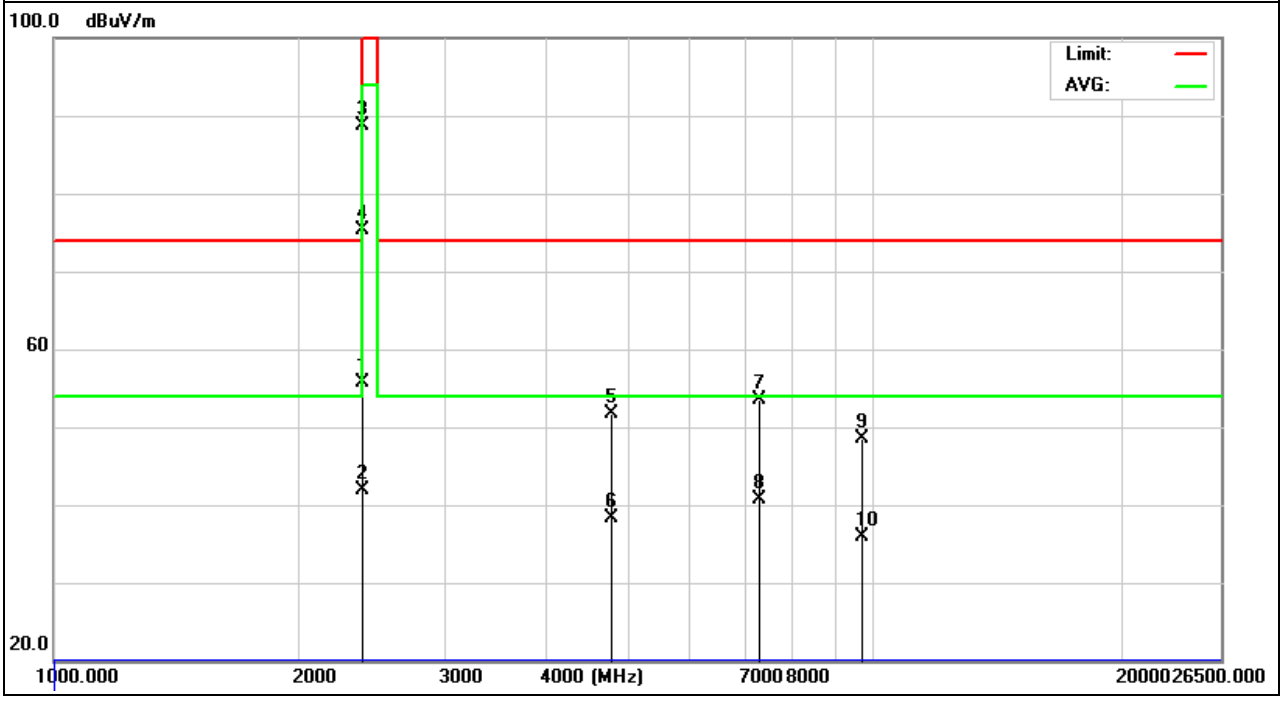
3.4.7 TEST RESULTS (ABOVE 1000 MHZ)

GFSK

EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX-CH1	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2400	64.18	-8.42	55.76	74	-18.24	peak
2400	50.33	-8.42	41.91	54	-12.09	AVG
2402	97.14	-8.42	88.72	114.0 0	-25.28	peak
2402	83.67	-8.42	75.25	94	-18.75	AVG
4804	56.58	-4.86	51.72	74	-22.28	peak
4804	43.18	-4.86	38.32	54	-15.68	AVG
7206	54.08	-0.58	53.5	74	-20.5	peak
7206	41.22	-0.58	40.64	54	-13.36	AVG
9608	43.68	4.81	48.49	74	-25.51	peak
9608	31.06	4.81	35.87	54	-18.13	AVG

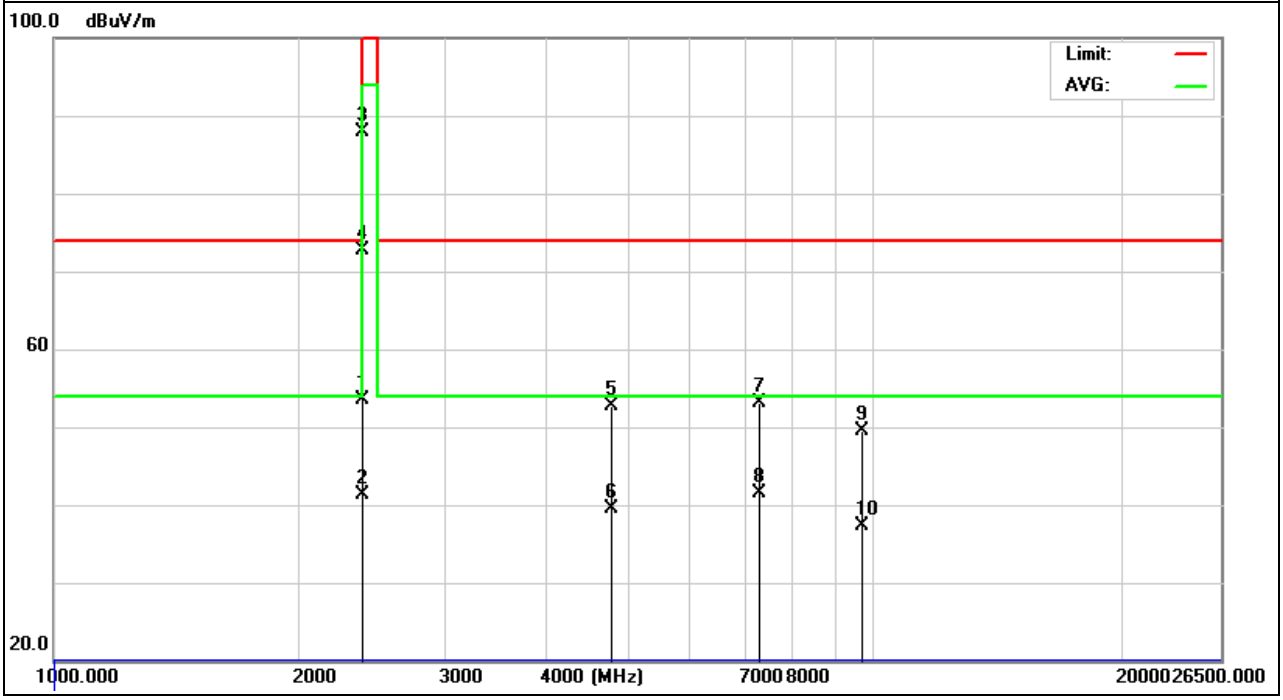
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX-CH1	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2400	61.94	-8.42	53.52	74	-20.48	peak
2400	49.66	-8.42	41.24	54	-12.76	AVG
2402	96.34	-8.42	87.92	114.0 0	-26.08	peak
2402	81.19	-8.42	72.77	94	-21.23	AVG
4804	57.59	-4.86	52.73	74	-21.27	peak
4804	44.37	-4.86	39.51	54	-14.49	AVG
7206	53.61	-0.58	53.03	74	-20.97	peak
7206	41.99	-0.58	41.41	54	-12.59	AVG
9608	44.78	4.81	49.59	74	-24.41	peak
9608	32.55	4.81	37.36	54	-16.64	AVG

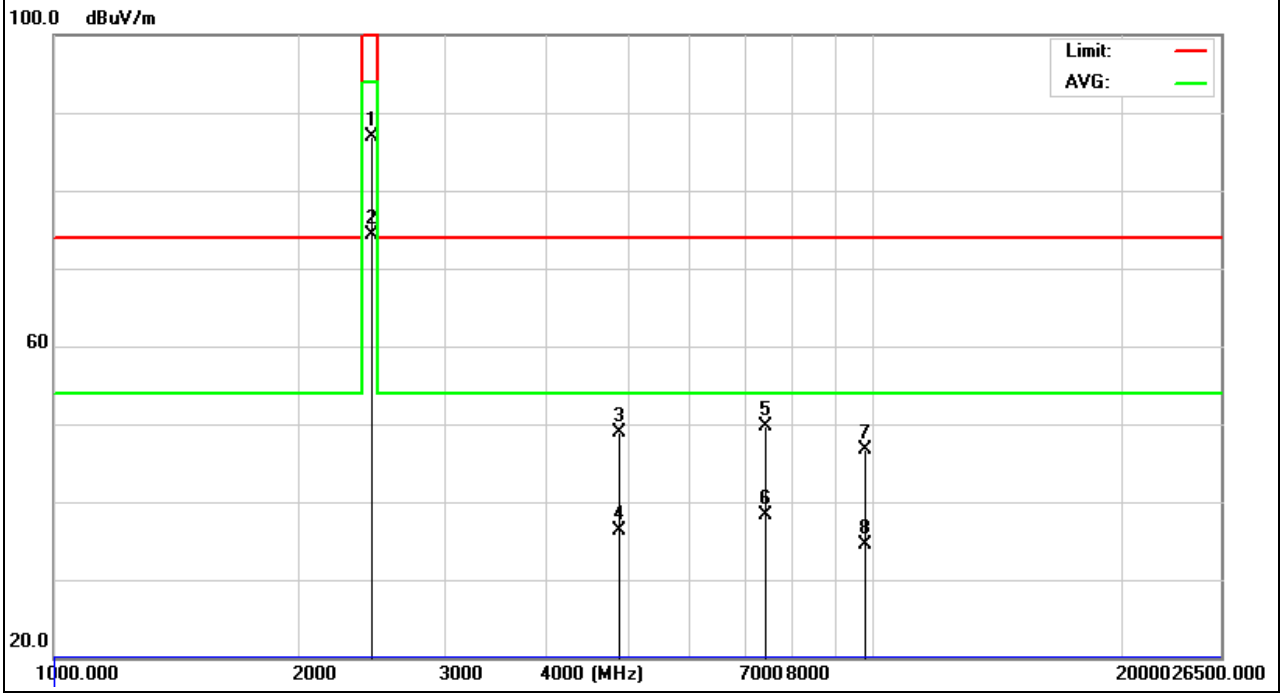
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX-CH9	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2441	95.17	-8.35	86.82	114.0 0	-27.18	peak
2441	82.72	-8.35	74.37	94	-19.63	AVG
4882	53.56	-4.73	48.83	74	-25.17	peak
4882	41.05	-4.73	36.32	54	-17.68	AVG
7323	49.97	-0.3	49.67	74	-24.33	peak
7323	38.61	-0.3	38.31	54	-15.69	AVG
9764	41.38	5.26	46.64	74	-27.36	peak
9764	29.28	5.26	34.54	54	-19.46	AVG

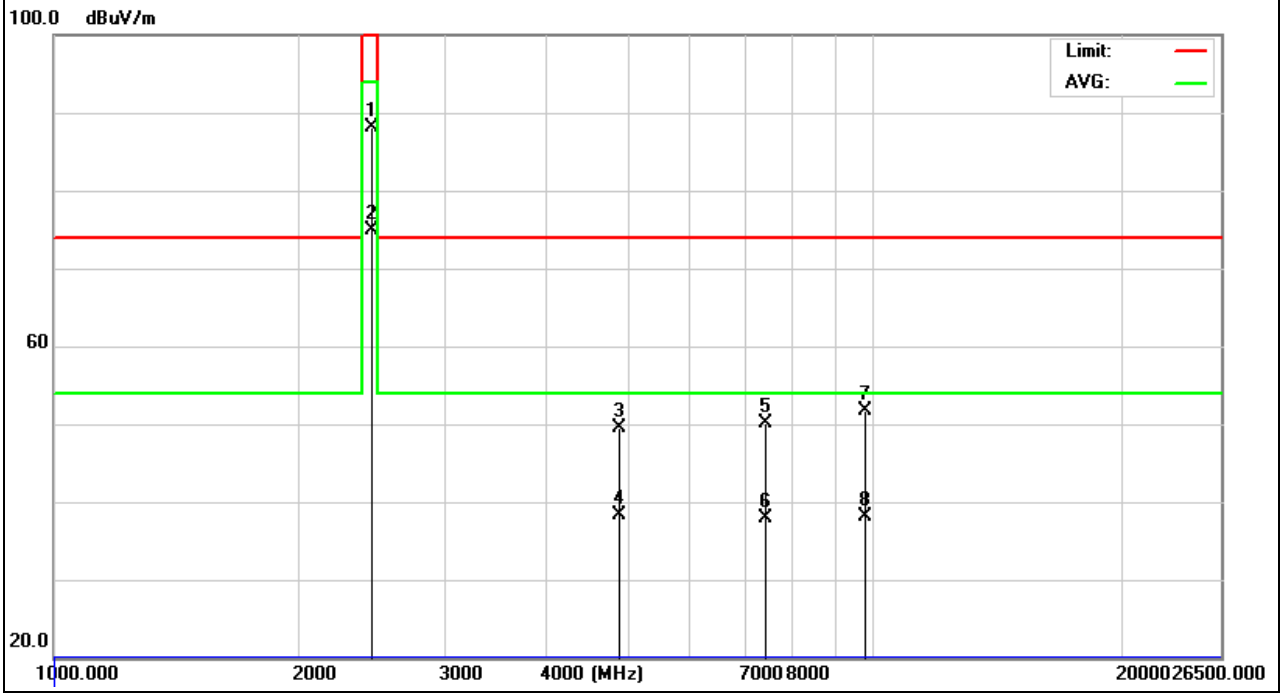
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX-CH9	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2441	96.42	-8.35	88.07	114.0 0	-25.93	peak
2441	83.19	-8.35	74.84	94	-19.16	AVG
4882	54.33	-4.73	49.6	74	-24.4	peak
4882	42.96	-4.73	38.23	54	-15.77	AVG
7323	50.37	-0.3	50.07	74	-23.93	peak
7323	38.26	-0.3	37.96	54	-16.04	AVG
9764	46.45	5.26	51.71	74	-22.29	peak
9764	32.91	5.26	38.17	54	-15.83	AVG

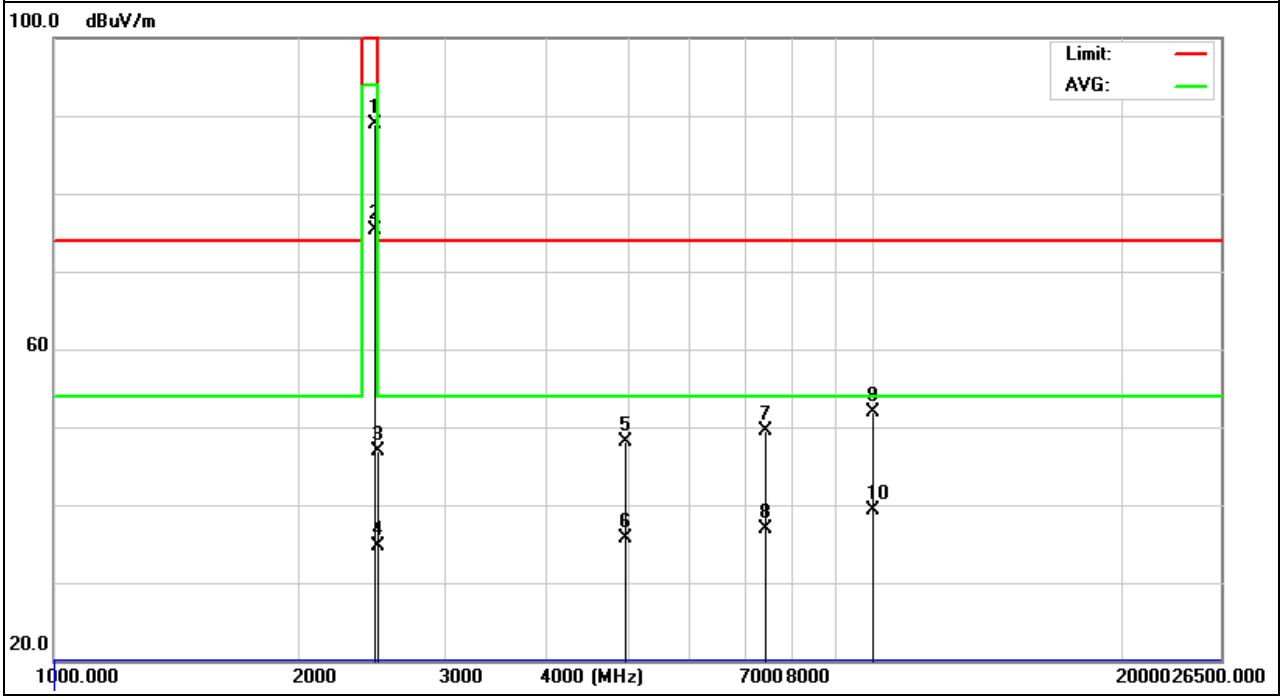
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX-CH16	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2480	97.16	-8.27	88.89	114.0 0	-25.11	peak
2480	83.64	-8.27	75.37	94	-18.63	AVG
2483.5	55.14	-8.27	46.87	74	-27.13	peak
2483.5	42.95	-8.27	34.68	54	-19.32	AVG
4960	52.67	-4.6	48.07	74	-25.93	peak
4960	40.35	-4.6	35.75	54	-18.25	AVG
7440	49.47	-0.02	49.45	74	-24.55	peak
7440	36.88	-0.02	36.86	54	-17.14	AVG
9920	46.19	5.66	51.85	74	-22.15	peak
9920	33.58	5.66	39.24	54	-14.76	AVG

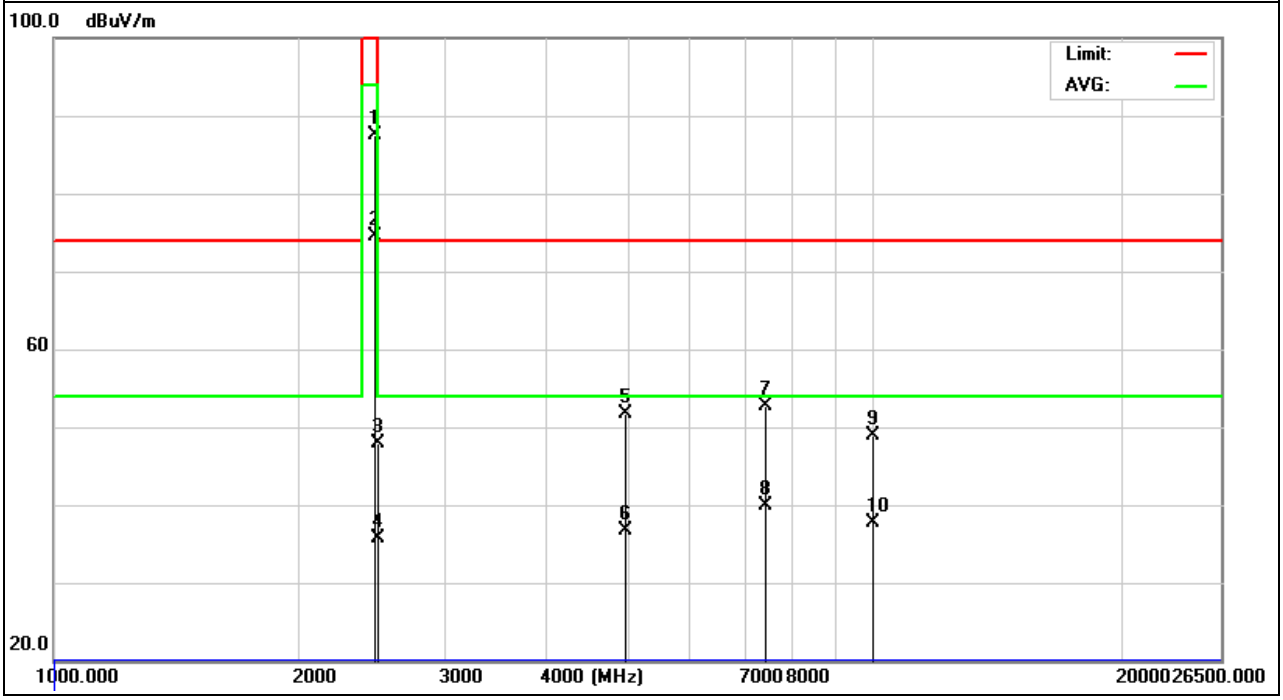
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	wireless mouse	Model Name ：	G52W
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX-CH16	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2480	95.87	-8.27	87.6	114.0 0	-26.4	peak
2480	82.69	-8.27	74.42	94	-19.58	AVG
2483.5	56.17	-8.27	47.9	74	-26.1	peak
2483.5	43.95	-8.27	35.68	54	-18.32	AVG
4960	56.24	-4.6	51.64	74	-22.36	peak
4960	41.37	-4.6	36.77	54	-17.23	AVG
7440	52.66	-0.02	52.64	74	-21.36	peak
7440	39.84	-0.02	39.82	54	-14.18	AVG
9920	43.18	5.66	48.84	74	-25.16	peak
9920	31.99	5.66	37.65	54	-16.35	AVG

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



3.4.8 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT：	wireless mouse	Model Name ：	G52W
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 3.7V

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type	Comment
2390	55.72	-8.36	47.36	74	-26.64	peak	Vertical
2390	54.38	-8.36	46.02	74	-27.98	peak	Horizontal
2483.5	56.72	-8.27	48.45	74	-25.55	peak	Vertical
2483.5	55.33	-8.27	47.06	74	-26.94	peak	Horizontal

Note: Test method to see chapter 3.2 . WhenPK value is lower than the Average value limit, average didn't record.

4. BANDWIDTH TEST

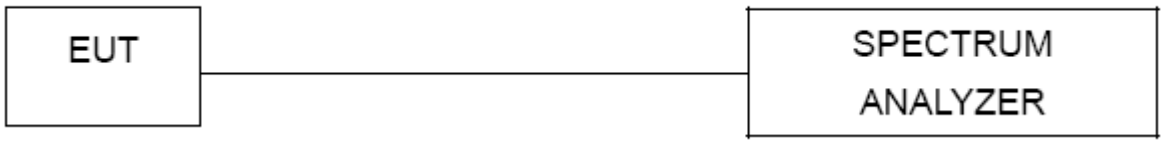
4.1 TEST PROCEDURE

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

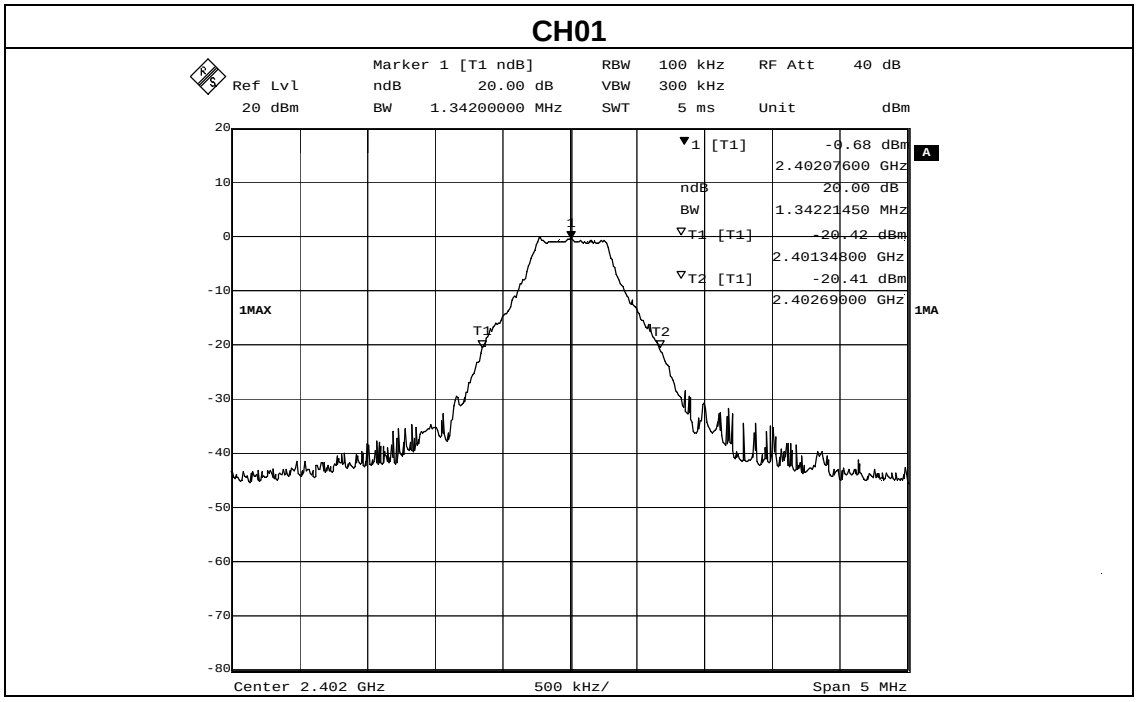


4.4 TEST RESULTS

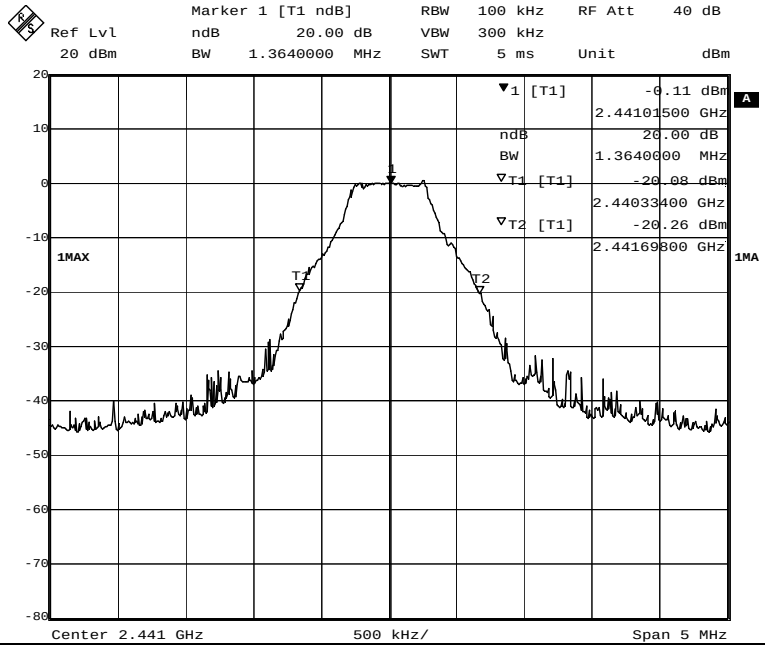
EUT：	wireless mouse	Model Name ：	G52W
Temperature：	25 ℃	Relative Humidity：	60%
Pressure：	1012 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	CH01 / CH9 /C16		

Frequency	20dB Bandwidth (kHz)	Result
2402 MHz	1342.00	**PASS**
2441 MHz	1364.00	**PASS**
2480 MHz	1327.40	**PASS**

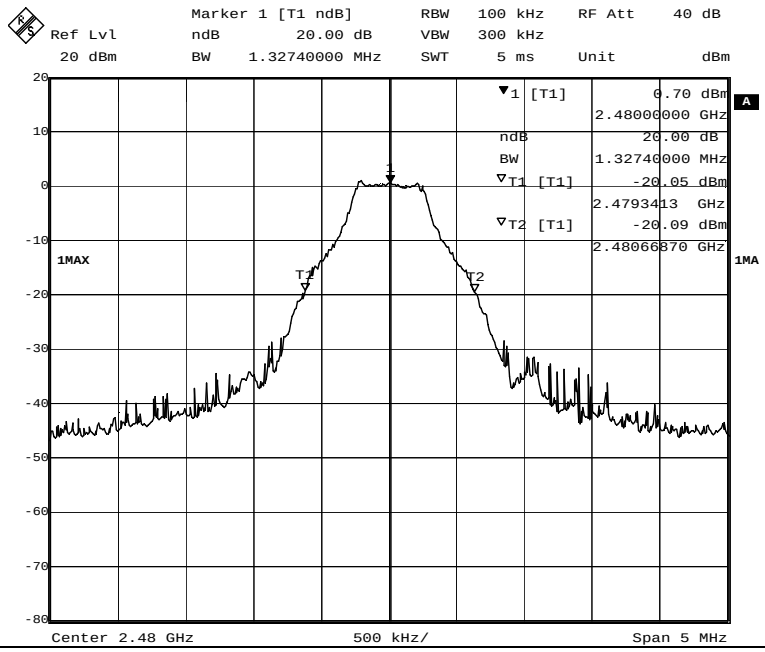
CH01



CH9


Marker 1 [T1 ndB]
RBW 100 kHz
RF Att 40 dB
Ref Lvl
ndB 20.00 dB
VBW 300 kHz
20 dBm
BW 1.3640000 MHz
SWT 5 ms
Unit dBm
1 [T1] -0.11 dBm
2.44101500 GHz
ndB 20.00 dB
BW 1.3640000 MHz
T1 [T1] -20.08 dBm
2.44033400 GHz
T2 [T1] -20.26 dBm
2.44169800 GHz
1MAX
1MA
A
Center 2.441 GHz
500 kHz/
Span 5 MHz

CH16


Marker 1 [T1 ndB]
RBW 100 kHz
RF Att 40 dB
Ref Lvl
ndB 20.00 dB
VBW 300 kHz
20 dBm
BW 1.32740000 MHz
SWT 5 ms
Unit dBm
1 [T1] 0.70 dBm
2.48000000 GHz
ndB 20.00 dB
BW 1.32740000 MHz
T1 [T1] -20.05 dBm
2.4793413 GHz
T2 [T1] -20.09 dBm
2.48066870 GHz
1MAX
1MA
A
Center 2.48 GHz
500 kHz/
Span 5 MHz