



FCC RADIO TEST REPORT

FCC ID: GV3M01291-D

Product Name:	Wireless Dongle
Trademark:	N/A
Model Number:	M01291-D
Prepared For : Address :	ACCO Brands, Inc. 333 Twin Dolphin Drive, 6th Floor, Redwood Shores, California, United States
Prepared By : Address :	Shenzhen BCTC Technology Co., Ltd. No.101, Yousong Road, Longhua New District, Shenzhen, China Nanshan District, Shenzhen, China
Test Date:	Dec. 12 - Dec. 21, 2014
Date of Report :	Dec. 21, 2014
Report No.:	BCTC-141125631R



VERIFICATION OF COMPLIANCE

Applicant:	ACCO Brands, Inc.
Address	333 Twin Dolphin Drive, 6th Floor, Redwood Shores, California, United States
Manufacturer Name:	Kensington Computer Products Group
Address:	333, Twin Dolphin Drive, 6th Floor, Redwood Shores, CA 94065, USA
Product Description:	Wireless Dongle
Brand Name:	N/A
Model Name:	M01291-D
Model difference:	N/A
Test procedure	RSS-GEN Issue 4, Dec 2010, ANSI C63.4:2014
Standards	FCC Part15.249, RSS-210 Issue 8, Dec 2010

Prepared by(Engineer):

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Reviewer(Quality Manager):

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Approved & Authorized Signer(Manager):

Casey Wang





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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.249) RSS-Gen Issue 3 & RSS-210 Issue 8			
Standard Section	Test Item	Judgment	Remark
15.207& 7.2.4	Conducted Emission	Pass	
15.203	Antenna Requirement	Pass	
15.249& A8.5	Radiated Spurious Emission	Pass	
15.205& A8.5	Band Edge Emission	Pass	
15.249& A8.1	Occupied Bandwidth	Pass	



1.1 TEST FACILITY

Shenzhen BCTC Technology Co., Ltd.

Add. : No.101,Yousong Road,Longhua New District, Shenzhen,China

FCC Registered No.: 187086

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Dongle	
Trade Name	N/A	
Model Name	M01291-D	
Serial Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a Wireless Dongle	
	Operation Frequency:	2408~2474MHz
	Modulation Type:	FSK
	Antenna Designation:	PCB Antenna
	Antenna Gain(Peak)	0.2 dBi
	Field Strength value	104.81dbuv/m@3m(Peak)
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.		
Rating	DC 5V by USB	
Channel List	Please refer to the Note 2.	
Adapter	N/A	
Battery	N/A	

Note:

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



2.

Frequency Group				
2408	2426	2444	2462	
2410	2428	2446	2464	
2412	2430	2448	2466	
2414	2432	2450	2468	
2416	2434	2452	2470	
2418	2436	2454	2472	
2420	2438	2456	2474	
2422	2440	2458		
2424	2442	2460		

3.

Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	PCB Antenna	NA	0.2	Antenna



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly 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	CH01(2408MHz)
Mode 2	CH17(2440MHz)
Mode 3	CH34(2474MHz)
Mode 4	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 4	Link Mode

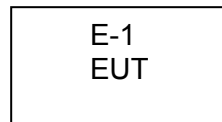
For Radiated Emission	
Final Test Mode	Description
Mode 1	CH01(2408MHz)
Mode 2	CH17(2440MHz)
Mode 3	CH34(2474MHz)

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
The worst data will be reported.
- (2) The EUT uses new battery.



2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED





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 Dongle	N/A	M01291-D	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

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2014.07.06	2015.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2014.06.07	2015.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2014.07.06	2015.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2014.06.07	2015.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2014.06.07	2015.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2014.07.06	2015.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2014.07.06	2015.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2014.12.22	2015.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2014.06.08	2015.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2014.07.06	2015.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2014.07.06	2015.07.05	1 year
12	RF cables	R&S	N/A	N/A	2014.07.06	2015.07.05	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 PCB external 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



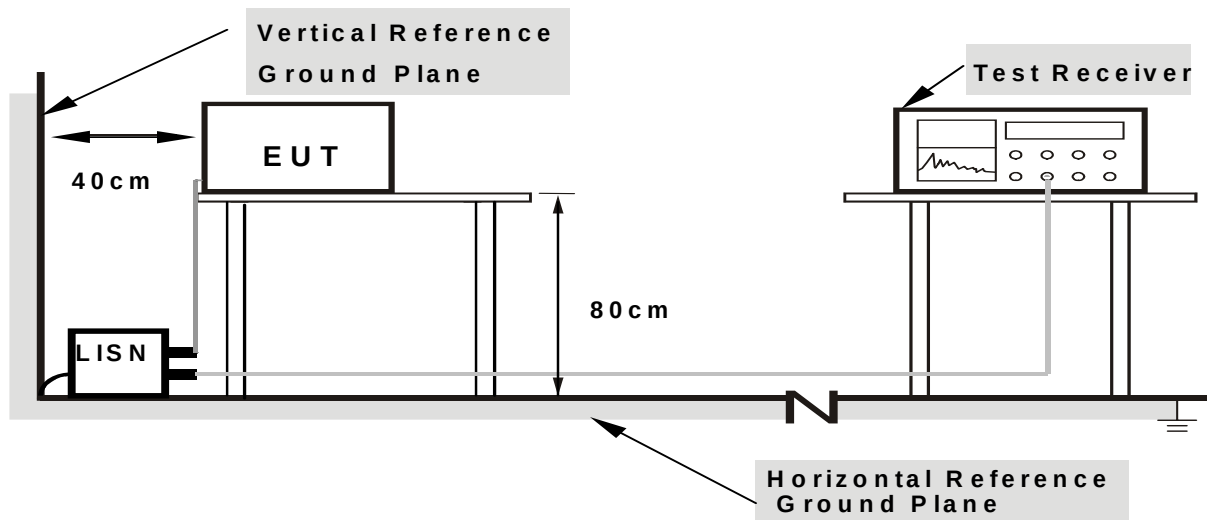
3.3.2 TEST PROCEDURE

- 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.
- 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.
- 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.
- LISN at least 80 cm from nearest part of EUT chassis.
- 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



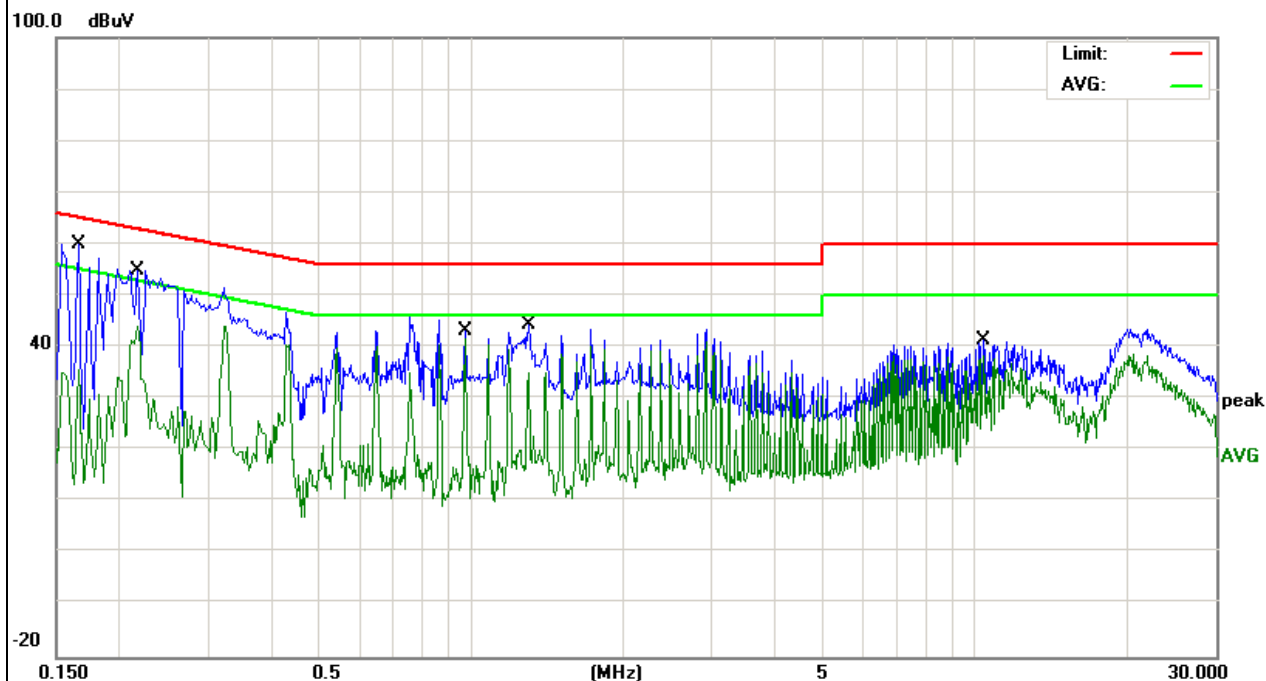
3.2.5 TEST RESULT

EUT :	Wireless Dongle	Model Name. :	M01291-D
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from PC 120V/60Hz	Test Mode :	Mode 4

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Detector
0.1660	49.46	10.45	59.91	65.15	-5.24	QP
0.2180	33.76	10.44	44.20	52.89	-8.69	AVG
0.9700	31.25	10.41	41.66	46.00	-4.34	AVG
1.2980	33.85	10.41	44.26	56.00	-11.74	QP
10.3700	30.71	10.63	41.34	60.00	-18.66	QP
10.3700	27.68	10.63	38.31	50.00	-11.69	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. N/A means All Data have pass Limit



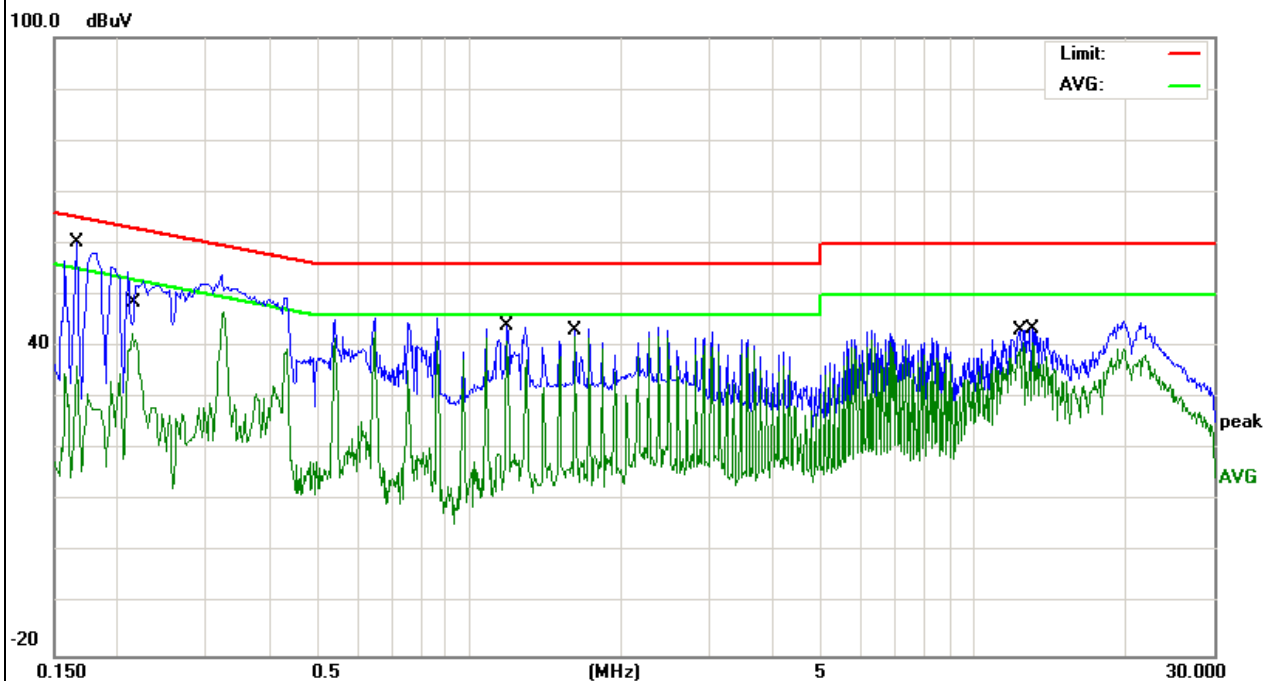


EUT :	Wireless Dongle	Model Name. :	M01291-D
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2014-12-06
Test Mode :	Data transmission	Phase :	N
Test Voltage :	DC 5V from PC 120V/60Hz		

Freq. (MHz)	Reading (dBuV)	Factor (dBuV)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Detector
0.1660	49.81	10.34	60.15	65.15	-5.00	QP
0.2140	32.17	10.43	42.60	53.04	-10.44	AVG
1.1900	33.68	10.45	44.13	56.00	-11.87	QP
1.6220	31.61	10.44	42.05	46.00	-3.95	AVG
12.5340	30.03	10.71	40.74	50.00	-9.26	AVG
13.0740	32.76	10.72	43.48	60.00	-16.52	QP

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. N/A means All Data have pass Limit





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

- 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.
- 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.
- 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.
- 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.
- 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.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

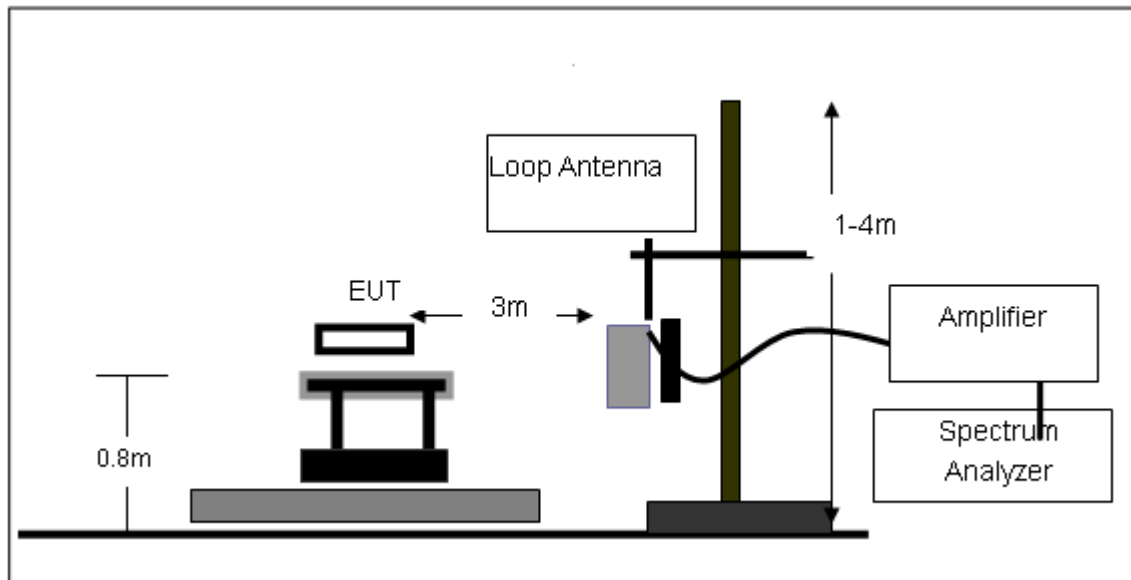
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.4.3 DEVIATION FROM TEST STANDARD

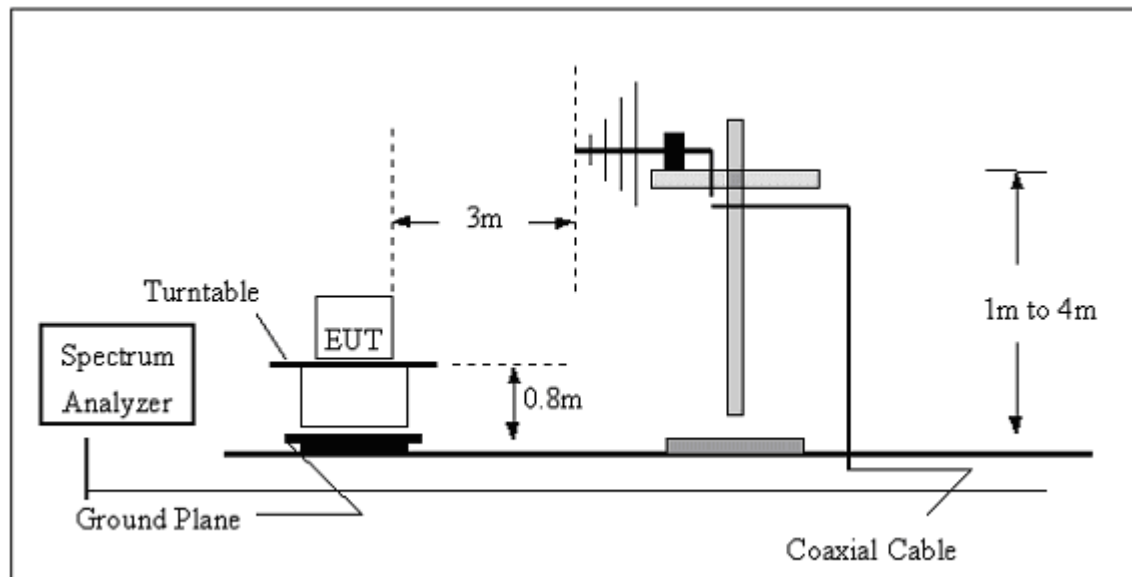
No deviation

3.4.4 TEST SETUP

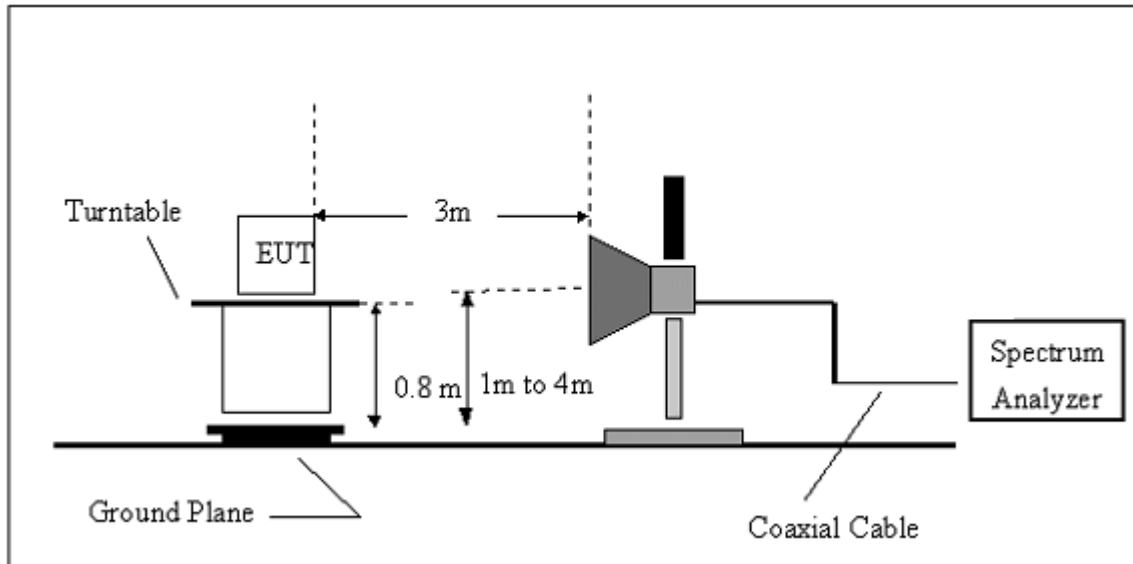
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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





3.4.5 TEST RESULTS (BLOW 30MHz)

EUT :	Wireless Dongle	Model Name. :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
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 = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



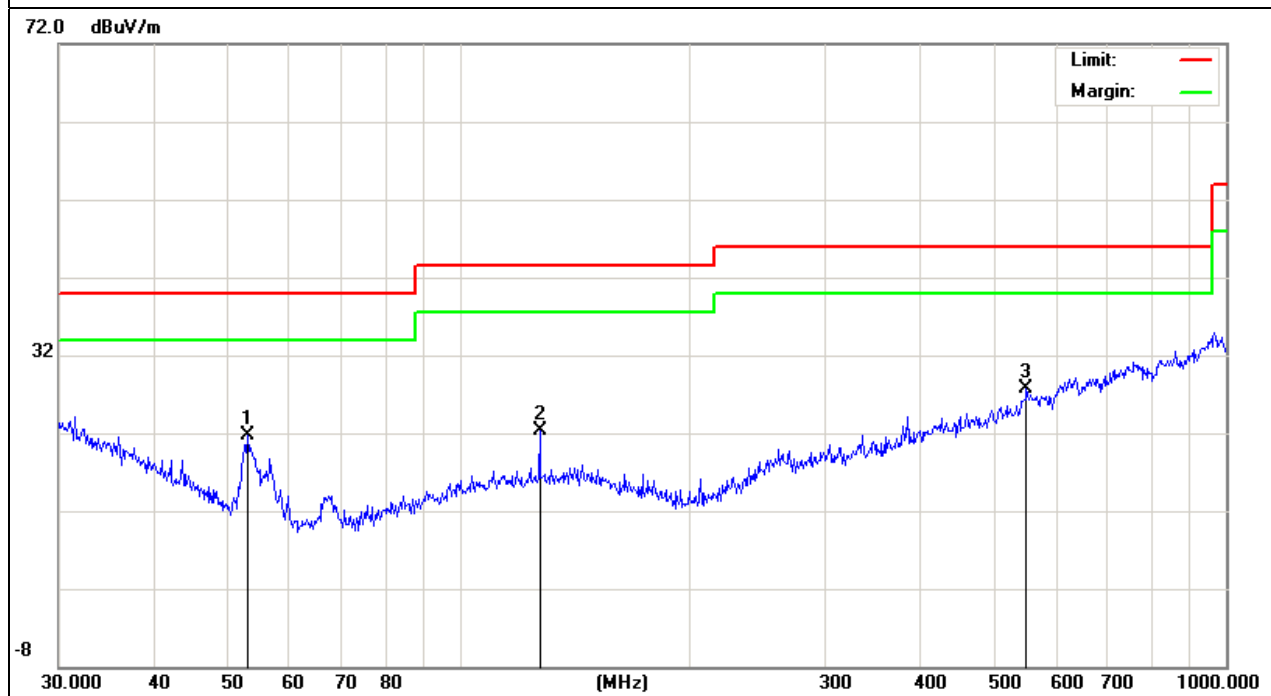
3.4.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX 2408MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
52.9453	14.96	6.84	21.8	40	-18.2	QP
127.2176	10.46	11.91	22.37	43.5	-21.13	QP
549.0193	5.87	21.83	27.7	46	-18.3	QP

Remark:

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



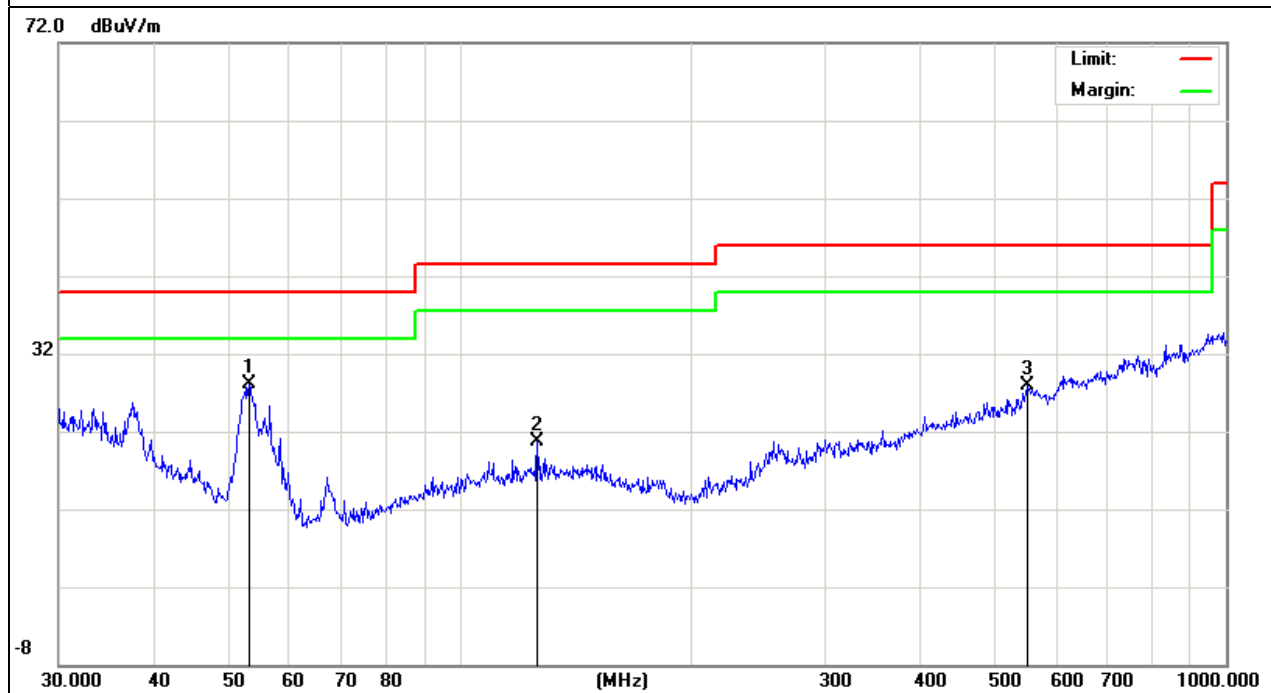


EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX 2408MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
53.1313	21.28	6.76	28.04	40	-11.96	QP
126.3285	8.76	11.9	20.66	43.5	-22.84	QP
550.9479	5.93	21.92	27.85	46	-18.15	QP

Remark:

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



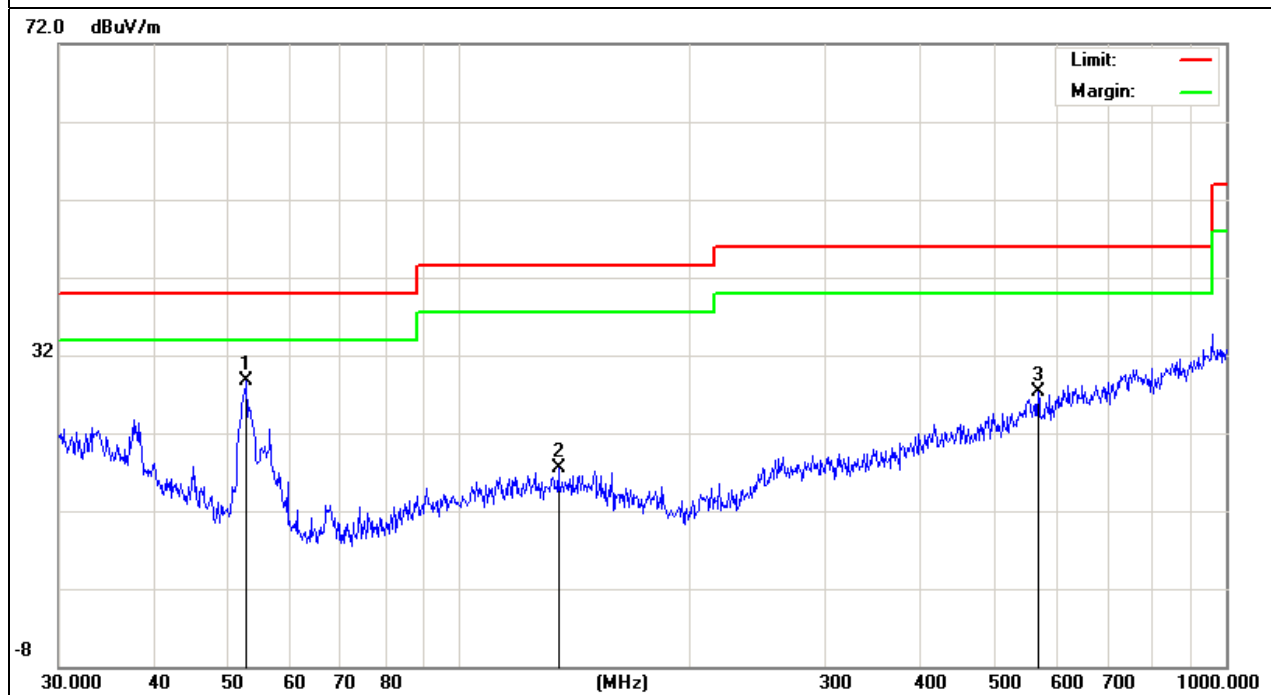


EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX 2440MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
52.7599	21.82	6.92	28.74	40	-11.26	QP
134.5592	5.45	11.98	17.43	43.5	-26.07	QP
568.6127	6.36	20.99	27.35	46	-18.65	QP

Remark:

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



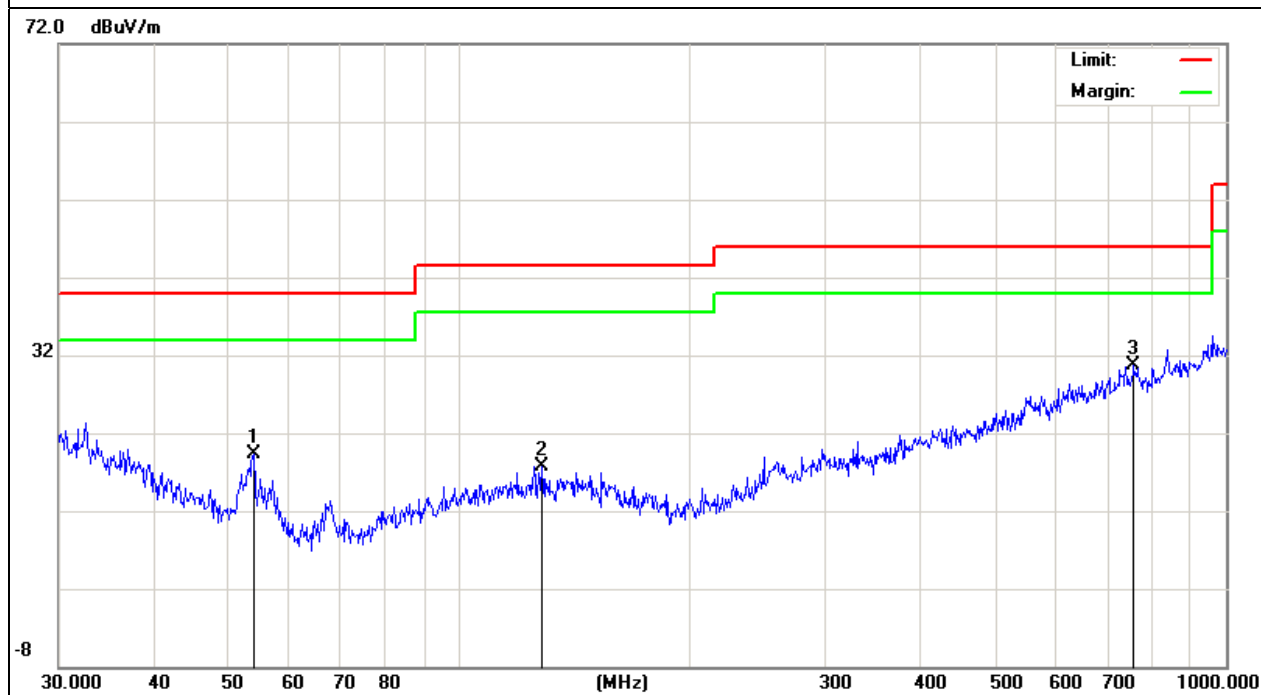


EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX 2440MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
53.8817	12.91	6.45	19.36	40	-20.64	QP
128.1127	5.87	11.91	17.78	43.5	-25.72	QP
758.0407	6.25	24.36	30.61	46	-15.39	QP

Remark:

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



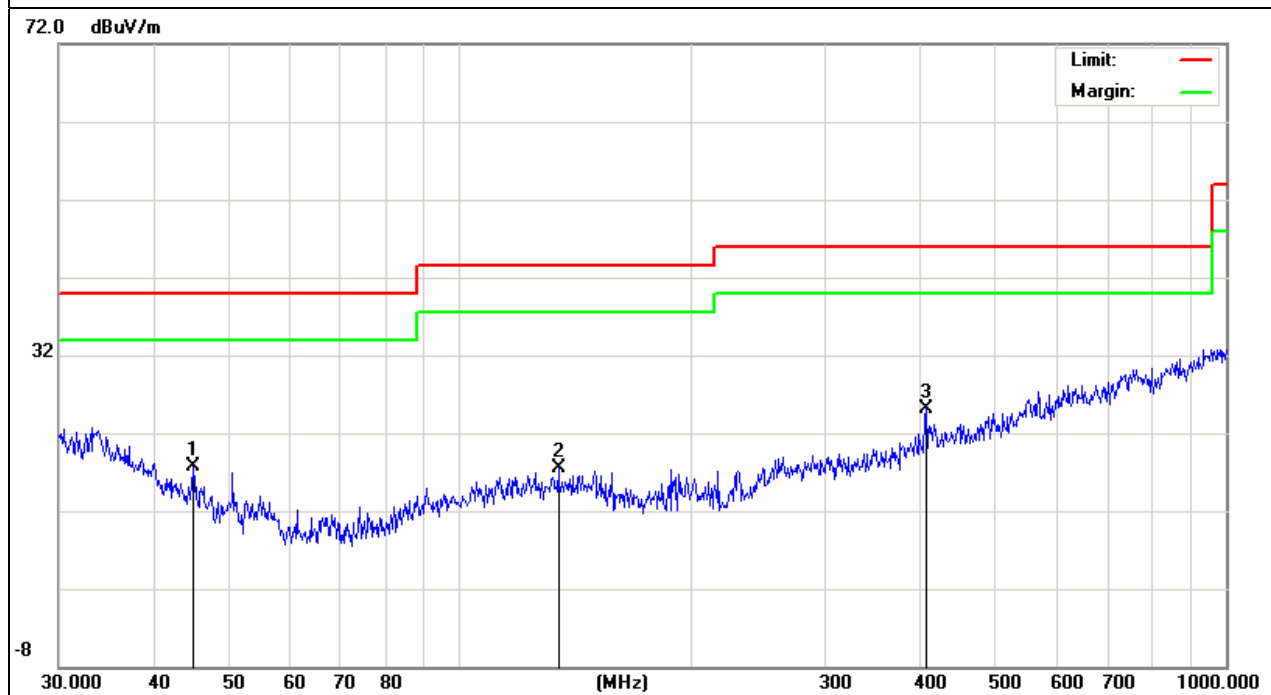


EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX 2472MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
44.9004	7.02	10.66	17.68	40	-22.32	QP
134.5592	5.45	11.98	17.43	43.5	-26.07	QP
406.088	7.72	17.48	25.2	46	-20.8	QP

Remark:

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



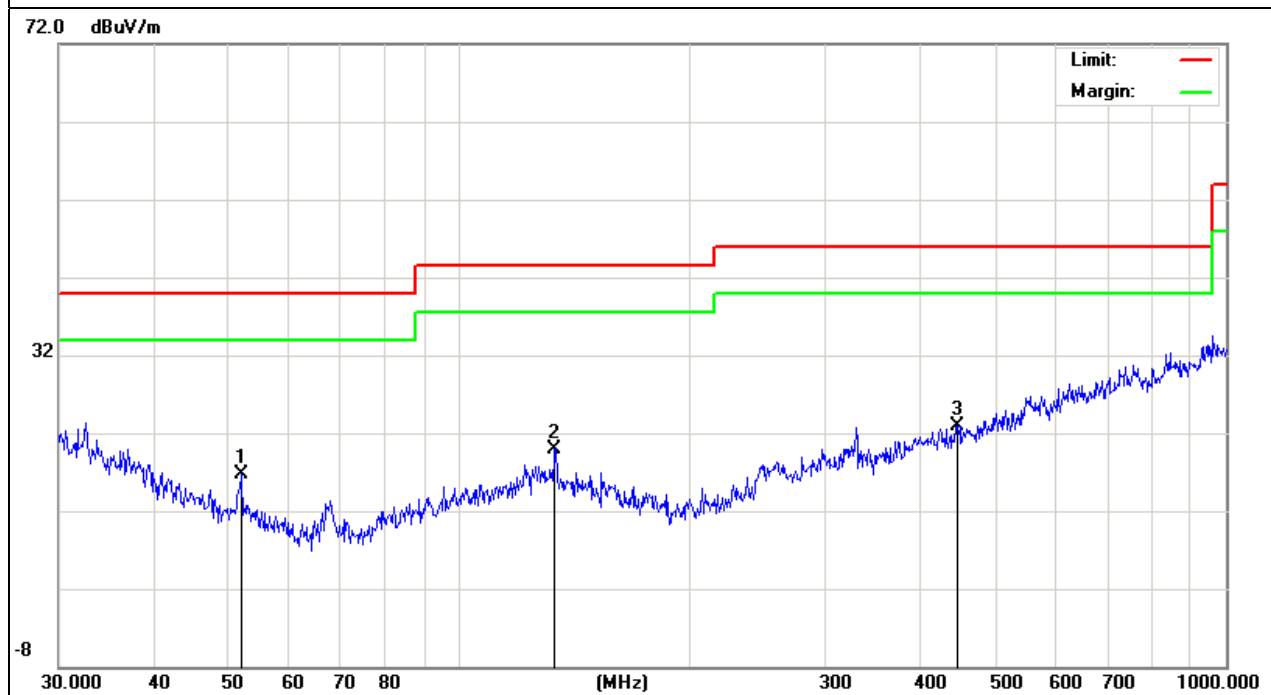


EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX 2472MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
51.843	9.43	7.31	16.74	40	-23.26	QP
133.1511	7.94	11.96	19.9	43.5	-23.6	QP
446.4141	4.87	18.13	23	46	-23	QP

Remark:

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





3.4.7 TEST RESULTS (ABOVE 1000 MHZ)

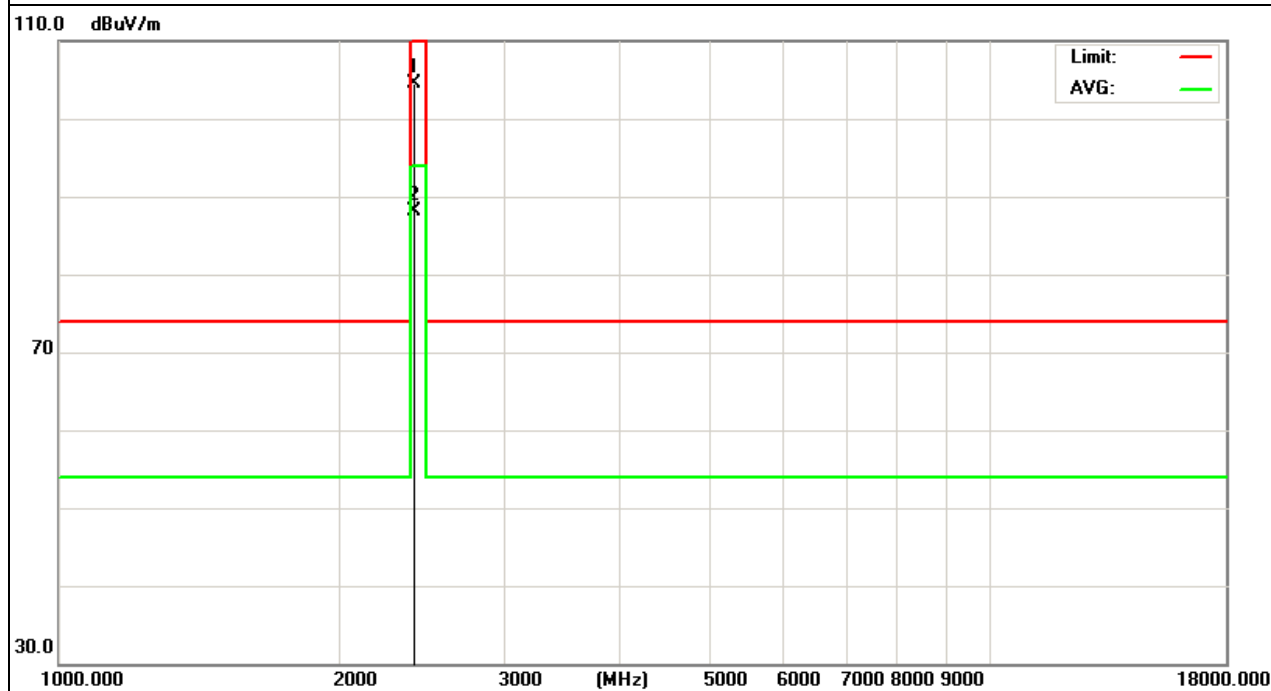
EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2408MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2408	117.44	-12.99	104.45	114.00	-9.55	peak
2408	101.06	-12.99	88.07	94.00	-5.93	AVG

Remark:

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

No emission detected in 18GHz~25GHz.

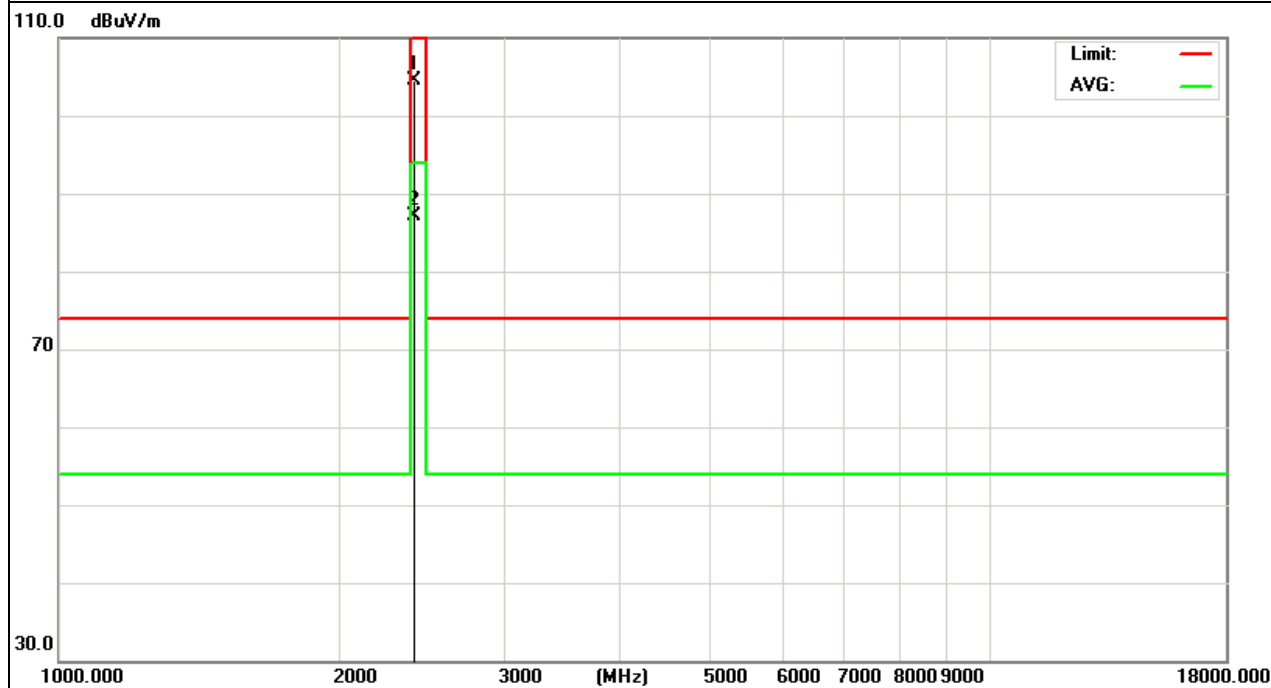




EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2408MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2408	117.46	-12.99	104.47	114.00	-9.53	peak
2408	100.18	-12.99	87.19	94.00	-6.81	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected in 18GHz~25GHz .





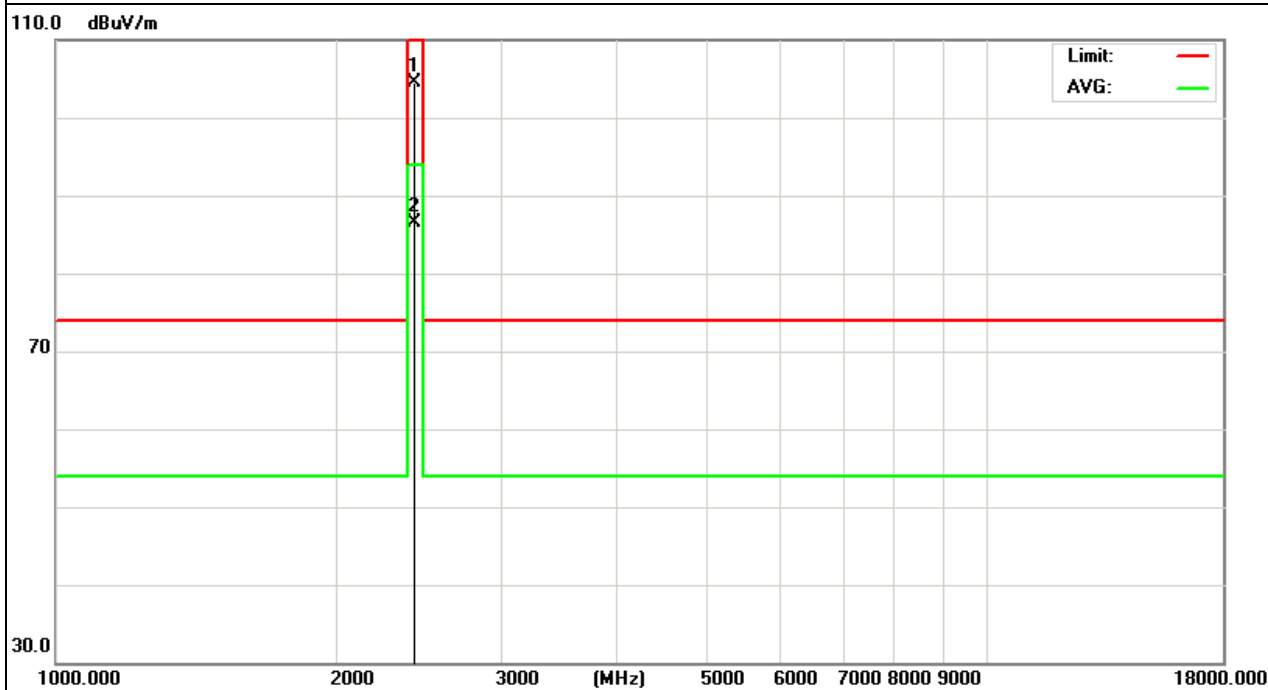
EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2440MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2440	117.42	-12.93	104.49	114.00	-9.51	peak
2440	99.52	-12.93	86.59	94.00	-7.41	AVG

Remark:

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

No emission detected in 18GHz~25GHz .





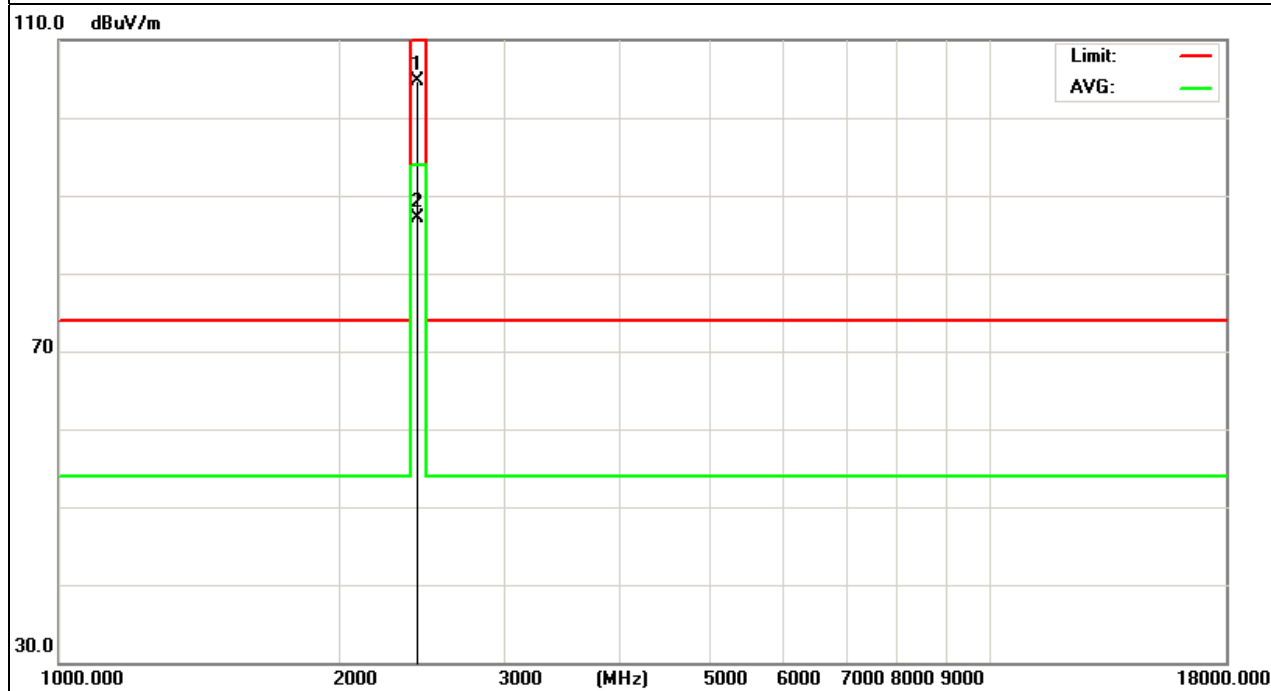
EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2440MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2440	117.54	-12.93	104.61	114.00	-9.39	peak
2440	100.06	-12.93	87.13	94.00	-6.87	AVG

Remark:

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

No emission detected in 18GHz~25GHz .

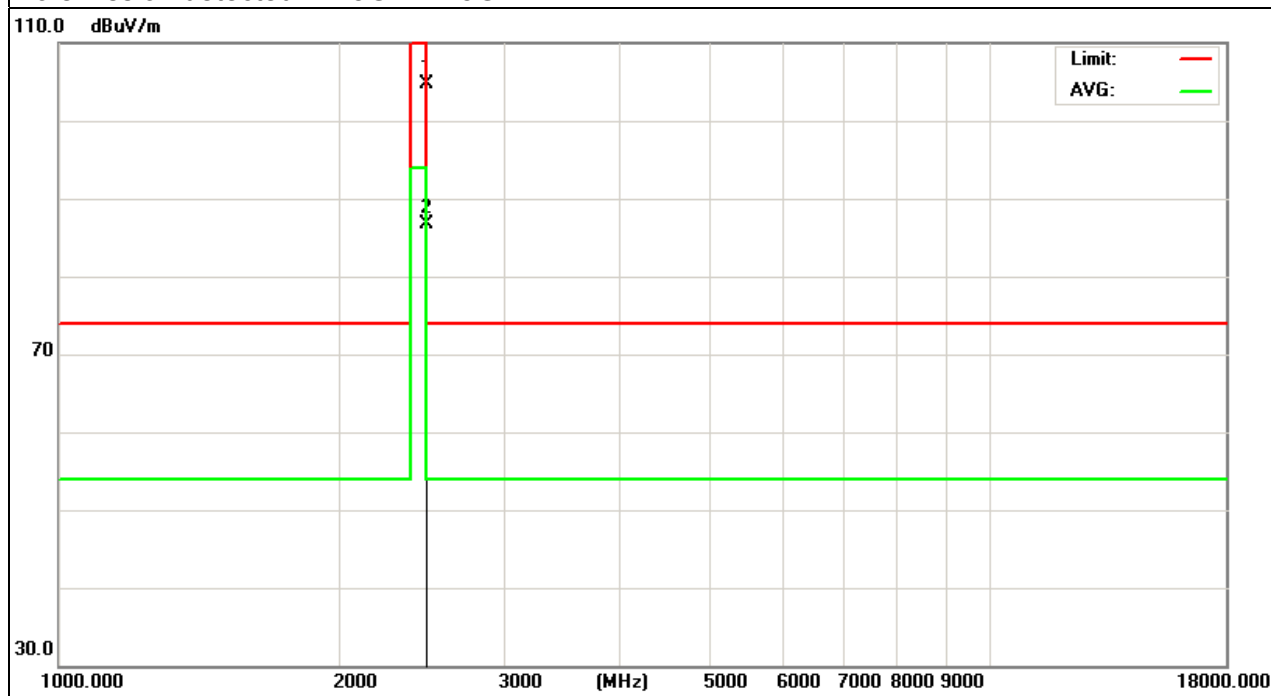




EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2474MHz	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2474	117.55	-12.82	104.73	114.00	-9.27	peak
2474	99.53	-12.82	86.71	94.00	-7.29	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission detected in 18GHz~25GHz .





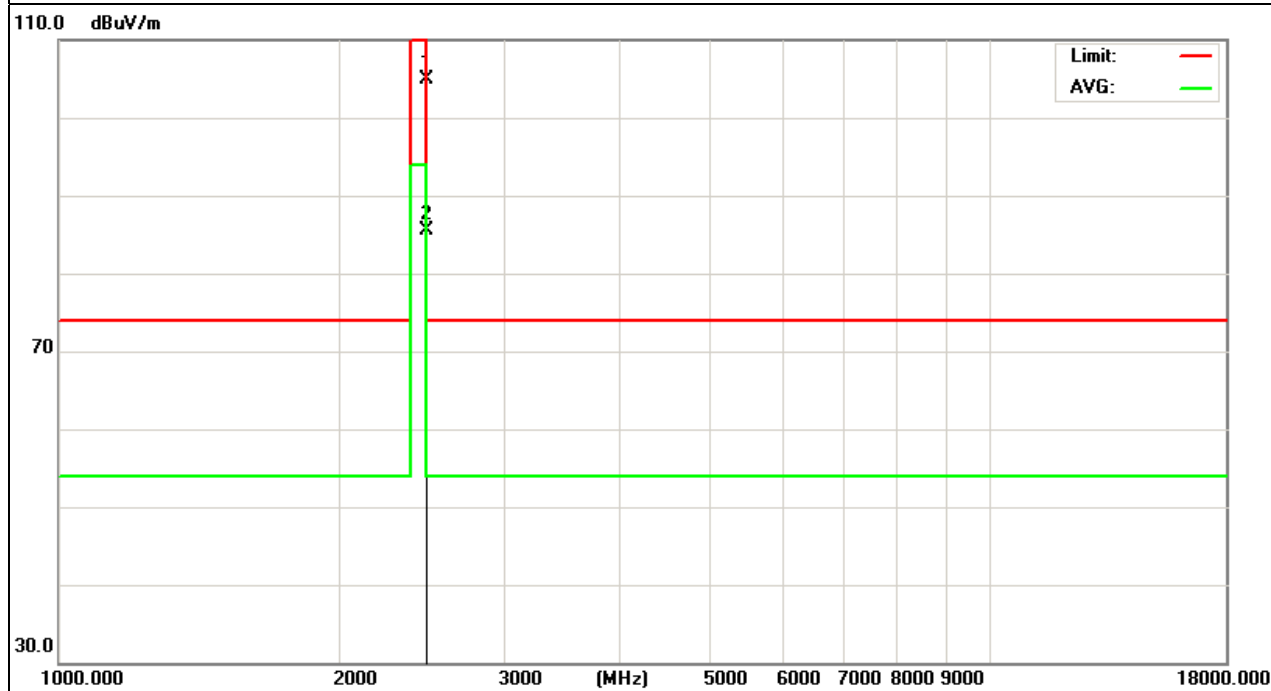
EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2474MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2474	117.63	-12.82	104.81	114.00	-9.19	peak
2474	98.42	-12.82	85.60	94.00	-8.40	AVG

Remark:

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

No emission detected in 18GHz~25GHz .





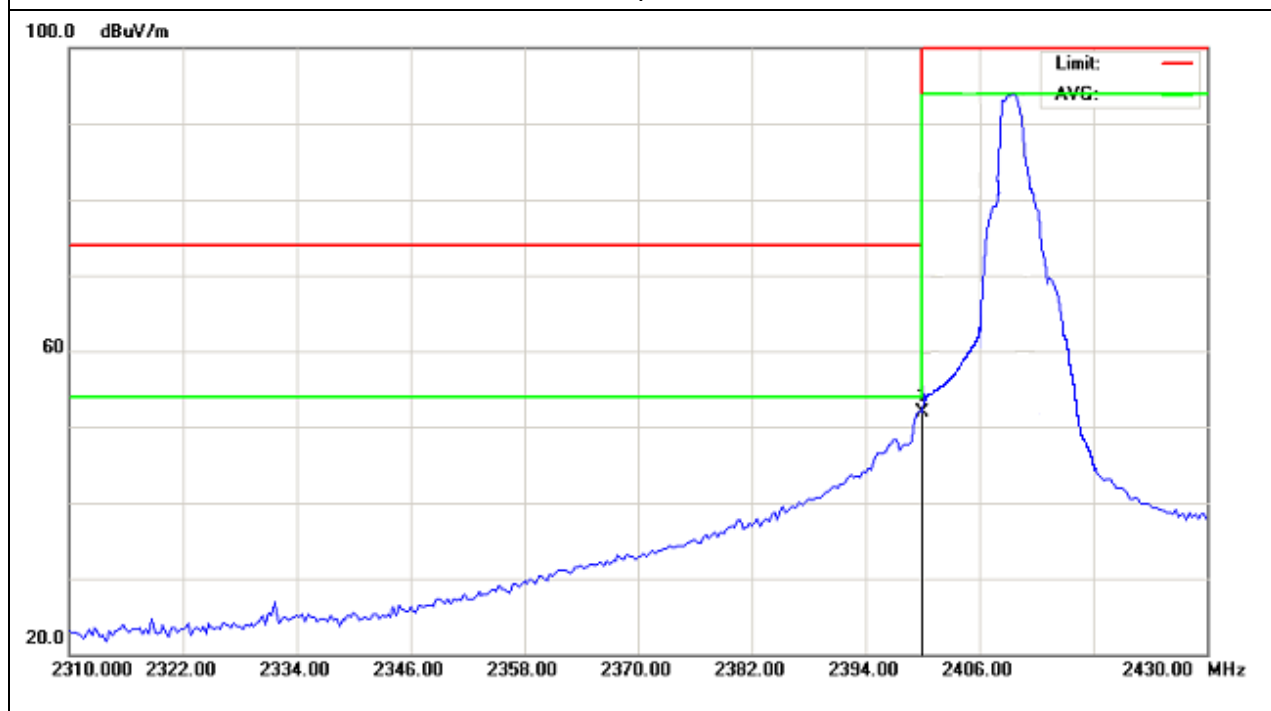
3.4.8 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2408MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2400.000	64.92	-12.99	51.93	74.00	-22.07	peak

Remark:

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

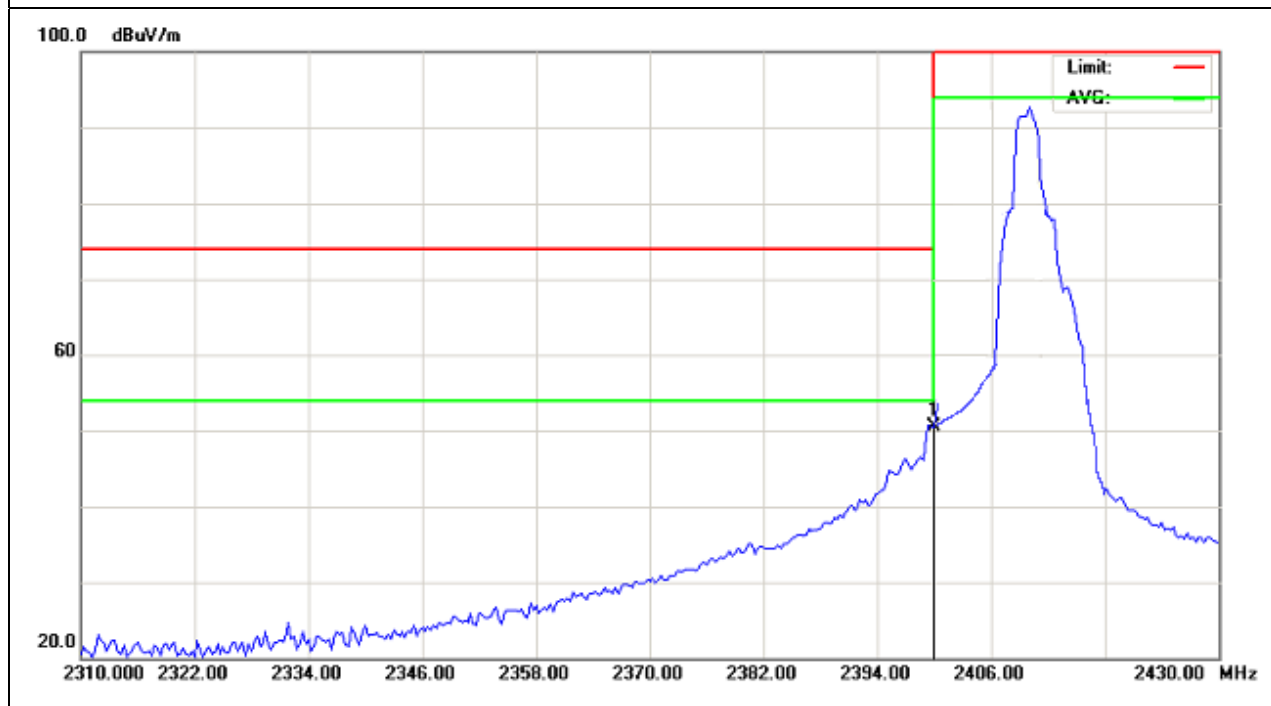




EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2402MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2400.000	63.43	-12.99	50.44	74.00	-23.56	
						peak

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



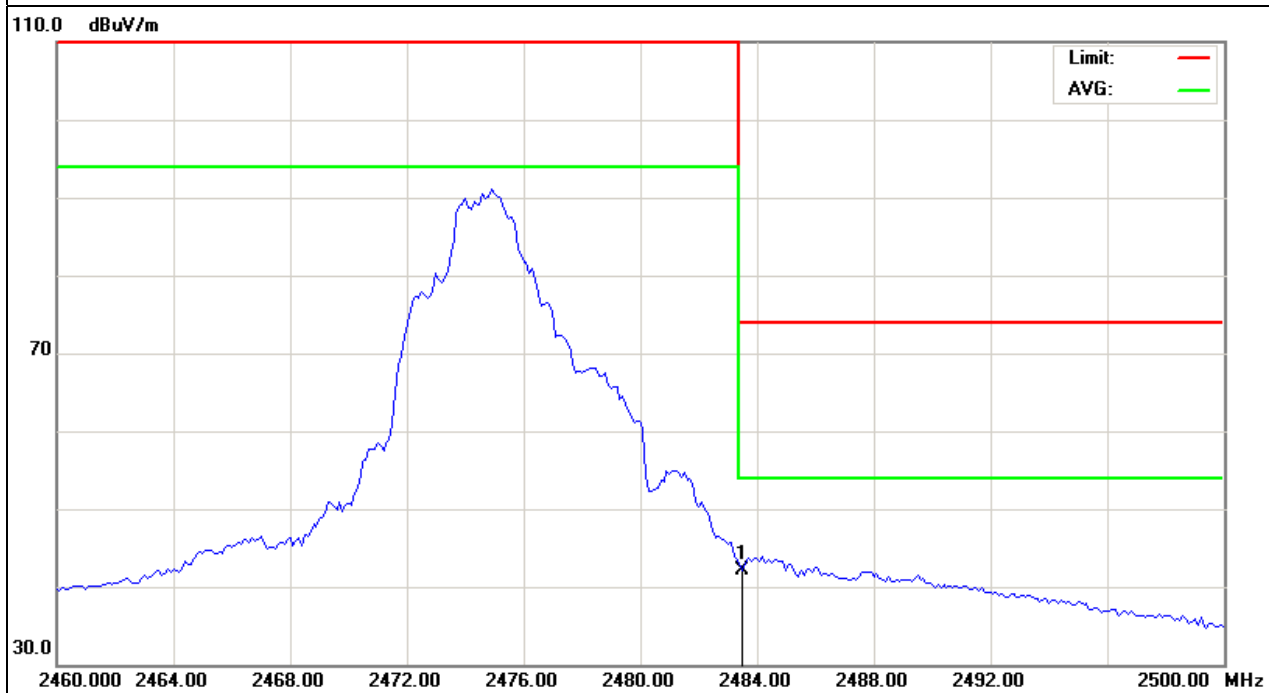


EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2480MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2483.500	54.82	-12.78	42.04	74.00	-31.96	peak

Remark:

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

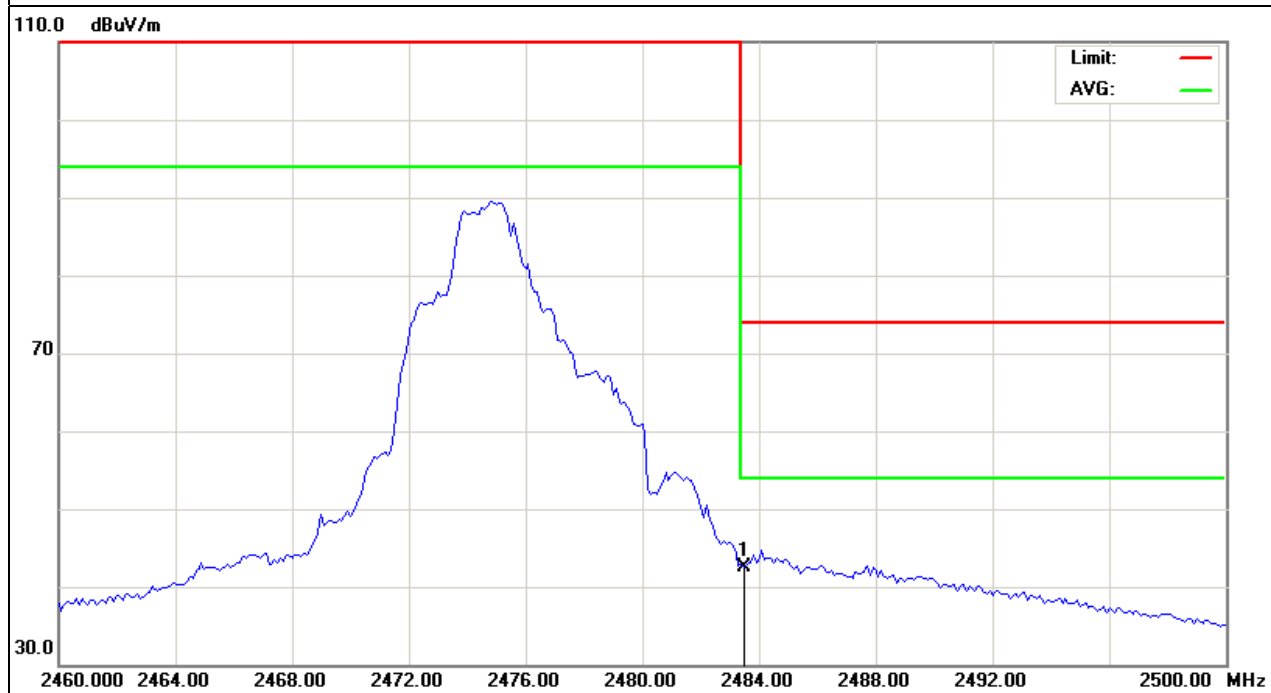




EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX /2480MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2483.500	55.30	-12.78	42.52	74.00	-31.48	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 $\geq$ RBW, Sweep time = Auto.

4.2 DEVIATION FROM STANDARD

No deviation.

4.3 TEST SETUP





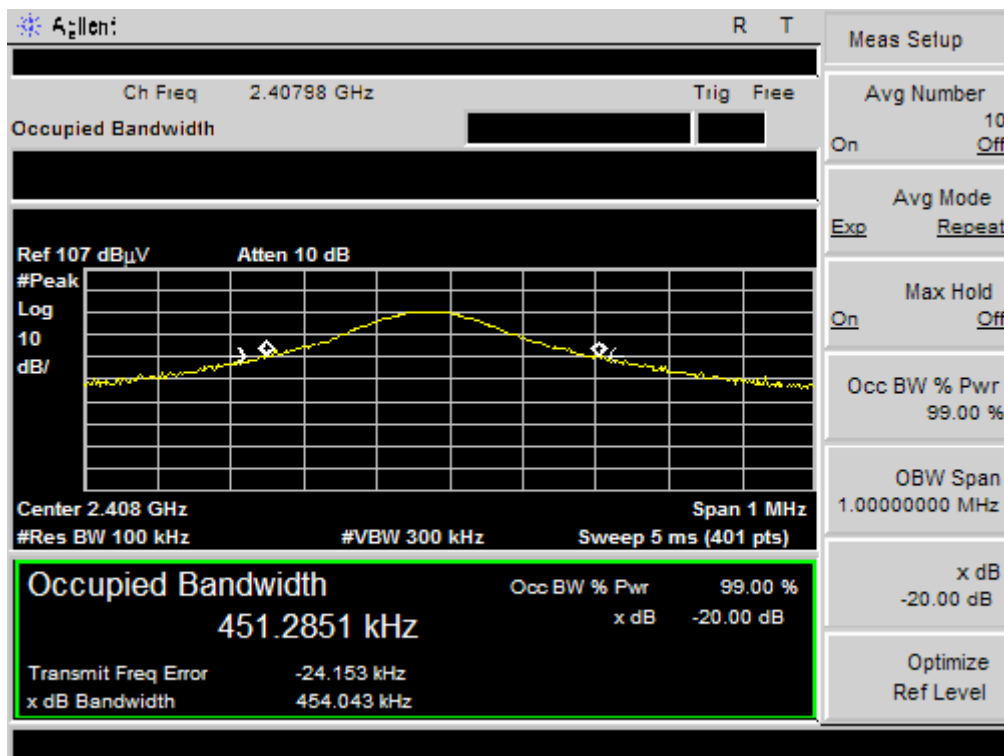
4.4 TEST RESULTS

EUT :	Wireless Dongle	Model Name :	M01291-D
Temperature :	26 °C	Relative Humidity :	53%
Pressure :	1020 hPa	Test Power :	DC 5.0V
Test Mode :	TX CH 1/17/34		

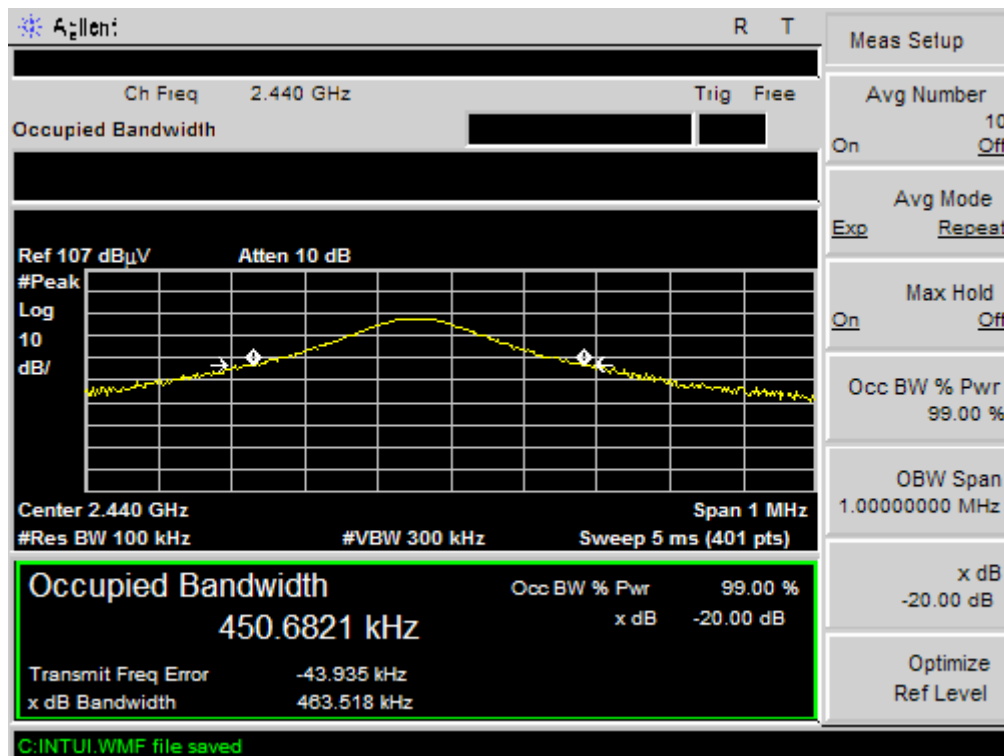
Test Channel	Frequency (MHz)	20 dBc Bandwidth (MHz)
CH01	2408	0.454
CH17	2440	0.463
CH34	2474	0.478



The Lowest Channel:2408MHz

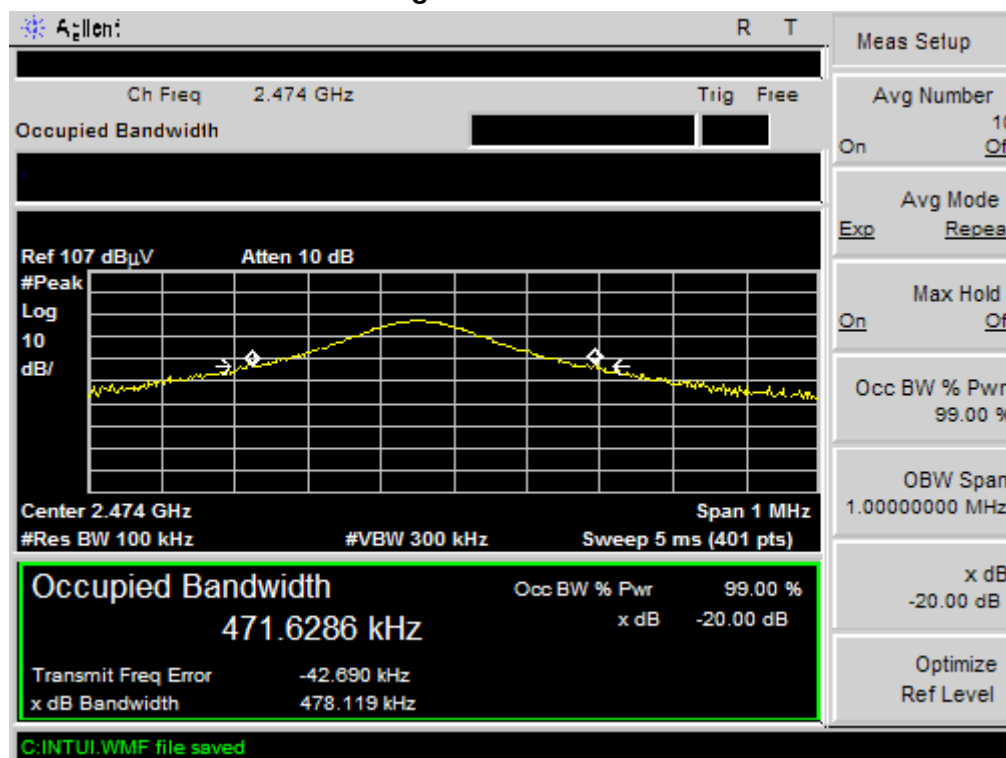


The Middle Channel: 2440MHz





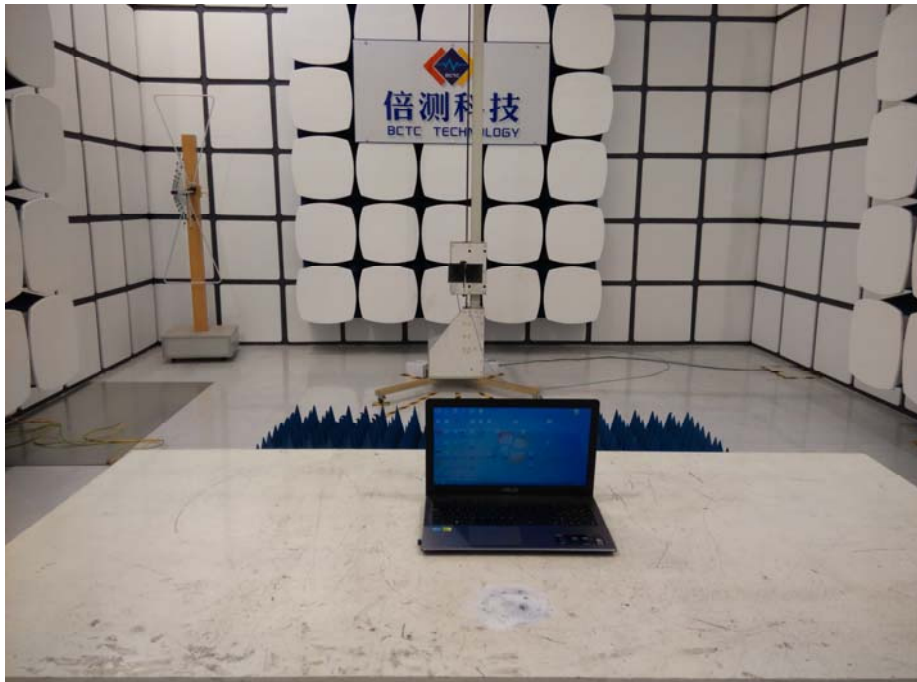
The High Channel:2474MHz





5. EUT TEST PHOTO

Radiated Measurement Photos





Conducted Measurement Photos





EUT PHOTO:

