Test Report of FCC Part 15 C for FCC Certificate

On Behalf of

Pismolabs Technology Limited

Product description:	**Mobile Router**
Model No.:	**MAX600**
FCC ID:	**XRN-MAX600**

Prepared for:	**Pismolabs Technology Limited** Room 1703A, 17/F, Park Building, 476 Castle Peak Road,Cheung Sha Wan, Kowloon, Hong Kong
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Report No.:	BCT09FR-550E
Issue Date:	September 31, 2009
Test Date:	September 12~ 25, 2009

Test by: **Reviewed By:**

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Applicant:	**Pismolabs Technology Limited**
Address of applicant:	Room 1703A, 17/F, Park Building, 476 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong
Manufacturer:	**Pismolabs Technology Limited**
Address of manufacturer:	Room 1703A, 17/F, Park Building, 476 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong
EUT Description:	**Mobile Router**
Tested Model No.:	MAX600
Trademark:	PePWave
Rated Voltage:	DC 12V from AC/DC Adapter
Frequency range:	2412MHz to 2462MHz
Frequency Channel	2412MHz + 5×n (MHz), n＝0, 1, 2,……10
Type of Modulation:	802.11b：DSSS(CCK, DQPSK, DBPSK) 802.11g：OFDM(64QAM, 16AQM, QPSK, BPSK)
Type of Antenna:	Dipole Antenna, Antenna gain : 2dBi
Channel Bandwidth:	5MHz
The Adapter:	SWITCHING POWER SUPPLY MODEL:S024EM1200200 Input:100~240VAC 50/60Hz 600mA Output:12VDC

Remark: * *The test data gathered are from the production sample provided by the manufacturer.*

1.2 Related Submittal(s) / Grant (s)

This submittal(s) is a test report based on the Electromagnetic Interference (EMI) tests performed on the EUT. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4 - 2003.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.207, and 15.247 rules.

1.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 - 2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 Test Facility

All measurement required was performed at laboratory of Bontek Compliance Testing Laboratory Ltd at 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China and SGS-CSTC Standards Technical Services Co., Ltd ShenZhen Branch EMC Lab at No.1 Workshop, M-10, Middle Section, Science&Technology Park, Shenzhen 518057, China

The test facility is recognized, certified, or accredited by the following organizations:

FCC – Registration No.: 338263

Bontek Compliance Testing Laboratory Ltd EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 338263, March 24, 2008.

IC Registration No.: 7631A

The 3m alternate test site of Bontek Compliance Testing Laboratory Ltd EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 7631A on March, 2008.

FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd ShenZhen Branch EMC Lab, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 556682.

2. SYSTEM TEST CONFIGURATION

The tests documented in this report were performed in accordance with ANSI C63.4-2003 and FCC CFR 47 Part 15 Subpart C.

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The calibrated antennas used to sample the radiated field strength are mounted on a non-conductive, motorized antenna mast 3 or 10 meters from the leading edge of the turntable.

2.3 General Test Procedures

Conducted Emissions The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 7.1 of ANSI C63.4-2003.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

Radiated Emissions The EUT is a placed on as turntable, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4-2003.

2.4 List of Measuring Equipments Used

For Radiated Spurious Emission (30~25GHz) test: SGS-CSTC Shenzhen Branch:

Items	Equipment	Manufacturer	Model No.	Last Cal	Calibration Period
1	EMI Test Receiver	R&S	ESI 26	2009/6	1 year
2	Horn Antenna	R/S	CH14-H052	2009/6	1 year
3	3m Semi- Anechoic Chamber	ETS	N/A	2009/6	1 year
4	Horn Antenna	R/S	HF906	2009/6	1 year
5	Spectrum Analyzer	HP	8594EM	2009/6	1 year

For other test: Bontek Compliance Testing Laboratory Ltd

Items	Equipment	Manufacturer	Model No.	Serial No.	Last Cal	Calibration Period
1	EMI Test Receiver	R&S	ESCI	100687	2009-2-22	1 Year
2	EMI Test Receiver	R&S	ESPI	100097	2009-2-22	1 Year
3	Amplifier	HP	8447D	1937A02492	2009-2-22	1 Year
4	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2009-2-22	1 Year
5	3 phase Artificial Mains（L.I.S.N）	SCHWARZBECK	NSLK 8128	8128247	2009-3-31	1 Year
6	Horn Antenna	SCHWARZBECK	BBHA9120A	D69250	2009-2-27	1 Year
7	High Field Biconical Antenna	ELECTRO-METRICS	EM-6913	166	2008-9-04	1 Year
8	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	811	2008-9-04	1 Year
9	Remote Active Vertical Antenna	ELECTRO-METRICS	EM-6892	304	2008-9-04	1 Year
10	Power Clamp	SCHWARZBECK	MDS-21	3812	2009-2-22	1 Year

3. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
15.107 15.207	Conducted Emission : 15.107	PASS
15.247(a)(2)	Spectrum Bandwidth of a Orthogonal Frequency Division Multiplex System Limit : 6dB bandwidth > 500KHz	PASS
15.247(b)	Maximum Peak Output Power Limit : max. 30dBm	PASS
15.109 15.205 15.209	Transmitter Radiated Emissions Limit : Table 15.209	PASS
15.247(e)	Power Spectral Density Limit : max. 8dBm	PASS
15.247(d)	Out of Band Emission and Restricted Band Radiation Limit:20dB less than peak value of fundamental frequency Restricted band Limit:Table 15.209	PASS

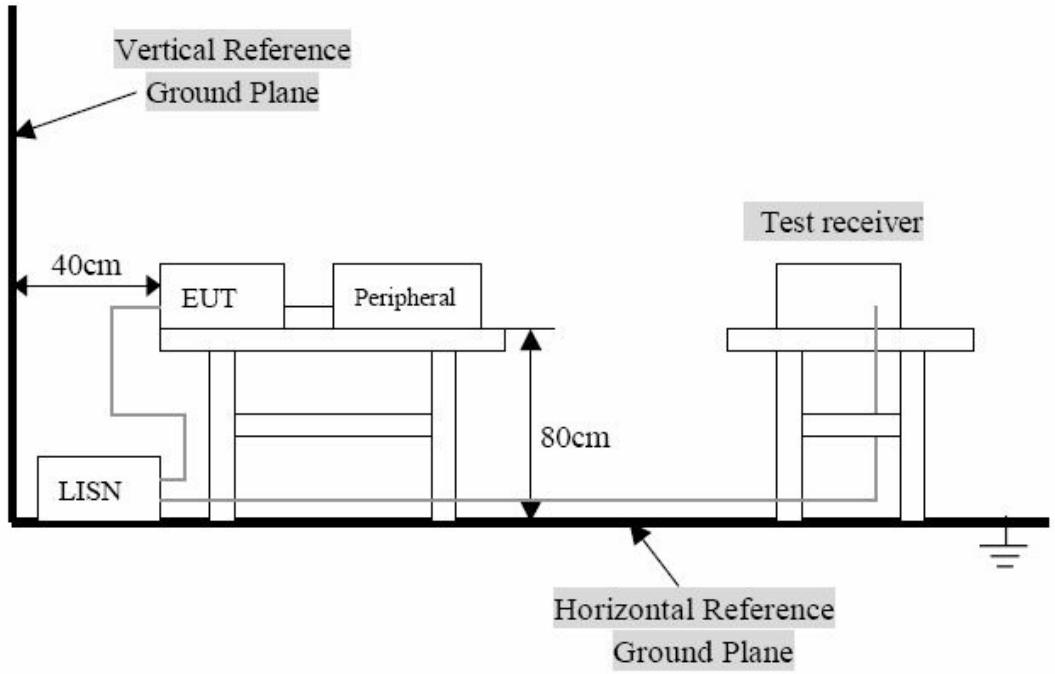
4. TEST OF CONDUCTED EMISSION

4.1 Applicable Standard

Section 15.207: For a Low-power Radio-frequency Device is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency Range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.150～0.500	66～56	56～46
0.500～5.000	56	46
5.000～30.00	60	50

4.2 Test Setup Diagram



Remark: 1. The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC 15.207 limits.

2. The EUT was connected to a 120 VAC/ 60Hz power source

4.3 Test Result

Temperature (℃)	22~23
Humidity (%RH)	50~54
Barometric Pressure (mbar)	950~1000
EUT	Mobile Router
M/N	MAX600
Testing Mode	IEEE 802.11b and IEEE 802.11g

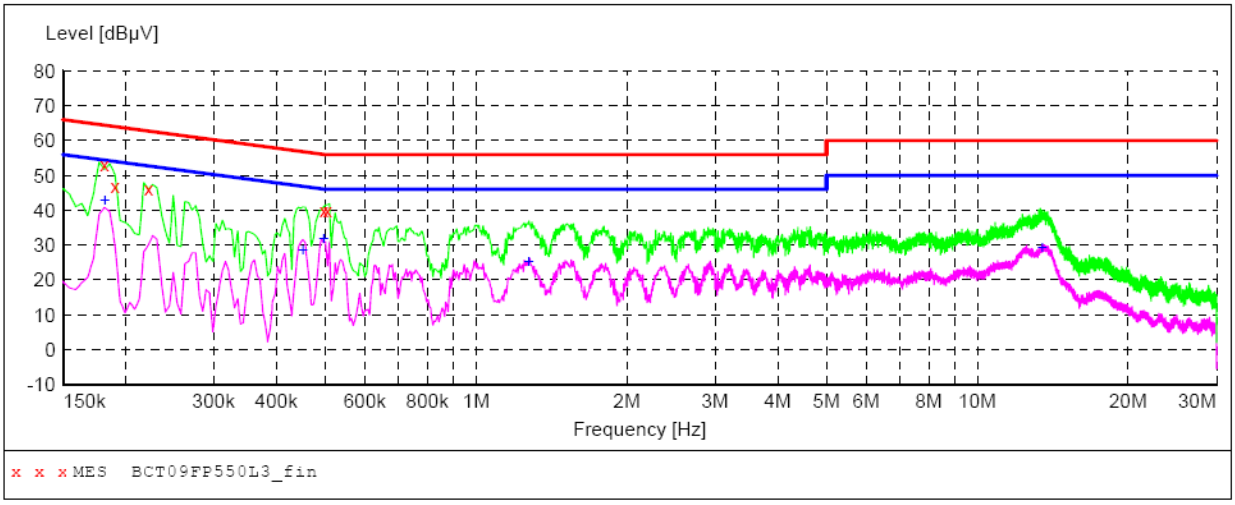
The test data of L line:

Voltage Mains FCC PART 15B

```
EUT:                    Mobile Router    M/N:MX-600
Manufacturer:           BCT
Operating Condition:    CONNECT TO PC
Test Site:              SHIELDED ROOM
Operator:               CHEN
Test Specification:     AC 120V/60Hz
Comment:                L  LINE
                        Temperature:25   Humiuity:50%
```

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "BCT09FP550L3_fin"

9/21/2009 09:16

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	53.20	11.0	64	11.2	QP	L1	GND
0.190500	46.70	10.9	64	17.3	QP	L1	GND
0.222000	46.00	10.7	63	16.7	QP	L1	GND
0.496500	40.00	10.3	56	16.1	QP	L1	GND
0.505500	40.10	10.2	56	15.9	QP	L1	GND

MEASUREMENT RESULT: "BCT09FP550L3_fin2"

9/21/2009 09:16

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	42.80	11.0	54	11.6	AV	L1	GND
0.451500	28.40	10.3	47	18.4	AV	L1	GND
0.496500	32.00	10.3	46	14.1	AV	L1	GND
1.275000	25.10	10.3	46	20.9	AV	L1	GND
13.492500	29.10	10.5	50	20.9	AV	L1	GND

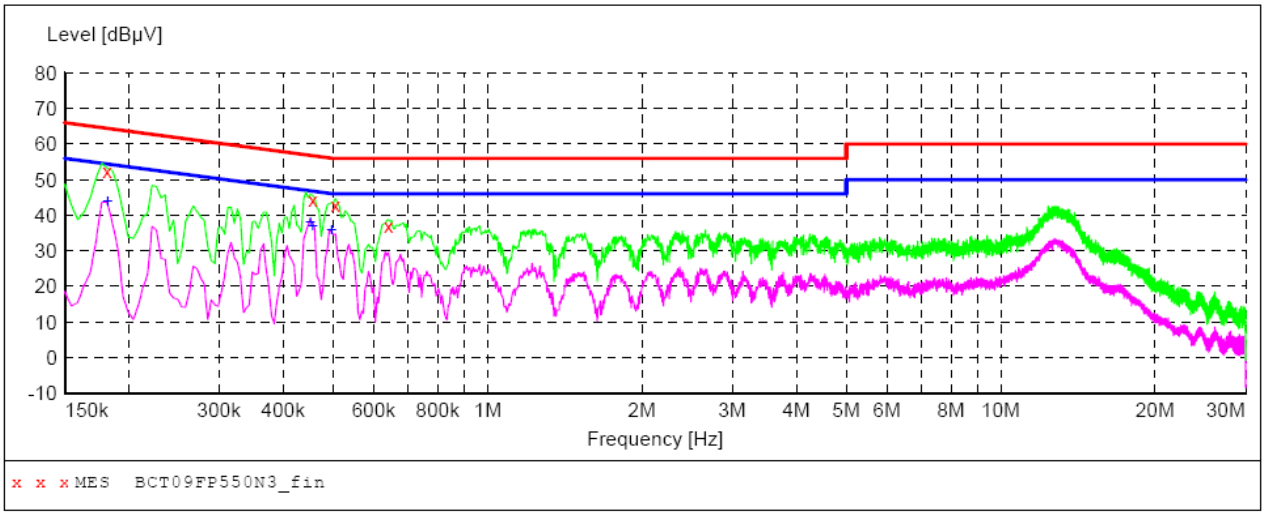
The test data of N line:

Voltage Mains FCC PART 15B

```
EUT:                  Mobile Router   M/N:MX-600M
Manufacturer:         BCT
Operating Condition:  CONNECT TO PC
Test Site:            SHIELDED ROOM
Operator:             CHEN
Test Specification:   AC 120V/60Hz
Comment:              N  LINE
                      Temperature:25  Humiuity:50%
```

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "BCT09FP550N3_fin"

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Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	52.60	11.0	64	11.8	QP	N	GND
0.456000	44.30	10.3	57	12.5	QP	N	GND
0.505500	42.80	10.2	56	13.2	QP	N	GND
0.640500	37.10	10.2	56	18.9	QP	N	GND

MEASUREMENT RESULT: "BCT09FP550N3_fin2"

9/21/2009 09:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.181500	44.00	11.0	54	10.4	AV	N	GND
0.451500	38.10	10.3	47	8.7	AV	N	GND
0.456000	37.10	10.3	47	9.7	AV	N	GND
0.496500	35.80	10.3	46	10.3	AV	N	GND

5. Test of Spurious Radiated Emission

5.1 Applicable Standard

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions that fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209.

5.2 Radiated Limit

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table. According to § 15.247(d), in any 100kHz bandwidth outside the frequency band in which the EUT is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of desired power.

5.3 EUT Setup

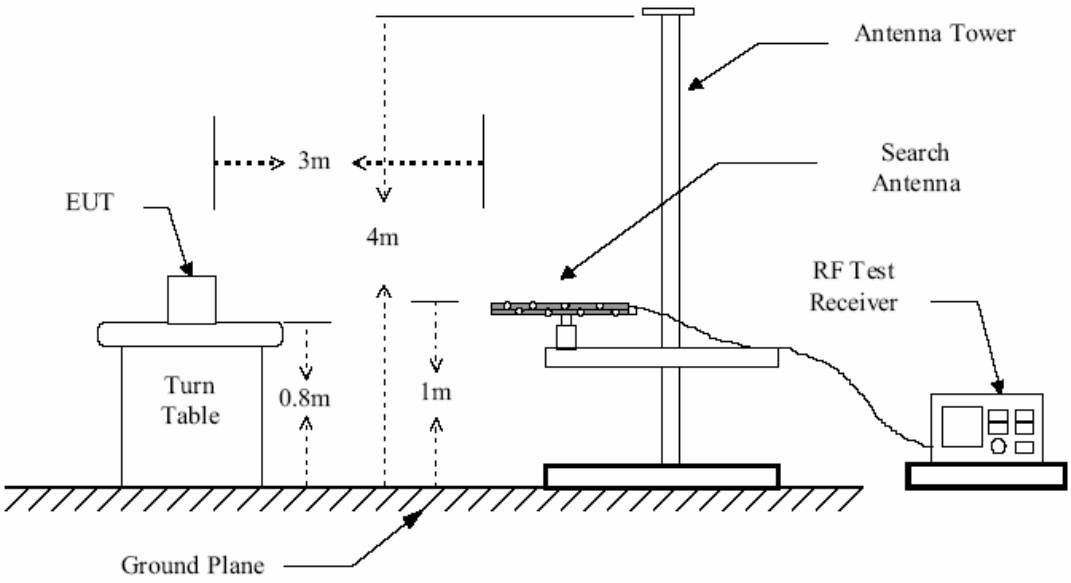


Figure 1 : Frequencies measured below 1 GHz configuration

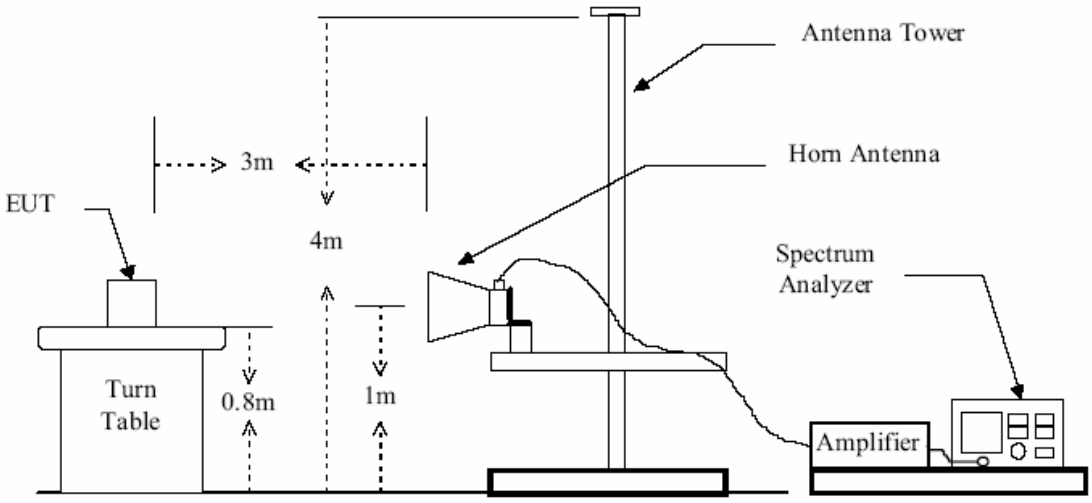


Figure 2 : Frequencies measured above 1 GHz configuration

5.4 Test Equipment List and Details

See section 2.4.

5.5 Test Procedure

1. Configure the EUT according to ANSI C63.4.

2. The EUT was placed on the top of the turntable 0.8 meter above ground.

3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.

4. Power on the EUT and all the supporting units.

5. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.

7. For each suspected emission, the antenna tower was scanned (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.

8. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.

5.6 Test Result

Temperature (℃)	22~23
Humidity (%RH)	50~54
Barometric Pressure (mbar)	950~1000
EUT	Mobile Router
M/N	MAX600
Testing Mode	IEEE 802.11b and IEEE 802.11g

Spurious Radiated Emission data below 1GHz

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading at 3m(dBμV)		Limits (dBμV/m)	Emission Level at 3m(dBμV/m)	
			Horizontal	Vertical		Horizontal	Vertical
			*	*	40.00	*	*
124.99	12.95	2.21	15.90	22.30	43.50	31.06	37.46
200.02	9.80	3.14	17.40	18.60	43.50	30.34	31.54
249.99	12.72	4.01	24.20	19.80	46.00	40.93	36.53
374.99	17.18	4.71	23.10	22.50	46.00	45.00	44.40
437.48	18.19	4.98	19.10	16.90	46.00	42.27	40.07
750.00	20.13	6.54	7.50	10.50	46.00	34.17	37.17
999.96	21.84	7.66	8.10	9.20	54.00	37.60	38.70
1000.00	21.30	7.00	*	*	54.00	*	*

Note :
1. * Undetectable
2. Emission level (dBμV/m) = Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. The test data marked in gray background means the EUT emission data is located in the margin uncertainty range of emission limits.

Spurious Radiated Emission data above 1GHz

For Wireless 802.11b mode at 11Mbps:

	CH1 TX			Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBµV)	AF (dBµV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*2389.90	13.40	31.81	3.57	0.00	9.50	0.00	39.28	74.00	-34.72	P	1.00
*2389.90	3.70	31.81	3.57	0.00	9.50	0.00	29.58	54.00	-24.42	A	1.00
2399.90	24.00	31.80	3.58	0.00	9.50	0.00	49.88	77.75	-27.87	P	1.00
2399.90	13.50	31.80	3.58	0.00	9.50	0.00	39.38	70.82	-31.44	A	1.00
2412.93	71.88	31.79	3.58	0.00	9.50	0.00	97.75	Fundamental Frequency		P	1.00
2412.93	64.95	31.79	3.58	0.00	9.50	0.00	90.82			A	1.00
*1500.00	59.66	28.10	2.89	35.60	9.50	0.00	45.55	74.00	-28.45	P	1.00
*1500.00	57.39	28.10	2.89	35.60	9.50	0.00	43.28	54.00	-10.72	A	1.00
*4823.86	45.46	34.44	5.08	35.16	9.50	2.00	42.33	74.00	-31.67	P	1.00
*4823.86	33.03	34.44	5.08	35.16	9.50	2.00	29.90	54.00	-24.10	A	1.00
7236.00	44.66	39.81	6.74	35.65	9.50	2.00	48.05	77.75	-29.70	P	1.00
7236.00	32.32	39.81	6.74	35.65	9.50	2.00	35.71	70.82	-35.11	A	1.00
9648.00	46.78	38.54	8.29	36.44	9.50	0.61	48.28	77.75	-29.47	P	1.00
9648.00	34.10	38.54	8.29	36.44	9.50	0.61	35.60	70.82	-35.22	A	1.00
* 12064.65					9.50	0.80					1.00
* 14477.58					0.00	0.67					1.00
16890.51					0.00	0.43					1.00
* 19303.44					0.00	1.96					1.00
21716.37					0.00	0.81					1.00
24129.30					0.00	2.89					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11b mode at 11Mbps:

	CH1 TX				Measurement Distance at 3m Vertical polarity						
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*2389.90	22.10	31.81	3.57	0.00	9.50	0.00	47.98	74.00	-26.02	P	1.00
*2389.90	10.10	31.81	3.57	0.00	9.50	0.00	35.98	54.00	-18.02	A	1.00
2399.90	37.20	31.80	3.58	0.00	9.50	0.00	63.08	89.07	-25.99	P	1.00
2399.90	26.80	31.80	3.58	0.00	9.50	0.00	52.68	82.28	-29.60	A	1.00
2410.22	83.20	31.79	3.58	0.00	9.50	0.00	109.07	Fundamental Frequency		P	1.00
2410.22	76.41	31.79	3.58	0.00	9.50	0.00	102.28			A	1.00
*1500.00	64.48	28.10	2.89	35.60	9.50	0.00	50.37	74.00	-23.63	P	1.00
*1500.00	61.95	28.10	2.89	35.60	9.50	0.00	47.84	54.00	-6.16	A	1.00
*4823.91	45.73	34.44	5.08	35.16	9.50	2.00	42.60	74.00	-31.40	P	1.00
*4823.91	34.69	34.44	5.08	35.16	9.50	2.00	31.56	54.00	-22.44	A	1.00
7236.02	46.30	39.81	6.74	35.65	9.50	2.00	49.69	89.07	-39.38	P	1.00
7236.02	33.69	39.81	6.74	35.65	9.50	2.00	37.08	82.28	-45.20	A	1.00
9648.00	46.34	38.54	8.29	36.44	9.50	0.61	47.84	89.07	-41.23	P	1.00
9648.00	34.30	38.54	8.29	36.44	9.50	0.61	35.80	82.28	-46.48	A	1.00
* 12051.10					9.50	0.80					1.00
14461.32					0.00	0.65					1.00
16871.54					0.00	0.42					1.00
* 19281.76					0.00	1.94					1.00
21691.98					0.00	0.82					1.00
24102.20					0.00	2.94					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11b mode at 11Mbps:

	CH6 TX			Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2437.68	71.12	31.76	3.59	0.00	9.50	0.00	96.97	Fundamental Frequency		P	1.00
2437.68	64.17	31.76	3.59	0.00	9.50	0.00	90.02			A	1.00
*1500.00	60.25	28.10	2.89	35.60	9.50	0.00	46.14	74.00	-27.86	P	1.00
*1500.00	57.67	28.10	2.89	35.60	9.50	0.00	43.56	54.00	-10.44	A	1.00
*4874.08	45.35	34.77	5.10	35.20	9.50	1.80	42.32	74.00	-31.68	P	1.00
*4874.08	32.80	34.77	5.10	35.20	9.50	1.80	29.77	54.00	-24.23	A	1.00
*7311.05	46.73	39.78	6.79	35.64	9.50	2.00	50.16	74.00	-23.84	P	1.00
*7311.05	33.90	39.78	6.79	35.64	9.50	2.00	37.33	54.00	-16.67	A	1.00
9747.89	44.48	38.53	8.33	36.60	9.50	0.55	45.79	76.97	-31.19	P	1.00
9747.89	34.30	38.53	8.33	36.60	9.50	0.55	35.61	70.02	-34.42	A	1.00
* 12188.40					9.50	0.80					1.00
14626.08					0.00	0.60					1.00
17063.76					0.00	0.53					1.00
* 19501.44					0.00	2.20					1.00
21939.12					0.00	0.72					1.00
24376.80					0.00	2.50					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11b mode at 11Mbps:

	CH6 TX				Measurement Distance at 3m Vertical polarity						
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2435.92	83.22	31.76	3.59	0.00	9.50	0.00	109.08	Fundamental Frequency		P	1.00
2435.92	76.38	31.76	3.59	0.00	9.50	0.00	102.24			A	1.00
*1500.00	64.46	28.10	2.89	35.60	9.50	0.00	50.35	74.00	-23.65	P	1.00
*1500.00	61.92	28.10	2.89	35.60	9.50	0.00	47.81	54.00	-6.19	A	1.00
*4874.07	44.90	34.77	5.10	35.20	9.50	1.80	41.87	74.00	-32.13	P	1.00
*4874.07	35.75	34.77	5.10	35.20	9.50	1.80	32.72	54.00	-21.28	A	1.00
*7311.01	45.84	39.78	6.79	35.64	9.50	2.00	49.27	74.00	-24.73	P	1.00
*7311.01	33.48	39.78	6.79	35.64	9.50	2.00	36.91	54.00	-17.09	A	1.00
9747.98	47.10	38.53	8.33	36.60	9.50	0.55	48.41	89.08	-40.67	P	1.00
9747.98	34.30	38.53	8.33	36.60	9.50	0.55	35.61	82.24	-46.63	A	1.00
* 12179.60					9.50	0.80					1.00
14615.52					0.00	0.61					1.00
17051.44					0.00	0.52					1.00
* 19487.36					0.00	2.18					1.00
21923.28					0.00	0.73					1.00
24359.20					0.00	2.53					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11b mode at 11Mbps:

	CH11 TX			Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2462.55	70.43	31.74	3.60	0.00	9.50	0.00	96.27	Fundamental Frequency		P	1.00
2462.55	63.60	31.74	3.60	0.00	9.50	0.00	89.44			A	1.00
*2483.50	13.20	31.72	3.61	0.00	9.50	0.00	39.03	74.00	-34.97	P	1.00
*2483.50	3.10	31.72	3.61	0.00	9.50	0.00	28.93	54.00	-25.07	A	1.00
*2483.60	14.60	31.72	3.61	0.00	9.50	0.00	40.43	74.00	-33.57	P	1.00
*2483.60	3.00	31.72	3.61	0.00	9.50	0.00	28.83	54.00	-25.17	A	1.00
*1500.00	60.15	28.10	2.89	35.60	9.50	0.00	46.04	74.00	-27.96	P	1.00
*1500.00	57.49	28.10	2.89	35.60	9.50	0.00	43.38	54.00	-10.62	A	1.00
*4924.19	45.69	35.10	5.12	35.24	9.50	1.60	42.77	74.00	-31.23	P	1.00
*4924.19	33.00	35.10	5.12	35.24	9.50	1.60	30.08	54.00	-23.92	A	1.00
*7386.33	46.85	39.75	6.84	35.62	9.50	2.00	50.32	74.00	-23.68	P	1.00
*7386.33	34.02	39.75	6.84	35.62	9.50	2.00	37.49	54.00	-16.51	A	1.00
9847.90	44.64	38.52	8.37	36.76	9.50	0.49	45.76	76.27	-30.52	P	1.00
9847.90	34.50	38.52	8.37	36.76	9.50	0.49	35.62	69.44	-33.83	A	1.00
* 12312.75					9.50	0.80					1.00
14775.30					0.00	0.48					1.00
17237.85					0.00	0.60					1.00
* 19700.40					0.00	2.40					1.00
* 22162.95					0.00	0.70					1.00
24625.50					0.00	2.12					1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11b mode at 11Mbps:

	CH11 TX				Measurement Distance at 3m Vertical polarity						
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2462.63	81.85	31.74	3.60	0.00	9.50	0.00	107.69	Fundamental Frequency		P	1.00
2462.63	74.97	31.74	3.60	0.00	9.50	0.00	100.81			A	1.00
*2483.50	23.50	31.72	3.61	0.00	9.50	0.00	49.33	74.00	-24.67	P	1.00
*2483.50	11.80	31.72	3.61	0.00	9.50	0.00	37.63	54.00	-16.37	A	1.00
*2483.60	22.90	31.72	3.61	0.00	9.50	0.00	48.73	74.00	-25.27	P	1.00
*2483.60	11.30	31.72	3.61	0.00	9.50	0.00	37.13	54.00	-16.87	A	1.00
*1500.00	64.85	28.10	2.89	35.60	9.50	0.00	50.74	74.00	-23.26	P	1.00
*1500.00	61.65	28.10	2.89	35.60	9.50	0.00	47.54	54.00	-6.46	A	1.00
*4923.78	44.25	35.10	5.12	35.24	9.50	1.60	41.33	74.00	-32.67	P	1.00
*4923.78	35.24	35.10	5.12	35.24	9.50	1.60	32.32	54.00	-21.68	A	1.00
*7386.05	45.68	39.75	6.84	35.62	9.50	2.00	49.15	74.00	-24.85	P	1.00
*7386.05	34.24	39.75	6.84	35.62	9.50	2.00	37.71	54.00	-16.29	A	1.00
9847.85	47.12	38.52	8.37	36.76	9.50	0.49	48.24	87.69	-39.46	P	1.00
9847.85	35.67	38.52	8.37	36.76	9.50	0.49	36.79	80.81	-44.03	A	1.00
* 12313.15					9.50	0.80					1.00
14775.78					0.00	0.48					1.00
17238.41					0.00	0.60					1.00
* 19701.04					0.00	2.40					1.00
* 22163.67					0.00	0.70					1.00
24626.30					0.00	2.12					1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11g mode at 6Mbps:

	CH1 TX			Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*2389.90	31.40	31.81	3.57	0.00	9.50	0.00	57.28	74.00	-16.72	P	1.00
*2389.90	10.30	31.81	3.57	0.00	9.50	0.00	36.18	54.00	-17.82	A	1.00
2399.90	46.20	31.80	3.58	0.00	9.50	0.00	72.08	77.67	-5.60	P	1.00
2399.90	28.00	31.80	3.58	0.00	9.50	0.00	53.88	68.53	-14.66	A	1.00
2407.11	71.80	31.79	3.58	0.00	9.50	0.00	97.67	Fundamental Frequency		P	1.00
2407.11	62.66	31.79	3.58	0.00	9.50	0.00	88.53			A	1.00
*1500.00	59.16	28.10	2.89	35.60	9.50	0.00	45.05	74.00	-28.95	P	1.00
*1500.00	57.28	28.10	2.89	35.60	9.50	0.00	43.17	54.00	-10.83	A	1.00
*4824.00	45.59	34.44	5.08	35.16	9.50	2.00	42.46	74.00	-31.54	P	1.00
*4824.00	33.48	34.44	5.08	35.16	9.50	2.00	30.35	54.00	-23.65	A	1.00
7236.00	45.19	39.81	6.74	35.65	9.50	2.00	48.58	77.67	-29.09	P	1.00
7236.00	33.03	39.81	6.74	35.65	9.50	2.00	36.42	68.53	-32.11	A	1.00
9648.00	43.85	38.54	8.29	36.44	9.50	0.61	45.35	77.67	-32.32	P	1.00
9648.00	33.90	38.54	8.29	36.44	9.50	0.61	35.40	68.53	-33.13	A	1.00
* 12035.55					9.50	0.80					1.00
14442.66					0.00	0.63					1.00
16849.77					0.00	0.41					1.00
* 19256.88					0.00	1.91					1.00
21663.99					0.00	0.83					1.00
24071.10					0.00	2.99					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level=Reading + AF + Cable – Preamp + Filter – Dist, Margin = Level-Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11g mode at 6Mbps:

	CH1 TX				Measurement Distance at 3m Vertical polarity						
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
*2389.90	42.90	31.81	3.57	0.00	9.50	0.00	68.78	74.00	-5.22	P	1.00
*2389.90	21.40	31.81	3.57	0.00	9.50	0.00	47.28	54.00	-6.72	A	1.00
2399.90	57.00	31.80	3.58	0.00	9.50	0.00	82.88	88.15	-5.27	P	1.00
2399.90	39.10	31.80	3.58	0.00	9.50	0.00	64.98	79.23	-14.25	A	1.00
2413.35	82.28	31.79	3.58	0.00	9.50	0.00	108.15	Fundamental Frequency		P	1.00
2413.35	73.36	31.79	3.58	0.00	9.50	0.00	99.23			A	1.00
*1500.00	63.10	28.10	2.89	35.60	9.50	0.00	48.99	74.00	-25.01	P	1.00
*1500.00	62.10	28.10	2.89	35.60	9.50	0.00	47.99	54.00	-6.01	A	1.00
*4824.00	44.90	34.44	5.08	35.16	9.50	2.00	41.77	74.00	-32.23	P	1.00
*4824.00	33.03	34.44	5.08	35.16	9.50	2.00	29.90	54.00	-24.10	A	1.00
7236.00	44.96	39.81	6.74	35.65	9.50	2.00	48.35	88.15	-39.80	P	1.00
7236.00	33.26	39.81	6.74	35.65	9.50	2.00	36.65	79.23	-42.58	A	1.00
9647.85	45.89	38.54	8.29	36.44	9.50	0.61	47.39	88.15	-40.76	P	1.00
9647.85	33.69	38.54	8.29	36.44	9.50	0.61	35.19	79.23	-44.04	A	1.00
* 12066.75					9.50	0.80					1.00
* 14480.10					0.00	0.68					1.00
16893.45					0.00	0.44					1.00
* 19306.80					0.00	1.97					1.00
21720.15					0.00	0.81					1.00
24133.50					0.00	2.89					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11g mode at 6Mbps:

	CH6 TX			Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2439.28	71.40	31.76	3.59	0.00	9.50	0.00	97.25	Fundamental Frequency		P	1.00
2439.28	61.83	31.76	3.59	0.00	9.50	0.00	87.68			A	1.00
*1500.00	58.87	28.10	2.89	35.60	9.50	0.00	44.76	74.00	-29.24	P	1.00
*1500.00	57.00	28.10	2.89	35.60	9.50	0.00	42.89	54.00	-11.11	A	1.00
*4874.08	44.68	34.77	5.10	35.20	9.50	1.80	41.65	74.00	-32.35	P	1.00
*4874.08	33.05	34.77	5.10	35.20	9.50	1.80	30.02	54.00	-23.98	A	1.00
*7311.77	45.24	39.78	6.79	35.64	9.50	2.00	48.67	74.00	-25.33	P	1.00
*7311.77	33.09	39.78	6.79	35.64	9.50	2.00	36.52	54.00	-17.48	A	1.00
9747.61	44.65	38.53	8.33	36.60	9.50	0.55	45.96	77.25	-31.29	P	1.00
9747.61	32.96	38.53	8.33	36.60	9.50	0.55	34.27	67.68	-33.41	A	1.00
* 12196.40					9.50	0.80					1.00
14635.68					0.00	0.59					1.00
17074.96					0.00	0.53					1.00
* 19514.24					0.00	2.21					1.00
21953.52					0.00	0.72					1.00
24392.80					0.00	2.47					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11g mode at 6Mbps:

	CH6 TX				Measurement Distance at 3m Vertical polarity						
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2442.99	81.63	31.76	3.59	0.00	9.50	0.00	107.48	Fundamental Frequency		P	1.00
2442.99	72.20	31.76	3.59	0.00	9.50	0.00	98.05			A	1.00
*1500.00	63.92	28.10	2.89	35.60	9.50	0.00	49.81	74.00	-24.19	P	1.00
*1500.00	61.96	28.10	2.89	35.60	9.50	0.00	47.85	54.00	-6.15	A	1.00
*4873.95	45.30	34.77	5.10	35.20	9.50	1.80	42.27	74.00	-31.73	P	1.00
*4873.95	33.56	34.77	5.10	35.20	9.50	1.80	30.53	54.00	-23.47	A	1.00
*7310.97	45.13	39.78	6.79	35.64	9.50	2.00	48.56	74.00	-25.44	P	1.00
*7310.97	32.32	39.78	6.79	35.64	9.50	2.00	35.75	54.00	-18.25	A	1.00
9747.69	46.68	38.53	8.33	36.60	9.50	0.55	47.99	87.48	-39.49	P	1.00
9747.69	34.10	38.53	8.33	36.60	9.50	0.55	35.41	78.05	-42.64	A	1.00
* 12214.95					9.50	0.80					1.00
14657.94					0.00	0.57					1.00
17100.93					0.00	0.54					1.00
* 19543.92					0.00	2.24					1.00
21986.91					0.00	0.71					1.00
24429.90					0.00	2.41					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11g mode at 6Mbps:

	CH11 TX			Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2464.15	69.68	31.74	3.60	0.00	9.50	0.00	95.52	Fundamental Frequency		P	1.00
2464.15	60.81	31.74	3.60	0.00	9.50	0.00	86.65			A	1.00
*2483.50	31.60	31.72	3.61	0.00	9.50	0.00	57.43	74.00	-16.57	P	1.00
*2483.50	10.60	31.72	3.61	0.00	9.50	0.00	36.43	54.00	-17.57	A	1.00
*2483.60	31.80	31.72	3.61	0.00	9.50	0.00	57.63	74.00	-16.37	P	1.00
*2483.60	10.20	31.72	3.61	0.00	9.50	0.00	36.03	54.00	-17.97	A	1.00
*1500.00	59.18	28.10	2.89	35.60	9.50	0.00	45.07	74.00	-28.93	P	1.00
*1500.00	57.56	28.10	2.89	35.60	9.50	0.00	43.45	54.00	-10.55	A	1.00
*4923.46	45.68	35.09	5.12	35.24	9.50	1.61	42.76	74.00	-31.24	P	1.00
*4923.46	33.54	35.09	5.12	35.24	9.50	1.61	30.62	54.00	-23.38	A	1.00
*7386.02	45.35	39.75	6.84	35.62	9.50	2.00	48.82	74.00	-25.18	P	1.00
*7386.02	33.24	39.75	6.84	35.62	9.50	2.00	36.71	54.00	-17.29	A	1.00
9847.78	44.52	38.52	8.37	36.76	9.50	0.49	45.64	75.52	-29.88	P	1.00
9847.78	34.05	38.52	8.37	36.76	9.50	0.49	35.17	66.65	-31.48	A	1.00
* 12320.75					9.50	0.80					1.00
14784.90					0.00	0.47					1.00
17249.05					0.00	0.60					1.00
* 19713.20					0.00	2.41					1.00
* 22177.35					0.00	0.70					1.00
24641.50					0.00	2.10					1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

For Wireless 802.11g mode at 6Mbps:

	CH11 TX				Measurement Distance at 3m Vertical polarity						
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
2455.21	81.62	31.74	3.60	0.00	9.50	0.00	107.47	Fundamental Frequency		P	1.00
2455.21	73.09	31.74	3.60	0.00	9.50	0.00	98.94			A	1.00
*2483.50	44.80	31.72	3.61	0.00	9.50	0.00	70.63	74.00	-3.37	P	1.00
*2483.50	22.90	31.72	3.61	0.00	9.50	0.00	48.73	54.00	-5.27	A	1.00
*2483.60	44.20	31.72	3.61	0.00	9.50	0.00	70.03	74.00	-3.97	P	1.00
*2483.60	22.70	31.72	3.61	0.00	9.50	0.00	48.53	54.00	-5.47	A	1.00
*1500.00	63.61	28.10	2.89	35.60	9.50	0.00	49.50	74.00	-24.50	P	1.00
*1500.00	62.02	28.10	2.89	35.60	9.50	0.00	47.91	54.00	-6.09	A	1.00
*4924.73	45.89	35.10	5.12	35.24	9.50	1.60	42.97	74.00	-31.03	P	1.00
*4924.73	33.48	35.10	5.12	35.24	9.50	1.60	30.56	54.00	-23.44	A	1.00
*7386.11	45.62	39.75	6.84	35.62	9.50	2.00	49.09	74.00	-24.91	P	1.00
*7386.11	33.48	39.75	6.84	35.62	9.50	2.00	36.95	54.00	-17.05	A	1.00
9847.66	46.20	38.52	8.37	36.76	9.50	0.49	47.32	87.47	-40.15	P	1.00
9847.66	33.69	38.52	8.37	36.76	9.50	0.49	34.81	78.94	-44.13	A	1.00
* 12276.05					9.50	0.80					1.00
14731.26					0.00	0.51					1.00
17186.47					0.00	0.57					1.00
* 19641.68					0.00	2.34					1.00
* 22096.89					0.00	0.70					1.00
24552.10					0.00	2.23					1.00

Note :

1. The measurement was searched to 10th harmonic, Remark "------" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means that Restricted band.
5. Dist : correction to extra plate reading to 3m specification distance 1m measurement distance = -9.5dB
6. The result basic equation calculation is as follow: Level = Reading + AF + Cable – Preamp + Filter - Dist, Margin = Level - Limit
7. The other emission levels were very low against the limit
8. The test limit distance is 3M limit.

6. Test of 6dB Bandwidth Measurement

6.1 Applicable Standard

Section 15.247(a)(2): Spectrum Bandwidth of a Orthogonal Frequency Division Multiplex System
Limit : 6dB bandwidth > 500KHz

6.2 EUT Setup

Spectrum

6.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 1MHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

6.4 Test Result

Temperature (℃)	22~23
Humidity (%RH)	50~54
Barometric Pressure (mbar)	950~1000
EUT	Mobile Router
M/N	MAX600
Testing Mode	IEEE 802.11b and IEEE 802.11g

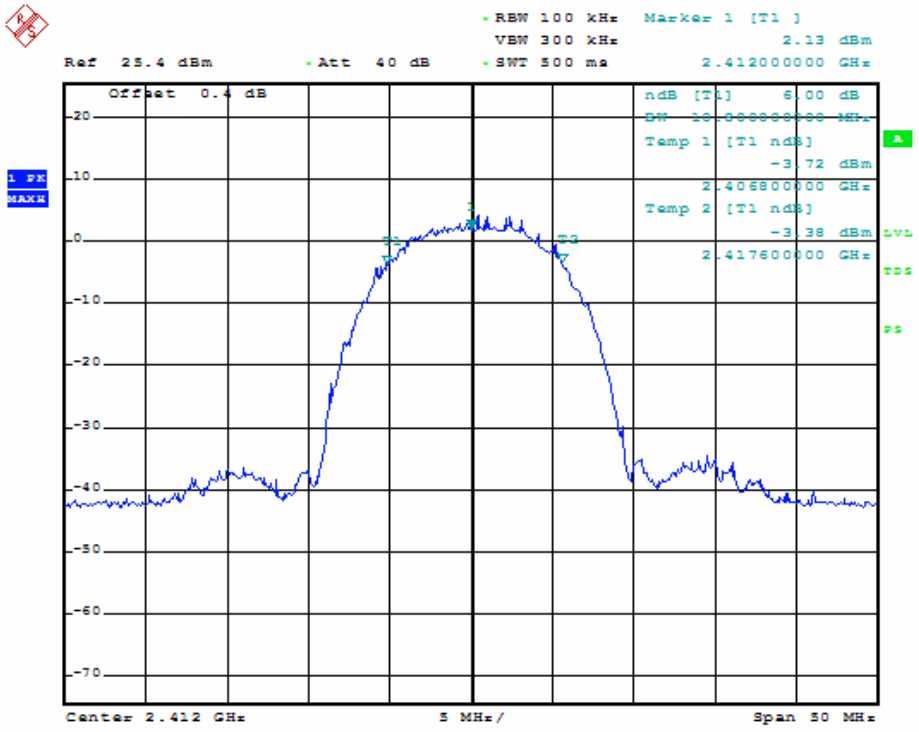
For 802.11b Mode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	10.00	0.5	PASS
6	2437	10.70	0.5	PASS
11	2462	9.00	0.5	PASS

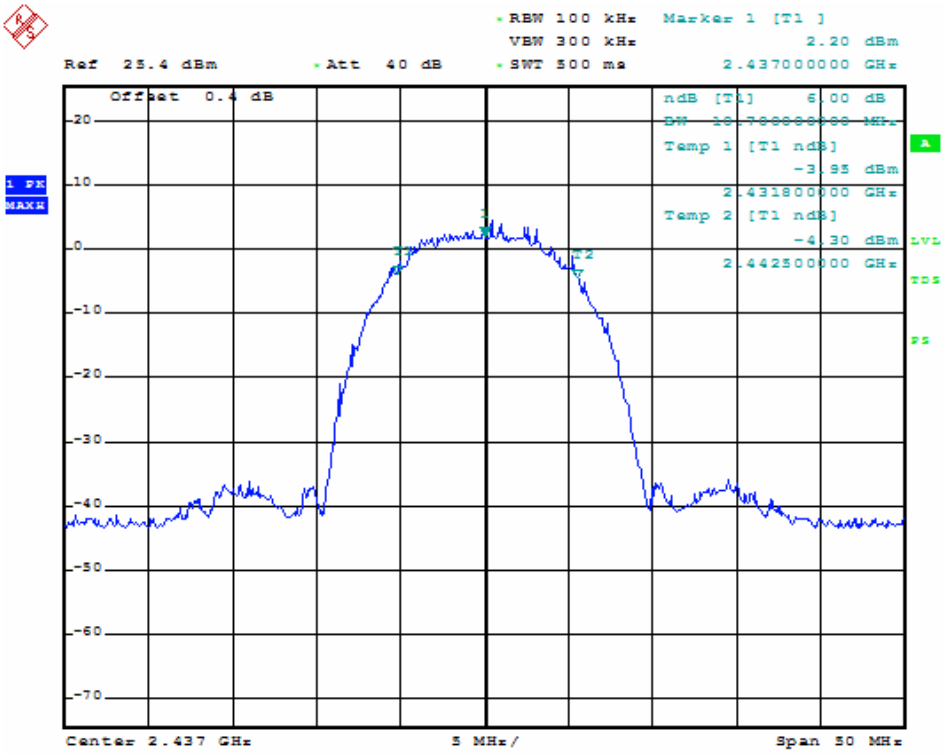
For 802.11g Mode

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.70	0.5	PASS
6	2437	16.71	0.5	PASS
11	2462	16.72	0.5	PASS

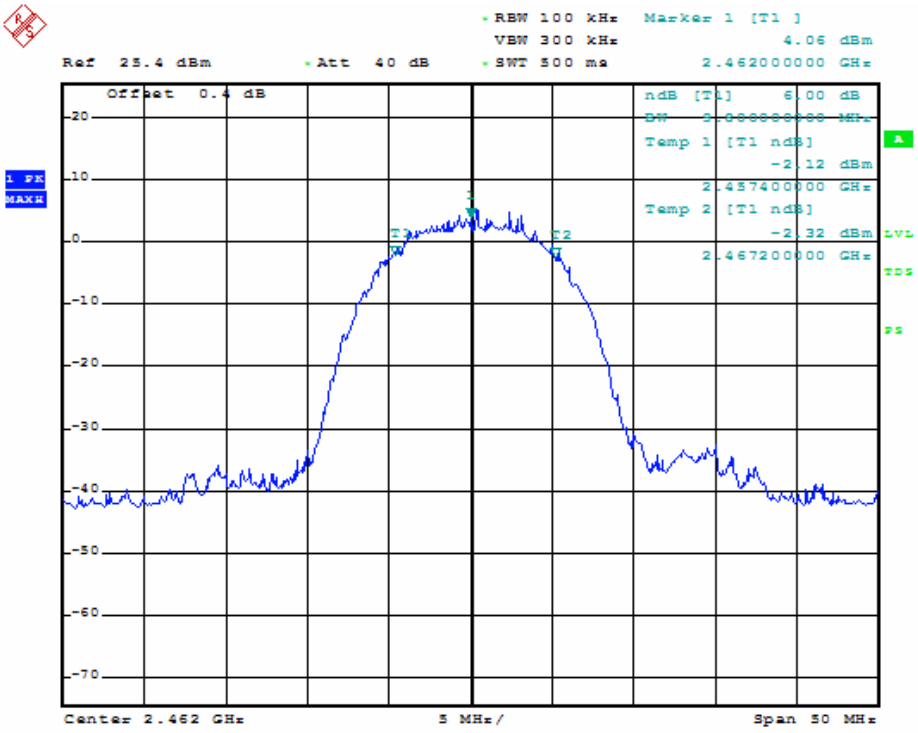
Photo of 6db Bandwidth Measurement (For 802.11b Mode)



Channel: 1

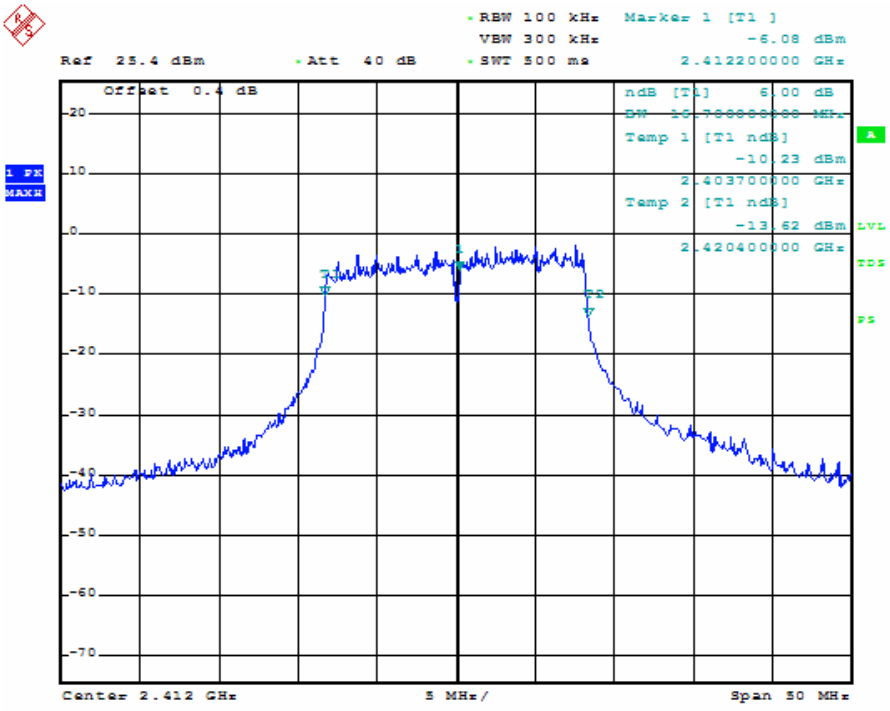


Channel: 6

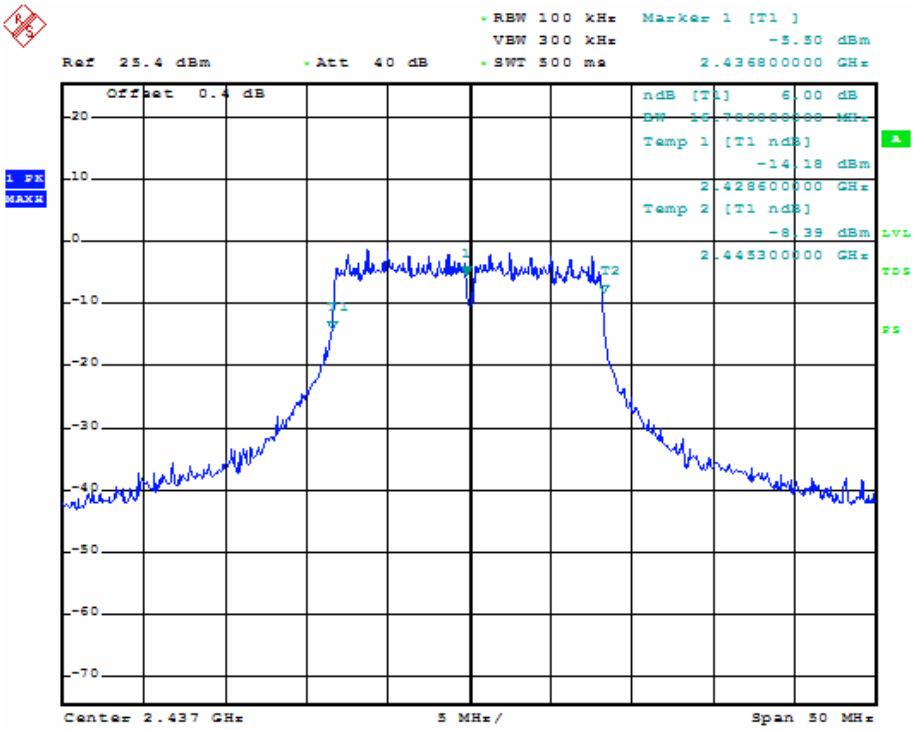

RBW 100 kHz
VBW 300 kHz
SWT 500 ms
Marker 1 [T1]
4.06 dBm
2.462000000 GHz
Ref 25.4 dBm
Att 40 dB
Offset 0.4 dB
ndB [T1] 6.00 dB
Temp 1 [T1 ndB]
-2.12 dBm
2.457400000 GHz
Temp 2 [T1 ndB]
-2.32 dBm
2.467200000 GHz
1 PK
MAXH
A
LVL
TDS
PS
20
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.462 GHz
5 MHz/
Span 50 MHz

Channel: 11

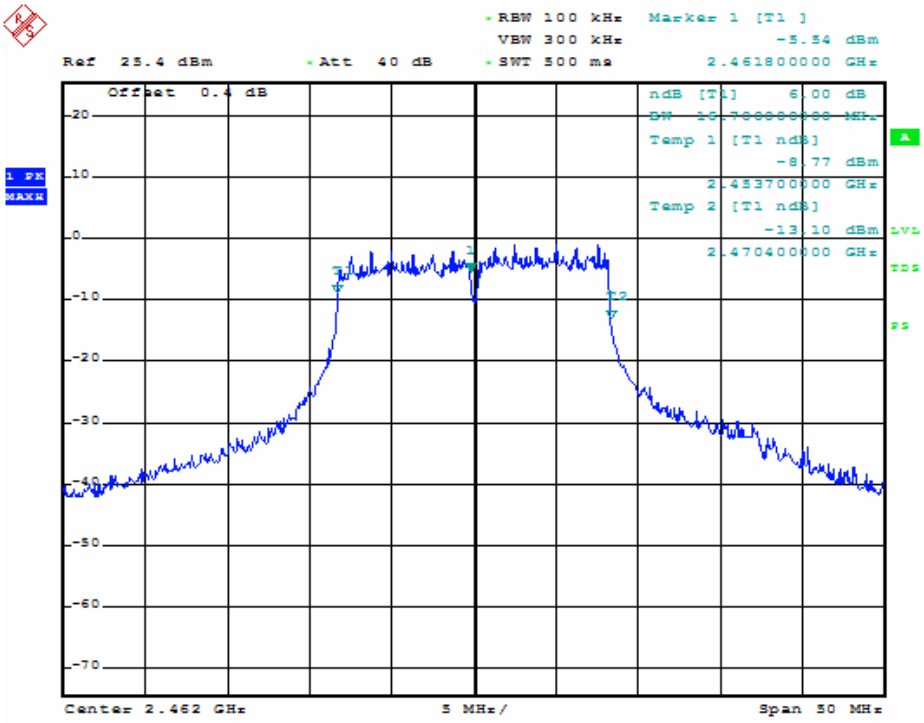
Photo of 6db Bandwidth Measurement (For 802.11g Mode)



Channel: 1



Channel: 6


RBW 100 kHz
VBW 300 kHz
SWT 500 ms
Marker 1 [T1]
-5.54 dBm
2.461800000 GHz
Ref 25.4 dBm
Att 40 dB
Offset 0.4 dB
ndB [T1] 6.00 dB
Temp 1 [T1 ndB]
-8.77 dBm
2.453700000 GHz
Temp 2 [T1 ndB]
-13.10 dBm
2.470400000 GHz
1 PK
MAXH
A
LVL
TDS
PS
20
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.462 GHz
5 MHz/
Span 50 MHz

Channel: 11

7. Test of Maximum Peak Output Power

7.1 Applicable Standard

Section 15.247(b)(1): For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels and The maximum peak output power shall not exceed 1 watt. For all other frequency hopping systems in this frequency band, The maximum peak output power shall not exceed 0.125 watt.

7.2 EUT Setup

Spectrum

7.3 Test Equipment List and Details

See section 2.4.

7.4 Test Procedure

1. The transmitter output was connected to the peak power meter and recorded the peak value.

2. Peak power meter parameter set to auto attenuator and filter is the same as.

3. Repeated the 1 for the middle and highest channel of the EUT.

7.5 Test Result

Temperature (℃)	22~23
Humidity (%RH)	50~54
Barometric Pressure (mbar)	950~1000
EUT	Mobile Router
M/N	MAX600
Testing Mode	IEEE 802.11b and IEEE 802.11g

For 802.11b Mode

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	19.24	30	PASS
6	2437	19.04	30	PASS
11	2462	19.33	30	PASS

Note :
1. At finial test to get the worst-case emission at 11Mbps.
2. Cable loss = 1dB
3. The result basic equation calculation as follow : Peak Power Output = Peak Power Reading + Cable loss

For 802.11g Mode

Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	18.52	30	PASS
6	2437	18.28	30	PASS
11	2462	18.67	30	PASS

Note :
4. At finial test to get the worst-case emission at 11Mbps.
5. Cable loss = 1dB
6. The result basic equation calculation as follow : Peak Power Output = Peak Power Reading + Cable loss

8. Test of Power Spectral Density Measurement

8.1 Applicable Standard

Section 15.247(e): The Maximum Power Spectral Density Measurement is 8dBm/3KHz.

8.2 EUT Setup

Spectrum

8.3 Test Equipment List and Details

See section 2.4.

8.4 Test Procedure

The transmitter output was connected to the spectrum analyzer, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3KHz RBW and 30KHz VBW, set sweep time=span / 3KHz. The power spectral density was measured and recorded. The sweep time is allowed to be longer than span / 3KHz for a full response of the mixer in the spectrum analyzer.

8.5 Test Result

Temperature (℃)	22~23
Humidity (%RH)	50~54
Barometric Pressure (mbar)	950~1000
EUT	Mobile Router
M/N	MAX600
Testing Mode	IEEE 802.11b and IEEE 802.11g

For 802.11b Mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Maxmum Limit (dBm)	Pass / Fail
1	2412	2.12	8	PASS
6	2437	2.29	8	PASS
11	2462	2.93	8	PASS

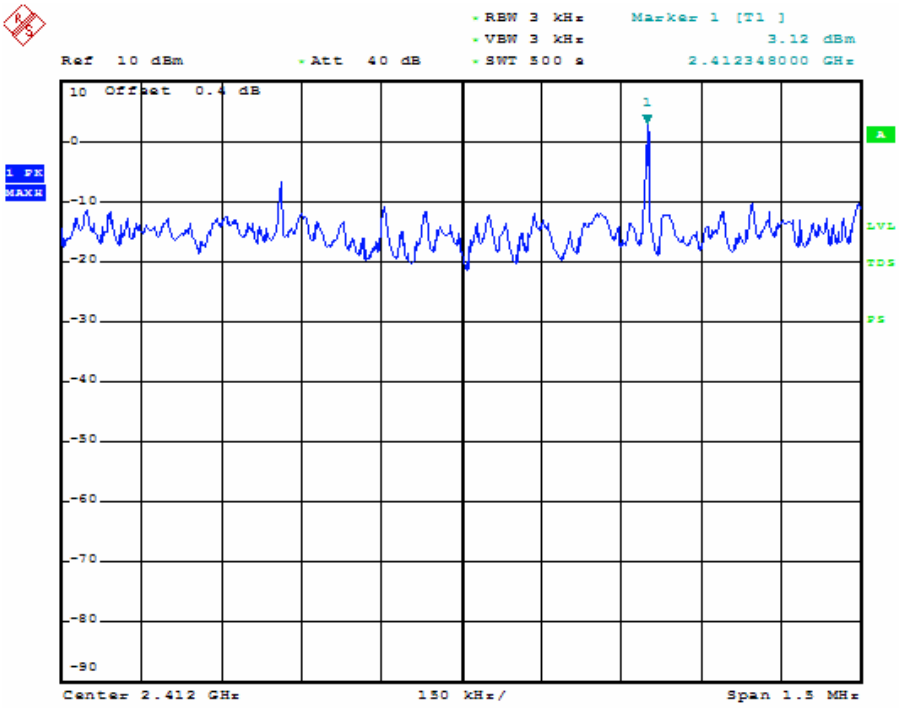
Note : At finial test to get the worst-case emission at 11Mbps.

For 802.11g Mode

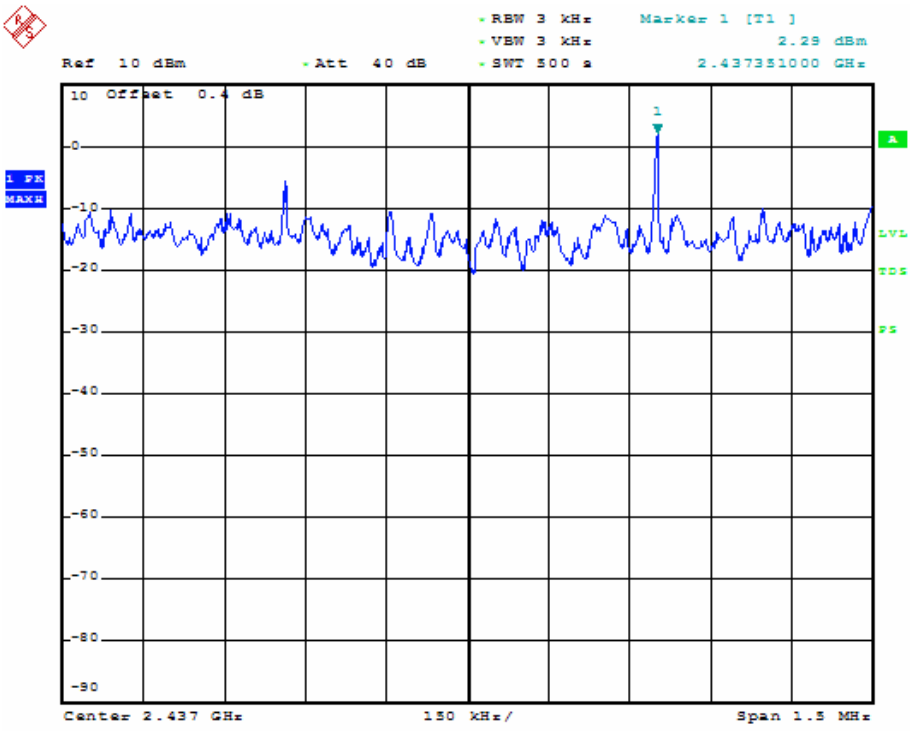
Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Maxmum Limit (dBm)	Pass / Fail
1	2412	-19.08	8	PASS
6	2437	-17.47	8	PASS
11	2462	-17.83	8	PASS

Note : At finial test to get the worst-case emission at 11Mbps.

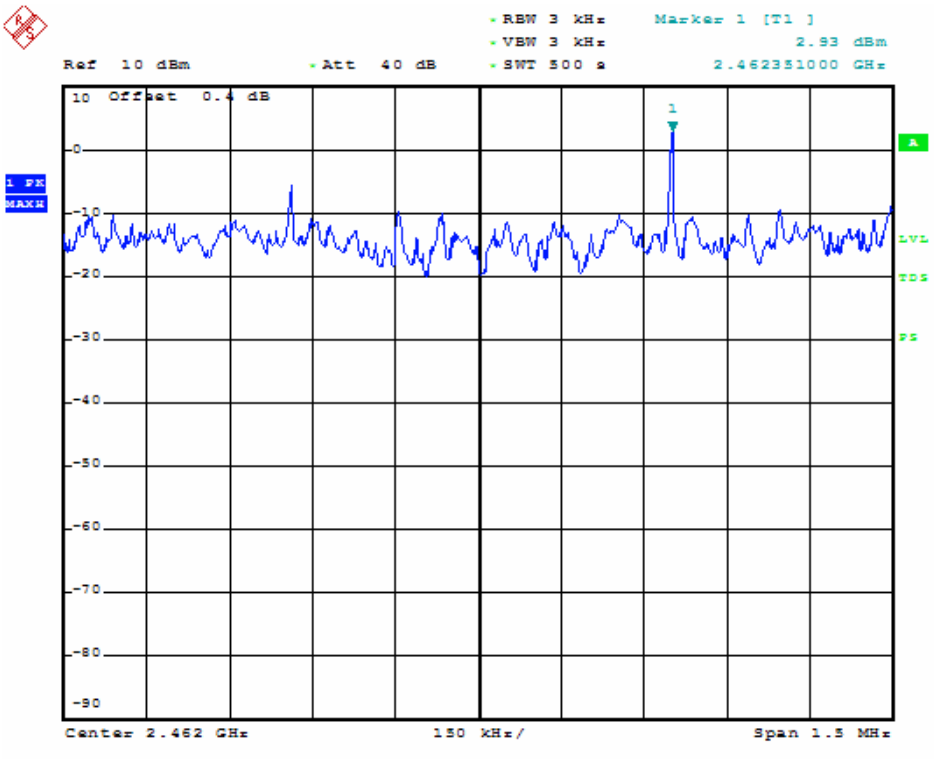
Photo of Power Spectral Density Measurement (For 802.11b Mode)



Channel: 1

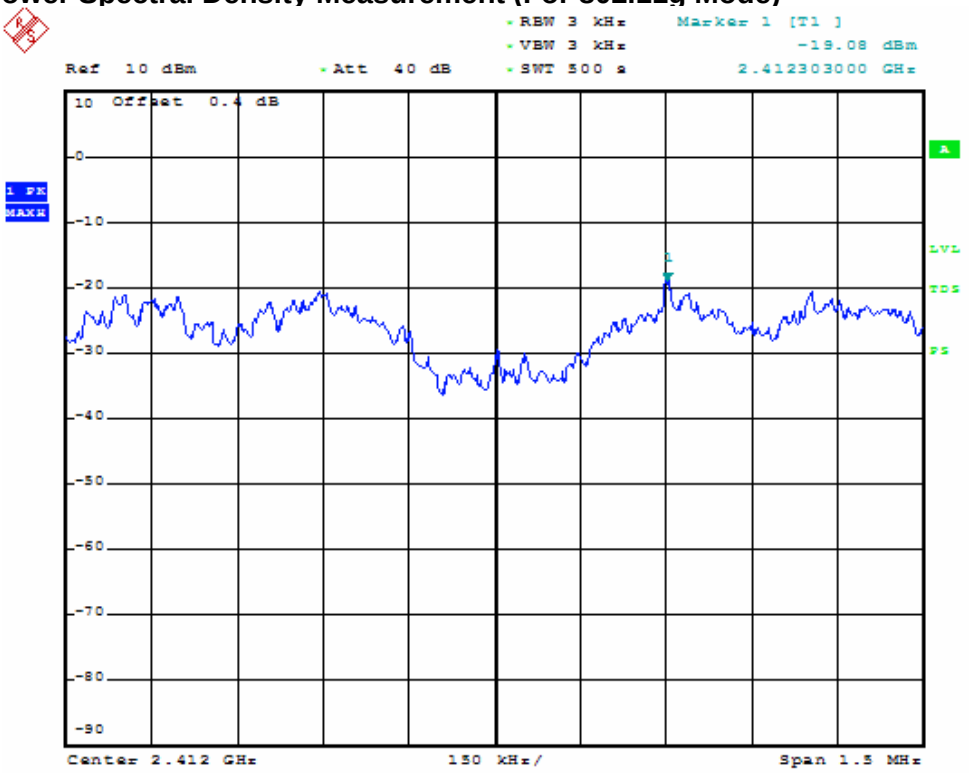


Channel: 6

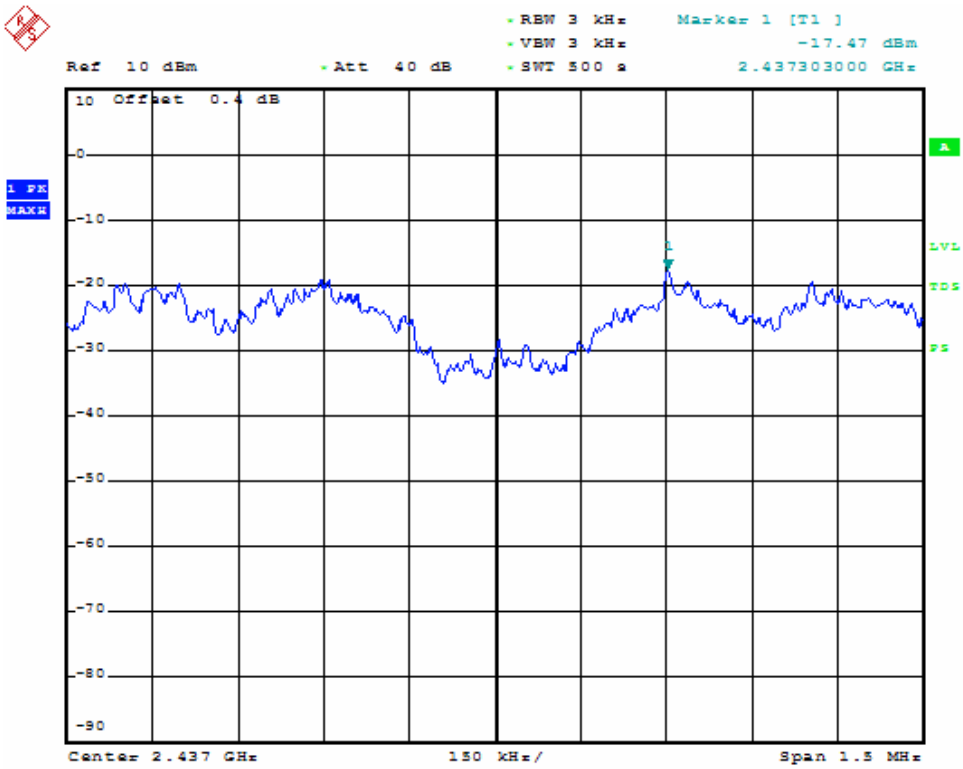

RBW 3 kHz
VBW 3 kHz
SWT 500 s
Marker 1 [T1]
2.93 dBm
2.462351000 GHz
Ref 10 dBm
Att 40 dB
Offset 0.4 dB
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
1 PK
MAXH
A
LVL
TDS
PS
Center 2.462 GHz
150 kHz/
Span 1.5 MHz

Channel: 11

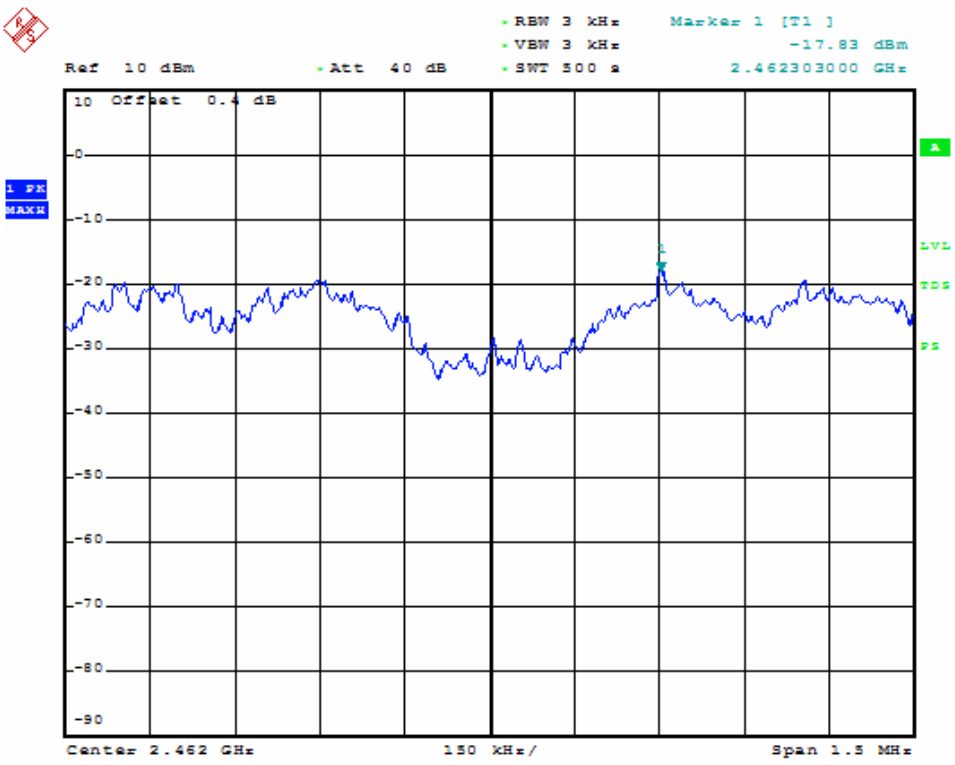
Photo of Power Spectral Density Measurement (For 802.11g Mode)



Channel: 1



Channel: 6


RBW 3 kHz
VBW 3 kHz
SWT 500 s
Marker 1 [T1]
-17.83 dBm
2.462303000 GHz
Ref 10 dBm
Att 40 dB
Offset 0.4 dB
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
1 PK
MAXH
A
LVL
TDS
PS
Center 2.462 GHz
150 kHz/
Span 1.5 MHz

Channel: 11

9. Test of Band edge Emission

9.1 Applicable Standard

Section 15.247(d): Out of Band Emission and Restricted Band Radiation Limit:20dB less than peak value of fundamental frequency Restricted band Limit:Table 15.209

9.2 EUT Setup

Spectrum

9.3 Test Equipment List and Details

See section 2.4.

9.4 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.4 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW and VBM to 1MHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength. The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW and VBW to 100kHz, to measure the conducted peak band edge.

9.5 Test Result

Temperature (℃)	22~23
Humidity (%RH)	50~54
Barometric Pressure (mbar)	950~1000
EUT	Mobile Router
M/N	MAX600
Testing Mode	IEEE 802.11b and IEEE 802.11g

For 802.11b Mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Maxmum Limit (dBm)	Pass / Fail
1	2412	-11.00	8	PASS
6	2437	-10.75	8	PASS
11	2462	-9.91	8	PASS

For 802.11g Mode

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)	Maxmum Limit (dBm)	Pass / Fail
1	2412	-14.00	8	PASS
6	2437	-14.75	8	PASS
11	2462	-14.91	8	PASS

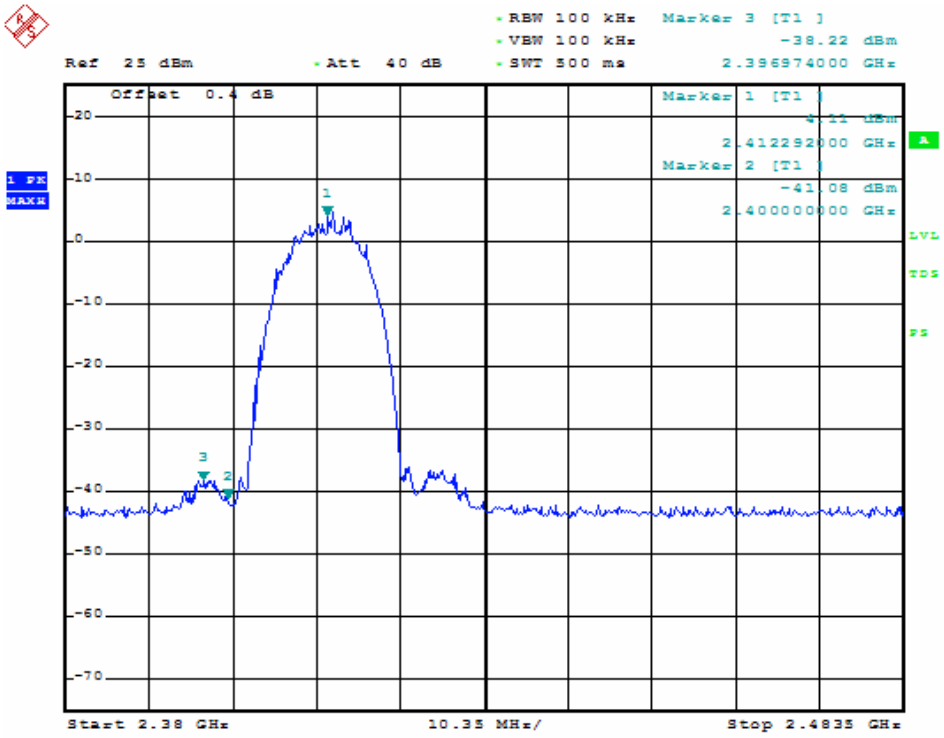
For 802.11b Mode

Band edge Frequency (MHz)		Measured radiated band edge field strength (dBuV/m)		Radiated band edge field strength limit (dBuV/m)		Pass / Fail
		Horizontal	Vertical	Horizontal	Vertical	
2399.90	PK	49.88	63.08	77.75	89.07	PASS
	AV	39.38	52.68	70.82	82.28	
2483.50	PK	39.03	49.33	74.00	74.00	PASS
	AV	28.93	37.63	54.00	54.00	

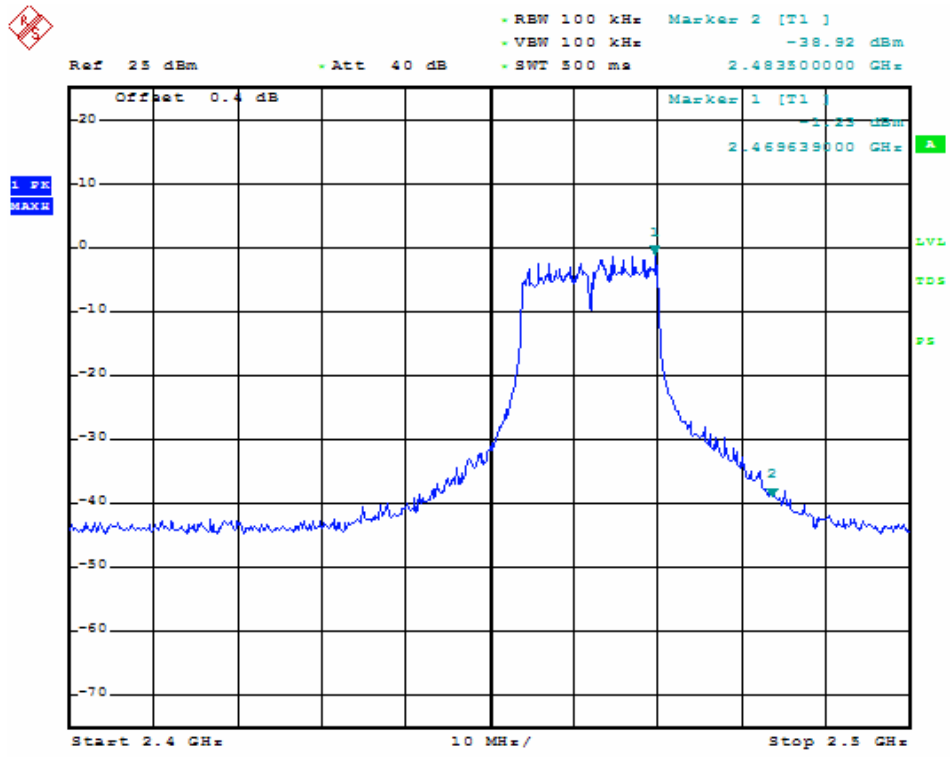
For 802.11g Mode

Band edge Frequency (MHz)		Measured radiated band edge field strength (dBuV/m)		Radiated band edge field strength limit (dBuV/m)		Pass / Fail
		Horizontal	Vertical	Horizontal	Vertical	
2399.90	PK	72.08	82.88	77.67	88.15	PASS
	AV	53.88	64.98	68.53	79.23	
2483.50	PK	57.43	70.63	74.00	74.00	PASS
	AV	36.43	48.73	54.00	54.00	

Photo of Band edge Emission (For 802.11b Mode)

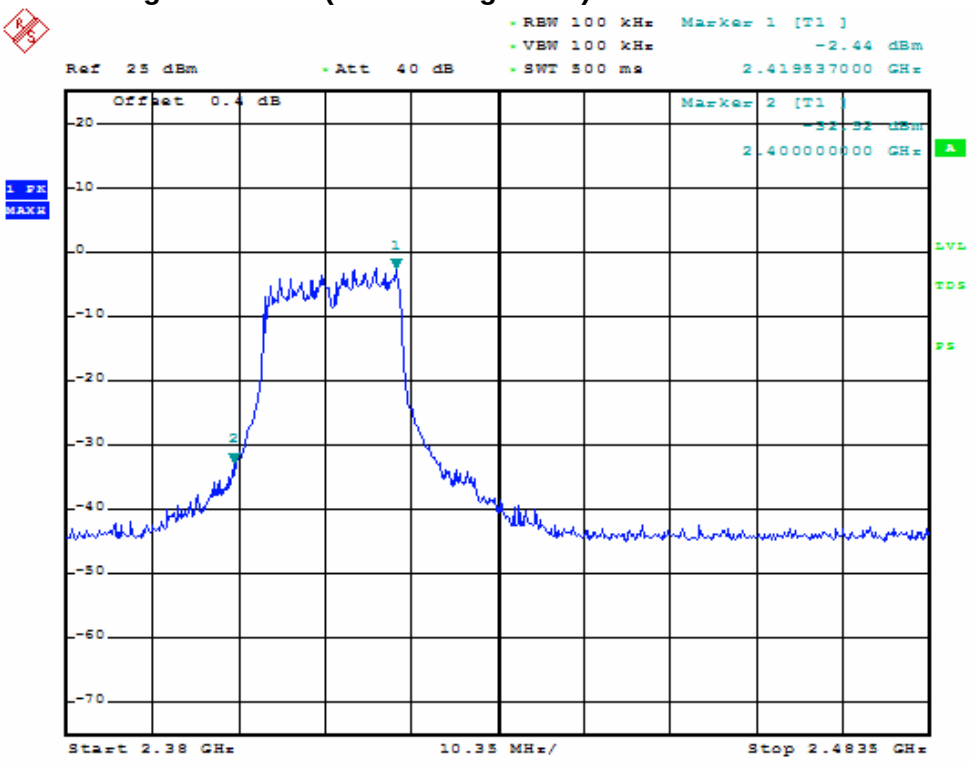


Low Channel

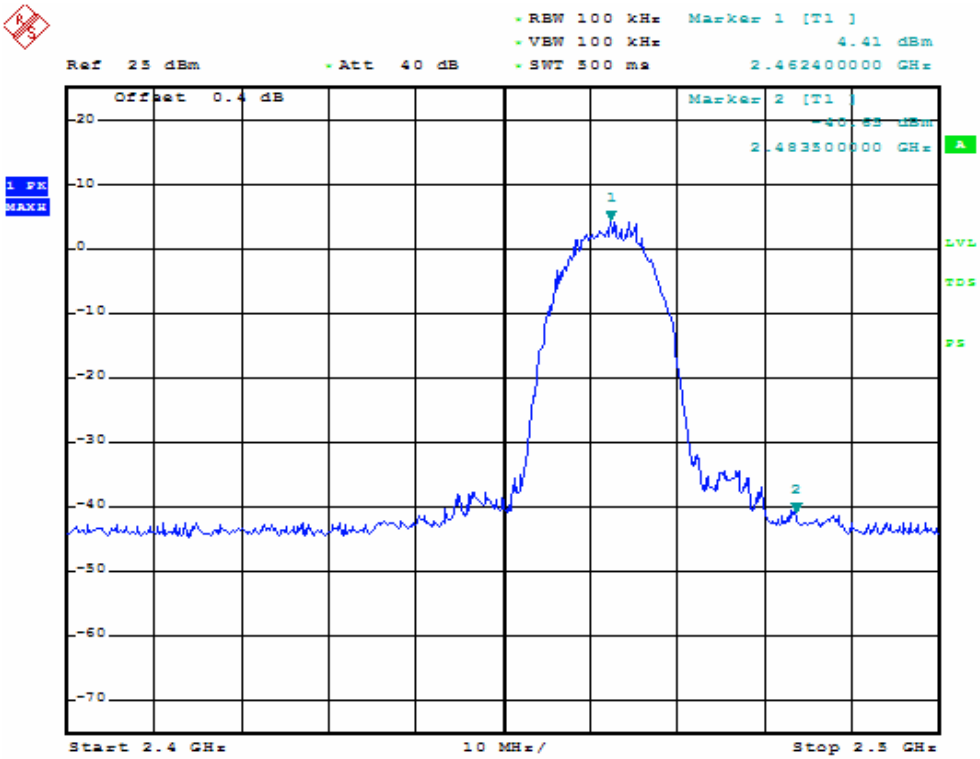


High Channel

Photo of Band edge Emission (For 802.11g Mode)



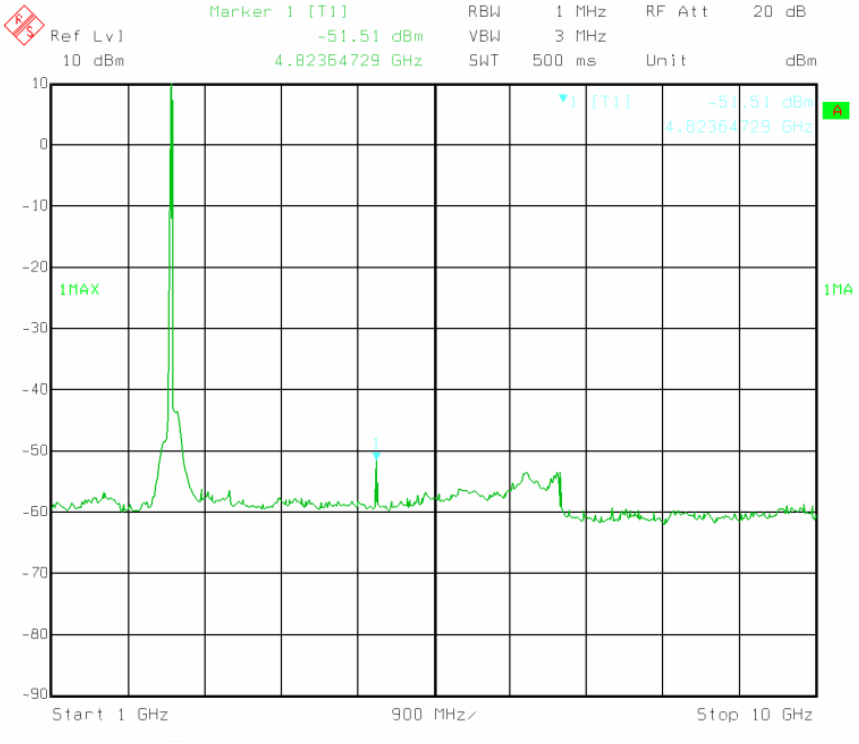
Low Channel



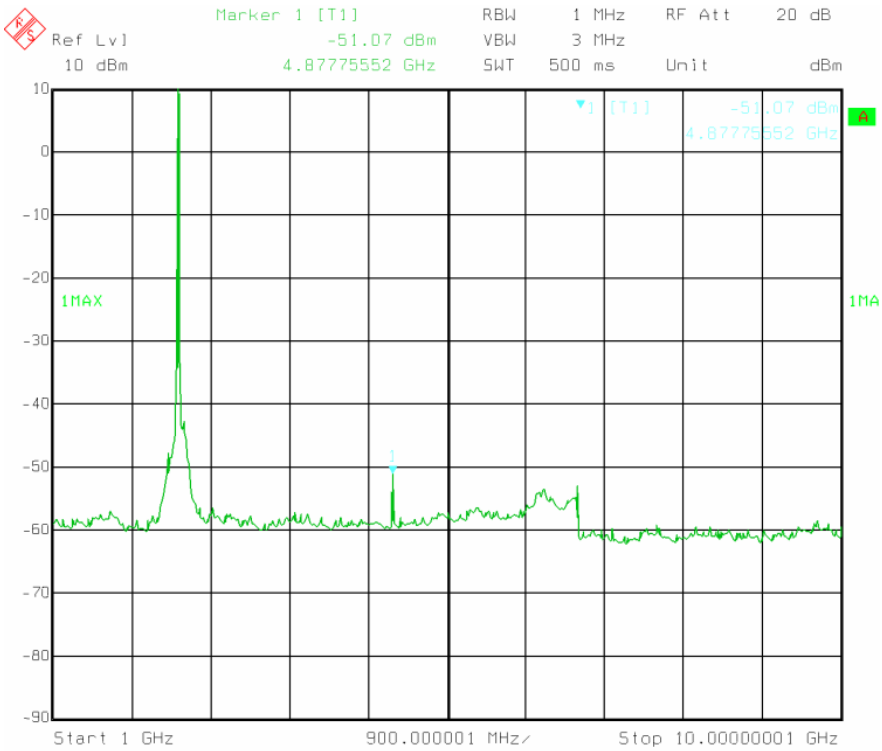
High Channel

Test results of Out-of-band Spurious Emissions-conducted measurement

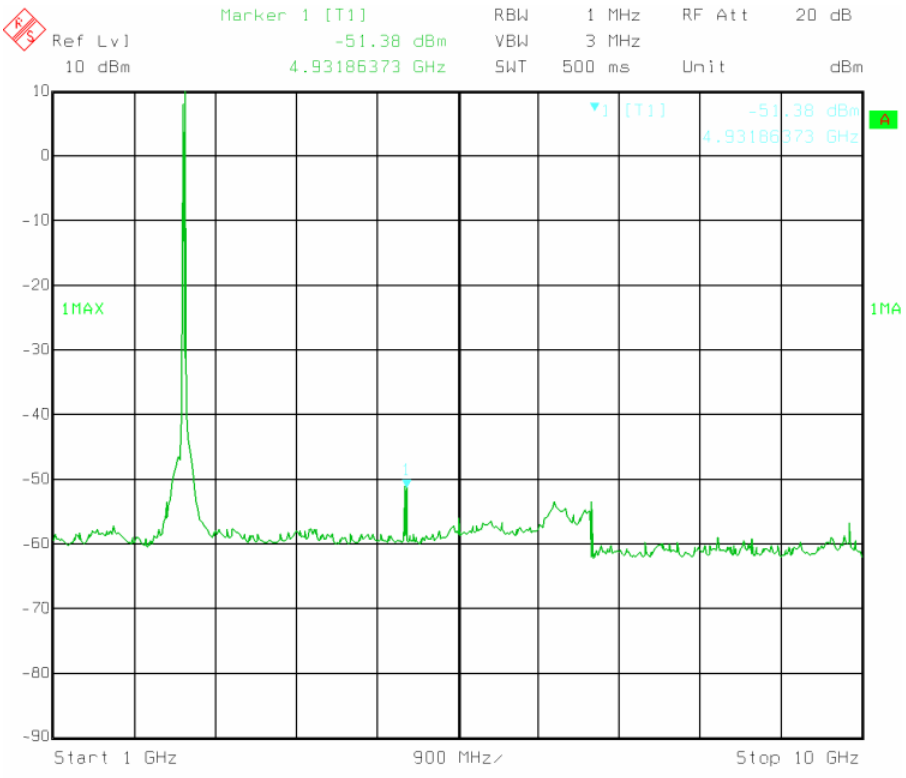
Wireless 802.11b mode:



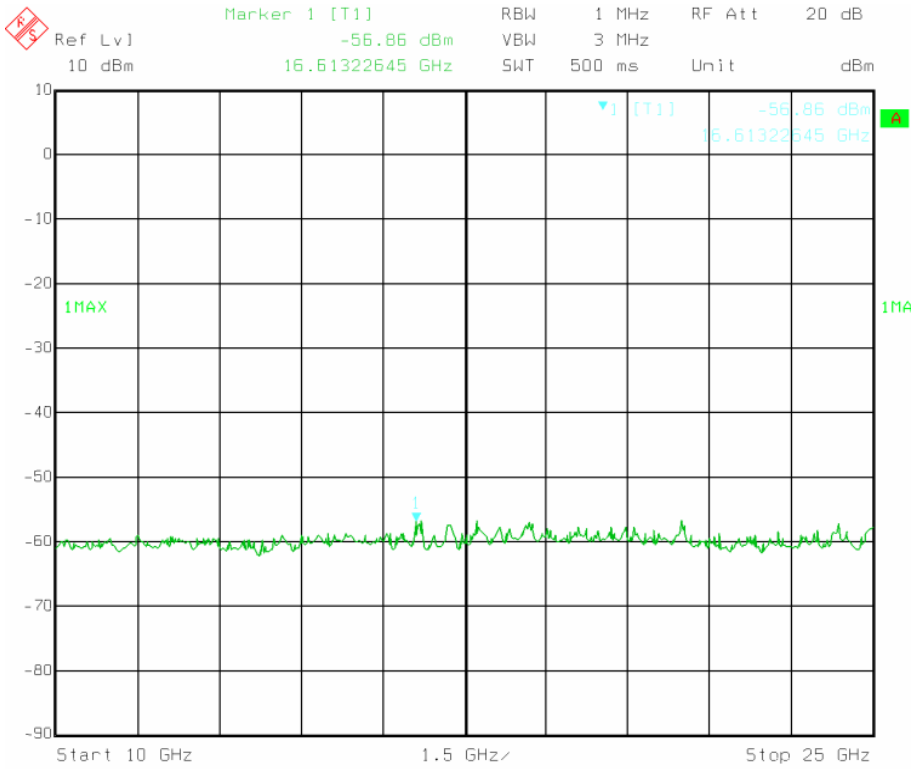
Channel: 1



Channel: 6

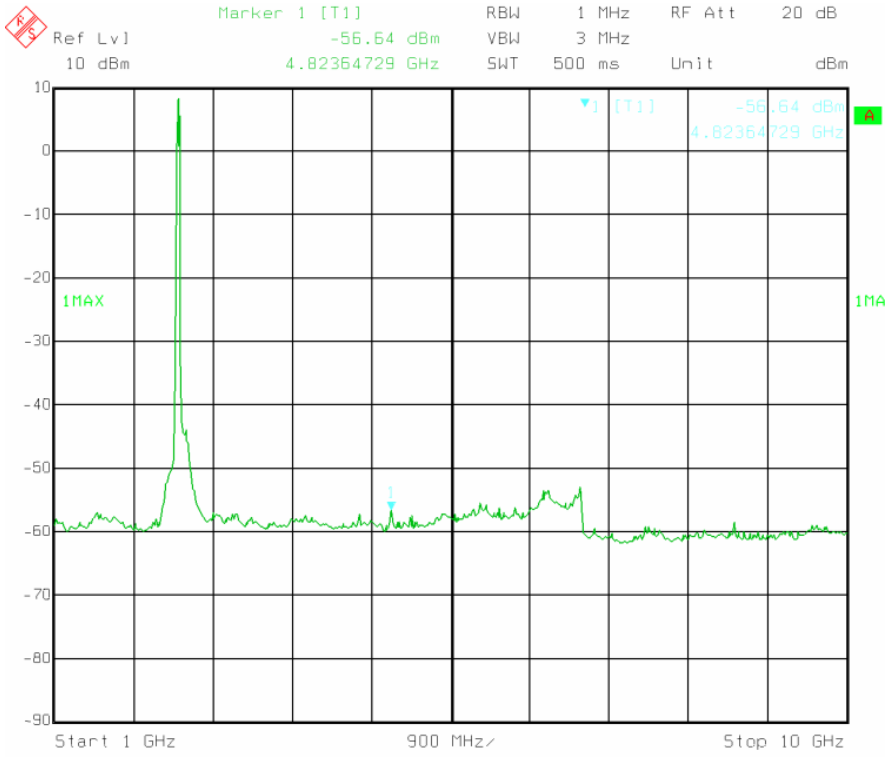


Channel: 11

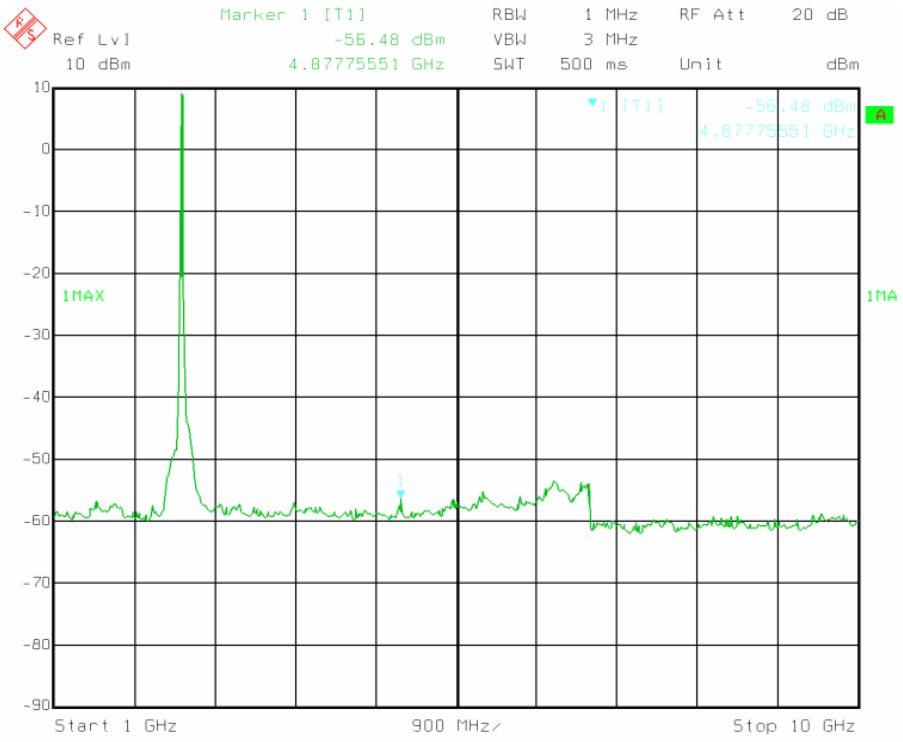


Test result of 10GHz-25GHz

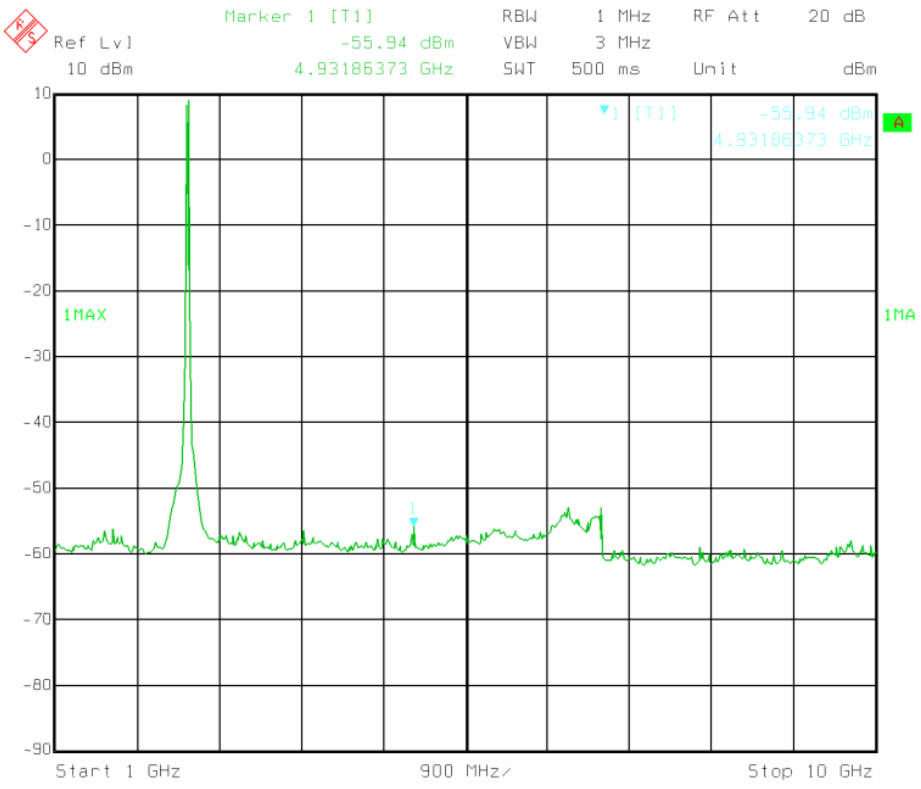
Wireless 802.11g mode:



Channel: 1



Channel: 6



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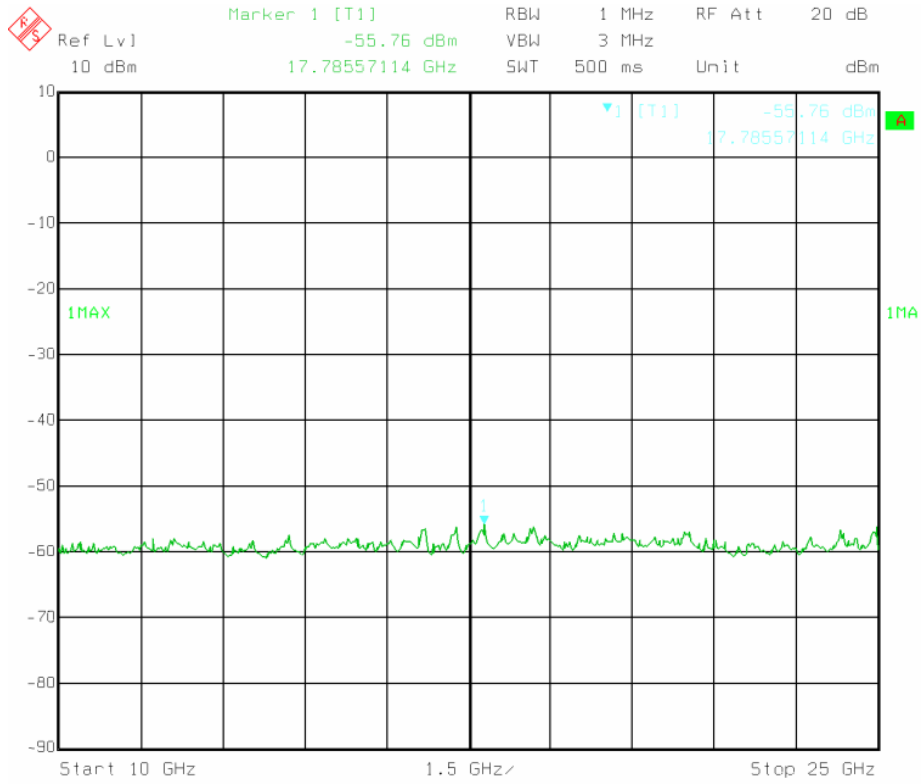

Test result of 10GHz-25GHz

10. Antenna Requirement

10.1 Applicable Standard

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2 Antenna Connected Construction

The antenna used in this product is Dipole antenna. The maximum Gain of the antenna only 2dBi