



NVLAP LAB CODE 200707-0



FCC PART 15.247

MEASUREMENT AND TEST REPORT

For

Azalea Networks USA, Inc.

673 S.Milpitas Blvd., Suite 105.Milpitas, California 95035.USA

FCC ID: URP-MST200

This Report Concerns: <input checked="" type="checkbox"/> Original Report		Equipment Type: Multi-Service Terminal Device	
Test Engineer:	King Tang <i>King Tang</i>		
Report No.:	RBJ08042352		
Test Date:	2008-05-01 to 2008-05-30		
Report Date:	2008-05-30		
Reviewed By:	EMC Manager: Green Xu <i>Green Xu</i>		
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Note: This test report is for the customer shown above and their specific product only. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Shenzhen). This report **must not** be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the Federal Government.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The Azalea Networks USA, INC 's product, model number: MST200 or the "EUT" as referred to in this report is a *Multi-Service Terminal Device*, which measures approximately: 18.0 cm L x 25.0 cm W x 7.7 cm H, rated input voltage: AC 120V/60 Hz.

** All measurement and test data in this report was gathered from production sample serial number: 0804023 (Assigned by BACL, Shenzhen). The EUT was received on 2008-04-23.*

Objective

This Type approval report is prepared on behalf of Azalea Networks USA, INC in accordance with Part 2, Subpart J, Part 15, Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with 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.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



NVLAP LAB CODE 200707-0

The current scope of accreditations can be found at
<http://ts.nist.gov/Standards/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing with the firmware which is provided by the manufacturer, it allow to select the channels and modes.

Equipment Modifications

No modifications were made to the unit tested.

Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number	FCC ID
COMPAQ	Laptop	PP2040	N/A	DoC

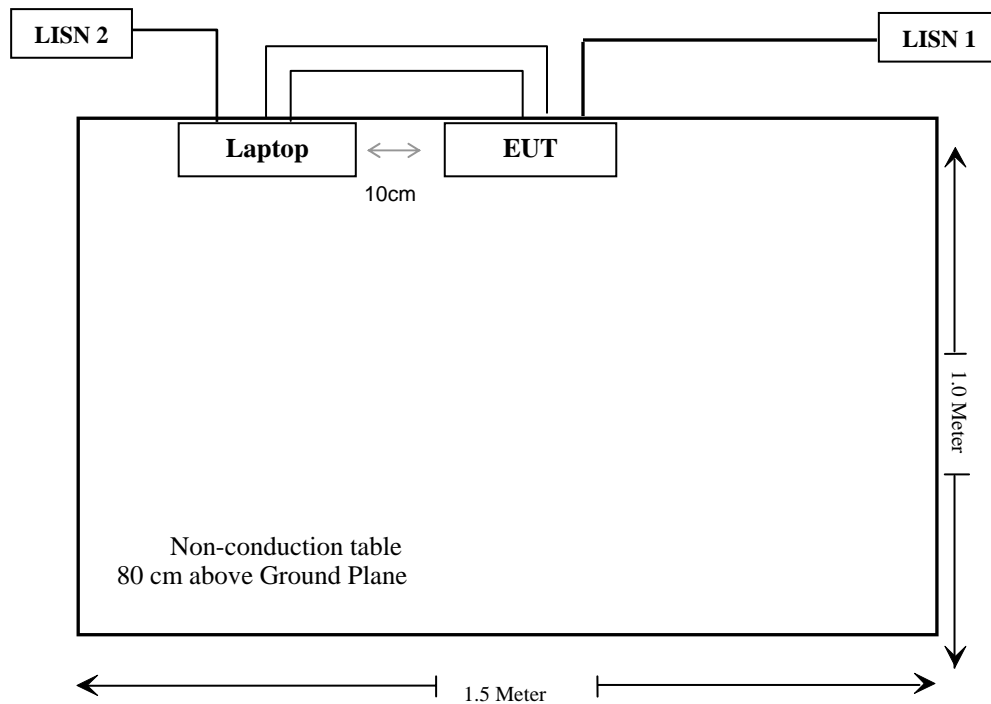
External I/O Cable

Cable Description	Length (M)	From Port	To
Shielded Detachable Power Cable	1.96	EUT	LISN
Shielded Detachable Ethernet Cable	2.00	EUT	Laptop
Shielded Detachable Data Cable	2.45	EUT	Laptop

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i), §1.1307 (b)(1)	Maximum Permissible Exposure (MPE)	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	Conducted Emissions	Compliant
§15.247(d)	Spurious Emissions at Antenna Port	Compliant
§15.205	Restricted Bands	Compliant
§15.209, §15.205, 1§15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Bandwidth	Compliant
§15.247(b)(3)	Maximum Peak Output Power	Compliant
§15.247(d)	100kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

§15.247 (i) and §1.1307 (b) (1) - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Standard Applicable

According to subpart 15.247 (i) and subpart 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

Test Data

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

S: Power density, in mW/cm²

P: Power input to the antenna, in mW

G: numeric gain of the antenna

R: distance to the center of the antenna, in cm

802.11b Mode

Maximum peak output power at antenna input terminal (dBm):	<u>13.79</u>
Maximum peak output power at antenna input terminal (mW):	<u>23.93</u>
Prediction distance (cm):	<u>34</u>
Prediction frequency (MHz):	<u>2437</u>
Antenna Gain, typical (dBi):	<u>12.0</u>
Maximum Antenna Gain (numeric):	<u>15.85</u>
Power density at predication frequency and distance (mW/cm ²):	<u>0.026</u>
MPE limit for Occupational exposure at predication frequency (mW/cm ²):	<u>1.0</u>

802.11g Mode

Maximum peak output power at antenna input terminal (dBm):	<u>13.87</u>
Maximum peak output power at antenna input terminal (mW):	<u>24.38</u>
Prediction distance (cm):	<u>34</u>
Prediction frequency (MHz):	<u>2437</u>
Antenna Gain, typical (dBi):	<u>12.0</u>
Maximum Antenna Gain (numeric):	<u>15.85</u>
Power density at predication frequency and distance (mW/cm ²):	<u>0.027</u>
MPE limit for Occupational exposure at predication frequency (mW/cm ²):	<u>1.0</u>

802.11a Mode

Maximum peak output power at antenna input terminal (dBm):	<u>11.44</u>
Maximum peak output power at antenna input terminal (mW):	<u>13.93</u>
Prediction distance (cm):	<u>34</u>
Prediction frequency (MHz):	<u>5825</u>
Antenna Gain, typical (dBi):	<u>14.0</u>
Maximum Antenna Gain (numeric):	<u>25.12</u>
Power density at predication frequency and distance (mW/cm ²):	<u>0.024</u>
MPE limit for Occupational exposure at predication frequency (mW/cm ²):	<u>1.0</u>

Result

The device is compliant with the MPE limit of General Population/Uncontrolled Exposure at predication frequency 1.0 mW/cm². And the precaution is outlined in the user's manual to prevent to high level of RF energy.

§15.203 - ANTENNA REQUIREMENT

Standard Applicable

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the 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 6 dBi.

Antenna Connector Construction

The internal antenna is the standard configure for MST200 which can not be access by the end-user, please refer to the EUT internal photos.

Gain of Antenna: 2.4 GHz: 12dBi
5.8 GHz: 14dBi.

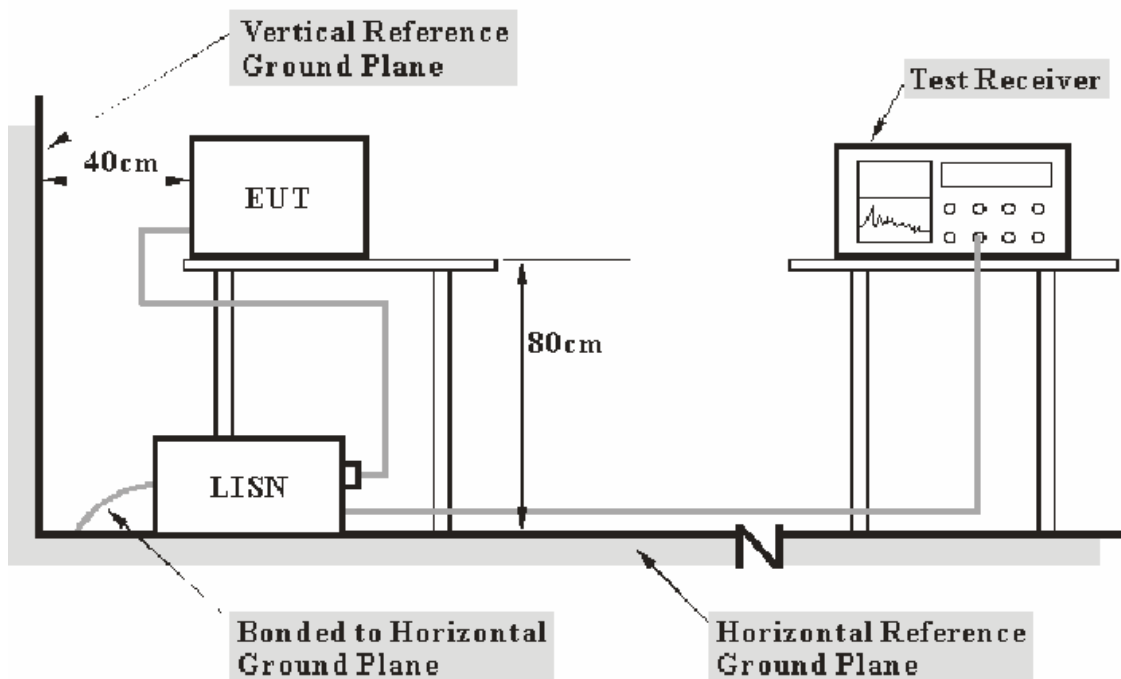
§15.207 - CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ± 2.4 dB.

EUT Setup



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

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

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

<i>Frequency Range</i>	<i>IF B/W</i>
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	DE25330	2008-03-25	2009-03-25
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2008-03-25	2009-03-25

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the EUT was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, with the worst margin reading of:

Transmitting Mode (802.11a): 3.1 dB at 0.6050 MHz in the Hot conductor mode

Transmitting Mode (802.11b): 3.80 dB at 0.6050 MHz in the Hot conductor mode

Transmitting Mode (802.11g): 3.30 dB at 0.6050 MHz in the Hot conductor mode

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by King Tang on 2008-05-12.

Test Mode: Transmitting (802.11a)

Line Conducted Emissions				FCC PART 15.207	
Frequency (MHz)	Amplitude (dBμV)	Detector (QP/AV)	Conductor (Hot/Neutral)	Limit (dBμV)	Margin (dB)
0.6050	52.90	QP	Hot	56.00	3.10
0.3000	56.00	QP	Hot	60.24	4.24
10.5200	54.70	QP	Hot	60.00	5.30
10.5200	44.10	AV	Hot	50.00	5.90
0.5050	48.80	QP	Hot	56.00	7.20
0.7050	48.50	QP	Hot	56.00	7.50
0.6050	44.60	QP	Neutral	56.00	11.40
0.2000	51.80	QP	Hot	63.61	11.81
0.6050	33.00	AV	Hot	46.00	13.00
10.6200	35.90	AV	Neutral	50.00	14.10
10.5250	45.80	QP	Neutral	60.00	14.20
0.3050	45.40	QP	Neutral	60.11	14.71
0.7100	40.80	QP	Neutral	56.00	15.20
0.3000	34.00	AV	Hot	50.24	16.24
0.5050	39.70	QP	Neutral	56.00	16.30
0.5050	29.50	AV	Hot	46.00	16.50
0.2000	35.40	AV	Hot	53.61	18.21
0.7050	27.20	AV	Hot	46.00	18.80
0.6050	22.40	AV	Neutral	46.00	23.60
0.2000	38.70	QP	Neutral	63.61	24.91
0.3050	24.10	AV	Neutral	50.11	26.01
0.7100	17.80	AV	Neutral	46.00	28.20
0.5050	17.60	AV	Neutral	46.00	28.40
0.2000	18.70	AV	Neutral	53.61	34.91

Test Mode: Transmitting (802.11b)

Line Conducted Emissions				FCC PART 15.207	
Frequency (MHz)	Amplitude (dBμV)	Detector (QP/AV)	Conductor (Hot/Neutral)	Limit (dBμV)	Margin (dB)
0.6050	52.20	QP	Hot	56.00	3.80
0.3000	55.60	QP	Hot	60.24	4.64
10.2000	55.00	QP	Hot	60.00	5.00
10.2000	44.30	AV	Hot	50.00	5.70
0.7050	48.80	QP	Hot	56.00	7.20
0.5050	48.30	QP	Hot	56.00	7.70
0.6050	44.60	QP	Neutral	56.00	11.40
10.2000	38.10	AV	Neutral	50.00	11.90
0.6050	33.10	AV	Hot	46.00	12.90
0.2000	50.50	QP	Hot	63.61	13.11
10.2000	45.40	QP	Neutral	60.00	14.60
0.3000	35.40	AV	Hot	50.24	14.84
0.7050	40.20	QP	Neutral	56.00	15.80
0.5050	39.50	QP	Neutral	56.00	16.50
0.3000	43.50	QP	Neutral	60.24	16.74
0.5050	28.90	AV	Hot	46.00	17.10
0.7050	27.90	AV	Hot	46.00	18.10
0.2000	34.70	AV	Hot	53.61	18.91
0.6050	22.90	AV	Neutral	46.00	23.10
0.2000	38.90	QP	Neutral	63.61	24.71
0.3000	22.80	AV	Neutral	50.24	27.44
0.5050	18.00	AV	Neutral	46.00	28.00
0.7050	17.30	AV	Neutral	46.00	28.70
0.2000	18.10	AV	Neutral	53.61	35.51

Test Mode: Transmitting (802.11g)

Line Conducted Emissions				FCC PART 15.207	
Frequency (MHz)	Amplitude (dB μ V)	Detector (QP/AV)	Conductor (Hot/Neutral)	Limit (dB μ V)	Margin (dB)
0.6050	52.70	QP	Hot	56.00	3.30
0.3000	55.80	QP	Hot	60.24	4.44
10.3050	44.50	AV	Hot	50.00	5.50
10.3100	53.70	QP	Hot	60.00	6.30
0.7050	48.70	QP	Hot	56.00	7.30
0.5050	48.60	QP	Hot	56.00	7.40
0.6050	44.50	QP	Neutral	56.00	11.50
10.4150	38.10	AV	Neutral	50.00	11.90
0.2000	51.40	QP	Hot	63.61	12.21
0.6050	32.00	AV	Hot	46.00	14.00
10.4150	45.20	QP	Neutral	60.00	14.80
0.3050	45.20	QP	Neutral	60.11	14.91
0.3000	35.10	AV	Hot	50.24	15.14
0.5050	39.60	QP	Neutral	56.00	16.40
0.5050	28.80	AV	Hot	46.00	17.20
0.2000	35.50	AV	Hot	53.61	18.11
0.7050	27.60	AV	Hot	46.00	18.40
1.0100	34.60	QP	Neutral	56.00	21.40
0.6050	22.10	AV	Neutral	46.00	23.90
0.2000	38.20	QP	Neutral	63.61	25.41
0.3050	23.40	AV	Neutral	50.11	26.71
0.5050	18.20	AV	Neutral	46.00	27.80
1.0100	14.30	AV	Neutral	46.00	31.70
0.2000	18.00	AV	Neutral	53.61	35.61

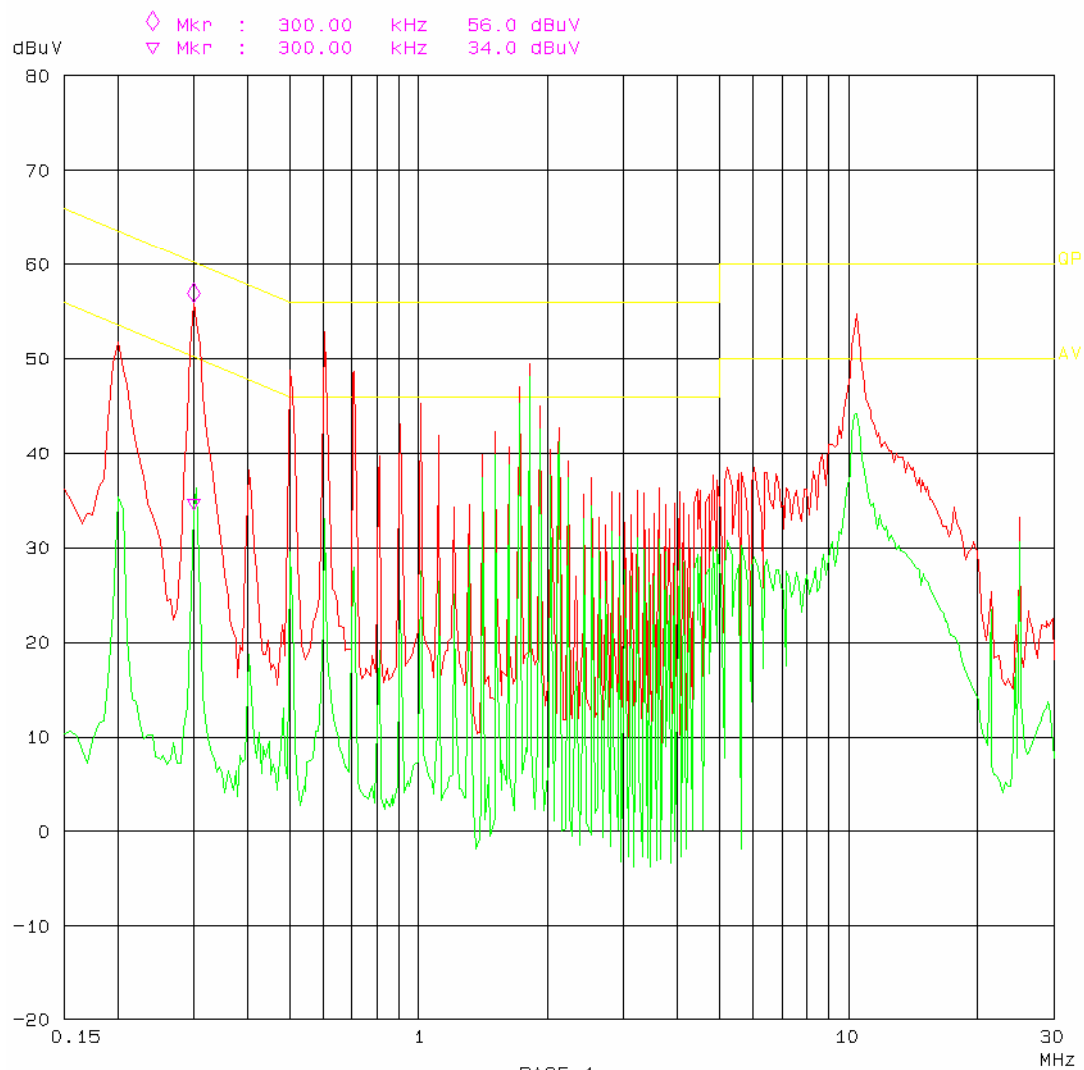
Plot(s) of Test Data

Plot(s) of Test Data is presented hereinafter as reference.

Conduction Emission Test FCC15

12. May 08 21:18

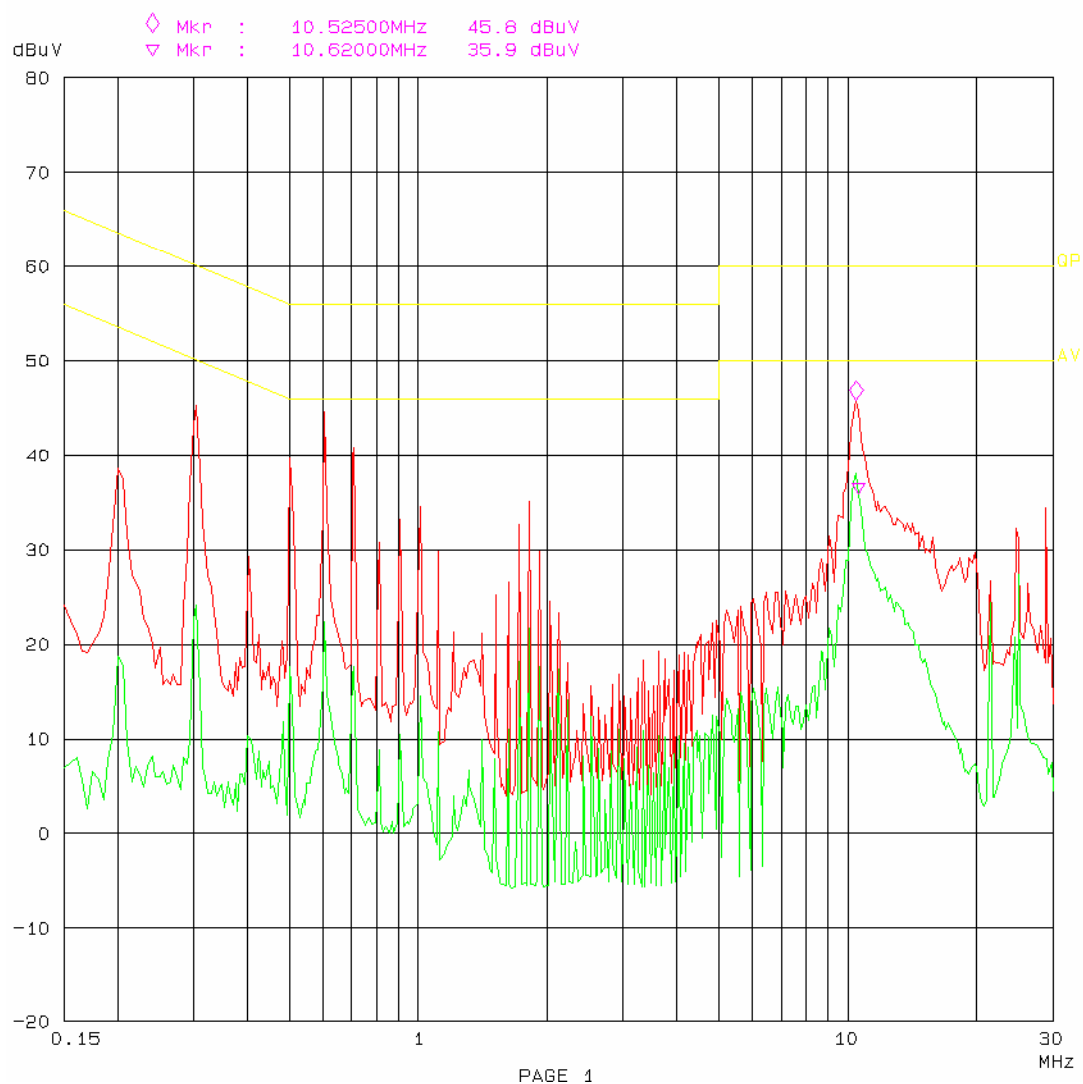
EUT: multi-service-terminal-Device M/N: MST200
Manuf: Azalea network usa.inc
Op Cond: transmittingS802.11A
Operator: King
Test Spec: AC120V/60HZ HOT
Comment: Temp: 28 Humi: 56%



Conduction Emission Test
FCC15

12. May 08 21:32

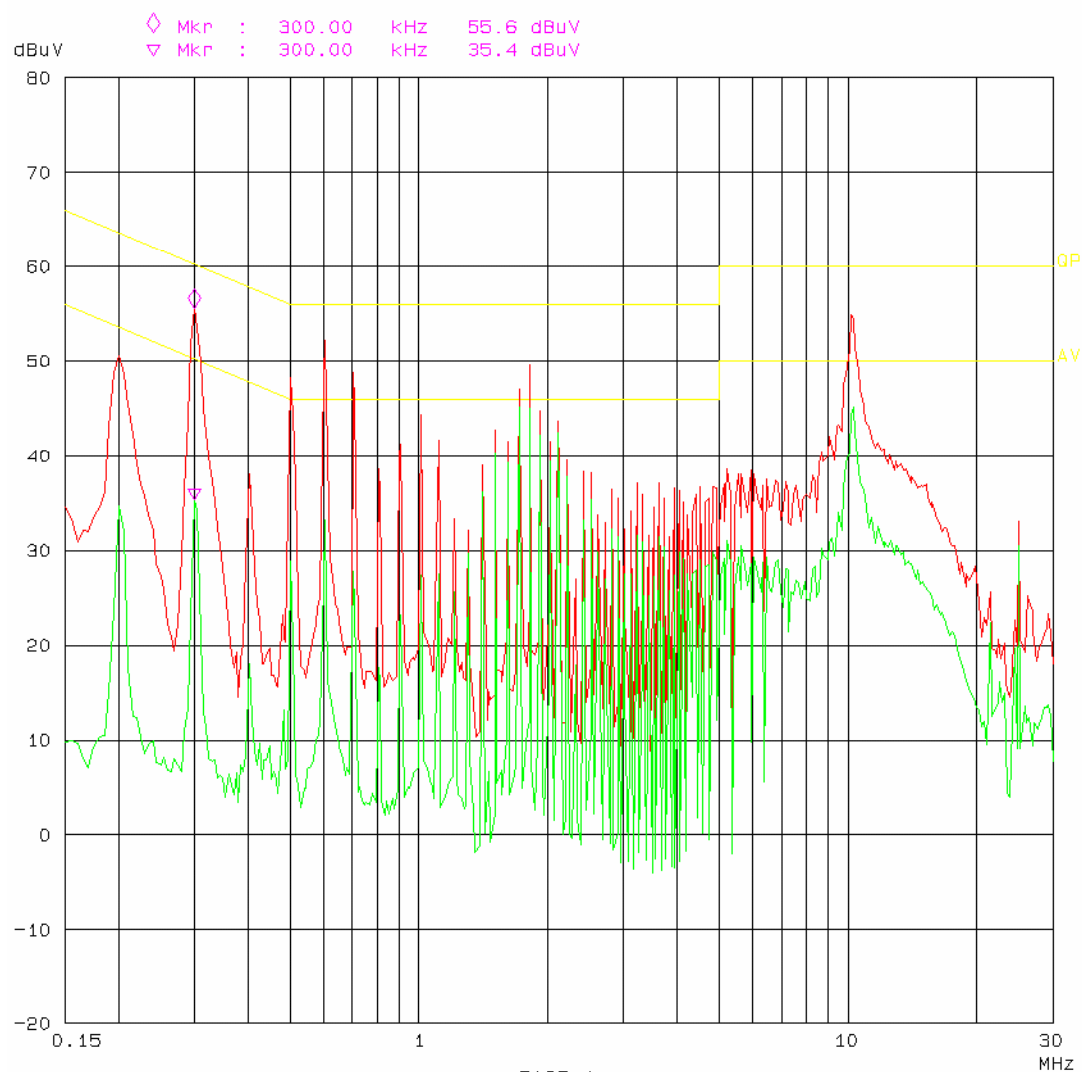
EUT: multi-service-terminal-Device M/N: MST200
Manuf: Azalea network usa.inc
Op Cond: transmitting&802.11A
Operator: King
Test Spec: AC120V/60HZ NEUTRAL
Comment: Temp: 28 Humi: 56%



Conduction Emission Test
FCC15

12. May 08 20:14

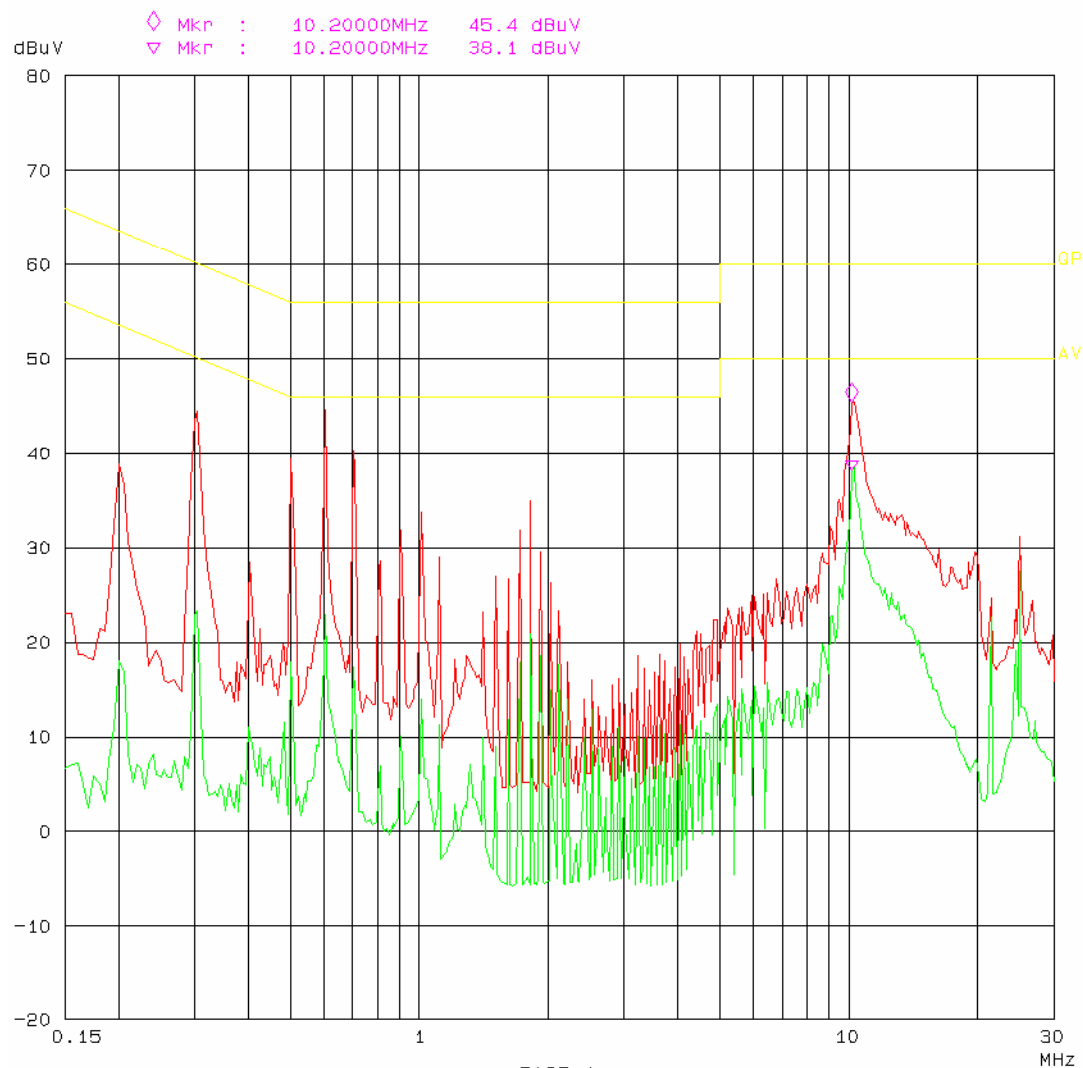
EUT: multi-service-terminal-Device M/N: MST200
Manuf: Azalea network usa.inc
Op Cond: transmitting&802.11B
Operator: King
Test Spec: AC120V/60HZ HOT
Comment: Temp: 28 Humi: 56%



Conduction Emission Test
FCC15

12. May 08 20:28

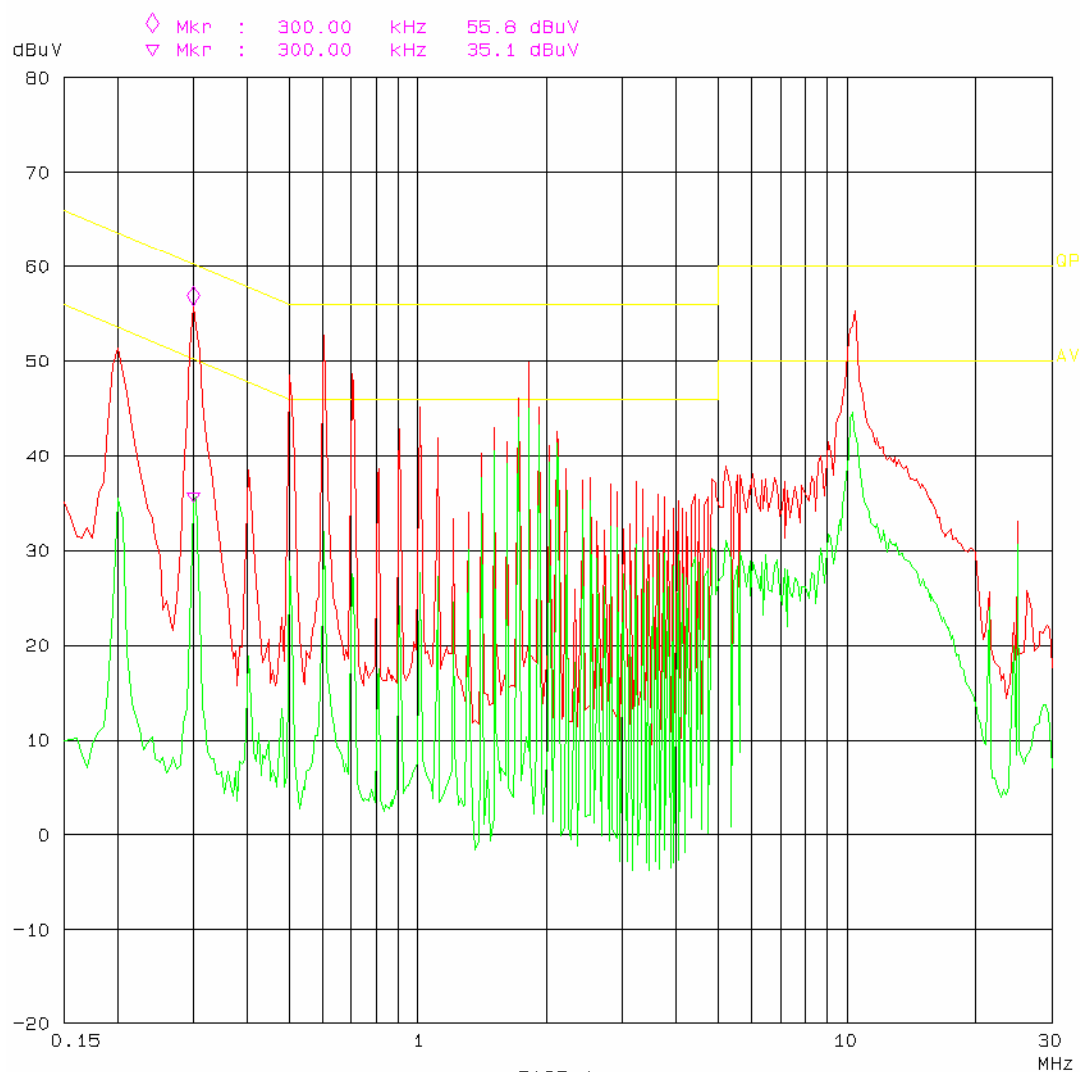
EUT: multi-service-terminal-Device M/N: MST200
Manuf: Azalea network usa.inc
Op Cond: transmitting&802.11B
Operator: King
Test Spec: AC120V/60HZ NEUTRAL
Comment: Temp: 28 Humi: 56%



Conduction Emission Test
FCC15

12. May 08 20:42

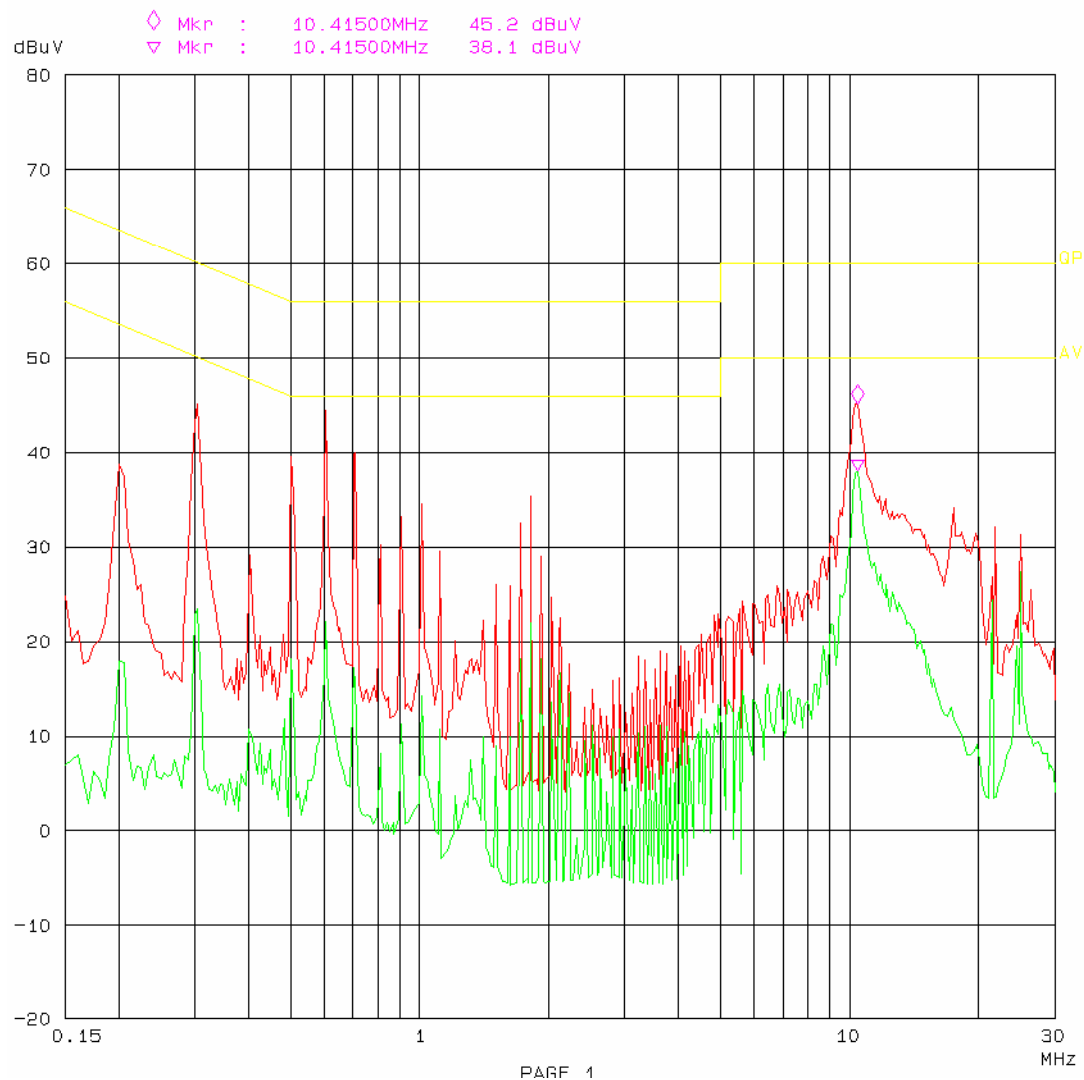
EUT: multi-service-terminal-Device M/N: MST200
Manuf: Azalea network usa.inc
Op Cond: transmitting&802.11G
Operator: King
Test Spec: AC120V/60HZ H0T
Comment: Temp: 28 Humi: 56%



Conduction Emission Test FCC15

12. May 08 21:02

EUT: multi-service-terminal-Device M/N: MST200
Manuf: Azalea network usa,inc
Op Cond: transmitting802.11g
Operator: King
Test Spec: AC120V/60HZ NEUTRAL
Comment: Temp: 28 Humi: 56%



§15.209, §15.205, §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

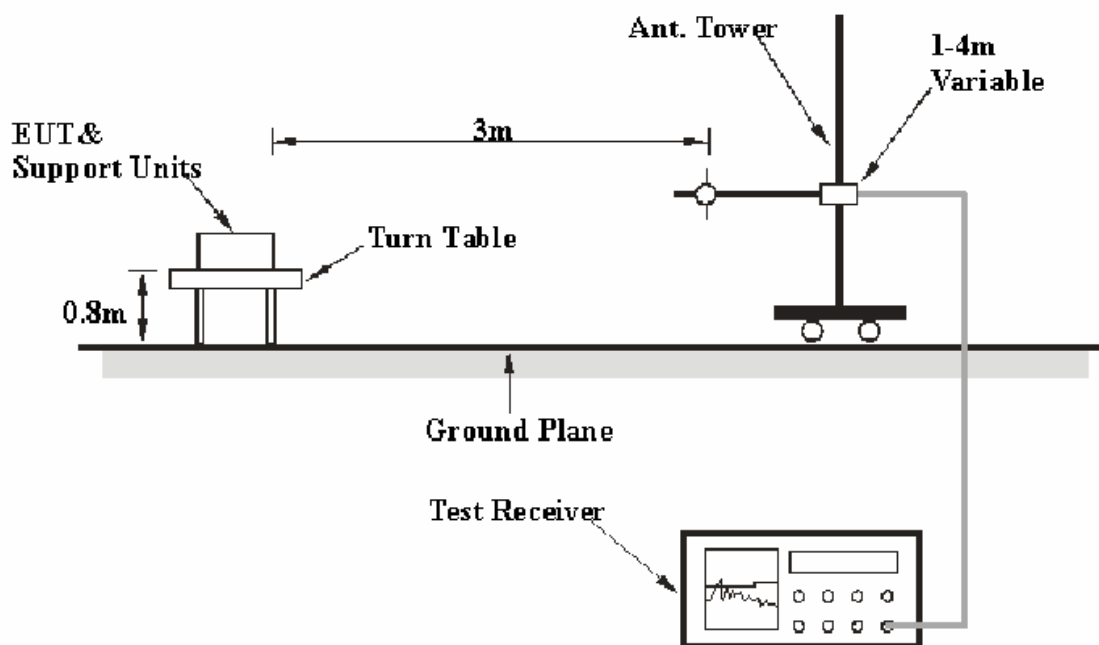
FCC §15.247 (d); §15.209; §15.205.

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ± 4.0 dB.

EUT Setup



The radiated emission tests were performed in the 3 meters chamber B test site, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.109, FCC 15.209 and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

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

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

<i>Frequency Range</i>	<i>RBW</i>	<i>Video B/W</i>
30MHz – 1000 MHz	100 kHz	300 kHz
1000 MHz – 40 GHz	1 MHz	3 MHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2007-11-15	2008-11-15
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2007-10-16	2008-10-16
Sunol Sciences	Bilog Antenna	JB1	A040904-2	2007-08-14	2008-08-14
HP	Amplifier	8449B	3008A00277	2007-09-29	2008-09-29
Sunol Sciences	Horn Antenna	DRH-118	A052604	2007-09-25	2008-09-25
Rohde&Schwarz	Spectrum Analyzer	FSEM30	849720/019	2007-05-09	2008-05-09

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

For the radiated emissions test, the EUT was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz and peak and Average detection modes for frequencies above 1GHz.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.209, 15.205, and 15.247, with the worst margin reading of:

30 -1000MHz:

Transmitting Mode (802.11a): 3.8 dB at 879.976650 MHz in the Vertical polarization
Transmitting Mode (802.11b): 5.7 dB at 600.009150 MHz in the Horizontal polarization
Transmitting Mode (802.11g): 3.0 dB at 879.999375 MHz in the Vertical polarization

Above 1GHz:

2.10 dB at 17235 MHz in the Vertical polarization, 802.11a Low Channel
2.68 dB at 17355 MHz in the Vertical polarization, 802.11a Middle Channel
2.00 dB at 17475 MHz in the Horizontal polarization, 802.11a High Channel

9.29 dB at 7236 MHz in the Vertical polarization, 802.11b Low Channel
5.95 dB at 7311 MHz in the Vertical polarization, 802.11b Middle Channel
4.65 dB at 7386 MHz in the Vertical polarization, 802.11b High Channel

8.19 dB at 7236 MHz in the Vertical polarization, 802.11g Low Channel
8.95 dB at 7311 MHz in the Horizontal polarization, 802.11g Middle Channel
8.45 dB at 7386 MHz in the Vertical polarization, 802.11g High Channel

Test Data

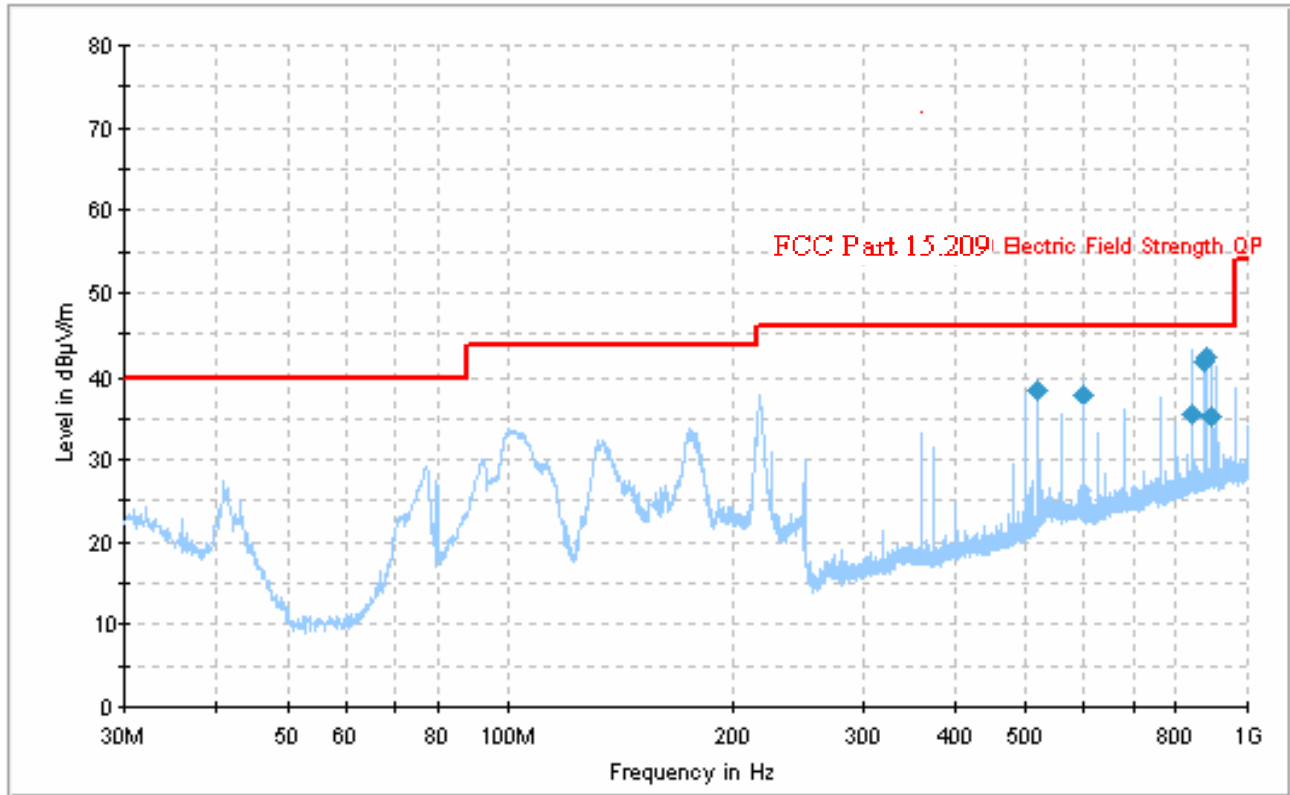
Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by King Tang on 2008-05-01 & 2008-05-29.

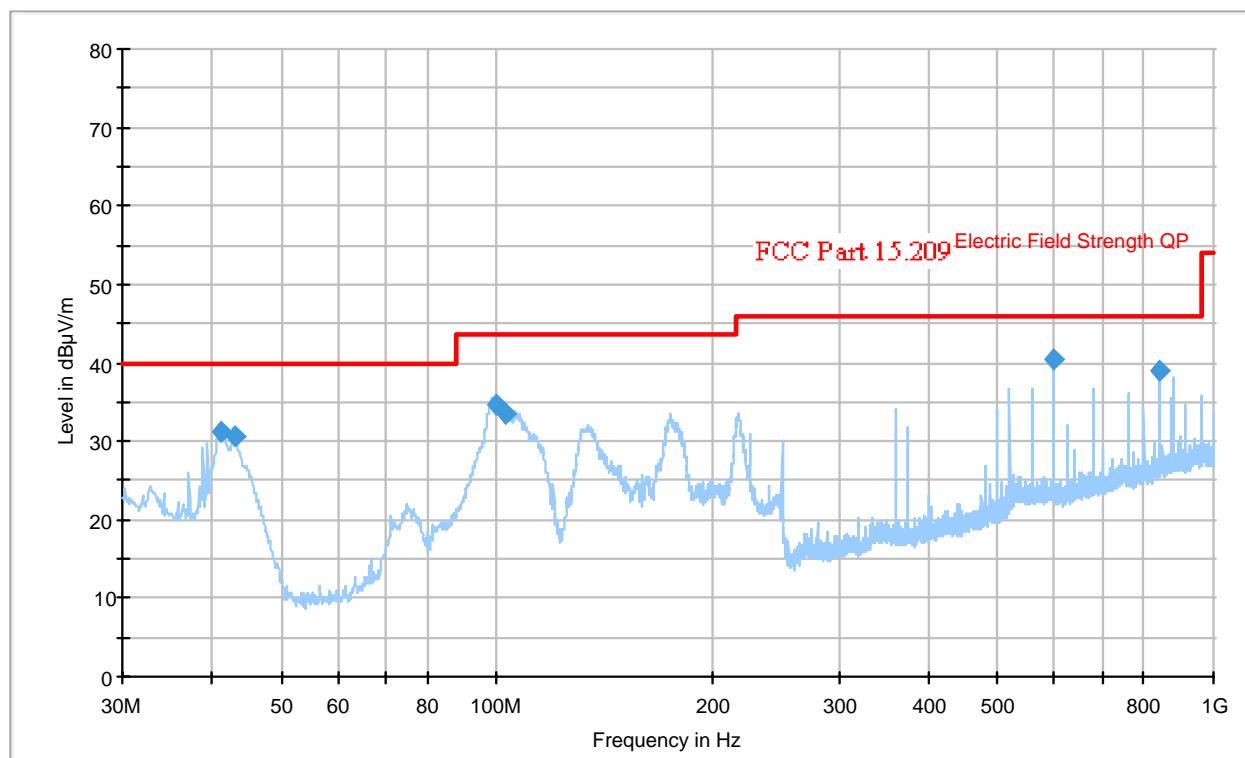
30-1000MHz

Test Mode: Transmitting (802.11a)



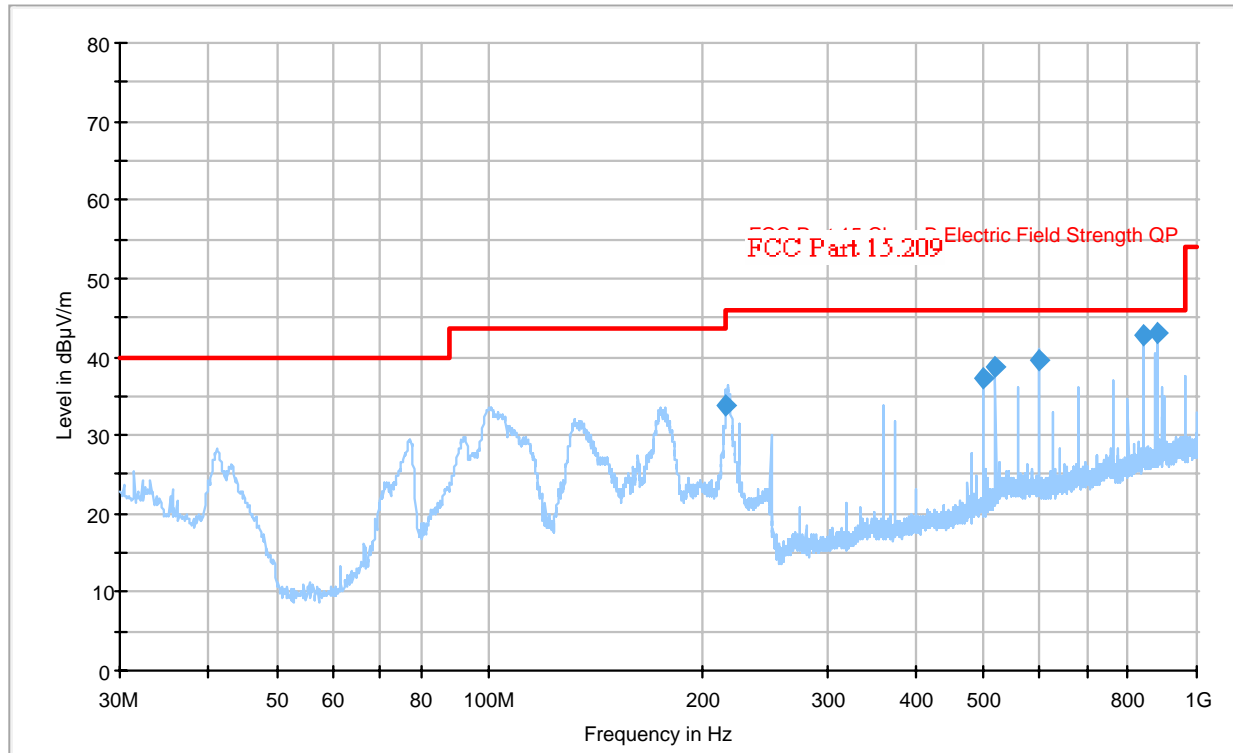
Frequency (MHz)	Corrected Amplitude (dBμV/m)	Ant. Height (cm)	Ant. Polarity (H/V)	Turntable Position (deg)	Correction Factor (dB)	Limit (dBμV/m)	Margin (dB)
879.976650	42.2	110.0	V	293.0	0.8	46.0	3.8
874.968525	41.5	110.0	V	290.0	0.7	46.0	4.5
519.987825	38.5	110.0	V	280.0	-5.2	46.0	7.5
600.011700	37.7	110.0	V	151.0	-3.7	46.0	8.3
839.996925	35.5	110.0	H	167.0	0.4	46.0	10.5
894.162000	35.1	112.0	H	279.0	1.1	46.0	10.9

Test Mode: Transmitting (802.11b)



Frequency (MHz)	Corrected Amplitude (dBμV/m)	Ant. Height (cm)	Ant. Polarity (H/V)	Turntable Position (deg)	Correction Factor (dB)	Limit (dBμV/m)	Margin (dB)
600.009150	40.3	244.0	H	204.0	-3.7	46.0	5.7
839.991675	38.9	105.0	V	295.0	0.4	46.0	7.1
100.005900	34.8	120.0	V	276.0	-15.7	43.5	8.7
41.292850	31.2	106.0	V	124.0	-12.2	40.0	8.8
42.987800	30.5	108.0	V	98.0	-13.4	40.0	9.5
102.618875	33.6	105.0	V	224.0	-15.0	43.5	9.9

Test Mode: Transmitting (802.11g)



Frequency (MHz)	Corrected Amplitude (dBμV/m)	Ant. Height (cm)	Ant. Polarity (H/V)	Turntable Position (deg)	Correction Factor (dB)	Limit (dBμV/m)	Margin (dB)
879.999375	43.0	107.0	V	295.0	0.8	46.0	3.0
839.977875	42.7	169.0	H	163.0	0.4	46.0	3.3
599.977200	39.5	124.0	V	286.0	-3.7	46.0	6.5
519.989550	38.7	120.0	V	276.0	-5.2	46.0	7.3
499.978575	37.3	130.0	V	263.0	-6.3	46.0	8.7
215.898575	33.7	166.0	H	247.0	-12.8	43.5	9.8

Above 1GHz:**802.11a mode:**

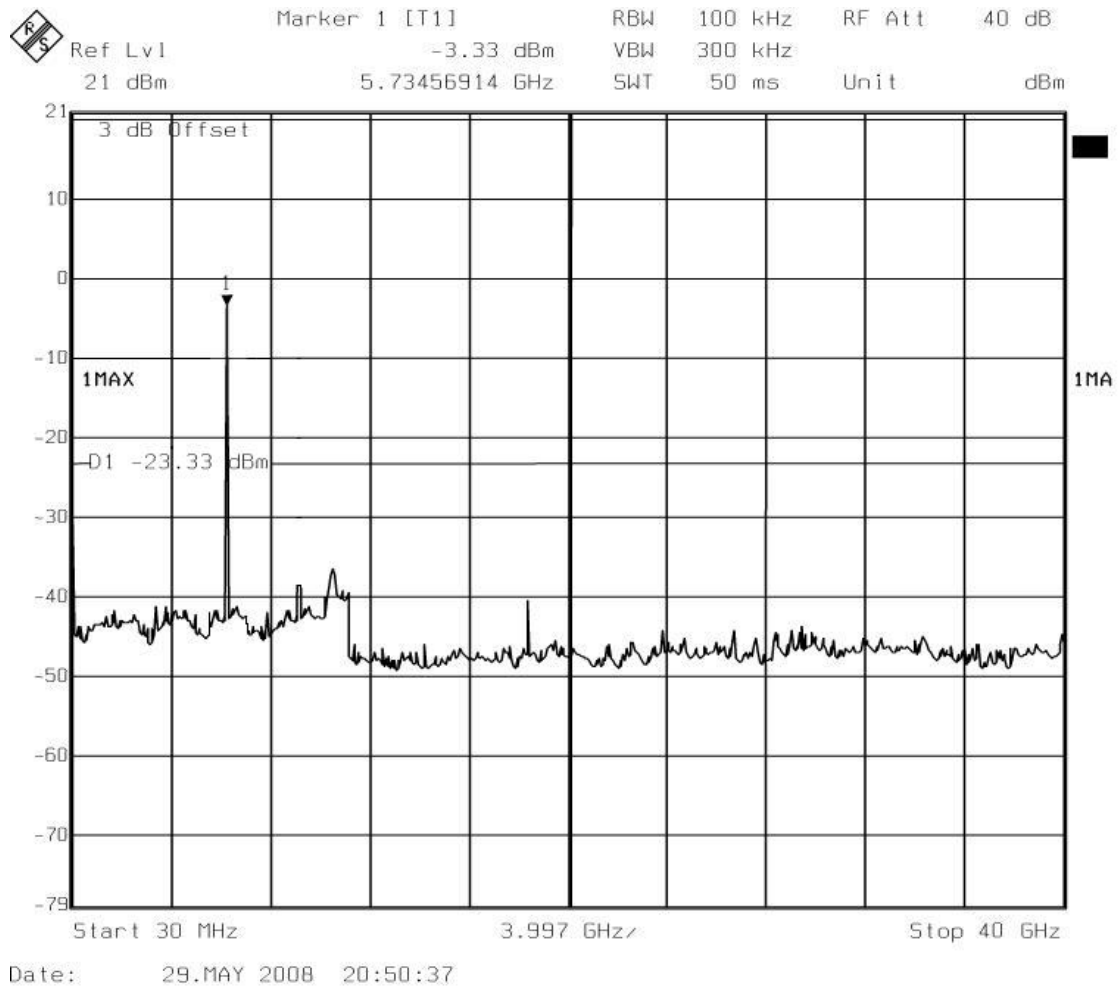
Indicated		Detector (PK/AV)	Table Angle Degree	Antenna		Correction Factor			FCC Part 15.247		
Frequency (MHz)	Receiver Reading (dBμV/m)			Height (m)	Polar (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low Channel (5745MHz)											
17235	35.8	AV	355	1.3	V	41.3	8.90	34.1	51.9	54	2.10
17235	34.2	AV	120	1.3	H	41.3	8.90	34.1	50.3	54	3.70
10490	40.6	AV	100	1.4	H	36.1	6.38	34.2	48.88	54	5.12
10490	40.1	AV	90	1.5	V	36.1	6.38	34.2	48.38	54	5.62
17235	46.2	PK	165	1.2	V	41.3	8.90	34.1	62.3	74	11.70
17235	44.3	PK	45	1.4	H	41.3	8.90	34.1	60.4	74	13.60
10490	48.3	PK	210	1.5	V	36.1	6.38	34.2	56.58	74	17.42
10490	47.2	PK	200	1.2	H	36.1	6.38	34.2	55.48	74	18.52
Middle Channel (5785MHz)											
17355	34.7	AV	360	1.3	V	41.8	8.92	34.1	51.32	54	2.68
17355	34.1	AV	180	1.4	H	41.8	8.92	34.1	50.72	54	3.28
17355	52.9	PK	300	1.4	V	41.8	8.92	34.1	69.52	74	4.48
11570	38.4	AV	205	1.3	H	36.5	6.39	34.2	47.09	54	6.91
17355	48.5	PK	150	1.3	H	41.8	8.92	34.1	65.12	74	8.88
11570	36.1	AV	90	1.5	V	36.5	6.39	34.2	44.79	54	9.21
11570	53.4	PK	45	1.5	V	36.5	6.39	34.2	62.09	74	11.91
11570	50.6	PK	0	1.1	H	36.5	6.39	34.2	59.29	74	14.71
HighChannel (5825MHz)											
17475	35.4	AV	210	1.5	H	42.0	8.90	34.3	52	54	2.00
17475	35.2	AV	0	1.3	V	42.0	8.90	34.3	51.8	54	2.20
11650	40.7	AV	115	1.4	H	36.4	6.39	34.2	49.29	54	4.71
11650	39.6	AV	45	1.4	V	36.4	6.39	34.2	48.19	54	5.81
17475	47.1	PK	180	1.4	V	42.0	8.90	34.3	63.7	74	10.30
17475	46.2	PK	95	1.4	H	42.0	8.90	34.3	62.8	74	11.20
11650	50.2	PK	360	1.5	V	36.4	6.39	34.2	58.79	74	15.21
11650	49.6	PK	265	1.1	H	36.4	6.39	34.2	58.19	74	15.81

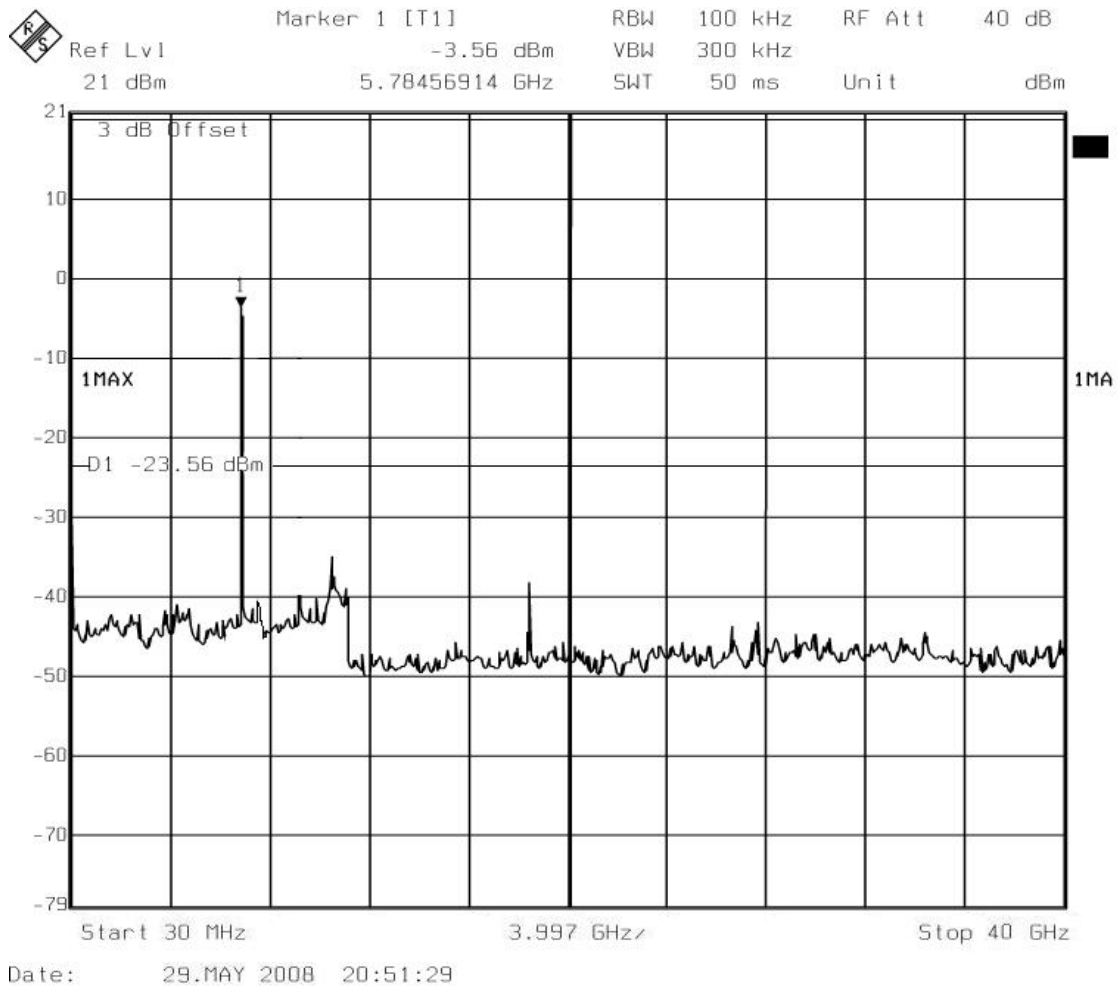
802.11b mode:

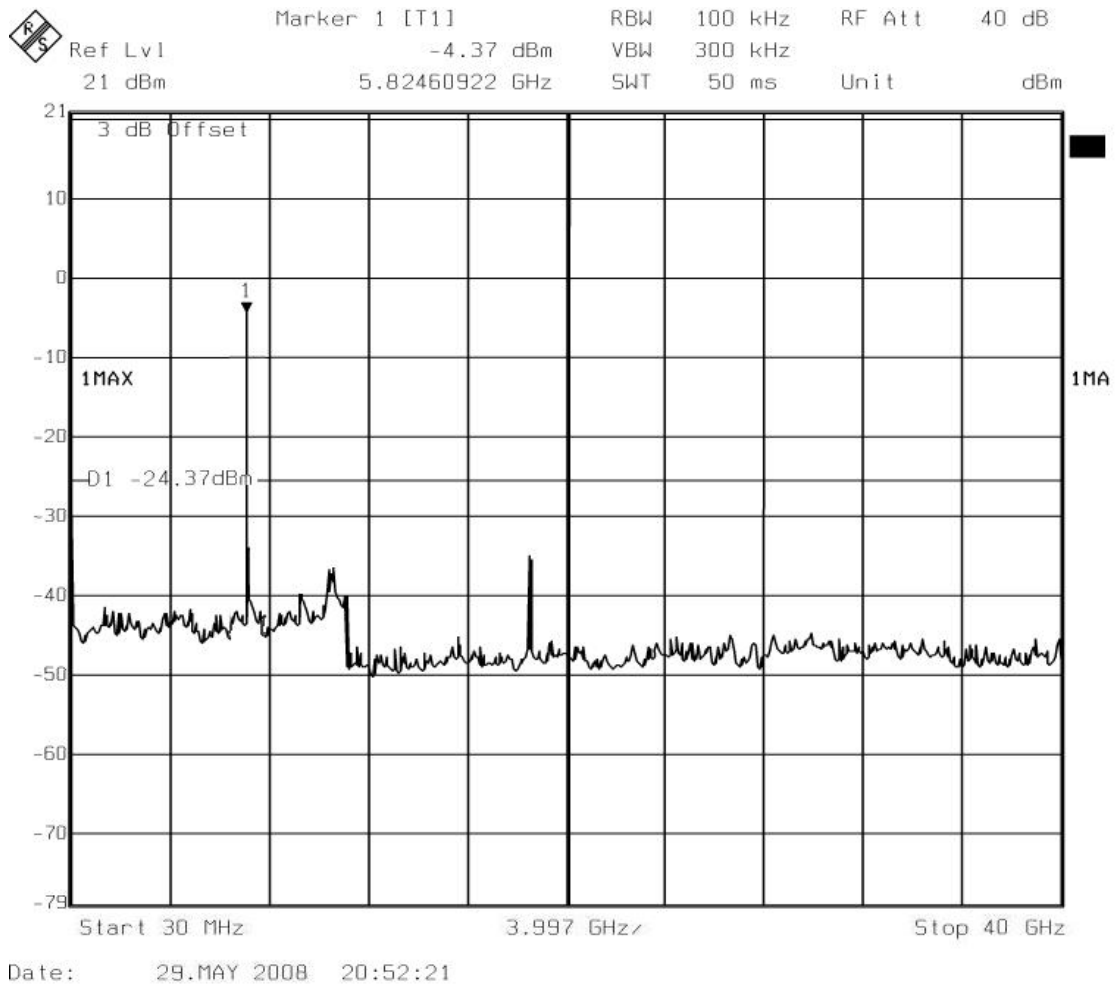
Indicated		Detector (PK/AV)	Table Angle Degree	Antenna		Correction Factor			FCC Part 15.247		
Frequency (MHz)	Receiver Reading (dBμV/m)			Height (m)	Polar (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low Channel (2412MHz)											
7236	38.5	AV	360	1.5	V	35.4	4.51	33.7	44.71	54	9.29
4824	40.3	AV	250	1.2	V	31.3	4.64	33.4	42.84	54	11.16
7236	36.2	AV	45	1.4	H	35.4	4.51	33.7	42.41	54	11.59
4824	39.6	AV	60	1.6	H	31.3	4.64	33.4	42.14	54	11.86
4824	54.6	PK	180	1.3	V	31.3	4.64	33.4	57.14	74	16.86
7236	49.6	PK	300	1.5	V	35.4	4.51	33.7	55.81	74	18.19
7236	48.7	PK	100	1.5	H	35.4	4.51	33.7	54.91	74	19.09
4824	50.9	PK	210	1.1	H	31.3	4.64	33.4	53.44	74	20.56
Middle Channel (2437MHz)											
7311	41.6	AV	180	1.5	V	35.4	4.75	33.7	48.05	54	5.95
7311	40.1	AV	185	1.3	H	35.4	4.75	33.7	46.55	54	7.45
4874	42.7	AV	200	1.5	V	31.3	4.64	33.4	45.24	54	8.76
4874	41.5	AV	360	1.5	H	31.3	4.64	33.4	44.04	54	9.96
7311	54.8	PK	120	1.2	V	35.4	4.75	33.7	61.25	74	12.75
4874	56.6	PK	75	1.5	V	31.3	4.64	33.4	59.14	74	14.86
7311	51.4	PK	220	1.4	H	35.4	4.75	33.7	57.85	74	16.15
4874	53.6	PK	0	1.1	H	31.3	4.64	33.4	56.14	74	17.86
HighChannel (2462MHz)											
7386	43.0	AV	160	1.3	V	35.3	4.75	33.7	49.35	54	4.65
7386	42.9	AV	245	1.4	H	35.3	4.75	33.7	49.25	54	4.75
4924	44.8	AV	360	1.5	V	32.0	4.64	33.4	48.04	54	5.96
4924	43.4	AV	45	1.5	H	32.0	4.64	33.4	46.64	54	7.36
7386	53.2	PK	90	1.2	V	35.3	4.75	33.7	59.55	74	14.45
4924	56.1	PK	0	1.4	V	32.0	4.64	33.4	59.34	74	14.66
4924	55.6	PK	200	1.4	H	32.0	4.64	33.4	58.84	74	15.16
7386	52.3	PK	180	1.2	H	35.3	4.75	33.7	58.65	74	15.35

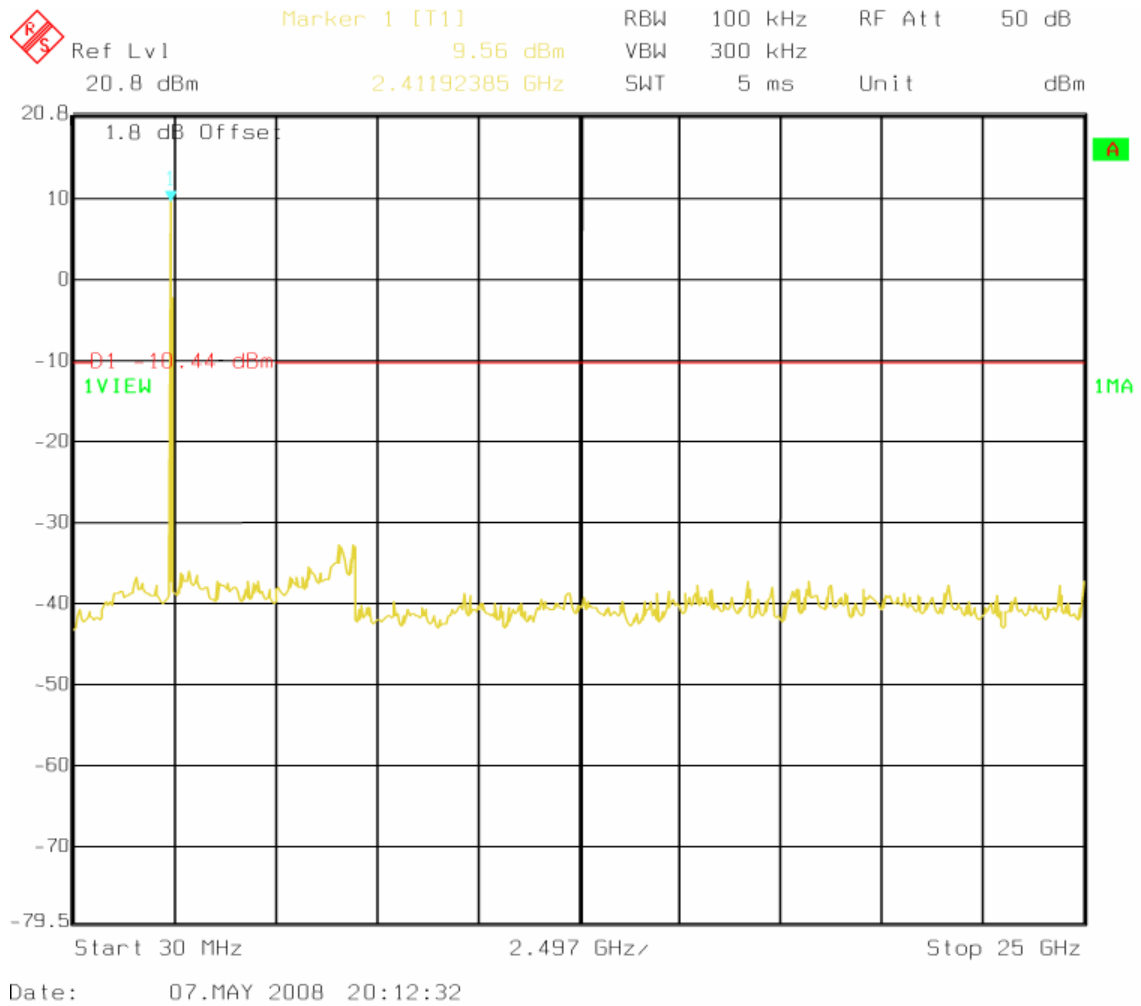
802.11g mode:

Indicated		Detector (PK/AV)	Table Angle Degree	Antenna		Correction Factor			FCC Part 15.247		
Frequency (MHz)	Receiver Reading (dBμV/m)			Height (m)	Polar (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
Low Channel (2412MHz)											
7236	39.6	AV	220	1.3	V	35.4	4.51	33.7	45.81	54	8.19
7236	38.8	AV	200	1.4	H	35.4	4.51	33.7	45.01	54	8.99
4824	41.7	AV	90	1.5	V	31.3	4.64	33.4	44.24	54	9.76
4824	40.1	AV	45	1.5	H	31.3	4.64	33.4	42.64	54	11.36
7236	47.5	PK	165	1.4	V	35.4	4.51	33.7	53.71	74	20.29
4824	50.8	PK	320	1.2	V	31.3	4.64	33.4	53.34	74	20.66
4824	48.5	PK	0	1.5	H	31.3	4.64	33.4	51.04	74	22.96
7236	43.7	PK	120	1.2	H	35.4	4.51	33.7	49.91	74	24.09
Middle Channel (2437MHz)											
7311	38.6	AV	200	1.5	H	35.4	4.75	33.7	45.05	54	8.95
4874	40.5	AV	120	1.4	H	31.3	4.64	33.4	43.04	54	10.96
7311	35.9	AV	320	1.3	V	35.4	4.75	33.7	42.35	54	11.65
4874	36.7	AV	190	1.3	V	31.3	4.64	33.4	39.24	54	14.76
7311	44.2	PK	45	1.5	H	35.4	4.75	33.7	50.65	74	23.35
7311	43.2	PK	360	1.4	V	35.4	4.75	33.7	49.65	74	24.35
4874	46.8	PK	0	1.4	V	31.3	4.64	33.4	49.34	74	24.66
4874	45.3	PK	60	1.2	H	31.3	4.64	33.4	47.84	74	26.16
HighChannel (2462MHz)											
7386	39.2	AV	160	1.3	V	35.3	4.75	33.7	45.55	54	8.45
4924	42.3	AV	360	1.5	V	32.0	4.55	33.4	45.45	54	8.55
4924	41.5	AV	45	1.5	H	32.0	4.55	33.4	44.65	54	9.35
7386	38.1	AV	245	1.4	H	35.3	4.75	33.7	44.45	54	9.55
4924	55.7	PK	0	1.4	V	32.0	4.55	33.4	58.85	74	15.15
7386	51.6	PK	90	1.2	V	35.3	4.75	33.7	57.95	74	16.05
7386	48.6	PK	180	1.2	H	35.3	4.75	33.7	54.95	74	19.05
4924	50.4	PK	200	1.4	H	32.0	4.55	33.4	53.55	74	20.45

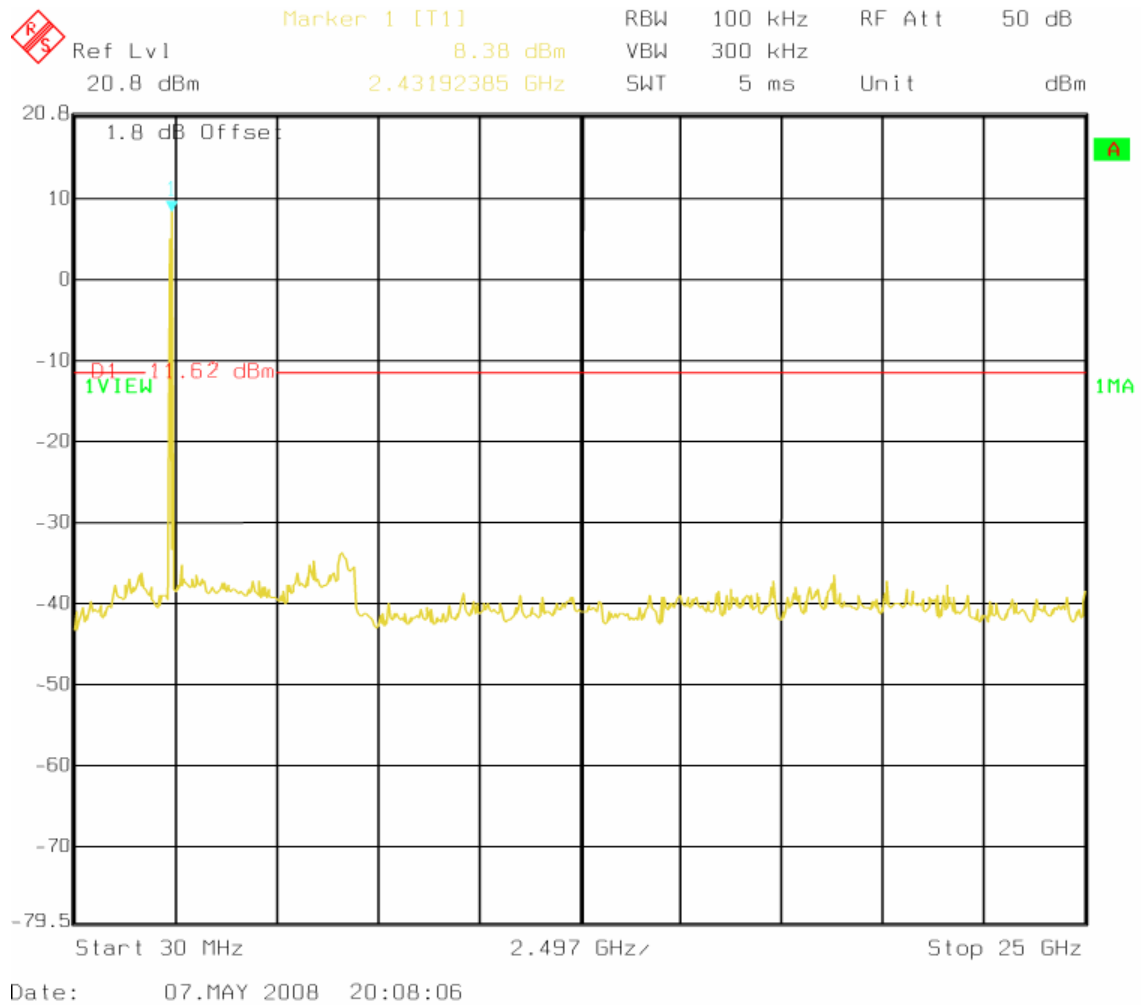
Antenna port conducted spurious emissions**802.11a mode:****Low Channel**

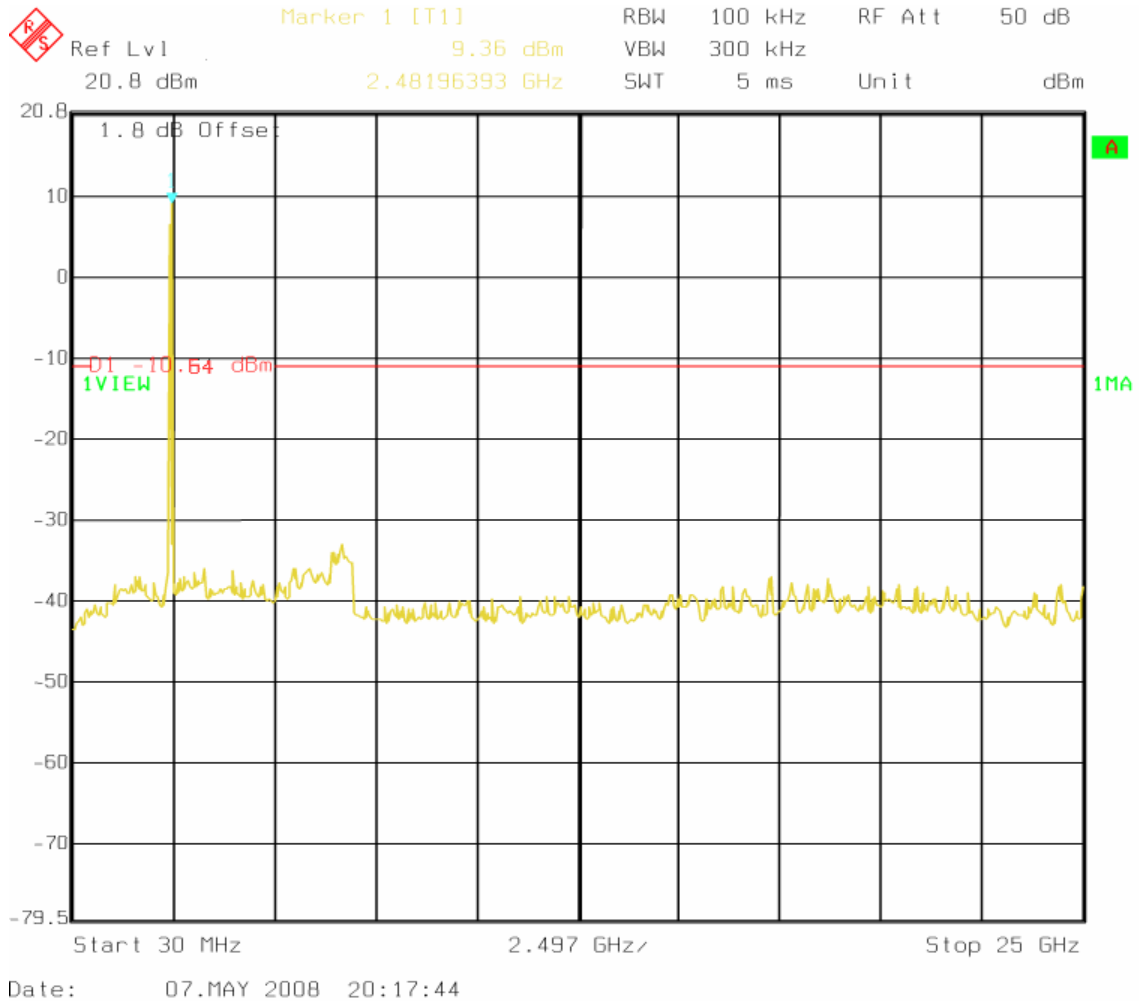
Middle Channel

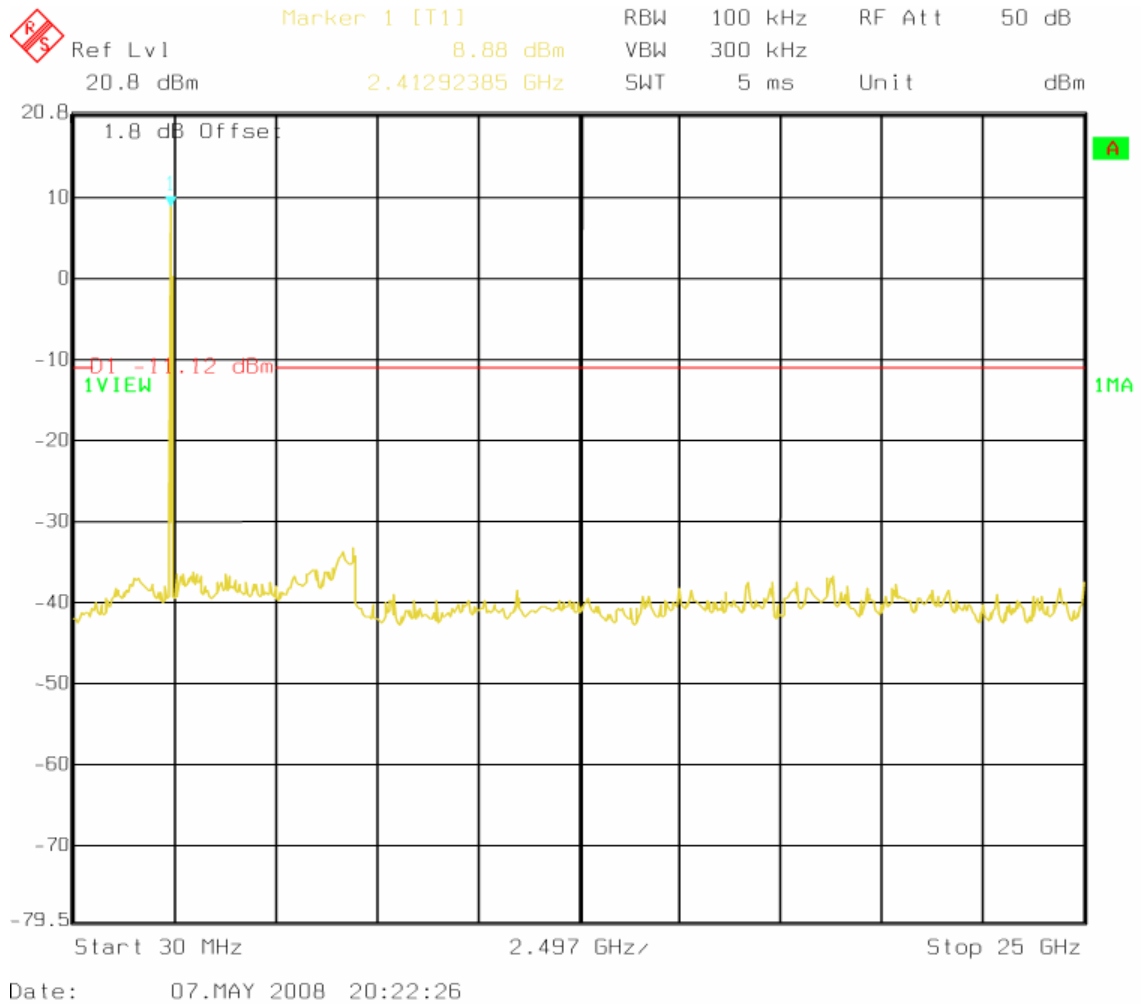
High Channel

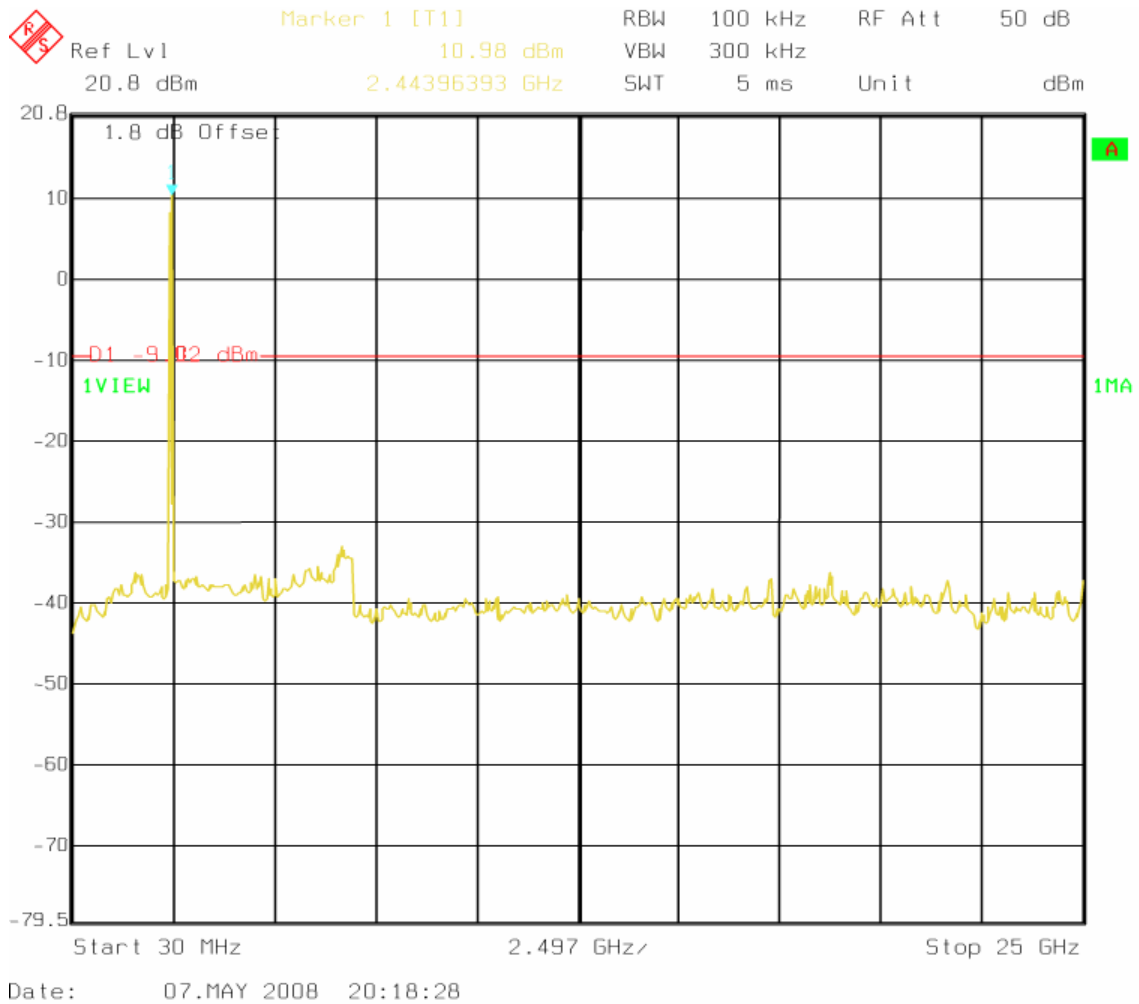
802.11b Mode:**Low Channel**

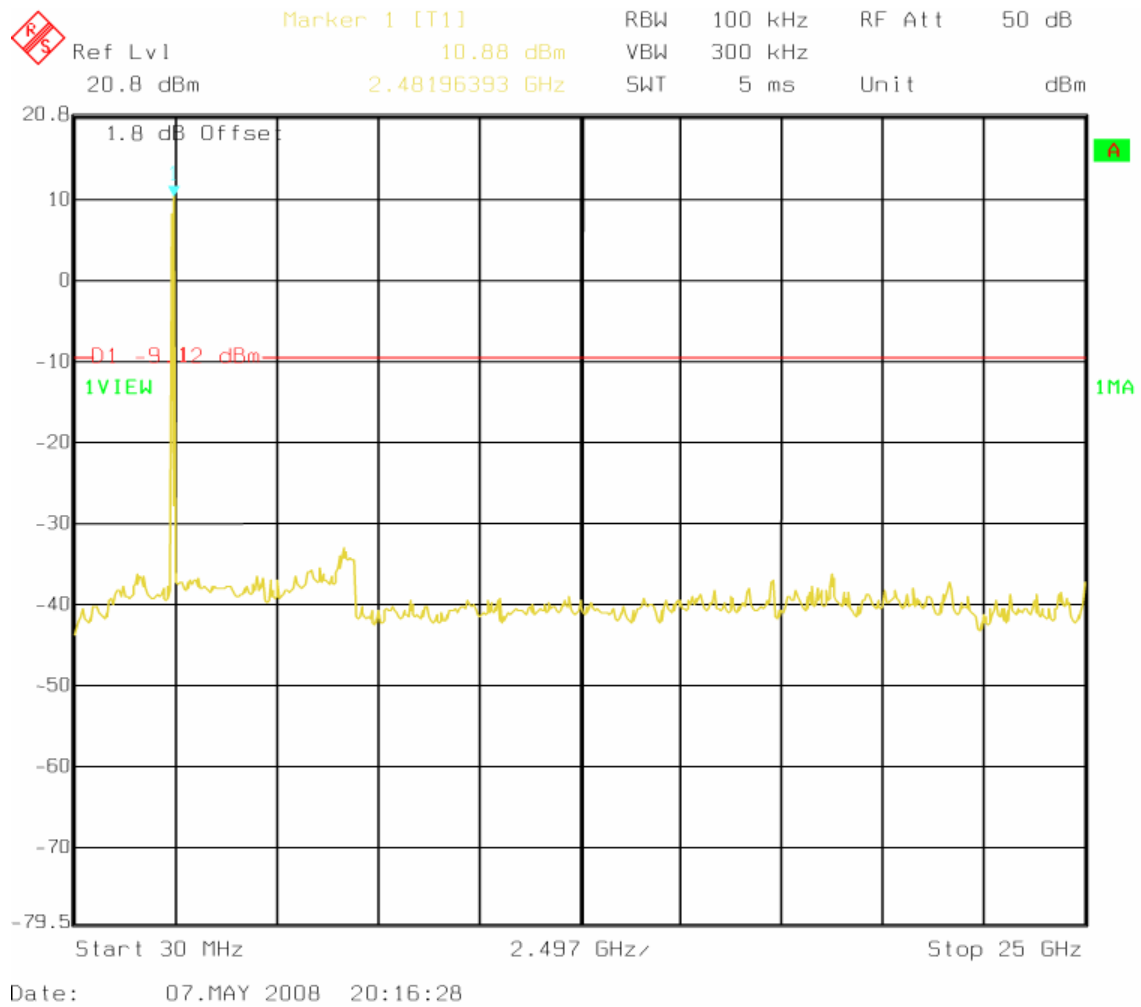
Middle Channel



High Channel

802.11g Mode:**Low Channel**

Middle Channel

High Channel

§15.247(a) (2) – 6dB BANDWIDTH TESTING

Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

Test Data

Environmental Conditions

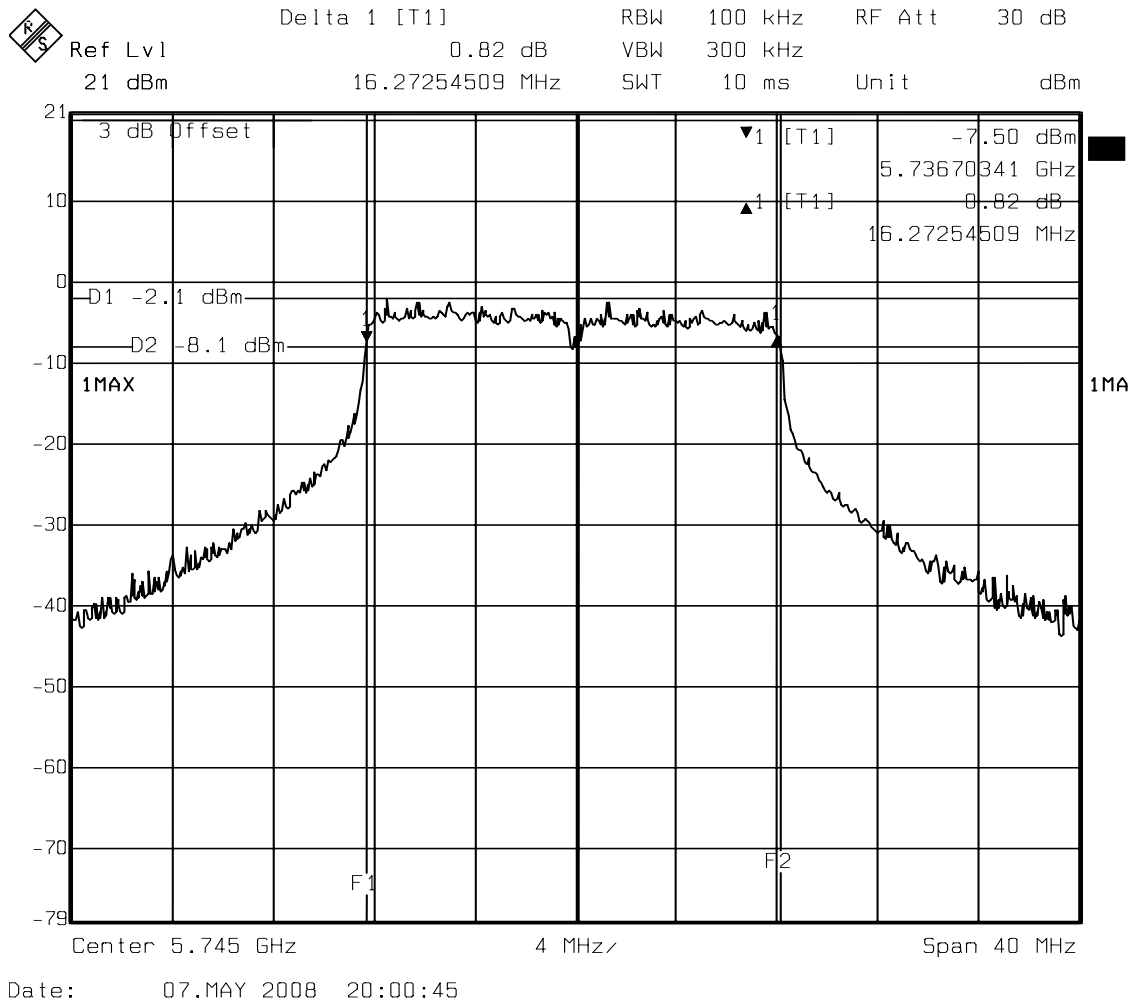
Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by King Tang on 2008-05-07, 2008-05-10.

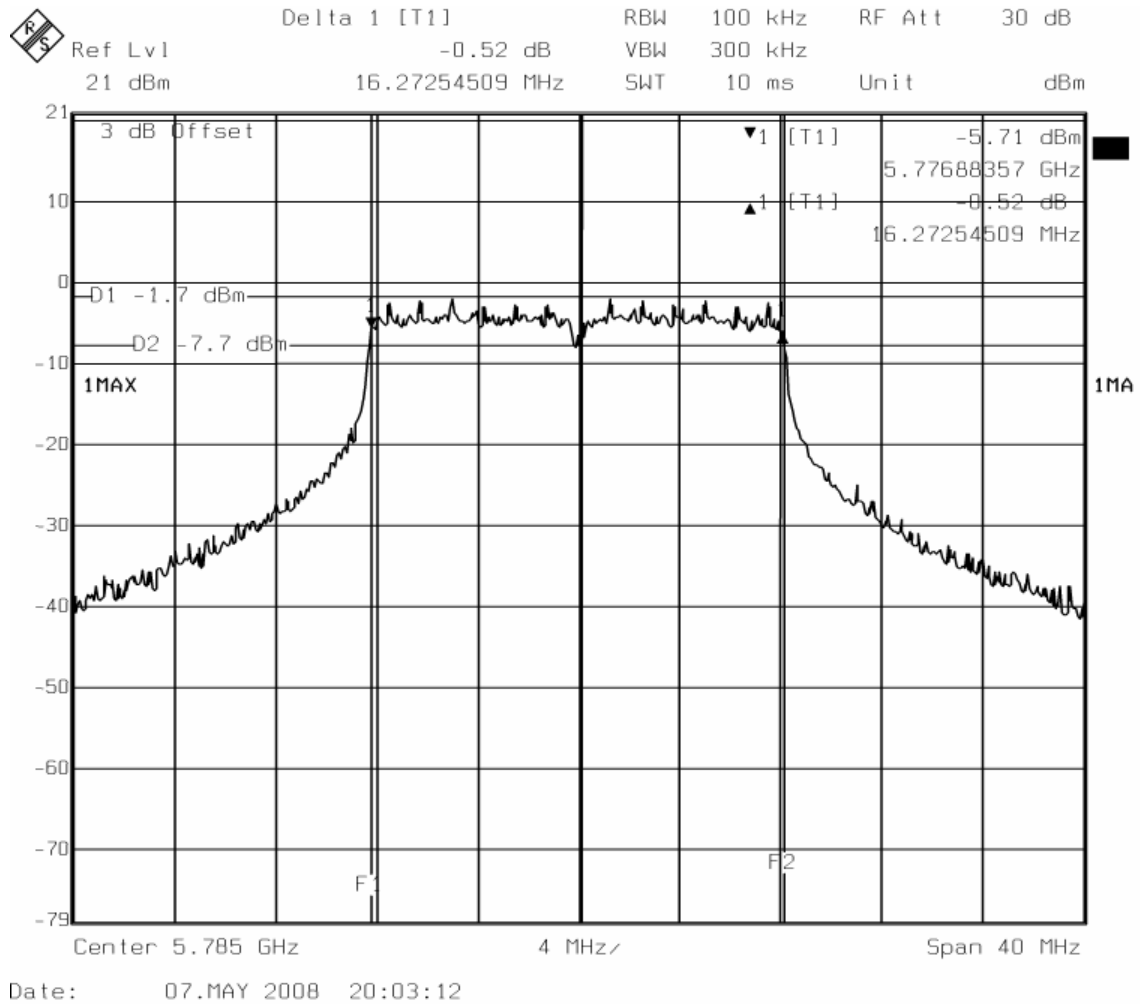
Test Result: Pass.

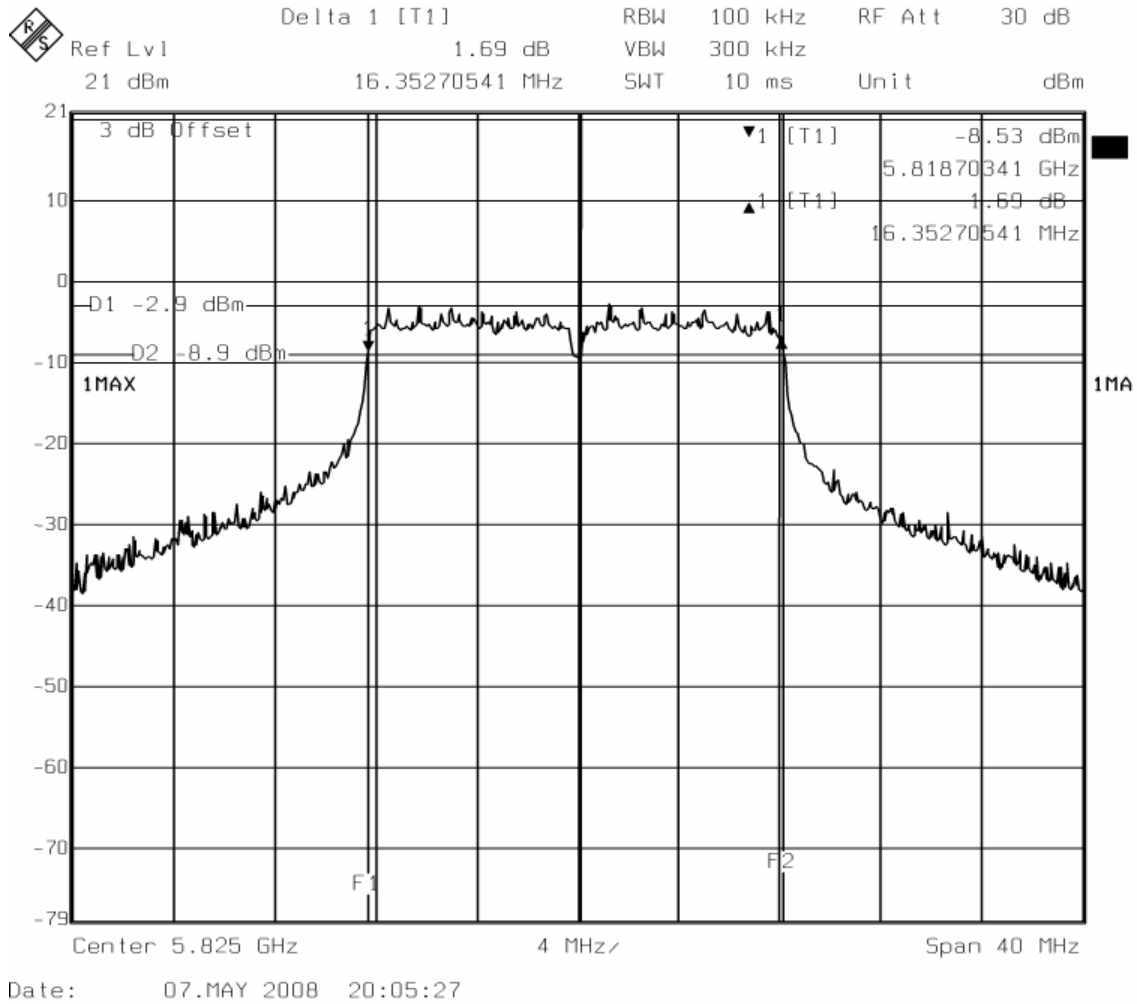
Please refer to the following tables and plots.

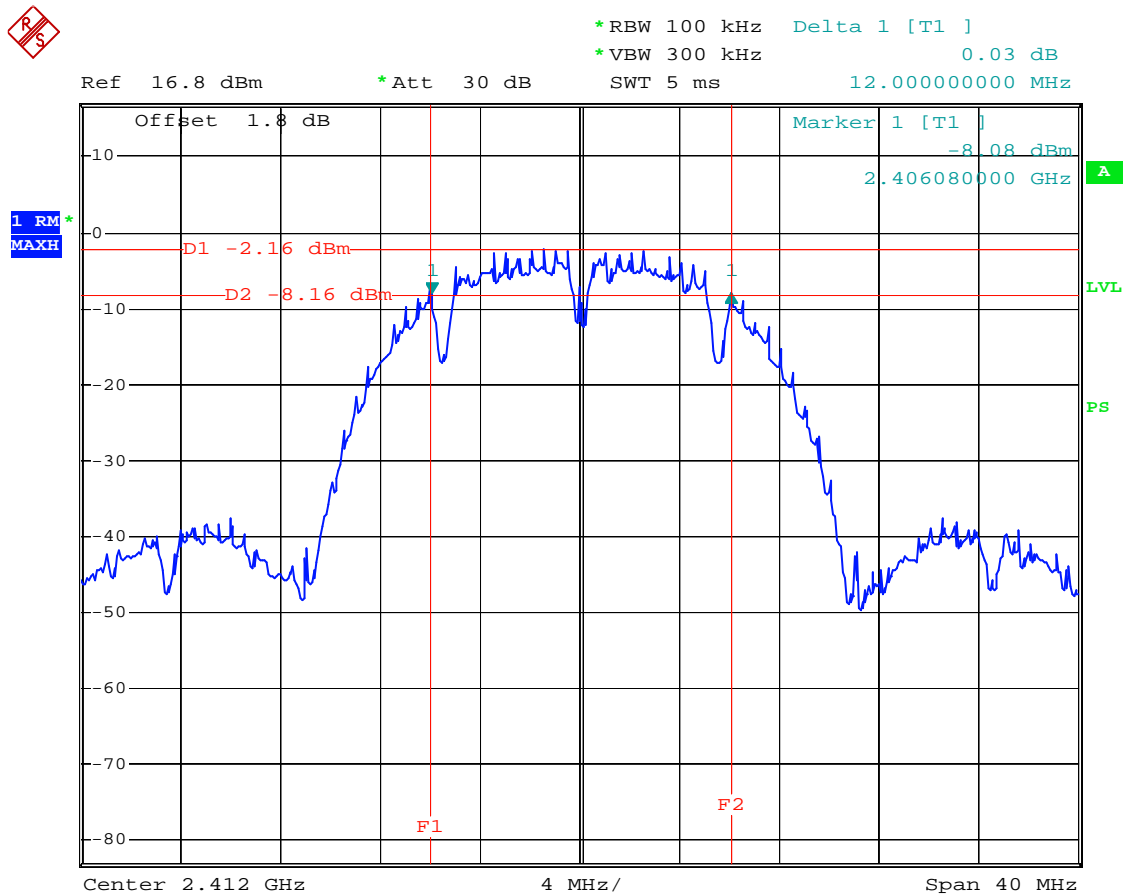
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
802.11a Mode			
Low	5745	16.27	0.5
Mid	5785	16.27	0.5
High	5825	16.35	0.5
802.11b Mode			
Low	2412	12.00	0.5
Mid	2437	12.48	0.5
High	2462	12.00	0.5
802.11g Mode			
Low	2412	15.84	0.5
Mid	2437	15.84	0.5
High	2462	15.92	0.5

802.11a Mode:**Low Channel**

Middle Channel



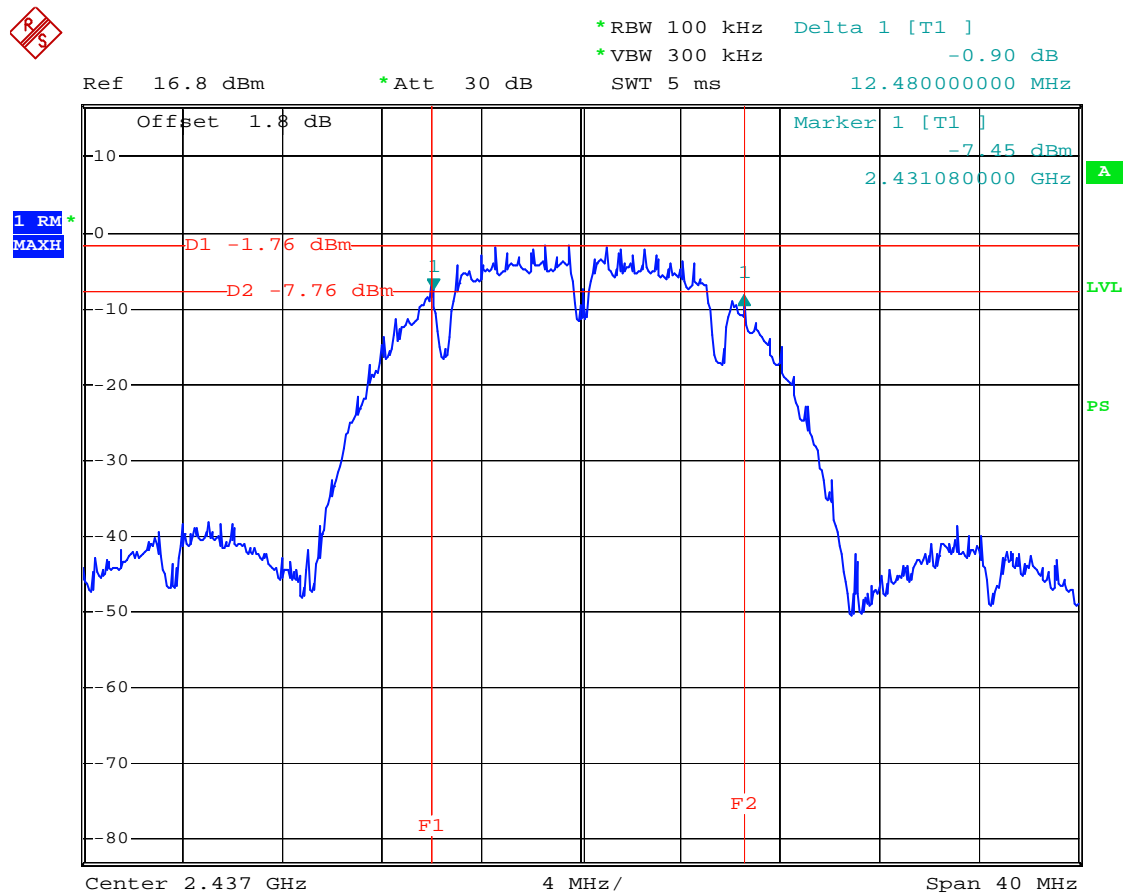
High Channel

802.11b Mode:**Low Channel**

802.11b 6db bandwidth low channel

Date: 10.MAY.2008 22:00:50

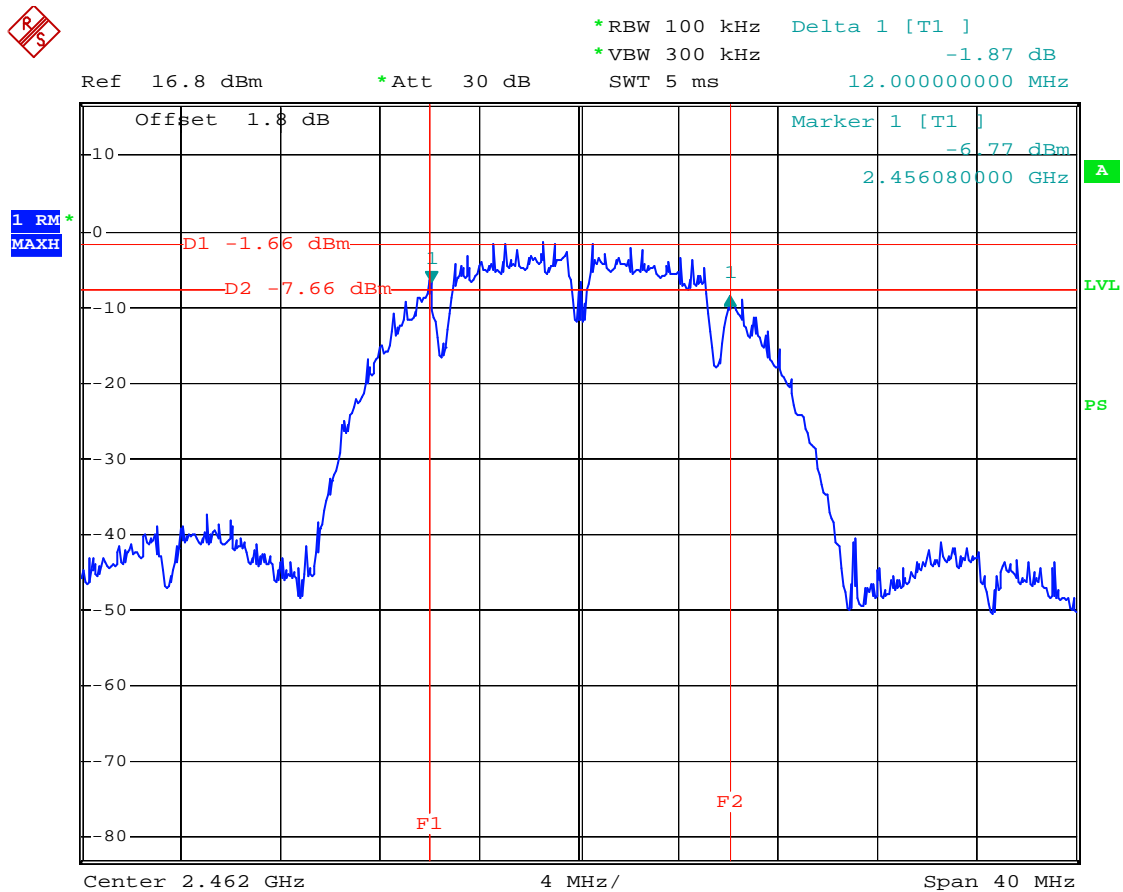
Middle Channel



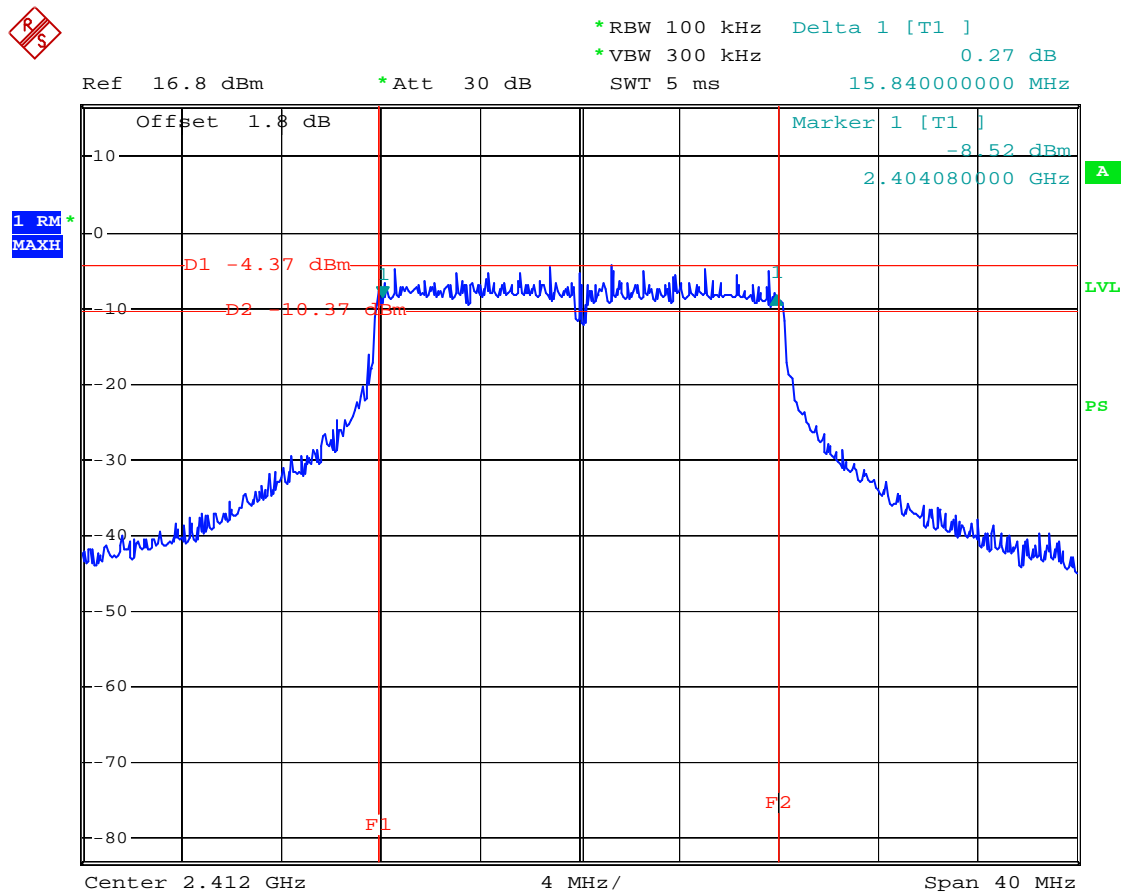
802.11b 6db bandwidth middle channel

Date: 10.MAY.2008 22:03:12

High Channel



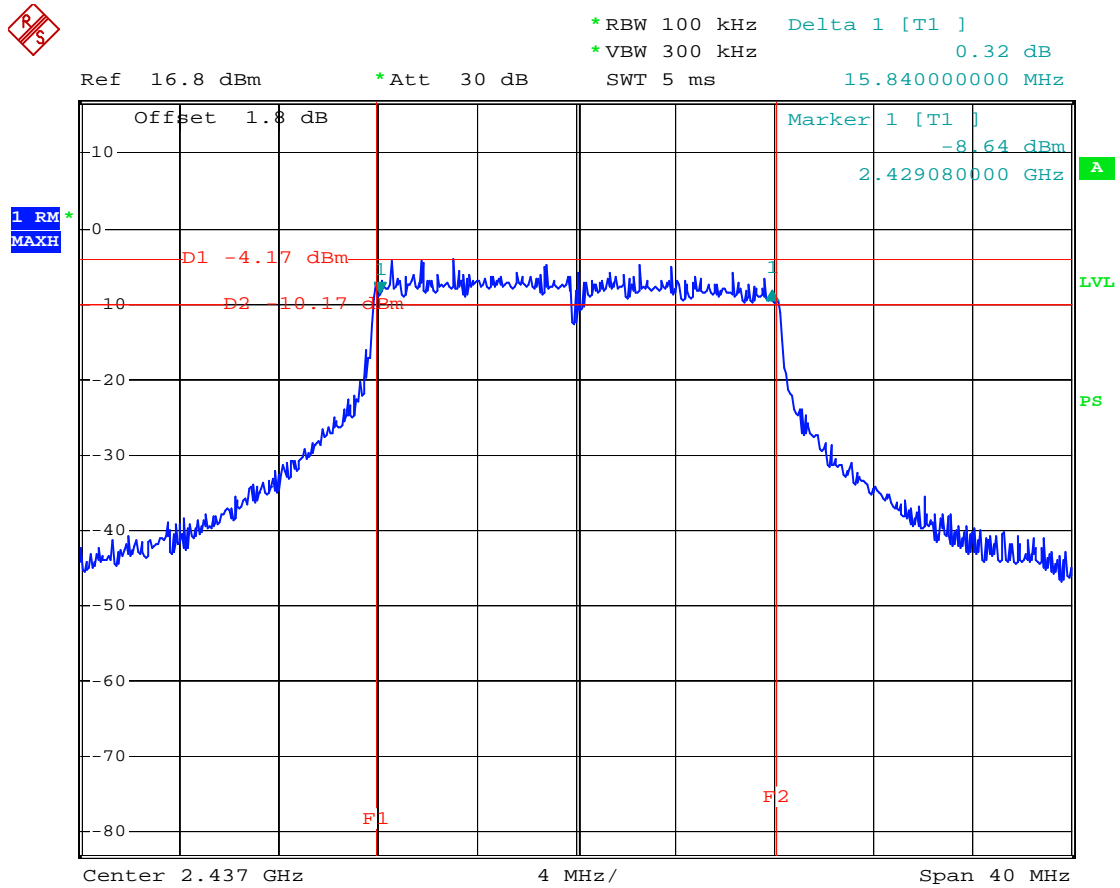
Date: 10.MAY.2008 22:09:44

802.11g Mode:**Low Channel**

802.11g 6db bandwidth low channel

Date: 10.MAY.2008 22:12:31

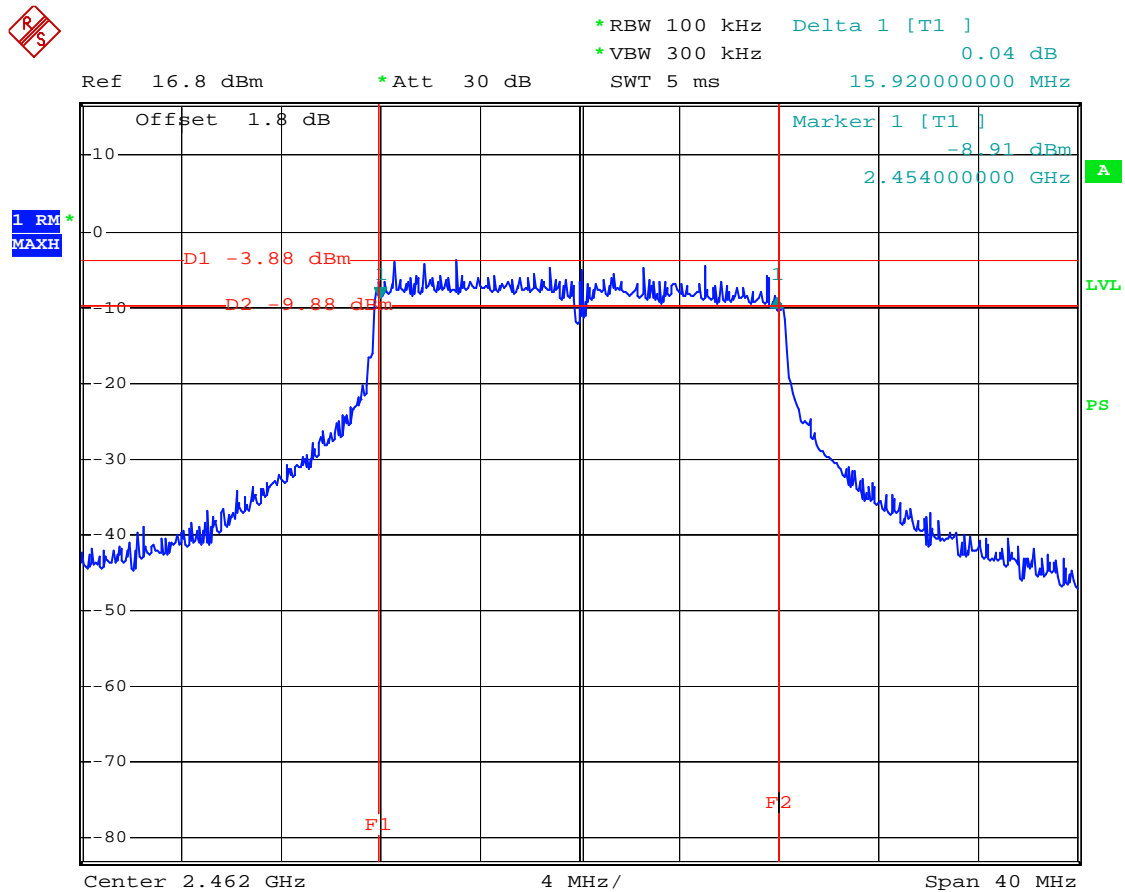
Middle Channel



802.11g 6db bandwidth middle channel

Date: 10.MAY.2008 22:14:55

High Channel



802.11g 6db bandwidth high channel

Date: 10.MAY.2008 22:17:03

§15.247(b) (3) - MAXIMUM PEAK OUTPUT POWER

Applicable Standard

According to §15.247(b) (3), for systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

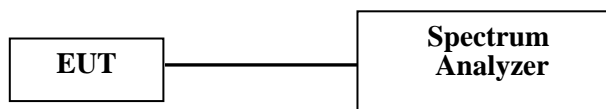
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an EMI Test Receiver.
3. Add a correction factor to the display.



Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by King Tang on 2008-05-01, 2008-05-07.

Test Mode: Transmitting

Test Result: Pass

802.11a Mode:

Channel	Channel Frequency (MHz)	Data Rate (Mbps)	Power Output (dBm)	Limit (dBm)
Low	5745	6	11.31	30
Mid	5785	6	11.10	30
High	5825	6	11.44	30

802.11b Mode:

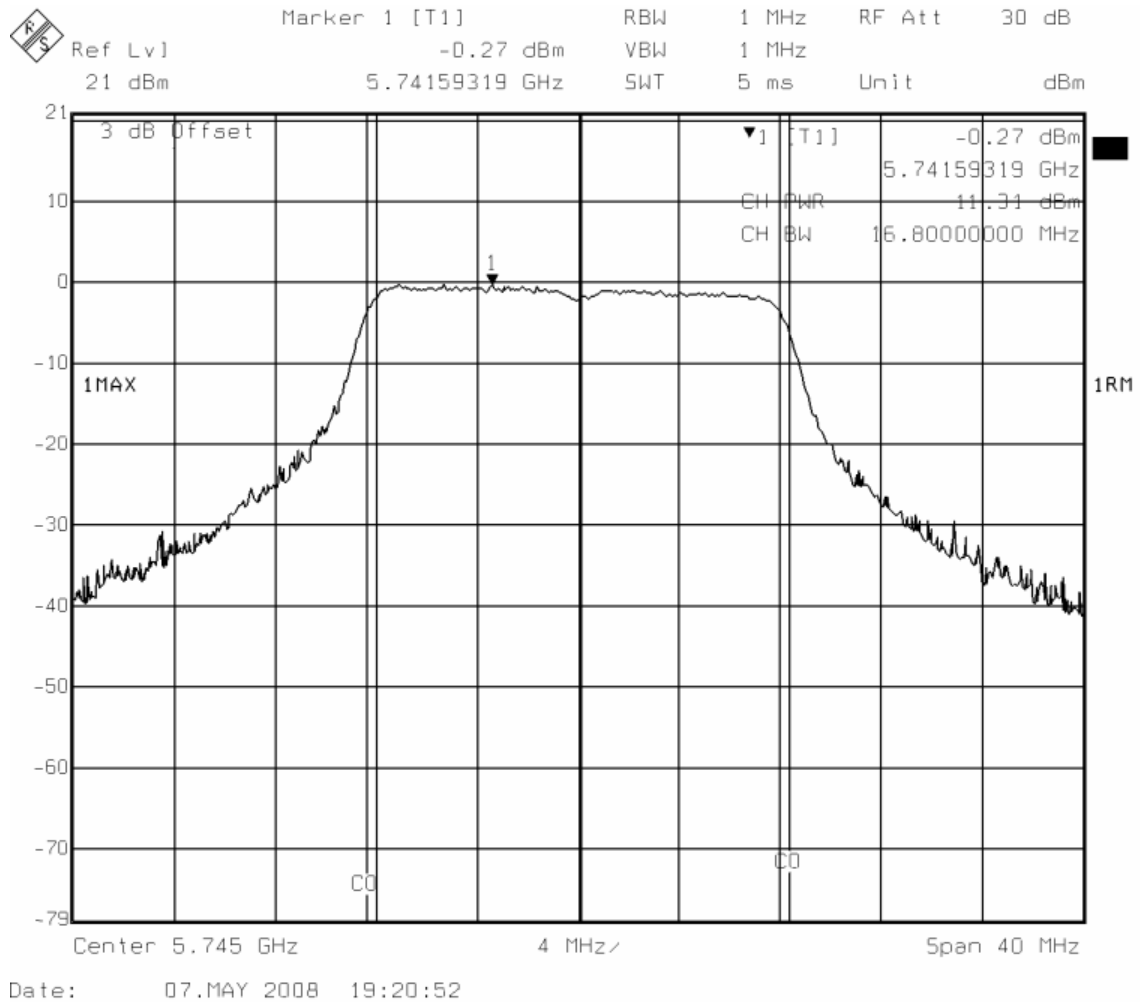
Channel	Channel Frequency (MHz)	Data Rate (Mbps)	Power Output (dBm)	Limit (dBm)
Low	2412	1	13.43	28*
Mid	2437	1	13.79	28*
High	2462	1	13.33	28*

802.11g Mode:

Channel	Channel Frequency (MHz)	Data Rate (Mbps)	Power Output (dBm)	Limit (dBm)
Low	2412	6	13.59	28*
Mid	2437	6	13.15	28*
High	2462	6	13.87	28*

Note: 1) System operates in 2.4 GHz band that are used for fixed, point to point operation may employ transmitting antenna with direction gain greater than 6 dBi provided the maximum peak power of the intentional radiator is reduced than 1 dB for every 3 dB the direction gain of the antenna exceeds 6 dBi.

2) Gain of 2.4 GHz antenna is 12 dBi, the conducted power limit should be reduced to $30 - (12 - 6) / 3 = 28$ dBm.

802.11a Mode:**Low Channel**

Ref Lvl] -0.86 dBm VBW 1 MHz RF Att 30 dB
21 dBm 5.78031062 GHz SWT 5 ms Unit dBm

3 dB Offset

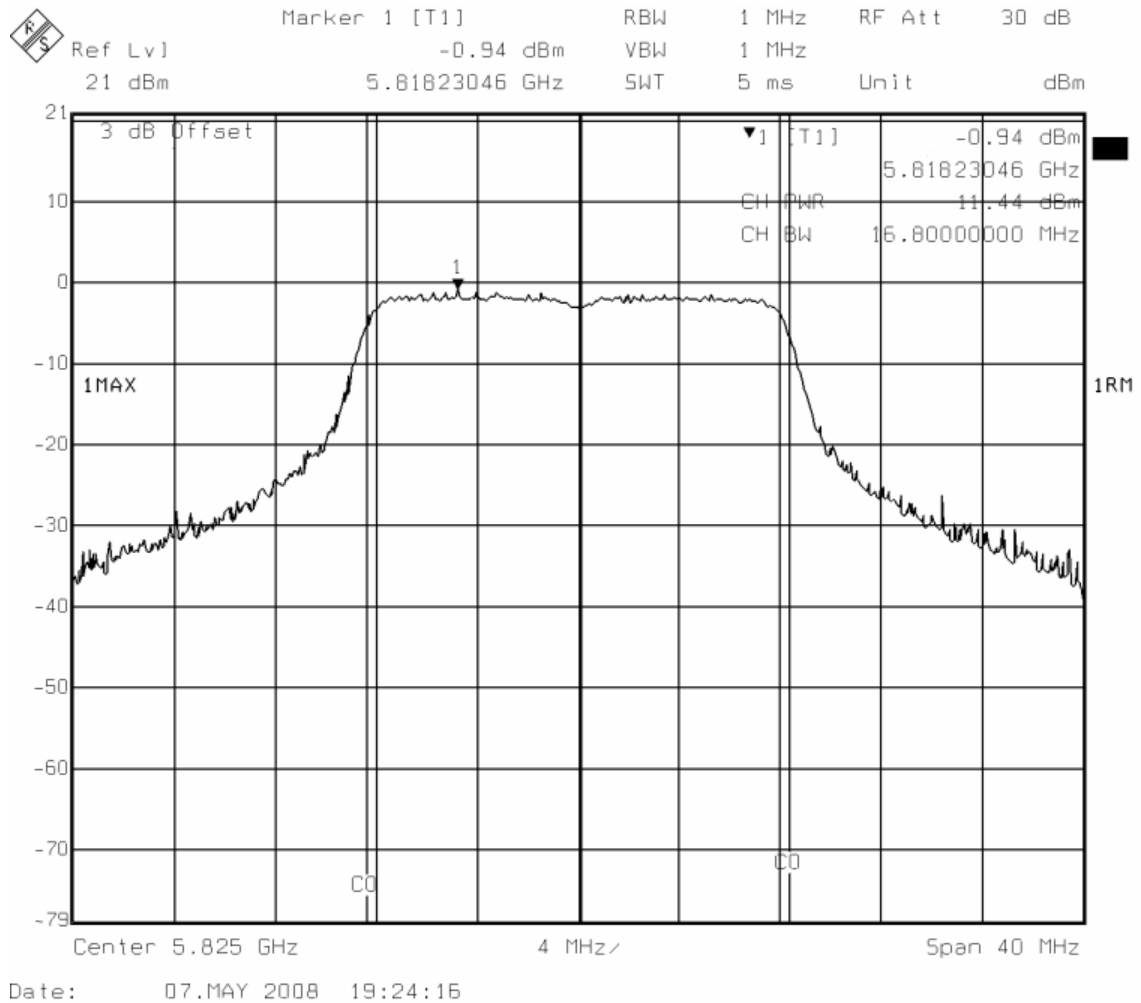
Marker 1 [T1] -0.86 dBm
5.78031062 GHz
CH PWR 11.10 dBm
CH BW 16.80000000 MHz

1 MAX

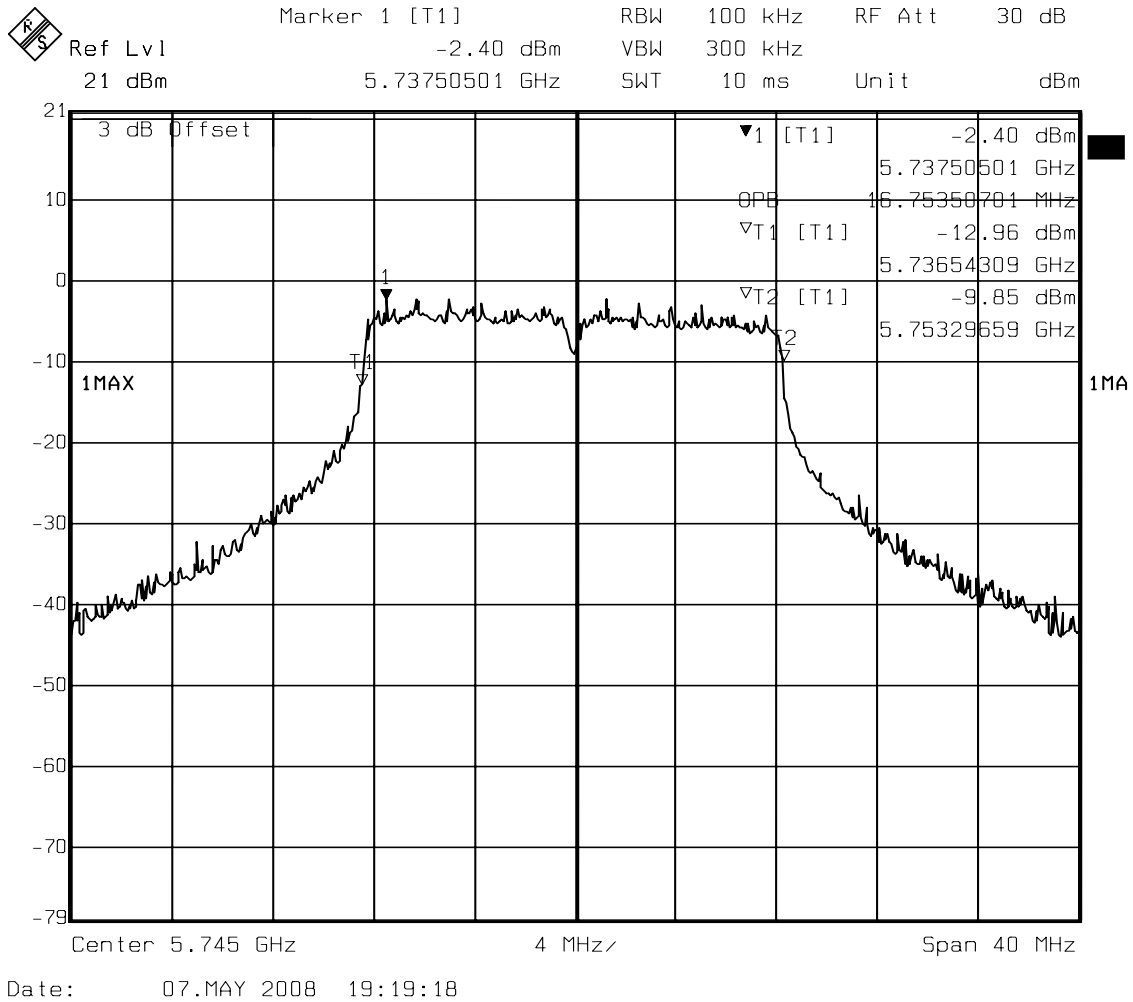
1 RM

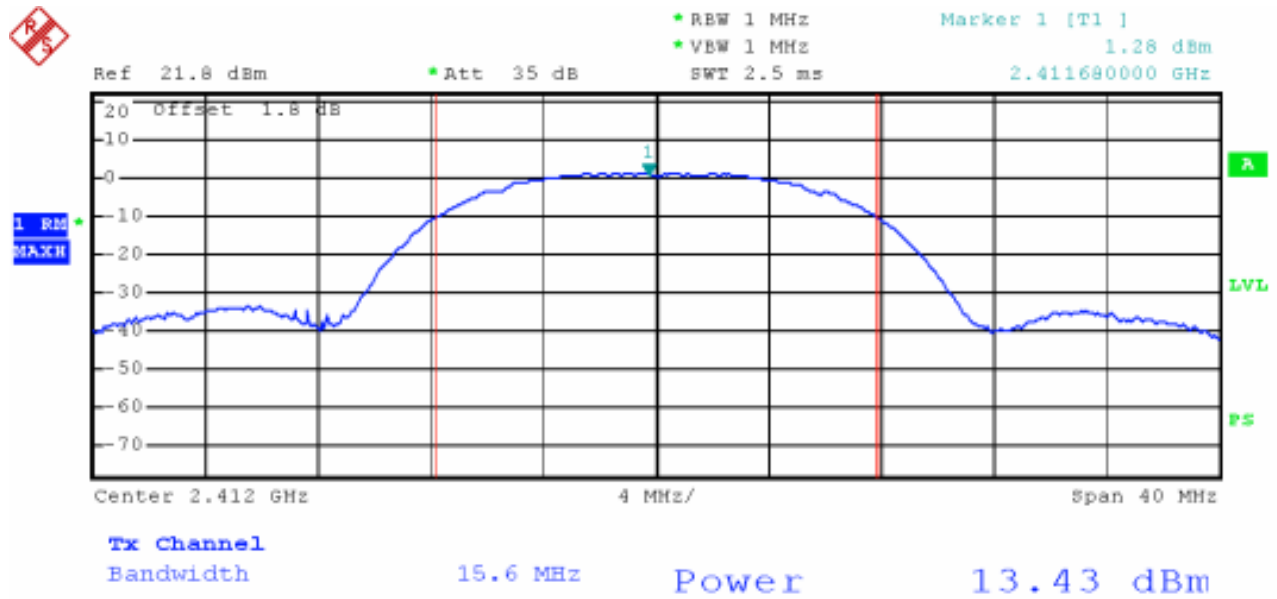
Center 5.785 GHz 4 MHz Span 40 MHz

Date: 07.MAY 2008 19:22:19

High Channel

99% Bandwidth

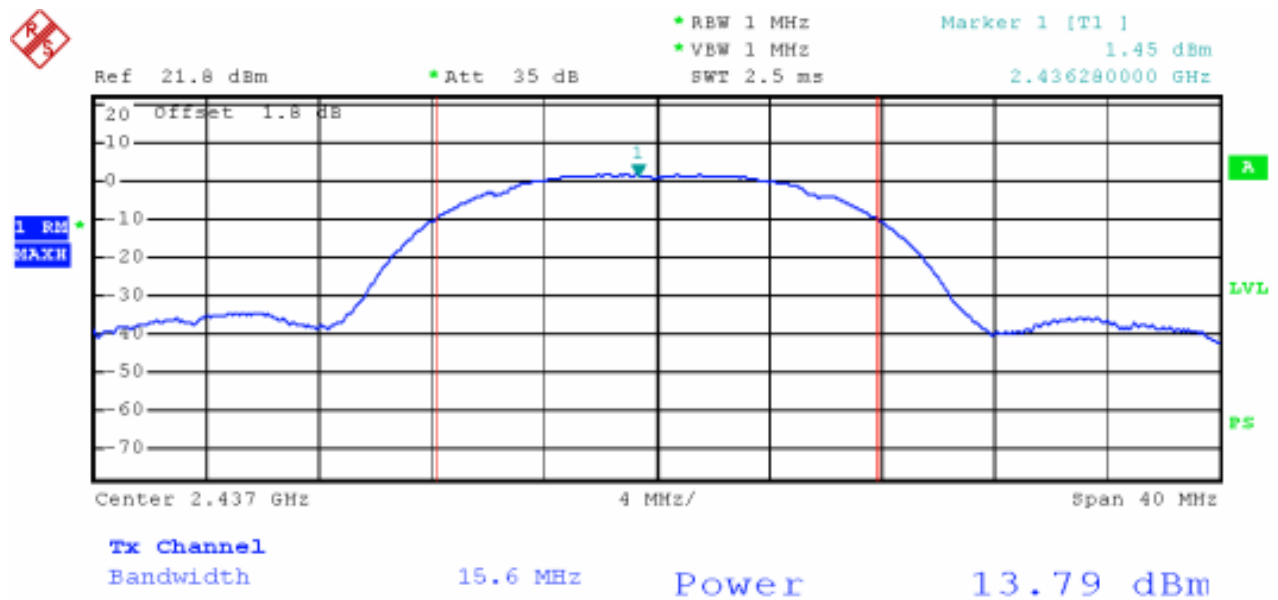


802.11b Mode:**Low Channel**

802.11b output power low channel-FCC

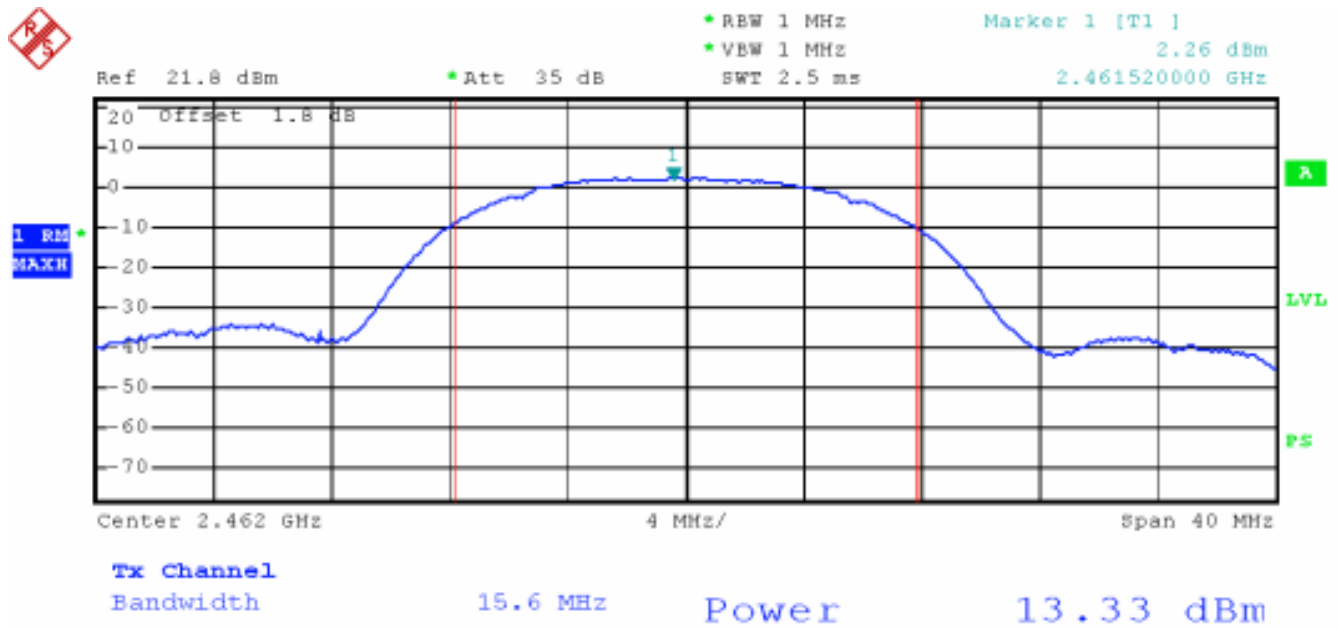
Date: 1.MAY.2008 09:49:22

Middle Channel



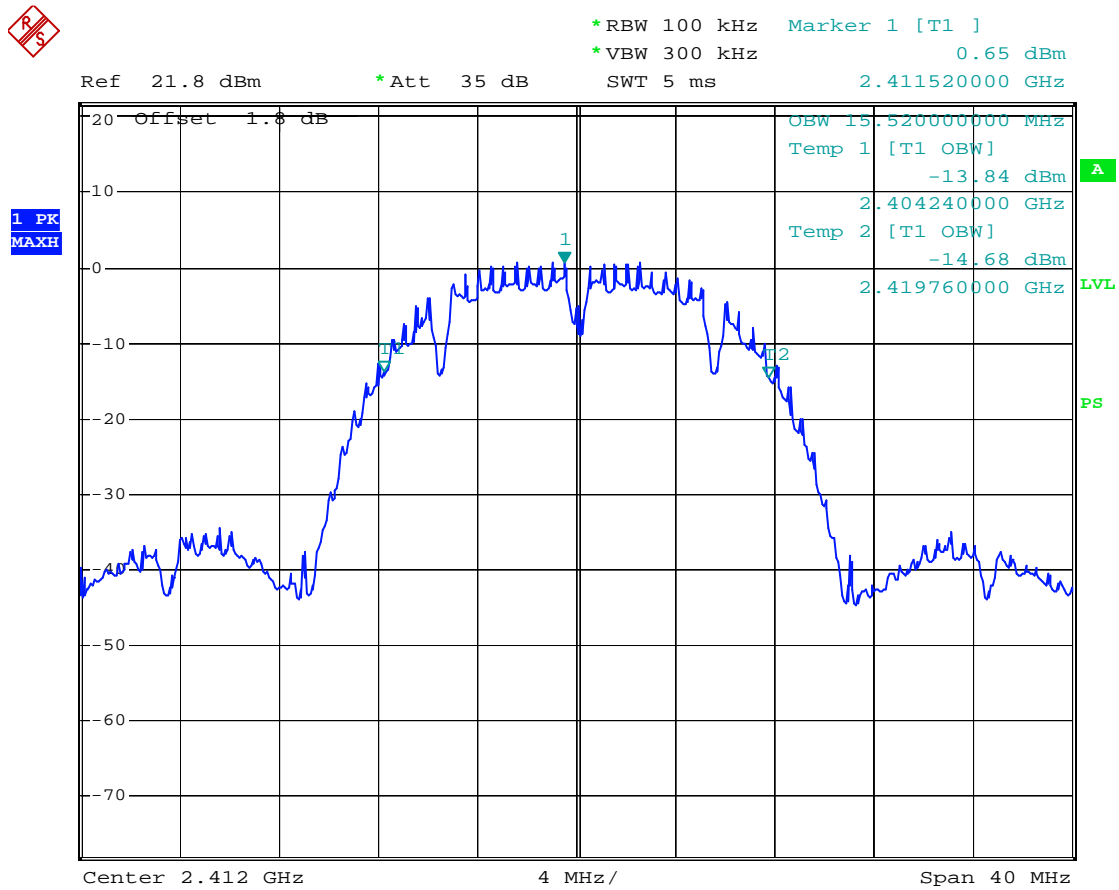
802.11b output power middle channel-FCC

Date: 1.MAY.2008 09:51:00

High Channel

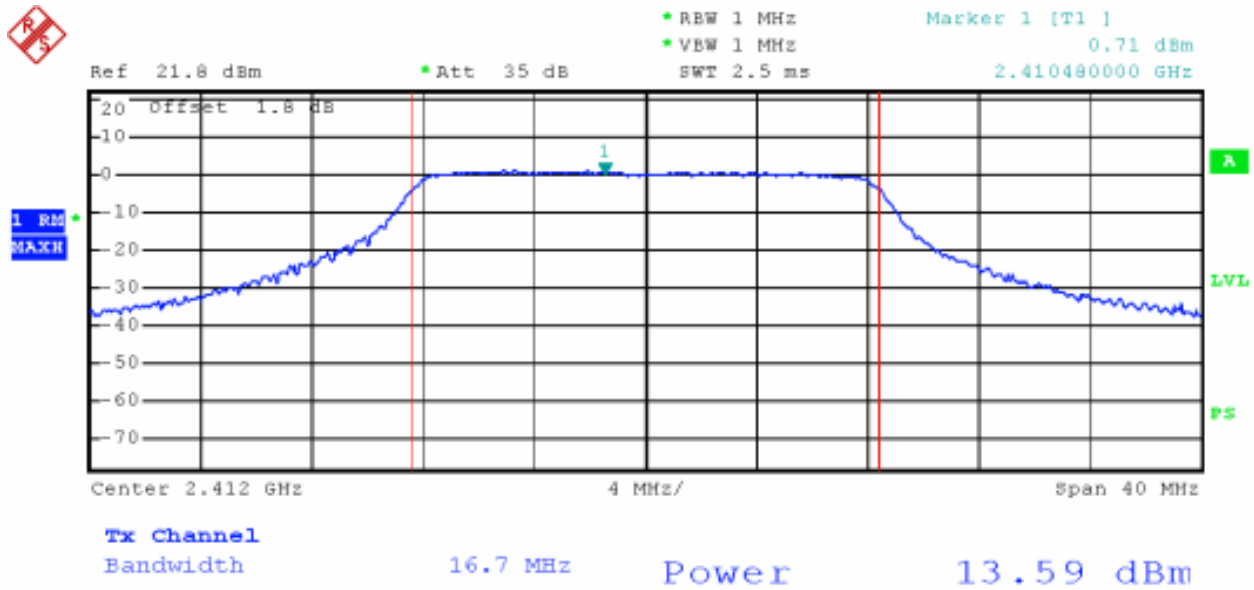
802.11b output power high channel-FCC

Date: 1.MAY.2008 09:51:52

99% Bandwidth

802.11b output power bandwidth-FCC

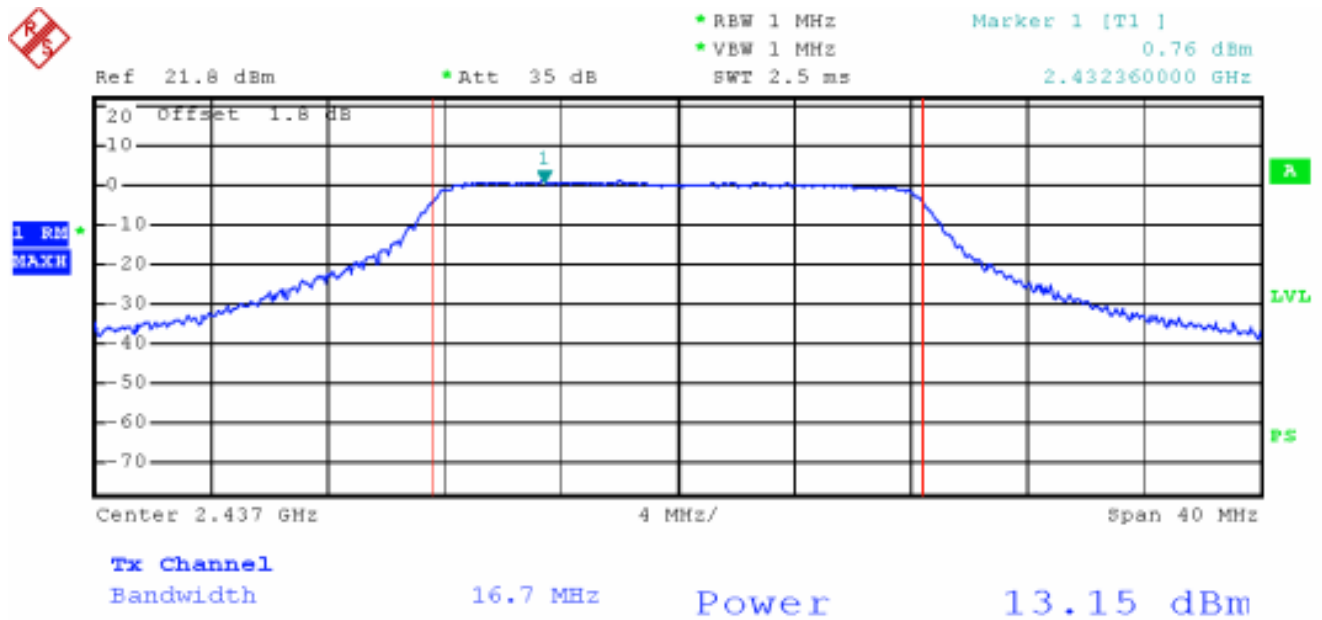
Date: 1.MAY.2008 09:48:11

802.11g Mode:**Low Channel**

802.11g output power low channel -FCC

Date: 1.MAY.2008 10:06:11

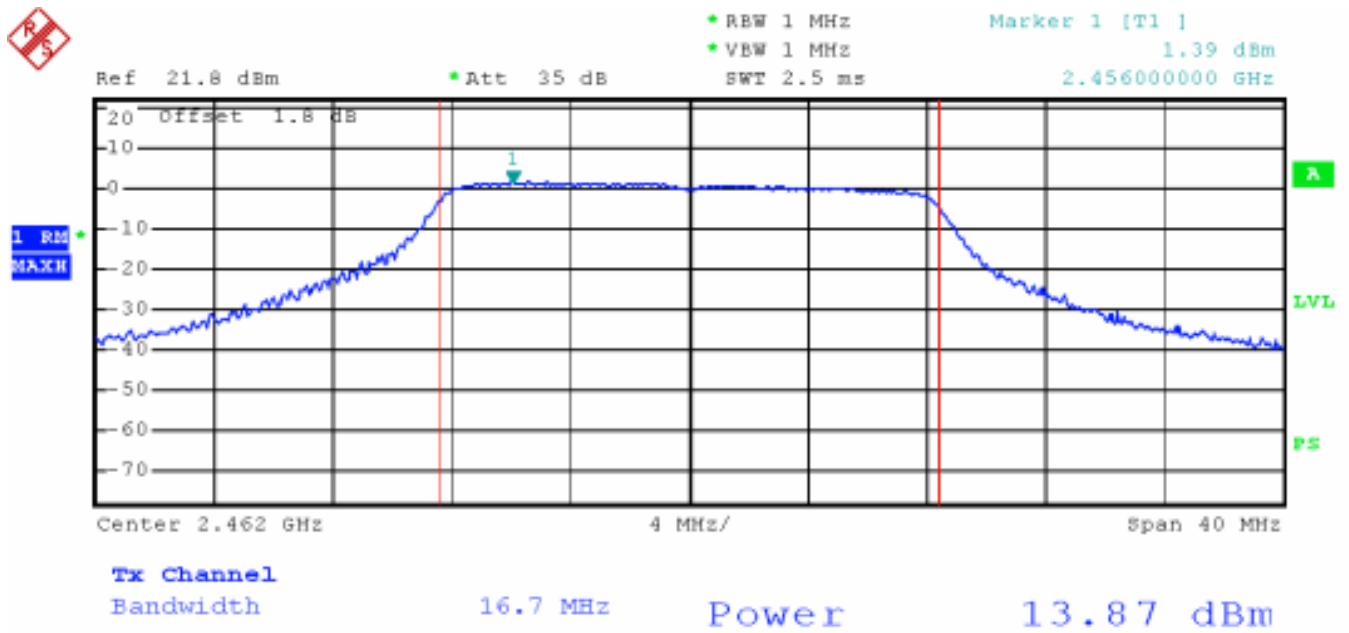
Middle Channel



802.11g output power middle channel -FCC

Date: 1.MAY.2008 10:07:48

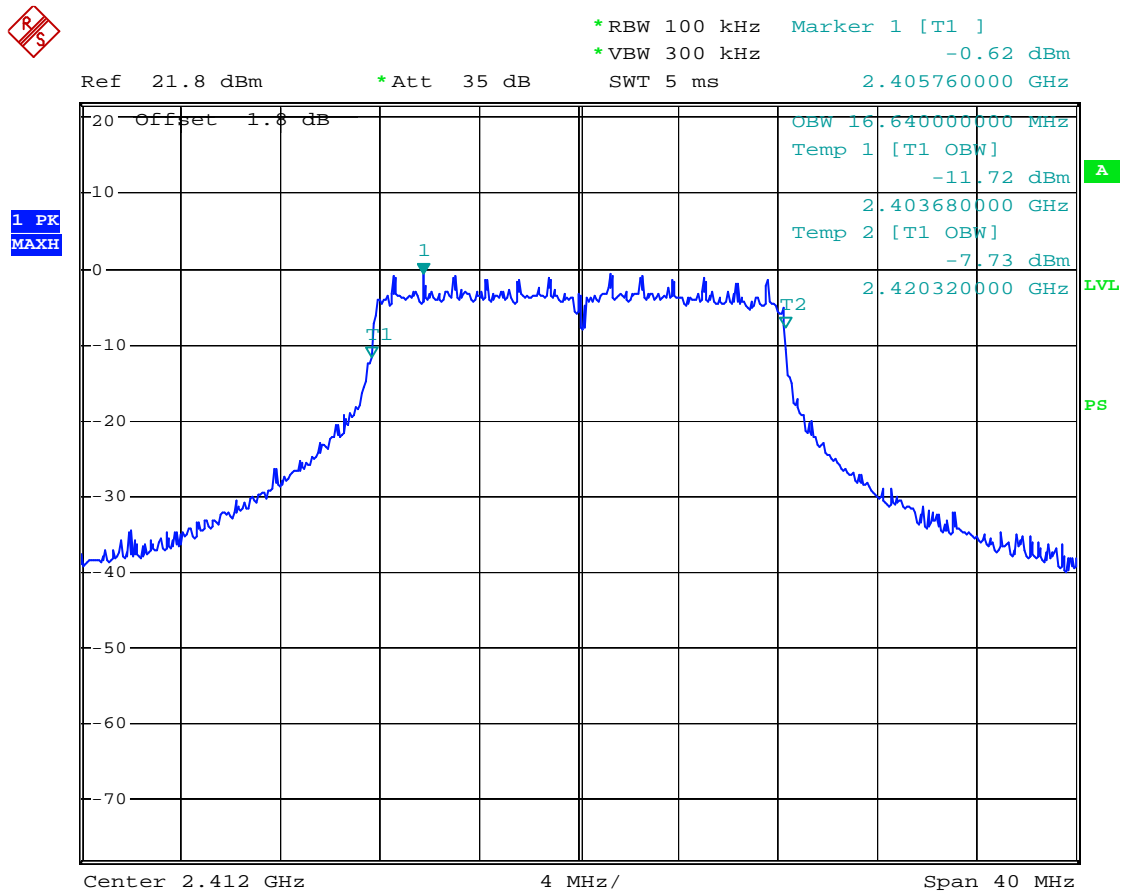
High Channel



802.11g output power high high channel -FCC

Date: 1.MAY.2008 10:08:27

99% Bandwidth



802.11g output power high bandwidth-FCC

Date: 1.MAY.2008 10:05:10

§15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Applicable Standard

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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
Note: For Restricted Band
RBW=1MHz
VBW=1 MHz
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Data**Environmental Conditions**

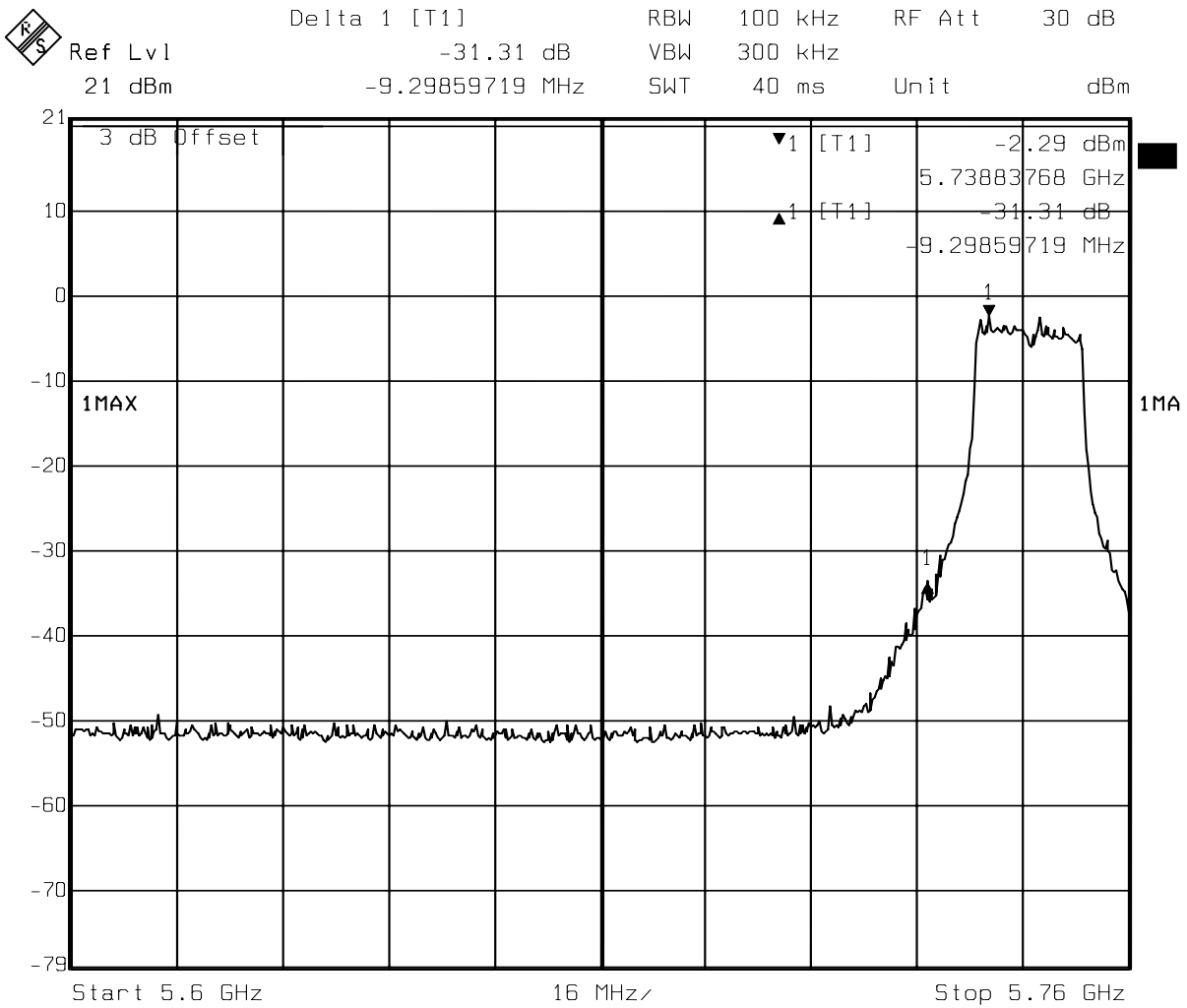
Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by King Tang on 2008-05-01, 2008-05-07 and 2008-05-30

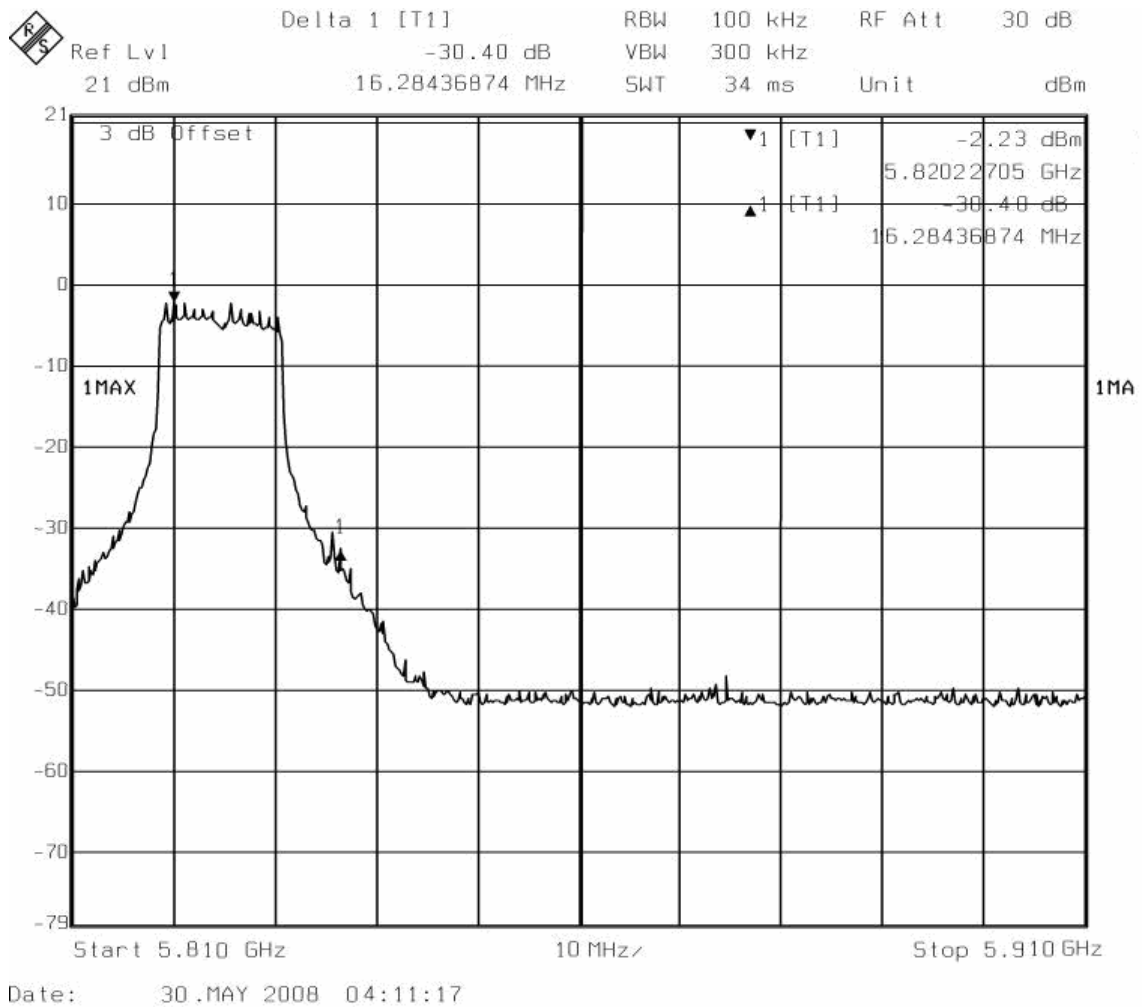
Test Result: *Compliant.*

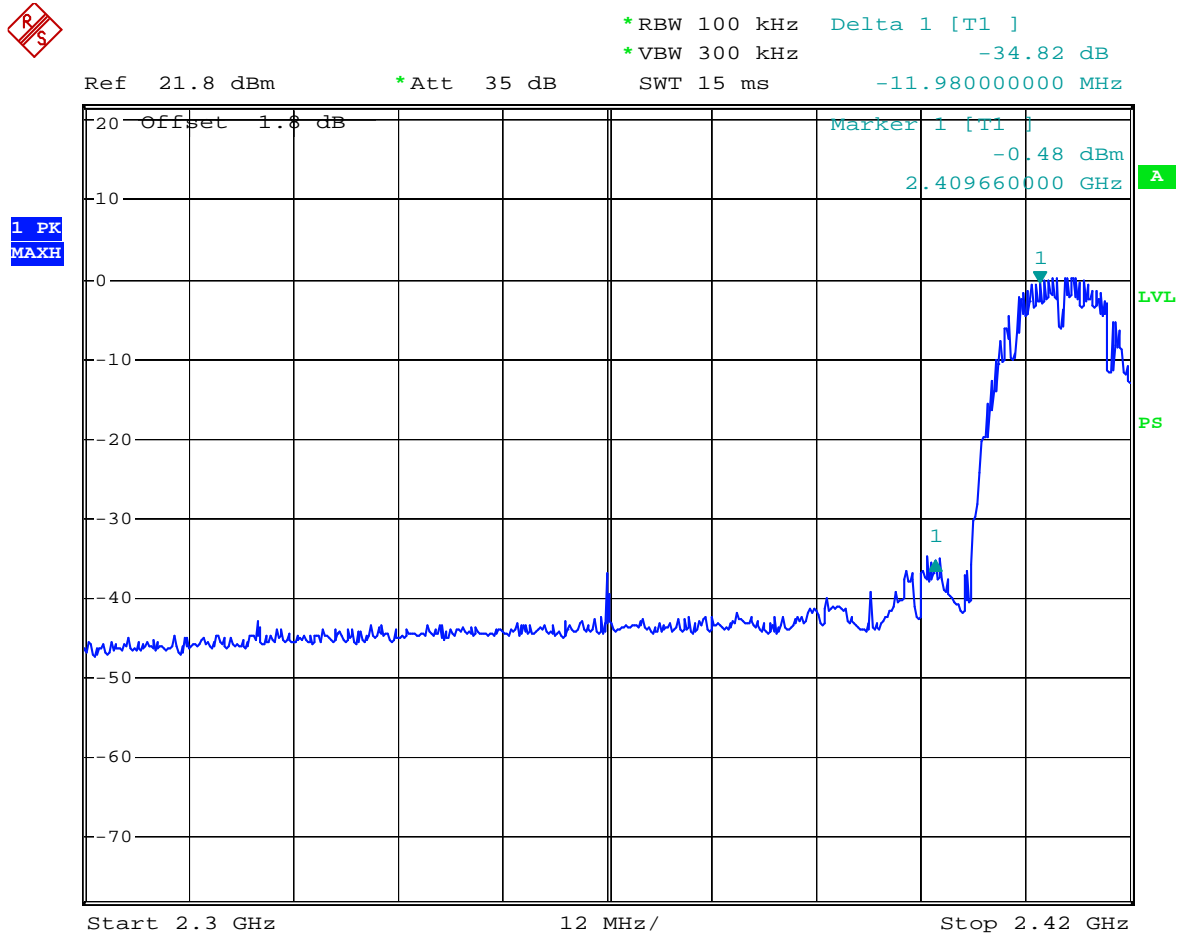
Channel Frequency (MHz)	Delta Value (dBc)	Limit (dBc)	Result
802.11a Mode			
5729.54	31.31	20	Pass
5836.51	30.40	20	Pass
802.11b Mode			
2397.68	34.82	20	Pass
2477.0	39.37	20	Pass
802.11g Mode			
2360.0	35.89	20	Pass
2479.7	36.57	20	Pass

Please refer to following plots.

802.11a Mode:**Lowest channel**

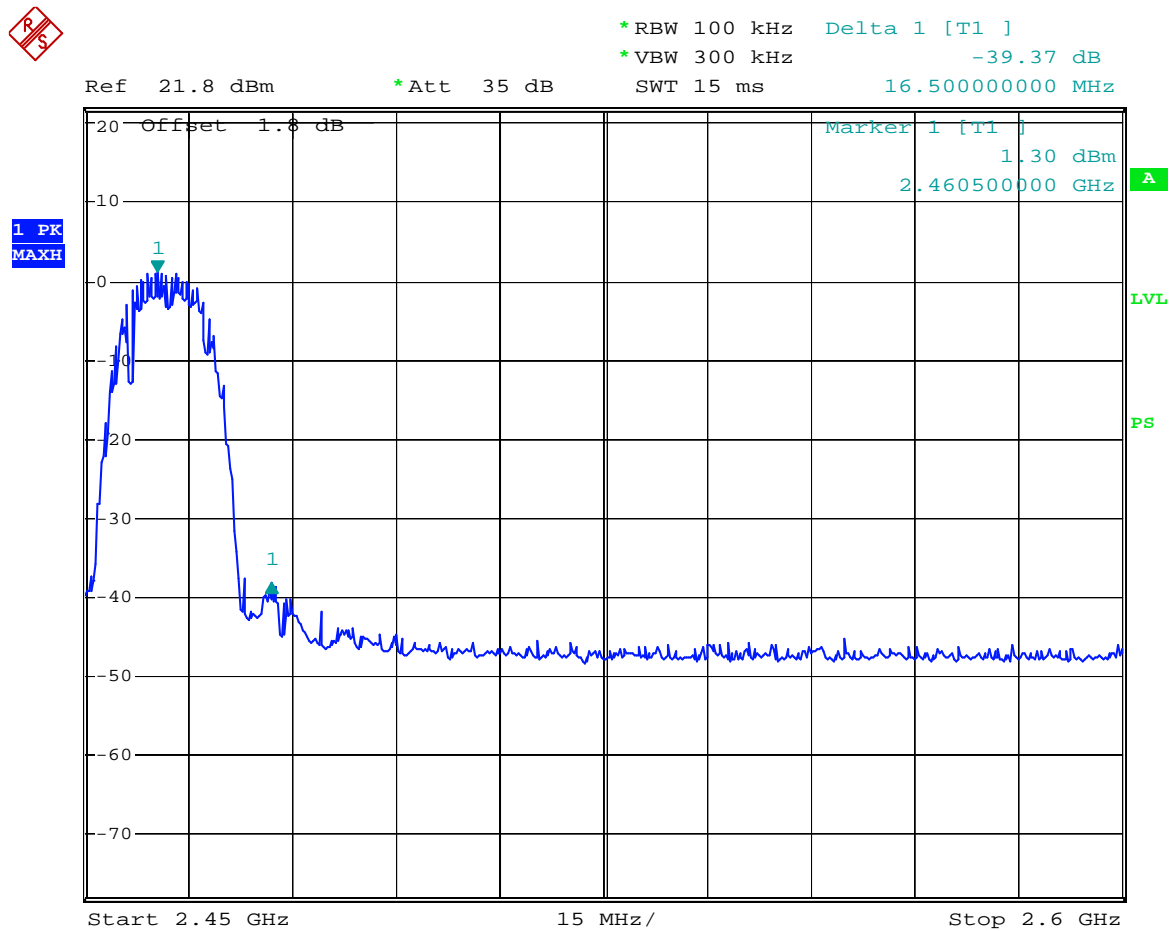
Date: 07.MAY 2008 20:08:33

Highest Channel

802.11b Mode:**Lowest channel**

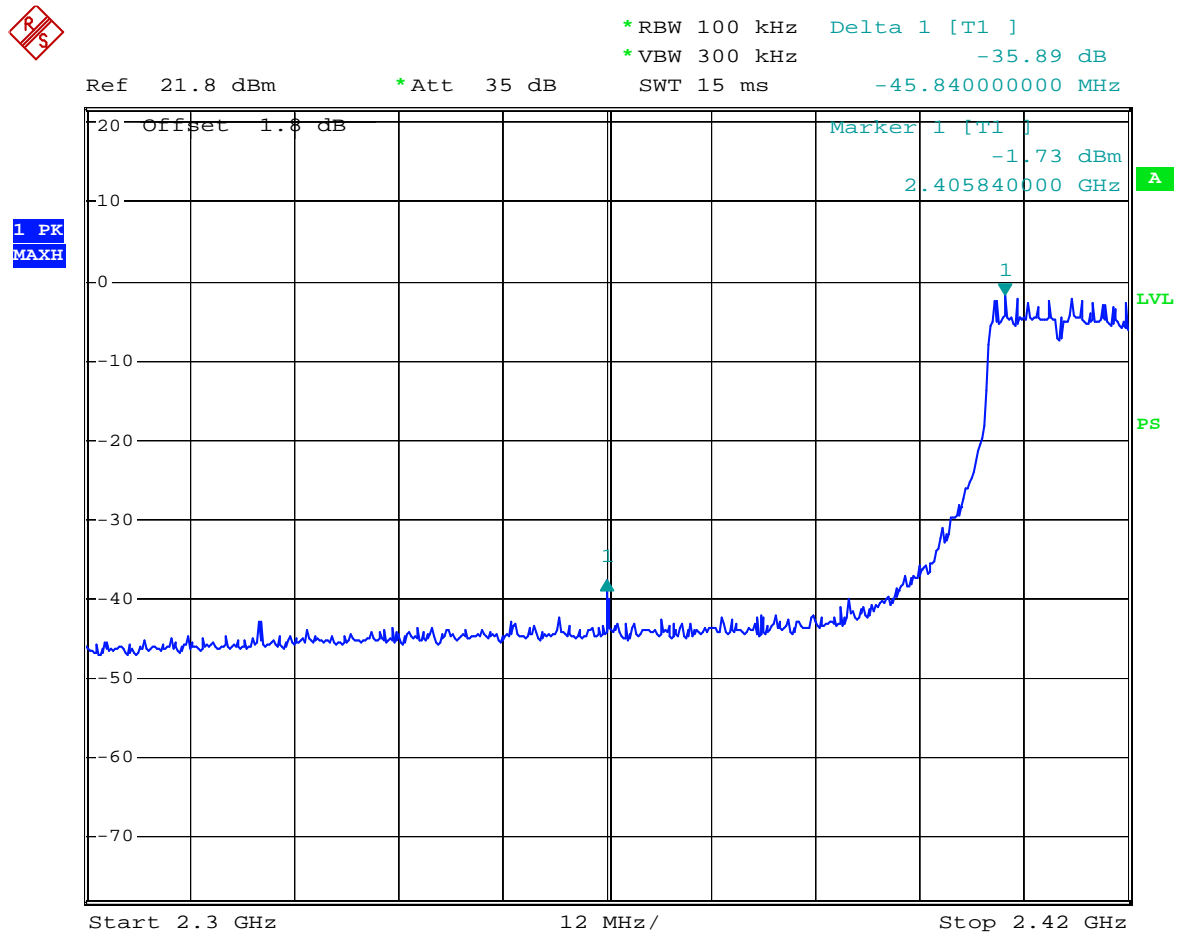
802.11B band edge left -FCC

Date: 1.MAY.2008 11:20:17

Highest Channel

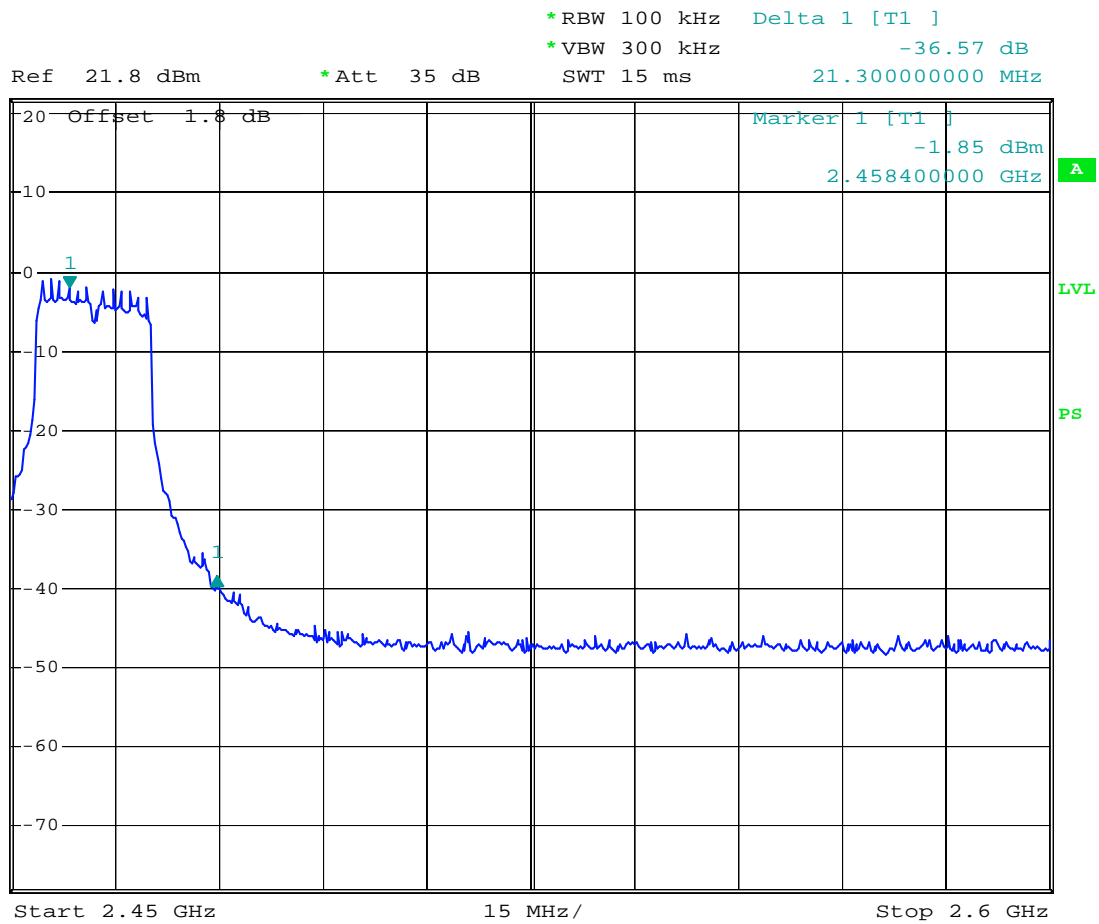
802.11B band edge right -FCC

Date: 1.MAY.2008 11:24:43

802.11g Mode:**Lowest Channel**

802.11G band edge left -FCC

Date: 1.MAY.2008 11:29:33

Highest Channel**1 PK
MAXH**

802.11G band edge right -FCC

Date: 1.MAY.2008 11:32:33

Restricted Bands

Indicated		Detector (PK/AV)	Table Angle Degree	Antenna		Correction Factor			FCC Part 15.247/15.209		
Frequency (MHz)	Receiver Reading (dBμV/m)			Height (m)	Polar (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
802.11b (2310MHz-2390MHz)											
2382.4	49.64	PK	360	1.2	V	27.4	3.61	30.6	50.05	54	3.95
2358.2	48.12	PK	45	1.2	H	27.4	3.61	30.6	48.53	54	5.47
2373.2	47.21	PK	200	1.5	V	27.4	3.61	30.6	47.62	54	6.38
2361.5	46.78	PK	180	1.4	V	27.4	3.61	30.6	47.19	54	6.81
2346.7	43.25	PK	120	1.5	H	27.4	3.61	30.6	43.66	54	10.34
802.11b (2483.5MHz-2500MHz)											
2489.1	49.47	PK	150	1.1	V	27.4	3.61	30.6	49.88	54	4.12
2494.6	47.26	PK	320	1.4	H	27.4	3.61	30.6	47.67	54	6.33
2496.4	46.15	PK	90	1.3	V	27.4	3.61	30.6	46.56	54	7.44
2492.5	45.38	PK	45	1.5	H	27.4	3.61	30.6	45.79	54	8.21
802.11g (2310MHz-2390MHz)											
2302.4	49.41	PK	115	1.4	V	27.4	3.61	30.6	49.82	54	4.18
2347.2	46.27	PK	225	1.3	V	27.4	3.61	30.6	46.68	54	7.32
2373.8	45.36	PK	360	1.2	H	27.4	3.61	30.6	45.77	54	8.23
2364.7	44.10	PK	300	1.1	H	27.4	3.61	30.6	44.51	54	9.49
802.11g (2483.5MHz-2500MHz)											
2492.1	47.2	PK	185	1.5	V	27.4	3.61	30.6	47.61	54	6.39
2489.2	46.8	PK	90	1.4	V	27.4	3.61	30.6	47.21	54	6.79
2496.3	45.7	PK	0	1.4	H	27.4	3.61	30.6	46.11	54	7.89
2495.5	43.1	PK	45	1.3	H	27.4	3.61	30.6	43.51	54	10.49

Note: Above all spurious emission strength in PK detector is below the spurious emission limit (54dBuV/m) in AV detector, so measurement in AV detector needn't.

§15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16

* **Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Adjust the center frequency of SA on any frequency be measured and set SA to 1.5MHz span mode. And then, set RBW and VBW of spectrum analyzer to proper value. (DTS)
4. Repeat above procedures until all frequencies measured were complete.

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by King Tang on 2008-05-07 to 2008-05-11.

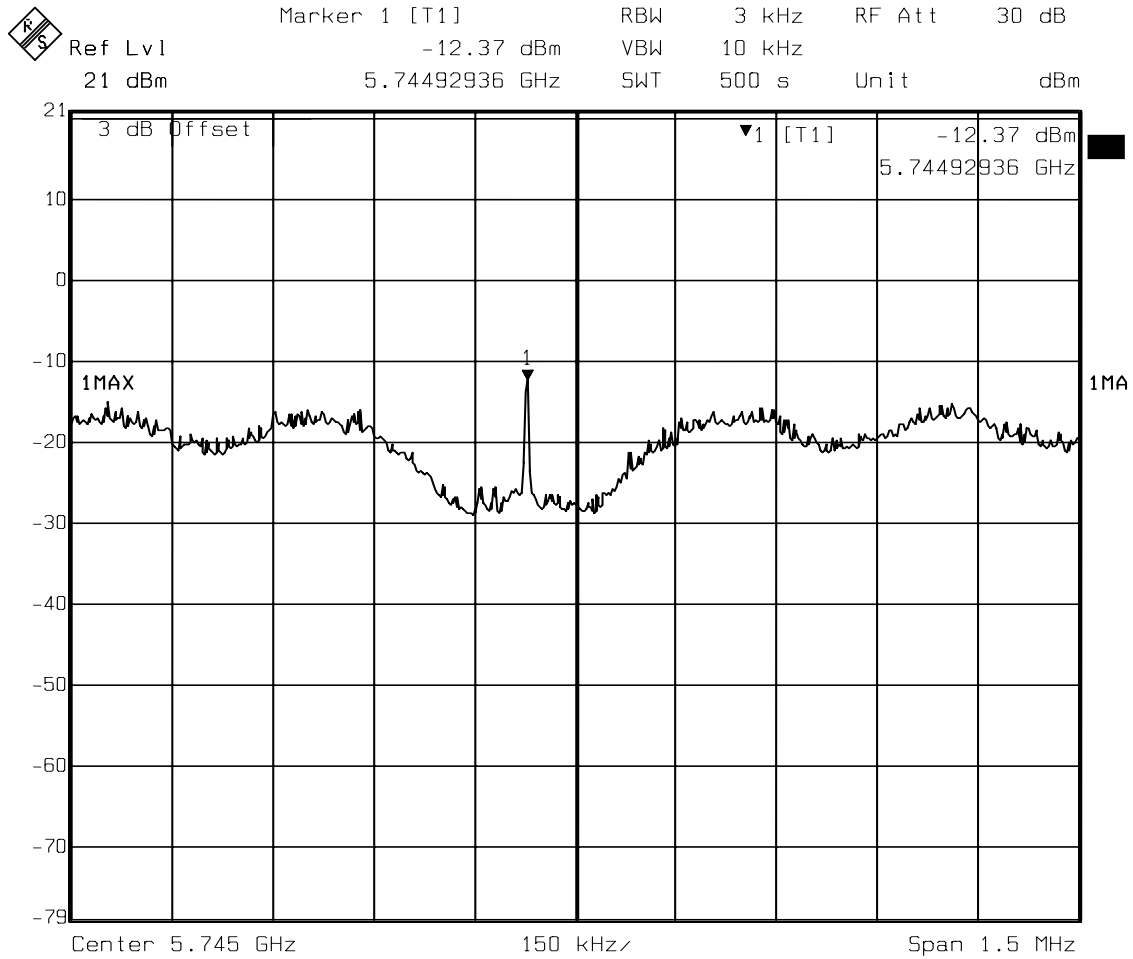
Test Mode: Transmitting

Test Result: Pass

Channel	Frequency (MHz)	Data Rate (Mbps)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
802.11a Mode					
Low	5745	6	-12.37	8	Pass
Mid	5785	6	-11.19	8	Pass
High	5825	6	-14.35	8	Pass
802.11b Mode					
Low	2412	1	-15.92	8	Pass
Mid	2437	1	-16.9	8	Pass
High	2462	1	-14.6	8	Pass
802.11g Mode					
Low	2412	6	-11.2	8	Pass
Mid	2437	6	-7.85	8	Pass
High	2462	6	-7.26	8	Pass

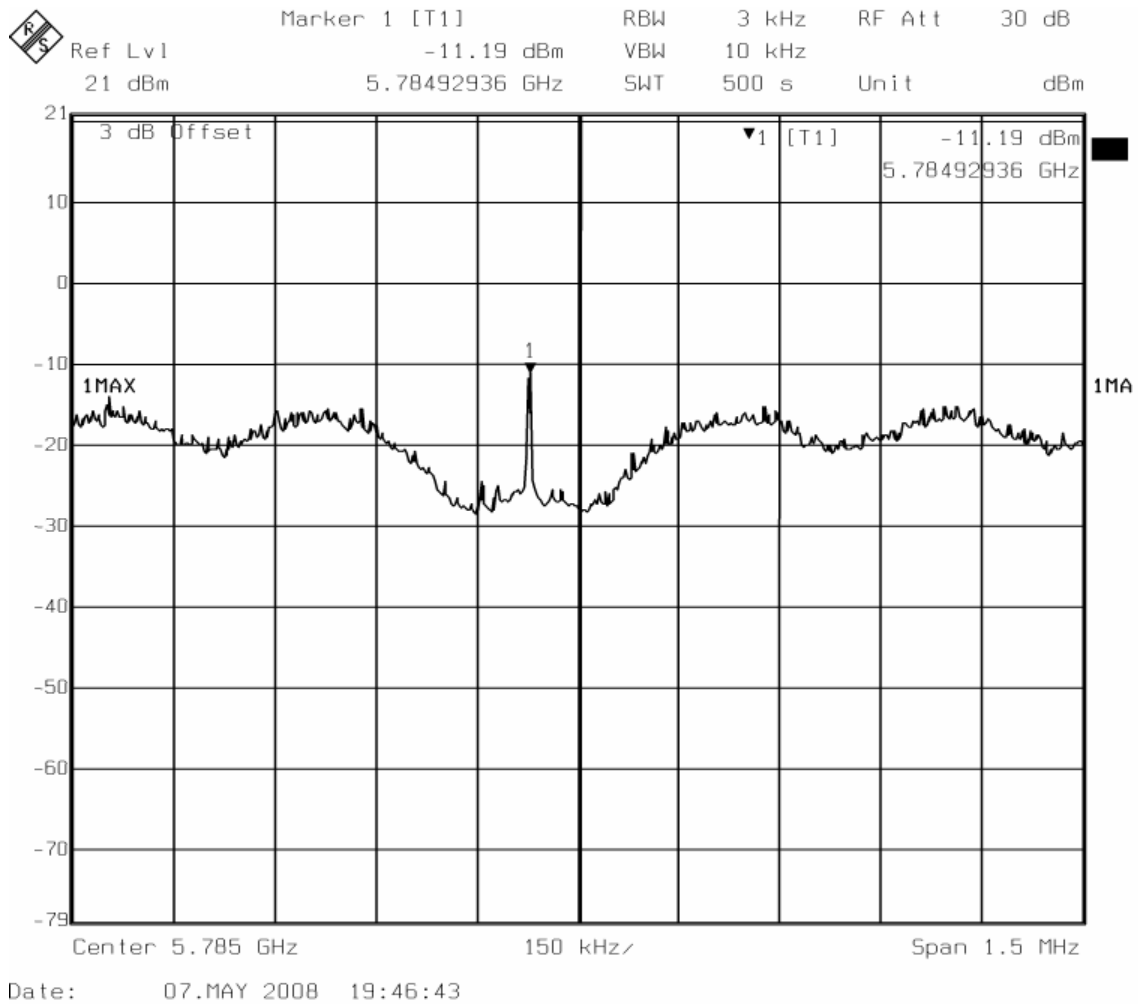
802.11a Mode:

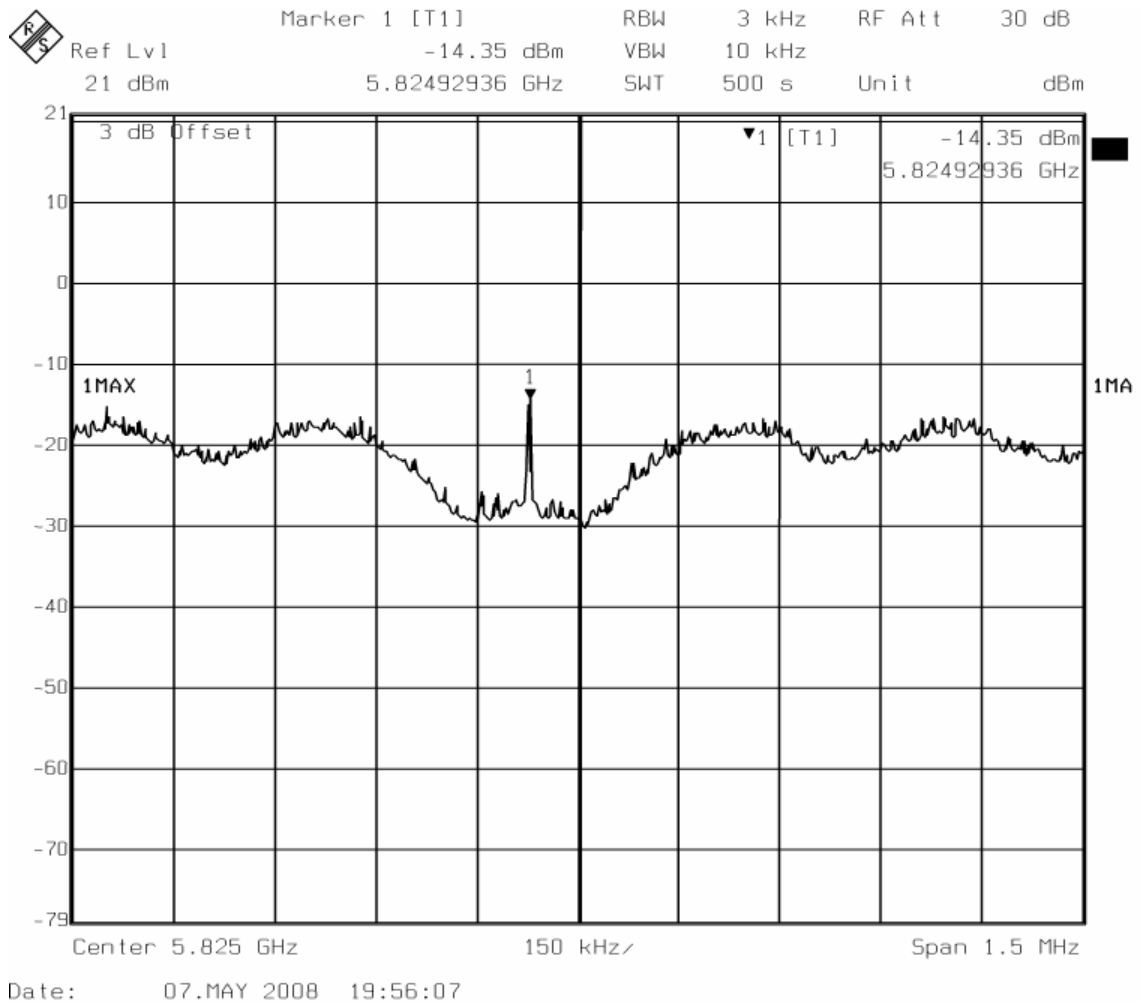
Low Channel

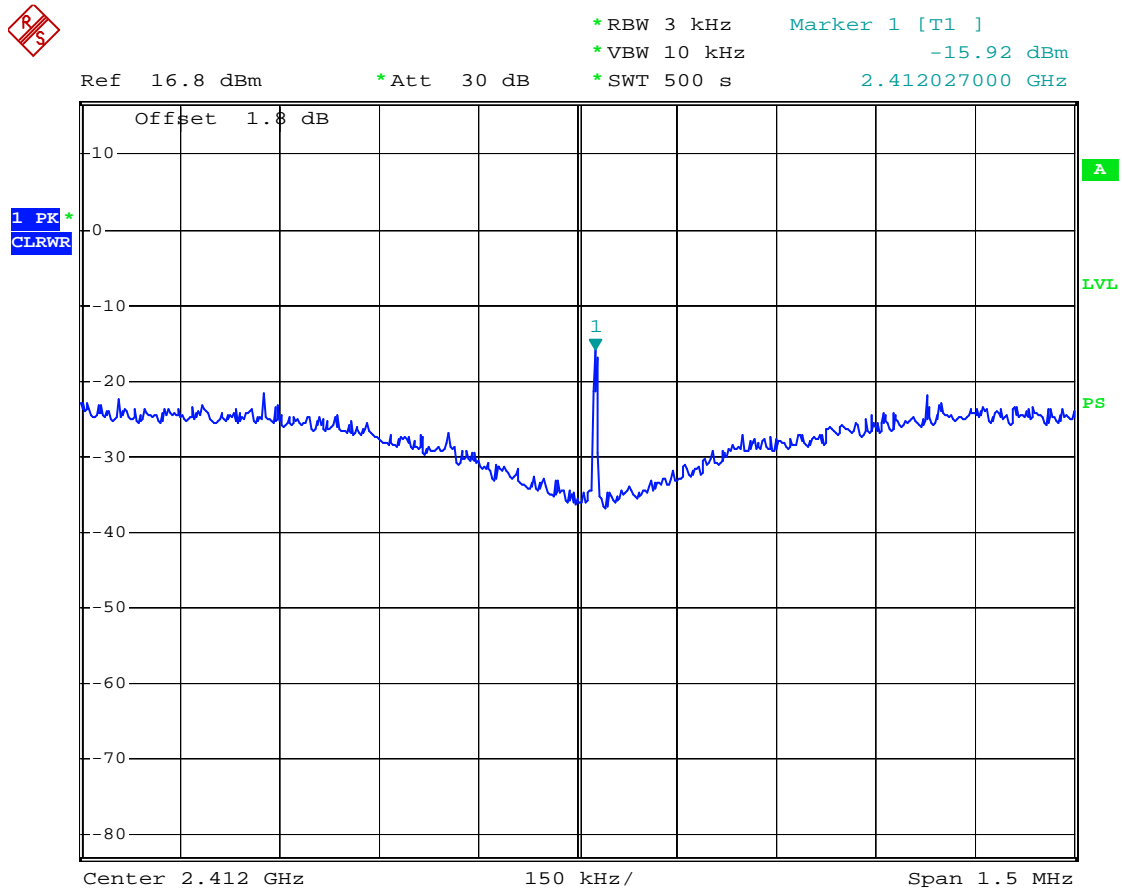


Date: 07.MAY 2008 19:37:16

Middle Channel



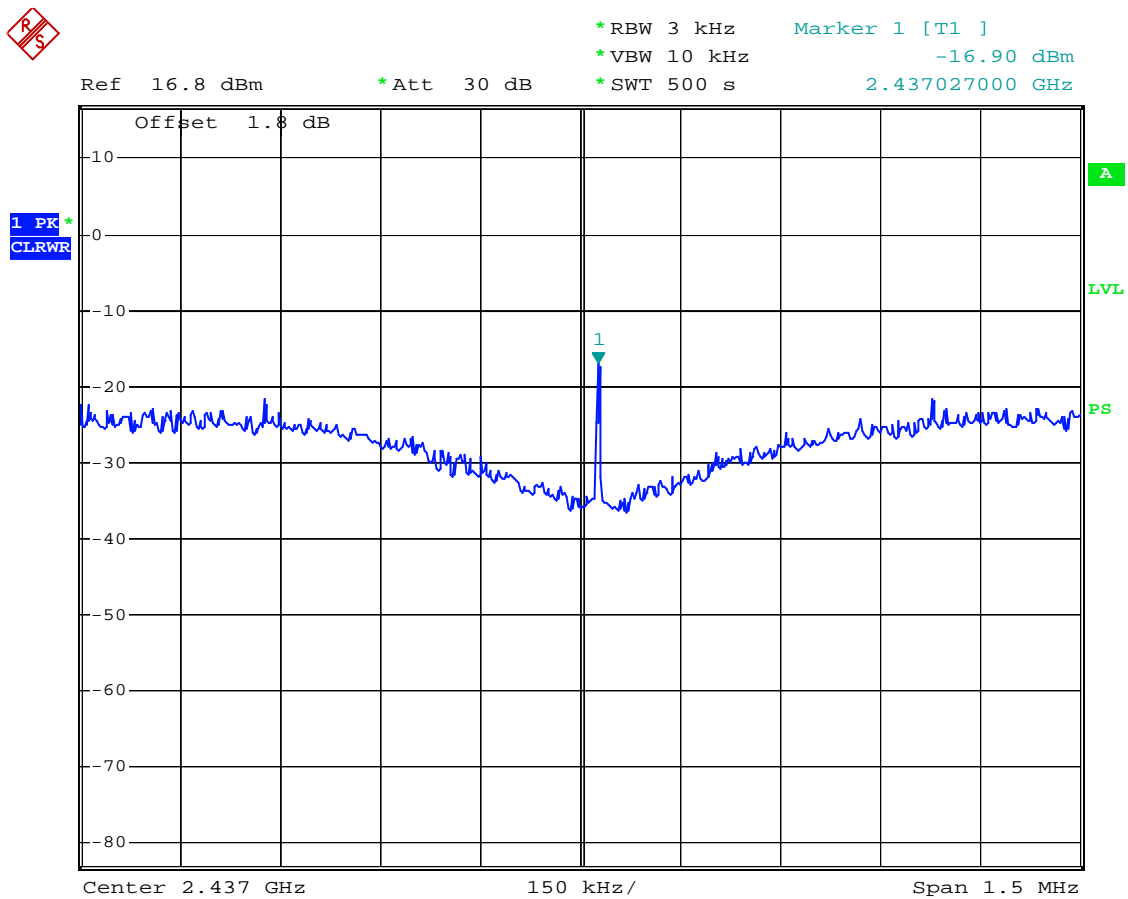
High Channel

802.11b Mode:**Low Channel**

802.11b power density low channel

Date: 11.MAY.2008 01:35:50

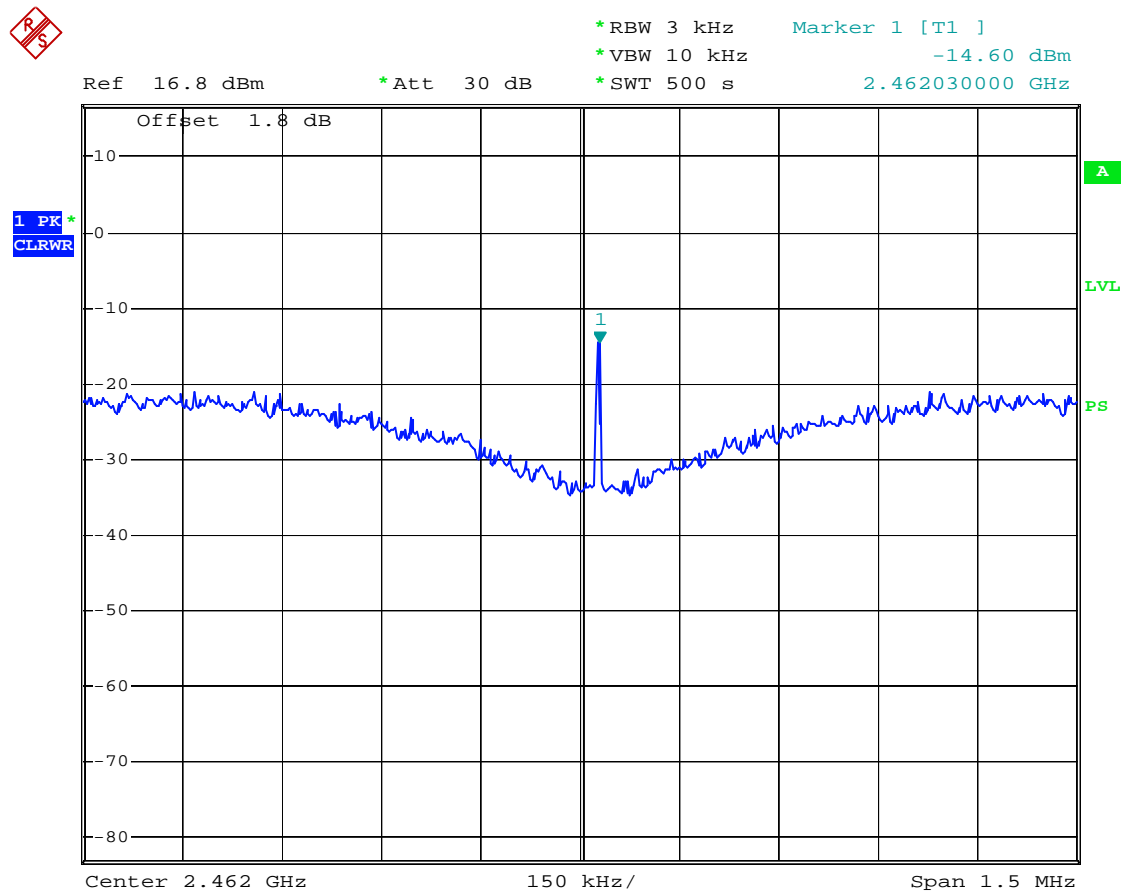
Middle Channel



802.11b power density middle channel

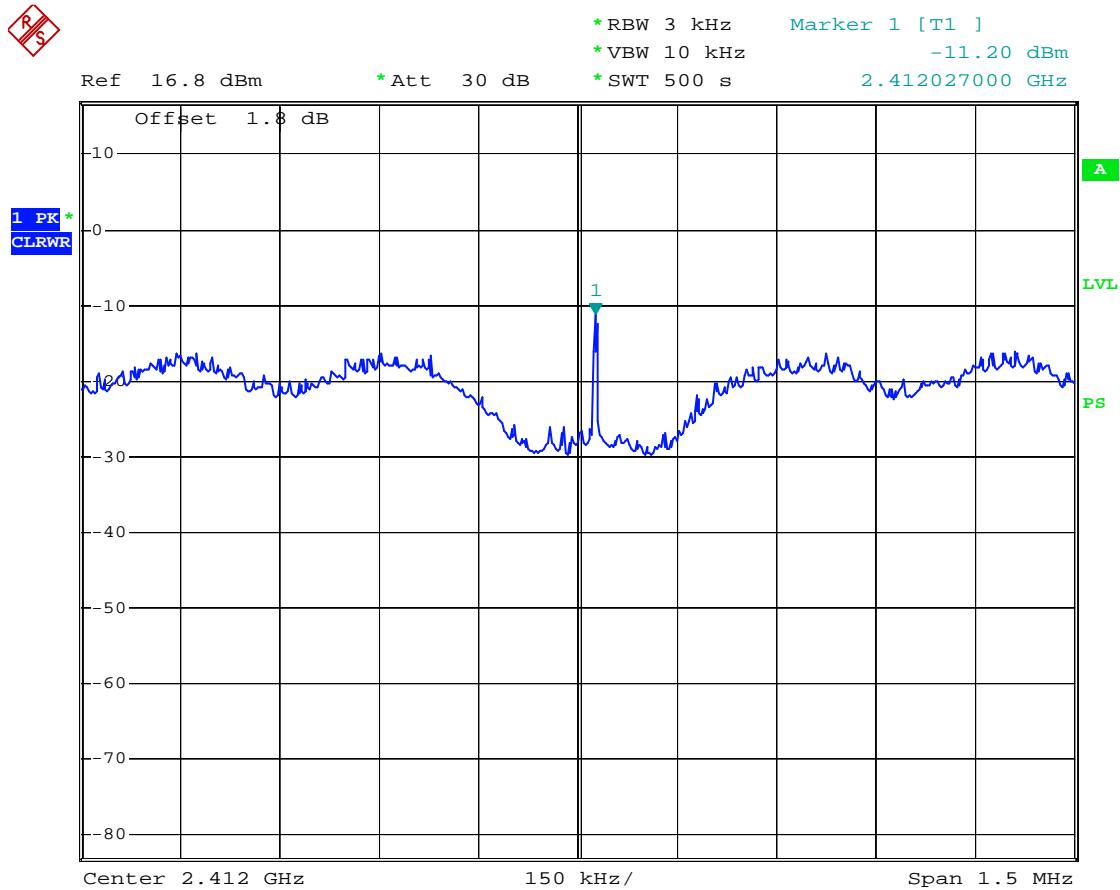
Date: 11.MAY.2008 02:01:57

High Channel



802.11b power density high channel

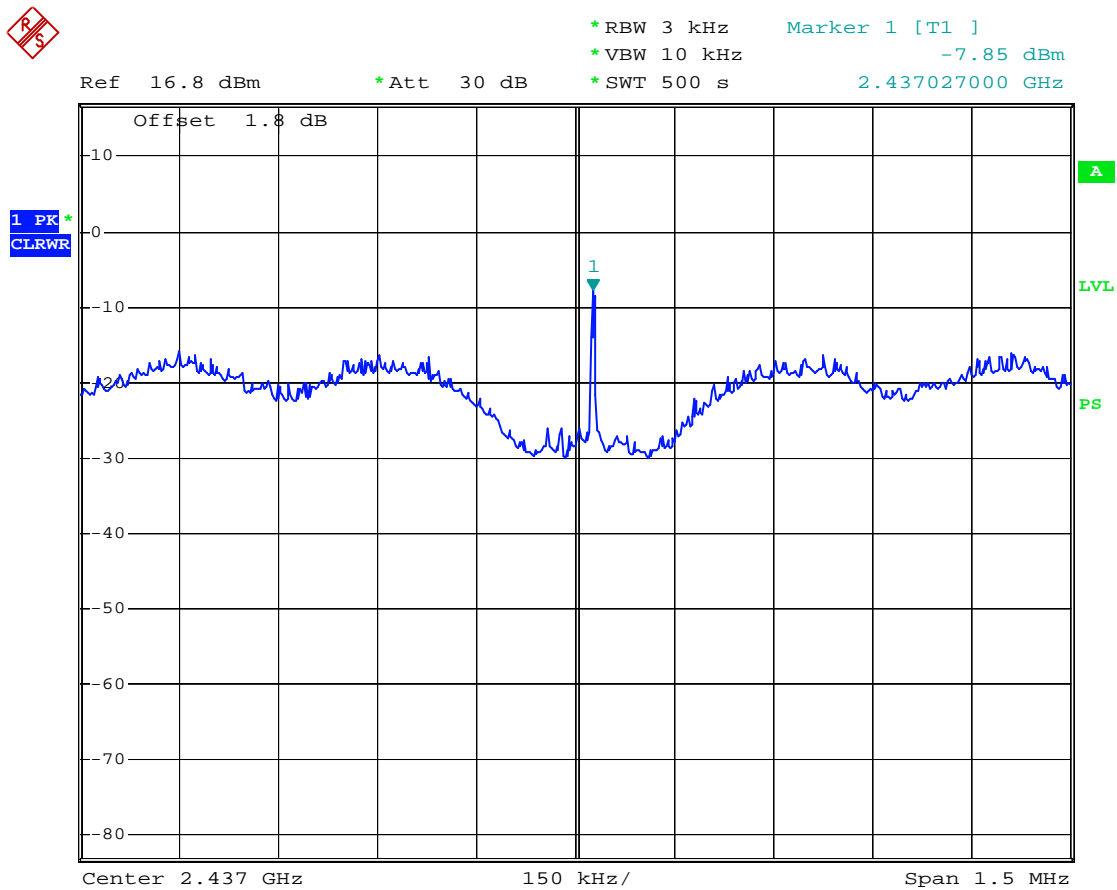
Date: 11.MAY.2008 02:21:13

802.11g Mode:**Low Channel**

802.11g power density low channel

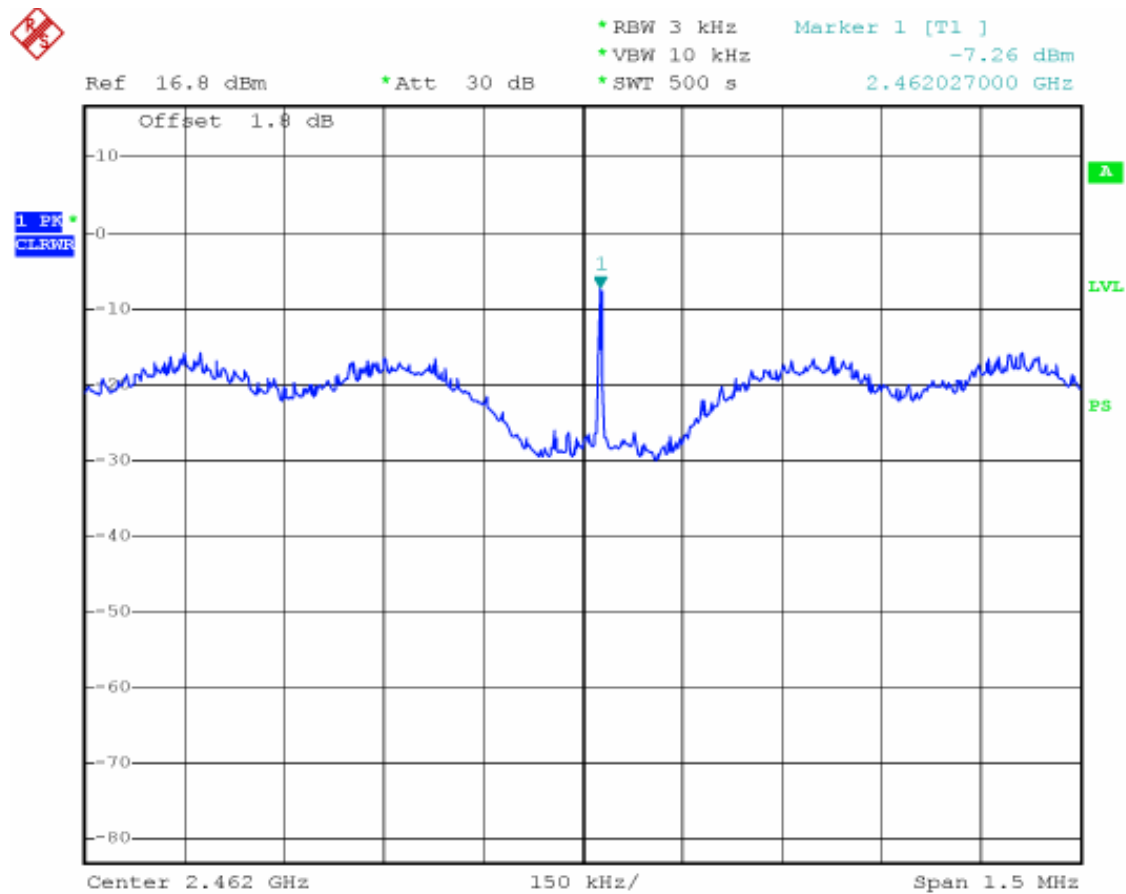
Date: 11.MAY.2008 00:00:05

Middle Channel



802.11g power density middle channel

Date: 10.MAY.2008 23:28:12

High Channel

802.11g power density high channel

Date: 11.MAY.2008 00:14:46

******* END OF REPORT *******