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Report No.: SZEMO10040172201  
Page: 1 of 58

# FCC REPORT

**Application No:** SZEMO100401722RF  
**Applicant:** HONGTIANTAI (H.K.) CO., LIMITED  
**Product Name:** Mobile Internet Device  
**Operation Frequency:** 2412MHz~2462MHz  
**FCC ID:** YB2-HTT-MD700  
**Standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2008  
**Date of Receipt:** 07 April 2010  
**Date of Test:** 13 April to 02 June 2010  
**Date of Issue:** 04 June 2010

<b>Test Result :</b>	<b>PASS *</b>
----------------------	---------------

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Jack Zhang  
Laboratory Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf  
This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK.. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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## 2 Contents

	Page
.....	1
<b>2 CONTENTS</b> .....	<b>2</b>
<b>3 TEST SUMMARY</b> .....	<b>3</b>
<b>4 GENERAL INFORMATION</b> .....	<b>4</b>
4.1 CLIENT INFORMATION .....	4
4.2 GENERAL DESCRIPTION OF E.U.T .....	4
4.3 TEST ENVIRONMENT AND MODE .....	6
4.4 TEST FACILITY .....	7
4.5 TEST LOCATION .....	7
4.6 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	7
4.7 TEST INSTRUMENTS LIST .....	8
<b>5 TEST RESULTS AND MEASUREMENT DATA</b> .....	<b>9</b>
5.1 ANTENNA REQUIREMENT: .....	9
5.2 CONDUCTED EMISSIONS .....	10
5.3 CONDUCTED PEAK OUTPUT POWER .....	13
5.4 6dB OCCUPY BANDWIDTH .....	16
5.5 POWER SPECTRAL DENSITY .....	20
5.6 BAND EDGE.....	24
5.7 RF ANTENNA CONDUCTED SPURIOUS EMISSIONS.....	27
5.8 RADIATED EMISSION.....	34
5.8.1 <i>Radiated emission below 1GHz</i> .....	36
5.8.2 <i>Transmitter emission above 1GHz</i> .....	37
5.8.3 <i>Band Edge and Restricted band (Radiated measurement)</i> .....	43-58



### 3 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Passed
AC Power Line Conducted Emission	15.207	Passed
Conducted Peak Output Power	15.247 (b)(3)	Passed
6dB Occupied Bandwidth	15.247 (a)(2)	Passed
Power Spectral Density	15.247 (e)	Passed
Radiated Emission	15.205/15.209	Passed
Band Edge	15.247(d)	Passed

*Remark: Passed: The EUT complies with the essential requirements in the standard.*

*Failed: The EUT does not comply with the essential requirements in the standard.*

## 4 General Information

### 4.1 Client Information

Applicant:	HONGTIANTAI (H.K.) CO., LIMITED
Address of Applicant:	2102Pakpolee Commercial Centre 1A Sai Yeung Choi Street South Monqkok Kowloon Hong Kong Sar
Manufacturer/ Factory:	HONGTIANTAI E-TECH (SHENZHEN) CO., LIMITED
Address of Manufacturer/ Factory:	Block 6, Xinxing Industrial Park, Xinhe Village, Fuhai Avenue, Fuyong Town Bao'an District, Shenzhen

### 4.2 General Description of E.U.T

Product Name:	Mobile Internet Device
Trade Name:	N/A
Item No.:	MD700,MD780,MD800,MD860
Operation Frequency:	2412MHz~2462MHz
Channel numbers:	11
Channel separation:	5MHz
Modulation type: (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Modulation type: (IEEE 802.11g)	Orthogonal Frequency Division Multiplexing(OFDM)
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps
Antenna Type:	Integral
Antenna gain:	0.98dBi
Power supply:	Input: AC 100-240V 50/60Hz 0.32A Max Output: DC 9.0V 1500mA



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz	X	

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz

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### 4.3 Test environment and mode

<b>Test Environment:</b>	
Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1008 mbar
<b>Test mode:</b>	
Play mode	Keep the EUT in play Video mode with earphone.
Communicate with PC(read & write Int. memory )	Keep the EUT communicate with PC and exchange data.
Communicate with PC(read & write SD card )	Keep the EUT communicate with PC and exchange data.
Wi-Fi mode	Keep the EUT communicate with other Wi-Fi device and exchange data.
U-Disk mode	Keep the EUT play video in U-disk with earphone.
Charge mode	Keep the AC adapter charge to EUT.
Transmitting mode:	Keep the EUT in transmitting mode with modulation.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

<b>Pre-Test Mode:</b>								
Mode	802.11b							
Data Rate	1Mbps	2Mbps	5.5Mbps	11Mbps				
Power (dBm)	14.12	14.23	14.53	14.64				
Mode	802.11g							
Data Rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Power (dBm)	18.66	18.75	18.85	18.92	18.95	19.00	19.07	19.19
<b>Final Test Mode:</b>								
According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”								
11Mbps for 802.11b, 54Mbps for 802.11g								

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#### 4.4 Test Facility

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

**CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

**VCCI**

The 3m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197 and C-2383 respectively.

Date of Registration: September 29, 2008. Valid until September 28, 2011.

**FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen 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, June 27, 2008.

**Industry Canada (IC)**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1.

#### 4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch E&E Lab

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

#### 4.6 Other Information Requested by the Customer

None.

**4.7 Test Instruments list**

<b>RE in Chamber</b>						
<b>Item</b>	<b>Test Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Inventory No.</b>	<b>Cal.Date (dd-mm-yy)</b>	<b>Cal.Due date (dd-mm-yy)</b>
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	16-06-2009	16-06-2010
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	05-11-2009	05-11-2010
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	18-06-2008	18-06-2011
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	05-11-2009	05-11-2010
6	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	10-11-2009	10-11-2010
7	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	10-11-2009	10-11-2010
8	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	02-06-2010	01-06-2011
9	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	SEL0080	13-07-2009	13-07-2010
10	Band filter	Amindeon	82346	SEL0094	23-06-2009	23-06-2010

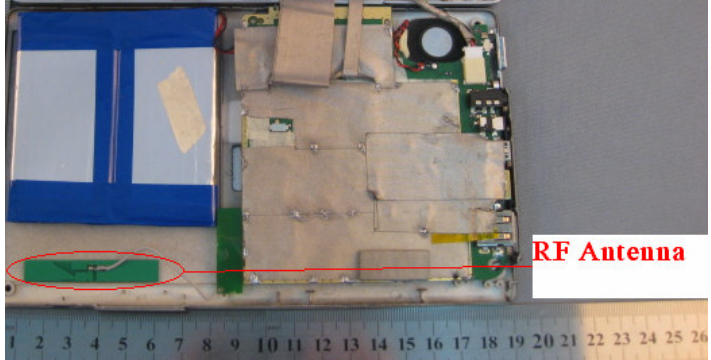
<b>Conducted Emission</b>						
<b>Item</b>	<b>Test Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Inventory No.</b>	<b>Cal.Date (dd-mm-yy)</b>	<b>Cal.Due date (dd-mm-yy)</b>
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	N/A	N/A
2	LISN	ETS-LINDGREN	3816/2	SEL0021	02-06-2010	01-06-2011
3	LISN	Schwarzbeck	NNBM 8125	SEL0119	28-07-2009	28-07-2010
4	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	02-06-2010	01-06-2011
5	Coaxial Cable	SGS	N/A	SEL0024	18-06-2008	18-06-2011

<b>RF conducted</b>						
<b>Item</b>	<b>Test Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Inventory No.</b>	<b>Cal.Date (dd-mm-yy)</b>	<b>Cal.Due date (dd-mm-yy)</b>
1	Spectrum Analyzer	Rohde & Schwarz	FSP 30	SEL0154	22-10-2009	22-10-2010
2	Coaxial cable	SGS	N/A	SEL0028	18-06-2008	18-06-2011

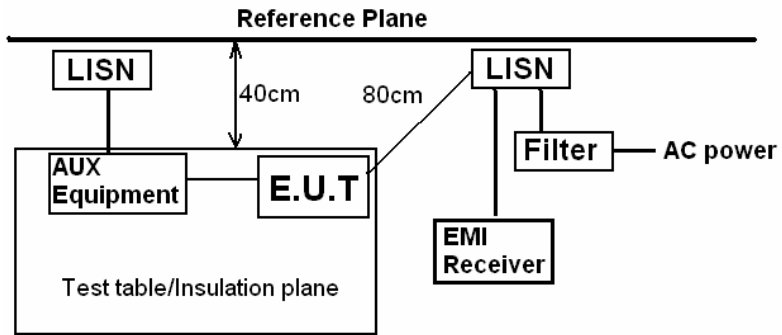


## 5 Test results and Measurement Data

### 5.1 Antenna requirement:

<b>Standard requirement:</b>	FCC Part15 C Section 15.203 /247(c)
<p>15.203 requirement:  <i>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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i></p> <p>15.247(c) (1)(i) requirement:  <i>(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.</i></p>	
<b>E.U.T Antenna:</b>	

**5.2 Conducted Emissions**

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.4: 2003														
Test Frequency Range:	150KHz to 30MHz														
Class / Severity:	Class B														
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> <p>* Decreases with the logarithm of the frequency.</p>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test procedure	The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.														
Test setup:	 <p><i>Remark</i>  <i>E.U.T: Equipment Under Test</i>  <i>LISN: Line Impedance Stabilization Network</i>  <i>Test table height=0.8m</i></p>														
Test Instruments:	Refer to section 4.7 for details														
Test mode:	Pre-scan was performed on the EUT in play mode, communicate with PC(read & write Int. memory) mode, communicate with PC(read & write SD card) mode, , WiFi mode, U-Disk mode, and charge mode, and then found the worst case mode was communicate with PC(read & write SD card) mode The Below test data was the worst case.														
Test results:	Passed														

**Measurement Data**

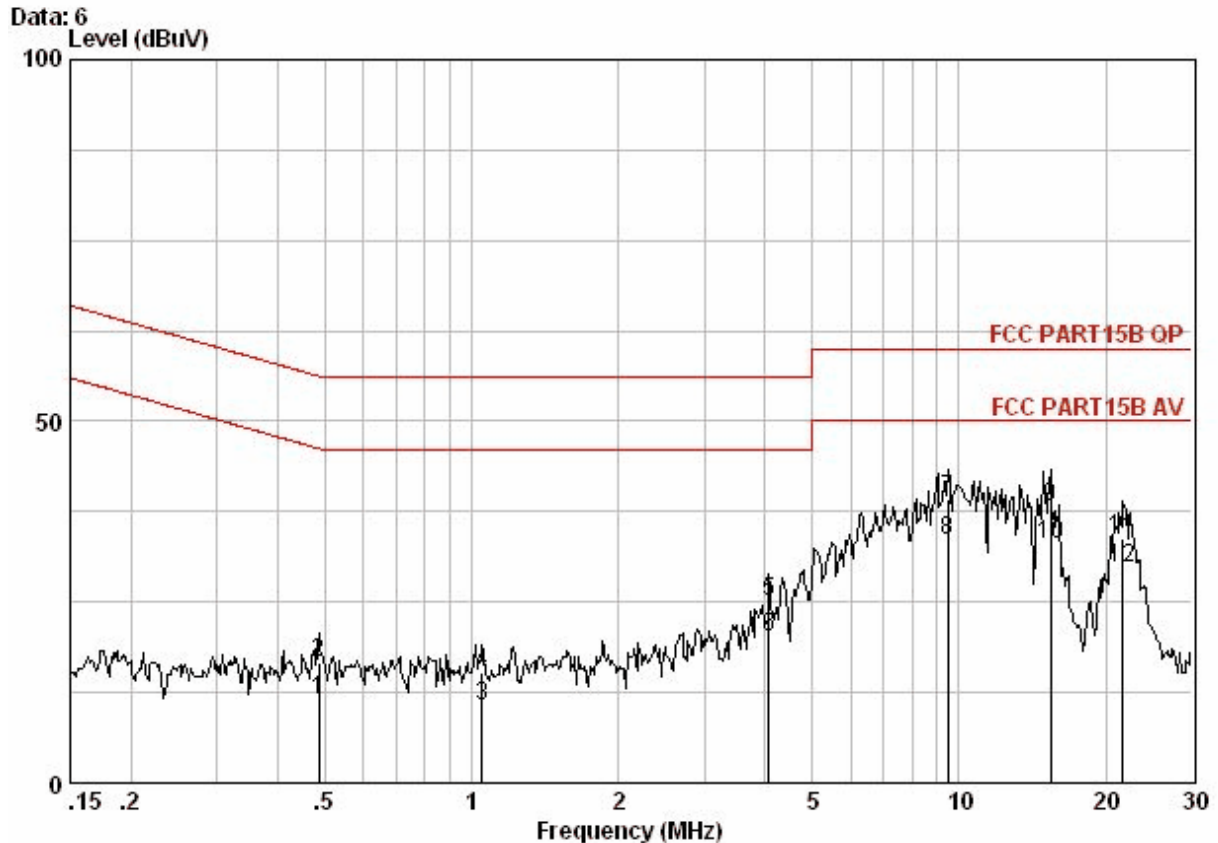
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

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Live Line:



	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.48632	0.06	-0.04	11.40	11.42	46.23	-34.81	Average
2	0.48632	0.06	-0.04	16.63	16.64	56.23	-39.59	QP
3	1.049	0.08	-0.05	10.60	10.63	46.00	-35.37	Average
4	1.049	0.08	-0.05	15.17	15.21	56.00	-40.79	QP
5	4.070	0.16	-0.09	24.92	24.99	56.00	-31.01	QP
6 @	4.070	0.16	-0.09	20.10	20.16	46.00	-25.84	Average
7 @	9.502	0.22	-0.27	39.30	39.24	60.00	-20.76	QP
8 @	9.502	0.22	-0.27	33.50	33.45	50.00	-16.55	Average
9 @	15.388	0.25	-0.51	38.51	38.25	60.00	-21.75	QP
10 @	15.388	0.25	-0.51	33.20	32.94	50.00	-17.06	Average
11 @	21.715	0.28	-0.69	34.32	33.91	60.00	-26.09	QP
12 @	21.715	0.28	-0.69	30.10	29.69	50.00	-20.31	Average

Notes:

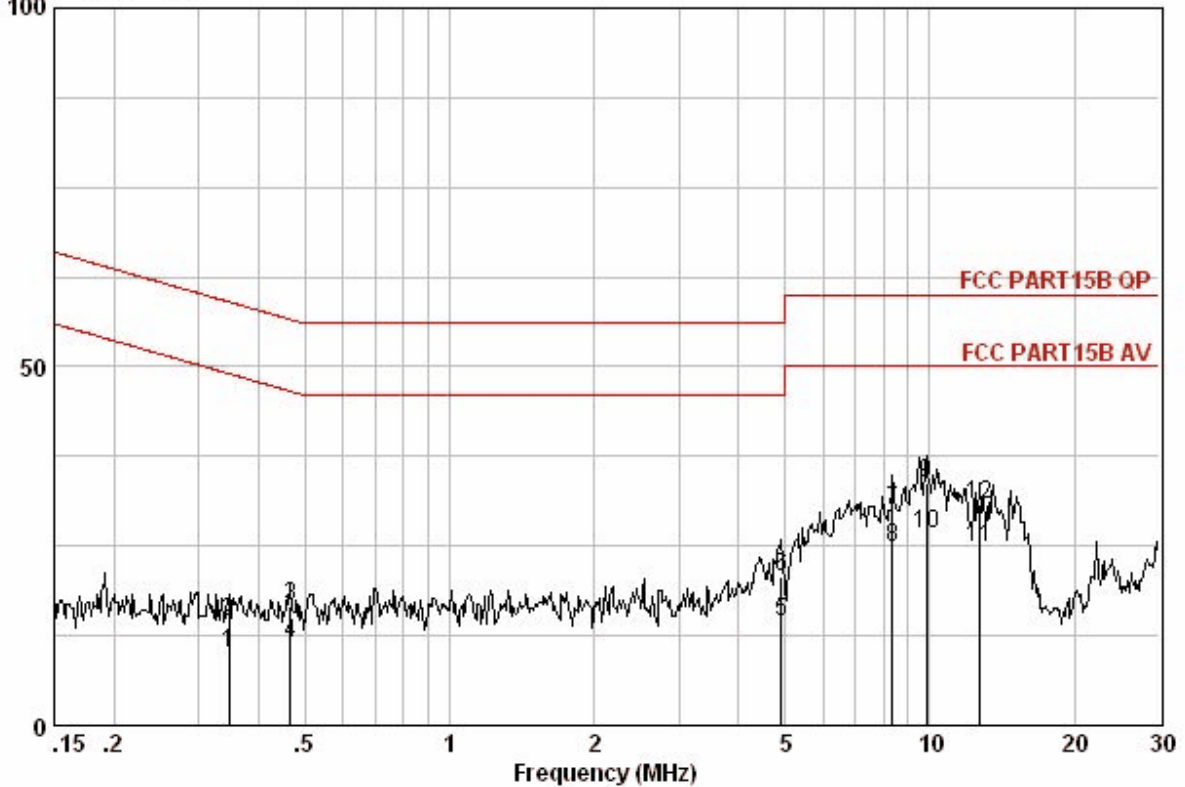
1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

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Neutral Line:

Data: 7  
Level (dBuV)



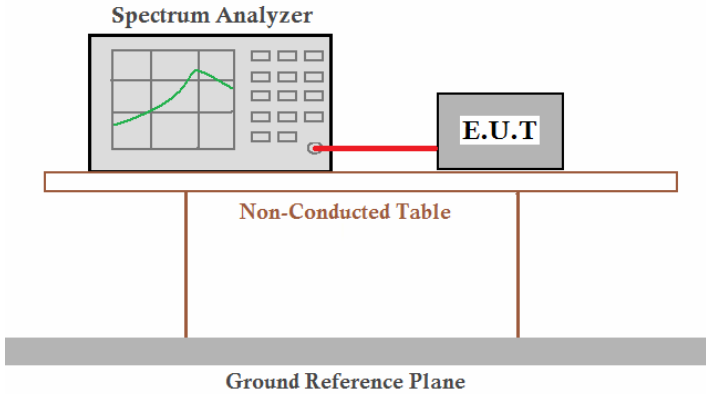
	Freq	Cable Loss	LISN Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.34646	0.05	-0.04	10.20	10.21	49.05	-38.83	Average
2	0.34646	0.05	-0.04	14.34	14.36	59.05	-44.69	QP
3	0.46614	0.06	-0.04	16.57	16.59	56.58	-39.99	QP
4	0.46614	0.06	-0.04	11.30	11.32	46.58	-35.26	Average
5	4.900	0.17	-0.12	14.50	14.55	46.00	-31.45	Average
6	4.900	0.17	-0.12	20.74	20.79	56.00	-35.21	QP
7	8.367	0.21	-0.24	29.95	29.91	60.00	-30.09	QP
8 @	8.367	0.21	-0.24	24.80	24.77	50.00	-25.23	Average
9 @	9.861	0.22	-0.33	33.79	33.68	60.00	-26.32	QP
10 @	9.861	0.22	-0.33	26.80	26.69	50.00	-23.31	Average
11 @	12.716	0.24	-0.41	24.90	24.73	50.00	-25.27	Average
12	12.716	0.24	-0.41	30.96	30.79	60.00	-29.21	QP

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

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**5.3 Conducted Peak Output Power**

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	30dBm
Test setup:	 <p><i>Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>
Test Instruments:	Refer to section 4.7 for details
Test results:	Passed

**Measurement Data**

802.11b mode			
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	14.39	30.00	Pass
Middle	14.64	30.00	Pass
Highest	14.23	30.00	Pass
802.11g mode			
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	19.19	30.00	Pass
Middle	18.50	30.00	Pass
Highest	17.47	30.00	Pass

Test plot as follows:

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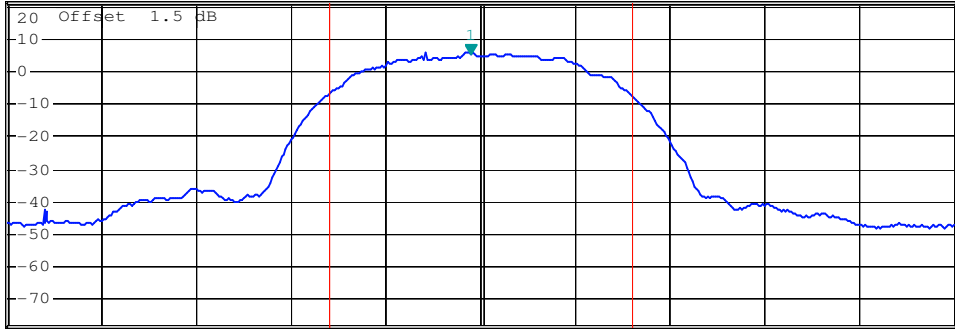


Test mode:	802.11b	Test channel:	Lowest
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Ref 21.5 dBm      \*Att 30 dB      \*RBW 1 MHz      Marker 1 [T1]      5.90 dBm  
 \*VBW 1 MHz      2.411400000 GHz  
 SWT 2.5 ms

1 PK VIEW



Center 2.412 GHz      5 MHz/      Span 50 MHz

Tx Channel

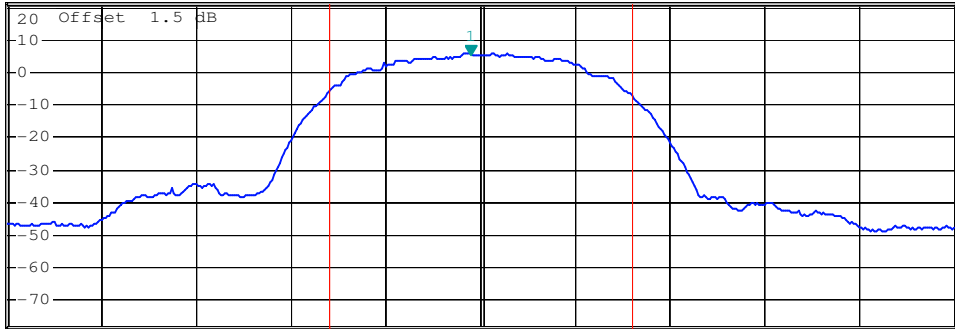
Bandwidth      16 MHz      Power      14.39 dBm

Test mode:	802.11b	Test channel:	Middle
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Ref 21.5 dBm      \*Att 30 dB      \*RBW 1 MHz      Marker 1 [T1]      6.24 dBm  
 \*VBW 1 MHz      2.436400000 GHz  
 SWT 2.5 ms

1 PK VIEW



Center 2.437 GHz      5 MHz/      Span 50 MHz

Tx Channel

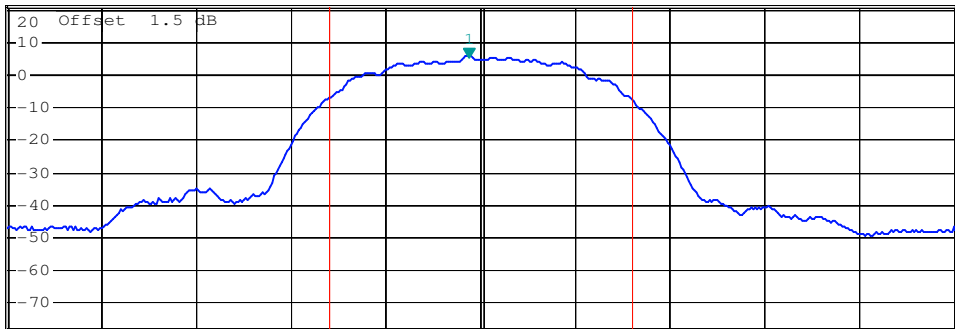
Bandwidth      16 MHz      Power      14.64 dBm

Test mode:	802.11b	Test channel:	Highest
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Ref 21.5 dBm      \*Att 30 dB      \*RBW 1 MHz      Marker 1 [T1]      5.84 dBm  
 \*VBW 1 MHz      2.461300000 GHz  
 SWT 2.5 ms

1 PK VIEW



Center 2.462 GHz      5 MHz/      Span 50 MHz

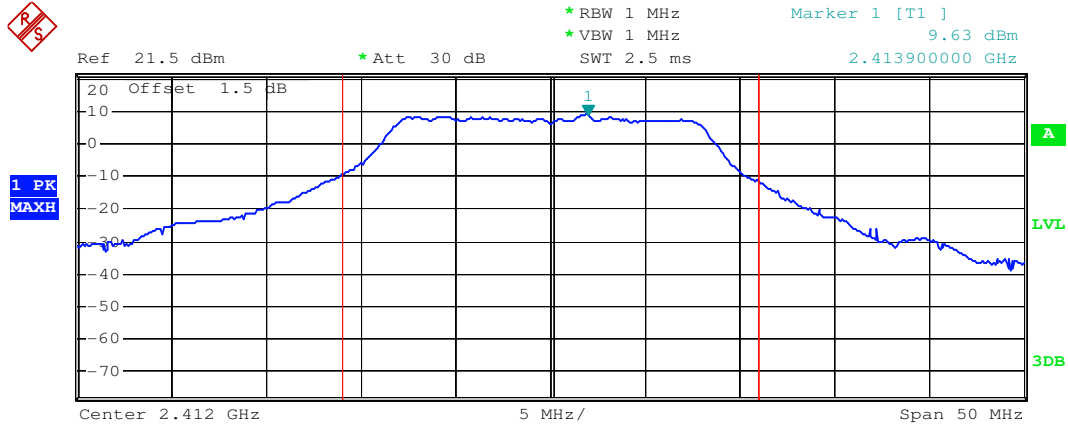
Tx Channel

Bandwidth      16 MHz      Power      14.23 dBm

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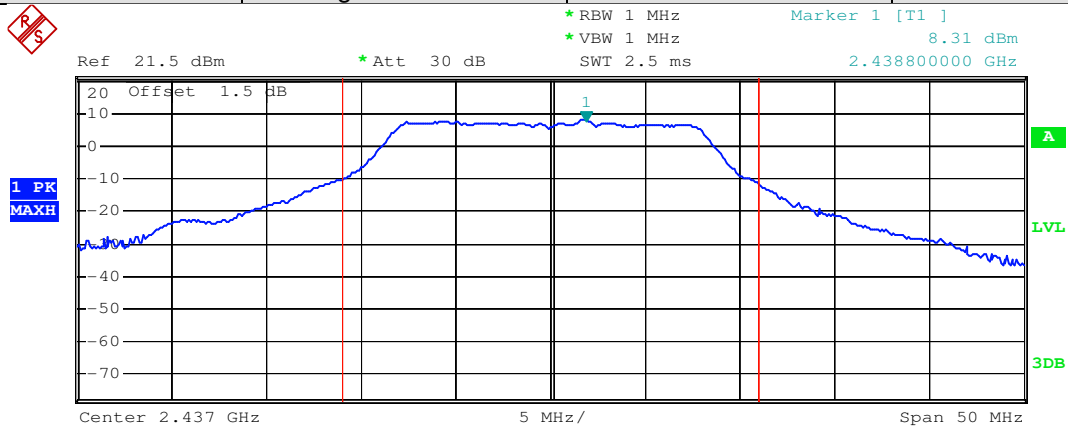


Test mode:	802.11g	Test channel:	Lowest
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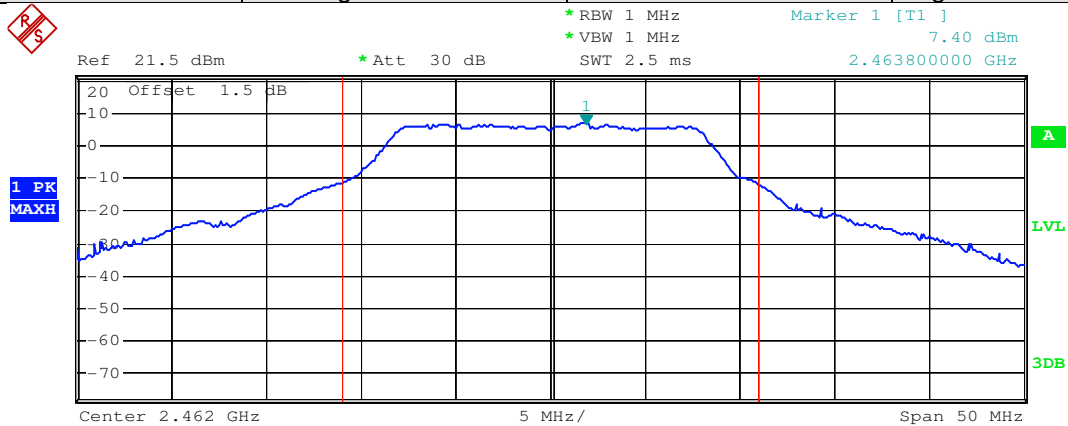
**Tx Channel**  
Bandwidth 22 MHz Power 19.19 dBm

Test mode:	802.11g	Test channel:	Middle
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**Tx Channel**  
Bandwidth 22 MHz Power 18.50 dBm

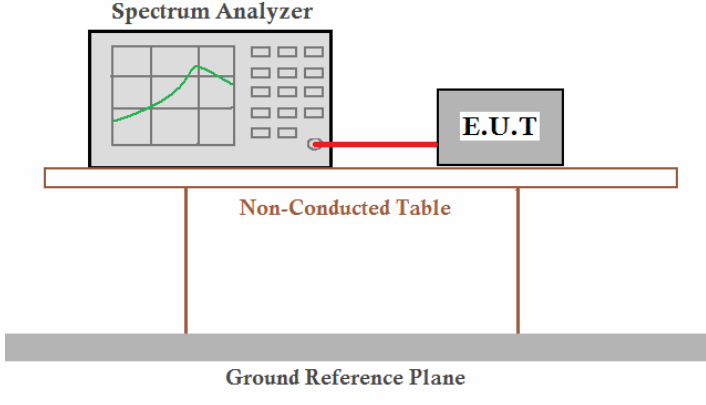
Test mode:	802.11g	Test channel:	Highest
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**Tx Channel**  
Bandwidth 22 MHz Power 17.47 dBm

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### 5.4 6dB Occupancy Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	>500KHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instruments:	Refer to section 4.7 for details
Test results:	Passed

### Measurement Data

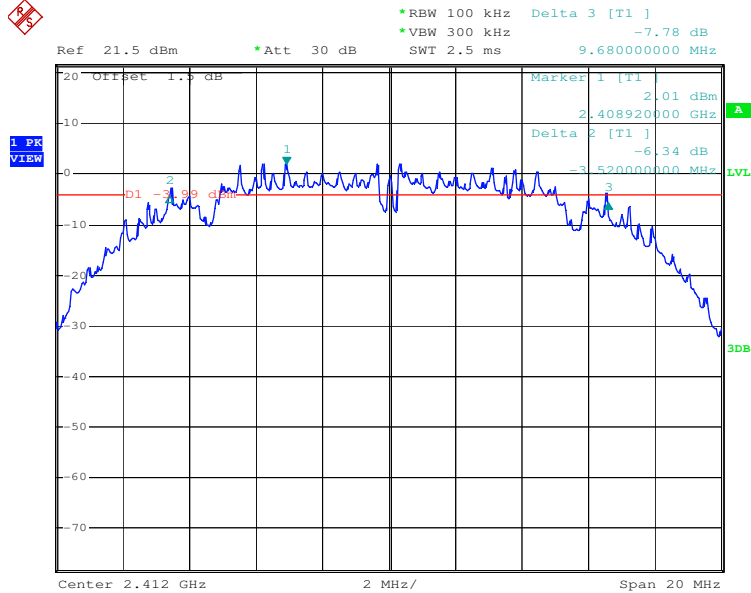
802.11b mode			
Test channel	6dB Occupancy Bandwidth (MHz)	Limit (KHz)	Result
Lowest	13.20	>500	Pass
Middle	13.16	>500	Pass
Highest	13.20	>500	Pass
802.11g mode			
Test channel	6dB Occupancy Bandwidth (MHz)	Limit (KHz)	Result
Lowest	15.60	>500	Pass
Middle	15.60	>500	Pass
Highest	15.60	>500	Pass

Test plot as follows:



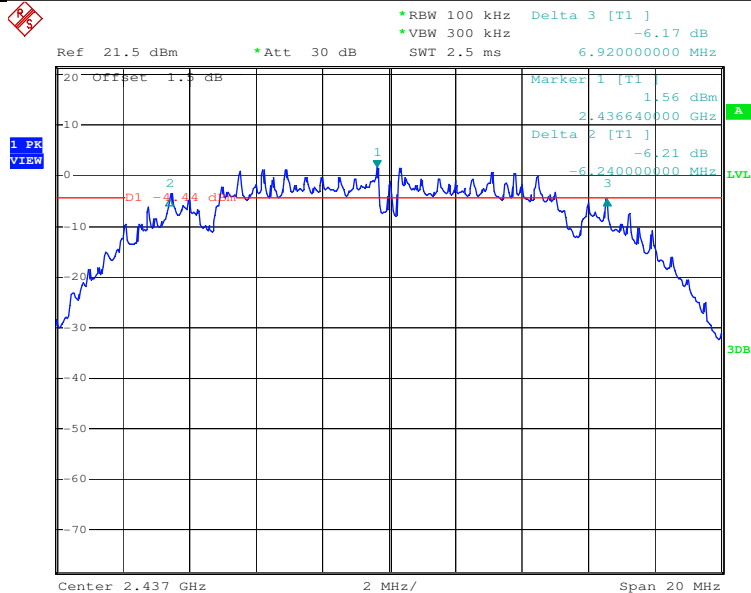


Test mode:	802.11b	Test channel:	Lowest
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Date: 17.MAY.2010 09:25:53

Test mode:	802.11b	Test channel:	Middle
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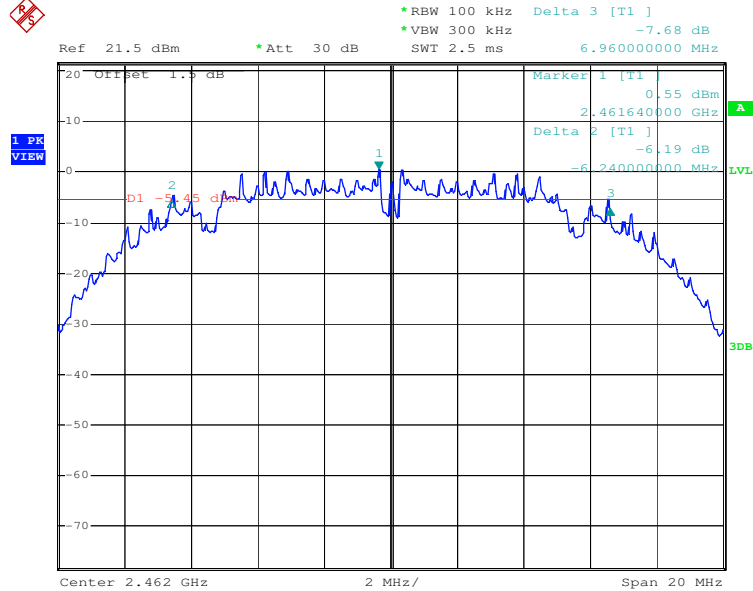


Date: 17.MAY.2010 09:01:57

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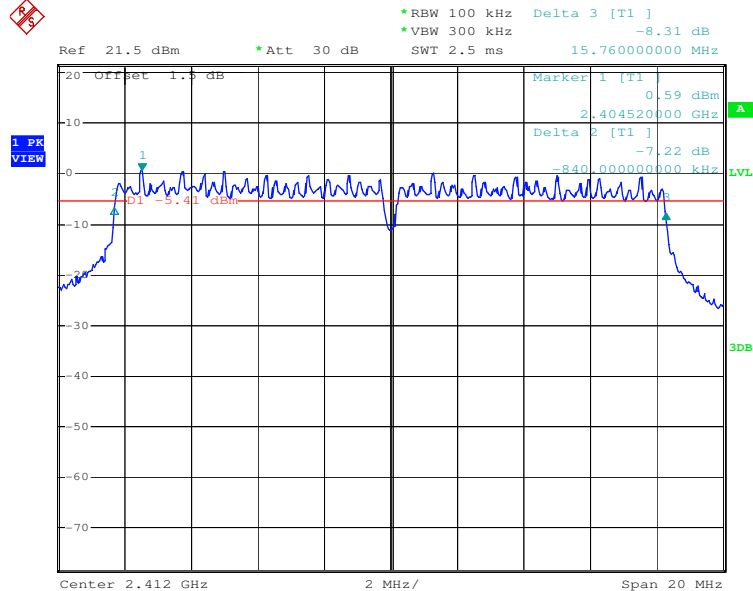


Test mode:	802.11b	Test channel:	Highest
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Date: 17.MAY.2010 09:15:19

Test mode:	802.11g	Test channel:	Lowest
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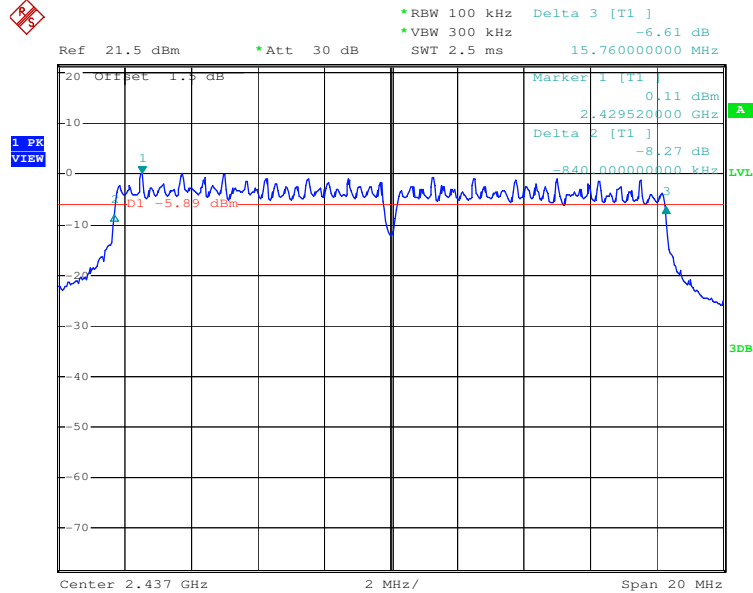


Date: 17.MAY.2010 09:28:26

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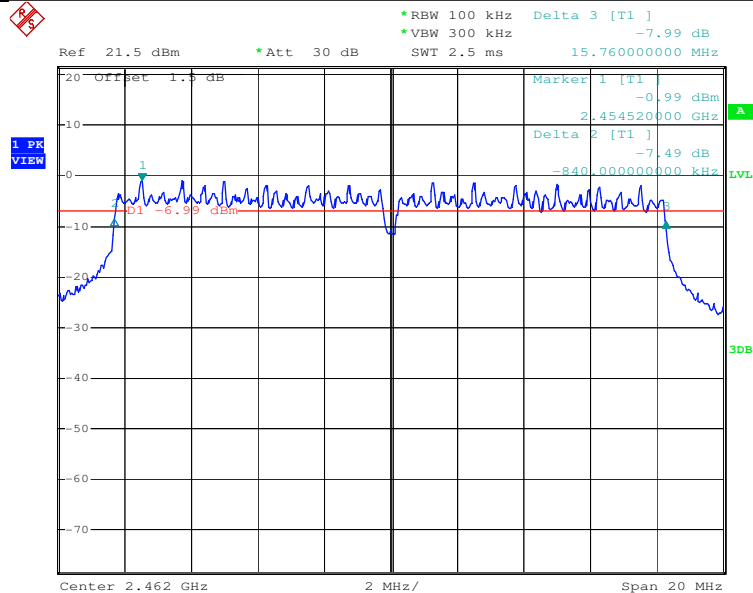


Test mode:	802.11g	Test channel:	Middle
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Date: 17.MAY.2010 09:44:13

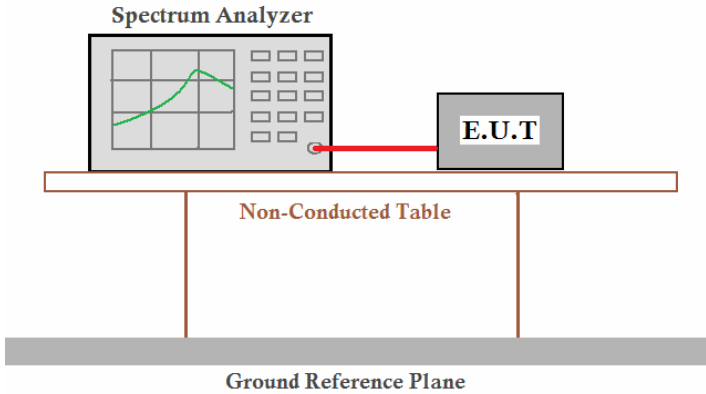
Test mode:	802.11g	Test channel:	Highest
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Date: 17.MAY.2010 10:04:22

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### 5.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	<8dBm
Test setup:	 <p><i>Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>
Test Instruments:	Refer to section 4.7 for details
Test results:	Passed

### Measurement Data

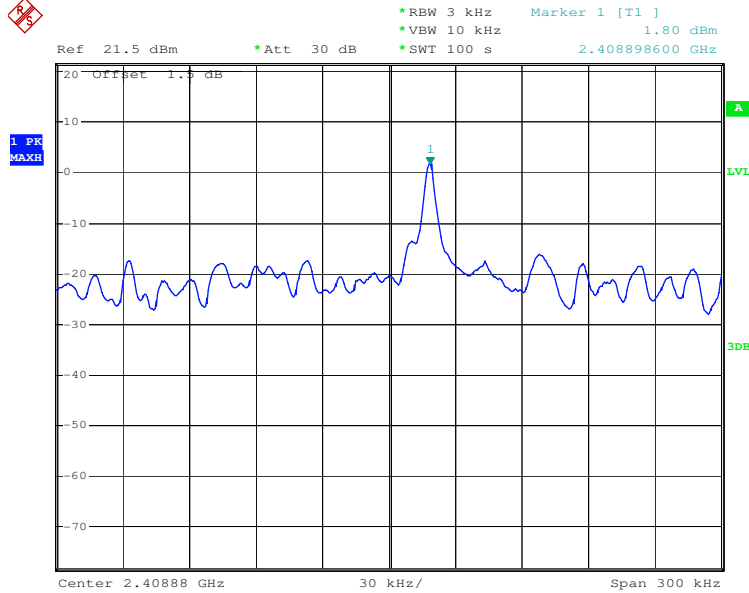
802.11b mode			
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result
Lowest	1.80	<8.00	Pass
Middle	1.42	<8.00	Pass
Highest	0.40	<8.00	Pass
802.11g mode			
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result
Lowest	-13.14	<8.00	Pass
Middle	-14.71	<8.00	Pass
Highest	-15.72	<8.00	Pass

Test plot as follows:

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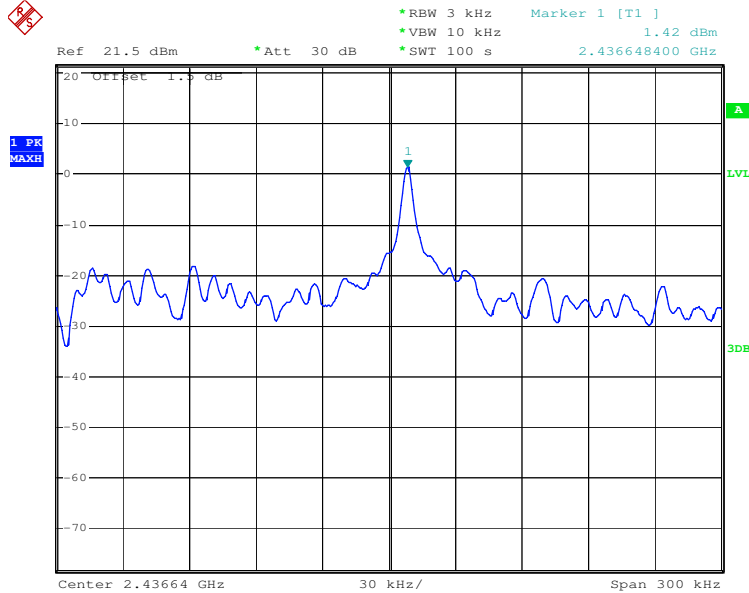


Test mode:	802.11b	Test channel:	Lowest
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Date: 17.MAY.2010 08:58:39

Test mode:	802.11b	Test channel:	Middle
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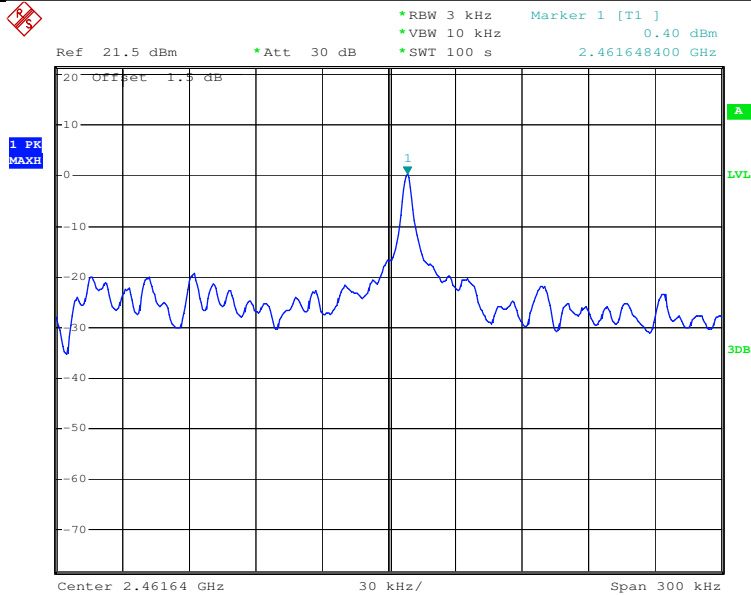


Date: 17.MAY.2010 09:10:18

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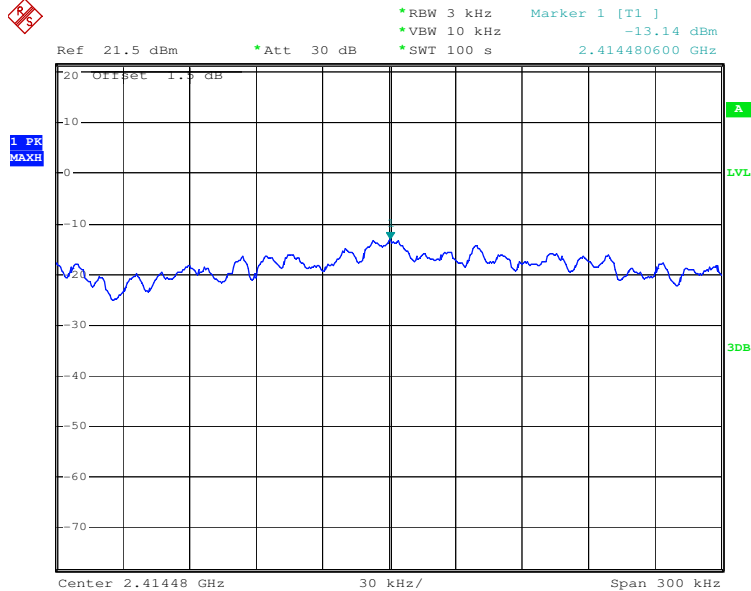


Test mode:	802.11b	Test channel:	Highest
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Date: 17.MAY.2010 09:24:25

Test mode:	802.11g	Test channel:	Lowest
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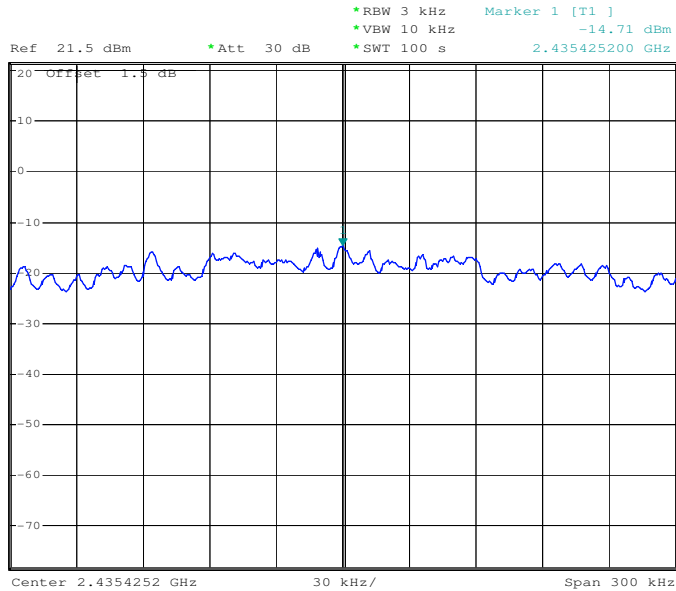


Date: 17.MAY.2010 09:34:18

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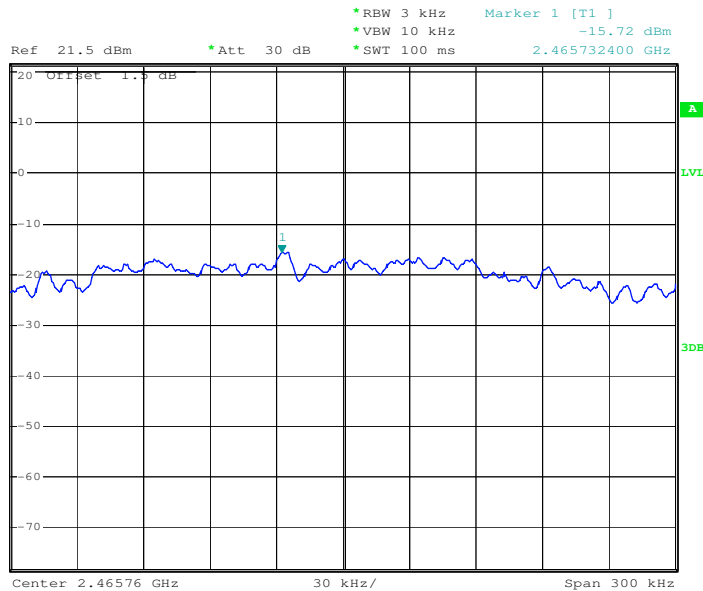


Test mode:	802.11g	Test channel:	Middle
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Date: 17.MAY.2010 09:59:23

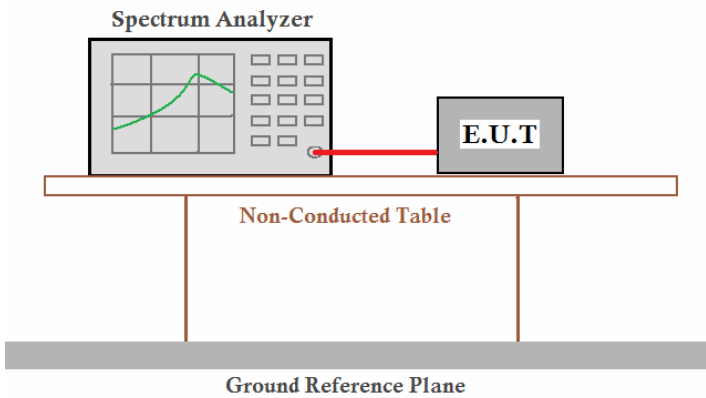
Test mode:	802.11g	Test channel:	Highest
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Date: 17.MAY.2010 10:12:33

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### 5.6 Band Edge

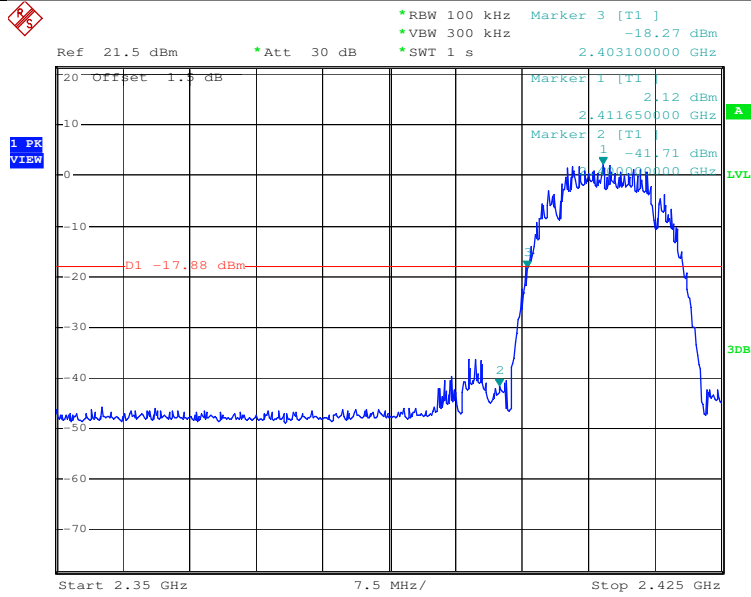
Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 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.
Test setup:	 <p><i>Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>
Test Instruments:	Refer to section 4.7 for details
Test results:	Passed

Test plot as follows:



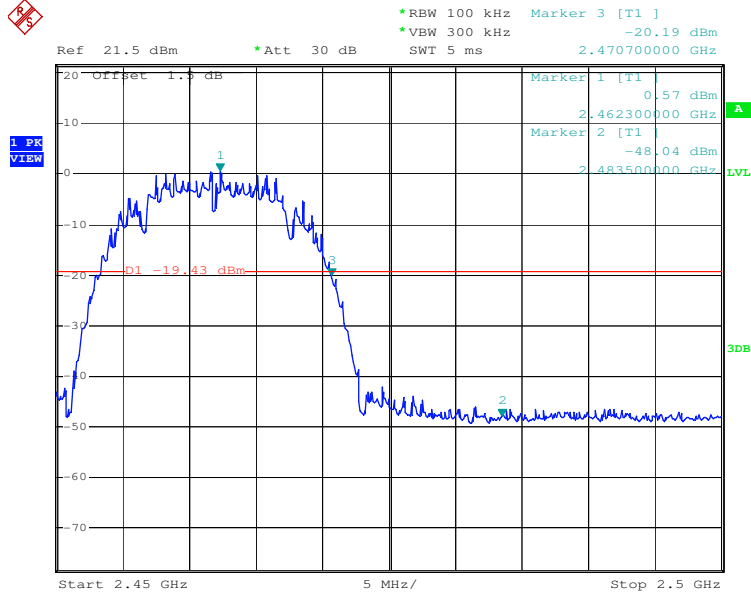


Test mode:	802.11b	Test channel:	Lowest
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Date: 17.MAY.2010 08:47:04

Test mode:	802.11b	Test channel:	Highest
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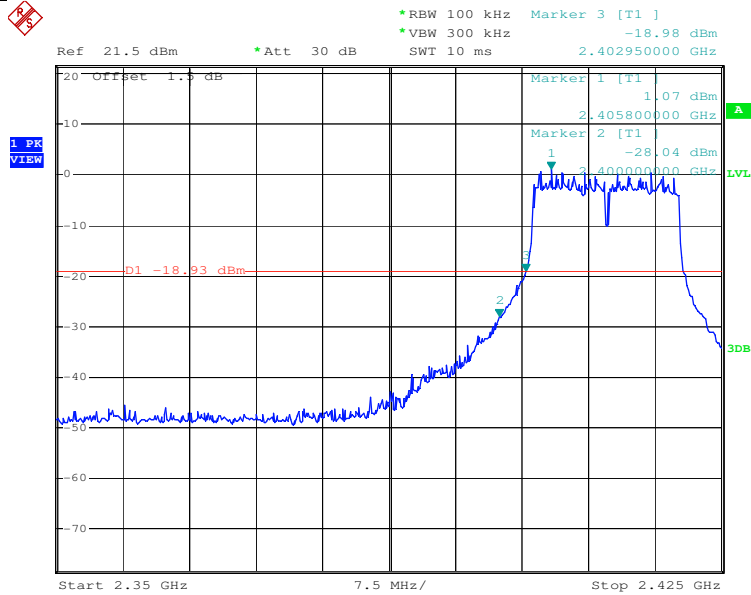


Date: 17.MAY.2010 09:18:27

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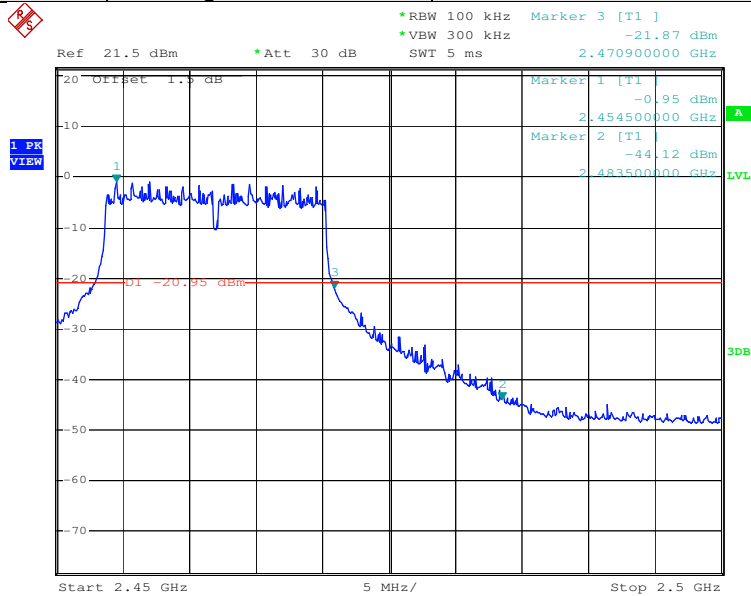


Test mode:	802.11g	Test channel:	Lowest
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Date: 17.MAY.2010 09:35:39

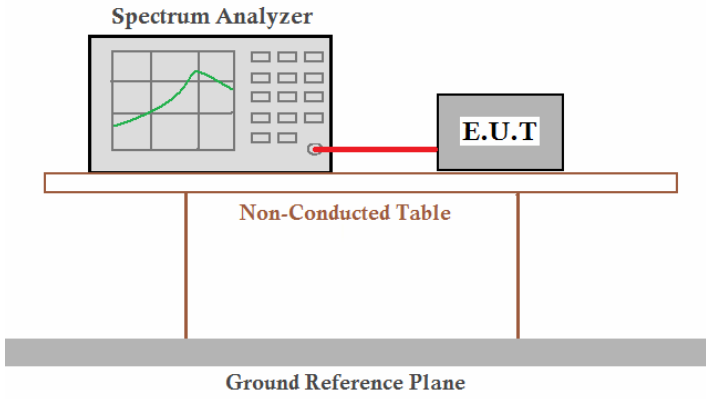
Test mode:	802.11g	Test channel:	Highest
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Date: 17.MAY.2010 10:02:33

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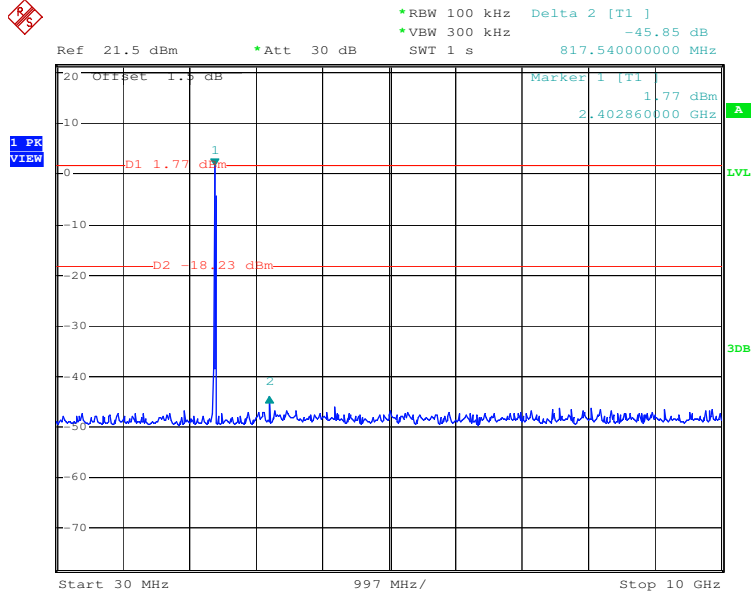
**5.7 RF Antenna Conducted spurious emissions**

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.
Test setup:	 <p><i>Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>
Test Instruments:	Refer to section 4.7 for details
Test results:	Passed

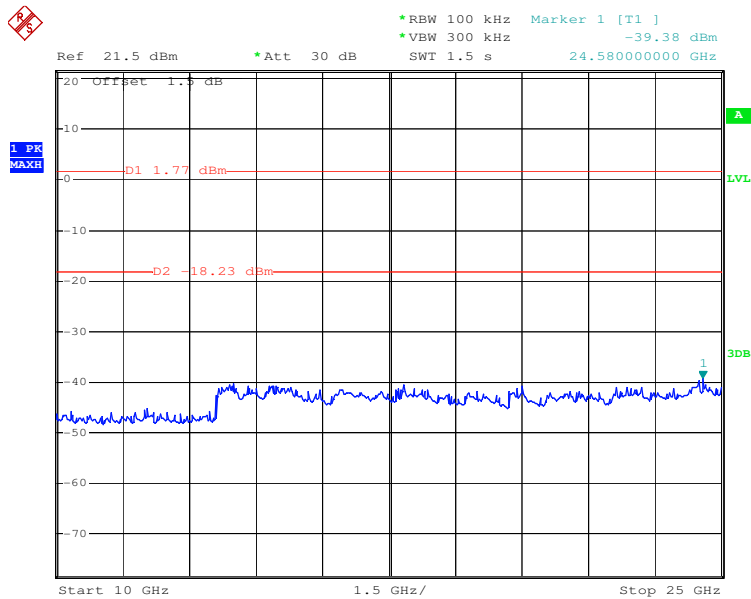
Test plot as follows:



Test mode:	802.11b	Test channel:	Lowest
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Date: 17.MAY.2010 08:51:36

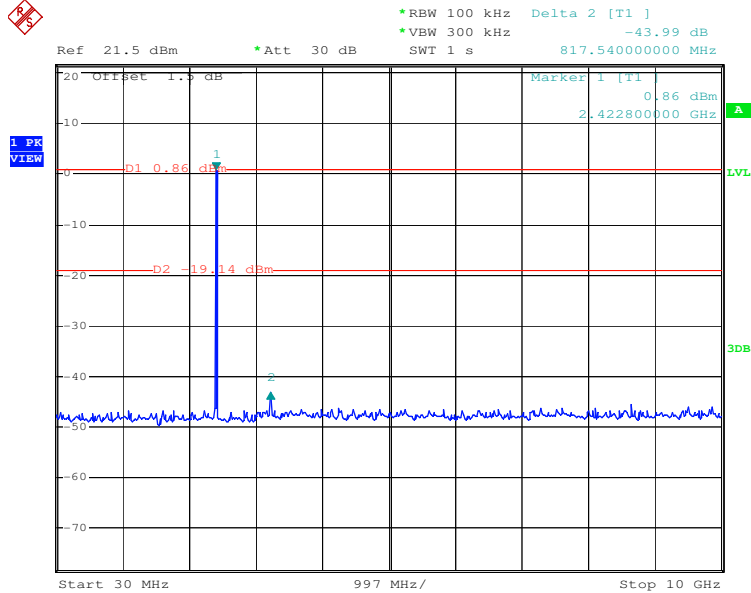


Date: 17.MAY.2010 08:52:01

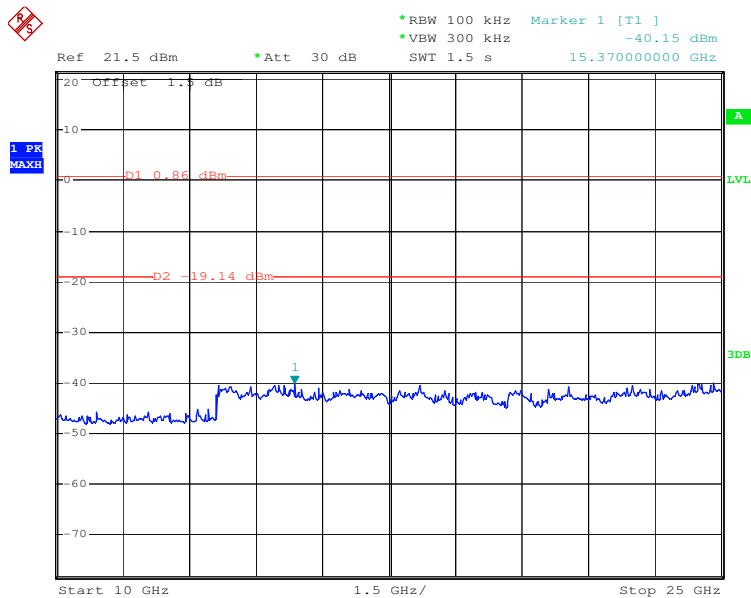
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Test mode:	802.11b	Test channel:	Middle
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Date: 17.MAY.2010 09:04:09

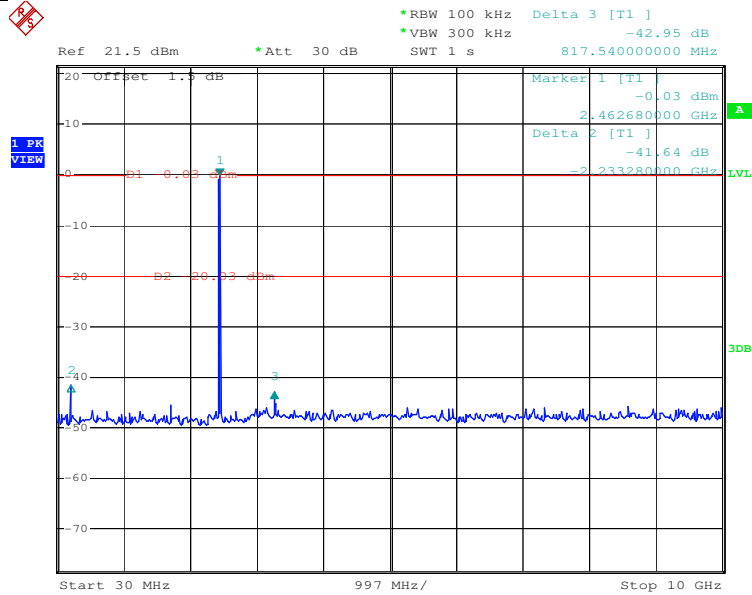


Date: 17.MAY.2010 09:05:37

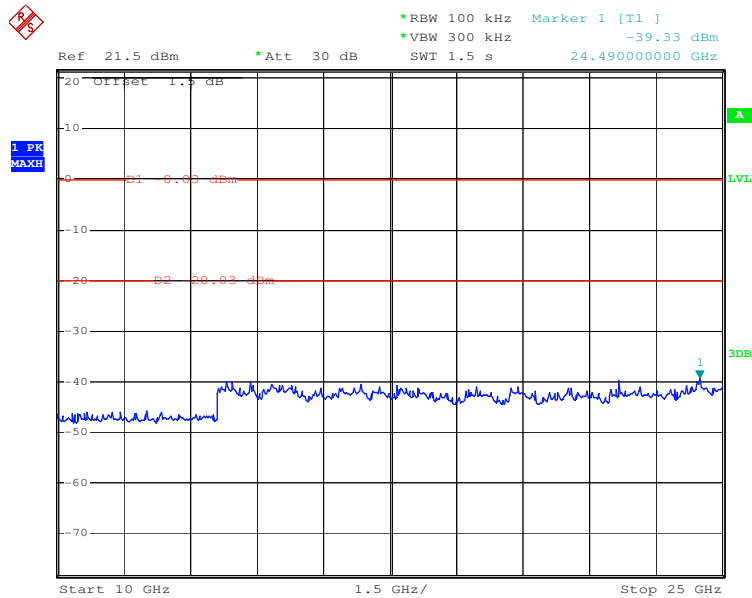
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Test mode:	802.11b	Test channel:	Highest
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Date: 17.MAY.2010 09:19:25

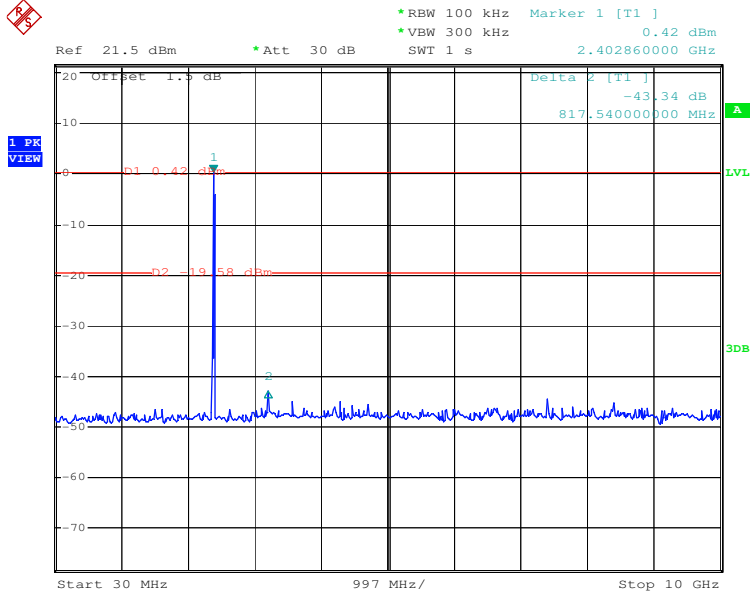


Date: 17.MAY.2010 09:20:07

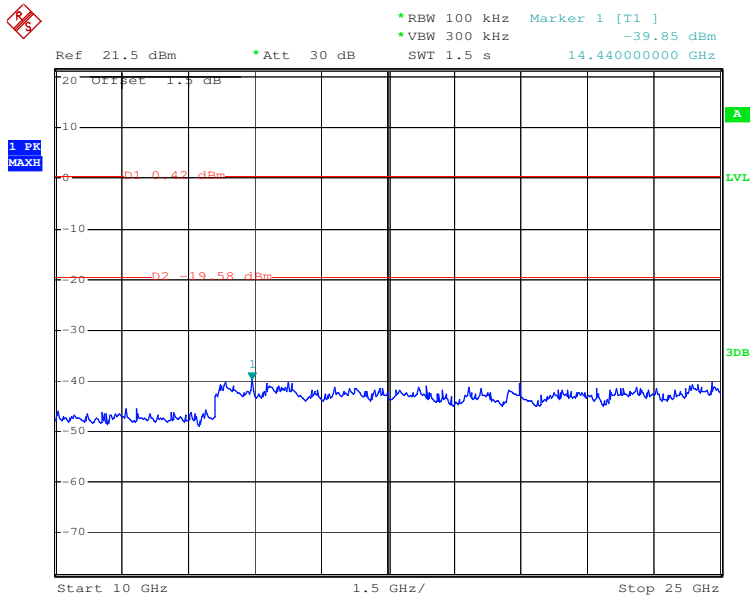
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Test mode:	802.11g	Test channel:	Lowest
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Date: 17.MAY.2010 09:29:52

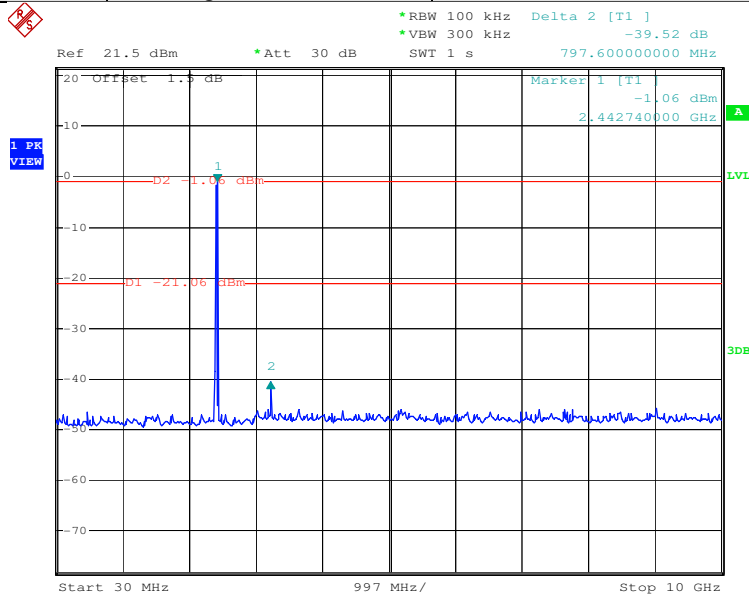


Date: 17.MAY.2010 09:30:13

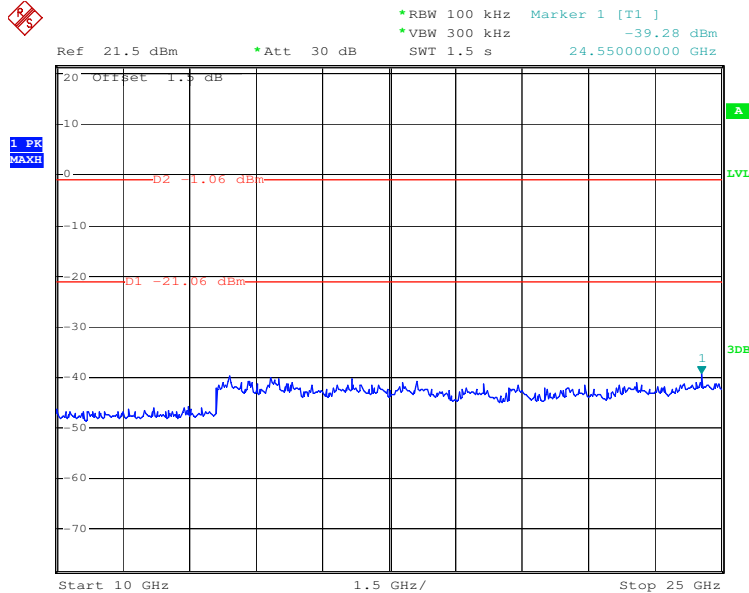
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Test mode:	802.11g	Test channel:	Middle
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Date: 17.MAY.2010 09:45:32



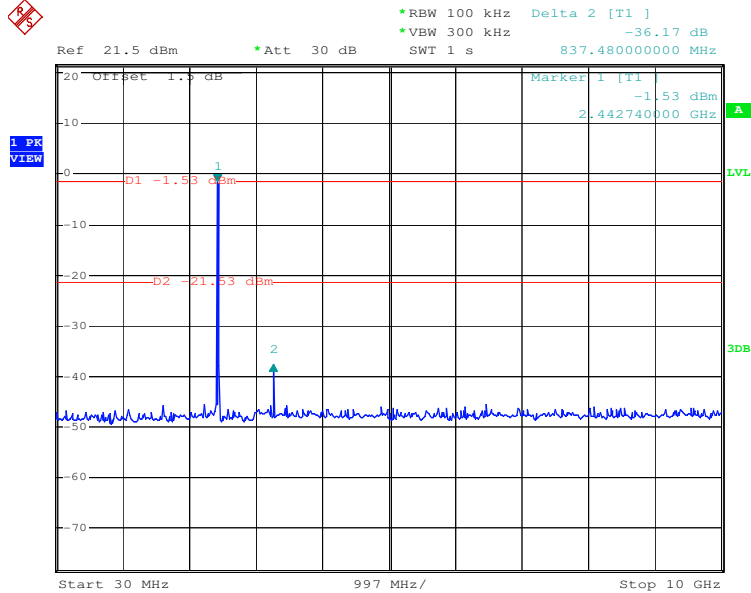
Date: 17.MAY.2010 09:45:54

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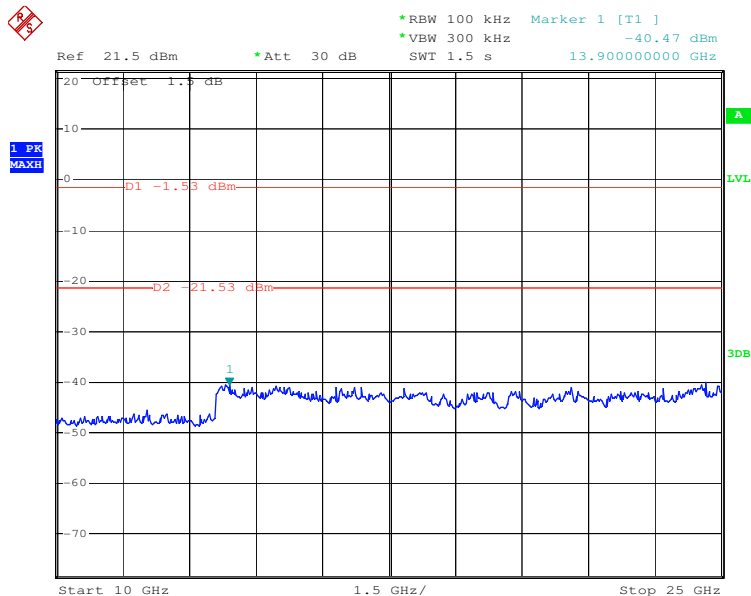




Test mode:	802.11g	Test channel:	Highest
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Date: 17.MAY.2010 10:06:07



Date: 17.MAY.2010 10:06:26

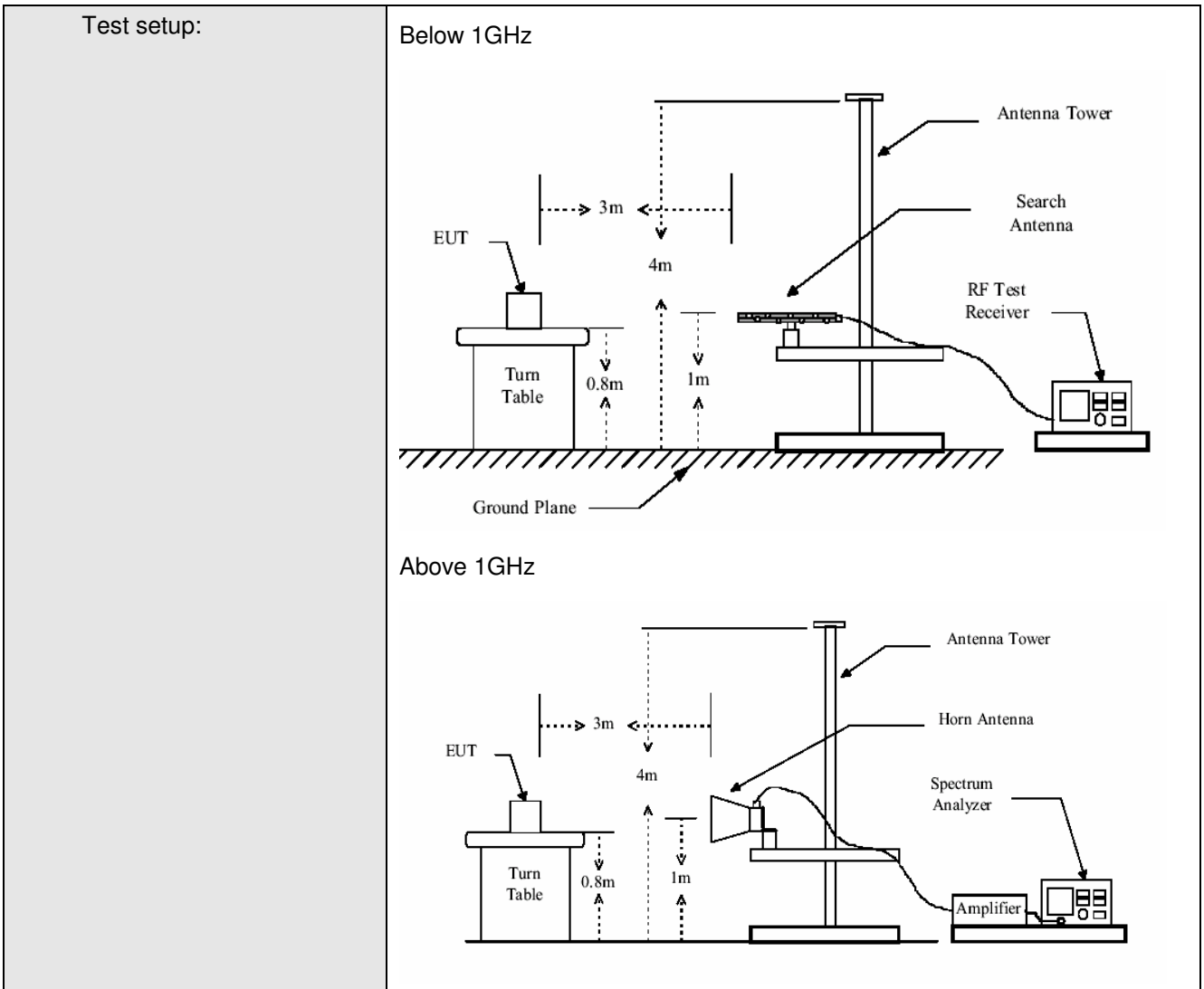
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**5.8 Radiated Emission**

Test Requirement:	FCC Part15 C Section 15.209 and 15.205																				
Test Method:	ANSI C63.4: 2003																				
Test Frequency Range:	30MHz to 25GHz																				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)																				
Receiver setup:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Detector</th> <th>RBW</th> <th>VBW</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-1GHz</td> <td>Quasi-peak</td> <td>100KHz</td> <td>300KHz</td> <td>Quasi-peak Value</td> </tr> <tr> <td rowspan="2">Above 1GHz</td> <td>Peak</td> <td>1MHz</td> <td>3MHz</td> <td>Peak Value</td> </tr> <tr> <td>Peak</td> <td>1MHz</td> <td>10Hz</td> <td>Average Value</td> </tr> </tbody> </table>	Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value	Above 1GHz	Peak	1MHz	3MHz	Peak Value	Peak	1MHz	10Hz	Average Value	
	Frequency	Detector	RBW	VBW	Remark																
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value																
	Above 1GHz	Peak	1MHz	3MHz	Peak Value																
Peak		1MHz	10Hz	Average Value																	
Limit:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Limit (dBuV/m @3m)</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-88MHz</td> <td>40.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>88MHz-216MHz</td> <td>43.5</td> <td>Quasi-peak Value</td> </tr> <tr> <td>216MHz-960MHz</td> <td>46.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>960MHz-1GHz</td> <td>54.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td rowspan="2">Above 1GHz</td> <td>54.0</td> <td>Average Value</td> </tr> <tr> <td>74.0</td> <td>Peak Value</td> </tr> </tbody> </table>	Frequency	Limit (dBuV/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value	74.0	Peak Value
	Frequency	Limit (dBuV/m @3m)	Remark																		
	30MHz-88MHz	40.0	Quasi-peak Value																		
	88MHz-216MHz	43.5	Quasi-peak Value																		
	216MHz-960MHz	46.0	Quasi-peak Value																		
	960MHz-1GHz	54.0	Quasi-peak Value																		
Above 1GHz	54.0	Average Value																			
	74.0	Peak Value																			
Test Procedure:	a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.																				
	b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.																				
	c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.																				
	d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.																				
	e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.																				
	f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.																				
	g. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.																				
Test Instruments:	Refer to section 4.7 for details																				
Test mode:	Keep the EUT in transmitting mode Pre-scan was performed on the EUT in play mode, communicate with PC(read & write Int. memory) mode, communicate with PC(read & write SD card) mode, WiFi mode, U-Disk mode, and charge mode, and then found the worst case mode was communicate with PC(read & write Int. memory) mode. The Below test data was the worst case.																				
Test results:	Passed																				

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**Note:**

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

$$\text{Final Test Level} = \text{Receiver Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Preamplifier Factor}$$

**5.8.1 Radiated emission below 1GHz**

Communicate with PC (read & write Int. memory mode)

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
36.790	0.60	12.30	28.12	44.32	29.10	40.00	-10.90	Vertical
122.150	1.26	7.85	27.67	51.31	32.75	43.50	-10.75	Vertical
194.900	1.39	10.15	27.18	51.41	35.77	43.50	-7.73	Vertical
505.300	2.61	17.96	27.70	45.23	38.10	46.00	-7.90	Vertical
749.740	3.06	21.70	27.11	42.62	40.27	46.00	-5.73	Vertical
935.980	3.64	23.30	26.43	38.25	38.76	46.00	-7.24	Vertical
36.790	0.60	12.53	28.12	38.94	23.95	40.00	-16.05	Horizontal
114.390	1.24	8.30	27.74	46.81	28.61	43.50	-14.89	Horizontal
194.900	1.39	10.15	27.18	50.15	34.51	43.50	-8.99	Horizontal
388.900	2.17	16.17	27.34	43.52	34.52	46.00	-11.48	Horizontal
710.940	2.94	21.60	27.24	40.94	38.24	46.00	-7.76	Horizontal
797.270	3.19	22.09	26.95	40.32	38.65	46.00	-7.35	Horizontal

Note: The data above is tested with QP detector mode.



**5.8.2 Transmitter emission above 1GHz**

Test mode:	802.11b	Test channel:	Lowest	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2326	6.02	29.76	39.75	44.67	40.70	74.00	-33.30	Vertical
3907	7.89	32.99	39.76	46.63	47.75	74.00	-26.25	Vertical
4824	9.21	34.26	41.27	47.23	49.43	74.00	-24.57	Vertical
7236	13.22	37.26	40.78	46.13	55.83	74.00	-18.17	Vertical
9648	13.49	37.99	37.64	42.60	56.44	74.00	-17.56	Vertical
12060	16.77	39.12	39.13	42.21	58.97	74.00	-15.03	Vertical
2326	6.02	29.76	39.75	45.32	41.35	74.00	-32.65	Horizontal
3907	7.89	32.99	39.76	46.15	47.27	74.00	-26.73	Horizontal
4824	9.21	34.26	41.27	47.31	49.51	74.00	-24.49	Horizontal
7236	13.22	37.26	40.78	46.01	55.71	74.00	-18.29	Horizontal
9648	13.49	37.99	37.64	42.42	56.26	74.00	-17.74	Horizontal
12060	16.77	39.12	39.13	43.53	60.29	74.00	-13.71	Horizontal

Test mode:	802.11b	Test channel:	Lowest	Remark:	Average
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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
2326	6.02	29.76	39.75	34.81	30.84	54.00	-23.16	Vertical
3907	7.89	32.99	39.76	35.80	36.92	54.00	-17.08	Vertical
4824	9.21	34.26	41.27	36.50	38.70	54.00	-15.30	Vertical
7236	13.22	37.26	40.78	33.50	43.20	54.00	-10.80	Vertical
9648	13.49	37.99	37.64	28.61	42.45	54.00	-11.55	Vertical
12060	16.77	39.12	39.13	29.30	46.06	54.00	-7.94	Vertical
2326	6.02	29.76	39.75	36.51	32.54	54.00	-21.46	Horizontal
3907	7.89	32.99	39.76	37.20	38.32	54.00	-15.68	Horizontal
4824	9.21	34.26	41.27	37.60	39.80	54.00	-14.20	Horizontal
7236	13.22	37.26	40.78	34.50	44.20	54.00	-9.80	Horizontal
9648	13.49	37.99	37.64	29.51	43.35	54.00	-10.65	Horizontal
12060	16.77	39.12	39.13	29.50	46.26	54.00	-7.74	Horizontal

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Report No.: SZEMO10040172201

Page: 38 of 58

Test mode:	802.11b	Test channel:	Middle	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1782	5.56	27.95	38.87	49.13	43.77	74.00	-30.23	Vertical
3720	7.42	32.80	39.42	45.57	46.37	74.00	-27.63	Vertical
4874	10.36	34.34	39.89	45.93	50.74	74.00	-23.26	Vertical
7311	12.99	37.30	40.50	45.64	55.43	74.00	-18.57	Vertical
9748	13.89	38.03	37.94	45.36	59.34	74.00	-14.66	Vertical
12185	18.03	39.21	39.27	47.68	65.65	74.00	-8.35	Vertical
3703	7.40	32.78	39.14	46.11	47.15	74.00	-26.85	Horizontal
4298	8.74	33.54	39.85	46.90	49.33	74.00	-24.67	Horizontal
4874	10.36	34.34	39.89	47.00	51.81	74.00	-22.19	Horizontal
7311	12.99	37.30	40.50	45.56	55.35	74.00	-18.65	Horizontal
9748	13.89	38.03	37.94	43.43	57.41	74.00	-16.59	Horizontal
12185	18.03	39.21	39.27	39.77	57.74	74.00	-16.26	Horizontal

Test mode:	802.11b	Test channel:	Middle	Remark:	Average
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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
1782	5.56	27.95	38.87	39.49	34.13	54.00	-19.87	Vertical
3720	7.42	32.80	39.42	35.61	36.41	54.00	-17.59	Vertical
4874	10.36	34.34	39.89	35.30	40.11	54.00	-13.89	Vertical
7311	12.99	37.30	40.50	34.20	43.99	54.00	-10.01	Vertical
9748	13.89	38.03	37.94	30.80	44.78	54.00	-9.22	Vertical
12185	18.03	39.21	39.27	28.60	46.57	54.00	-7.43	Vertical
3703	7.40	32.78	39.14	37.20	38.24	54.00	-15.76	Horizontal
4298	8.74	33.54	39.85	36.20	38.63	54.00	-15.37	Horizontal
4874	10.36	34.34	39.89	37.10	41.91	54.00	-12.09	Horizontal
7311	12.99	37.30	40.50	32.60	42.39	54.00	-11.61	Horizontal
9748	13.89	38.03	37.94	28.80	42.78	54.00	-11.22	Horizontal
12185	18.03	39.21	39.27	28.20	46.17	54.00	-7.83	Horizontal

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# SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO10040172201

Page: 39 of 58

Test mode:	802.11b	Test channel:	Highest	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1799	5.65	27.99	38.66	47.13	42.11	74.00	-31.89	Vertical
3057	7.23	31.98	39.59	45.04	44.66	74.00	-29.34	Vertical
4924	10.53	34.41	40.90	46.18	50.22	74.00	-23.78	Vertical
7386	12.68	37.35	40.11	45.11	55.03	74.00	-18.97	Vertical
9848	14.13	38.05	38.01	42.81	56.98	74.00	-17.02	Vertical
12310	17.71	39.30	39.41	42.86	60.46	74.00	-13.54	Vertical
1782	5.56	27.95	38.87	48.65	43.29	74.00	-30.71	Horizontal
3074	7.39	32.01	39.77	47.11	46.74	74.00	-27.26	Horizontal
4924	10.53	34.41	40.90	46.40	50.44	74.00	-23.56	Horizontal
7386	12.68	37.35	40.11	46.48	56.40	74.00	-17.60	Horizontal
9848	14.13	38.05	38.01	43.49	57.66	74.00	-16.34	Horizontal
12310	17.71	39.30	39.41	42.77	60.37	74.00	-13.63	Horizontal

Test mode:	802.11b	Test channel:	Highest	Remark:	Average
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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
1799	5.65	27.99	38.66	37.50	32.48	54.00	-21.52	Vertical
3057	7.23	31.98	39.59	31.00	30.62	54.00	-23.38	Vertical
4924	10.53	34.41	40.90	36.20	40.24	54.00	-13.76	Vertical
7386	12.68	37.35	40.11	34.10	44.02	54.00	-9.98	Vertical
9848	14.13	38.05	38.01	31.30	45.47	54.00	-8.53	Vertical
12310	17.71	39.30	39.41	32.10	49.70	54.00	-4.30	Vertical
1782	5.56	27.95	38.87	38.49	33.13	54.00	-20.87	Horizontal
3074	7.39	32.01	39.77	36.40	36.03	54.00	-17.97	Horizontal
4924	10.53	34.41	40.90	35.80	39.84	54.00	-14.16	Horizontal
7386	12.68	37.35	40.11	33.20	43.12	54.00	-10.88	Horizontal
9848	14.13	38.05	38.01	30.60	44.77	54.00	-9.23	Horizontal
12310	17.71	39.30	39.41	30.10	47.70	54.00	-6.30	Horizontal

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# SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO10040172201

Page: 40 of 58

Test mode:	802.11g	Test channel:	Lowest	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1935	5.45	28.33	39.49	47.28	41.57	74.00	-32.43	Vertical
3210	7.00	32.19	39.37	45.57	45.39	74.00	-28.61	Vertical
4824	9.21	34.26	41.27	48.06	50.26	74.00	-23.74	Vertical
7236	13.22	37.26	40.78	45.61	55.31	74.00	-18.69	Vertical
9648	13.49	37.99	37.64	42.54	56.38	74.00	-17.62	Vertical
12060	16.77	39.12	39.13	42.20	58.96	74.00	-15.04	Vertical
1782	5.56	27.95	38.87	49.63	44.27	74.00	-29.73	Horizontal
3091	7.47	32.02	39.86	45.70	45.33	74.00	-28.67	Horizontal
4824	9.21	34.26	41.27	46.73	48.93	74.00	-25.07	Horizontal
7236	13.22	37.26	40.78	46.27	55.97	74.00	-18.03	Horizontal
9648	13.49	37.99	37.64	42.96	56.80	74.00	-17.20	Horizontal
12060	16.77	39.12	39.13	43.02	59.78	74.00	-14.22	Horizontal

Test mode:	802.11g	Test channel:	Lowest	Remark:	Average
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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
1935	5.45	28.33	39.49	37.50	31.79	54.00	-22.21	Vertical
3210	7.00	32.19	39.37	35.21	35.03	54.00	-18.97	Vertical
4824	9.21	34.26	41.27	37.60	39.80	54.00	-14.20	Vertical
7236	13.22	37.26	40.78	35.30	45.00	54.00	-9.00	Vertical
9648	13.49	37.99	37.64	29.21	43.05	54.00	-10.95	Vertical
12060	16.77	39.12	39.13	29.40	46.16	54.00	-7.84	Vertical
1782	5.56	27.95	38.87	38.49	33.13	54.00	-20.87	Horizontal
3091	7.47	32.02	39.86	35.60	35.23	54.00	-18.77	Horizontal
4824	9.21	34.26	41.27	35.80	38.00	54.00	-16.00	Horizontal
7236	13.22	37.26	40.78	33.70	43.40	54.00	-10.60	Horizontal
9648	13.49	37.99	37.64	30.11	43.95	54.00	-10.05	Horizontal
12060	16.77	39.12	39.13	29.50	46.26	54.00	-7.74	Horizontal

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# SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO10040172201

Page: 41 of 58

Test mode:	802.11g	Test channel:	Middle	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1799	5.65	27.99	38.66	47.42	42.40	74.00	-31.60	Vertical
3244	6.97	32.22	39.27	45.79	45.71	74.00	-28.29	Vertical
4874	10.36	34.34	39.89	45.05	49.86	74.00	-24.14	Vertical
7311	12.99	37.30	40.50	45.90	55.69	74.00	-18.31	Vertical
9748	13.89	38.03	37.94	43.84	57.82	74.00	-16.18	Vertical
12185	18.03	39.21	39.27	42.93	60.90	74.00	-13.10	Vertical
1799	5.65	27.99	38.66	47.22	42.20	74.00	-31.80	Horizontal
3295	6.89	32.30	39.08	46.41	46.52	74.00	-27.48	Horizontal
4874	10.36	34.34	39.89	44.34	49.15	74.00	-24.85	Horizontal
7311	12.99	37.30	40.50	45.60	55.39	74.00	-18.61	Horizontal
9748	13.89	38.03	37.94	42.93	56.91	74.00	-17.09	Horizontal
12185	18.03	39.21	39.27	42.70	60.67	74.00	-13.33	Horizontal

Test mode:	802.11g	Test channel:	Middle	Remark:	Average
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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Over limit	polarization
1799	5.65	27.99	38.66	37.50	32.48	54.00	-21.52	Vertical
3244	6.97	32.22	39.27	35.60	35.52	54.00	-18.48	Vertical
4874	10.36	34.34	39.89	35.04	39.85	54.00	-14.15	Vertical
7311	12.99	37.30	40.50	31.33	41.12	54.00	-12.88	Vertical
9748	13.89	38.03	37.94	30.90	44.88	54.00	-9.12	Vertical
12185	18.03	39.21	39.27	28.10	46.07	54.00	-7.93	Vertical
1799	5.65	27.99	38.66	37.50	32.48	54.00	-21.52	Horizontal
3295	6.89	32.30	39.08	35.80	35.91	54.00	-18.09	Horizontal
4874	10.36	34.34	39.89	34.20	39.01	54.00	-14.99	Horizontal
7311	12.99	37.30	40.50	33.60	43.39	54.00	-10.61	Horizontal
9748	13.89	38.03	37.94	31.20	45.18	54.00	-8.82	Horizontal
12185	18.03	39.21	39.27	29.60	47.57	54.00	-6.43	Horizontal

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# SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO10040172201

Page: 42 of 58

Test mode:	802.11g	Test channel:	Highest	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2122	5.72	28.99	39.55	47.00	42.16	74.00	-31.84	Vertical
4315	8.79	33.57	39.87	47.19	49.68	74.00	-24.32	Vertical
4924	10.53	34.41	40.90	46.44	50.48	74.00	-23.52	Vertical
7386	12.68	37.35	40.11	46.11	56.03	74.00	-17.97	Vertical
9848	14.13	38.05	38.01	43.72	57.89	74.00	-16.11	Vertical
12310	17.71	39.30	39.41	43.39	60.99	74.00	-13.01	Vertical
1799	5.65	27.99	38.66	49.65	44.63	74.00	-29.37	Horizontal
4298	8.74	33.54	39.85	46.75	49.18	74.00	-24.82	Horizontal
4924	10.53	34.41	40.90	46.10	50.14	74.00	-23.86	Horizontal
7386	12.68	37.35	40.11	45.83	55.75	74.00	-18.25	Horizontal
9848	14.13	38.05	38.01	42.99	57.16	74.00	-16.84	Horizontal
12310	17.71	39.30	39.41	42.66	60.26	74.00	-13.74	Horizontal

Test mode:	802.11g	Test channel:	Highest	Remark:	Average
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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Over limit	polarization
2122	5.72	28.99	39.55	36.49	31.65	54.00	-22.35	Vertical
4315	8.79	33.57	39.87	37.20	39.69	54.00	-14.31	Vertical
4924	10.53	34.41	40.90	36.50	40.54	54.00	-13.46	Vertical
7386	12.68	37.35	40.11	33.70	43.62	54.00	-10.38	Vertical
9848	14.13	38.05	38.01	31.50	45.67	54.00	-8.33	Vertical
12310	17.71	39.30	39.41	30.50	48.10	54.00	-5.90	Vertical
1799	5.65	27.99	38.66	38.50	33.48	54.00	-20.52	Horizontal
4298	8.74	33.54	39.85	35.80	38.23	54.00	-15.77	Horizontal
4924	10.53	34.41	40.90	36.50	40.54	54.00	-13.46	Horizontal
7386	12.68	37.35	40.11	33.40	43.32	54.00	-10.68	Horizontal
9848	14.13	38.05	38.01	31.40	45.57	54.00	-8.43	Horizontal
12310	17.71	39.30	39.41	28.50	46.10	54.00	-7.90	Horizontal

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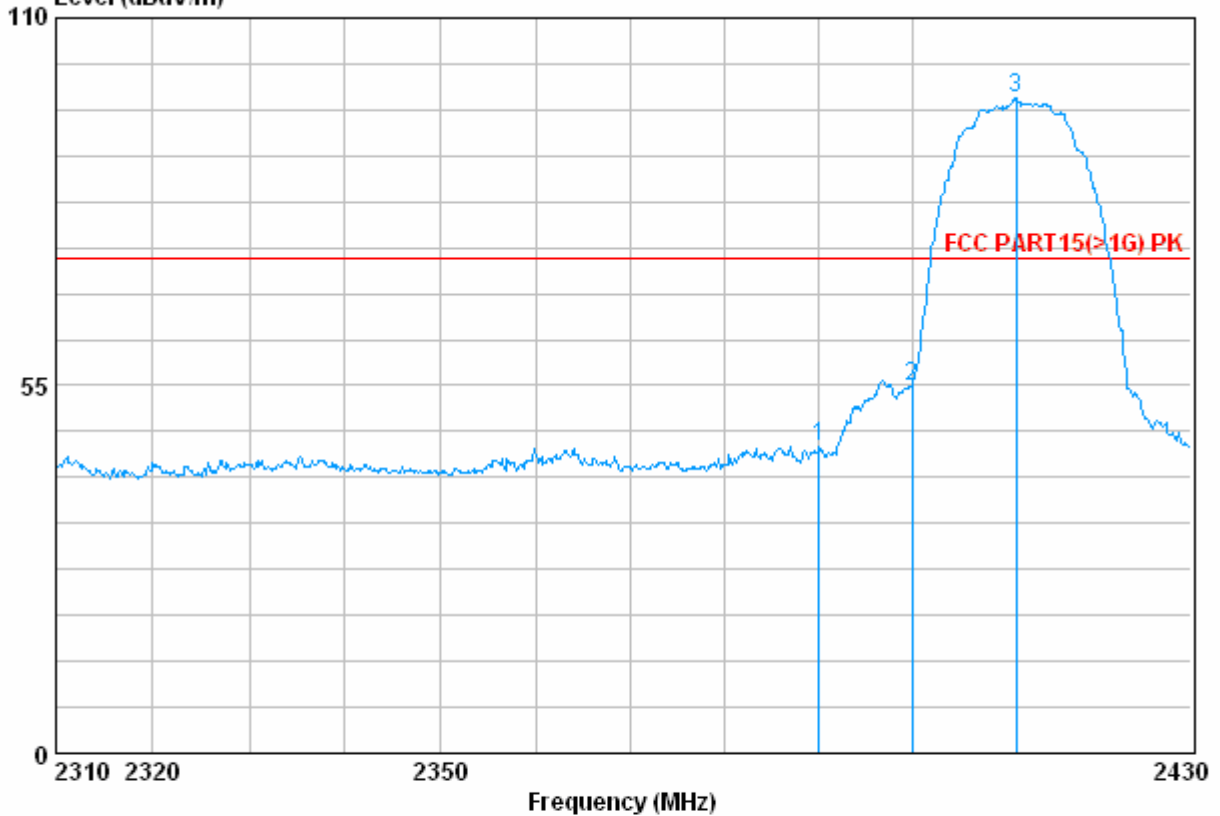
5.8.3 Band Edge and Restricted band (Radiated measurement)

Test mode:	802.11b	Test channel:	Lowest	Remark:	Peak
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Horizontal:

Data: 142

Level (dBuV/m)



	Freq	CableAntenna Loss	Preamp Factor	Preamp	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	29.98	39.03	48.52	45.75	74.00	-28.25
2	2400.000	6.34	30.03	38.87	57.38	54.88	74.00	-19.12
3 @	2411.160	6.25	30.05	38.83	100.49	97.96	74.00	23.96

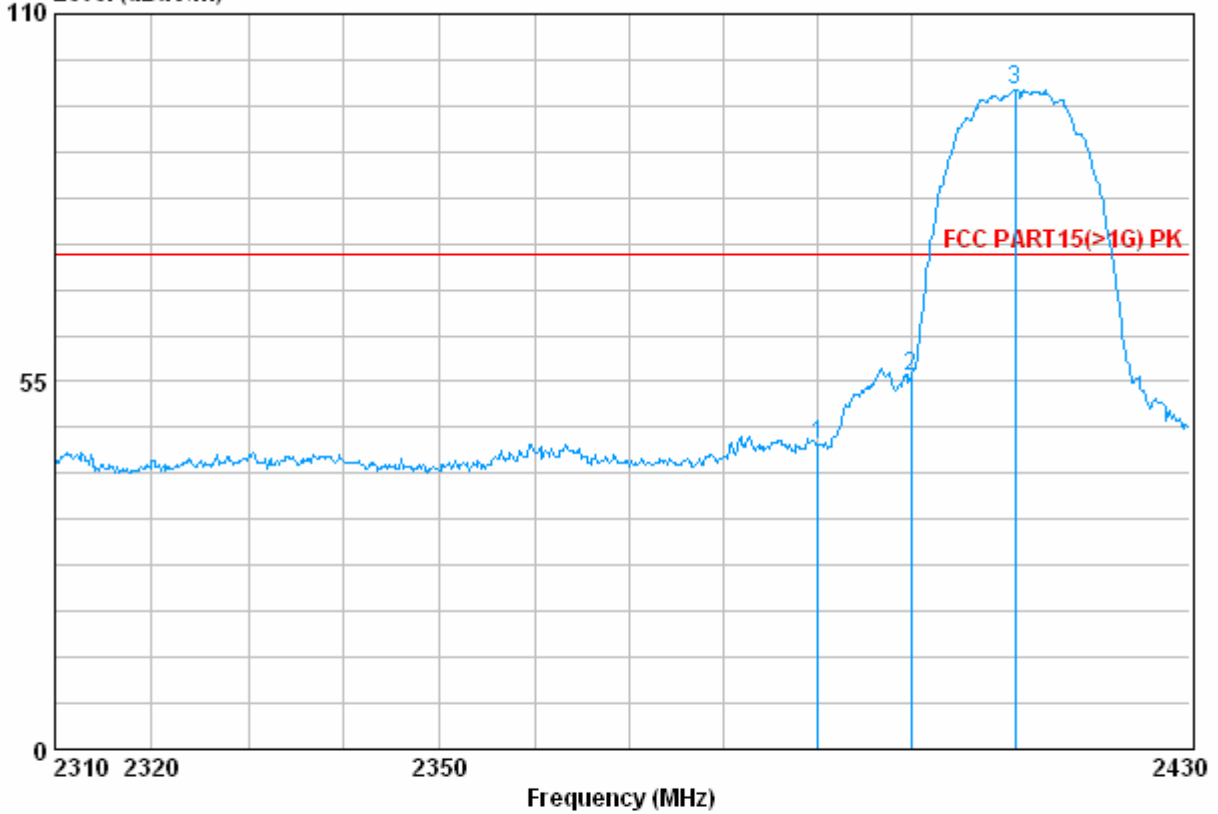
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Vertical:

Data: 143

Level (dBuV/m)



	Freq	CableAntenna Loss	Preamp Factor	Read Level	Limit Line	Over Limit		
	MHz	dB	dB/m	dBuV	dBuV/m	dB		
1	2390.000	6.28	29.98	39.03	48.26	45.49	74.00	-28.51
2	2400.000	6.34	30.03	38.87	58.32	55.82	74.00	-18.18
3 @	2411.160	6.25	30.05	38.83	101.28	98.76	74.00	24.76

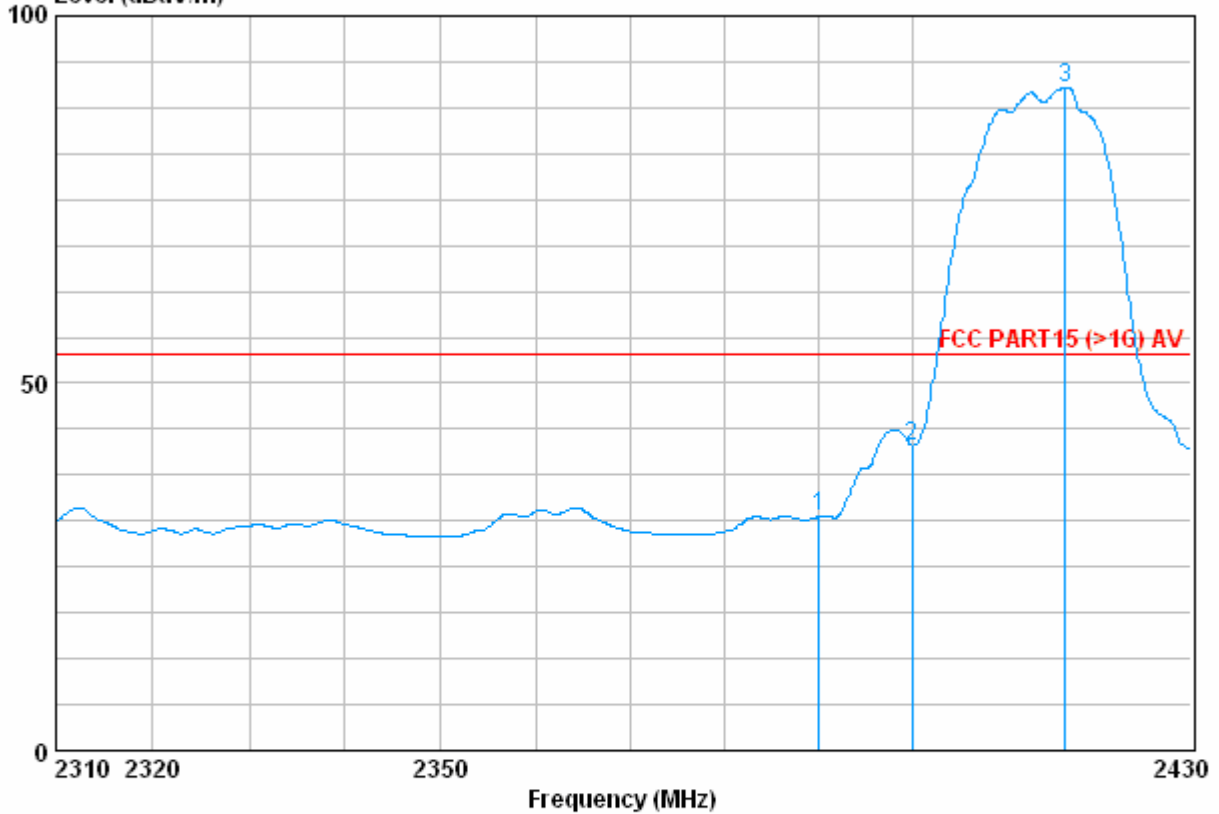
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Test mode:	802.11b	Test channel:	Lowest	Remark:	Average
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Horizontal:

Data: 145  
Level (dBuV/m)



	Cable	Antenna	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Line	Limit		
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2390.000	6.28	29.98	39.03	34.51	31.74	54.00	-22.26
2	2400.000	6.34	30.03	38.87	44.03	41.53	54.00	-12.47
3 @	2416.440	6.15	30.08	38.78	92.84	90.29	54.00	36.29

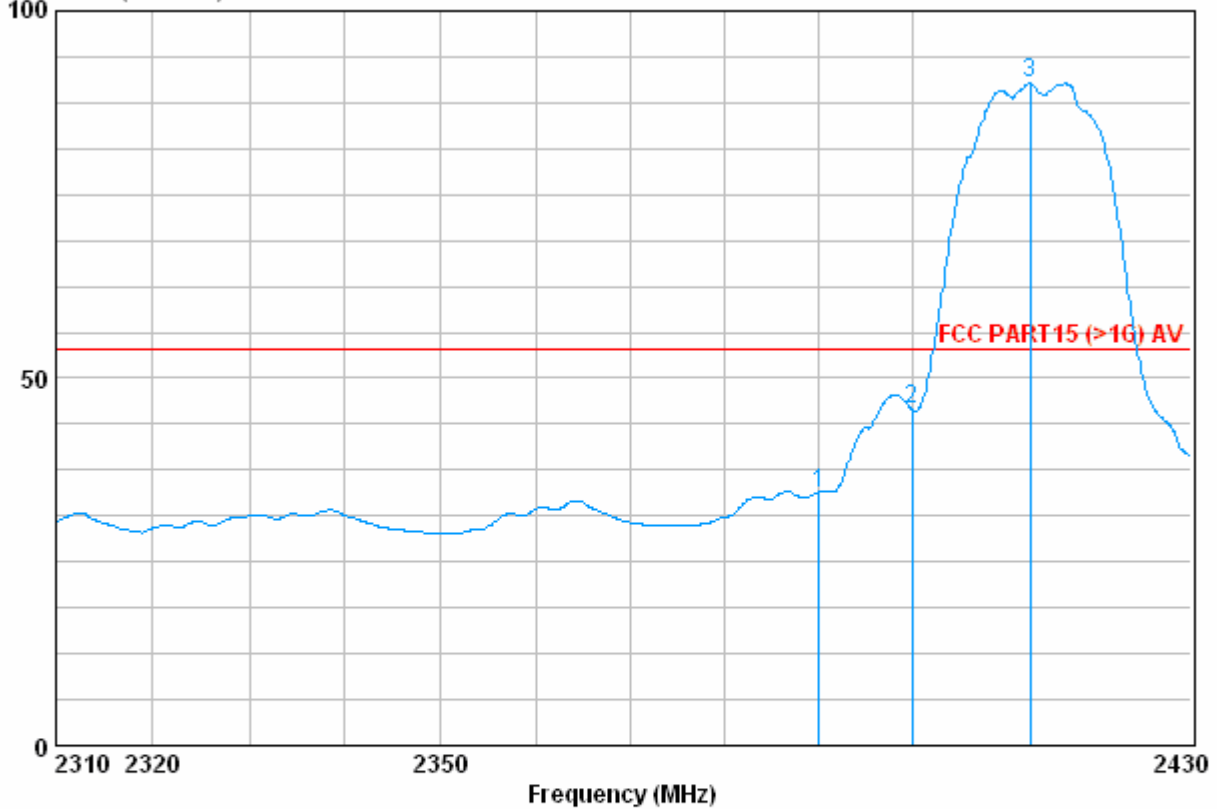
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Vertical:

Data: 144

Level (dBuV/m)



	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	29.98	39.03	37.20	34.43	54.00	-19.57
2	2400.000	6.34	30.03	38.87	48.24	45.74	54.00	-8.26
3 @	2412.600	6.15	30.08	38.78	92.65	90.10	54.00	36.10

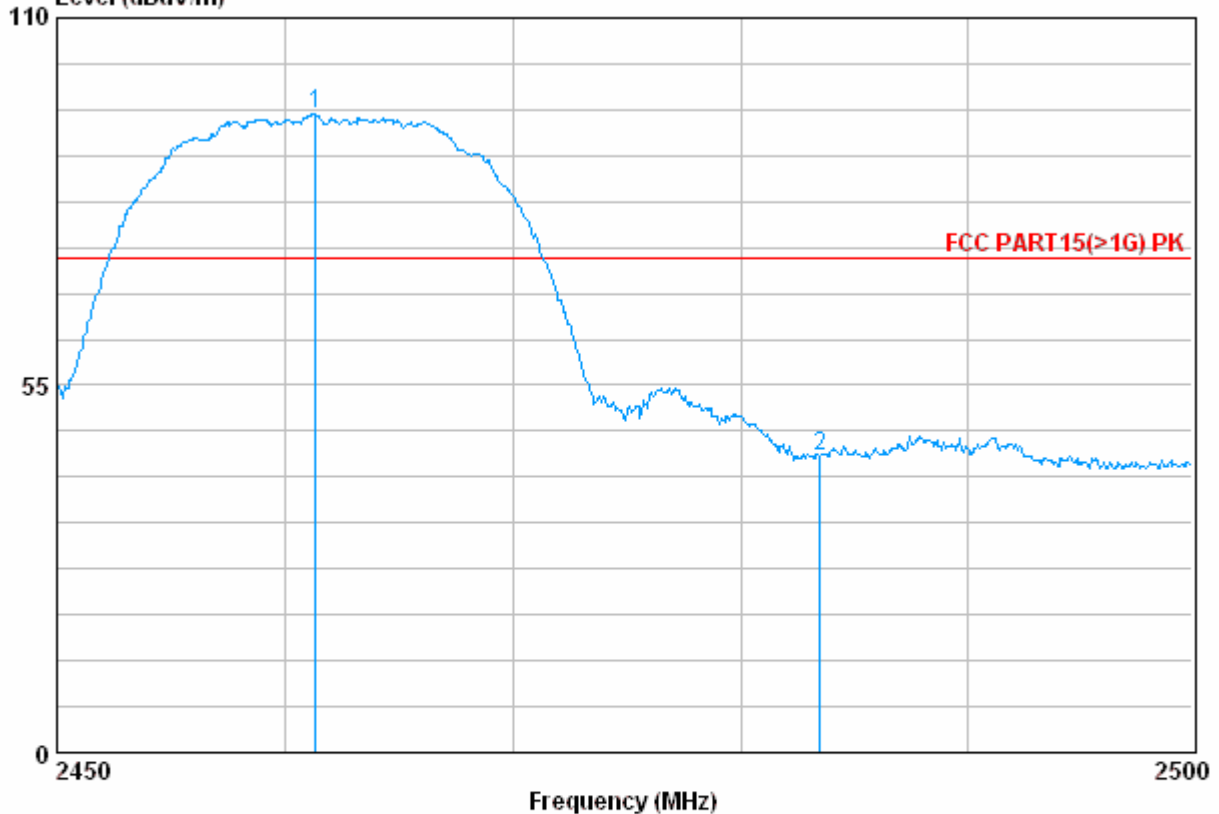
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Test mode:	802.11b	Test channel:	Highest	Remark:	Peak
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Horizontal:

Data: 146  
Level (dBuV/m)



	Cable	Antenna	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Line	Limit		
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m		
1 X	2461.300	6.70	30.25	39.61	98.24	95.58	74.00	21.58
2	2483.500	6.22	30.32	39.53	47.43	44.45	74.00	-29.55

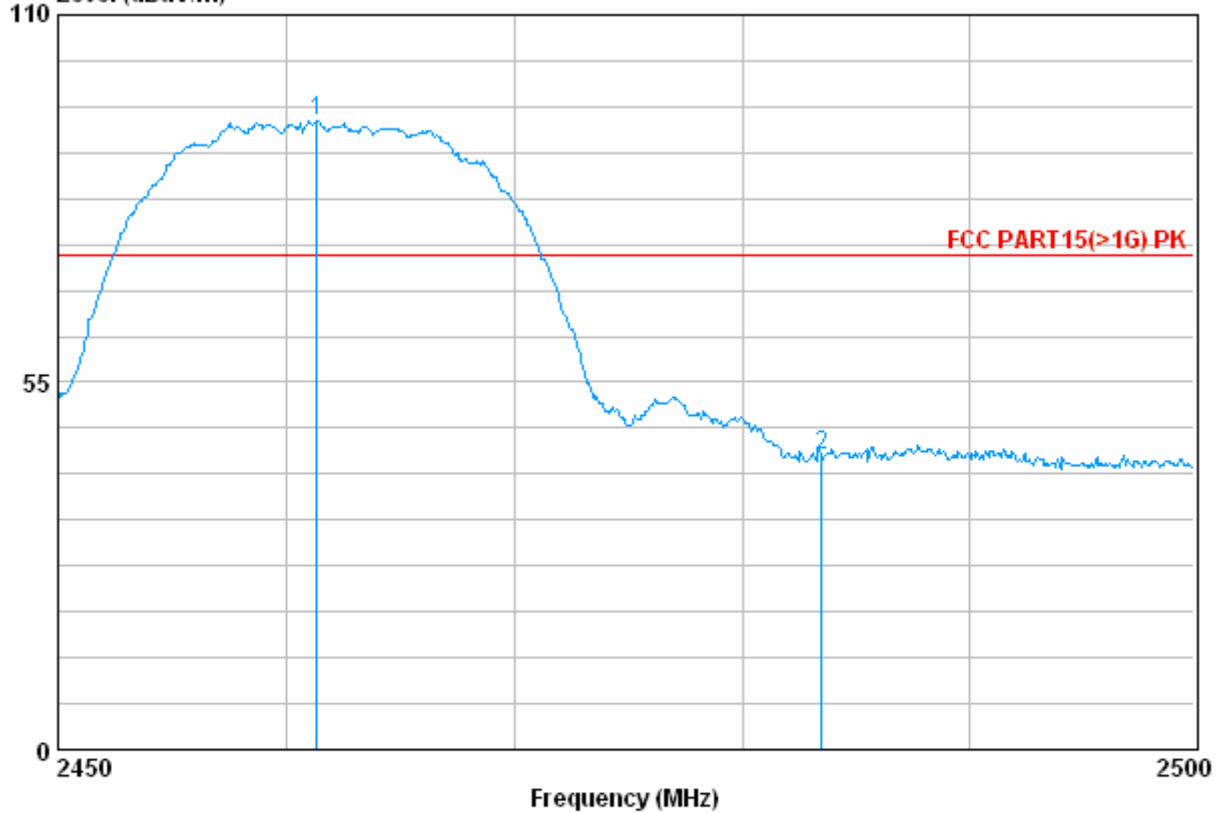
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Vertical

Data: 147

Level (dBuV/m)



	CableAntenna	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Level	Line	Limit			
MHz	dB	dB/m	dBuV	dBuV/m	dB			
1 X	2461.300	6.70	30.25	39.61	96.92	94.26	74.00	20.26
2	2483.500	6.22	30.32	39.53	47.11	44.12	74.00	-29.88

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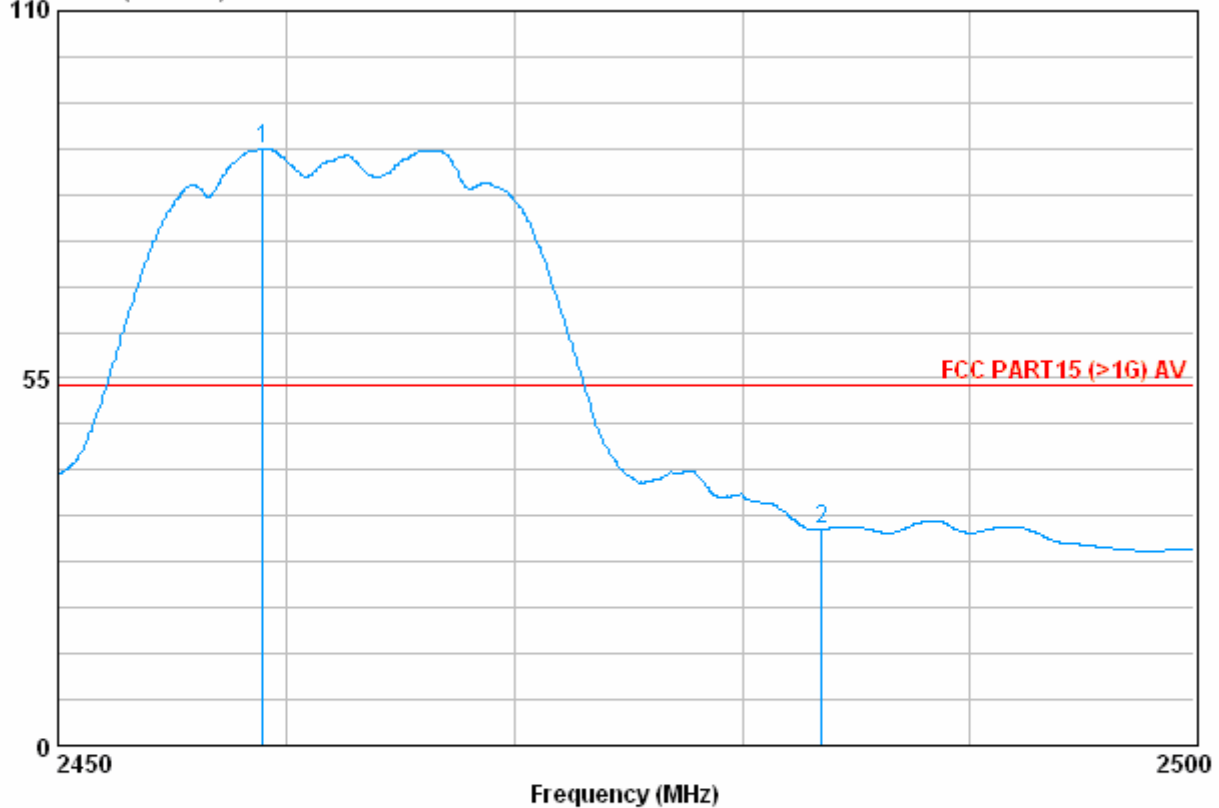


Test mode:	802.11b	Test channel:	Highest	Remark:	Average
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Horizontal

Data: 149

Level (dBuV/m)



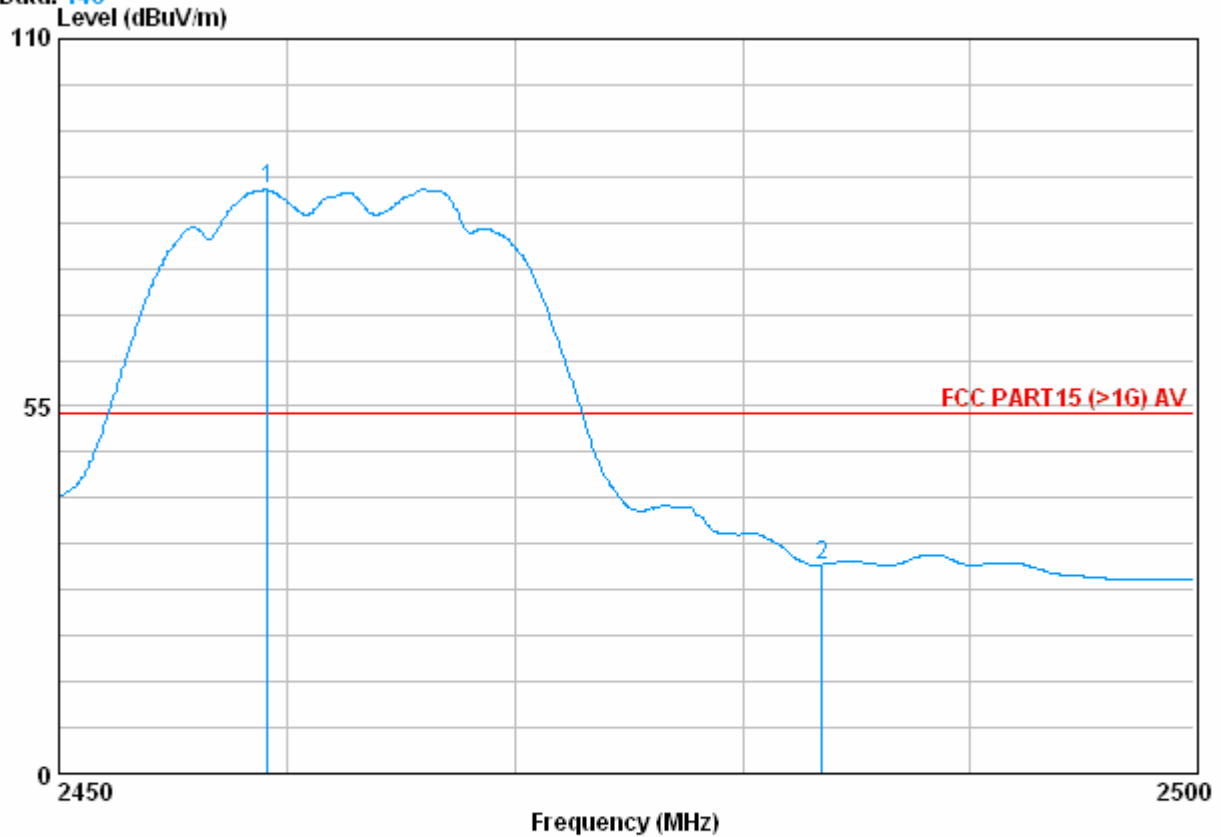
	Cable	Antenna	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Line	Limit		
MHz	dB	dB/m	dB	dBuV	dBuV/m	dB		
1 @	2458.950	6.83	30.22	39.56	91.91	89.40	54.00	35.40
2	2483.500	6.22	30.32	39.53	35.35	32.37	54.00	-21.63

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Vertical:

Data: 148



	Freq	Cable Loss	Antenna Factor	Preamplifier	Read Level	Level	Limit	Over Limit
	MHz	dB	dB/m	Factor	dBuV	dBuV/m	dBuV/m	dB
1	2459.100	6.83	30.22	39.56	89.93	87.42	54.00	33.42
2	2483.500	6.22	30.32	39.53	34.26	31.27	54.00	-22.73

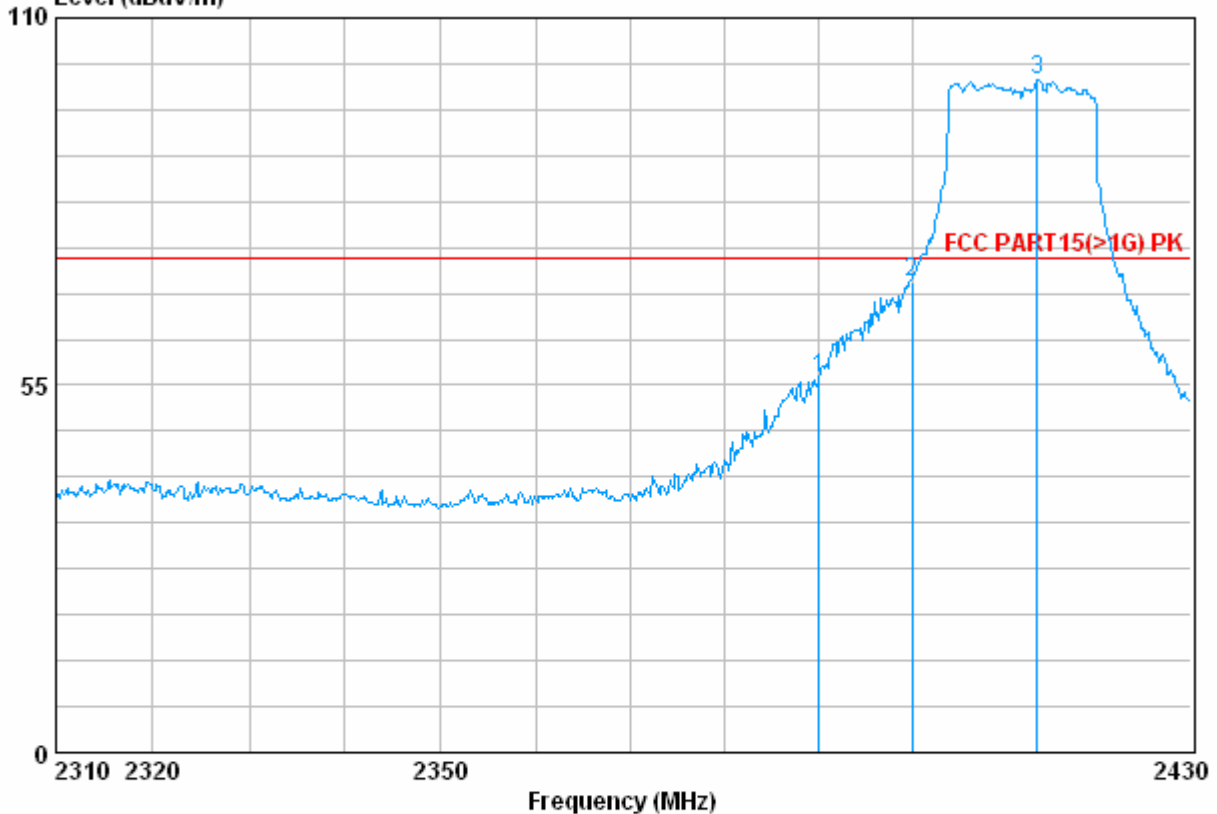
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Test mode:	802.11g	Test channel:	Lowest	Remark:	Peak
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Horizontal:

Data: 154  
Level (dBuV/m)



	CableAntenna	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Level	Line	Limit			
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2390.000	6.28	29.98	39.03	58.75	55.98	74.00	-18.02
2	2400.000	6.34	30.03	38.87	72.86	70.36	74.00	-3.64
3 @	2413.440	6.15	30.08	38.78	103.41	100.86	74.00	26.86

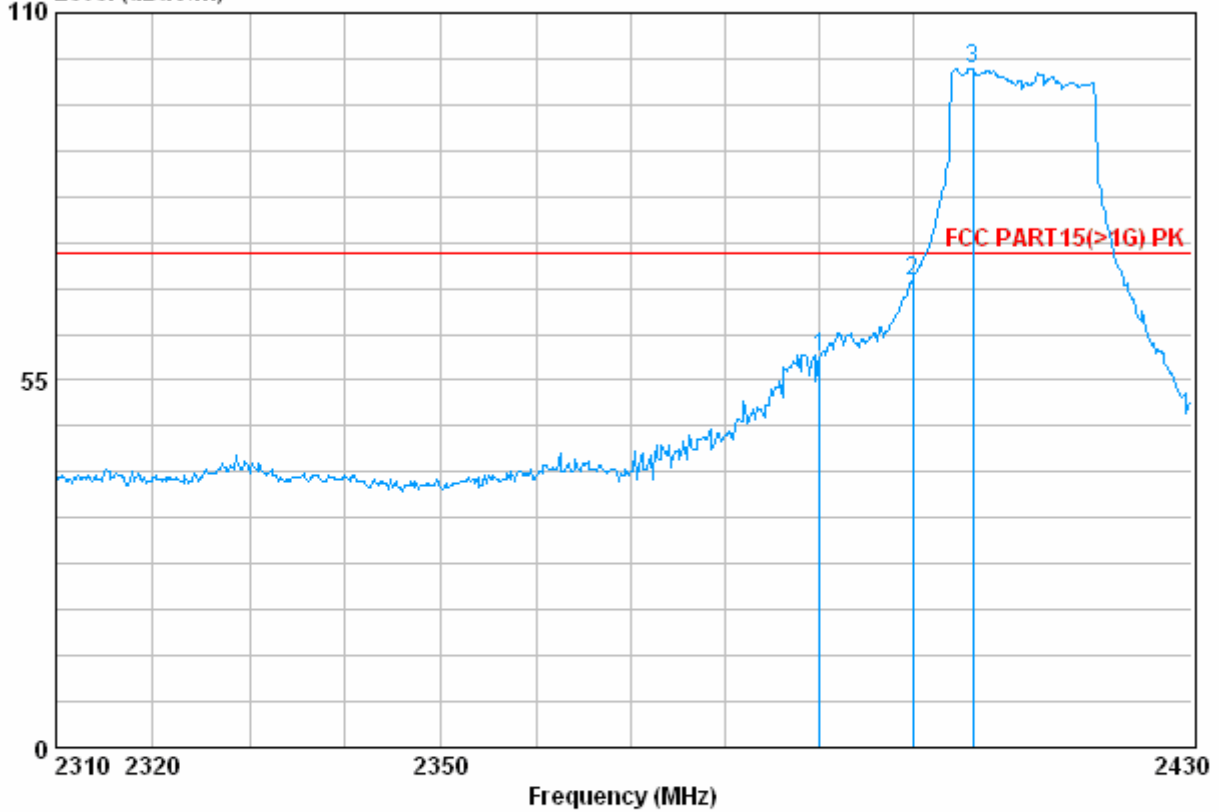
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Vertical:

Data: 155

Level (dBuV/m)



	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit	Over
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	29.98	39.03	61.22	58.45	74.00	-15.55
2	2400.000	6.34	30.03	38.87	72.26	69.76	74.00	-4.24
3 @	2406.360	6.25	30.05	38.83	104.17	101.64	74.00	27.64

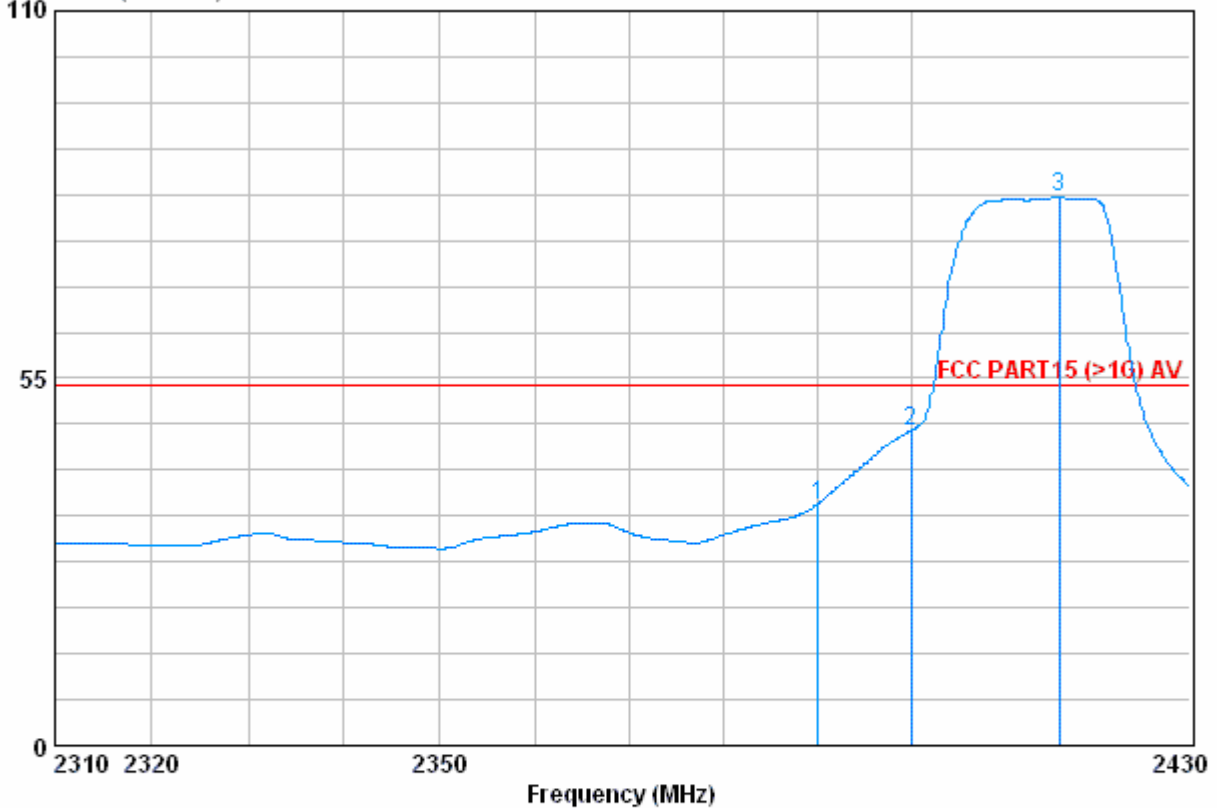
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Test mode:	802.11g	Test channel:	Lowest	Remark:	Average
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Horizontal

Data: 157  
Level (dBuV/m)



	CableAntenna	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Level	Line	Limit			
MHz	dB	dB/m	dB	dBuV	dBuV/m			
1	2390.000	6.28	29.98	39.03	38.73	35.97	74.00	-38.03
2	2400.000	6.34	30.03	38.87	49.64	47.14	74.00	-26.86
3 X	2415.840	6.15	30.08	38.78	84.62	82.07	74.00	8.07

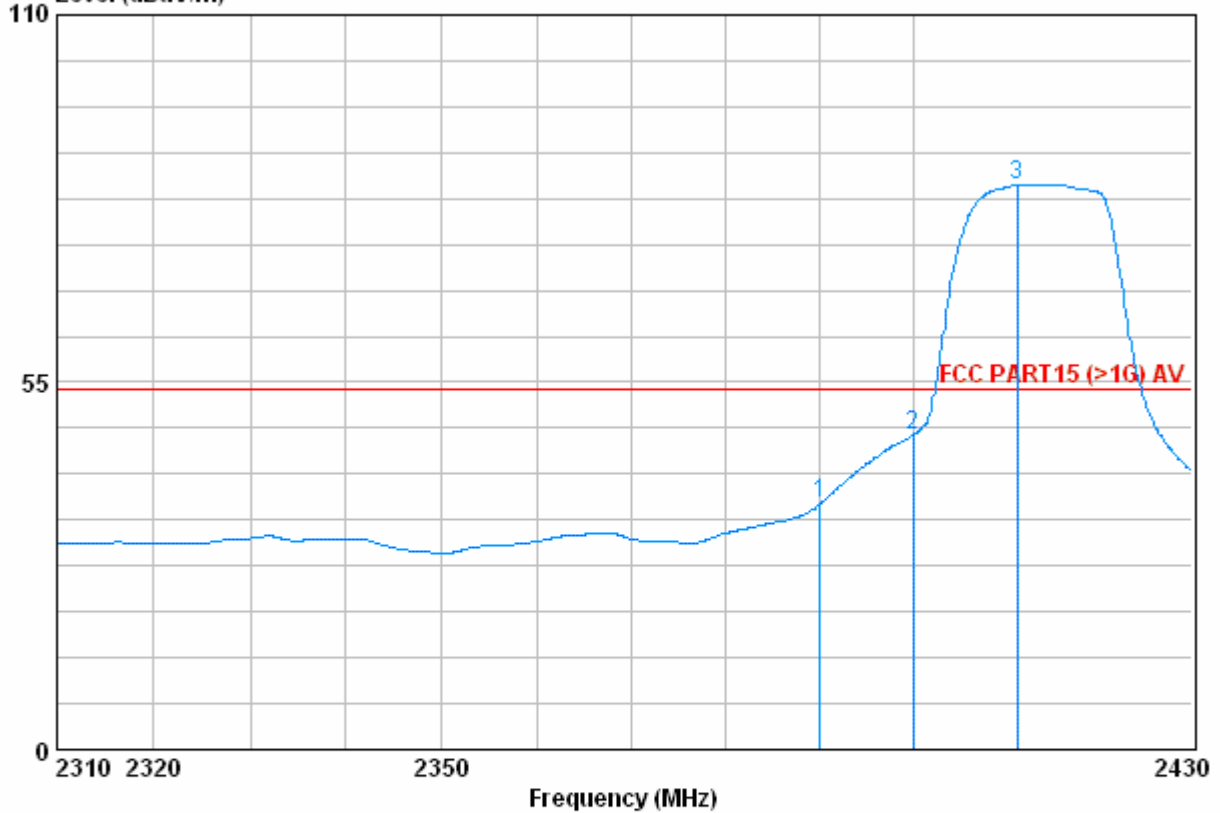
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Vertical:

Data: 156

Level (dBuV/m)



	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	29.98	39.03	39.65	36.88	54.00	-17.12
2	2400.000	6.34	30.03	38.87	49.56	47.06	54.00	-6.94
3	2411.160	6.25	30.05	38.83	87.13	84.60	54.00	30.60

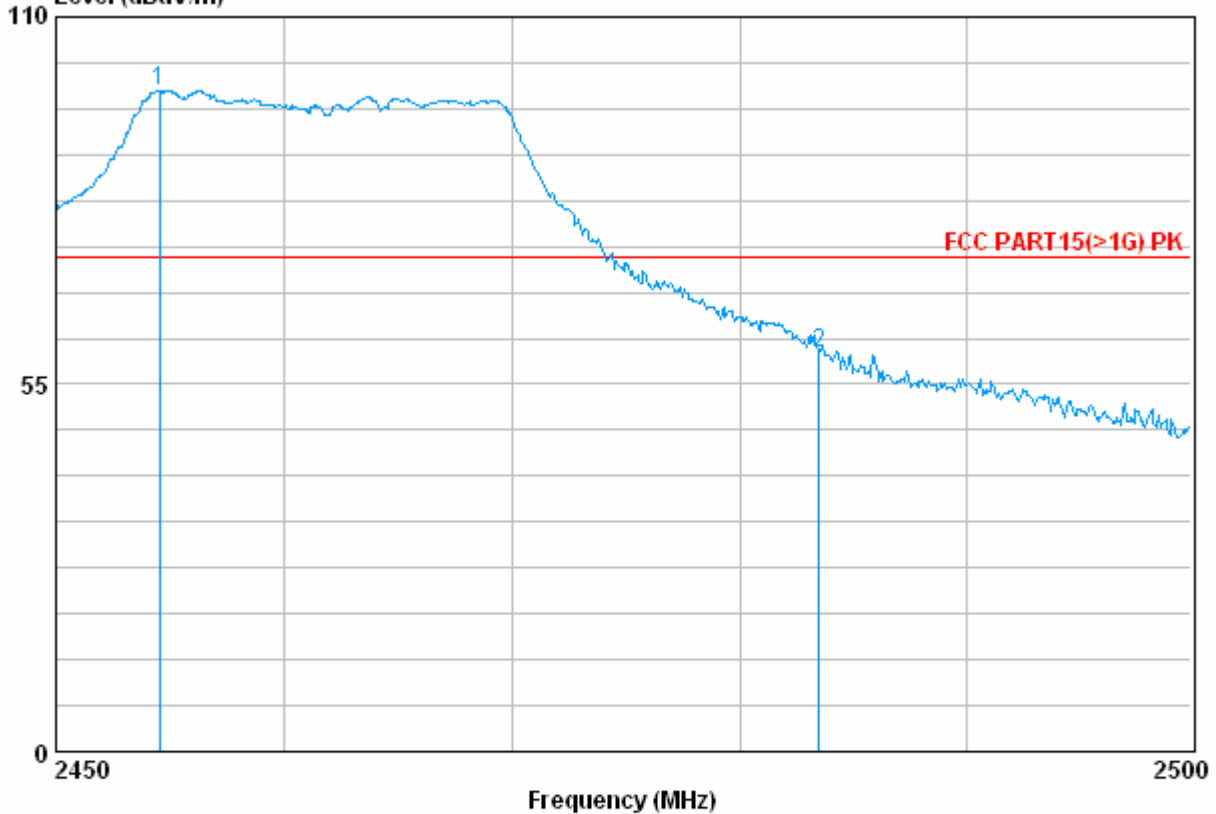
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Test mode:	802.11g	Test channel:	Highest	Remark:	Peak
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Horizontal

Data: 153  
Level (dBuV/m)



	Freq	CableAntenna Loss	Antenna Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2454.500	6.83	30.22	39.56	101.53	99.02	74.00	25.02
2	2483.500	6.22	30.32	39.53	62.74	59.75	74.00	-14.25

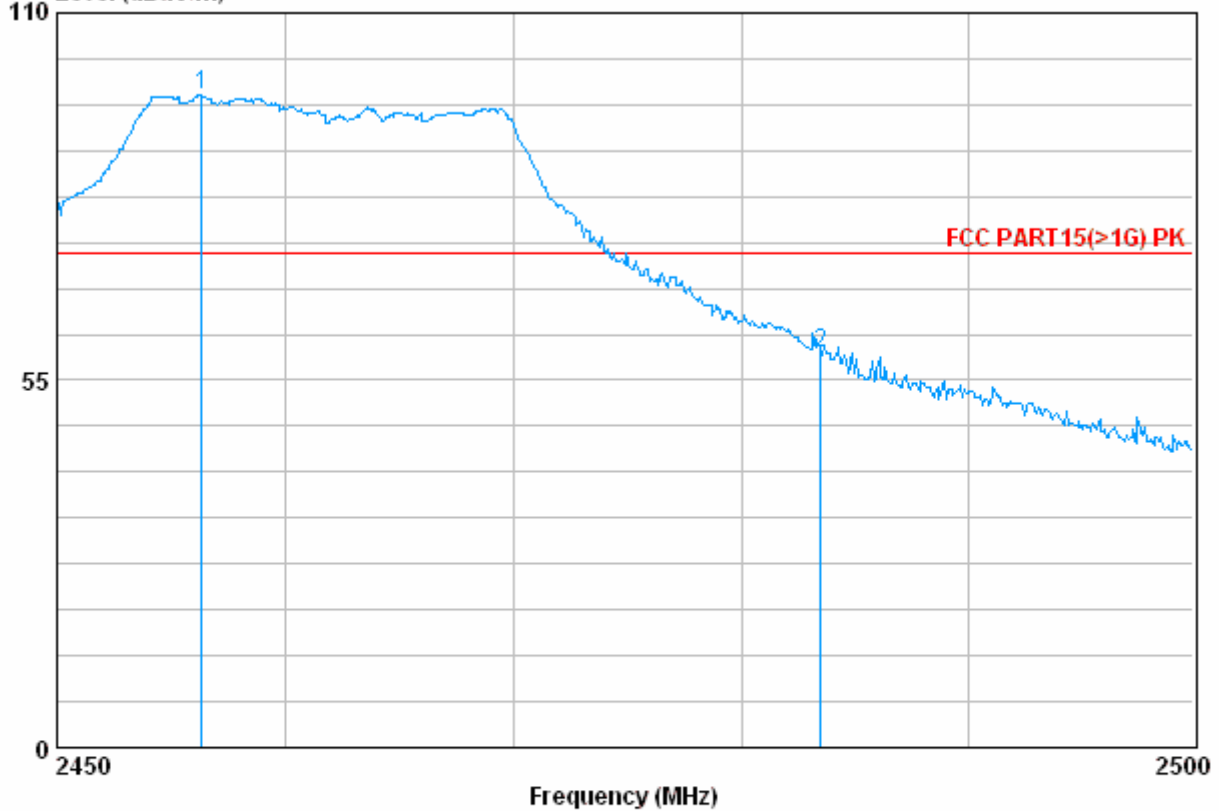
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Vertical:

Data: 152

Level (dBuV/m)



		CableAntenna	Preamp	Read	Limit	Over			
	Freq	Loss	Factor	Level	Line	Limit			
	MHz	dB	dB/m	dB	dBuV	dBuV/m			
1	X	2456.300	6.83	30.22	39.56	100.24	97.74	74.00	23.74
2		2483.500	6.22	30.32	39.53	62.17	59.19	74.00	-14.81

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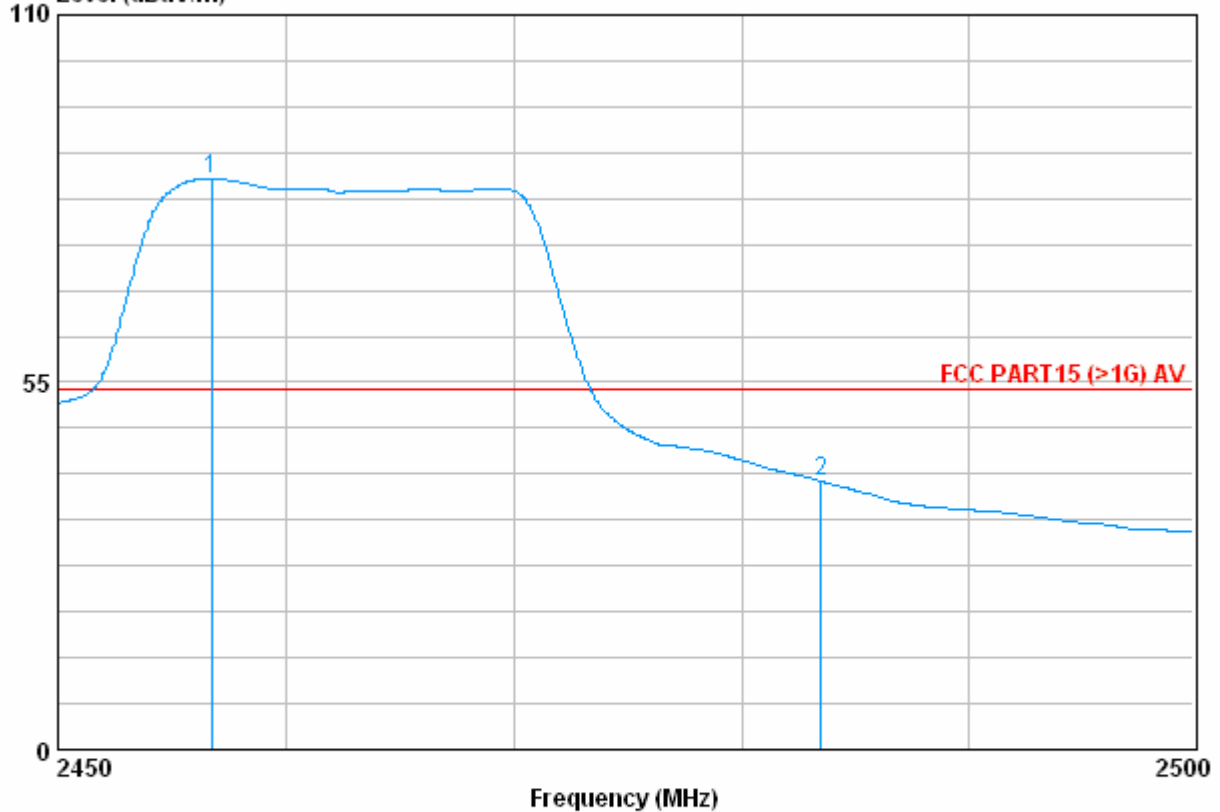


Test mode:	802.11g	Test channel:	Highest	Remark:	Average
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Horizontal:

Data: 150

Level (dBuV/m)



	Cable	Antenna	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Line	Limit		
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 @	2456.700	6.83	30.22	39.56	87.90	85.39	54.00	31.39
2	2483.500	6.22	30.32	39.53	43.22	40.23	54.00	-13.77

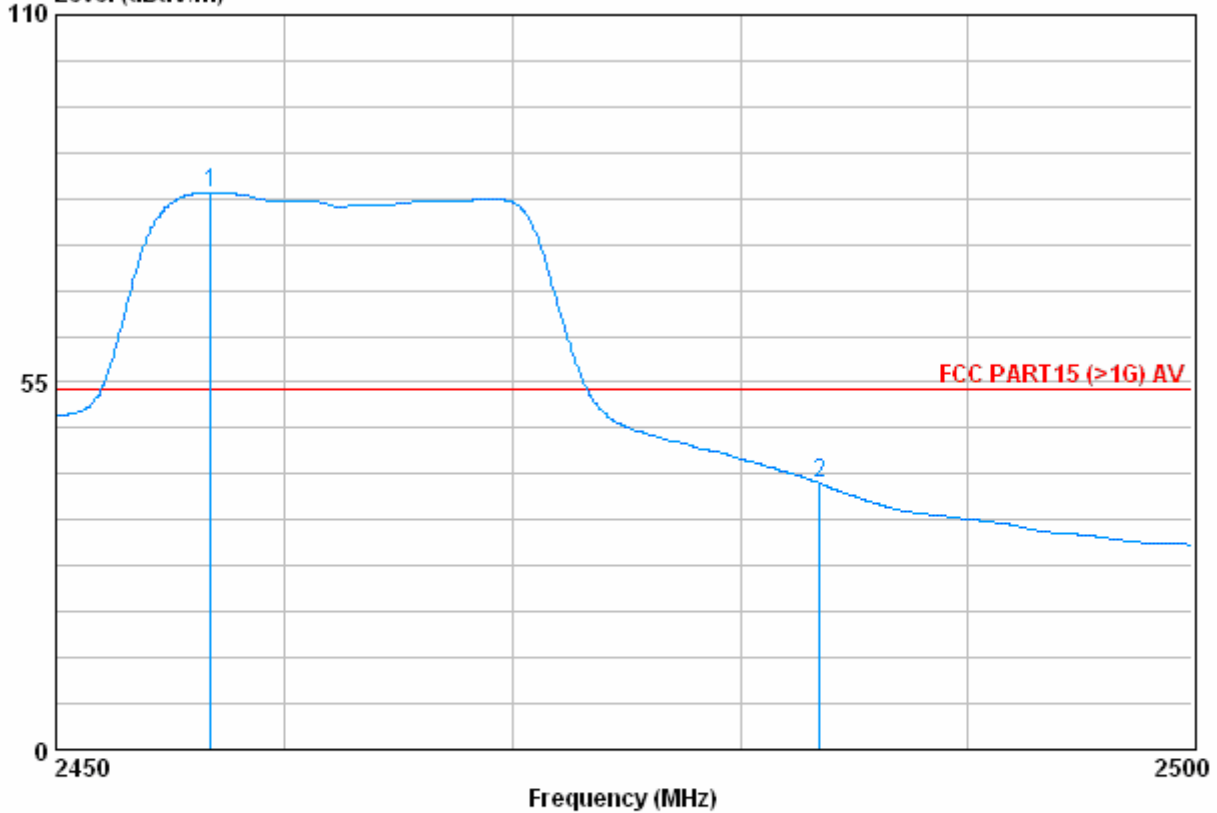
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Vertical:

Data: 151

Level (dBuV/m)



	Freq	CableAntenna Loss	Preamp Factor	Read Level	Limit	Over
	MHz	dB	dB/m	dB	dBuV	dBuV/m
1 @	2456.750	6.83	30.22	39.56	85.96	83.45
2	2483.500	6.22	30.32	39.53	42.90	39.91

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