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Report No.: SZEMO10070438101

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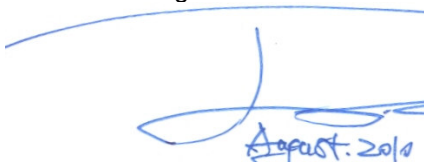
# FCC REPORT

**Application No:** SZEMO100704381RF  
**Applicant:** Summer Infant, Inc.  
**Product Name:** Baby Monitor  
**Operation Frequency:** 2405MHz to 2475MHz  
**FCC ID:** PZK02480  
**Standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247  
**Date of Receipt:** 2010-07-15  
**Date of Test:** 2010-07-19 to 2010-08-13  
**Date of Issue:** 2010-08-20

<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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### 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.*

*For trading purpose, the product baby monitor of model 02480 & 02950 are identical in both transmitter and receiver except model names which was declared by the applicant.*

*Only the test item of transmitter is recorded in this report.*

## 4 General Information

### 4.1 Client Information

Applicant:	Summer Infant, Inc.
Address of Applicant:	582 Great Road, North Smithfield Rhode Island, United States
Factory:	Dongguan Tangxia Cheng De Electronic Factory
Address of Factory:	20, XinGui Rd, Lincun, Tangxia, Dongguan.

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

Product Name:	Baby Monitor
Trade Name:	N/A
Item No.:	02480/02950♣
♣	Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.
Operation Frequency:	2405MHz~2475MHz
Channel numbers:	15
Channel separation:	5MHz
Modulation type:	Direct Sequence Spread Spectrum (DSSS)
Antenna Type:	Integral
Antenna gain:	2.5 dBi
Power supply:	Input: AC 120V/60Hz Output: DC 5V 350mA



Operation Frequency of each channel			
Channel	Frequency	Channel	Frequency
CH00	2405.050±50KHz	CH08	2445.050±50KHz
CH01	2410.050±50KHz	CH09	2450.050±50KHz
CH02	2415.050±50KHz	CH10	2455.050±50KHz
CH03	2420.050±50KHz	CH11	2460.050±50KHz
CH04	2425.050±50KHz	CH12	2465.050±50KHz
CH05	2430.050±50KHz	CH13	2470.050±50KHz
CH06	2435.050±50KHz	CH14	2475.050±50KHz
CH07	2440.050±50KHz		

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	2405MHz
The middle channel	2440MHz
The Highest channel	2475MHz



### 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>	
Tx mode:	Keep the EUT in transmitting mode with modulation.

#### 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

RE in Chamber						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2010-06-17	2011-06-17
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	2009-11-05	2010-11-05
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	2008-06-18	2011-06-18
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2009-11-05	2010-11-05
6	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2009-11-10	2010-11-10
7	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2009-11-10	2010-11-10
8	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2010-06-02	2011-06-02
9	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2009-12-18	2010-12-18
10	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	SEL0080	2010-06-04	2011-06-04
11	Band filter	Amindeon	82346	SEL0094	2010-06-02	2011-06-02

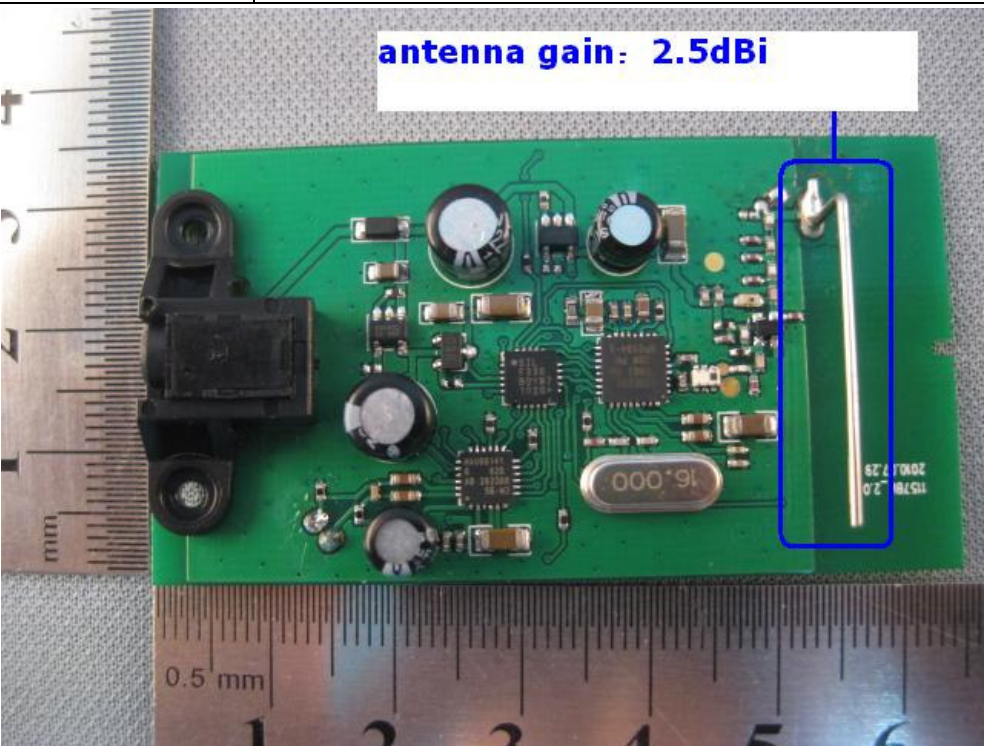
Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	N/A	N/A
2	LISN	ETS-LINDGREN	3816/2	SEL0021	2010-06-02	2011-06-02
3	Two-Line V-Network	Rohde & Schwarz	ENV216	SEL0152	2009-10-22	2010-10-22
4	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2010-06-02	2011-06-02
5	Coaxial Cable	SGS	N/A	SEL0024	2008-06-18	2011-06-18



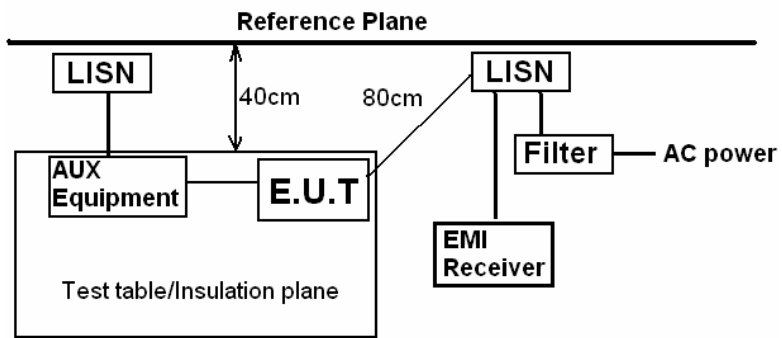
RF conducted						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	Spectrum Analyzer	Rohde & Schwarz	FSP 30	SEL0154	2009-10-22	2010-10-22
2	Coaxial cable	SGS	N/A	SEL0028	2008-06-18	2011-06-18

## 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	<p>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 refers 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.</p>														
Test setup:	 <p><i>Remark:</i>  E.U.T: Equipment Under Test  LISN: Line Impedance Stabilization Network  Test table height=0.8m</p>														
Test Instruments:	Refer to section 4.7 for details														
Test mode:	Tx mode														
Test results:	Passed														

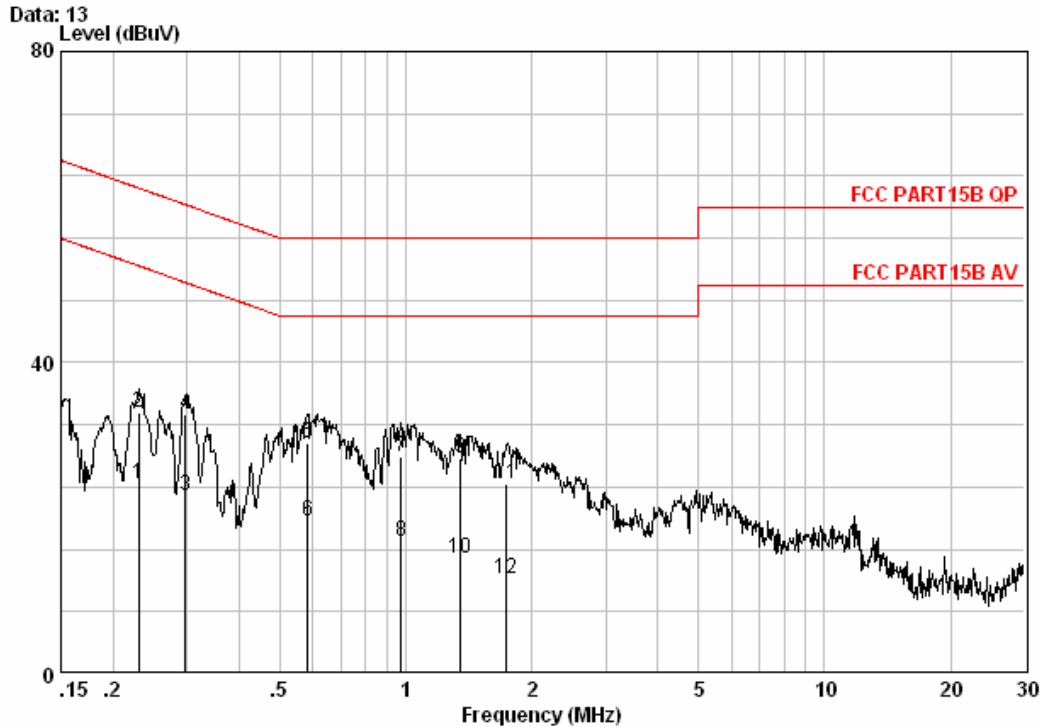
### Measurement Data

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.



Live Line:



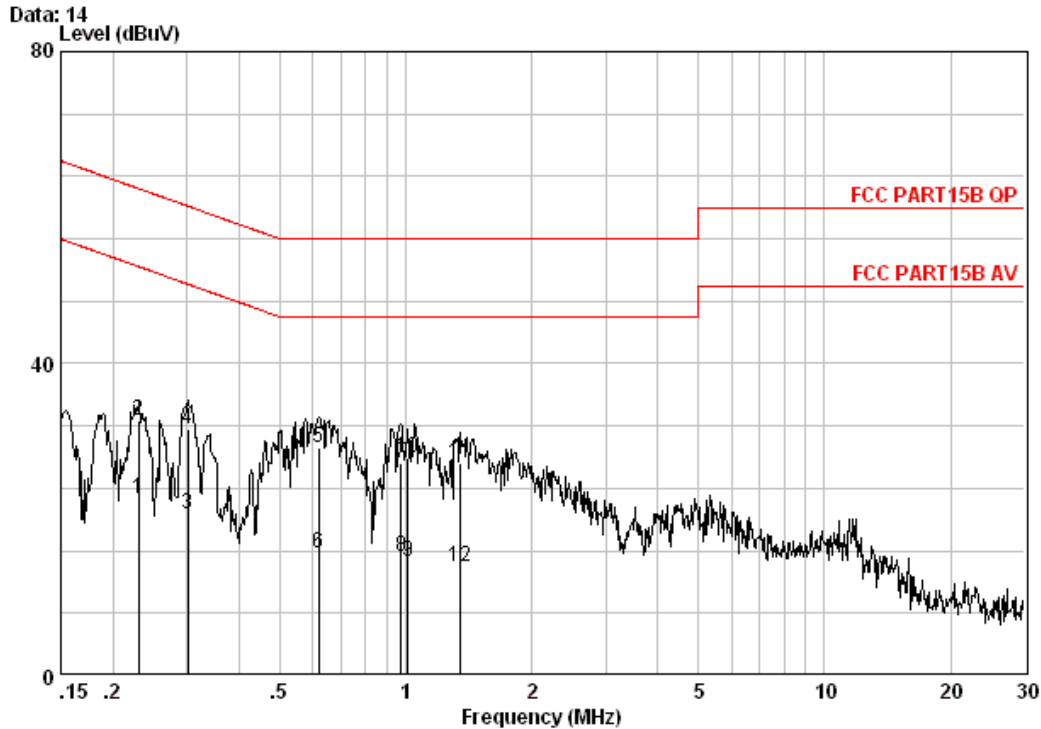
Limit	Over	Remark					
Line	Limit	Remark					
dBuV	dB	Remark					
0.23000	0.04	-0.04	24.40	24.40	52.45	-28.05	Average
0.23000	0.04	-0.04	33.60	33.60	62.45	-28.85	QP
0.29800	0.05	-0.04	22.90	22.91	50.30	-27.39	Average
0.29800	0.05	-0.04	33.40	33.41	60.30	-26.89	QP
0.58200	0.06	-0.04	29.70	29.72	56.00	-26.28	QP
0.58200	0.06	-0.04	19.60	19.62	46.00	-26.38	Average
0.97300	0.08	-0.05	27.80	27.83	56.00	-28.17	QP
0.97300	0.08	-0.05	16.90	16.93	46.00	-29.07	Average
1.350	0.10	-0.05	27.60	27.64	56.00	-28.36	QP
1.350	0.10	-0.05	14.70	14.74	46.00	-31.26	Average
1.740	0.11	-0.06	24.30	24.35	56.00	-31.65	QP
1.740	0.11	-0.06	12.20	12.25	46.00	-33.75	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:

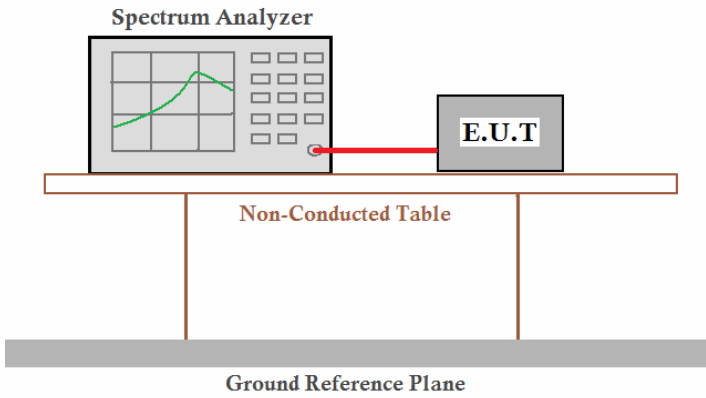


Freq	Cable Loss	LISN Factor	Read Level	Limit	Over	Remark
MHz	dB	dB	dBuV	dBuV	dB	
0.23000	0.04	-0.04	22.70	52.45	-29.75	Average
0.23000	0.04	-0.04	32.80	62.45	-29.65	QP
0.30100	0.05	-0.04	20.70	50.22	-29.50	Average
0.30100	0.05	-0.04	31.70	60.22	-28.50	QP
0.62000	0.06	-0.04	29.10	56.00	-26.88	QP
0.62000	0.06	-0.04	15.70	46.00	-30.28	Average
0.97300	0.08	-0.04	27.30	56.00	-28.67	QP
0.97300	0.08	-0.04	15.30	46.00	-30.67	Average
1.010	0.08	-0.05	14.50	46.00	-31.46	Average
1.010	0.08	-0.05	27.90	56.00	-28.06	QP
1.350	0.10	-0.05	27.10	56.00	-28.86	QP
1.350	0.10	-0.05	13.80	46.00	-32.16	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.

### 5.3 Conducted Peak Output Power

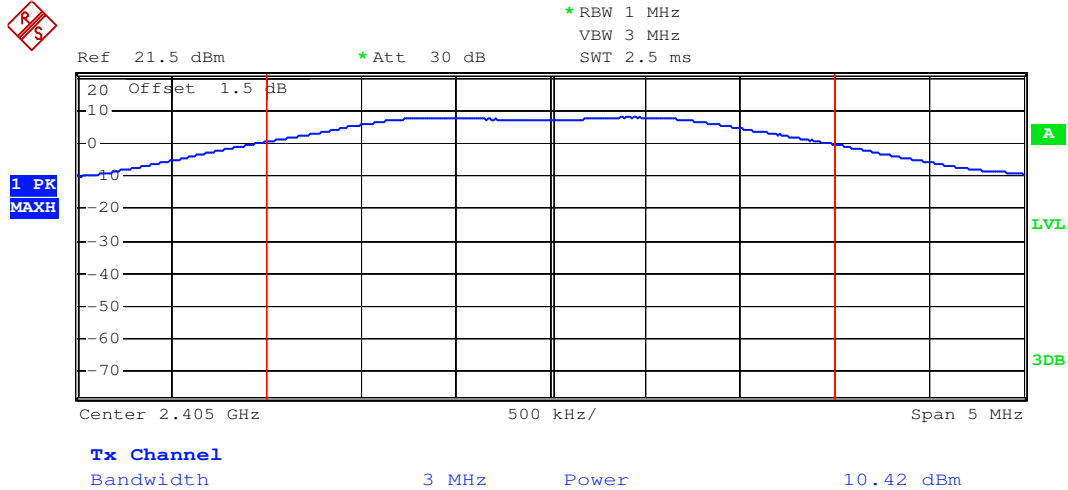
Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	30dBm
Test setup:	 <p><i>Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>
Test Instruments:	Refer to section 4.7 for details
Test results:	Passed

#### Measurement Data

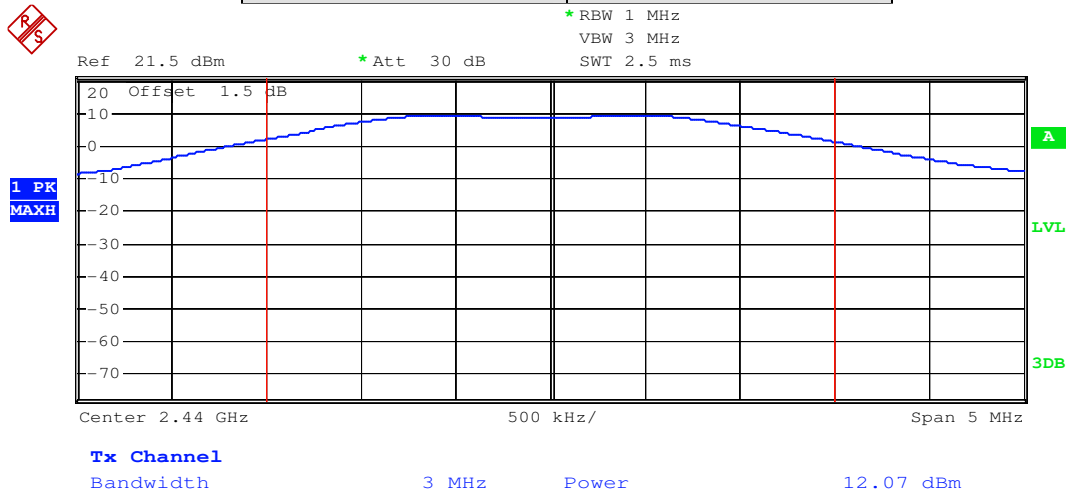
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	10.42	30.00	Pass
Middle	12.07	30.00	Pass
Highest	12.36	30.00	Pass

Test plot as follows:

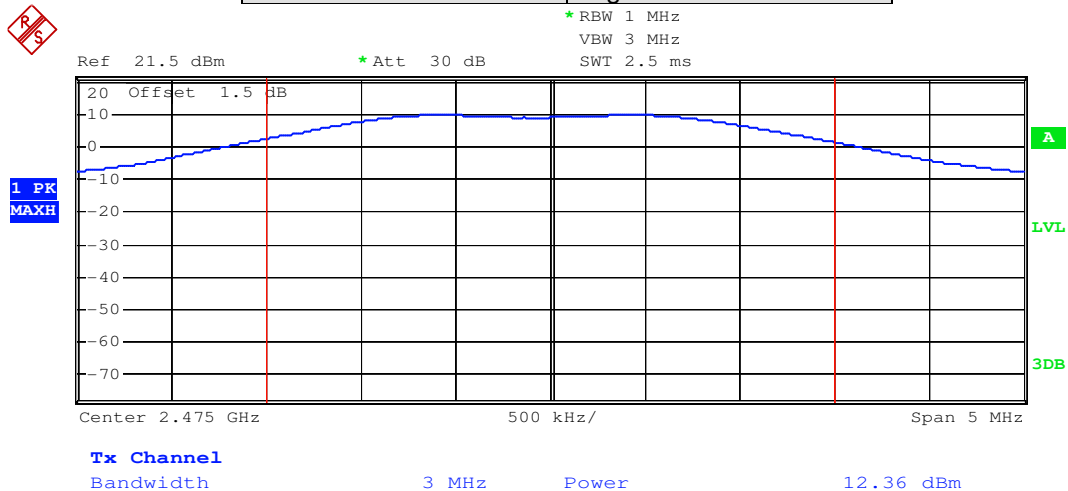
Test channel: **Lowest**



Test channel: **Middle**

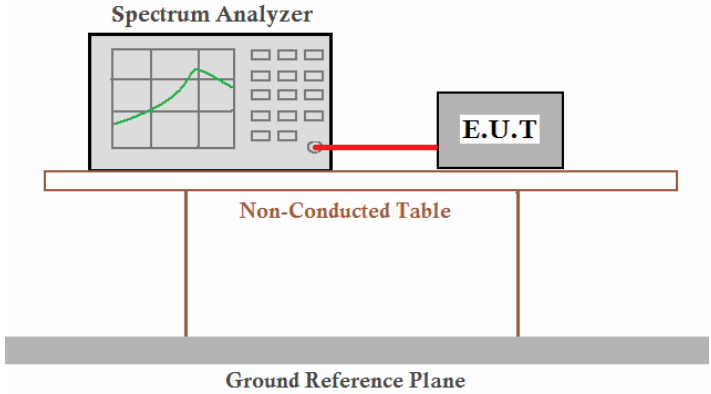


Test channel: **Highest**



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### 5.4 6dB Occupy Bandwidth

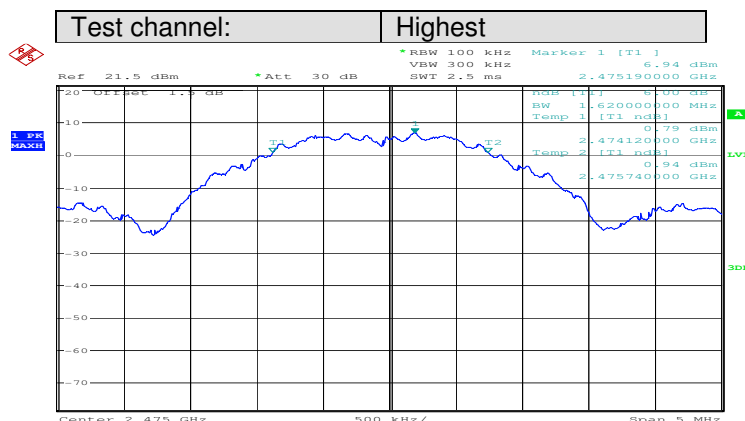
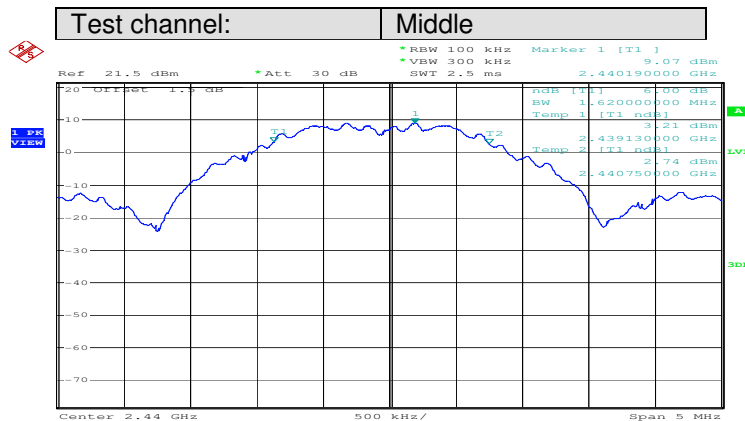
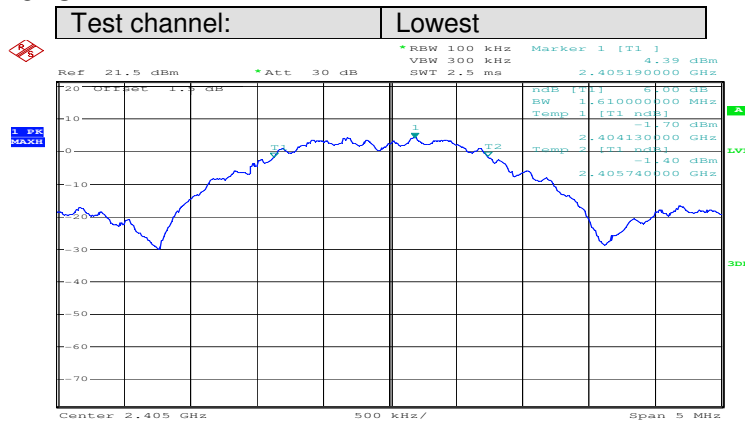
Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	>500KHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below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

#### Measurement Data

Test channel	6dB Occupy Bandwidth (KHz)	Limit (KHz)	Result
Lowest	1610	>500	Pass
Middle	1620	>500	Pass
Highest	1620	>500	Pass

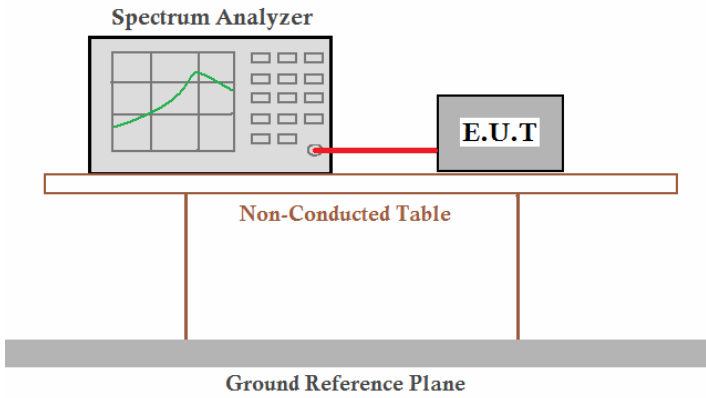


Test plot as follows:



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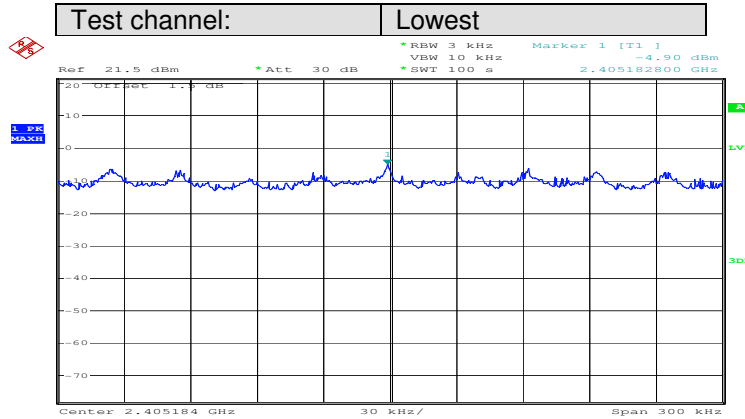
### 5.5 Power Spectral Density

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

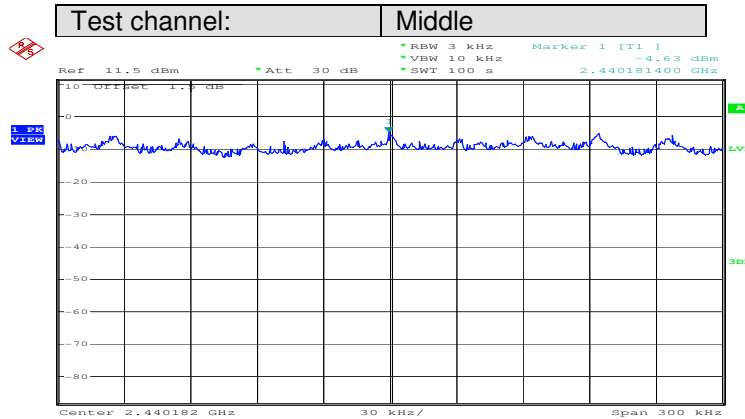
### Measurement Data

Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result
Lowest	-4.90	<8.00	Pass
Middle	-4.63	<8.00	Pass
Highest	-4.90	<8.00	Pass

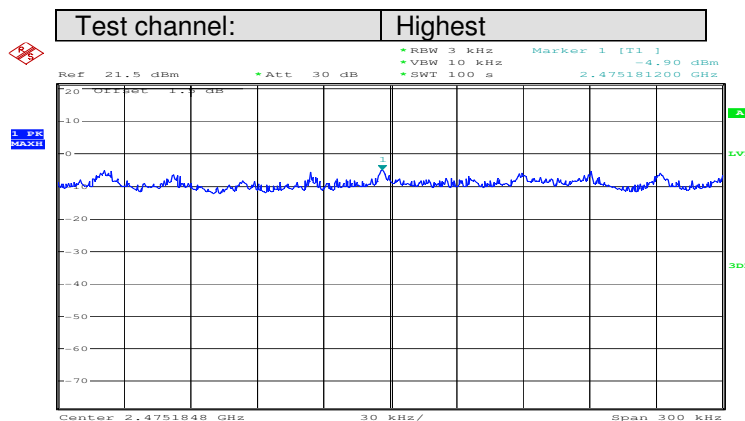
Test plot as follows:



Date: 10.AUG.2010 16:21:16



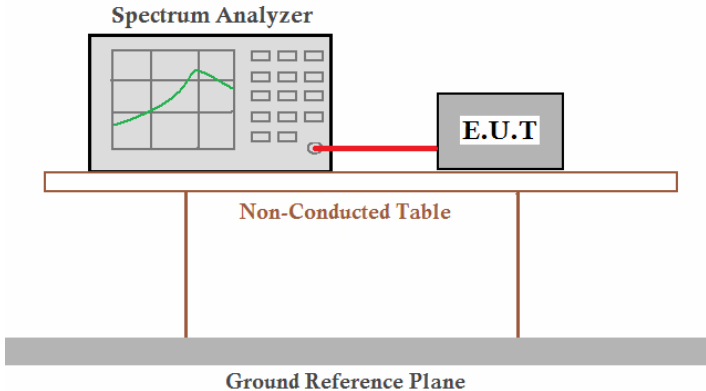
Date: 10.AUG.2010 15:23:28



Date: 10.AUG.2010 15:59:22

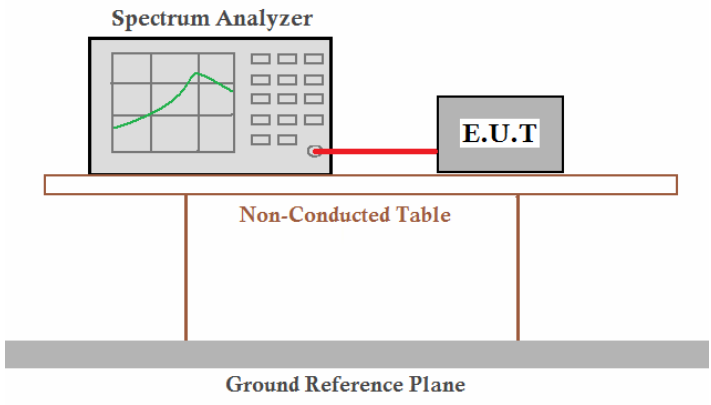
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### 5.6 Band Edge

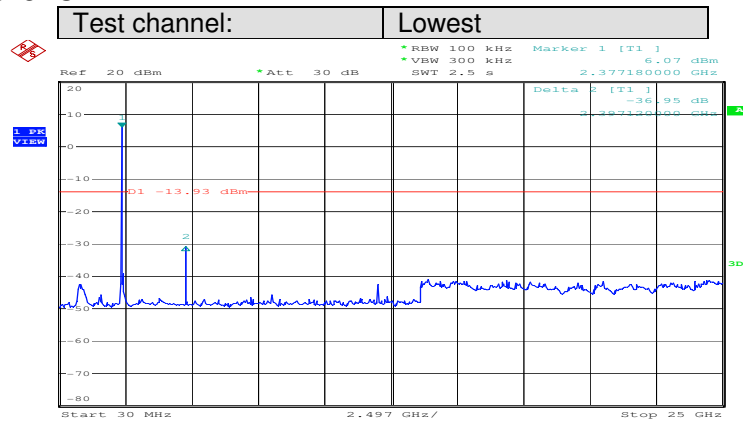
Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.4:2003 and KDB558074
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least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



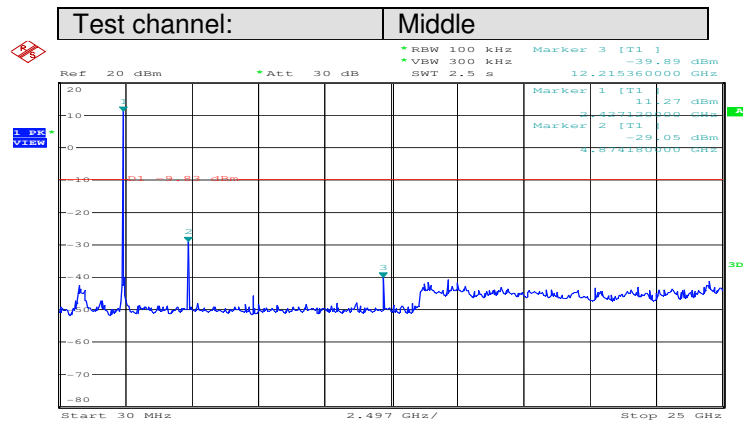
### 5.7 RF Antenna Conducted spurious emissions

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

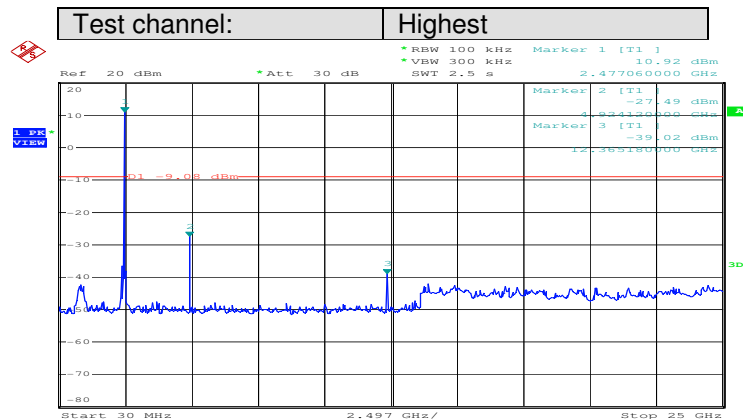
Test plot as follows:



Date: 25.AUG.2010 14:09:05



Date: 25.AUG.2010 14:20:45



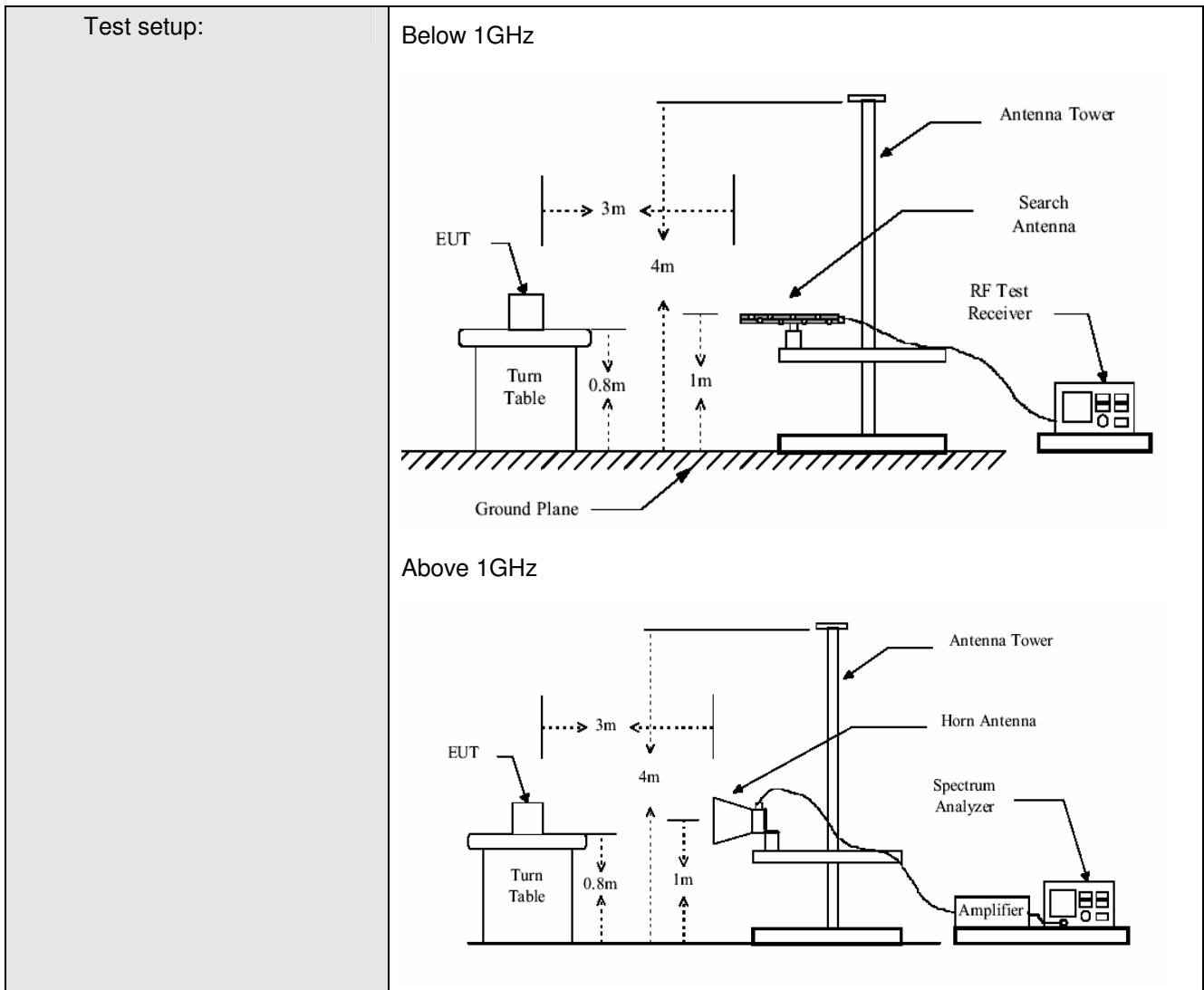
Date: 25.AUG.2010 14:22:59

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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:	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:	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:	<p>The E.U.T and its simulators are placed on a turn table which is 0.8meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.</p> <p>Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.</p>				
Test Instruments:	Refer to section 4.7 for details				
Test mode:	Tx mode				
Test results:	Passed				





**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

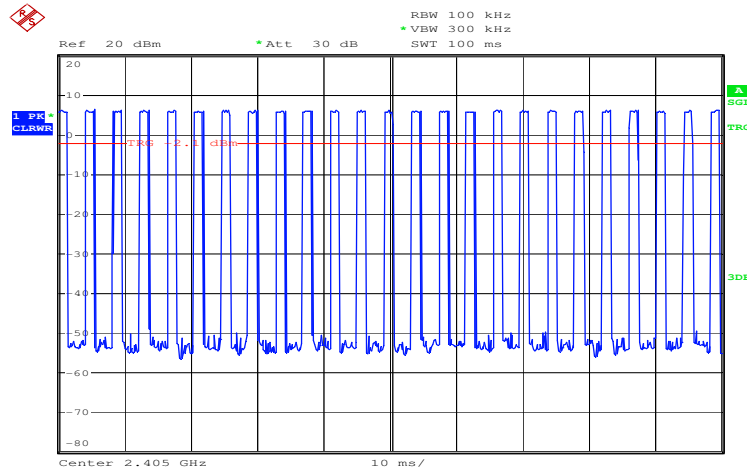
**Tx mode:**

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
31.940	0.60	14.43	27.55	37.74	25.22	40.00	-14.78	Vertical
44.550	0.70	9.61	27.51	39.95	22.75	40.00	-17.25	Vertical
55.220	0.80	7.56	27.48	41.15	22.03	40.00	-17.97	Vertical
78.500	1.05	7.59	27.43	39.37	20.58	40.00	-19.42	Vertical
157.070	1.33	9.42	27.03	34.31	18.03	43.50	-25.47	Vertical
917.550	3.62	23.27	26.44	26.34	26.79	46.00	-19.21	Vertical
31.940	0.60	14.31	27.55	37.94	25.30	40.00	-14.70	Horizontal
39.700	0.60	11.87	27.52	38.61	23.56	40.00	-16.44	Horizontal
66.860	0.80	6.99	27.45	40.91	21.25	40.00	-18.75	Horizontal
75.590	0.97	7.37	27.44	39.22	20.12	40.00	-19.88	Horizontal
157.070	1.33	9.42	27.03	33.34	17.06	43.50	-26.44	Horizontal
995.150	3.70	24.26	26.13	26.88	28.71	54.00	-25.29	Horizontal

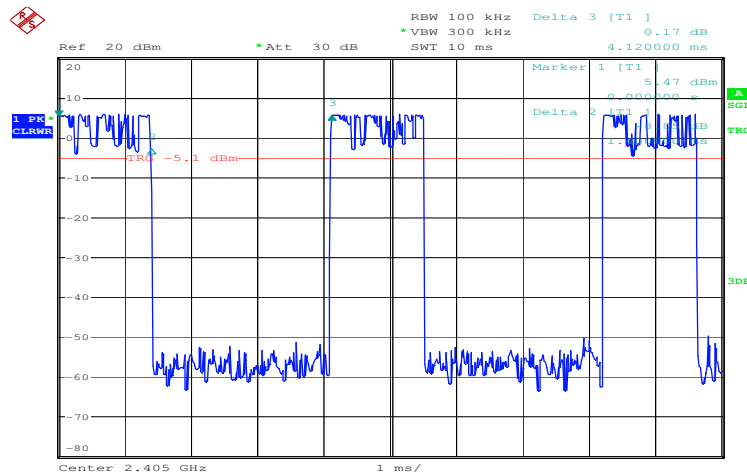
### 5.8.2 Transmitter emission above 1GHz

PDCF value:	
Calculate Formula:	Average value=Peak value - PDCF
	PDCF=20 log(Duty cycle)= 9.38dB
	Duty cycle= T on time / T period
Test data:	Ton time =1.40ms
	T period =4.12ms

Test plot as follows:



Date: 25.AUG.2010 14:11:15



Date: 25.AUG.2010 14:14:59

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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
1663	5.08	27.62	39.55	63.47	56.62	74.00	-17.38	Vertical
4810	9.36	34.25	41.53	55.49	57.57	74.00	-16.43	Vertical
7215	13.30	37.24	40.88	47.36	57.02	74.00	-16.98	Vertical
9619	13.39	37.99	37.56	43.53	57.35	74.00	-16.65	Vertical
12016	16.45	39.10	39.09	42.02	58.48	74.00	-15.52	Vertical
14447	17.43	41.37	45.11	43.51	57.20	74.00	-16.80	Vertical
1595	5.11	27.43	38.85	64.05	57.74	74.00	-16.26	Horizontal
4810	9.36	34.25	41.53	56.43	58.51	74.00	-15.49	Horizontal
7215	13.30	37.24	40.88	47.59	57.25	74.00	-16.75	Horizontal
9619	13.39	37.99	37.56	43.67	57.49	74.00	-16.51	Horizontal
12033	16.77	39.12	39.13	43.12	59.88	74.00	-14.12	Horizontal
14447	17.43	41.37	45.11	45.80	59.49	74.00	-14.51	Horizontal

Test channel:	Lowest	Remark:	Average
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Frequency (MHz)	Peak level (dBuV/m)	PDCF (dB)	Average Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1663	56.62	9.38	47.24	54.00	-6.76	Vertical
4810	57.57	9.38	48.19	54.00	-5.81	Vertical
7215	57.02	9.38	47.64	54.00	-6.36	Vertical
9619	57.35	9.38	47.97	54.00	-6.03	Vertical
12016	58.48	9.38	49.10	54.00	-4.90	Vertical
14447	57.20	9.38	47.82	54.00	-6.18	Vertical
1595	57.74	9.38	48.36	54.00	-5.64	Horizontal
4810	58.51	9.38	49.13	54.00	-4.87	Horizontal
7215	57.25	9.38	47.87	54.00	-6.13	Horizontal
9619	57.49	9.38	48.11	54.00	-5.89	Horizontal
12033	59.88	9.38	50.50	54.00	-3.50	Horizontal
14447	59.49	9.38	50.11	54.00	-3.89	Horizontal

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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
1595	5.11	27.43	38.85	63.05	56.74	74.00	-17.26	Vertical
4859	9.68	34.32	40.35	54.86	58.51	74.00	-15.49	Vertical
7341	12.84	37.32	40.30	47.08	56.94	74.00	-17.06	Vertical
9772	13.99	38.04	38.01	43.90	57.92	74.00	-16.08	Vertical
12220	17.95	39.23	39.30	39.51	57.39	74.00	-16.61	Vertical
14668	17.18	41.27	45.96	46.41	58.90	74.00	-15.10	Vertical
1663	5.08	27.62	39.55	62.47	55.62	74.00	-18.38	Horizontal
4859	9.68	34.32	40.35	54.21	57.86	74.00	-16.14	Horizontal
7307	12.99	37.30	40.50	47.23	57.02	74.00	-16.98	Horizontal
9772	13.99	38.04	38.01	42.86	56.88	74.00	-17.12	Horizontal
12220	17.95	39.23	39.30	40.05	57.93	74.00	-16.07	Horizontal
14668	17.18	41.27	45.96	46.58	59.07	74.00	-14.93	Horizontal

Test channel:	Middle	Remark:	Average
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Frequency (MHz)	Peak level (dBuV/m)	PDCF (dB)	Average Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1595	56.74	9.38	47.36	54.00	-6.64	Vertical
4859	58.51	9.38	49.13	54.00	-4.87	Vertical
7341	56.94	9.38	47.56	54.00	-6.44	Vertical
9772	57.92	9.38	48.54	54.00	-5.46	Vertical
12220	57.39	9.38	48.01	54.00	-5.99	Vertical
14668	58.90	9.38	49.52	54.00	-4.48	Vertical
1663	55.62	9.38	46.24	54.00	-7.76	Horizontal
4859	57.86	9.38	48.48	54.00	-5.52	Horizontal
7307	57.02	9.38	47.64	54.00	-6.36	Horizontal
9772	56.88	9.38	47.50	54.00	-6.50	Horizontal
12220	57.93	9.38	48.55	54.00	-5.45	Horizontal
14668	59.07	9.38	49.69	54.00	-4.31	Horizontal

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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
1646	5.10	27.57	39.32	63.52	56.87	74.00	-17.13	Vertical
4944	10.51	34.43	40.96	53.20	57.18	74.00	-16.82	Vertical
7426	12.72	37.37	40.01	47.70	57.78	74.00	-16.22	Vertical
9908	14.21	38.07	37.85	42.58	57.01	74.00	-16.99	Vertical
12390	17.55	39.34	39.48	39.46	56.87	74.00	-17.13	Vertical
14855	16.69	41.16	46.61	46.52	57.76	74.00	-16.24	Vertical
1663	5.08	27.62	39.55	64.47	57.62	74.00	-16.38	Horizontal
4950	10.51	34.43	40.96	52.88	56.86	74.00	-17.14	Horizontal
7425	12.72	37.37	40.01	46.94	57.02	74.00	-16.98	Horizontal
9908	14.21	38.07	37.85	43.38	57.81	74.00	-16.19	Horizontal
12373	17.63	39.32	39.45	40.18	57.68	74.00	-16.32	Horizontal
14855	16.69	41.16	46.61	45.89	57.13	74.00	-16.87	Horizontal

Test channel:	Middle	Remark:	Average
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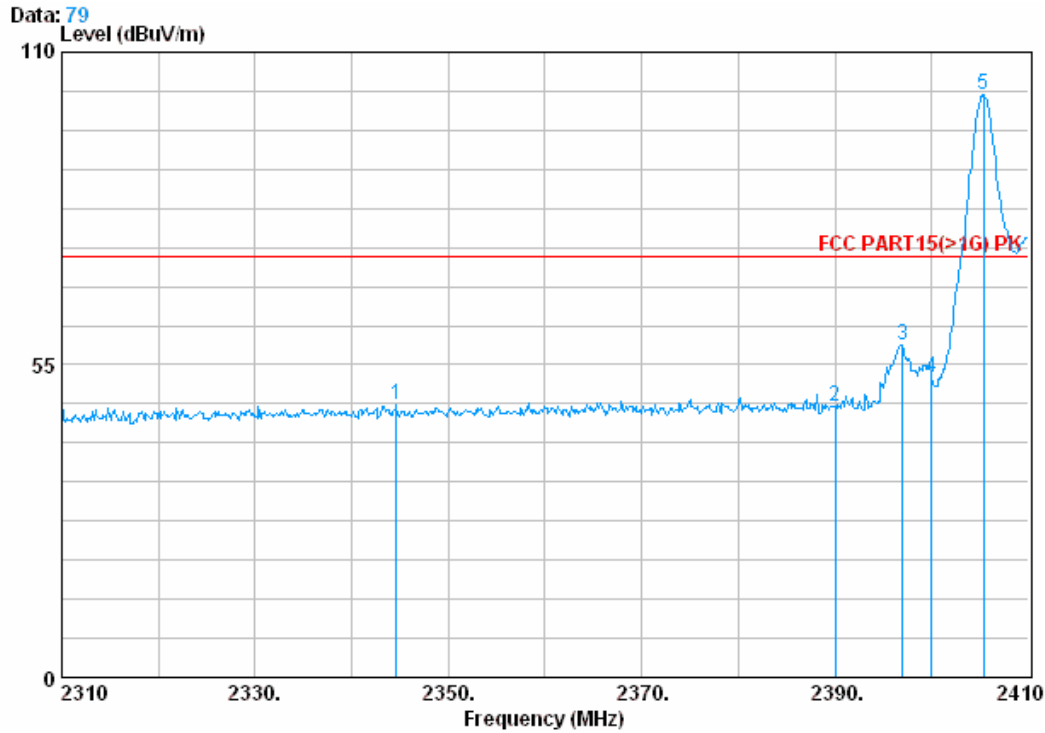
Frequency (MHz)	Peak level (dBuV/m)	PDCF (dB)	Average Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1646	56.87	9.38	47.49	54.00	-6.51	Vertical
4944	57.18	9.38	47.80	54.00	-6.20	Vertical
7426	57.78	9.38	48.40	54.00	-5.60	Vertical
9908	57.01	9.38	47.63	54.00	-6.37	Vertical
12390	56.87	9.38	47.49	54.00	-6.51	Vertical
14855	57.76	9.38	48.38	54.00	-5.62	Vertical
1663	57.62	9.38	48.24	54.00	-5.76	Horizontal
4950	56.86	9.38	47.48	54.00	-6.52	Horizontal
7425	57.02	9.38	47.64	54.00	-6.36	Horizontal
9908	57.81	9.38	48.43	54.00	-5.57	Horizontal
12373	57.68	9.38	48.30	54.00	-5.70	Horizontal
14855	57.13	9.38	47.75	54.00	-6.25	Horizontal



**5.8.3 Band edge (Radiated Emission)**

Test mode:	Tx	Test channel:	Lowest	Remark:	Peak
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Vertical:



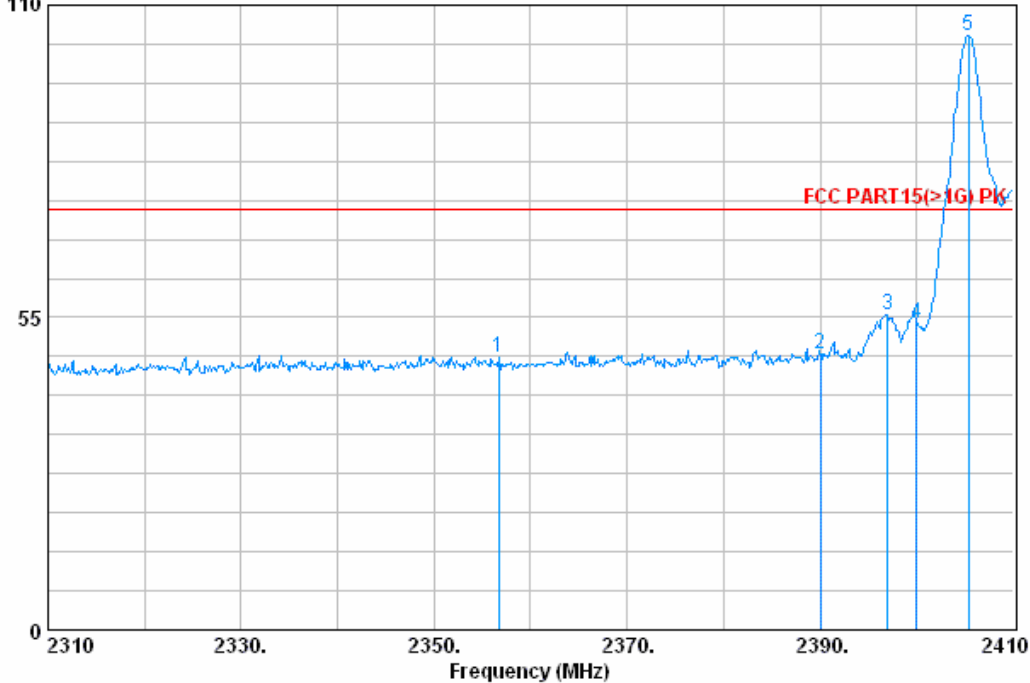
	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2344.600	6.11	32.21	39.51	49.09	47.91	74.00	-26.09 Peak
2	2390.000	6.28	32.24	39.03	48.02	47.51	74.00	-26.49 Peak
3	2397.000	6.31	32.24	38.95	58.96	58.57	74.00	-15.43 Peak
4	2400.000	6.34	32.25	38.87	53.12	52.84	74.00	-21.16 Peak
5 X	2405.400	6.25	32.25	38.83	102.77	102.44	74.00	28.44 Peak

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Horizontal:

Data: 77

Level (dBuV/m)



	Freq	Cable&Antenna Loss	Preamp Factor	Preamp	Read Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2356.700	6.17	32.22	39.35	49.01	48.05	74.00	-25.95 Peak
2	2390.000	6.28	32.24	39.03	49.05	48.54	74.00	-25.46 Peak
3	2397.000	6.31	32.24	38.95	55.80	55.40	74.00	-18.60 Peak
4	2400.000	6.34	32.25	38.87	54.32	54.03	74.00	-19.97 Peak
5 X	2405.400	6.25	32.25	38.83	104.96	104.63	74.00	30.63 Peak

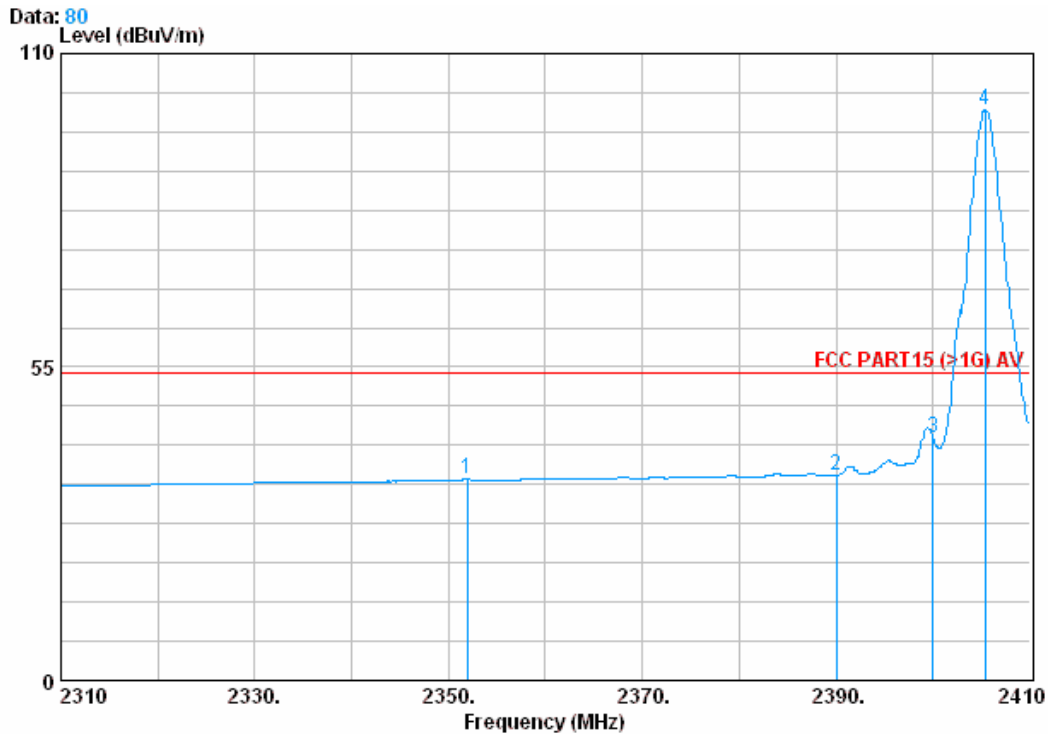
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Test mode:	Tx	Test channel:	Lowest	Remark:	Average
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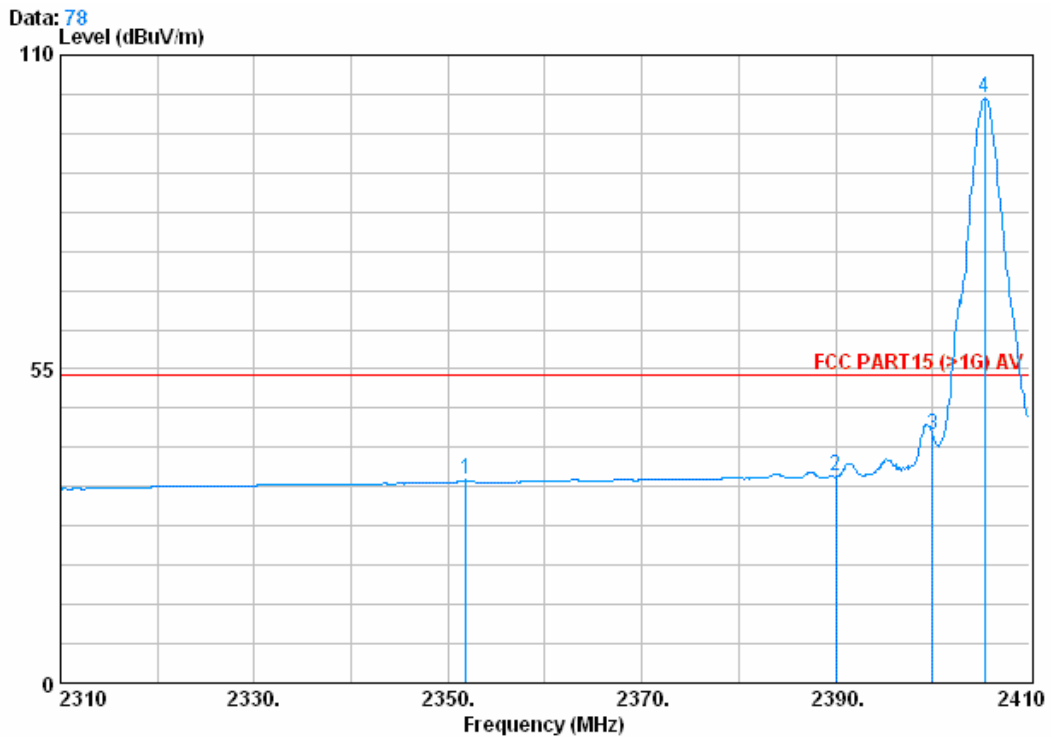
Vertical:



	CableAntenna	Preamp	Read	Limit	Over				
Freq	Loss	Factor	Level	Line	Limit	Remark			
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	2351.900	6.14	32.22	39.43	36.35	35.28	54.00	-18.72	Average
2	2390.000	6.28	32.24	39.03	36.48	35.97	54.00	-18.03	Average
3	2400.000	6.34	32.25	38.87	42.83	42.54	54.00	-11.46	Average
4	2405.400	6.25	32.25	38.83	100.47	100.14	54.00	46.14	Average

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Horizontal:

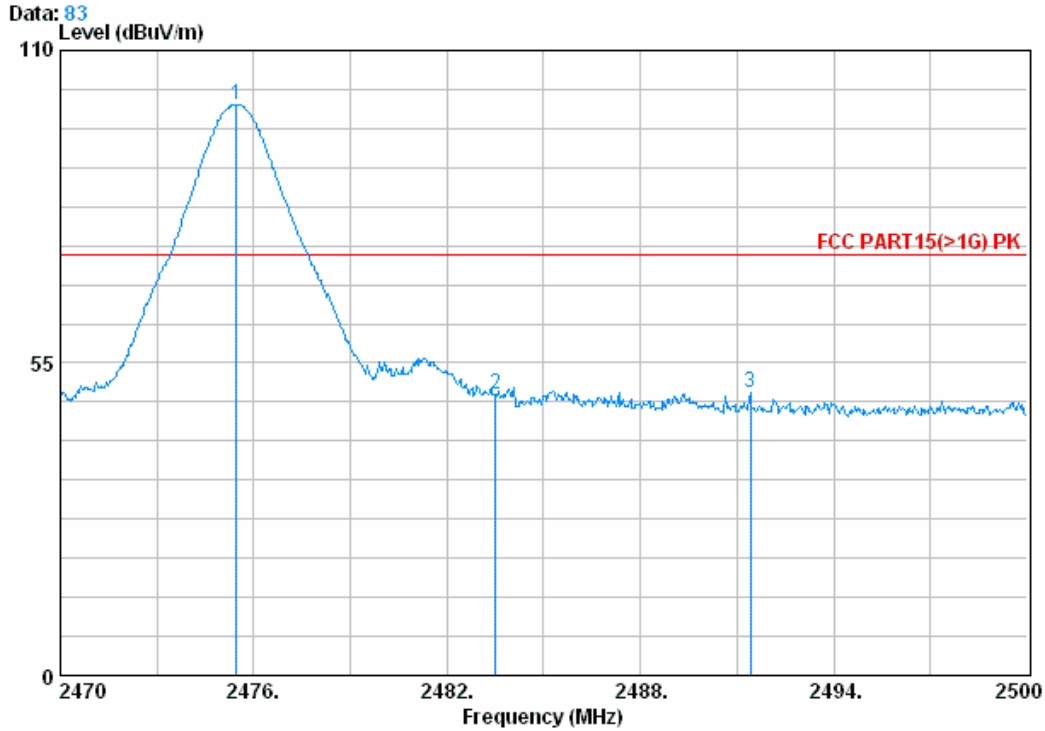


	Freq	Cable Loss	Antenna Factor	Preamplifier	Read Level	Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	2351.800	6.14	32.22	39.43	36.59	35.52	54.00	-18.48	Average
2	2390.000	6.28	32.24	39.03	36.64	36.13	54.00	-17.87	Average
3	2400.000	6.34	32.25	38.87	43.79	43.51	54.00	-10.49	Average
4	2405.400	6.25	32.25	38.83	102.73	102.40	54.00	48.40	Average



Test mode:	Tx	Test channel:	Highest	Remark:	Peak
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Vertical:

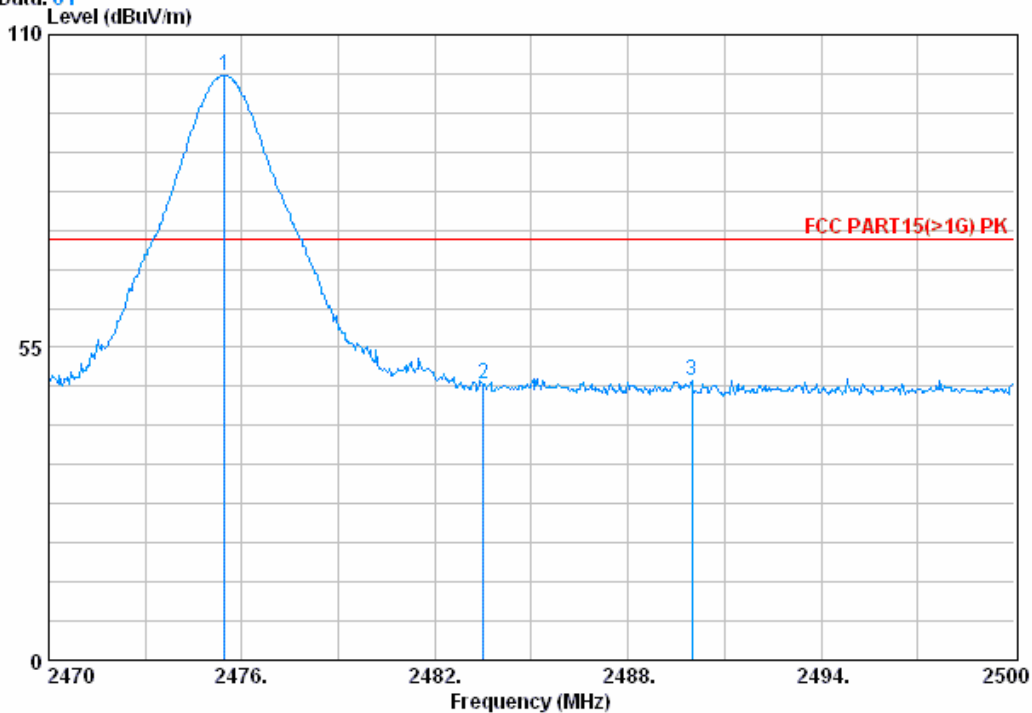


	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	
1 X	2475.460	6.45	32.29	39.72	101.43	74.00	26.45	Peak
2	2483.500	6.22	32.29	39.53	50.35	74.00	-24.67	Peak
3	2491.420	5.99	32.30	39.34	50.76	74.00	-24.29	Peak

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Horizontal:

Data: 81



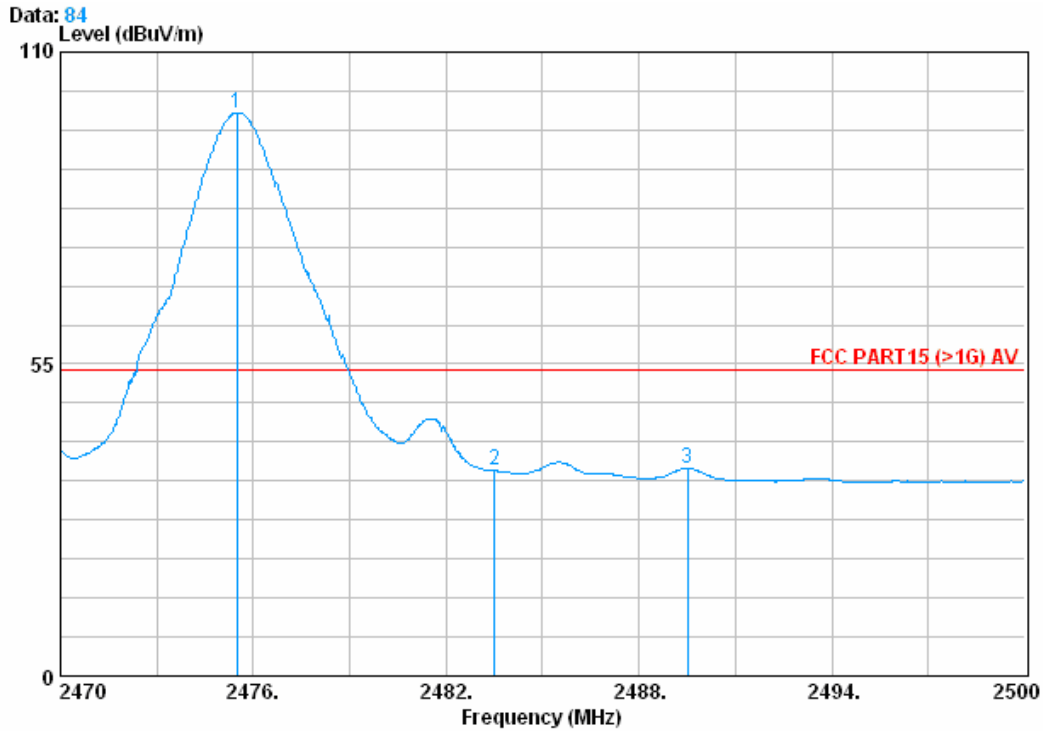
		Cable	Antenna	Preamp	Read	Limit	Over		
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	X	2475.460	6.45	32.29	39.72	103.80	102.81	74.00	28.81 Peak
2		2483.500	6.22	32.29	39.53	49.54	48.52	74.00	-25.48 Peak
3		2489.980	5.99	32.30	39.34	50.11	49.05	74.00	-24.95 Peak

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Test mode:	Tx	Test channel:	Highest	Remark:	Average
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Vertical:

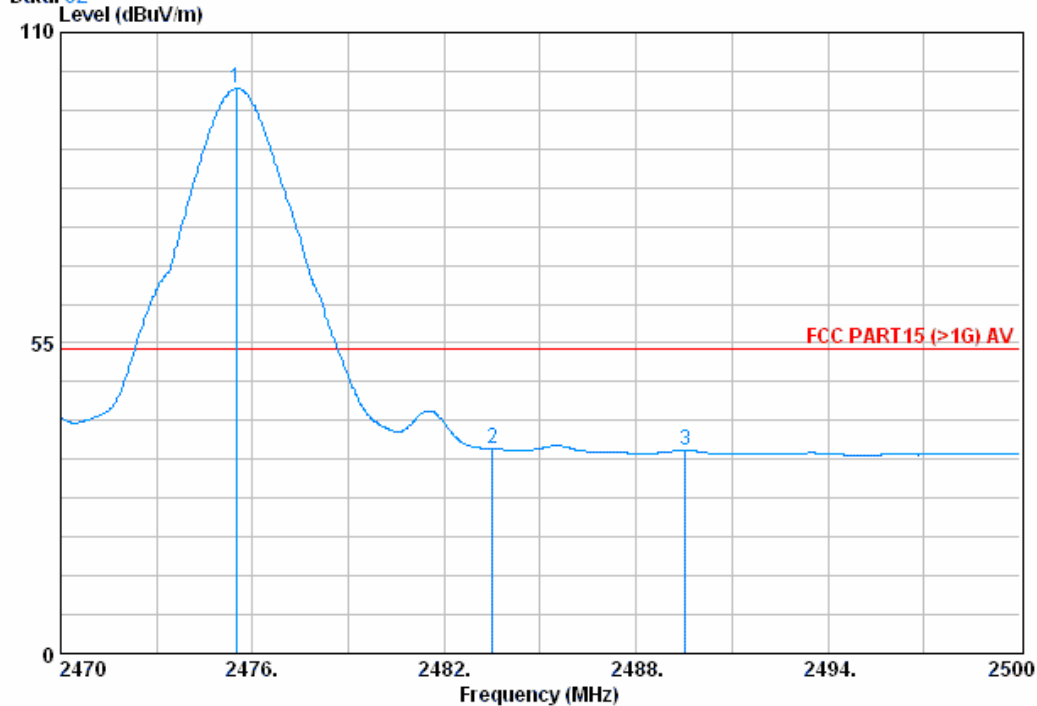


	Freq	CableAntenna Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 @	2475.490	6.45	32.29	39.72	100.22	99.24	54.00	45.24	Average
2	2483.500	6.22	32.29	39.53	37.20	36.19	54.00	-17.82	Average
3	2489.500	5.99	32.30	39.34	37.62	36.57	54.00	-17.43	Average

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Horizontal:

Data: 82



	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	
1	2475.490	6.45	32.29	39.72	101.04	100.06	54.00	46.06 Average
2	2483.500	6.22	32.29	39.53	37.31	36.29	54.00	-17.71 Average
3	2489.530	5.99	32.30	39.34	37.09	36.03	54.00	-17.97 Average

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