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Report No.: SZEMO10040161301

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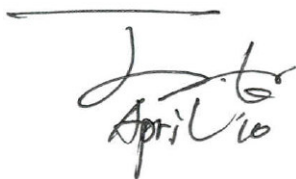
# FCC REPORT

**Application No. :** SZEMO100401613RF  
**Applicant:** MILLENNIUM DRAGON ELECTRONICS, LTD.  
**Product Name:** Wii remote with nunchuk  
**Operation Frequency:** 2402MHz to 2480MHz  
**FCC ID:** YDE-VG09070V1  
**Standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.249: 2008  
**Date of Receipt** 01 April 2010  
**Date of Test** 01 to 26 April 2010  
**Date of Issue** 26 April 2010

<b>Test Result :</b>	<b>PASS *</b>
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\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Jack Zhang  
Lab Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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### 3 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Passed
AC Power Line Conducted Emission	15.207	Passed
Field strength of the fundamental signal	15.249 (a)	Passed
Spurious emissions	15.249 (a)/15.209	Passed
Band edge (Radiated Emission)	15.249(a)/15.205	Passed
20dB Occupied Bandwidth	15.215 (c)	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:	MILLENNIUM DRAGON ELECTRONICS, LTD.
Manufacturer/ Factory:	Shenzhen Millennium Dragon Electronic Co., Ltd.
Address of Applicant:	2-3 Floor, West Building, Hengfang Laobing Industry Town, Xingye RD., Xixiang, Bao'an District, Shenzhen 518102, PR China
Address of Manufacturer:	3,4/F, Building 28, Longwangmiao Industrial Zone, Baishixia, Fuyong Street, Bao'an District, Shenzhen 518103, Guangdong, P.R.China

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

Product Name:	Wii remote with nunchuk
Trade Name:	DreamGear, bigben, 3 <sup>rd</sup>
Item No.:	DGWII-3111, DGWII-3112, BB3174; BM3226(for remote with white nunchuk) DGWII-3107, DGWII-3108, BB3174, VG09070V1(for remote)
	Only the Item in section 6 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above items.
Operation Frequency:	2402MHz to 2480MHz
Channel numbers:	79
Channel separation:	1MHz
Modulation type:	GFSK
Antenna Type:	Integral
Antenna gain:	0dBi
Power supply:	DC3.0V(2*1.5V"AA"Size Batteries)

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2402MHz	21	2422MHz	41	2442MHz	61	2462MHz
2	2403MHz	22	2423MHz	42	2443MHz	62	2463MHz
3	2404MHz	23	2424MHz	43	2444MHz	63	2464MHz
4	2405MHz	24	2425MHz	44	2445MHz	64	2465MHz
5	2406MHz	25	2426MHz	45	2446MHz	65	2466MHz
6	2407MHz	26	2427MHz	46	2447MHz	66	2467MHz
7	2408MHz	27	2428MHz	47	2448MHz	67	2468MHz
8	2409MHz	28	2429MHz	48	2449MHz	68	2469MHz
9	2410MHz	29	2430MHz	49	2450MHz	69	2470MHz
10	2411MHz	30	2431MHz	50	2451MHz	70	2471MHz
11	2412MHz	31	2432MHz	51	2452MHz	71	2472MHz
12	2413MHz	32	2433MHz	52	2453MHz	72	2473MHz
13	2414MHz	33	2434MHz	53	2454MHz	73	2474MHz
14	2415MHz	34	2435MHz	54	2455MHz	74	2475MHz
15	2416MHz	35	2436MHz	55	2456MHz	75	2476MHz
16	2417MHz	36	2437MHz	56	2457MHz	76	2477MHz
17	2418MHz	37	2438MHz	57	2458MHz	77	2478MHz
18	2419MHz	38	2439MHz	58	2459MHz	78	2479MHz
19	2420MHz	39	2440MHz	59	2460MHz	79	2480MHz
20	2421MHz	40	2441MHz	60	2461MHz		

**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	2402MHz
The middle channel	2441MHz
The Highest channel	2480MHz

### 4.3 E.U.T Operation mode

**Operating Environment:**

Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1008 mbar

**Test mode:**

Normal operation mode:	Keep the controller connecting to the EUT and exchanging data at the same time
Transmitting mode:	Keep EUT in transmitting mode

#### 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	15-06-2010
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	12-12-2009	11-12-2010
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	18-06-2009	17-06-2010
6	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	12-08-2009	11-08-2010
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	12-08-2009	11-08-2010
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	12-08-2009	11-08-2010
9	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	18-06-2009	17-06-2010
10	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	18-06-2009	17-06-2010
11	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	SEL0080	18-06-2009	17-06-2010
12	Band filter	Amindeon	82346	SEL0094	18-06-2009	17-06-2010

<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	10336/030	EMC0040	16-06-2009	15-06-2010
2	Coaxial cable	SGS	N/A	SEL0029	18-06-2009	17-06-2010



## 5 Test results and Measurement Data

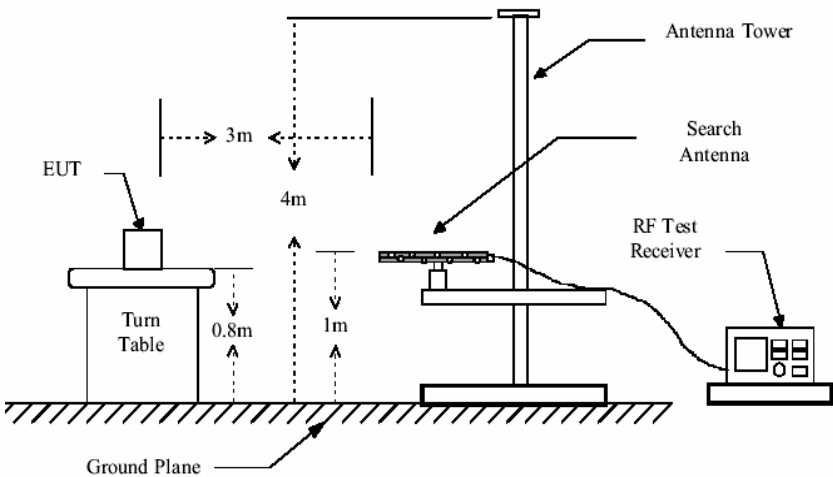
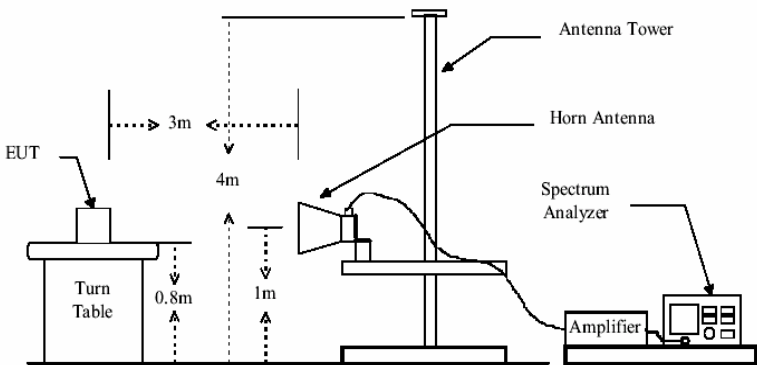
### 5.1 Antenna requirement:

<b>Standard requirement:</b>	FCC Part15 C Section 15.203
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>	
<b>E.U.T Antenna:</b>	
<i>The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.</i>	

## 5.2 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.249 and 15.209																								
Test Method:	ANSI C63.4: 2003																								
Test Frequency Range:	30MHz to 25000MHz																								
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)																								
Receiver setup:	<table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><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></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: (Field strength of the fundamental signal)	<table><tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr><tr><td rowspan="2">2400MHz-2483.5MHz</td><td>94.0</td><td>Average Value</td></tr><tr><td>114.0</td><td>Peak Value</td></tr></table>					Frequency	Limit (dBuV/m @3m)	Remark	2400MHz-2483.5MHz	94.0	Average Value	114.0	Peak Value												
Frequency	Limit (dBuV/m @3m)	Remark																							
2400MHz-2483.5MHz	94.0	Average Value																							
	114.0	Peak Value																							
Limit: (Spurious Emissions)	<table><tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr><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></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																							
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.																								
Test Procedure:	<p>a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>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.</p> <p>g. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.</p>																								
Test Instruments:	Refer to section 4.7 for details																								

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Test mode:	Normal operation mode and transmitting mode
Test results:	Passed
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p> 

**Note:**

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

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

**Measurement Data**
**5.2.1 Field Strength Of The Fundamental Signal**

Peak value:

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2402	6.34	32.25	38.87	89.31	89.03	114	-24.97	Vertical
2402	6.34	32.25	38.87	92.19	91.91	114	-22.09	Horizontal
2441	6.40	32.27	38.59	88.34	88.42	114	-25.58	Vertical
2441	6.40	32.27	38.59	92.85	92.93	114	-21.07	Horizontal
2480	6.45	32.29	39.72	90.69	89.71	114	-24.29	Vertical
2480	6.45	32.29	39.72	92.41	91.43	114	-22.57	Horizontal

Average value:

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2402	6.34	32.25	38.87	86.55	86.27	94	-7.73	Vertical
2402	6.34	32.25	38.87	89.66	89.38	94	-4.62	Horizontal
2441	6.40	32.27	38.59	85.45	85.53	94	-8.47	Vertical
2441	6.40	32.27	38.59	89.78	89.86	94	-4.14	Horizontal
2480	6.45	32.29	39.72	87.99	87.01	94	-6.99	Vertical
2480	6.45	32.29	39.72	89.15	88.17	94	-5.83	Horizontal

**5.2.2 Spurious Emissions****30MHz~1GHz**

Test mode:	Transmitting	Remark:	QP
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
36.790	0.60	12.30	27.53	29.78	15.15	40.00	-24.85	Vertical
66.860	0.80	6.99	27.45	32.55	12.89	40.00	-27.11	Vertical
97.900	1.18	9.02	27.40	36.21	19.01	43.50	-24.49	Vertical
105.660	1.22	8.81	27.35	39.72	22.40	43.50	-21.10	Vertical
669.230	2.84	21.24	27.26	27.38	24.20	46.00	-21.80	Vertical
920.460	3.62	23.29	26.44	26.74	27.21	46.00	-18.79	Vertical
106.630	1.22	8.77	27.35	49.13	31.77	43.50	-11.73	Horizontal
241.460	1.63	12.04	26.68	28.74	15.73	46.00	-30.27	Horizontal
358.830	2.09	15.62	26.91	27.81	18.61	46.00	-27.39	Horizontal
893.300	3.57	23.14	26.57	39.91	40.05	46.00	-5.95	Horizontal
902.030	3.60	23.21	26.50	41.34	41.65	46.00	-4.35	Horizontal
912.700	3.62	23.25	26.47	37.70	38.10	46.00	-7.90	Horizontal

Above 1GHz					
Test mode:	Transmitting	Test channel:	Lowest	Remark:	Peak

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4804	9.36	34.04	41.53	53.75	55.62	74.00	-18.38	Vertical
7206	13.38	36.33	40.98	35.19	43.92	74.00	-30.08	Vertical
9608	13.39	36.99	37.56	46.37	59.19	74.00	-14.81	Vertical
12010	16.45	38.80	39.09	45.32	61.48	74.00	-12.52	Vertical
4804	9.36	34.04	41.53	50.60	52.47	74.00	-21.53	Horizontal
7206	13.38	36.33	40.98	48.34	57.07	74.00	-16.93	Horizontal
9608	13.39	36.99	37.56	44.87	57.69	74.00	-16.31	Horizontal
12010	16.45	38.80	39.09	46.15	62.31	74.00	-11.69	Horizontal

Test mode:	Transmitting	Test channel:	Lowest	Remark:	average
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4804	9.36	34.04	41.53	40.62	42.49	54.00	-11.51	Vertical
7206	13.38	36.33	40.98	28.26	36.99	54.00	-17.01	Vertical
9608	13.39	36.99	37.56	31.99	44.81	54.00	-9.19	Vertical
12010	16.45	38.80	39.09	28.22	44.38	54.00	-9.62	Vertical
4804	9.36	34.04	41.53	43.55	45.42	54.00	-8.58	Horizontal
7206	13.38	36.33	40.98	35.60	44.33	54.00	-9.67	Horizontal
9608	13.39	36.99	37.56	31.87	44.69	54.00	-9.31	Horizontal
12010	16.45	38.8	39.09	33.00	49.16	54.00	-4.84	Horizontal



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Test mode:	Transmitting	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
4882	10.57	34.02	40.33	49.05	53.31	74.00	-20.69	Vertical
7323	12.91	36.10	40.40	47.81	56.42	74.00	-17.58	Vertical
9764	13.89	37.10	37.94	44.18	57.23	74.00	-16.77	Vertical
12205	17.95	38.93	39.30	45.39	62.97	74.00	-11.03	Vertical
4882	10.57	34.02	40.33	50.05	54.31	74.00	-19.69	Horizontal
7323	12.91	36.10	40.40	47.74	56.35	74.00	-17.65	Horizontal
9764	13.89	37.10	37.94	44.55	57.60	74.00	-16.40	Horizontal
12205	17.95	38.93	39.30	44.99	62.57	74.00	-11.43	Horizontal

Test mode:	Transmitting	Test channel:	Middle	Remark:	average
------------	--------------	---------------	--------	---------	---------

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
4882	10.57	34.02	40.33	35.67	39.93	54.00	-14.07	Vertical
7323	12.91	36.10	40.40	34.66	43.27	54.00	-10.73	Vertical
9764	13.89	37.10	37.94	31.00	44.05	54.00	-9.95	Vertical
12205	17.95	38.93	39.30	25.99	43.57	54.00	-10.43	Vertical
4882	10.57	34.02	40.33	37.99	42.25	54.00	-11.75	Horizontal
7323	12.91	36.10	40.40	34.55	43.16	54.00	-10.84	Horizontal
9764	13.89	37.10	37.94	30.22	43.27	54.00	-10.73	Horizontal
12205	17.95	38.93	39.30	26.87	44.45	54.00	-9.55	Horizontal

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Test mode:	Transmitting	Test channel:	Highest	Remark:	Peak
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4960	10.43	34.01	41.03	47.59	51.00	74.00	-23.00	Vertical
7440	12.72	35.91	40.01	50.17	58.79	74.00	-15.21	Vertical
9920	14.24	37.23	37.78	44.16	57.85	74.00	-16.15	Vertical
12400	17.55	39.04	39.48	46.24	63.35	74.00	-10.65	Vertical
4960	10.43	34.01	41.03	48.66	52.07	74.00	-21.93	Horizontal
7440	12.72	35.91	40.01	47.27	55.89	74.00	-18.11	Horizontal
9920	14.24	37.23	37.78	44.88	58.57	74.00	-15.43	Horizontal
12400	17.55	39.04	39.48	45.69	62.80	74.00	-11.20	Horizontal

Test mode:	Transmitting	Test channel:	Highest	Remark:	average
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Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4960	10.43	34.01	41.03	36.22	39.63	54.00	-14.37	Vertical
7440	12.72	35.91	40.01	34.30	42.92	54.00	-11.08	Vertical
9920	14.24	37.23	37.78	27.56	41.25	54.00	-12.75	Vertical
12400	17.55	39.04	39.48	25.54	42.65	54.00	-11.35	Vertical
4960	10.43	34.01	41.03	35.14	38.55	54.00	-15.45	Horizontal
7440	12.72	35.91	40.01	35.11	43.73	54.00	-10.27	Horizontal
9920	14.24	37.23	37.78	29.89	43.58	54.00	-10.42	Horizontal
12400	17.55	39.04	39.48	26.47	43.58	54.00	-10.42	Horizontal

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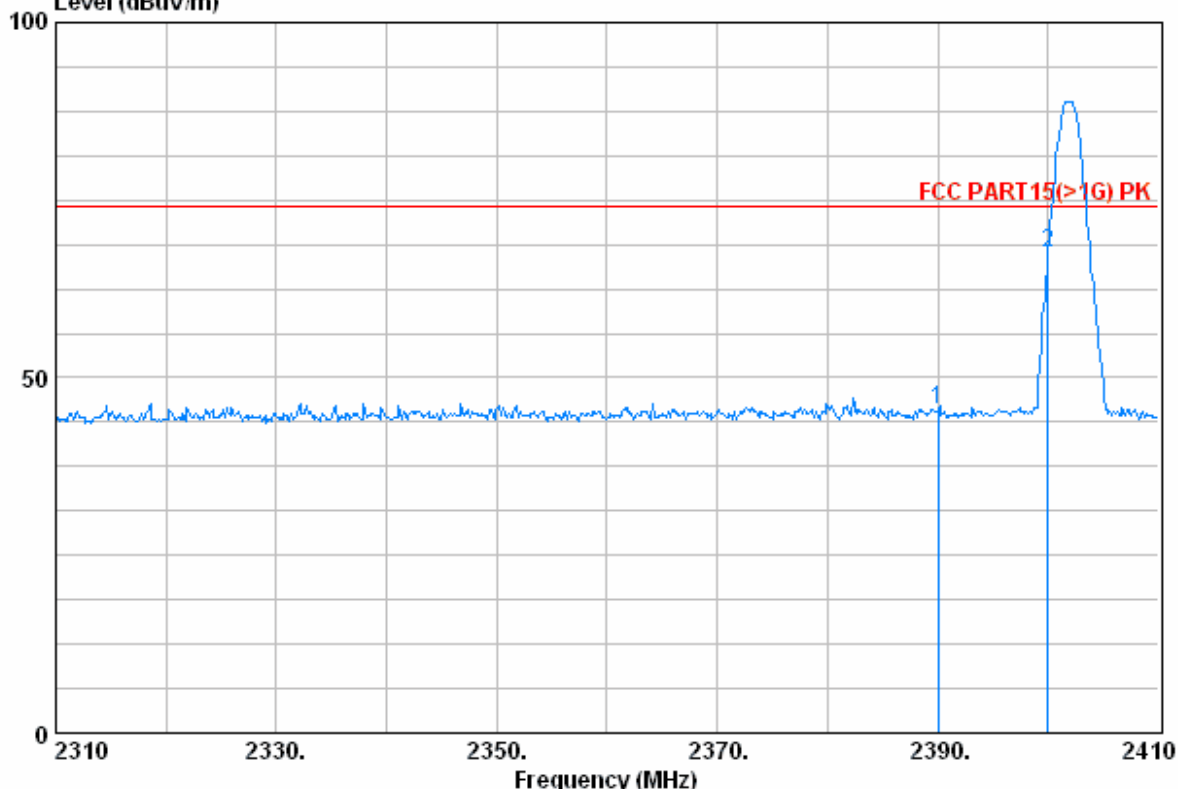
### 5.2.3 Band edge (Radiated Emission)

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

Data: 5

Level (dBuV/m)

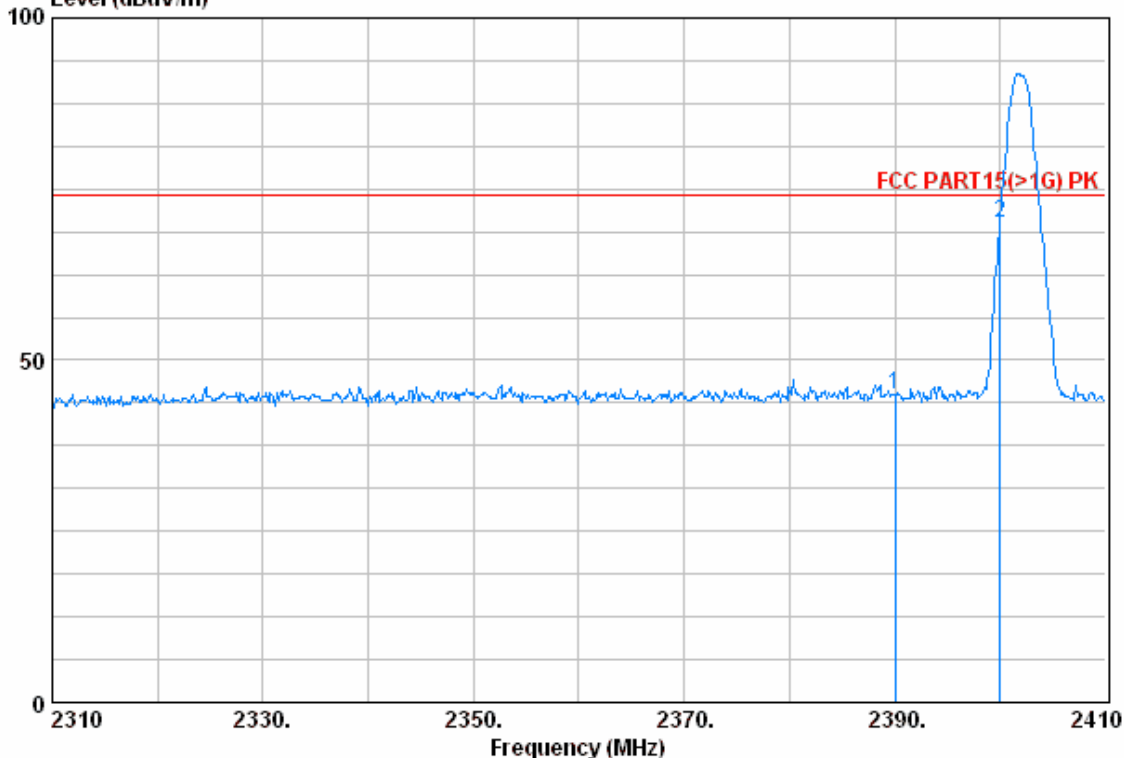


		CableAntenna Preamp			Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	32.24	39.03	46.03	45.52	74.00	-28.48
2	2400.000	6.34	32.25	38.87	67.95	67.66	74.00	-6.34

Horizontal:

Data: 6

Level (dBuV/m)



	Freq	Cable 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	2390.000	6.28	32.24	39.03	45.51	45.00	74.00	-29.00
2	2400.000	6.34	32.25	38.87	70.28	70.00	74.00	-4.00



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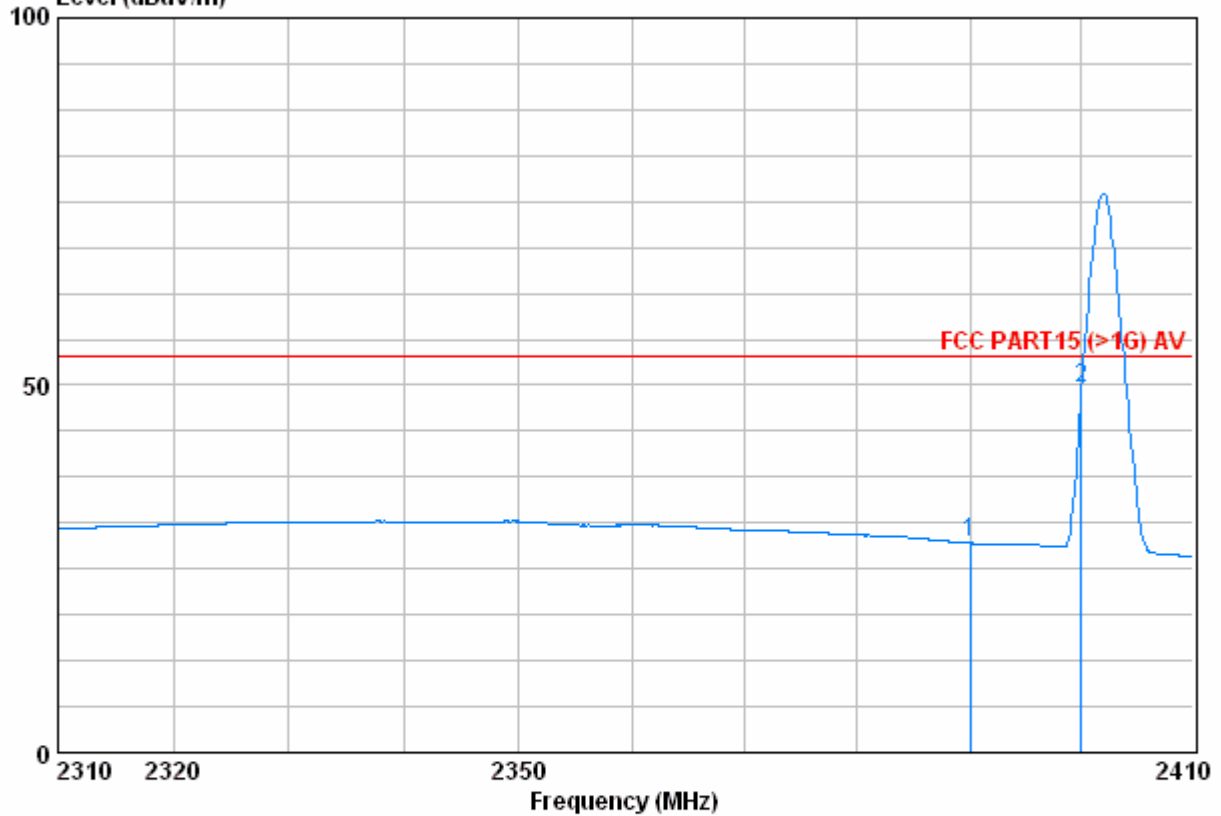
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Test mode:	Transmitting	Test channel:	Lowest	Remark:	Average
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Vertical:

Data: 20

Level (dBuV/m)



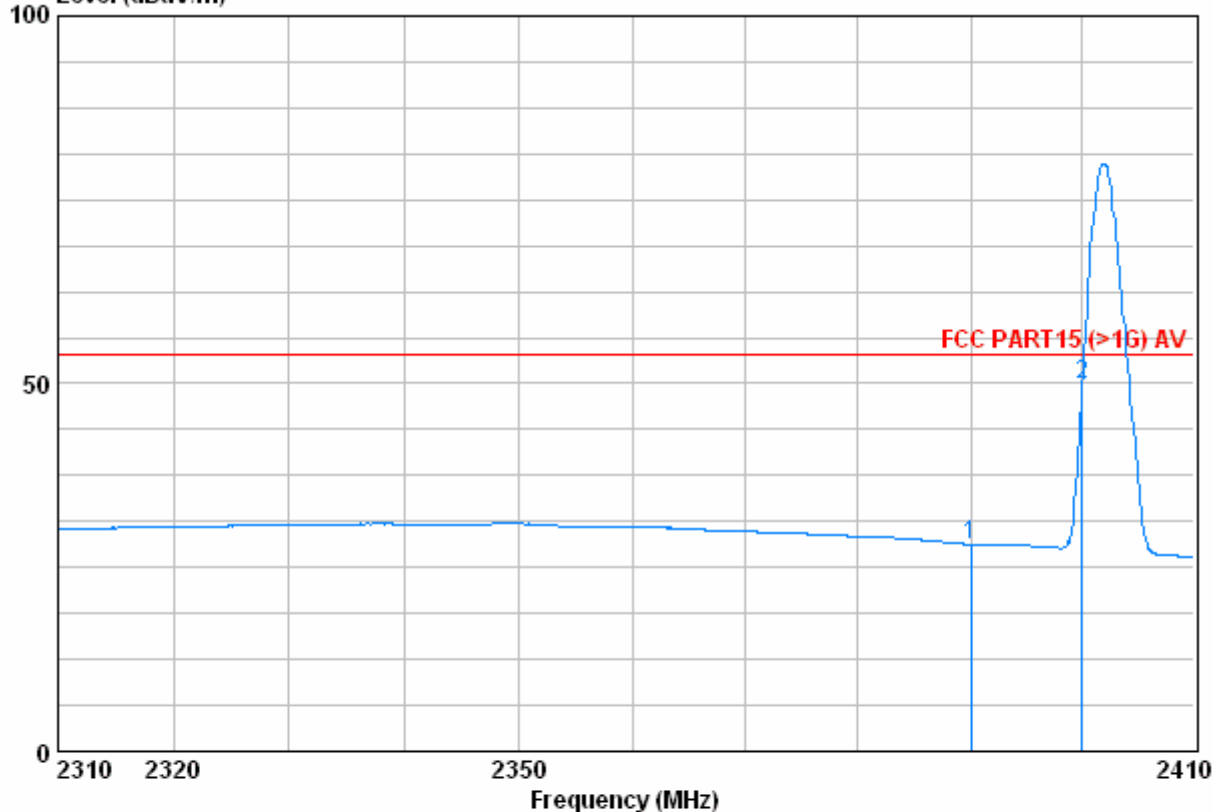
	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	32.24	39.03	29.01	28.50	54.00	-25.50
2	2400.000	6.34	32.25	38.87	49.82	49.54	54.00	-4.46

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Horizontal:

Data: 21

Level (dBuV/m)



		Cable	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.000	6.28	32.24	39.03	28.65	28.14	54.00	-25.86
2 @	2400.000	6.34	32.25	38.87	50.12	49.83	54.00	-4.17



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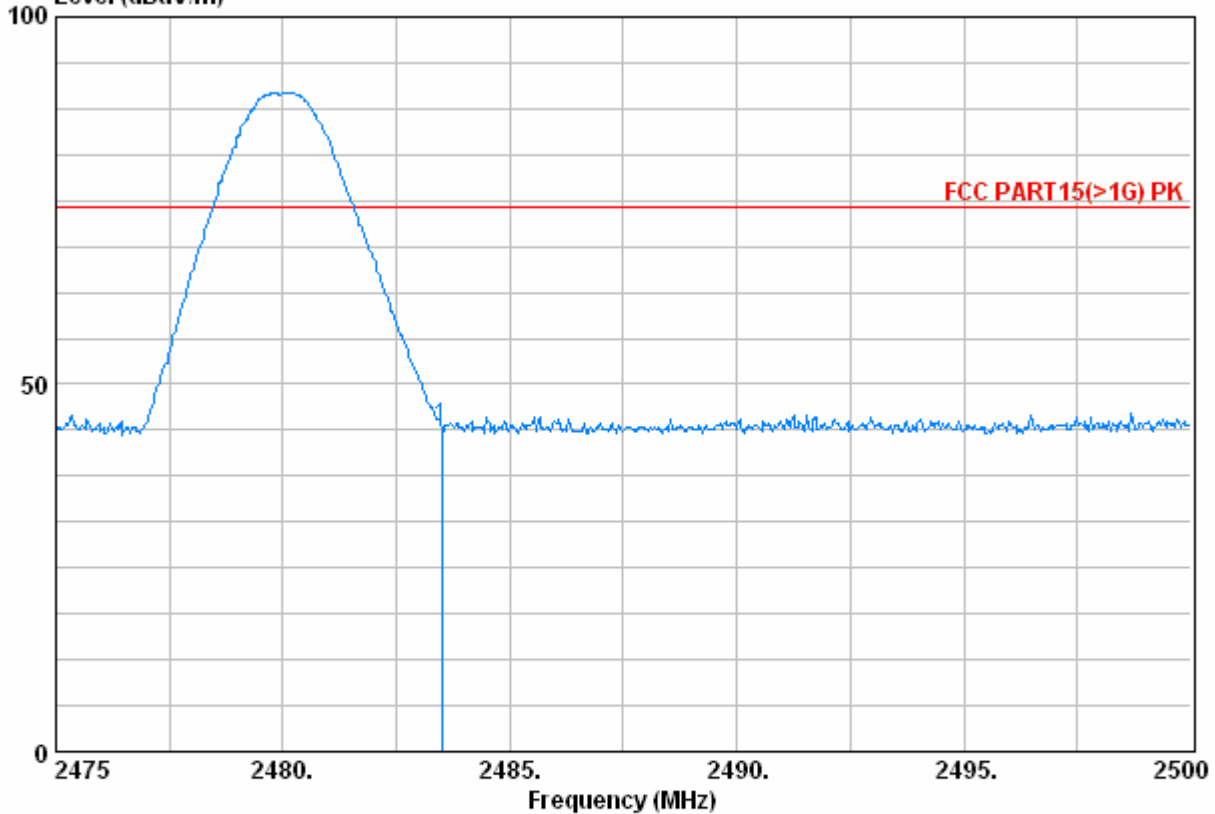
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Test mode:	Transmitting	Test channel:	Highest	Remark:	Peak
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Vertical:

Data: 16

Level (dBuV/m)



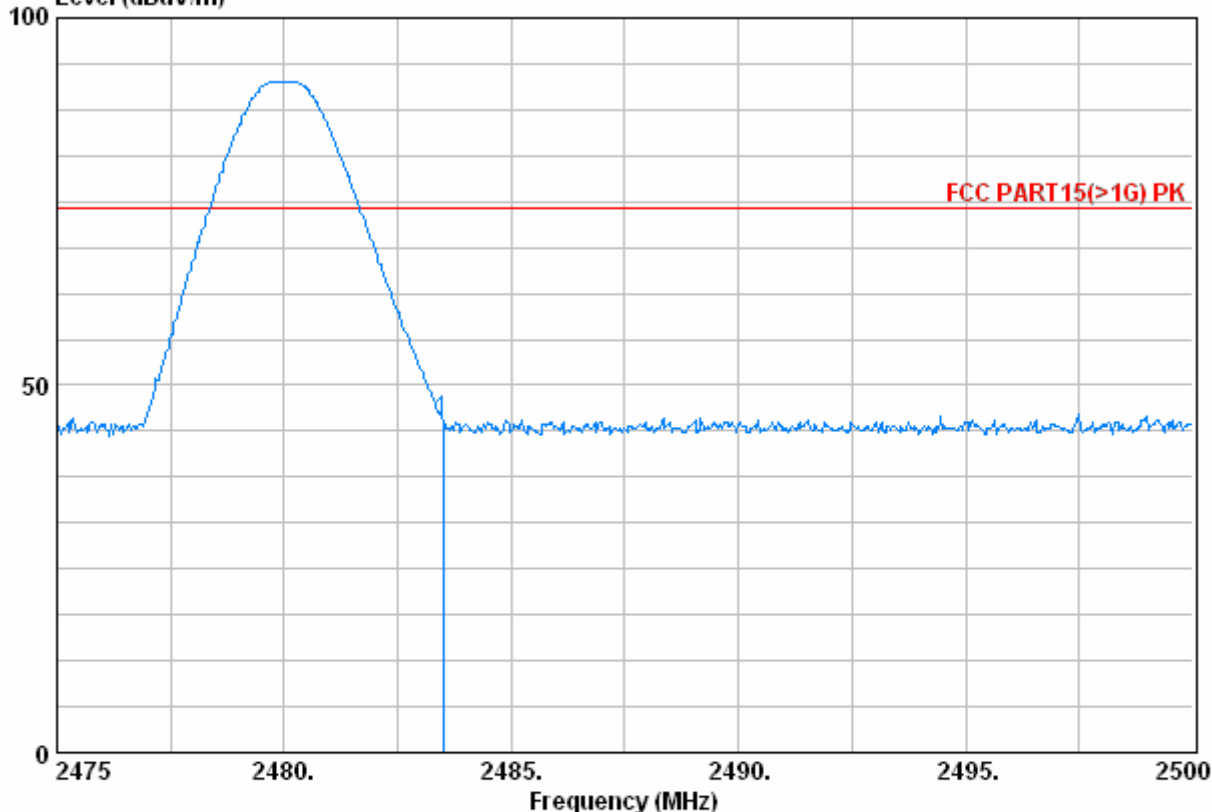
	Cable	Antenna	Preamp	Read		Limit	Over
Freq	Loss	Factor	Factor	Level	Level	Line	Limit
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 @	2483.500	6.22	32.29	39.53	45.10	44.08	74.00 -29.92

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Horizontal:

Data: 15

Level (dBuV/m)



	Cable	Antenna	Preamp	Read	Limit	Over
Freq	Loss	Factor	Factor	Level	Level	Limit
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m
1 @ 2483.500	6.22	32.29	39.53	46.21	45.19	74.00
						-28.81



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Report No.: SZEMO10040161301

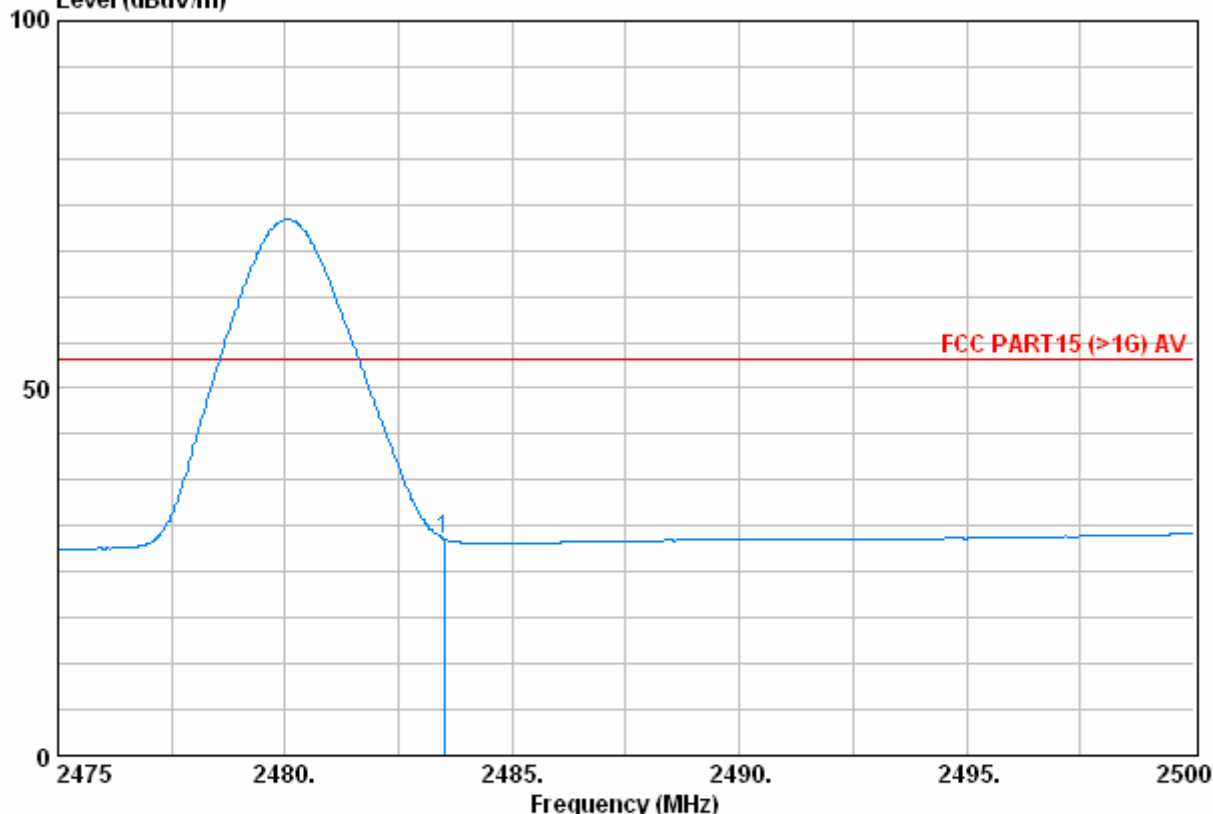
Page: 23 of 27

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

Data: 23

Level (dBuV/m)



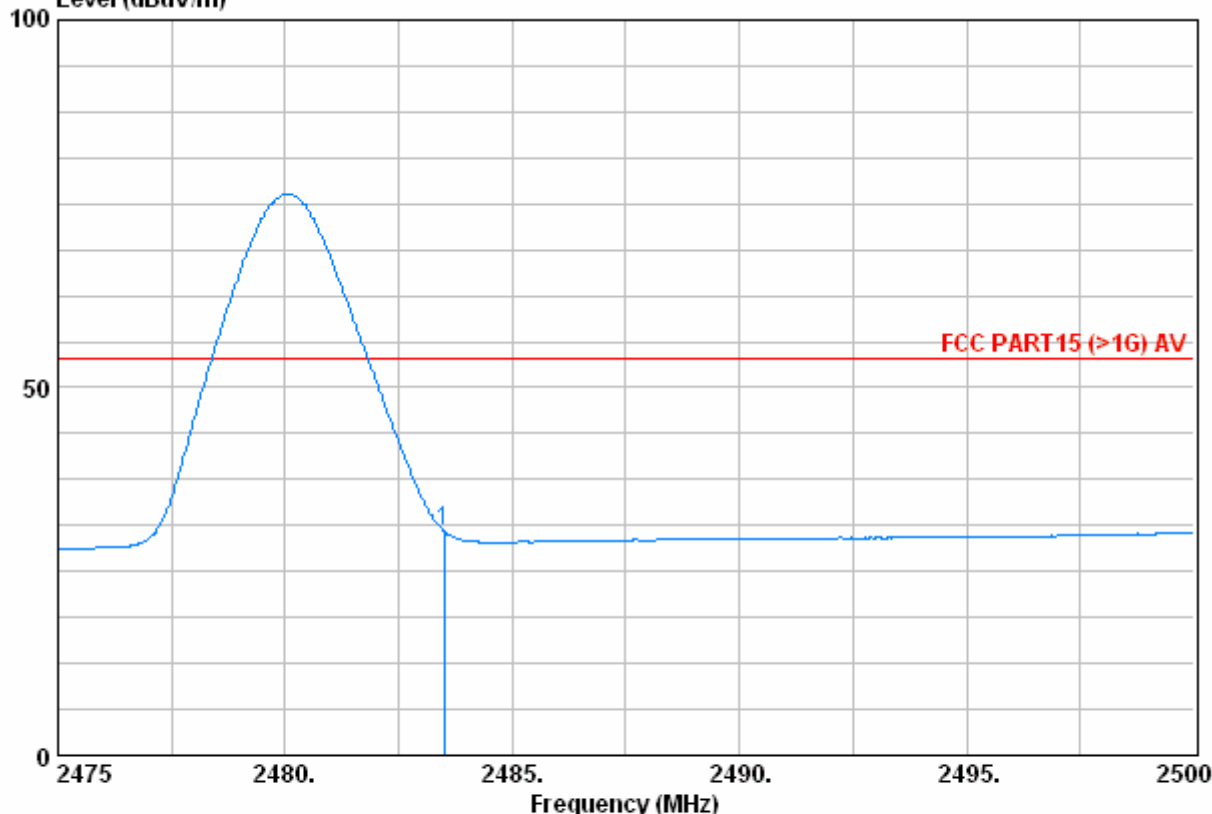
	Cable	Antenna	Preamplifier	Read	Limit	Over
Freq	Loss	Factor	Factor	Level	Line	Limit
MHz	dB	dB/m	dB	dBuV	dBuV/m	dB
1 @ 2483.500	6.22	32.29	39.53	30.53	29.51	54.00 -24.49

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Horizontal:

Data: 22

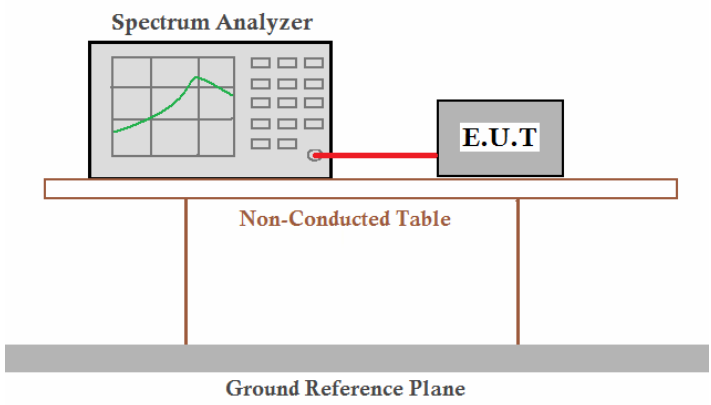
Level (dBuV/m)



		CableAntenna Preamp			Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 0	2483.500	6.22	32.29	39.53	31.53	30.51	54.00	-23.49



### 5.3 20dB Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Limit:	Operation Frequency range 2400MHz-2483.5MHz
Test Procedure:	<ol style="list-style-type: none"> <li>1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT.</li> <li>2. Set the EUT to proper test channel.</li> <li>3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points.</li> <li>4. Read 20dB bandwidth.</li> </ol>
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Electronic Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by two vertical legs and sits on a Ground Reference Plane, which is represented by a thick grey bar at the bottom.</p>
Test Instruments:	Refer to section 4.7 for details
Test mode:	Transmitting mode
Test results:	Passed

### Measurement Data

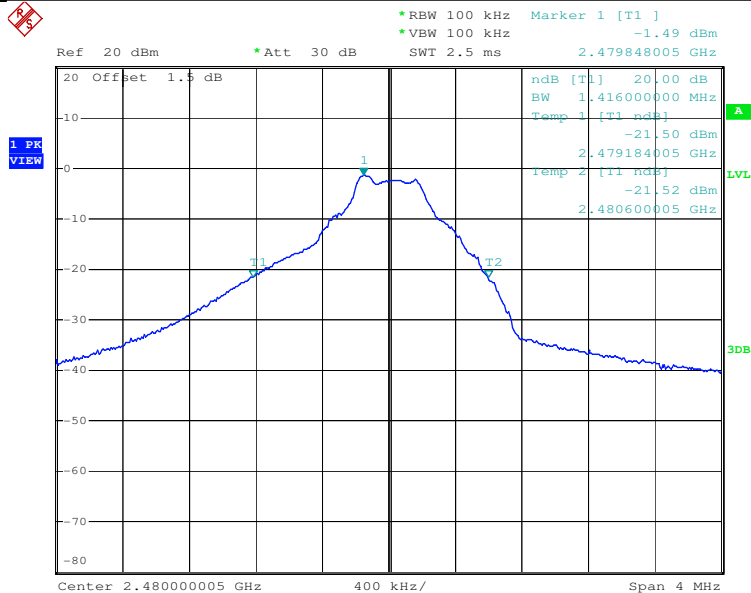
Test channel	20dB bandwidth (KHz)	Results
Lowest	1256	Passed
Middle	1344	Passed
Highest	1416	Passed

Test plot as follows:

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Test channel:	Highest
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Date: 13.APR.2010 09:58:32