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**FEDERAL COMMUNICATIONS COMMISSION**  
Registration number: 282399

Report No.: SZEMO071203569RFF  
Page: 1 of 33  
FCC ID: VUY1048P

# TEST REPORT

**Application No. :** SZEMO071203569RF  
**Applicant:** Vocentrix(HK)Limited  
**FCC ID:** VUY1048P  
**Fundamental Carrier** 2.400GHz to 2.4835GHz  
**Frequency :**

**Equipment Under Test (EUT):**

**Name:** Baby monitor  
**Model:** 08280

**Standards:** FCC PART 15, SUBPART C : 2007 ( Section 15.247)

**Date of Receipt:** 10 December 2007

**Date of Test:** 11 December 2007

**Date of Issue:** 14 December 2007

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

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

Robinson Lo  
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. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.



## 2 Test Summary

The customer requested FCC tests for Baby monitor.			
Test	Test Requirement	Stanadard Paragraph	Result
Conducted Emission (150KHz to 30MHz)	FCC PART 15 : 2007	Section 15.207	PASS
Radiated Emission (30MHz to 25GHz)	FCC PART 15 : 2007	Section 15.209 Section 15:205	PASS
Maximum Peak Output Power	FCC PART 15 : 2007	Section 15.247 (b)	PASS
Occupied Bandwidth	FCC PART 15 : 2007	Section 15.247 (b)	PASS
Band Edges Measurement	FCC PART 15 : 2007	Section 15.247 (c)	PASS
Power Spectral Density Measurement	FCC PART 15 : 2007	Section 15.247 (d)	PASS

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## **4 General Information**

### **4.1 Client Information**

Applicant Name: Vocentrix(HK)Limited  
Applicant Address: Flat5-6,11/F,Harry Ind Bldg,49-51 Au Pui Wat St ,Fotain,Shatin,HK

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

Product Name: Baby monitor  
Model: 08280  
Power Supply: 100-240V AC(AC-DC DC OUTPUT 5V DC 1.0A)  
Power Cord: DC cord is 2m.

### **4.3 Description of Support Units**

None.

### **4.4 Standards Applicable for Testing**

The customer requested FCC tests for Baby monitor  
The standard used was FCC PART 15, SUBPART C (2007) section 15.247.

### **4.5 Test Location**

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory, No.198 Kezhu Road, Science Town Economic& Technology Development District Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

### **4.6 Other Information Requested by the Customer**

None.

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#### **4.7 Test Facility**

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

- **NVLAP – Lab Code: 200611-0**  
SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0. Effective through December 31, 2006.
- **ACA**  
SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.
- **VCCI**  
The 3m Semi-anechoic chamber and Shielded Room (11.5m x 4m x 4m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-1599 and C-1706 respectively.  
Date of Registration: June 01, 2005. Valid until February 22, 2008
- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FINKO**  
Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.
- **CNAL – LAB Code: L0141**  
SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of Testing Laboratories.
- **FCC – Registration No.: 282399**  
SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 282399, May 31, 2002. With the above and NVLAP, SGS-CSTC is an authorized test laboratory for the DoC process.
- **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.: 5169.

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## 5 Test Results

### 5.1 Test Instruments

Test Equipment	Manufacturer	Model	Asset No.	Cal. Due Date
3m Semi- Anechoic Chamber	Frankonia	3m method	EMC0501	15-02-2008
EMI Test Receiver	Rohde & Schwarz	ESCS30	EMC0506	15-02-2008
Bilog Type Antenna	Schaffner Chase	CBL6143	EMC0519	17-01-2008
Coaxial cable	SGS-CSTC	10m	EMC0514	04-11- 2008
Spectrum Analyzer	Rohde& Schwarz	FSP 30	EMC0521	01-04-2008
Horn Antenna	Rohde& Schwarz	HF906	EMC0517	01-04-2008
Temperature, Humidity & Barometer	Oregon Scientific	BA-888	EMC0003	24-07-2008
Peramplifier	Agilent	8449B	EMC0520	30-06-2008
Coaxial cable	SGS	N/A	EMC0514	01-06-2008
Shielding Room	Frankonia	12 x 4 x 4 m <sup>3</sup>	EMC0103	N/A
LISN	Schaffner Chase	MNZ050D11	1421	04-11-2008
EMI Test Receiver	Rohde& Schwarz	ESCS30	100086	09-12-2008
Coaxial Cable	SGS	2m	EMC0107	01-06-2008

### 5.2 E.U.T. Operation

Input voltage: Supplied 5V DC

Operating Environment:

Temperature: 24.0 °C

Humidity: 52 % RH

Atmospheric Pressure: 1008 mbar

EUT Operation: Test the EUT as a product which Direct Sequence Spread Spectrum

. The total channels are 13 channels (1 to 13 channels), the fundamental frequencies are from 2.410GHz to 2.470GHz.

The test procedure provided by applicant enabled the EUT to transmit and receive data at lowest (**Channel 1: 2.410GHz**), middle (**Channel 7: 2.440GHz**), and highest channel (**Channel 13: 2.470GHz**), frequencies individually.

Pre-test all the frequencies mode and their power status, compliance test in the worse case: Channel 13, Channel 7, Channel 1.

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### 5.3 Test Result

#### 5.3.1 Conducted Emissions Mains Terminals, 150kHz to 30MHz

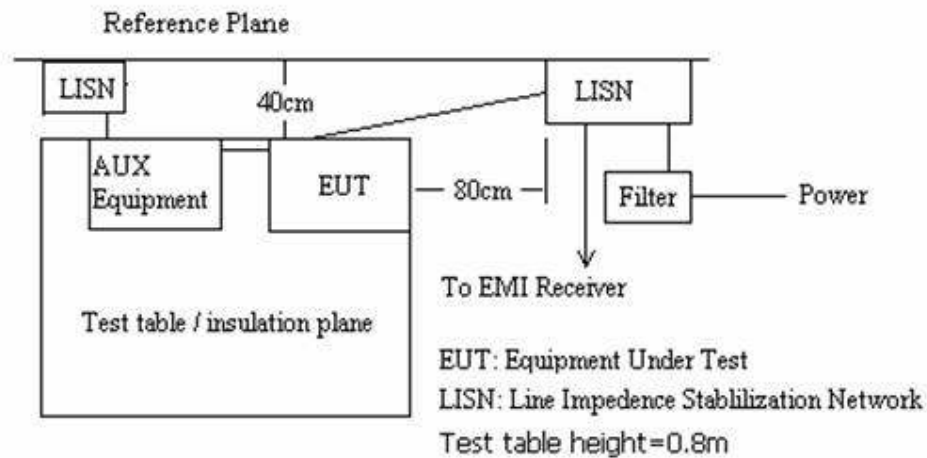
Test Requirement: FCC Part15 B  
Test Method: ANSI C63.4  
Test Date: 2007-12-05  
Frequency Range: 150KHz to 30MHz  
Class / Severity: Class B  
Detector: Peak for pre-scan (9kHz Resolution Bandwidth)  
Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

Operating Environment:

Temperature: 26.0 °C Humidity: 73 % RH Atmospheric Pressure: 1005 mbar

EUT Operation: Test the EUT in On Mode.

#### Plan View of Test Setup



#### 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.

The following Quasi-Peak and Average measurements were performed on the EUT on 2007-12-05

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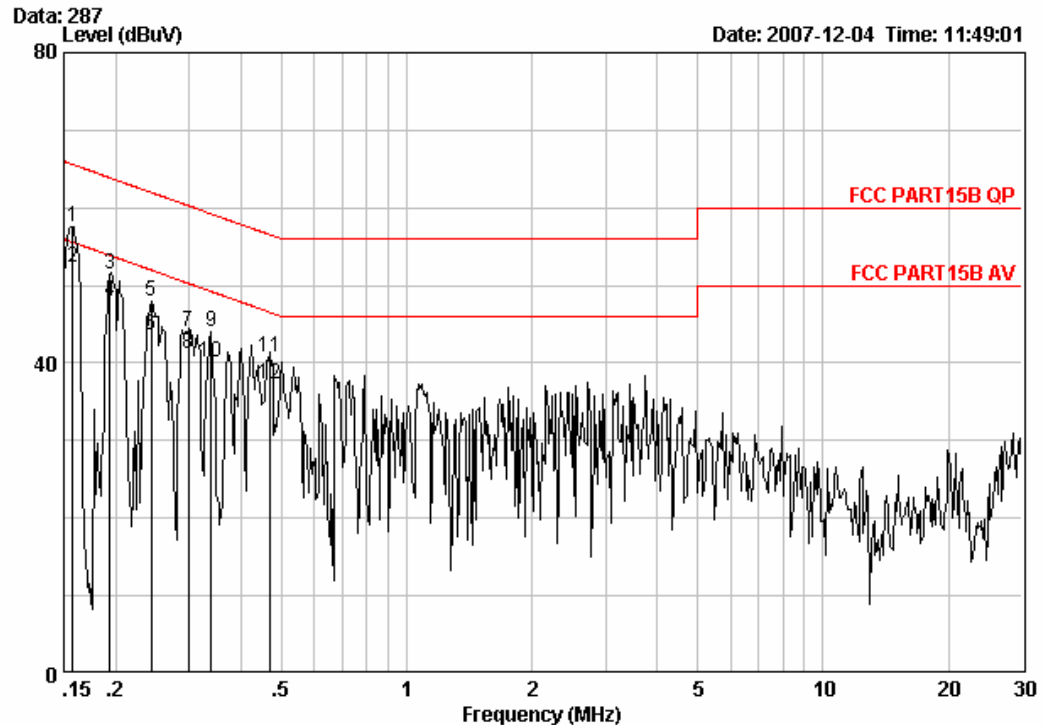
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Quasi-peak and Average measurement:

Live Line:

Peak Scan:



Site : Shielding Room  
Condition : FCC PART15B QP CE LINE  
EUT :

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15733	-0.02	-0.05	57.63	57.56	65.60	-8.04	QP
2 @	0.15733	-0.02	-0.05	52.44	52.37	55.60	-3.23	Average
3	0.19344	-0.09	-0.05	51.56	51.43	63.89	-12.46	QP
4	0.19344	-0.09	-0.05	48.17	48.03	53.89	-5.85	Average
5	0.24293	-0.05	-0.04	48.14	48.04	62.00	-13.95	QP
6	0.24293	-0.05	-0.04	43.66	43.56	52.00	-8.43	Average
7	0.29869	0.00	-0.04	44.03	43.98	60.28	-16.30	QP
8	0.29869	0.00	-0.04	41.16	41.11	50.28	-9.16	Average
9	0.33920	0.00	-0.04	44.17	44.12	59.22	-15.10	QP
10	0.33920	0.00	-0.04	40.22	40.18	49.22	-9.05	Average
11	0.47110	0.00	-0.04	40.77	40.73	56.49	-15.77	QP
12	0.47110	0.00	-0.04	37.42	37.38	46.49	-9.12	Average

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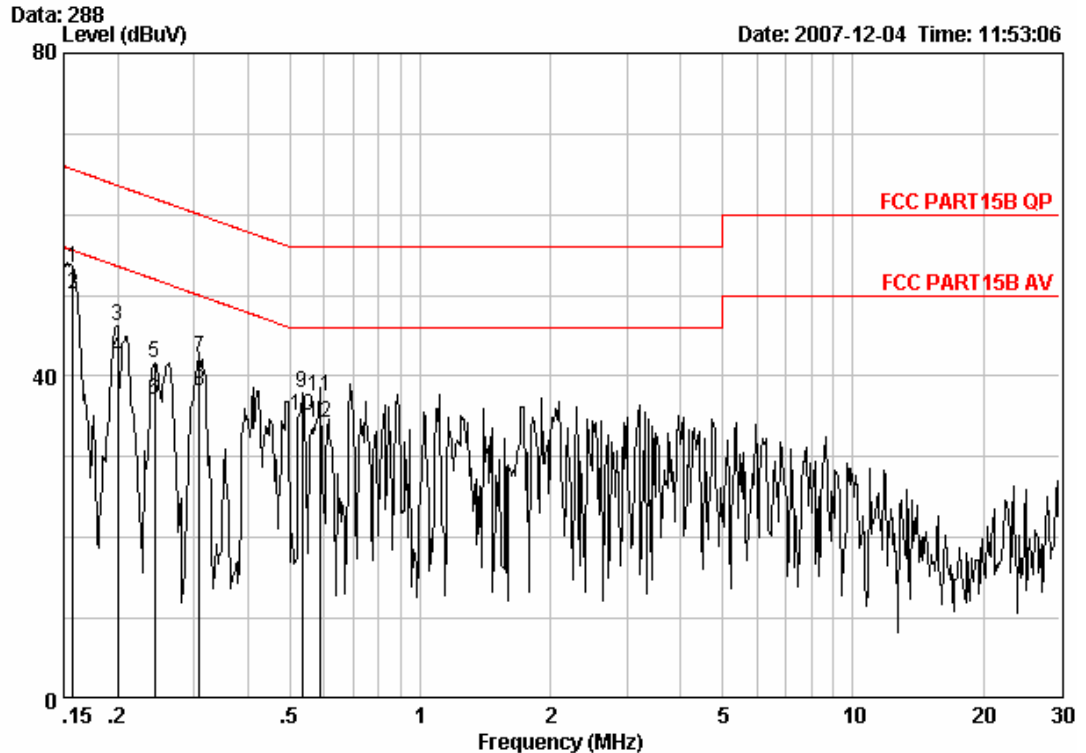
# SGS-CSTC Standards Technical Services Co., Ltd.

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Quasi-peak and Average measurement:  
Neutral Line

Peak Scan:



Site : Shielding Room  
Condition : FCC PART15B QP CE NEUTRAL  
EUT :

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15733	-0.02	-0.05	53.42	53.36	65.60	-12.24	QP
2	0.15733	-0.02	-0.05	50.11	50.05	55.60	-5.56	Average
3	0.19969	-0.10	-0.04	46.38	46.24	63.62	-17.39	QP
4	0.19969	-0.10	-0.04	42.53	42.39	53.62	-11.23	Average
5	0.24293	-0.05	-0.04	41.74	41.65	62.00	-20.35	QP
6	0.24293	-0.05	-0.04	37.17	37.08	52.00	-14.92	Average
7	0.30834	0.00	-0.04	42.34	42.30	60.02	-17.71	QP
8	0.30834	0.00	-0.04	38.17	38.13	50.02	-11.88	Average
9	0.53215	0.00	-0.04	37.98	37.94	56.00	-18.06	QP
10	0.53215	0.00	-0.04	35.15	35.11	46.00	-10.89	Average
11	0.58540	0.00	-0.04	37.47	37.42	56.00	-18.58	QP
12	0.58540	0.00	-0.04	34.18	34.14	46.00	-11.86	Average

Quasi-peak and Average measurement

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### 5.3.2 Radiated Emissions

Test Requirement: FCC 15.209

Test Method: ANSI C63.4 section 8 & 13

Test Date: 2007-12-05

Measurement Distance: 3m (Semi-Anechoic Chamber)

Frequency range 30 MHz – 25GHz for transmitting mode.

The EUT was setup to ANSI C63.4,2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Spectrum: 30 MHz - 1000 MHz: RBW=120KHz, VBW=300KHz

above 1GHz Peak RBW=1MHz, VBW=3MHz

Average: RBW=1MHz, VBW=10Hz

Receive antenna scan height 1 m - 4 m, polarization Vertical / Horizontal

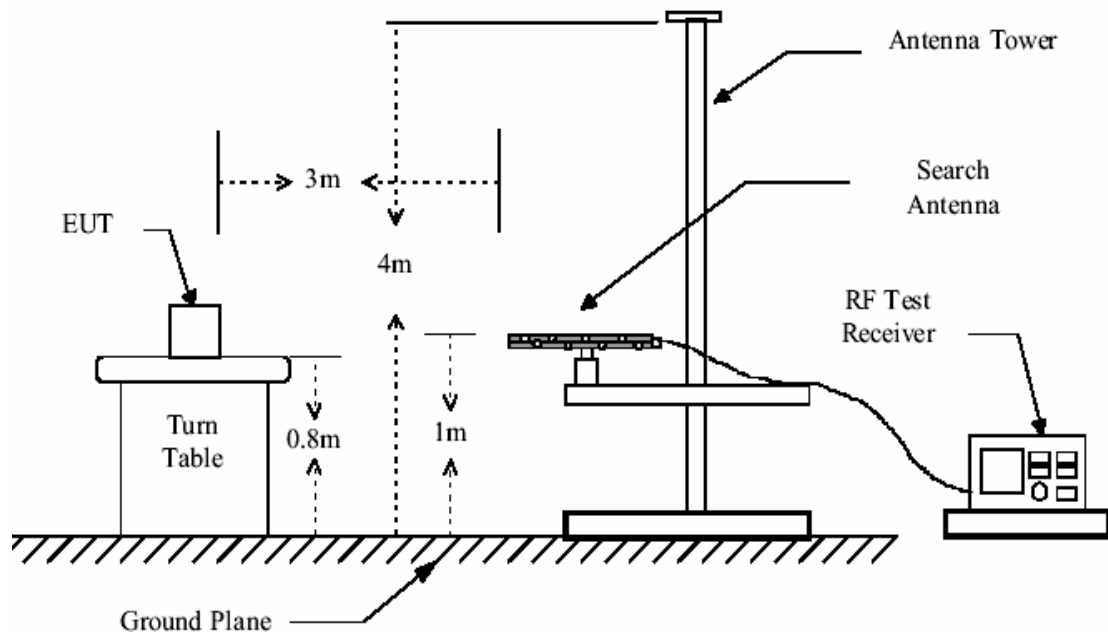
Limit: 40.0 dB $\mu$ V/m between 30MHz & 88MHz

43.5 dB $\mu$ V/m between 88MHz & 216MHz

46.0 dB $\mu$ V/m between 216MHz & 960MHz

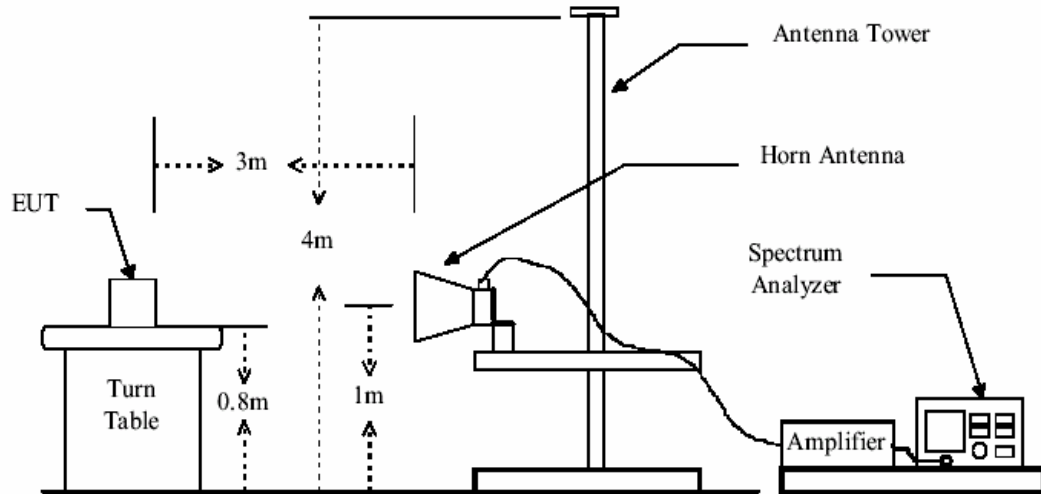
54.0 dB $\mu$ V/m above 960MHz

#### Test Configuration:



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**Test Procedure:** The procedure used was ANSI Standard C63.4-2003. The receiver was scanned from 30MHz to 25GHz. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.

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

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Peramplifier Factor

The following test results were performed on the EUT



### 5.3.3 Harmonics Emissions

Test mode: **perform the test in transmitting status:**

**Test in Channel 1**

Harmonics & Spurious Emissions

Test Frequency (GHz)	Peak Measurement				
	Measuring Level (dBuV/m)		Limits (dBuV/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
2.410	107.3	104.2			
4.820	50.8	51.2	74.0	23.2	22.8
7.230	52.6	50.7	74.0	21.4	23.3
9.640	N/A	N/A	74.0	N/A	N/A
12.050	N/A	N/A	74.0	N/A	N/A
14.460	N/A	N/A	74.0	N/A	N/A
16.870	N/A	N/A	74.0	N/A	N/A
19.280	N/A	N/A	74.0	N/A	N/A
21.690	N/A	N/A	74.0	N/A	N/A
24.100	N/A	N/A	74.0	N/A	N/A
Average Measurement					
2.410	103.6	100.4			
4.820	43.7	44.1	54.0	10.3	9.9
7.230	45.3	44.2	54.0	8.7	9.8
9.640	N/A	N/A	54.0	N/A	N/A
12.050	N/A	N/A	54.0	N/A	N/A
14.460	N/A	N/A	54.0	N/A	N/A
16.870	N/A	N/A	54.0	N/A	N/A
19.280	N/A	N/A	54.0	N/A	N/A
21.690	N/A	N/A	54.0	N/A	N/A
24.100	N/A	N/A	54.0	N/A	N/A

N/A: refer to remark 1).

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Test mode: **perform the test in transmitting status :**

**Test the racing wheel in Channel 7.**

Harmonics & Spurious Emissions:

Peak Measurement					
Test Frequency (GHz)	Measuring Level (dBuV/m)		Limits (dBuV/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
2.440	106.1	107.2			
4.880	51.8	52.0	74.0	22.2	22.0
7.320	50.6	49.8	74.0	23.4	24.2
9.760	N/A	N/A	74.0	N/A	N/A
12.200	N/A	N/A	74.0	N/A	N/A
14.640	N/A	N/A	74.0	N/A	N/A
17.080	N/A	N/A	74.0	N/A	N/A
19.520	N/A	N/A	74.0	N/A	N/A
21.960	N/A	N/A	74.0	N/A	N/A
24.400	N/A	N/A	74.0	N/A	N/A
Average Measurement					
2.440	102.9	99.3			
4.880	43.2	42.9	54.0	10.8	12.1
7.320	42.6	43.1	54.0	11.4	10.9
9.760	N/A	N/A	54.0	N/A	N/A
12.200	N/A	N/A	54.0	N/A	N/A
14.640	N/A	N/A	54.0	N/A	N/A
17.080	N/A	N/A	54.0	N/A	N/A
19.520	N/A	N/A	54.0	N/A	N/A
21.960	N/A	N/A	54.0	N/A	N/A
24.400	N/A	N/A	54.0	N/A	N/A

N/A: refer to remark 1).

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Test mode: **perform the test in transmitting status :**

**Test in Channel 13.**

Harmonics & Spurious Emissions:

Peak Measurement					
Test Frequency (GHz)	Measuring Level (dBuV/m)		Limits (dBuV/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
2.470	105.4	100.8			
4.940	51.7	53.2	74.0	22.3	20.8
7.410	50.6	54.7	74.0	23.4	19.3
9.880	N/A	N/A	74.0	N/A	N/A
12.350	N/A	N/A	74.0	N/A	N/A
14.820	N/A	N/A	74.0	N/A	N/A
17.290	N/A	N/A	74.0	N/A	N/A
19.760	N/A	N/A	74.0	N/A	N/A
22.230	N/A	N/A	74.0	N/A	N/A
24.700	N/A	N/A	74.0	N/A	N/A
Average Measurement					
2.470	102.5	99.1			
4.940	43.7	45.5	54.0	10.3	8.5
7.410	43.0	44.9	54.0	11.0	9.1
9.880	N/A	N/A	54.0	N/A	N/A
12.350	N/A	N/A	54.0	N/A	N/A
14.820	N/A	N/A	54.0	N/A	N/A
17.290	N/A	N/A	54.0	N/A	N/A
19.760	N/A	N/A	54.0	N/A	N/A
22.230	N/A	N/A	54.0	N/A	N/A
24.700	N/A	N/A	54.0	N/A	N/A

N/A: refer to remark 1).

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**Remark:**

- 1). N/A: For this intentional radiator operates below 10 GHz, the spectrum shall be investigated to the tenth harmonic of the highest fundamental frequency. And above the fifth harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to 5<sup>th</sup> harmonic.
- 2). According to 15.247 (d) As shown in Section 15.35(b), for frequencies above 1000 MHz, the above field strength limits are based on average limits.
- 3). The test only perform the EUT in transmitting status since the test frequencies were over 1GHz only required transmitting status.

**TEST RESULTS:** The unit does meet the FCC requirements.

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#### 5.3.4 Other Emissions.

Test Requirement: FCC Part15 Section 15.209  
Test Method: Based on FCC Part15 B  
Measurement Distance: 3m  
Limit: 40.0 dB $\mu$ V/m between 30MHz & 88MHz  
43.5 dB $\mu$ V/m between 88MHz & 216MHz  
46.0 dB $\mu$ V/m between 216MHz & 960MHz  
54.0 dB $\mu$ V/m above 960MHz  
Procedure: The EUT was setup to ANSI C63.4,2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.  
Spectrum: 30 MHz - 1000 MHz: RBW=120KHz, VBW=300KHz  
above 1GHz Peak RBW=1MHz, VBW=3MHz  
Average: RBW=1MHz, VBW=10Hz  
Quasi-Peak if maximised peak within 6dB of limit

All the test modes( including with **transmitting mode and receiving mode**), the test data only was shown for the worsted case mode:

The following measurement result were performed on the EUT:

Frequency (Hz)	Antenna Polarization	Emission Level (dB $\mu$ V/m)	Limit dB $\mu$ V/m)	Margin (dB)
62.98	Vertical	10.98	40	29.02
94.02	Vertical	20.04	43.5	23.46
126.03	Vertical	29.50	43.5	14.0
325.85	Vertical	22.62	46	23.38
501.42	Vertical	32.17	46	13.83
37.76	Horizontal	11.64	40	27.36
163.86	Horizontal	14.72	43.5	28.78
211.39	Horizontal	21.22	43.5	22.28
372.41	Horizontal	16.47	46	29.53
570.29	Horizontal	21.11	46	24.89

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

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Peramlifer Factor

**TEST RESULTS: The unit does meet the FCC requirements**

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### 5.3.5 Maximum Peak Output Power

Test Requirement: FCC Part15 C

Test Method: Base on ANSI 63.4.

Test Date: 2007-12-5

Requirements: Regulation 15.247 (b) The Limit of Maximum Peak Output Power Measurement is 1W (30dBm).

Test mode: Compliance test in the worse case: Channel1, Channel 7, Channel 13.

Test Procedure: The EUT was setup to ANSI C63.4,2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.  
Used spectrum analyzer: set RBW=3MHz, VBW=3MHz:

#### Test Result:

Test Channel	Fundamental Frequency (GHz)	Output Power (dBm)	Limit (dBm)	PASS/FAIL
1	2.410	7.75	30.0	Pass
7	2.440	7.50	30.0	Pass
13	2.470	6.88	30.0	Pass

**Remark:** The manufacturer for the cable loss is 2 dB.

**TEST RESULTS:** The unit does meet the FCC requirements.

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### 5.3.6 Occupied Bandwidth

Test Requirement: FCC Part 15 C  
Test Method: Based on FCC Part15 C Section 15.247:  
Test Date: 2007-12-5  
Requirements: Regulation 15.247 (b) (2) Systems using digital modulation techniques may operate in the 2400 - 2483.5 MHz band. The minimum 6 dB bandwidth shall be at least 500 kHz.  
The EUT was setup to ANSI C63.4,2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Test Procedure: The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100KHz RBW and 300 KHz VBW. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test result:

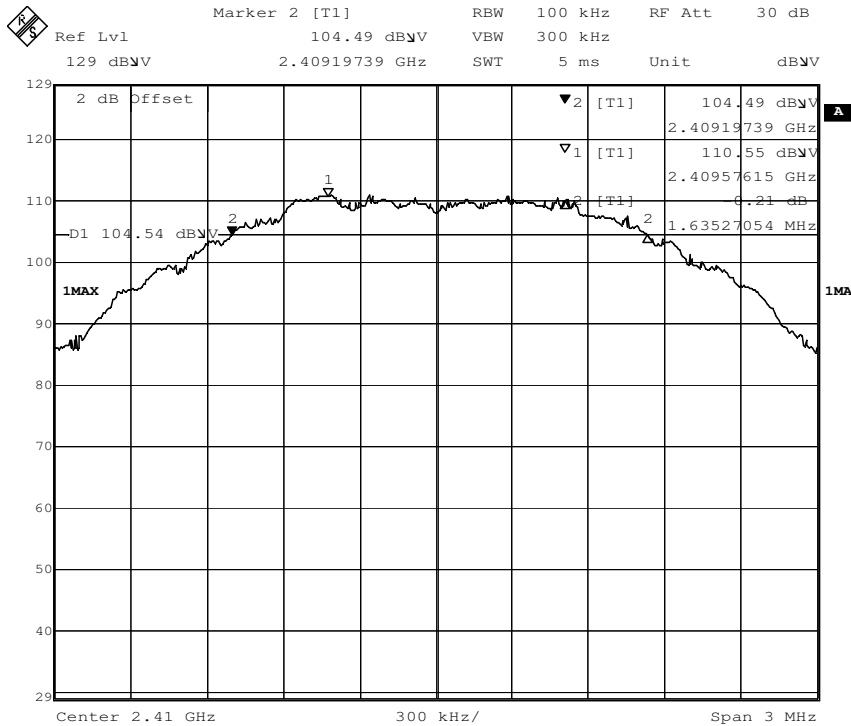
Test Channel	6 dB bandwidth(KHz)	LIMIT(KHz)	PASS/FAIL
1	1635	500	Pass
7	1617	500	Pass
13	1593	500	Pass

The unit does meet the FCC requirements. Please refer the graph as below:

#### 1. Channel 1: 6dB Bandwidth

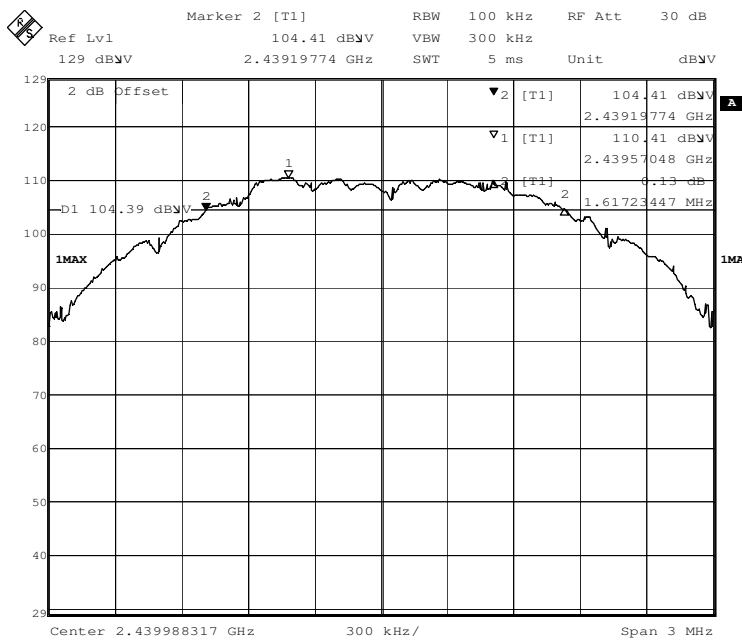
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Date: 5.DEC.2007 09:04:42

## 2. Channel 7: 6dB Bandwidth

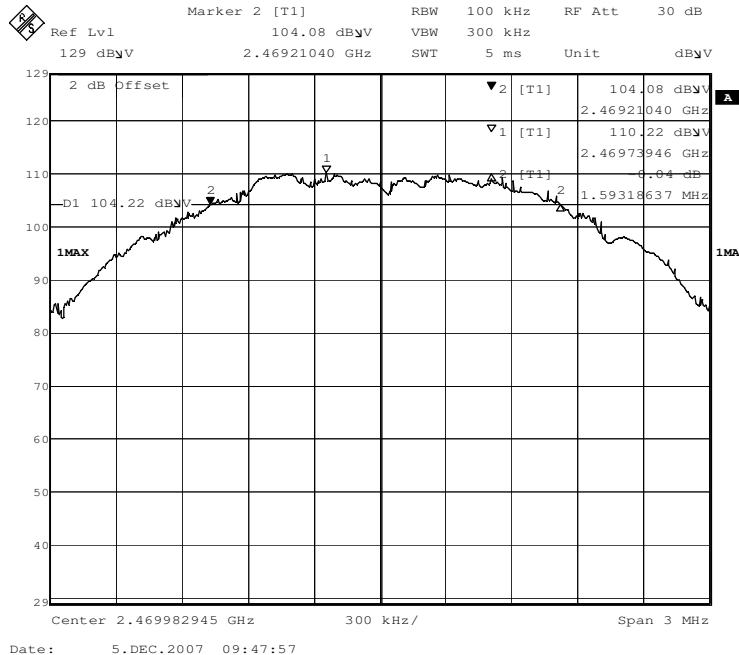


Date: 5.DEC.2007 09:28:52

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### 3. Channel 13: 6dB Bandwidth



The unit does meet the FCC requirements.

### 5.3.7 Band Edges Requirement

Test Requirement: FCC Part 15 C

Test Method: Based on FCC Part15 C Section 15.247:  
KDB Publication No. 558074 Public Notice DA 00-705 for DSS.  
Operation within the band 2400 – 2483.5 MHz

Test Date: 2007-12-5

Procedure: The EUT was setup to ANSI C63.4,2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.  
Spectrum: 30 MHz - 1000 MHz: RBW=120KHz, VBW=300KHz  
above 1GHz Peak RBW=100KHz, VBW=100KHz  
Average RBW=1MHz, VBW=10Hz

Requirements: Section 15.247 (d) 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

The graph as below, represents the emissions take for this device.

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NOTE 1: The band edge emission plot on page 21 shows 55.60dBc between carrier maximum power and local maximum emission in restrict band (2.390GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.3.3 is 107.3dBuV/m (Peak), so the maximum field strength in restrict band is  $107.3 - 55.60 = 51.70$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on page 22 shows 61.40dBc between carrier maximum power and local maximum emission in restrict band (2.3865GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.3.3 is 104.2dBuV/m (Average), so the maximum field strength in restrict band is  $104.2 - 61.40 = 42.80$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 26 shows 58.98dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 13 at the item 5.3.3 is 105.4dBuV/m (Peak), so the maximum field strength in restrict band is  $105.4 - 58.98 = 46.42$ dBuV/m which is under 74dBuV/m limit.

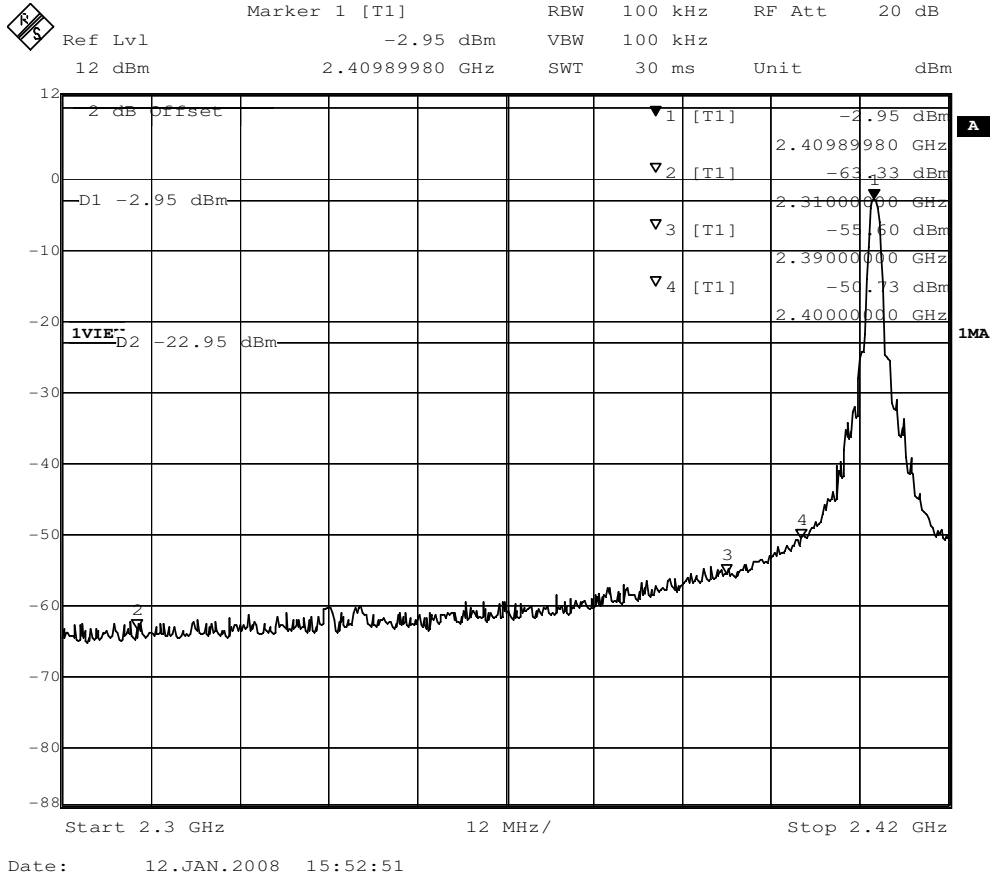
The band edge emission plot on page 27 shows 66.37dBc between carrier maximum power and local maximum emission in restrict band (2.4900GHz). The emission of carrier strength list in the test result of channel 13 at the item 5.3.3 is 102.5dBuV/m (Average), so the maximum field strength in restrict band is  $102.5 - 66.37 = 36.13$ dBuV/m which is under 54dBuV/m limit.



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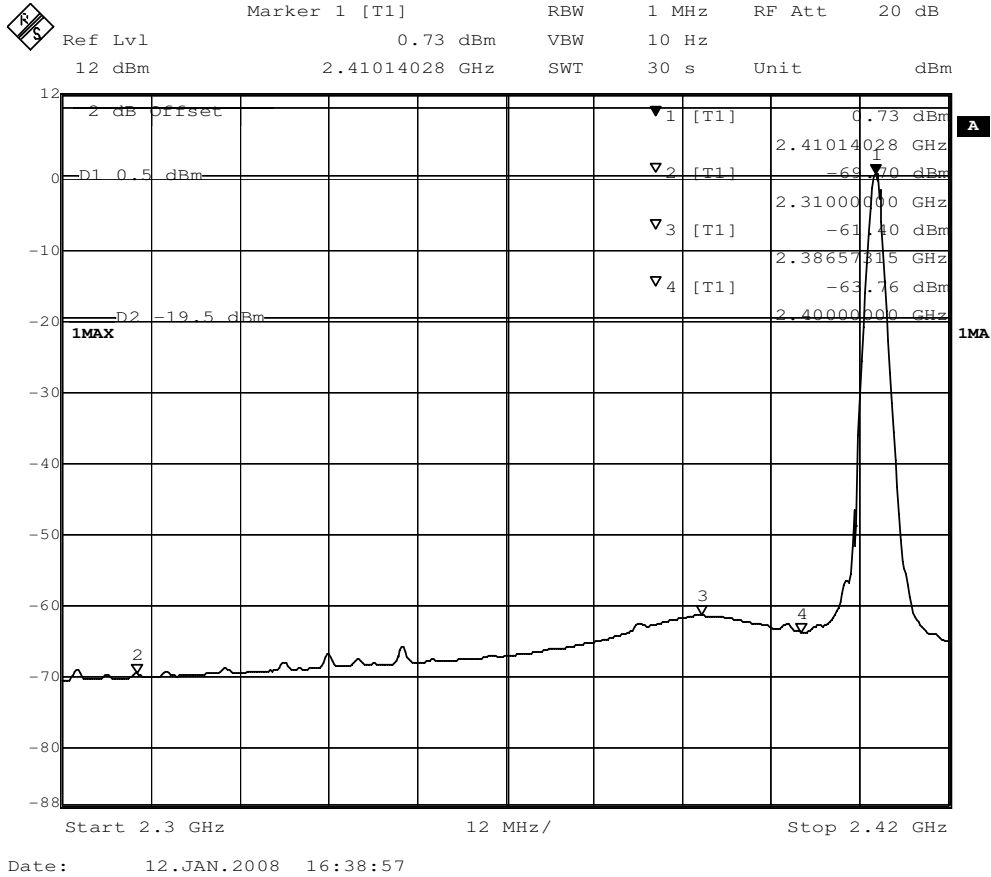
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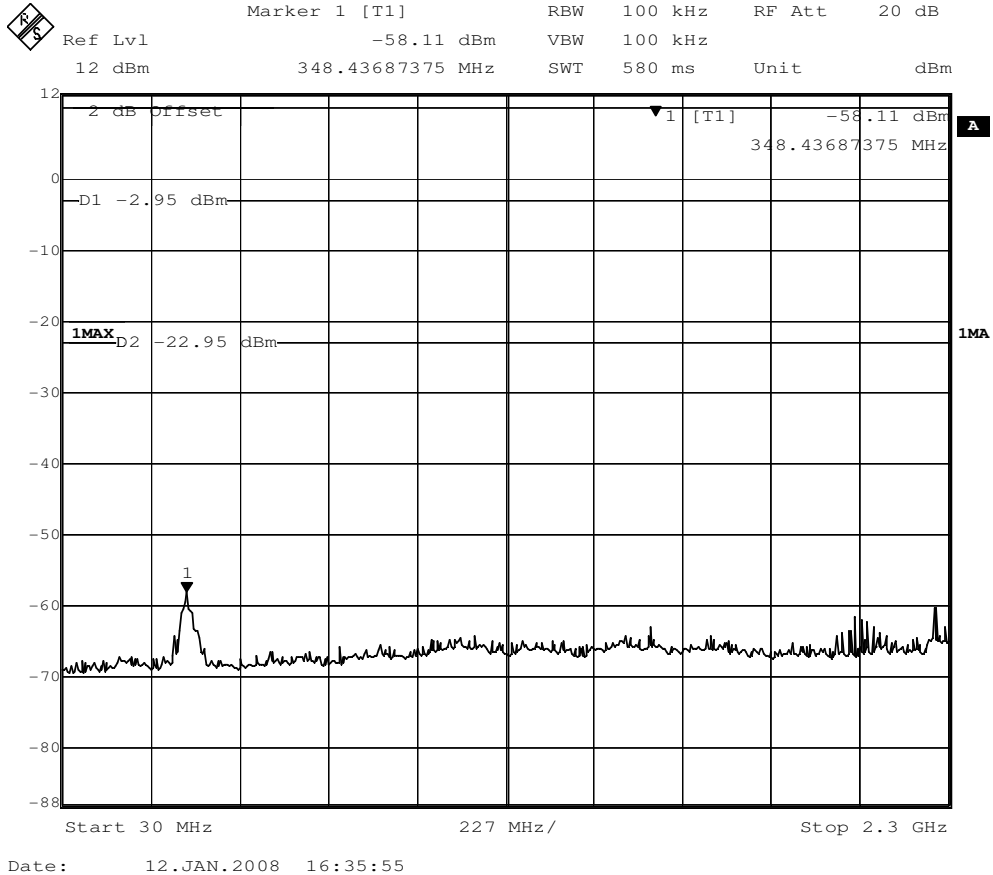
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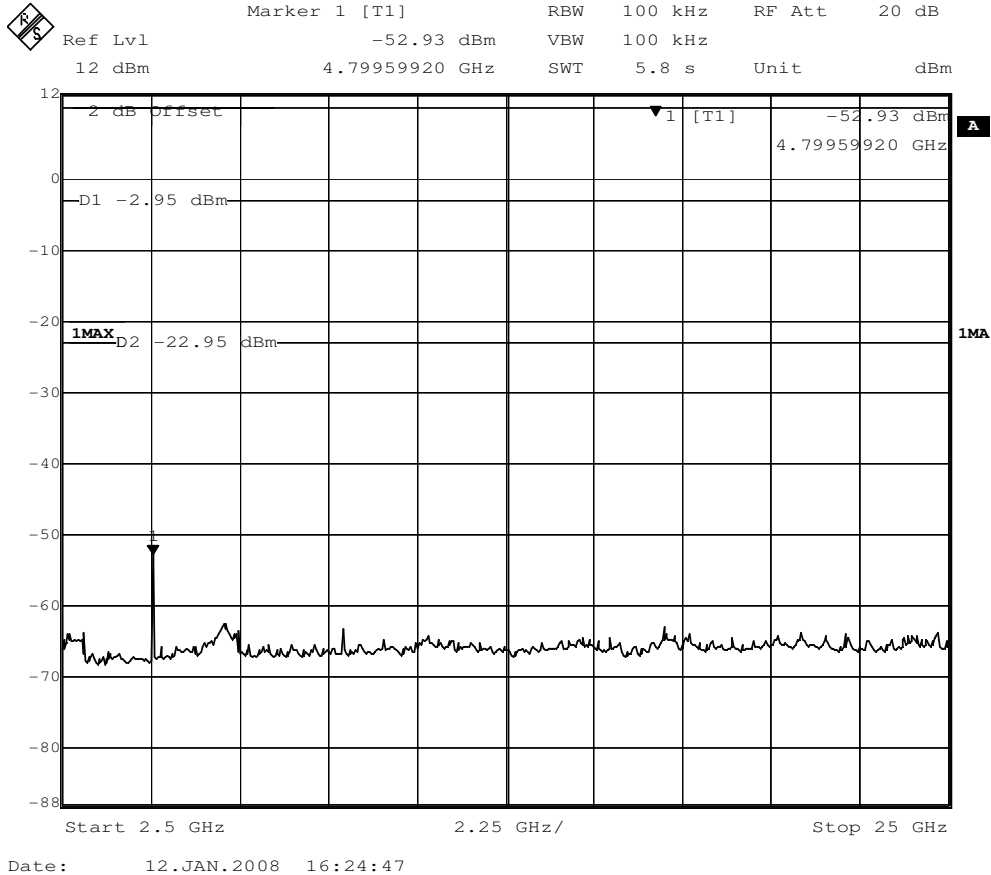
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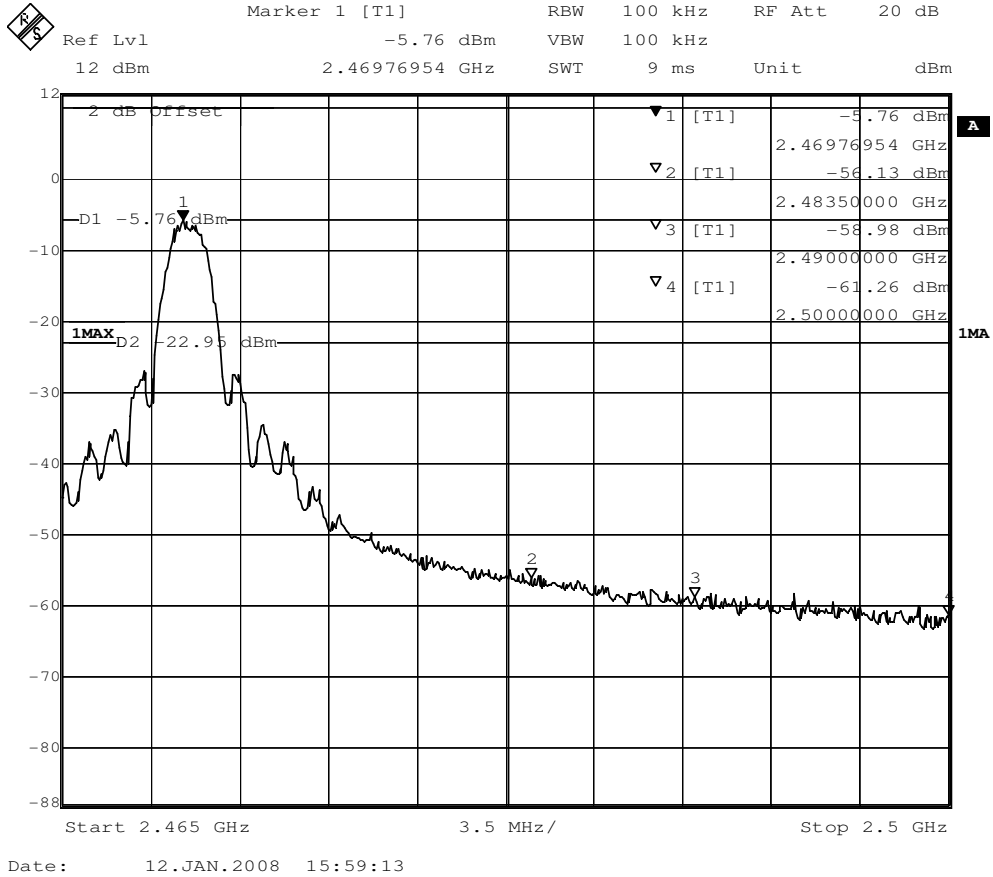
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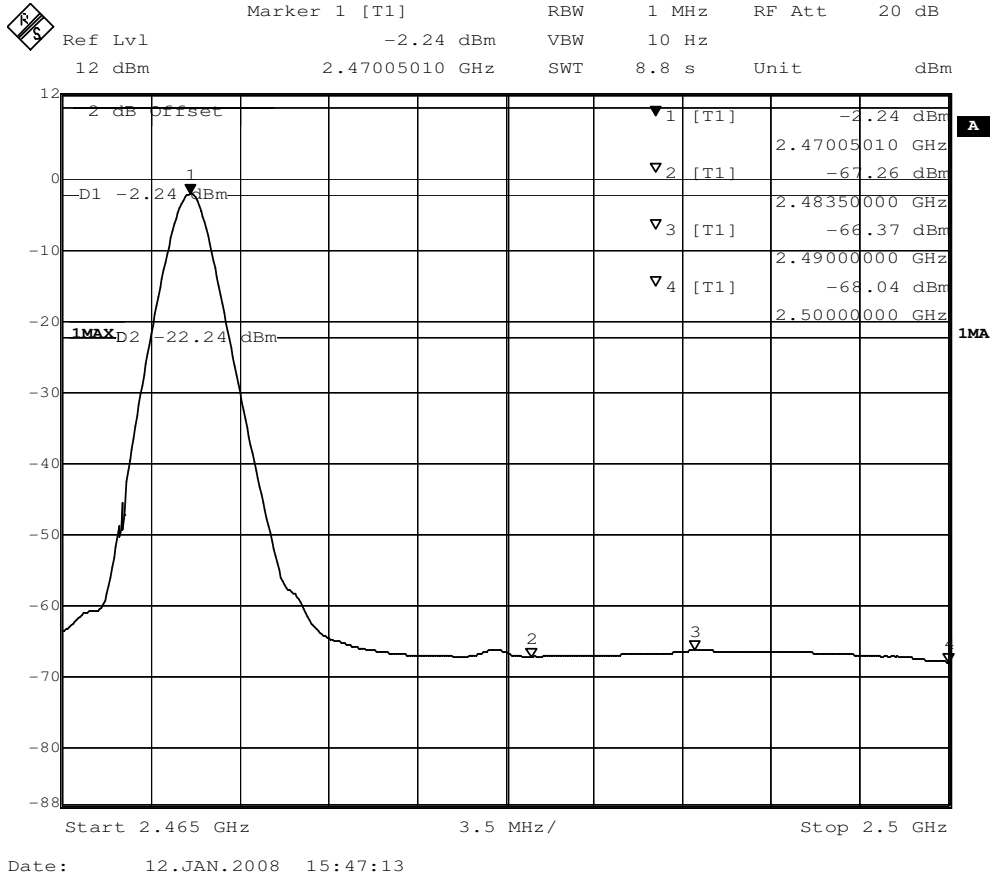
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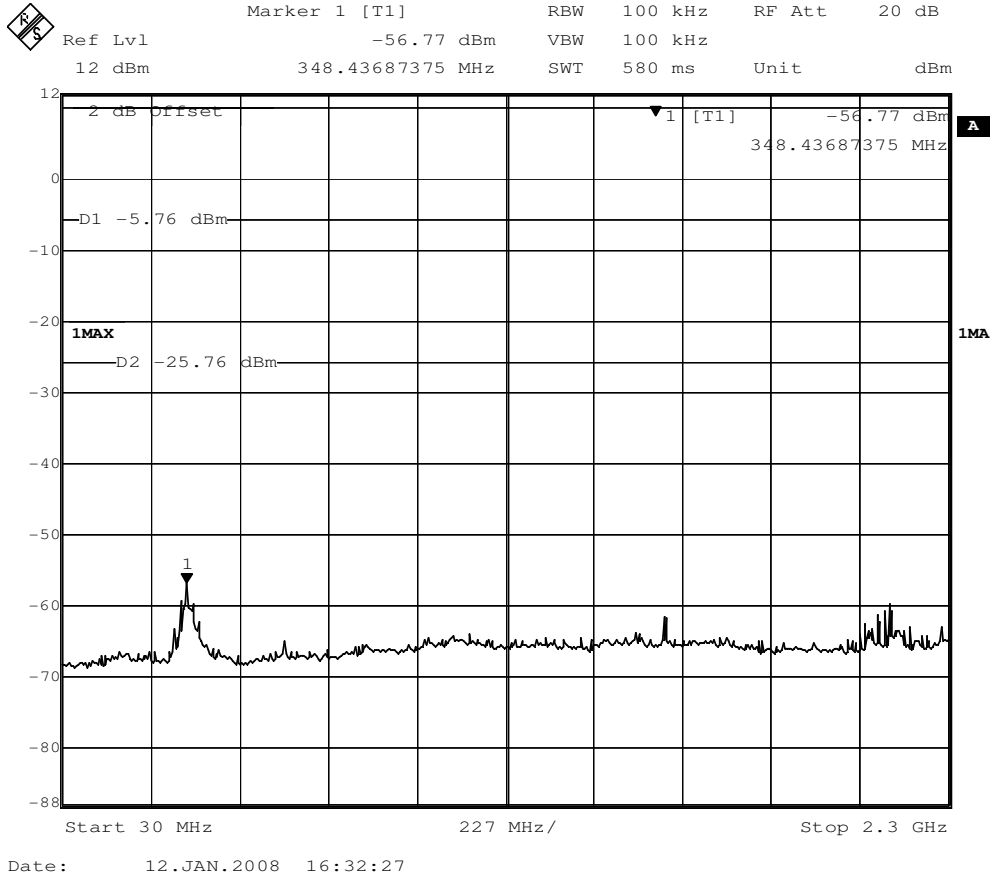
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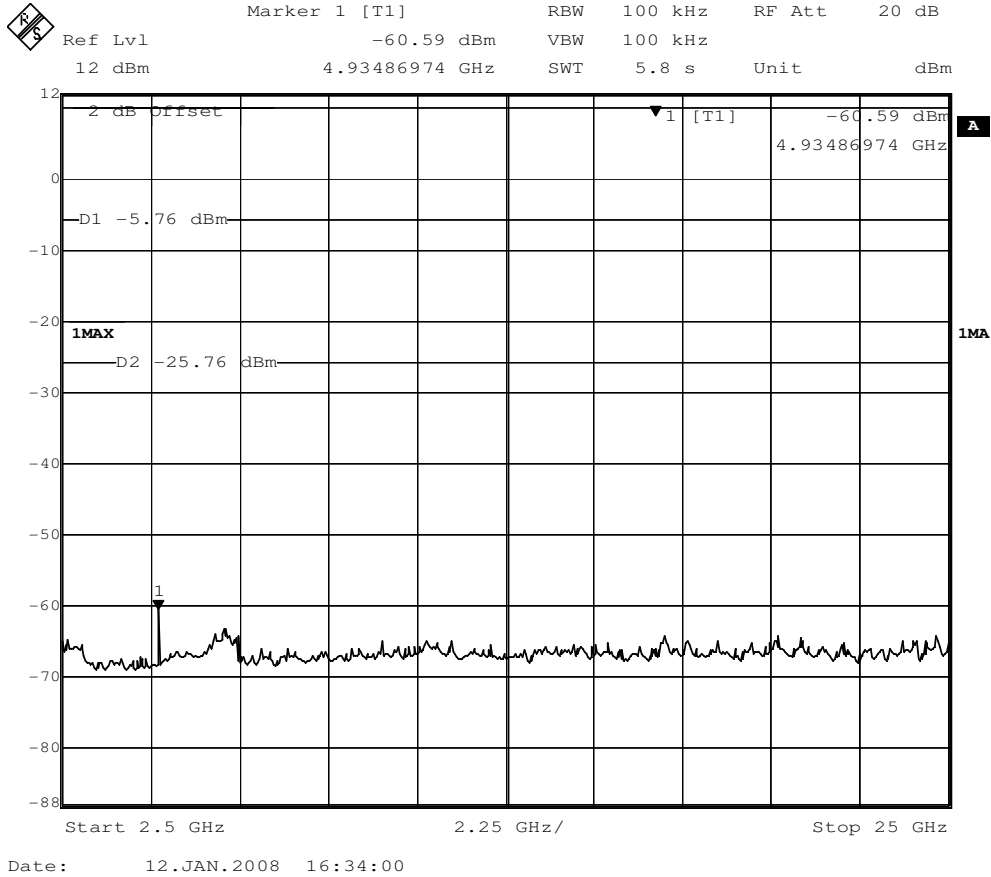
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The unit does meet the FCC requirements.

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Section 15.205 Restricted bands of operation.

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	( <sup>2</sup> )
13.36 - 13.41			

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### 5.3.8 Power Spectral Density

Test Requirement: FCC Part15 C  
Test Method: Base on ANSI 63.4..  
Test Date: 2007-12-5  
Requirements: **Regulation 15.247 (d)** For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission .

#### Test Procedures:

The tests below are running with the EUT transmitter set at high power mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. A horn antenna was connected with the spectrum analyzer.

The EUT was set transmitting continuously and force selection of output power level and channel number. We'd observed that the peak levels aren't greater than +8dBm limit. The EUT was setup to ANSI C63.4,2003, tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Spectrum: RBW=3KHz, VBW=10KHz Sweep time=200S

#### Test Result:

Test Channel	Fundamental Frequency (GHz)	RF POWER LEVEL	MAXIMUM Limit (dBm)	PASS/ FAIL
		IN 3 KHz BW (dBm)		
1	2.410	-3.2	8.0	Pass
7	2.440	-3.0	8.0	Pass
13	2.470	-3.5	8.0	Pass

The EUT meets the requirements of this section.

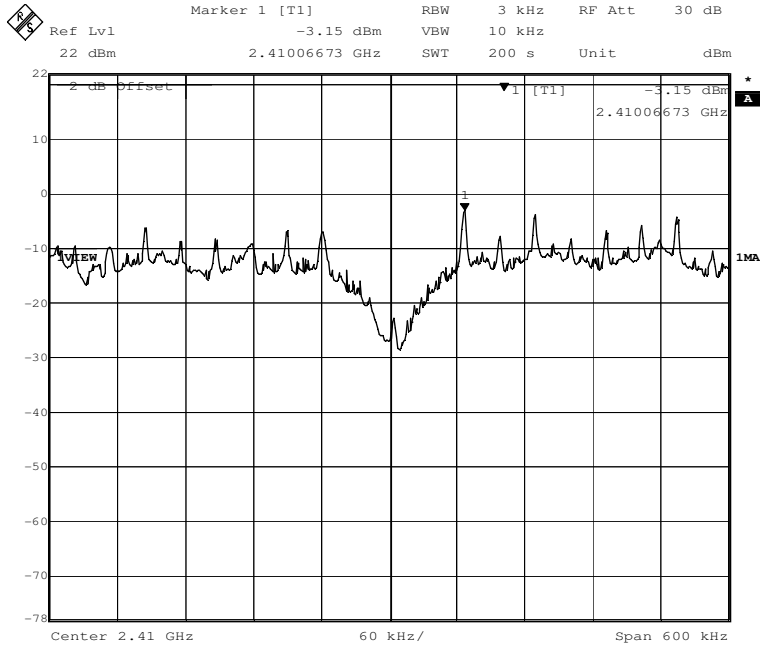
Please refer to graph as below:

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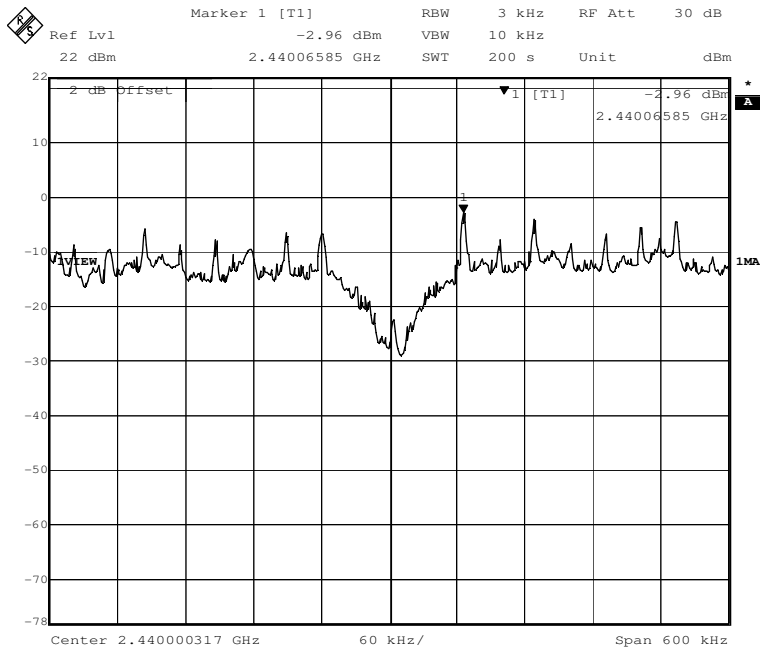


Channel 1:



Date: 5.DEC.2007 09:15:54

Channel 2



Date: 5.DEC.2007 09:34:50

FCC ID: VUY1048B

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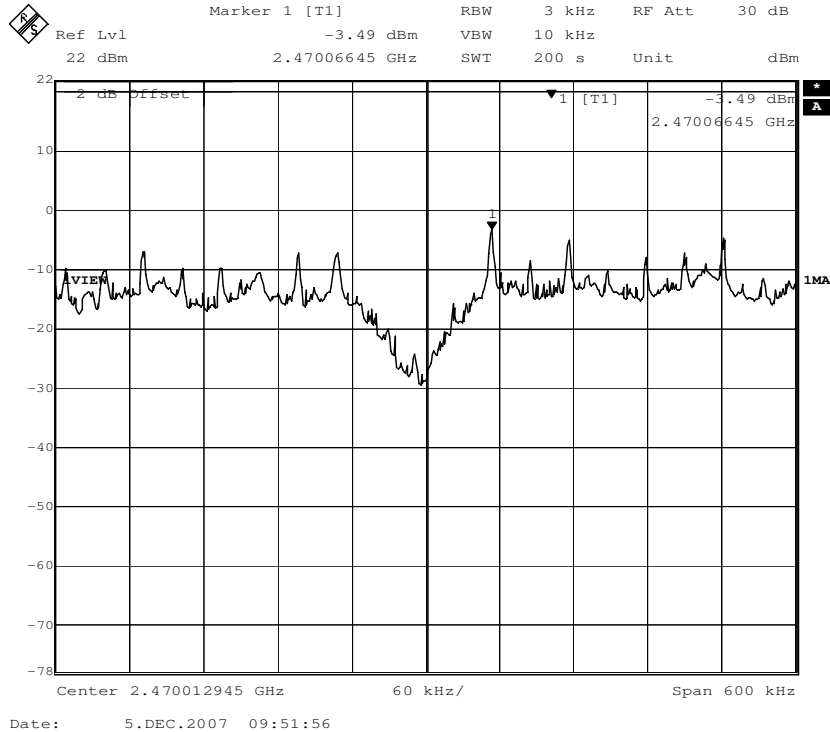


## SGS-CSTC Standards Technical Services Co., Ltd.

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### Channel 3:



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