6. Radiated Emission Band Edge

6.1. Test Equipment

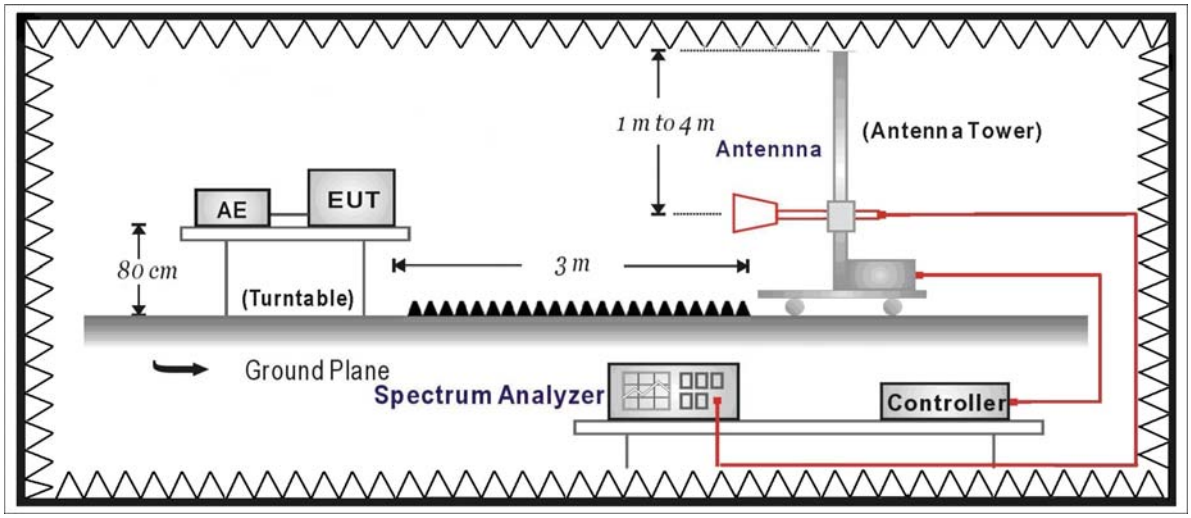
The following test equipments are used during the test:

Radiated Emission Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120D	743	2013/02/02
Spectrum Analyzer	Agilent	E4440A	MY46187335	2013/02/07
Coaxial Cable	Huber+Suhner AG	Sucoflex 102	25623/2	2013/03/04

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.
The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2011

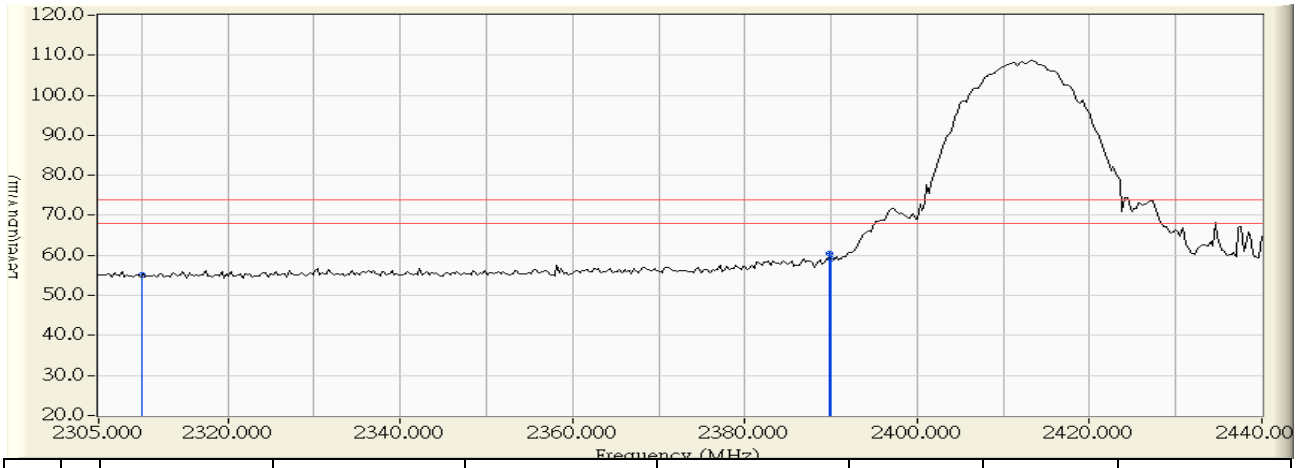
6.6. Uncertainty

The measurement uncertainty
± 3.9 dB above 1GHz

6.7. Test Result

Radiated is defined as

Site : CB1	**Time : 2013/01/30 - 10:21**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11b**

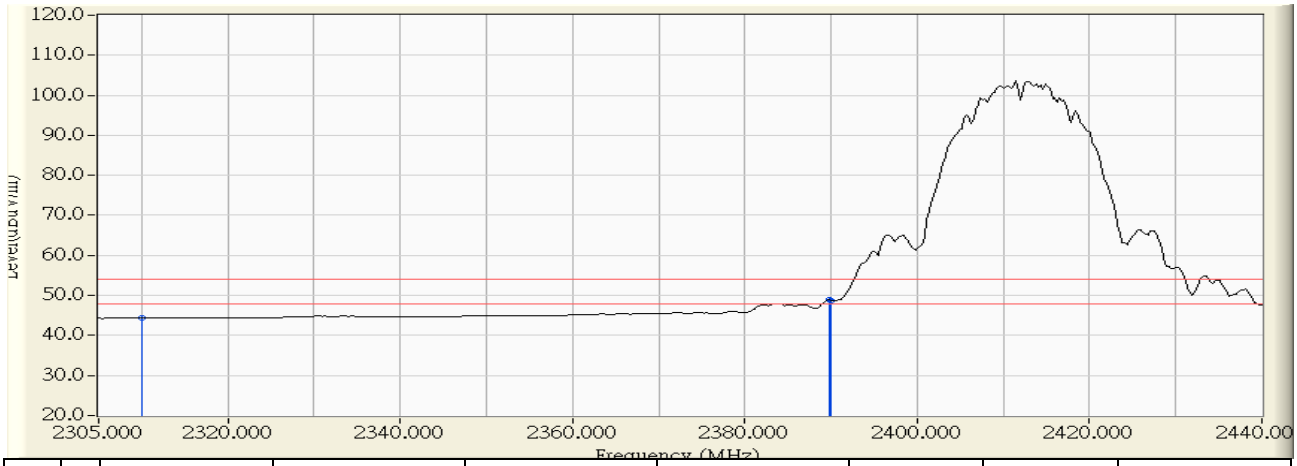


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	25.257	55.036	-18.964	74.000	PEAK
2	*	2389.808	30.576	29.841	60.417	-13.583	74.000	PEAK
3		2390.000	30.578	28.596	59.174	-14.826	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 10:25**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11b**

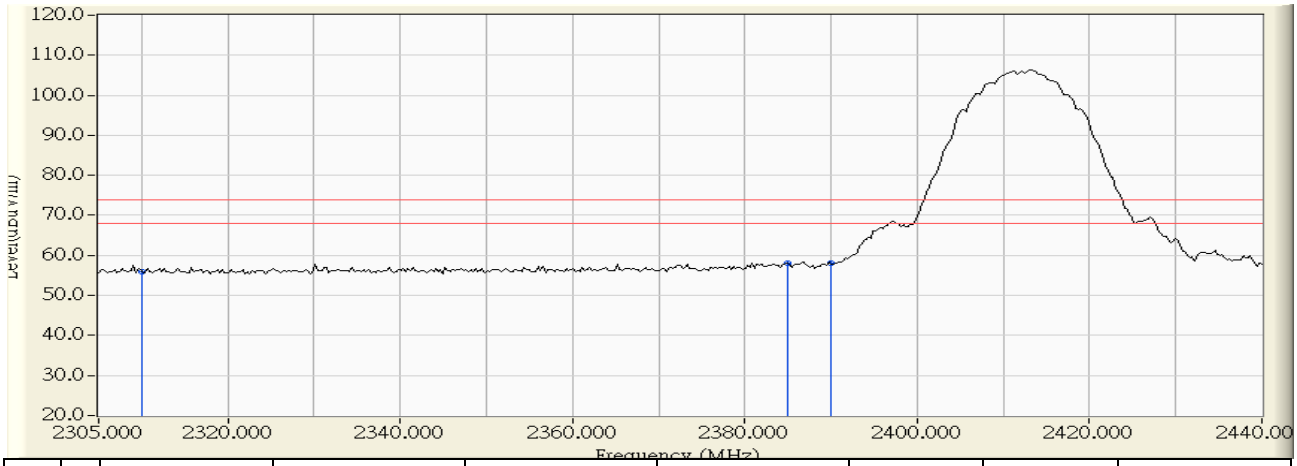


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.524	44.303	-9.697	54.000	AVERAGE
2	*	2389.780	30.576	18.278	48.854	-5.146	54.000	AVERAGE
3		2390.000	30.578	18.201	48.779	-5.221	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 10:31**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11b**

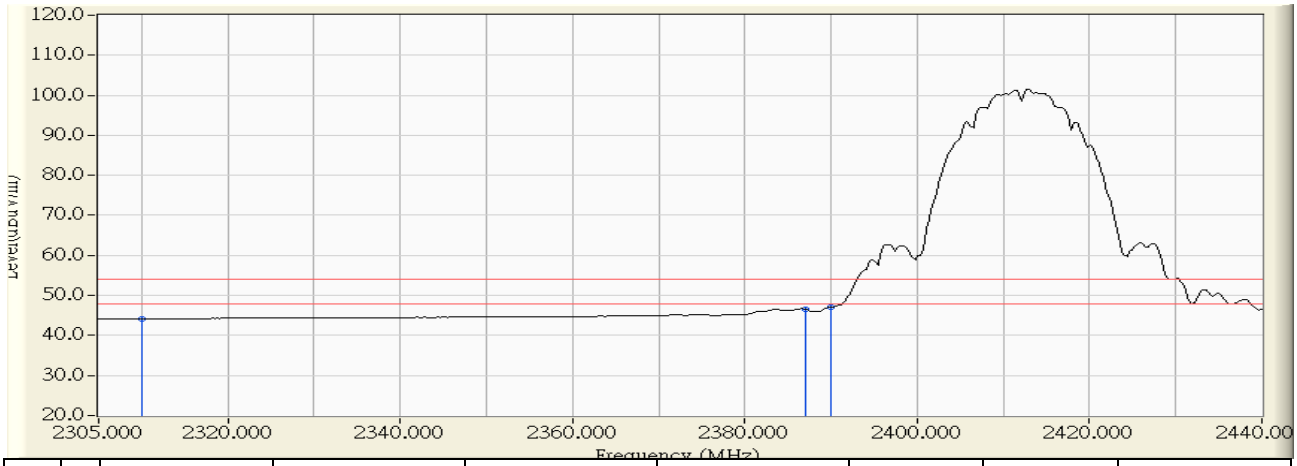


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	26.237	56.016	-17.984	74.000	PEAK
2	*	2384.920	30.527	27.625	58.152	-15.848	74.000	PEAK
3		2390.000	30.578	27.410	57.988	-16.012	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 10:36**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11b**

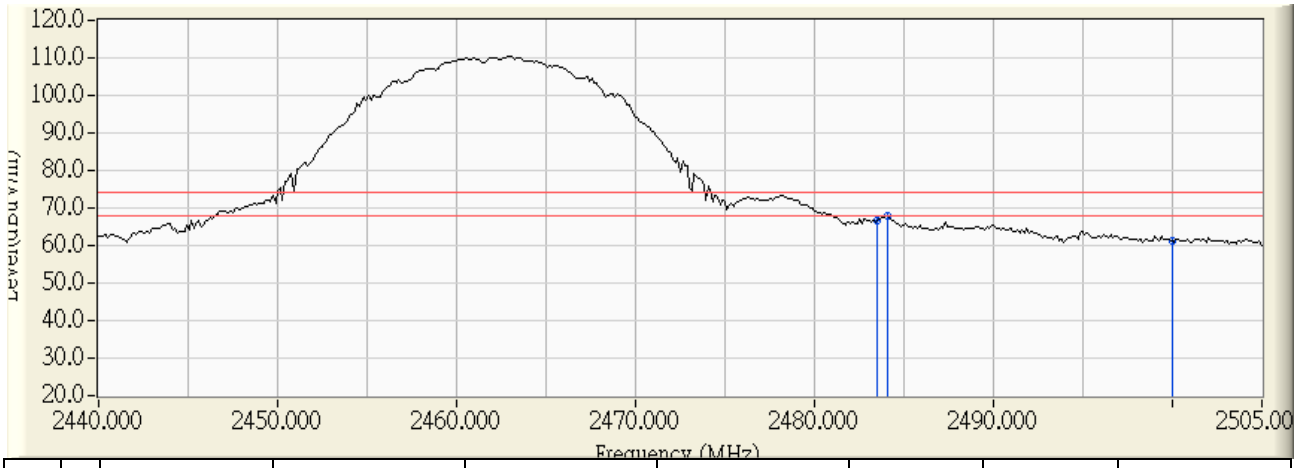


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.410	44.189	-9.811	54.000	AVERAGE
2		2387.080	30.549	15.989	46.538	-7.462	54.000	AVERAGE
3	*	2390.000	30.578	16.419	46.997	-7.003	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/11/27 - 19:59**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11b**

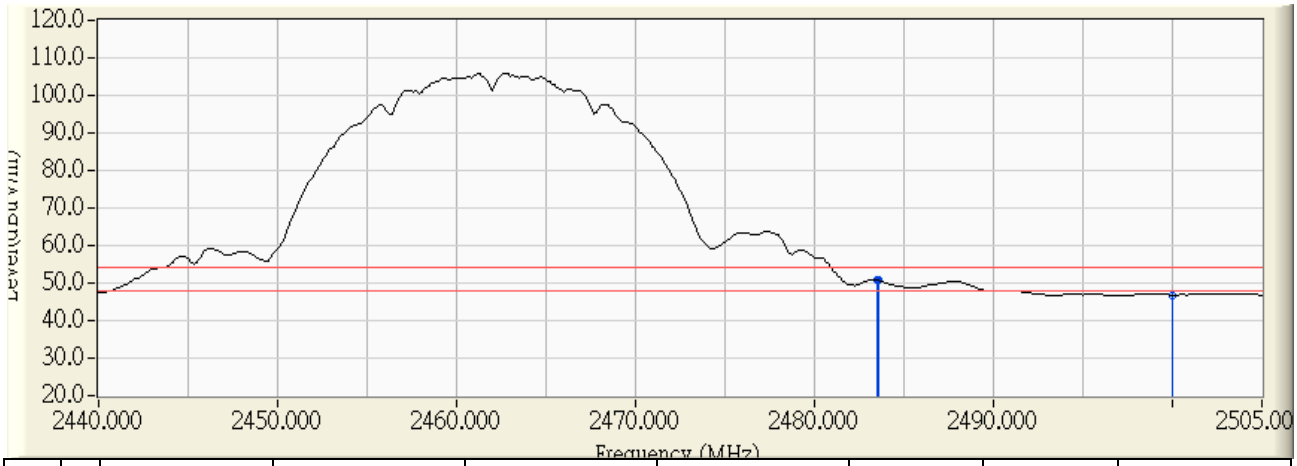


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	35.273	66.785	-7.215	74.000	PEAK
2	*	2484.070	31.517	36.554	68.072	-5.928	74.000	PEAK
3		2500.000	31.638	29.466	61.105	-12.895	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/11/27 - 19:59**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11b**

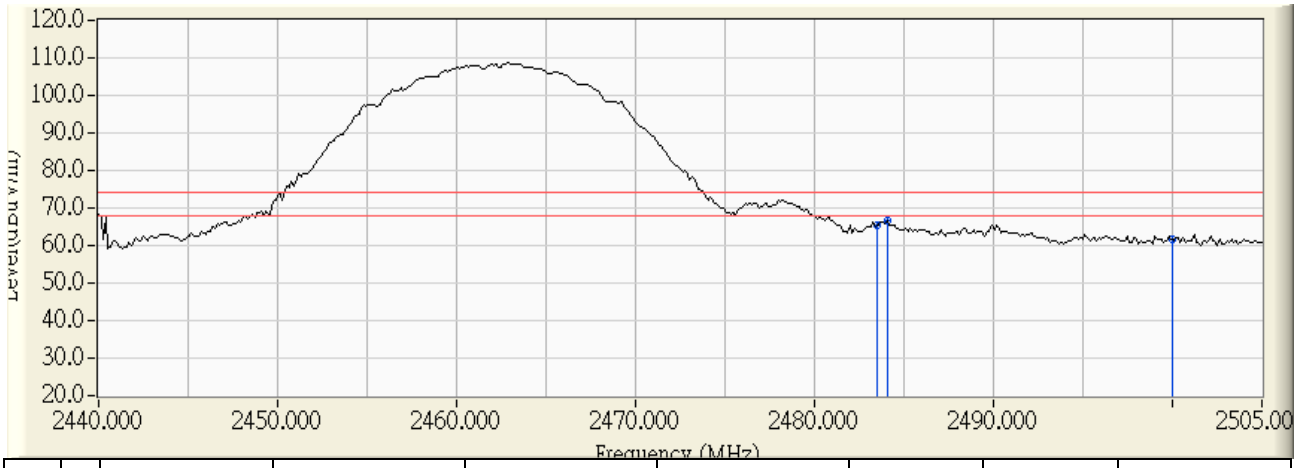


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	19.298	50.810	-3.190	54.000	AVERAGE
2		2483.550	31.513	19.255	50.767	-3.233	54.000	AVERAGE
3		2500.000	31.638	15.175	46.814	-7.186	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/11/27 - 20:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11b**

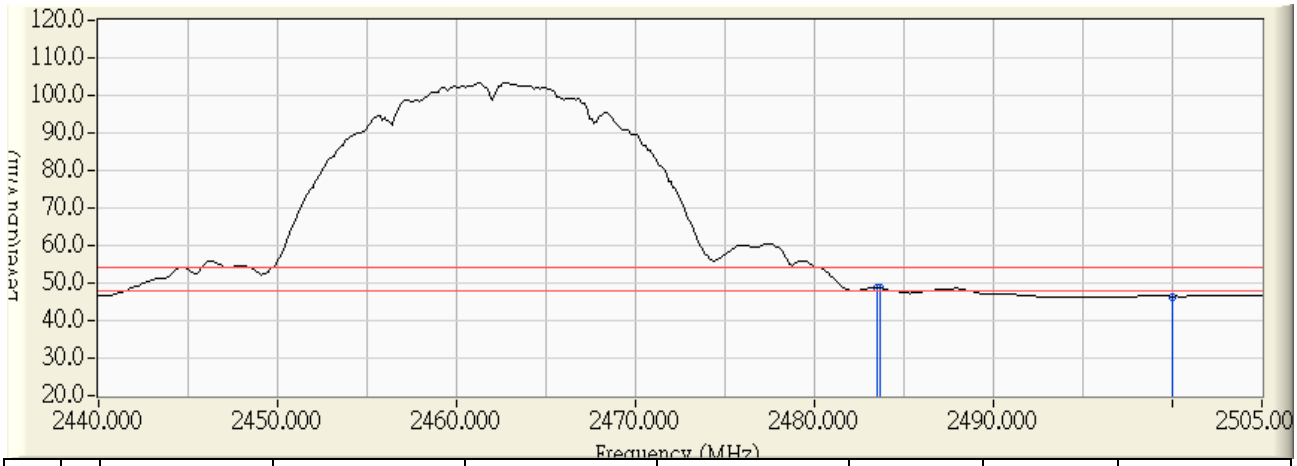


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	33.700	65.212	-8.788	74.000	PEAK
2	*	2484.070	31.517	35.333	66.851	-7.149	74.000	PEAK
3		2500.000	31.638	29.837	61.476	-12.524	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/11/27 - 20:02**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11b**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	17.207	48.719	-5.281	54.000	AVERAGE
2		2483.680	31.514	17.060	48.574	-5.426	54.000	AVERAGE
3		2500.000	31.638	14.785	46.424	-7.576	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

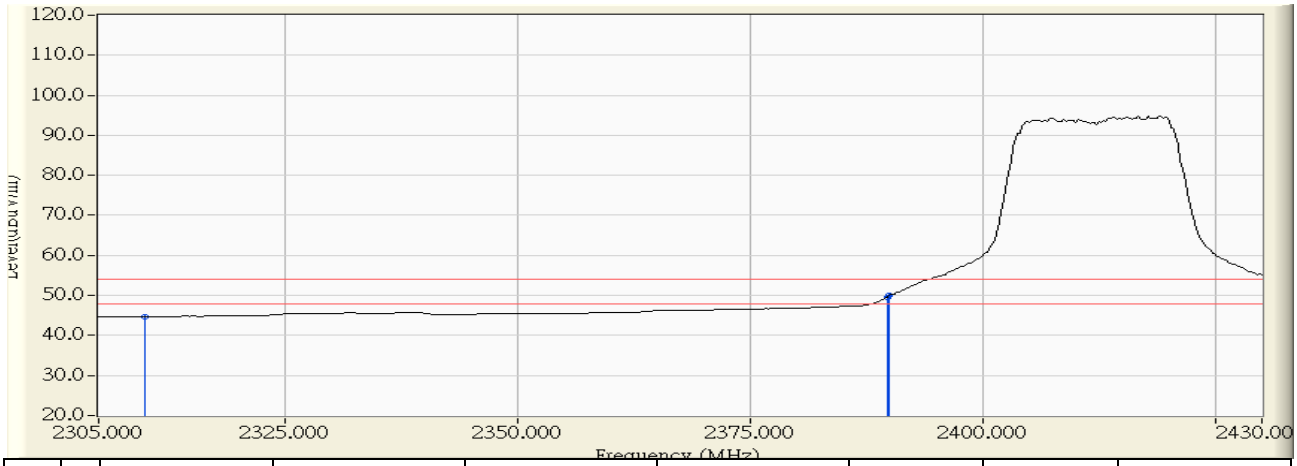
Site : CB1	**Time : 2013/01/30 - 09:38**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11g**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	25.750	55.529	-18.471	74.000	PEAK
2		2389.750	30.576	40.689	71.264	-2.736	74.000	PEAK
3	*	2390.000	30.578	41.033	71.611	-2.389	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:39**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11g**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.958	44.737	-9.263	54.000	AVERAGE
2		2389.750	30.576	19.034	49.609	-4.391	54.000	AVERAGE
3	*	2390.000	30.578	19.348	49.926	-4.074	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

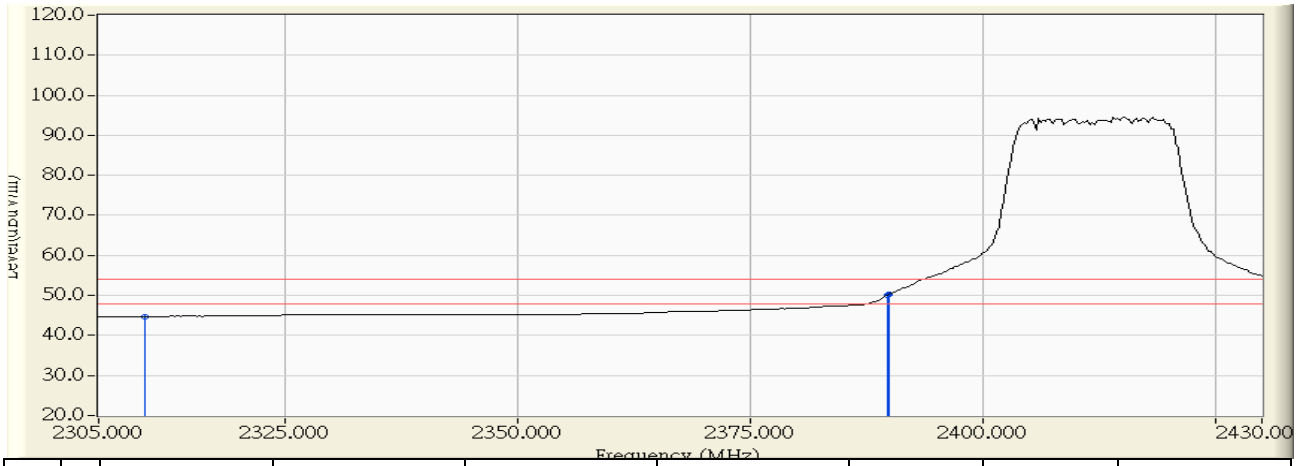
Site : CB1	**Time : 2013/01/30 - 09:33**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11g**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	25.662	55.441	-18.559	74.000	PEAK
2		2386.250	30.541	41.050	71.590	-2.410	74.000	PEAK
3	*	2390.000	30.578	41.293	71.871	-2.129	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:34**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11g**

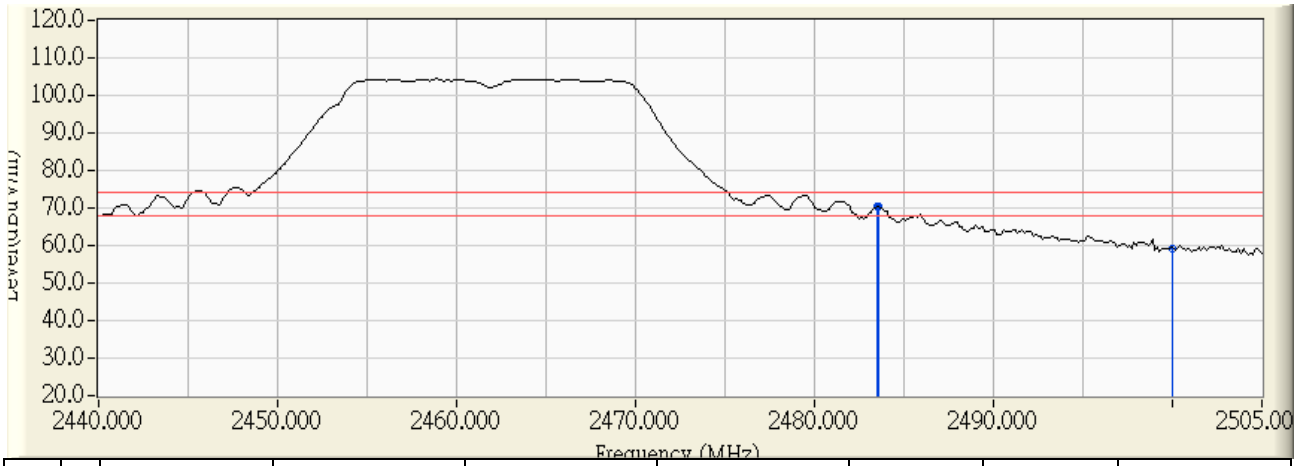


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.981	44.760	-9.240	54.000	AVERAGE
2		2389.750	30.576	19.329	49.904	-4.096	54.000	AVERAGE
3	*	2390.000	30.578	19.704	50.282	-3.718	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/12/11 - 14:15**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11g**

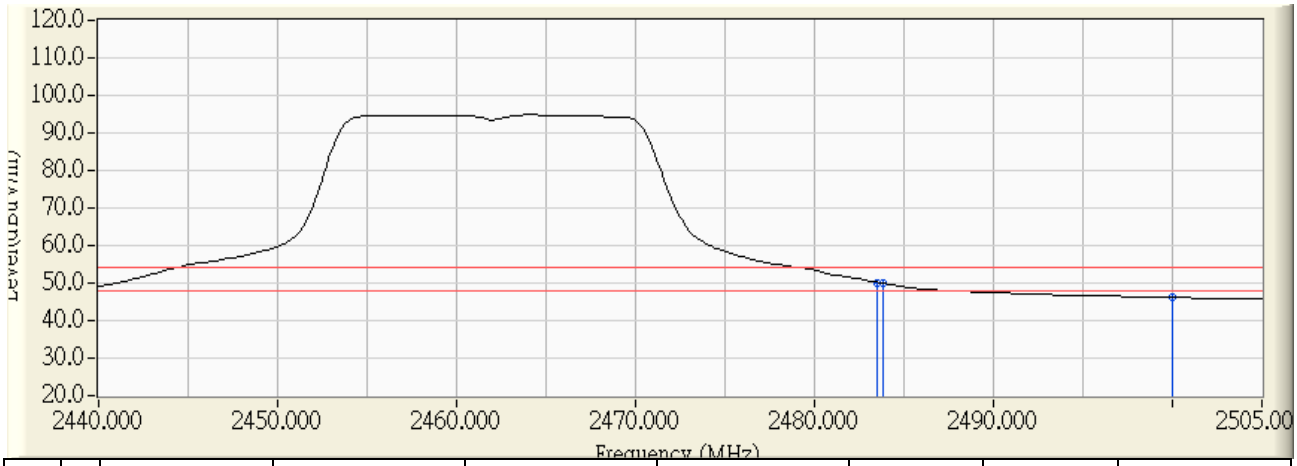


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	38.799	70.311	-3.689	74.000	PEAK
2	*	2483.550	31.513	38.937	70.449	-3.551	74.000	PEAK
3		2500.000	31.638	27.675	59.314	-14.686	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/12/11 - 14:15**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11g**

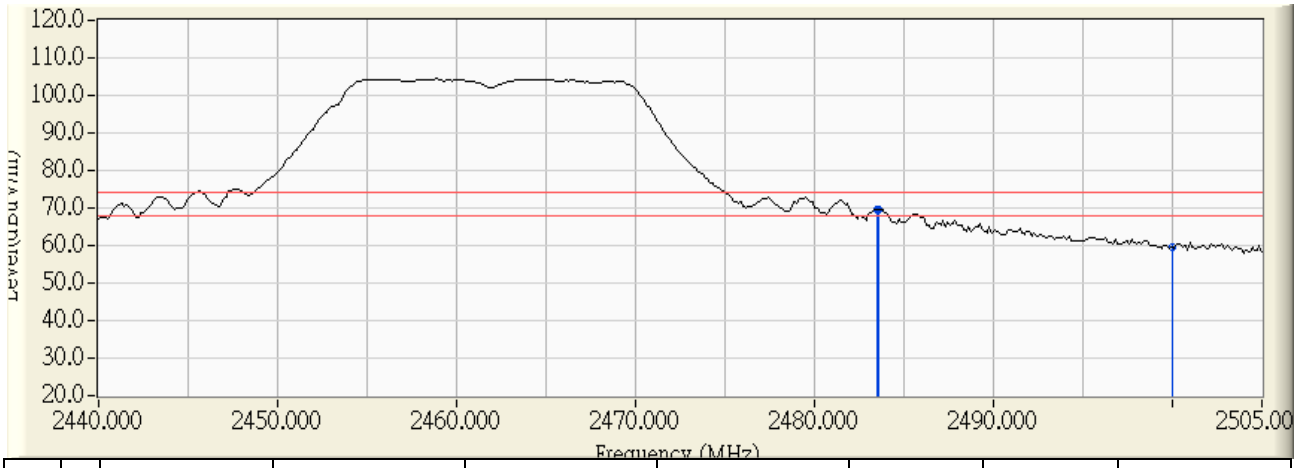


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	18.650	50.162	-3.838	54.000	AVERAGE
2		2483.810	31.515	18.395	49.910	-4.090	54.000	AVERAGE
3		2500.000	31.638	14.493	46.132	-7.868	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/12/11 - 14:18**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11g**

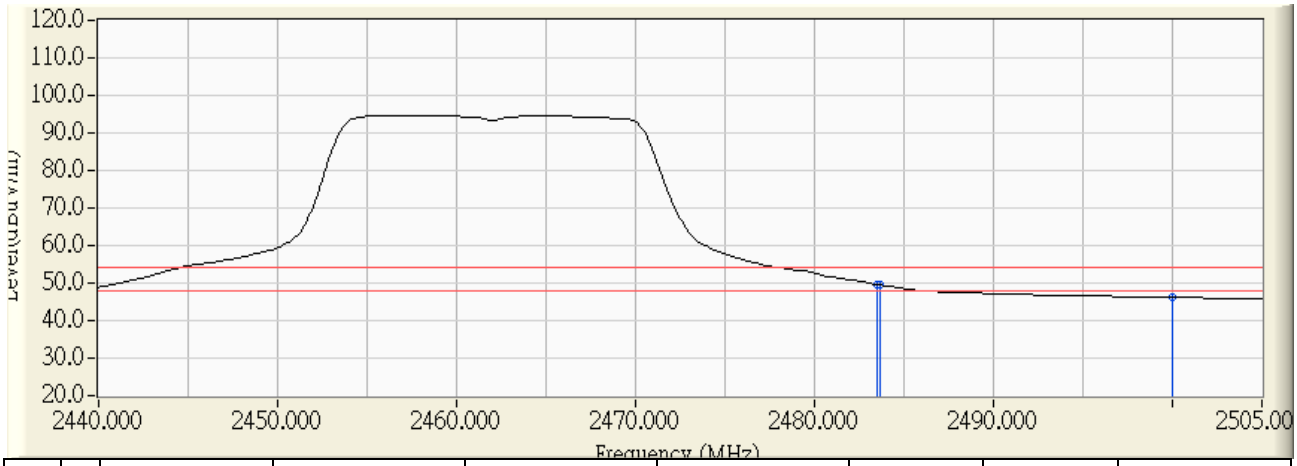


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	38.093	69.605	-4.395	74.000	PEAK
2	*	2483.550	31.513	38.196	69.708	-4.292	74.000	PEAK
3		2500.000	31.638	27.894	59.533	-14.467	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2012/12/11 - 14:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11g**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	18.068	49.580	-4.420	54.000	AVERAGE
2		2483.680	31.514	17.937	49.451	-4.549	54.000	AVERAGE
3		2500.000	31.638	14.523	46.162	-7.838	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

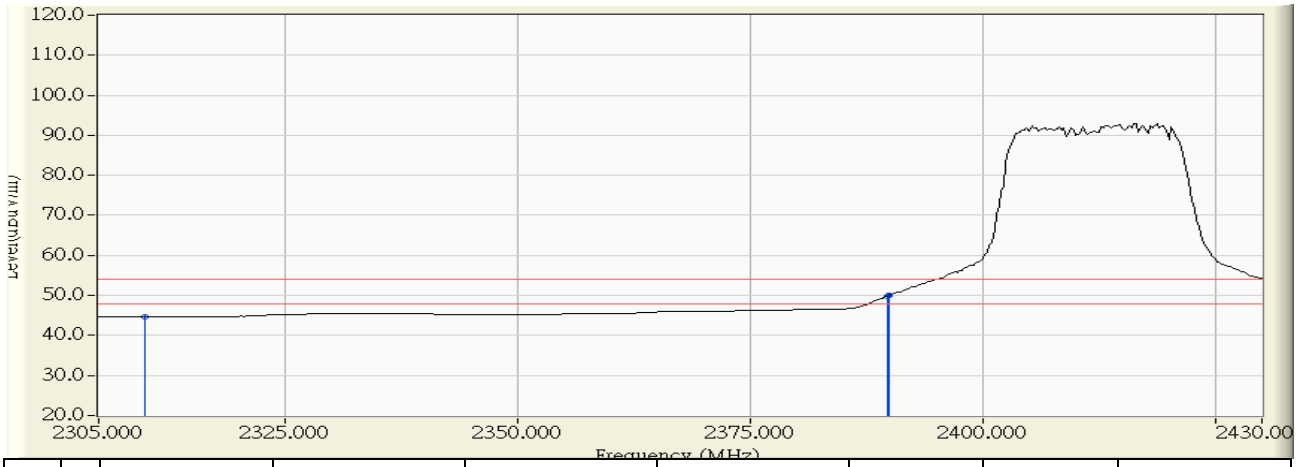
Site : CB1	**Time : 2013/01/30 - 09:43**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11n(20M)**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	25.145	54.924	-19.076	74.000	PEAK
2	*	2387.750	30.555	39.750	70.305	-3.695	74.000	PEAK
3		2390.000	30.578	39.117	69.695	-4.305	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:44**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11n(20M)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.884	44.663	-9.337	54.000	AVERAGE
2		2389.750	30.576	19.266	49.841	-4.159	54.000	AVERAGE
3	*	2390.000	30.578	19.507	50.085	-3.915	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

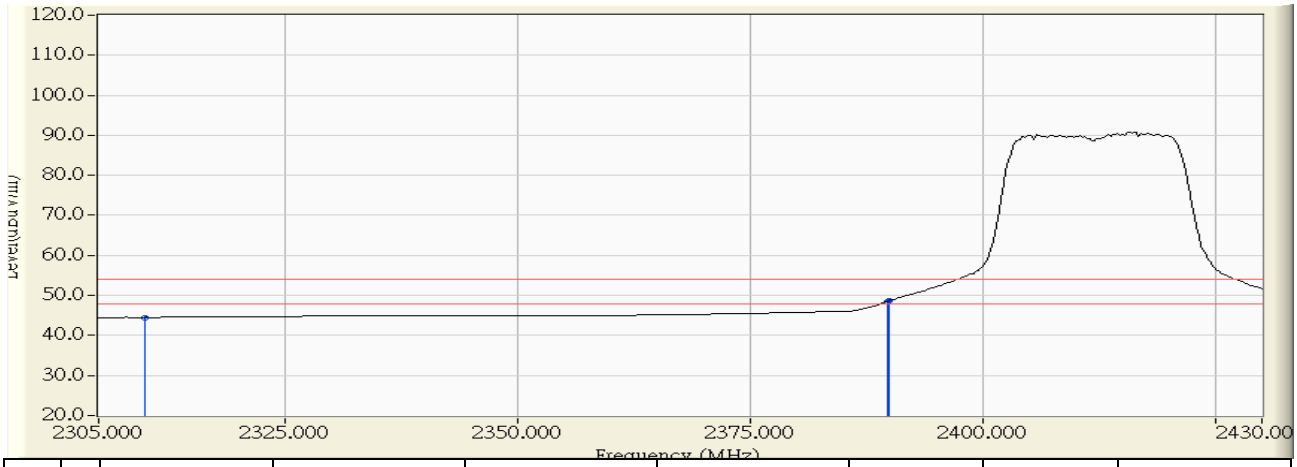
Site : CB1	**Time : 2013/01/30 - 09:47**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11n(20M)**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	26.780	56.559	-17.441	74.000	PEAK
2		2387.250	30.551	36.780	67.330	-6.670	74.000	PEAK
3	*	2390.000	30.578	37.003	67.581	-6.419	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:48**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2412MHz_802.11n(20M)**

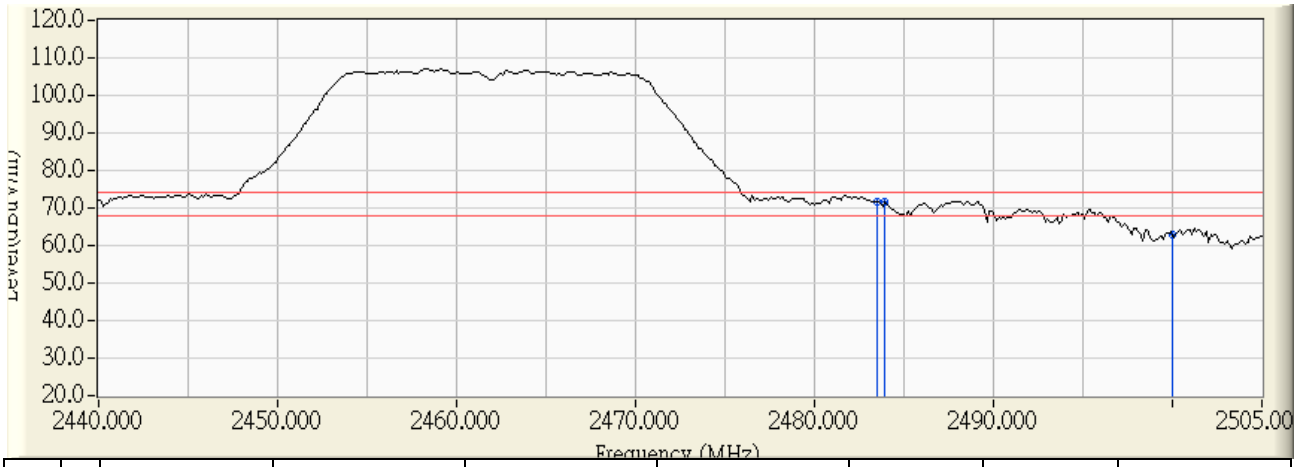


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.736	44.515	-9.485	54.000	AVERAGE
2		2389.750	30.576	17.877	48.452	-5.548	54.000	AVERAGE
3	*	2390.000	30.578	18.094	48.672	-5.328	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:10**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11n(20M)**

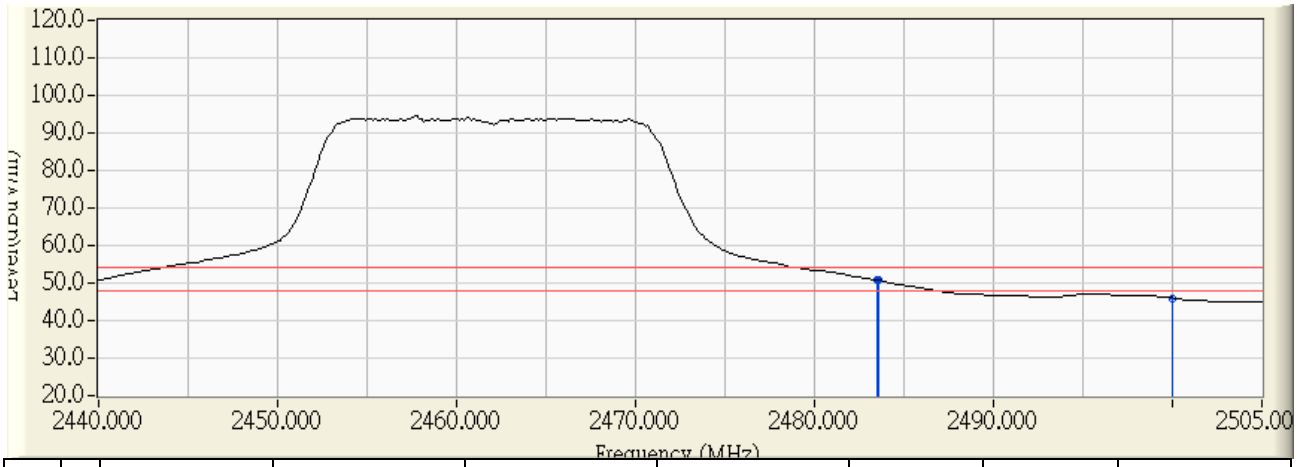


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	40.131	71.643	-2.357	74.000	PEAK
2		2483.940	31.516	39.961	71.477	-2.523	74.000	PEAK
3		2500.000	31.638	31.298	62.937	-11.063	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:12**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11n(20M)**

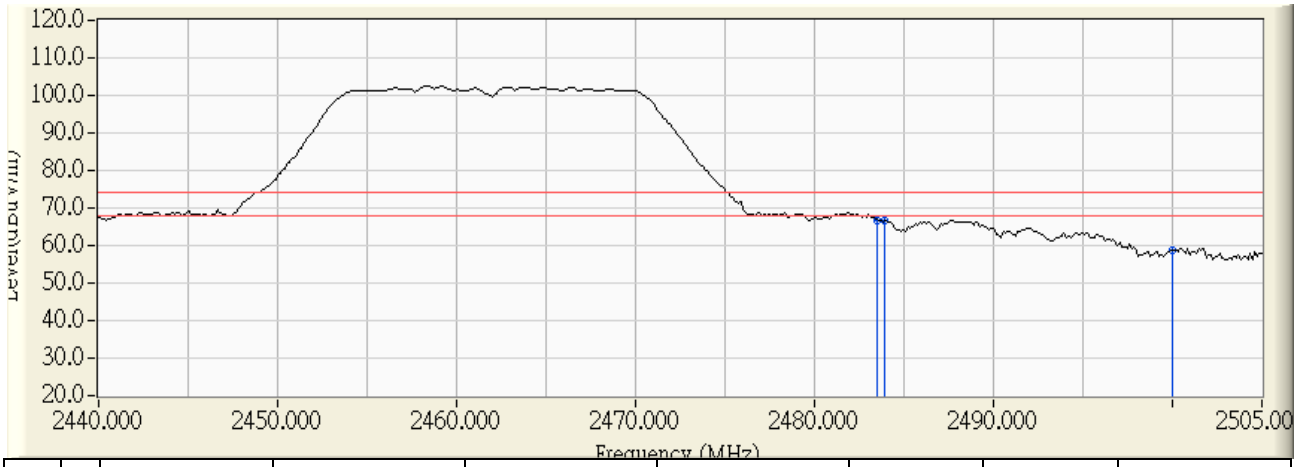


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	19.259	50.771	-3.229	54.000	AVERAGE
2		2483.550	31.513	19.208	50.720	-3.280	54.000	AVERAGE
3		2500.000	31.638	14.368	46.007	-7.993	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:26**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11n(20M)**

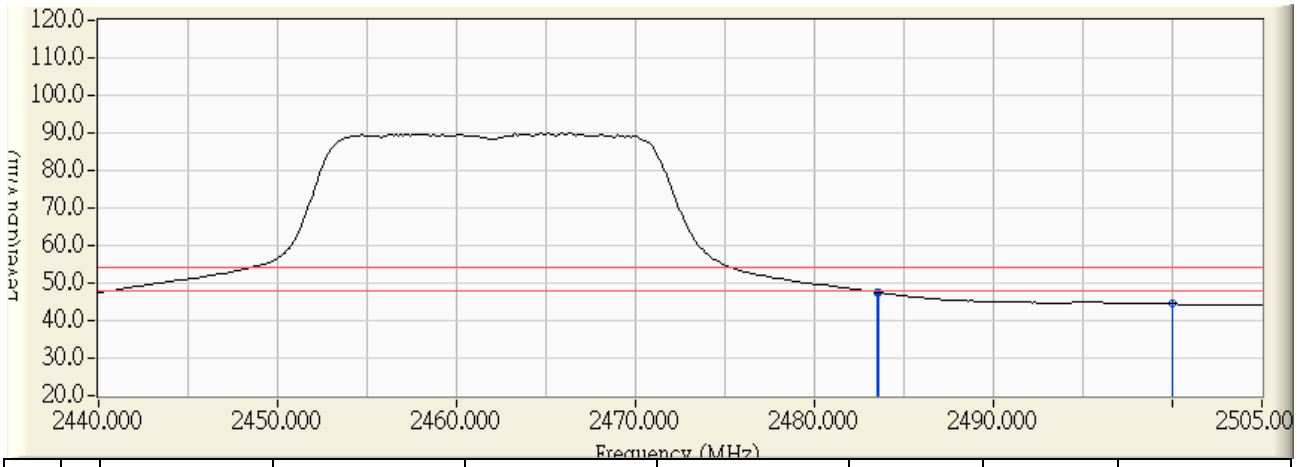


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	35.287	66.799	-7.201	74.000	PEAK
2		2483.940	31.516	35.077	66.593	-7.407	74.000	PEAK
3		2500.000	31.638	27.079	58.718	-15.282	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2462MHz_802.11n(20M)**

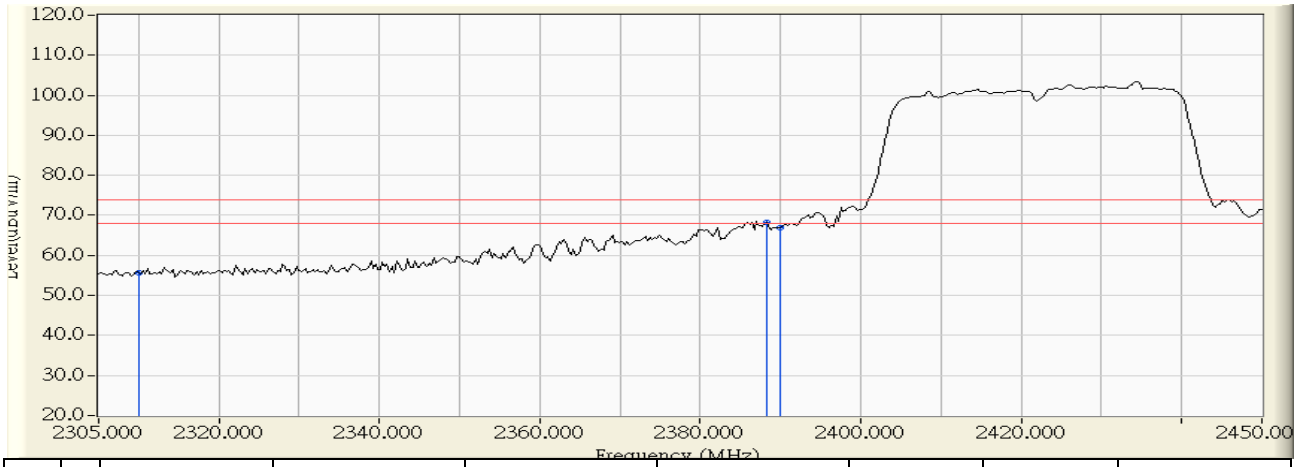


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	16.078	47.590	-6.410	54.000	AVERAGE
2		2483.550	31.513	16.061	47.573	-6.427	54.000	AVERAGE
3		2500.000	31.638	12.774	44.413	-9.587	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:55**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2422MHz_802.11n(40M)**

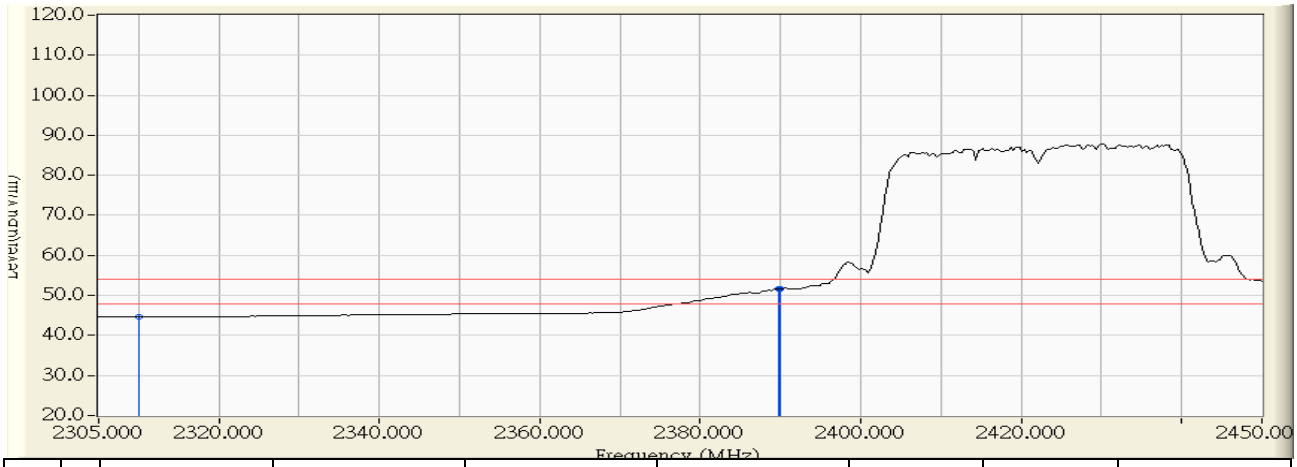


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	25.920	55.699	-18.301	74.000	PEAK
2	*	2388.230	30.561	37.777	68.337	-5.663	74.000	PEAK
3		2390.000	30.578	36.358	66.936	-7.064	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:54**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2422MHz_802.11n(40M)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.799	44.578	-9.422	54.000	AVERAGE
2		2389.680	30.575	21.000	51.575	-2.425	54.000	AVERAGE
3	*	2390.000	30.578	21.066	51.644	-2.356	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

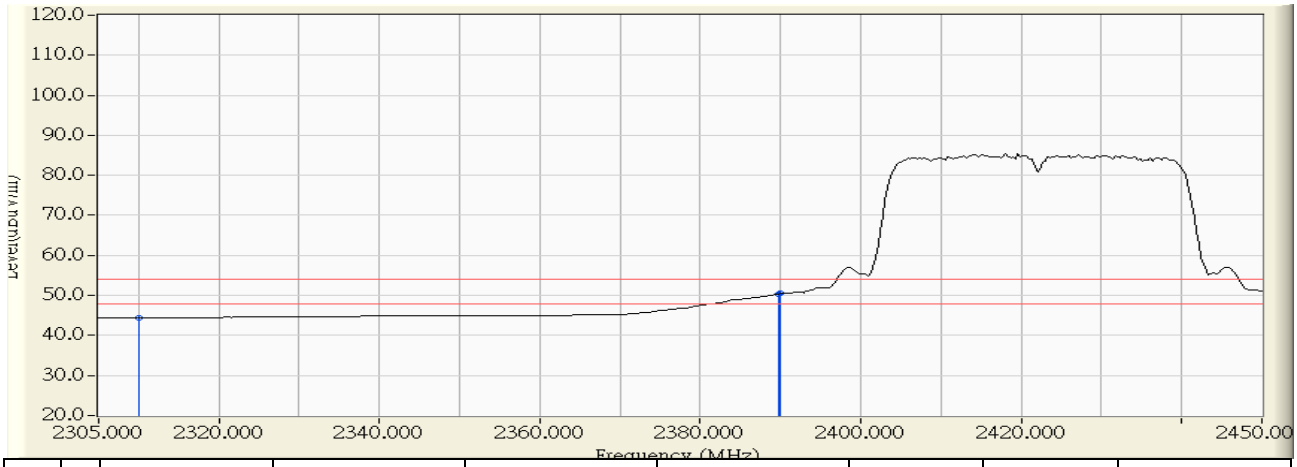
Site : CB1	**Time : 2013/01/30 - 09:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2422MHz_802.11n(40M)**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	26.021	55.800	-18.200	74.000	PEAK
2	*	2385.910	30.537	36.412	66.949	-7.051	74.000	PEAK
3		2390.000	30.578	35.132	65.710	-8.290	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/30 - 09:58**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2422MHz_802.11n(40M)**

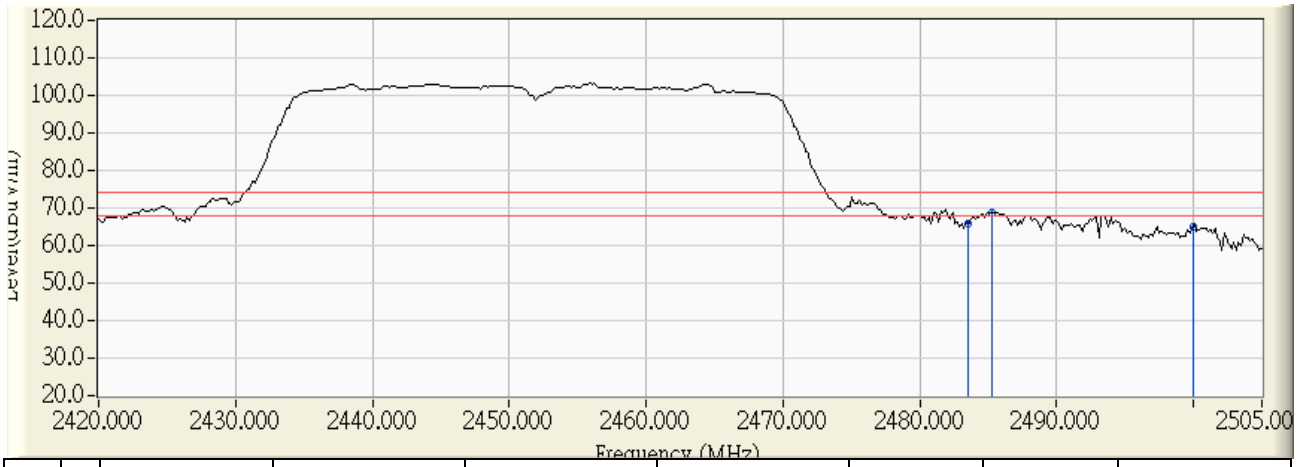


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	29.779	14.656	44.435	-9.565	54.000	AVERAGE
2		2389.680	30.575	19.823	50.398	-3.602	54.000	AVERAGE
3	*	2390.000	30.578	19.928	50.506	-3.494	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:33**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2452MHz_802.11n(40M)**

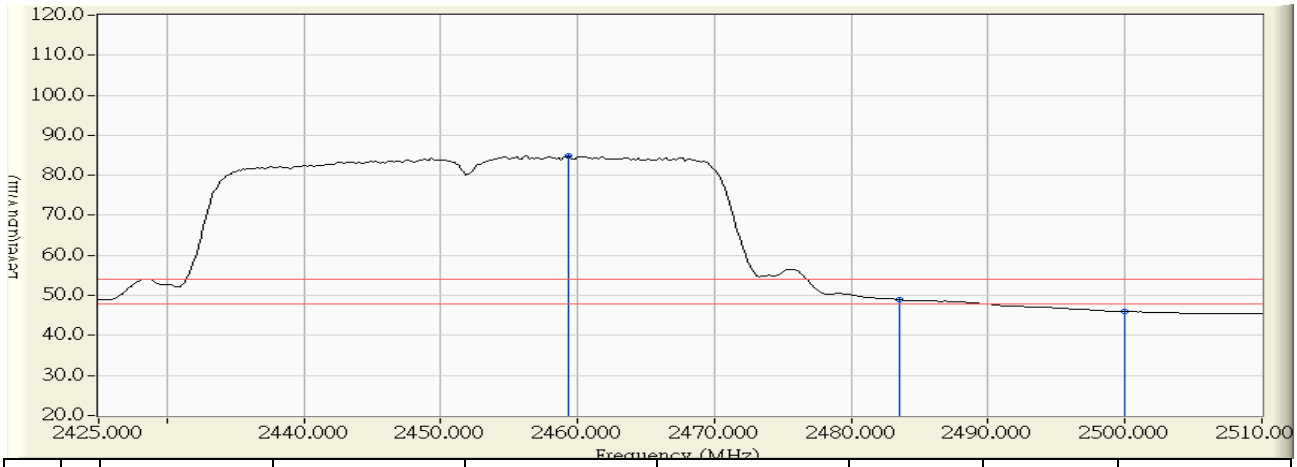


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	34.485	65.997	-8.003	74.000	PEAK
2	*	2485.280	31.530	37.284	68.814	-5.186	74.000	PEAK
3		2500.000	31.638	33.537	65.176	-8.824	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/03/04 - 11:21**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2452MHz_802.11n(40M)**

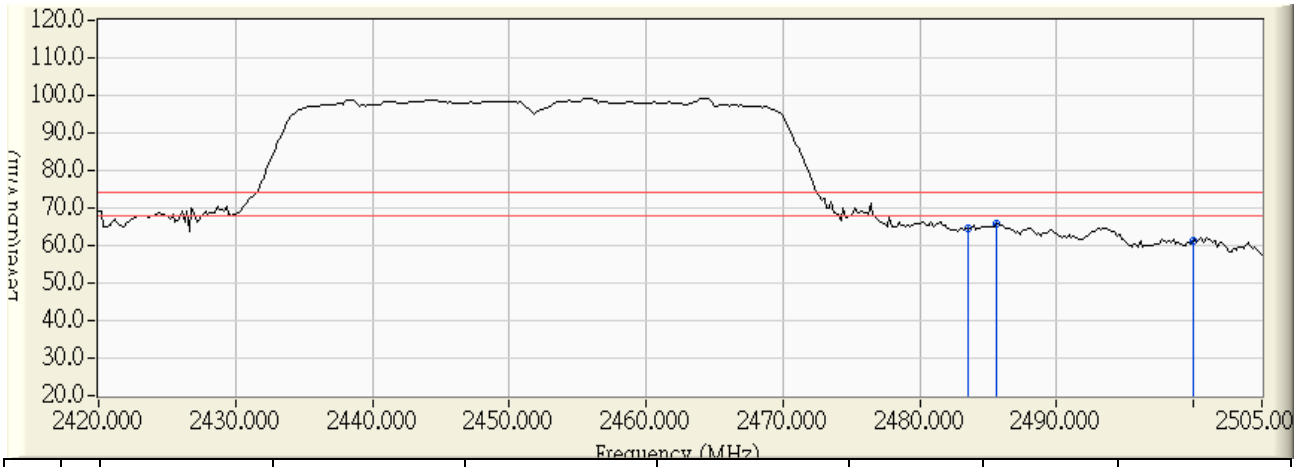


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.040	31.288	56.013	87.301	33.301	54.000	AVERAGE
2		2483.500	31.512	16.548	48.060	-5.940	54.000	AVERAGE
3		2500.000	31.638	14.854	46.493	-7.507	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2452MHz_802.11n(40M)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	31.512	32.900	64.412	-9.588	74.000	PEAK
2	*	2485.620	31.533	34.161	65.694	-8.306	74.000	PEAK
3		2500.000	31.638	29.622	61.261	-12.739	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/01/15 - 15:25**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : USB**
EUT : All-in-One Wireless-N pocket router	**Note : Mode 1: Transmit (Adapter)-2452MHz_802.11n(40M)**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	31.512	16.497	48.009	-5.991	54.000	AVERAGE
2		2483.750	31.515	16.342	47.856	-6.144	54.000	AVERAGE
3		2500.000	31.638	13.216	44.855	-9.145	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

7.1. Test Equipment

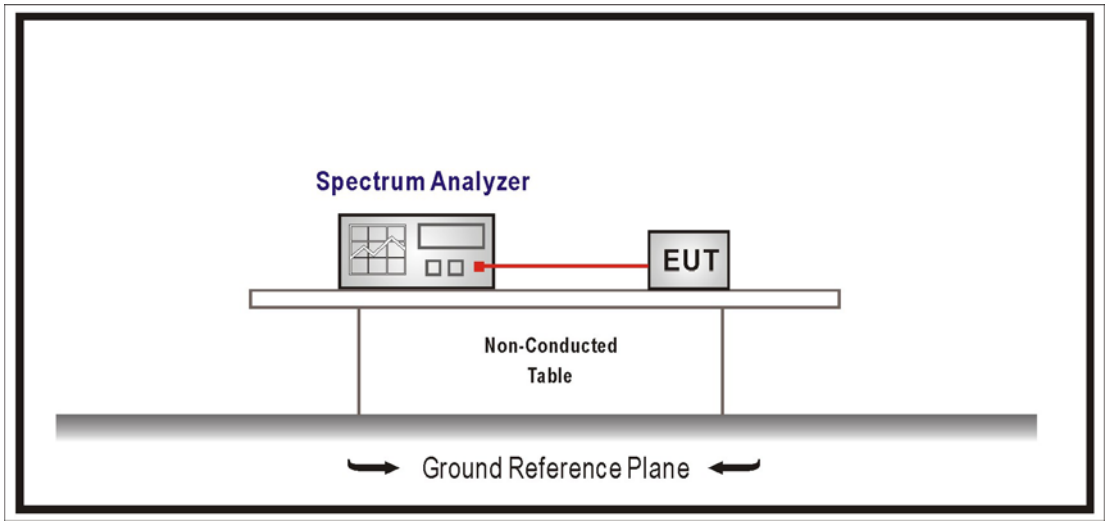
The following test equipments are used during the test:

Occupied Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	R&S	FSP	100561	2013/02/19

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 1% of EBW, Span greater than RBW.

7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2011

7.6. Uncertainty

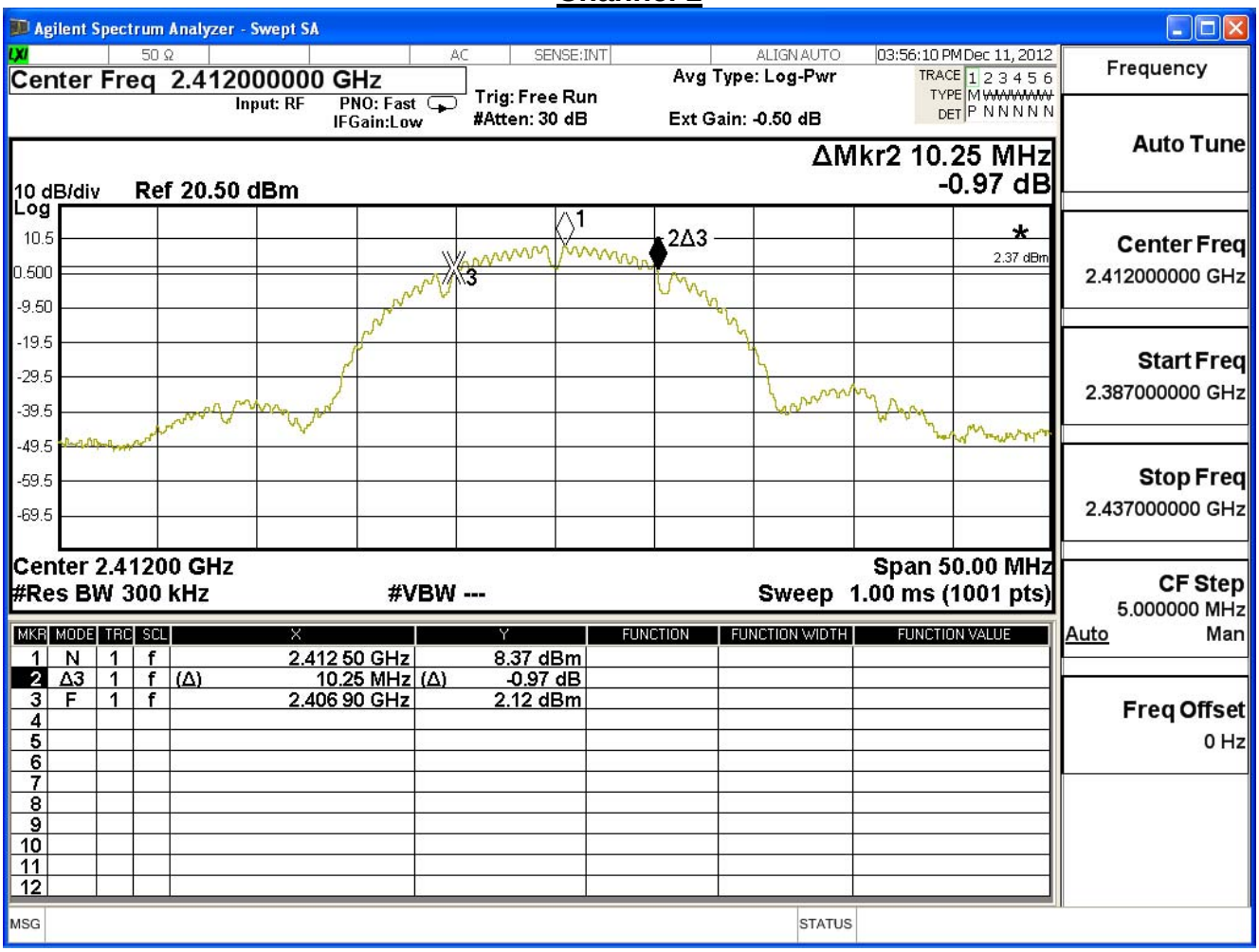
The measurement uncertainty is defined as ±150Hz

7.7. Test Result

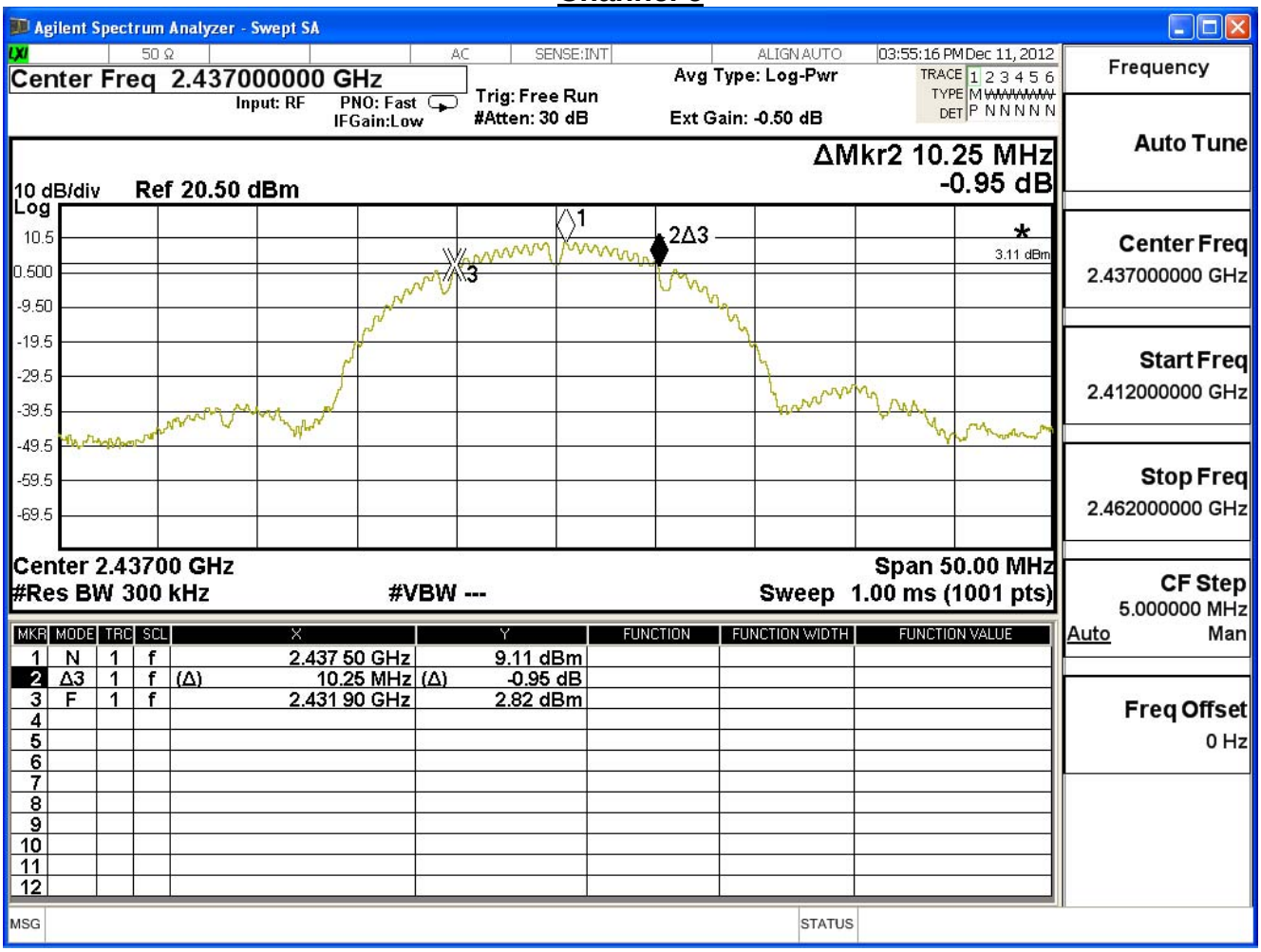
Product	All-in-One Wireless-N pocket router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/12/11	Test Site	SR7

802.11 b				
Channel No.	Frequency (MHz)	Measurement Level (MHz)	Required Limit (MHz)	Result
1	2412	10.25	≧0.5	Pass
6	2437	10.25	≧0.5	Pass
11	2462	10.25	≧0.5	Pass

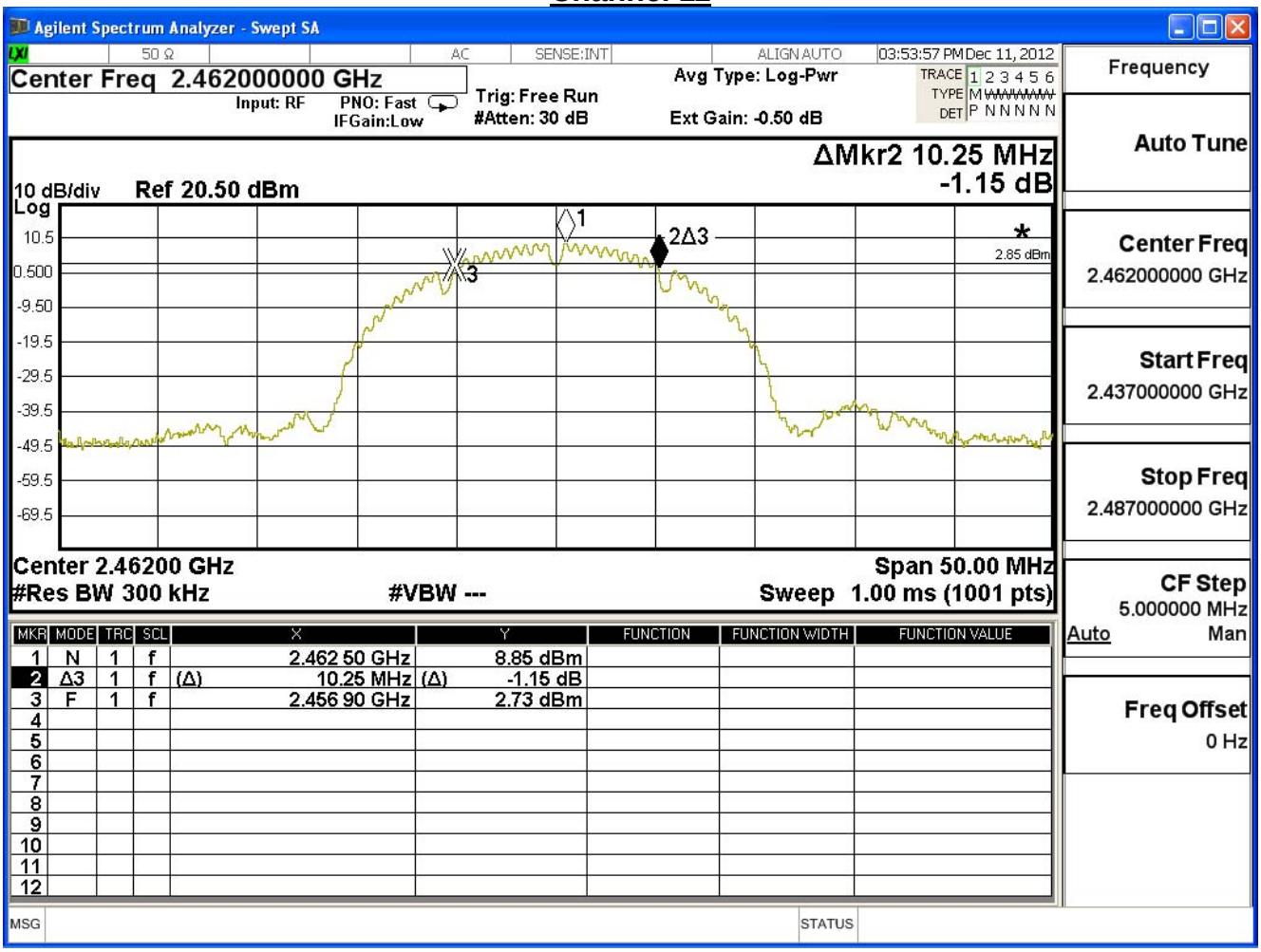
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:55:16 PM Dec 11, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 10.25 MHz
-0.95 dB
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
1
2Δ3
3
*
3.11 dBm
Center 2.43700 GHz
#Res BW 300 kHz
#VBW ---
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.437 50 GHz 9.11 dBm
2 Δ3 1 f (Δ) 10.25 MHz (Δ) -0.95 dB
3 F 1 f 2.431 90 GHz 2.82 dBm
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.412000000 GHz
Stop Freq
2.462000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

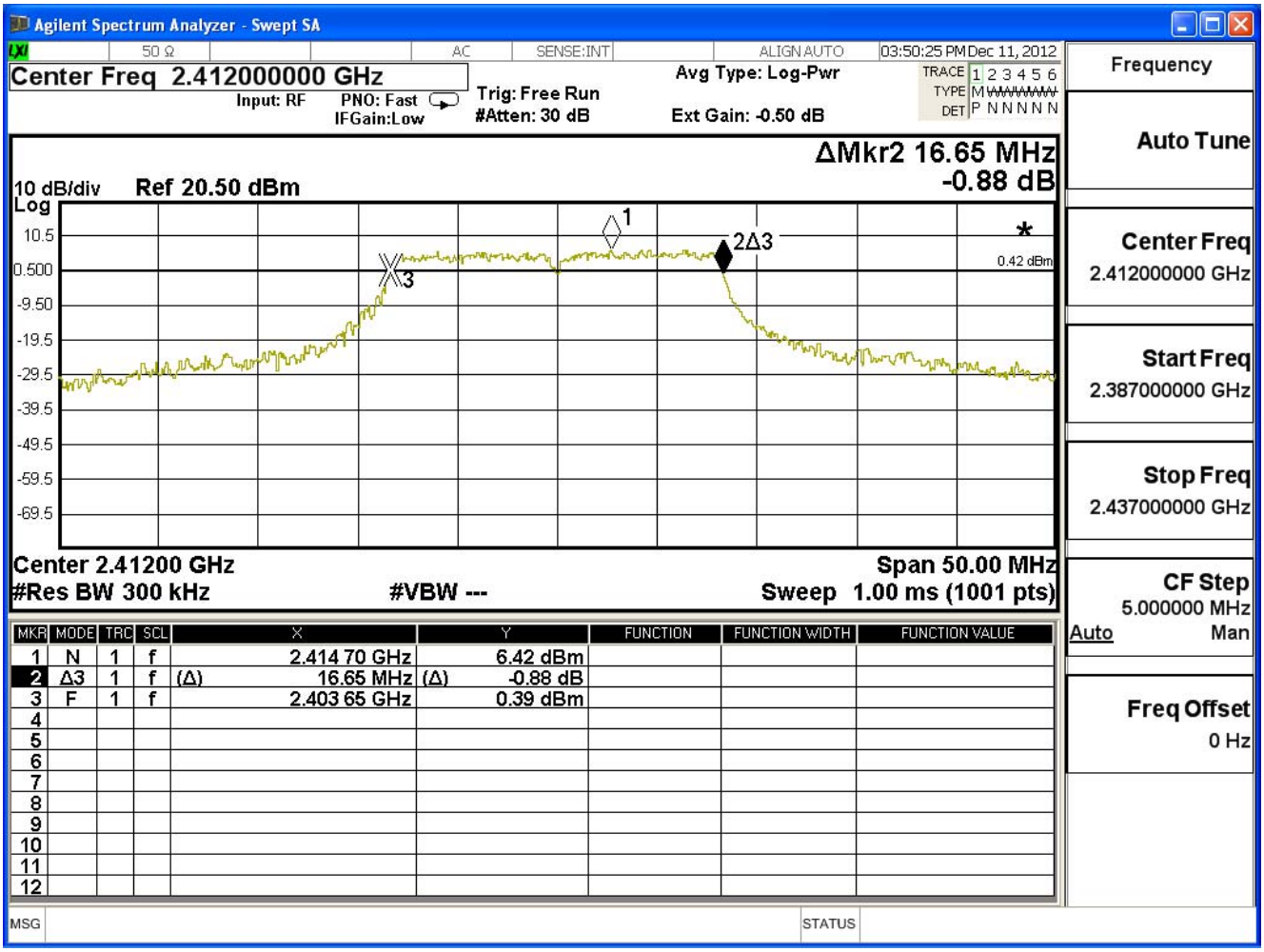
Channel 11


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:53:57 PM Dec 11, 2012
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 10.25 MHz
-1.15 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
1
2Δ3
3
2.85 dBm
Center 2.46200 GHz
#Res BW 300 kHz
#VBW ---
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.462 50 GHz 8.85 dBm
2 Δ3 1 f (Δ) 10.25 MHz (Δ) -1.15 dB
3 F 1 f 2.456 90 GHz 2.73 dBm
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.437000000 GHz
Stop Freq
2.487000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

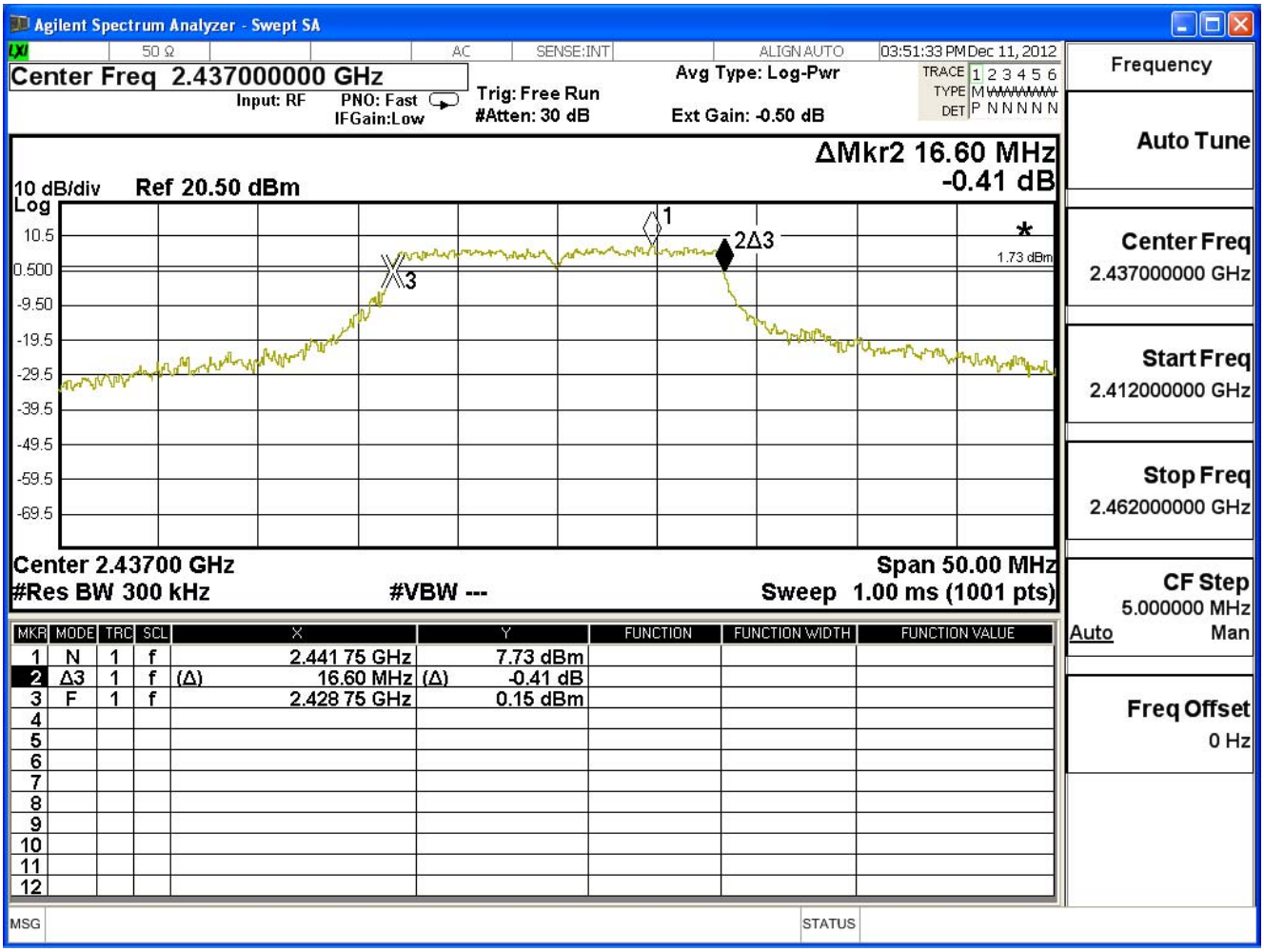
Product	All-in-One Wireless-N pocket router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/12/11	Test Site	SR7

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measurement Level (MHz)	Required Limit (MHz)	Result
1	2412	16.65	≧0.5	Pass
6	2437	16.60	≧0.5	Pass
11	2462	16.50	≧0.5	Pass

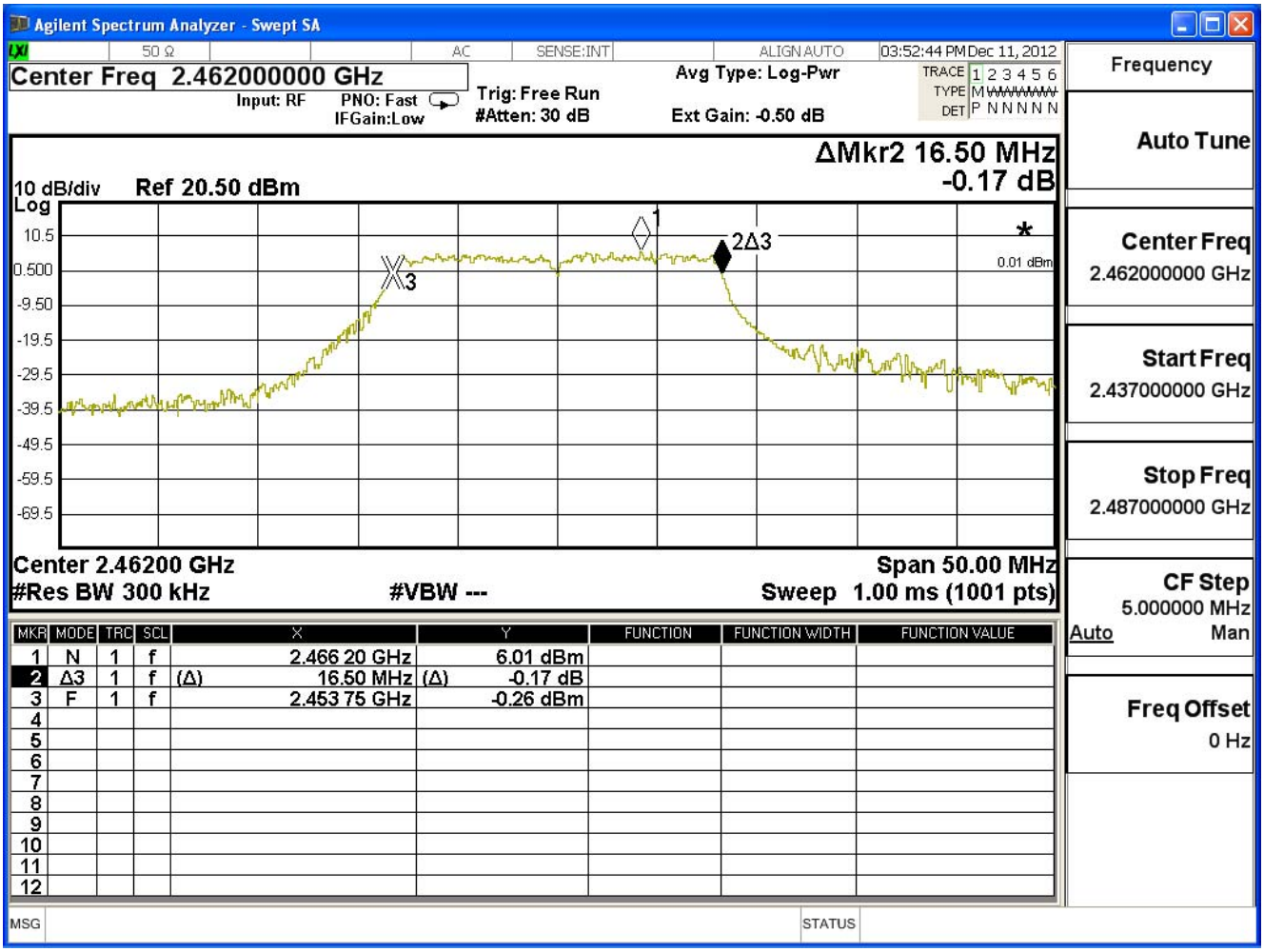
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:51:33 PM Dec 11, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 16.60 MHz
-0.41 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
1.73 dBm
Center 2.43700 GHz
#Res BW 300 kHz
#VBW ---
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.441 75 GHz 7.73 dBm
2 Δ3 1 f (Δ) 16.60 MHz (Δ) -0.41 dB
3 F 1 f 2.428 75 GHz 0.15 dBm
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.412000000 GHz
Stop Freq
2.462000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

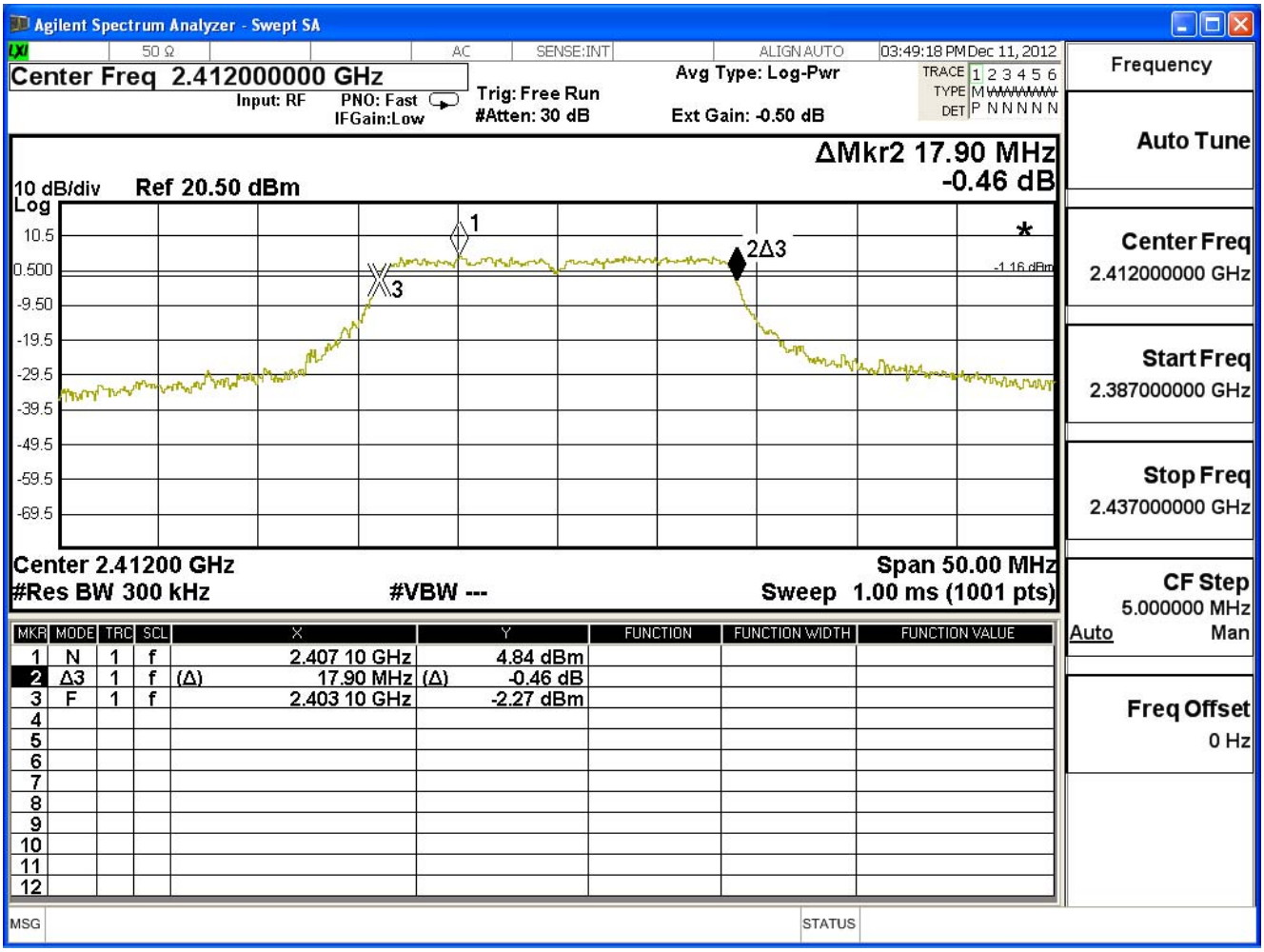
Channel 11


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:52:44 PM Dec 11, 2012
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 16.50 MHz
-0.17 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
0.01 dBm
Center 2.46200 GHz
#Res BW 300 kHz
#VBW ---
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.466 20 GHz 6.01 dBm
2 Δ3 1 f (Δ) 16.50 MHz (Δ) -0.17 dB
3 F 1 f 2.453 75 GHz -0.26 dBm
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.437000000 GHz
Stop Freq
2.487000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

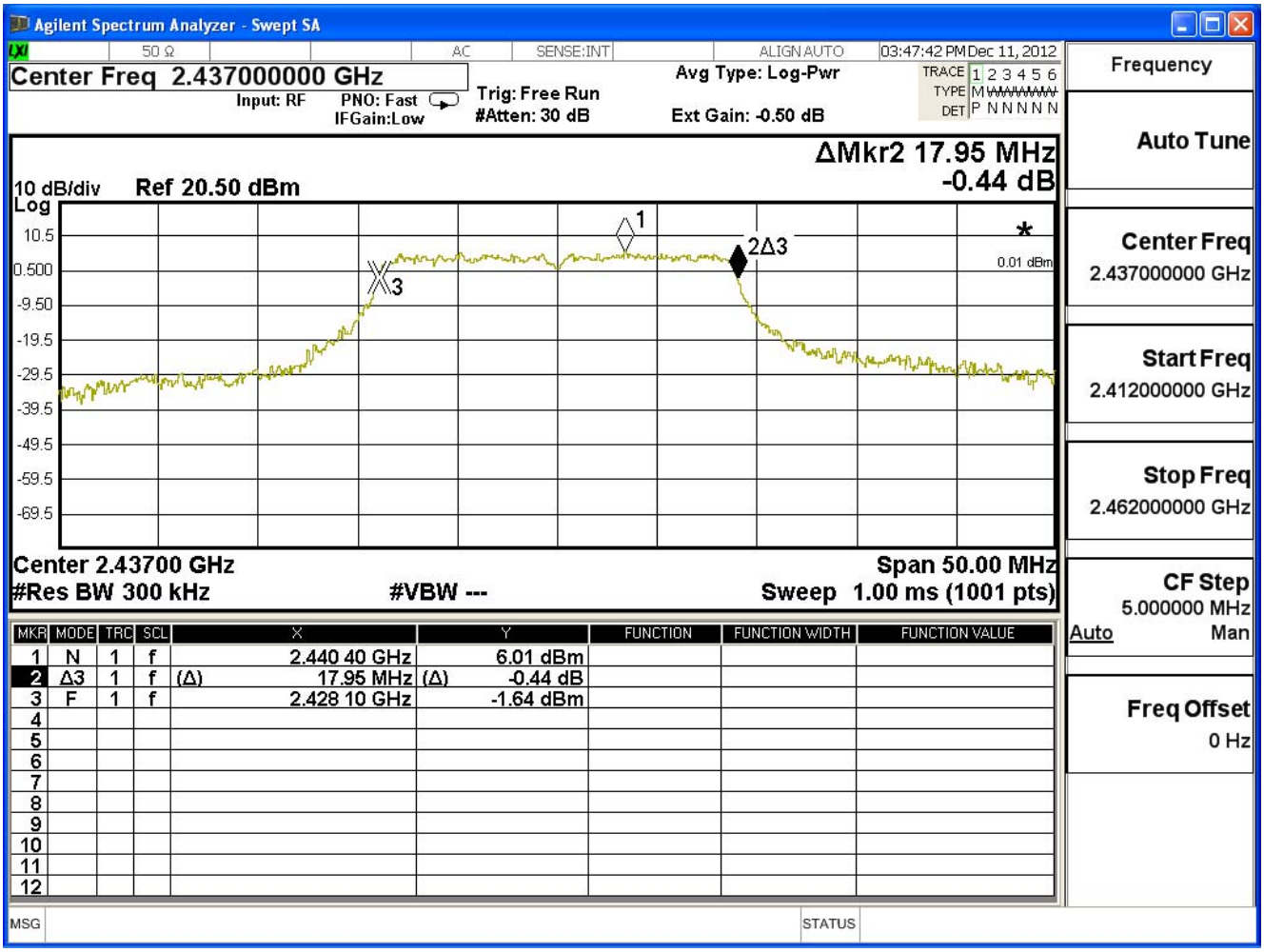
Product	All-in-One Wireless-N pocket router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/12/11	Test Site	SR7

IEEE 802.11n (20MHz)(ANT 0)				
Channel No.	Frequency (MHz)	Measurement Level (MHz)	Required Limit (MHz)	Result
1	2412	17.90	≧0.5	Pass
6	2437	17.95	≧0.5	Pass
11	2462	17.80	≧0.5	Pass

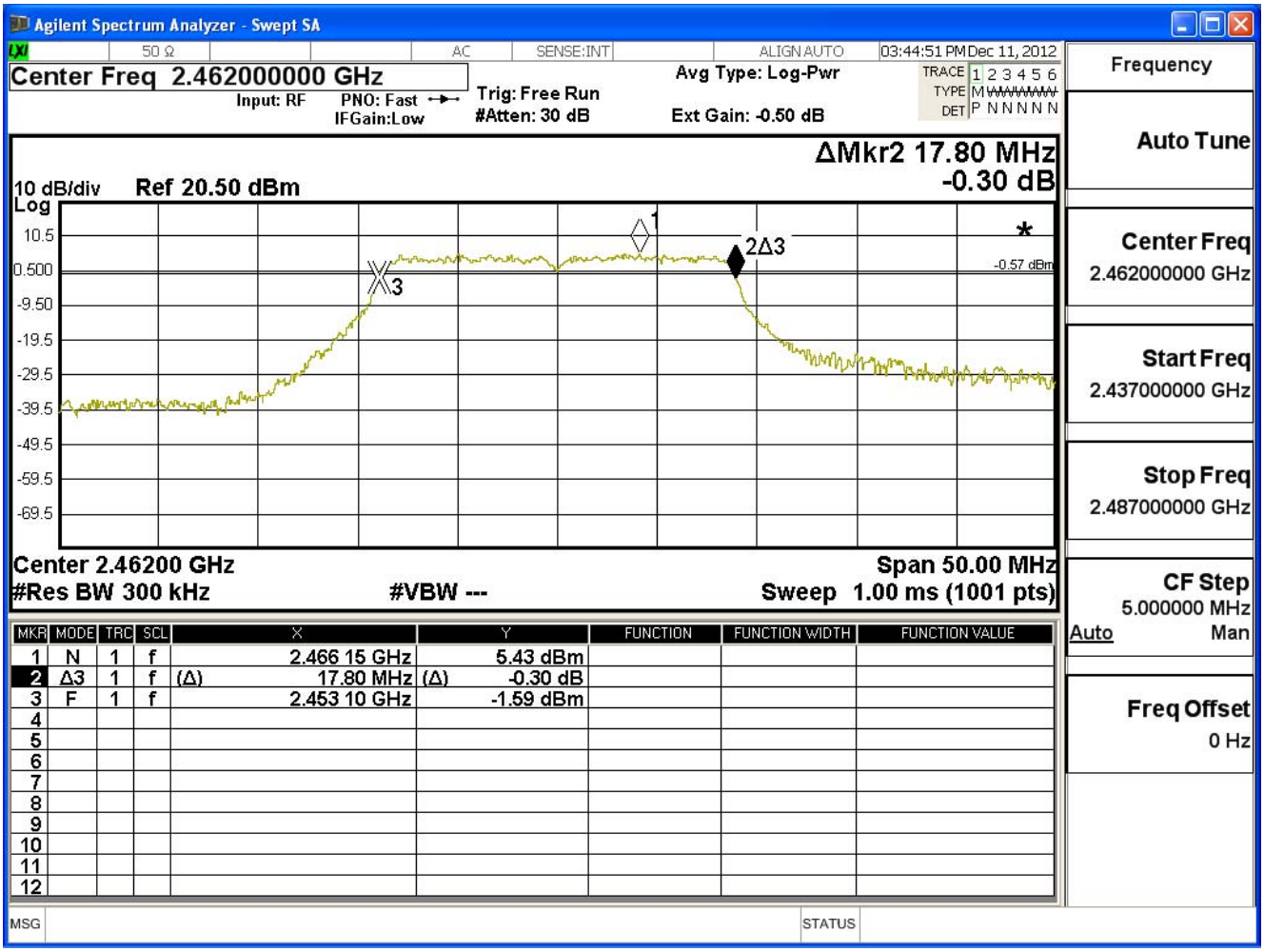
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:47:42 PM Dec 11, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 17.95 MHz
-0.44 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
0.01 dBm
Center 2.43700 GHz
#Res BW 300 kHz
#VBW ---
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.440 40 GHz 6.01 dBm
2 Δ3 1 f (Δ) 17.95 MHz (Δ) -0.44 dB
3 F 1 f 2.428 10 GHz -1.64 dBm
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.412000000 GHz
Stop Freq
2.462000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

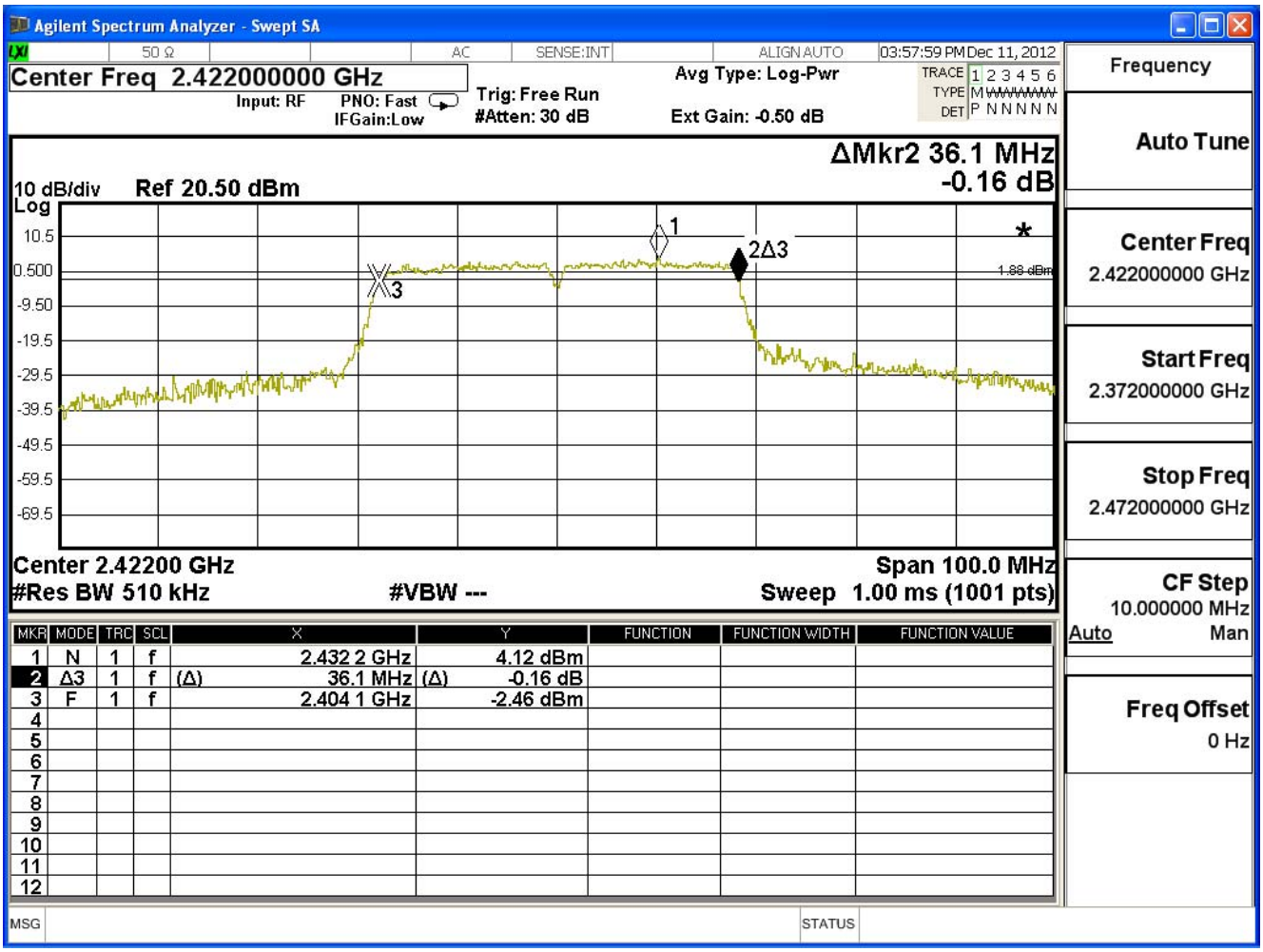
Channel 11


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:44:51 PM Dec 11, 2012
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 17.80 MHz
-0.30 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
-0.57 dBm
Center 2.46200 GHz
#Res BW 300 kHz
#VBW ---
Span 50.00 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.466 15 GHz 5.43 dBm
2 Δ3 1 f (Δ) 17.80 MHz (Δ) -0.30 dB
3 F 1 f 2.453 10 GHz -1.59 dBm
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.437000000 GHz
Stop Freq
2.487000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

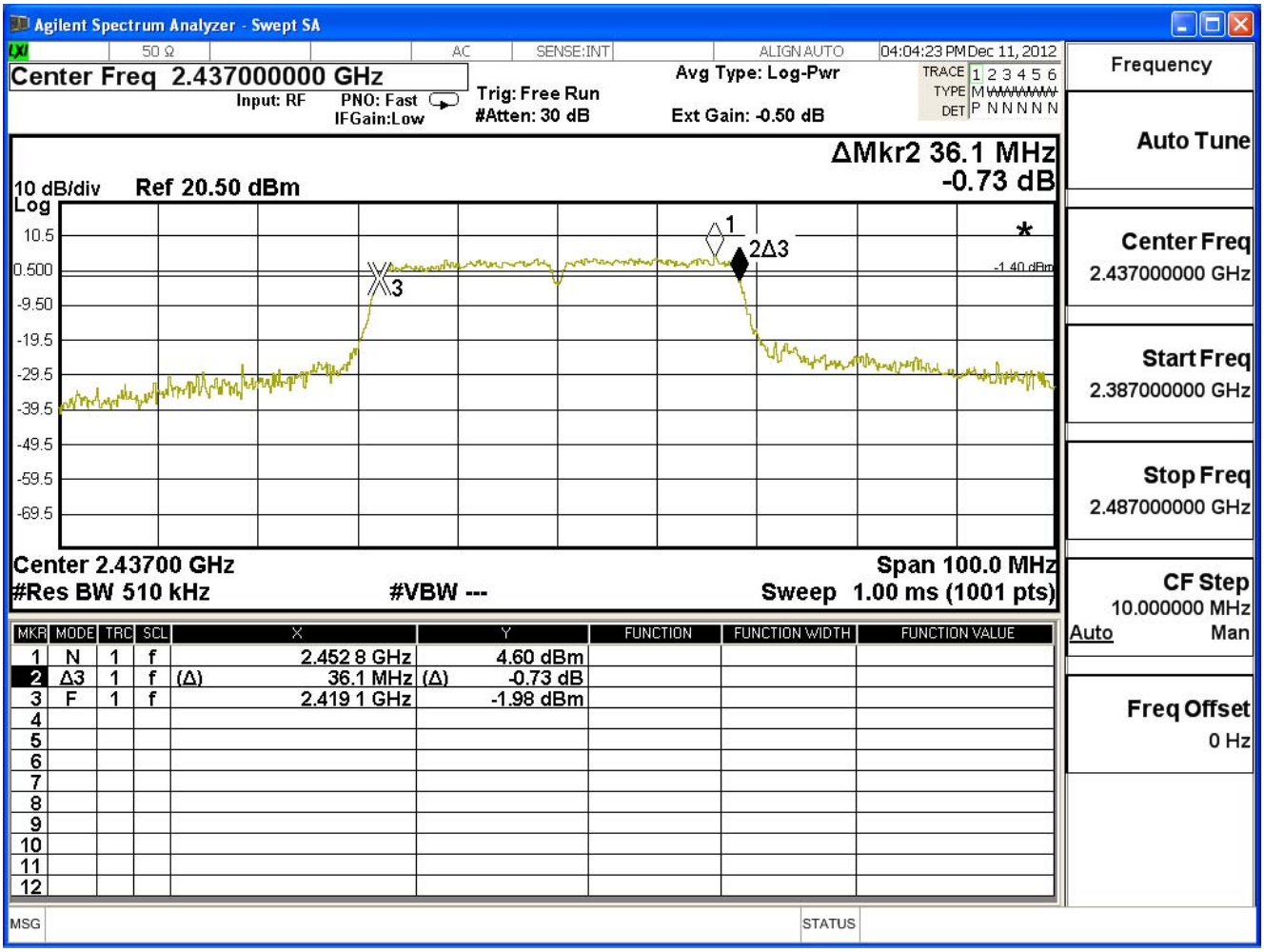
Product	All-in-One Wireless-N pocket router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/12/11	Test Site	SR7

IEEE 802.11n (40MHz)(ANT 0)				
Channel No.	Frequency (MHz)	Measurement Level (MHz)	Required Limit (MHz)	Result
3	2422	36.10	≧0.5	Pass
6	2437	36.10	≧0.5	Pass
9	2452	36.20	≧0.5	Pass

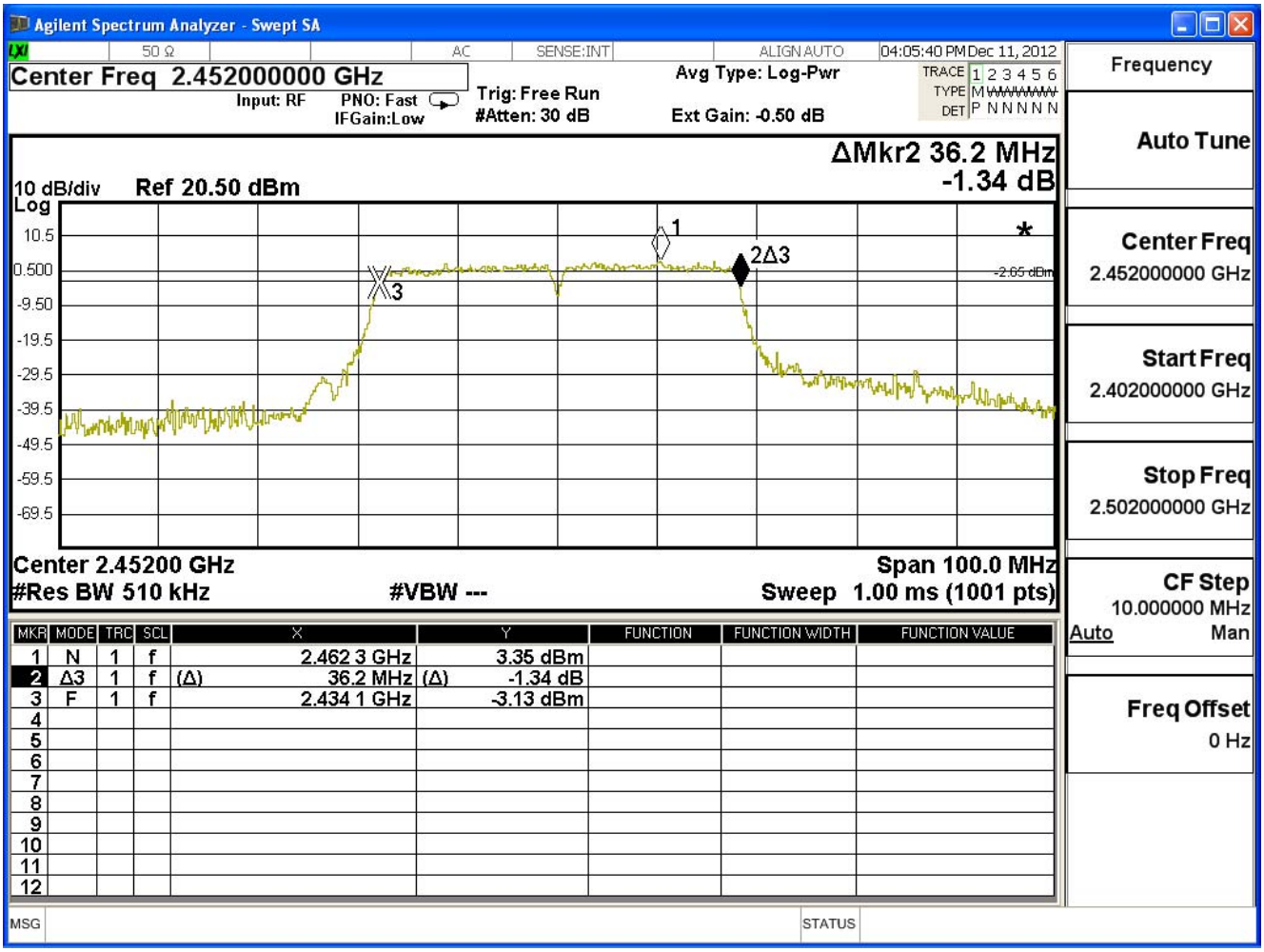
Channel 3



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:04:23 PM Dec 11, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 36.1 MHz
-0.73 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
-1.40 dBm
Center 2.43700 GHz
#Res BW 510 kHz
#VBW ---
Span 100.0 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.452 8 GHz 4.60 dBm
2 Δ3 1 f (Δ) 36.1 MHz (Δ) -0.73 dB
3 F 1 f 2.419 1 GHz -1.98 dBm
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.387000000 GHz
Stop Freq
2.487000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Channel 9


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:05:40 PM Dec 11, 2012
Center Freq 2.452000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr2 36.2 MHz
-1.34 dB
10 dB/div
Ref 20.50 dBm
Log
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
-2.65 dBm
Center 2.45200 GHz
#Res BW 510 kHz
#VBW ---
Span 100.0 MHz
Sweep 1.00 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.462 3 GHz 3.35 dBm
2 Δ3 1 f (Δ) 36.2 MHz (Δ) -1.34 dB
3 F 1 f 2.434 1 GHz -3.13 dBm
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.402000000 GHz
Stop Freq
2.502000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

8. Power Density

8.1. Test Equipment

The following test equipment is used during the test:

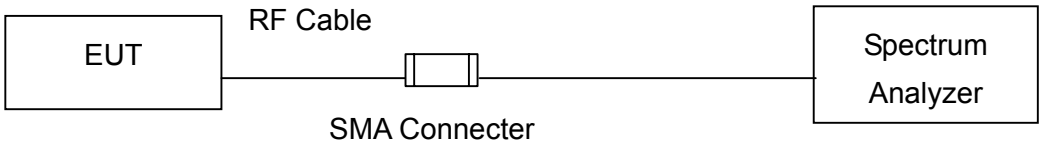
Power Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	R&S	FSP	100561	2013/02/19

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup

IEEE 802.11 b / g / a / n (20M / 40M) MODE



8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW= 100 kHz, Set VBW= 300 kHz, Sweep time=Auto, Set detector=Peak detector

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2011

8.6. Uncertainty

The measurement uncertainty is defined as ±1.27dB.

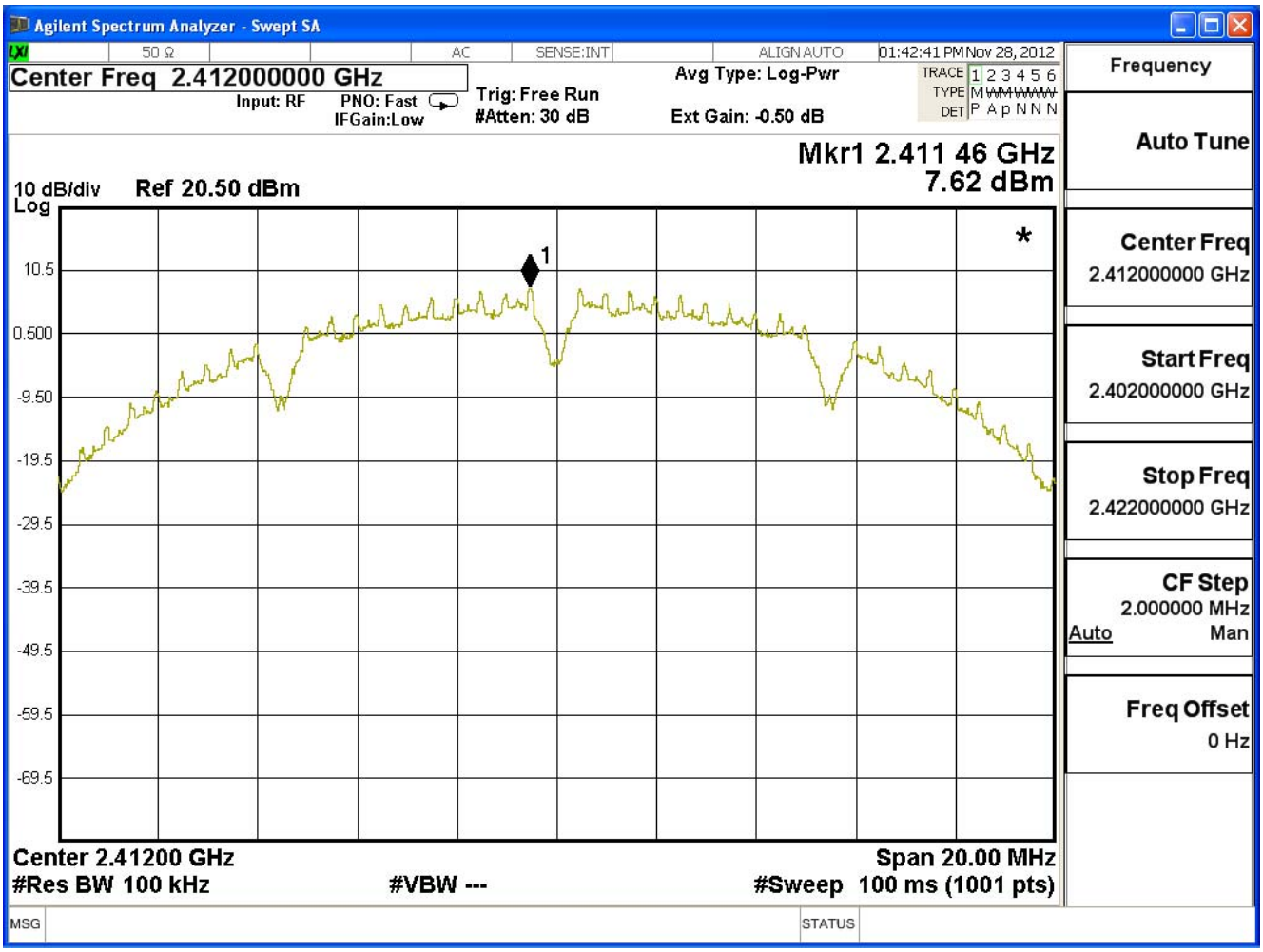
8.7. Test Result

Product	All-in-One Wireless-N pocket router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/11/28	Test Site	SR7

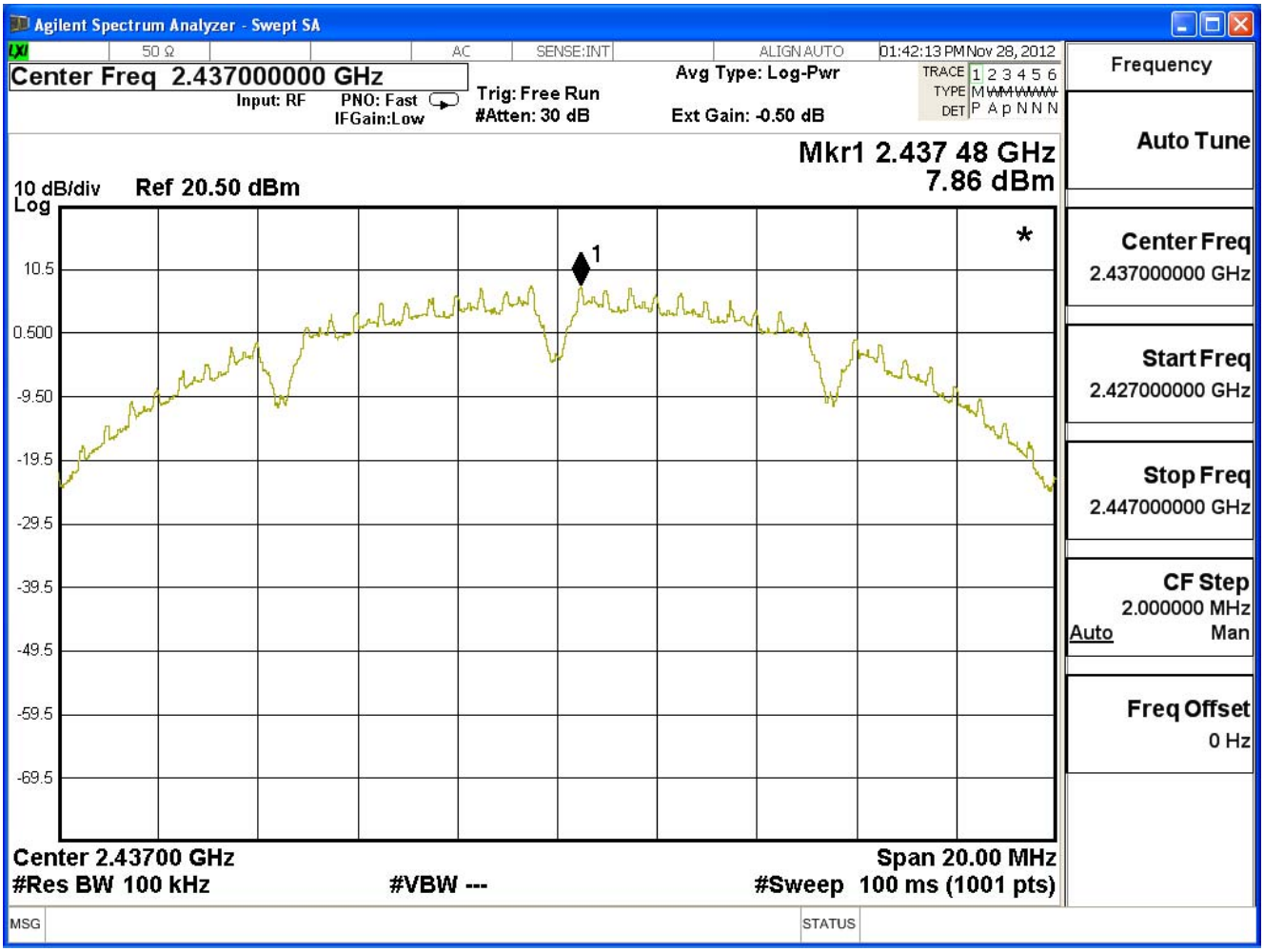
IEEE 802.11b					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	7.62	-7.58	≦8	Pass
6	2437	7.86	-7.34	≦8	Pass
11	2462	7.79	-7.41	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

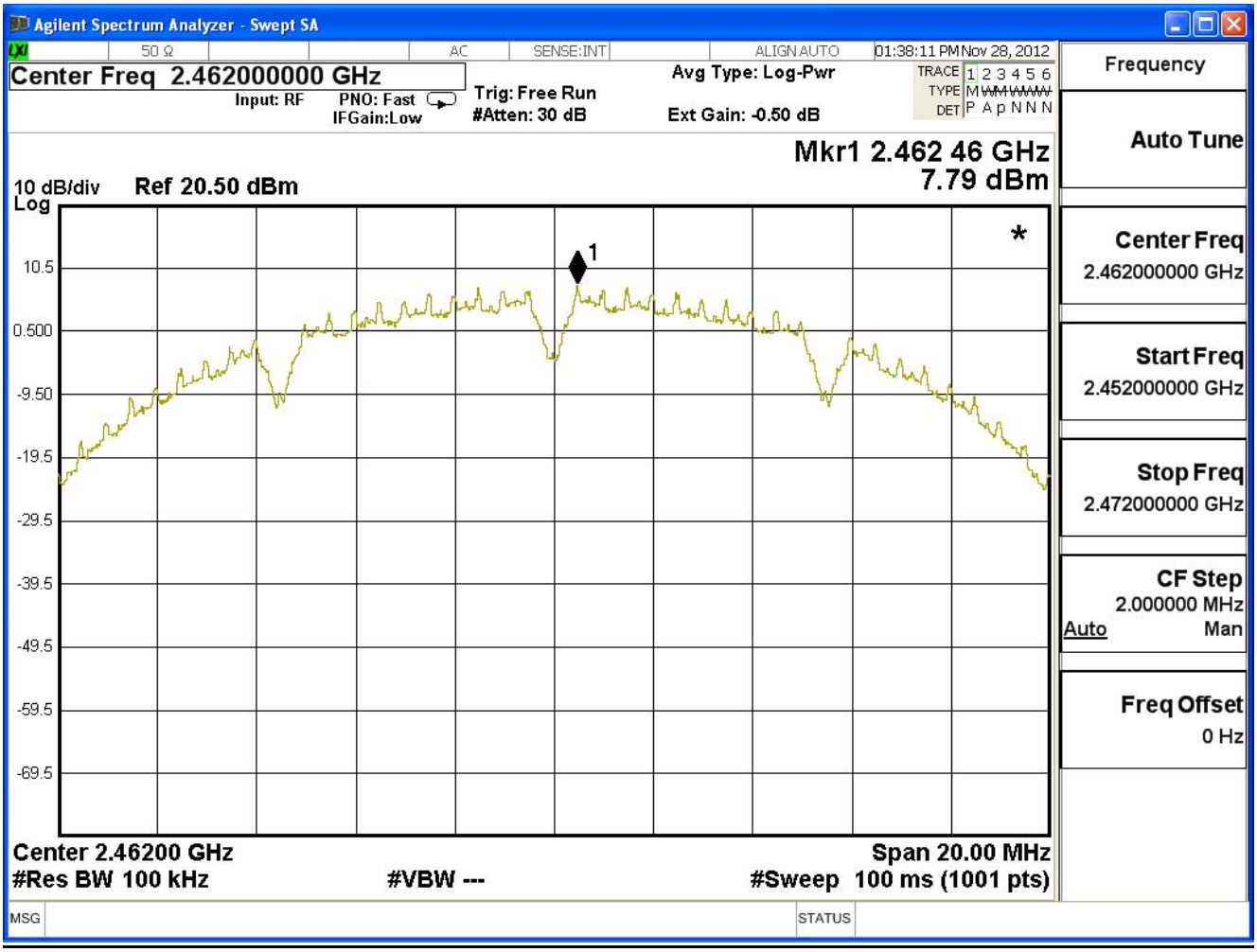
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:42:13 PM Nov 28, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P A p N N N
Mkr1 2.437 48 GHz
7.86 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.43700 GHz
#Res BW 100 kHz
#VBW ---
Span 20.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.427000000 GHz
Stop Freq
2.447000000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 11

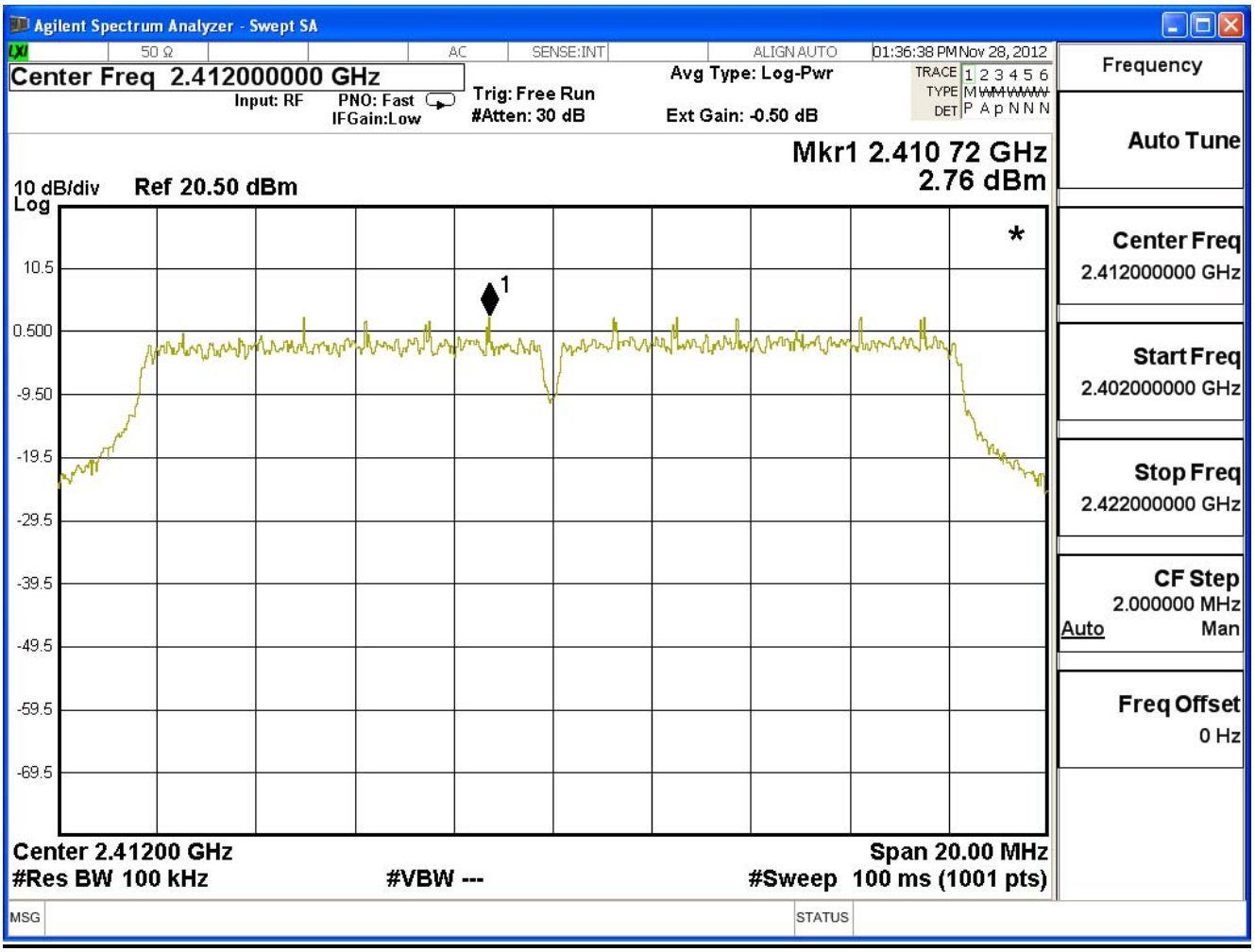

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:38:11 PM Nov 28, 2012
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P A p N N N
Mkr1 2.462 46 GHz
7.79 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.46200 GHz
#Res BW 100 kHz
#VBW ---
Span 20.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.452000000 GHz
Stop Freq
2.472000000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	All-in-One Wireless-N pocket router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/11/28	Test Site	SR7

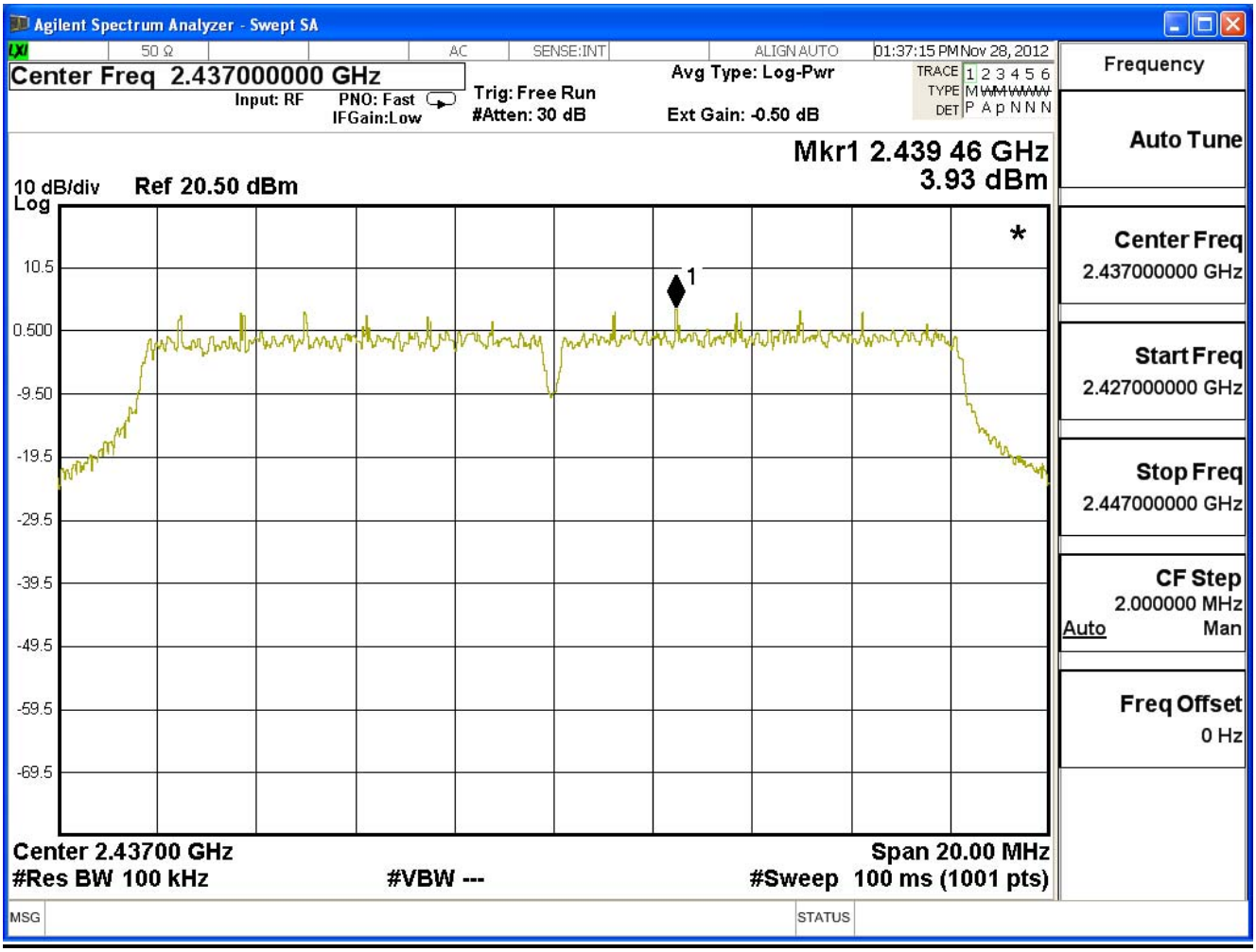
IEEE 802.11g					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measurement (dBm)	Limit (dBm)	Result
1	2412	2.76	-12.44	≦8	Pass
6	2437	3.93	-11.27	≦8	Pass
11	2462	-1.75	-16.95	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

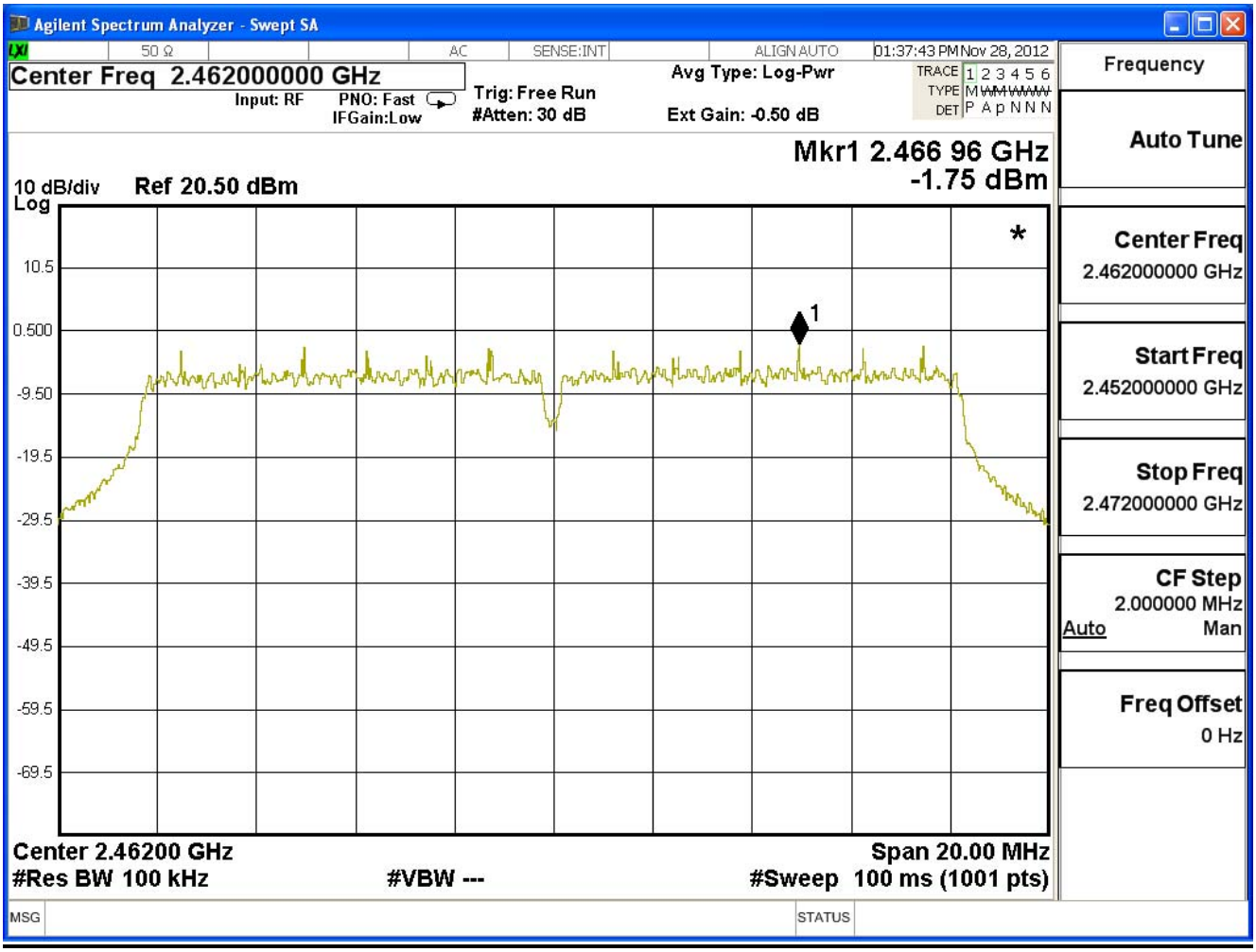
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:37:15 PM Nov 28, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P A p N N N
Mkr1 2.439 46 GHz
3.93 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.43700 GHz
#Res BW 100 kHz
#VBW ---
Span 20.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.427000000 GHz
Stop Freq
2.447000000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 11

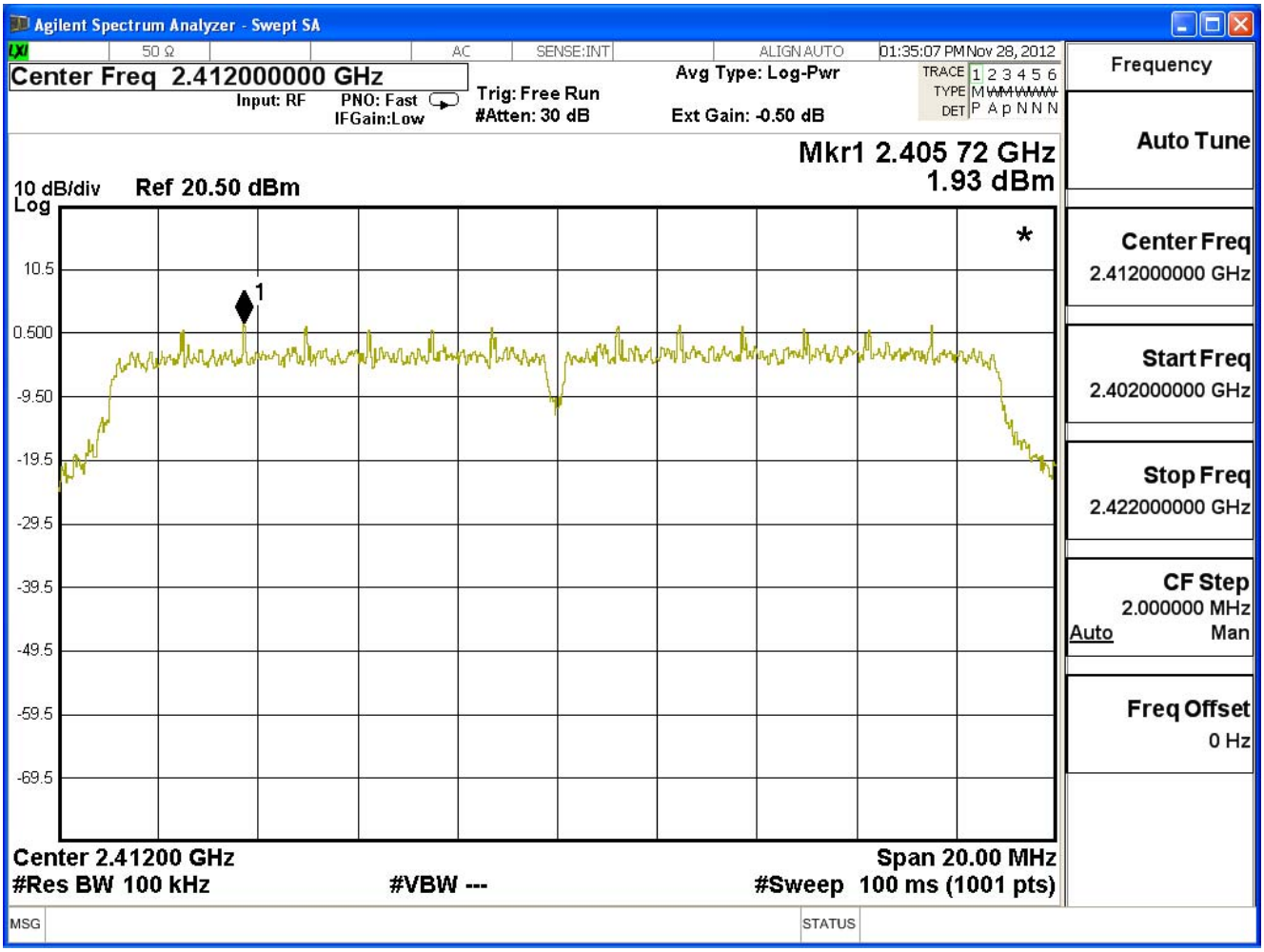

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:37:43 PM Nov 28, 2012
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P A P N N N
Mkr1 2.466 96 GHz
-1.75 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.46200 GHz
#Res BW 100 kHz
#VBW ---
Span 20.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.452000000 GHz
Stop Freq
2.472000000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	All-in-One Wireless-N pocket router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/11/28	Test Site	SR7

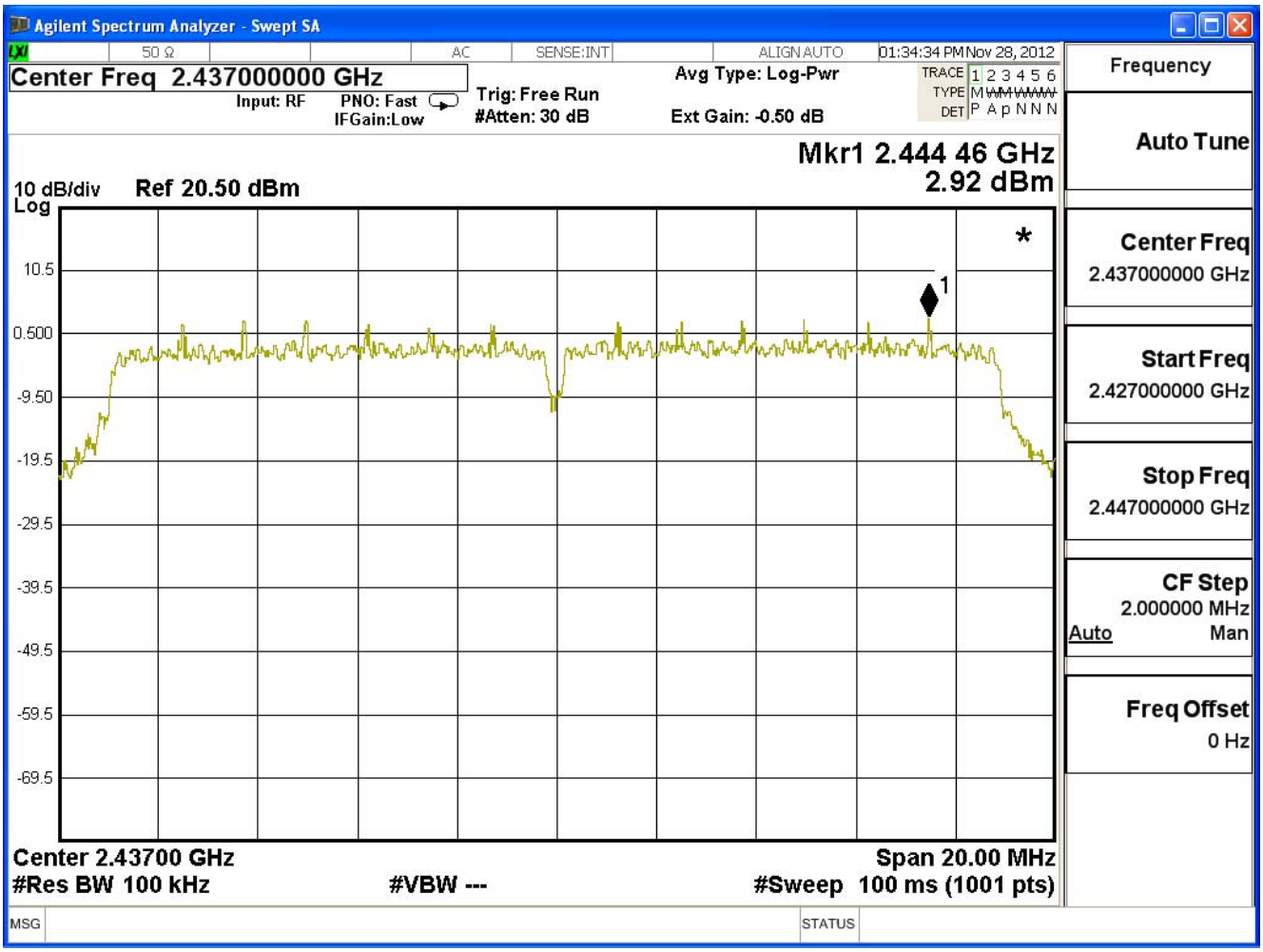
IEEE802.11n_20MHz_(ANT 0)					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	1.93	-13.27	≦8	Pass
6	2437.00	2.92	-12.28	≦8	Pass
11	2462.00	-1.44	-16.64	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

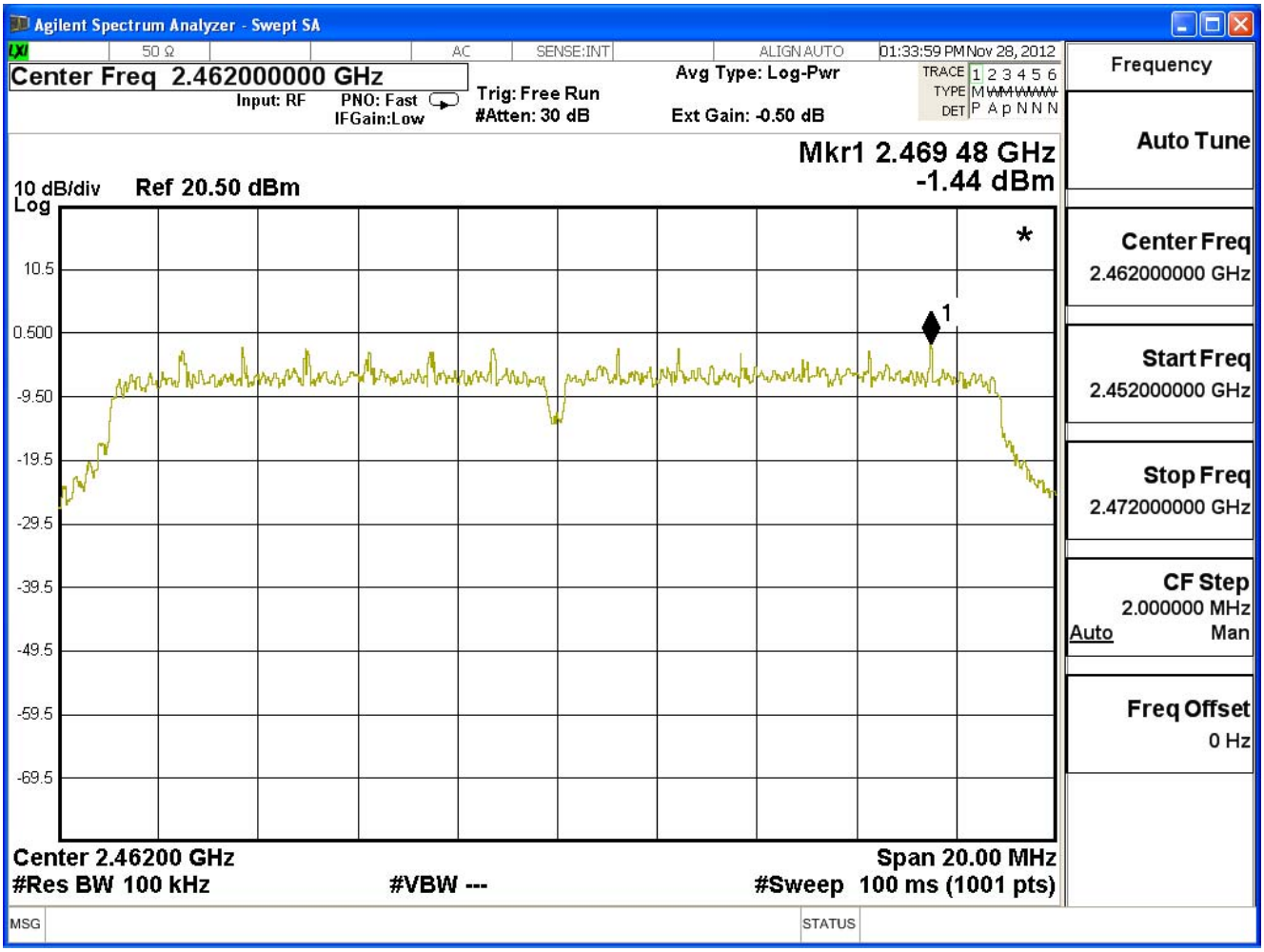
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:34:34 PM Nov 28, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P A p N N N
Mkr1 2.444 46 GHz
2.92 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.43700 GHz
#Res BW 100 kHz
#VBW ---
Span 20.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.427000000 GHz
Stop Freq
2.447000000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 11


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:33:59 PM Nov 28, 2012
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P A p N N N
Mkr1 2.469 48 GHz
-1.44 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.46200 GHz
#Res BW 100 kHz
#VBW ---
Span 20.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.452000000 GHz
Stop Freq
2.472000000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

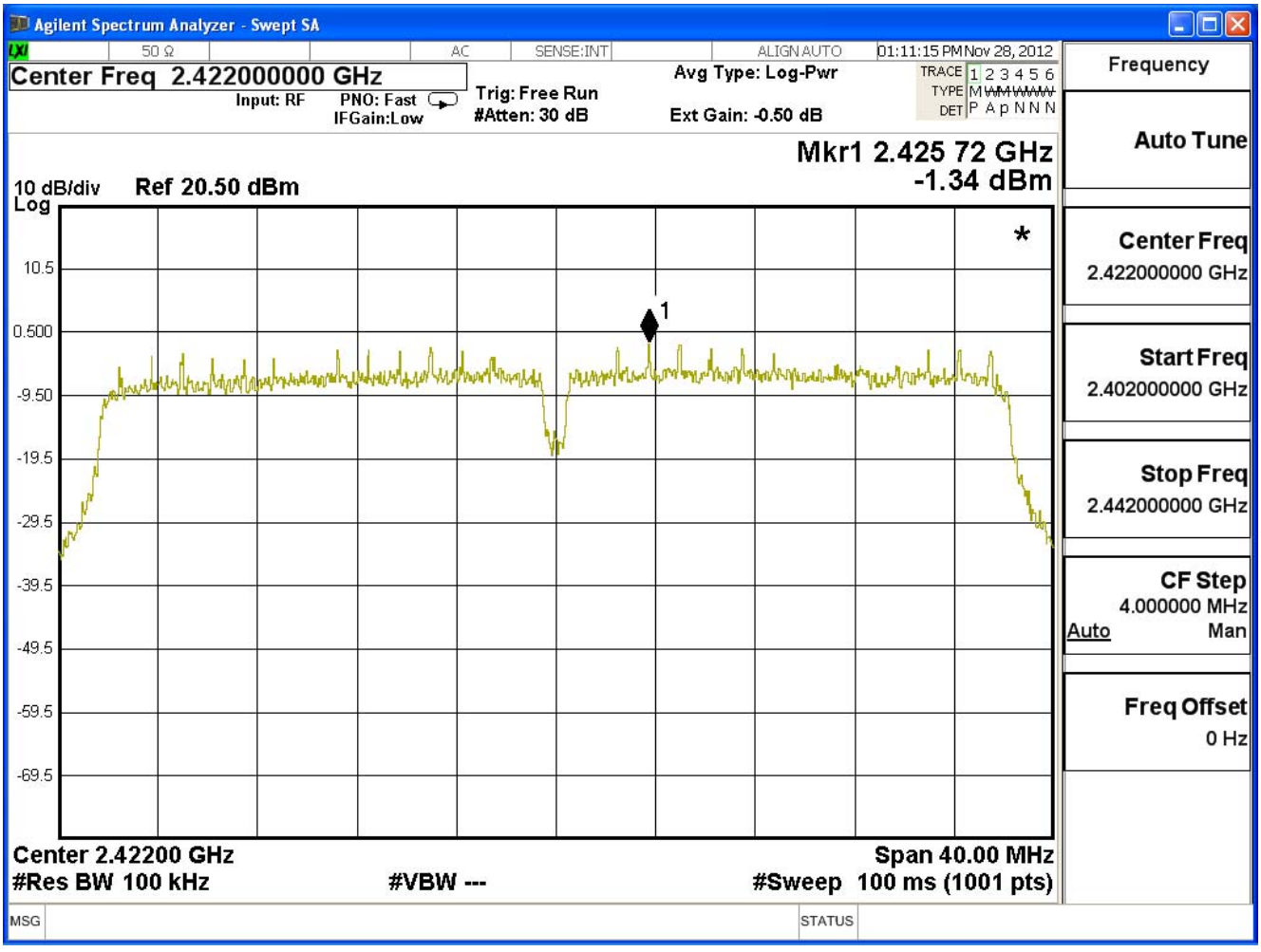
Product	All-in-One Wireless-N pocket router		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Adapter)		
Date of Test	2012/11/28	Test Site	SR7

IEEE 802.11n_40MHz (ANT 0)

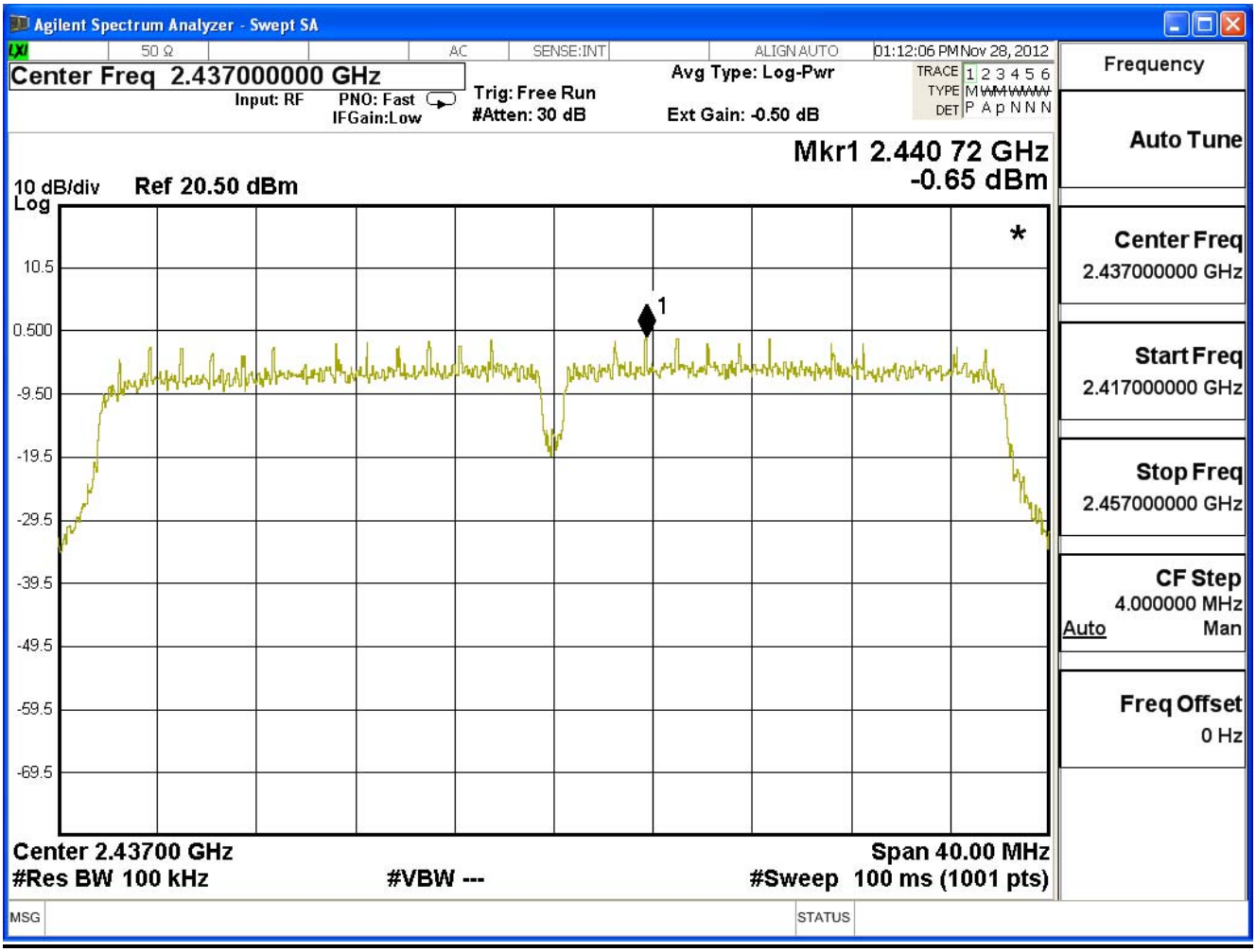
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measurement (dBm)	Limit (dBm)	Result
3	2422	-1.34	-16.54	≦8	Pass
6	2437	-0.65	-15.85	≦8	Pass
9	2452	-2.87	-18.07	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

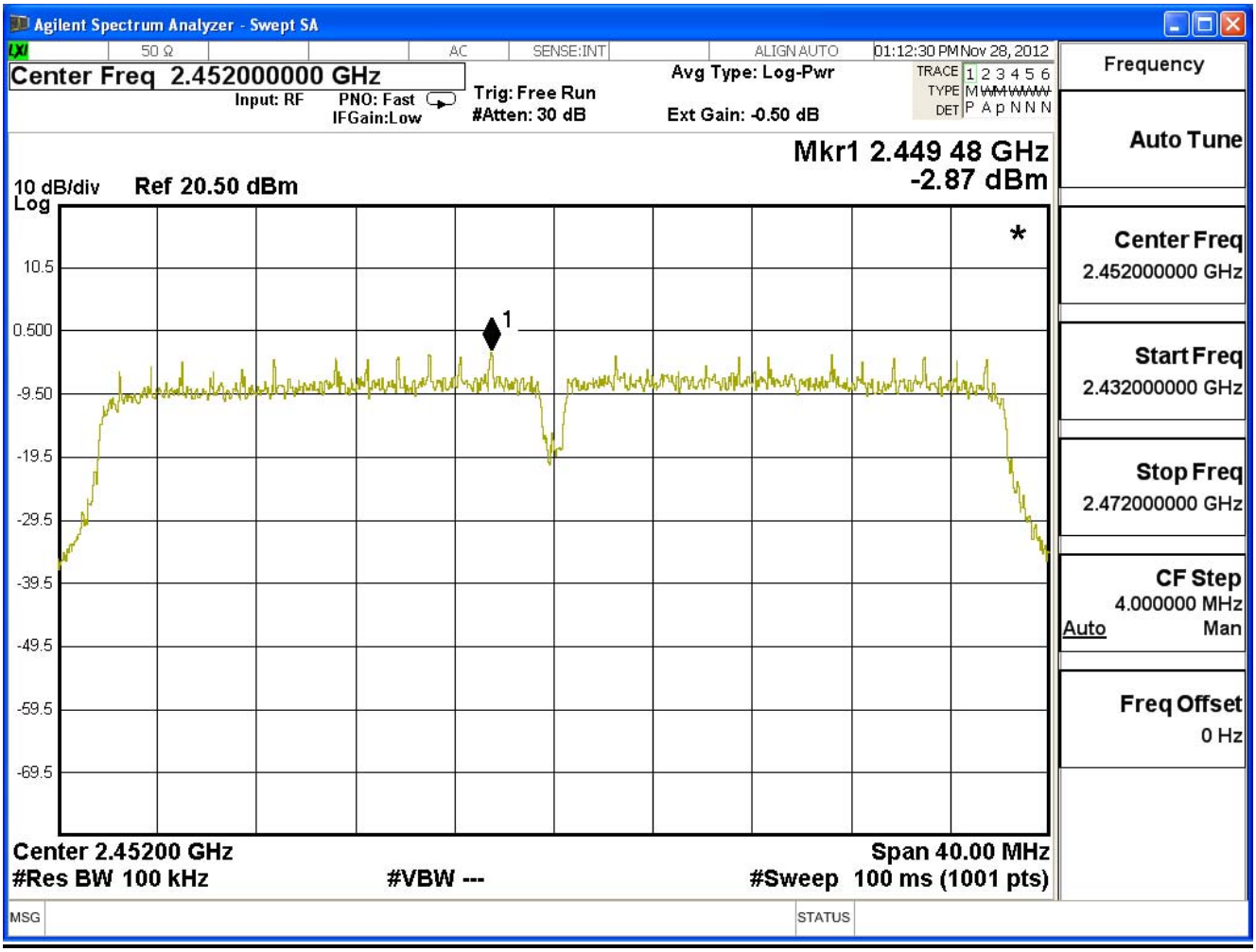
Channel 3



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:12:06 PM Nov 28, 2012
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P A p N N N
Mkr1 2.440 72 GHz
-0.65 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.43700 GHz
#Res BW 100 kHz
#VBW ---
Span 40.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.437000000 GHz
Start Freq
2.417000000 GHz
Stop Freq
2.457000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 9


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:12:30 PM Nov 28, 2012
Center Freq 2.452000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Ext Gain: -0.50 dB
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P A p N N N
Mkr1 2.449 48 GHz
-2.87 dBm
10 dB/div
Log
Ref 20.50 dBm
10.5
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
Center 2.45200 GHz
#Res BW 100 kHz
#VBW ---
Span 40.00 MHz
#Sweep 100 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.432000000 GHz
Stop Freq
2.472000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz