6. **Radiated Emission Band Edge**

6.1. Test Equipment

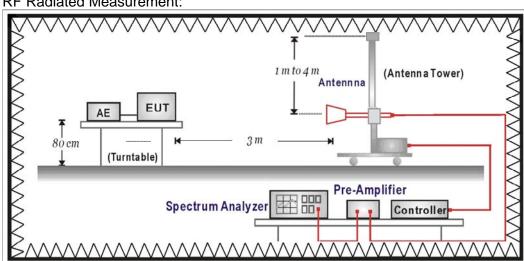
The following test equipments are used during the test:

Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date	
Double Ridged Guide	Schwarzback	BBHA 9120D	743	2013/02/02	
Horn Antenna					
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



RF Radiated Measurement:



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

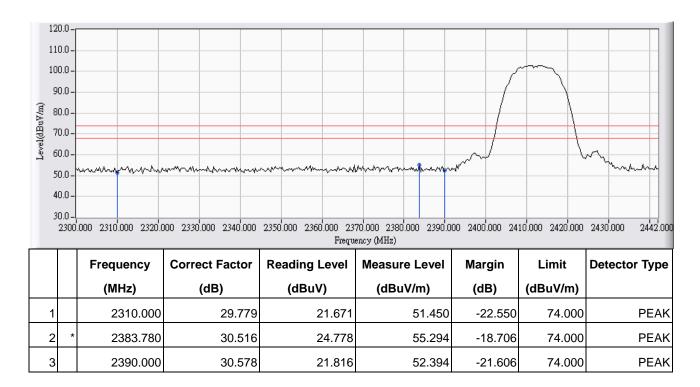
The measurement uncertainty ± 3.9 dB above 1GHz



6.7. Test Result

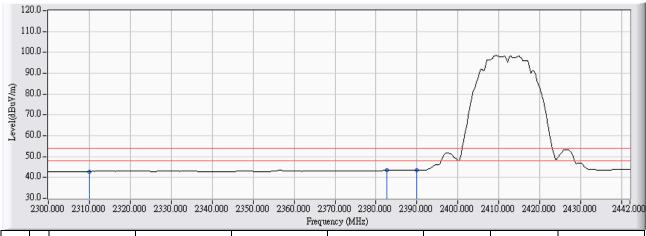
Radiated is defined as

Site : Site1	Time : 2012/06/06 - 18:37
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH01



- 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.

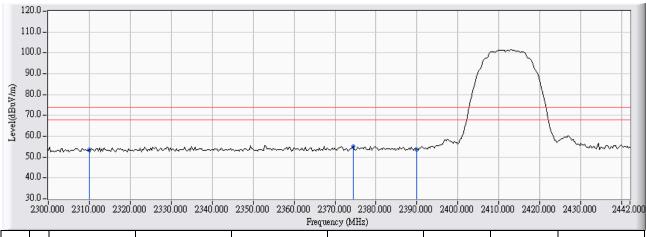
Site : Site1	Time : 2012/06/06 - 18:39
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	13.134	42.913	-11.087	54.000	AVERAGE
2		2382.644	30.504	12.842	43.346	-10.654	54.000	AVERAGE
3	*	2390.000	30.578	12.812	43.390	-10.610	54.000	AVERAGE

- 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.

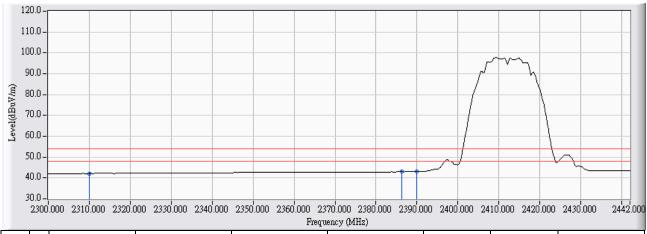
Site : Site1	Time : 2012/06/06 - 18:44
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	23.696	53.475	-20.525	74.000	PEAK
2	*	2374.408	30.423	24.596	55.018	-18.982	74.000	PEAK
3		2390.000	30.578	23.185	53.763	-20.237	74.000	PEAK

- 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.

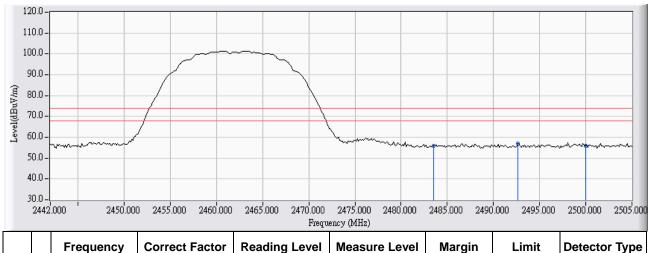
Site : Site1	Time : 2012/06/06 - 18:45
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.401	42.180	-11.820	54.000	AVERAGE
2		2386.336	30.541	12.406	42.947	-11.053	54.000	AVERAGE
3	*	2390.000	30.578	12.445	43.023	-10.977	54.000	AVERAGE

- 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 : Site1	Time : 2012/06/06 - 18:48
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	24.284	55.796	-18.204	74.000	PEAK
2	*	2492.652	31.603	25.488	57.091	-16.909	74.000	PEAK
3		2500.000	31.638	24.408	56.047	-17.953	74.000	PEAK

- 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.

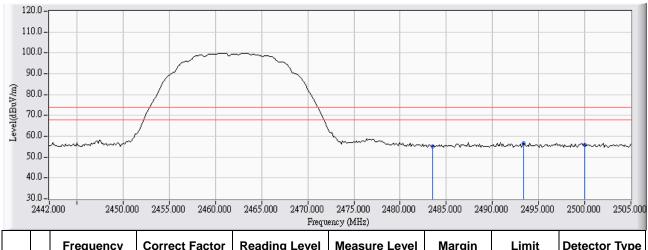
Site : Site1	Time : 2012/06/06 - 18:49
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	12.328	43.840	-10.160	54.000	AVERAGE
2		2498.574	31.638	12.209	43.847	-10.153	54.000	AVERAGE
3	*	2500.000	31.638	12.298	43.937	-10.063	54.000	AVERAGE

- 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.

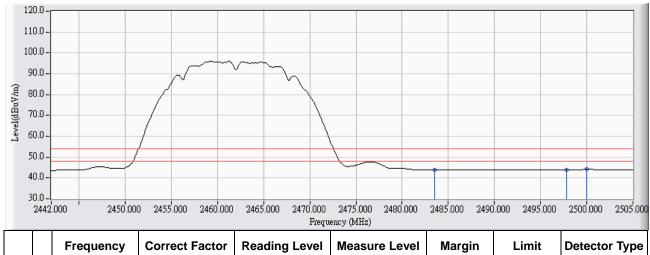
Site : Site1	Time : 2012/06/06 - 18:51
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	23.771	55.283	-18.717	74.000	PEAK
2	*	2493.408	31.610	25.129	56.740	-17.260	74.000	PEAK
3		2500.000	31.638	24.245	55.884	-18.116	74.000	PEAK

- 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.

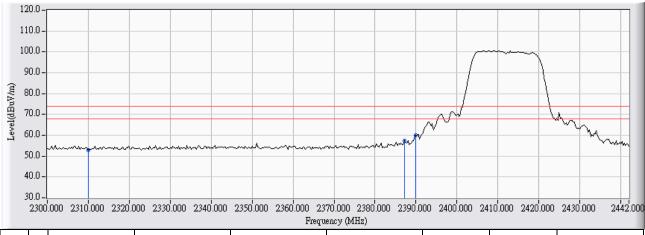
Site : Site1	Time : 2012/06/06 - 18:53
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	12.376	43.888	-10.112	54.000	AVERAGE
2		2497.818	31.637	12.170	43.808	-10.192	54.000	AVERAGE
3	*	2500.000	31.638	12.641	44.280	-9.720	54.000	AVERAGE

- 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.

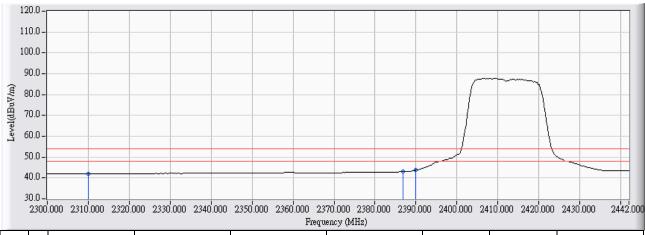
Site : Site1	Time : 2012/06/06 - 19:02
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	23.141	52.920	-21.080	74.000	PEAK
2		2387.188	30.550	26.965	57.515	-16.485	74.000	PEAK
3	*	2390.000	30.578	29.272	59.850	-14.150	74.000	PEAK

- 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.

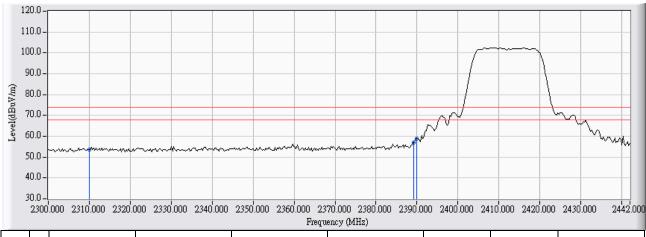
Site : Site1	Time : 2012/06/06 - 19:04
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.189	41.968	-12.032	54.000	AVERAGE
2		2386.904	30.548	12.394	42.941	-11.059	54.000	AVERAGE
3	*	2390.000	30.578	13.177	43.755	-10.245	54.000	AVERAGE

- 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.

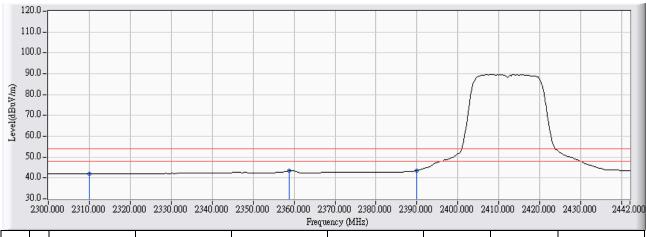
Site : Site1	Time : 2012/06/06 - 19:06
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	23.737	53.516	-20.484	74.000	PEAK
2		2389.176	30.569	26.536	57.106	-16.894	74.000	PEAK
3	*	2390.000	30.578	28.234	58.812	-15.188	74.000	PEAK

- 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 : Site1	Time : 2012/06/06 - 19:07
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.213	41.992	-12.008	54.000	AVERAGE
2		2358.788	30.266	13.118	43.384	-10.616	54.000	AVERAGE
3	*	2390.000	30.578	13.018	43.596	-10.404	54.000	AVERAGE

- 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.

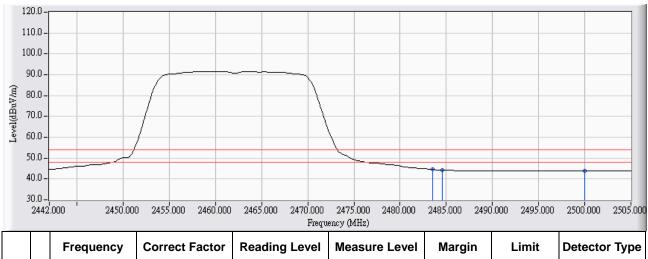
Site : Site1	Time : 2012/06/06 - 19:11
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	28.764	60.276	-13.724	74.000	PEAK
2		2484.966	31.527	28.691	60.217	-13.783	74.000	PEAK
3		2500.000	31.638	23.937	55.576	-18.424	74.000	PEAK

- 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.

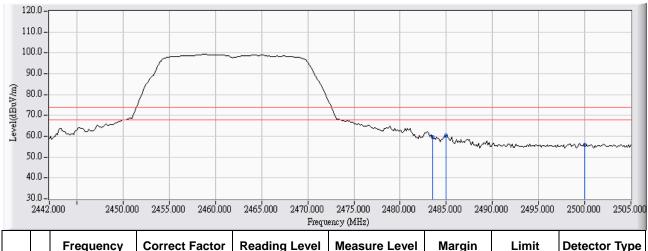
Site : Site1	Time : 2012/06/06 - 19:12
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	13.043	44.555	-9.445	54.000	AVERAGE
2		2484.588	31.523	12.694	44.217	-9.783	54.000	AVERAGE
3		2500.000	31.638	12.231	43.870	-10.130	54.000	AVERAGE

- 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.

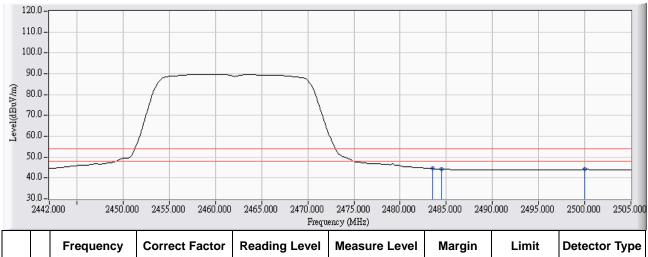
Site : Site1	Time : 2012/06/06 - 19:14
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	28.150	59.662	-14.338	74.000	PEAK
2	*	2484.966	31.527	28.726	60.252	-13.748	74.000	PEAK
3		2500.000	31.638	24.155	55.794	-18.206	74.000	PEAK

- 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.

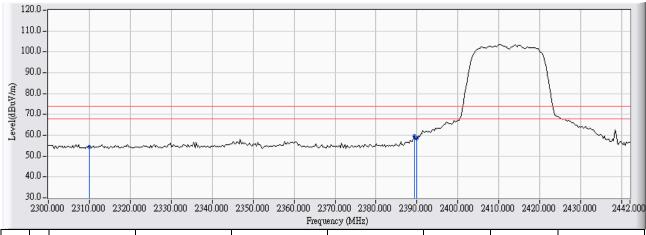
Site : Site1	Time : 2012/06/06 - 19:15
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	12.972	44.484	-9.516	54.000	AVERAGE
2		2484.462	31.521	12.672	44.193	-9.807	54.000	AVERAGE
3		2500.000	31.638	12.517	44.156	-9.844	54.000	AVERAGE

- 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.

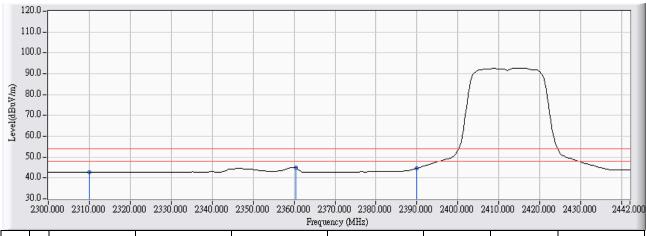
Site : Site1	Time : 2012/06/06 - 19:20
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.763	54.542	-19.458	74.000	PEAK
2	*	2389.460	30.573	28.890	59.463	-14.537	74.000	PEAK
3		2390.000	30.578	27.789	58.367	-15.633	74.000	PEAK

- 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.

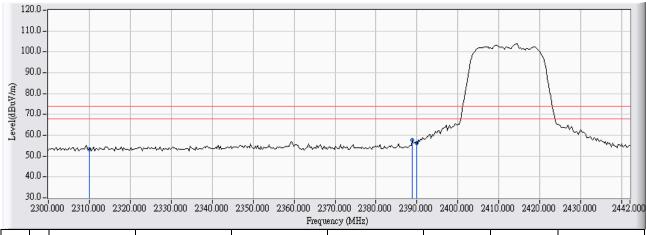
Site : Site1	Time : 2012/06/06 - 19:22
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.853	42.632	-11.368	54.000	AVERAGE
2	*	2360.492	30.284	14.670	44.953	-9.047	54.000	AVERAGE
3		2390.000	30.578	14.080	44.658	-9.342	54.000	AVERAGE

- 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.

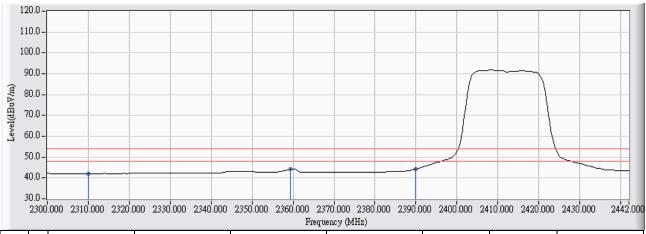
Site : Site1	Time : 2012/06/06 - 19:24
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	23.584	53.363	-20.637	74.000	PEAK
2	*	2388.892	30.567	27.019	57.586	-16.414	74.000	PEAK
3		2390.000	30.578	25.492	56.070	-17.930	74.000	PEAK

- 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 : Site1	Time : 2012/06/06 - 19:25
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.362	42.141	-11.859	54.000	AVERAGE
2		2359.356	30.272	13.841	44.113	-9.887	54.000	AVERAGE
3	*	2390.000	30.578	13.721	44.299	-9.701	54.000	AVERAGE

- 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.

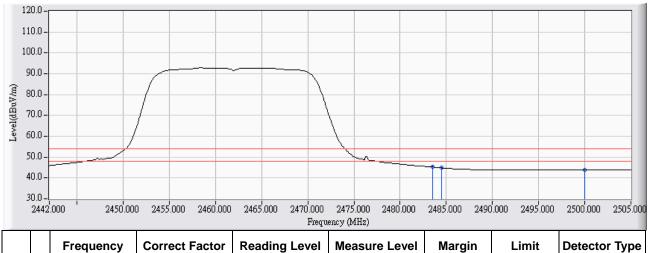
Site : Site1	Time : 2012/06/06 - 19:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	26.219	57.731	-16.269	74.000	PEAK
2	*	2484.714	31.524	26.648	58.172	-15.828	74.000	PEAK
3		2500.000	31.638	23.921	55.560	-18.440	74.000	PEAK

- 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.

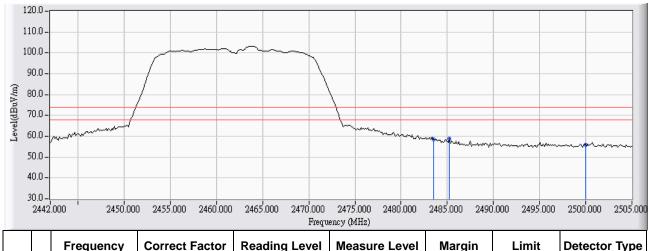
Site : Site1	Time : 2012/06/06 - 19:29
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	13.697	45.209	-8.791	54.000	AVERAGE
2		2484.462	31.521	13.295	44.816	-9.184	54.000	AVERAGE
3		2500.000	31.638	12.329	43.968	-10.032	54.000	AVERAGE

- 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.

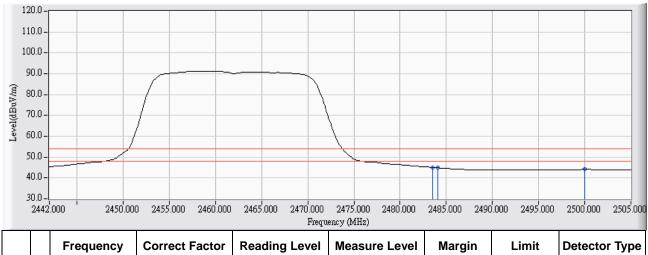
Site : Site1	Time : 2012/06/06 - 19:32
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	27.112	58.624	-15.376	74.000	PEAK
2	*	2485.218	31.529	27.253	58.782	-15.218	74.000	PEAK
3		2500.000	31.638	24.189	55.828	-18.172	74.000	PEAK

- 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.

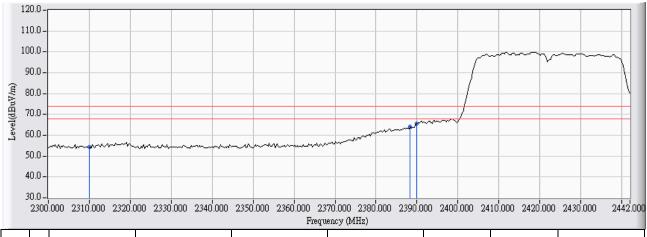
Site : Site1	Time : 2012/06/06 - 19:33
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 20MHz _CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	13.555	45.067	-8.933	54.000	AVERAGE
2		2484.084	31.518	13.316	44.834	-9.166	54.000	AVERAGE
3		2500.000	31.638	12.578	44.217	-9.783	54.000	AVERAGE

- 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.

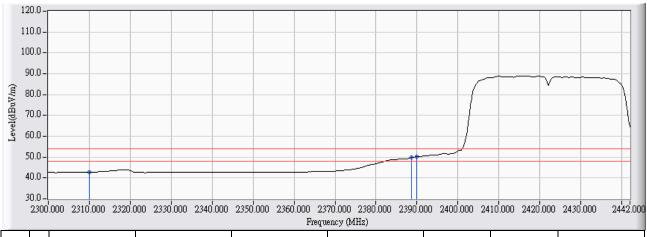
Site : Site1	Time : 2012/06/06 - 19:44
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.462	54.241	-19.759	74.000	PEAK
2		2388.324	30.562	33.594	64.155	-9.845	74.000	PEAK
3	*	2390.000	30.578	34.864	65.442	-8.558	74.000	PEAK

- 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.

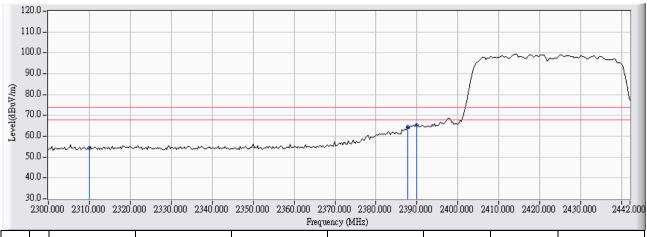
Site : Site1	Time : 2012/06/06 - 19:45
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.957	42.736	-11.264	54.000	AVERAGE
2		2388.608	30.564	19.149	49.713	-4.287	54.000	AVERAGE
3	*	2390.000	30.578	19.551	50.129	-3.871	54.000	AVERAGE

- 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.

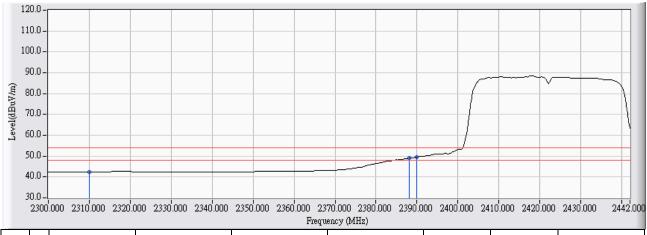
Site : Site1	Time : 2012/06/06 - 19:50
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.476	54.255	-19.745	74.000	PEAK
2		2387.756	30.555	33.791	64.347	-9.653	74.000	PEAK
3	*	2390.000	30.578	34.720	65.298	-8.702	74.000	PEAK

- 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 : Site1	Time : 2012/06/06 - 19:57
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.487	42.266	-11.734	54.000	AVERAGE
2		2388.040	30.558	18.491	49.049	-4.951	54.000	AVERAGE
3	*	2390.000	30.578	18.867	49.445	-4.555	54.000	AVERAGE

- 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.

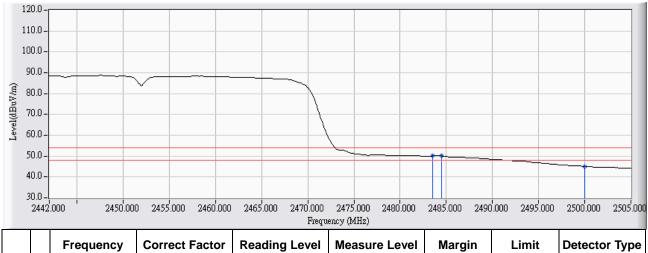
Site : Site1	Time : 2012/06/06 - 20:00		
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6		
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz		
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:		
	SAG024F 3)802.11n 40MHz _CH09		



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	35.478	66.990	-7.010	74.000	PEAK
2	*	2483.958	31.516	35.666	67.182	-6.818	74.000	PEAK
3		2500.000	31.638	27.659	59.298	-14.702	74.000	PEAK

- 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.

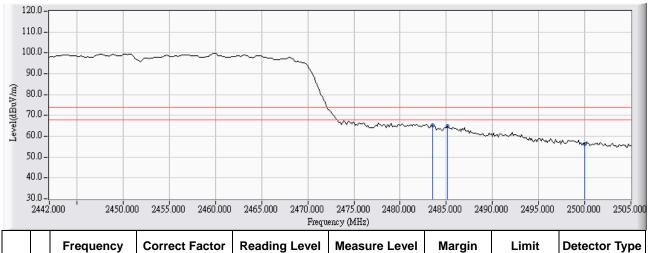
Site : Site1	Time : 2012/06/06 - 20:01
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	18.555	50.067	-3.933	54.000	AVERAGE
2	*	2484.462	31.521	18.563	50.084	-3.916	54.000	AVERAGE
3		2500.000	31.638	13.405	45.044	-8.956	54.000	AVERAGE

- 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.

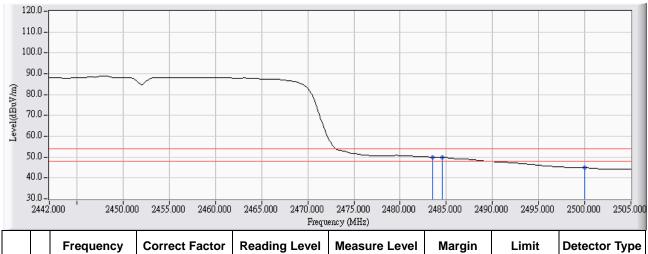
Site : Site1	Time : 2012/06/06 - 20:03
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	33.562	65.074	-8.926	74.000	PEAK
2		2485.092	31.528	33.302	64.830	-9.170	74.000	PEAK
3		2500.000	31.638	24.617	56.256	-17.744	74.000	PEAK

- 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.

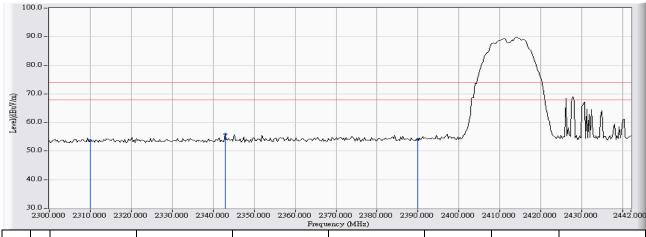
Site : Site1	Time : 2012/06/06 - 20:05
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 1: Transmit (Internal Antenna, Adapter:
	SAG024F 3)802.11n 40MHz _CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	18.497	50.009	-3.991	54.000	AVERAGE
2		2484.588	31.523	18.454	49.977	-4.023	54.000	AVERAGE
3		2500.000	31.638	13.320	44.959	-9.041	54.000	AVERAGE

- 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.

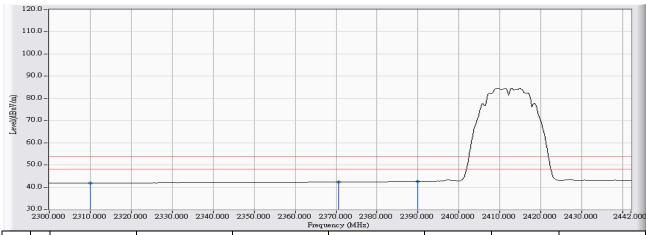
Site : Site1	Time : 2012/06/06 - 14:57
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	23.796	53.575	-20.425	74.000	PEAK
2	*	2342.884	30.108	25.789	55.896	-18.104	74.000	PEAK
3		2390.000	30.578	23.368	53.946	-20.054	74.000	PEAK

- 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.

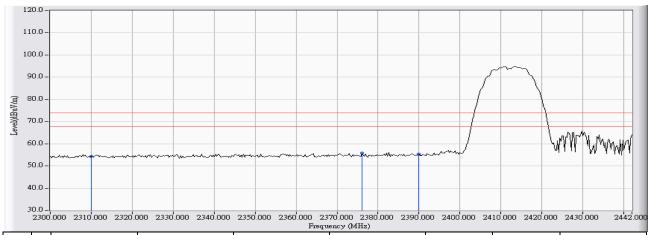
Site : Site1	Time : 2012/06/06 - 14:59
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3)802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.017	41.796	-12.204	54.000	AVERAGE
2		2370.716	30.386	11.904	42.289	-11.711	54.000	AVERAGE
3	*	2390.000	30.578	11.898	42.476	-11.524	54.000	AVERAGE

- 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.

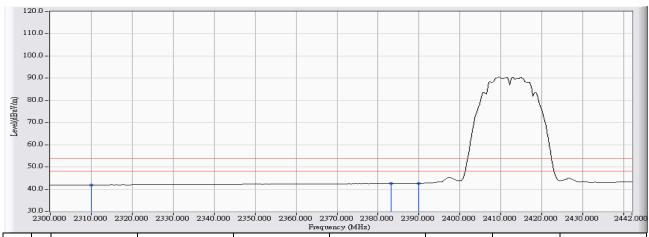
Site : Site1	Time : 2012/06/06 - 15:02
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3)802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.554	54.333	-19.667	74.000	PEAK
2	*	2376.112	30.439	25.478	55.917	-18.083	74.000	PEAK
3		2390.000	30.578	24.694	55.272	-18.728	74.000	PEAK

- 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.

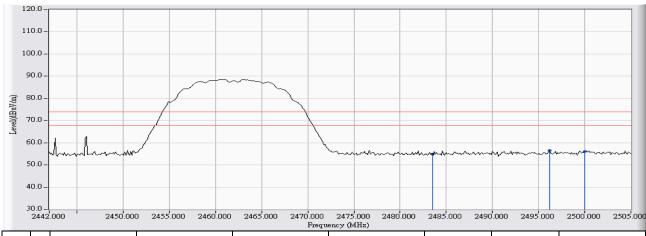
Site : Site1	Time : 2012/06/06 - 15:04
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11b_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.138	41.917	-12.083	54.000	AVERAGE
2		2383.212	30.511	12.067	42.577	-11.423	54.000	AVERAGE
3	*	2390.000	30.578	12.043	42.621	-11.379	54.000	AVERAGE

- 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 : Site1	Time : 2012/06/06 - 15:08
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	23.460	54.972	-19.028	74.000	PEAK
2	*	2496.180	31.637	24.883	56.520	-17.480	74.000	PEAK
3		2500.000	31.638	24.484	56.123	-17.877	74.000	PEAK

- 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.

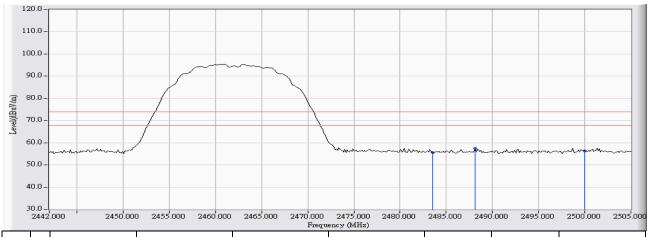
Site : Site1	Time : 2012/06/06 - 15:11
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	11.926	43.438	-10.562	54.000	AVERAGE
2		2499.582	31.639	12.605	44.244	-9.756	54.000	AVERAGE
3	*	2500.000	31.638	13.034	44.673	-9.327	54.000	AVERAGE

- 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 : Site1	Time : 2012/06/06 - 15:16
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	24.119	55.631	-18.369	74.000	PEAK
2	*	2488.116	31.558	25.854	57.412	-16.588	74.000	PEAK
3		2500.000	31.638	24.767	56.406	-17.594	74.000	PEAK

- 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.

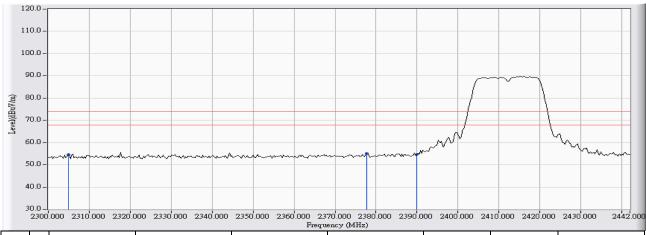
Site : Site1	Time : 2012/06/06 - 15:19
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11b_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	12.056	43.568	-10.432	54.000	AVERAGE
2		2499.078	31.638	12.068	43.706	-10.294	54.000	AVERAGE
3	*	2500.000	31.638	12.571	44.210	-9.790	54.000	AVERAGE

- 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.

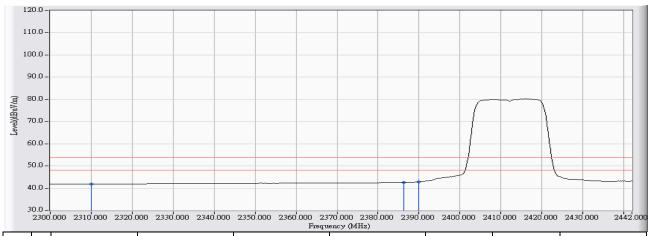
Site : Site1	Time : 2012/06/06 - 15:22
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2305.000	29.729	24.839	54.568	-19.432	74.000	PEAK
2	*	2377.816	30.456	24.676	55.132	-18.868	74.000	PEAK
3		2390.000	30.578	24.109	54.687	-19.313	74.000	PEAK

- 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.

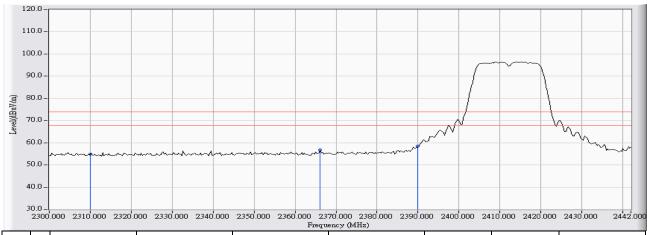
Site : Site1	Time : 2012/06/06 - 15:24
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.060	41.839	-12.161	54.000	AVERAGE
2		2386.336	30.541	12.041	42.582	-11.418	54.000	AVERAGE
3	*	2390.000	30.578	12.222	42.800	-11.200	54.000	AVERAGE

- 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.

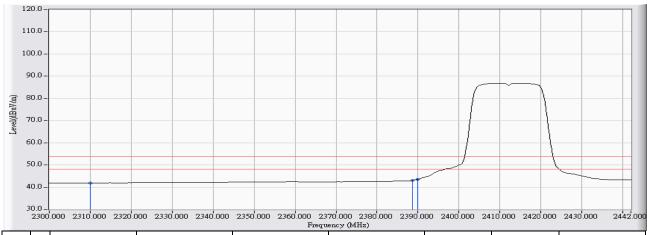
Site : Site1	Time : 2012/06/06 - 15:30
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	25.013	54.792	-19.208	74.000	PEAK
2		2366.172	30.340	26.460	56.800	-17.200	74.000	PEAK
3	*	2390.000	30.578	27.846	58.424	-15.576	74.000	PEAK

- 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.

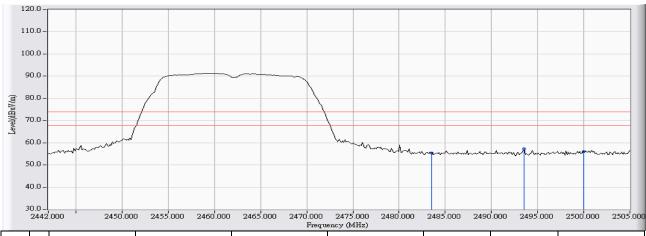
Site : Site1	Time : 2012/06/06 - 15:32
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.108	41.887	-12.113	54.000	AVERAGE
2		2388.608	30.564	12.402	42.966	-11.034	54.000	AVERAGE
3	*	2390.000	30.578	12.919	43.497	-10.503	54.000	AVERAGE

- 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.

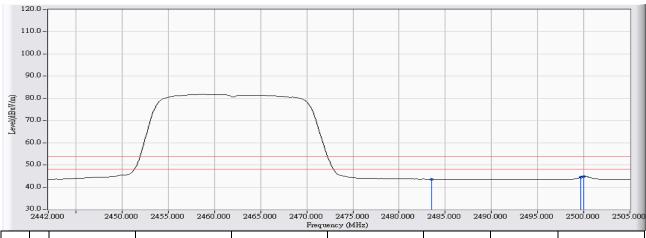
Site : Site1	Time : 2012/06/06 - 15:36
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	23.931	55.443	-18.557	74.000	PEAK
2	*	2493.534	31.613	25.766	57.378	-16.622	74.000	PEAK
3		2500.000	31.638	24.475	56.114	-17.886	74.000	PEAK

- 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.

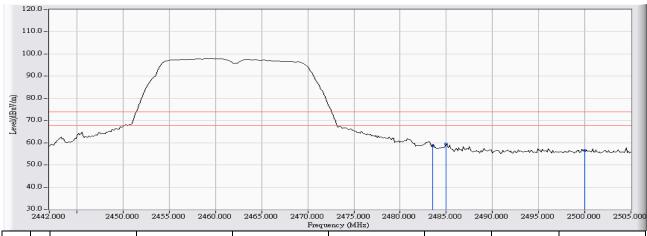
Site : Site1	Time : 2012/06/06 - 15:38
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	12.064	43.576	-10.424	54.000	AVERAGE
2		2499.708	31.639	12.776	44.415	-9.585	54.000	AVERAGE
3	*	2500.000	31.638	13.153	44.792	-9.208	54.000	AVERAGE

- 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.

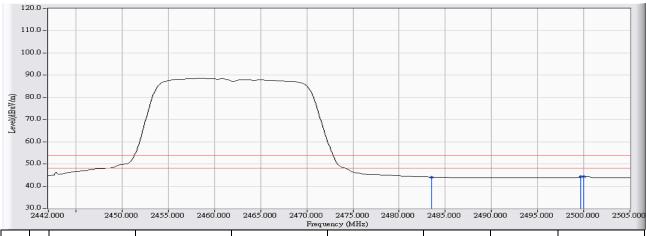
Site : Site1	Time : 2012/06/06 - 15:41
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	27.106	58.618	-15.382	74.000	PEAK
2	*	2484.966	31.527	27.839	59.365	-14.635	74.000	PEAK
3		2500.000	31.638	24.792	56.431	-17.569	74.000	PEAK

- 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.

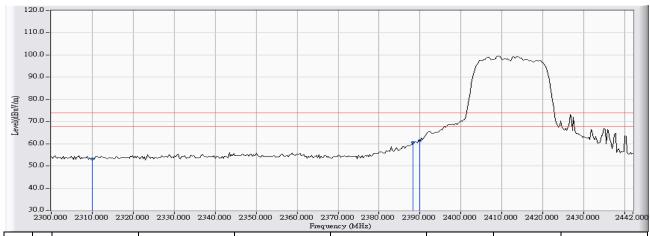
Site : Site1	Time : 2012/06/06 - 15:43
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11g_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	12.543	44.055	-9.945	54.000	AVERAGE
2		2499.708	31.639	12.554	44.193	-9.807	54.000	AVERAGE
3	*	2500.000	31.638	12.696	44.335	-9.665	54.000	AVERAGE

- 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.

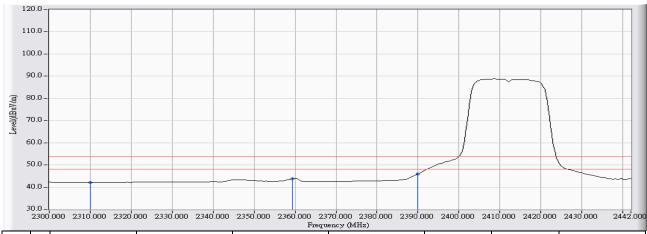
Site : Site1	Time : 2012/06/06 - 16:02
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	23.488	53.267	-20.733	74.000	PEAK
2		2388.324	30.562	30.145	60.706	-13.294	74.000	PEAK
3	*	2390.000	30.578	30.829	61.407	-12.593	74.000	PEAK

- 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.

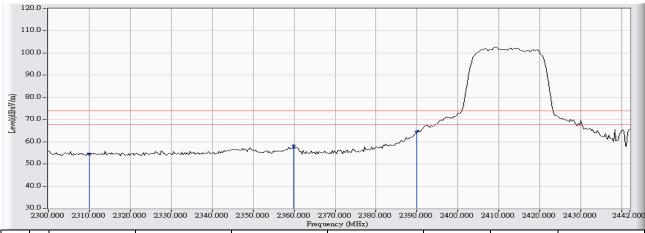
Site : Site1	Time : 2012/06/06 - 16:04
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.335	42.114	-11.886	54.000	PEAK
2		2359.356	30.272	13.529	43.801	-10.199	54.000	PEAK
3	*	2390.000	30.578	15.296	45.874	-8.126	54.000	PEAK

- 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.

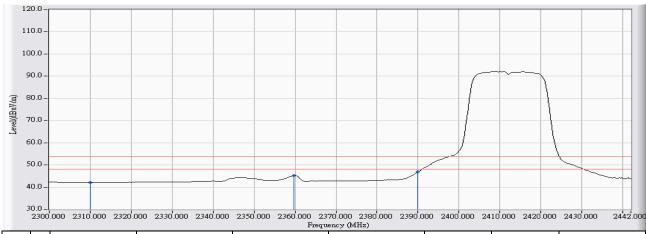
Site : Site1	Time : 2012/06/06 - 16:08
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.580	54.359	-19.641	74.000	PEAK
2		2359.924	30.277	27.855	58.133	-15.867	74.000	PEAK
3	*	2390.000	30.578	33.890	64.468	-9.532	74.000	PEAK

- 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.

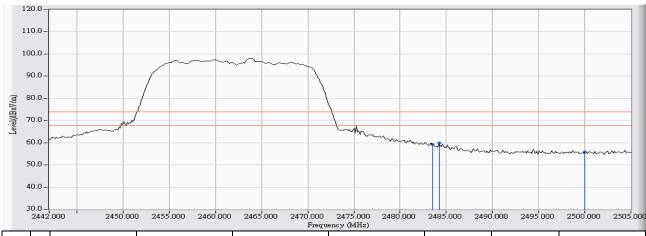
Site : Site1	Time : 2012/06/06 - 16:10
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH01



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.336	42.115	-11.885	54.000	AVERAGE
2		2359.640	30.275	14.882	45.157	-8.843	54.000	AVERAGE
3	*	2390.000	30.578	16.227	46.805	-7.195	54.000	AVERAGE

- 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.

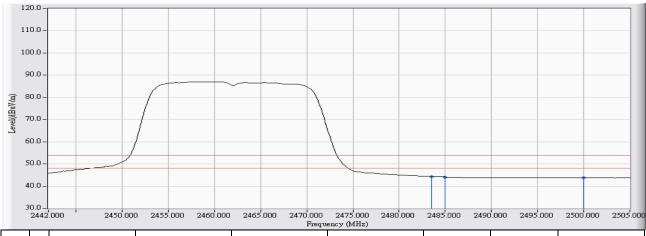
Site : Site1	Time : 2012/06/06 - 16:22
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3)802.11n 20MHz_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	27.574	59.086	-14.914	74.000	PEAK
2	*	2484.210	31.519	28.391	59.910	-14.090	74.000	PEAK
3		2500.000	31.638	24.109	55.748	-18.252	74.000	PEAK

- 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.

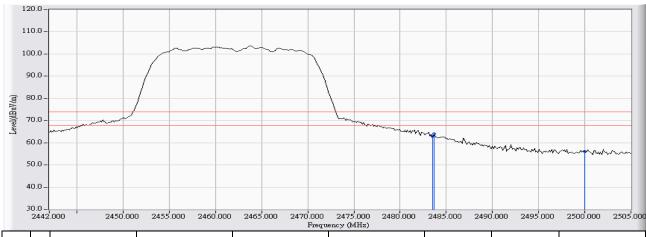
Site : Site1	Time : 2012/06/06 - 16:23
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	12.830	44.342	-9.658	54.000	AVERAGE
2		2484.966	31.527	12.579	44.105	-9.895	54.000	AVERAGE
3		2500.000	31.638	12.104	43.743	-10.257	54.000	AVERAGE

- 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 : Site1	Time : 2012/06/06 - 16:26
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	31.349	62.861	-11.139	74.000	PEAK
2	*	2483.706	31.514	32.424	63.938	-10.062	74.000	PEAK
3		2500.000	31.638	24.506	56.145	-17.855	74.000	PEAK

- 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.

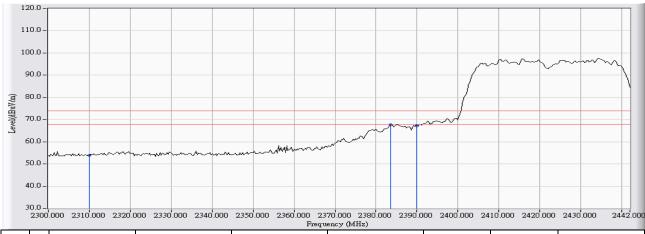
Site : Site1	Time : 2012/06/06 - 16:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 20MHz_CH11



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	14.579	46.091	-7.909	54.000	AVERAGE
2		2484.462	31.521	14.092	45.613	-8.387	54.000	AVERAGE
3		2500.000	31.638	12.840	44.479	-9.521	54.000	AVERAGE

- 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.

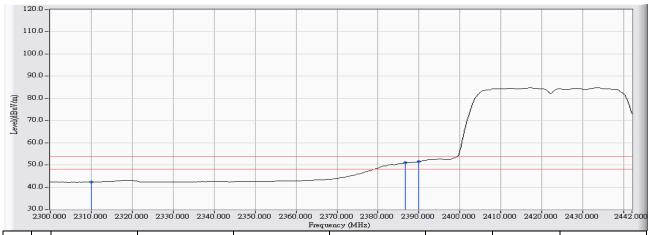
Site : Site1	Time : 2012/06/06 - 17:26
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.062	53.841	-20.159	74.000	PEAK
2	*	2383.496	30.513	37.089	67.602	-6.398	74.000	PEAK
3		2390.000	30.578	36.587	67.165	-6.835	74.000	PEAK

- 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 : Site1	Time : 2012/06/06 - 17:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.433	42.212	-11.788	54.000	AVERAGE
2		2386.620	30.544	20.374	50.918	-3.082	54.000	AVERAGE
3	*	2390.000	30.578	20.902	51.480	-2.520	54.000	AVERAGE

- 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.

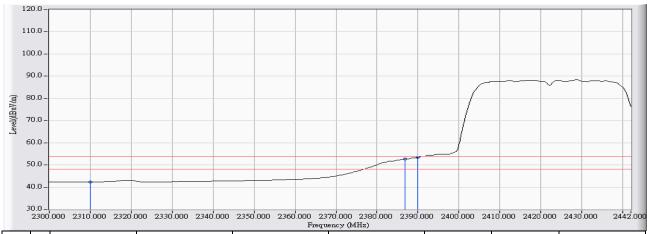
Site : Site1	Time : 2012/06/06 - 17:35
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	24.897	54.676	-19.324	74.000	PEAK
2	*	2385.484	30.532	39.131	69.664	-4.336	74.000	PEAK
3		2390.000	30.578	38.255	68.833	-5.167	74.000	PEAK

- 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.

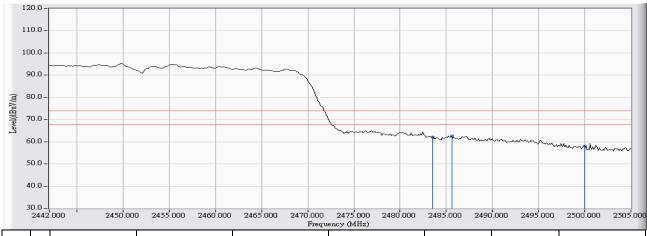
Site : Site1	Time : 2012/06/06 - 17:44
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH03



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	29.779	12.445	42.224	-11.776	54.000	AVERAGE
2		2386.904	30.548	22.156	52.703	-1.297	54.000	AVERAGE
3	*	2390.000	30.578	22.752	53.330	-0.670	54.000	AVERAGE

- 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.

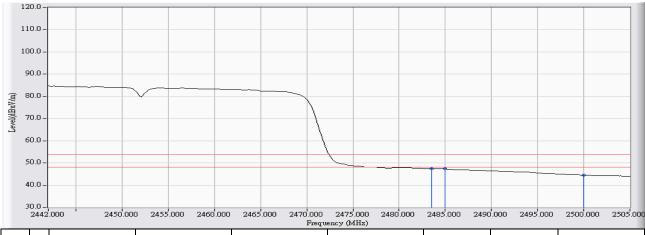
Site : Site1	Time : 2012/06/06 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3)802.11n 40MHz_CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	30.575	62.087	-11.913	74.000	PEAK
2	*	2485.596	31.532	30.923	62.456	-11.544	74.000	PEAK
3		2500.000	31.638	26.466	58.105	-15.895	74.000	PEAK

- 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.

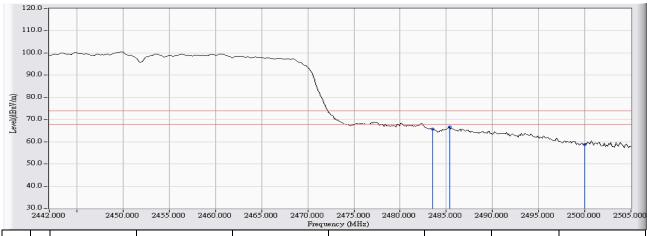
Site : Site1	Time : 2012/06/06 - 17:48
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	15.907	47.419	-6.581	54.000	AVERAGE
2		2484.966	31.527	15.758	47.284	-6.716	54.000	AVERAGE
3		2500.000	31.638	12.888	44.527	-9.473	54.000	AVERAGE

- 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.

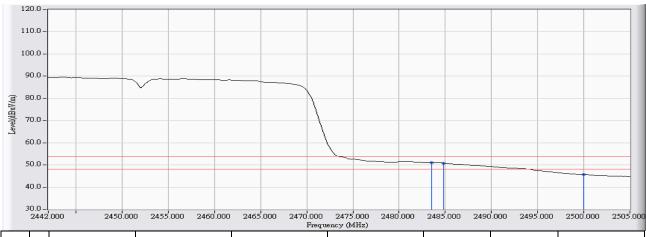
Site : Site1	Time : 2012/06/06 - 17:50
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2483.500	31.512	34.086	65.598	-8.402	74.000	PEAK
2	*	2485.344	31.530	35.228	66.758	-7.242	74.000	PEAK
3		2500.000	31.638	27.064	58.703	-15.297	74.000	PEAK

- 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 : Site1	Time : 2012/06/06 - 17:51
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC 120V/60Hz
EUT : VDSL2 Router with WLAN/VoIP	Note : Mode 3: Transmit (External Antenna, Adapter:
	SAG024F 3) 802.11n 40MHz_CH09



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2483.500	31.512	19.465	50.977	-3.023	54.000	AVERAGE
2		2484.840	31.526	19.290	50.815	-3.185	54.000	AVERAGE
3		2500.000	31.638	14.110	45.749	-8.251	54.000	AVERAGE

- 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

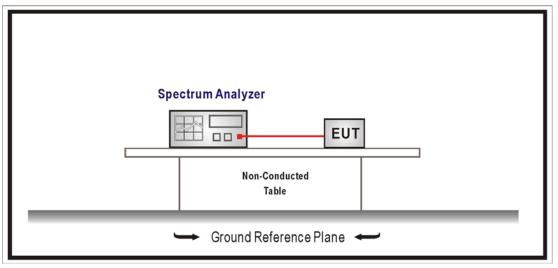
The following test equipment is used during the test:

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 = 1-5 % of the emission bandwidth (EBW).

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 $\pm 150 Hz$

7.7. Test Result

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

802.11 b					
Channel No.	Frequency	Measurement Level	Required Limit	Result	
	(MHz)	(kHz)	(kHz)	Kesuit	
1	2412	11460	≧500	Pass	
6	2437	11440	≧500	Pass	
11	2462	11460	≧500	Pass	

<u>Channel 1</u>

🕦 Agilent Spectrum Analyzer - Occupied					
X 50 Ω X dB -6.00 dB Input: RF 10 dB/div Ref 10 dBm	Center	SENSE:INT Freq: 2.412000000 GHz 'ee Run Avg Holo 30 dB	Radio St d:>10/10	AM Jun 14, 2012 d: None wice: BTS	Trace/Detector
Log 0 -10					Clear Write
-20 -30 -40			harman	mar when the	Average
-60					Max Hold
-80 Center 2.412 GHz #Res BW 300 kHz	#\	/BW 910 kHz		an 40 MHz reep 1 ms	Min Hold
a sea - second the sea - a second the second second	Occupied Bandwidth 14.089 MHz		11.58 dBm		Detector Peak► Auto <u>Man</u>
Transmit Freq Error x dB Bandwidth	-14480 Hz 11.46 MHz	OBW Power x dB	99.00 % -6.00 dB		
MSG			STATUS		



<u>Channel 6</u>

					<u> </u>				
Agilent Spectru	um Analyzer - Occu	upied BW							
	^{50 Ω} q 2.437000	000 GHz	Center	SENSE:INT	00 GHz	Radio S	01 AM Jun 14, 2012 td: None	Trace	Detector
	Input:	RF #IFGain:Low	ч р –		vg Hold:>10/1		evice: BTS		
) dB/div	Ref 10 dBr	n	12						
0 10			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~			c	lear Wr
20 30								-	Avera
40	morenaria					Ly John Start Star	1-20-4-11-4-1-4-14-14-1-1-1-1-1-1-1-1-1-1-1		Avent
70									Max H
enter 2.43 Res BW 30			#\	/BW 910 kH	,		oan 40 MHz weep 1 ms		Min H
	ed Bandwi			Total Pov		9.63 dBm			Detec Pea
<u> </u>		14.048 I						Auto	N
Transmit x dB Ban	Freq Error		'4 kHz 4 MHz	OBW Por x dB	ver	99.00 % -6.00 dB			
						STATUS		-	



Channel 11

Dia d		1.000								
	um Analyzer - Occupie 50 Ω	ed BW	AC	SENSE:INT		ALIGNAUTO	11.16.47	AM Jun 14, 2012	8	
	q 2.46200000 Input: RF	0 GHz #IFGain:Low	Center	Freq: 2.46200 ree Run	00000 GHz Avg Hold		Radio Std	l: None	Trac	e/Detector
0 dB/div 0	Ref 10 dBm			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-					Clear Wri
20 30 40										Avera
50 mmm~m4/mm 60	international and					- Junor	Jlannortha	้างไม่เขาเมารถางไ		Max Ho
enter 2.46 Res BW 3			#\	/BW 910 k	KHz		Spa Swe	an 40 MHz eep 1 ms		Min He
Occupied Bandwidth 13.998 MHz							ō dBm		Auto	Detect Pea <u>M</u>
Transmit x dB Bar	t Freq Error ndwidth		28 Hz 6 MHz	OBW P x dB	ower		9.00 % 00 dB			
G						STATUS	5		-	

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11g					
Channel No.	Frequency	Measurement Level	Required Limit	Result	
Channel No.	(MHz)	(kHz)	(kHz)	Nesult	
1	2412	16390	≧500	Pass	
6	2437	16410	≧500	Pass	
11	2462	16290	≧500	Pass	

Channel 1

		er - Occupied BW									
(XI Center	50Ω Freg 241	2000000 G			NSE:INT req: 2.41200	0000 GHz	ALIGN AUTO	11:21:17 A	M Jun 14, 2012	Trac	e/Detector
		Input: RF #IF	Gain:Low	Trig: Free #Atten: 30	e Run	Avg Hold	> 10/10	Radio Dev	ice: BTS		
10 dB/div Log	Ref 1	0 dBm		9	1	1	1				
-10			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m	m	m	\				Clear Write
-20											Average
-50	marchan	Charley Allery					י _{ער} איי 	Manger Lynn	The Contraction of the Contraction		
-60 -70 -70											Max Hold
-80						, I					
	2.412 GHz V 300 kHz			#VE	3W 910 k	Hz			n 40 MHz ep 1 ms		Min Hold
Οςςι	Occupied Bandwidth 16.471 MHz				Total Power 9.31 dBm					Auto	Detector Peak▶ <u>Man</u>
Trans	smit Freq	Error	27.651	κHz	OBW P	ower	99	9.00 %			
	Bandwidth		16.39 N	ЛНz	x dB		-6.	00 dB			
MSG							STATUS				



<u>Channel 6</u>

					onam						
Agilent Spec	trum Analyzer - (Occupied BW	v								
	50 Ω				SENSE:INT		ALIGN AUTO		AM Jun 14, 2012	Trac	e/Detector
	500 D	put: RF #IF	Gain:Low		Freq: 2.4370 ree Run 30 dB	00000 GHz Avg Holo	d:>10/10	Radio Std Radio Dev		The	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ref 10 d			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~						Clear Wr
20 30 40	and the second							the top the top the top the top the top the top top the top			Avera
50 60 70 									1411 - 7614 (1814) yew		Max He
® enter 2.4 tes BW				#\	/BW 910	kHz			un 40 MHz eep 1 ms		Min He
Occupied Bandwidth 16.444 MHz					6 dBm		Auto	Detec Pea <u>M</u>			
Transm	nit Freq Err	ror	45.92	9 kHz	OBW I	Power	99	9.00 %			
x dB Ba	andwidth		16.41	1 MHz	x dB		-6.	.00 dB			
G							STATUS				



					<u> </u>					
Agilent Spectr	um Analyzer - Occuj	pied BW								
	50 Ω			SENSE:INT		LIGN AUTO		M Jun 14, 2012	Tree	e/Detector
Center Fre	q 2.4620000			Freq: 2.4620000			Radio Std:	None	ITac	erDelector
	Input: F	RE	#Atten:		Avg Hold:>1	10/10	Radio Dev	In a DTC		
		#IFGain:Low	#Atten:	30 dB			Radio Dev	ICE: BIS		
0 dB/div	Ref 10 dBm	i i								
og			1							
0		1000								
					a					Clear Wr
-10		-from	s annon a co	the court	many					
20		2			1	<i></i>				
-20		1				1				
30		1				<u>\</u>				
12.00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~				· Con a	ሙ			Avera
-40	www.www.ww						YAA.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
50 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	M_						ਾ ਪ	· ~ my		
-60										Max Ho
										Maxin
-70										
-80										
enter 2.46	32 CH2						Sna	n 40 MHz		Min Ho
Res BW 3			#1	/BW 910 kH	-			ep 1 ms		
			#\	DW SICKI	2		SWC			
Occupie	ed Bandwid	4th		Total Po	wer	9.67	' dBm			Detec
Occupie				Totarro	wor	0.01	ubm			Pea
	-	16.545 N	/Hz						Auto	N
									/ 1410	83
Transmit	t Freq Error	-284	62 Hz	OBW Po	wer	90	.00 %			
	1974									
x dB Bar	ndwidth	16.29) MHz	x dB		-6.	00 dB			
G						STATUS				

Product	VDSL2 Router with WLAN/VoIP						
Test Item	Occupied Bandwidth						
Test Mode	Transmit	Transmit					
Date of Test	2012/06/14	Test Site	SR7				

IEEE 802.11n (20MHz) ANT 0								
Channel No.	Frequency	Measurement Level	Required Limit	Result				
Channel No.	(MHz)	(kHz)	(kHz)	Result				
1	2412	17540	≧500	Pass				
6	2437	17510	≧500	Pass				
11	2462	17580	≧500	Pass				

<u>Channel 1</u>

D Agilent S			Occupied	BW								200	
<mark>⊯</mark> Center I	50Ω Fred		0000	CH2	AC Ce		SE:INT	00000 GHz	ALIGN AUTO	11:22:37 A	M Jun 14, 2012	Trac	e/Detector
			out: RF	#IFGain:Low	G Tri	g: Free ten: 30	Run	Avg Hold	:>10/10	Radio Dev			
10 dB/div Log	R	ef 10 d	Bm					1	<u> </u>				
-10				m	~~~~	~~~~		m					Clear Write
-20													Average
-40 vrmd -50		๛ๅ๚ๅฅ๛๛๏	~~~							how port and a second sec	Muren war		
-60 -70													Max Hold
-80 Center 3	2 4 1 2 6	GH7								Sna	n 40 MHz		Min Hold
#Res BV						#VB	W 910 H	KHZ			ep 1 ms		
Οςςι	Ipied	Bandy		491 M	ИНz		Total P	ower	9.74	l dBm		Auto	Detector Peak▶ <u>Man</u>
Trans	smit Fi	req Erre	or	22.69	0 kHz		OBW F	ower	99	9.00 %			
x dB	Bandv	width		17.54	4 MHz		x dB		-6.	00 dB			
MSG									STATUS				



<u>Channel 6</u>

Agilent Spectrum	n Analyzer - Occupied	BW								
	2.437000000 Input: RF		Center	SENSE:INT Freq: 2.43700 ree Run 30 dB	0000 GHz Avg Hold	ALIGN AUTO >10/10	11:23:40 Radio Sto Radio De		Trac	e/Detector
0 dB/div 0 -10 -10	Ref 10 dBm	hum		vananana	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				3	Clear Wri
-20 -30 -40	with more and	/					hure of the works	"Niwilshawayarila		Avera
60 70										Max Ho
enter 2.437 Res BW 300			#\	/BW 910 k	Hz			an 40 MHz eep 1 ms		Min Ho
Occupied	d Bandwidth 17	י .480 M	ЛНz	Total P	ower	9.86	ð dBm		Auto	Detec Pea <u>M</u>
Transmit x dB Band	Freq Error dwidth	36.75 17.51	6 kHz I MHz	OBW P x dB	ower		9.00 % 00 dB			
G						STATUS				



Agilent Spect	rum Analyzer - Oco	cupied BW							
	50 Ω			SENSE:INT	ALIGN AU		AM Jun 14, 2012	Trac	Detector
enter Fre	eq 2.462000	t: RF #IFGain:Lov	Trig: F		0 GHz vg Hold:>10/10	Radio Sto Radio De	d: None vice: BTS	Tac	Detector
dB/div 9 0 10	Ref 10 dB	m	man	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	reveren by			c	:lear Wr
20 30 40	when the provide the second					manderenan			Avera
50 60 70							<u>, , , , , , , , , , , , , , , , , , , </u>		MaxHo
enter 2.40 Res BW 3			#1	/BW 910 kHz			an 40 MHz eep 1 ms		Min Ho
Occupi	ied Bandw	/idth 17.488	MHz	Total Pov	ver 9.	.76 d B m		Auto	Detec Pea <u>M</u>
Transmi	it Freq Erro		33 kHz	OBW Pov	ver	99.00 %			
x dB Ba	ndwidth	17.5	8 MHz	x dB		-6.00 dB			
G					STA	710		6	

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11n (20MHz) ANT 1								
Channel No	Frequency	Measurement Level	Required Limit	Decult				
Channel No.	(MHz)	(kHz)	(kHz)	Result				
1	2412	17450	≧500	Pass				
6	2437	17250	≧500	Pass				
11	2462	17230	≧500	Pass				

	ectrum Analyzer - (Occupied BW						90.			
(XI Center E	50 Ω req 2.41200	0000 C			INSE:INT req: 2.41200	0000 GHz	ALIGN AUTO	11:28:42 Radio Sto	AM Jun 14, 2012 I: None	Trac	e/Detector
		out: RF	Gain:Low	Trig: Fre #Atten: 3	e Run	Avg Hold	l:>10/10	Radio De			
10 dB/div Log	Ref 10 d	Bm	1	2	1	1	.				
-10			yer-otogen p mbac	~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~	y por any						Clear Write
-20 -30 -40	Jayon Joyan Maria							Maller Mary Market	In an and a constance		Average
-50 -60 -70											Max Hold
-80 Center 2. #Res BW				#VI	3W 910 k	:Hz		Spa Sw	an 40 MHz eep 1 ms		Min Hold
Occu	pied Band		512 MI	Ηz	Total P	ower	16.99) dBm		Auto	Detector Peak► <u>Man</u>
Transr	nit Freq Err	or	-21277	Hz	OBW P	ower	99	9.00 %			
	andwidth		17.45 N	ΛHz	x dB		-6.	00 dB			
MSG							STATUS	6			



<u>Channel 6</u>

	rum Analyzer - Occup 50 Ω	lea BW	AC	SENSE:INT	ALIGNAUTO	11:20:47.6	M Jun 14, 2012		
	i q 2.4370000 Input: Ri		Center	Freq: 2.437000000 ee Run Avg		Radio Std:	None	Trac	e/Detector
0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ref 10 dBm		and the second		mon				Clear Wri
-20 -30 -40	The month and the state	<i></i>			- hours	un and a start and a start and a start and a start a st	part ware and		Avera
50 60 70									Max Ho
enter 2.43 Res BW 3			#\	/BW 910 kHz		Spa Swe	n 40 MHz ep 1 ms		Min He
Occupi	ed Bandwid 1	th 7.460	MHz	Total Powe	r 16.5	1 dBm		Auto	Detec Pea <u>M</u>
	t Freq Error		0 kHz	OBW Powe		9.00 %			
x dB Ba	ndwidth	17.2	5 MHz	x dB	-6	.00 dB			
G					STATU	S			



Agilant Spect	rum Analyzer - Occupied	BW		<u></u>				
	Tum Analyzer - Occupied		C SENSE:INT		LIGNAUTO 1	1:30:25 AM Jun 14, 2012		
enter Fre	eq 2.462000000 Input: RF	GHz #IFGain:Low	Center Freq: 2.4620 Trig: Free Run #Atten: 30 dB	000000 GHz Avg Hold:>	Ra 10/10	dio Std: None dio Device: BTS	Trace/Detect	or
0 dB/div 29 0	Ref 10 dBm			www			ClearW	/ri
20 30 40 איז איז איז	man man m	/			- hurrow	man marine	Aver	a
50 60 70							MaxH	10
enter 2.40 Res BW 3			#VBW 910	kHz		Span 40 MHz Sweep 1 ms	Min H	-10
Occupi	ied Bandwidth 17	.447 Mł		Power	16.01 dl		Dete Pe Auto	
	it Freq Error	49.082 k		Power	99.00			
x dB Ba	nawiatn	17.23 №	1Hz xdB		-6.00	aв		

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11n (40MHz) ANT 0										
Channel No	Frequency	Measurement Level	Required Limit	Decult						
Channel No.	(MHz)	(kHz)	(kHz)	Result						
3	2422	35600	≧500	Pass						
6	2437	35530	≧500	Pass						
9	2452	35550	≧500	Pass						

💴 Agilent Spectrum Analyzer - Occupie					
Σ0 Ω Center Freq 2.42200000 Input: RF	0 GHz Center F		Radio Std:		Trace/Detector
10 dB/div Ref 10 dBm	#IFGain:Low #Atten: 3	0 dB	Radio Dev	ice: BTS	
-10		mann			Clear Write
-20 -30 -40			- mmm	VL vou amon	Average
-50 -60 -70					Max Hold
-80 Center 2.422 GHz #Res BW 510 kHz	#VI	BW 1.5 MHz		n 80 MHz ep 1 ms	Min Hold
Occupied Bandwidt	^h 5.940 MHz	Total Power	11.70 dBm		Detector Peak Auto <u>Mar</u>
Transmit Freq Error x dB Bandwidth	23.339 kHz 35.60 MHz	OBW Power x dB	99.00 % -6.00 dB		
MSG			STATUS		



<u>Channel 6</u>

D Agilent S	pectrum Analyz	zer - Occupied	BW								
M Center	50 Ω Freq 2.43	Input: RF		Center F		0000 GHz Avg Hold:	ALIGN AUTO >10/10	12:41:27 Radio Std Radio Dev		Trac	e/Detector
10 dB/div Log	Ref	10 dBm				1					
-10			h	h	renarm	mm				1	Clear Write
	yr hanger	Marian						how	4 Arganes		Average
-50 -60 -70											Max Hold
	2.437 GHz № 510 kHz			#VE	3W 1.5 M	IHz			ın 80 MHz eep 1 ms		Min Hold
Οςςι	upied Ba		854 MI	Hz	Total P	ower	12.32	2 dBm		Auto	Detector Peak▶ <u>Man</u>
	smit Freq Bandwidt		42.790 35.53 N		OBW P x dB	ower		9.00 % 00 dB			
MSG							STATUS				



<u>Channel 9</u>

					<u></u>					
Agilent Spectr	um Analyzer - Occuj	pied BW								
	50 Ω			SENSE:INT		ALIGN AUTO		PM Jun 14, 2012	Trac	e/Detector
	q 2.4520000 Input: F	RF #IFGain:Low	Trig: Fr	Freq: 2.452000 ee Run 30 dB	0000 GHz Avg Hold:>	10/10	Radio Sto Radio De	d: None vice: BTS	Trac	elDetector
0 dB/div 0 0	Ref 10 dBm	<u> </u>	wy.~	Jumann	a Maria	×				Clear Wri
20 30 40/////////////////////////////////	mours a sound and	<u></u>					Marillan	Montematic		Avera
50 60 70										Max Ho
enter 2.45 Res BW 5			#\	/BW 1.5 MI	Hz			an 80 MHz eep 1 ms		Min Ho
Occupio	ed Bandwid	dth 35.839	MHz	Total Po	ower	13.27	7 dBm		Auto	Detec Pea <u>M</u>
	t Freq Error		67 Hz	OBW P	ower		9.00 %			
x dB Bar	ndwidth	35.5	5 MHz	x dB		-6.	00 dB			

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11n (40MHz) ANT 1										
Channel No	Frequency	Measurement Level	Required Limit	Decult						
Channel No.	(MHz)	(kHz)	(kHz)	Result						
3	2422	35580	≧500	Pass						
6	2437	35580	≧500	Pass						
9	2452	35510	≧500	Pass						

<u>Channel 3</u>

	ctrum Analyzer - (Occupied BW									
🚧 Center Fi	50 Ω req 2.42200 Ing	out: RF	Hz	Center F Trig: Fre		0000 GHz Avg Hold	ALIGNAUTO	Radio Std		Trace	e/Detector
10 dB/div Log	Ref 10 d	19795	Gain:Low	#Atten: 3	0 dB	1		Radio Dev	vice: BTS		
-10		~	ᢦᠬᠴᡙᡘᢇᡆ᠋ᡐᢦ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	America	mmmn				Ċ	Clear Write
-40	y the hypertree						- Jours	a ⁿ -vi ⁿ sk-vake-	Nut ^{ra} nstitutions/		Average
-50 -60 -70											Max Hold
-80 Center 2. #Res BW				#VE	3W 1.5 M	IHz			ın 80 MHz eep 1 ms		Min Hold
Occup	Occupied Bandwidth Total Power 16.77 dBm 35.705 MHz							Auto	Detector Peak▶ <u>Man</u>		
	nit Freq Err andwidth	or	-63429 35.58 N		OBW P x dB	ower		9.00 % 00 dB			
MSG							STATUS				



<u>Channel 6</u>

Agilent Spec	trum Analyzer -	Occupied BW									
	50 Ω				SENSE:INT		ALIGN AUTO		AM Jun 14, 2012	Tree	e/Detector
enter Fr	eq 2.4370 In	put: RF	Hz Gain:Low		Freq: 2.4370 ee Run 30 dB	00000 GHz Avg Hold	¥:>10/10	Radio Sto Radio De		Trac	elDetector
dB/div 9 0	Ref 10 c		ᠺᡅᡊ᠊ᠬᢦᡘᡅᡯ	Jacobran	V.M.	harran	un				Clear Wr
20	par productor all	where					-	፞ዾፙፙኯዀኯጚጚጚ	an and a cours		Avera
50 60 70											Max He
enter 2.4 Res BW	137 GHz 510 kHz			#\	/BW 1.5 M	ЛНz		Spa Sw	an 80 MHz eep 1 ms		Min H
Occup	ied Band		09 N	1Hz	Total I	ower	16.3 [,]	1 dBm		Auto	Detec Pea <u>N</u>
Transm	nit Freq Err	ror	-4917	'3 Hz	OBW I	Power	99	9.00 %			
x dB Ba	andwidth		35.58	MHz	x dB		-6.	00 dB			
G							STATUS				



<u>Channel 9</u>

Agilent Spectr	um Analyzer - Occuj	nied BW		<u></u>						
	50 Ω 9 q 2.4520000 Input: F	000 GHz	Center			R: 0/10	11:34:00 AM Jur adio Std: Nor adio Device:	ne	Trac	e/Detector
0 dB/div og	Ref 10 dBm		The Arter	1 toma	՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟՟					
-10 -20 -30				Ψ						
40 ************************************	ang annage () - give particular of the second						wmaadlikeliseliseliseliseliseliseliseliseliselis	^{«ՆՆԻ} ՆաԼԻպքն		Avera
80										Max Ho
enter 2.44 Res BW 5			#\	/BW 1.5 MH	łz		Span 8 Sweep			Min Ho
Occupi	ed Bandwid	^{dth} 35.677	ИНz	Total Po	wer	15.83 d	Bm		Auto	Detec Pea <u>M</u>
Transmi x dB Baı	t Freq Error ndwidth		79 Hz 1 MHz	OBW Po x dB	ower	99.0 -6.00				
G						STATUS				

8. Power Density

8.1. Test Equipment

The following test equipment is used during the test:

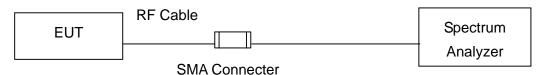
Power Density / SR7

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 / 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= 3 kHz, Set VBW \geq 9 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 ± 1.27 dB.

8.7. Test Result

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11b										
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result					
1	2412	-6.105	-21.305	≦8	Pass					
6	2437	-6.359	-21.559	≦8	Pass					
11	2462	-6.984	-22.184	≦8	Pass					

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

S0.9 AC SENSE:INT ALIGNAUTO D03:06:26 MX:n 14,2012 Peak Search Input: RF PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg1Hold>100/100 IPACE [12:3:4:07 Next Peal dB/div Ref 20.00 dBm -6.105 dBm -6.105 dBm Next Righ 00 -6.105 dBm -6.105 dBm Next Righ 01 -6.105 dBm -6.105 dBm Next Righ 02 -7.107 dW -7.107 dW Marker Delt 03 -7.107 dW -7.107 dW -7.107 dW 04 -7.107 dW -7.107 dW -7.107 dW 05 -7.107 dW -7.107 dW -7.107 dW 06 -7.107 dW -7.107 dW -7.107 dW 07 -7.107 dW -7.107 dW -7.107 dW 08			Channel I			
Arker 1 2.413924000000 GHz Avg Type: Log-Pwr Twee [1:2:4:5:6] Peak Search Input: RF PRO: Fast Trig: Free Run Avg Type: Log-Pwr Twee [1:2:4:5:6] Next Peak dB/div Ref 20.00 dBm GB/div Ref 20.00 dBm Next Right Next Right 00 Imput: RF Imput: RF Imput: RF Mkr 1 Next Right 00 Imput: RF Imput: RF Imput: RF Imput: RF Imput: RF Next Right 00 Imput: RF Imput: RF Imput: RF Imput: RF Imput: RF Imput: RF Next Right 00 Impu: RF Imput: RF Impu: RF Impu: RF Impu: RF Next Right 00 Impu: RF Impu: RF Impu: RF Impu: RF Impu: RF Impu: RF Next Right 00 Impu: RF Next Right 00 Impu: RF Impu: RF Impu: RF Imp		Swept SA				
Input: RF PHO: Fast Trig: Free Run #Atten: 30 dB Avg Hold>100/100 Trig: Free Run Avg Hold>100/100 Next Peal dB/div Ref 20.00 dBm -6.105 dBm Next Righ 00 -6.105 dBm Next Lef 00 -6.105 dBm Next Lef 00 -6.105 dBm Marker Delt 00 -6.105 dBm Mkr→Ref Lv 00 -6.105 dBm Marker D		00000 GHz	Av	g Type: Log-Pwr	TRACE 1 2 3 4 5 6	Peak Search
INIKIT 2.413 924 GHZ GB/div Ref 20.00 dBm GB/div Sweep 2.53 ms (1001 pts)		out: RF PNO: Fast 😱 Trig: I		Hold:>100/100		
Next Right Next Right Next Right Next Right Next Left Marker Delt Mkr-Cl Mkr-Stript Marker Delt Mkr-Stript Mkr-Stript Marker Delt Mkr-Stript Mkr-Stript Marker Delt Mkr-Stript Marker Delt	10 dB/div Ref 20.00 c	lBm		Mkr1 2		NextPea
Image: Next Lef Next Lef Image: Next Lef Marker Delt Image: Next Lef Mkr-Jef Image: Next Lef	10.0					Next Righ
Marker Del Mkr→C Mkr→Ref L Marker Del Mkr→Ref L Marker Del Marker De	0.00	- monte	1 Marthan from from from from from from from from	A/A		Next Le
10 10	20.0	A MANA				Marker Del
Image: Non-Apple Sector Span 26.00 MHz Month (Month (Mon	40.0				Nn	
Image: Non-Series Micro-Ref L Image: Non-Series Micro-Ref L Image: Non-Series Span 26.00 MHz Image: Non-Series Mor Image: Non-Series Span 26.00 MHz Image: Non-Series 1 of Sweep 2.53 ms (1001 pts)	0.0 how have have				han an a	MKr→C
enter 2.41200 GHz Span 26.00 MHz 1 of Res BW 100 kHz #VBW 300 kHz Sweep 2.53 ms (1001 pts)	70.0					Mkr→RefL
	Center 2.41200 GHz Res BW 100 kHz	#VBW 300 k	Hz	Sweep 2	Span 26.00 MHz .53 ms (1001 pts)	
	SG	Andred State (1997)			/	-

				<u>el 6</u>	<u>Chann</u>						
								wept SA	n Analyzer - S		
Peak Search	3 PM Jun 14, 2012 ACE 1 2 3 4 5 6	TRAC	ALIGNAUTO : Log-Pwr >100/100			C SE Trig: Free	Hz	00000 G	1388980	50 (er 1 2.4	w Mark
Next Pea	898 GHz 359 dBm	2.438 8		Avginoi		#Atten: 30	IO: Fast 😱 ain:Low	IFG	Inp ef 20.00 d	l/div Re	10 dE
Next Rig						9 	9 0				.og 10.0
Next Lo			NWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	anna Antar	La	ᢣᡁᠬᢇᡐᡅᡗᠬ᠕ᠰ	www.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			0.00 10.0
Marker De		Al vy	" " ¹ " 					- Marine	and the second sec		20.0 30.0
Mkr→0	\	MA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA							W		i0.0 i0.0
Mkr→RefL	horner -									ᡃᡅᠴᠬᠾᢦᢌᠰᡀᠬ	i0.0
Mo 1 o	26.00 MHz (1001 pts)		Sweep			300 kHz	#VBW			er 2.4370 BW 100	ent
		-	STATUS								SG



	<u> </u>	annel 11		
🗊 Agilent Spectrum Analyzer - S	wept SA			
X 50 Ω Marker 1 2.4639240		Avg Type: Log-Pwr	3:38:28 PM Jun 14, 2012 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Peak Search
Inp	ut: RF PNO: Fast Trig: Free Rur IFGain:Low #Atten: 30 dB	8.09	63 924 GHz	NextPeak
10 dB/div Ref 20.00 d	Bm	WIKI 1 2.4	-6.984 dBm	
10.0				Next Right
10.0	and when the property when the second shaft	1 martin aunoration of the second sec		Next Lef
-20.0 -30.0	In the second se	Marin Marine Marin		Marker Delta
40.0 50.0		`````````````````````````````````	14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Mkr→Cl
члжл-ИМ-ЧИ 60.0			While the thready	Mkr→RefLv
70.0 Center 2.46200 GHz Res BW 100 kHz	#VBW 300 kHz		pan 26.00 MHz ms (1001 pts)	Mor 1 of
ISG		STATUS		

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11g					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-9.947	-25.147	≦8	Pass
6	2437	-9.747	-24.947	≦8	Pass
11	2462	-10.247	-25.447	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

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								Swept SA	m Analyzer - S	ent Spectru	Agile
Peak Search	M Jun 14, 2012 E 1 2 3 4 5 6 E M WWWWW	TRAC	ALIGNAUTO : Log-Pwr :>100/100		e Run]	GHz		οΩ 4129100		lark
Next Pea	PNNNNN	DE		Arginere		#Atten: 30	PNO: Fast 😱 Gain:Low	put: RF F IF	Inj		
	10 GHZ 47 dBm	2.412 9 -9.94	WIKFT	0	29	ç.	<i>a</i> t 5	1Bm	ef 20.00 d	3/div R	0 dB
Next Righ											10.0
											0.00 -
Next Le				7 - 1-	● ¹						10.0
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Marker Deb											30.0
	-	- Vur							- when we we we we we we		40.0 -
Mkr→C	myMur	h							JP J	ᢉᡙᠬ᠕ᡰᢦᡗᠰ	+0.0 50.0
											50.0 -
Mkr→RefL											70.0
Mor						0					
1 of	6.00 MHz 1001 pts)	Span 2 2.53 ms ('	Sweep :			300 kHz	#VBW			ter 2.412 5 BW 10	
		;	STATUS								SG



	<u>Chanı</u>	<u>nel 6</u>		100-10
🛿 Agilent Spectrum Analyzer - Swep	nt SA			
م المعام معام المعام المعام Marker 1 2.437910000		ALIGNAUTO Avg Type: Log-Pwr Avg Hold:>100/100	03:40:10 PM Jun 14, 2012 TRACE 1 2 3 4 5 6 TYPE MWWWWW	Peak Search
Input: F	RF PNO: Fast 🎧 Trig: Free Run IFGain:Low #Atten: 30 dB	8.04	DET P NNNNN 2.437 910 GHz	NextPeak
0 dB/div Ref 20.00 dBn	n		-9.747 dBm	
10.0				Next Righ
.00	1			Next Lef
20.0	www.www.	www.www.www.	ή	
30.0			λ	Marker Delta
40.0				Mkr→C
0.0			Wy wy BM pp	
0.0				Mkr→RefLv
0.0				More
enter 2.43700 GHz Res BW 100 kHz	#VBW 300 kHz	Sweep 2	Span 26.00 MHz .53 ms (1001 pts)	1 of 2
SG		STATUS		



				<u>el 11</u>	<u>Chanr</u>						
								Swept SA	n Analyzer -		
Peak Search	M Jun 14, 2012 ¹ ² ¹ ² ³ ⁴ ⁵ ⁴ ⁴ ⁴	TRAC	ALIGN AUTO e: Log-Pwr :>100/100		ENSE:INT		GHz PNO: Fast C	000000	Ω 4595040		<mark>x</mark> Marl
NextPeak	2.459 504 GHz -10.247 dBm					#Atten: 3	IFGain:Low	ļ			40.15
Next Right		-10.2							ef 20.00 (3/div R	10 de Log 10.0
Next Lef		h.	y may lun and	and the contraction] John Marin	1	nnantan	vvvyti ^{to} strvi			0.00 -10.0
Marker Delta					¥ 						-20.0 -30.0
Mkr→CF	Vur	John Mark							y de la companya de l	᠕᠕᠕	40.0 •50.0
Mkr→RefLv											-60.0 -70.0
More 1 of 2	6.00 MHz 1001 pts)	Span 2 2.53 ms (Sweep			V 300 kHz	#VB			er 2.462 BW 10	
	-	-	STATUS				44			annan da Maria - Indri Ada	MSG

Product	VDSL2 Router with WLAN/VoIP		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2012/06/14	Test Site	SR7

IEEE 802.11n (20M) A	NT 0				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-10.167	-25.367	≦8	Pass
6	2437	-10.214	-25.414	≦8	Pass
11	2462	-9.896	-25.096	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

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Peak Search	4 Jun 14, 2012		ALIGNAUTO		NSE:INT	IC SE				50 Ω	1
	123456 MWWWWW TPNNNNN	TRAC TYP DE	Log-Pwr 100/100	Avg Ty Avg Ho		Trig: Free #Atten: 30	GHZ PNO: Fast 😱 Gain:Low			1 2.414	larker
NextPea	22 GHz 87 dBm	2.414 5 -10.16	Mkr1	<i>.</i>	2			lBm	20.00 d	Ref 2	0 dB/div
Next Rig				-							10.0
											0.00
Next L	<u></u>		···· ሰስ _{፡፡} ሌሎ። ፣	1 r~MAN	1. mu Alir	Larran Ma A	10,000,00.0				10.0
		wy	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			V	MAN	10.0.4	M		20.0
Marker De											80.0
net course of									/	hap	0.0
Mkr→	how for the	۰ ۲			-					www	۳۰۰ ۸ 0.0
Mkr→Refl						1					0.0
											'0.0
М с 1 с	6.00 MHz									2.41200 (
	1001 pts)	2.53 ms ('	Sweep :			300 kHz	#VBW		lz	N 100 kH	Res B
			STATUS								G

<u>Channel 1</u>



				<u>el 6</u>	<u>Chanr</u>					
								Swept SA	trum Analyzer -	🛙 Agilent Spe
Peak Search	8:42:31 PM Jun 14, 2012 TRACE 1 2 3 4 5 6 TYPE MWWWWW	TR	ALIGNAUTO : Log-Pwr 59/100	Avg Type Avg Hold:	NSE:INT			000000	50 Ω 2.434504	× Marker 1
Next Peak	34 504 GHz 10.214 dBm	2.434				#Atten: 3	IFGain:Low		Ref 20.00	10 dB/div
Next Righ								·		10.0
Next Lef			walkarangar	Northan	Number	1 L _{int} uring in the second	wywwww.	ሰነጭ ጉሙ	Da	10.00
Marker Delt										30.0
Mkr→C	¹ 40 40 1110 1110 100 1110 100 100 100	<u>\</u>						2	vln V ^{n In}	40.0 50.0 Mandrin
Mkr→RefL										70.0
Mor 1 of	pan 26.00 MHz ms (1001 pts)		Sweep			300 kHz	#VBW	-	3700 GHz 100 kHz	
			STATUS							MSG

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								Swept SA	m Analyzer - !	gilent Spectr
Peak Search	03:43:20 PM Jun 14, 2012		ALIGN AUTO		ENSE:INT	C SE	A		ΩΩ	
NextPeak	E 123456 E MWWWWW T P NNNNN	TYP	e: Log-Pwr ⊳100/100] Trig: Fre #Atten: 3	GHz PNO: Fast 😱 IFGain:Low	out: RF	4645220 Inj	urker 12
	Mkr1 2.464 522 GHz 0 dB/div Ref 20.00 dBm -9.896 dBm -9.896 dBm									
Next Rig										.0
Next Le			mmmm	1 Trans	\ A~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	burre and	nnm	JVIV WWW		o
Marker Del					ы́					o
Mkr→C	hur white of	N.							production of the second se	0 0 <u>M</u> wwM
Mkr→RefL										
Mo 1 of	6.00 MHz									nter 2.46
	1001 pts)		Sweep STATUS		2	300 kHz	#VBW		0 KHZ	es BW 10

Product	VDSL2 Router with WLAN/VoIP				
Test Item	Power Density				
Test Mode	Transmit				
Date of Test	2012/06/14	Test Site	SR7		

IEEE 802.11n (20M) A	NT 1				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-3.120	-17.54	≦8	Pass
6	2437	-4.123	-18.37	≦8	Pass
11	2462	-4.560	-18.65	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

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								iwept SA	n Analyzer - S	lent Spectrun	🛛 Agil
Peak Search	4 PM Jun 14, 2012		ALIGNAUTO : Log-Pwr	Δυσ Τν	NSE:INT	AC SE		00000 0	Ω 4070080	50 ker 1 2.4	() Aorl
	DET P N N N N N	TY	>100/100			Trig: Free #Atten: 30	PNO: Fast 😱 Gain:Low	out: RF P		ker 1 Z.4	nari
Next Pea	008 GHz 120 dBm	Mkr1 2.407 008 GHz 10 dB/div Ref 20.00 dBm -3.120 dBm									
Next Rigi											. og 10.0
							● ¹				0.00
Next Le	┼──╢	V~~	ᡣᠰᠰ᠕	Mr. A.	M	burra	Munum	Mrnnh	Nrw		10.0
Marker De											20.0 30.0
Mkr→C									w/*	WWW	40.0
											0.0 0.0
Mkr→RefL											0.0
Mo 1 o	26.00 MHz	Span 2							00 GHz	ter 2.412	ent
	(1001 pts)		Sweep 2			300 kHz	#VBW) kHz	s BW 100	Res
			STATUS								SG



				<u>Chann</u>	<u>el 6</u>				
💴 Agilent Spectrum	m Analyzer - Swept S	N.							
	Ω 43850800000 Input: RF	PNO: Fast 😱	⊂ SEr] Trig: Free #Atten: 30		Avg Type Avg Hold:	ALIGN AUTO :: Log-Pwr >100/100	TRAC	PM Jun 14, 2012 CE 1 2 3 4 5 6 PE MWWWWW ET P N N N N N	Peak Search
	ef 20.00 dBm	IFGain:Low	#Atten: 30	dB		Mkr1	2.438 5	08 GHz 23 dBm	Next Peak
10.0									Next Right
-10.0	million	urwhyn Away	hanna	proving	WWW	www.	Arn 1		Next Left
-20.0							h h		Marker Delta
-40.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						\ 	wyddyf	Mkr→CF
-60.0									Mkr→RefLvl
Center 2.437 #Res BW 100		#VBW	300 kHz			Sweep		6.00 MHz 1001 pts)	More 1 of 2
MSG						STATUS	5		

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Channel 11	
nt Spectrum Analyzer - Swept SA	
er 1 2.463248000000 GHZ Avg lipe. Log-Fwr	Peak Search
Input: RF PNO: Fast Trig: Free Run Avg Hold:>100/100 IPE MWWWWW Der PNNNN IFGain:Low #Atten: 30 dB Mkr1 2.463 248 GHz -4.560 dBm	Next Peak
	Next Right
mannanter and	Next Lef
	Marker Delt
whythere is a second se	Mkr→C
	Mkr→RefL
r 2.46200 GHz Span 26.00 MHz BW 100 kHz #VBW 300 kHz Sweep 2.53 ms (1001 pts)	Mor 1 of
STATUS	

Product	VDSL2 Router with WLAN/VoIP				
Test Item	Power Density				
Test Mode	Transmit				
Date of Test	2012/06/14	Test Site	SR7		

IEEE 802.11n (20M) A	IEEE 802.11n (20M) ANT 0+1								
Channel No	Frequency	Measure Level	Limit	Decult					
Channel No.	(MHz)	(dBm)	(dBm)	Result					
1	2412	-16.877	≦8	Pass					
6	2437	-17.587	≦8	Pass					
11	2462	-17.763	≦8	Pass					

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

Product	/DSL2 Router with WLAN/VoIP				
Test Item	Power Density				
Test Mode	Transmit				
Date of Test	2011/08/08	Test Site	SR7		

IEEE 802.11n (40M) A	NT 0				
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
3	2422	-13.992	-29.192	≦8	Pass
6	2437	-13.930	-29.130	≦8	Pass
9	2452	-14.302	-29.502	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

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🗊 Agilent Sp	ectrum Analyzer -	Swept SA								
w Marker	^{50 Ω} 1 2.4322440)00000 GH	Iz		NSE:INT	Avg Type	ALIGNAUTO : Log-Pwr	TRAC	M Jun 14, 2012 E 1 2 3 4 5 6	Peak Search
	In		0: Fast 😱 ain:Low	¹ Trig: Free #Atten: 30		Avg Hold:	>100/100	DE		NewtDeale
10 dB/div	Ref 20.00	dBm					Mkr1	2.432 2 -13.9	44 GHz 92 dBm	Next Peak
10.0										Next Right
-10.0							1			Next Left
-20.0		honor long your la	re-rytated from the	per-managaranan 	ุศังหางที่ระหาง ก	นม. 	ી*ીµની∐જ્ય~પાંધુઅધ _ા /			Marker Delta
-40.0 -50.0 4444	han the trank							Ny Ny	hel along they	Mkr→CF
-60.0										Mkr→RefLvl
#Res BW	.42200 GHz / 100 kHz		#VBW	300 kHz				5.00 ms (2.00 MHz 1001 pts)	More 1 of 2
MSG							STATUS	5		



				<u>nnel 6</u>	<u>Cr</u>				
							r - Swept SA	ectrum Analyzer	D Agilent S
Peak Search	CE 1 2 3 4 5 6	TO 03:44:33 PM Jun 14, 201 TRACE 1 2 3 4 5 TYPE MWWWW		Avg	SENSE:I			^{50 Ω} 2.441732	<mark>w</mark> Marker
Next Peak	732 GHz 30 dBm	2.441 7	d:>100/100 Mkr1	Avgi	rig: Free Ru Atten: 30 dB	PNO: Fast 😱 Gain:Low		Ref 20.00	10 dB/div
Next Right									10.0
Next Lef				1					-10.0
Marker Delta			¹ ปร ¹ ม ² มร์ไปไหร่ง/ปูร์ห _า ง			^{เษ} ไขหร _{ับไ} ปะงารให้การใ	, Muchandon And		-20.0
Mkr→CF		h h						www.mw.mall	-40.0 -50.0
Mkr→RefLv									-60.0
More 1 of 2	52.00 MHz (1001 pts)	Span 5 5.00 ms (Sweep		00 kHz	#VBW	Z	43700 GHz 100 kHz	Center 2
			STATUS						MSG



<u>Channel 9</u>

						r - Swept SA	ipectrum Analyze	🛛 Agilent S
	03:45:06 PM Jun 14, 2012	ALIGN AUTO		SENSE:INT	AC		50 Ω	d I
Peak Search	TRACE 1 2 3 4 5 6	/pe: Log-Pwr			GHz	8000000	1 2.44726	Marker
NextBee	DET P N N N N	ld:>100/100	Avg H	「rig: Free Run !Atten: 30 dB	PNO: East	Input: RF		
Next Pea	2.447 268 GHz -14.302 dBm	Mkr1	-			0 dBm	Ref 20.0	0 dB/div
Next Righ								10.0
Next Le								0.00
Marker Del		หรับที่ไ ⁵⁵ นะมีในระบัง _{ไป} เส _{็นปร}	๛ๅ๛๛๚๛๛๛๚๛	annon hannen		weilthe work with		20.0
Mkr→C	Wing way way						Whyters Program Wall	40.0 50.0 Jurah
Mkr→RefL	······································							50.0 ——
Mo i 1 of	Span 52.00 MHz					z	2.45200 GH	
	6.00 ms (1001 pts)	Sweep (UU KHZ	#VBW 3		N 100 kHz	FRes BV

Product	VDSL2 Router with WLAN/VoIP				
Test Item	Power Density				
Test Mode	Transmit				
Date of Test	2012/06/14	Test Site	SR7		

IEEE 802.11n (40M) ANT 1								
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result			
3	2422	-6.634	-21.834	≦8	Pass			
6	2437	-7.511	-22.711	≦8	Pass			
9	2452	-5.538	-20.738	≦8	Pass			

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

and the second									
							- Swept SA	ctrum Analyzer -	🛯 Agilent Sp
Peak Search	03:52:52 PM Jun 14, 2012	ALIGNAUTO	A	ENSE:INT	AC SE			50 Ω	XI
	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	e: Log-Pwr >100/100	AvgiHold	e Run	Trig: Free	GHZ PNO: Fast 😱			Marker
	DET PNNNNN				#Atten: 30	IFGain:Low	npuc Kr		
NextPea	410 768 GHz	Mkr1							
	-6.634 dBm						dBm	Ref 20.00	10 dB/div
			2	- X0		-		Kei 20.00	
Next Righ				-					10.0
									0.00
201 0.001 02						≜]			0.00
Next Lef		dales and a la	W. INTO Brather	. alto retting	Ampleton	Inderadopman	muchnullessam		-10.0
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	η Ι-								
		i i i		- 1 11					-20.0
Marker Delta	1.							1	
	<u></u> L				ð			1	-30.0
	Υ <u></u>							IN HOLD	
	WW CARANTA LA		-					44mm	-40.0 APALA
Mkr→Cl	hunger here here								
									-50.0
Mkr Dofla			-	-					60.0
Mkr→RefLv									
				-	· .				70.0
constant of									12022
More					6				
1 of 2	Span 52.00 MHz							42200 GHz	
	00 ms (1001 pts)	Sweep \$		z	300 kHz	#VBW		100 kHz	#Res BW
		STATUS							ISG



			<u>nannel 6</u>	<u> </u>				
						er - Swept SA	ctrum Analyze	
Peak Search	03:52:10 PM Jun 14, 2012 TRACE 1 2 3 4 5 6	ALIGN AUTO e: Log-Pwr I:>100/100	Avg	C SENSE	GHz		^{50 Ω}	<mark>x</mark> Marker 1
Next Peak	2.425 768 GHz			#Atten: 30 d	PNO: Fast 😱 IFGain:Low	Input: RF		
	-7.511 dBm					0 dBm	Ref 20.0	10 dB/div Log
Next Righ								10.0
Next Lef		ที่ ประการแก่งสูญเป ก		Yeredelerer for the	กิจสาราราช	Jourtliver through the for		0.00
Marker Delta				A				20.0 30.0
Mkr→Cl	Whywywe						Ardrand .	40.0 <mark>/ 1999 / 1</mark> 909
Mkr→RefLv								60.0
More								70.0
1 of 2	Span 52.00 MHz 5.00 ms (1001 pts) –	Sweep :		300 kHz	#VBW	z	13700 GHz 100 kHz	Center 2 #Res BW
	3	STATUS						ISG



						Swept SA	trum Analyzer -	Agilent Spe
.	03:51:19 PM Jun 14, 2012	ALIGN AUTO		SENSE:INT	AC		50 Ω	
	TRACE 1 2 3 4 5 6	e: Log-Pwr				000000	2.4532480	arker 1
	DET P N N N N N	:>100/100	Avg Hol	Trig: Free Run #Atten: 30 dB	PNO: Fast 😱	put: RF	In	
Next Dee				#Atten: 30 db	IFGain:Low			
	2.453 248 GHz	Mkr1						
	-5.538 dBm					dBm	Ref 20.00) dB/div
		1 1			- T- T		1101 20100	
ALC 74 (1940 ALC 2008)								
Next Rig								0.0
1993					0	~		0.0
		-		_ 1		-		.00
Next Le			500520					
NextLe	hlallan	walnamayayah	walter and	When handling performanted we	whenly when when	hter frankran	International	0.0
	^{, τω} ν _ų			tif			prov.	0.0
	} -							1000-02
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	hu han uuyya haaraan -						1	2.20.000
	MALL						NAT AND	0.0 AMMM
	- I HAMY WOLL							0.0 445-240-24
Mkr→C								
								0.0
								(57357) (57357)
Mkr→RefL		1						0.0
								0.0
								(Network)
Mo								
1 of	Span 52.00 MHz						5200 GHz	enter 24
101	5.00 ms (1001 pts)	Sween 4		00 kHz	#VBW (Res BW
				vv 1116				
		STATUS						G

Product	VDSL2 Router with WLAN/VoIP				
Test Item	Power Density				
Test Mode	Transmit				
Date of Test	2012/06/14	Test Site	SR7		

IEEE 802.11n (40M) ANT 0+1									
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result					
3	2422	-21.101	≦8	Pass					
6	2437	-21.819	≦8	Pass					
9	2452	-20.196	≦8	Pass					

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB

Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)