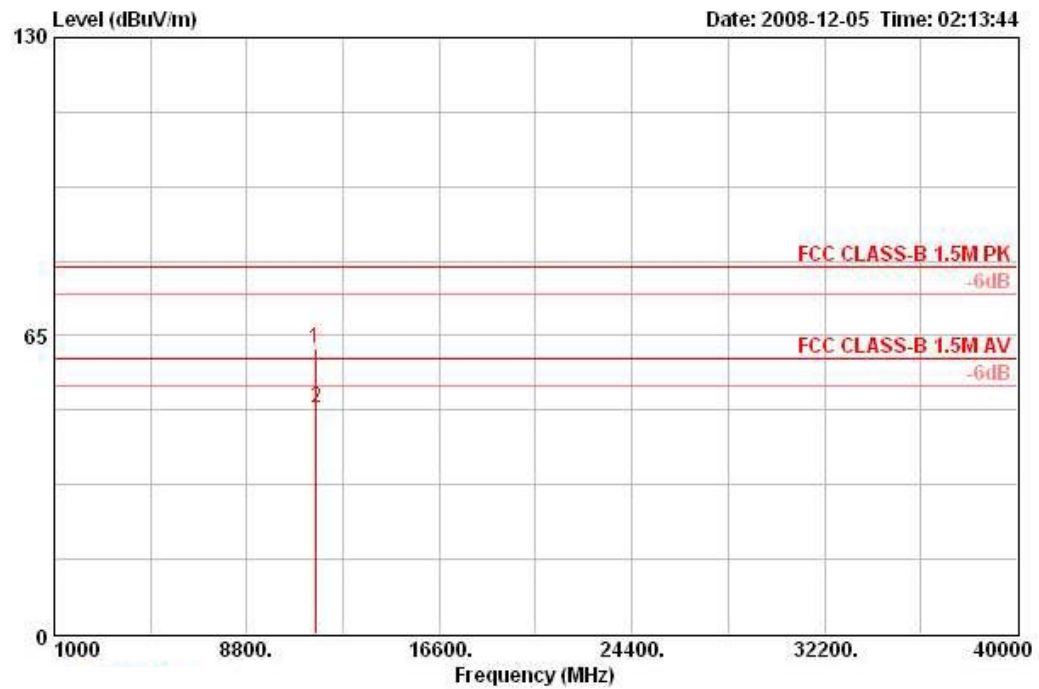


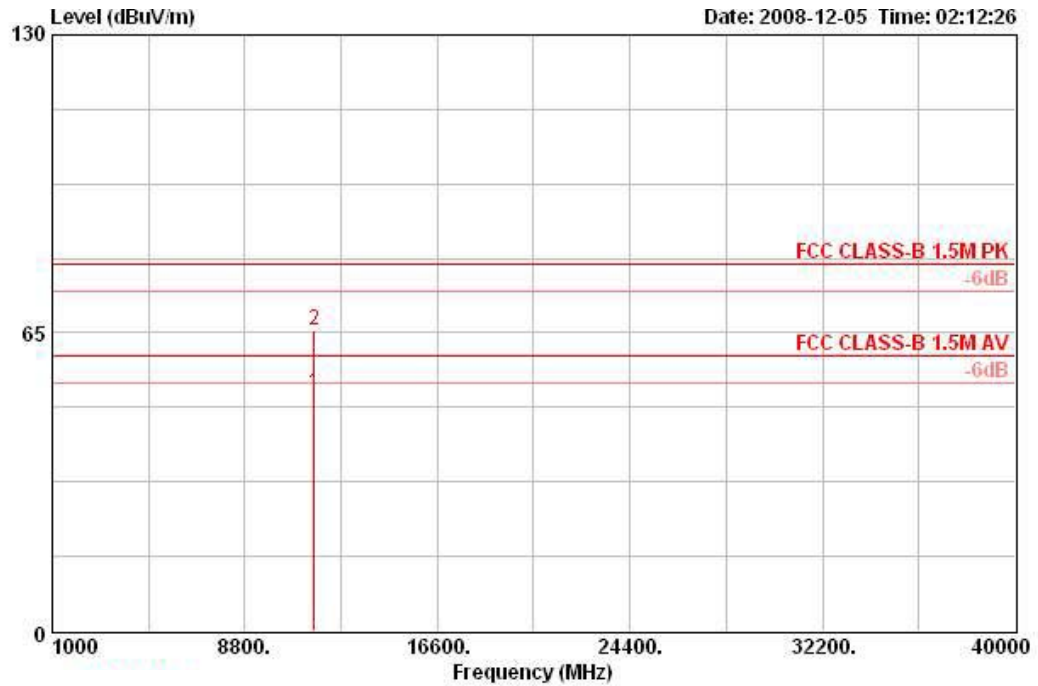
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	11a Draft n MCS8 40MHz CH 159 / Ant. A + Ant. C

Horizontal



	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable			Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Factor	Loss	Remark	Pol/Phase	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	11588.600	62.14	-17.86	80.00	46.93	39.47	35.08	10.83	PEAK	HORIZONTAL	261	107
2	11597.320	49.09	-10.91	60.00	33.91	39.47	35.08	10.79	AVERAGE	HORIZONTAL	261	107

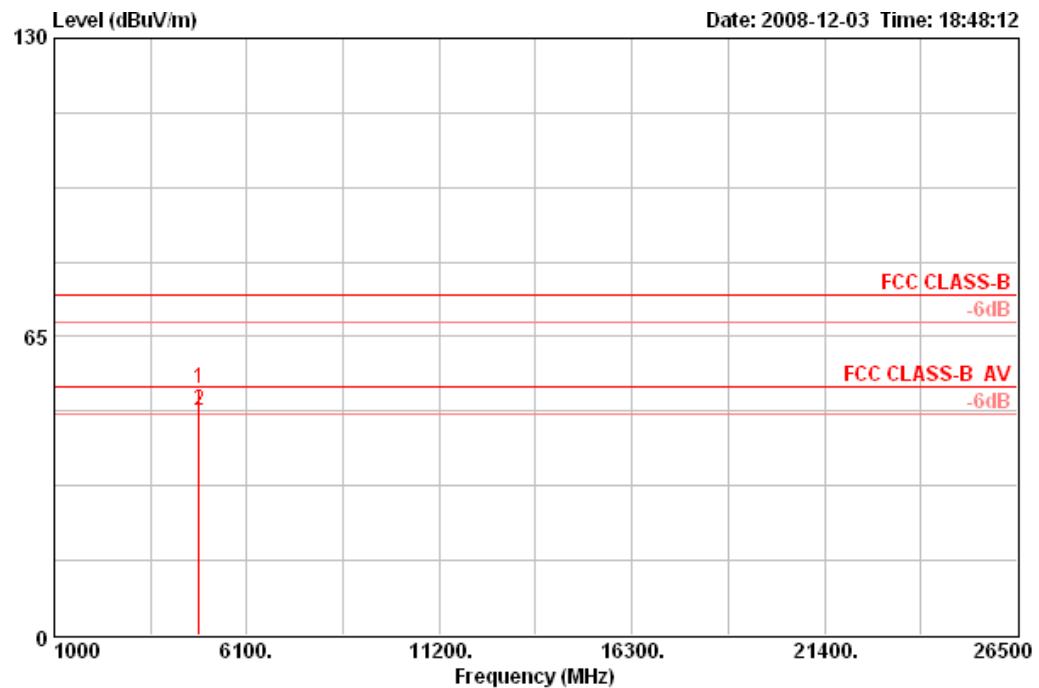
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	11597.720	51.69	-8.31	60.00	36.51	39.47	35.08	10.79	AVERAGE	VERTICAL	310	100
2	11599.680	65.43	-14.57	80.00	50.26	39.46	35.08	10.79	PEAK	VERTICAL	310	100

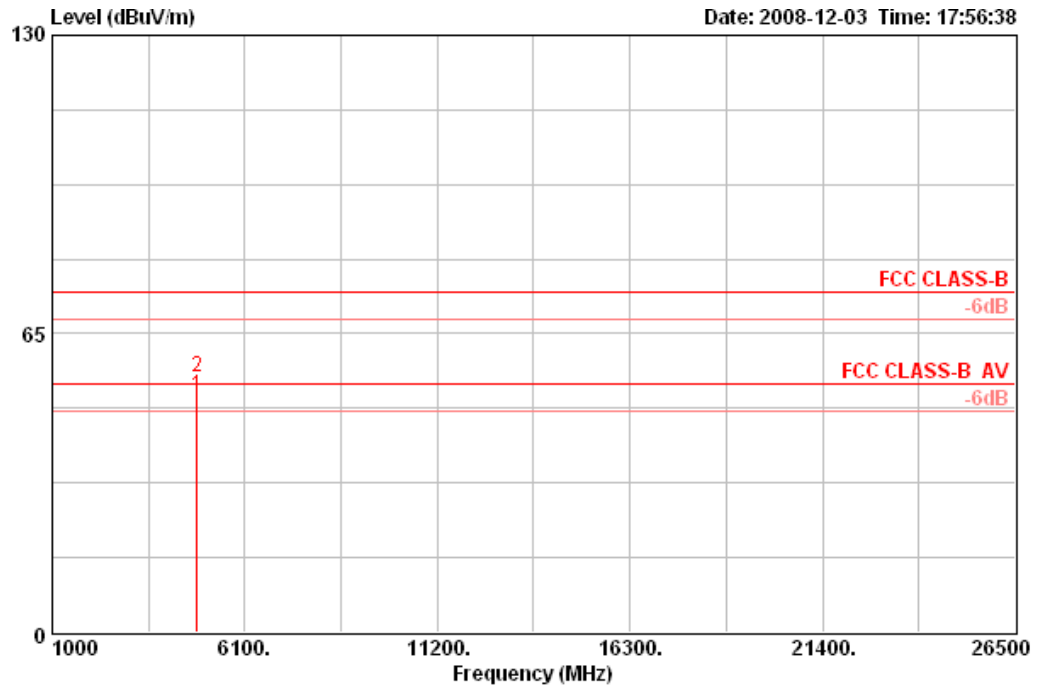
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 1 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4824.112	53.69	-20.31	74.00	49.12	33.39	35.20	6.39	PEAK	HORIZONTAL	110	146
2	4824.208	48.81	-5.19	54.00	44.23	33.39	35.20	6.39	AVERAGE	HORIZONTAL	110	146

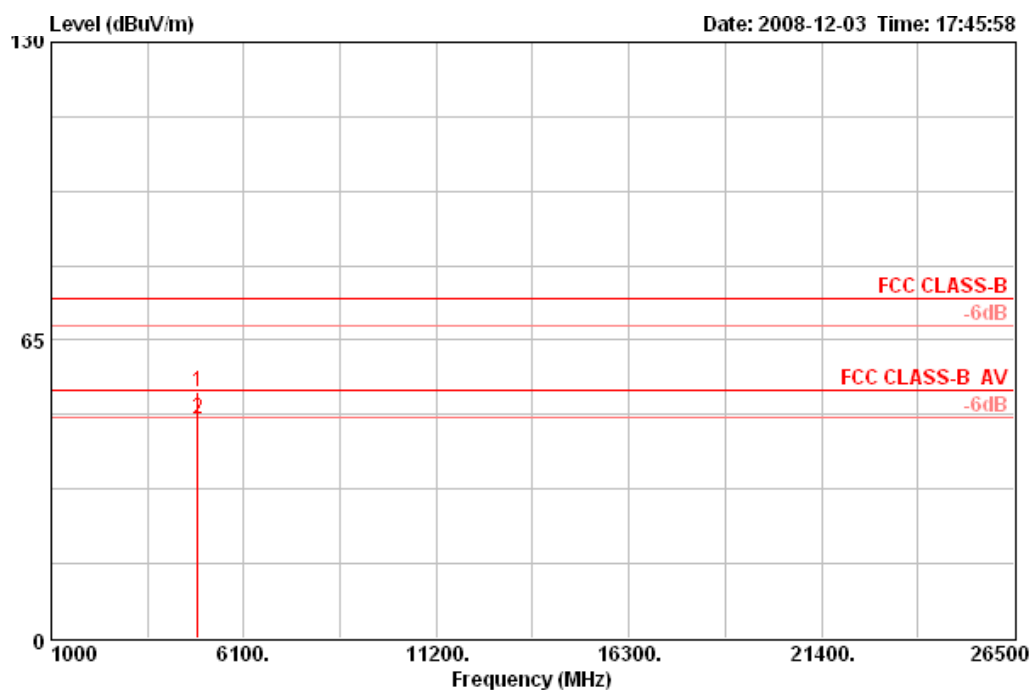
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	4824.208	51.59	-2.41	54.00	47.01	33.39	35.20	6.39	AVERAGE	VERTICAL	170	140
2	4824.296	55.49	-18.51	74.00	50.91	33.39	35.20	6.39	PEAK	VERTICAL	170	140

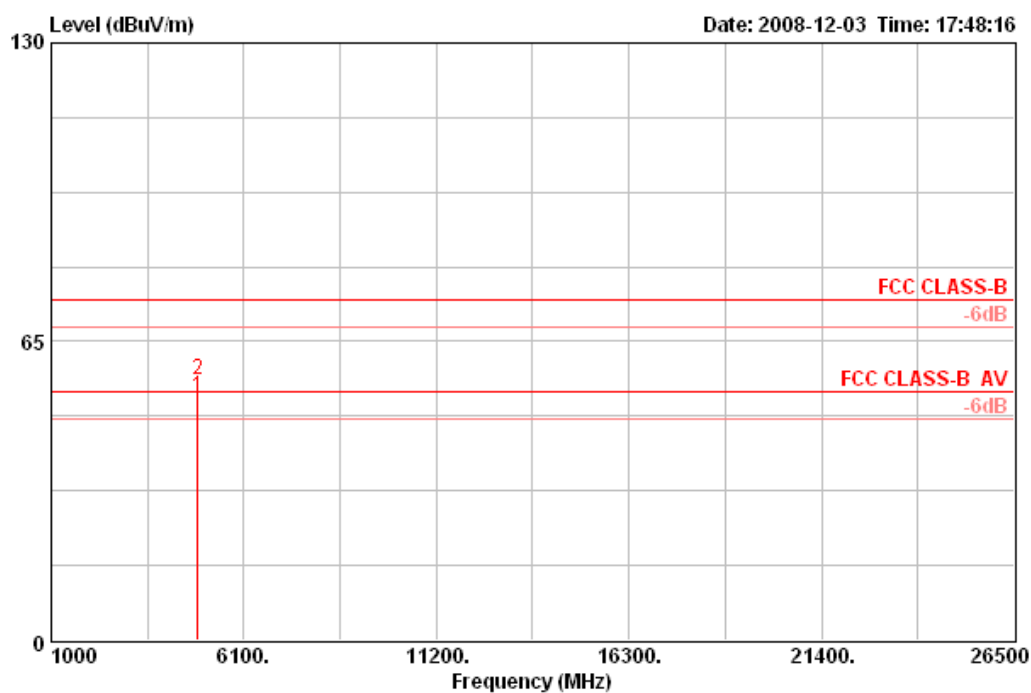
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 6 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB			deg	cm
1	4874.130	53.82	-20.18	74.00	48.98	33.48	35.20	6.56	PEAK	HORIZONTAL	145	129
2	4874.210	47.85	-6.15	54.00	43.00	33.48	35.20	6.56	AVERAGE	HORIZONTAL	145	129

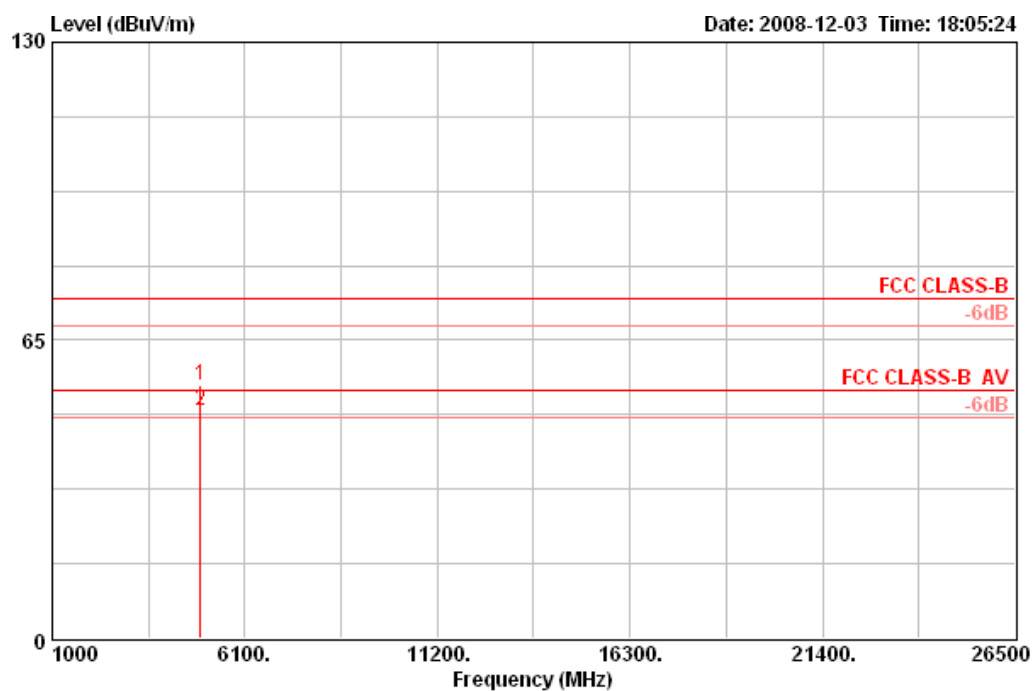
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	4874.212	52.96	-1.04	54.00	48.12	33.48	35.20	6.56	AVERAGE	VERTICAL	163	110
2	4874.280	56.49	-17.51	74.00	51.64	33.48	35.20	6.56	PEAK	VERTICAL	163	110

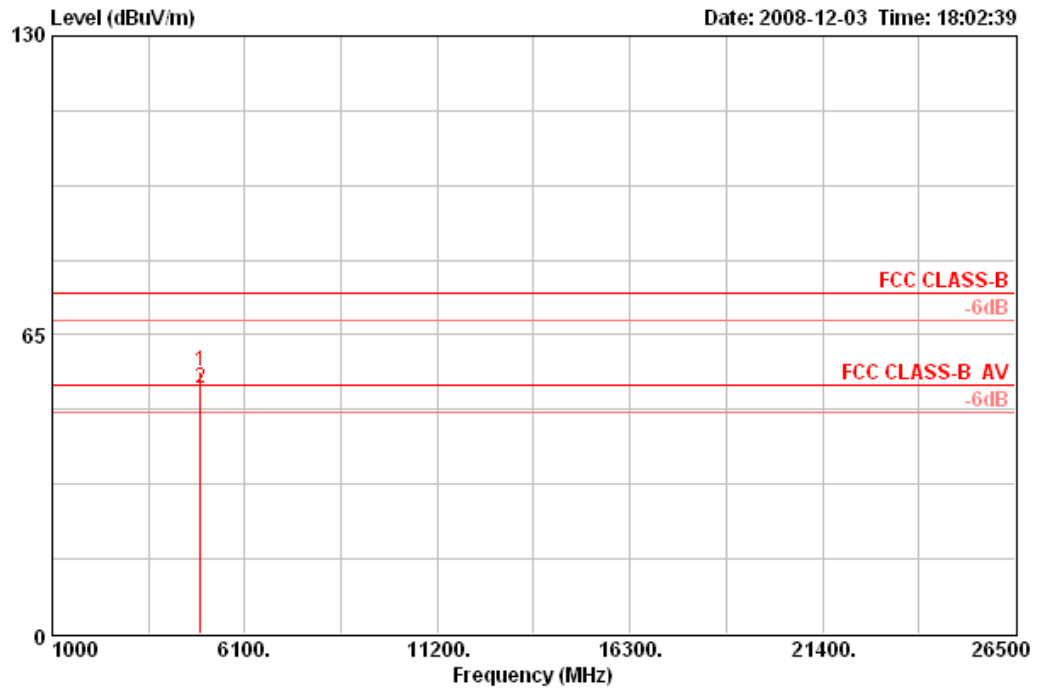
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 11 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB			deg	cm
1	4924.120	55.22	-18.78	74.00	50.12	33.58	35.20	6.73 PEAK	HORIZONTAL	141	104
2 !	4924.212	49.62	-4.38	54.00	44.51	33.58	35.20	6.73 AVERAGE	HORIZONTAL	141	104

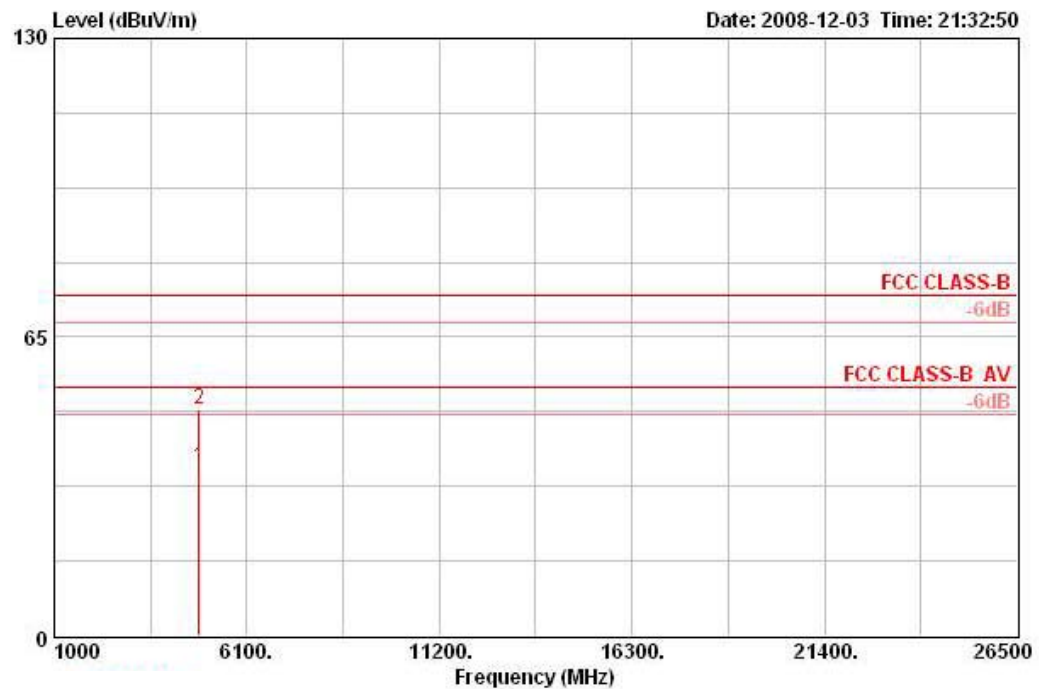
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4924.036	57.07	-16.93	74.00	51.96	33.58	35.20	6.73	PEAK	VERTICAL	170	108
2 !	4924.232	53.36	-0.64	54.00	48.25	33.58	35.20	6.73	AVERAGE	VERTICAL	170	108

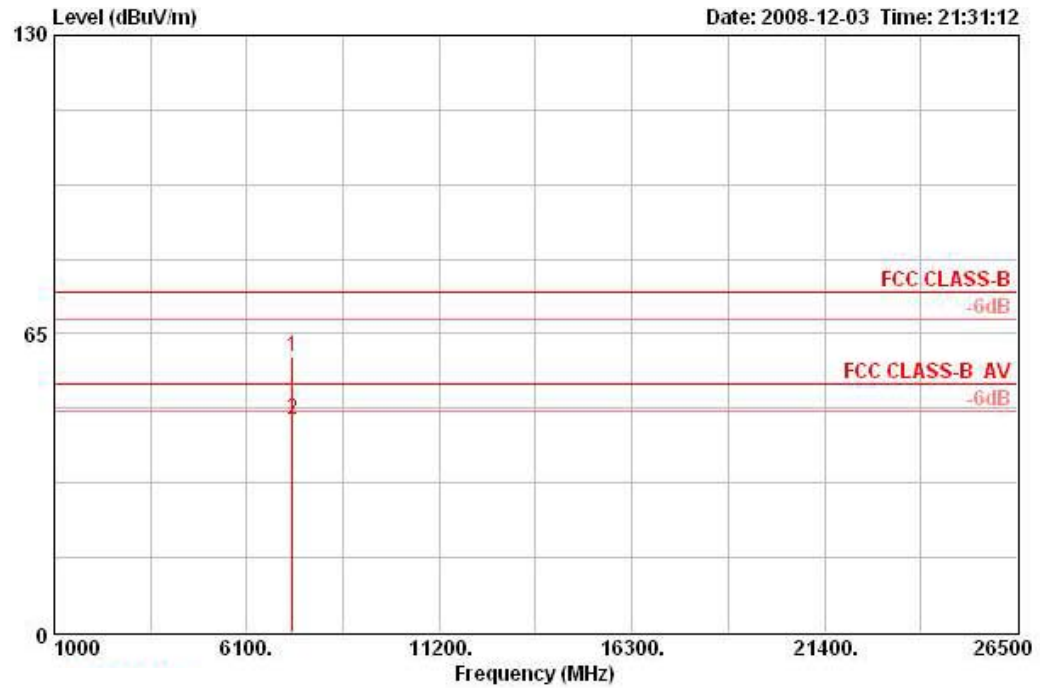
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 1 / Ant. A

Horizontal



	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4825.560	36.74	-17.26	54.00	32.16	33.39	35.20	6.39	AVERAGE	HORIZONTAL	0	100
2	4826.370	49.31	-24.69	74.00	44.73	33.39	35.20	6.39	PEAK	HORIZONTAL	0	100

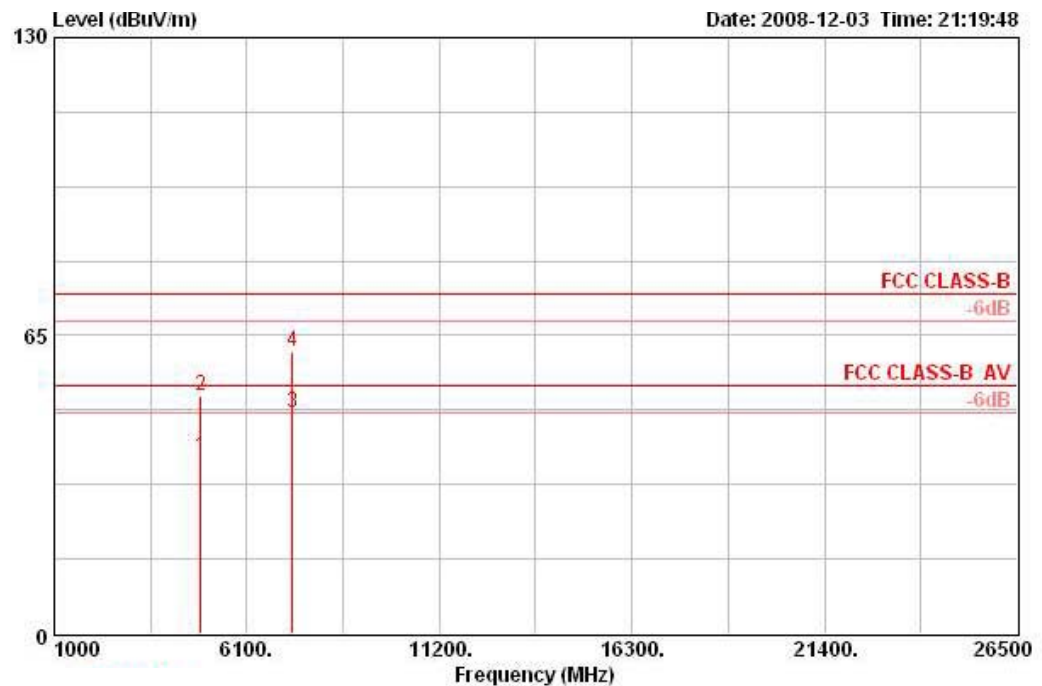
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	7311.040	59.96	-14.04	74.00	50.89	36.50	35.42	7.99	PEAK	VERTICAL	141	100
2	7311.790	46.42	-7.58	54.00	37.34	36.50	35.42	8.01	AVERAGE	VERTICAL	141	100

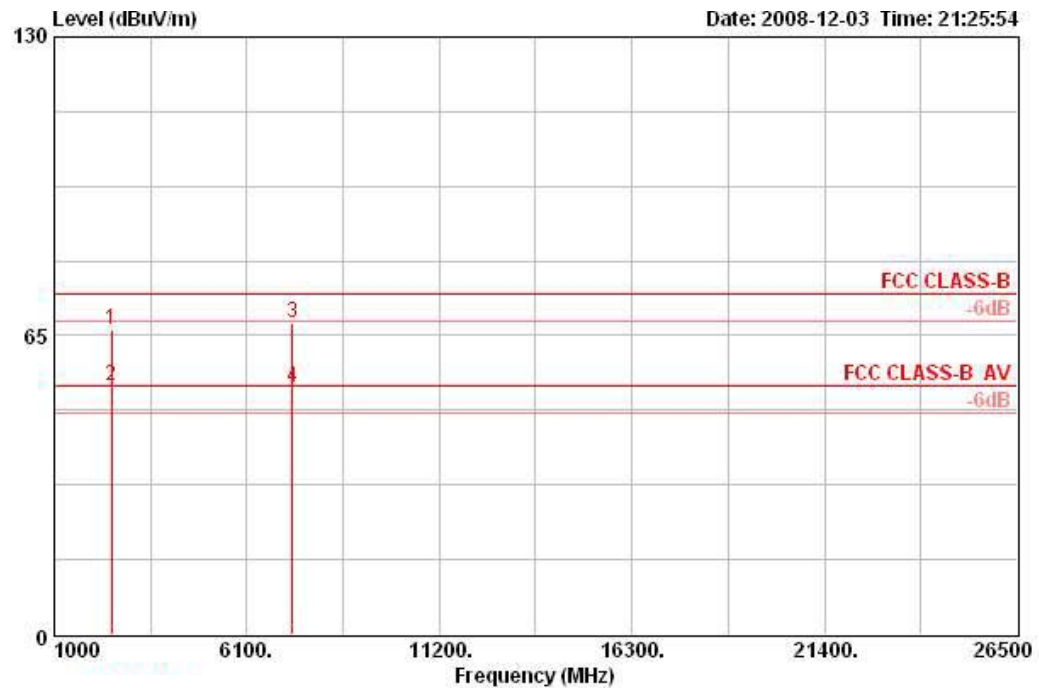
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 6 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4875.300	38.37	-15.63	54.00	33.53	33.48	35.20	6.56	AVERAGE	HORIZONTAL	230	136
2	4875.900	51.80	-22.20	74.00	46.96	33.48	35.20	6.56	PEAK	HORIZONTAL	230	136
3 !	7310.240	48.08	-5.92	54.00	39.01	36.50	35.42	7.99	AVERAGE	HORIZONTAL	66	100
4	7311.550	61.61	-12.39	74.00	52.53	36.50	35.42	8.01	PEAK	HORIZONTAL	66	100

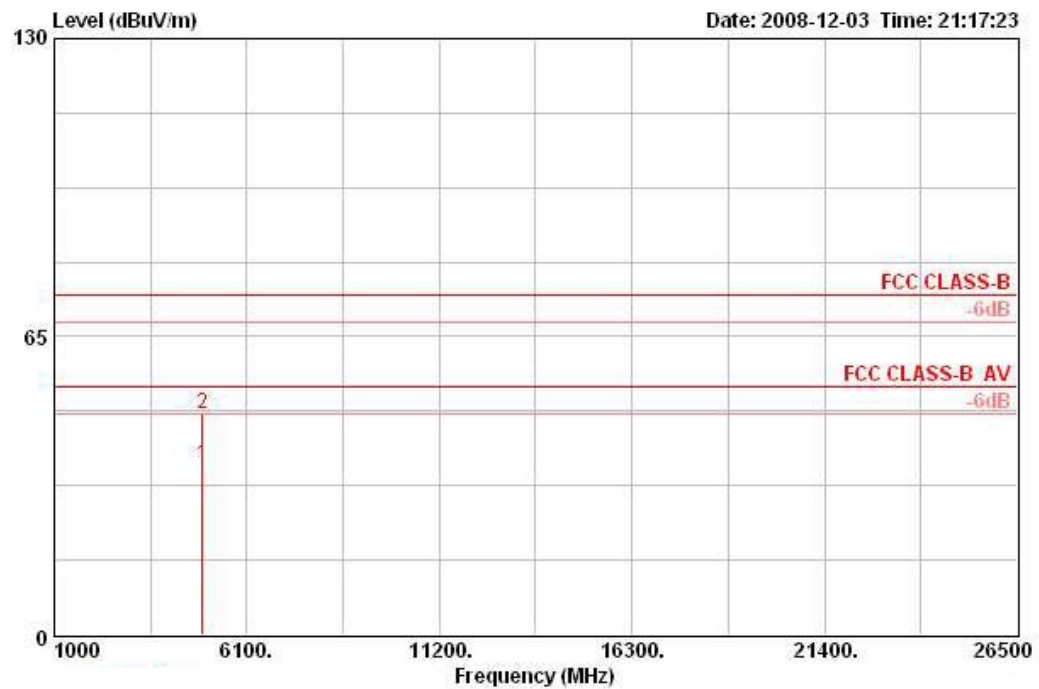
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2512.730	66.31	-7.69	74.00	68.89	28.35	35.01	4.08	PEAK	VERTICAL	281	100
2 !	2512.770	53.92	-0.08	54.00	56.50	28.35	35.01	4.08	AVERAGE	VERTICAL	281	100
3	7305.400	67.61	-6.39	74.00	58.55	36.50	35.42	7.99	PEAK	VERTICAL	92	100
4 !	7314.200	53.70	-0.30	54.00	44.62	36.50	35.42	8.01	AVERAGE	VERTICAL	92	100

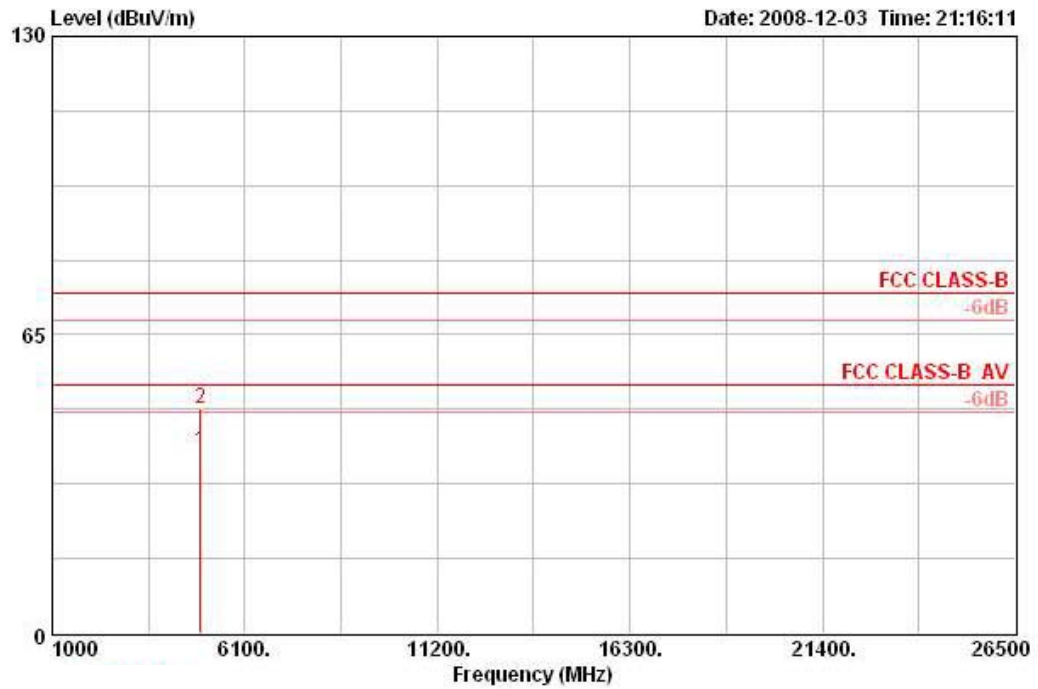
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 11 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4922.270	37.02	-16.98	54.00	31.91	33.58	35.20	6.73	AVERAGE	HORIZONTAL	0	100
2	4922.810	48.27	-25.73	74.00	43.16	33.58	35.20	6.73	PEAK	HORIZONTAL	0	100

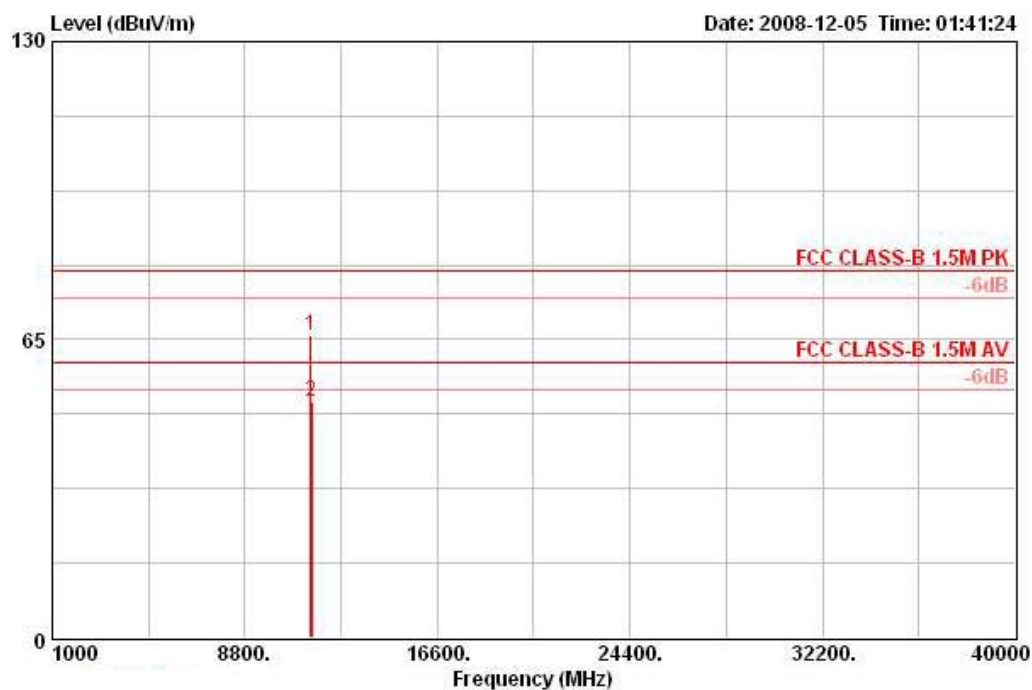
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	4922.620	39.73	-14.27	54.00	34.63	33.58	35.20	6.73	AVERAGE	VERTICAL	360	100
2	4923.100	48.98	-25.02	74.00	43.87	33.58	35.20	6.73	PEAK	VERTICAL	360	100

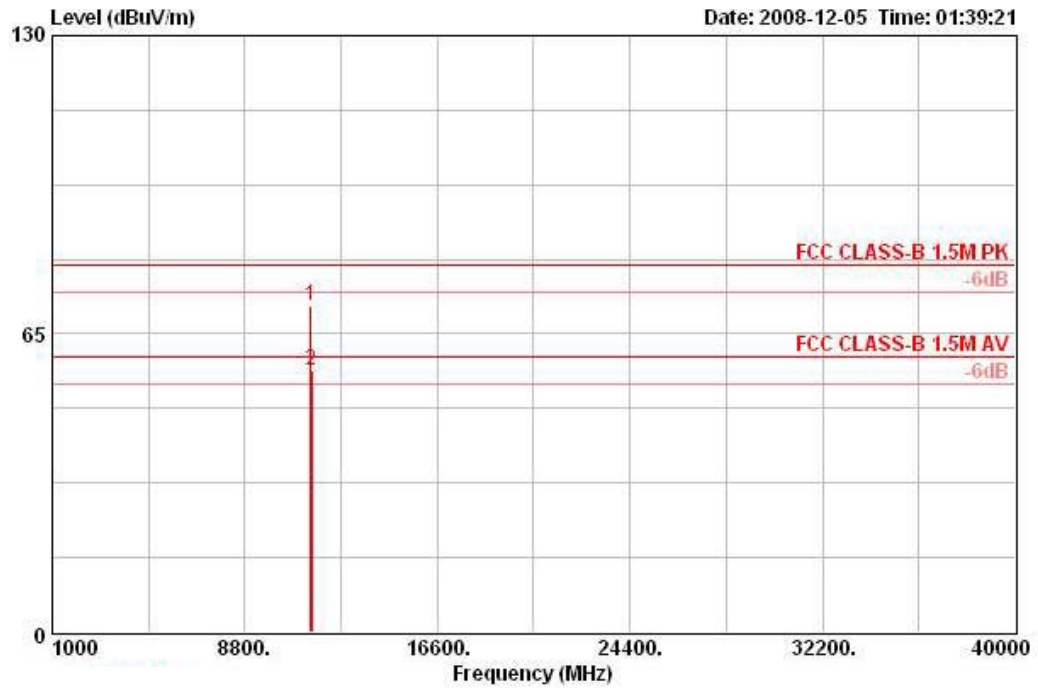
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a CH 149 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	11489.160	65.98	-14.02	80.00	50.68	39.50	35.09	10.90	PEAK	HORIZONTAL	260	112
2	11490.720	51.61	-8.39	60.00	36.30	39.50	35.09	10.90	AVERAGE	HORIZONTAL	260	112

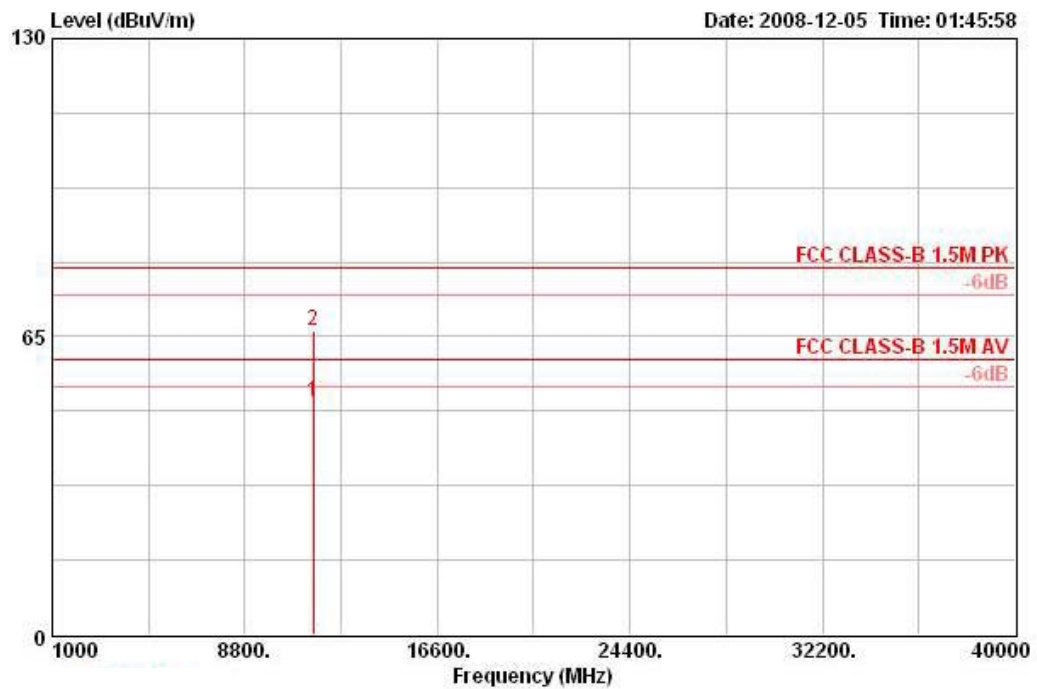
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB			deg	cm
1	11489.040	71.00	-9.00	80.00	55.69	39.50	35.09	10.90 PEAK	VERTICAL	167	111
2 !	11490.640	56.97	-3.03	60.00	41.66	39.50	35.09	10.90 AVERAGE	VERTICAL	167	111

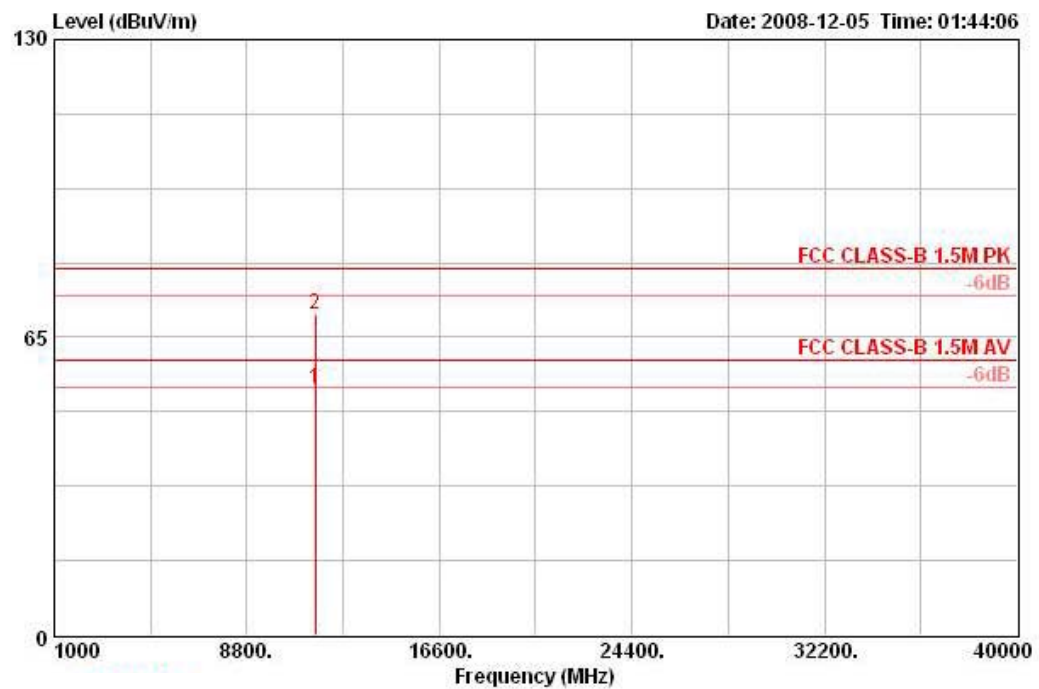
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a CH 157 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	11570.520	50.66	-9.34	60.00	35.45	39.47	35.09	10.83	AVERAGE	HORIZONTAL	260	111
2	11573.080	66.26	-13.74	80.00	51.05	39.47	35.09	10.83	PEAK	HORIZONTAL	260	111

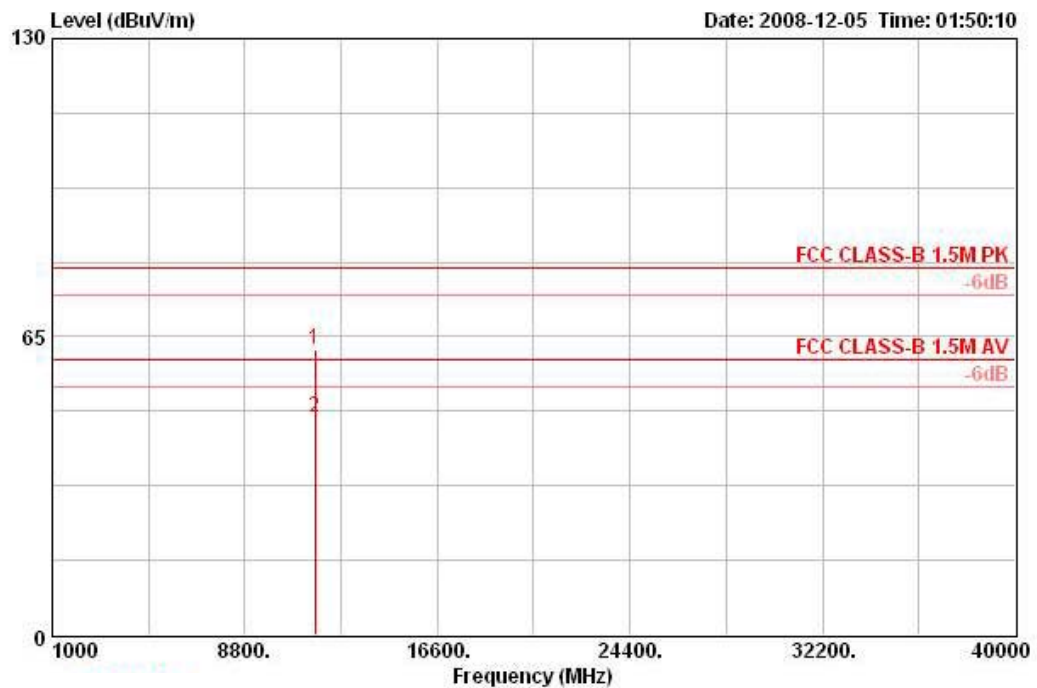
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB			deg	cm
1	11570.640	53.67	-6.33	60.00	38.46	39.47	35.09	10.83 AVERAGE	VERTICAL	168	110
2	11572.760	70.09	-9.91	80.00	54.87	39.47	35.09	10.83 PEAK	VERTICAL	168	110

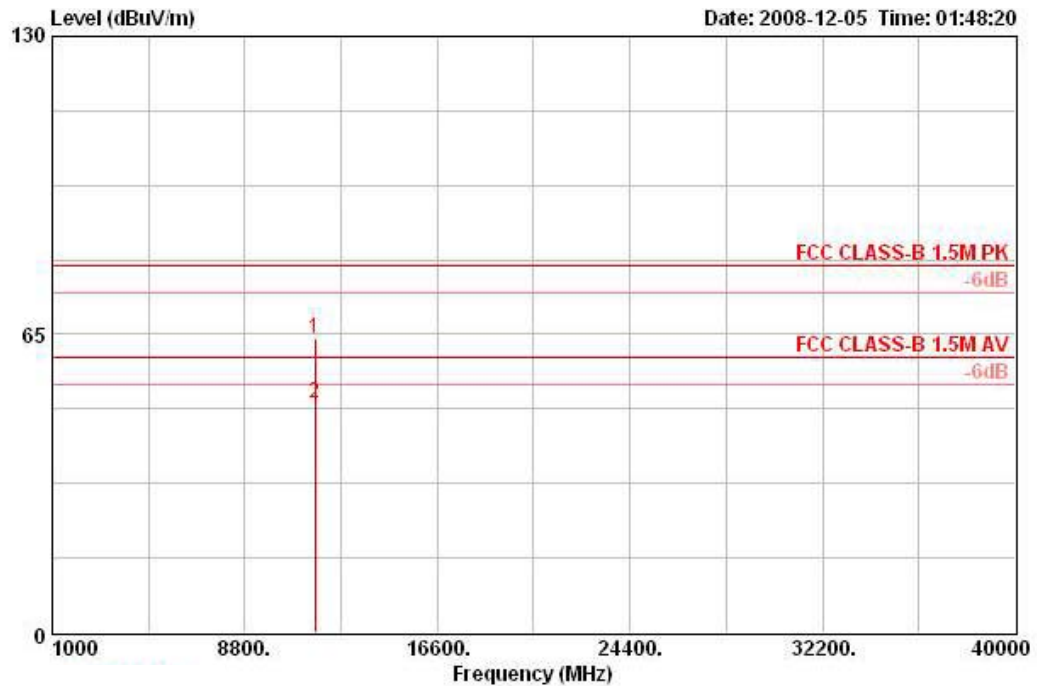
Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a CH 165 / Ant. A

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB			deg	cm
1	11651.000	62.23	-17.77	80.00	47.14	39.44	35.07	10.72 PEAK	HORIZONTAL	259	112
2	11652.360	47.42	-12.58	60.00	32.32	39.44	35.07	10.72 AVERAGE	HORIZONTAL	259	112

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	11640.800	64.00	-16.00	80.00	48.87	39.44	35.07	10.76	PEAK	VERTICAL	166	112
2	11652.520	50.15	-9.85	60.00	35.05	39.44	35.07	10.72	AVERAGE	VERTICAL	166	112

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

4.6. Band Edge Emissions Measurement

4.6.1. Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.6.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (Emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	100 KHz /100 KHz for Peak

4.6.3. Test Procedures

1. The test procedure is the same as section 4.5.3, only the frequency range investigated is limited to 100MHz around bandedges.
2. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

4.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.5.4.

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.6.7. Test Result of Band Edge and Fundamental Emissions

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 1, 6, 11 / Ant. A + Ant. C
Test date	Dec. 03, 2008		

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2389.200	69.92	-4.08	74.00	39.00	28.05	0.00	2.86	PEAK	VERTICAL	80	100
2 !	2390.000	53.66	-0.34	54.00	22.72	28.05	0.00	2.88	AVERAGE	VERTICAL	80	100
3	2415.200	102.33			71.36	28.09	0.00	2.88	AVERAGE	VERTICAL	80	100
4	2416.400	113.92			82.93	28.09	0.00	2.90	PEAK	VERTICAL	80	100

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2389.000	71.26	-2.74	74.00	40.35	28.05	0.00	2.86	PEAK	VERTICAL	80	100
2 !	2390.000	53.73	-0.27	54.00	22.80	28.05	0.00	2.88	AVERAGE	VERTICAL	80	100
3	2441.400	119.83			88.74	28.18	0.00	2.91	PEAK	VERTICAL	80	100
4 @	2442.400	107.85			76.76	28.18	0.00	2.91	AVERAGE	VERTICAL	80	100
5 !	2483.500	53.58	-0.42	54.00	22.39	28.26	0.00	2.93	AVERAGE	VERTICAL	80	100
6 !	2484.300	68.41	-5.59	74.00	37.23	28.26	0.00	2.93	PEAK	VERTICAL	80	100

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2457.400	110.70			79.58	28.22	0.00	2.91	Peak	VERTICAL	96	100
2 @	2457.400	101.01			69.88	28.22	0.00	2.91	AVERAGE	VERTICAL	96	100
3 !	2483.500	53.20	-0.80	54.00	22.02	28.26	0.00	2.93	AVERAGE	VERTICAL	96	100
4 !	2484.100	70.61	-3.39	74.00	39.43	28.26	0.00	2.93	Peak	VERTICAL	96	100

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 3, 6, 9 / Ant. A + Ant. C
Test date	Dec. 03, 2008		

Channel 3

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2387.600	67.68	-6.32	74.00	36.77	28.05	0.00	2.86	PEAK	VERTICAL	82	100
2 !	2388.800	53.91	-0.09	54.00	23.00	28.05	0.00	2.86	AVERAGE	VERTICAL	82	100
3	2412.000	108.04			77.07	28.09	0.00	2.88	PEAK	VERTICAL	82	100
4	2418.400	96.10			65.11	28.09	0.00	2.90	AVERAGE	VERTICAL	82	100

Item 3, 4 are the fundamental frequency at 2422 MHz.

Channel 6

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2390.000	53.88	-0.12	54.00	22.95	28.05	0.00	2.88	AVERAGE	VERTICAL	80	100
2 !	2390.000	70.00	-4.00	74.00	39.07	28.05	0.00	2.88	PEAK	VERTICAL	80	100
3	2442.200	100.05			68.96	28.18	0.00	2.91	AVERAGE	VERTICAL	80	100
4	2445.000	111.98			80.89	28.18	0.00	2.91	PEAK	VERTICAL	80	100
5 !	2483.500	53.15	-0.85	54.00	21.97	28.26	0.00	2.93	AVERAGE	VERTICAL	80	100
6	2484.700	67.69	-6.31	74.00	36.50	28.26	0.00	2.93	PEAK	VERTICAL	80	100

Item 3, 4 are the fundamental frequency at 2437MHz.

Channel 9

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2448.000	107.55			76.46	28.18	0.00	2.91	PEAK	VERTICAL	280	100
2	2456.800	96.18			65.06	28.22	0.00	2.91	AVERAGE	VERTICAL	280	100
3 !	2483.500	53.20	-0.80	54.00	22.01	28.26	0.00	2.93	AVERAGE	VERTICAL	280	100
4 !	2485.900	68.36	-5.64	74.00	37.17	28.26	0.00	2.93	PEAK	VERTICAL	280	100

Item 1, 2 are the fundamental frequency at 2452 MHz.

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 1, 6, 11 / Ant. A
Test date	Dec. 03, 2008		

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2386.400	53.21	-0.79	54.00	22.29	28.05	0.00	2.86	AVERAGE	VERTICAL	277	100
2	2386.600	63.64	-10.36	74.00	32.72	28.05	0.00	2.86	PEAK	VERTICAL	277	100
3	2413.600	110.73			79.76	28.09	0.00	2.88	PEAK	VERTICAL	277	100
4 @	2414.800	106.17			75.20	28.09	0.00	2.88	AVERAGE	VERTICAL	277	100

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2387.400	47.11	-6.89	54.00	16.19	28.05	0.00	2.86	AVERAGE	VERTICAL	278	100
2	2388.800	59.34	-14.66	74.00	28.42	28.05	0.00	2.86	PEAK	VERTICAL	278	100
3	2438.600	111.68			80.61	28.18	0.00	2.90	PEAK	VERTICAL	278	100
4 @	2439.800	107.47			76.40	28.18	0.00	2.90	AVERAGE	VERTICAL	278	100
5	2484.700	61.48	-12.52	74.00	30.30	28.26	0.00	2.93	PEAK	VERTICAL	278	100
6 !	2485.500	48.19	-5.81	54.00	17.01	28.26	0.00	2.93	AVERAGE	VERTICAL	278	100

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2459.400	106.22			75.10	28.22	0.00	2.91	AVERAGE	VERTICAL	278	100
2	2460.800	110.50			79.37	28.22	0.00	2.91	PEAK	VERTICAL	278	100
3 !	2483.500	53.66	-0.34	54.00	22.48	28.26	0.00	2.93	AVERAGE	VERTICAL	278	100
4	2484.100	64.01	-9.99	74.00	32.83	28.26	0.00	2.93	PEAK	VERTICAL	278	100

Item 1, 2 are the fundamental frequency at 2462 MHz.

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 1, 6, 11 / Ant. A
Test Date	Dec. 03, 2008		

Channel 1

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	2390.000	53.25	-0.75	54.00	22.32	28.05	0.00	2.88	AVERAGE	VERTICAL	280	100
2 !	2390.000	72.08	-1.92	74.00	41.15	28.05	0.00	2.88	PEAK	VERTICAL	280	100
3	2413.600	112.60			81.62	28.09	0.00	2.88	PEAK	VERTICAL	280	100
4 ☺	2415.000	102.03			71.06	28.09	0.00	2.88	AVERAGE	VERTICAL	280	100

Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2390.000	63.26	-10.74	74.00	32.33	28.05	0.00	2.88	PEAK	VERTICAL	278	100
2 !	2390.000	48.92	-5.08	54.00	17.99	28.05	0.00	2.88	AVERAGE	VERTICAL	278	100
3	2438.800	116.72			85.65	28.18	0.00	2.90	PEAK	VERTICAL	278	100
4 ☺	2440.200	106.30			75.22	28.18	0.00	2.90	AVERAGE	VERTICAL	278	100
5 !	2483.500	50.00	-4.00	54.00	18.82	28.26	0.00	2.93	AVERAGE	VERTICAL	278	100
6	2484.300	65.18	-8.82	74.00	34.00	28.26	0.00	2.93	PEAK	VERTICAL	278	100

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	2456.000	111.94			80.82	28.22	0.00	2.91	PEAK	VERTICAL	279	100
2	2467.600	101.42			70.28	28.22	0.00	2.93	AVERAGE	VERTICAL	279	100
3 !	2483.500	53.15	-0.85	54.00	21.97	28.26	0.00	2.93	AVERAGE	VERTICAL	279	100
4 !	2483.500	70.77	-3.23	74.00	39.58	28.26	0.00	2.93	PEAK	VERTICAL	279	100

Item 1, 2 are the fundamental frequency at 2462 MHz.

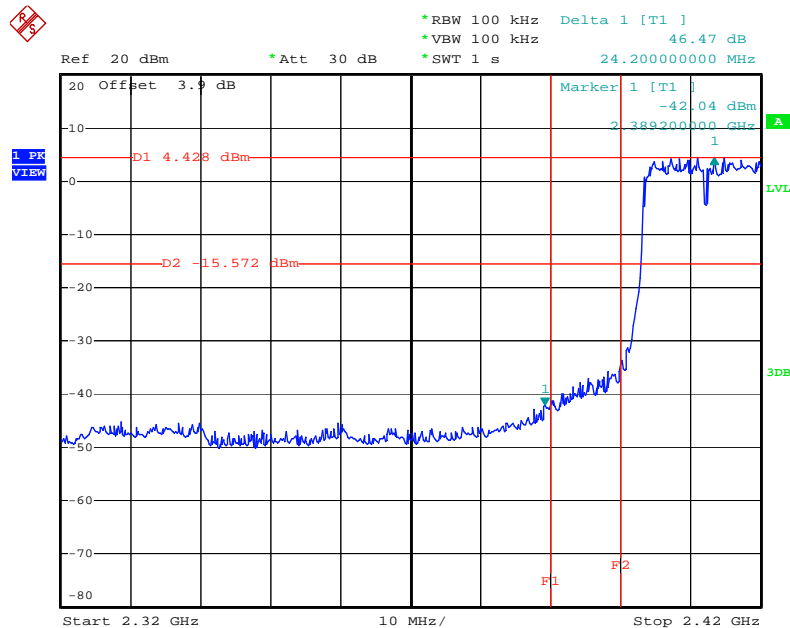
Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

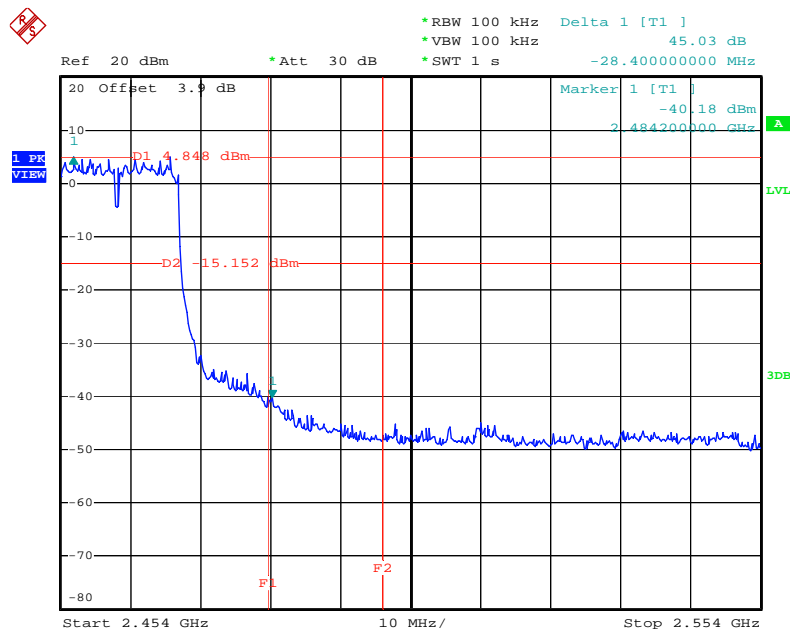
For Emission not in Restricted Band

Low Band Edge Plot on Configuration Drafft n MCS8 20MHz Ant. A + Ant. C / 2412 MHz



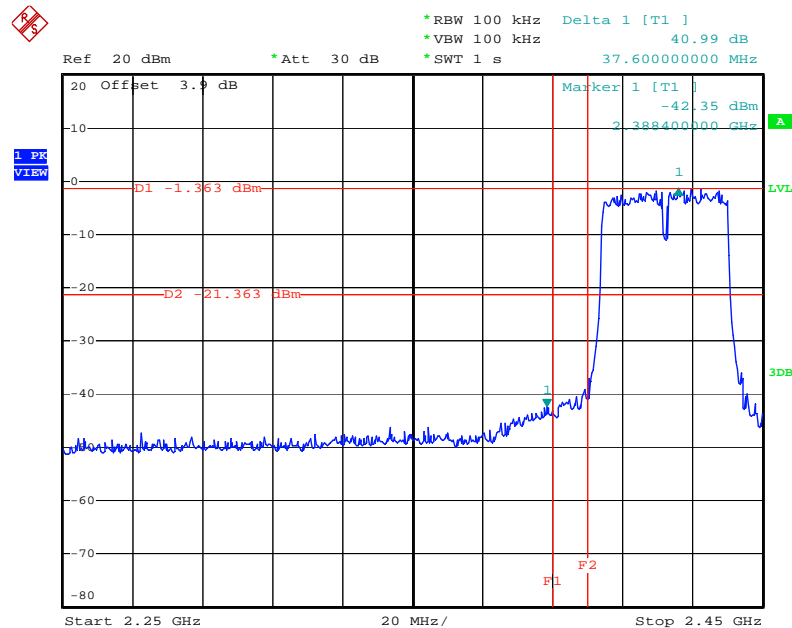
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High Band Edge Plot on Configuration Drafft n MCS8 20MHz Ant. A + Ant. C / 2462 MHz



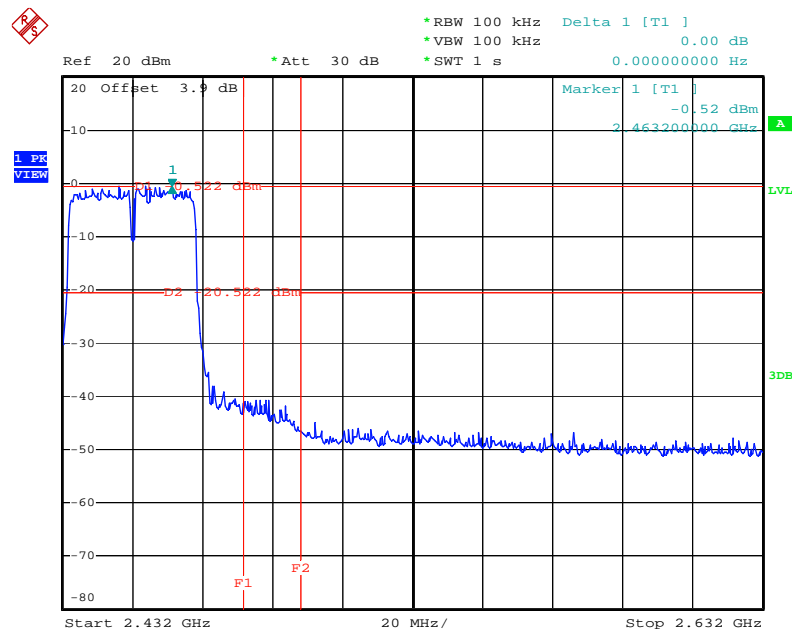
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Low Band Edge Plot on Configuration Drafft n MCS8 40MHz Ant. A + Ant. C / 2412 MHz



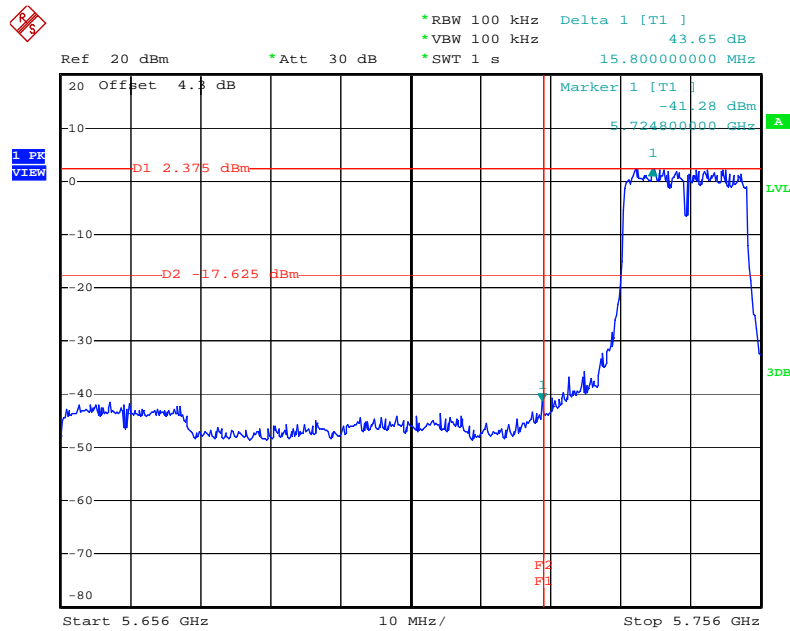
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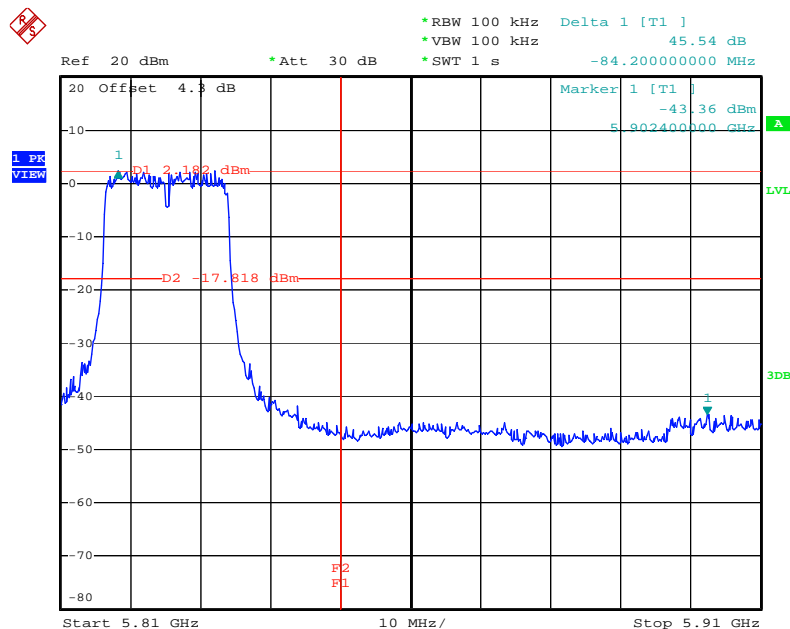
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Low Band Edge Plot on Configuration 11a Draft n MCS8 20MHz Ant. A + Ant. C / 5745 MHz



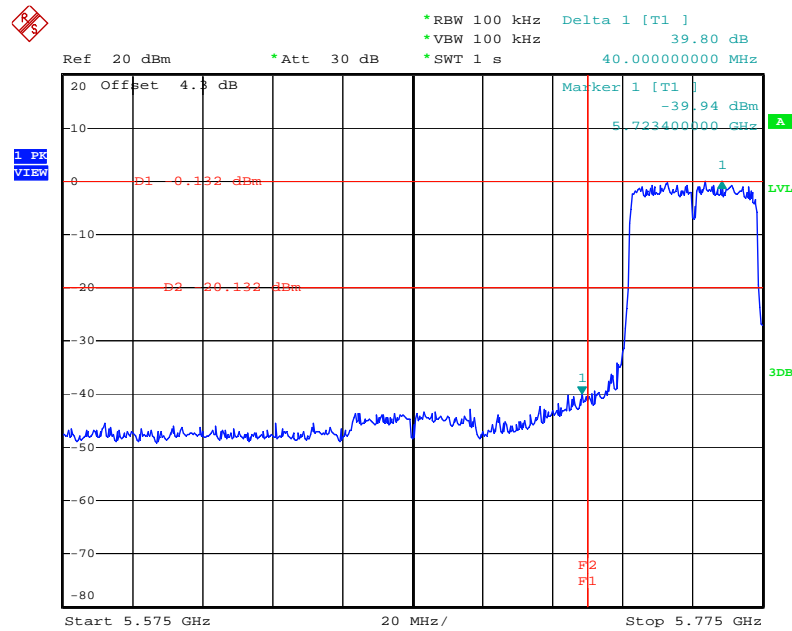
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High Band Edge Plot on Configuration 11a Draft n MCS8 20MHz Ant. A + Ant. C / 5825 MHz



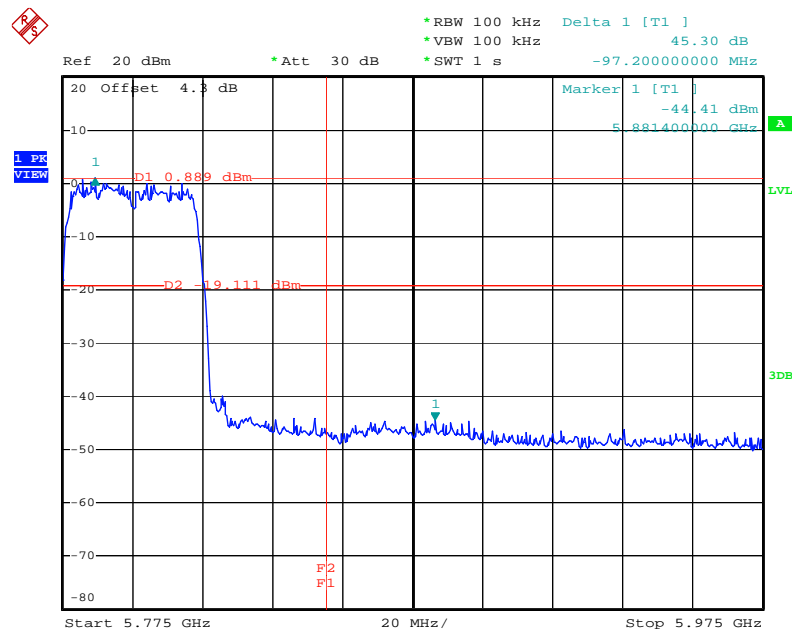
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Low Band Edge Plot on Configuration 11a Draft n MCS8 40MHz Ant. A + Ant. C / 5755 MHz



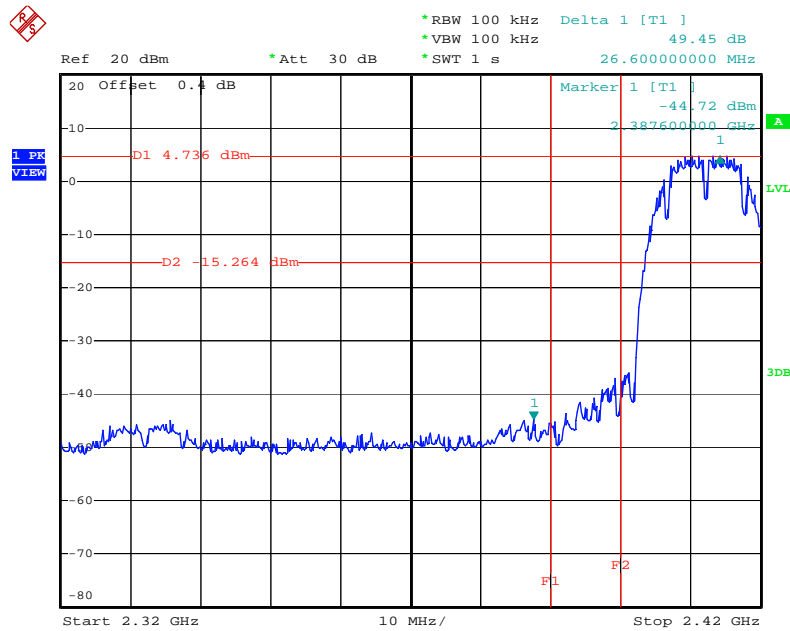
Date: 7.DEC.2008 15:22:31

High Band Edge Plot on Configuration 11a Draft n MCS8 40MHz Ant. A + Ant. C / 5795 MHz



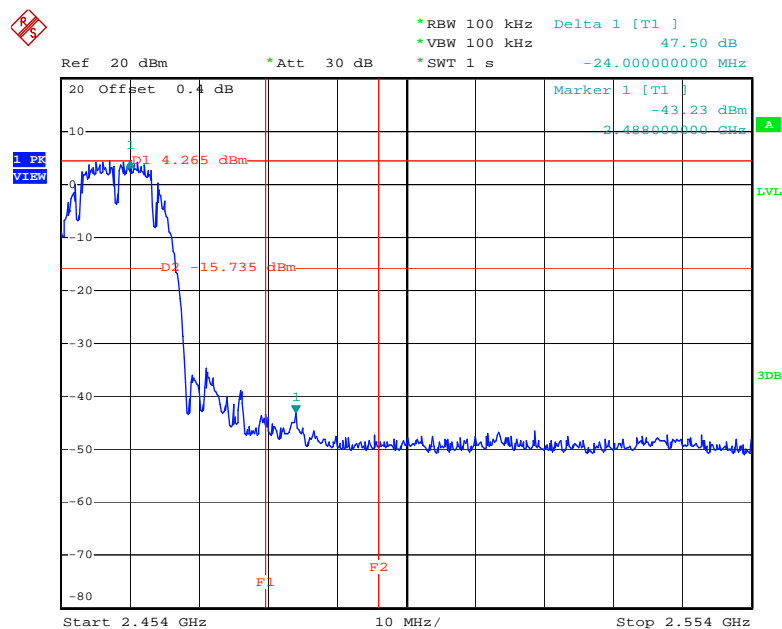
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Low Band Edge Plot on Configuration IEEE 802.11b / 2412 MHz



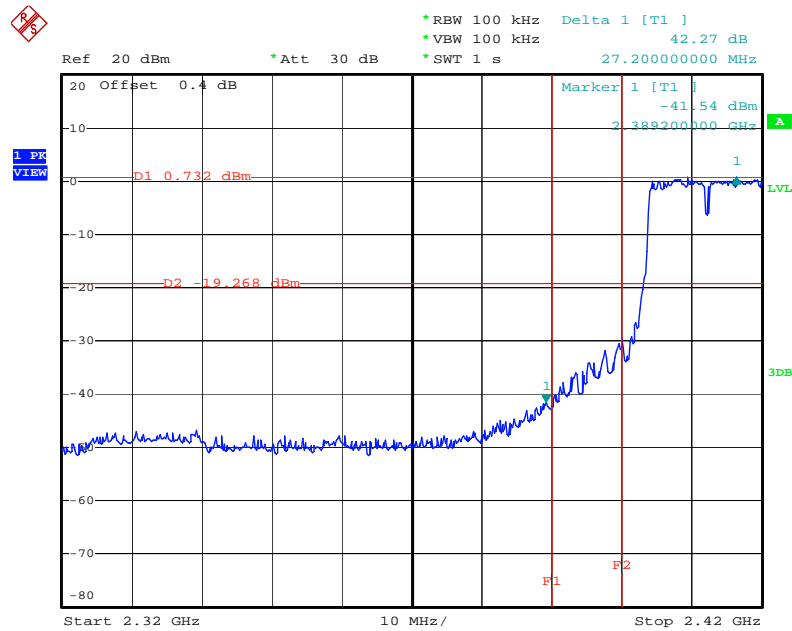
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High Band Edge Plot on Configuration IEEE 802.11b / 2462 MHz



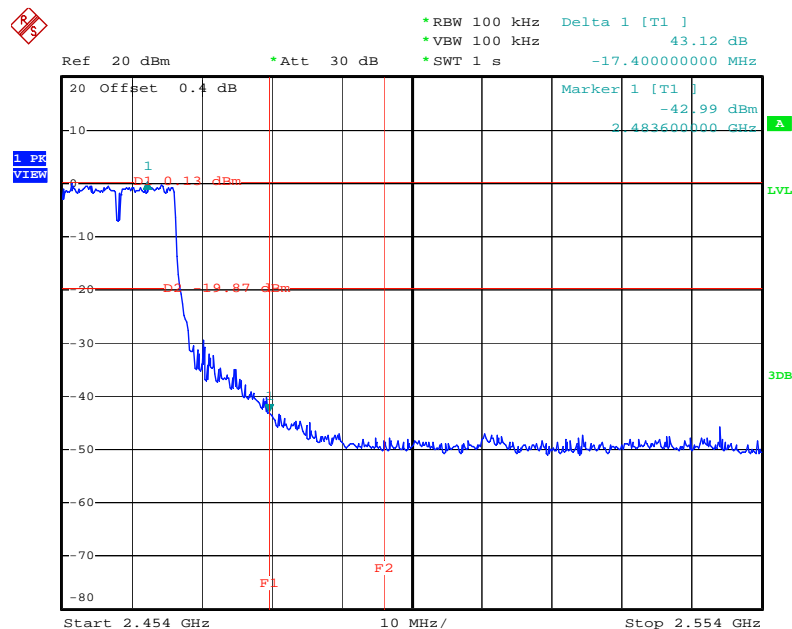
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Low Band Edge Plot on Configuration IEEE 802.11g / 2412 MHz



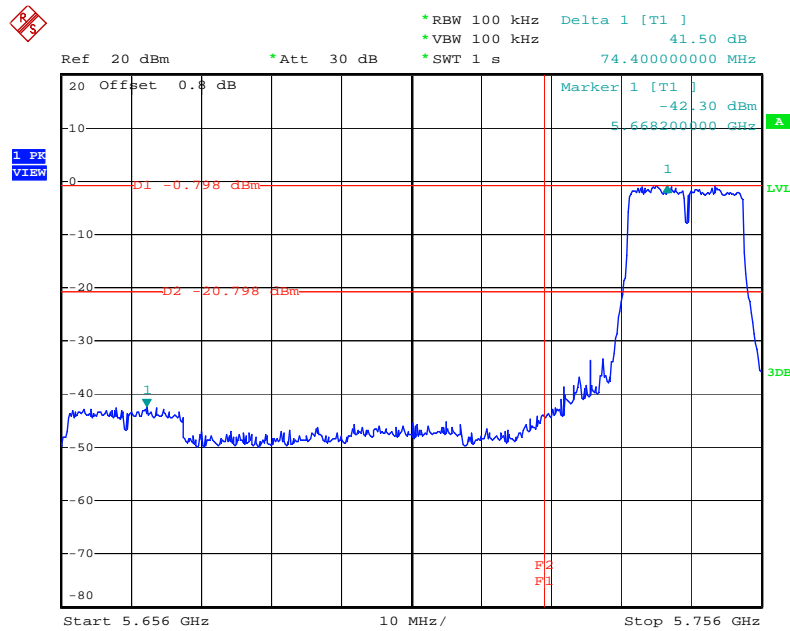
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High Band Edge Plot on Configuration IEEE 802.11g / 2462 MHz



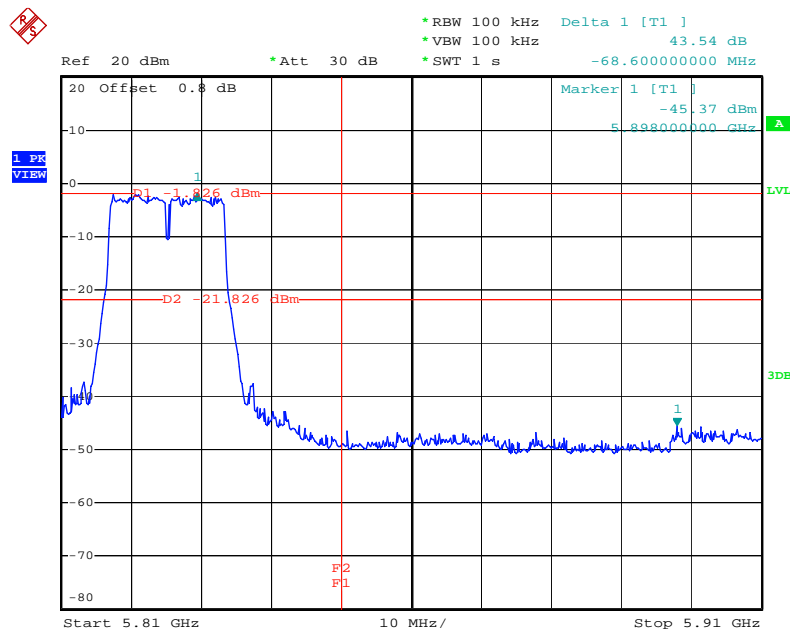
Date: 7.DEC.2008 14:29:26

Low Band Edge Plot on Configuration IEEE 802.11a / 5745 MHz



Date: 7.DEC.2008 15:37:26

High Band Edge Plot on Configuration IEEE 802.11a / 5825 MHz



Date: 7.DEC.2008 15:42:03

4.7. Antenna Requirements

4.7.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

4.7.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	Mar. 03, 2008	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2008	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2008	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2008	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN ST08	21653	9kHz – 30MHz	Mar. 27, 2008	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	Conduction (CO04-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 14, 2008	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	COA9231A	18667	9 kHz - 2 GHz	Jan. 14, 2008	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	Jul. 21, 2008	Radiation (03CH03-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Jan. 22, 2007*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP30	100023	9 kHz - 30 GHz	Jan. 10, 2008	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	Jul. 28, 2008*	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz – 1 GHz	Jul. 12, 2008	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	Apr. 04, 2008	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	Jan.18, 2008	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Dec. 03, 2008	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 03, 2008	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 – 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP30	100023	9kHz ~ 30GHz	Jan. 10, 2008	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jul. 11, 2008	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jul. 11, 2008	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jul. 11, 2008	Conducted (TH01-HY)
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	May 30, 2008*	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2008	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	N/A	Jul. 18, 2008	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2008	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2008	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Dec. 14, 2008	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 10, 2008	Conducted (TH01-HY)
Oscilloscope	Tektonix	TDS380	B016197	400MHz/ 2GS/s	Jun. 27, 2008	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Note: *Calibration Interval of instruments listed above is two year.

6. TEST LOCATION

SHIJR	ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. TEL : 886-2-2696-2468 FAX : 886-2-2696-2255
HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055
LINKOU	ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C TEL : 886-2-2601-1640 FAX : 886-2-2601-1695
DUNGHU	ADD : No. 3, Lane 238, Kangle St., Neihsu Chiu, Taipei, Taiwan 114, R.O.C. TEL : 886-2-2631-4739 FAX : 886-2-2631-9740
JUNGHE	ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 886-2-8227-2020 FAX : 886-2-8227-2626
NEIHU	ADD : 4Fl., No. 339, Hsin Hu 2 nd Rd., Taipei 114, Taiwan, R.O.C. TEL : 886-2-2794-8886 FAX : 886-2-2794-9777
JHUBEI	ADD : No.8, Lane 728, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

7. TAF CERTIFICATE OF ACCREDITATION



Certificate No. : LI190-070110

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien,
Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	: ISO/IEC 17025:2005
Accreditation Number	: 1190
Originally Accredited	: December 15, 2003
Effective Period	: January 10, 2007 to January 09, 2010
Accredited Scope	: Testing Field, see described in the Appendix
Specific Accreditation Program	: Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory



Jay-San Chen
President, Taiwan Accreditation Foundation
Date : January 10, 2007

PI, total 9 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.