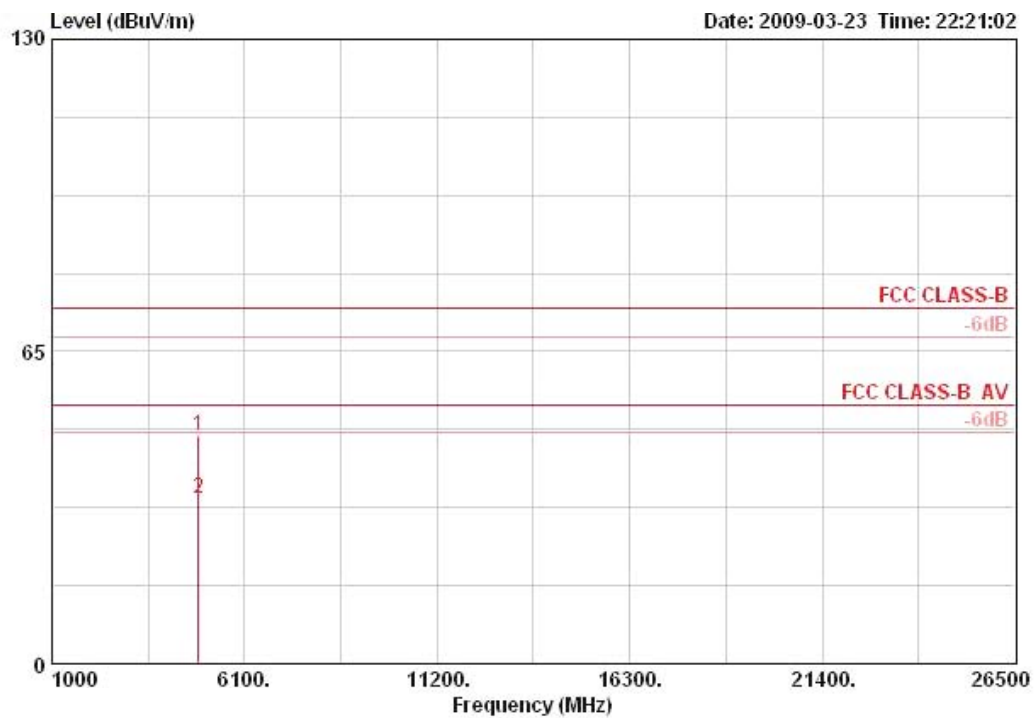


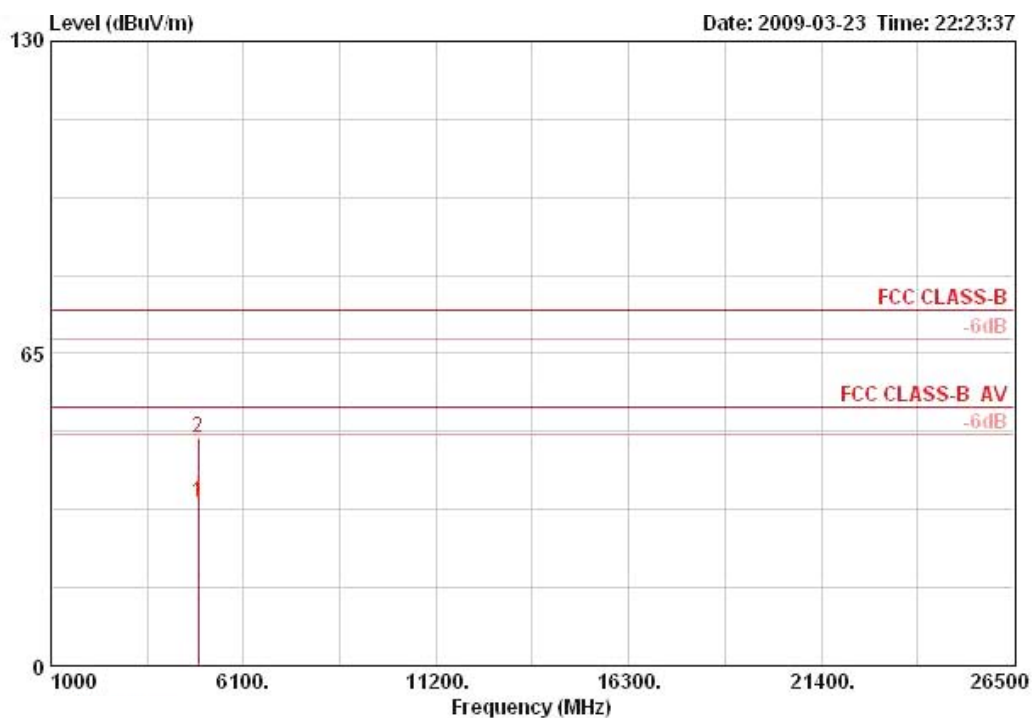
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4873.040	47.29	-26.71	74.00	43.35	32.56	6.53	35.15	PEAK	100	0	VERTICAL
2	4875.860	34.28	-19.72	54.00	30.34	32.56	6.53	35.15	AVERAGE	100	0	VERTICAL

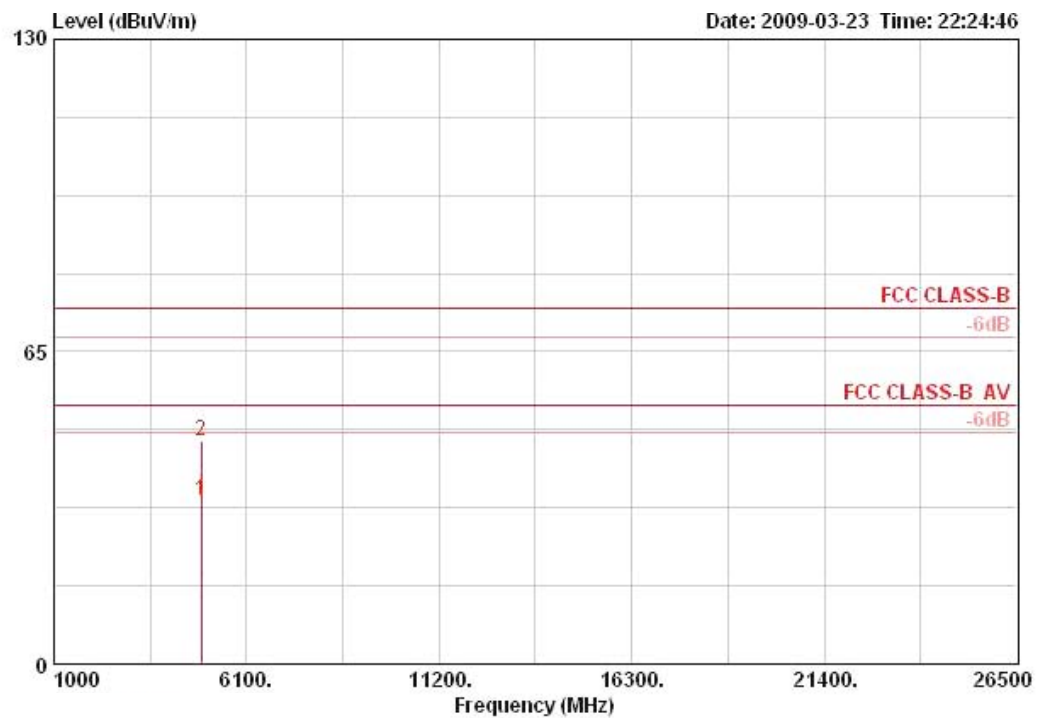
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 9 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4905.110	34.00	-20.00	54.00	29.86	32.63	6.61	35.09	AVERAGE	100	0	HORIZONTAL
2	4905.530	47.51	-26.49	74.00	43.36	32.63	6.61	35.09	PEAK	100	0	HORIZONTAL

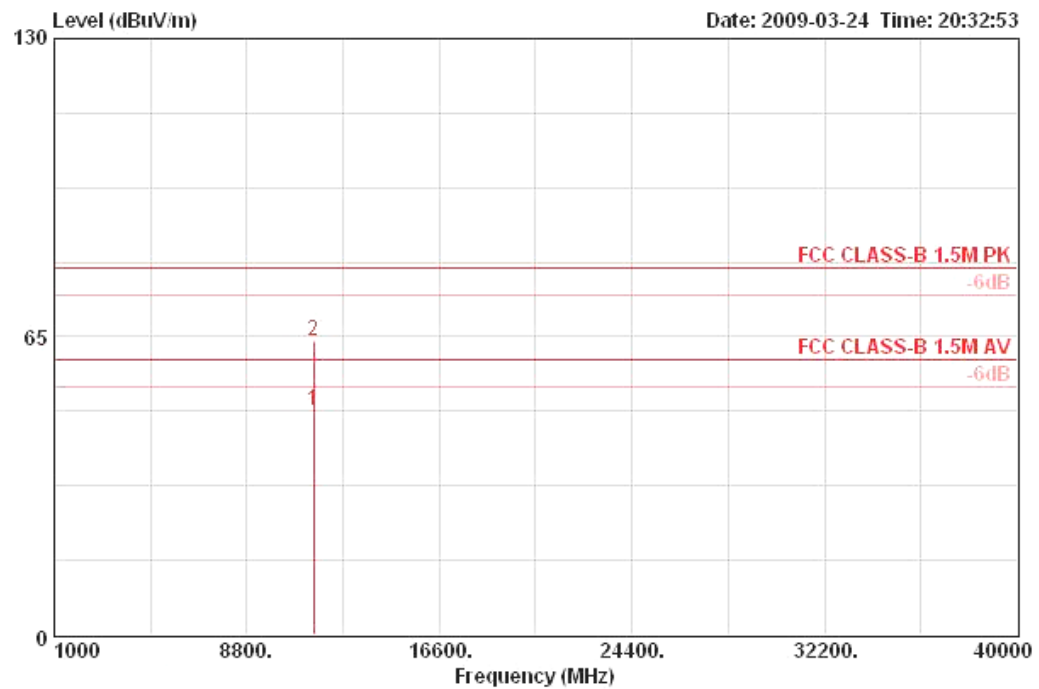
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4904.960	34.01	-19.99	54.00	29.87	32.63	6.61	35.09	AVERAGE	100	360	VERTICAL
2	4905.910	46.42	-27.58	74.00	42.28	32.63	6.61	35.09	PEAK	100	360	VERTICAL

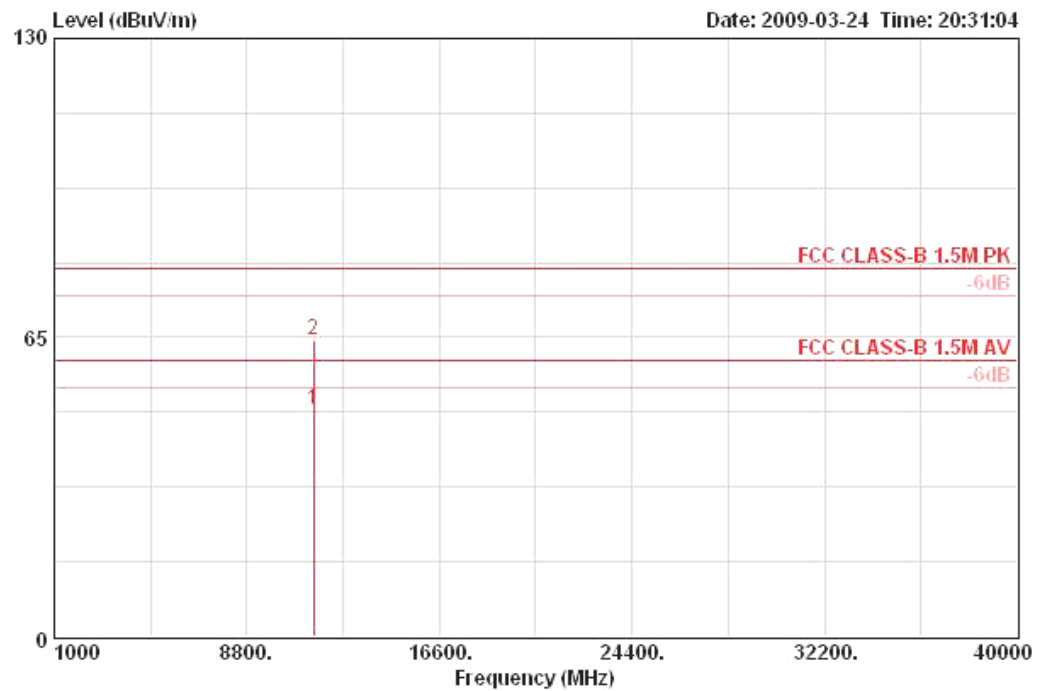
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	11a Draft n MCS8 20MHz CH 149 / Ant. A + Ant. B

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	11491.110	48.90	-11.10	60.00	33.59	39.50	35.09	10.90 AVERAGE	HORIZONTAL	319	125
2	11491.410	64.17	-15.83	80.00	48.87	39.50	35.09	10.90 PEAK	HORIZONTAL	319	125

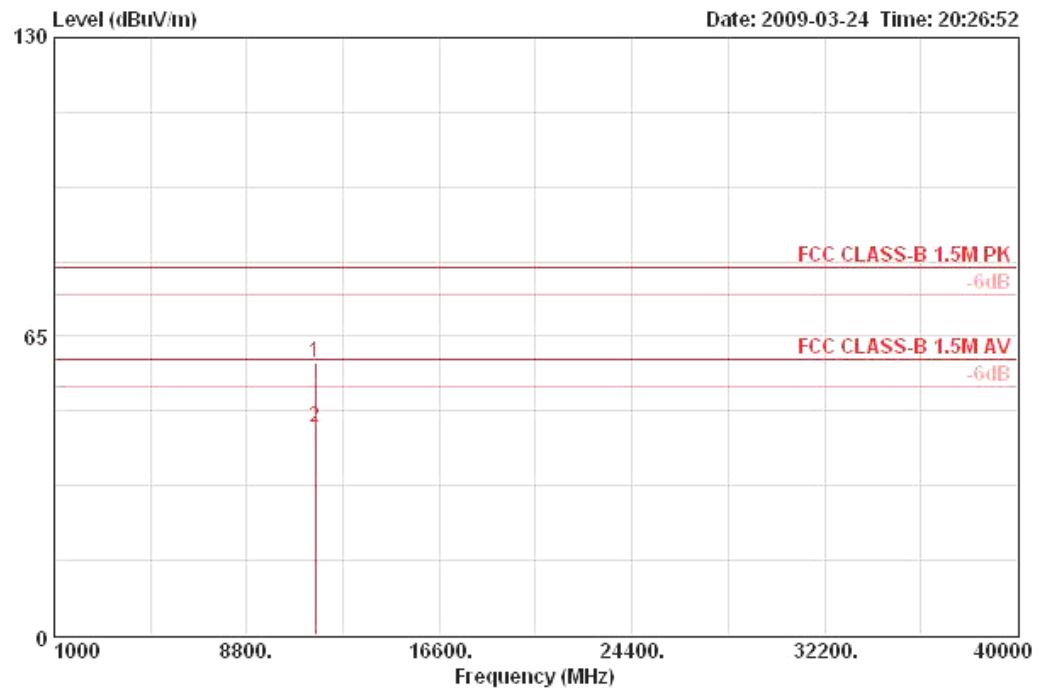
Vertical



	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 @	11491.120	49.27	-10.73	60.00	33.96	39.50	35.09	10.90 AVERAGE	VERTICAL	252	109
2	11492.410	64.51	-15.49	80.00	49.20	39.50	35.09	10.90 PEAK	VERTICAL	252	109

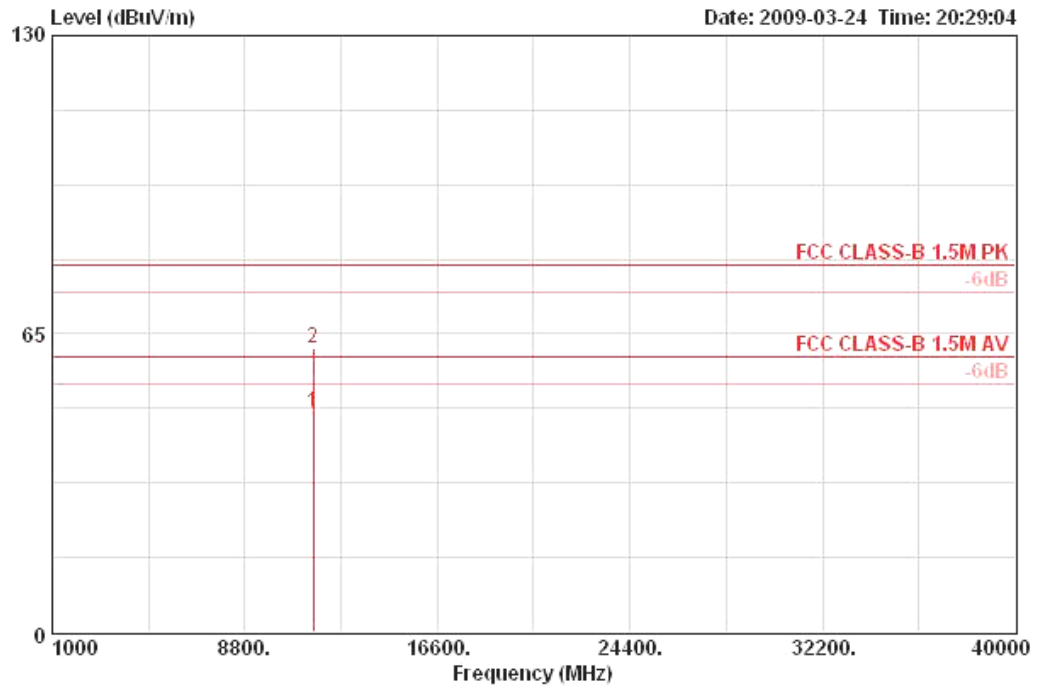
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	11a Draft n MCS8 20MHz CH 157 / Ant. A + Ant. B

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	11569.620	59.35	-20.65	80.00	44.10	39.47	35.09	10.86 PEAK	HORIZONTAL	360	100
2	11571.640	45.09	-14.91	60.00	29.88	39.47	35.09	10.83 AVERAGE	HORIZONTAL	360	100

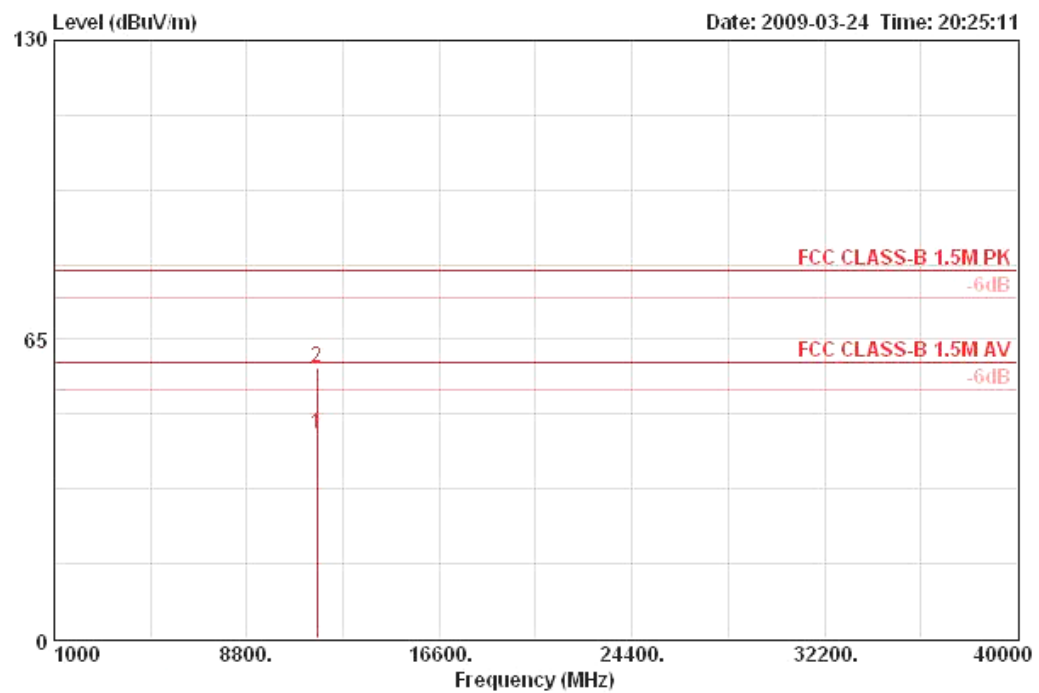
Vertical



	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	11571.350	47.62	-12.38	60.00	32.40	39.47	35.09	10.83	AVERAGE	VERTICAL	251	125
2	11571.390	61.97	-18.03	80.00	46.75	39.47	35.09	10.83	PEAK	VERTICAL	251	125

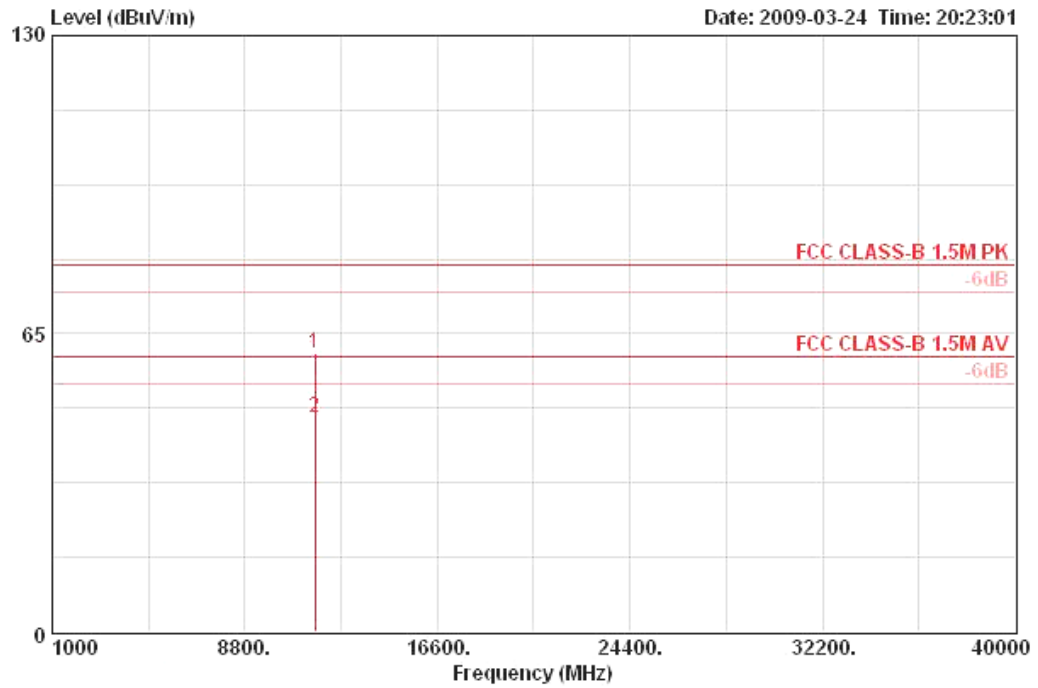
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	11a Draft n MCS8 20MHz CH 165 / Ant. A + Ant. B

Horizontal



	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	11652.110	44.63	-15.37	60.00	29.53	39.44	35.07	10.72	AVERAGE	HORIZONTAL	0	100
2	11652.150	58.73	-21.27	80.00	43.63	39.44	35.07	10.72	PEAK	HORIZONTAL	0	100

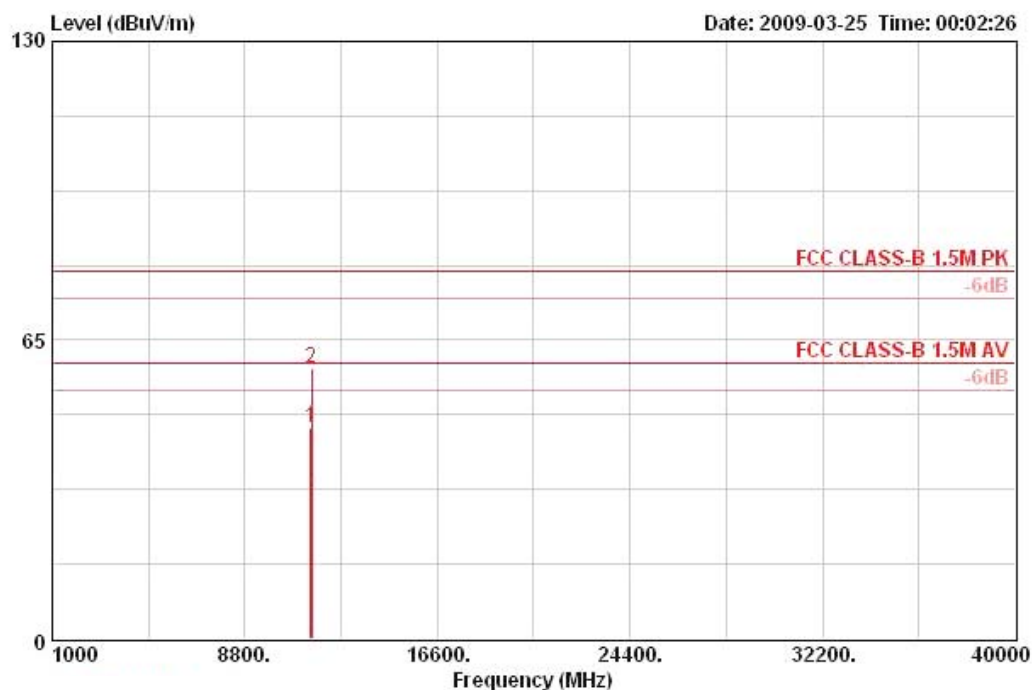
Vertical



	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	11650.900	60.59	-19.41	80.00	45.50	39.44	35.07	10.72 PEAK	VERTICAL	223	117
2	11652.140	46.54	-13.46	60.00	31.44	39.44	35.07	10.72 AVERAGE	VERTICAL	223	117

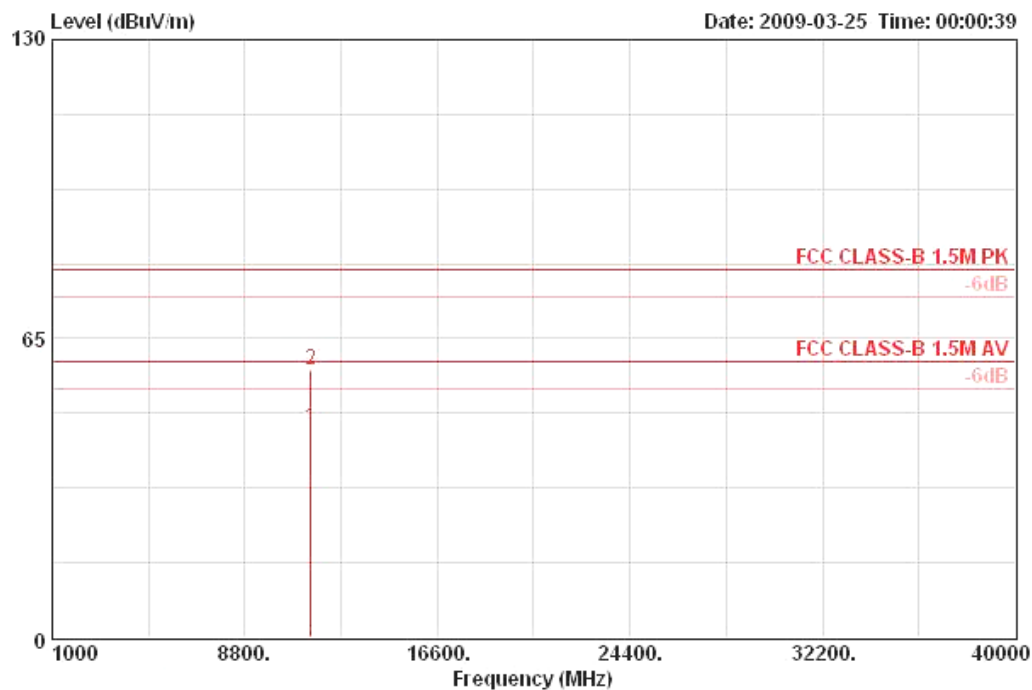
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	11a Draft n MCS8 40MHz CH 151 / Ant. A + Ant. B

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	11460.000	45.76	-14.24	60.00	30.47	39.50	35.07	10.87	AVERAGE	HORIZONTAL	360	100
2	11504.400	58.91	-21.09	80.00	43.58	39.50	35.10	10.93	PEAK	HORIZONTAL	360	100

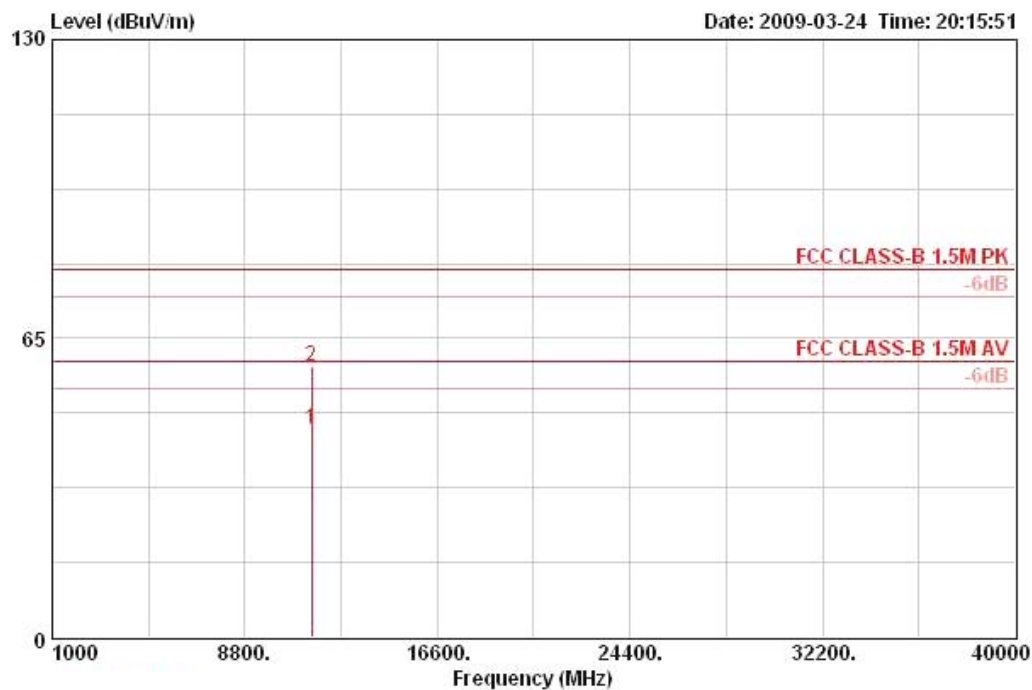
Vertical



	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	11460.000	45.63	-14.37	60.00	30.34	39.50	35.07	10.87	AVERAGE	VERTICAL	0	100
2	11479.200	58.24	-21.76	80.00	42.92	39.50	35.08	10.90	PEAK	VERTICAL	0	100

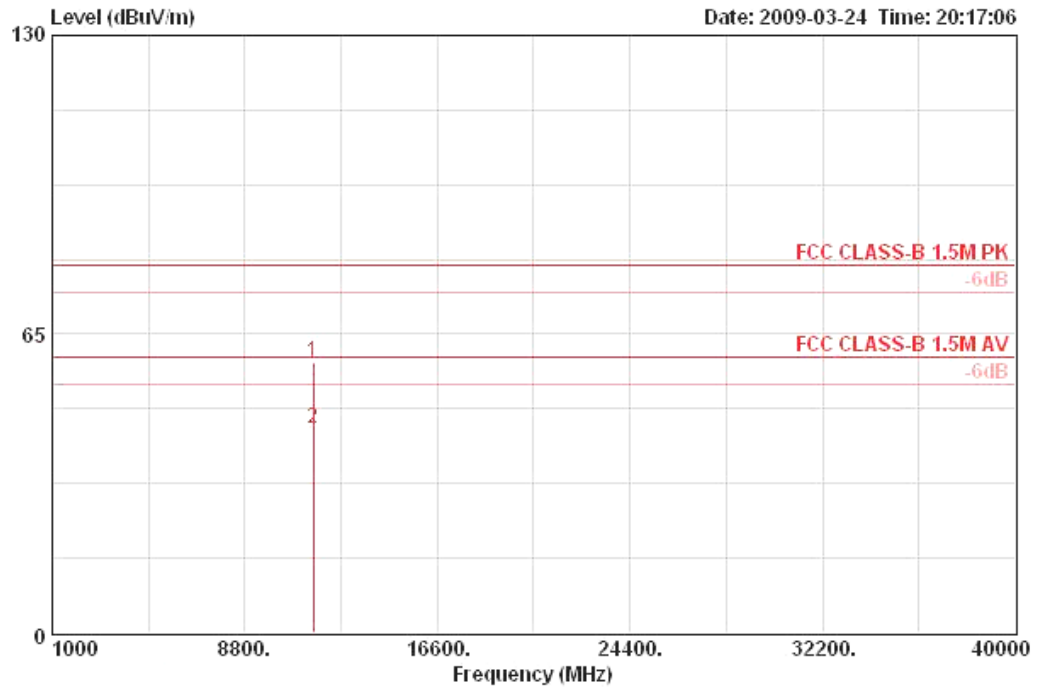
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	11a Draft n MCS8 40MHz CH 159 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna	Preamp	Cable	Remark	Pol/Phase	Table Pos	Ant Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB			deg	cm
1	11508.480	45.14	-14.86	60.00	29.81	39.50	35.10	10.93 AVERAGE	HORIZONTAL	0	100
2	11511.930	59.00	-21.00	80.00	43.67	39.50	35.10	10.93 PEAK	HORIZONTAL	0	100

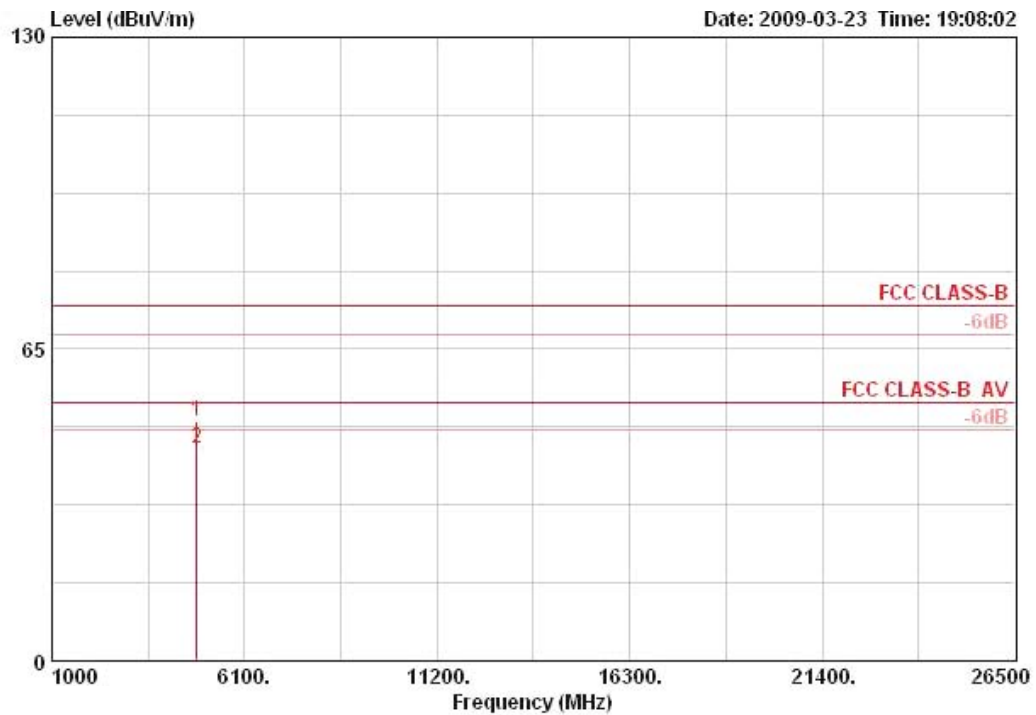
Vertical



	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	11569.800	58.76	-21.24	80.00	43.54	39.47	35.09	10.83	PEAK	VERTICAL	360	100
2	11575.000	44.55	-15.45	60.00	29.34	39.47	35.09	10.83	AVERAGE	VERTICAL	360	100

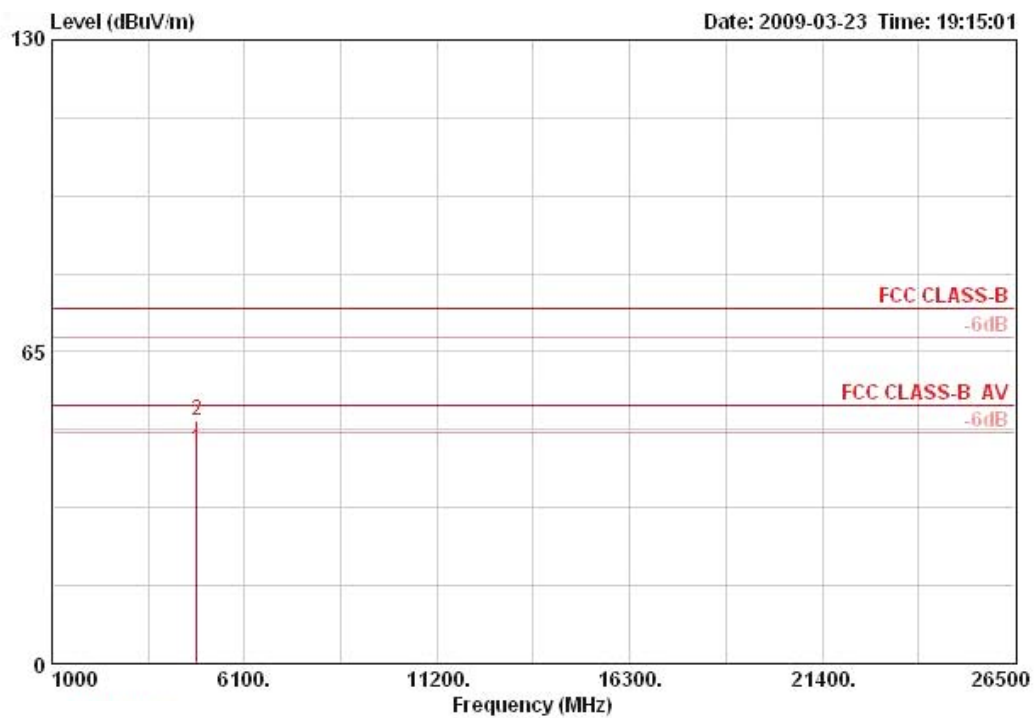
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 1 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4823.640	49.95	-24.05	74.00	46.37	32.46	6.39	35.26	PEAK	134	71	HORIZONTAL
2	4823.950	44.39	-9.61	54.00	40.81	32.46	6.39	35.26	AVERAGE	134	71	HORIZONTAL

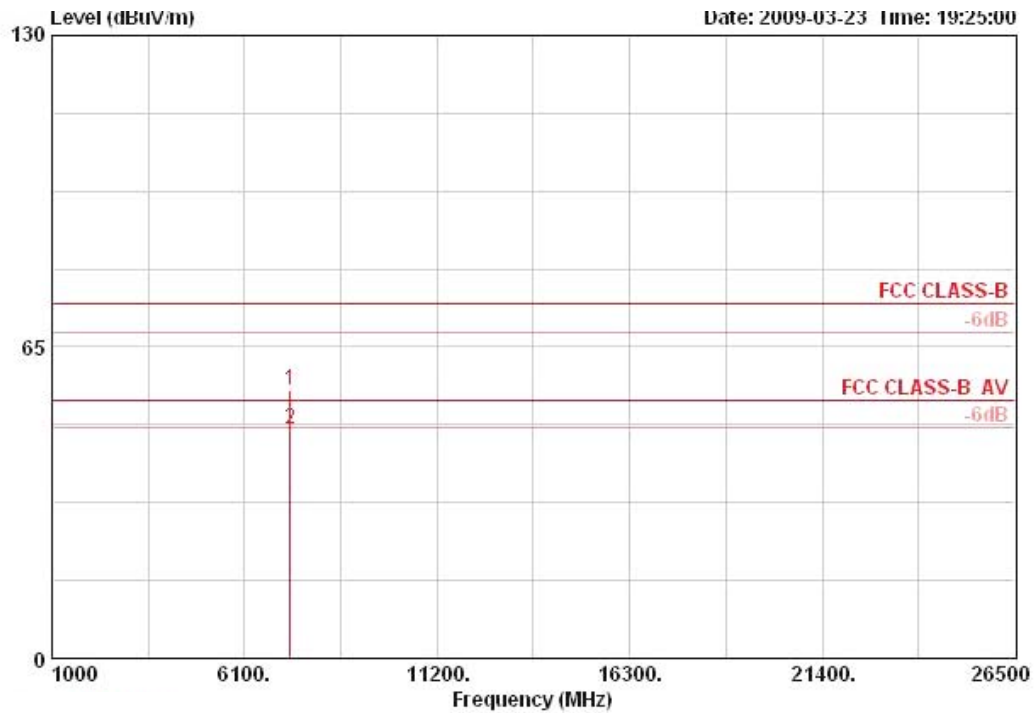
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4824.030	44.75	-9.25	54.00	41.17	32.46	6.39	35.26	AVERAGE	100	334	VERTICAL
2	4824.170	50.81	-23.19	74.00	47.22	32.46	6.39	35.26	PEAK	100	334	VERTICAL

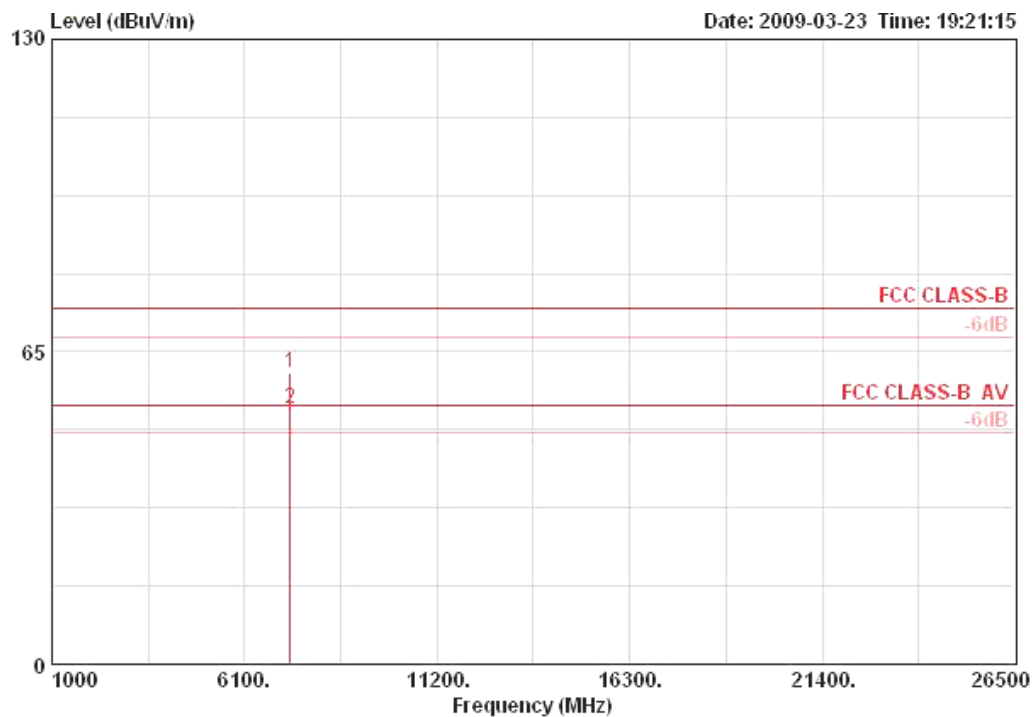
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 6 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	7307.180	56.14	-17.86	74.00	46.99	36.67	7.41	34.94	PEAK	110	45	HORIZONTAL
2	7308.040	47.98	-6.02	54.00	38.83	36.67	7.41	34.94	AVERAGE	110	45	HORIZONTAL

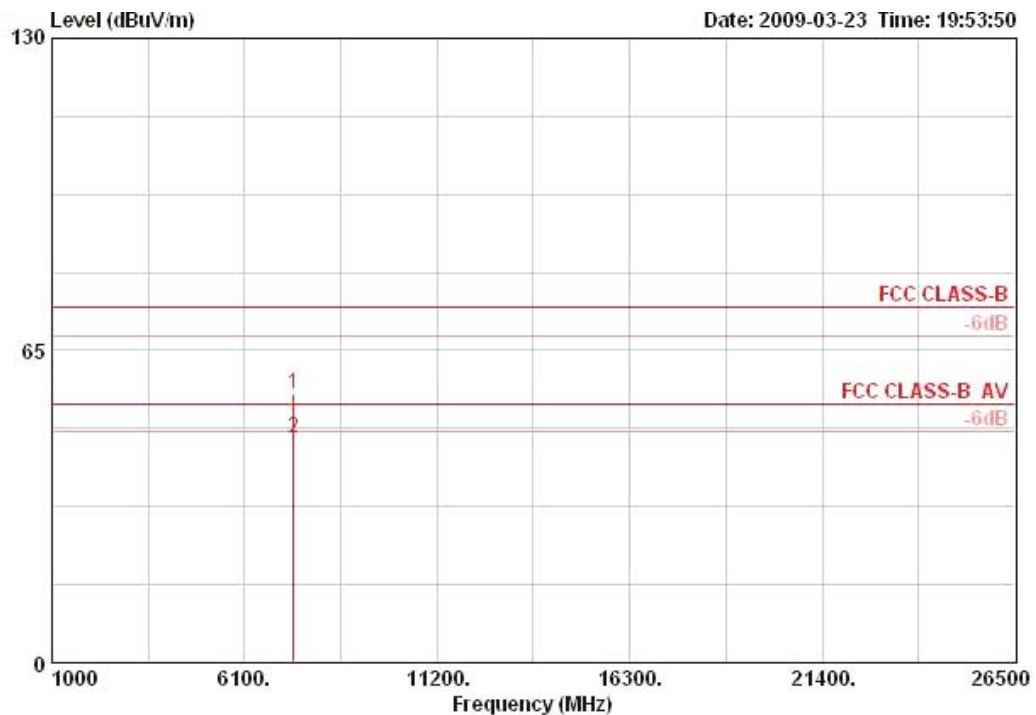
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	7309.850	60.48	-13.52	74.00	51.34	36.67	7.41	34.94	PEAK	100	338	VERTICAL
2 !	7310.160	53.15	-0.85	54.00	44.00	36.67	7.41	34.94	AVERAGE	100	338	VERTICAL

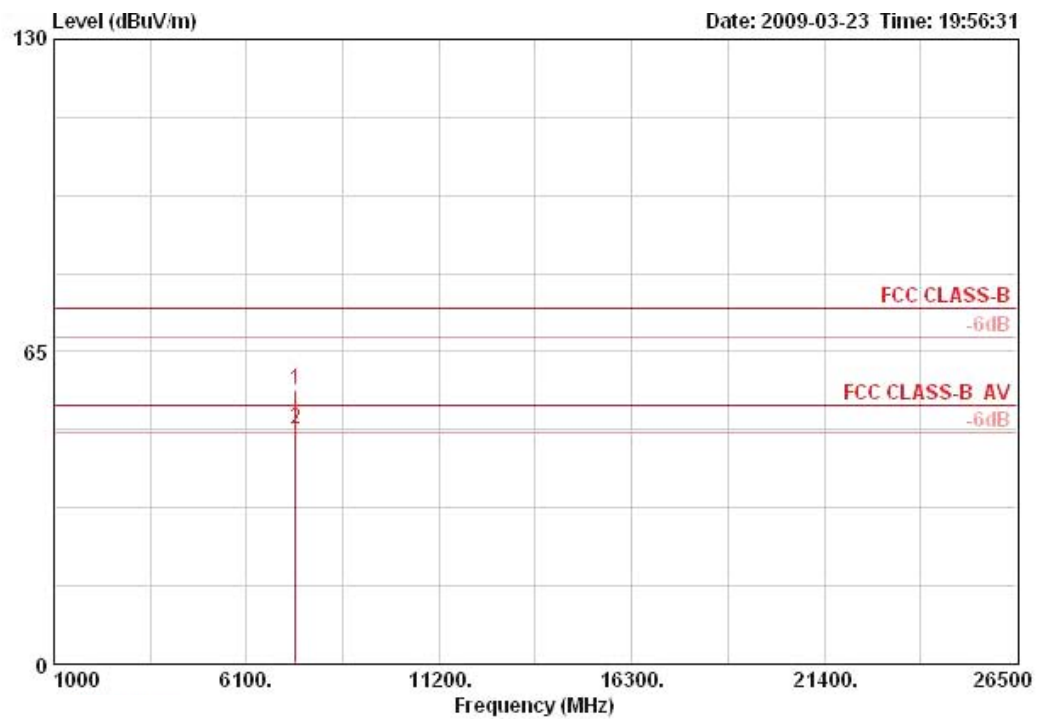
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 11 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	7387.920	55.80	-18.20	74.00	46.39	36.78	7.53	34.89	PEAK	176	37	HORIZONTAL
2	7388.480	46.59	-7.41	54.00	37.17	36.78	7.53	34.89	AVERAGE	176	37	HORIZONTAL

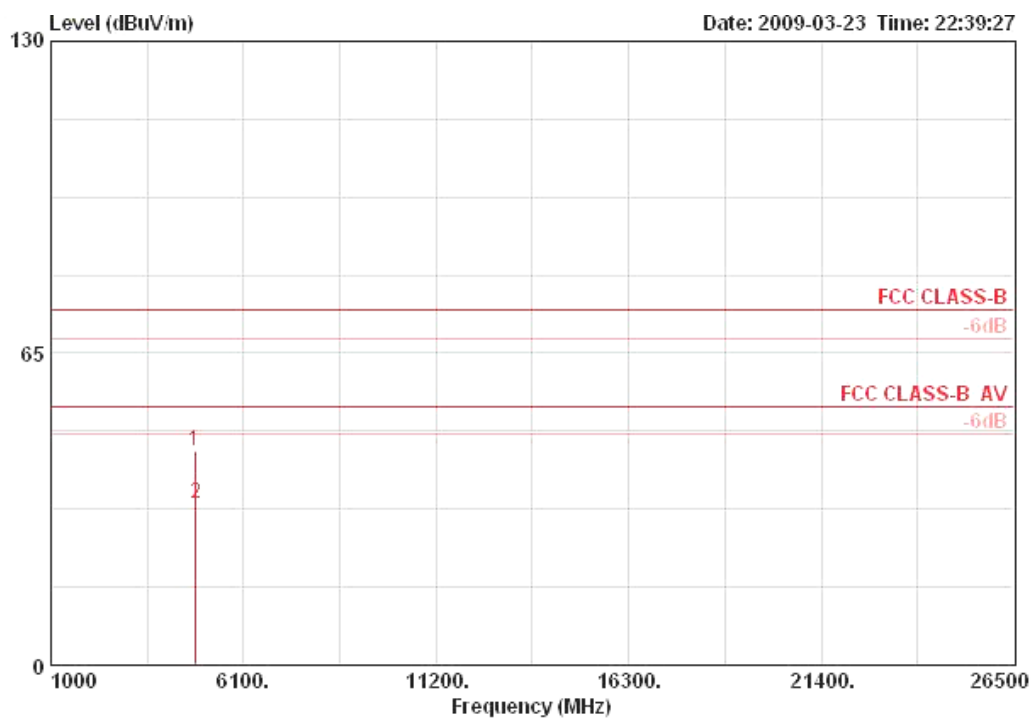
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	7387.320	57.11	-16.89	74.00	47.73	36.78	7.50	34.90	PEAK	100	355	VERTICAL
2	7388.520	48.79	-5.21	54.00	39.37	36.78	7.53	34.89	AVERAGE	100	355	VERTICAL

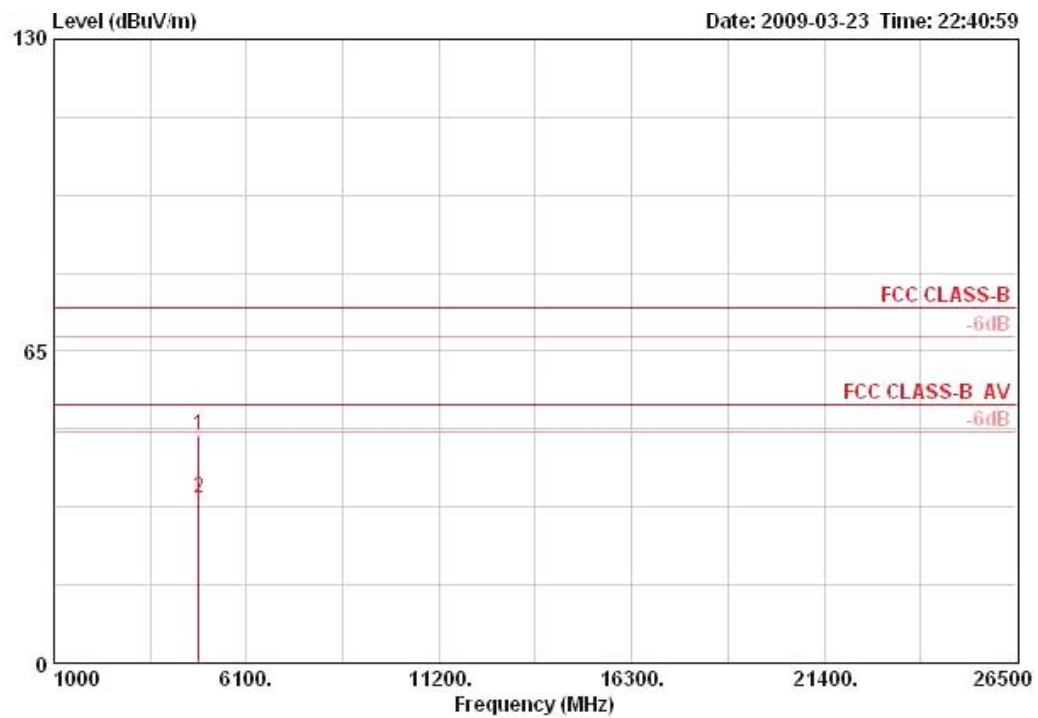
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 1 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4822.180	44.50	-29.50	74.00	40.91	32.46	6.39	35.26	PEAK	100	0	HORIZONTAL
2	4823.130	33.81	-20.19	54.00	30.23	32.46	6.39	35.26	AVERAGE	100	0	HORIZONTAL

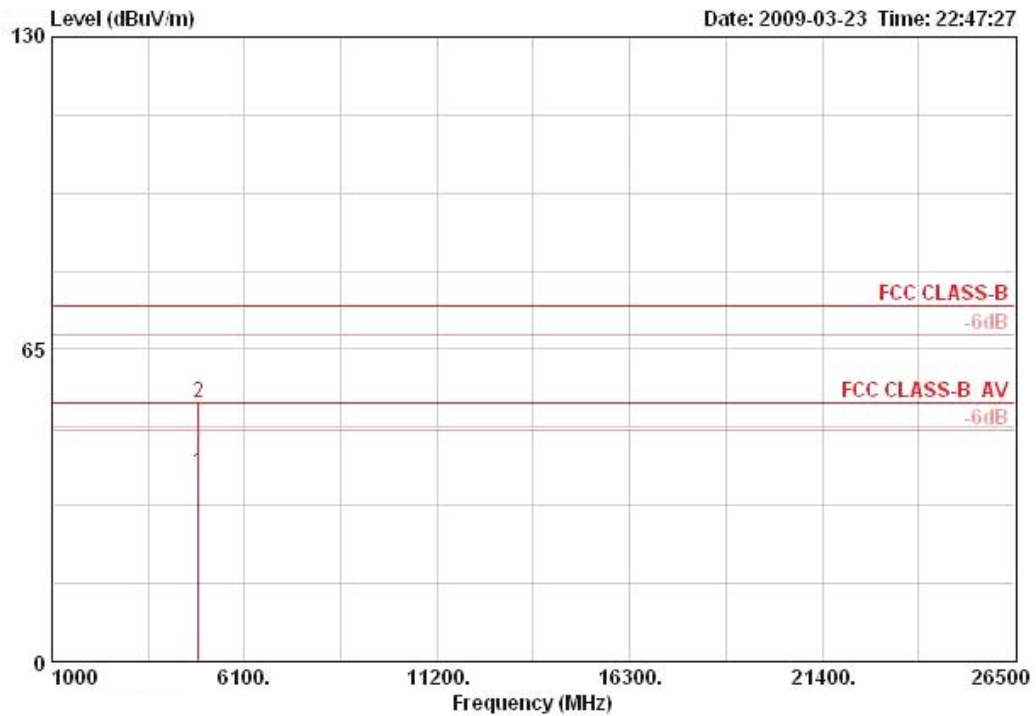
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4822.960	47.58	-26.42	74.00	44.00	32.46	6.39	35.26	PEAK	100	360	VERTICAL
2	4824.850	34.27	-19.73	54.00	30.68	32.46	6.39	35.26	AVERAGE	100	360	VERTICAL

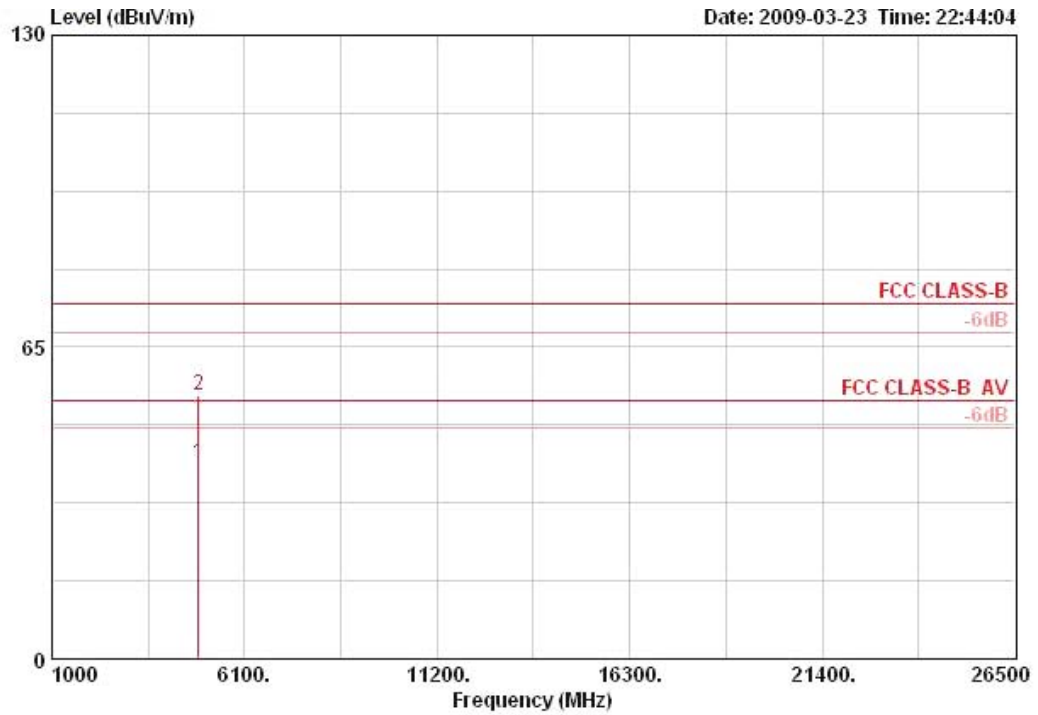
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 6 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4874.720	39.22	-14.78	54.00	35.27	32.56	6.53	35.15	AVERAGE	127	78	HORIZONTAL
2	4874.860	53.92	-20.08	74.00	49.97	32.56	6.53	35.15	PEAK	127	78	HORIZONTAL

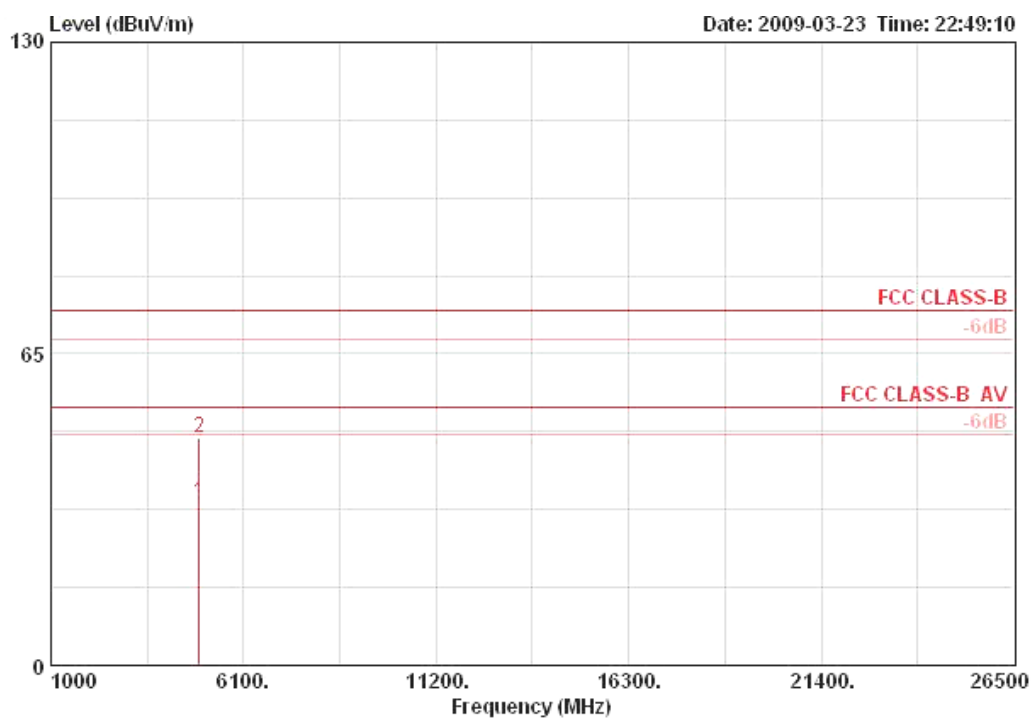
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4874.430	40.88	-13.12	54.00	36.93	32.56	6.53	35.15	AVERAGE	100	40	VERTICAL
2	4875.140	54.86	-19.14	74.00	50.92	32.56	6.53	35.15	PEAK	100	40	VERTICAL

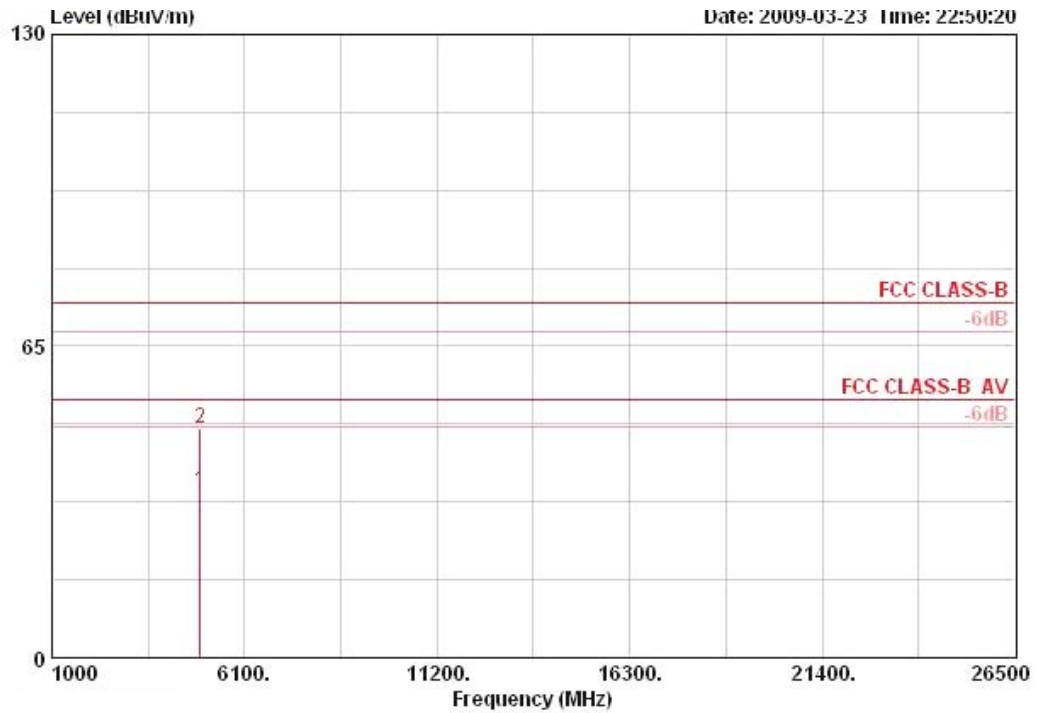
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 11 / Ant. A + Ant. B

Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4921.980	34.10	-19.90	54.00	29.79	32.66	6.68	35.03	AVERAGE	100	360	HORIZONTAL
2	4923.060	47.44	-26.56	74.00	43.13	32.66	6.68	35.03	PEAK	100	360	HORIZONTAL

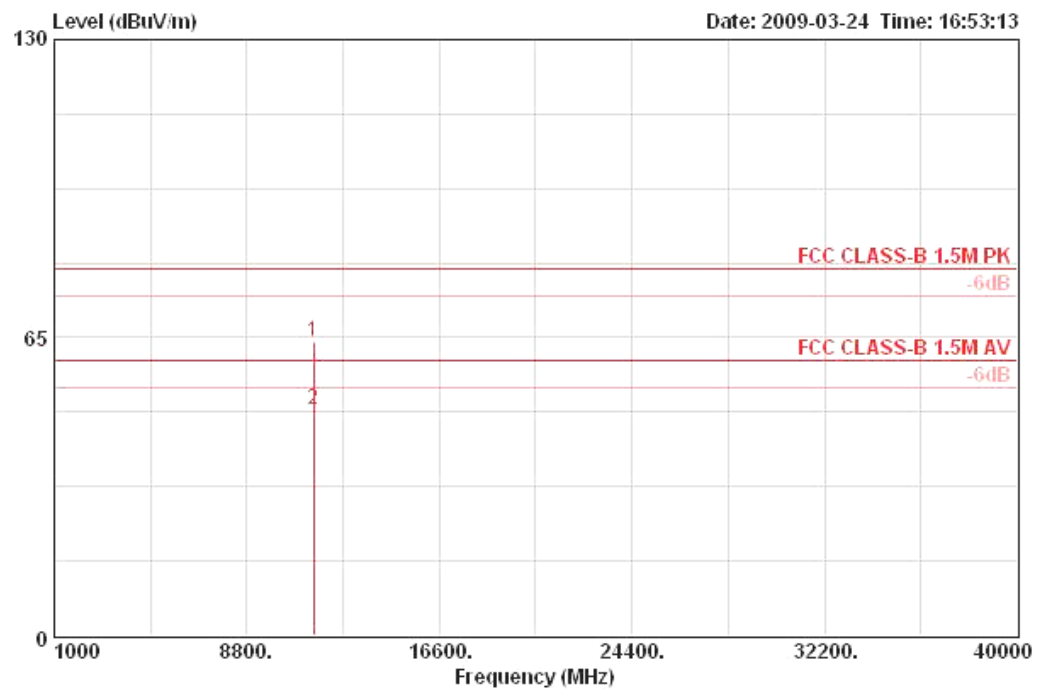
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	4925.590	34.84	-19.16	54.00	30.53	32.66	6.68	35.03	AVERAGE	100	0	VERTICAL
2	4925.880	47.74	-26.26	74.00	43.43	32.66	6.68	35.03	PEAK	100	0	VERTICAL

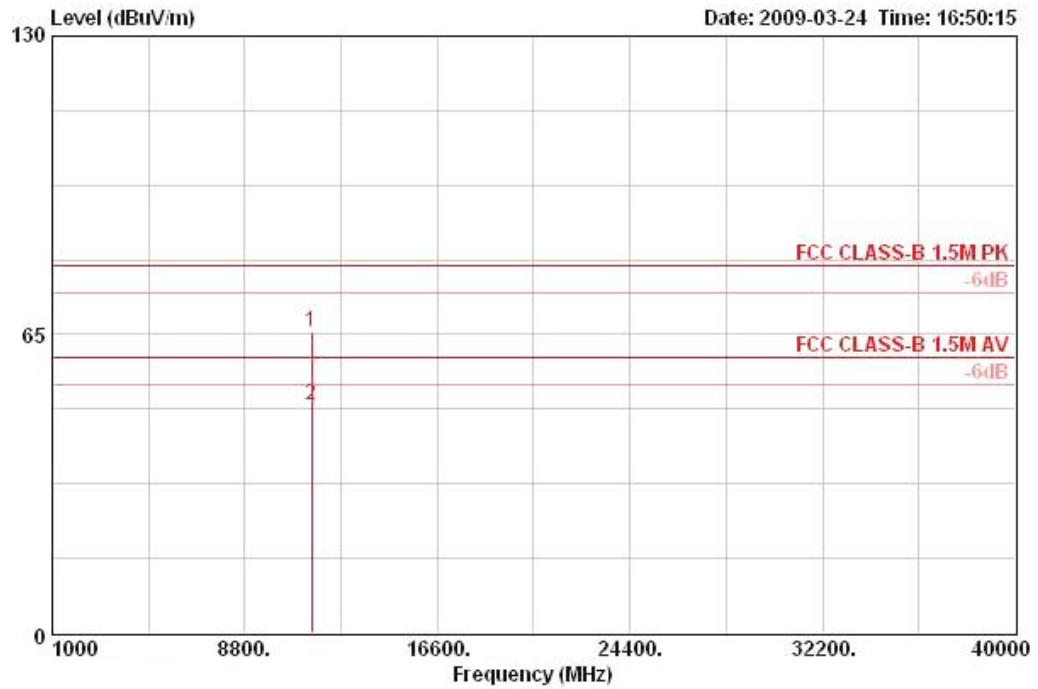
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a CH 149 / Ant. A + Ant. B

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	11490.940	64.23	-15.77	80.00	48.93	39.50	35.09	10.90	PEAK	HORIZONTAL	318	120
2 @	11491.230	49.10	-10.90	60.00	33.80	39.50	35.09	10.90	AVERAGE	HORIZONTAL	318	120

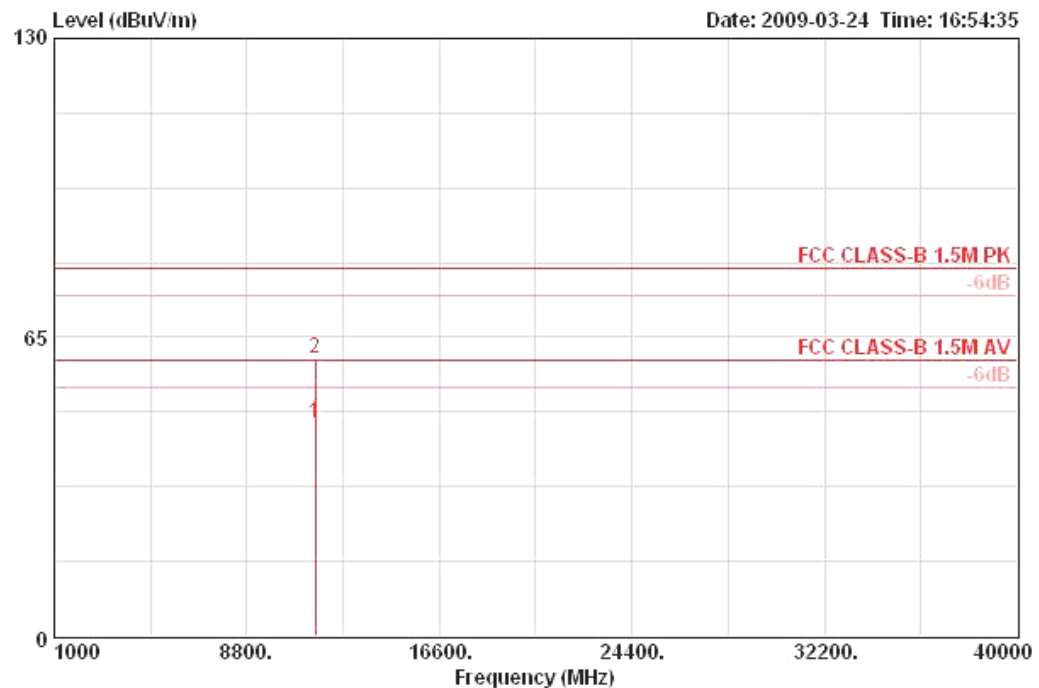
Vertical



	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	11490.560	65.54	-14.46	80.00	50.24	39.50	35.09	10.90 PEAK	VERTICAL	254	122
2	11491.100	49.47	-10.53	60.00	34.16	39.50	35.09	10.90 AVERAGE	VERTICAL	254	122

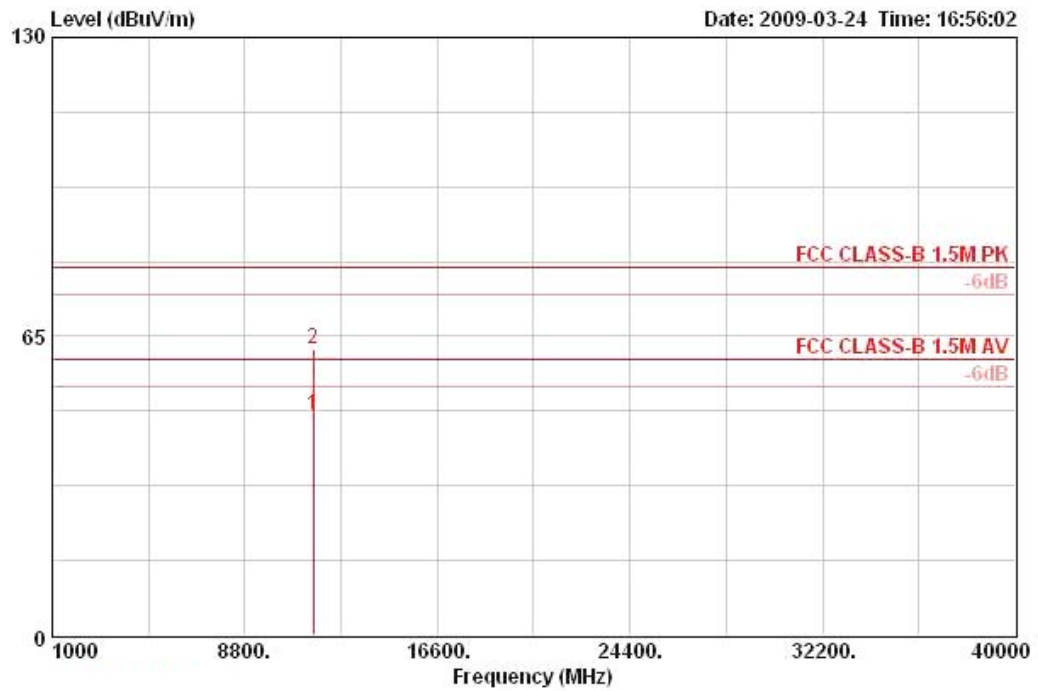
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a CH 157 / Ant. A + Ant. B

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	11567.540	46.37	-13.63	60.00	31.12	39.47	35.09	10.86	AVERAGE	HORIZONTAL	318	120
2	11571.440	60.36	-19.64	80.00	45.15	39.47	35.09	10.83	PEAK	HORIZONTAL	318	120

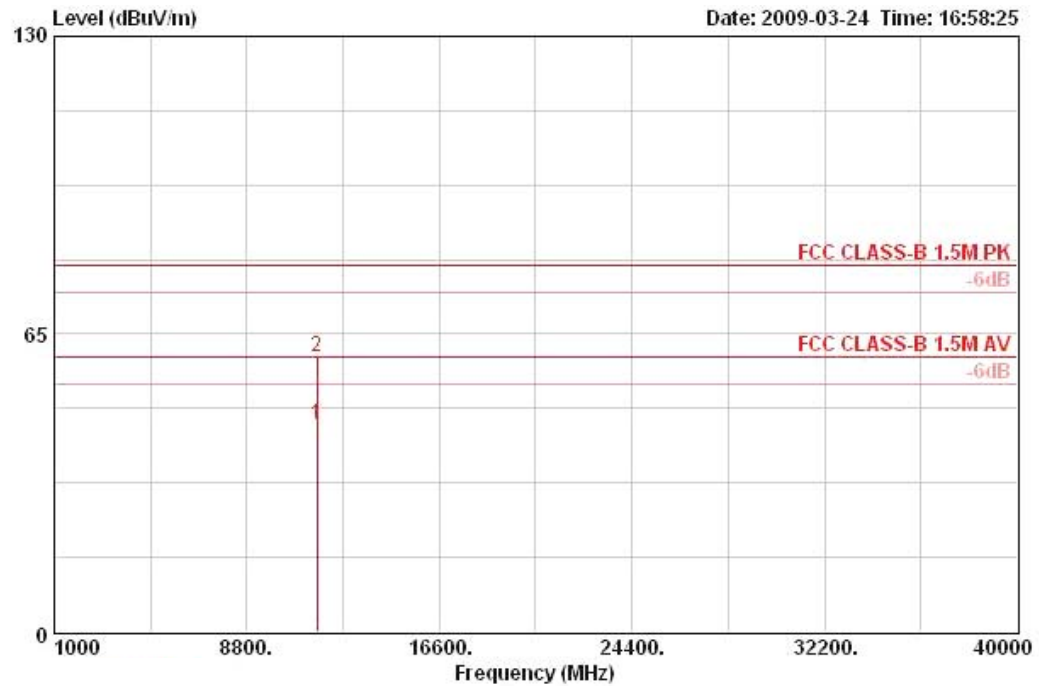
Vertical



	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	11571.330	47.93	-12.07	60.00	32.71	39.47	35.09	10.83 AVERAGE	VERTICAL	255	120
2	11572.000	62.11	-17.89	80.00	46.90	39.47	35.09	10.83 PEAK	VERTICAL	255	120

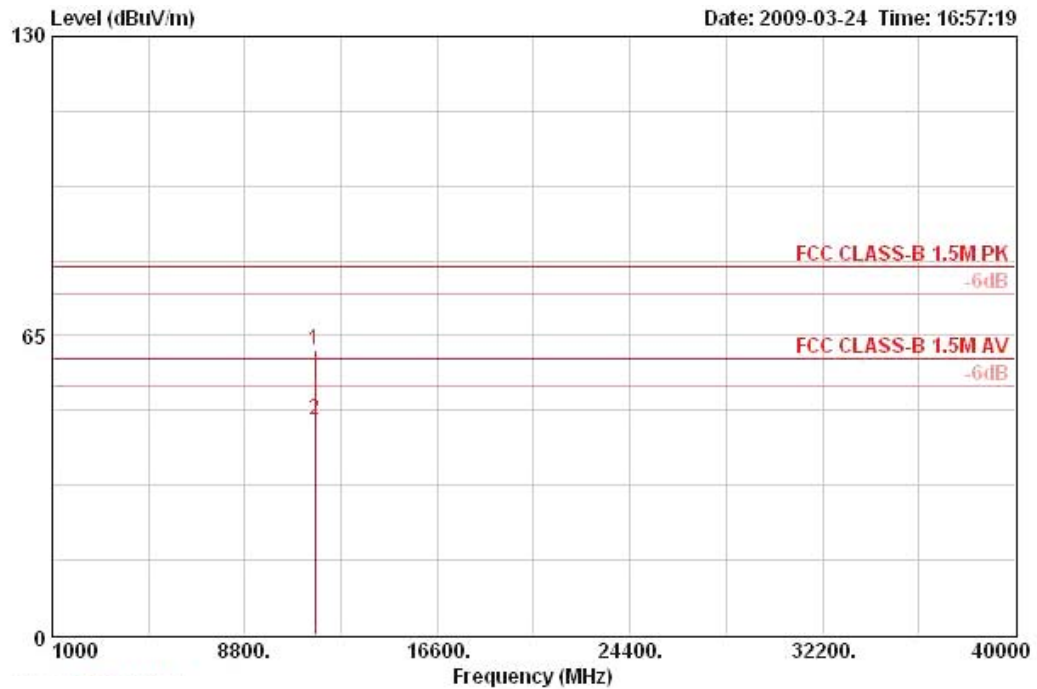
Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a CH 165 / Ant. A + Ant. B

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	11651.560	45.12	-14.88	60.00	30.03	39.44	35.07	10.72	AVERAGE	HORIZONTAL	324	120
2	11652.070	59.82	-20.18	80.00	44.73	39.44	35.07	10.72	PEAK	HORIZONTAL	324	120

Vertical



	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Factor	Loss			Pos	Pos
					dBuV	dB/m	dB	dB			deg	cm
1	11651.080	61.92	-18.08	80.00	46.83	39.44	35.07	10.72	PEAK	VERTICAL	255	120
2	11651.610	46.84	-13.16	60.00	31.75	39.44	35.07	10.72	AVERAGE	VERTICAL	255	120

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 / 1MHz 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

- The test procedure is the same as section 4.5.3, only the frequency range investigated is limited to 100MHz around bandedges.
- 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°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 1, 6, 11 / Ant. A + Ant. B
Test date	Mar. 23, 2009		

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	2389.400	52.77	-1.23	54.00	21.42	27.87	3.49	0.00 AVERAGE	100	272	VERTICAL
2 !	2389.800	72.59	-1.41	74.00	41.22	27.87	3.50	0.00 PEAK	100	272	VERTICAL
3 @	2405.000	99.15			67.80	27.84	3.50	0.00 AVERAGE	100	272	VERTICAL
4	2410.200	110.53			79.19	27.84	3.50	0.00 PEAK	100	272	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	2389.800	68.67	-5.33	74.00	37.30	27.87	3.50	0.00 PEAK	178	276	VERTICAL
2 !	2390.000	52.91	-1.09	54.00	21.54	27.87	3.50	0.00 AVERAGE	178	276	VERTICAL
3 @	2431.200	105.92			74.59	27.81	3.52	0.00 AVERAGE	178	276	VERTICAL
4 @	2433.400	117.84			86.51	27.81	3.52	0.00 PEAK	178	276	VERTICAL
5 !	2483.500	49.89	-4.11	54.00	18.60	27.73	3.56	0.00 AVERAGE	178	276	VERTICAL
6	2484.900	66.16	-7.84	74.00	34.87	27.73	3.56	0.00 PEAK	178	276	VERTICAL

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

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	2459.000	98.82			67.52	27.76	3.54	0.00 AVERAGE	104	63	VERTICAL
2	2470.000	110.53			79.22	27.76	3.56	0.00 PEAK	104	63	VERTICAL
3 !	2483.500	53.52	-0.48	54.00	22.23	27.73	3.56	0.00 AVERAGE	104	63	VERTICAL
4 !	2483.900	69.78	-4.22	74.00	38.49	27.73	3.56	0.00 PEAK	104	63	VERTICAL

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

Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 3, 6, 9 / Ant. A + Ant. B
Test date	Mar. 23, 2009		

Channel 3

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	2389.600	69.66	-4.34	74.00	38.31	27.87	3.49	0.00	PEAK	100	271	VERTICAL
2 !	2390.000	53.35	-0.65	54.00	21.98	27.87	3.50	0.00	AVERAGE	100	271	VERTICAL
3	2409.200	90.88			59.54	27.84	3.50	0.00	AVERAGE	100	271	VERTICAL
4	2410.800	103.96			72.61	27.84	3.50	0.00	PEAK	100	271	VERTICAL

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

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	2390.000	53.13	-0.87	54.00	21.76	27.87	3.50	0.00	AVERAGE	176	282	VERTICAL
2 !	2390.000	68.53	-5.47	74.00	37.16	27.87	3.50	0.00	PEAK	176	282	VERTICAL
3	2427.400	110.81			79.47	27.81	3.52	0.00	PEAK	176	282	VERTICAL
4 @	2429.800	97.16			65.83	27.81	3.52	0.00	AVERAGE	176	282	VERTICAL
5 !	2483.500	49.65	-4.35	54.00	18.36	27.73	3.56	0.00	AVERAGE	176	282	VERTICAL
6	2483.900	65.82	-8.18	74.00	34.54	27.73	3.56	0.00	PEAK	176	282	VERTICAL

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

Channel 9

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	2462.800	108.07			76.77	27.76	3.54	0.00	PEAK	152	56	VERTICAL
2 @	2464.000	94.43			63.13	27.76	3.54	0.00	AVERAGE	152	56	VERTICAL
3 !	2483.500	53.94	-0.06	54.00	22.65	27.73	3.56	0.00	AVERAGE	152	56	VERTICAL
4 !	2483.500	73.55	-0.45	74.00	42.26	27.73	3.56	0.00	PEAK	152	56	VERTICAL

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

Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11b CH 1, 6, 11 / Ant. A + Ant. B
Test Date	Mar. 23, 2009		

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	2386.200	52.98	-1.02	54.00	21.63	27.87	3.49	0.00	AVERAGE	142	298	VERTICAL
2	2386.800	61.01	-12.99	74.00	29.66	27.87	3.49	0.00	PEAK	142	298	VERTICAL
3 @	2410.400	106.34			75.00	27.84	3.50	0.00	AVERAGE	142	298	VERTICAL
4	2410.600	110.76			79.42	27.84	3.50	0.00	PEAK	142	298	VERTICAL

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

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	2389.800	56.82	-17.18	74.00	25.46	27.87	3.50	0.00	PEAK	106	60	VERTICAL
2	2390.000	45.45	-8.55	54.00	14.08	27.87	3.50	0.00	AVERAGE	106	60	VERTICAL
3 @	2438.200	115.26			83.96	27.78	3.52	0.00	PEAK	106	60	VERTICAL
4 @	2438.600	110.62			79.32	27.78	3.52	0.00	AVERAGE	106	60	VERTICAL
5	2483.500	55.13	-18.87	74.00	23.84	27.73	3.56	0.00	PEAK	106	60	VERTICAL
6	2483.500	45.58	-8.42	54.00	14.29	27.73	3.56	0.00	AVERAGE	106	60	VERTICAL

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

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	2462.600	105.22			73.92	27.76	3.54	0.00	AVERAGE	100	93	VERTICAL
2	2463.400	109.57			78.27	27.76	3.54	0.00	PEAK	100	93	VERTICAL
3 !	2487.700	53.67	-0.33	54.00	22.41	27.70	3.56	0.00	AVERAGE	100	93	VERTICAL
4	2487.900	61.96	-12.04	74.00	30.70	27.70	3.56	0.00	PEAK	100	93	VERTICAL

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

Temperature	25°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11g CH 1, 6, 11/ Ant. A + Ant. B
Test Date	Mar. 23, 2009		

Channel 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	2390.000	53.64	-0.36	54.00	22.27	27.87	3.50	0.00	AVERAGE	173	229	VERTICAL
2 !	2390.000	69.60	-4.40	74.00	38.23	27.87	3.50	0.00	PEAK	173	229	VERTICAL
3 @	2409.800	101.30			69.96	27.84	3.50	0.00	AVERAGE	173	229	VERTICAL
4	2417.600	113.12			81.76	27.84	3.52	0.00	PEAK	173	229	VERTICAL

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

Channel 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	2387.200	69.42	-4.58	74.00	38.07	27.87	3.49	0.00	PEAK	105	63	VERTICAL
2 !	2390.000	52.26	-1.74	54.00	20.90	27.87	3.50	0.00	AVERAGE	105	63	VERTICAL
3 @	2440.800	108.18			76.85	27.78	3.54	0.00	AVERAGE	105	63	VERTICAL
4 @	2441.400	119.60			88.28	27.78	3.54	0.00	PEAK	105	63	VERTICAL
5 !	2483.500	53.70	-0.30	54.00	22.41	27.73	3.56	0.00	AVERAGE	105	63	VERTICAL
6	2483.500	67.77	-6.23	74.00	36.49	27.73	3.56	0.00	PEAK	105	63	VERTICAL

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

Channel 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	2468.200	110.07			78.75	27.76	3.56	0.00	PEAK	103	63	VERTICAL
2 @	2468.800	99.98			68.66	27.76	3.56	0.00	AVERAGE	103	63	VERTICAL
3 !	2483.500	53.16	-0.84	54.00	21.87	27.73	3.56	0.00	AVERAGE	103	63	VERTICAL
4 !	2484.100	70.42	-3.58	74.00	39.13	27.73	3.56	0.00	PEAK	103	63	VERTICAL

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

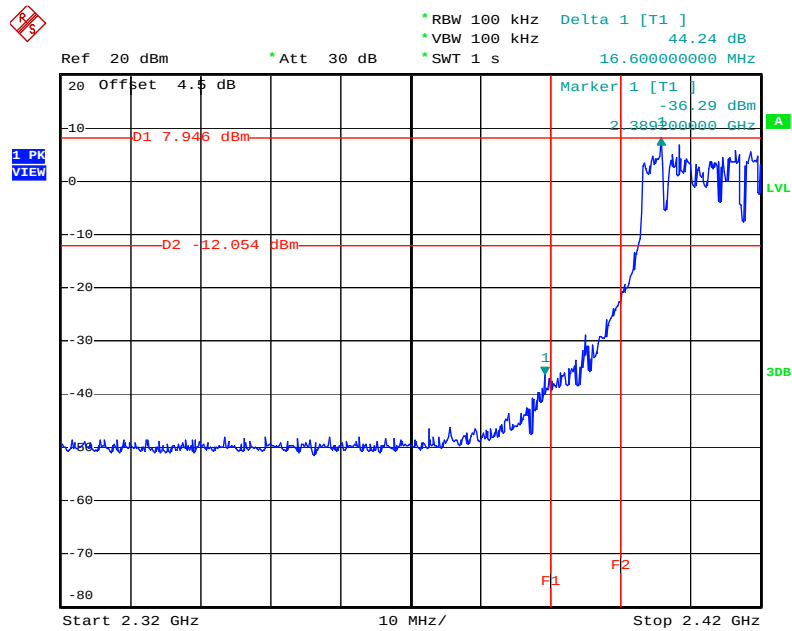
Note:

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

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

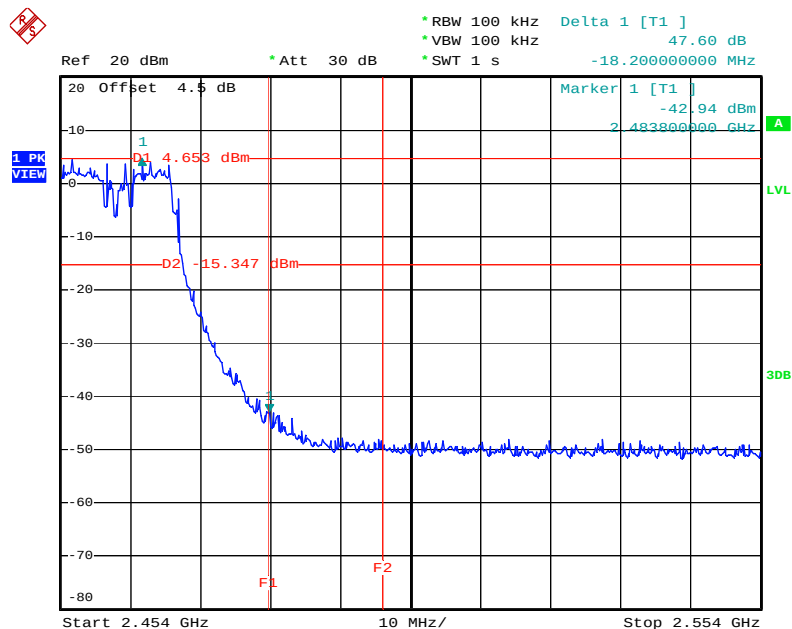
For Emission not in Restricted Band

Low Band Edge Plot on Configuration Drafft n MCS0 20MHz Ant. A + Ant. B / 2412 MHz



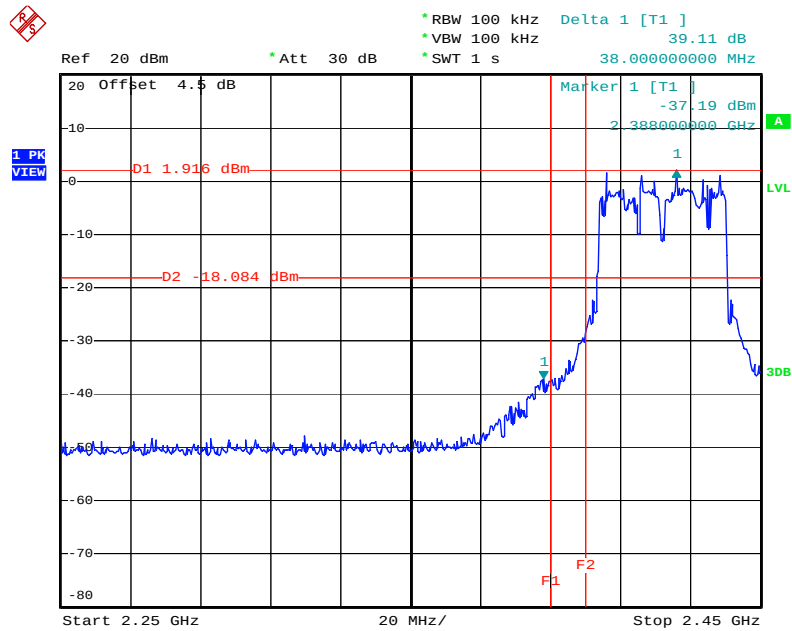
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High Band Edge Plot on Configuration Drafft n MCS0 20MHz Ant. A + Ant. B / 2462 MHz



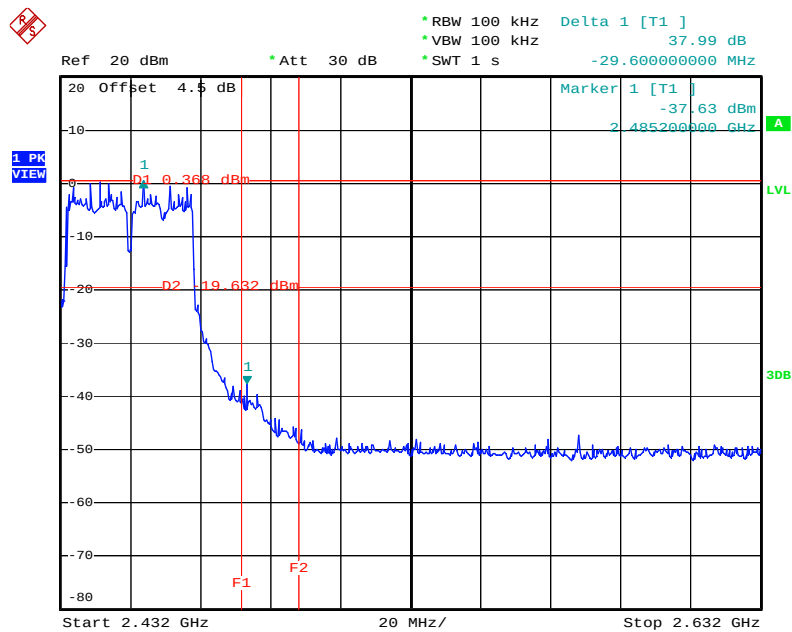
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Low Band Edge Plot on Configuration Drafft n MCS0 40MHz Ant. A + Ant. B / 2422 MHz



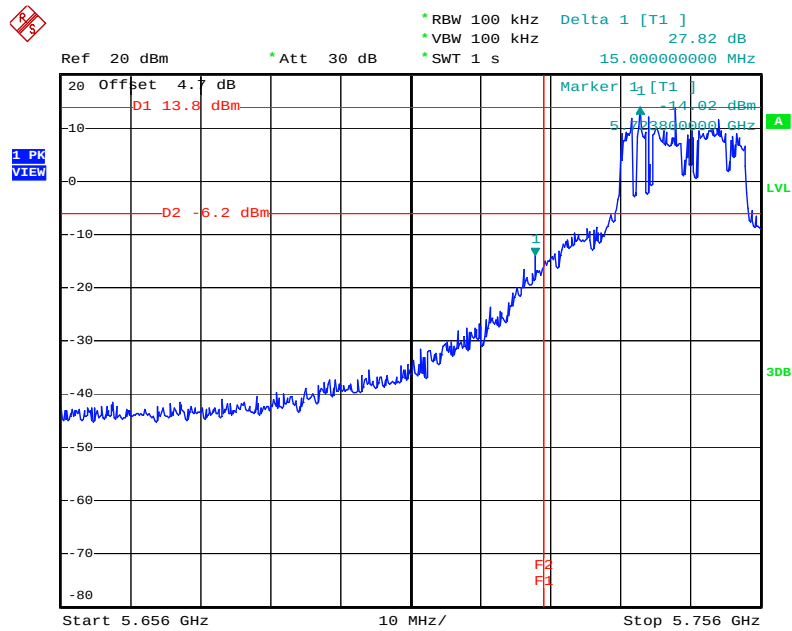
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High Band Edge Plot on Configuration Drafft n MCS0 40MHz Ant. A + Ant. B / 2452 MHz



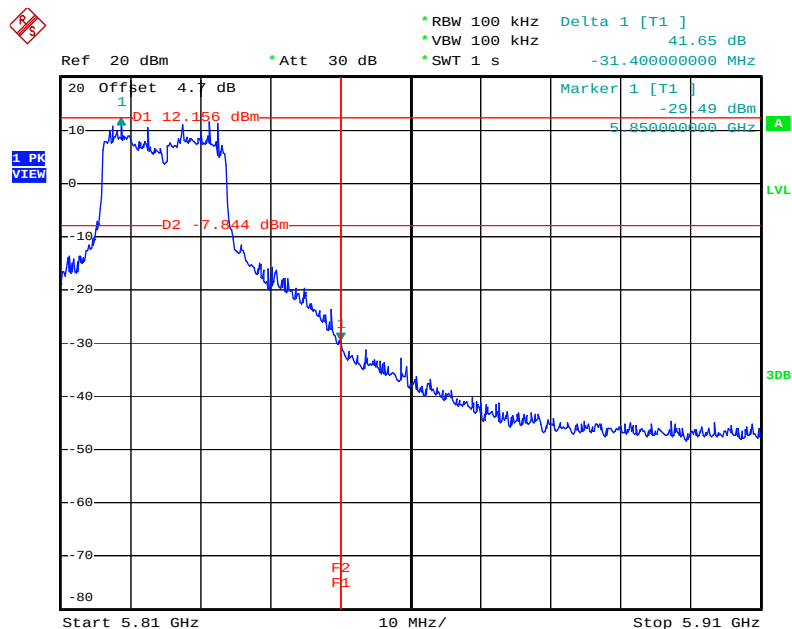
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Low Band Edge Plot on Configuration 11a Draft n MCS0 20MHz Ant. A + Ant. B / 5745 MHz



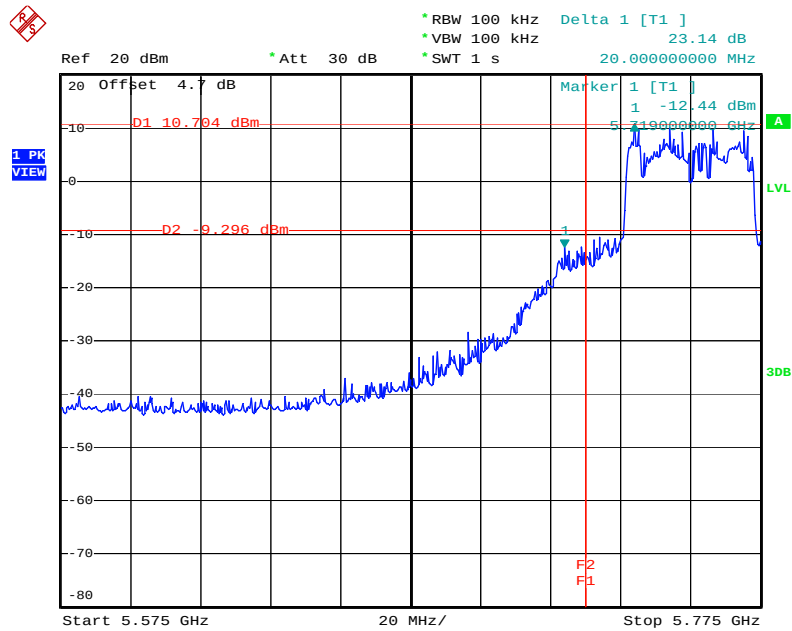
Date: 26.MAR.2009 12:26:28

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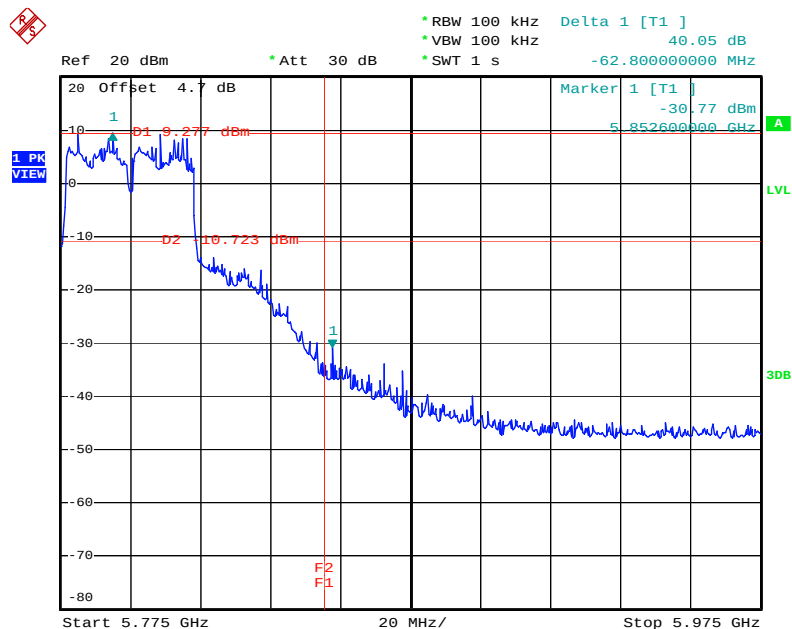
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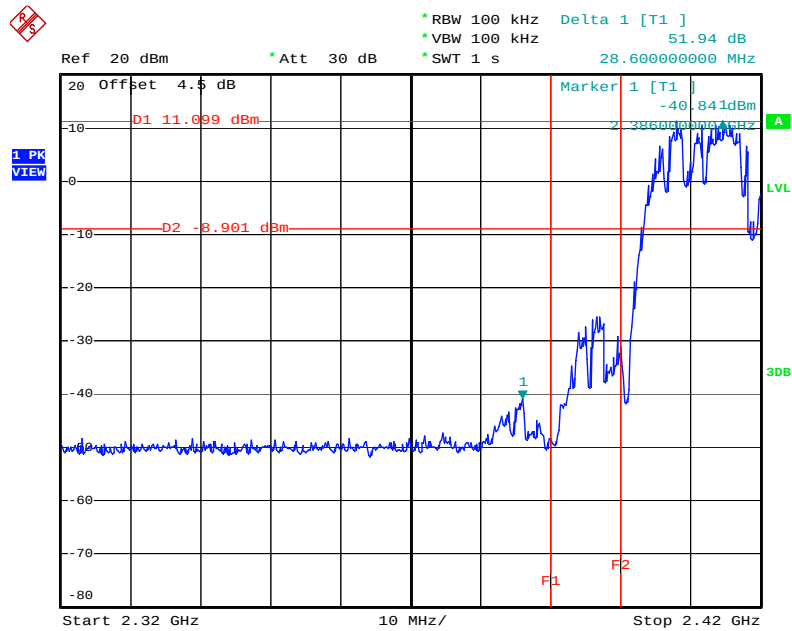
High Band Edge Plot on Configuration 11a Draft n MCS8 40MHz Ant. A + Ant. B / 5795 MHz



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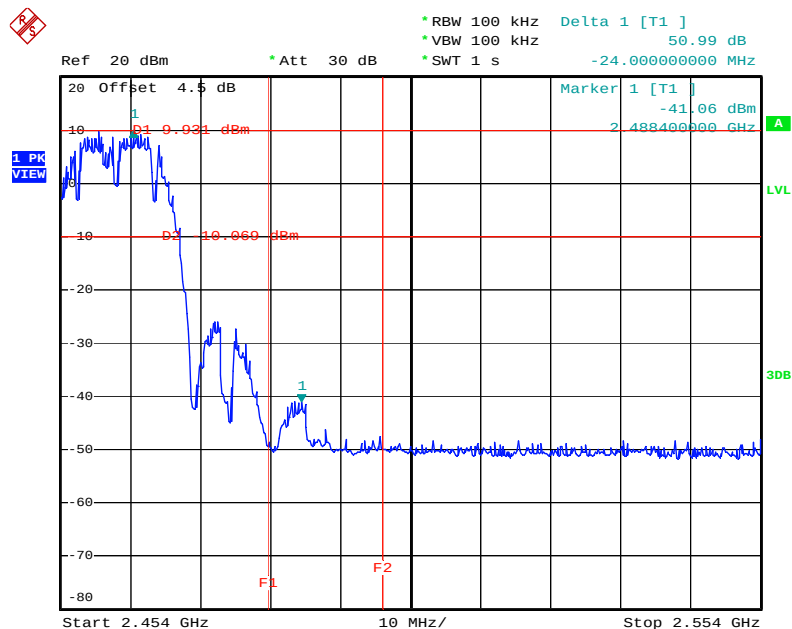
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11b Ant. A + Ant. B / 2412 MHz



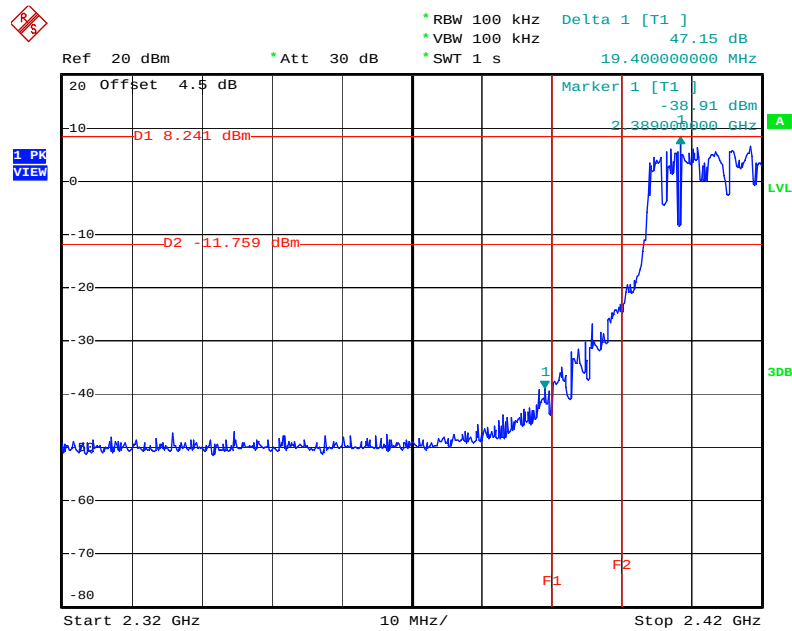
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High Band Edge Plot on Configuration IEEE 802.11b Ant. A + Ant. B / 2462 MHz



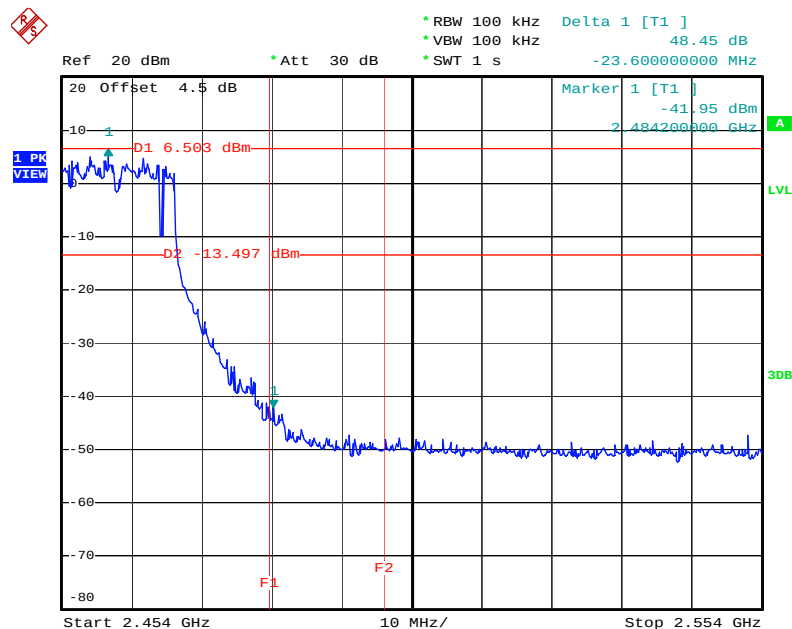
Date: 26.MAR.2009 12:05:28

Low Band Edge Plot on Configuration IEEE 802.11g Ant. A + Ant. B / 2412 MHz



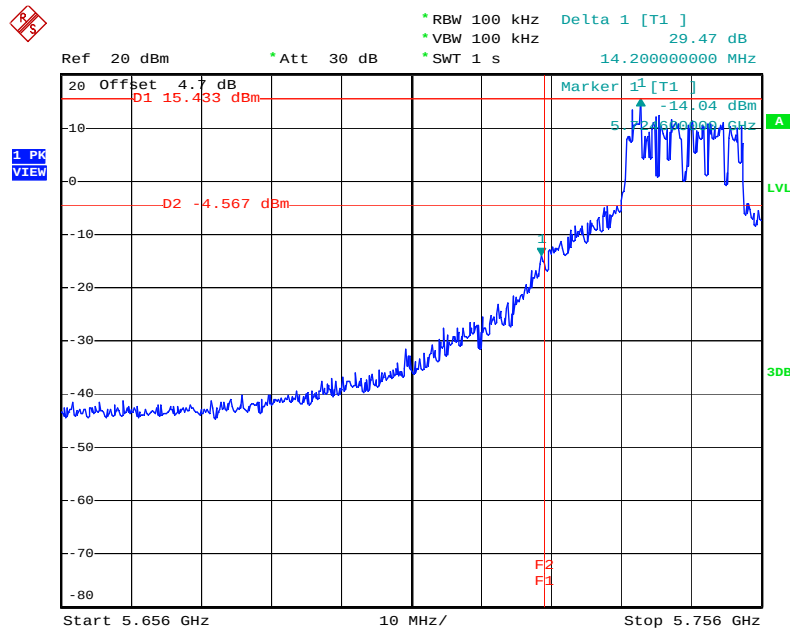
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High Band Edge Plot on Configuration IEEE 802.11g Ant. A + Ant. B / 2462 MHz



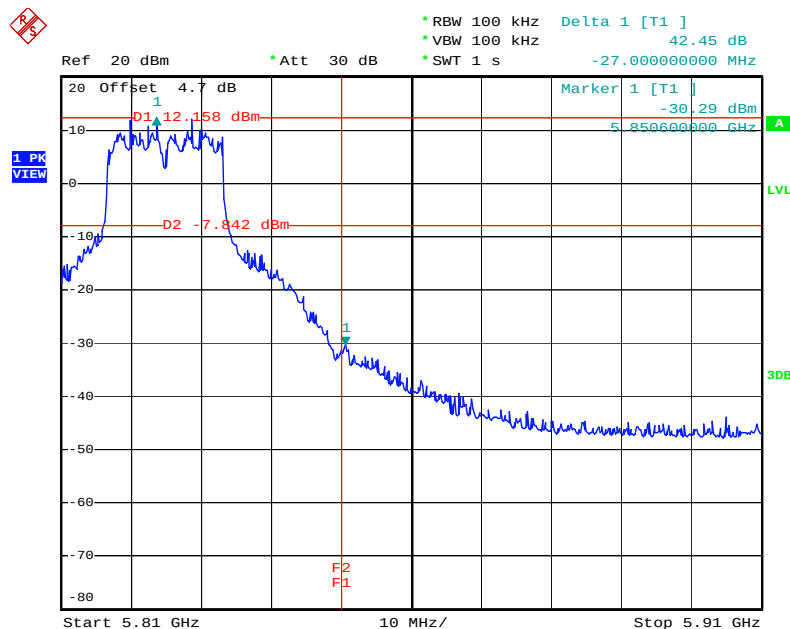
Date: 26.MAR.2009 12:08:59

Low Band Edge Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5745 MHz



Date: 26.MAR.2009 14:03:13

High Band Edge Plot on Configuration IEEE 802.11a Ant. A + Ant. B / 5825 MHz



Date: 26.MAR.2009 13:48:13

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, 2009	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2009	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2009	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2008	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz – 30MHz	Mar. 27, 2009	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. 23, 2009	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, 2009*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100004	9 kHz - 30 GHz	Oct. 06, 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. 16, 2009	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Jan. 05, 2009	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Jan. 05, 2009	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. 09, 2009	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, 2009	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)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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, 2009	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., Neihu 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 Accreditation Program for Designated Testing Laboratory for Commodities Inspection
Specific Accreditation Program	: Accreditation Program for Telecommunication Equipment Testing Laboratory



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

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