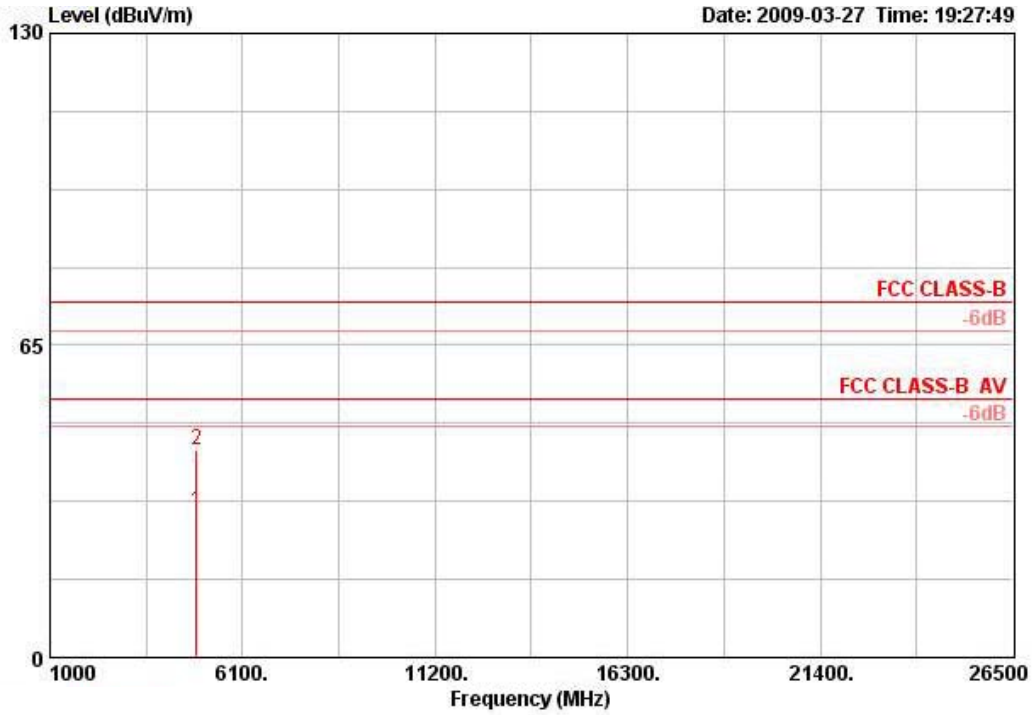
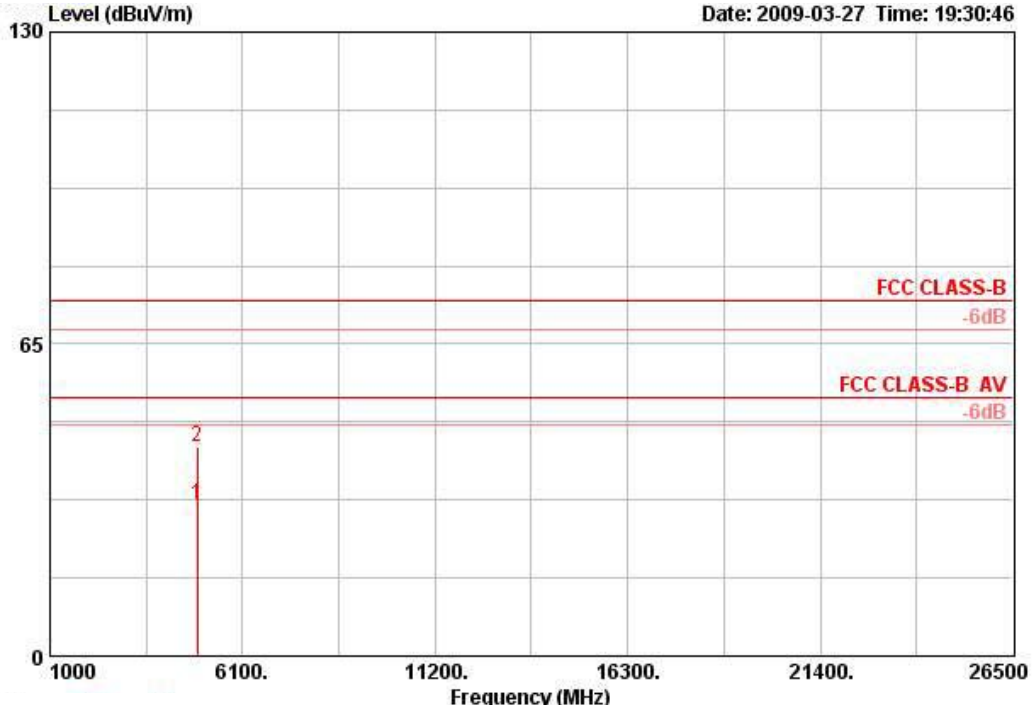
Vertical



	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 @	4873.500	30.46	-23.54	54.00	29.68	32.56	3.36	35.15	AVERAGE	3905	0	VERTICAL
2 @	4873.630	43.18	-30.82	74.00	42.41	32.56	3.36	35.15	PEAK	100	0	VERTICAL

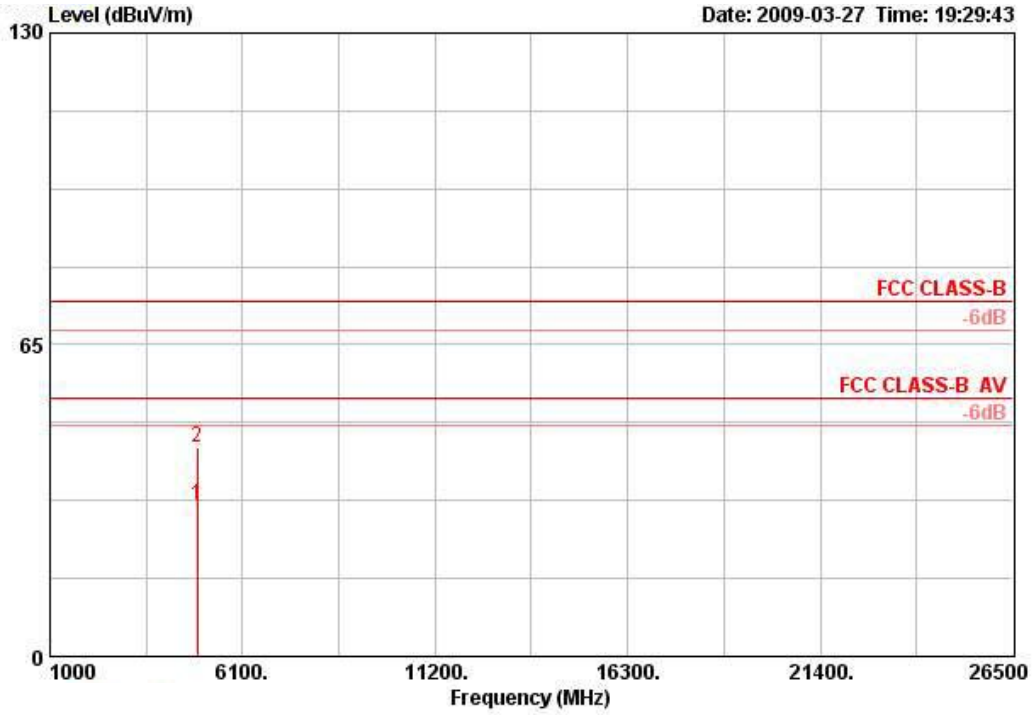
Temperature	24.3℃	Humidity	56%
Test Engineer	Roy Huang	Configurations	Draft n MCS0 40MHz Ch 9 / Ant. 1 + Ant. 2

Horizontal



	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 @	4904.490	31.65	-22.35	54.00	30.74	32.63	3.37	35.09	AVERAGE	100	0	HORIZONTAL
2 @	4906.020	43.66	-30.34	74.00	42.75	32.63	3.37	35.09	PEAK	100	0	HORIZONTAL

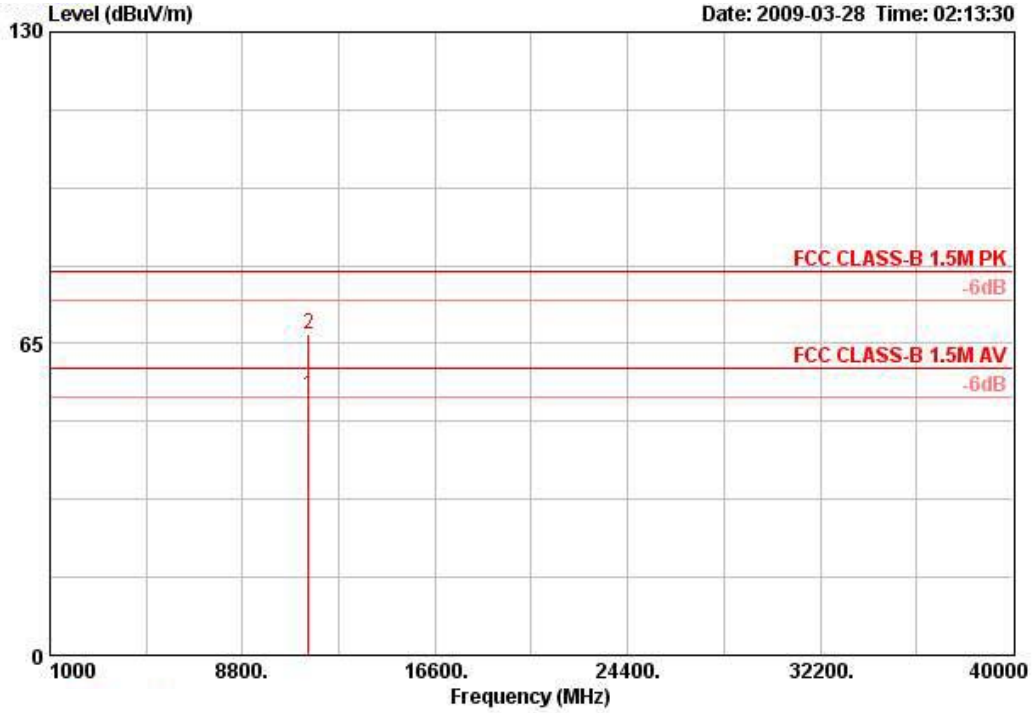
Vertical



	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 @	4904.900	31.37	-22.63	54.00	30.46	32.63	3.37	35.09	AVERAGE	100	360	VERTICAL
2 @	4906.360	43.58	-30.42	74.00	42.67	32.63	3.37	35.09	PEAK	100	360	VERTICAL

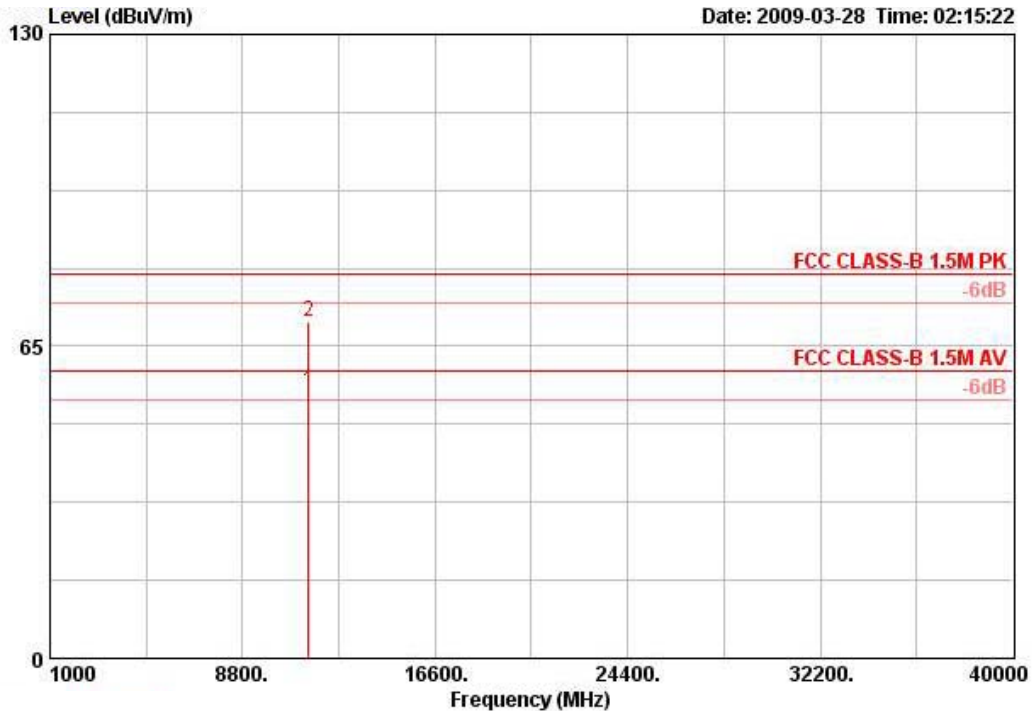
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	11a Draft n MCS0 20MHz CH 149 / Ant. 1 + Ant. 2

Horizontal



	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 @	11484.320	54.16	-5.84	60.00	44.60	38.50	5.81	34.75	AVERAGE	122	336	HORIZONTAL
2 @	11484.520	66.86	-13.14	80.00	57.30	38.50	5.81	34.75	PEAK	122	336	HORIZONTAL

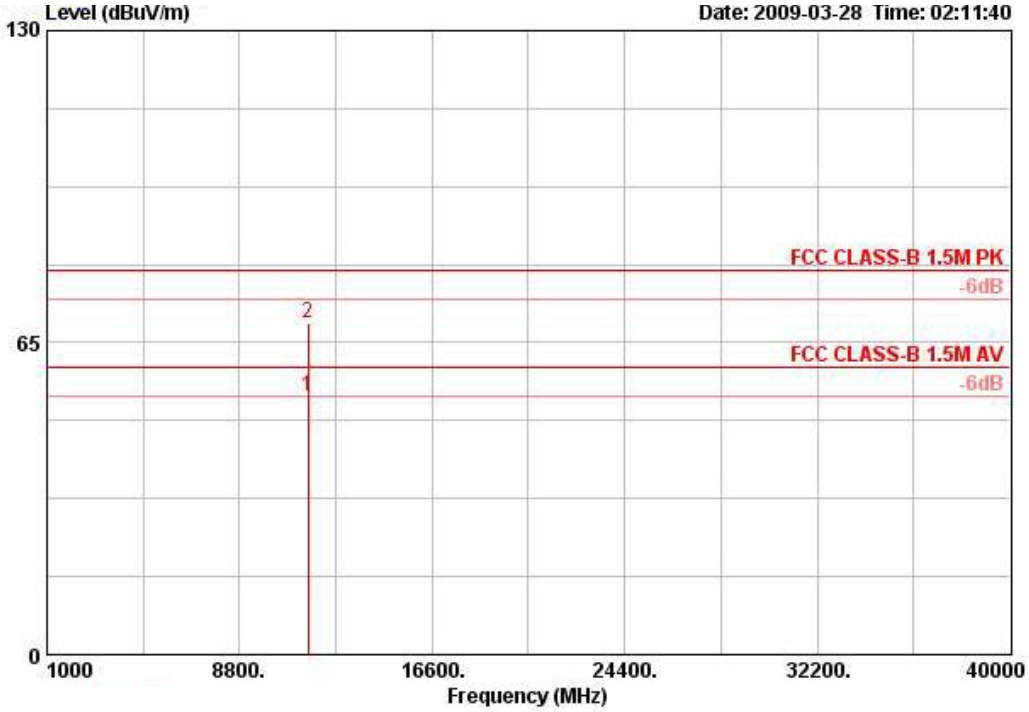
Vertical



	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 @	11487.240	55.71	-4.29	60.00	46.15	38.50	5.81	34.75	AVERAGE	121	272	VERTICAL
2 @	11488.080	70.05	-9.95	80.00	60.50	38.50	5.81	34.75	PEAK	100	272	VERTICAL

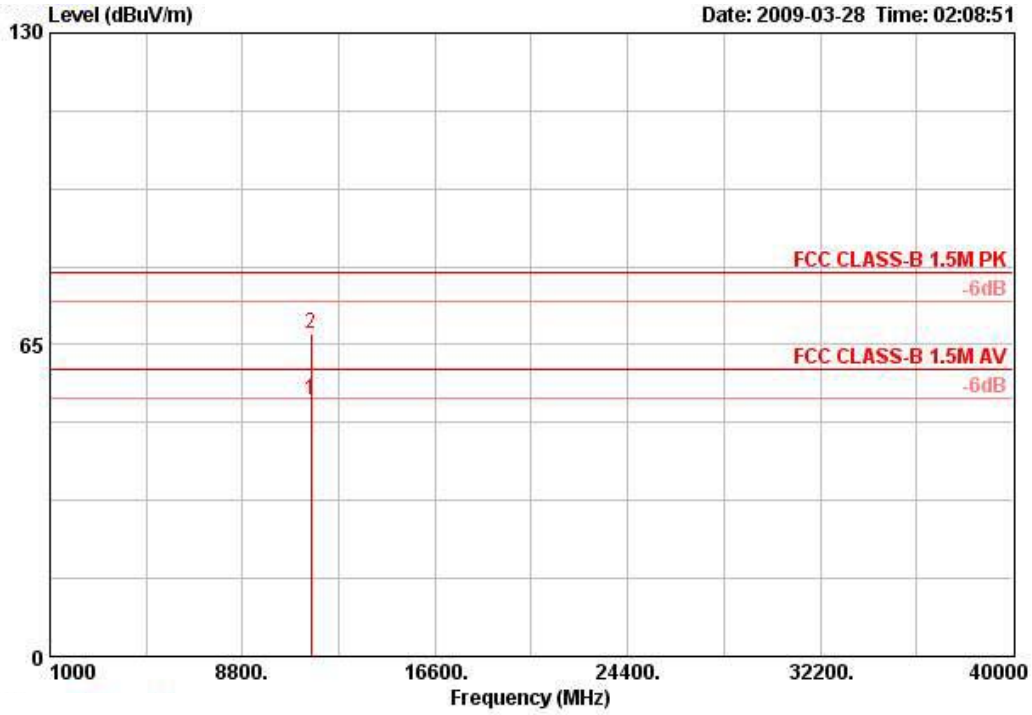
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	11a Draft n MCS0 20MHz CH 157 / Ant. 1 + Ant. 2

Horizontal



	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 @	11566.840	53.92	-6.08	60.00	44.41	38.51	5.80	34.80	AVERAGE	116	334	HORIZONTAL
2 @	11568.160	69.20	-10.80	80.00	59.69	38.51	5.80	34.80	PEAK	116	334	HORIZONTAL

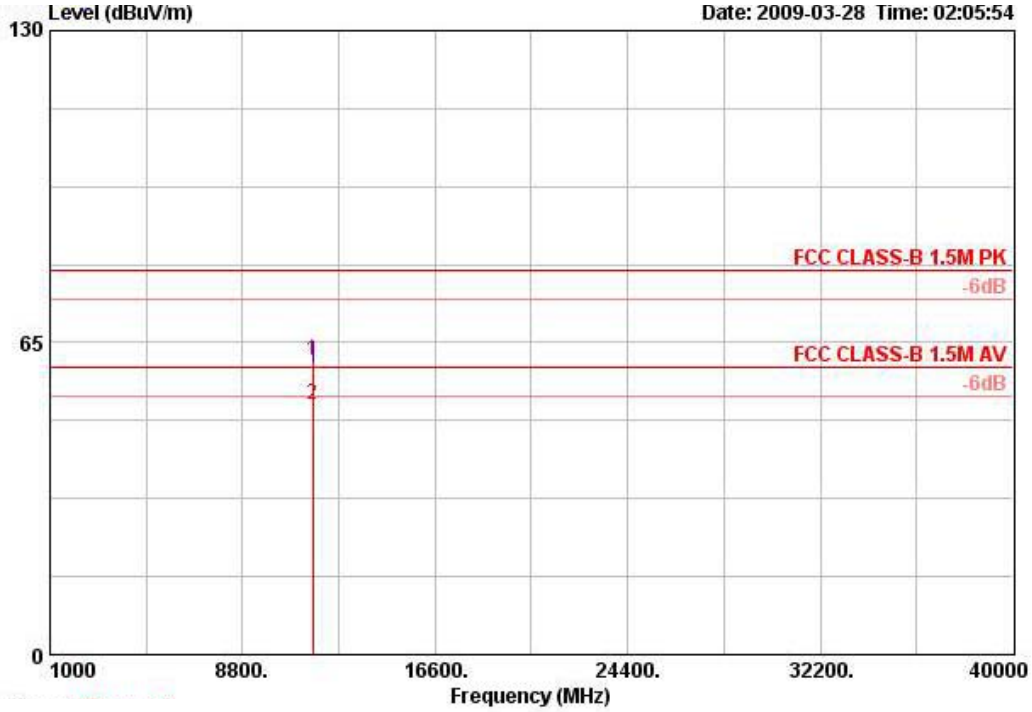
Vertical



	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 @	11566.840	53.49	-6.51	60.00	43.98	38.51	5.80	34.80	AVERAGE	100	270	VERTICAL
2 @	11568.200	67.36	-12.64	80.00	57.85	38.51	5.80	34.80	PEAK	100	270	VERTICAL

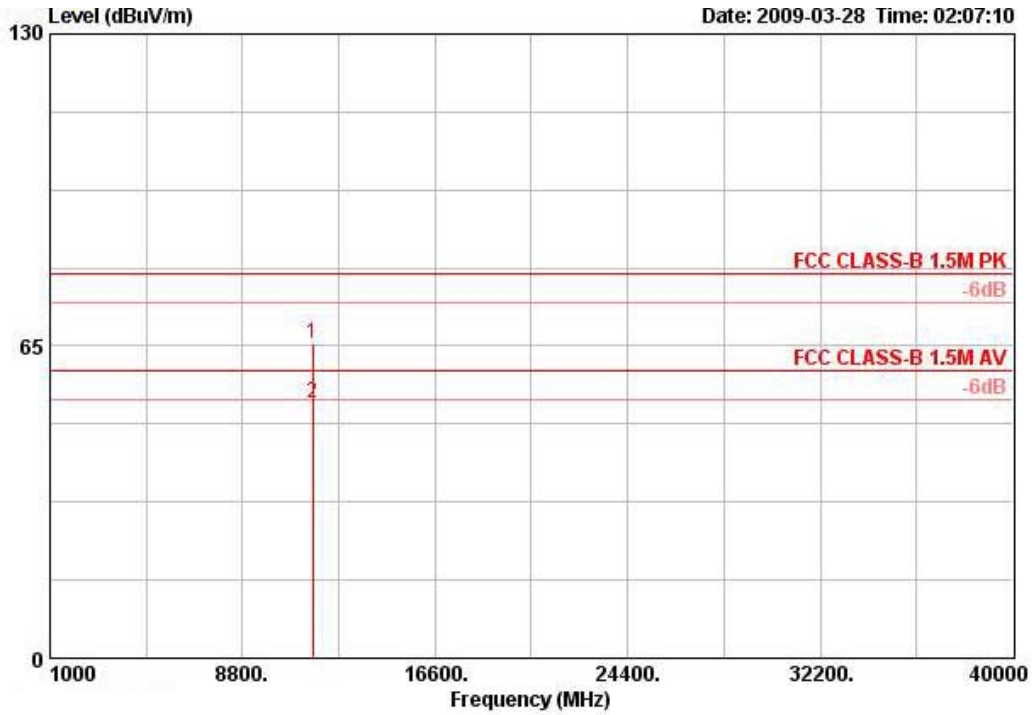
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	11a Draft n MCS0 20MHz CH 165 / Ant. 1 + Ant. 2

Horizontal



	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 @	11643.680	61.13	-18.87	80.00	51.69	38.53	5.78	34.87	PEAK	119	333	HORIZONTAL
2 @	11648.480	52.17	-7.83	60.00	42.77	38.53	5.77	34.90	AVERAGE	119	333	HORIZONTAL

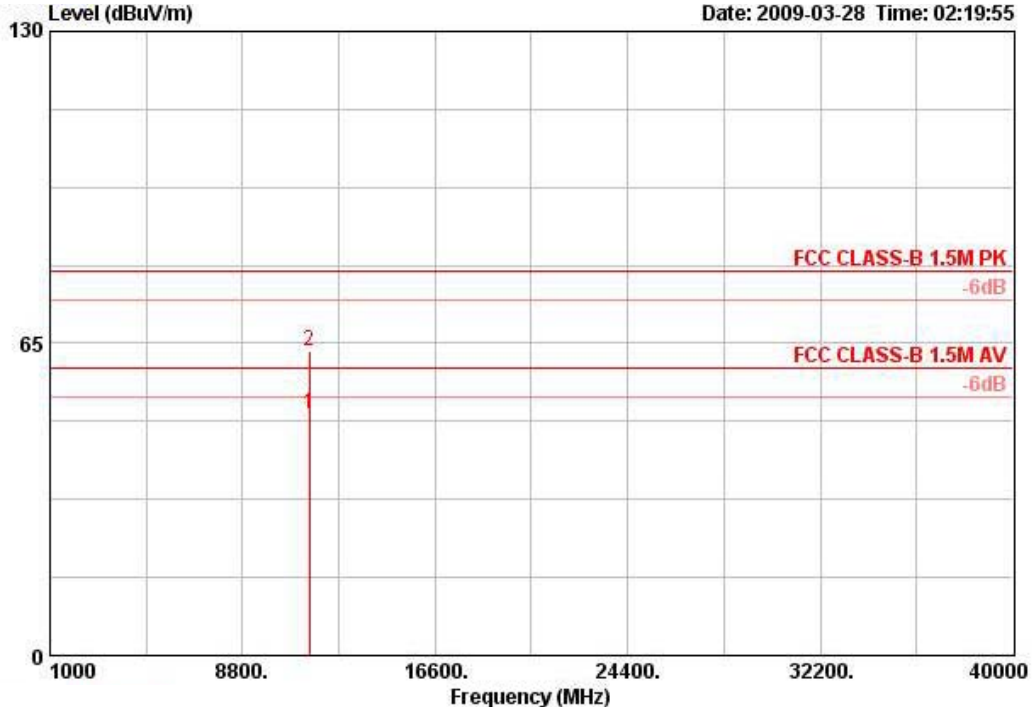
Vertical



	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 @	11644.080	65.59	-14.41	80.00	56.16	38.53	5.78	34.87	PEAK	100	285	VERTICAL
2 @	11649.080	53.06	-6.94	60.00	43.65	38.53	5.77	34.90	AVERAGE	100	285	VERTICAL

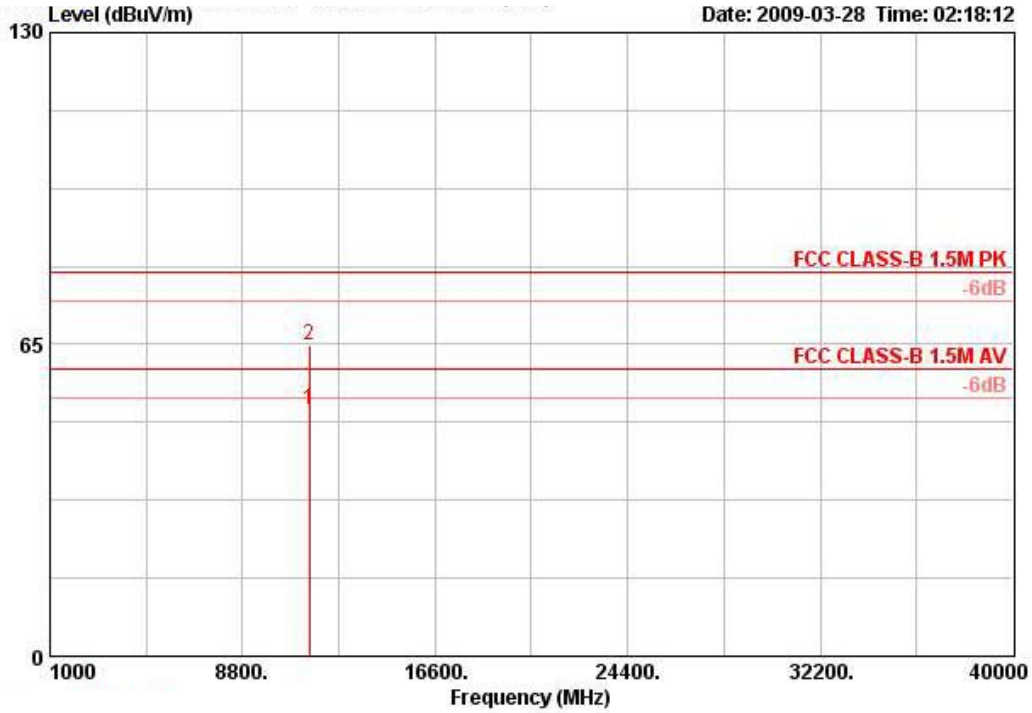
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	11a Draft n MCS0 40MHz CH 151 / Ant. 1 + Ant. 2

Horizontal



	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 @	11502.100	50.12	-9.88	60.00	40.56	38.50	5.81	34.75	AVERAGE	121	333	HORIZONTAL
2 @	11502.400	63.27	-16.73	80.00	53.71	38.50	5.81	34.75	PEAK	121	333	HORIZONTAL

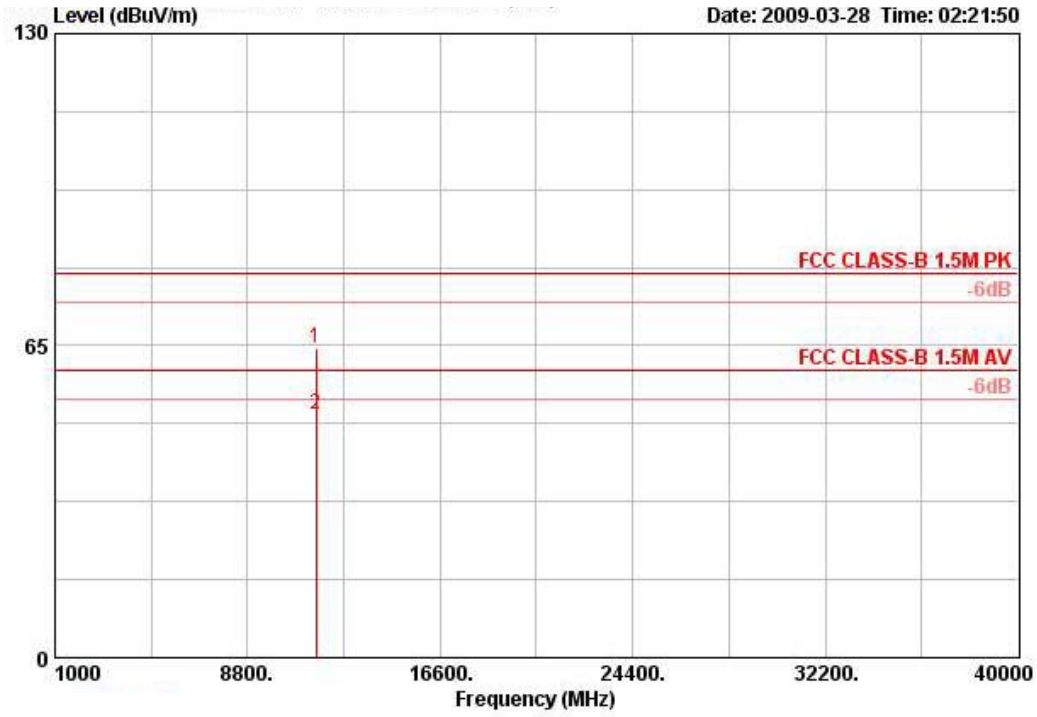
Vertical



	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 @	11504.500	51.34	-8.66	60.00	41.78	38.50	5.81	34.75	AVERAGE	100	273	VERTICAL
2 @	11507.000	64.76	-15.24	80.00	55.20	38.50	5.81	34.75	PEAK	100	273	VERTICAL

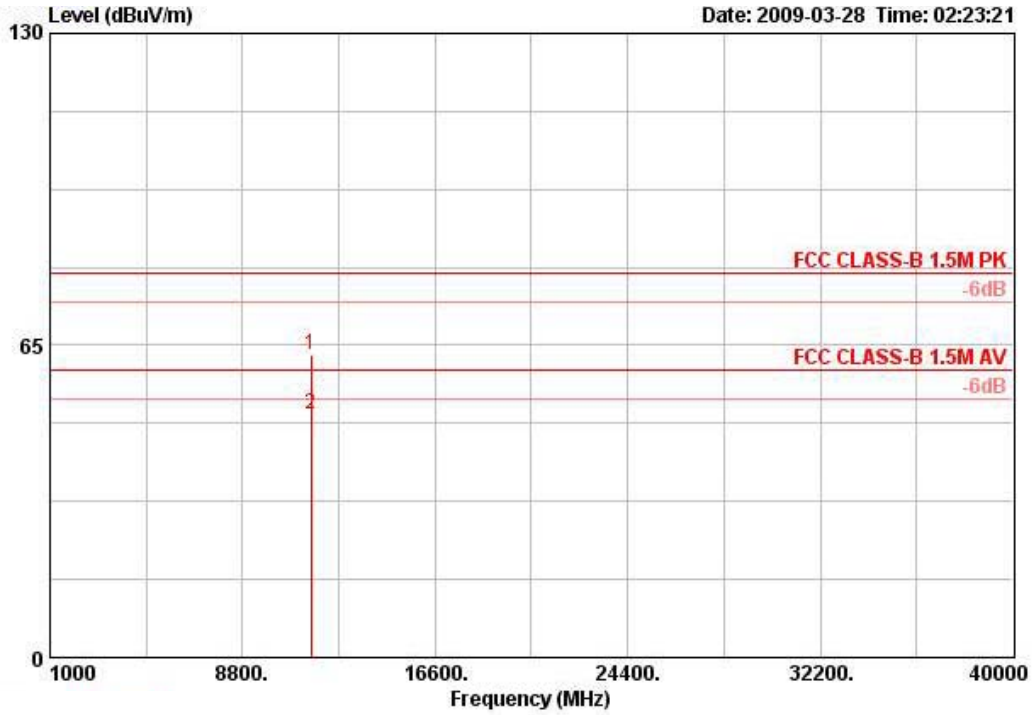
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	11a Draft n MCS0 40MHz CH 159 / Ant. 1 + Ant. 2

Horizontal



	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 @	11582.400	64.57	-15.43	80.00	55.09	38.51	5.79	34.82	PEAK	121	333	HORIZONTAL
2 @	11582.900	50.76	-9.24	60.00	41.27	38.52	5.79	34.82	AVERAGE	121	333	HORIZONTAL

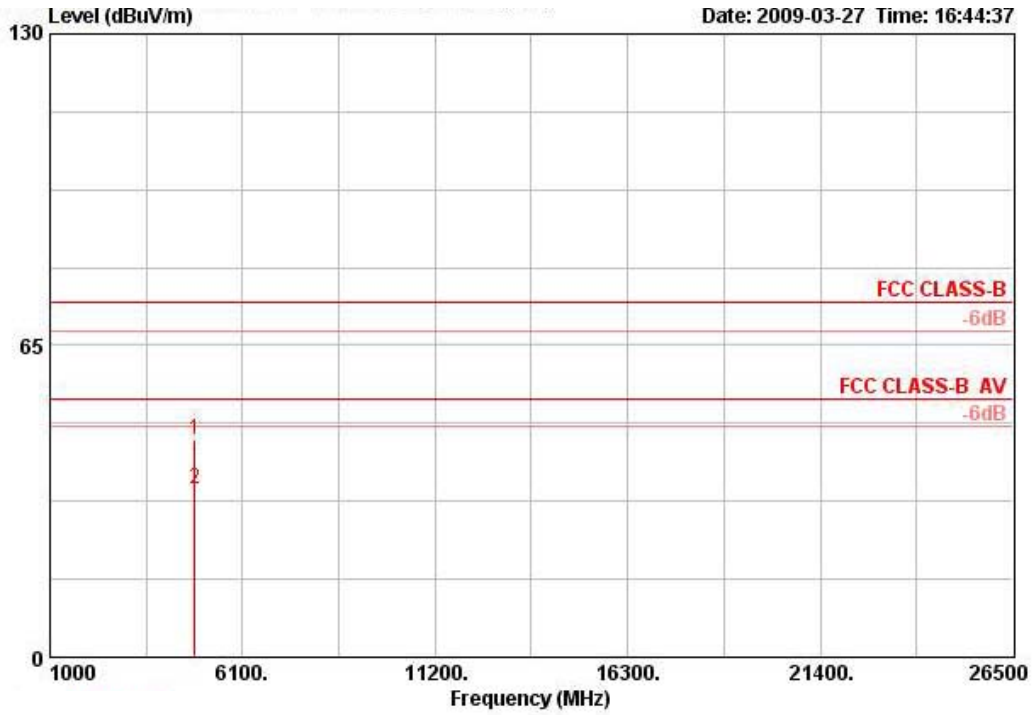
Vertical



	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 @	11584.200	63.15	-16.85	80.00	53.67	38.52	5.79	34.82	PEAK	100	271	VERTICAL
2 @	11584.400	50.49	-9.51	60.00	41.01	38.52	5.79	34.82	AVERAGE	100	271	VERTICAL

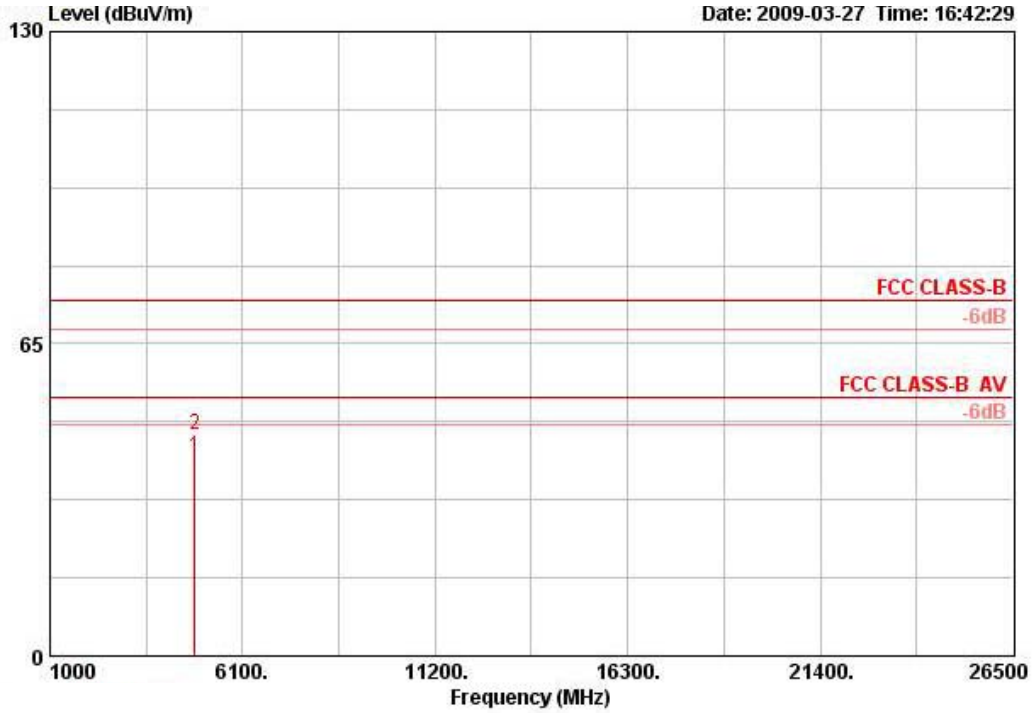
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11b CH 1 / Ant. 1 + Ant. 2

Horizontal



	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 @	4823.650	45.35	-28.65	74.00	44.81	32.46	3.34	35.26	PEAK	100	266	HORIZONTAL
2 @	4824.030	34.89	-19.11	54.00	34.35	32.46	3.34	35.26	AVERAGE	100	266	HORIZONTAL

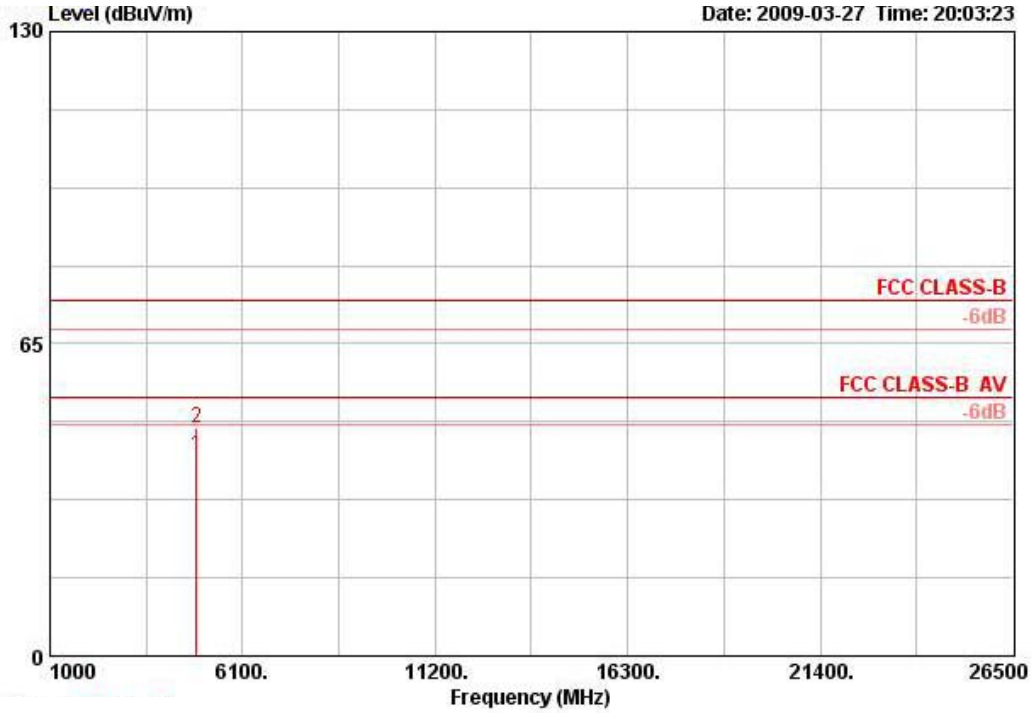
Vertical



	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 @	4824.010	41.38	-12.62	54.00	40.84	32.46	3.34	35.26	AVERAGE	100	6	VERTICAL
2 @	4824.230	45.88	-28.12	74.00	45.34	32.46	3.34	35.26	PEAK	100	6	VERTICAL

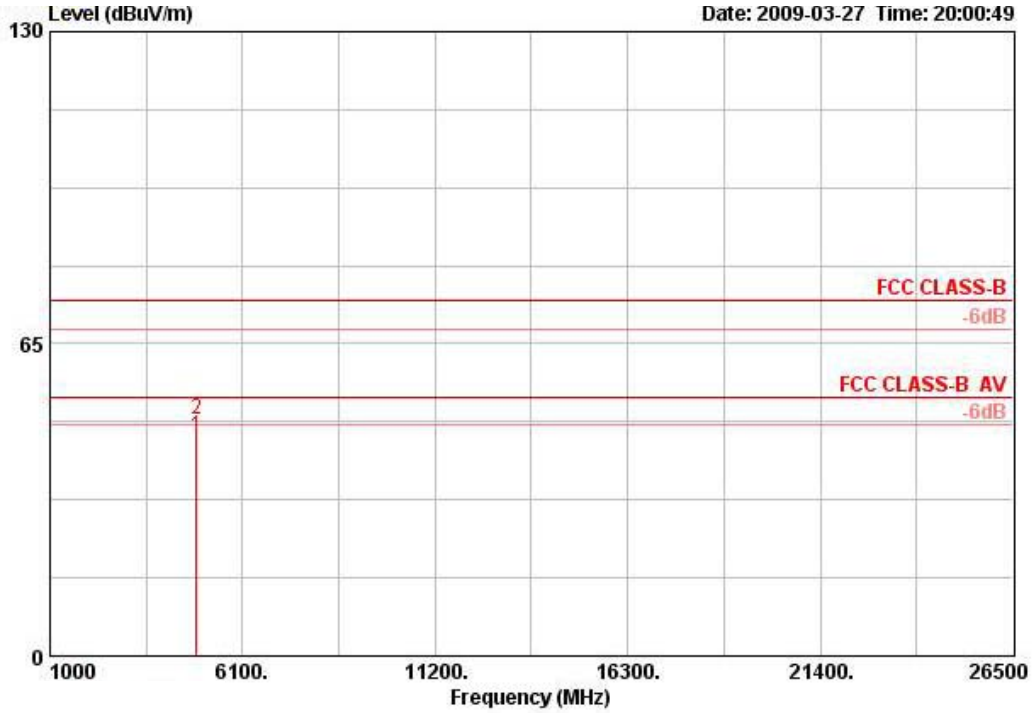
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11b CH 6 / Ant. 1 + Ant. 2

Horizontal



	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 @	4874.030	41.86	-12.14	54.00	41.08	32.56	3.36	35.15	AVERAGE	103	149	HORIZONTAL
2 @	4874.180	47.54	-26.46	74.00	46.76	32.56	3.36	35.15	PEAK	103	149	HORIZONTAL

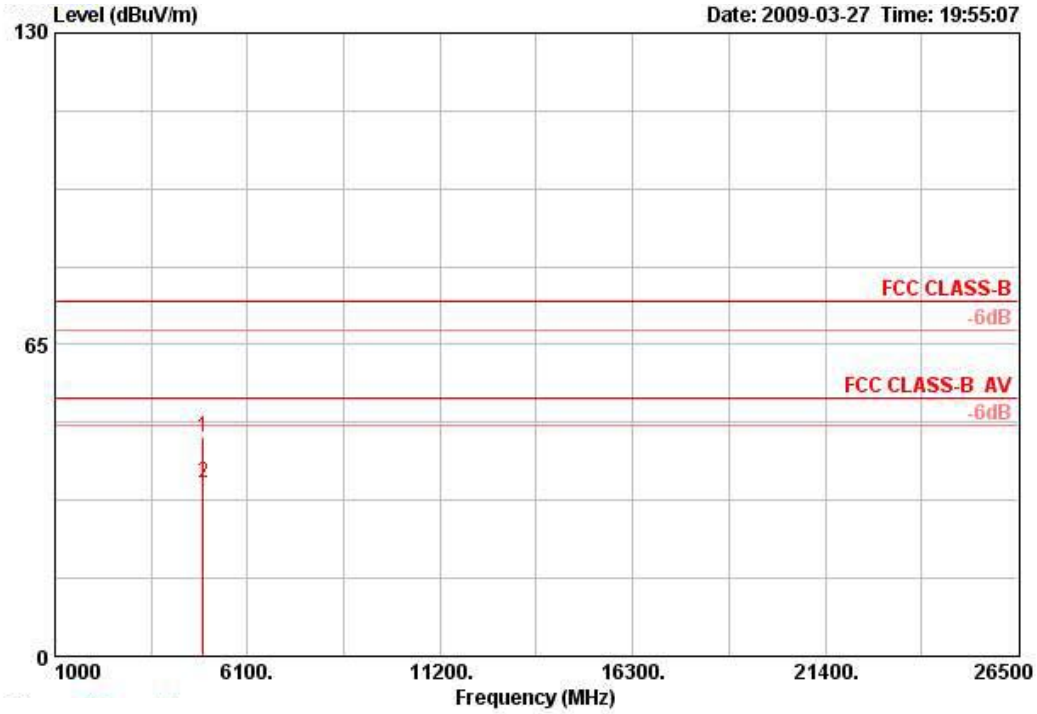
Vertical



	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 @	4874.070	45.54	-8.46	54.00	44.77	32.56	3.36	35.15	AVERAGE	100	7	VERTICAL
2 @	4874.100	49.40	-24.60	74.00	48.62	32.56	3.36	35.15	PEAK	100	7	VERTICAL

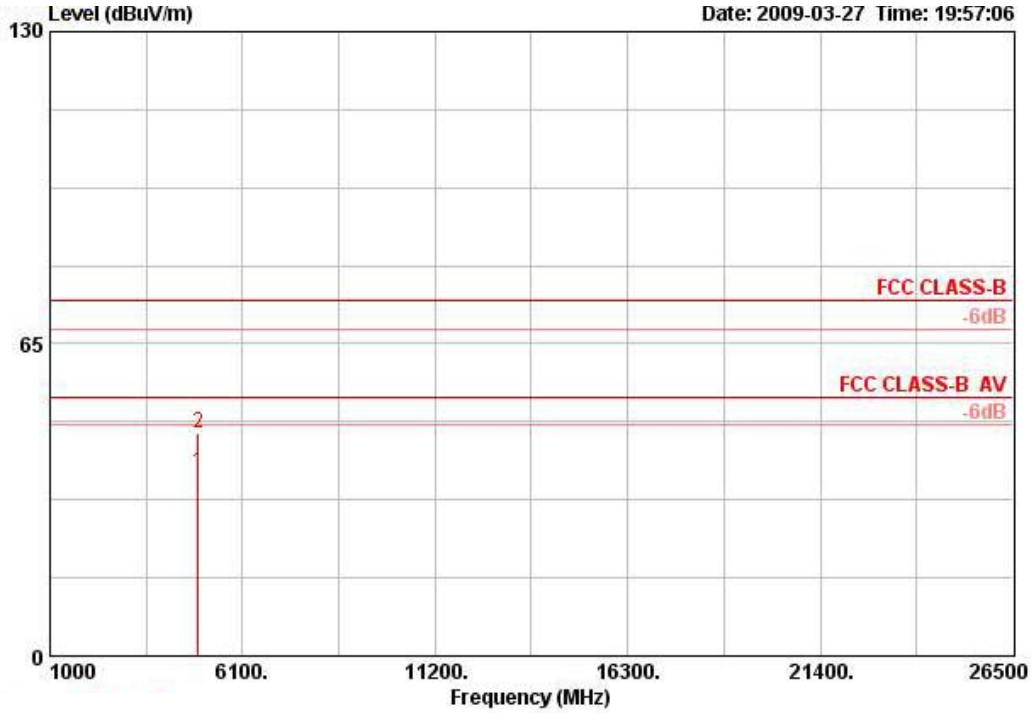
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11b CH 11 / Ant. 1 + Ant. 2

Horizontal



	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 @	4923.830	45.53	-28.47	74.00	44.52	32.66	3.38	35.03	PEAK	105	181	HORIZONTAL
2 @	4924.130	36.23	-17.77	54.00	35.21	32.66	3.38	35.03	AVERAGE	105	181	HORIZONTAL

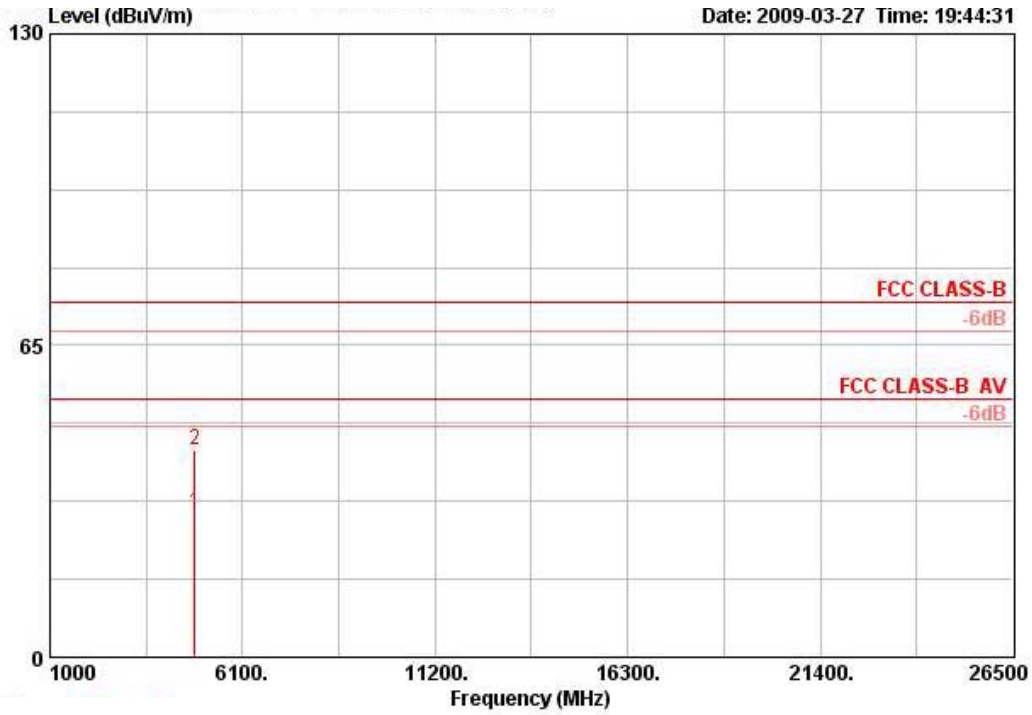
Vertical



	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 @	4924.150	38.15	-15.85	54.00	37.14	32.66	3.38	35.03	AVERAGE	100	0	VERTICAL
2 @	4924.170	46.27	-27.73	74.00	45.26	32.66	3.38	35.03	PEAK	100	0	VERTICAL

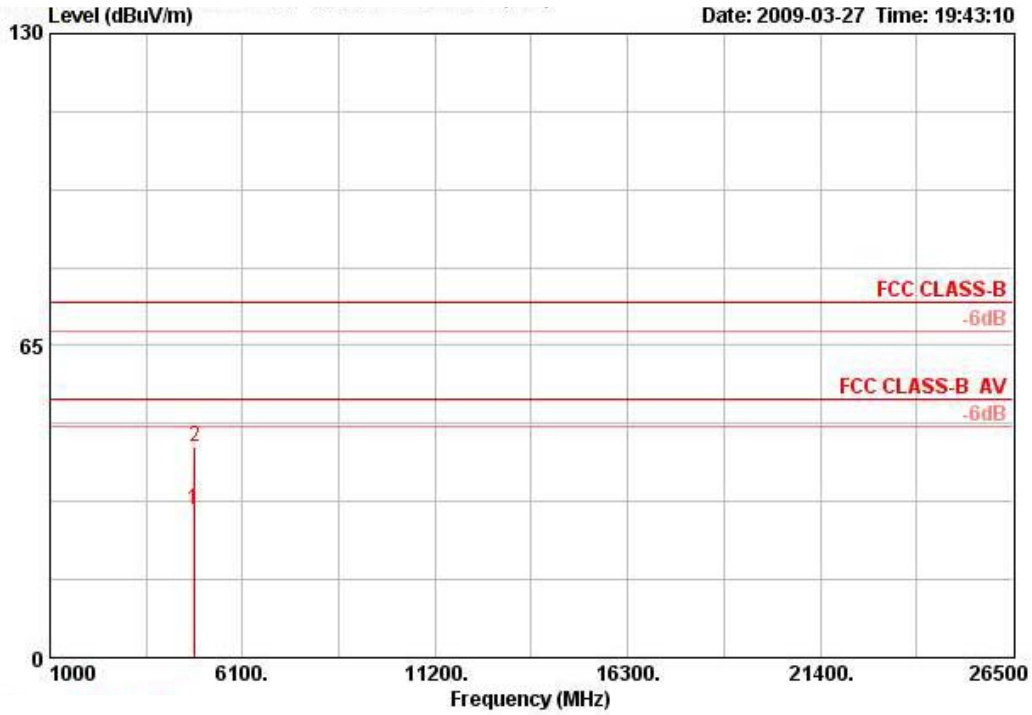
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11g CH 1 / Ant. 1 + Ant. 2

Horizontal



	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 @	4823.950	30.11	-23.89	54.00	29.57	32.46	3.34	35.26	AVERAGE	100	0	HORIZONTAL
2 @	4826.040	43.21	-30.79	74.00	42.67	32.46	3.34	35.26	PEAK	100	0	HORIZONTAL

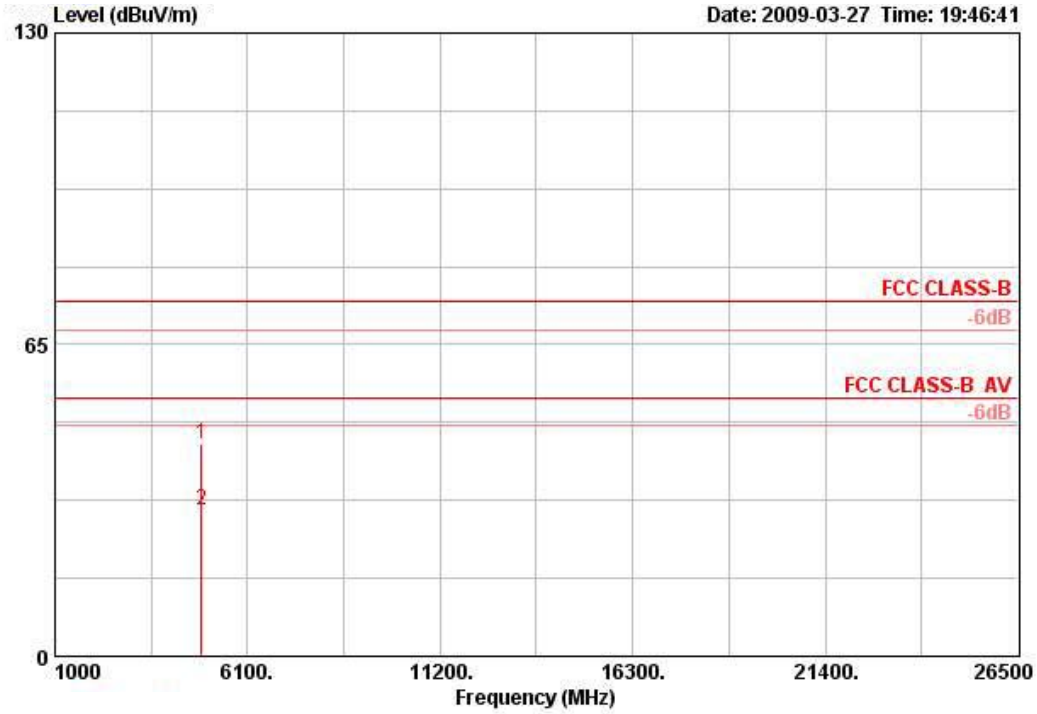
Vertical



	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 @	4822.500	30.72	-23.28	54.00	30.18	32.46	3.34	35.26	AVERAGE	100	360	VERTICAL
2 @	4823.830	44.07	-29.93	74.00	43.53	32.46	3.34	35.26	PEAK	100	360	VERTICAL

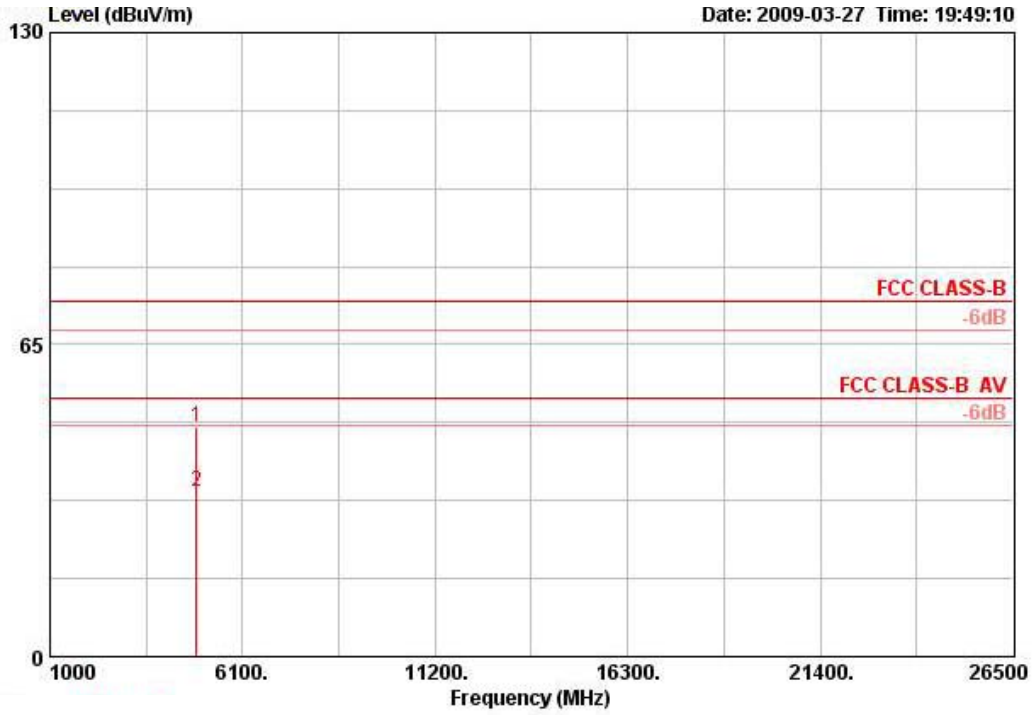
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11g CH 6 / Ant. 1 + Ant. 2

Horizontal



	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 @	4874.880	44.28	-29.72	74.00	43.51	32.56	3.36	35.15	PEAK	100	360	HORIZONTAL
2 @	4874.910	30.33	-23.67	54.00	29.56	32.56	3.36	35.15	AVERAGE	100	360	HORIZONTAL

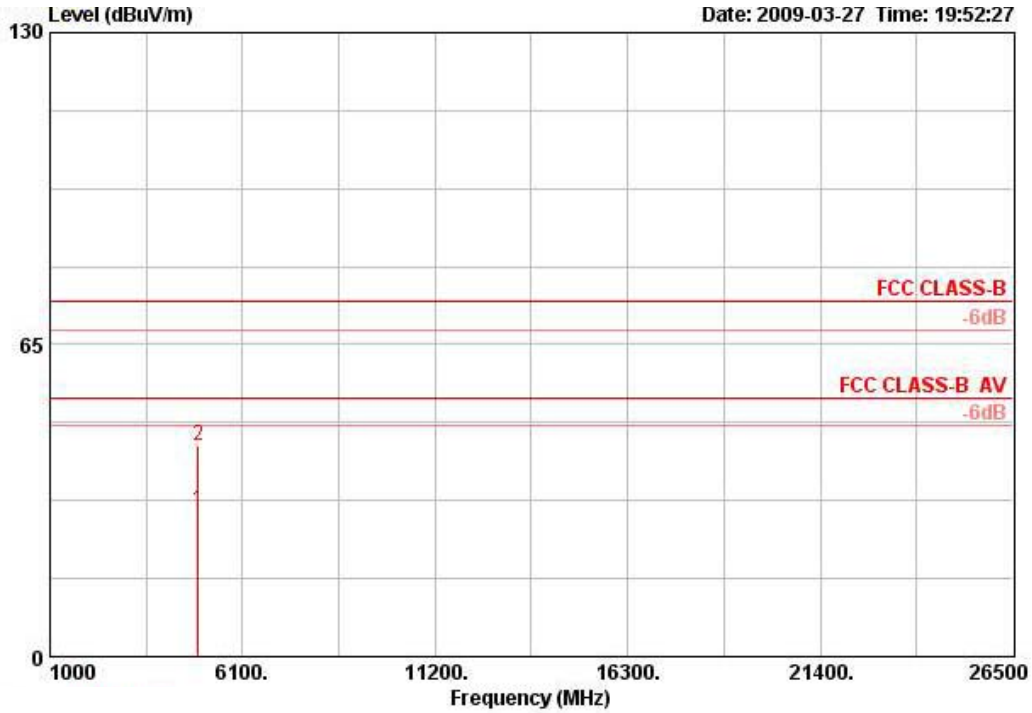
Vertical



	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 @	4872.340	47.68	-26.32	74.00	46.90	32.56	3.36	35.15	PEAK	100	348	VERTICAL
2 @	4872.970	34.50	-19.50	54.00	33.72	32.56	3.36	35.15	AVERAGE	100	348	VERTICAL

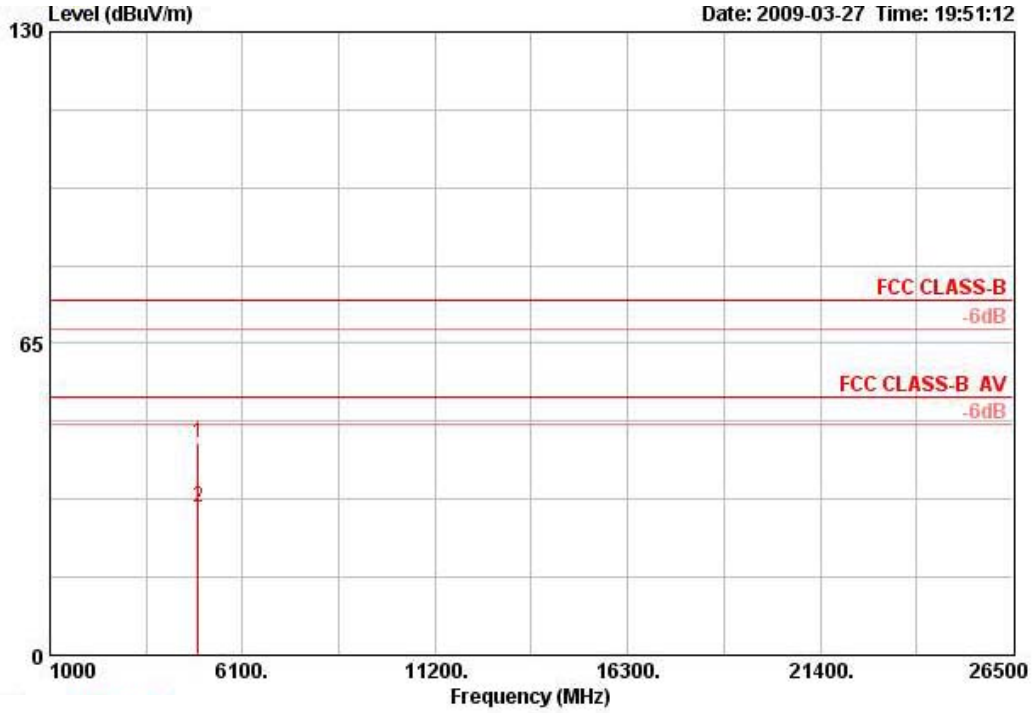
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11g CH 11 / Ant. 1 + Ant. 2

Horizontal



	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 @	4921.520	30.63	-23.37	54.00	29.62	32.66	3.38	35.03	AVERAGE	100	360	HORIZONTAL
2 @	4921.980	44.10	-29.90	74.00	43.09	32.66	3.38	35.03	PEAK	100	360	HORIZONTAL

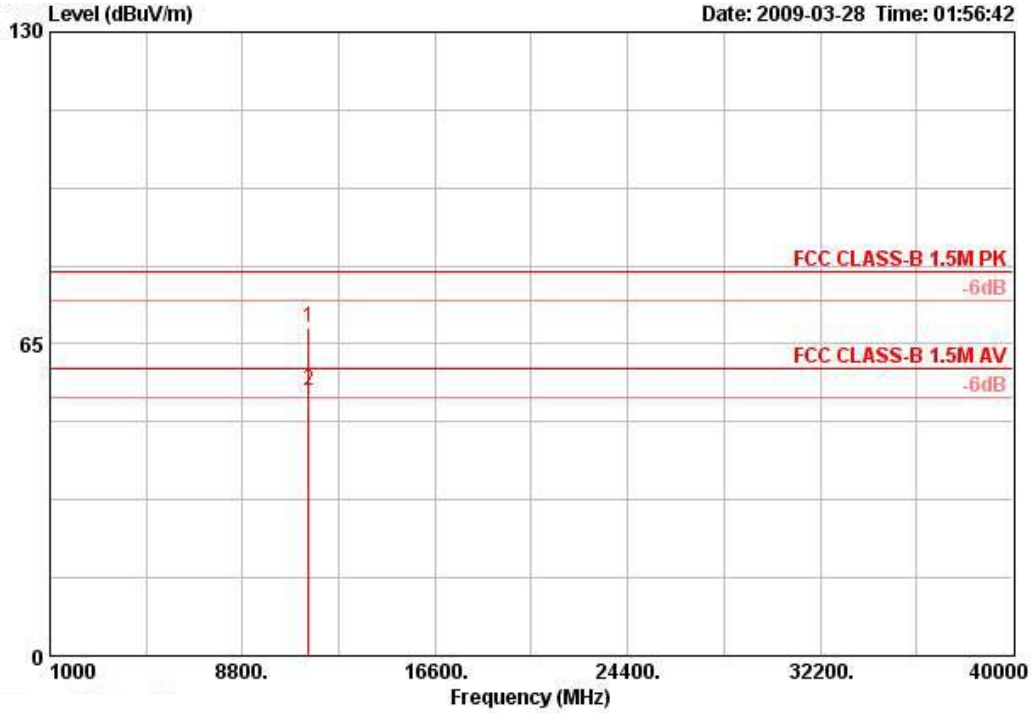
Vertical



	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 @	4923.890	44.20	-29.80	74.00	43.18	32.66	3.38	35.03	PEAK	100	0	VERTICAL
2 @	4924.070	30.95	-23.05	54.00	29.94	32.66	3.38	35.03	AVERAGE	100	0	VERTICAL

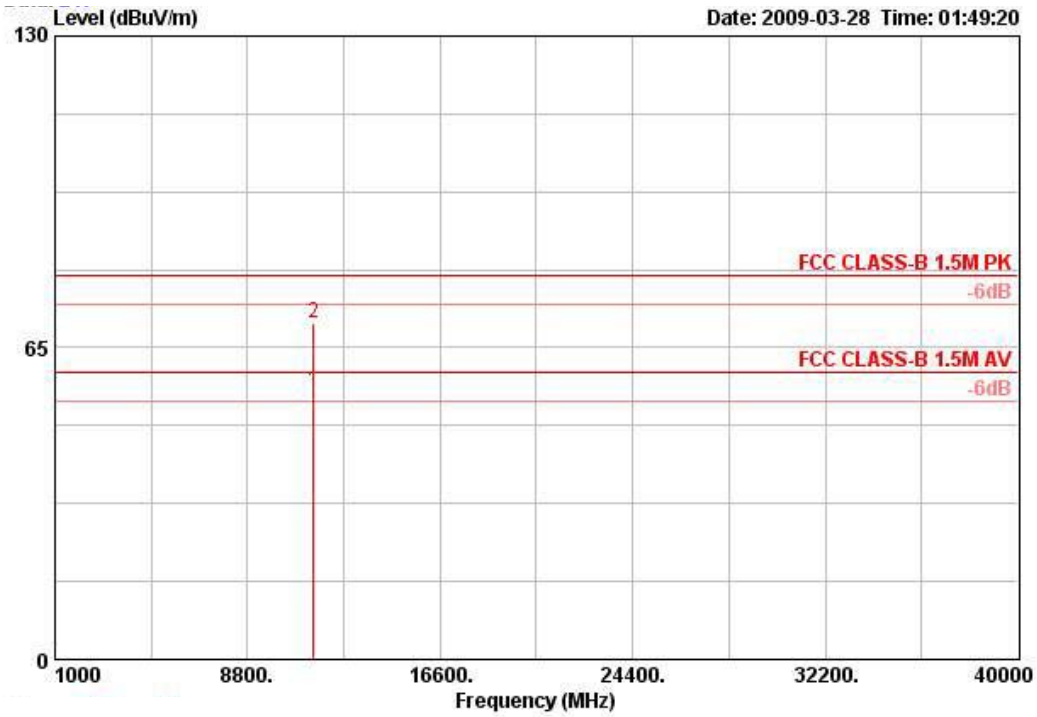
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11a CH 149 / Ant. 1 + Ant. 2

Horizontal



	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 @	11488.480	68.46	-11.54	80.00	58.90	38.50	5.81	34.75	PEAK	155	334	HORIZONTAL
2 @	11488.520	55.24	-4.76	60.00	45.68	38.50	5.81	34.75	AVERAGE	155	334	HORIZONTAL

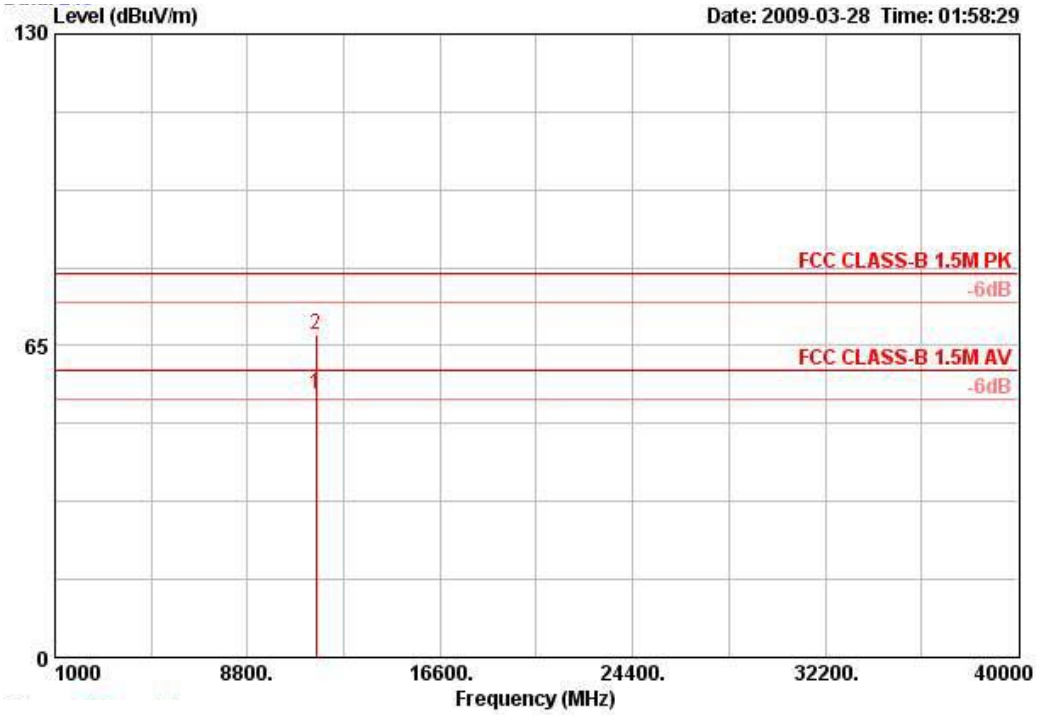
Vertical



	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 @	11488.840	55.92	-4.08	60.00	46.36	38.50	5.81	34.75	AVERAGE	100	272	VERTICAL
2 @	11489.000	70.03	-9.97	80.00	60.48	38.50	5.81	34.75	PEAK	100	272	VERTICAL

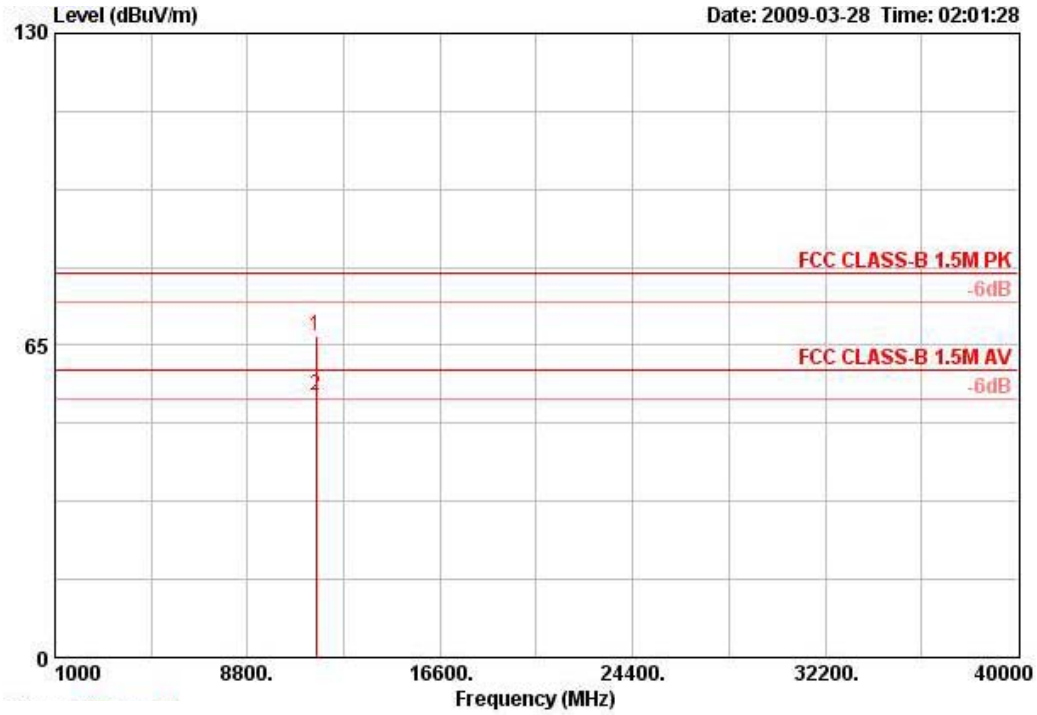
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11a CH 157 / Ant. 1 + Ant. 2

Horizontal



	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 @	11568.500	55.03	-4.97	60.00	45.51	38.51	5.80	34.80	AVERAGE	123	332	HORIZONTAL
2 @	11573.020	67.43	-12.57	80.00	57.95	38.51	5.79	34.82	PEAK	123	332	HORIZONTAL

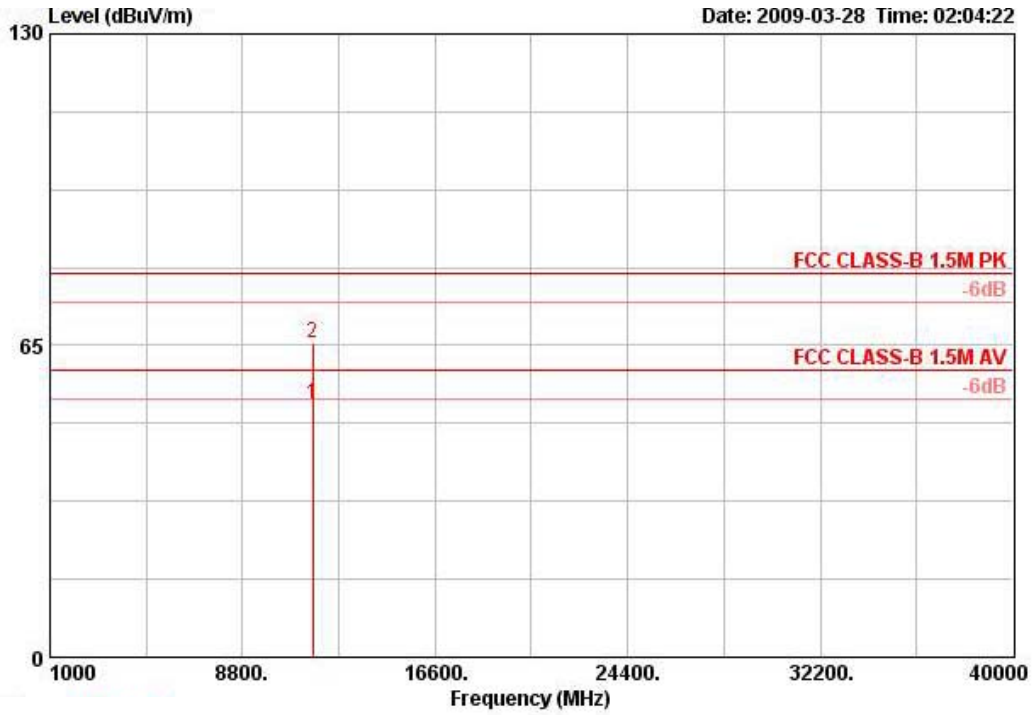
Vertical



	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 @	11564.560	66.98	-13.02	80.00	57.48	38.51	5.80	34.80	PEAK	100	272	VERTICAL
2 @	11569.040	54.46	-5.54	60.00	44.94	38.51	5.80	34.80	AVERAGE	100	272	VERTICAL

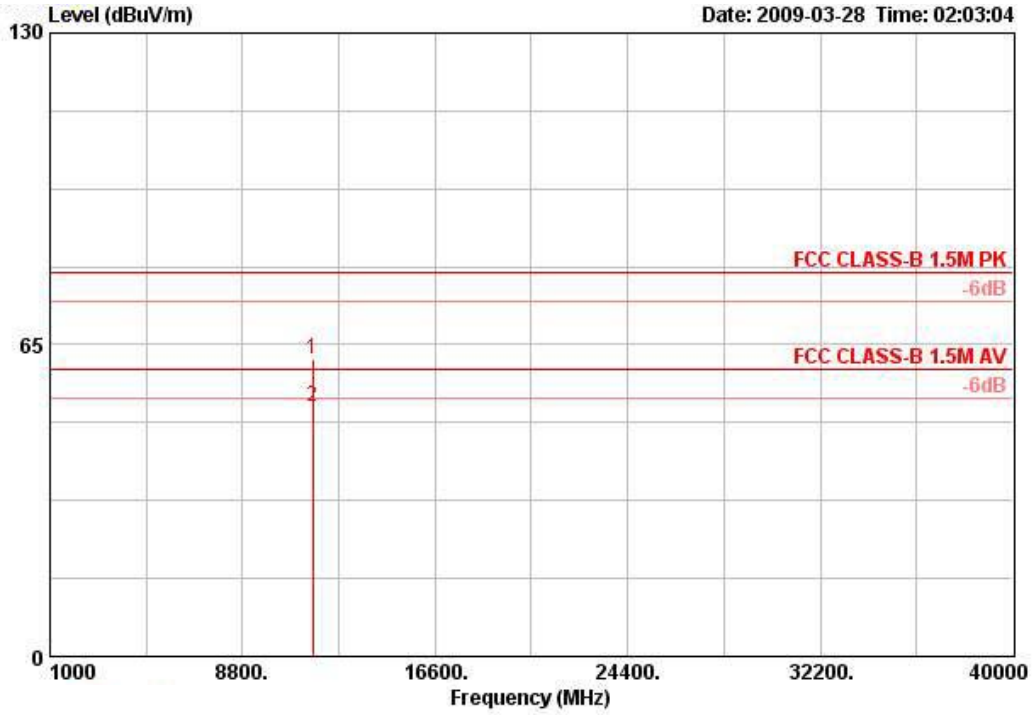
Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11a CH 165 / Ant. 1 + Ant. 2

Horizontal



	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 @	11648.480	52.86	-7.14	60.00	43.46	38.53	5.77	34.90	AVERAGE	119	333	HORIZONTAL
2 @	11653.320	65.53	-14.47	80.00	56.12	38.53	5.77	34.90	PEAK	119	333	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 @	11643.800	62.01	-17.99	80.00	52.58	38.53	5.78	34.87	PEAK	100	272	VERTICAL
2 @	11648.880	52.18	-7.82	60.00	42.77	38.53	5.77	34.90	AVERAGE	100	272	VERTICAL

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)	1MHz / 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

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	24.3℃	Humidity	56%
Test Engineer	Roy Huang	Configurations	Draft n MCS0 20MHz Ch 1, 6, 11 / Ant. 1 + Ant. 2
Test date	Mar. 27, 2009		

Channel 1

	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 @	2389.800	71.24	-2.76	74.00	40.96	27.87	2.42	0.00	PEAK	100	212	HORIZONTAL
2 @	2390.000	52.17	-1.83	54.00	21.89	27.87	2.42	0.00	AVERAGE	100	212	HORIZONTAL
3 @	2410.400	98.28			68.02	27.84	2.42	0.00	AVERAGE	100	212	HORIZONTAL
4 @	2410.800	109.66			79.41	27.84	2.42	0.00	PEAK	100	212	HORIZONTAL

Item 3, 4 are the fundamental frequency at 2412 MHz

Channel 6

	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 @	2389.000	72.90	-1.10	74.00	42.63	27.87	2.40	0.00	PEAK	100	353	HORIZONTAL
2 @	2390.000	48.74	-5.26	54.00	18.46	27.87	2.42	0.00	AVERAGE	100	353	HORIZONTAL
3 @	2431.400	115.85			85.61	27.81	2.43	0.00	PEAK	100	353	HORIZONTAL
4 @	2437.000	104.69			74.47	27.78	2.43	0.00	AVERAGE	100	353	HORIZONTAL
5 @	2483.500	45.27	-8.73	54.00	15.08	27.73	2.46	0.00	AVERAGE	100	353	HORIZONTAL
6 @	2483.900	64.48	-9.52	74.00	34.29	27.73	2.46	0.00	PEAK	100	353	HORIZONTAL

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

Channel 11

	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	2459.800	95.71			65.51	27.76	2.44	0.00	AVERAGE	100	272	HORIZONTAL
2 @	2462.400	108.40			78.20	27.76	2.44	0.00	PEAK	100	272	HORIZONTAL
3 @	2483.700	52.98	-1.02	54.00	22.80	27.73	2.46	0.00	AVERAGE	100	272	HORIZONTAL
4 @	2483.900	71.72	-2.28	74.00	41.54	27.73	2.46	0.00	PEAK	100	272	HORIZONTAL

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.

Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	Draft n MCS0 40MHz Ch 3, 6, 9 / Ant. 1 + Ant. 2
Test date	Mar. 27, 2009		

Channel 3

	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 @	2388.800	69.22	-4.78	74.00	38.96	27.87	2.40	0.00	PEAK	100	212	HORIZONTAL
2 @	2390.000	53.50	-0.50	54.00	23.22	27.87	2.42	0.00	AVERAGE	100	212	HORIZONTAL
3	2412.000	91.75			61.50	27.84	2.42	0.00	AVERAGE	100	212	HORIZONTAL
4 @	2412.800	104.17			73.91	27.84	2.42	0.00	PEAK	100	212	HORIZONTAL

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

Channel 6

	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 @	2388.000	70.22	-3.78	74.00	39.95	27.87	2.40	0.00	PEAK	100	211	HORIZONTAL
2 @	2388.400	52.44	-1.56	54.00	22.18	27.87	2.40	0.00	AVERAGE	100	211	HORIZONTAL
3 @	2420.600	93.00			62.76	27.81	2.43	0.00	AVERAGE	100	211	HORIZONTAL
4 @	2427.400	105.20			74.96	27.81	2.43	0.00	PEAK	100	211	HORIZONTAL
5 @	2483.500	47.03	-6.97	54.00	16.85	27.73	2.46	0.00	AVERAGE	100	211	HORIZONTAL
6 @	2484.700	62.30	-11.70	74.00	32.11	27.73	2.46	0.00	PEAK	100	211	HORIZONTAL

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

Channel 9

	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	2441.600	89.58			59.35	27.78	2.44	0.00	AVERAGE	100	273	HORIZONTAL
2 @	2442.400	103.13			72.90	27.78	2.44	0.00	PEAK	100	273	HORIZONTAL
3 @	2483.500	52.35	-1.65	54.00	22.17	27.73	2.46	0.00	AVERAGE	100	273	HORIZONTAL
4 @	2483.500	67.78	-6.22	74.00	37.59	27.73	2.46	0.00	PEAK	100	273	HORIZONTAL

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

Note:

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

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

Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11b CH 1, 6, 11 / Ant. 1 + Ant. 2
Test Date	Mar. 27, 2009		

Channel 1

	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 @	2386.400	52.41	-1.59	54.00	22.14	27.87	2.40	0.00	AVERAGE	100	5	HORIZONTAL
2 @	2386.800	61.51	-12.49	74.00	31.24	27.87	2.40	0.00	PEAK	100	5	HORIZONTAL
3 @	2411.000	108.69			78.44	27.84	2.42	0.00	AVERAGE	100	5	HORIZONTAL
4 @	2411.200	113.44			83.19	27.84	2.42	0.00	PEAK	100	5	HORIZONTAL

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

Channel 6

	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 @	2388.800	60.38	-13.62	74.00	30.12	27.87	2.40	0.00	PEAK	112	271	HORIZONTAL
2 @	2389.200	50.69	-3.31	54.00	20.42	27.87	2.40	0.00	AVERAGE	112	271	HORIZONTAL
3 @	2436.200	118.01			87.77	27.81	2.43	0.00	PEAK	112	271	HORIZONTAL
4 @	2437.800	113.52			83.30	27.78	2.43	0.00	AVERAGE	112	271	HORIZONTAL
5 @	2483.500	56.71	-17.29	74.00	26.52	27.73	2.46	0.00	PEAK	112	271	HORIZONTAL
6 @	2484.100	46.43	-7.57	54.00	16.25	27.73	2.46	0.00	AVERAGE	112	271	HORIZONTAL

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

Channel 11

	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 @	2461.200	112.53			82.33	27.76	2.44	0.00	PEAK	111	272	HORIZONTAL
2 @	2461.400	108.10			77.91	27.76	2.44	0.00	AVERAGE	111	272	HORIZONTAL
3 @	2487.700	52.67	-1.33	54.00	22.51	27.70	2.46	0.00	AVERAGE	111	272	HORIZONTAL
4 @	2488.100	60.63	-13.37	74.00	30.47	27.70	2.46	0.00	PEAK	111	272	HORIZONTAL

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.

Temperature	24.3°C	Humidity	56%
Test Engineer	Roy Huang	Configurations	802.11g CH 1, 6, 11 / Ant. 1 + Ant. 2
Test Date	Mar. 27, 2009		

Channel 1

	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 @	2389.200	70.01	-3.99	74.00	39.74	27.87	2.40	0.00	PEAK	100	211	HORIZONTAL
2 @	2390.000	53.11	-0.89	54.00	22.83	27.87	2.42	0.00	AVERAGE	100	211	HORIZONTAL
3 -	2413.400	110.17			79.91	27.84	2.42	0.00	PEAK	100	211	HORIZONTAL
4 @	2413.600	99.32			69.07	27.84	2.42	0.00	AVERAGE	100	211	HORIZONTAL

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

Channel 6

	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 @	2387.600	72.45	-1.55	74.00	42.18	27.87	2.40	0.00	PEAK	100	212	HORIZONTAL
2 @	2390.000	52.99	-1.01	54.00	22.71	27.87	2.42	0.00	AVERAGE	100	212	HORIZONTAL
3 @	2431.800	115.09			84.85	27.81	2.43	0.00	PEAK	100	212	HORIZONTAL
4 @	2433.200	103.32			73.08	27.81	2.43	0.00	AVERAGE	100	212	HORIZONTAL
5 @	2483.500	48.07	-5.93	54.00	17.89	27.73	2.46	0.00	AVERAGE	100	212	HORIZONTAL
6 @	2486.400	68.34	-5.66	74.00	38.16	27.73	2.46	0.00	PEAK	100	212	HORIZONTAL

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

Channel 11

	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	2459.800	111.18			80.98	27.76	2.44	0.00	PEAK	112	272	HORIZONTAL
2 @	2462.200	99.87			69.67	27.76	2.44	0.00	AVERAGE	112	272	HORIZONTAL
3 @	2483.500	52.87	-1.13	54.00	22.68	27.73	2.46	0.00	AVERAGE	112	272	HORIZONTAL
4 @	2483.900	69.64	-4.36	74.00	39.46	27.73	2.46	0.00	PEAK	112	272	HORIZONTAL

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

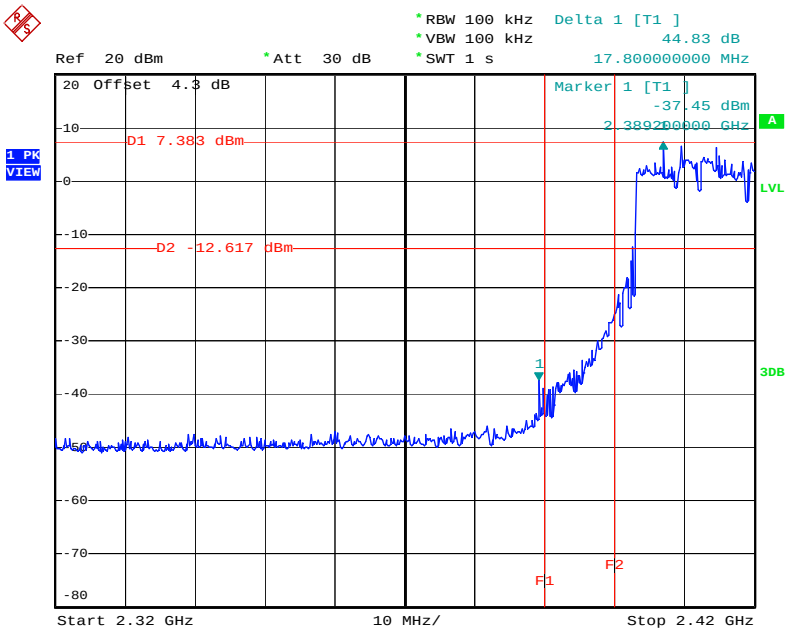
Note:

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

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

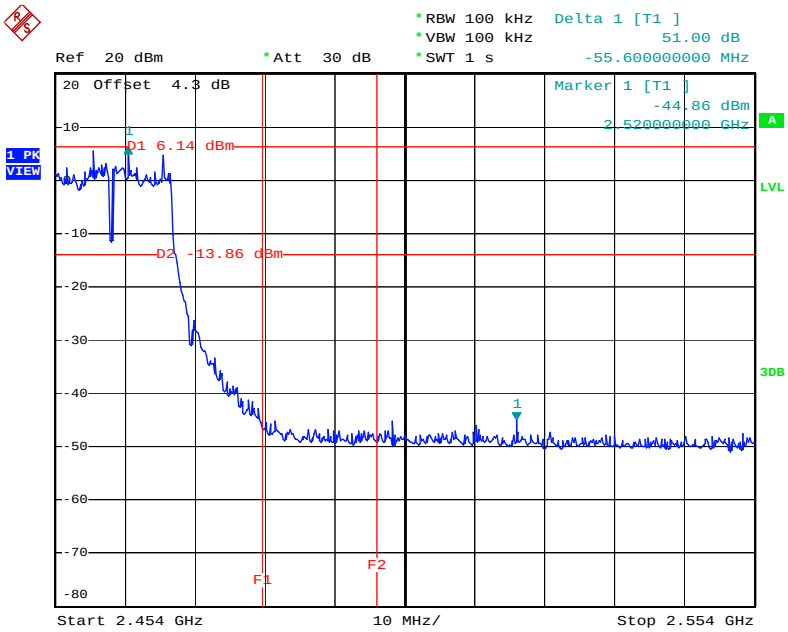
For Emission not in Restricted Band

Low Band Edge Plot on Configuration Draft n MCS0 20MHz Ant. 1 + Ant. 2 / 2412 MHz



Date: 28.MAR.2009 15:36:45

High Band Edge Plot on Configuration Draft n MCS0 20MHz Ant. 1 + Ant. 2 / 2462 MHz



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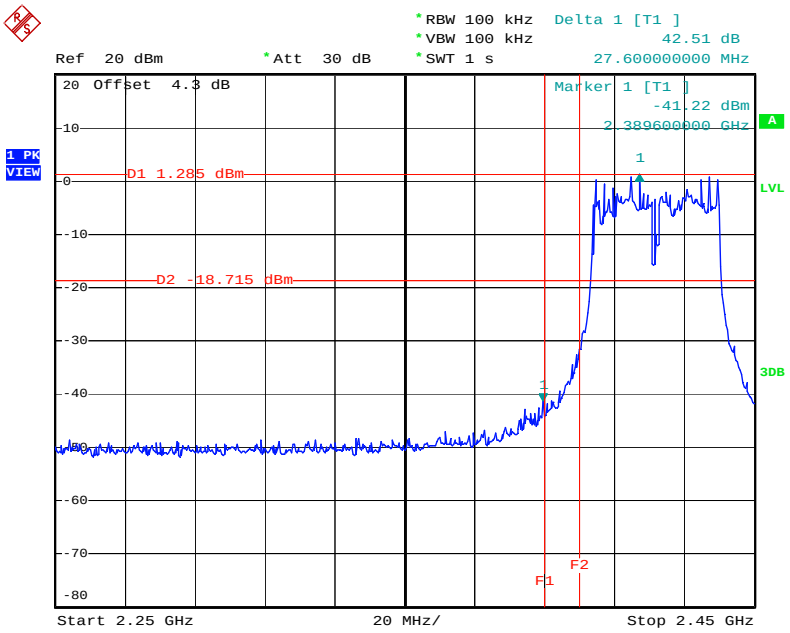
Low Band Edge Plot on Configuration Draft n MCS0 40MHz Ant. 1 + Ant. 2 / 2422 MHz



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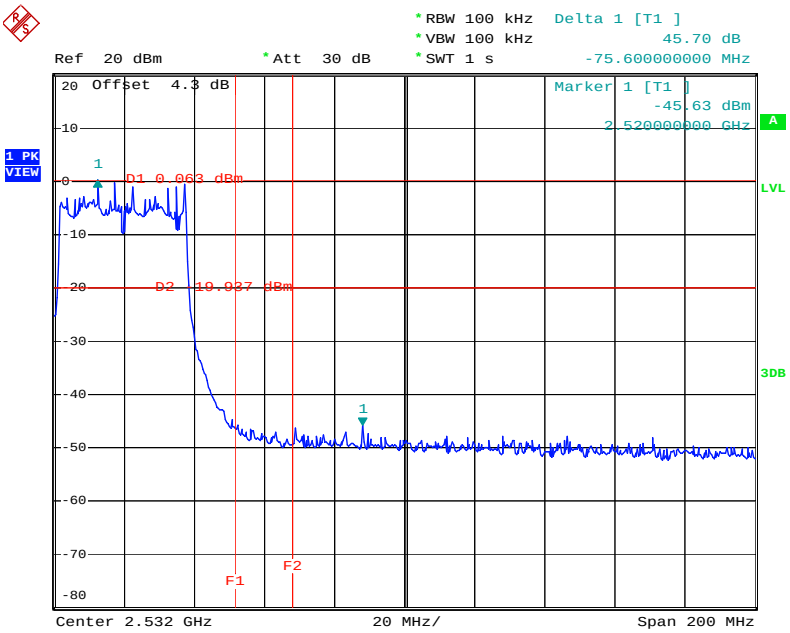
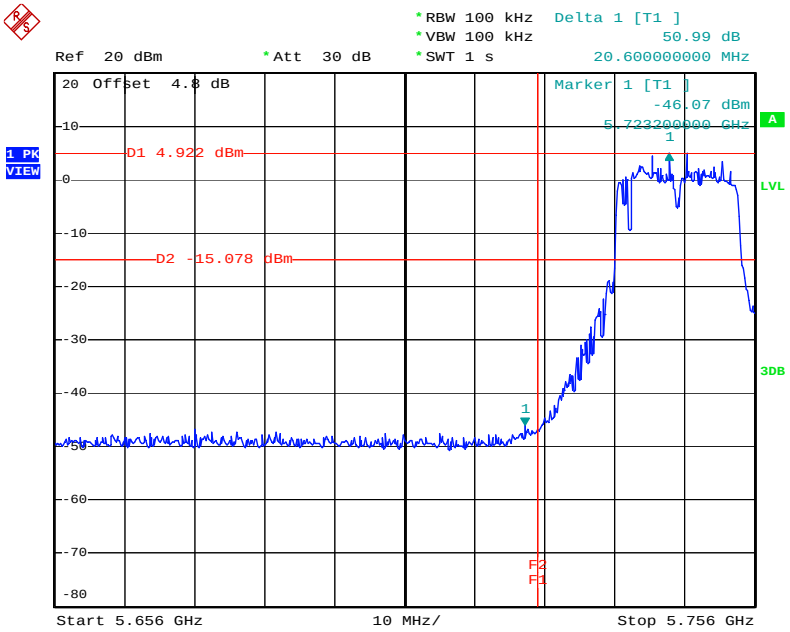
High Band Edge Plot on Configuration Draft n MCS0 40MHz Ant. 1 + Ant. 2 / 2452 MHz



Date: 24.APR.2009 16:43:54

Low Band Edge Plot on Configuration 11a Draft n MCS0 20MHz Ant. 1 + Ant. 2 / 5745 MHz



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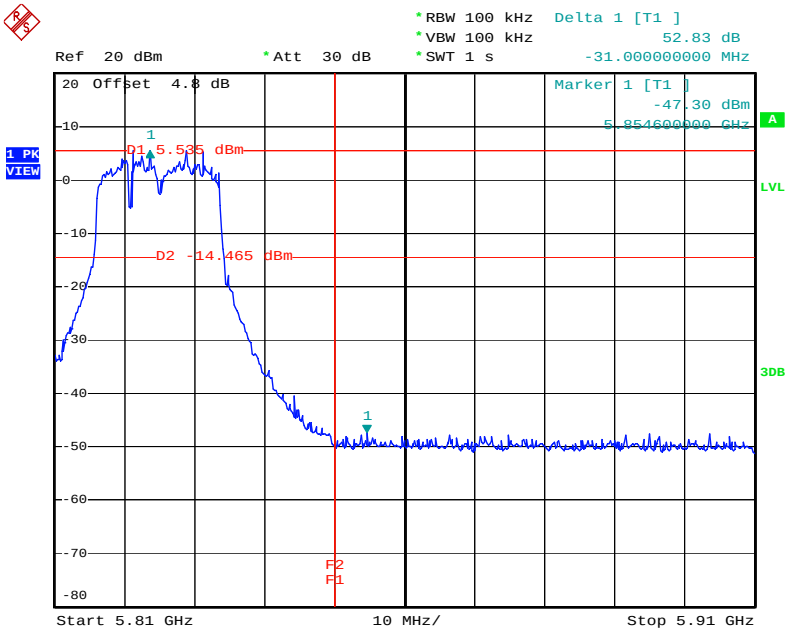
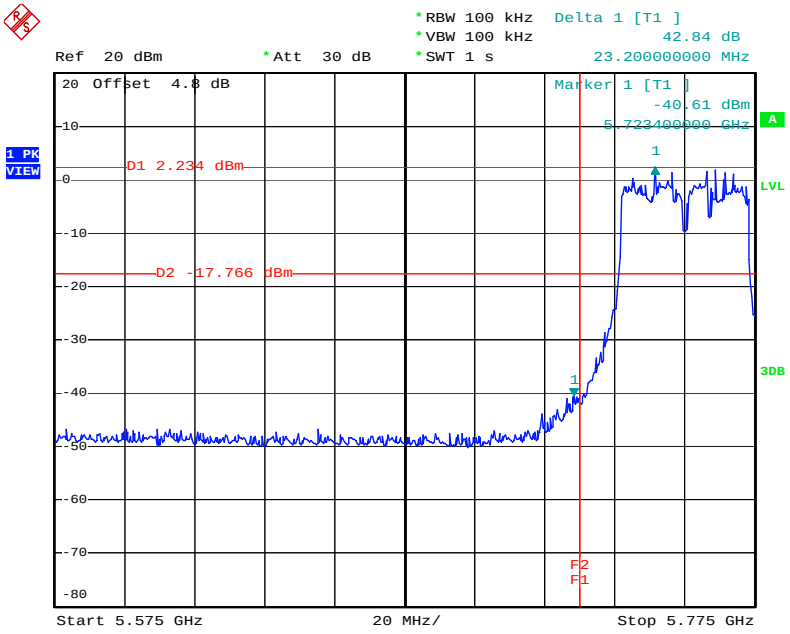
High Band Edge Plot on Configuration 11a Draft n MCS0 20MHz Ant. 1 + Ant. 2 / 5825 MHz



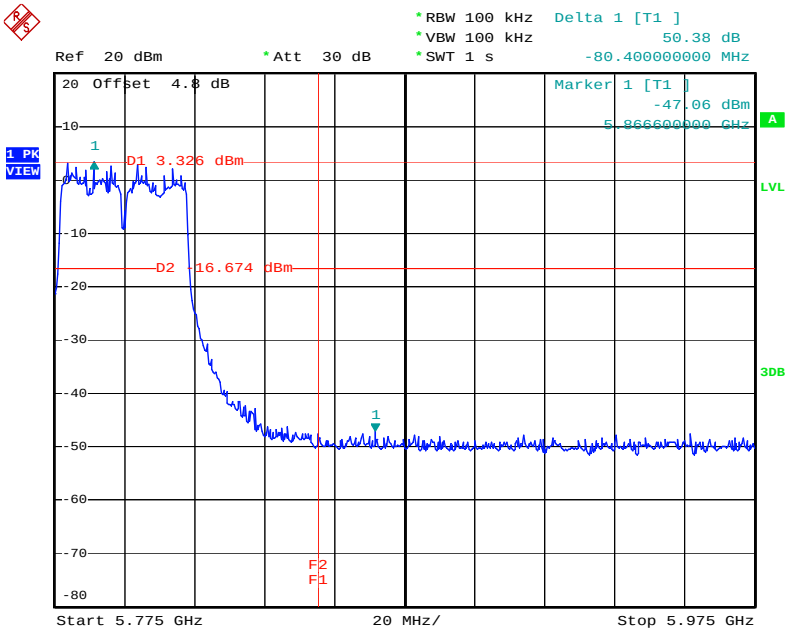
Date: 24.APR.2009 04:29:41

Low Band Edge Plot on Configuration 11a Draft n MCS8 40MHz Ant. 1 + Ant. 2 / 5755 MHz



Date: 24.APR.2009 04:24:24

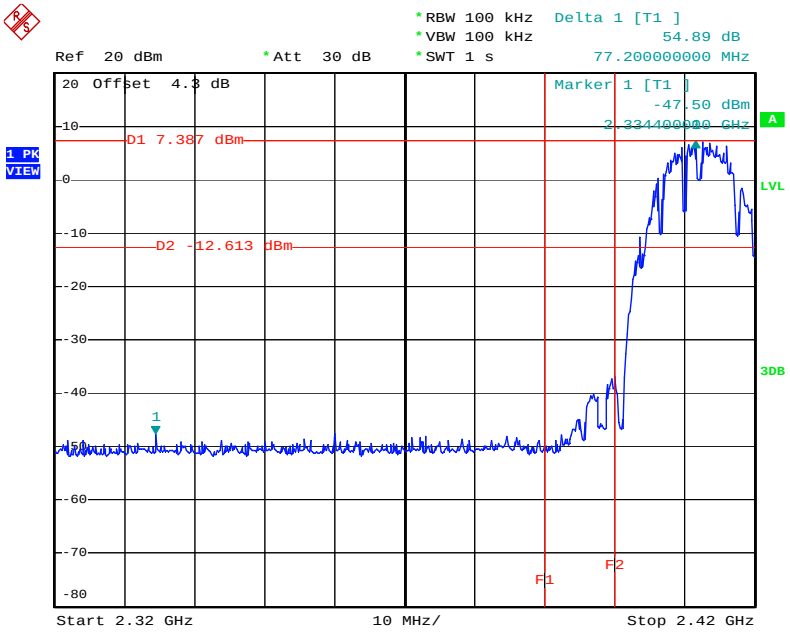
High Band Edge Plot on Configuration 11a Draft n MCS8 40MHz Ant. 1 + Ant. 2 / 5795 MHz



Date: 24.APR.2009 04:26:48

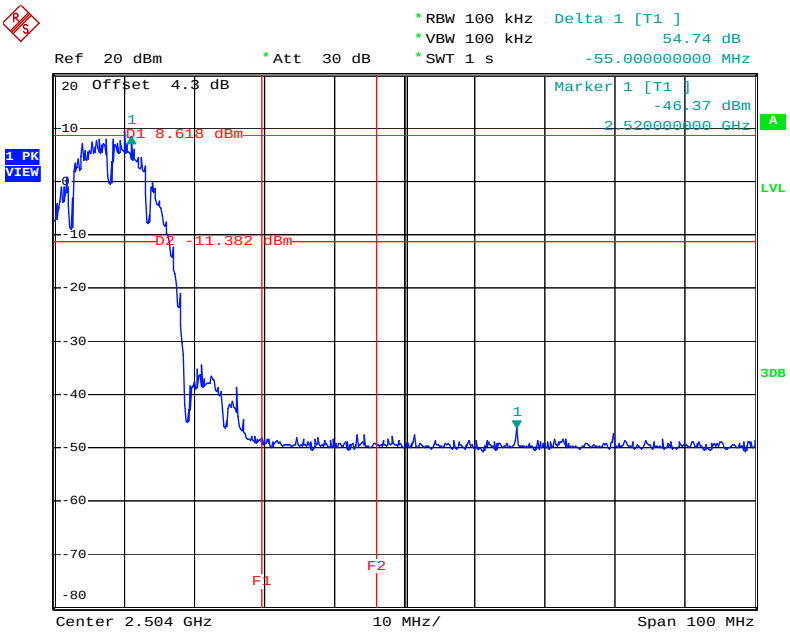
For Emission not in Restricted Band

Low Band Edge Plot on Configuration IEEE 802.11b Ant. 1 + Ant. 2 / 2412 MHz



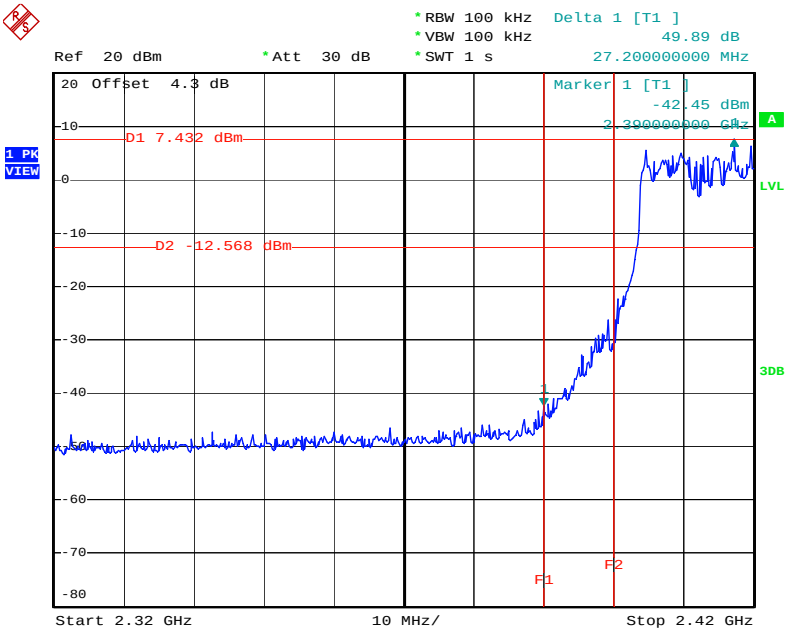
Date: 24.APR.2009 15:26:10

High Band Edge Plot on Configuration IEEE 802.11b Ant. 1 + Ant. 2 / 2462 MHz



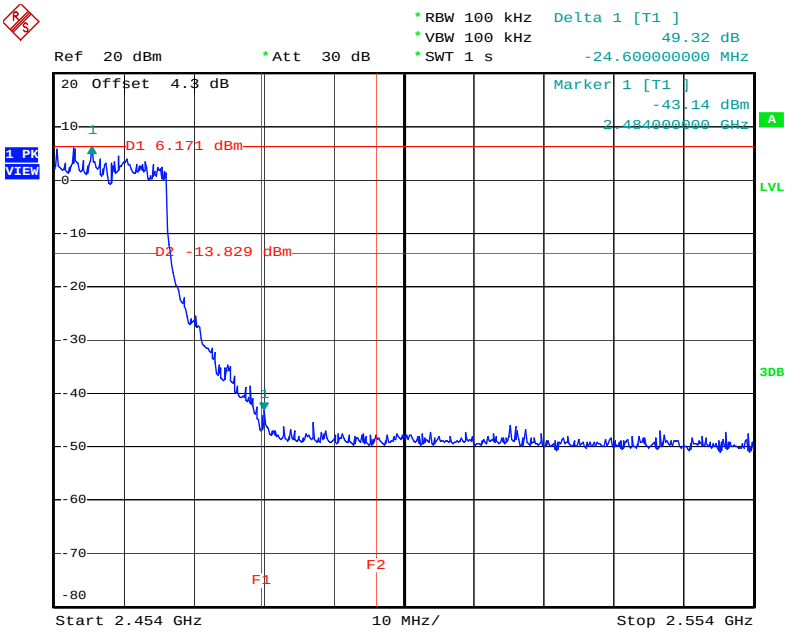
Date: 24.APR.2009 15:42:02

Low Band Edge Plot on Configuration IEEE 802.11g Ant. 1 + Ant. 2 / 2412 MHz



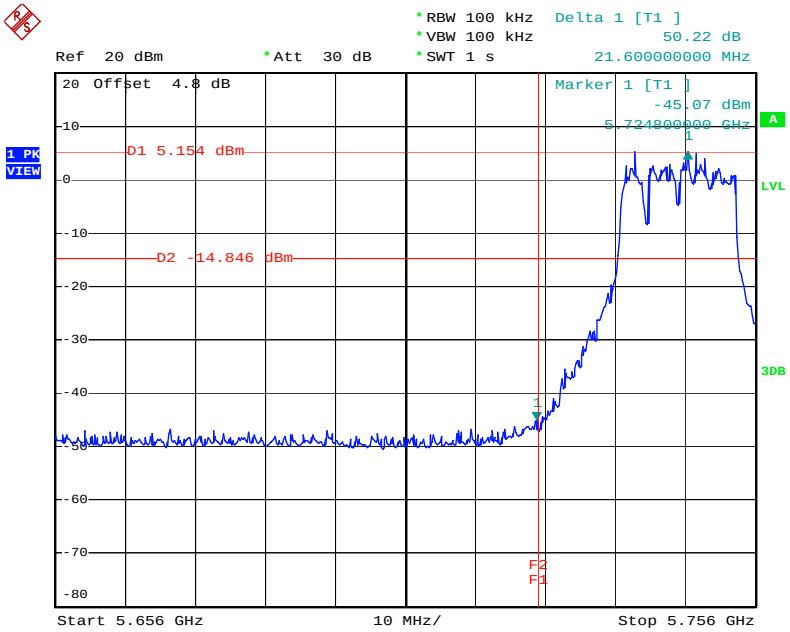
Date: 24.APR.2009 15:54:18

High Band Edge Plot on Configuration IEEE 802.11g Ant. 1 + Ant. 2 / 2462 MHz



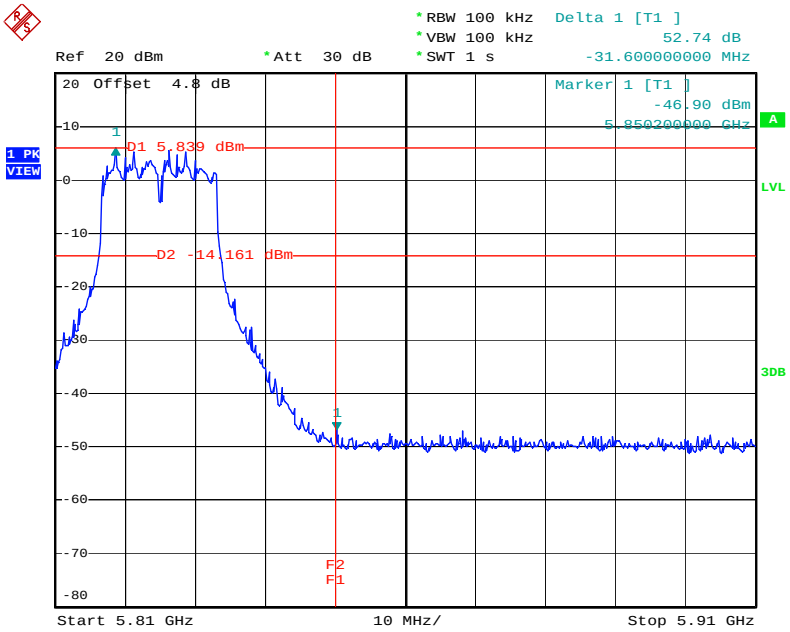
Date: 24.APR.2009 15:48:09

Low Band Edge Plot on Configuration IEEE 802.11a Ant. 1 + Ant. 2 / 5745 MHz



Date: 24.APR.2009 14:10:56

High Band Edge Plot on Configuration IEEE 802.11a Ant. 1 + Ant. 2 / 5825 MHz



Date: 24.APR.2009 14:13:11

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	Apr. 15, 2008	Conduction (CO04-HY)
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	Apr. 15, 2009	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 23, 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)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2009	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz –30MHz	Jun 13, 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. 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	Apr. 06, 2008*	Radiation (03CH03-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Apr. 06, 2009*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP30	100023	9 kHz - 30 GHz	Feb. 02, 2009	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. 29, 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	FSU26.5	100015	20Hz ~ 26.5GHz	Oct. 29, 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)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Dec. 14, 2008	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 25, 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 2nd 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. : L1190-070110

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

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