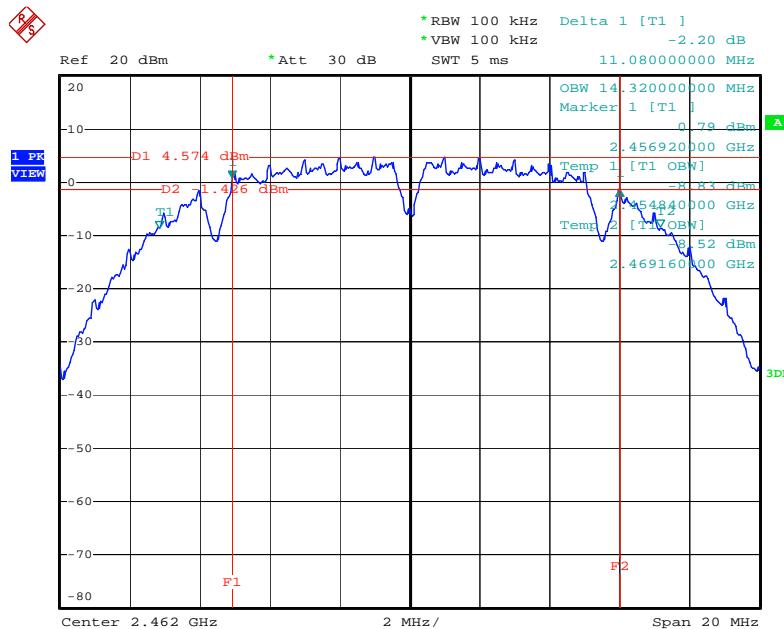
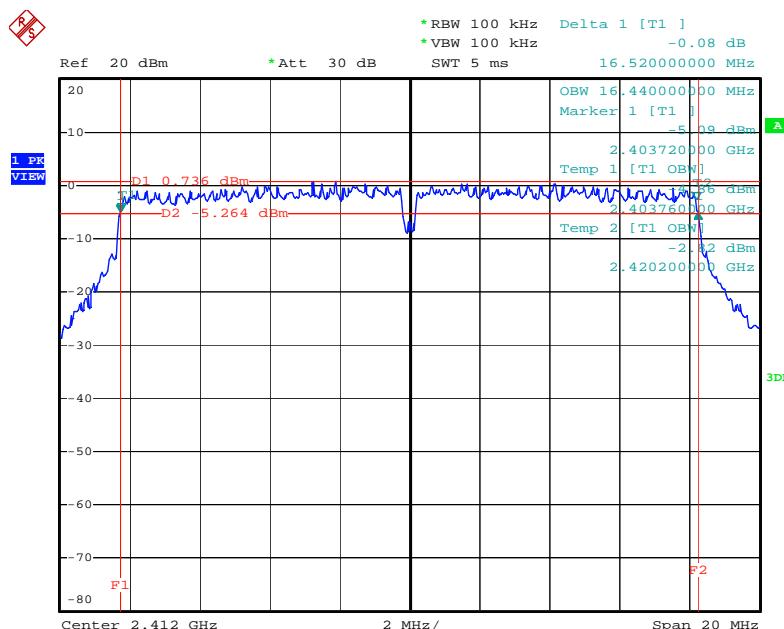


### 6 dB Bandwidth Plot on Configuration IEEE 802.11b / Connector 1 / 2462 MHz



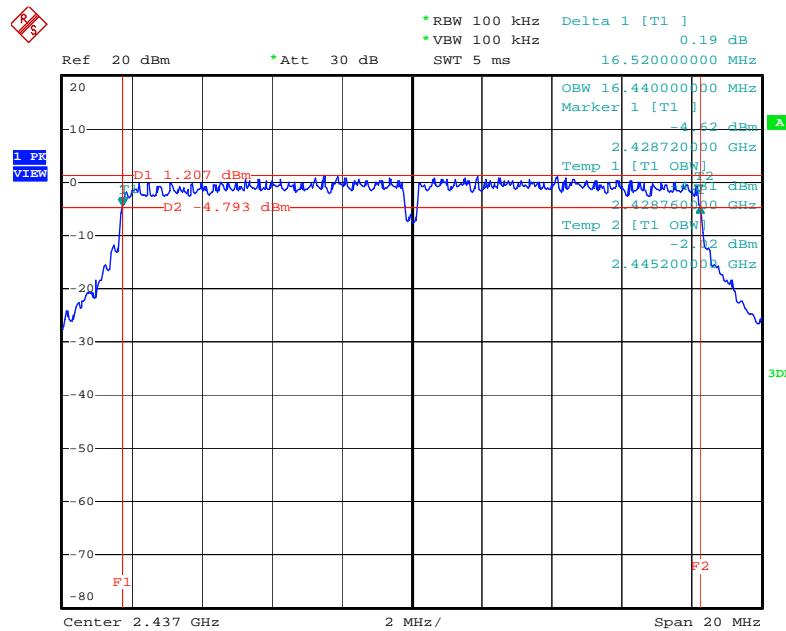
Date: 1.OCT.2009 20:50:57

### 6 dB Bandwidth Plot on Configuration IEEE 802.11g / Connector 1 / 2412 MHz



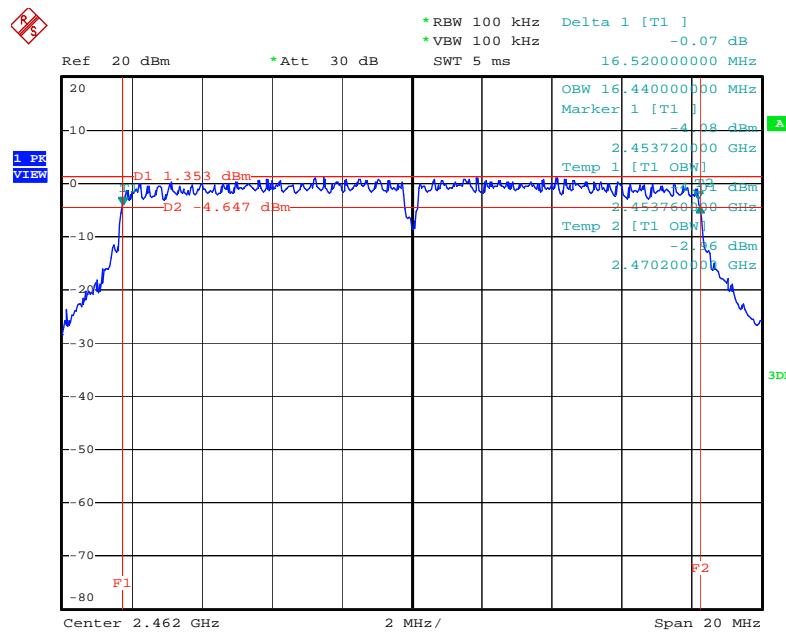
Date: 1.OCT.2009 20:56:41

### 6 dB Bandwidth Plot on Configuration IEEE 802.11g / Connector 1 / 2437 MHz



Date: 1.OCT.2009 20:58:58

### 6 dB Bandwidth Plot on Configuration IEEE 802.11g / Connector 1 / 2462 MHz



Date: 1.OCT.2009 21:01:10

## 4.5. Radiated Emissions Measurement

### 4.5.1. 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

### 4.5.2. Measuring Instruments and Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for peak

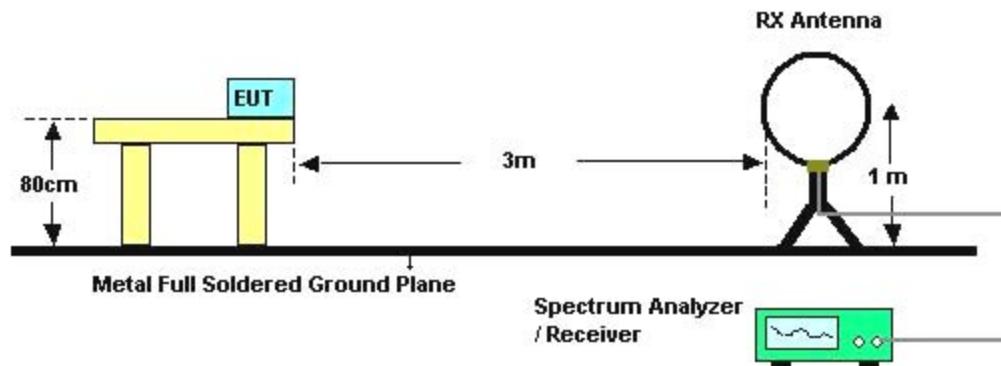
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

#### 4.5.3. Test Procedures

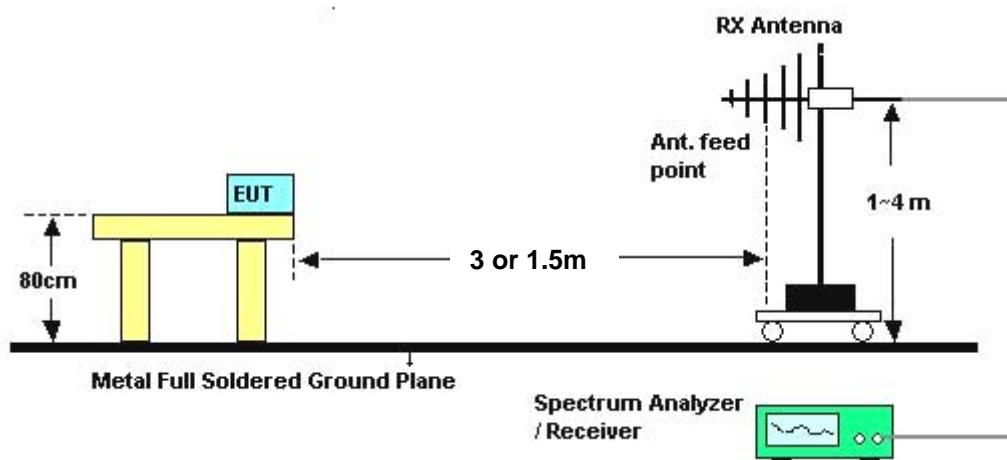
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

#### 4.5.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor =  $20 \log (\text{specific distanc [3m]} / \text{test distance [1.5m]})$  (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

#### 4.5.5. Test Deviation

There is no deviation with the original standard.

#### 4.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

#### 4.5.7. Results of Radiated Emissions (9kHz~30MHz)

Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	Normal Link

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	See Note

Note:

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

Distance extrapolation factor =  $40 \log (\text{specific distance} / \text{test distance})$  (dB);

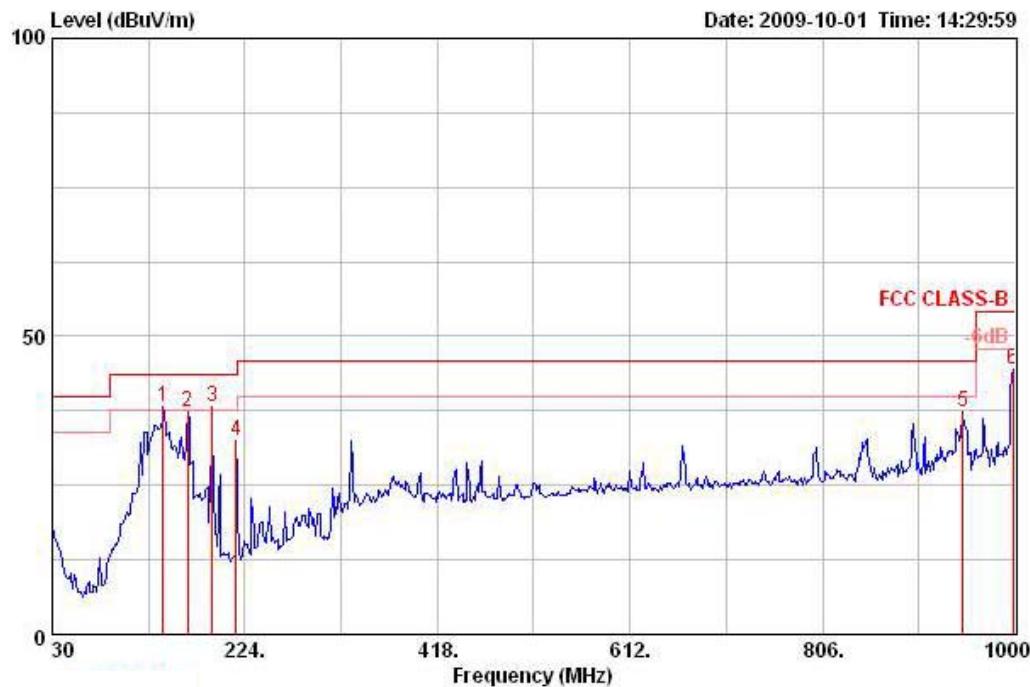
Limit line = specific limits (dBuV) + distance extrapolation factor.

#### 4.5.8. Results of Radiated Emissions (30MHz~1GHz)

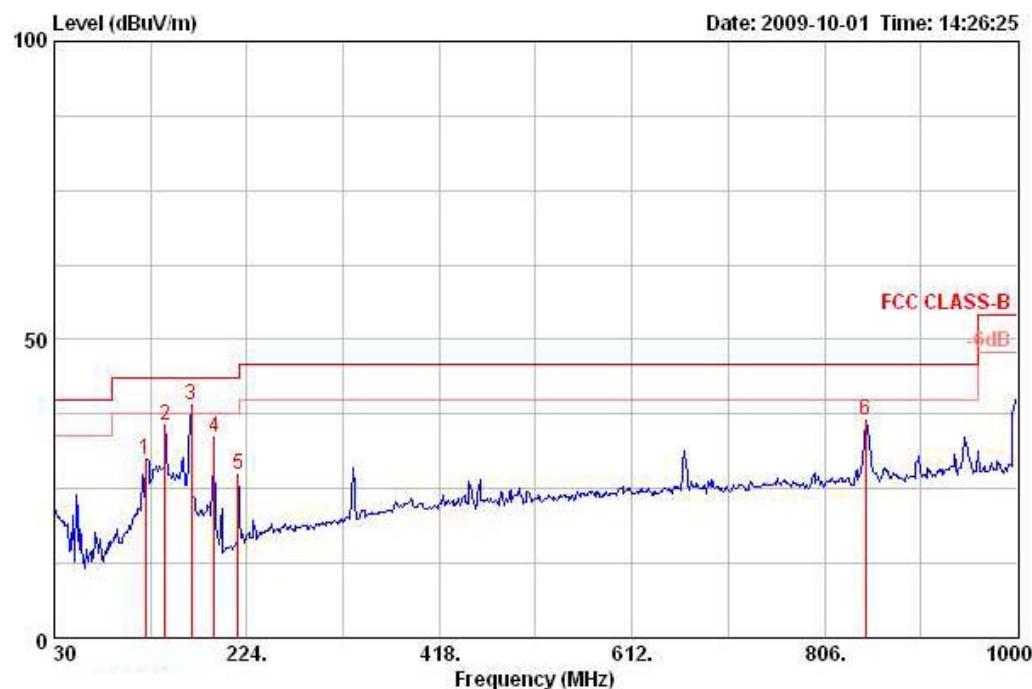
<For EUT 2 with PIFA antenna>

Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	Normal Link / Mode 2

*Horizontal*



Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	141.550	38.05	-5.45	43.50	51.78	12.26	27.39	1.41 Peak	HORIZONTAL	0	100
2	166.770	37.46	-6.04	43.50	50.65	12.54	27.27	1.53 Peak	HORIZONTAL	0	100
3 @	191.020	38.21	-5.29	43.50	52.81	10.89	27.14	1.65 Peak	HORIZONTAL	324	100
4	215.270	32.57	-10.93	43.50	47.68	10.19	27.07	1.76 Peak	HORIZONTAL	0	100
5	947.620	37.39	-8.61	46.00	40.11	20.89	27.21	3.60 Peak	HORIZONTAL	0	100
6	998.060	44.54	-9.46	54.00	46.58	21.28	27.01	3.70 Peak	HORIZONTAL	0	100

**Vertical**

Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Loss				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB				
1	122.150	30.04	-13.46	43.50	43.90	12.40	27.49	1.22 Peak	VERTICAL	0	400
2	141.550	35.61	-7.89	43.50	49.33	12.26	27.39	1.41 Peak	VERTICAL	0	400
3 @	167.740	38.94	-4.56	43.50	52.05	12.61	27.26	1.54 Peak	VERTICAL	92	100
4	191.020	33.65	-9.85	43.50	48.25	10.89	27.14	1.65 Peak	VERTICAL	0	400
5	215.270	27.32	-16.18	43.50	42.44	10.19	27.07	1.76 Peak	VERTICAL	0	400
6	847.710	36.34	-9.66	46.00	40.32	20.13	27.51	3.40 Peak	VERTICAL	0	400

**Note:**

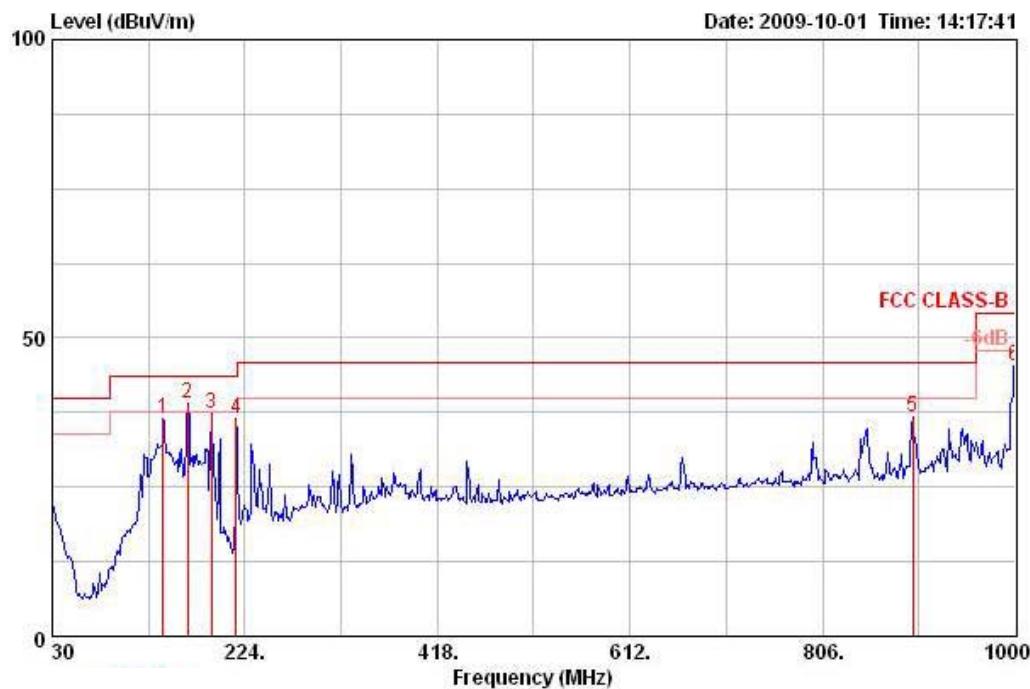
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

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

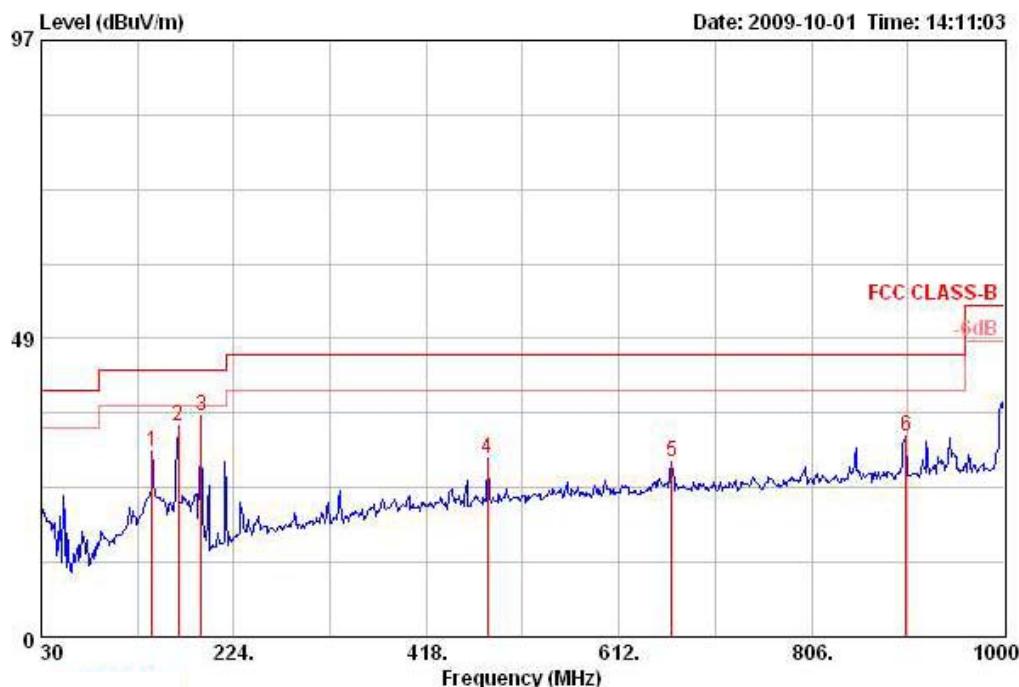
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

&lt;For EUT 2 with Dipole antenna&gt;

Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	Normal Link / Mode 4

**Horizontal**

Freq	Level	Over Limit	Limit	Read		Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB		
1	141.550	36.59	-6.91	43.50	50.32	12.26	27.39	1.41	Peak	HORIZONTAL	0	100
2	166.770	39.05	-4.45	43.50	52.24	12.54	27.27	1.53	Peak	HORIZONTAL	157	100
3	190.050	37.44	-6.06	43.50	51.85	11.10	27.15	1.65	Peak	HORIZONTAL	0	100
4	215.270	36.55	-6.95	43.50	51.66	10.19	27.07	1.76	Peak	HORIZONTAL	0	100
5	897.180	36.88	-9.12	46.00	40.19	20.51	27.41	3.59	Peak	HORIZONTAL	0	100
6	1000.000	45.19	-8.81	54.00	47.20	21.29	27.00	3.70	Peak	HORIZONTAL	0	100

**Vertical**

Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table Pos	Ant Pos
		Limit	Line	Level	Factor	Factor	Loss		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm
1	141.550	30.01	-13.49	43.50	43.74	12.26	27.39	1.41 Peak	VERTICAL 0 400
2	167.740	34.40	-9.10	43.50	47.51	12.61	27.26	1.54 Peak	VERTICAL 0 400
3	191.020	35.82	-7.68	43.50	50.42	10.89	27.14	1.65 Peak	VERTICAL 223 100
4	479.110	29.10	-16.90	46.00	37.14	17.30	27.99	2.66 Peak	VERTICAL 0 400
5	665.350	28.49	-17.51	46.00	34.10	18.98	28.03	3.44 Peak	VERTICAL 0 400
6	901.060	32.63	-13.37	46.00	35.89	20.54	27.39	3.60 Peak	VERTICAL 0 400

**Note:**

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

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

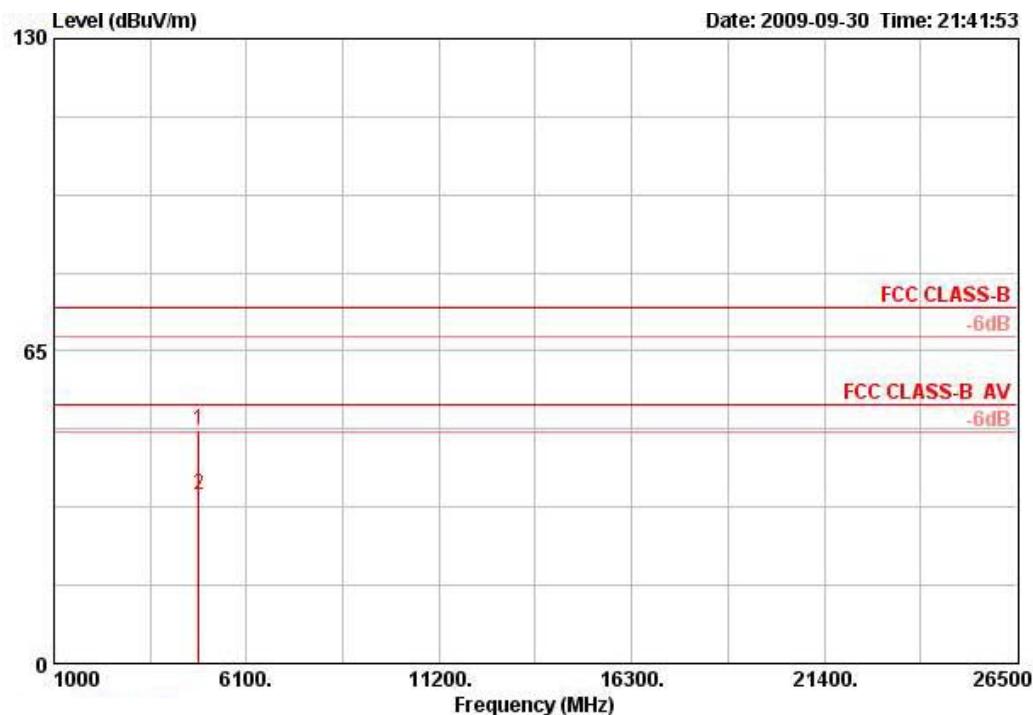
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

#### 4.5.9. Results for Radiated Emissions (1GHz~10<sup>th</sup> Harmonic)

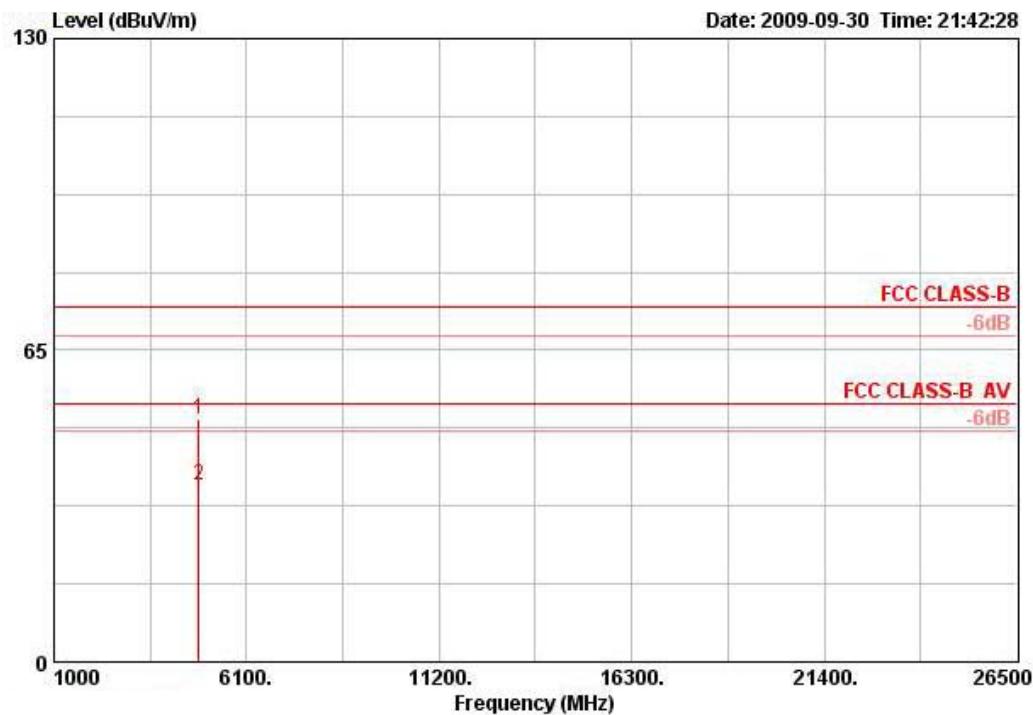
<For EUT 2 with PIFA antenna>

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch 1 / Connector 1 / Mode 2

*Horizontal*

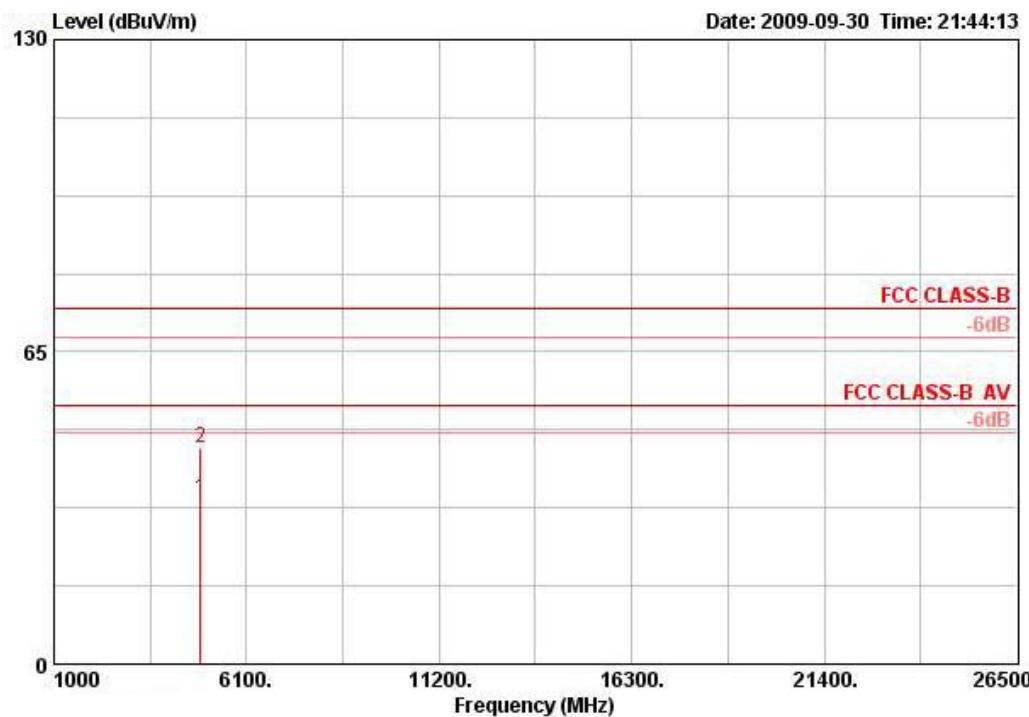


Freq	Level	Over Limit	Read Antenna Line	Cable Preamp			Ant Pos	Table Pos	Table Pol/Phase
				Limit	Factor	Loss Factor			
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	4823.997	48.59	-25.41	74.00	48.40	32.46	3.00	35.26	PEAK 100 40 HORIZONTAL
2	4824.014	35.19	-18.81	54.00	34.99	32.46	3.00	35.26	AVERAGE 100 40 HORIZONTAL

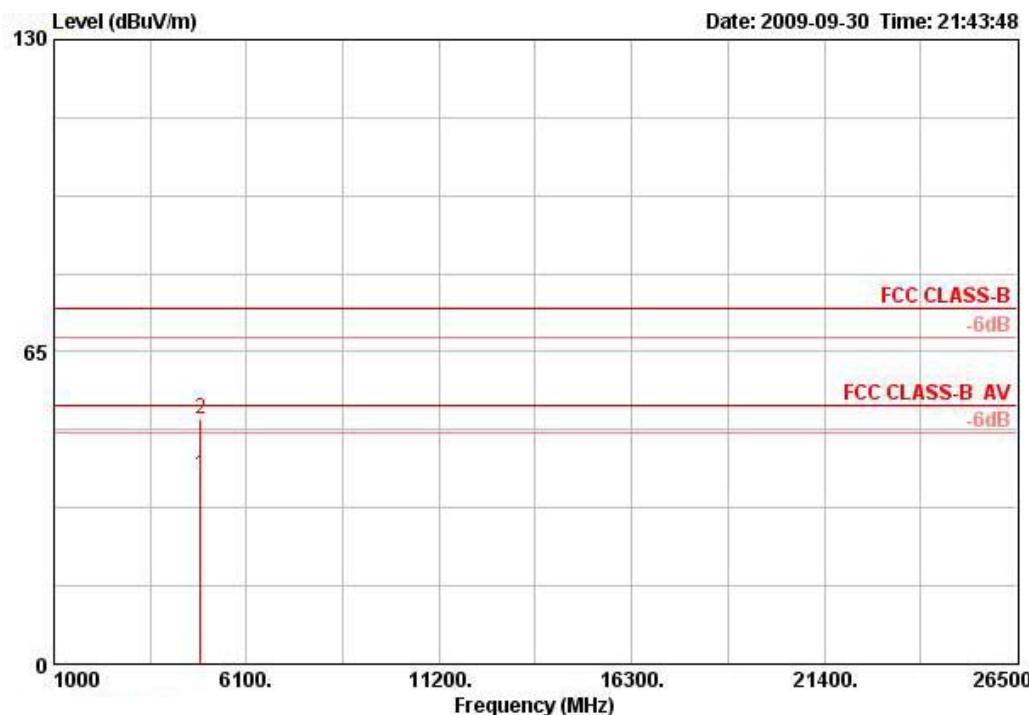
*Vertical*


Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Ant Pos	Table Pos	Table Pol/Phase	
				Level	Factor	Loss	Factor				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1	4823.983	50.62	-23.38	74.00	50.42	32.46	3.00	35.26	PEAK	100	58 VERTICAL
2	4824.002	36.95	-17.05	54.00	36.75	32.46	3.00	35.26	AVERAGE	100	58 VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch 6 / Connector 1 / Mode 2

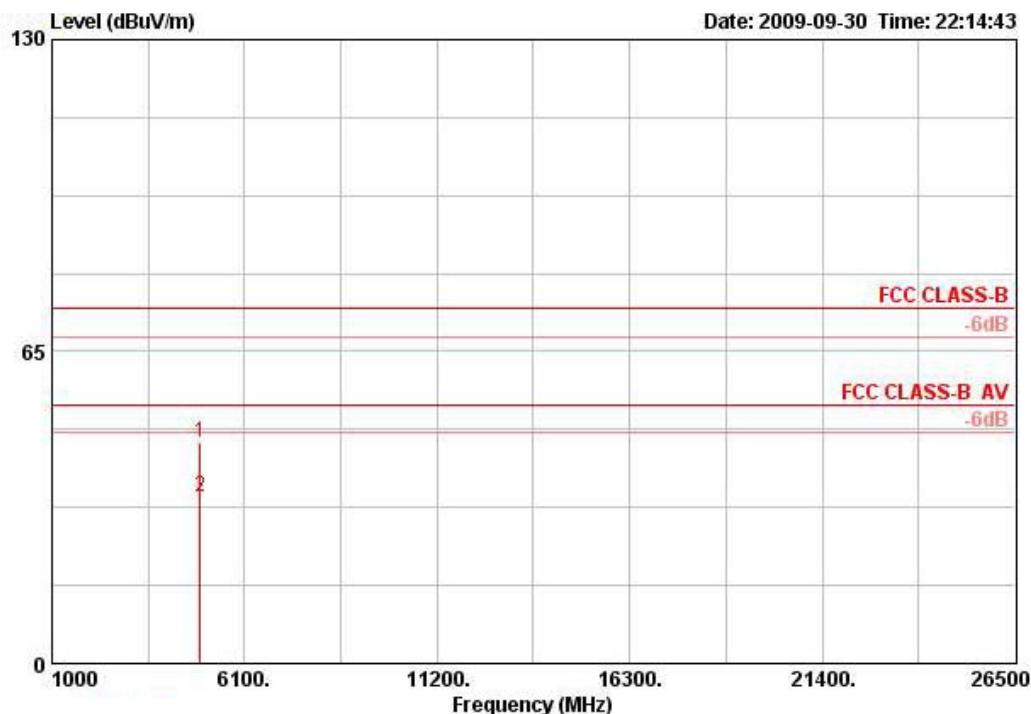
**Horizontal**


Freq	Level	Over Limit	Limit Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4873.992	34.32	-19.68	54.00	33.89	32.56	3.01	35.15	AVERAGE	100	206 HORIZONTAL
2	4874.006	45.11	-28.89	74.00	44.68	32.56	3.01	35.15	PEAK	100	206 HORIZONTAL

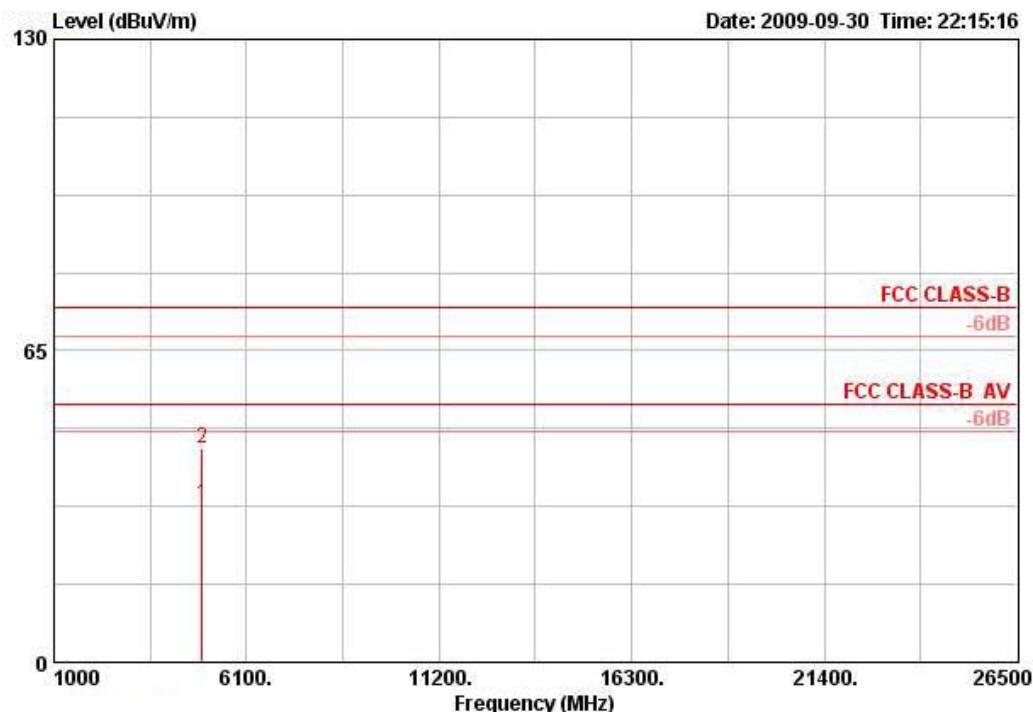
*Vertical*


Freq	Level	Over Limit	Line	ReadAntenna		Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Table Pol/Phase
				dB	dBuV/m						
1	4873.976	39.20	-14.80	54.00	38.78	32.56	3.01	35.15 AVERAGE	100	142	VERTICAL
2	4873.980	50.92	-23.08	74.00	50.50	32.56	3.01	35.15 PEAK	100	142	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch11 / Connector 1 / Mode 2

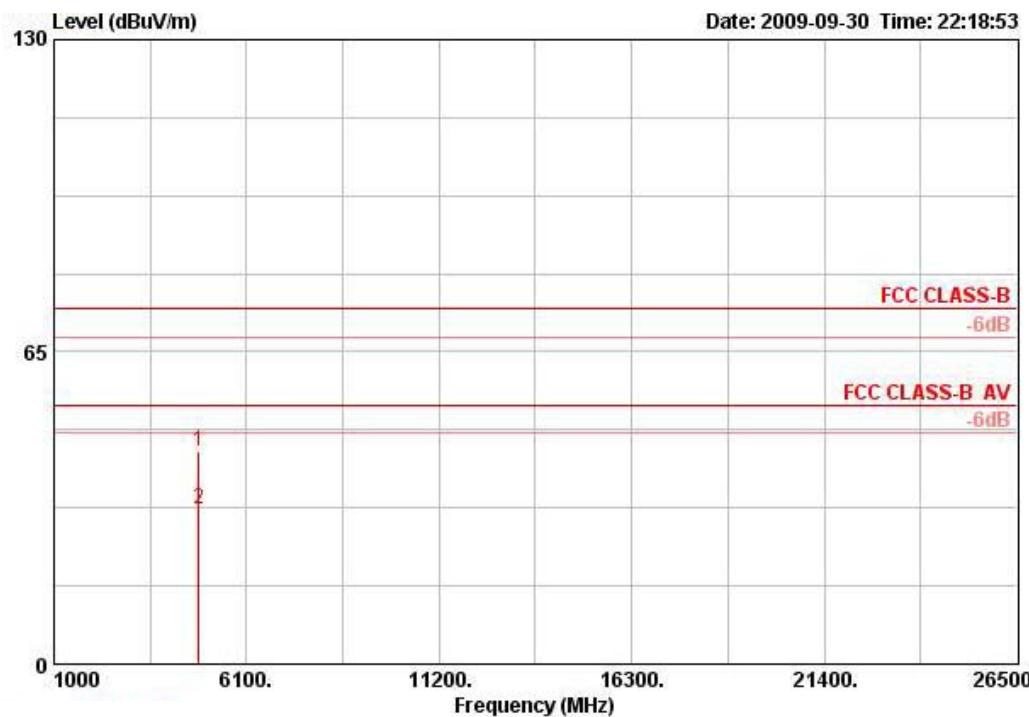
**Horizontal**


Freq	Level	Over Limit	Limit Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				Level	Factor	dBuV	dB/m				
1	4924.002	46.18	-27.82	74.00	45.53	32.66	3.02	35.03 PEAK	100	192	HORIZONTAL
2	4924.021	34.72	-19.28	54.00	34.07	32.66	3.02	35.03 AVERAGE	100	192	HORIZONTAL

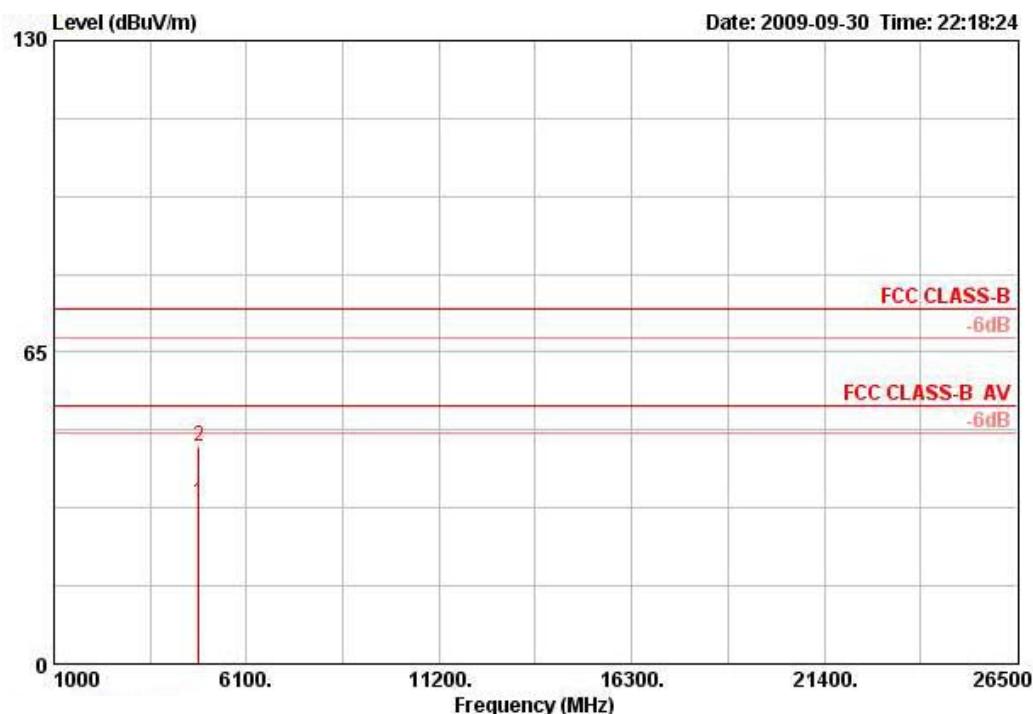
*Vertical*


Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Ant Pos	Table Pos	Table Pol/Phase
				Level Factor	dBuV	dB/m	dB			
1	4923.986	33.09	-20.91	54.00	32.44	32.66	3.02	35.03	AVERAGE	100 300 VERTICAL
2	4923.996	44.53	-29.47	74.00	43.88	32.66	3.02	35.03	PEAK	100 300 VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 3 / Connector 1 / Mode 2

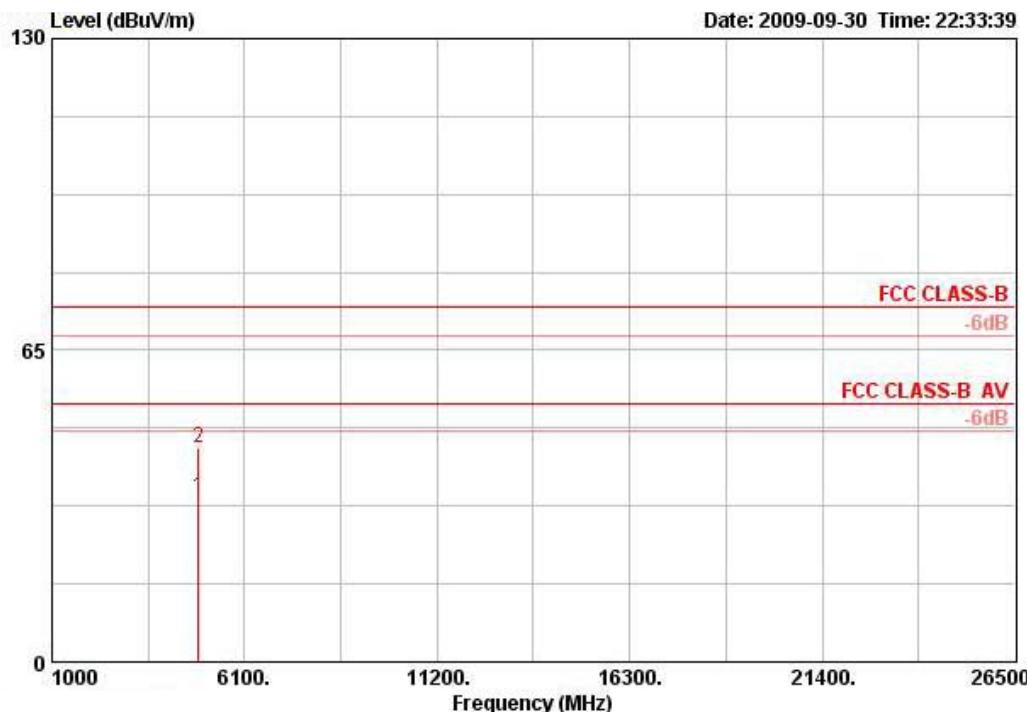
**Horizontal**


Freq	Level	Over Limit	Line	Read	Antenna	Cable	Preamp	Table	
								Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg
1	4843.985	44.33	-29.67	74.00	44.04	32.49	3.01	35.20	PEAK
2	4844.013	32.39	-21.61	54.00	32.10	32.49	3.01	35.20	AVERAGE

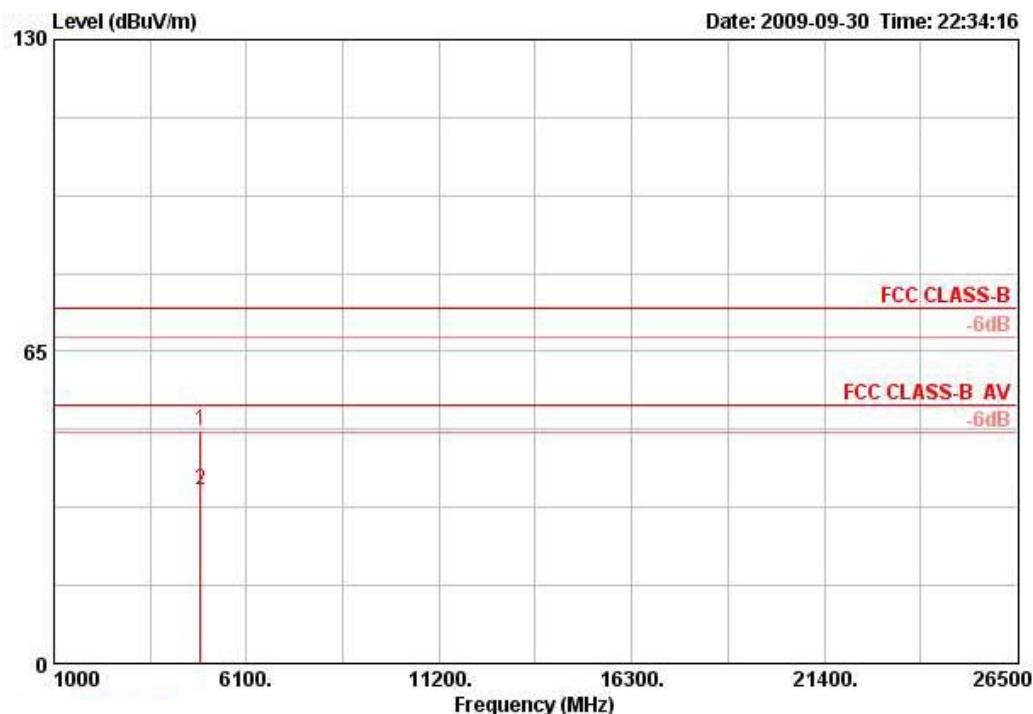
*Vertical*

Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Pol/Phase
				Level	Factor	dBuV	dB/m				
1	4843.985	33.69	-20.31	54.00	33.40	32.49	3.01	35.20	AVERAGE	100	157 VERTICAL
2	4844.010	45.20	-28.80	74.00	44.90	32.49	3.01	35.20	PEAK	100	157 VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 6 / Connector 1 / Mode 2

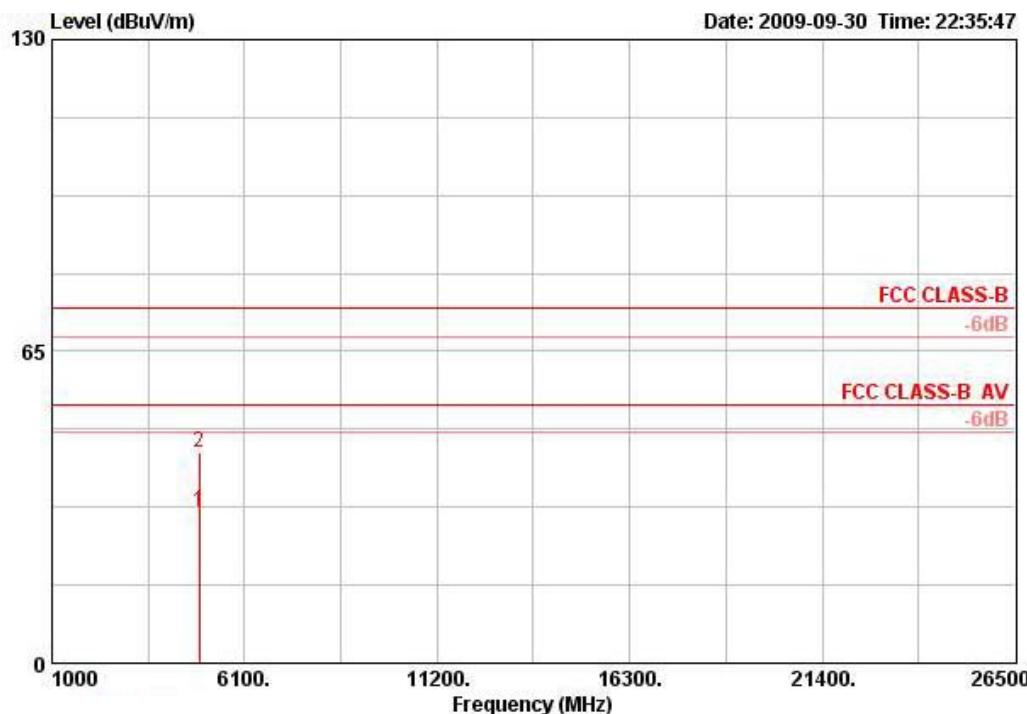
**Horizontal**


Freq	Level	Over Limit	Limit Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	4873.987	34.51	-19.49	54.00	34.09	32.56	3.01	35.15	AVERAGE	100	111 HORIZONTAL
2	4874.013	44.67	-29.33	74.00	44.25	32.56	3.01	35.15	PEAK	100	111 HORIZONTAL

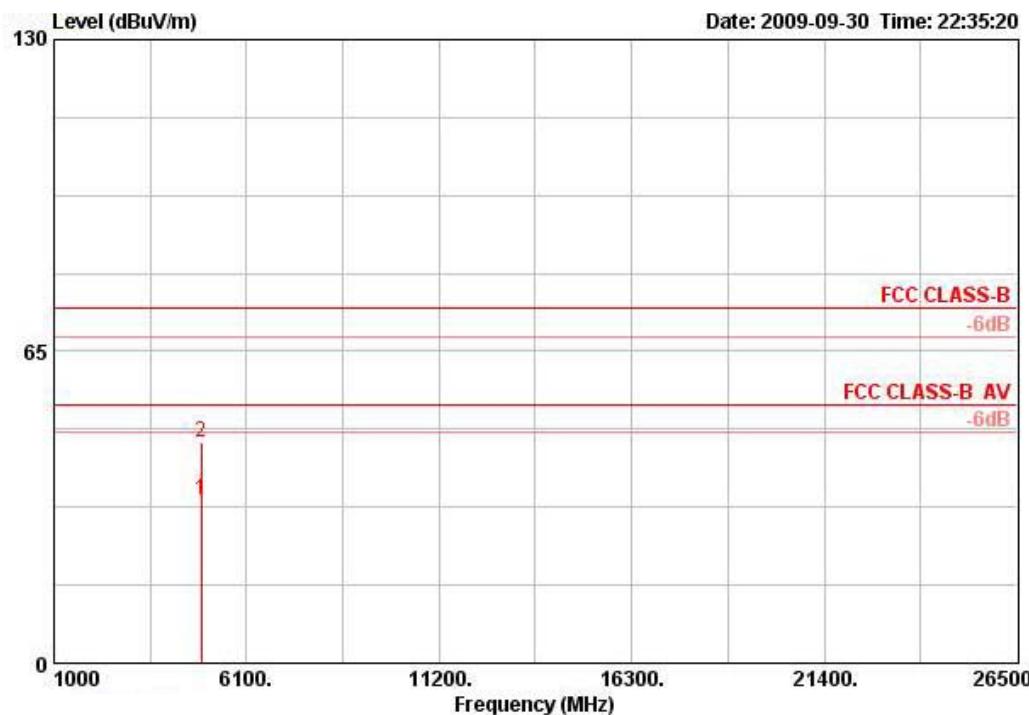
*Vertical*


Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				Level	Factor	dBuV	dB/m				
1	4873.983	48.37	-25.63	74.00	47.95	32.56	3.01	35.15 PEAK	100	128	VERTICAL
2	4873.985	36.08	-17.92	54.00	35.65	32.56	3.01	35.15 AVERAGE	100	128	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 9 / Connector 1 / Mode 2

**Horizontal**


Freq	Level	Over Limit	Limit Line	Read		Ant Pos	Table Pos	Table Pol/Phase
				Cable	Antenna Factor			
				dB	dBuV/m	dBuV	dB/m	dB
1	4904.000	31.67	-22.33	54.00	31.11	32.63	3.02	35.09 AVERAGE
2	4904.011	43.78	-30.22	74.00	43.22	32.63	3.02	35.09 PEAK

*Vertical*


Freq	Level	Over Limit	Line	ReadAntenna		Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Table Pol/Phase
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	4904.020	34.04	-19.96	54.00	33.48	32.63	3.02	35.09	AVERAGE	100	88 VERTICAL
2	4904.025	46.09	-27.91	74.00	45.54	32.63	3.02	35.09	PEAK	100	88 VERTICAL

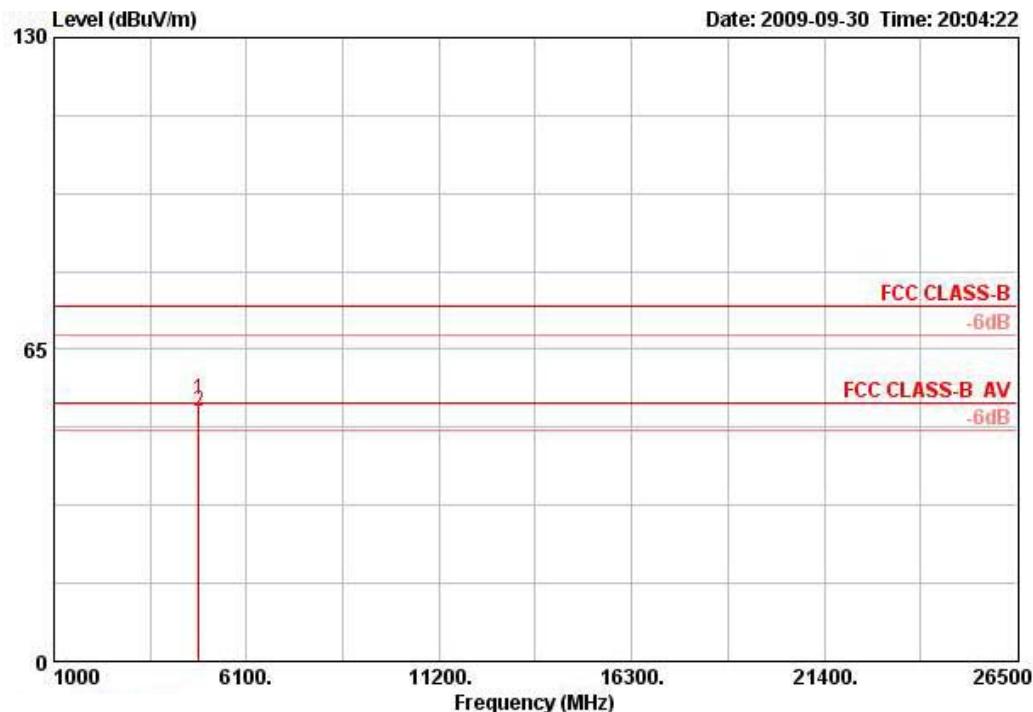
## Note:

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

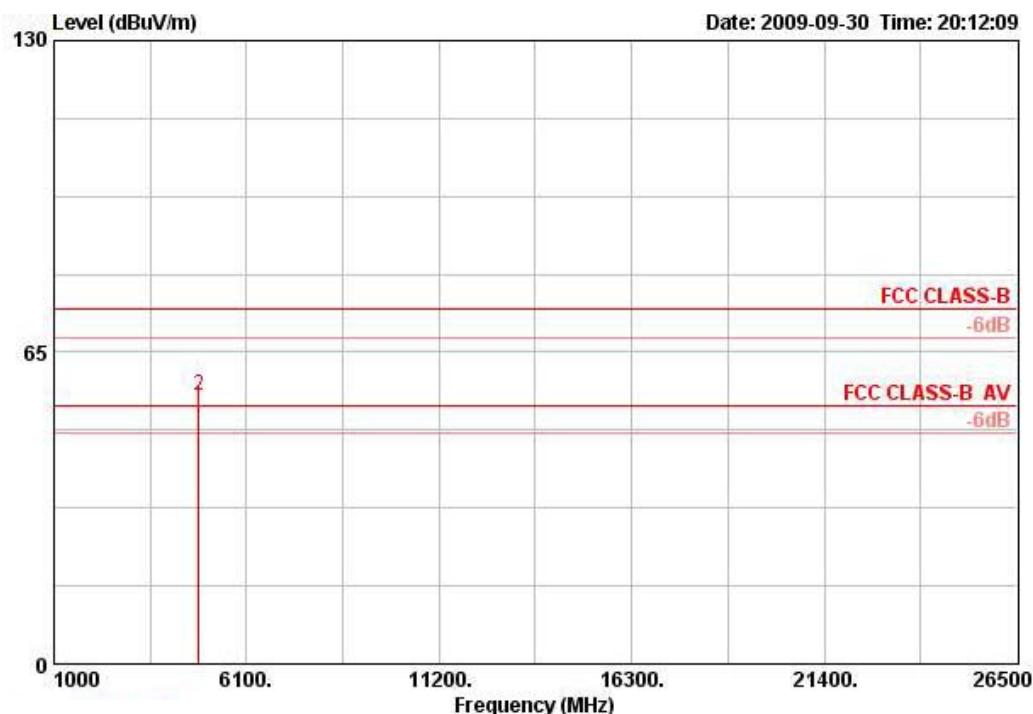
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11b CH 1 / Connector 1 / Mode 2

**Horizontal**


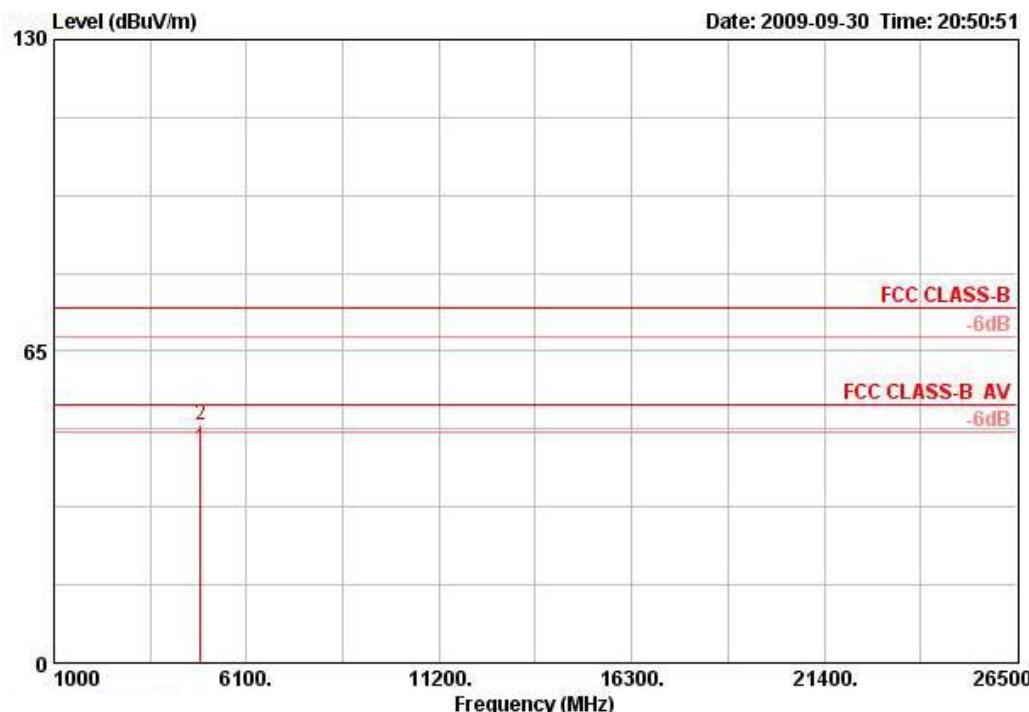
Freq	Level	Over Limit	Limit Line	ReadAntenna		Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Table Pol/Phase
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	4823.936	54.59	-19.41	74.00	54.39	32.46	3.00	35.26	PEAK	196	94 HORIZONTAL
2 !	4823.976	52.02	-1.98	54.00	51.82	32.46	3.00	35.26	AVERAGE	196	94 HORIZONTAL

*Vertical*


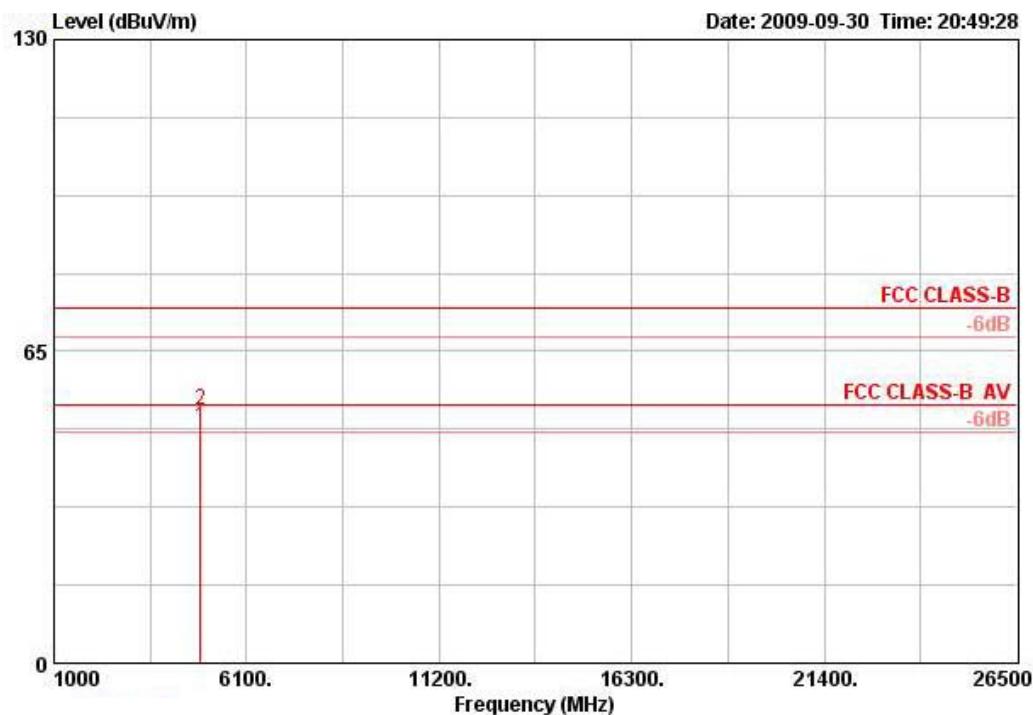
Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				Level	Factor	dBuV	dB/m				
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	4823.952	53.84	-0.16	54.00	53.64	32.46	3.00	35.26	AVERAGE	111	91 VERTICAL
2	4823.976	56.02	-17.98	74.00	55.82	32.46	3.00	35.26	PEAK	111	91 VERTICAL



Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	802.11b CH 6 / Connector 1 / Mode 2

**Horizontal**

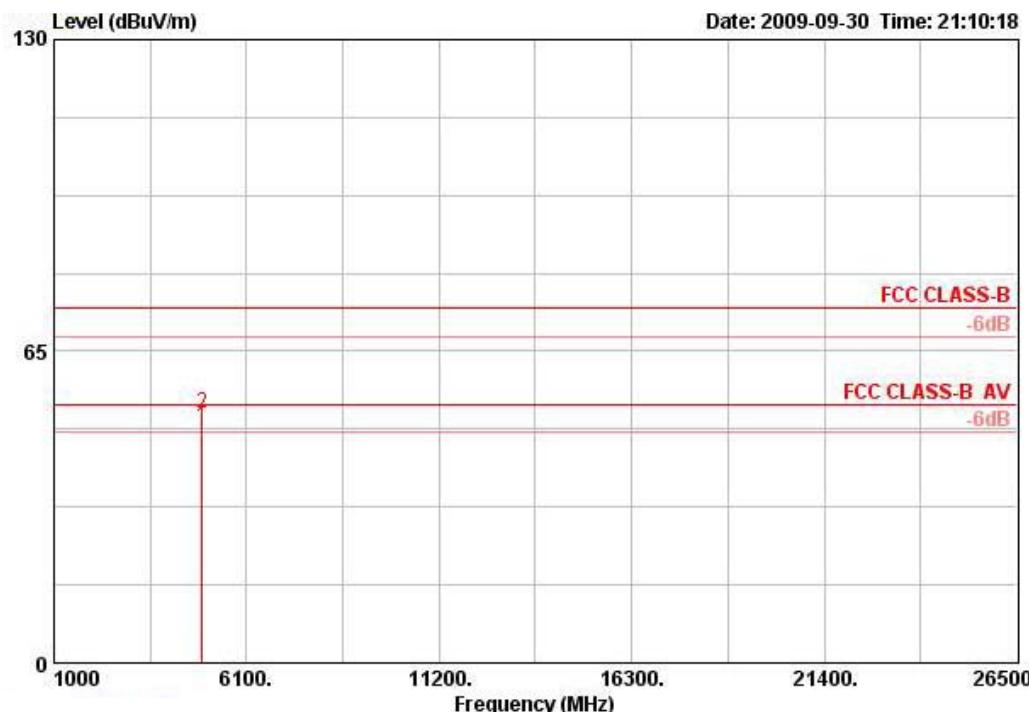
Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant Pos	Table Pos	Table Pos	Pol/Phase
		Limit	Line	Antenna Level Factor	Cable Loss Factor	Preamp Factor					
1	4873.980	44.46	-9.54	54.00	44.04	32.56	3.01	35.15	AVERAGE	155	88 HORIZONTAL
2	4874.060	49.63	-24.37	74.00	49.21	32.56	3.01	35.15	PEAK	155	88 HORIZONTAL

*Vertical*


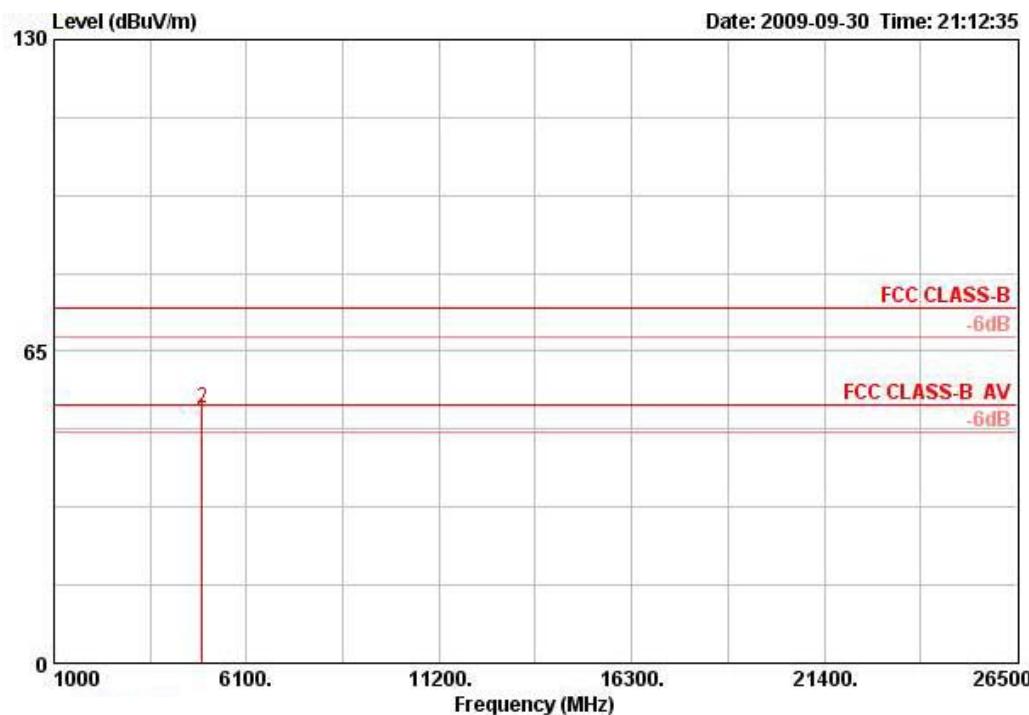
Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				Level	Factor	dBuV	dB/m				
MHz	dBuV/m	dB	dBuV/m						cm	deg	
1 !	4873.948	49.32	-4.68	54.00	48.89	32.56	3.01	35.15	AVERAGE	100	340 VERTICAL
2	4874.024	52.67	-21.33	74.00	52.24	32.56	3.01	35.15	PEAK	100	340 VERTICAL



Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	802.11b CH 11 / Connector 1 / Mode 2

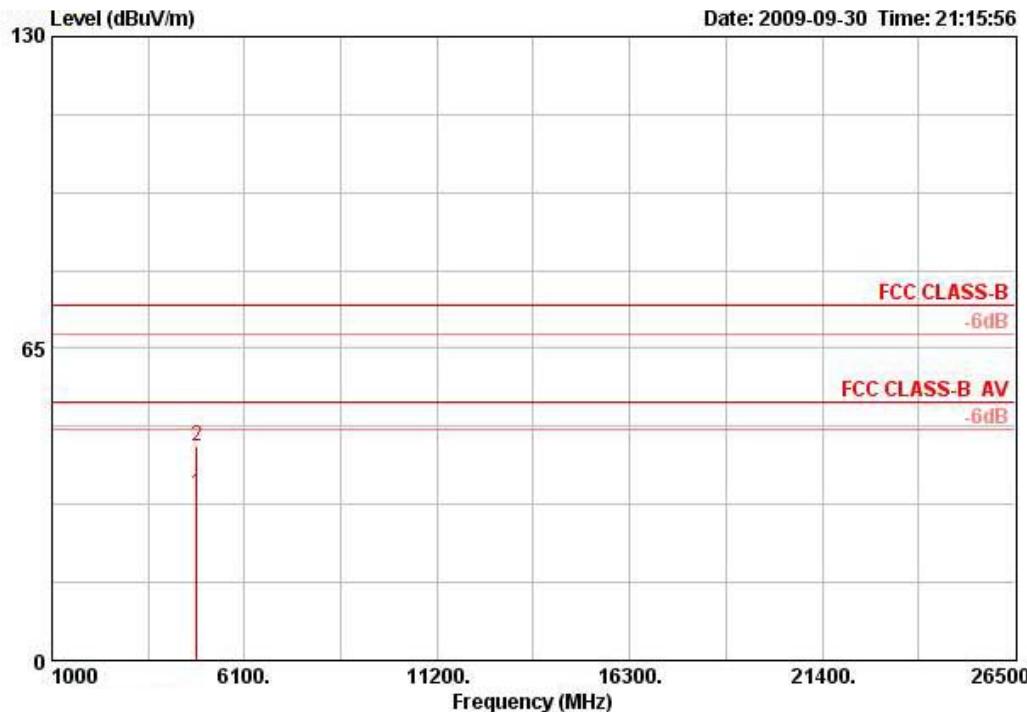
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant Pos	Table Pos	Table Pos
		Limit	Line	Level	Factor	Cable	Preamp			
1 !	4923.972	49.09	-4.91	54.00	48.44	32.66	3.02	35.03	AVERAGE	102
2	4923.976	52.07	-21.93	74.00	51.42	32.66	3.02	35.03	PEAK	102

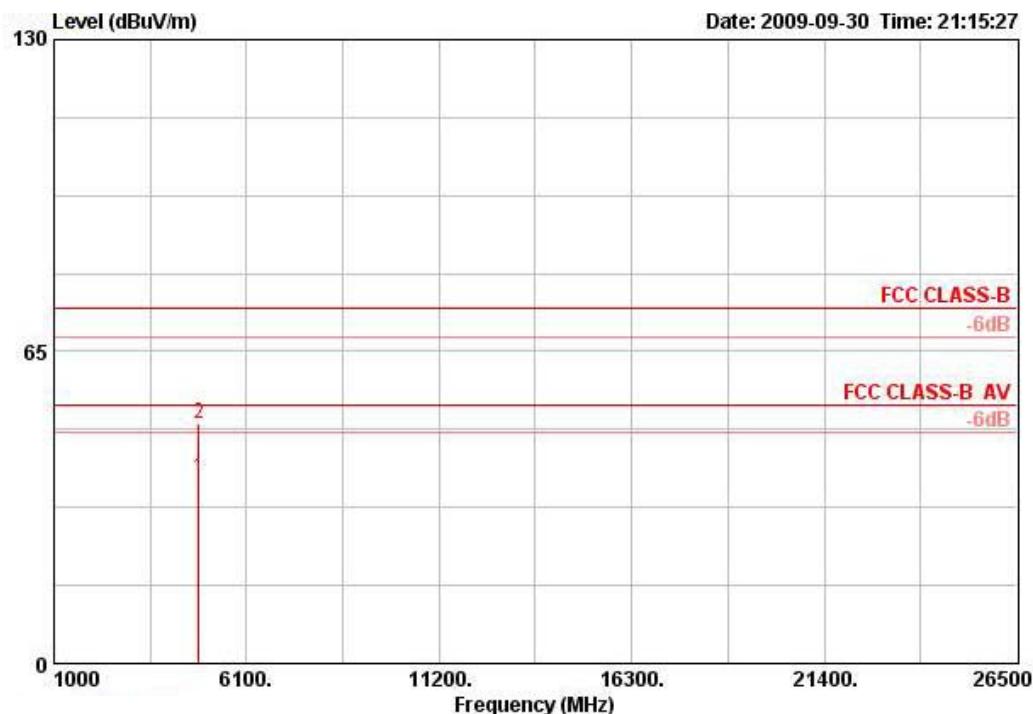
*Vertical*


Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				Level	Factor	dBuV	dB/m				
MHz	dBuV/m	dB	dBuV/m						cm	deg	
1 !	4923.976	50.65	-3.35	54.00	49.99	32.66	3.02	35.03	AVERAGE	100	85 VERTICAL
2	4924.084	53.17	-20.83	74.00	52.52	32.66	3.02	35.03	PEAK	100	85 VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11g CH 1 / Connector 1 / Mode 2

**Horizontal**


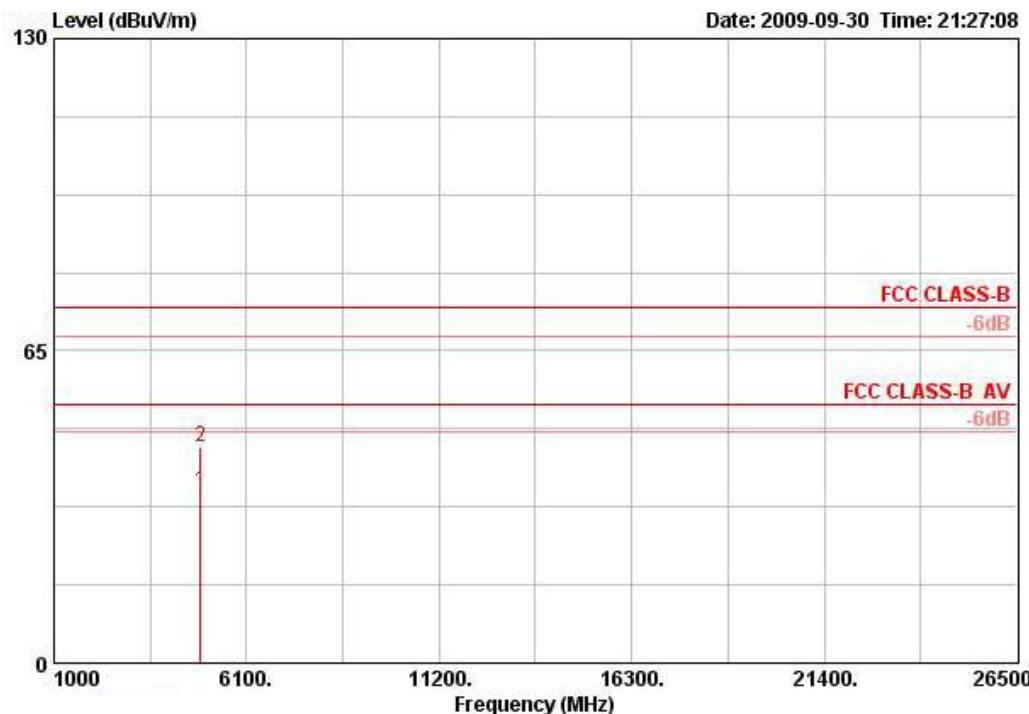
Freq	Level	Over Limit	Limit Line	Read Antenna Level	Cable Preamp			Ant Pos	Table Pos	Table Pol/Phase				
					Factor	Loss	Factor							
					MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	4824.001	34.73	-19.27	54.00	34.53	32.46	3.00	35.26	AVERAGE	100	122	HORIZONTAL		
2	4824.008	44.49	-29.51	74.00	44.29	32.46	3.00	35.26	PEAK	100	122	HORIZONTAL		

*Vertical*


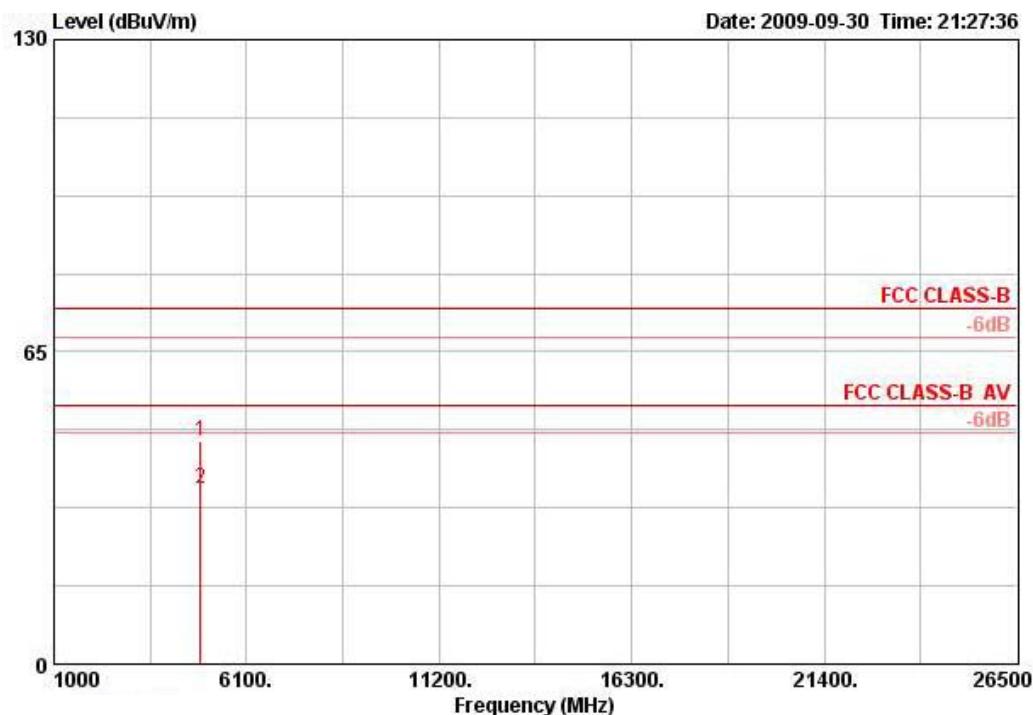
Freq	Level	Over Limit	Line	ReadAntenna		Cable Preamp		Remark	Ant Pos	Table Pos	Table Pol/Phase
				Level	Factor	dBuV	dB/m				
	MHz	dBuV/m	dB	dBuV/m					cm	deg	
1	4823.989	38.67	-15.33	54.00	38.47	32.46	3.00	35.26	AVERAGE	100	57 VERTICAL
2	4824.016	49.84	-24.16	74.00	49.65	32.46	3.00	35.26	PEAK	100	57 VERTICAL



Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	802.11g CH 6 / Connector 1 / Mode 2

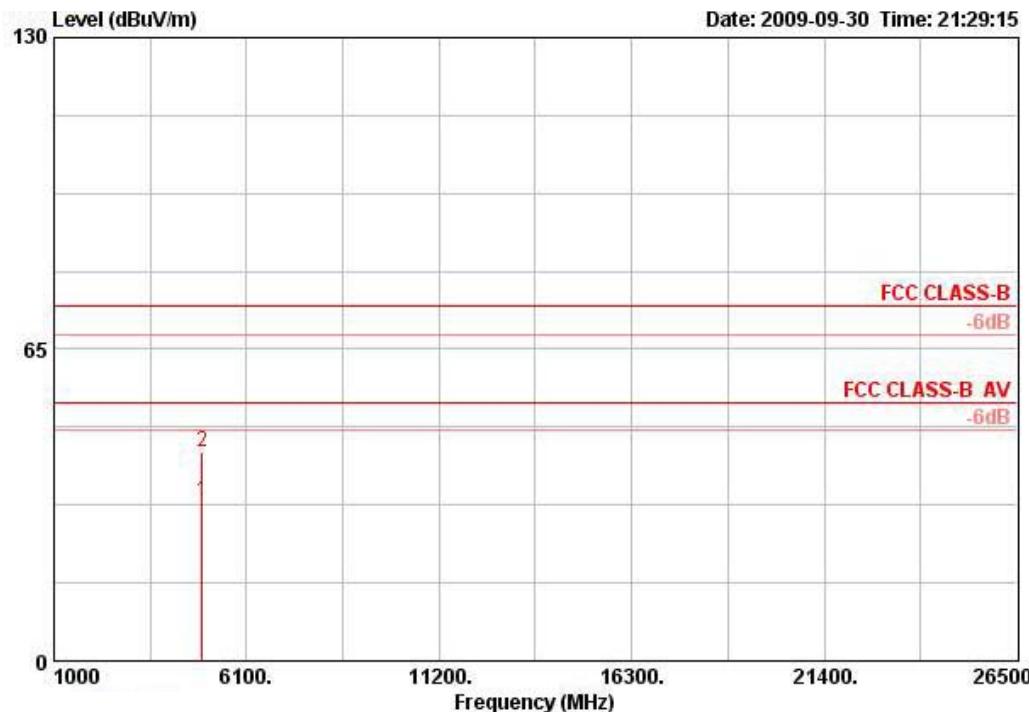
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table	Pos	Pos	Pol/Phase
		MHz	dBuV/m	dB	dBuV/m	Line	Level Factor						
1	4873.979	35.84	-18.16	54.00	35.42	32.56	3.01	35.15	AVERAGE	100	124	HORIZONTAL	
2	4873.996	45.05	-28.95	74.00	44.63	32.56	3.01	35.15	PEAK	100	124	HORIZONTAL	

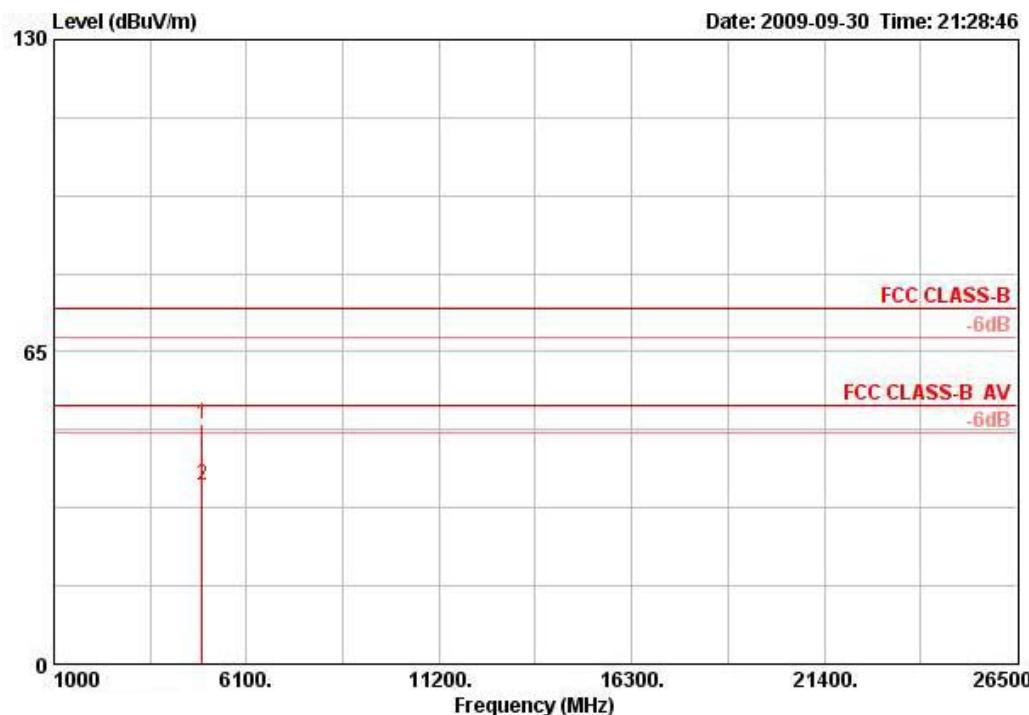
*Vertical*


Freq	Level	Over Limit	Limit	ReadAntenna		Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Table Pol/Phase
				Line	Level Factor						
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	4873.997	46.54	-27.46	74.00	46.12	32.56	3.01	35.15	PEAK	100	201 VERTICAL
2	4874.009	36.38	-17.62	54.00	35.96	32.56	3.01	35.15	AVERAGE	100	201 VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11g CH 11 / Connector 1 / Mode 2

**Horizontal**


Freq	Level	Over Limit	Read Line	Antenna Factor	Cable Loss	Preamp Factor	Remark	Table Pos	Table Pos		
									cm	deg	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	deg	Pol/Phase			
1	4923.978	33.35	-20.65	54.00	32.70	32.66	3.02	35.03	AVERAGE	100	272 HORIZONTAL
2	4924.009	43.50	-30.50	74.00	42.85	32.66	3.02	35.03	PEAK	100	272 HORIZONTAL

**Vertical**


Freq	Level	Over Limit	Limit Line	ReadAntenna		Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Table Pol/Phase
				dB	dBuV/m						
1	4923.995	50.11	-23.89	74.00	49.45	32.66	3.02	35.03 PEAK	100	342	VERTICAL
2	4924.005	37.35	-16.65	54.00	36.70	32.66	3.02	35.03 AVERAGE	100	342	VERTICAL

**Note:**

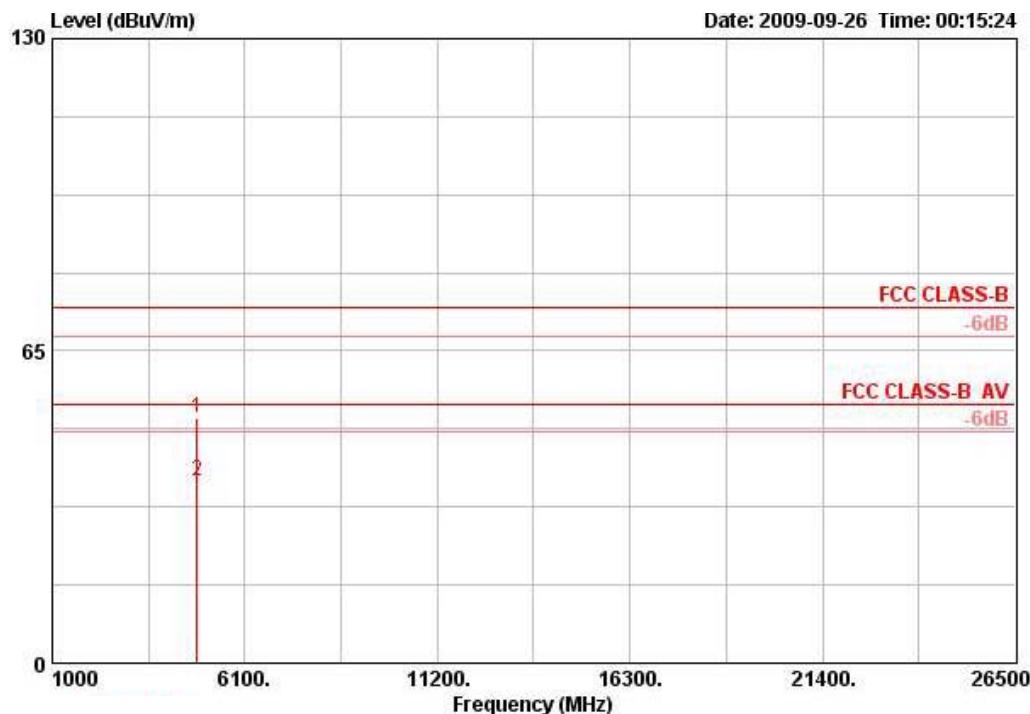
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

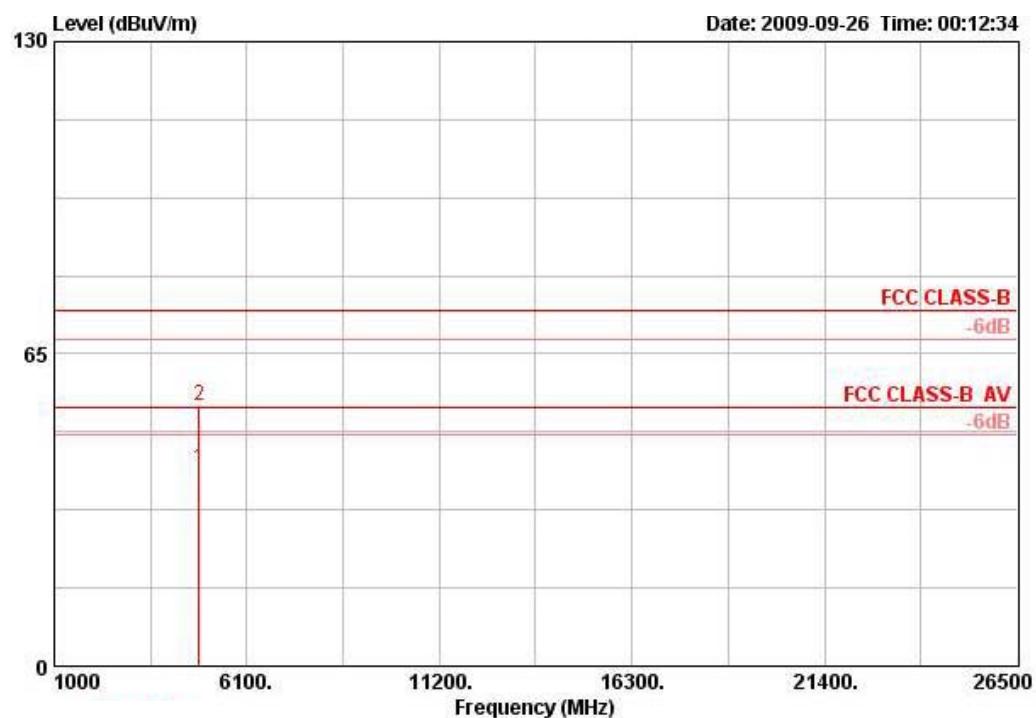
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

&lt;For EUT 2 with Dipole antenna&gt;

Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 20MHz Ch 1 / Connector 1 / Mode 4

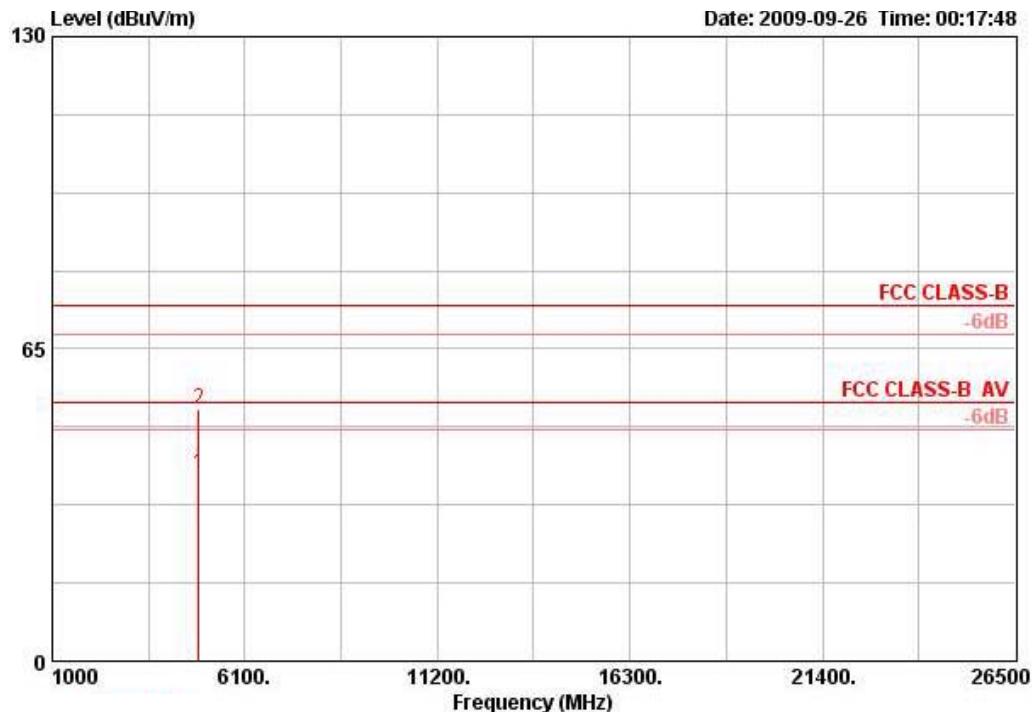
**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable Preamp Antenna			Table Pos	Ant Pos	Remark	Pol/Phase
		Line	Cable			Preamp Factor	Antenna Factor					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm			
1	4824.074	50.91	74.00	-23.09	48.89	3.96	35.03	33.09	200	121	PEAK	HORIZONTAL
2	4824.248	38.00	54.00	-16.00	35.97	3.96	35.03	33.09	200	121	AVERAGE	HORIZONTAL

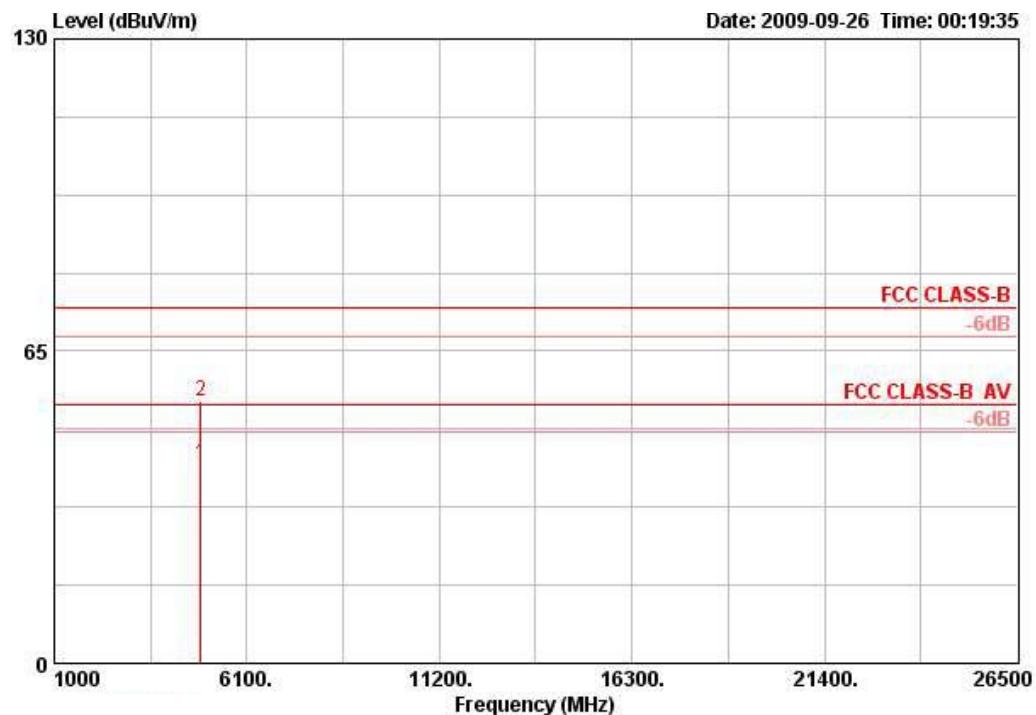
*Vertical*


Freq	Level	Limit		Over Limit	Read Level	Cable Preamplifier		Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	Line dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	
1	4824.000	40.98	54.00	-13.02	39.00	3.96	35.04	33.06	269	109	AVERAGE	VERTICAL
2	4826.640	54.15	74.00	-19.85	52.17	3.96	35.04	33.06	269	109	PEAK	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch 6 / Connector 1 / Mode 4

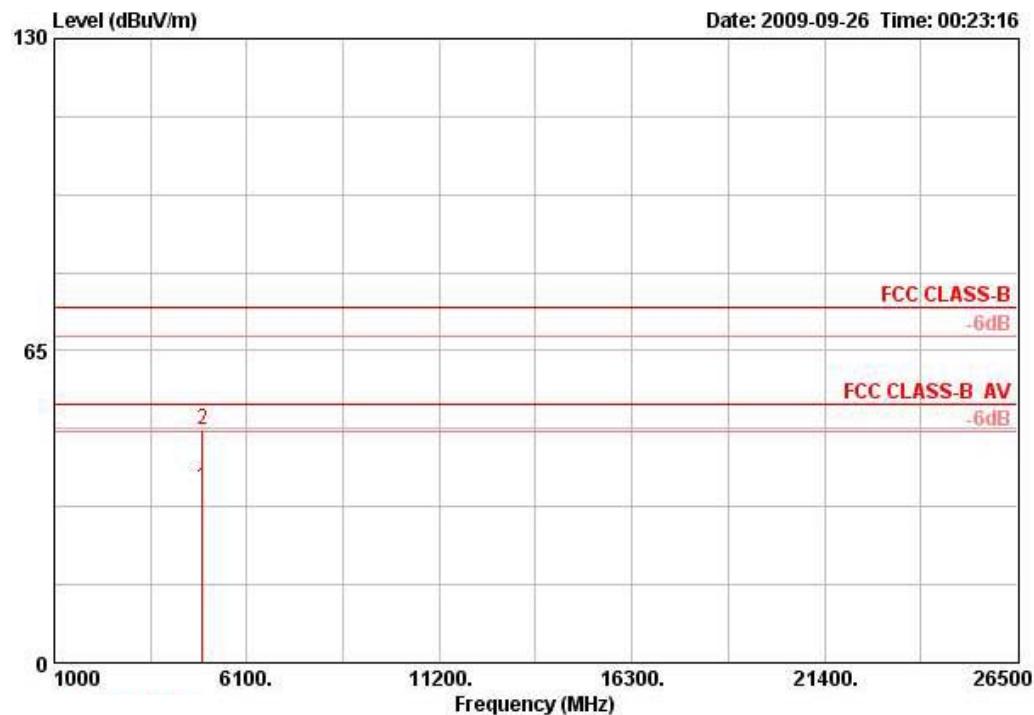
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	
1	4874.040	39.01	54.00	-14.99	36.91	3.97	35.03	33.16	200	173	AVERAGE	HORIZONTAL
2	4876.320	52.51	74.00	-21.49	50.41	3.97	35.03	33.16	200	173	PEAK	HORIZONTAL

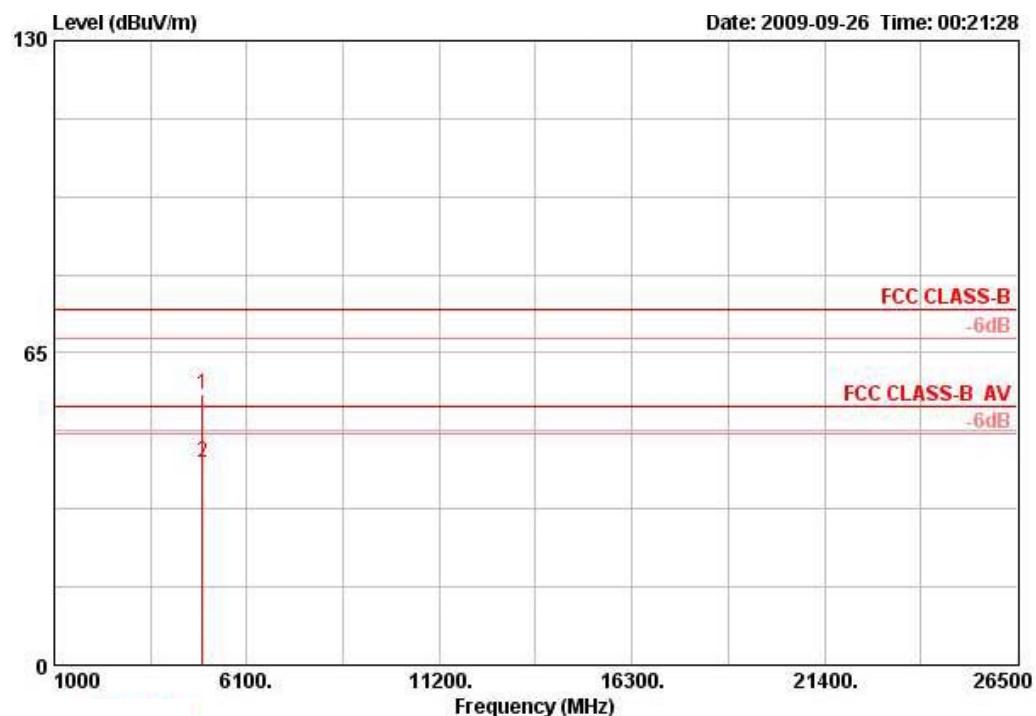
*Vertical*


Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	Pos	Pos	
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm
1	4873.520	41.40	54.00	-12.60	39.30	3.97	35.03	33.16	89	126 AVERAGE VERTICAL
2	4876.600	54.54	74.00	-19.46	52.45	3.97	35.03	33.16	89	126 PEAK VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch11 / Connector 1 / Mode 4

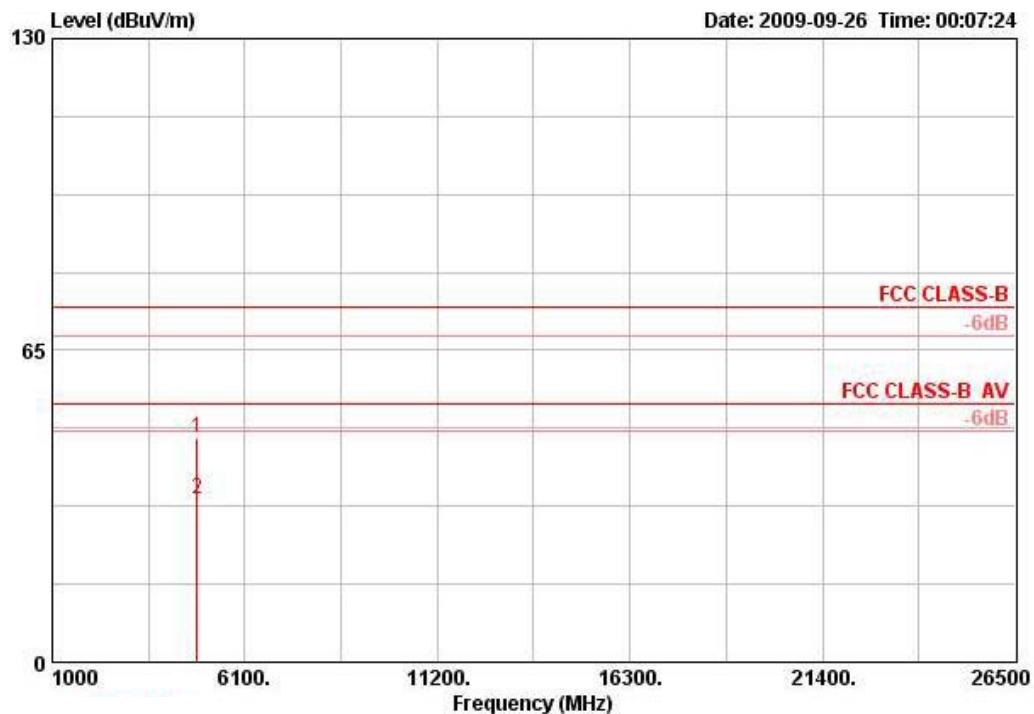
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Preamplifier Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4923.040	36.53	54.00	-17.47	34.31	3.97	35.02	33.26	298	123	AVERAGE	HORIZONTAL
2	4926.840	48.68	74.00	-25.32	46.46	3.97	35.02	33.26	298	123	PEAK	HORIZONTAL

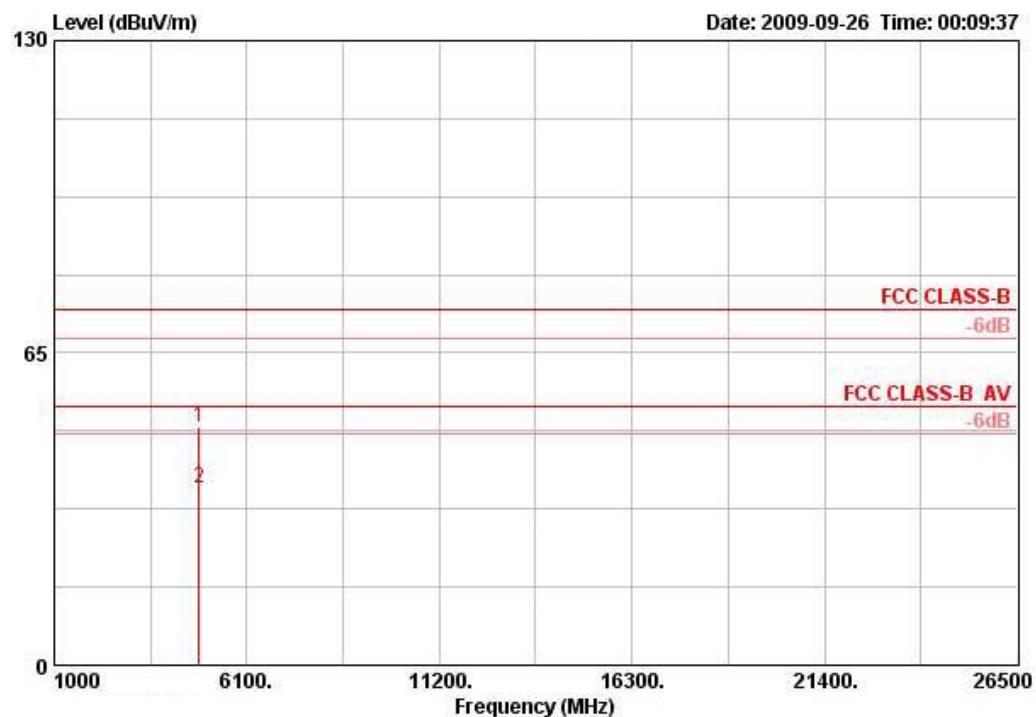
*Vertical*


Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB	dB/m	deg	cm		
1	4918.840	56.42	74.00	-17.58	54.24	3.97	35.02	33.23	88	126	PEAK	VERTICAL	
2	4923.840	42.26	54.00	-11.74	40.04	3.97	35.02	33.26	88	126	AVERAGE	VERTICAL	

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 3 / Connector 1 / Mode 4

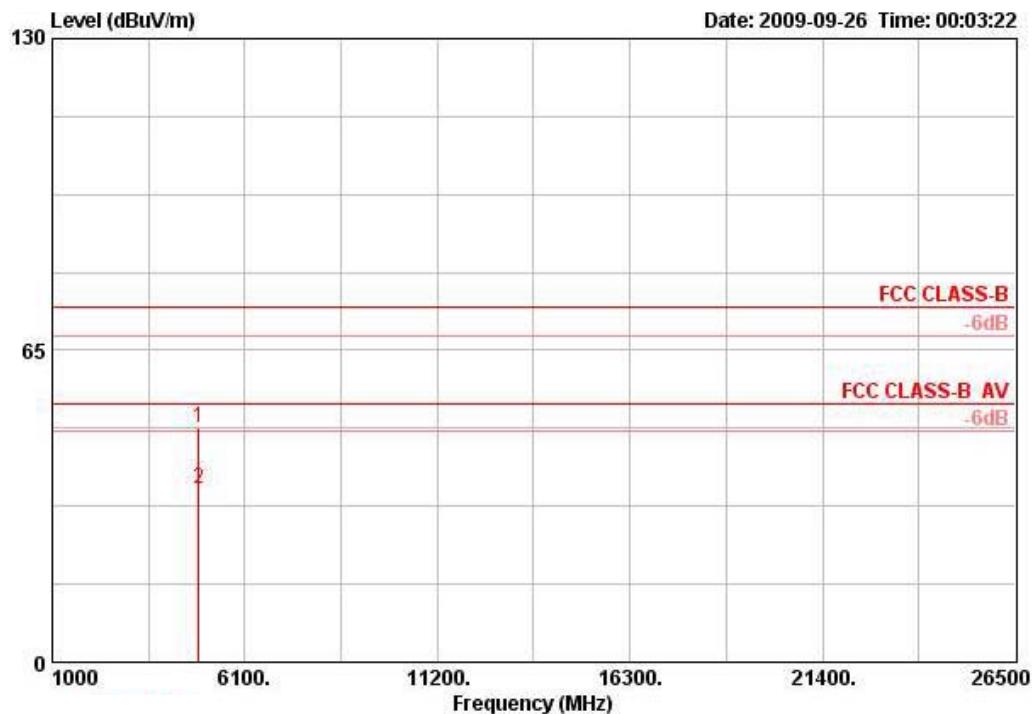
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Preamp Antenna			Table Pos	Ant Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB				
1	4844.074	46.91	74.00	-27.09	44.89	3.96	35.03	33.09	200	121	PEAK	HORIZONTAL
2	4844.248	34.00	54.00	-20.00	31.97	3.96	35.03	33.09	200	121	AVERAGE	HORIZONTAL

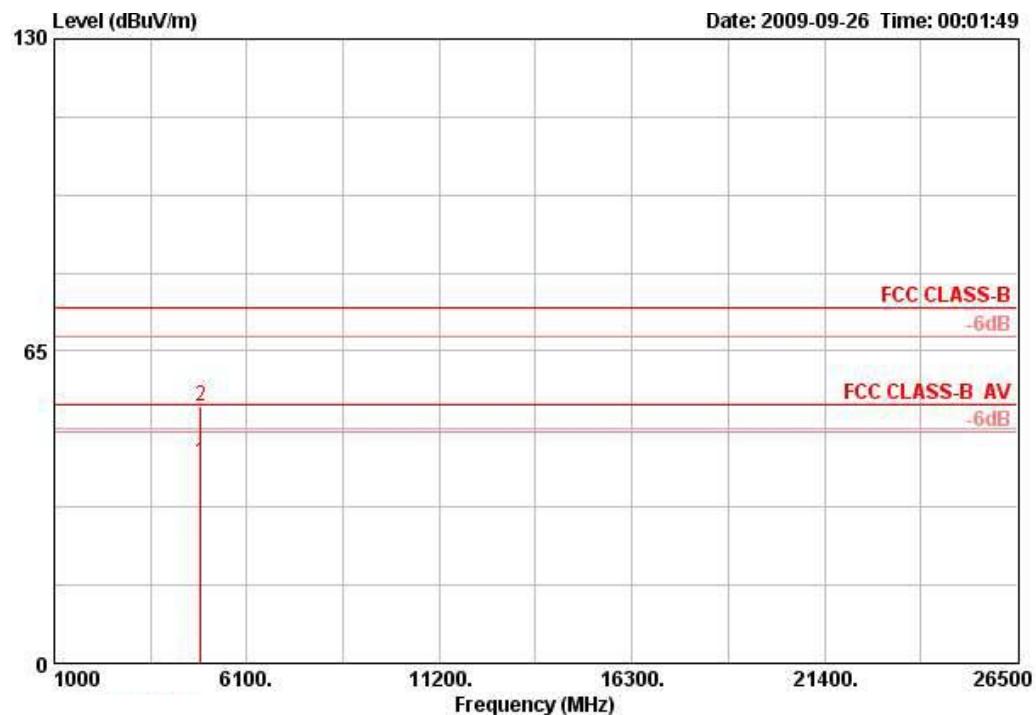
*Vertical*


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4843.524	49.49	74.00	-24.51	47.47	3.96	35.03	33.09	270	106	PERK	VERTICAL
2	4844.032	36.80	54.00	-17.20	34.78	3.96	35.03	33.09	270	106	AVERAGE	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 6 / Connector 1 / Mode 4

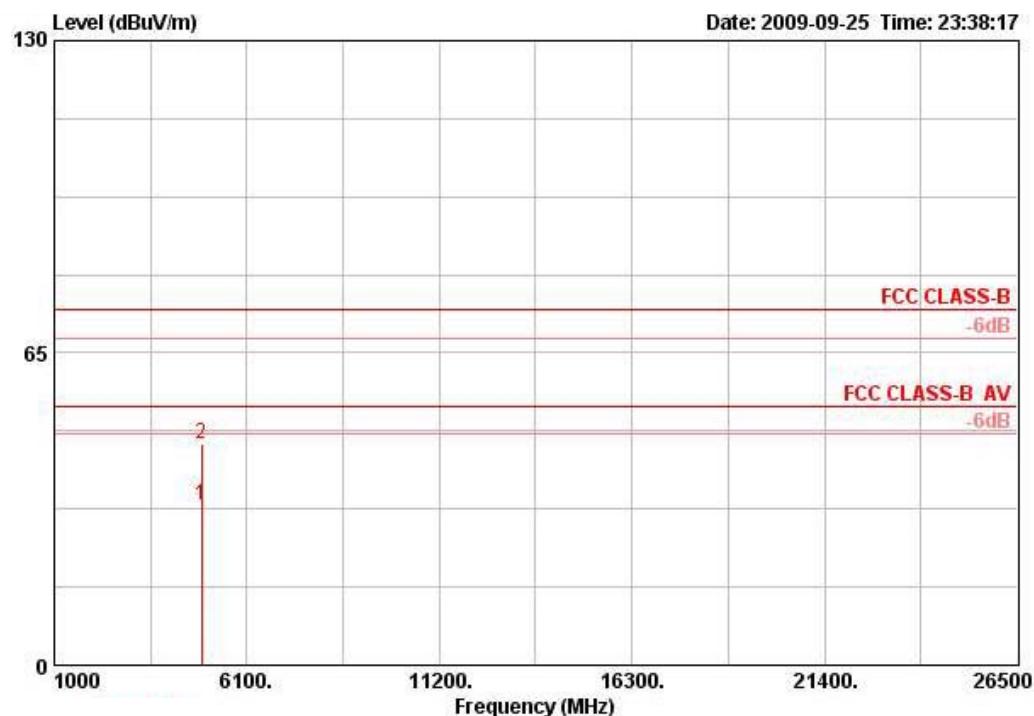
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Preamp Antenna			Table Pos	Ant Pos	Remark	Pol/Phase
		Line	Cable			Preamp	Antenna					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm			
1	4873.700	48.97	74.00	-25.03	46.87	3.97	35.03	33.16	298	124	PEAK	HORIZONTAL
2	4874.094	36.28	54.00	-17.72	34.18	3.97	35.03	33.16	298	124	AVERAGE	HORIZONTAL

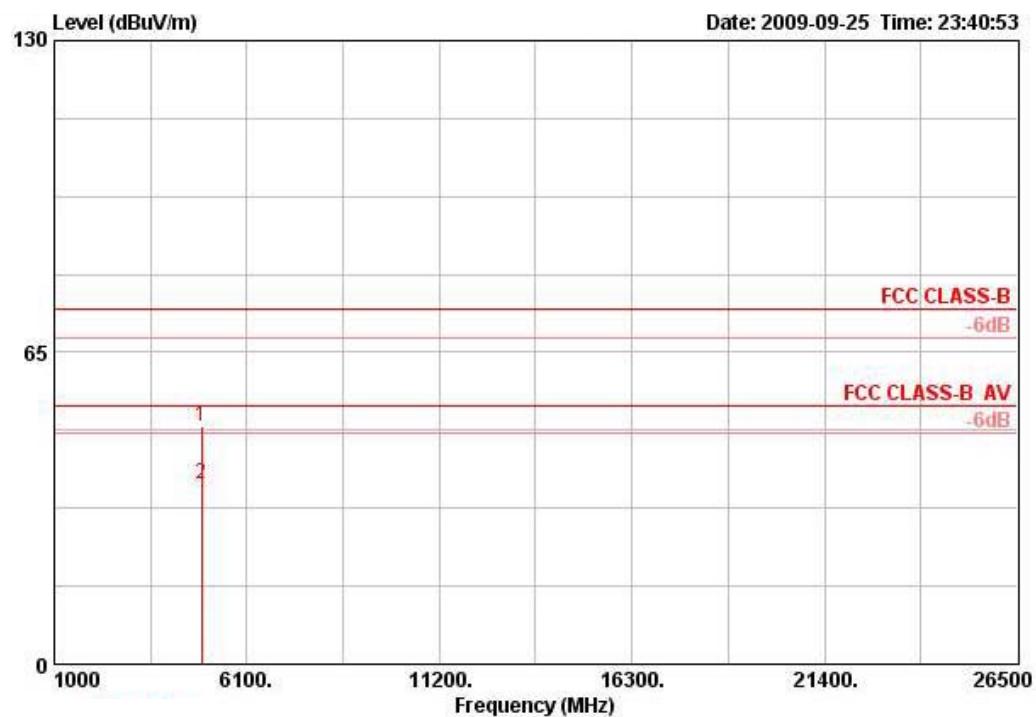
*Vertical*


Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4873.880	41.67	54.00	-12.33	39.57	3.97	35.03	33.16	75	126	AVERAGE	VERTICAL	
2	4874.268	53.61	74.00	-20.39	51.51	3.97	35.03	33.16	75	126	PEAK	VERTICAL	

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 9 / Connector 1 / Mode 4

**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	MHz	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm
1	4903.916	33.27	54.00	-20.73	31.13	3.97	35.02	33.19	68	118	AVERAGE	HORIZONTAL
2	4904.258	46.09	74.00	-27.91	43.95	3.97	35.02	33.19	68	118	PEAK	HORIZONTAL

*Vertical*


Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	Table Pos	Ant Pos	Remark	Pol/Phase
					Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	4904.214	49.60	74.00	-24.40	47.46	3.97	35.02	33.19	146	100 PEAK	VERTICAL
2	4904.270	37.41	54.00	-16.59	35.27	3.97	35.02	33.19	146	100 AVERAGE	VERTICAL

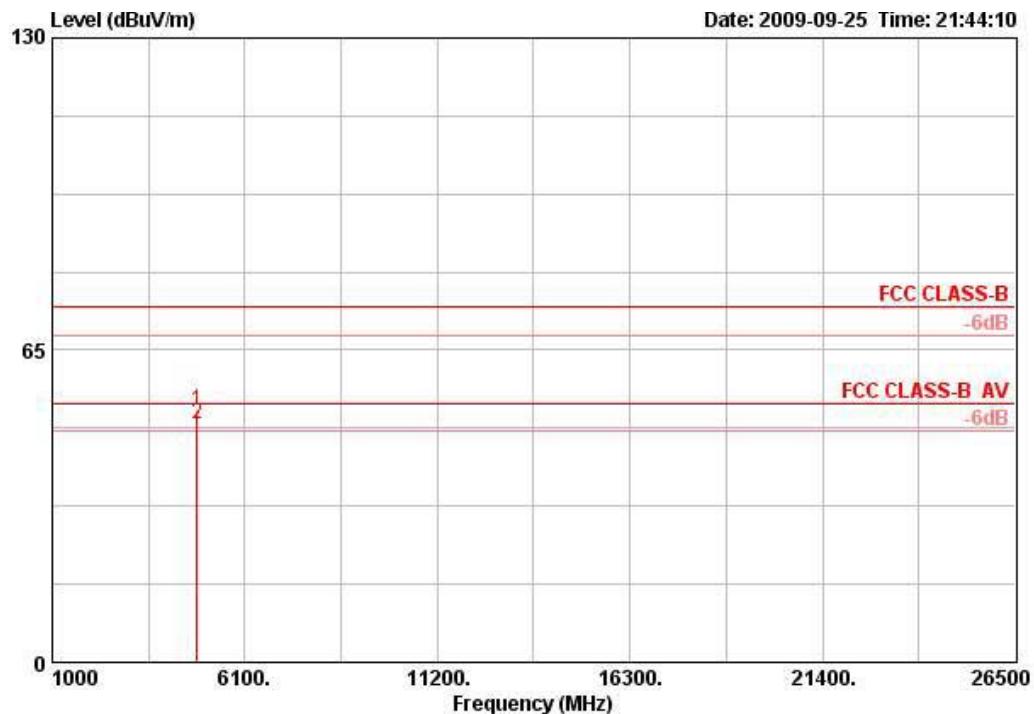
## Note:

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

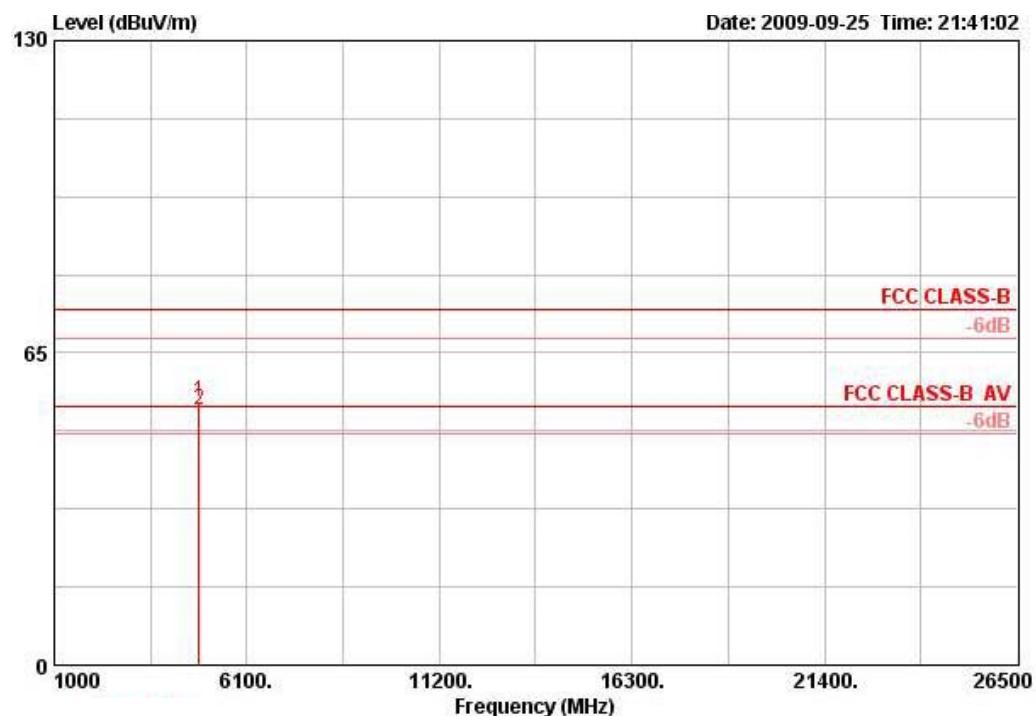
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11b CH 1 / Connector 1 / Mode 4

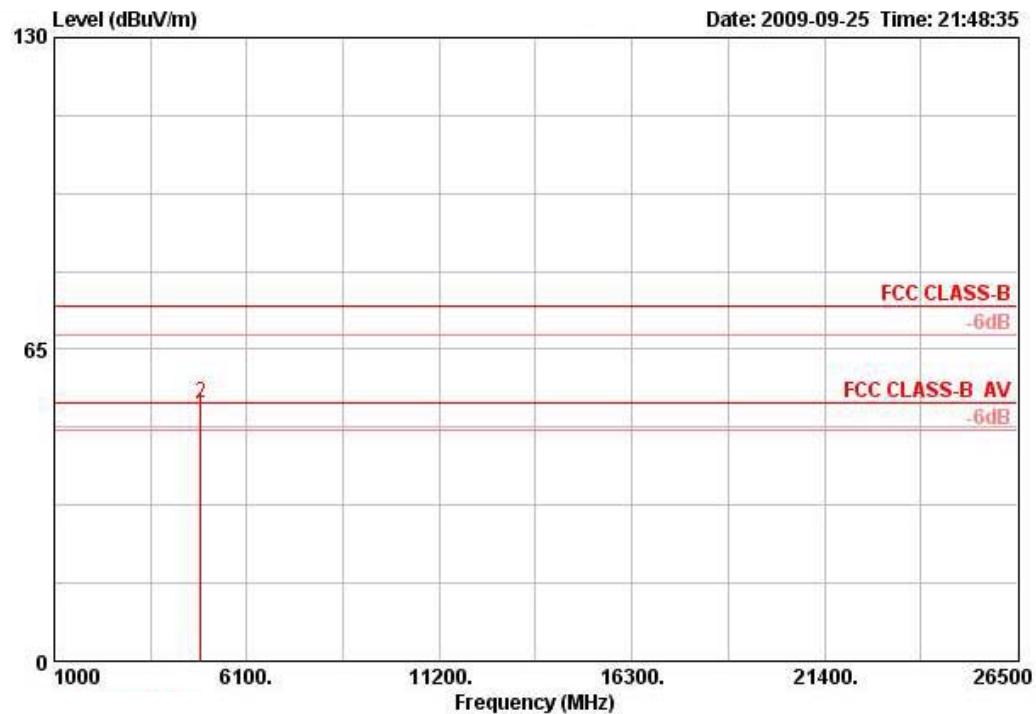
**Horizontal**


Freq	Level	Limit		Over Line Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4823.884	52.35	74.00	-21.65	50.37	3.96	35.04	33.06	196	190	PEAK	HORIZONTAL
2 !	4823.932	49.47	54.00	-4.53	47.49	3.96	35.04	33.06	196	190	AVERAGE	HORIZONTAL

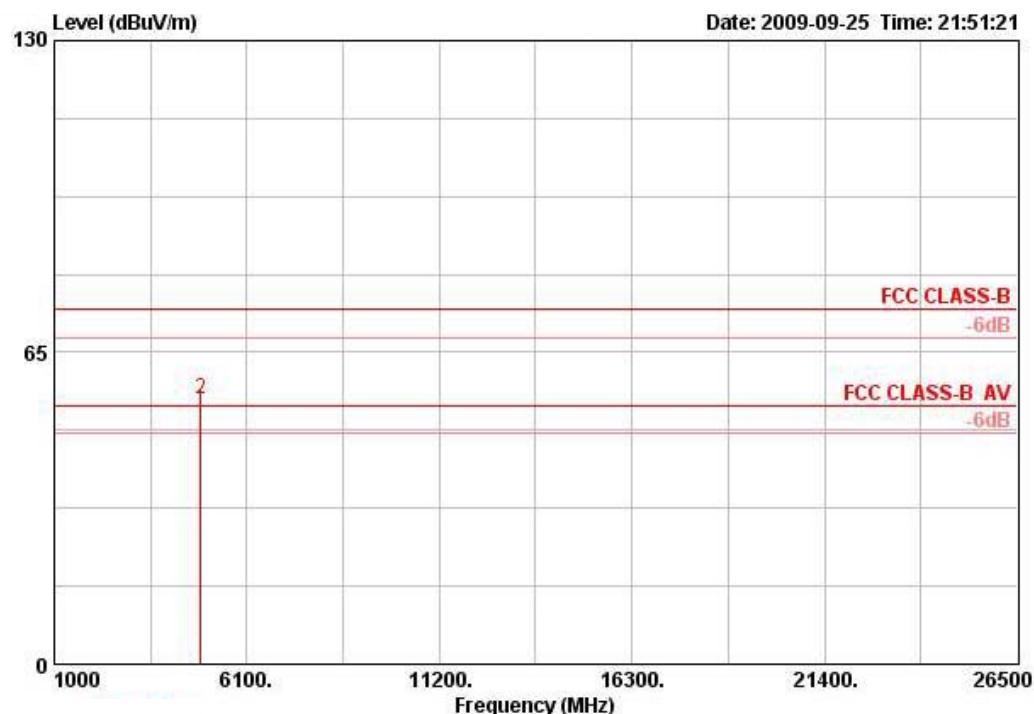
*Vertical*


Freq	Level	Limit		Over Limit	Read Level	Cable Preamp		Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB					
MHz	dBuV/m	dBuV/m	dB									
1	4823.908	55.04	74.00	-18.96	53.06	3.96	35.04	33.06	82	101	PEAK	VERTICAL
2 @	4823.964	53.19	54.00	-0.81	51.21	3.96	35.04	33.06	82	101	AVERAGE	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11b CH 6 / Connector 1 / Mode 4

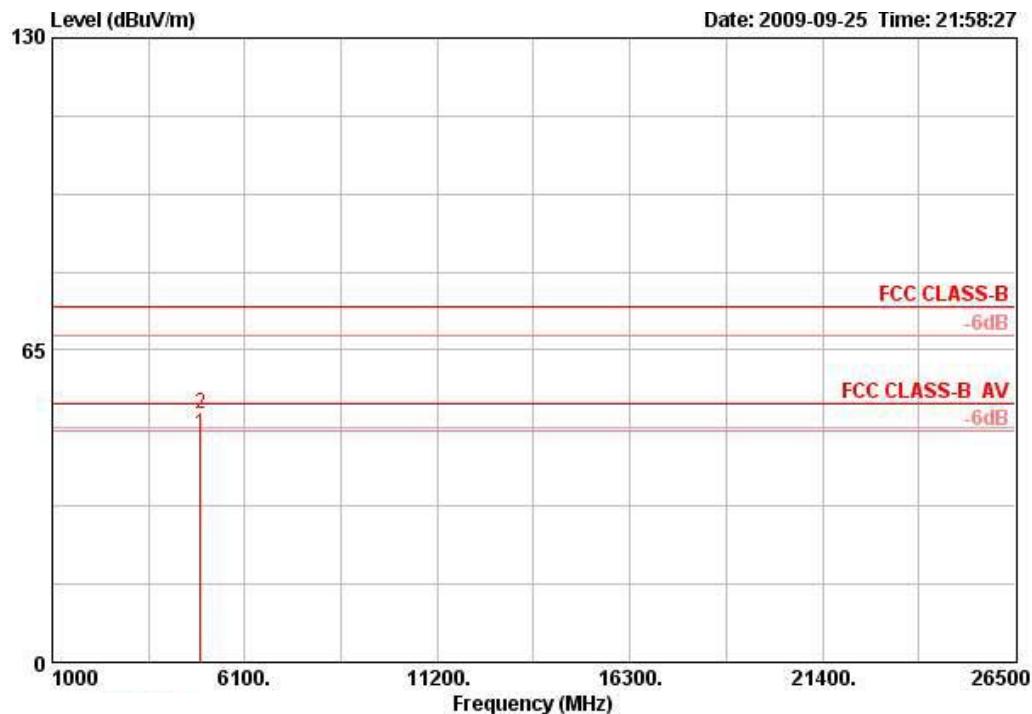
**Horizontal**


Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Pol/Phase	
		Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1 !	4873.988	51.31	54.00	-2.69	49.21	3.97	35.03	33.16	196	183 AVERAGE	HORIZONTAL
2	4874.008	53.97	74.00	-20.03	51.87	3.97	35.03	33.16	196	183 PEAK	HORIZONTAL

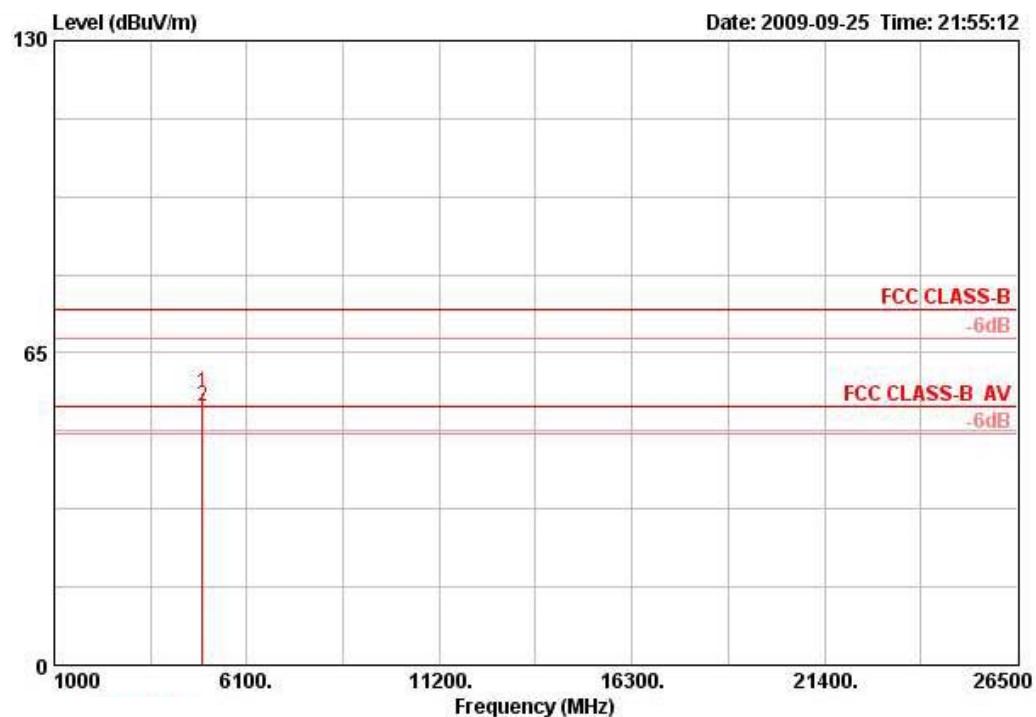
*Vertical*

Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Preamplifier Factor		Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB	dB/m	deg	cm		
1 @	4873.976	53.19	54.00	-0.81	51.09	3.97	35.03	33.16	72	110	AVERAGE	VERTICAL		
2	4874.092	55.37	74.00	-18.63	53.28	3.97	35.03	33.16	72	110	PEAK	VERTICAL		

Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	802.11b CH 11 / Connector 1 / Mode 4

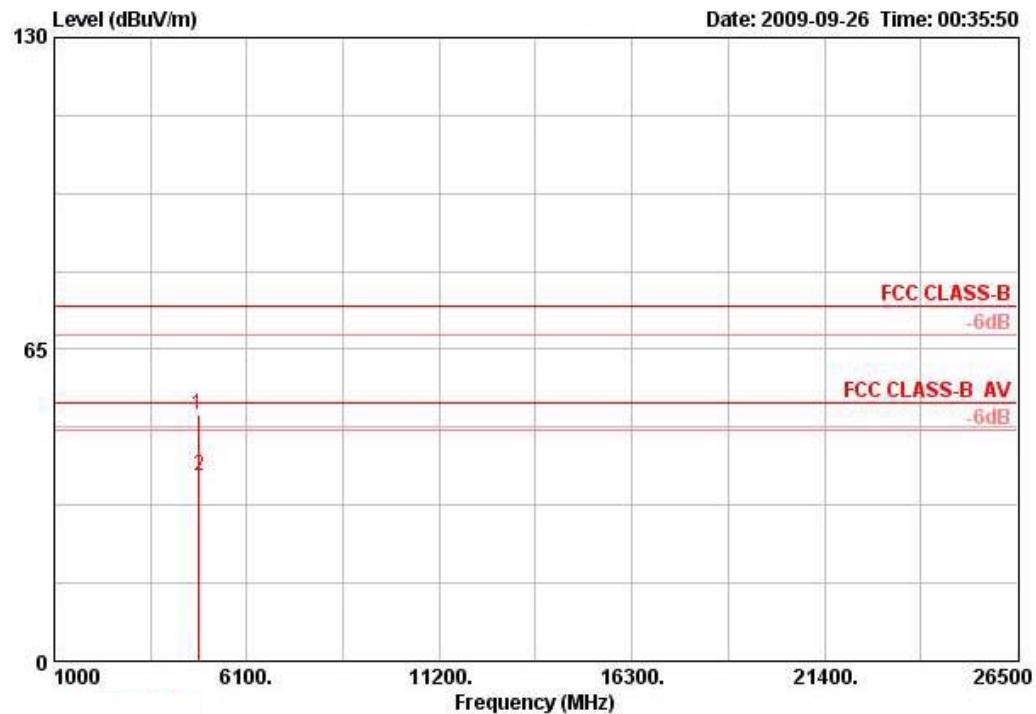
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4923.952	47.37	54.00	-6.63	45.15	3.97	35.02	33.26	220	201	AVERAGE	HORIZONTAL	
2	4924.008	51.79	74.00	-22.21	49.57	3.97	35.02	33.26	220	201	PEAK	HORIZONTAL	

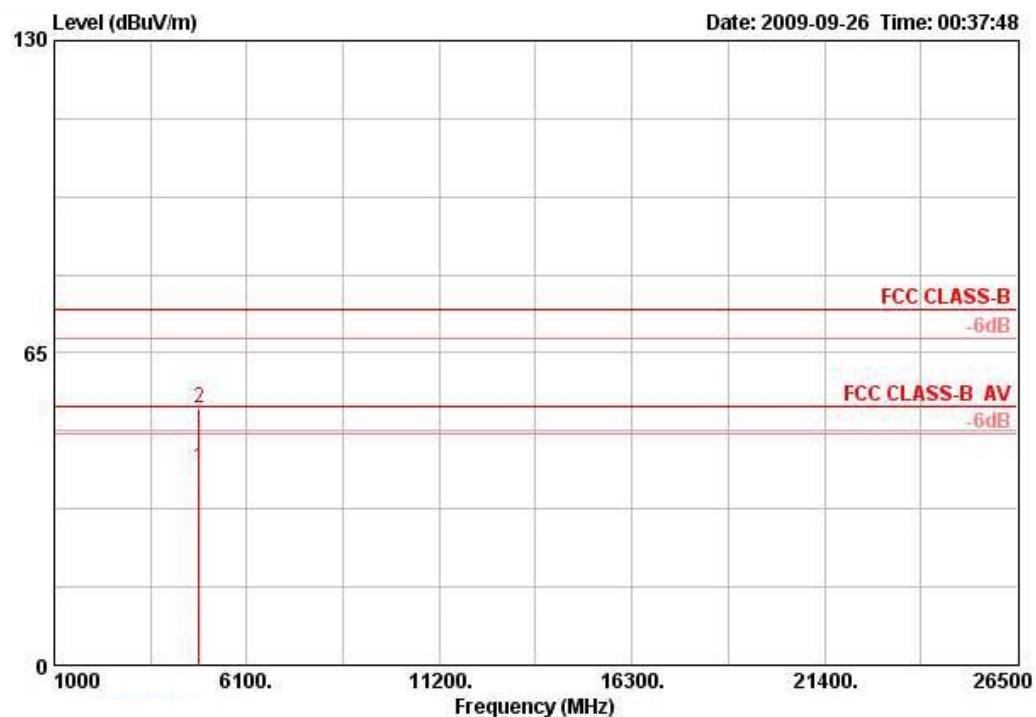
*Vertical*


Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	Pos				
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm		
1	4923.964	56.55	74.00	-17.45	54.33	3.97	35.02	33.26	82	125	PEAK	VERTICAL
2 @	4923.980	53.97	54.00	-0.03	51.75	3.97	35.02	33.26	82	125	AVERAGE	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11g CH 1 / Connector 1 / Mode 4

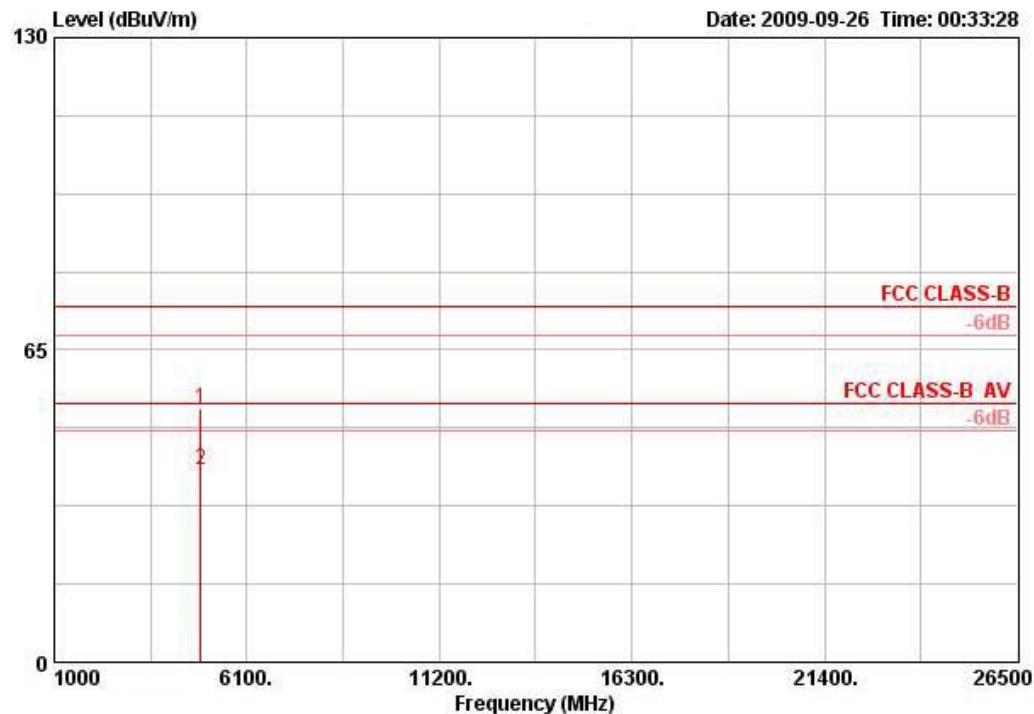
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m			MHz	dBuV/m					
1	4819.600	51.25	74.00	-22.75	49.27	3.96	35.04	33.06	205	184	PEAK	HORIZONTAL
2	4824.080	38.52	54.00	-15.48	36.54	3.96	35.04	33.06	205	184	AVERAGE	HORIZONTAL

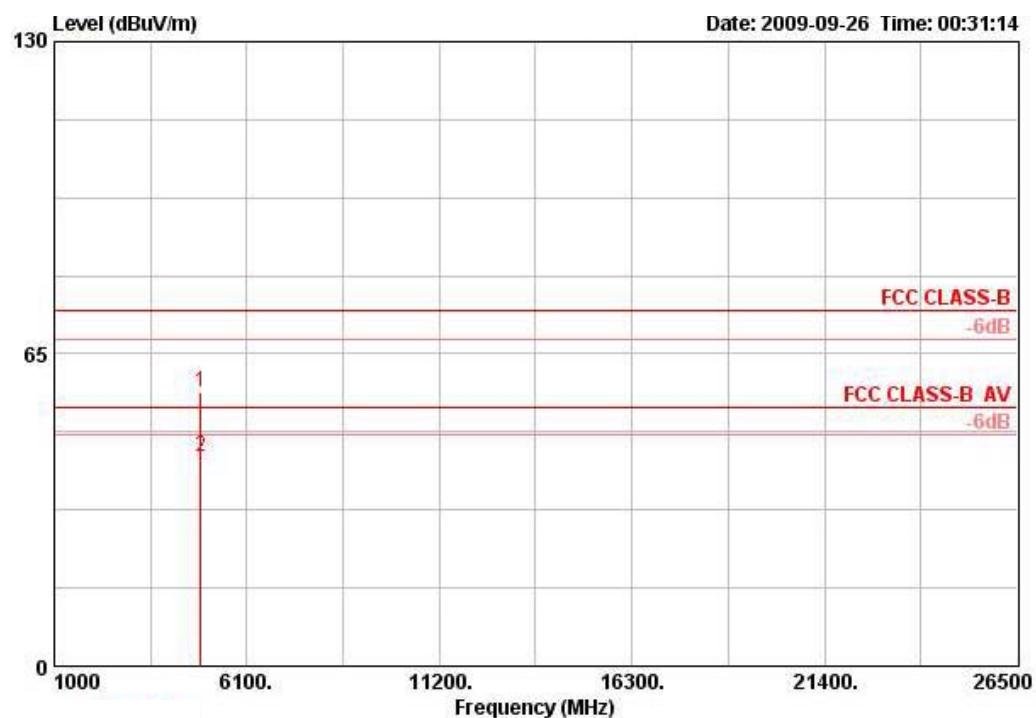
*Vertical*


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4824.280	40.93	54.00	-13.07	38.95	3.96	35.04	33.06	246	100	AVERAGE	VERTICAL
2	4825.840	53.60	74.00	-20.40	51.62	3.96	35.04	33.06	246	100	PEAK	VERTICAL

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11g CH 6 / Connector 1 / Mode 4

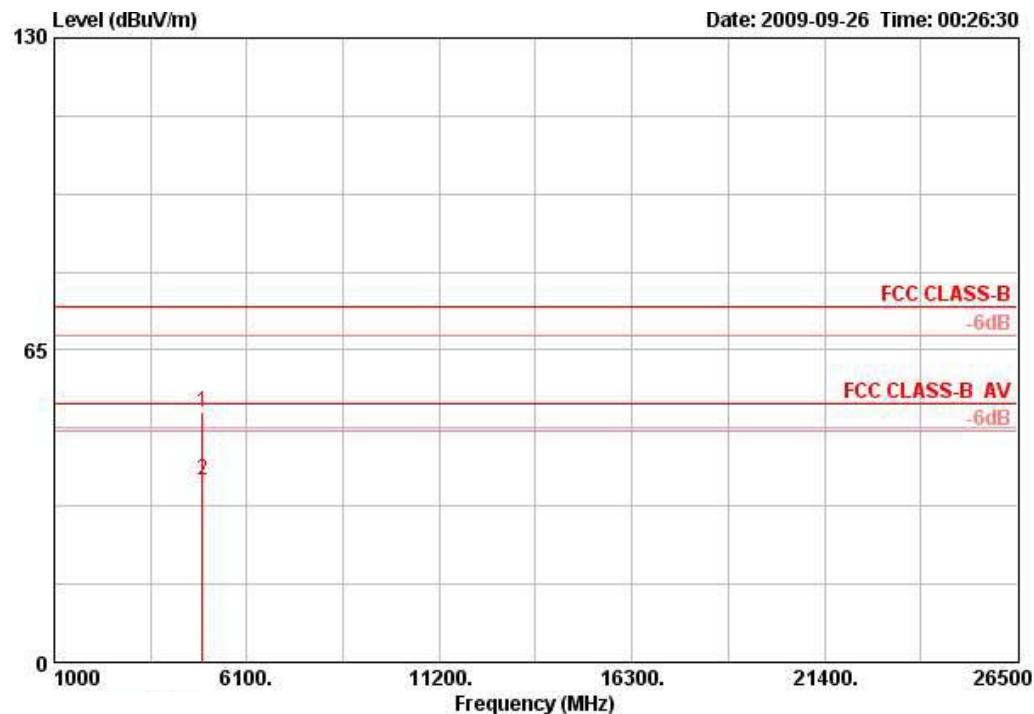
**Horizontal**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm	
1	4869.800	52.68	74.00	-21.32	50.62	3.97	35.03	33.12	200	178	PEAK	HORIZONTAL
2	4874.280	39.92	54.00	-14.08	37.82	3.97	35.03	33.16	200	178	AVERAGE	HORIZONTAL

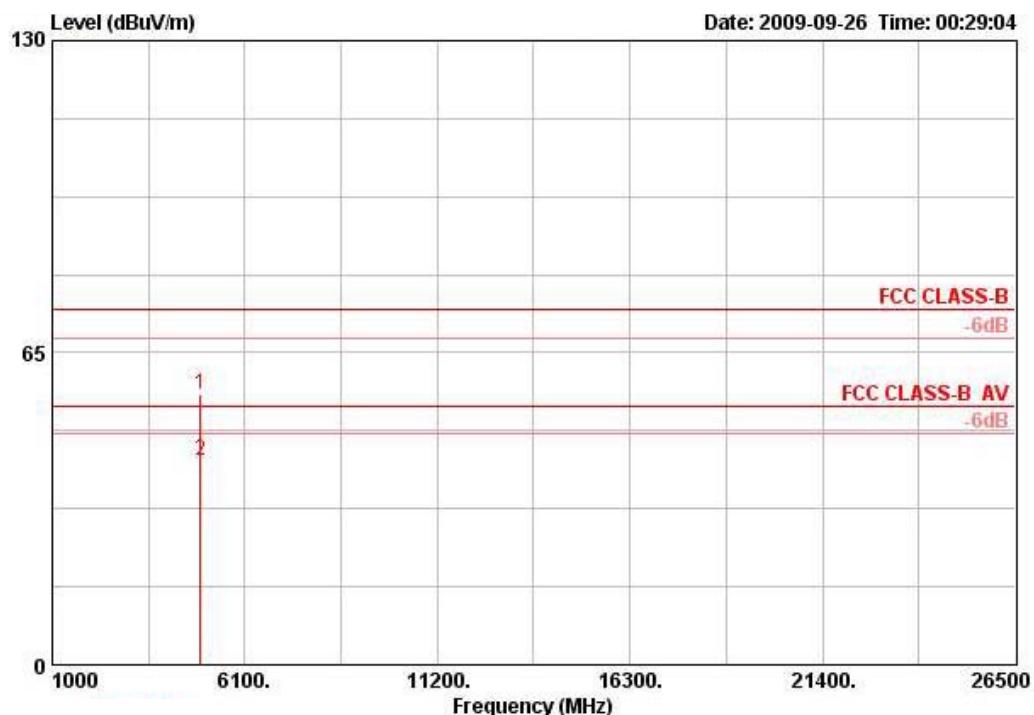
*Vertical*


Freq	Level	Limit		Over Limit	Read Level	Cable Preamplifier		Antenna Factor	Table Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m	Line dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	4869.640	57.10	74.00	-16.90	55.03	3.97	35.03	33.12	74	128	PERK		VERTICAL
2	4874.080	43.72	54.00	-10.28	41.62	3.97	35.03	33.16	74	128	AVERAGE		VERTICAL

Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	802.11g CH 11 / Connector 1 / Mode 4

**Horizontal**


Freq	Level	Limit		Over Line Limit	Read Level	Cable Loss	Preamplifier Factor	Antenna Factor	Table Pos	Ant Pos	Remark	Pol/Phase
		MHz	dBuV/m			MHz	dBuV/m					
1	4919.560	51.99	74.00	-22.01	49.81	3.97	35.02	33.23	221	122	PEAK	HORIZONTAL
2	4924.040	38.06	54.00	-15.94	35.85	3.97	35.02	33.26	221	122	AVERAGE	HORIZONTAL

*Vertical*


Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Pol/Phase	
		Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm	
1	4919.880	56.28	74.00	-17.72	54.09	3.97	35.02	33.23	83	125 PERK	VERTICAL
2	4923.920	42.54	54.00	-11.46	40.32	3.97	35.02	33.26	83	125 AVERAGE	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 (microvolt/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

- 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

<For EUT 2 with PIFA antenna>

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch 1, 6, 11 / Connector 1 / Mode 2
<b>Test Date</b>	Sep. 30, 2009		

##### Channel 1

	<b>Freq</b>	<b>Level</b>	<b>Over</b>	<b>Limit</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>	<b>Ant</b>	<b>Table</b>
			<b>Line</b>	<b>Factor</b>	<b>Level</b>	<b>Loss</b>	<b>Factor</b>	<b>Factor</b>		<b>Pos</b>	<b>Pos</b>
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	2389.600	69.77	-4.23	74.00	39.87	27.87	2.04	0.00	PEAK	128	295 VERTICAL
2 !	2390.000	52.65	-1.35	54.00	22.73	27.87	2.05	0.00	AVERAGE	128	295 VERTICAL
3 @	2407.400	100.05			70.16	27.84	2.05	0.00	AVERAGE	128	295 VERTICAL
4 over	2409.400	109.22			79.33	27.84	2.05	0.00	PEAK	128	295 VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

##### Channel 6

	<b>Freq</b>	<b>Level</b>	<b>Over</b>	<b>Limit</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>	<b>Ant</b>	<b>Table</b>
			<b>Line</b>	<b>Factor</b>	<b>Level</b>	<b>Loss</b>	<b>Factor</b>	<b>Factor</b>		<b>Pos</b>	<b>Pos</b>
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	2389.600	55.03	-18.97	74.00	25.12	27.87	2.04	0.00	PEAK	100	247 VERTICAL
2	2390.000	44.52	-9.48	54.00	14.60	27.87	2.05	0.00	AVERAGE	100	247 VERTICAL
3 @	2438.600	96.63			66.78	27.78	2.07	0.00	AVERAGE	100	247 VERTICAL
4 over	2438.800	106.14			76.29	27.78	2.07	0.00	PEAK	100	247 VERTICAL
5	2483.500	44.38	-9.62	54.00	14.56	27.73	2.10	0.00	AVERAGE	100	247 VERTICAL
6	2484.700	56.01	-17.99	74.00	26.19	27.73	2.10	0.00	PEAK	100	247 VERTICAL

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

##### Channel 11

	<b>Freq</b>	<b>Level</b>	<b>Over</b>	<b>Limit</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>	<b>Ant</b>	<b>Table</b>
			<b>Line</b>	<b>Factor</b>	<b>Level</b>	<b>Loss</b>	<b>Factor</b>	<b>Factor</b>		<b>Pos</b>	<b>Pos</b>
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 @	2467.200	100.69			70.84	27.76	2.10	0.00	AVERAGE	104	293 VERTICAL
2 over	2467.600	110.17			80.32	27.76	2.10	0.00	PEAK	104	293 VERTICAL
3 !	2483.500	53.10	-0.90	54.00	23.28	27.73	2.10	0.00	AVERAGE	104	293 VERTICAL
4 !	2483.500	69.40	-4.60	74.00	39.58	27.73	2.10	0.00	PEAK	104	293 VERTICAL

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



Temperature	24.3°C	Humidity	56.4%
Test Engineer	Allen Liu	Configurations	Draft n MCS0 40MHz Ch 3, 6, 9 / Connector 1 / Mode 2
Test Date	Sep. 30, 2009		

### Channel 3

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table	Pos	Pos	Pol/Phase
		Line	Level	Factor	Loss	Factor	cm		cm	deg			
1 !	2386.000	70.39	-3.61	74.00	40.48	27.87	2.04	0.00 PEAK	104	295	VERTICAL		
2 !	2390.000	52.45	-1.55	54.00	22.53	27.87	2.05	0.00 AVERAGE	104	295	VERTICAL		
3 @	2427.600	94.78			64.90	27.81	2.07	0.00 AVERAGE	104	295	VERTICAL		
4 over	2428.800	104.44			74.56	27.81	2.07	0.00 PEAK	104	295	VERTICAL		

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

### Channel 6

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table	Pos	Pos	Pol/Phase
		Line	Level	Factor	Loss	Factor	cm		cm	deg			
1	2390.000	65.40	-8.60	74.00	35.48	27.87	2.05	0.00 PEAK	126	295	VERTICAL		
2 !	2390.000	51.90	-2.10	54.00	21.98	27.87	2.05	0.00 AVERAGE	126	295	VERTICAL		
3 @	2446.200	98.08			68.22	27.78	2.08	0.00 AVERAGE	126	295	VERTICAL		
4 over	2447.800	107.95			78.08	27.78	2.08	0.00 PEAK	126	295	VERTICAL		
5 !	2483.500	52.79	-1.21	54.00	22.97	27.73	2.10	0.00 AVERAGE	126	295	VERTICAL		
6	2483.900	67.05	-6.95	74.00	37.23	27.73	2.10	0.00 PEAK	126	295	VERTICAL		

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

### Channel 9

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table	Pos	Pos	Pol/Phase
		Line	Level	Factor	Loss	Factor	cm		cm	deg			
1 over	2454.800	105.65			75.82	27.76	2.08	0.00 PEAK	126	295	VERTICAL		
2 @	2454.800	96.48			66.65	27.76	2.08	0.00 AVERAGE	126	295	VERTICAL		
3 !	2483.900	53.81	-0.19	54.00	23.99	27.73	2.10	0.00 AVERAGE	126	295	VERTICAL		
4 !	2488.300	68.19	-5.81	74.00	38.39	27.70	2.10	0.00 PEAK	126	295	VERTICAL		

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.

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11b CH 1, 6, 11 / Connector 1 / Mode 2
<b>Test Date</b>	Sep. 30, 2009		

**Channel 1**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Pos	Pos	Pol/Phase
			Line	Level	Factor	Loss	Factor	Remark					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg		
1	2386.000	59.36	-14.64	74.00	29.45	27.87	2.04	0.00 PEAK		130	295	VERTICAL	
2 !	2387.200	49.78	-4.22	54.00	19.87	27.87	2.04	0.00 AVERAGE		130	295	VERTICAL	
3 @	2412.800	104.91			75.02	27.84	2.05	0.00 AVERAGE		130	295	VERTICAL	
4 over	2413.000	108.81			78.92	27.84	2.05	0.00 PEAK		130	295	VERTICAL	

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

**Channel 6**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Pos	Pos	Pol/Phase
			Line	Level	Factor	Loss	Factor	Remark					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg		
1	2389.200	55.25	-18.75	74.00	25.35	27.87	2.04	0.00 PEAK		100	144	VERTICAL	
2	2390.000	44.82	-9.18	54.00	14.90	27.87	2.05	0.00 AVERAGE		100	144	VERTICAL	
3 over	2438.200	106.53			76.68	27.78	2.07	0.00 PEAK		100	144	VERTICAL	
4 @	2439.800	102.79			72.94	27.78	2.07	0.00 AVERAGE		100	144	VERTICAL	
5	2483.500	43.98	-10.02	54.00	14.16	27.73	2.10	0.00 AVERAGE		100	144	VERTICAL	
6	2486.300	54.43	-19.57	74.00	24.61	27.73	2.10	0.00 PEAK		100	144	VERTICAL	

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

**Channel 11**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Pos	Pos	Pol/Phase
			Line	Level	Factor	Loss	Factor	Remark					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg		
1 over	2463.200	110.10			80.27	27.76	2.08	0.00 PEAK		122	294	VERTICAL	
2 @	2464.800	106.52			76.68	27.76	2.08	0.00 AVERAGE		122	294	VERTICAL	
3 !	2487.500	53.26	-0.74	54.00	23.46	27.70	2.10	0.00 AVERAGE		122	294	VERTICAL	
4	2487.900	60.75	-13.25	74.00	30.95	27.70	2.10	0.00 PEAK		122	294	VERTICAL	

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

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11g CH 1, 6, 11 / Connector 1 / Mode 2
<b>Test Date</b>	Sep. 30, 2009		

**Channel 1**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Pos	Pos	Pol/Phase
			Line	Level	Factor	Loss	Factor	Remark					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg		
1 !	2390.000	51.97	-2.03	54.00	22.05	27.87	2.05	0.00	AVERAGE	105	295	VERTICAL	
2 !	2390.000	69.38	-4.62	74.00	39.46	27.87	2.05	0.00	PEAK	105	295	VERTICAL	
3 over	2409.600	109.31			79.41	27.84	2.05	0.00	PEAK	105	295	VERTICAL	
4 @	2410.000	100.27			70.38	27.84	2.05	0.00	AVERAGE	105	295	VERTICAL	

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

**Channel 6**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Pos	Pos	Pol/Phase
			Line	Level	Factor	Loss	Factor	Remark					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg		
1	2390.000	44.53	-9.47	54.00	14.61	27.87	2.05	0.00	AVERAGE	123	295	VERTICAL	
2	2390.000	55.54	-18.46	74.00	25.62	27.87	2.05	0.00	PEAK	123	295	VERTICAL	
3 @	2439.200	100.40			70.55	27.78	2.07	0.00	AVERAGE	123	295	VERTICAL	
4 over	2440.400	109.77			79.92	27.78	2.07	0.00	PEAK	123	295	VERTICAL	
5	2483.500	45.18	-8.82	54.00	15.36	27.73	2.10	0.00	AVERAGE	123	295	VERTICAL	
6	2484.300	56.05	-17.95	74.00	26.22	27.73	2.10	0.00	PEAK	123	295	VERTICAL	

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

**Channel 11**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Pos	Pos	Pol/Phase
			Line	Level	Factor	Loss	Factor	Remark					
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg		
1 @	2467.200	101.32			71.47	27.76	2.10	0.00	AVERAGE	105	294	VERTICAL	
2 over	2467.600	110.75			80.90	27.76	2.10	0.00	PEAK	105	294	VERTICAL	
3 !	2483.500	53.38	-0.62	54.00	23.56	27.73	2.10	0.00	AVERAGE	105	294	VERTICAL	
4 !	2483.900	71.52	-2.48	74.00	41.69	27.73	2.10	0.00	PEAK	105	294	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.

&lt;For EUT 2 with Dipole antenna&gt;

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 20MHz Ch 1, 6, 11 / Connector 1 / Mode 4
<b>Test Date</b>	Sep. 25, 2009		

**Channel 1**

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg			
1	2390.000	60.80	74.00	-13.20	29.87	2.76	0.00	28.17	296	107	PEAK	VERTICAL
2	2390.000	47.49	54.00	-6.51	16.56	2.76	0.00	28.17	296	107	AVERAGE	VERTICAL
3 @	2414.200	110.16			79.18	2.77	0.00	28.21	296	107	PERK	VERTICAL
4 @	2414.800	101.22			70.24	2.77	0.00	28.21	296	107	AVERAGE	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz

**Channel 6**

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg			
1	2390.000	45.17	54.00	-8.83	14.24	2.76	0.00	28.17	61	106	AVERAGE	VERTICAL
2	2390.000	53.53	74.00	-20.47	22.60	2.76	0.00	28.17	61	106	PEAK	VERTICAL
3 @	2439.800	102.86			71.79	2.78	0.00	28.29	61	106	AVERAGE	VERTICAL
4 @	2440.000	111.79			80.72	2.78	0.00	28.29	61	106	PEAK	VERTICAL
5	2483.500	45.62	54.00	-8.38	14.44	2.81	0.00	28.37	61	106	AVERAGE	VERTICAL
6	2484.300	56.71	74.00	-17.29	25.53	2.81	0.00	28.37	61	106	PERK	VERTICAL

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

**Channel 11**

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg			
1 @	2455.000	98.42			67.29	2.80	0.00	28.33	60	105	AVERAGE	VERTICAL
2 @	2455.200	107.69			76.57	2.80	0.00	28.33	60	105	PERK	VERTICAL
3 @	2483.500	53.76	54.00	-0.24	22.58	2.81	0.00	28.37	60	105	AVERAGE	VERTICAL
4 !	2483.500	68.78	74.00	-5.22	37.60	2.81	0.00	28.37	60	105	PEAK	VERTICAL

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

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	Draft n MCS0 40MHz Ch 3, 6, 9 / Connector 1 / Mode 4
<b>Test Date</b>	Sep. 25, 2009		

**Channel 3**

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2390.000	53.17	54.00	-0.83	22.24	2.76	0.00	28.17	60	110	AVERAGE	VERTICAL
2	2390.000	66.79	74.00	-7.21	35.86	2.76	0.00	28.17	60	110	PEAK	VERTICAL
3 @	2438.000	97.21			66.13	2.78	0.00	28.29	60	110	AVERAGE	VERTICAL
4 @	2438.800	108.42			77.34	2.78	0.00	28.29	60	110	PEAK	VERTICAL

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

**Channel 6**

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2390.000	49.88	54.00	-4.12	18.95	2.76	0.00	28.17	237	142	AVERAGE	VERTICAL
2	2390.000	63.31	74.00	-10.69	32.38	2.76	0.00	28.17	237	142	PEAK	VERTICAL
3 @	2453.000	100.71			69.59	2.78	0.00	28.33	237	142	AVERAGE	VERTICAL
4 @	2453.400	111.42			80.31	2.78	0.00	28.33	237	142	PEAK	VERTICAL
5 !	2483.500	48.52	54.00	-5.48	17.34	2.81	0.00	28.37	237	142	AVERAGE	VERTICAL
6	2484.300	61.97	74.00	-12.03	30.79	2.81	0.00	28.37	237	142	PEAK	VERTICAL

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

**Channel 9**

	Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 @	2454.000	106.82			75.70	2.78	0.00	28.33	43	137	PEAK	VERTICAL
2 @	2459.200	96.83			65.71	2.80	0.00	28.33	43	137	AVERAGE	VERTICAL
3 @	2483.475	53.74	54.00	-0.26	22.56	2.81	0.00	28.37	43	137	AVERAGE	VERTICAL
4	2483.500	67.32	74.00	-6.68	36.14	2.81	0.00	28.37	43	137	PEAK	VERTICAL

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	56.4%
Test Engineer	Allen Liu	Configurations	802.11b CH 1, 6, 11 / Connector 1 / Mode 4
Test Date	Sep. 25, 2009		

**Channel 1**

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamplifier	Antenna	Table	Ant Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	Pos	cm		
1	2387.000	47.18	54.00	-6.82	16.25	2.76	0.00	28.17	74	100	AVERAGE	VERTICAL
2	2387.200	57.14	74.00	-16.86	26.21	2.76	0.00	28.17	74	100	PEAK	VERTICAL
3 @	2409.200	106.25			75.27	2.77	0.00	28.21	74	100	AVERAGE	VERTICAL
4 @	2411.000	109.96			78.97	2.77	0.00	28.21	74	100	PEAK	VERTICAL

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

**Channel 6**

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamplifier	Antenna	Table	Ant Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	Pos	cm		
1	2390.000	53.20	74.00	-20.80	22.27	2.76	0.00	28.17	60	107	PEAK	VERTICAL
2	2390.000	44.86	54.00	-9.14	13.93	2.76	0.00	28.17	60	107	AVERAGE	VERTICAL
3 @	2437.800	106.82			75.74	2.78	0.00	28.29	60	107	AVERAGE	VERTICAL
4 @	2438.200	110.64			79.56	2.78	0.00	28.29	60	107	PEAK	VERTICAL
5	2483.500	45.32	54.00	-8.68	14.14	2.81	0.00	28.37	60	107	AVERAGE	VERTICAL
6	2483.500	54.86	74.00	-19.14	23.68	2.81	0.00	28.37	60	107	PEAK	VERTICAL

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

**Channel 11**

Freq	Level	Limit		Over Limit	Read Level	Cable	Preamplifier	Antenna	Table	Ant Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	Pos	cm		
1 @	2462.800	106.21			75.09	2.80	0.00	28.33	61	163	AVERAGE	VERTICAL
2 @	2463.200	110.00			78.88	2.80	0.00	28.33	61	163	PEAK	VERTICAL
3 !	2487.500	48.62	54.00	-5.38	17.40	2.81	0.00	28.41	61	163	AVERAGE	VERTICAL
4	2488.100	57.52	74.00	-16.48	26.30	2.81	0.00	28.41	61	163	PEAK	VERTICAL

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

<b>Temperature</b>	24.3°C	<b>Humidity</b>	56.4%
<b>Test Engineer</b>	Allen Liu	<b>Configurations</b>	802.11g CH 1, 6, 11 / Connector 1 / Mode 4
<b>Test Date</b>	Sep. 25, 2009		

**Channel 1**

	Freq	Level	Limit	Over	Read	Cable	Pream	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 !	2390.000	52.47	54.00	-1.53	21.54	2.76	0.00	28.17	244	100	AVERAGE	VERTICAL
2	2390.000	67.18	74.00	-6.82	36.25	2.76	0.00	28.17	244	100	PEAK	VERTICAL
3 @	2409.000	109.88			78.90	2.77	0.00	28.21	244	100	PEAK	VERTICAL
4 @	2409.400	100.71			69.73	2.77	0.00	28.21	244	100	AVERAGE	VERTICAL

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

**Channel 6**

	Freq	Level	Limit	Over	Read	Cable	Pream	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1	2389.800	55.37	74.00	-18.63	24.44	2.76	0.00	28.17	236	99	PEAK	VERTICAL
2	2390.000	44.70	54.00	-9.30	13.77	2.76	0.00	28.17	236	99	AVERAGE	VERTICAL
3 @	2439.200	112.46			81.39	2.78	0.00	28.29	236	99	PEAK	VERTICAL
4 @	2439.800	103.51			72.44	2.78	0.00	28.29	236	99	AVERAGE	VERTICAL
5	2483.500	45.41	54.00	-8.59	14.23	2.81	0.00	28.37	236	99	AVERAGE	VERTICAL
6	2483.700	56.51	74.00	-17.49	25.33	2.81	0.00	28.37	236	99	PEAK	VERTICAL

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

**Channel 11**

	Freq	Level	Limit	Over	Read	Cable	Pream	Antenna	Table	Ant	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	Pos	Pos		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	deg	cm		
1 @	2454.800	97.23			66.11	2.80	0.00	28.33	58	105	AVERAGE	VERTICAL
2 @	2455.000	106.43			75.30	2.80	0.00	28.33	58	105	PEAK	VERTICAL
3 @	2483.500	53.60	54.00	-0.40	22.42	2.81	0.00	28.37	58	105	AVERAGE	VERTICAL
4	2483.500	67.35	74.00	-6.65	36.17	2.81	0.00	28.37	58	105	PEAK	VERTICAL

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

**Note:**

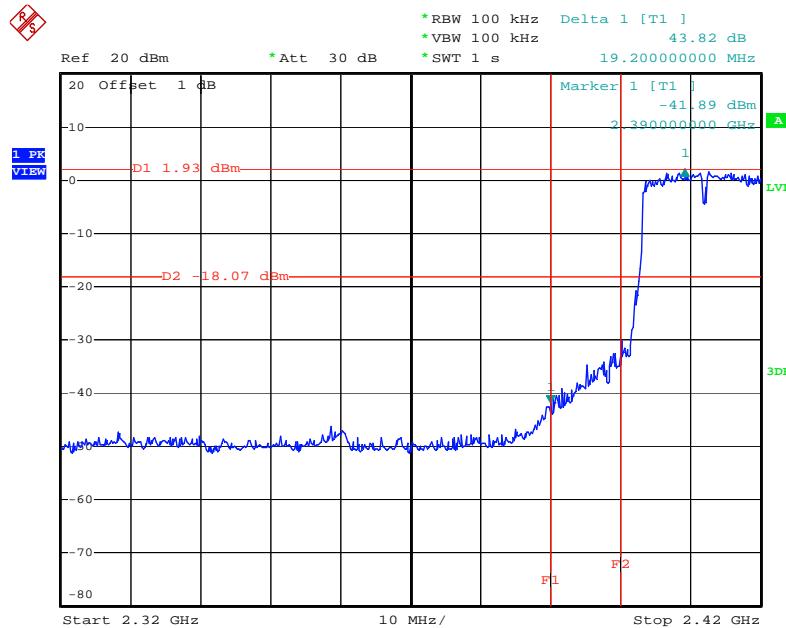
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

### For Emission not in Restricted Band

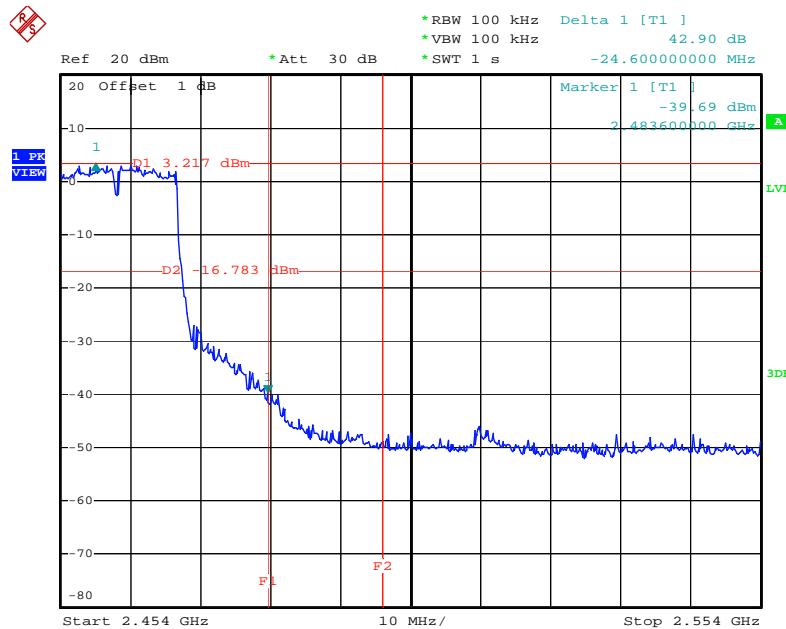
<For EUT 2 with PIFA antenna>

#### Low Band Edge Plot on Configuration Draft n MCS0 20MHz / Connector 1 / 2412 MHz



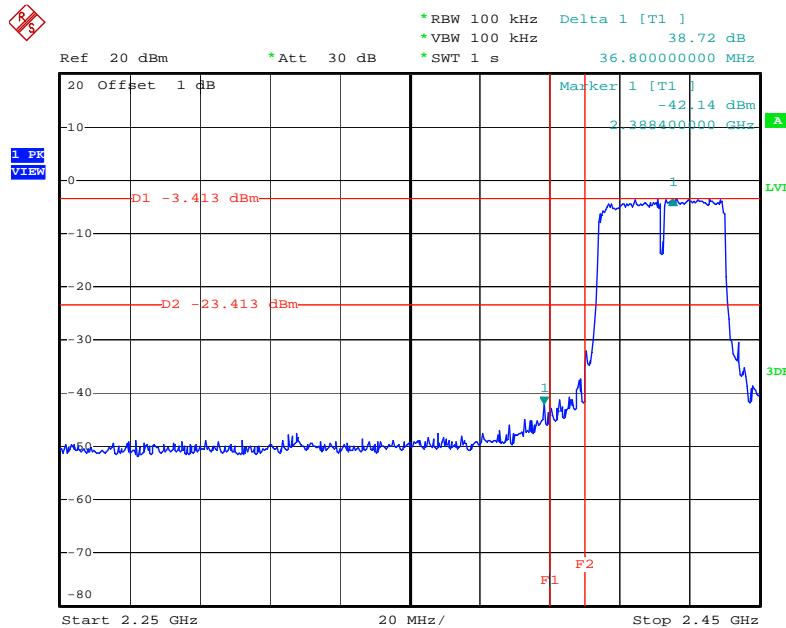
Date: 1.OCT.2009 22:03:08

#### High Band Edge Plot on Configuration Draft n MCS0 20MHz / Connector 1 / 2462 MHz



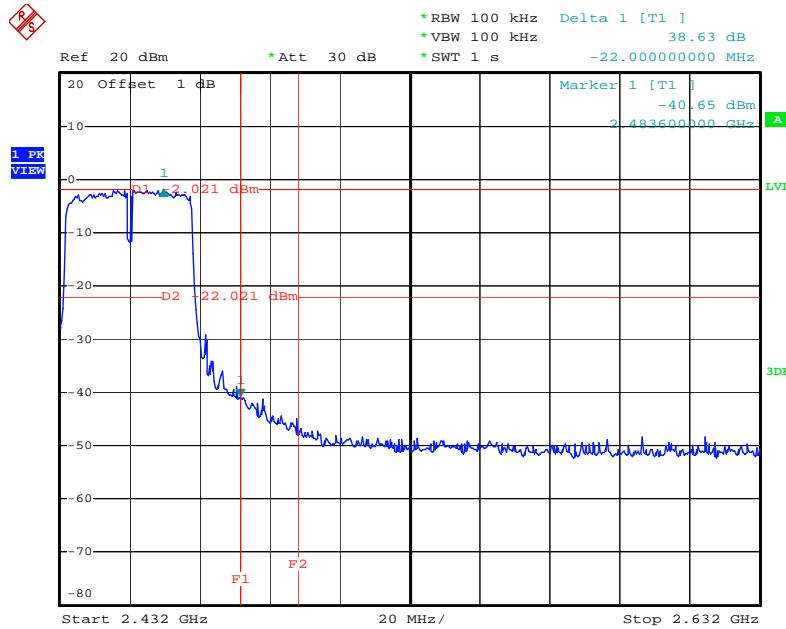
Date: 1.OCT.2009 22:10:27

### Low Band Edge Plot on Configuration Draft n MCS0 40MHz / Connector 1 / 2422 MHz



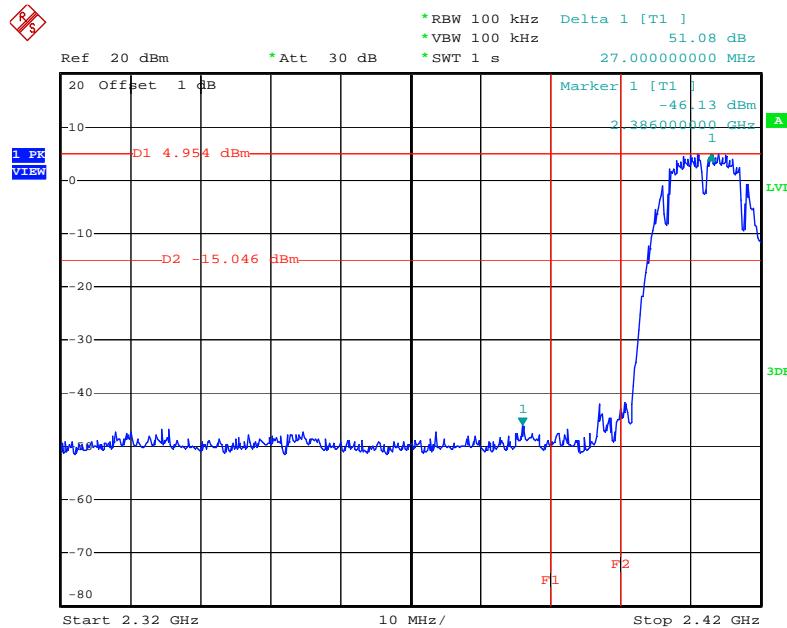
Date: 1.OCT.2009 21:56:08

### High Band Edge Plot on Configuration Draft n MCS0 40MHz / Connector 1 / 2452 MHz



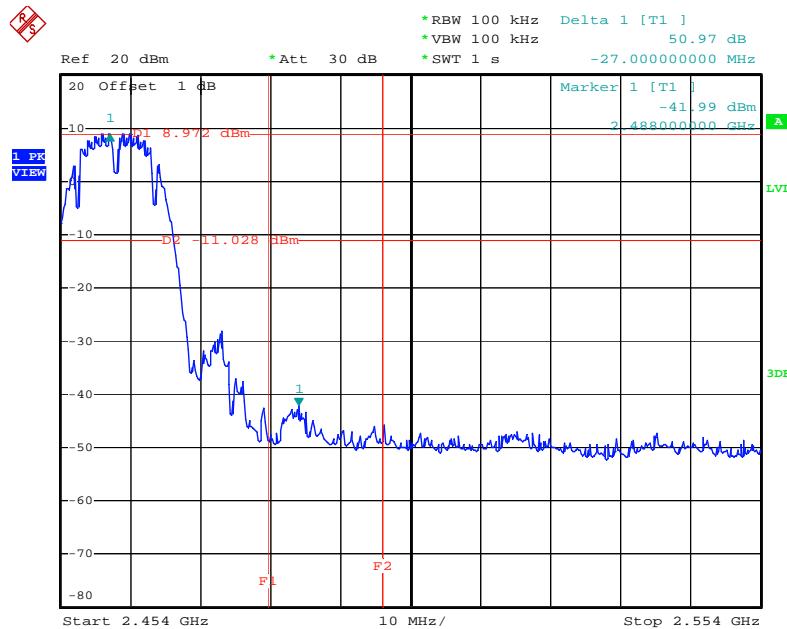
Date: 1.OCT.2009 21:58:26

### Low Band Edge Plot on Configuration IEEE 802.11b / Connector 1 / 2412 MHz



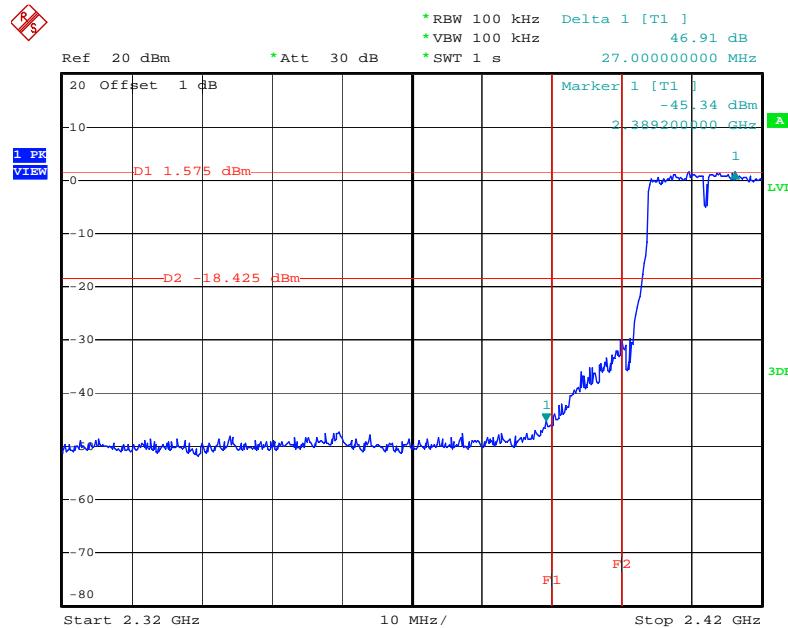
Date: 1.OCT.2009 22:43:47

### High Band Edge Plot on Configuration IEEE 802.11b / Connector 1 / 2462 MHz



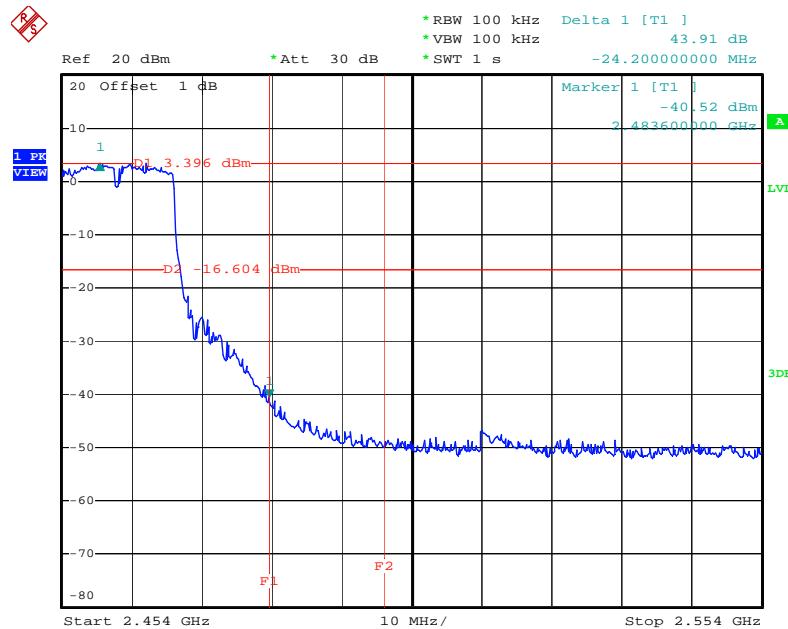
Date: 1.OCT.2009 22:48:05

### Low Band Edge Plot on Configuration IEEE 802.11g / Connector 1 / 2412 MHz



Date: 1.OCT.2009 22:23:52

### High Band Edge Plot on Configuration IEEE 802.11g / Connector 1 / 2462 MHz

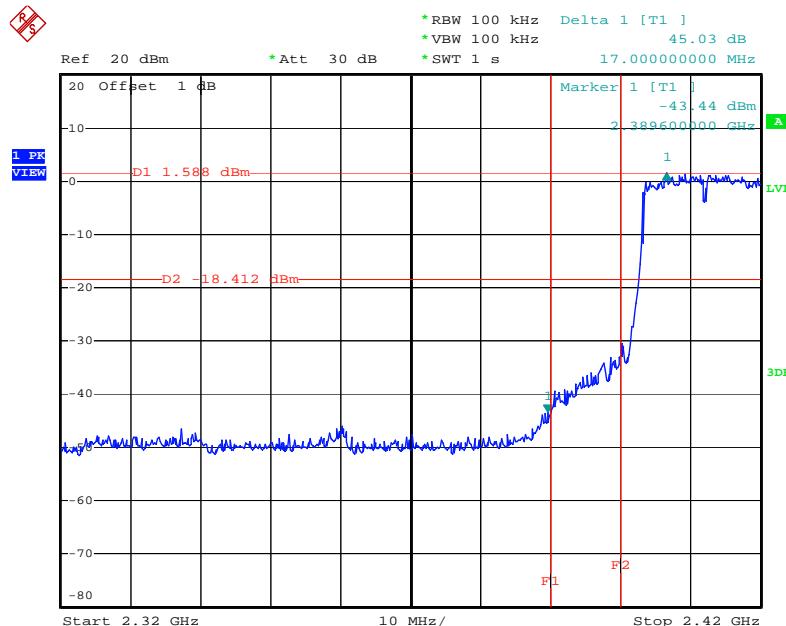


Date: 1.OCT.2009 22:19:22

**For Emission not in Restricted Band**

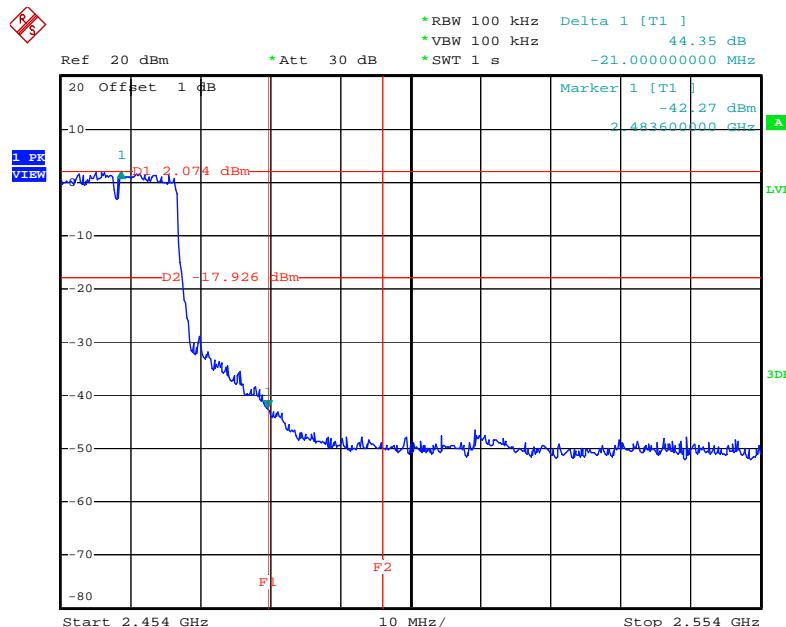
<For EUT 2 with Dipole antenna>

**Low Band Edge Plot on Configuration Draft n MCS0 20MHz / Connector 1 / 2412 MHz**



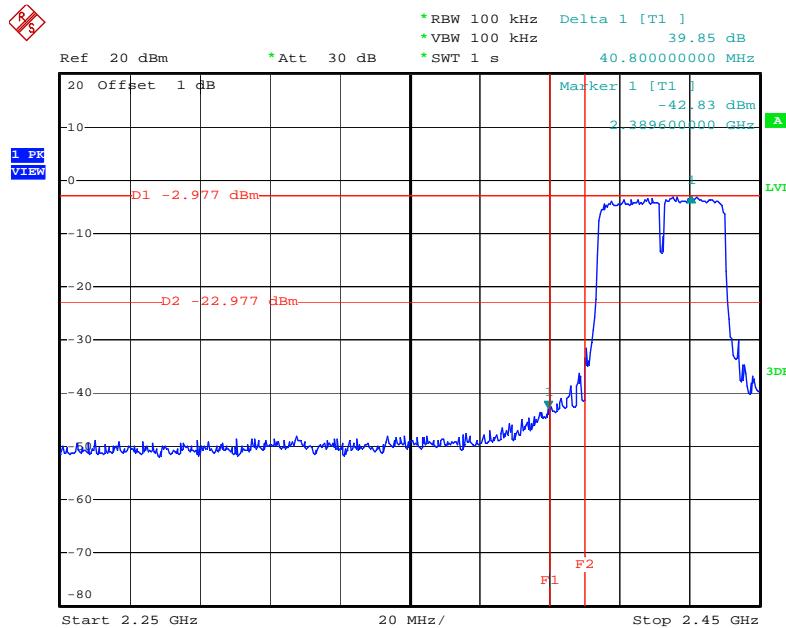
Date: 1.OCT.2009 21:05:19

**High Band Edge Plot on Configuration Draft n MCS0 20MHz / Connector 1 / 2462 MHz**



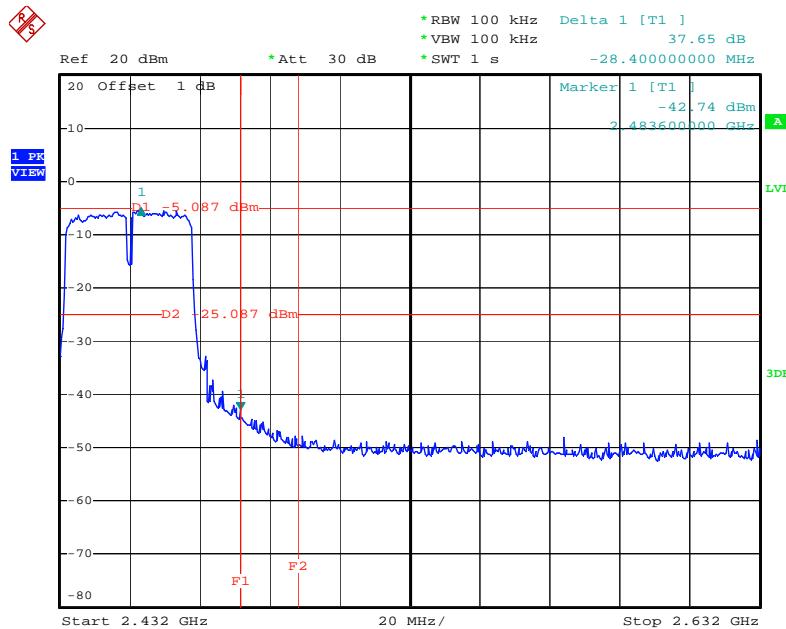
Date: 1.OCT.2009 21:09:34

### Low Band Edge Plot on Configuration Draft n MCS0 40MHz / Connector 1 / 2422 MHz



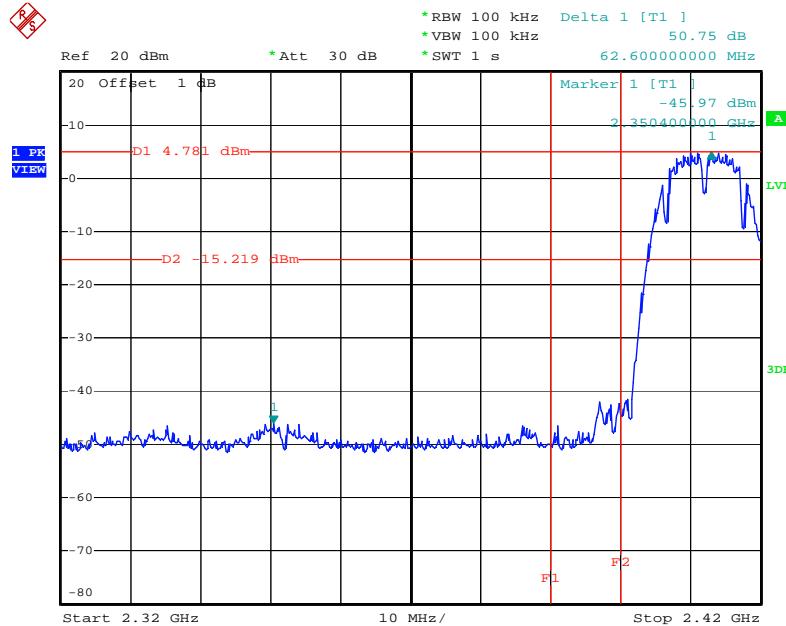
Date: 1.OCT.2009 21:15:05

### High Band Edge Plot on Configuration Draft n MCS0 40MHz / Connector 1 / 2452 MHz



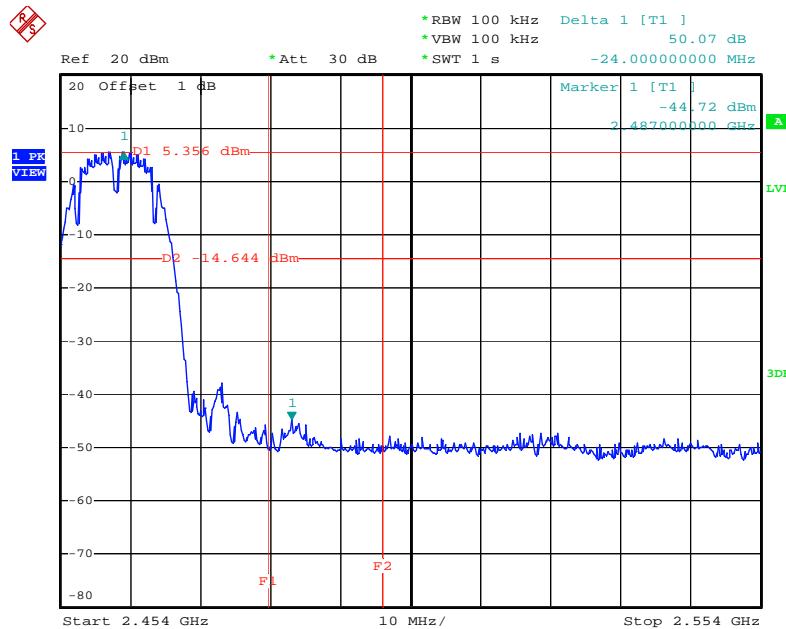
Date: 1.OCT.2009 21:31:23

### Low Band Edge Plot on Configuration IEEE 802.11b / Connector 1 / 2412 MHz



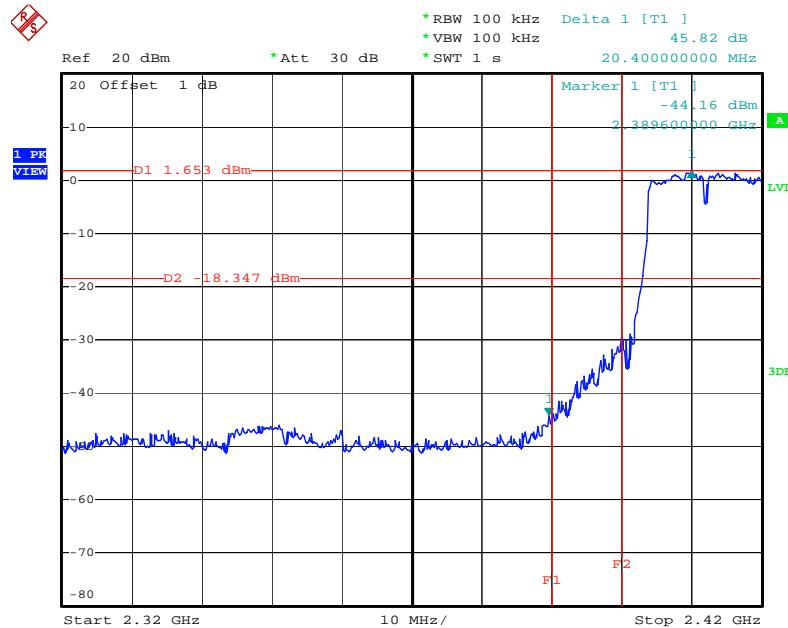
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### High Band Edge Plot on Configuration IEEE 802.11b / Connector 1 / 2462 MHz



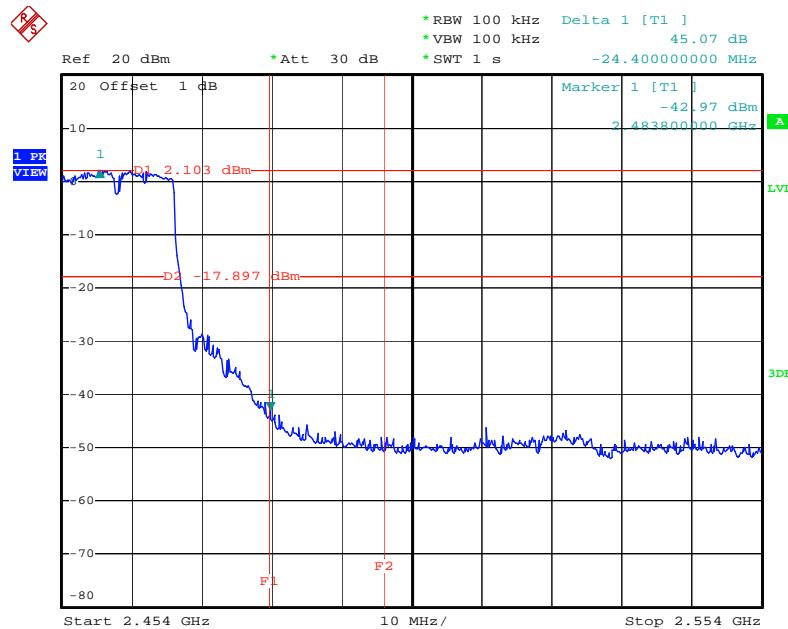
Date: 1.OCT.2009 20:52:33

### Low Band Edge Plot on Configuration IEEE 802.11g / Connector 1 / 2412 MHz



Date: 1.OCT.2009 20:58:16

### High Band Edge Plot on Configuration IEEE 802.11g / Connector 1 / 2462 MHz



Date: 1.OCT.2009 21:02:45

## 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, 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, 2009	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz – 30MHz	Jun. 11, 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. 07, 2009	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, 2009	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	100305	9 kHz - 40 GHz	Feb. 03, 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	Sep. 26, 2008	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz – 1 GHz	Sep. 26, 2009	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	Apr. 28, 2009	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. 28, 2008	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jul. 31, 2009	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100666	DC ~ 30GHz	Aug. 05, 2009	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jul. 31, 2009	Conducted (TH01-HY)
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	Jul. 12, 2009*	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	Aug. 06, 2009	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	Feb. 13, 2009	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 25, 2009	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 <sup>nd</sup> Rd., Taipei 114, Taiwan, R.O.C. TEL : 886-2-2794-8886 FAX : 886-2-2794-9777
JHUBEI	ADD : No.8, Lane 724, 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

**Sportun 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

P1, total 9 pages

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