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)	100KHz / 100KHz for peak

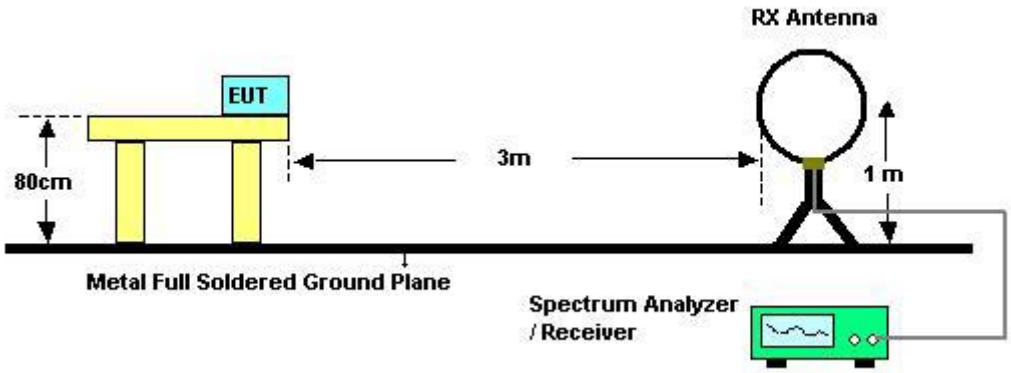
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.5.3. Test Procedures

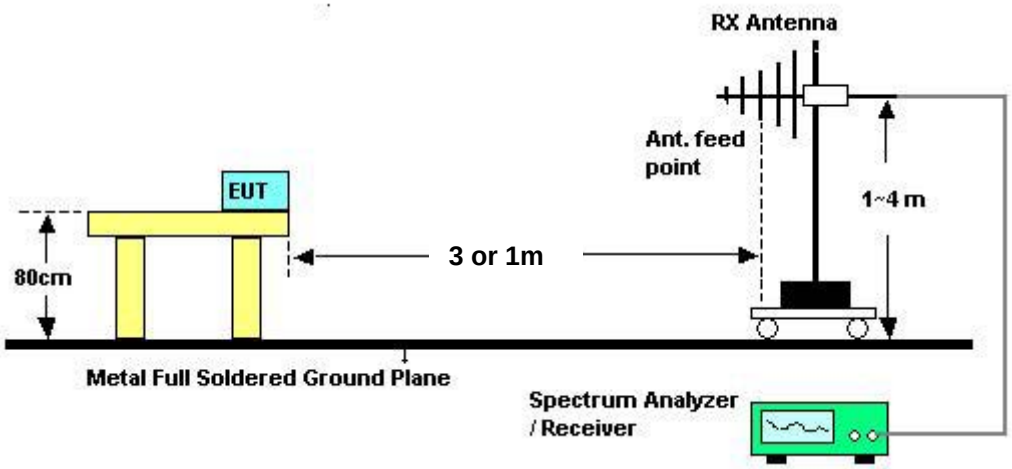
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting 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 1m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [9.54 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	26℃	Humidity	55%
Test Engineer	Vic Hsiao		

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

Note:

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

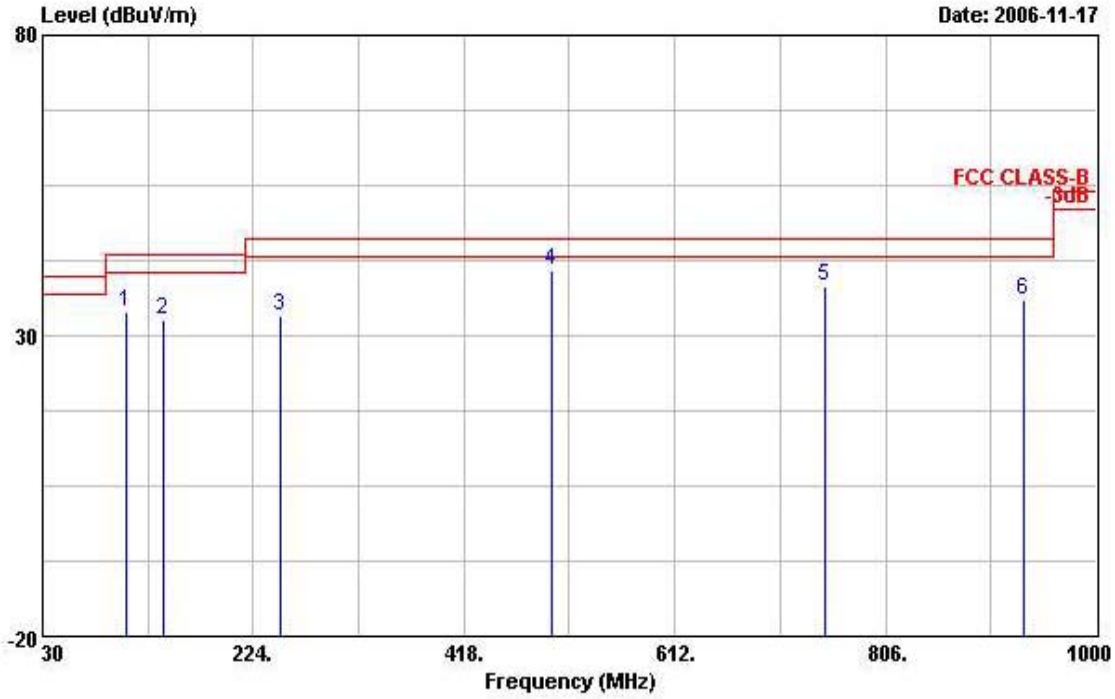
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

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

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

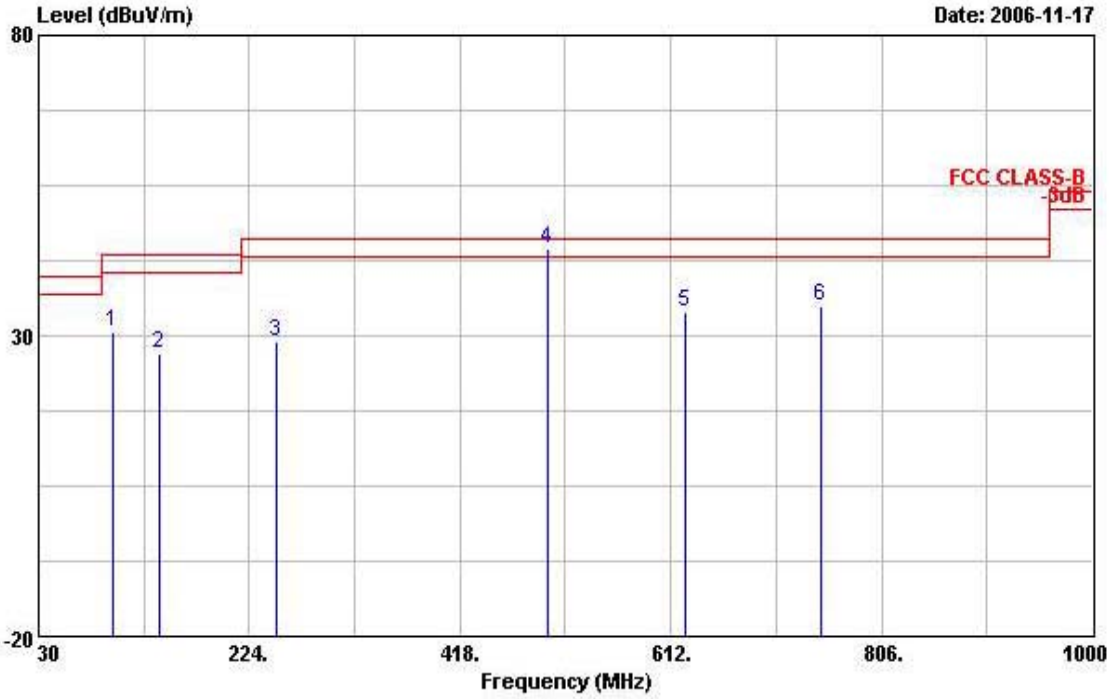
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 1 / 802.11a CH 157

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	106.630	34.07	-9.43	43.50	48.49	12.04	1.44	27.90	Peak
2 @	141.550	32.63	-10.87	43.50	47.60	11.26	1.86	28.09	Peak
3 @	249.220	33.45	-12.55	46.00	46.73	12.58	2.50	28.36	Peak
4 @	498.510	40.88	-5.12	46.00	48.66	18.09	3.81	29.68	QP
5 @	749.740	38.08	-7.92	46.00	42.22	20.71	4.86	29.70	Peak
6 @	933.070	35.83	-10.17	46.00	38.99	21.23	5.37	29.76	Peak

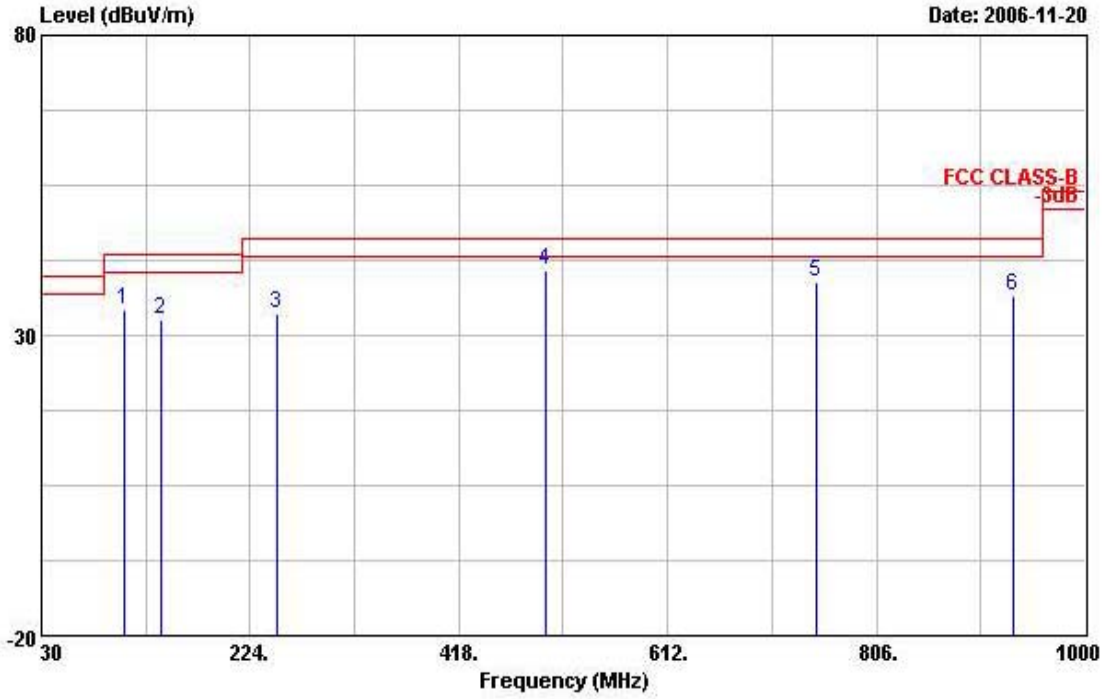
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	97.900	30.70	-12.80	43.50	46.37	10.86	1.32	27.85	Peak
2	141.550	26.95	-16.55	43.50	41.92	11.26	1.86	28.09	Peak
3	249.220	29.02	-16.98	46.00	42.30	12.58	2.50	28.36	Peak
4 @	498.510	44.39	-1.61	46.00	52.17	18.09	3.81	29.68	QP
5 @	625.580	34.10	-11.90	46.00	40.22	19.47	4.30	29.88	Peak
6 @	749.740	34.78	-11.22	46.00	38.92	20.71	4.86	29.70	Peak

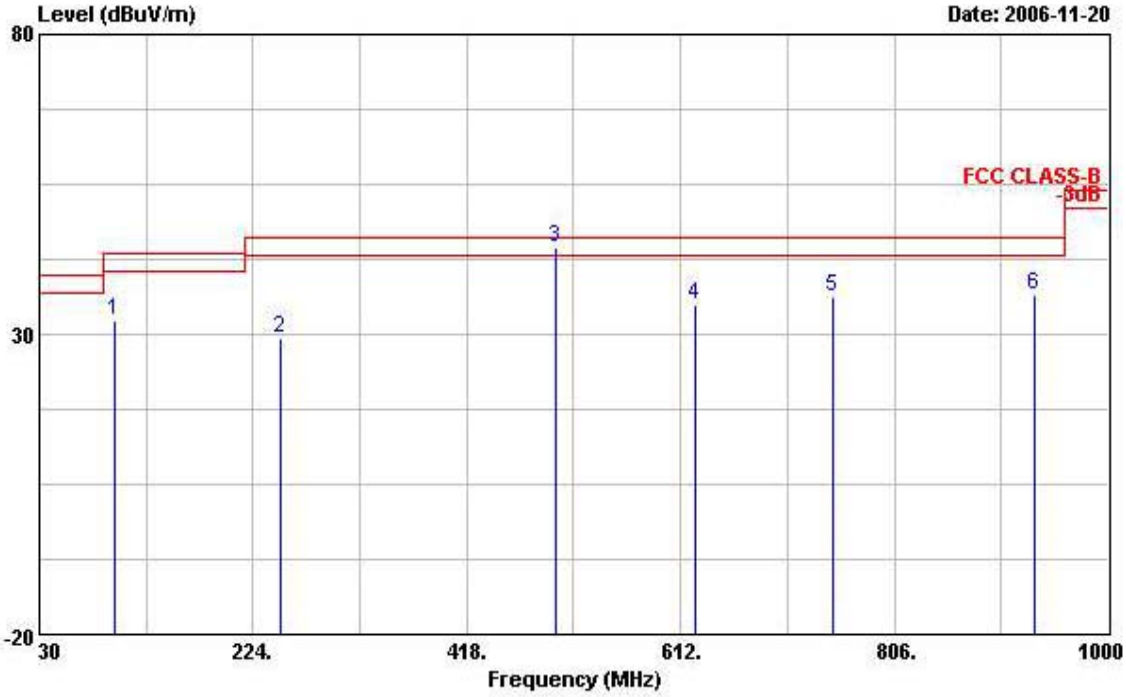
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 1 / 802.11g CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	106.680	34.33	-9.17	43.50	48.75	12.04	1.44	27.90	Peak
2	141.580	32.49	-11.01	43.50	47.46	11.26	1.86	28.09	Peak
3	249.180	33.70	-12.30	46.00	46.97	12.58	2.50	28.36	Peak
4	498.540	40.96	-5.04	46.00	48.74	18.09	3.81	29.68	QP
5	749.700	38.82	-7.18	46.00	42.96	20.71	4.86	29.70	Peak
6	933.120	36.72	-9.28	46.00	39.88	21.23	5.37	29.76	Peak

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	97.940	32.46	-11.04	43.50	48.13	10.86	1.32	27.85	Peak
2	249.200	29.46	-16.54	46.00	42.74	12.58	2.50	28.36	Peak
3 @	498.540	44.56	-1.44	46.00	52.34	18.09	3.81	29.68	QP
4	625.540	34.78	-11.22	46.00	40.90	19.47	4.30	29.88	Peak
5	749.780	36.09	-9.91	46.00	40.23	20.71	4.86	29.70	Peak
6	933.070	36.64	-9.36	46.00	39.80	21.23	5.37	29.76	Peak

Note:

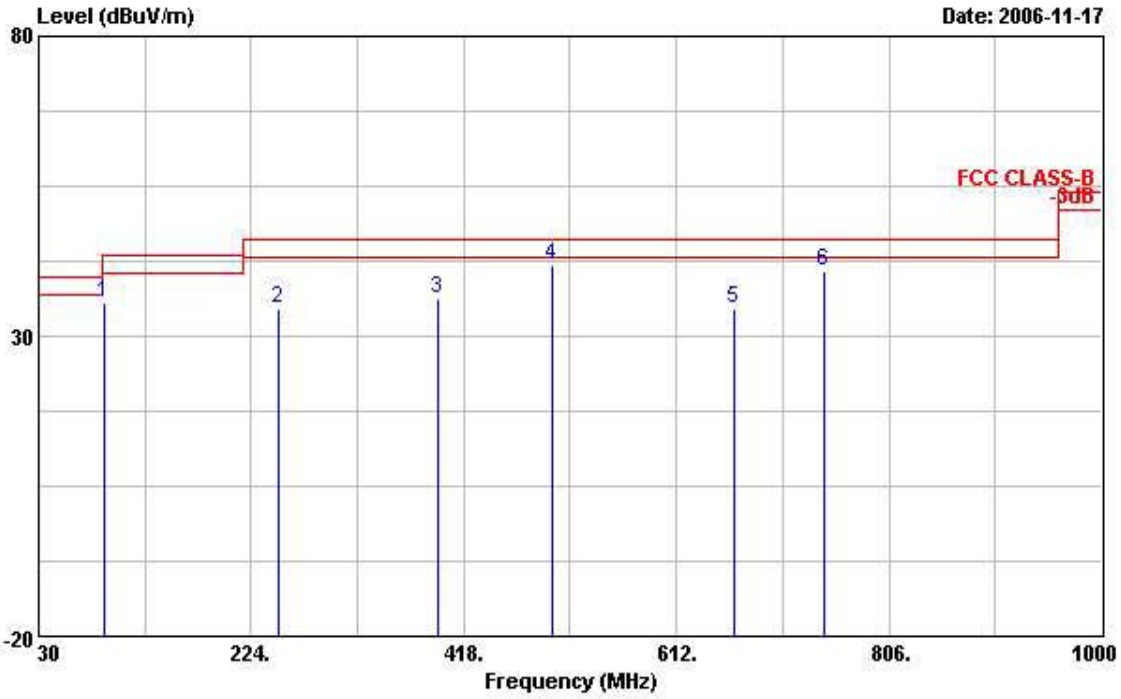
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

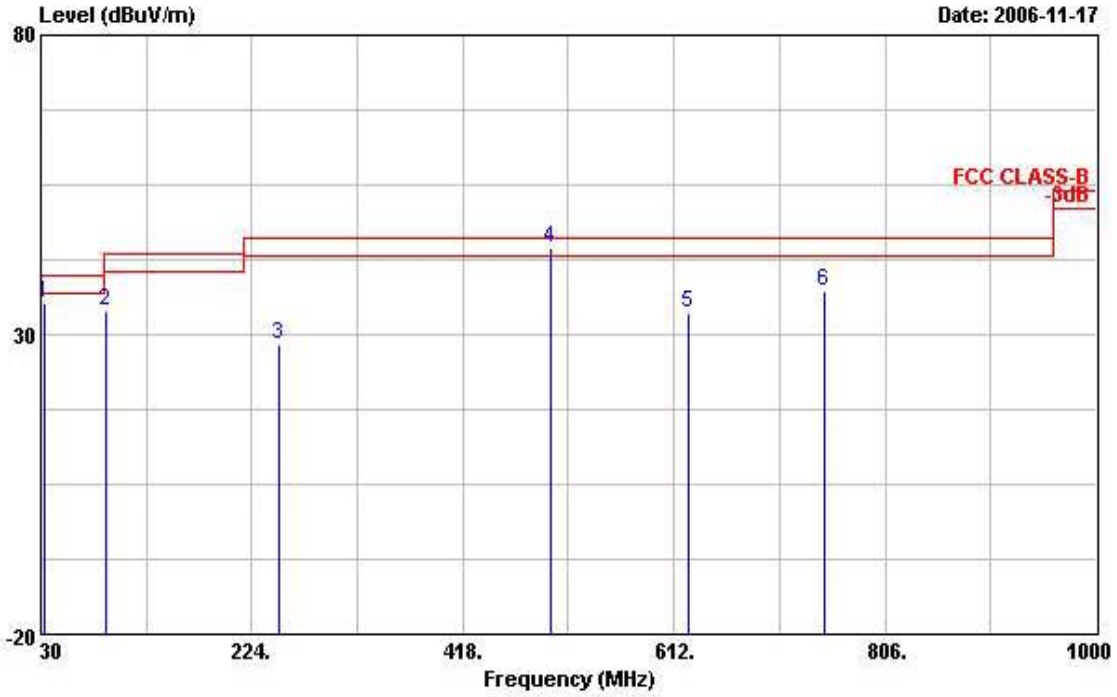
Temperature	26°C	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11a CH 157

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	90.140	35.48	-8.02	43.50	52.49	9.50	1.30	27.81	Peak
2	249.220	34.54	-11.46	46.00	47.82	12.58	2.50	28.36	Peak
3	393.750	36.20	-9.80	46.00	45.71	16.25	3.36	29.11	Peak
4	498.510	41.90	-4.10	46.00	49.68	18.09	3.81	29.68	QP
5	665.350	34.65	-11.35	46.00	40.45	19.73	4.49	30.03	Peak
6	746.830	40.70	-5.30	46.00	44.92	20.66	4.84	29.72	Peak

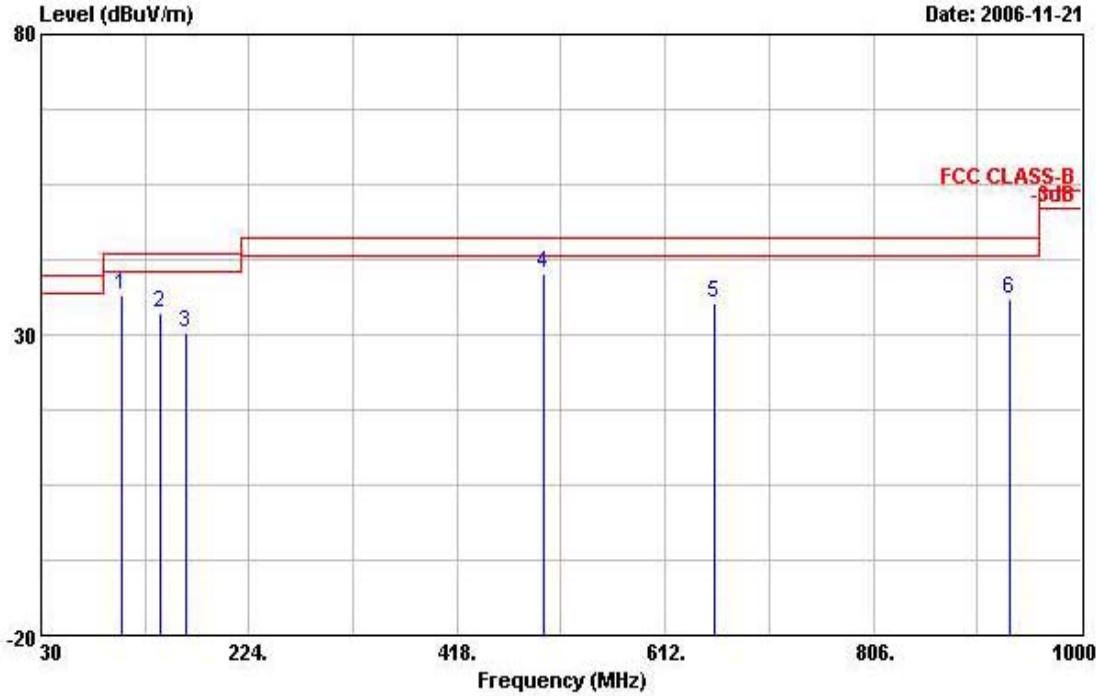
Vertical



		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		32.910	35.38	-4.62	40.00	46.07	16.71	0.38	27.78	Peak
2		90.140	34.08	-9.42	43.50	51.09	9.50	1.30	27.81	Peak
3		249.220	28.48	-17.52	46.00	41.76	12.58	2.50	28.36	Peak
4	!	498.510	44.64	-1.36	46.00	52.42	18.09	3.81	29.68	QP
5		625.580	33.58	-12.42	46.00	39.70	19.47	4.30	29.88	Peak
6		749.740	37.38	-8.62	46.00	41.52	20.71	4.86	29.70	Peak

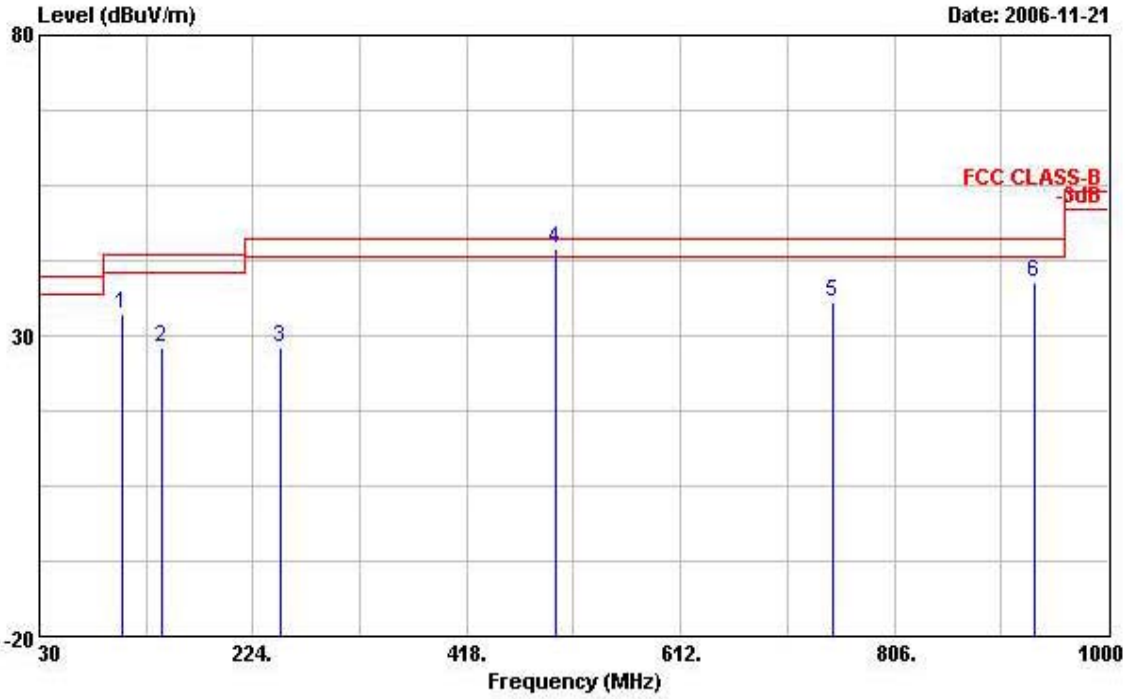
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11g CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	105.660	36.44	-7.06	43.50	50.99	11.92	1.43	27.90	Peak
2	141.550	33.63	-9.87	43.50	48.60	11.26	1.86	28.09	Peak
3	164.830	30.24	-13.26	43.50	46.54	9.89	1.88	28.07	Peak
4	498.510	40.34	-5.66	46.00	48.12	18.09	3.81	29.68	Peak
5	657.590	35.38	-10.62	46.00	41.33	19.68	4.43	30.05	Peak
6	933.070	35.96	-10.04	46.00	39.12	21.23	5.37	29.76	Peak

Vertical



		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		105.660	33.65	-9.85	43.50	48.20	11.92	1.43	27.90	Peak
2		141.550	28.10	-15.40	43.50	43.07	11.26	1.86	28.09	Peak
3		249.220	27.95	-18.05	46.00	41.23	12.58	2.50	28.36	Peak
4	!	498.510	44.56	-1.44	46.00	52.34	18.09	3.81	29.68	QP
5		749.740	35.44	-10.56	46.00	39.58	20.71	4.86	29.70	Peak
6		933.070	38.94	-7.06	46.00	42.10	21.23	5.37	29.76	Peak

Note:

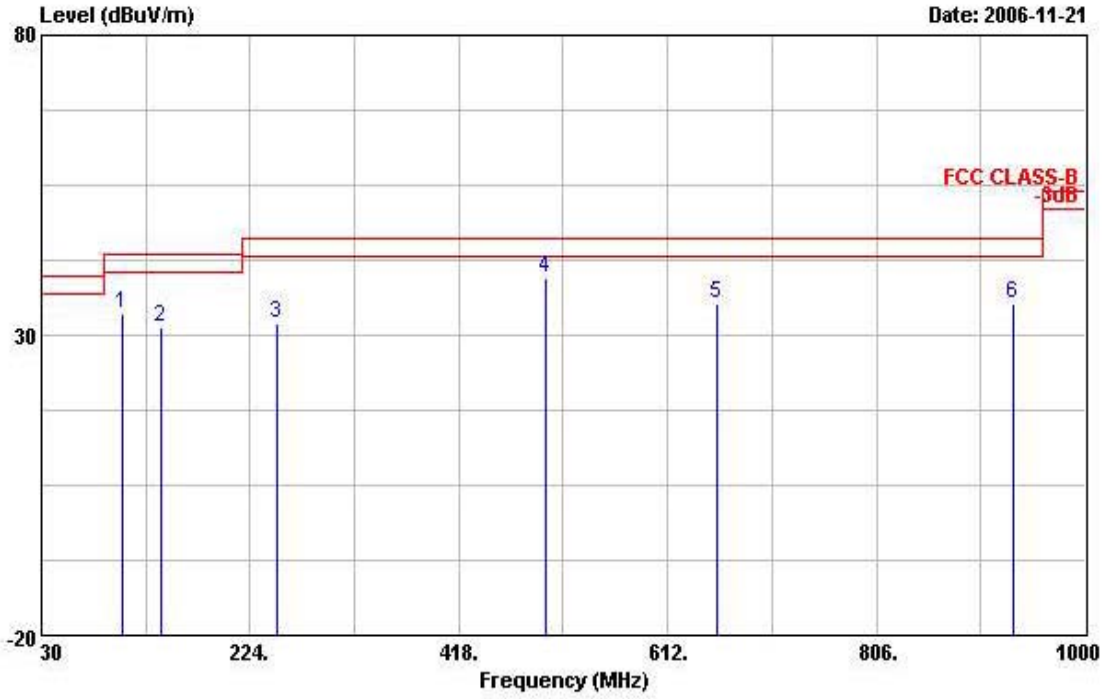
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

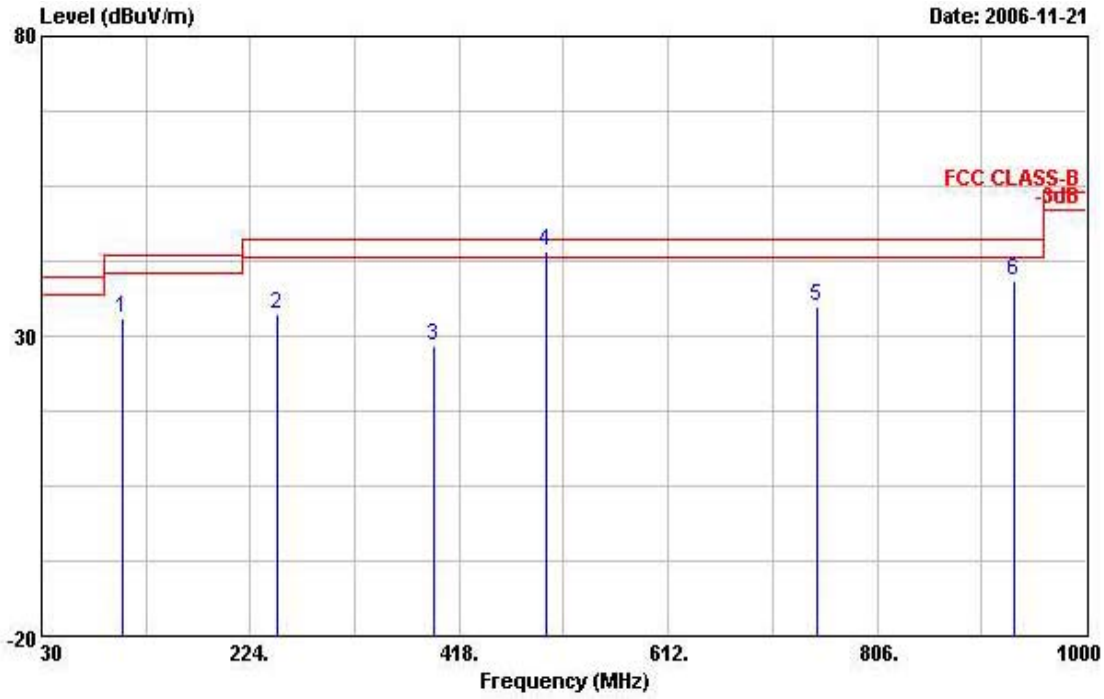
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 3 / 802.11a CH 157

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	105.660	33.67	-9.83	43.50	48.22	11.92	1.43	27.90	Peak
2	141.550	31.40	-12.10	43.50	46.37	11.26	1.86	28.09	Peak
3	249.220	32.02	-13.98	46.00	45.30	12.58	2.50	28.36	Peak
4	498.510	39.48	-6.52	46.00	47.26	18.09	3.81	29.68	Peak
5	657.590	35.38	-10.62	46.00	41.33	19.68	4.43	30.05	Peak
6	933.070	35.32	-10.68	46.00	38.48	21.23	5.37	29.76	Peak

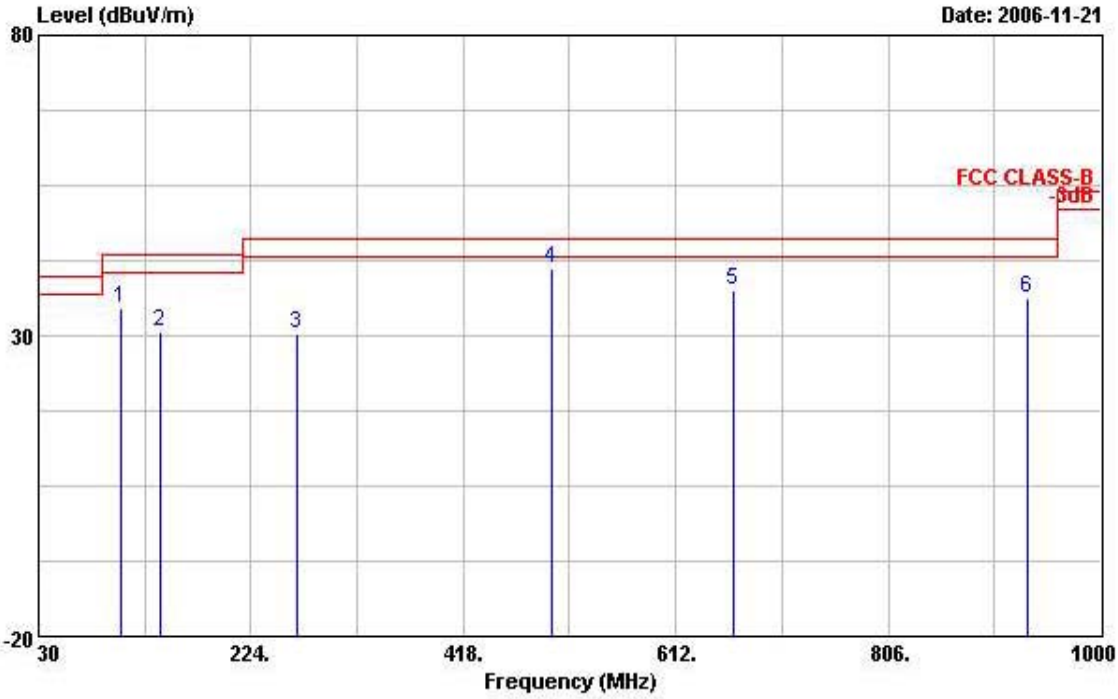
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	105.660	33.11	-10.39	43.50	47.66	11.92	1.43	27.90	Peak
2	249.220	33.66	-12.34	46.00	46.94	12.58	2.50	28.36	Peak
3	393.750	28.48	-17.52	46.00	37.99	16.25	3.36	29.11	Peak
4 @	498.510	44.09	-1.91	46.00	51.87	18.09	3.81	29.68	QP
5	749.740	34.86	-11.14	46.00	39.00	20.71	4.86	29.70	Peak
6	933.070	39.27	-6.73	46.00	42.43	21.23	5.37	29.76	Peak

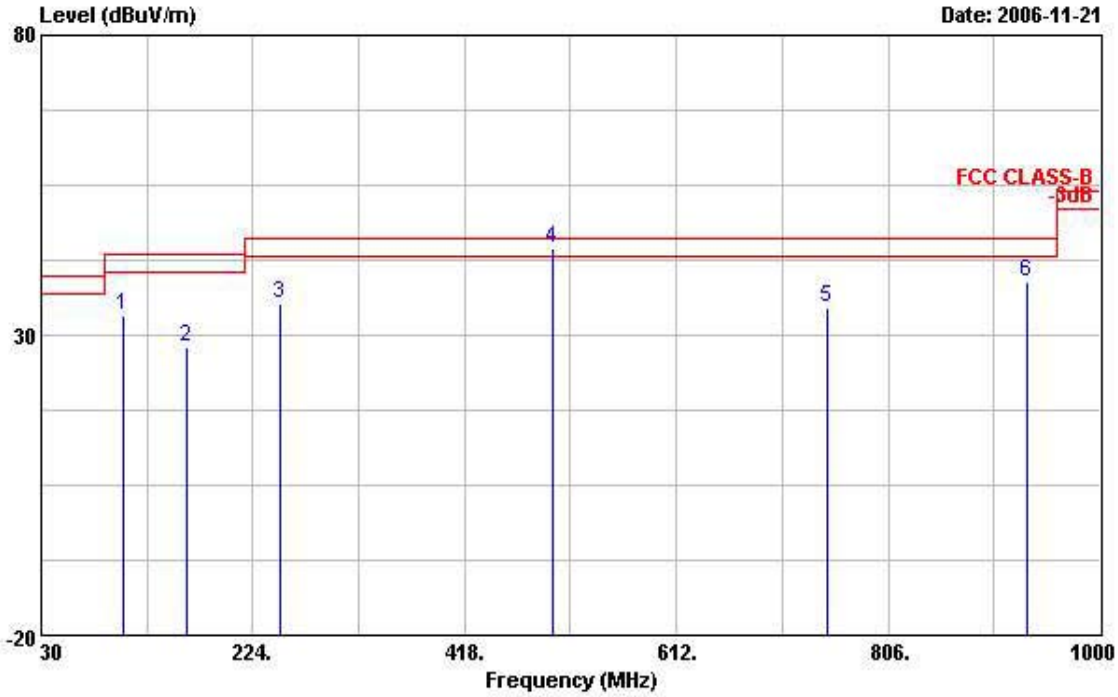
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 3 / 802.11g CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	105.660	34.66	-8.84	43.50	49.21	11.92	1.43	27.90	Peak
2	141.550	30.66	-12.84	43.50	45.63	11.26	1.86	28.09	Peak
3	265.710	30.43	-15.57	46.00	42.90	13.55	2.39	28.41	Peak
4 @	498.510	41.19	-4.81	46.00	48.97	18.09	3.81	29.68	Peak
5	665.350	37.47	-8.53	46.00	43.27	19.73	4.49	30.03	Peak
6	933.070	36.28	-9.72	46.00	39.44	21.23	5.37	29.76	Peak

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	105.660	33.38	-10.12	43.50	47.93	11.92	1.43	27.90	Peak
2	163.860	27.91	-15.59	43.50	44.21	9.92	1.85	28.07	Peak
3	249.220	35.24	-10.76	46.00	48.52	12.58	2.50	28.36	Peak
4 @	498.510	44.48	-1.52	46.00	52.26	18.09	3.81	29.68	QP
5	749.740	34.71	-11.29	46.00	38.85	20.71	4.86	29.70	Peak
6	933.070	38.97	-7.03	46.00	42.13	21.23	5.37	29.76	Peak

Note:

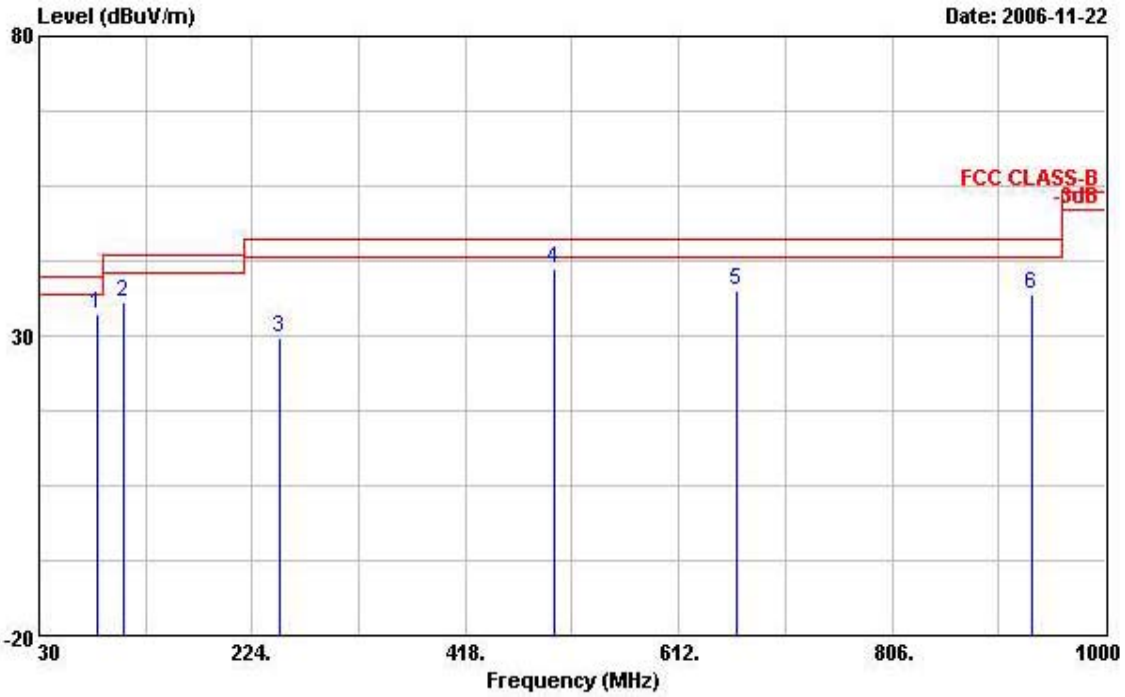
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

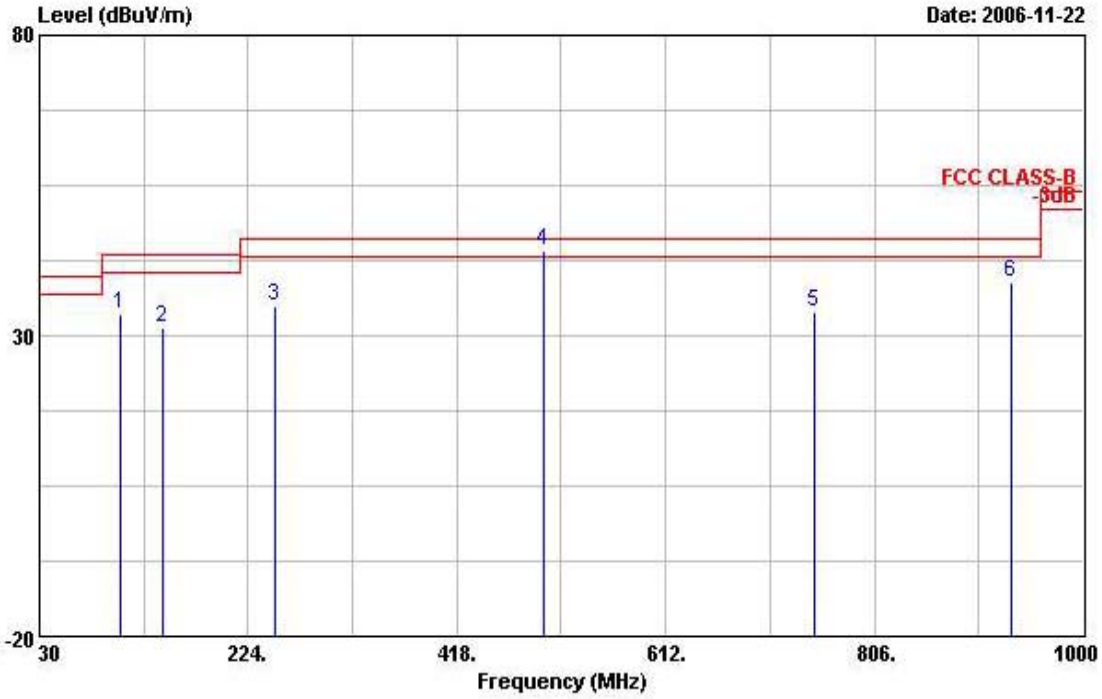
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 4 / 802.11a CH 157

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	82.380	33.73	-6.27	40.00	52.40	7.79	1.33	27.80	Peak
2	106.630	35.56	-7.94	43.50	49.98	12.04	1.44	27.90	Peak
3	249.220	29.83	-16.17	46.00	43.11	12.58	2.50	28.36	Peak
4	498.510	41.08	-4.92	46.00	48.86	18.09	3.81	29.68	Peak
5	665.350	37.50	-8.50	46.00	43.30	19.73	4.49	30.03	Peak
6	933.070	36.86	-9.14	46.00	40.02	21.23	5.37	29.76	Peak

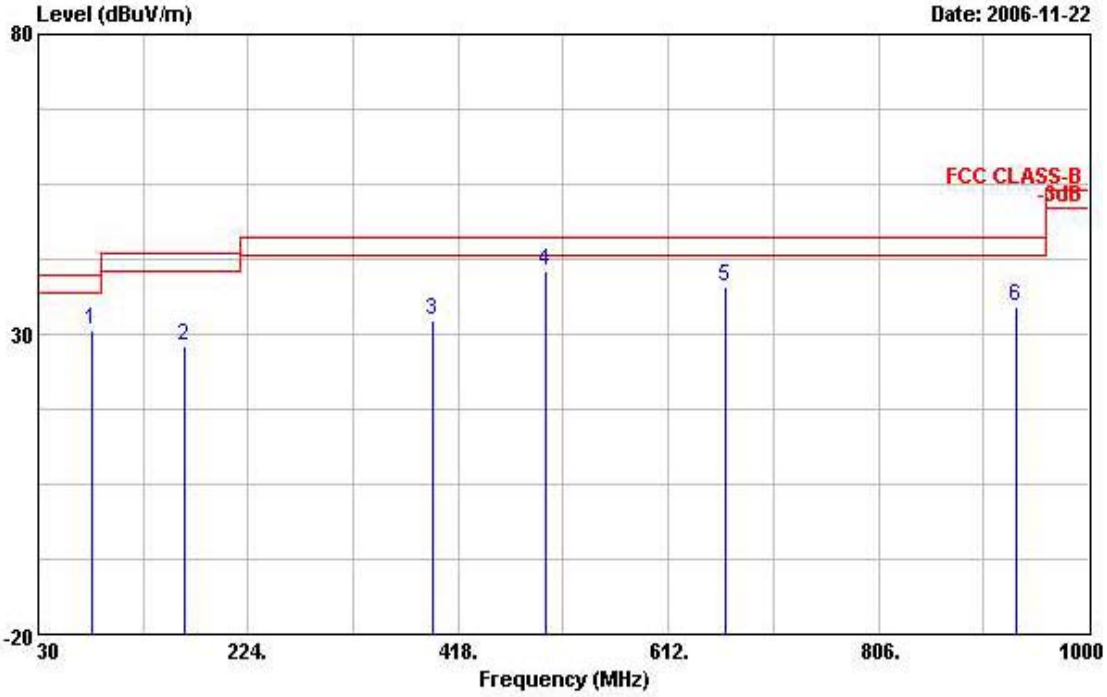
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	105.660	33.47	-10.03	43.50	48.02	11.92	1.43	27.90	Peak
2	144.460	31.26	-12.24	43.50	46.55	10.98	1.84	28.10	Peak
3	249.220	35.01	-10.99	46.00	48.29	12.58	2.50	28.36	Peak
4 !	498.510	44.16	-1.84	46.00	51.94	18.09	3.81	29.68	QP
5	749.740	34.10	-11.90	46.00	38.24	20.71	4.86	29.70	Peak
6	933.070	39.01	-6.99	46.00	42.17	21.23	5.37	29.76	Peak

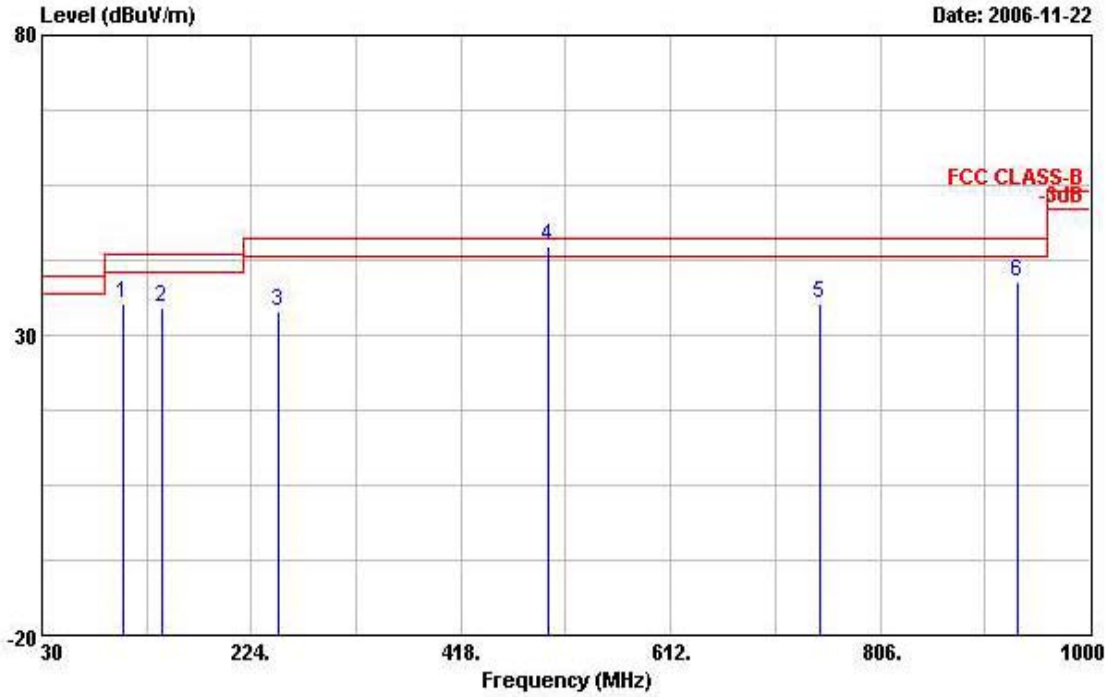
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 4 / 802.11g CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	79.470	30.73	-9.27	40.00	50.01	7.15	1.36	27.79	Peak
2	164.830	27.89	-15.61	43.50	44.19	9.89	1.88	28.07	Peak
3	393.750	32.20	-13.80	46.00	41.71	16.25	3.36	29.11	Peak
4	498.510	40.47	-5.53	46.00	48.25	18.09	3.81	29.68	Peak
5	665.350	37.75	-8.25	46.00	43.55	19.73	4.49	30.03	Peak
6	933.070	34.48	-11.52	46.00	37.64	21.23	5.37	29.76	Peak

Vertical



		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		105.660	35.32	-8.18	43.50	49.87	11.92	1.43	27.90	Peak
2		141.550	34.69	-8.81	43.50	49.66	11.26	1.86	28.09	Peak
3		249.220	33.87	-12.13	46.00	47.15	12.58	2.50	28.36	Peak
4	!	498.510	44.77	-1.23	46.00	52.55	18.09	3.81	29.68	QP
5		749.740	35.24	-10.76	46.00	39.38	20.71	4.86	29.70	Peak
6		933.070	38.79	-7.21	46.00	41.95	21.23	5.37	29.76	Peak

Note:

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

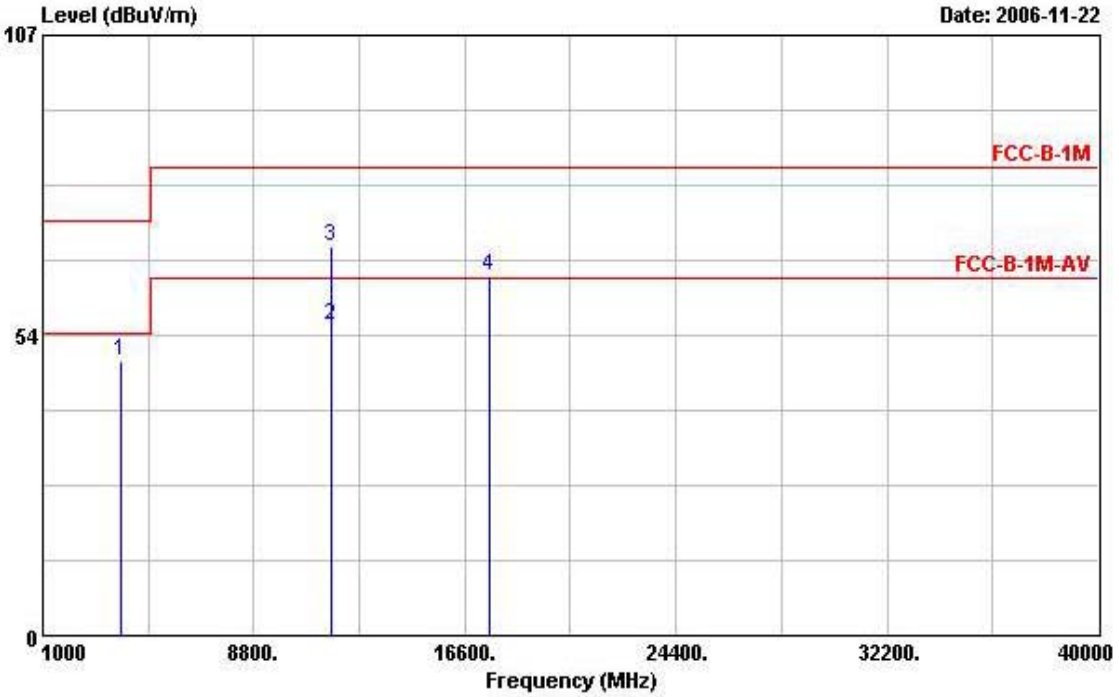
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

4.5.9. Results for Radiated Emissions (1GHz~10th Harmonic)

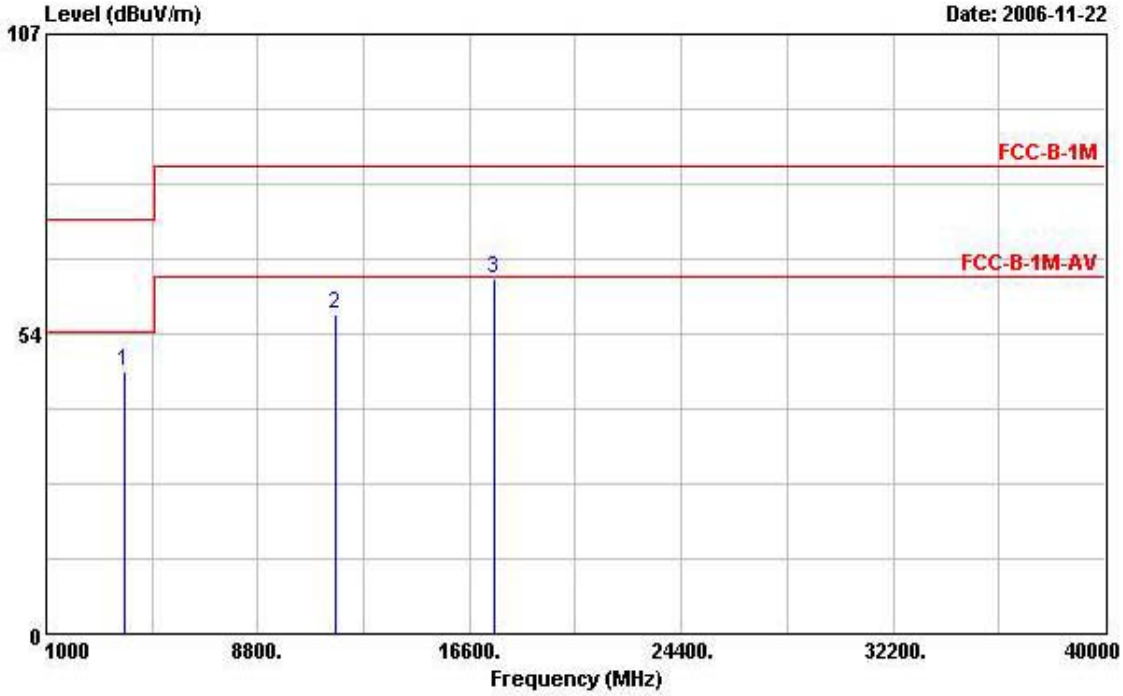
Temperature	20℃	Humidity	70%
Test Engineer	Vic Hsiao	Configurations	Mode 1 / 802.11a CH 149

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3884.000	48.77	-25.23	74.00	45.79	32.73	2.83	32.58	PEAK
2 @	11649.500	55.37	-8.17	63.54	43.19	39.19	4.87	31.88	Average
3	11649.500	69.20	-14.34	83.54	57.02	39.19	4.87	31.88	Peak
4	17475.000	64.14	-19.40	83.54	44.42	45.11	6.29	31.67	PEAK

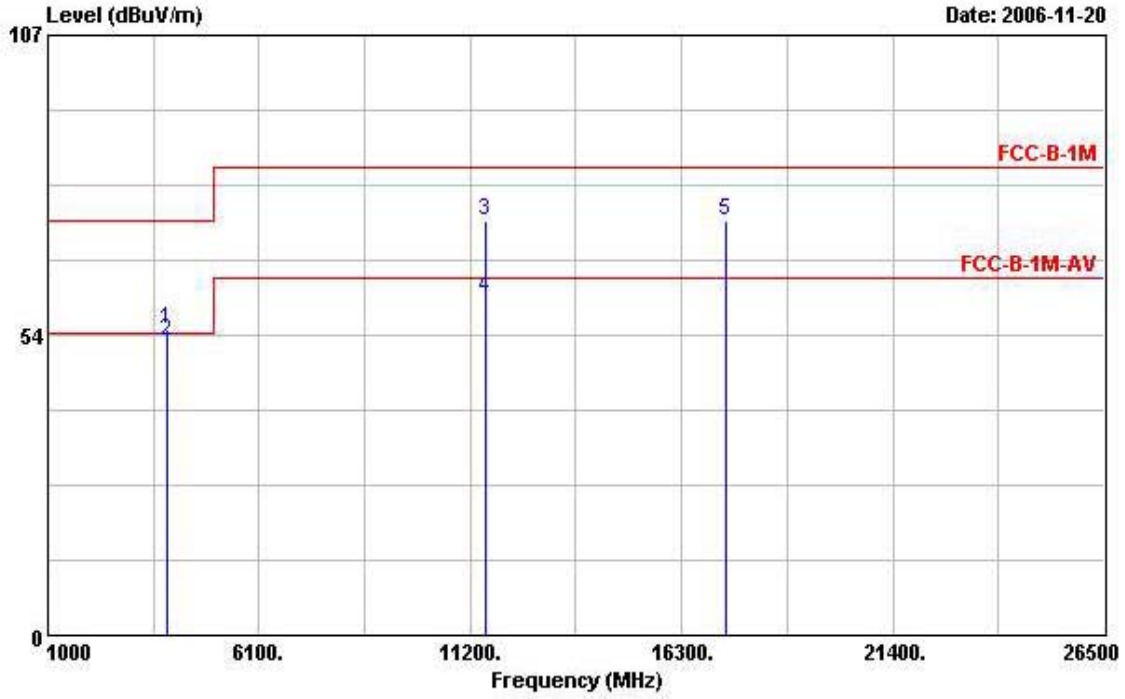
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3884.000	46.69	-27.31	74.00	43.70	32.73	2.83	32.58	PEAK
2	11648.000	56.95	-26.59	83.54	44.77	39.19	4.87	31.88	PEAK
3	17475.000	63.35	-20.19	83.54	43.63	45.11	6.29	31.67	PEAK

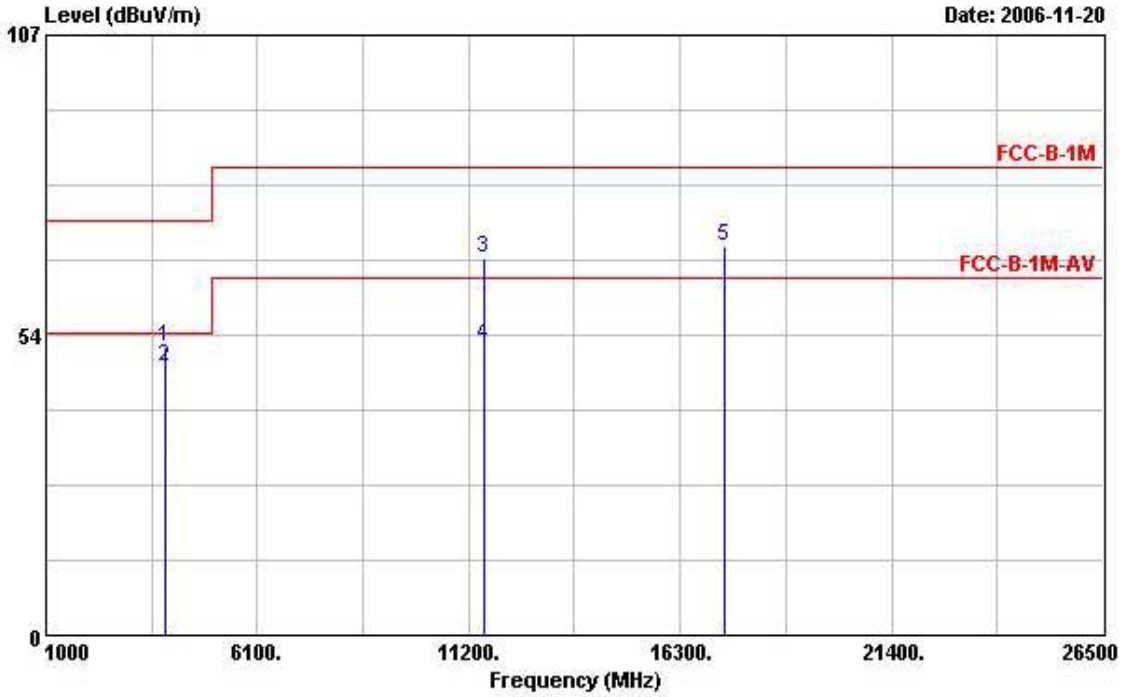
Temperature	20℃	Humidity	70%
Test Engineer	Vic Hsiao	Configurations	Mode 1 / 802.11a CH 157

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3858.000	54.42	-19.58	74.00	51.55	32.64	2.81	32.59	PEAK
2 @	3858.000	52.29	-1.71	54.00	49.43	32.64	2.81	32.59	Average
3 @	11568.000	73.94	-9.60	83.54	61.64	39.24	4.82	31.77	PEAK
4 @	11568.000	60.06	-3.48	63.54	47.76	39.24	4.82	31.77	Average
5 @	17355.000	73.82	-9.72	83.54	55.24	44.08	6.24	31.74	PEAK

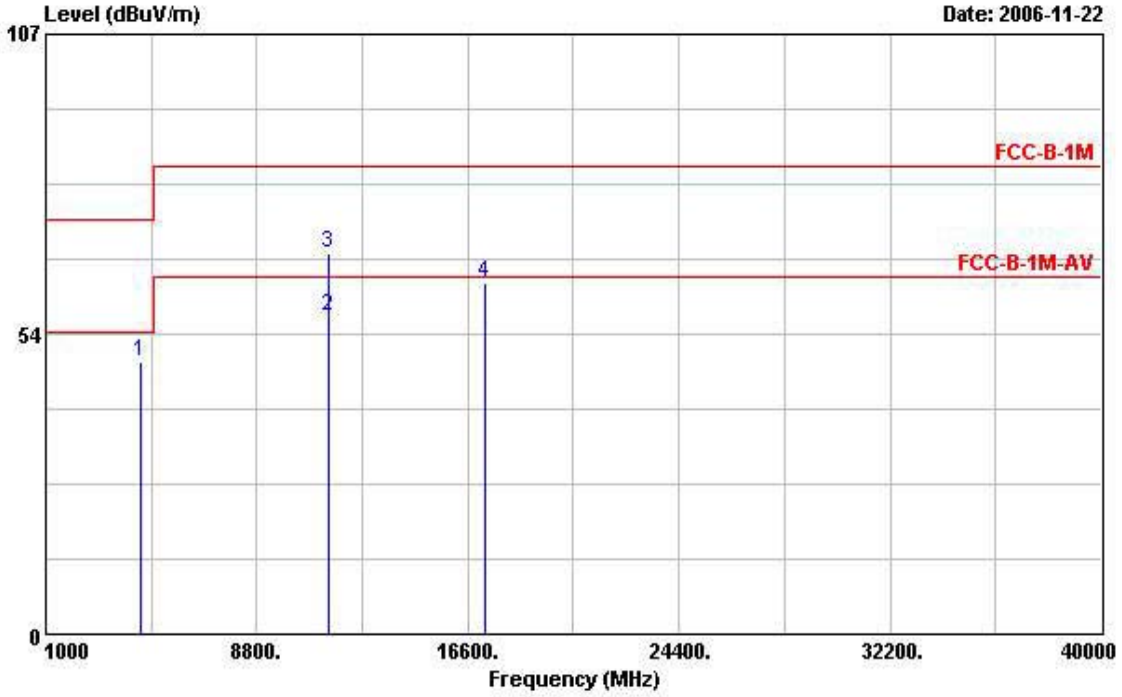
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3858.000	51.30	-22.70	74.00	48.44	32.64	2.81	32.59	PEAK
2 @	3858.000	47.81	-6.19	54.00	44.95	32.64	2.81	32.59	Average
3	11568.000	67.36	-16.18	83.54	55.06	39.24	4.82	31.77	PEAK
4 @	11568.000	51.74	-11.80	63.54	39.44	39.24	4.82	31.77	Average
5	17355.000	69.47	-14.07	83.54	50.89	44.08	6.24	31.74	PEAK

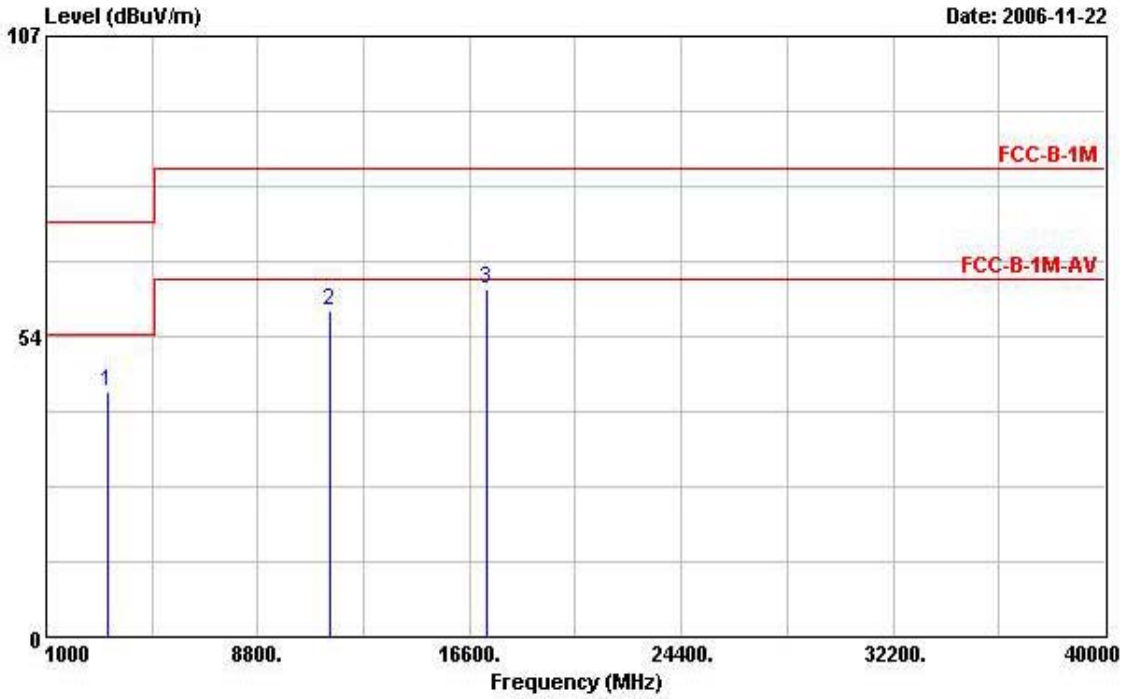
Temperature	20℃	Humidity	70%
Test Engineer	Vic Hsiao	Configurations	Mode 1 / 802.11a CH 165

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4482.000	48.63	-25.37	74.00	45.34	32.71	3.06	32.48	PEAK
2 @	11488.000	56.56	-6.98	63.54	44.23	39.28	4.78	31.73	Average
3	11488.000	67.95	-15.59	83.54	55.61	39.28	4.78	31.73	PEAK
4	17235.000	62.50	-21.04	83.54	45.04	43.05	6.21	31.80	PEAK

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3255.000	43.62	-30.38	74.00	42.75	31.12	2.46	32.71	PEAK
2	11486.000	58.15	-25.39	83.54	45.82	39.28	4.78	31.73	Peak
3	17235.000	61.81	-21.73	83.54	44.35	43.05	6.21	31.80	Peak

Note:

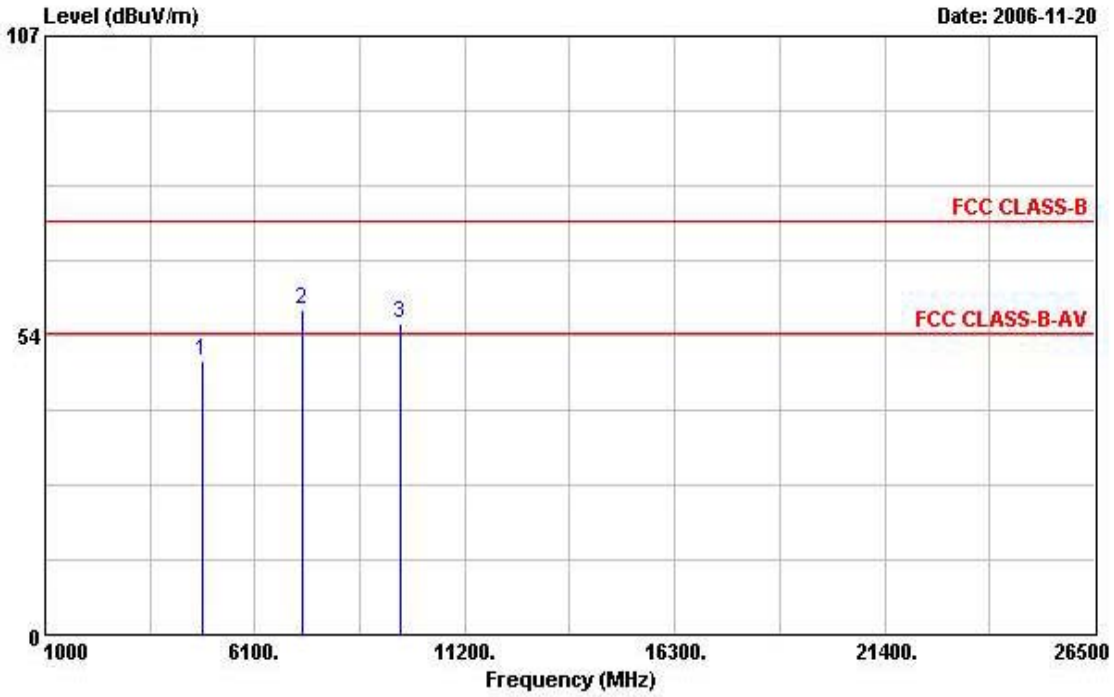
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

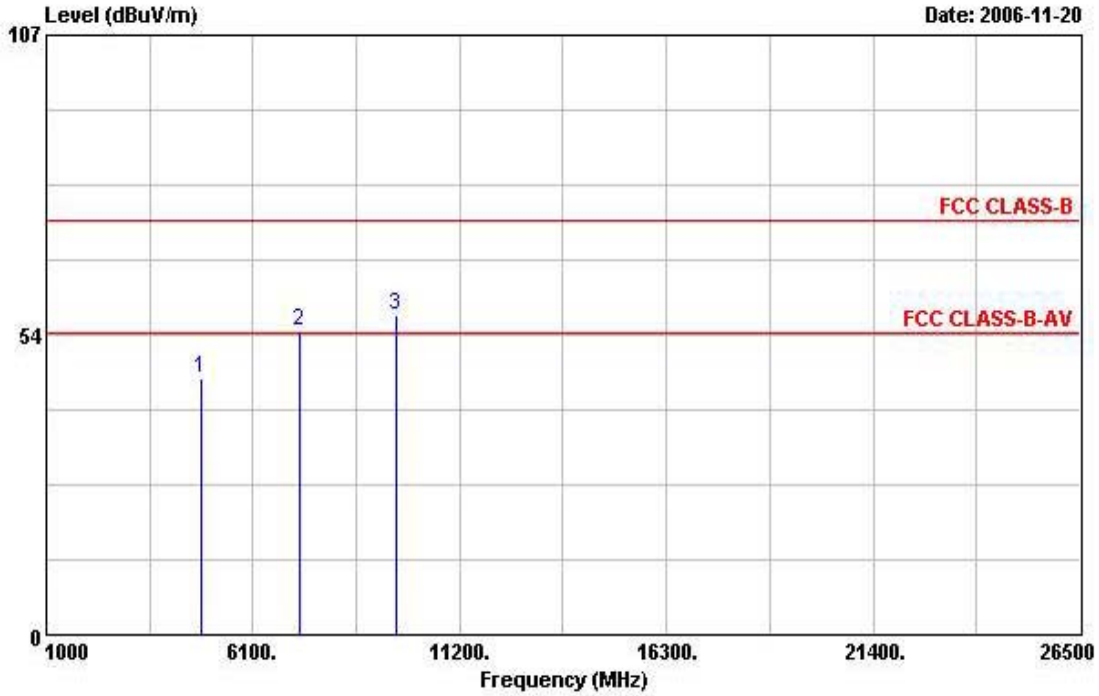
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11b CH 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	49.01	-24.99	74.00	45.10	33.09	3.15	32.32	PEAK
2	7236.000	57.94	-16.06	74.00	50.37	35.98	4.15	32.57	PEAK
3	9648.000	55.50	-18.50	74.00	45.30	38.58	4.42	32.80	PEAK

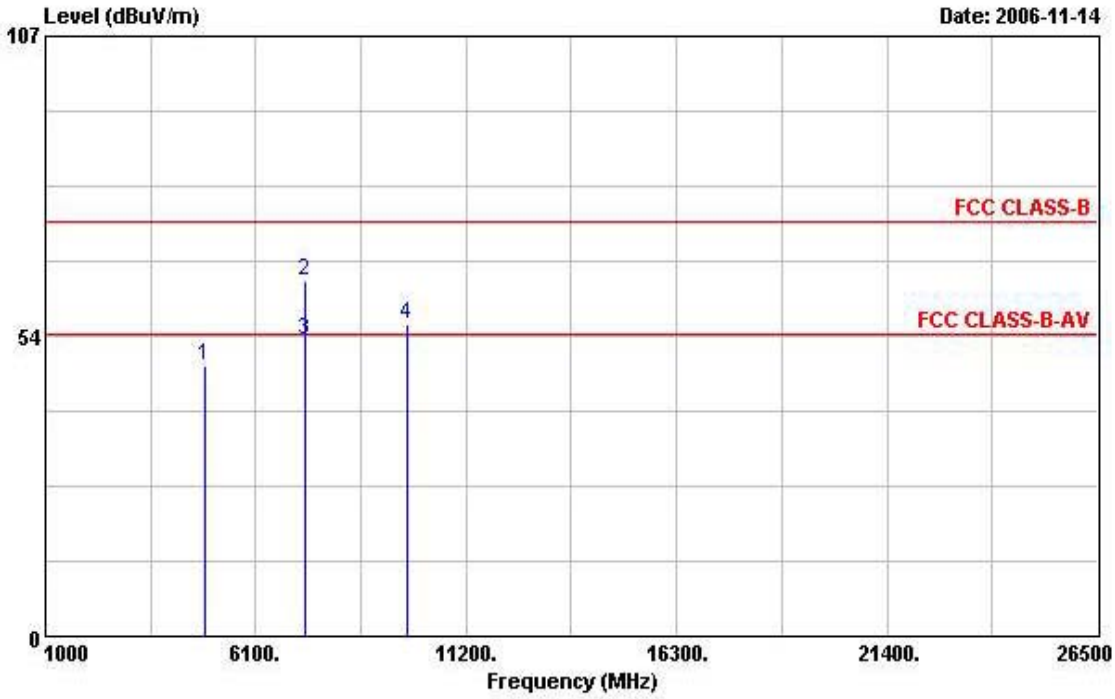
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	45.84	-28.16	74.00	41.92	33.09	3.15	32.32	PEAK
2	7236.000	54.15	-19.85	74.00	46.59	35.98	4.15	32.57	PEAK
3	9648.000	56.99	-17.01	74.00	46.79	38.58	4.42	32.80	PEAK

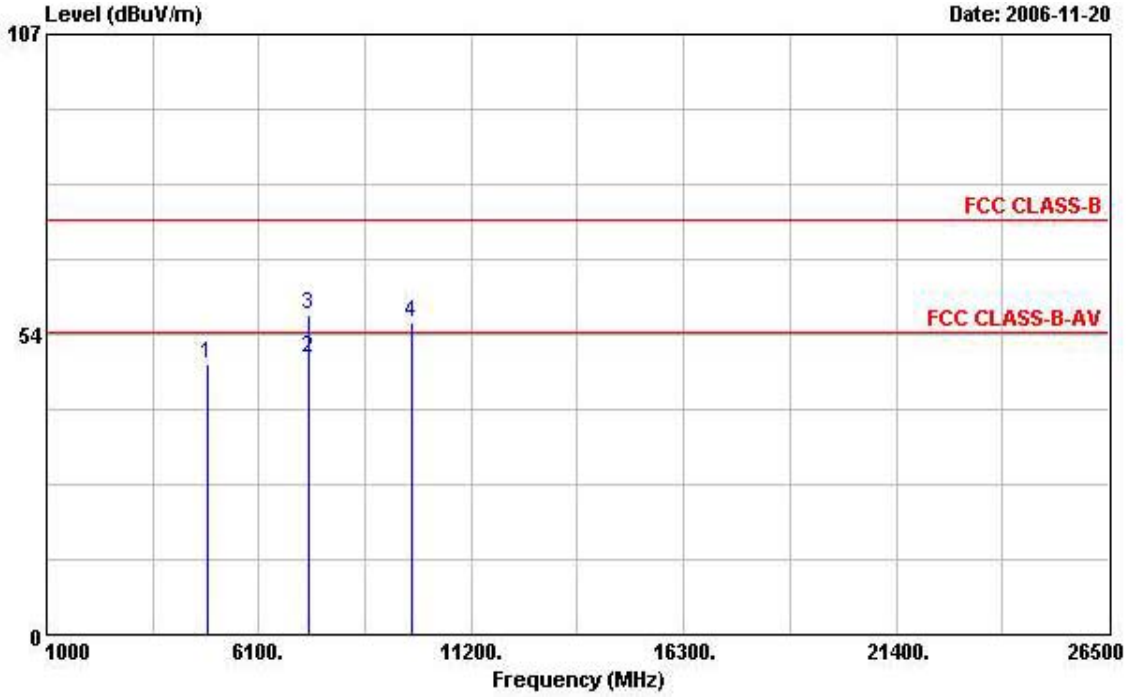
Temperature	26°C	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11b CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4876.000	48.22	-25.78	74.00	44.18	33.18	3.16	32.30	PEAK
2 @	7312.000	63.52	-10.48	74.00	55.80	36.14	4.18	32.61	PEAK
3 @	7312.000	52.90	-1.10	54.00	45.18	36.14	4.18	32.61	Average
4	9748.000	55.67	-18.33	74.00	45.26	38.77	4.44	32.80	PEAK

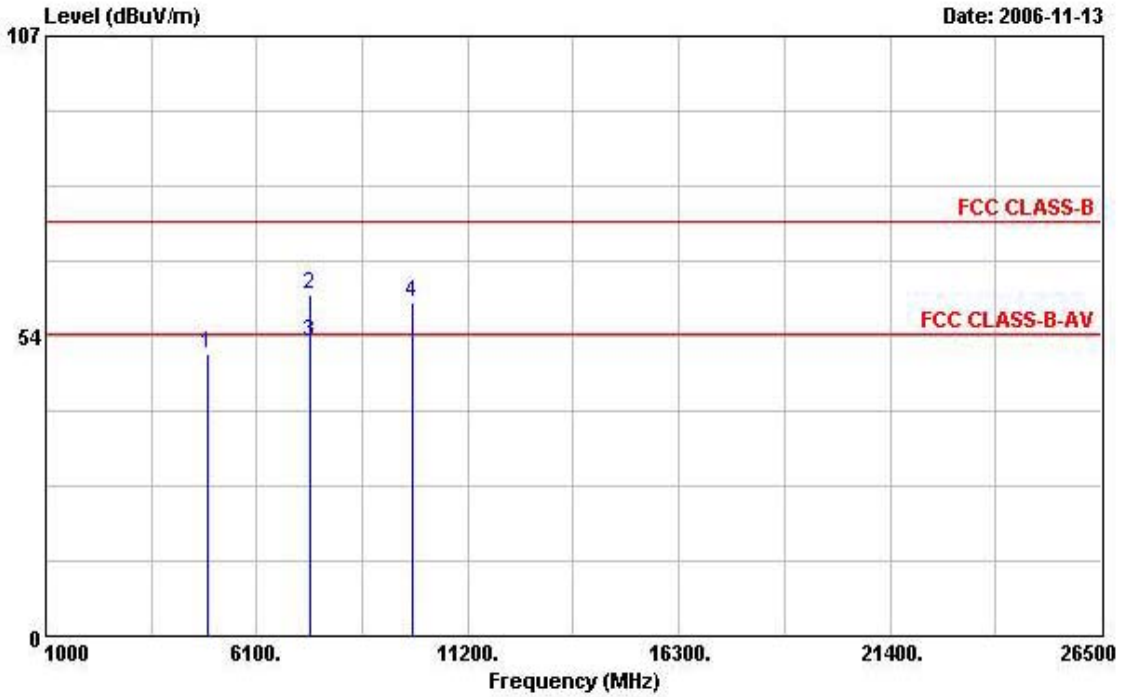
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	48.08	-25.92	74.00	44.04	33.18	3.16	32.30	PEAK
2 @	7308.000	49.37	-4.63	54.00	41.64	36.14	4.18	32.59	Average
3	7308.000	57.11	-16.89	74.00	49.38	36.14	4.18	32.59	PEAK
4	9748.000	55.77	-18.23	74.00	45.36	38.77	4.44	32.80	PEAK

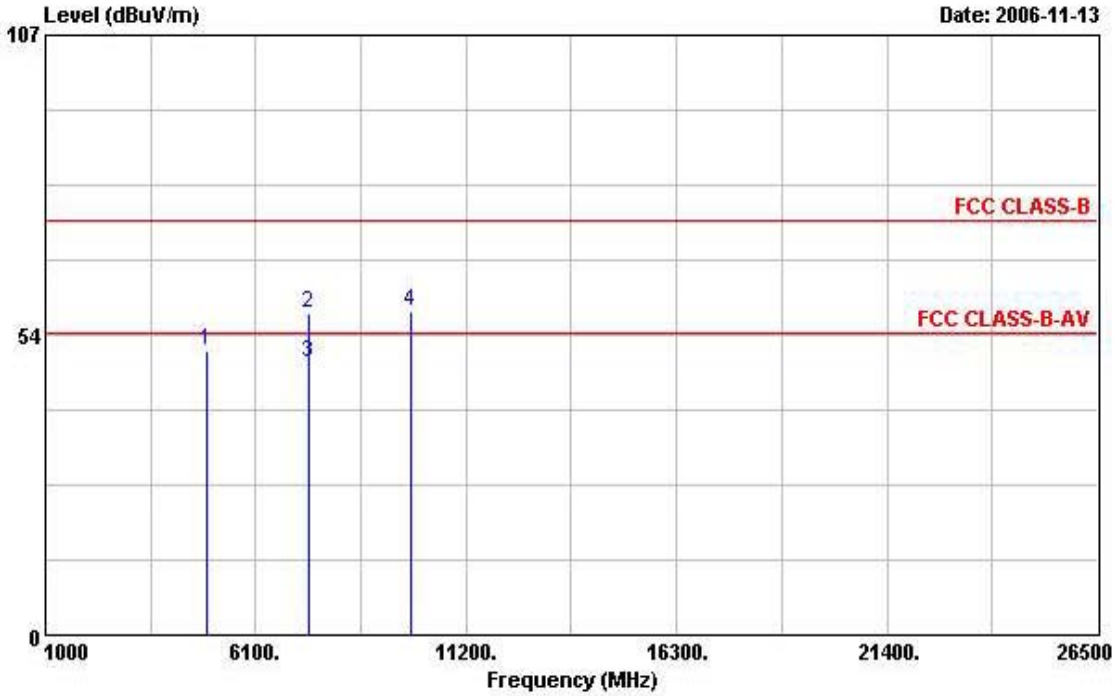
Temperature	26°C	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11b CH 11

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	50.28	-23.72	74.00	46.09	33.28	3.19	32.28	PEAK
2 @	7384.000	60.99	-13.01	74.00	53.05	36.35	4.21	32.63	PEAK
3 @	7384.000	52.61	-1.39	54.00	44.68	36.35	4.21	32.63	Average
4	9848.000	59.43	-14.57	74.00	48.82	38.92	4.48	32.79	PEAK

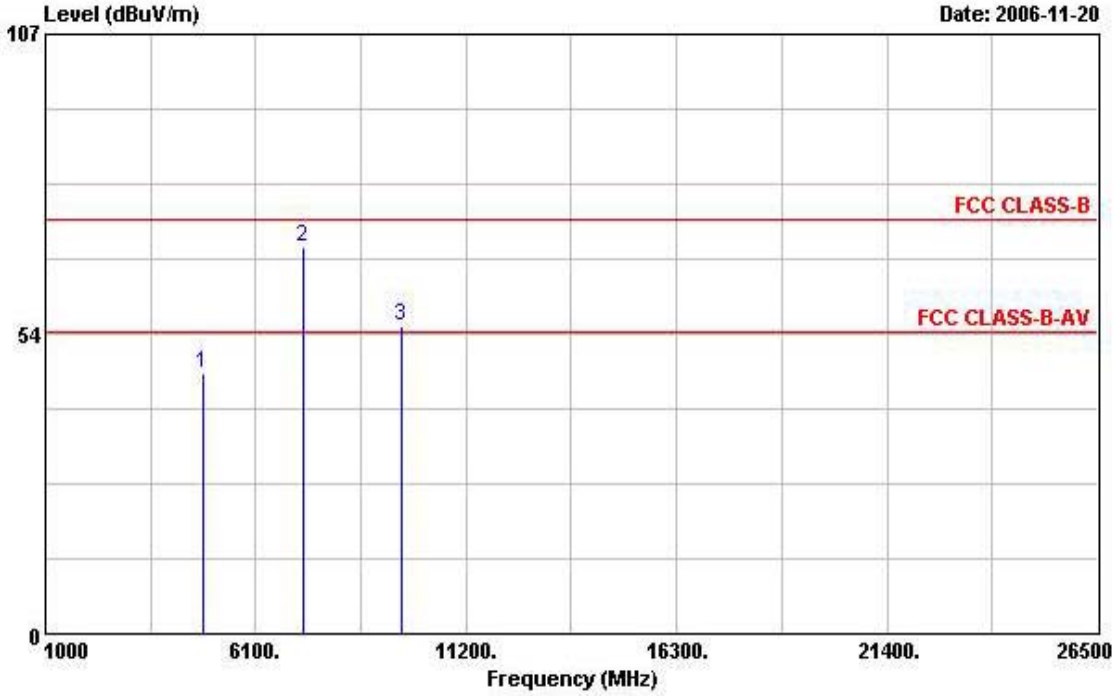
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	50.71	-23.29	74.00	46.53	33.28	3.19	32.28	PEAK
2	7384.000	57.39	-16.61	74.00	49.46	36.35	4.21	32.63	PEAK
3 @	7384.000	48.59	-5.41	54.00	40.66	36.35	4.21	32.63	Average
4	9848.000	57.84	-16.16	74.00	47.23	38.92	4.48	32.79	PEAK

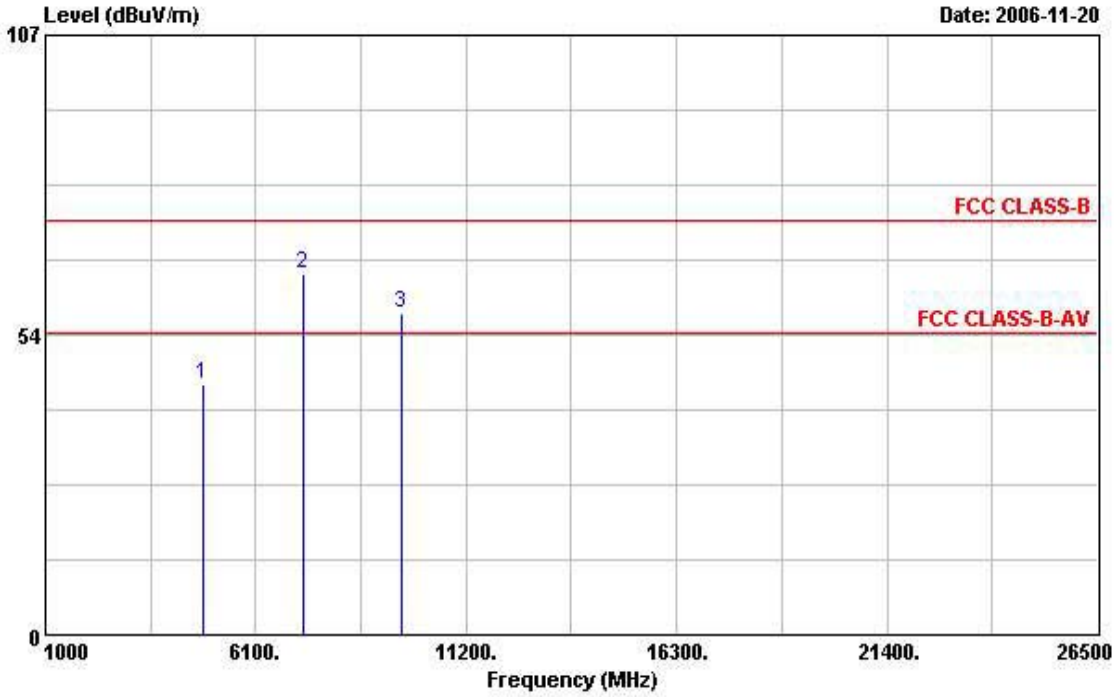
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11g CH 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4828.000	46.64	-27.36	74.00	42.72	33.09	3.15	32.32	PEAK
2 @	7236.000	69.06	-4.94	74.00	61.50	35.98	4.15	32.57	PEAK
3	9640.000	54.95	-19.05	74.00	44.79	38.55	4.42	32.80	PEAK

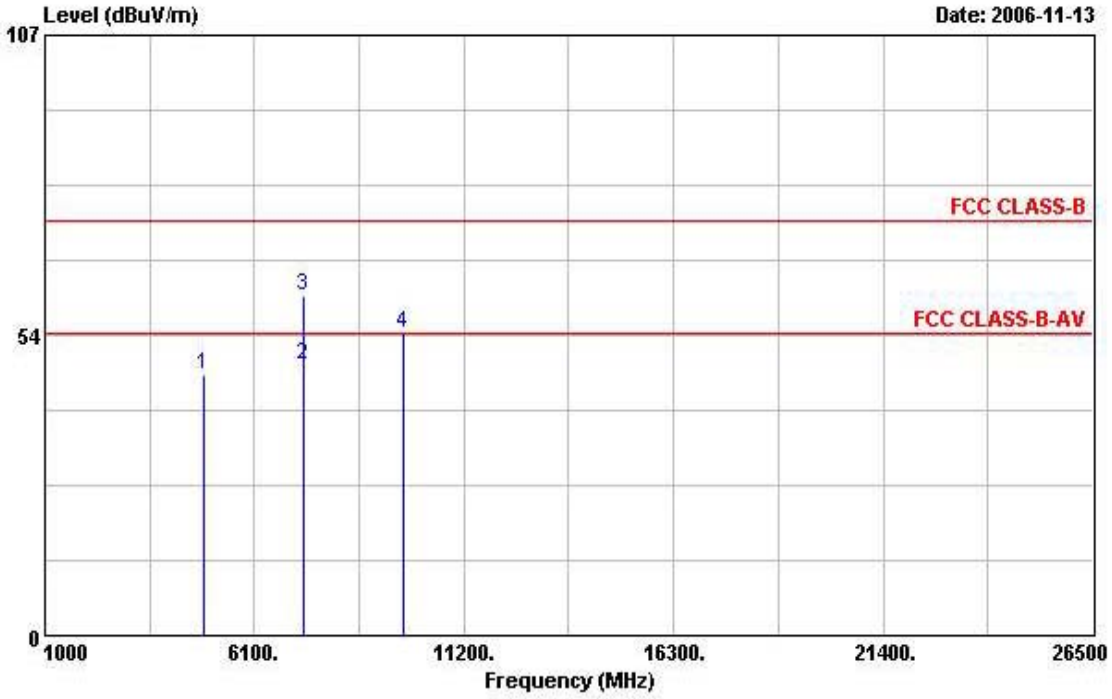
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	44.63	-29.37	74.00	40.71	33.09	3.15	32.32	Peak
2 @	7240.000	64.54	-9.46	74.00	56.97	35.98	4.15	32.57	PEAK
3	9644.000	57.47	-16.53	74.00	47.31	38.55	4.42	32.80	PEAK

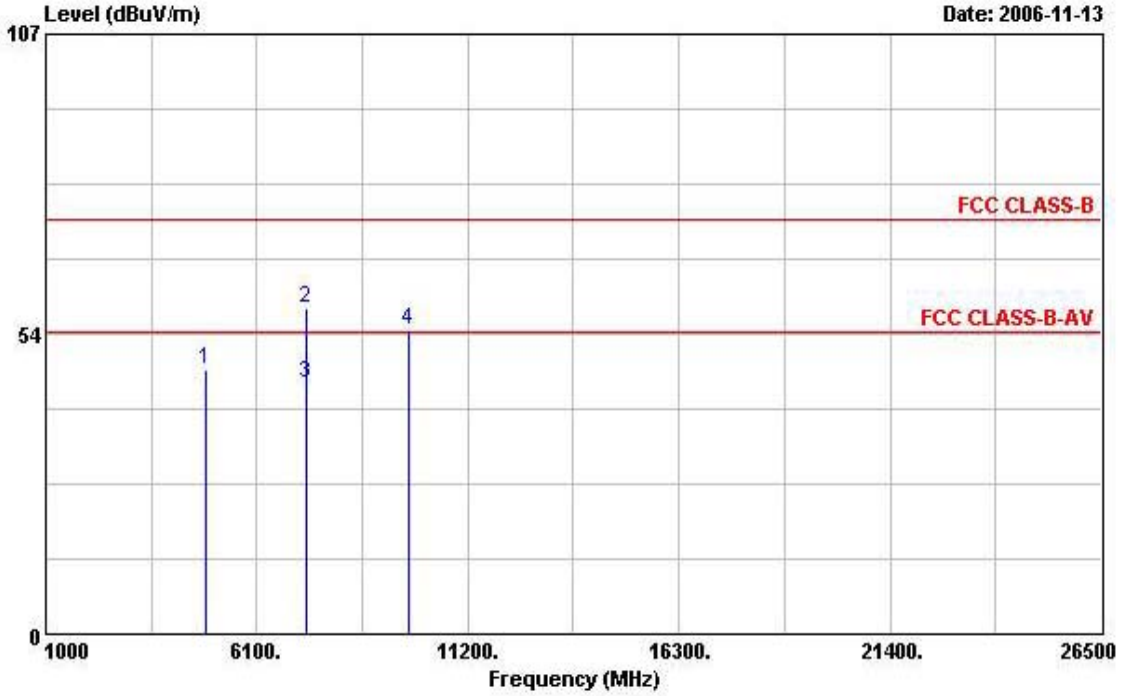
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11g CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4870.000	46.47	-27.53	74.00	42.42	33.18	3.16	32.30	PEAK
2 @	7304.000	48.22	-5.78	54.00	40.49	36.14	4.18	32.59	Average
3 @	7304.000	60.49	-13.51	74.00	52.76	36.14	4.18	32.59	PEAK
4	9744.000	53.73	-20.27	74.00	43.35	38.73	4.44	32.80	PEAK

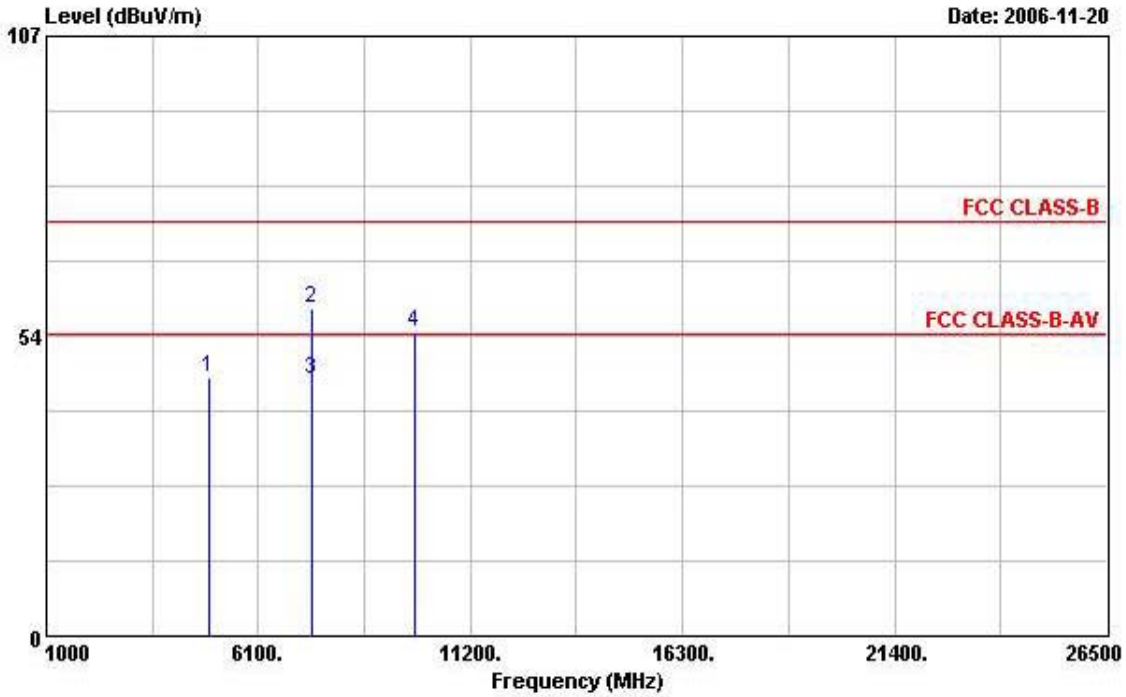
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4874.000	47.02	-26.98	74.00	42.98	33.18	3.16	32.30	PEAK
2	7312.000	57.94	-16.06	74.00	50.22	36.14	4.18	32.61	PEAK
3 @	7312.000	44.70	-9.30	54.00	36.98	36.14	4.18	32.61	Average
4	9752.000	54.23	-19.77	74.00	43.82	38.77	4.44	32.80	PEAK

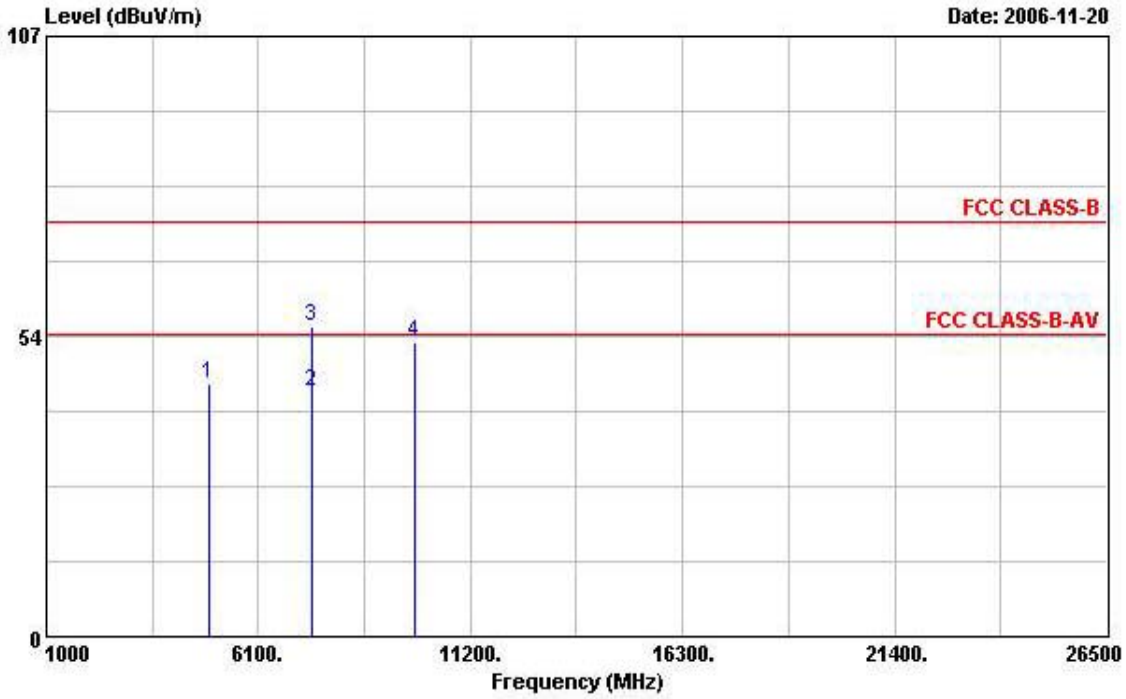
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11g CH 11

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4928.000	46.02	-27.98	74.00	41.84	33.28	3.19	32.28	PEAK
2	7388.000	58.45	-15.55	74.00	50.53	36.35	4.21	32.65	PEAK
3 @	7388.000	45.61	-8.39	54.00	37.69	36.35	4.21	32.65	Average
4	9852.000	54.14	-19.86	74.00	43.49	38.95	4.48	32.79	PEAK

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4916.000	44.98	-29.02	74.00	40.84	33.24	3.17	32.28	PEAK
2 @	7372.000	43.50	-10.50	54.00	35.63	36.31	4.20	32.63	Average
3	7372.000	55.23	-18.77	74.00	47.35	36.31	4.20	32.63	PEAK
4	9848.000	52.41	-21.59	74.00	41.80	38.92	4.48	32.79	PEAK

Note:

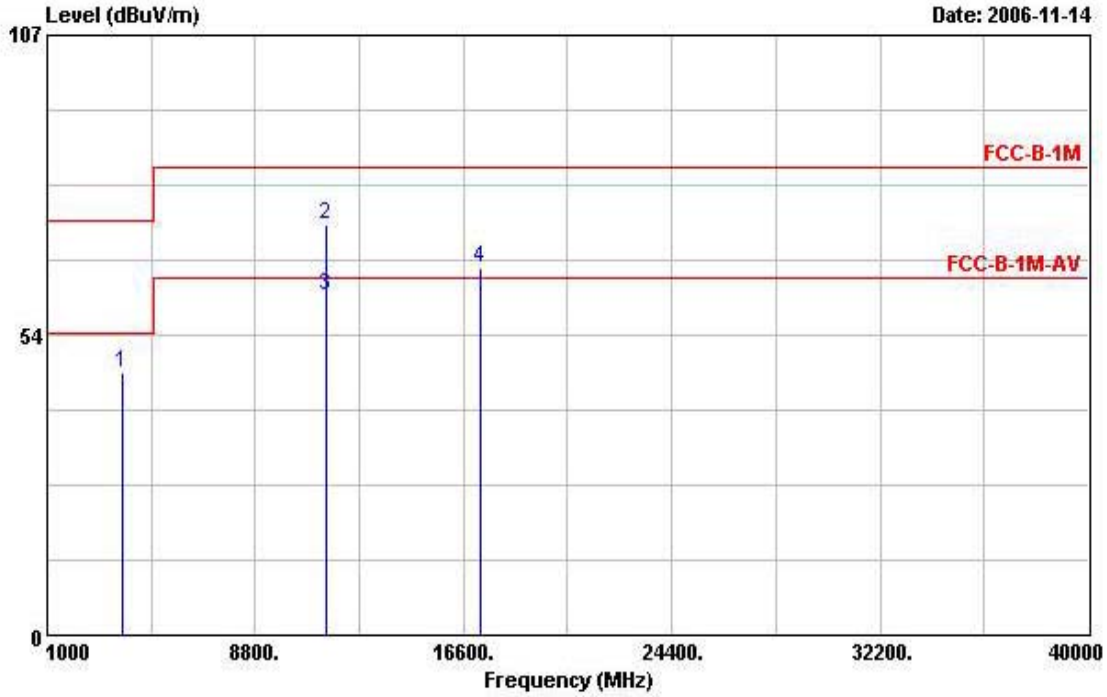
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

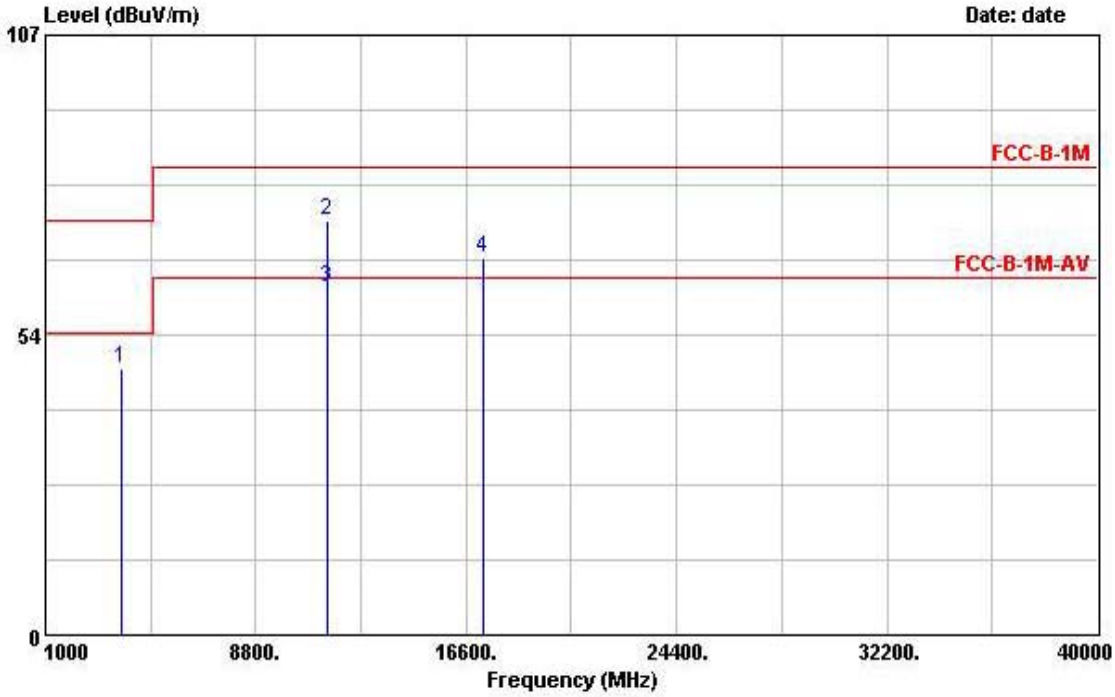
Temperature	20℃	Humidity	70%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11a CH 149

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3831.000	46.87	-27.13	74.00	44.06	32.60	2.81	32.59	PEAK
2	11488.000	73.04	-10.50	83.54	60.70	39.28	4.78	31.73	PEAK
3	11488.000	60.47	-3.07	63.54	48.14	39.28	4.78	31.73	Average
4	17232.000	65.49	-18.05	83.54	48.03	43.05	6.21	31.80	PEAK

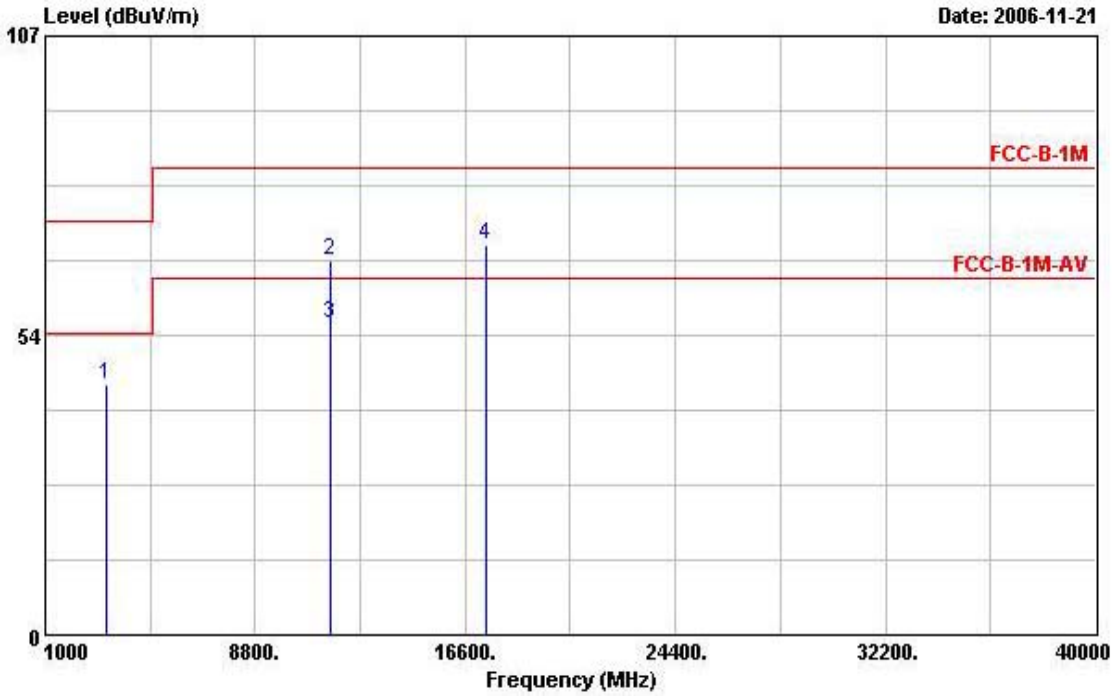
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3831.000	47.59	-26.41	74.00	44.78	32.60	2.81	32.59	PEAK
2	11488.000	73.76	-9.78	83.54	61.43	39.28	4.78	31.73	PEAK
3	11488.000	61.94	-1.60	63.54	49.61	39.28	4.78	31.73	Average
4	17232.000	67.11	-16.43	83.54	49.64	43.05	6.21	31.80	PEAK

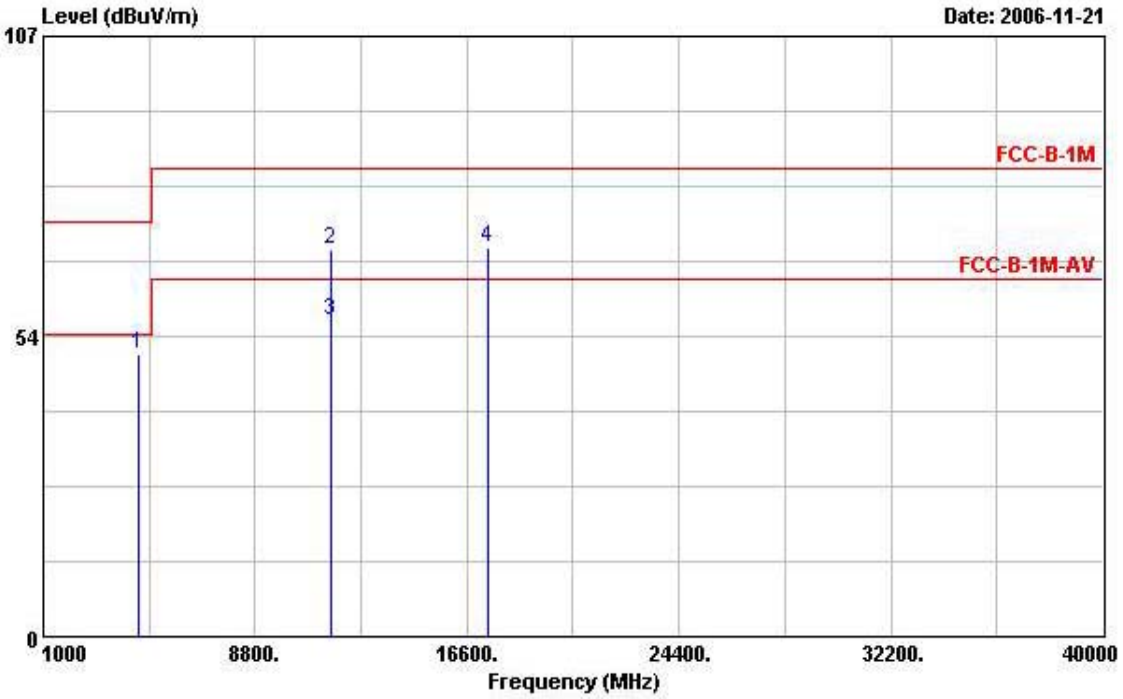
Temperature	20℃	Humidity	70%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11a CH 157

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3270.000	44.61	-29.39	74.00	43.69	31.16	2.46	32.70	Peak
2	11572.000	66.73	-16.81	83.54	54.46	39.24	4.82	31.80	PEAK
3	11572.000	55.69	-7.85	63.54	43.42	39.24	4.82	31.80	Average
4	17350.000	69.72	-13.82	83.54	51.14	44.08	6.24	31.74	Peak

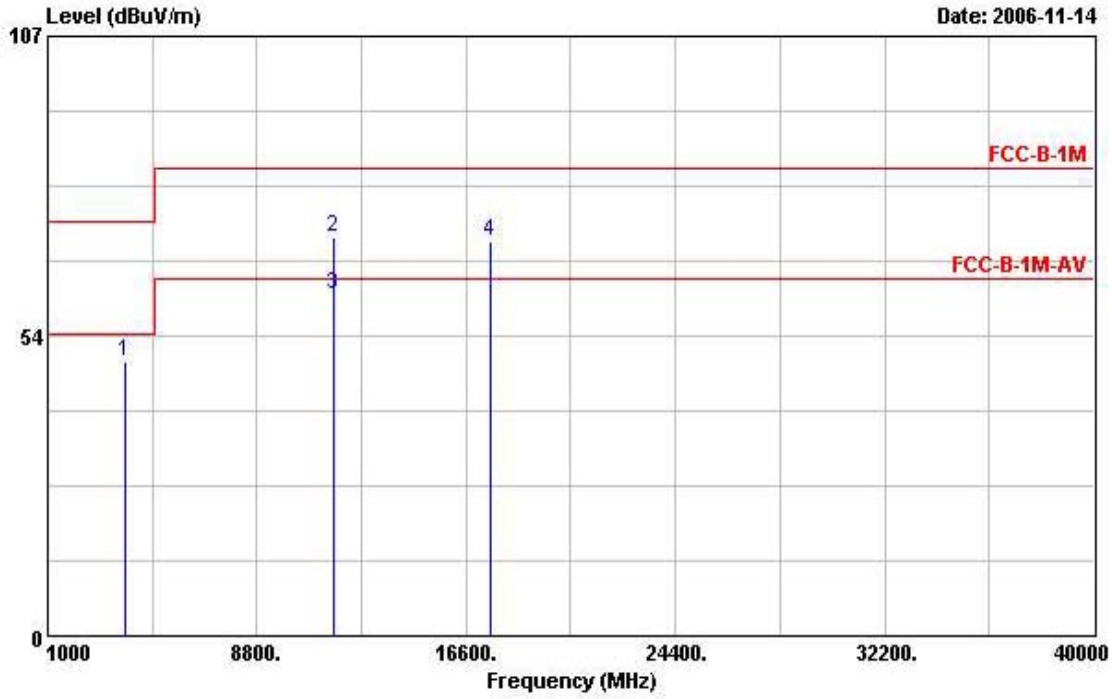
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4482.000	50.24	-23.76	74.00	46.95	32.71	3.06	32.48	Peak
2	11572.000	69.04	-14.50	83.54	56.77	39.24	4.82	31.80	PEAK
3	11572.000	56.43	-7.11	63.54	44.16	39.24	4.82	31.80	Average
4	17356.000	69.20	-14.34	83.54	50.62	44.08	6.24	31.74	PEAK

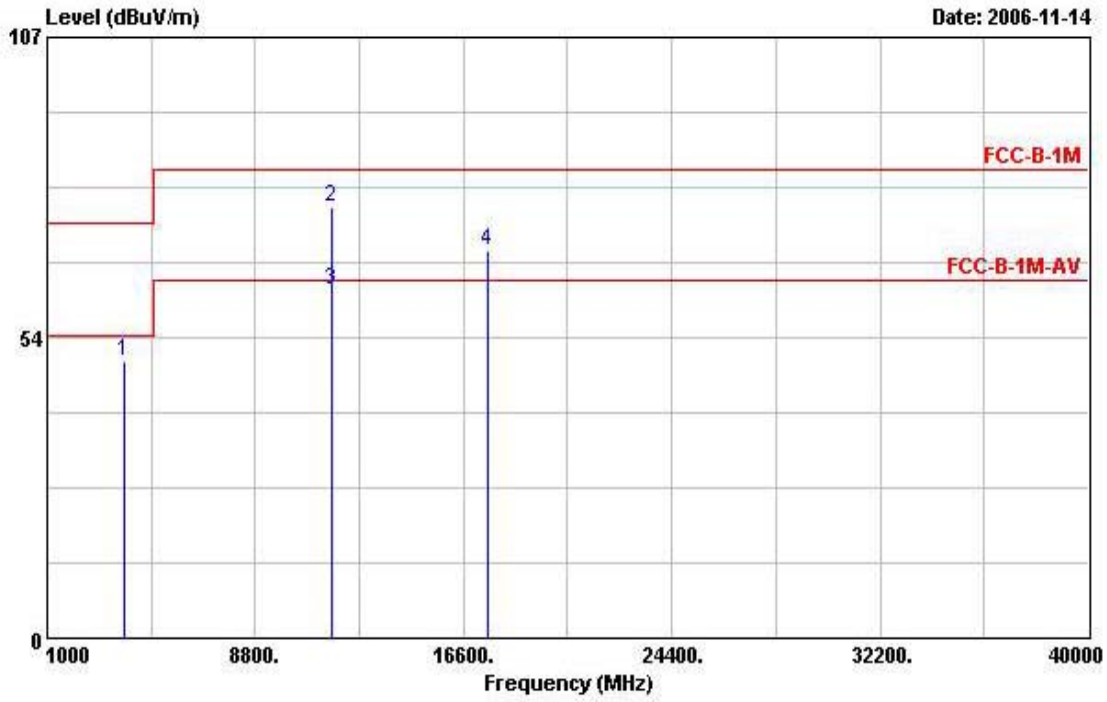
Temperature	20℃	Humidity	70%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11a CH 165

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3885.000	48.95	-25.05	74.00	45.96	32.73	2.83	32.58	PEAK
2	11656.000	70.93	-12.61	83.54	58.76	39.18	4.87	31.88	PEAK
3	11656.000	60.97	-2.57	63.54	48.80	39.18	4.87	31.88	Average
4	17480.000	70.40	-13.14	83.54	50.68	45.11	6.29	31.67	PEAK

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	3885.000	49.41	-24.59	74.00	46.43	32.73	2.83	32.58	PEAK
2	11648.000	76.56	-6.98	83.54	64.38	39.19	4.87	31.88	PEAK
3	11648.000	61.90	-1.64	63.54	49.72	39.19	4.87	31.88	Average
4	17476.000	69.04	-14.50	83.54	49.32	45.11	6.29	31.67	PEAK

Note:

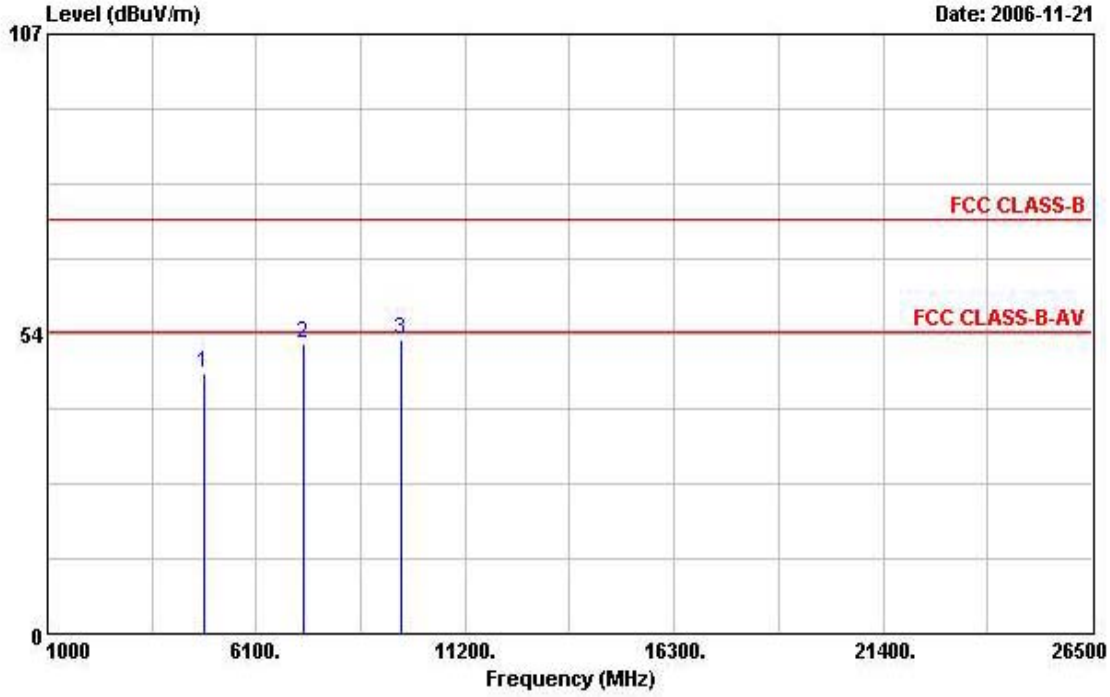
The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

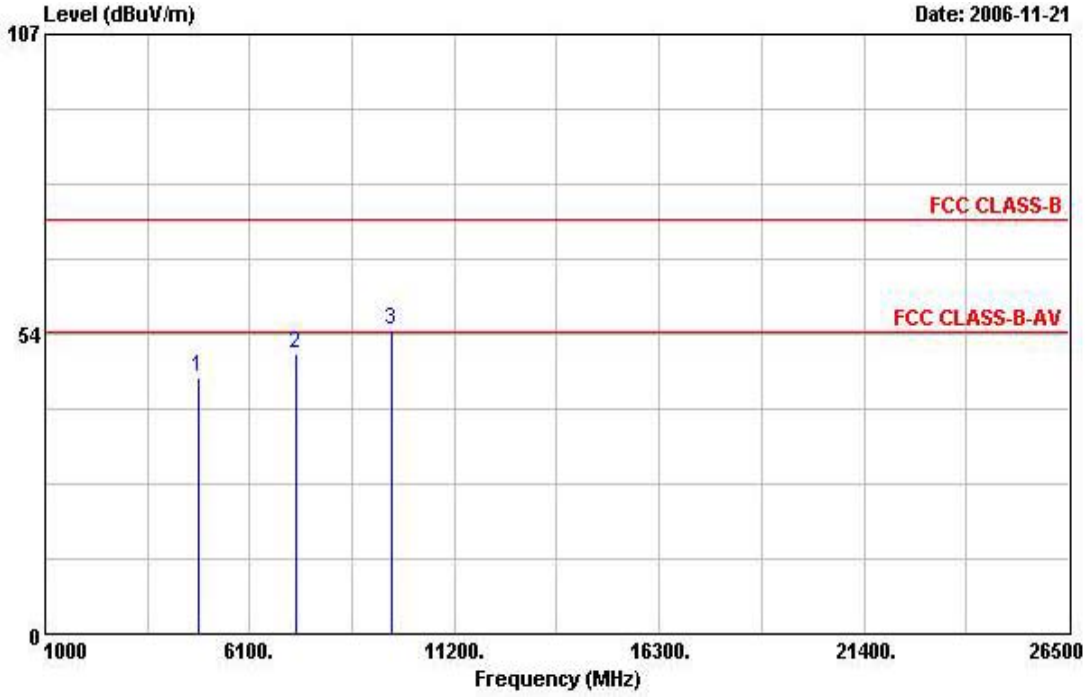
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11b CH 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	46.32	-27.68	74.00	42.41	33.09	3.15	32.32	PEAK
2	7232.000	51.85	-22.15	74.00	44.27	35.98	4.15	32.55	PEAK
3	9648.000	52.49	-21.51	74.00	42.29	38.58	4.42	32.80	PEAK

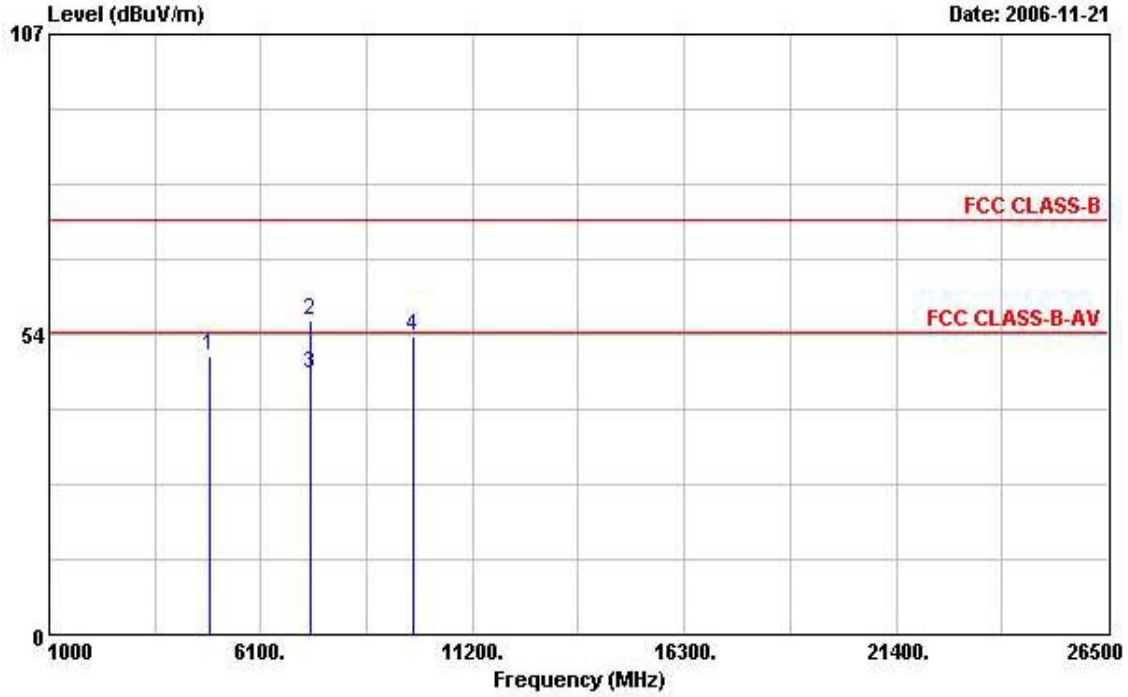
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	45.81	-28.19	74.00	41.89	33.09	3.15	32.32	PEAK
2	7236.000	50.15	-23.85	74.00	42.58	35.98	4.15	32.57	PEAK
3	9648.000	54.11	-19.89	74.00	43.91	38.58	4.42	32.80	PEAK

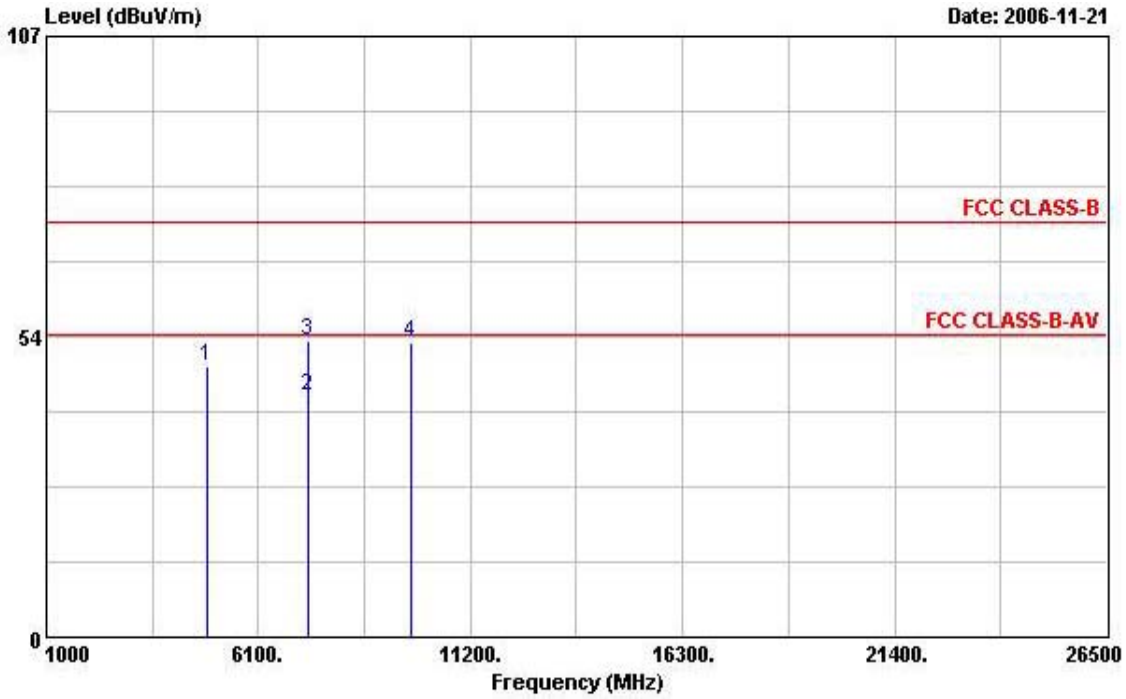
Temperature	26°C	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11b CH 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4876.000	49.62	-24.38	74.00	45.58	33.18	3.16	32.30	Peak
2	7308.000	55.90	-18.10	74.00	48.16	36.14	4.18	32.59	PEAK
3	7308.000	46.55	-7.45	54.00	38.82	36.14	4.18	32.59	Average
4	9748.000	53.21	-20.79	74.00	42.80	38.77	4.44	32.80	PEAK

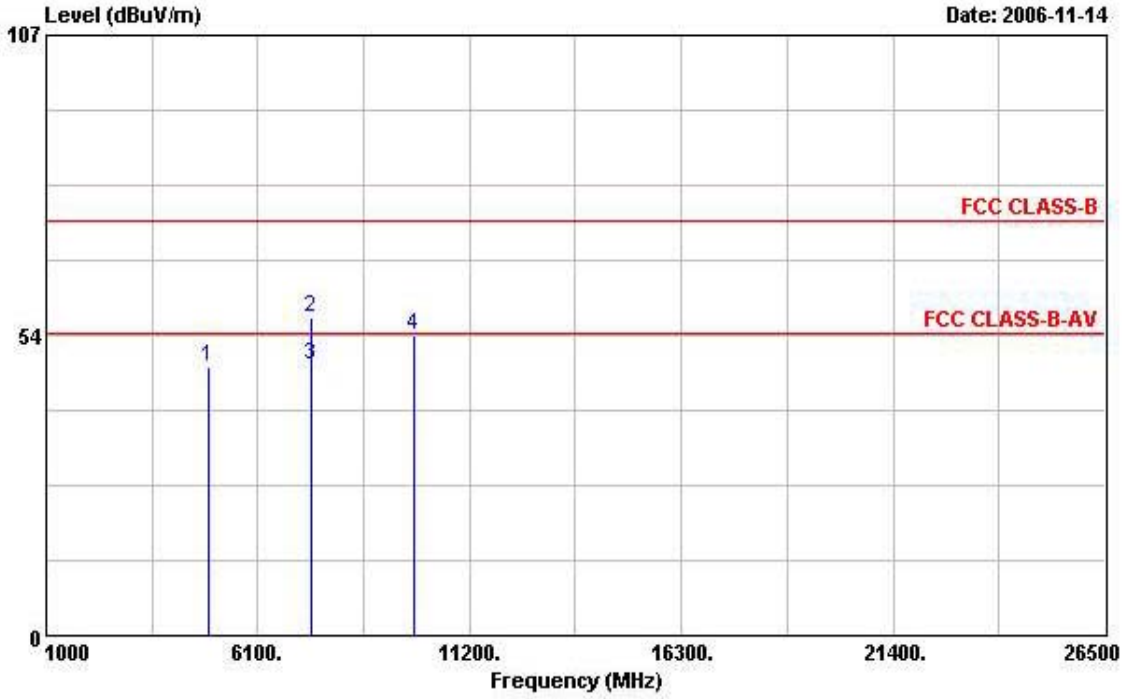
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4876.000	48.33	-25.67	74.00	44.29	33.18	3.16	32.30	PEAK
2	7308.000	42.91	-11.09	54.00	35.18	36.14	4.18	32.59	Average
3	7308.000	52.91	-21.09	74.00	45.18	36.14	4.18	32.59	PEAK
4	9748.000	52.45	-21.55	74.00	42.04	38.77	4.44	32.80	PEAK

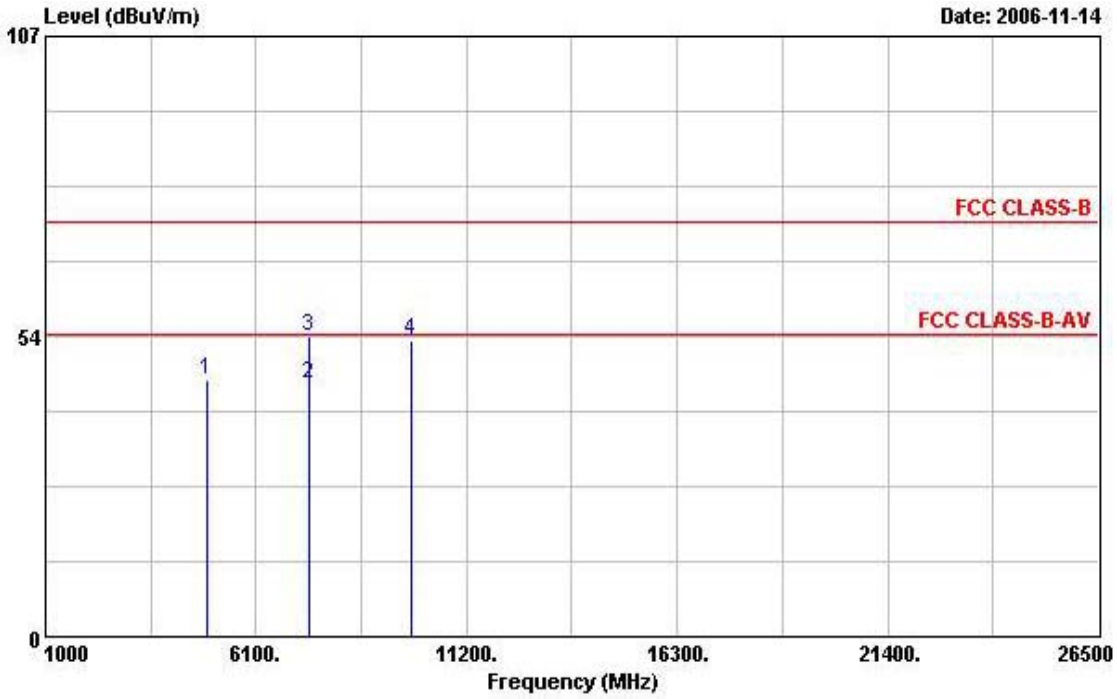
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11b CH 11

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	47.98	-26.02	74.00	43.79	33.28	3.19	32.28	PEAK
2	7384.000	56.65	-17.35	74.00	48.72	36.35	4.21	32.63	PEAK
3	7384.000	48.08	-5.92	54.00	40.15	36.35	4.21	32.63	Average
4	9848.000	53.35	-20.65	74.00	42.74	38.92	4.48	32.79	PEAK

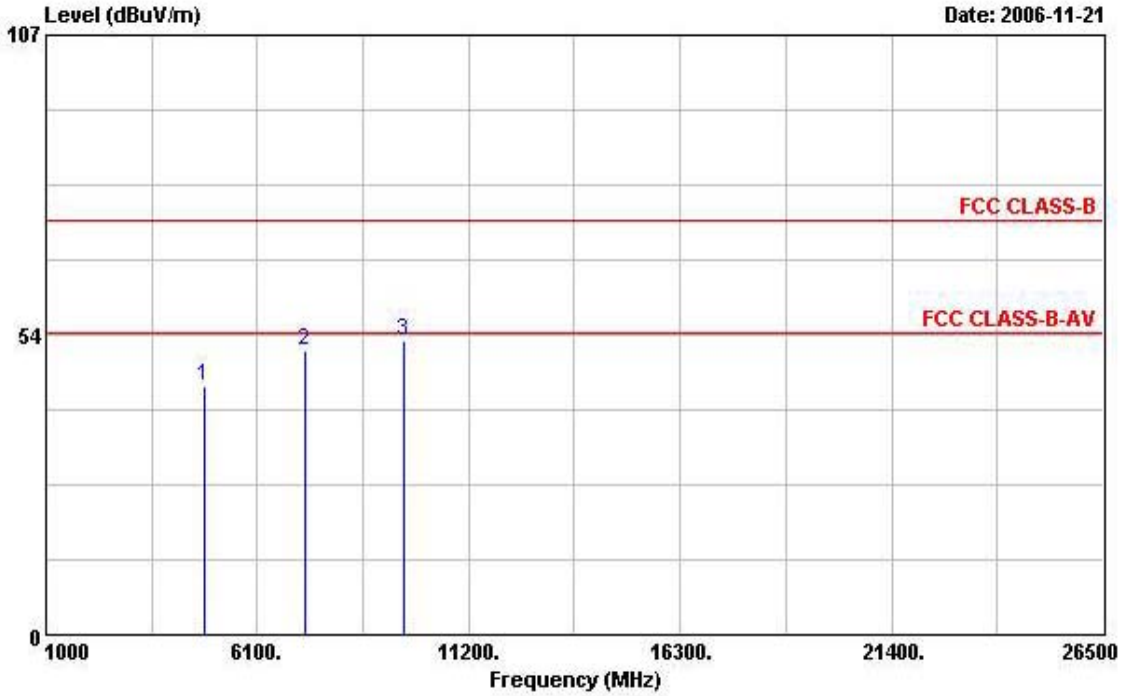
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4924.000	45.69	-28.31	74.00	41.50	33.28	3.19	32.28	PEAK
2	7384.000	45.17	-8.83	54.00	37.24	36.35	4.21	32.63	Average
3	7384.000	53.62	-20.38	74.00	45.69	36.35	4.21	32.63	PEAK
4	9848.000	52.63	-21.37	74.00	42.02	38.92	4.48	32.79	PEAK

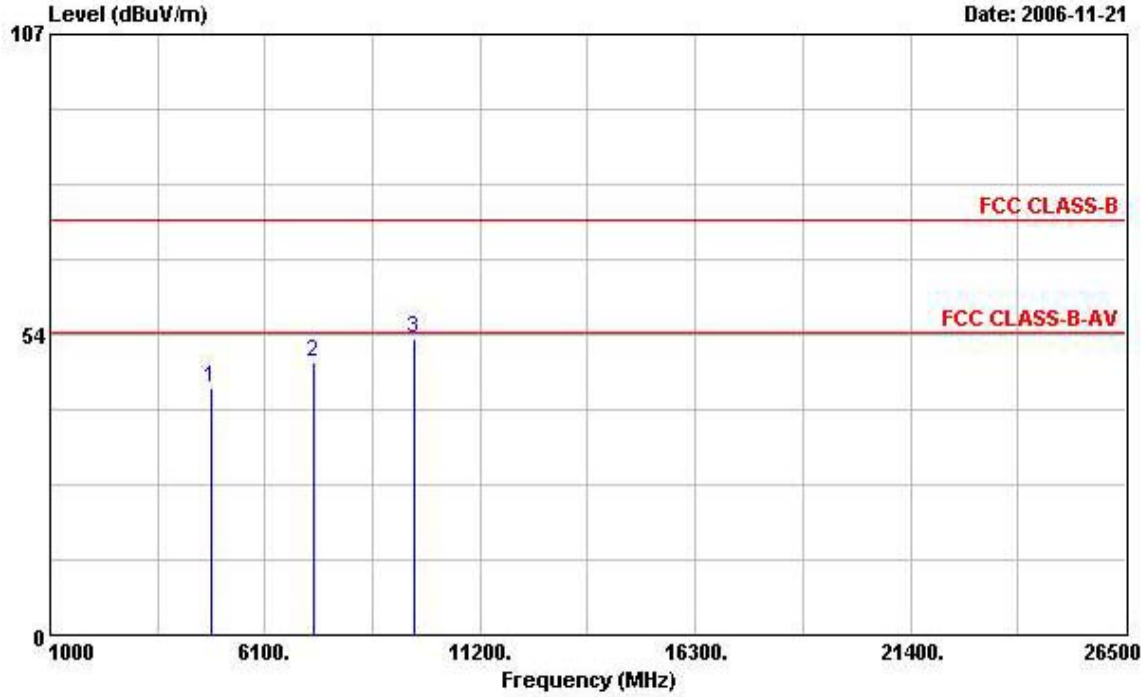
Temperature	26℃	Humidity	55%
Test Engineer	Vic Hsiao	Configurations	Mode 2 / 802.11g CH 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	44.43	-29.57	74.00	40.52	33.09	3.15	32.32	PEAK
2	7244.000	50.67	-23.33	74.00	43.10	35.98	4.15	32.57	PEAK
3	9648.000	52.47	-21.53	74.00	42.27	38.58	4.42	32.80	PEAK

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4824.000	44.07	-29.93	74.00	40.16	33.09	3.15	32.32	PEAK
2	7236.000	48.50	-25.50	74.00	40.94	35.98	4.15	32.57	PEAK
3	9648.000	52.77	-21.23	74.00	42.57	38.58	4.42	32.80	PEAK