

4.3. Radiated Emissions Measurement

4.3.1. Limit

The field strength of any emissions which appear outside of this band shall not exceed the general radiated emissions limits in Section 15.209(a)

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

4.3.2. Measuring Instruments and Setting

Please refer to section 5 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	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

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

4.3.3. Test Procedures

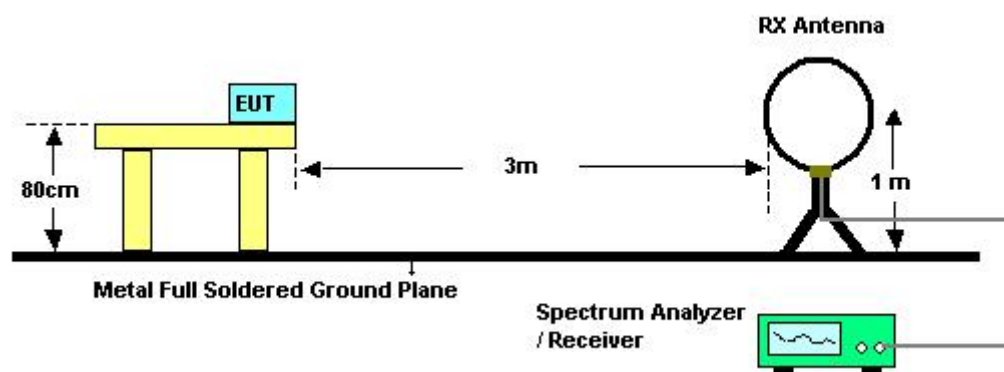
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting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

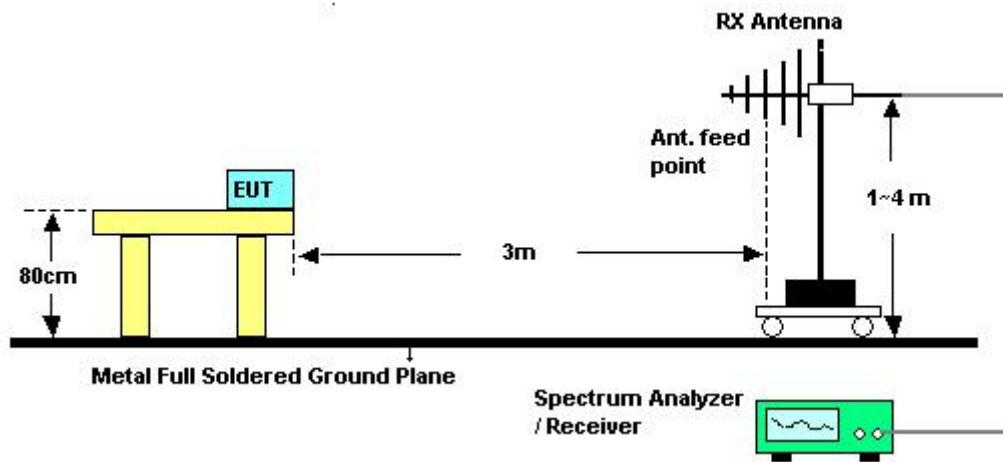
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. 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.

4.3.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



4.3.5. Test Deviation

There is no deviation with the original standard.

4.3.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

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

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 51 / Ant. 1 / Ant. 1+Ant. 2/ Antenna without bundle of cable / Antenna with bundle of cable

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.

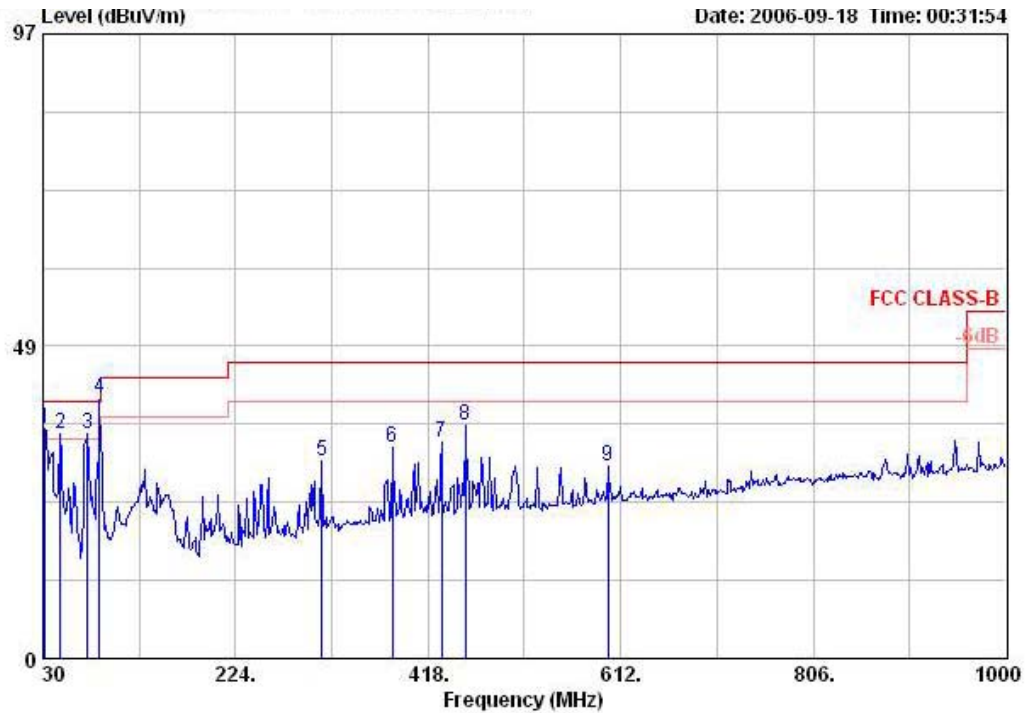
Distance extrapolation factor = $40 \log(\text{specific distance} / \text{test distance})$ (dB);

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

4.3.8. Results for Radiated Emissions (30MHz~10th Harmonic)

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 1 / Antenna without bundle of cable / Ant. 1

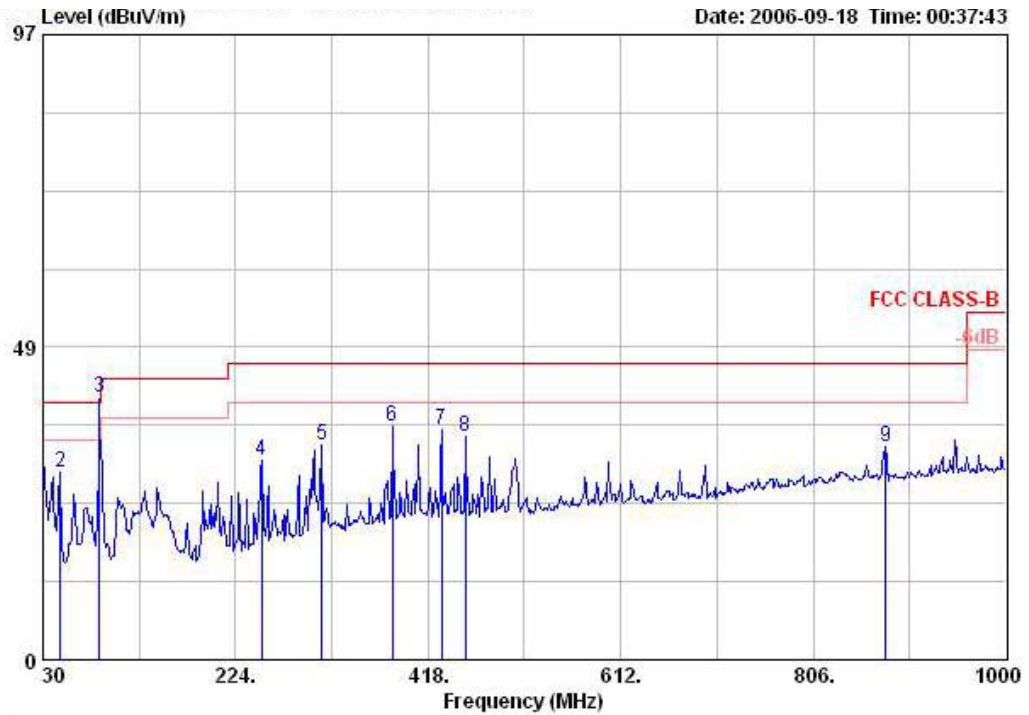
Vertical



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	31.940	35.58	-4.42	40.00	42.78	18.96	0.32	26.49	Peak	400	0
2 !	47.460	34.99	-5.01	40.00	50.64	10.20	0.63	26.48	Peak	400	0
3 !	74.620	34.77	-5.23	40.00	53.39	7.21	0.37	26.20	Peak	400	0
4 C	87.230	40.43			57.20	8.82	0.54	26.13	Peak	400	0
5	311.300	30.59	-15.41	46.00	40.18	14.22	1.14	24.95	Peak	400	0
6	382.110	32.66	-13.34	46.00	40.48	16.08	1.45	25.35	Peak	400	0
7	431.580	33.63	-12.37	46.00	40.99	16.94	1.49	25.79	Peak	400	0
8	455.830	36.22	-9.78	46.00	43.47	17.27	1.47	25.99	Peak	400	0
9	599.390	29.87	-16.13	46.00	35.04	18.99	2.07	26.23	Peak	400	0

Item 4 is fundamental frequency.

Horizontal

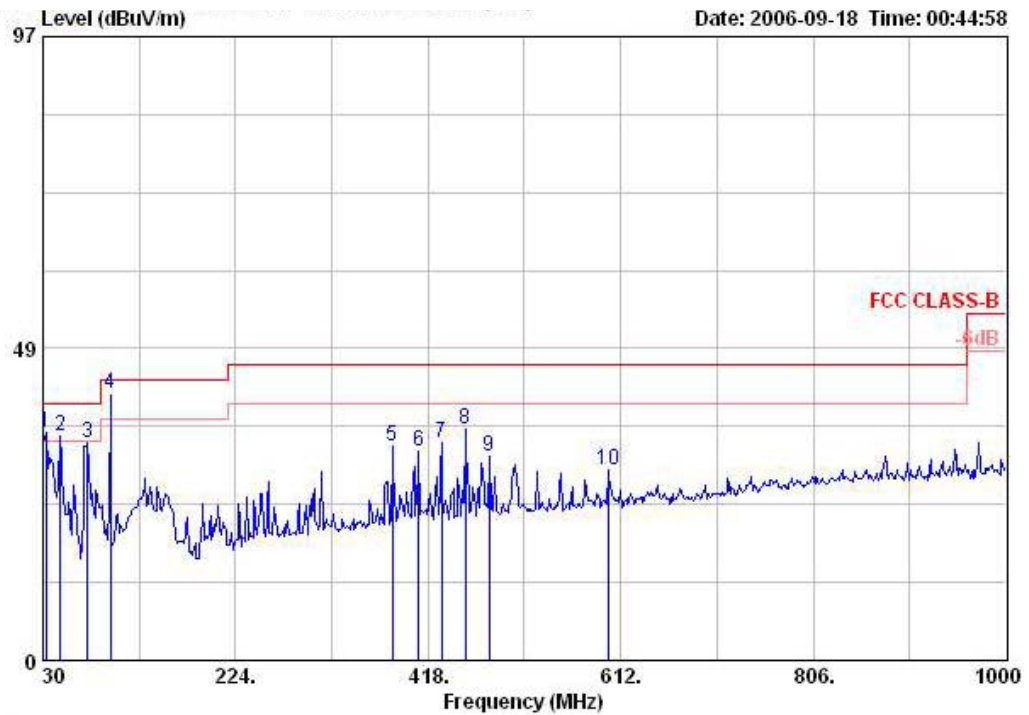


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	30.000	30.84	-9.16	40.00	36.88	20.20	0.44	26.68	Peak	100	0
2	47.460	29.05	-10.95	40.00	44.70	10.20	0.63	26.48	Peak	100	0
3 @	87.230	40.67			57.44	8.82	0.54	26.13	Peak	100	0
4	250.190	30.79	-15.21	46.00	42.16	12.90	1.15	25.42	Peak	100	0
5	311.300	33.38	-12.62	46.00	42.96	14.22	1.14	24.95	Peak	100	0
6	382.110	36.09	-9.91	46.00	43.90	16.08	1.45	25.35	Peak	100	0
7	431.580	35.76	-10.24	46.00	43.12	16.94	1.49	25.79	Peak	100	0
8	455.830	34.65	-11.35	46.00	41.90	17.27	1.47	25.99	Peak	100	0
9	878.750	33.12	-12.88	46.00	34.11	21.46	2.63	25.08	Peak	100	0

Item 3 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 51 / Antenna without bundle of cable / Ant. 1

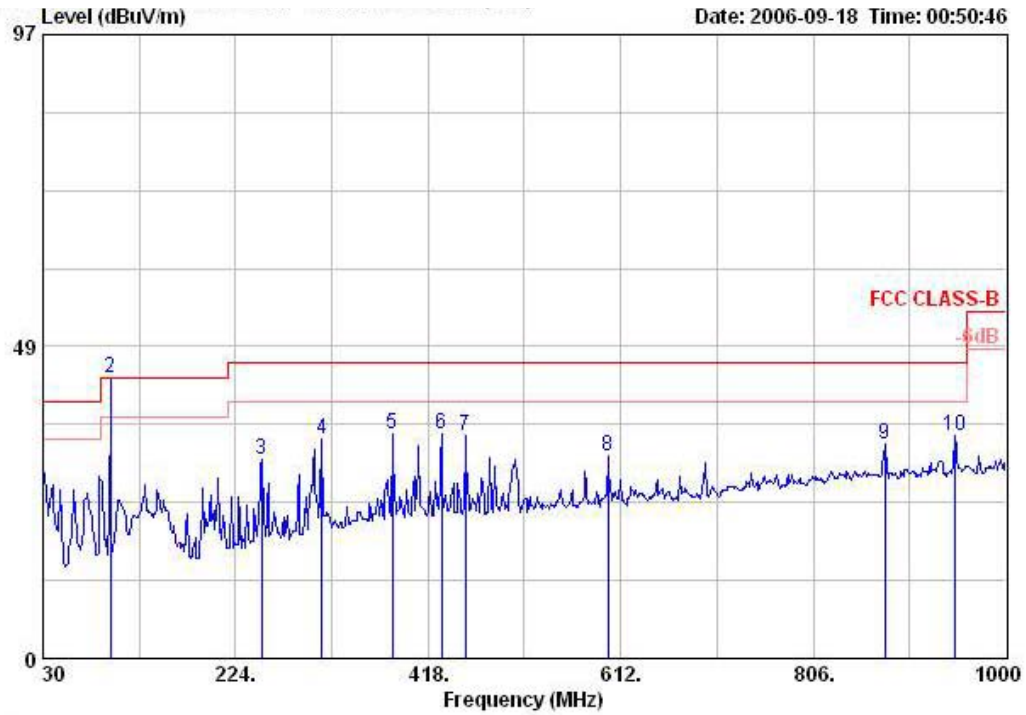
Vertical



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
	Level	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg		
1 !	32.910	35.46	-4.54	40.00	43.25	18.34	0.27	26.40	Peak	400	0
2 !	47.460	34.93	-5.07	40.00	50.58	10.20	0.63	26.48	Peak	400	0
3	74.620	33.73	-6.27	40.00	52.35	7.21	0.37	26.20	Peak	400	0
4 !	97.900	41.45			56.20	10.82	0.42	26.00	Peak	400	0
5	382.110	33.35	-12.65	46.00	41.17	16.08	1.45	25.35	Peak	400	0
6	408.300	32.53	-13.47	46.00	39.94	16.62	1.58	25.61	Peak	400	0
7	431.580	33.81	-12.19	46.00	41.17	16.94	1.49	25.79	Peak	400	0
8	455.830	35.91	-10.09	46.00	43.17	17.27	1.47	25.99	Peak	400	0
9	479.110	31.82	-14.18	46.00	38.81	17.55	1.65	26.18	Peak	400	0
10	599.390	29.64	-16.36	46.00	34.81	18.99	2.07	26.23	Peak	400	0

Item 4 is fundamental frequency.

Horizontal

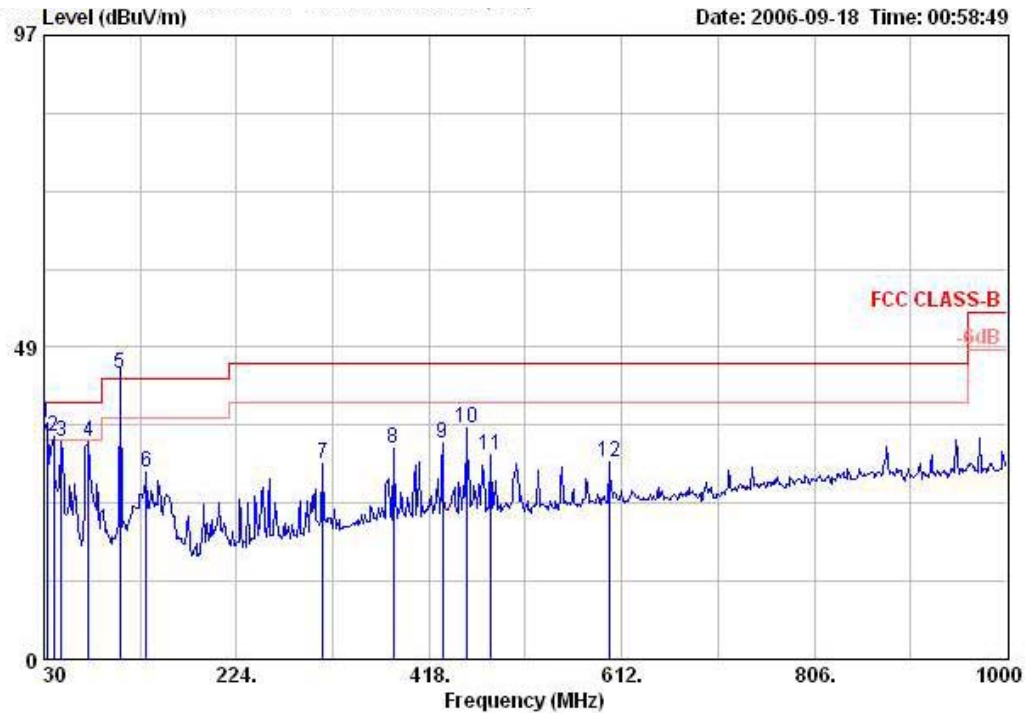


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	30.000	29.34	-10.66	40.00	35.38	20.20	0.44	26.68	Peak	100	0
2 over	97.900	43.74			58.49	10.82	0.42	26.00	Peak	100	0
3	250.190	30.82	-15.18	46.00	42.19	12.90	1.15	25.42	Peak	100	0
4	311.300	33.98	-12.02	46.00	43.56	14.22	1.14	24.95	Peak	100	0
5	382.110	34.89	-11.11	46.00	42.71	16.08	1.45	25.35	Peak	100	0
6	431.580	34.94	-11.06	46.00	42.30	16.94	1.49	25.79	Peak	100	0
7	455.830	34.57	-11.43	46.00	41.82	17.27	1.47	25.99	Peak	100	0
8	599.390	31.33	-14.67	46.00	36.50	18.99	2.07	26.23	Peak	100	0
9	877.780	33.39	-12.61	46.00	34.38	21.46	2.62	25.07	Peak	100	0
10	948.590	34.72	-11.28	46.00	35.17	21.99	3.05	25.49	Peak	100	0

Item 2 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 100 /Antenna without bundle of cable /Ant. 1

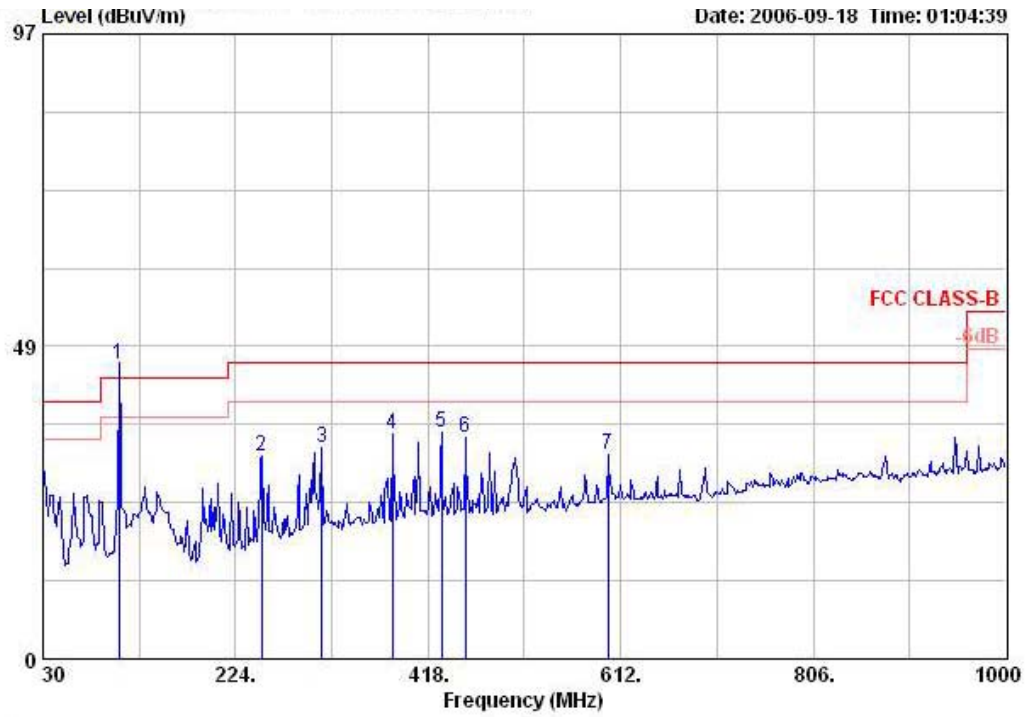
Vertical



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	-3.38	40.00	44.41	18.34	0.27	26.40	Peak	400	0
2 !	-5.25	40.00	46.62	14.10	0.63	26.60	Peak	400	0
3	-6.29	40.00	49.35	10.20	0.63	26.48	Peak	400	0
4	-6.18	40.00	52.44	7.21	0.37	26.20	Peak	400	0
5 @			57.66	12.11	0.50	25.95	Peak	400	0
6	-14.44	43.50	41.95	12.35	0.62	25.87	Peak	400	0
7	-15.72	46.00	39.86	14.22	1.14	24.95	Peak	400	0
8	-13.18	46.00	40.63	16.08	1.45	25.35	Peak	400	0
9	-12.40	46.00	40.96	16.94	1.49	25.79	Peak	400	0
10	-9.94	46.00	43.32	17.27	1.47	25.99	Peak	400	0
11	-14.31	46.00	38.67	17.55	1.65	26.18	Peak	400	0
12	-15.29	46.00	35.88	18.99	2.07	26.23	Peak	400	0

Item 5 is fundamental frequency.

Horizontal



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
Freq	Level	Limit	Level	Factor	Loss	Factor	Remark	Pos	Pos
MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	106.630	45.66		59.00	12.11	0.50	25.95 Peak	100	0
2	250.190	31.36	-14.64	46.00	42.73	12.90	1.15 25.42 Peak	100	0
3	311.300	32.77	-13.23	46.00	42.36	14.22	1.14 24.95 Peak	100	0
4	382.110	34.97	-11.03	46.00	42.79	16.08	1.45 25.35 Peak	100	0
5	431.580	35.15	-10.85	46.00	42.51	16.94	1.49 25.79 Peak	100	0
6	455.830	34.37	-11.63	46.00	41.62	17.27	1.47 25.99 Peak	100	0
7	599.390	31.69	-14.31	46.00	36.85	18.99	2.07 26.23 Peak	100	0

Item 1 is fundamental frequency.

Note:

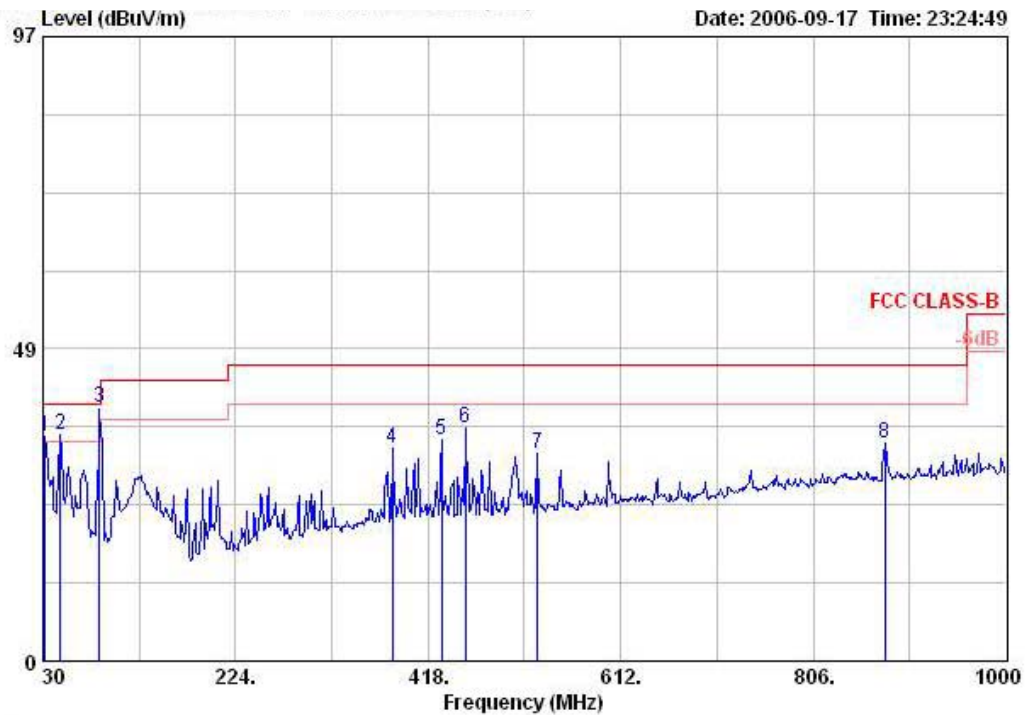
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

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

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

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 1 / Antenna with bundle of cable / Ant. 1

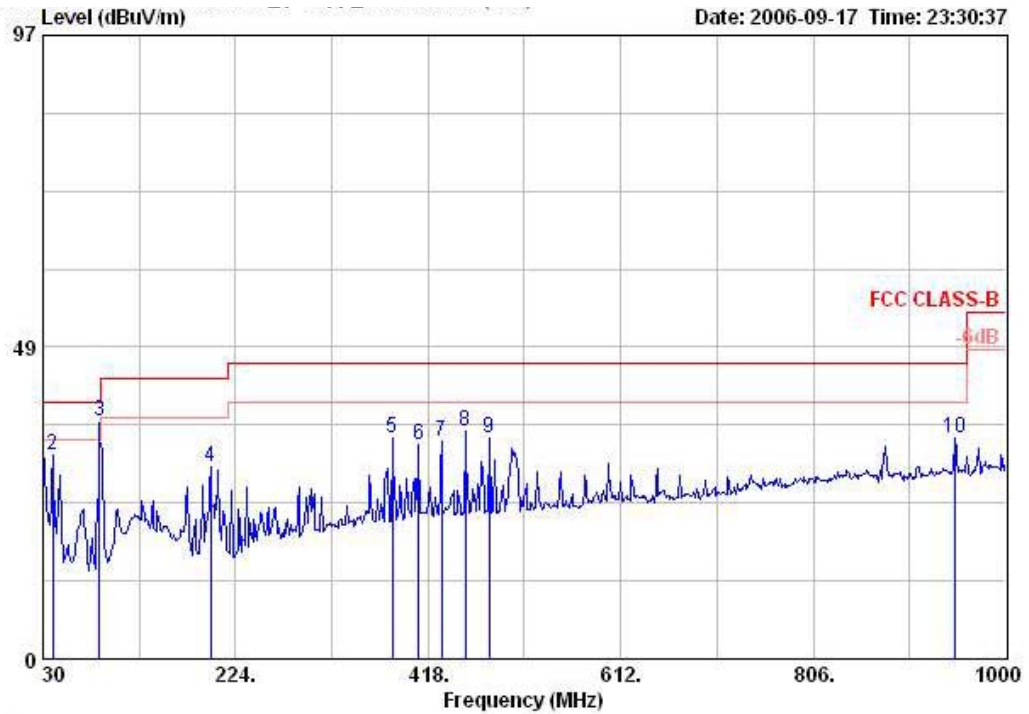
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	31.940	34.99	-5.01	40.00	42.19	18.96	0.32	26.49	Peak	400	0
2 !	47.460	35.23	-4.77	40.00	50.88	10.20	0.63	26.48	Peak	400	0
3 !	87.230	39.46			56.23	8.82	0.54	26.13	Peak	400	0
4	382.110	33.11	-12.89	46.00	40.92	16.08	1.45	25.35	Peak	400	0
5	431.580	34.26	-11.74	46.00	41.62	16.94	1.49	25.79	Peak	400	0
6	455.830	36.19	-9.81	46.00	43.45	17.27	1.47	25.99	Peak	400	0
7	528.580	32.31	-13.69	46.00	38.66	18.25	1.70	26.30	Peak	400	0
8	877.780	33.94	-12.06	46.00	34.93	21.46	2.62	25.07	Peak	400	0

Item 3 is fundamental frequency.

Horizontal

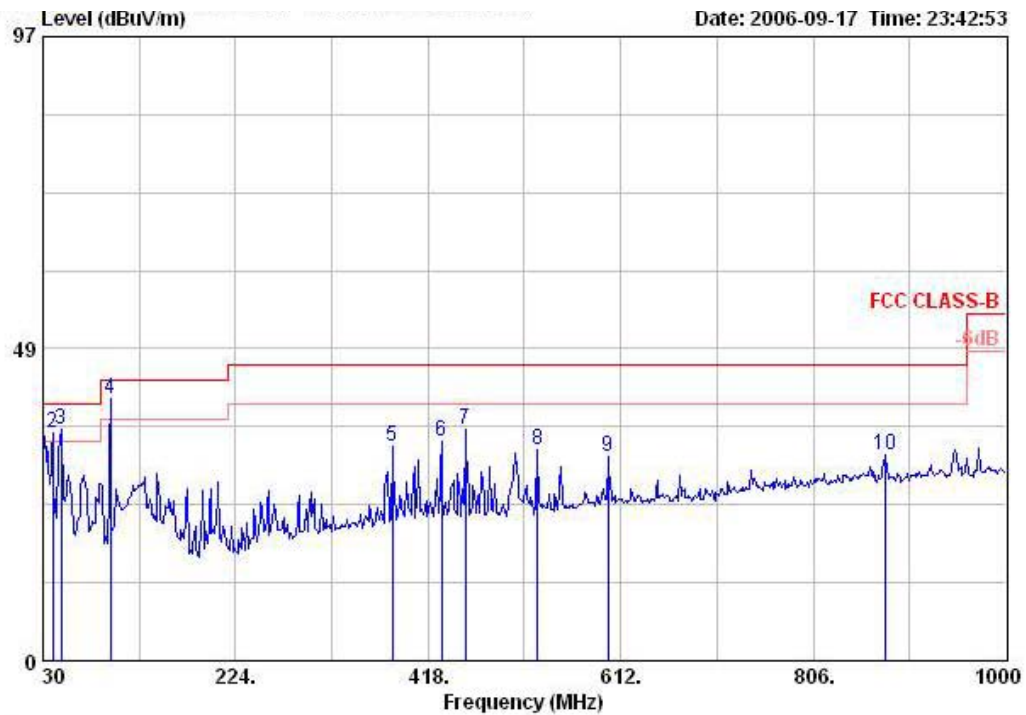


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	30.000	32.35	-7.65	40.00	38.39	20.20	0.44	26.68	Peak	100	0
2	39.700	31.64	-8.36	40.00	43.51	14.10	0.63	26.60	Peak	100	0
3 !	87.230	36.91			53.68	8.82	0.54	26.13	Peak	100	0
4	198.780	29.78	-13.72	43.50	44.07	10.22	0.95	25.45	Peak	100	0
5	382.110	34.37	-11.63	46.00	42.19	16.08	1.45	25.35	Peak	100	0
6	408.300	33.35	-12.65	46.00	40.76	16.62	1.58	25.61	Peak	100	0
7	431.580	33.85	-12.15	46.00	41.21	16.94	1.49	25.79	Peak	100	0
8	455.830	35.30	-10.70	46.00	42.55	17.27	1.47	25.99	Peak	100	0
9	479.110	34.26	-11.74	46.00	41.25	17.55	1.65	26.18	Peak	100	0
10	948.590	34.33	-11.67	46.00	34.77	21.99	3.05	25.49	Peak	100	0

Item 3 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 51 / Antenna with bundle of cable / Ant. 1

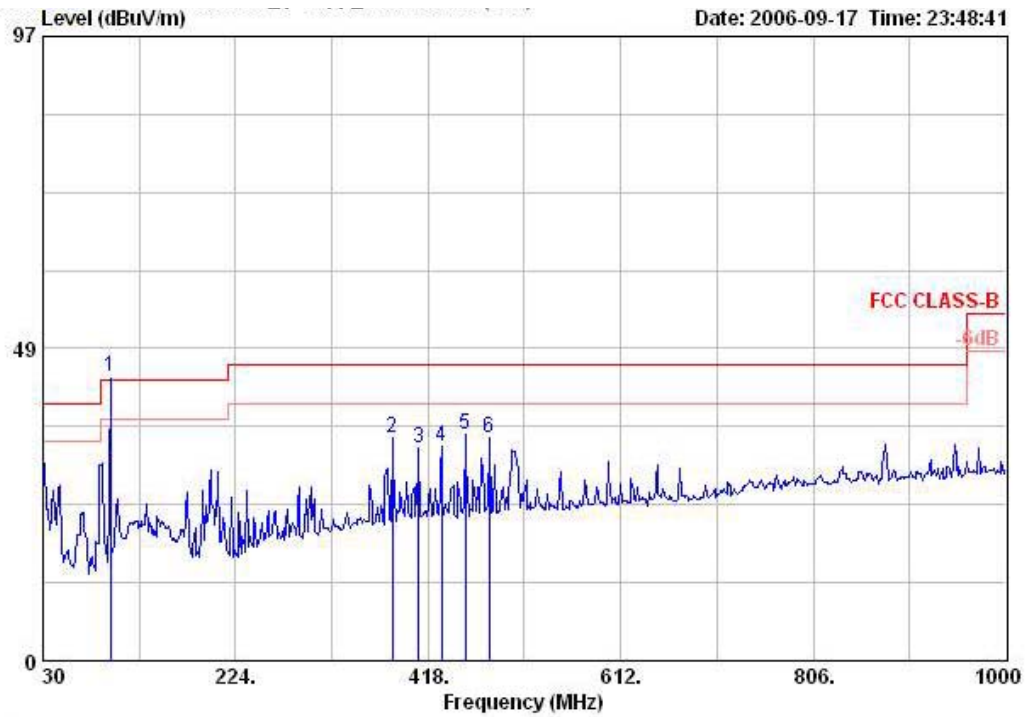
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	30.000	34.95	-5.05	40.00	40.99	20.20	0.44	26.68	Peak	400	0
2 !	39.700	35.33	-4.67	40.00	47.20	14.10	0.63	26.60	Peak	400	0
3 !	48.430	35.86	-4.14	40.00	51.90	9.77	0.67	26.47	Peak	400	0
4 !	97.900	40.73			55.48	10.82	0.42	26.00	Peak	400	0
5	382.110	33.39	-12.61	46.00	41.21	16.08	1.45	25.35	Peak	400	0
6	431.580	34.04	-11.96	46.00	41.40	16.94	1.49	25.79	Peak	400	0
7	455.830	35.99	-10.01	46.00	43.24	17.27	1.47	25.99	Peak	400	0
8	528.580	32.86	-13.14	46.00	39.22	18.25	1.70	26.30	Peak	400	0
9	599.390	31.81	-14.19	46.00	36.98	18.99	2.07	26.23	Peak	400	0
10	877.780	31.99	-14.01	46.00	32.98	21.46	2.62	25.07	Peak	400	0

Item 4 is fundamental frequency.

Horizontal

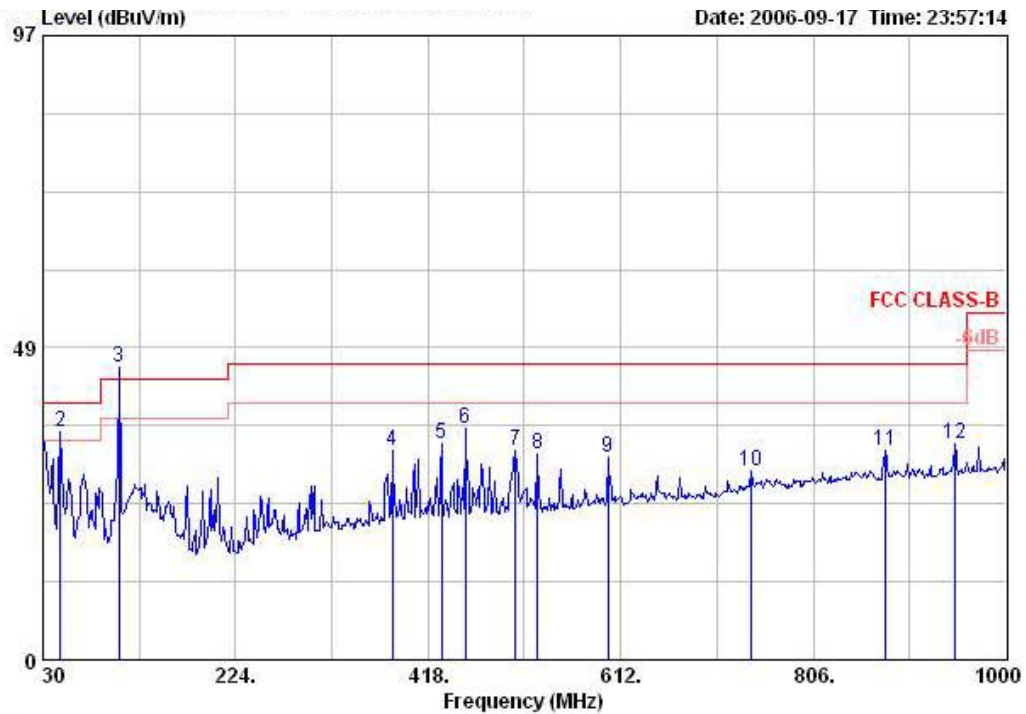


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 over	97.900	44.24			58.99	10.82	0.42	26.00	Peak	100	0
2	382.110	34.63	-11.37	46.00	42.45	16.08	1.45	25.35	Peak	100	0
3	408.300	33.03	-12.97	46.00	40.44	16.62	1.58	25.61	Peak	100	0
4	431.580	33.30	-12.70	46.00	40.66	16.94	1.49	25.79	Peak	100	0
5	455.830	35.20	-10.80	46.00	42.45	17.27	1.47	25.99	Peak	100	0
6	479.110	34.58	-11.42	46.00	41.57	17.55	1.65	26.18	Peak	100	0

Item 1 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 100 / Antenna with bundle of cable / Ant. 1

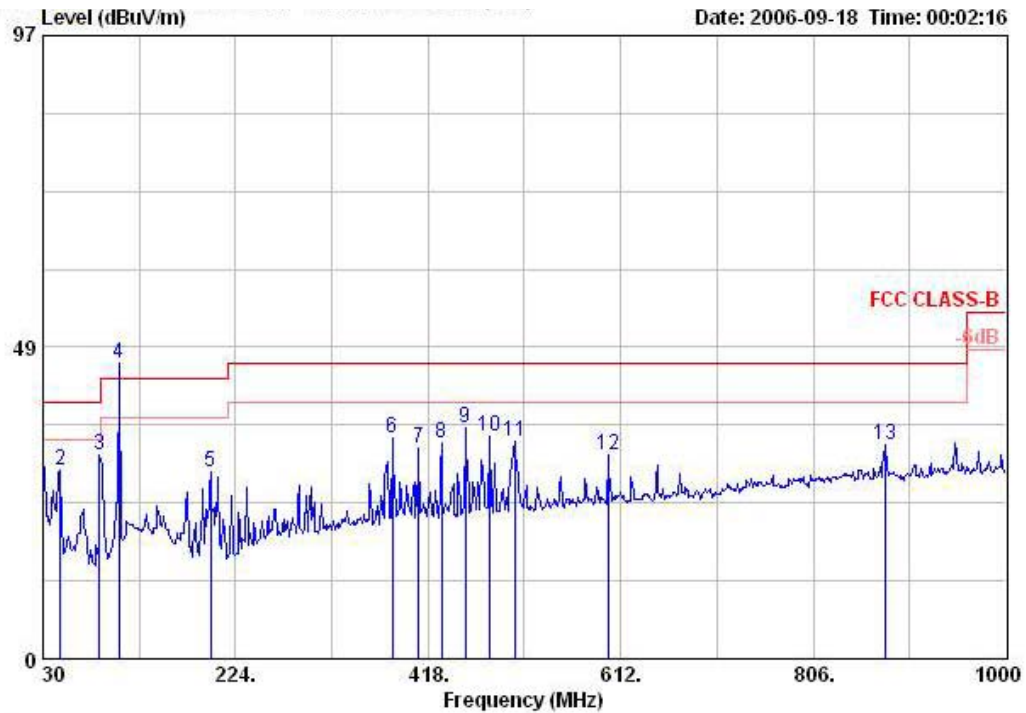
Vertical



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
Freq	Level	Limit	Level	Factor	Loss	Factor	Remark	Pos	Pos		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1 !	30.000	34.09	-5.91	40.00	40.13	20.20	0.44	26.68	Peak	400	0
2 !	47.460	35.36	-4.64	40.00	51.01	10.20	0.63	26.48	Peak	400	0
3 over	106.630	45.45			58.79	12.11	0.50	25.95	Peak	400	0
4	382.110	32.58	-13.42	46.00	40.40	16.08	1.45	25.35	Peak	400	0
5	431.580	33.49	-12.51	46.00	40.85	16.94	1.49	25.79	Peak	400	0
6	455.830	35.96	-10.04	46.00	43.21	17.27	1.47	25.99	Peak	400	0
7	506.270	32.59	-13.41	46.00	39.25	17.89	1.79	26.34	Peak	400	0
8	528.580	32.00	-14.00	46.00	38.35	18.25	1.70	26.30	Peak	400	0
9	599.390	31.48	-14.52	46.00	36.65	18.99	2.07	26.23	Peak	400	0
10	742.950	29.40	-16.60	46.00	32.09	20.05	2.43	25.17	Peak	400	0
11	878.750	32.43	-13.57	46.00	33.43	21.46	2.63	25.08	Peak	400	0
12	948.590	33.48	-12.52	46.00	33.92	21.99	3.05	25.49	Peak	400	0

Item 3 is fundamental frequency.

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg
1	30.000	29.85	-10.15	40.00	35.89	20.20	0.44	26.68	Peak	100	0
2	47.460	29.21	-10.79	40.00	44.85	10.20	0.63	26.48	Peak	100	0
3	87.230	31.76	-8.24	40.00	48.53	8.82	0.54	26.13	Peak	100	0
4 @	106.630	45.99			59.32	12.11	0.50	25.95	Peak	100	0
5	198.780	29.17	-14.33	43.50	43.46	10.22	0.95	25.45	Peak	100	0
6	382.110	34.46	-11.54	46.00	42.28	16.08	1.45	25.35	Peak	100	0
7	408.300	32.75	-13.25	46.00	40.16	16.62	1.58	25.61	Peak	100	0
8	431.580	33.46	-12.54	46.00	40.82	16.94	1.49	25.79	Peak	100	0
9	455.830	36.06	-9.94	46.00	43.31	17.27	1.47	25.99	Peak	100	0
10	479.110	34.50	-11.50	46.00	41.48	17.55	1.65	26.18	Peak	100	0
11	505.300	33.90	-12.10	46.00	40.57	17.88	1.79	26.34	Peak	100	0
12	599.390	31.73	-14.27	46.00	36.89	18.99	2.07	26.23	Peak	100	0
13	877.780	33.30	-12.70	46.00	34.29	21.46	2.62	25.07	Peak	100	0

Item 4 is fundamental frequency.

Note:

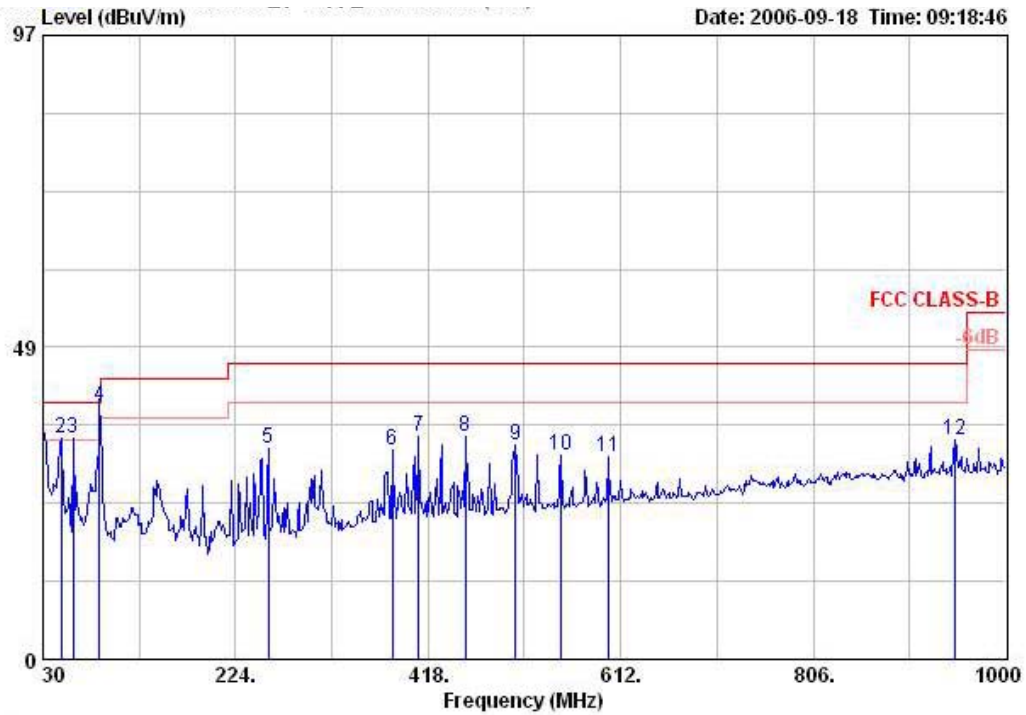
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

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

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

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 1 / Antenna without bundle of cable / Ant. 1 + Ant. 2

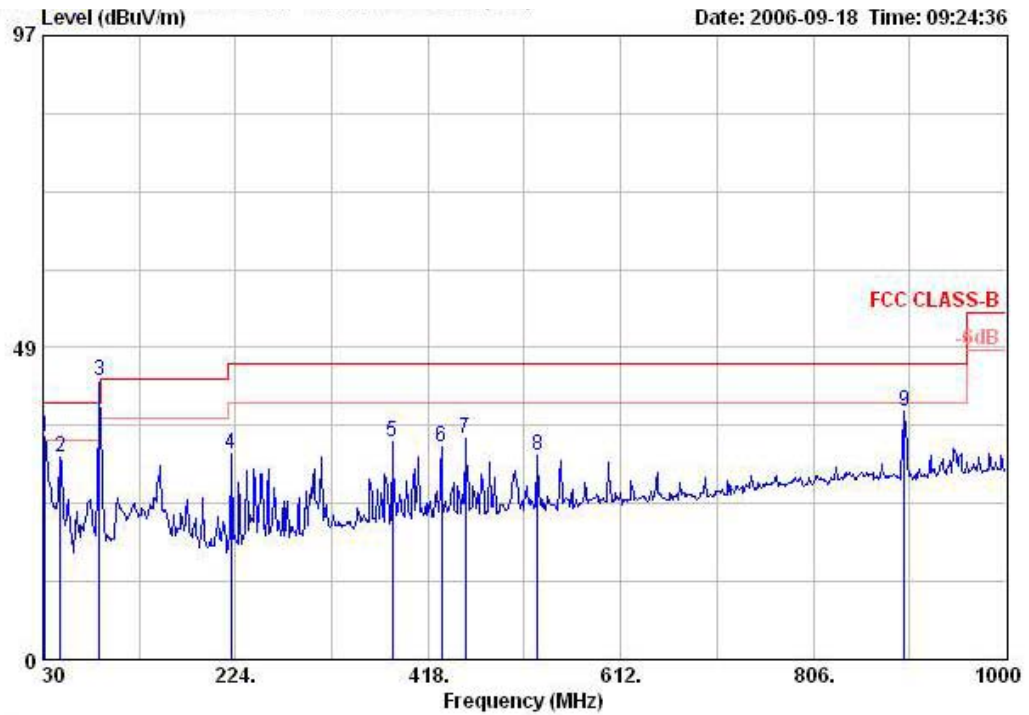
Vertical



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
	Freq	Level	Limit	Level	Factor	Loss	Factor	Pos	Pos		
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	cm	deg		
1 !	30.000	35.44	-4.56	40.00	41.48	20.20	0.44	26.68	Peak	400	0
2 !	48.430	34.33	-5.67	40.00	50.36	9.77	0.67	26.47	Peak	400	0
3 !	60.070	34.27	-5.73	40.00	53.04	7.10	0.51	26.38	Peak	400	0
4 @	87.230	39.33			56.10	8.82	0.54	26.13	Peak	400	0
5	256.980	32.75	-13.25	46.00	43.29	13.67	1.15	25.35	Peak	400	0
6	382.110	32.59	-13.41	46.00	40.40	16.08	1.45	25.35	Peak	400	0
7	408.300	34.56	-11.44	46.00	41.97	16.62	1.58	25.61	Peak	400	0
8	455.830	34.62	-11.38	46.00	41.87	17.27	1.47	25.99	Peak	400	0
9	506.270	33.23	-12.77	46.00	39.89	17.89	1.79	26.34	Peak	400	0
10	551.860	31.84	-14.16	46.00	37.87	18.62	1.63	26.27	Peak	400	0
11	599.390	31.39	-14.61	46.00	36.56	18.99	2.07	26.23	Peak	400	0
12	948.590	34.14	-11.86	46.00	34.58	21.99	3.05	25.49	Peak	400	0

Item 4 is fundamental frequency.

Horizontal

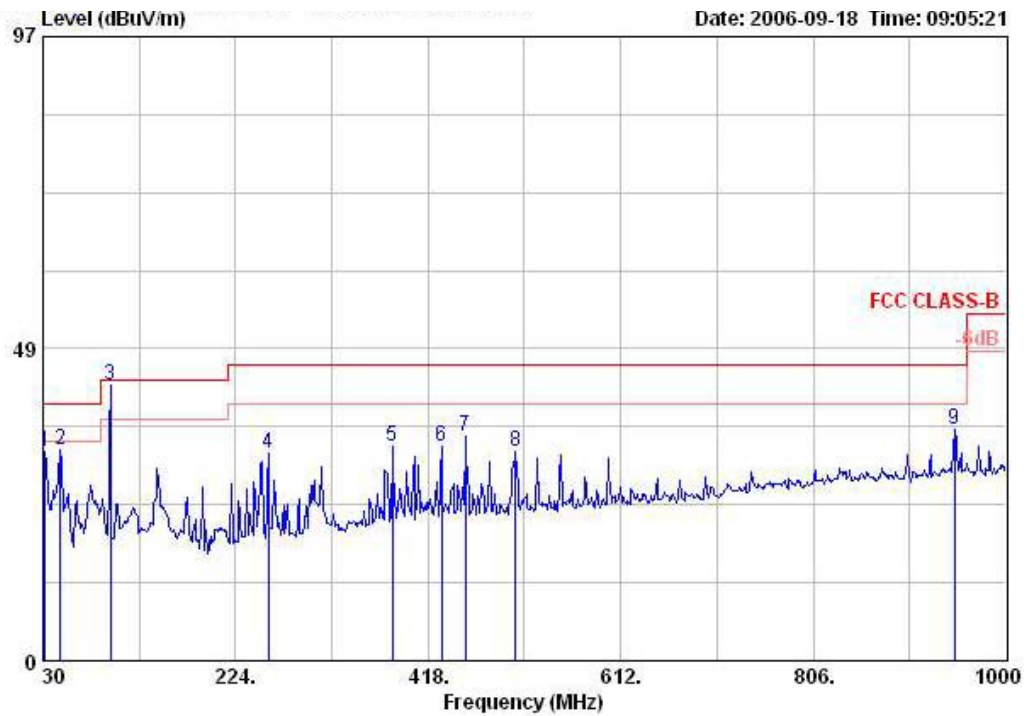


	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB		cm	deg
1 !	31.940	34.67	-5.33	40.00	41.88	18.96	0.32	26.49 Peak	100	0
2	47.460	31.53	-8.47	40.00	47.17	10.20	0.63	26.48 Peak	100	0
3 @	87.230	43.33			60.10	8.82	0.54	26.13 Peak	100	0
4	219.150	31.99	-14.01	46.00	45.79	10.61	1.03	25.44 Peak	100	0
5	382.110	33.94	-12.06	46.00	41.76	16.08	1.45	25.35 Peak	100	0
6	431.580	32.94	-13.06	46.00	40.30	16.94	1.49	25.79 Peak	100	0
7	455.830	34.40	-11.60	46.00	41.65	17.27	1.47	25.99 Peak	100	0
8	528.580	31.80	-14.20	46.00	38.15	18.25	1.70	26.30 Peak	100	0
9	898.150	38.71	-7.29	46.00	39.78	21.50	2.69	25.26 Peak	100	0

Item 3 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 51 / Antenna without bundle of cable / Ant. 1 + Ant. 2

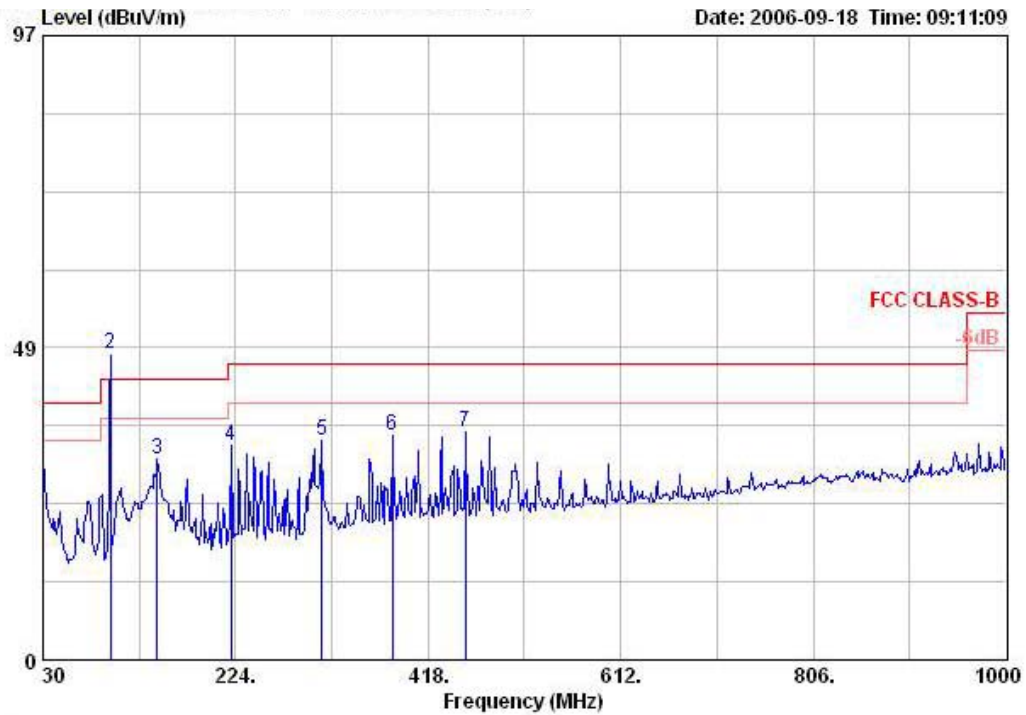
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	31.940	32.64	-7.36	40.00	39.85	18.96	0.32	26.49	Peak	400	0
2	47.460	32.90	-7.10	40.00	48.54	10.20	0.63	26.48	Peak	400	0
3 @	97.900	42.90			57.66	10.82	0.42	26.00	Peak	400	0
4	256.980	32.23	-13.77	46.00	42.77	13.67	1.15	25.35	Peak	400	0
5	382.110	33.28	-12.72	46.00	41.09	16.08	1.45	25.35	Peak	400	0
6	431.580	33.25	-12.75	46.00	40.61	16.94	1.49	25.79	Peak	400	0
7	455.830	34.91	-11.09	46.00	42.17	17.27	1.47	25.99	Peak	400	0
8	506.270	32.52	-13.48	46.00	39.18	17.89	1.79	26.34	Peak	400	0
9	948.590	36.05	-9.95	46.00	36.49	21.99	3.05	25.49	Peak	400	0

Item 3 is fundamental frequency.

Horizontal

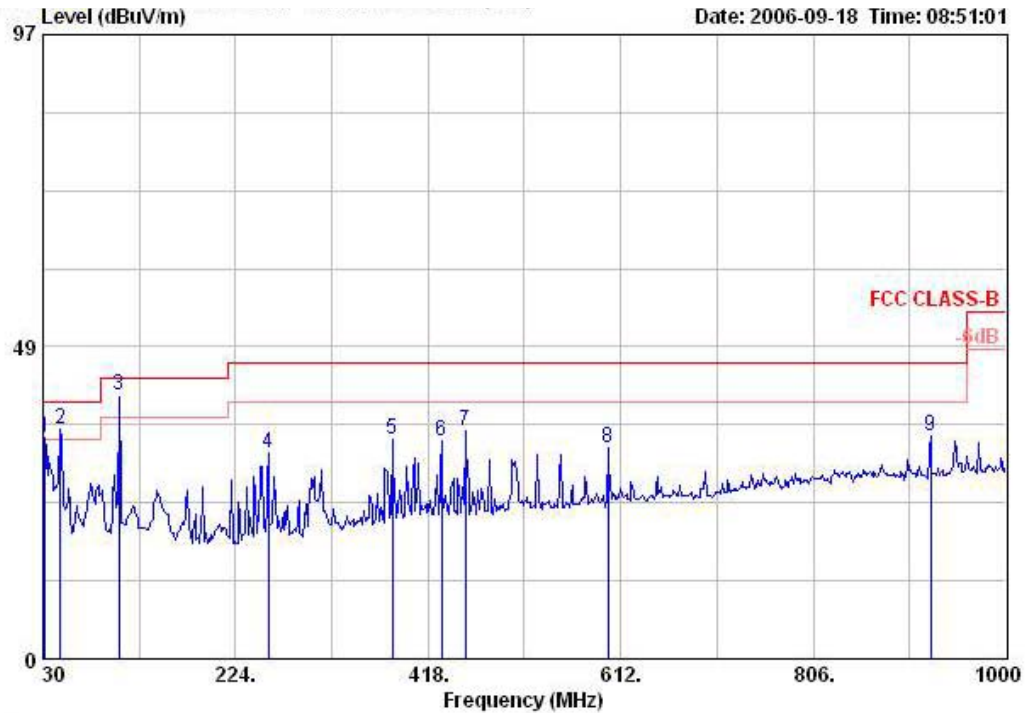


	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.000	30.31	-9.69	40.00	36.35	20.20	0.44	26.68 Peak	100	0
2 @	97.900	47.66			62.41	10.82	0.42	26.00 Peak	100	0
3	145.430	31.19	-12.31	43.50	44.87	11.56	0.54	25.79 Peak	100	0
4	219.150	33.37	-12.63	46.00	47.17	10.61	1.03	25.44 Peak	100	0
5	311.300	34.00	-12.00	46.00	43.58	14.22	1.14	24.95 Peak	100	0
6	382.110	34.91	-11.09	46.00	42.73	16.08	1.45	25.35 Peak	100	0
7	455.830	35.46	-10.54	46.00	42.71	17.27	1.47	25.99 Peak	100	0

Item 2 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 100 / Antenna without bundle of cable / Ant. 1+Ant. 2

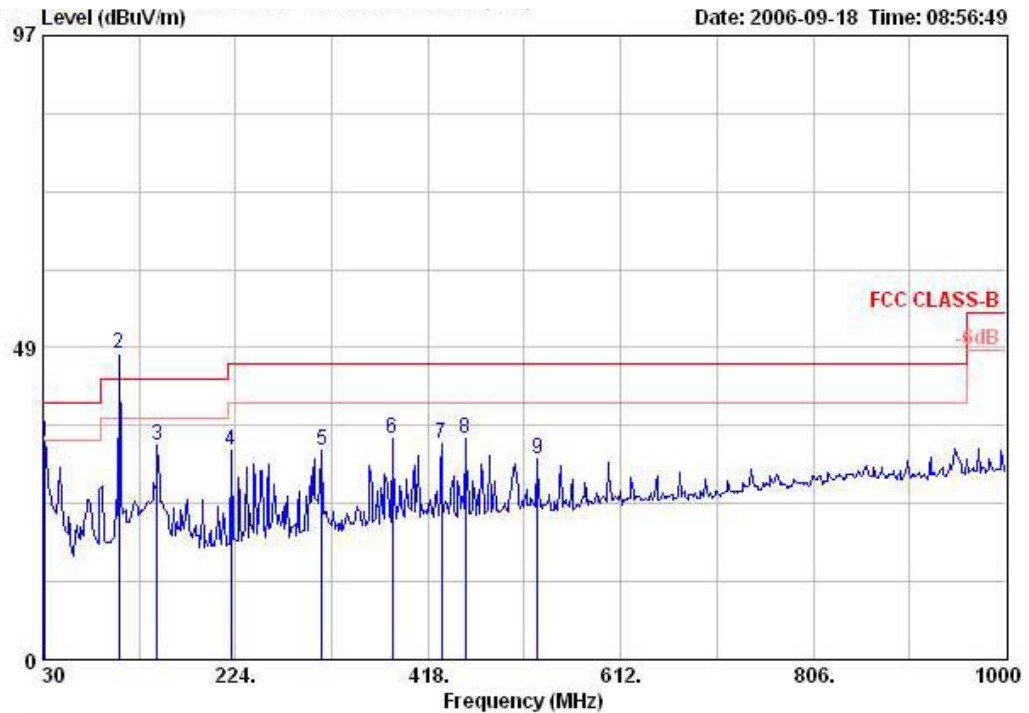
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	31.940	34.32	-5.68	40.00	41.53	18.96	0.32	26.49	Peak	400	0
2 !	47.460	35.81	-4.19	40.00	51.46	10.20	0.63	26.48	Peak	400	0
3 @	106.630	40.89			54.23	12.11	0.50	25.95	Peak	400	0
4	256.980	32.07	-13.93	46.00	42.61	13.67	1.15	25.35	Peak	400	0
5	382.110	33.99	-12.01	46.00	41.81	16.08	1.45	25.35	Peak	400	0
6	431.580	33.83	-12.17	46.00	41.19	16.94	1.49	25.79	Peak	400	0
7	455.830	35.30	-10.70	46.00	42.55	17.27	1.47	25.99	Peak	400	0
8	599.390	32.89	-13.11	46.00	38.06	18.99	2.07	26.23	Peak	400	0
9	924.340	34.64	-11.36	46.00	35.40	21.75	2.88	25.38	Peak	400	0

Item 3 is fundamental frequency.

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg
1	31.940	33.92	-6.08	40.00	41.13	18.96	0.32	26.49	Peak	100	0
2 @	106.630	47.66			61.00	12.11	0.50	25.95	Peak	100	0
3	145.430	33.19	-10.31	43.50	46.88	11.56	0.54	25.79	Peak	100	0
4	219.150	32.57	-13.43	46.00	46.37	10.61	1.03	25.44	Peak	100	0
5	311.300	32.42	-13.58	46.00	42.01	14.22	1.14	24.95	Peak	100	0
6	382.110	34.41	-11.59	46.00	42.22	16.08	1.45	25.35	Peak	100	0
7	431.580	33.65	-12.35	46.00	41.01	16.94	1.49	25.79	Peak	100	0
8	455.830	34.49	-11.51	46.00	41.74	17.27	1.47	25.99	Peak	100	0
9	528.580	31.13	-14.87	46.00	37.49	18.25	1.70	26.30	Peak	100	0

Item 2 is fundamental frequency.

Note:

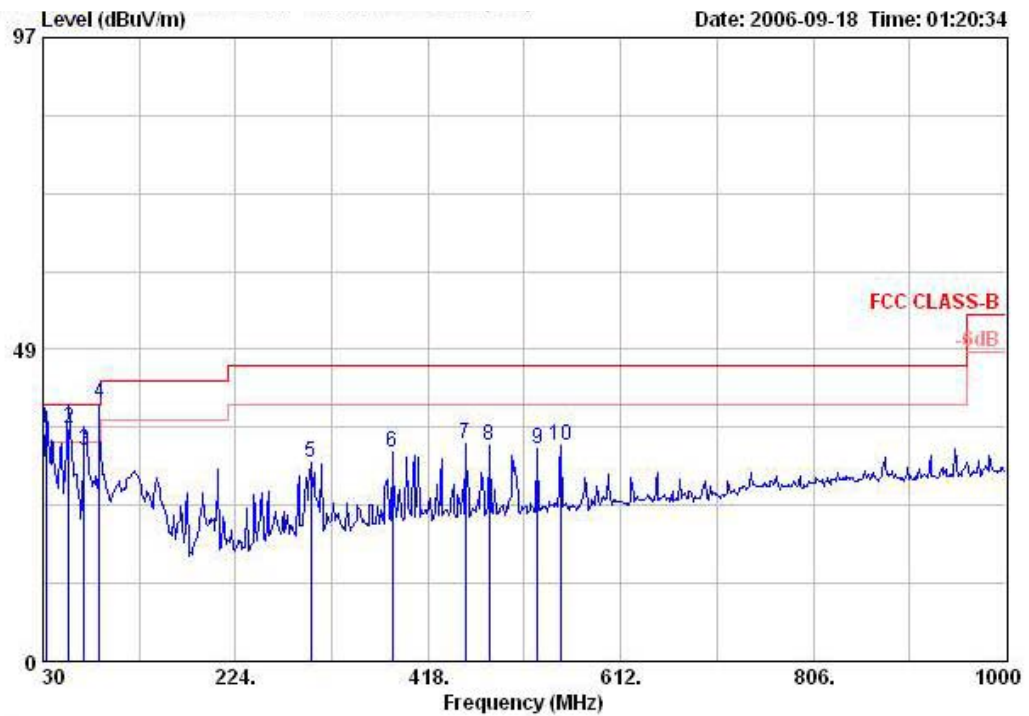
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

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

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

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 1 / Antenna with bundle of cable / Ant. 1+Ant. 2

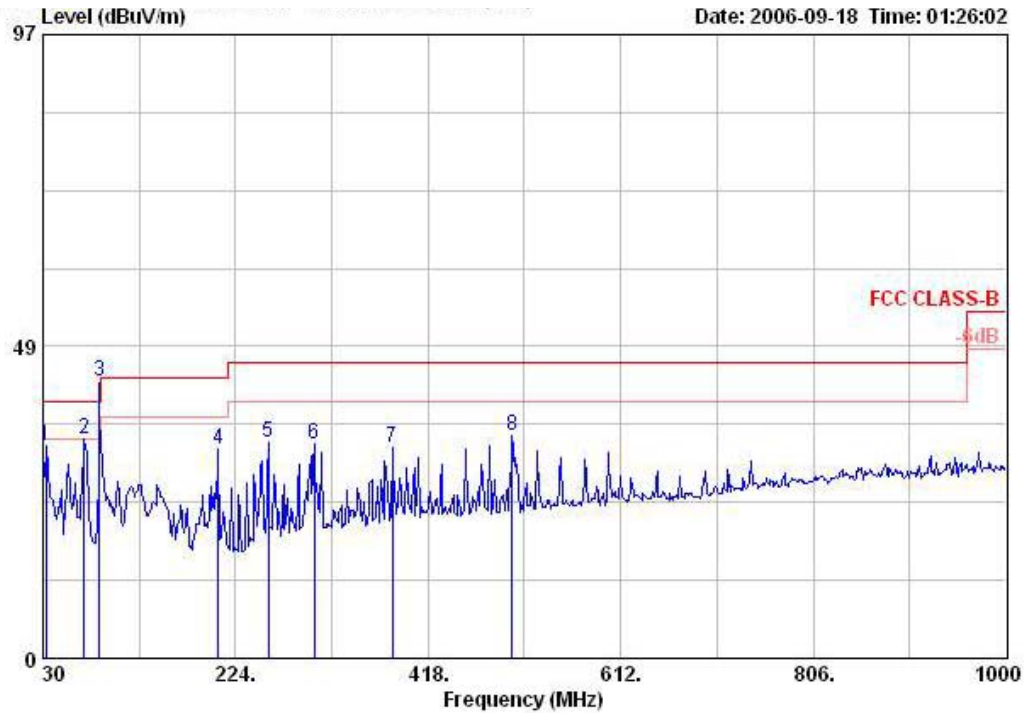
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	32.910	36.19	-3.81	40.00	43.98	18.34	0.27	26.40	QP	100	0
2 !	56.190	36.31	-3.69	40.00	54.33	7.82	0.45	26.28	Peak	100	0
3	71.710	32.85	-7.15	40.00	51.66	6.96	0.39	26.16	QP	100	0
4 @	87.230	40.23			57.00	8.82	0.54	26.13	Peak	400	0
5	299.660	31.00	-15.00	46.00	40.90	13.90	1.14	24.94	Peak	400	0
6	382.110	32.41	-13.59	46.00	40.22	16.08	1.45	25.35	Peak	400	0
7	455.830	33.81	-12.19	46.00	41.07	17.27	1.47	25.99	Peak	400	0
8	479.110	33.63	-12.37	46.00	40.62	17.55	1.65	26.18	Peak	400	0
9	528.580	33.15	-12.85	46.00	39.50	18.25	1.70	26.30	Peak	400	0
10	551.860	33.61	-12.39	46.00	39.64	18.62	1.63	26.27	Peak	400	0

Item 4 is fundamental frequency.

Horizontal

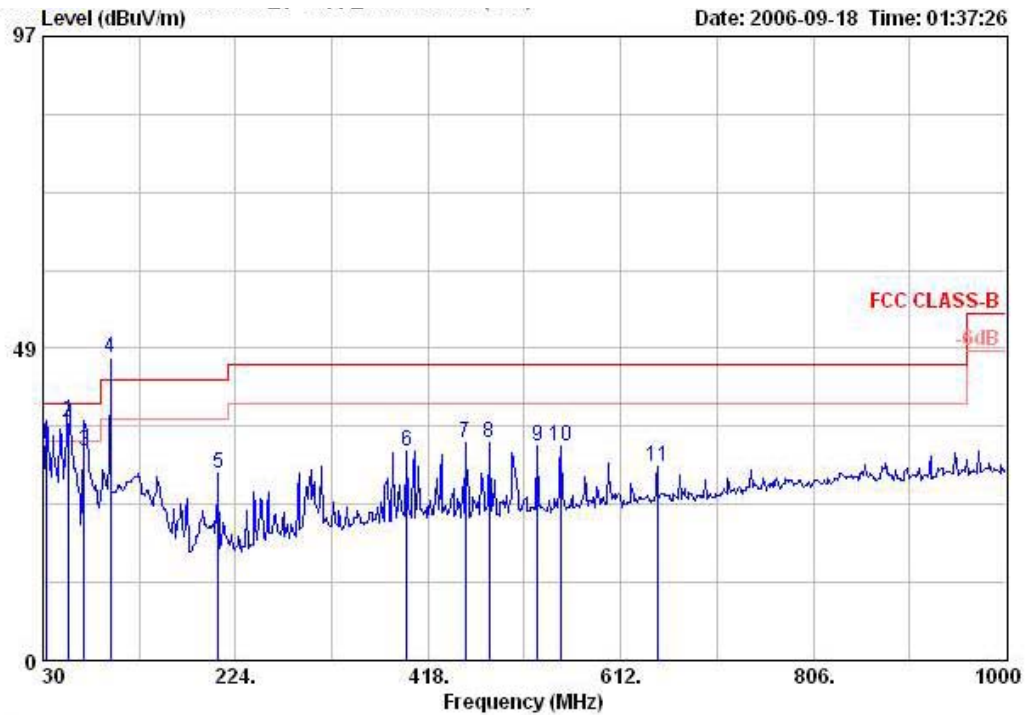


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	32.910	33.02	-6.98	40.00	40.82	18.34	0.27	26.40	Peak	100	216
2 !	71.710	34.03	-5.97	40.00	52.83	6.96	0.39	26.16	Peak	100	216
3 @	87.230	43.13			59.90	8.82	0.54	26.13	Peak	100	216
4	206.540	32.49	-11.01	43.50	46.40	10.55	0.99	25.45	Peak	100	216
5	256.980	33.57	-12.43	46.00	44.11	13.67	1.15	25.35	Peak	100	216
6	303.540	33.18	-12.82	46.00	42.98	14.01	1.14	24.94	Peak	100	216
7	382.110	32.82	-13.18	46.00	40.64	16.08	1.45	25.35	Peak	100	216
8	502.390	34.50	-11.50	46.00	41.21	17.83	1.80	26.35	Peak	100	216

Item 3 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 51 / Antenna with bundle of cable / Ant. 1+Ant. 2

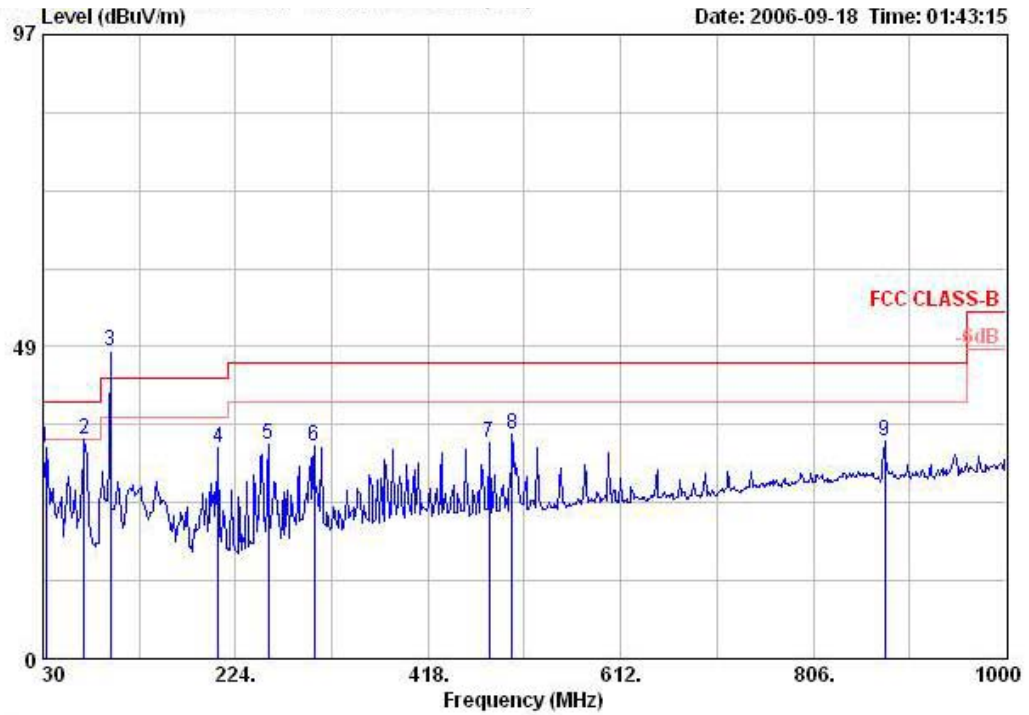
Vertical



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1	32.910	33.50	-6.50	40.00	41.29	18.34	0.27	26.40	QP	100	0
2	55.220	36.88	-3.12	40.00	54.71	8.00	0.43	26.26	QP	100	0
3	71.710	32.45	-7.55	40.00	51.26	6.96	0.39	26.16	QP	100	0
4	97.900	47.02			61.77	10.82	0.42	26.00	Peak	400	0
5	206.540	29.03	-14.47	43.50	42.95	10.55	0.99	25.45	Peak	400	0
6	396.660	32.54	-13.46	46.00	40.03	16.43	1.58	25.51	Peak	400	0
7	455.830	33.88	-12.12	46.00	41.13	17.27	1.47	25.99	Peak	400	0
8	479.110	33.88	-12.12	46.00	40.87	17.55	1.65	26.18	Peak	400	0
9	528.580	33.42	-12.58	46.00	39.77	18.25	1.70	26.30	Peak	400	0
10	551.860	33.19	-12.81	46.00	39.21	18.62	1.63	26.27	Peak	400	0
11	648.860	30.11	-15.89	46.00	34.57	19.59	2.15	26.20	Peak	400	0

Item 4 is fundamental frequency.

Horizontal

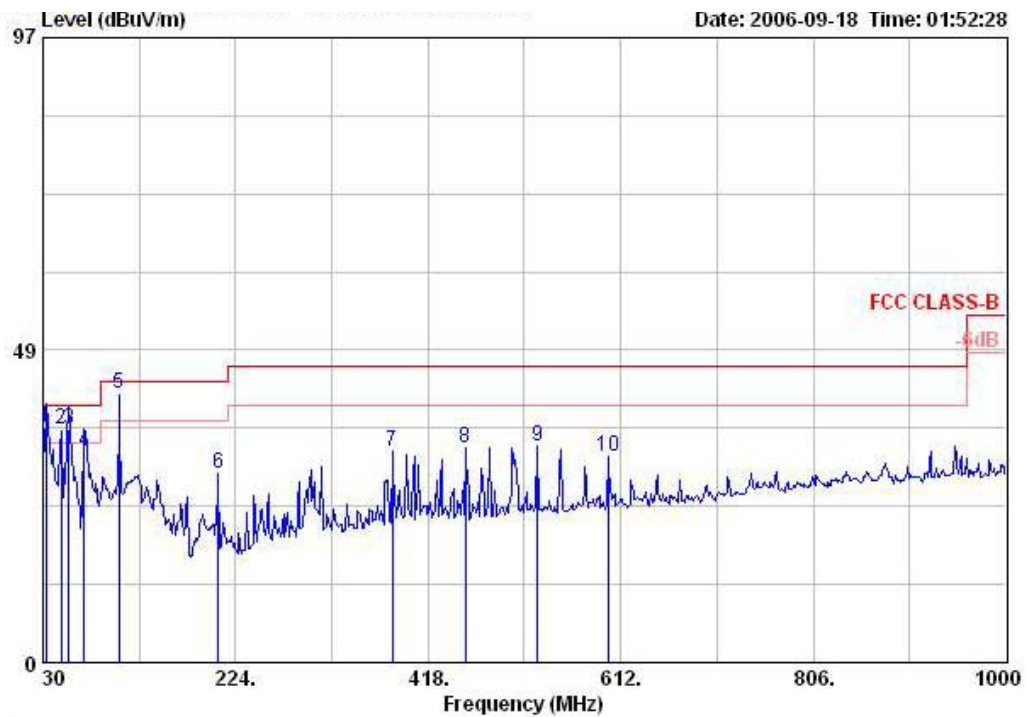


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	32.910	32.89	-7.11	40.00	40.68	18.34	0.27	26.40	Peak	100	0
2	71.710	33.99	-6.01	40.00	52.80	6.96	0.39	26.16	Peak	100	0
3 @	97.900	47.90			62.65	10.82	0.42	26.00	Peak	100	0
4	206.540	32.70	-10.80	43.50	46.61	10.55	0.99	25.45	Peak	100	0
5	256.980	33.28	-12.72	46.00	43.82	13.67	1.15	25.35	Peak	100	0
6	303.540	33.09	-12.91	46.00	42.89	14.01	1.14	24.94	Peak	100	0
7	479.110	33.63	-12.37	46.00	40.61	17.55	1.65	26.18	Peak	100	0
8	502.390	34.87	-11.13	46.00	41.58	17.83	1.80	26.35	Peak	100	0
9	877.780	33.89	-12.11	46.00	34.88	21.46	2.62	25.07	Peak	100	0

Item 3 is fundamental frequency.

Temperature	24°C	Humidity	64%
Test Engineer	Beck Wu	Configurations	Channel 100 / Antenna with bundle of cable / Ant. 1+Ant. 2

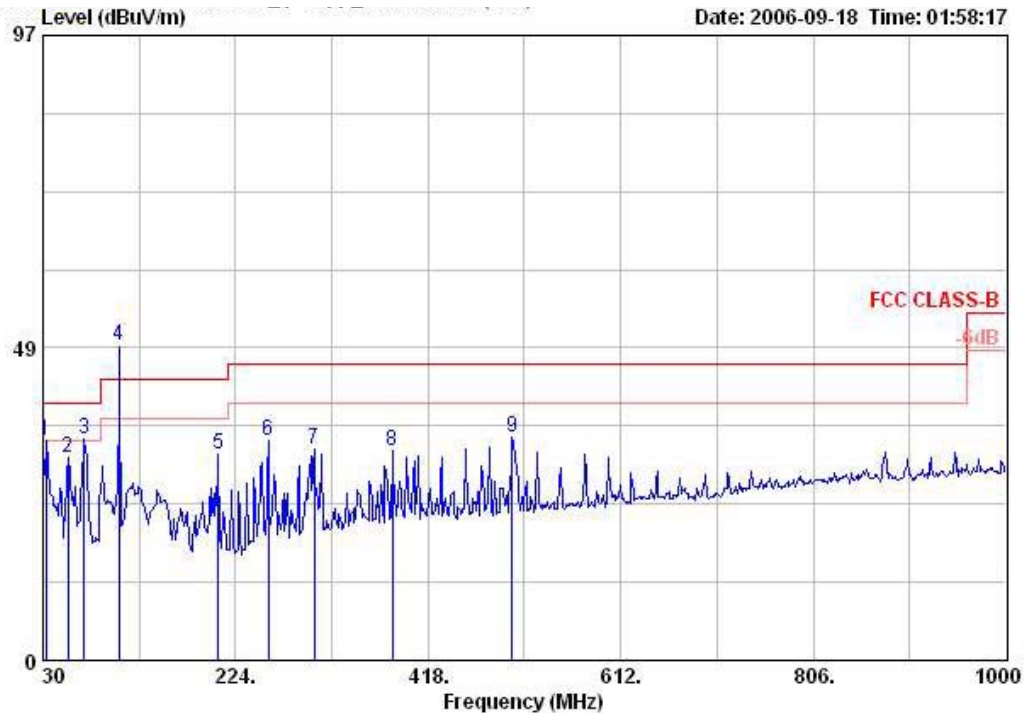
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 !	32.910	36.51	-3.49	40.00	44.30	18.34	0.27	26.40	QP	100	0
2 !	48.430	36.23	-3.77	40.00	52.26	9.77	0.67	26.47	Peak	400	0
3 !	56.190	36.24	-3.76	40.00	54.26	7.82	0.45	26.28	QP	100	0
4	71.710	32.82	-7.18	40.00	51.63	6.96	0.39	26.16	QP	100	0
5 !	106.630	41.66			55.00	12.11	0.50	25.95	Peak	400	0
6	206.540	29.28	-14.22	43.50	43.19	10.55	0.99	25.45	Peak	400	0
7	382.110	32.85	-13.15	46.00	40.67	16.08	1.45	25.35	Peak	400	0
8	455.830	33.40	-12.60	46.00	40.66	17.27	1.47	25.99	Peak	400	0
9	528.580	33.60	-12.40	46.00	39.96	18.25	1.70	26.30	Peak	400	0
10	599.390	31.95	-14.05	46.00	37.11	18.99	2.07	26.23	Peak	400	0

Item 5 is fundamental frequency.

Horizontal



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1 !	32.910	34.14	-5.86	40.00	41.93	18.34	0.27	26.40	Peak	100	0
2	55.220	31.52	-8.48	40.00	49.35	8.00	0.43	26.26	Peak	100	0
3 !	71.710	34.28	-5.72	40.00	53.09	6.96	0.39	26.16	Peak	100	0
4 @	106.630	48.77			62.11	12.11	0.50	25.95	Peak	100	0
5	206.540	32.07	-11.43	43.50	45.98	10.55	0.99	25.45	Peak	100	0
6	256.980	34.17	-11.83	46.00	44.70	13.67	1.15	25.35	Peak	100	0
7	303.540	32.72	-13.28	46.00	42.51	14.01	1.14	24.94	Peak	100	0
8	382.110	32.44	-13.56	46.00	40.26	16.08	1.45	25.35	Peak	100	0
9	502.390	34.67	-11.33	46.00	41.38	17.83	1.80	26.35	Peak	100	0

Item 4 is fundamental frequency.

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.

4.4. Band Edge Emissions Measurement

4.4.1. Limit

Band edge emissions outside of the frequency bands shown in below table.

Outside Frequency Band Edge	Limit (dBuV/m) at 3m
Below 88MHz	40.0 (QP)
Above 108MHz	43.5 (QP)

4.4.2. Measuring Instruments and Setting

Please refer to section 5 in this report. The following table is the setting of the receiver.

Receiver Parameter	Setting
Center Frequency	Fundamental Frequency
RB	120 KHz
Detector	QP or Peak

4.4.3. Test Procedures

The test procedure is the same as section 4.2.3, only the frequency range investigated is limited to 2MHz around bandedges.

4.4.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.2.4

4.4.5. Test Deviation

There is no deviation with the original standard.

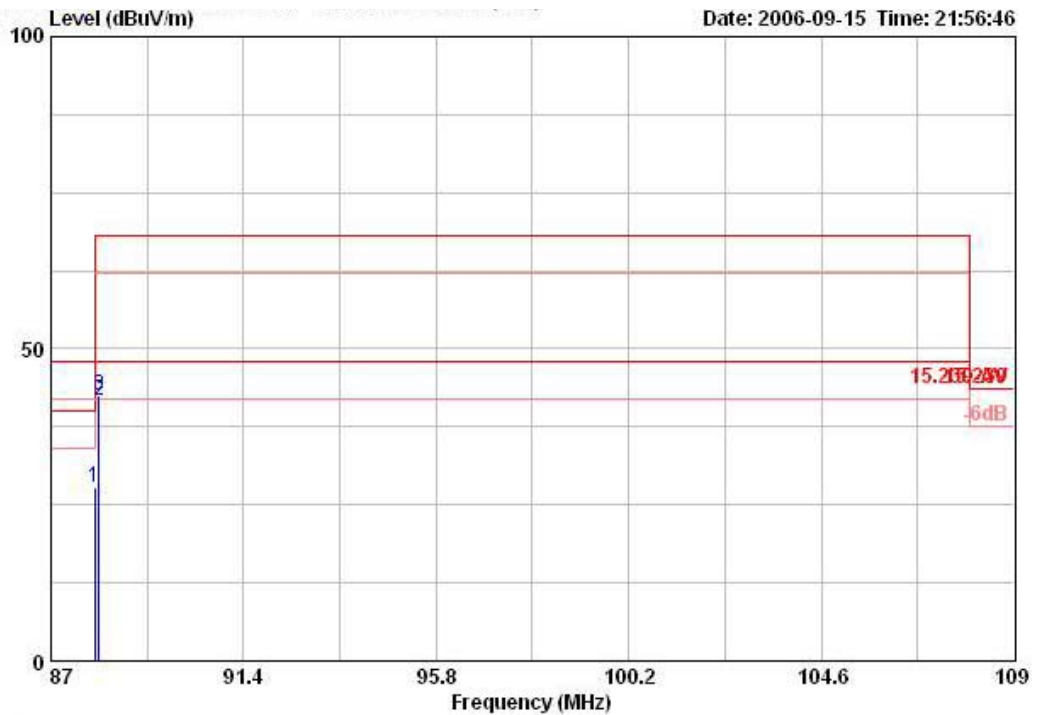
4.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.4.7. Test Result of Band Edge and Fundamental Emissions

Temperature	24°C	Humidity	64%
Test Engineer	Leo Hung	Configurations	Channel 1, 100 / Antenna without bundle of cable / Ant. 1

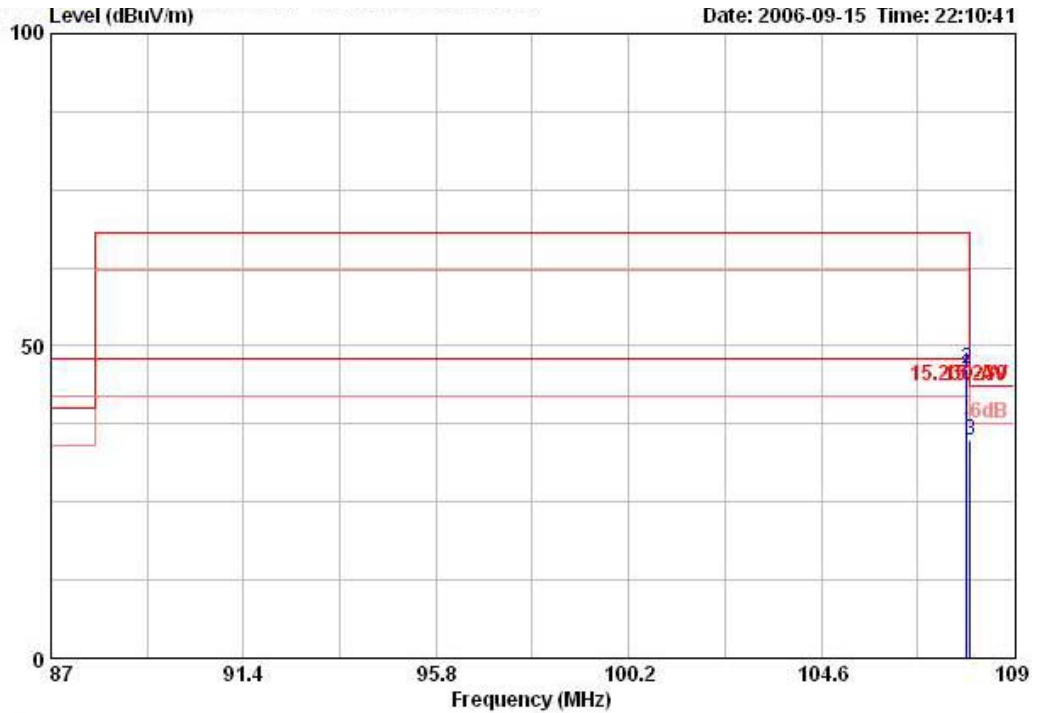
Channel 1



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	88.000	27.77	-12.23	40.00	44.36	8.98	0.55	26.12	QP	121	0

Item 1 is Band Edge.

Channel 100



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
Freq	Level	Limit	Level	Factor	Loss	Factor	Remark	Pos	Pos		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB		cm	deg		
3	108.000	34.82	-8.68	43.50	48.00	12.24	0.53	25.95	QP	288	32

Item 3 is Band Edge.

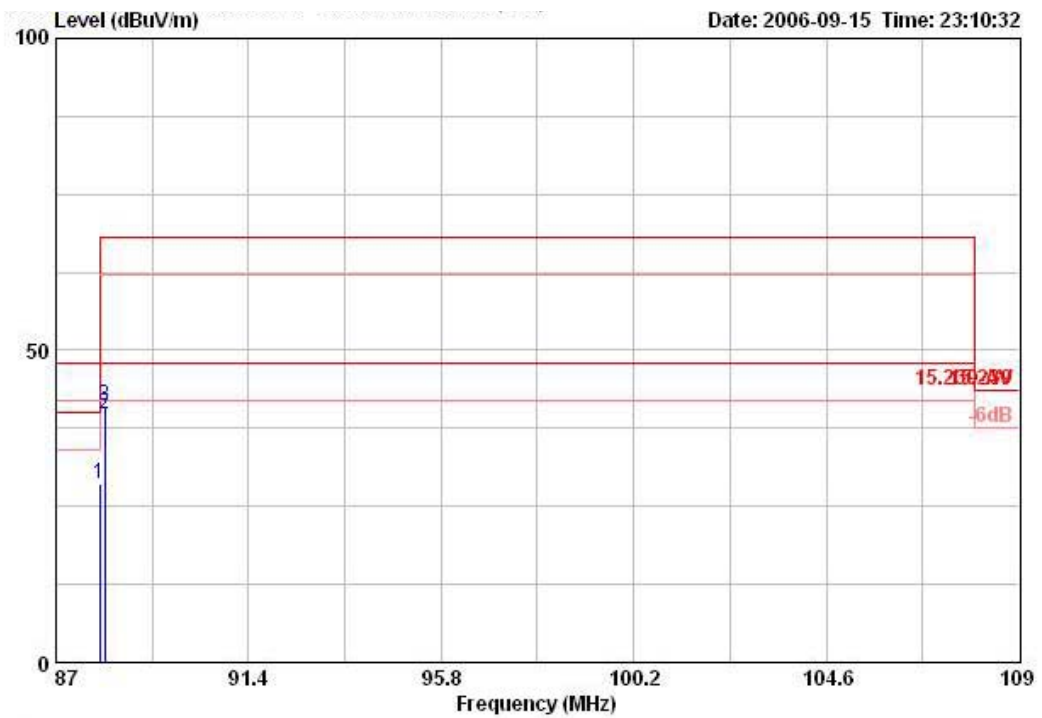
Note:

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

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

Temperature	24°C	Humidity	64%
Test Engineer	Leo Hung	Configurations	Channel 1, 100 / Antenna with bundle of cable / Ant. 1

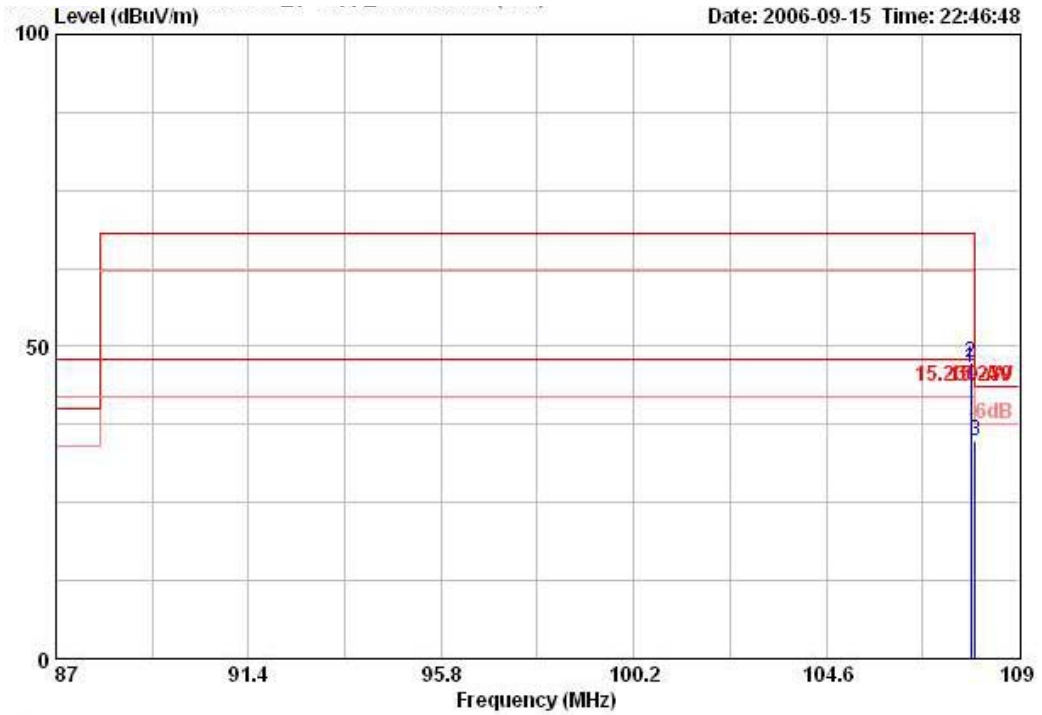
Channel 1



	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB		cm	deg
1	88.000	28.74	-11.26	40.00	45.33	8.98	0.55	26.12 QP	100	309

Item 1 is Band Edge.

Channel 100



Item	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg

3	108.000	34.98	-8.52	43.50	48.16	12.24	0.53	25.95	QP	285	318
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Item 3 is Band Edge.

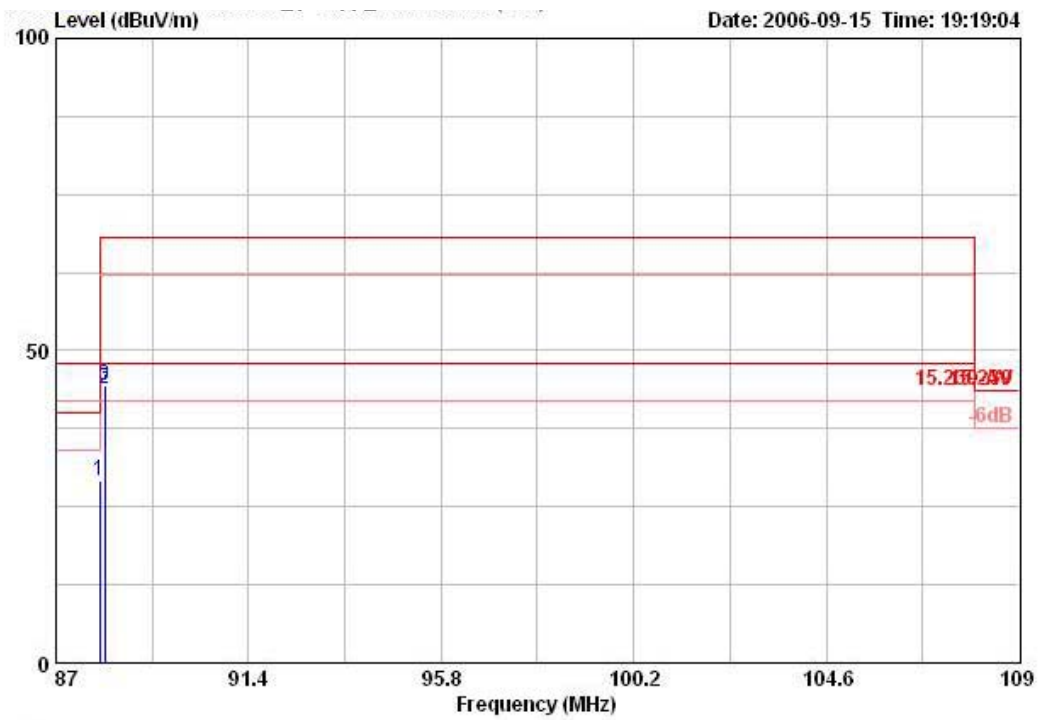
Note:

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

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

Temperature	24°C	Humidity	64%
Test Engineer	Leo Hung	Configurations	Channel 1, 100 / Antenna without bundle of cable / Ant. 1+Ant. 2

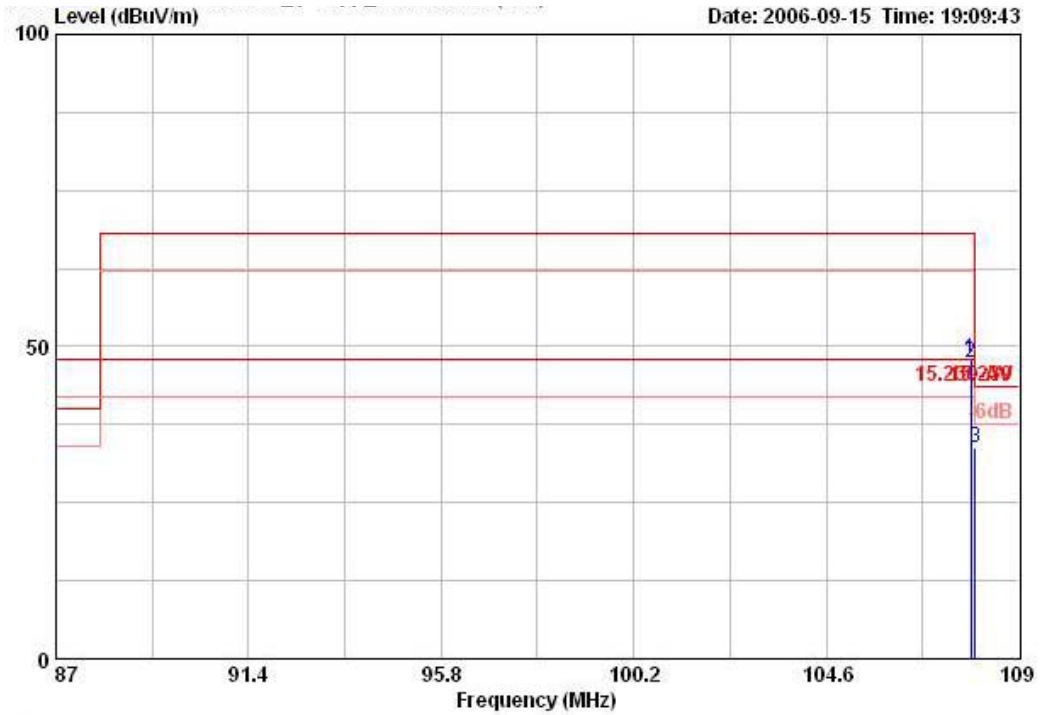
Channel 1



	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	-10.96	40.00	45.63	8.98	0.55	26.12	QP	182	141

Item 1 is Band Edge.

Channel 100



Item	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
3	108.000	33.72	-9.78	43.50	46.90	12.24	0.53	25.95	QP	275	55

Item 3 is Band Edge.

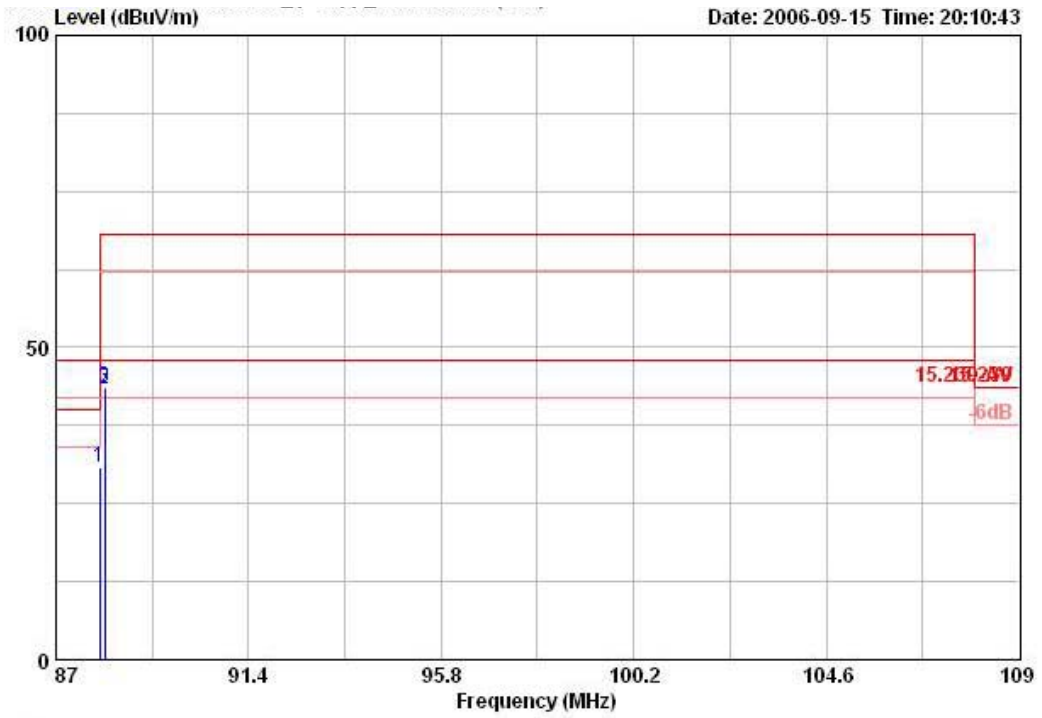
Note:

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

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

Temperature	24°C	Humidity	64%
Test Engineer	Leo Hung	Configurations	Channel 1, 100 / Antenna without bundle of cable / Ant. 1+Ant. 2

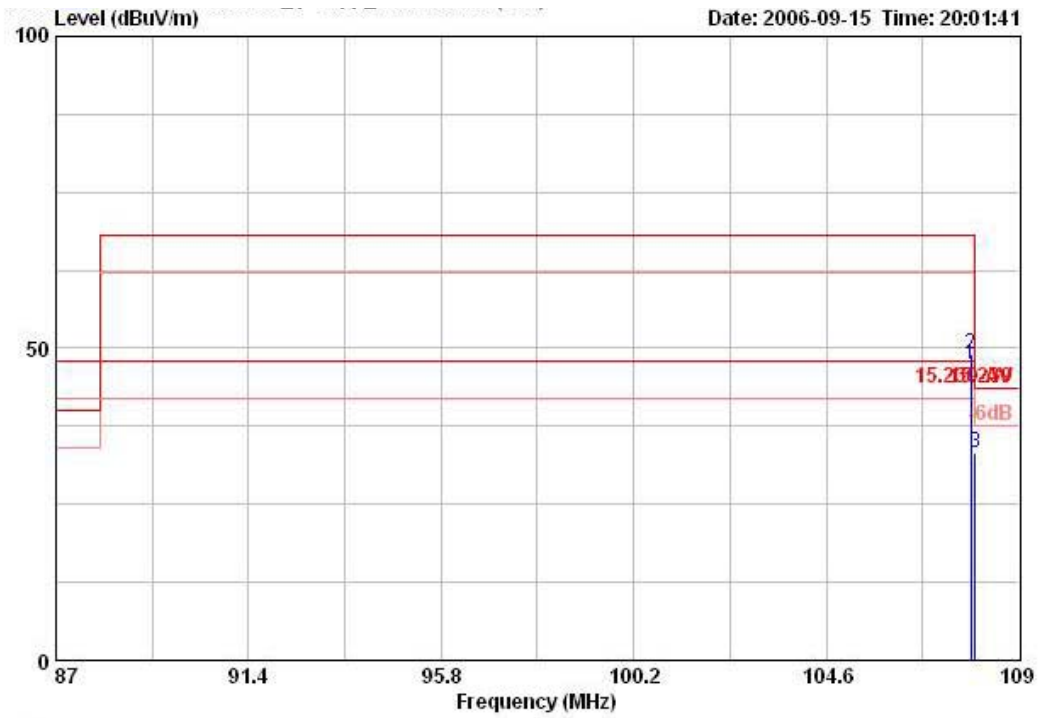
Channel 1



	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB		cm	deg
1	88.000	30.67	-9.33	40.00	47.26	8.98	0.55	26.12 QP	400	360

Item 1 is Band Edge.

Channel 100



Item	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB		cm	deg
3	108.000	33.12	-10.38	43.50	46.30	12.24	0.53	25.95	QP	282	40

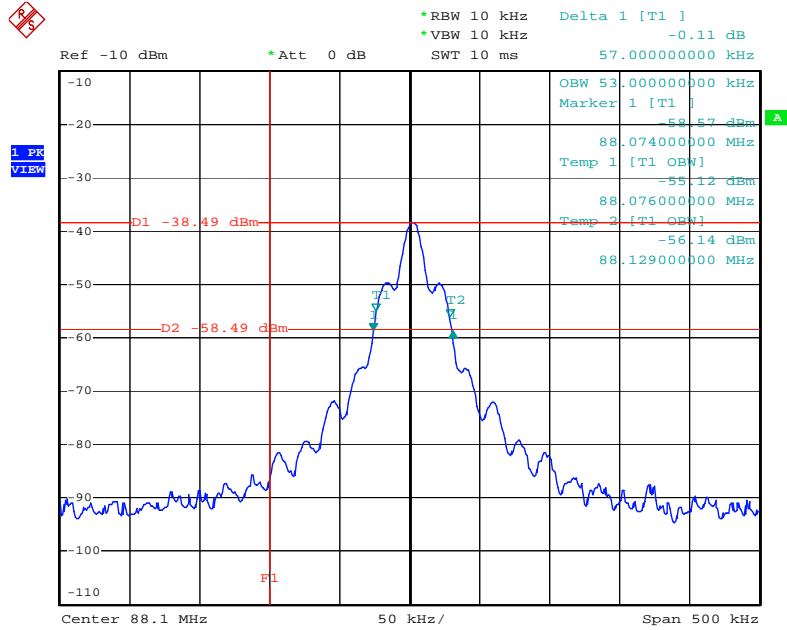
Item 3 is Band Edge.

Note:

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

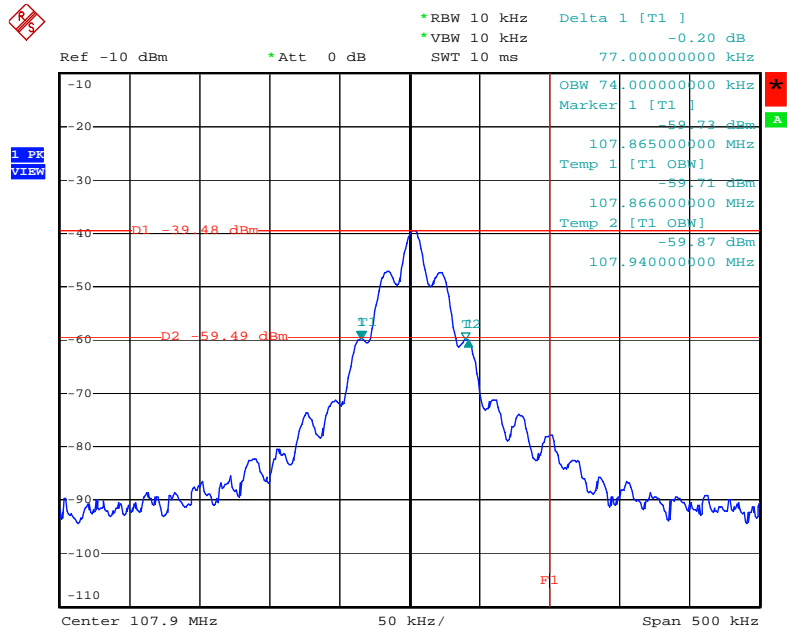
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Low Band Edge Plot on 88.1 MHz



Date: 18.JUL.2006 16:19:10

High Band Edge Plot on 107.9 MHz



Date: 18.JUL.2006 16:21:55

4.5. Antenna Requirements

4.5.1. 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.

4.5.2. Antenna Connector Construction

Please refer to section 3.1 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
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 15, 2006	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	CPA9231A	3565	9 kHz - 2 GHz	Jan. 18, 2006	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	May 29, 2006	Radiation (03CH03-HY)
Amplifier	MITEQ	AMF-6F-260400	923364	26.5 GHz - 40 GHz	Jan. 24, 2006*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100004/040	9 kHz - 40 GHz	Sep. 30, 2005	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	May 23, 2006*	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz - 1 GHz	Jul. 24, 2006	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6903	1GHz ~ 18GHz	Mar. 15, 2006	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	NCR	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Dec.02, 2005	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec.02, 2005	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 - 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
Spectrum analyzer	R&S	FSP30	100023	9kHz ~ 30GHz	Nov. 26, 2005	Conducted (TH01-HY)
AC power source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	Apr. 21, 2005*	Conducted (TH01-HY)
DC power source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Dec. 28, 2005	Conducted (TH01-HY)
Temp. and Humidity Chamber	KSON	THS-C3L	612	N/A	Oct. 01, 2005	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 30, 2005	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 30, 2005	Conducted (TH01-HY)
Oscilloscope	Tektronix	TDS1012	CO38515	100MHz / 1GS/s	Jun. 20, 2006	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Dec. 30, 2005	Conducted (TH01-HY)
Data Generator	Tektronix	DG2030	063-2920-50	0.1Hz~400MHz	Jun. 16, 2006	Conducted (TH01-HY)

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

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

Note: NCR means Non-Calibration required.

6. SPORTON COMPANY PROFILE

SPORTON Lab. was established in 1986 with one shielded room: the first private EMI test facility, offering local manufacturers an alternative EMI test facility apart from ERSO. In 1988, one 3M and 10M/3M open area test site were setup and also obtained official accreditation from FCC, VCCI and NEMKO. In 1993, a Safety laboratory was founded and obtained accreditation from UL of USA, CSA of Canada and TUV (Rhineland & PS) of Germany. In 1995, one EMC lab, including EMI and EMS test facilities was setup. In 1997, SPORTON Group has provided financial expense to relocate the headquarter to Orient Scientific Park in Taipei Hsien to offer more comprehensive, more qualified and better service to local suppliers and manufactures. In 1999, Safety Group and Component Group were setup. In 2001, SPORTON has established 3M/10M chamber in Hwa Ya Technology Park.

6.1. Test Location

SHIJR	ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. TEL : 02-2696-2468 FAX : 02-2696-2255
HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 03-327-3456 FAX : 03-318-0055
LINKOU	ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C TEL : 02-2601-1640 FAX : 02-2601-1695
DUNGHU	ADD : No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C. TEL : 02-2631-4739 FAX : 02-2631-9740
JUNGHE	ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 02-8227-2020 FAX : 02-8227-2626
NEIHU	ADD : 4Fl., No. 339, Hsin Hu 2 nd Rd., Taipei 114, Taiwan, R.O.C. TEL : 02-2794-8886 FAX : 02-2794-9777
JHUBEI	ADD : No.8, Lane 728, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C. TEL : 03-656-9065 FAX : 03-656-9085