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. Test Result of Peak Excursion

Temperature	22℃	Humidity	61%
Test Engineer	Sam Chen	Configurations	Draft n / Antenna 1

Configuration Draft n MCS8 20MHz Ant. 1

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.31	13	Complies
40	5200 MHz	5.52	13	Complies
48	5240 MHz	4.56	13	Complies

Configuration Draft n MCS8 40MHz Ant. 1

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
38	5190 MHz	5.10	13	Complies
46	5230 MHz	5.65	13	Complies

Temperature	22℃	Humidity	61%
Test Engineer	Sam Chen	Configurations	Draft n / Antenna 5

Configuration Draft n MCS8 20MHz 5

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.31	13	Complies
40	5200 MHz	5.52	13	Complies
48	5240 MHz	4.56	13	Complies

Configuration Draft n MCS8 40MHz 5

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
38	5190 MHz	5.11	13	Complies
46	5230 MHz	5.65	13	Complies

Temperature	22℃	Humidity	61%
Test Engineer	Sam Chen	Configurations	Draft n / Antenna 6

Configuration Draft n MCS8 20MHz 6

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.65	13	Complies
40	5200 MHz	6.08	13	Complies
48	5240 MHz	4.57	13	Complies

Configuration Draft n MCS8 40MHz 6

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
38	5190 MHz	5.32	13	Complies
46	5230 MHz	4.43	13	Complies

Temperature	22℃	Humidity	61%
Test Engineer	Sam Chen	Configurations	Draft n / Antenna 7

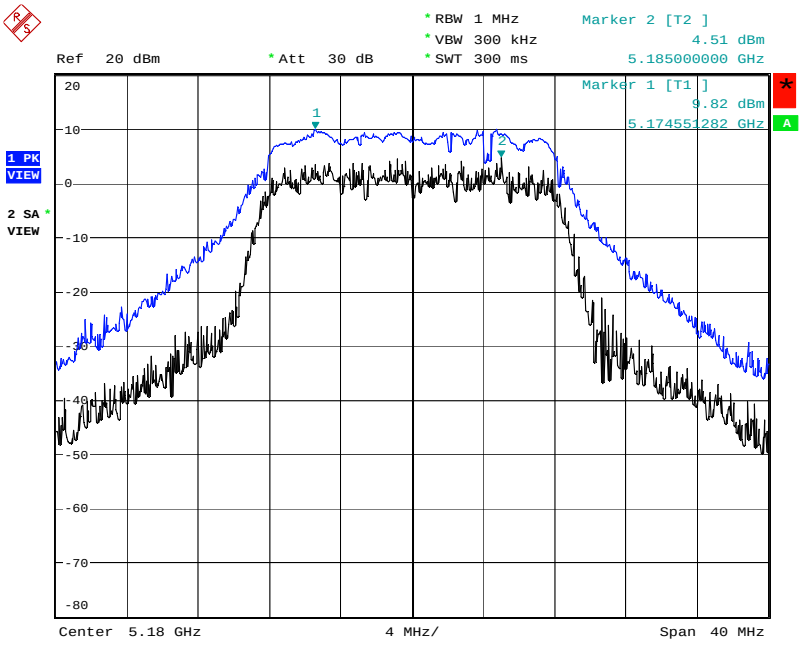
Configuration Draft n MCS8 20MHz 7

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.31	13	Complies
40	5200 MHz	5.52	13	Complies
48	5240 MHz	4.56	13	Complies

Configuration Draft n MCS8 40MHz 7

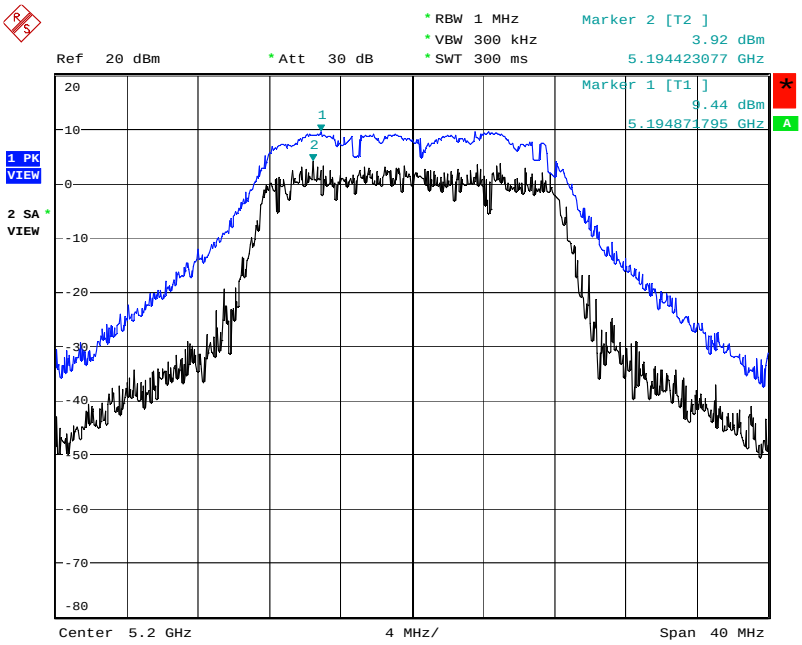
Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
38	5190 MHz	6.61	13	Complies
46	5230 MHz	5.65	13	Complies

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 1 / 5180 MHz



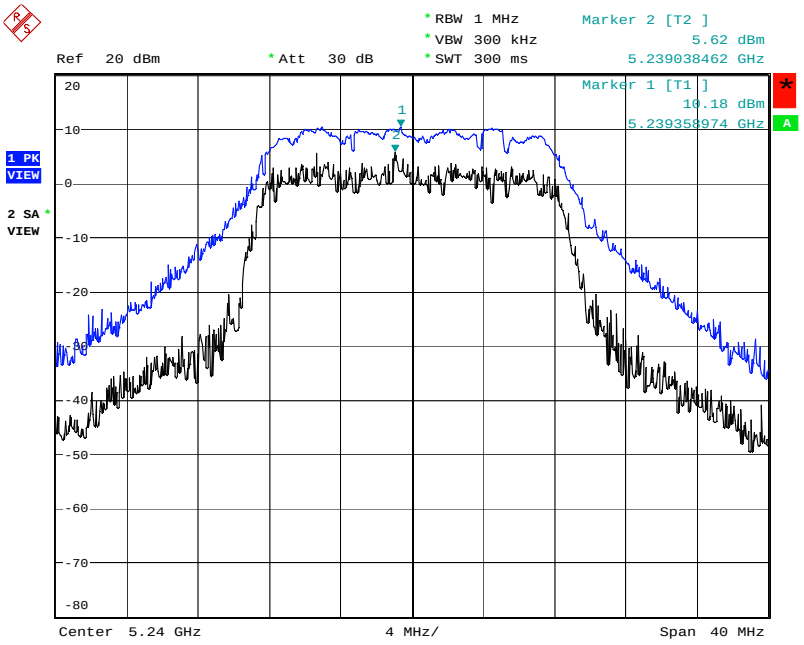
Date: 20.MAR.2008 20:04:50

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 1 / 5200 MHz

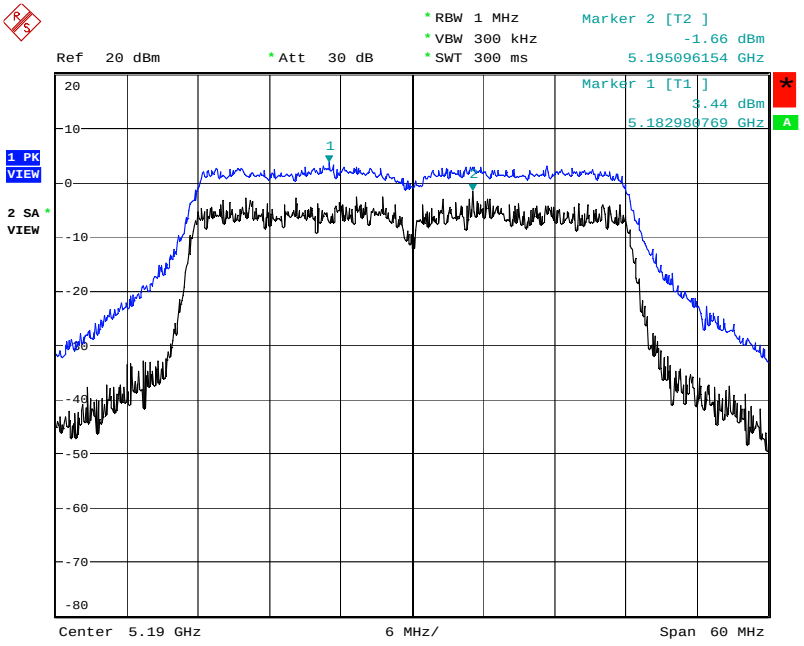


Date: 20.MAR.2008 20:06:12

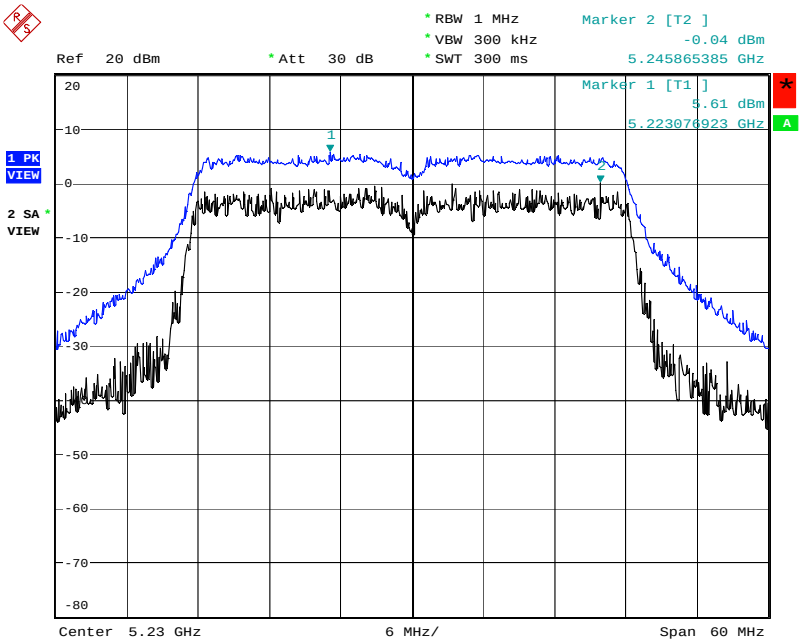
Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 1 / 5240 MHz



Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 1 / 5190 MHz

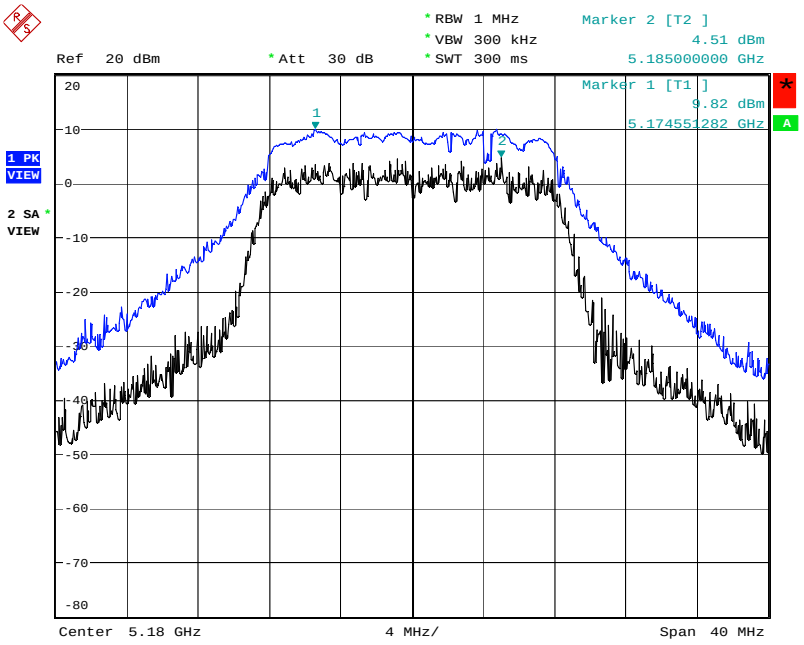


Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 1 / 5230 MHz



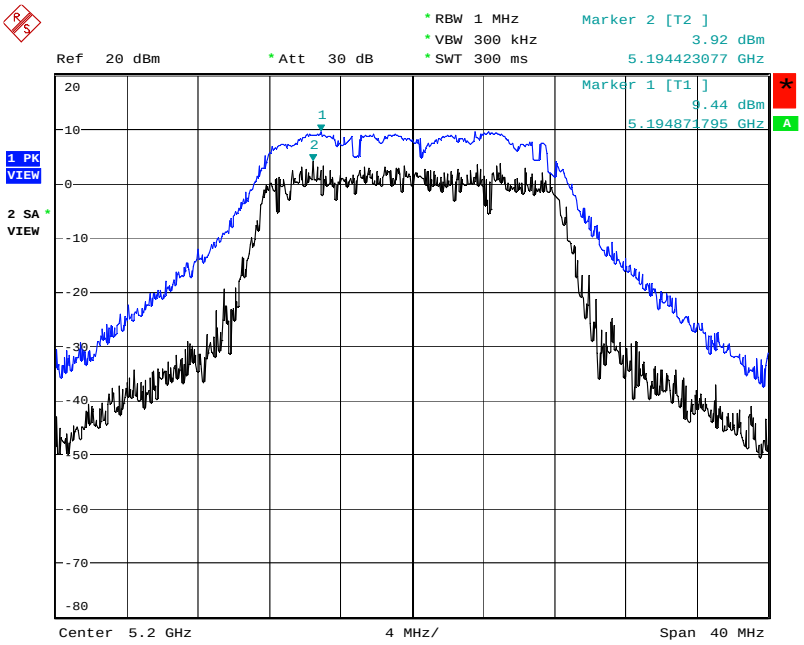
Date: 20.MAR.2008 19:32:08

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 5 / 5180 MHz



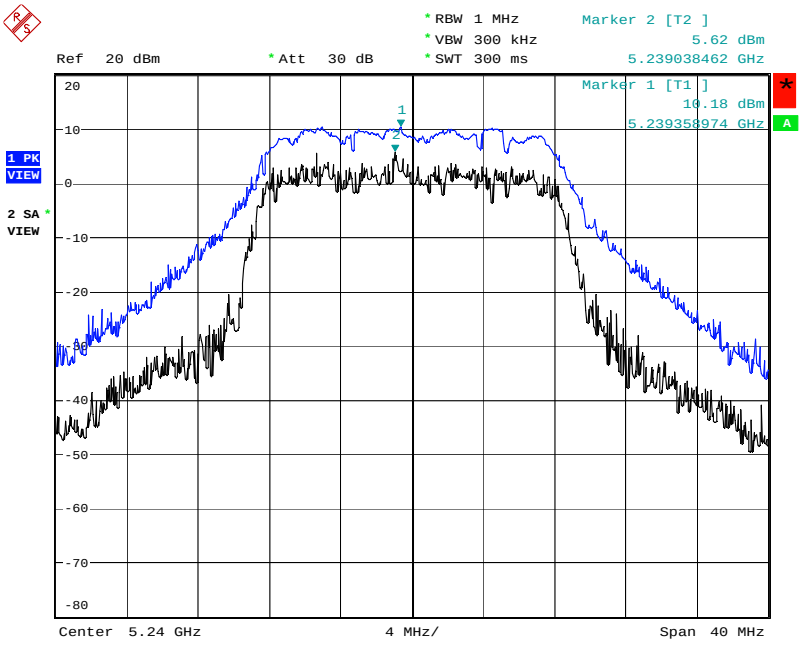
Date: 20.MAR.2008 20:04:50

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 5 / 5200 MHz



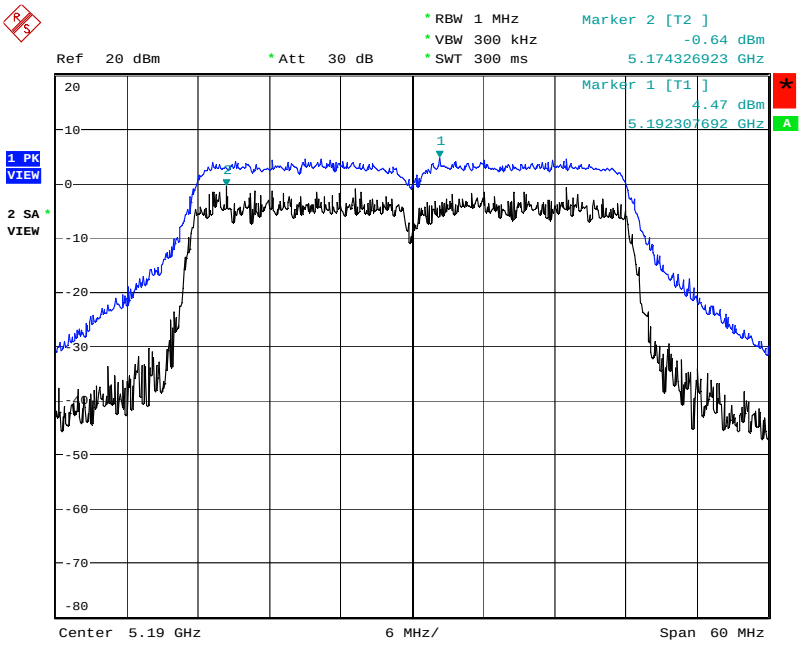
Date: 20.MAR.2008 20:06:12

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 5 / 5240 MHz



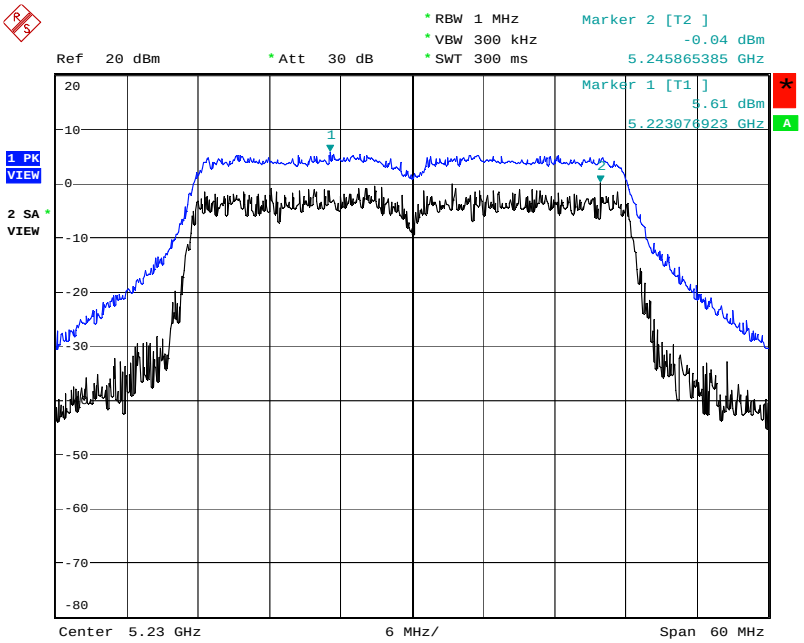
Date: 20.MAR.2008 20:07:51

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 5 / 5190 MHz



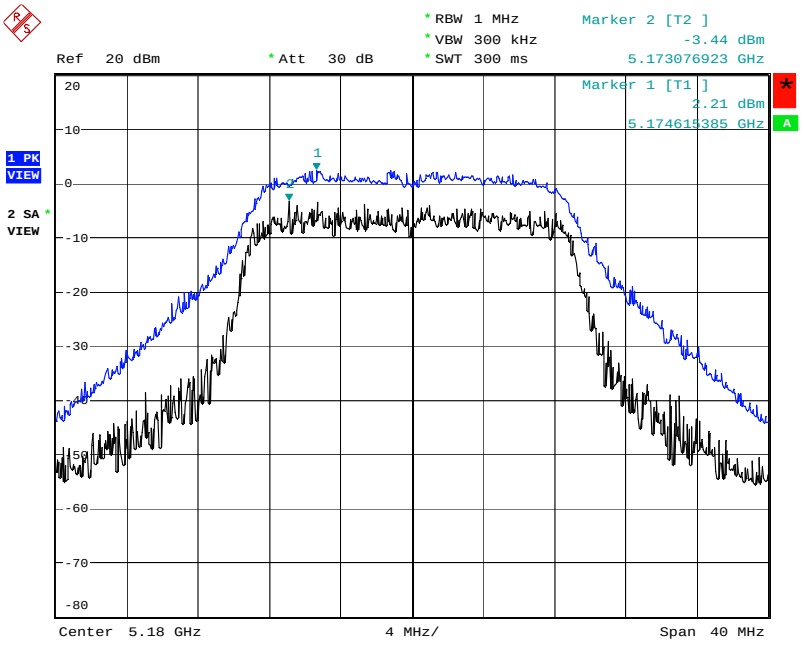
Date: 21.MAR.2008 16:53:07

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 5 / 5230 MHz



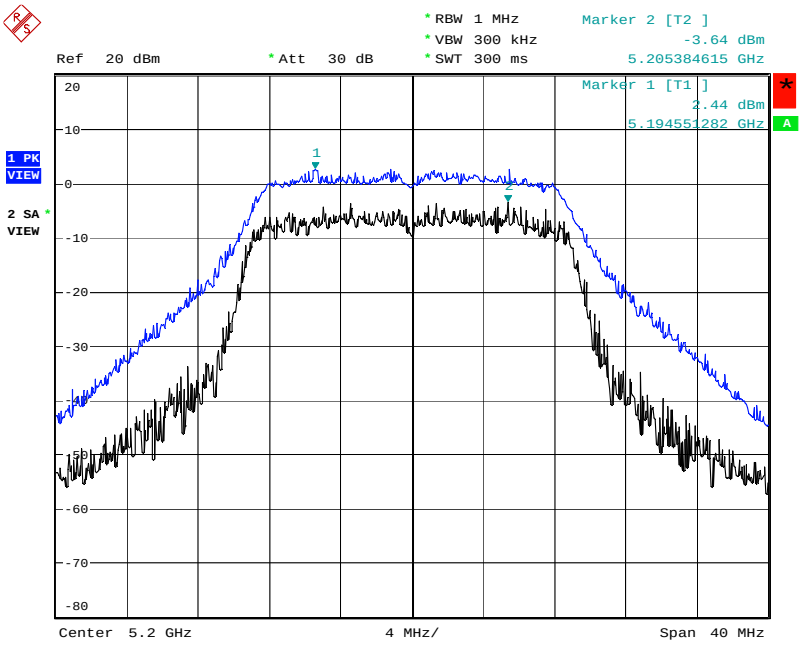
Date: 20.MAR.2008 19:32:08

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 6 / 5180 MHz



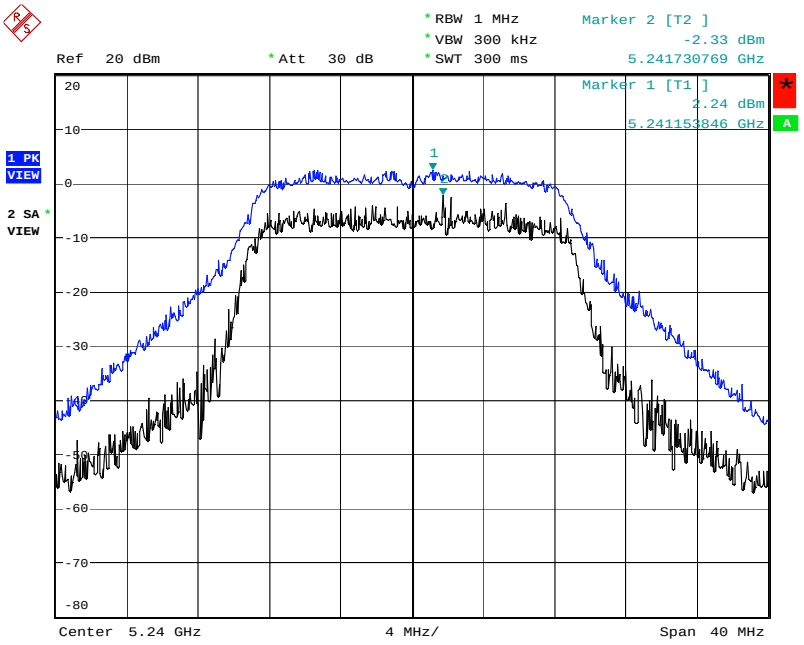
Date: 25.MAR.2008 14:43:27

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 6 / 5200 MHz



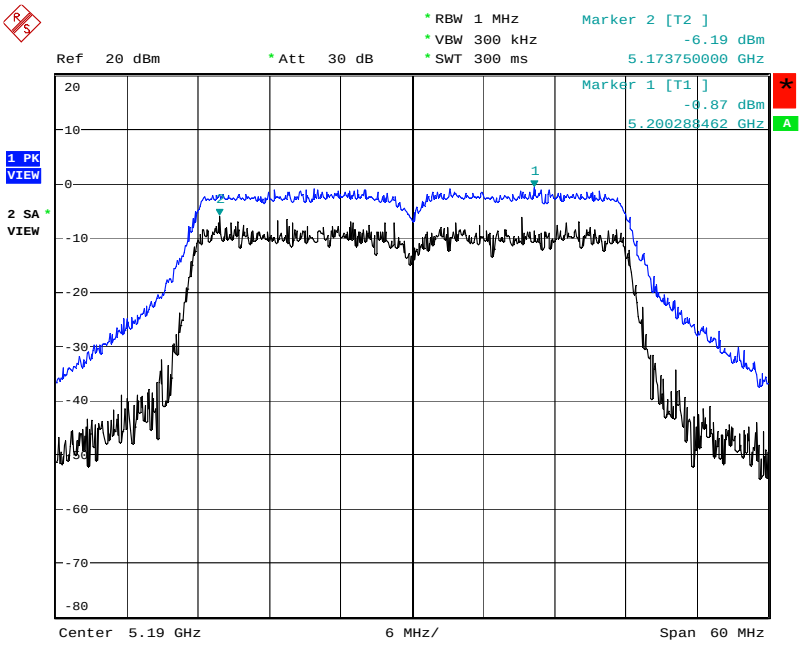
Date: 25.MAR.2008 14:42:47

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 6 / 5240 MHz



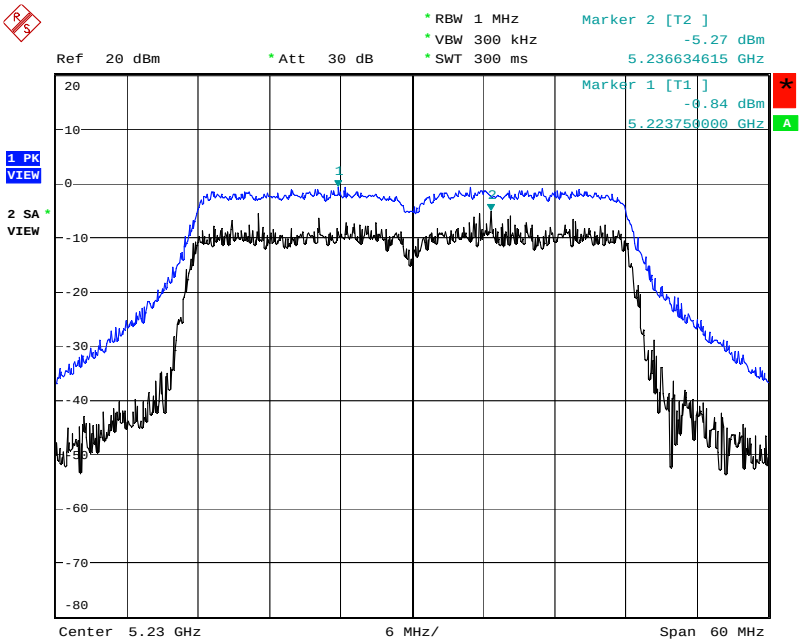
Date: 25.MAR.2008 14:41:59

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 6 / 5190 MHz



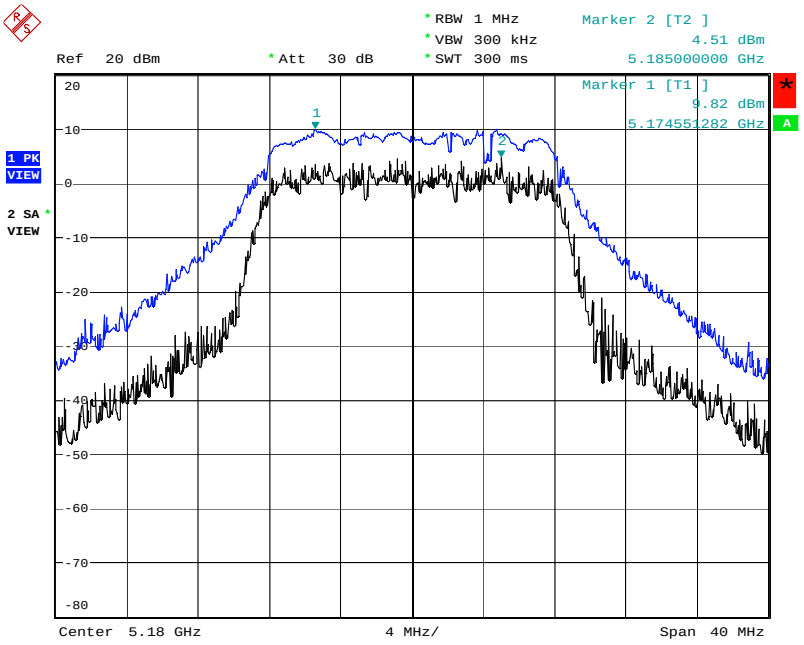
Date: 25.MAR.2008 14:44:26

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 6 / 5230 MHz



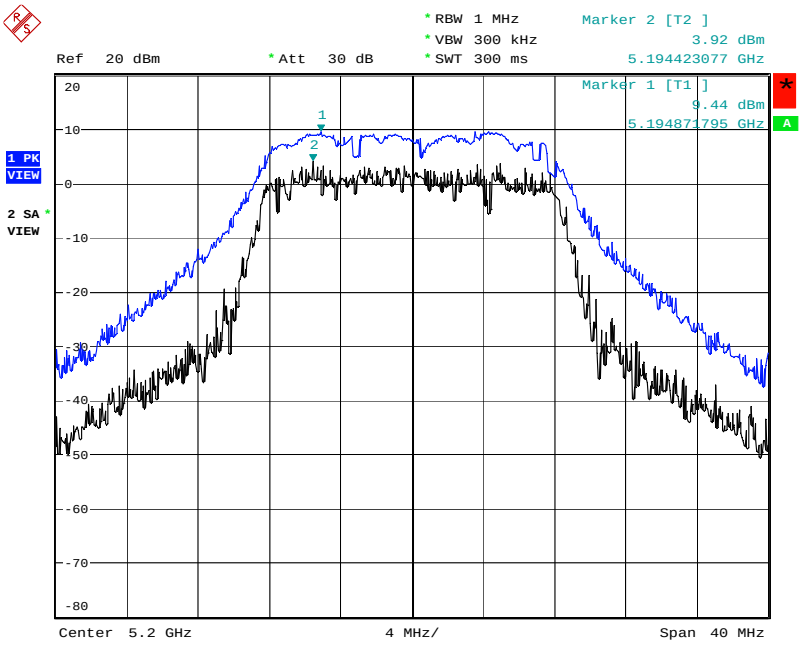
Date: 25.MAR.2008 14:45:12

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 7 / 5180 MHz



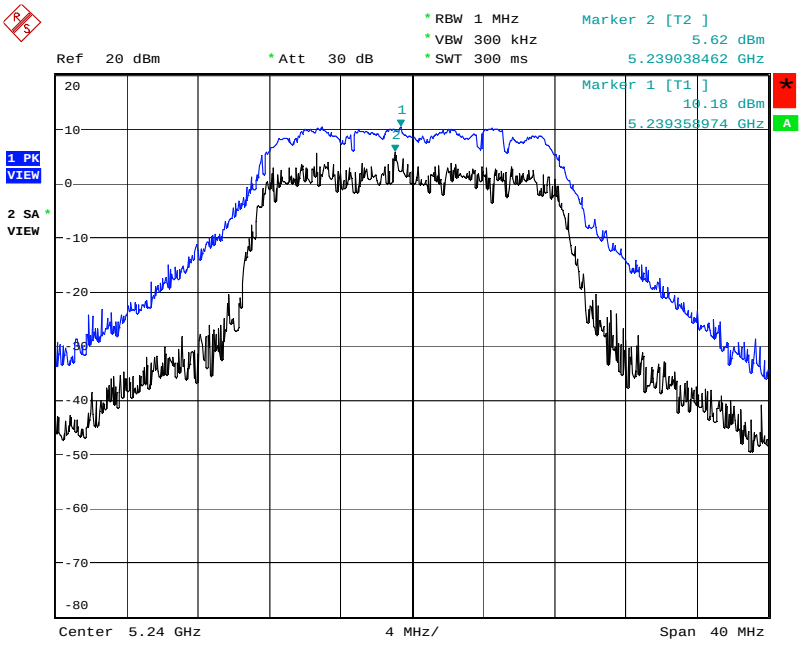
Date: 20.MAR.2008 20:04:50

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 7 / 5200 MHz



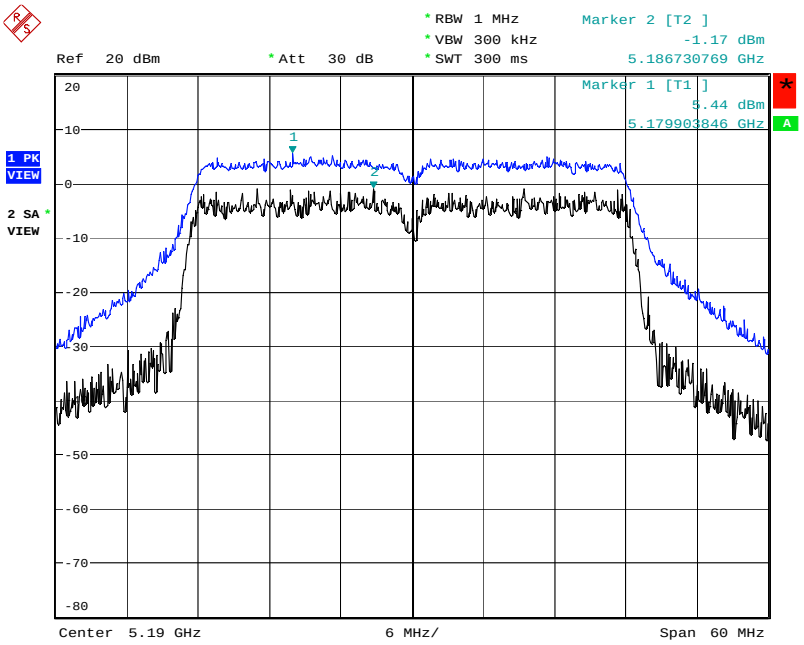
Date: 20.MAR.2008 20:06:12

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. 7 / 5240 MHz



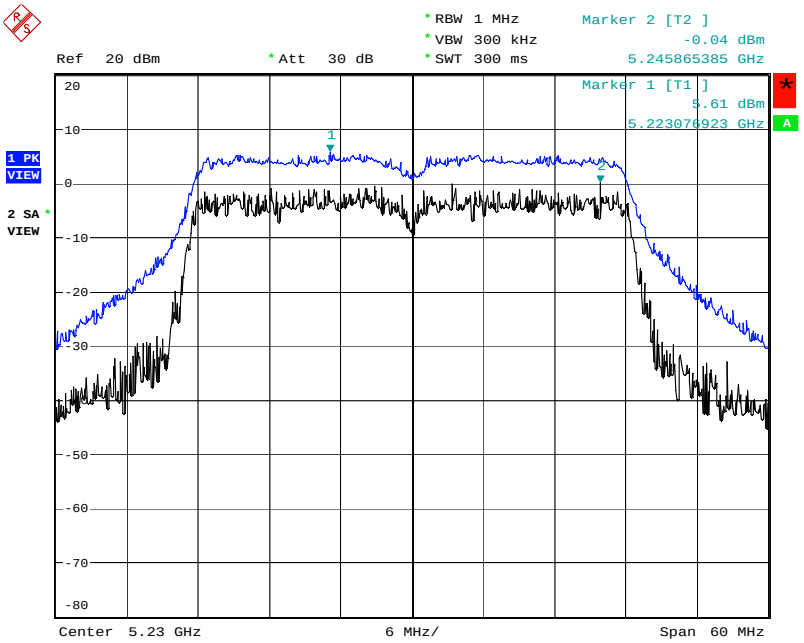
Date: 20.MAR.2008 20:07:51

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 7 / 5190 MHz



Date: 26.MAR.2008 17:45:57

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. 7 / 5230 MHz



Date: 20.MAR.2008 19:32:08

4.6. Radiated Emissions Measurement

4.6.1. Limit

For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.25 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.6.2. Measuring Instruments and Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1000KHz / 1000KHz for peak

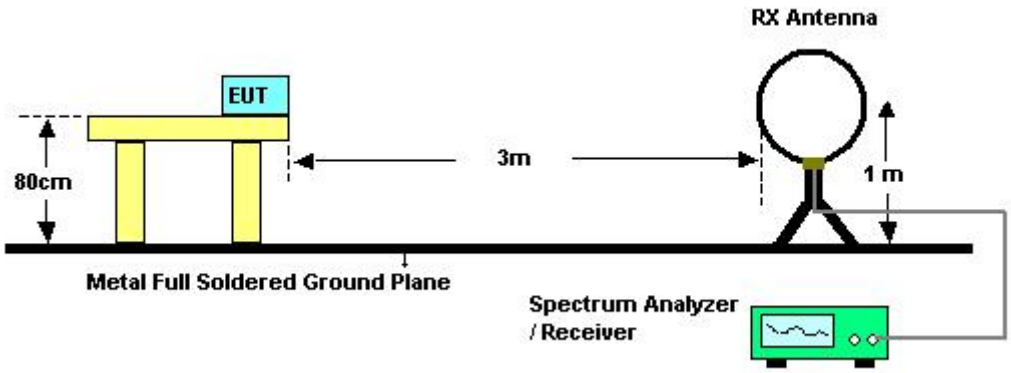
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.6.3. Test Procedures

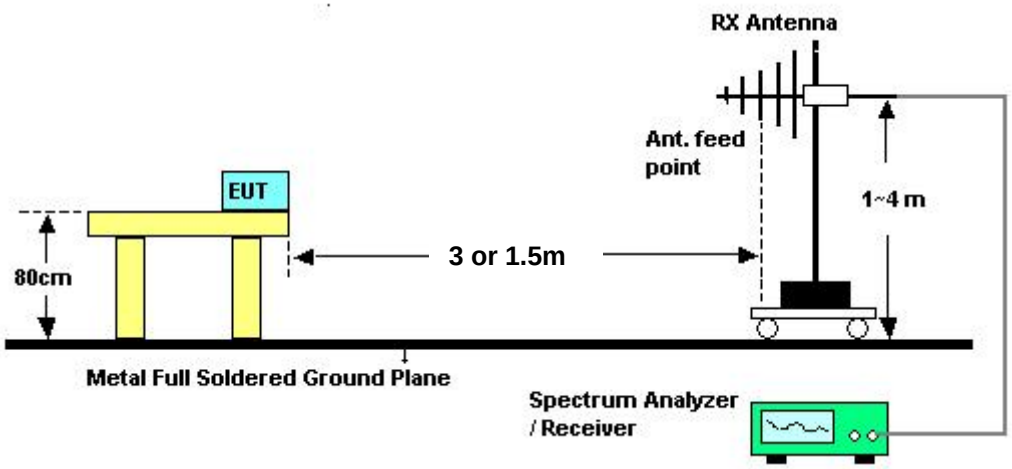
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting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

4.6.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 5GHz 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 (specific distance [3m] / test distance [1.5m]) (dB);

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

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

Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen		

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 20dB below the permissible value has no need to be reported.

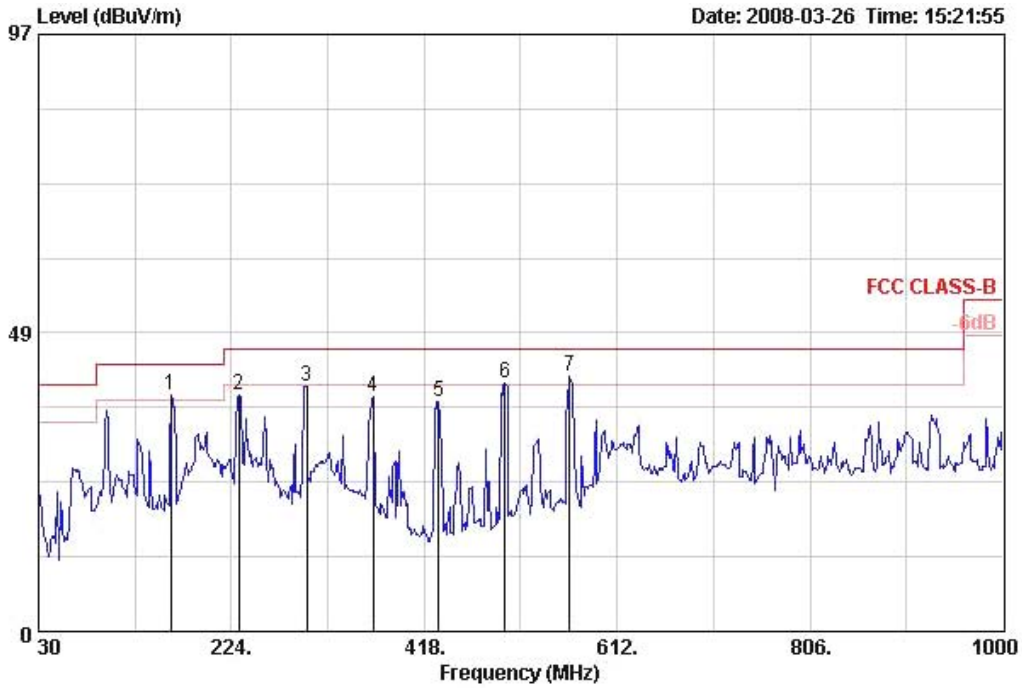
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

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

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

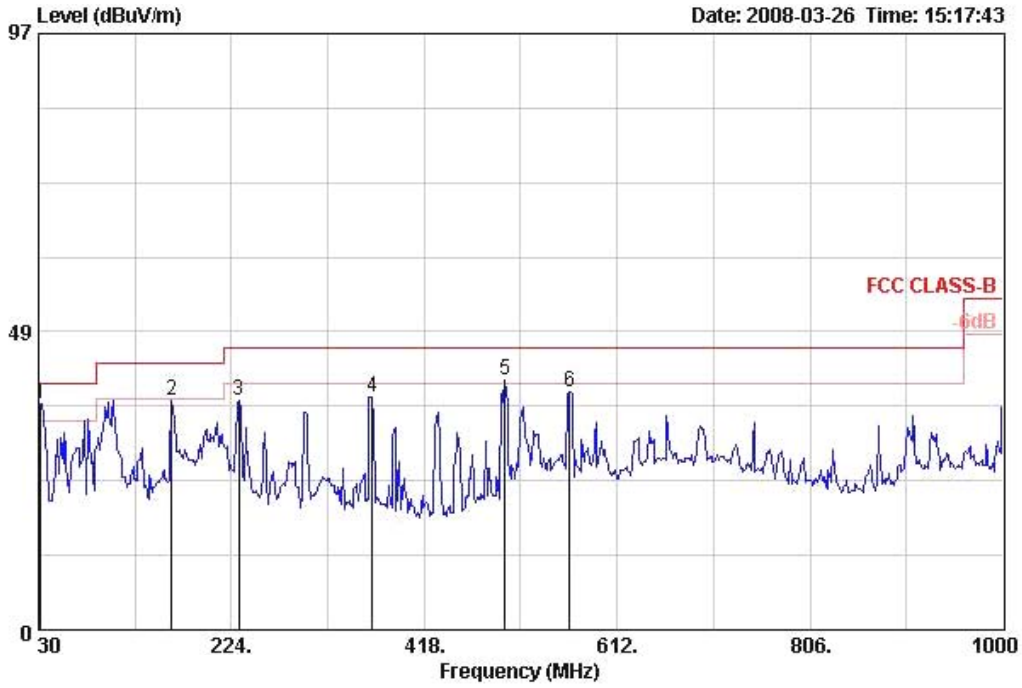
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	162.890	38.33	-5.17	43.50	57.35	10.51	2.00	31.53	Peak	100	-1	HORIZONTAL
2	231.760	38.54	-7.46	46.00	56.41	11.30	2.21	31.38	Peak	100	-1	HORIZONTAL
3	299.660	39.92	-6.08	46.00	55.04	14.00	2.20	31.32	Peak	100	-1	HORIZONTAL
4	366.590	38.01	-7.99	46.00	50.88	15.80	2.50	31.17	Peak	100	-1	HORIZONTAL
5	432.550	37.21	-8.79	46.00	48.35	16.99	2.83	30.96	Peak	100	-1	HORIZONTAL
6 !	499.480	40.42	-5.58	46.00	50.19	17.89	3.28	30.94	Peak	100	-1	HORIZONTAL
7 @	564.470	41.45	-4.55	46.00	50.07	18.96	3.17	30.75	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	31.940	36.76	-3.24	40.00	48.84	18.66	0.93	31.67	Peak	400	-1	VERTICAL
2	163.860	37.34	-6.16	43.50	56.39	10.48	2.00	31.53	Peak	400	-1	VERTICAL
3	231.760	37.18	-8.82	46.00	55.05	11.30	2.21	31.38	Peak	400	-1	VERTICAL
4	365.620	37.92	-8.08	46.00	50.83	15.78	2.49	31.17	Peak	400	-1	VERTICAL
5 !	499.480	40.52	-5.48	46.00	50.29	17.89	3.28	30.94	Peak	400	-1	VERTICAL
6	564.470	38.82	-7.18	46.00	47.44	18.96	3.17	30.75	Peak	400	-1	VERTICAL

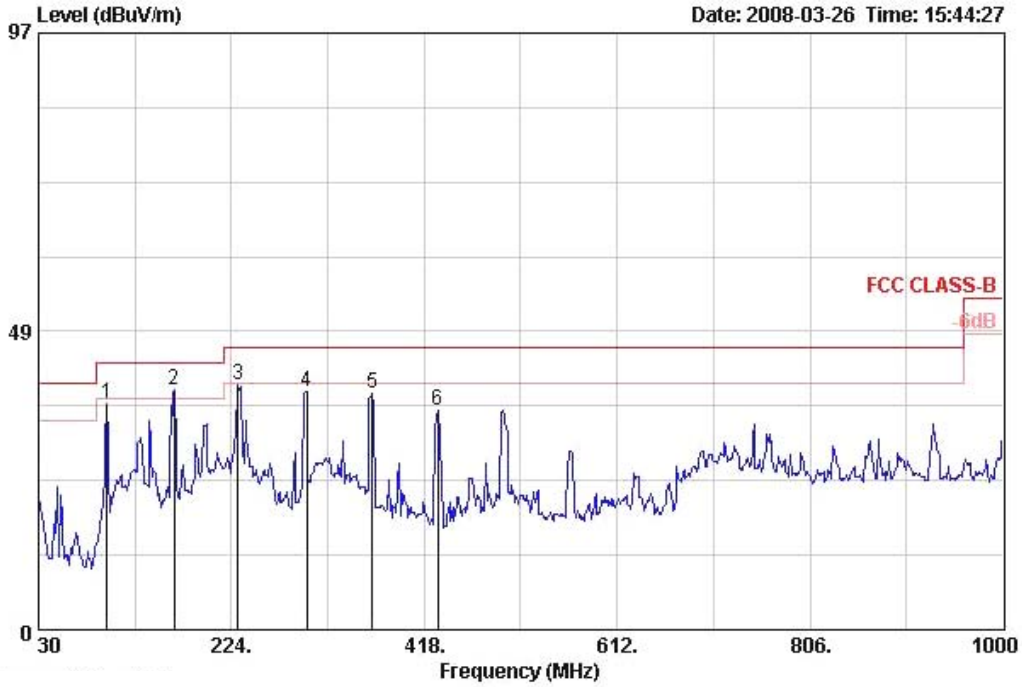
Note:

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

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

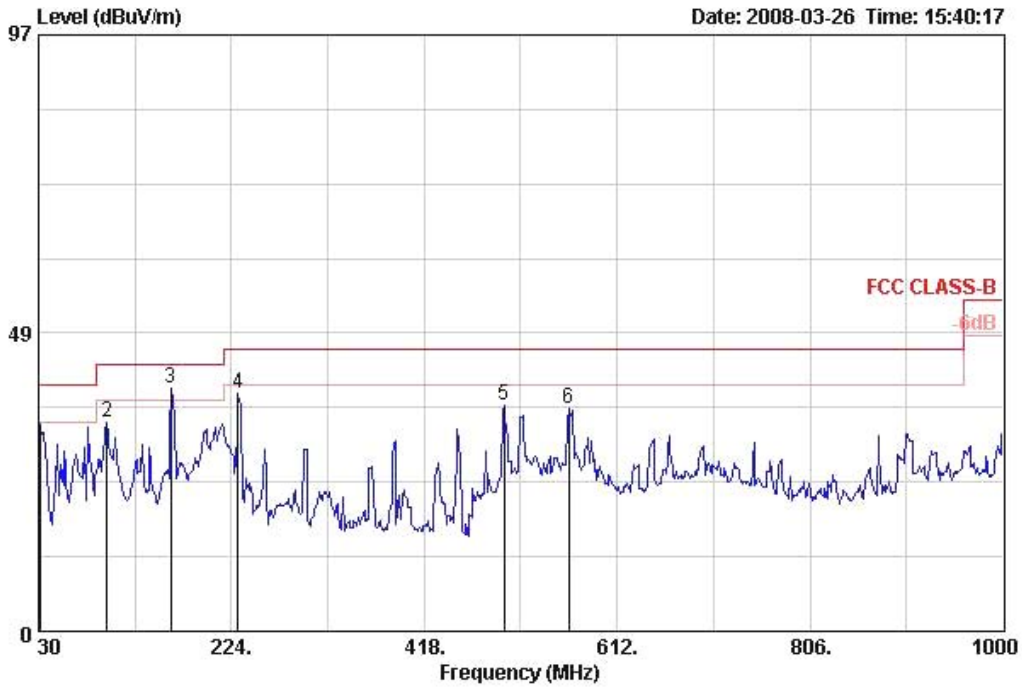
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 2

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	98.870	36.73	-6.77	43.50	55.93	11.02	1.50	31.72	Peak	100	-4	HORIZONTAL
2 @	166.770	38.85	-4.65	43.50	58.01	10.39	2.00	31.55	Peak	100	-4	HORIZONTAL
3	230.790	39.68	-6.32	46.00	57.65	11.20	2.21	31.38	Peak	100	-4	HORIZONTAL
4	299.660	38.61	-7.39	46.00	53.73	14.00	2.20	31.32	Peak	100	-4	HORIZONTAL
5	365.620	38.37	-7.63	46.00	51.27	15.78	2.49	31.17	Peak	100	-4	HORIZONTAL
6	431.580	35.51	-10.49	46.00	46.66	16.98	2.83	30.96	Peak	100	-4	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	30.970	33.60	-6.40	40.00	45.09	19.38	0.80	31.67	Peak	400	-1	VERTICAL
2	98.870	34.12	-9.38	43.50	53.32	11.02	1.50	31.72	Peak	400	-1	VERTICAL
3 @	162.890	39.65	-3.85	43.50	58.67	10.51	2.00	31.53	Peak	400	-1	VERTICAL
4	230.790	38.62	-7.38	46.00	56.59	11.20	2.21	31.38	Peak	400	-1	VERTICAL
5	498.510	36.65	-9.35	46.00	46.43	17.87	3.28	30.94	Peak	400	-1	VERTICAL
6	563.500	36.22	-9.78	46.00	44.85	18.95	3.17	30.75	Peak	400	-1	VERTICAL

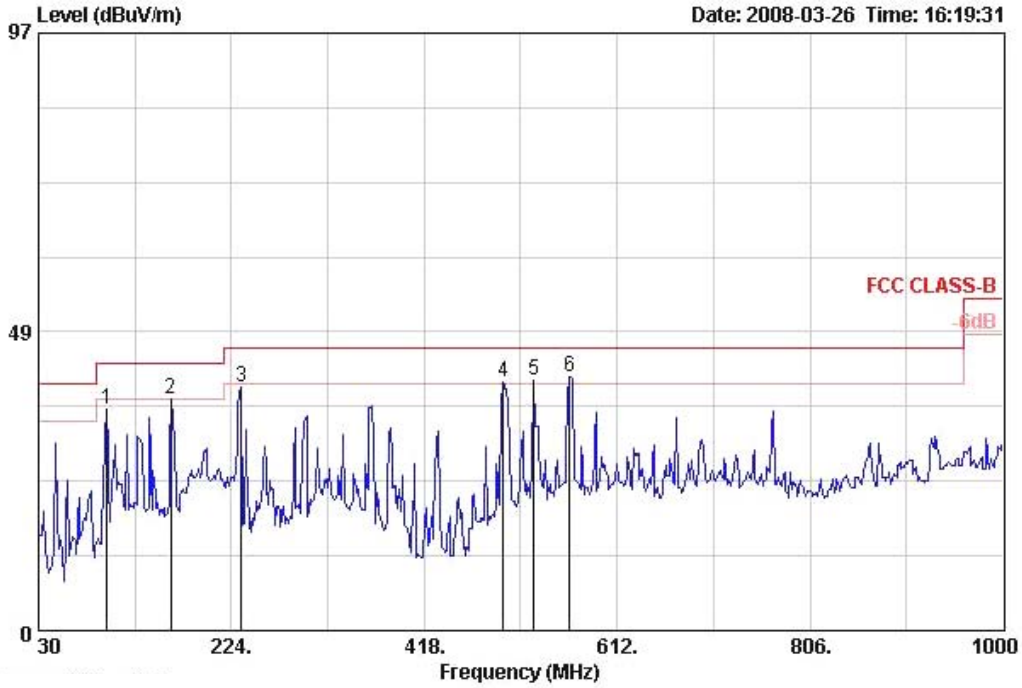
Note:

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

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

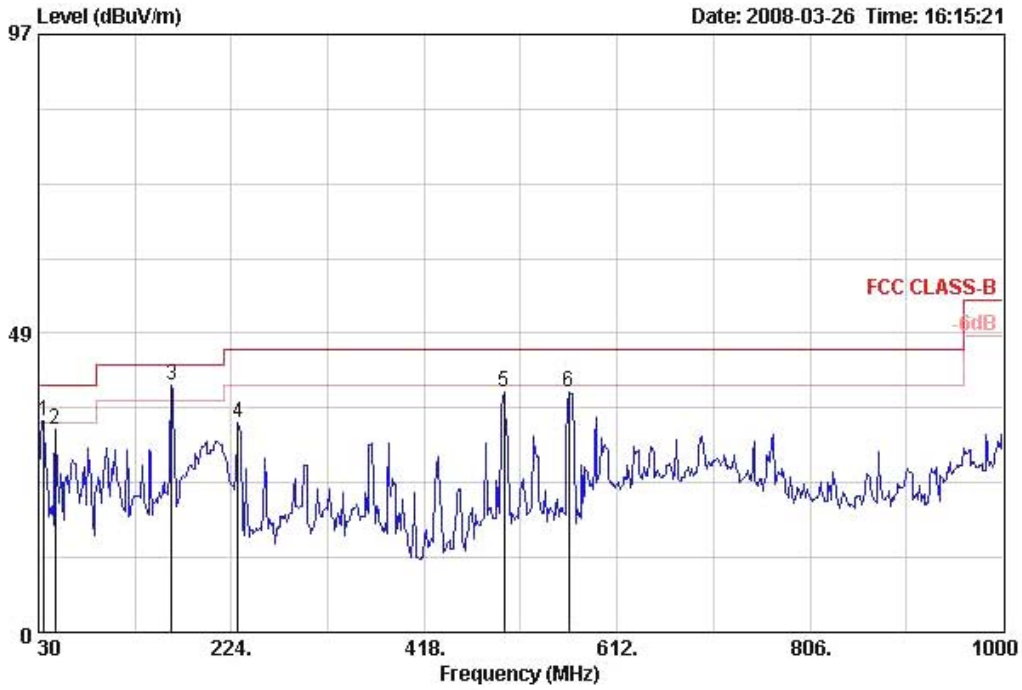
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 3

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	98.870	36.00	-7.50	43.50	55.20	11.02	1.50	31.72	Peak	100	-1	HORIZONTAL
2 !	162.890	37.55	-5.95	43.50	56.57	10.51	2.00	31.53	Peak	100	-1	HORIZONTAL
3	233.700	39.50	-6.50	46.00	57.15	11.50	2.23	31.38	Peak	100	-1	HORIZONTAL
4 !	497.540	40.30	-5.70	46.00	50.11	17.86	3.27	30.94	Peak	100	-1	HORIZONTAL
5 !	528.580	40.74	-5.26	46.00	49.86	18.47	3.24	30.83	Peak	100	-1	HORIZONTAL
6 !	564.470	41.19	-4.81	46.00	49.81	18.96	3.17	30.75	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	35.820	34.33	-5.67	40.00	48.85	15.98	1.20	31.70	Peak	400	-1	VERTICAL
2	46.490	32.86	-7.14	40.00	52.89	10.67	1.10	31.79	Peak	400	-1	VERTICAL
3 @	163.860	39.96	-3.54	43.50	59.01	10.48	2.00	31.53	Peak	400	-1	VERTICAL
4	230.790	33.89	-12.11	46.00	51.86	11.20	2.21	31.38	Peak	400	-1	VERTICAL
5	498.510	38.97	-7.03	46.00	48.75	17.87	3.28	30.94	Peak	400	-1	VERTICAL
6	563.500	38.86	-7.14	46.00	47.48	18.95	3.17	30.75	Peak	400	-1	VERTICAL

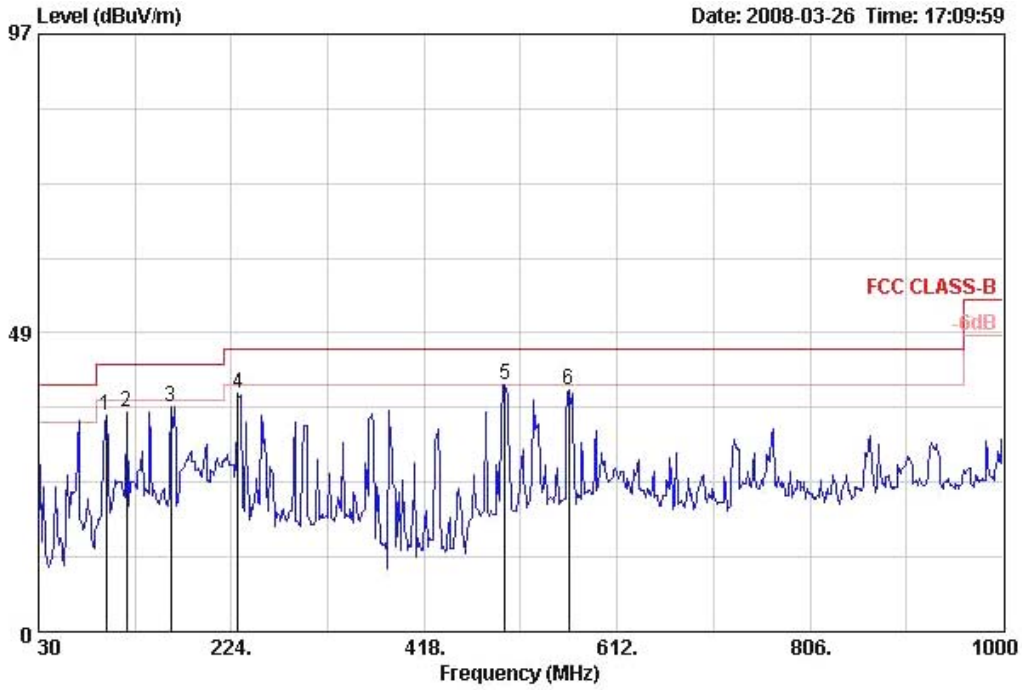
Note:

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

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

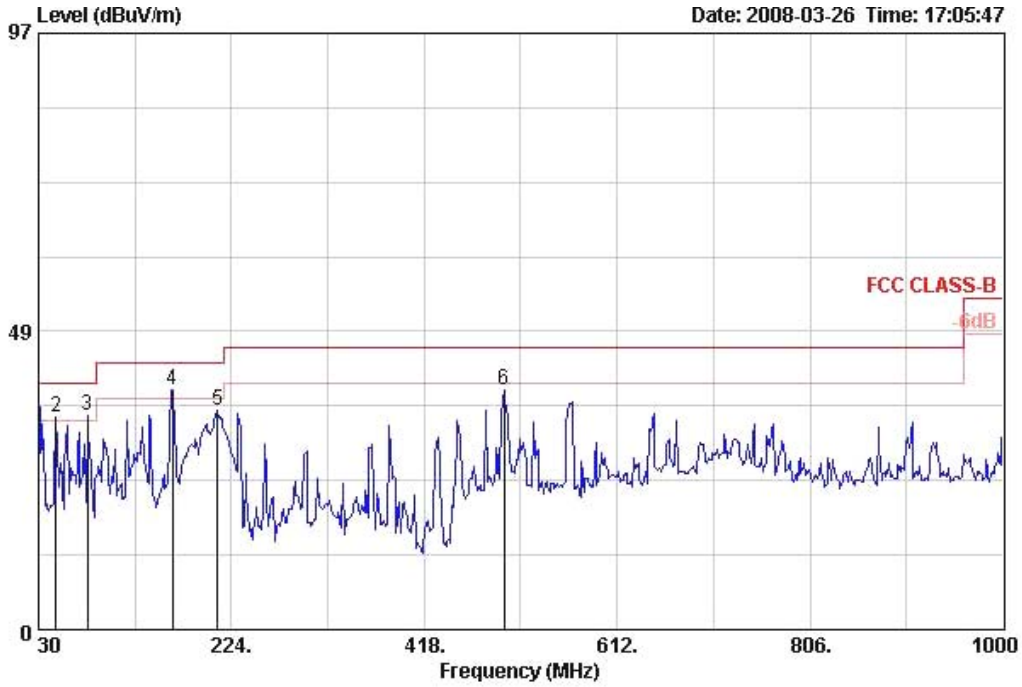
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 4

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	97.900	35.03	-8.47	43.50	54.42	10.84	1.50	31.73	Peak	100	-4	HORIZONTAL
2	118.270	35.55	-7.95	43.50	52.86	12.88	1.57	31.76	Peak	100	-4	HORIZONTAL
3	162.890	36.55	-6.95	43.50	55.57	10.51	2.00	31.53	Peak	100	-4	HORIZONTAL
4	230.790	38.65	-7.35	46.00	56.62	11.20	2.21	31.38	Peak	100	-4	HORIZONTAL
5 !	499.480	40.14	-5.86	46.00	49.91	17.89	3.28	30.94	Peak	100	-4	HORIZONTAL
6	563.500	39.16	-6.84	46.00	47.78	18.95	3.17	30.75	Peak	100	-4	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	30.000	36.19	-3.81	40.00	46.96	20.10	0.80	31.67	Peak	400	-1	VERTICAL
2 !	47.460	34.56	-5.44	40.00	54.97	10.30	1.10	31.81	Peak	400	-1	VERTICAL
3 !	79.470	34.93	-5.07	40.00	57.87	7.51	1.30	31.75	Peak	400	-1	VERTICAL
4 !	164.830	39.06	-4.44	43.50	58.15	10.45	2.00	31.54	Peak	400	-1	VERTICAL
5	210.420	35.61	-7.89	43.50	54.37	10.60	2.06	31.42	Peak	400	-1	VERTICAL
6	498.510	38.86	-7.14	46.00	48.64	17.87	3.28	30.94	Peak	400	-1	VERTICAL

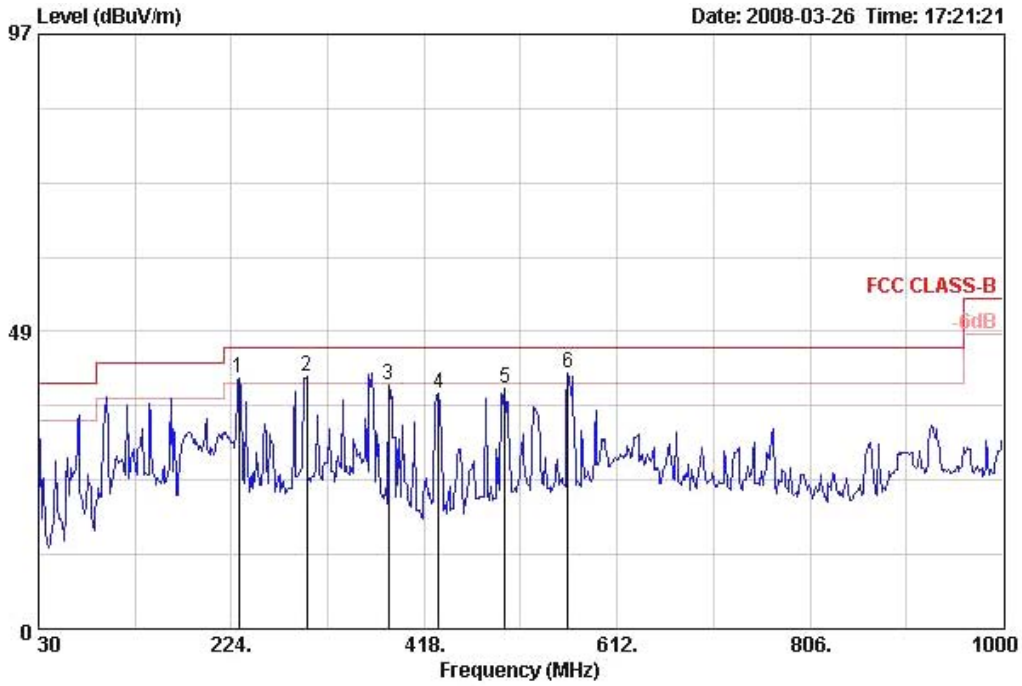
Note:

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

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

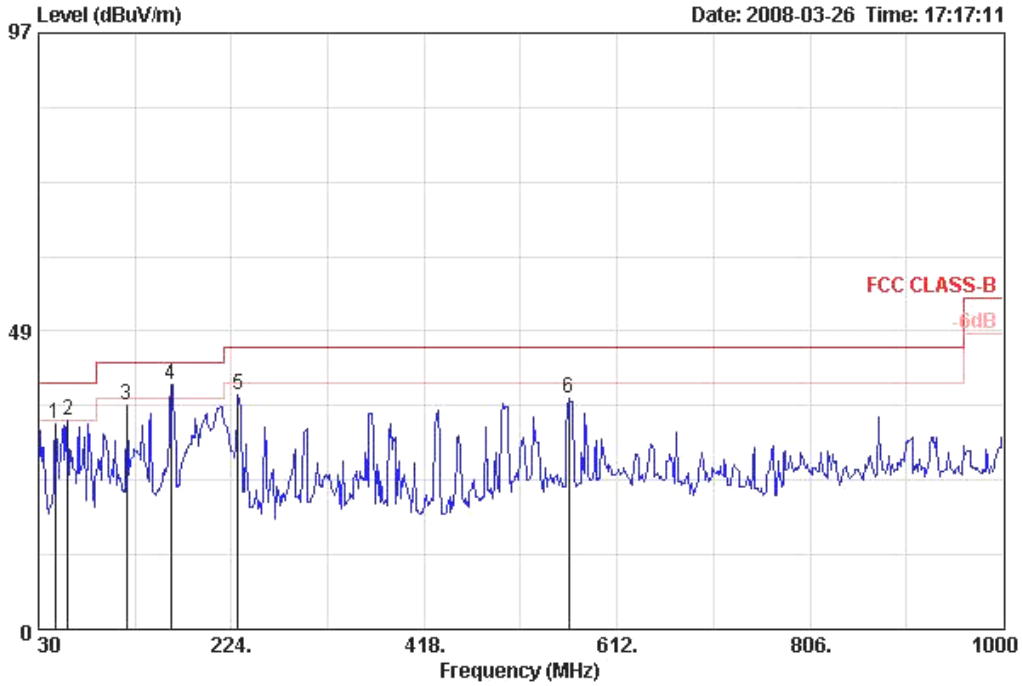
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 5

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	231.760	40.85	-5.15	46.00	58.72	11.30	2.21	31.38	Peak	100	-5	HORIZONTAL
2 !	299.660	41.09	-4.91	46.00	56.21	14.00	2.20	31.32	Peak	100	-5	HORIZONTAL
3	382.110	39.90	-6.10	46.00	52.23	16.18	2.60	31.10	Peak	100	-5	HORIZONTAL
4	432.550	38.54	-7.46	46.00	49.68	16.99	2.83	30.96	Peak	100	-5	HORIZONTAL
5	499.480	39.35	-6.65	46.00	49.12	17.89	3.28	30.94	Peak	100	-5	HORIZONTAL
6 !	562.530	41.70	-4.30	46.00	50.32	18.95	3.18	30.75	Peak	100	-5	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	46.490	33.36	-6.64	40.00	53.38	10.67	1.10	31.79	Peak	400	-5	VERTICAL
2	59.100	34.00	-6.00	40.00	57.50	6.86	1.40	31.76	Peak	400	-5	VERTICAL
3	118.270	36.39	-7.11	43.50	53.69	12.88	1.57	31.76	Peak	400	-5	VERTICAL
4 @	162.890	39.87	-3.63	43.50	58.89	10.51	2.00	31.53	Peak	400	-5	VERTICAL
5	230.790	38.25	-7.75	46.00	56.22	11.20	2.21	31.38	Peak	400	-5	VERTICAL
6	563.500	37.47	-8.53	46.00	46.09	18.95	3.17	30.75	Peak	400	-5	VERTICAL

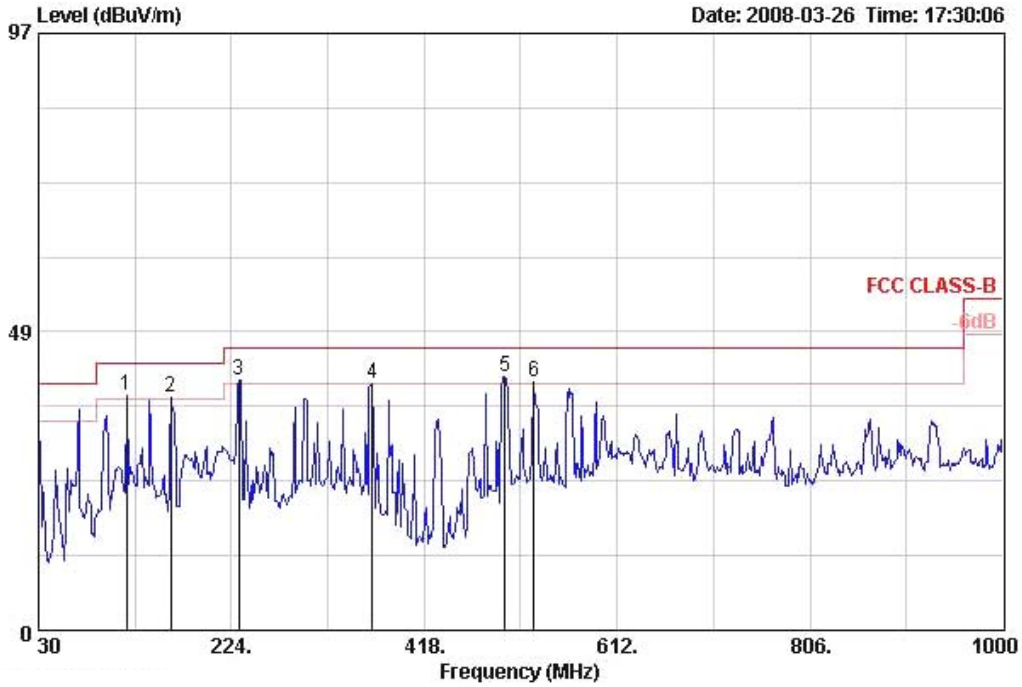
Note:

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

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

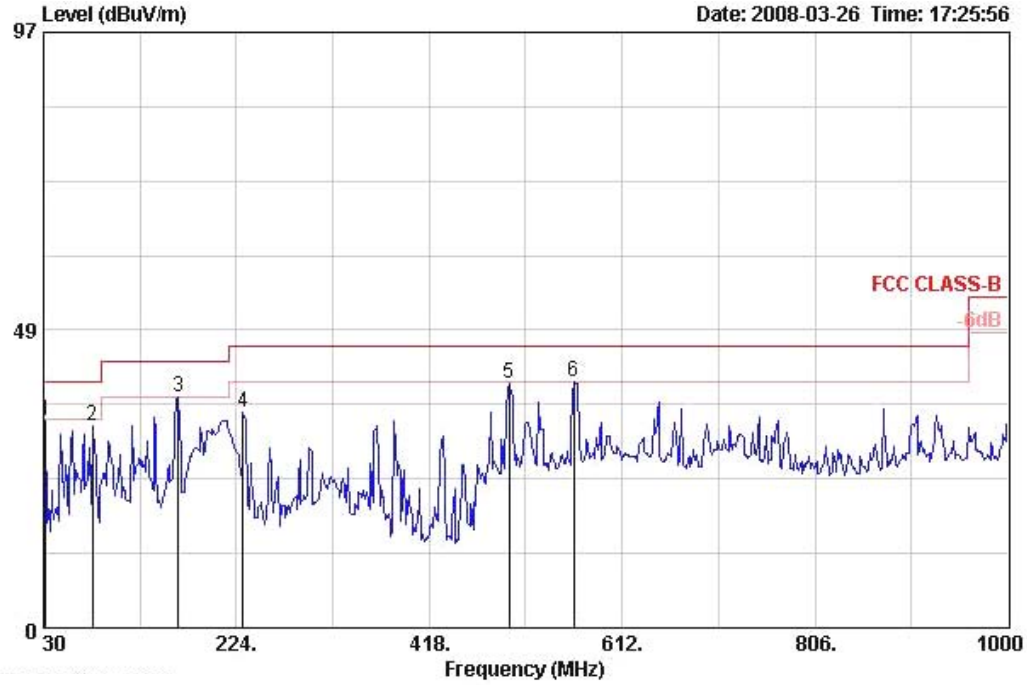
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	118.270	38.16	-5.34	43.50	55.46	12.88	1.57	31.76	Peak	100	-1	HORIZONTAL
2 !	162.890	37.79	-5.71	43.50	56.81	10.51	2.00	31.53	Peak	100	-1	HORIZONTAL
3 !	231.760	40.66	-5.34	46.00	58.53	11.30	2.21	31.38	Peak	100	-1	HORIZONTAL
4	365.620	39.94	-6.06	46.00	52.85	15.78	2.49	31.17	Peak	100	-1	HORIZONTAL
5 @	499.480	41.31	-4.69	46.00	51.08	17.89	3.28	30.94	Peak	100	-1	HORIZONTAL
6 !	528.580	40.41	-5.59	46.00	49.53	18.47	3.24	30.83	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	31.940	33.82	-6.18	40.00	45.90	18.66	0.93	31.67	Peak	400	-1	VERTICAL
2	79.470	32.81	-7.19	40.00	55.75	7.51	1.30	31.75	Peak	400	-1	VERTICAL
3 !	165.800	37.64	-5.86	43.50	56.76	10.42	2.00	31.55	Peak	400	-1	VERTICAL
4	230.790	35.22	-10.78	46.00	53.19	11.20	2.21	31.38	Peak	400	-1	VERTICAL
5	498.510	39.89	-6.11	46.00	49.67	17.87	3.28	30.94	Peak	400	-1	VERTICAL
6	563.500	39.96	-6.04	46.00	48.59	18.95	3.17	30.75	Peak	400	-1	VERTICAL

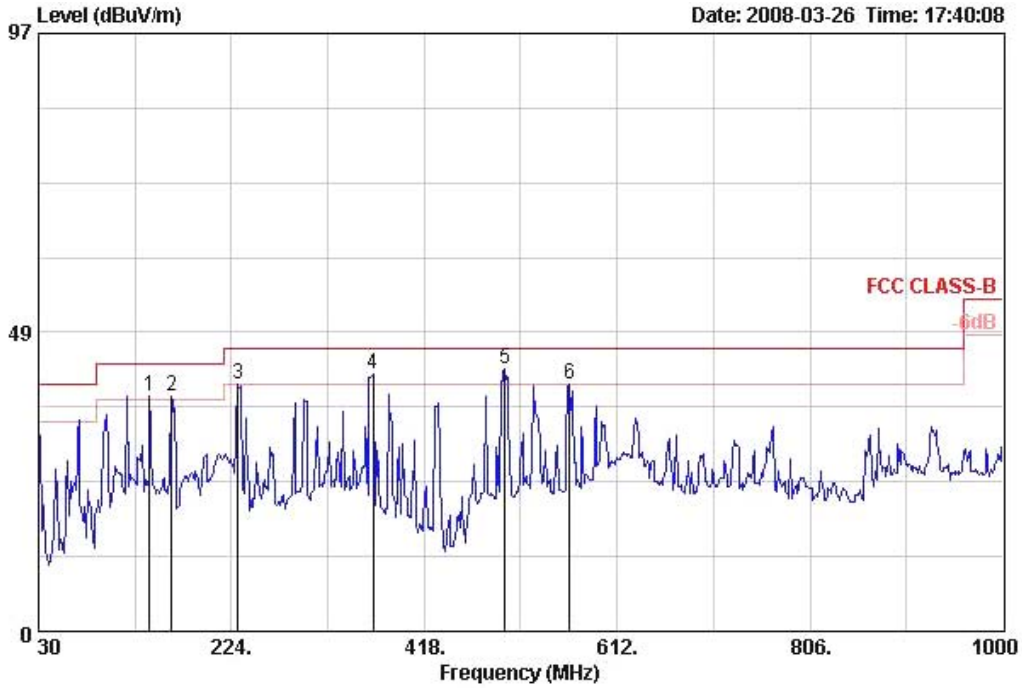
Note:

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

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

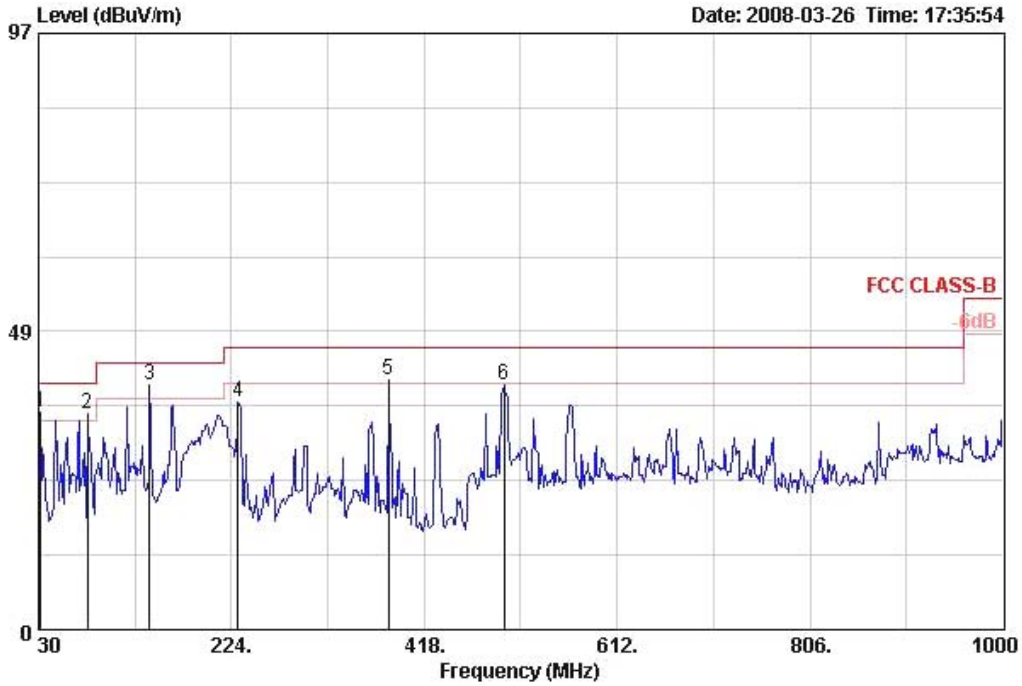
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	141.550	38.25	-5.25	43.50	56.43	11.69	1.70	31.56	Peak	100	-1	HORIZONTAL
2 !	163.860	38.15	-5.35	43.50	57.21	10.48	2.00	31.53	Peak	100	-1	HORIZONTAL
3	230.790	39.97	-6.03	46.00	57.94	11.20	2.21	31.38	Peak	100	-1	HORIZONTAL
4 !	366.590	41.59	-4.41	46.00	54.46	15.80	2.50	31.17	Peak	100	-1	HORIZONTAL
5 @	499.480	42.62	-3.38	46.00	52.39	17.89	3.28	30.94	Peak	100	-1	HORIZONTAL
6	564.470	39.95	-6.05	46.00	48.57	18.96	3.17	30.75	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	31.940	35.26	-4.74	40.00	47.34	18.66	0.93	31.67	Peak	400	-5	VERTICAL
2 !	79.470	35.05	-4.95	40.00	57.99	7.51	1.30	31.75	Peak	400	-5	VERTICAL
3 @	141.550	39.70	-3.80	43.50	57.88	11.69	1.70	31.56	Peak	400	-5	VERTICAL
4	230.790	37.12	-8.88	46.00	55.09	11.20	2.21	31.38	Peak	400	-5	VERTICAL
5 !	382.110	40.53	-5.47	46.00	52.86	16.18	2.60	31.10	Peak	400	-5	VERTICAL
6	498.510	39.71	-6.29	46.00	49.49	17.87	3.28	30.94	Peak	400	-5	VERTICAL

Note:

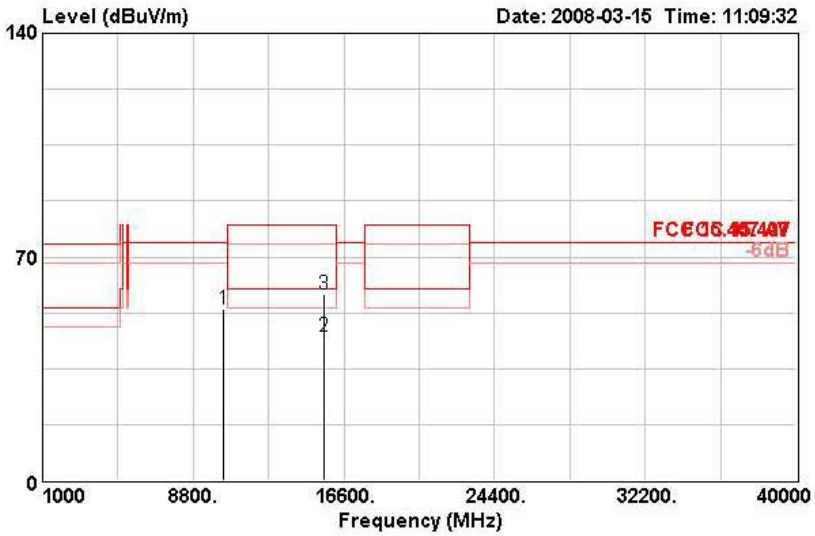
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

4.6.9. Results for Radiated Emissions (1GHz~40GHz)

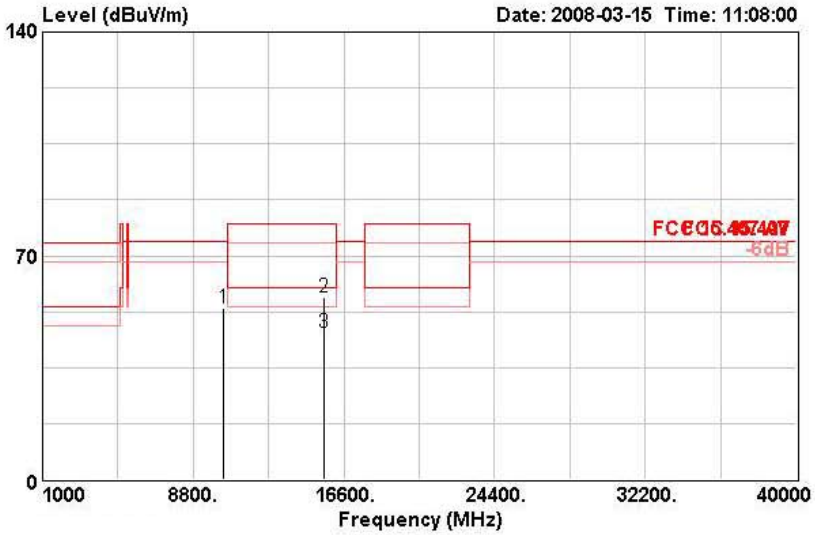
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 36 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10362.350	53.80	-20.50	74.30	41.23	38.37	9.32	35.12	PEAK	100	360	HORIZONTAL
2	15540.810	45.11	-14.89	60.00	31.20	37.67	11.52	35.28	AVERAGE	100	0	HORIZONTAL
3	15541.620	58.23	-21.77	80.00	44.33	37.67	11.52	35.28	PEAK	100	0	HORIZONTAL

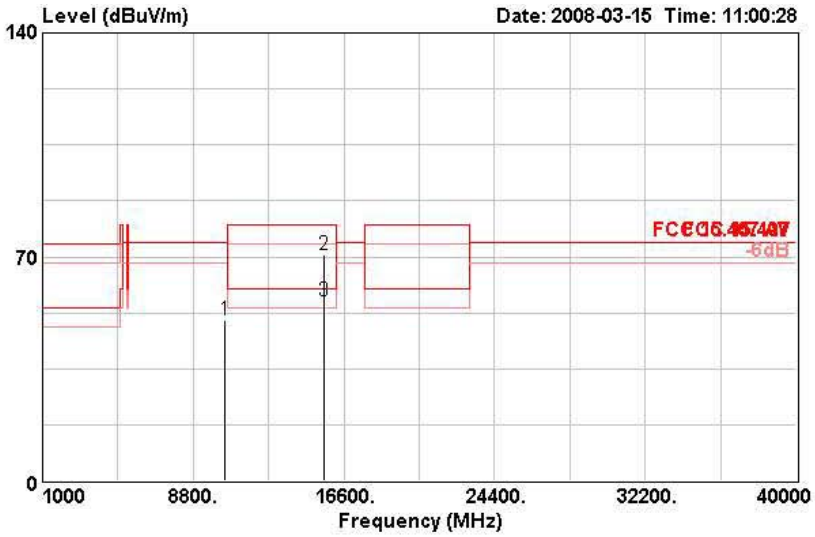
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10359.610	53.72	-20.58	74.30	41.15	38.37	9.32	35.12	PEAK	100	0	VERTICAL
2	15537.550	57.05	-22.95	80.00	43.15	37.67	11.52	35.28	PEAK	100	360	VERTICAL
3	15542.390	45.97	-14.03	60.00	32.07	37.67	11.52	35.28	AVERAGE	100	360	VERTICAL

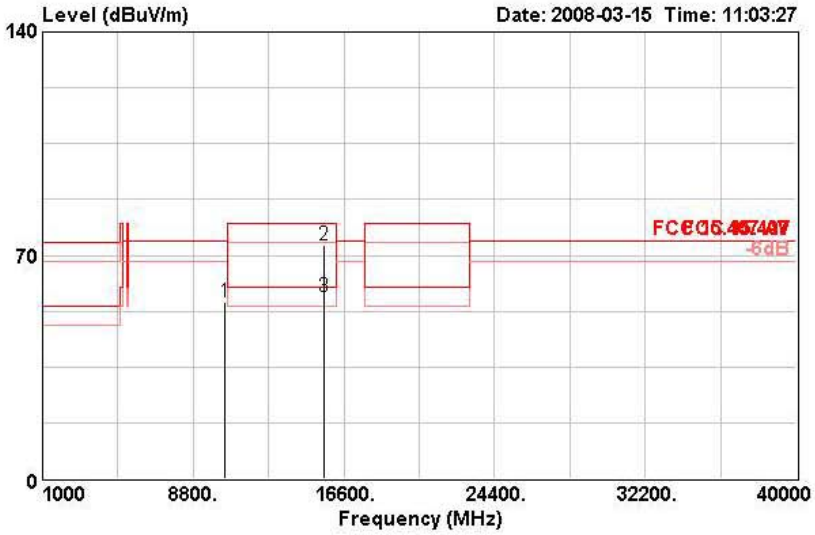
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 40 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10402.450	50.38	-23.92	74.30	37.70	38.38	9.36	35.05	PEAK	100	360	HORIZONTAL
2 @	15597.590	70.51	-9.49	80.00	56.70	37.60	11.52	35.30	PEAK	113	98	HORIZONTAL
3 @	15601.140	56.25	-3.75	60.00	42.45	37.60	11.52	35.31	AVERAGE	113	98	HORIZONTAL

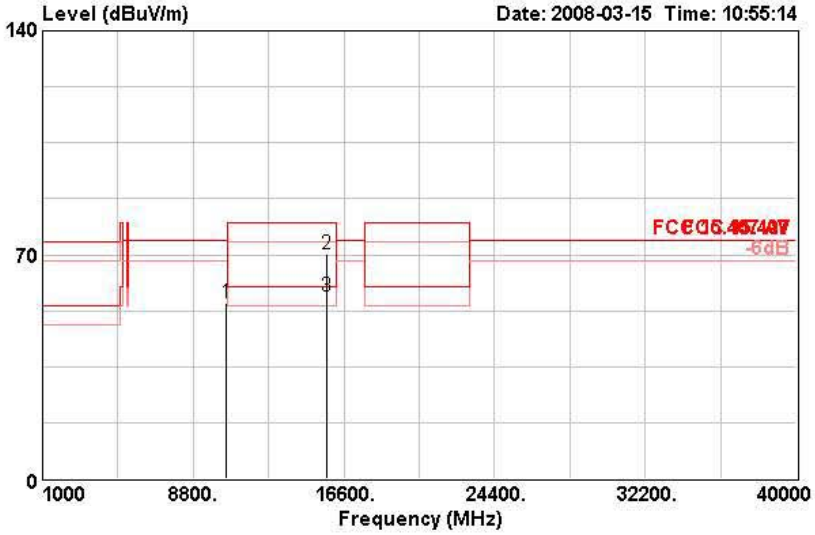
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10398.840	55.53	-18.77	74.30	42.85	38.38	9.36	35.05	PEAK	100	246	VERTICAL
2 @	15597.910	73.05	-6.95	80.00	59.24	37.60	11.52	35.30	PEAK	133	211	VERTICAL
3 @	15601.360	56.86	-3.14	60.00	43.06	37.60	11.52	35.31	AVERAGE	133	211	VERTICAL

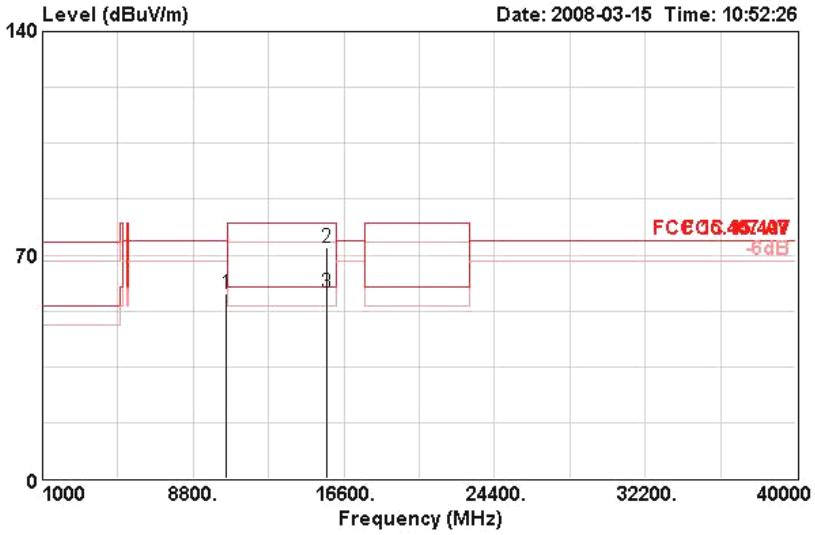
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 48 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10480.360	55.10	-19.20	74.30	42.25	38.40	9.41	34.96	PEAK	100	0	HORIZONTAL
2 @	15719.090	70.07	-9.93	80.00	56.43	37.48	11.51	35.35	PEAK	111	95	HORIZONTAL
3 @	15720.370	57.03	-2.97	60.00	43.39	37.48	11.51	35.35	AVERAGE	111	95	HORIZONTAL

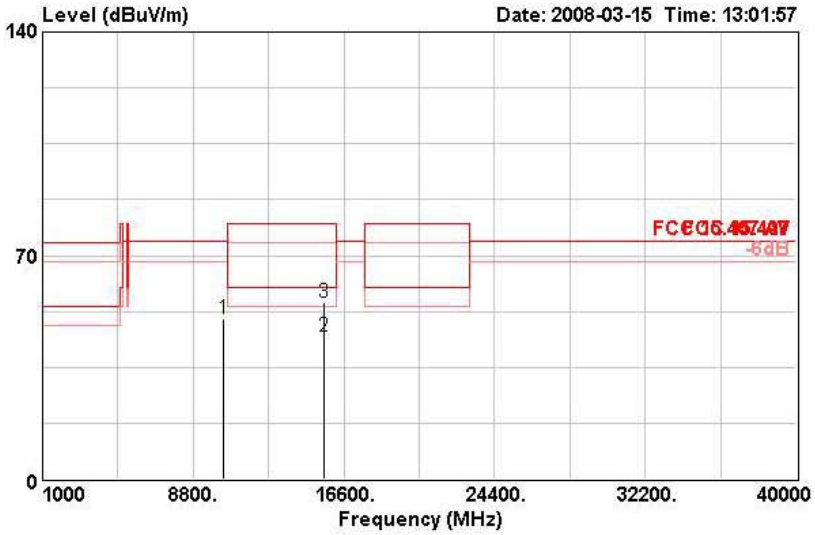
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10480.060	58.08	-16.22	74.30	45.23	38.40	9.41	34.96	PEAK	121	299	VERTICAL
2 @	15718.030	72.52	-7.48	80.00	58.88	37.48	11.51	35.35	PEAK	108	198	VERTICAL
3 @	15720.250	58.39	-1.61	60.00	44.75	37.48	11.51	35.35	AVERAGE	108	198	VERTICAL

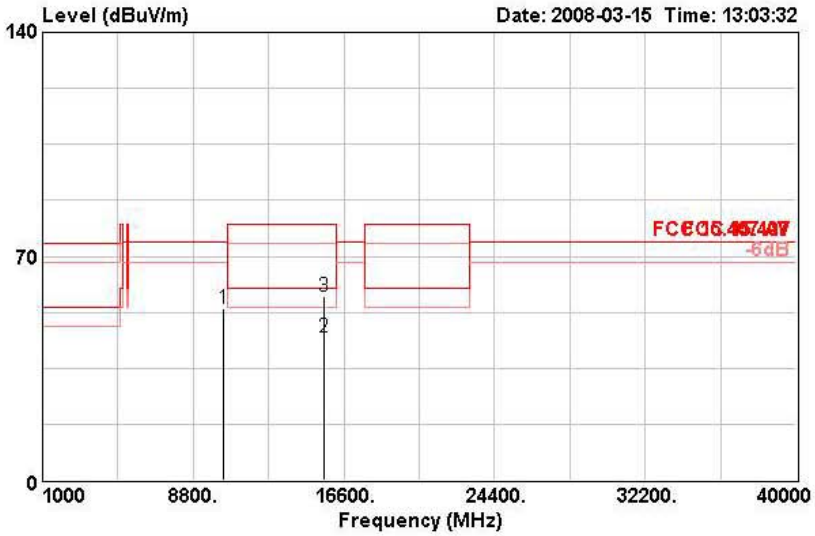
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 38 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10381.760	50.35	-23.95	74.30	37.72	38.38	9.34	35.09	PEAK	100	360	HORIZONTAL
2	15570.790	44.61	-15.39	60.00	30.75	37.63	11.52	35.29	AVERAGE	100	0	HORIZONTAL
3	15572.040	55.37	-24.63	80.00	41.51	37.63	11.52	35.29	PEAK	100	0	HORIZONTAL

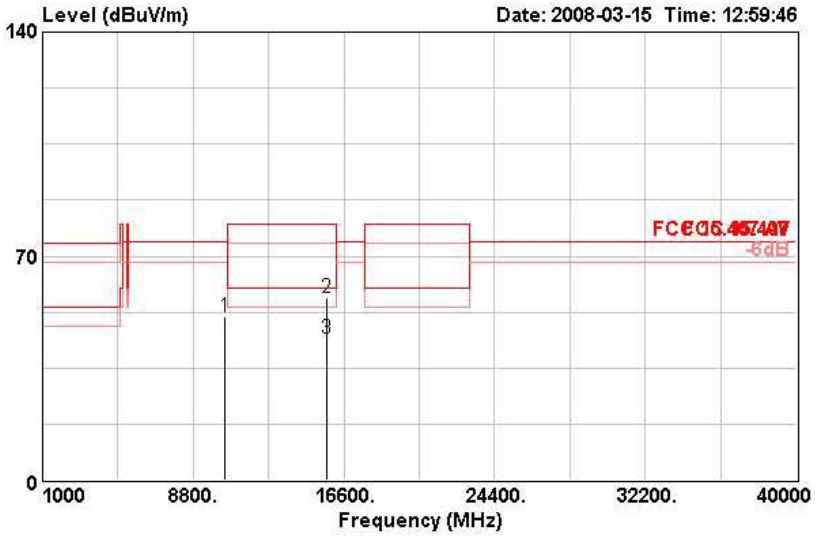
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10378.570	53.67	-20.63	74.30	41.04	38.38	9.34	35.09	PEAK	100	0	VERTICAL
2	15570.710	44.55	-15.45	60.00	30.69	37.63	11.52	35.29	AVERAGE	100	360	VERTICAL
3	15570.960	57.37	-22.63	80.00	43.51	37.63	11.52	35.29	PEAK	100	360	VERTICAL

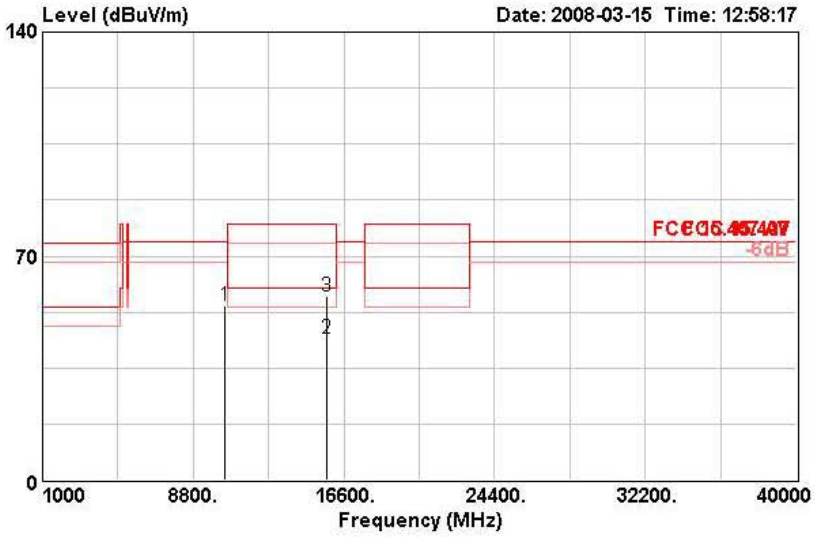
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 46 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10459.280	51.13	-23.17	74.30	38.34	38.39	9.39	34.99	PEAK	100	0	HORIZONTAL
2	15687.790	56.96	-23.04	80.00	43.27	37.51	11.51	35.34	PEAK	100	360	HORIZONTAL
3	15692.500	44.25	-15.75	60.00	30.57	37.51	11.51	35.34	AVERAGE	100	360	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10459.620	54.40	-19.90	74.30	41.61	38.39	9.39	34.99	PEAK	100	360	VERTICAL
2	15689.770	44.37	-15.63	60.00	30.68	37.51	11.51	35.34	AVERAGE	100	0	VERTICAL
3	15690.350	57.66	-22.34	80.00	43.97	37.51	11.51	35.34	PEAK	100	0	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.

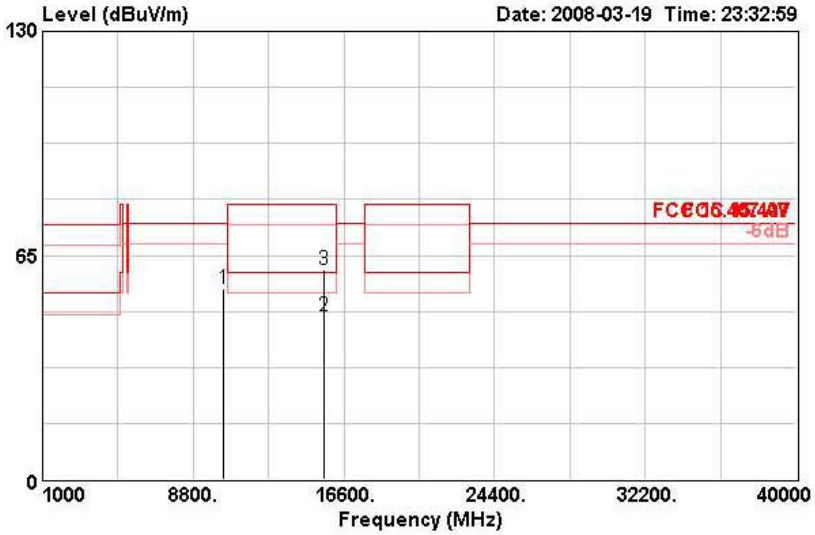
The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

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

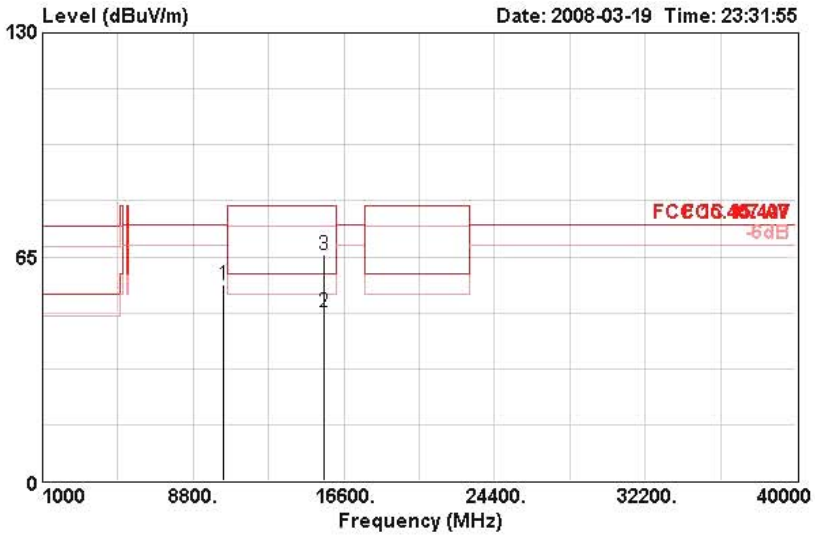
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 36 / Ant. 5

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10362.580	55.27	-19.03	74.30	42.69	38.37	9.32	35.12	PEAK	100	71	HORIZONTAL
2 @	15535.760	47.35	-12.65	60.00	33.45	37.67	11.52	35.28	AVERAGE	135	275	HORIZONTAL
3	15540.900	61.04	-18.96	80.00	47.13	37.67	11.52	35.28	PEAK	135	275	HORIZONTAL

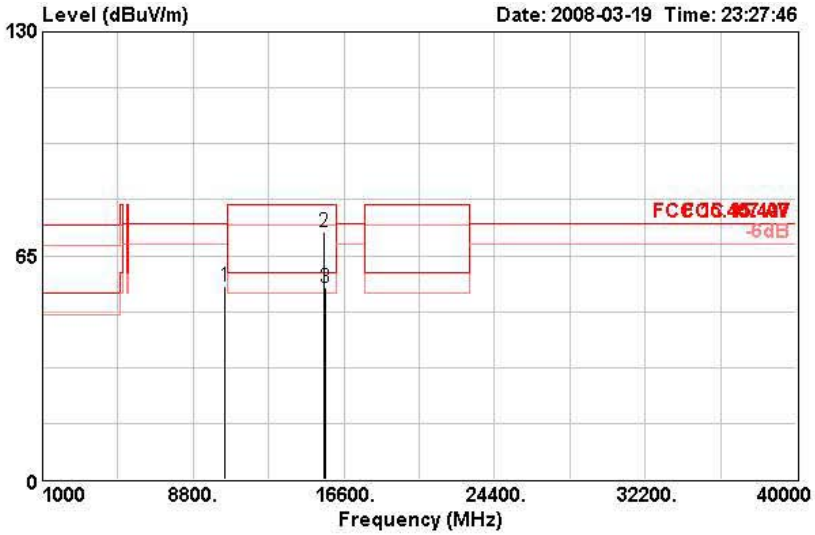
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10359.140	56.99	-17.31	74.30	44.42	38.37	9.32	35.12	PEAK	121	213	VERTICAL
2 @	15541.300	49.16	-10.84	60.00	35.26	37.67	11.52	35.28	AVERAGE	127	277	VERTICAL
3 @	15541.880	65.65	-14.35	80.00	51.75	37.67	11.52	35.28	PEAK	127	277	VERTICAL

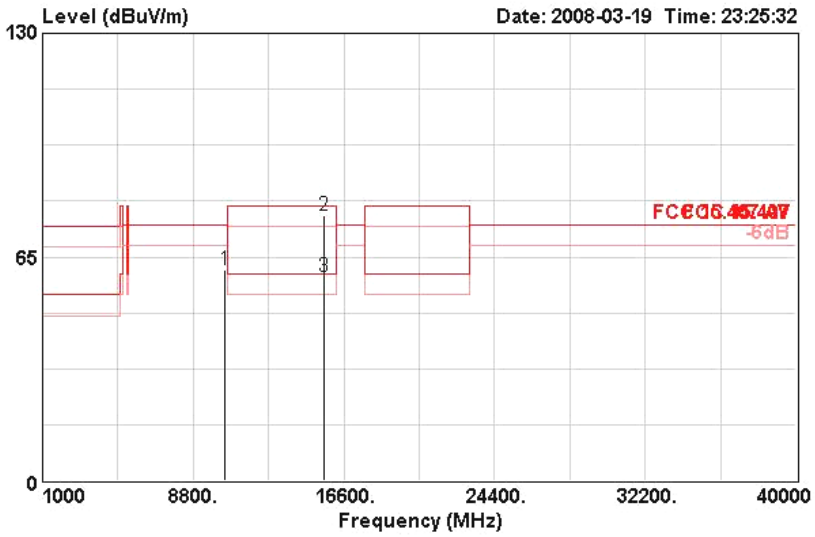
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 40 / Ant. 5

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10400.120	56.18	-18.12	74.30	43.49	38.38	9.36	35.05	PEAK	149	140	HORIZONTAL
2 @	15599.180	71.92	-8.08	80.00	58.11	37.60	11.52	35.31	PEAK	136	263	HORIZONTAL
3 @	15604.920	55.88	-4.12	60.00	42.07	37.60	11.52	35.31	AVERAGE	136	263	HORIZONTAL

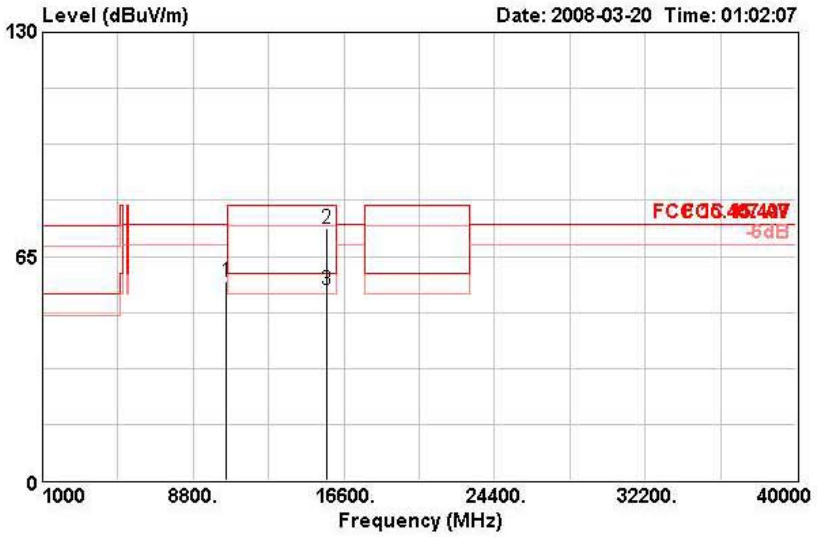
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	10399.900	61.35	-12.95	74.30	48.67	38.38	9.36	35.05	PEAK	129	113	VERTICAL
2 @	15599.300	77.14	-2.86	80.00	63.34	37.60	11.52	35.31	PEAK	119	265	VERTICAL
3 @	15599.960	59.41	-0.59	60.00	45.61	37.60	11.52	35.31	AVERAGE	119	265	VERTICAL

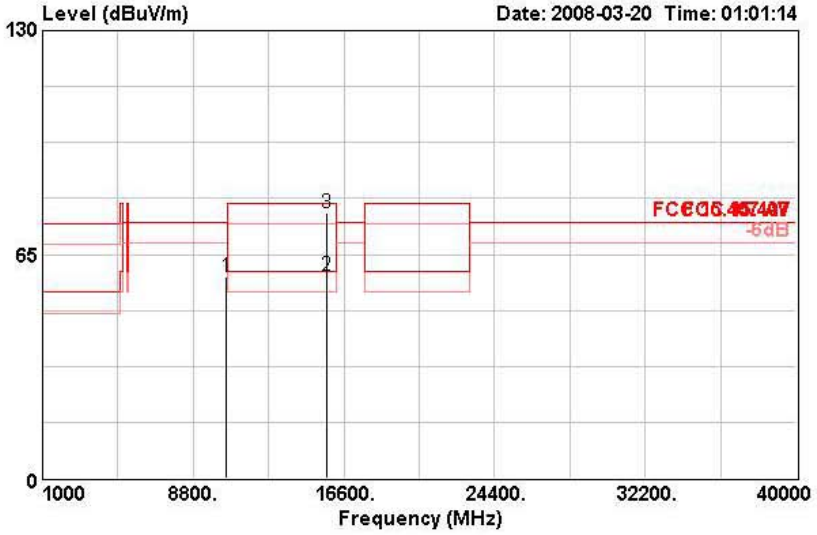
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 48 / Ant. 5

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10482.350	57.83	-16.47	74.30	44.98	38.40	9.41	34.96	PEAK	130	118	HORIZONTAL
2 @	15721.900	73.22	-6.78	80.00	59.57	37.48	11.51	35.35	PEAK	135	265	HORIZONTAL
3 @	15722.670	55.40	-4.60	60.00	41.76	37.48	11.51	35.35	AVERAGE	135	265	HORIZONTAL

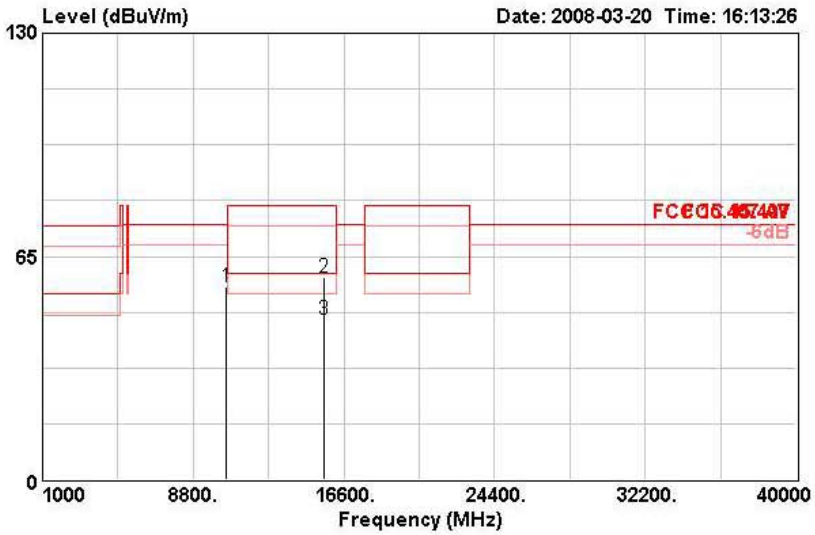
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10483.220	58.59	-15.71	74.30	45.74	38.40	9.41	34.96	PEAK	119	210	VERTICAL
2 @	15723.300	58.89	-1.11	60.00	45.24	37.48	11.51	35.35	AVERAGE	121	263	VERTICAL
3 @	15723.520	77.16	-2.84	80.00	63.52	37.48	11.51	35.35	PEAK	121	263	VERTICAL

Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 38 / Ant. 5

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	10496.000	56.09	-18.21	74.30	43.24	38.40	9.41	34.96	PEAK	100	80	HORIZONTAL
2	15579.140	58.87	-21.13	80.00	45.04	37.61	11.52	35.30	PEAK	113	87	HORIZONTAL
3 @	15581.600	46.74	-13.26	60.00	32.91	37.61	11.52	35.30	AVERAGE	113	87	HORIZONTAL