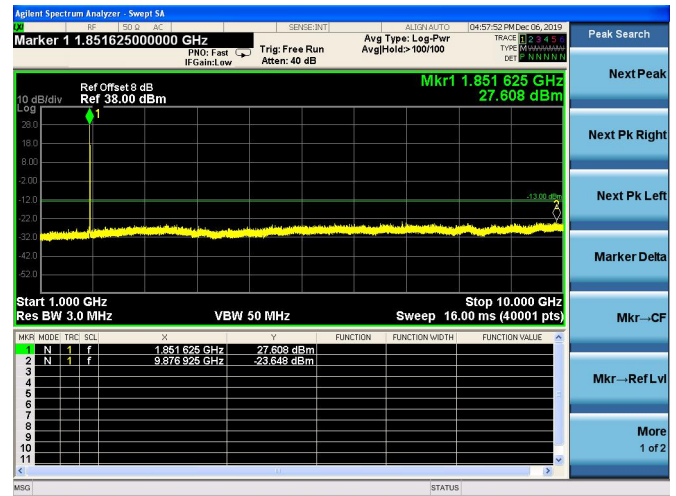
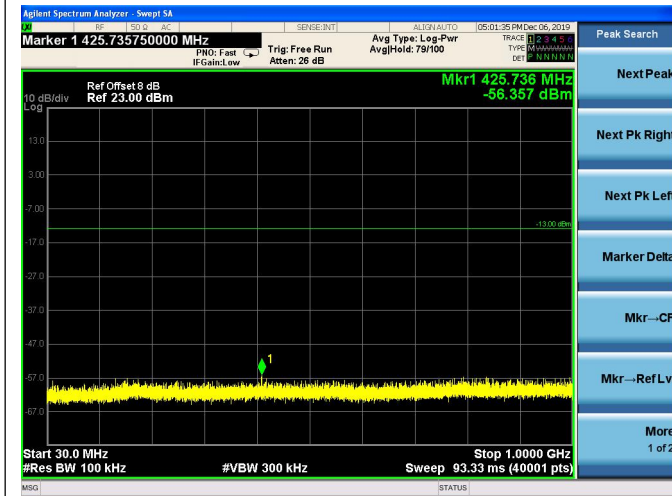
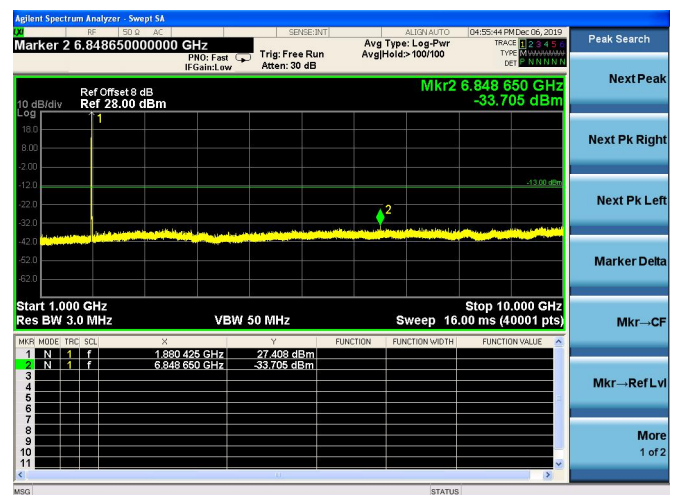
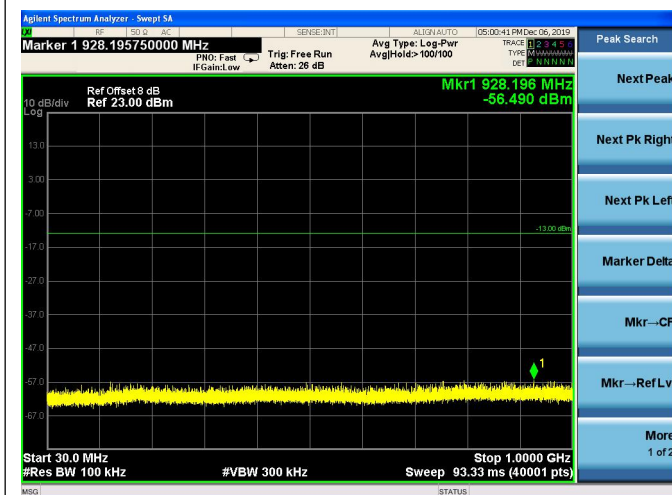




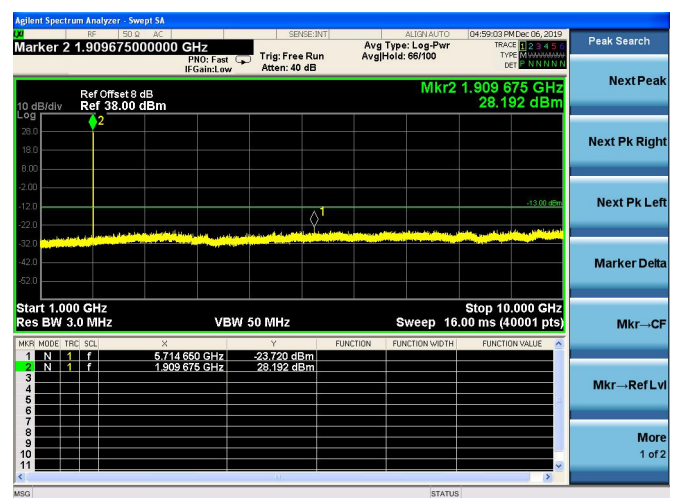
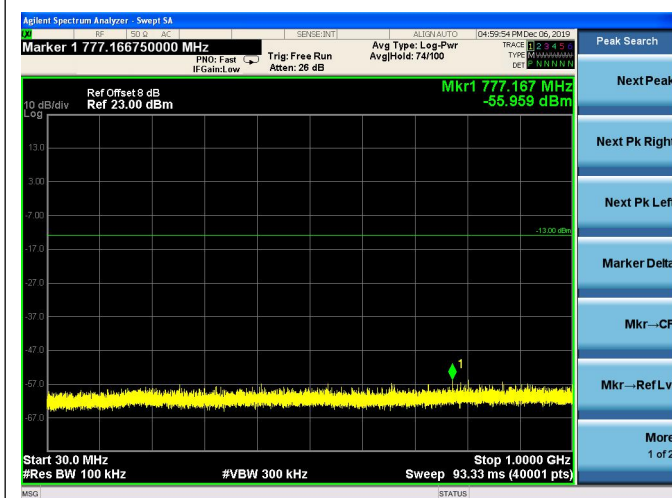
1XEVD0 Rev A BC1, Channel=25



1XEVD0 Rev A BC1, Channel=600

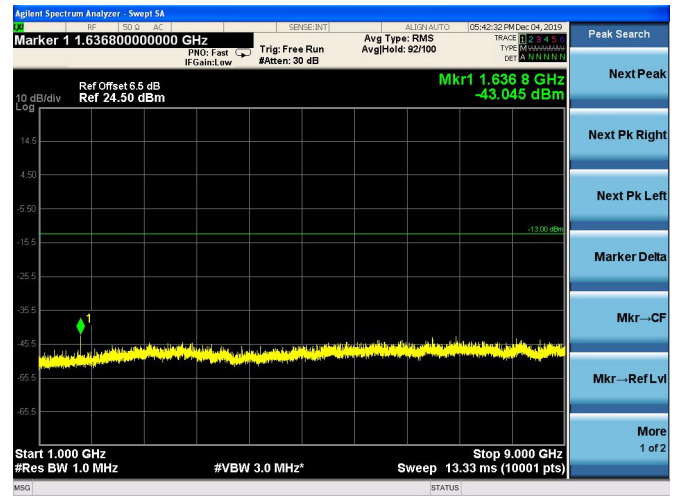
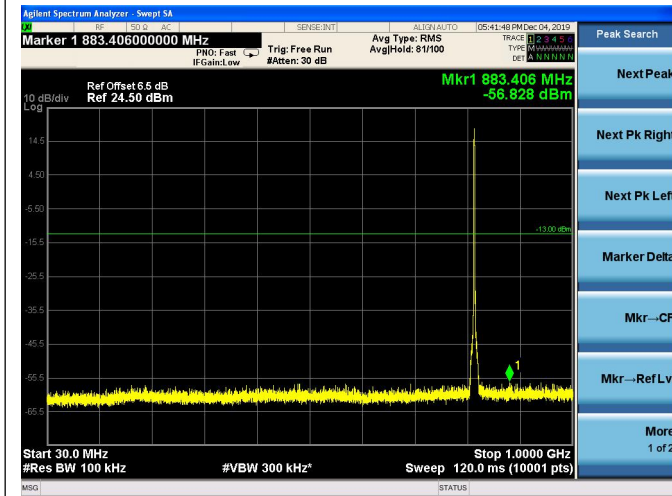


1XEVD0 Rev A BC1, Channel=1175

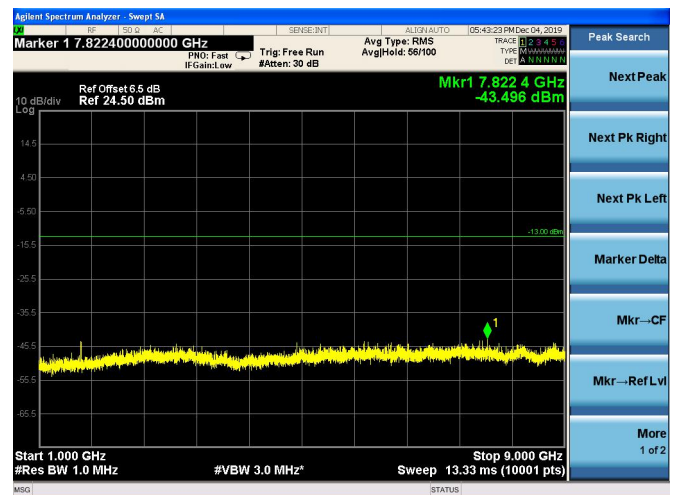
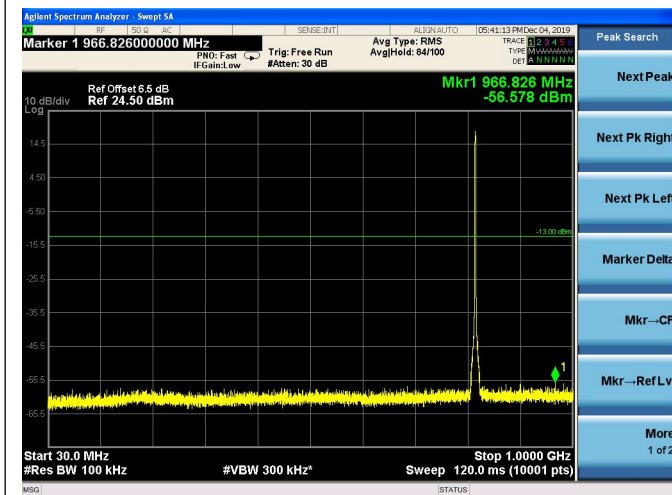




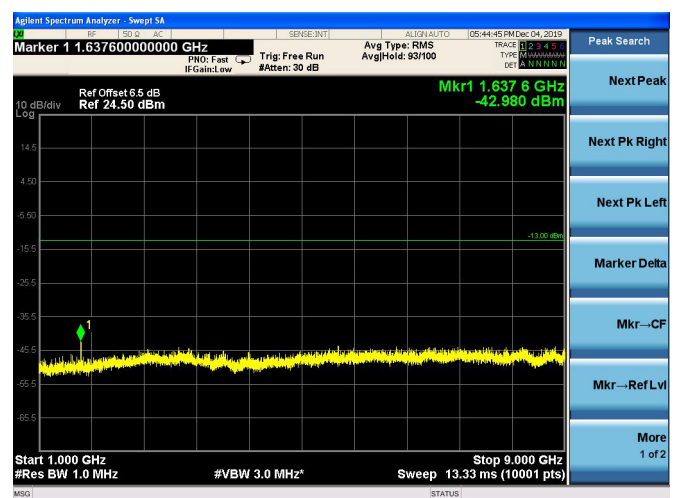
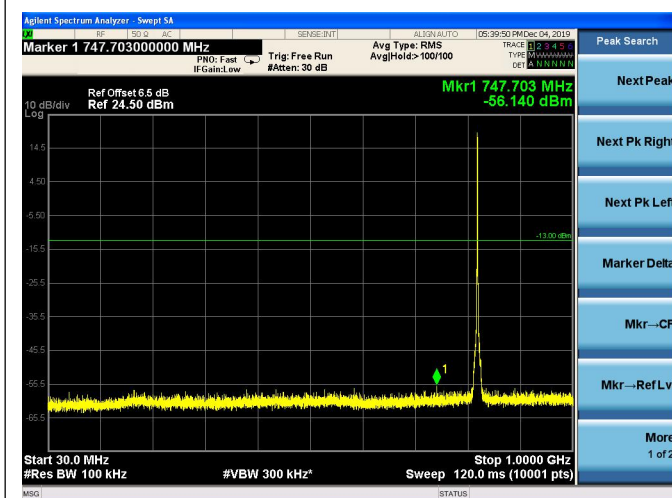
CDMA BC10, Channel=476



CDMA BC10, Channel=526

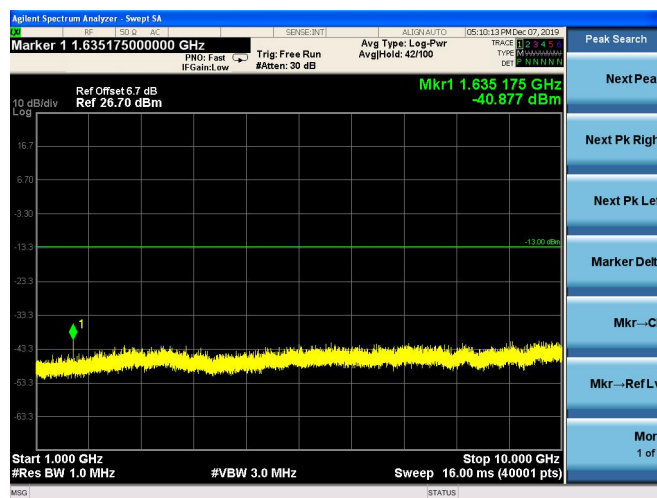
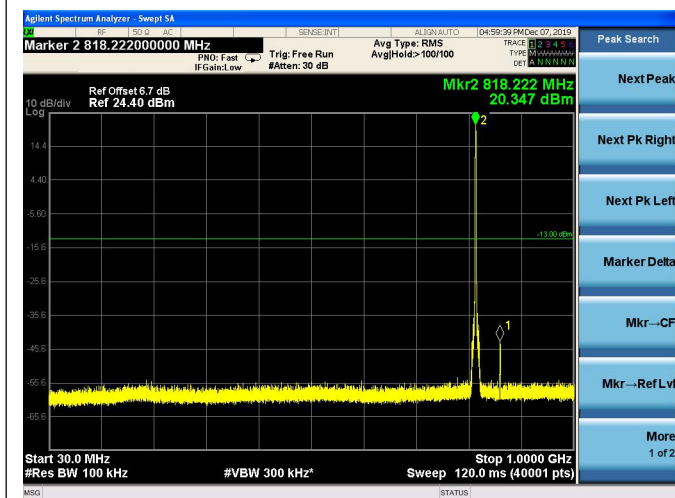


CDMA BC10, Channel=684

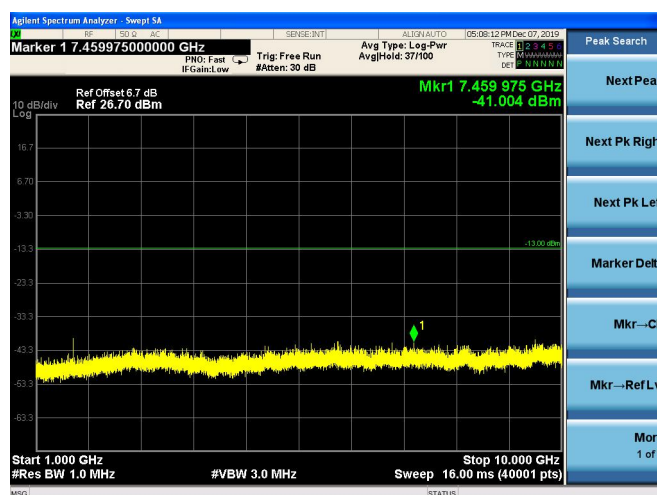
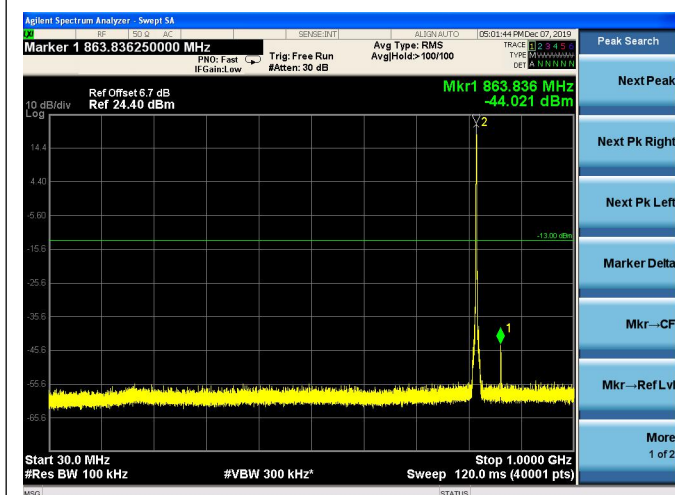




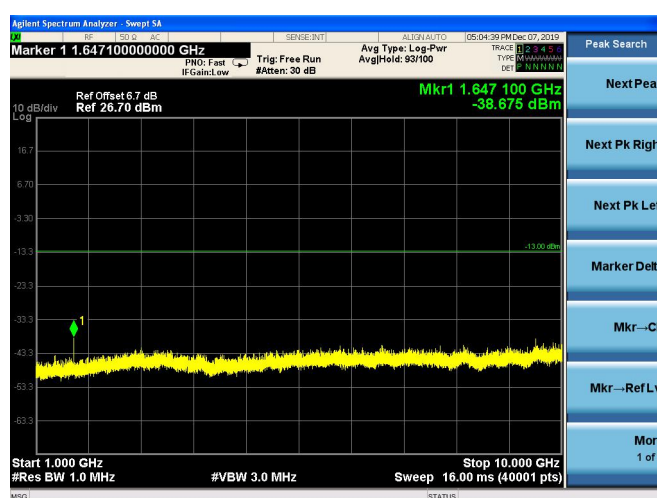
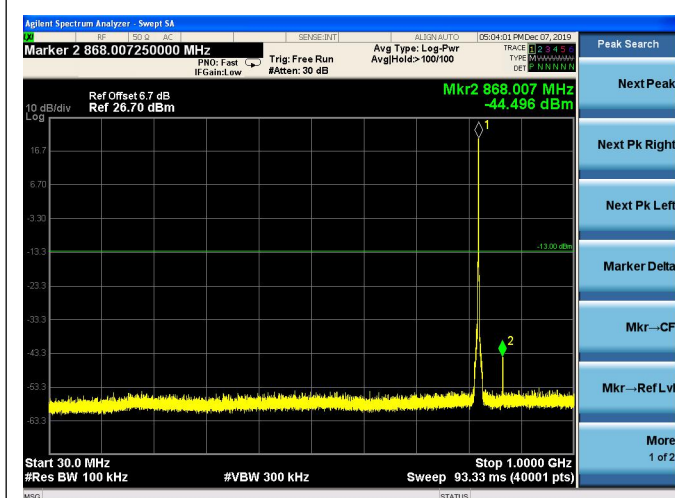
1XEVD0 Rev 0 BC10, Channel=476



1XEVD0 Rev 0 BC10, Channel=526

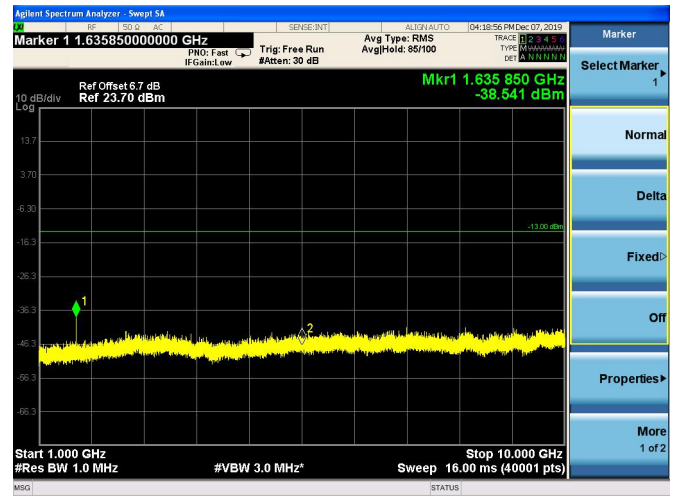
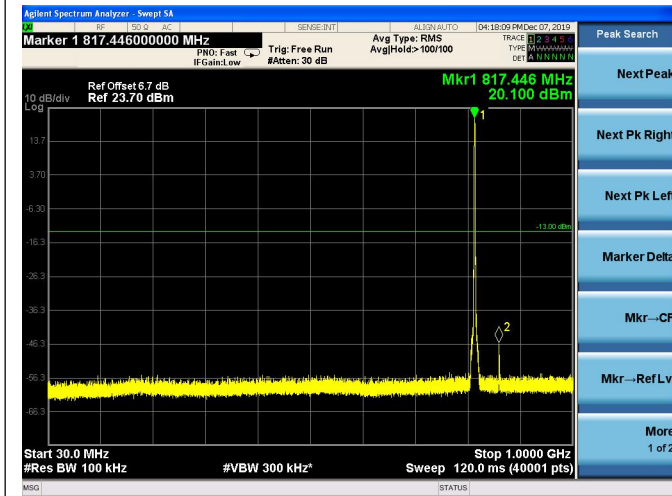


1XEVD0 Rev 0 BC10, Channel=684

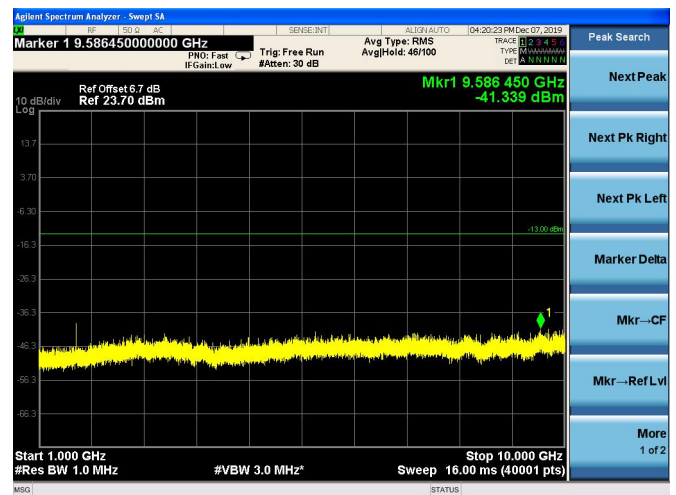
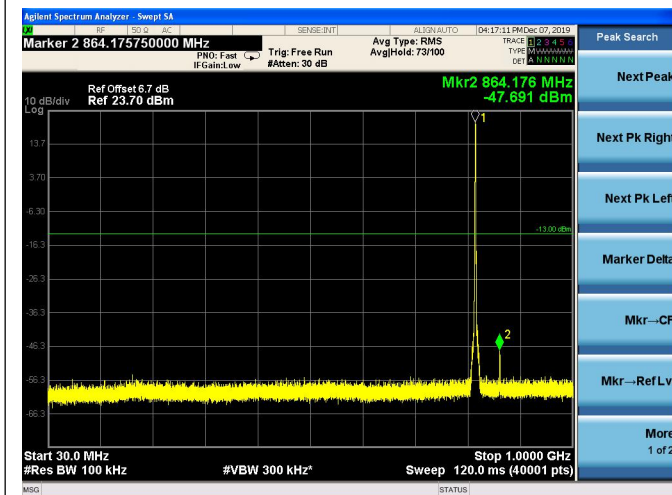




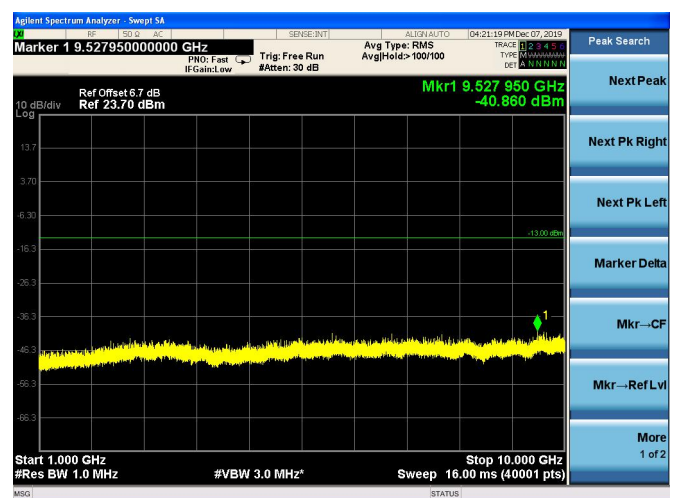
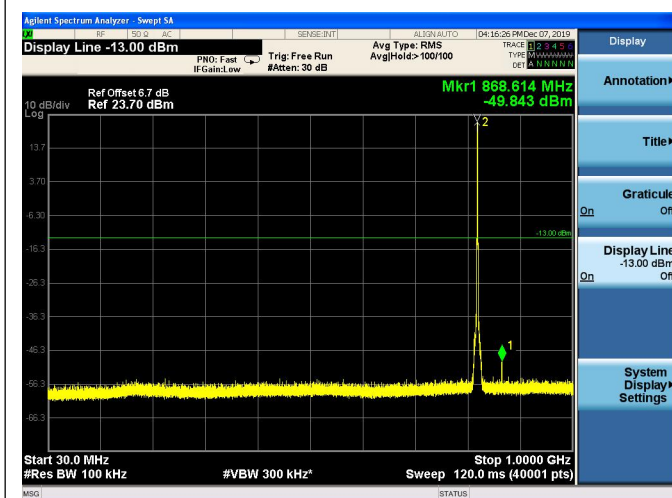
1XEVD0 Rev A BC10, Channel=476



1XEVD0 Rev A BC10, Channel=526



1XEVD0 Rev A BC10, Channel=684



2.6. Band Edge

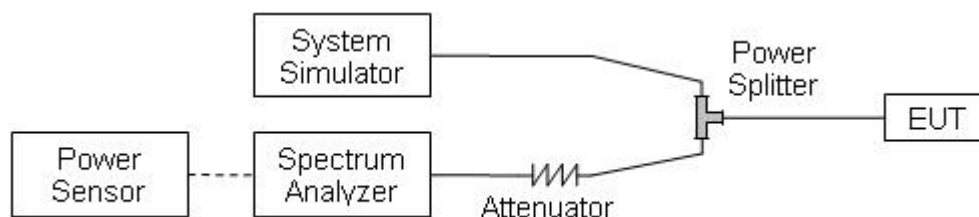
2.6.1. Requirement

According to FCC section 22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC section 24.238(a), The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC section 90.691, For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

2.6.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

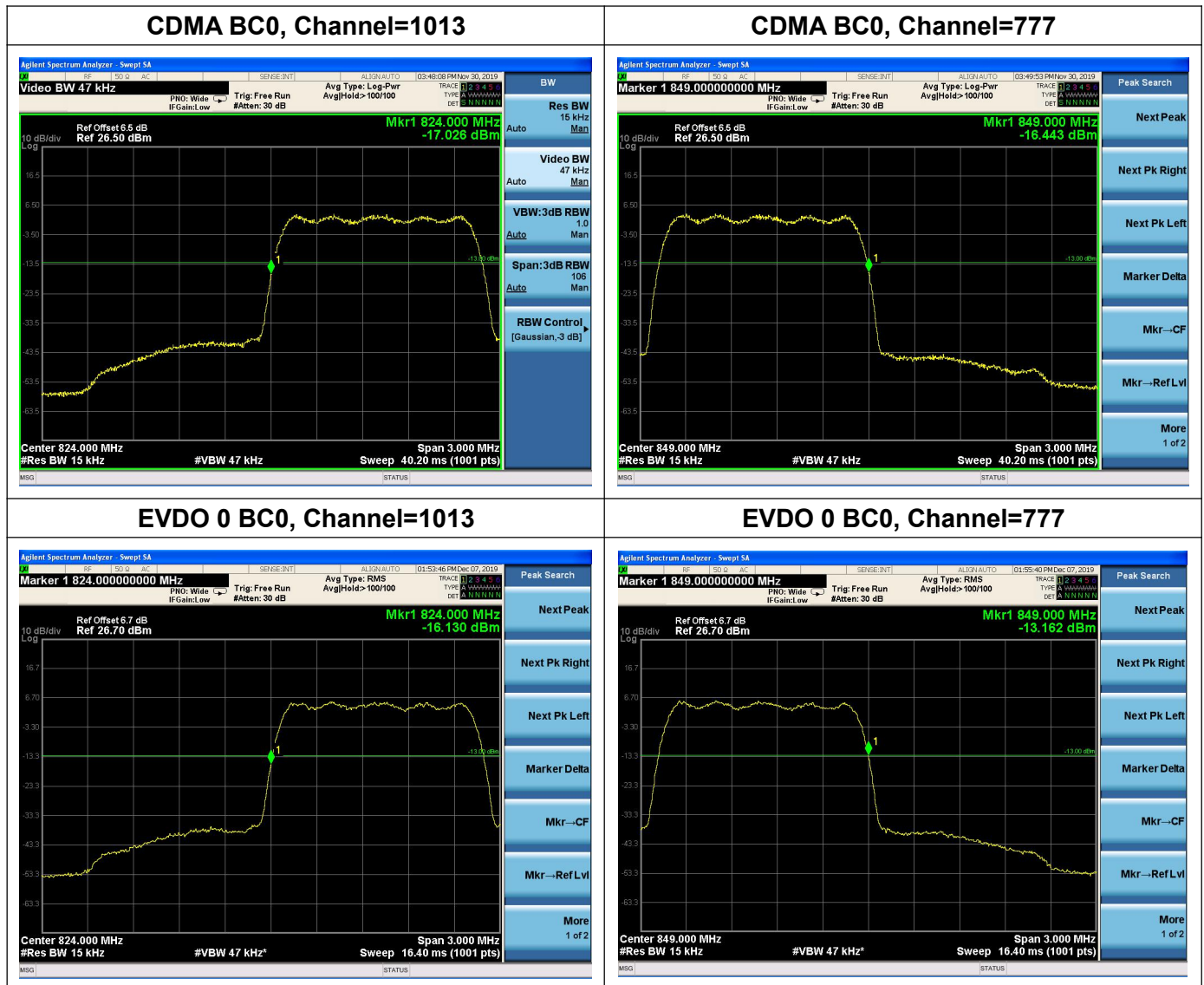
2.6.3. Test procedure

KDB 971168 D01 v03r01 Section 6.0 and ANSI/TIA-603-E-2016.



2.6.4. Test Result

The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.





EVDO A BC0, Channel=1013



EVDO A BC0, Channel=777



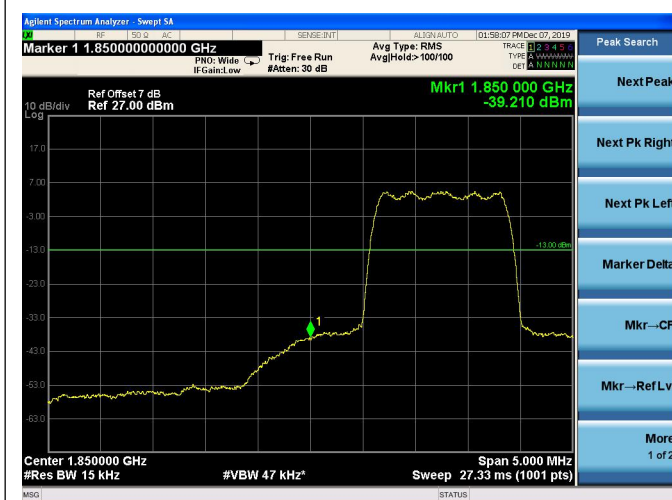
CDMA BC1, Channel=25



CDMA BC1, Channel=1175



EVDO 0 BC1, Channel=25



EVDO 0 BC1, Channel=1175





EVDO A BC1, Channel=25



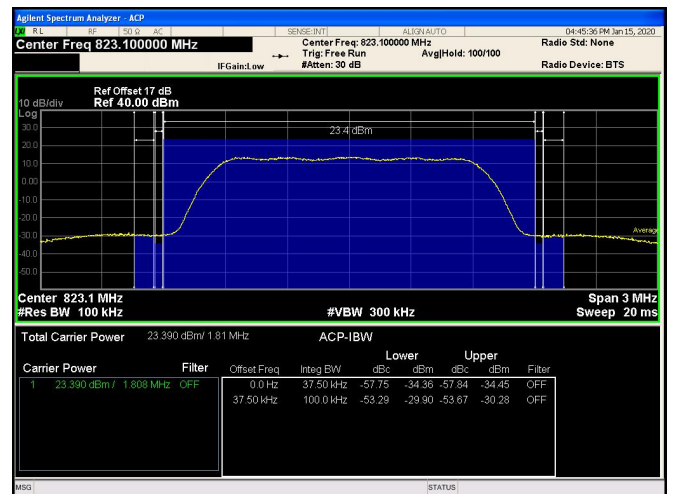
EVDO A BC1, Channel=1175



CDMA BC10, Channel=476



CDMA BC10, Channel=684



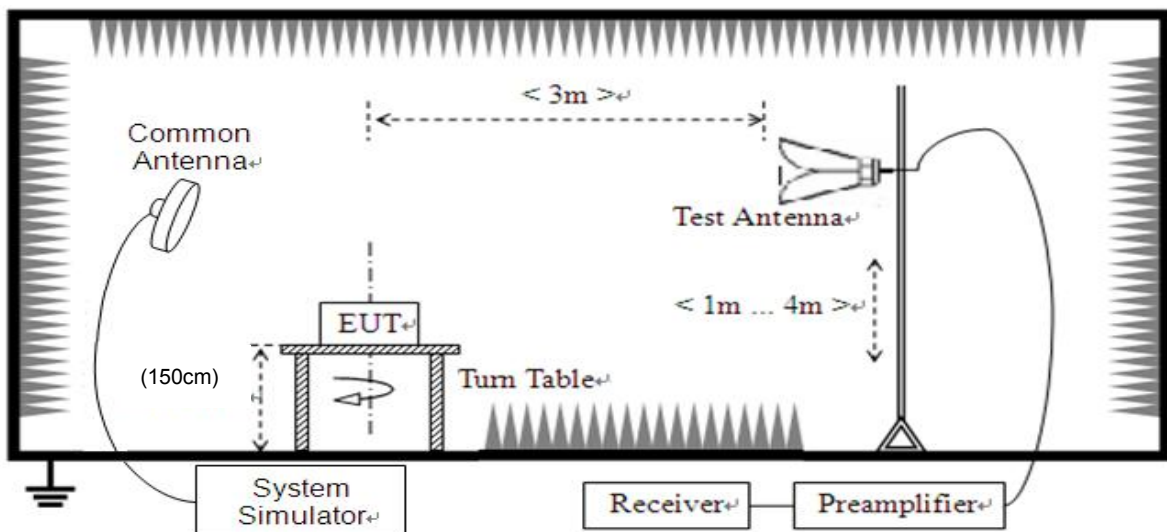
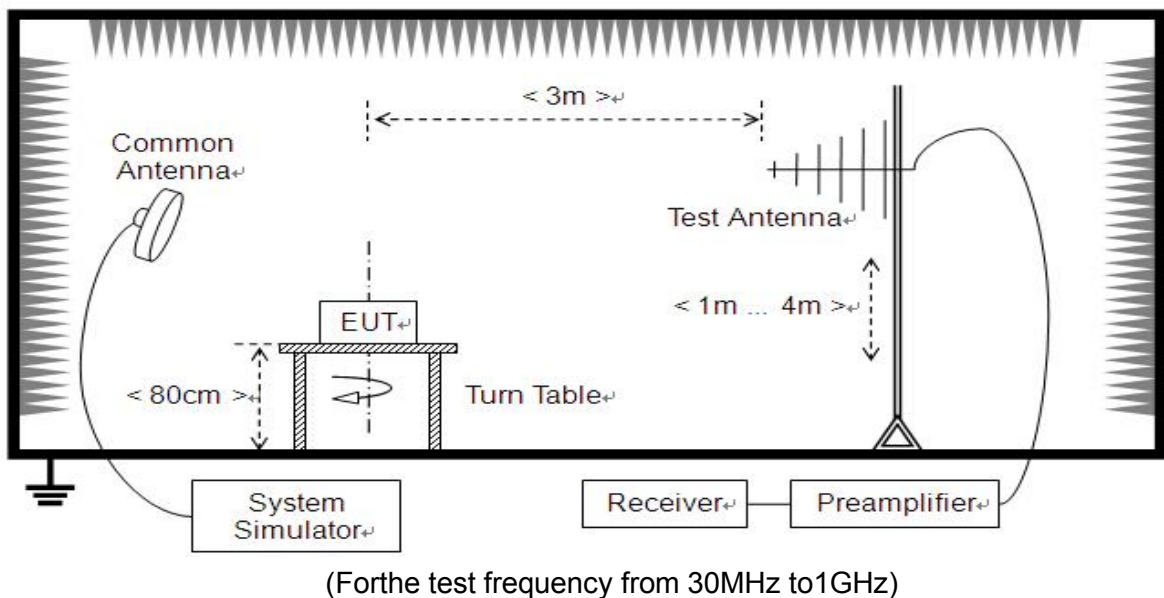
2.7. Transmitter Radiated Power (EIRP/ERP)

2.7.1. Requirement

According to FCC section 22.913 (a.2) for CDMA BC0, the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 24.232 (c) for CDMA BC1, Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

2.7.2. Test Description





(For the test frequency above 1GHz)

The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360° to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consist of Notch Filters and High Pass Filter.

2.7.3. Test procedure

KDB 971168 D01 v03r01 Section 51&5.2 and ANSI/TIA-603-E-2016.

2.7.4. Test Result

The EUT was verified under all configurations (RB size and offset) and the worst case radiated power reported for each modulation/channel bandwidth.

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze



reading is the final values which contain the data of A_{TOT} .

Note: Both horizontal and vertical polarizations of the test antenna are evaluated respectively, only the worst data (horizontal) were recorded in this report.

Test Plots:

Band	CDMA2000 BC0					
TX Channel	1013		384		777	
Frequency (MHz)	824.7		836.52		848.31	
	dBm	W	dBm	W	dBm	W
RC1 SO55	19.15	0.082	19.18	0.083	19.03	0.080
RC3 SO55	19.39	0.087	19.30	0.085	19.23	0.084
RC3 SO32 (F+SCH)	18.50	0.071	18.55	0.072	18.46	0.070
RC3 SO32 (+SCH)	18.15	0.065	18.23	0.067	18.18	0.066
1xEVDO Rev 0	18.96	0.079	18.97	0.079	18.99	0.079
1xEVDO Rev A	18.32	0.068	18.36	0.069	18.58	0.072

Band	CDMA2000 BC1					
TX Channel	25		600		1175	
Frequency (MHz)	1851.25		1880		1908.75	
	dBm	W	dBm	W	dBm	W
RC1 SO55	21.30	0.135	21.38	0.137	21.57	0.144
RC3 SO55	21.35	0.136	21.32	0.136	21.55	0.143
RC3 SO32 (F+SCH)	21.35	0.136	21.36	0.137	21.51	0.142
RC3 SO32 (+SCH)	20.33	0.108	20.40	0.110	20.51	0.112
1xEVDO Rev 0	20.68	0.117	20.79	0.120	21.07	0.128
1xEVDO Rev A	20.57	0.114	20.72	0.118	20.95	0.124

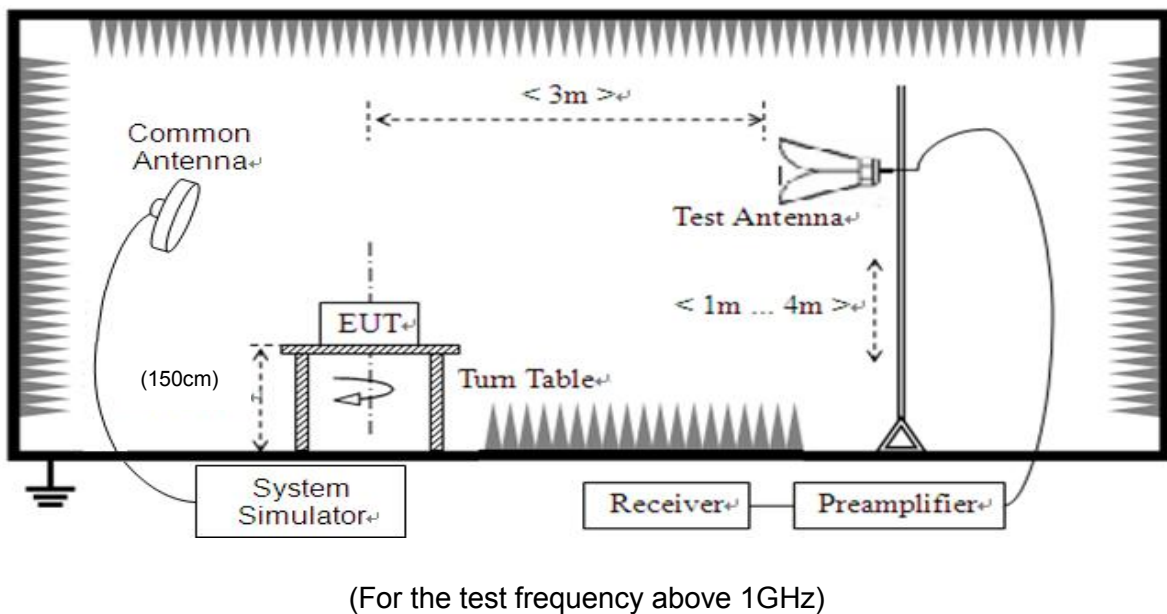
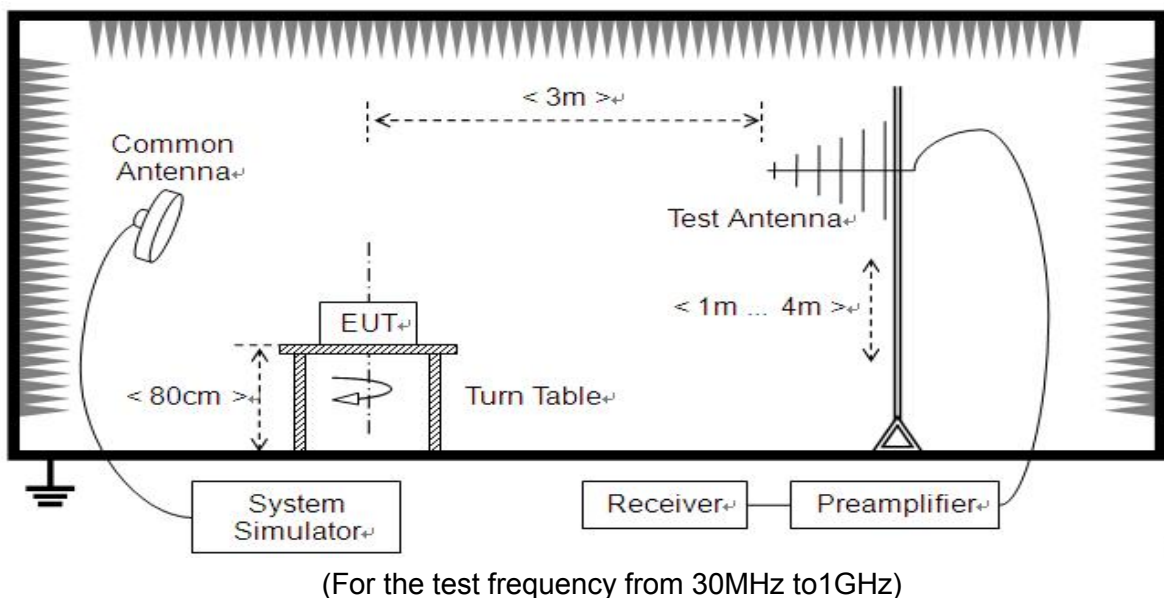
Band	CDMA2000 BC10					
TX Channel	476		526		684	
Frequency (MHz)	817.9		819.15		823.1	
	dBm	W	dBm	W	dBm	W
RC1 SO55	19.20	0.083	20.31	0.107	19.18	0.083
RC3 SO55	18.90	0.078	19.00	0.079	18.89	0.077
RC3 SO32 (F+SCH)	19.12	0.082	19.37	0.086	18.91	0.078
RC3 SO32 (+SCH)	19.03	0.080	18.45	0.070	19.15	0.082
1xEVDO Rev 0	18.89	0.077	19.23	0.084	18.97	0.079
1xEVDO Rev A	19.10	0.081	19.16	0.082	18.95	0.079

2.8. Radiated Spurious Emissions

2.8.1. Requirement

According to FCC section 2.1051, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43+10\log(P)$ dB. This calculated to be -13dBm.

2.8.2. Test Description





The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360° to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.8.3. Test procedure

KDB 971168 D01 v03r01 Section 5.8 and ANSI/TIA-603-E-2016.

2.8.4. Test Result

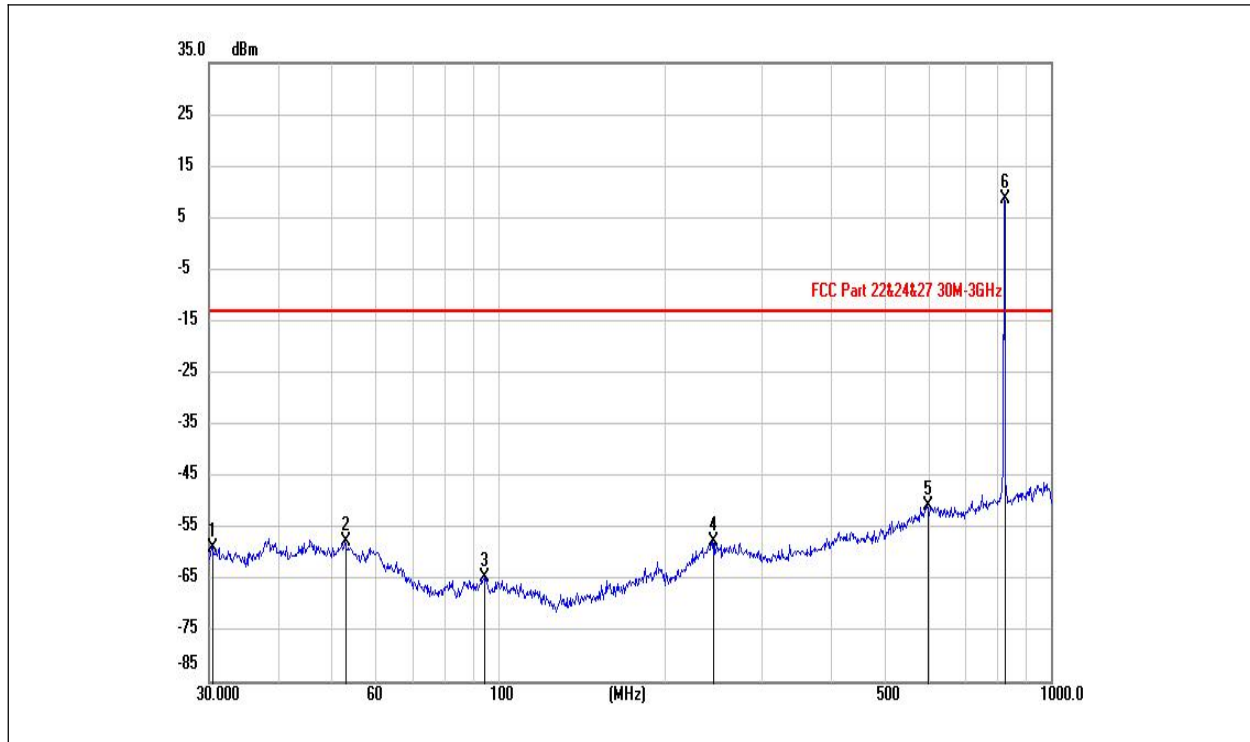
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. Test Antenna height is varied from 1m to 4m above the ground, and the Turn Table is actuated to turn from 0° to 360°, both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

Note1: The power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst case Y axis test condition was recorded in this test report.

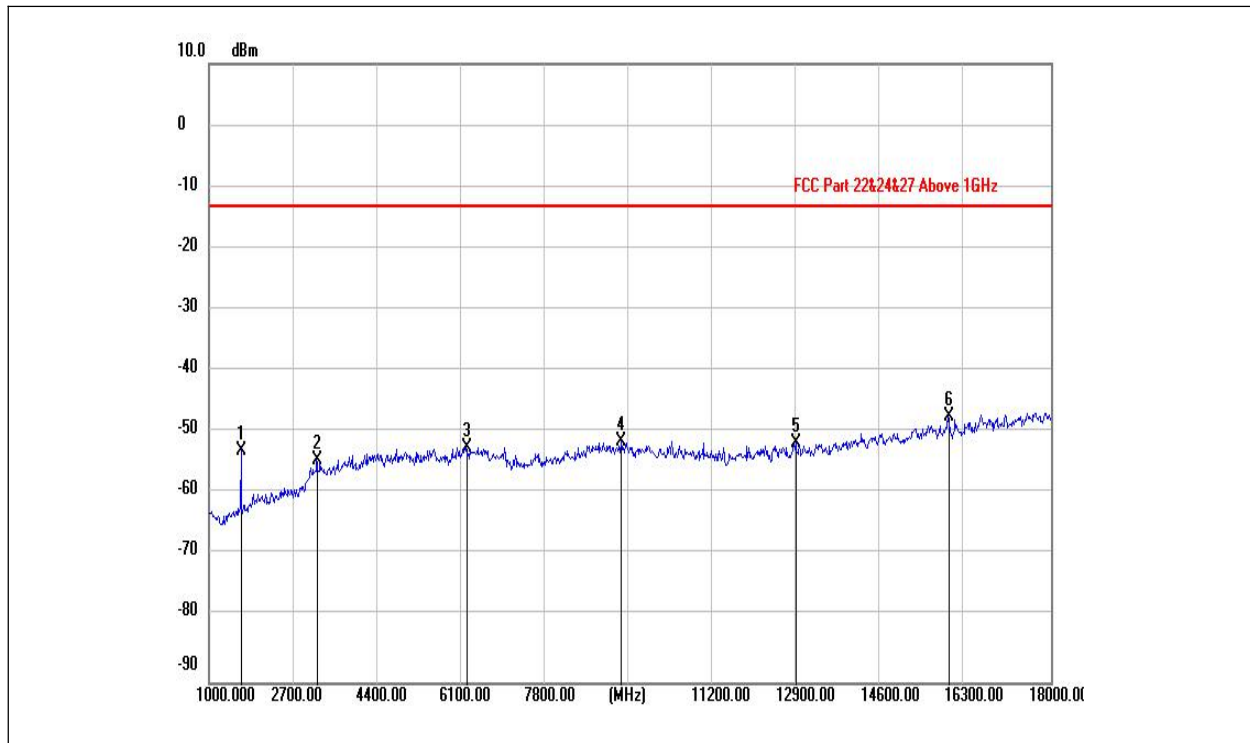
Note3: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Test Plots



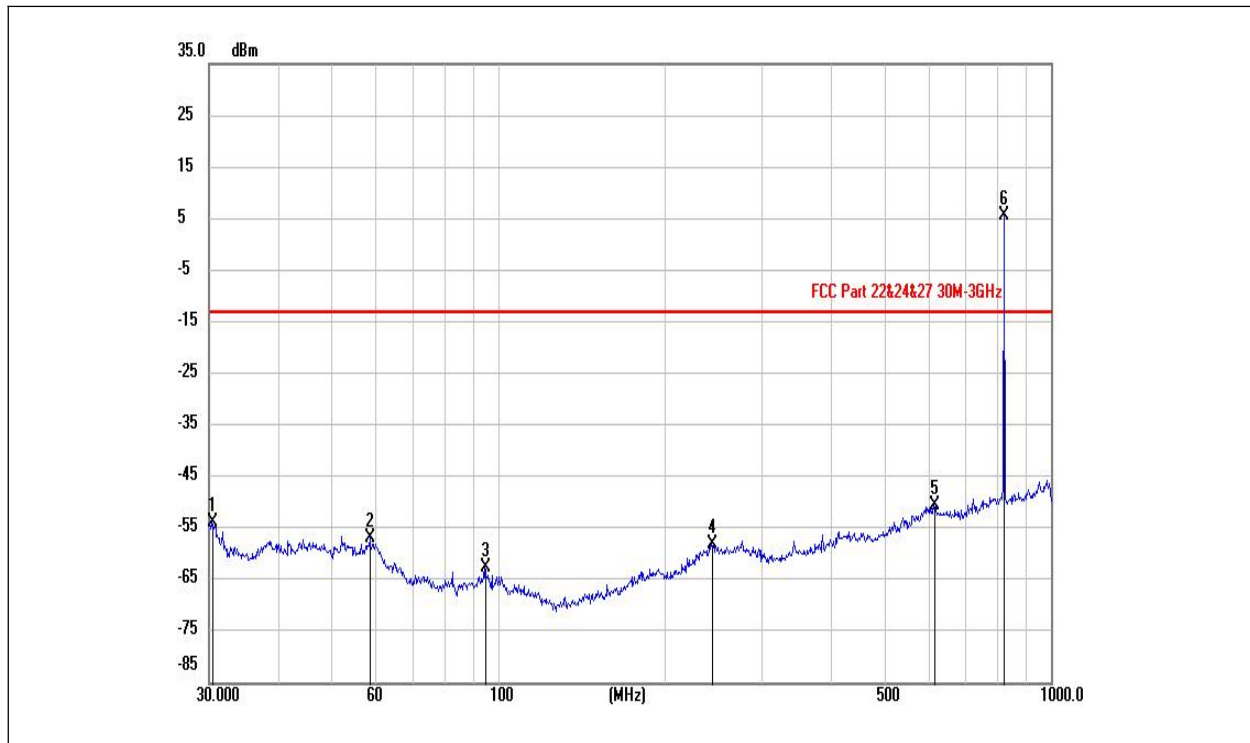
(CDMA BC 0 _ CH 1013 _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
30.4878	-58.82	-13.00	45.82	H	27.59
53.0196	-57.63	-13.00	44.63	H	30.05
94.4615	-64.65	-13.00	51.65	H	22.76
244.7465	-57.83	-13.00	44.83	H	29.03
598.4813	-50.74	-13.00	37.74	H	31.20
825.0307	8.56	N/A	N/A	H	32.06



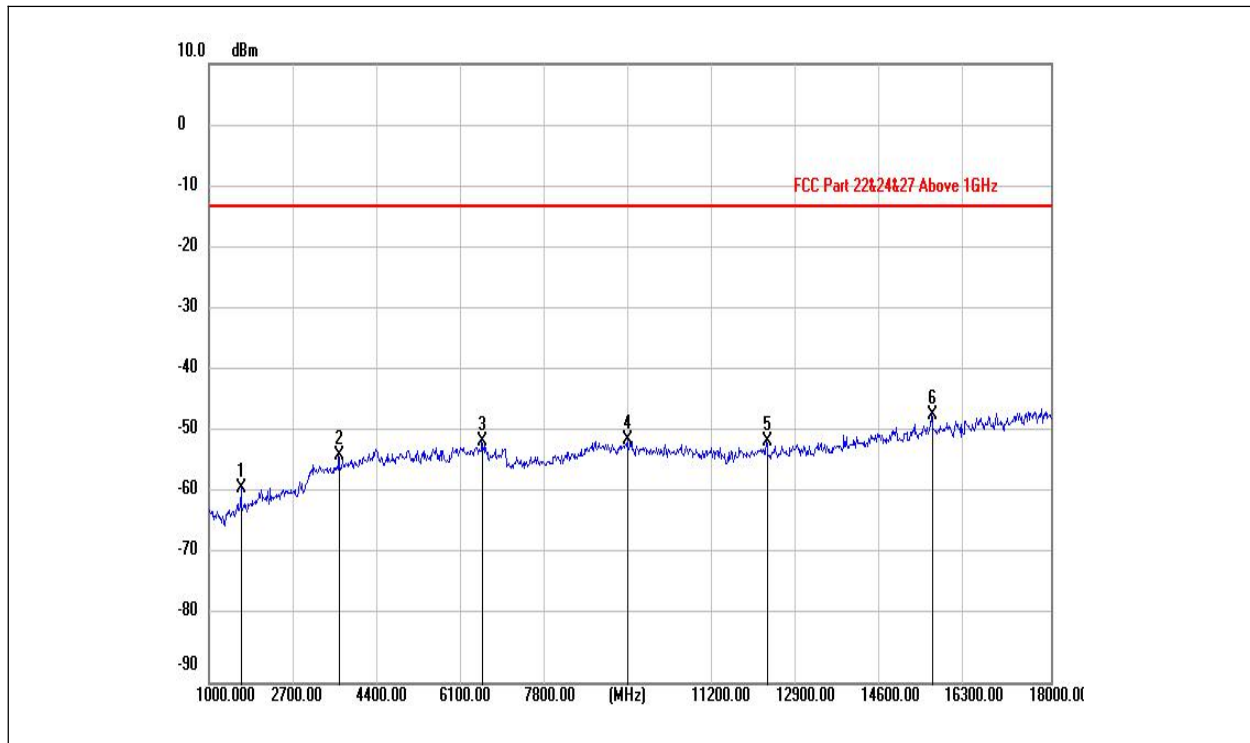
(CDMA BC 0 _ CH 1013 _ 1GHz to 18GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
1648.550	-52.36	-13.00	39.36	H	-3.25
3188.750	-53.88	-13.00	40.88	H	5.07
6188.400	-51.94	-13.00	38.94	H	9.90
9330.000	-50.86	-13.00	37.86	H	13.25
12863.450	-51.07	-13.00	38.07	H	15.90
15931.100	-47.03	-13.00	34.03	H	21.22



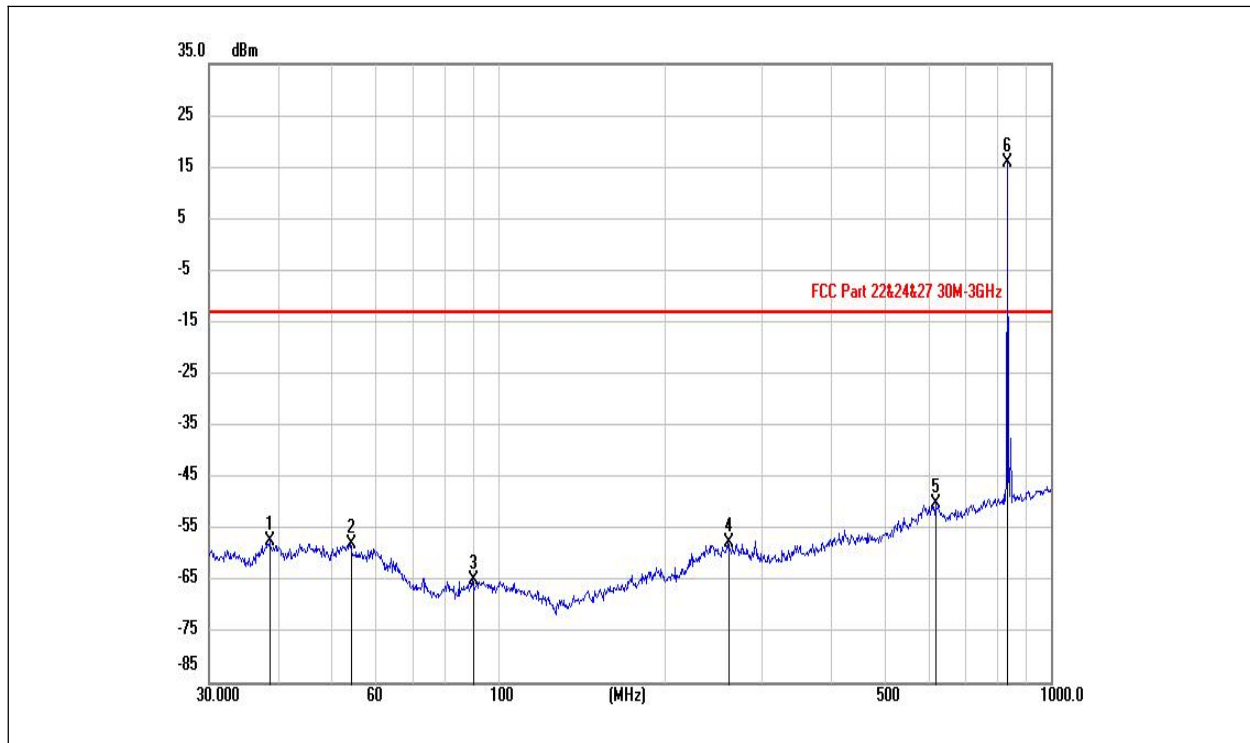
(CDMA BC 0 _ CH 1013 _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
30.4024	-53.91	-13.00	40.91	V	19.65
58.6229	-56.82	-13.00	43.82	V	22.95
94.7601	-62.51	-13.00	49.51	V	27.07
243.7188	-57.92	-13.00	44.92	V	24.99
614.5374	-50.51	-13.00	37.51	V	29.92
824.3076	5.55	N/A	N/A	V	31.79



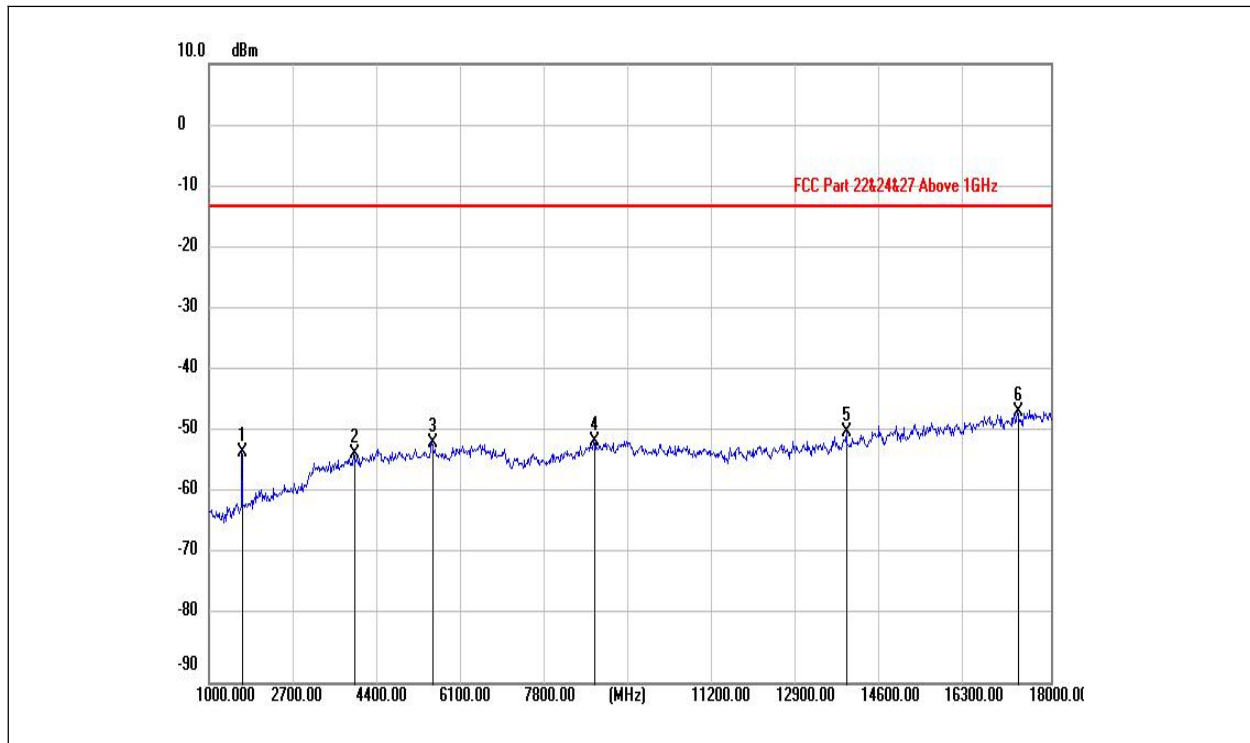
(CDMA BC 0 _ CH 1013 _ 1GHz to 18GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
1649.400	-58.38	-13.00	45.38	V	-3.23
3622.250	-53.22	-13.00	40.22	V	5.86
6524.150	-51.04	-13.00	38.04	V	10.30
9449.850	-50.79	-13.00	37.79	V	13.36
12267.600	-51.00	-13.00	38.00	V	14.54
15597.050	-46.66	-13.00	33.66	V	20.81



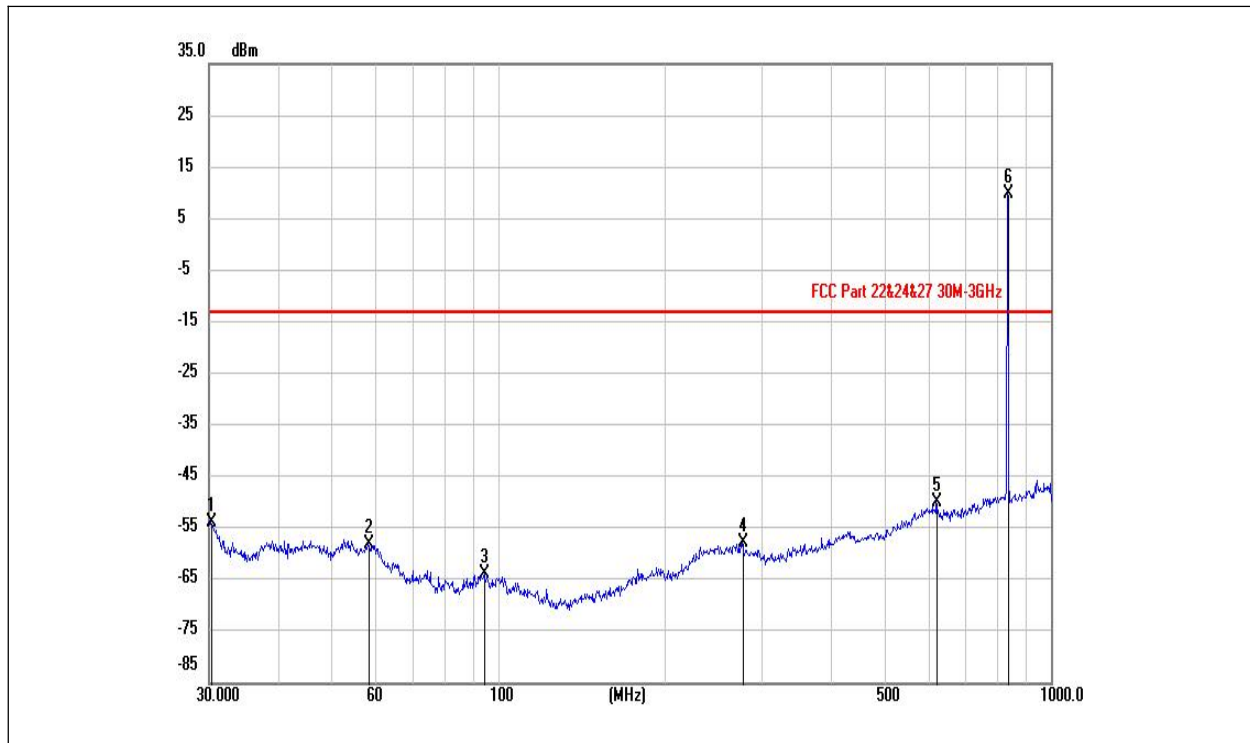
(CDMA BC 0 _ CH 384 _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
38.6839	-57.46	-13.00	44.46	H	29.66
54.2515	-57.94	-13.00	44.94	H	29.53
89.9520	-64.94	-13.00	51.94	H	21.89
260.7381	-57.84	-13.00	44.84	H	29.06
619.9483	-50.11	-13.00	37.11	H	35.34
836.2443	15.97	N/A	N/A	H	36.96



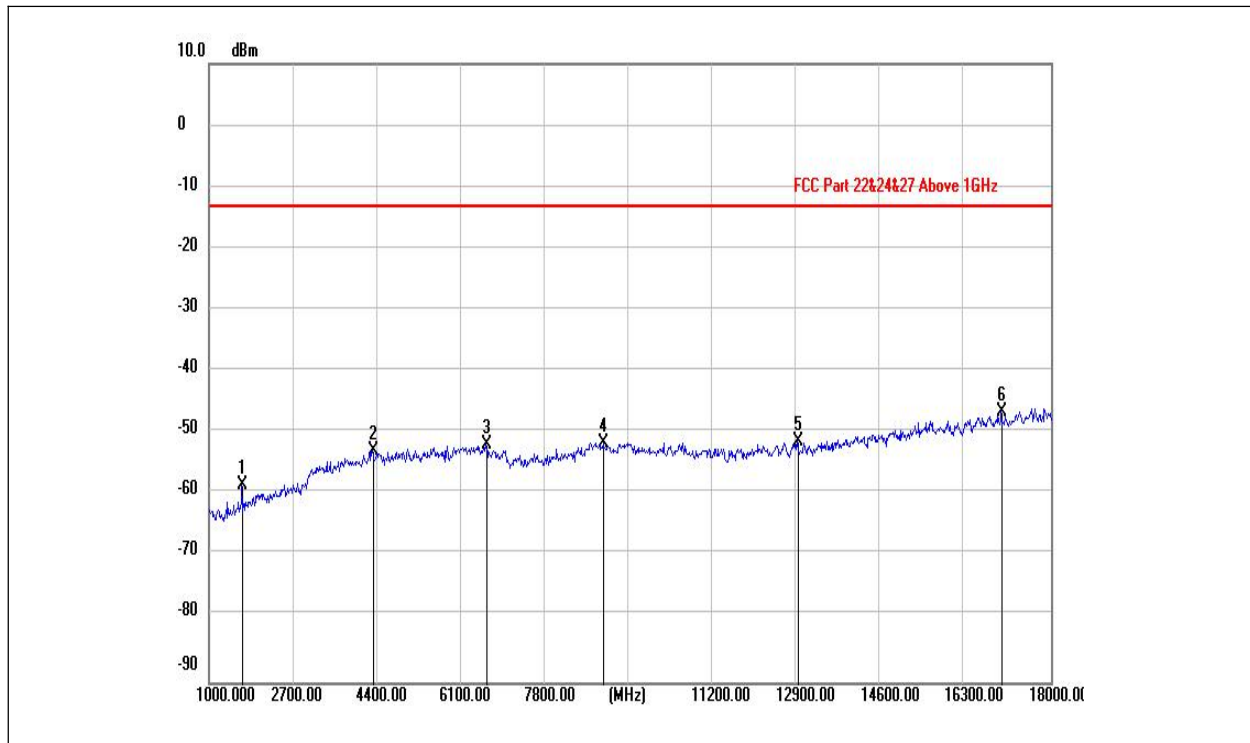
(CDMA BC 0 _ CH 384 _ 1GHz to 18GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
1672.350	-52.76	-13.00	39.76	H	-2.81
3927.400	-52.90	-13.00	39.90	H	6.81
5519.450	-51.11	-13.00	38.11	H	9.14
8785.150	-50.83	-13.00	37.83	H	12.95
13869.000	-49.44	-13.00	36.44	H	17.72
17323.400	-46.09	-13.00	33.09	H	24.08



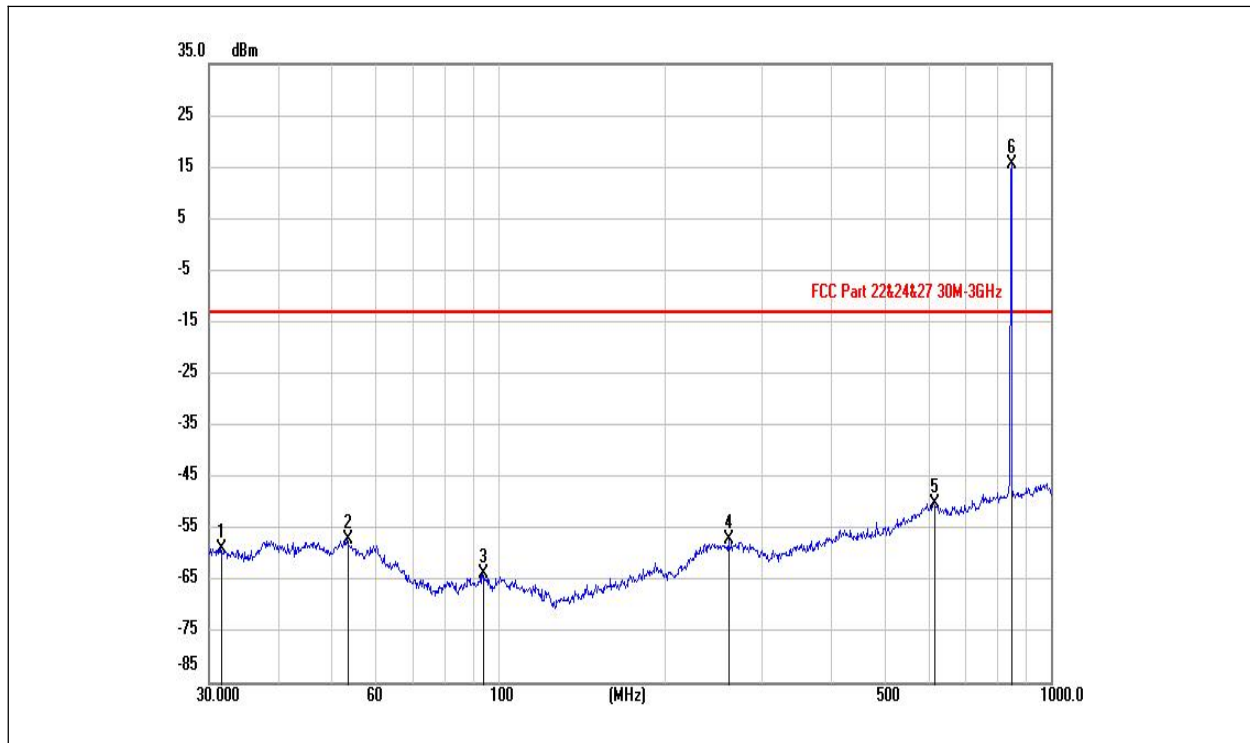
(CDMA BC 0 _ CH 384 _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
30.2164	-53.76	-13.00	40.76	V	19.59
58.3154	-57.87	-13.00	44.87	V	22.66
94.5775	-63.73	-13.00	50.73	V	26.97
276.8992	-57.76	-13.00	44.76	V	26.55
621.6899	-49.90	-13.00	36.90	V	29.73
836.5376	9.88	N/A	N/A	V	31.77



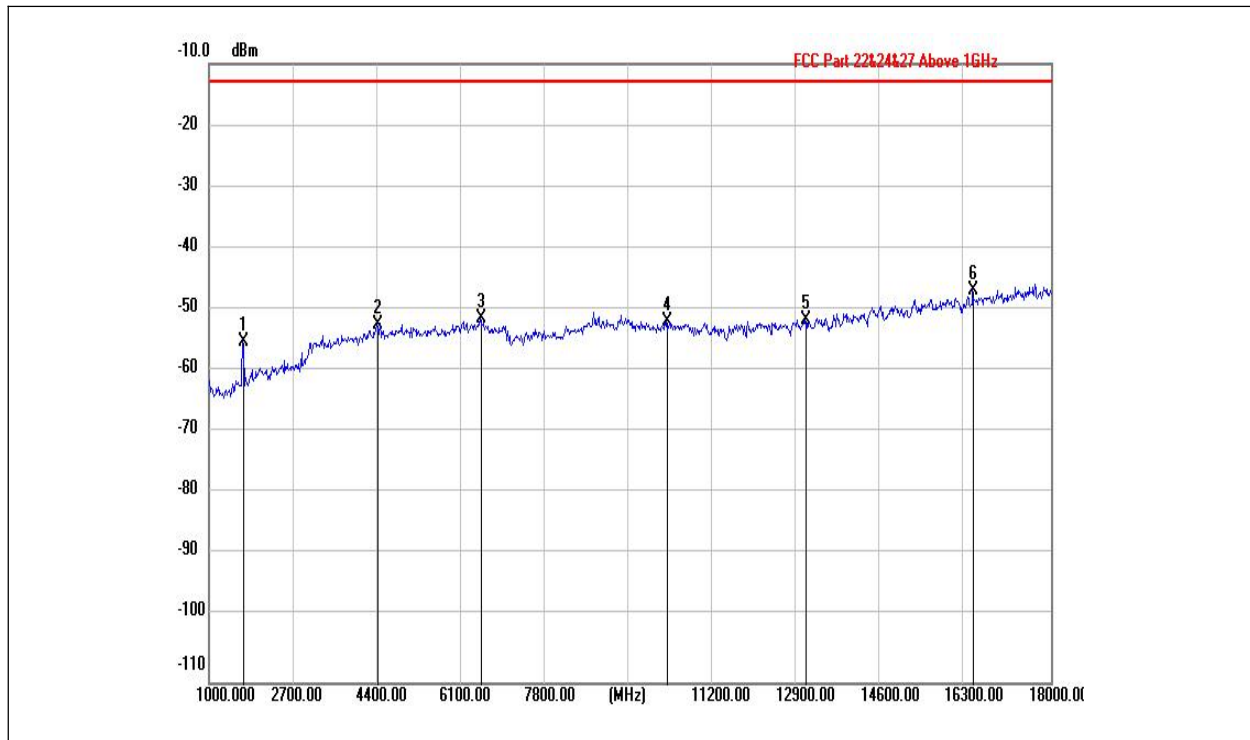
(CDMA BC 0 _ CH 384 _ 1GHz to 18GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
1671.500	-57.96	-13.00	44.96	V	-2.56
4305.650	-52.43	-13.00	39.43	V	7.99
6601.500	-51.51	-13.00	38.51	V	9.92
8959.400	-51.20	-13.00	38.20	V	13.22
12891.500	-51.01	-13.00	38.01	V	15.86
17009.750	-46.15	-13.00	33.15	V	22.19



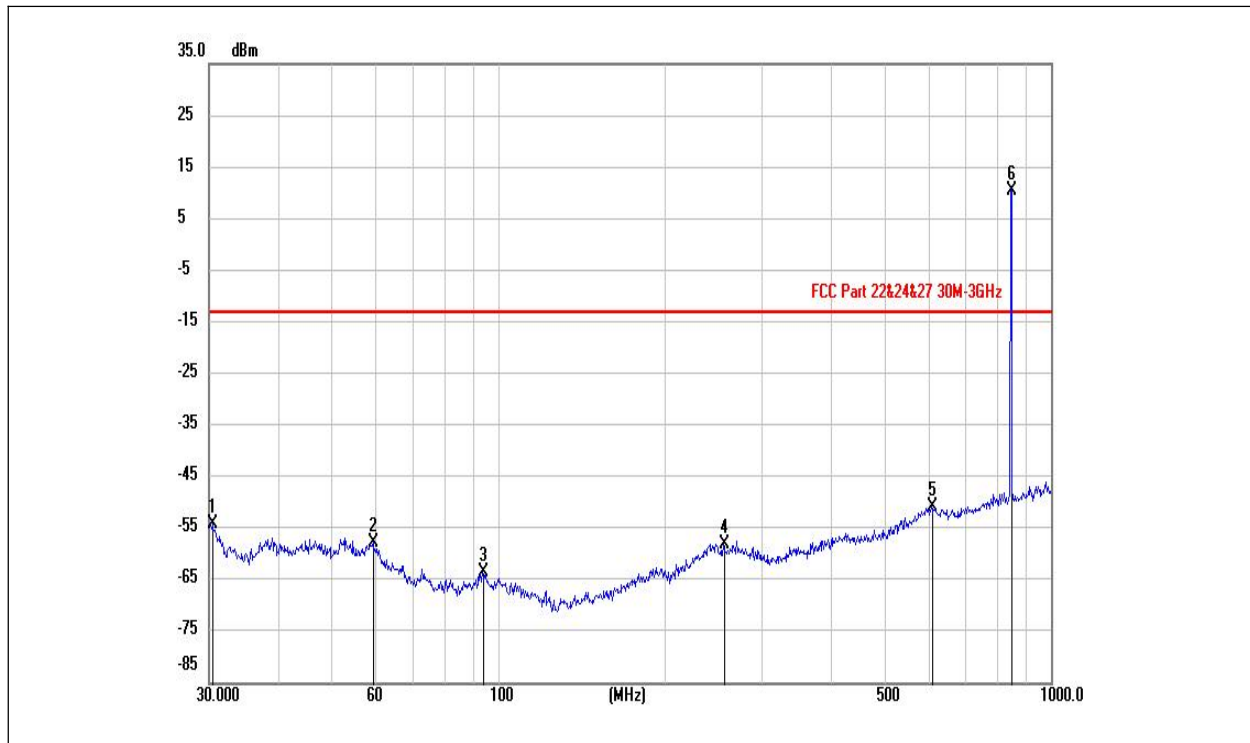
(CDMA BC 0 _ CH 777 _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
31.5150	-58.88	-13.00	45.88	H	27.48
53.3460	-57.10	-13.00	44.10	H	29.99
93.8507	-63.89	-13.00	50.89	H	22.56
261.1498	-57.23	-13.00	44.23	H	29.05
615.2920	-50.22	-13.00	37.22	H	35.43
848.2050	15.44	N/A	N/A	H	37.14



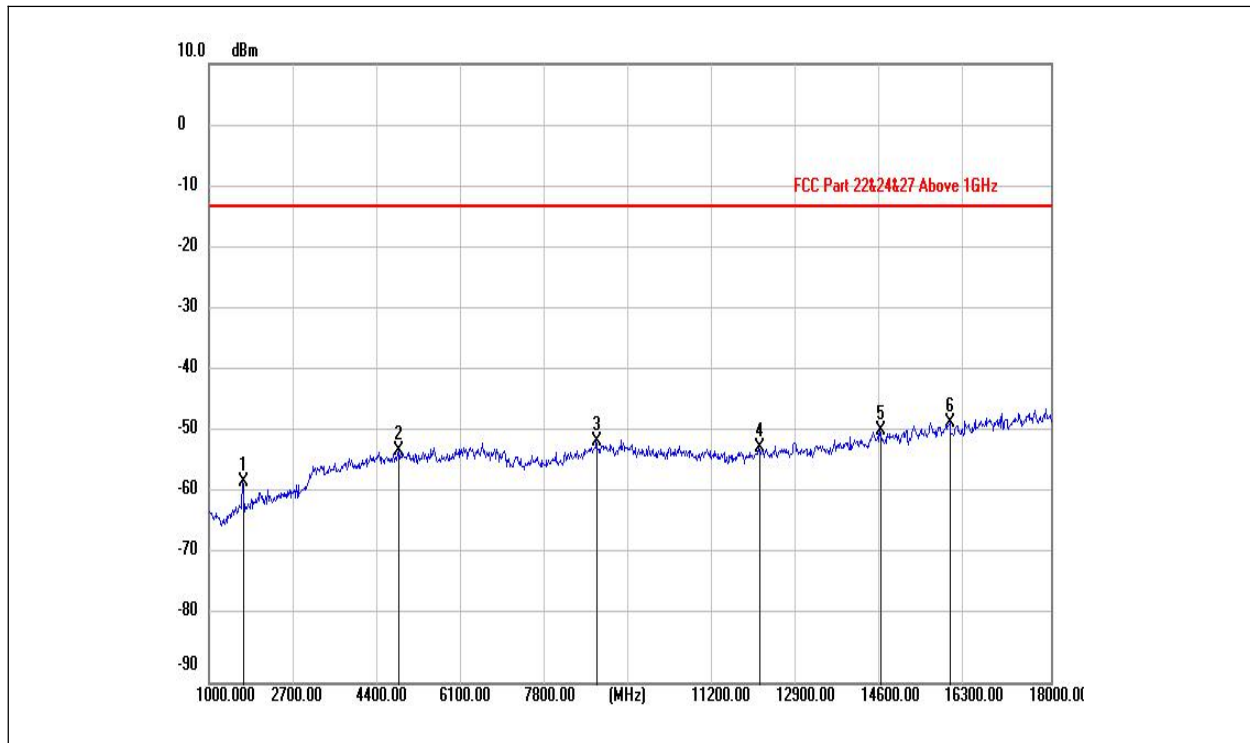
(CDMA BC 0 _ CH 777 _ 1GHz to 18GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
1696.150	-54.75	-13.00	41.75	H	-3.16
4395.750	-52.09	-13.00	39.09	H	8.24
6482.500	-51.19	-13.00	38.19	H	10.19
10241.200	-51.58	-13.00	38.58	H	13.06
13040.250	-51.31	-13.00	38.31	H	16.34
16424.950	-46.63	-13.00	33.63	H	21.32



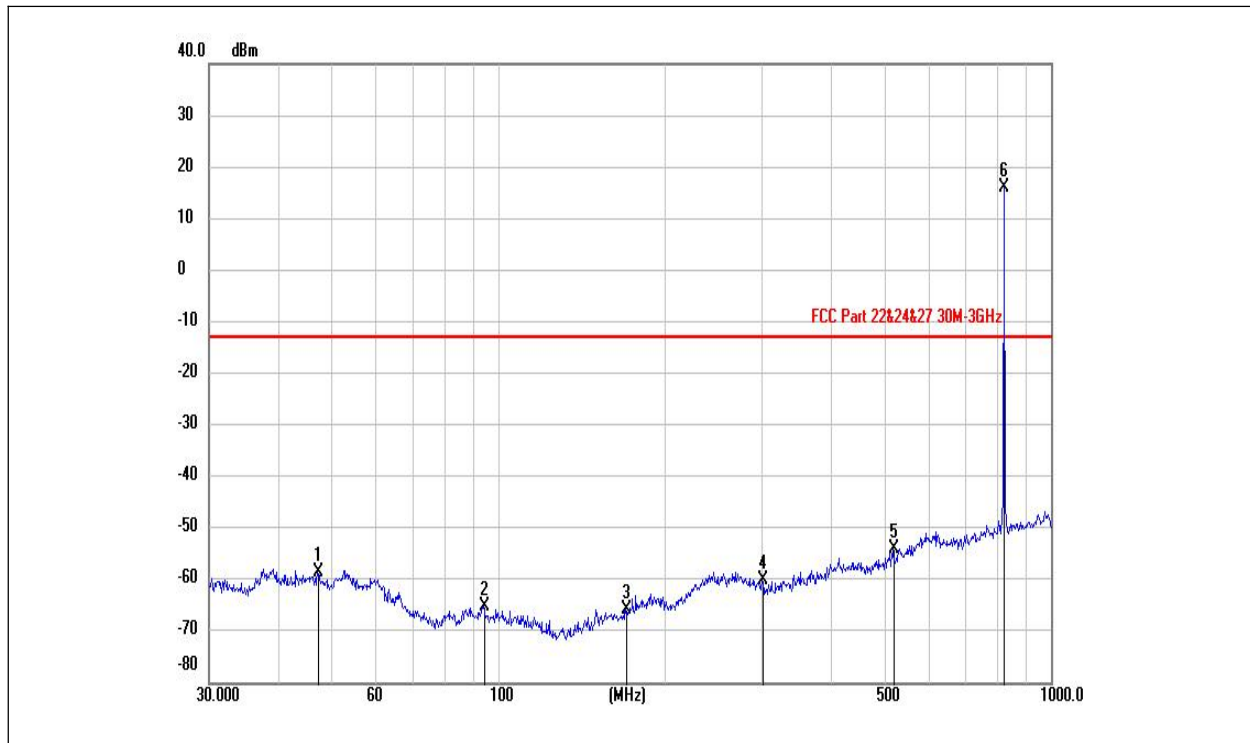
(CDMA BC 0 _ CH 777 _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
30.4665	-54.12	-13.00	41.12	V	19.68
59.5971	-57.58	-13.00	44.58	V	23.93
93.9824	-63.37	-13.00	50.37	V	26.54
256.0717	-58.04	-13.00	45.04	V	25.28
609.8148	-50.90	-13.00	37.90	V	34.35
848.8001	10.43	N/A	N/A	V	37.05



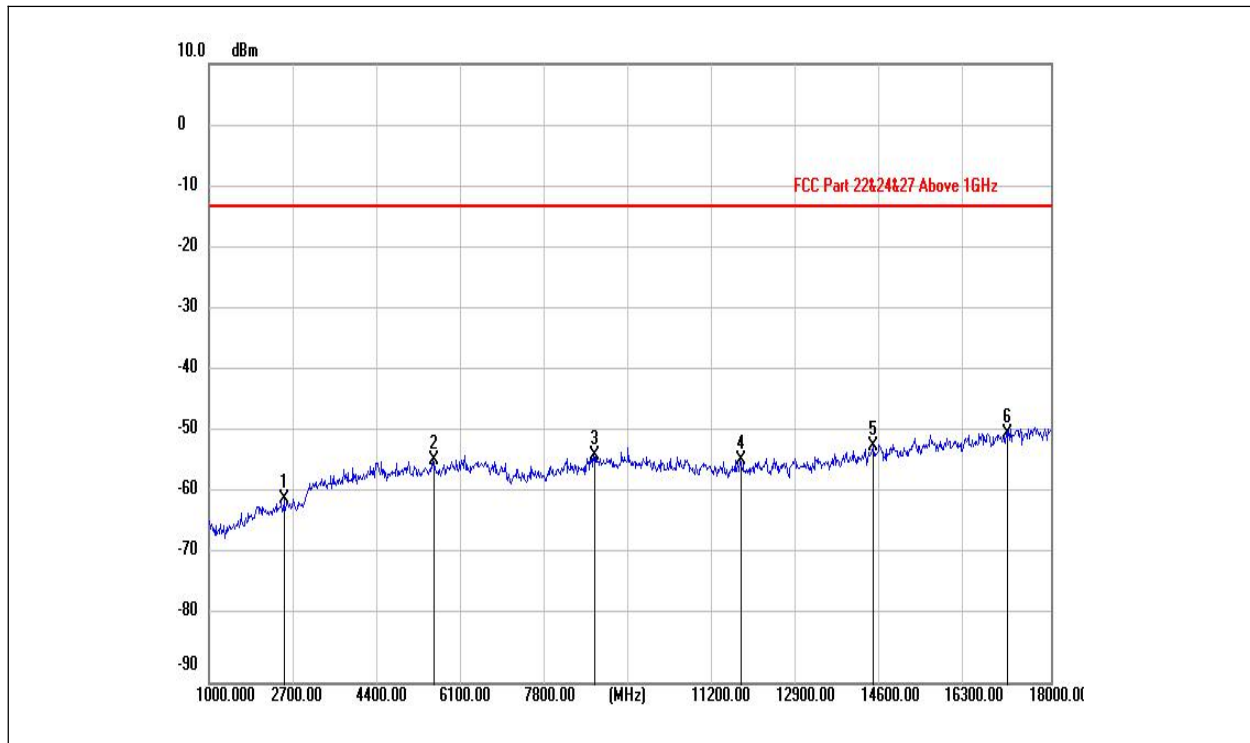
(CDMA BC 0 _ CH 777 _ 1GHz to 18GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
1696.150	-57.38	-13.00	44.38	V	-3.26
4842.000	-52.48	-13.00	39.48	V	8.48
8824.250	-50.87	-13.00	37.87	V	12.95
12117.150	-51.99	-13.00	38.99	V	14.33
14555.800	-49.06	-13.00	36.06	V	19.02
15968.500	-47.88	-13.00	34.88	V	20.93



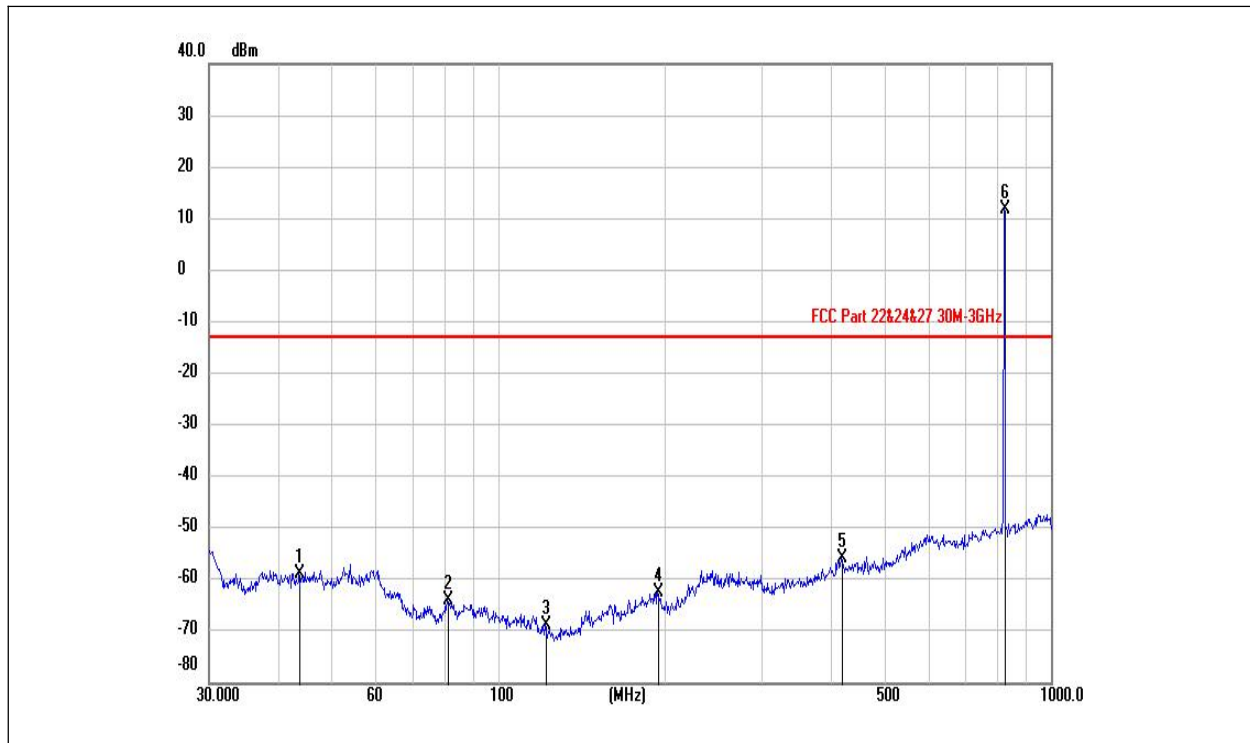
(1XEVD0 Rev 0 BC 0 _ CH 1013 _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
47.3006	-58.46	-13.00	45.46	H	29.59
94.2299	-65.16	-13.00	52.16	H	22.74
170.6729	-65.64	-13.00	52.64	H	21.52
301.2639	-59.86	-13.00	46.86	H	27.74
520.5231	-53.91	-13.00	40.91	H	32.04
824.4523	16.11	N/A	N/A	H	37.26



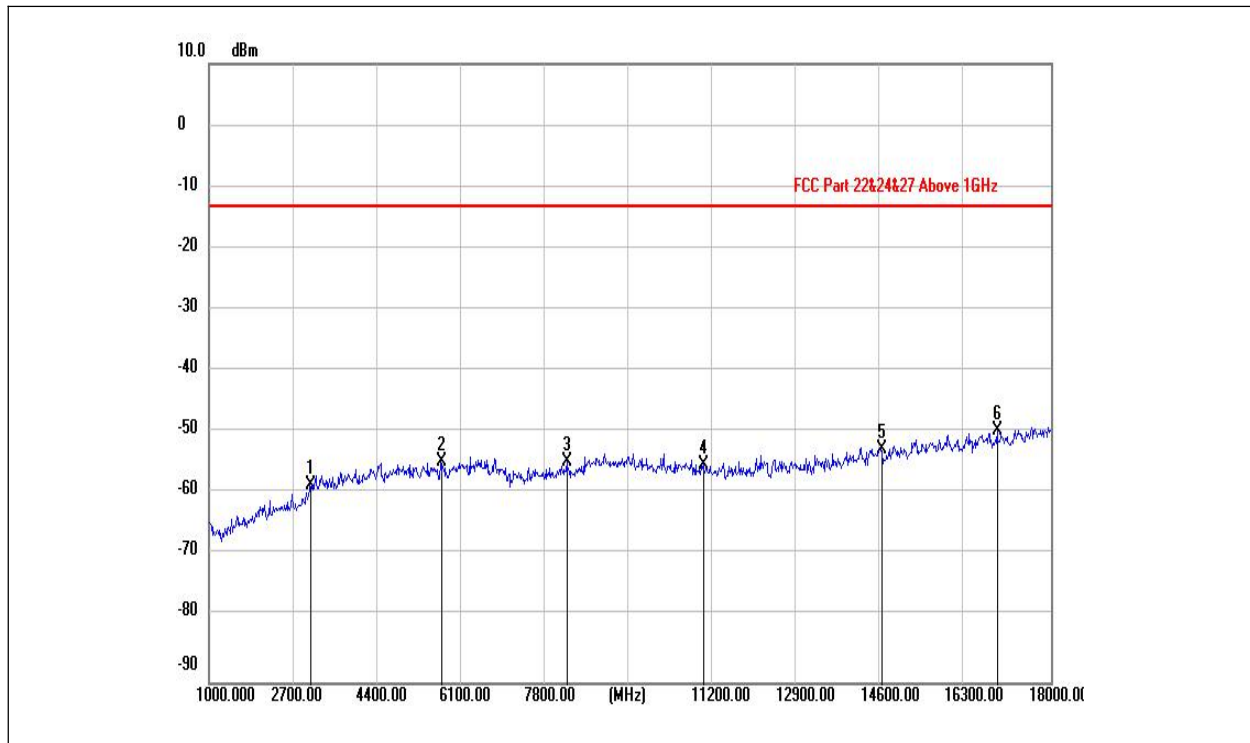
(1XEVD0 Rev 0 BC 0 _ CH 1013 _ 1GHz to 18GHz _ Horizontal)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
2517.250	-60.15	-13.00	47.15	H	0.59
5534.750	-53.94	-13.00	40.94	H	9.22
8785.150	-53.13	-13.00	40.13	H	12.95
11728.700	-53.91	-13.00	40.91	H	14.04
14413.000	-51.60	-13.00	38.60	H	18.87
17104.950	-49.58	-13.00	36.58	H	22.87



(1XEVD0 Rev 0 BC 0 _ CH 1013 _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
43.6968	-58.85	-13.00	45.85	V	21.75
81.0411	-63.98	-13.00	50.98	V	22.21
121.6765	-68.79	-13.00	55.79	V	28.98
194.9655	-62.24	-13.00	49.24	V	24.58
418.0073	-55.58	-13.00	42.58	V	30.07
825.0307	11.68	N/A	N/A	V	36.96



(1XEVD0 Rev 0 BC 0 _ CH 1013 _ 1GHz to 18GHz _ Vertical)

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Pol	Corr. (dB)
3049.350	-58.07	-13.00	45.07	V	4.17
5675.850	-54.22	-13.00	41.22	V	8.77
8233.500	-54.26	-13.00	41.26	V	11.49
10980.700	-54.78	-13.00	41.78	V	13.36
14576.200	-52.07	-13.00	39.07	V	19.01
16917.950	-49.07	-13.00	36.07	V	22.27