



Appendix for test report

1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band	Test Mode	Test Channel	Conducted Power [dBm]	ERP [dBm]	Limit [dBm]	Verdict
BC0	CDMA/1X/TM1	LCH	23.59	22.24	38.5	PASS
		MCH	23.5	22.42	38.5	PASS
		HCH	23.55	22.2	38.5	PASS
	CDMA/1X/TM3	LCH	23.61	22.26	38.5	PASS
		MCH	23.48	22.47	38.5	PASS
		HCH	23.47	22.43	38.5	PASS
BC1	CDMA/1X/TM1	LCH	24.58	25.38	33	PASS
		MCH	24.61	25.72	33	PASS
		HCH	24.35	25.45	33	PASS
	CDMA/1X/TM3	LCH	24.62	25.42	33	PASS
		MCH	24.54	25.63	33	PASS
		HCH	24.22	25.02	33	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

Note2: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
BC0	CDMA/1X/TM1	LCH	3.7	13	PASS
		MCH	5.28	13	PASS
		HCH	5.18	13	PASS
	CDMA/1X/TM3	LCH	3.29	13	PASS
		MCH	4.04	13	PASS
		HCH	3.48	13	PASS
BC1	CDMA/1X/TM1	LCH	4.27	13	PASS
		MCH	4.55	13	PASS
		HCH	4.21	13	PASS
	CDMA/1X/TM3	LCH	3.75	13	PASS
		MCH	4	13	PASS
		HCH	3.75	13	PASS

3Appendix_C: Modulation Characteristics

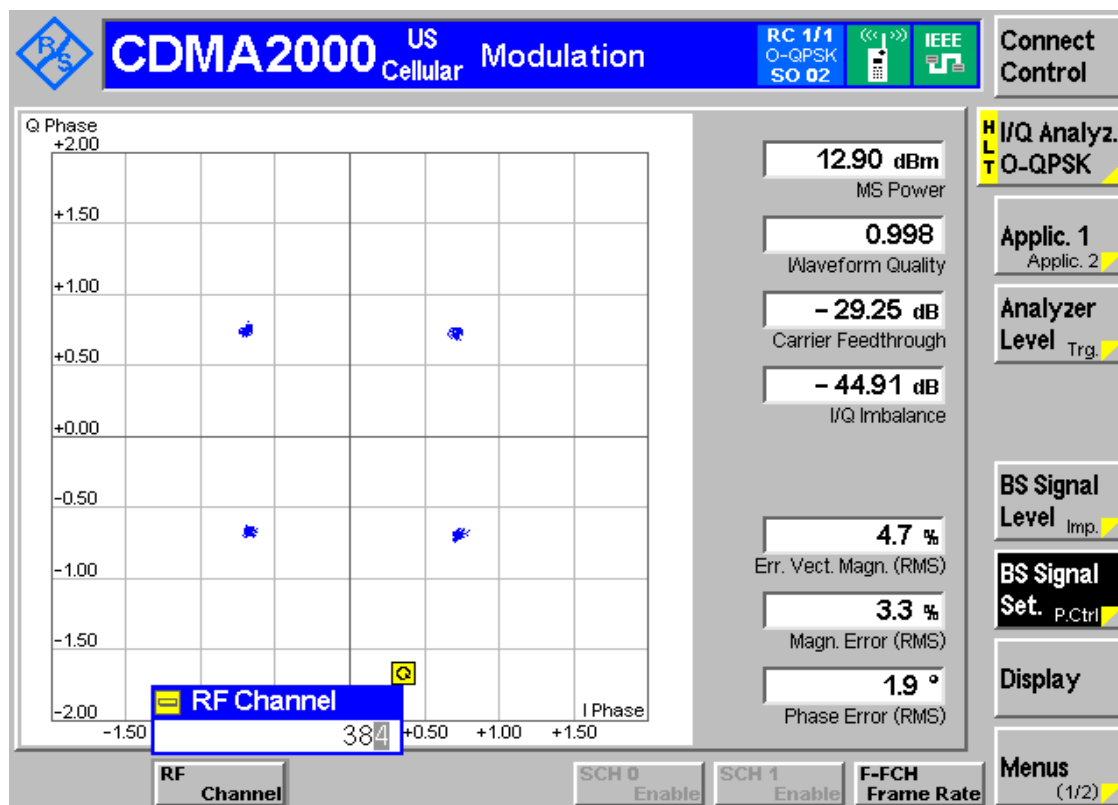
Part I - Test Plots

3.1 For CDMA/1X

3.1.1 Test Band = BC0

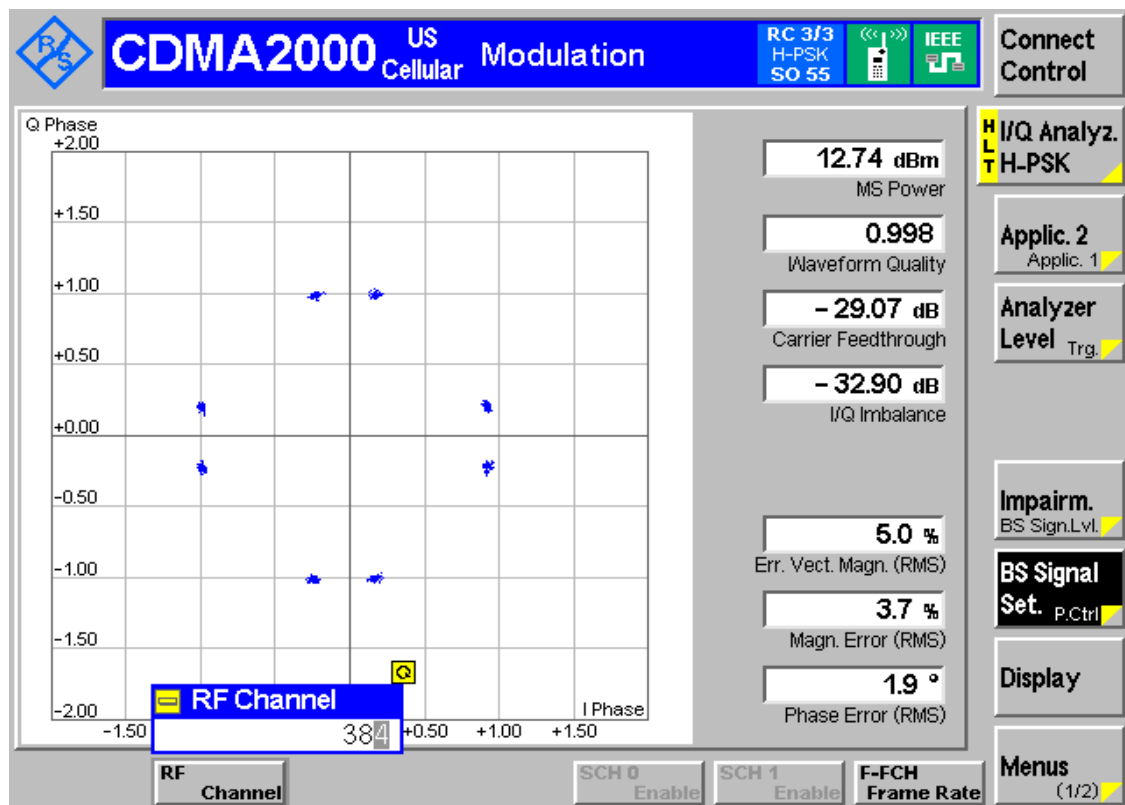
3.1.1.1 Test Mode = CDMA/1X/TM1

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = CDMA/1X/TM3

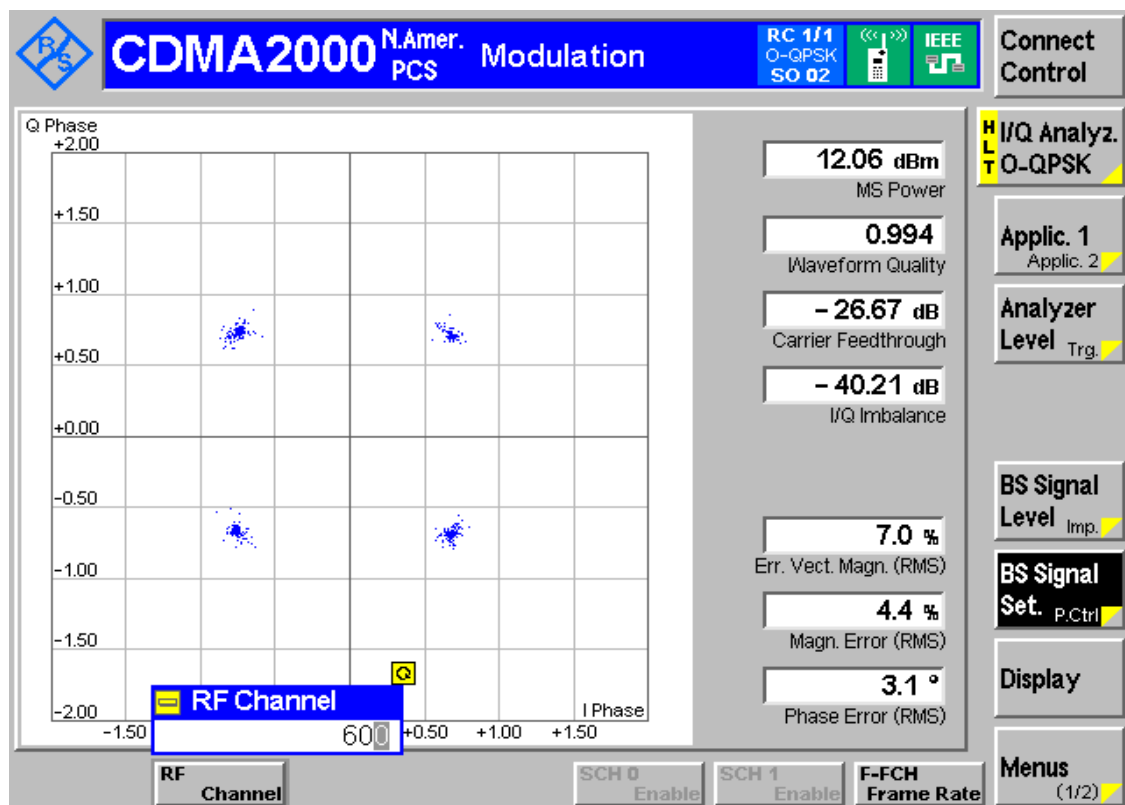
3.1.1.2.1 Test Channel = MCH



3.1.2 Test Band = BC1

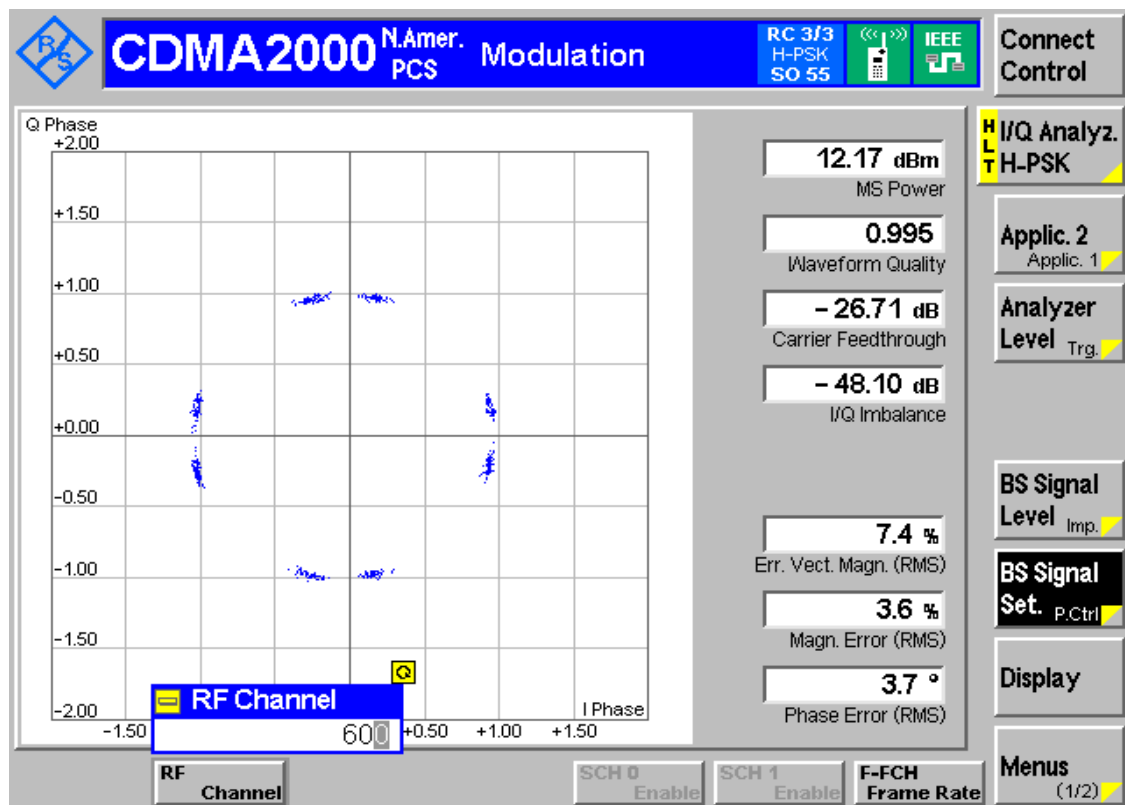
3.1.2.1 Test Mode = CDMA/1X/TM1

3.1.2.1.1 Test Channel = MCH



3.1.2.2 Test Mode = CDMA/1X/TM3

3.1.2.2.1 Test Channel = MCH



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
BC0	CDMA/1X/TM1	LCH	1.30	1.48	Pass
		MCH	1.29	1.45	Pass
		HCH	1.30	1.46	Pass
	CDMA/1X/TM3	LCH	1.29	1.45	Pass
		MCH	1.29	1.45	Pass
		HCH	1.29	1.46	Pass
BC1	CDMA/1X/TM1	LCH	1.30	1.49	Pass
		MCH	1.30	1.47	Pass
		HCH	1.31	1.50	Pass
	CDMA/1X/TM3	LCH	1.29	1.46	Pass
		MCH	1.28	1.45	Pass
		HCH	1.28	1.46	Pass

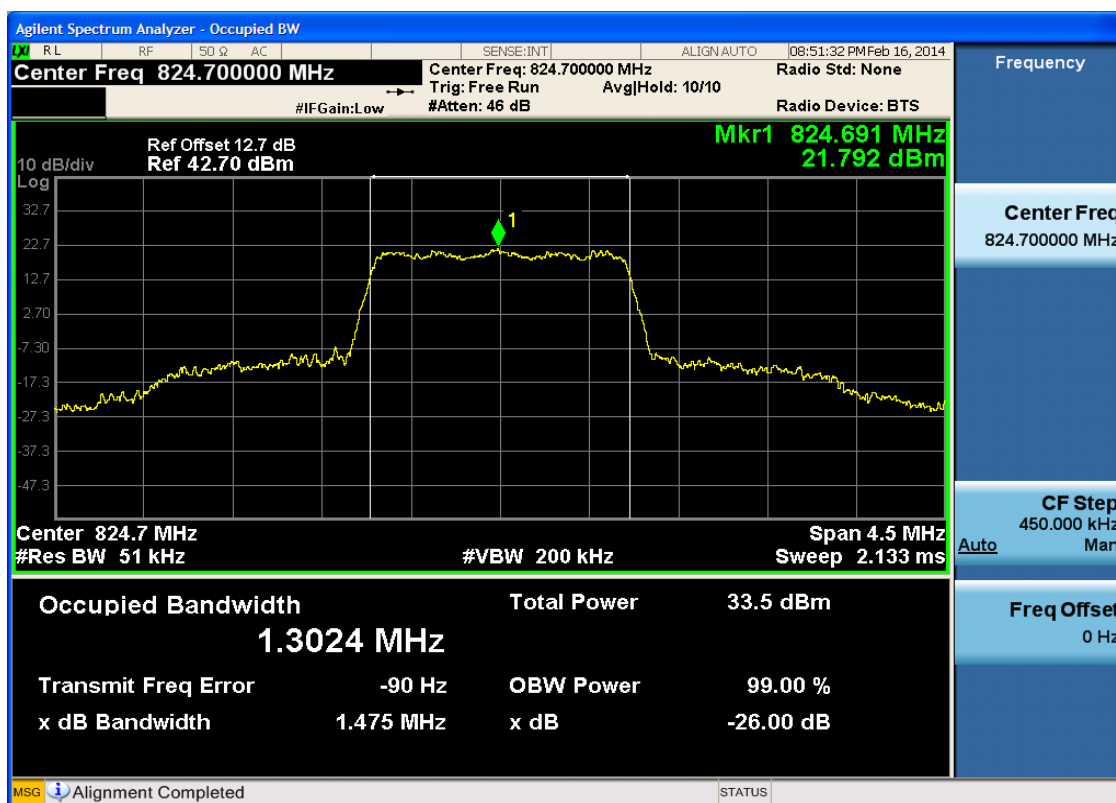
Part II - Test Plots

4.1 For CDMA/1X

4.1.1 Test Band = BC0

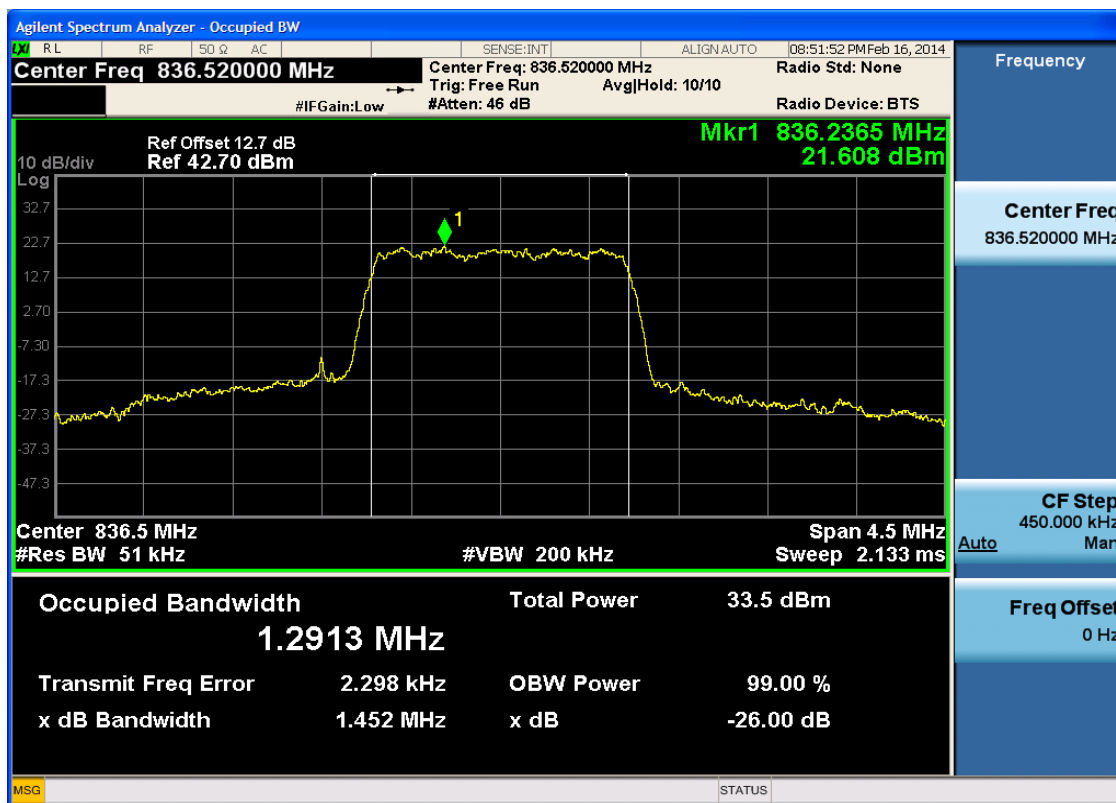
4.1.1.1 Test Mode = CDMA/1X/TM1

4.1.1.1.1 Test Channel = LCH



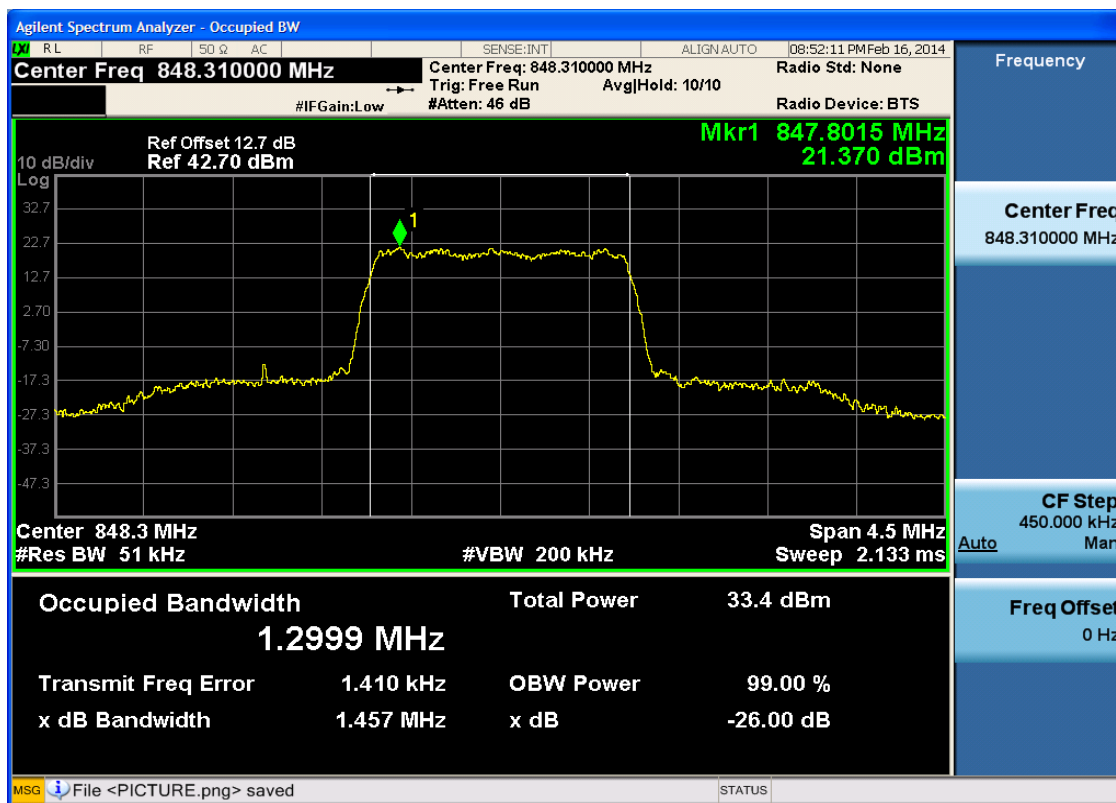


4.1.1.1.2 Test Channel = MCH





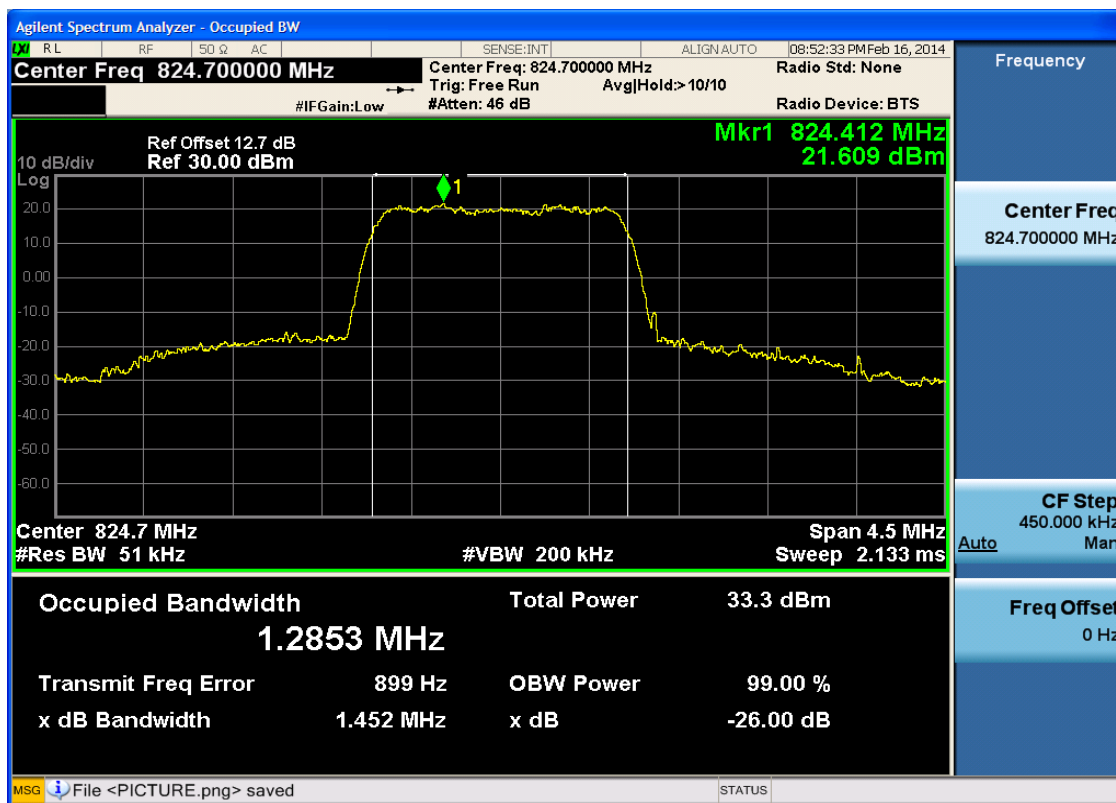
4.1.1.1.3 Test Channel = HCH





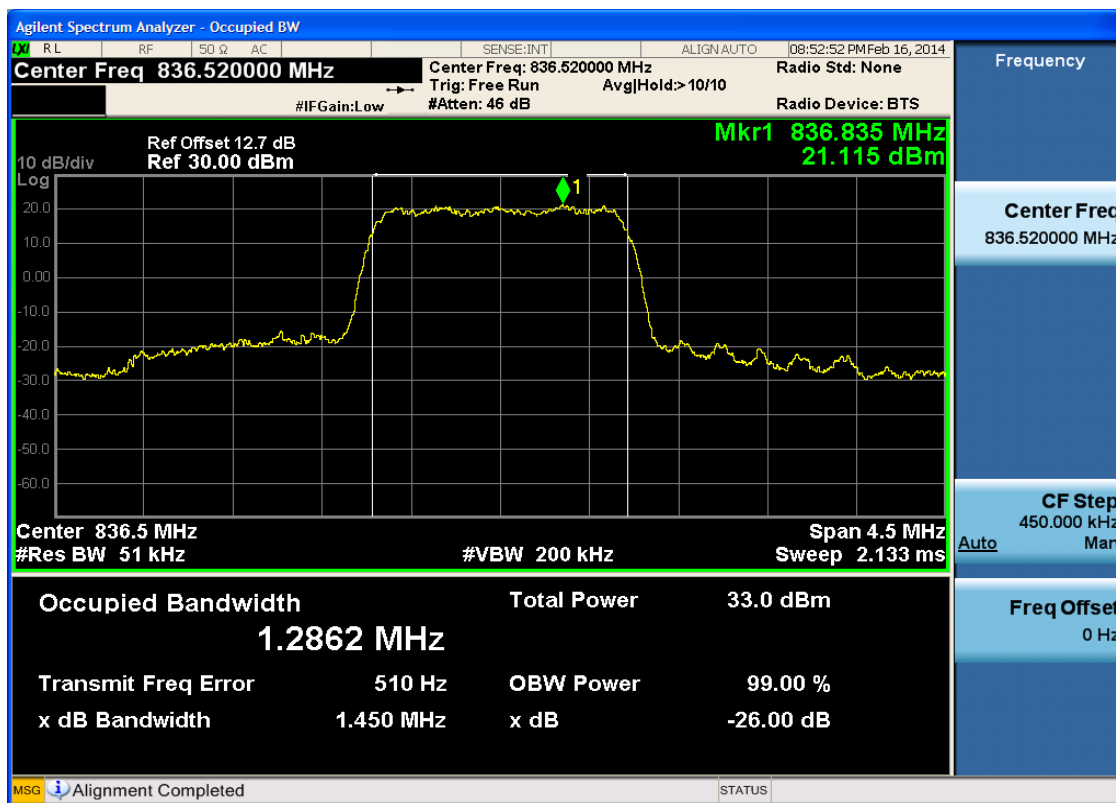
4.1.1.2 Test Mode = CDMA/1X/TM3

4.1.1.2.1 Test Channel = LCH

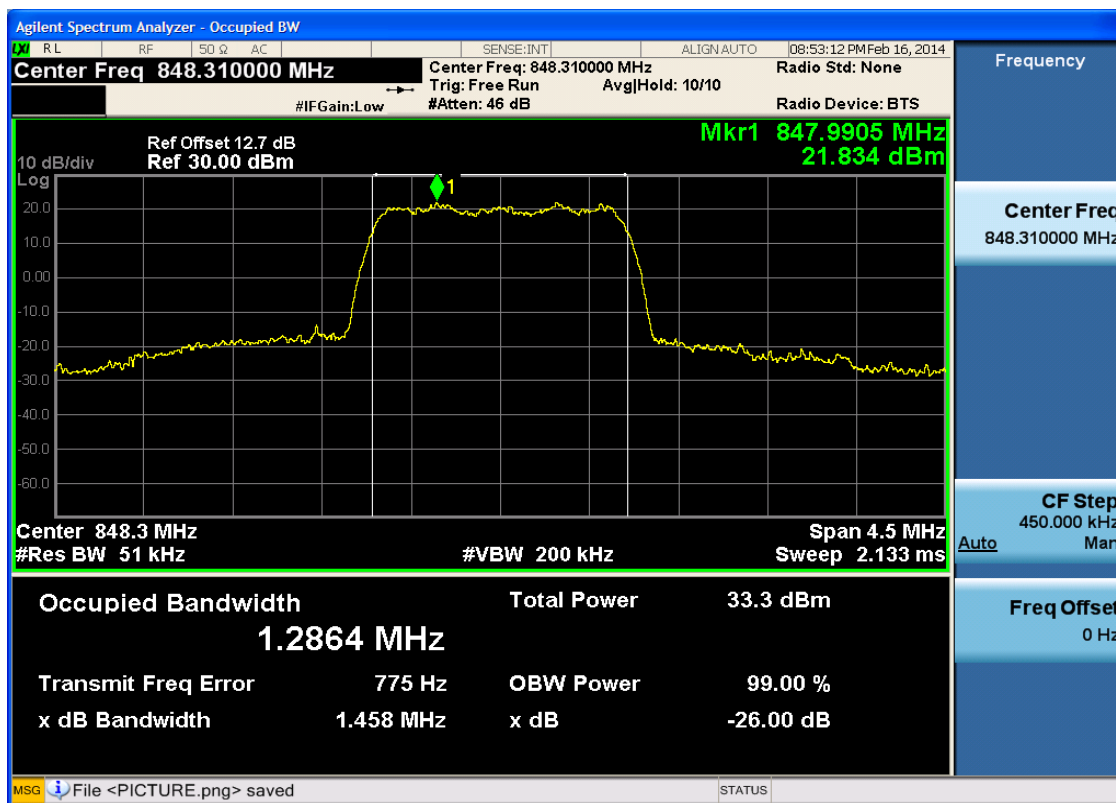




4.1.1.2.2 Test Channel = MCH



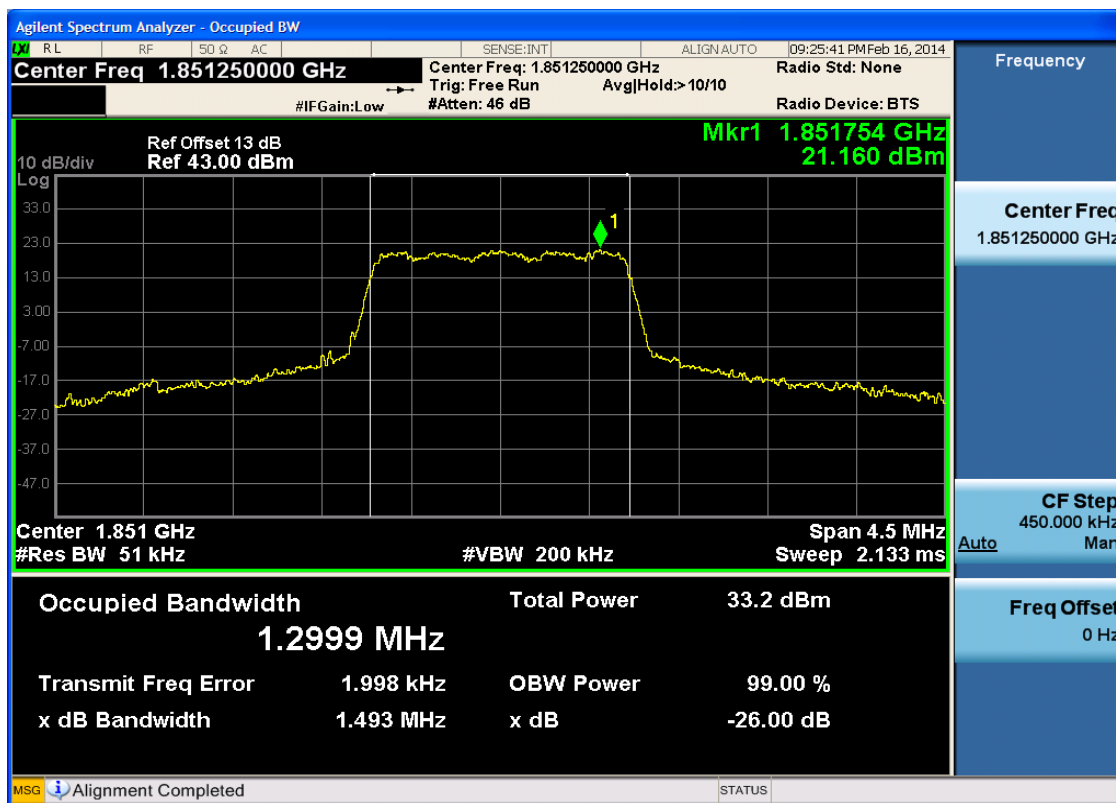
4.1.1.2.3 Test Channel = HCH



4.1.2 Test Band = BC1

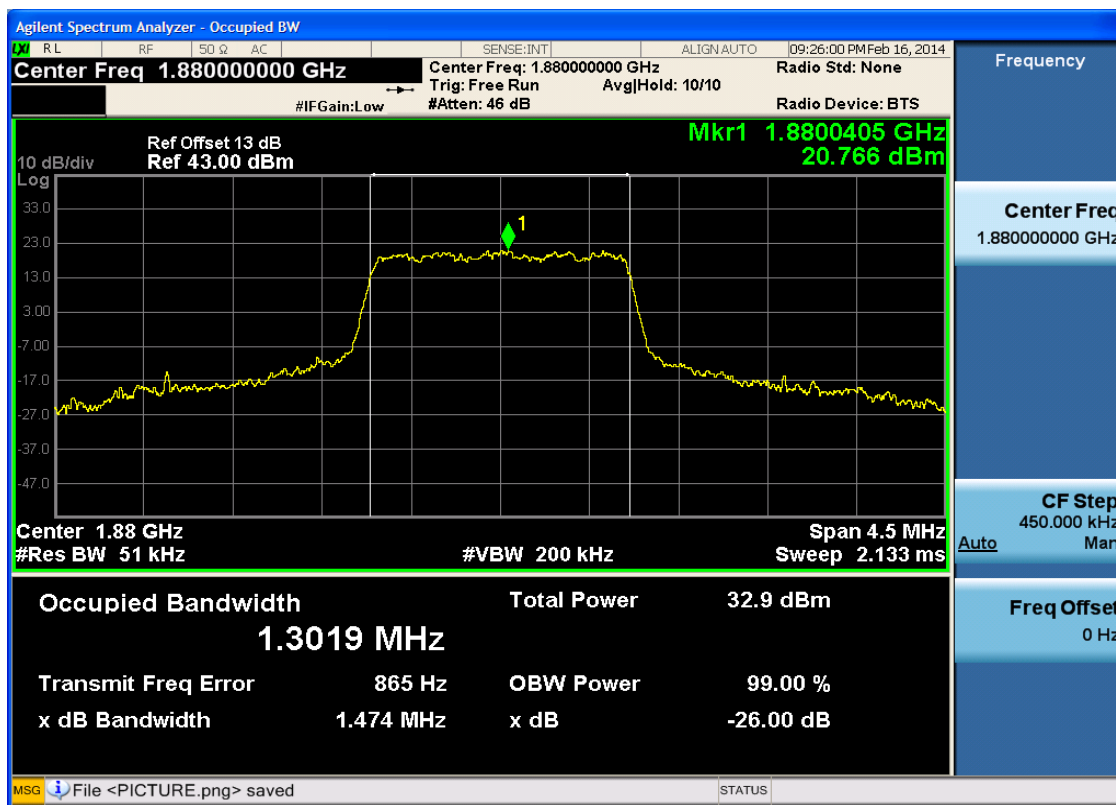
4.1.2.1 Test Mode = CDMA/1X/TM1

4.1.2.1.1 Test Channel = LCH



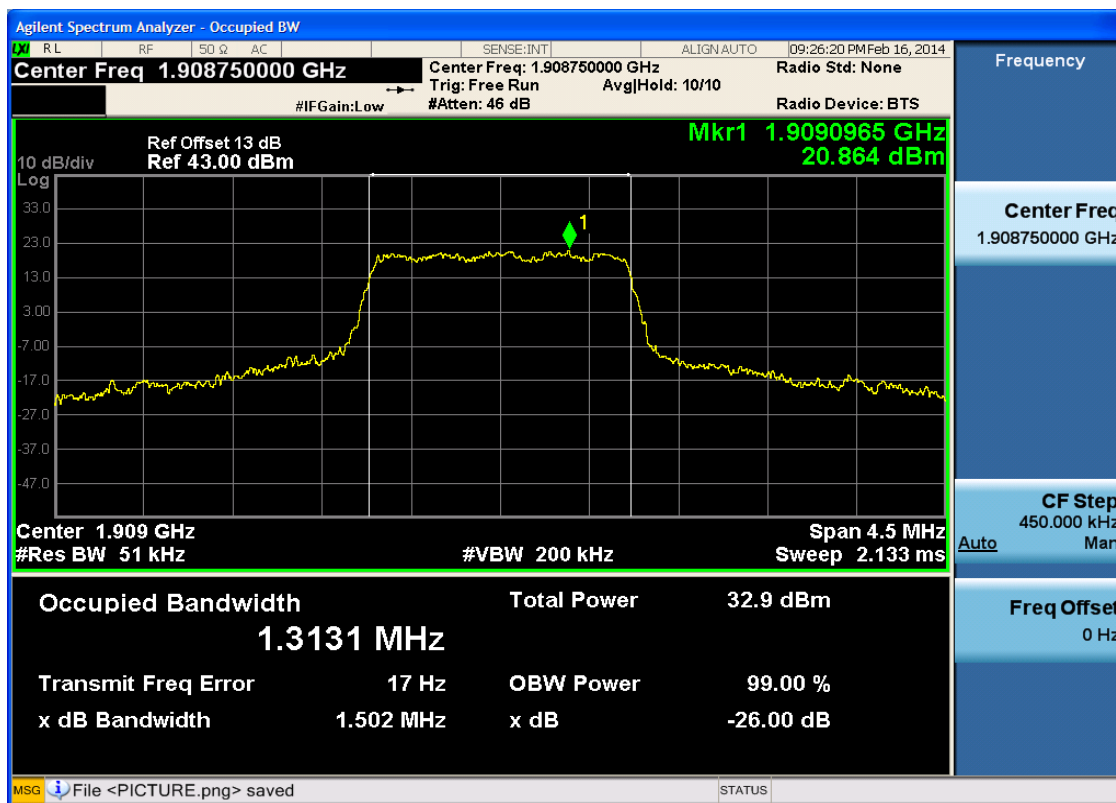


4.1.2.1.2 Test Channel = MCH



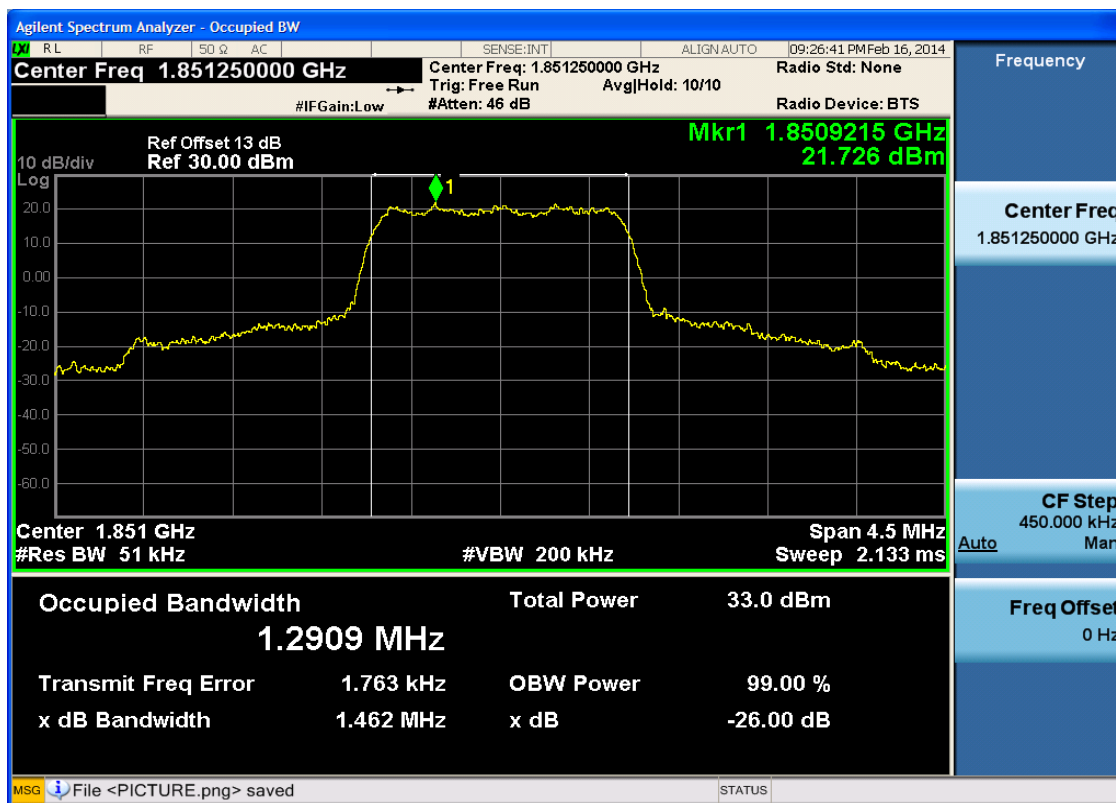


4.1.2.1.3 Test Channel = HCH

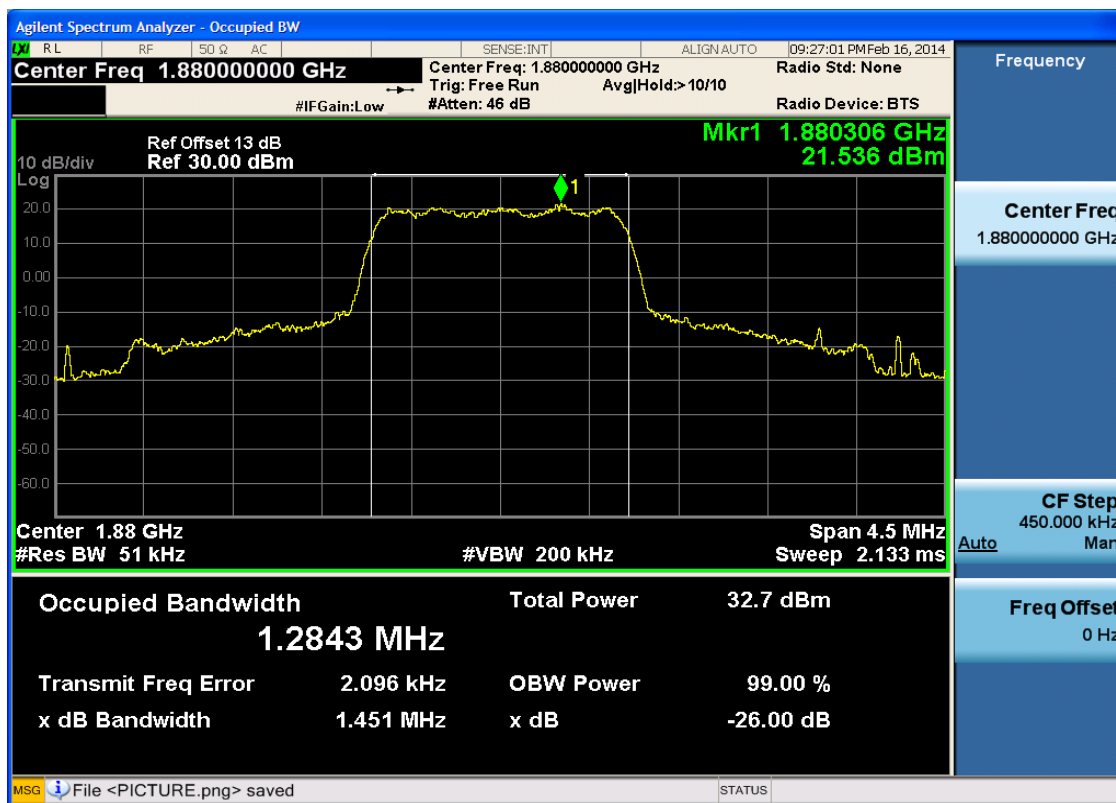


4.1.2.2 Test Mode = CDMA/1X/TM3

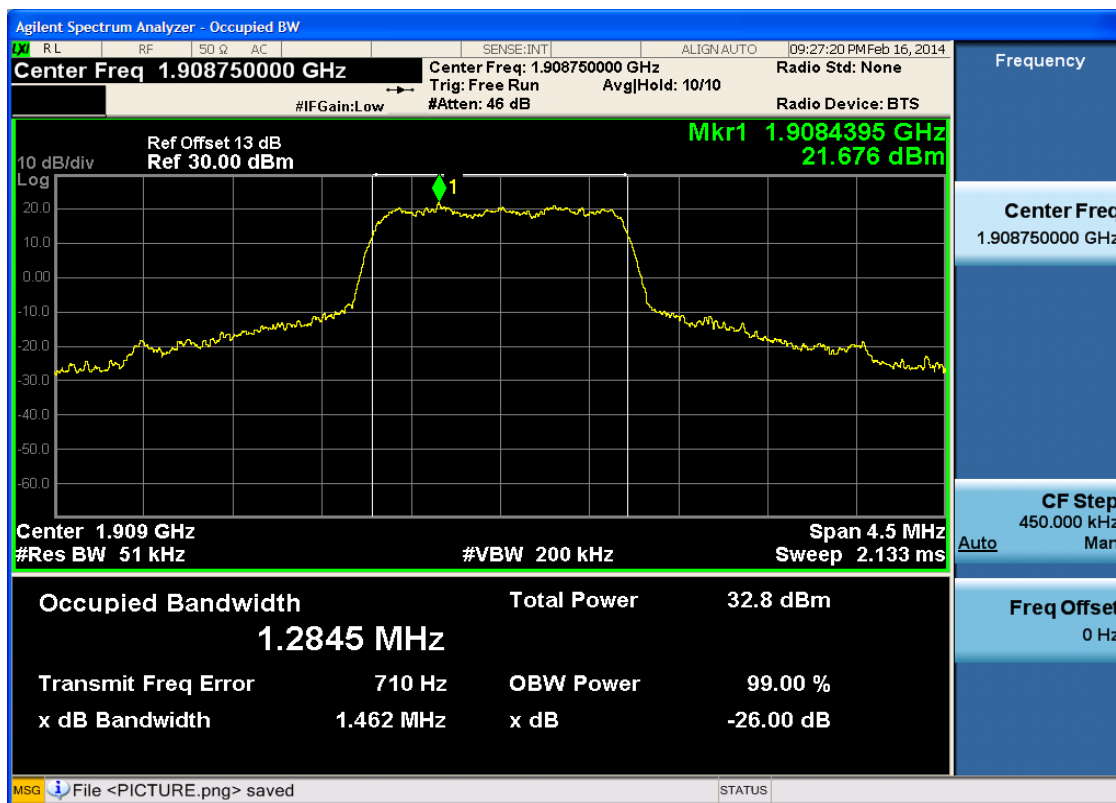
4.1.2.2.1 Test Channel = LCH



4.1.2.2.2 Test Channel = MCH



4.1.2.2.3 Test Channel = HCH





5Appendix_E: Band Edges Compliance

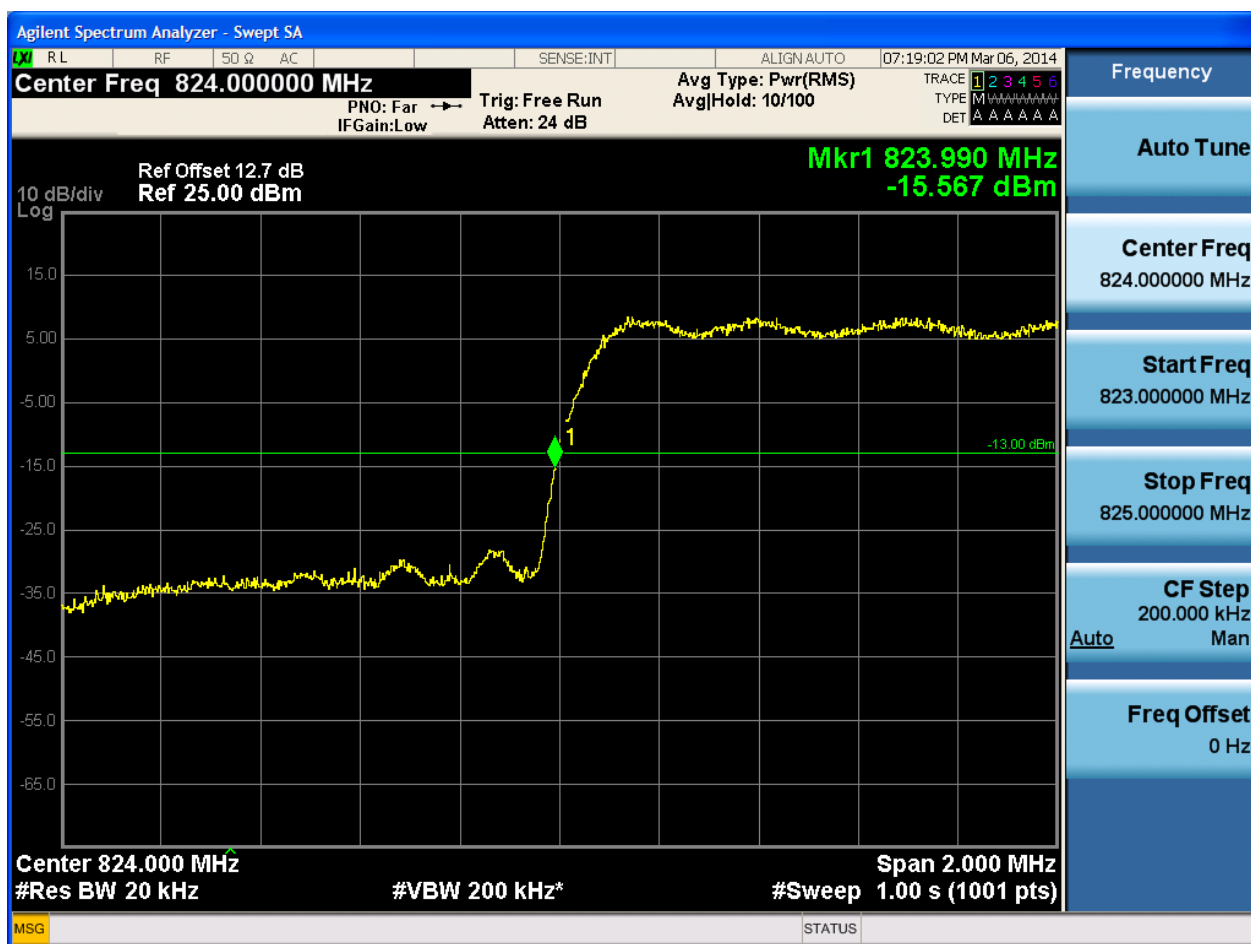
Part I - Test Plots

5.1 For CDMA/1X

5.1.1 Test Band = BC0

5.1.1.1 Test Mode = CDMA/1X/TM1

5.1.1.1.1 Test Channel = LCH

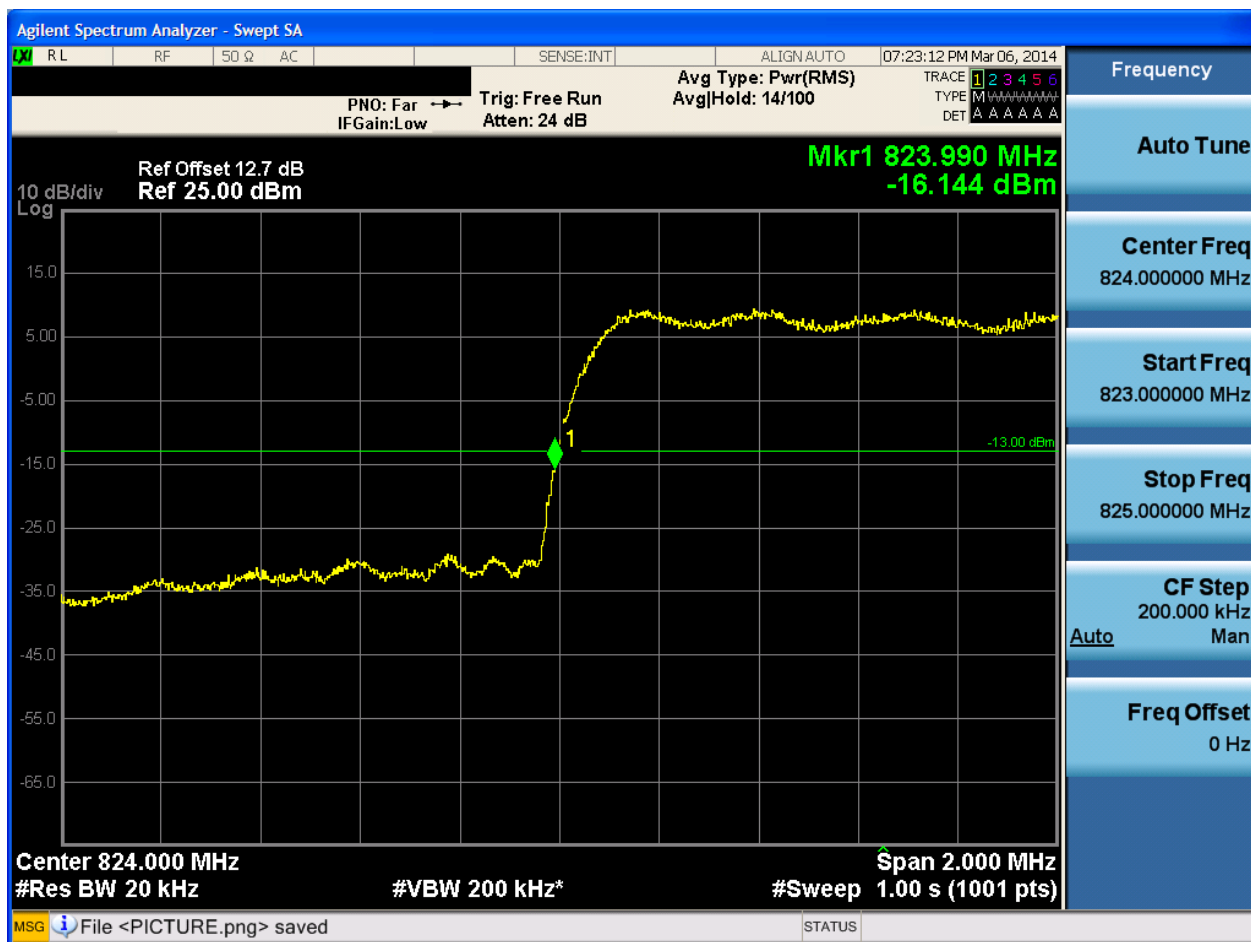


5.1.1.1.2 Test Channel = HCH

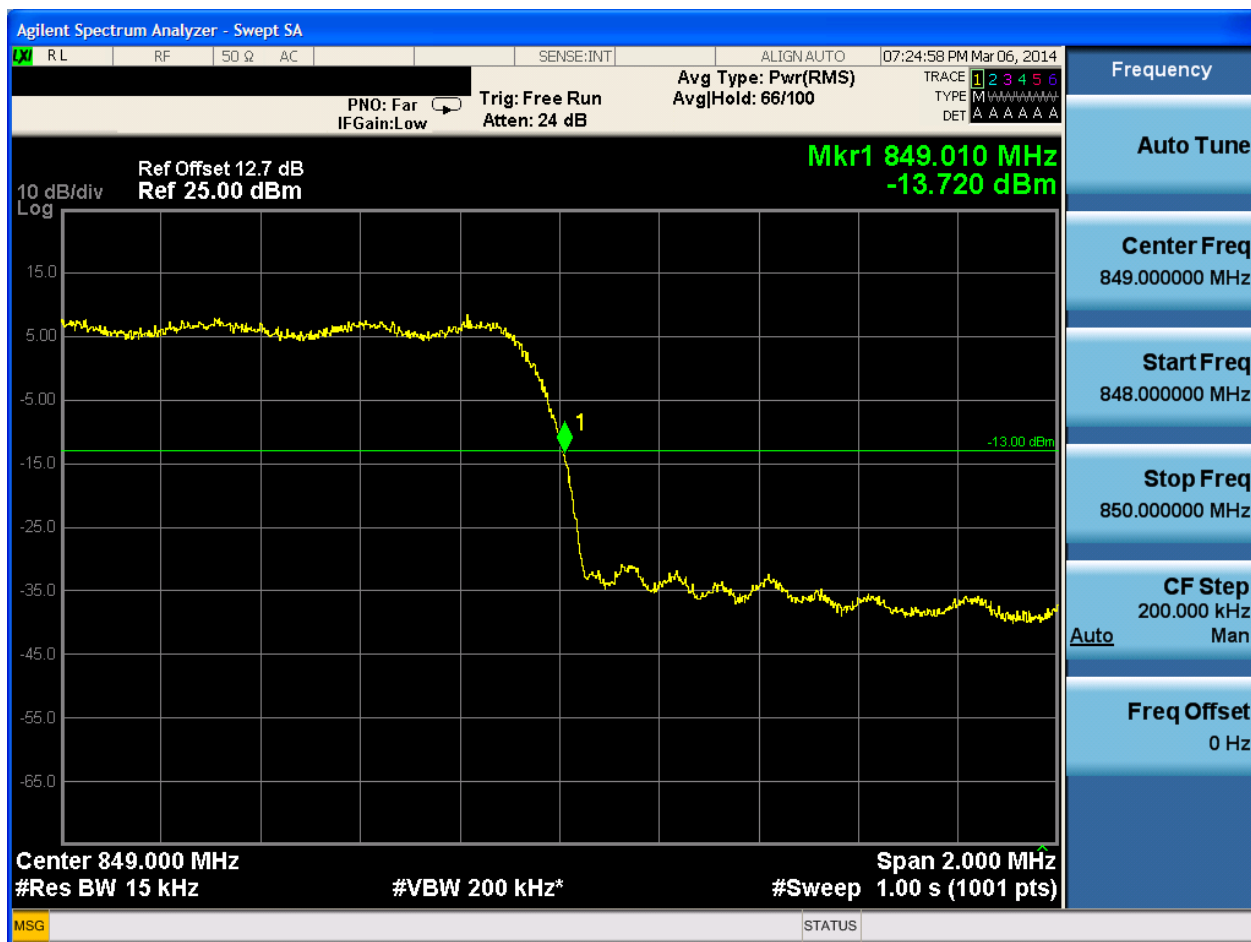


5.1.1.2 Test Mode = CDMA/1X/TM3

5.1.1.2.1 Test Channel = LCH



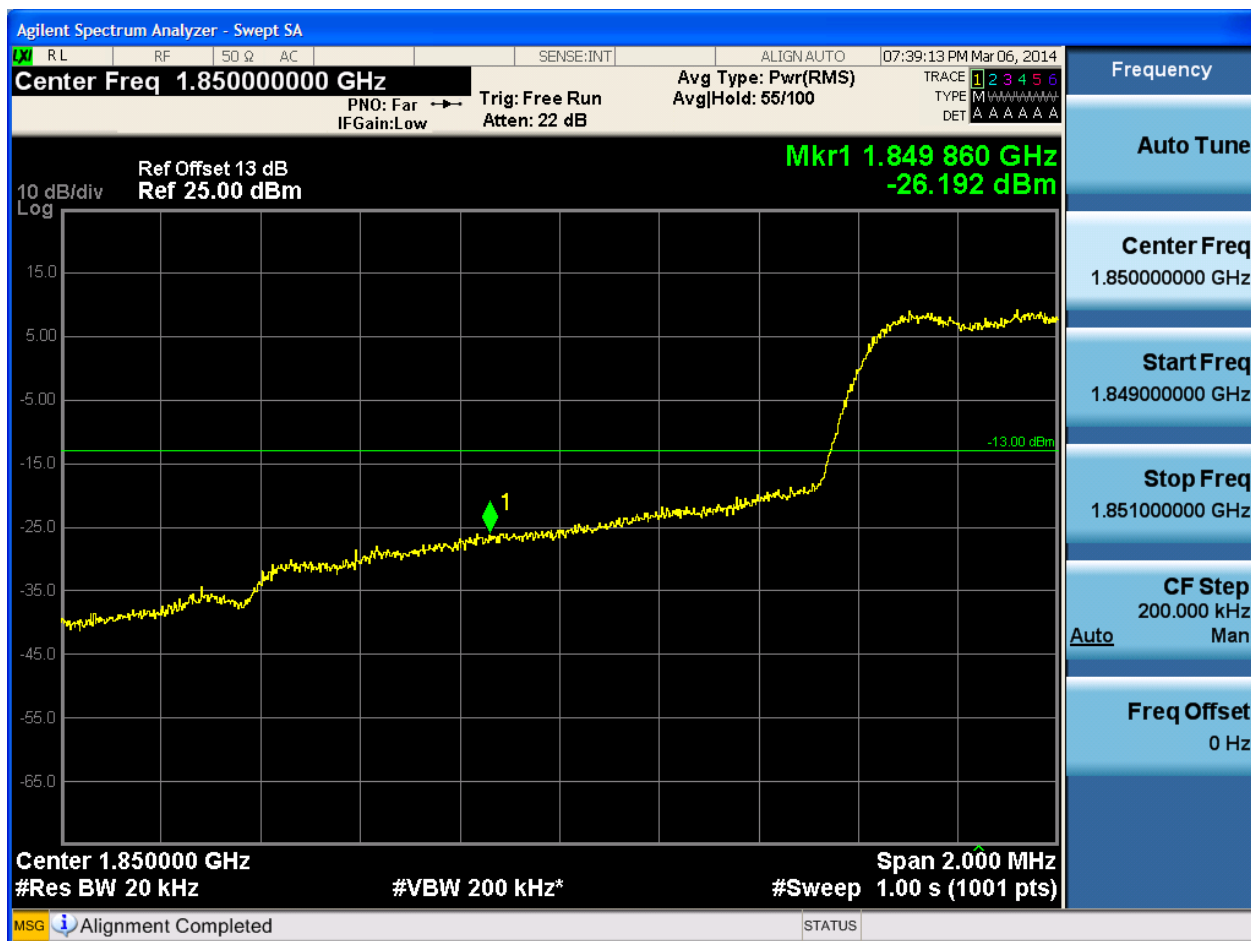
5.1.1.2.2 Test Channel = HCH



5.1.2 Test Band = BC1

5.1.2.1 Test Mode = CDMA/1X/TM1

5.1.2.1.1 Test Channel = LCH

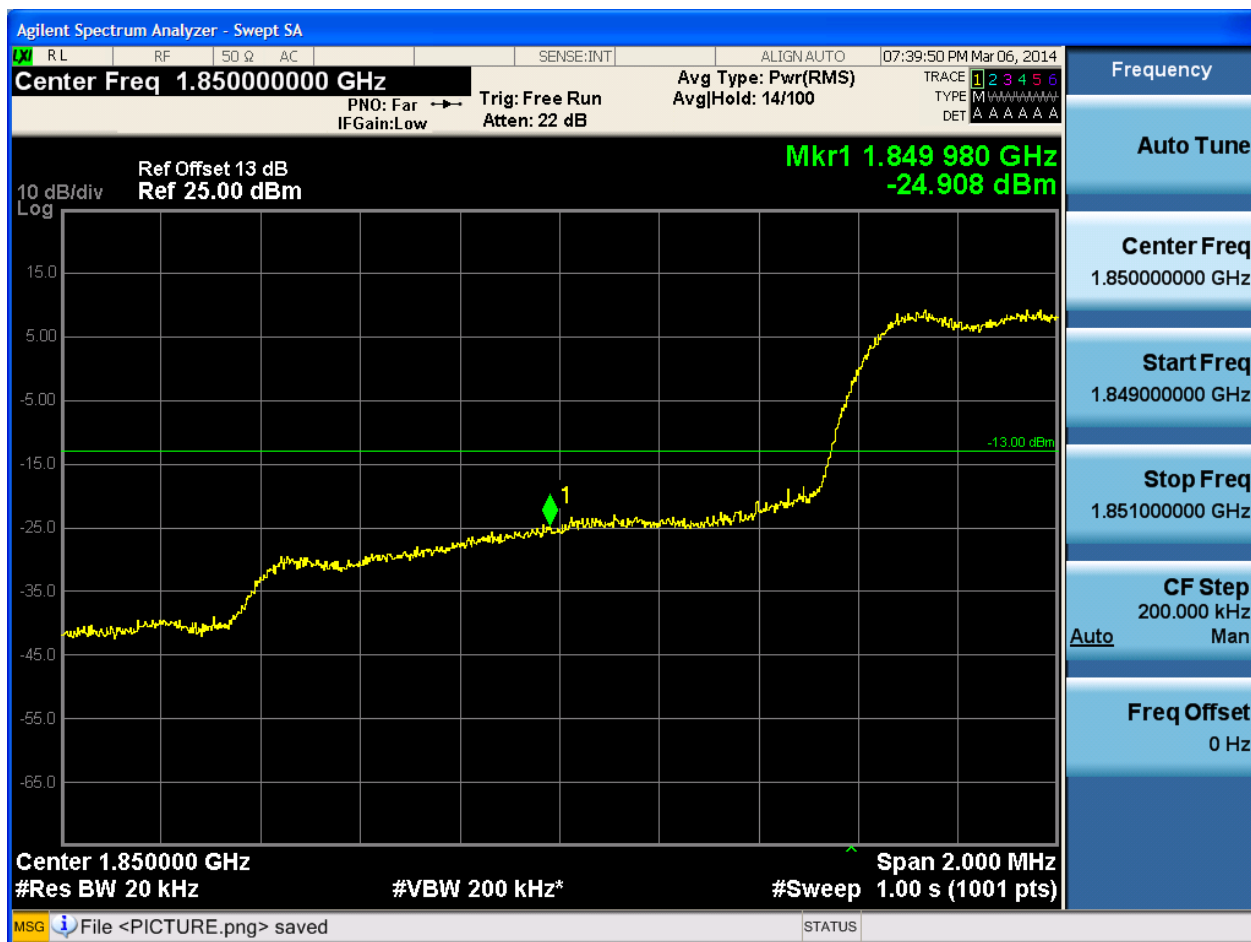


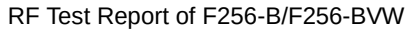
5.1.2.1.2 Test Channel = HCH



5.1.2.2 Test Mode = CDMA/1X/TM3

5.1.2.2.1 Test Channel = LCH





Agilent Spectrum Analyzer - Swept SA

Center Freq 1.91000000 GHz

Ref Offset 13 dB
Ref 25.00 dBm

Mkr1 1.910 GHz
-28.940 dBm

10 dB/div
Log

Center 1.91000 GHz
#Res BW 20 kHz
#VBW 200 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
1.91000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

Center Freq 1.91000000 GHz

Avg Type: Pwr(RMS)
AvgHold: 14/100

Trace 1 2 3 4 5 6
Type M W W W W W W W
Det A A A A A A

PNO: Far
IFGain: Low

Trig: Free Run
Atten: 22 dB

Ref Offset 13 dB
Ref 25.00 dBm

Mkr1 1.910 GHz
-28.940 dBm

10 dB/div
Log

Center 1.91000 GHz
#Res BW 20 kHz
#VBW 200 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
1.91000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

MSG File <PICTURE.png> saved

STATUS

6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

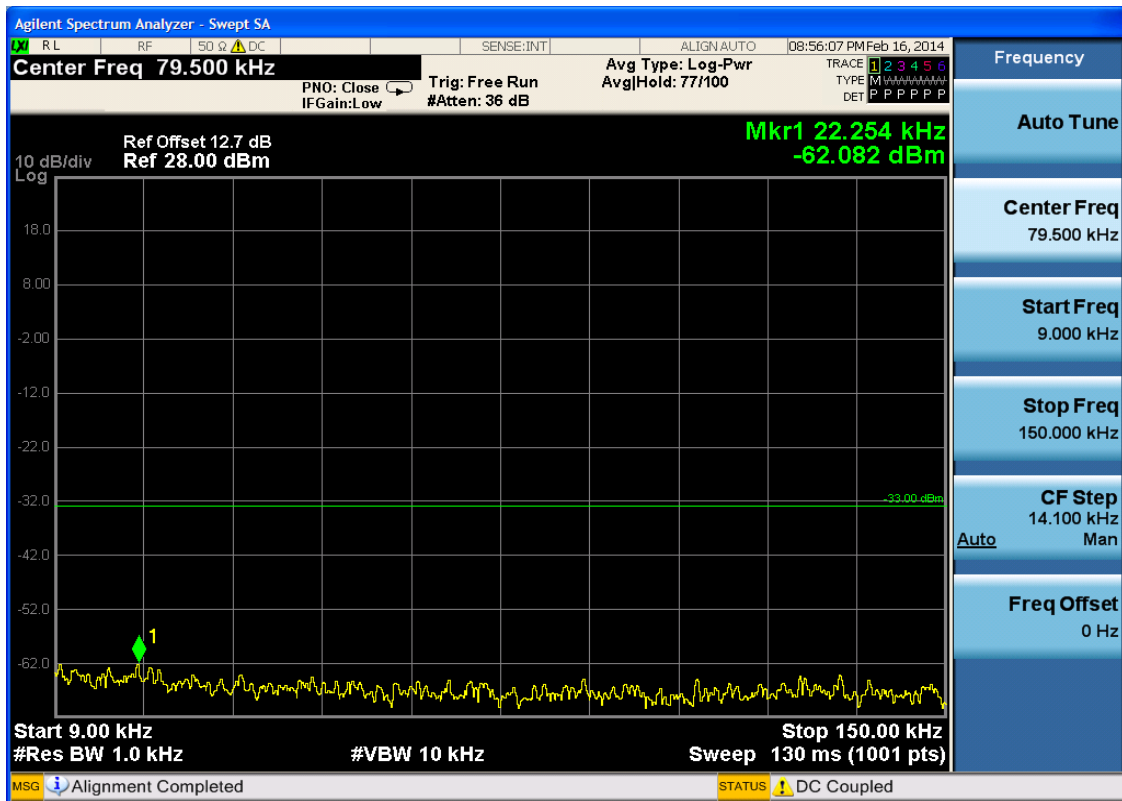
Part I - Test Plots

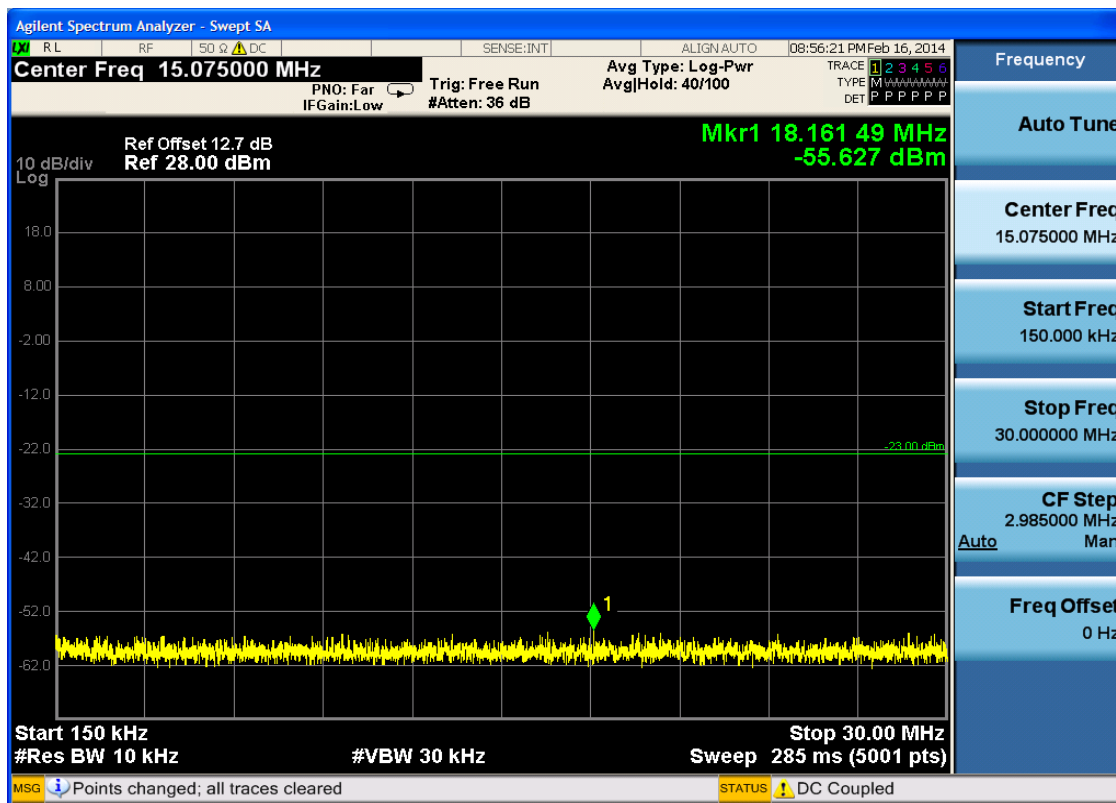
6.1 For CDMA/1X

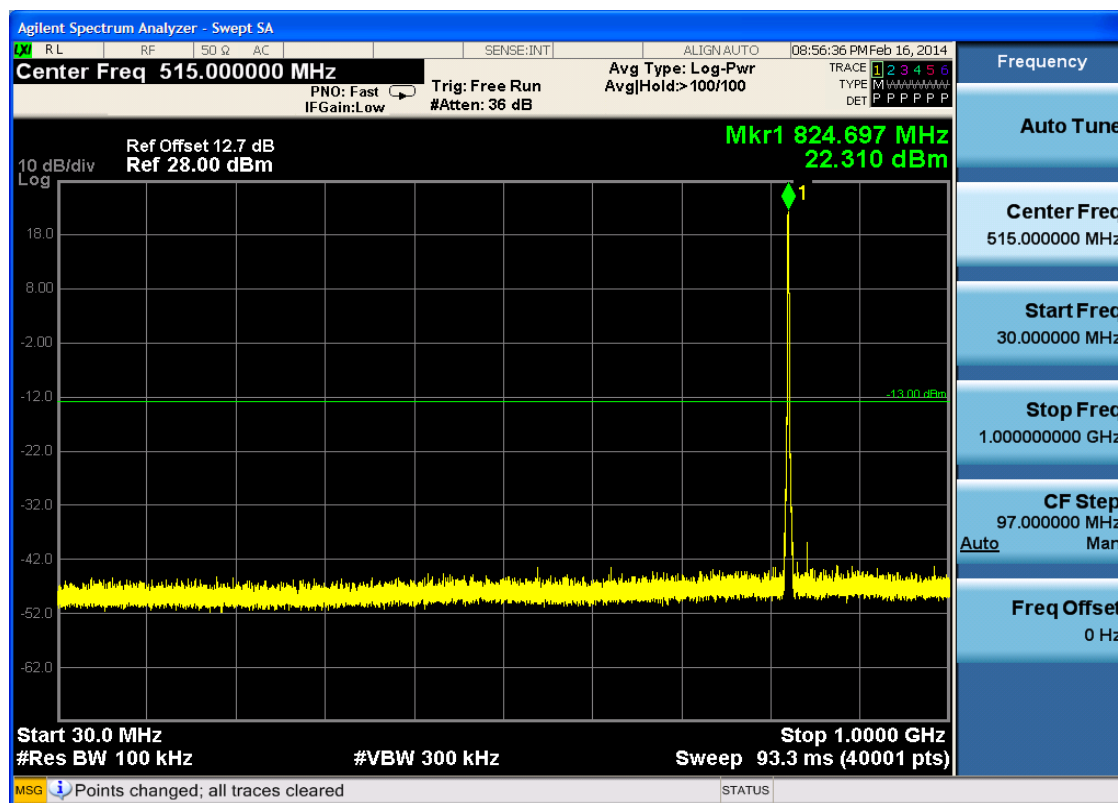
6.1.1 Test Band = BC0

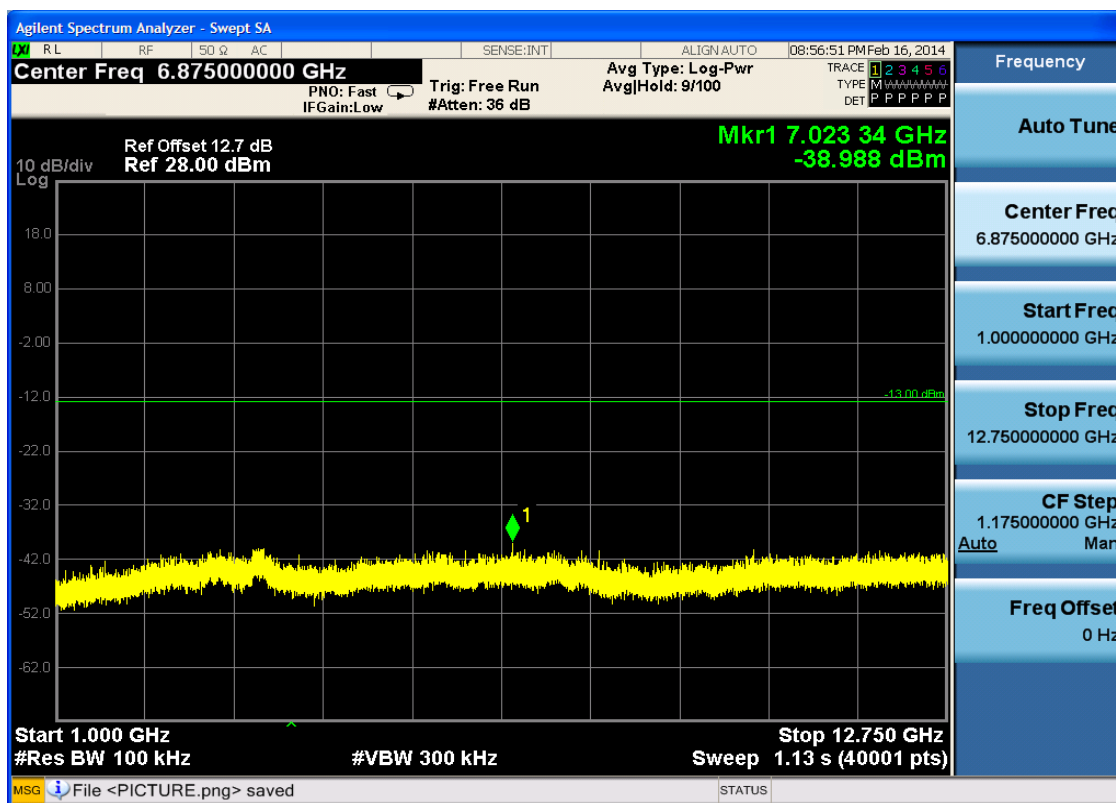
6.1.1.1 Test Mode = CDMA/1X/TM1

6.1.1.1.1 Test Channel = LCH

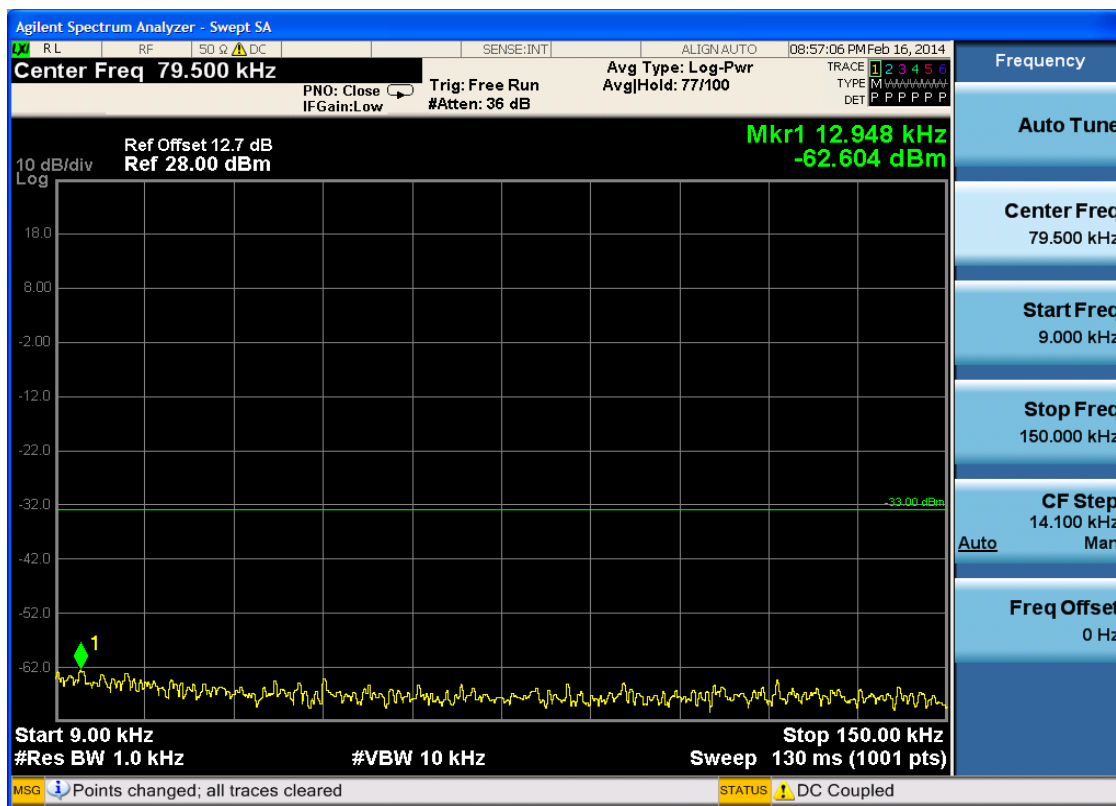


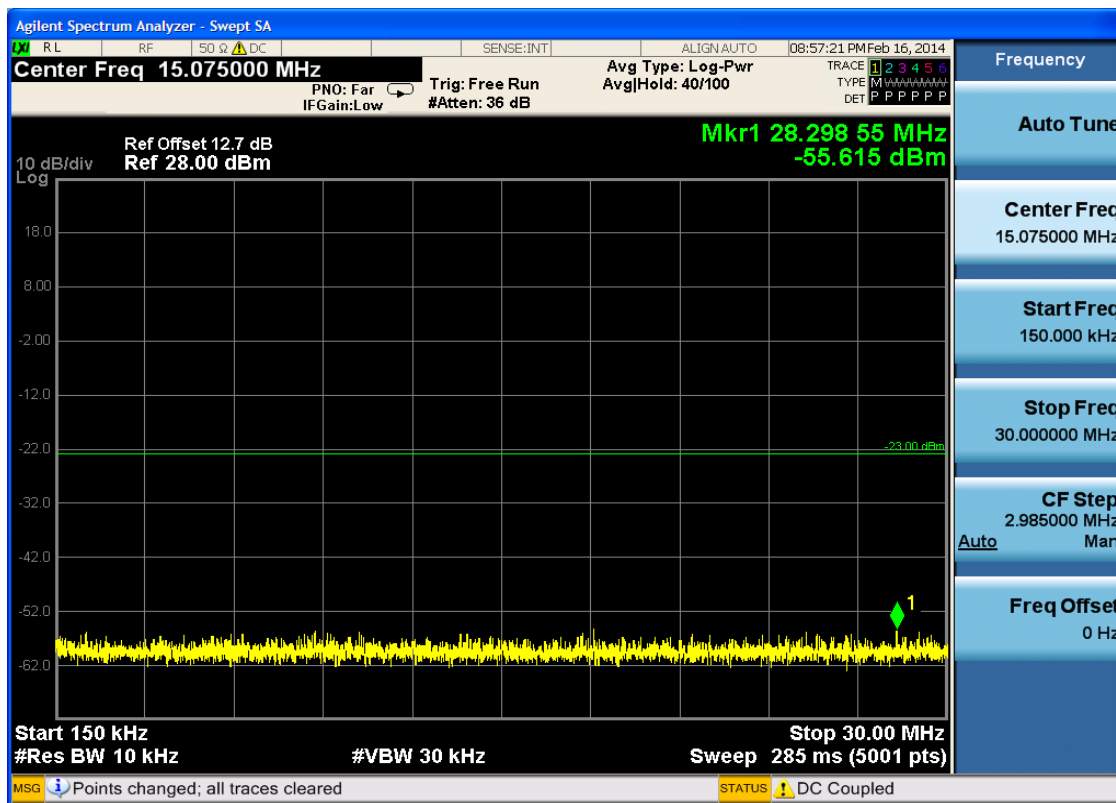


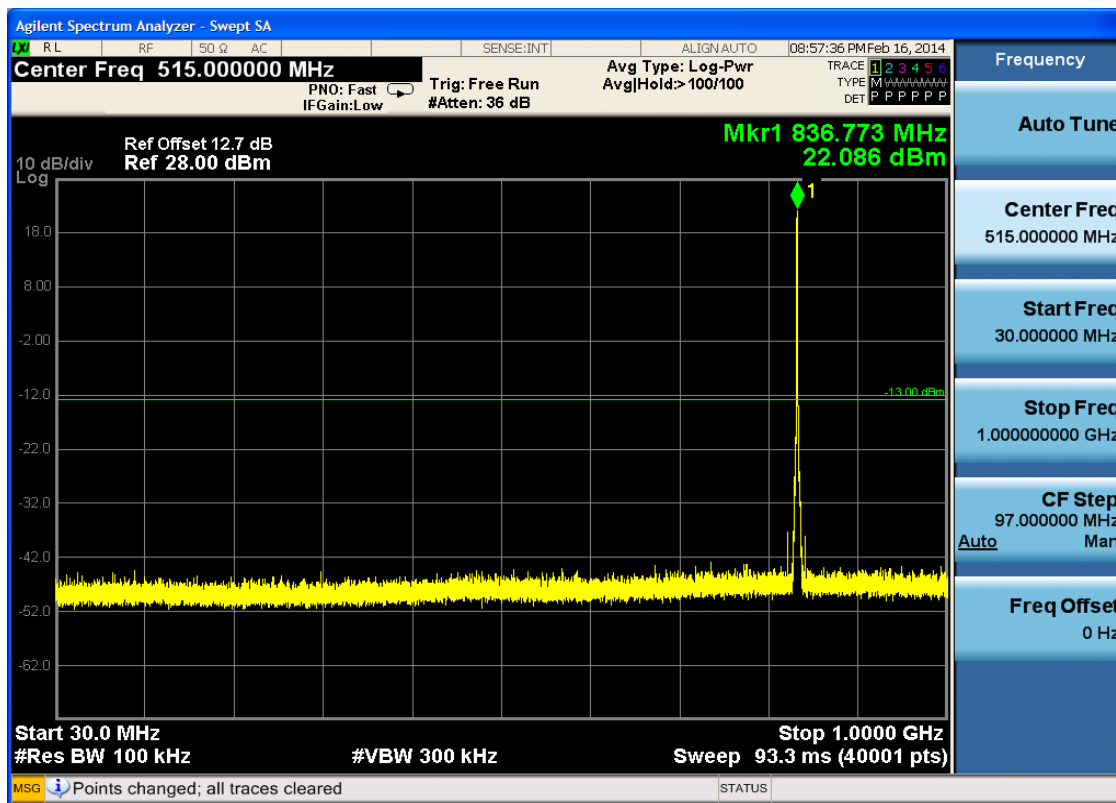


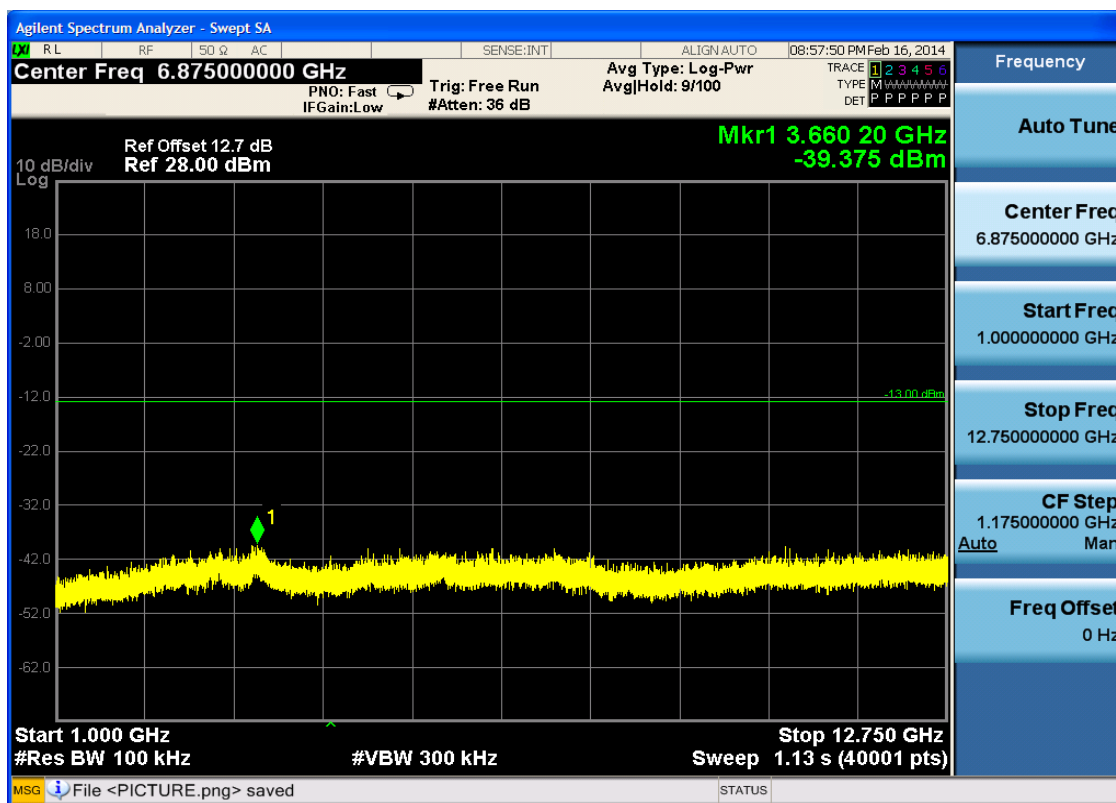


6.1.1.1.2 Test Channel = MCH

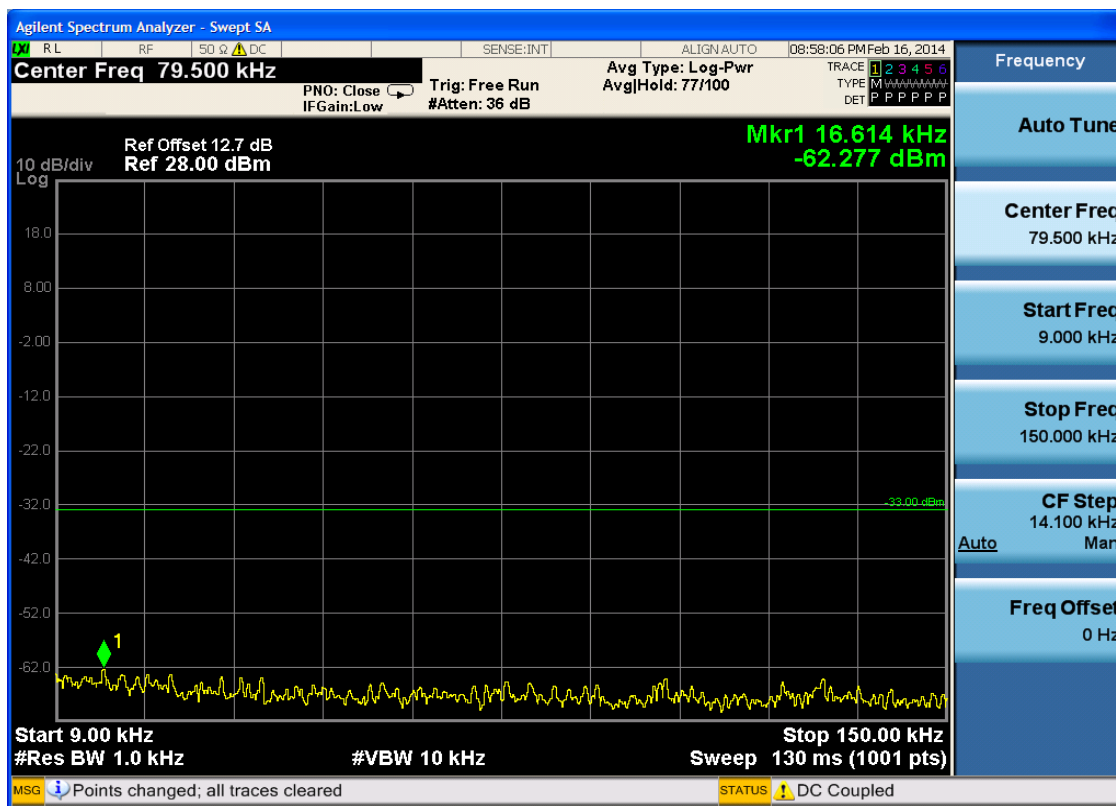


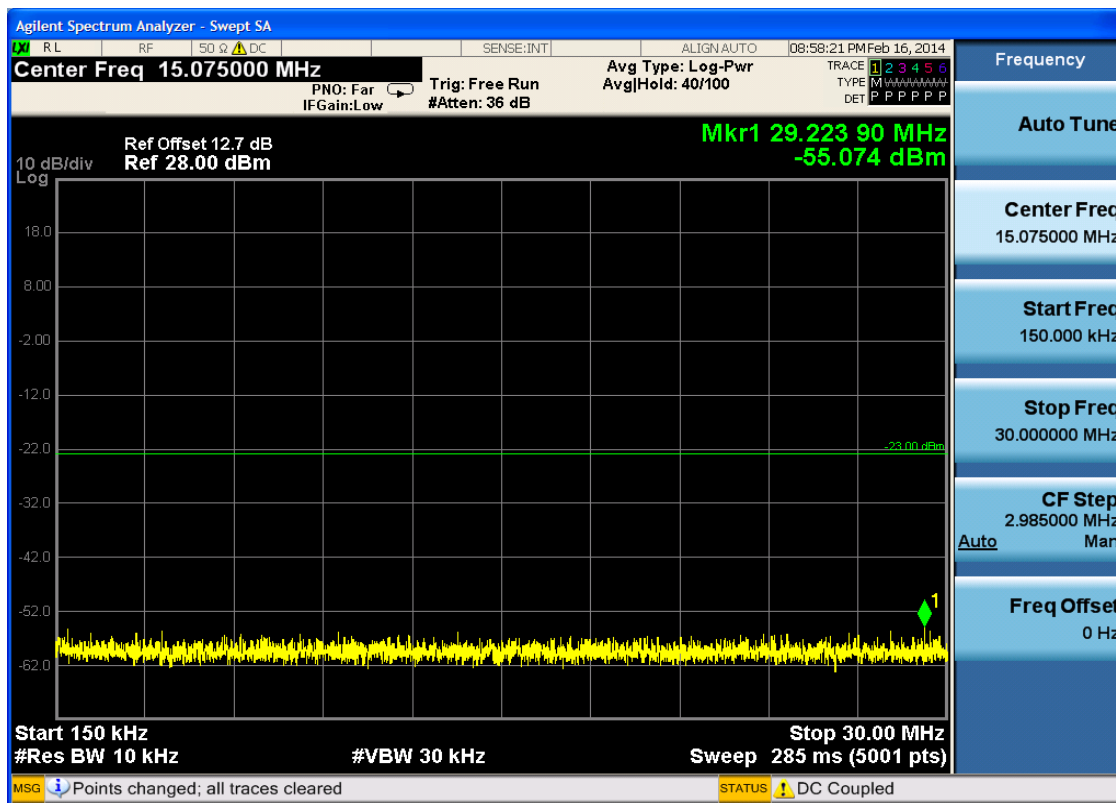


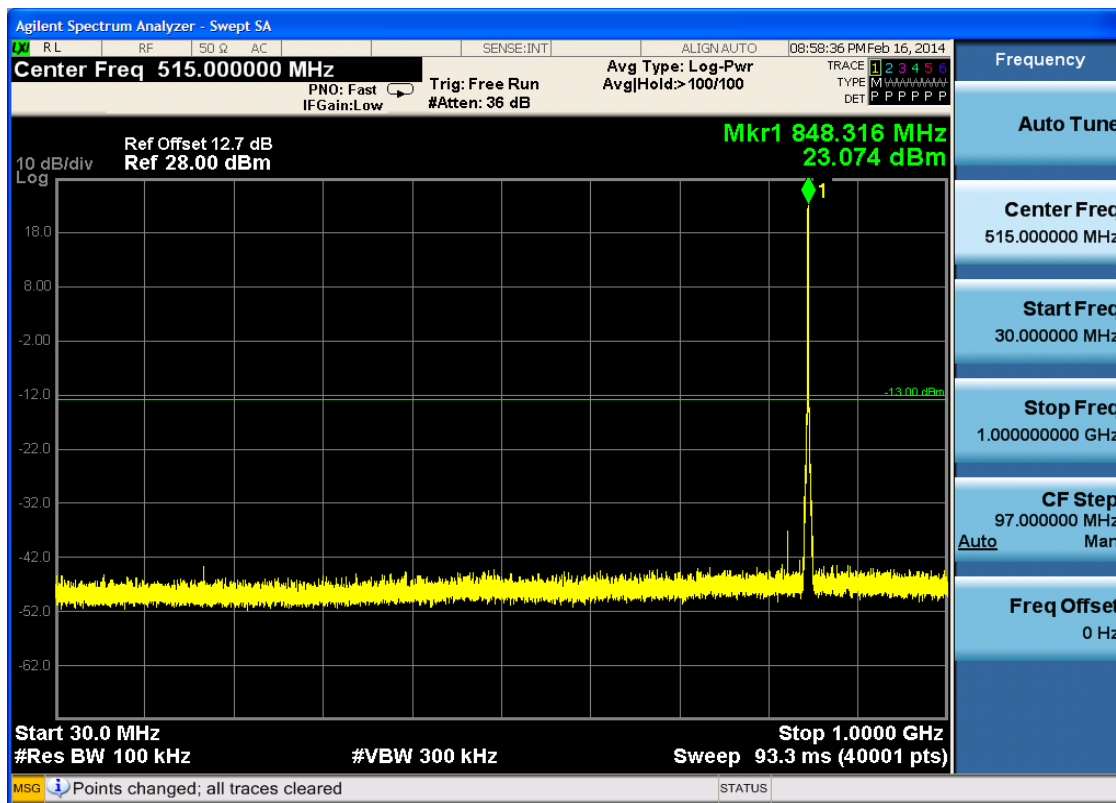


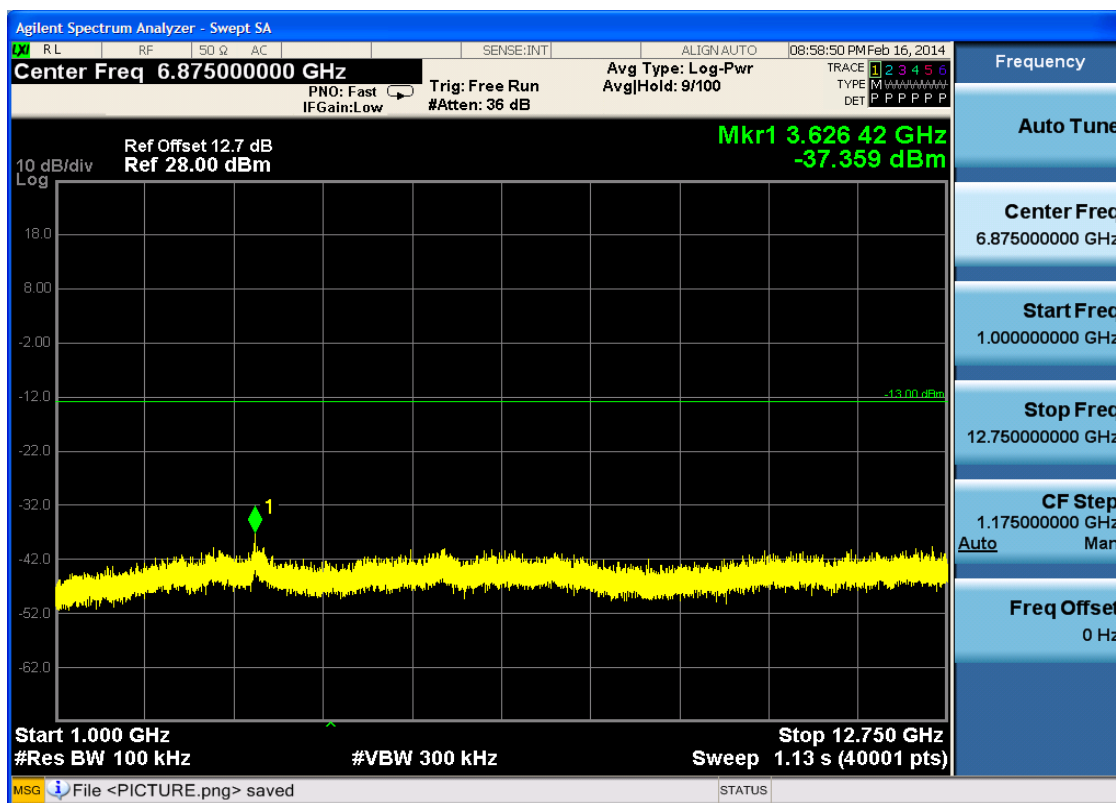


6.1.1.1.3 Test Channel = HCH





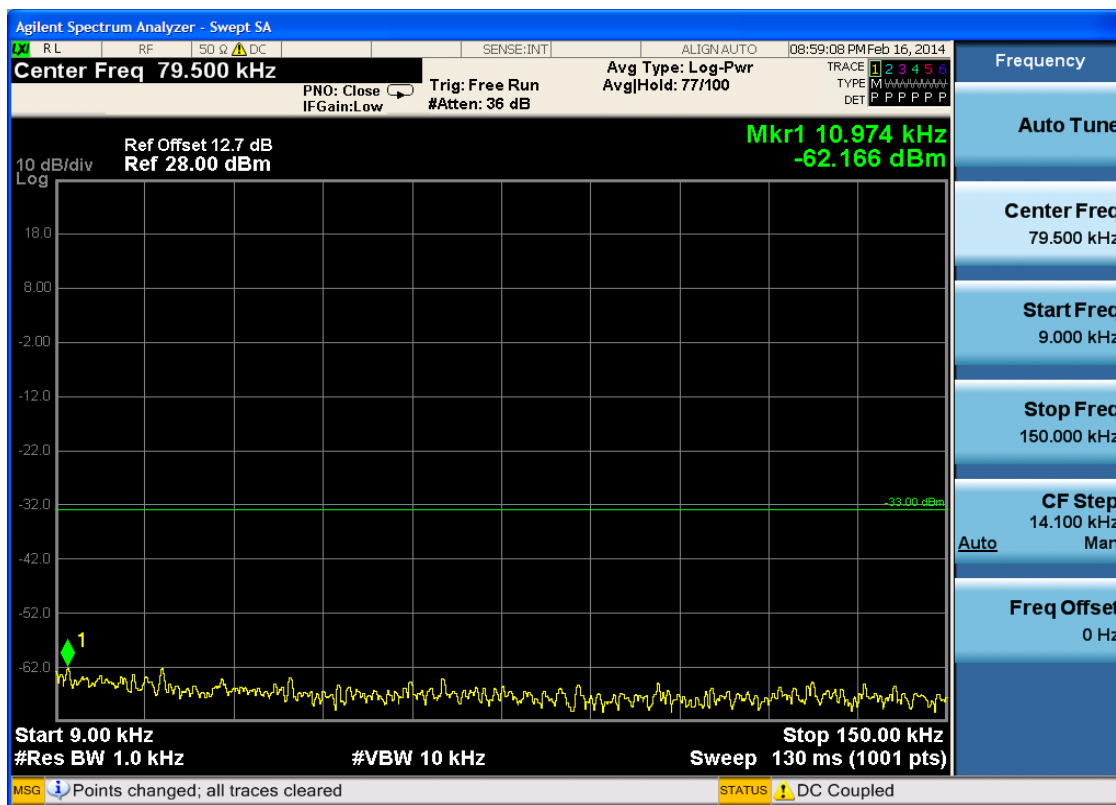


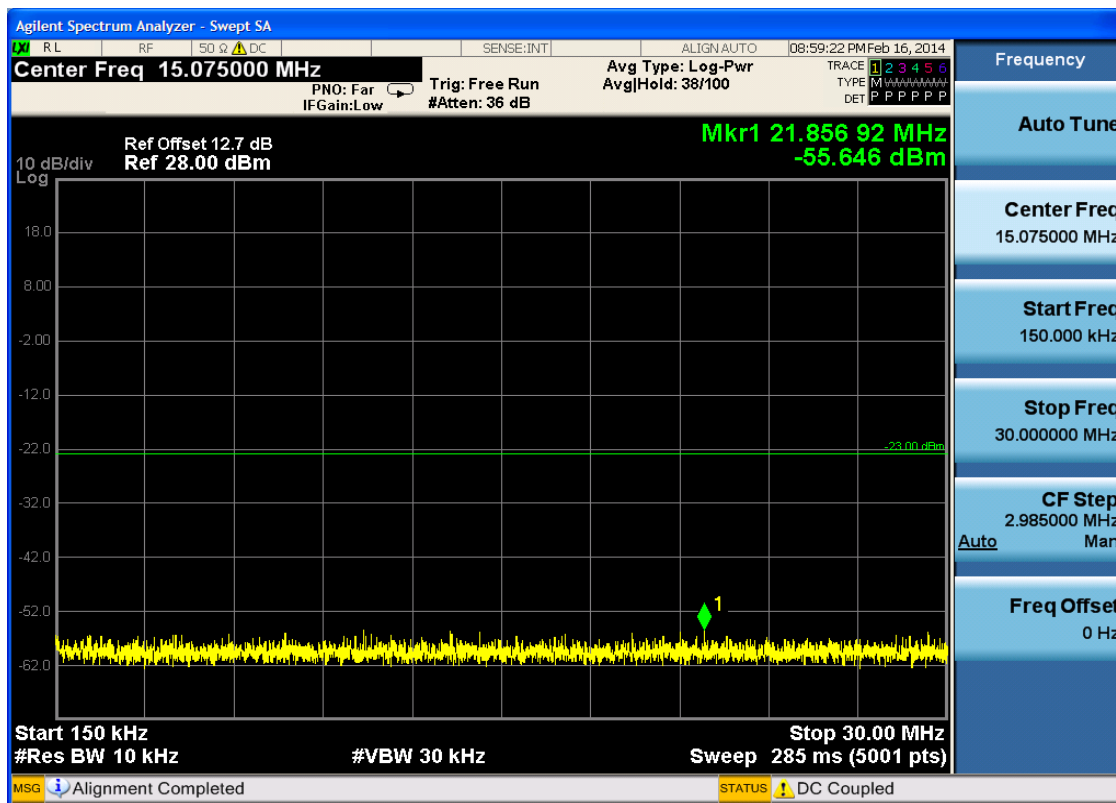


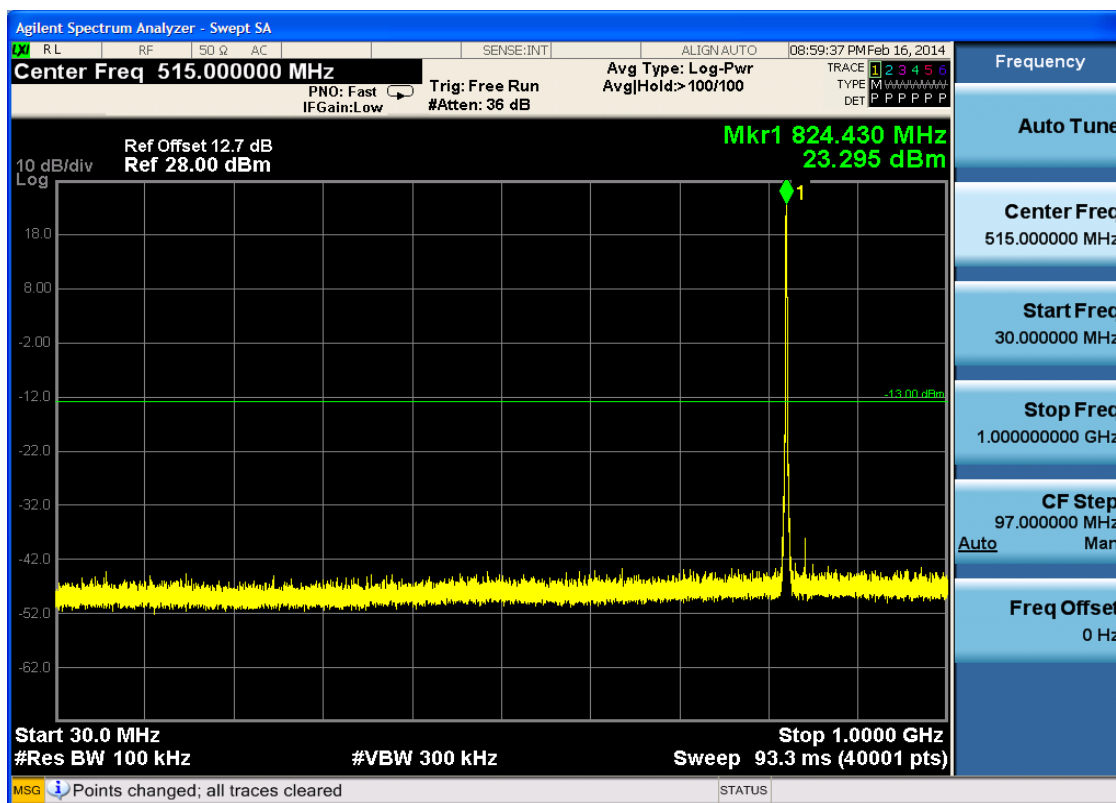


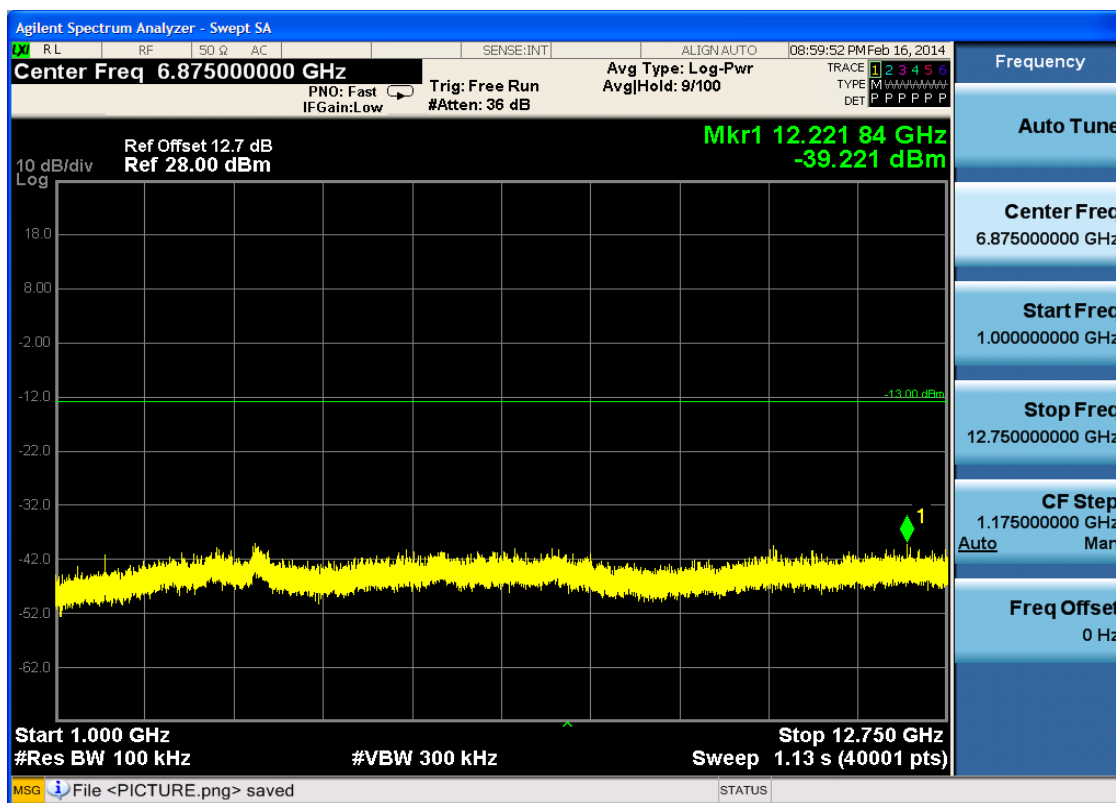
6.1.1.2 Test Mode = CDMA/1X/TM3

6.1.1.2.1 Test Channel = LCH

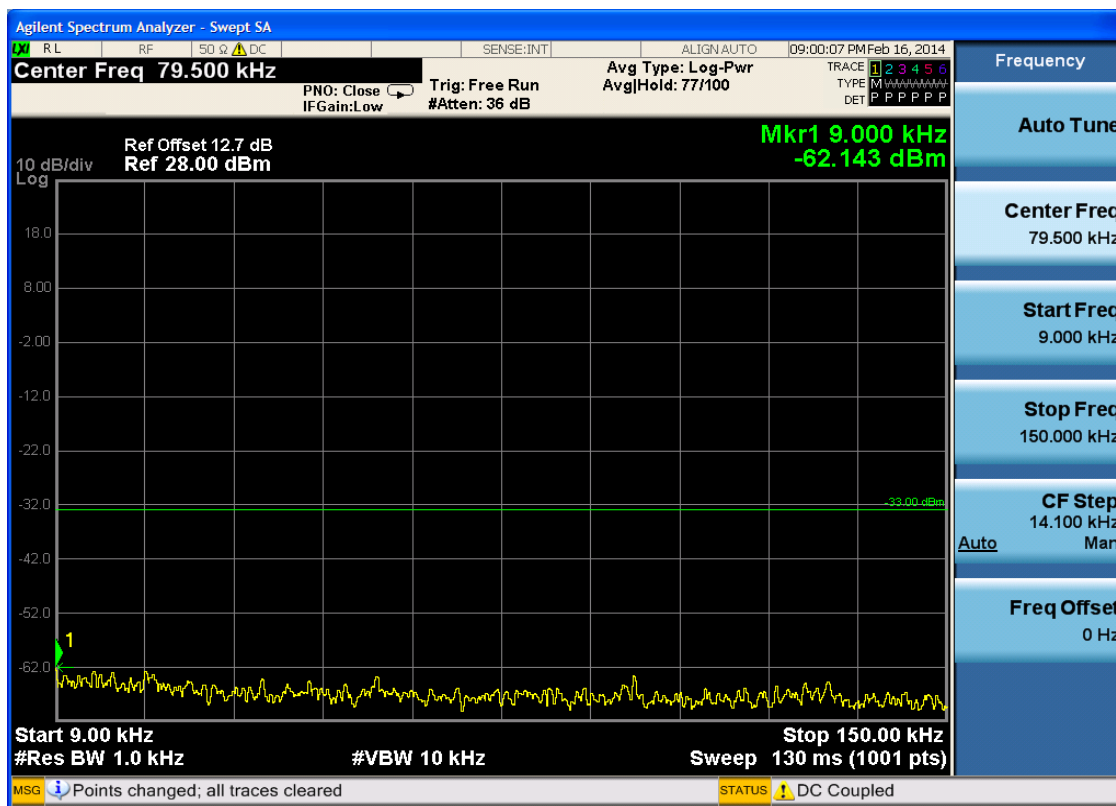


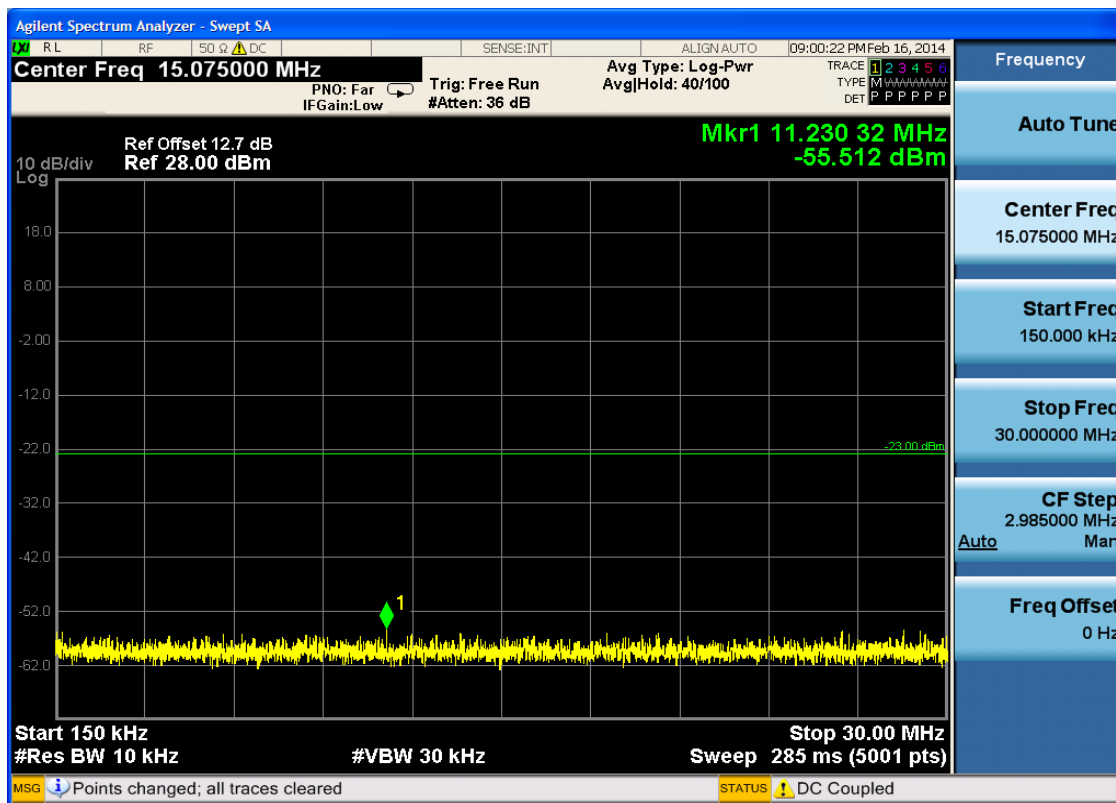


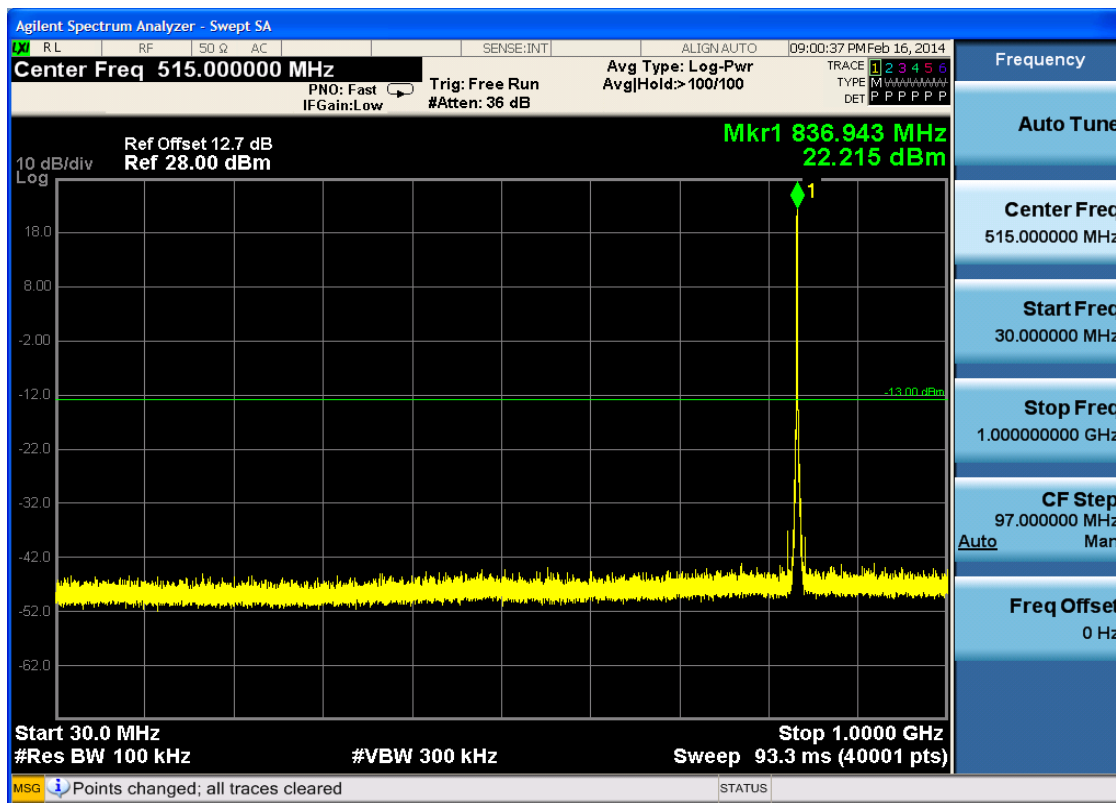


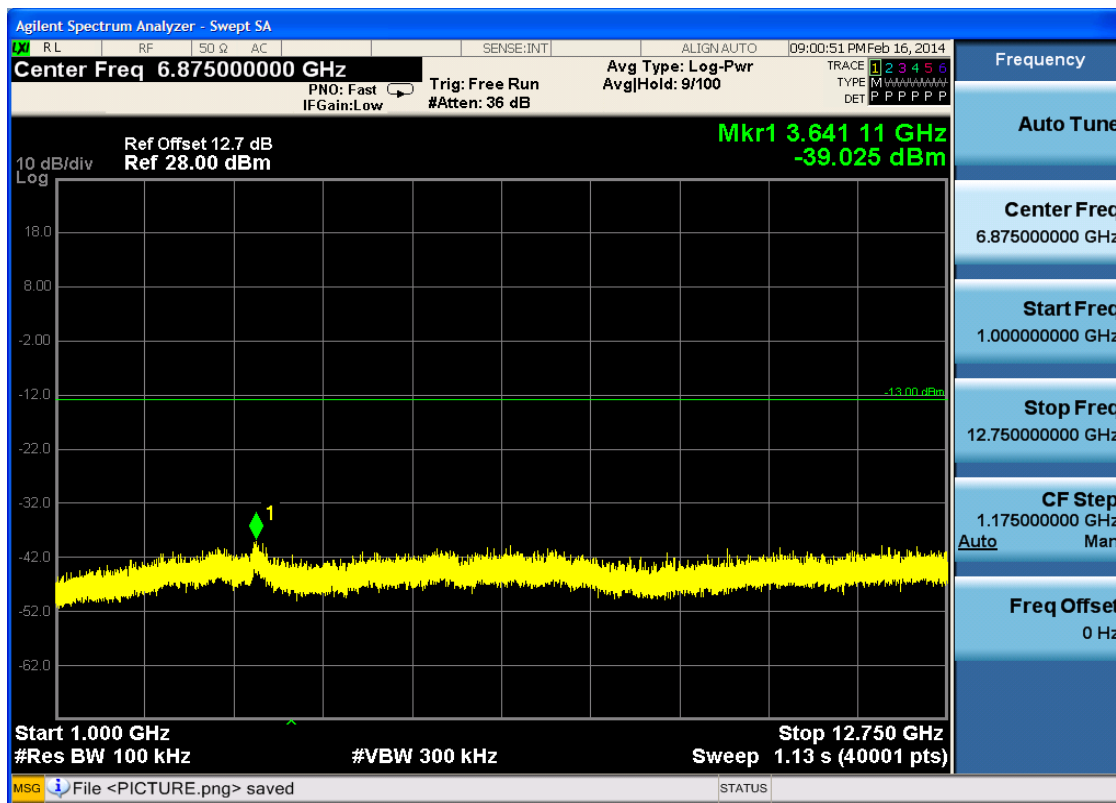


6.1.1.2.2 Test Channel = MCH



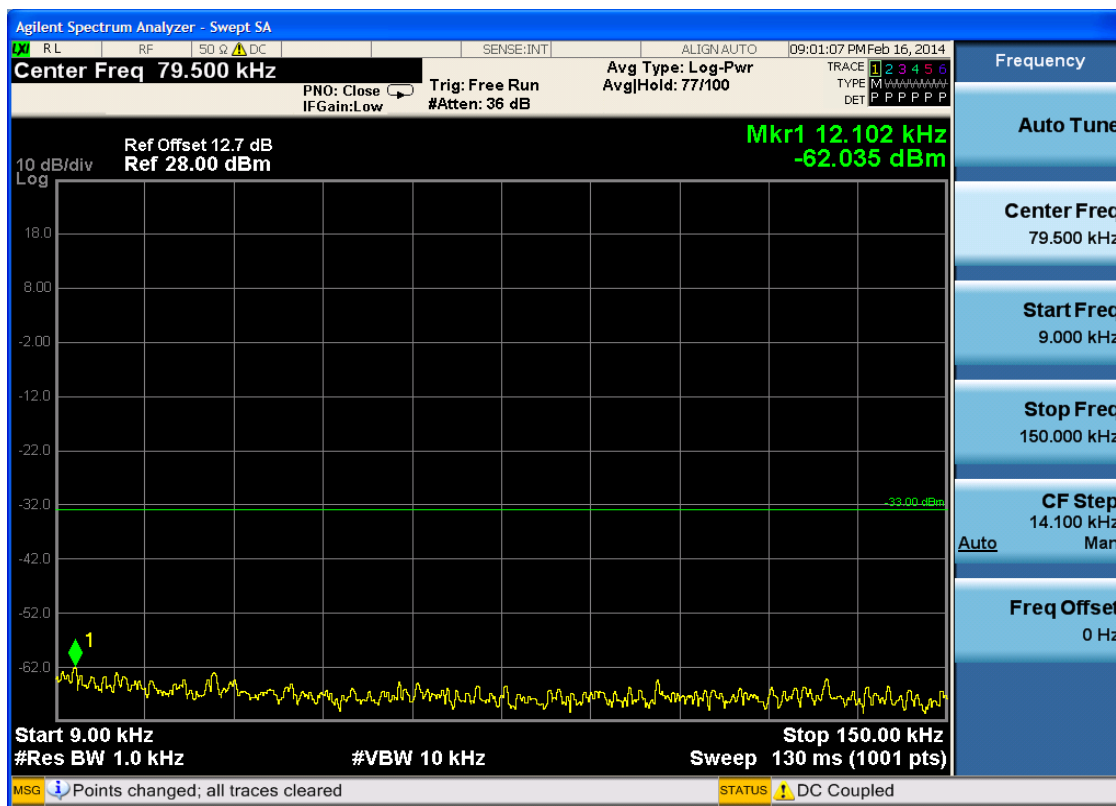


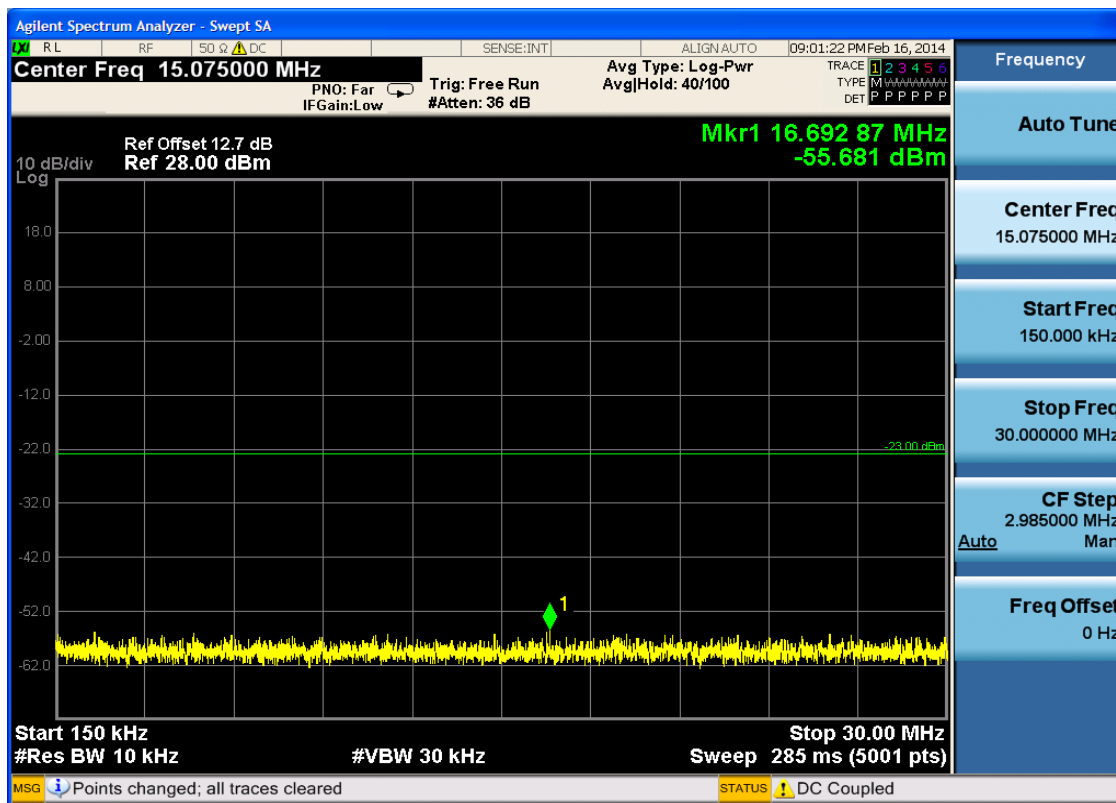


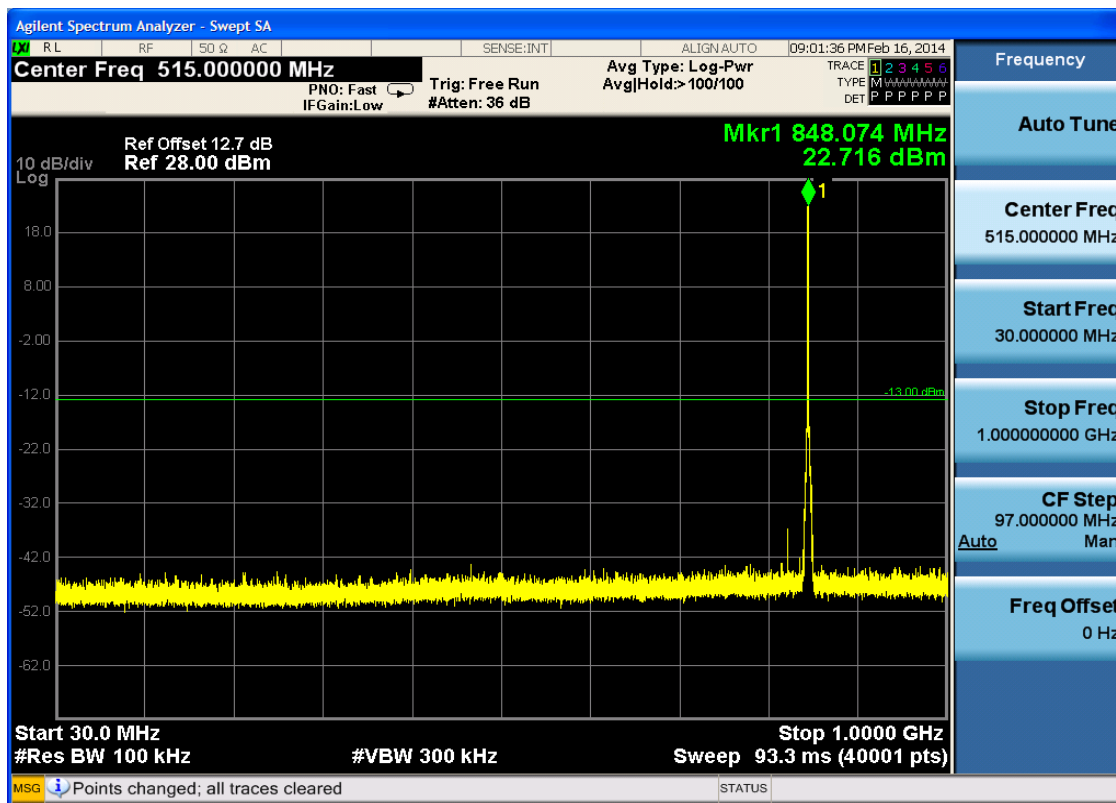


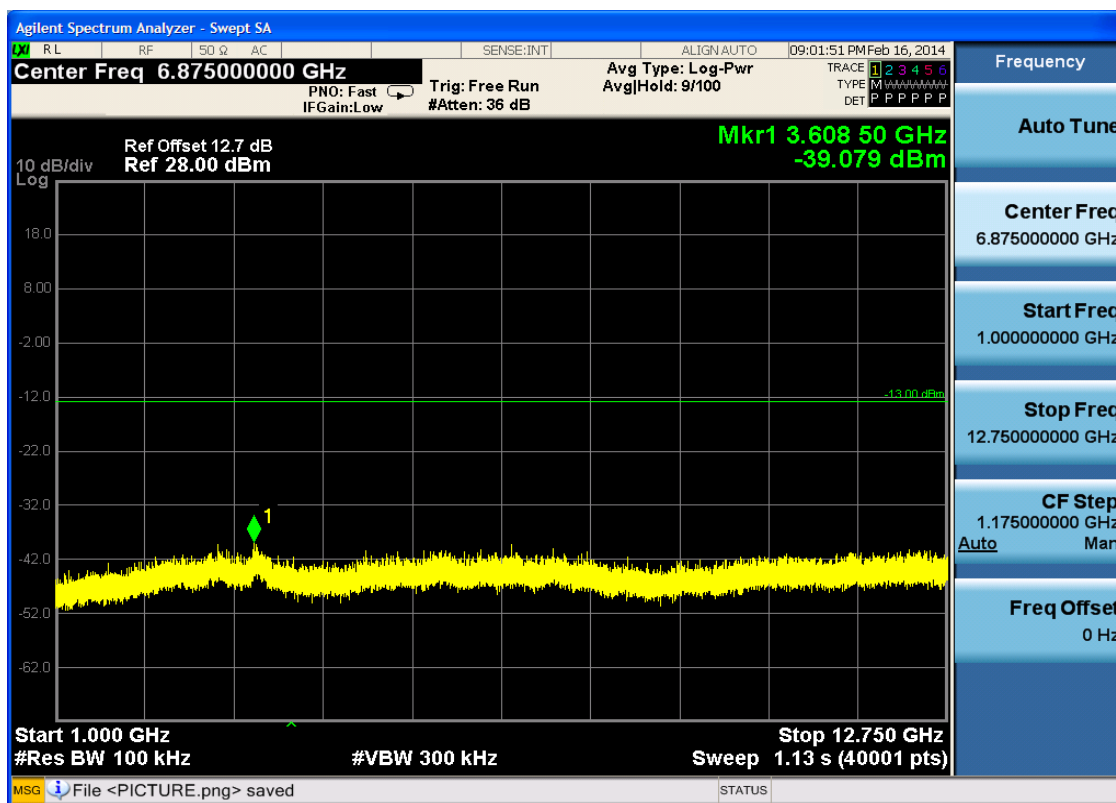


6.1.1.2.3 Test Channel = HCH





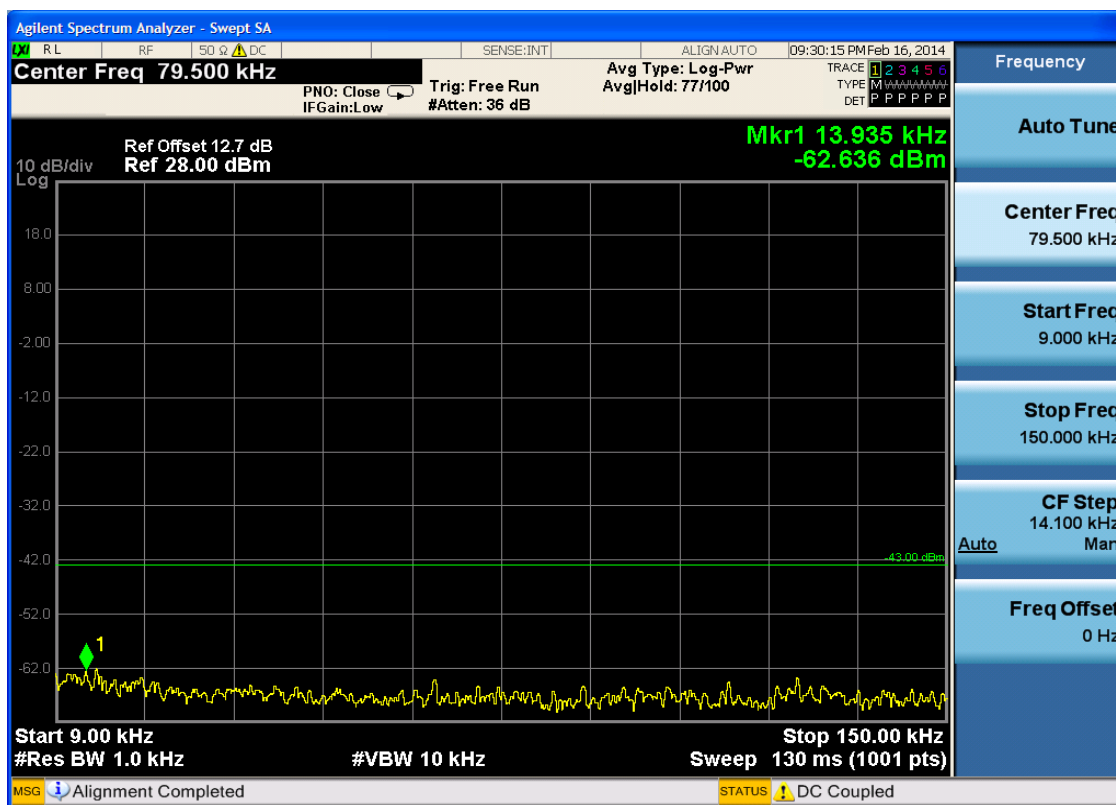


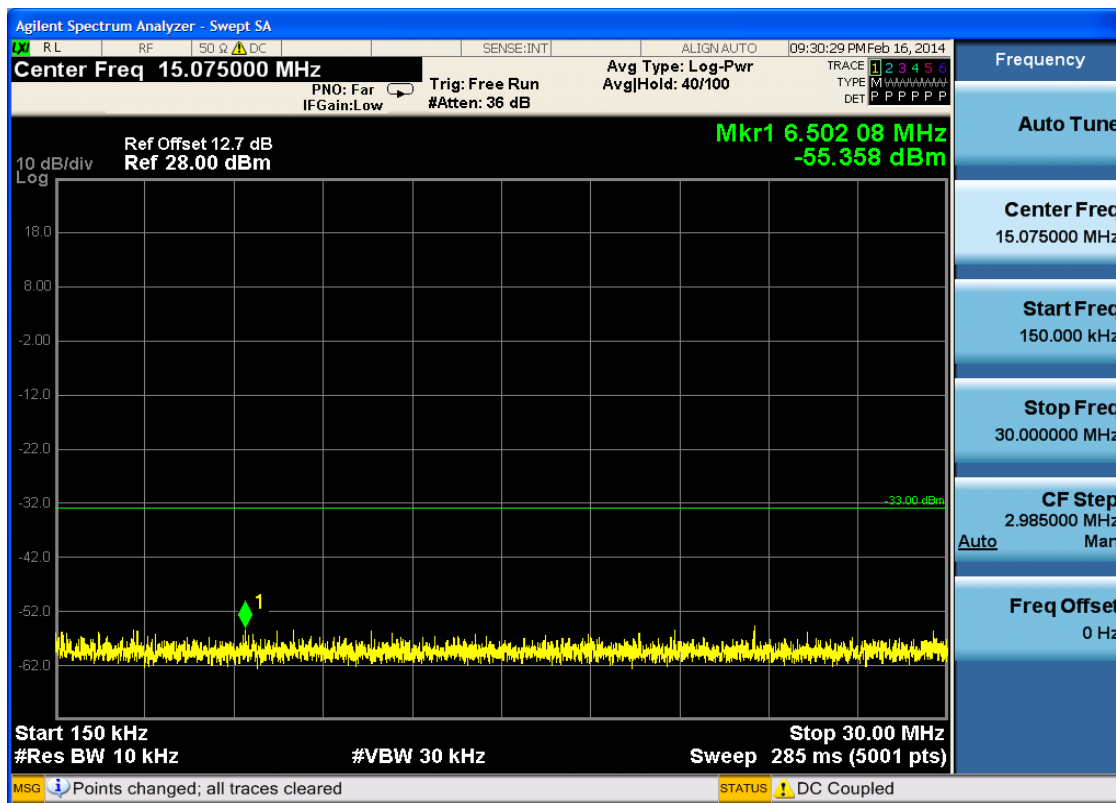


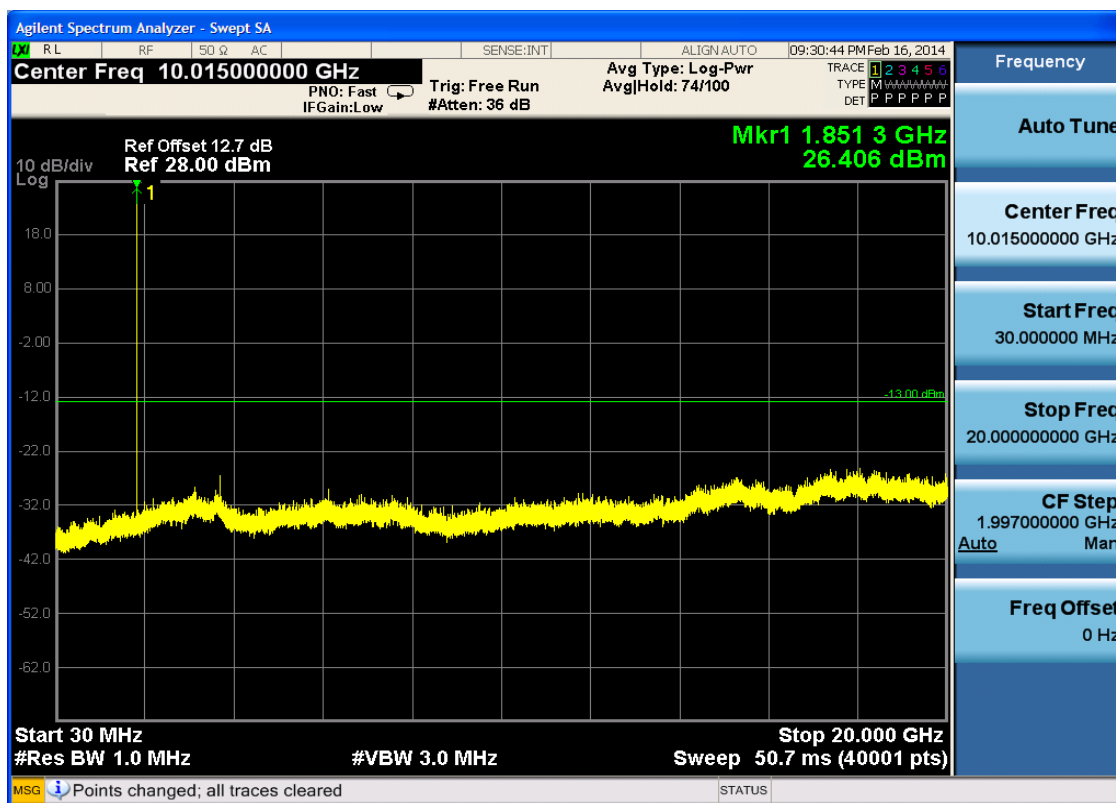
6.1.2 Test Band = BC1

6.1.2.1 Test Mode = CDMA/1X/TM1

6.1.2.1.1 Test Channel = LCH

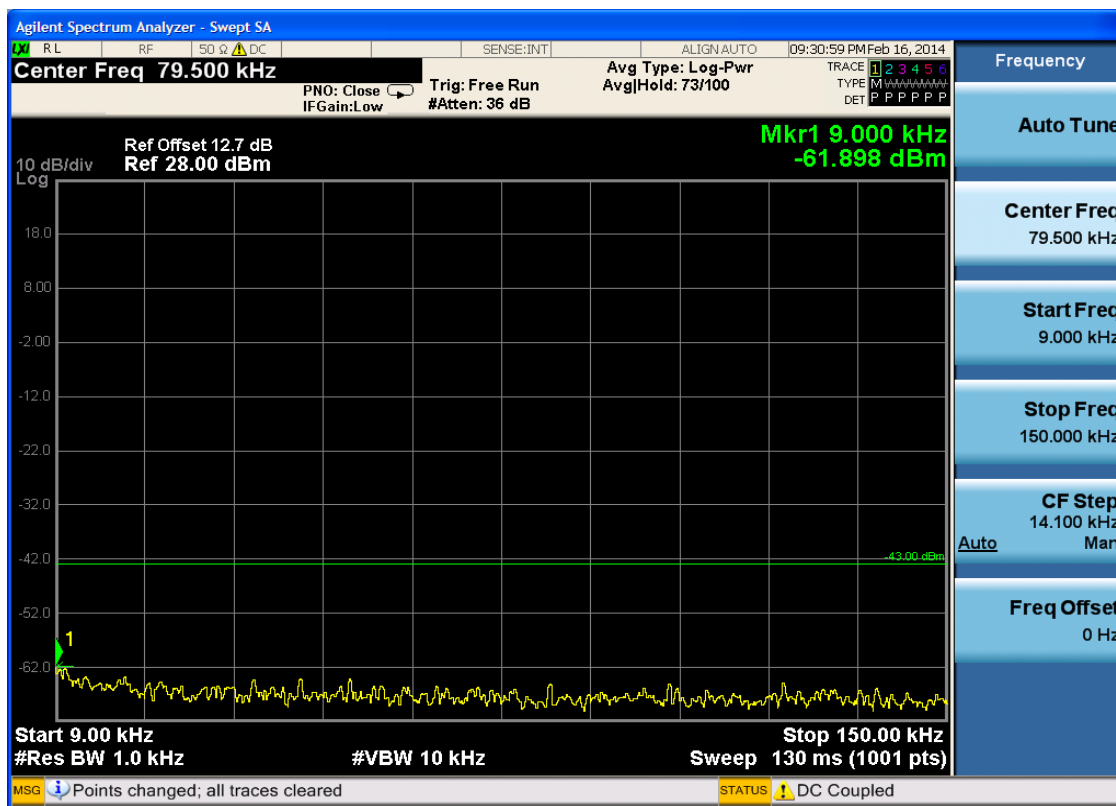


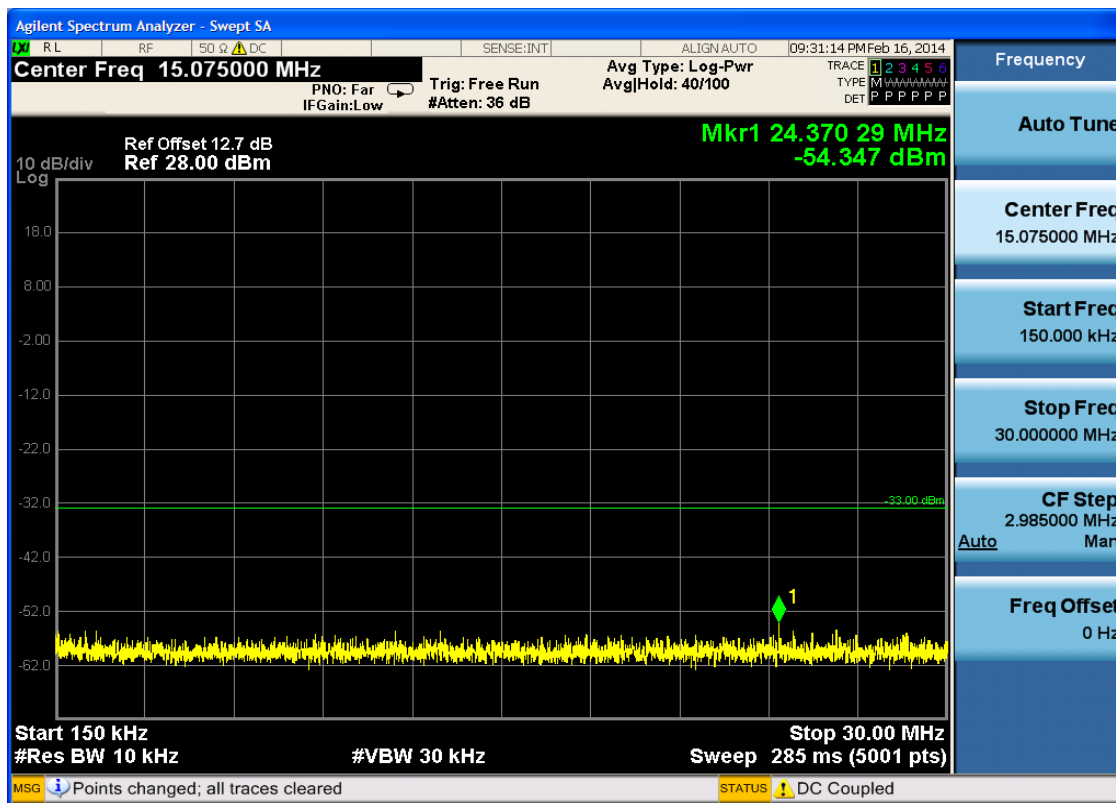


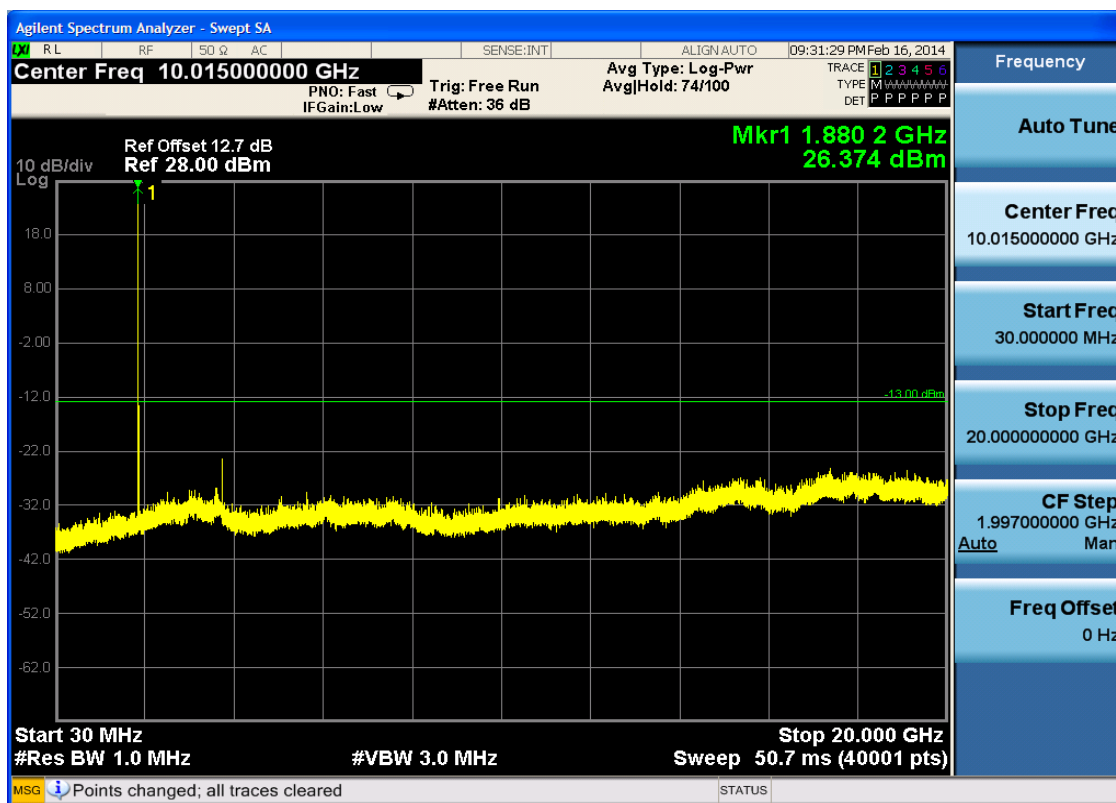




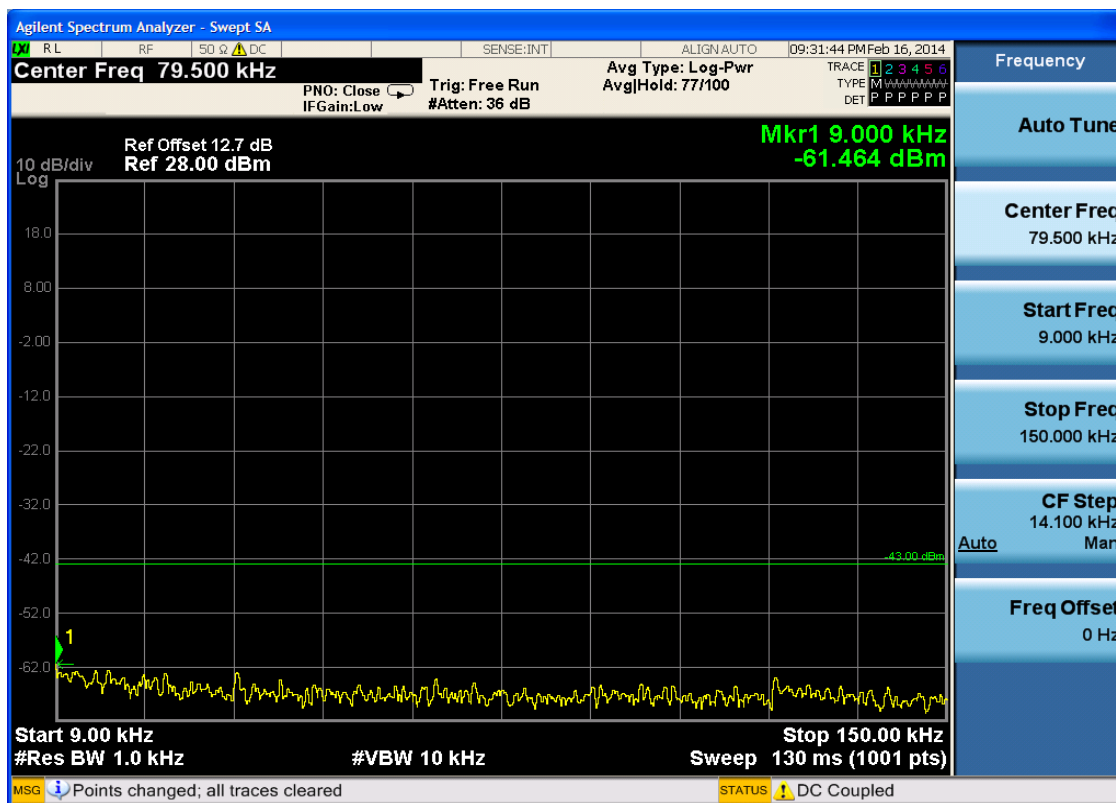
6.1.2.1.2 Test Channel = MCH

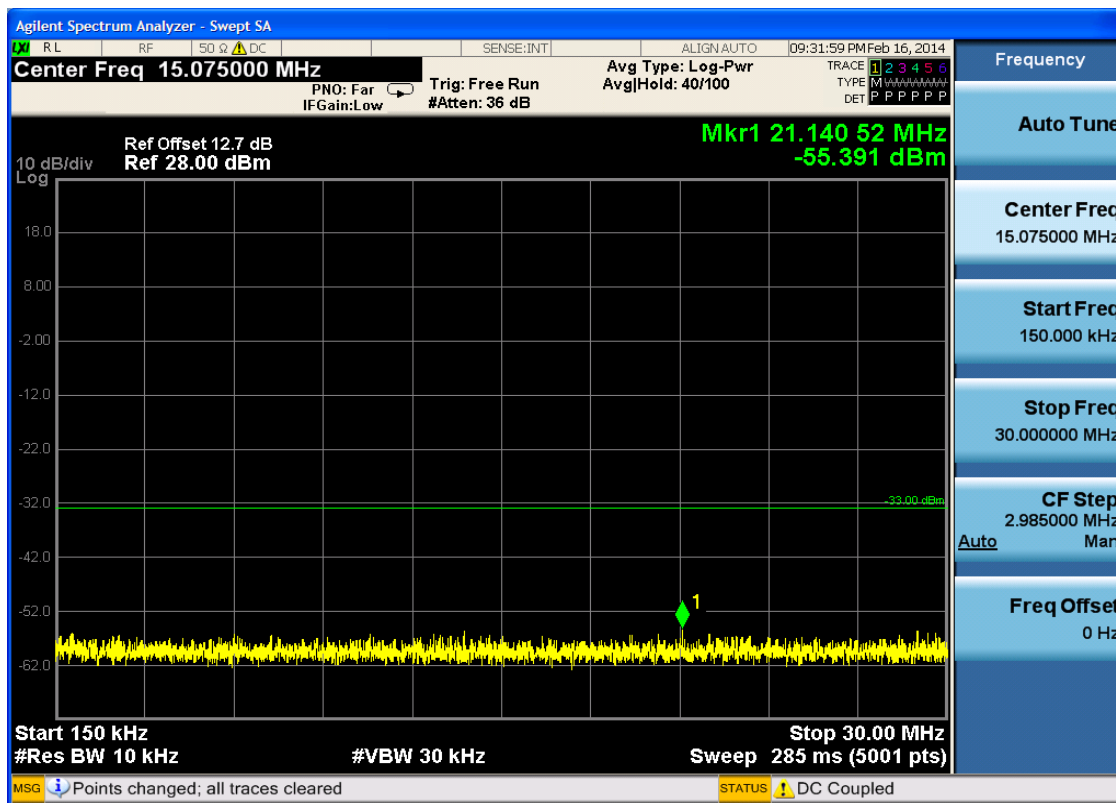


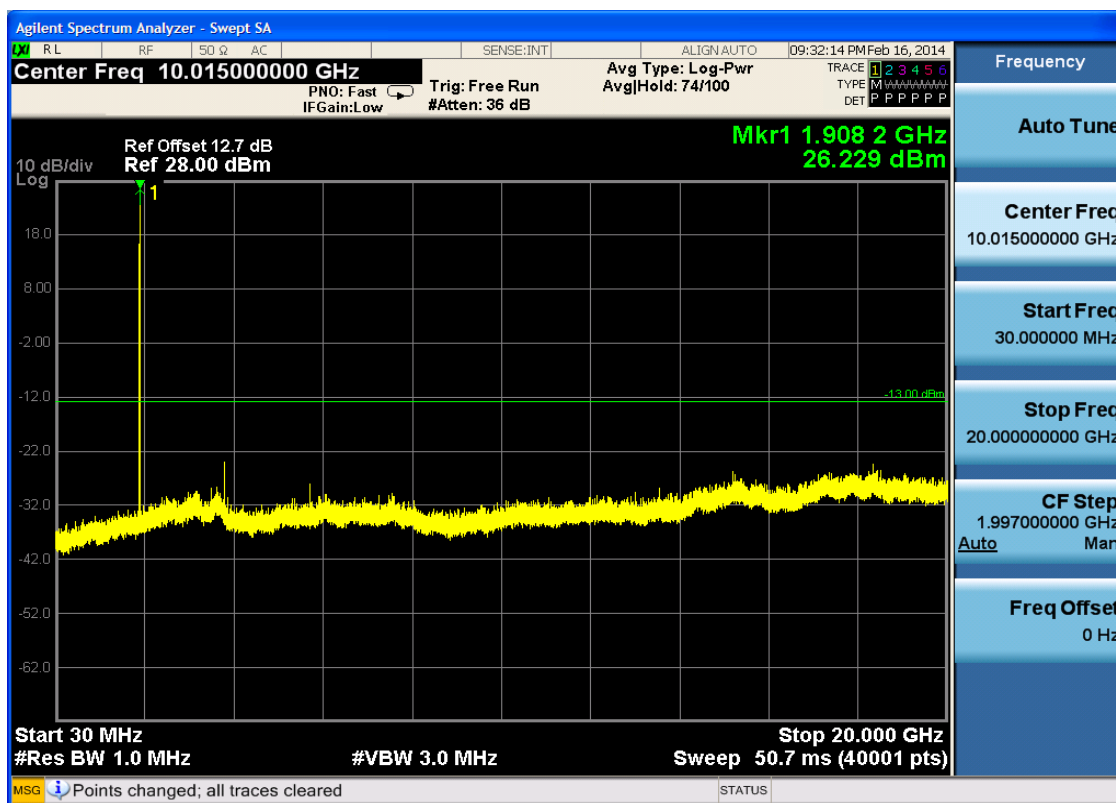




6.1.2.1.3 Test Channel = HCH

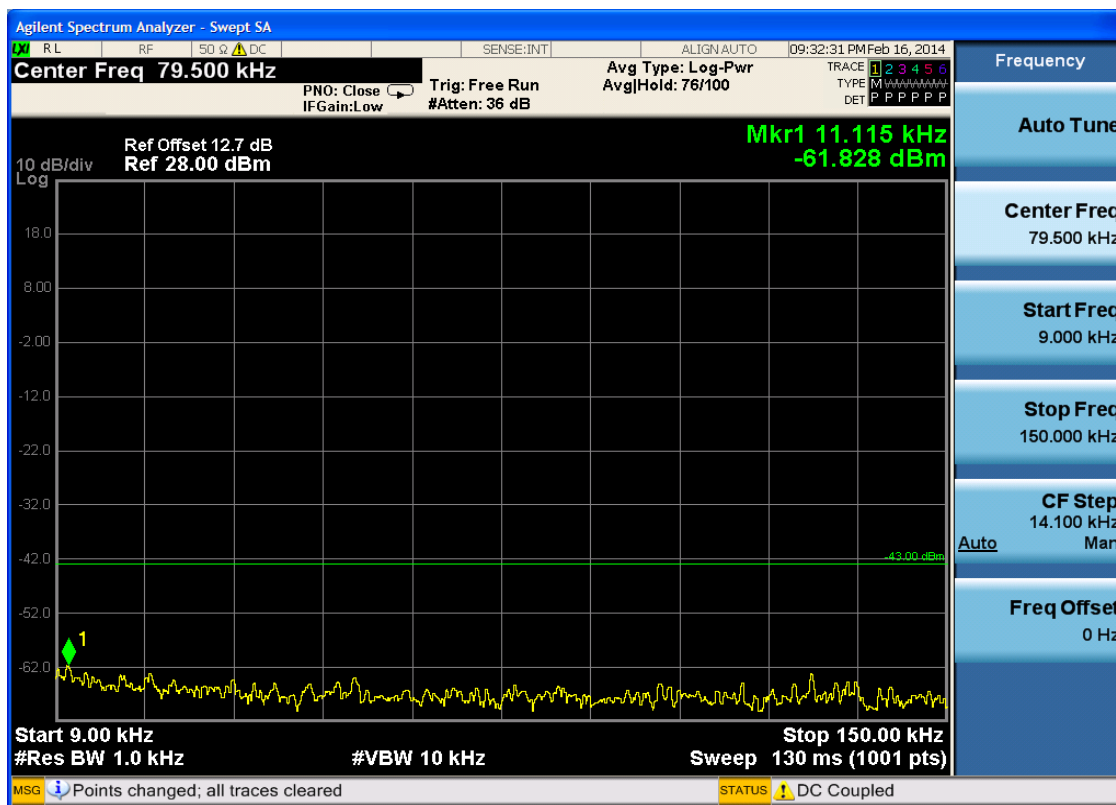


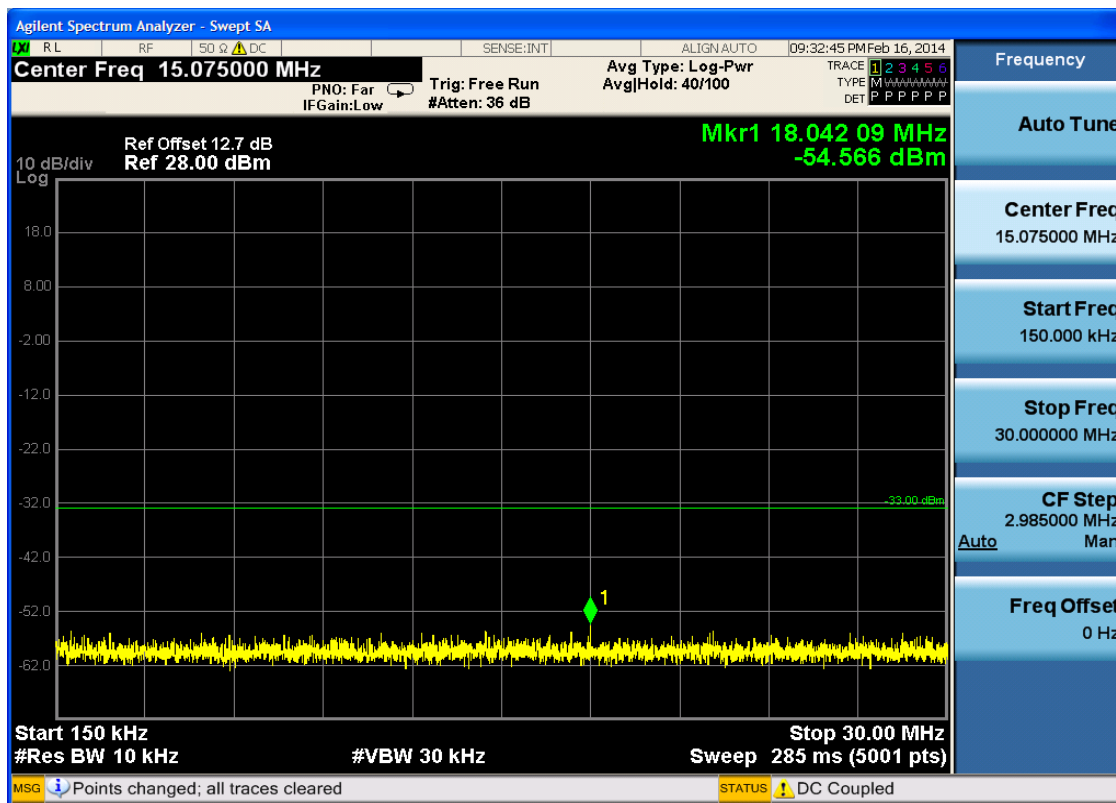


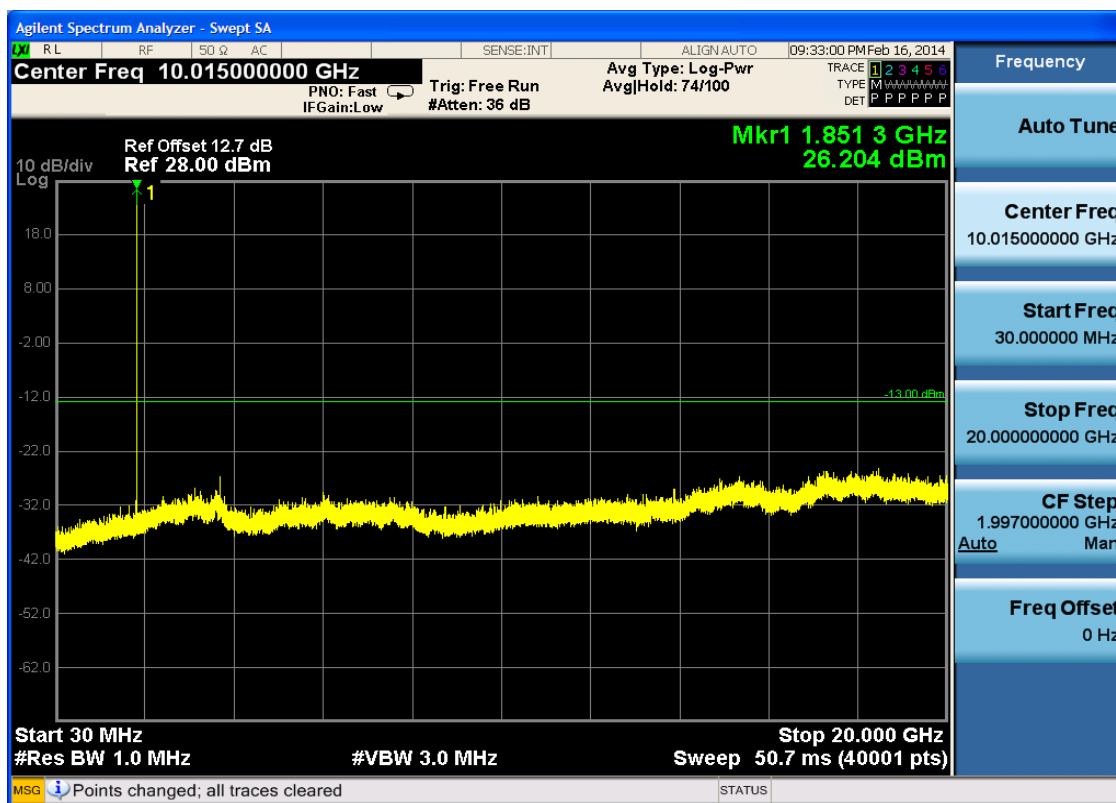


6.1.2.2 Test Mode = CDMA/1X/TM3

6.1.2.2.1 Test Channel = LCH

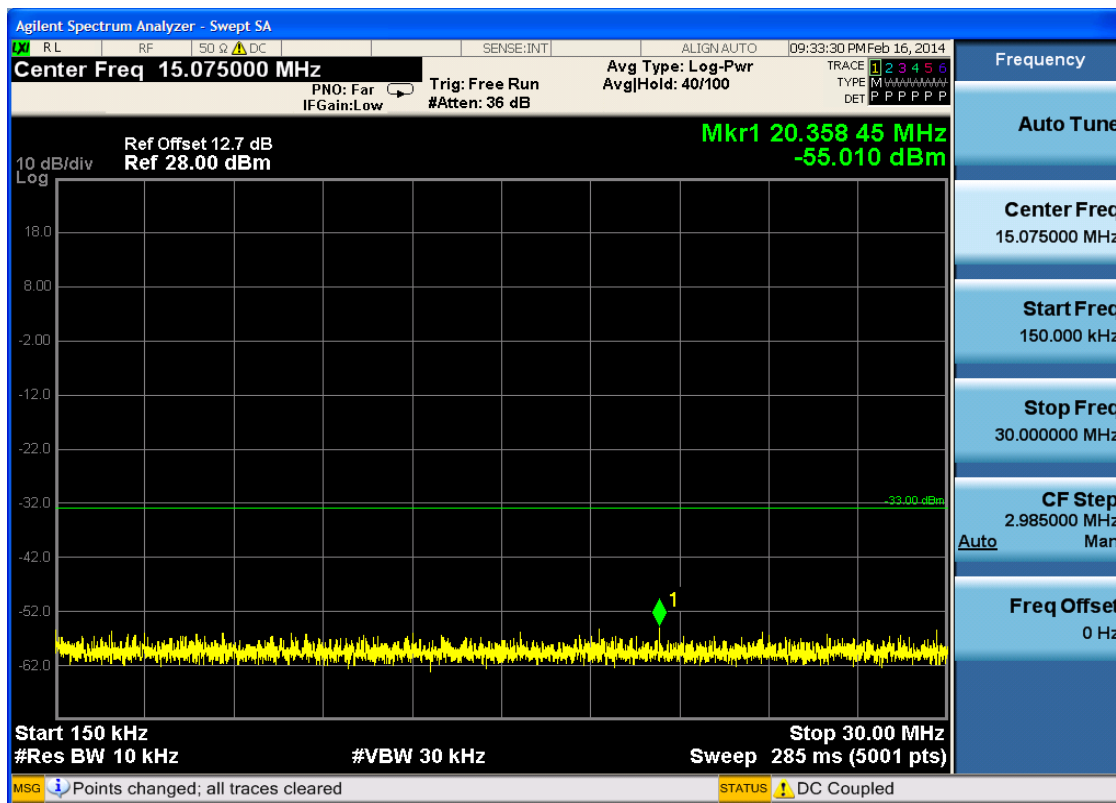






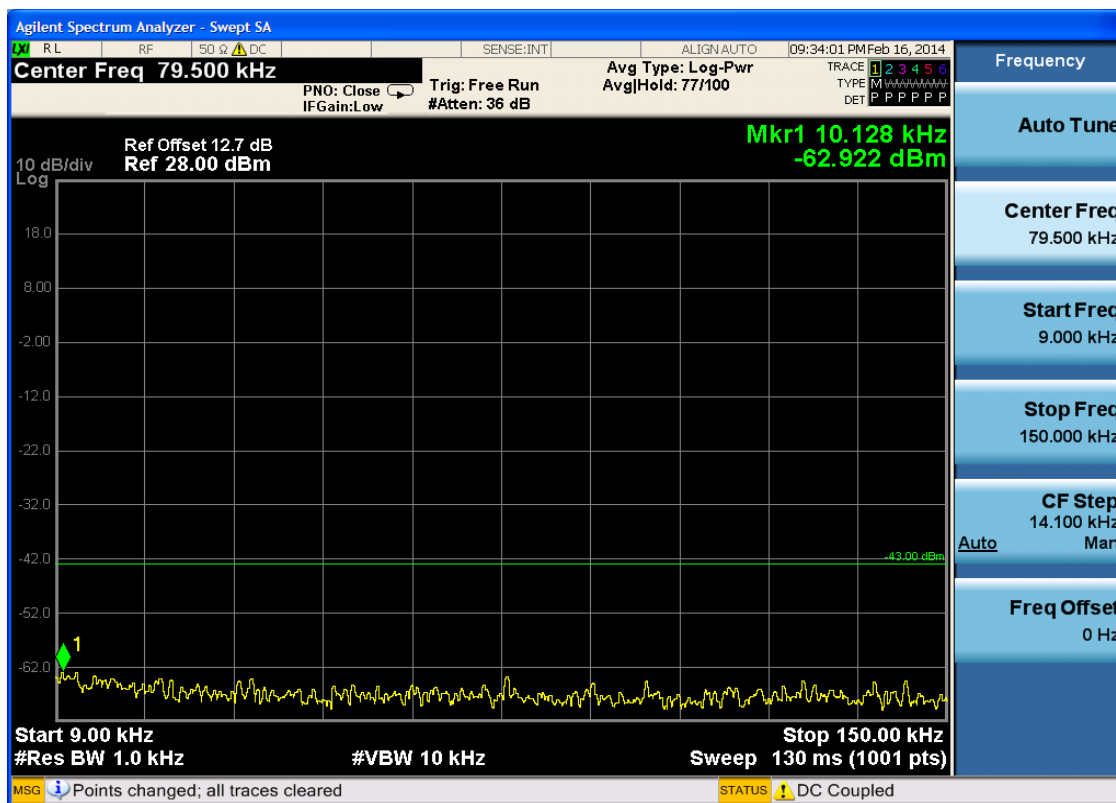
6.1.2.2.2 Test Channel = MCH

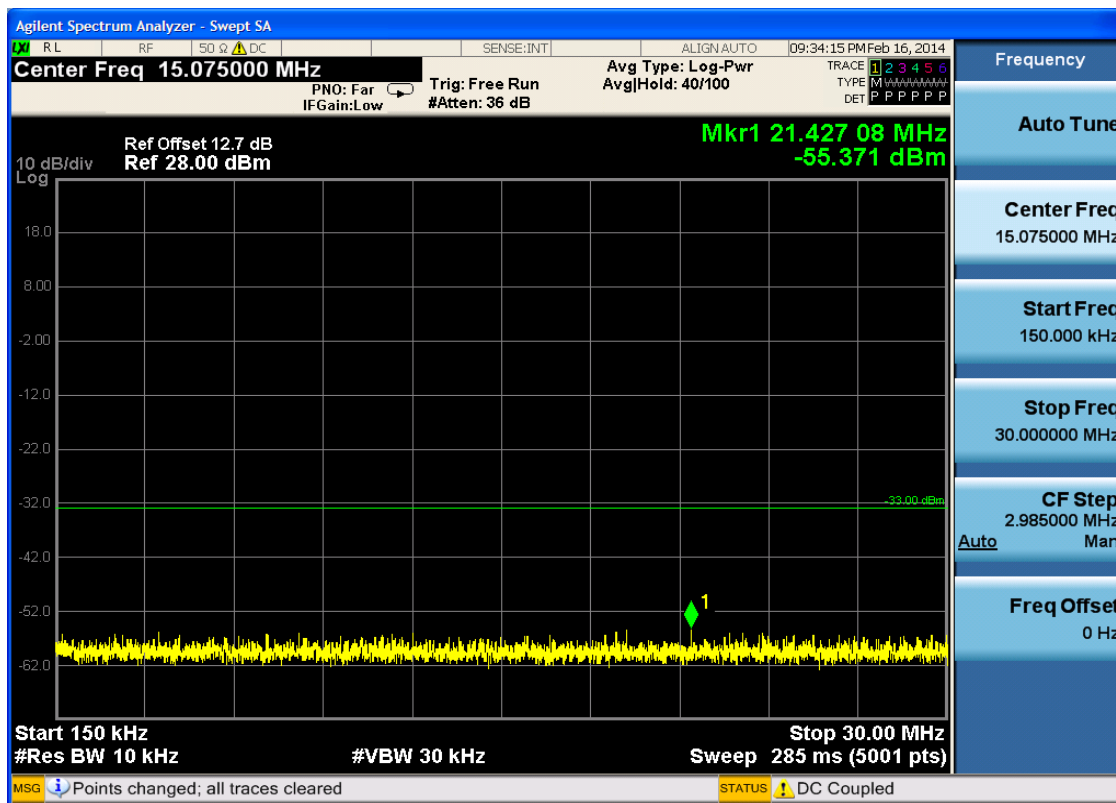


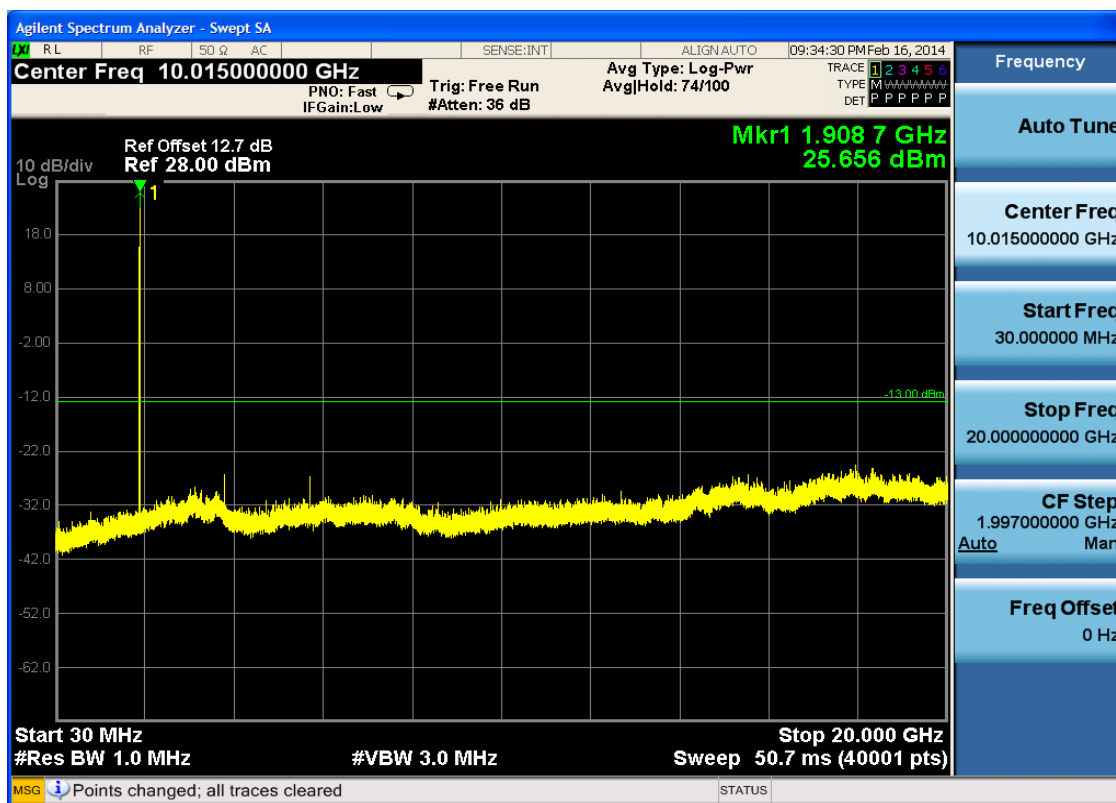




6.1.2.2.3 Test Channel = HCH







7Appendix_G: Field Strength of Spurious Radiation

Note:

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

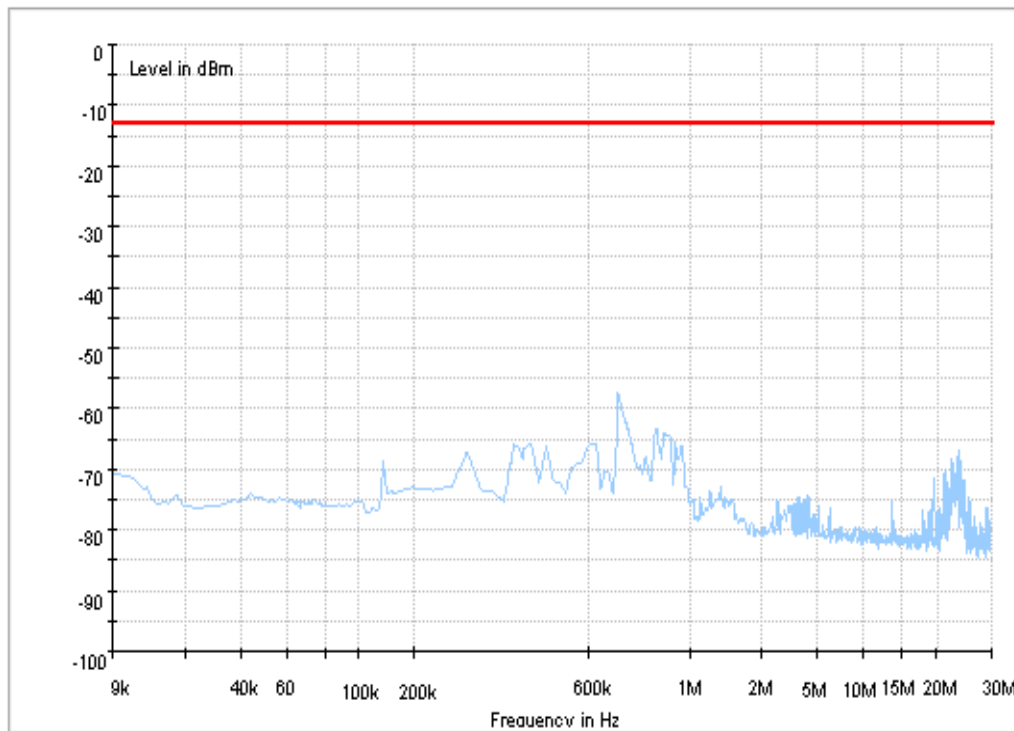
30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

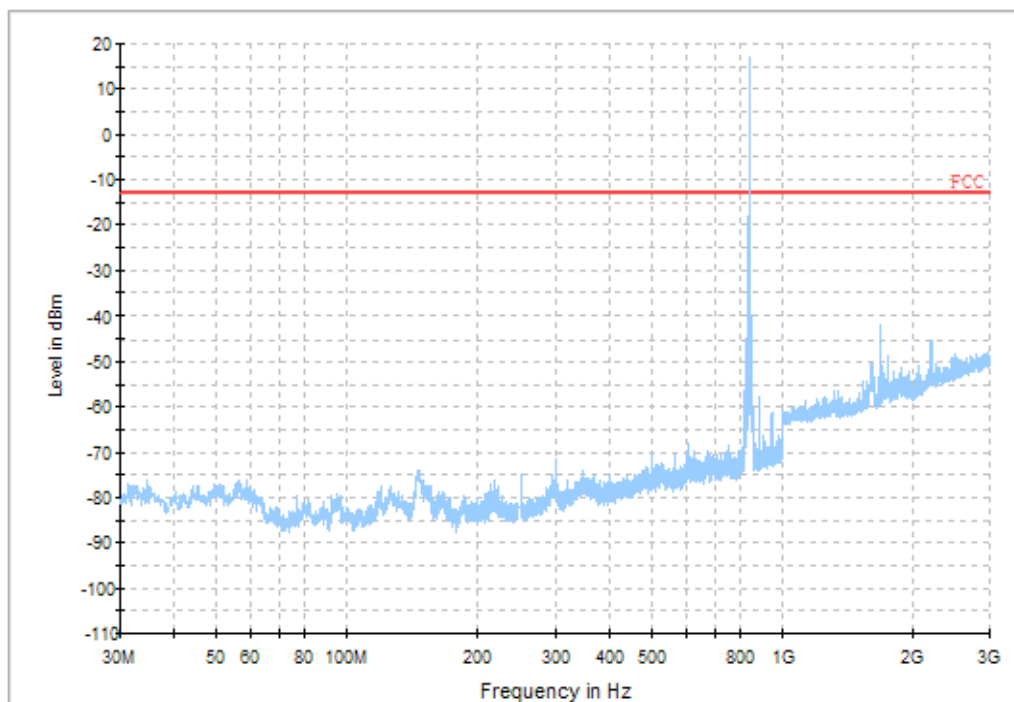
Part I - Test Plots

7.1 For CDMA/1X

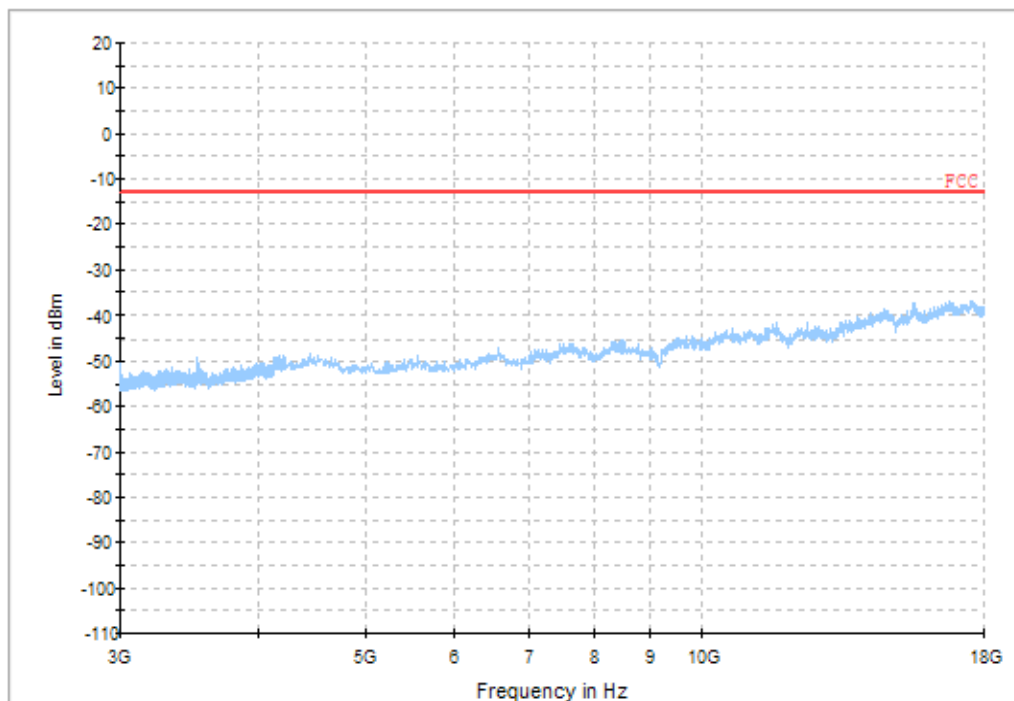
7.1.1 Test Band = BC0



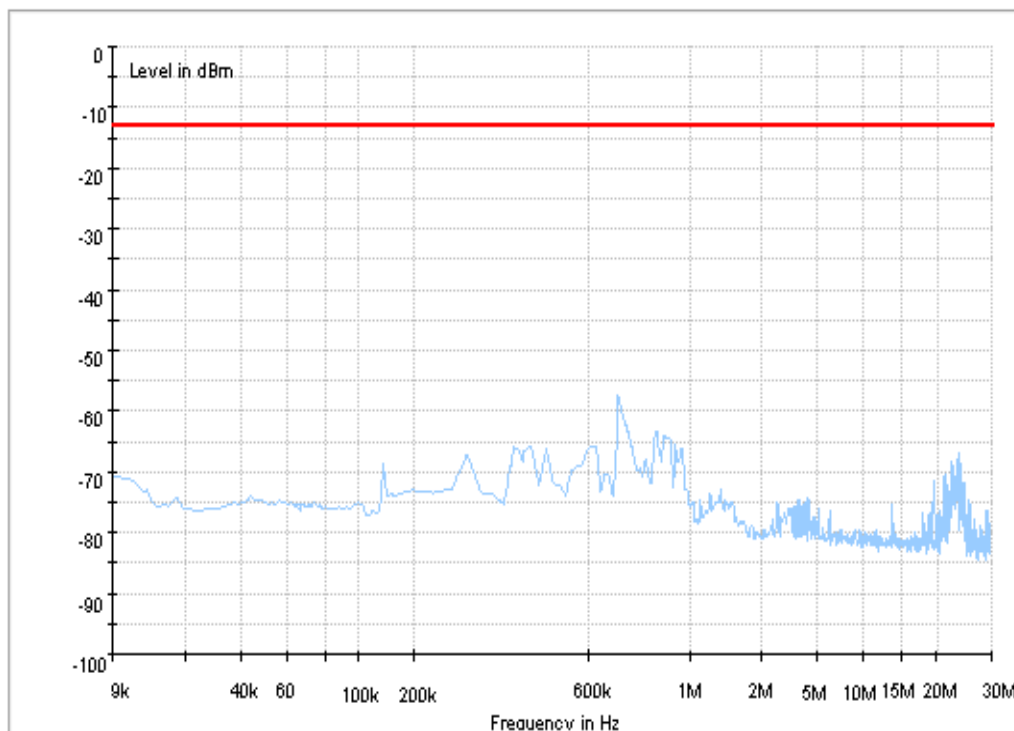
Copy of FCC PART22 CDMA800_L



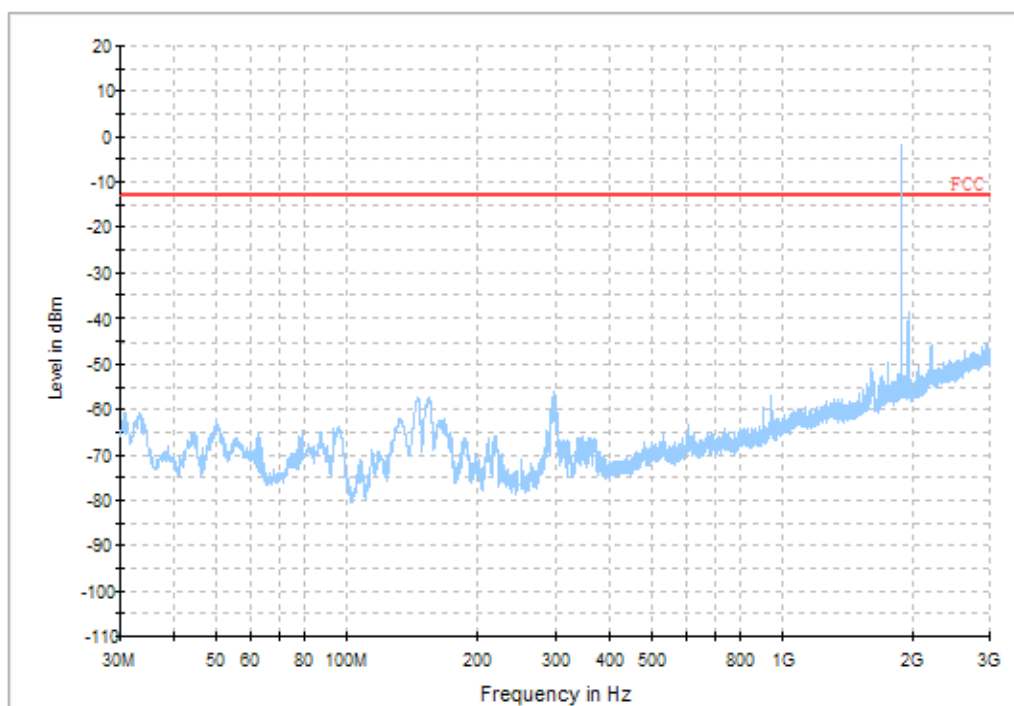
Copy of FCC PART22 CDMA800_H



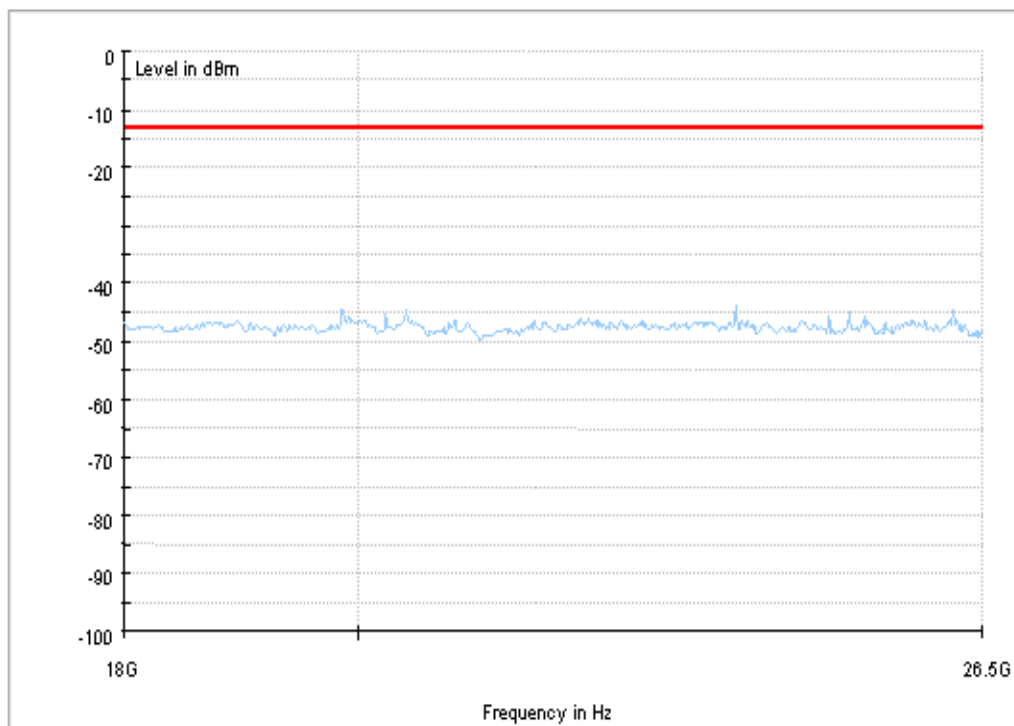
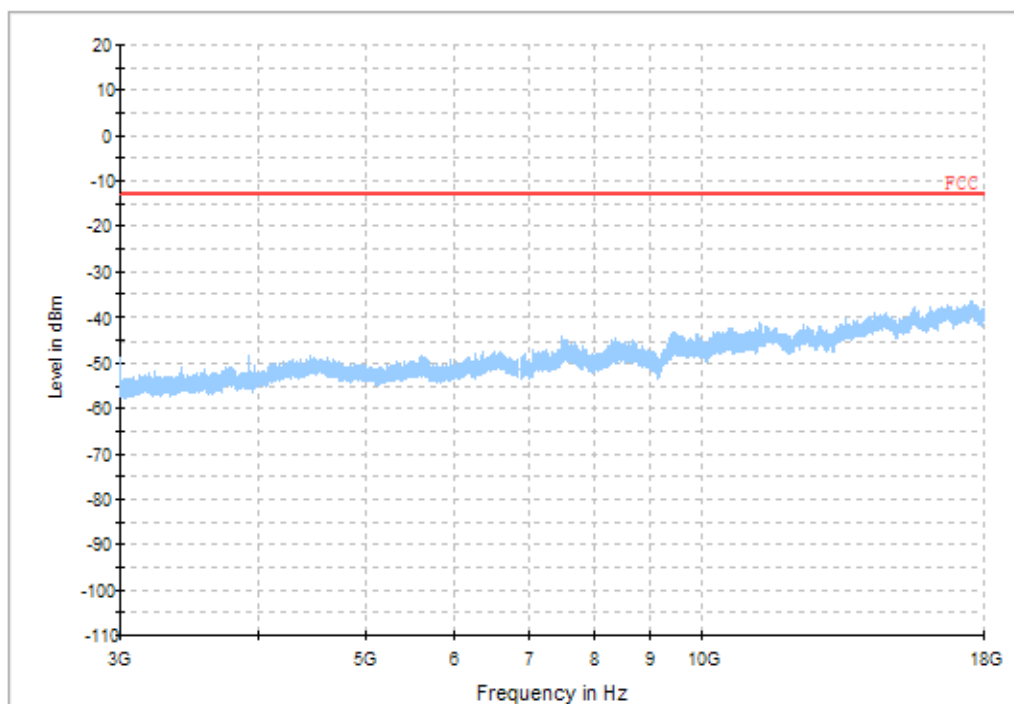
7.1.2 Test Band = BC1



Copy of FCC PART24 CDMA1900_L



Copy of FCC PART24 CDMA1900_H



8Appendix_H: Frequency Stability

8.1 For CDMA/1X

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BC0	CDMA/1X/TM1	LCH	TN	VL	-4.834	-0.00586	PASS
				VN	1.7578	0.00213	PASS
				VH	2.9297	0.00355	PASS
		MCH	TN	VL	4.1016	0.0049	PASS
				VN	4.0283	0.00482	PASS
				VH	3.1494	0.00376	PASS
		HCH	TN	VL	3.2959	0.00389	PASS
				VN	3.0029	0.00354	PASS
				VH	2.5635	0.00302	PASS
	CDMA/1X/TM3	LCH	TN	VL	-21.0205	-0.02549	PASS
				VN	1.9775	0.0024	PASS
				VH	1.2451	0.00151	PASS
		MCH	TN	VL	1.0986	0.00131	PASS
				VN	1.9775	0.00236	PASS
				VH	2.3438	0.0028	PASS
		HCH	TN	VL	1.4648	0.00173	PASS
				VN	-1.8311	-0.00216	PASS
				VH	-0.8789	-0.00104	PASS
BC1	CDMA/1X/TM1	LCH	TN	VL	-13.1104	-0.00708	PASS
				VN	10.4736	0.00566	PASS
				VH	9.8877	0.00534	PASS
		MCH	TN	VL	6.5186	0.00347	PASS
				VN	9.668	0.00514	PASS
				VH	8.9355	0.00475	PASS
		HCH	TN	VL	6.0059	0.00315	PASS
				VN	8.6426	0.00453	PASS
				VH	8.2764	0.00434	PASS
	CDMA/1X/TM3	LCH	TN	VL	-65.9912	-0.03565	PASS
				VN	14.4287	0.00779	PASS
				VH	8.7158	0.00471	PASS
		MCH	TN	VL	0.3662	0.00019	PASS
				VN	-1.9043	-0.00101	PASS
				VH			

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		HCH	TN	VH	-1.6113	-0.00086	PASS
				VL	-4.1748	-0.00219	PASS
				VN	-0.293	-0.00015	PASS
				VH	-0.293	-0.00015	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BC0	CDMA/1X/TM1	LCH	VN	-30	-6.4453	-0.00782	PASS
				-20	3.8818	0.00471	PASS
				-10	1.9775	0.0024	PASS
				0	3.4424	0.00417	PASS
				10	3.7354	0.00453	PASS
				20	1.6846	0.00204	PASS
				30	3.1494	0.00382	PASS
				40	2.1973	0.00266	PASS
				50	3.5156	0.00426	PASS
		MCH	VN	-30	4.6875	0.0056	PASS
				-20	4.4678	0.00534	PASS
				-10	4.4678	0.00534	PASS
				0	3.5889	0.00429	PASS
				10	4.4678	0.00534	PASS
				20	4.1016	0.0049	PASS
				30	4.3213	0.00517	PASS
				40	2.9297	0.0035	PASS
				50	3.7354	0.00447	PASS
		HCH	VN	-30	0.1465	0.00017	PASS
				-20	3.5156	0.00414	PASS
				-10	3.4424	0.00406	PASS
				0	3.0029	0.00354	PASS
				10	4.6143	0.00544	PASS
				20	3.4424	0.00406	PASS
				30	3.2227	0.0038	PASS
				40	2.6367	0.00311	PASS
				50	3.2959	0.00389	PASS
	CDMA/1X/TM3	LCH	VN	-30	-21.167	-0.02567	PASS
				-20	3.6621	0.00444	PASS
				-10	1.4648	0.00178	PASS
				0	1.8311	0.00222	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				10	0.5127	0.00062	PASS
				20	0.2197	0.00027	PASS
				30	0.9521	0.00115	PASS
				40	1.6113	0.00195	PASS
				50	0.2197	0.00027	PASS
		MCH	VN	-30	2.6367	0.00315	PASS
				-20	2.1973	0.00263	PASS
				-10	1.0986	0.00131	PASS
				0	0.8057	0.00096	PASS
				10	1.6846	0.00201	PASS
				20	0.293	0.00035	PASS
				30	0.9521	0.00115	PASS
				40	1.0986	0.00131	PASS
				50	1.0986	0.00131	PASS
		HCH	VN	-30	-2.8564	-0.00337	PASS
				-20	-1.9775	-0.00233	PASS
				-10	-1.0254	-0.00121	PASS
				0	-0.2197	-0.00026	PASS
				10	-0.4395	-0.00052	PASS
				20	-0.293	-0.00035	PASS
				30	0.293	0.00035	PASS
				40	-0.3662	-0.00043	PASS
				50	-1.3916	-0.00164	PASS
BC1	CDMA/1X/TM1	LCH	VN	-30	-13.3301	-0.0072	PASS
				-20	14.7217	0.00795	PASS
				-10	12.9639	0.007	PASS
				0	13.2568	0.00716	PASS
				10	11.5723	0.00625	PASS
				20	12.4512	0.00673	PASS
				30	10.4004	0.00562	PASS
				40	12.5977	0.0068	PASS
				50	10.4004	0.00562	PASS
		MCH	VN	-30	7.8369	0.00417	PASS
				-20	9.082	0.00483	PASS
				-10	7.0313	0.00374	PASS
				0	8.6426	0.0046	PASS
				10	6.0791	0.00323	PASS
				20	9.8877	0.00526	PASS
				30	3.5156	0.00187	PASS
				40	6.3721	0.00339	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		HCH	VN	50	5.9326	0.00316	PASS
				-30	7.3975	0.00388	PASS
				-20	10.2539	0.00537	PASS
				-10	9.5947	0.00503	PASS
				0	9.9609	0.00522	PASS
				10	9.082	0.00476	PASS
				20	8.4229	0.00441	PASS
				30	10.0342	0.00526	PASS
				40	8.4229	0.00441	PASS
				50	10.3272	0.00541	PASS
	CDMA/1X/TM3	LCH	VN	-30	-63.5742	-0.03434	PASS
				-20	16.8457	0.0091	PASS
				-10	9.0088	0.00487	PASS
				0	7.1777	0.00388	PASS
				10	4.6875	0.00253	PASS
				20	4.3213	0.00233	PASS
				30	4.541	0.00245	PASS
				40	4.0283	0.00218	PASS
				50	4.1016	0.00222	PASS
		MCH	VN	-30	-4.9805	-0.00265	PASS
				-20	-3.1494	-0.00168	PASS
				-10	-0.5127	-0.00027	PASS
				0	-2.71	-0.00144	PASS
				10	-1.0254	-0.00055	PASS
				20	-0.8789	-0.00047	PASS
				30	-1.7578	-0.00094	PASS
				40	-0.8789	-0.00047	PASS
				50	-1.4648	-0.00078	PASS
		HCH	VN	-30	-2.71	-0.00142	PASS
				-20	-1.1719	-0.00061	PASS
				-10	-0.8789	-0.00046	PASS
				0	0.6592	0.00035	PASS
				10	-0.3662	-0.00019	PASS
				20	0.5859	0.00031	PASS
				30	-0.4395	-0.00023	PASS
				40	-1.4648	-0.00077	PASS
				50	-0.293	-0.00015	PASS

END