



Appendix for test report

1 Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
BC10	CDMA/1X/TM1	LCH	24.06	20.91	38.5	PASS
		MCH	24.06	20.91	38.5	PASS
		HCH	24.03	20.88	38.5	PASS
	CDMA/1X/TM3	LCH	24.06	20.91	38.5	PASS
		MCH	24.07	20.92	38.5	PASS
		HCH	24.03	20.88	38.5	PASS
	CDMA/EV-DO/Subtype0	LCH	24.03	27.18	38.5	PASS
		MCH	24.09	27.24	38.5	PASS
		HCH	23.94	27.09	38.5	PASS
	CDMA/EV-DO/Subtype2	LCH	23.61	26.76	38.5	PASS
		MCH	23.53	26.68	38.5	PASS
		HCH	23.58	26.73	38.5	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

Void

3Appendix_C: Modulation Characteristics

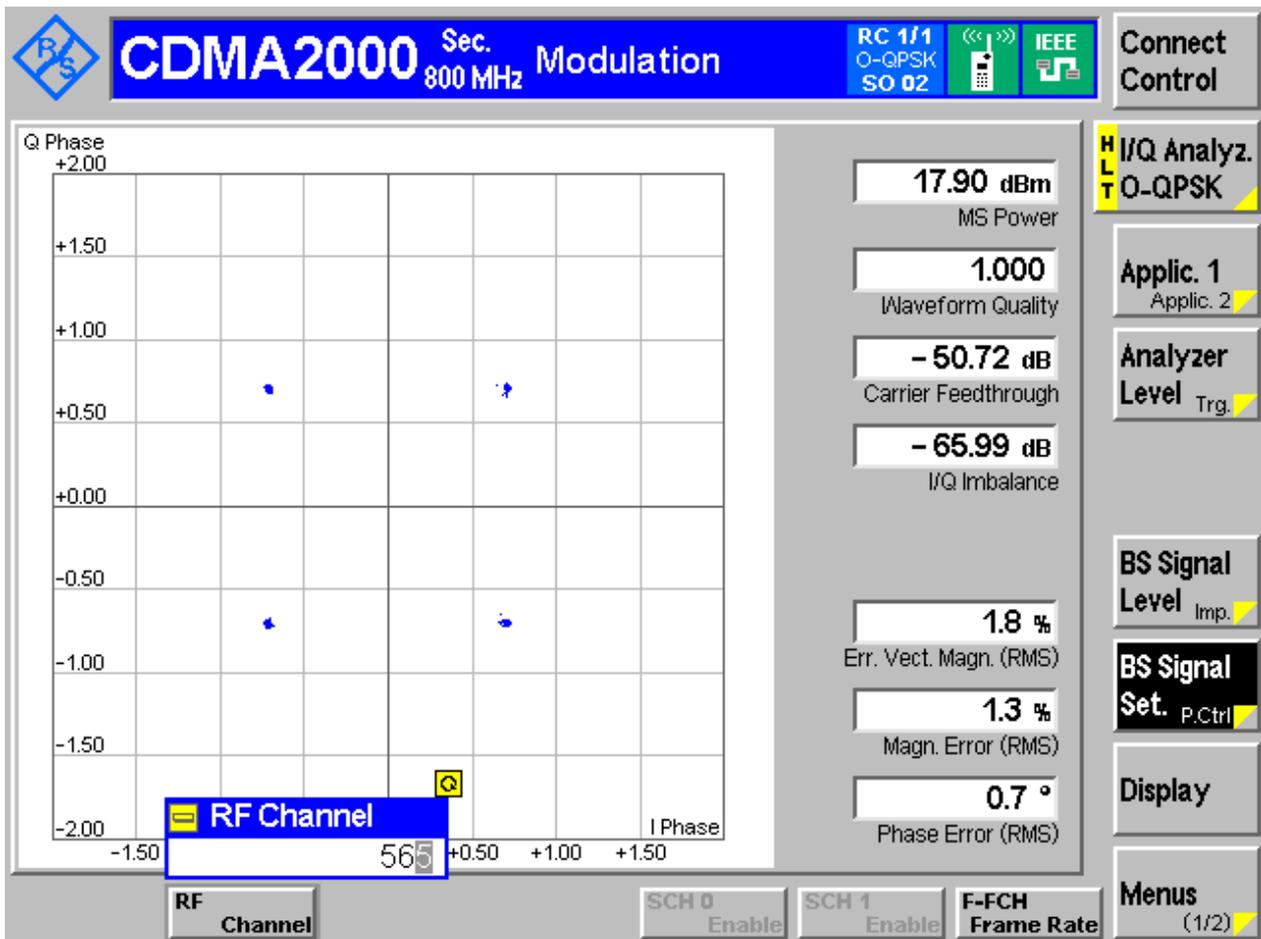
Part I - Test Plots

3.1 For CDMA/1X

3.1.1 Test Band = BC10

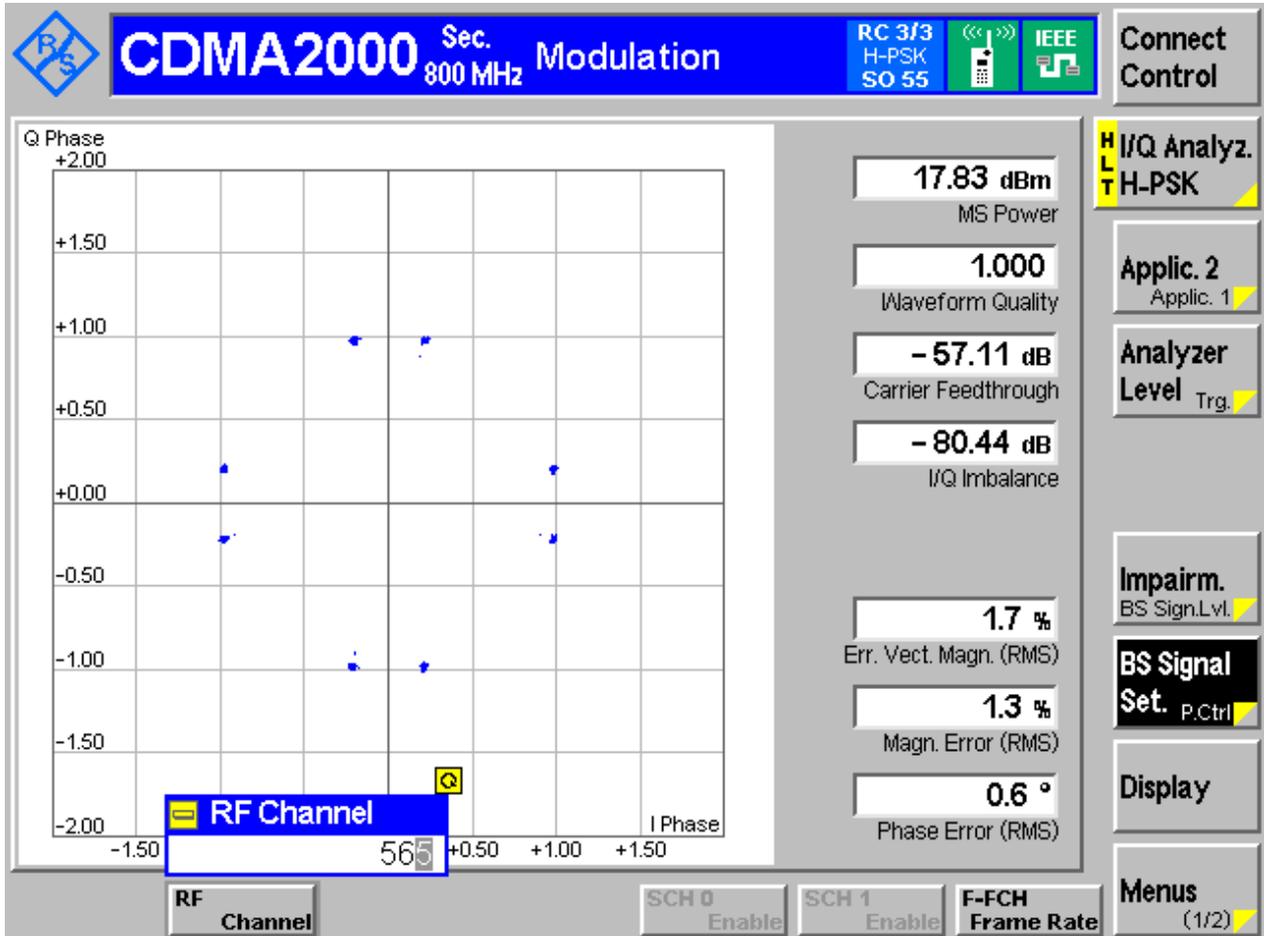
3.1.1.1 Test Mode = CDMA/1X/TM1

3.1.1.1.1 Test Channel = MCH



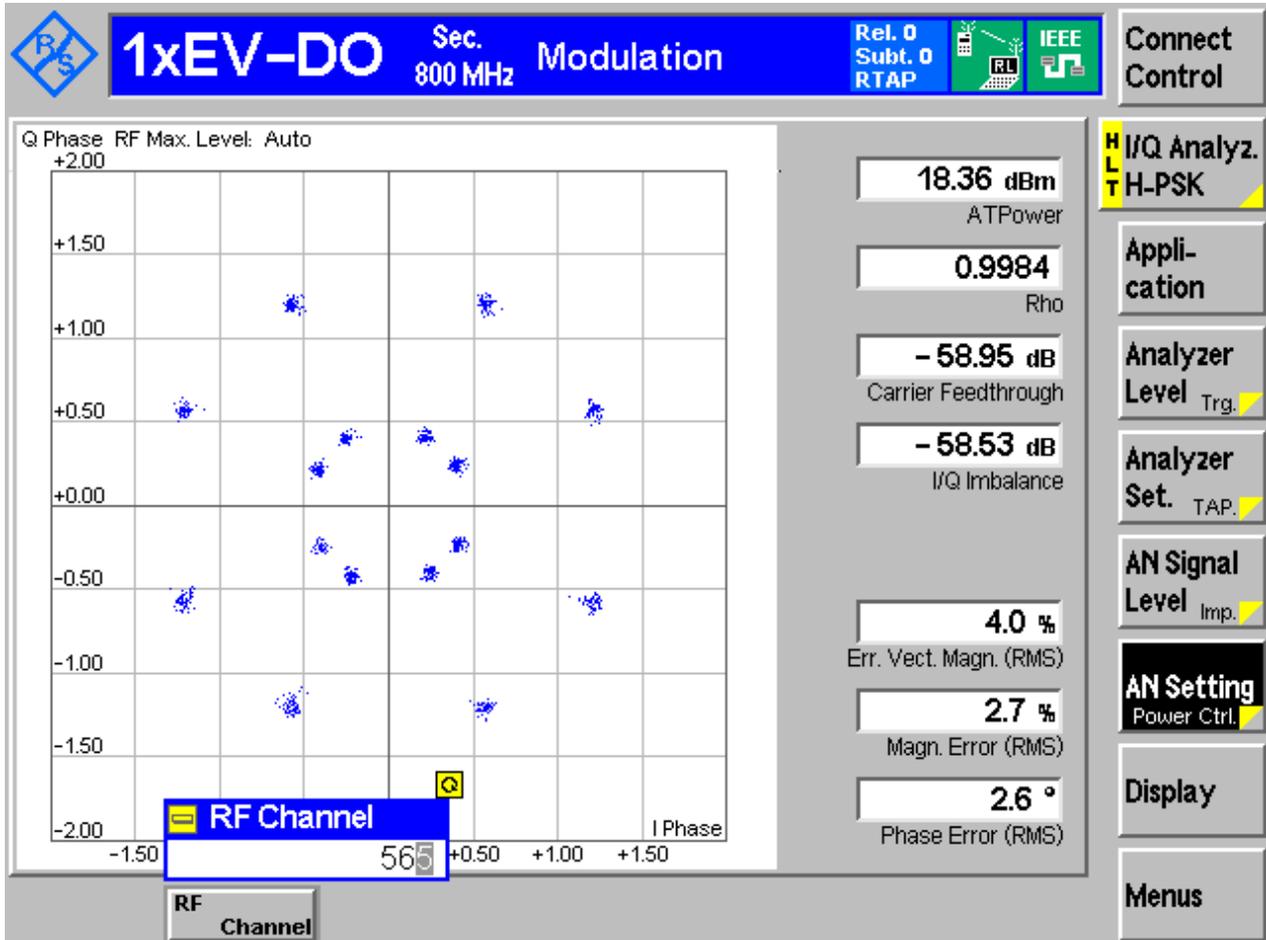
3.1.1.2 Test Mode = CDMA/1X/TM3

3.1.1.2.1 Test Channel = MCH



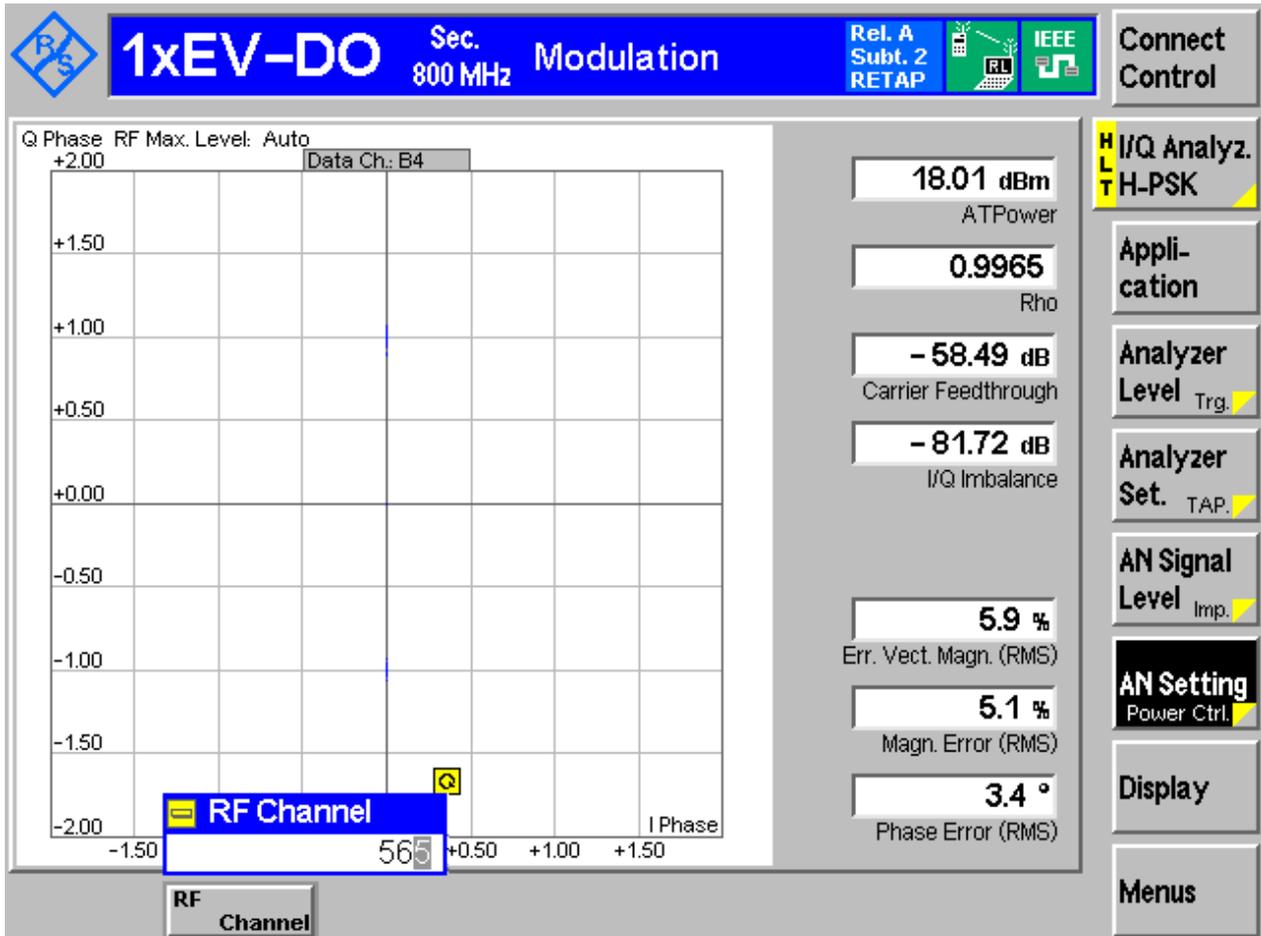
3.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

3.1.1.3.1 Test Channel = MCH



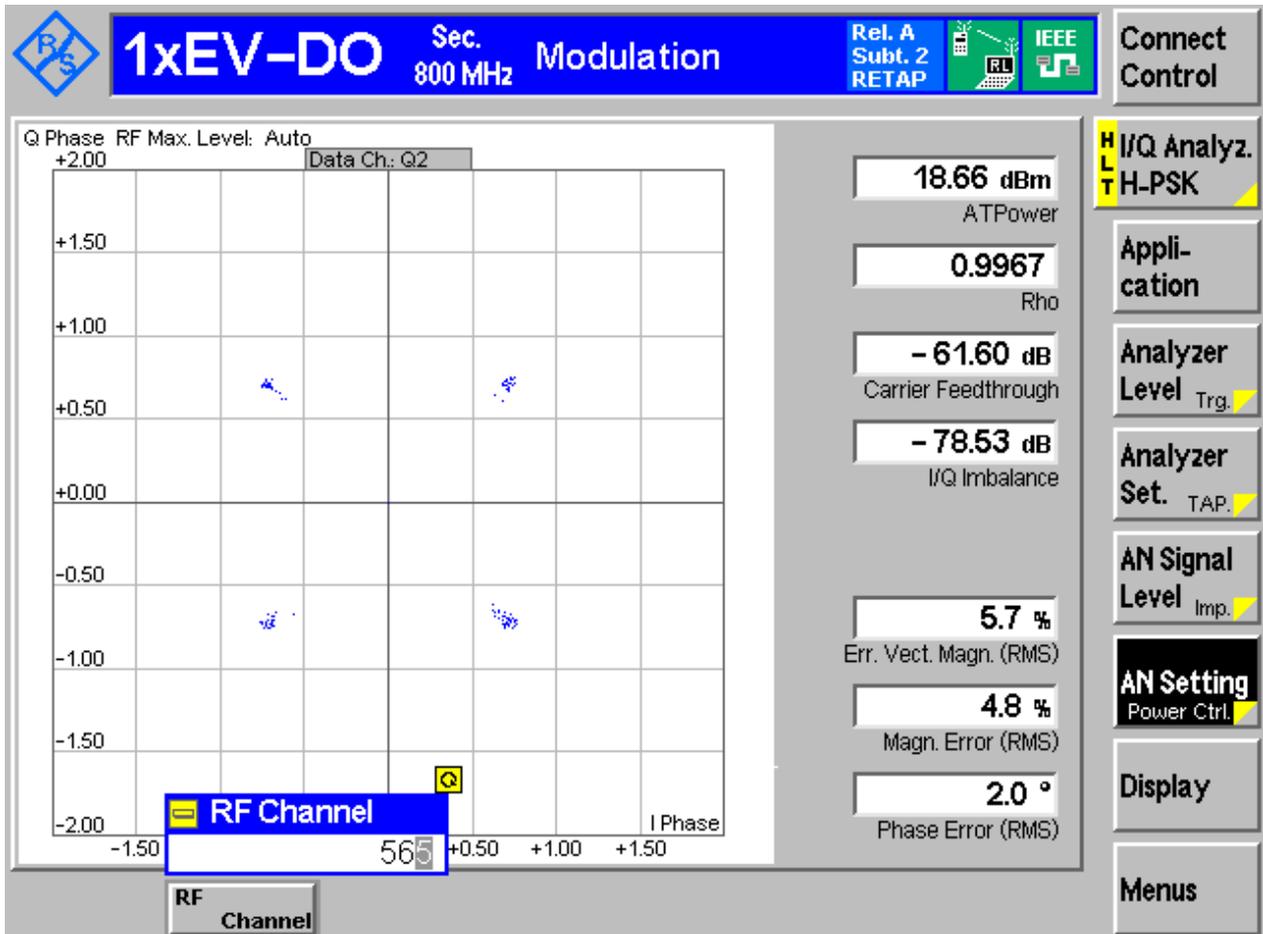
3.1.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

3.1.1.4.1 Test Channel = MCH



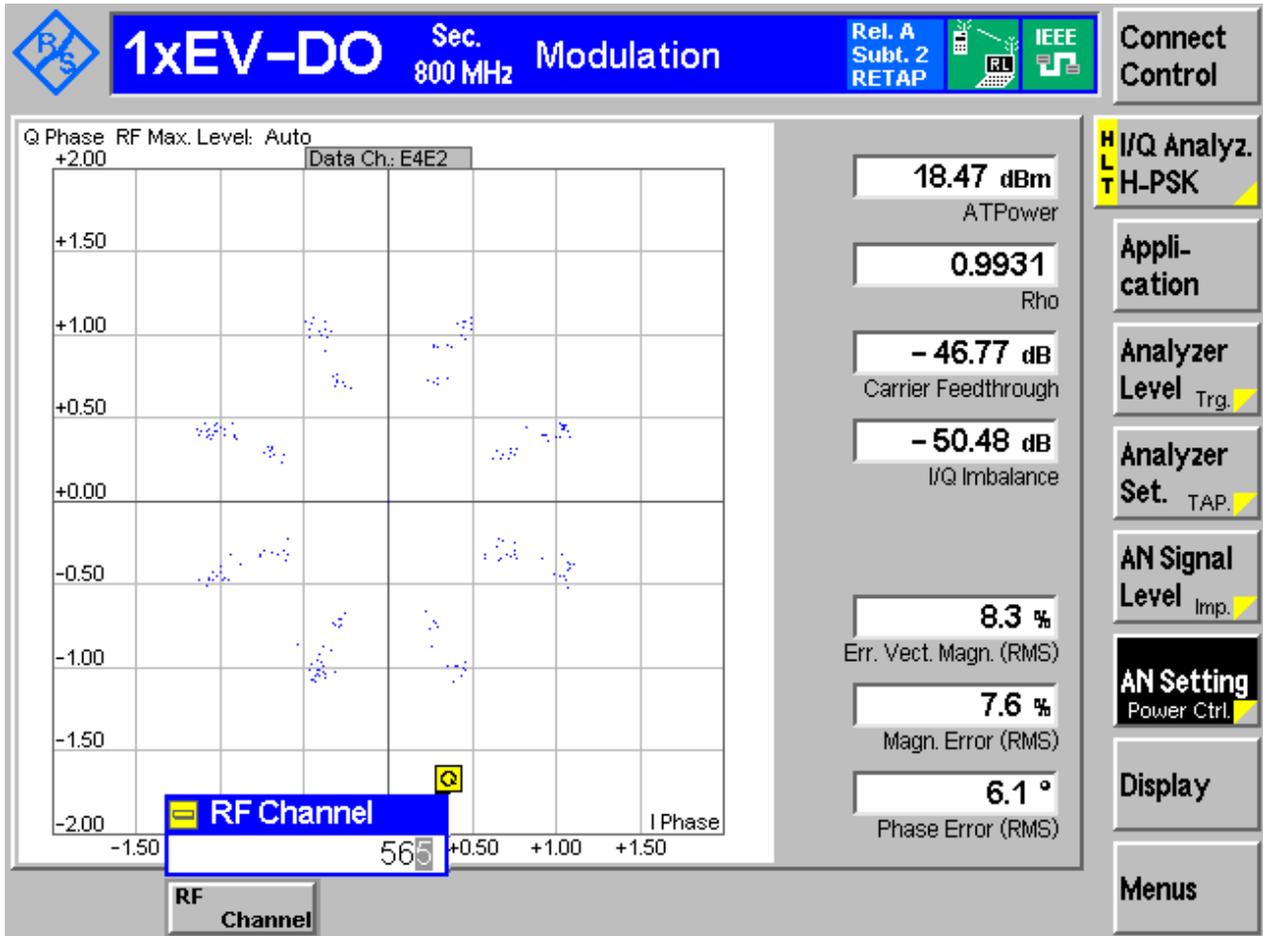
3.1.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

3.1.1.5.1 Test Channel = MCH



3.1.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

3.1.1.6.1 Test Channel = MCH



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
BC10	CDMA/1X/TM1	LCH	1.29	1.46	Pass
		MCH	1.29	1.45	Pass
		HCH	1.29	1.46	Pass
	CDMA/1X/TM3	LCH	1.28	1.45	Pass
		MCH	1.29	1.46	Pass
		HCH	1.28	1.45	Pass
	CDMA/EV-DO/ Subtype0	LCH	1.29	1.45	Pass
		MCH	1.28	1.45	Pass
		HCH	1.29	1.45	Pass
	CDMA/EV-DO/ Subtype2/256	LCH	1.29	1.45	Pass
		MCH	1.29	1.45	Pass
		HCH	1.28	1.45	Pass
	CDMA/EV-DO/ Subtype2/409 6	LCH	1.29	1.45	Pass
		MCH	1.29	1.45	Pass
		HCH	1.29	1.45	Pass
	CDMA/EV-DO/ Subtype2/122 88	LCH	1.29	1.45	Pass
		MCH	1.28	1.45	Pass
		HCH	1.28	1.47	Pass

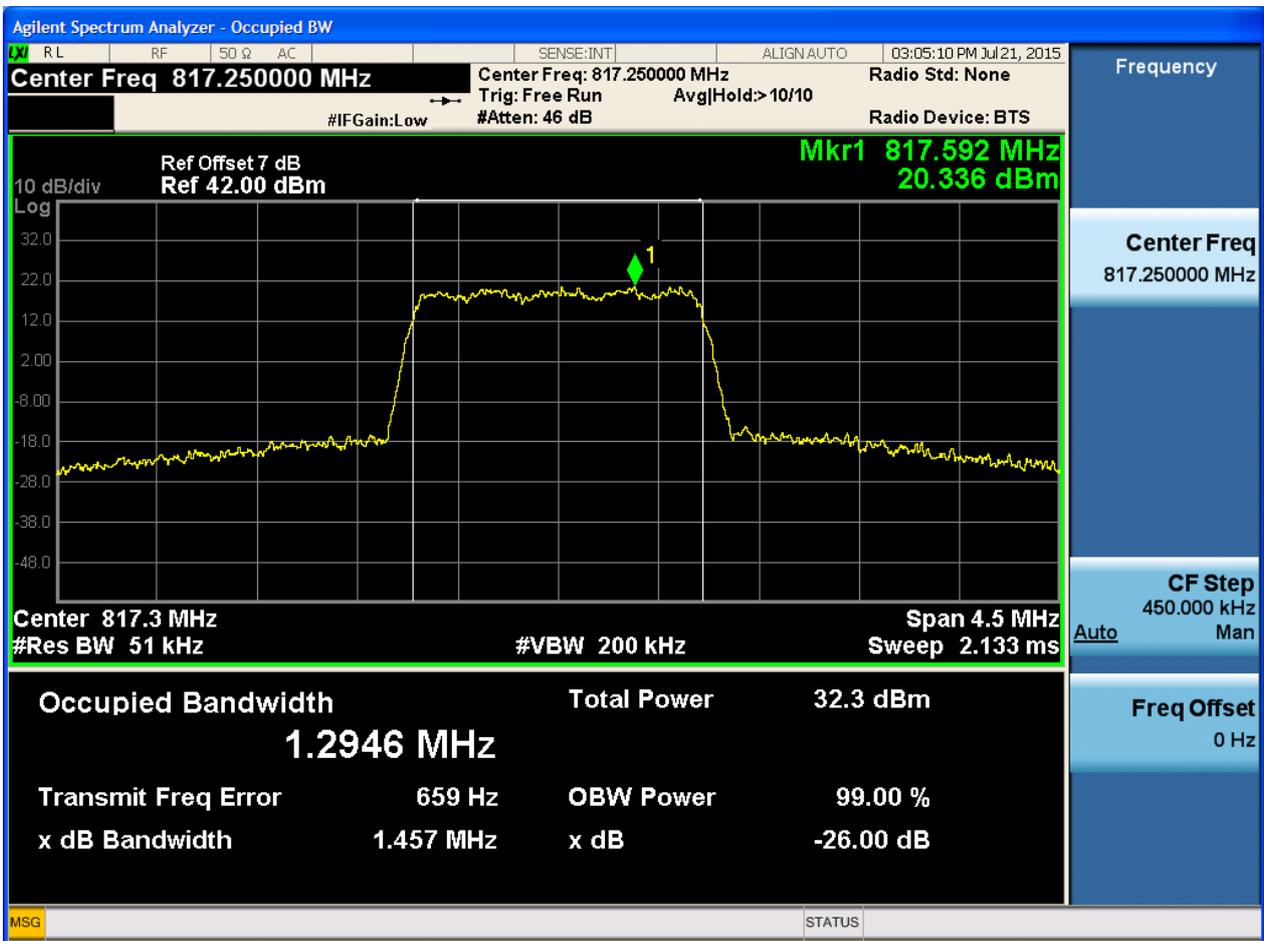
Part II - Test Plots

4.1 For CDMA1X

4.1.1 Test Band = BC10

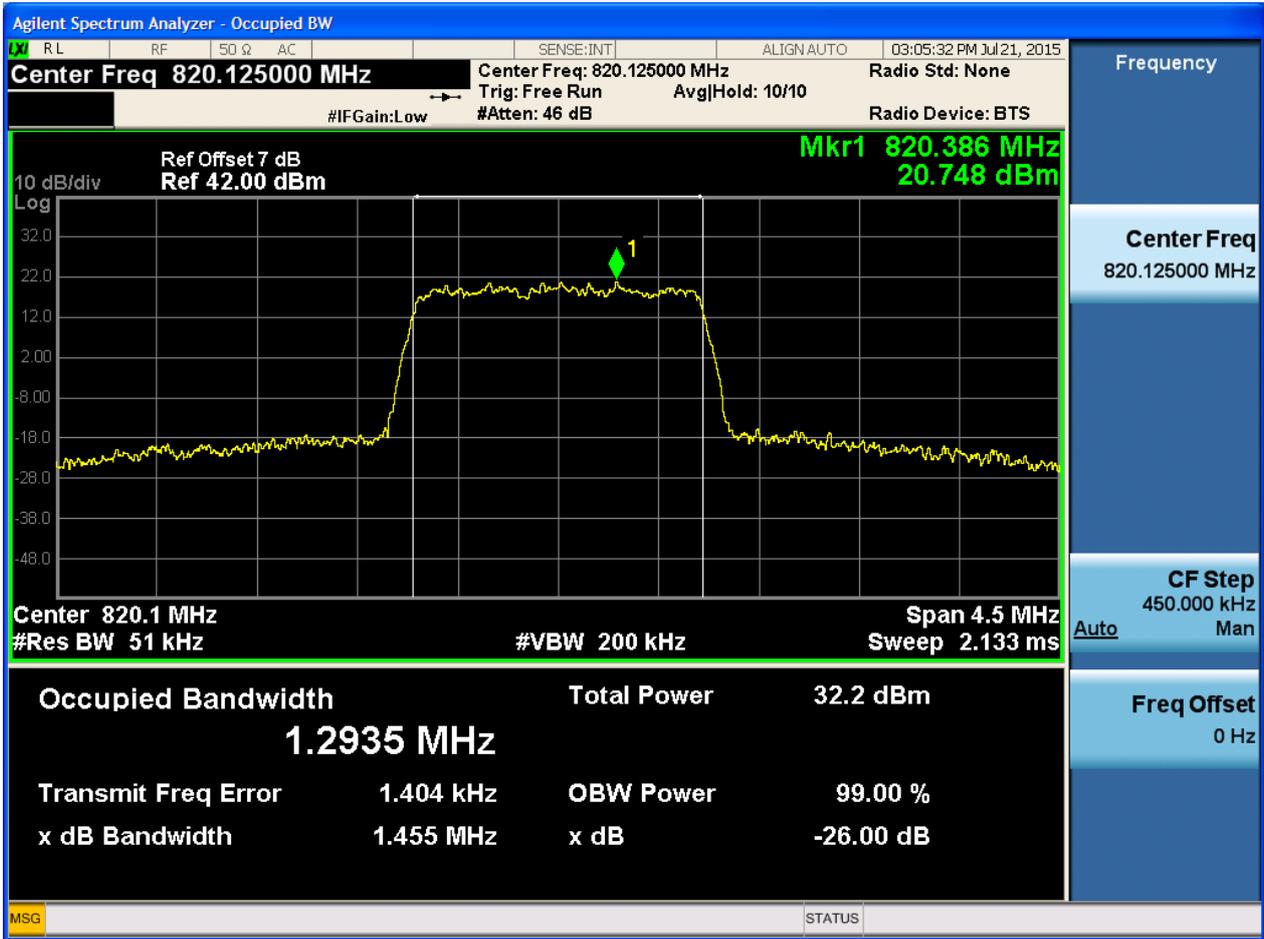
4.1.1.1 Test Mode = CDMA1X/TM1

4.1.1.1.1 Test Channel = LCH



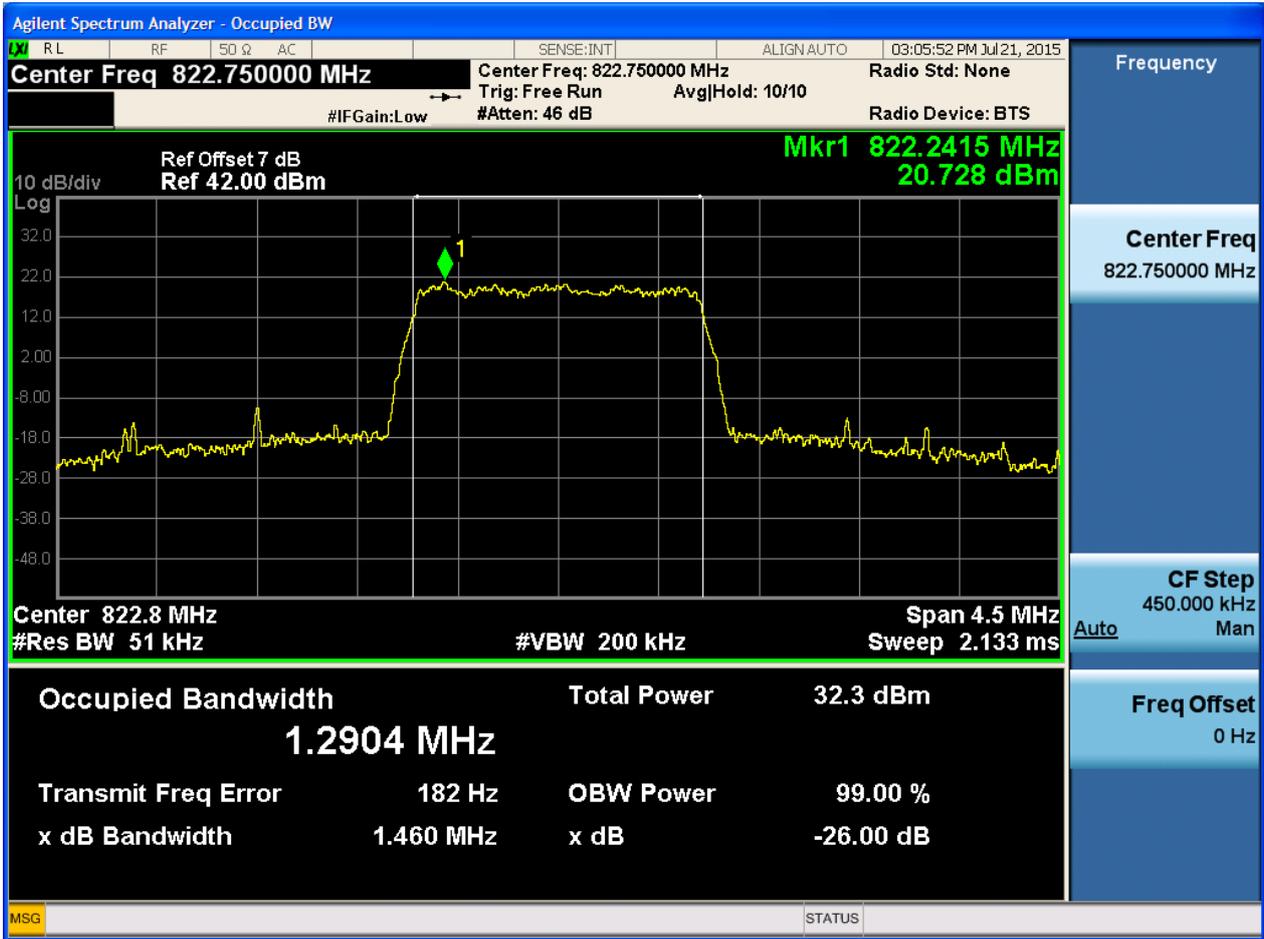


4.1.1.1.2 Test Channel = MCH





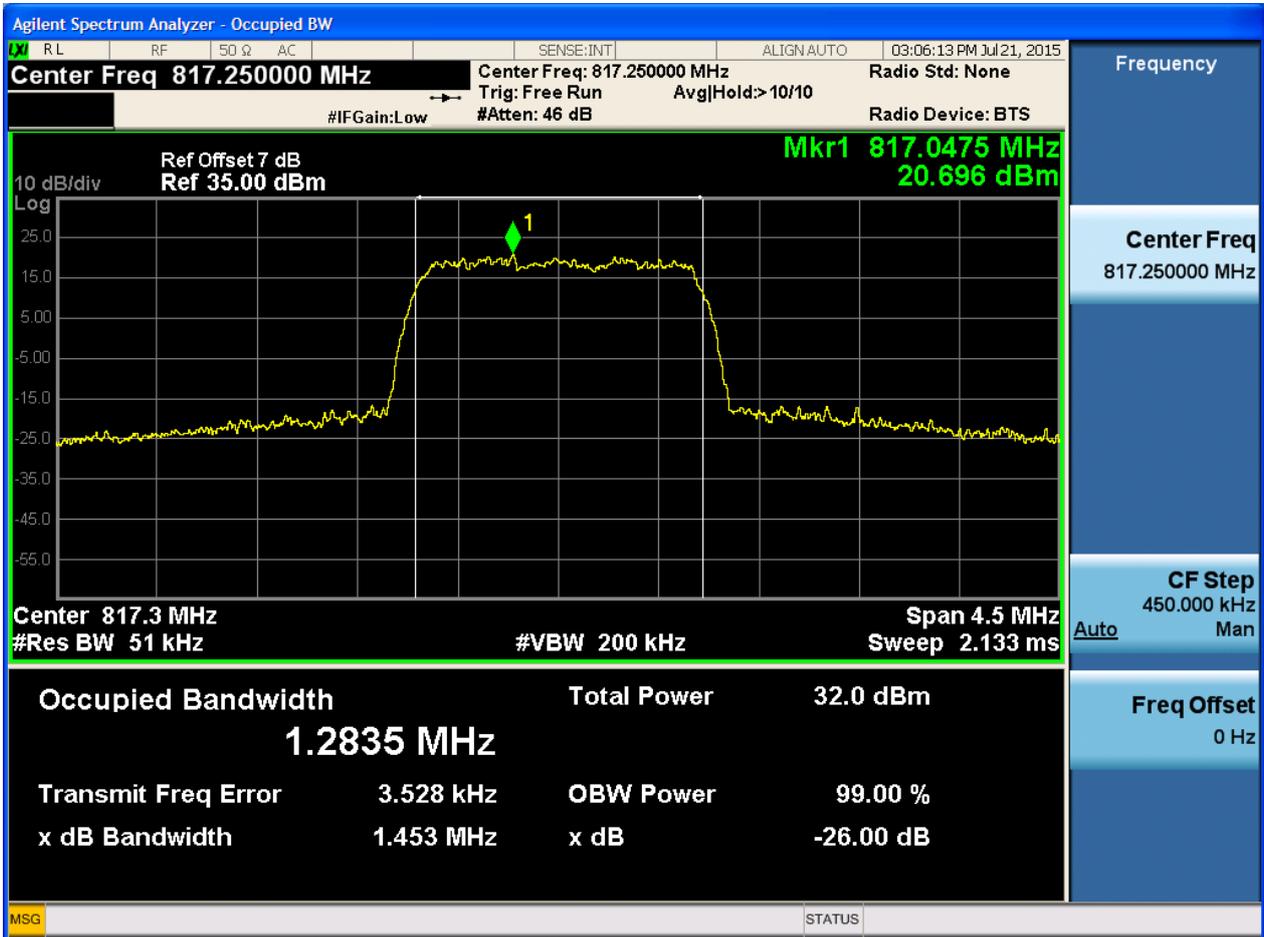
4.1.1.1.3 Test Channel = HCH





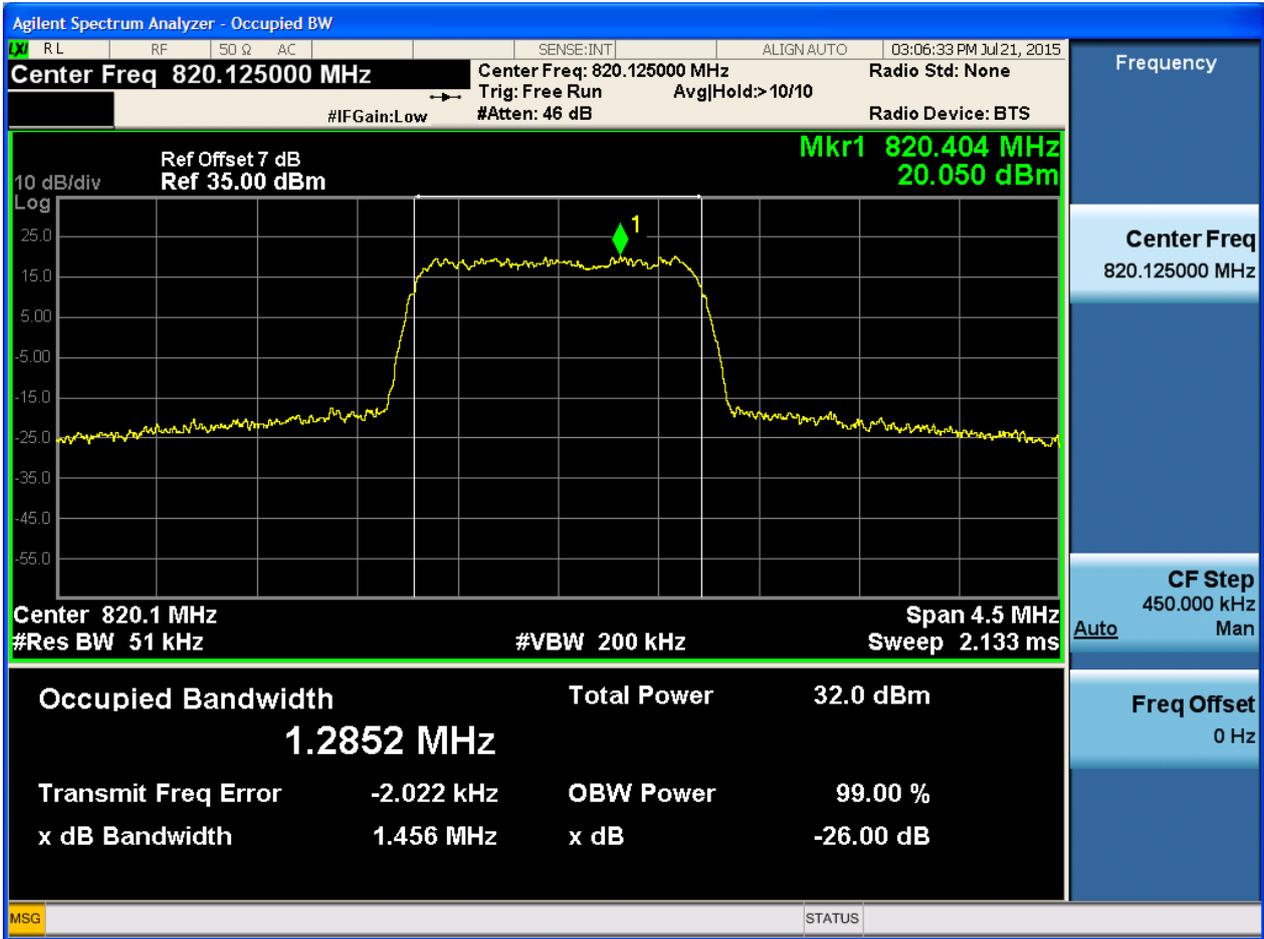
4.1.1.2 Test Mode = CDMA/1X/TM3

4.1.1.2.1 Test Channel = LCH



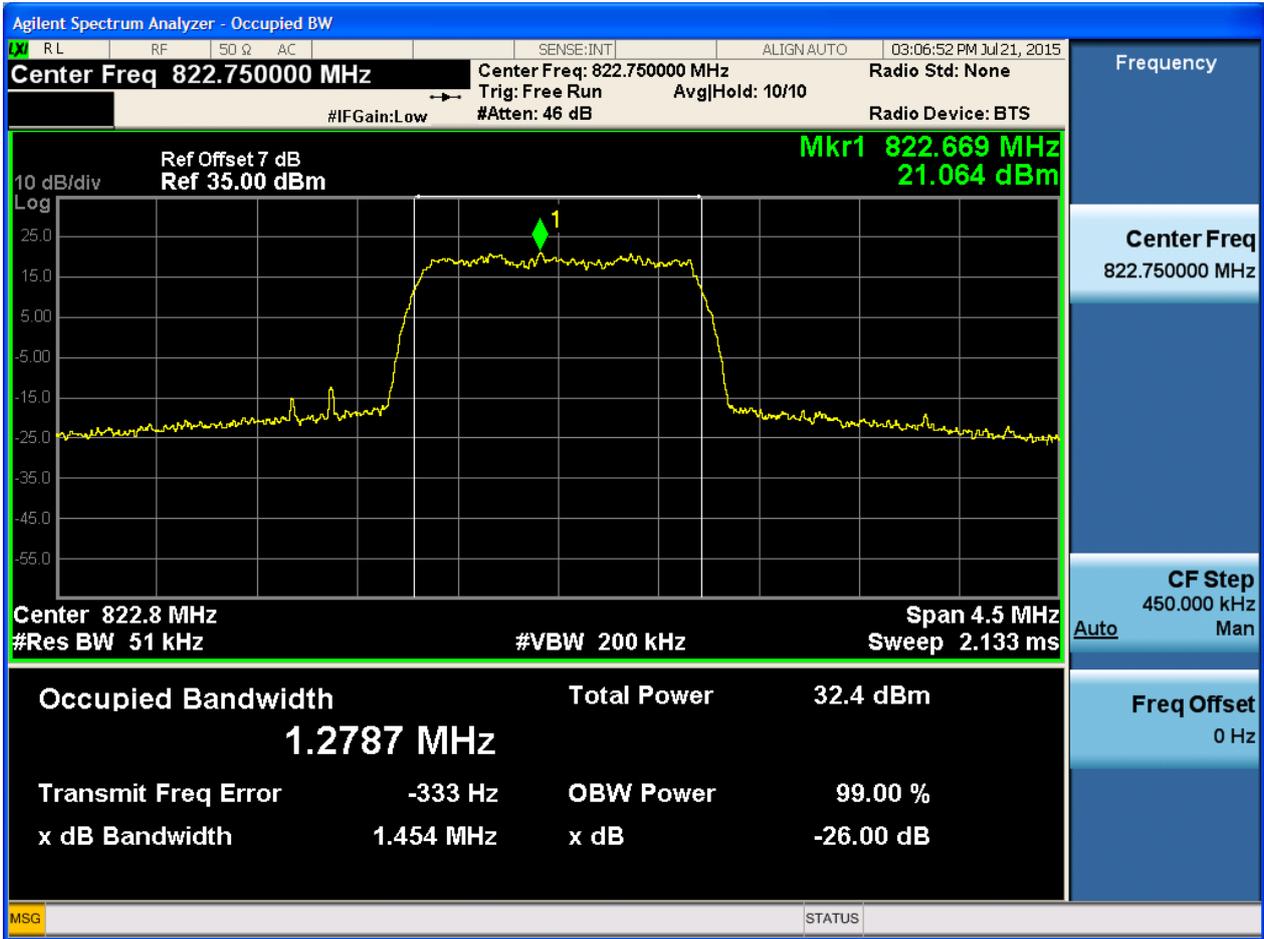


4.1.1.2.2 Test Channel = MCH



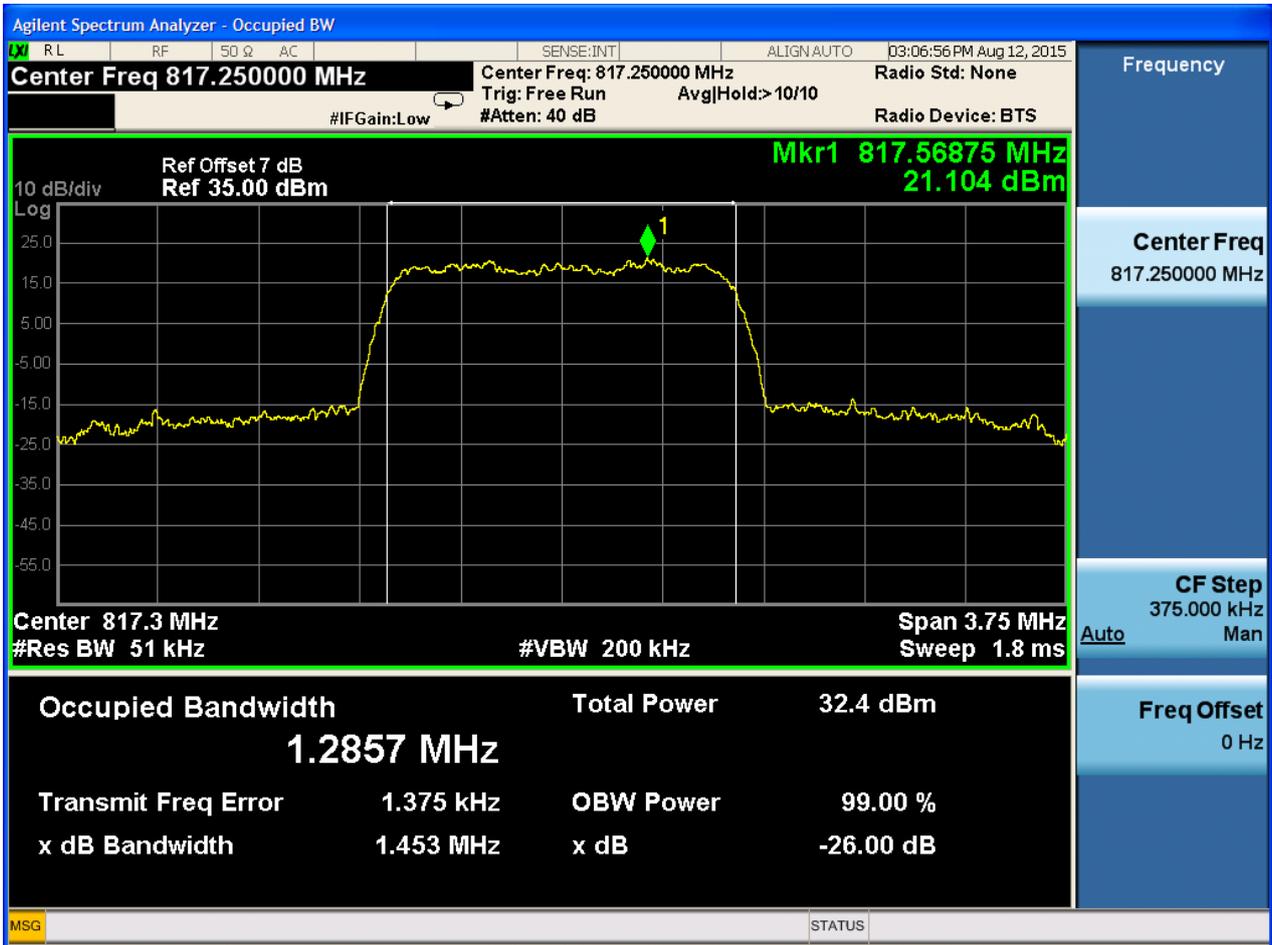


4.1.3.1.3 Test Channel = HCH



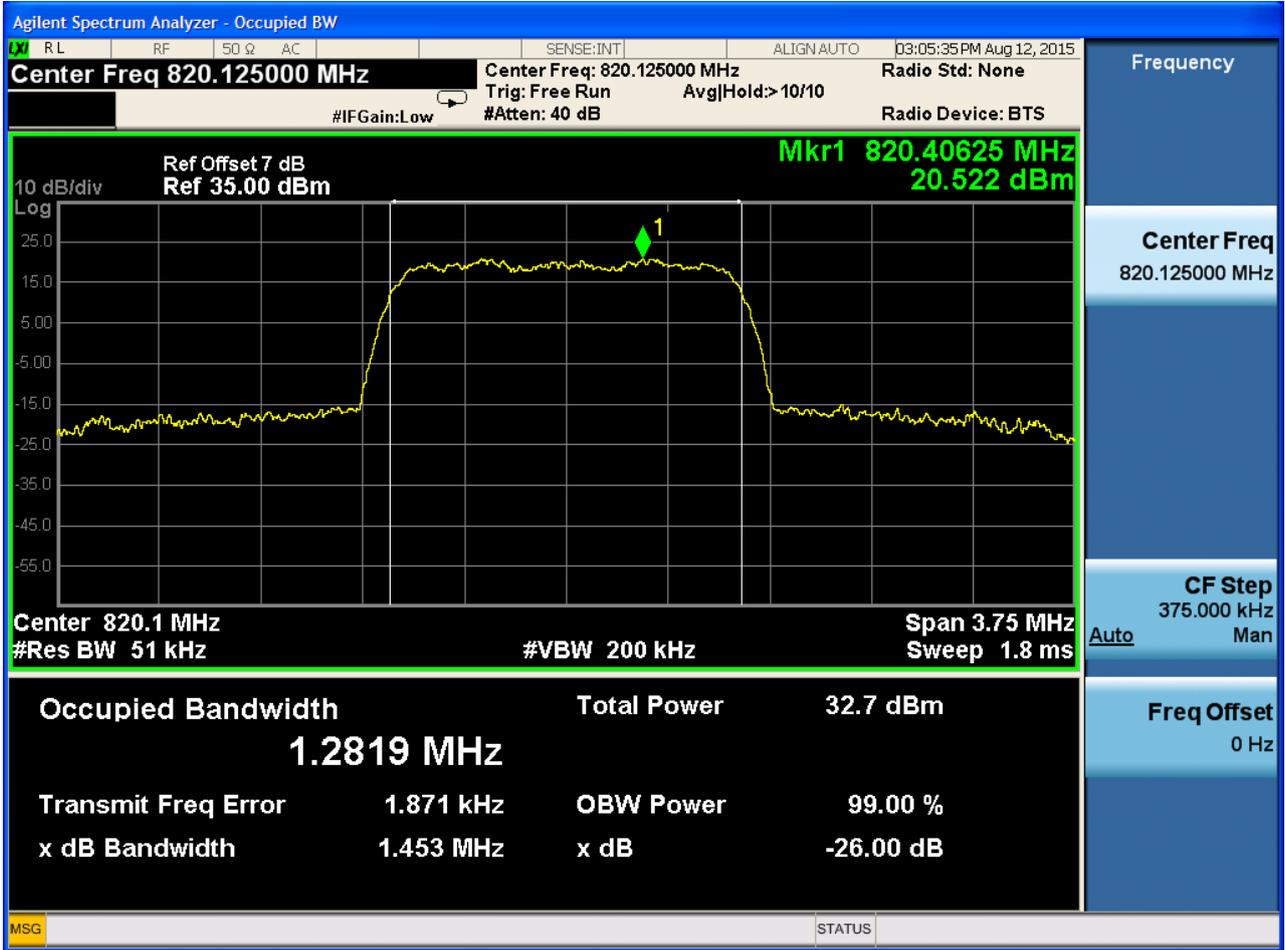
4.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

4.1.1.3.1 Test Channel = LCH



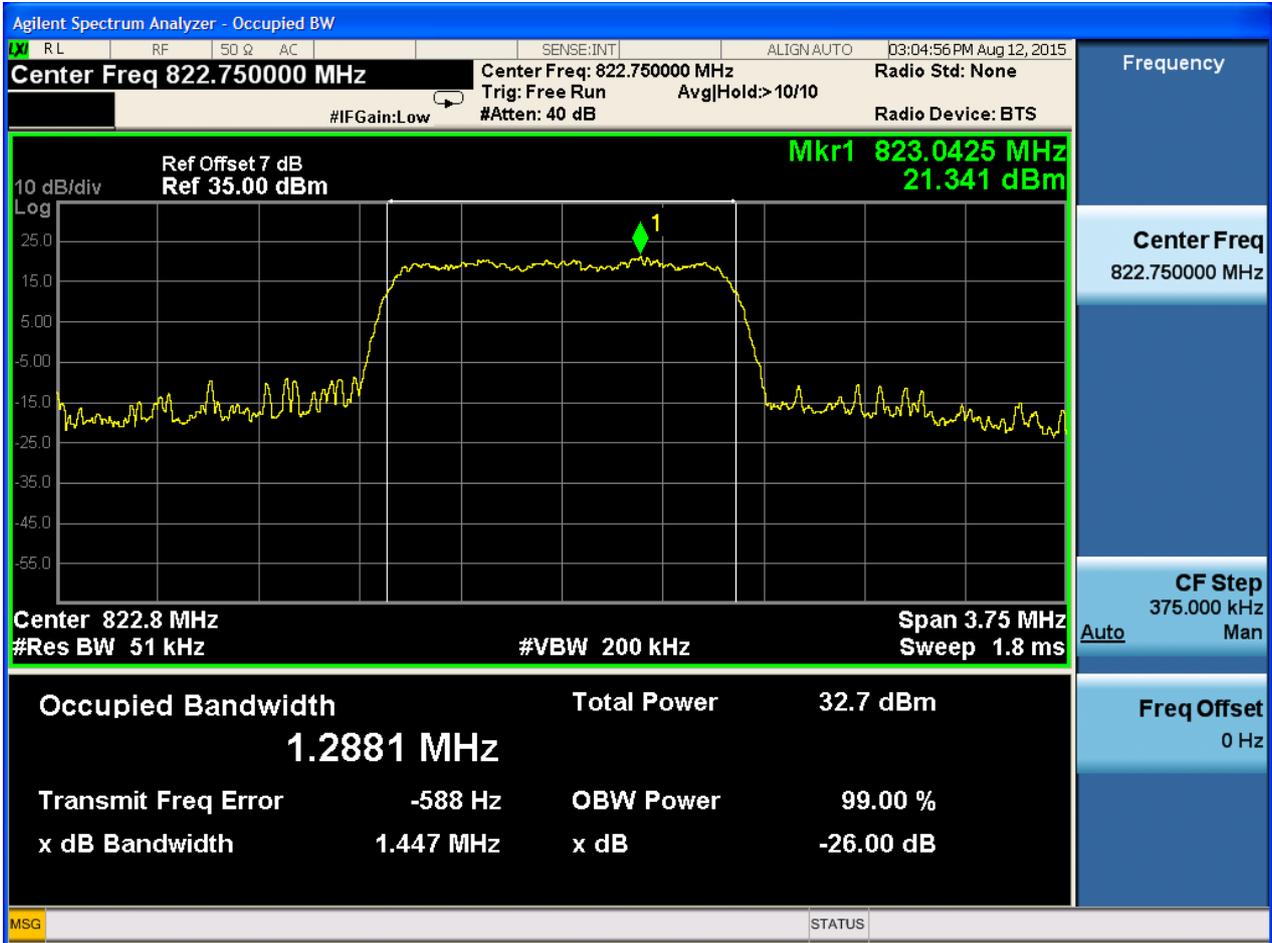


4.1.1.3.2 Test Channel = MCH





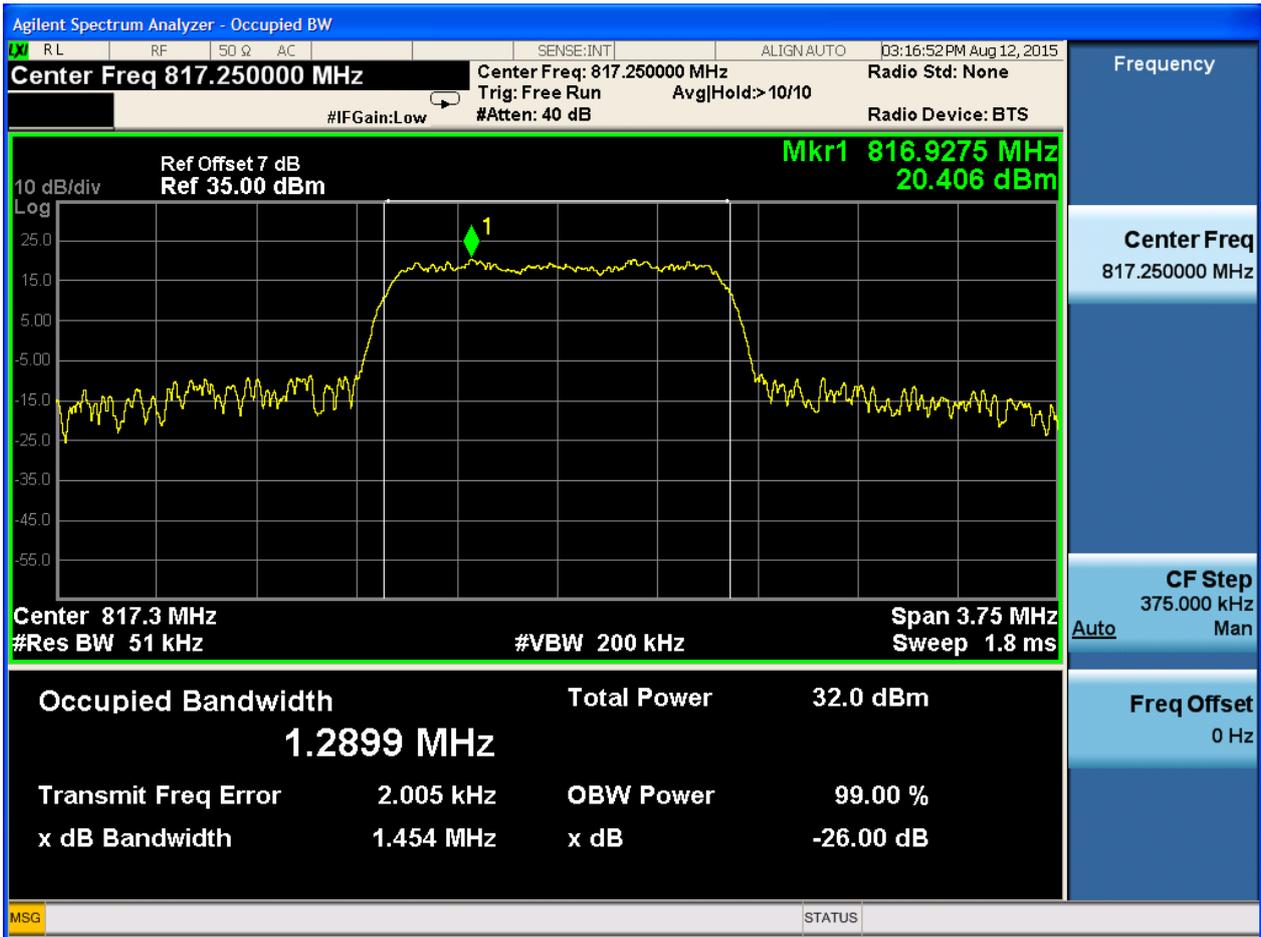
4.1.1.3.3 Test Channel = HCH





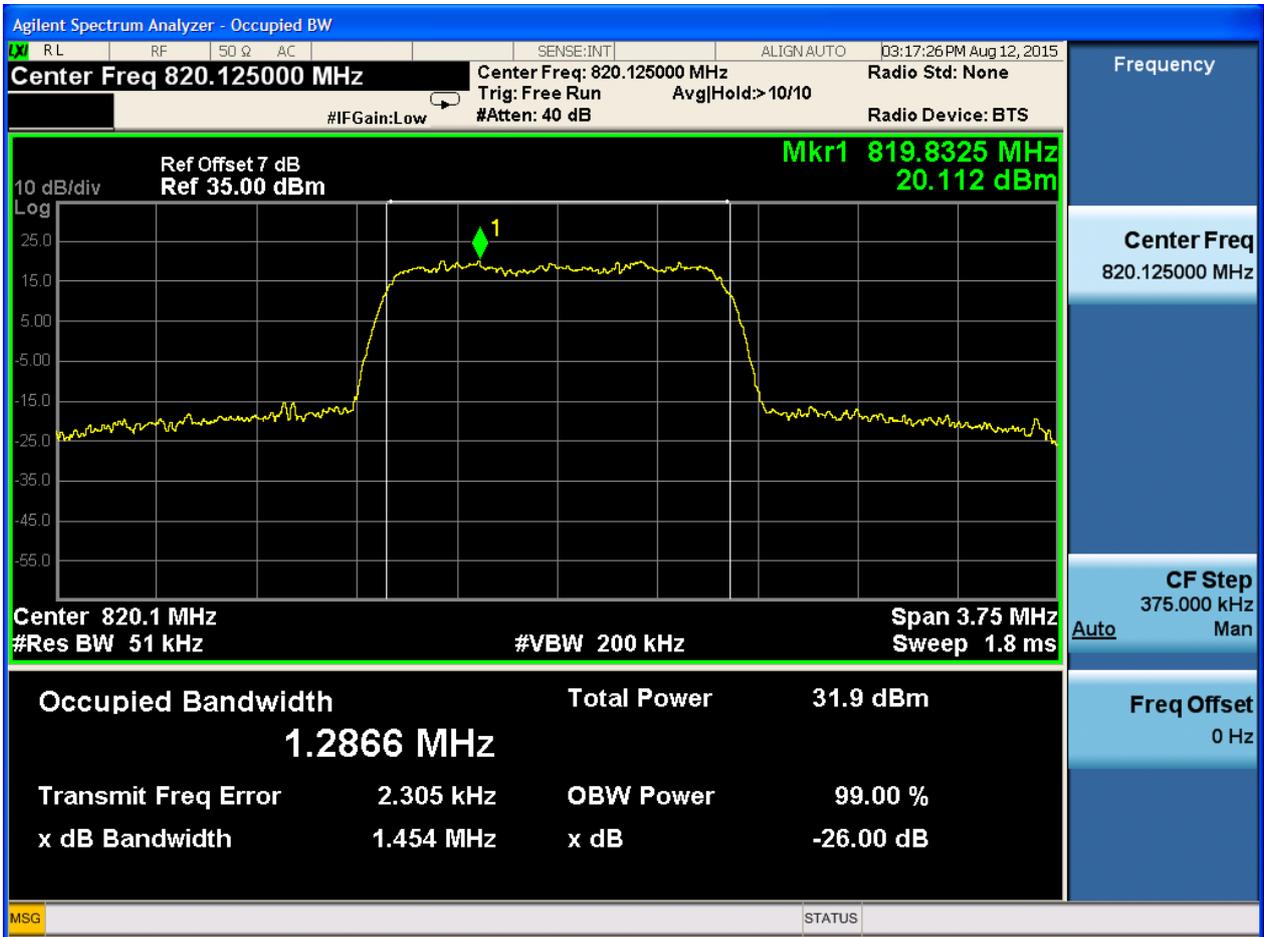
4.1.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

4.1.1.4.1 Test Channel = LCH

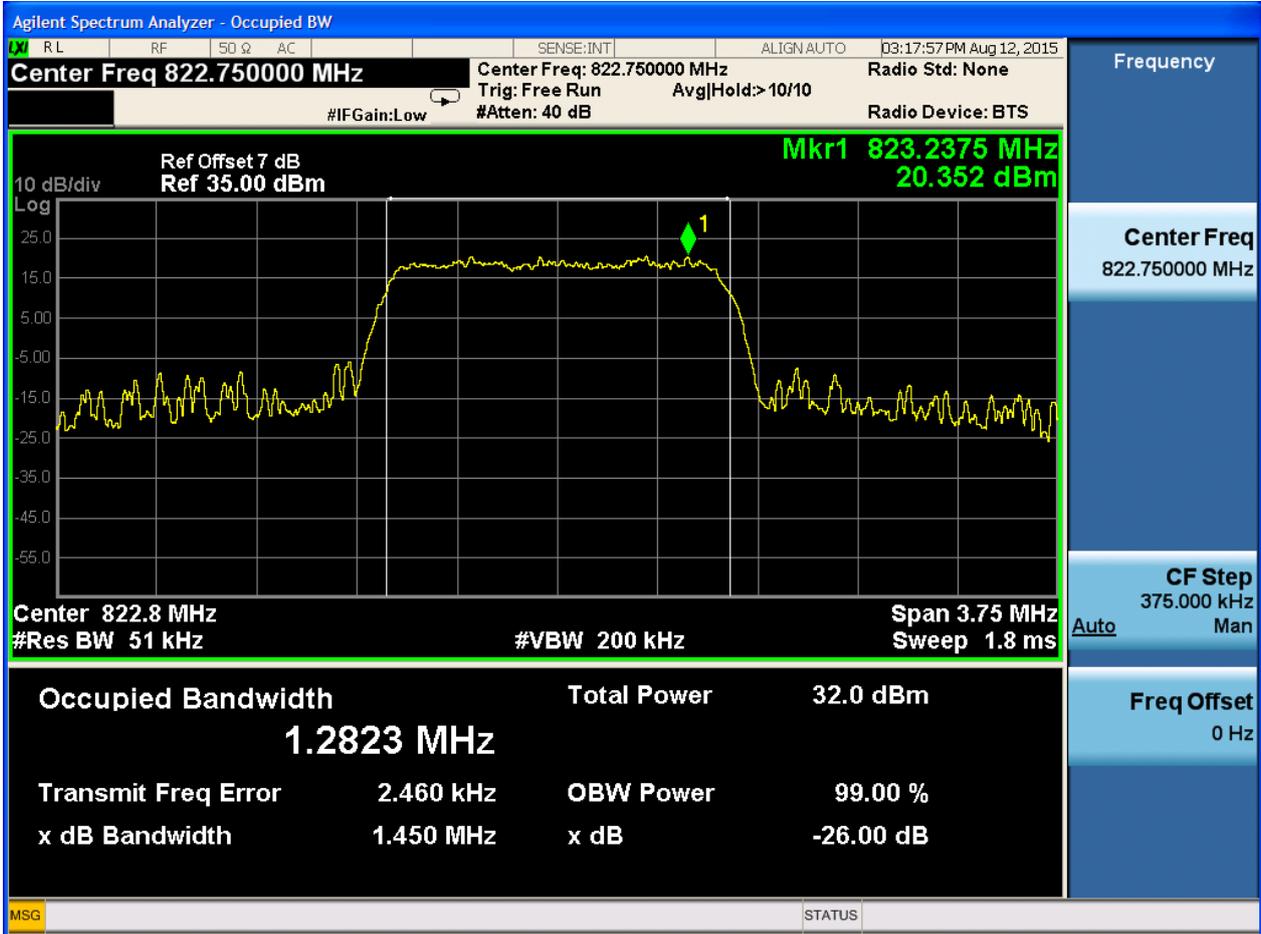




4.1.1.4.2 Test Channel = MCH

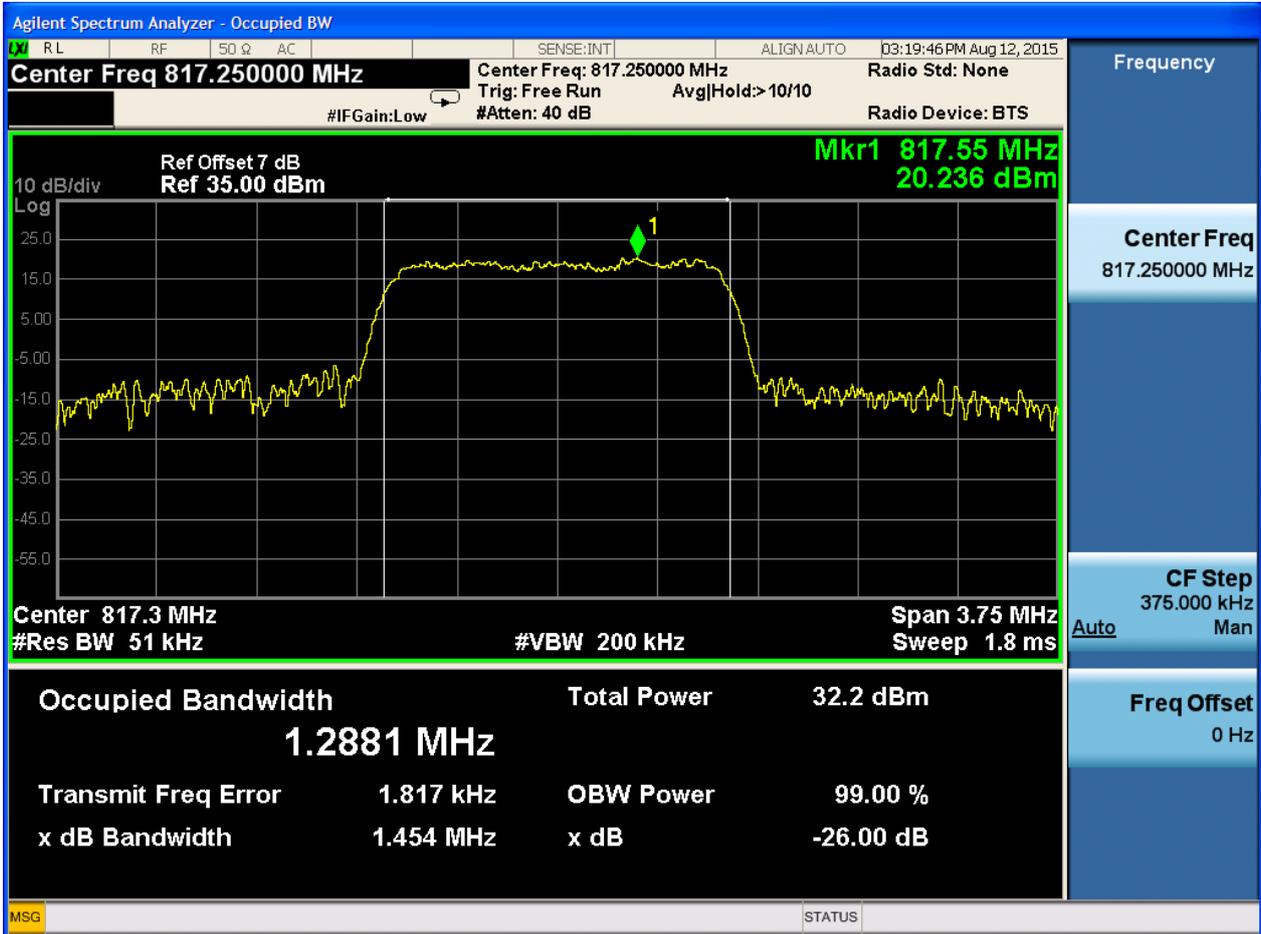


4.1.1.4.3 Test Channel = HCH



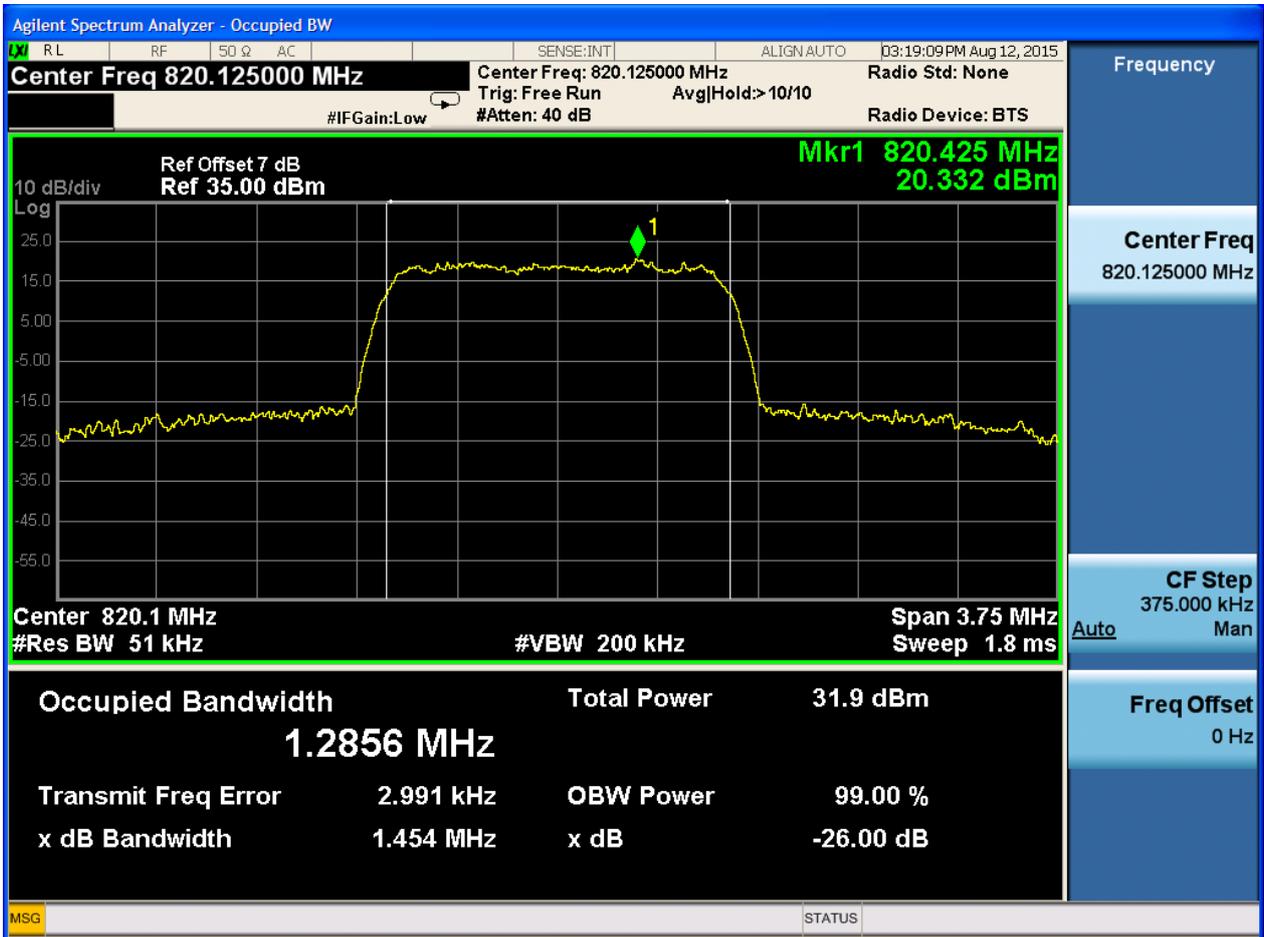
4.1.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

4.1.1.5.1 Test Channel = LCH

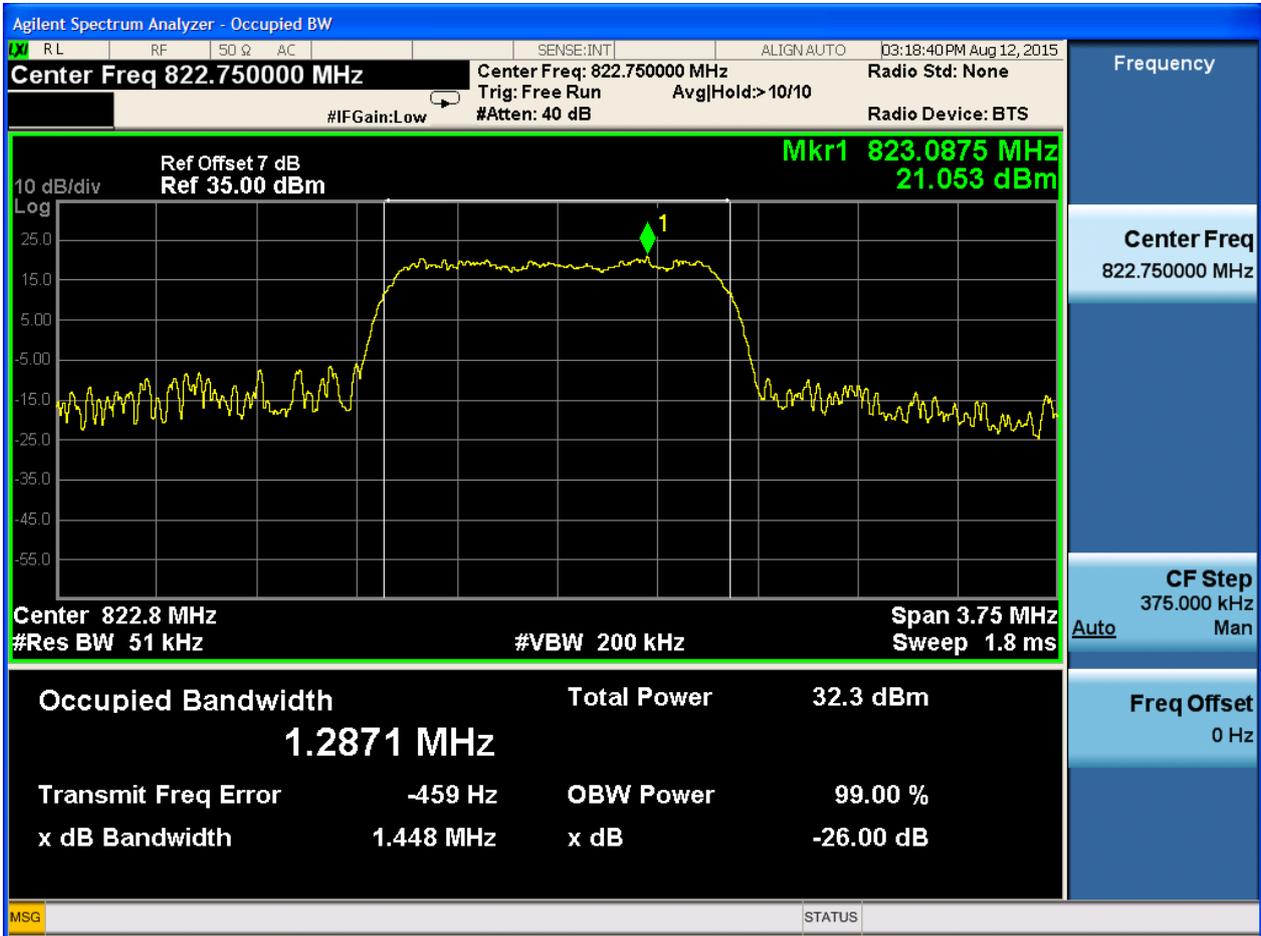




4.1.1.5.2 Test Channel = MCH



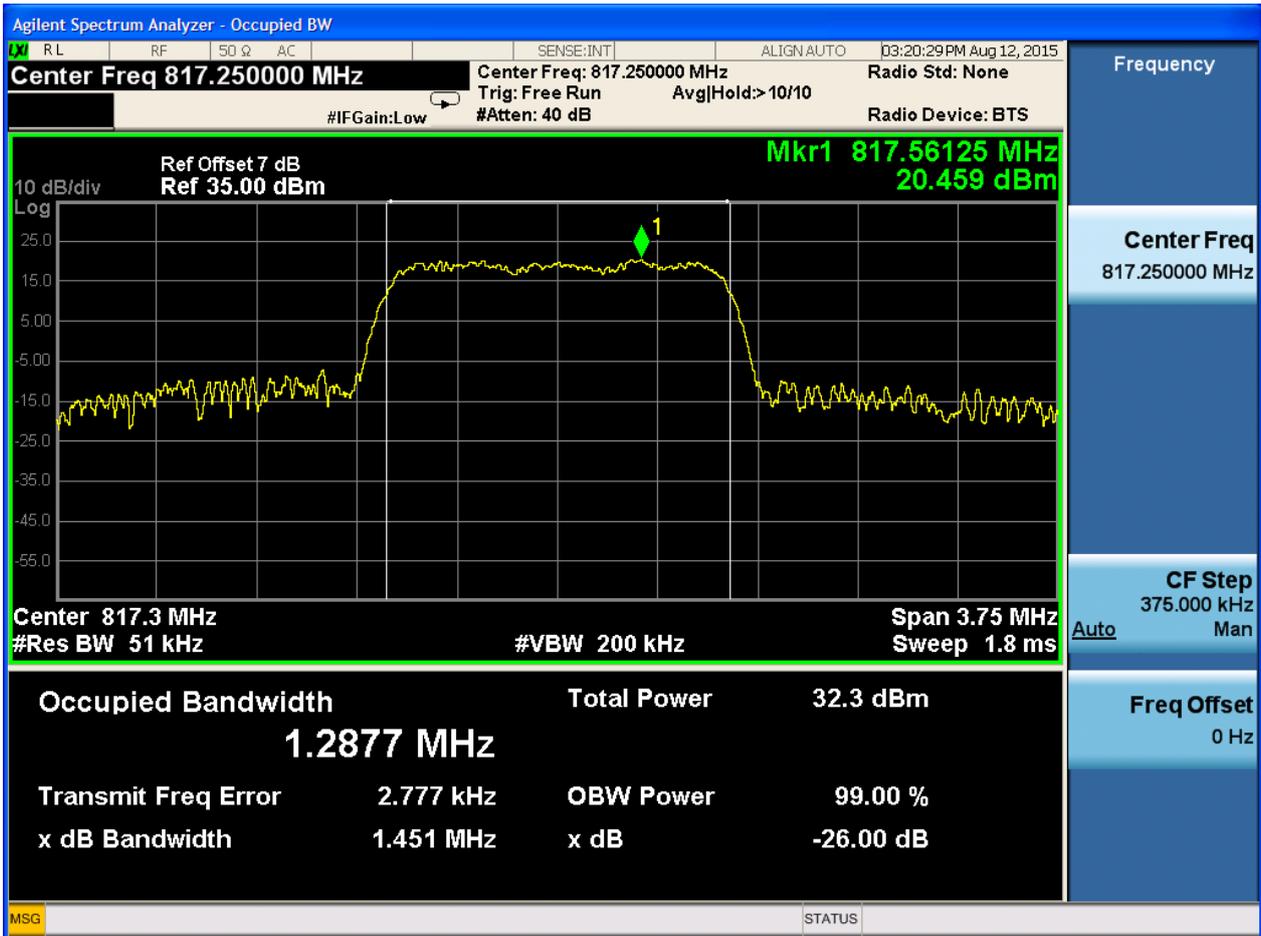
4.1.1.5.3 Test Channel = HCH





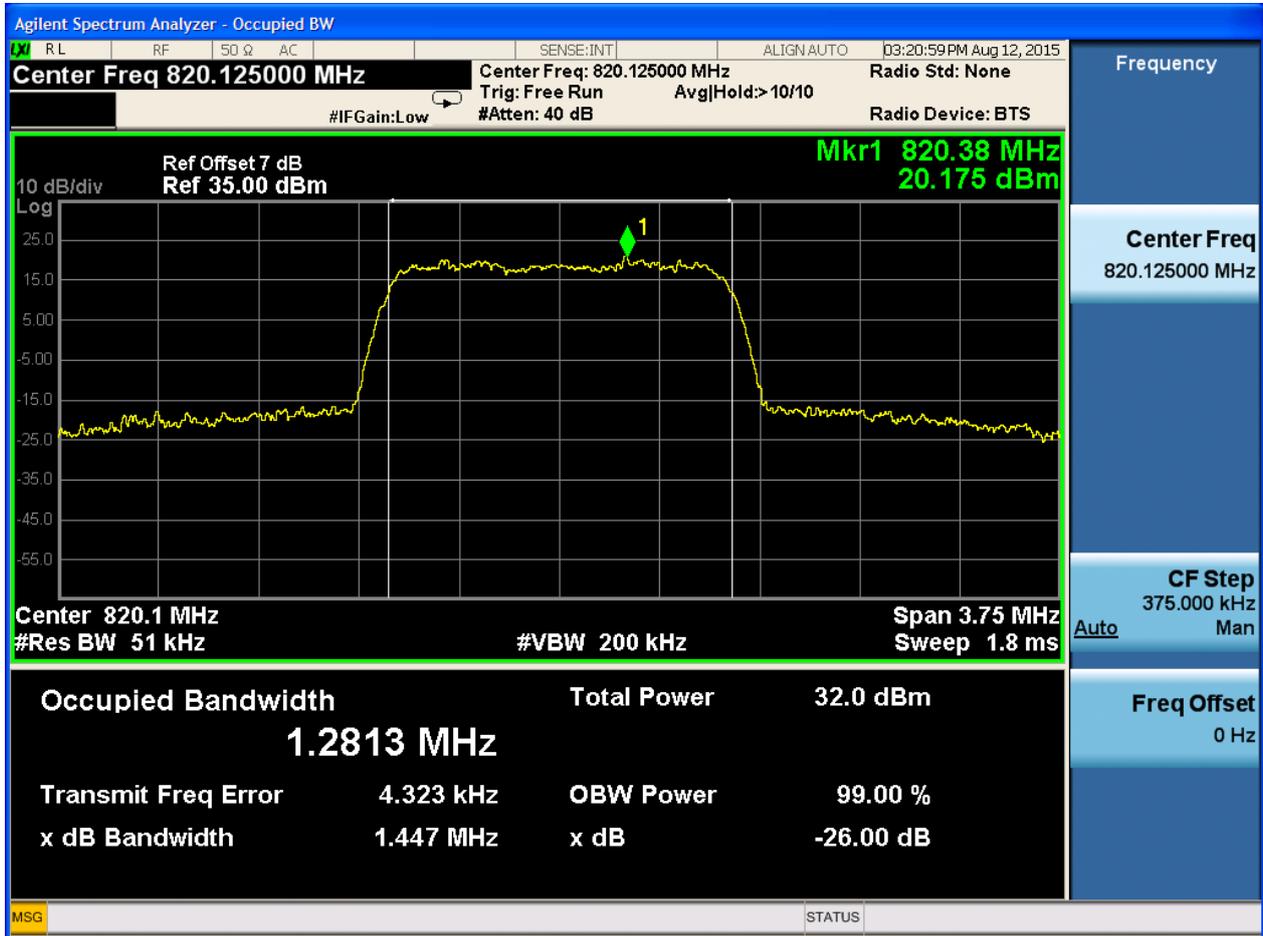
4.1.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

4.1.1.6.1 Test Channel = LCH



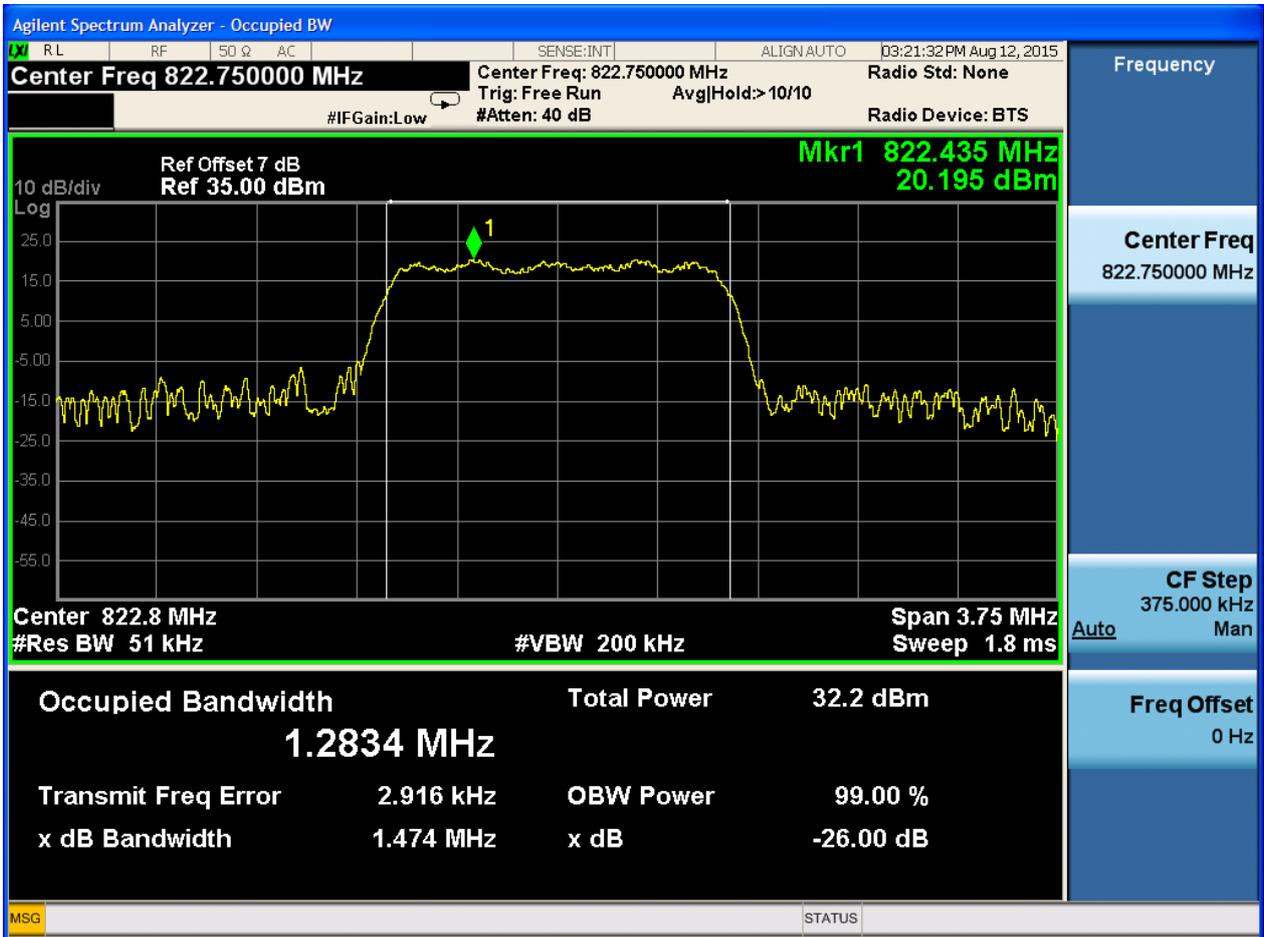


4.1.1.6.2 Test Channel = MCH





4.1.1.6.2 Test Channel = HCH





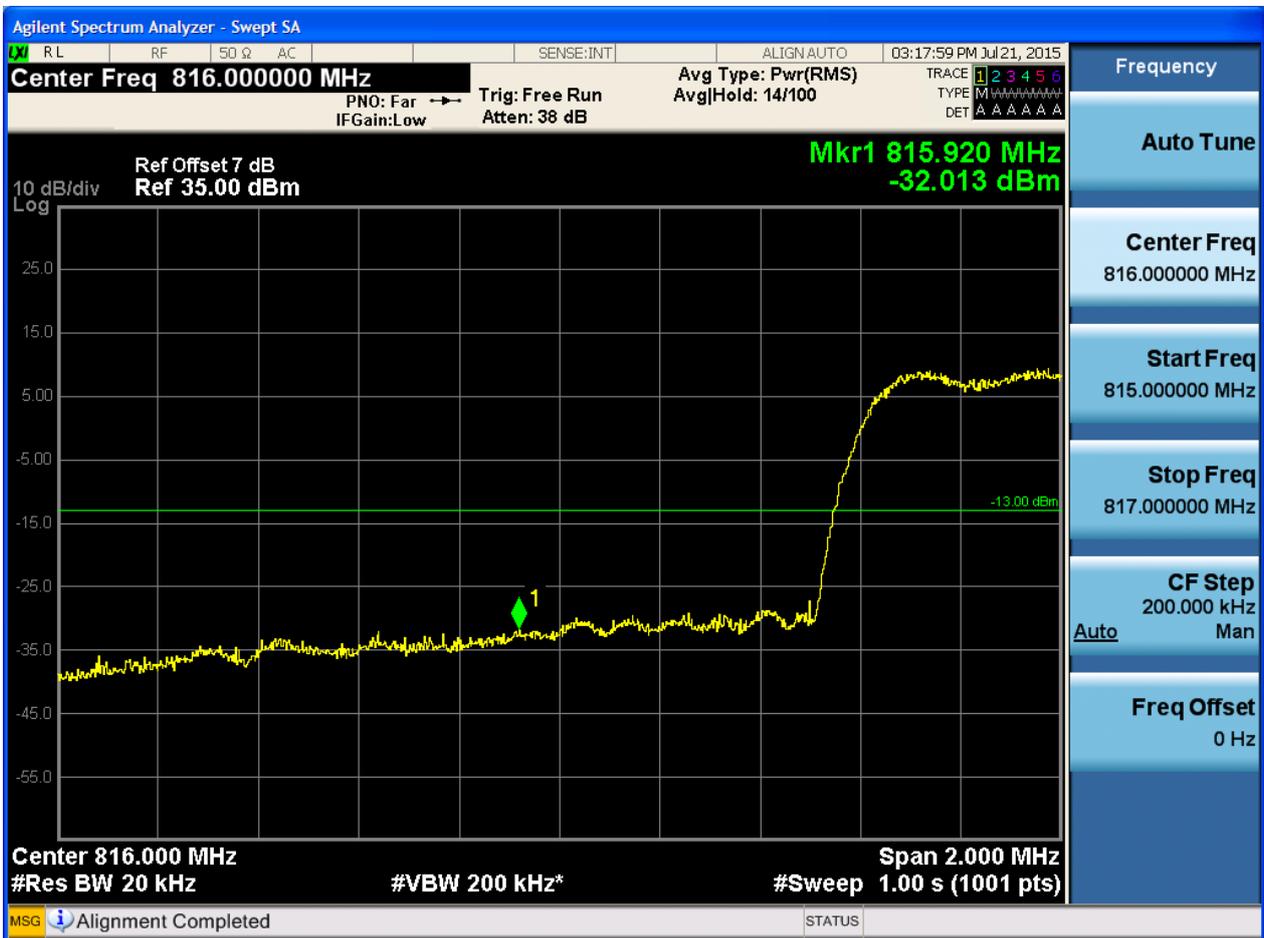
5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 Test Band = BC10

5.1.1 Test Mode = CDMA/1X/TM1

5.1.1.1 Test Channel = LCH





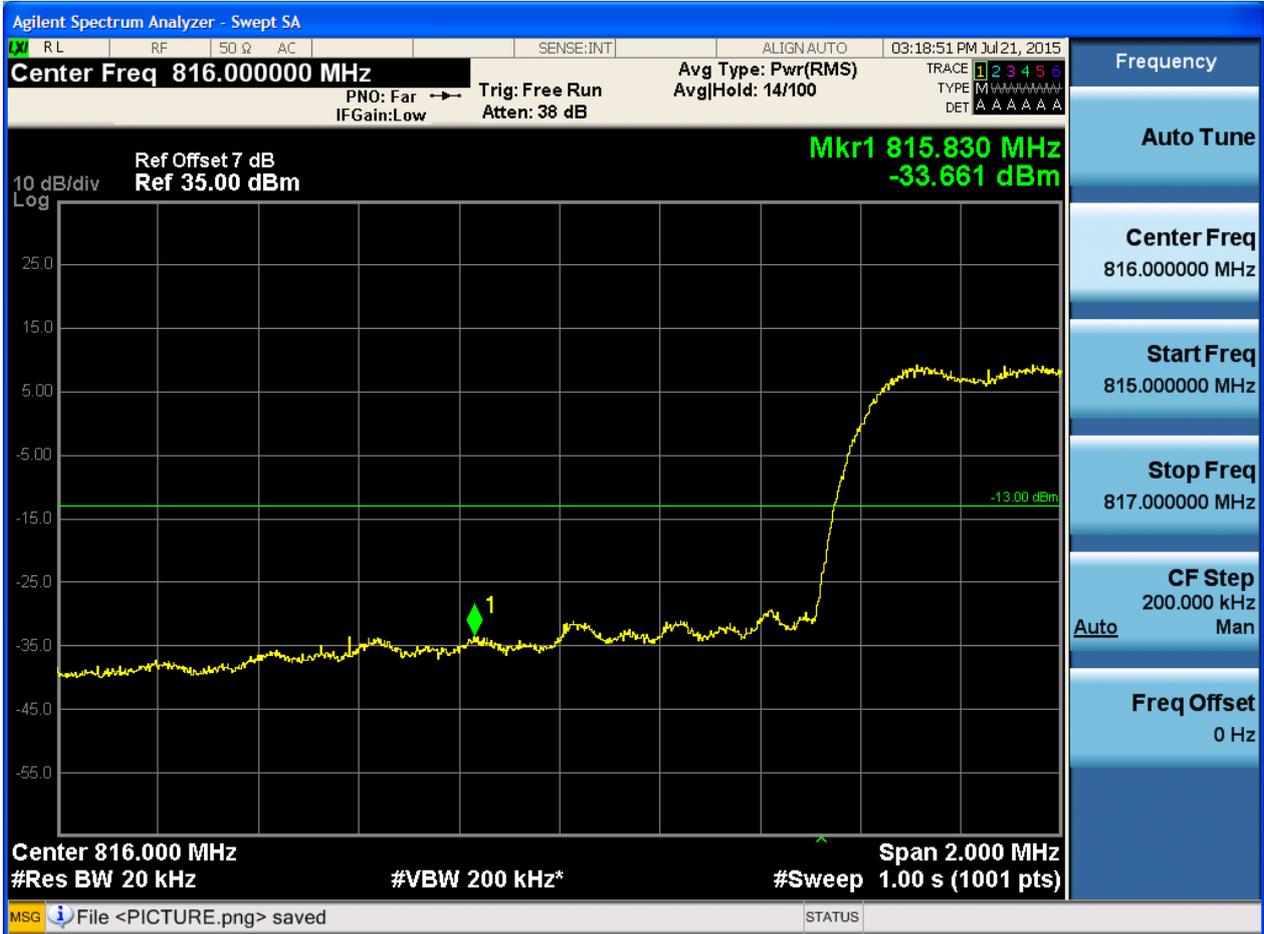
5.1.1.2 Test Channel = HCH





5.1.2 Test Mode = CDMA/1X/TM3

5.1.2.1 Test Channel = LCH





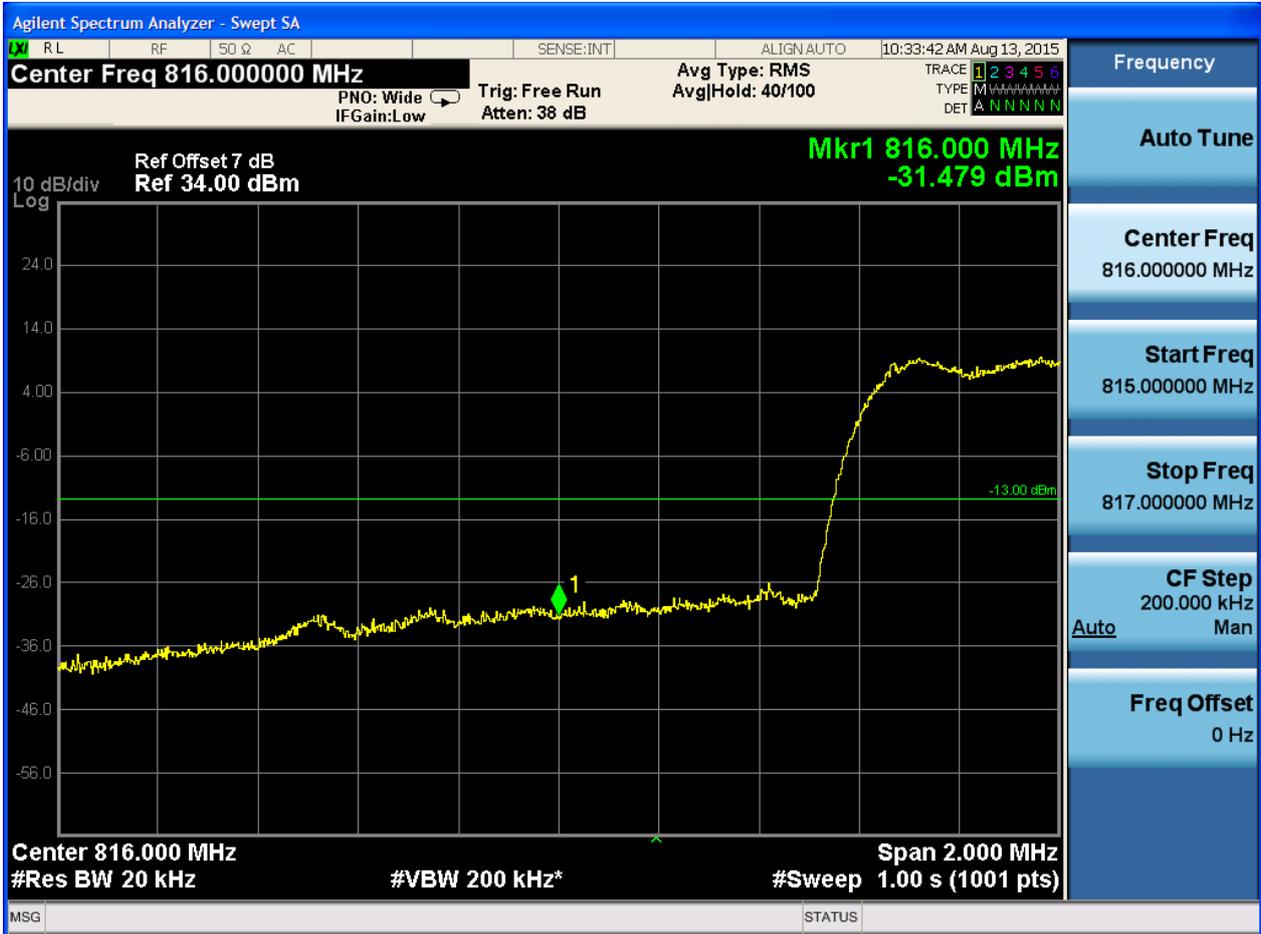
5.1.2.2 Test Channel = HCH





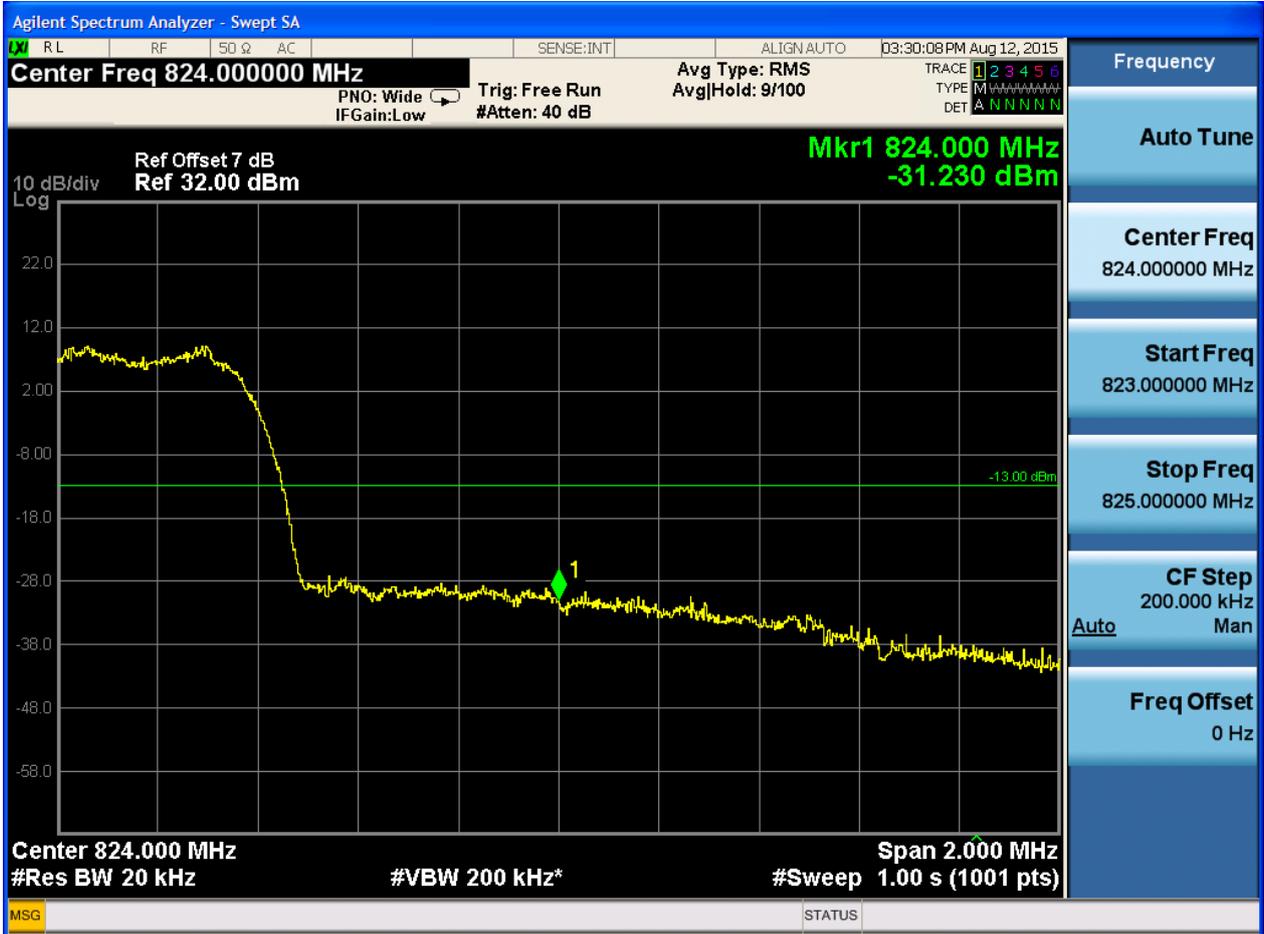
5.1.3 Test Mode = CDMA/EV-DO/Subtype0

5.1.3.1 Test Channel = LCH





5.1.3.2 Test Channel = HCH





5.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

5.1.4.1 Test Channel = LCH





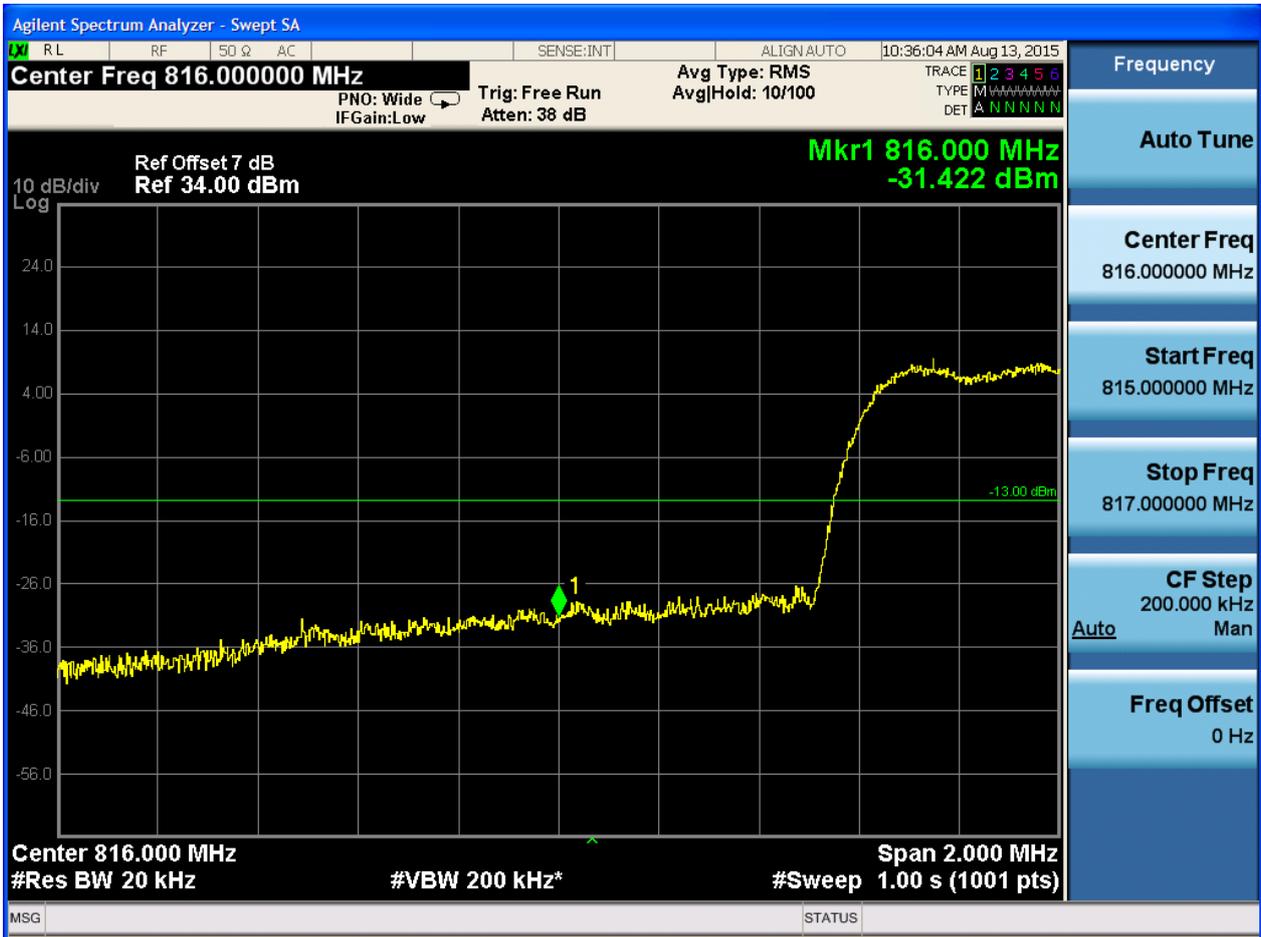
5.1.4. 2 Test Channel = HCH



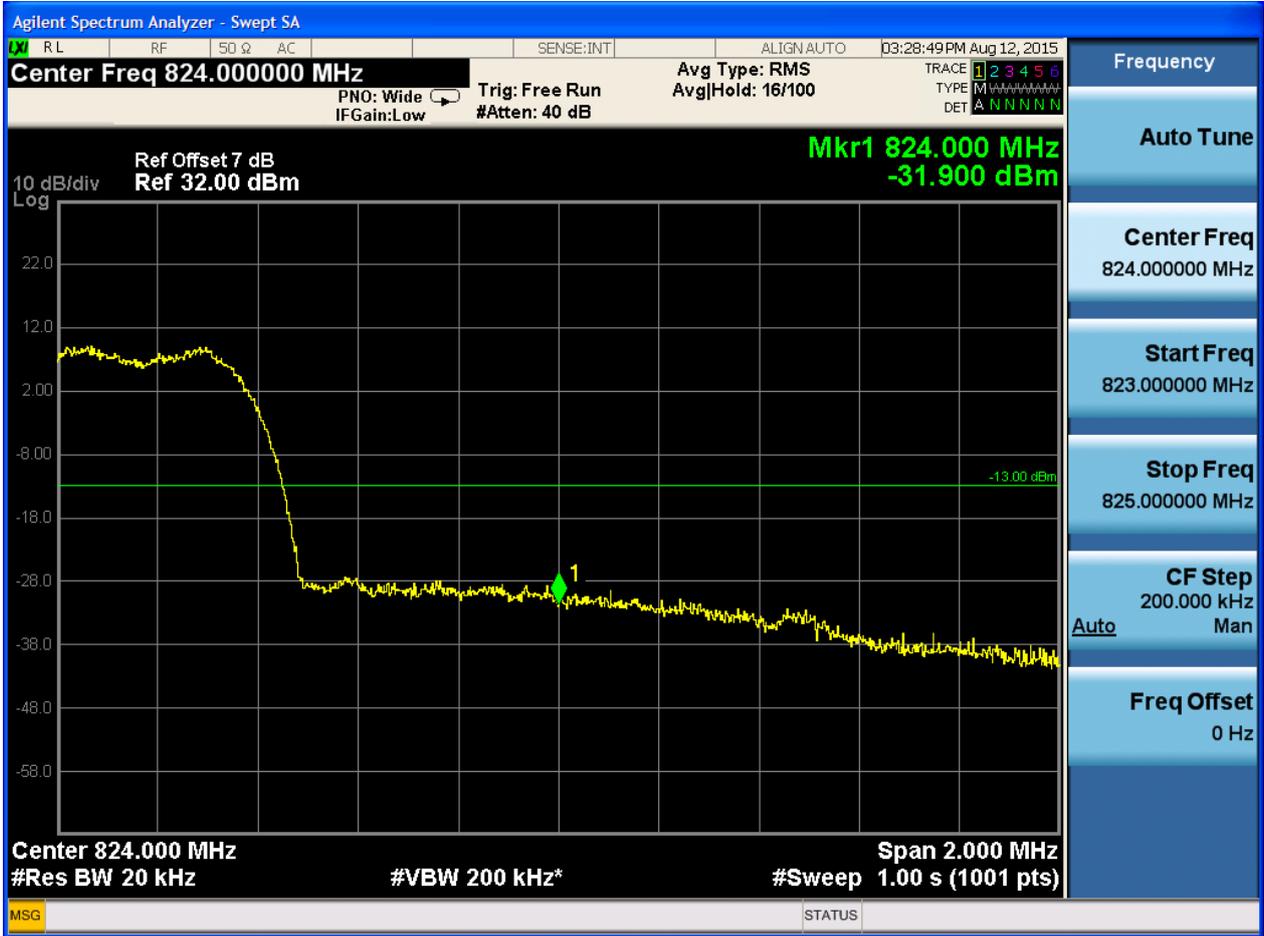


5.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

5.1.5.1 Test Channel = LCH



5.1.5.2 Test Channel = HCH



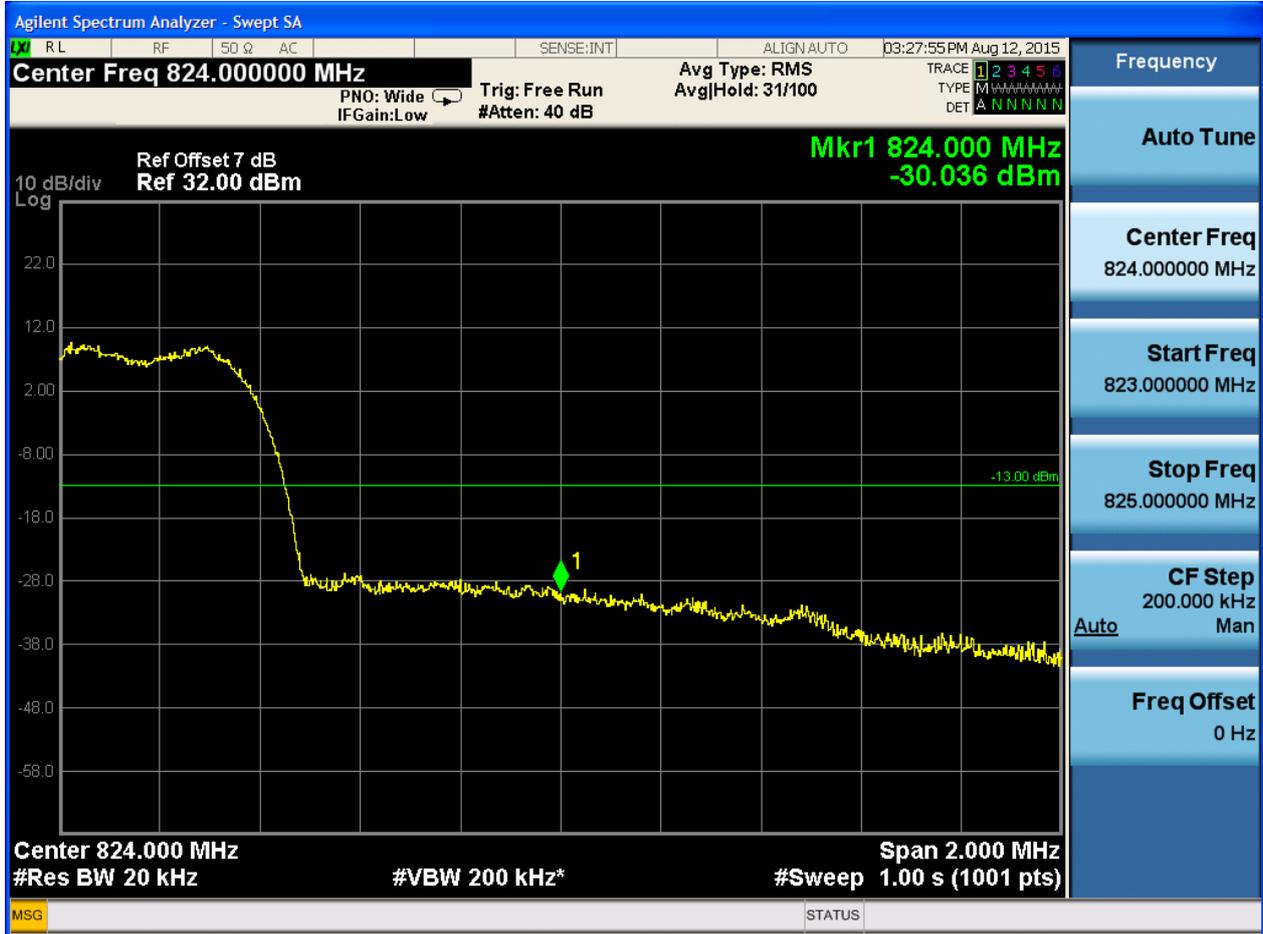


5.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

5.1.6.1 Test Channel = LCH



5.1.6.2 Test Channel = HCH



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.

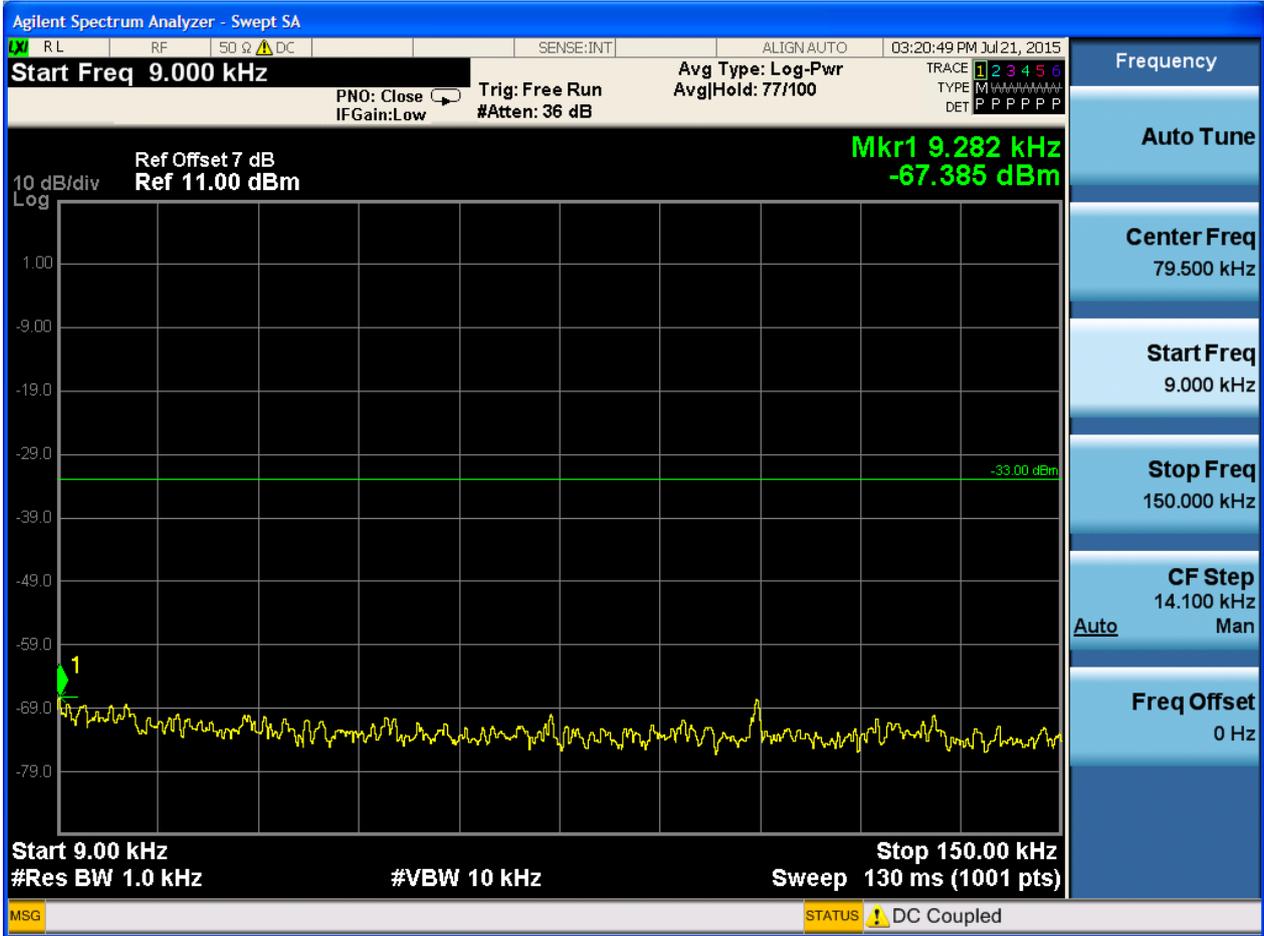
Part I - Test Plots

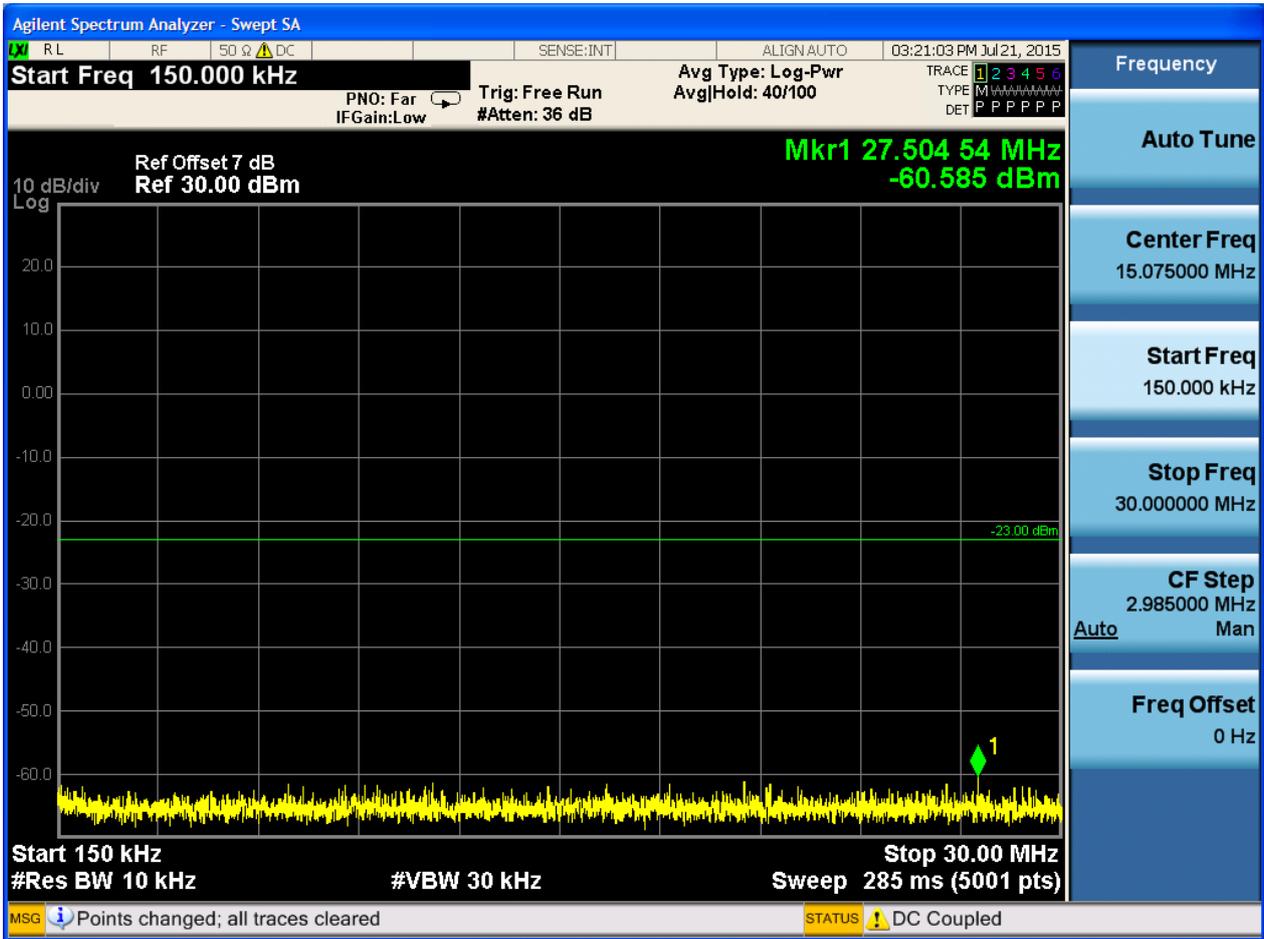
6.1 For CDMA/1X

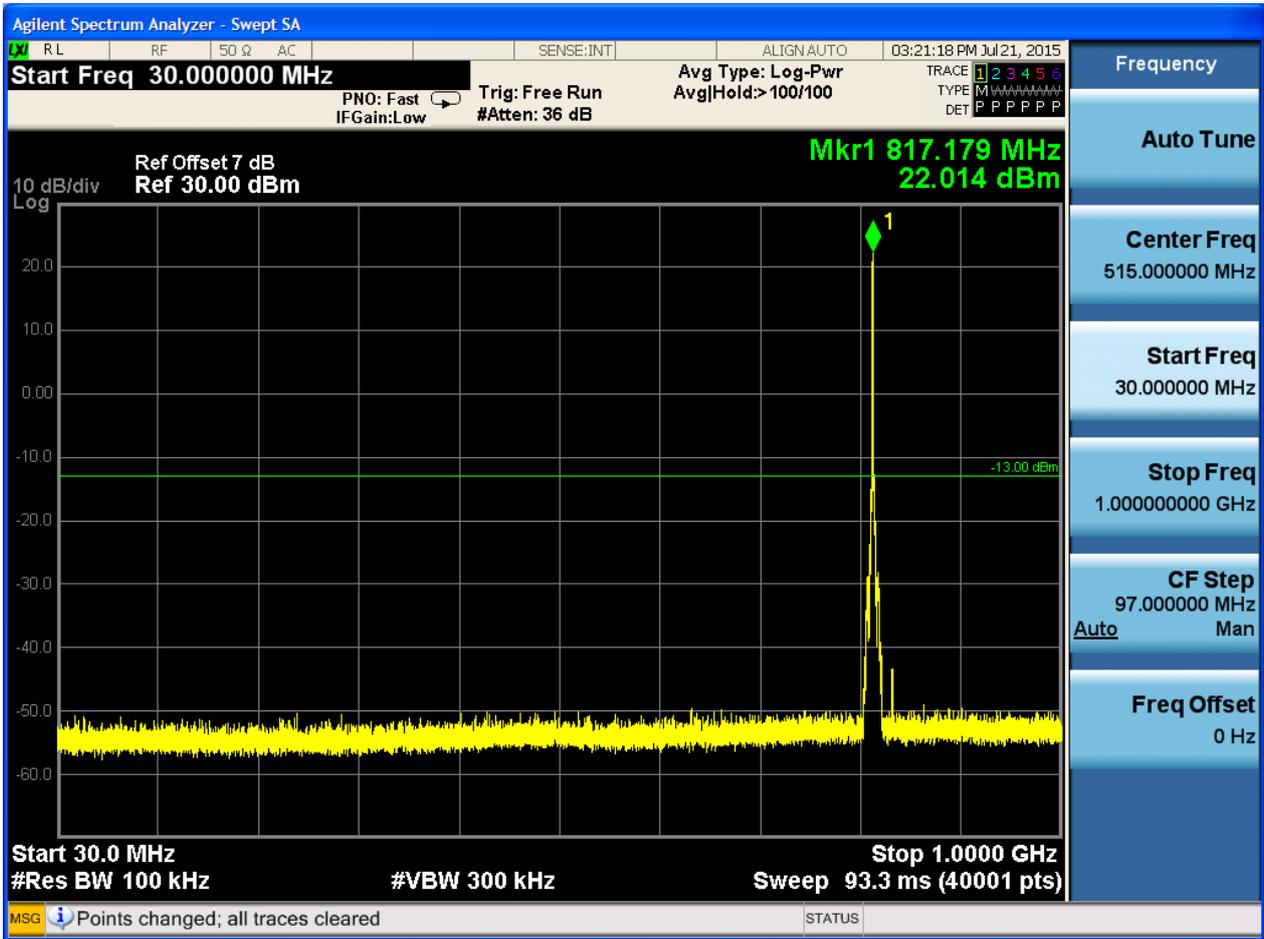
6.1.1 Test Band = BC10

6.1.1.1 Test Mode = CDMA/1X/TM1

6.1.1.1.1 Test Channel = LCH

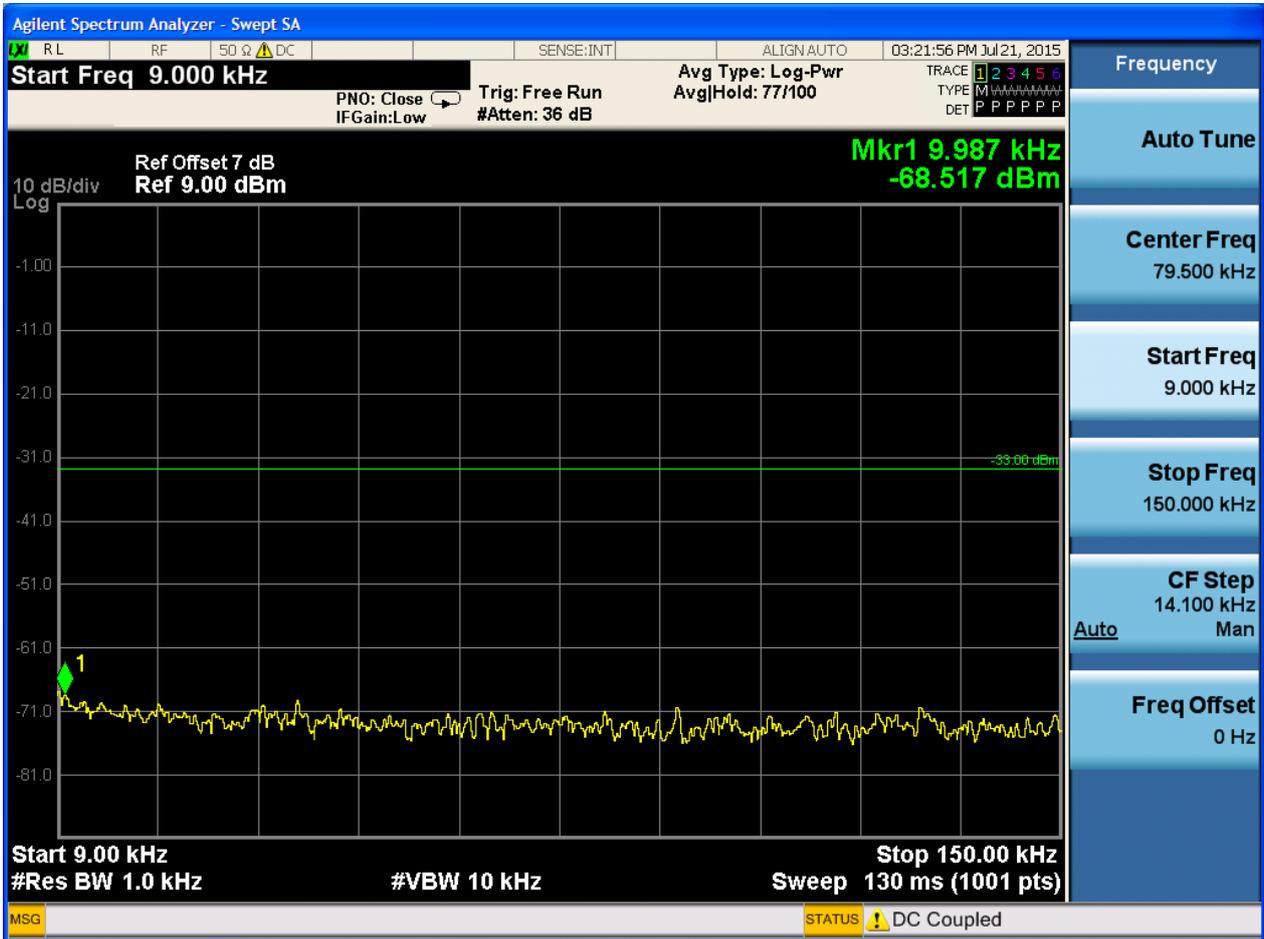


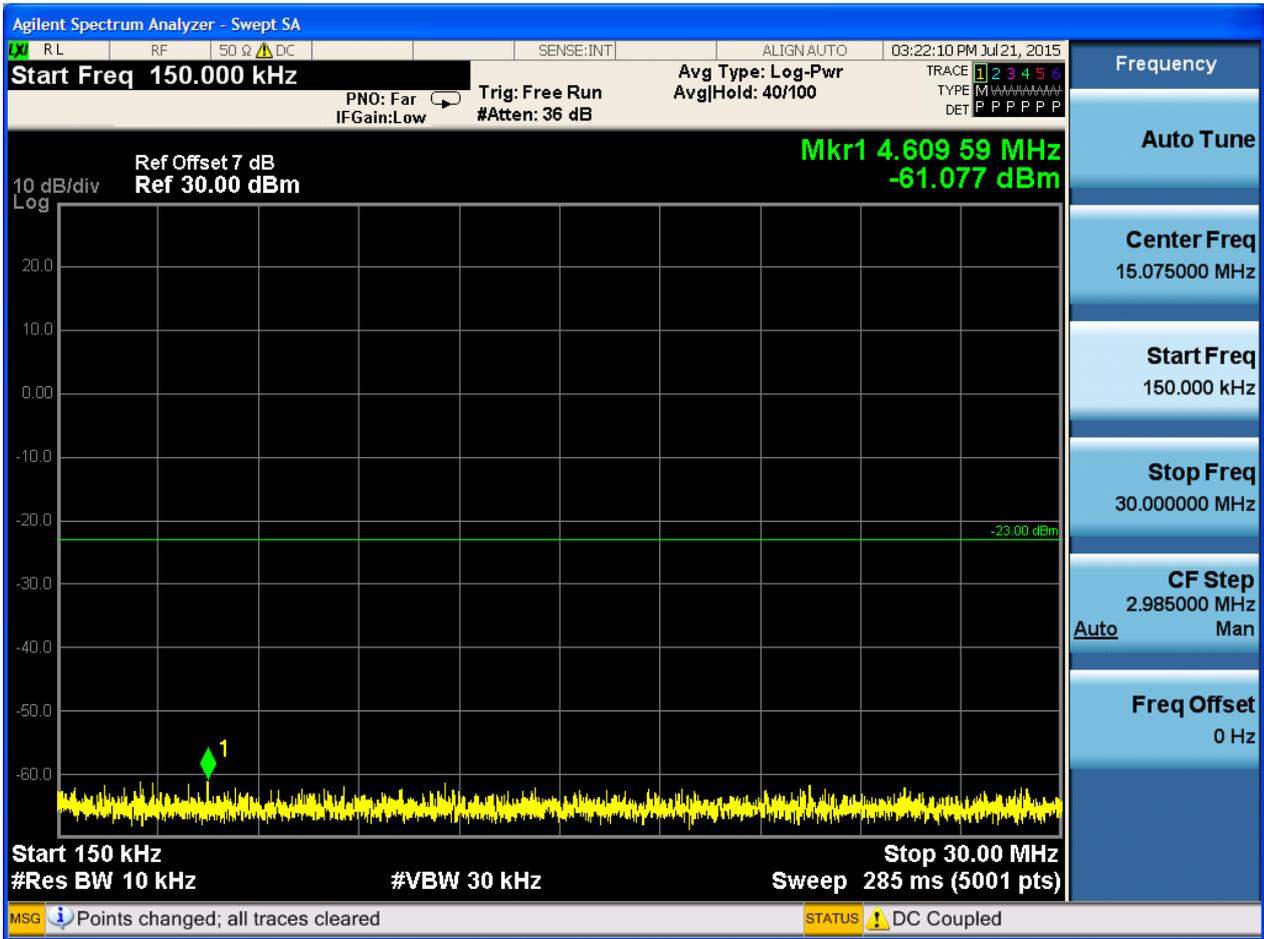


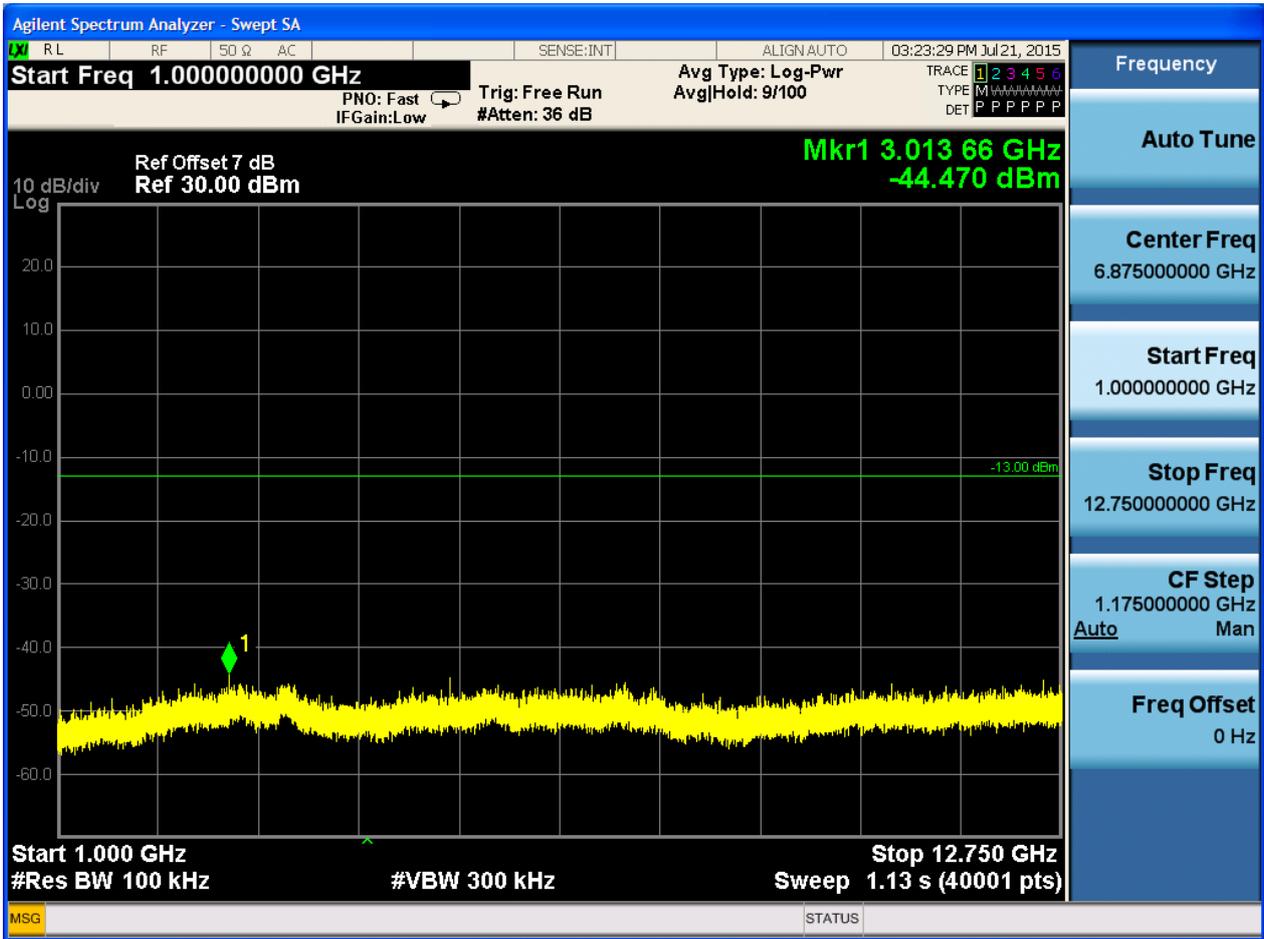




6.1.1.1.2 Test Channel = MCH

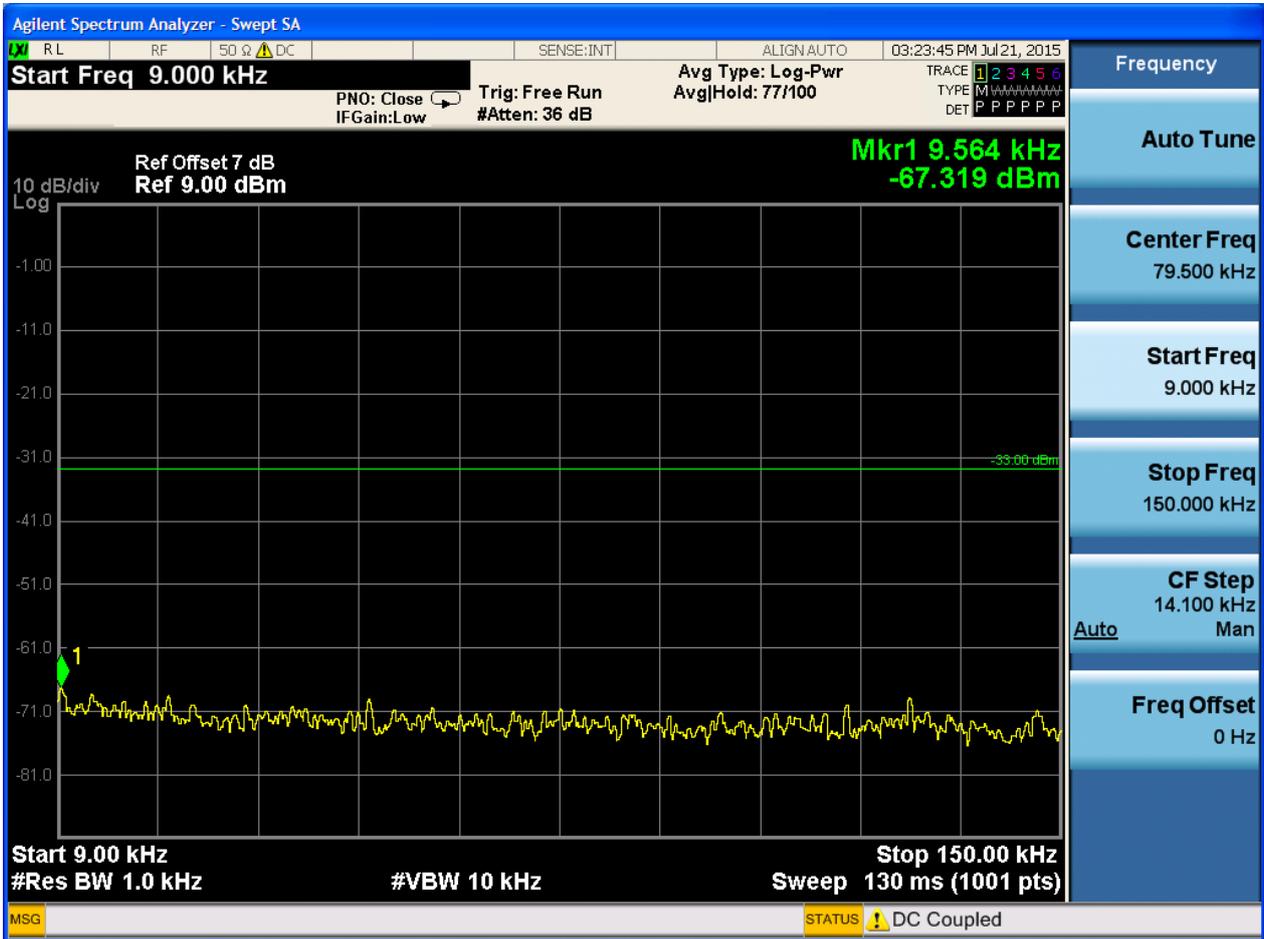


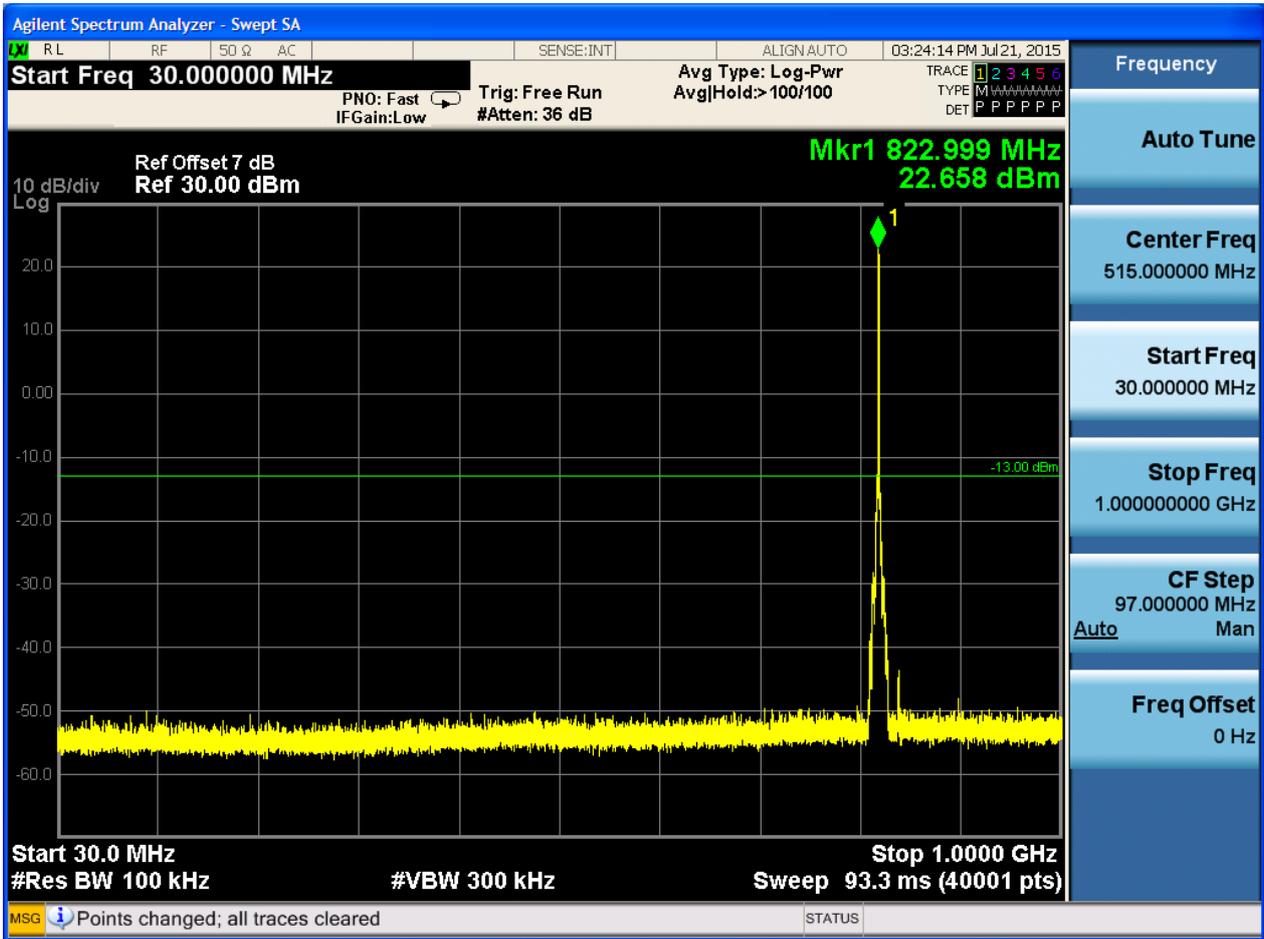


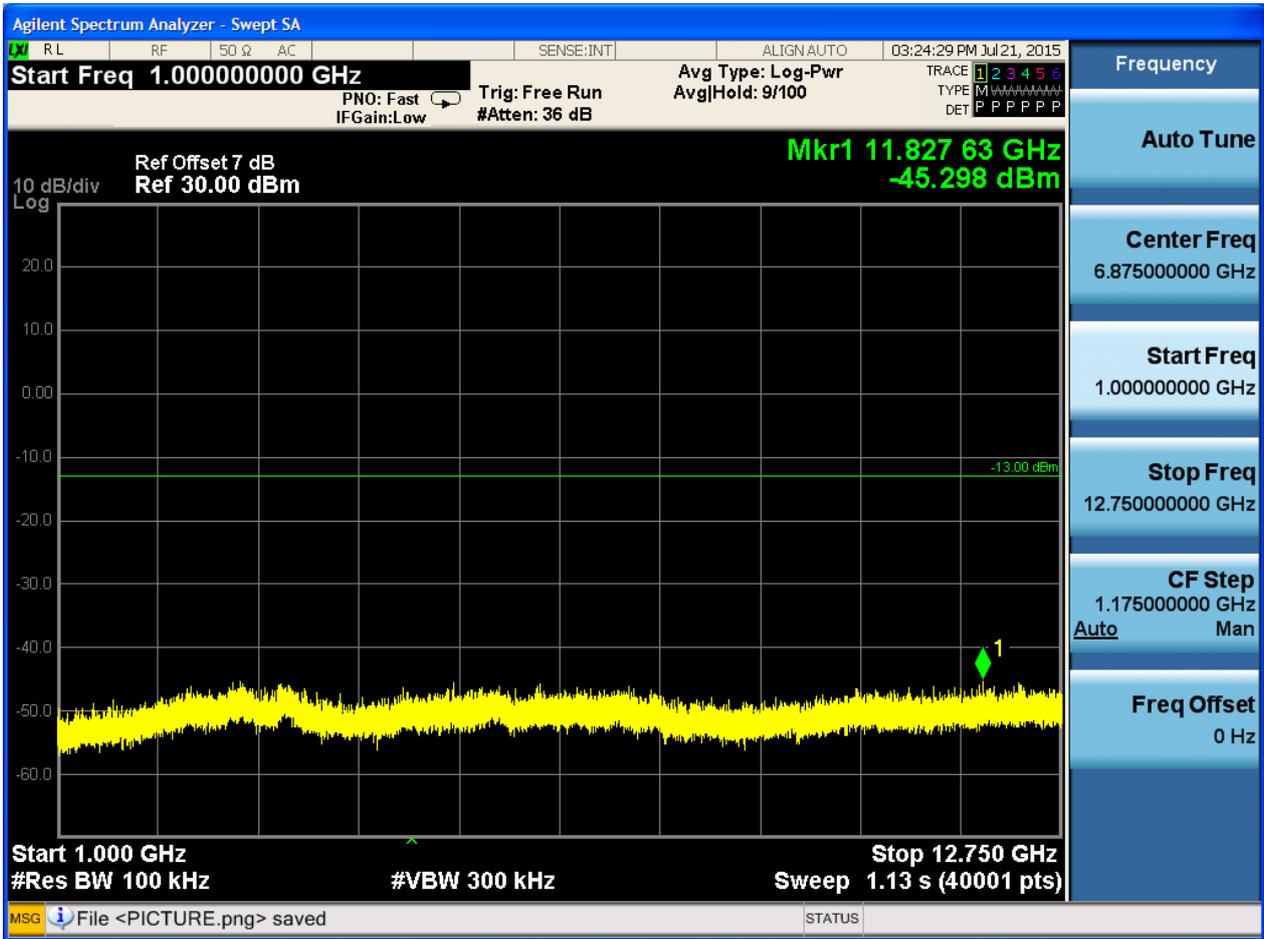


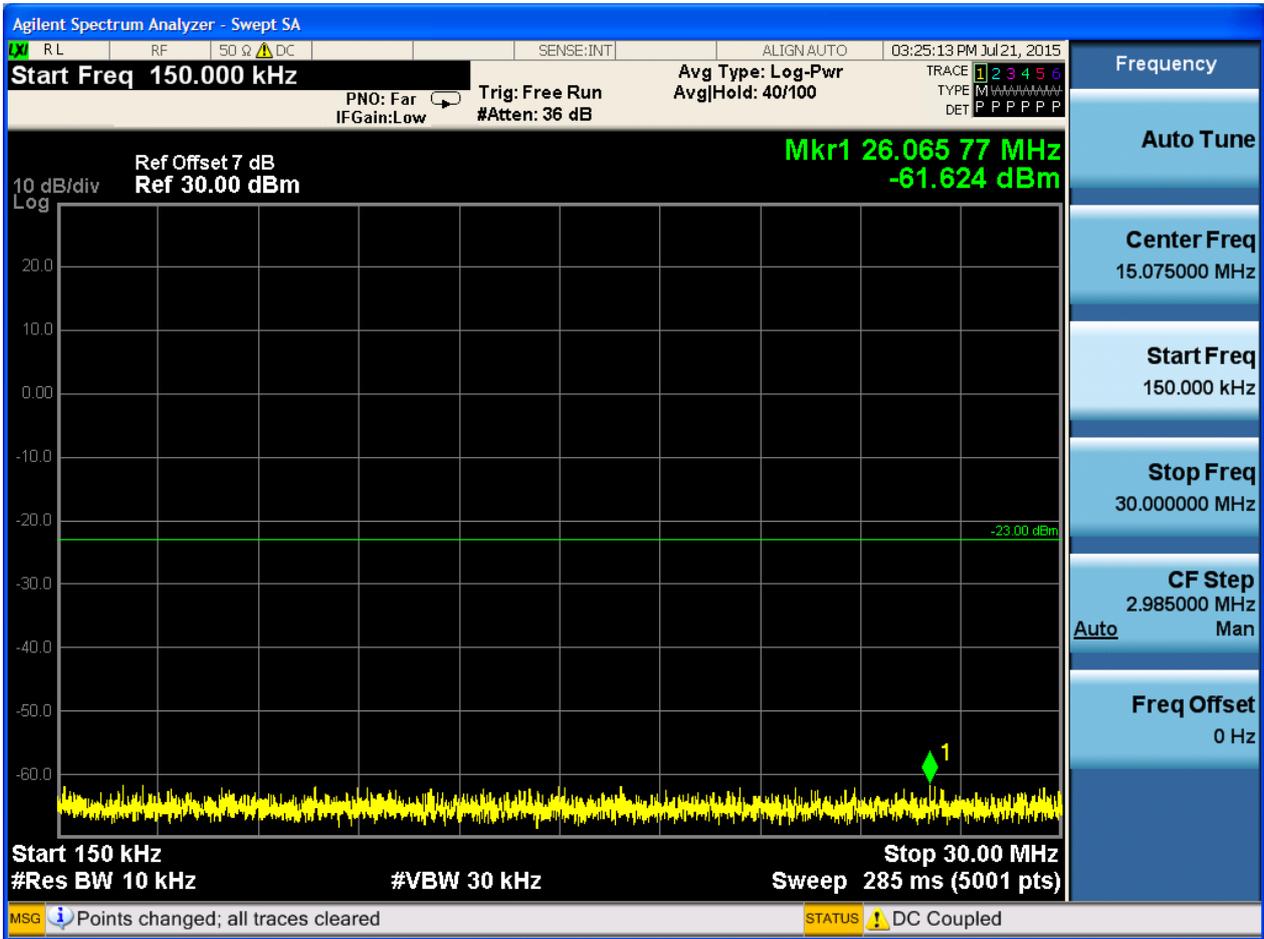


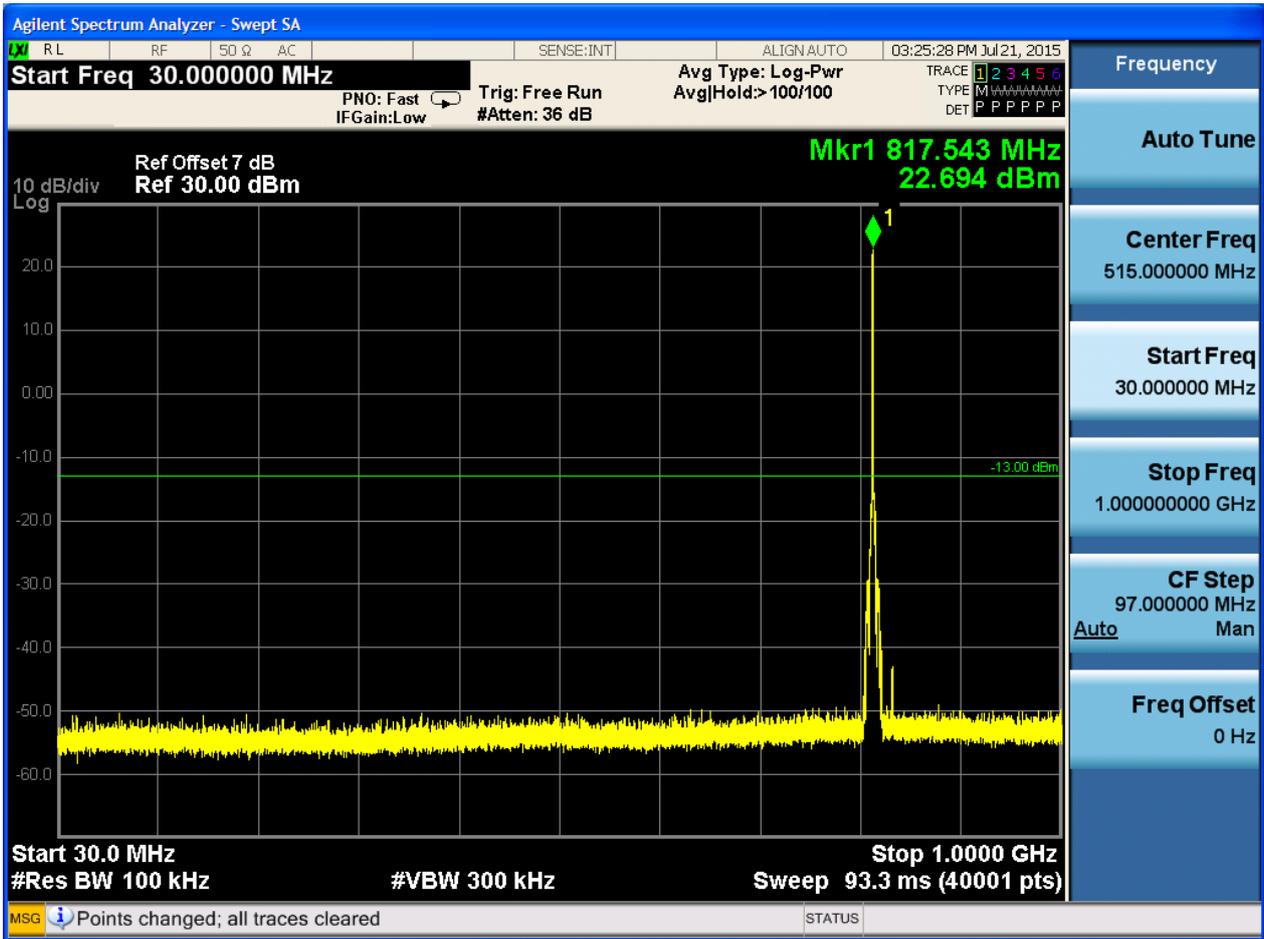
6.1.1.1.3 Test Channel = HCH

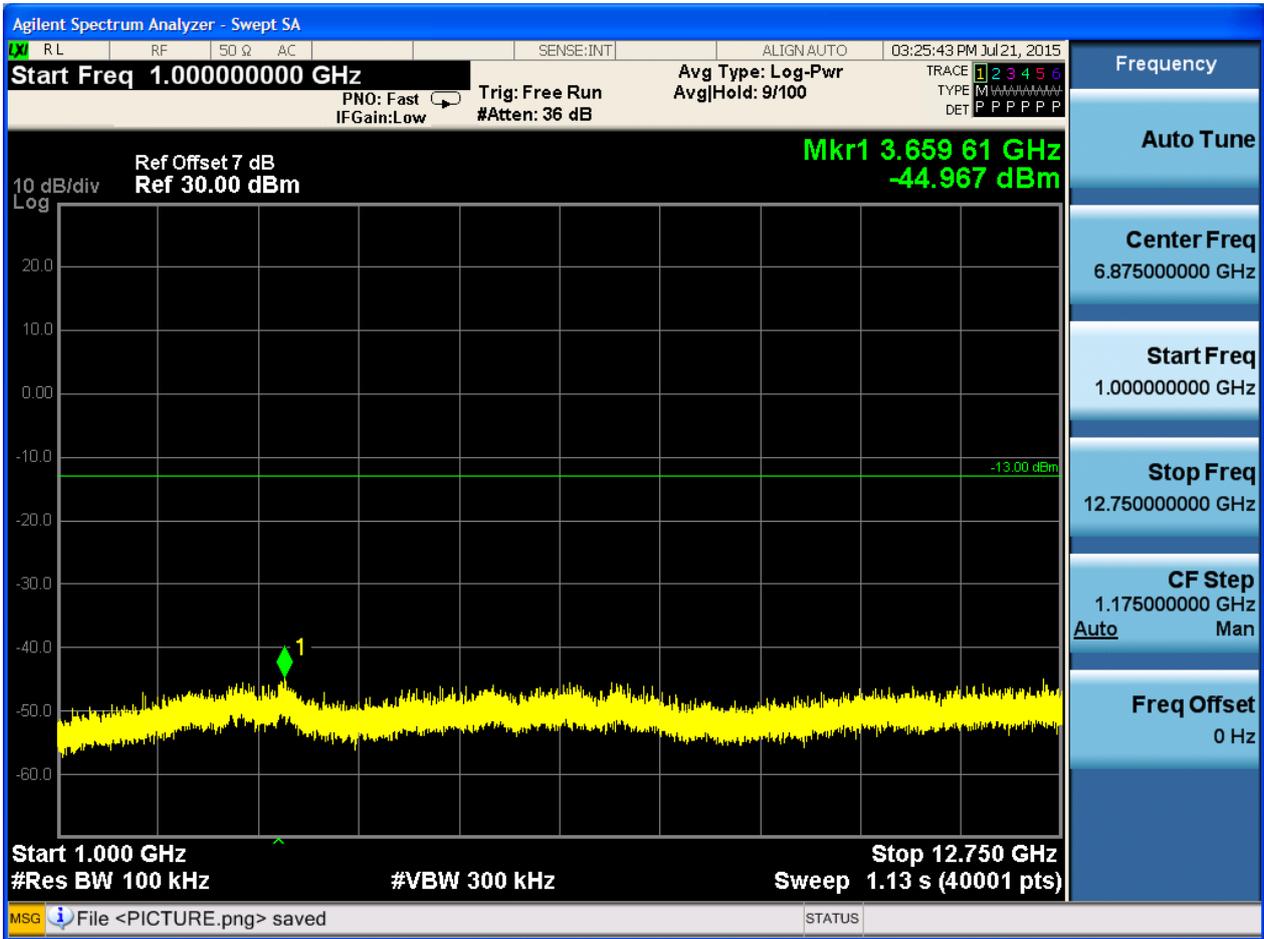






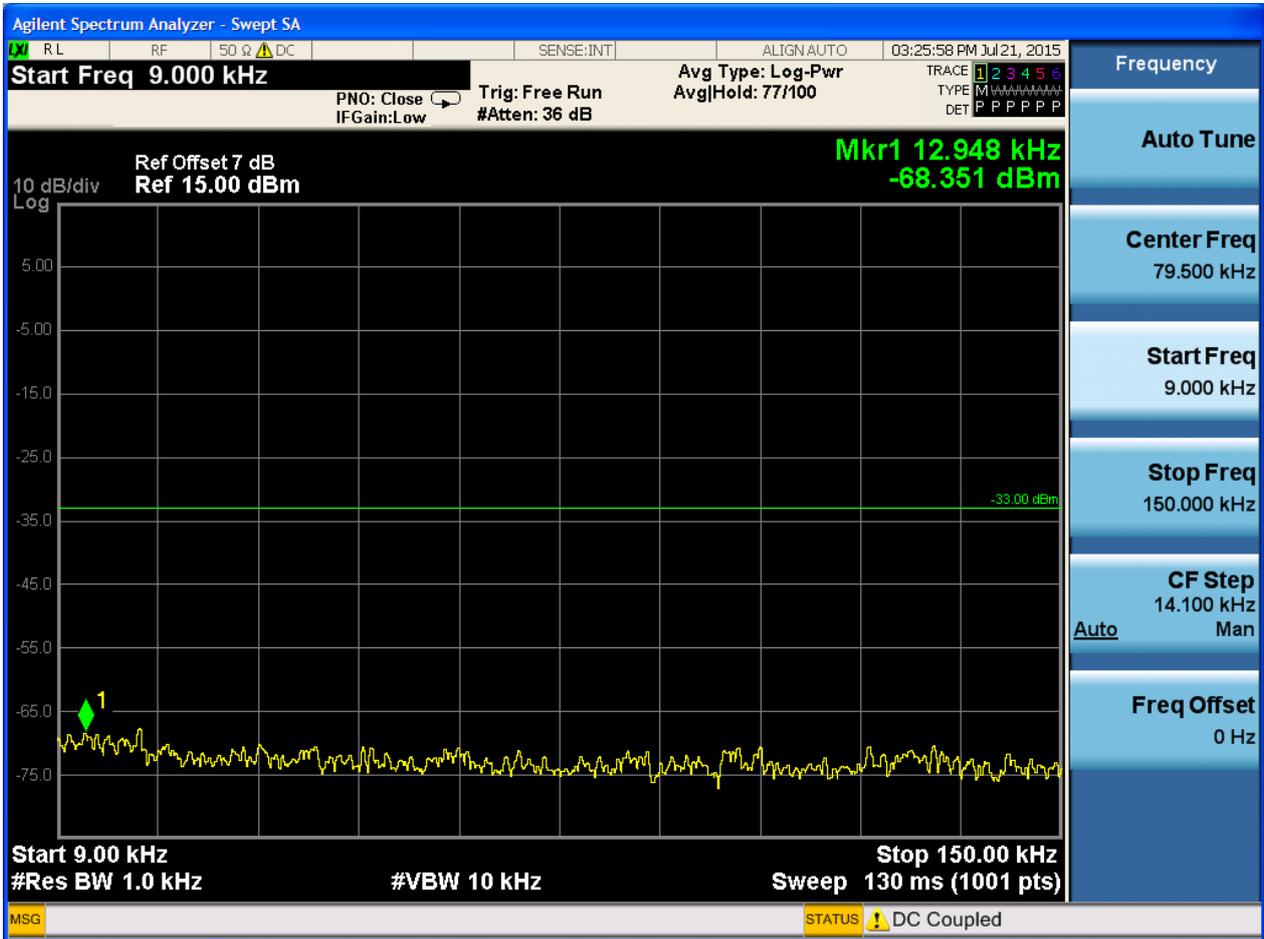


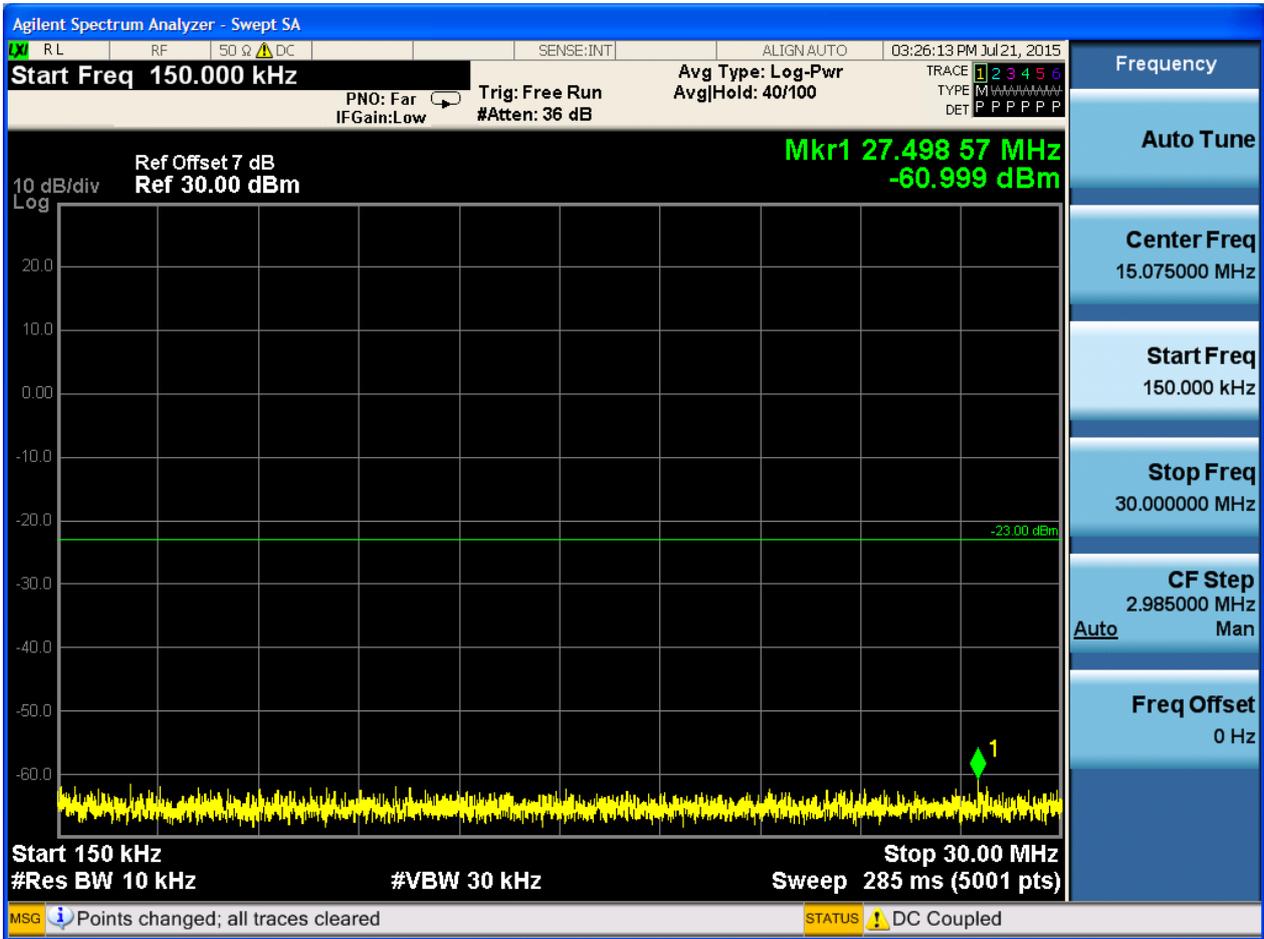


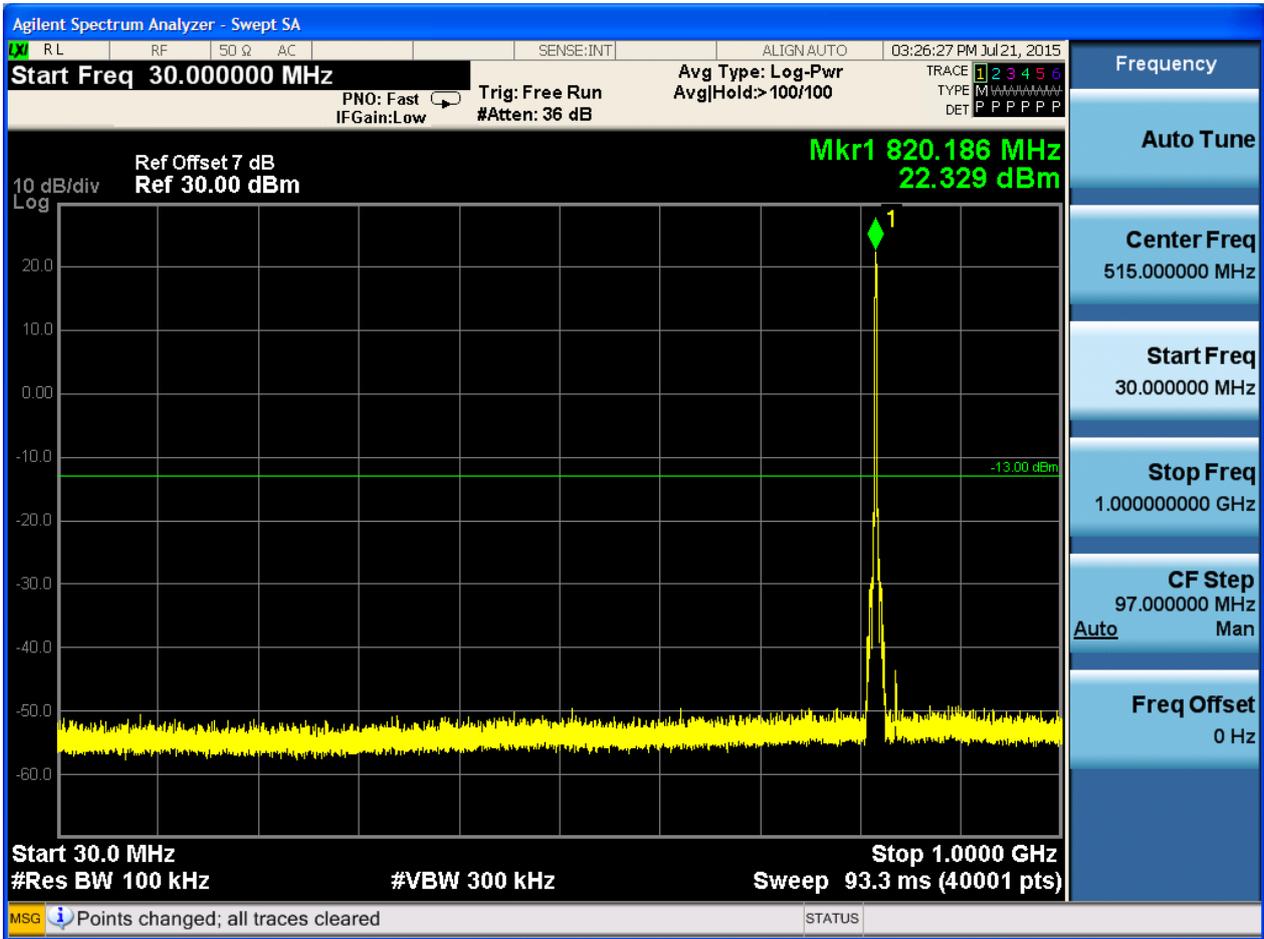


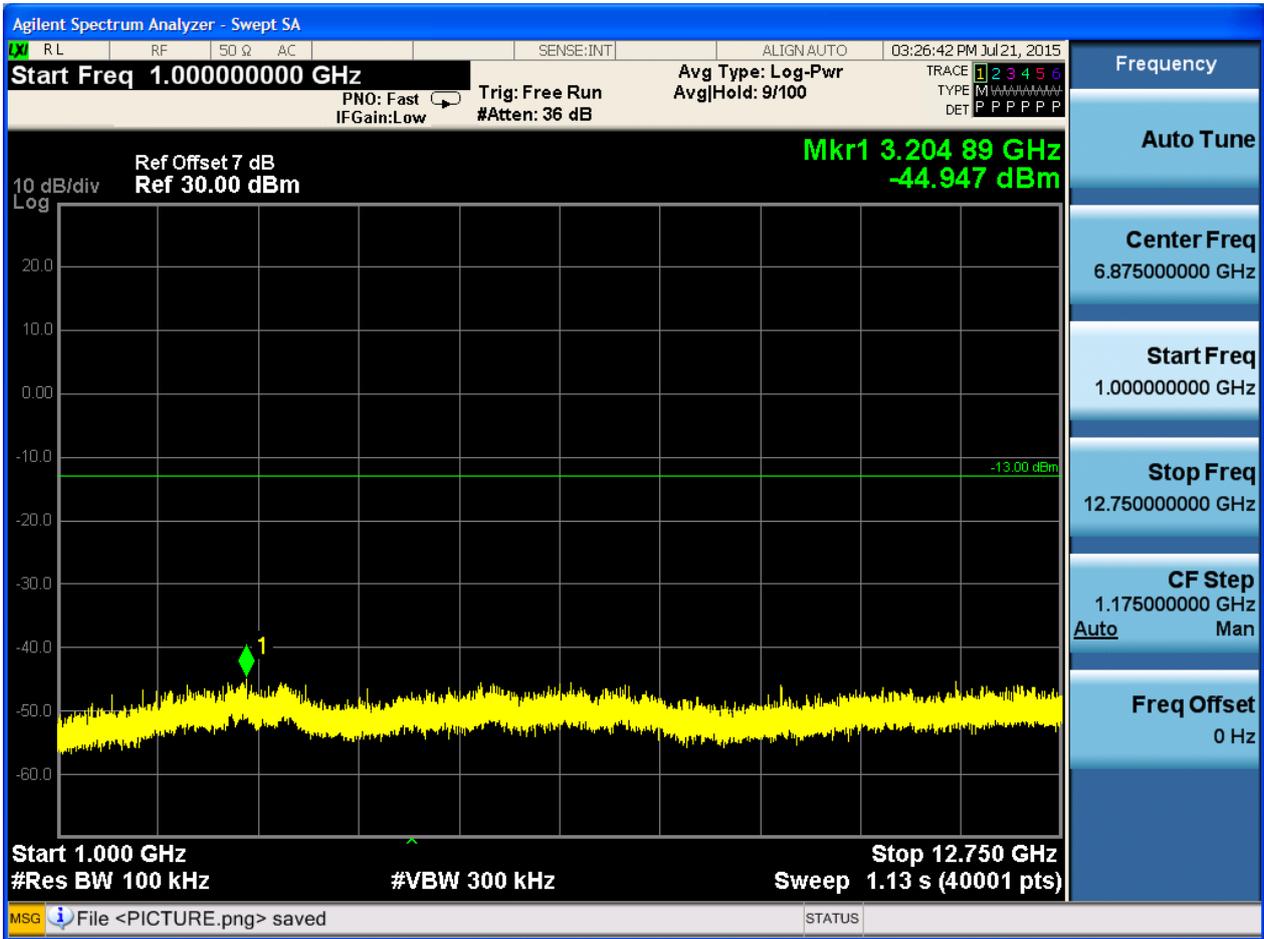


6.1.1.2.2 Test Channel = MCH



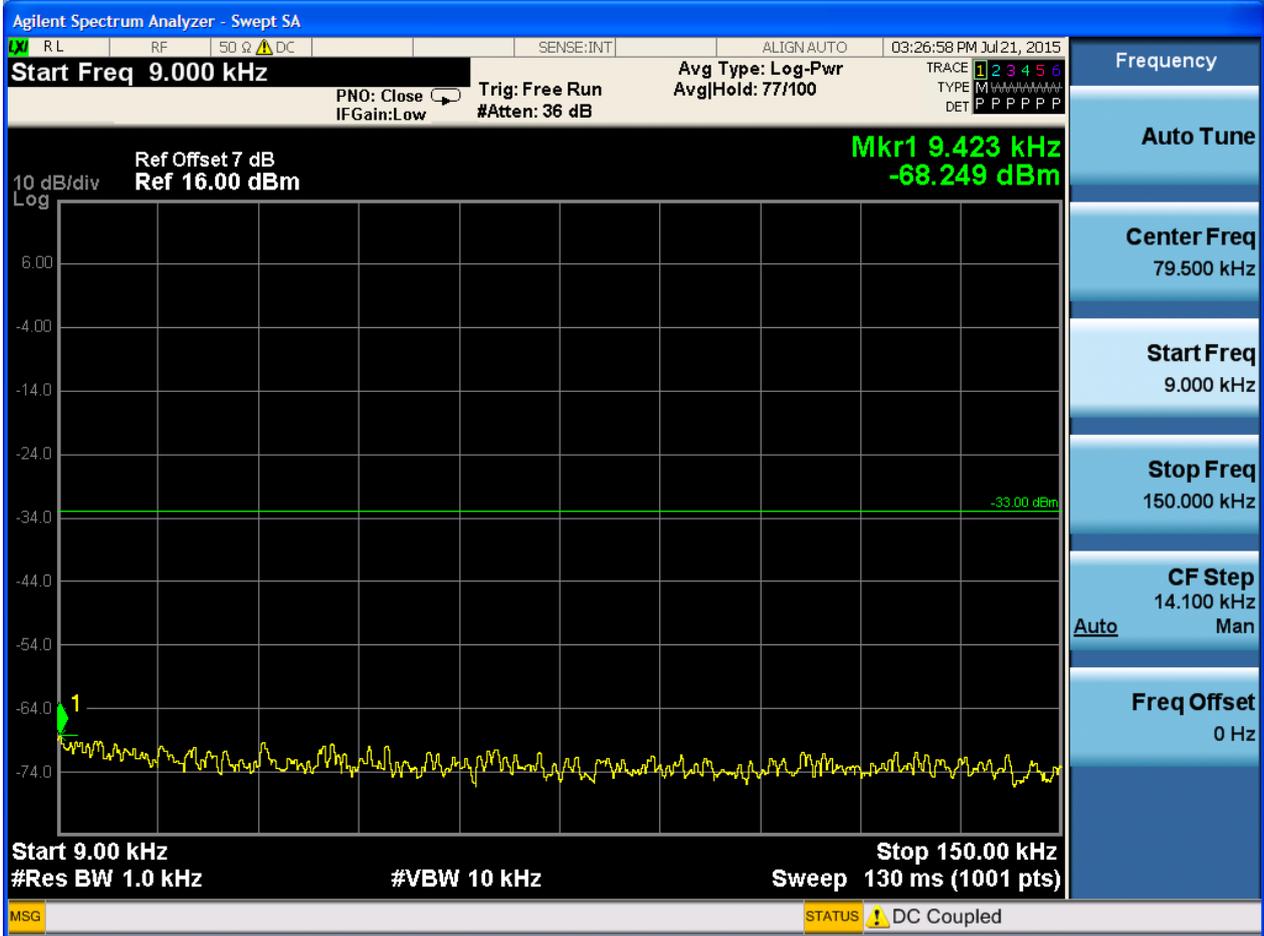


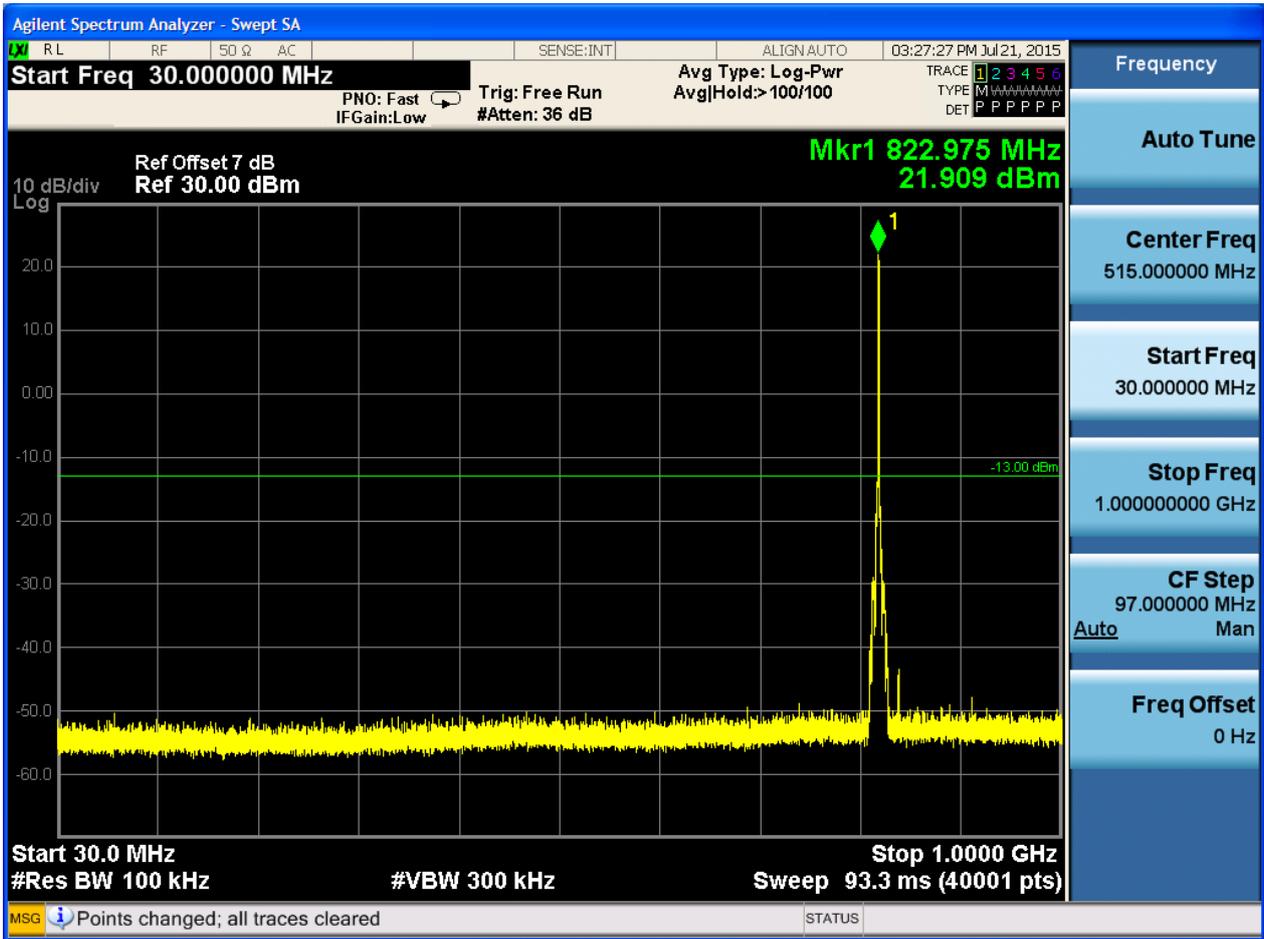


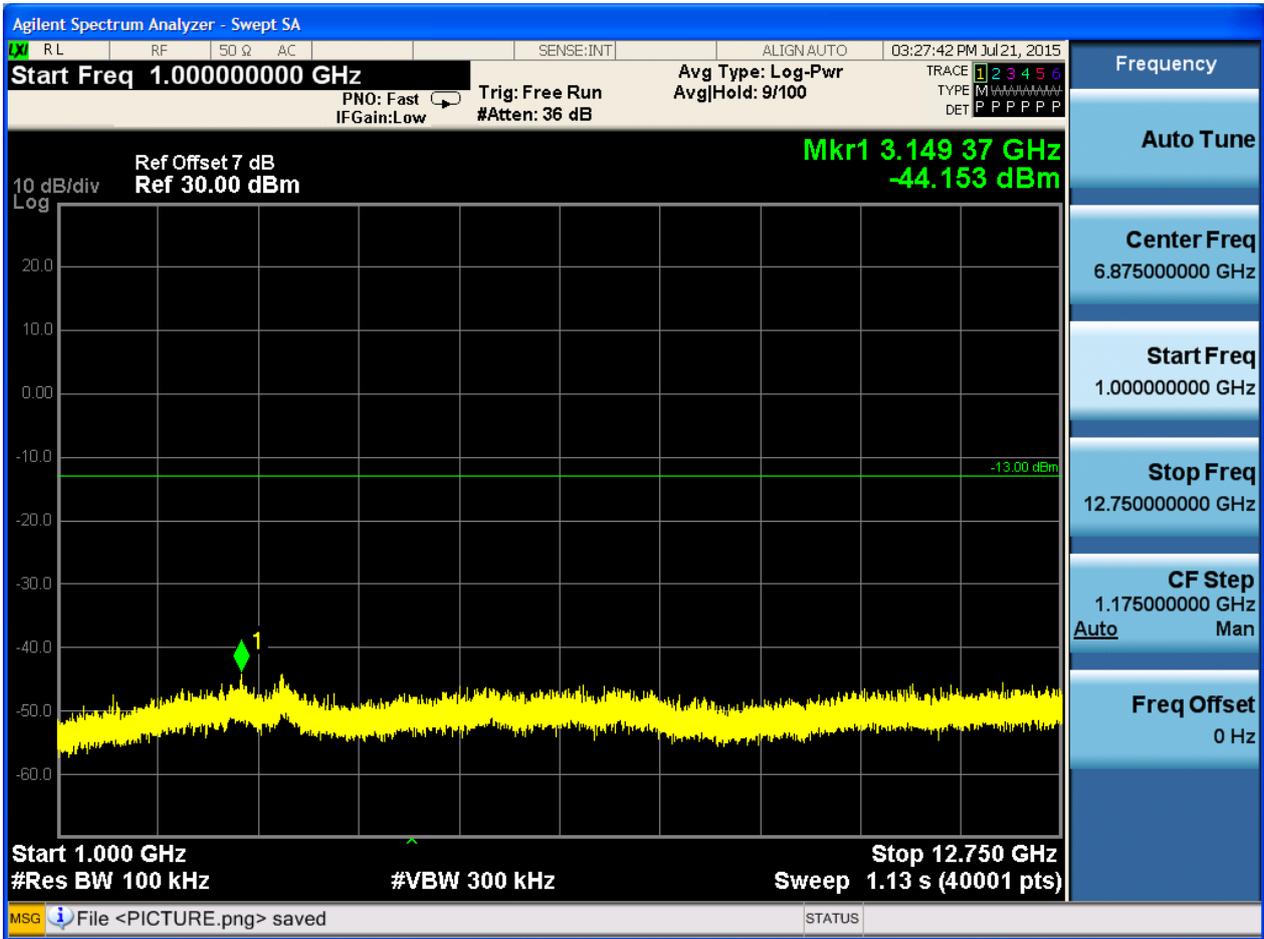




6.1.1.2.3 Test Channel = HCH





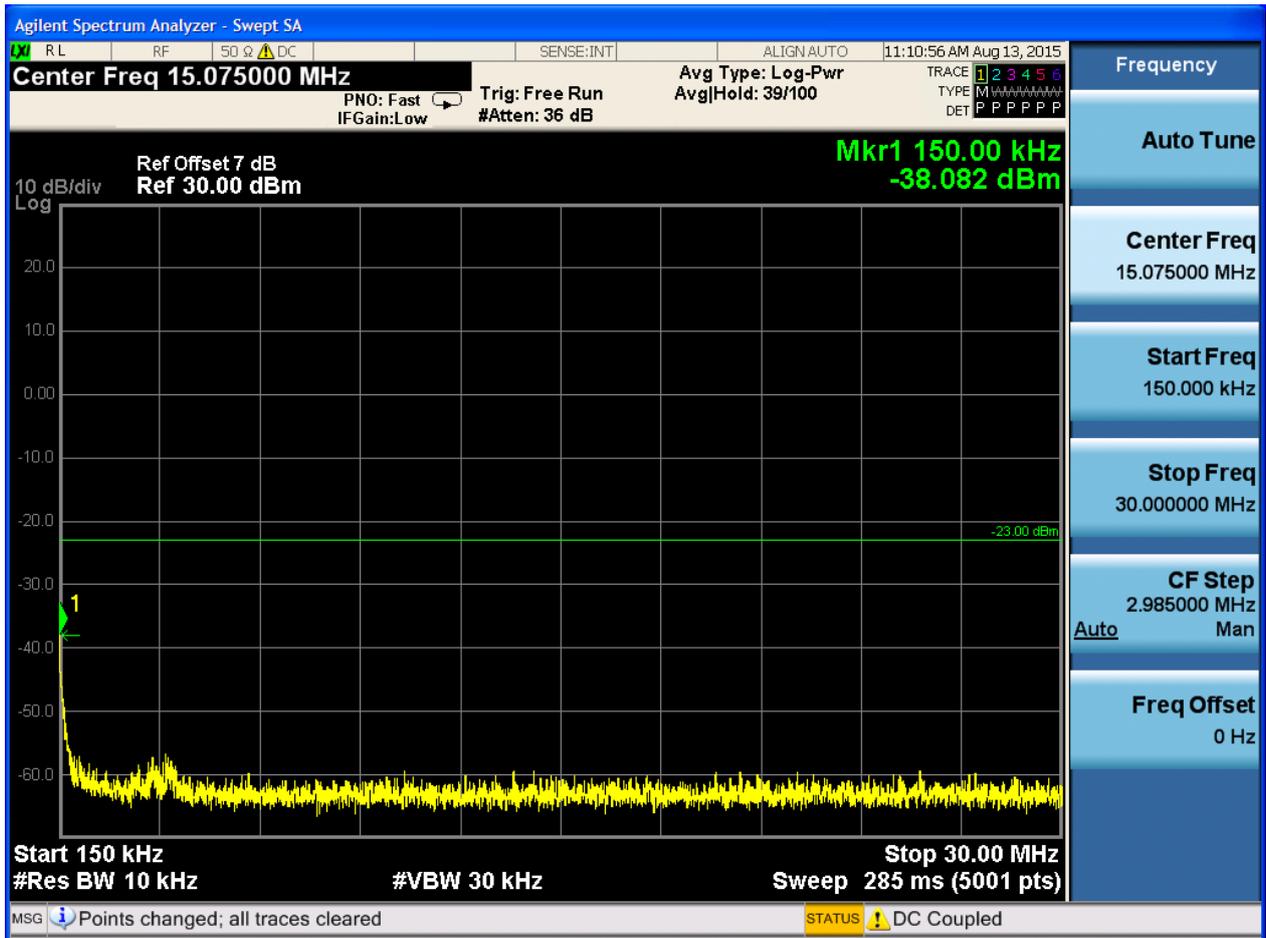


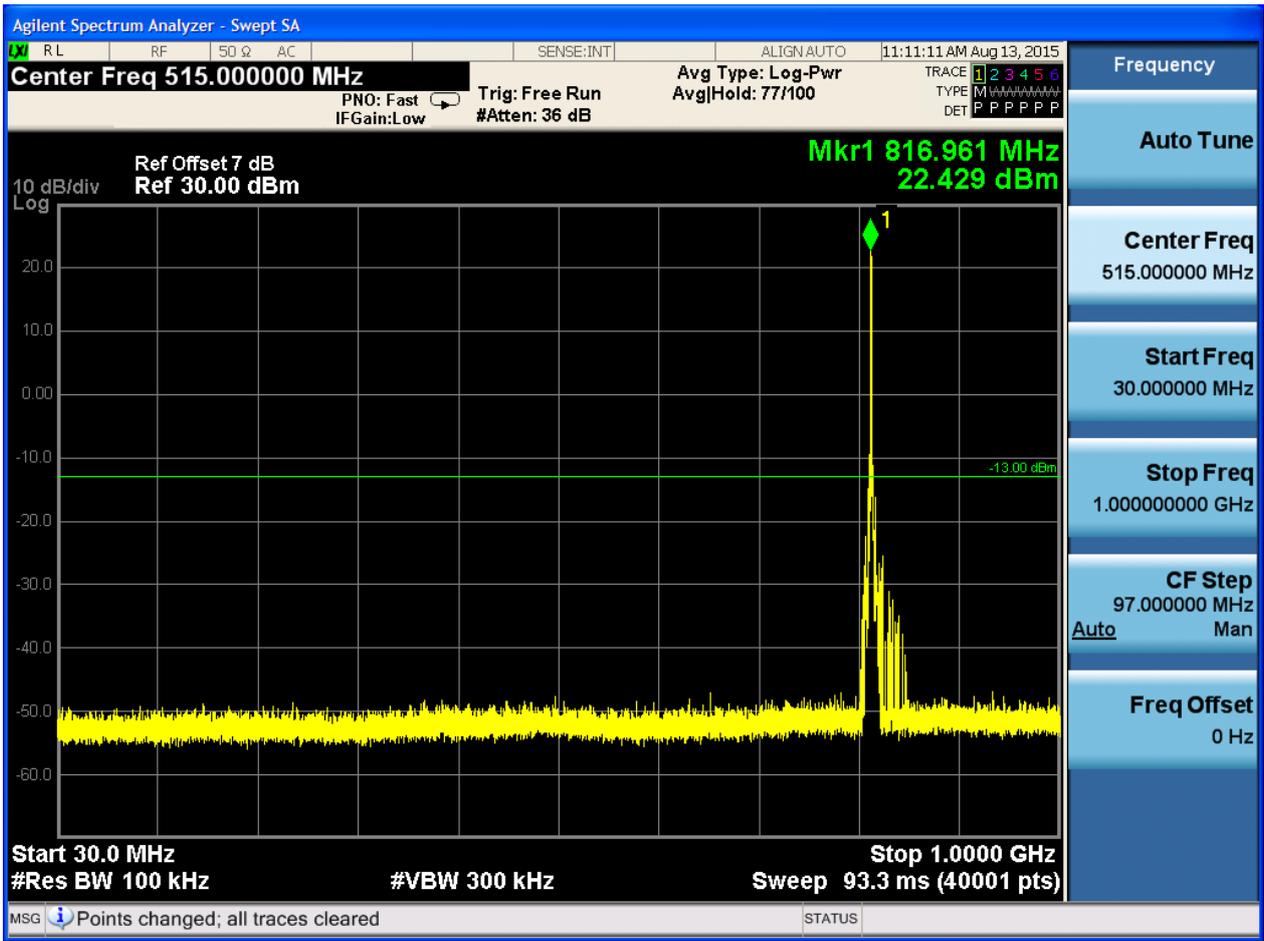


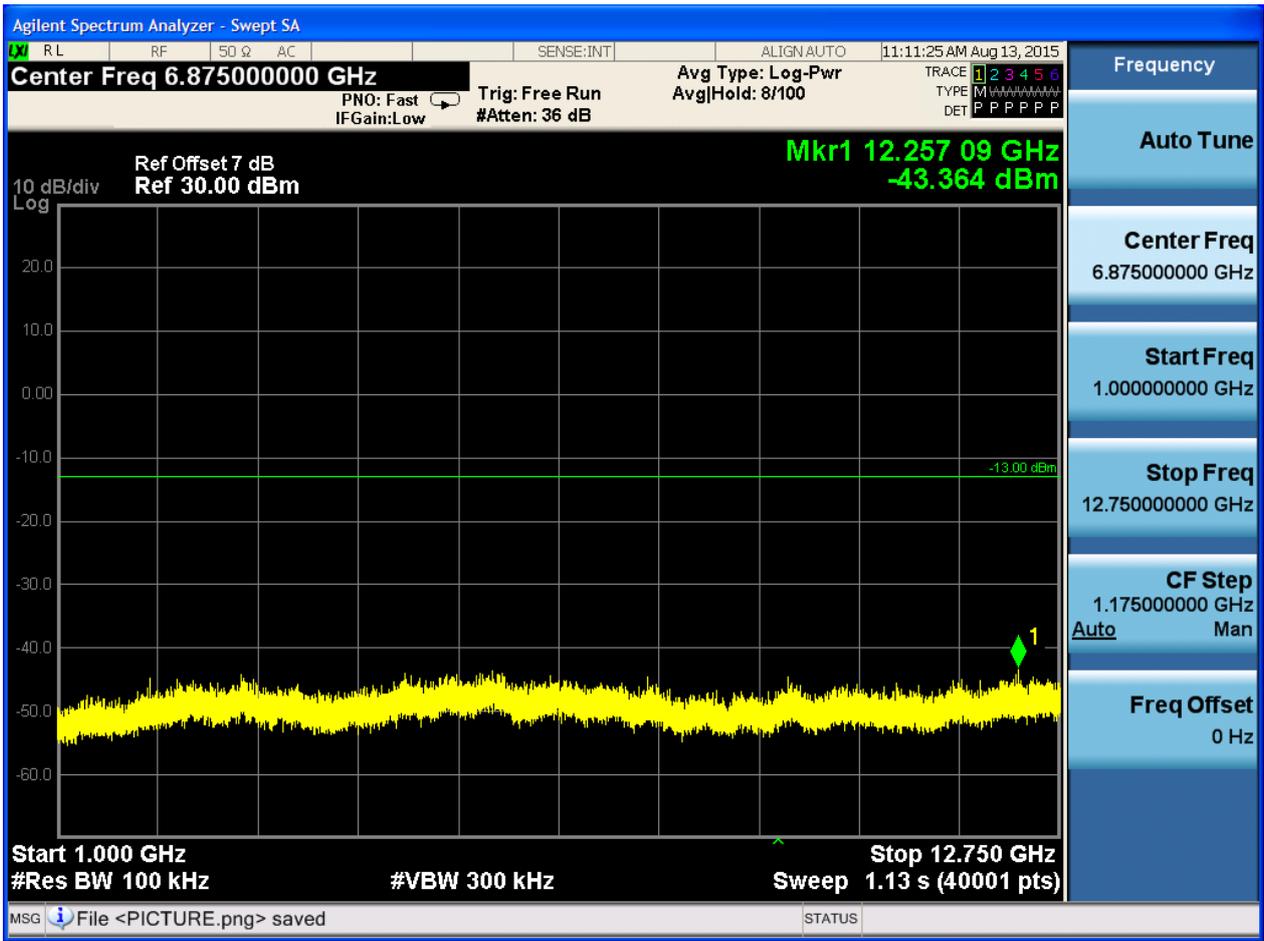
6.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

6.1.1.3.1 Test Channel = LCH



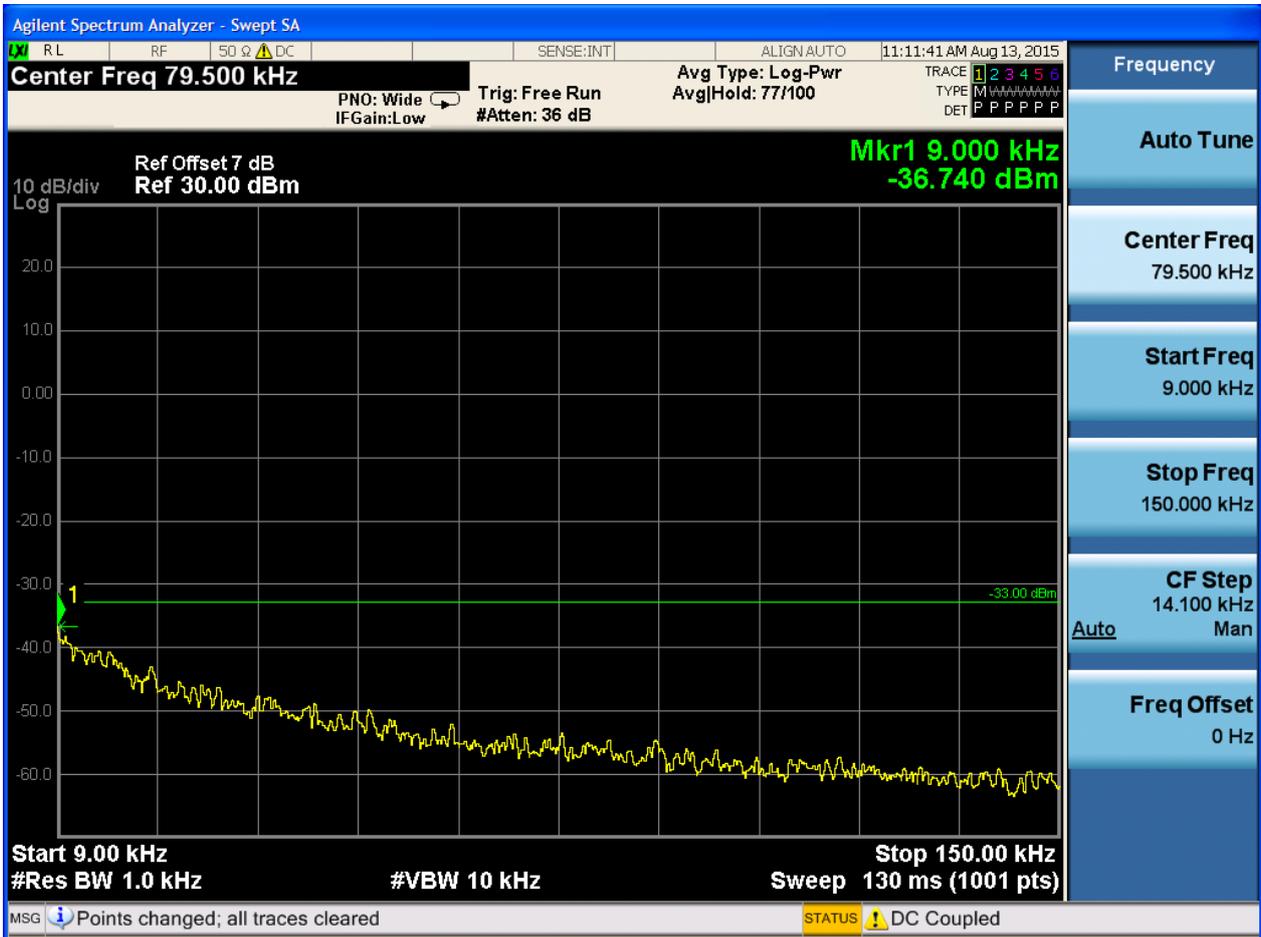


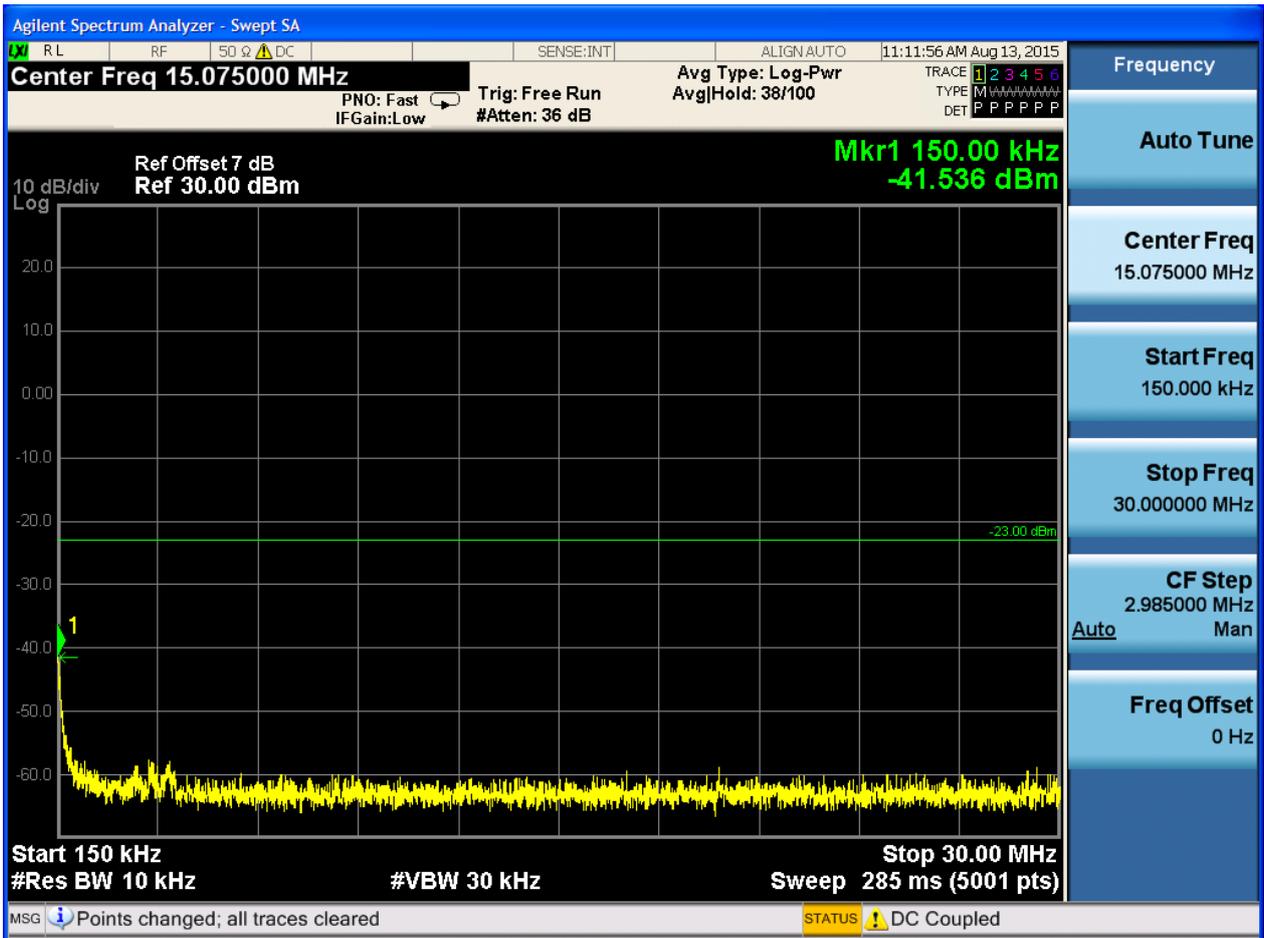


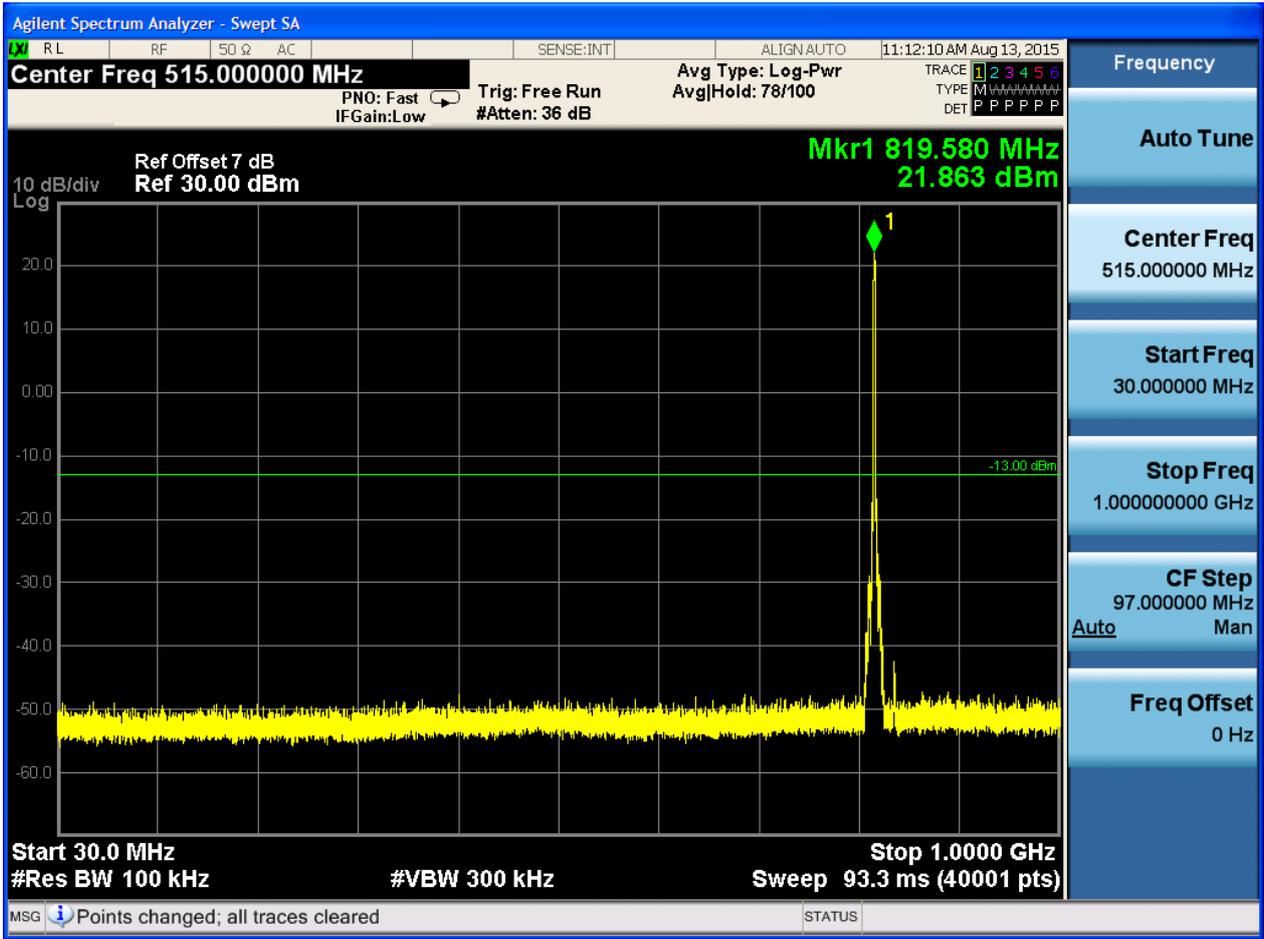


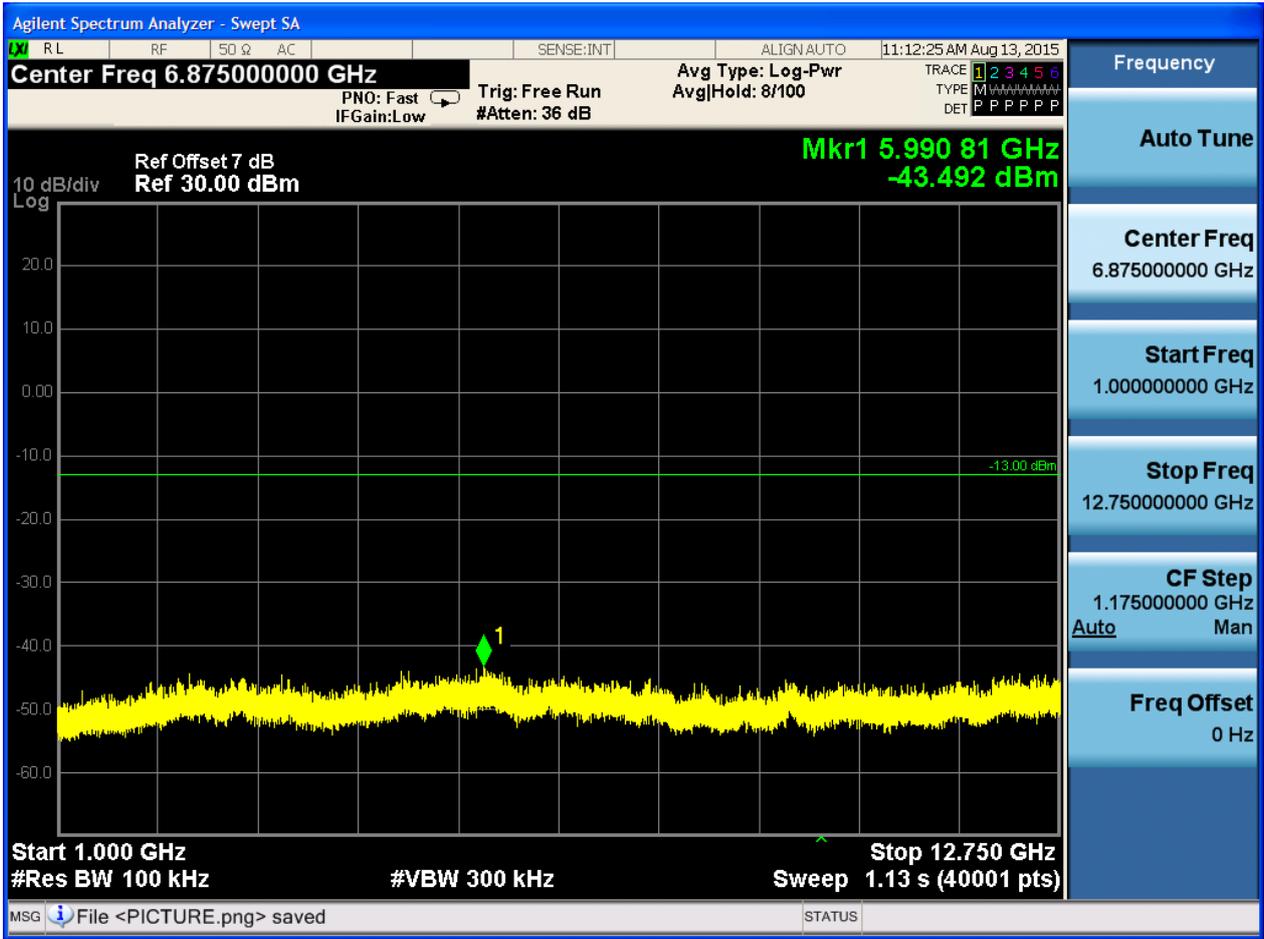


6.1.1.3.2 Test Channel = MCH



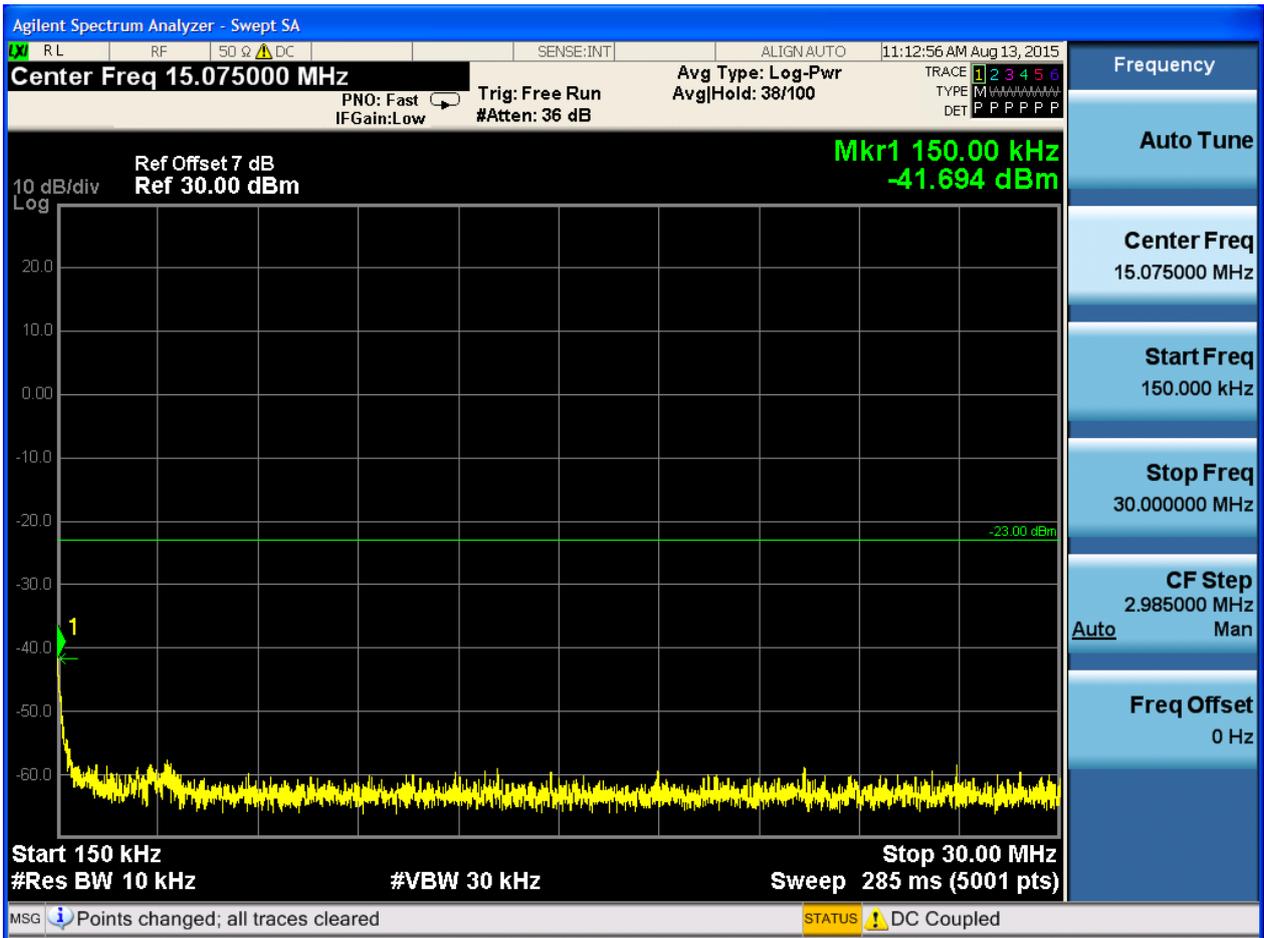


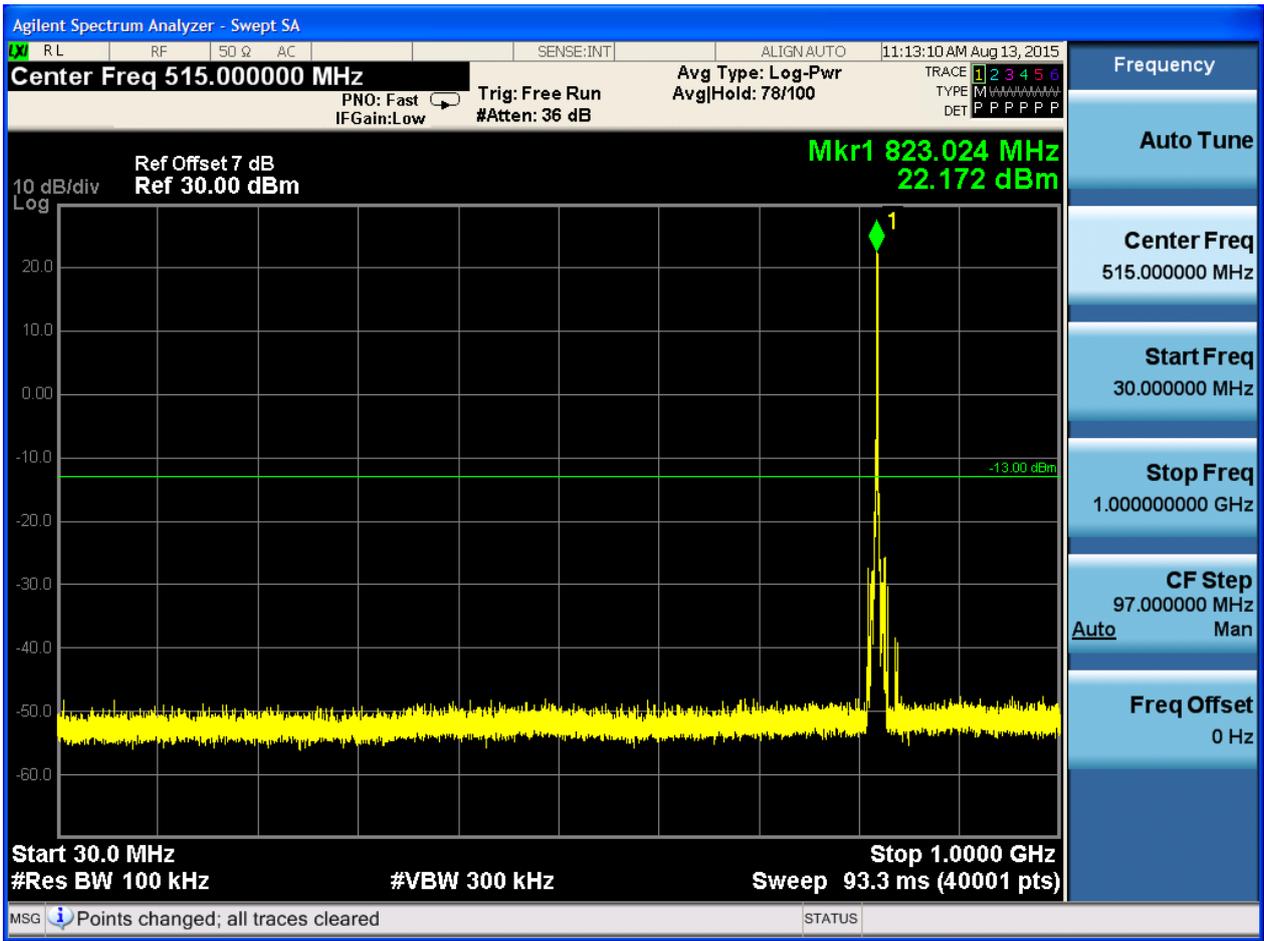


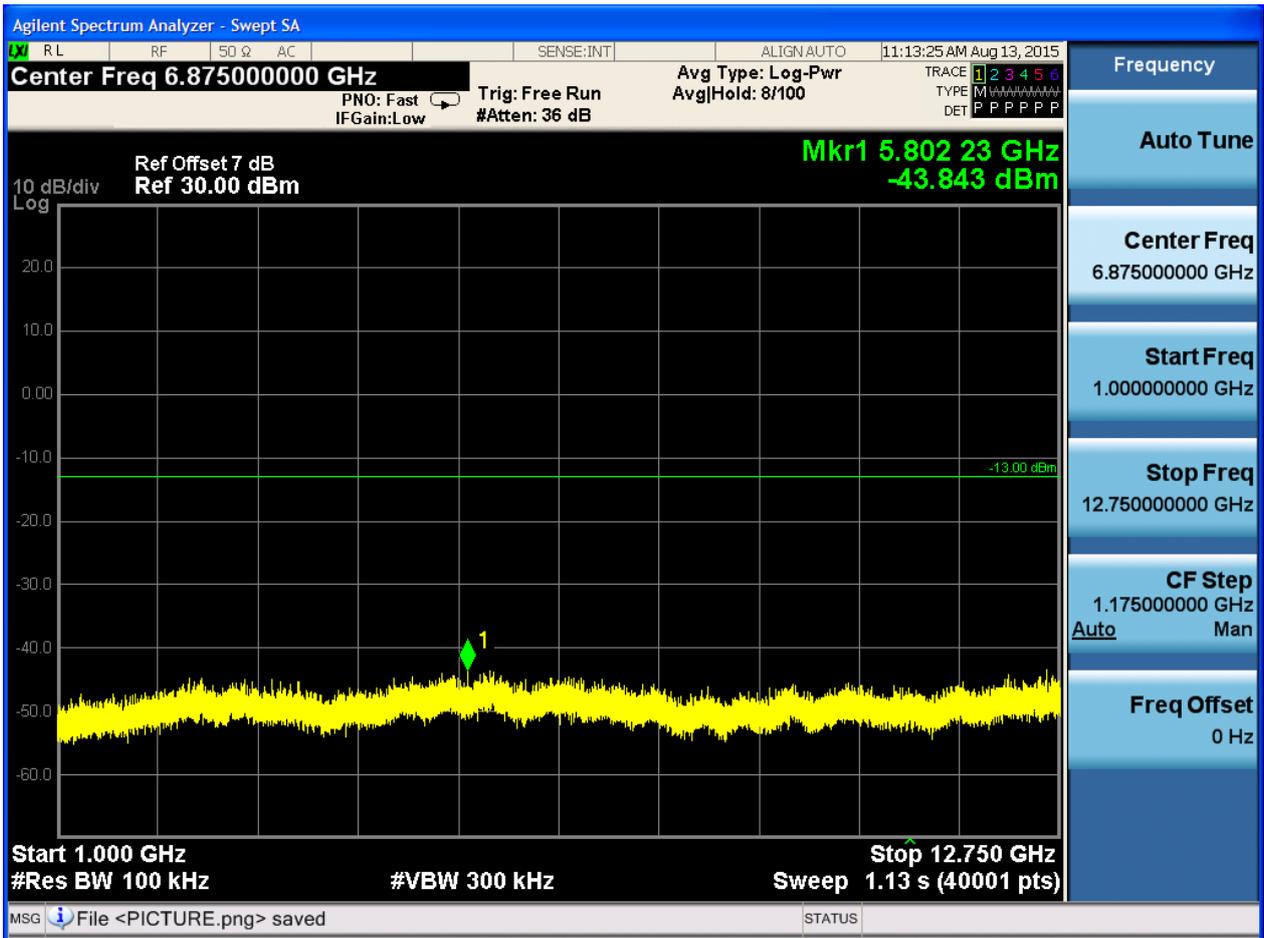


6.1.1.3.3 Test Channel = HCH







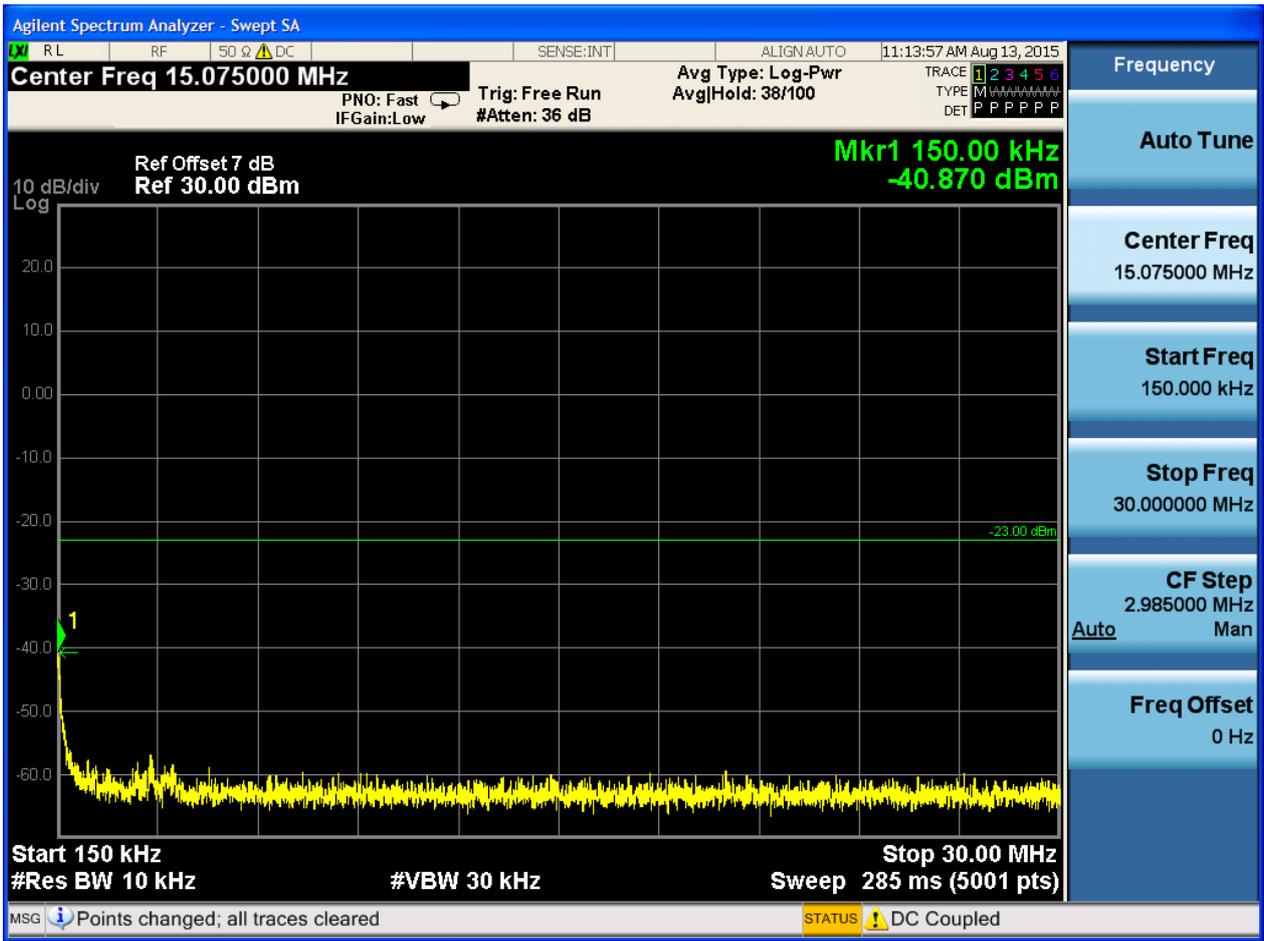


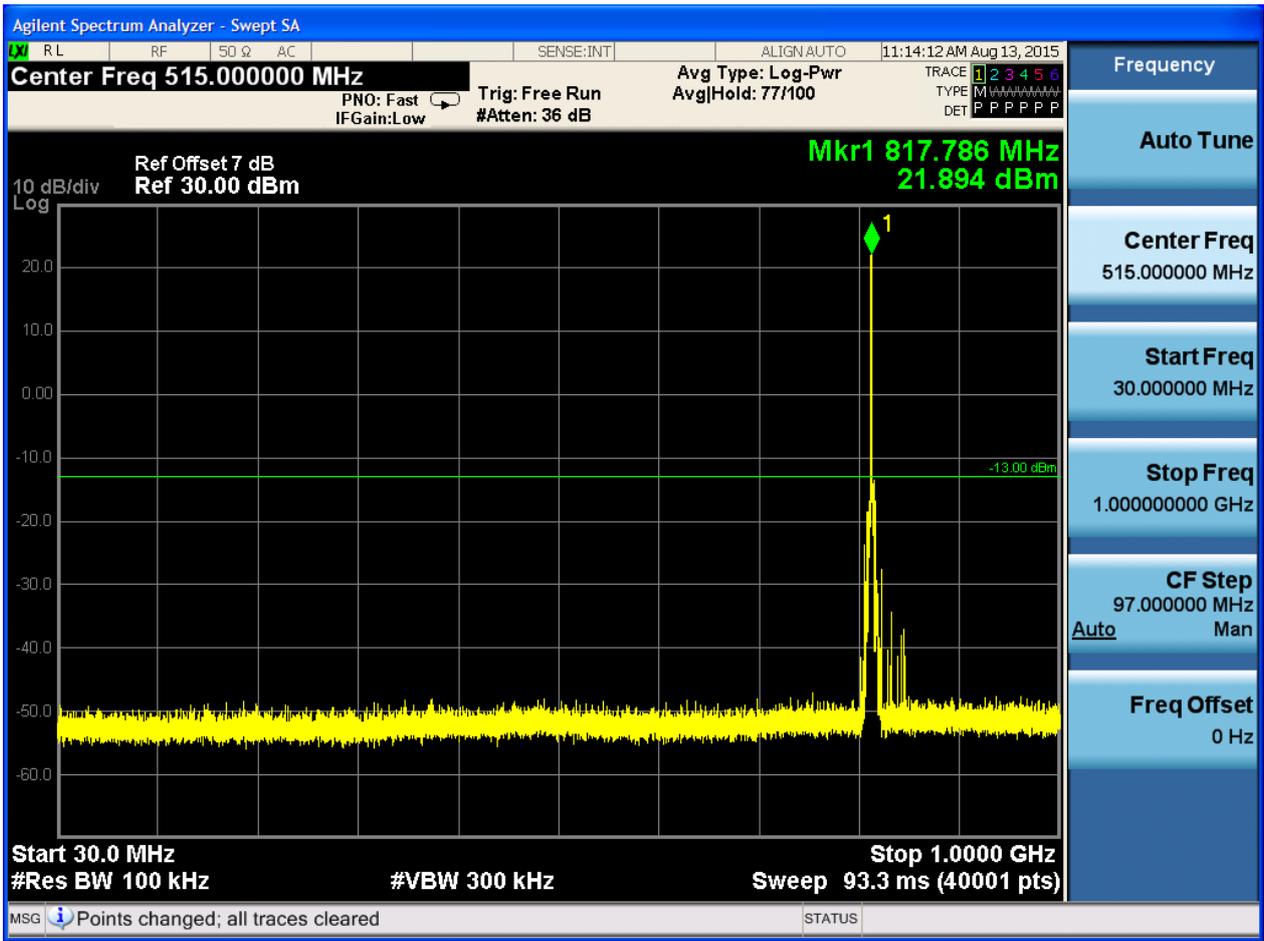


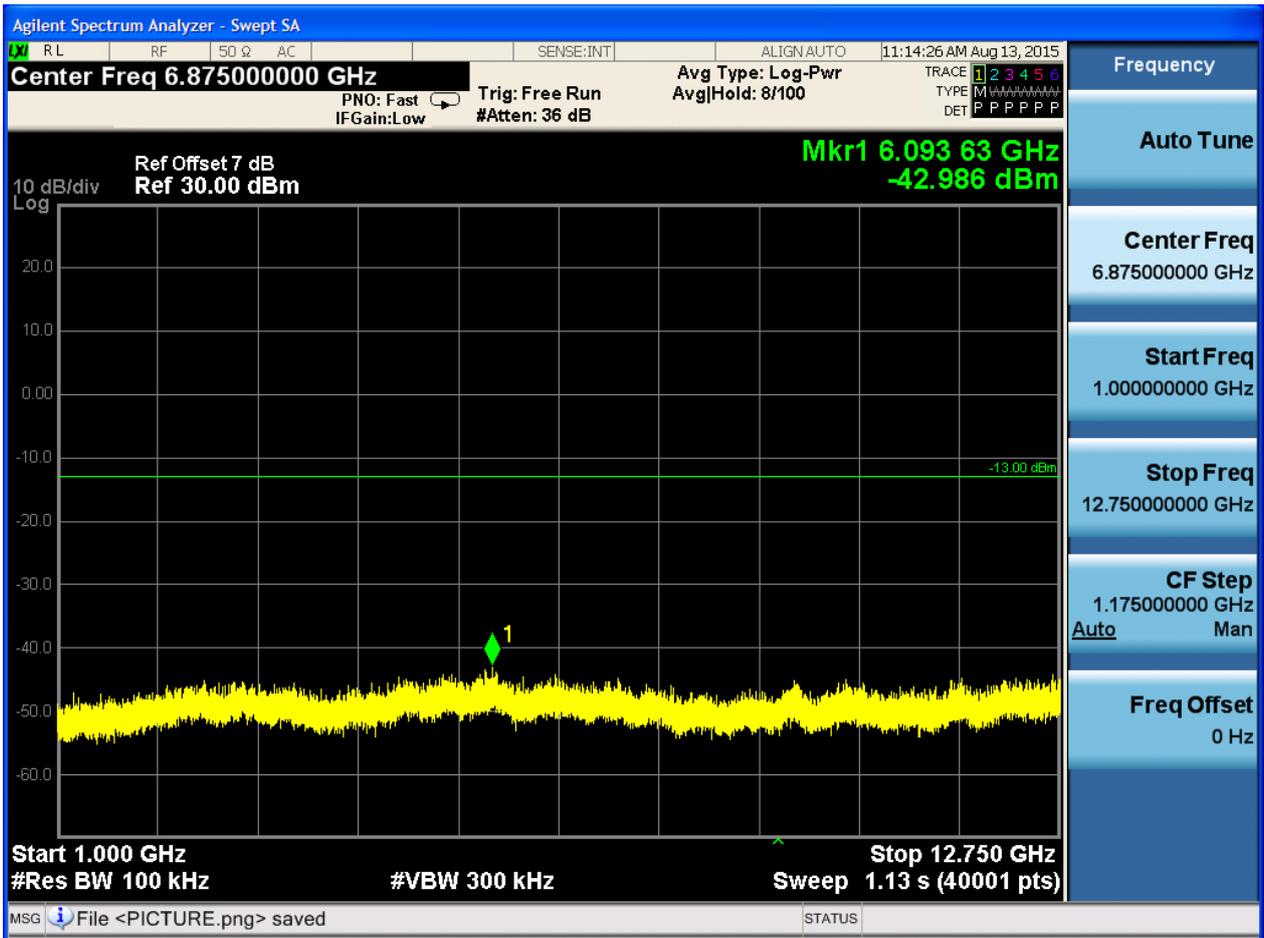
6.1.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

6.1.1.4.1 Test Channel = LCH



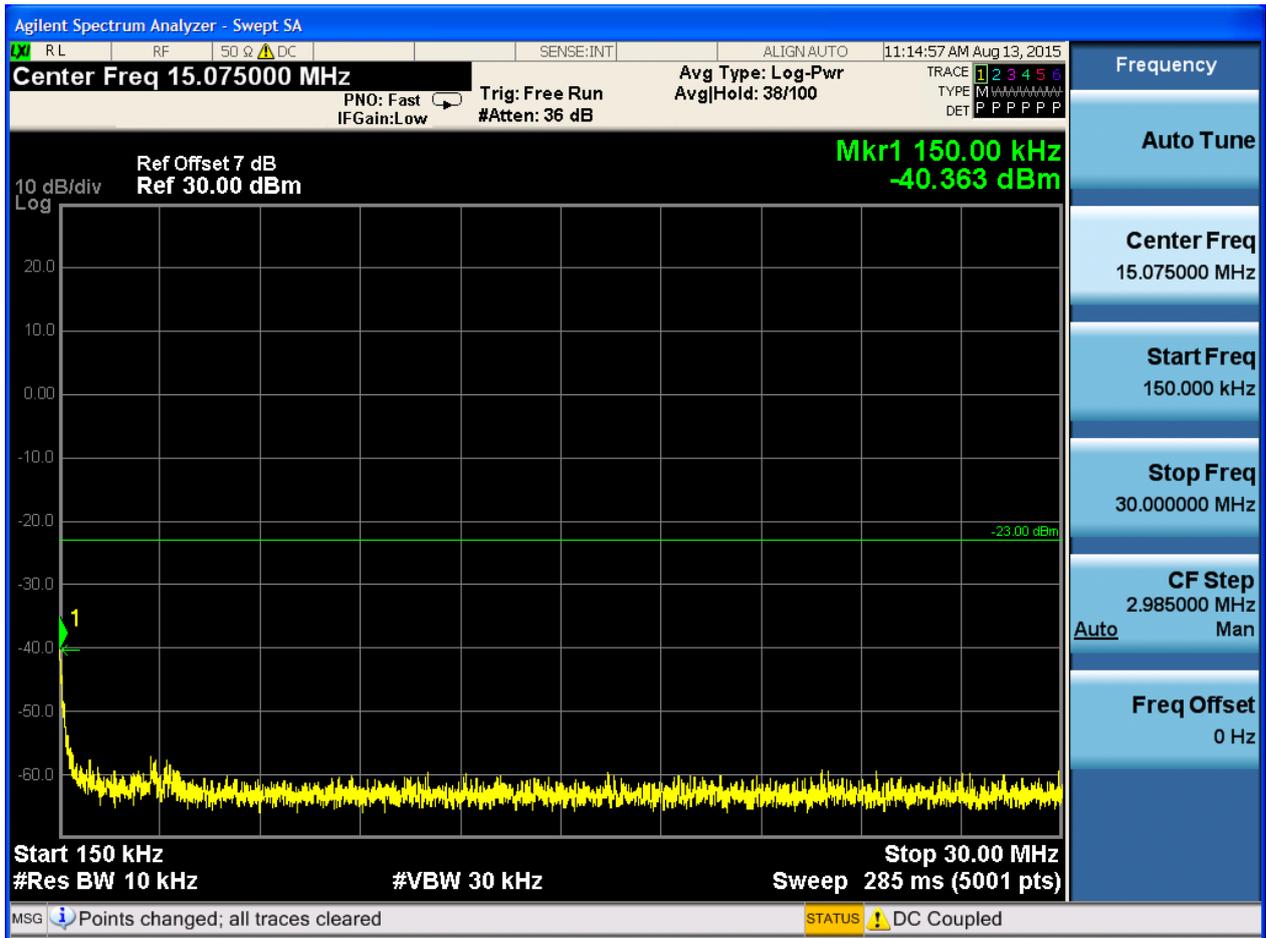


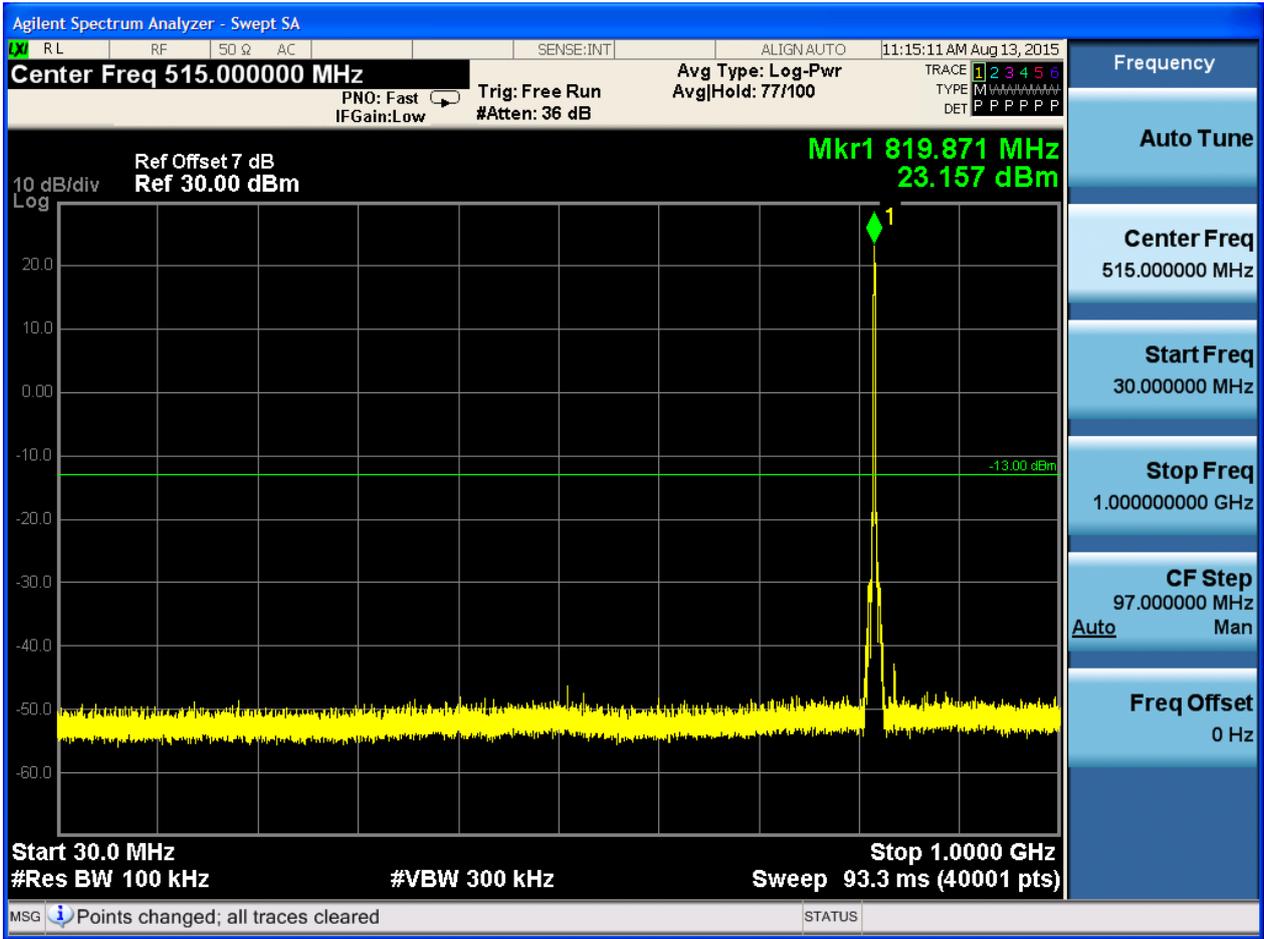


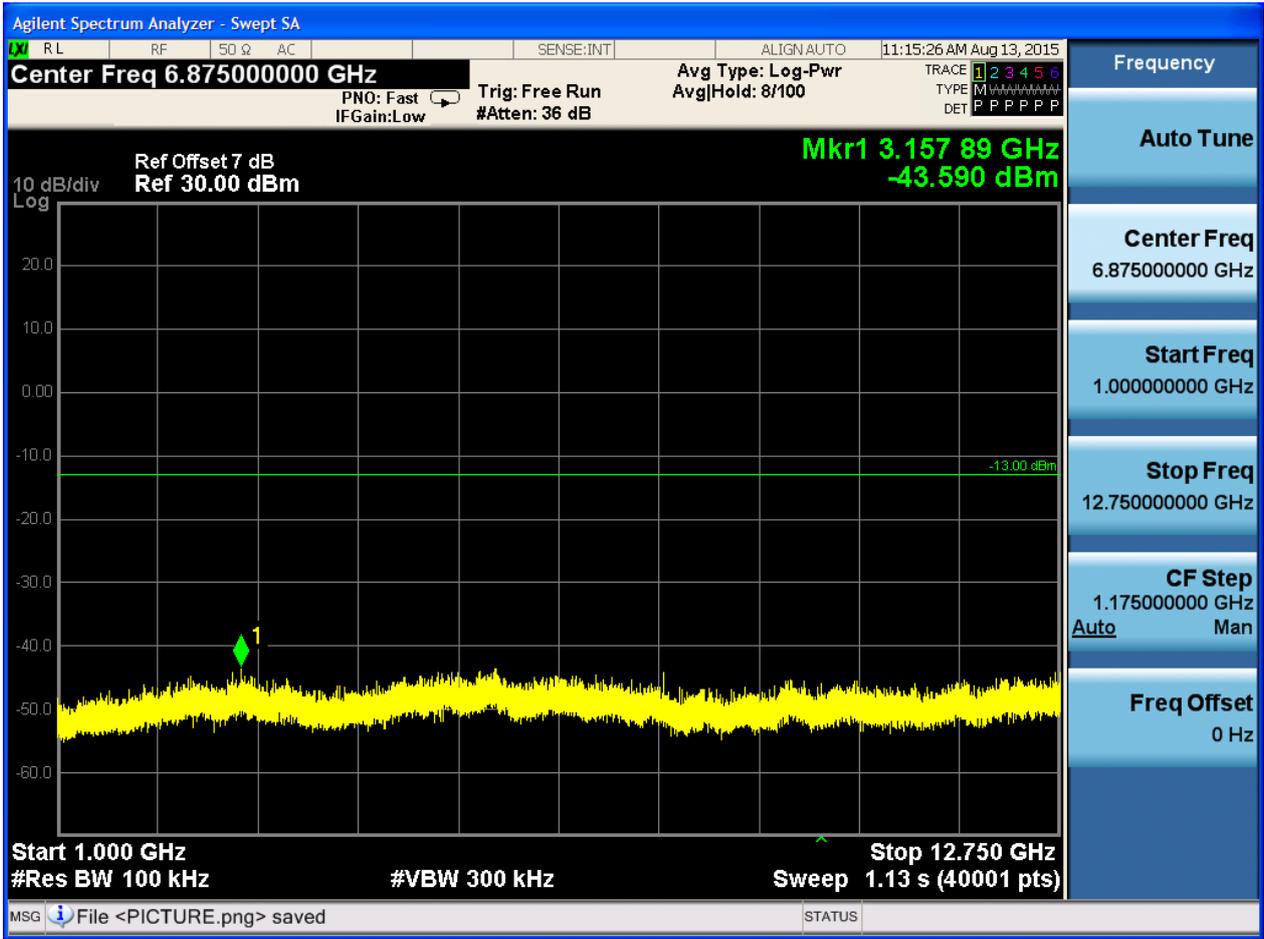


6.1.1.4.2 Test Channel = MCH

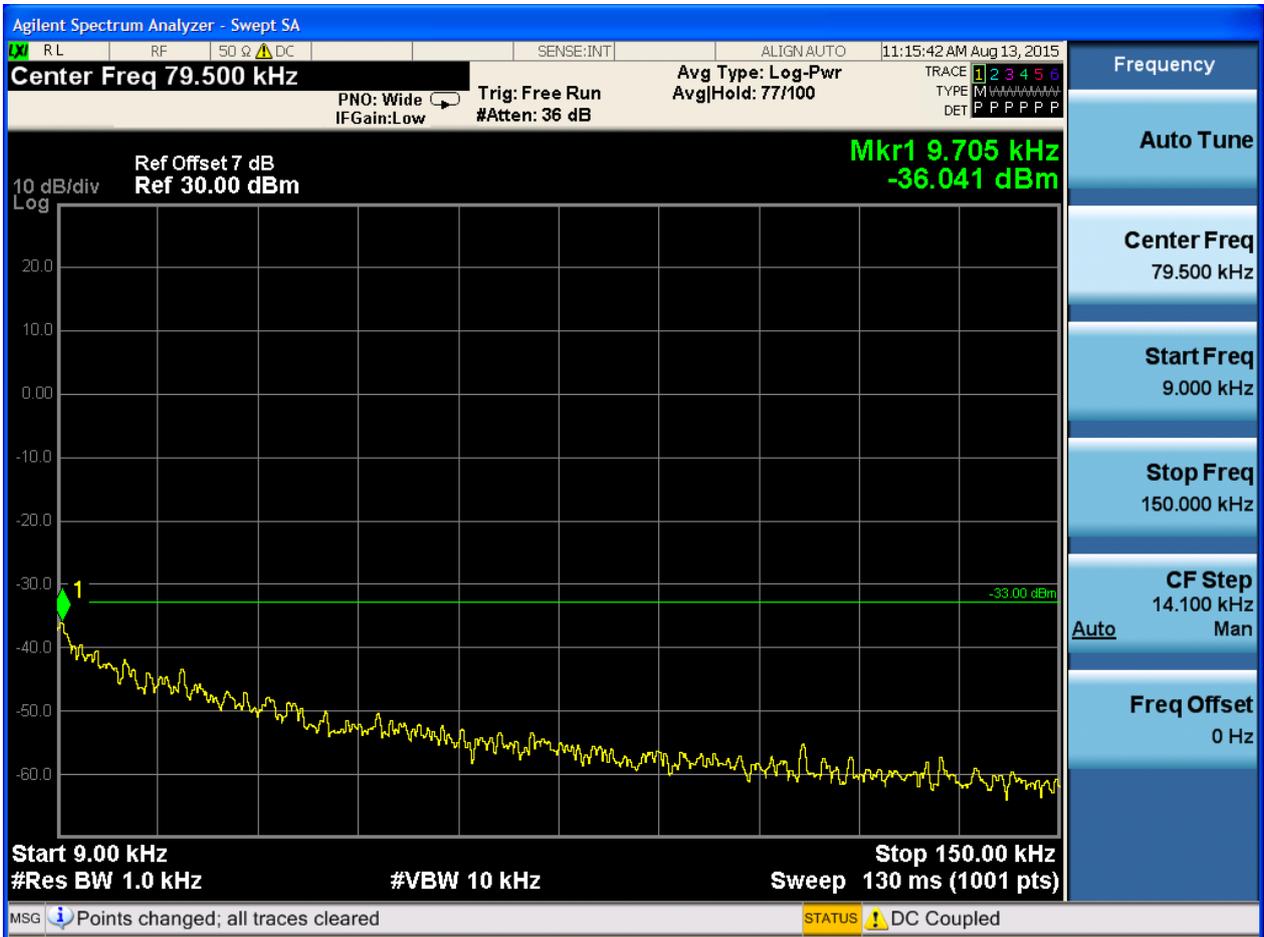


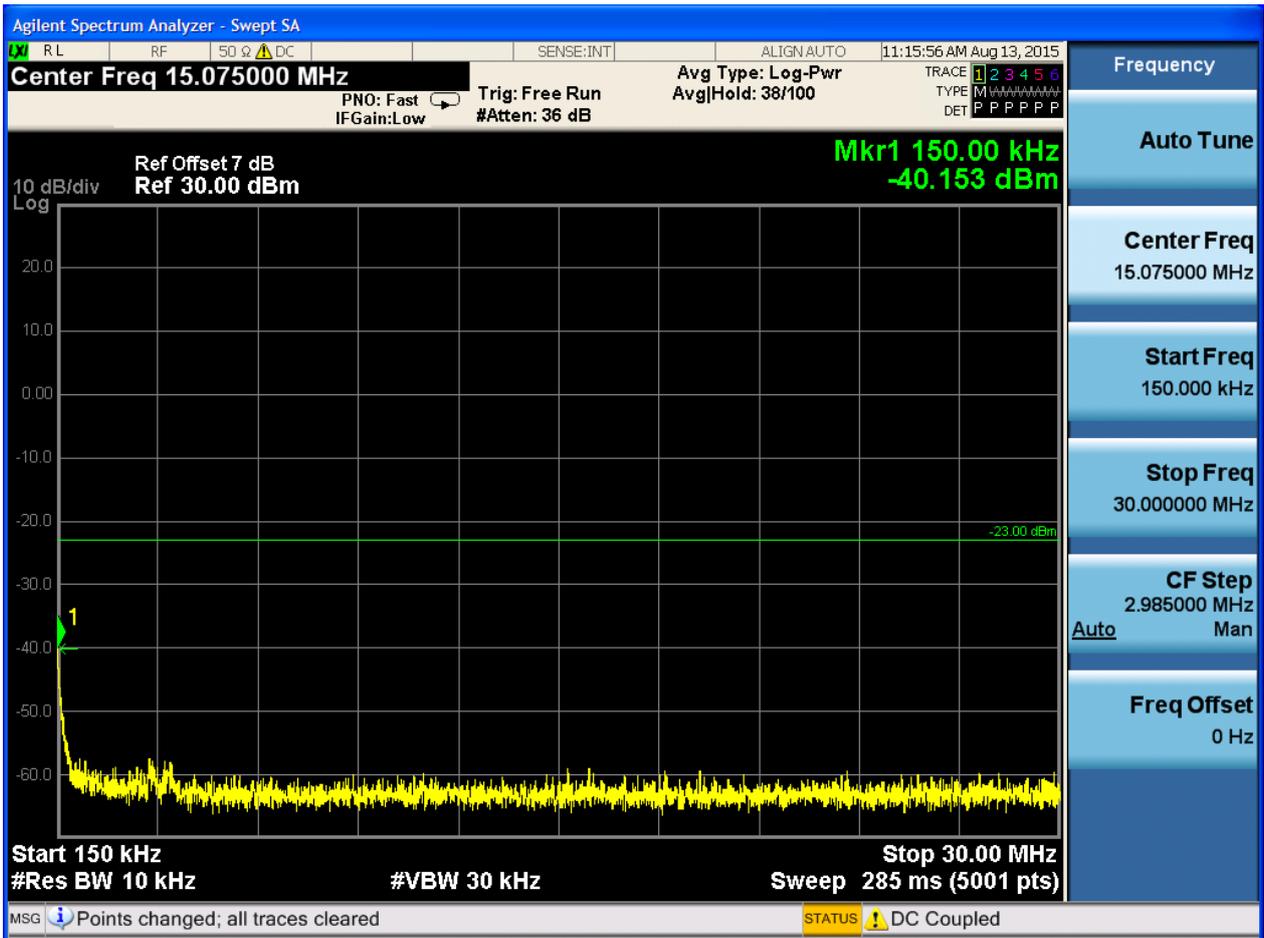


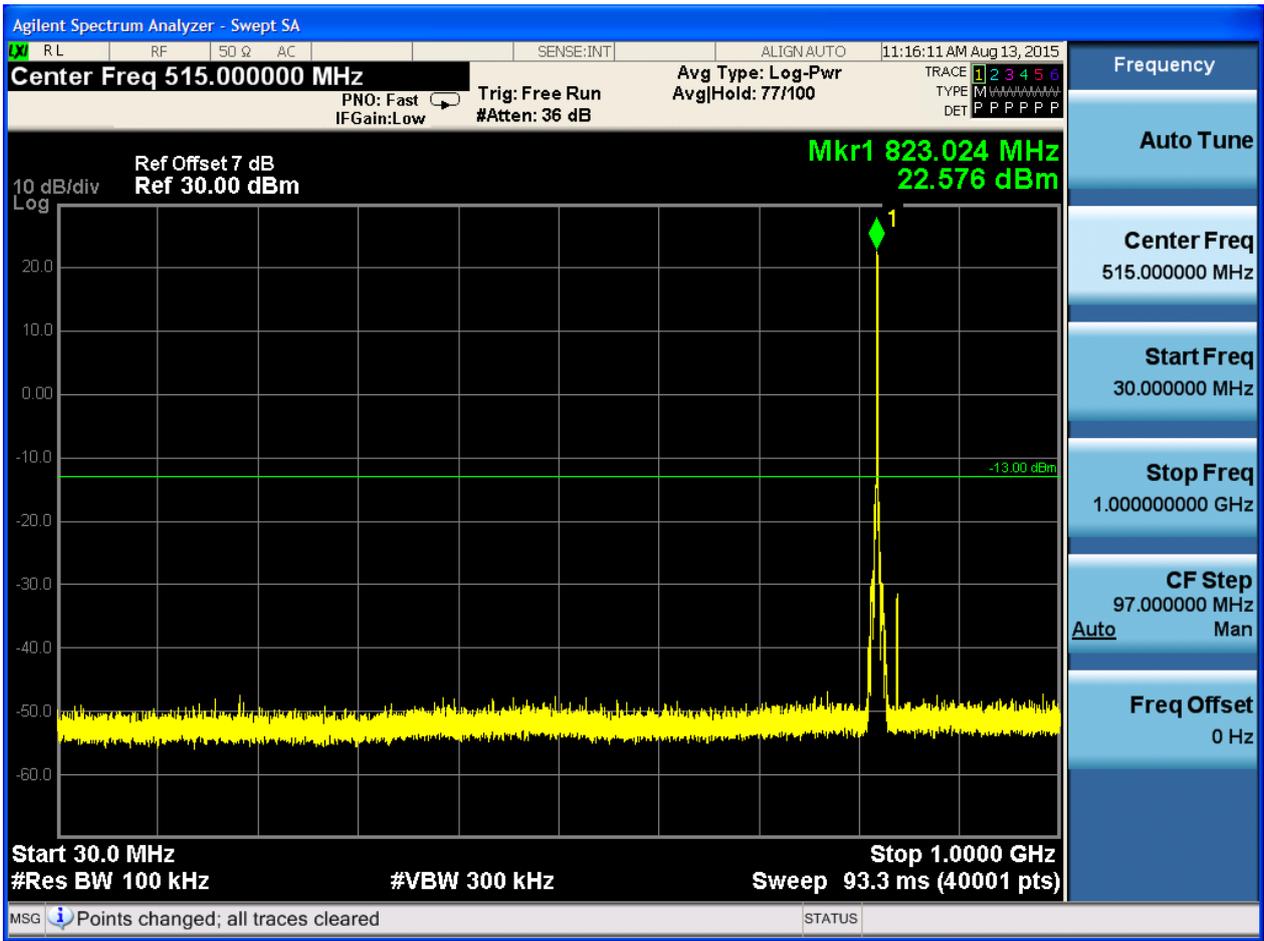


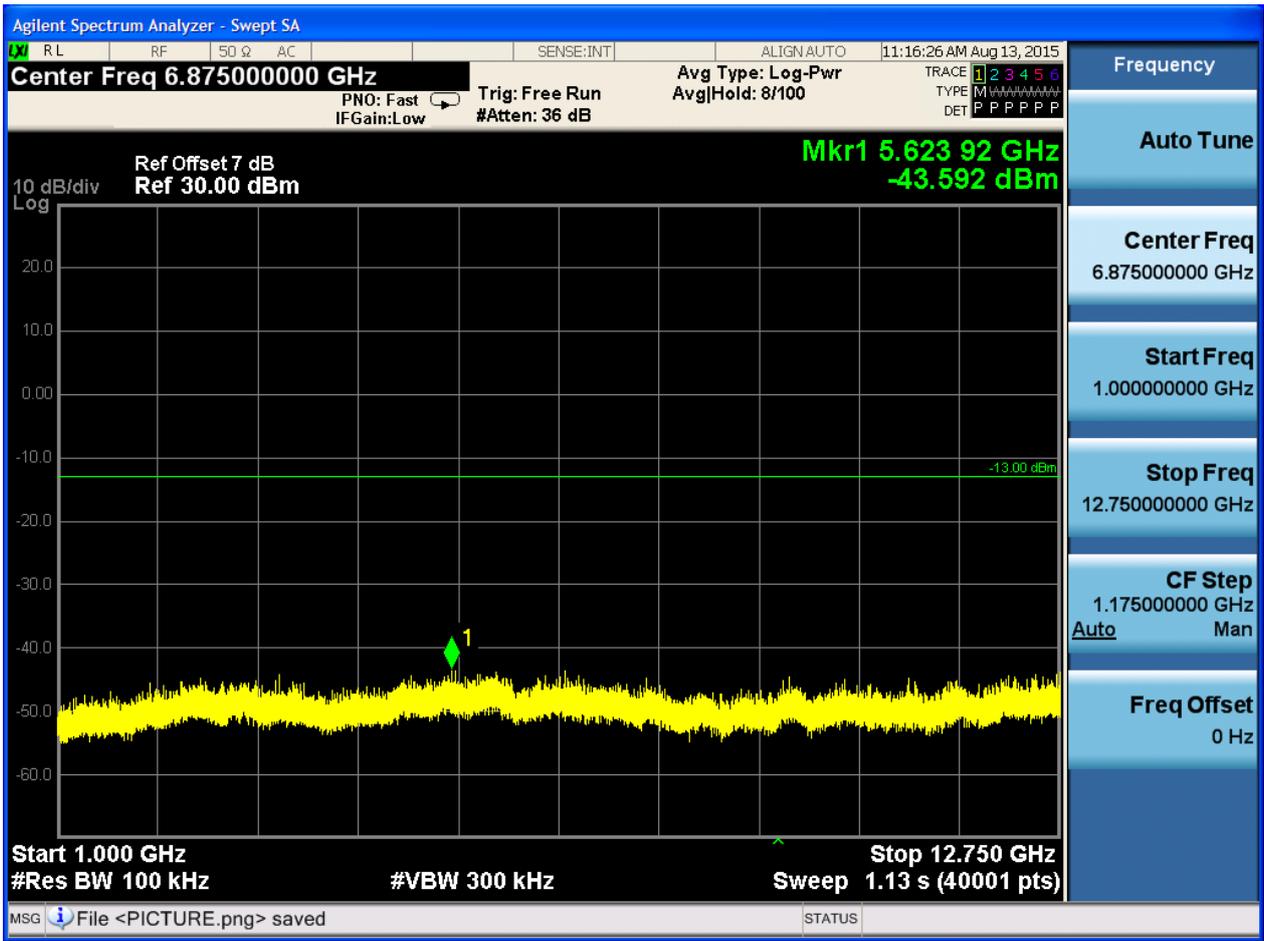


6.1.1.4.3 Test Channel = HCH







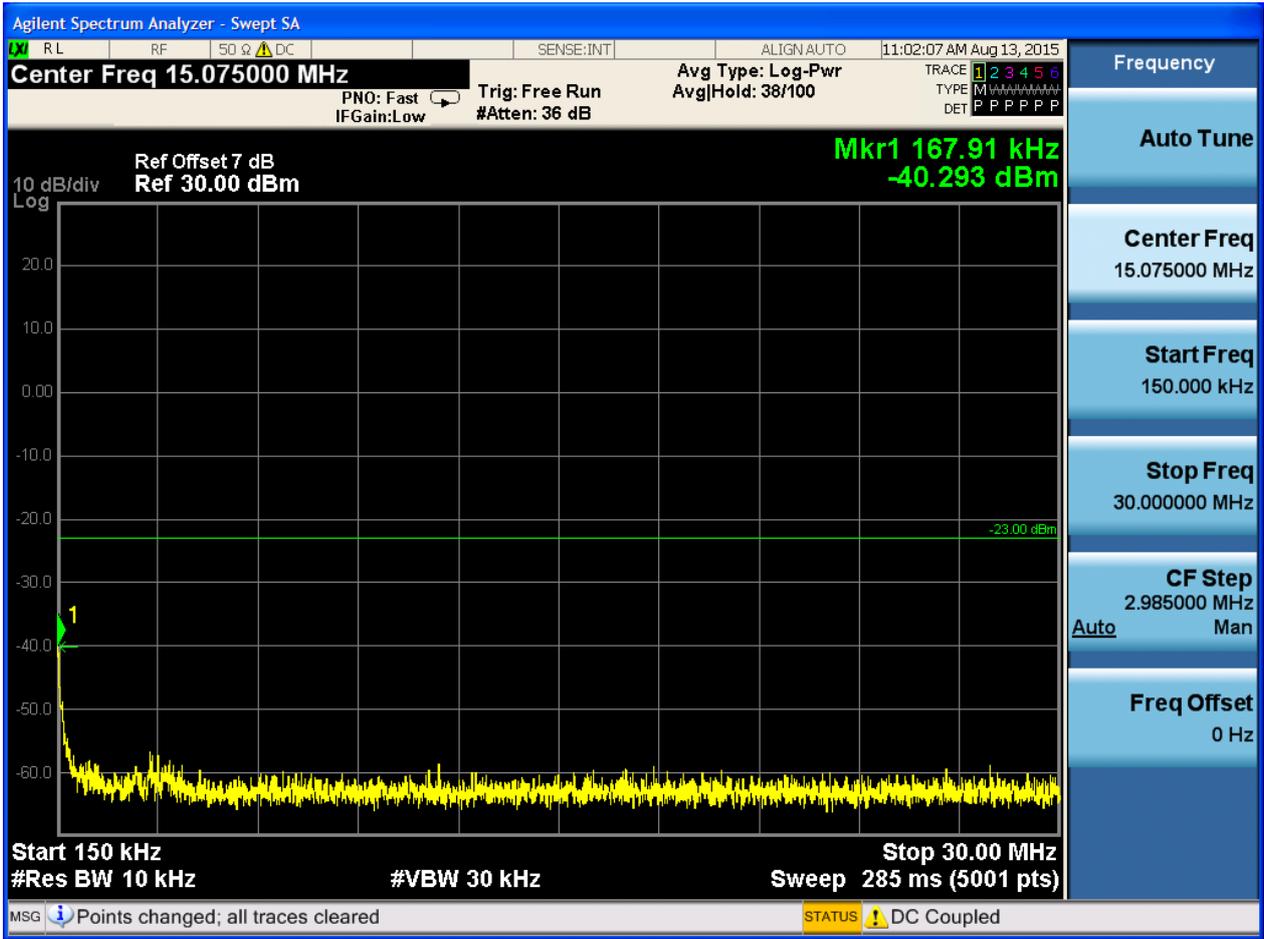


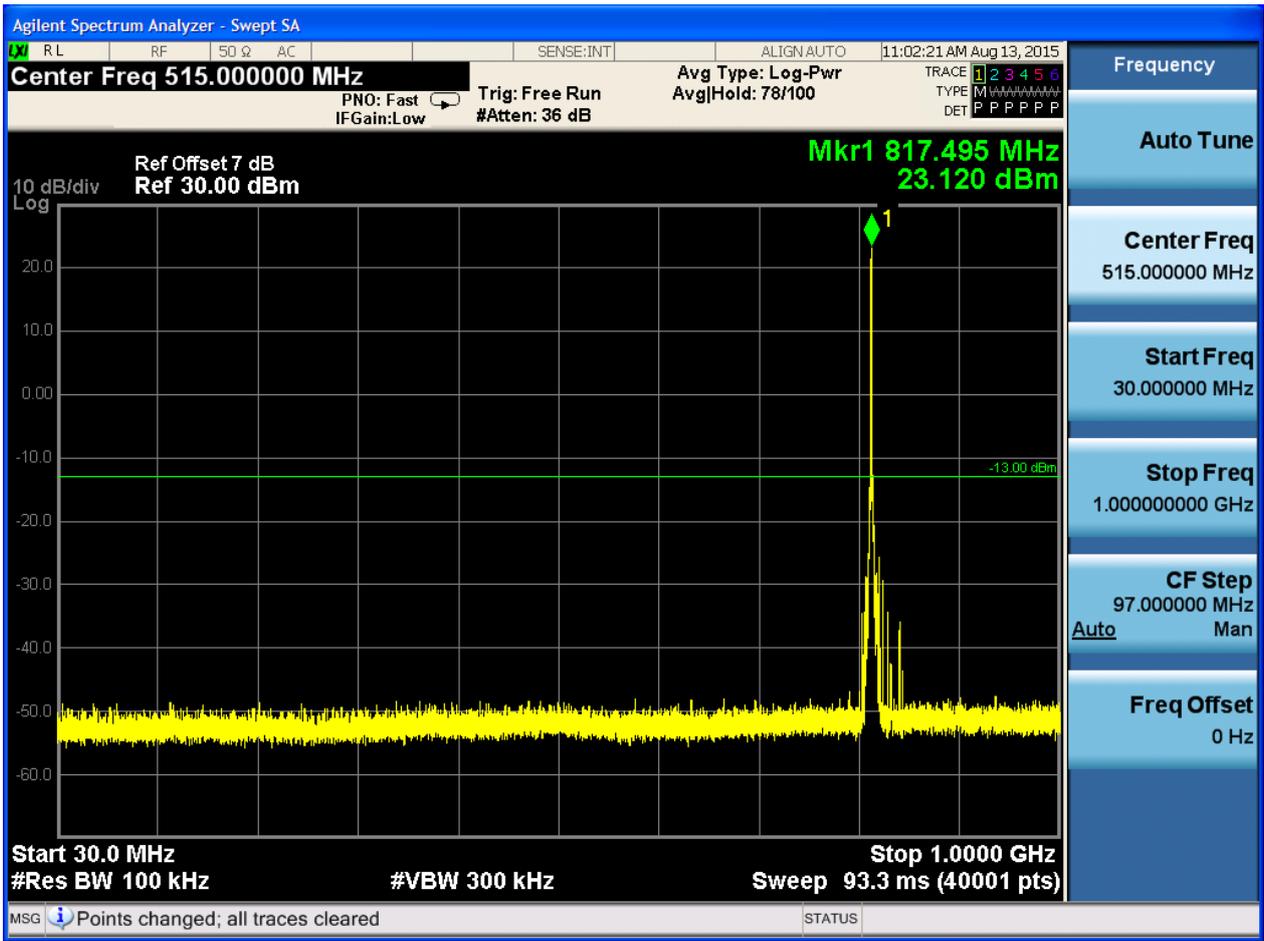


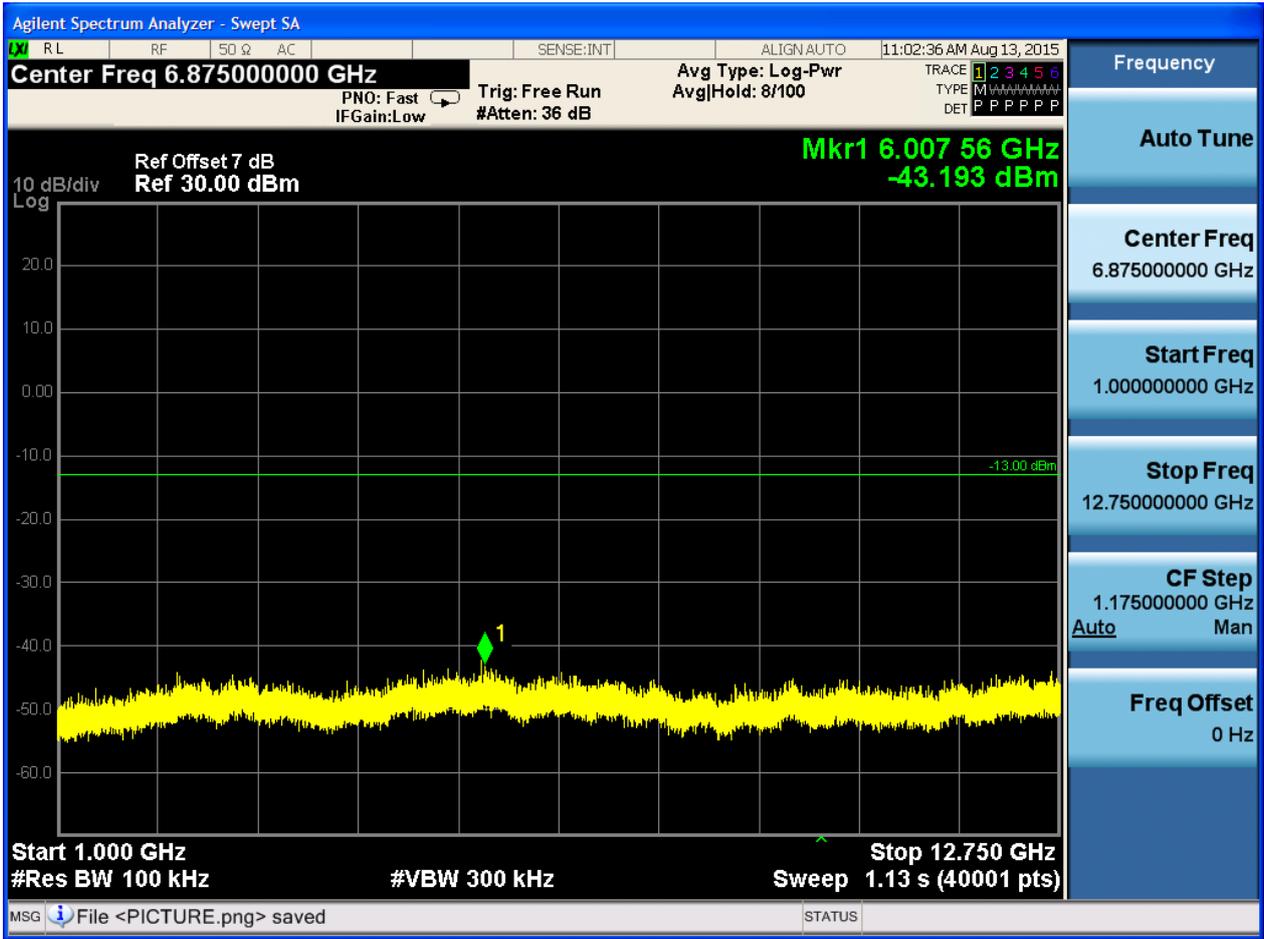
6.1.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

6.1.1.5.1 Test Channel = LCH





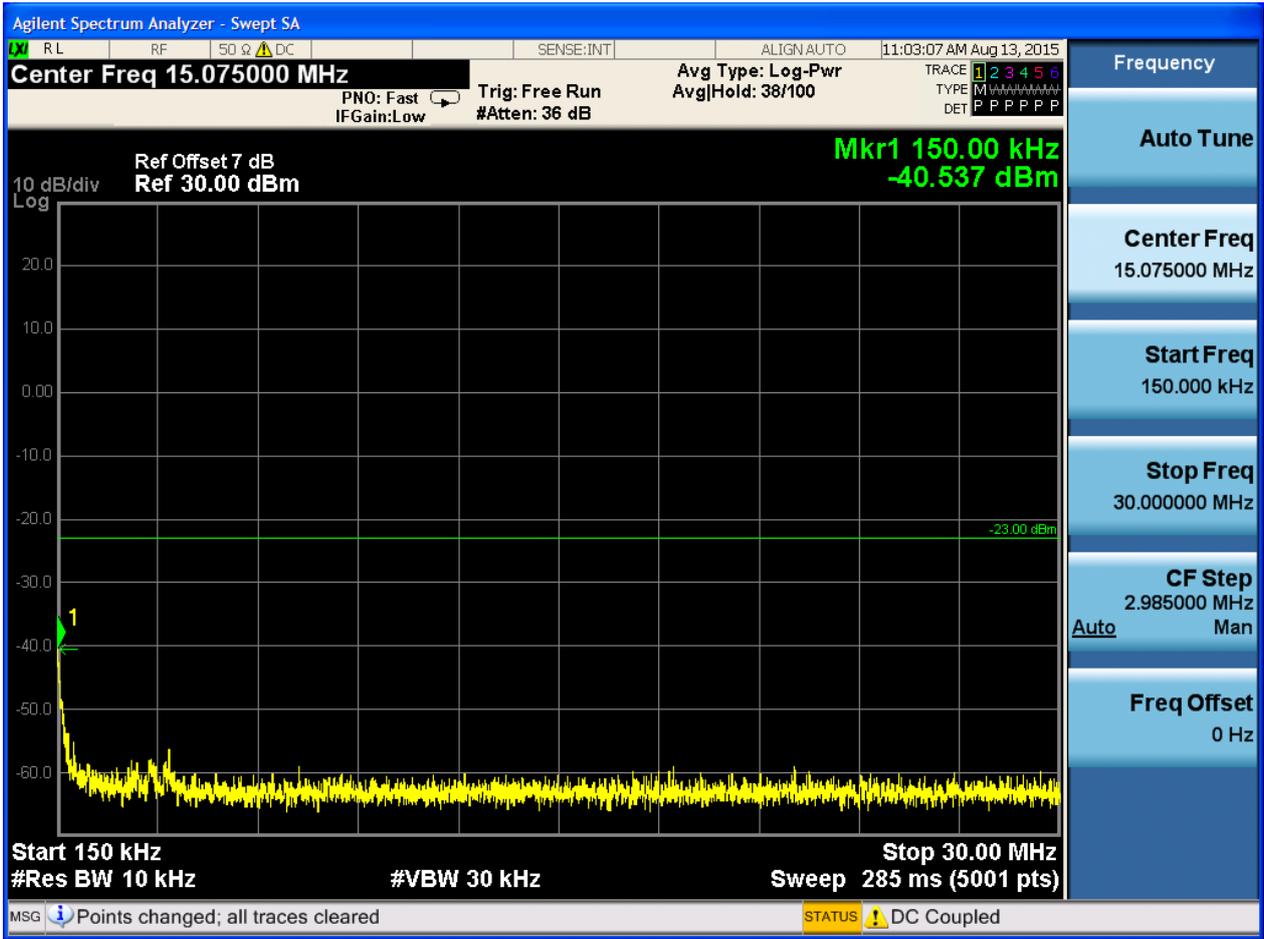


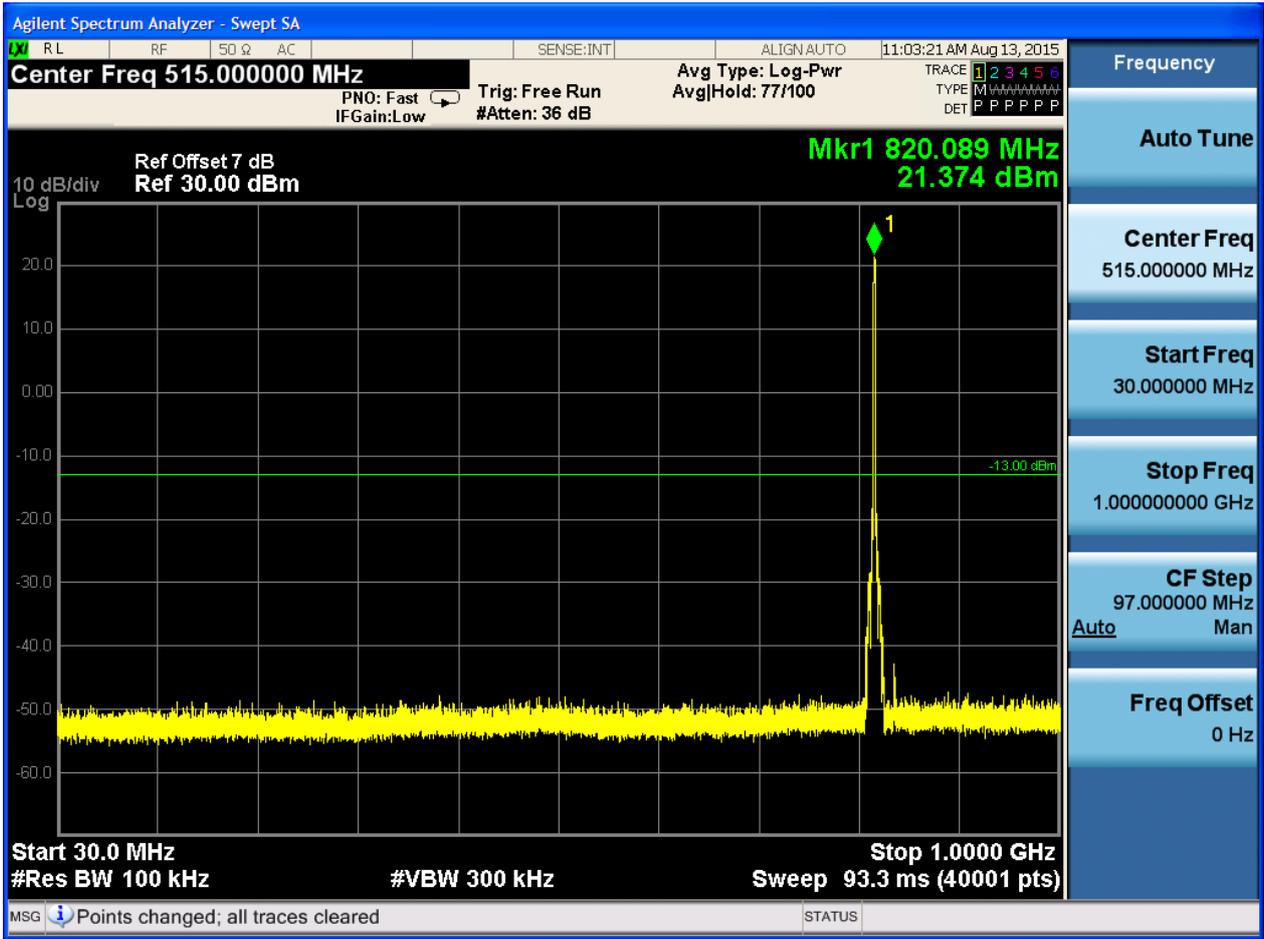


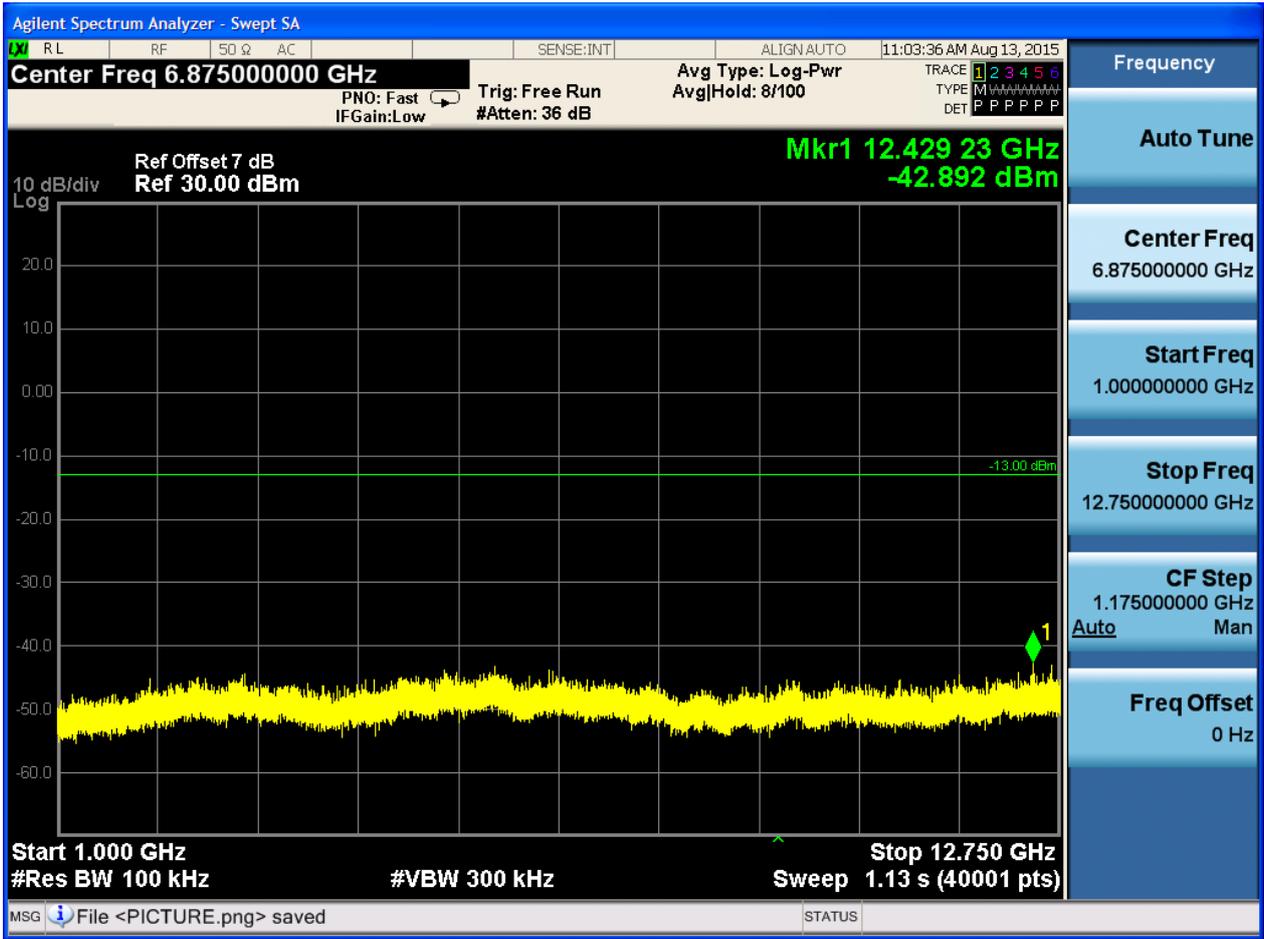


6.1.1.5.2 Test Channel = MCH



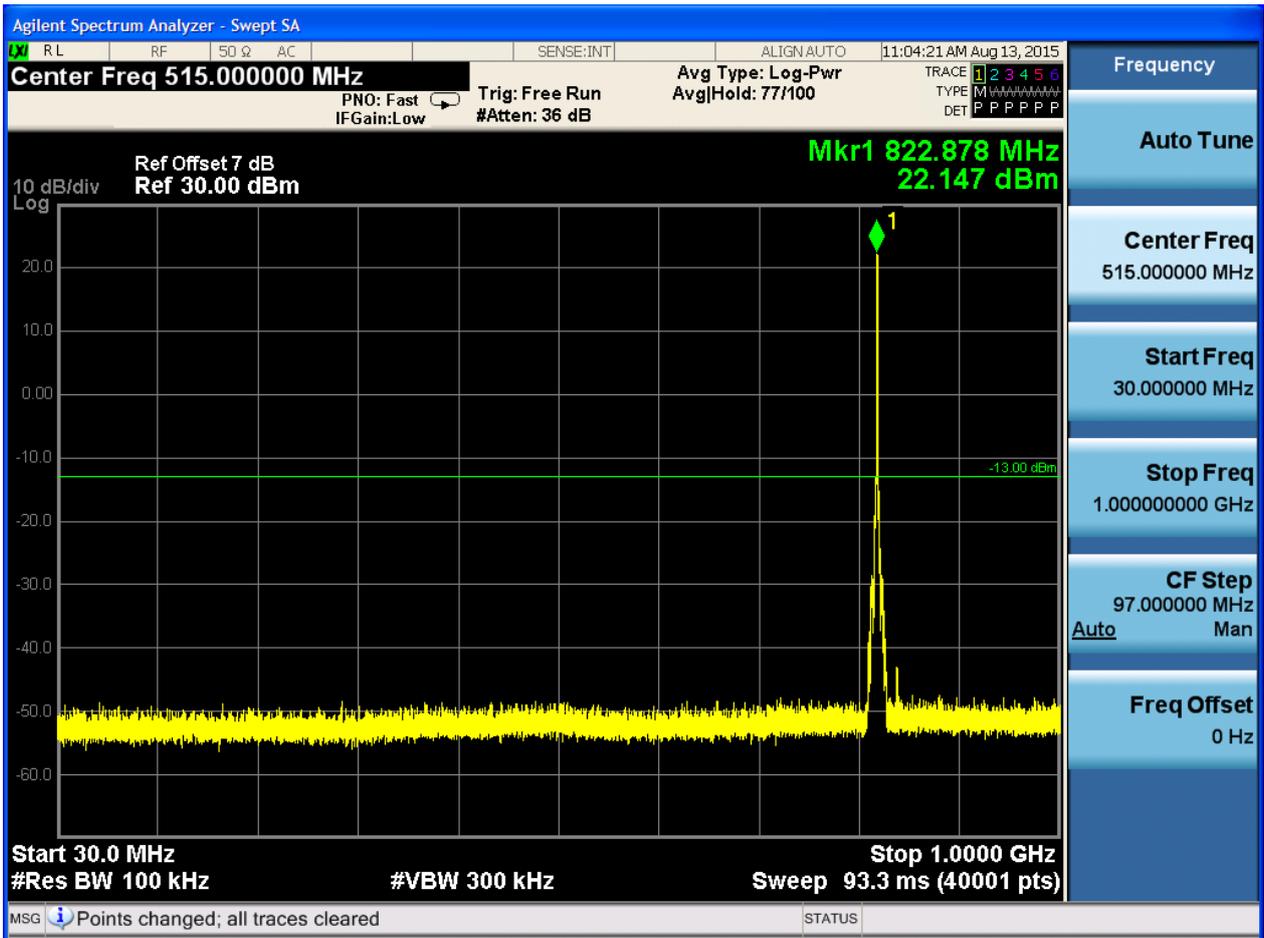


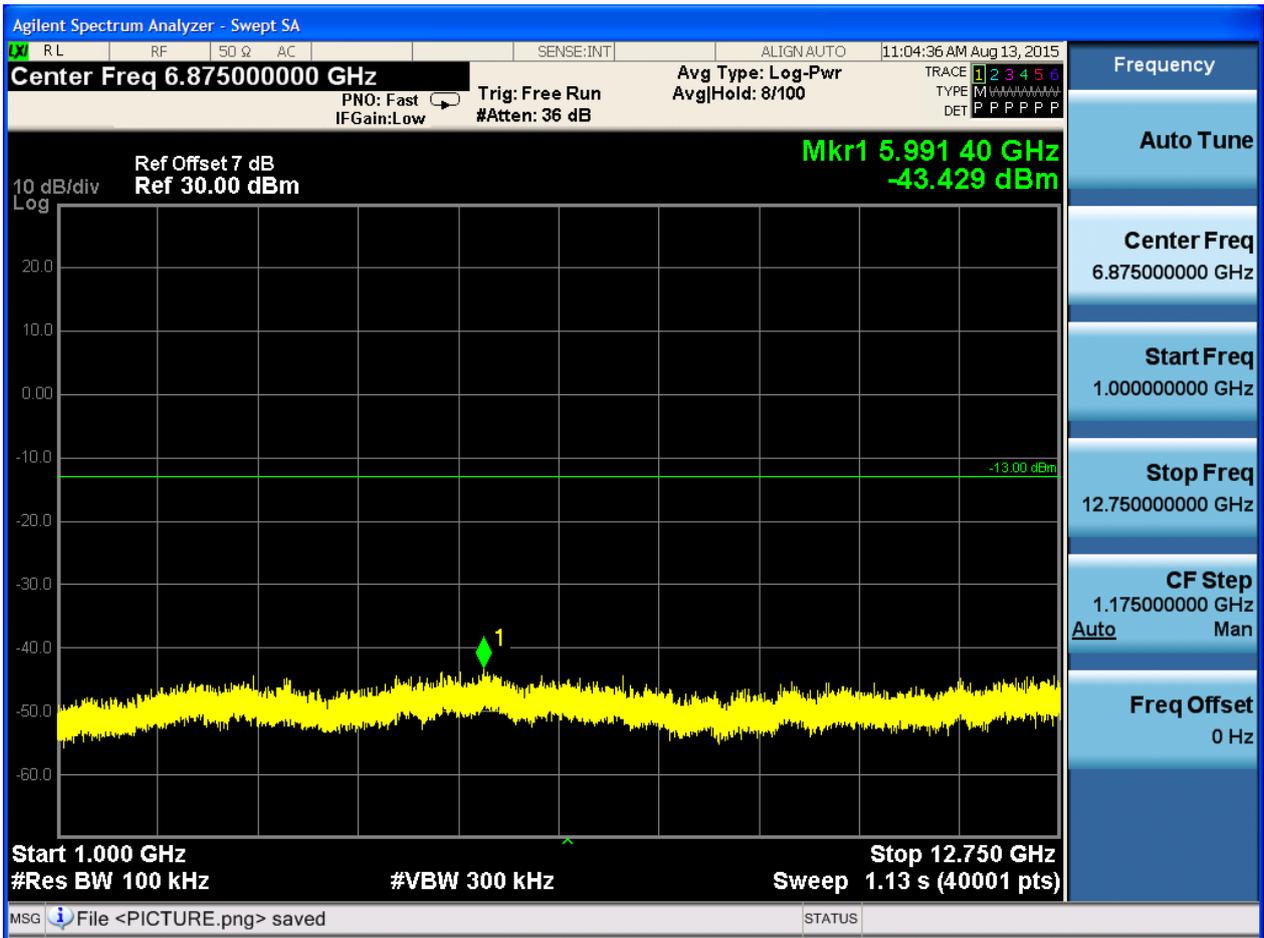




6.1.1.5.3 Test Channel = HCH



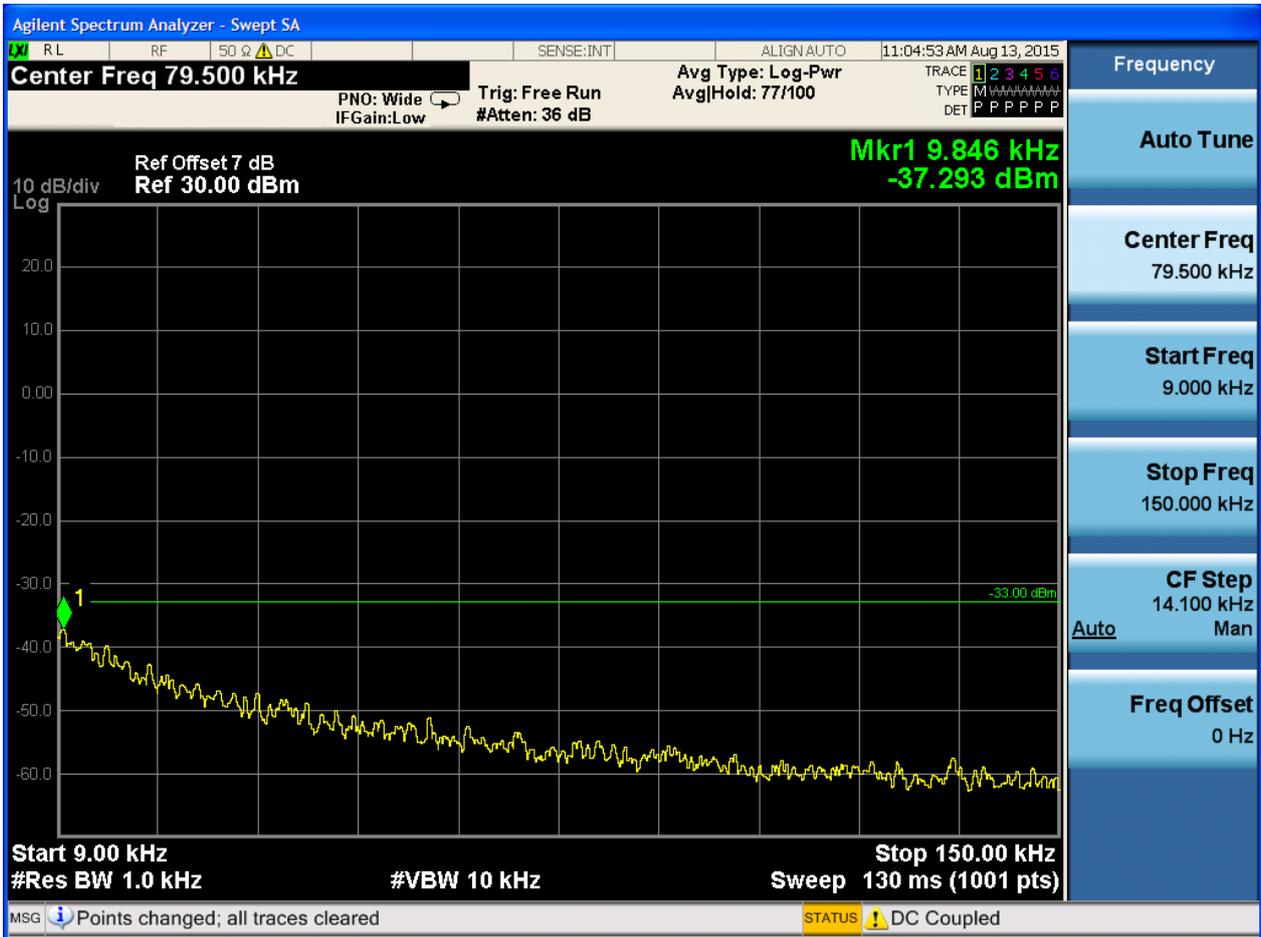


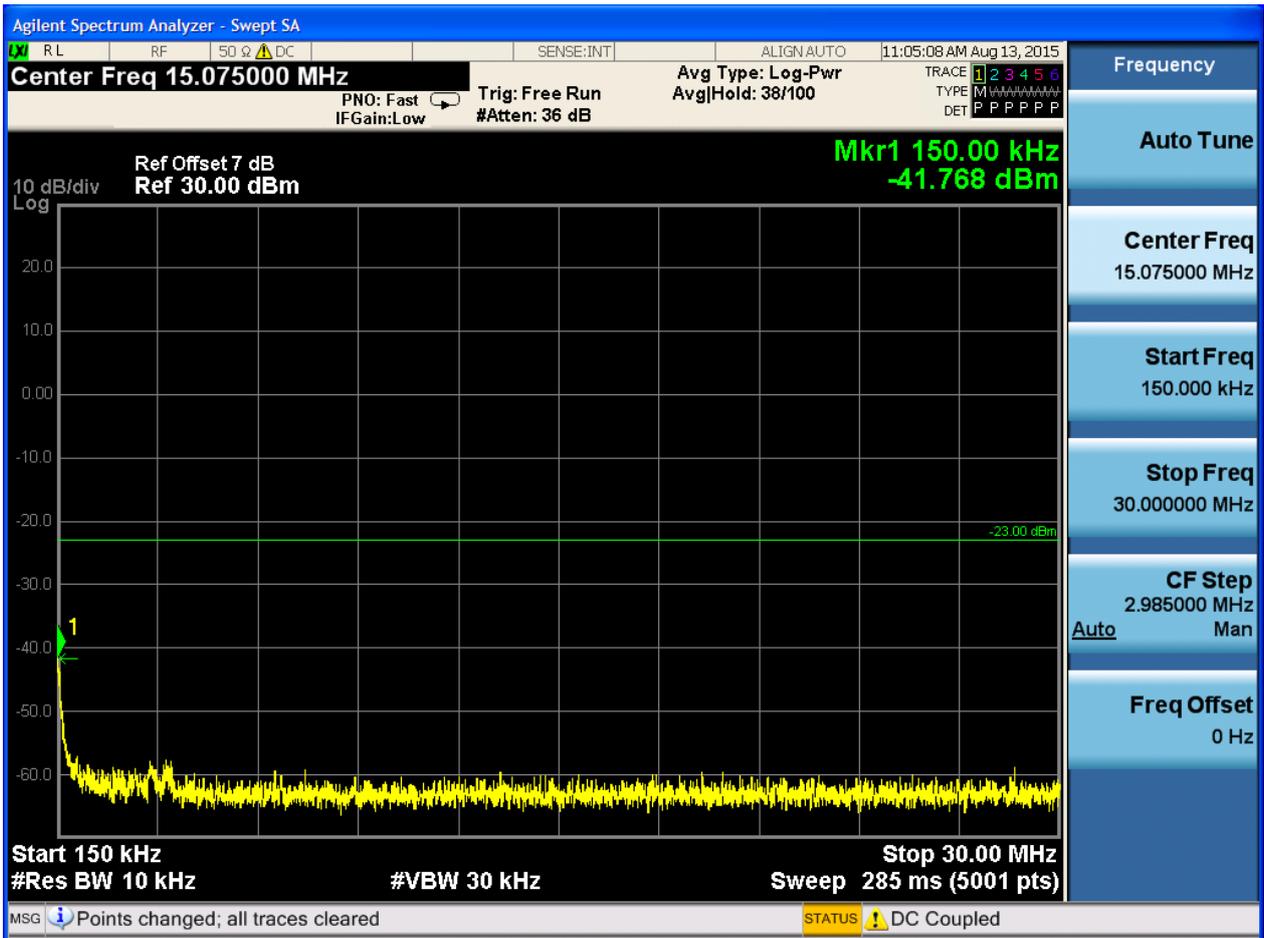


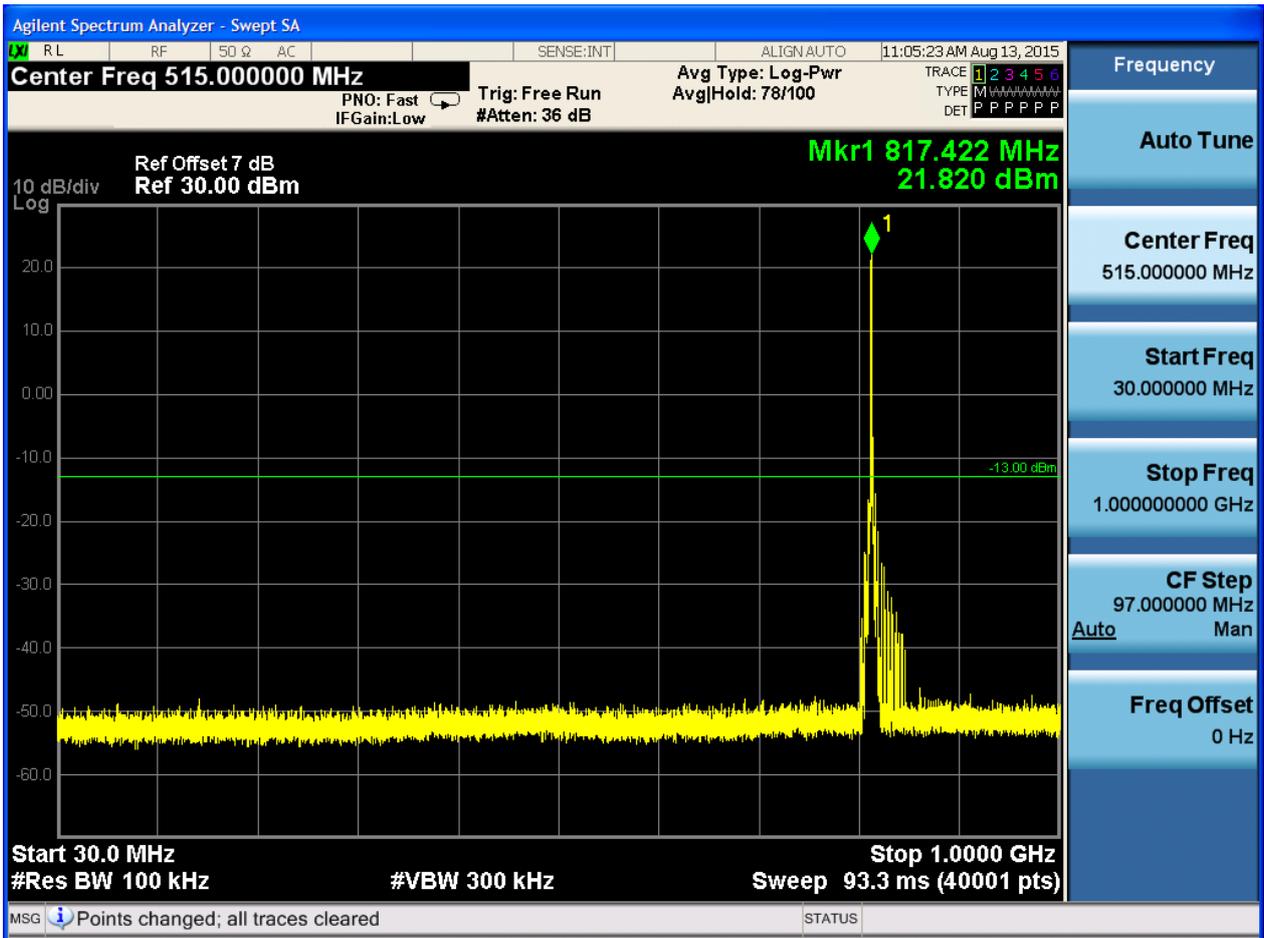


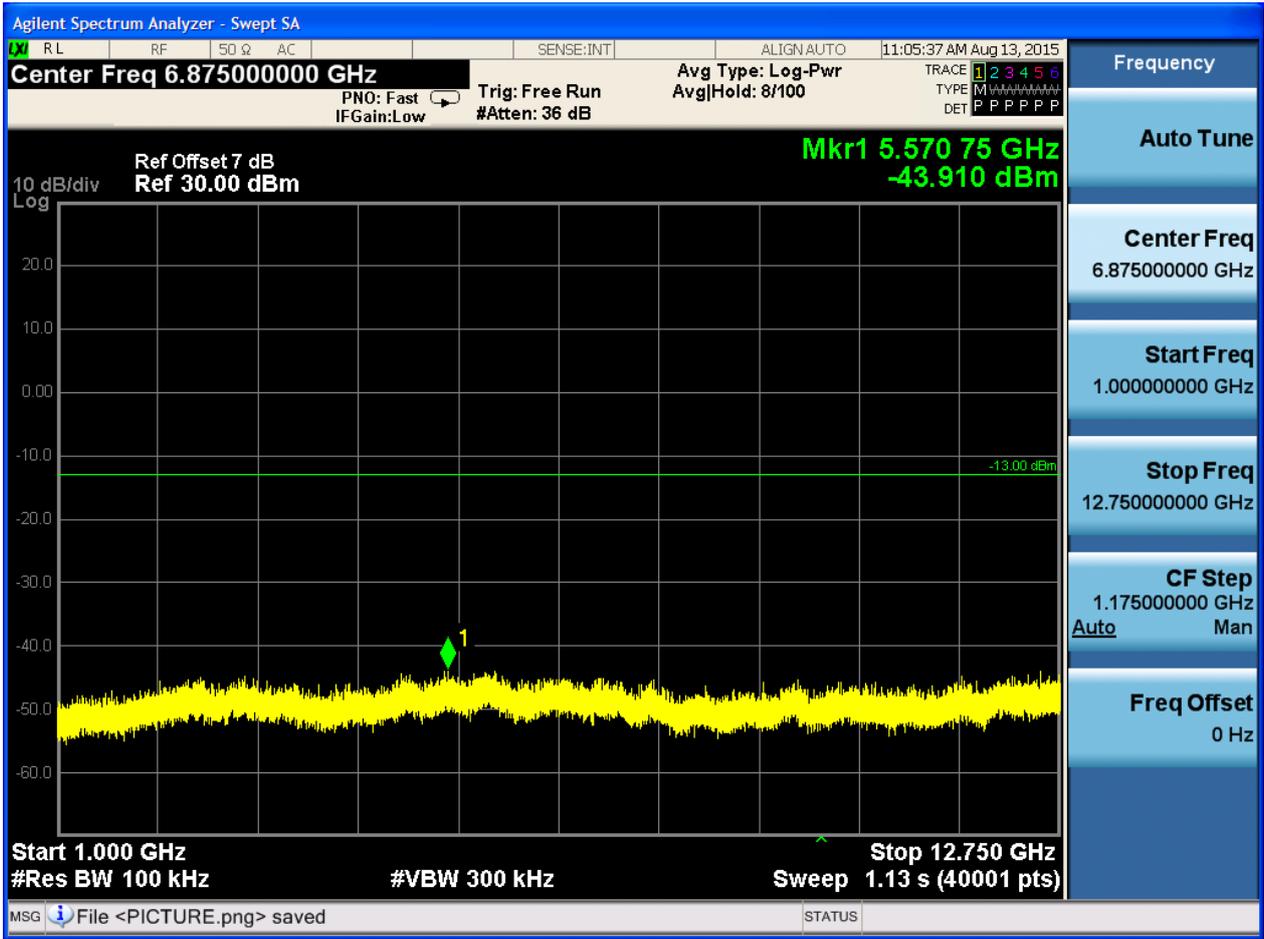
6.1.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

6.1.1.6.1 Test Channel = LCH



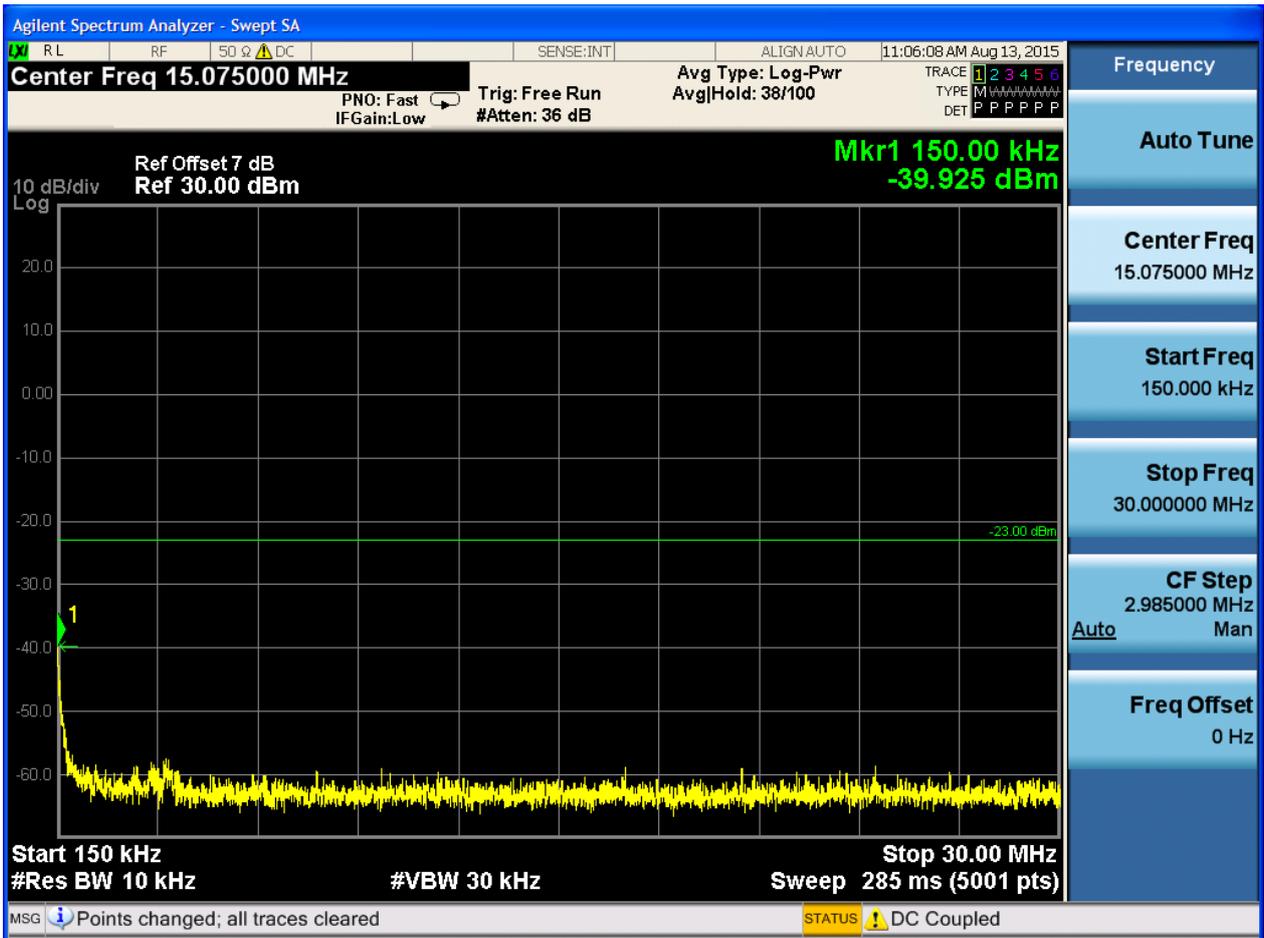


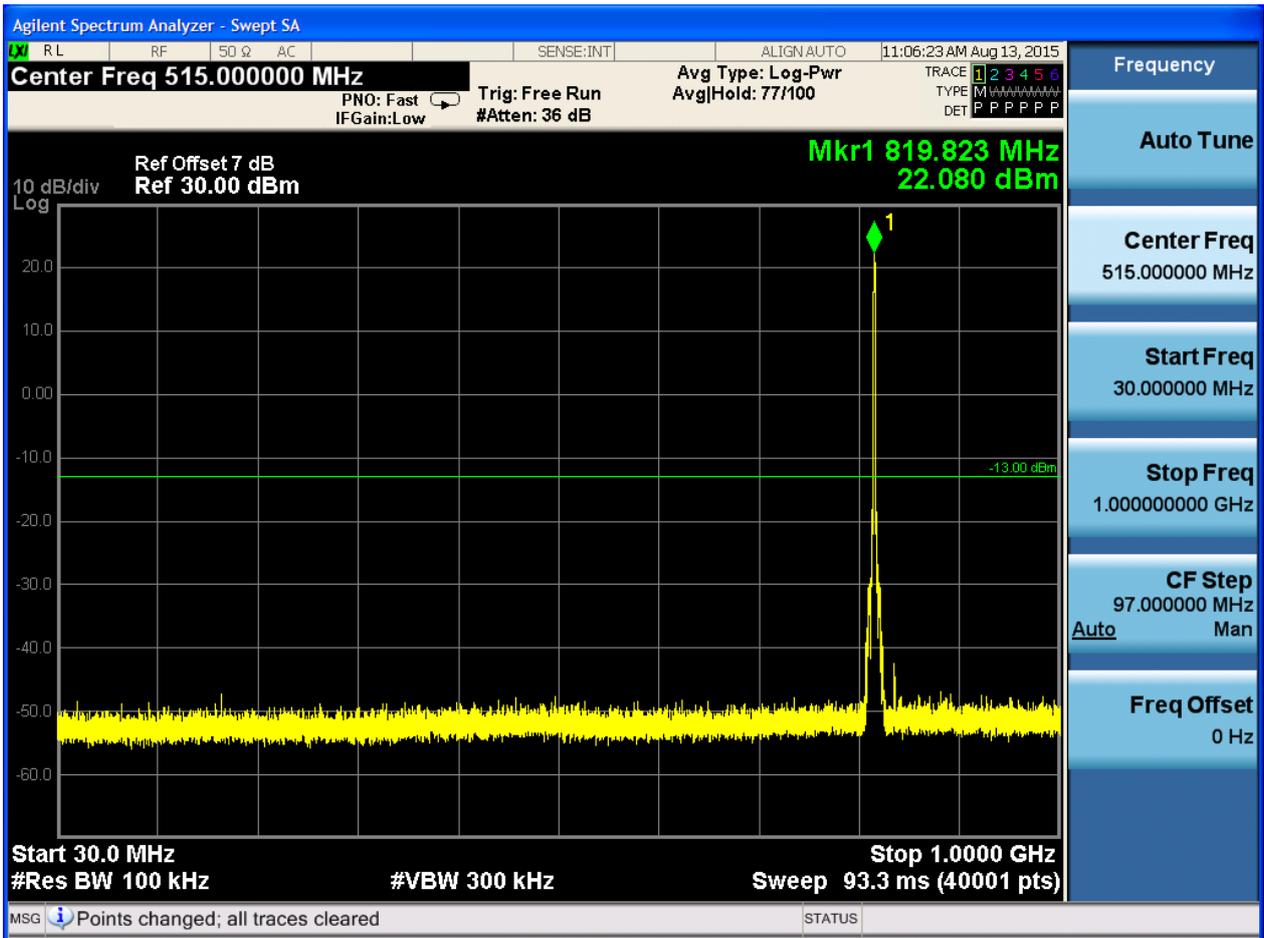


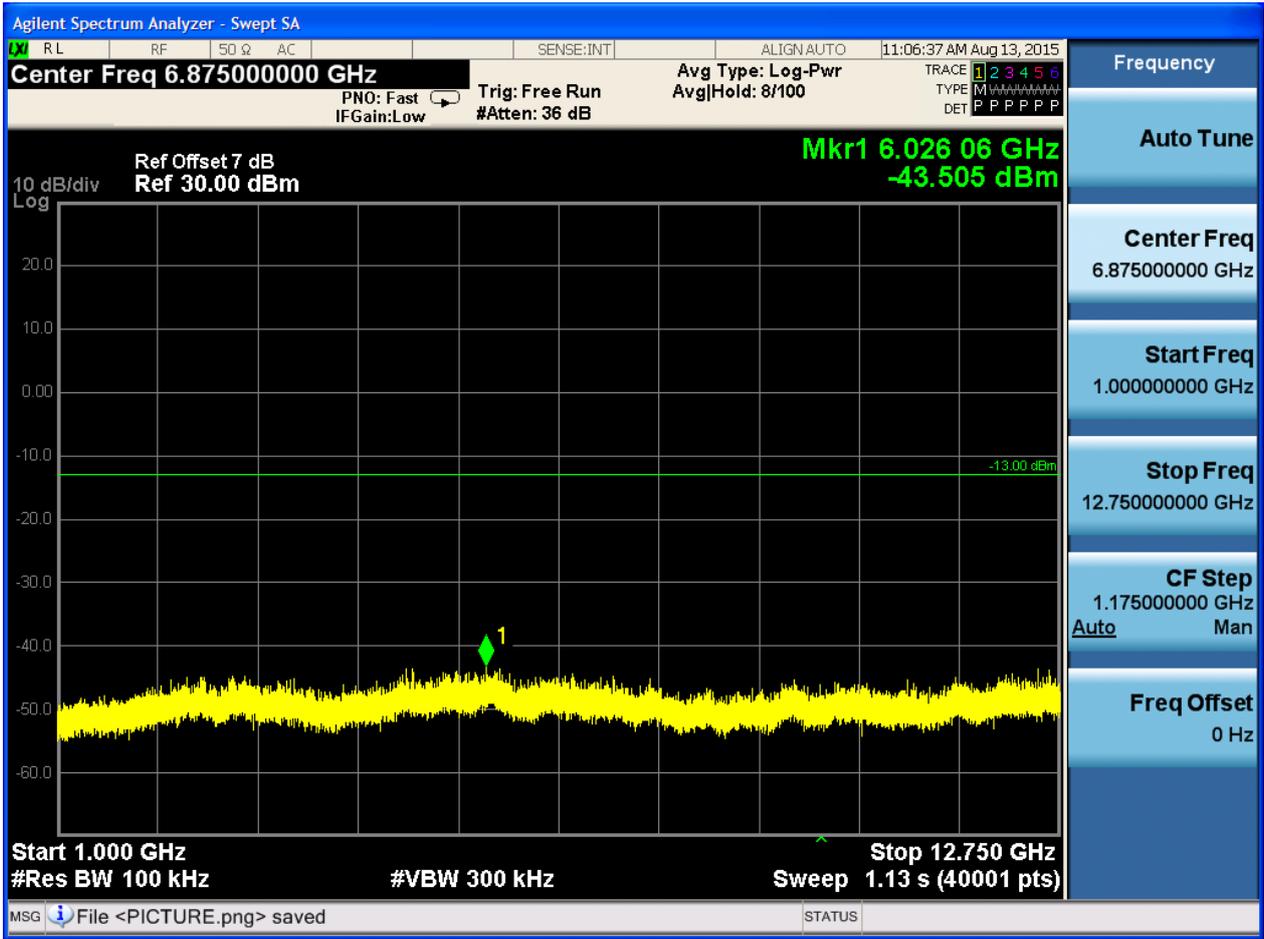


6.1.1.6.2 Test Channel = MCH





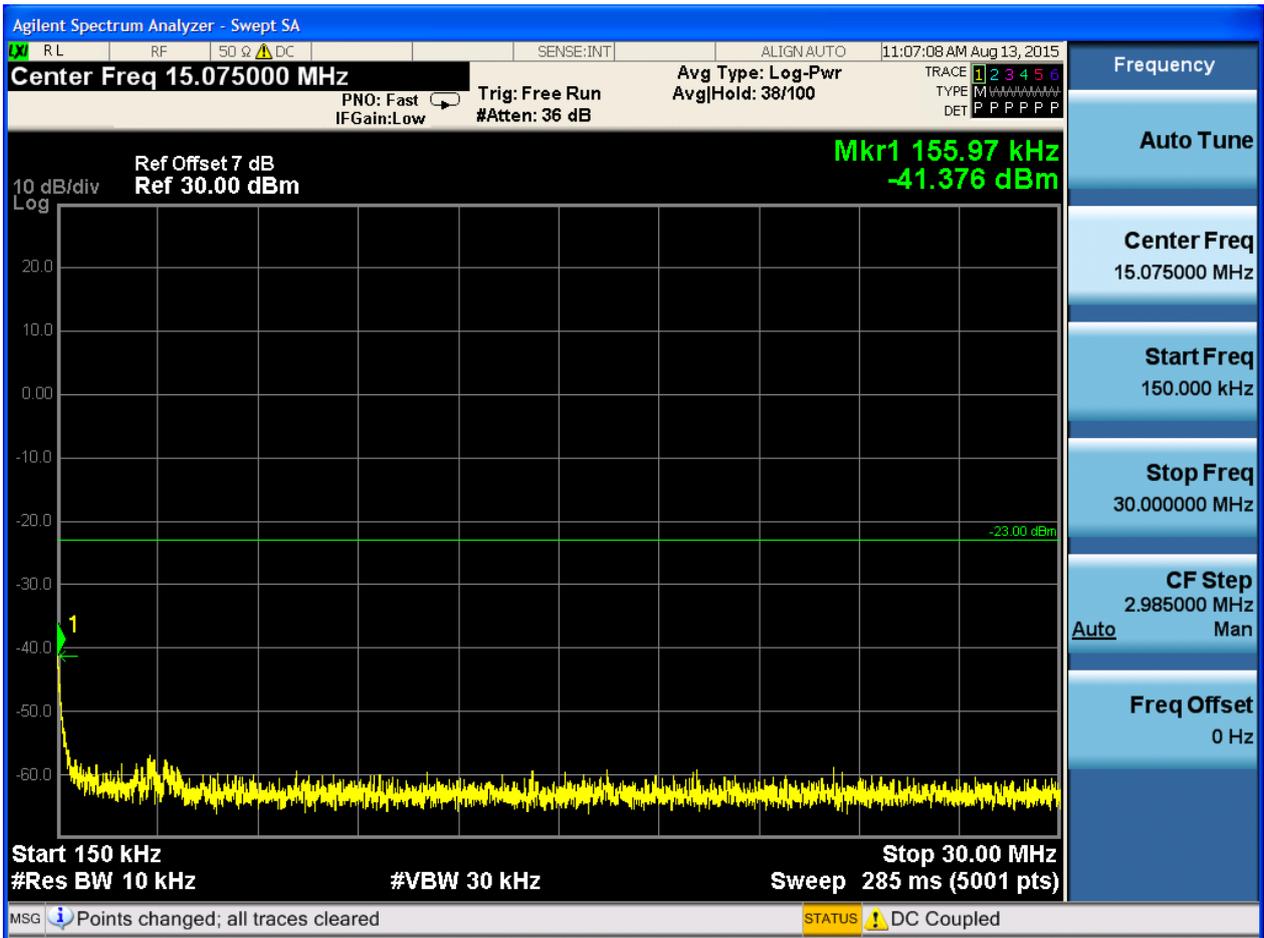


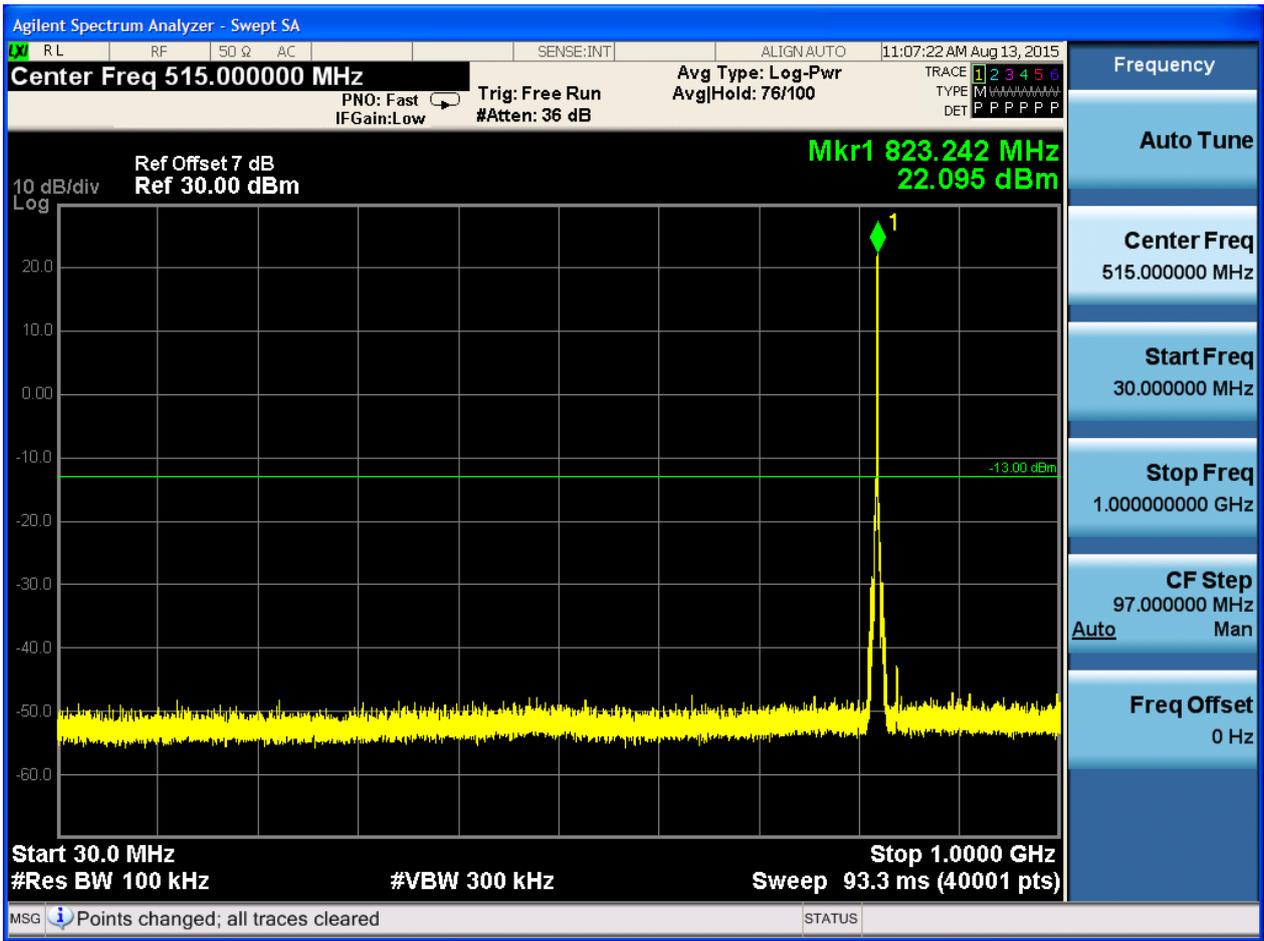


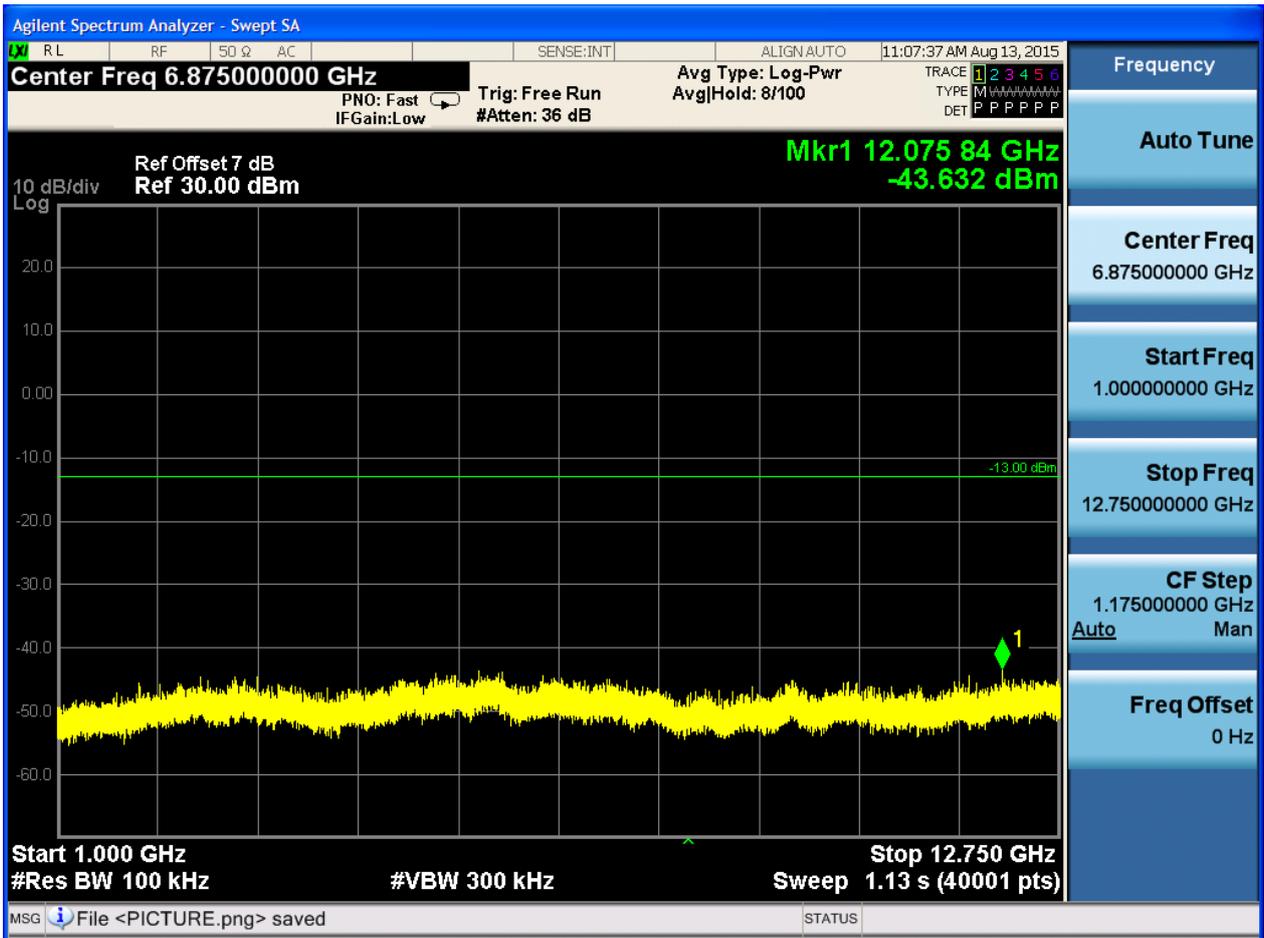


6.1.1.6.3 Test Channel = HCH









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

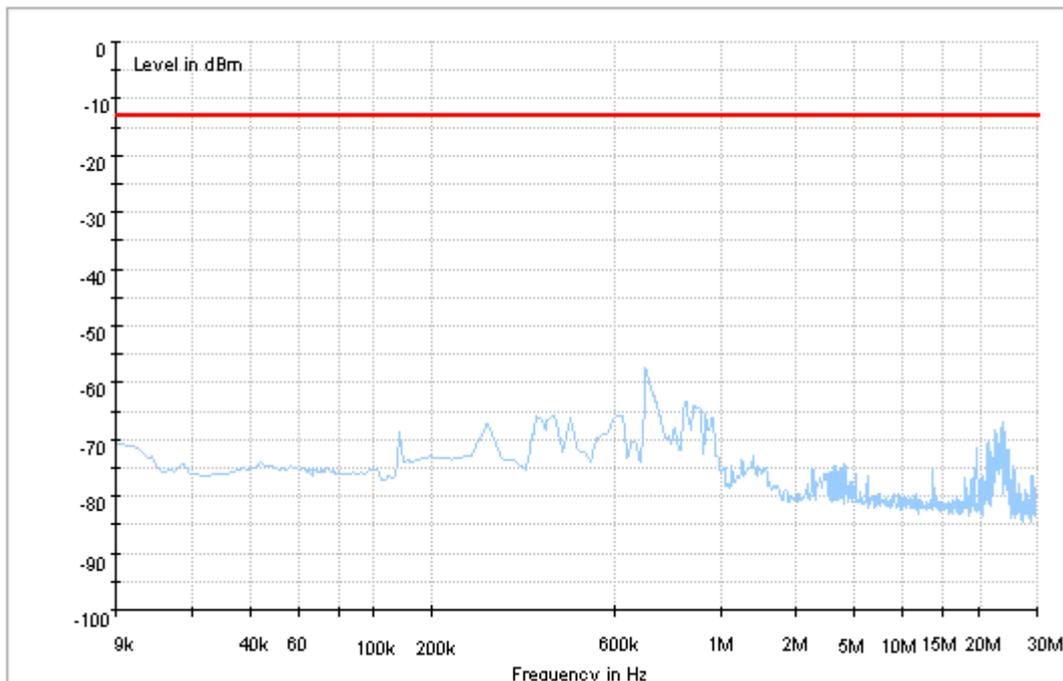
30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

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

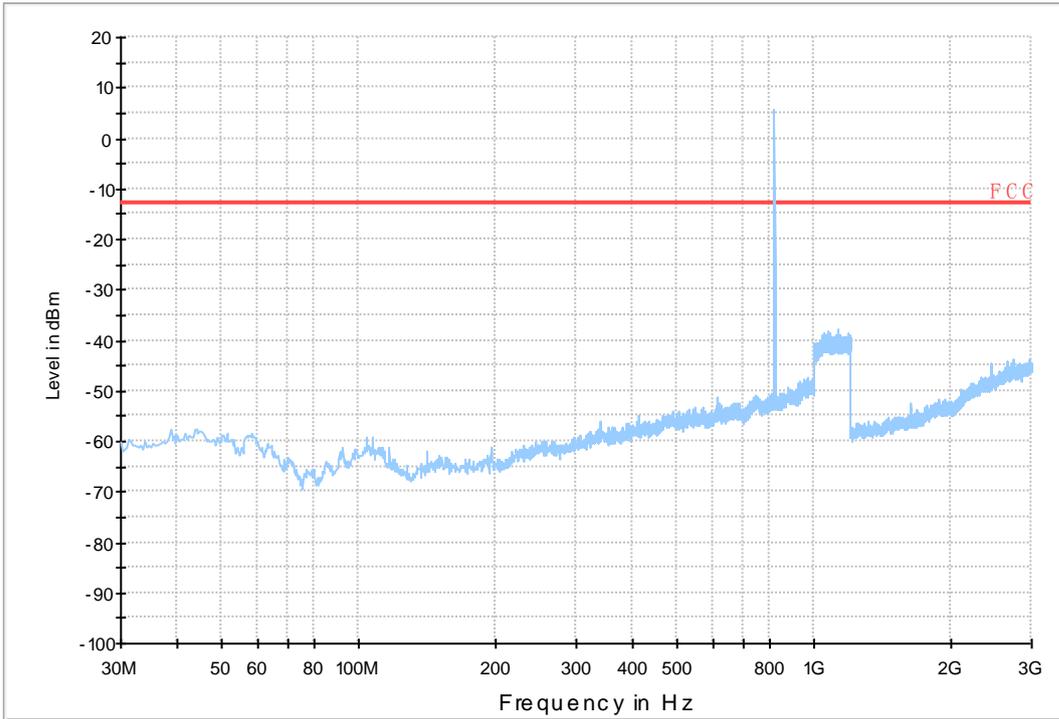
Part I - Test Plots

7.1 For CDMA/1X

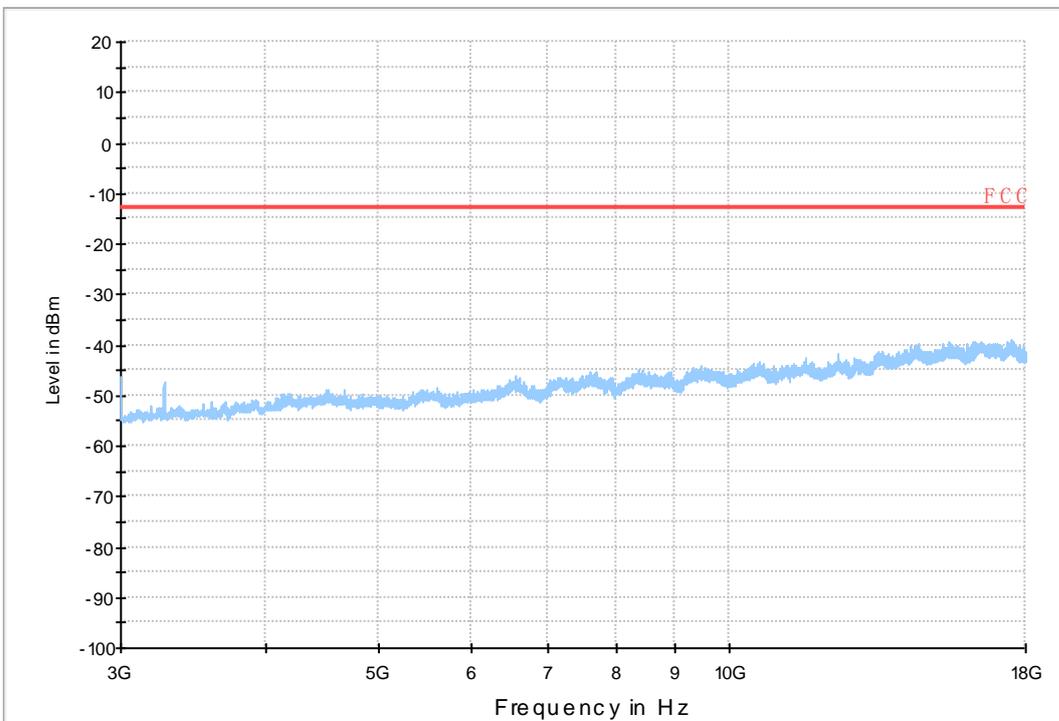
7.1.1 Test Band = BC10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of RSE-TX-DIRECTOR BELOW 1G_H



8Appendix_H: Frequency Stability

8.1 For CDMA/1X

8.1.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BC10	CDMA/1X/TM1	LCH	TN	VL	-1.9043	-0.0023	PASS
				VN	-1.9043	-0.0023	PASS
				VH	-1.5381	-0.00186	PASS
		MCH	TN	VL	-0.7324	-0.00088	PASS
				VN	-0.7324	-0.00088	PASS
				VH	-1.0254	-0.00124	PASS
		HCH	TN	VL	-0.5859	-0.0007	PASS
				VN	-1.2451	-0.00149	PASS
				VH	-0.7324	-0.00087	PASS
	CDMA/1X/TM3	LCH	TN	VL	-1.3916	-0.00168	PASS
				VN	-1.0986	-0.00133	PASS
				VH	-0.9521	-0.00115	PASS
		MCH	TN	VL	-0.293	-0.00035	PASS
				VN	-0.3662	-0.00044	PASS
				VH	-0.293	-0.00035	PASS
		HCH	TN	VL	-0.293	-0.00035	PASS
				VN	-0.3662	-0.00044	PASS
				VH	-0.2197	-0.00026	PASS
	CDMA/EV-DO/Subtype0	LCH	TN	VL	-0.22	-0.00027	PASS
				VN	-0.29	-0.00035	PASS
				VH	-0.37	-0.00045	PASS
		MCH	TN	VL	0.4395	0.00053	PASS
				VN	0.3662	0.00044	PASS
				VH	0.293	0.00035	PASS
		HCH	TN	VL	1.0986	0.00132	PASS
				VN	0.4395	0.00052	PASS
				VH	0.293	0.00035	PASS
	CDMA/EV-DO/Subtype2	LCH	TN	VL	-15.09	-0.01823	PASS
				VN	-2.12	-0.00256	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				VH	-6.01	-0.00726	PASS
		MCH	TN	VL	-5.13	-0.00618	PASS
				VN	3.37	0.00406	PASS
				VH	-3.15	-0.00379	PASS
		HCH	TN	VL	-6.23	-0.00743	PASS
				VN	3.74	0.00446	PASS
				VH	-16.85	-0.0201	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
BC10	CDMA/1X/TM1	LCH	VN	-30	-1.9043	-0.0023	PASS
				-20	-1.8311	-0.00221	PASS
				-10	-1.4648	-0.00177	PASS
				0	-1.3916	-0.00168	PASS
				10	-1.7578	-0.00212	PASS
				20	-1.3916	-0.00168	PASS
				30	-1.9043	-0.0023	PASS
				40	-1.4648	-0.00177	PASS
		MCH	VN	50	-1.0254	-0.00124	PASS
				-30	-0.6592	-0.00079	PASS
				-20	-0.6592	-0.00079	PASS
				-10	-0.5859	-0.00071	PASS
				0	-0.5127	-0.00062	PASS
				10	-0.3662	-0.00044	PASS
				20	-0.6592	-0.00079	PASS
				30	-1.0254	-0.00124	PASS
		HCH	VN	40	-0.5859	-0.00071	PASS
				50	-0.8057	-0.00097	PASS
				-30	-0.8789	-0.00105	PASS
				-20	-0.6592	-0.00079	PASS
				-10	-0.4395	-0.00052	PASS
				0	-0.5859	-0.0007	PASS
				10	-0.6592	-0.00079	PASS
				20	-0.5127	-0.00061	PASS
30	-0.5859	-0.0007	PASS				
40	-0.5127	-0.00061	PASS				

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	CDMA/1X/TM3	LCH	VN	50	-0.8789	-0.00105	PASS
				-30	-1.3916	-0.00168	PASS
				-20	-1.0986	-0.00133	PASS
				-10	-1.0986	-0.00133	PASS
				0	-1.0254	-0.00124	PASS
				10	-1.3184	-0.00159	PASS
				20	-1.0254	-0.00124	PASS
				30	-1.1719	-0.00142	PASS
		40	-1.2451	-0.00151	PASS		
		50	-1.2451	-0.00151	PASS		
		MCH	VN	-30	-0.3662	-0.00044	PASS
				-20	-0.5127	-0.00062	PASS
				-10	-0.293	-0.00035	PASS
				0	-0.2197	-0.00026	PASS
				10	-0.3662	-0.00044	PASS
				20	-0.2197	-0.00026	PASS
				30	-0.3662	-0.00044	PASS
				40	-0.4395	-0.00053	PASS
		50	-0.293	-0.00035	PASS		
		HCH	VN	-30	-0.2197	-0.00026	PASS
				-20	-0.2197	-0.00026	PASS
				-10	-0.293	-0.00035	PASS
				0	0.1465	0.00017	PASS
				10	-0.2197	-0.00026	PASS
	20			-0.3662	-0.00044	PASS	
	30			-0.3662	-0.00044	PASS	
	40			-0.1465	-0.00017	PASS	
	50	-0.1465	-0.00017	PASS			
	CDMA/EV-DO/Subtype0	LCH	VN	-30	-8.5000	-0.01027	PASS
				-20	2.2000	0.00266	PASS
				-10	-15.5300	-0.01876	PASS
				0	-4.5400	-0.00548	PASS
				10	10.9900	0.01327	PASS
				20	6.0800	0.00734	PASS
				30	-7.9100	-0.00955	PASS
				40	1.0300	0.00124	PASS
50		4.4700	0.0054	PASS			
MCH		VN	-30	-11.9400	-0.01438	PASS	
			-20	-9.8900	-0.01191	PASS	
			-10	-2.4900	-0.003	PASS	

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict						
				0	11.2800	0.01358	PASS						
				10	-1.7600	-0.00212	PASS						
				20	0.7300	0.00088	PASS						
				30	-13.7700	-0.01658	PASS						
				40	3.0800	0.00371	PASS						
				50	-12.7400	-0.01534	PASS						
		HCH	VN			-30	7.9100	0.00944	PASS				
						-20	-9.5200	-0.01136	PASS				
						-10	-14.5800	-0.0174	PASS				
						0	12.3000	0.01468	PASS				
						10	-3.2200	-0.00384	PASS				
						20	2.2700	0.00271	PASS				
						30	-13.3300	-0.01591	PASS				
						40	-1.4600	-0.00174	PASS				
						50	-15.7500	-0.01879	PASS				
						CDMA/EV-DO/Subtype2	LCH	VN		-30	1.0254	0.00125	PASS
										-20	1.3916	0.0017	PASS
										-10	1.2451	0.00152	PASS
	0	1.1719	0.00143	PASS									
	10	1.3184	0.00161	PASS									
	20	1.6846	0.00206	PASS									
	30	1.3916	0.0017	PASS									
	40	0.9521	0.00116	PASS									
	50	1.0986	0.00134	PASS									
	MCH	VN			-30		0.3662	0.00045	PASS				
					-20		0.5859	0.00071	PASS				
					-10		0.5859	0.00071	PASS				
					0		0.2197	0.00027	PASS				
					10		0.9521	0.00116	PASS				
					20		0.5127	0.00062	PASS				
					30	0.2930	0.00036	PASS					
					40	0.0732	0.00009	PASS					
	HCH	VN			50	0.2930	0.00036	PASS					
-30					0.1465	0.00018	PASS						
-20					0.4395	0.00053	PASS						
-10					0.2930	0.00036	PASS						
0					0.0732	0.00009	PASS						
10					0.1465	0.00018	PASS						
20					0.1465	0.00018	PASS						
30	0.2930	0.00036	PASS										



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				40	0.1465	0.00018	PASS
				50	0.5859	0.00071	PASS

END