



# Appendix for test report



## 1 Appendix\_B: Effective (Isotropic) Radiated Power Output Data

### Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	EIRP [dBm]	Limit [dBm]	Verdict
BC10	CDMA/1X/TM1	LCH	24.31	21.24	50	PASS
		MCH	24.42	21.35	50	PASS
		HCH	24.22	21.15	50	PASS
	CDMA/1X/TM3	LCH	24.47	21.4	50	PASS
		MCH	24.39	21.32	50	PASS
		HCH	24.25	21.18	50	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

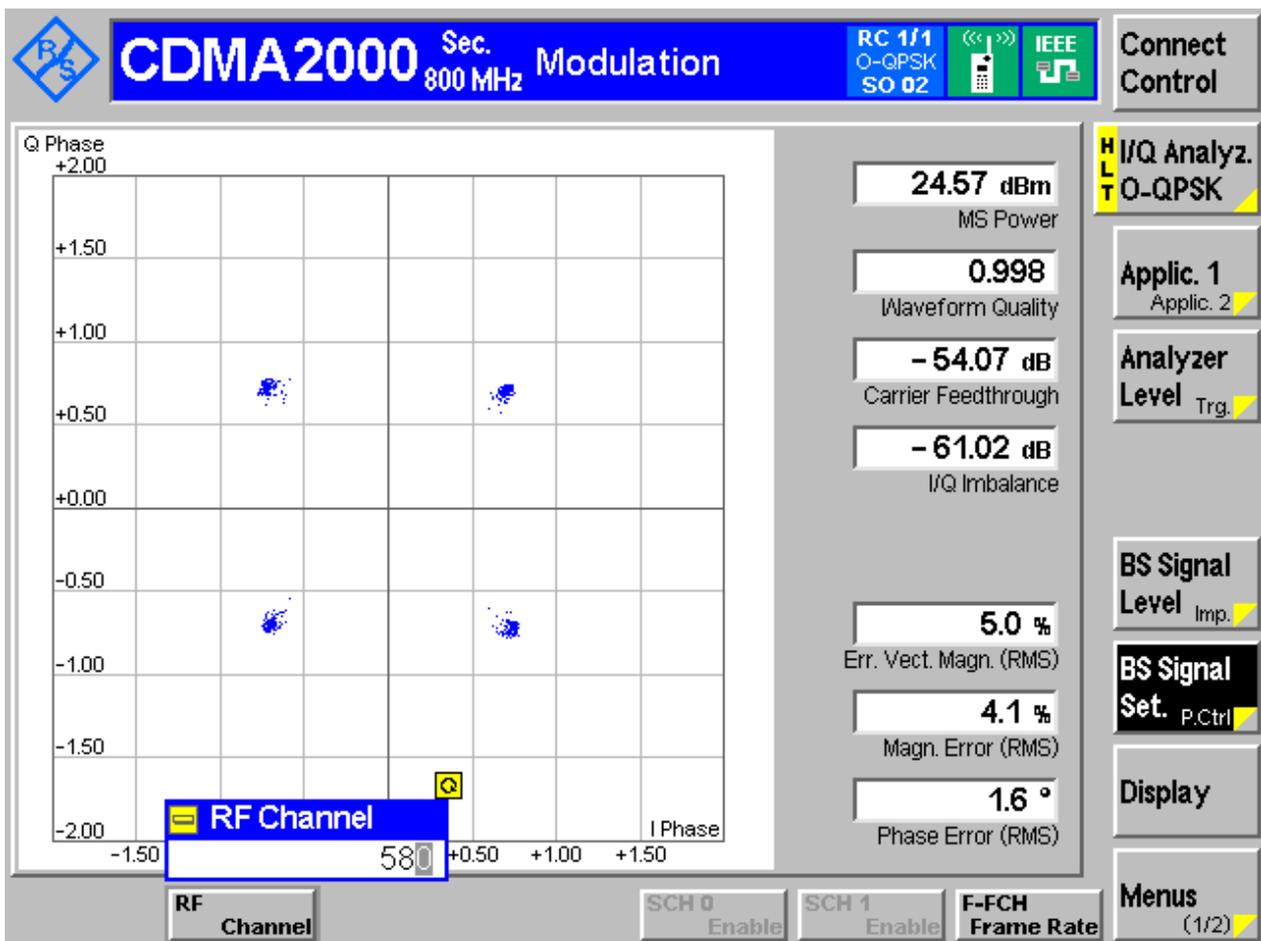
#### Part I - Test Plots

##### 3.1 For CDMA1X

##### 3.1.1 Test Band = BC10

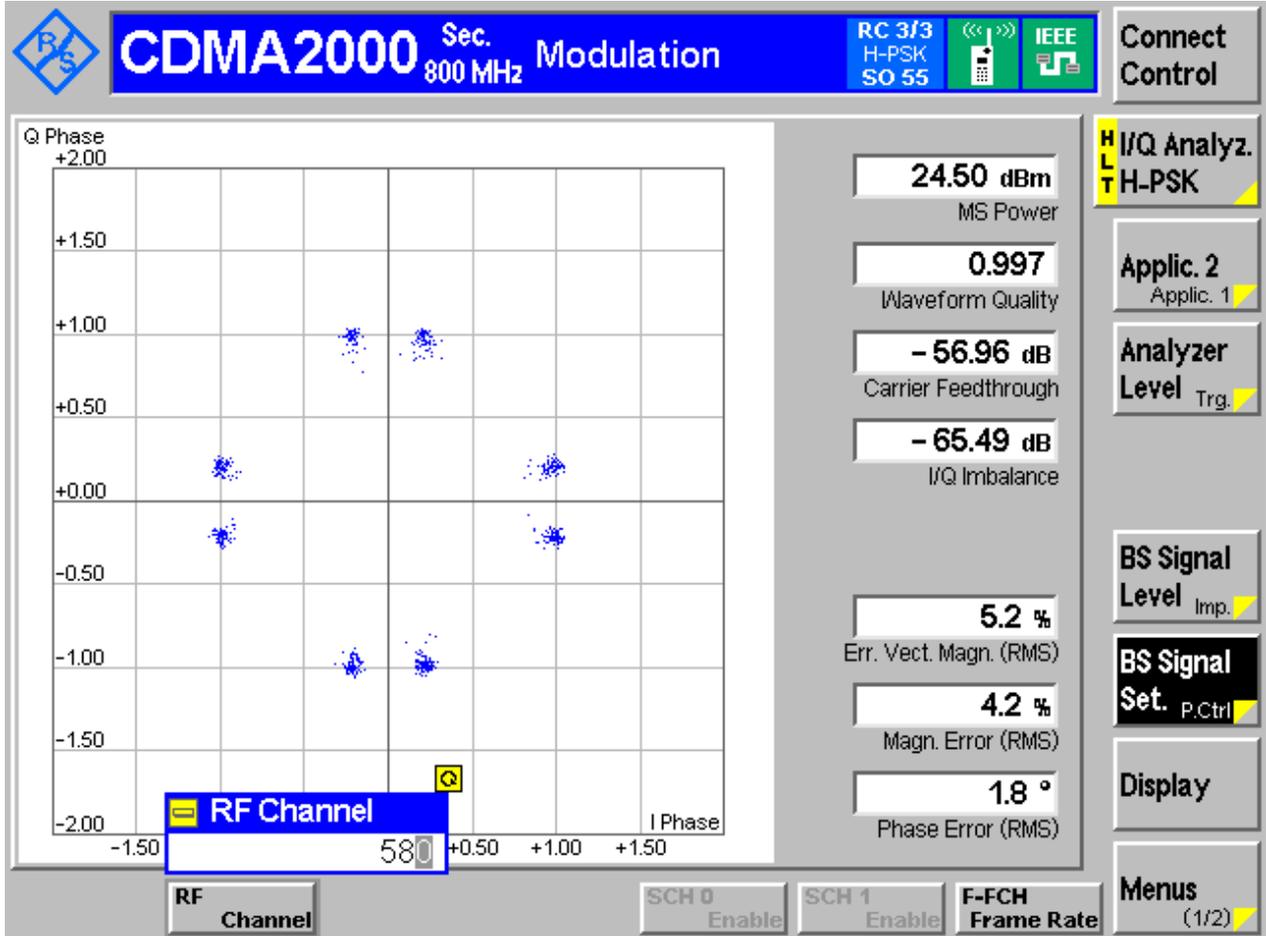
##### 3.1.1.1 Test Mode = CDMA1X/TM1

##### 3.1.1.1.1 Test Channel = MCH



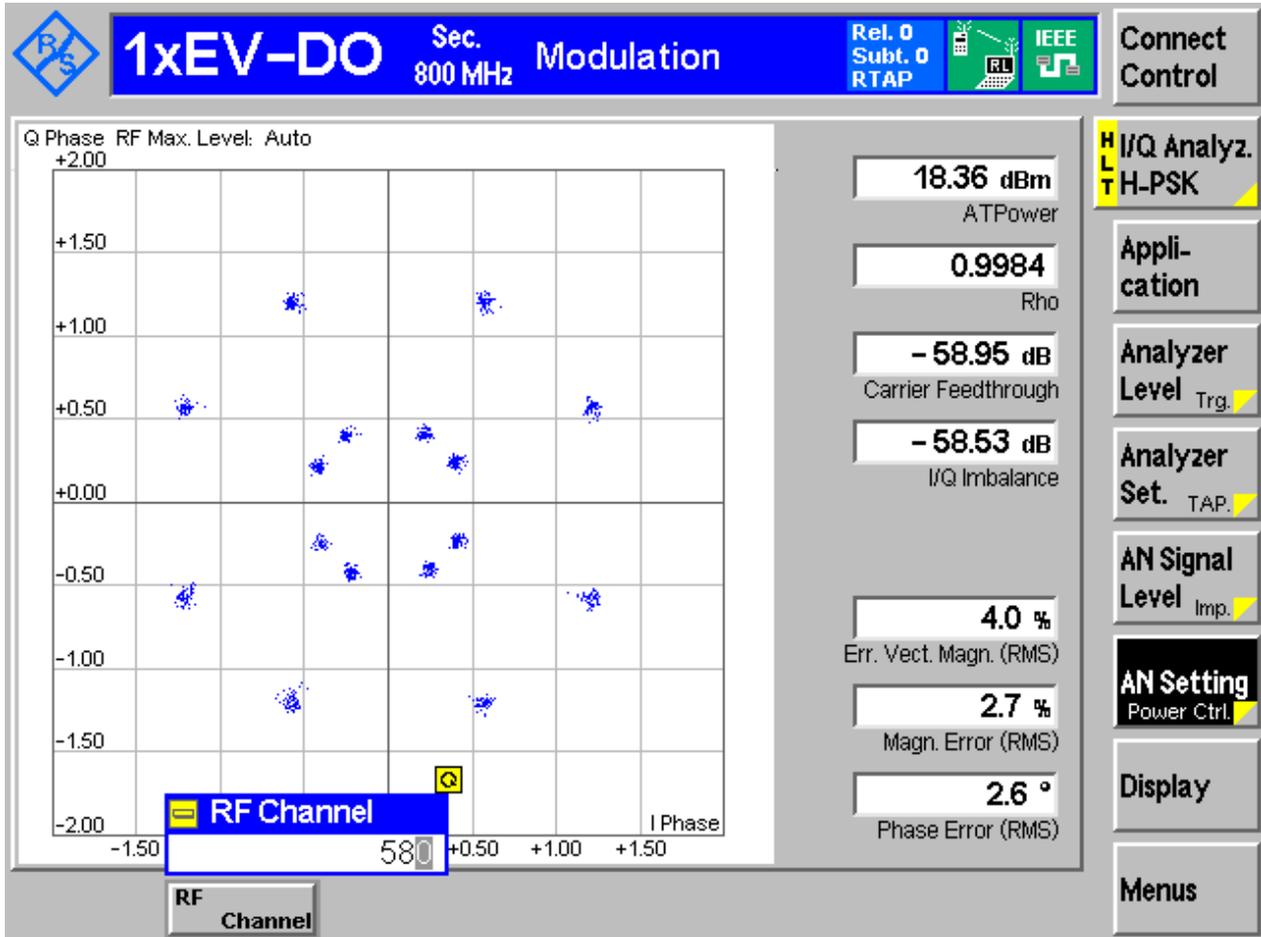
3.1.1.2 Test Mode = CDMA1X/TM3

3.1.1.2.1 Test Channel = MCH



### 3.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

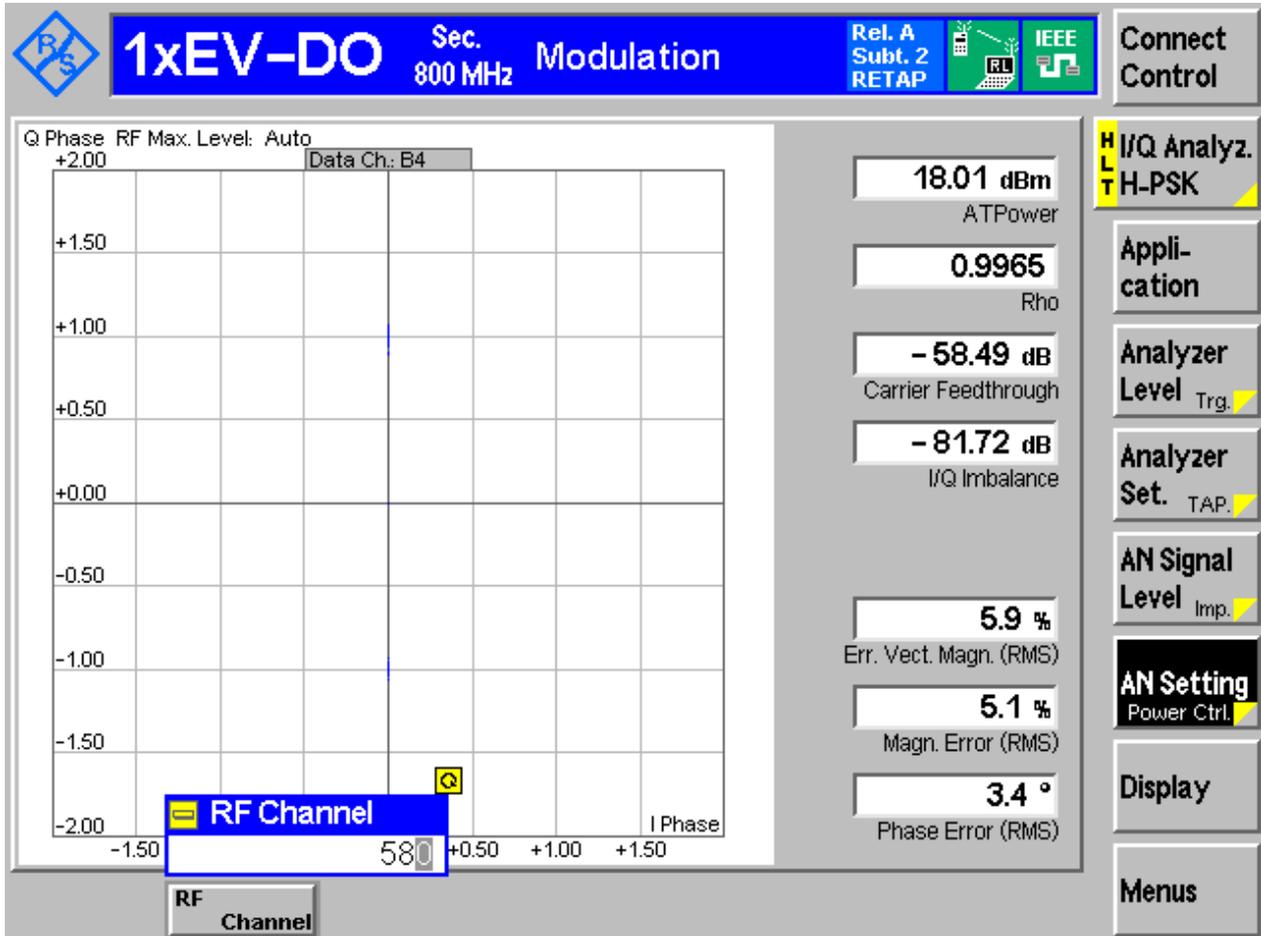
#### 3.1.1.3.1 Test Channel = MCH





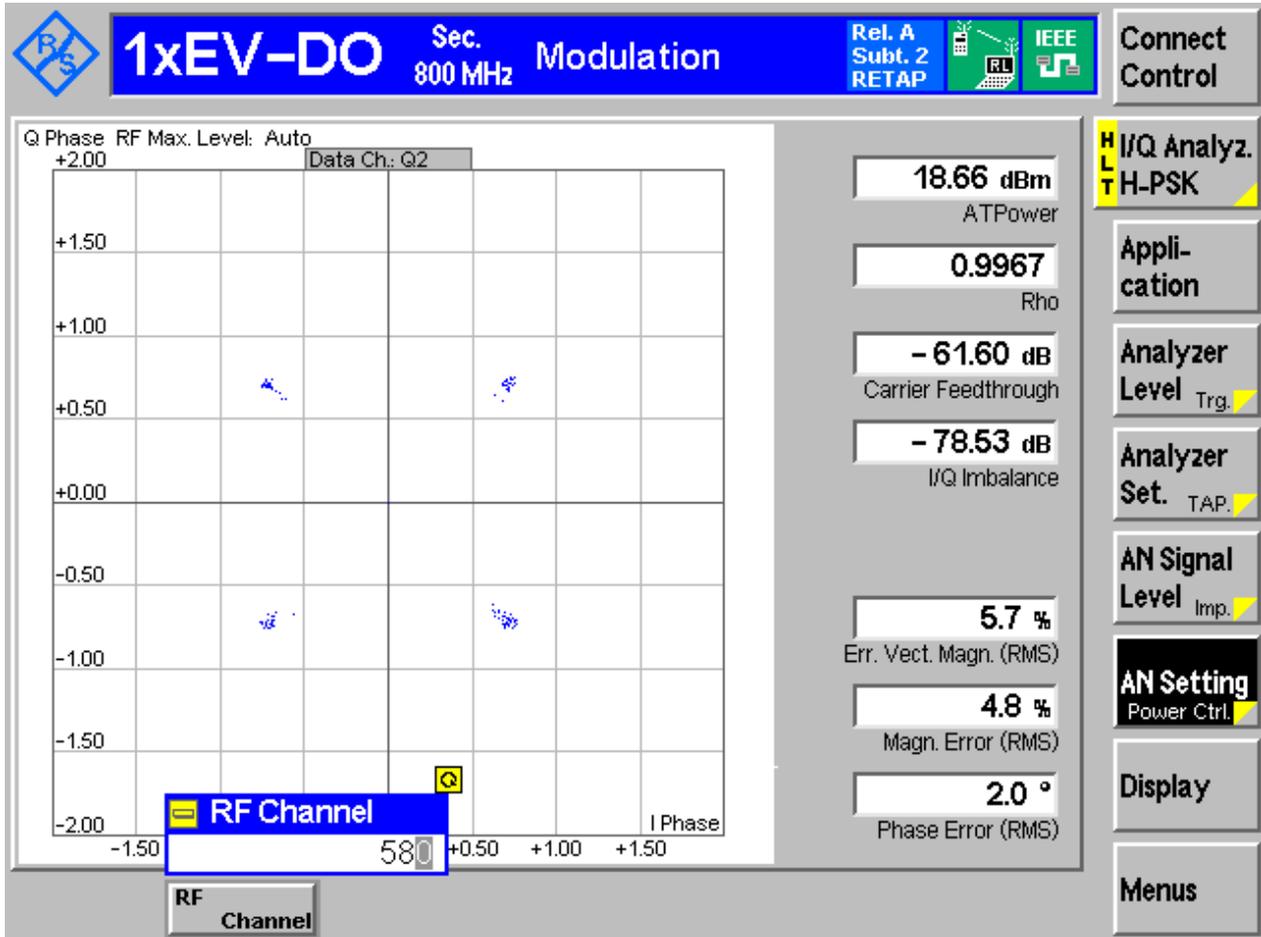
### 3.1.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

#### 3.1.1.4.1 Test Channel = MCH



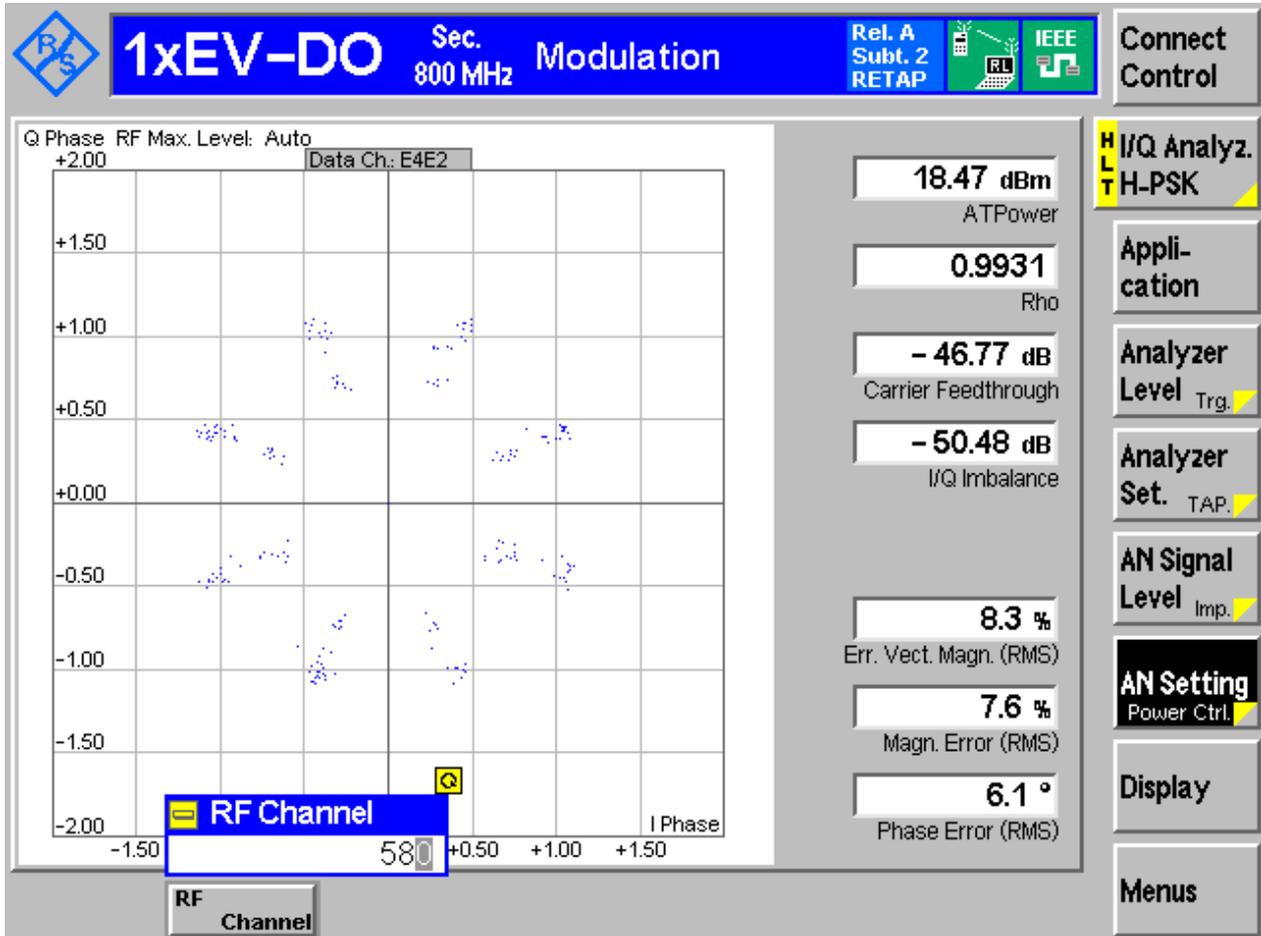
### 3.1.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

#### 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	1.32	1.53	Pass
		MCH	1.32	1.95	Pass
		HCH	1.34	2.40	Pass
	CDMA/1X/TM3	LCH	1.30	1.48	Pass
		MCH	1.29	1.47	Pass
		HCH	1.29	1.48	Pass



## Part II - Test Plots

### 4.1 For CDMA1X

#### 4.1.1 Test Band = BC10

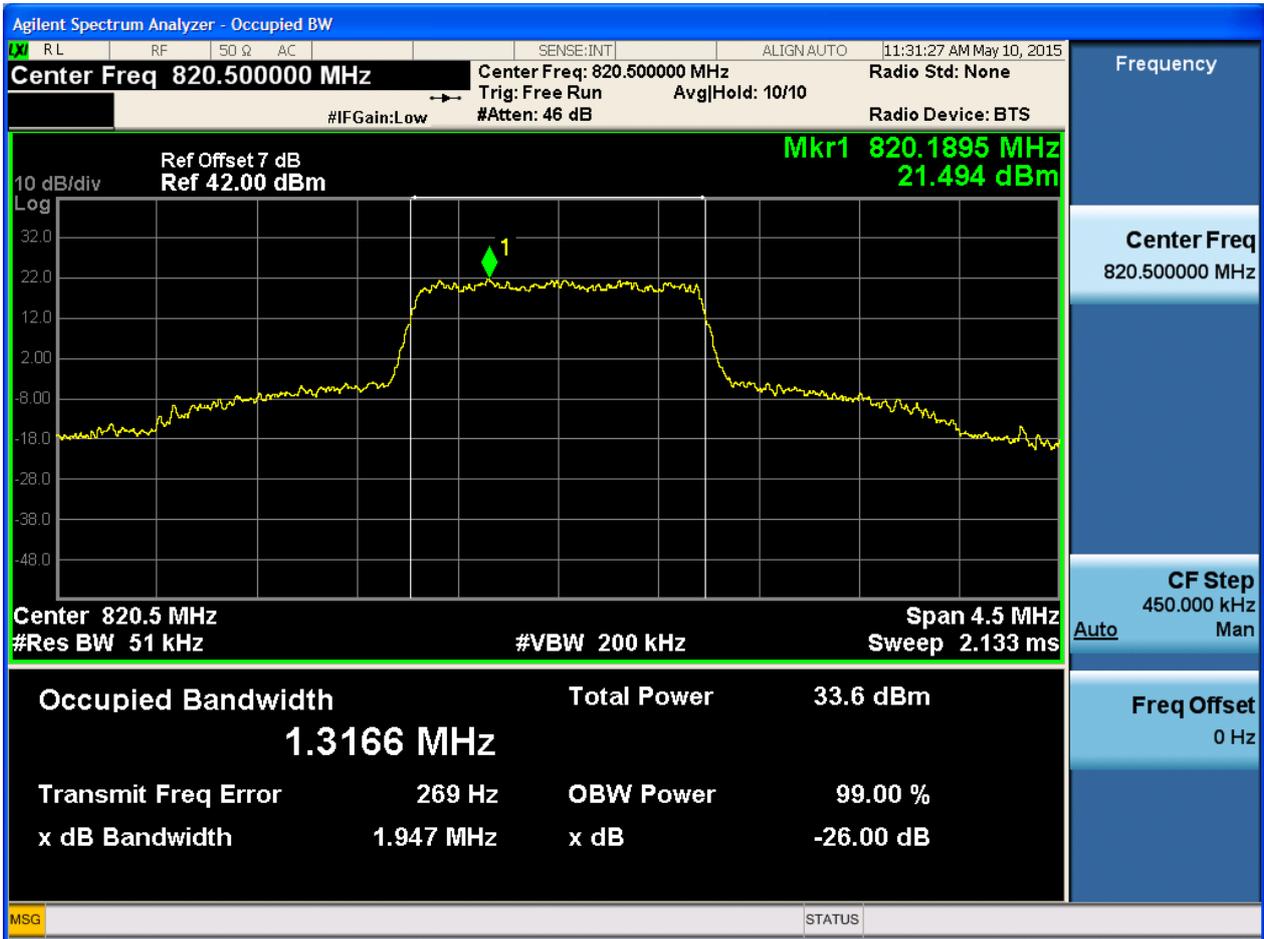
##### 4.1.1.1 Test Mode = CDMA1X/TM1

##### 4.1.1.1.1 Test Channel = LCH



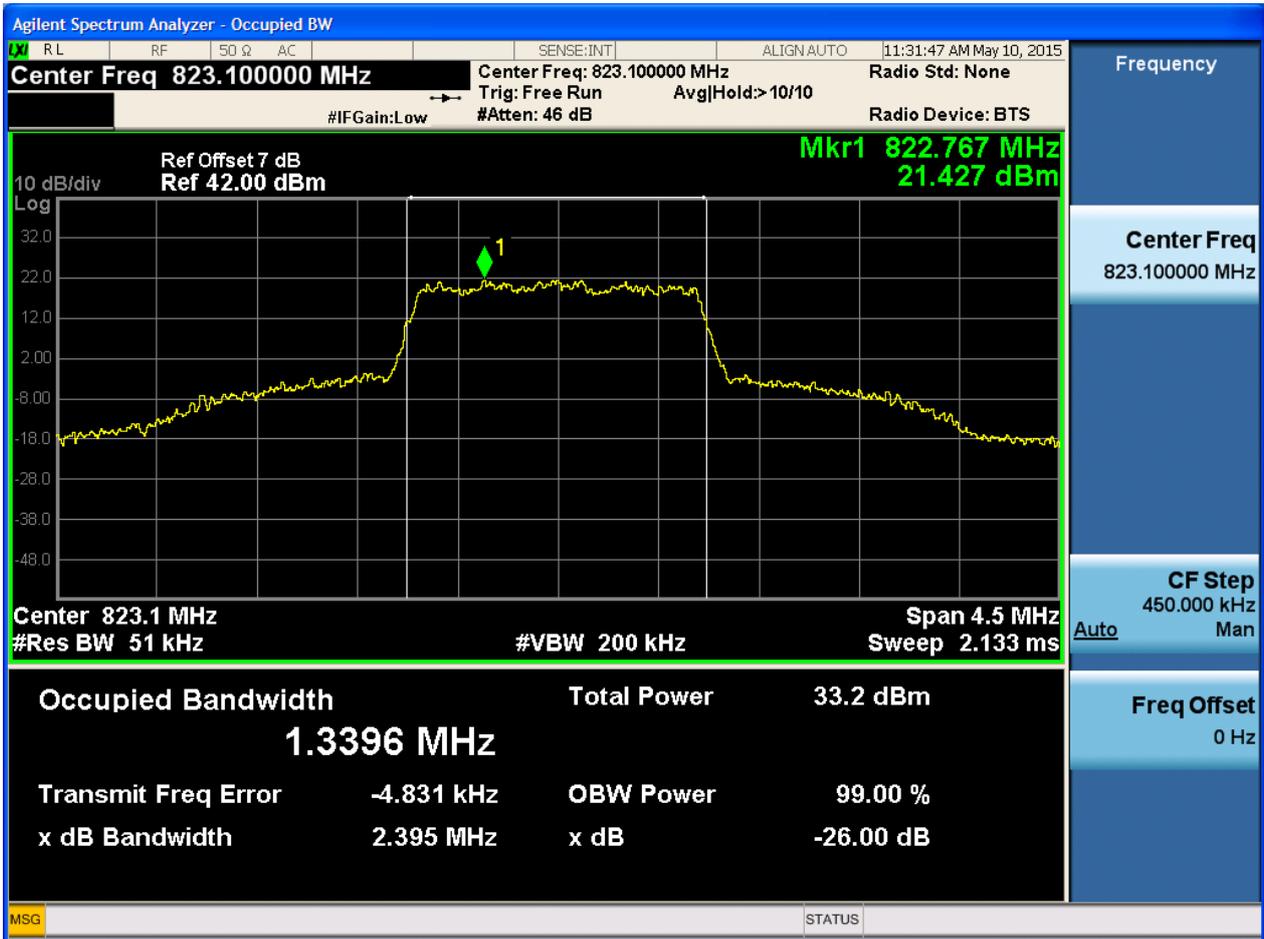


4.1.1.1.2 Test Channel = MCH





4.1.1.1.3 Test Channel = HCH





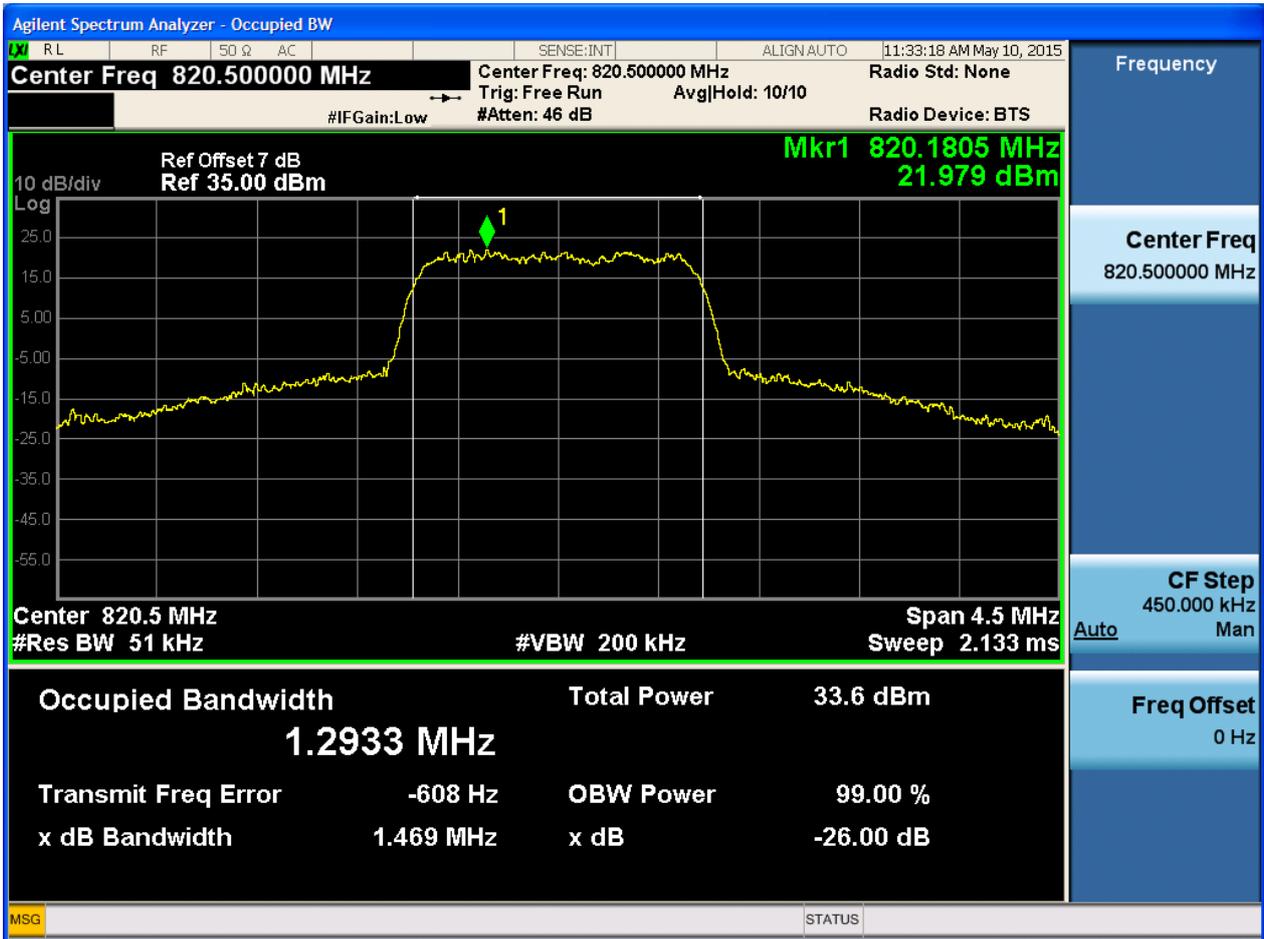
4.1.1.2 Test Mode = CDMA/1X/TM3

4.1.1.2.1 Test Channel = LCH



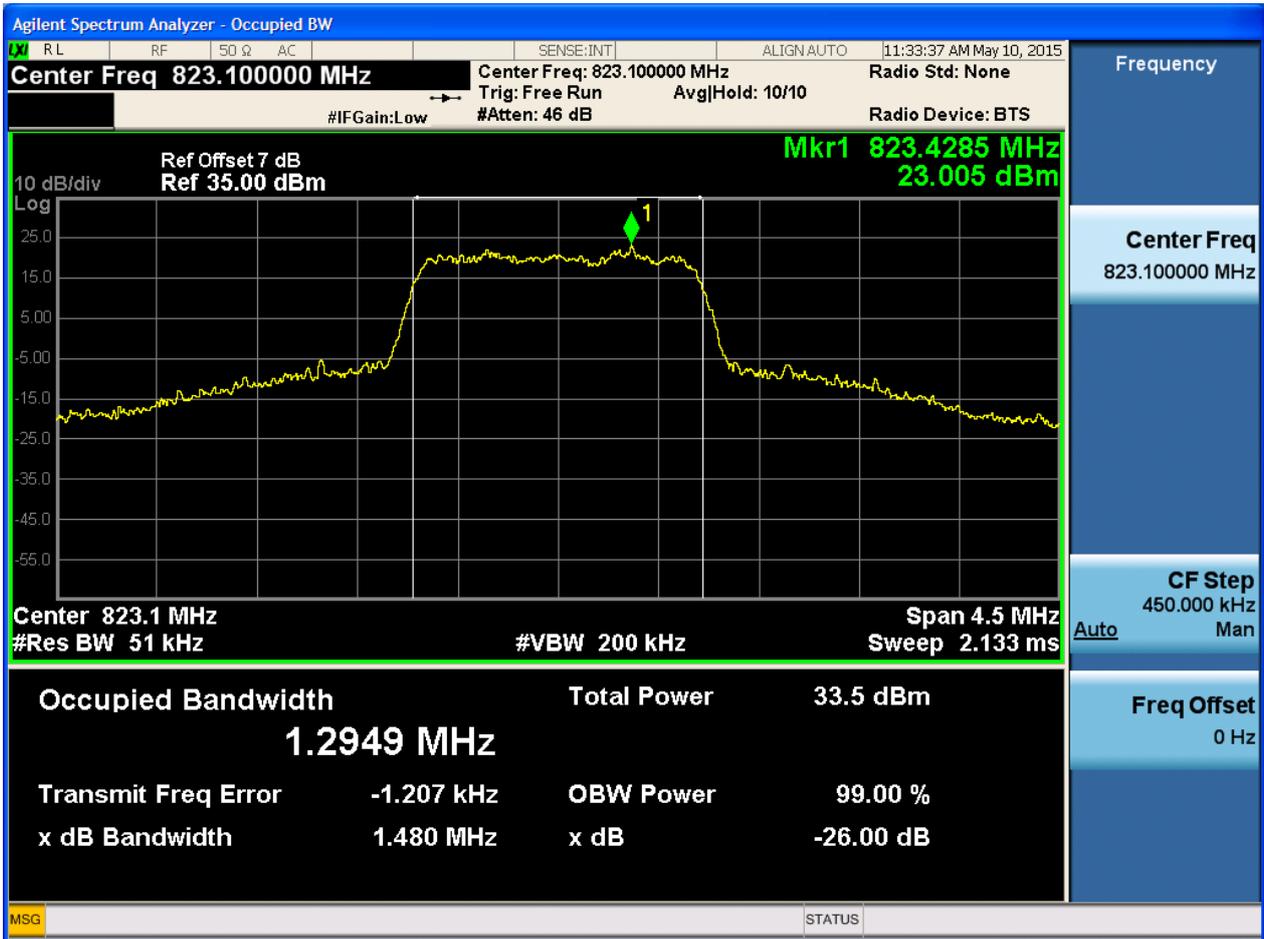


4.1.1.2.2 Test Channel = MCH





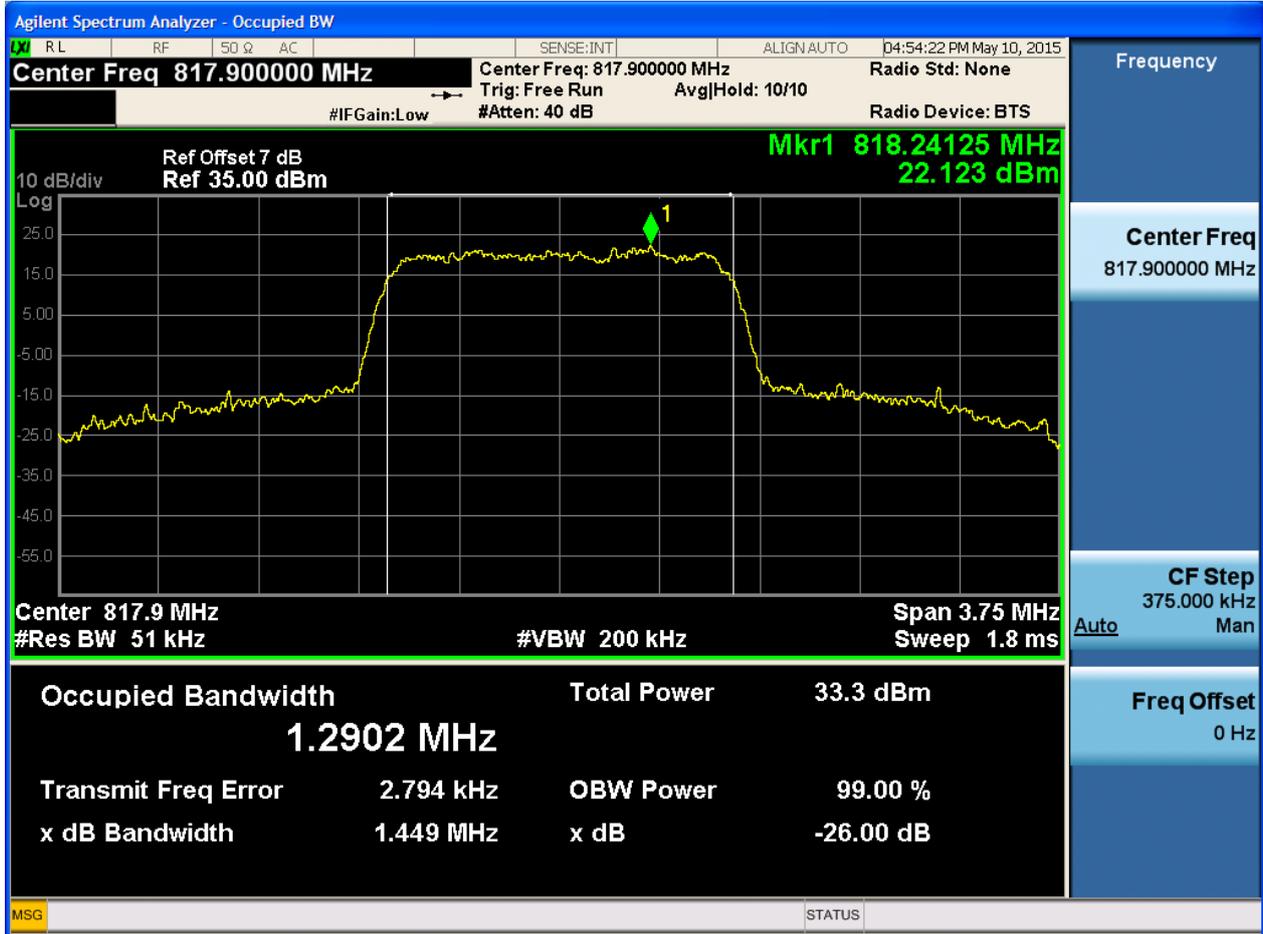
4.1.1.2.3 Test Channel = HCH





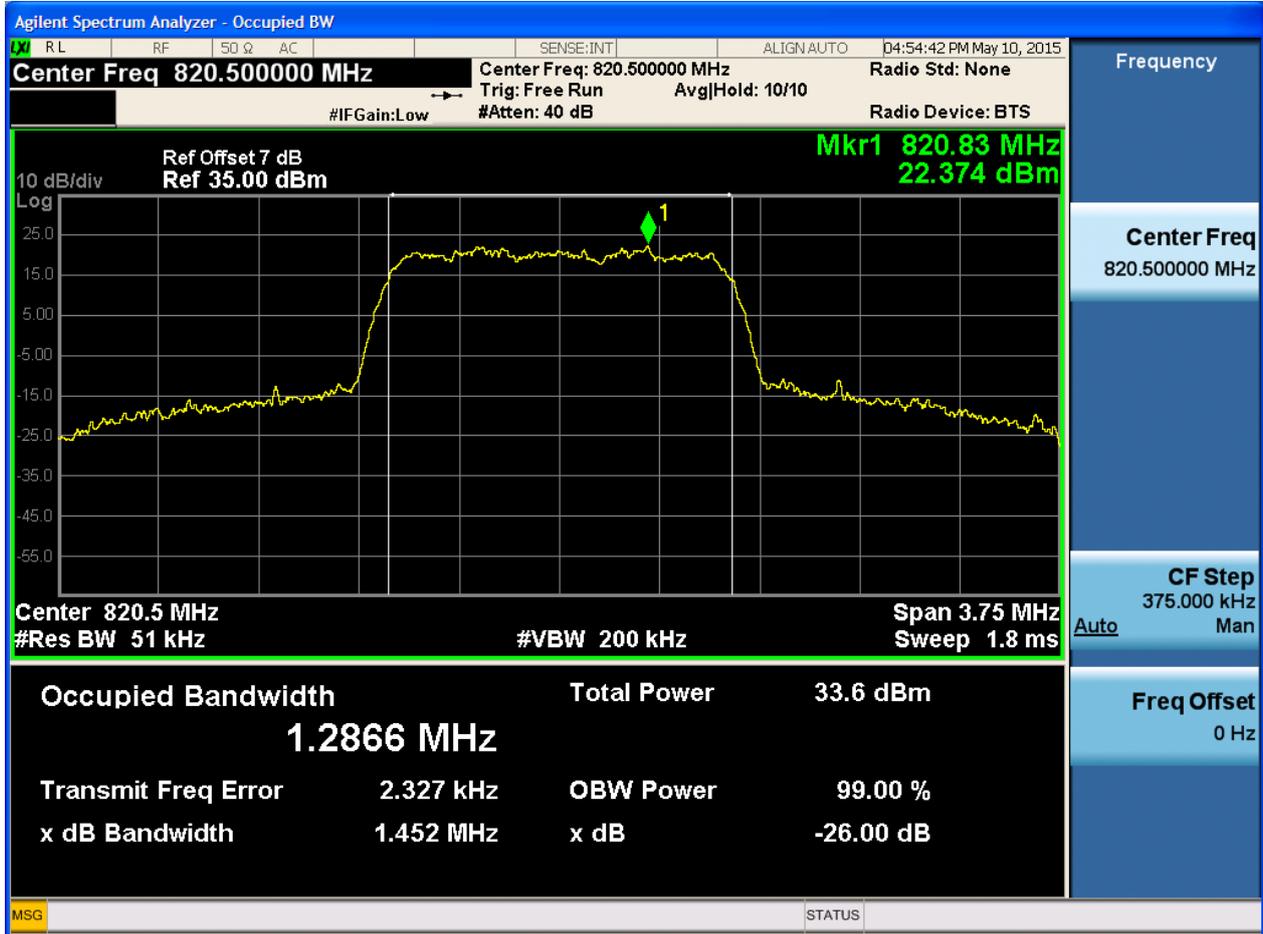
#### 4.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

##### 4.1.1.3.1 Test Channel = LCH



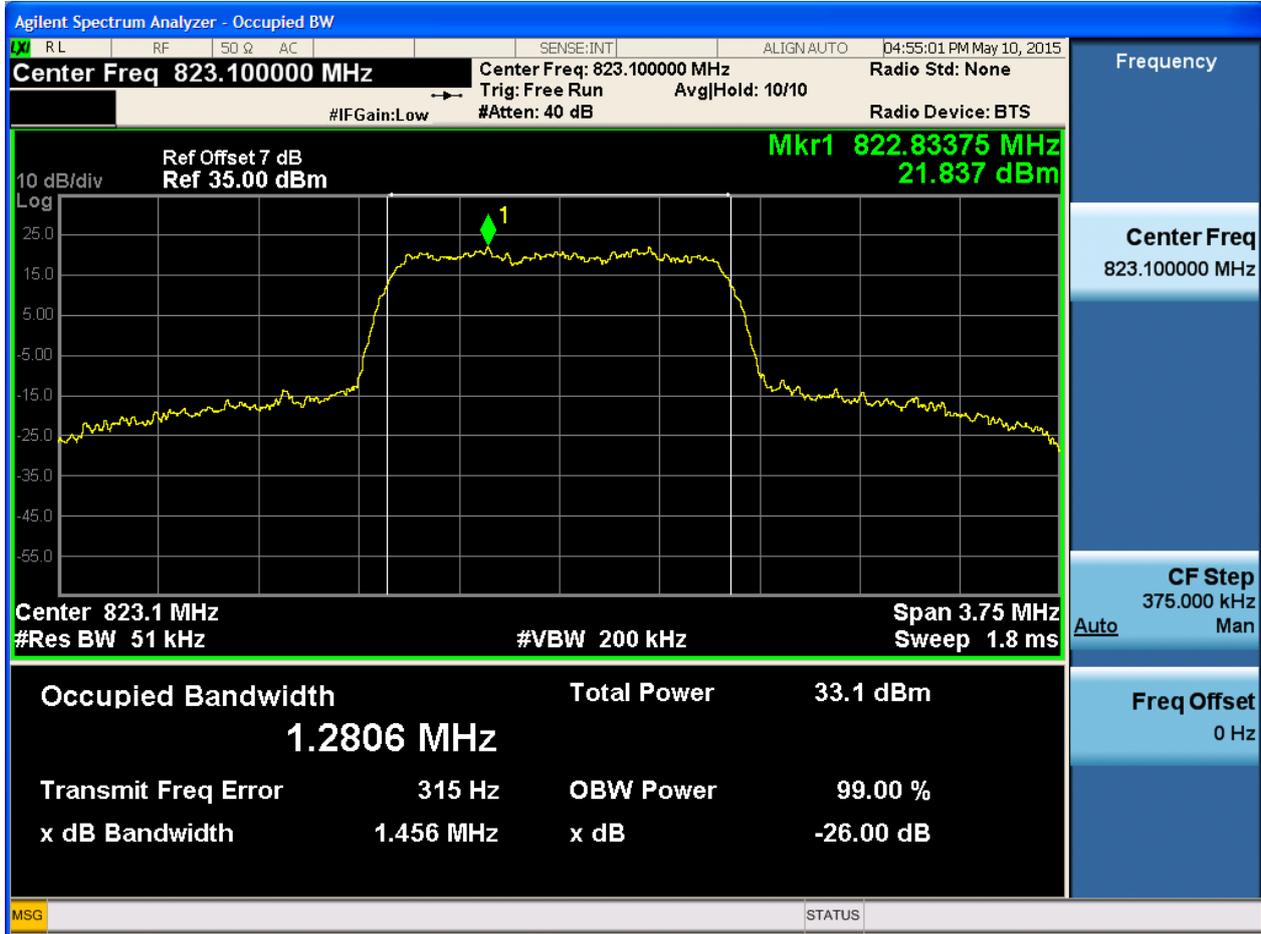


4.1.1.3.2 Test Channel = MCH





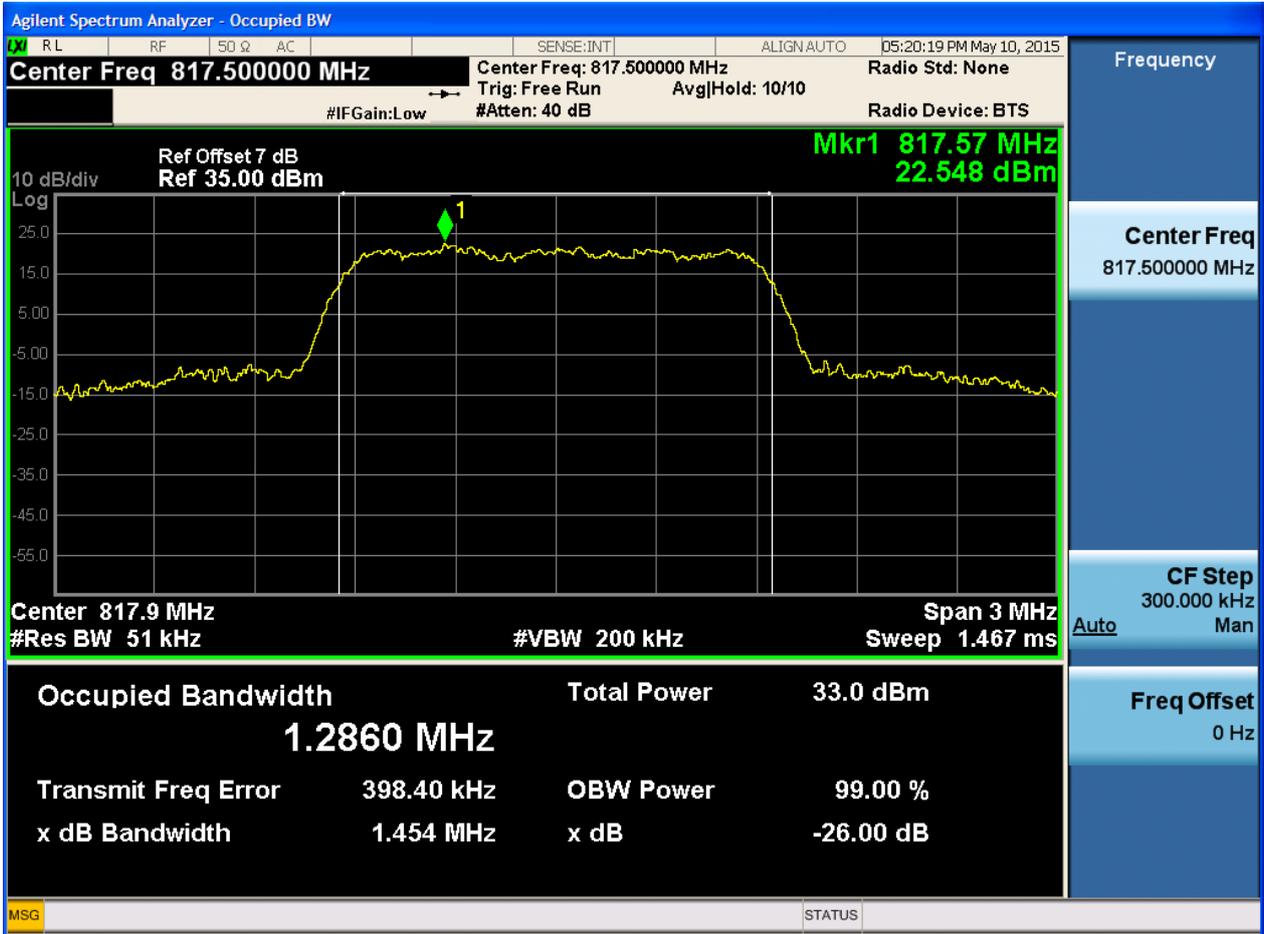
#### 4.1.1.3.3 Test Channel = HCH





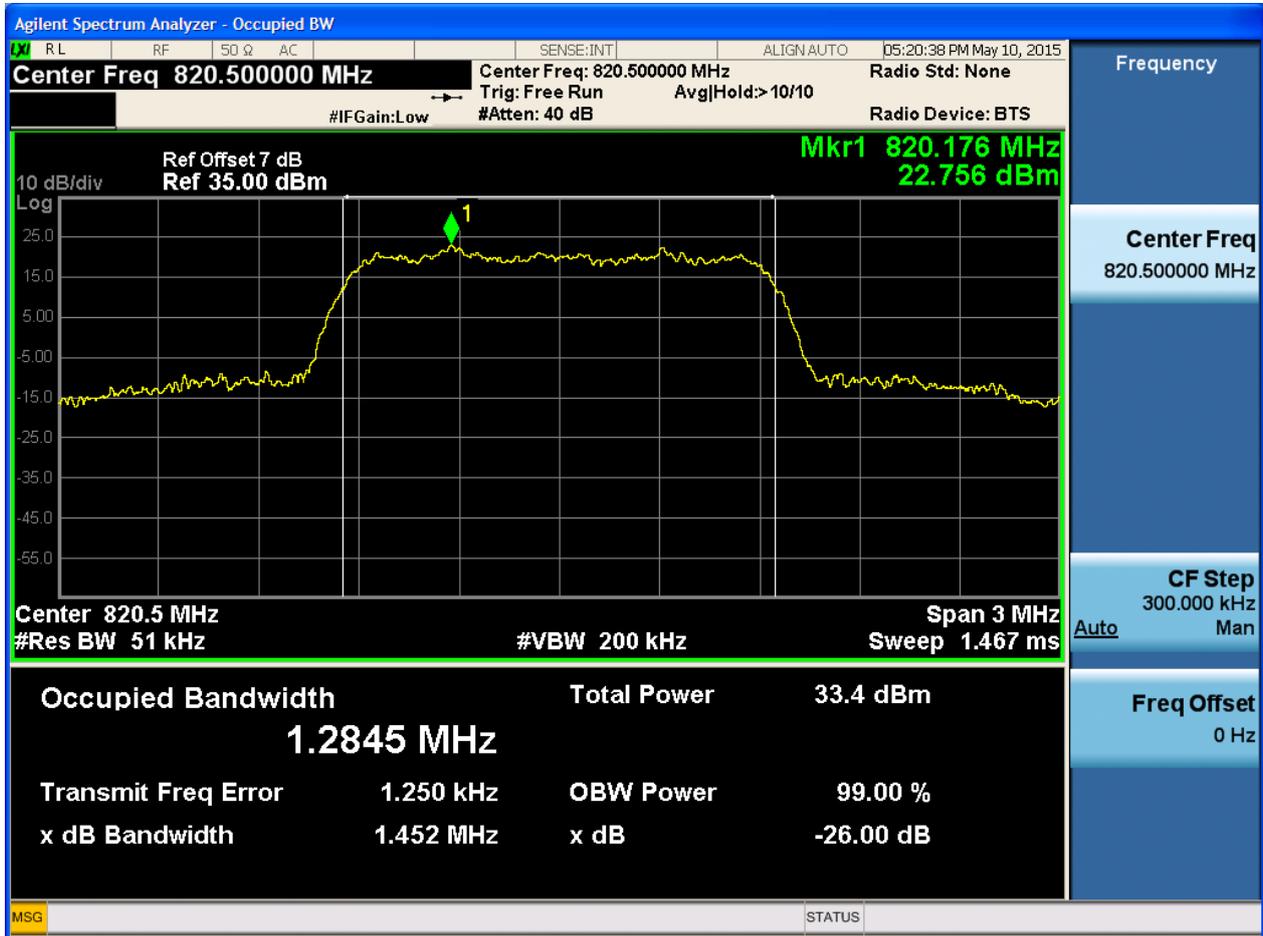
4.1.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

4.1.1.4.1 Test Channel = LCH



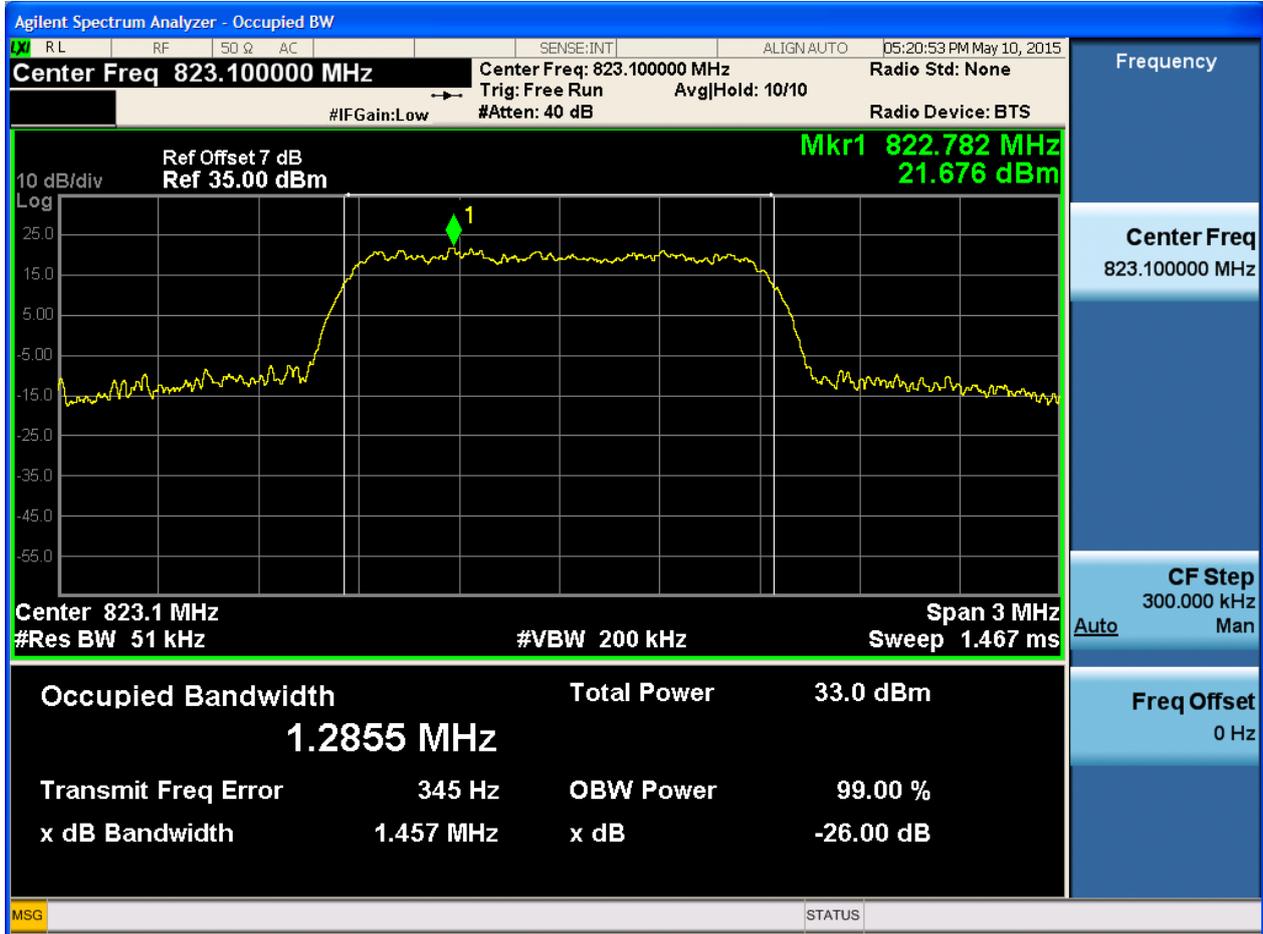


#### 4.1.1.4.2 Test Channel = MCH





#### 4.1.1.4.3 Test Channel = HCH





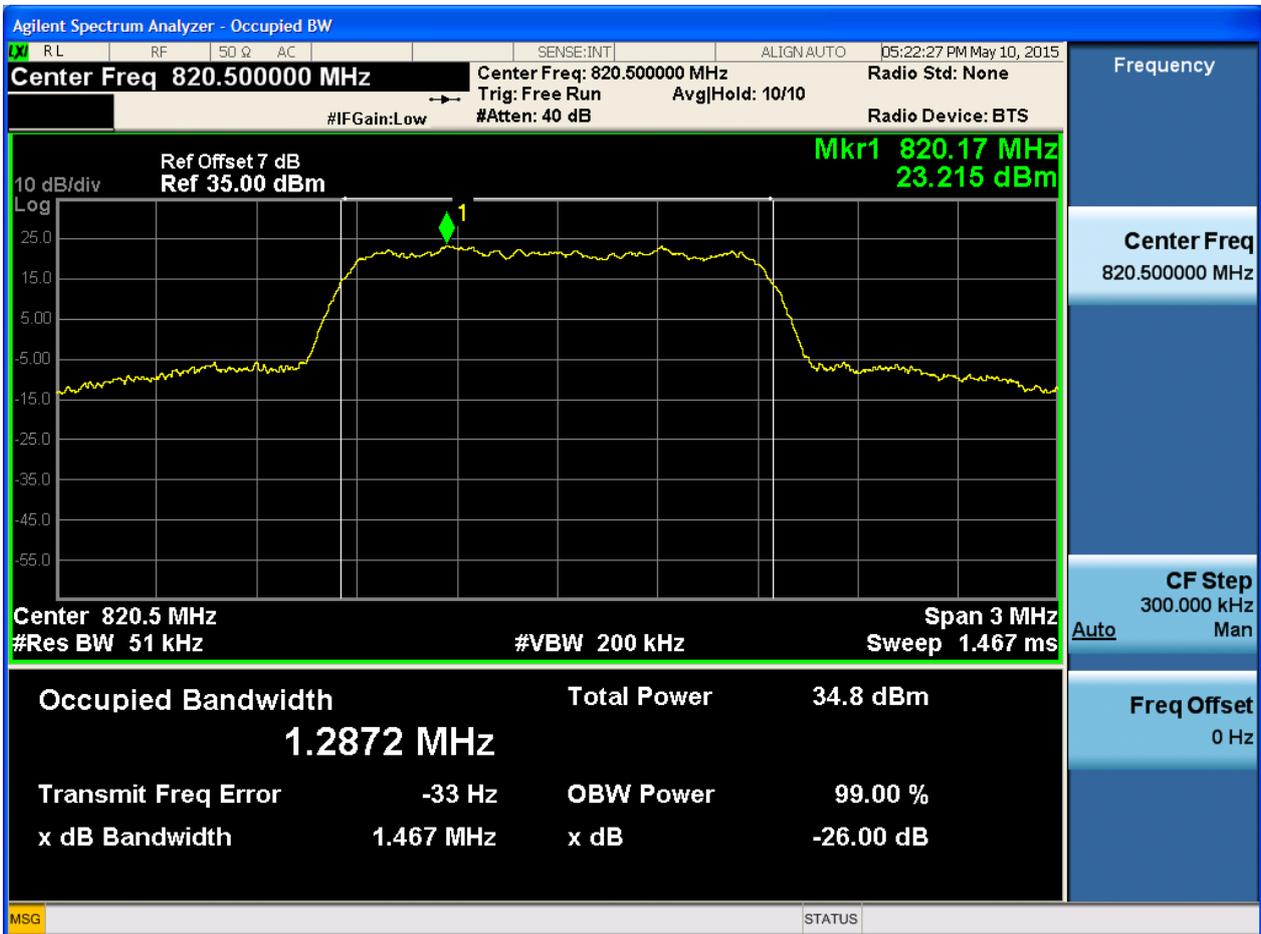
4.1.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

4.1.1.5.1 Test Channel = LCH



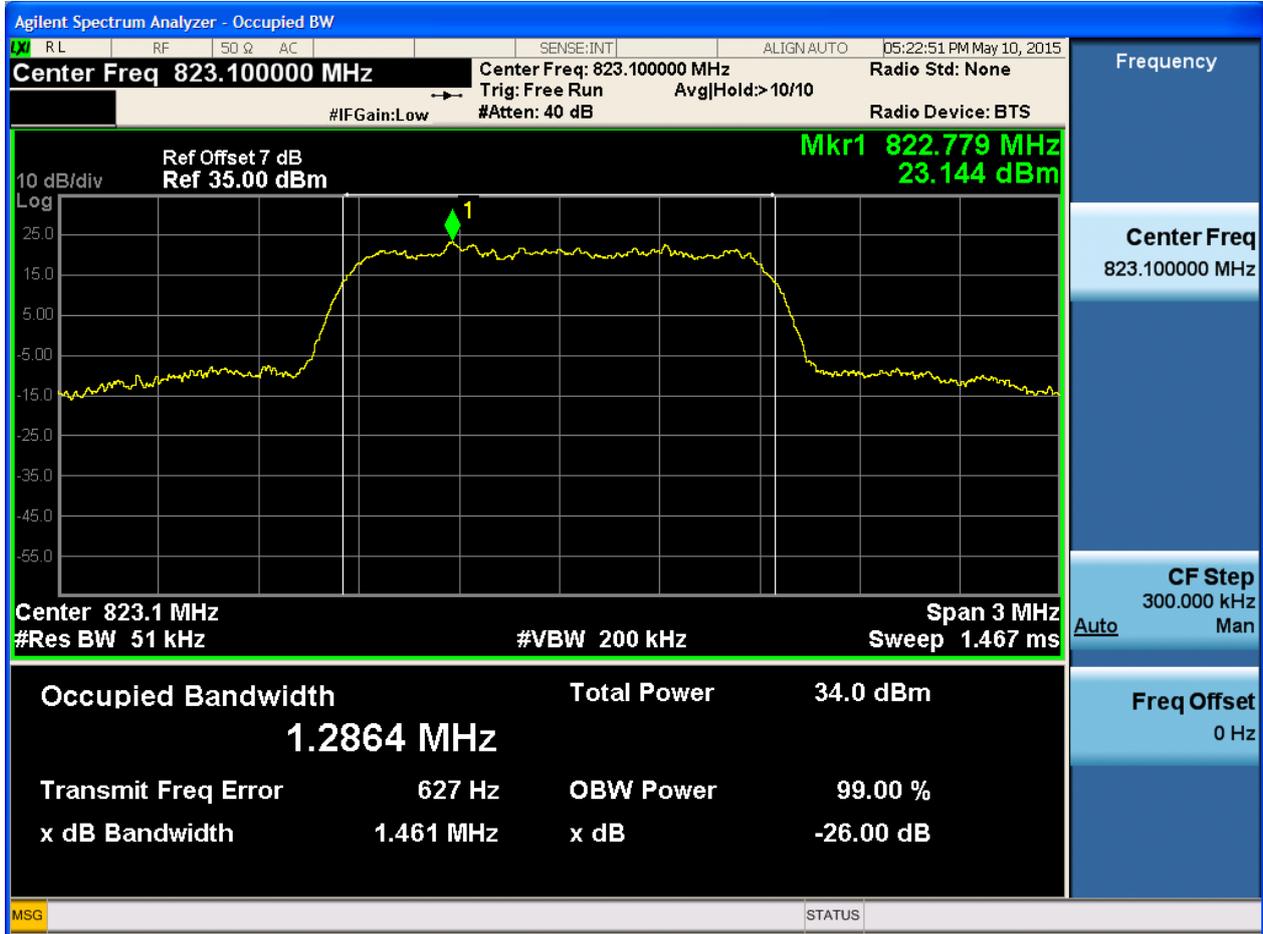


4.1.1.5.2 Test Channel = MCH





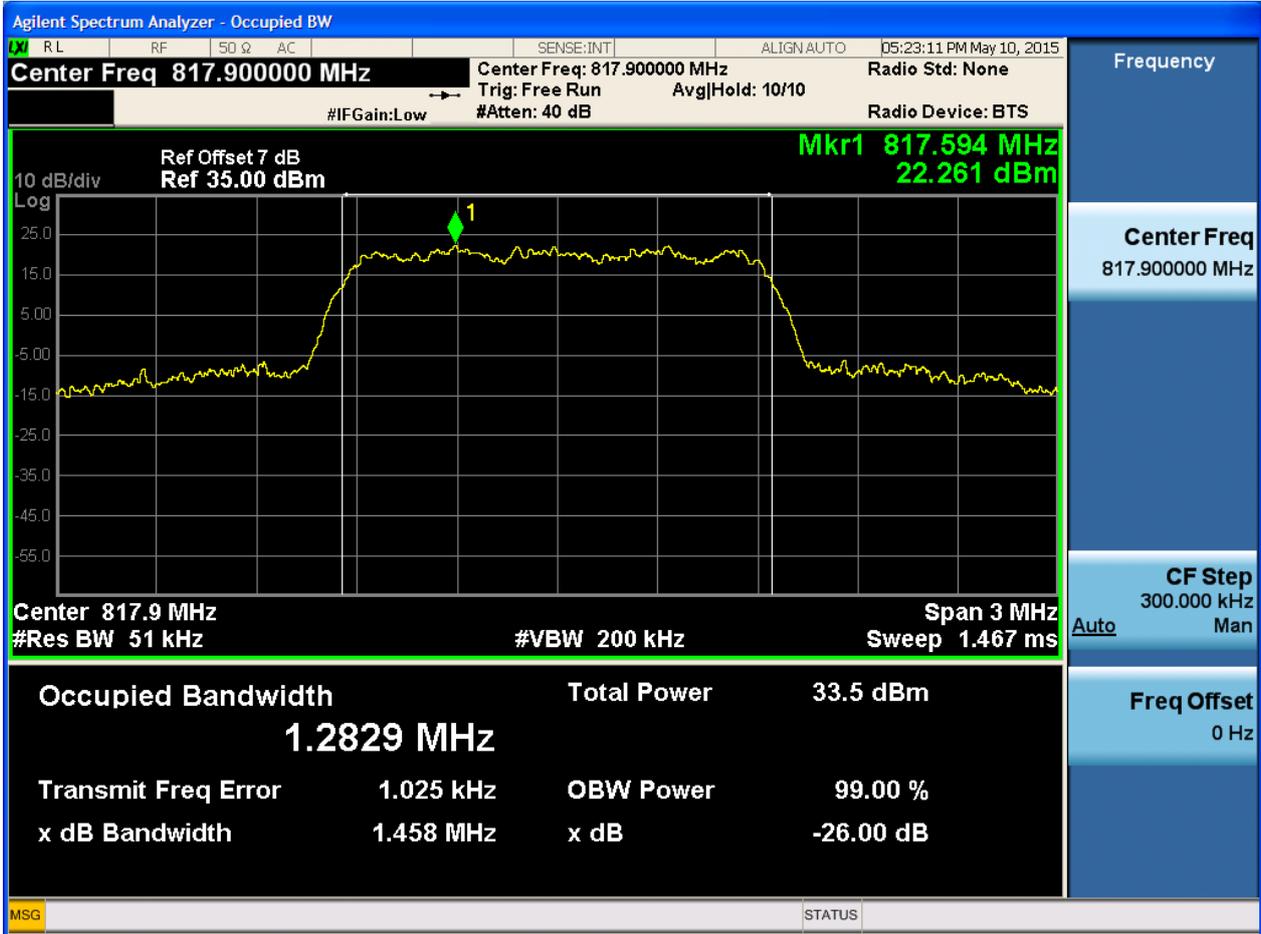
4.1.1.5.3 Test Channel = HCH





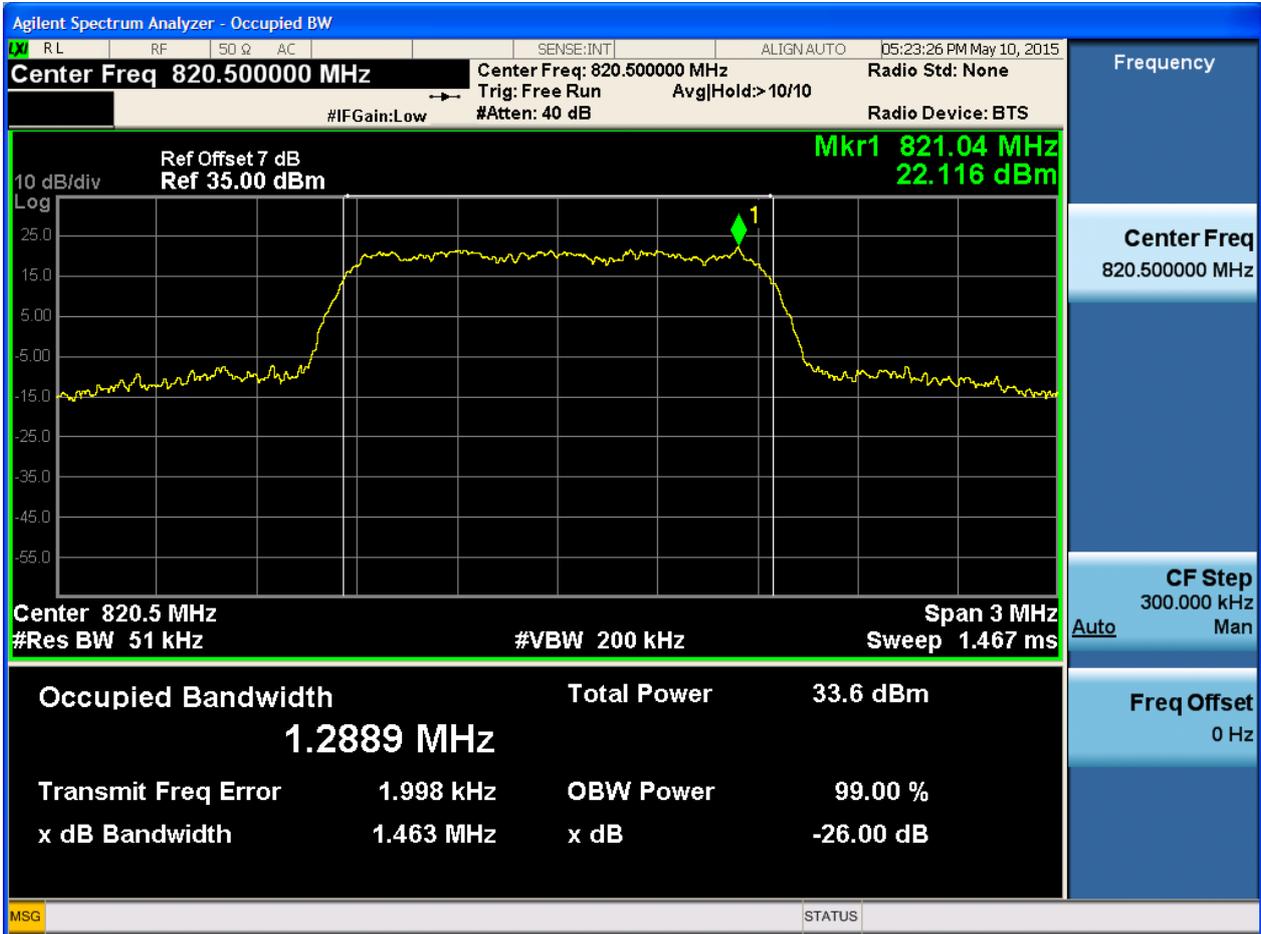
4.1.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

4.1.1.6.1 Test Channel = LCH



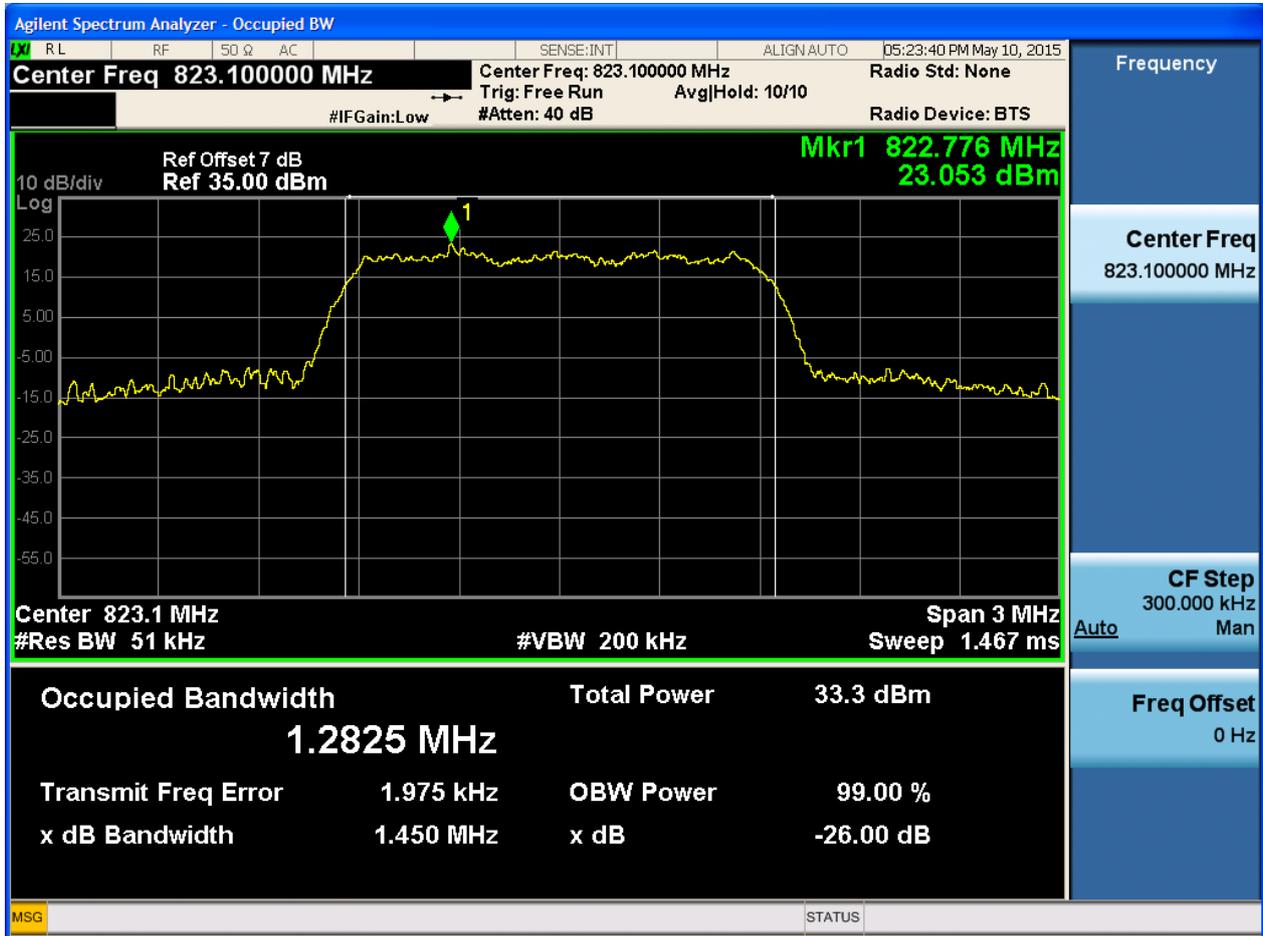


4.1.1.6.2 Test Channel = MCH





4.1.1.6.3 Test Channel = HCH





## 5Appendix\_E: Band Edges Compliance

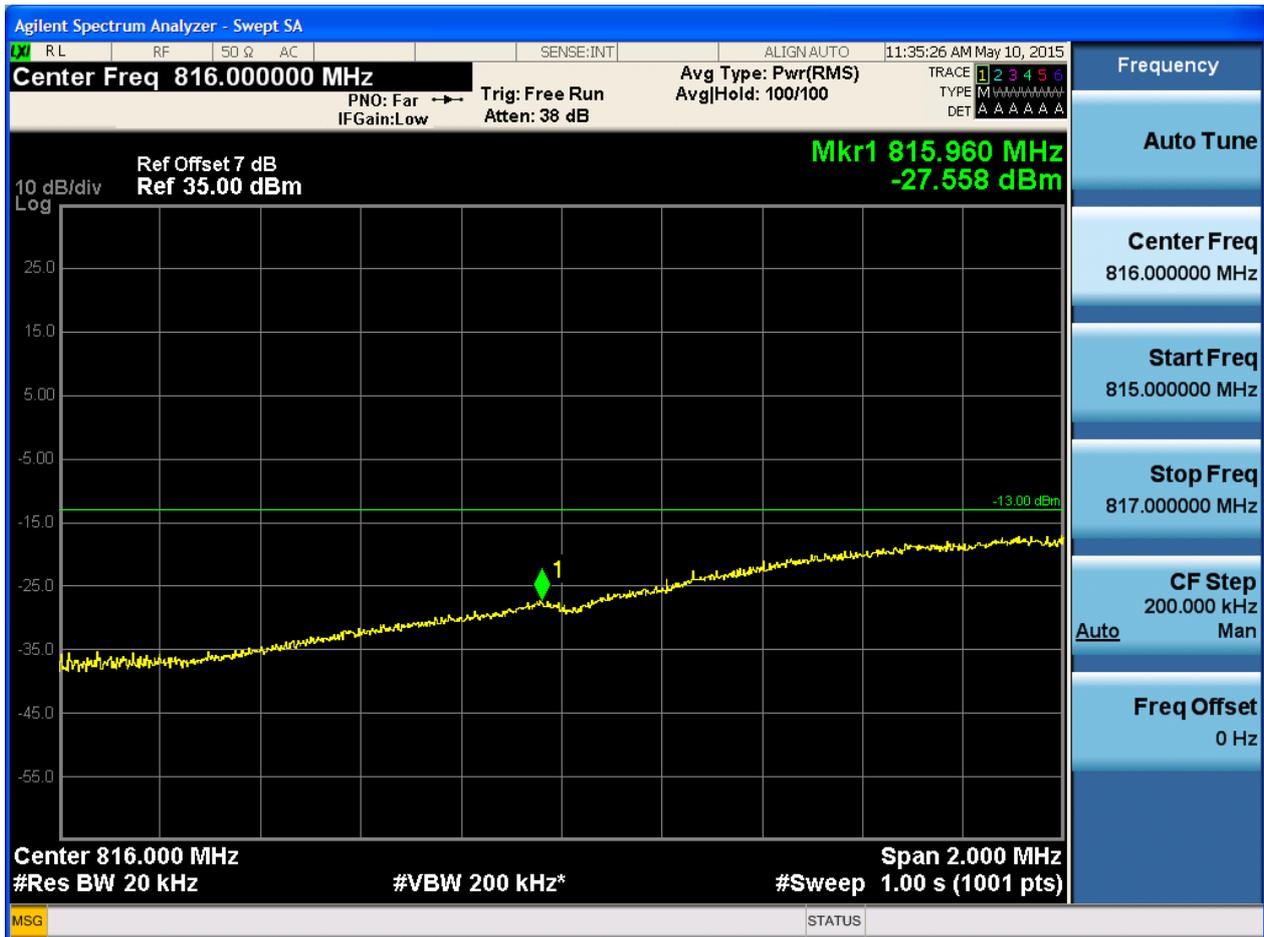
### Part I - Test Plots

#### 5.1 For CDMA1X

##### 5.1.1 Test Band = BC10

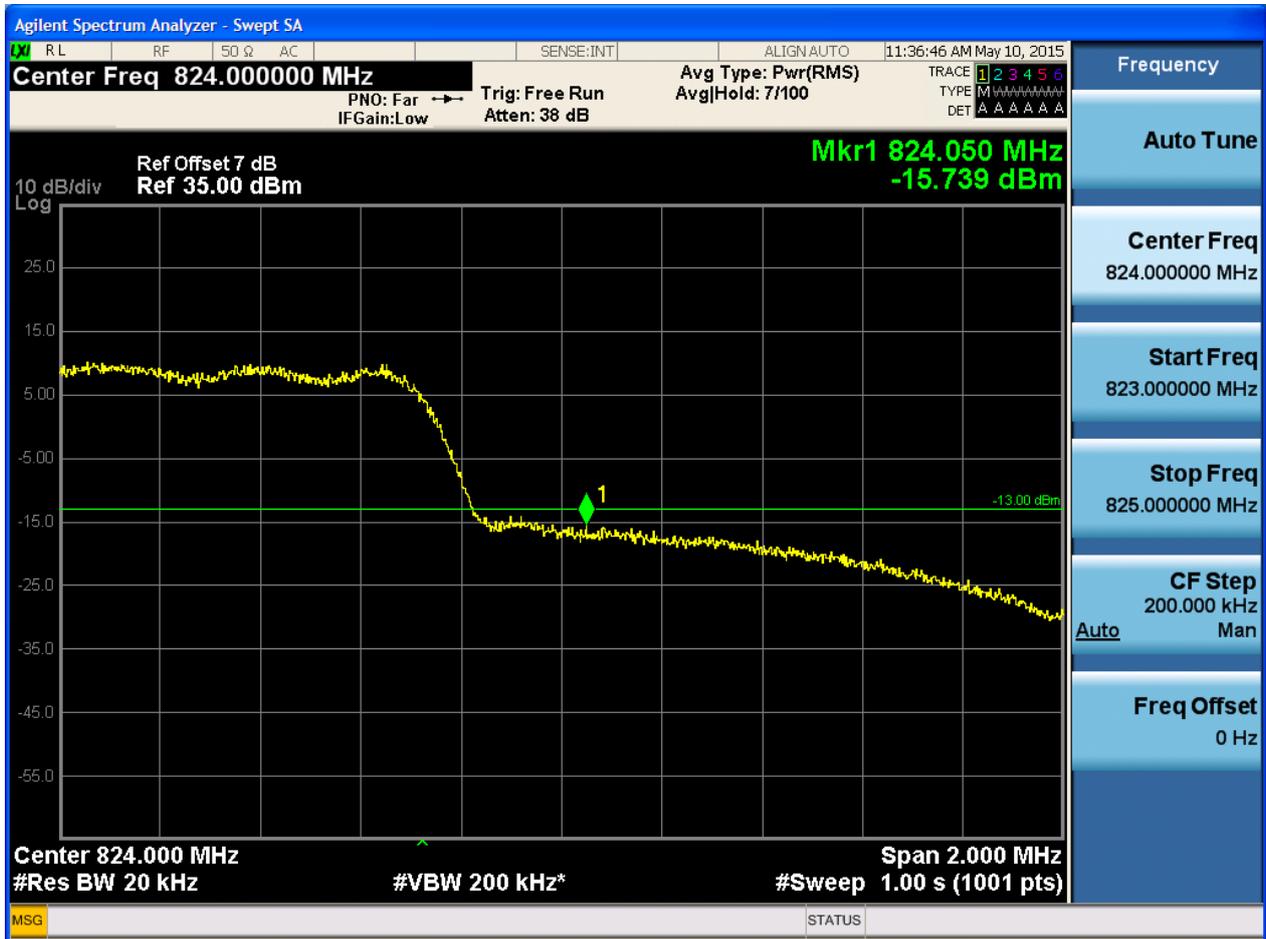
##### 5.1.1.1 Test Mode = CDMA1X/TM1

##### 5.1.1.1.1 Test Channel = LCH





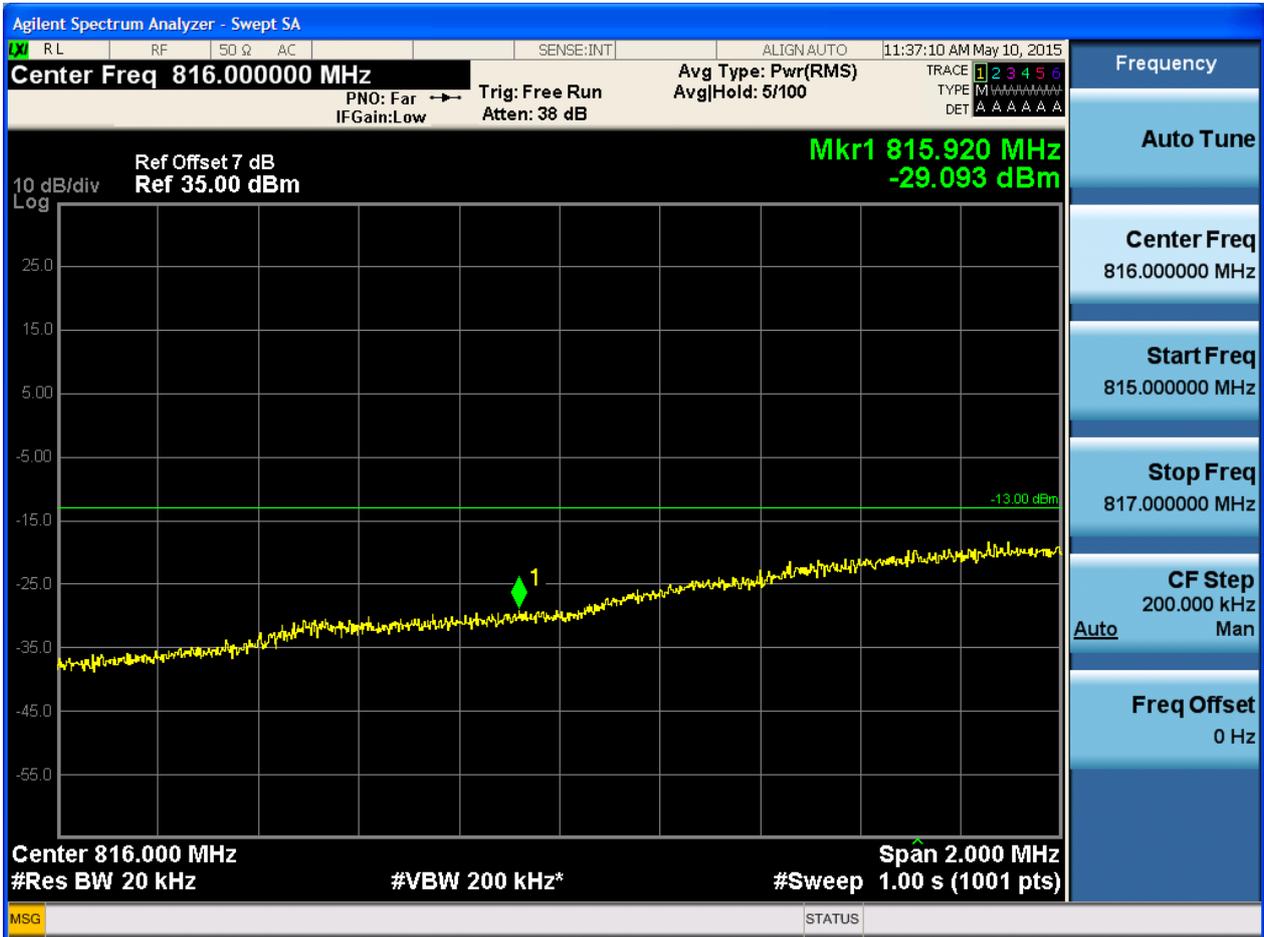
### 5.1.1.1.2 Test Channel = HCH





### 5.1.1.2 Test Mode = CDMA1X/TM3

#### 5.1.1.2.1 Test Channel = LCH





5.1.1.2.2 Test Channel = HCH





5.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

5.1.1.3.1 Test Channel = LCH





5.1.1.3.2 Test Channel = HCH





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

5.1.1.4.1 Test Channel = LCH





5.1.1.4.2 Test Channel = HCH





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

5.1.1.5.1 Test Channel = LCH

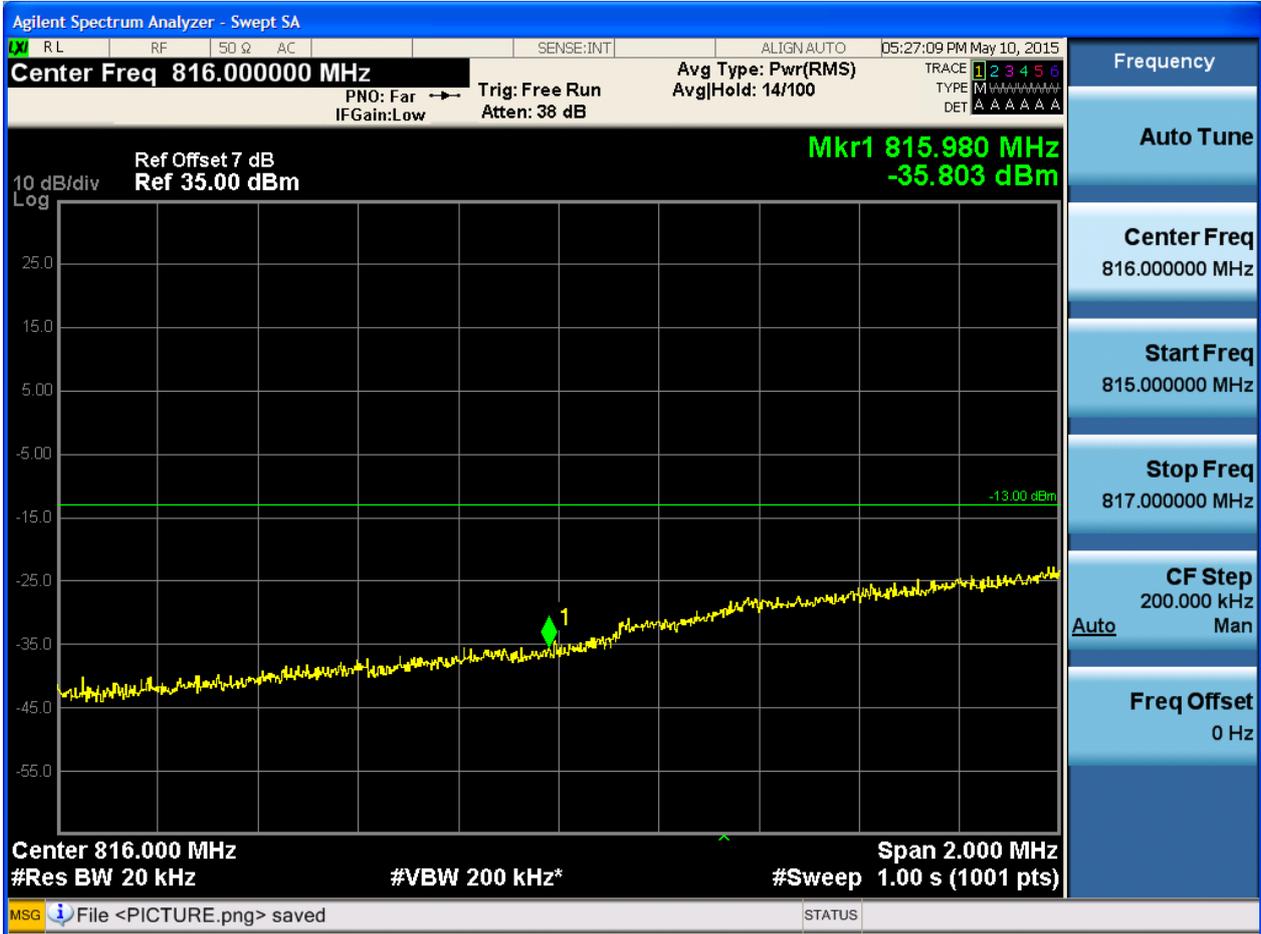






5.1.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

5.1.1.6.1 Test Channel = LCH





5.1.1.6.2 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.

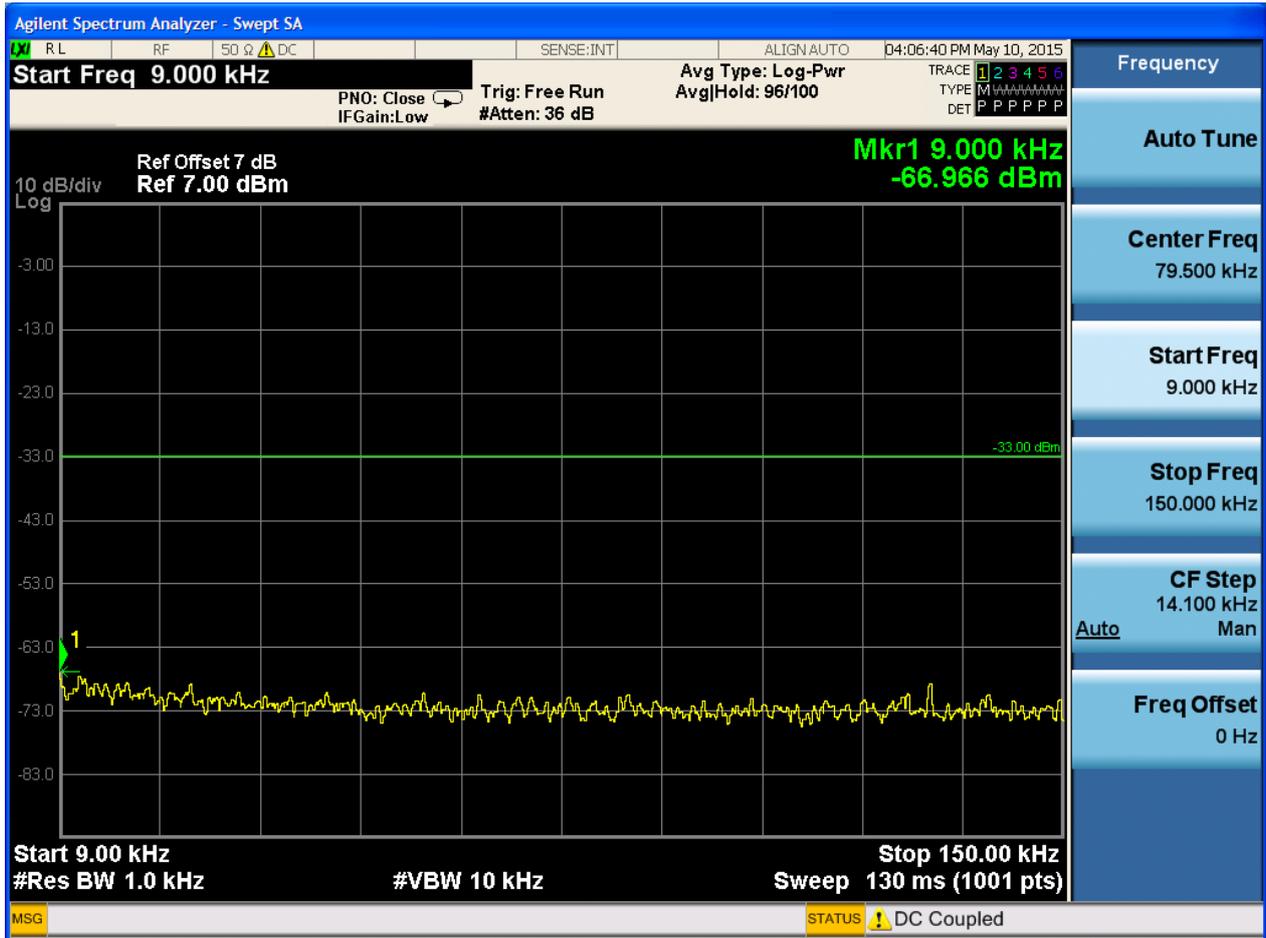
### Part I - Test Plots

#### 6.1 For CDMA1X

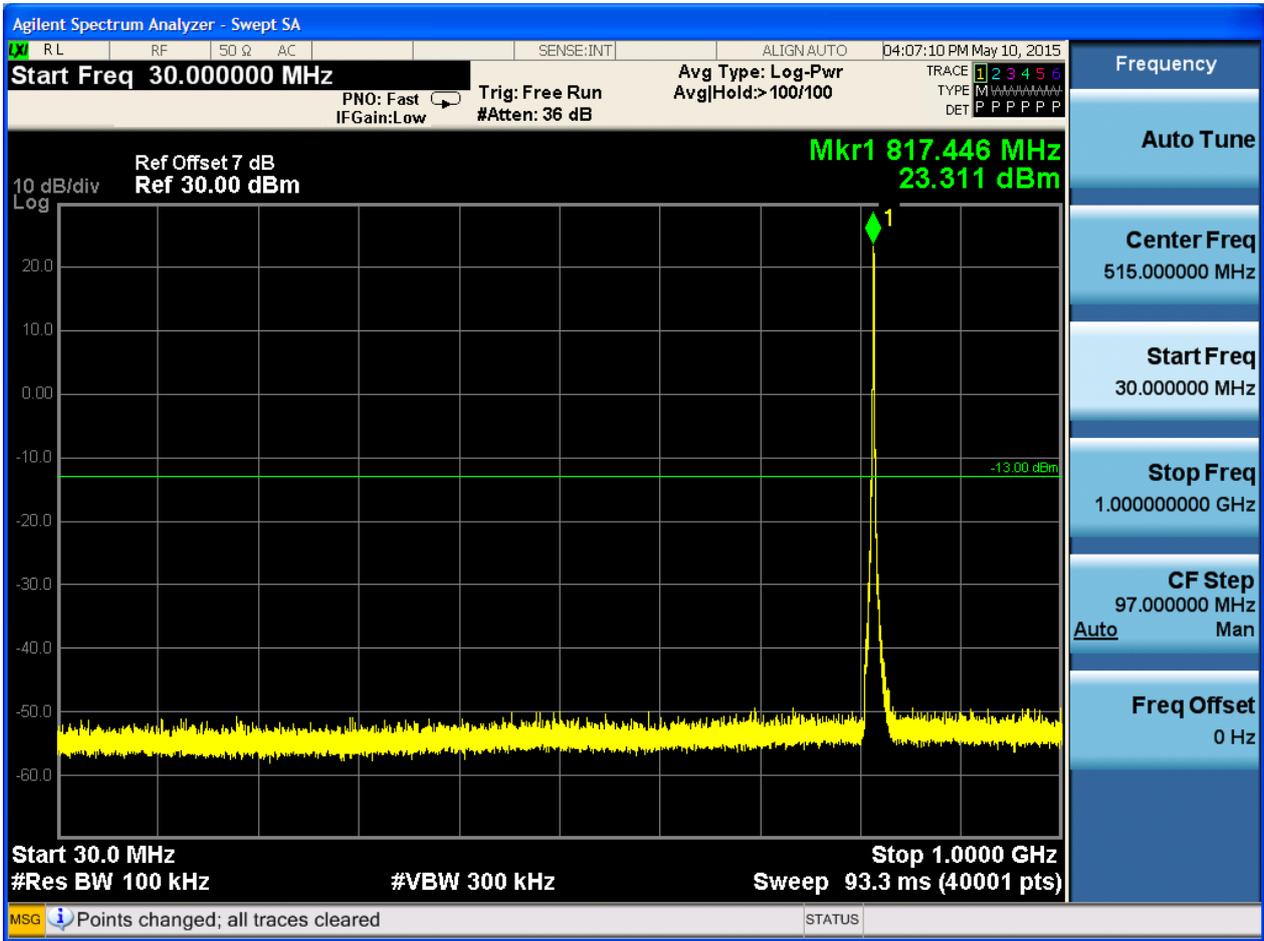
##### 6.1.1 Test Band = BC10

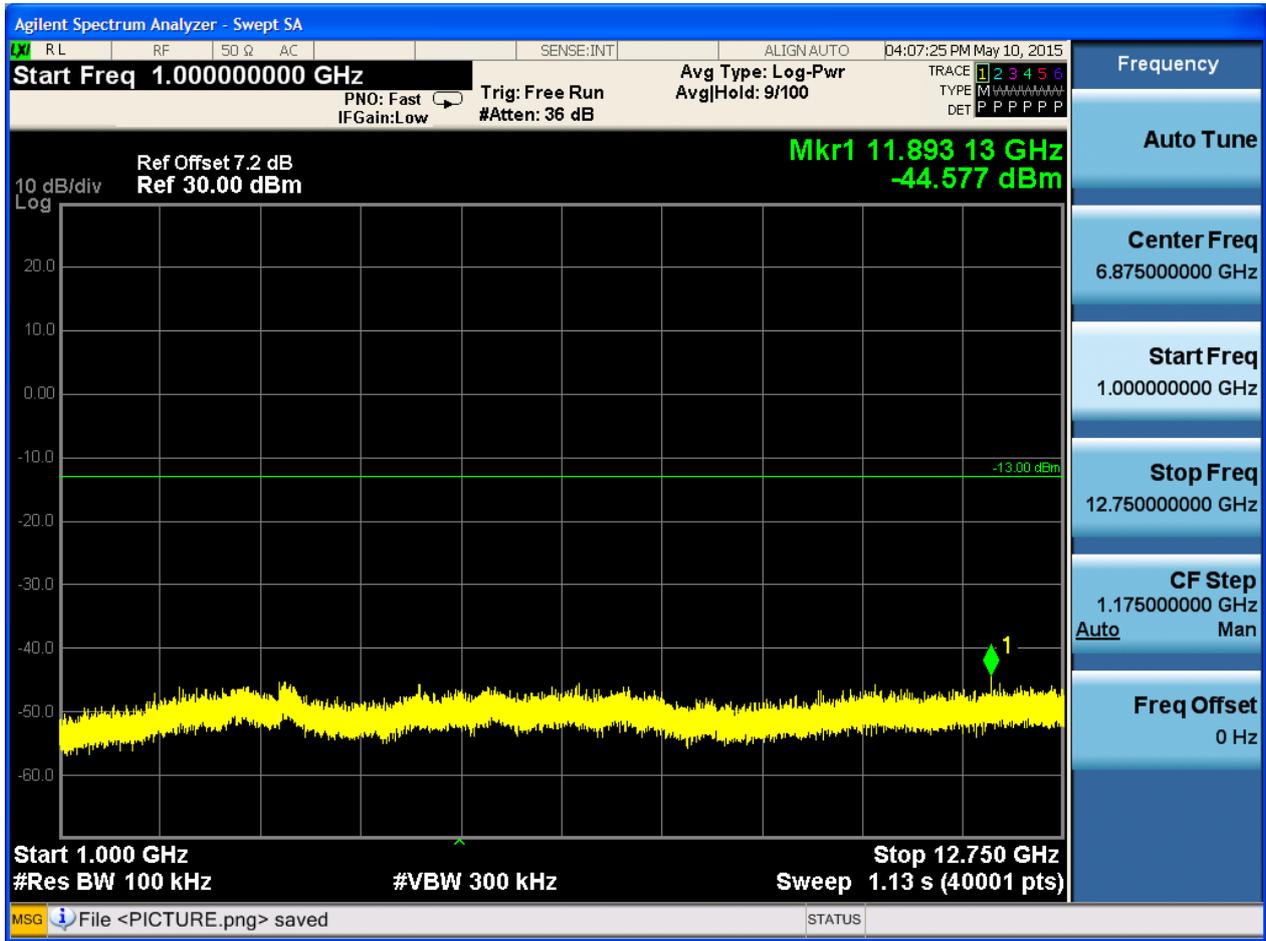
##### 6.1.1.1 Test Mode = CDMA1X/TM1

##### 6.1.1.1.1 Test Channel = LCH



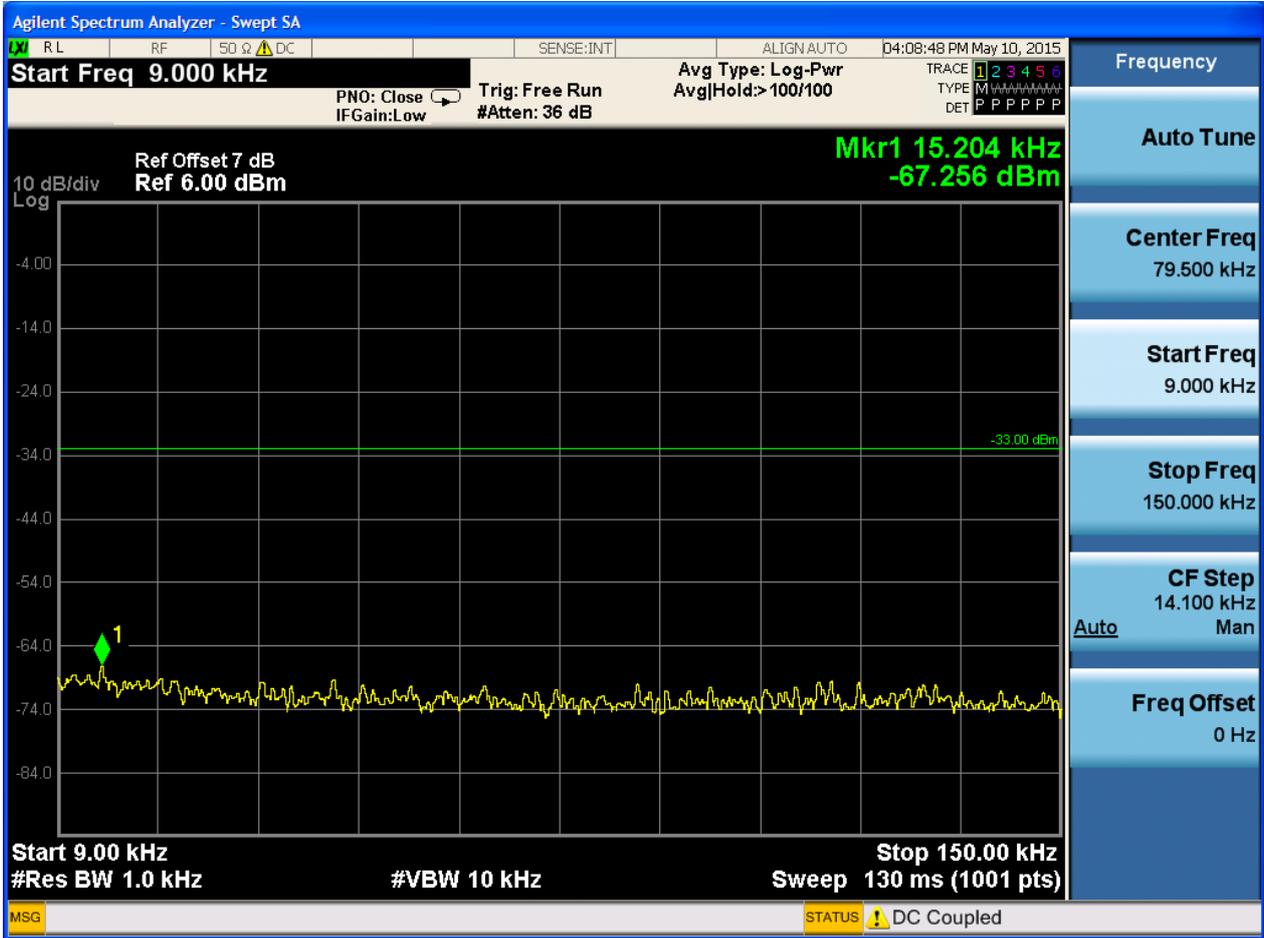




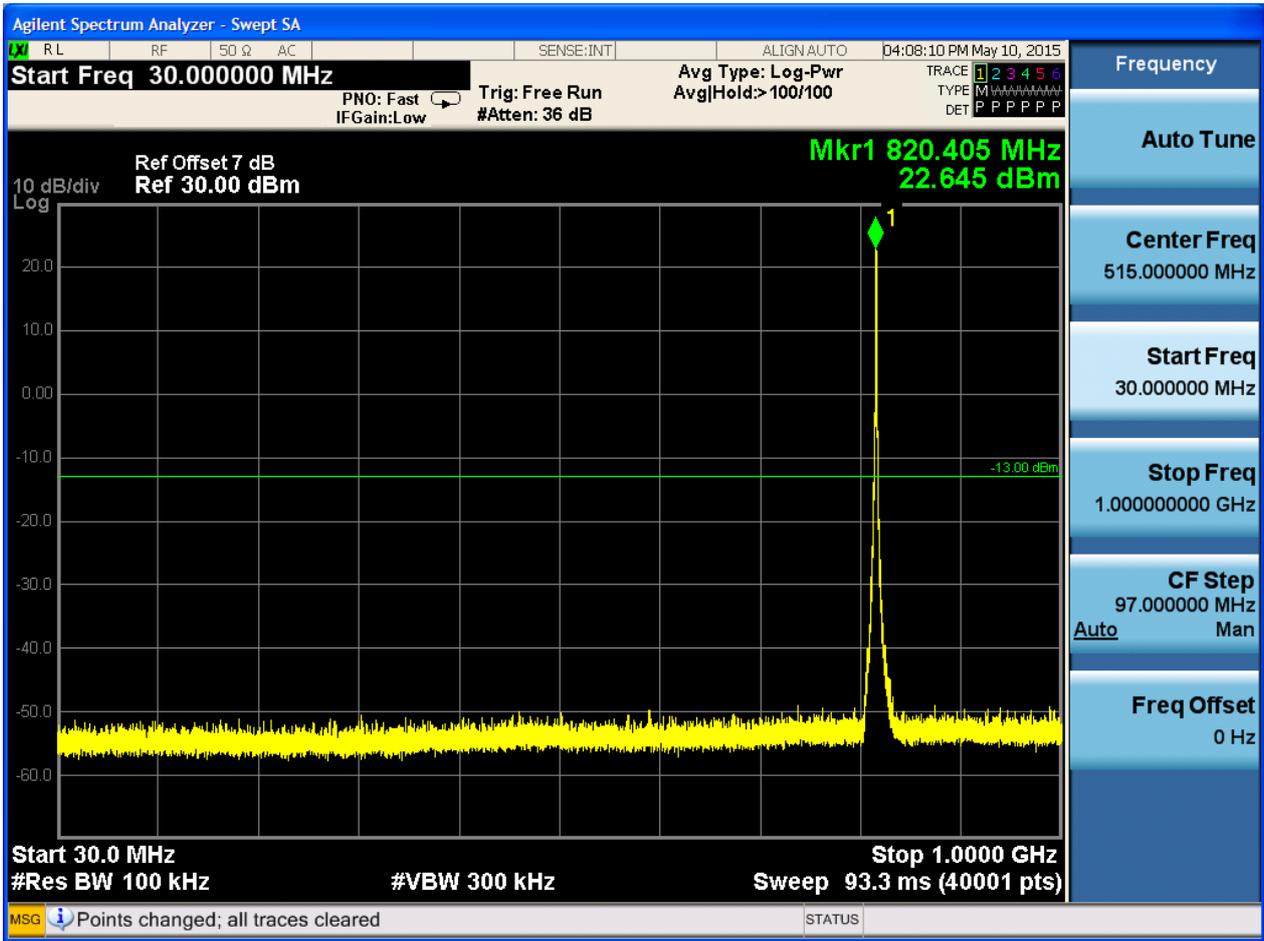


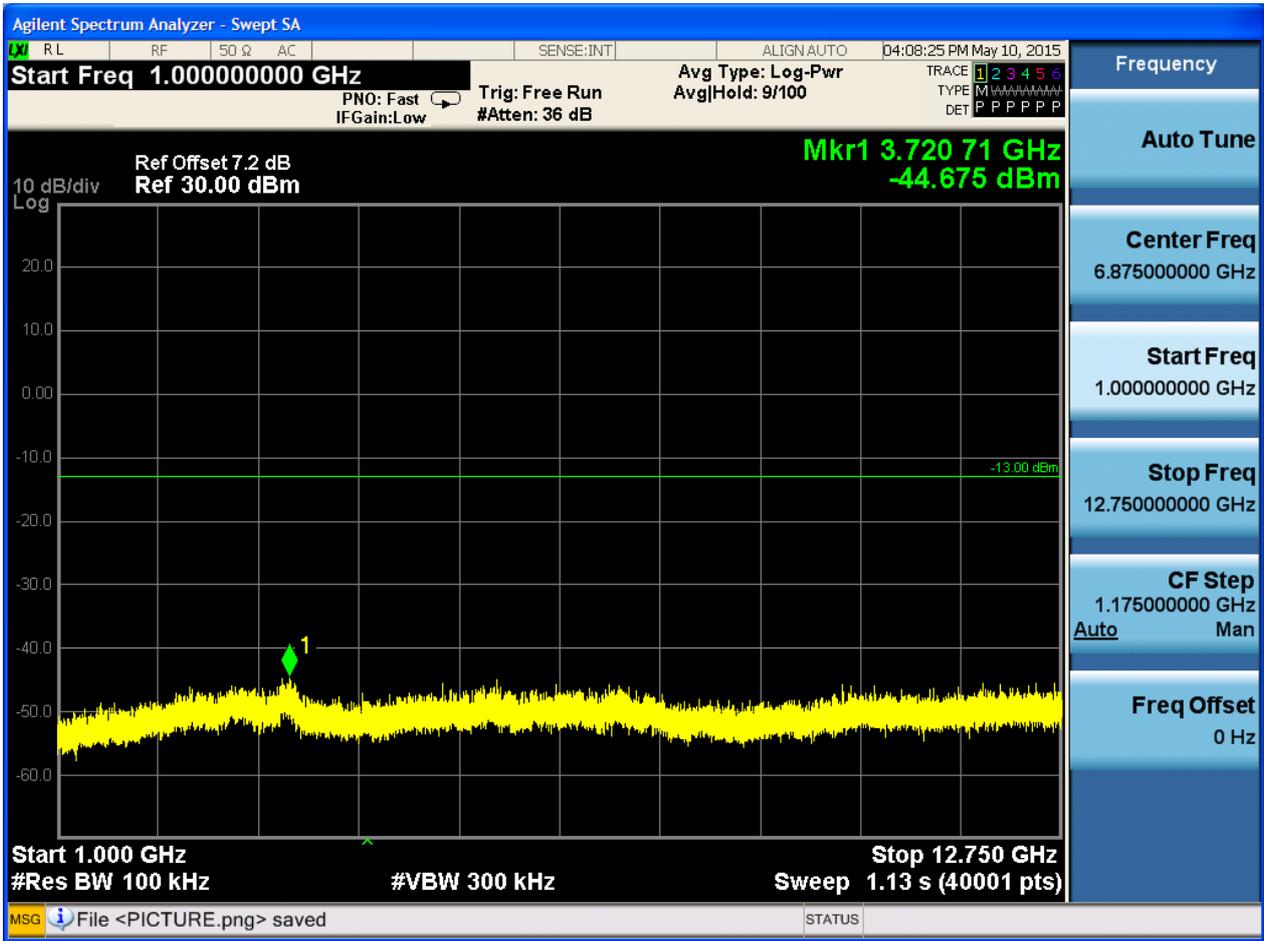


6.1.1.1.2 Test Channel = MCH



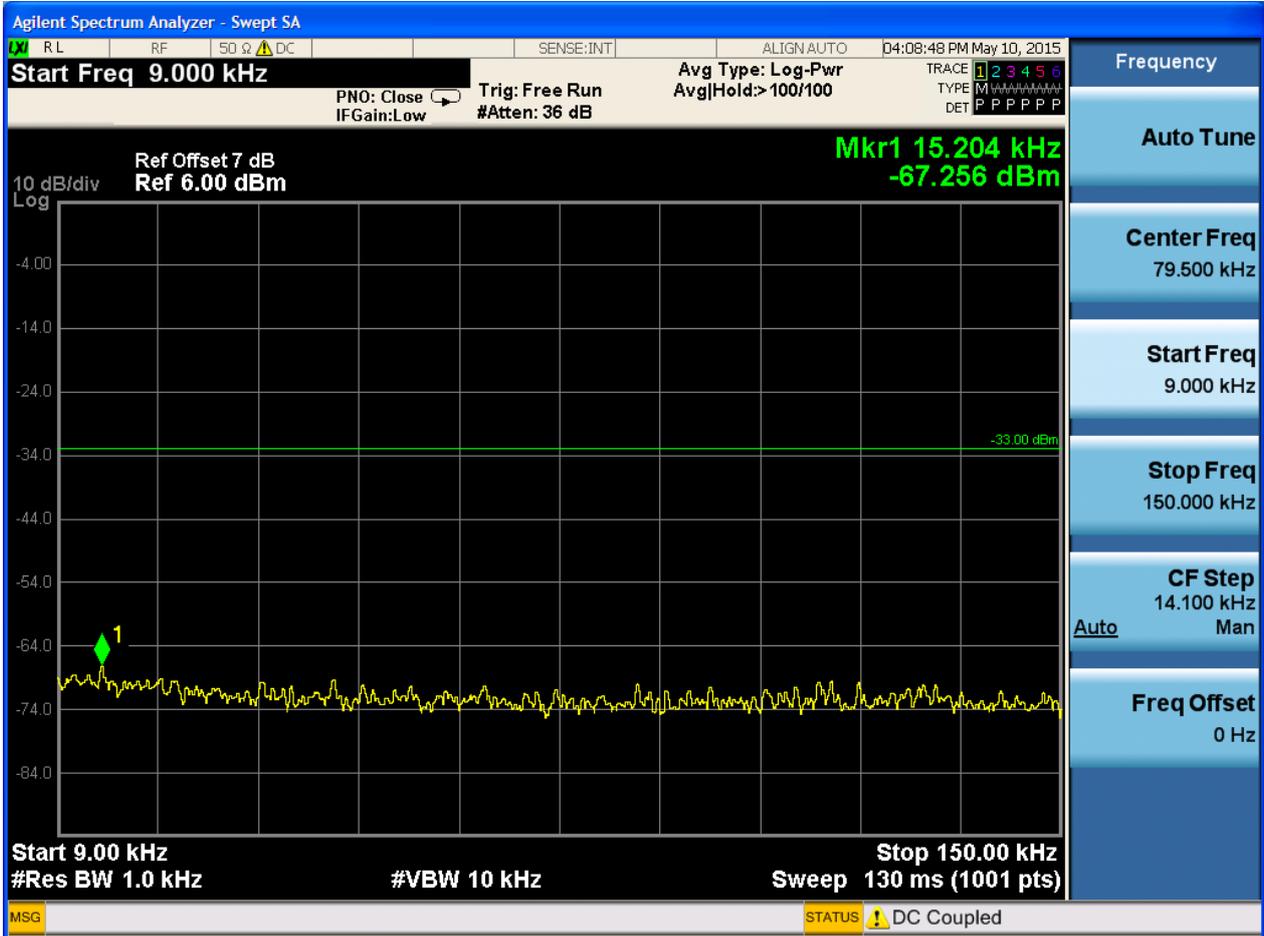




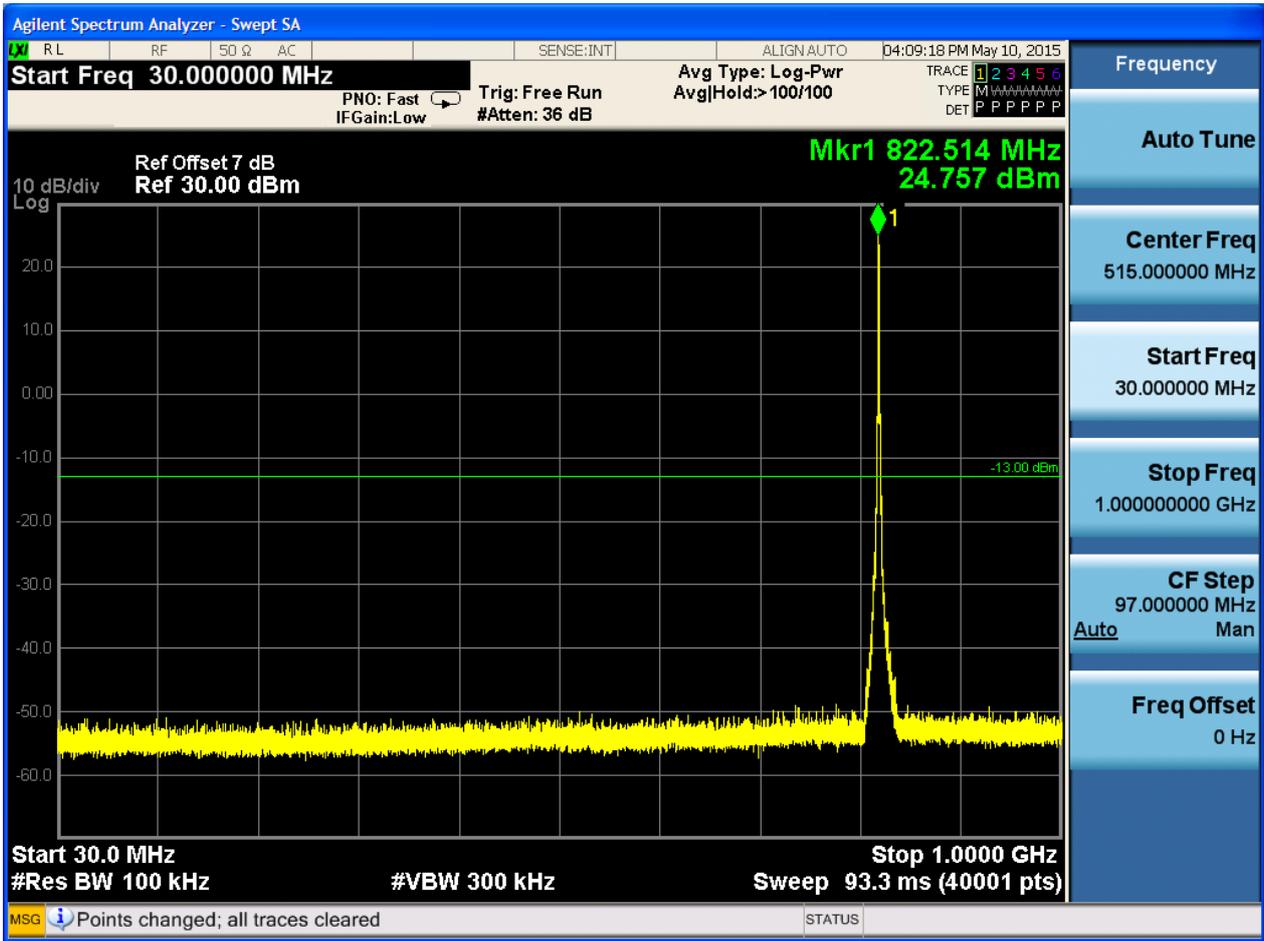




6.1.1.1.3 Test Channel = HCH

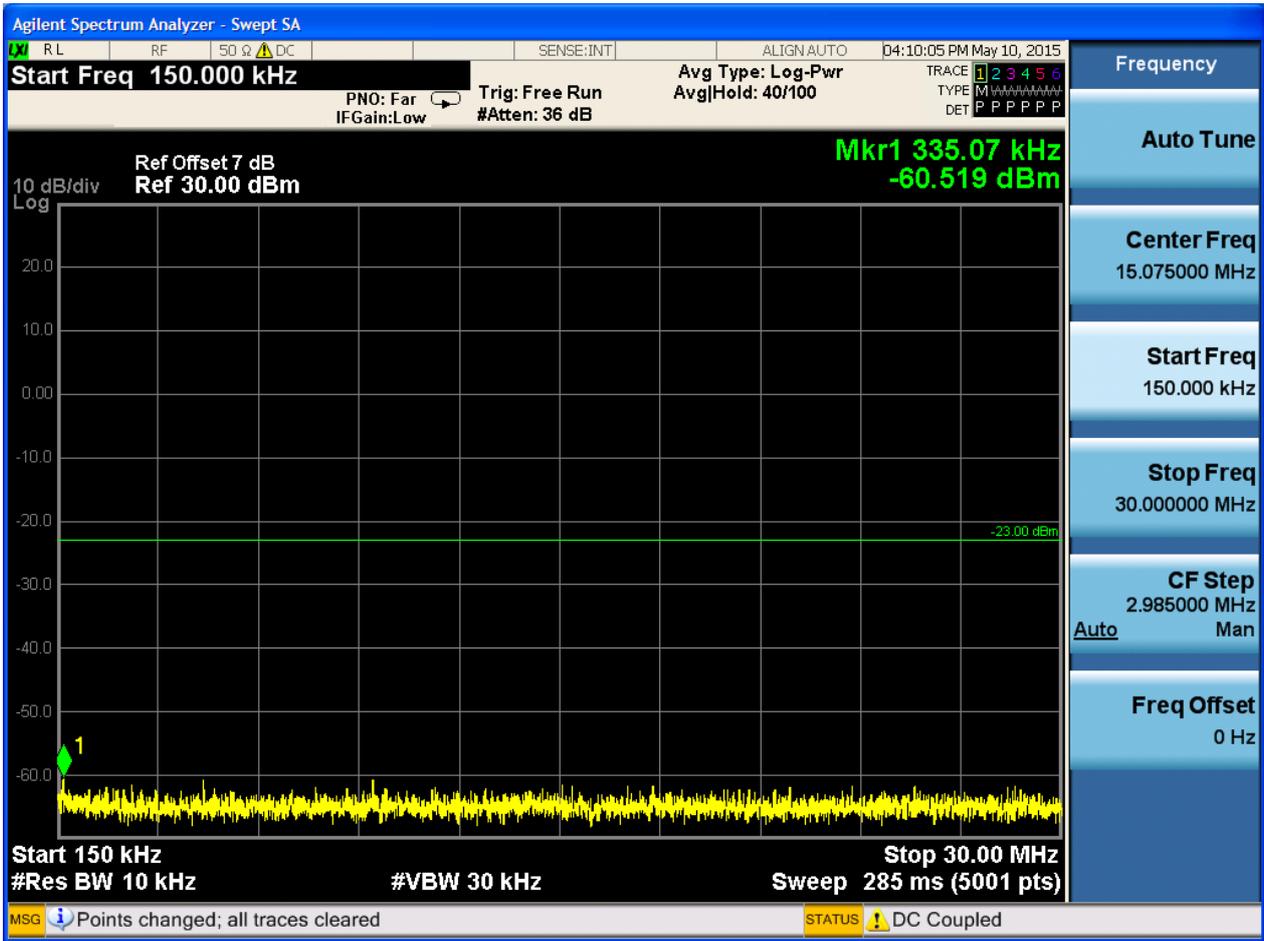




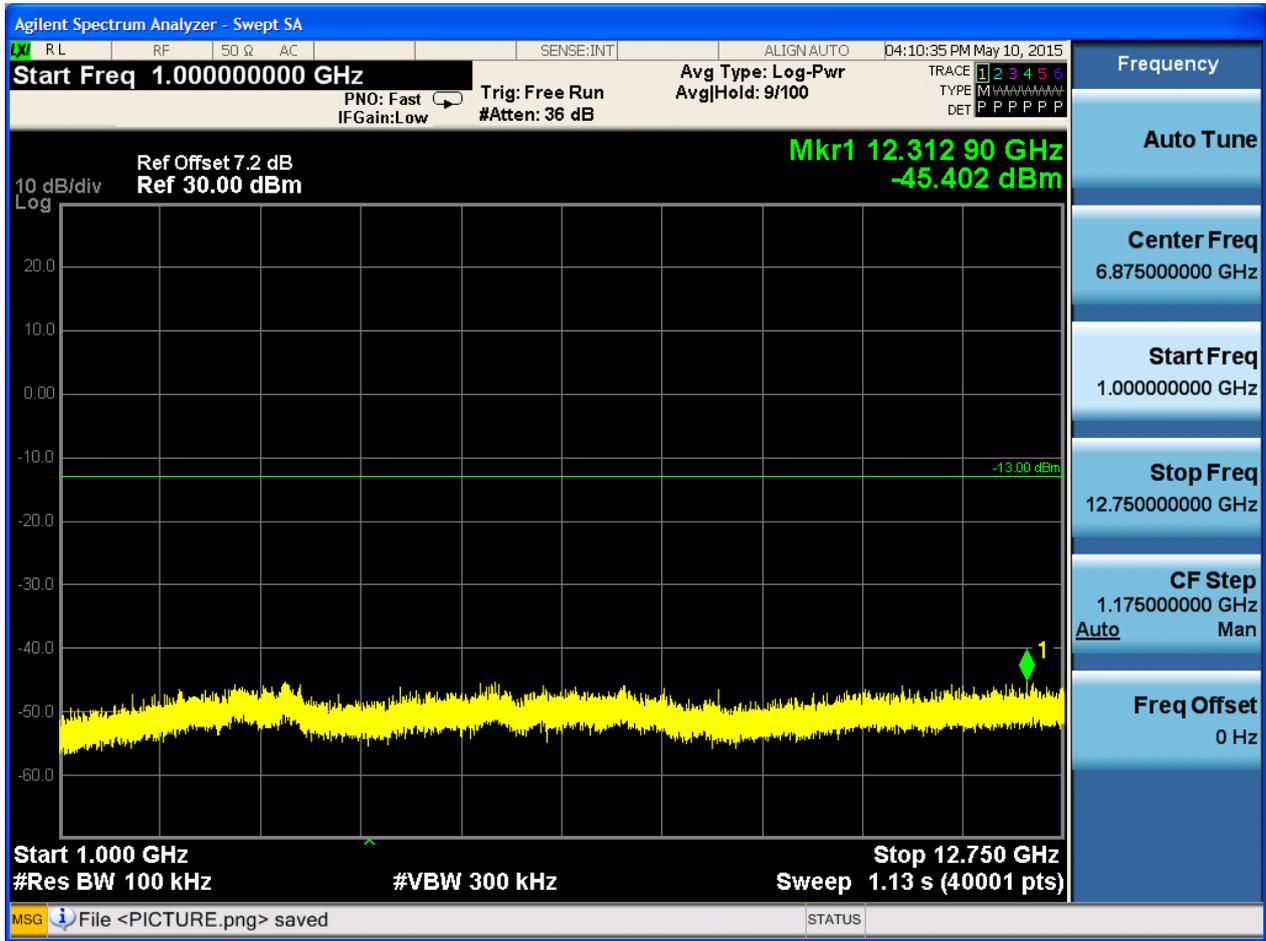






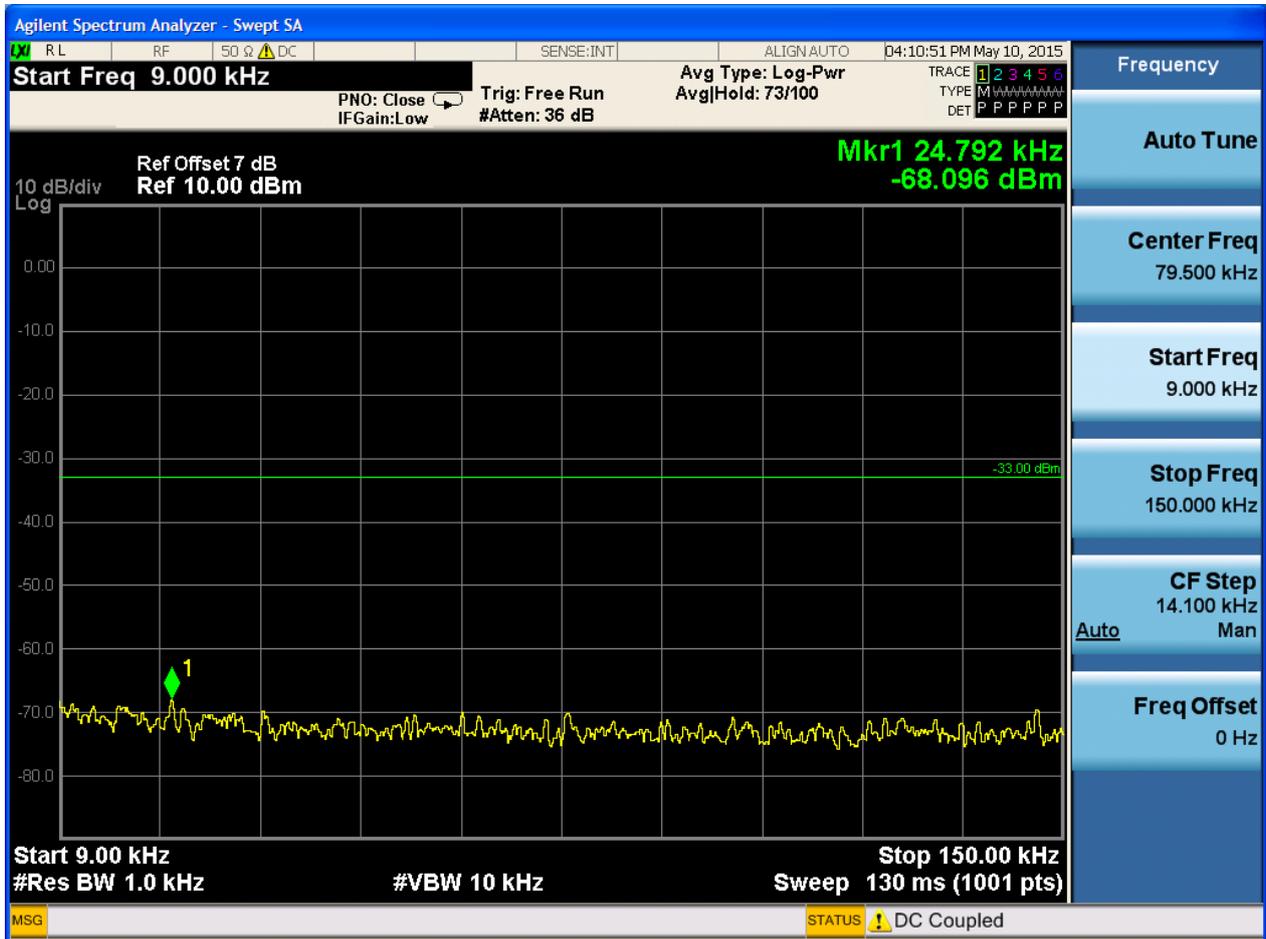


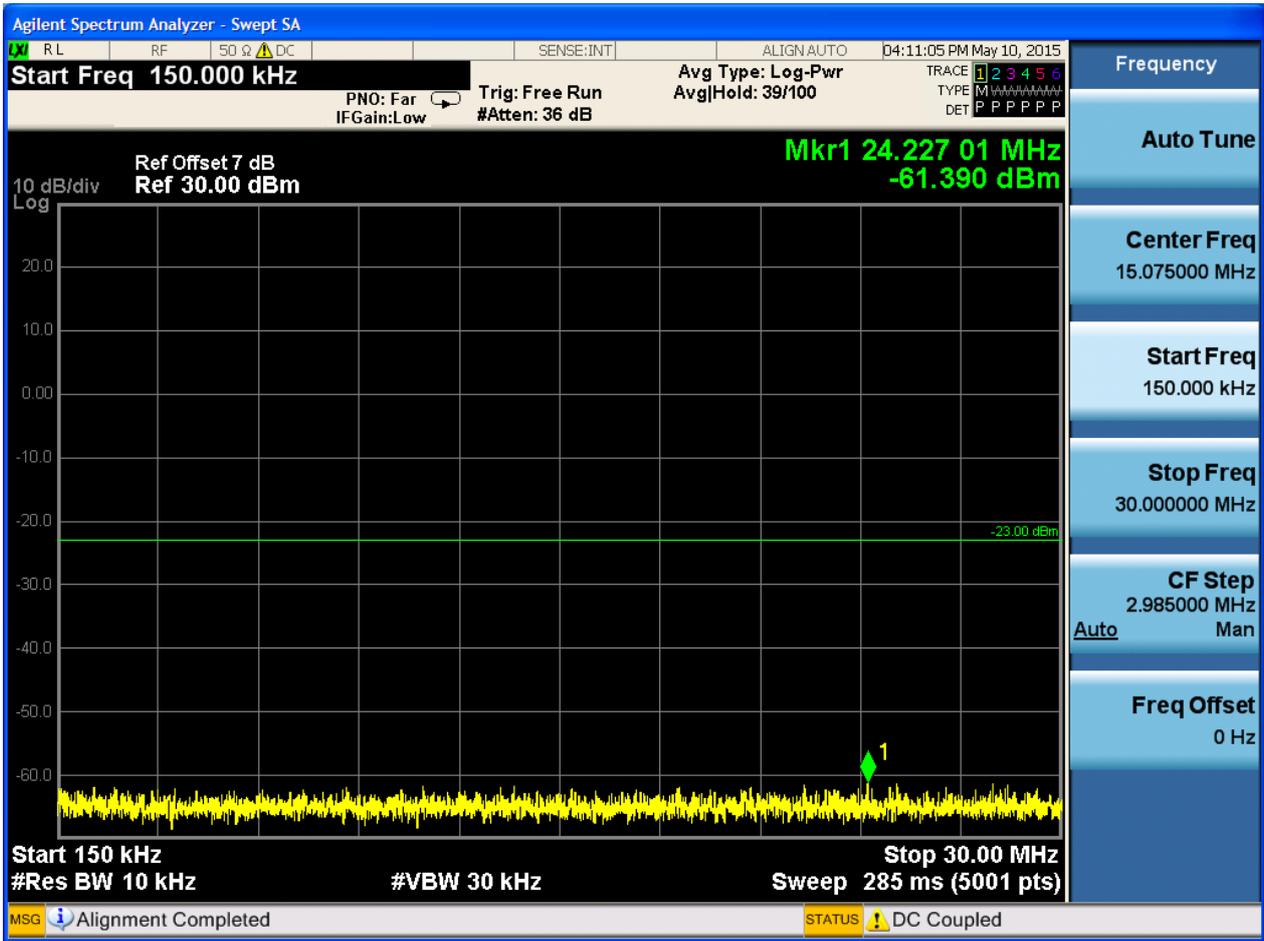


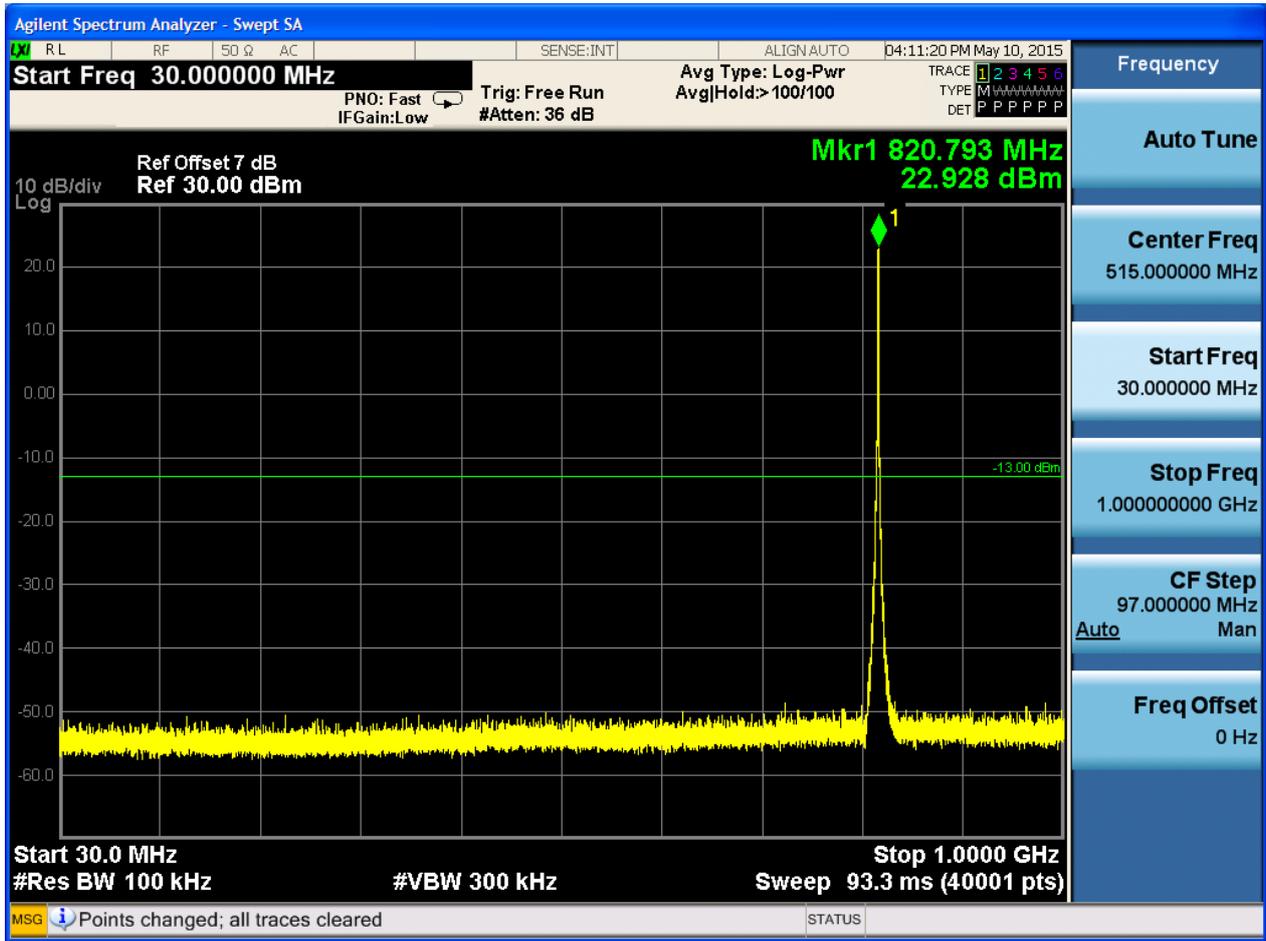


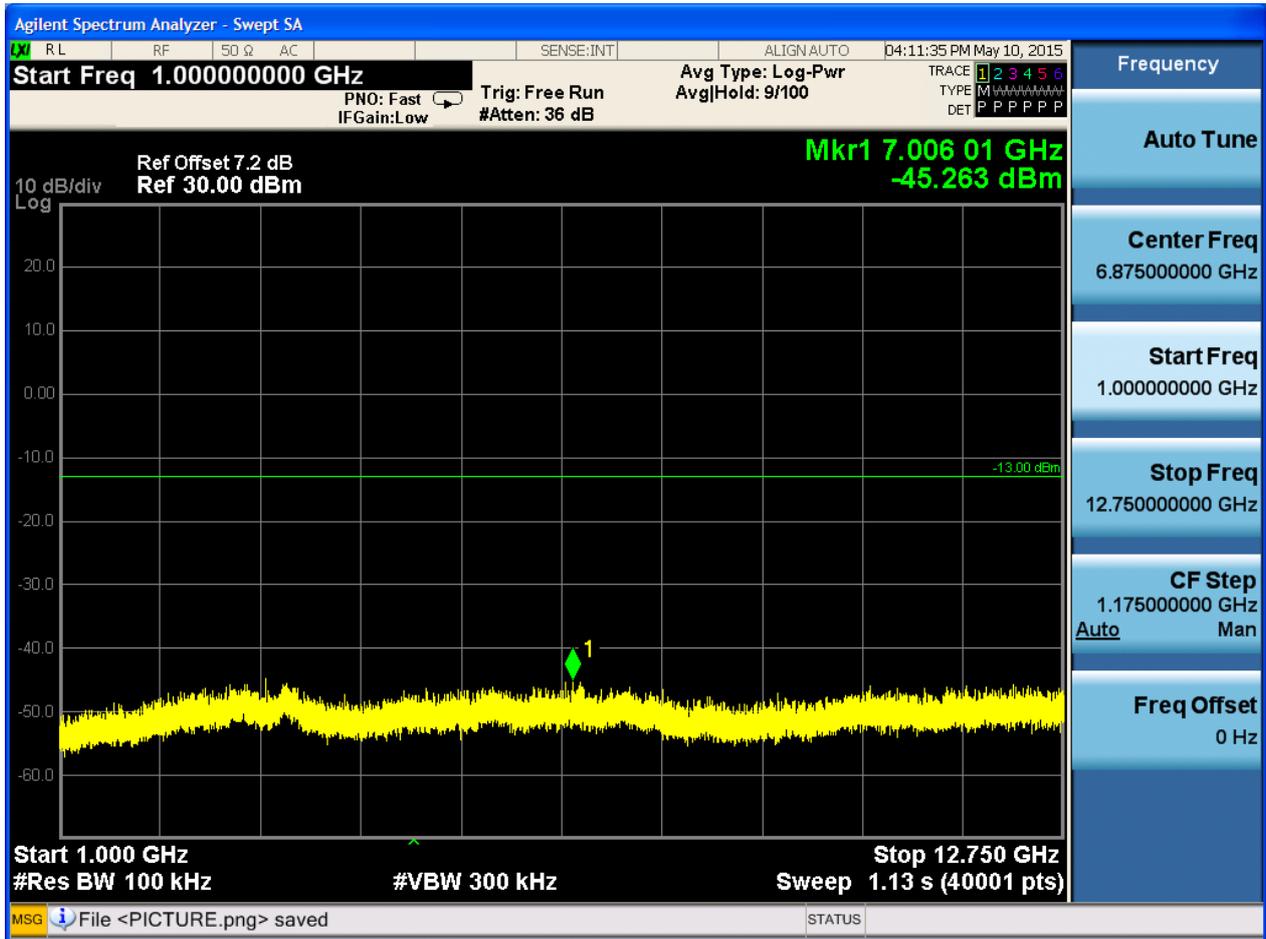


### 6.1.1.2.2 Test Channel = MCH



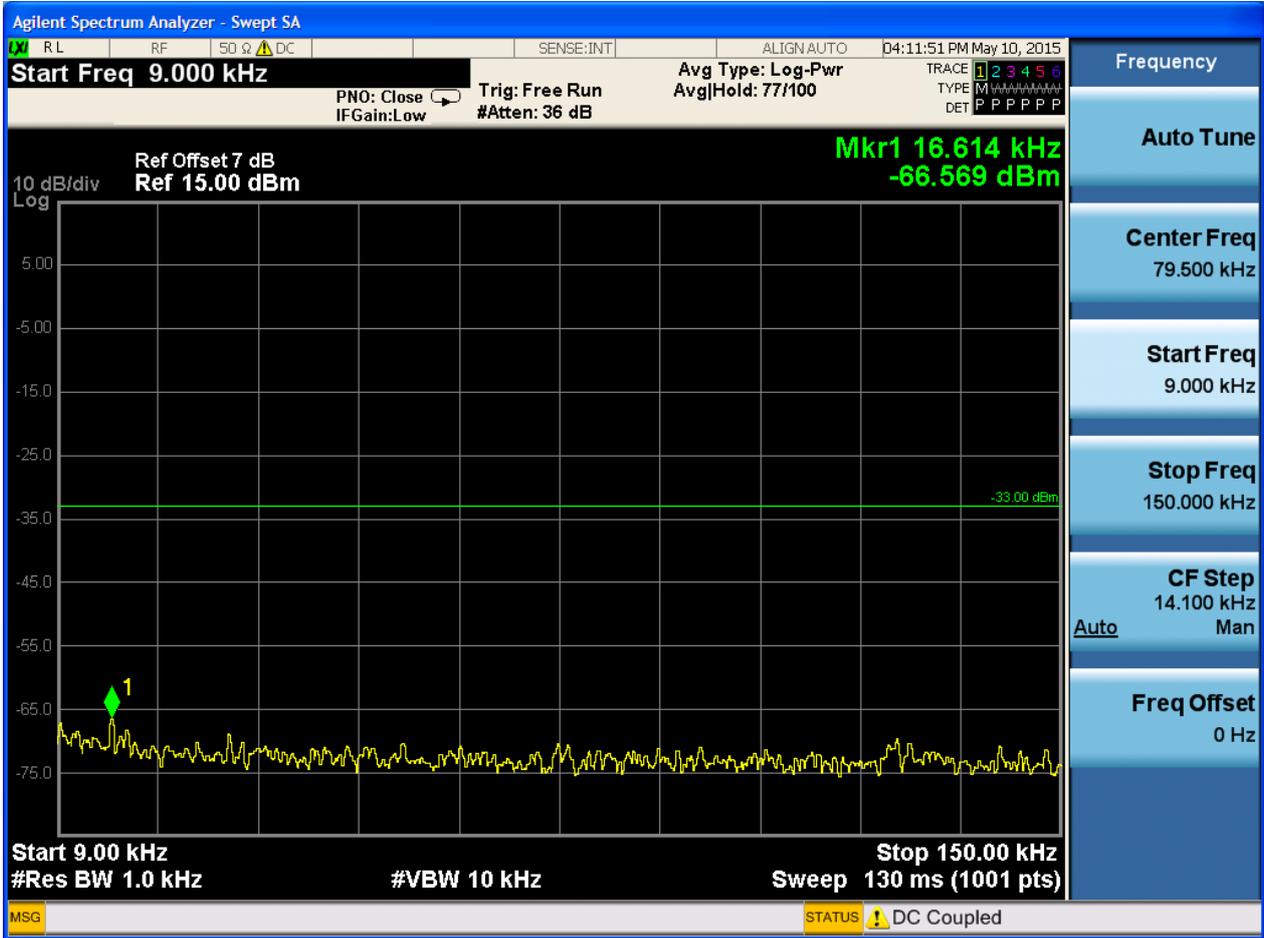




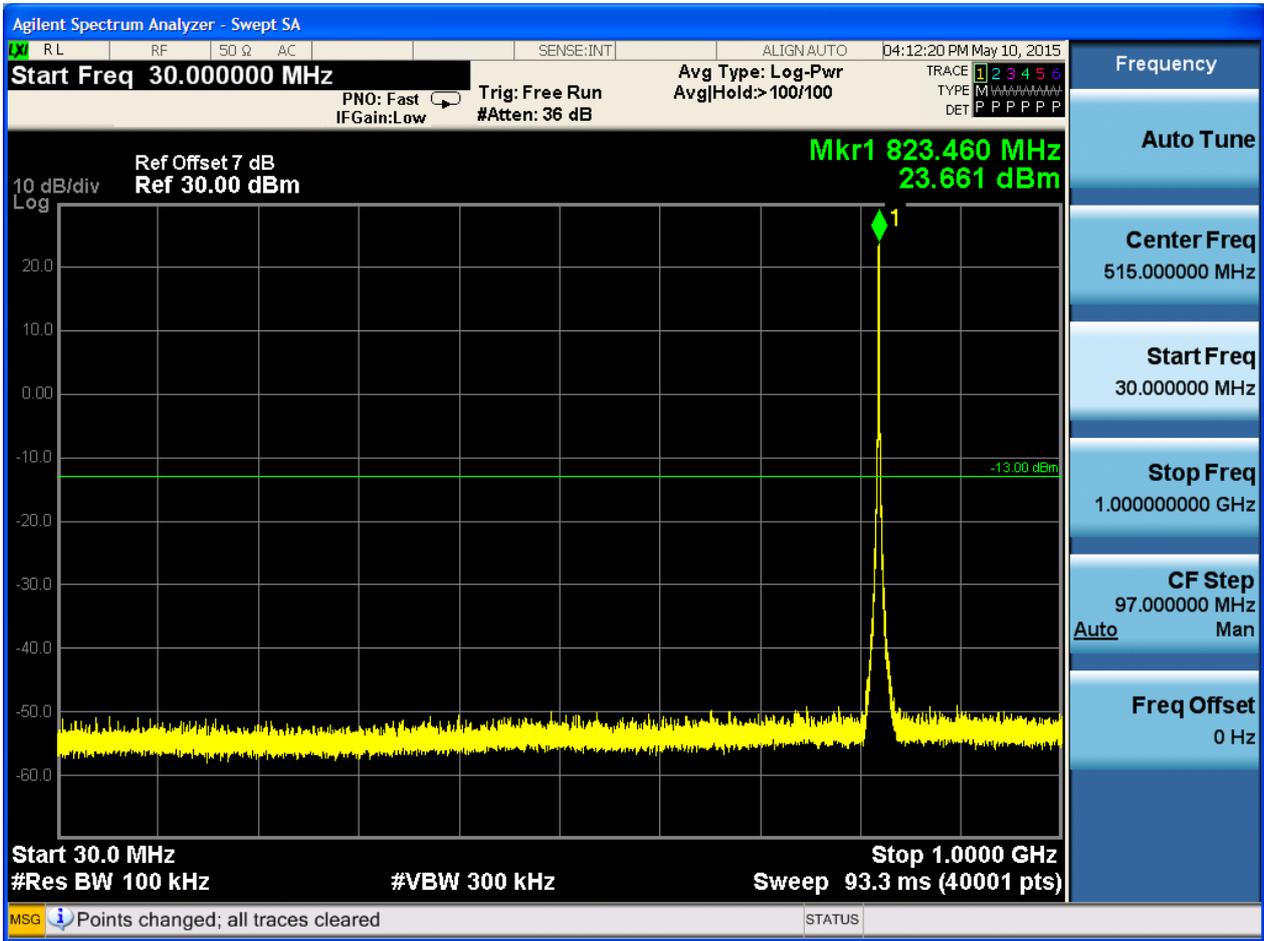




6.1.1.2.3 Test Channel = HCH





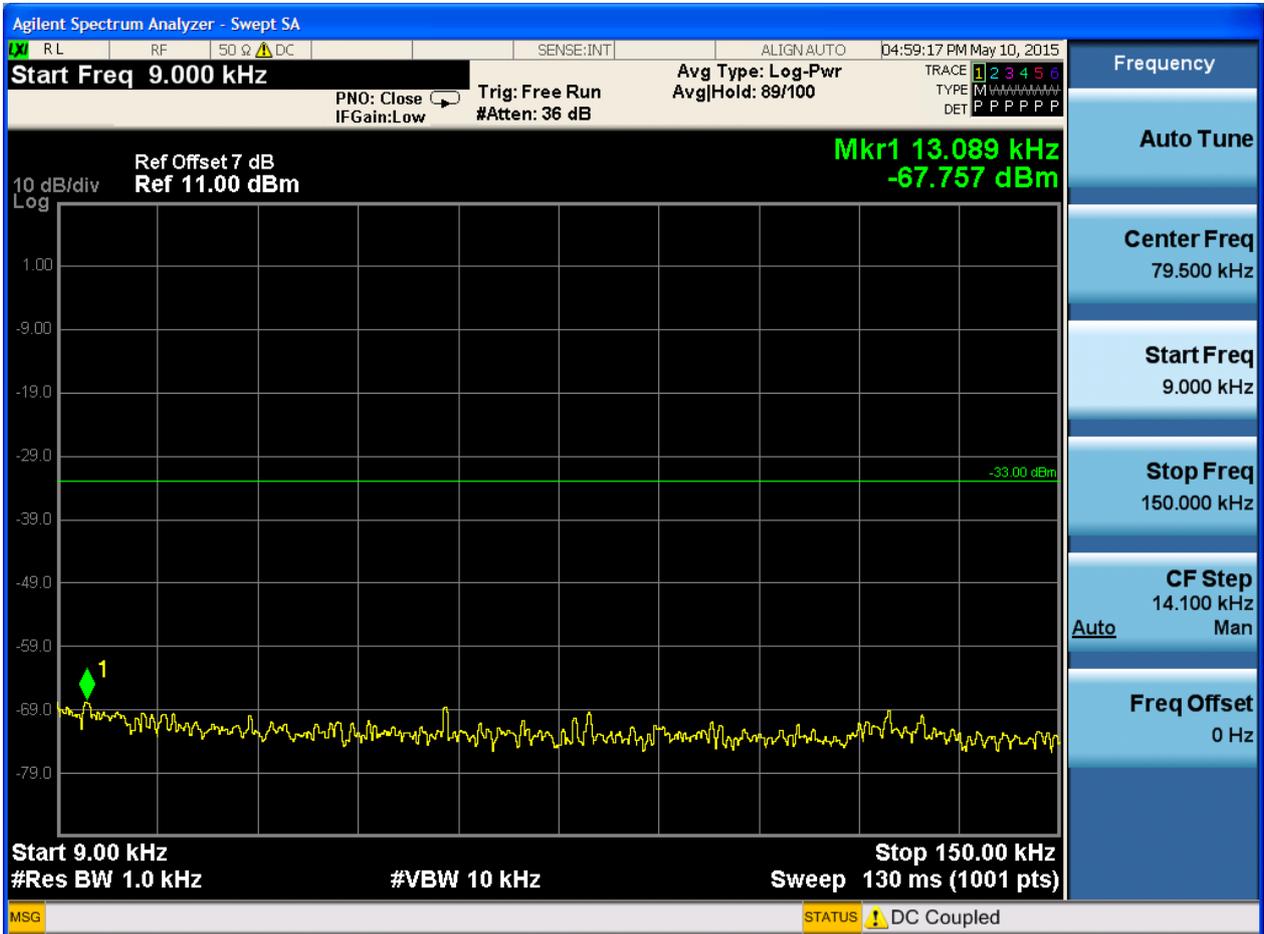




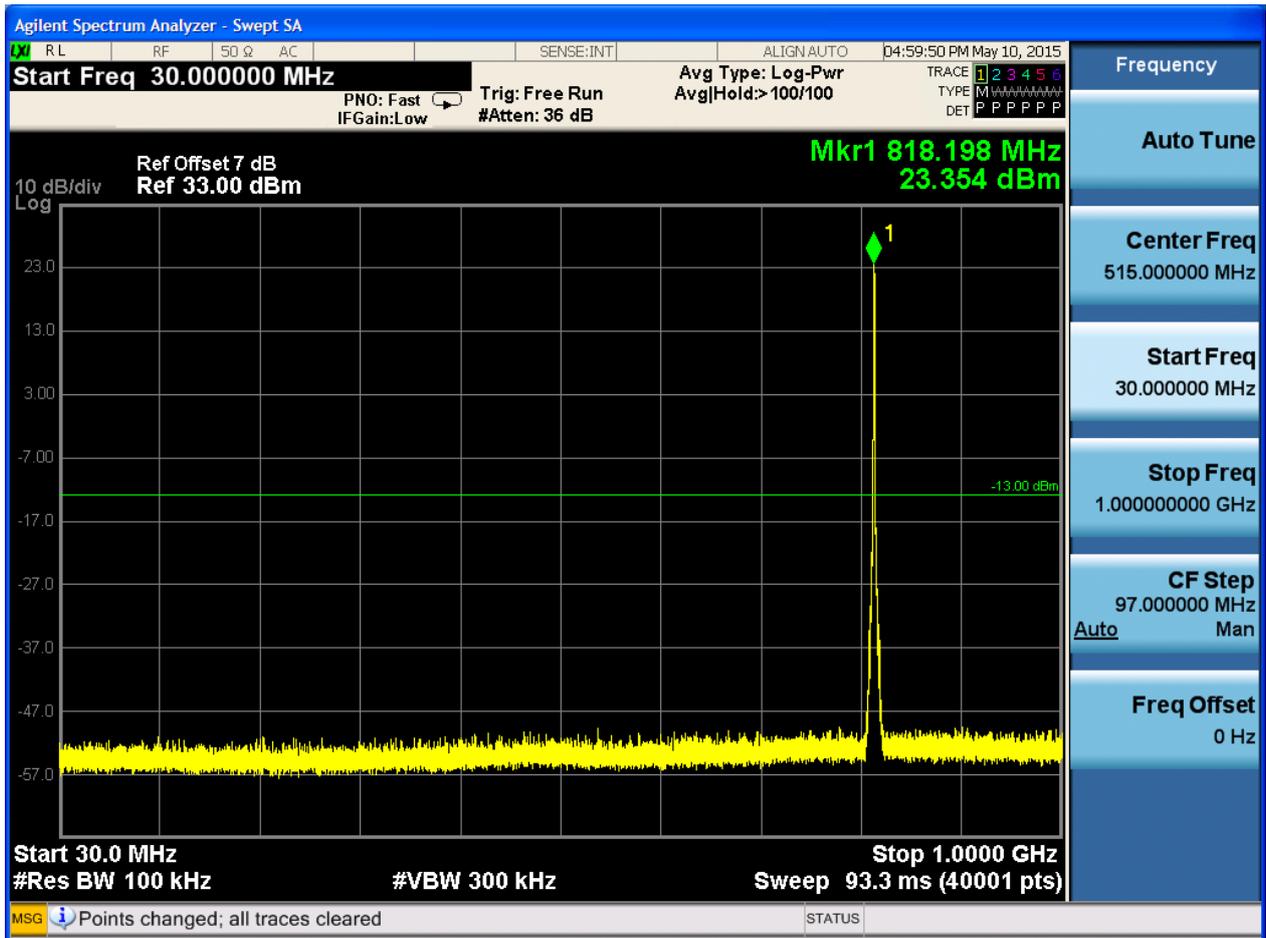


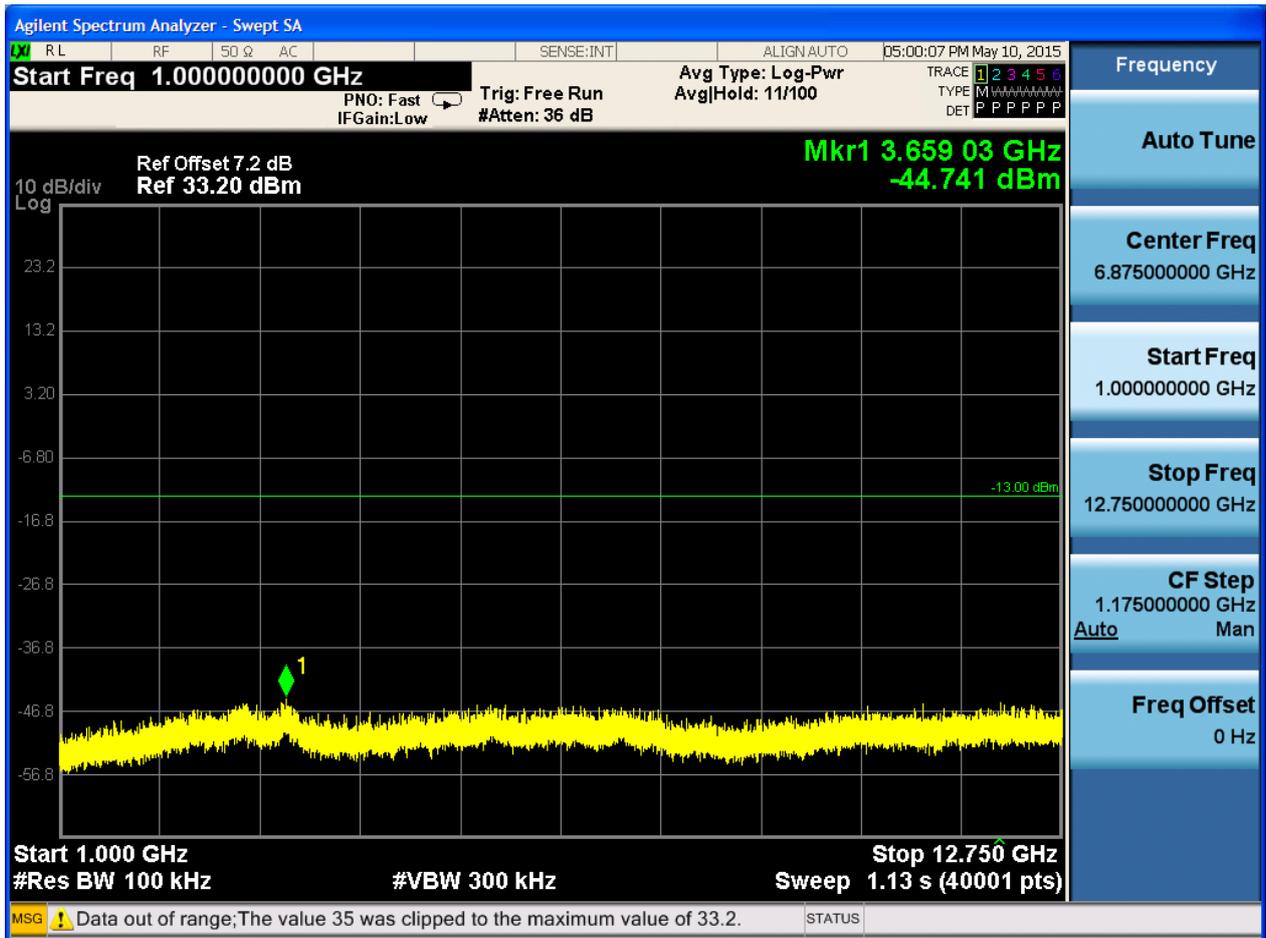
6.1.1.3 Test Mode = CDMA/EV-DO/Subtype0

6.1.1.3.1 Test Channel = LCH

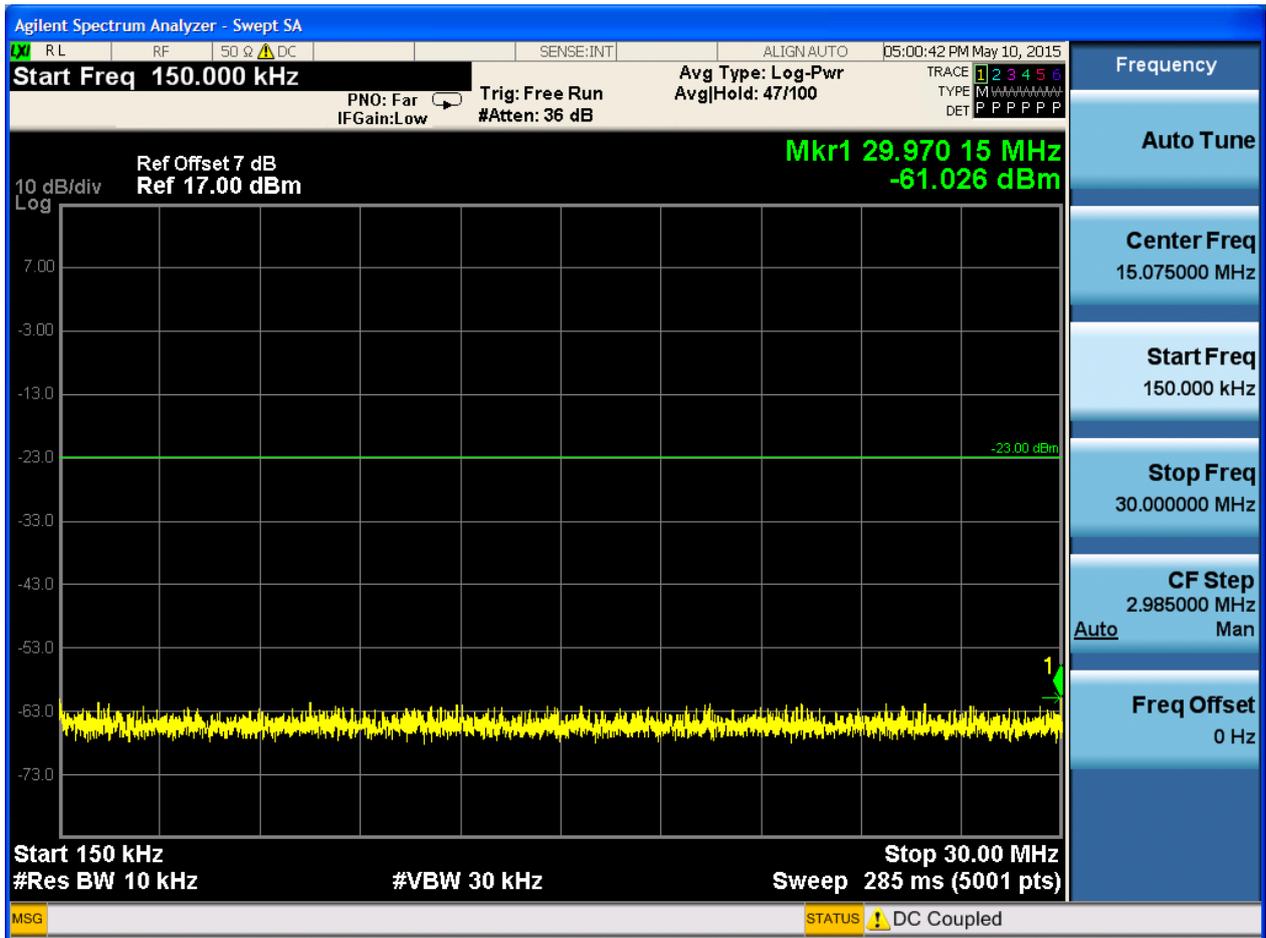


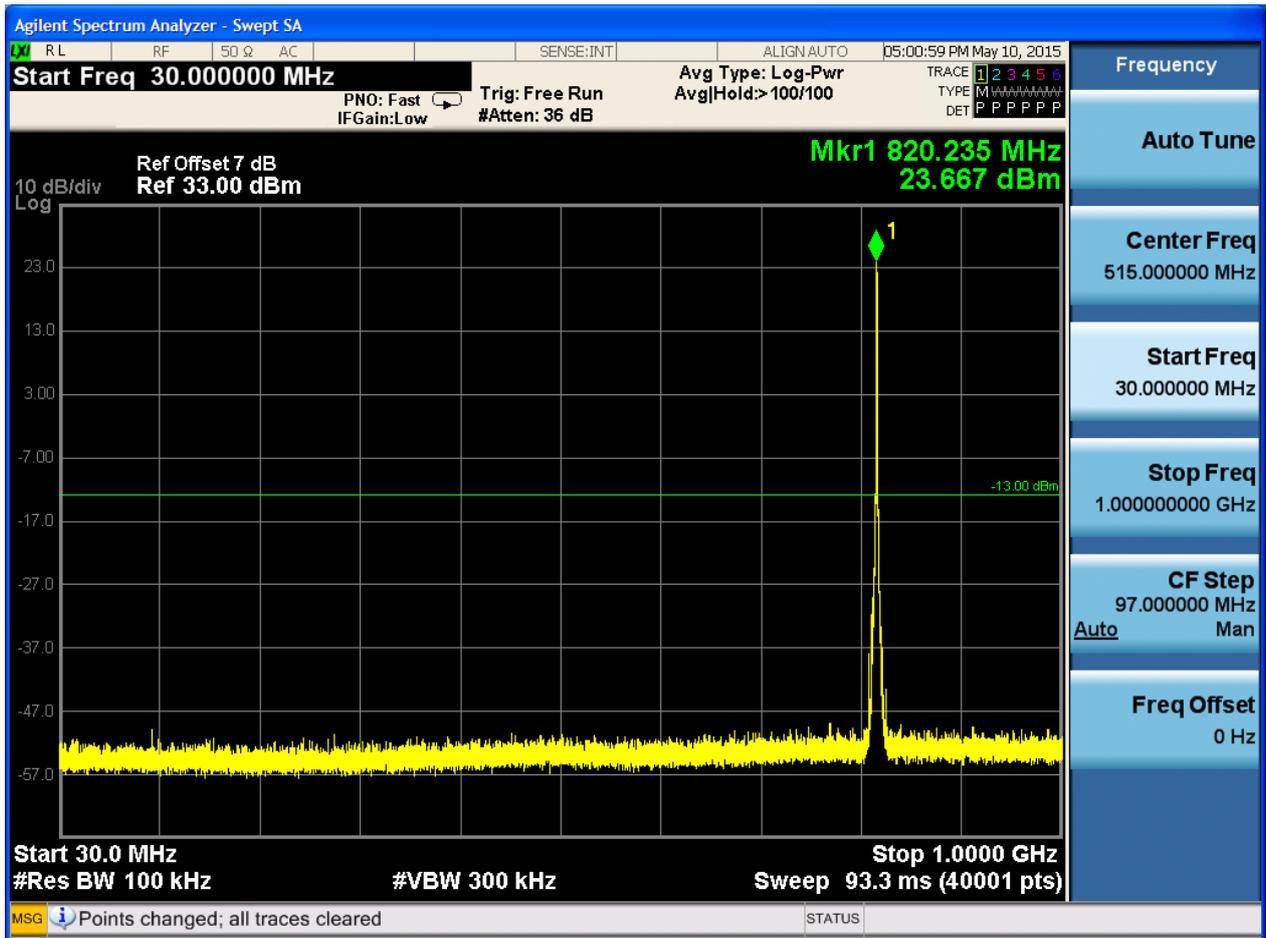


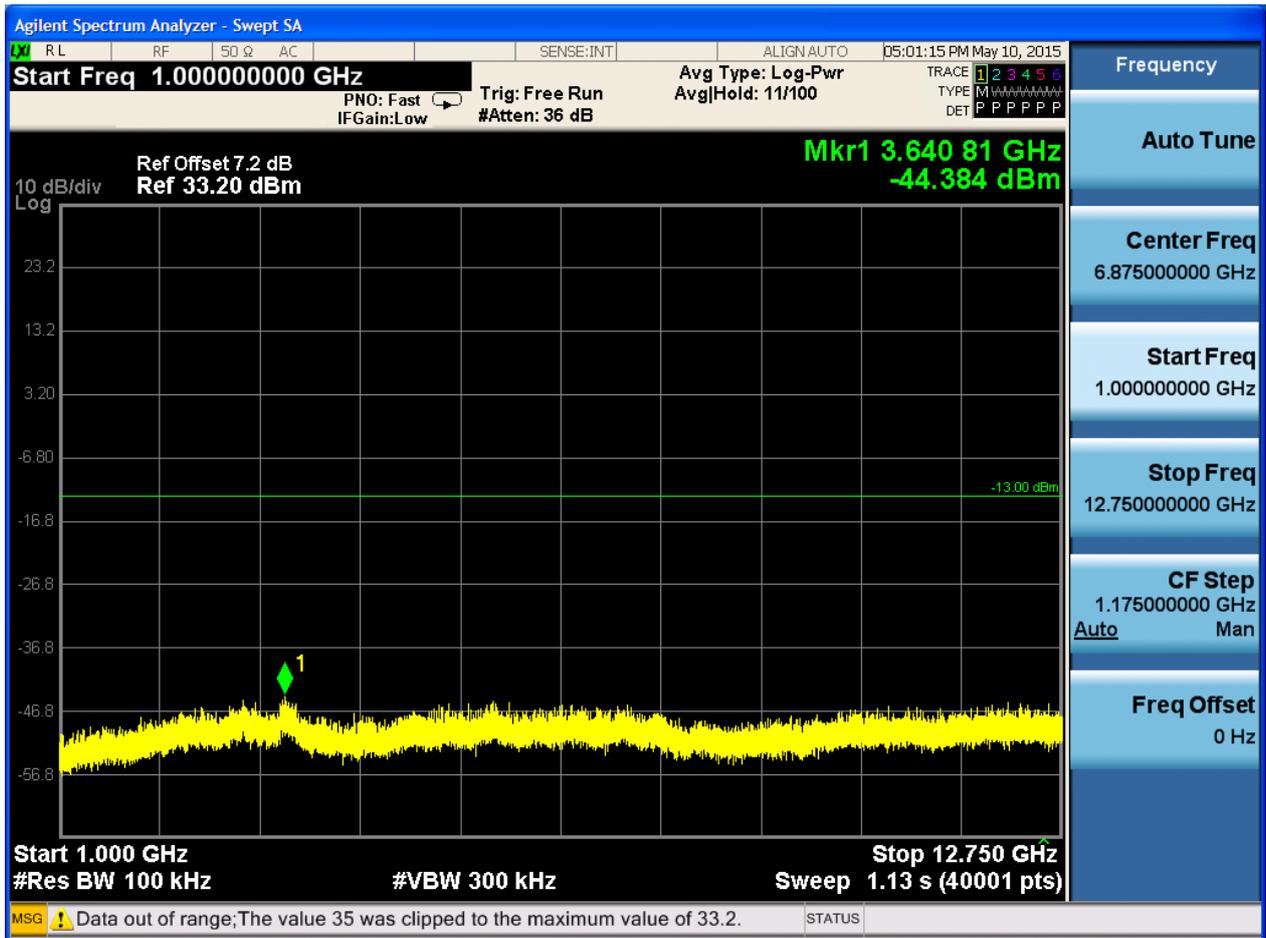






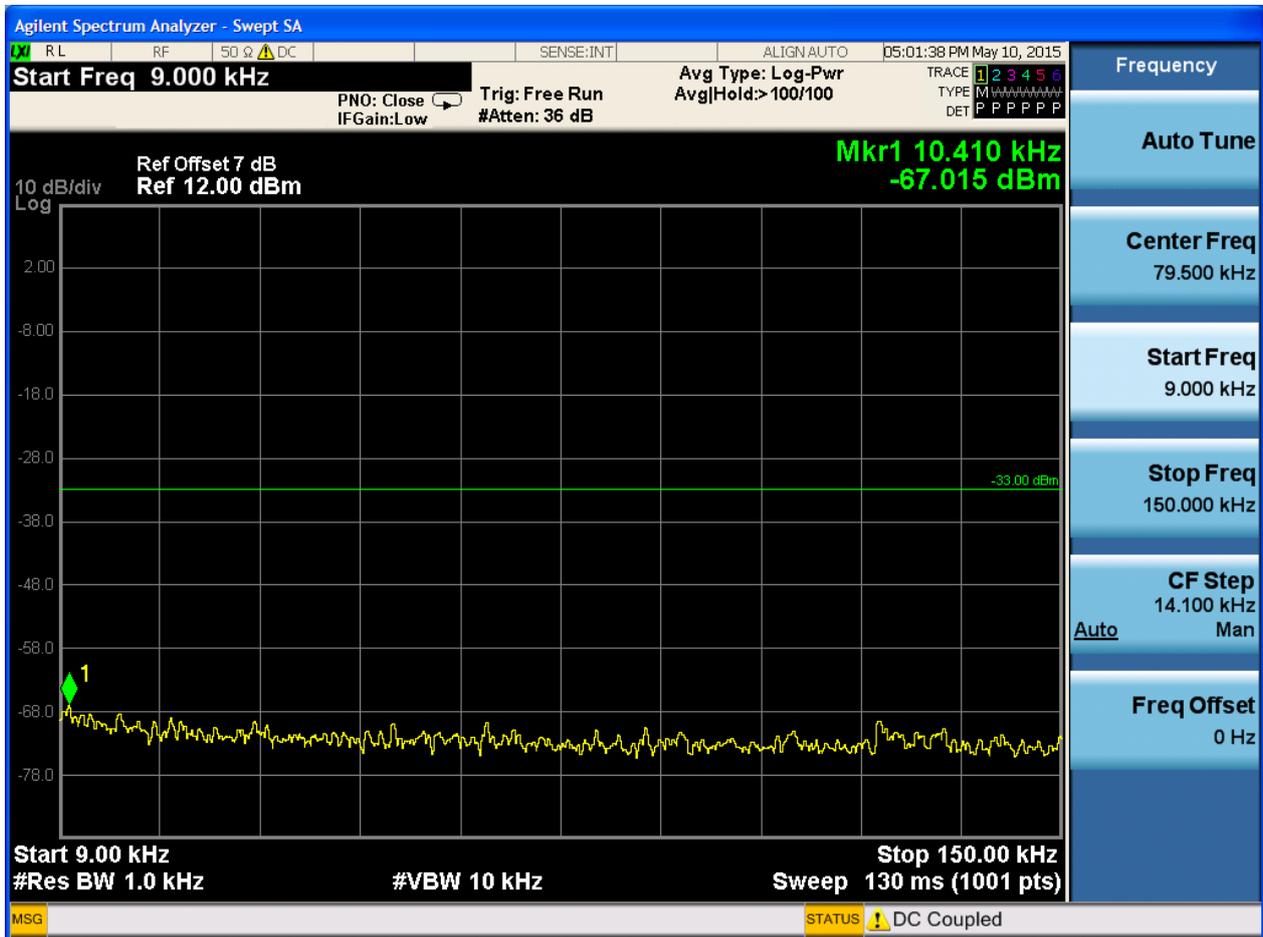




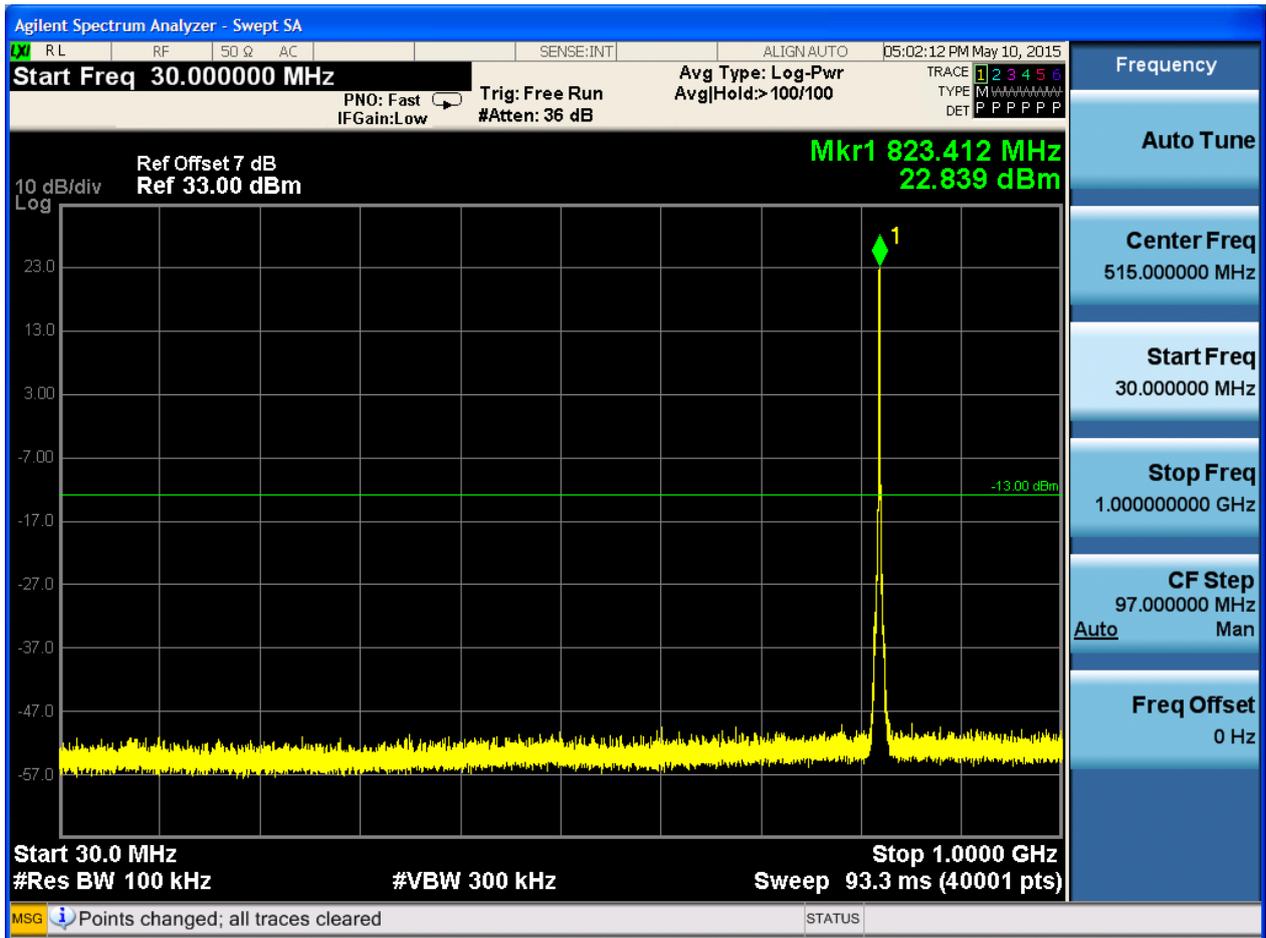


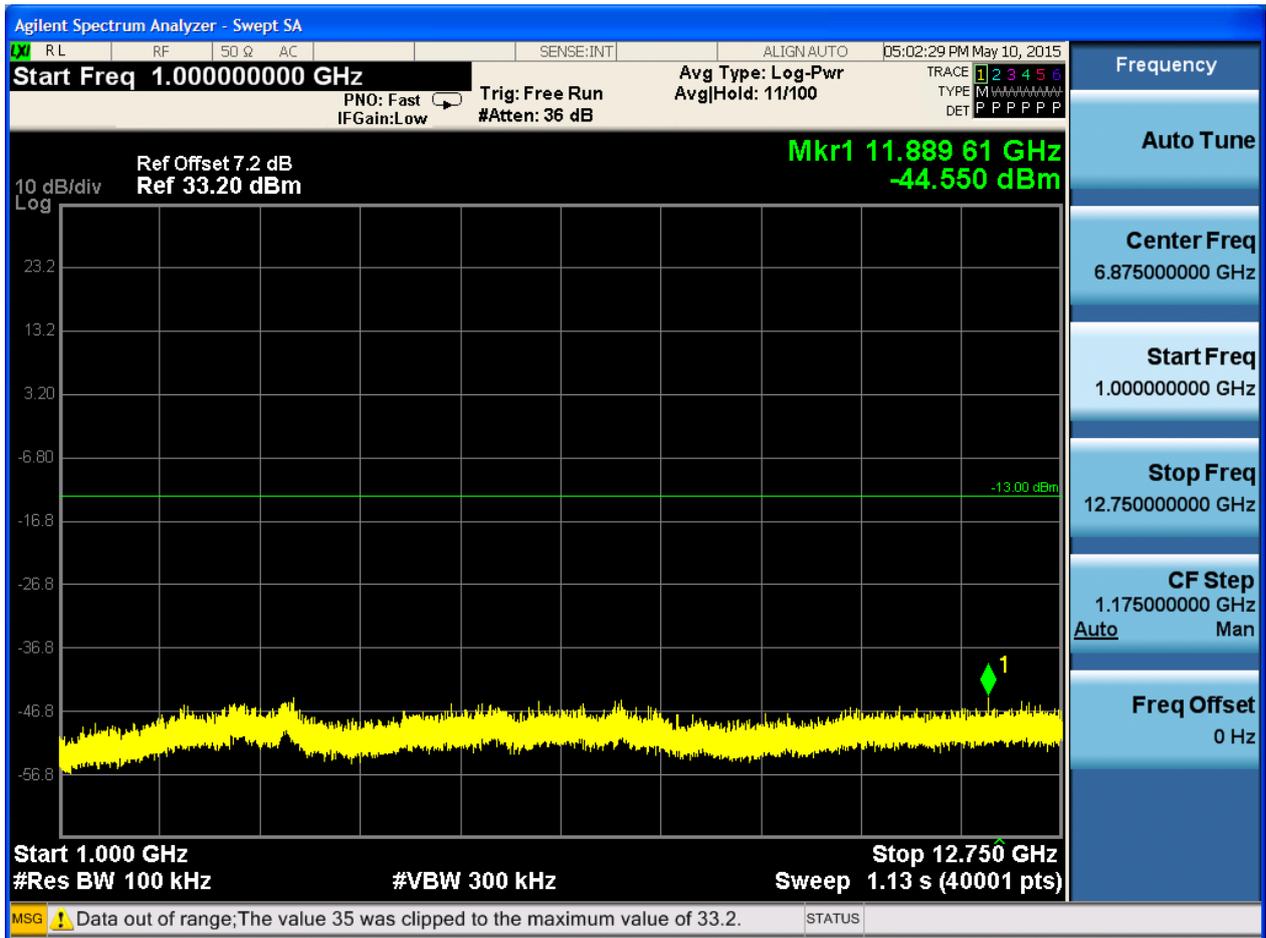


### 6.1.1.3.3 Test Channel = HCH





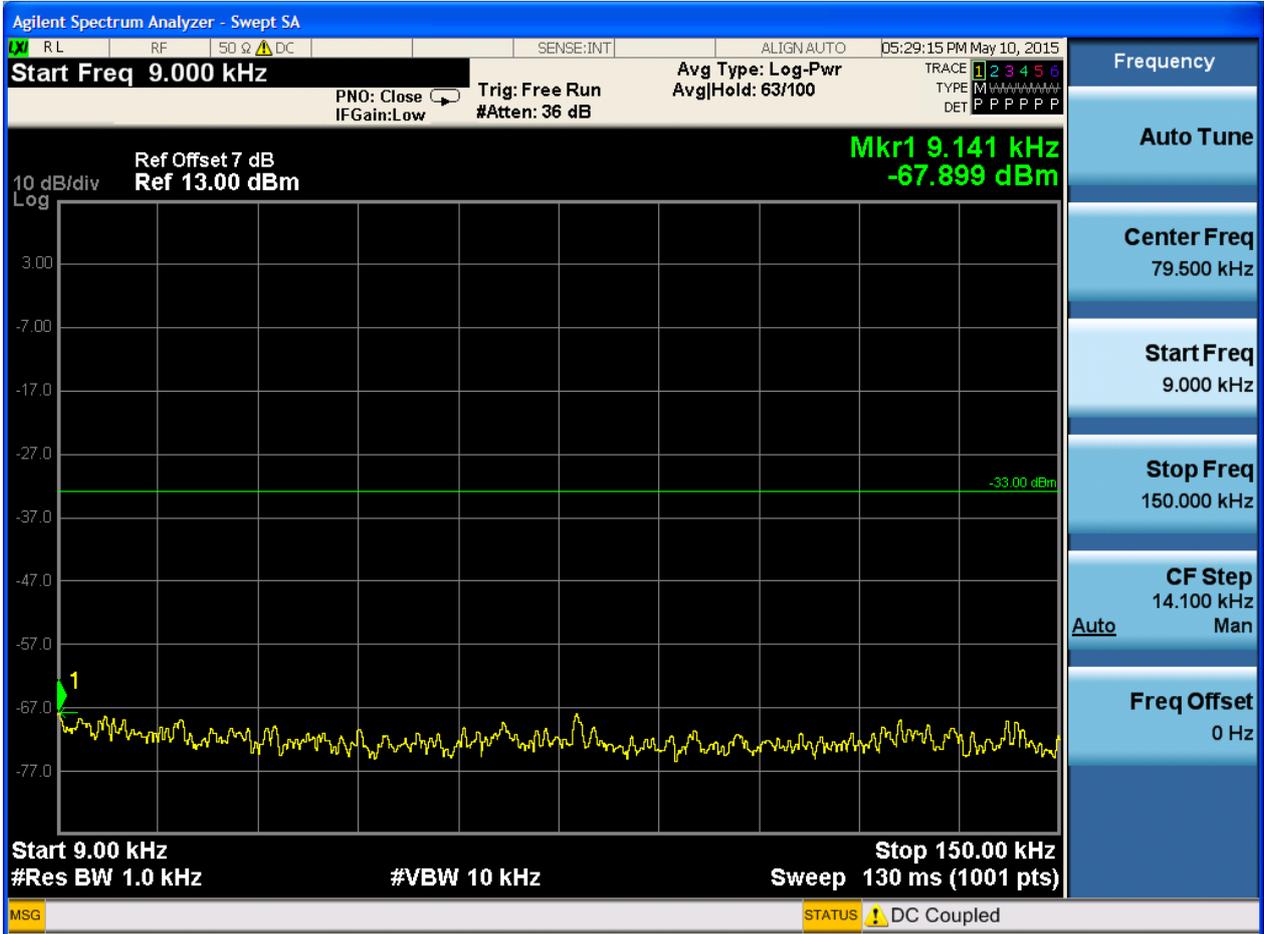


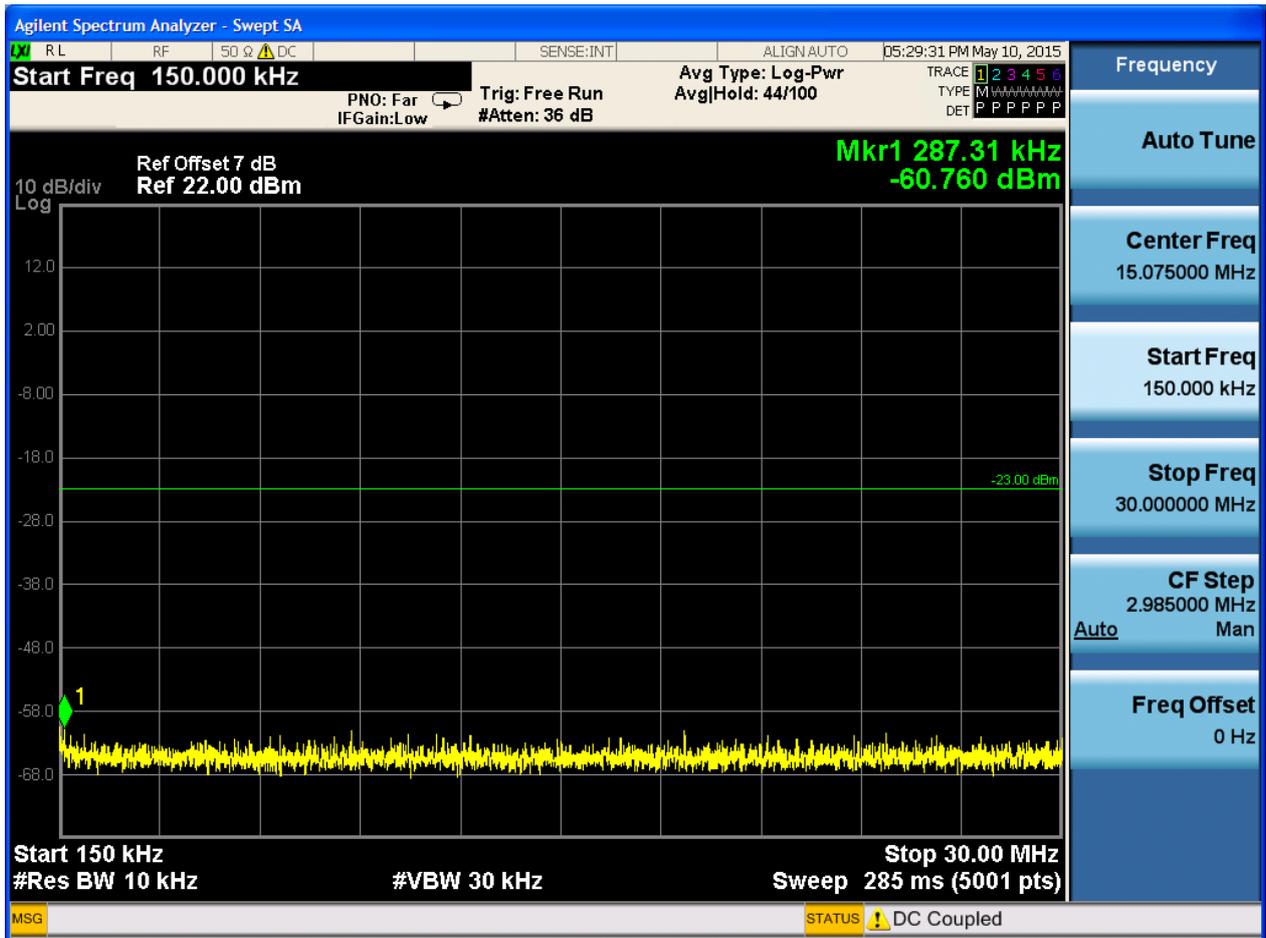


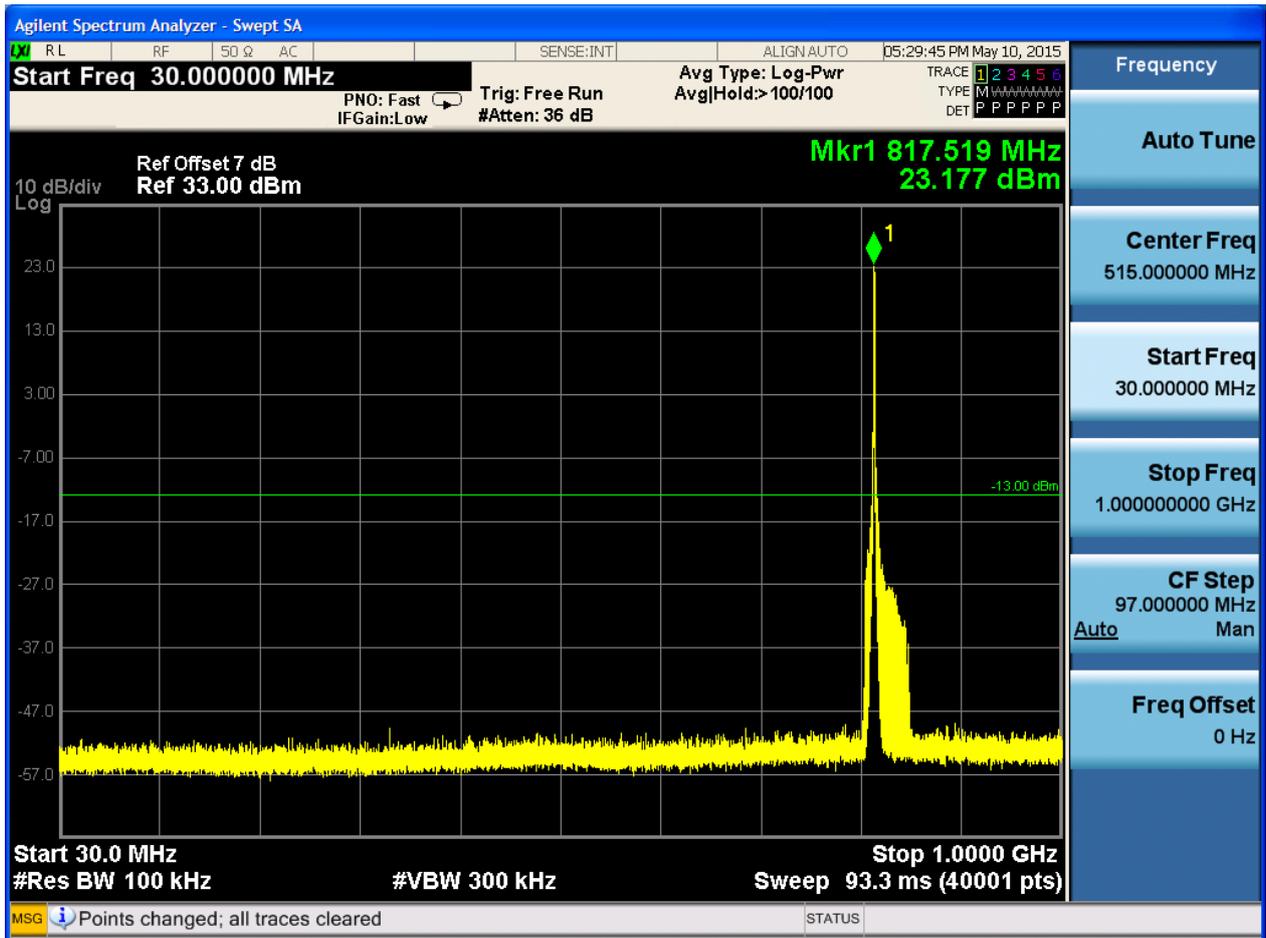


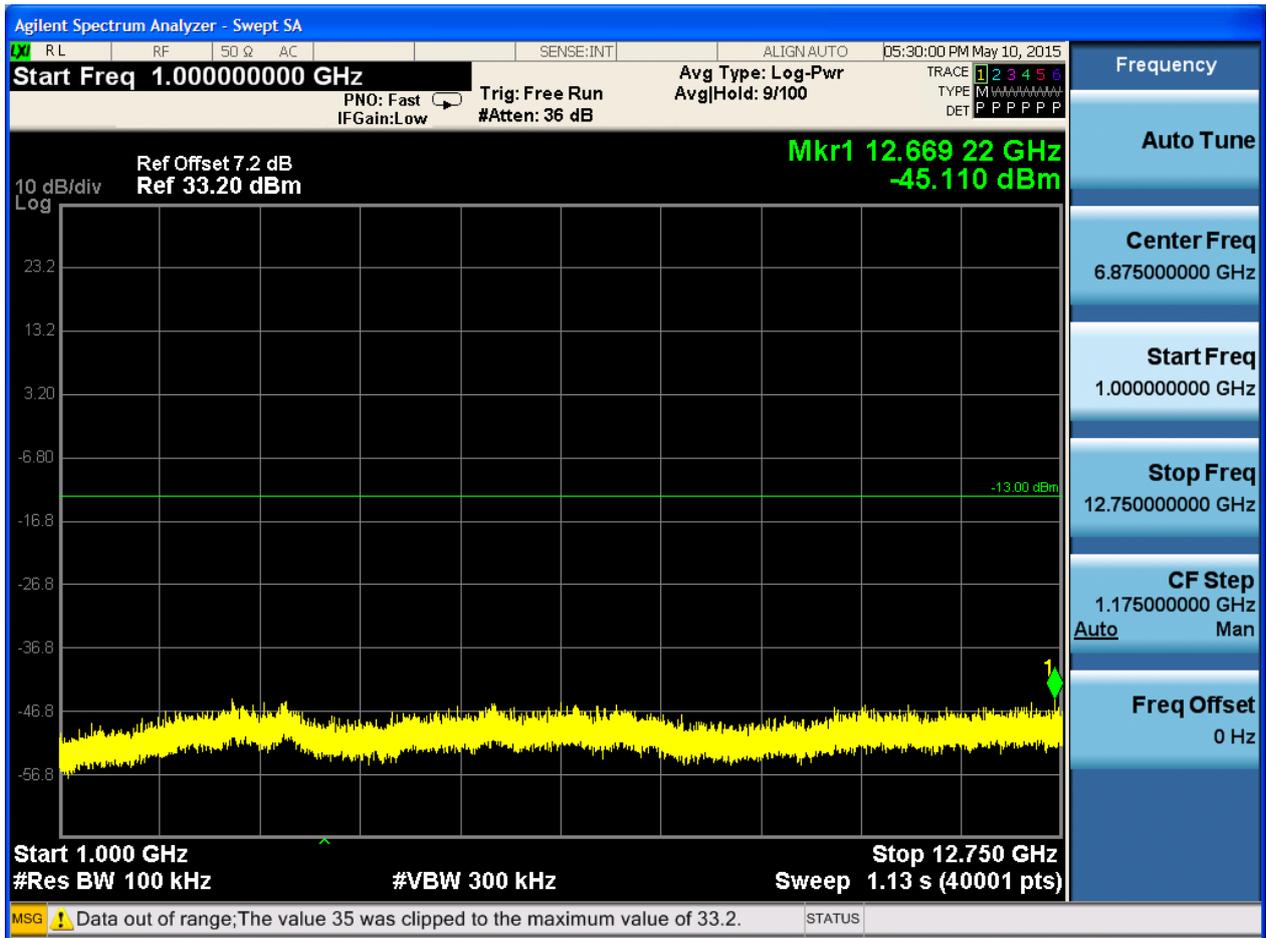
6.1.1.4 Test Mode = CDMA/EV-DO/Subtype2/256

6.1.1.4.1 Test Channel = LCH



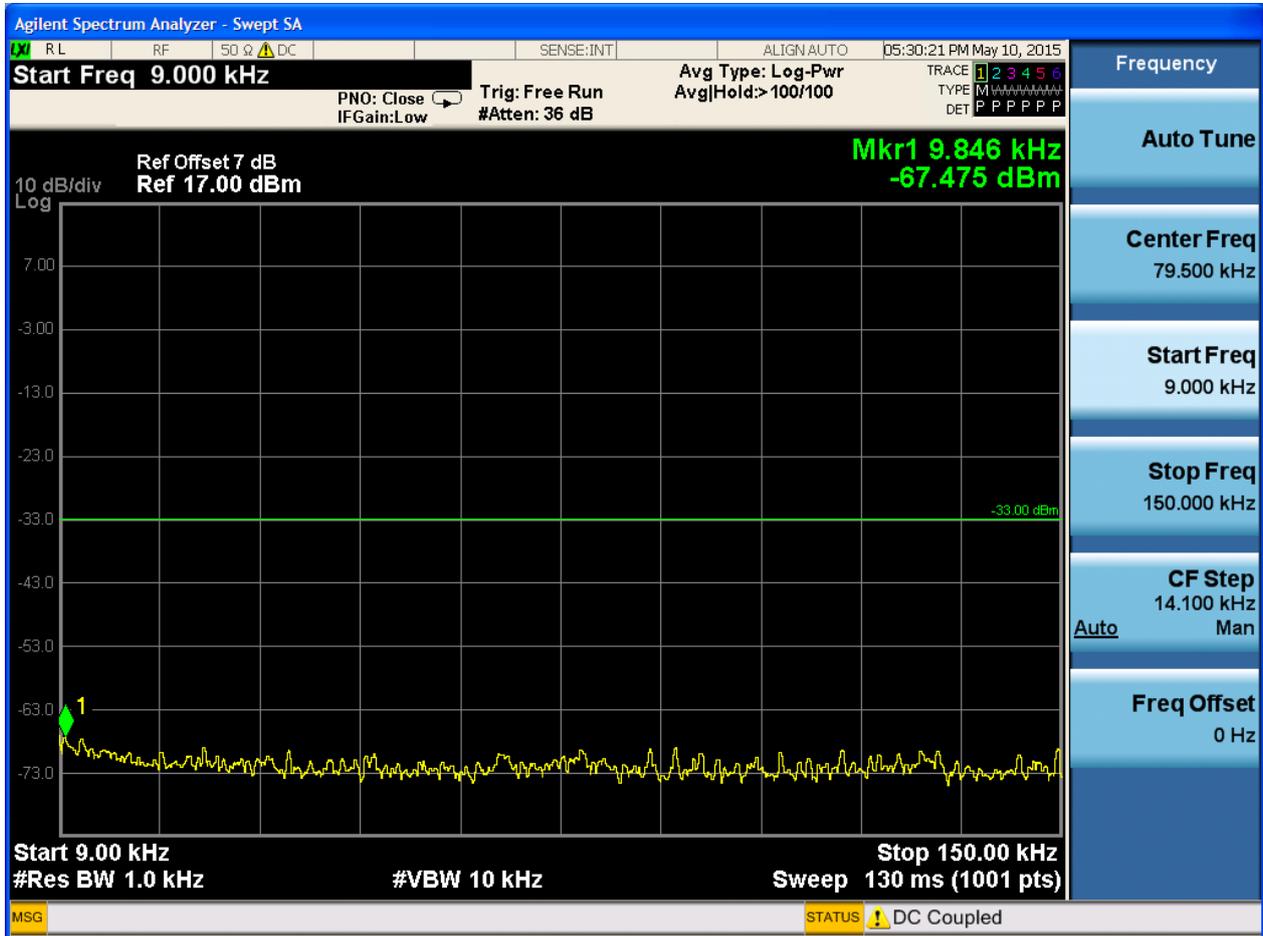


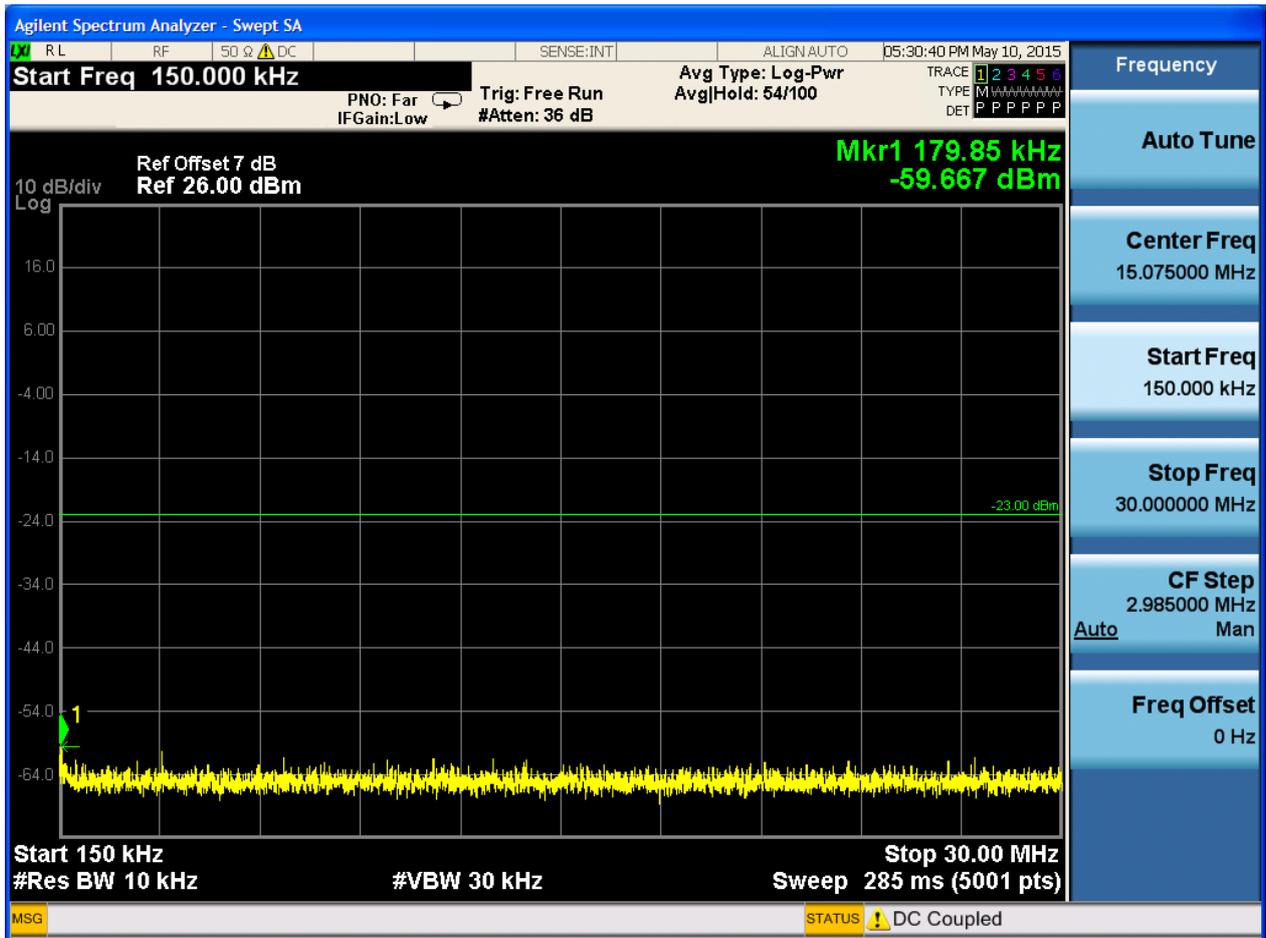


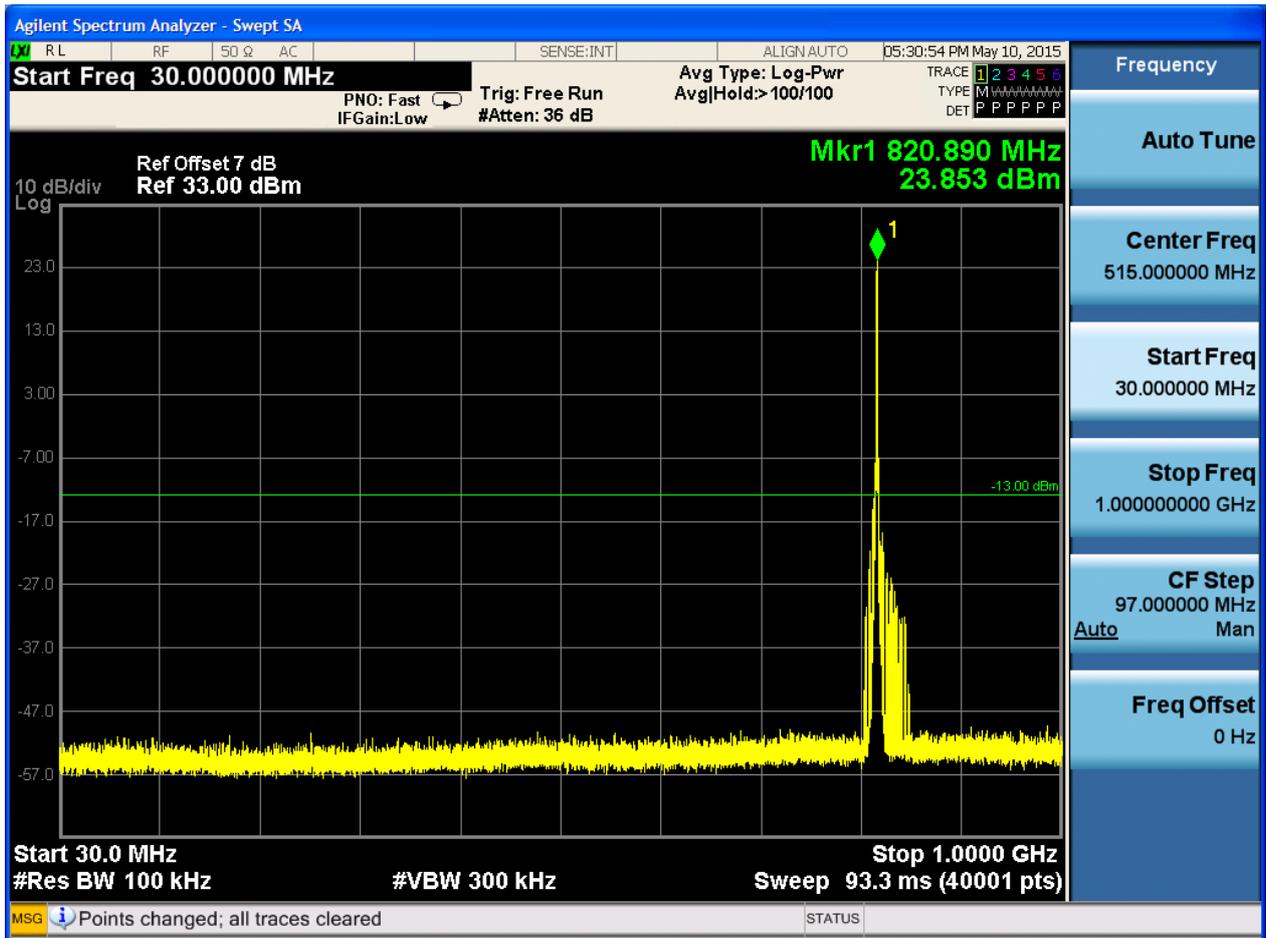


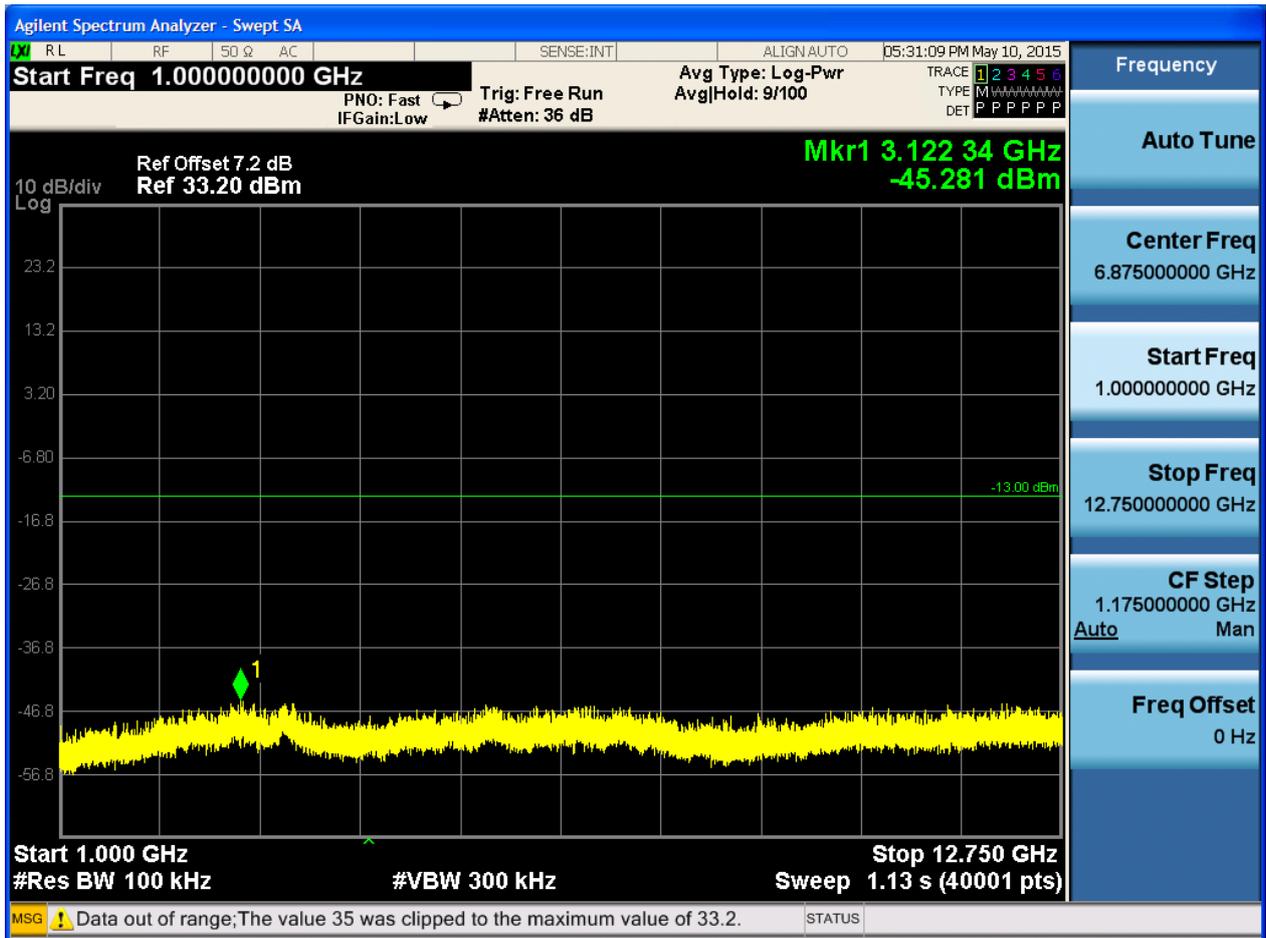


### 6.1.1.4.2 Test Channel = MCH

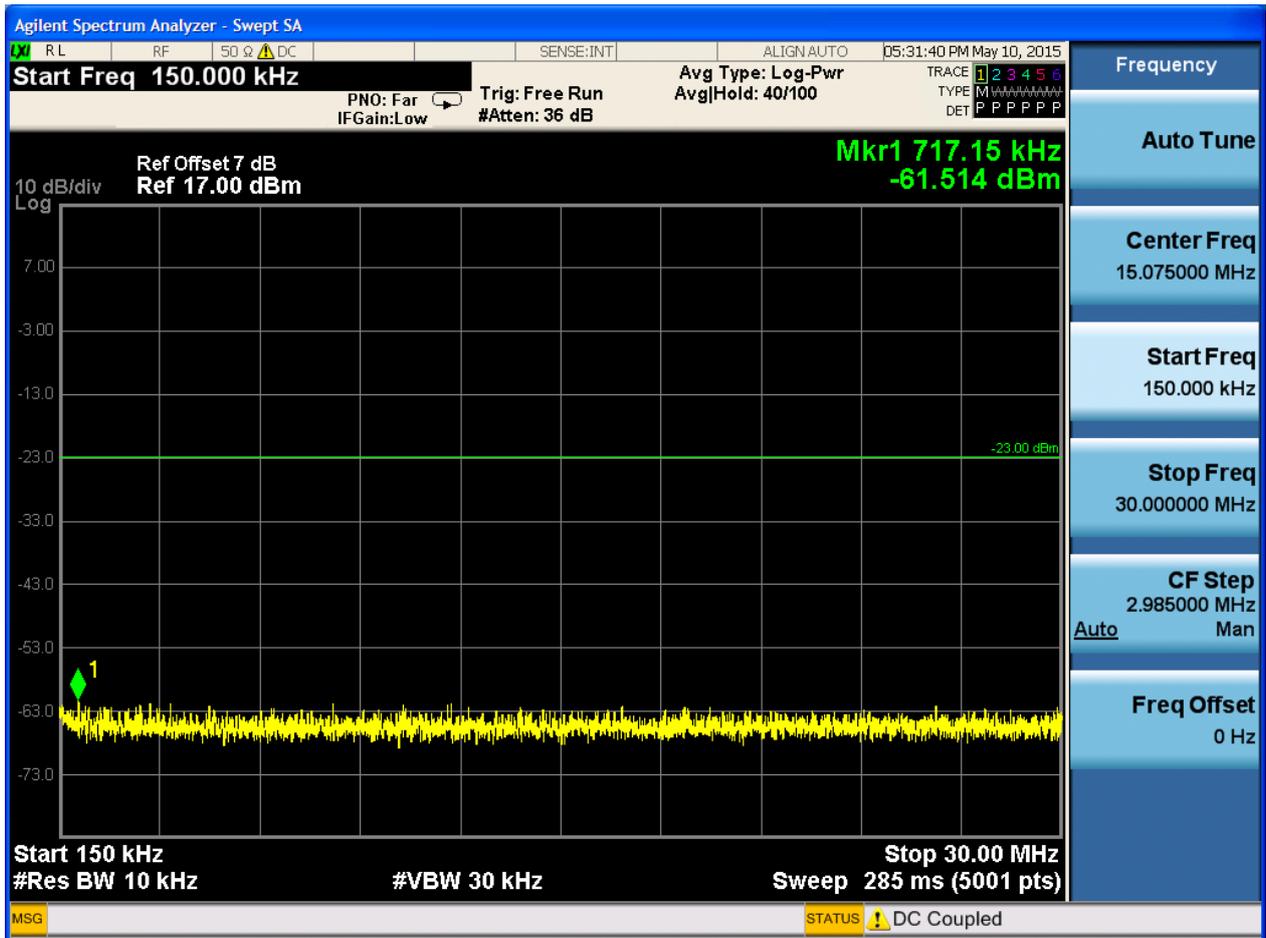


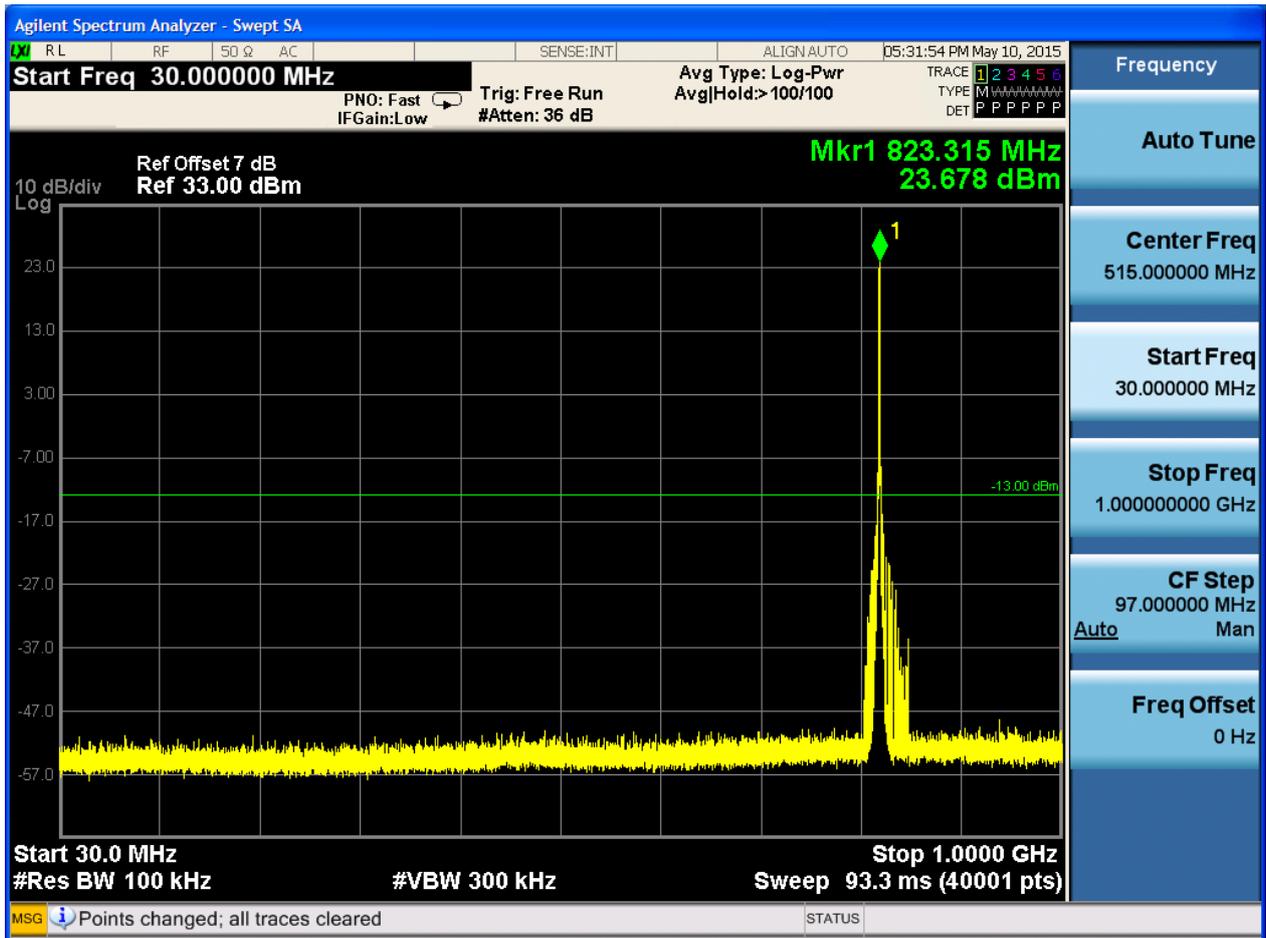


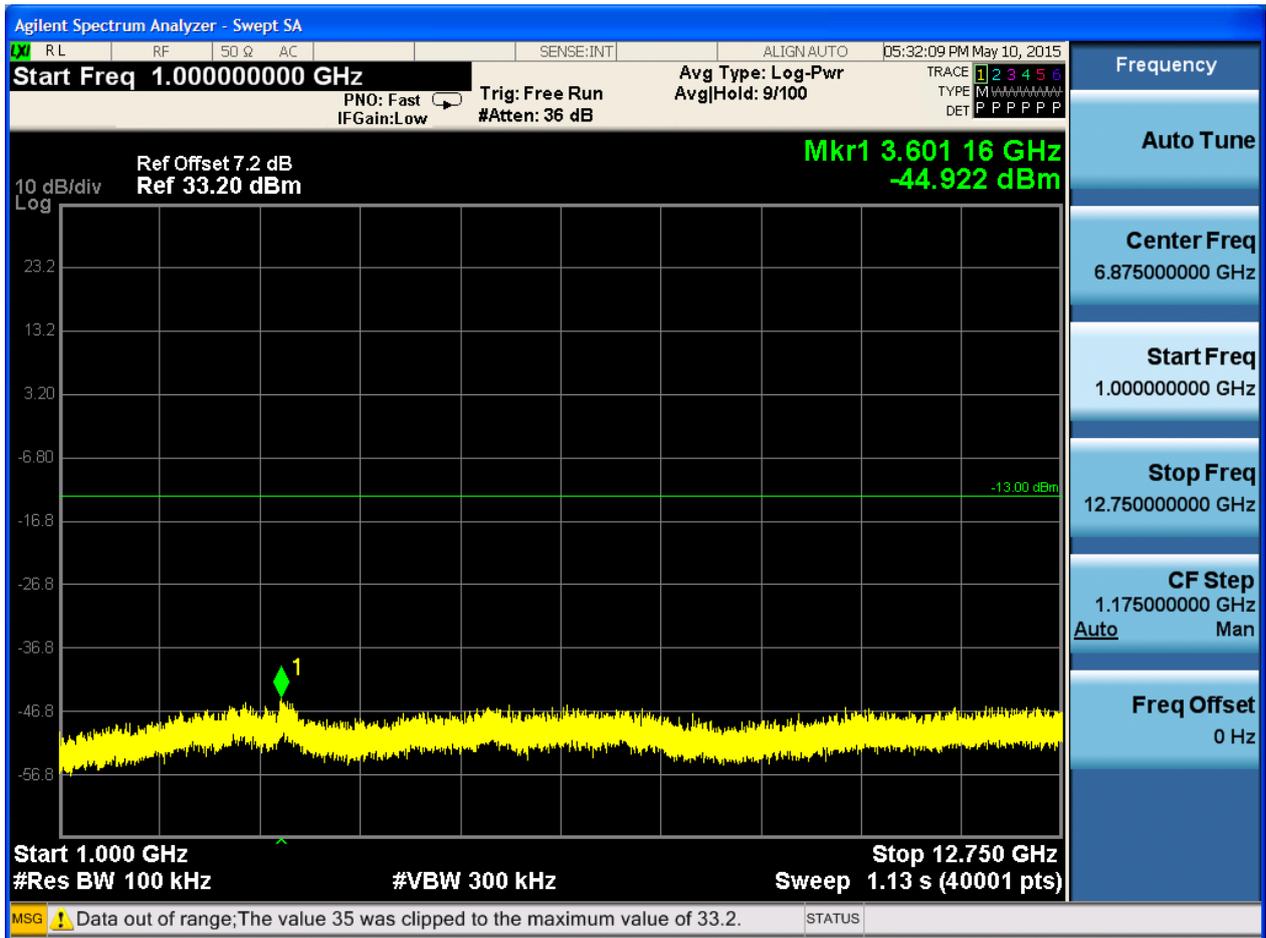








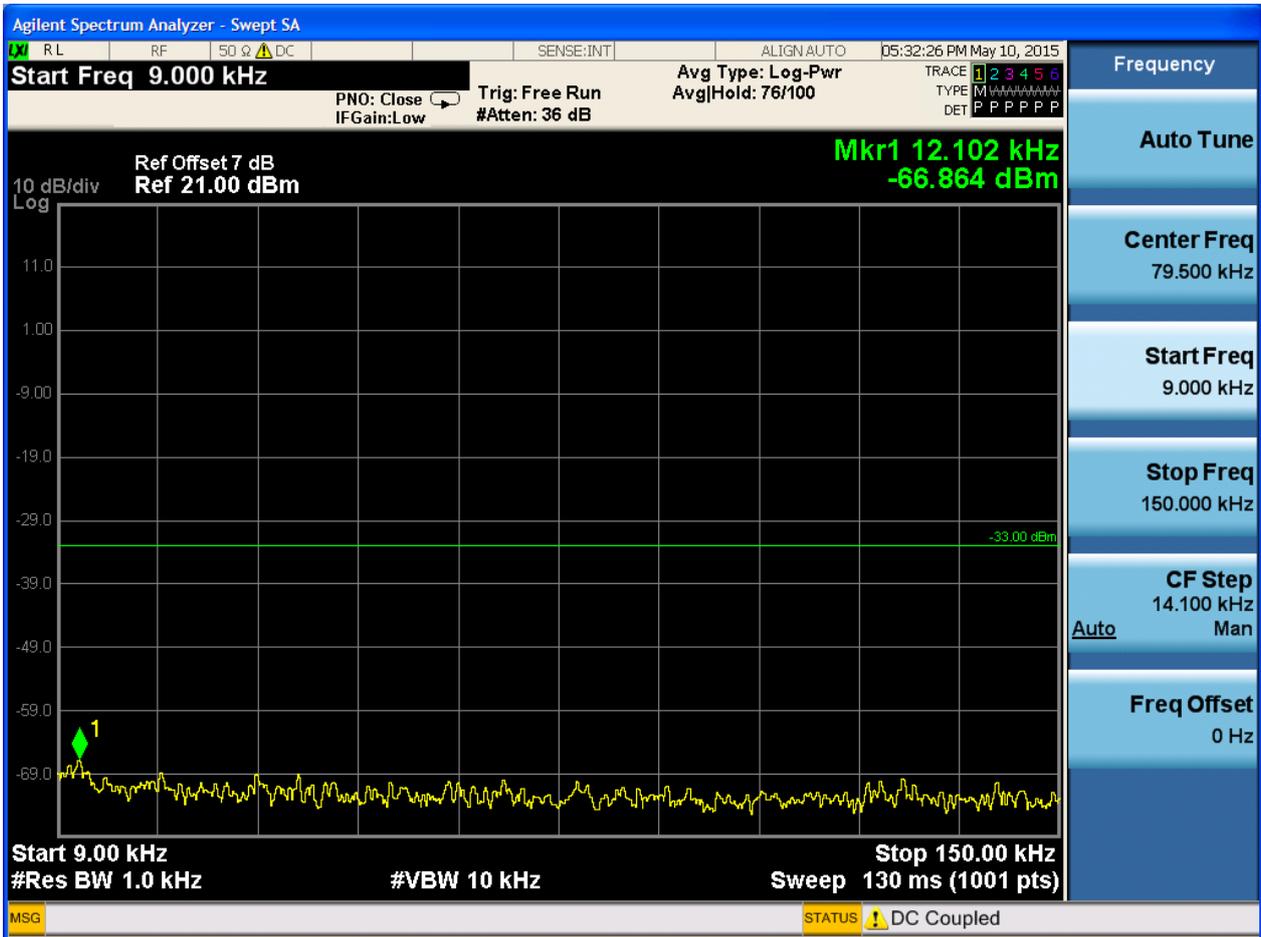


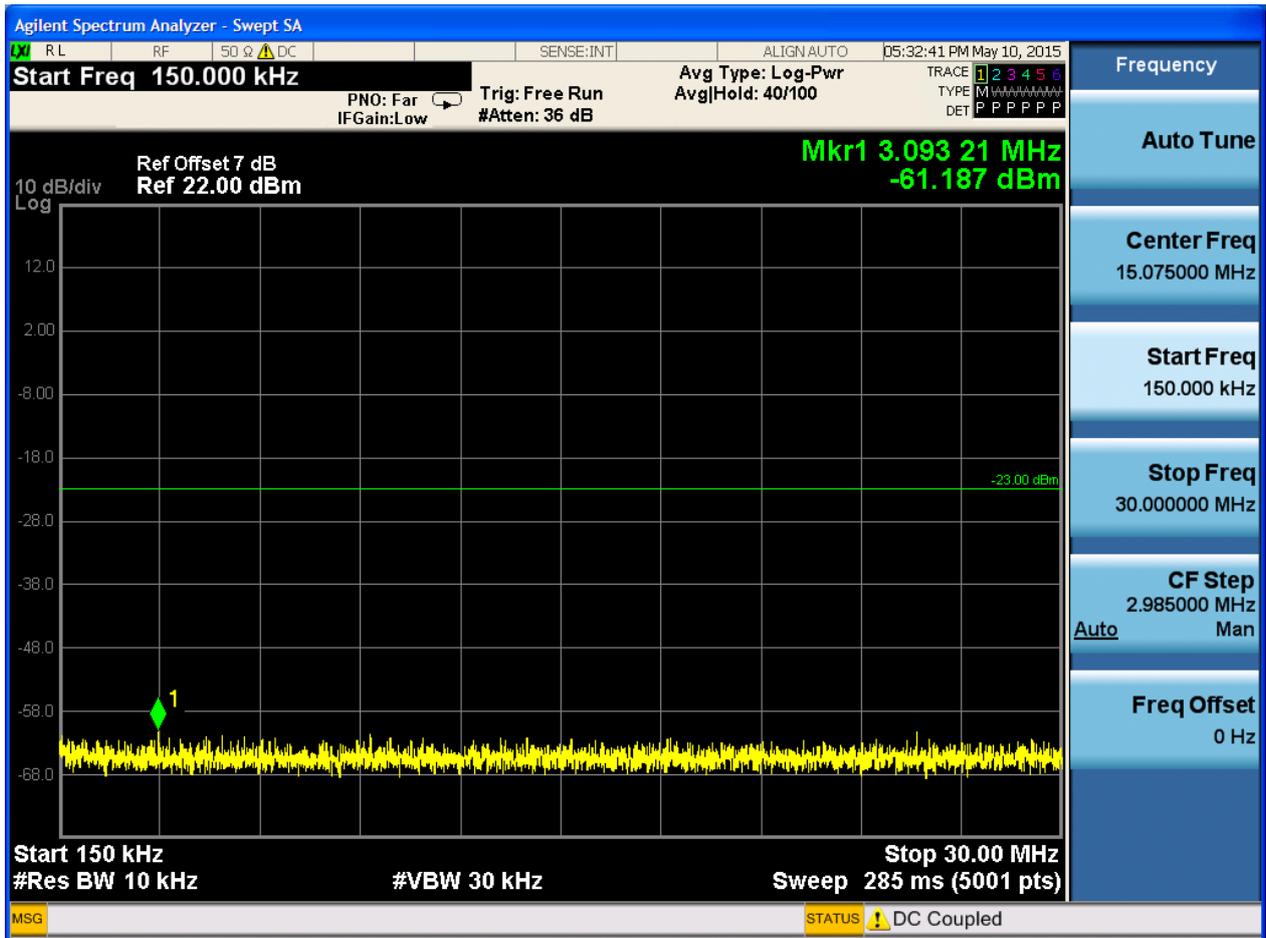


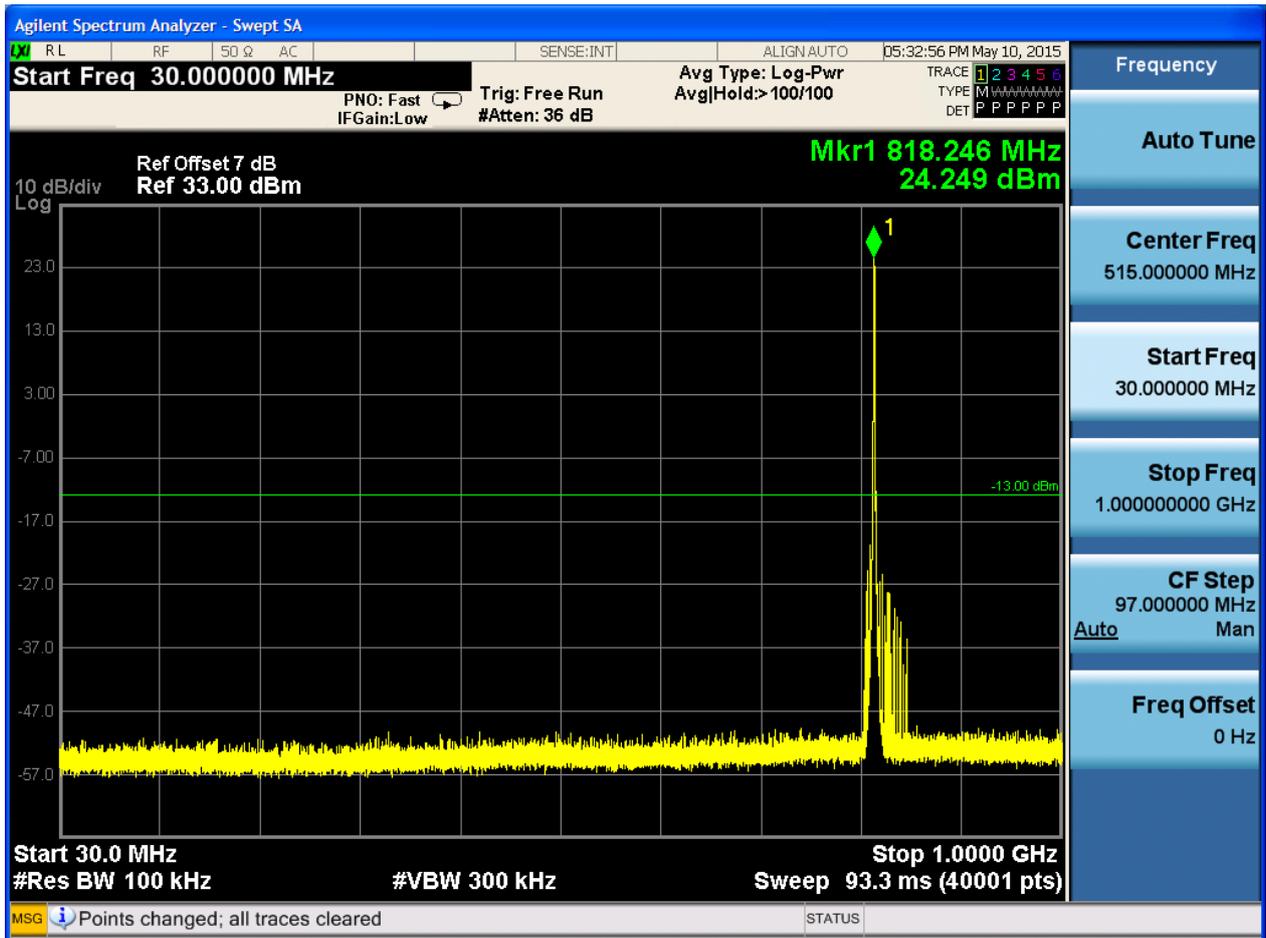


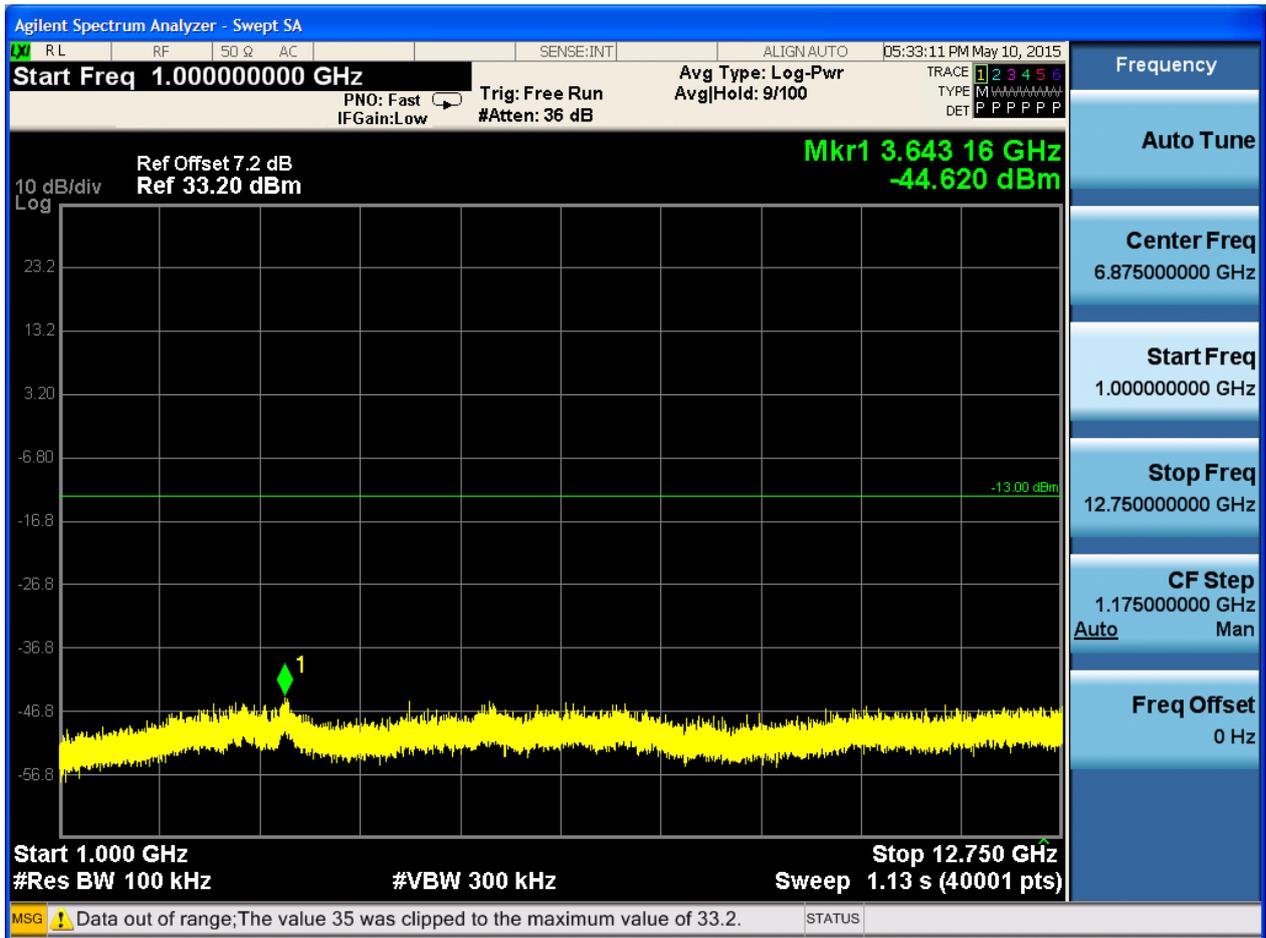
6.1.1.5 Test Mode = CDMA/EV-DO/Subtype2/4096

6.1.1.5.1 Test Channel = LCH



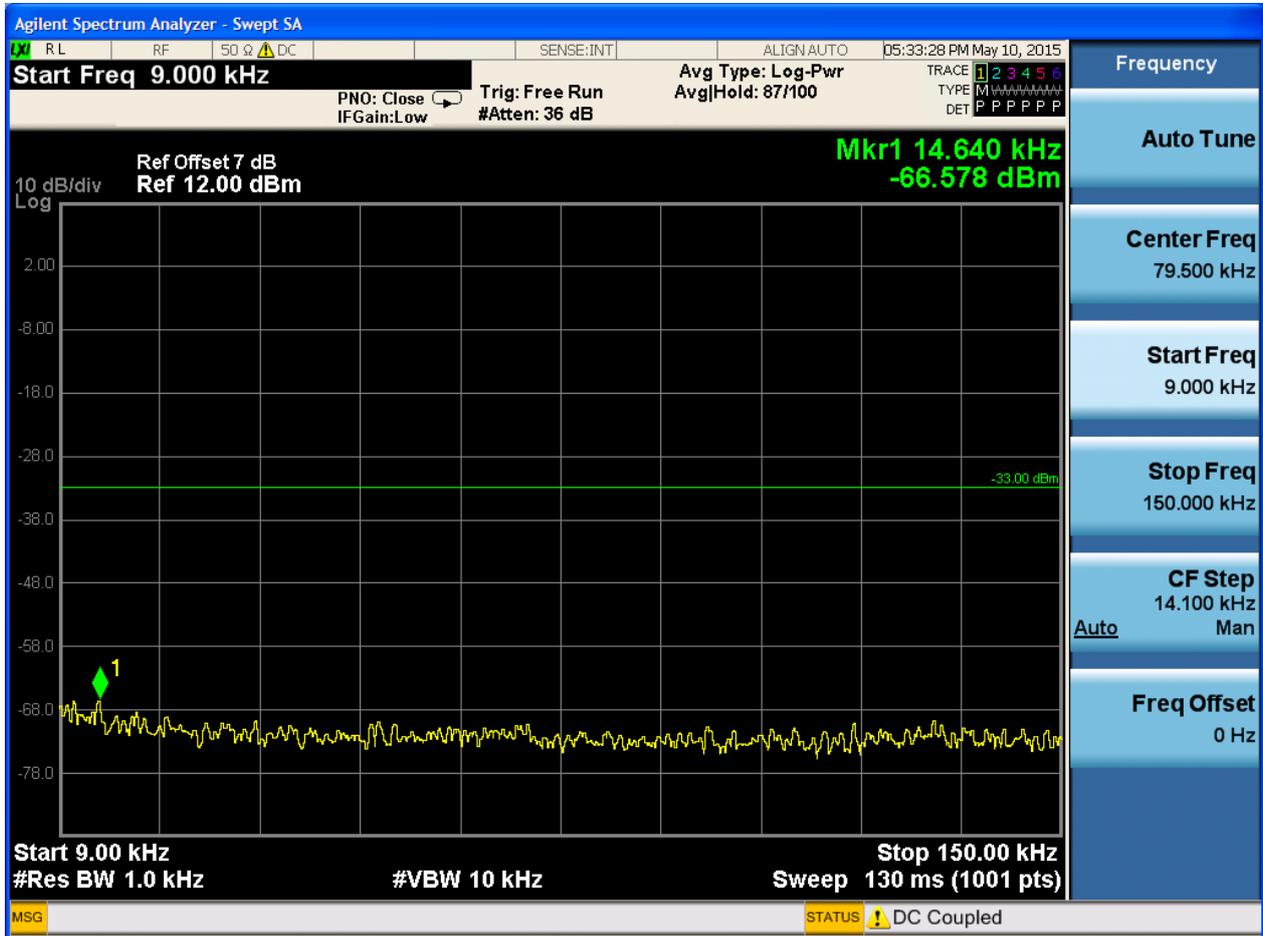


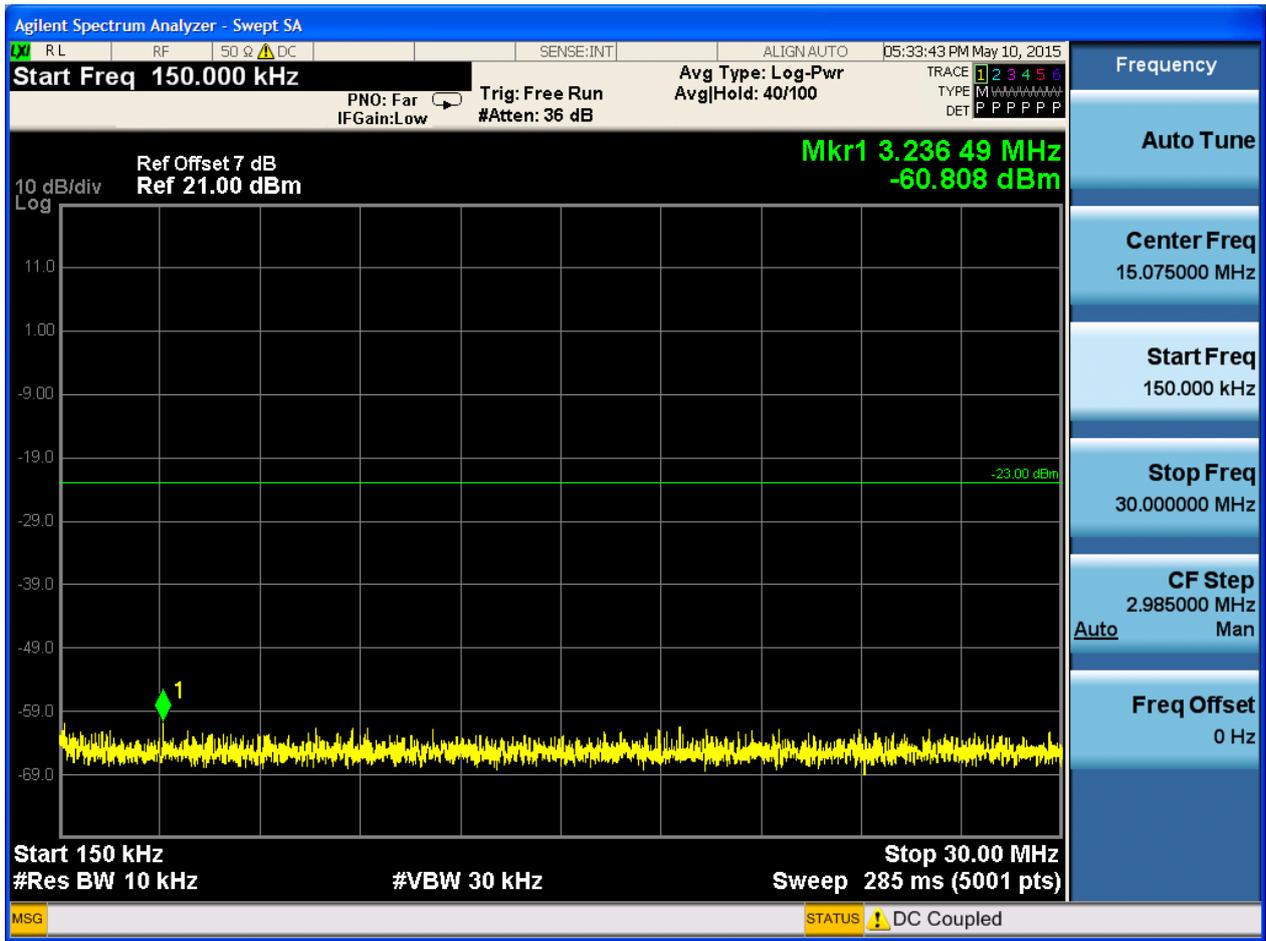


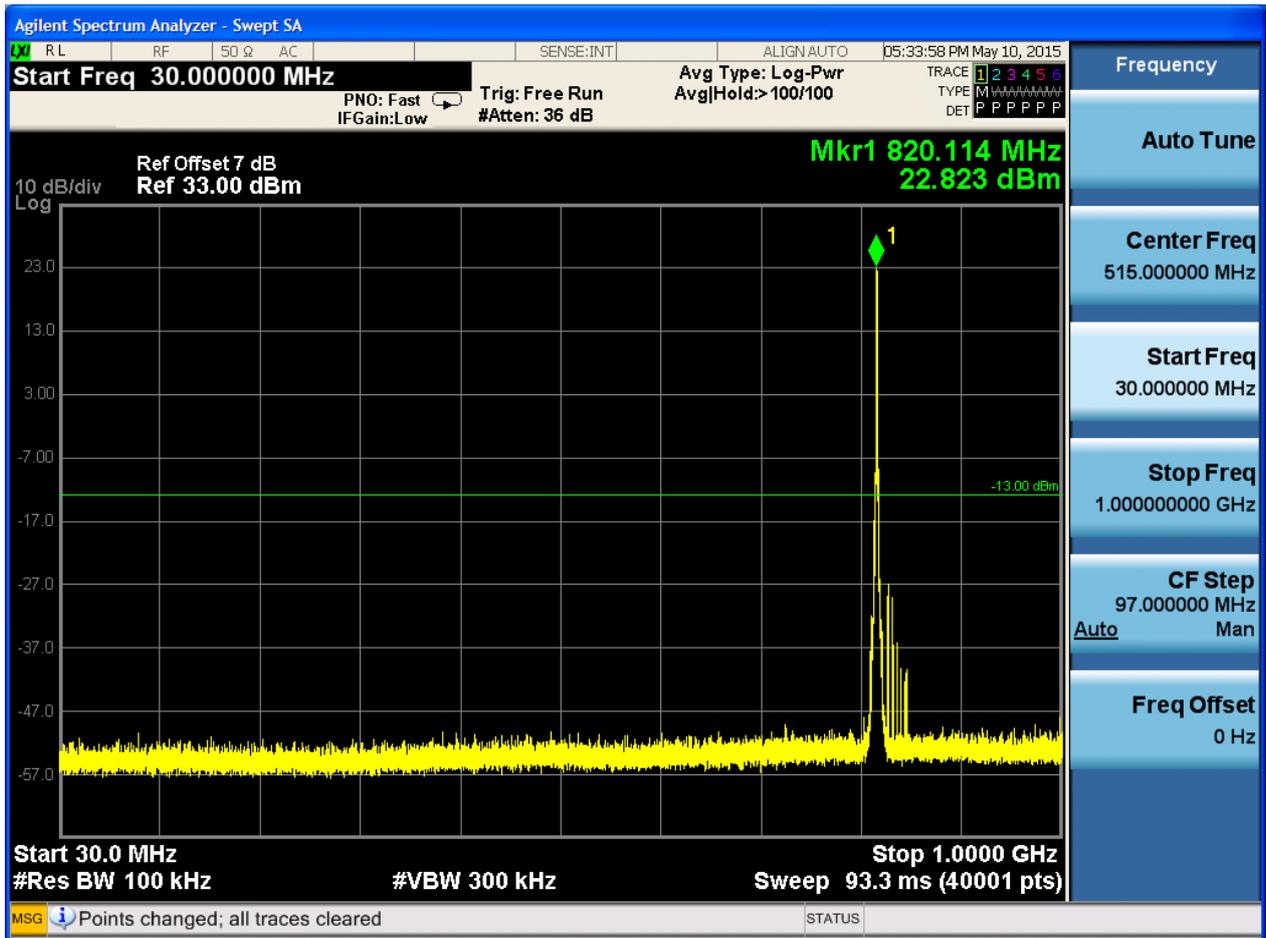


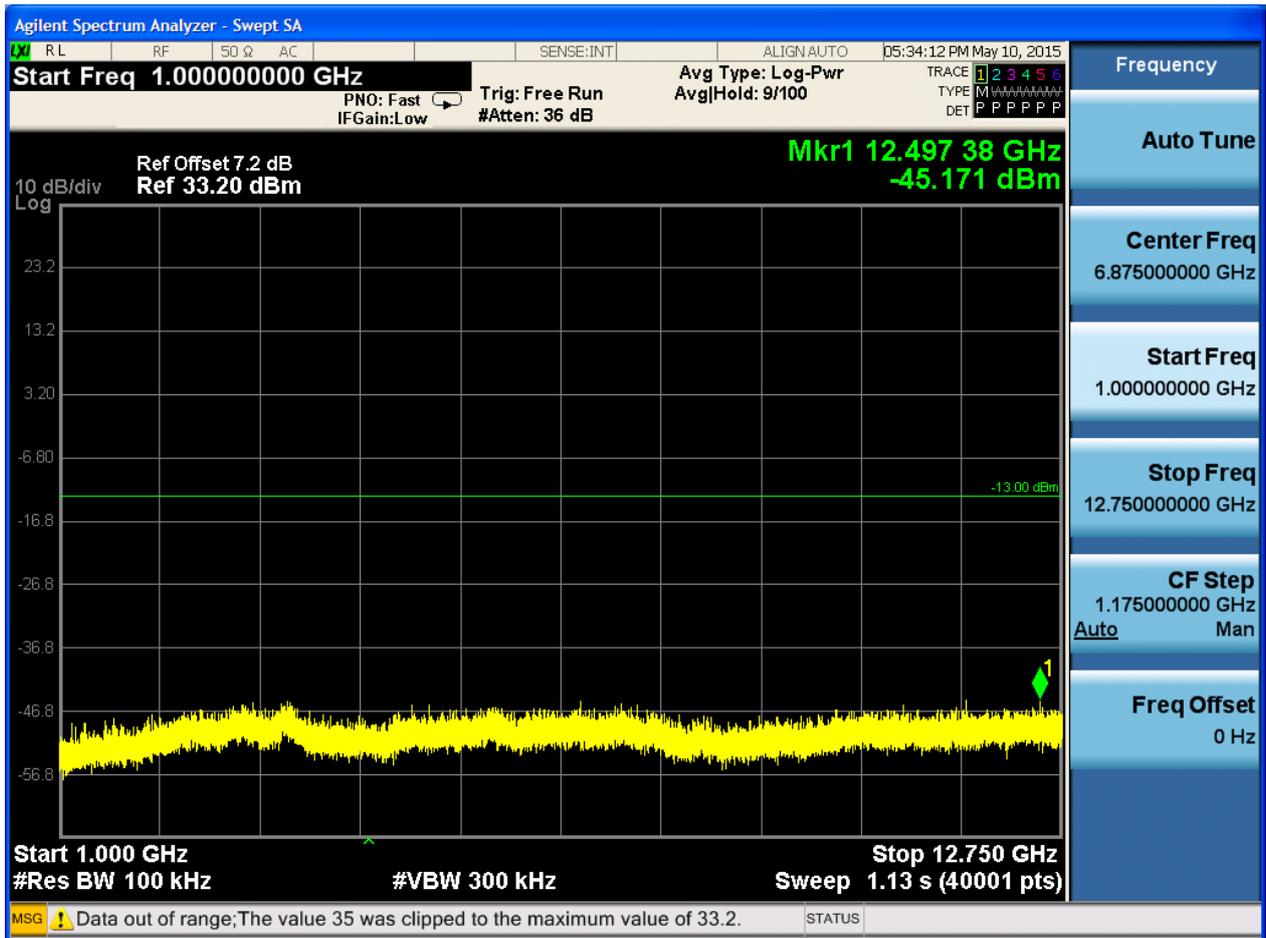


### 6.1.1.5.2 Test Channel = MCH



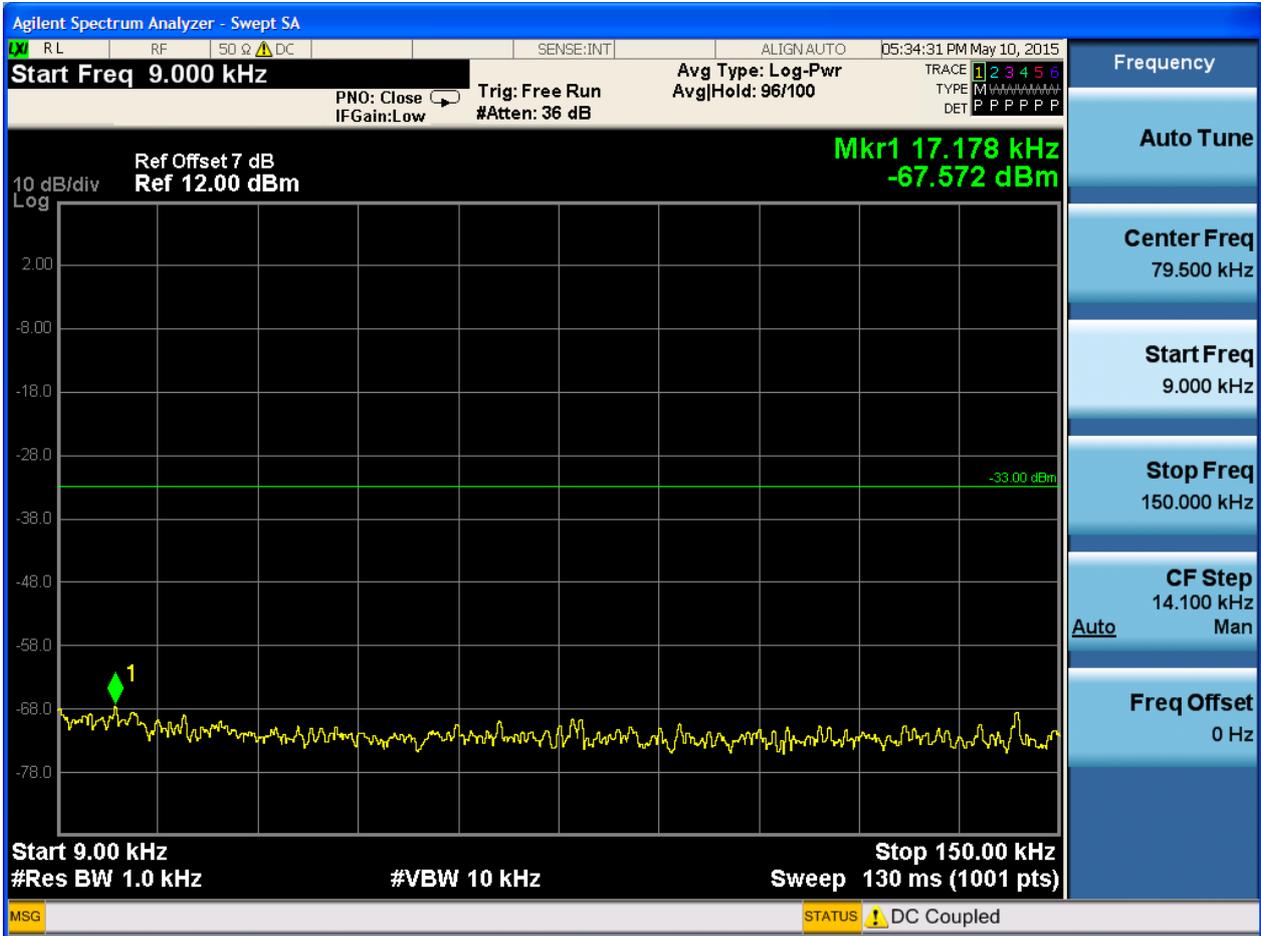


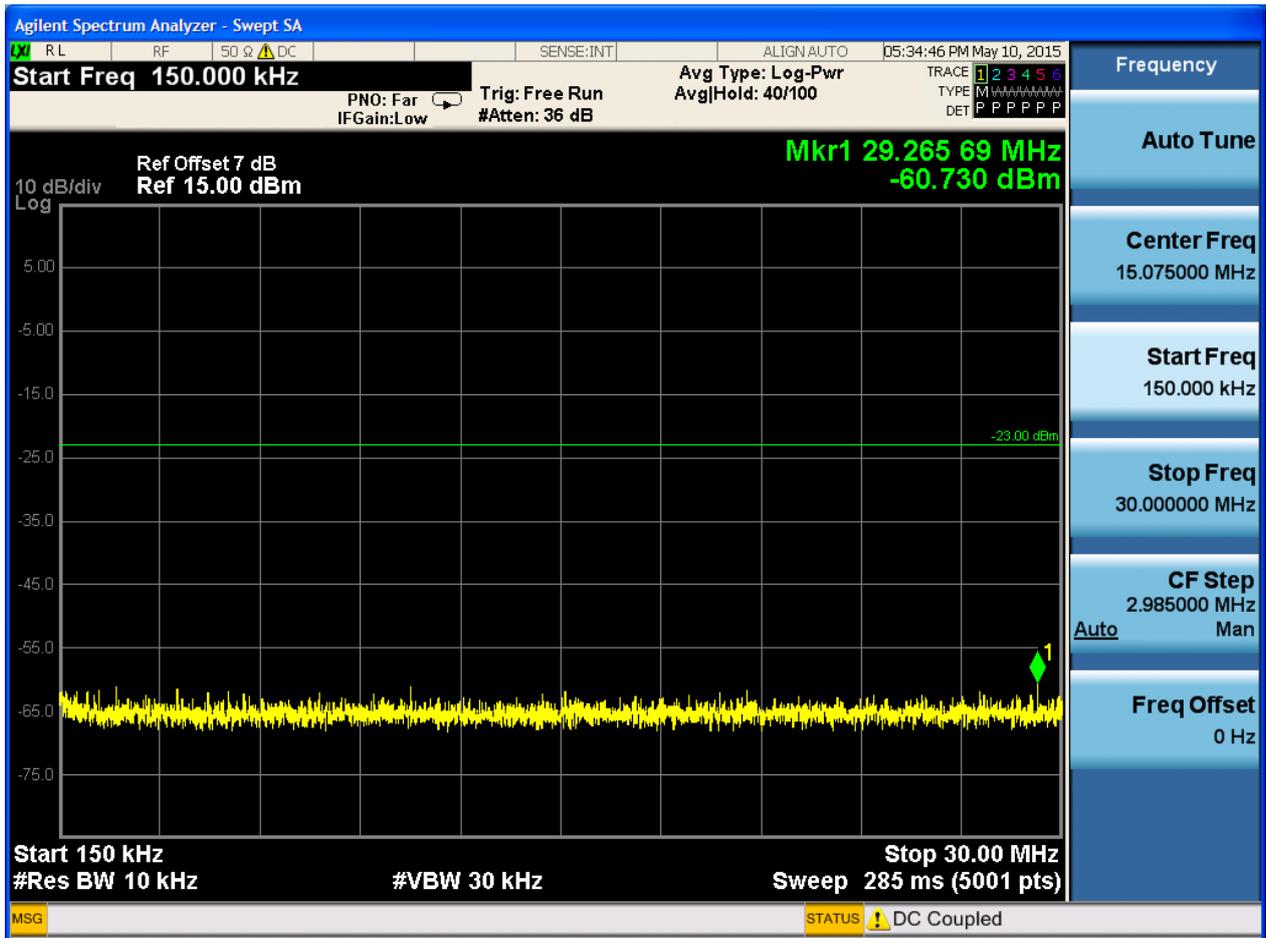


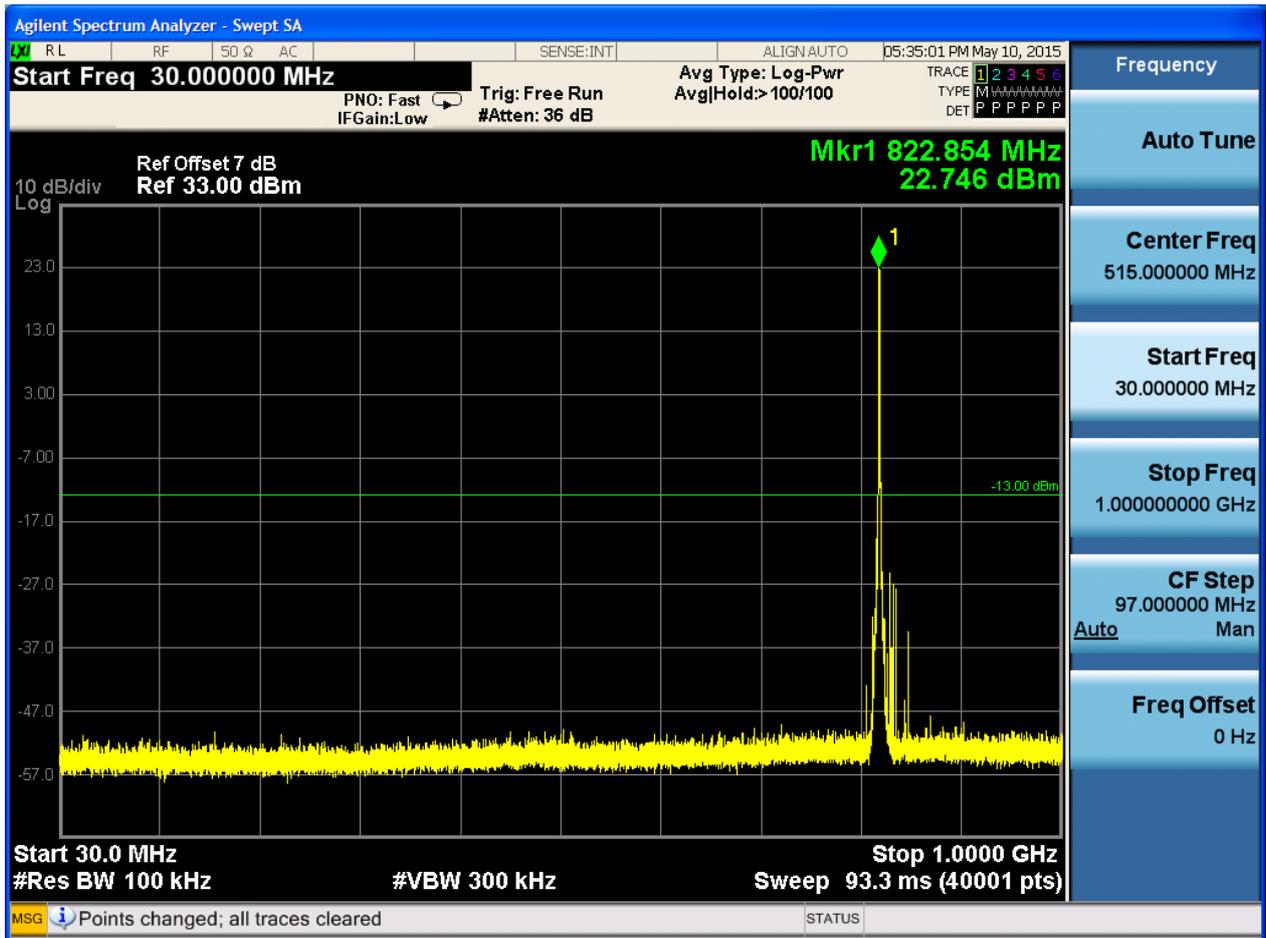


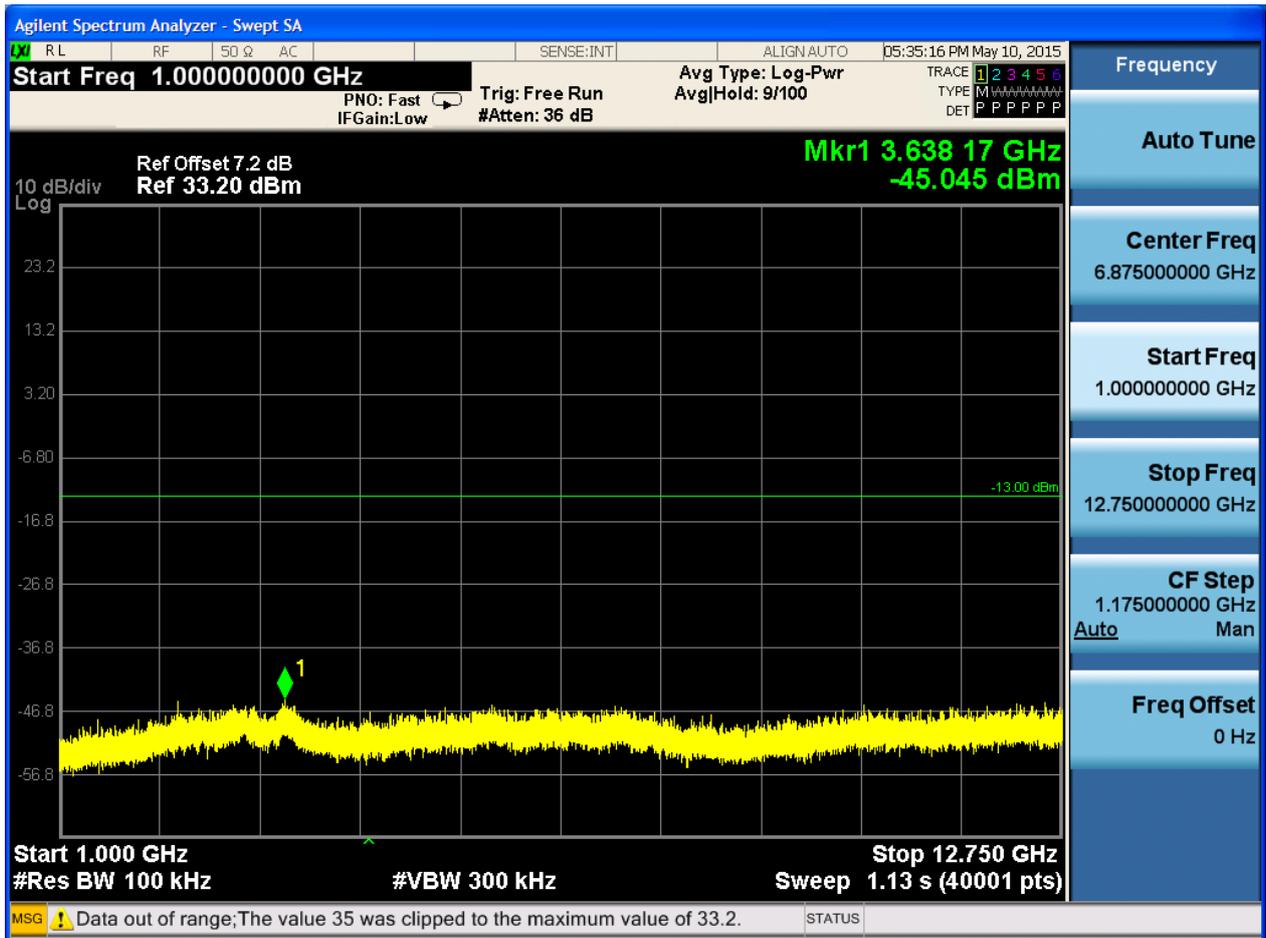


### 6.1.1.5.3 Test Channel = HCH





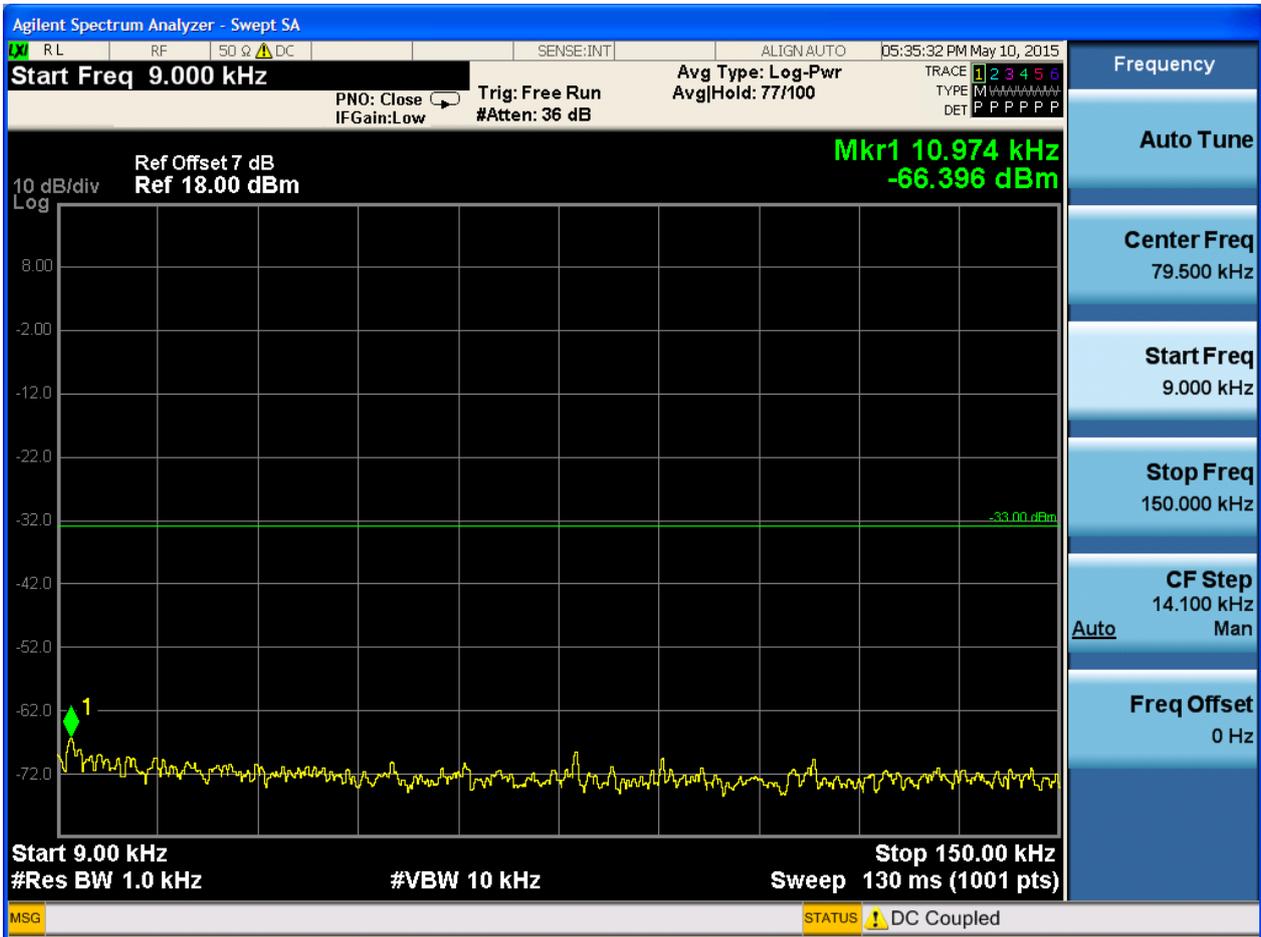


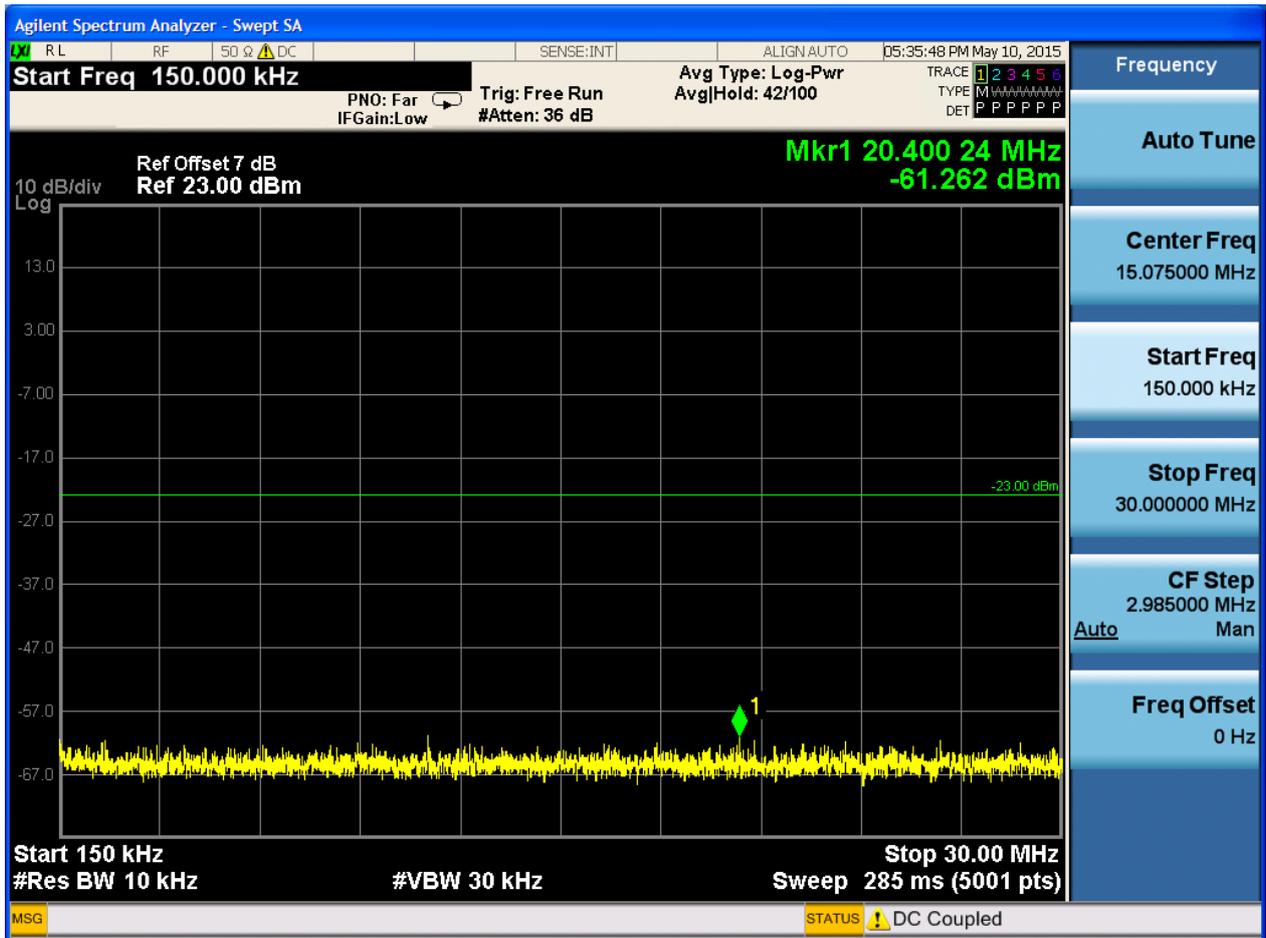


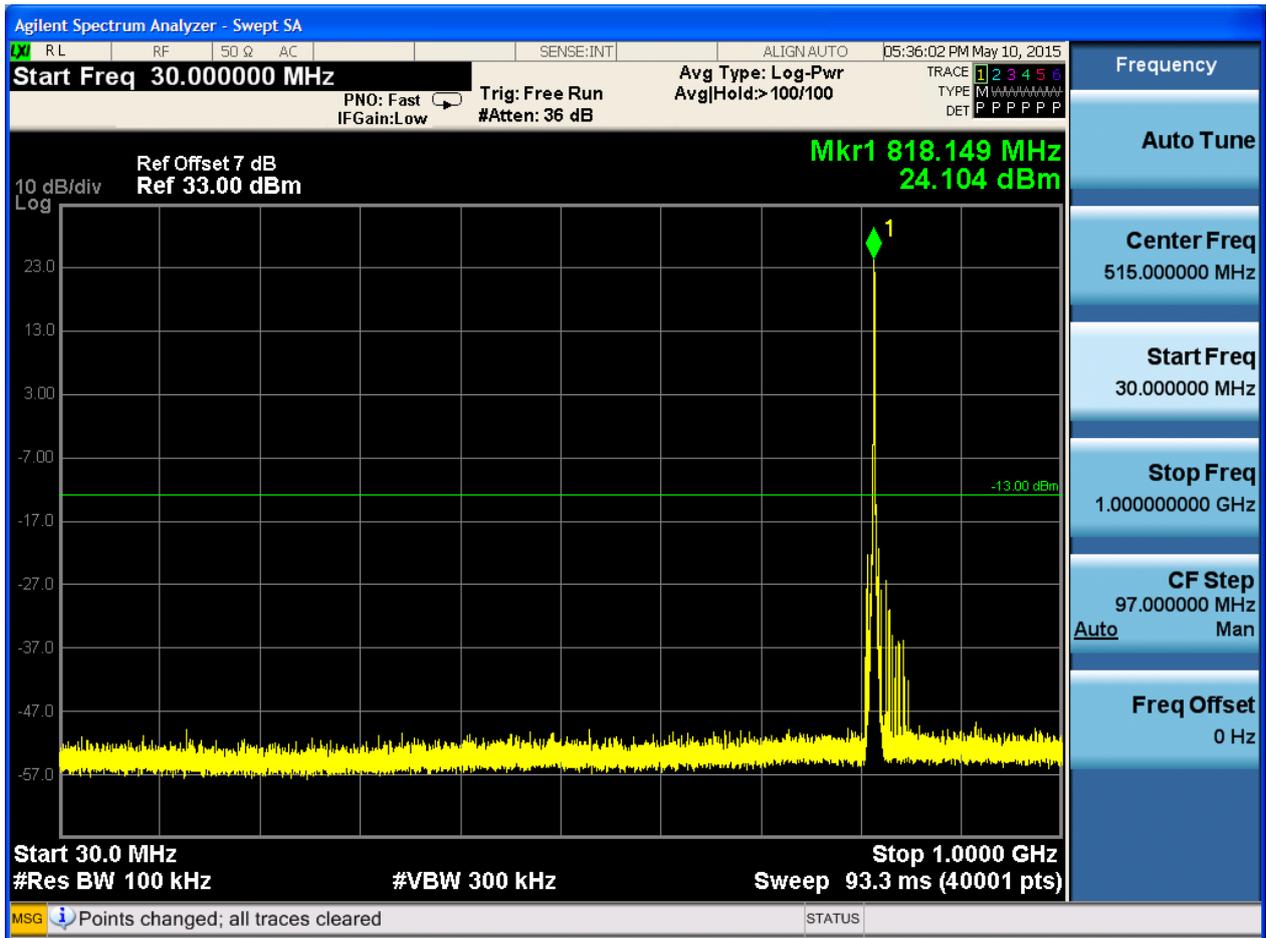


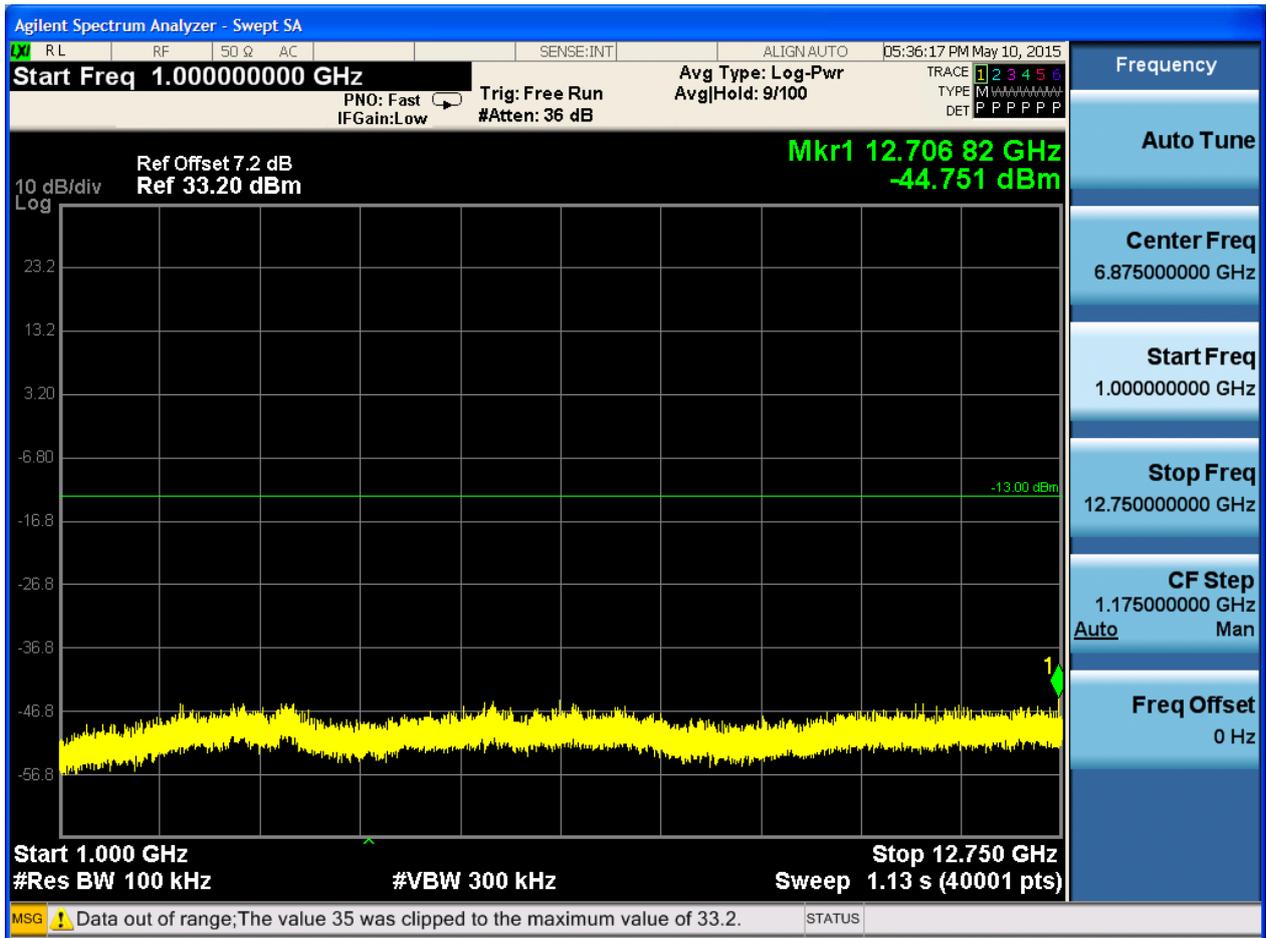
### 6.1.1.6 Test Mode = CDMA/EV-DO/Subtype2/12288

#### 6.1.1.6.1 Test Channel = LCH



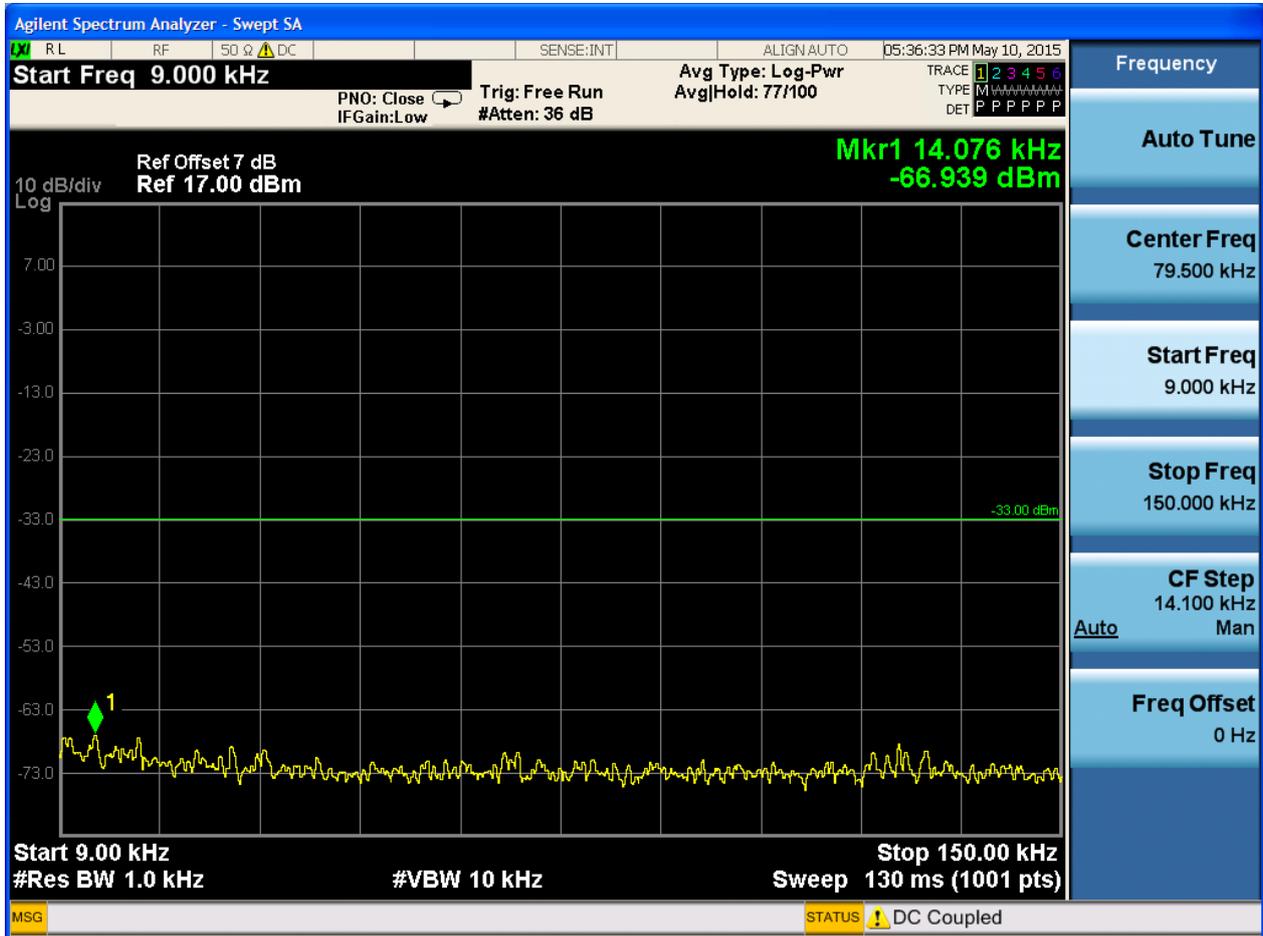


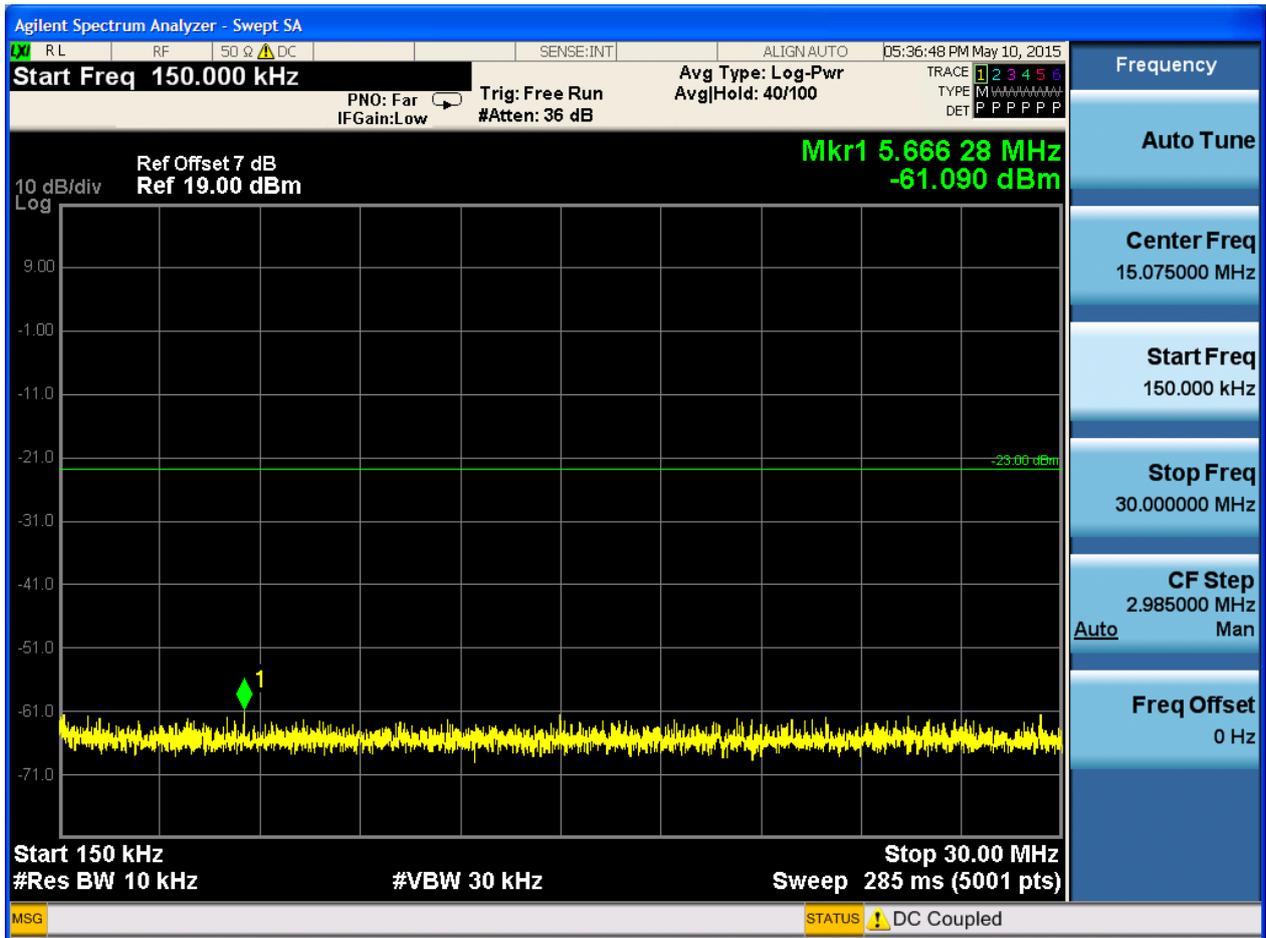


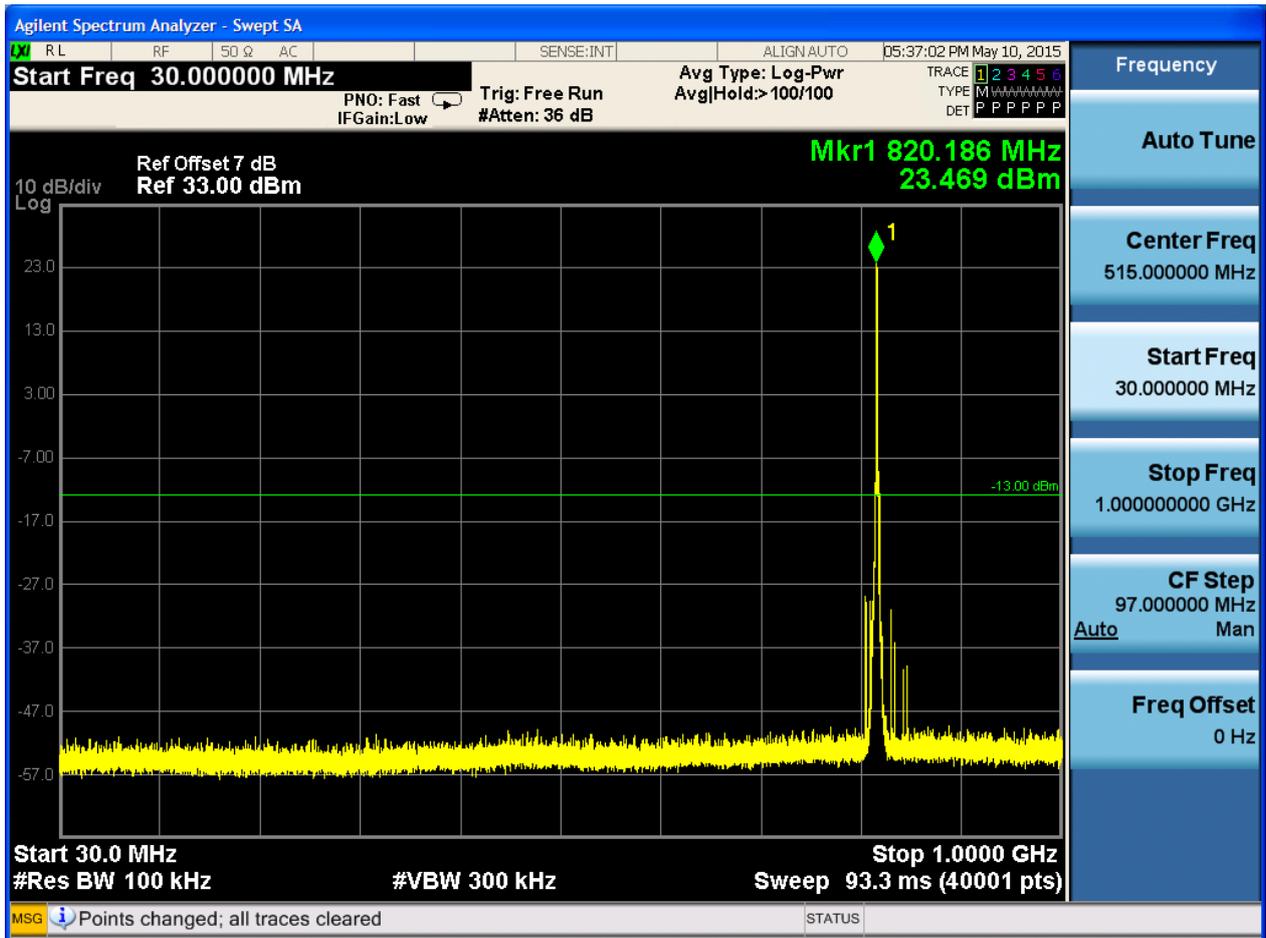


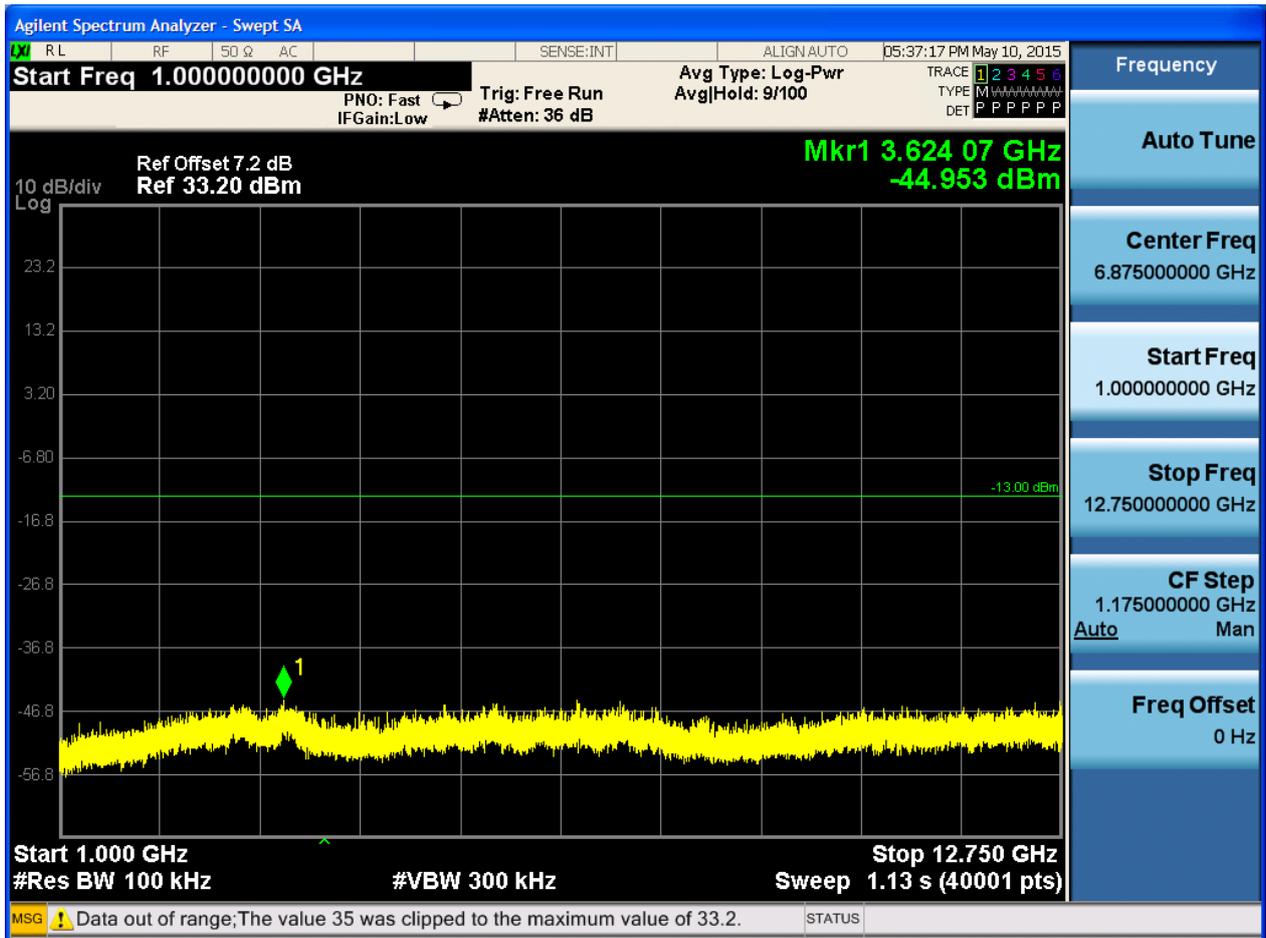


### 6.1.1.6.2 Test Channel = MCH



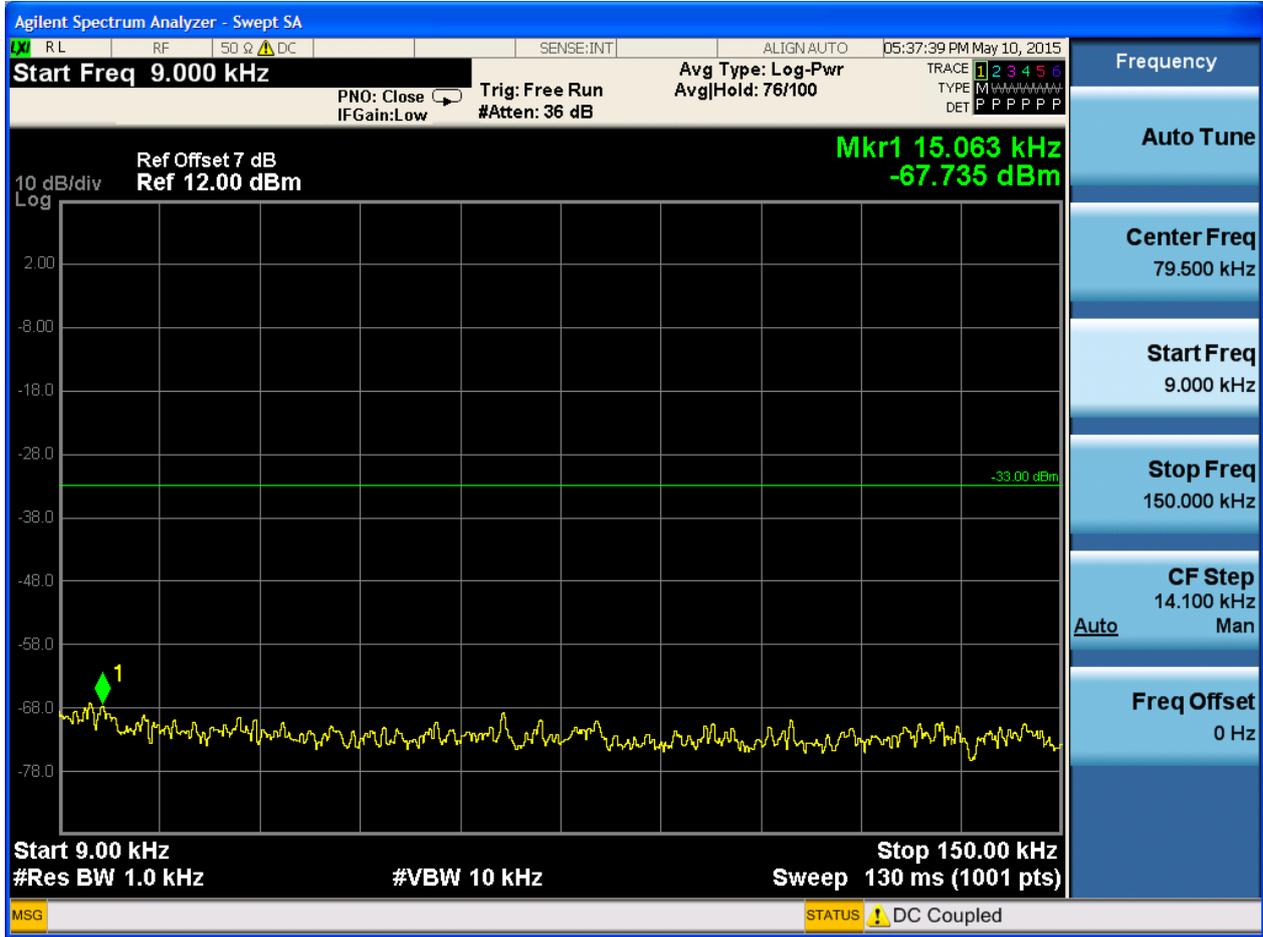


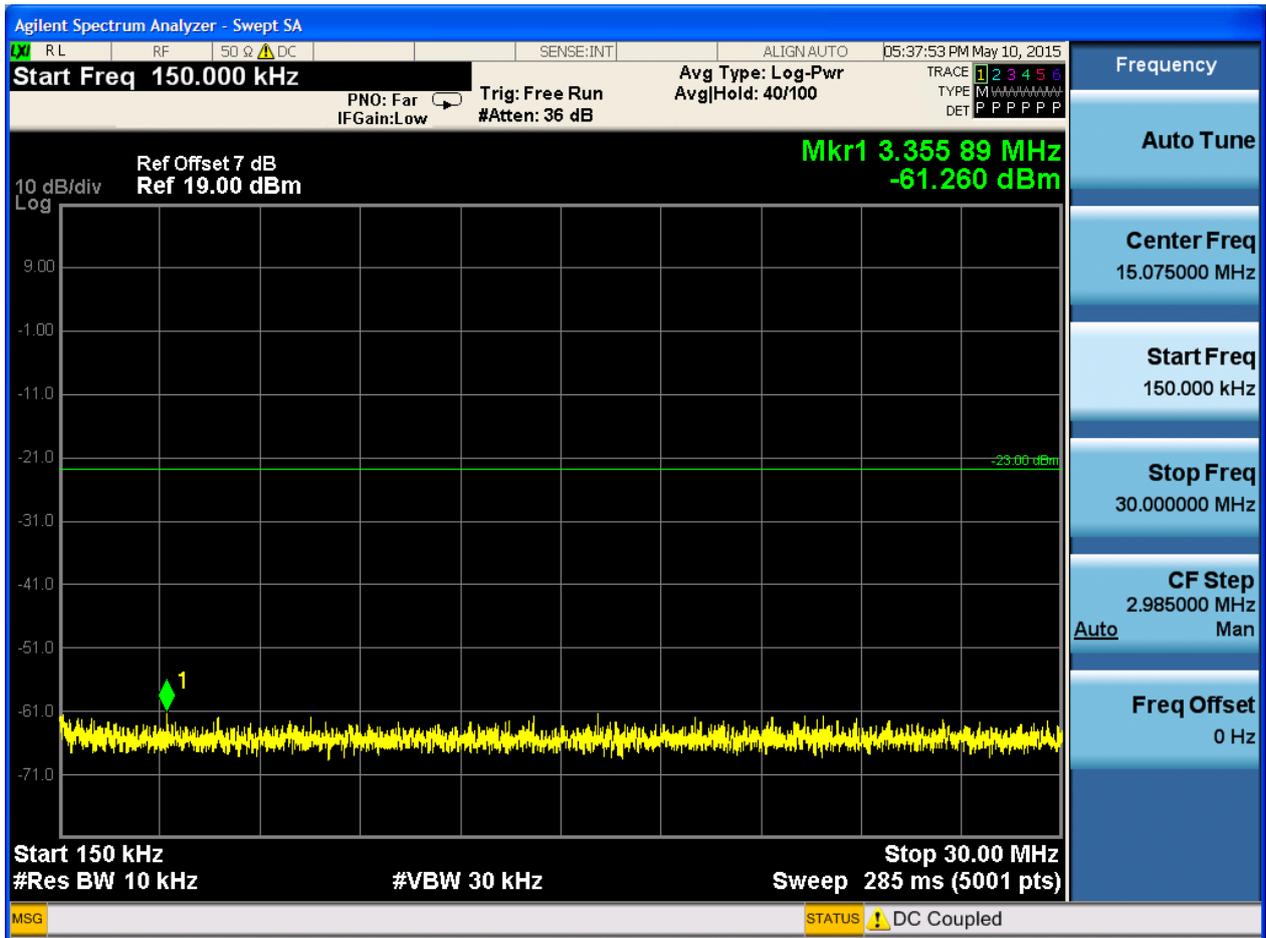


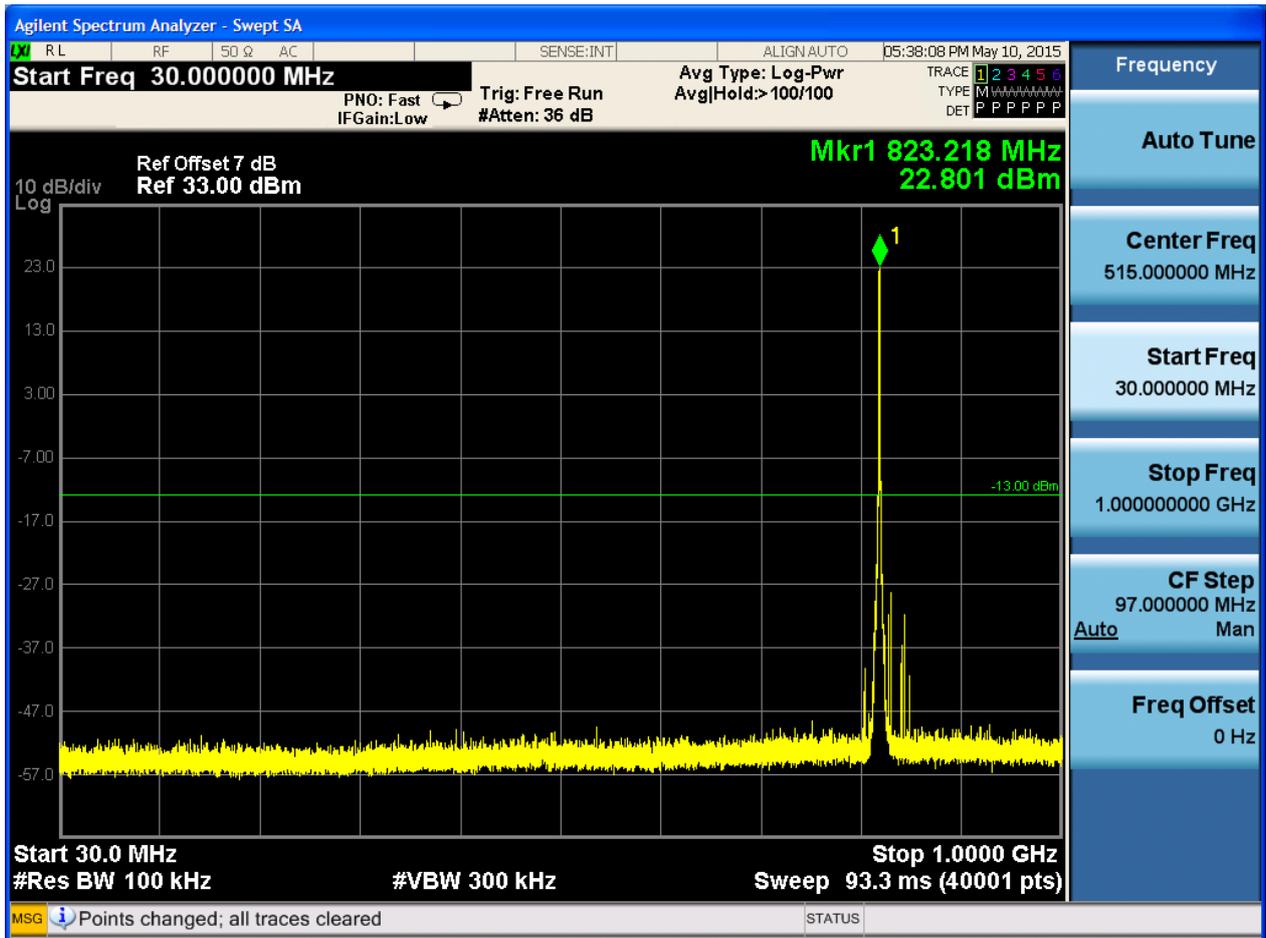


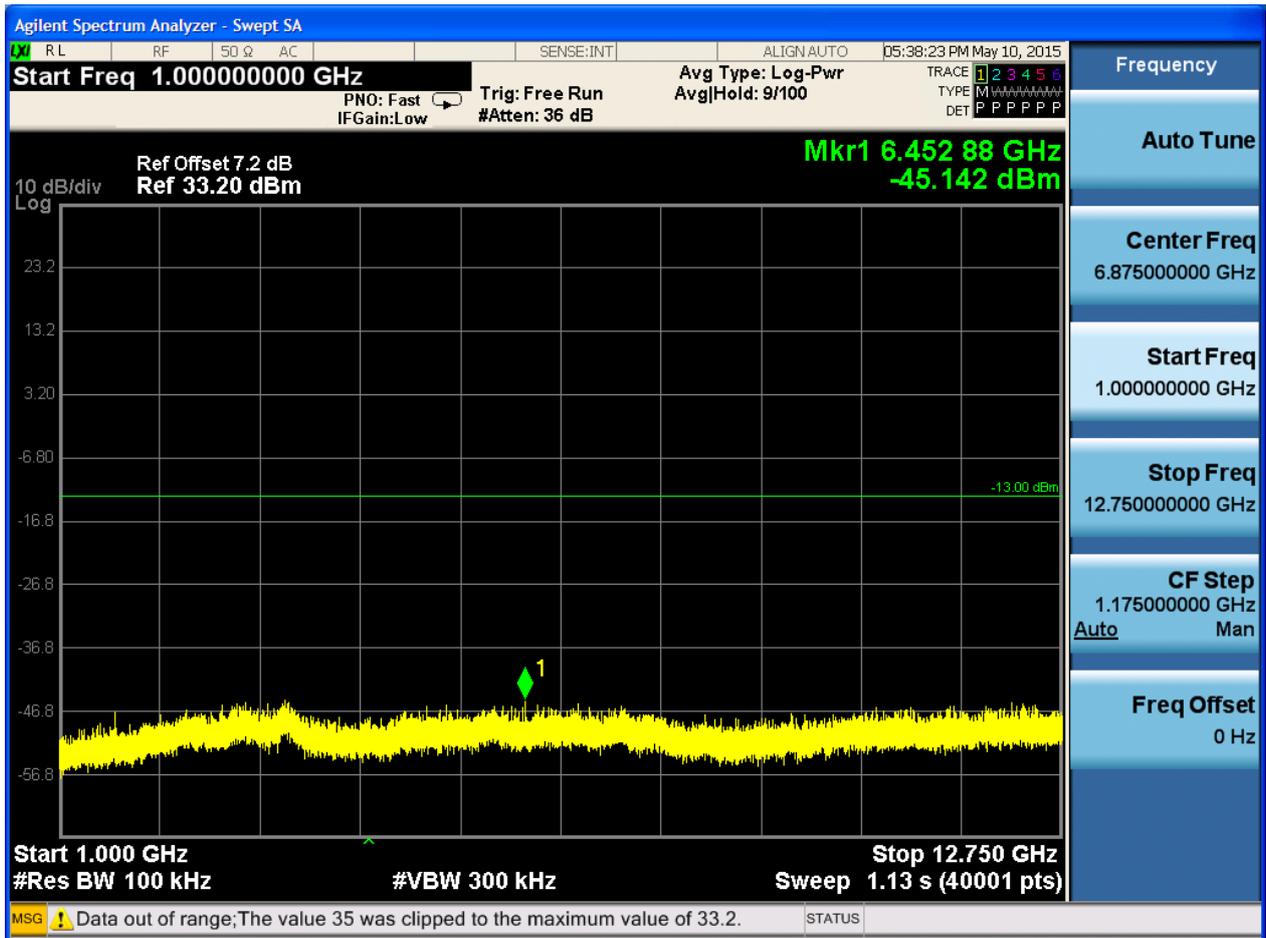


### 6.1.1.6.3 Test Channel = HCH











## 7Appendix\_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case.

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

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

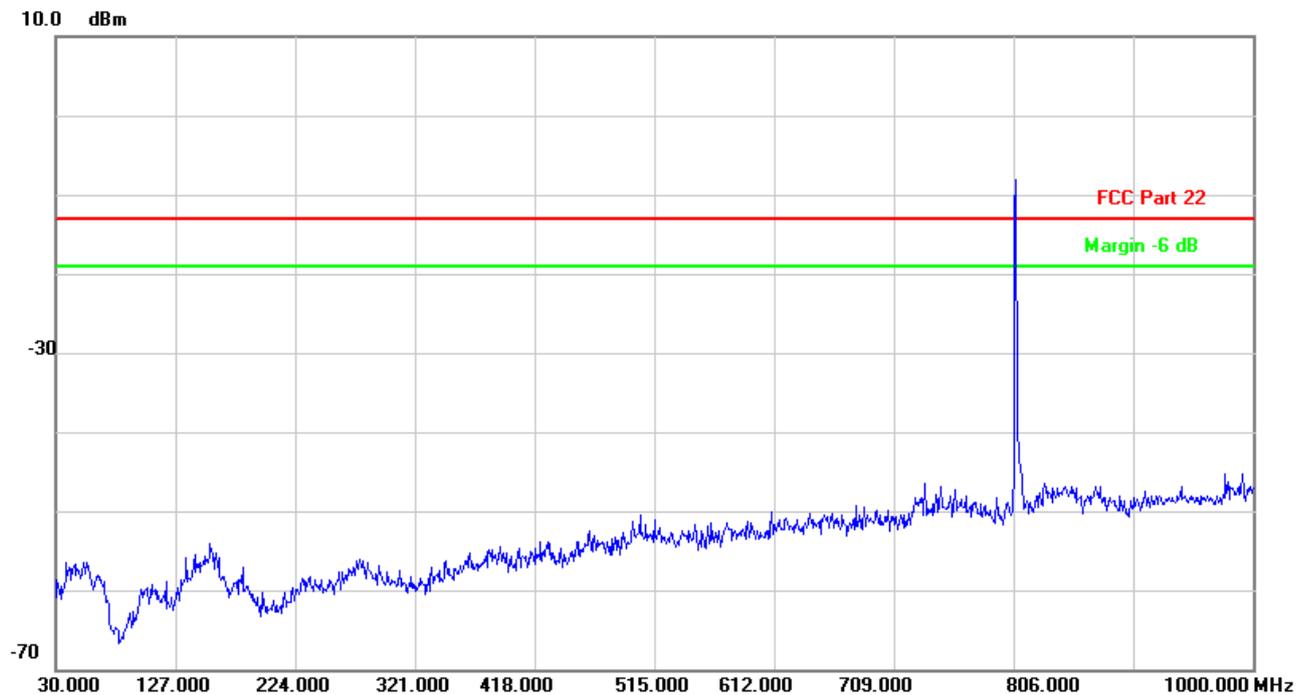
30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

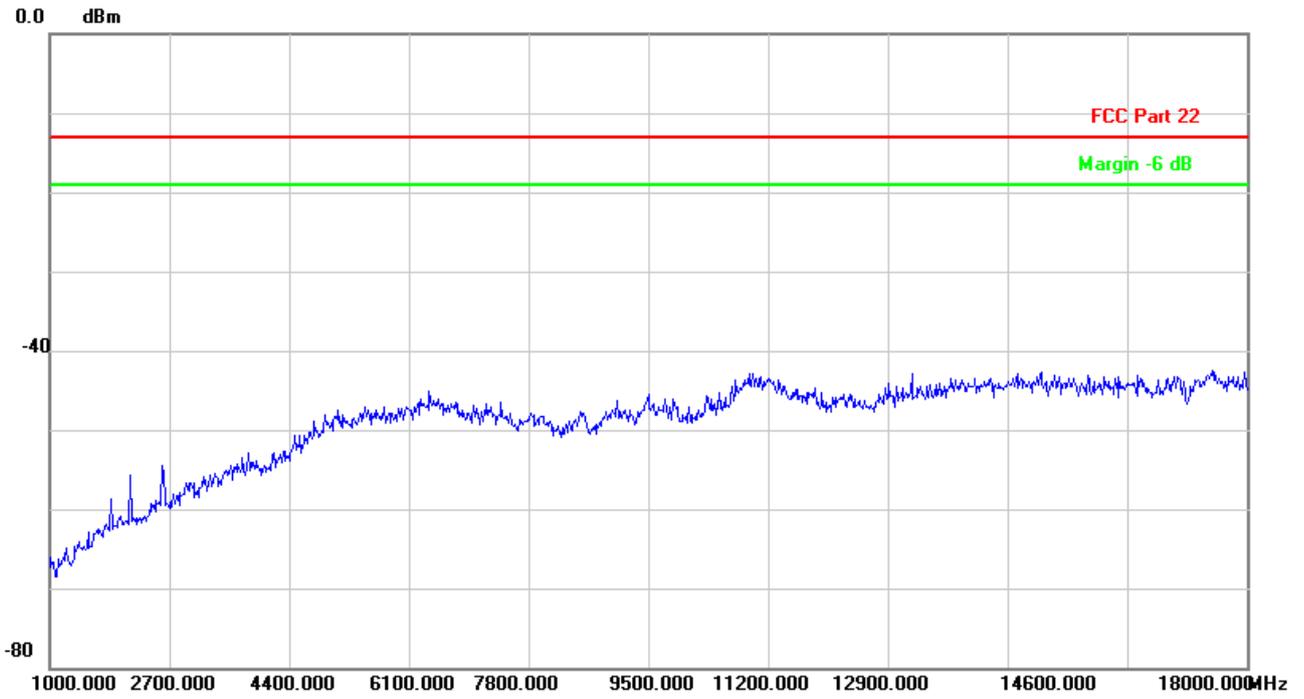
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

### Part I - Test Plots

#### 7.1 For CDMA/1X

##### 7.1.1 Test Band = BC10

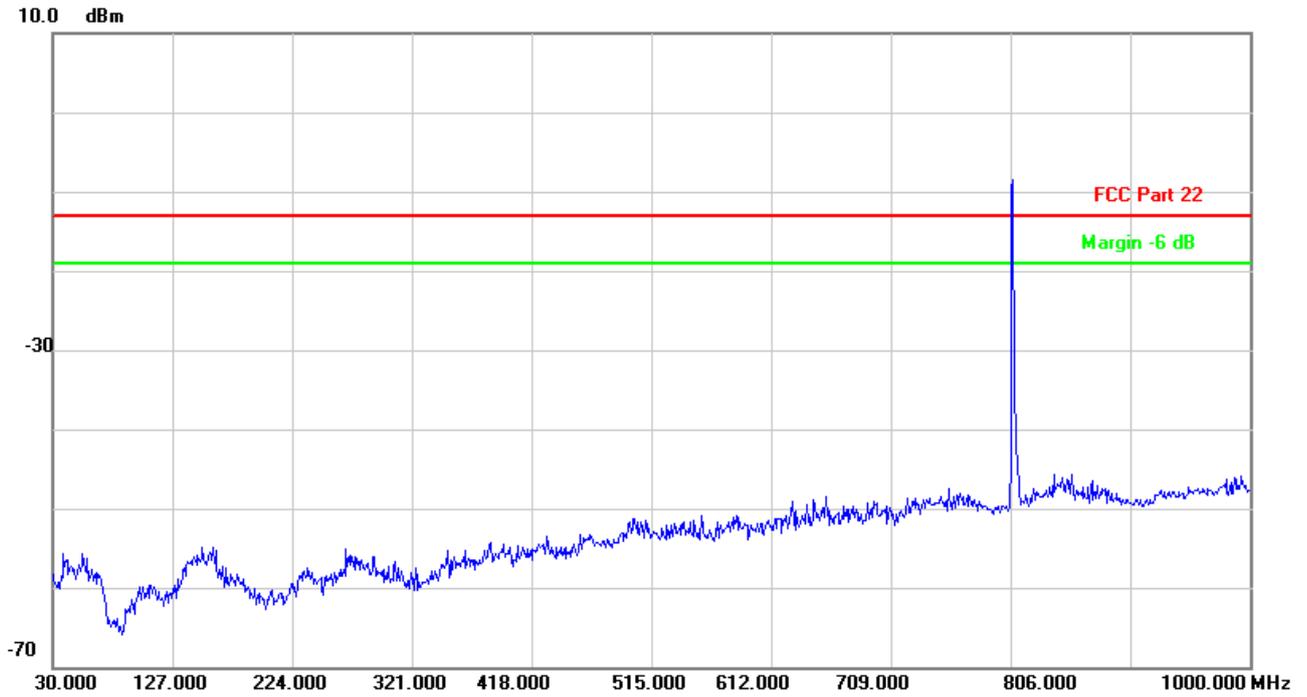


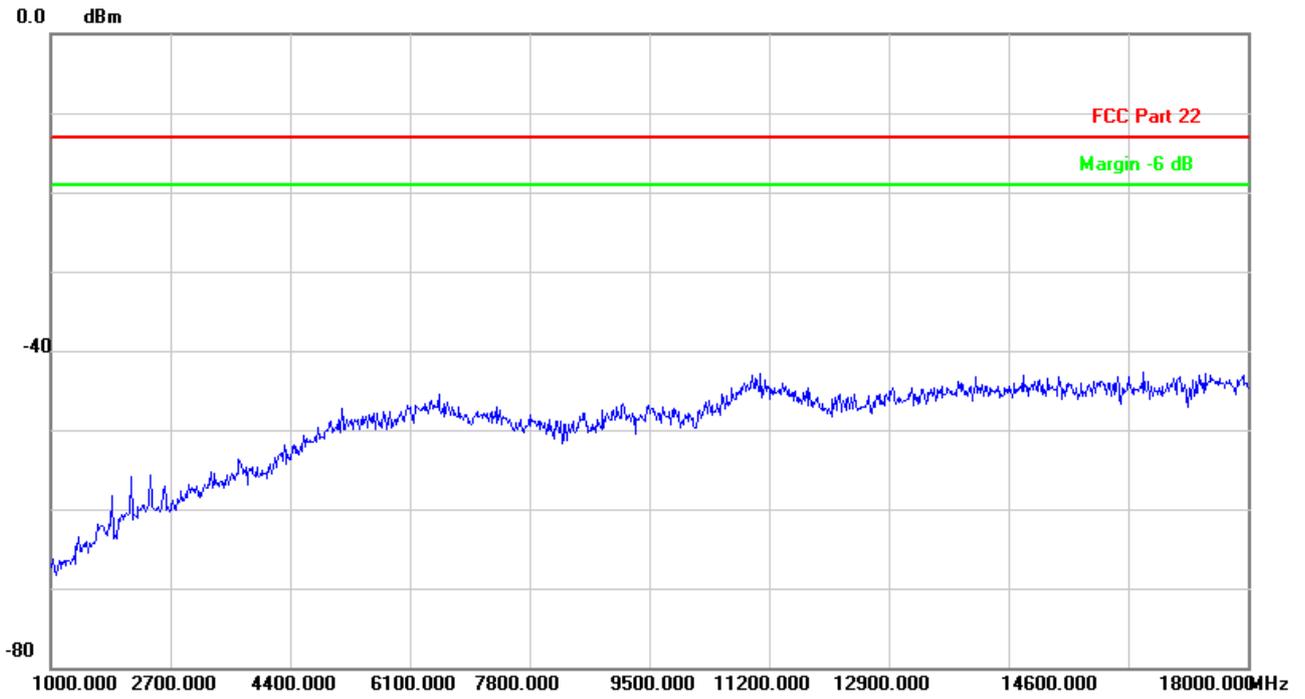




## 7.2 For CDMA/EV-DO

### 7.2.1 Test Band = BC10







## 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	1.5381	0.00186	PASS
				VN	1.0254	0.00124	PASS
				VH	0.293	0.00035	PASS
		MCH	TN	VL	1.0986	0.00132	PASS
				VN	0.6592	0.00079	PASS
				VH	0.6592	0.00079	PASS
		HCH	TN	VL	0.8789	0.00105	PASS
				VN	0.6592	0.00079	PASS
				VH	0.4395	0.00052	PASS
	CDMA/1X/TM3	LCH	TN	VL	0.9521	0.00115	PASS
				VN	-0.8789	-0.00106	PASS
				VH	-0.5859	-0.00071	PASS
		MCH	TN	VL	-0.5127	-0.00062	PASS
				VN	-0.3662	-0.00044	PASS
				VH	-0.293	-0.00035	PASS
		HCH	TN	VL	-6.8115	-0.00813	PASS
				VN	-1.5381	-0.00184	PASS
				VH	-1.0986	-0.00131	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	
			VH	-6.01	-0.00726	PASS	



Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		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	0.8057	0.00097	PASS	
				-20	0.4395	0.00053	PASS	
				-10	0.3662	0.00044	PASS	
				0	0.3662	0.00044	PASS	
				10	0.293	0.00035	PASS	
				20	0.3662	0.00044	PASS	
				30	0.5859	0.00071	PASS	
				40	0.3662	0.00044	PASS	
				50	0.3662	0.00044	PASS	
		MCH	VN	-30	0.3662	0.00044	PASS	
				-20	0.8057	0.00097	PASS	
				-10	0.7324	0.00088	PASS	
				0	0.4395	0.00053	PASS	
				10	0.3662	0.00044	PASS	
				20	0.2197	0.00026	PASS	
				30	0.5127	0.00062	PASS	
				40	0.5859	0.00071	PASS	
				50	0.293	0.00035	PASS	
		HCH	VN	-30	0.4395	0.00052	PASS	
				-20	0.5127	0.00061	PASS	
				-10	0.293	0.00035	PASS	
				0	0.5127	0.00061	PASS	
				10	0.1465	0.00017	PASS	
				20	0.0732	0.00009	PASS	
				30	0.4395	0.00052	PASS	
				40	0.4395	0.00052	PASS	
				50	0.293	0.00035	PASS	
		CDMA/1X/TM3	LCH	VN	-30	-0.6592	-0.0008	PASS
					-20	-0.9521	-0.00115	PASS



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
	CDMA/EV-DO/Subtype0			-10	-0.4395	-0.00053	PASS		
				0	-0.4395	-0.00053	PASS		
				10	-0.5859	-0.00071	PASS		
				20	-0.5127	-0.00062	PASS		
				30	-0.1465	-0.00018	PASS		
				40	-0.1465	-0.00018	PASS		
				50	-0.6592	-0.0008	PASS		
		MCH	VN	-30	-0.0732	-0.00009	PASS		
				-20	-0.0732	-0.00009	PASS		
				-10	-0.2197	-0.00026	PASS		
				0	-0.2197	-0.00026	PASS		
				10	-0.3662	-0.00044	PASS		
				20	-0.0732	-0.00009	PASS		
				30	0.1465	0.00018	PASS		
				40	-0.4395	-0.00053	PASS		
				50	0.2197	0.00026	PASS		
		HCH	VN	-30	-0.5859	-0.0007	PASS		
				-20	-0.5127	-0.00061	PASS		
				-10	-0.5127	-0.00061	PASS		
				0	-0.6592	-0.00079	PASS		
				10	-0.293	-0.00035	PASS		
				20	-0.0732	-0.00009	PASS		
				30	-0.293	-0.00035	PASS		
				40	-0.5859	-0.0007	PASS		
		50	-0.1465	-0.00017	PASS				
		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		
0	11.2800					0.01358	PASS		
10	-1.7600					-0.00212	PASS		
20	0.7300	0.00088	PASS						



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict										
				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													
	50	0.2930	0.00036	PASS													
	HCH	VN															
									-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					
40	0.1465	0.00018	PASS														
50	0.5859	0.00071	PASS														



END