



Appendix for test report

1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dBm]	ERP/EIRP [dBm]	Limit [dBm]	Verdict
GSM850	GSM/TM1	LCH	33.1	27.95	38.5	PASS
		MCH	33.19	28.04	38.5	PASS
		HCH	33.33	28.18	38.5	PASS
	GSM/TM2	LCH	26.71	21.56	38.5	PASS
		MCH	26.81	21.66	38.5	PASS
		HCH	26.8	21.65	38.5	PASS
GSM1900	GSM/TM1	LCH	30.24	30.24	33	PASS
		MCH	30.27	30.27	33	PASS
		HCH	30.46	30.46	33	PASS
	GSM/TM2	LCH	25.8	25.8	33	PASS
		MCH	25.89	25.89	33	PASS
		HCH	25.87	25.87	33	PASS



Test Band	Test Mode	Test Channel	Measured[dBm]	ERP/EIRP [dBm]	Limit [dBm]	Verdict
WCDMA850	UMTS/TM1	LCH	23.07	18.08	38.5	PASS
		MCH	23.14	18.16	38.5	PASS
		HCH	23.09	18.13	38.5	PASS
WCDMA1900	UMTS/TM1	LCH	21.83	21.83	33	PASS
		MCH	22	22	33	PASS
		HCH	22.01	22.01	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:

SET Span=1.5*OBW

SET RBW=1%of the OBW,not to exceed 1MHz

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector:RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
GSM1900	GSM/TM1	LCH	0.15	13	PASS
		MCH	0.17	13	PASS
		HCH	0.16	13	PASS
	GSM/TM2	LCH	3.19	13	PASS
		MCH	3.08	13	PASS
		HCH	3.21	13	PASS
WCDMA1900	UMTS/TM1	LCH	3.66	13	PASS
		MCH	3.89	13	PASS
		HCH	3.93	13	PASS

3Appendix_C: Modulation Characteristics

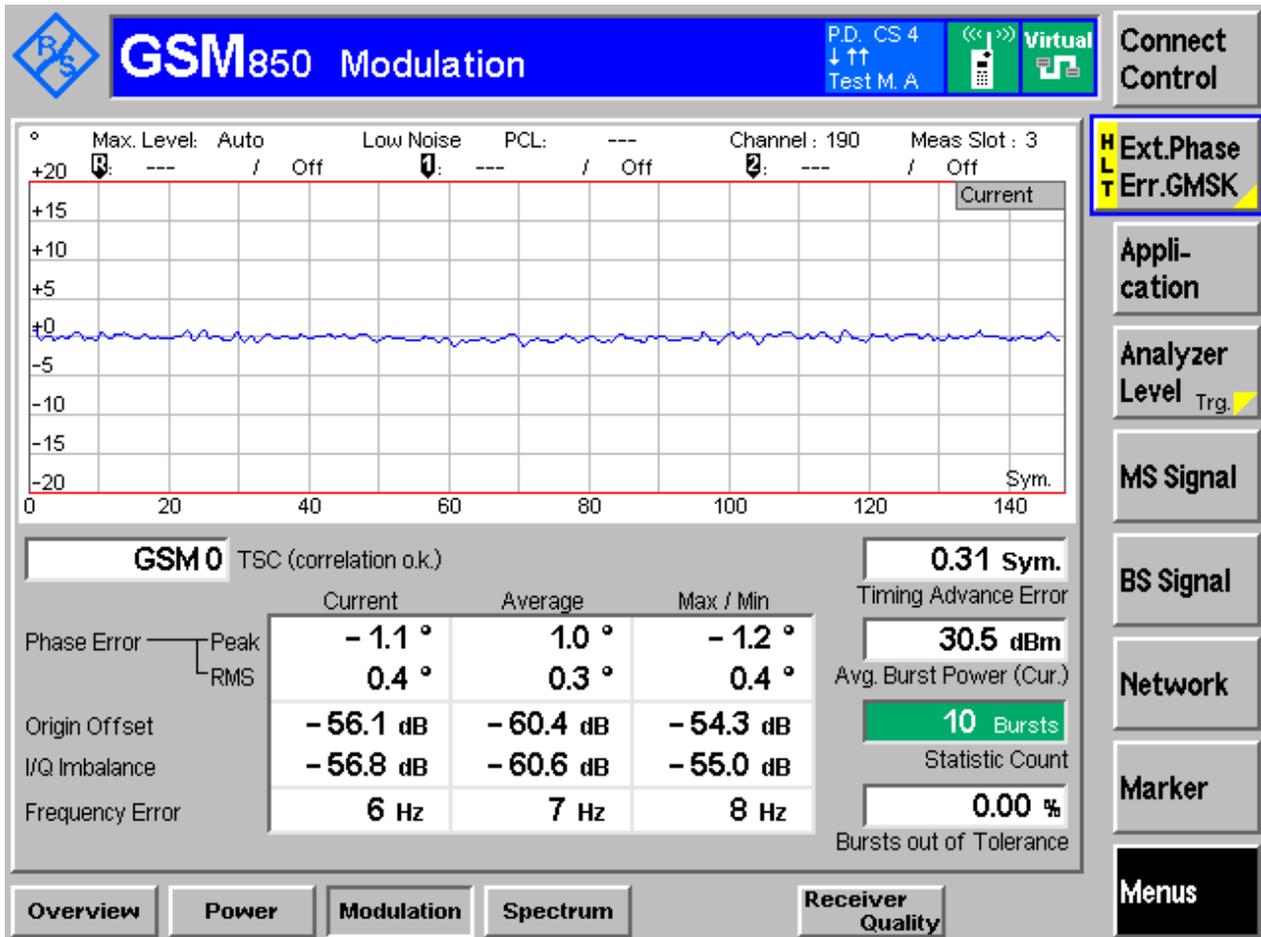
Part I - Test Plots

3.1 For GSM

3.1.1 Test Band = GSM850

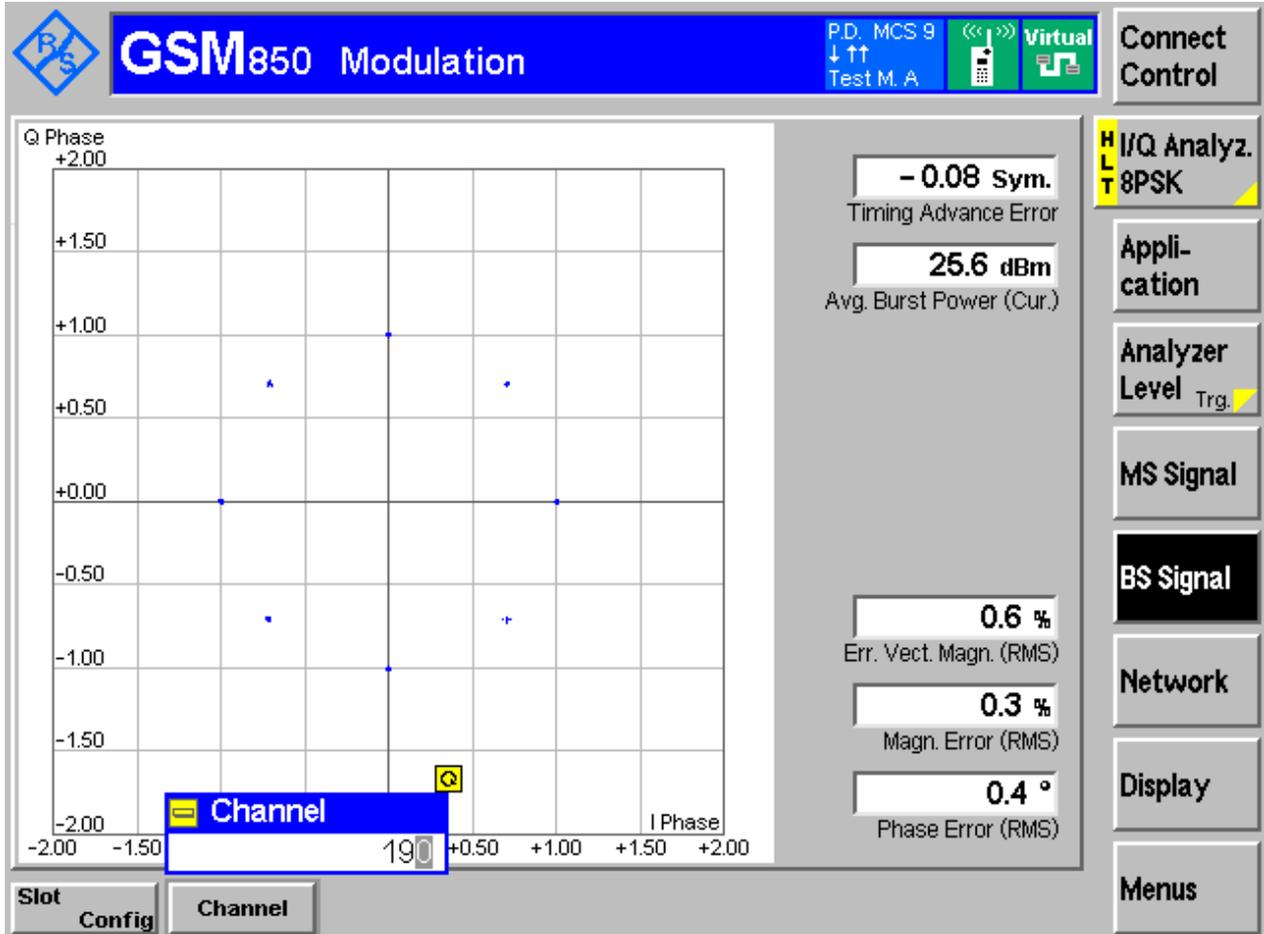
3.1.1.1 Test Mode = GSM/TM1

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = GSM/TM2

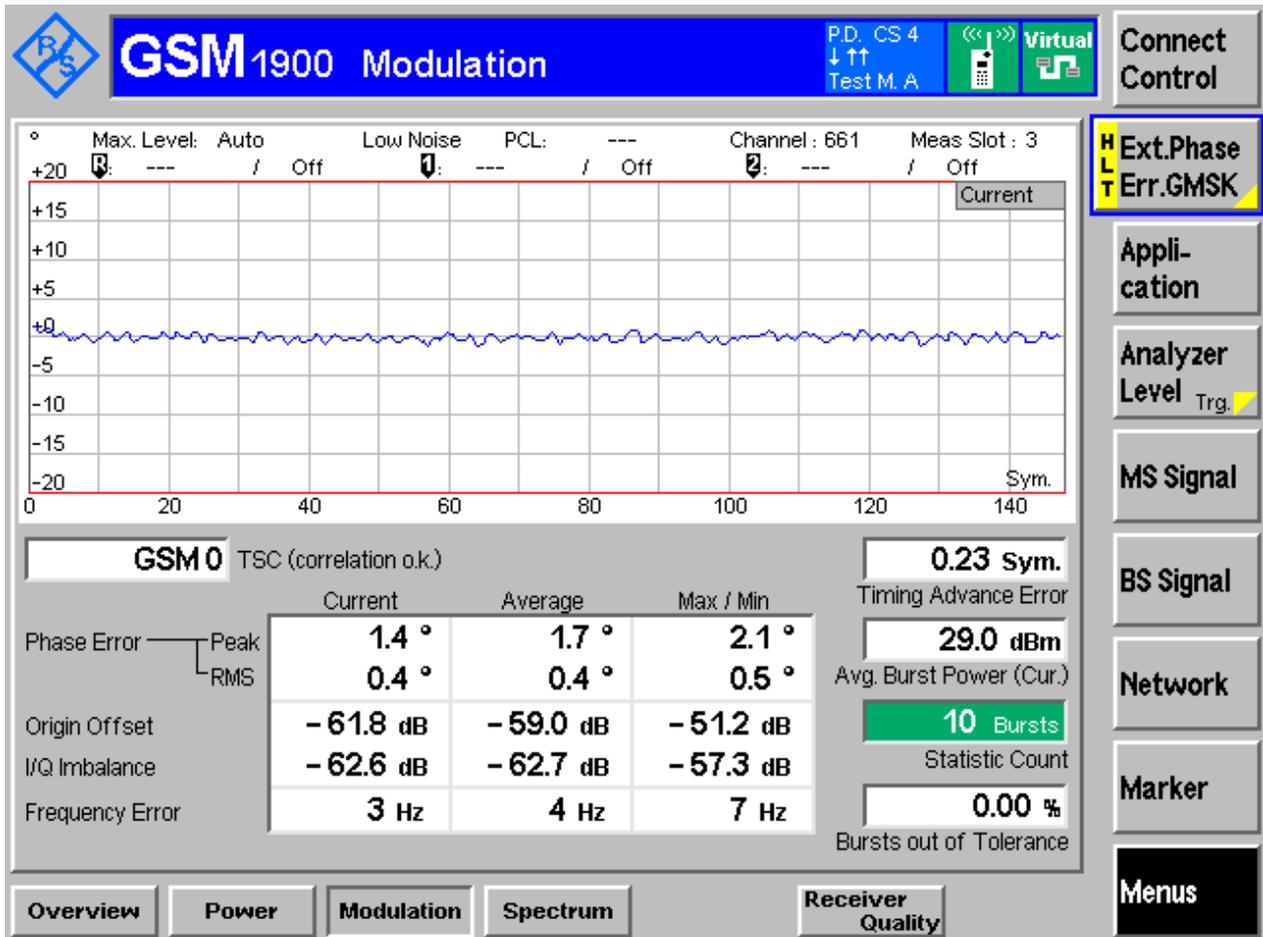
3.1.1.2.1 Test Channel = MCH



3.1.2 Test Band = GSM1900

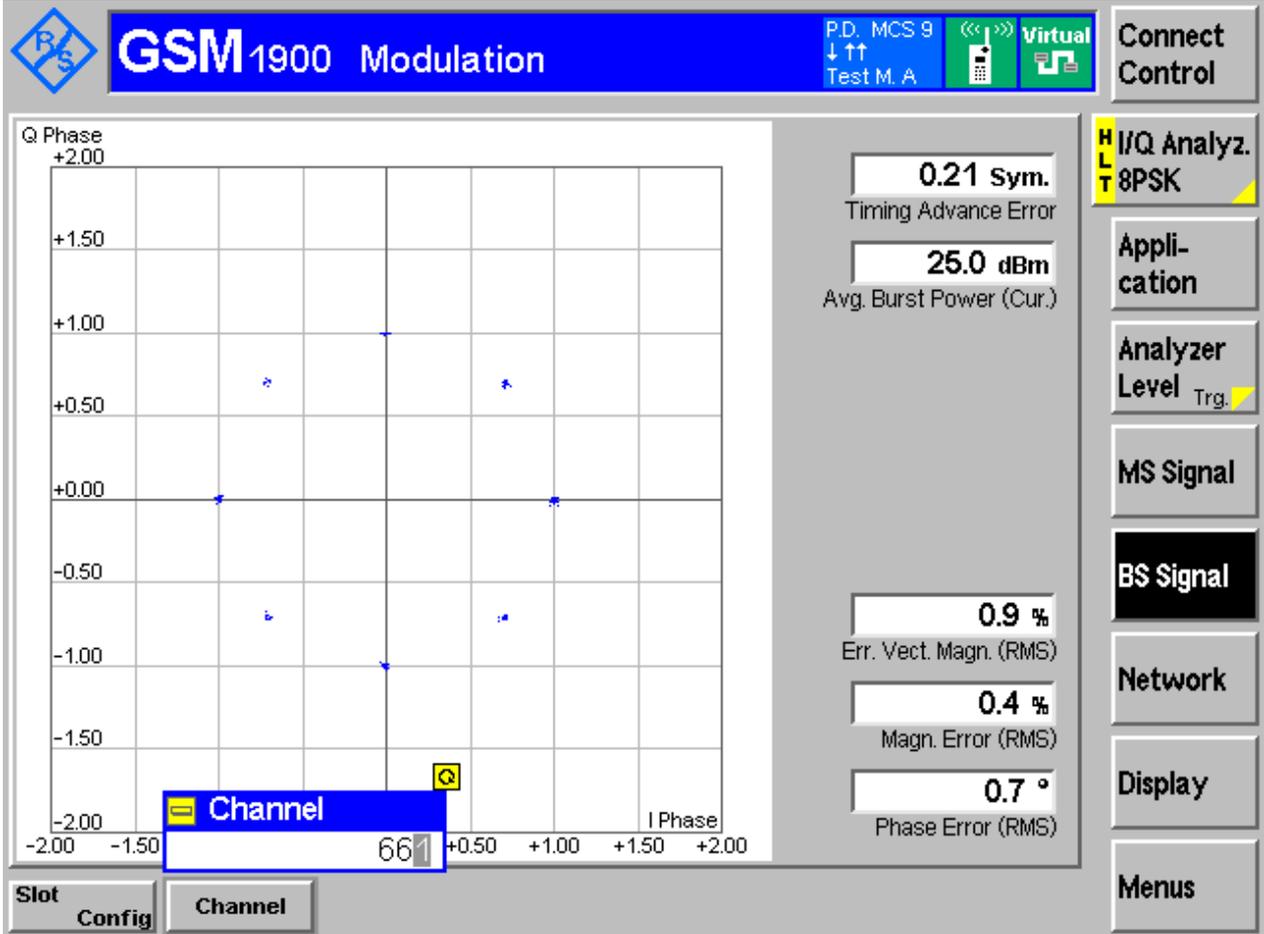
3.1.2.1 Test Mode = GSM/TM1

3.1.2.1.1 Test Channel = MCH



3.1.2.2 Test Mode = GSM/TM2

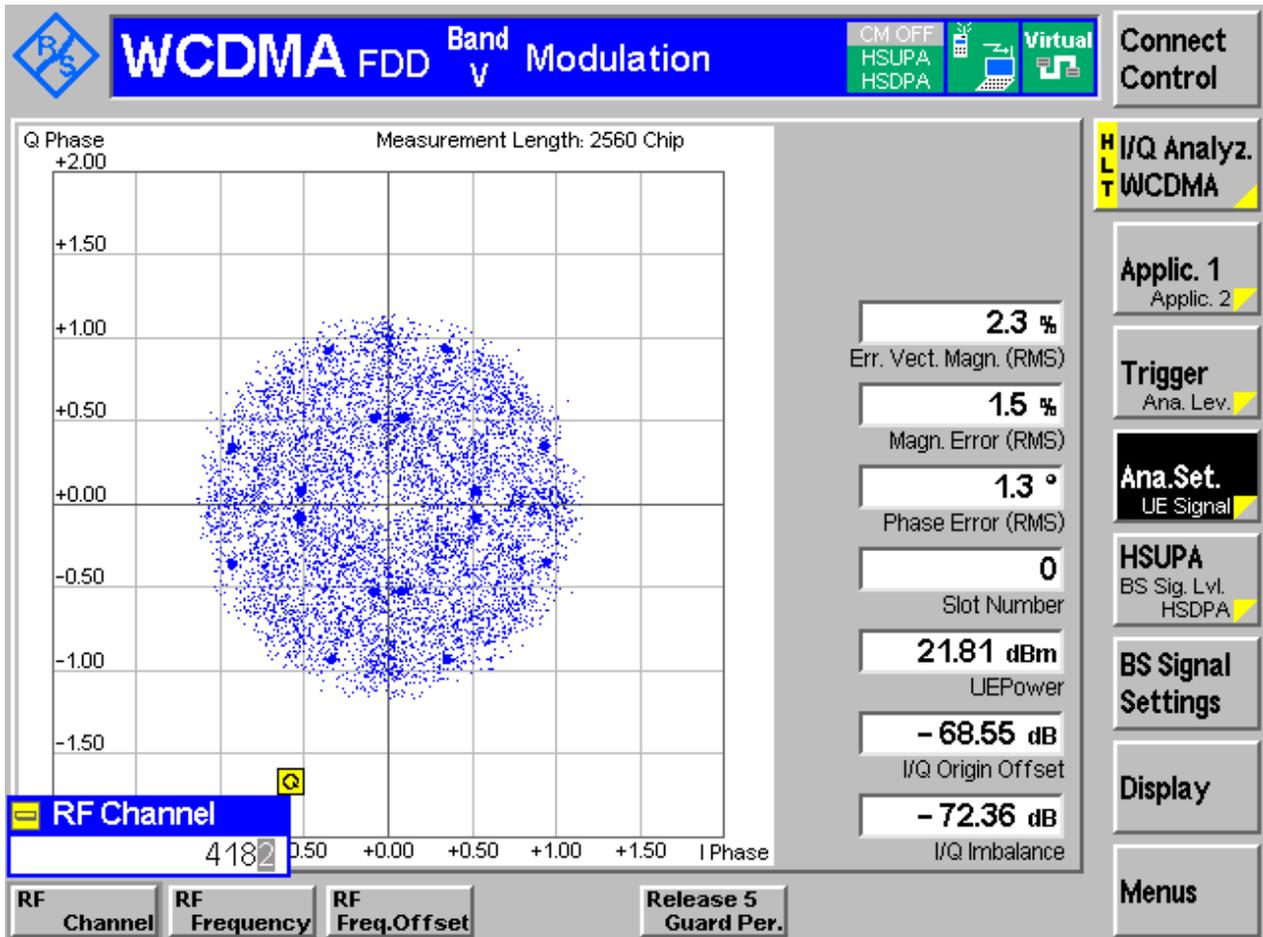
3.1.2.2.1 Test Channel = MCH



3.1.3 Test Band = WCDMA850

3.1.3.1 Test Mode = UMTS/TM1

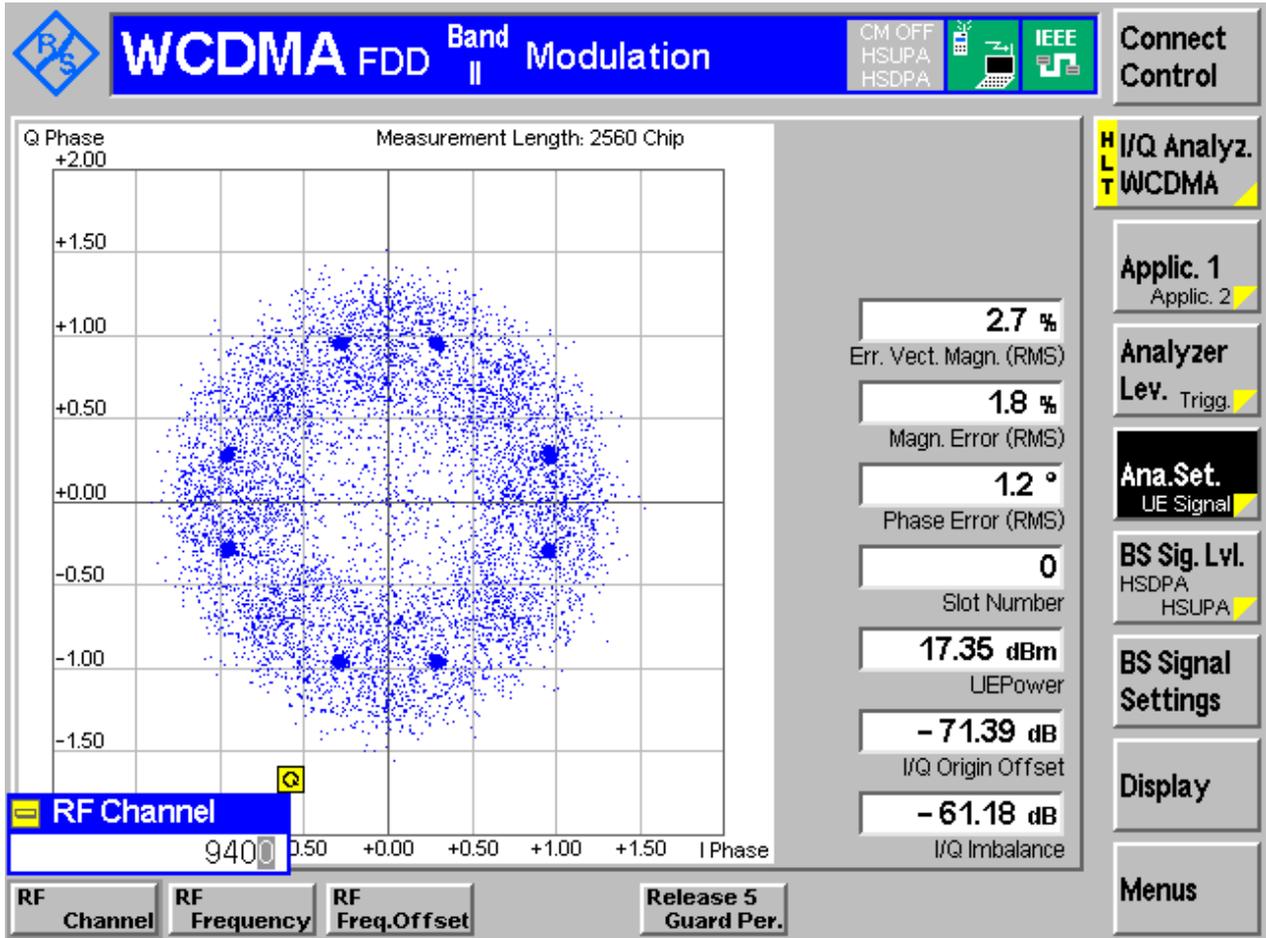
3.1.3.1.1 Test Channel = MCH



3.1.4 Test Band = WCDMA1900

3.1.4.1 Test Mode = UMTS/TM1

3.1.4.1.1 Test Channel = MCH



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [kHz]	Emission Bandwidth [kHz]	Verdict
GSM850	GSM/TM1	LCH	244.35	320.06	Pass
		MCH	243.00	313.06	Pass
		HCH	243.64	322.66	Pass
	GSM/TM2	LCH	243.49	317.18	Pass
		MCH	243.66	314.55	Pass
		HCH	240.51	309.09	Pass
GSM1900	GSM/TM1	LCH	244.47	320.77	Pass
		MCH	243.38	315.81	Pass
		HCH	245.37	317.86	Pass
	GSM/TM2	LCH	250.24	319.67	Pass
		MCH	244.46	304.05	Pass
		HCH	247.28	315.62	Pass
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
WCDMA850	UMTS/TM1	LCH	4.16	4.69	Pass
		MCH	4.16	4.68	Pass
		HCH	4.16	4.69	Pass
WCDMA1900	UMTS/TM1	LCH	4.17	4.69	Pass
		MCH	4.17	4.68	Pass
		HCH	4.19	4.67	Pass



Part II - Test Plots

4.1 For GSM

4.1.1 Test Band = GSM850

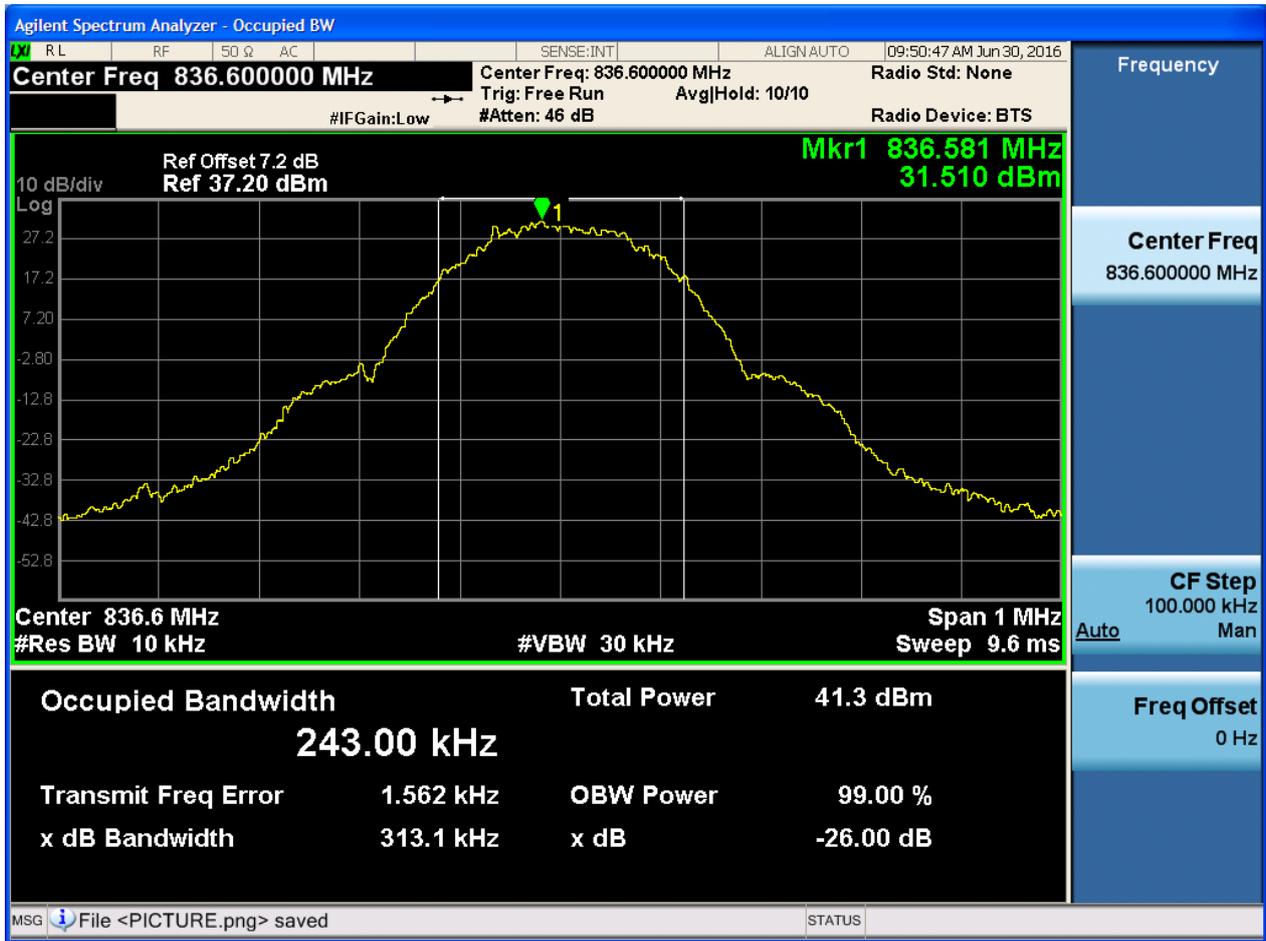
4.1.1.1 Test Mode = GSM/TM1

4.1.1.1.1 Test Channel = LCH





4.1.1.1.2 Test Channel = MCH





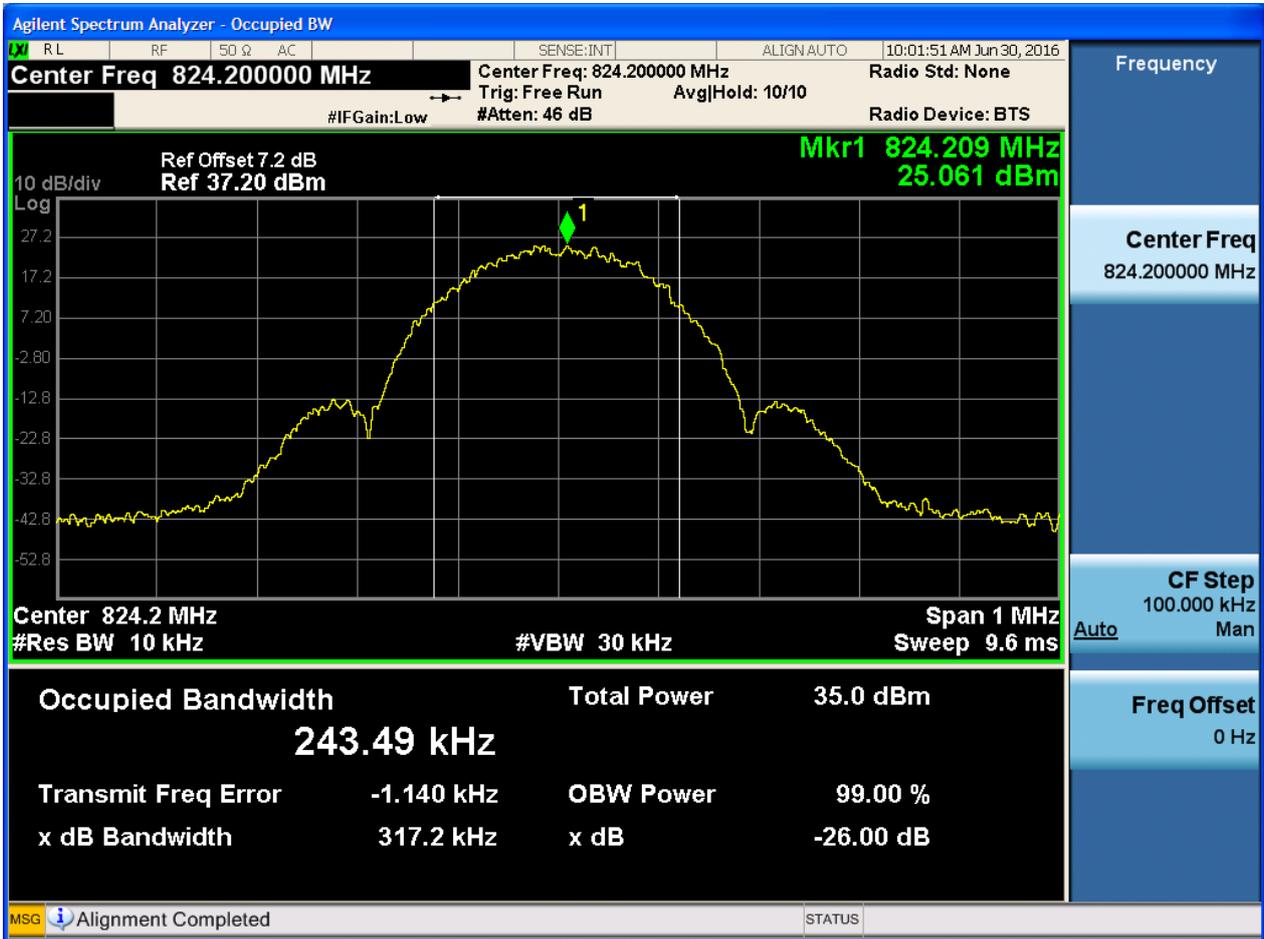
4.1.1.1.3 Test Channel = HCH





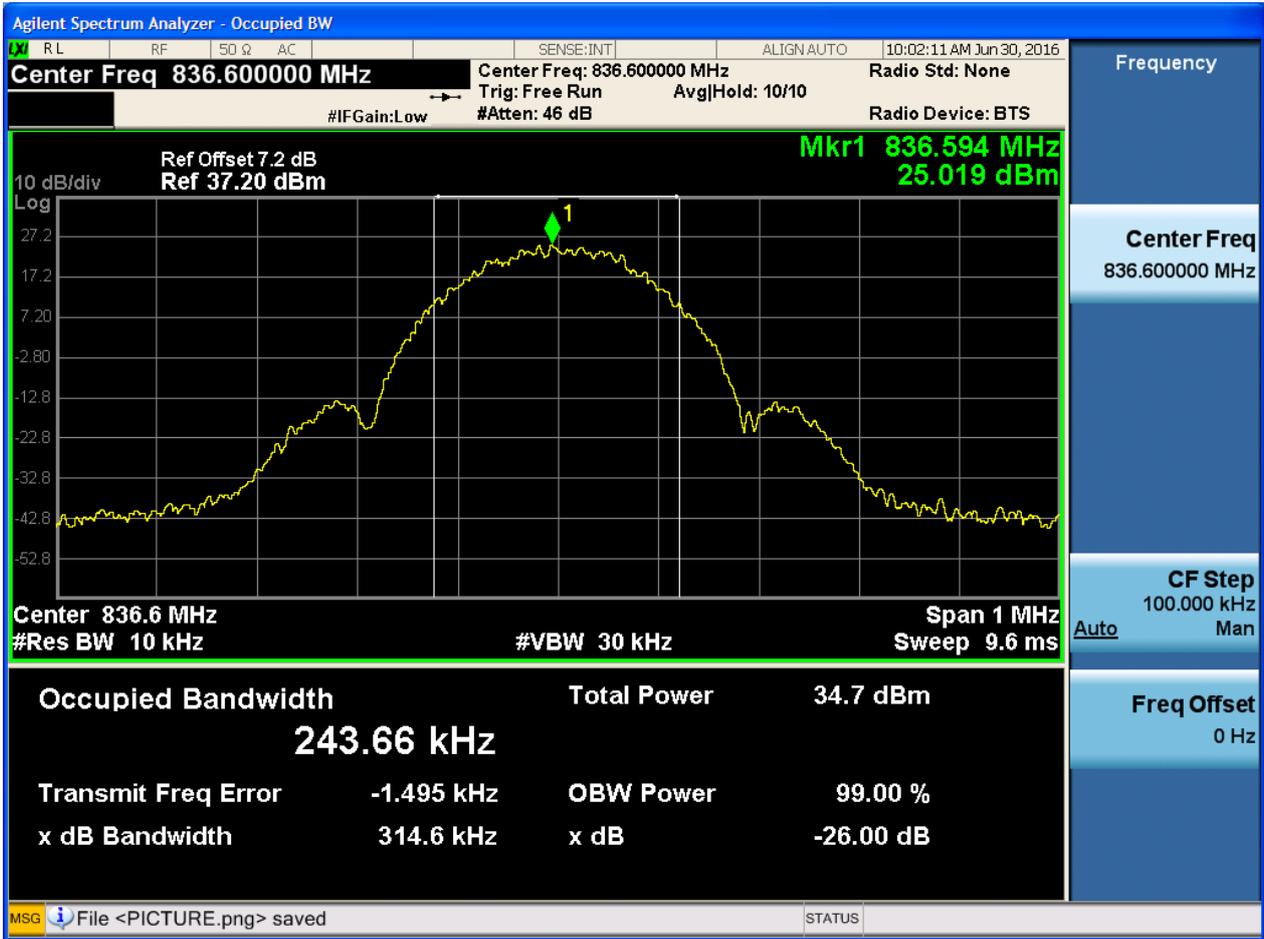
4.1.1.2 Test Mode = GSM/TM2

4.1.1.2.1 Test Channel = LCH



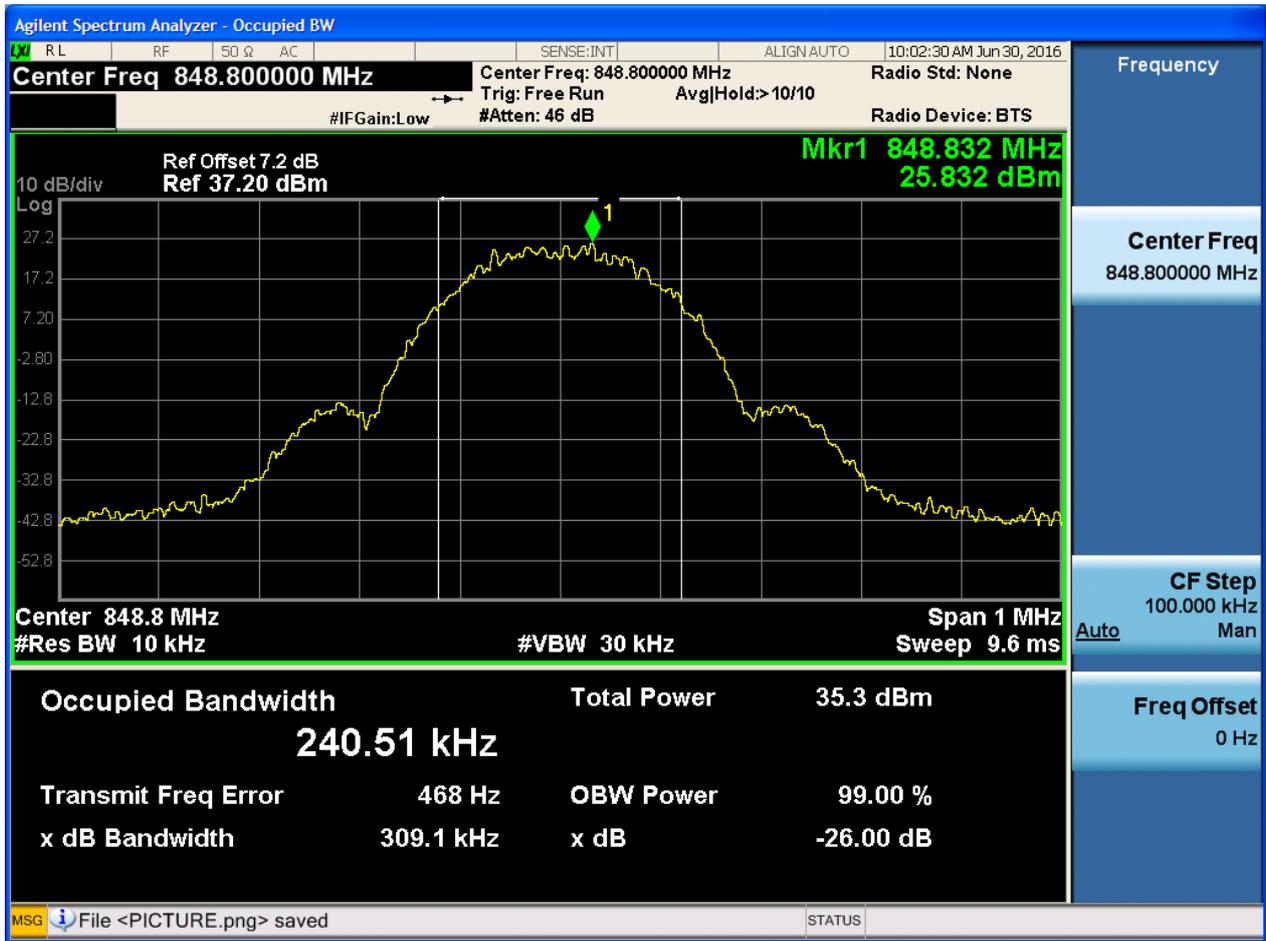


4.1.1.2.2 Test Channel = MCH





4.1.1.2.3 Test Channel = HCH

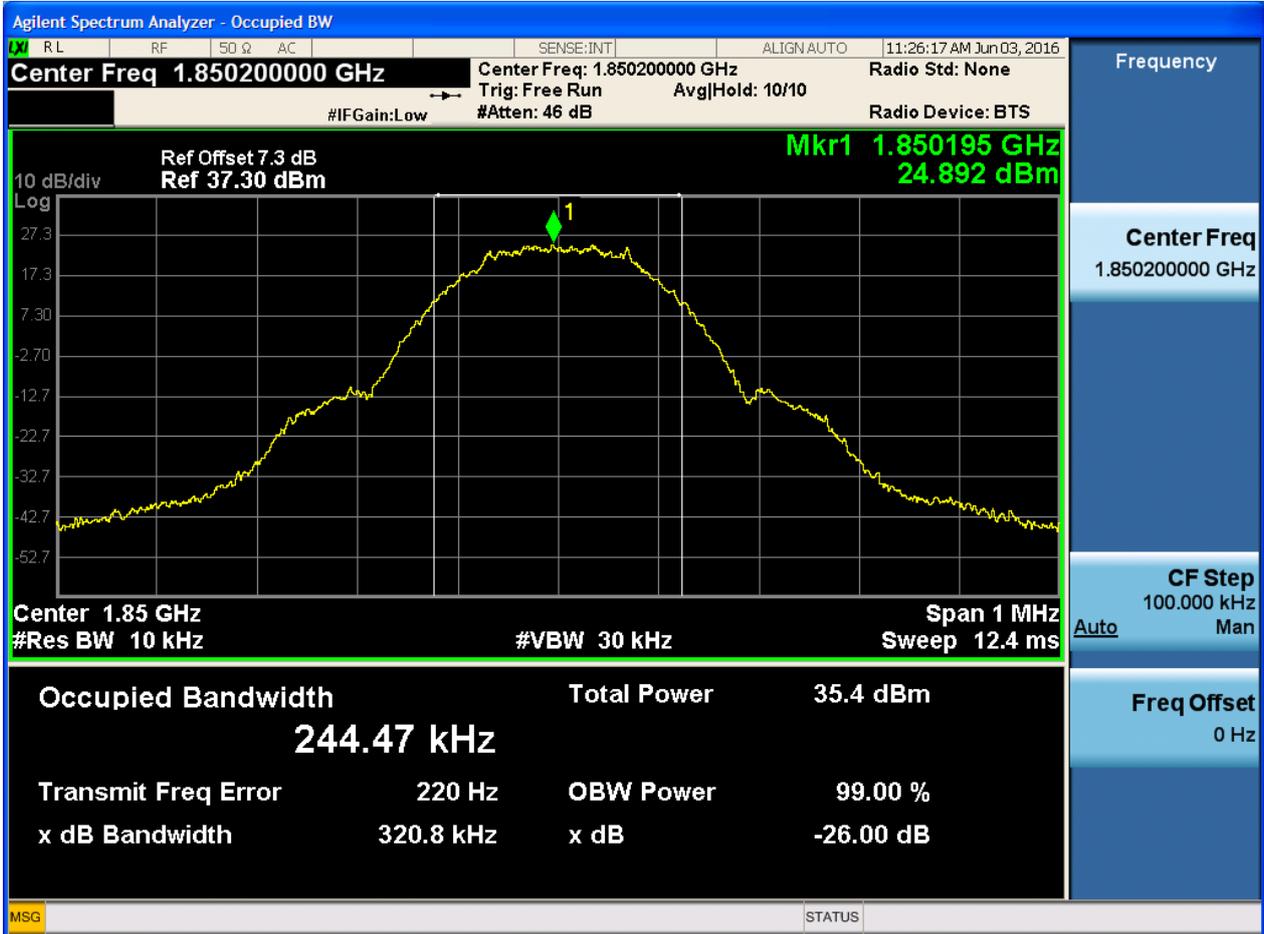




4.1.2 Test Band = GSM1900

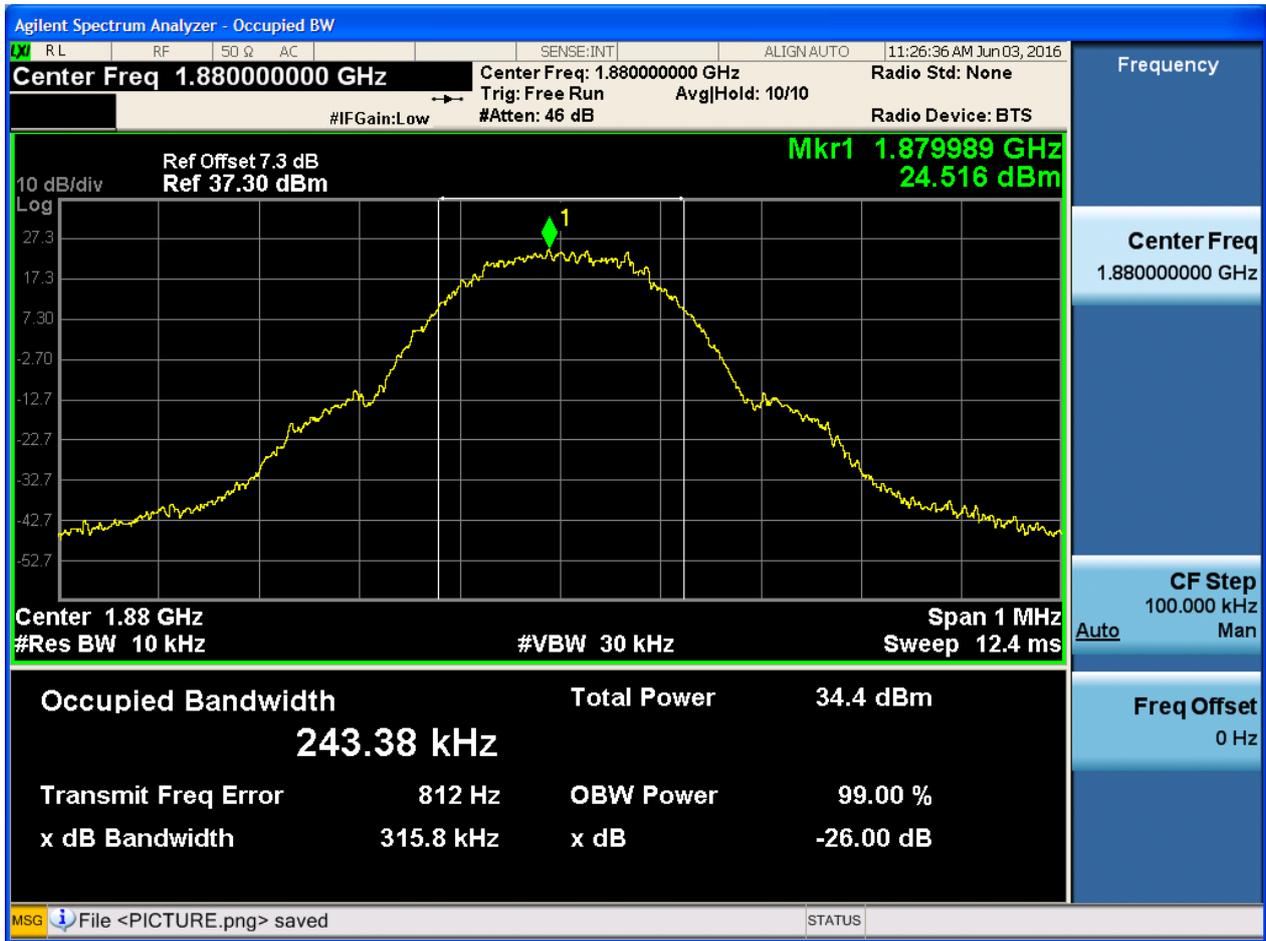
4.1.2.1 Test Mode = GSM/TM1

4.1.2.1.1 Test Channel = LCH



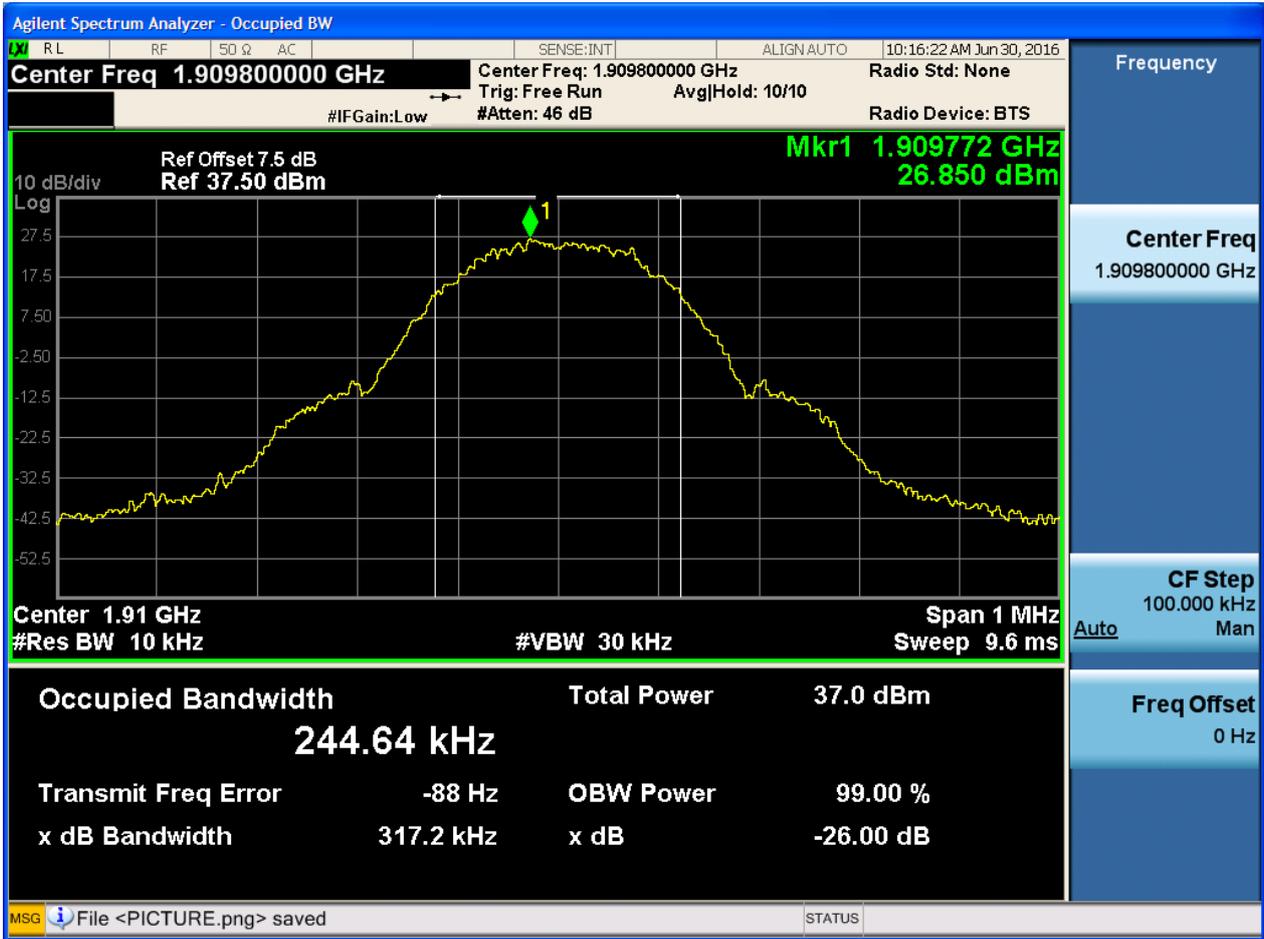


4.1.2.1.2 Test Channel = MCH





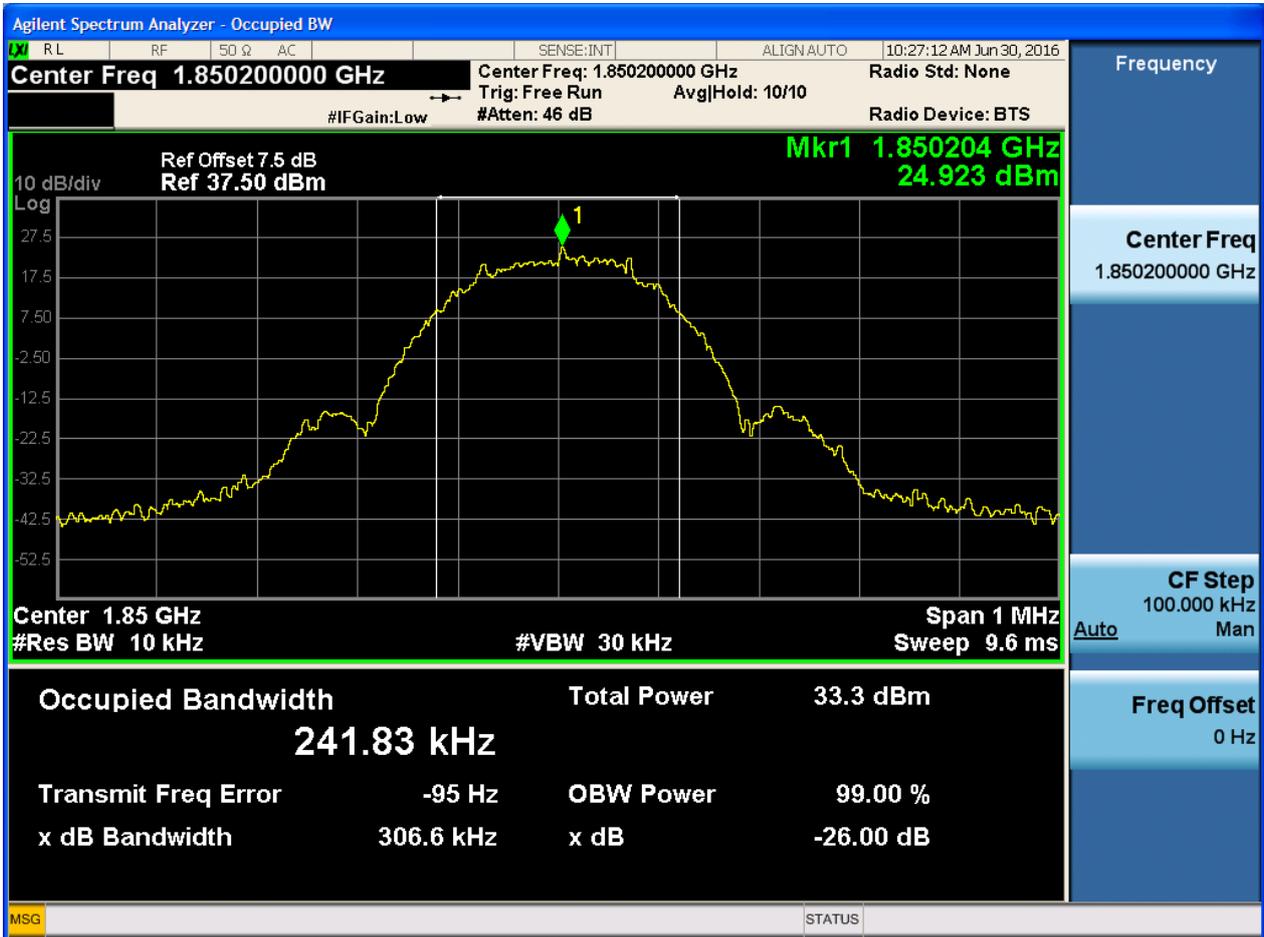
4.1.2.1.3 Test Channel = HCH





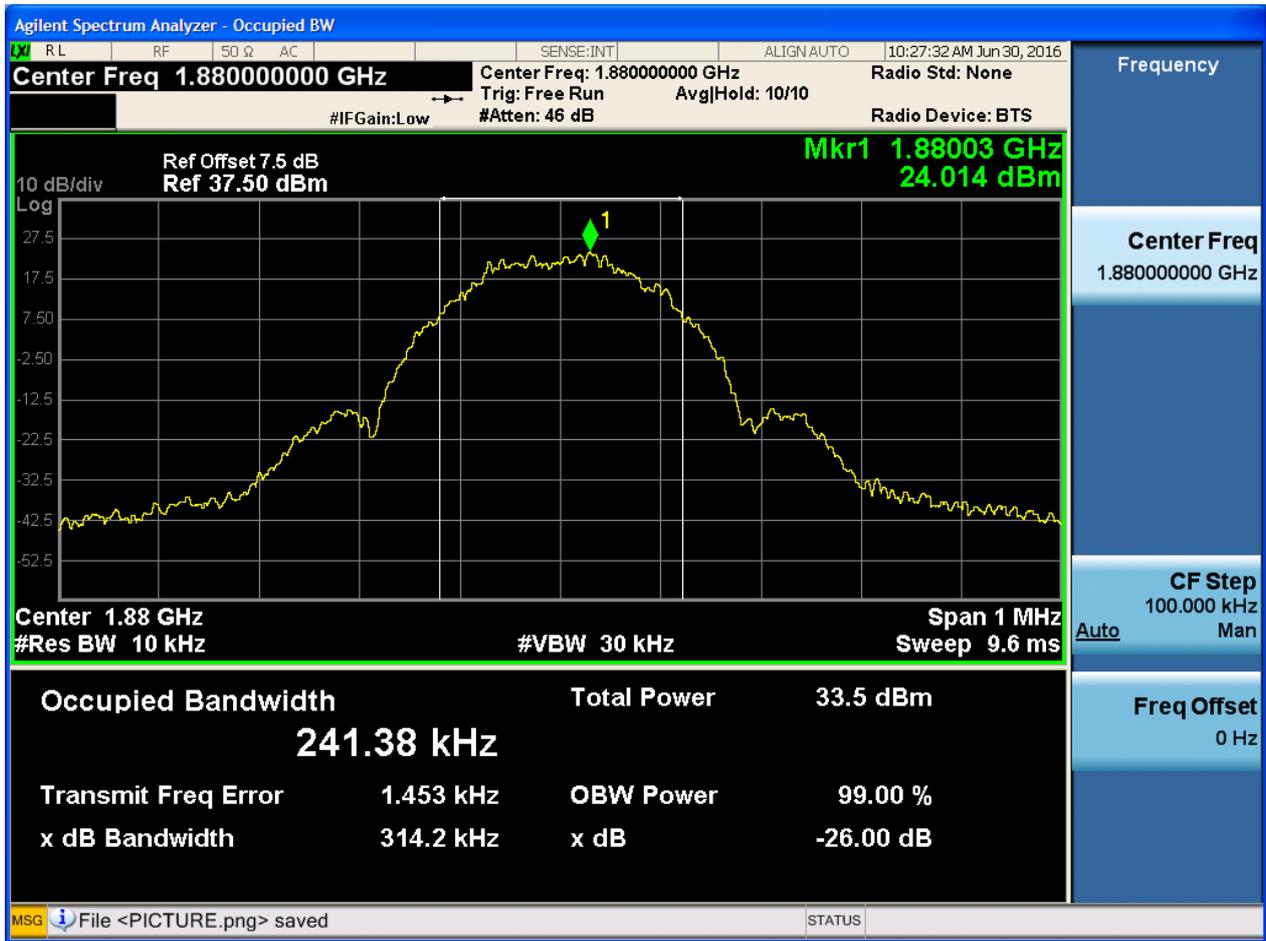
4.1.2.2 Test Mode = GSM/TM2

4.1.2.2.1 Test Channel = LCH



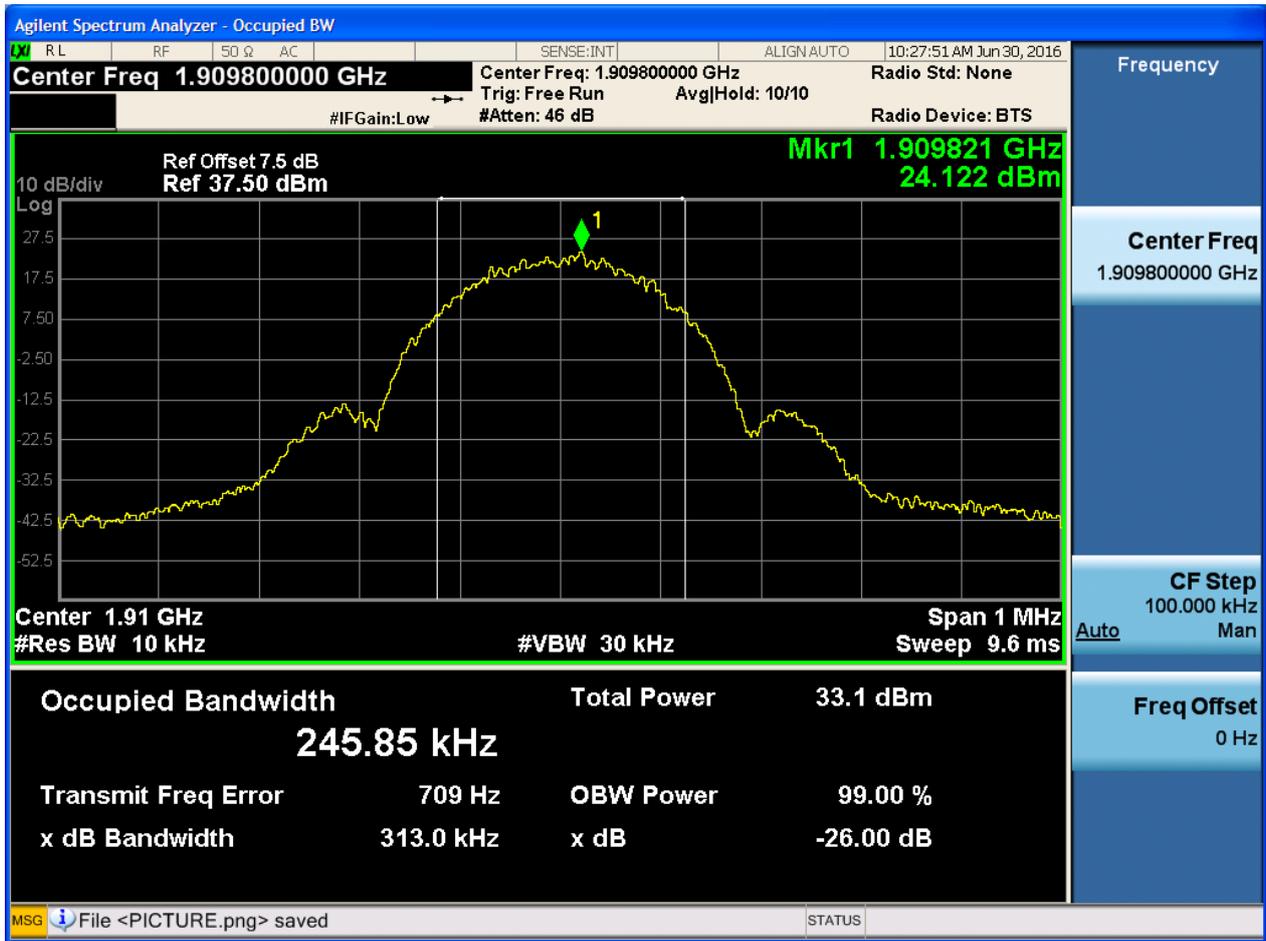


4.1.2.2.2 Test Channel = MCH





4.1.2.2.3 Test Channel = HCH



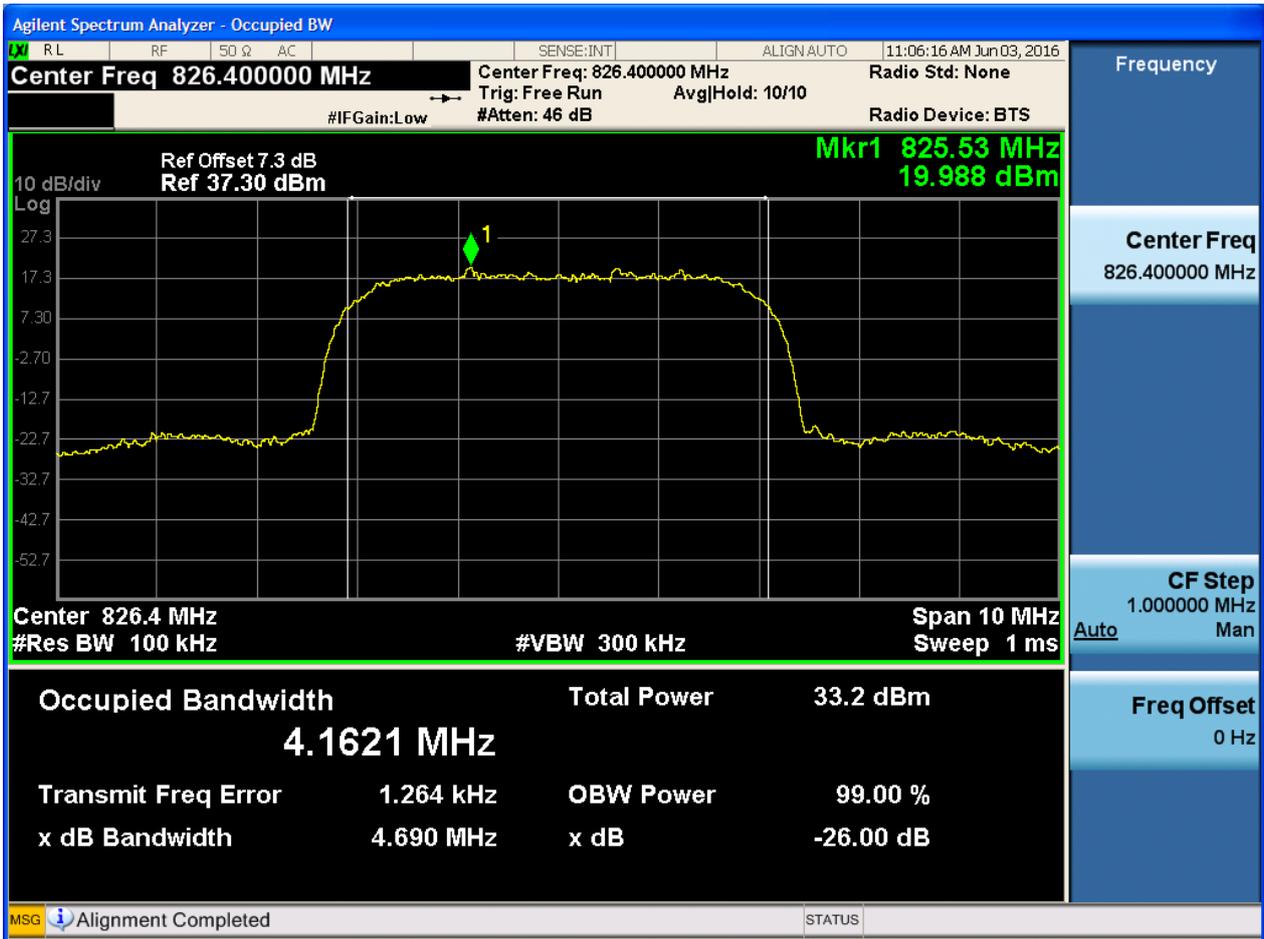


4.2 For UMTS

4.2.1 Test Band = WCDMA850

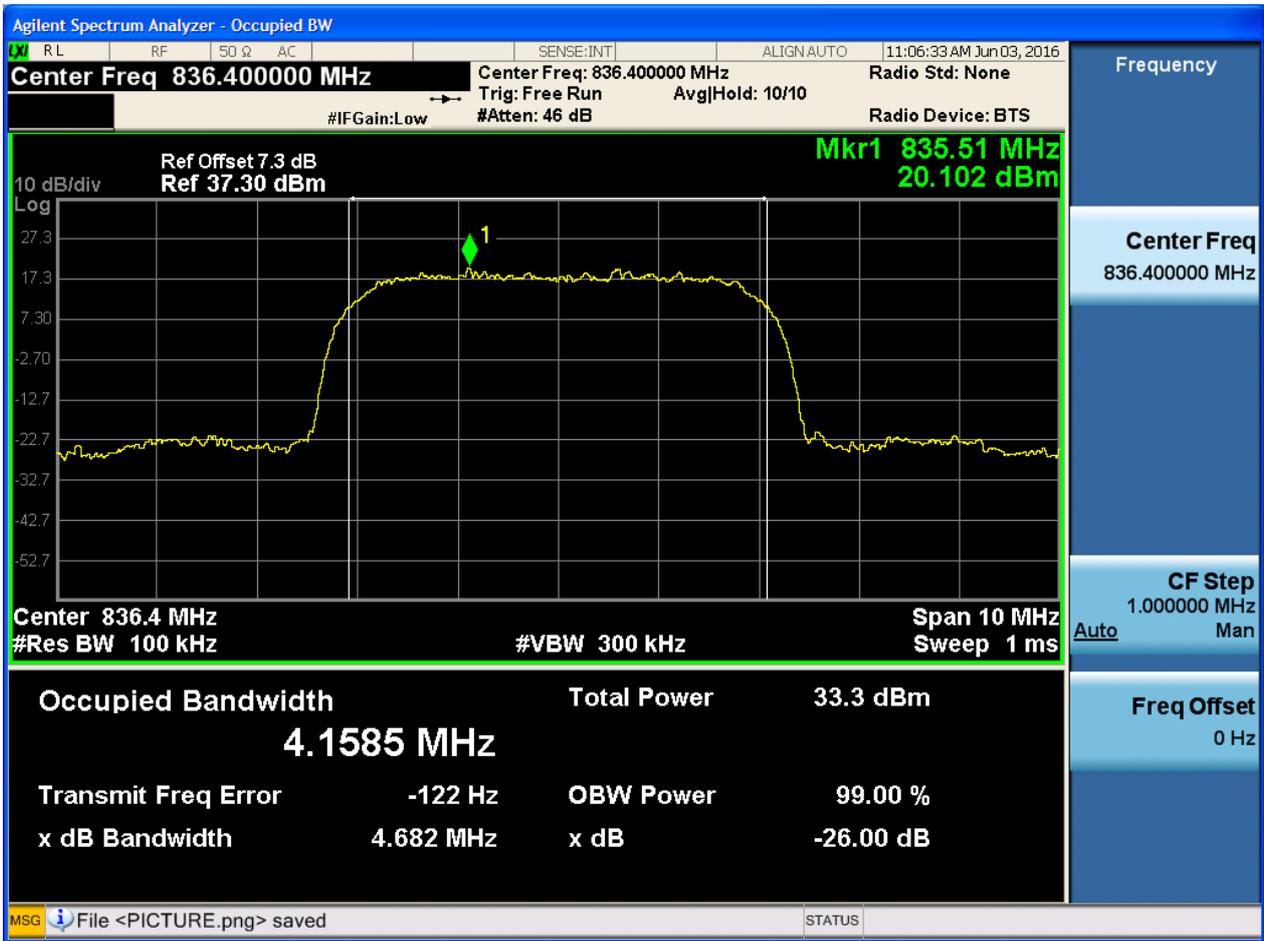
4.2.1.1 Test Mode = UMTS/TM1

4.2.1.1.1 Test Channel = LCH

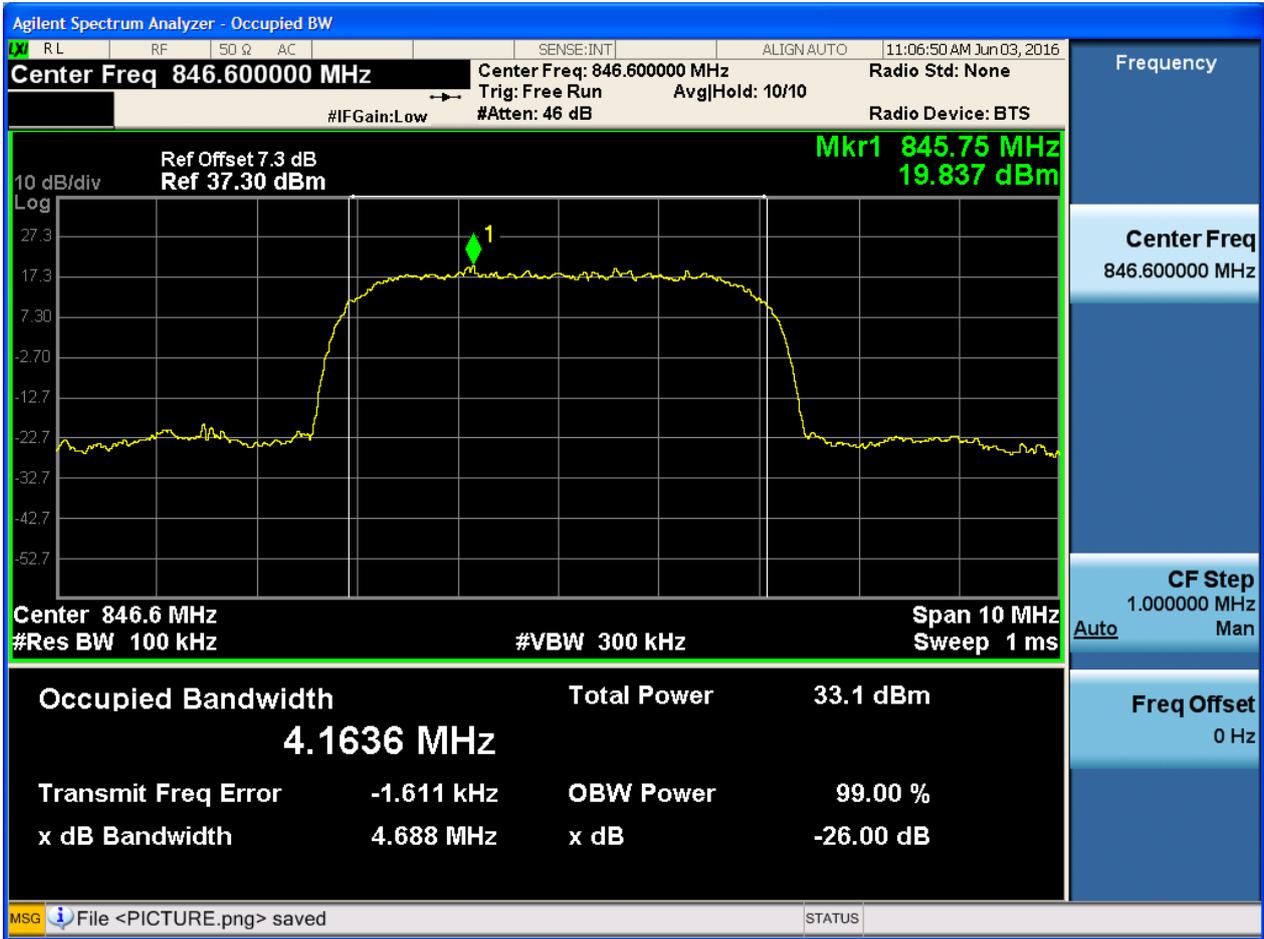




4.2.1.1.2 Test Channel = MCH



4.2.1.1.3 Test Channel = HCH

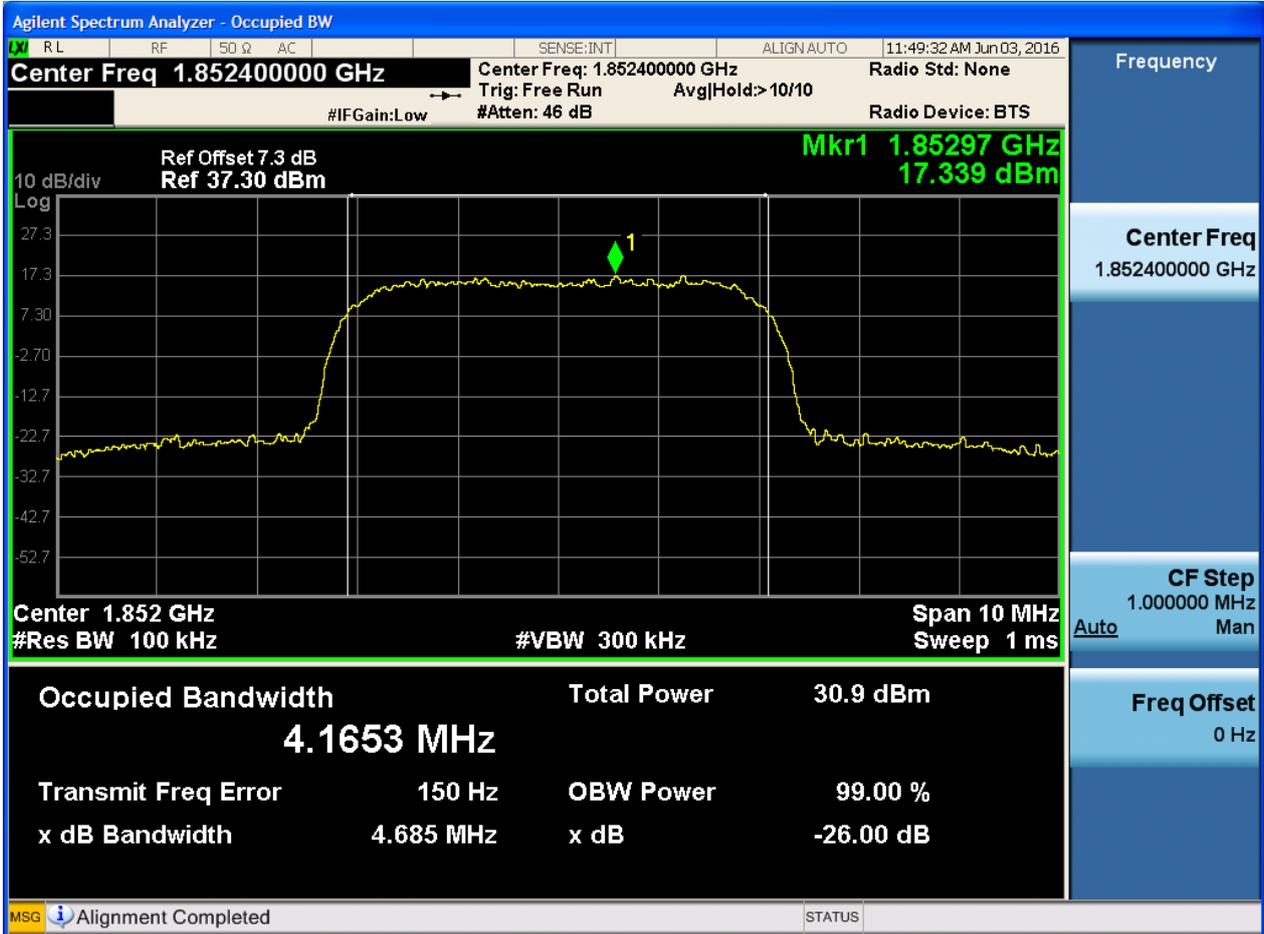




4.2.2 Test Band = WCDMA1900

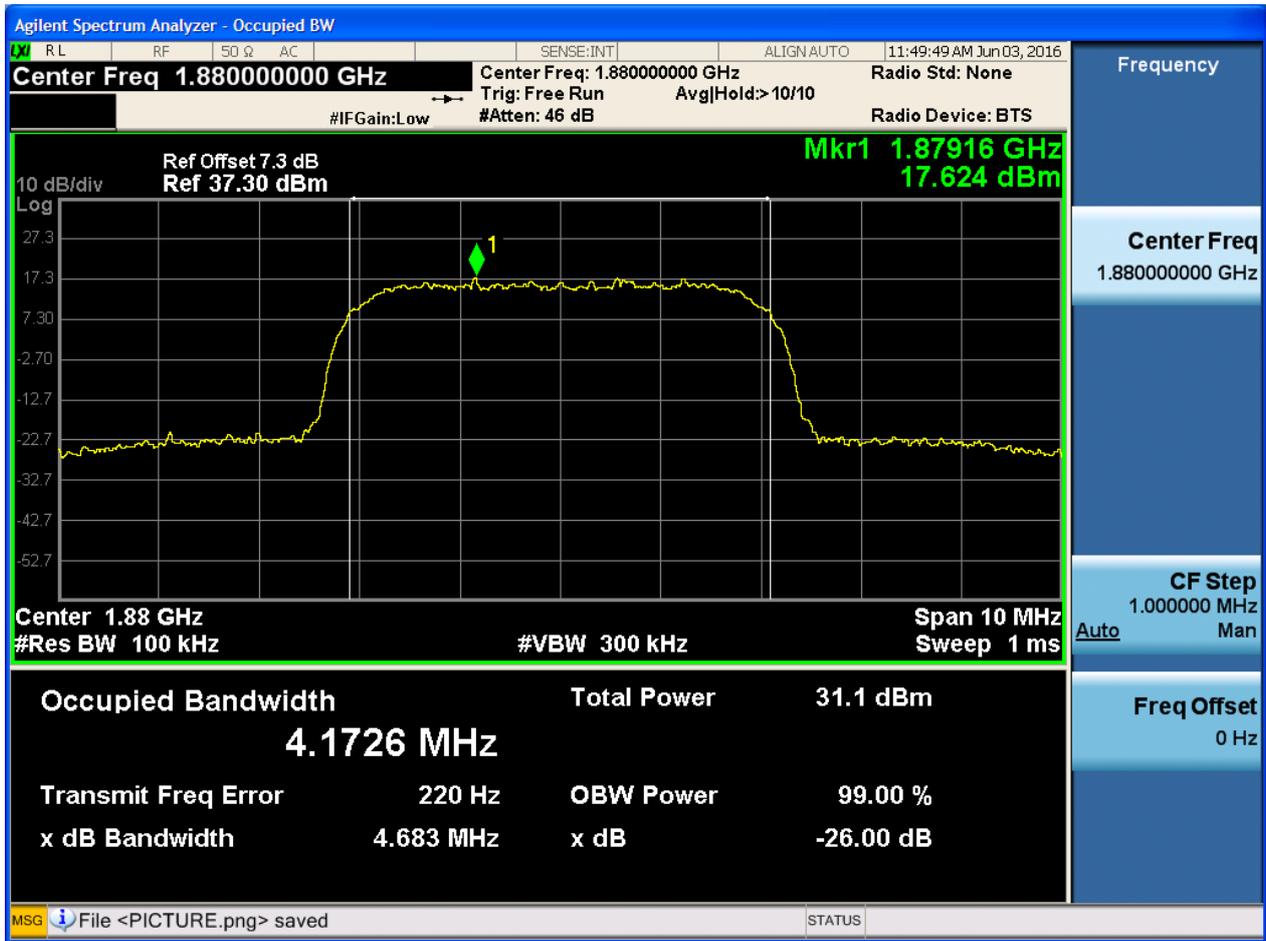
4.2.2.1 Test Mode = UMTS/TM1

4.2.2.1.1 Test Channel = LCH



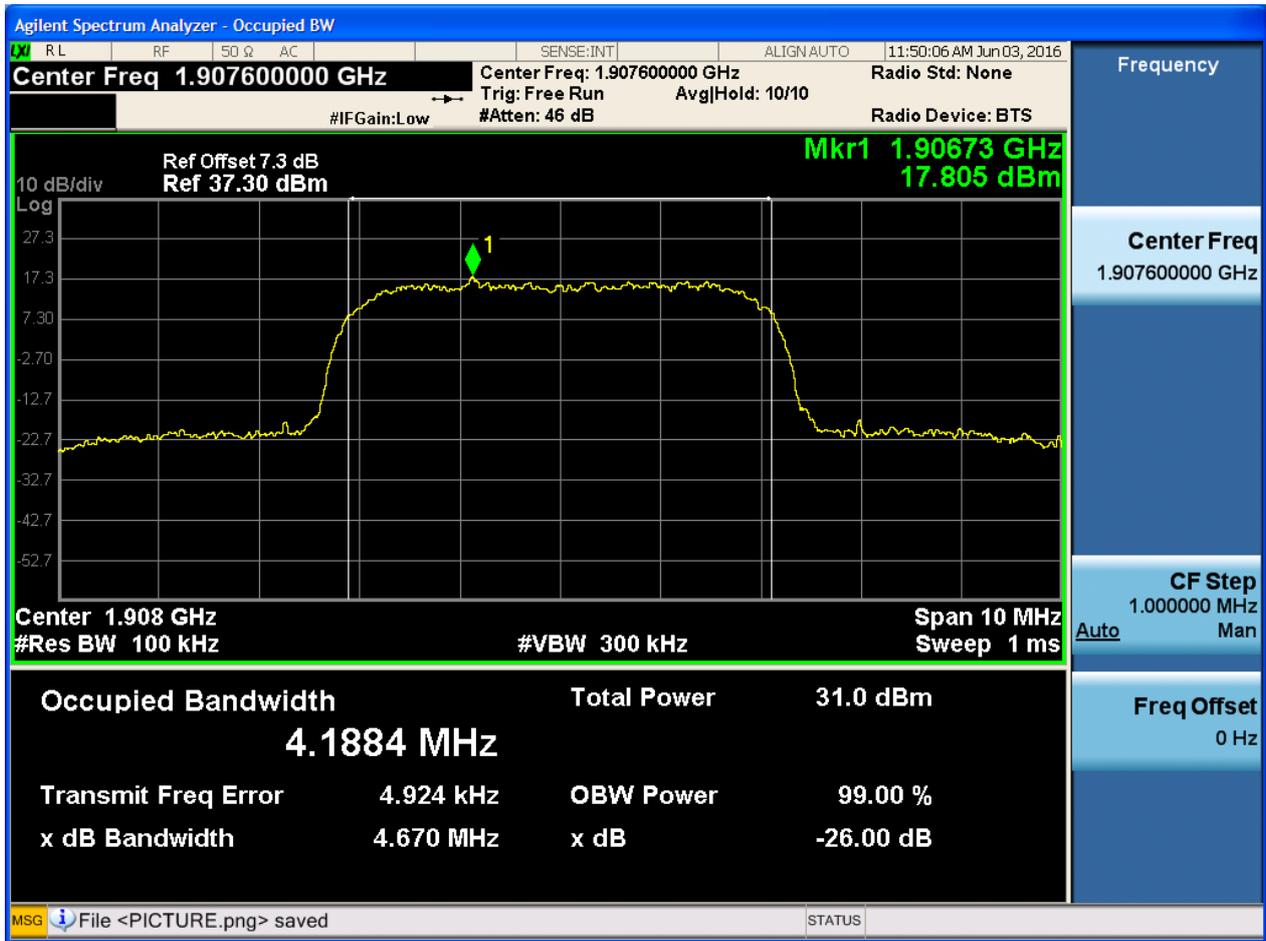


4.2.2.1.2 Test Channel = MCH





4.2.2.1.3 Test Channel = HCH





5Appendix_E: Band Edges Compliance

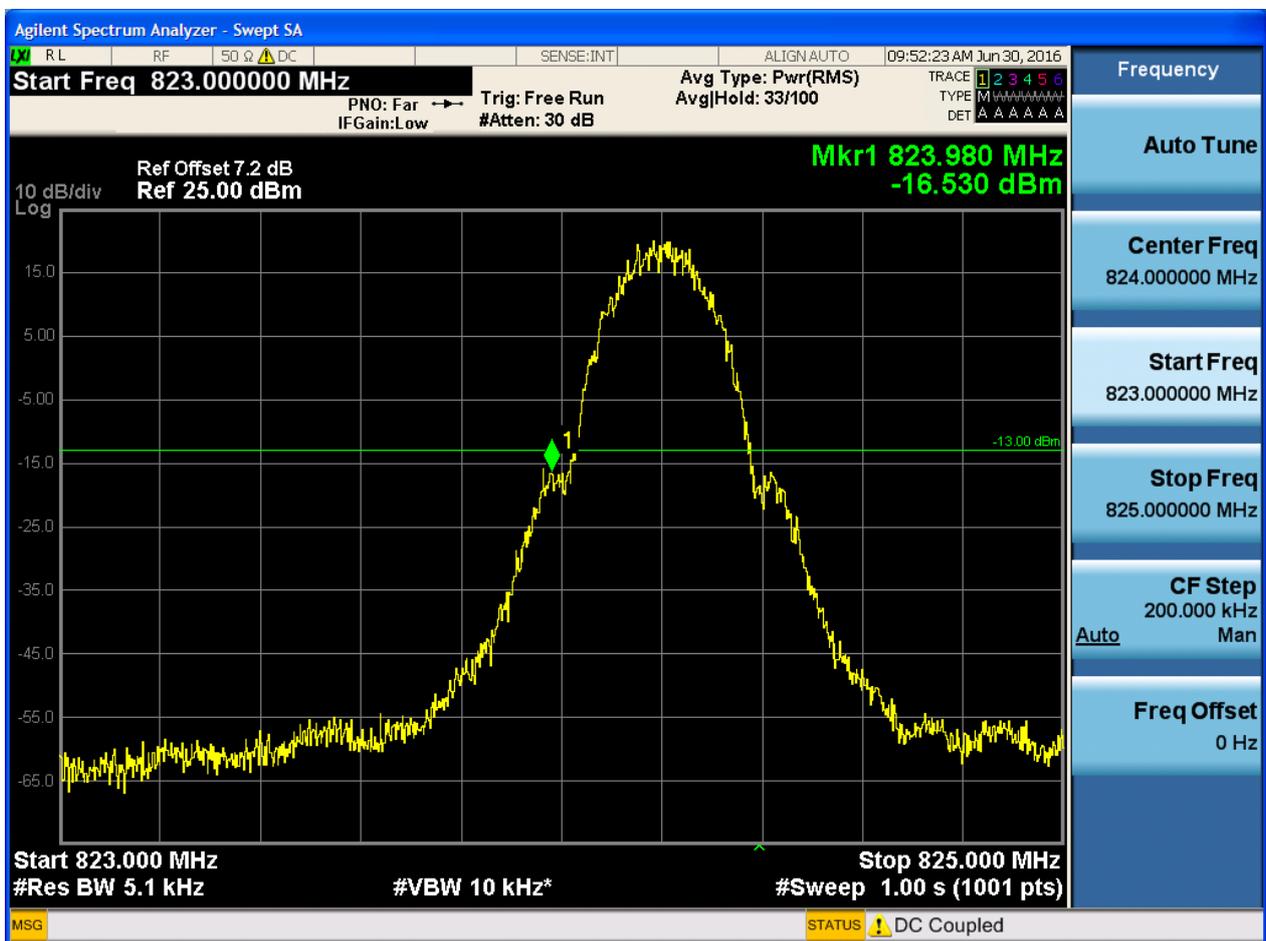
Part I - Test Plots

5.1 For GSM

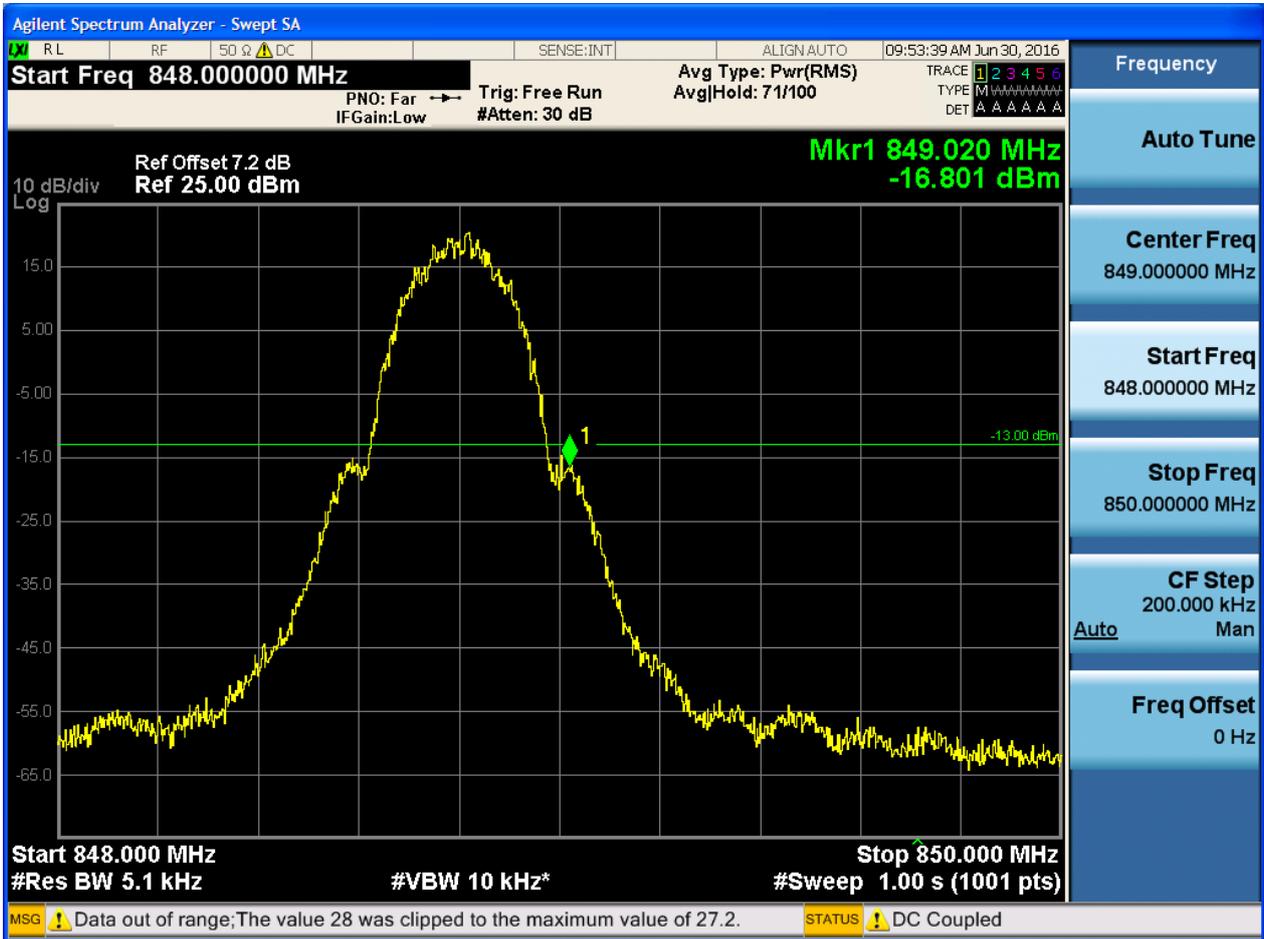
5.1.1 Test Band = GSM850

5.1.1.1 Test Mode = GSM/TM1

5.1.1.1.1 Test Channel = LCH



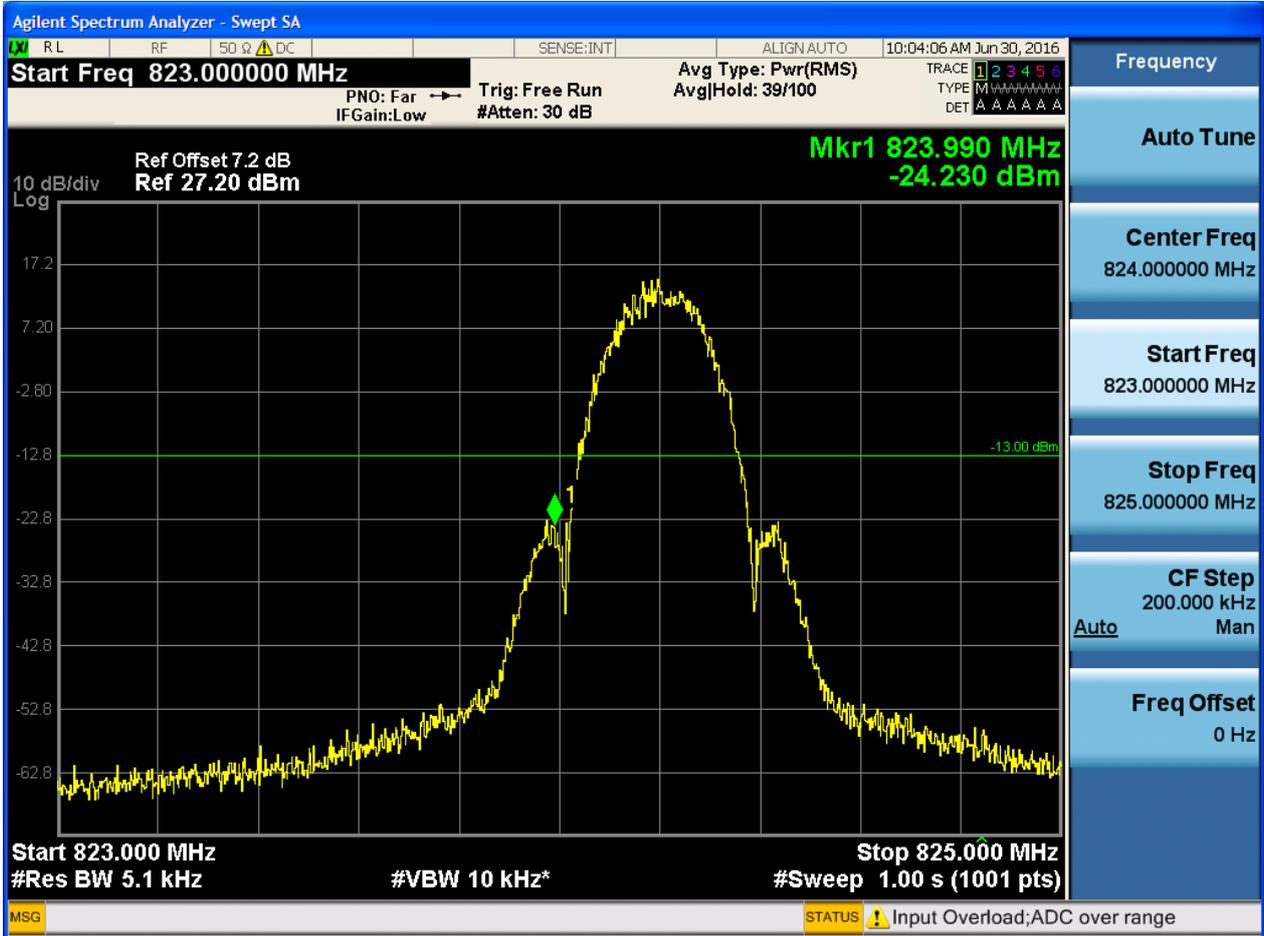
5.1.1.1.2 Test Channel = HCH



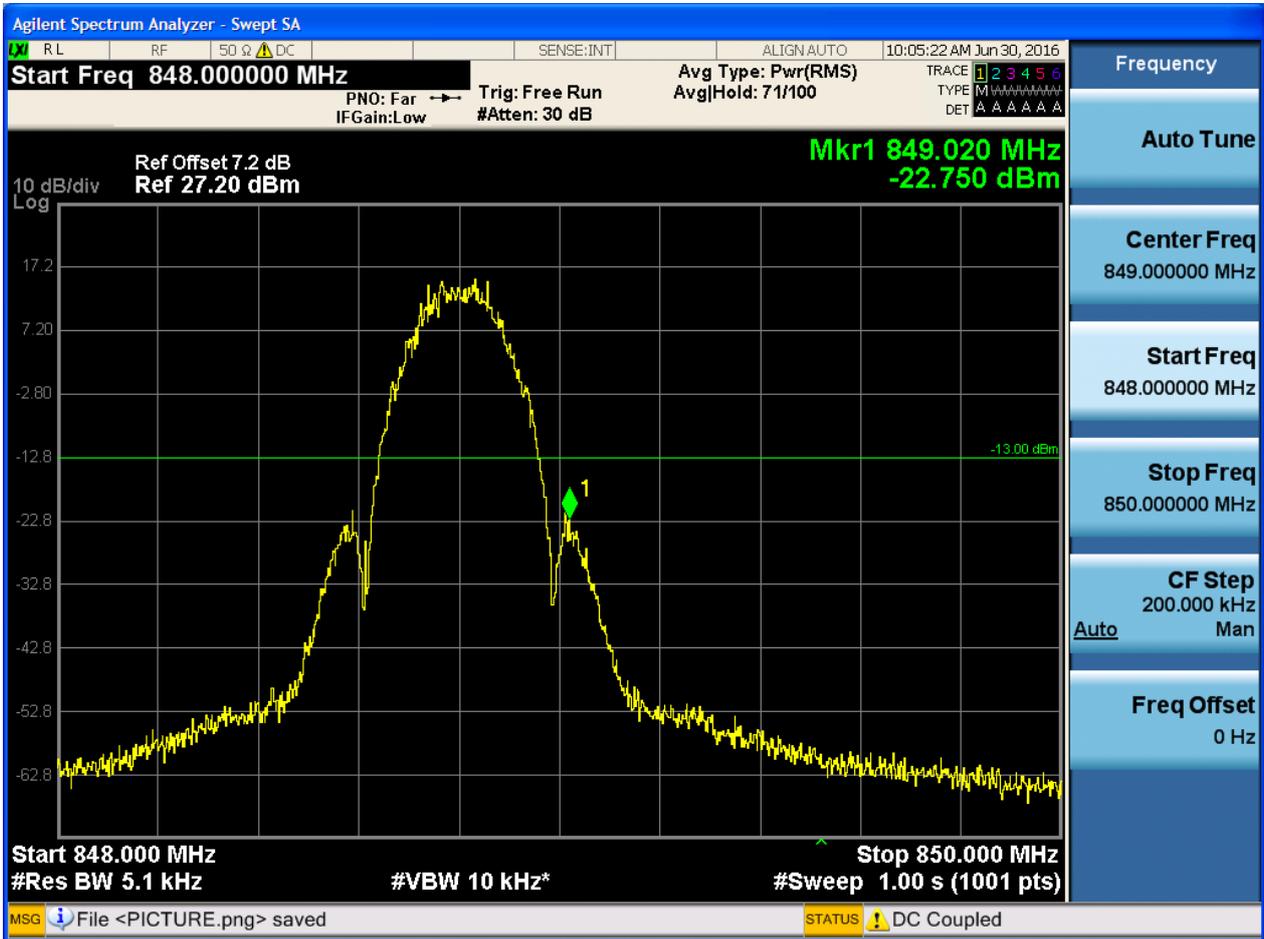


5.1.1.2 Test Mode = GSM/TM2

5.1.1.2.1 Test Channel = LCH



5.1.1.2.2 Test Channel = HCH

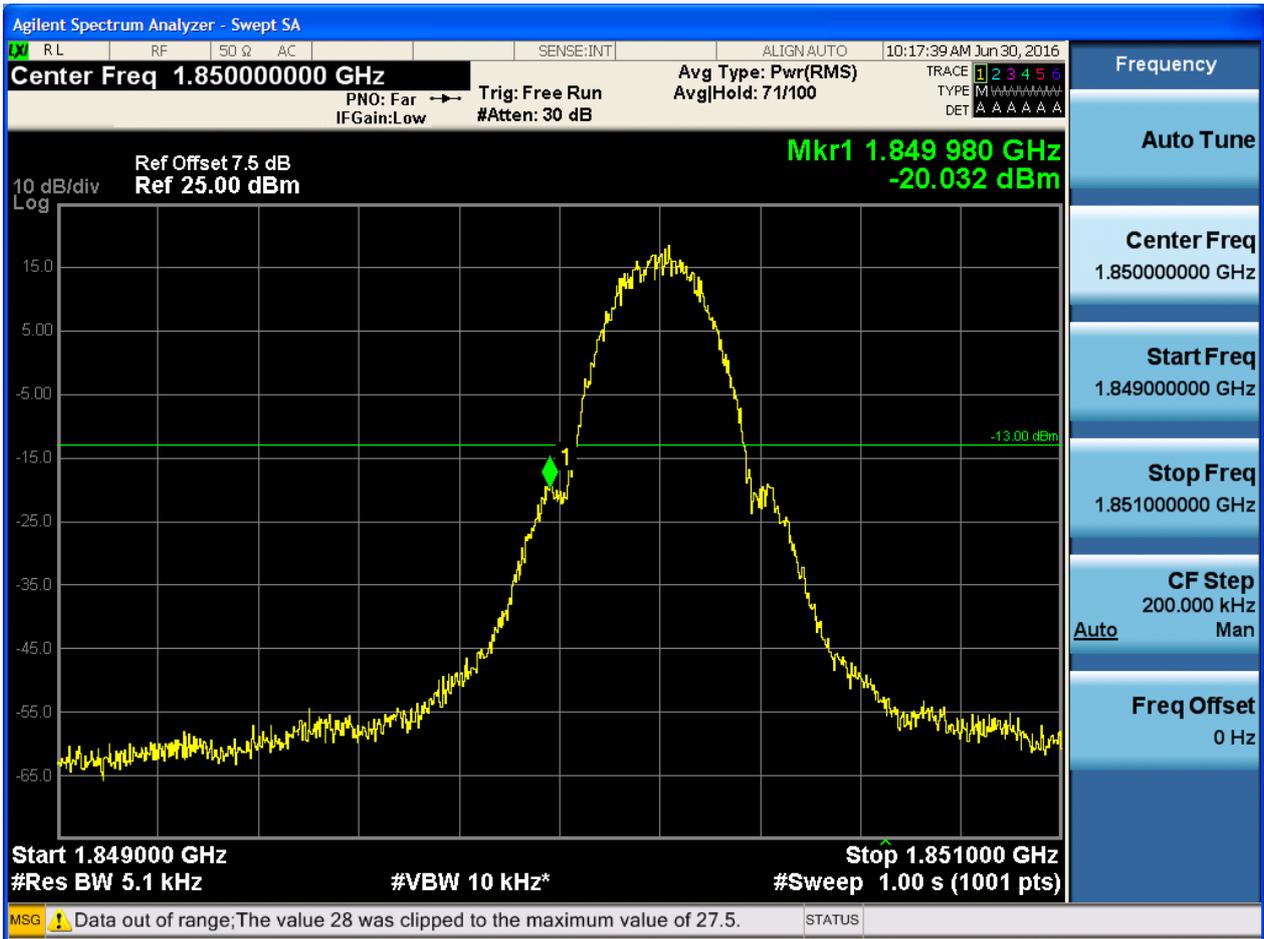




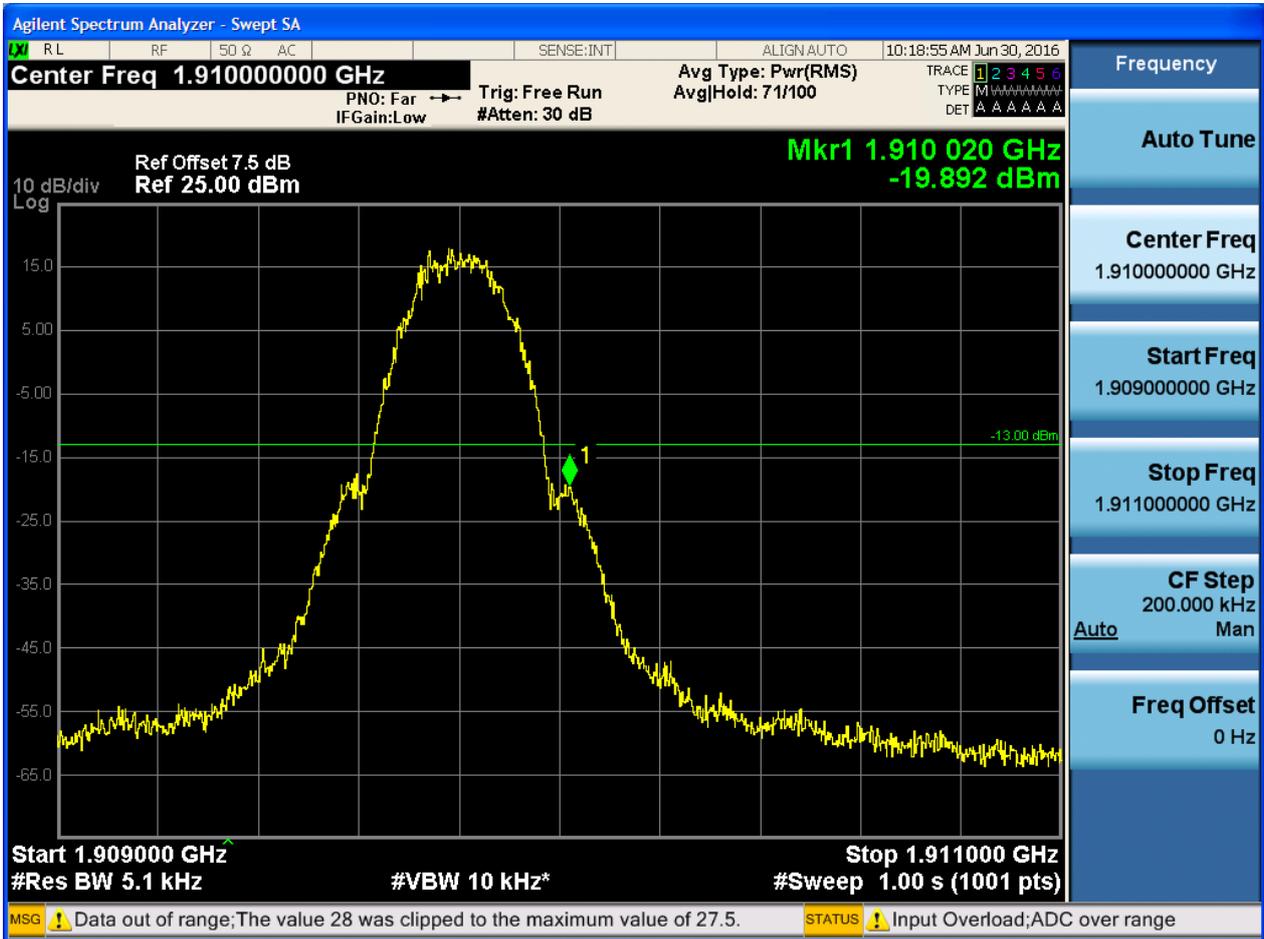
5.1.2 Test Band = GSM1900

5.1.2.1 Test Mode = GSM/TM1

5.1.2.1.1 Test Channel = LCH

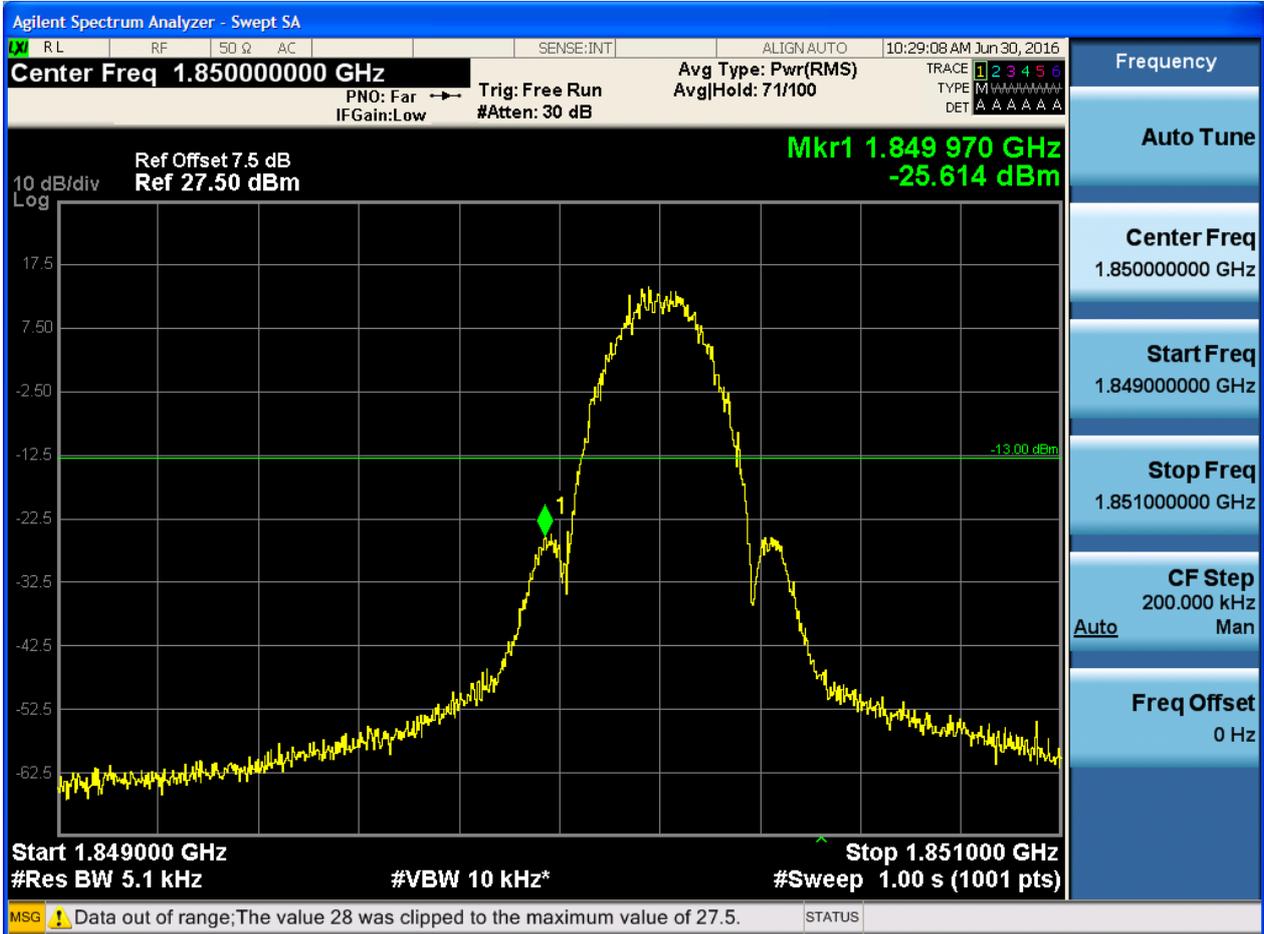


5.1.2.1.2 Test Channel = HCH

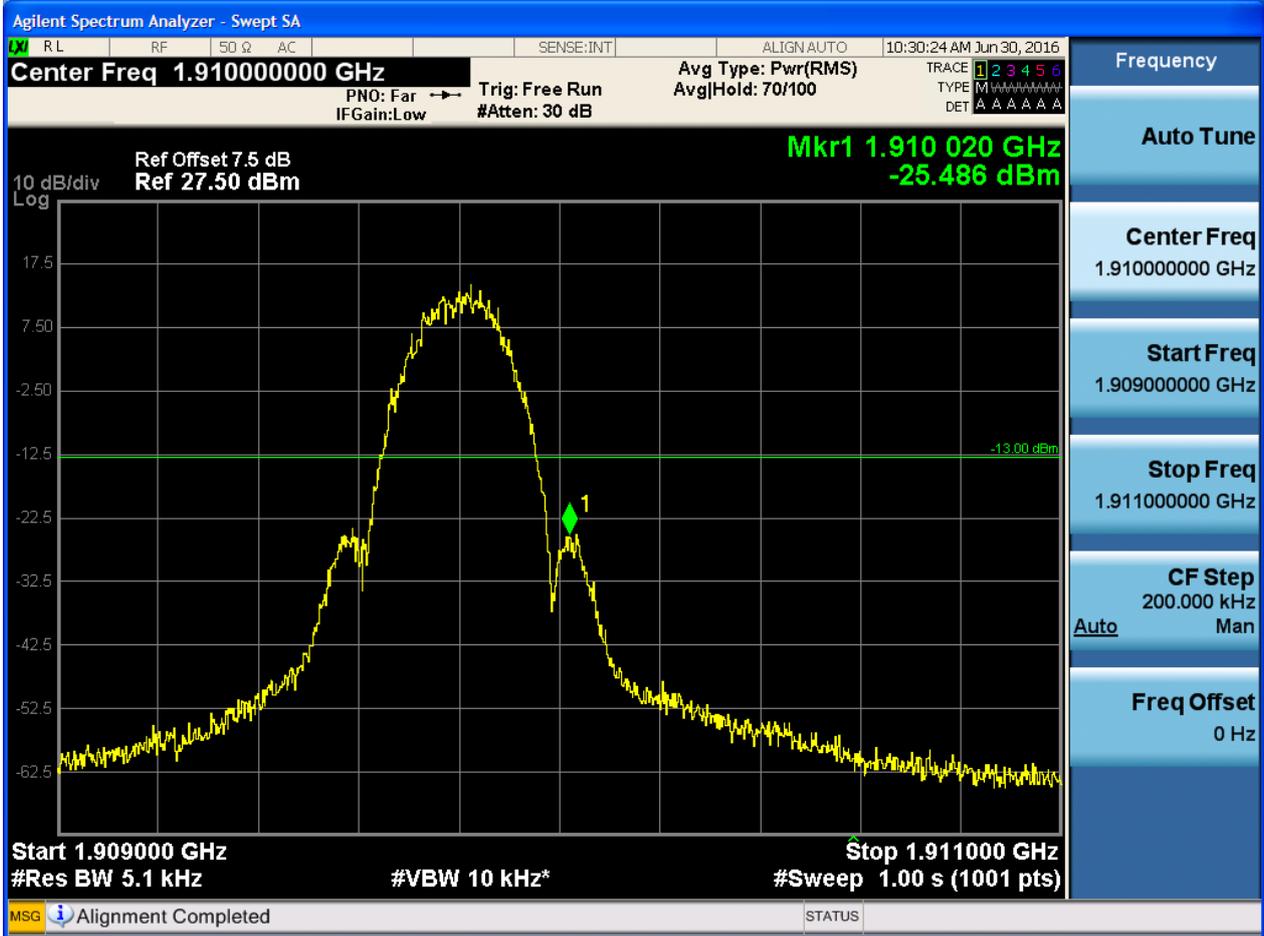


5.1.2.2 Test Mode = GSM/TM2

5.1.2.2.1 Test Channel = LCH



5.1.2.2.2 Test Channel = HCH



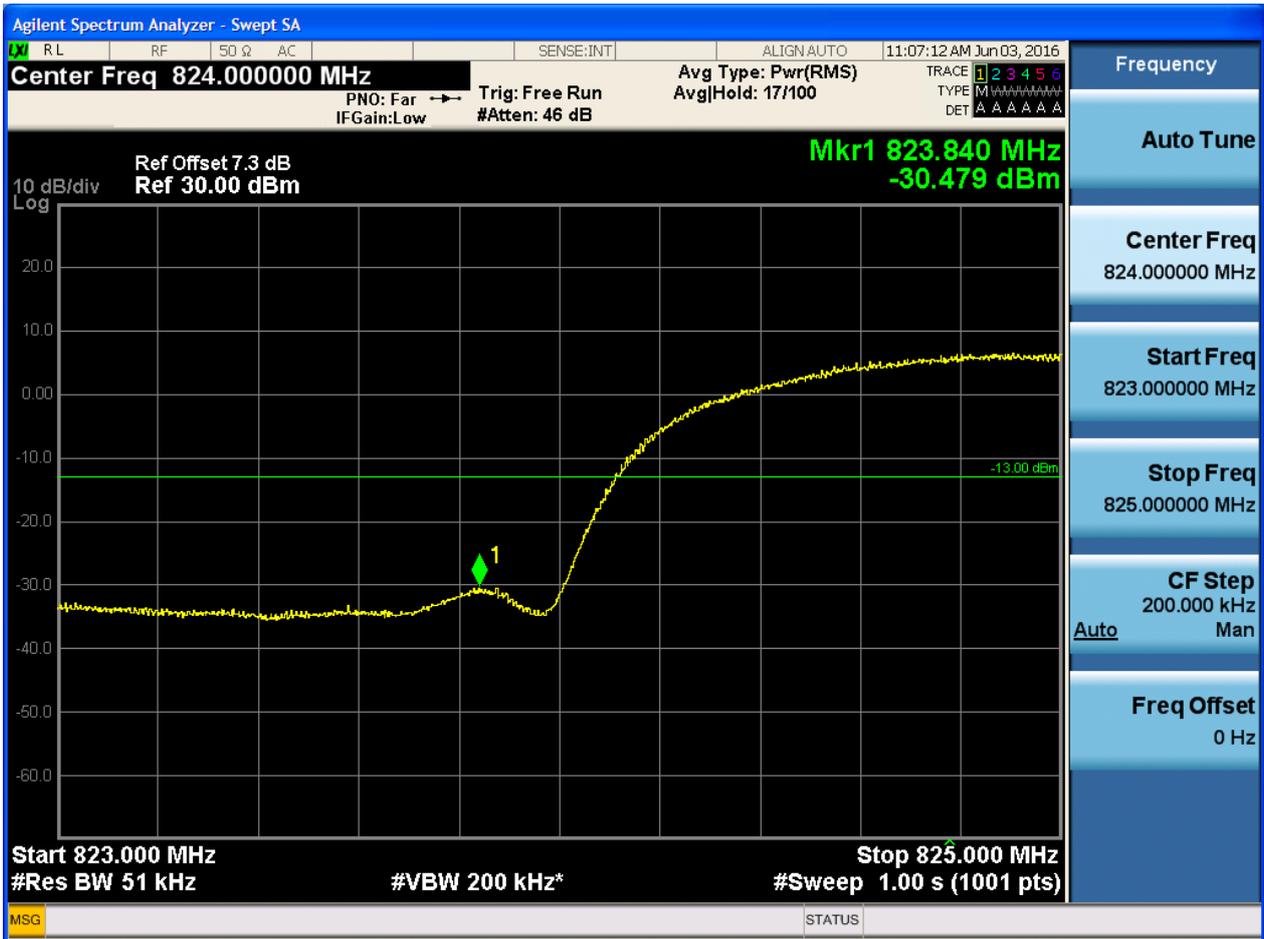


5.2 For UMTS

5.2.1 Test Band = WCDMA850

5.2.1.1 Test Mode = UMTS/TM1

5.2.1.1.1 Test Channel = LCH



5.2.1.1.2 Test Channel = HCH





5.2.2 Test Band = WCDMA1900

5.2.2.1 Test Mode = UMTS/TM1

5.2.2.1.1 Test Channel = LCH



5.2.2.1.2 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.

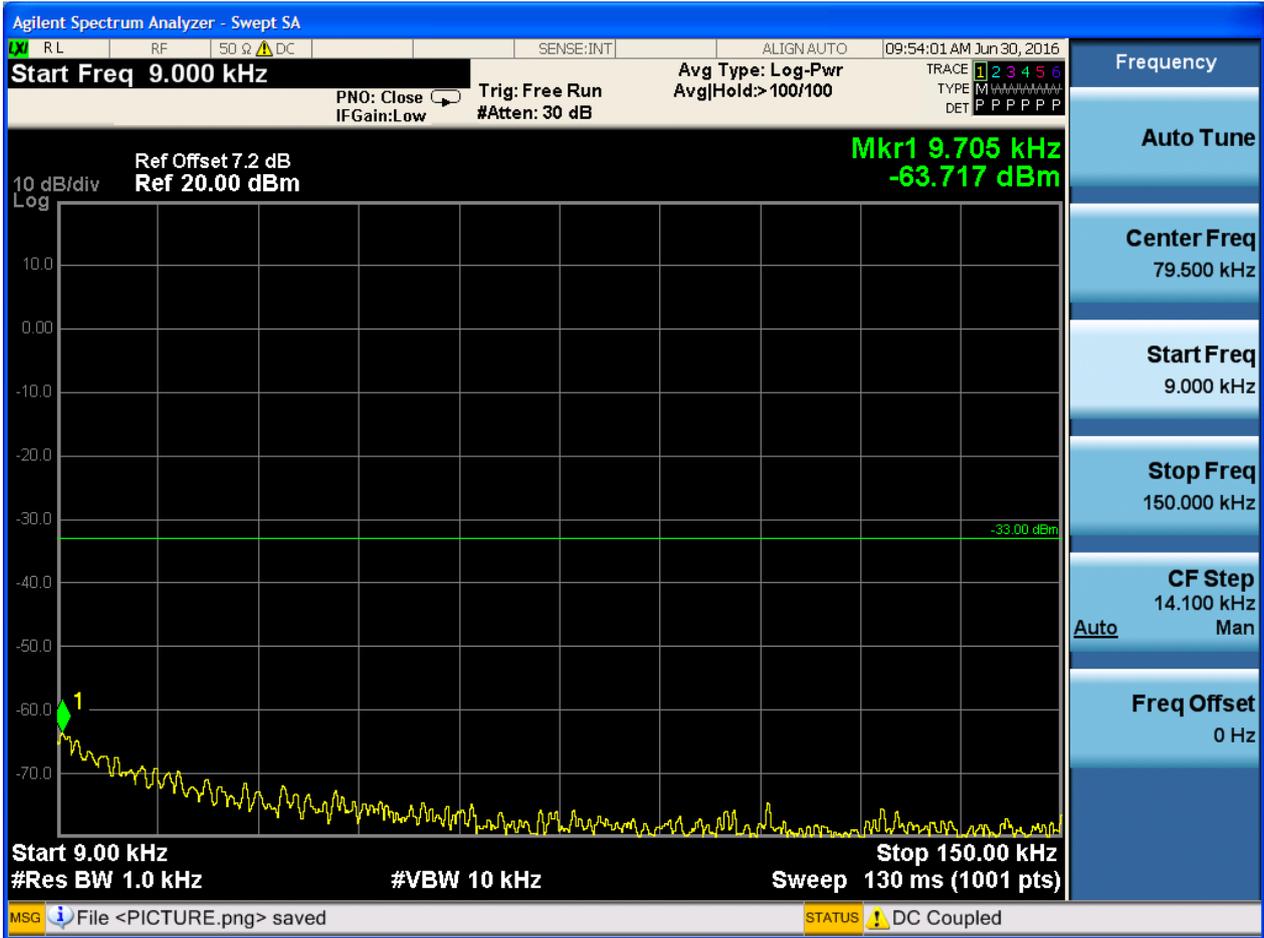
Part I - Test Plots

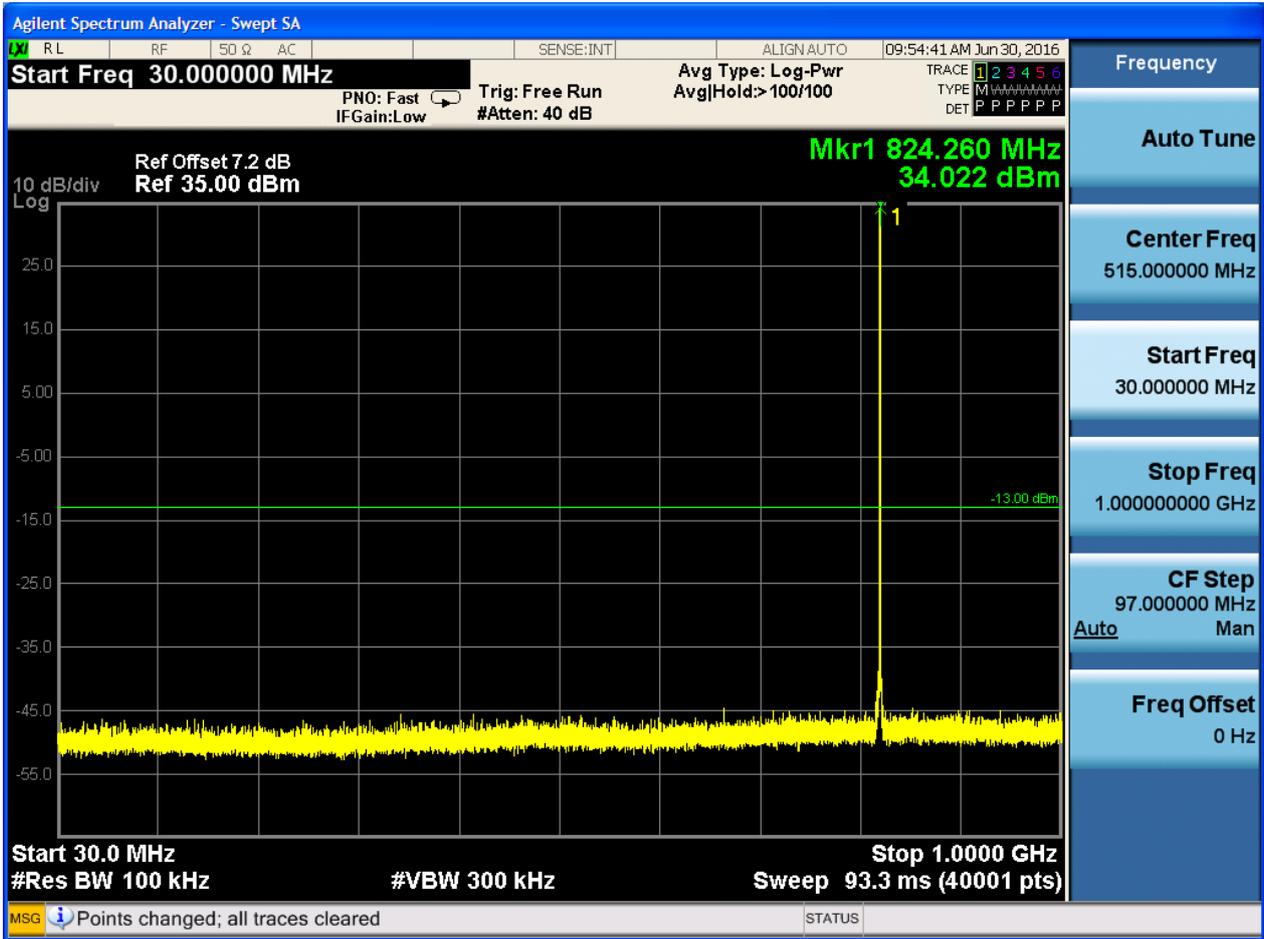
6.1 For GSM

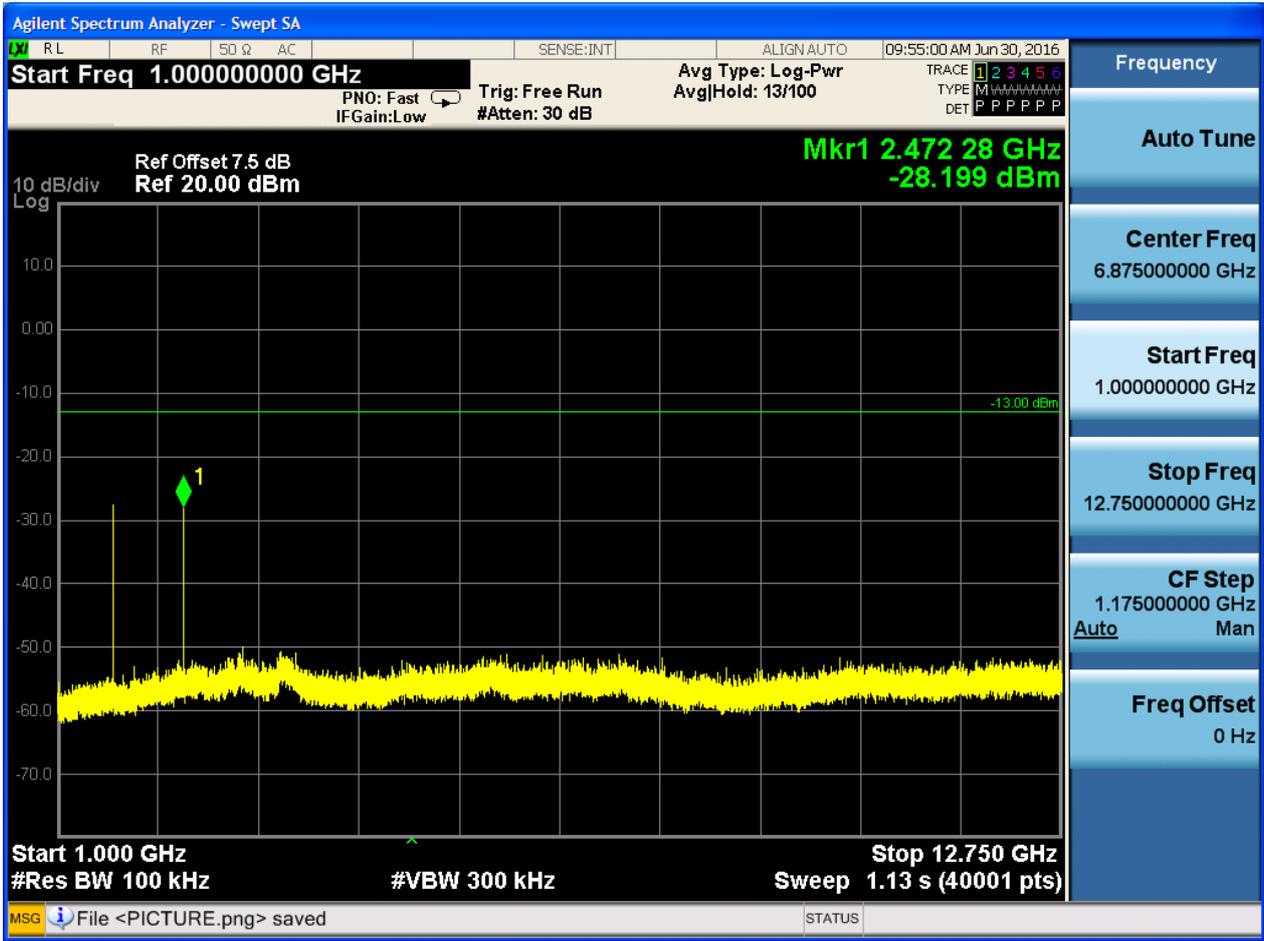
6.1.1 Test Band = GSM850

6.1.1.1 Test Mode = GSM/TM1

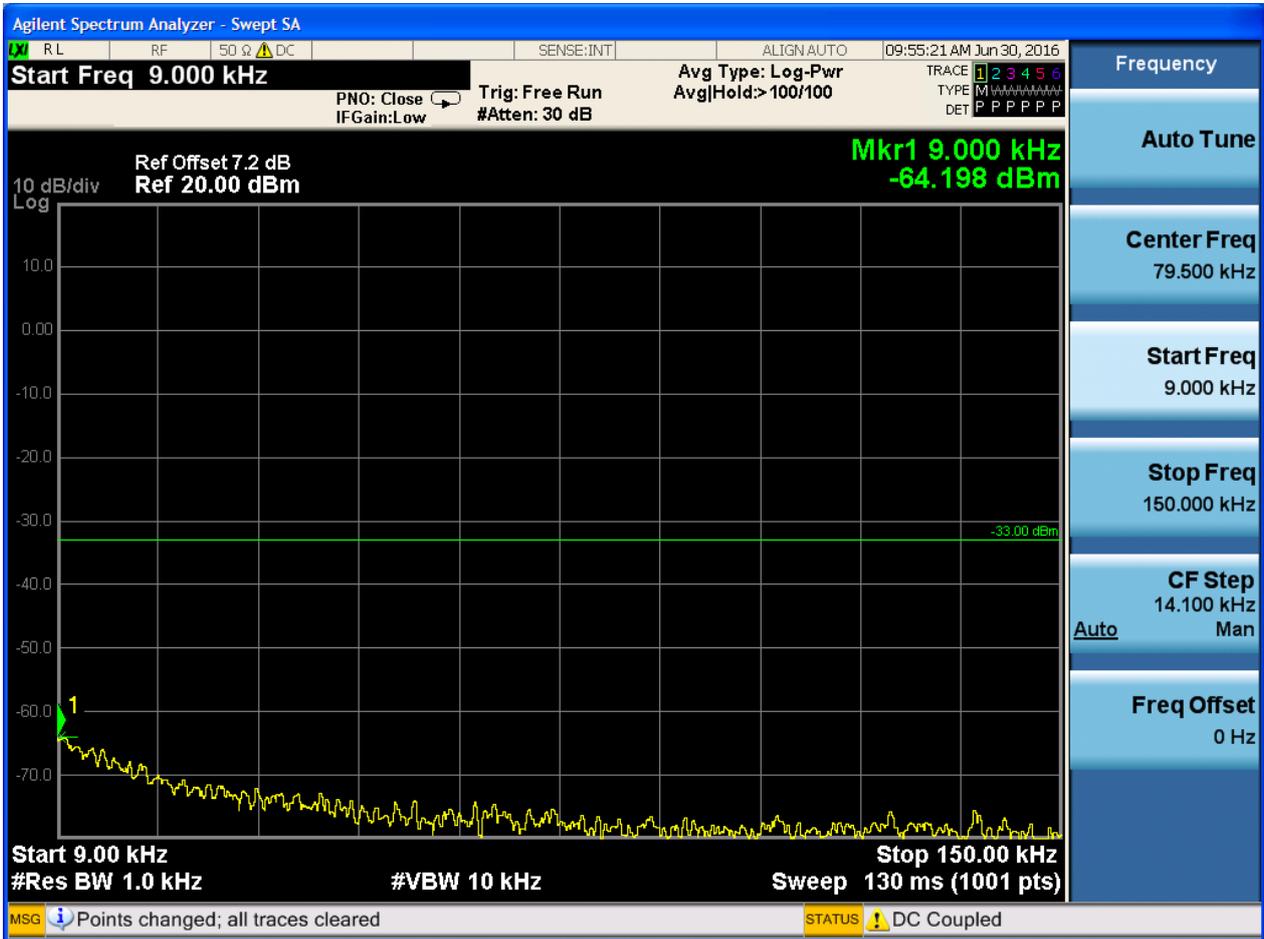
6.1.1.1.1 Test Channel = LCH

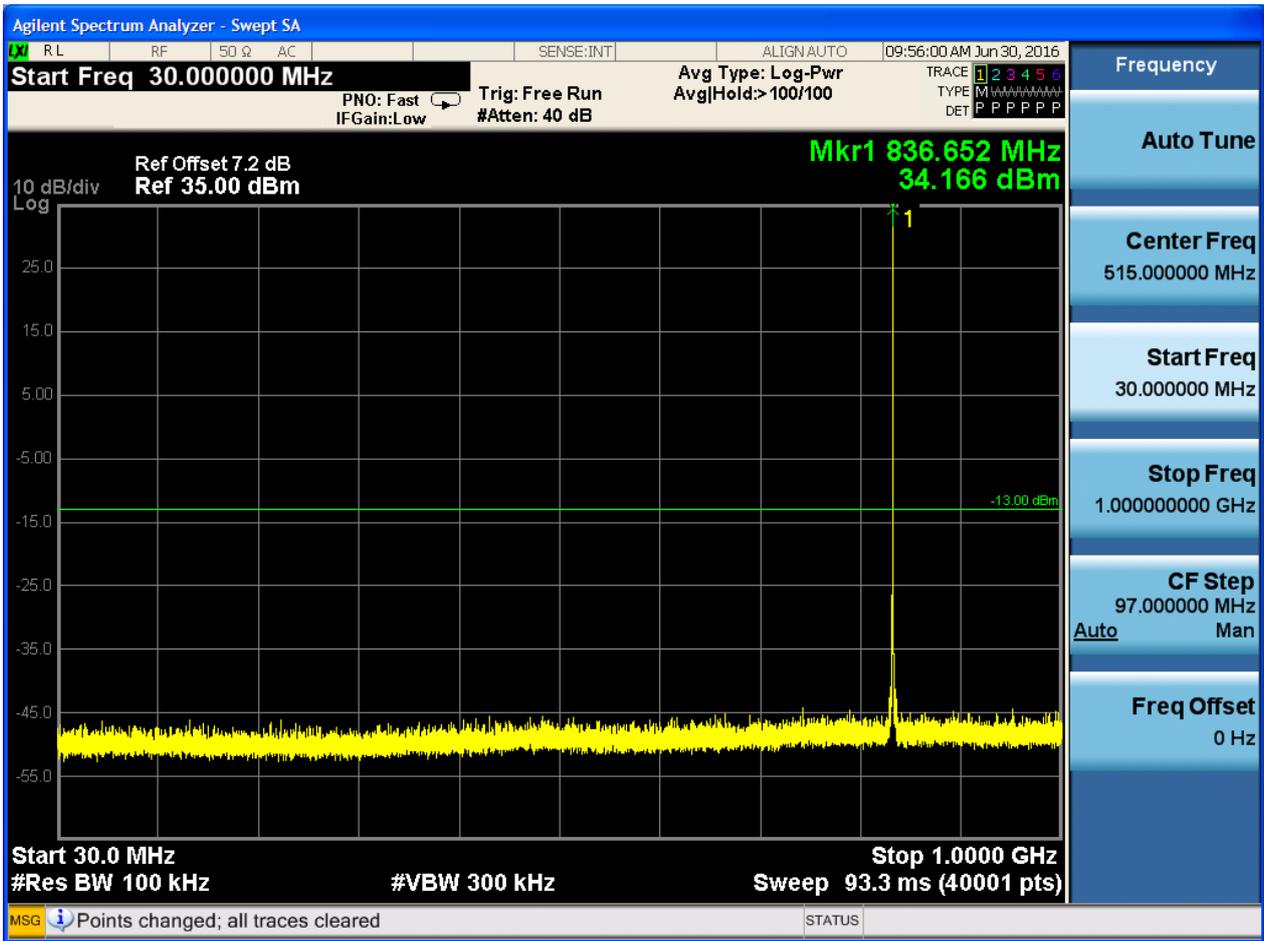


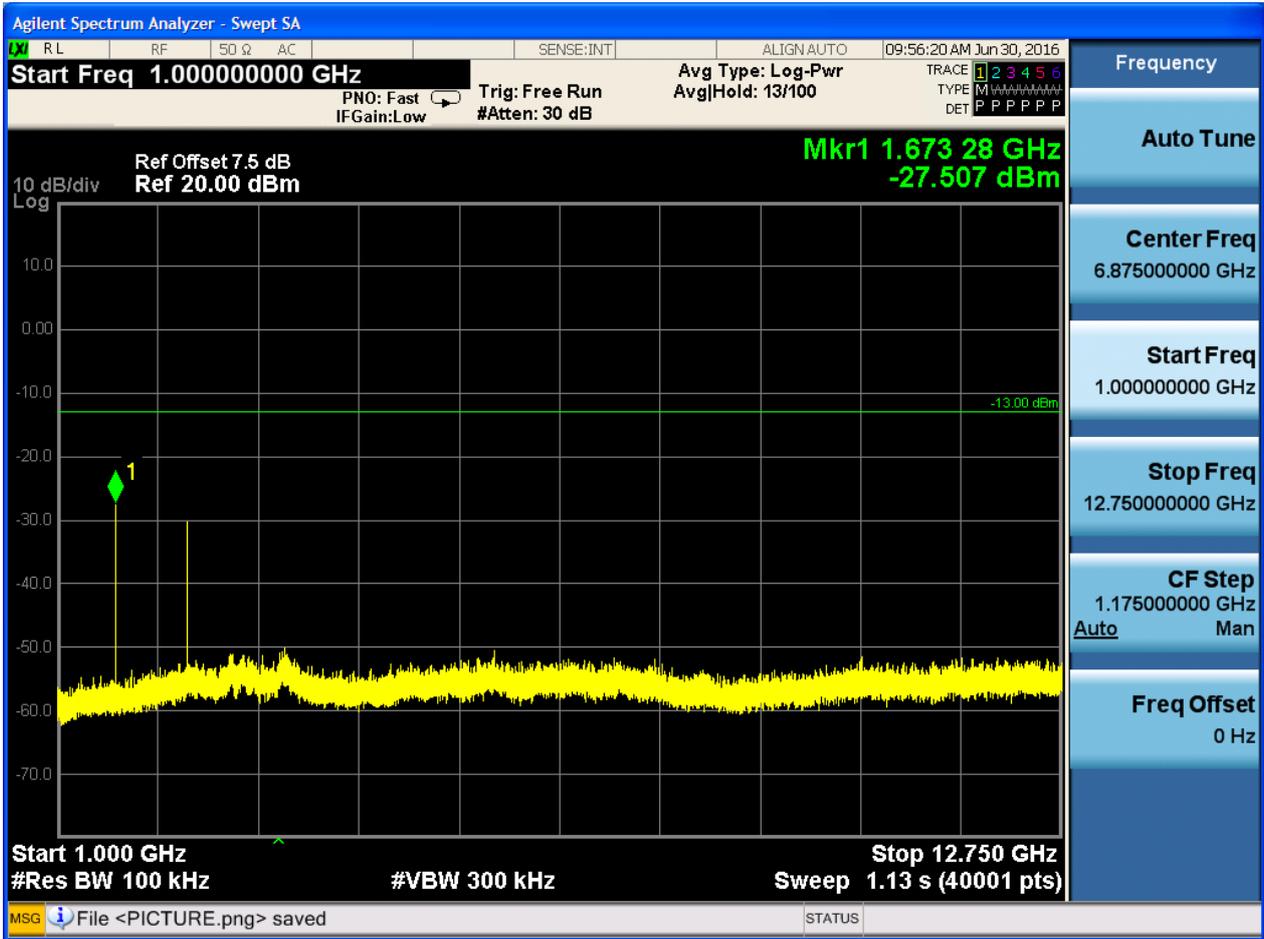




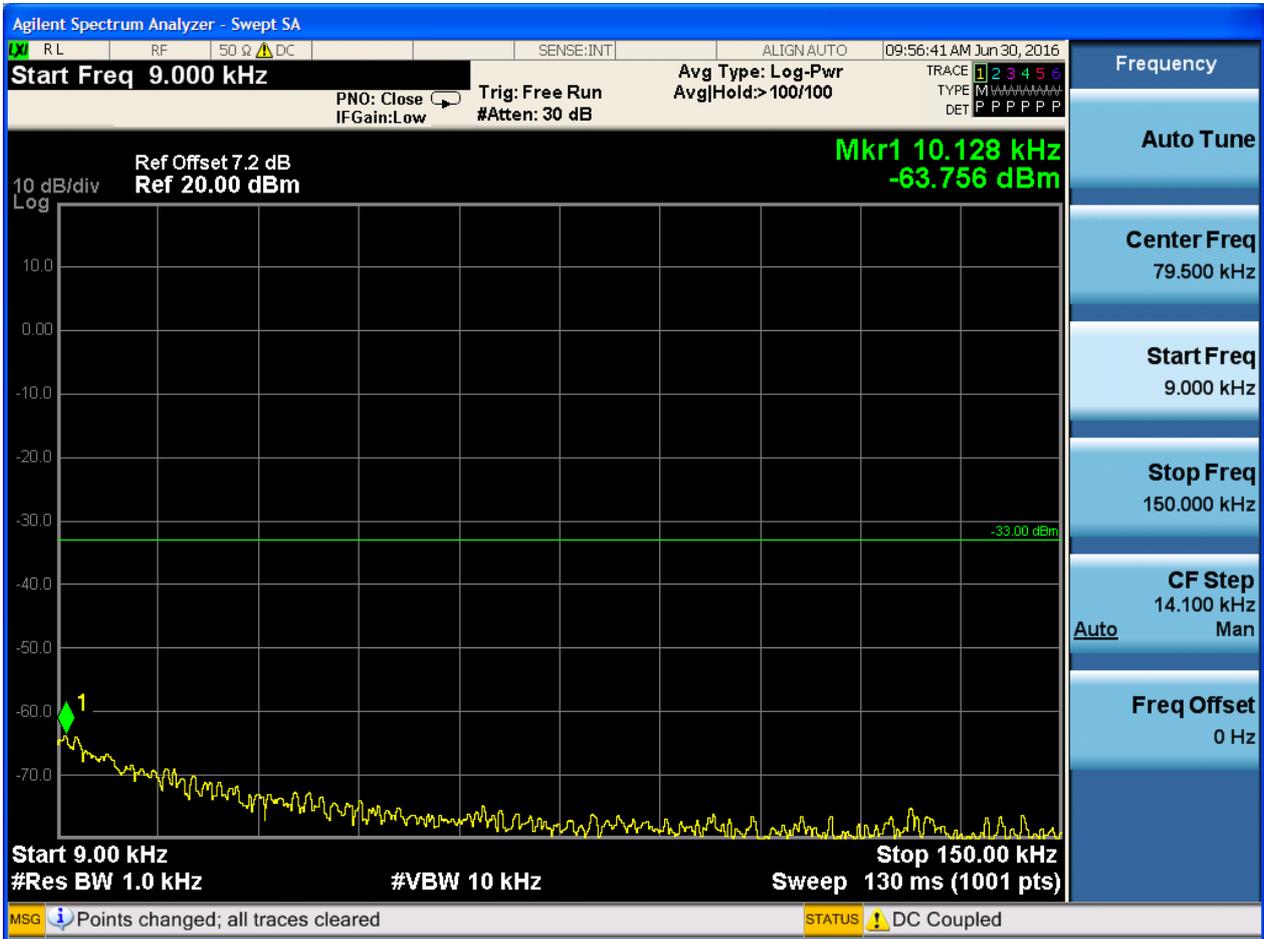
6.1.1.1.2 Test Channel = MCH

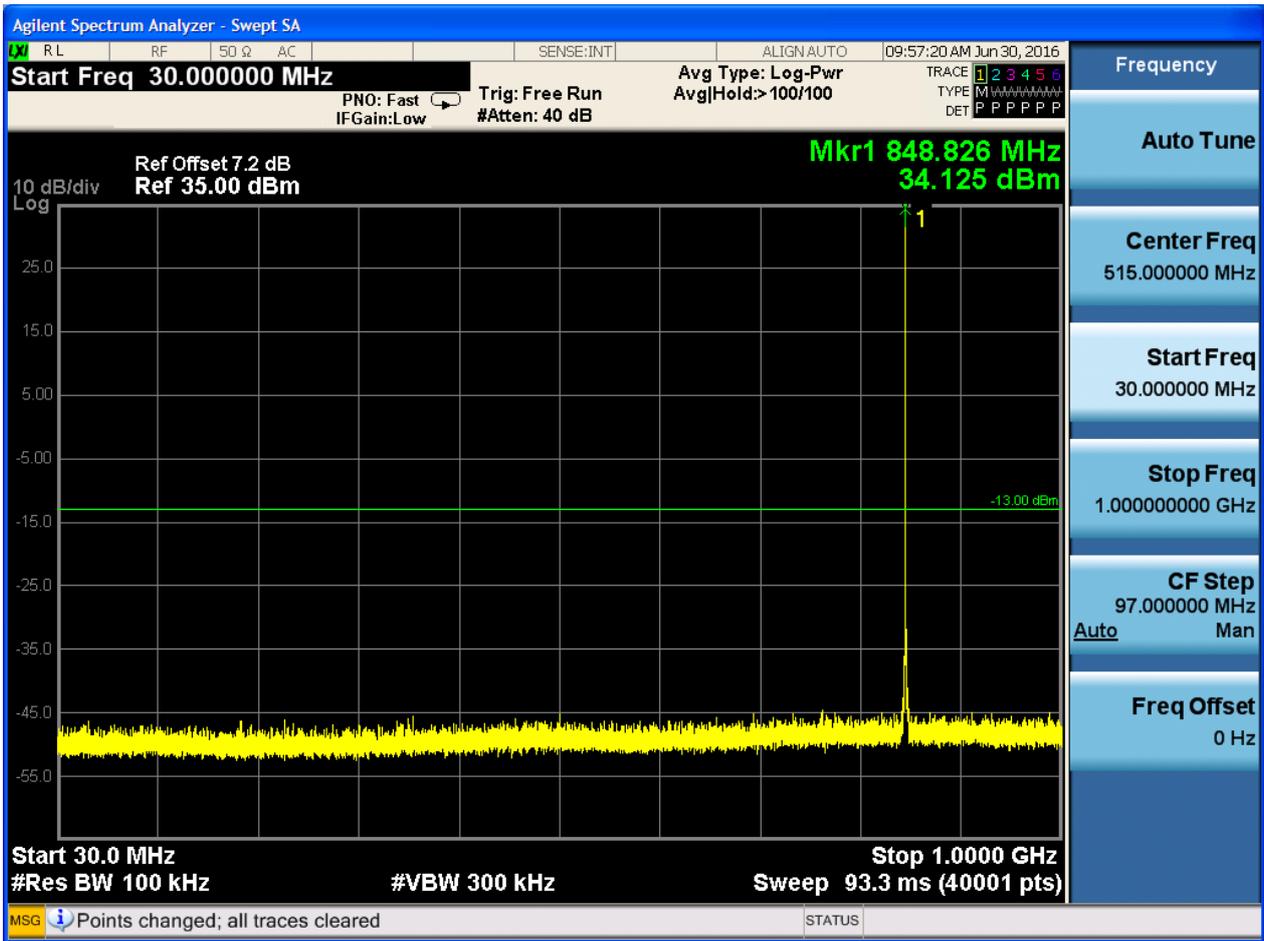


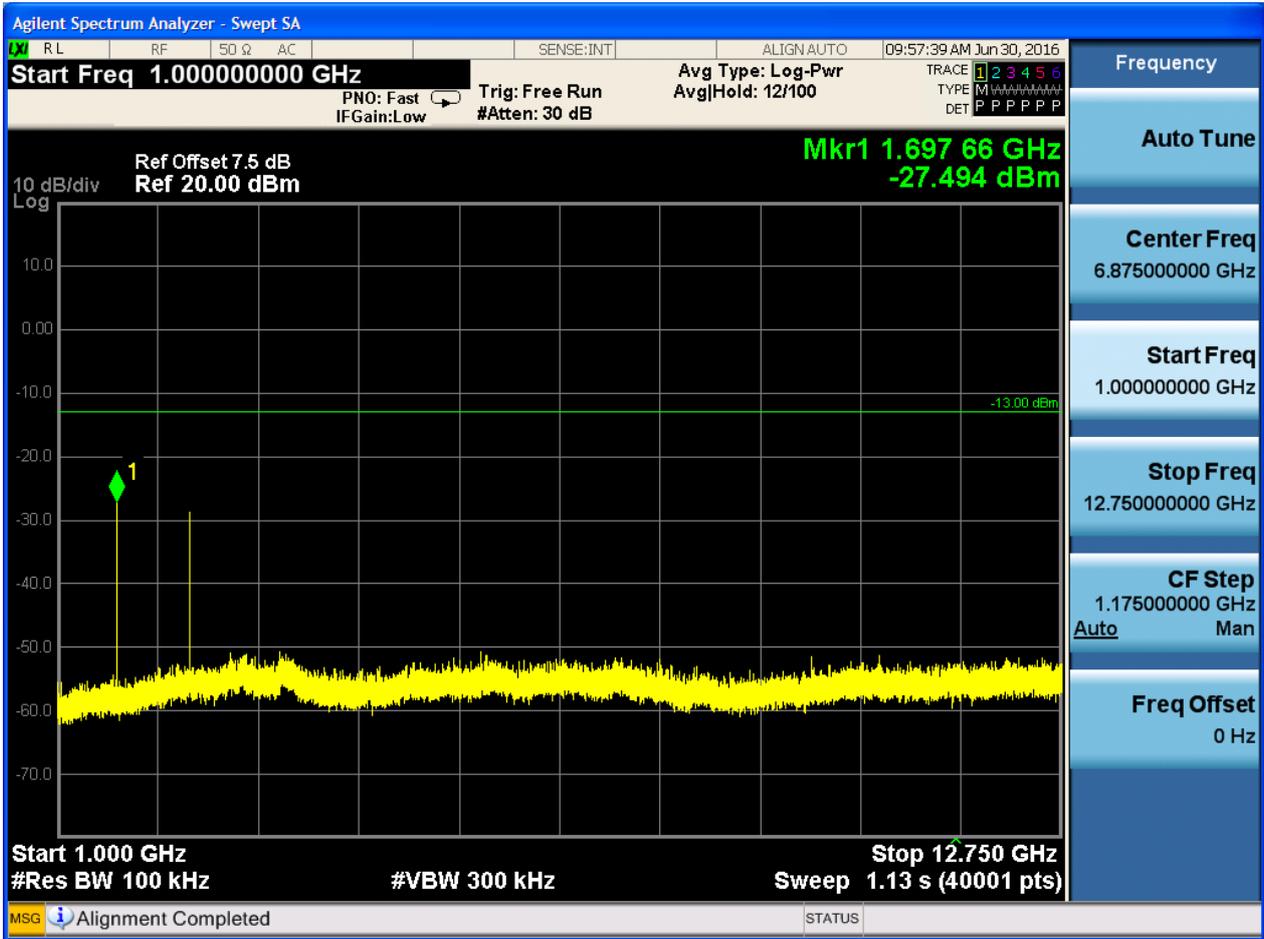




6.1.1.1.3 Test Channel = HCH



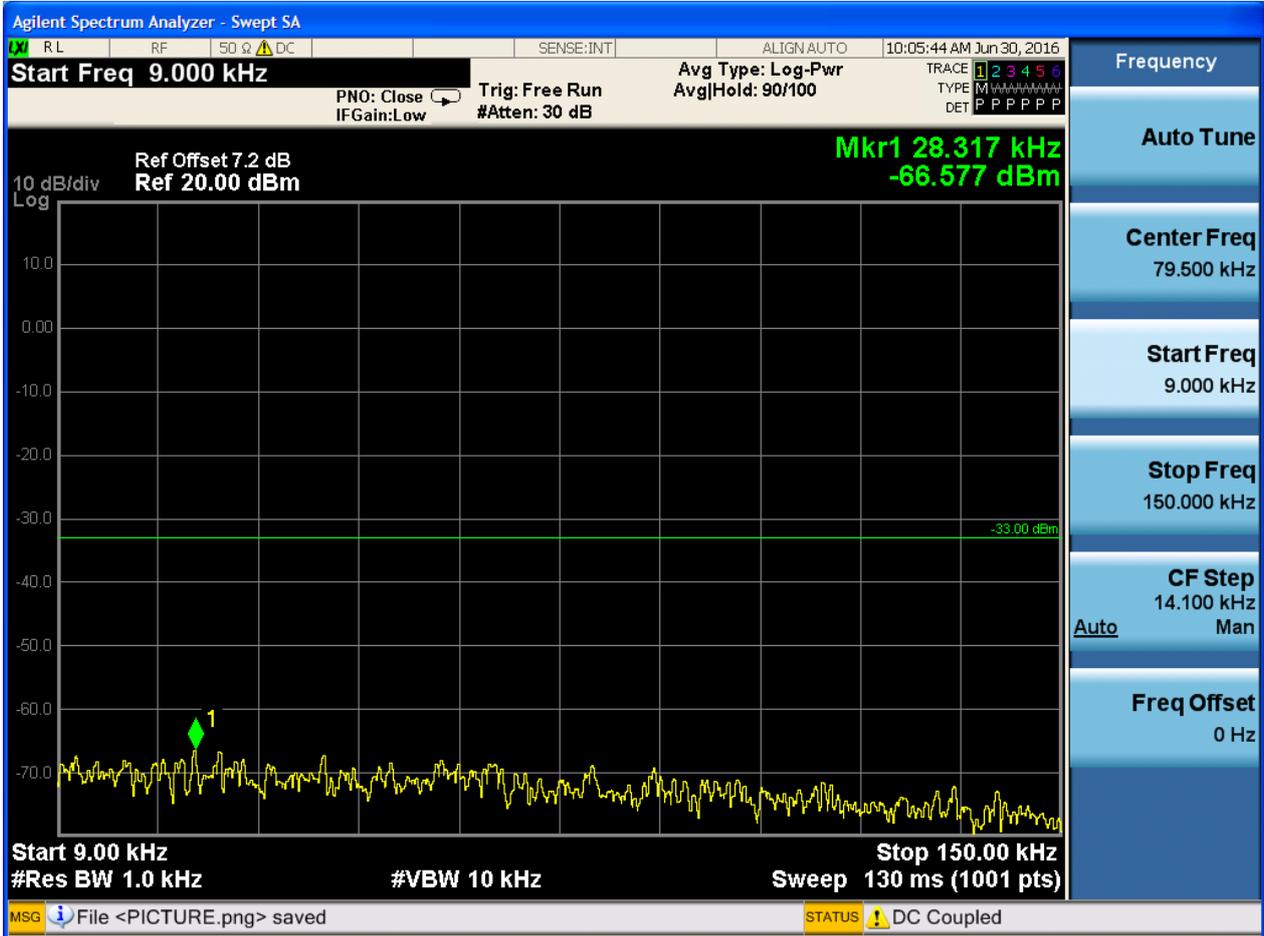


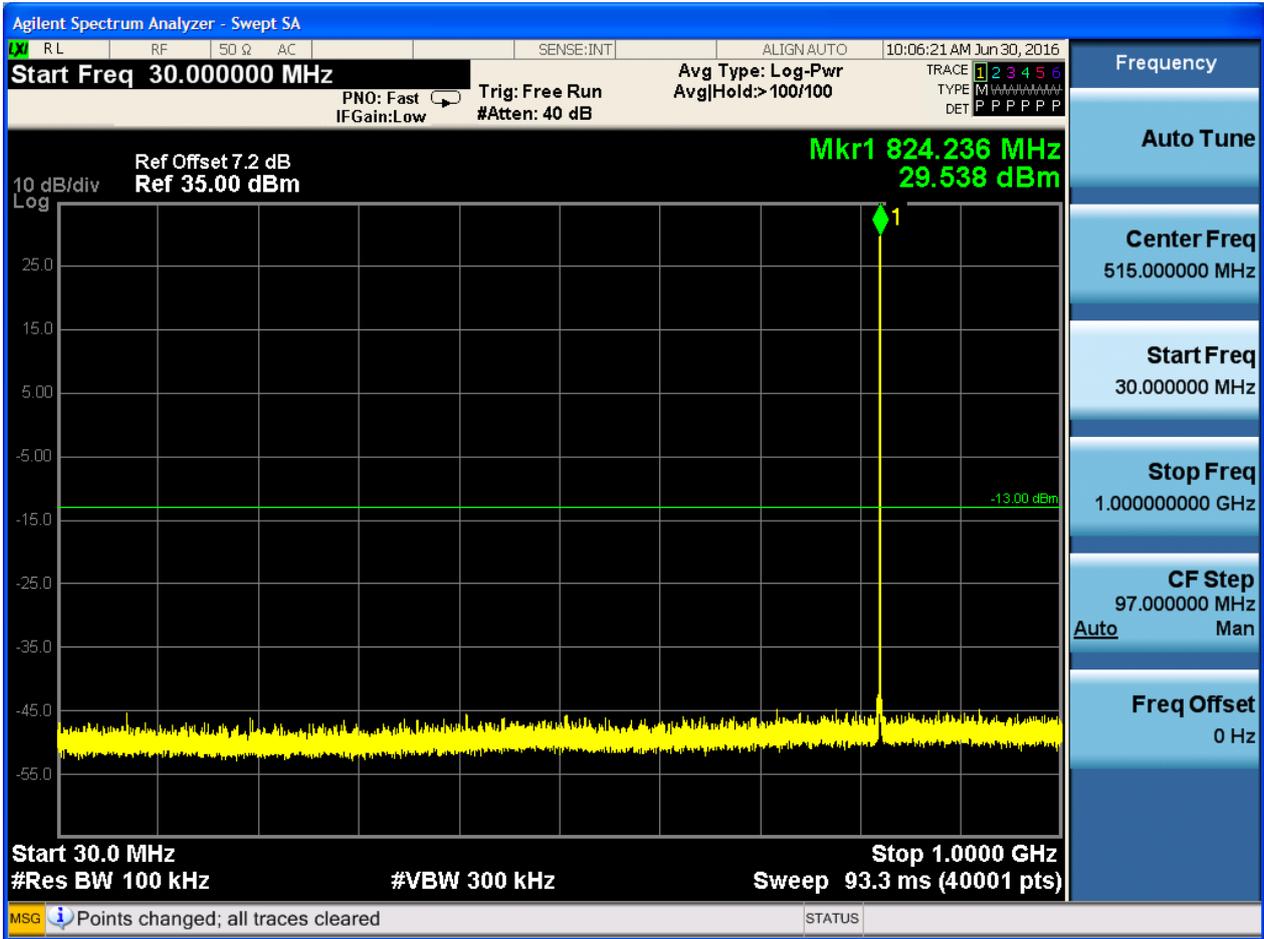


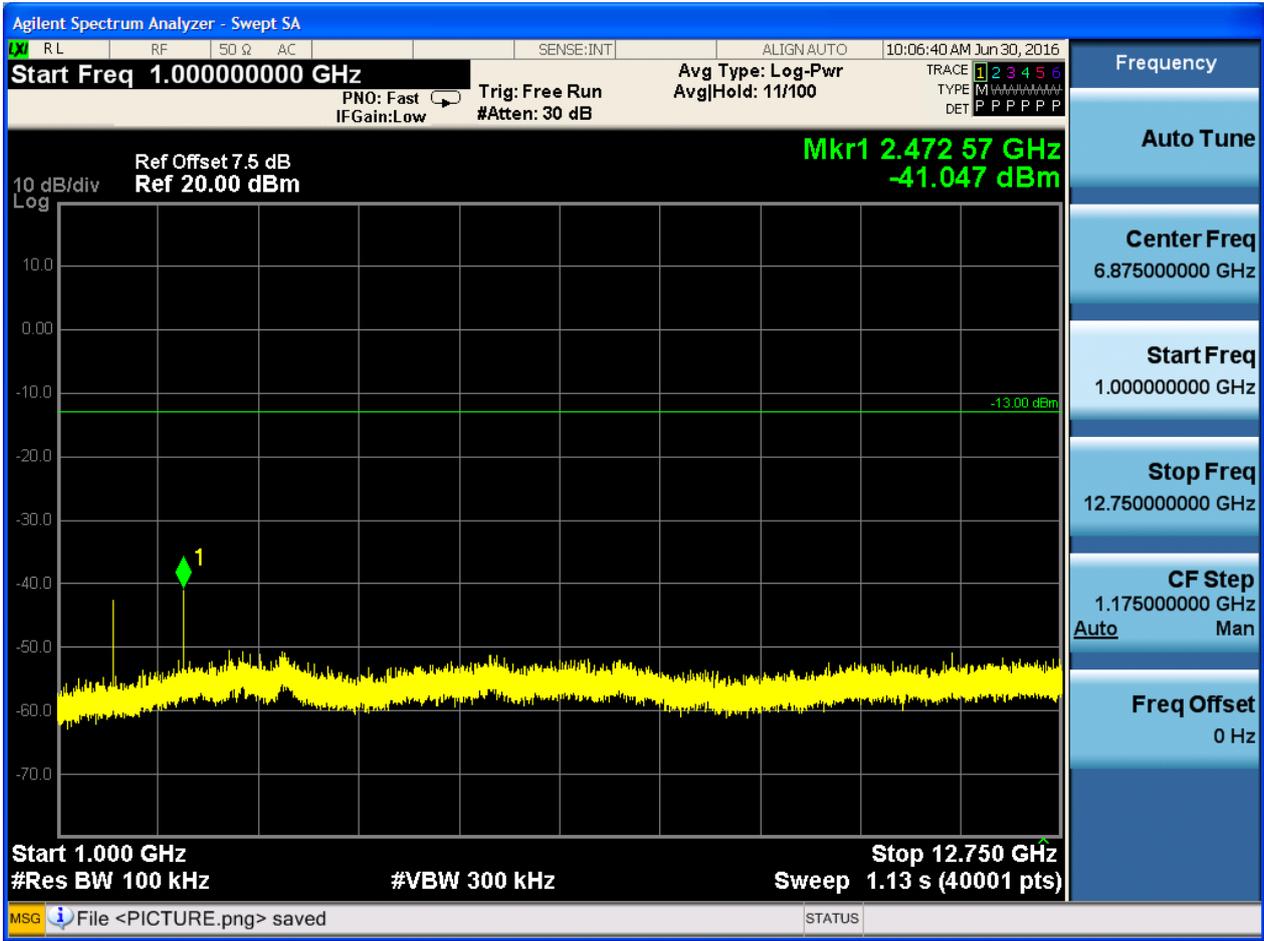


6.1.1.2 Test Mode = GSM/TM2

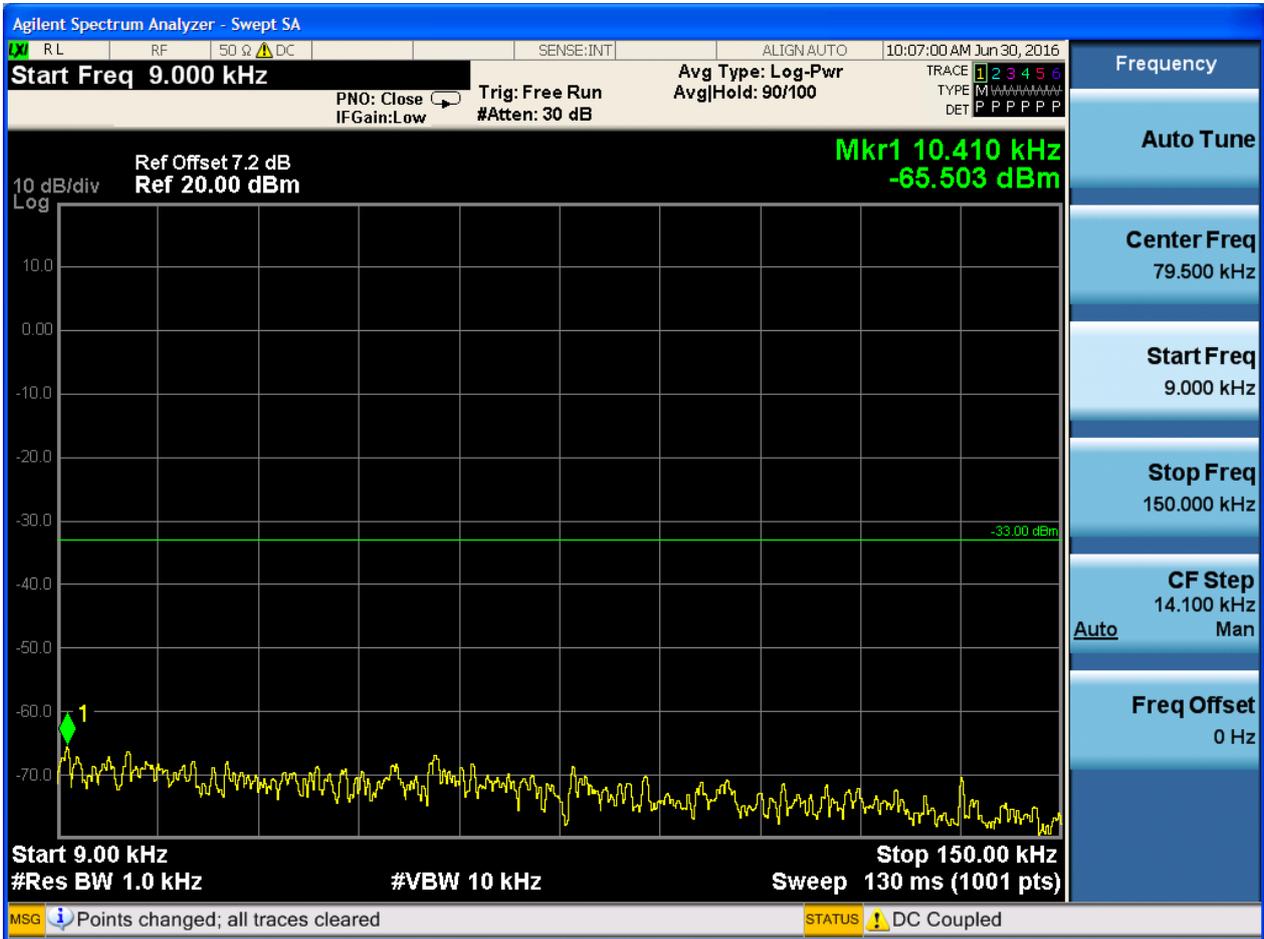
6.1.1.2.1 Test Channel = LCH

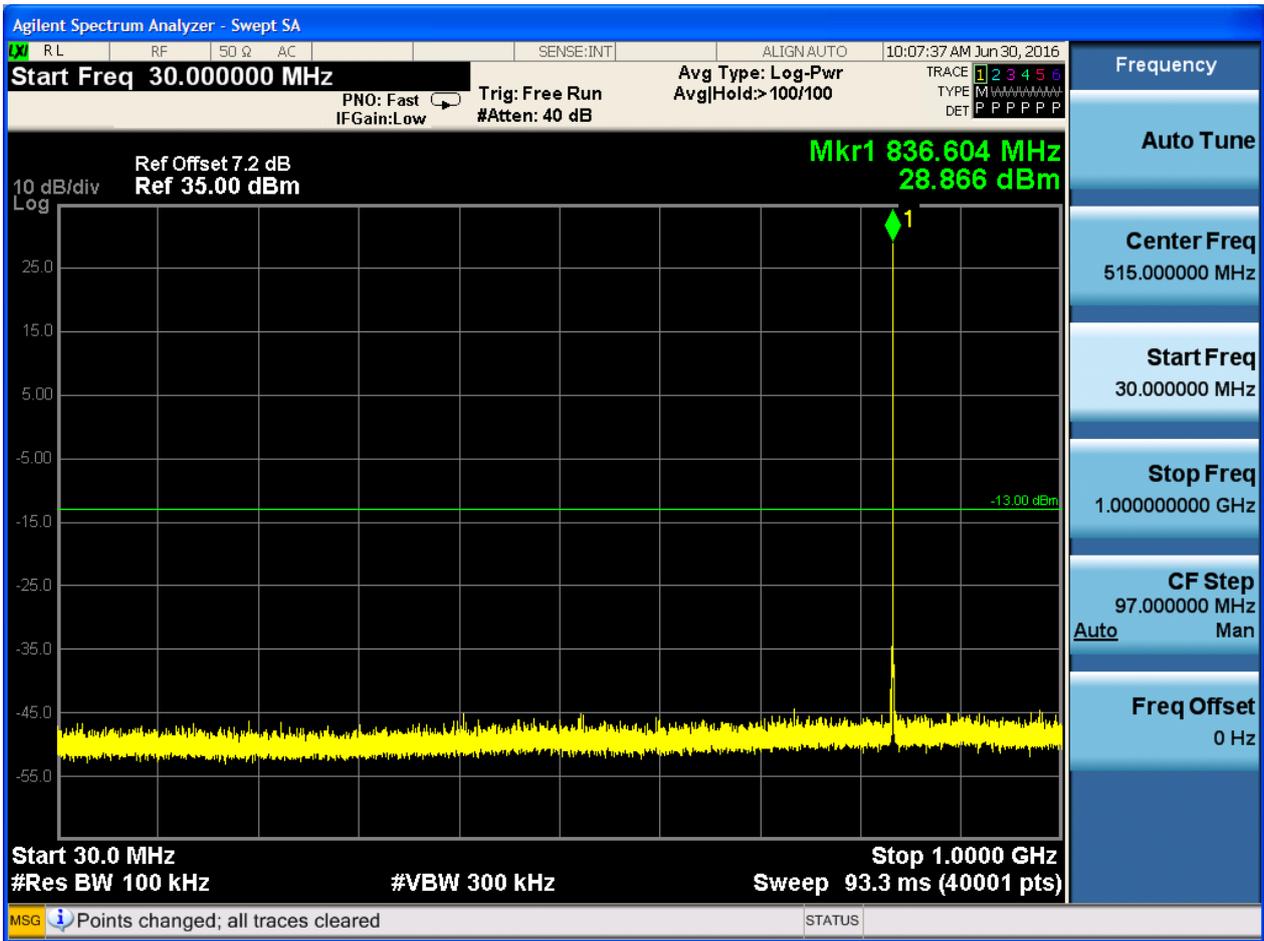


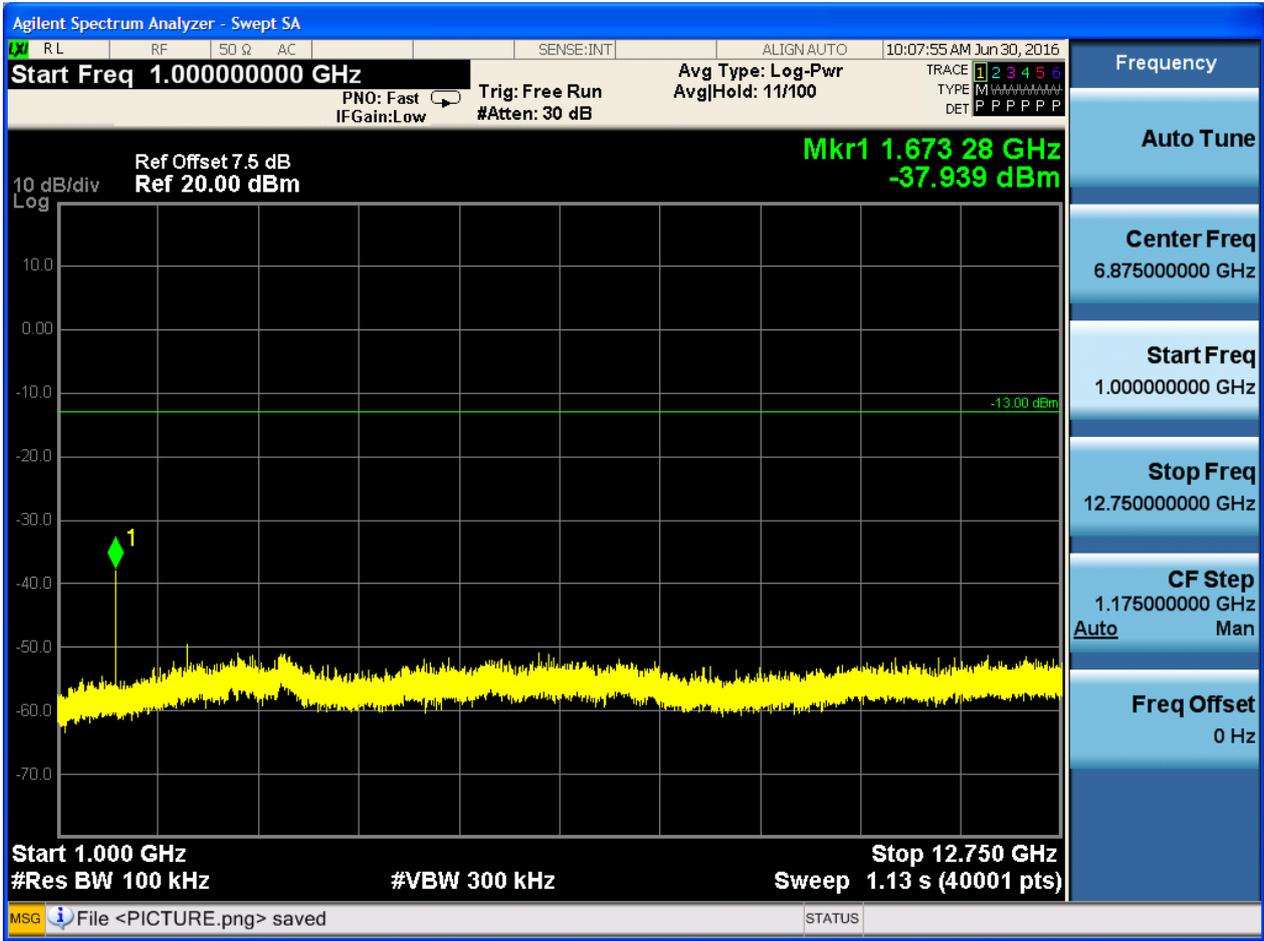




6.1.1.2.2 Test Channel = MCH

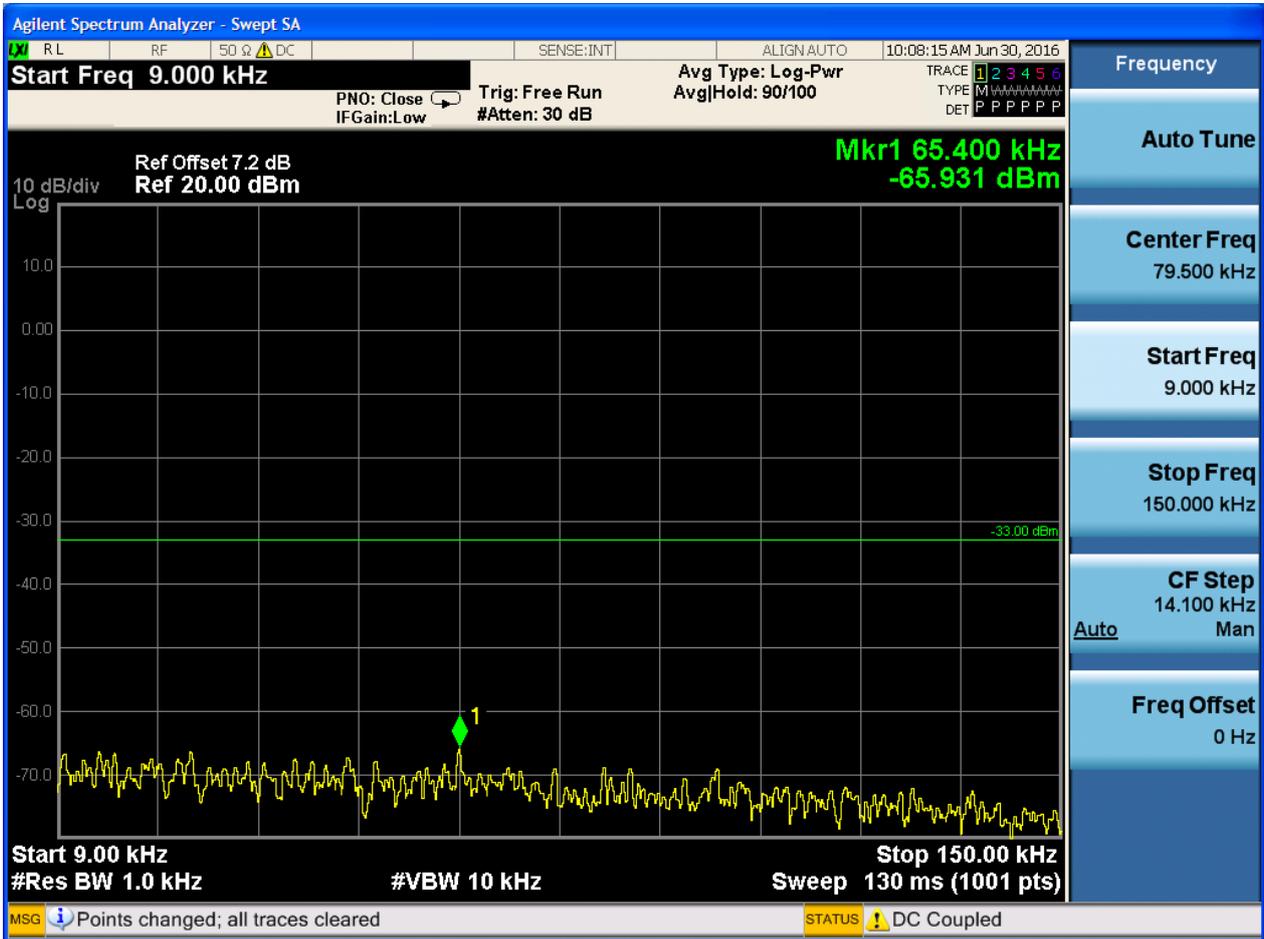


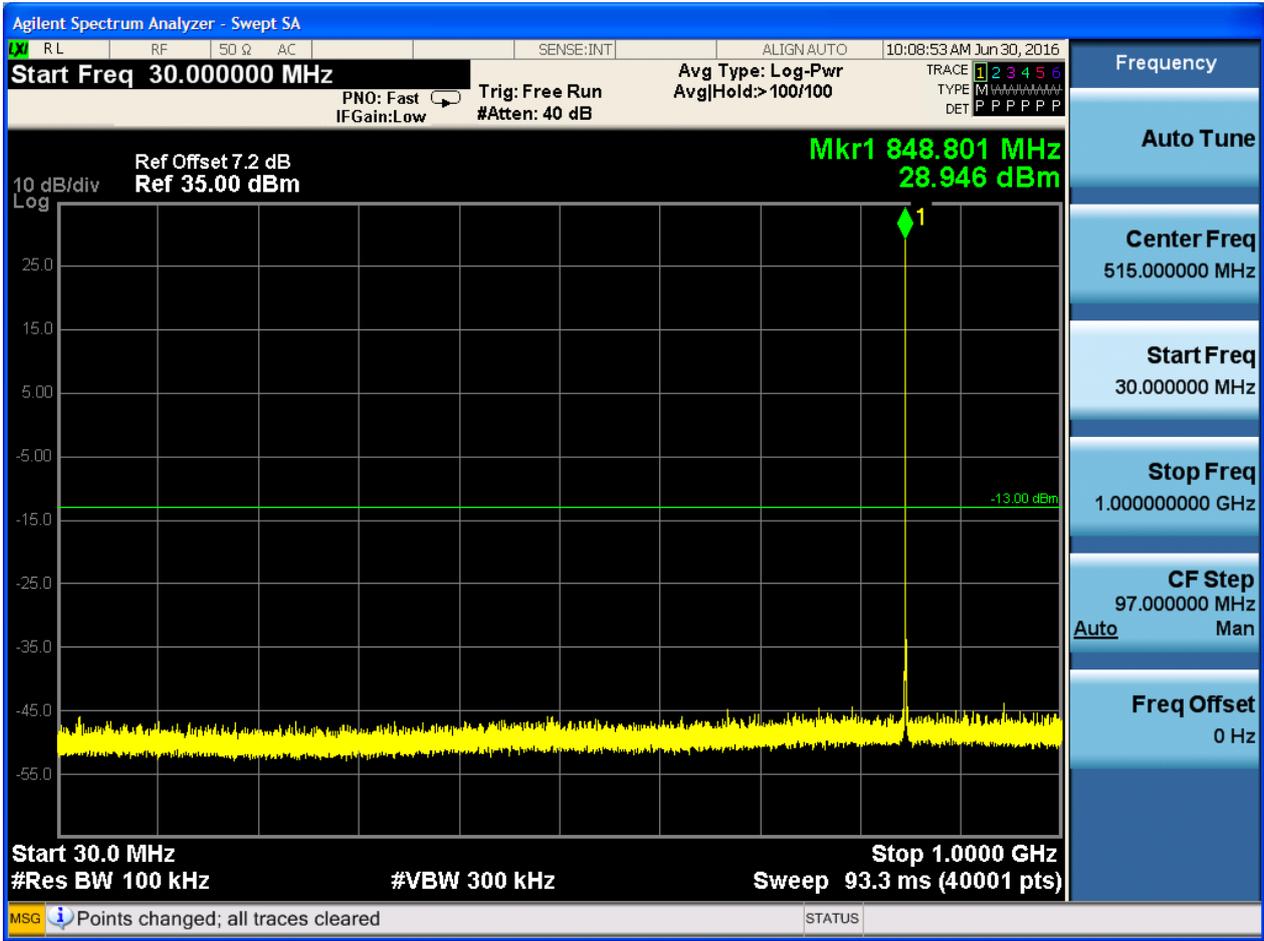


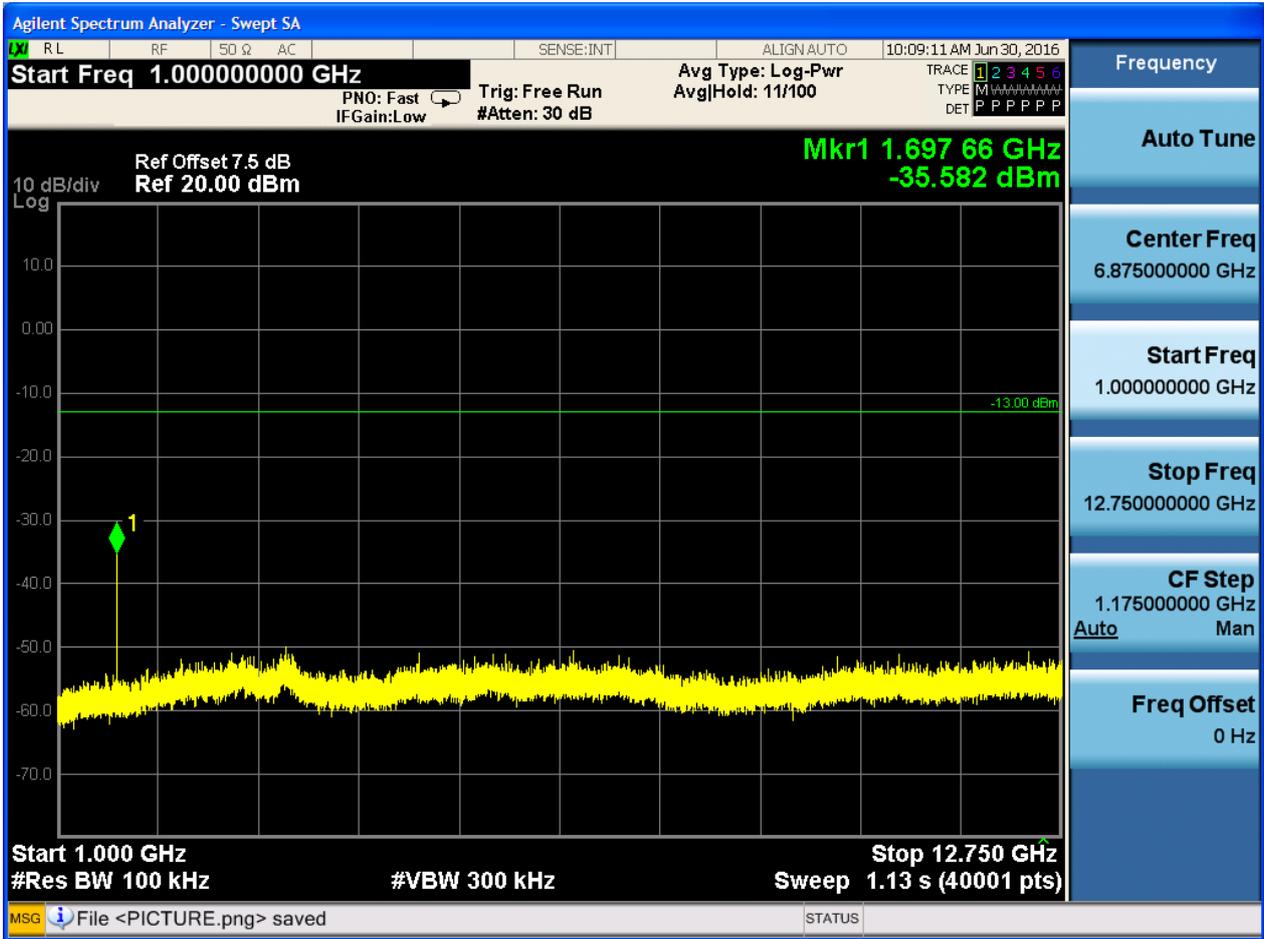


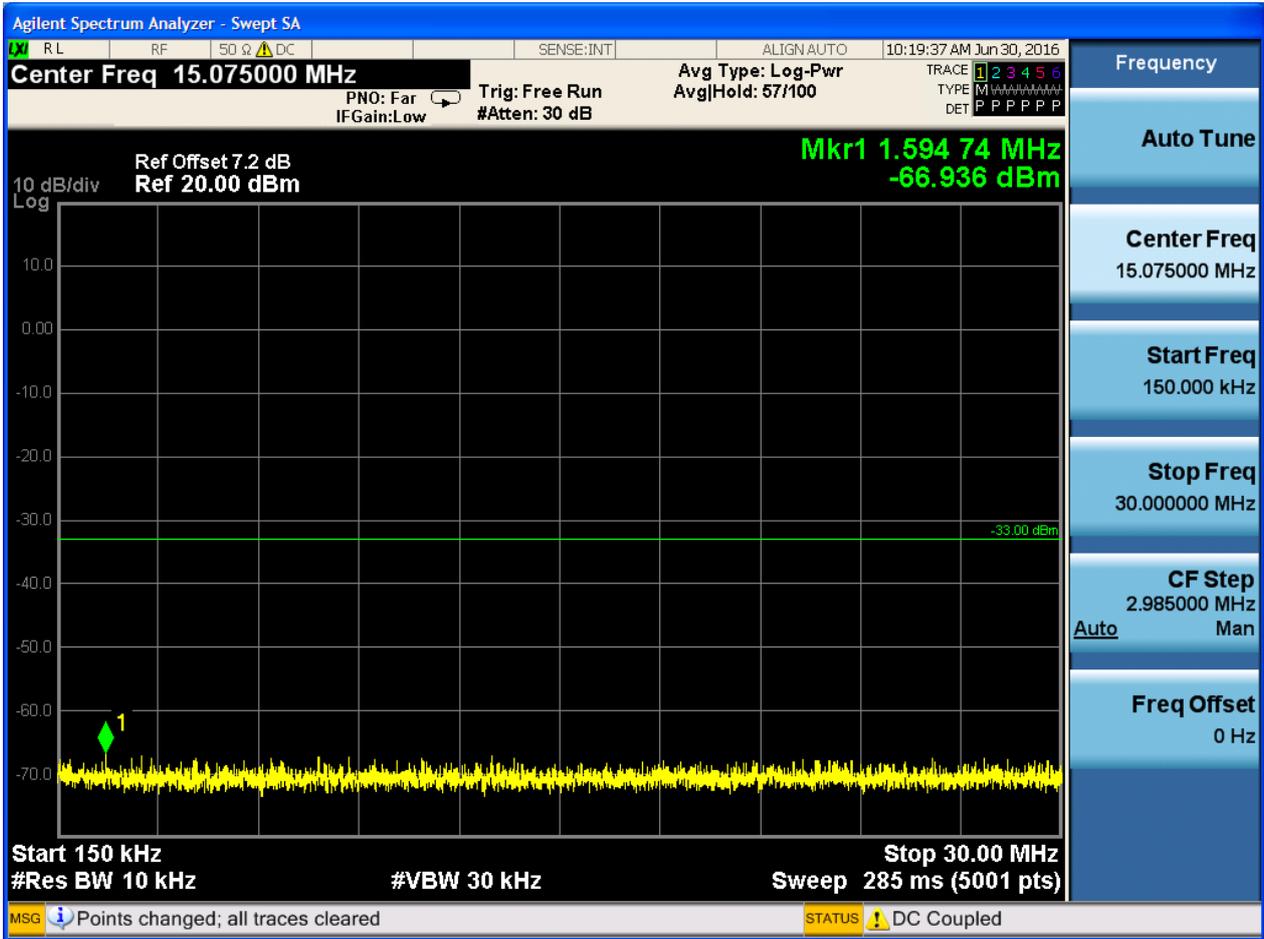


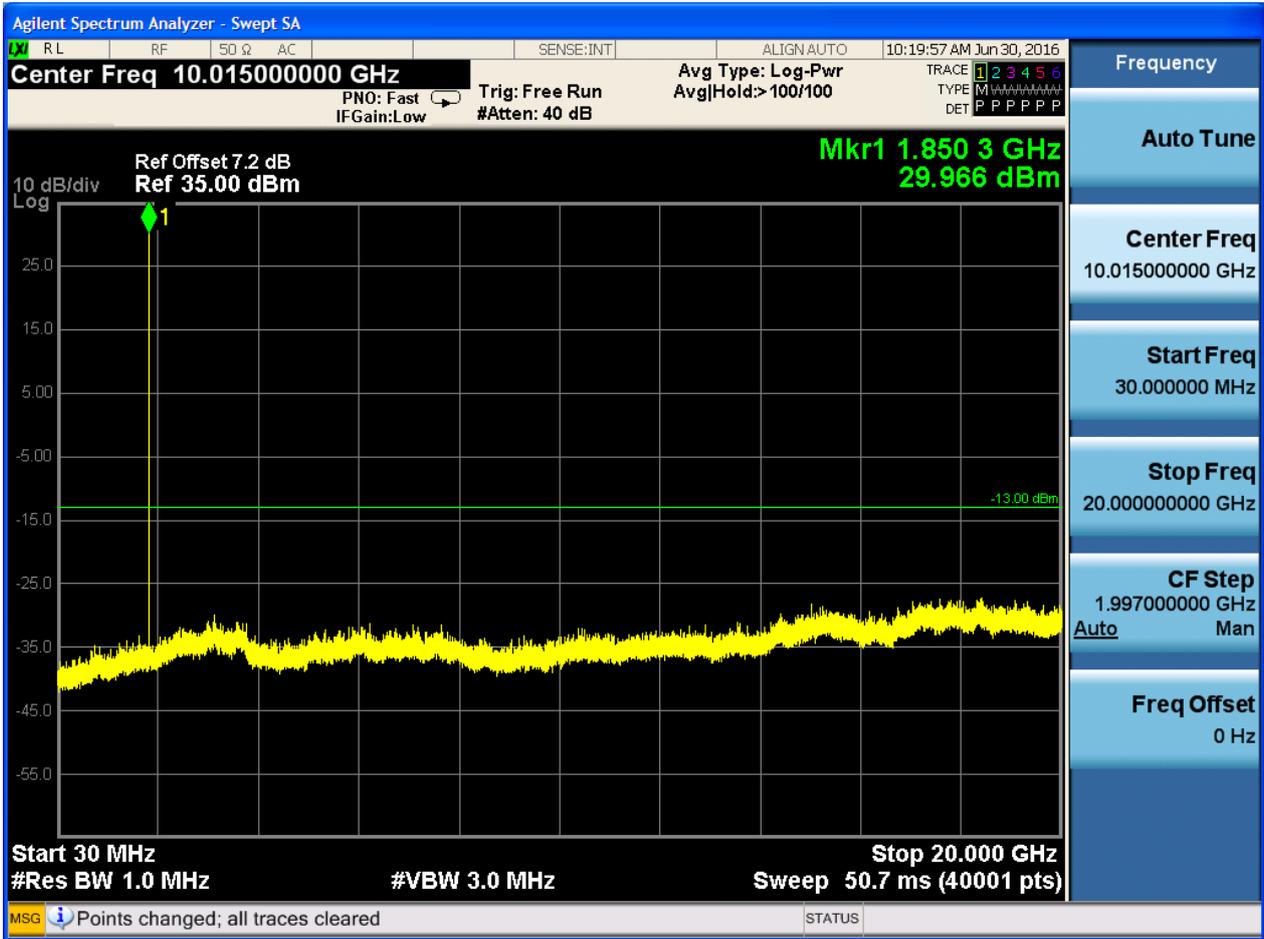
6.1.1.2.3 Test Channel = HCH



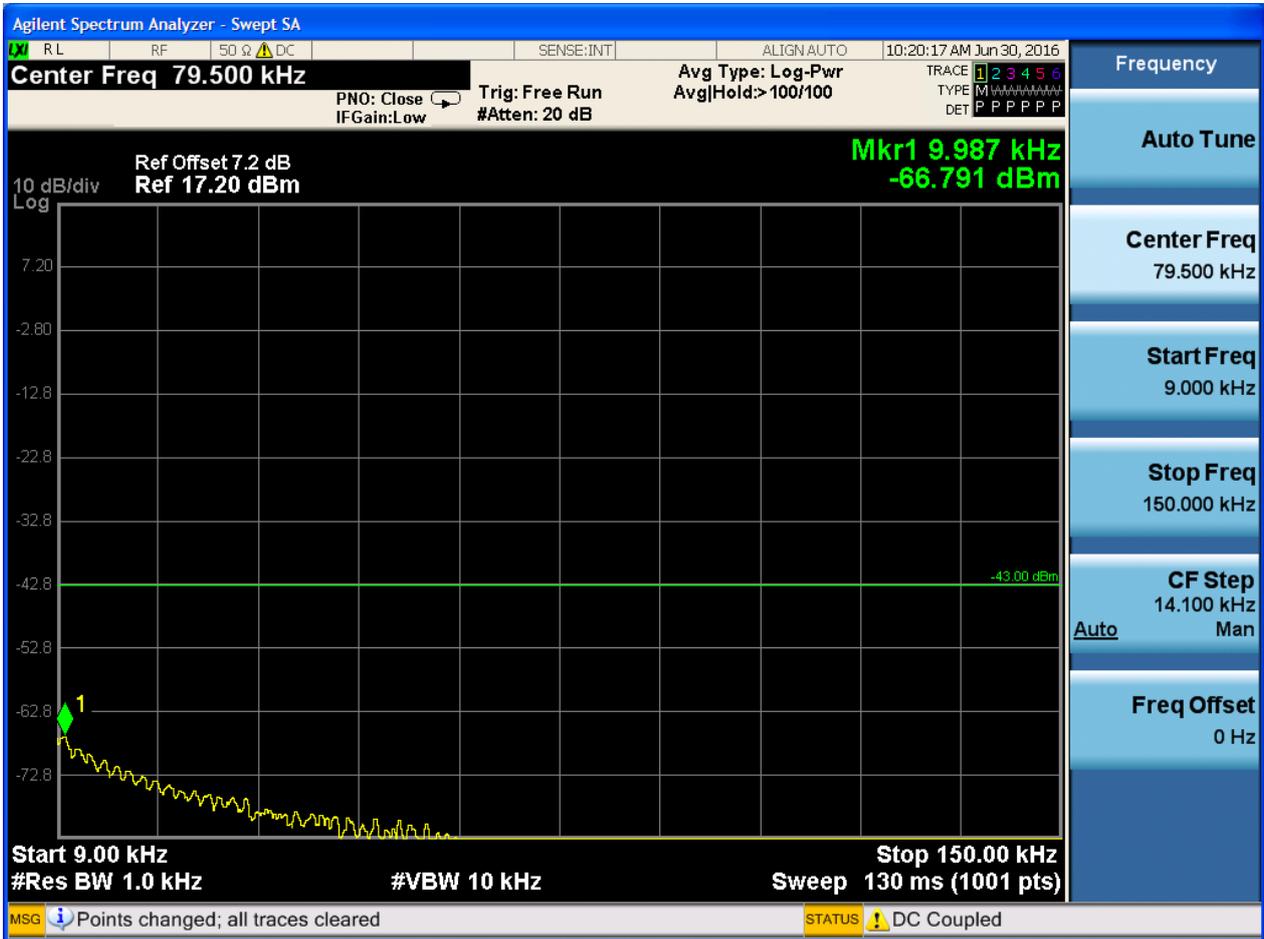


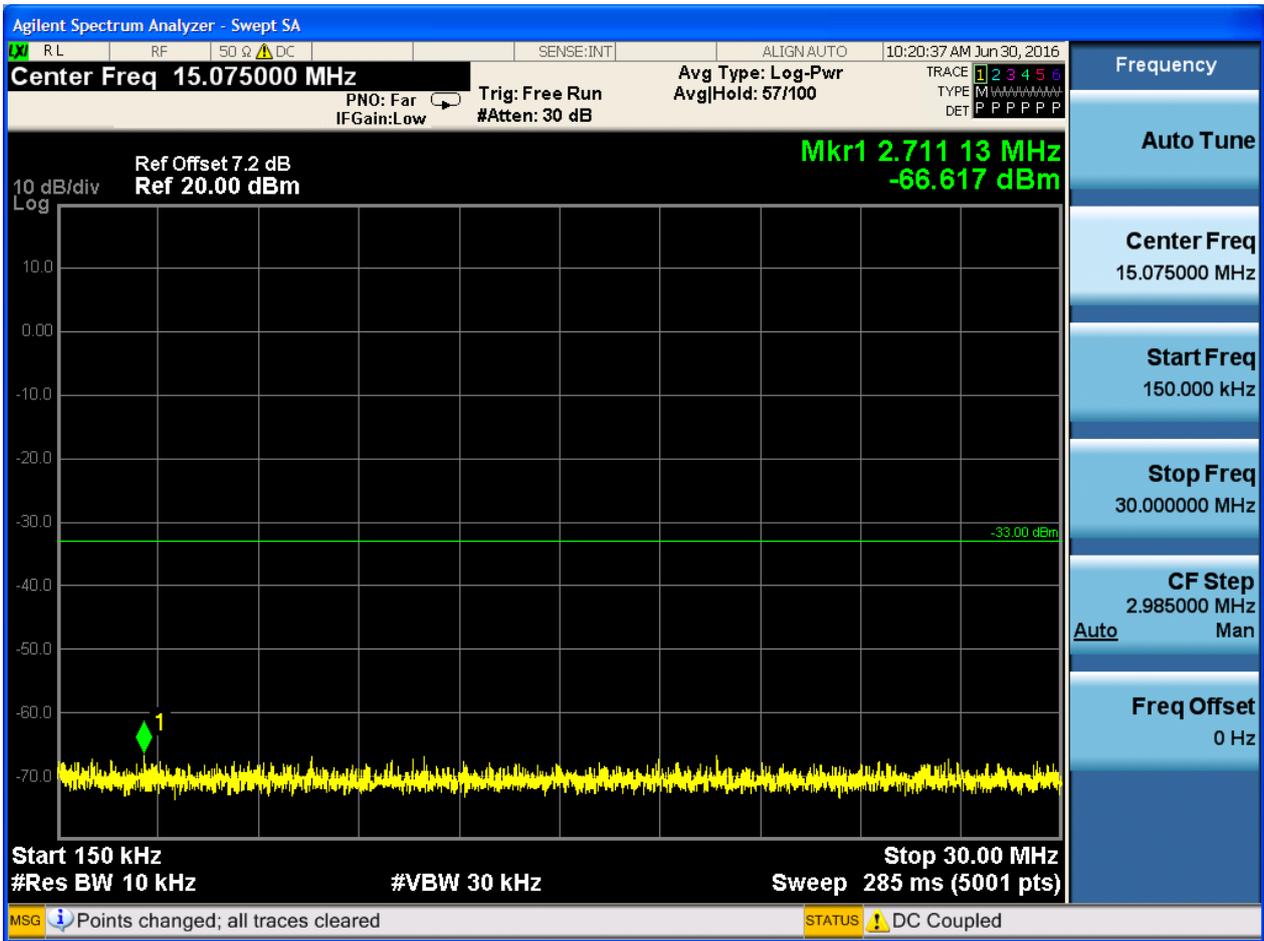


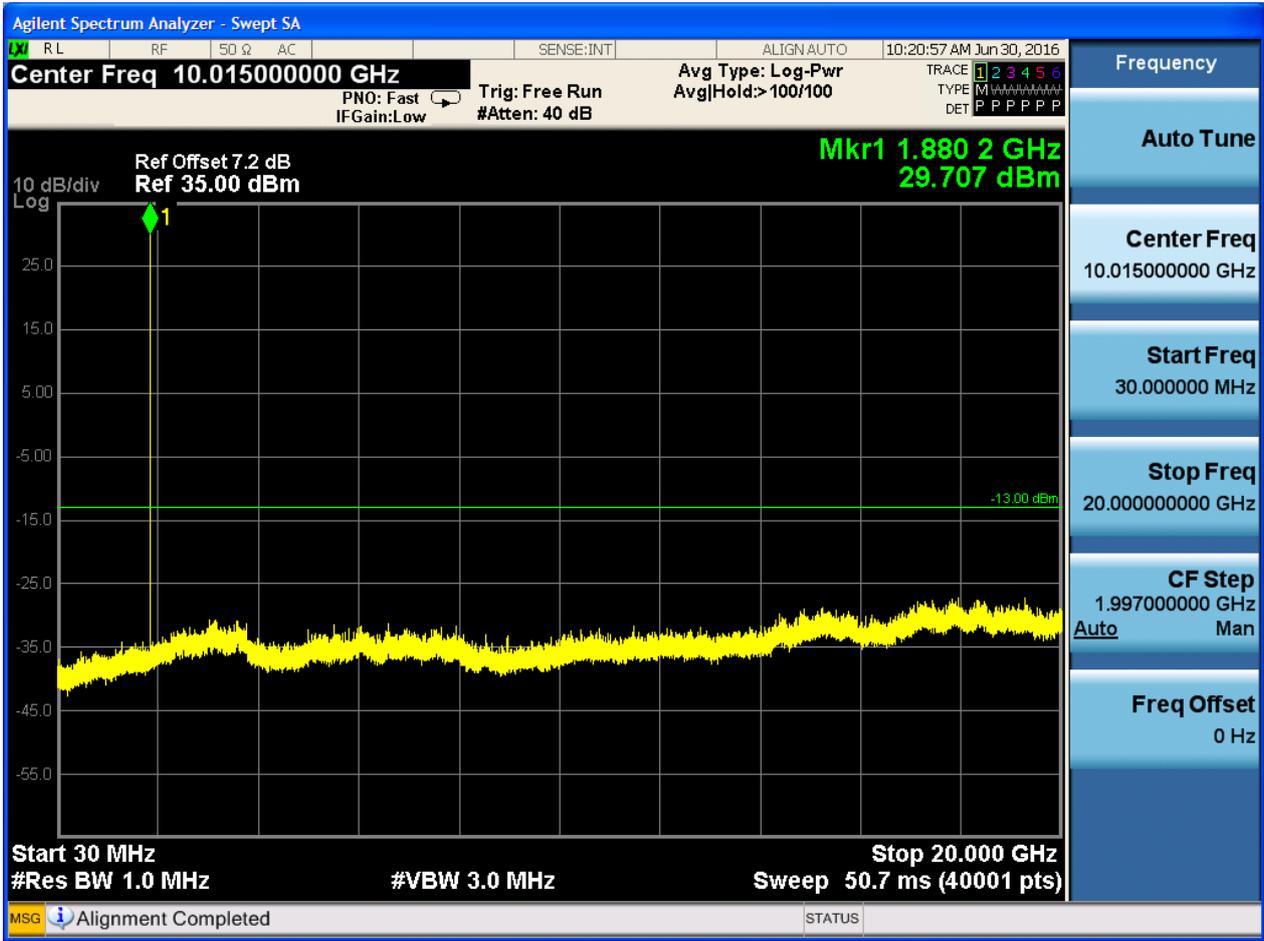




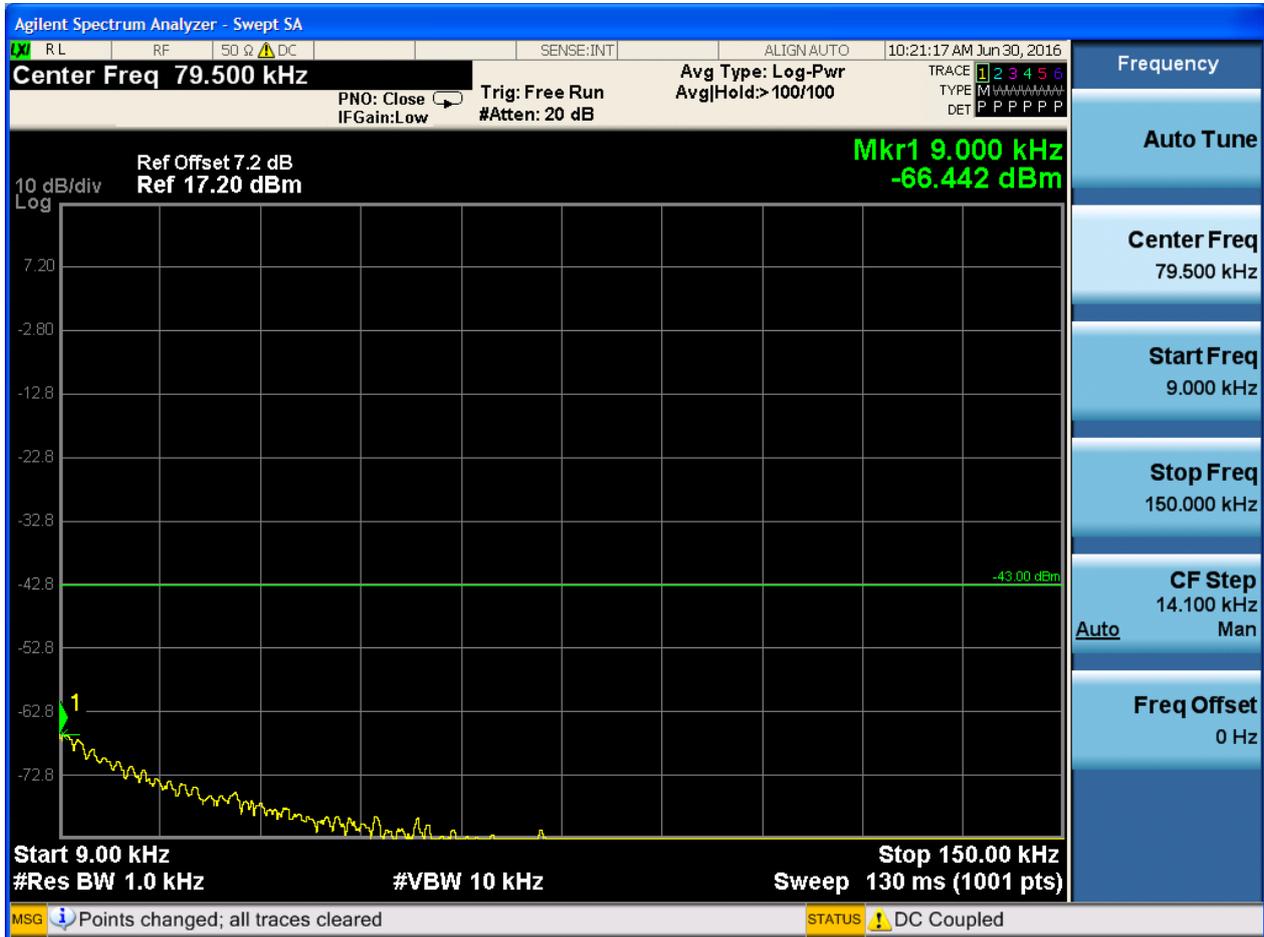
6.1.2.1.2 Test Channel = MCH

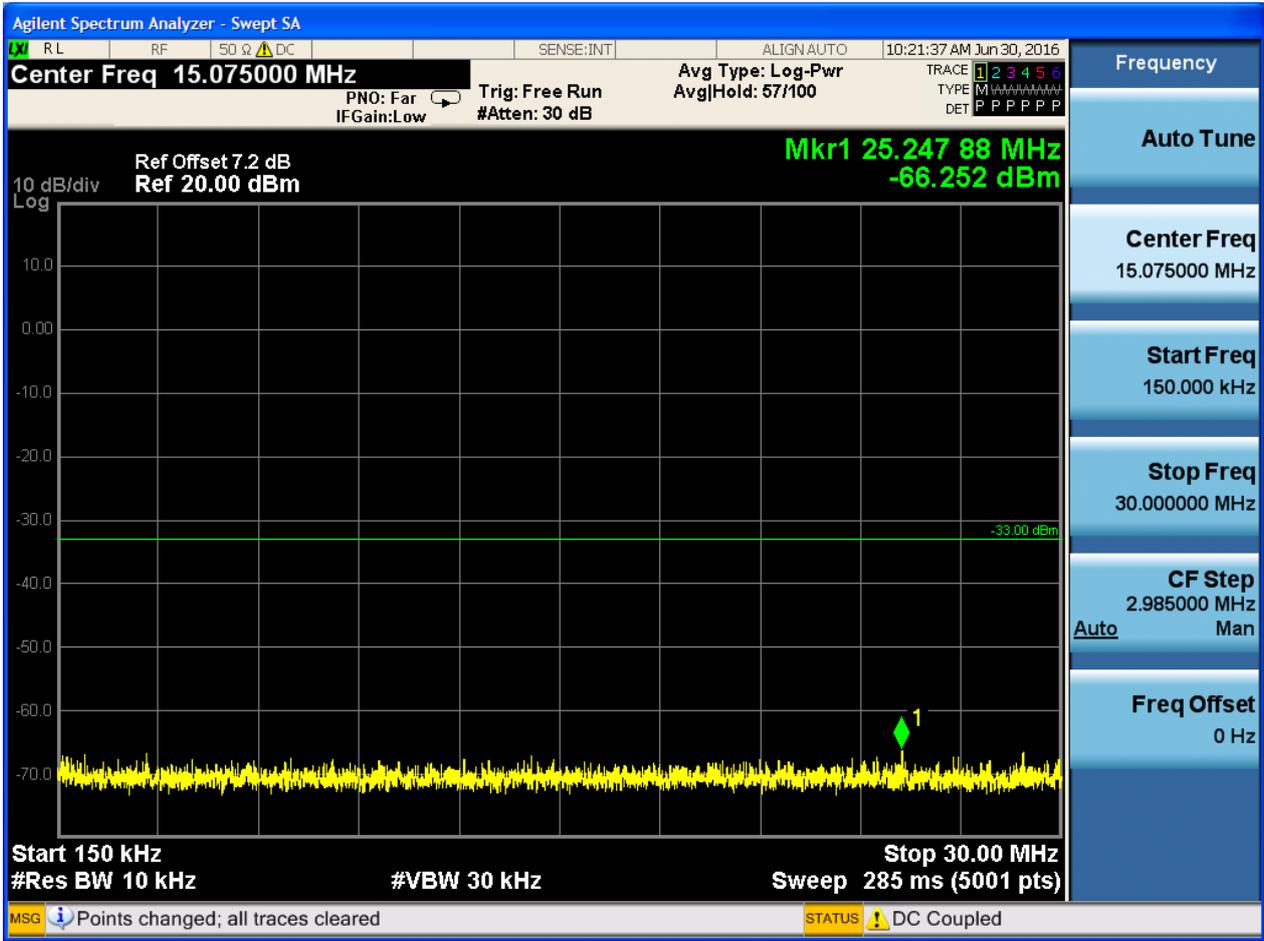


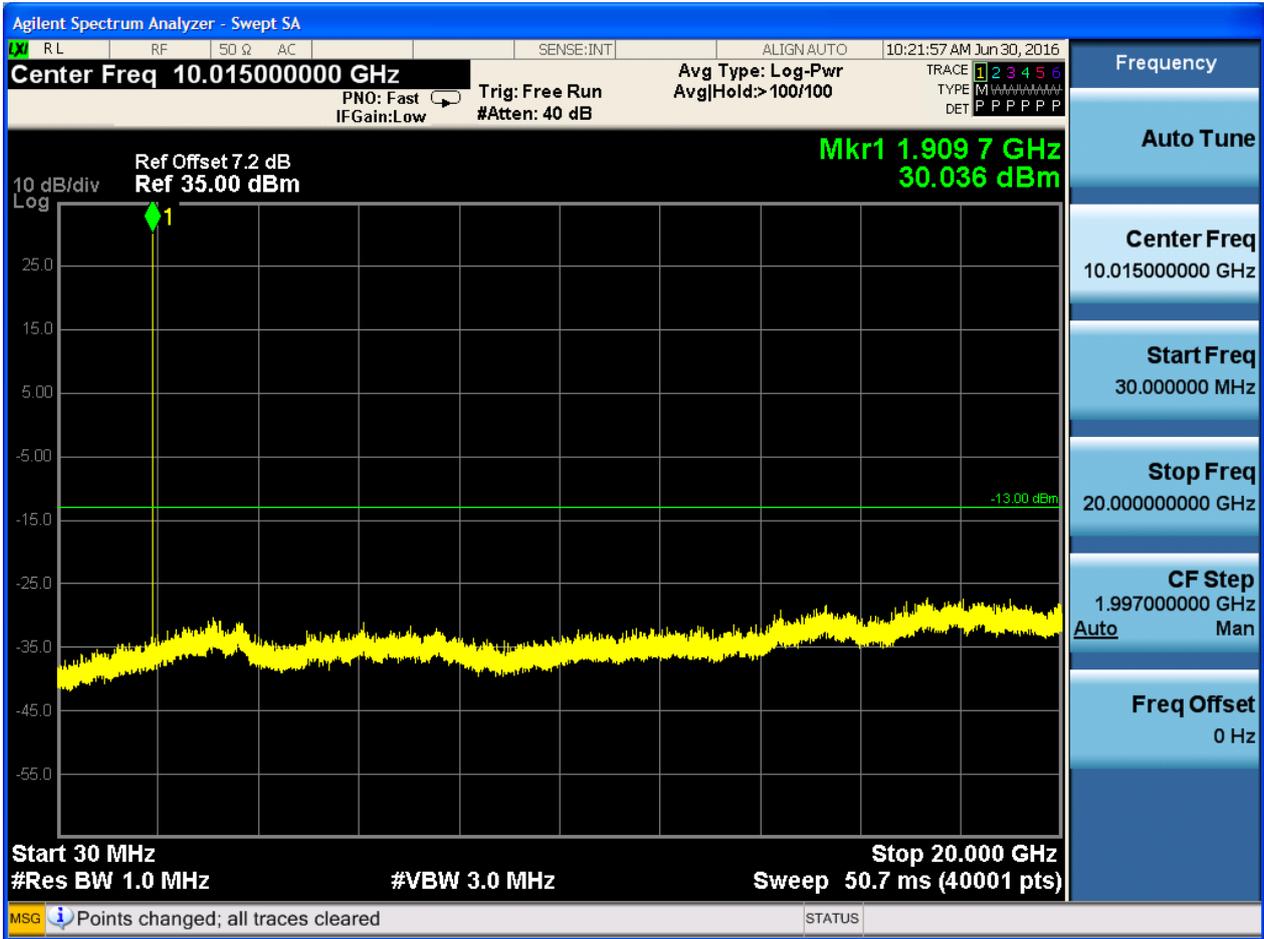




6.1.2.1.3 Test Channel = HCH



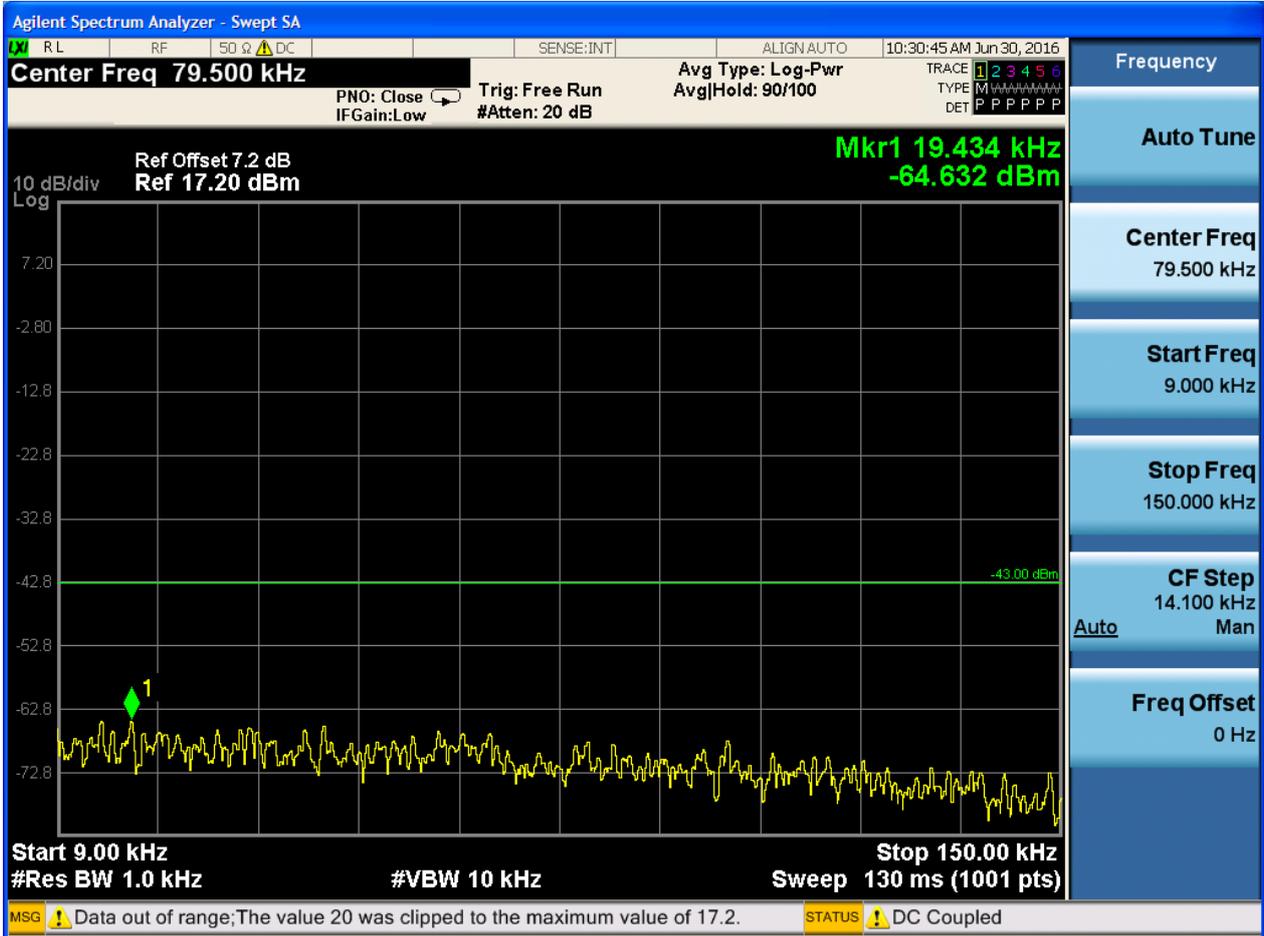


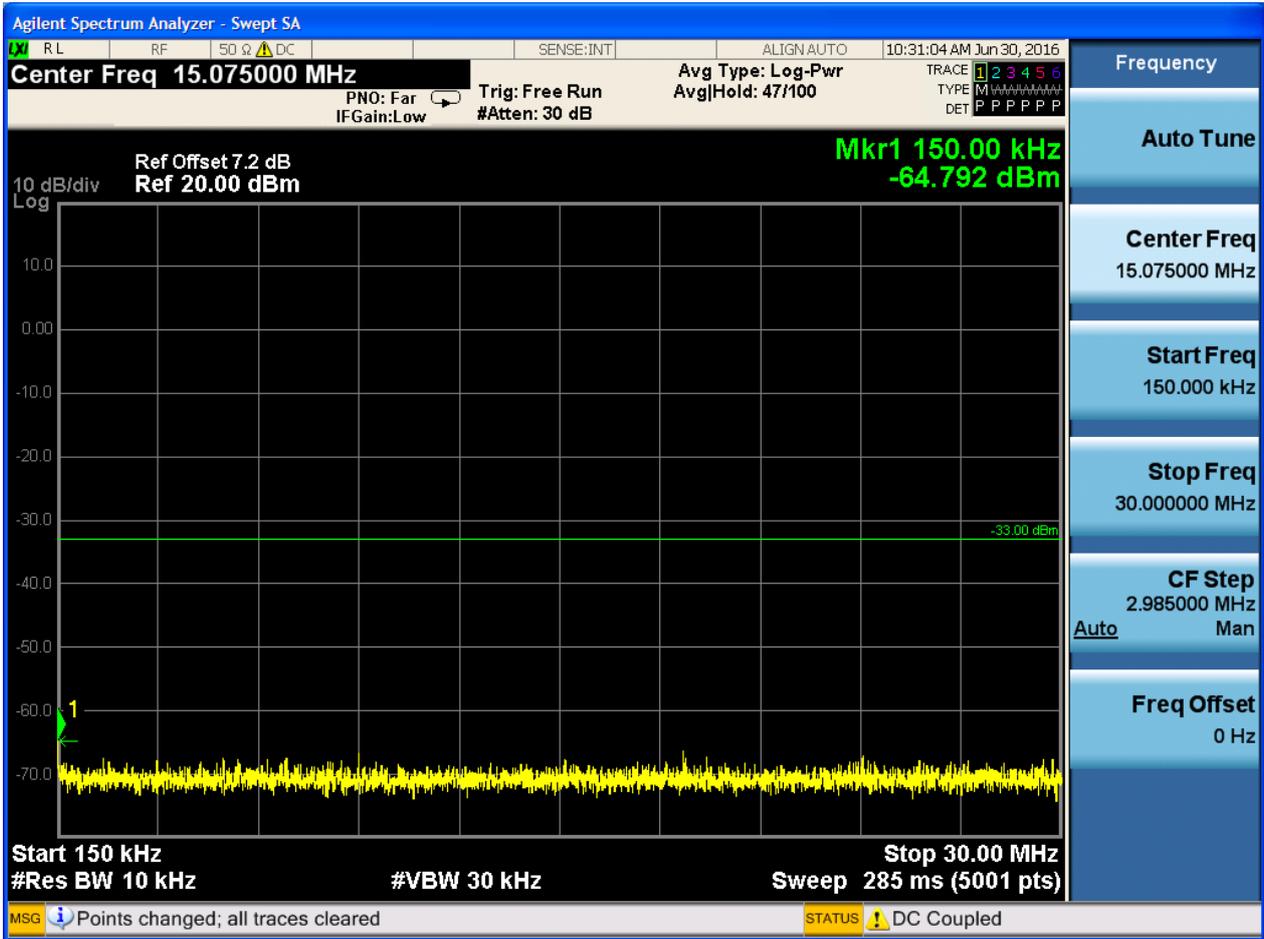




6.1.2.2 Test Mode = GSM/TM2

6.1.2.2.1 Test Channel = LCH

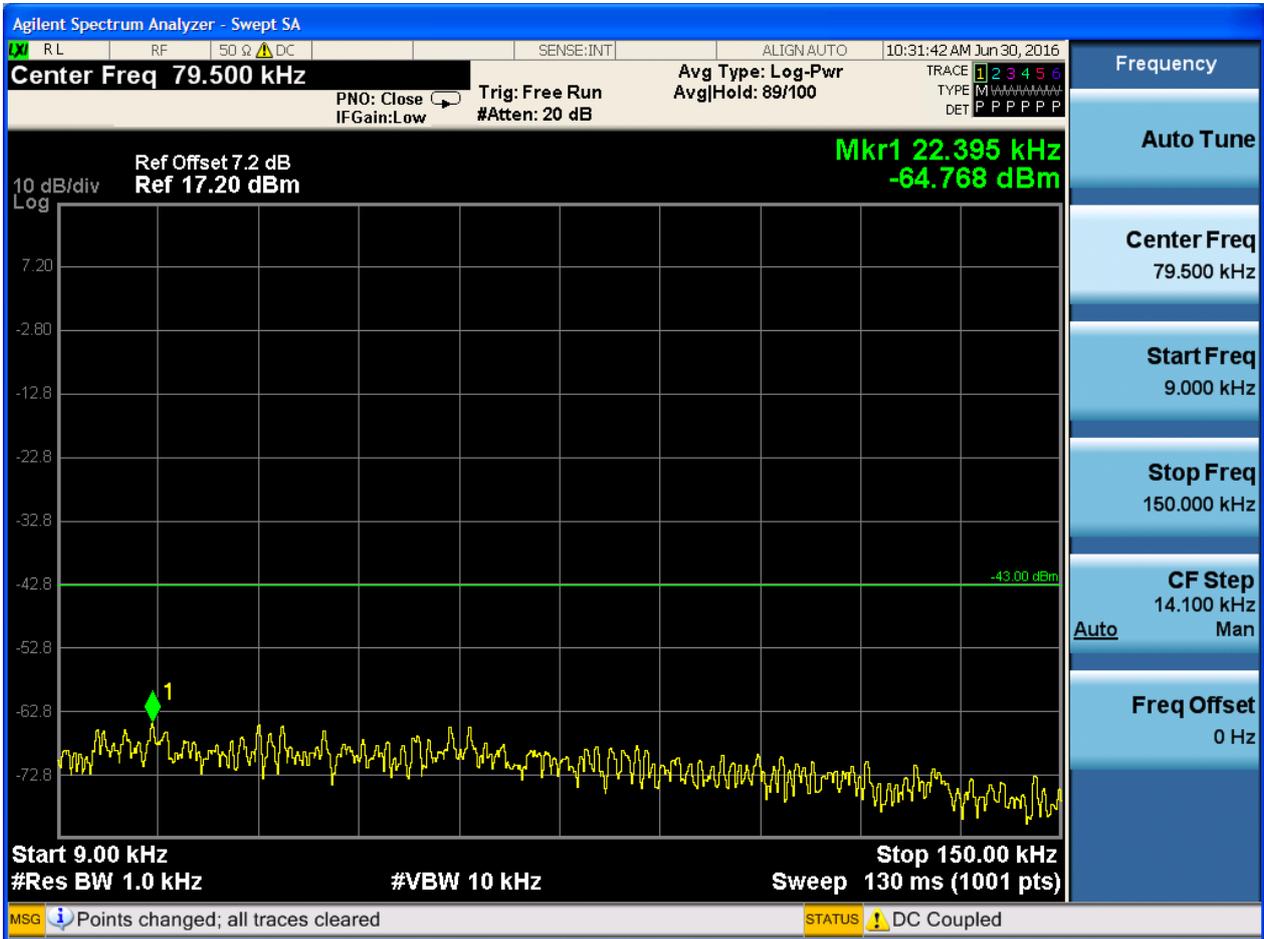


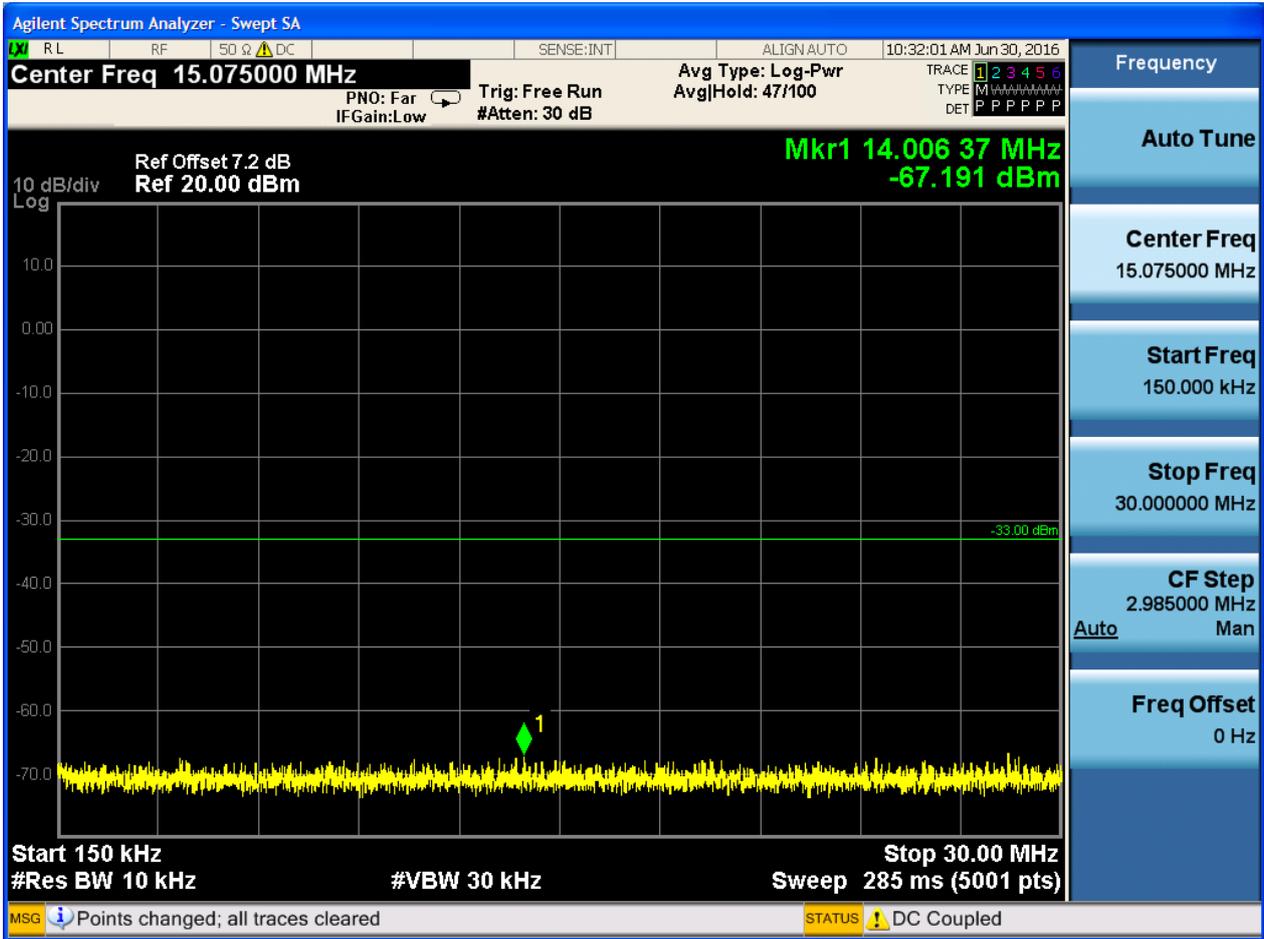


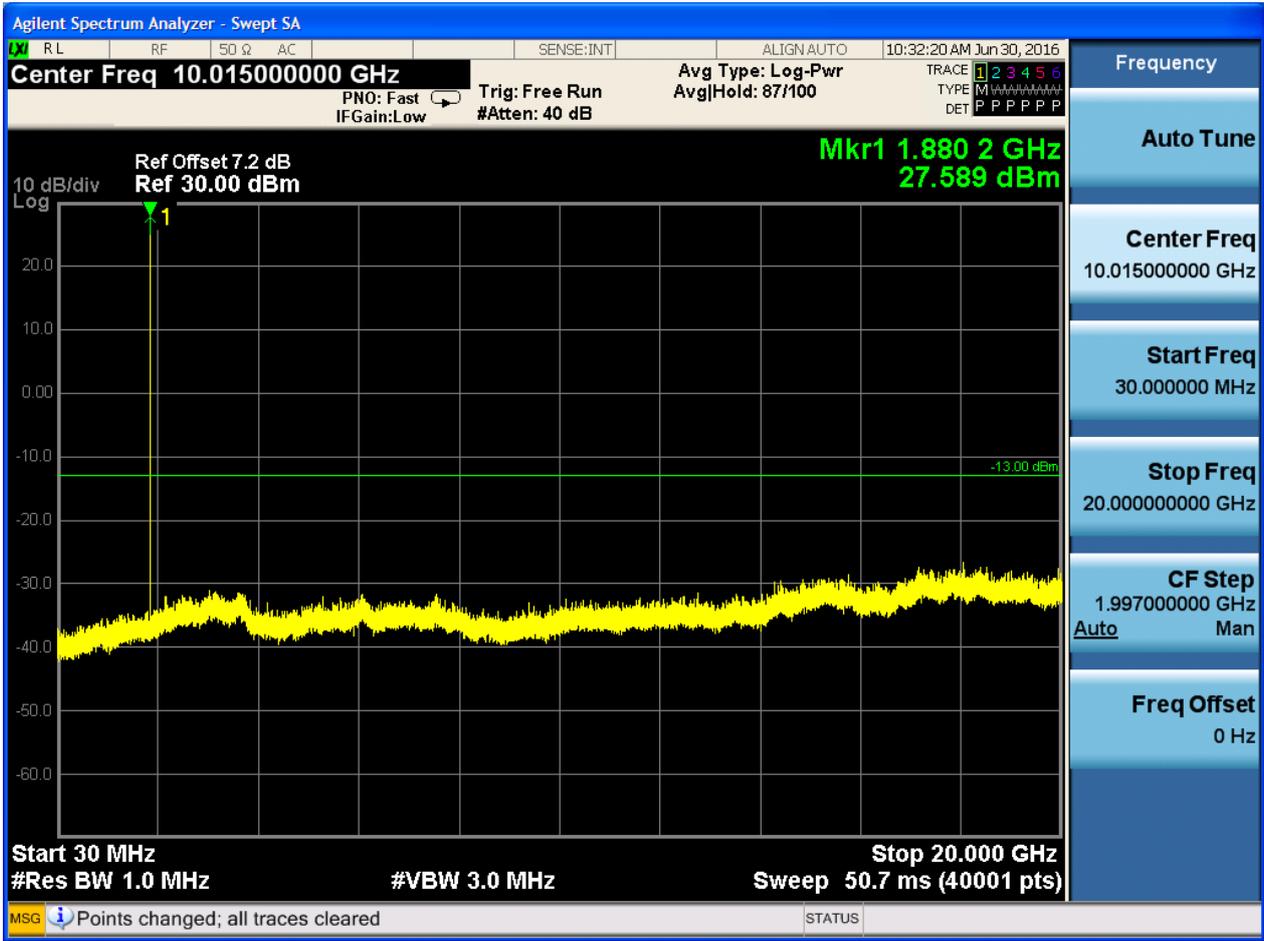




6.1.2.2.2 Test Channel = MCH

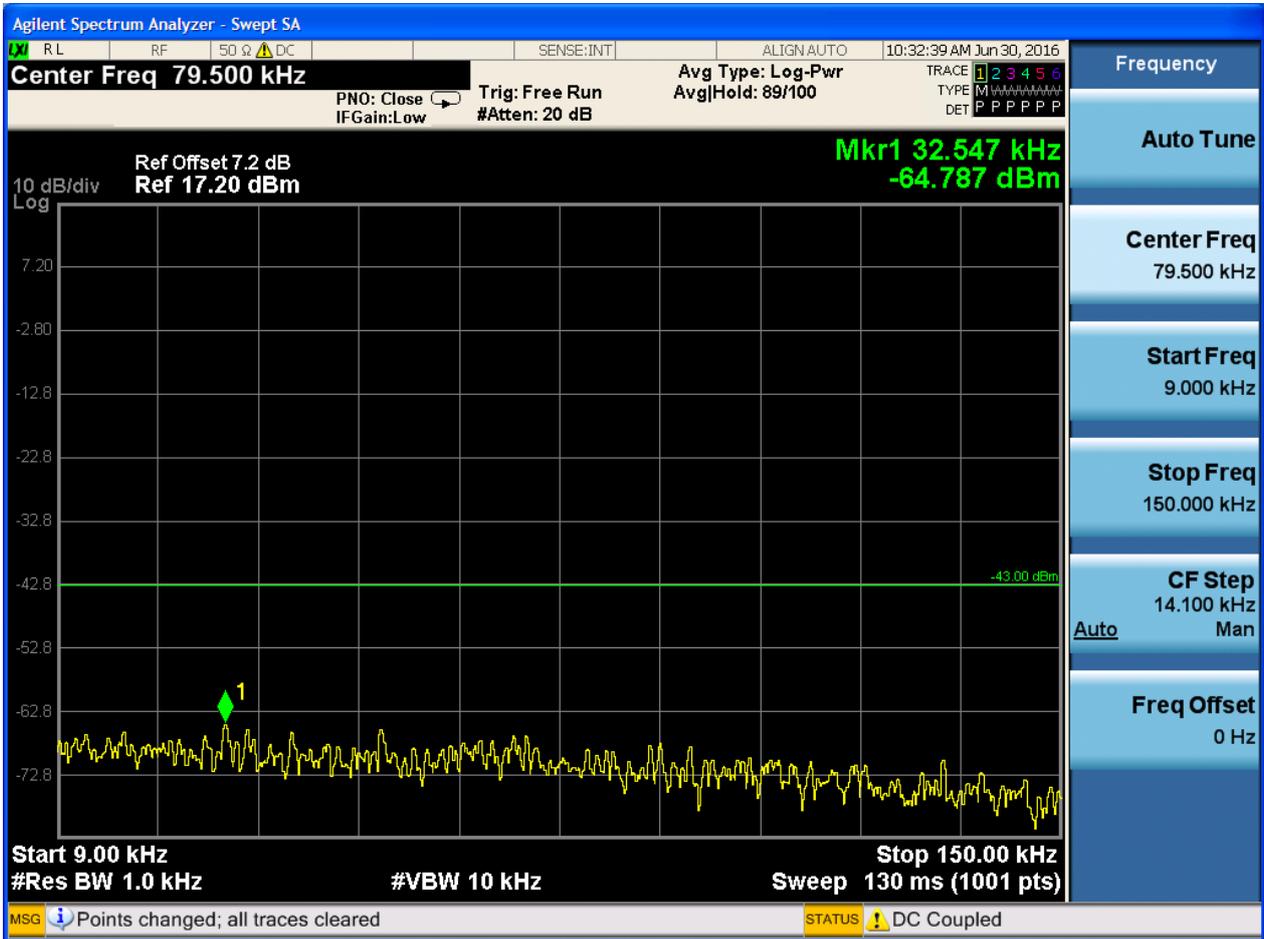


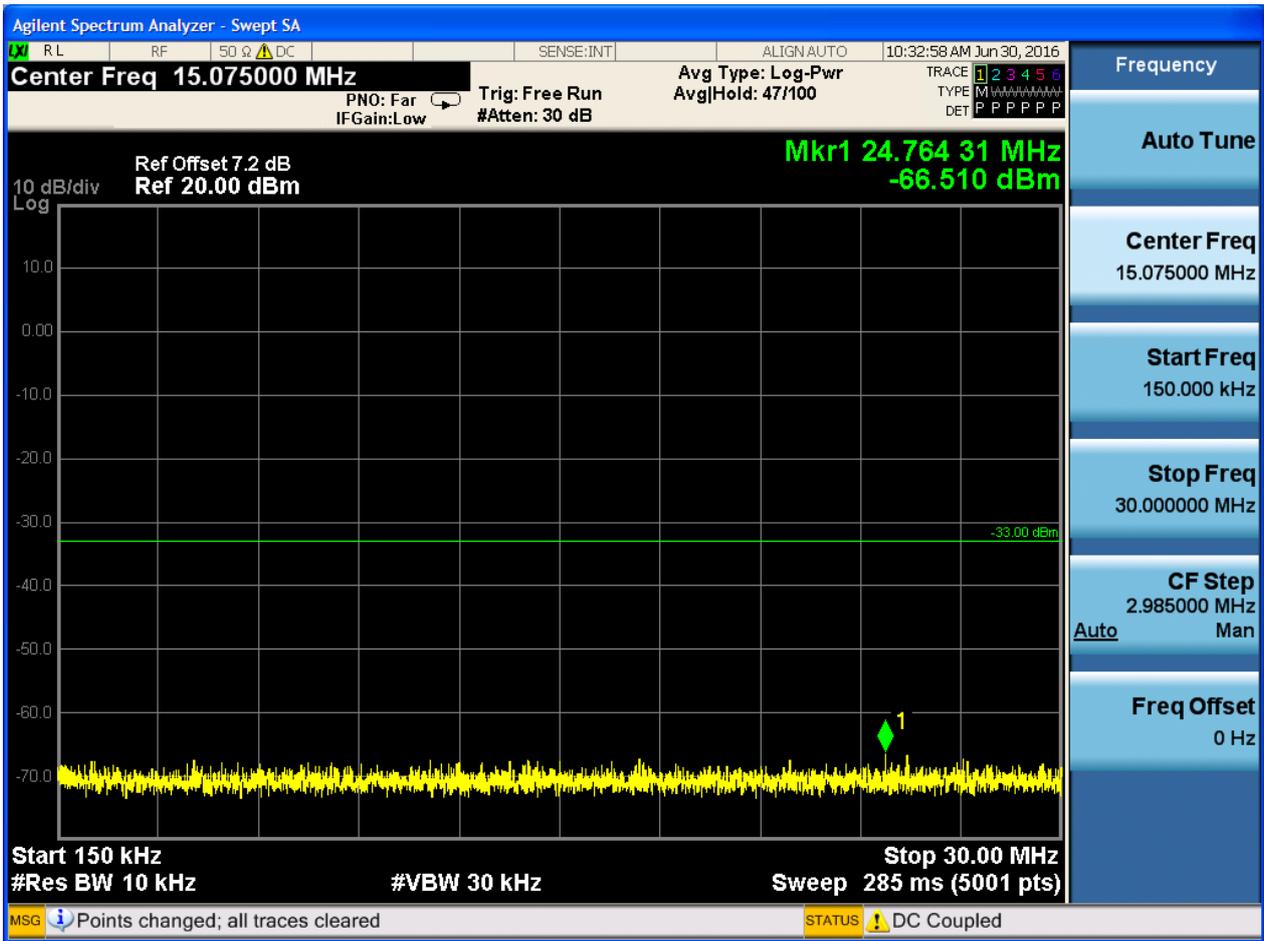


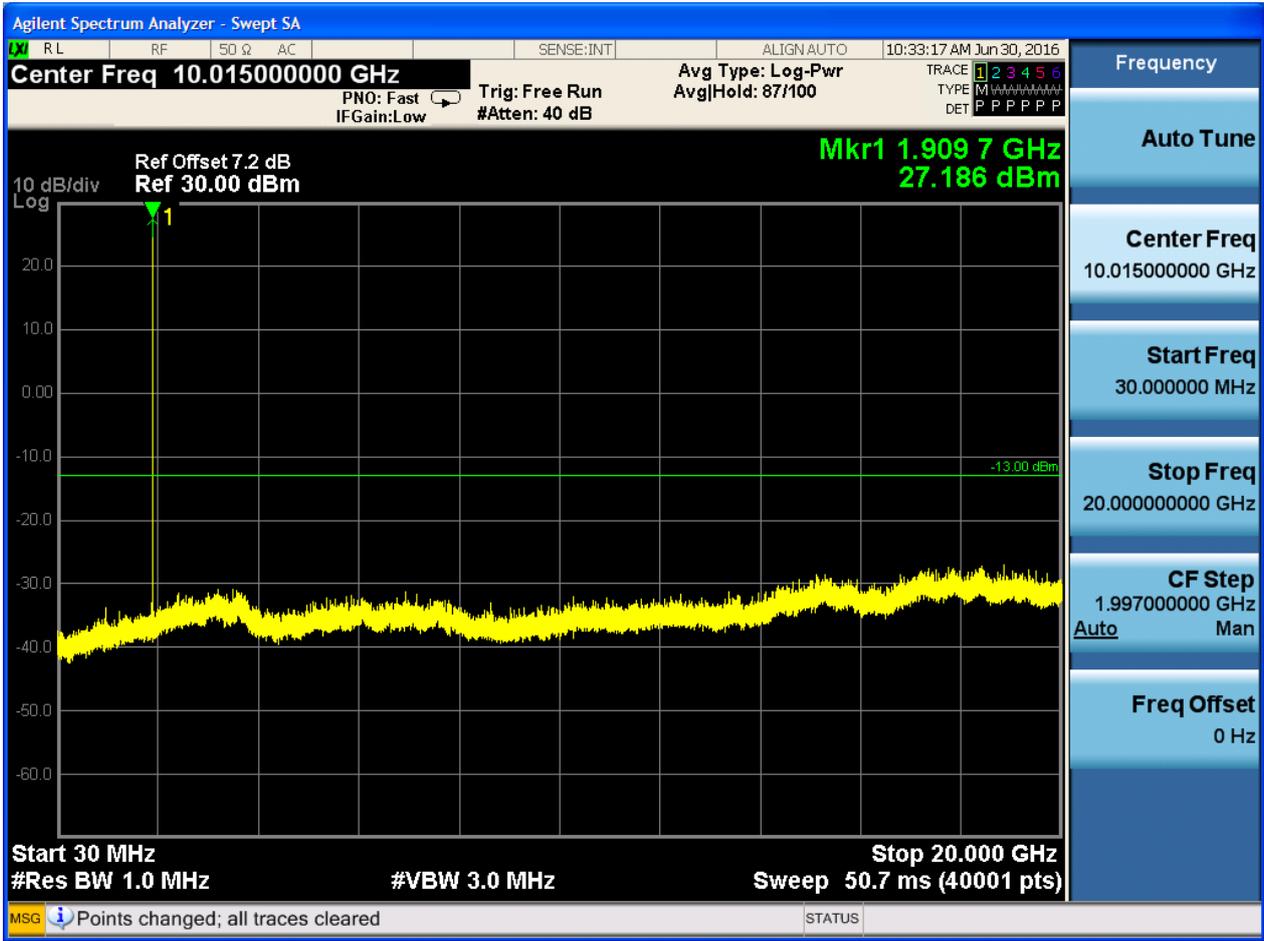




6.1.2.2.3 Test Channel = HCH







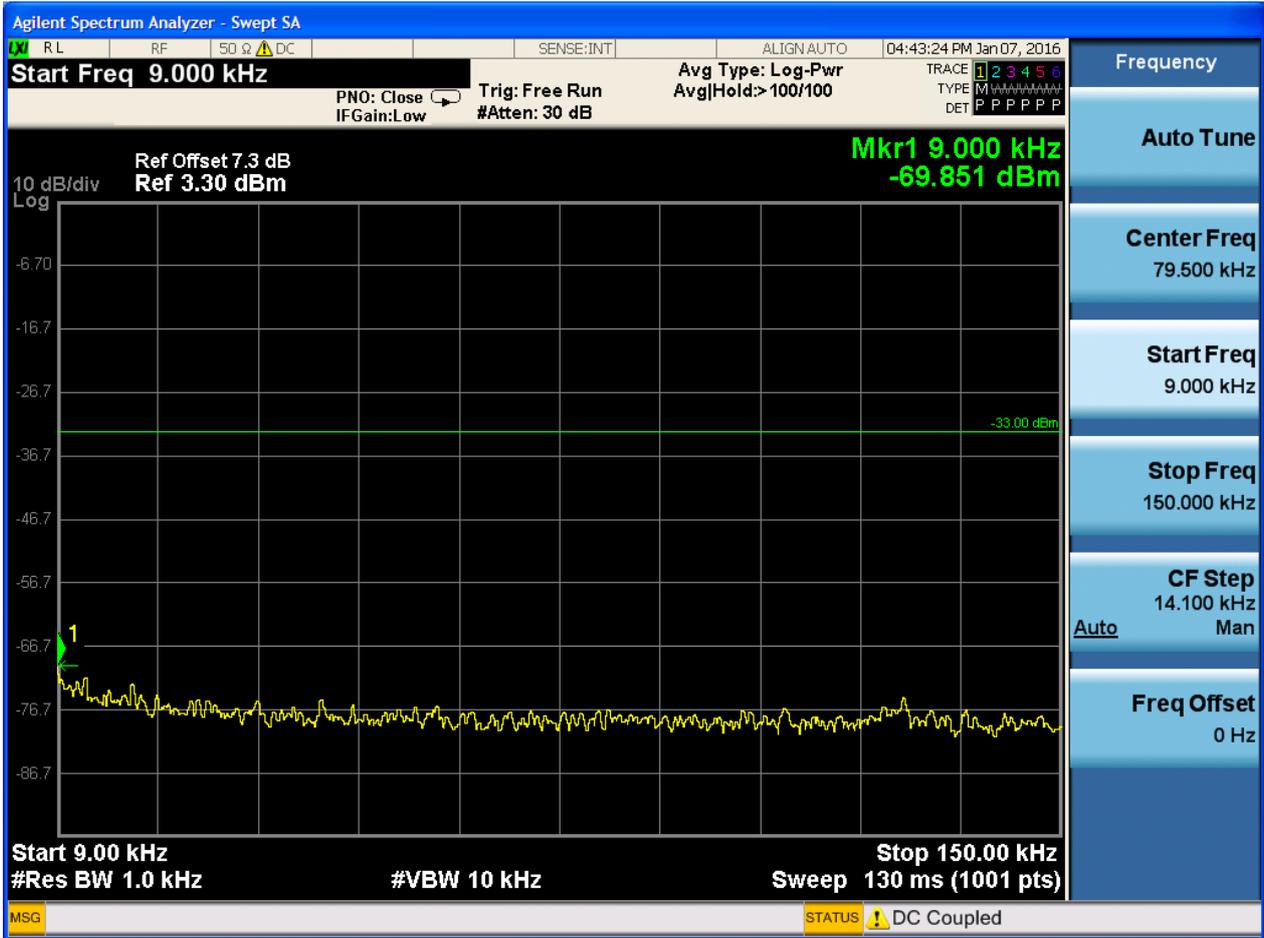


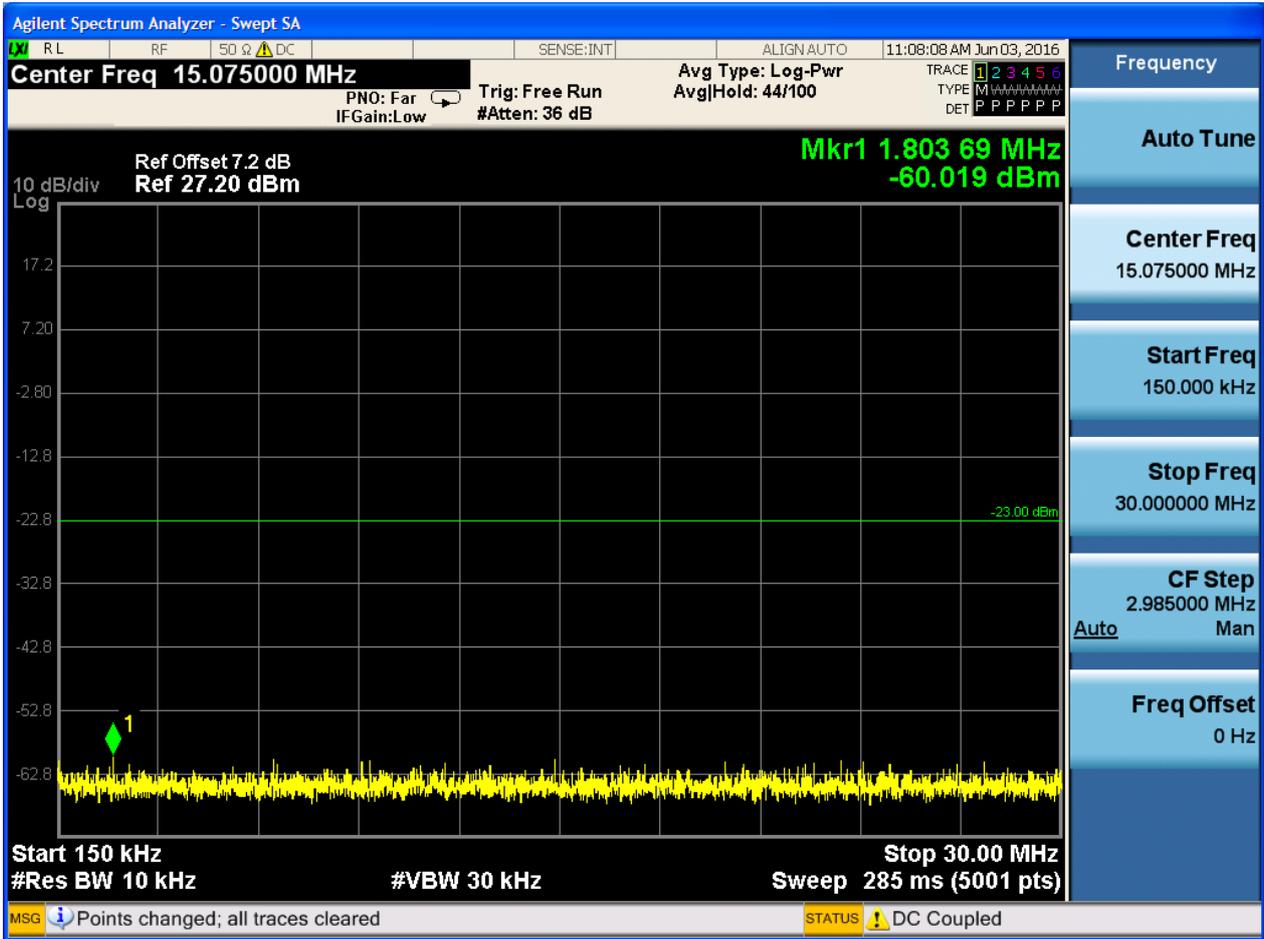
6.2 For UMTS

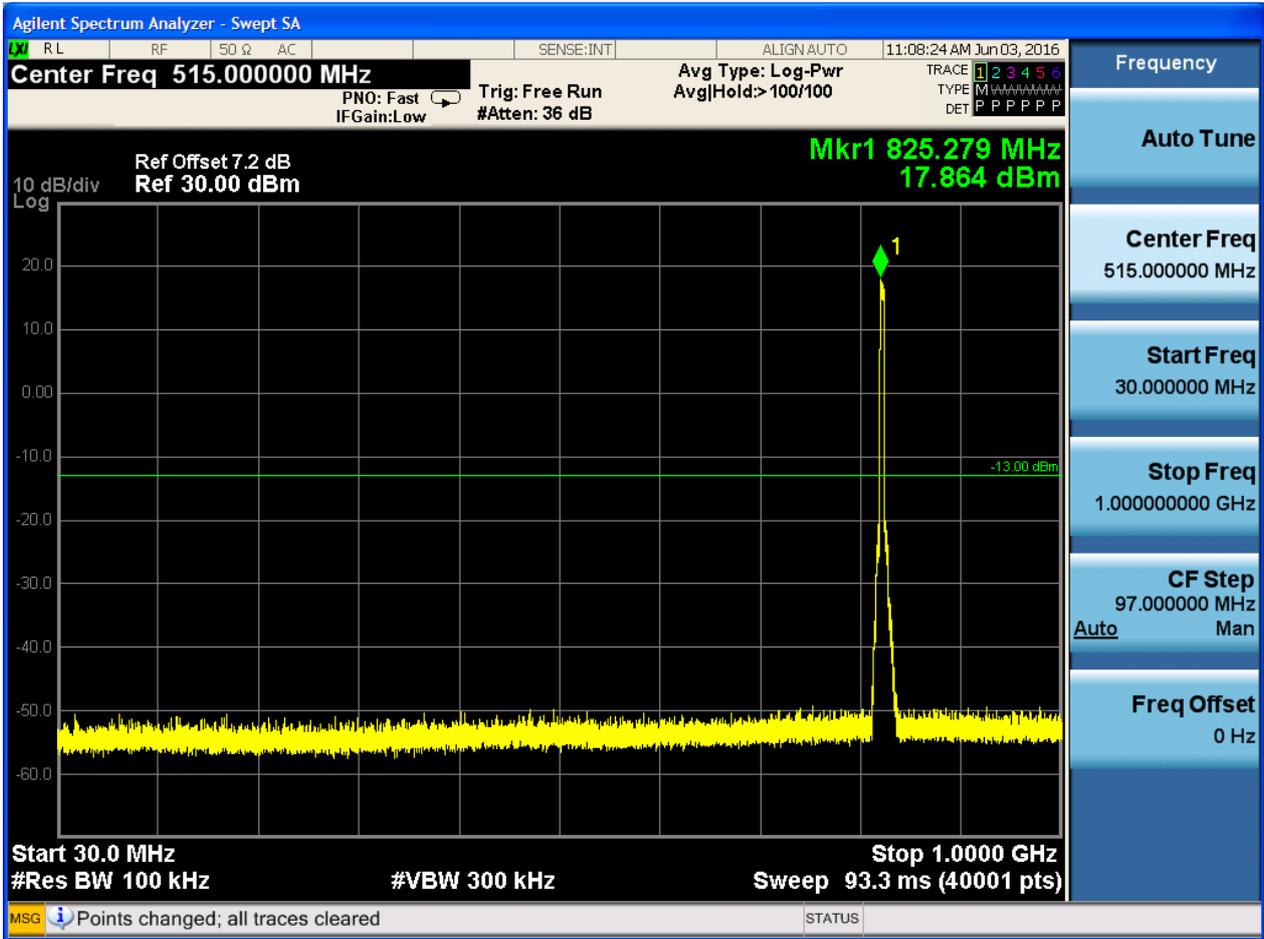
6.2.1 Test Band = WCDMA850

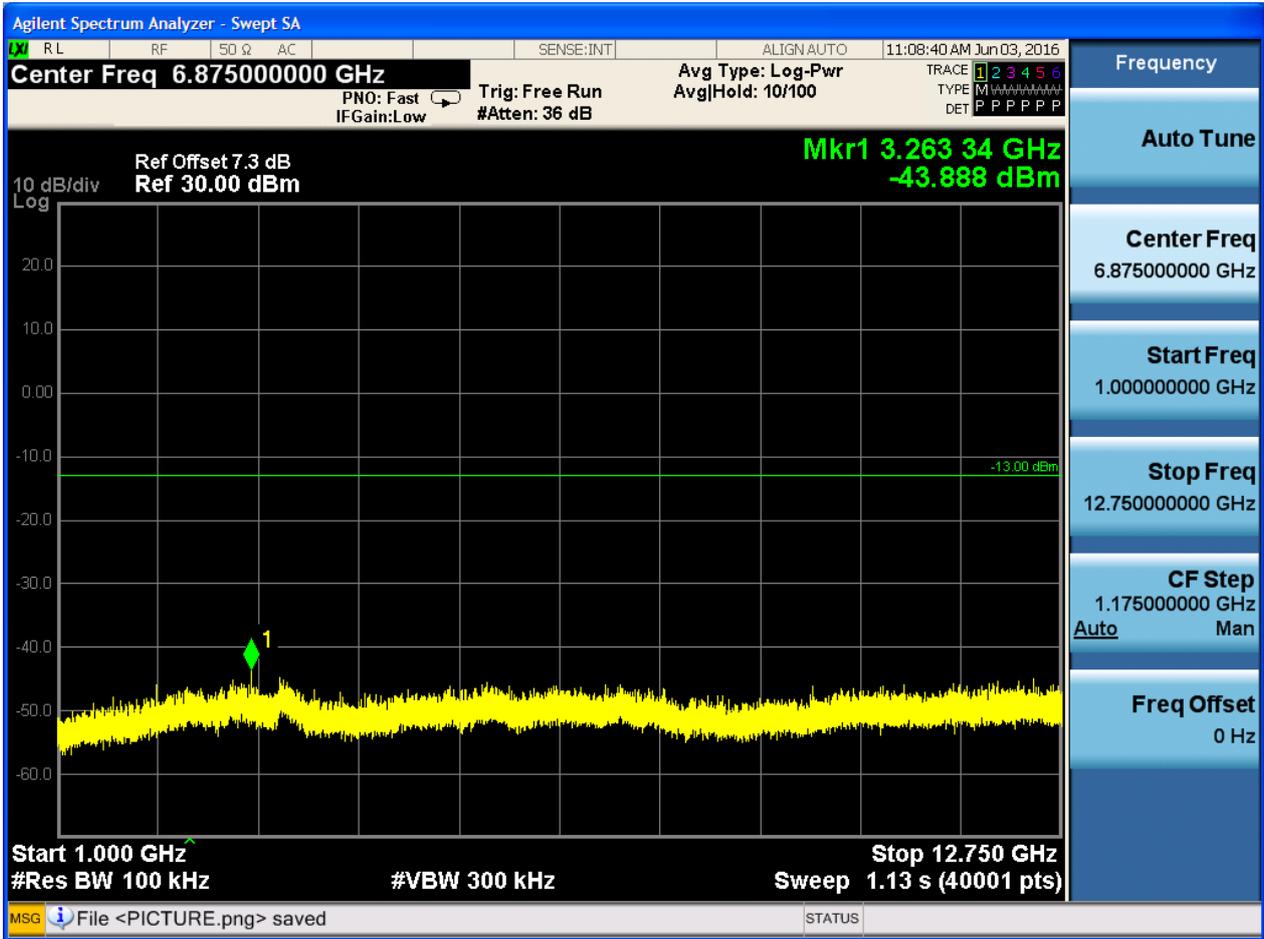
6.2.1.1 Test Mode = UMTS/TM1

6.2.1.1.1 Test Channel = LCH

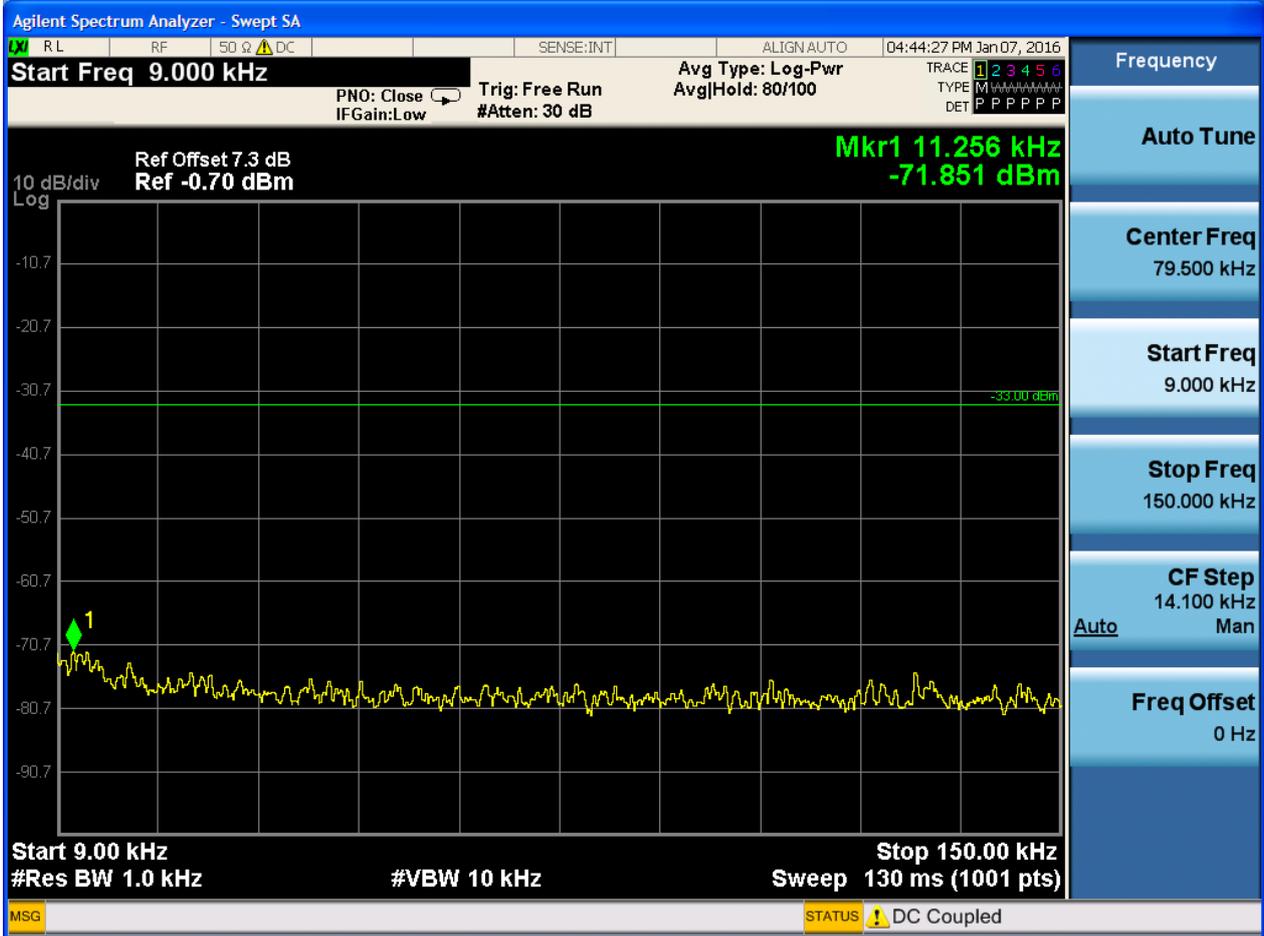


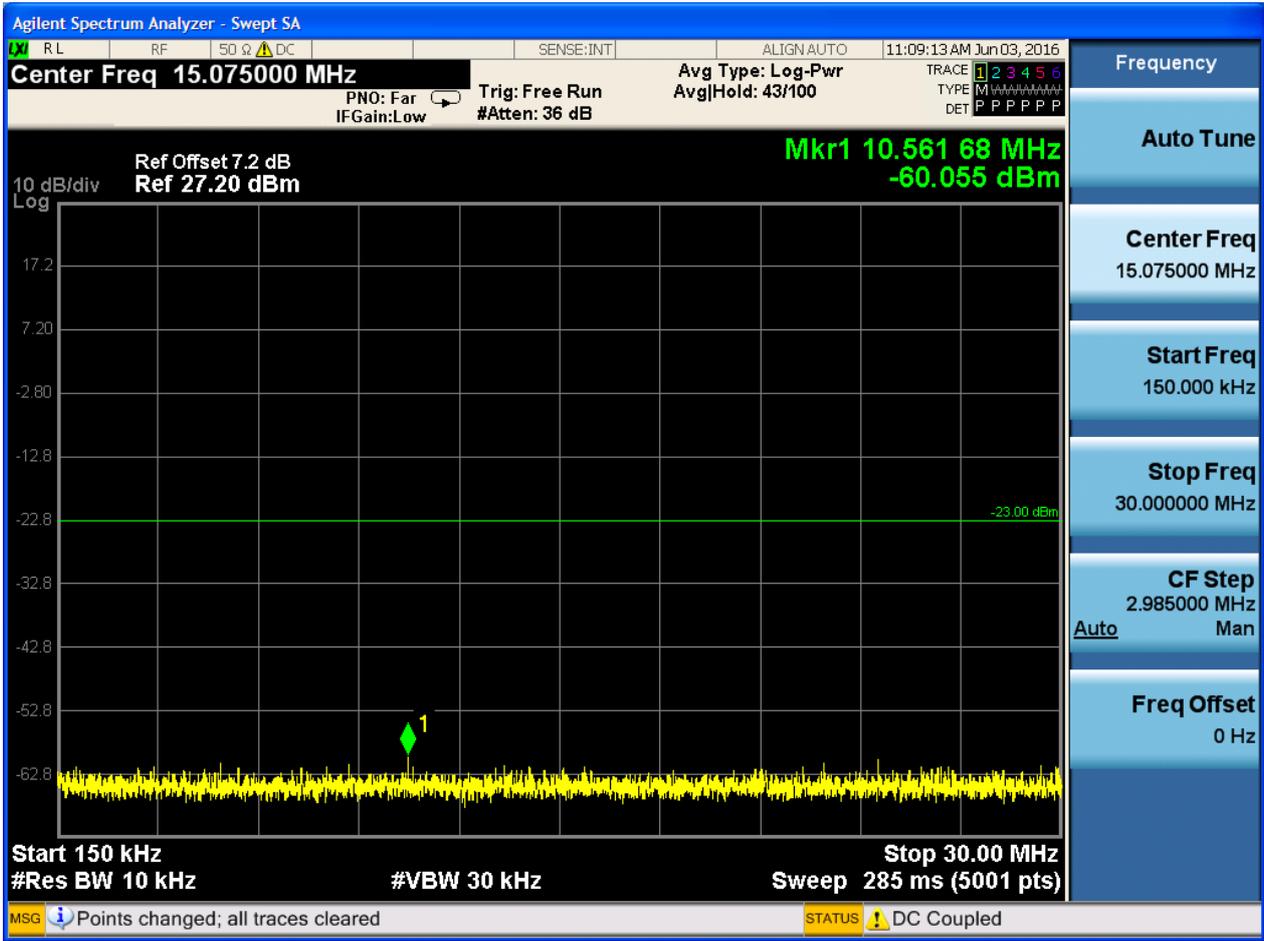


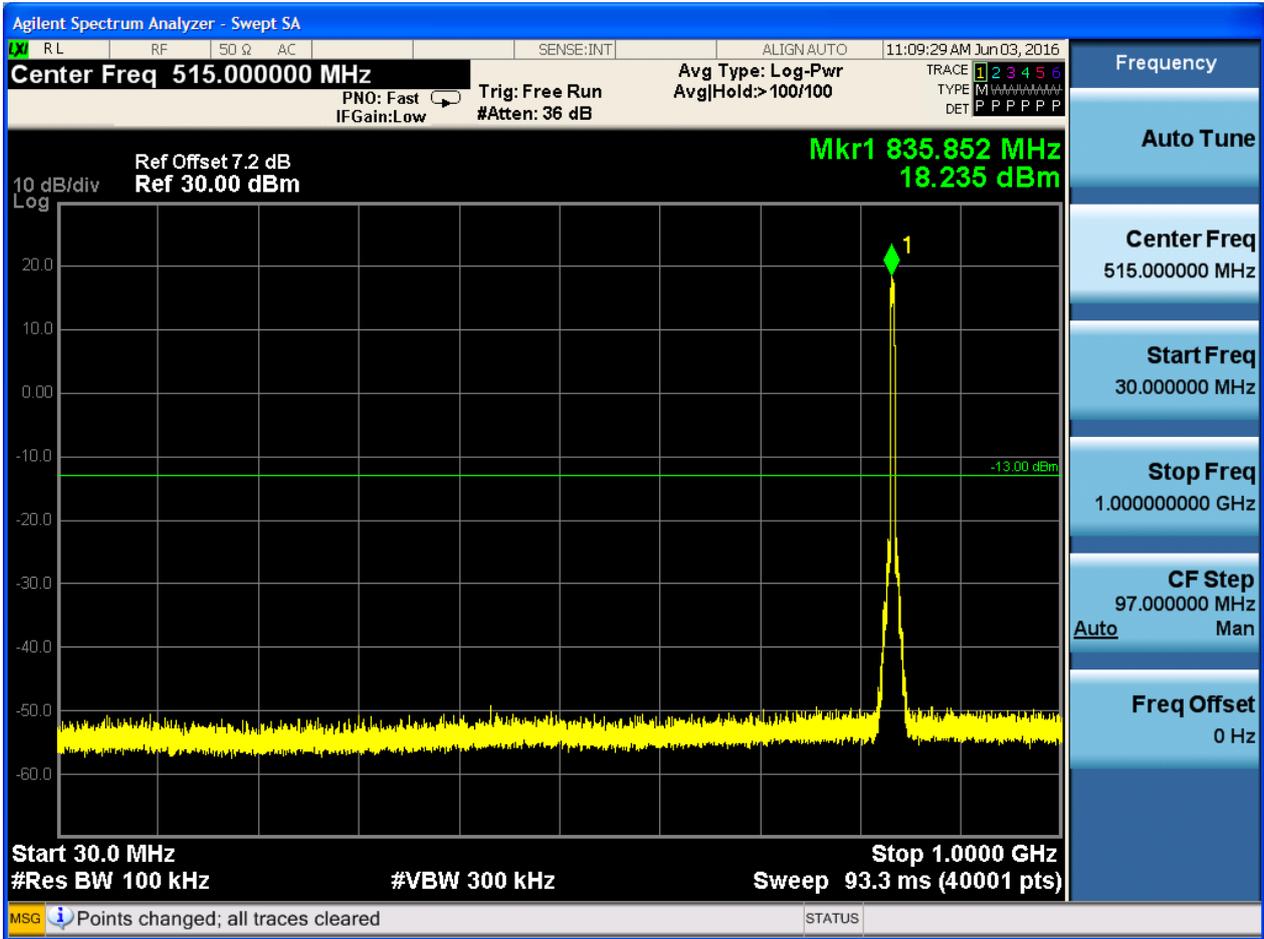


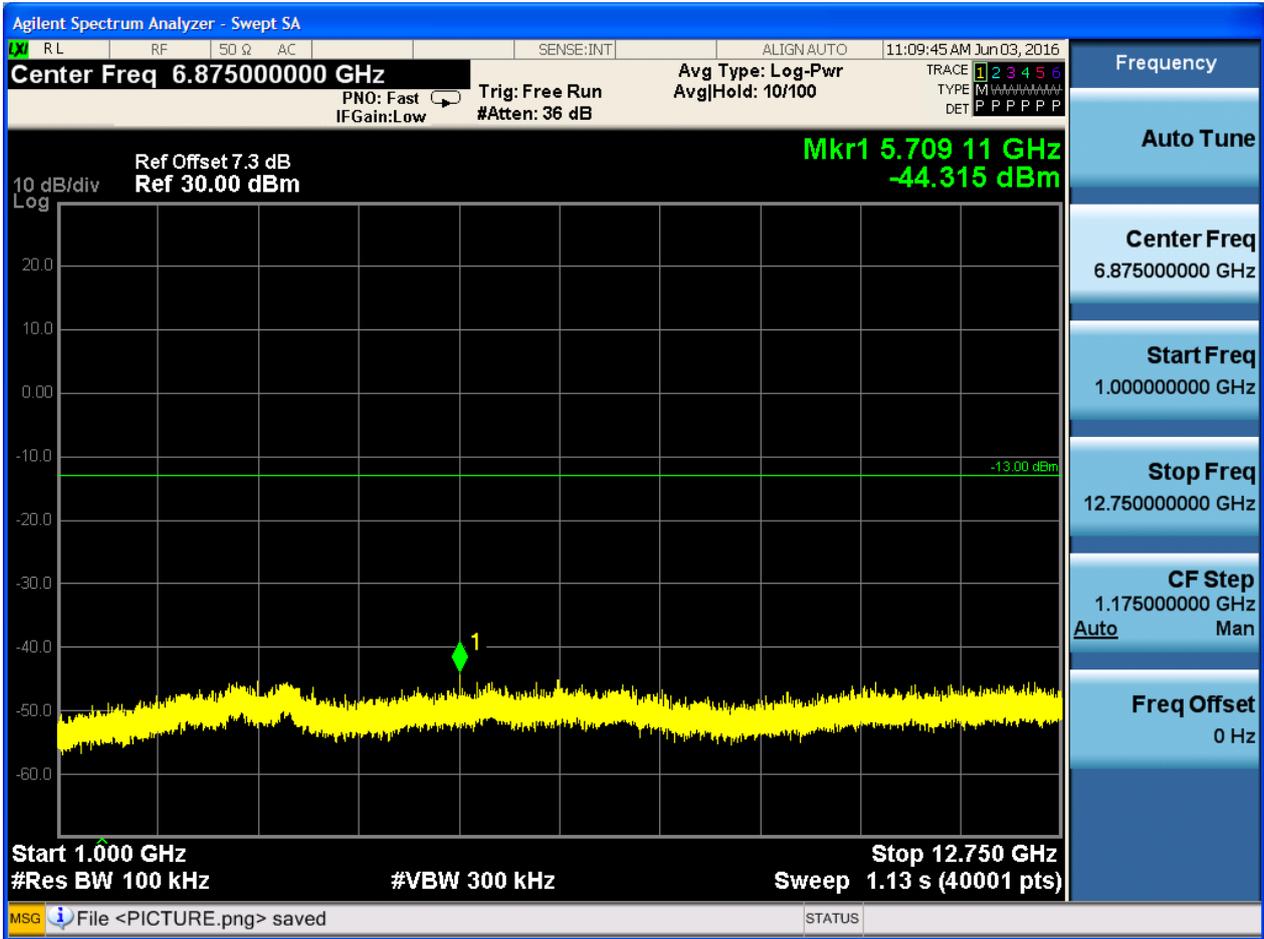


6.2.1.1.2 Test Channel = MCH

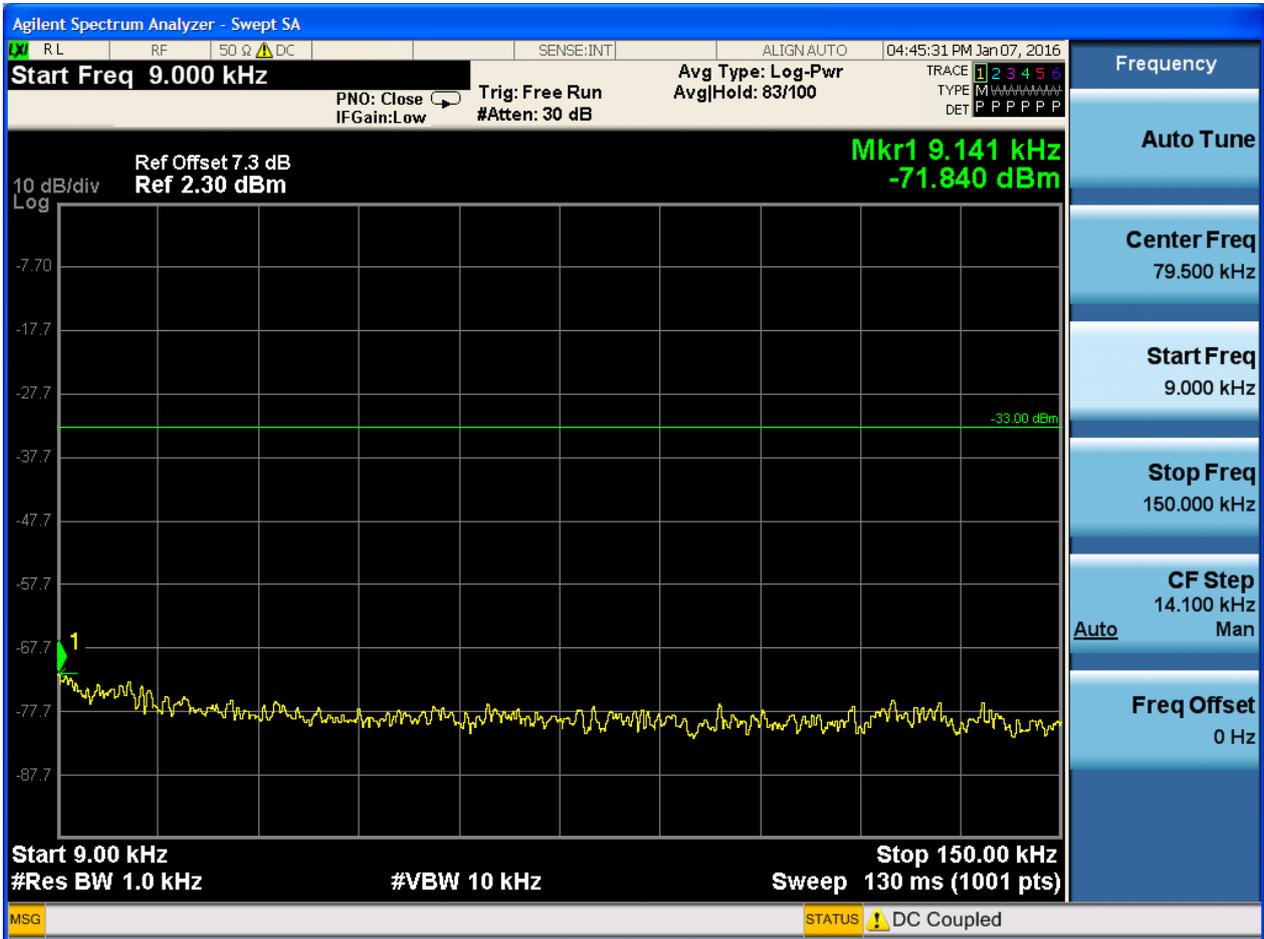


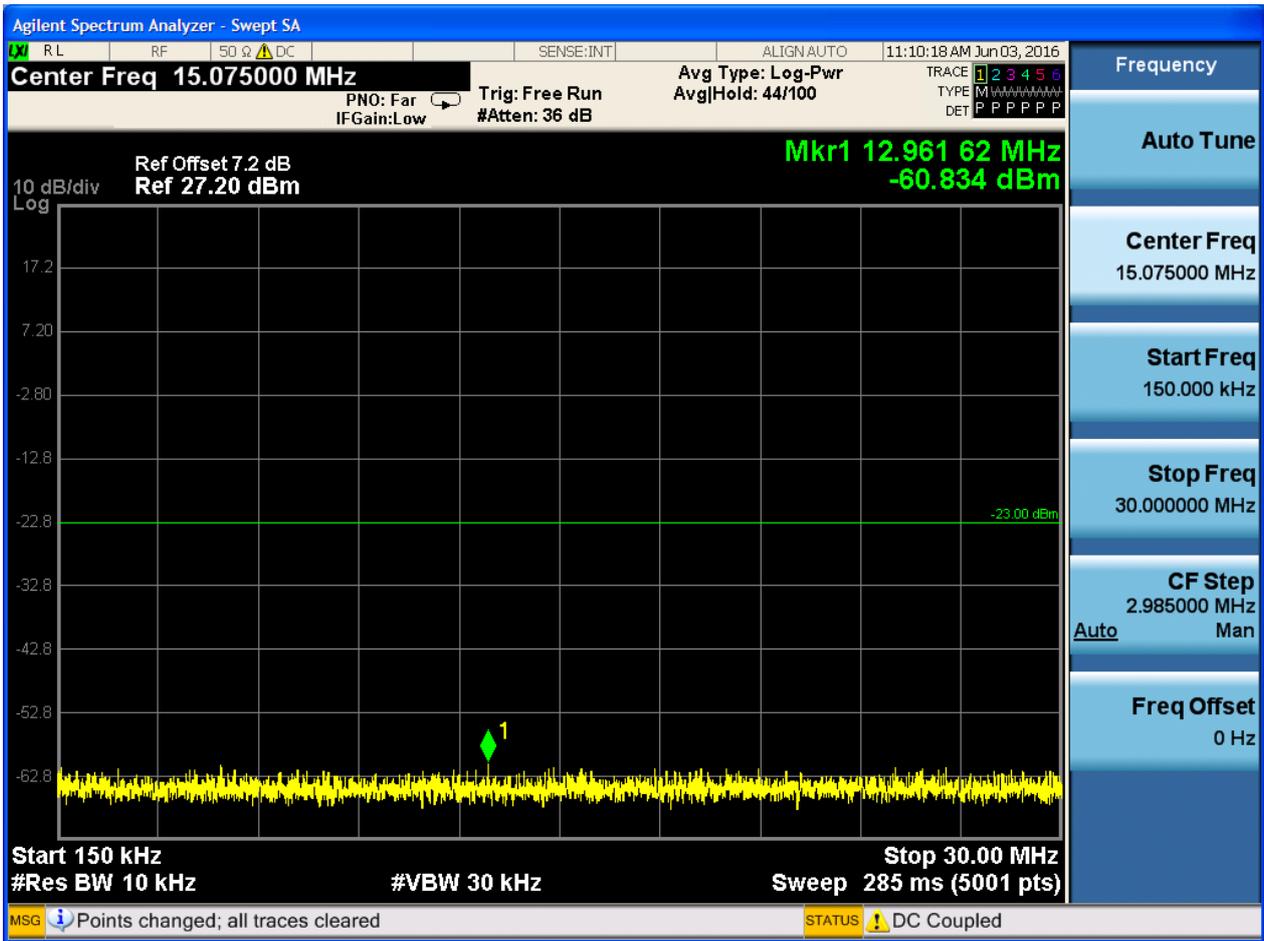


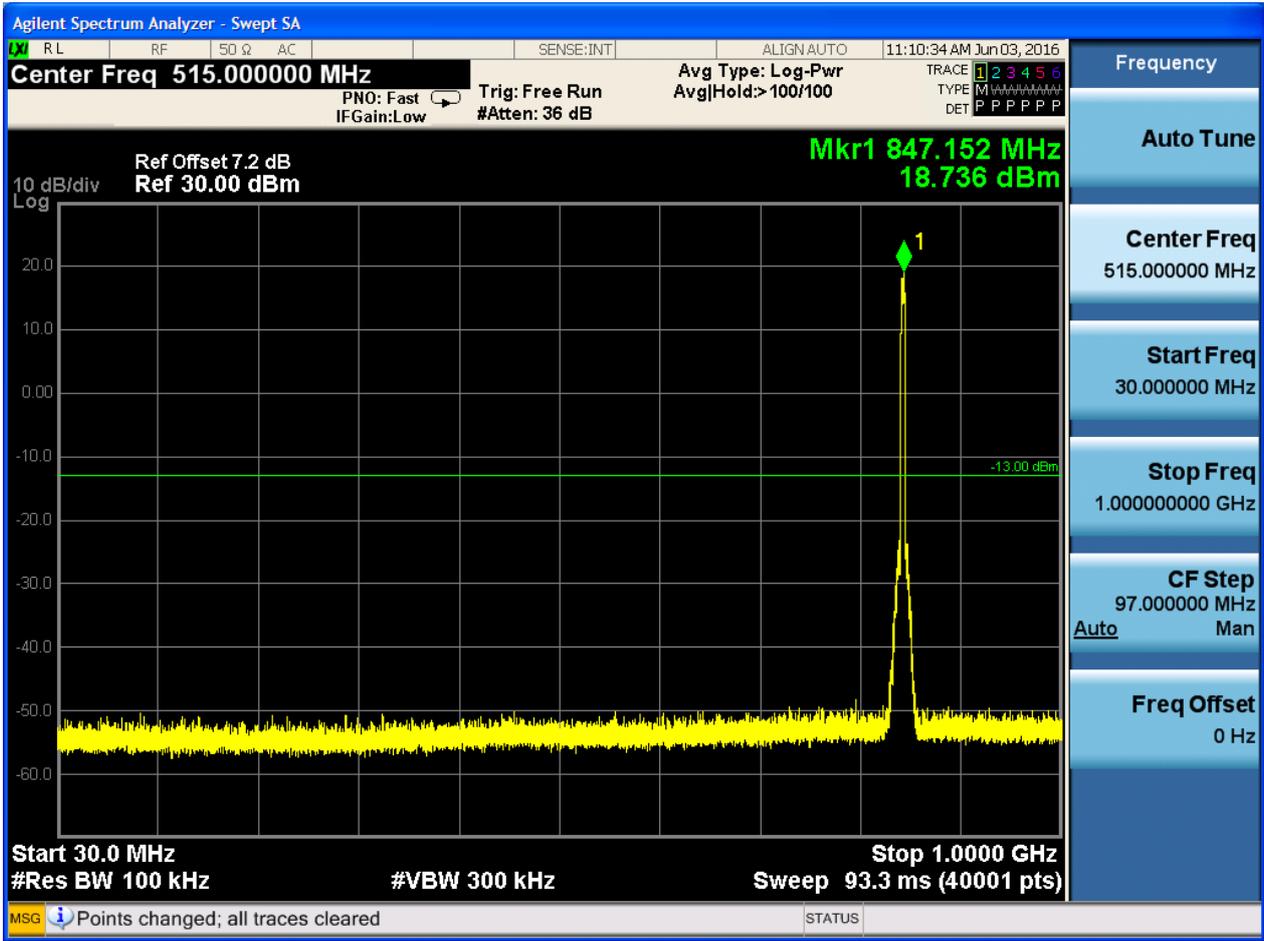


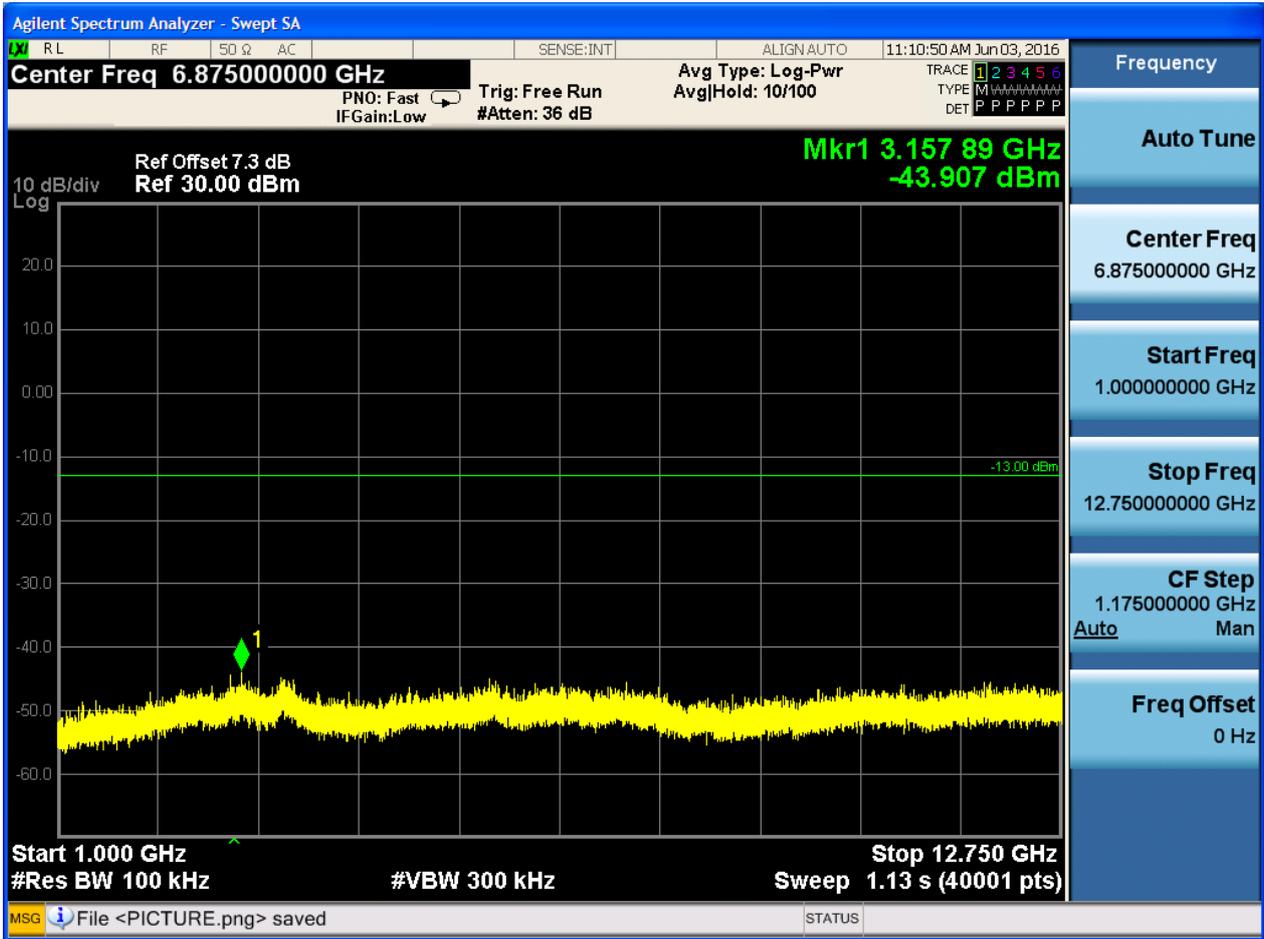


6.2.1.1.3 Test Channel = HCH







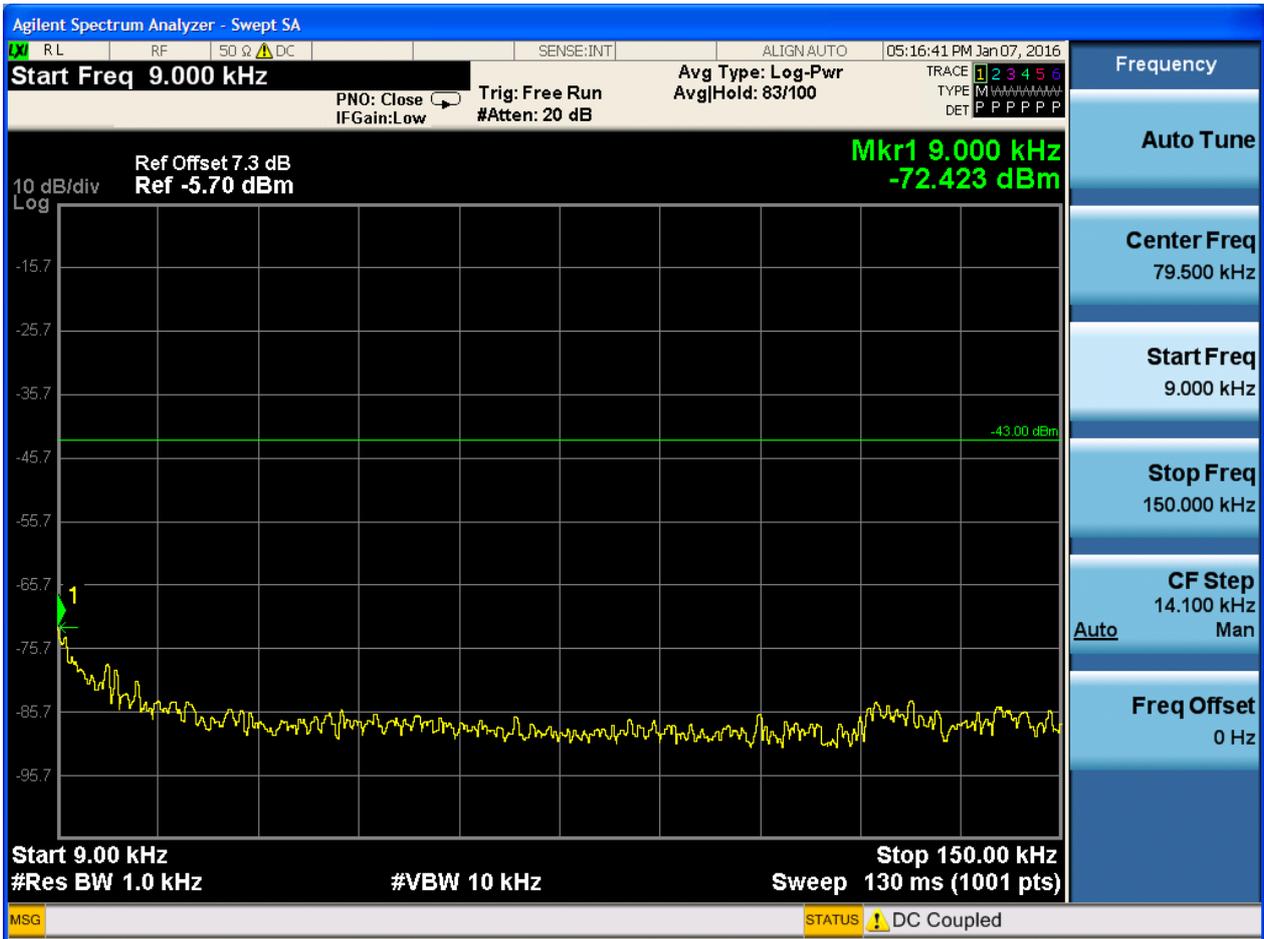


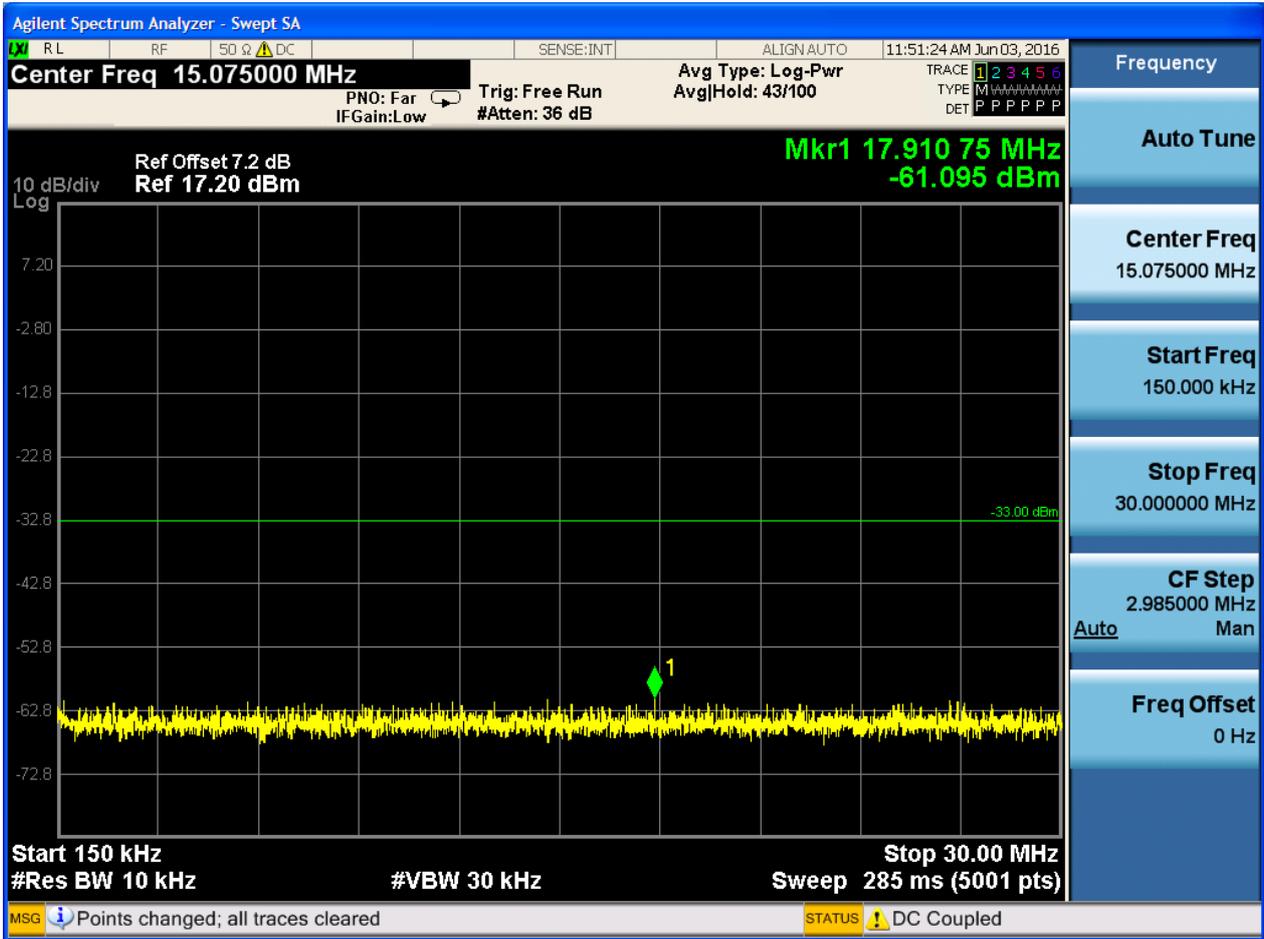


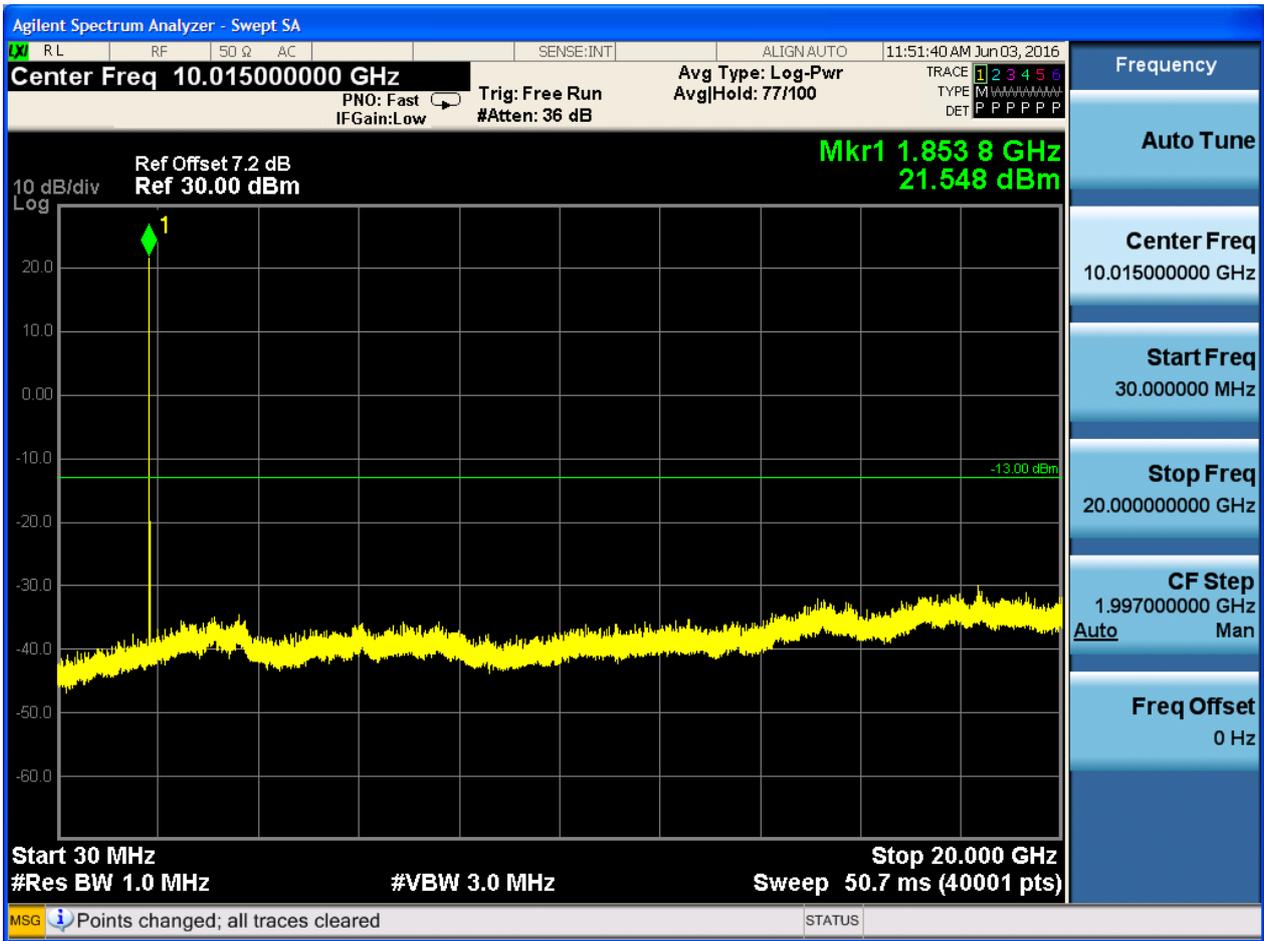
6.2.2 Test Band = WCDMA1900

6.2.2.1 Test Mode = UMTS/TM1

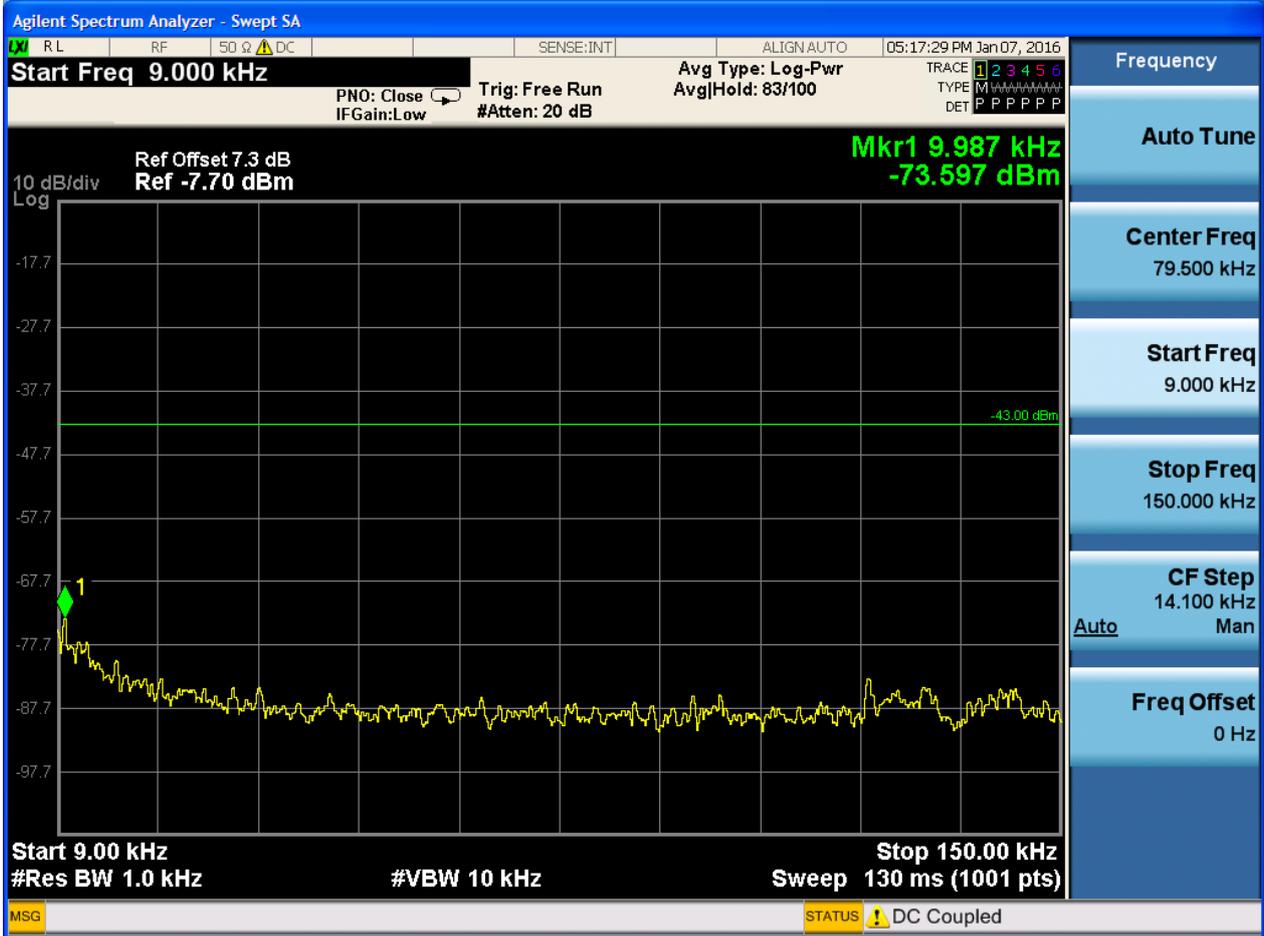
6.2.2.1.1 Test Channel = LCH

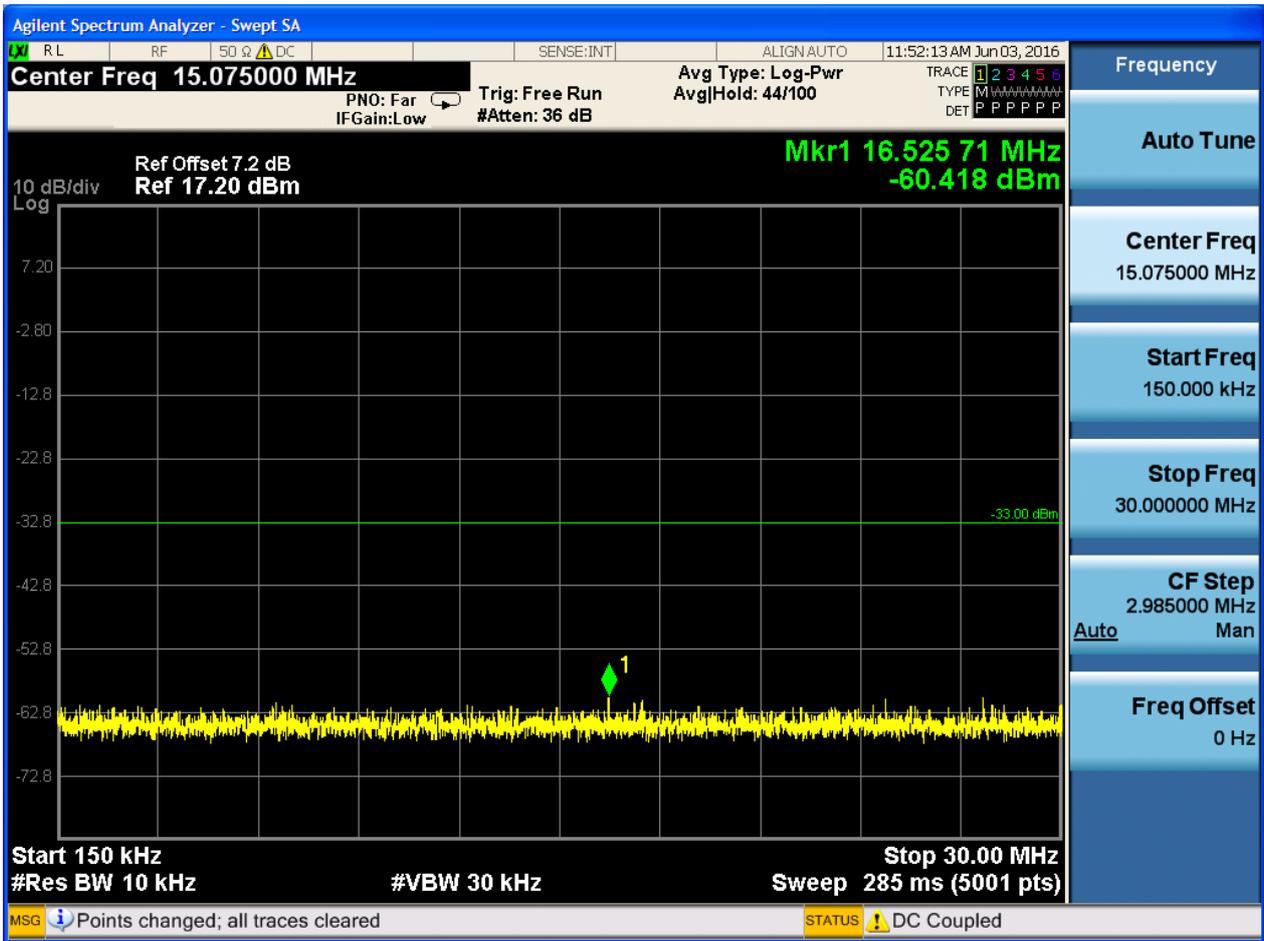


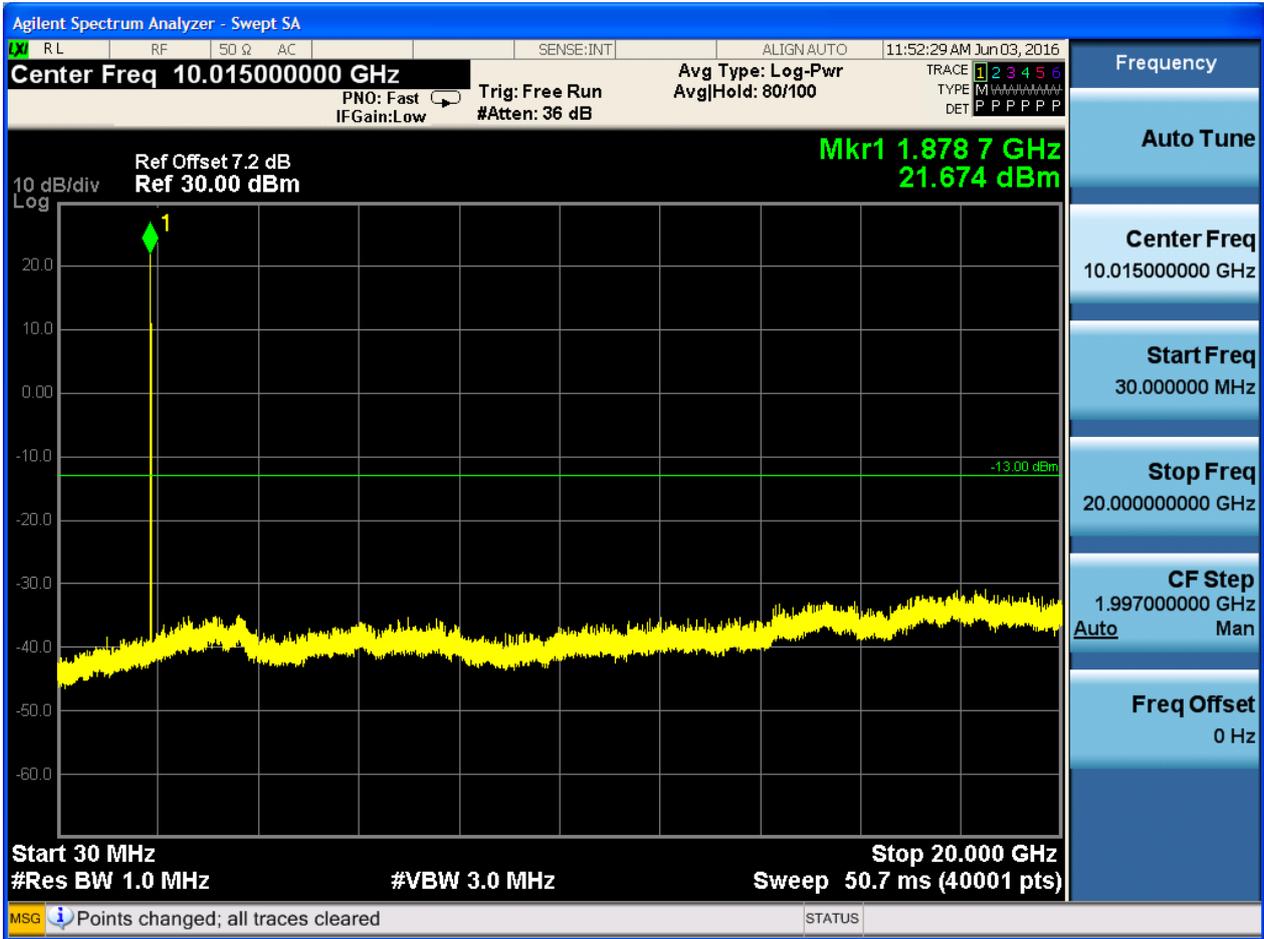




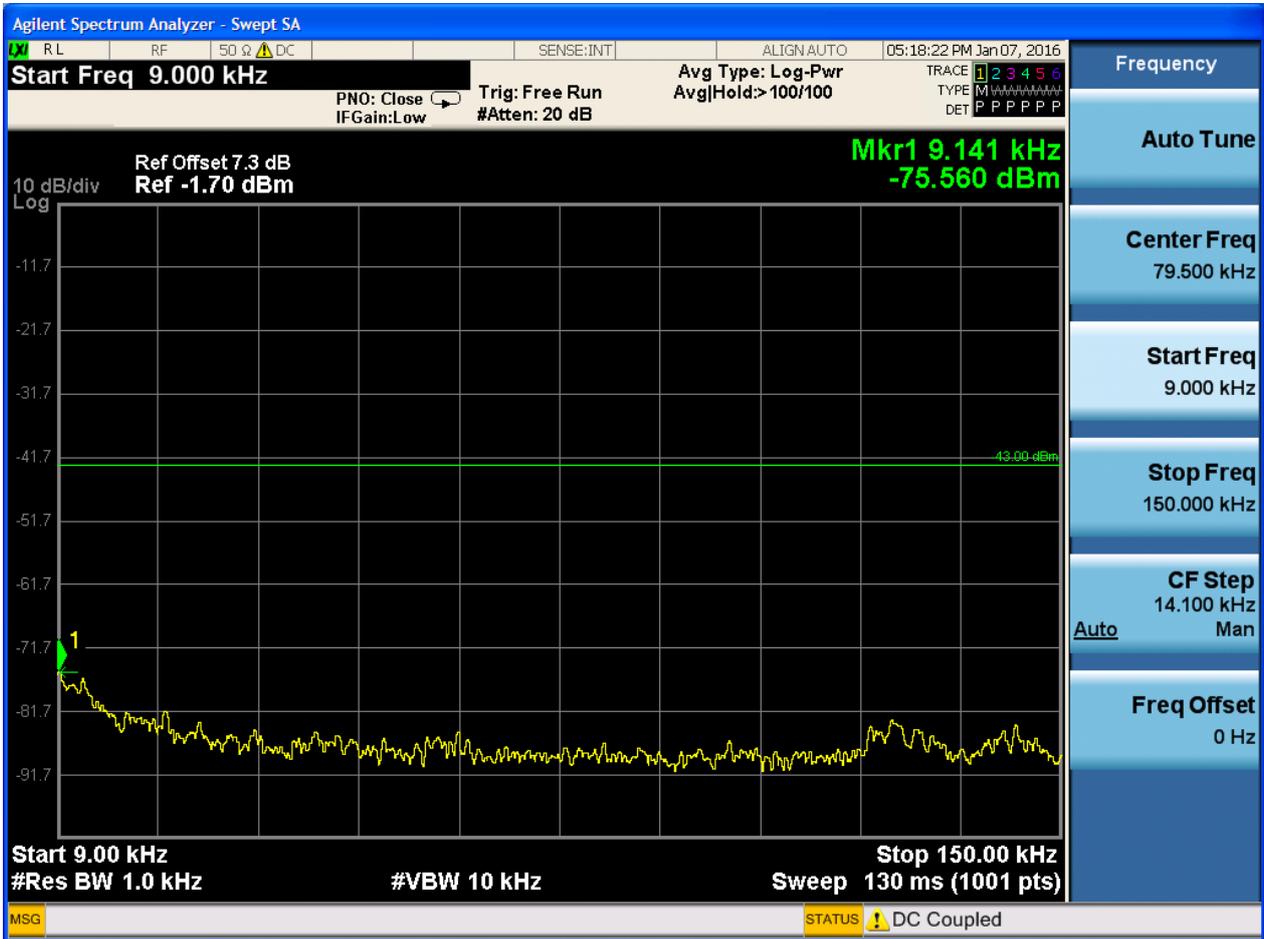
6.2.2.1.2 Test Channel = MCH

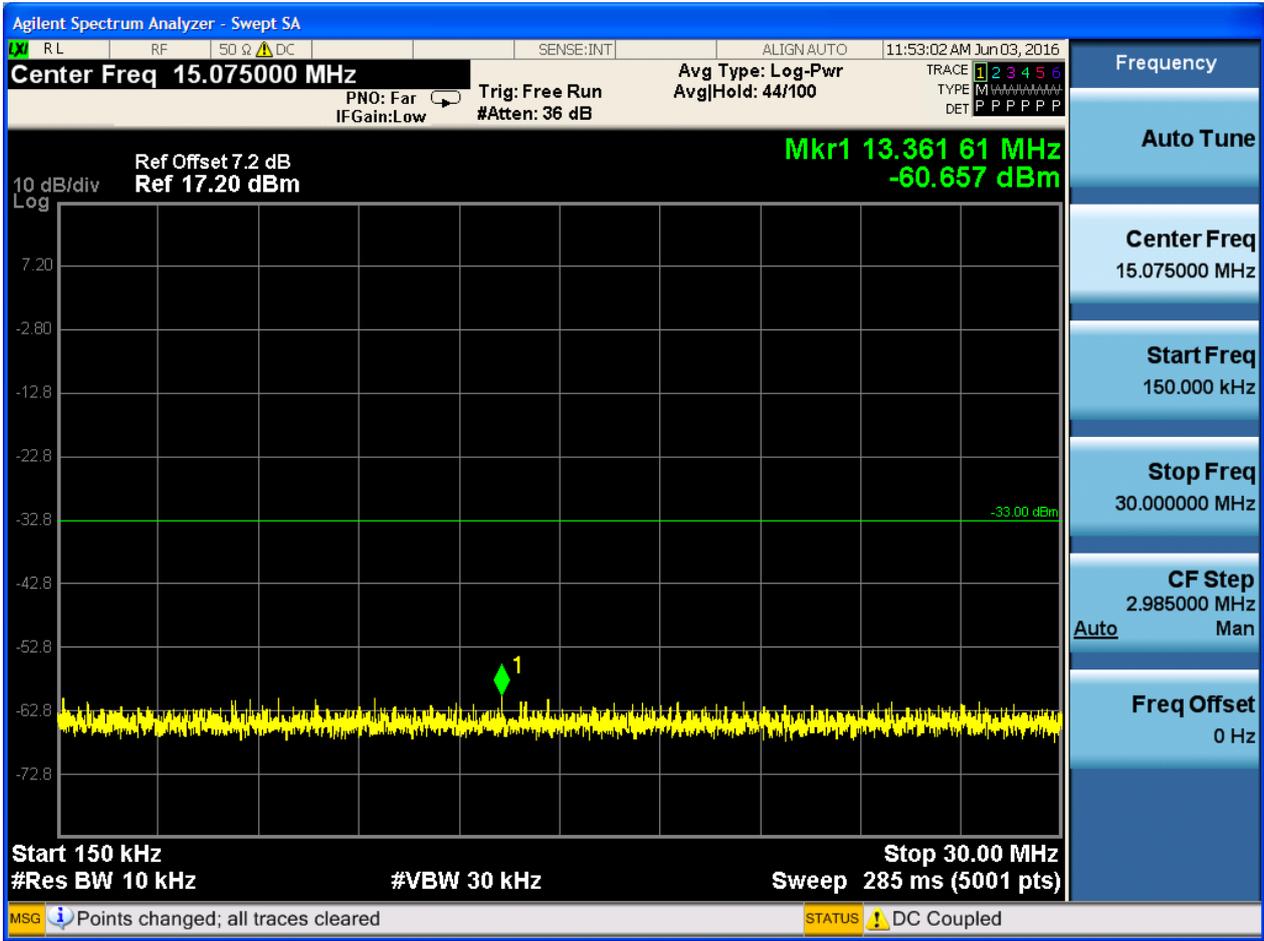






6.2.2.1.3 Test Channel = HCH







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

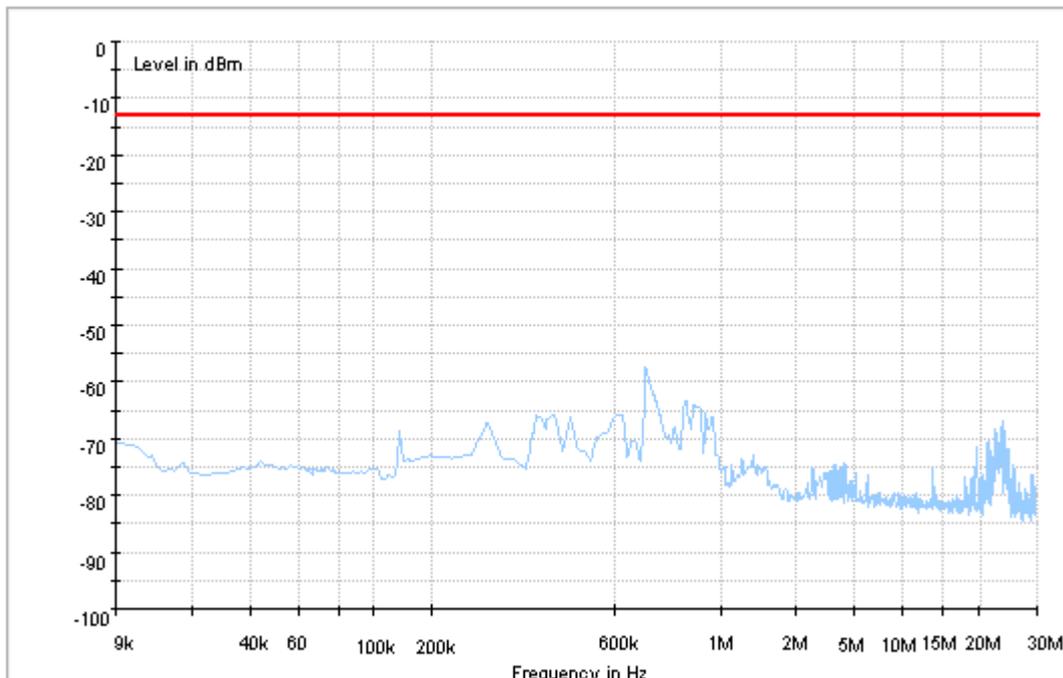
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

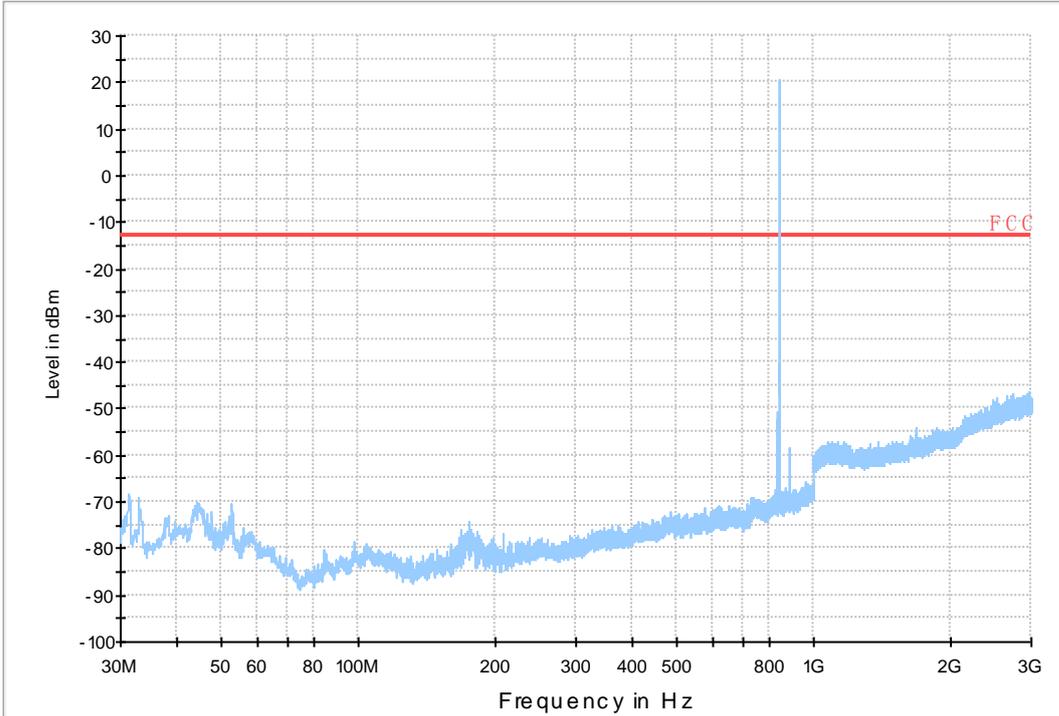
7.1 For GSM

7.1.1 Test Band = GSM850

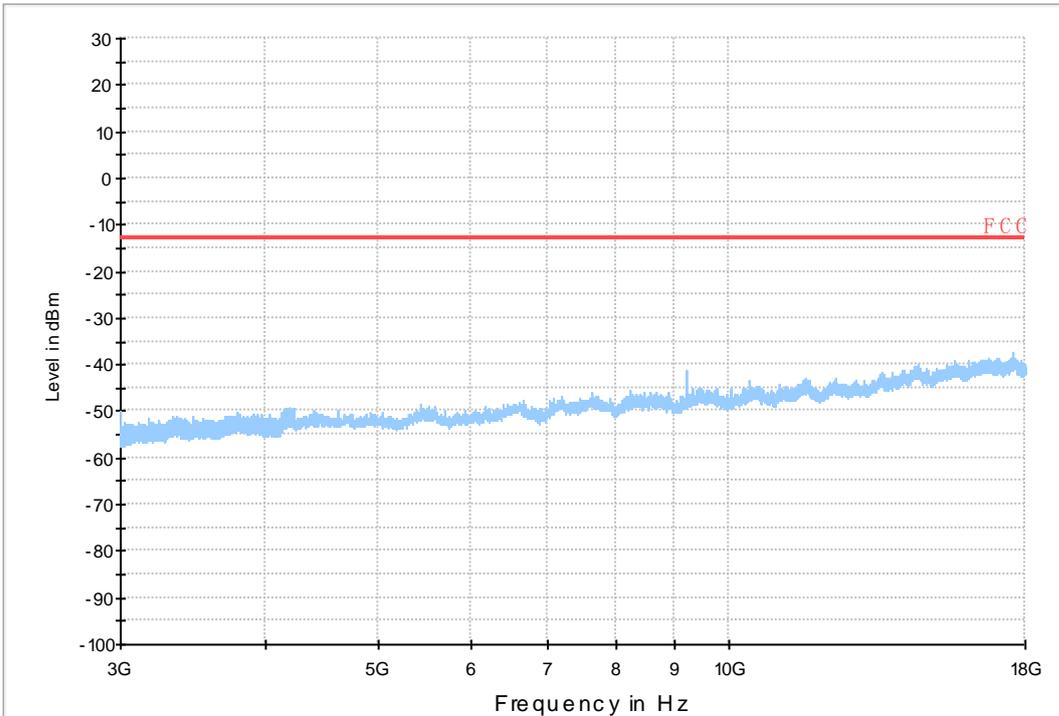
7.1.1.1 Test Mode = GSM/TM1



Copy of FCC PART22 GSM850_L

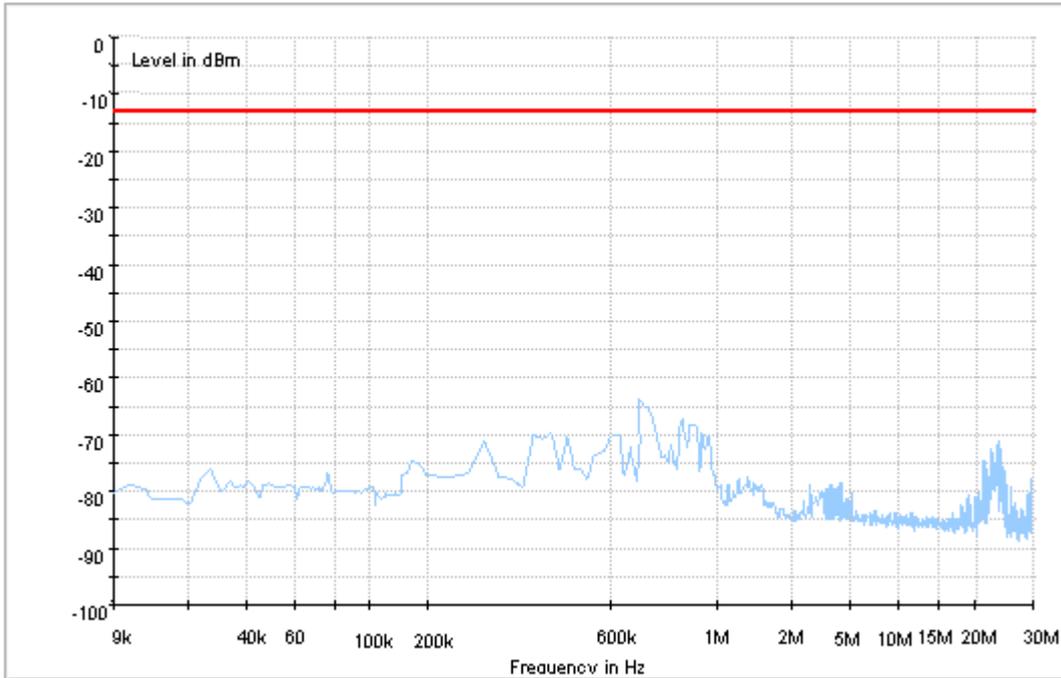


Copy of FCC PART22 GSM850_H

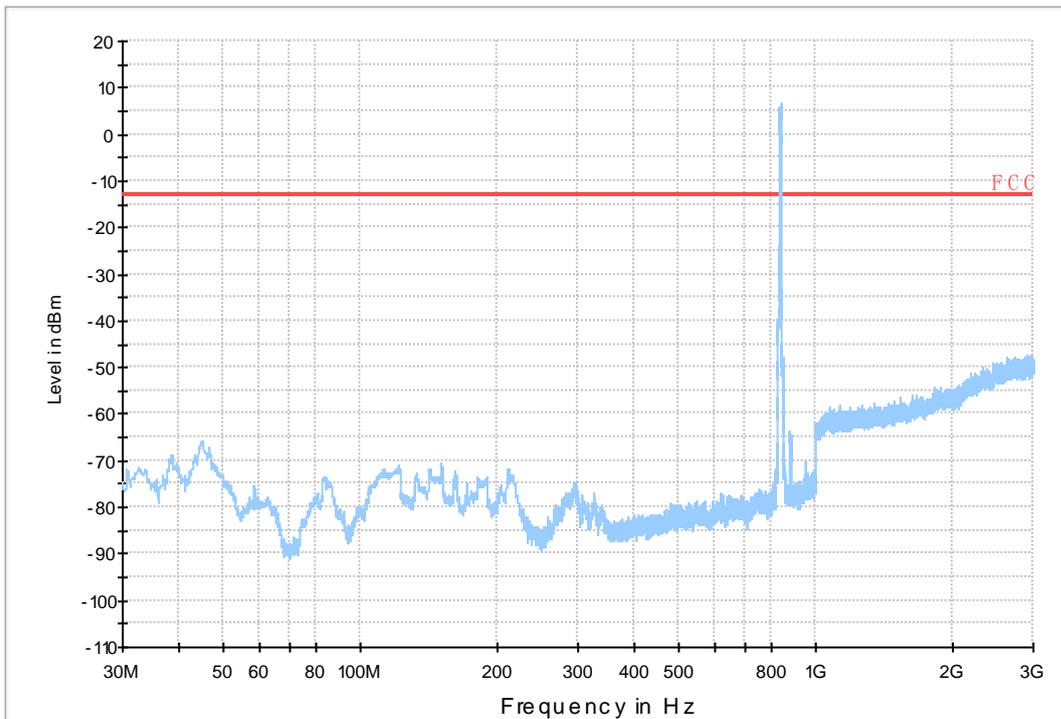


7.1.2 Test Band = WCDMA850

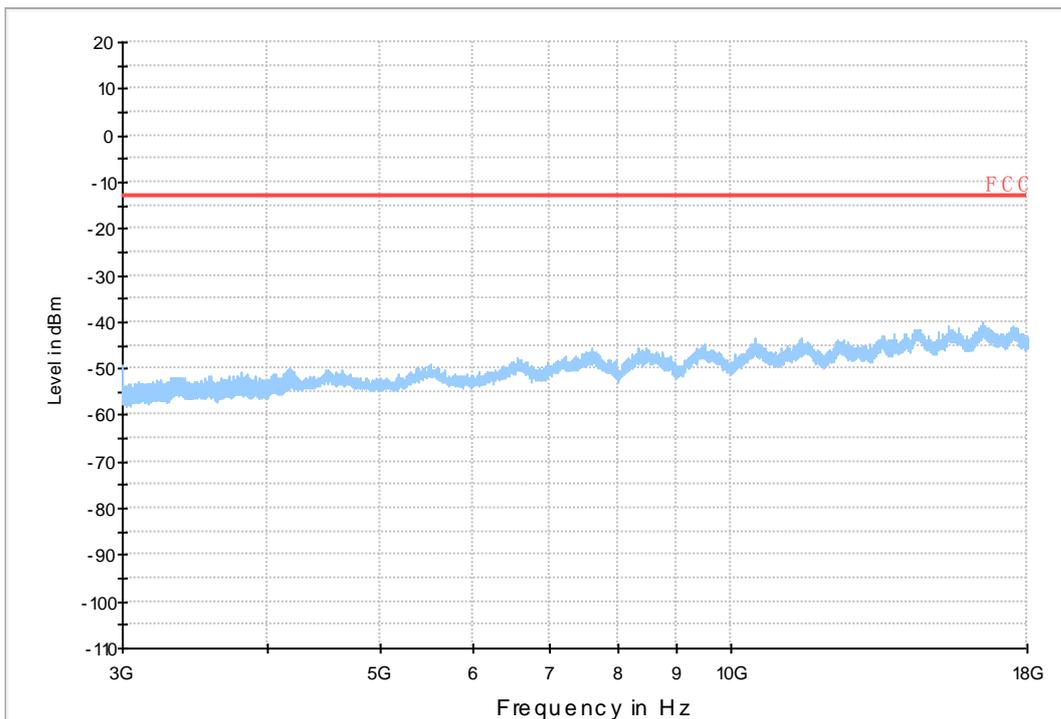
7.1.2.1 Test Mode = UMTS/TM1



Copy of FCC PART22 W CDM A850_L

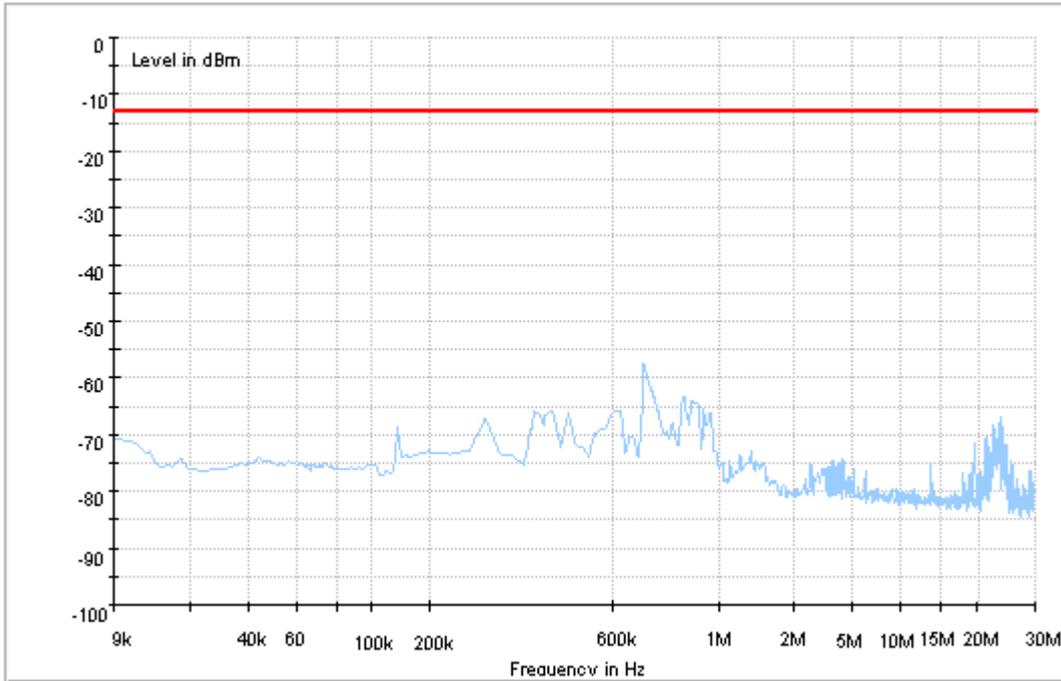


Copy of FCC PART22 W CDM A850_H

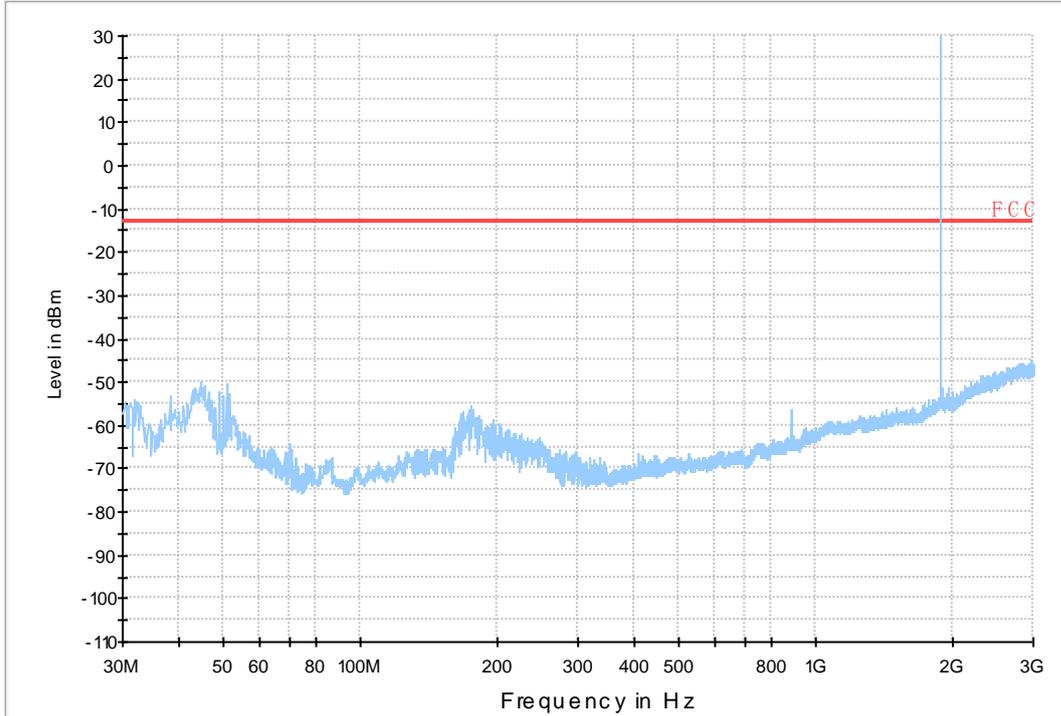


7.1.3 Test Band = GSM1900

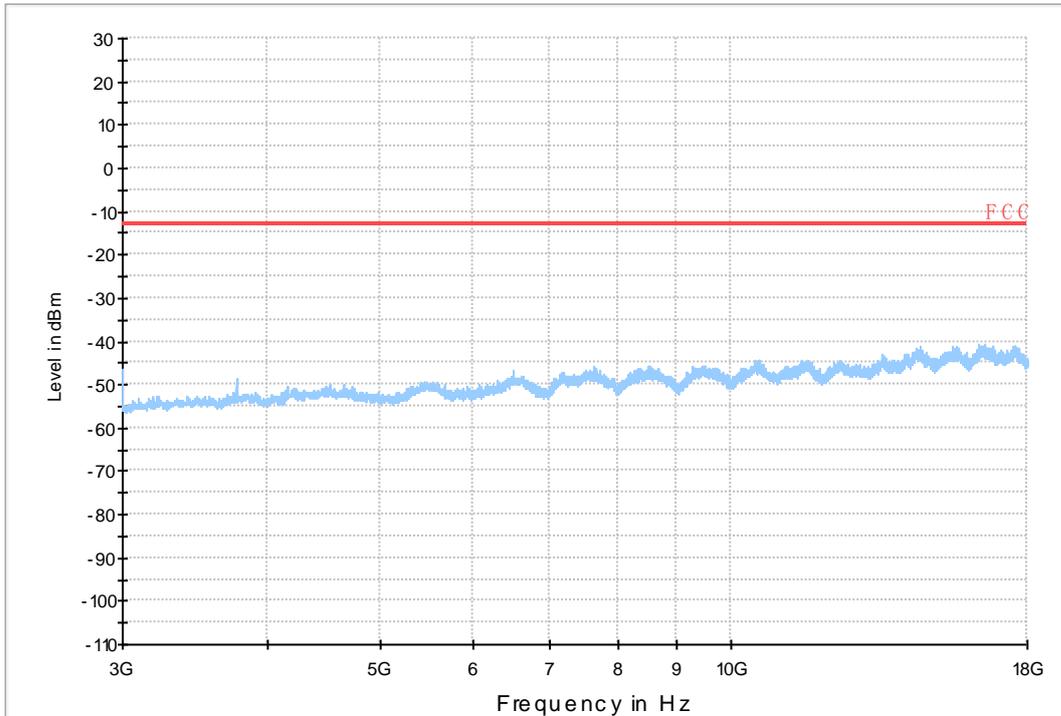
7.1.3.1 Test Mode = GSM/TM1

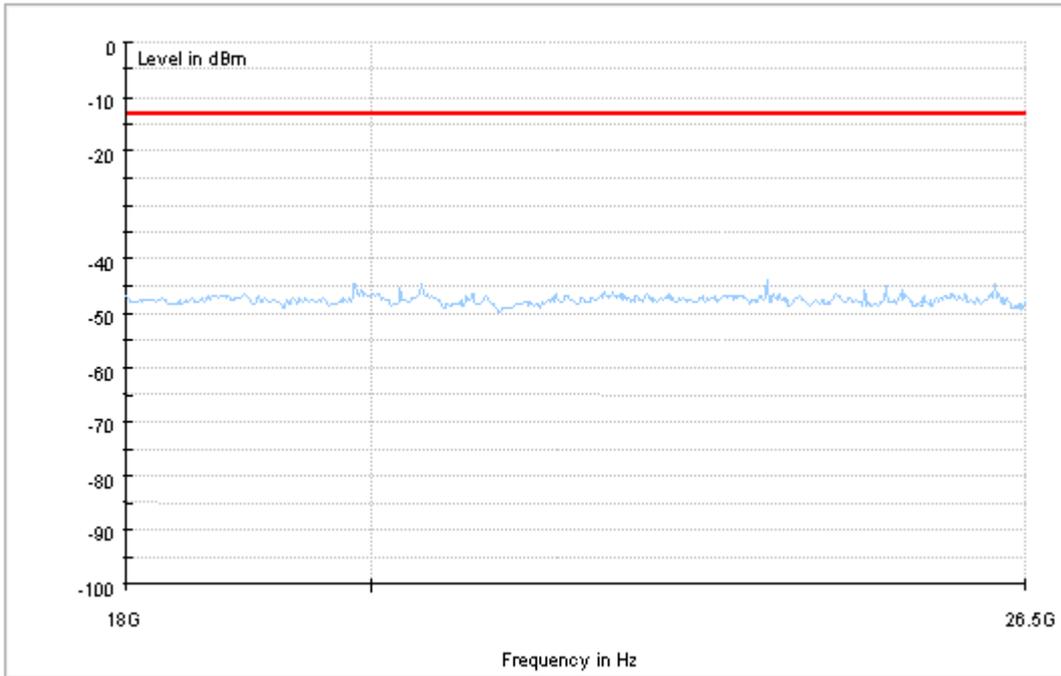


Copy of FCC PART24 GSM 1900_L



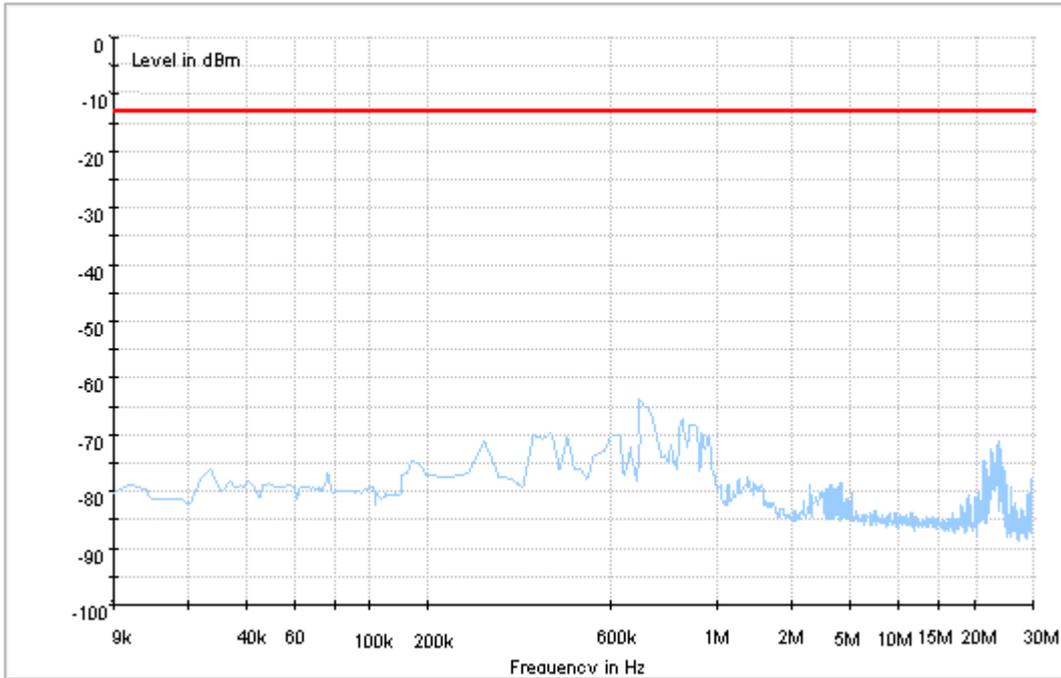
Copy of FCC PART24 GSM 1900_H



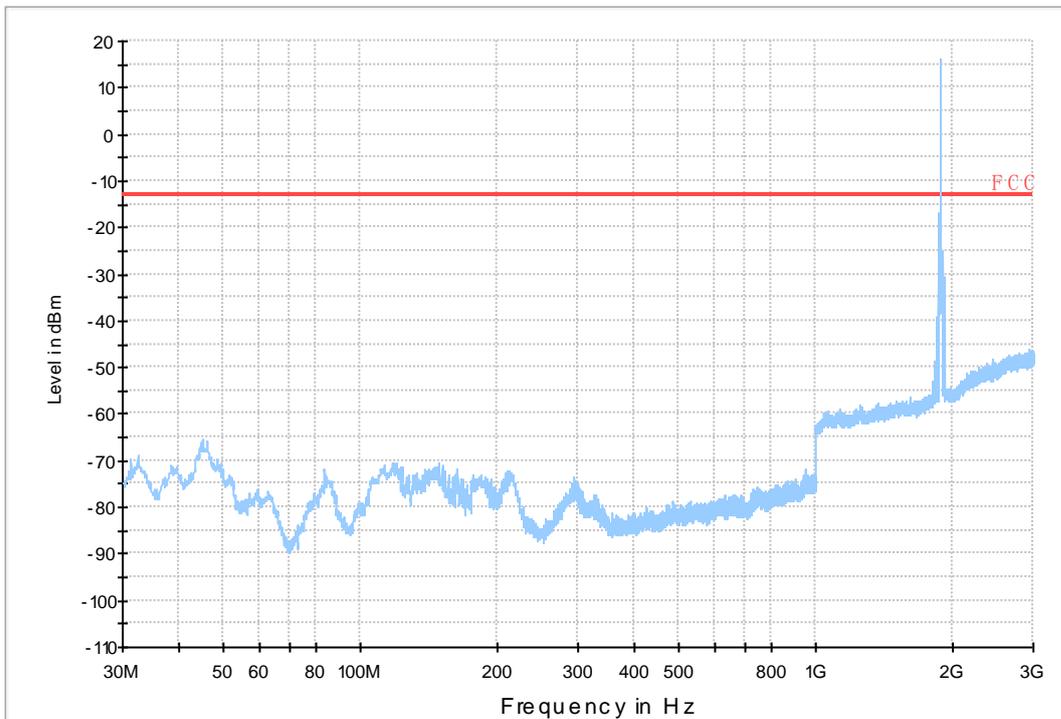


7.1.4 Test Band = WCDMA1900

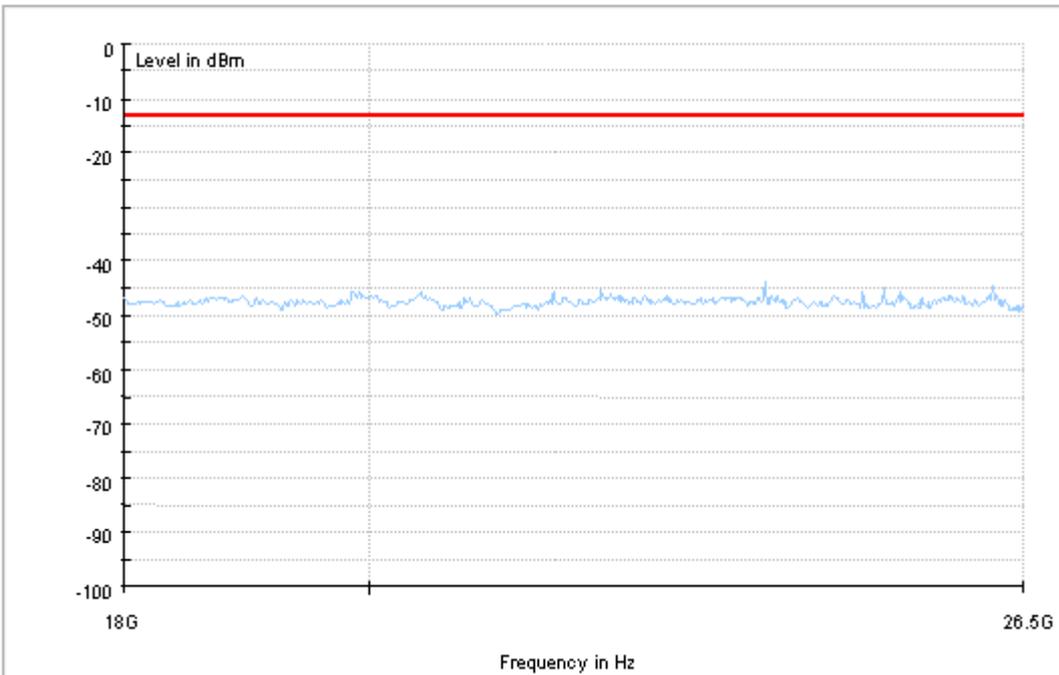
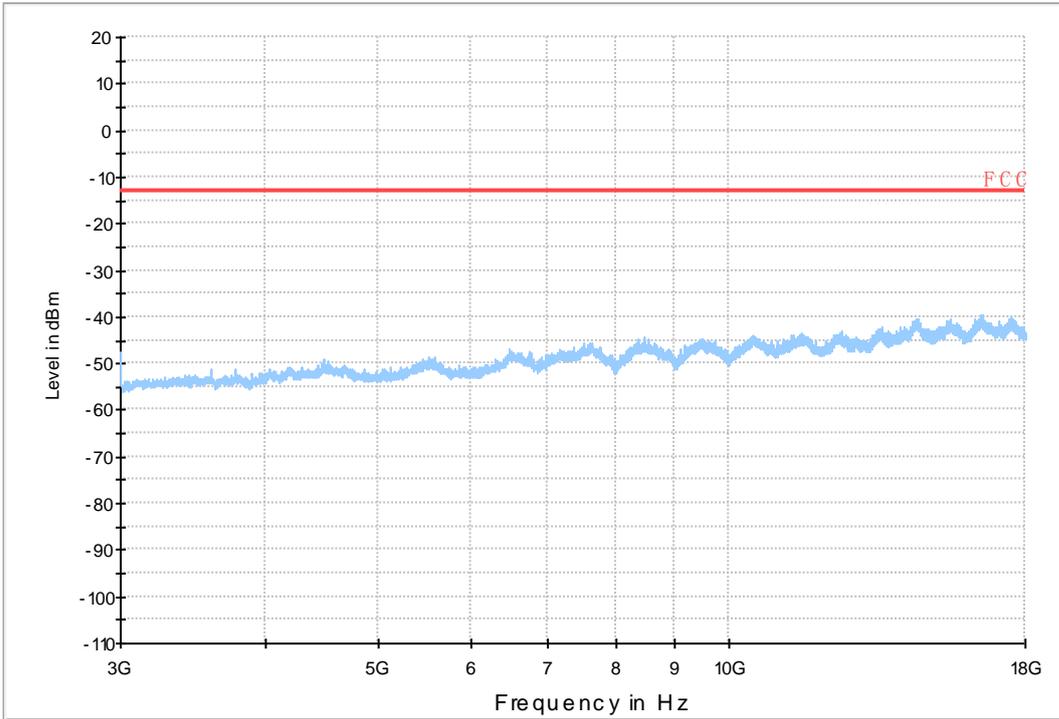
7.1.4.1 Test Mode = UMTS/TM1



Copy of FCC PART24 W CDMA1900_L



Copy of FCC PART24 W CDMA1900_H



8Appendix_H: Frequency Stability

8.1 For GSM

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM1900	GSM/TM1	LCH	TN	VL	20.53	0.0111	PASS
				VN	19.69	0.01064	PASS
				VH	22.15	0.01197	PASS
		MCH	TN	VL	24.02	0.01278	PASS
				VN	18.53	0.00986	PASS
				VH	23.89	0.01271	PASS
		HCH	TN	VL	22.99	0.01204	PASS
				VN	24.15	0.01265	PASS
				VH	24.02	0.01258	PASS
	GSM/TM2	LCH	TN	VL	10.2	0.00551	PASS
				VN	8.14	0.0044	PASS
				VH	3.29	0.00178	PASS
		MCH	TN	VL	6.55	0.00348	PASS
				VN	14.5	0.00771	PASS
				VH	8.65	0.0046	PASS
		HCH	TN	VL	10.65	0.00558	PASS
				VN	12.14	0.00636	PASS
				VH	5.33	0.00279	PASS
GSM850	GSM/TM1	LCH	TN	VL	-11.88	-0.01441	PASS
				VN	-7.36	-0.00893	PASS
				VH	-8.72	-0.01058	PASS
		MCH	TN	VL	-3.16	-0.00378	PASS
				VN	-2.91	-0.00348	PASS
				VH	-5.81	-0.00694	PASS
	HCH	TN	VL	-2.65	-0.00312	PASS	
			VN	-1.42	-0.00167	PASS	
			VH	-1.42	-0.00167	PASS	
	GSM/TM2	LCH	TN	VL	-12.85	-0.01559	PASS
				VN	-18.63	-0.0226	PASS
				VH	-19.92	-0.02417	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		MCH	TN	VL	-6.94	-0.0083	PASS
				VN	-6.72	-0.00803	PASS
				VH	-8.33	-0.00996	PASS
		HCH	TN	VL	-15.21	-0.01792	PASS
				VN	-11.2	-0.0132	PASS
				VH	-7.81	-0.0092	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
WCDMA850	UMTS/TM1	LCH	TN	VL	1.45	0.00175	PASS
				VN	2.35	0.00284	PASS
				VH	-2.29	-0.00277	PASS
		MCH	TN	VL	-4.85	-0.0058	PASS
				VN	-0.31	-0.00037	PASS
				VH	-7.71	-0.00922	PASS
		HCH	TN	VL	0.4	0.00047	PASS
				VN	3.69	0.00436	PASS
				VH	3.17	0.00374	PASS
WCDMA1900	UMTS/TM1	LCH	TN	VL	8.41	0.00454	PASS
				VN	10.82	0.00584	PASS
				VH	8.35	0.00451	PASS
		MCH	TN	VL	3.01	0.0016	PASS
				VN	6.76	0.0036	PASS
				VH	1.25	0.00066	PASS
		HCH	TN	VL	-0.32	-0.00017	PASS
				VN	5.54	0.0029	PASS
				VH	-3.95	-0.00207	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
GSM1900	GSM/TM1	LCH	VN	-30	22.34	0.01207	PASS
				-20	14.53	0.00785	PASS
				-10	21.37	0.01155	PASS
				0	22.15	0.01197	PASS
				10	22.41	0.01211	PASS
				20	19.57	0.01058	PASS
				30	16.47	0.0089	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
				40	21.57	0.01166	PASS	
				50	20.02	0.01082	PASS	
		MCH	VN	-30	23.57	0.01254	PASS	
				-20	21.05	0.0112	PASS	
				-10	24.28	0.01291	PASS	
				0	18.21	0.00969	PASS	
				10	20.53	0.01092	PASS	
				20	20.21	0.01075	PASS	
				30	20.28	0.01079	PASS	
				40	21.37	0.01137	PASS	
				50	22.66	0.01205	PASS	
				HCH	VN	-30	28.15	0.01474
		-20	25.05			0.01312	PASS	
		-10	22.92			0.012	PASS	
		0	26.28			0.01376	PASS	
		10	23.12			0.01211	PASS	
		20	24.21			0.01268	PASS	
		30	23.37			0.01224	PASS	
		40	20.53			0.01075	PASS	
		50	21.95	0.01149	PASS			
		GSM/TM2	LCH	VN	-30	6.68	0.00361	PASS
					-20	9.88	0.00534	PASS
	-10				3.62	0.00196	PASS	
	0				8.1	0.00438	PASS	
	10				9.2	0.00497	PASS	
	20				3.97	0.00215	PASS	
	30				4.75	0.00257	PASS	
	40				4.84	0.00262	PASS	
	50				2.39	0.00129	PASS	
	MCH				VN	-30	2.49	0.00132
			-20	10.88		0.00579	PASS	
			-10	7.78		0.00414	PASS	
			0	5.81		0.00309	PASS	
			10	13.11		0.00697	PASS	
			20	9.23		0.00491	PASS	
			30	7.07		0.00376	PASS	
			40	5.26		0.0028	PASS	
	50		7.94	0.00422	PASS			
	HCH		VN	-30	5.75	0.00301	PASS	
				-20	7.91	0.00414	PASS	



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-10	5.88	0.00308	PASS
				0	9.2	0.00482	PASS
				10	1.74	0.00091	PASS
				20	9.91	0.00519	PASS
				30	9.56	0.00501	PASS
				40	5.26	0.00275	PASS
				50	7.62	0.00399	PASS
GSM850	GSM/TM1	LCH	VN	-30	-10.98	-0.01332	PASS
				-20	-9.56	-0.0116	PASS
				-10	-10.98	-0.01332	PASS
				0	-10.65	-0.01292	PASS
				10	-10.59	-0.01285	PASS
				20	-11.56	-0.01403	PASS
				30	-9.88	-0.01199	PASS
				40	-10.85	-0.01316	PASS
				50	-10.98	-0.01332	PASS
		MCH	VN	-30	-2.97	-0.00355	PASS
				-20	-3.94	-0.00471	PASS
				-10	-2.45	-0.00293	PASS
				0	-3.03	-0.00362	PASS
				10	-2.2	-0.00263	PASS
				20	-3.42	-0.00409	PASS
	30			-3.62	-0.00433	PASS	
	40			-3.68	-0.0044	PASS	
	50			-4.2	-0.00502	PASS	
	HCH	VN	-30	-4.2	-0.00495	PASS	
			-20	-3.03	-0.00357	PASS	
			-10	-6.01	-0.00708	PASS	
			0	-1.55	-0.00183	PASS	
			10	-1.81	-0.00213	PASS	
			20	-3.42	-0.00403	PASS	
			30	-3.16	-0.00372	PASS	
			40	-2.84	-0.00335	PASS	
			50	-0.19	-0.00022	PASS	
	GSM/TM2	LCH	VN	-30	-18.31	-0.02222	PASS
				-20	-19.57	-0.02374	PASS
				-10	-18.82	-0.02283	PASS
0				-14.01	-0.017	PASS	
10				-22.86	-0.02774	PASS	
20				-21.92	-0.0266	PASS	

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
				30	-23.31	-0.02828	PASS		
				40	-24.15	-0.0293	PASS		
				50	-15.85	-0.01923	PASS		
		MCH	VN			-30	-13.14	-0.01571	PASS
						-20	-11.88	-0.0142	PASS
						-10	-16.82	-0.02011	PASS
						0	-12.75	-0.01524	PASS
						10	-13.46	-0.01609	PASS
						20	-9.27	-0.01108	PASS
						30	-14.63	-0.01749	PASS
						40	-8.1	-0.00968	PASS
						50	-8.85	-0.01058	PASS
						HCH	VN		
		-20	-5.78	-0.00681	PASS				
		-10	-17.11	-0.02016	PASS				
		0	-19.11	-0.02251	PASS				
		10	-11.24	-0.01324	PASS				
		20	-8.14	-0.00959	PASS				
		30	-16.21	-0.0191	PASS				
		40	-17.18	-0.02024	PASS				
		50	-13.66	-0.01609	PASS				

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
WCDMA850	UMTS/TM1	LCH	VN	-30	-5.17	-0.00626	PASS		
				-20	-11.55	-0.01398	PASS		
				-10	2.87	0.00347	PASS		
				0	-1.11	-0.00134	PASS		
				10	-12.28	-0.01486	PASS		
				20	-2.78	-0.00336	PASS		
				30	-4.73	-0.00572	PASS		
				40	-6.23	-0.00754	PASS		
				50	-0.08	-0.0001	PASS		
		MCH	VN			-30	-2.85	-0.00341	PASS
						-20	-5.31	-0.00635	PASS
						-10	-2.14	-0.00256	PASS
						0	-0.92	-0.0011	PASS
						10	-4.62	-0.00552	PASS
						20	-2.56	-0.00306	PASS



				30	-4.21	-0.00503	PASS		
				40	-2.06	-0.00246	PASS		
				50	0.14	0.00017	PASS		
				HCH	VN	-30	3.83	0.00452	PASS
						-20	4.55	0.00537	PASS
						-10	3.95	0.00467	PASS
		0	8.18	0.00966	PASS				
		10	4.78	0.00565	PASS				
		20	2.3	0.00272	PASS				
		30	9.41	0.01112	PASS				
		40	3.57	0.00422	PASS				
		50	-0.93	-0.0011	PASS				
WCDMA1900	UMTS/TM1	LCH	VN	-30	2.76	0.00149	PASS		
				-20	7.28	0.00393	PASS		
				-10	-1.5	-0.00081	PASS		
				0	8.06	0.00435	PASS		
				10	-14.22	-0.00768	PASS		
				20	3.34	0.0018	PASS		
				30	9.81	0.0053	PASS		
				40	7.66	0.00414	PASS		
				50	9.46	0.00511	PASS		
		MCH	VN	-30	-3.72	-0.00198	PASS		
				-20	7.31	0.00389	PASS		
				-10	5.87	0.00312	PASS		
				0	1.27	0.00068	PASS		
				10	7.68	0.00409	PASS		
				20	3.83	0.00204	PASS		
				30	3.34	0.00178	PASS		
				40	-0.99	-0.00053	PASS		
		50	3.69	0.00196	PASS				
		HCH	VN	-30	3.36	0.00176	PASS		
				-20	7.71	0.00404	PASS		
				-10	13.49	0.00707	PASS		
				0	-3.01	-0.00158	PASS		
				10	-1.31	-0.00069	PASS		
				20	-0.76	-0.0004	PASS		
				30	0.96	0.0005	PASS		
				40	14.71	0.00771	PASS		
		50	-4.76	-0.0025	PASS				

END