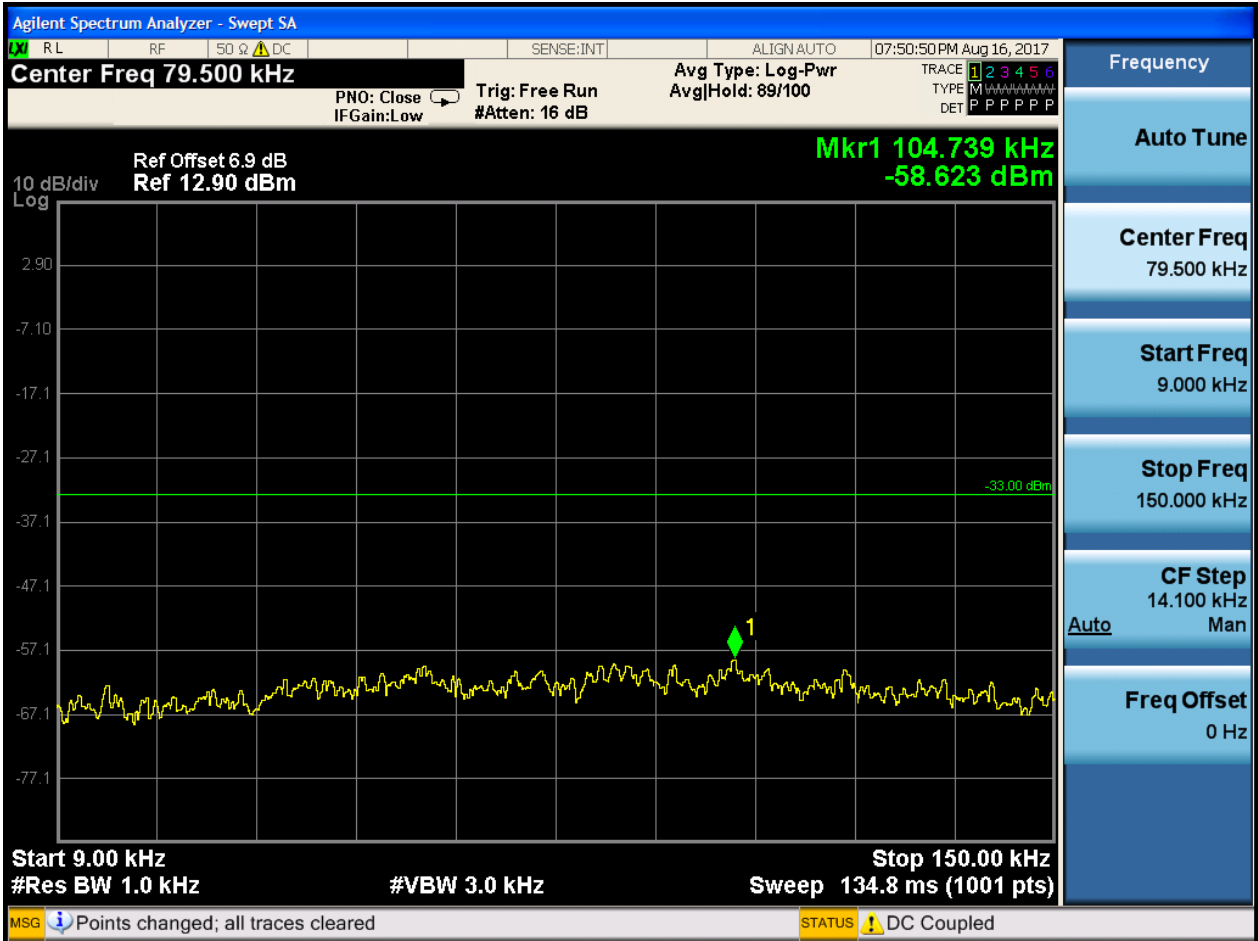




6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0

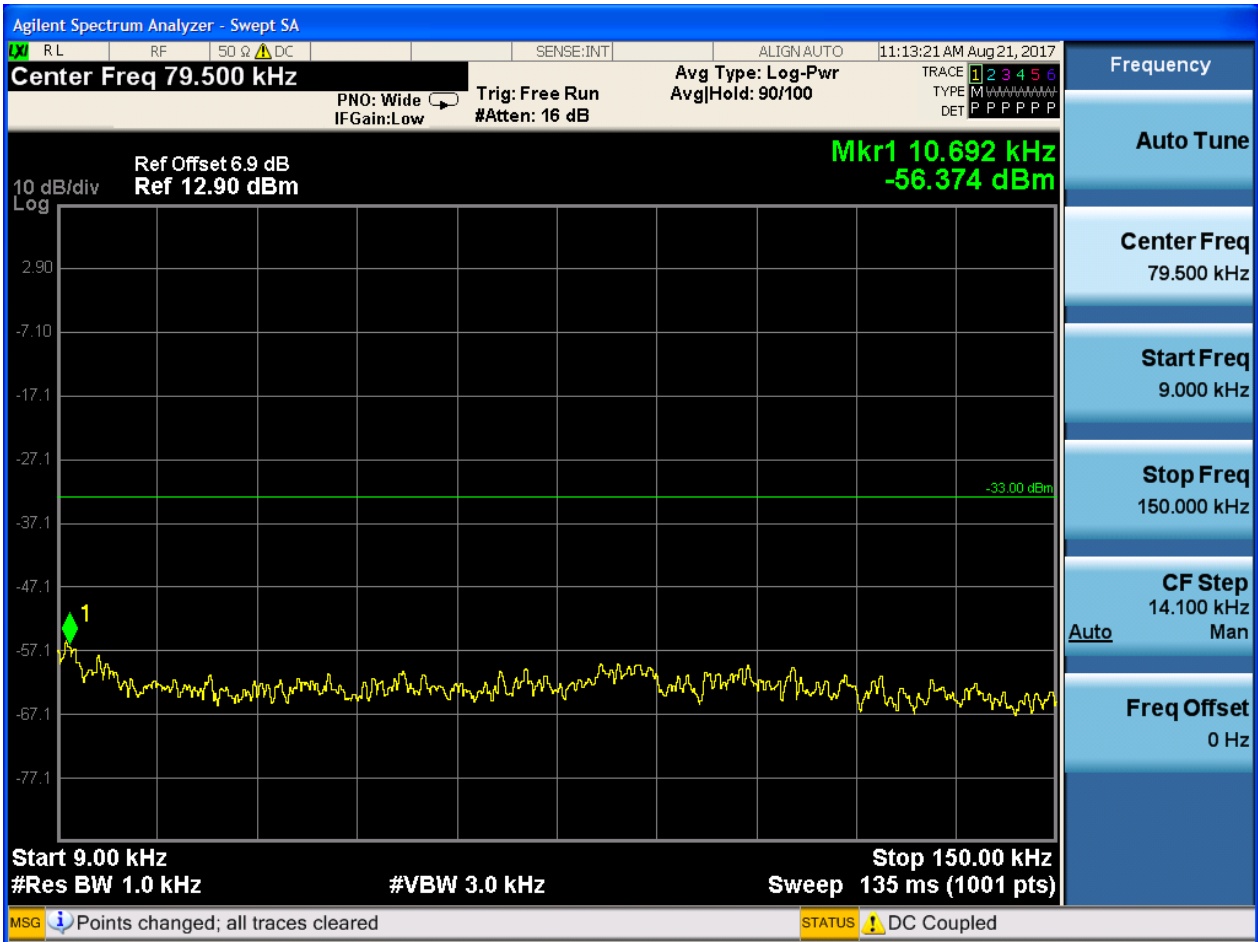


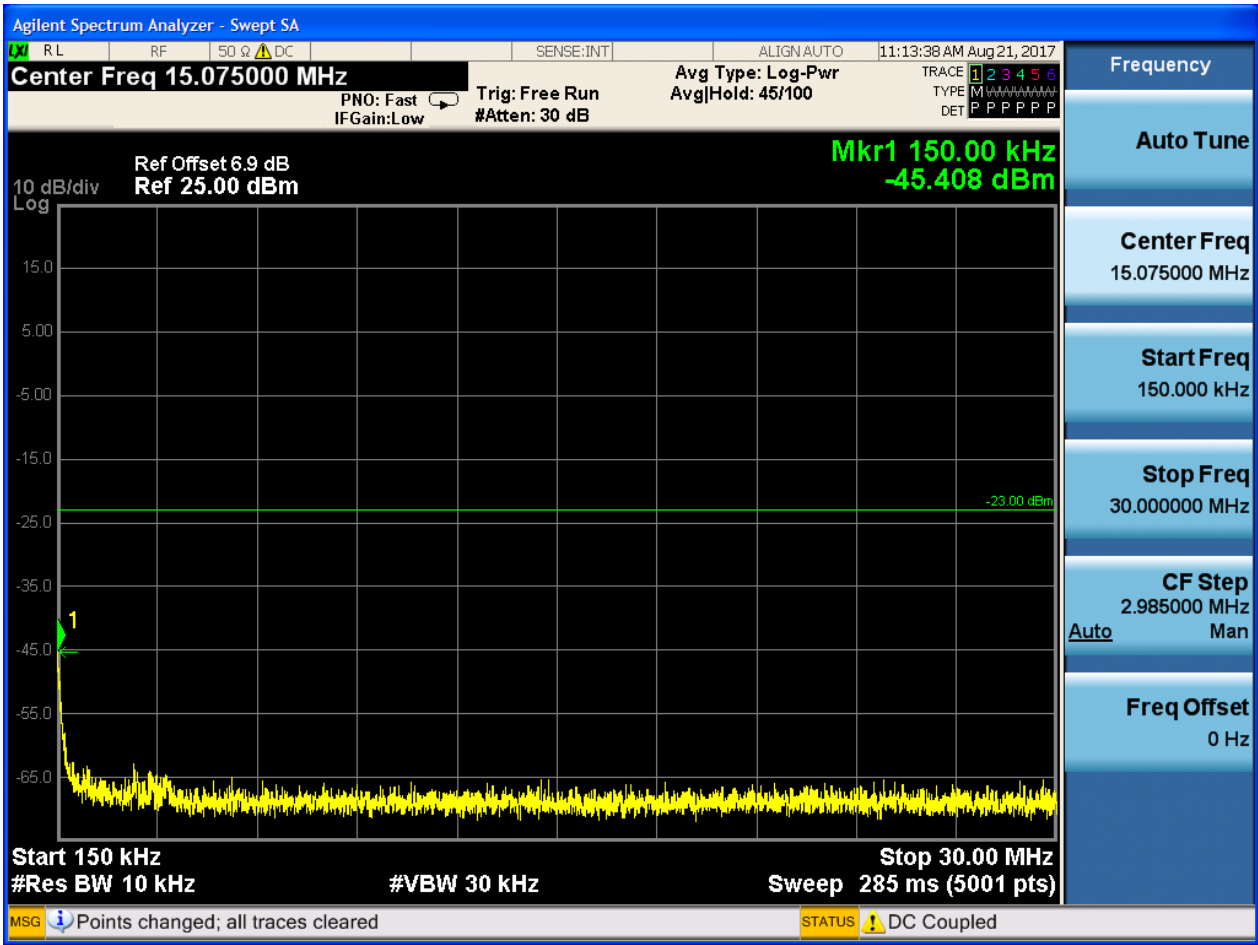


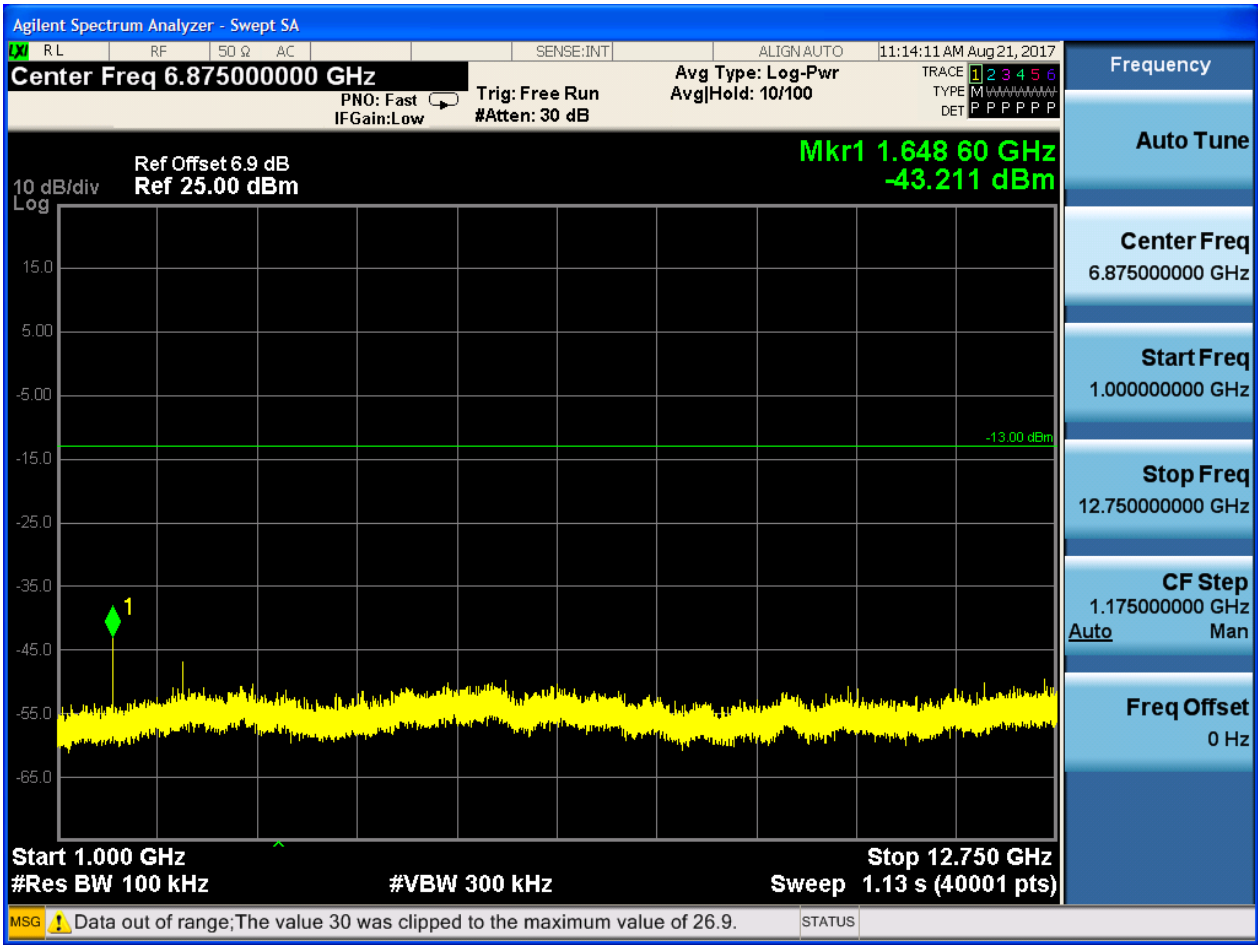
6.1.1.1.3 Test Bandwidth = 5

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



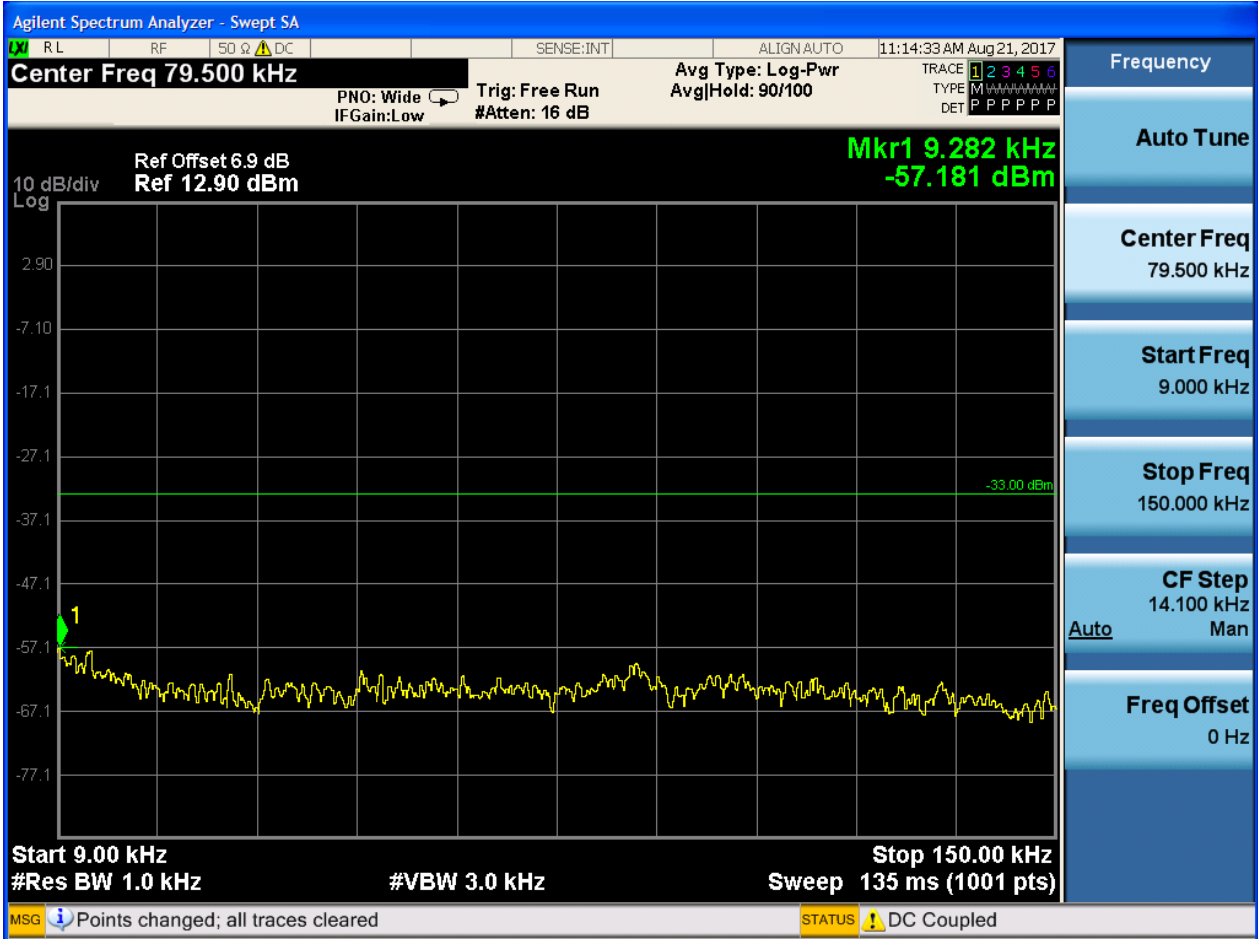


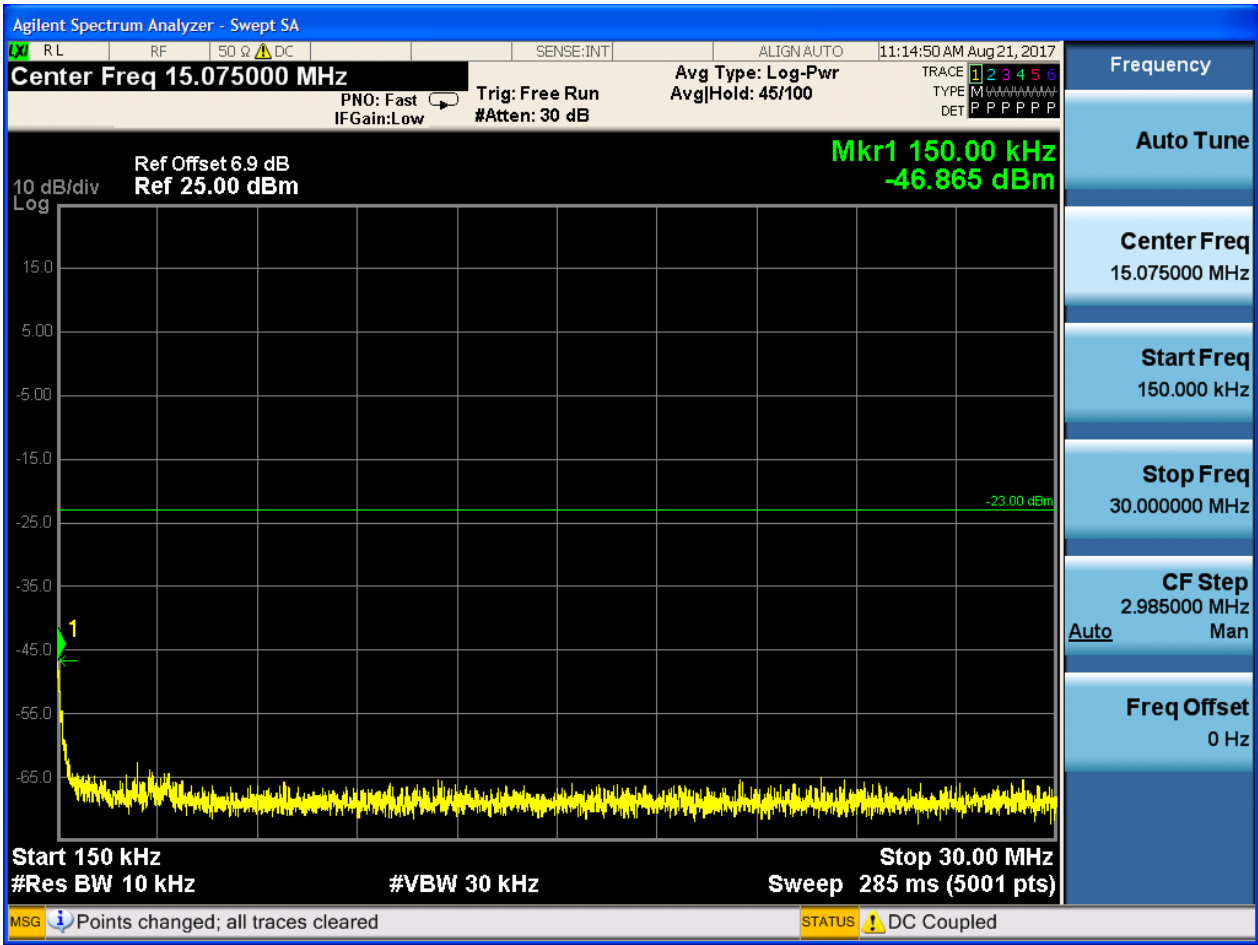


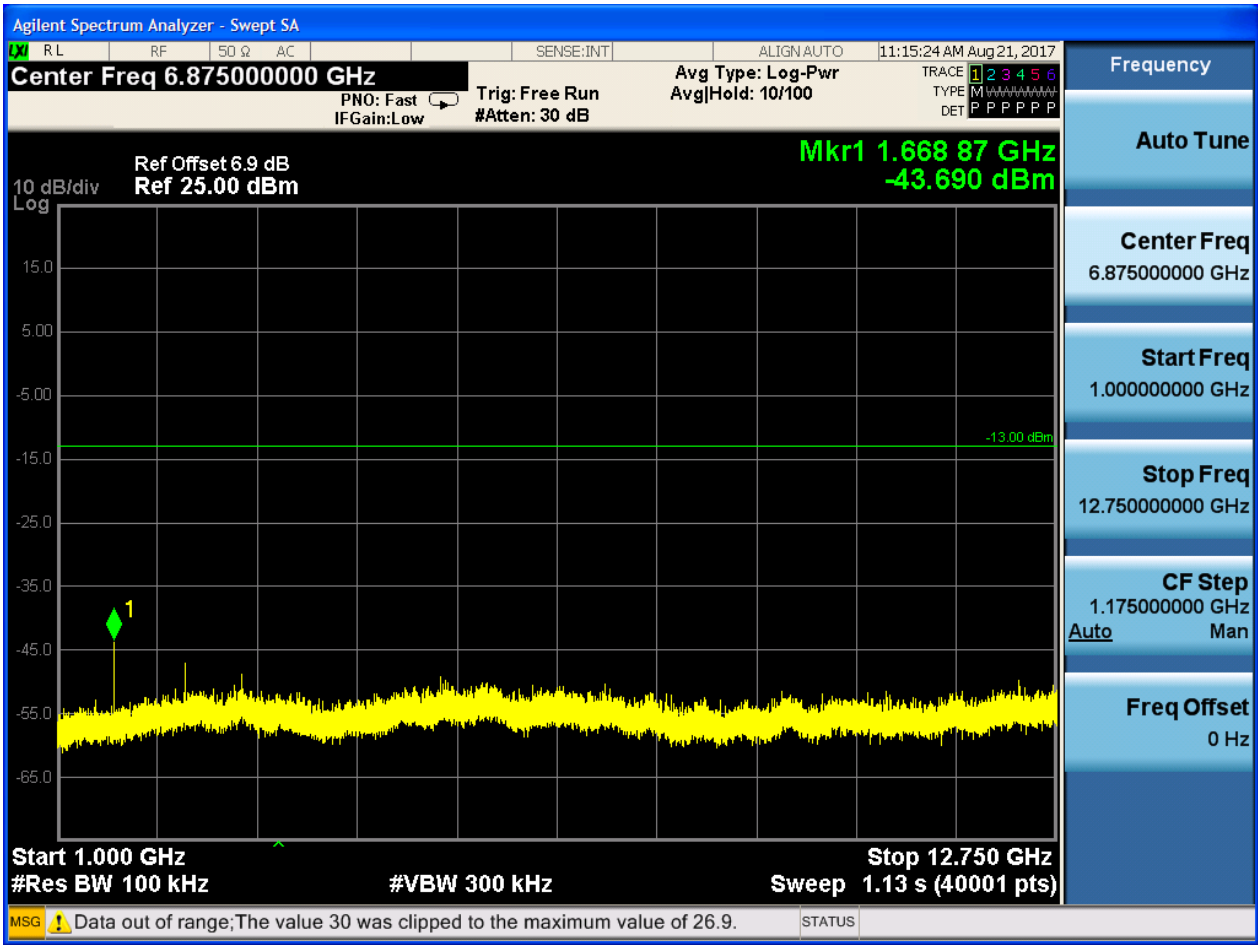


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



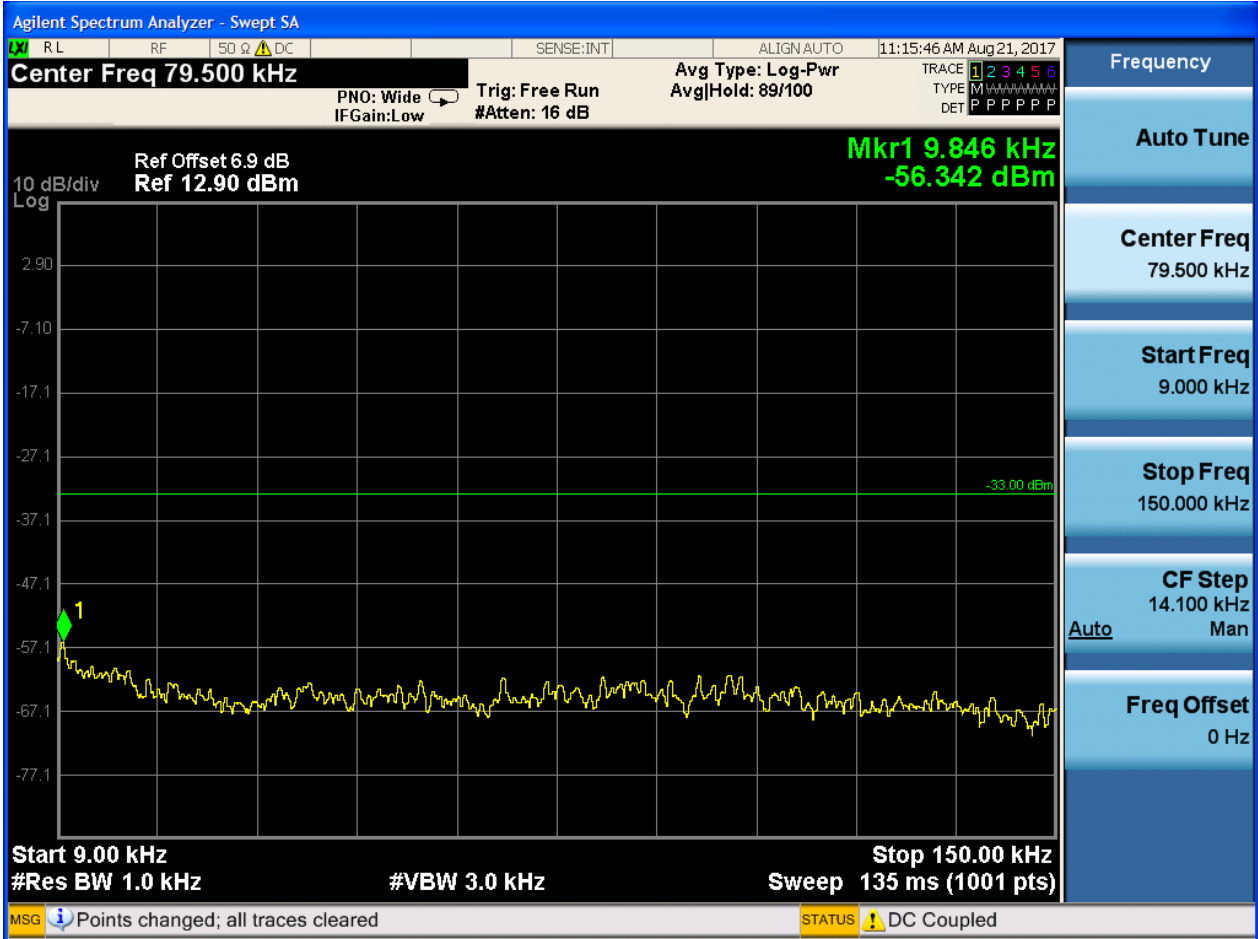


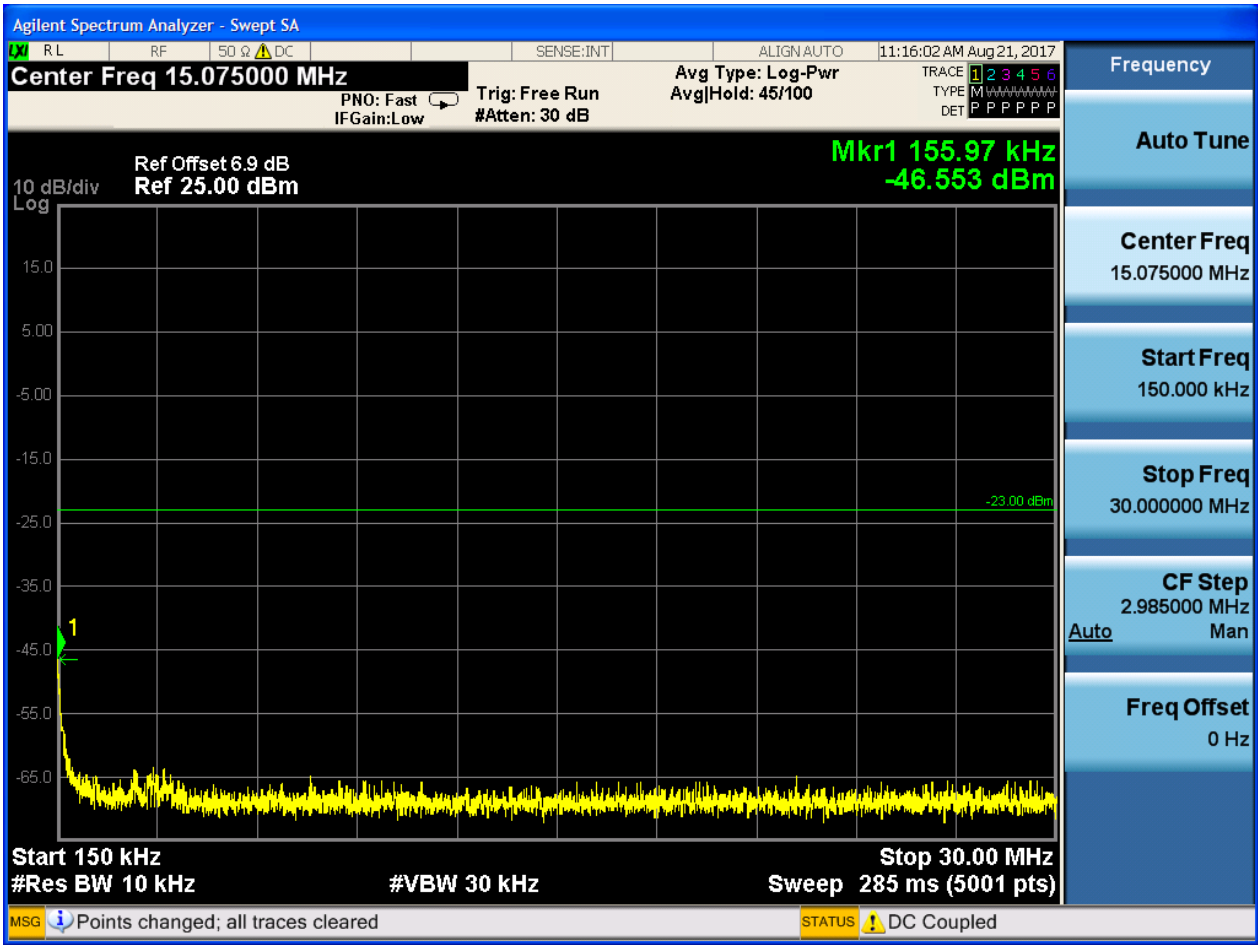


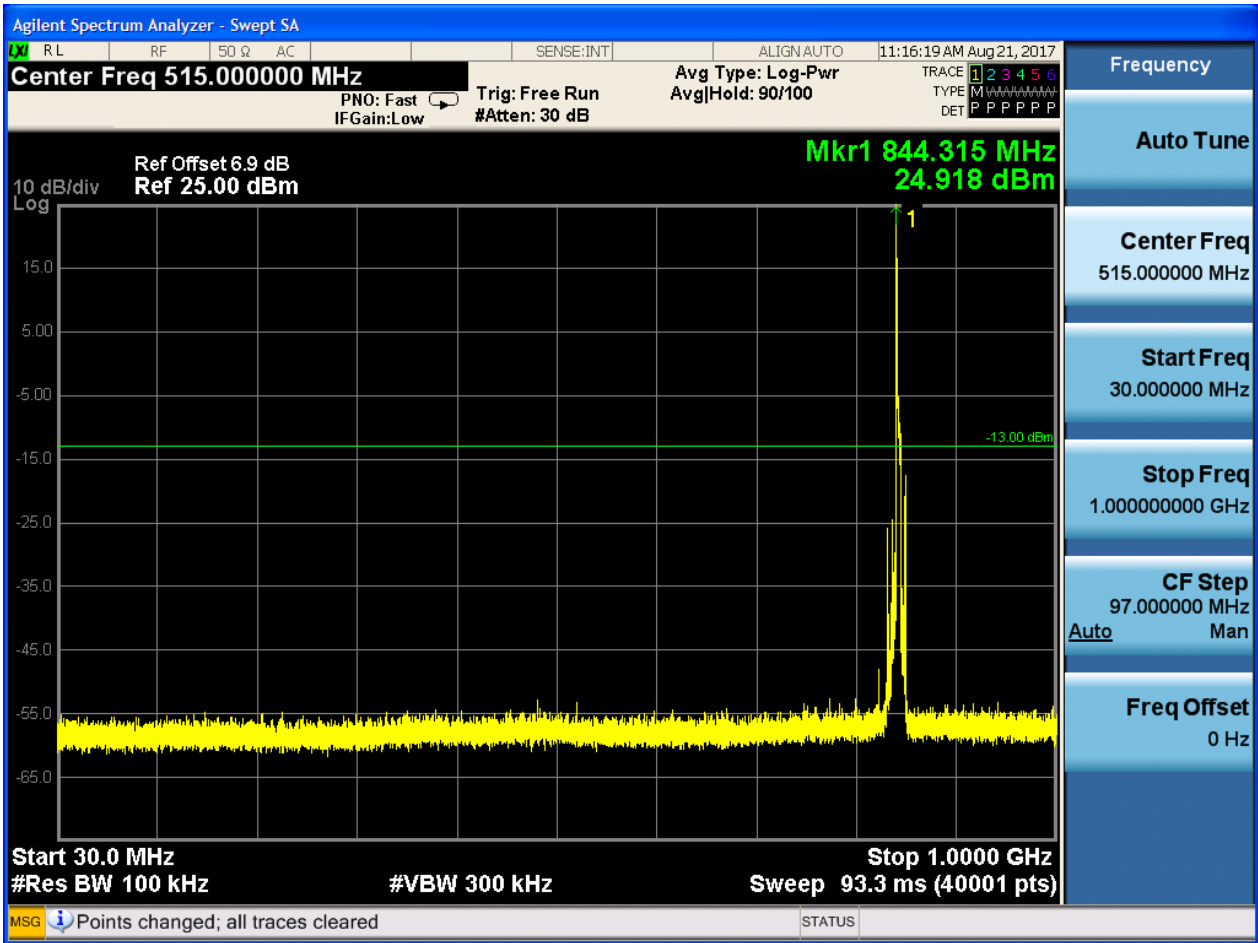


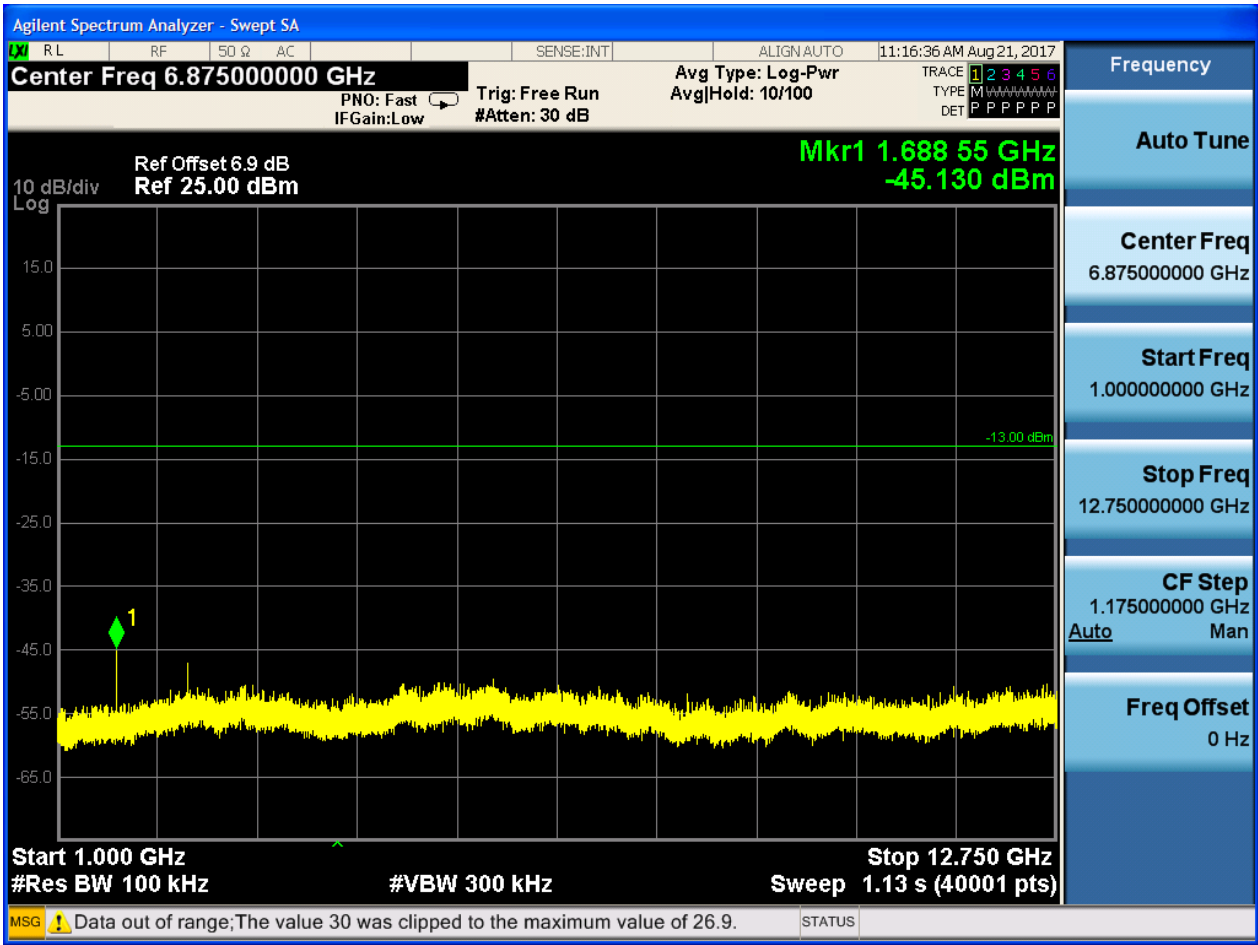
6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0







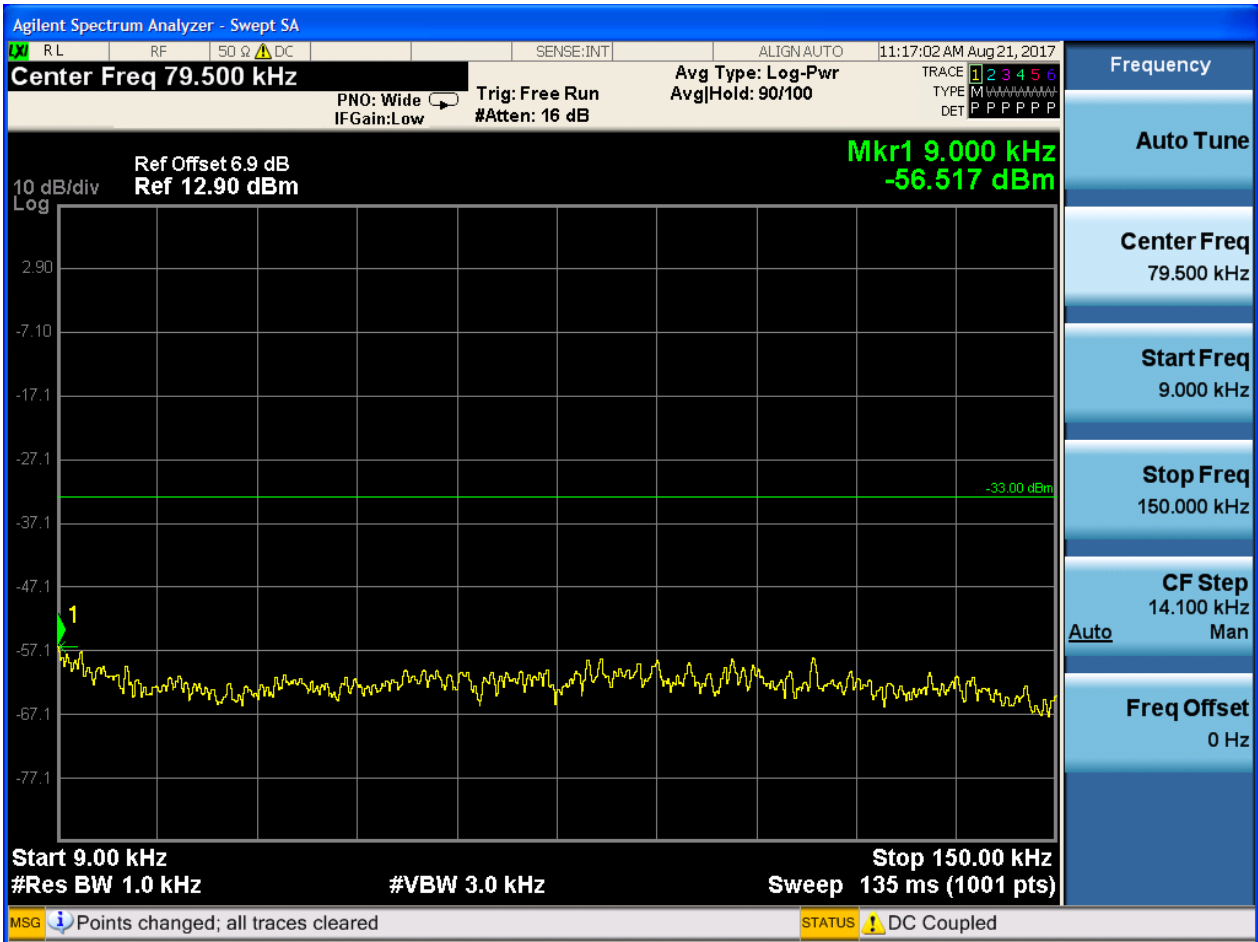


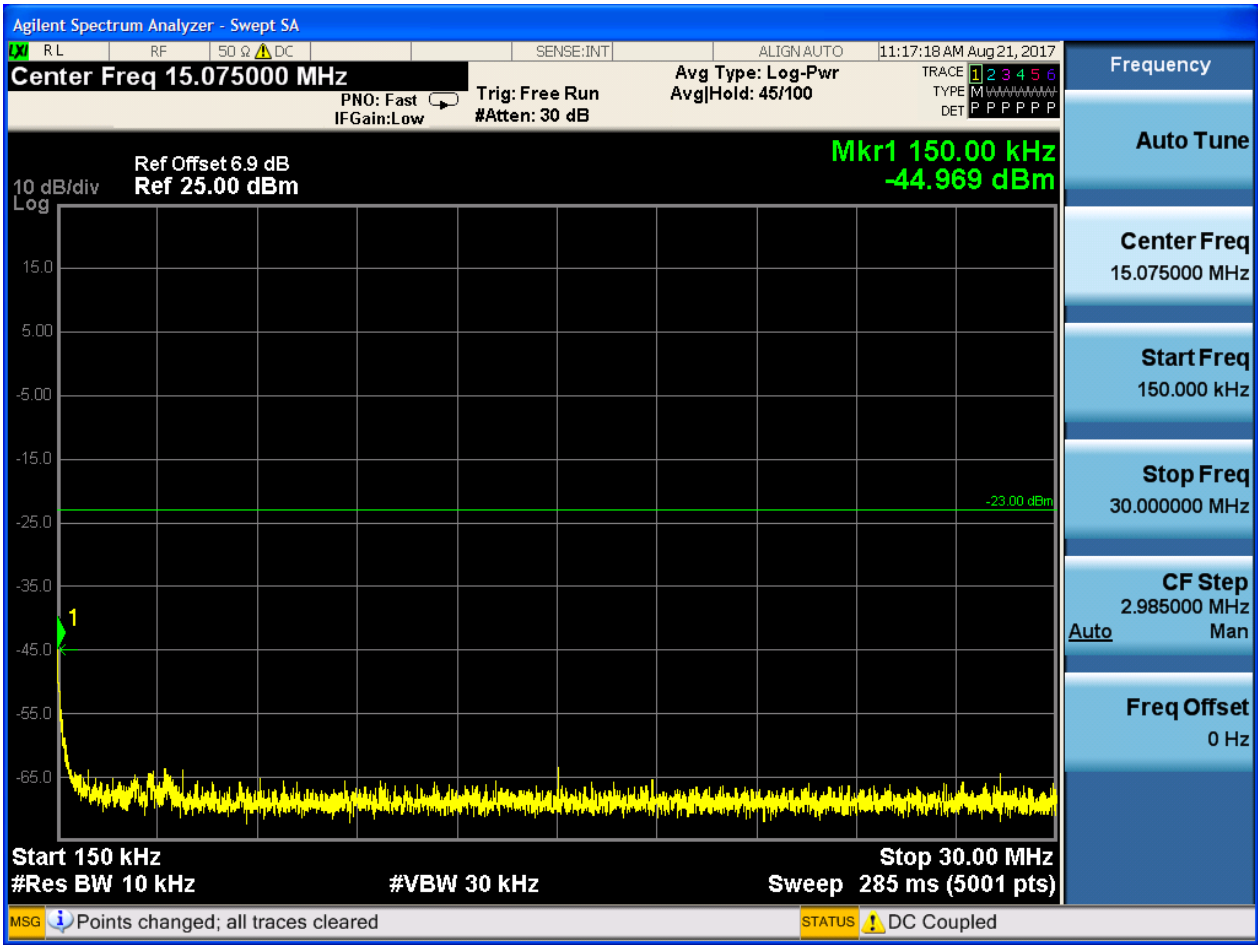


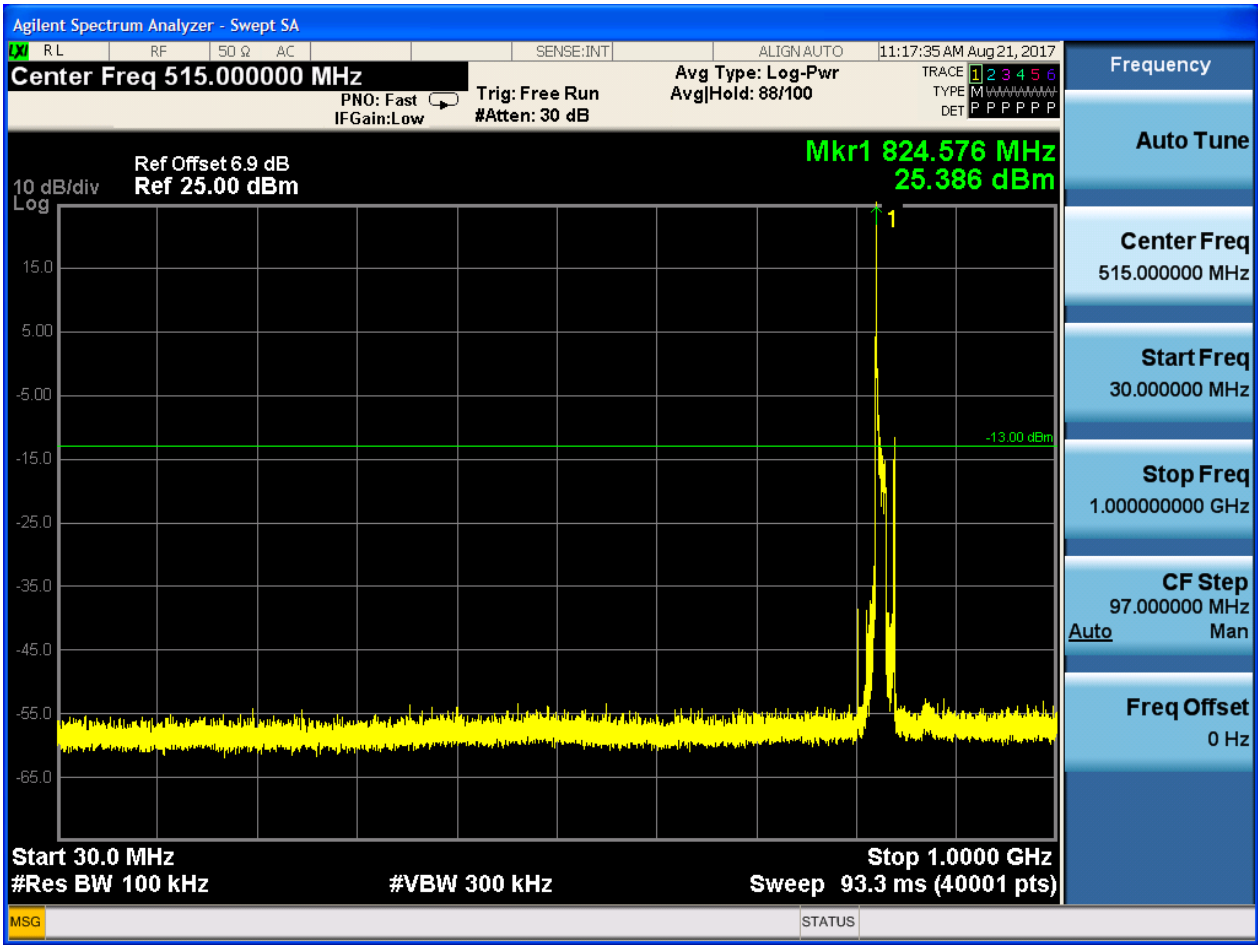
6.1.1.1.4 Test Bandwidth = 10

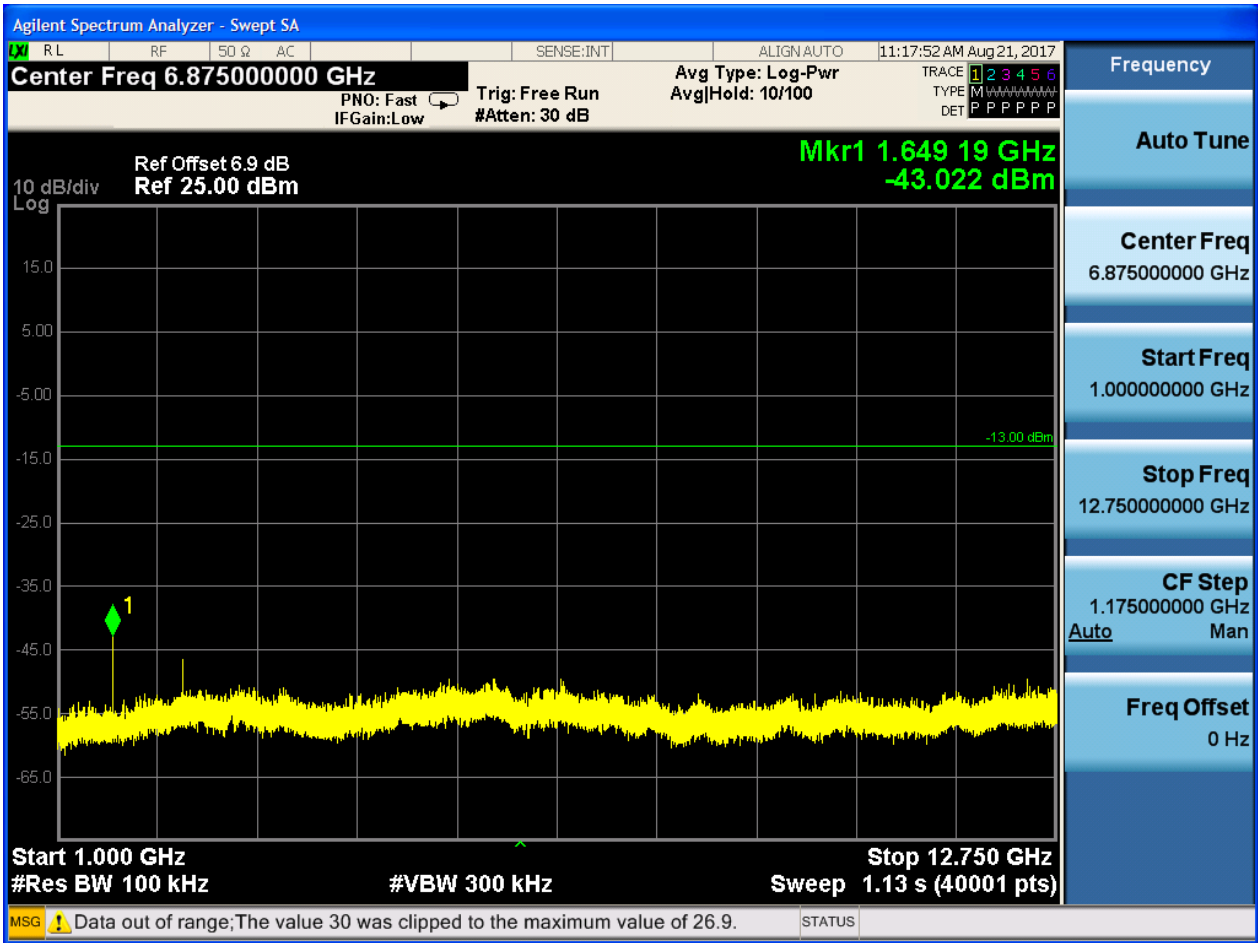
6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0





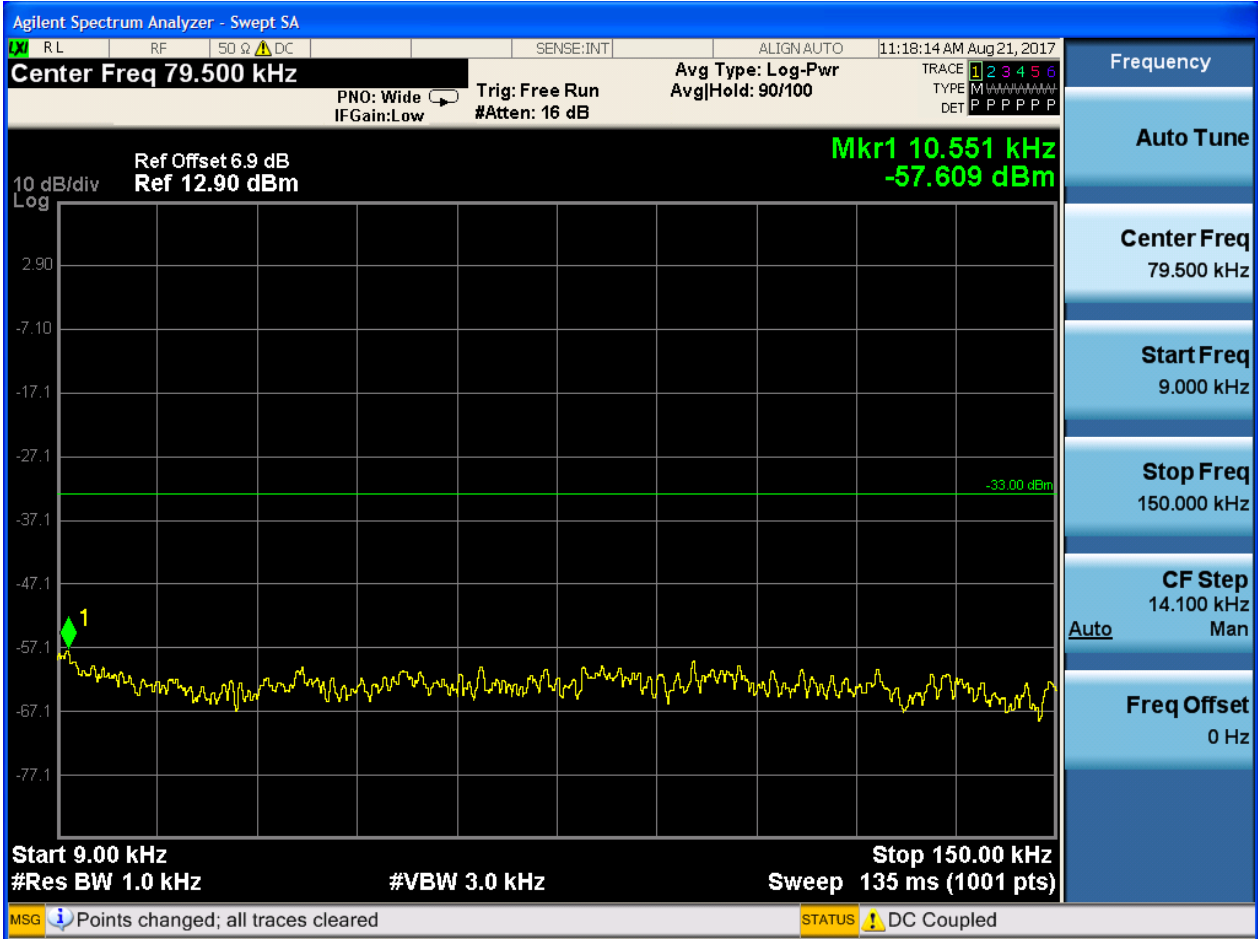


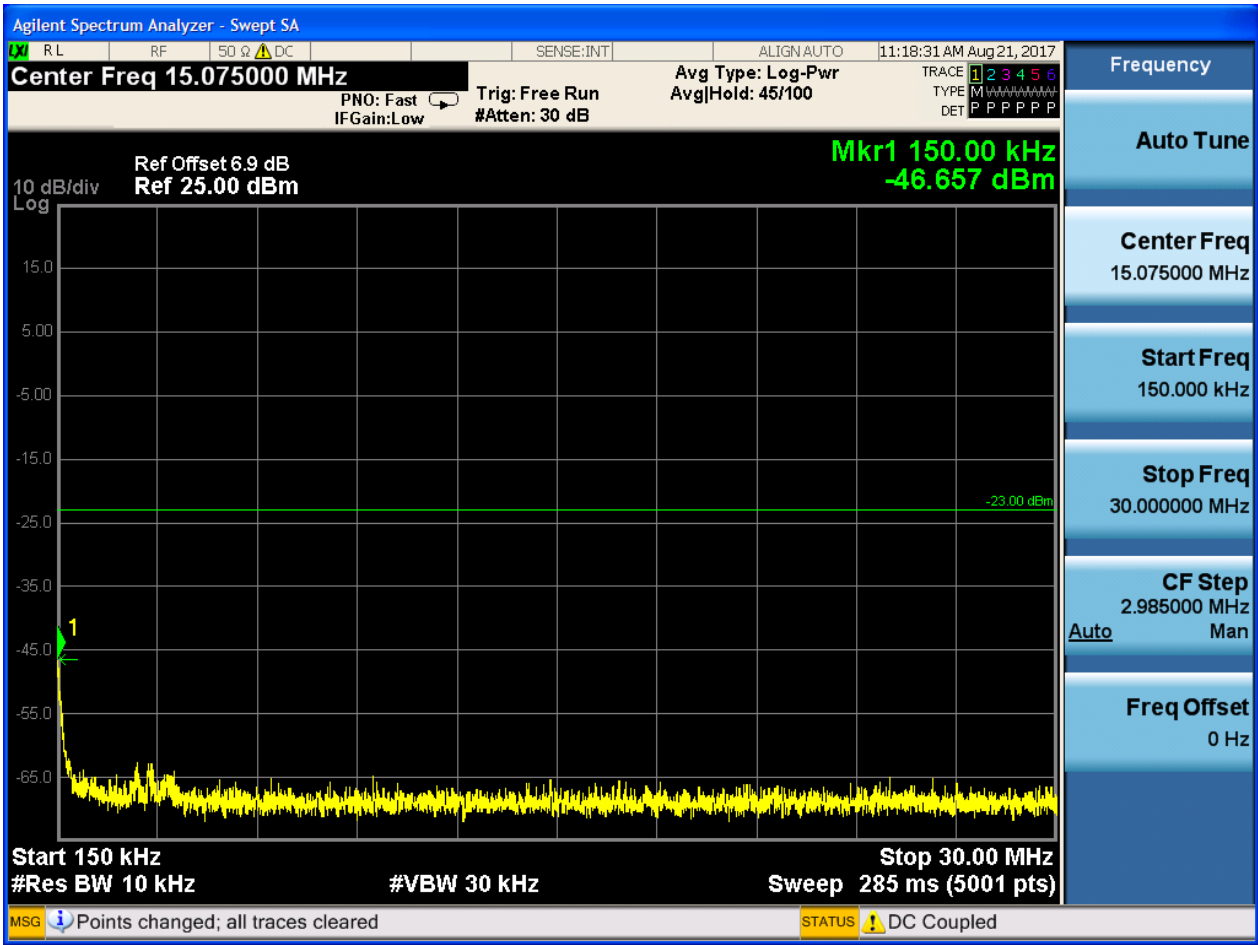


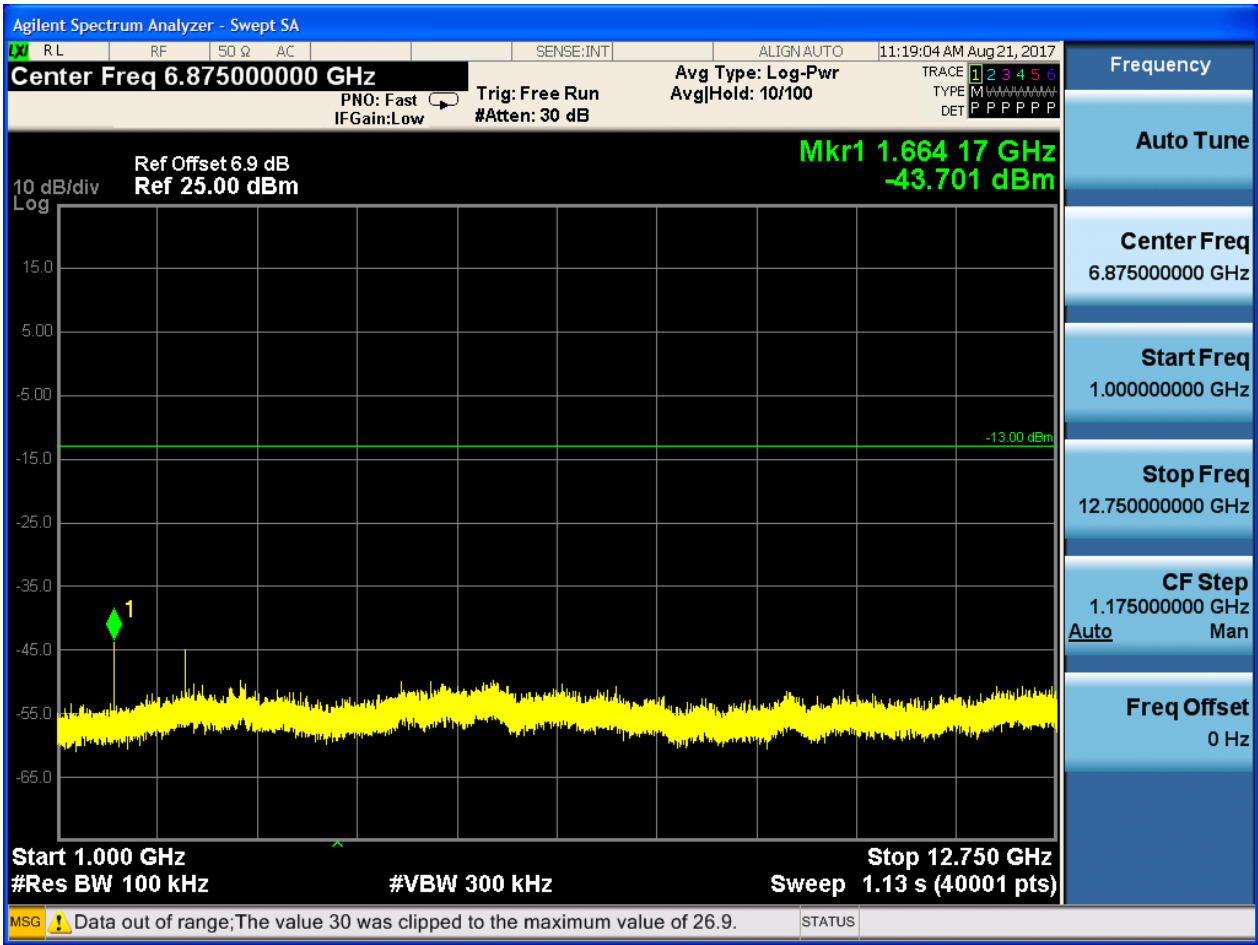


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



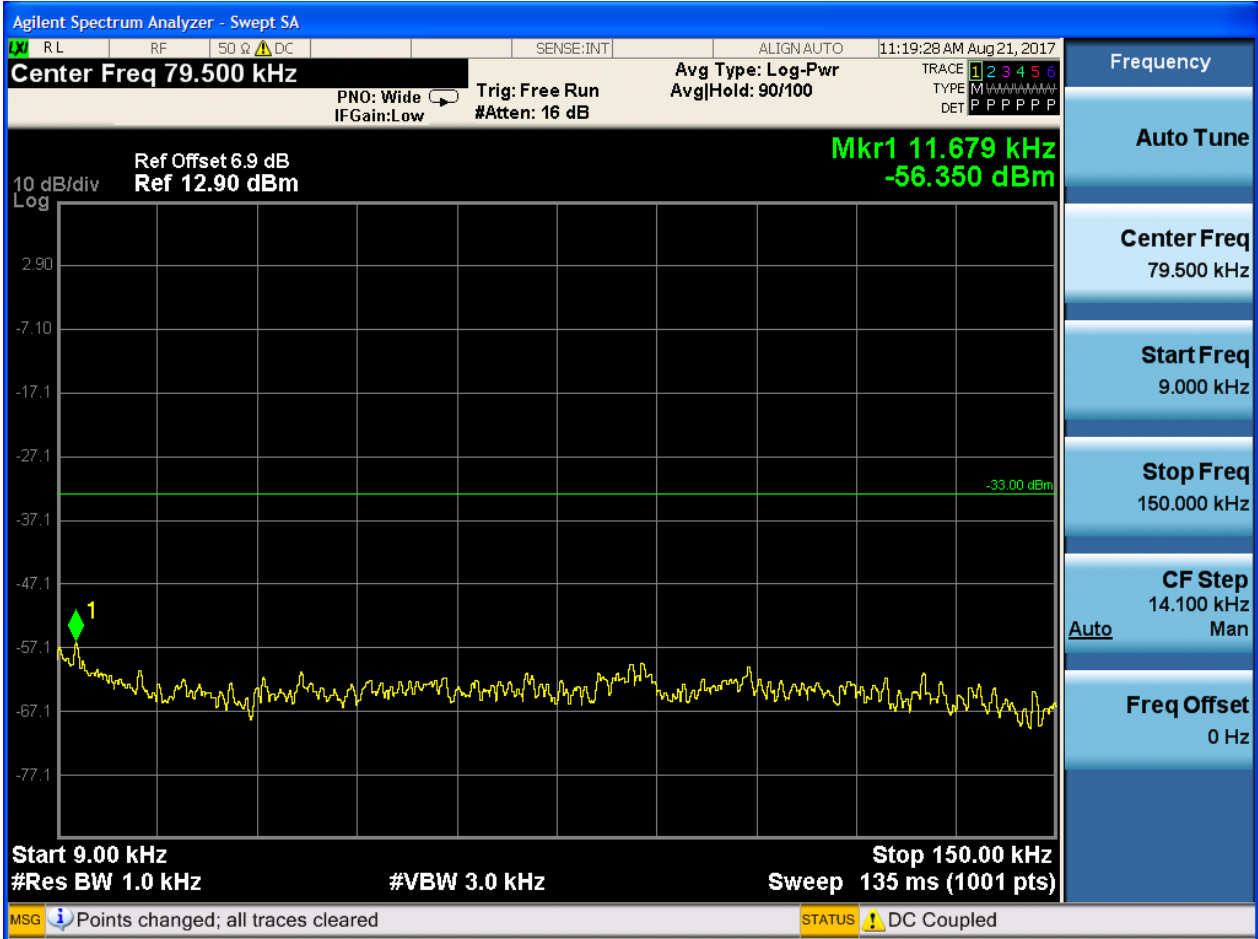


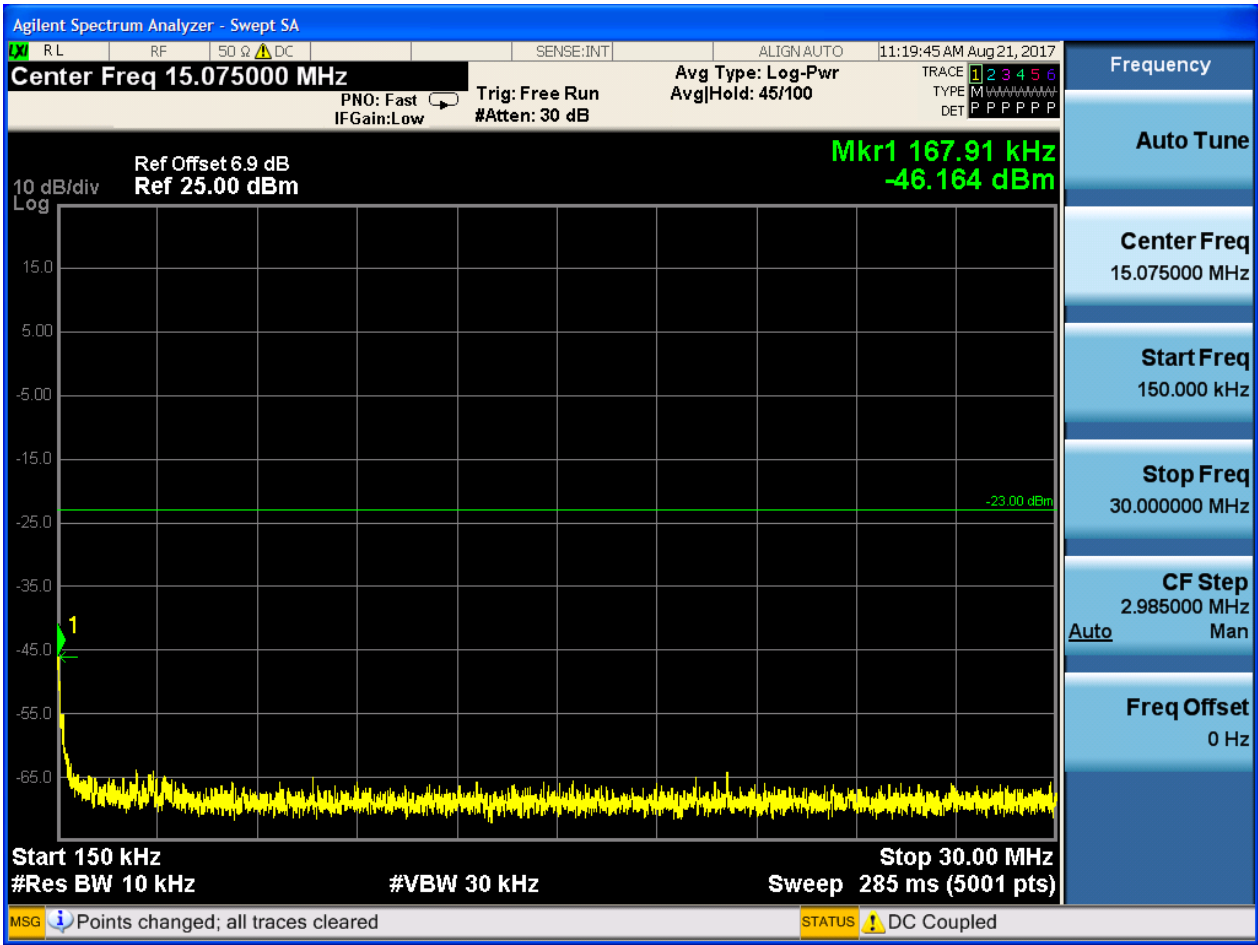


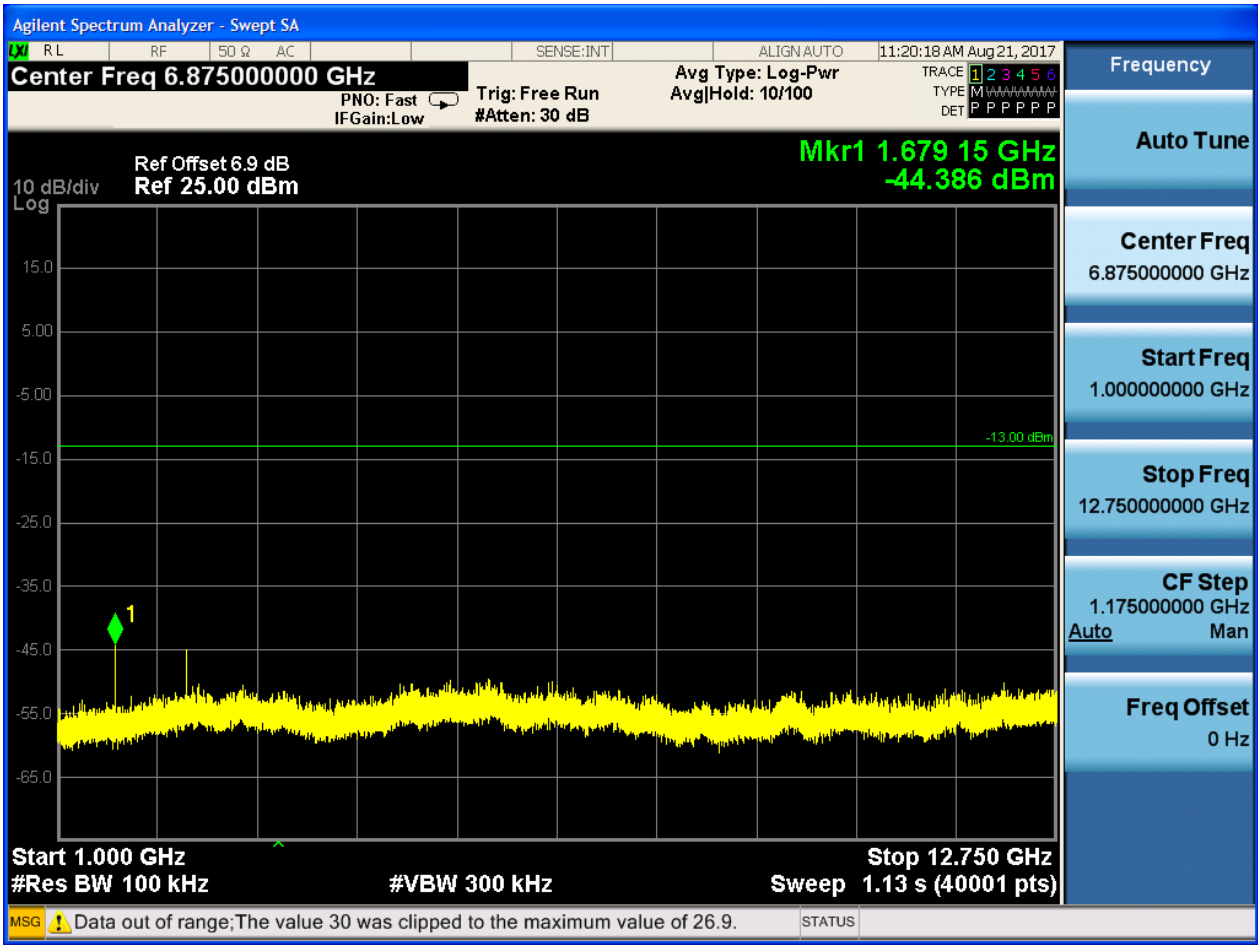


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







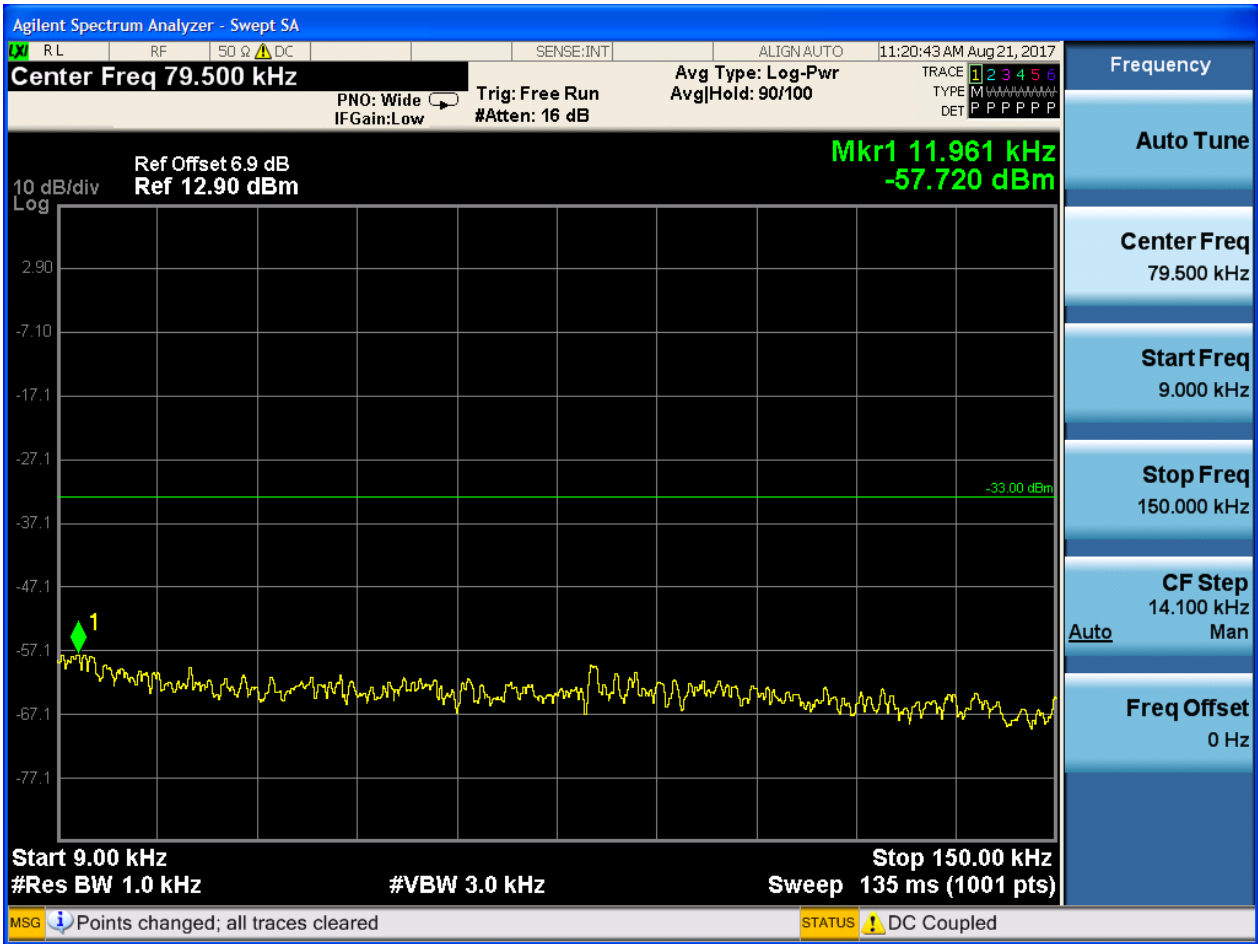


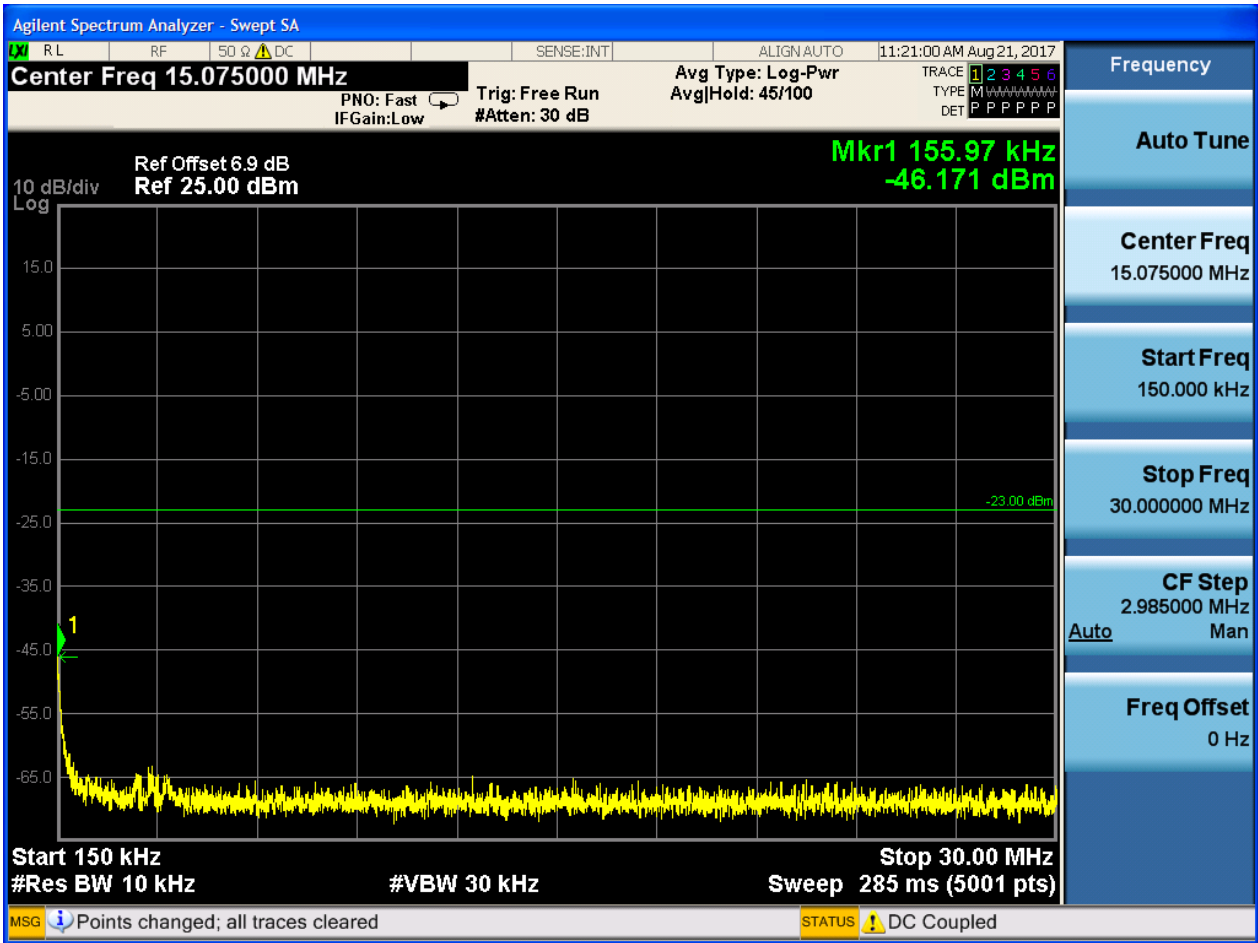
6.1.1.2 Test Mode = LTE/TM2

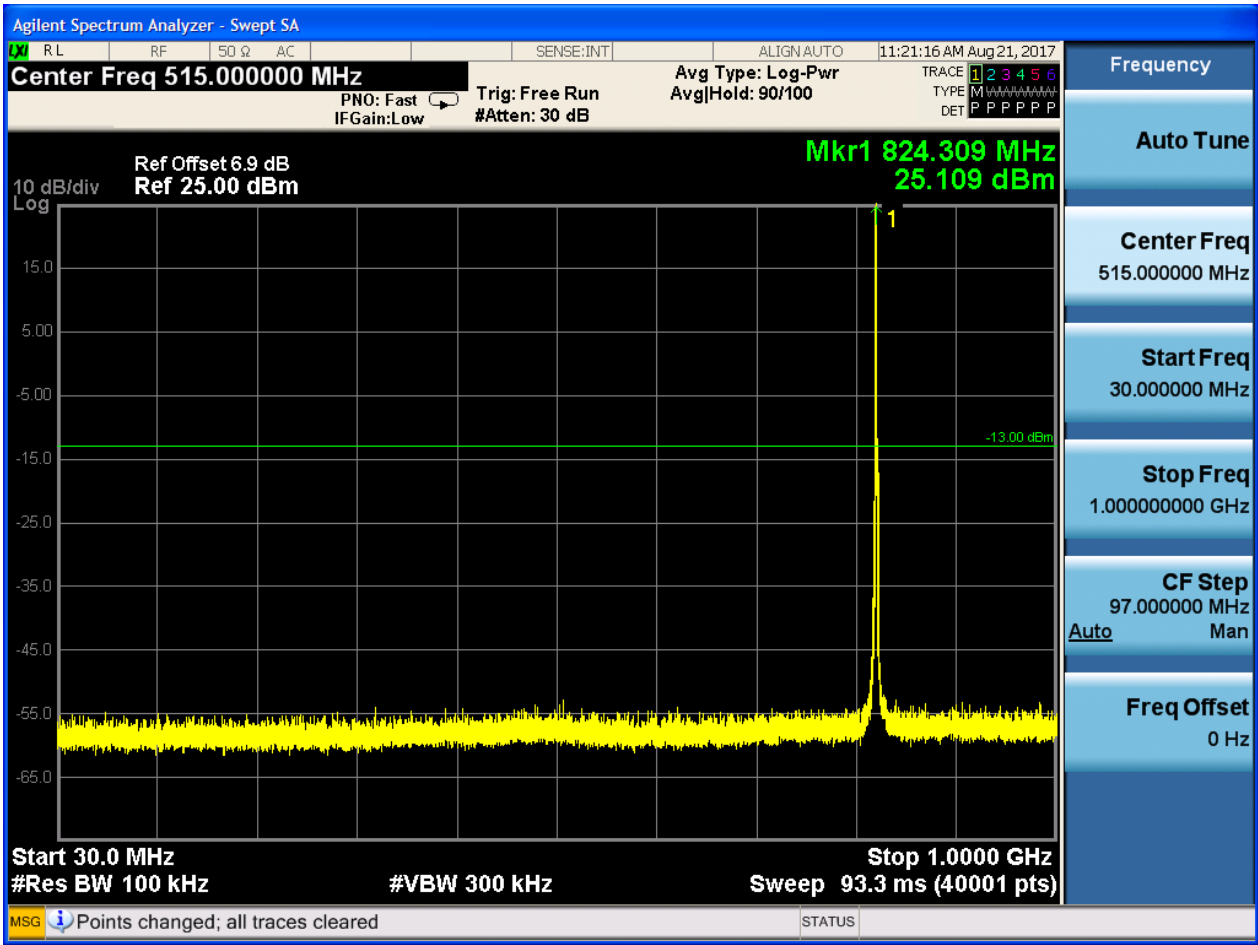
6.1.1.2.1 Test Bandwidth = 1.4

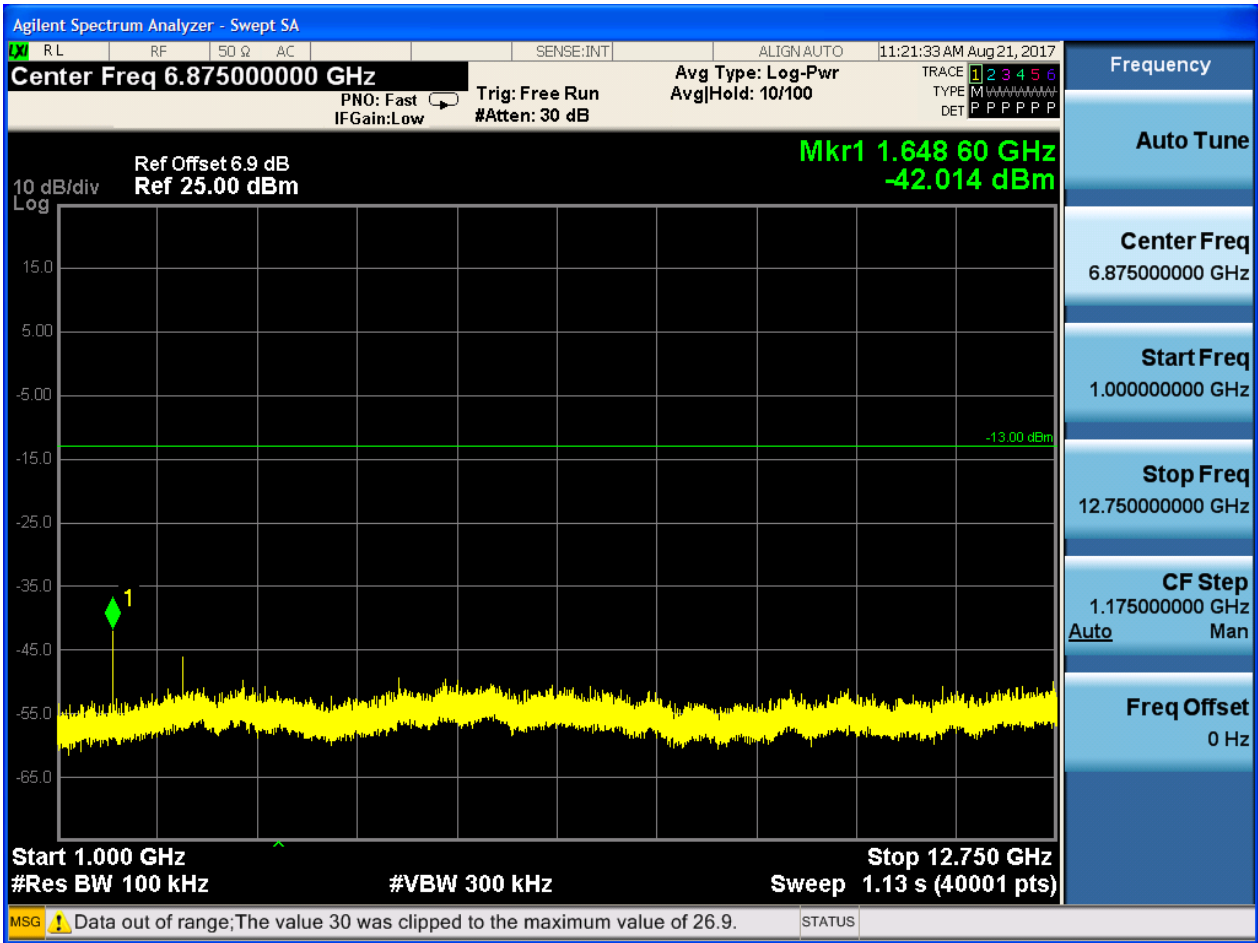
6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0





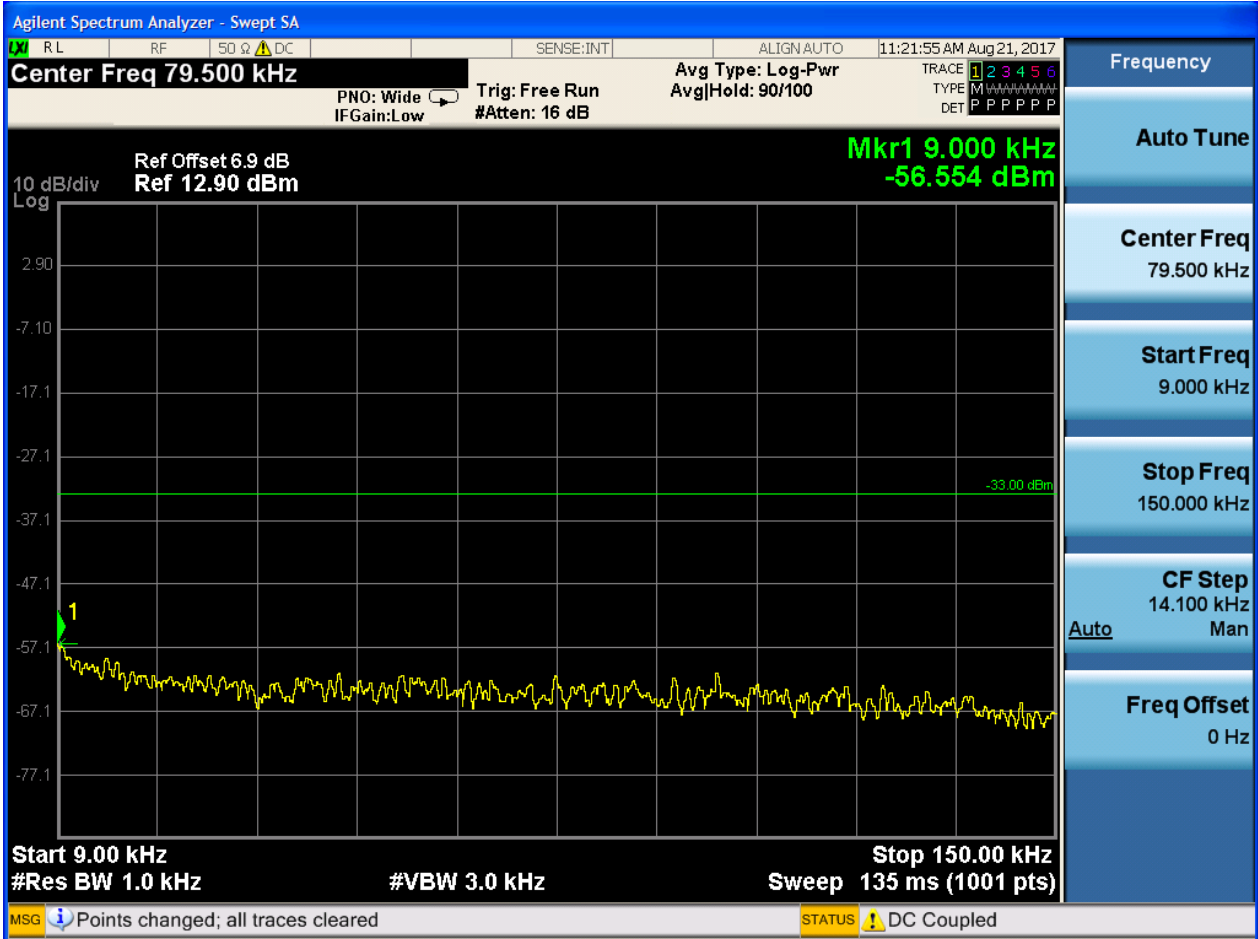


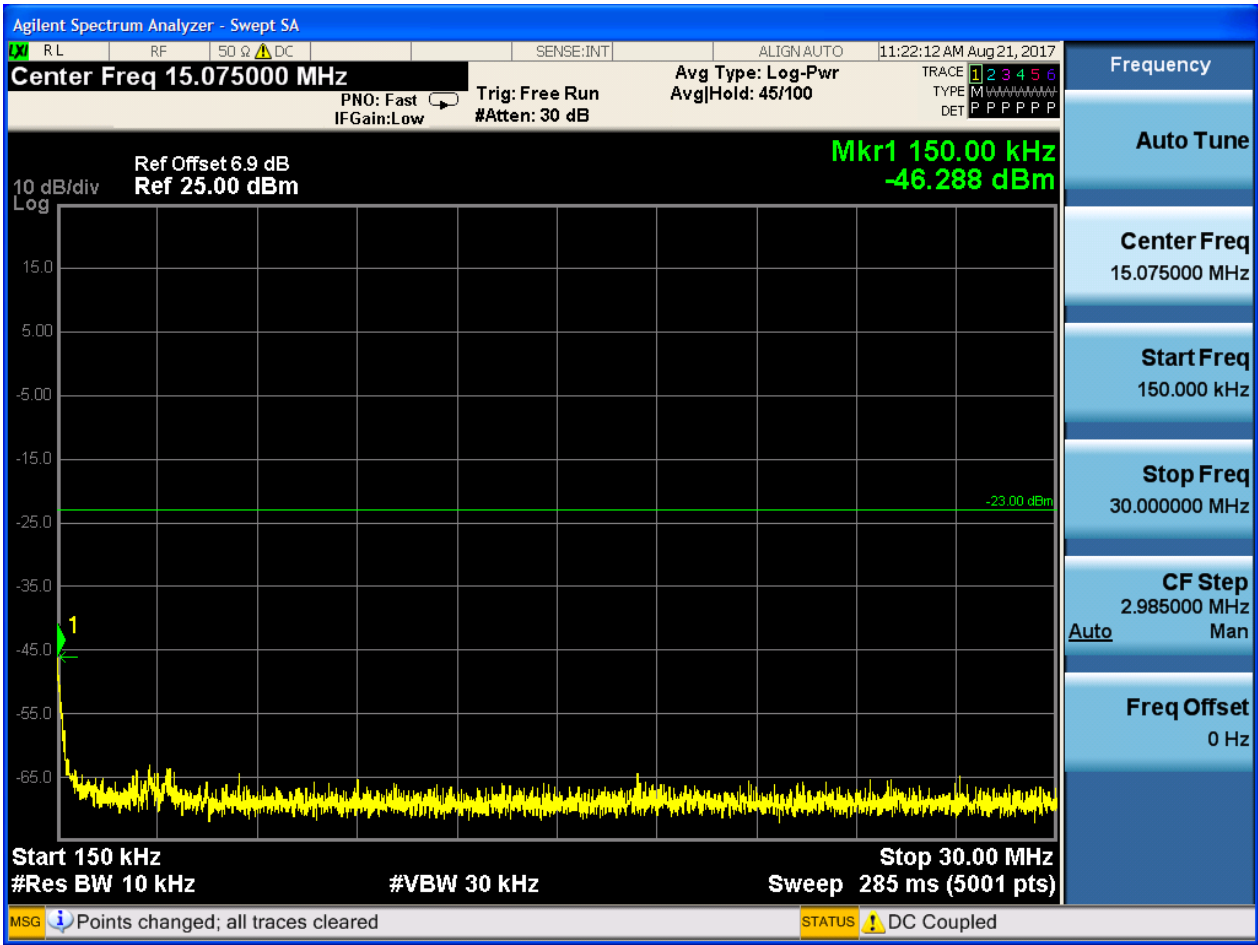


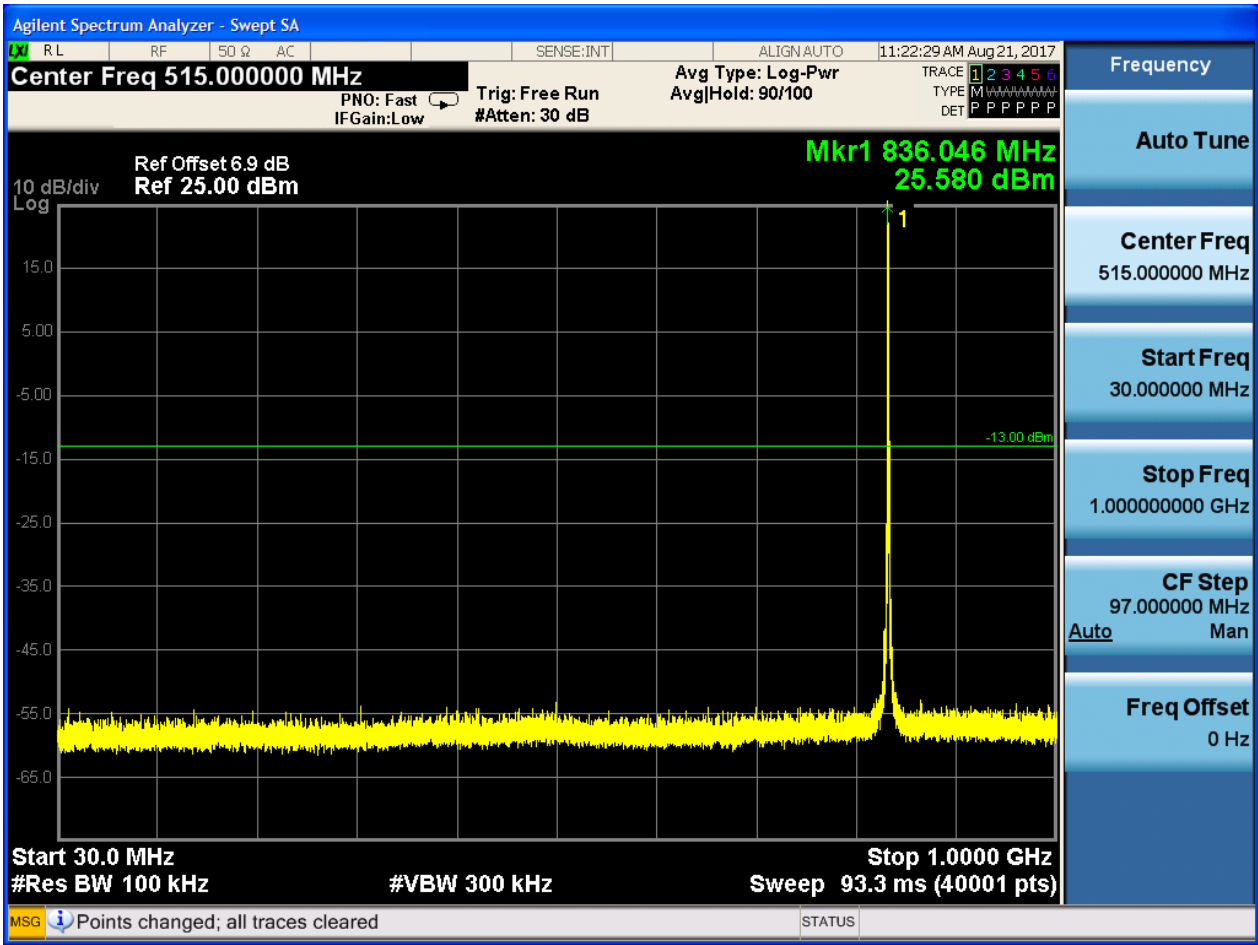


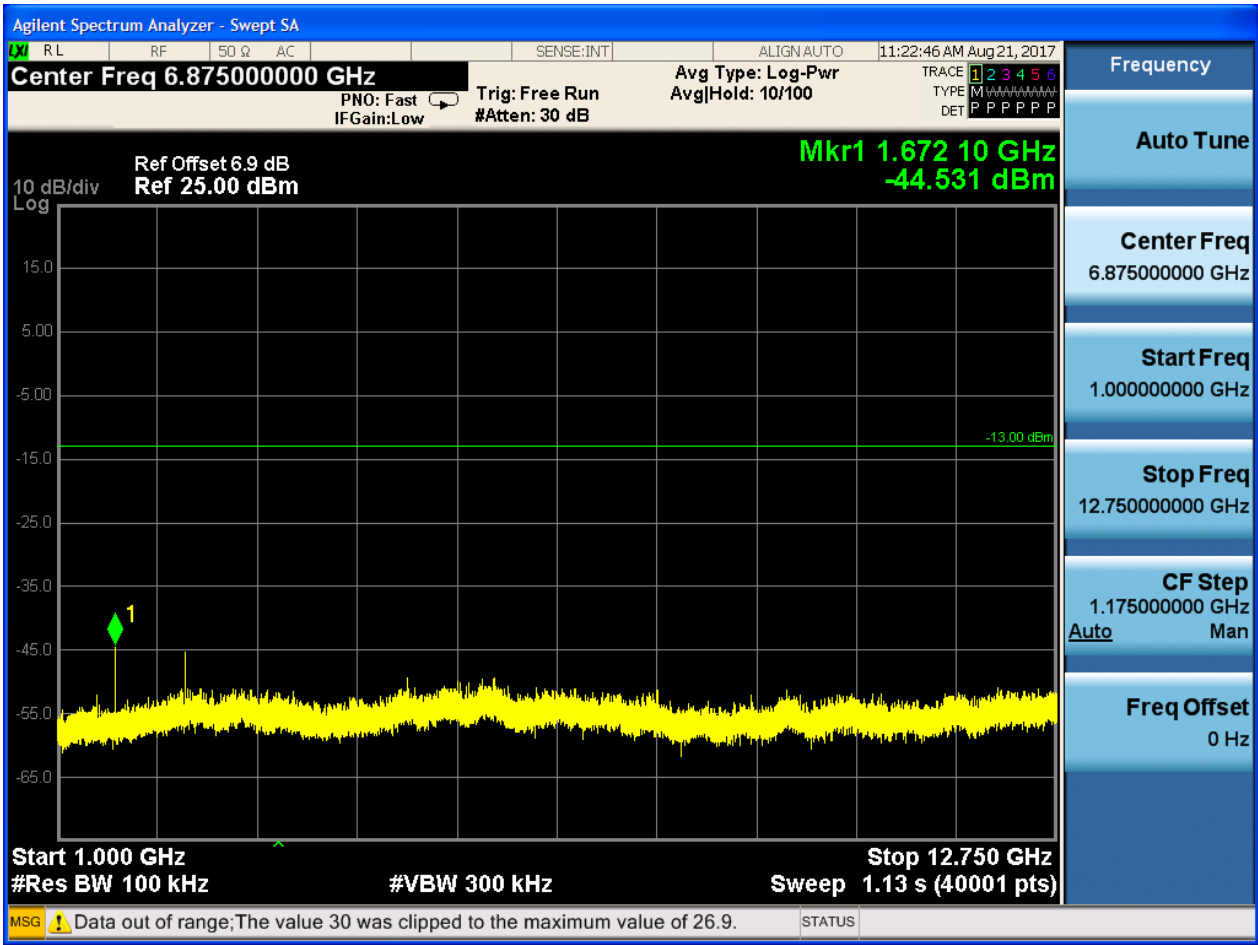
6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0





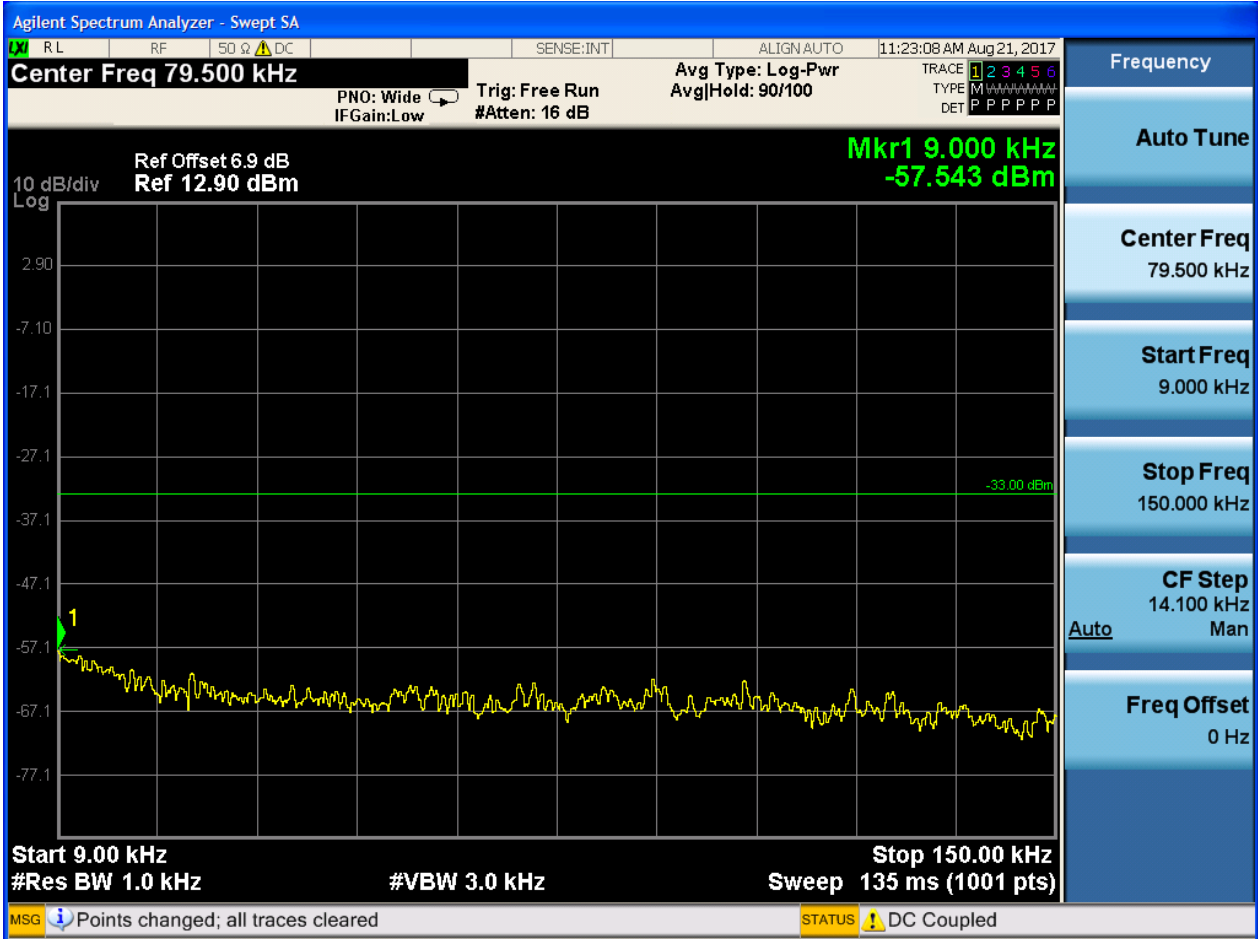


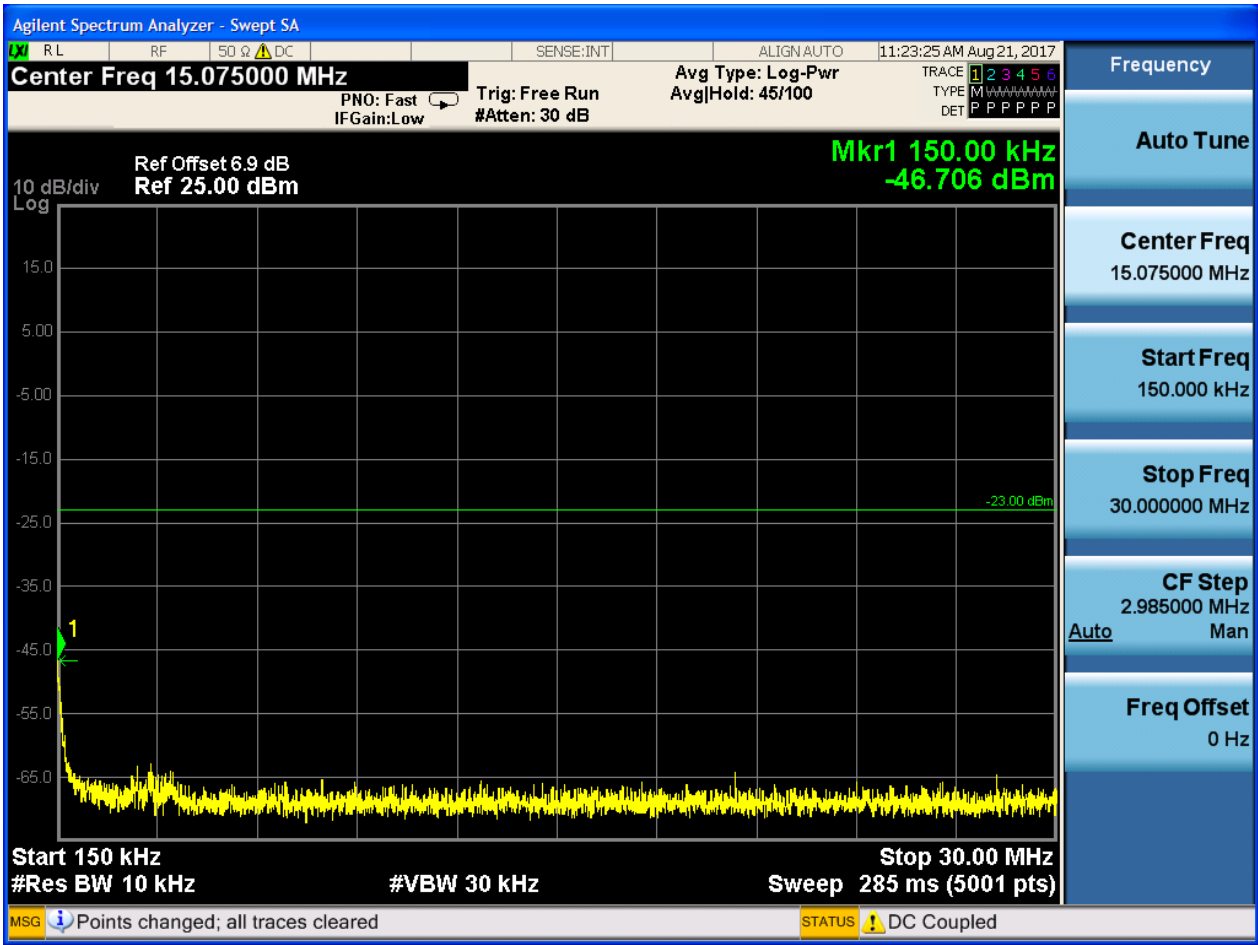


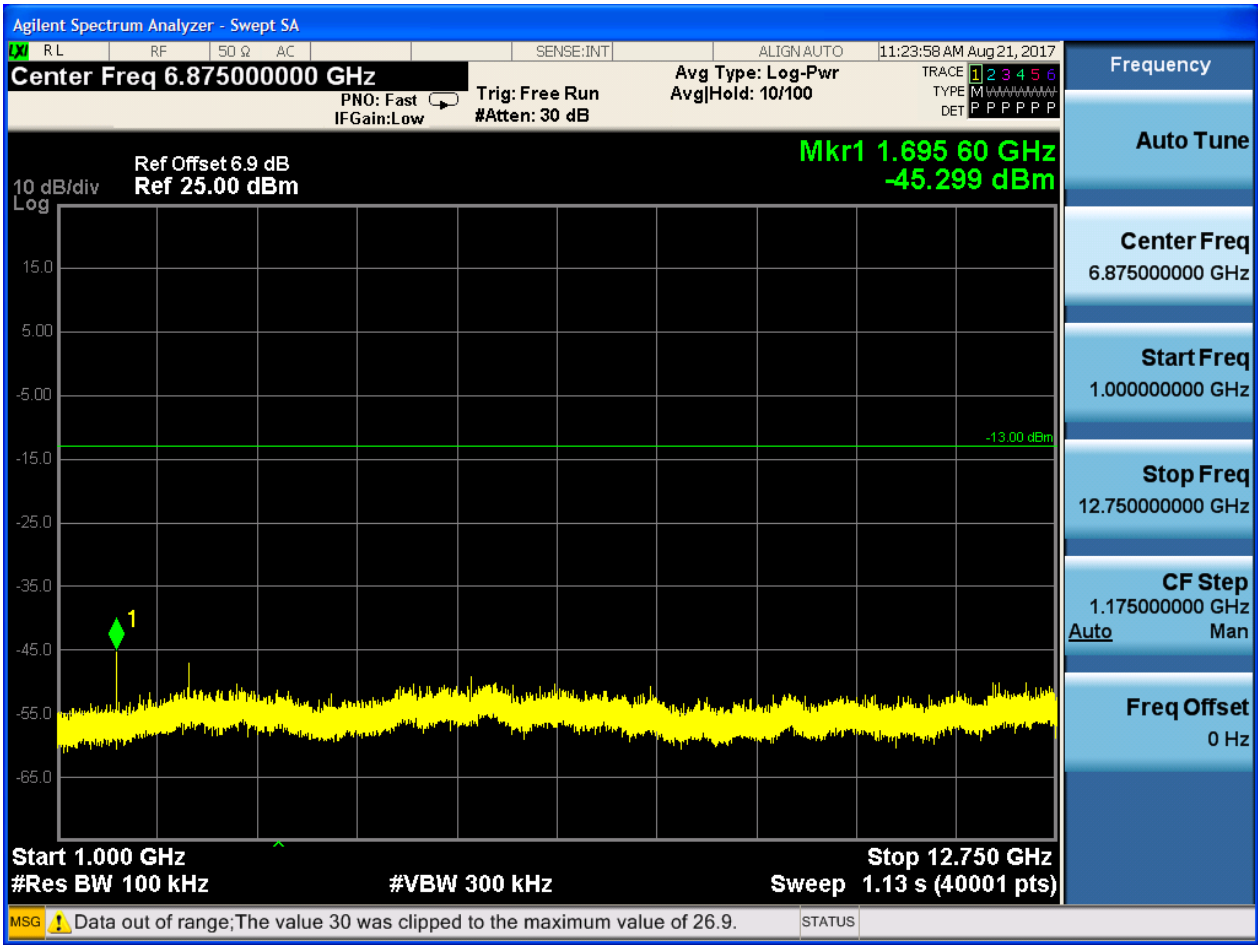


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





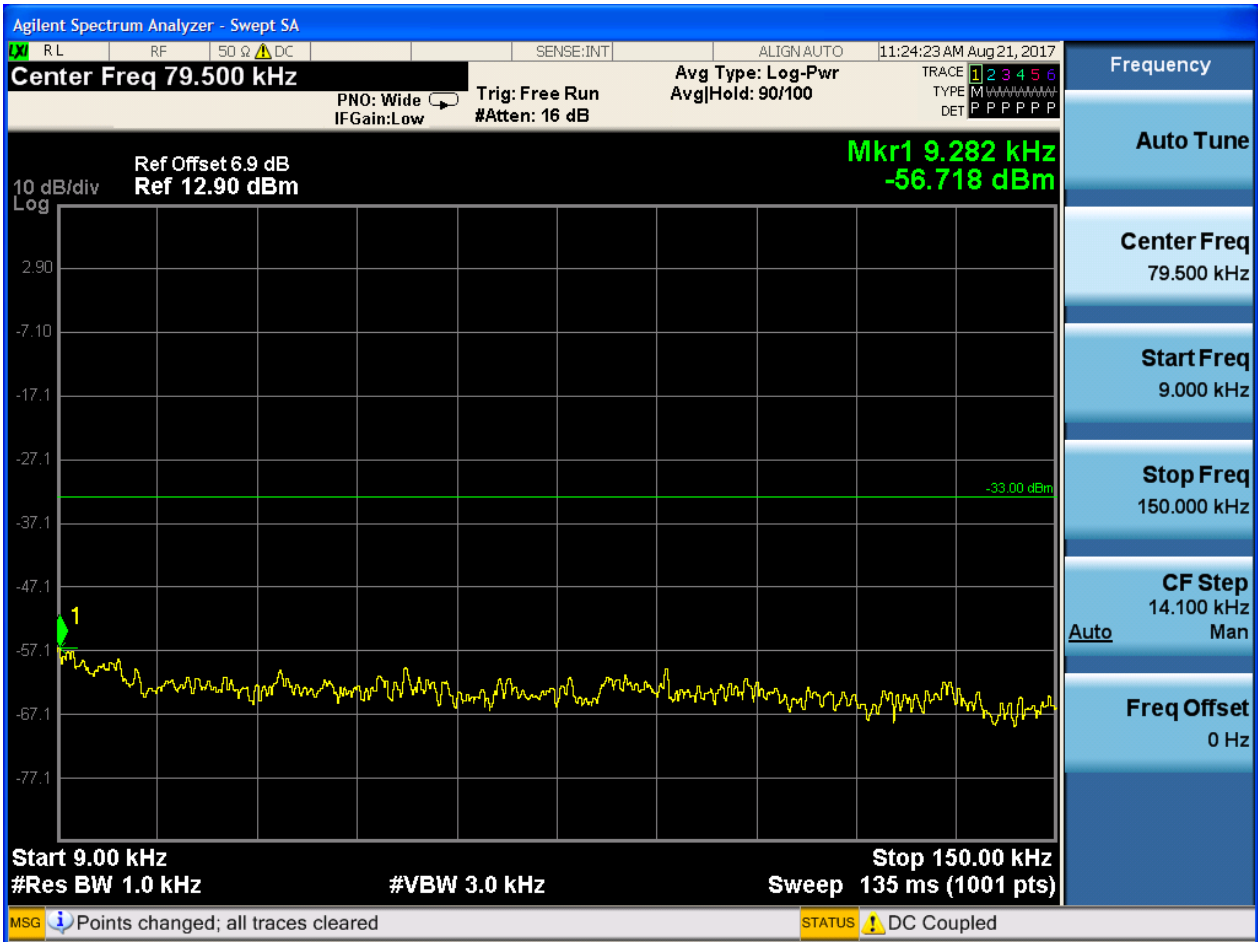


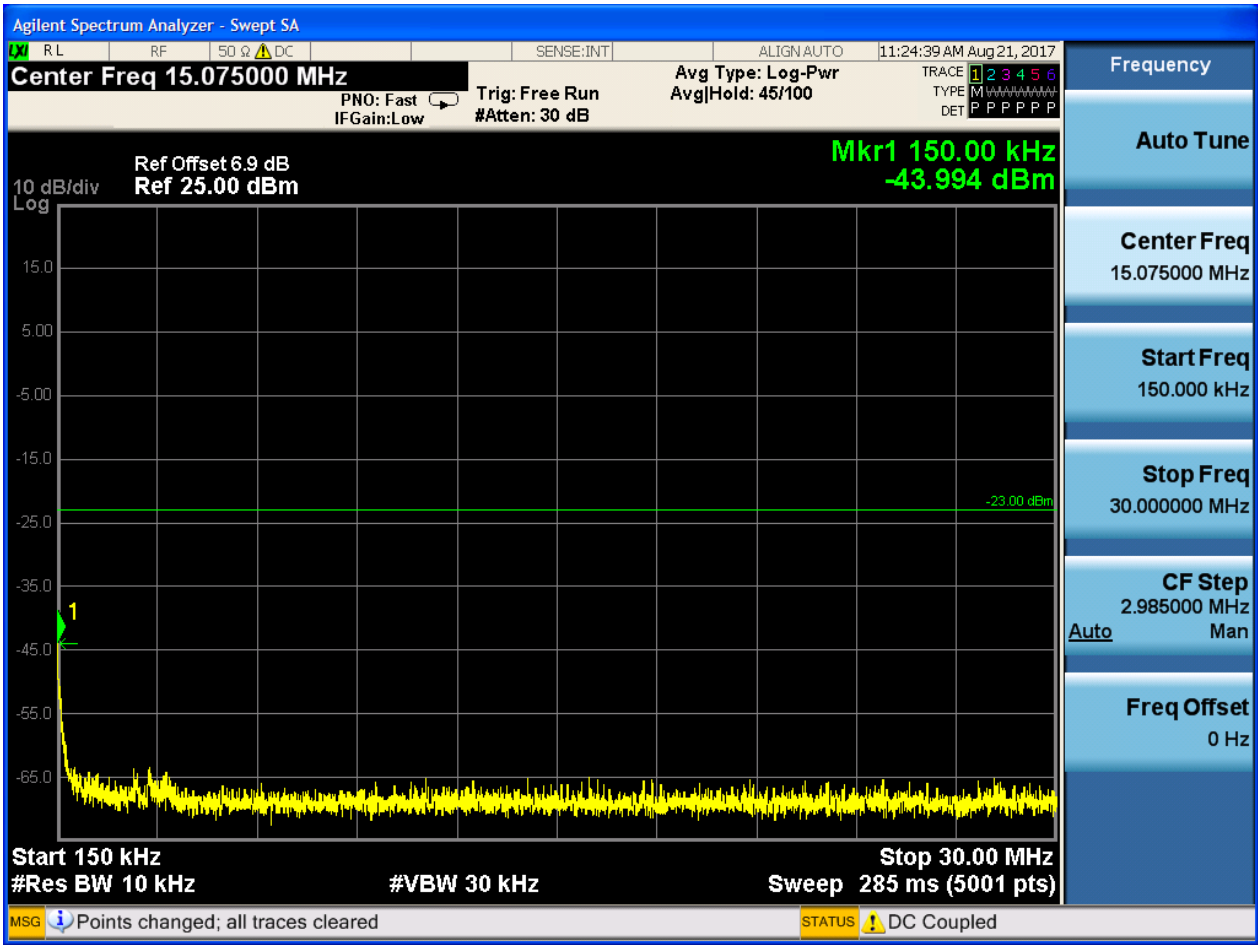


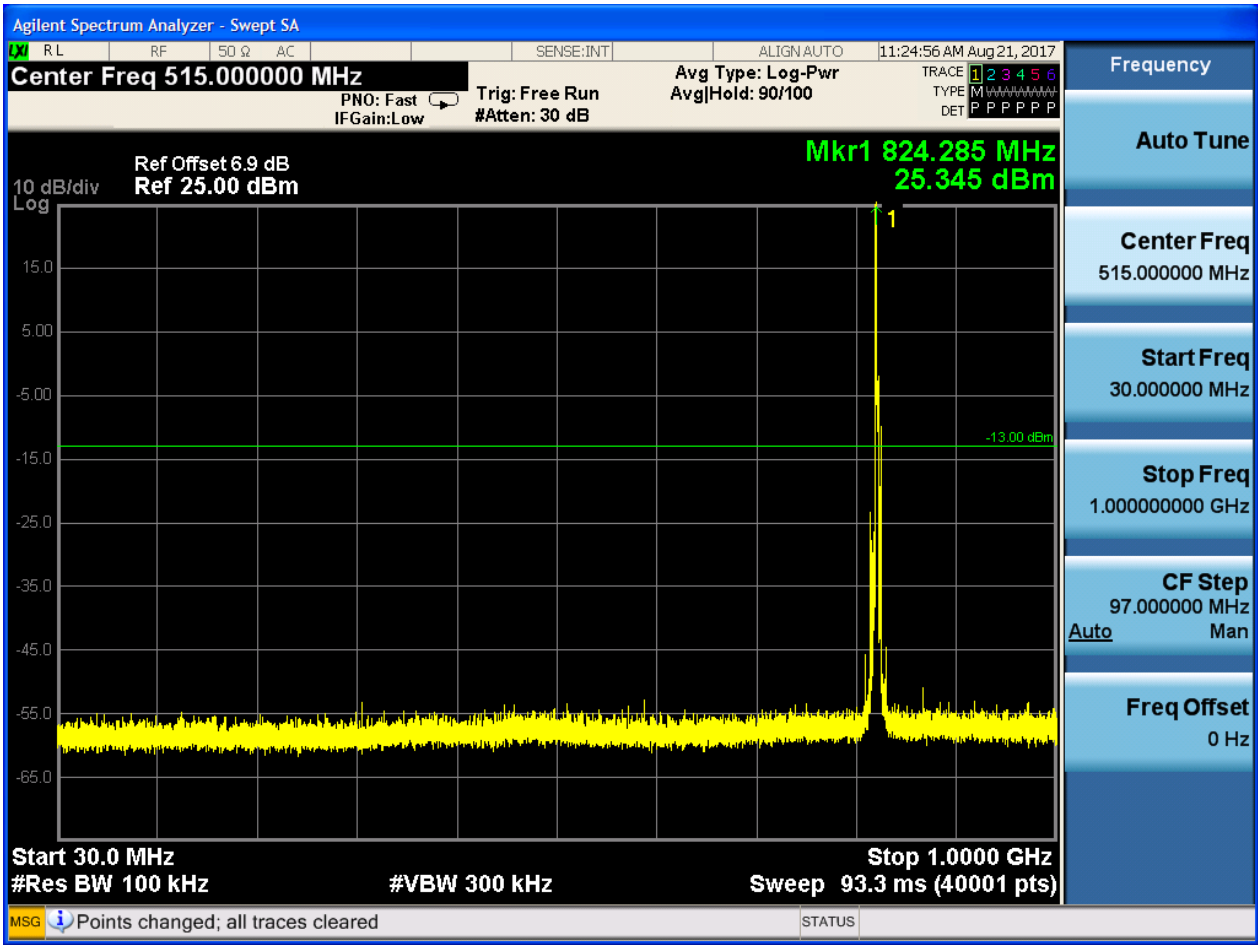
6.1.1.2.2 Test Bandwidth = 3

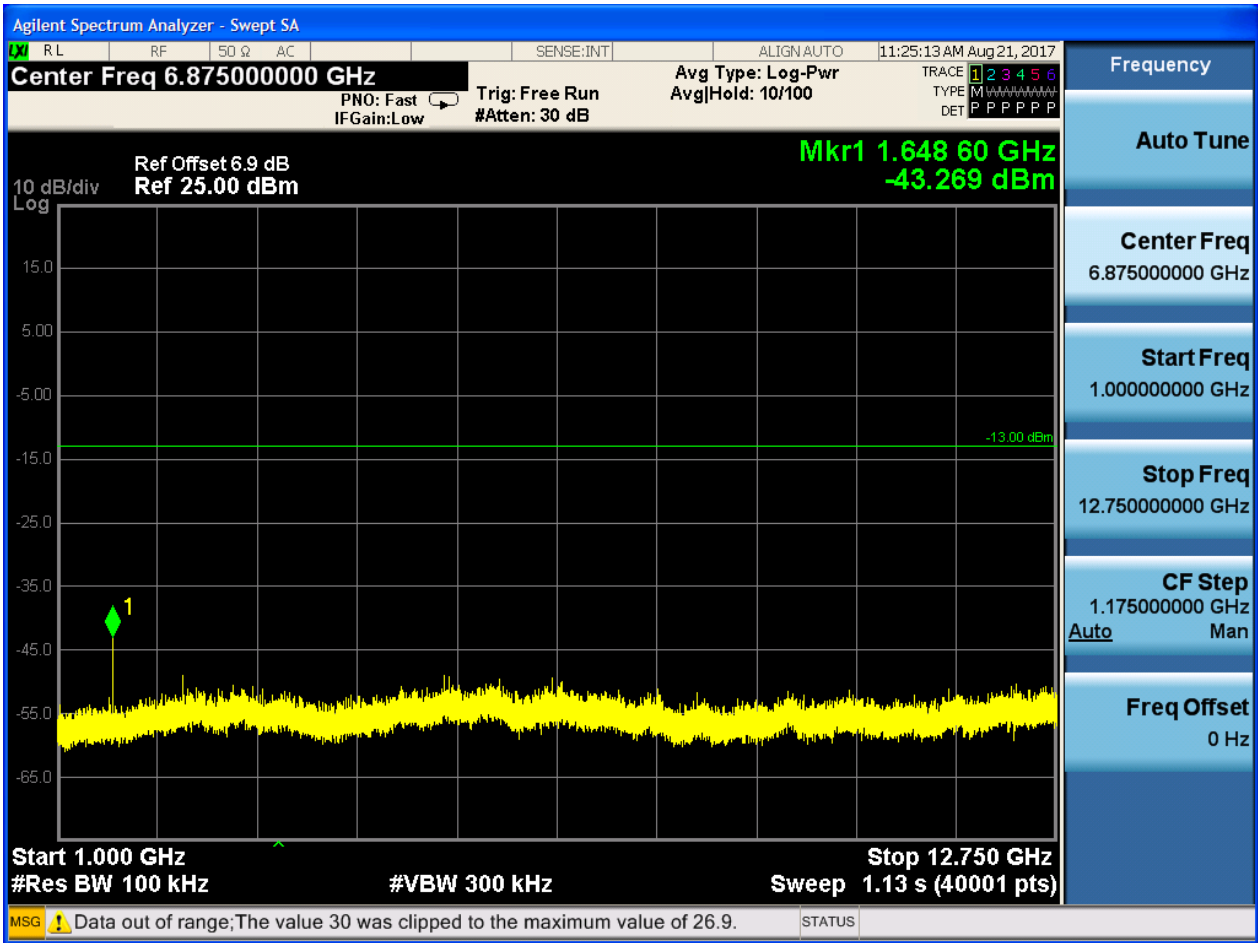
6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



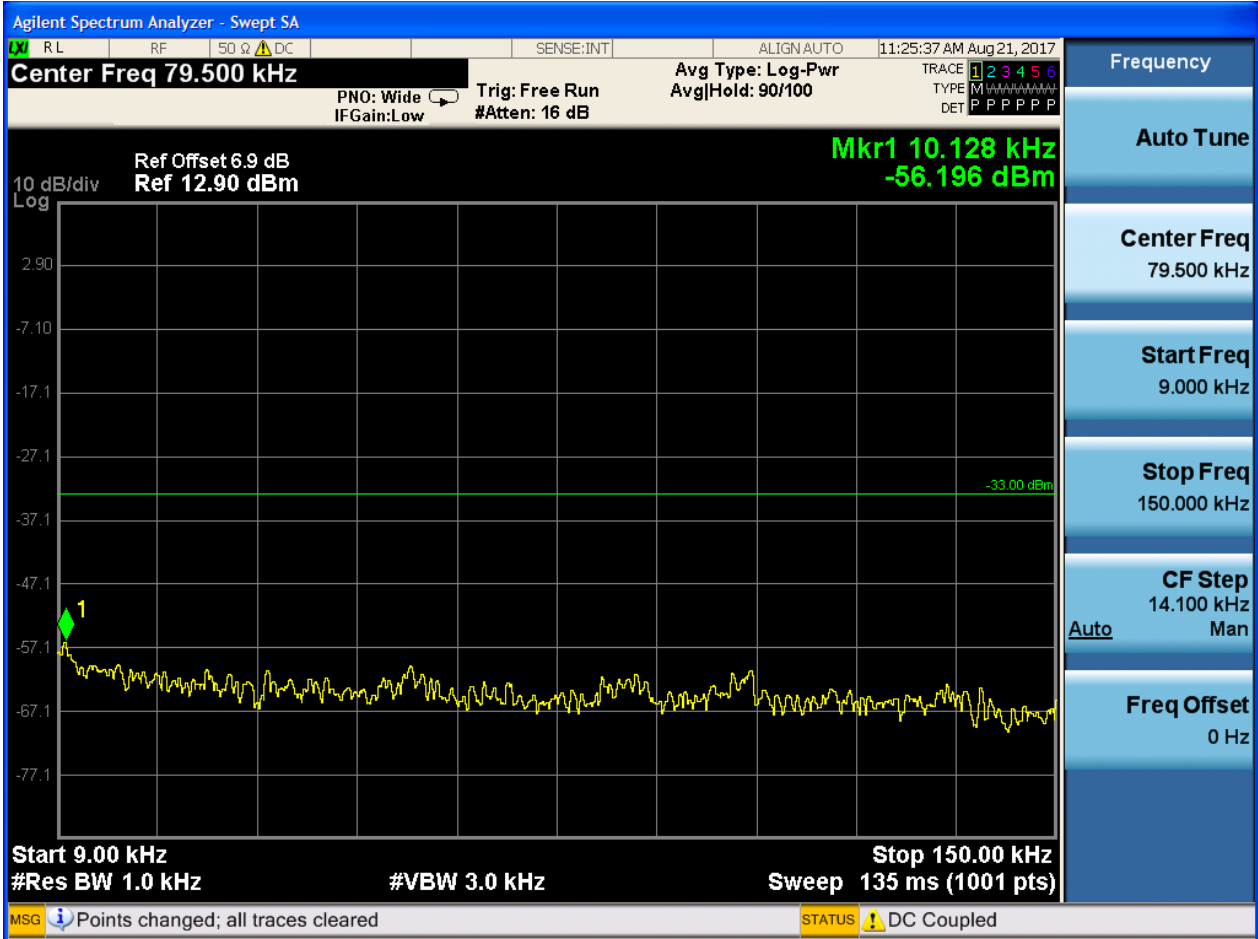


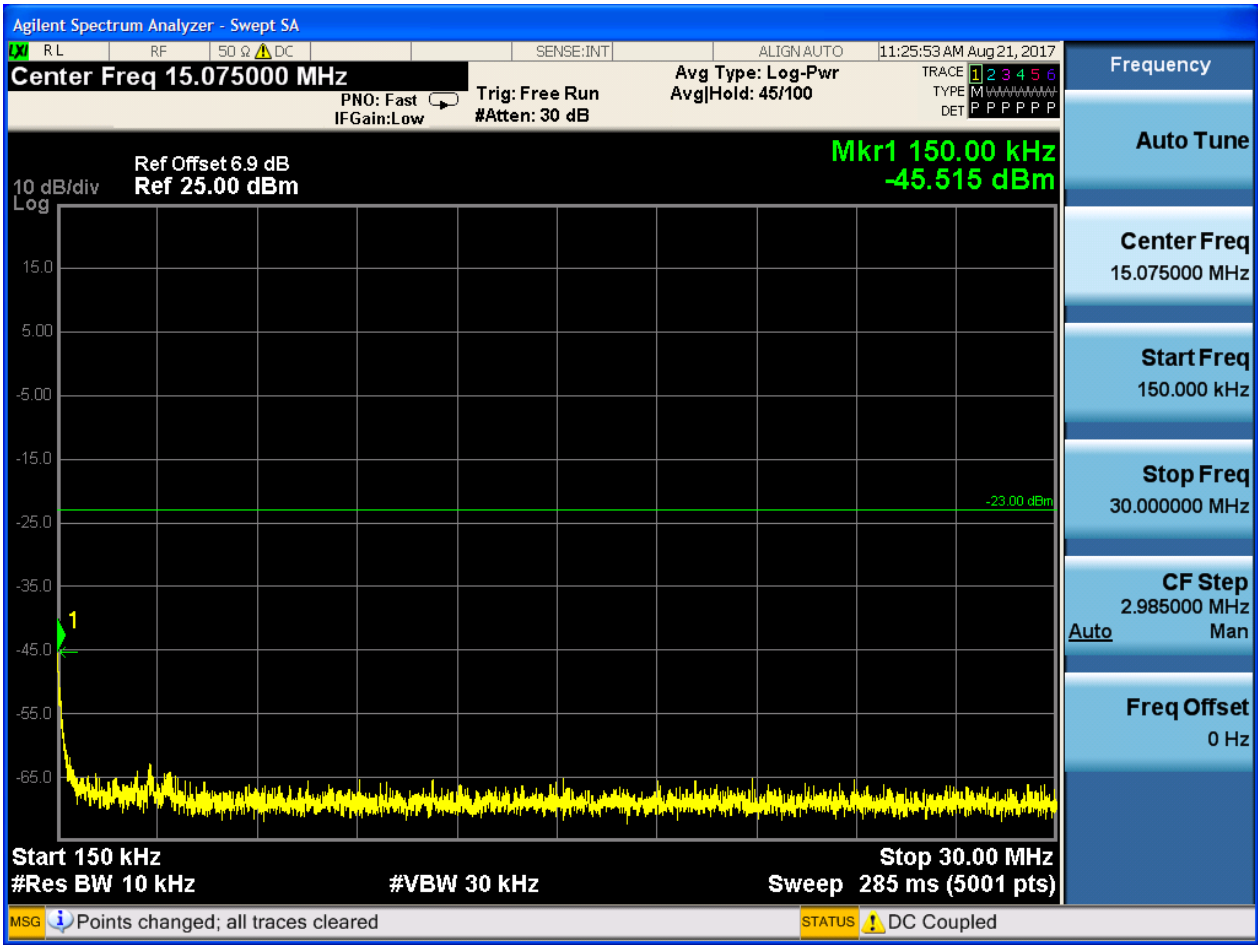


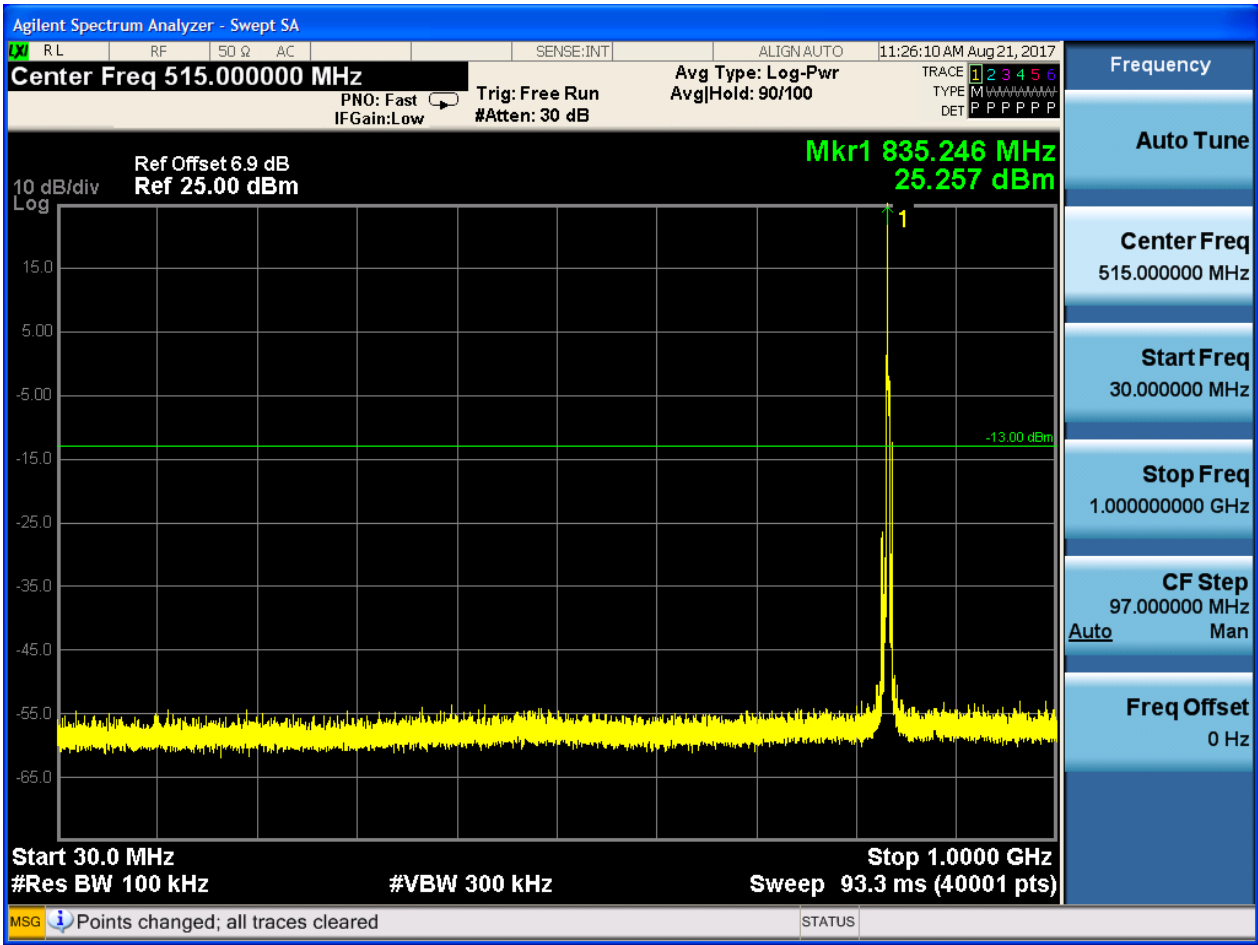


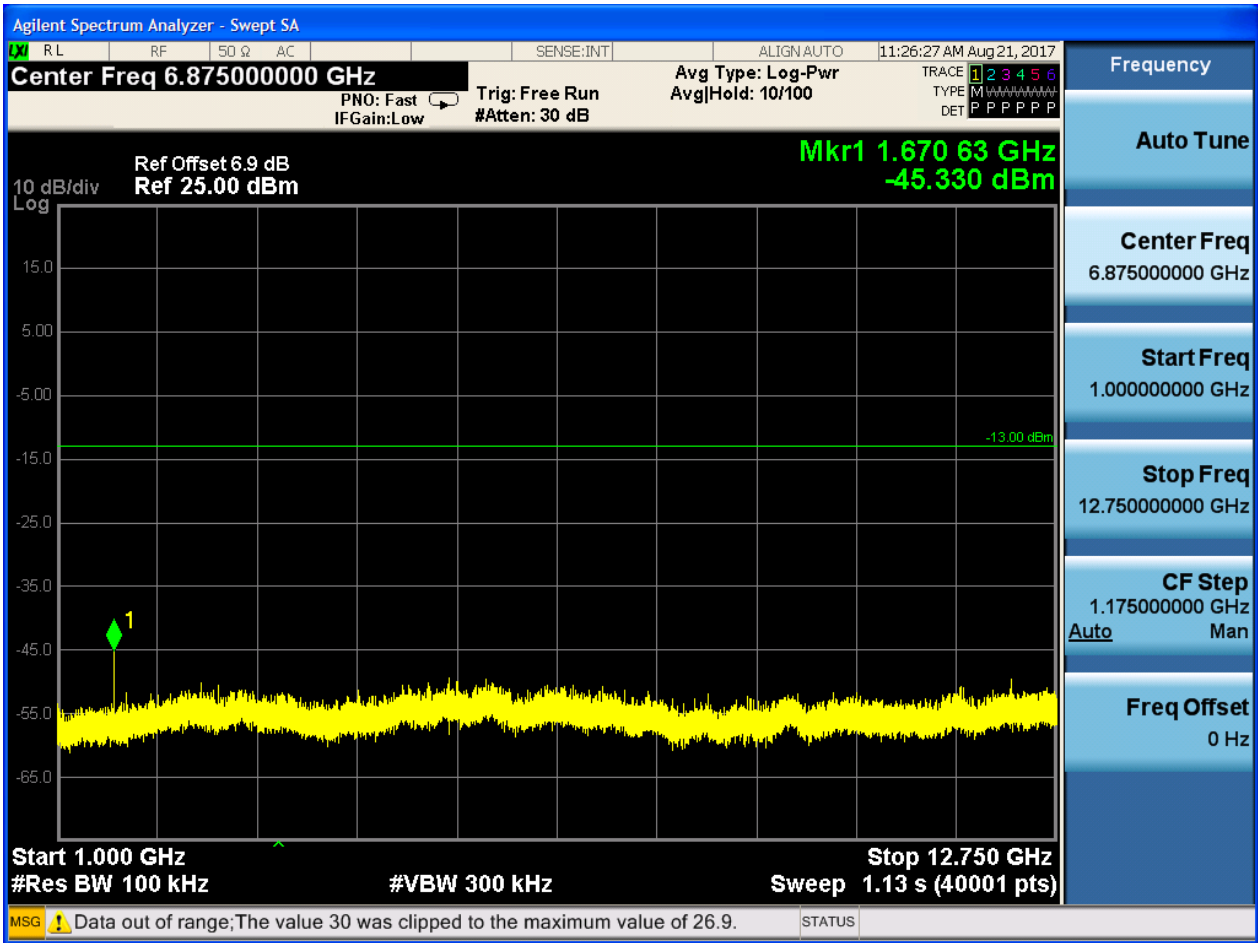
6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0





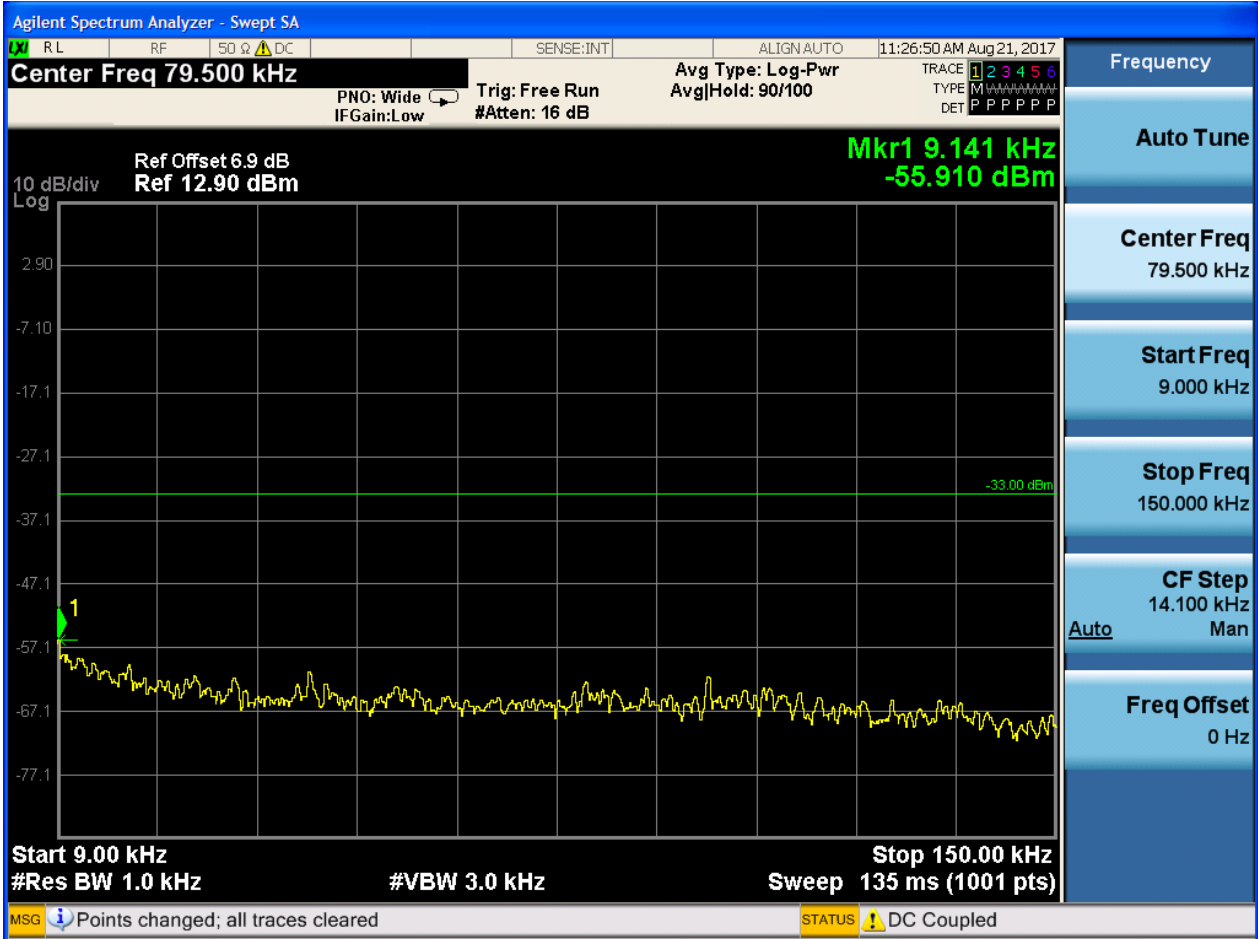


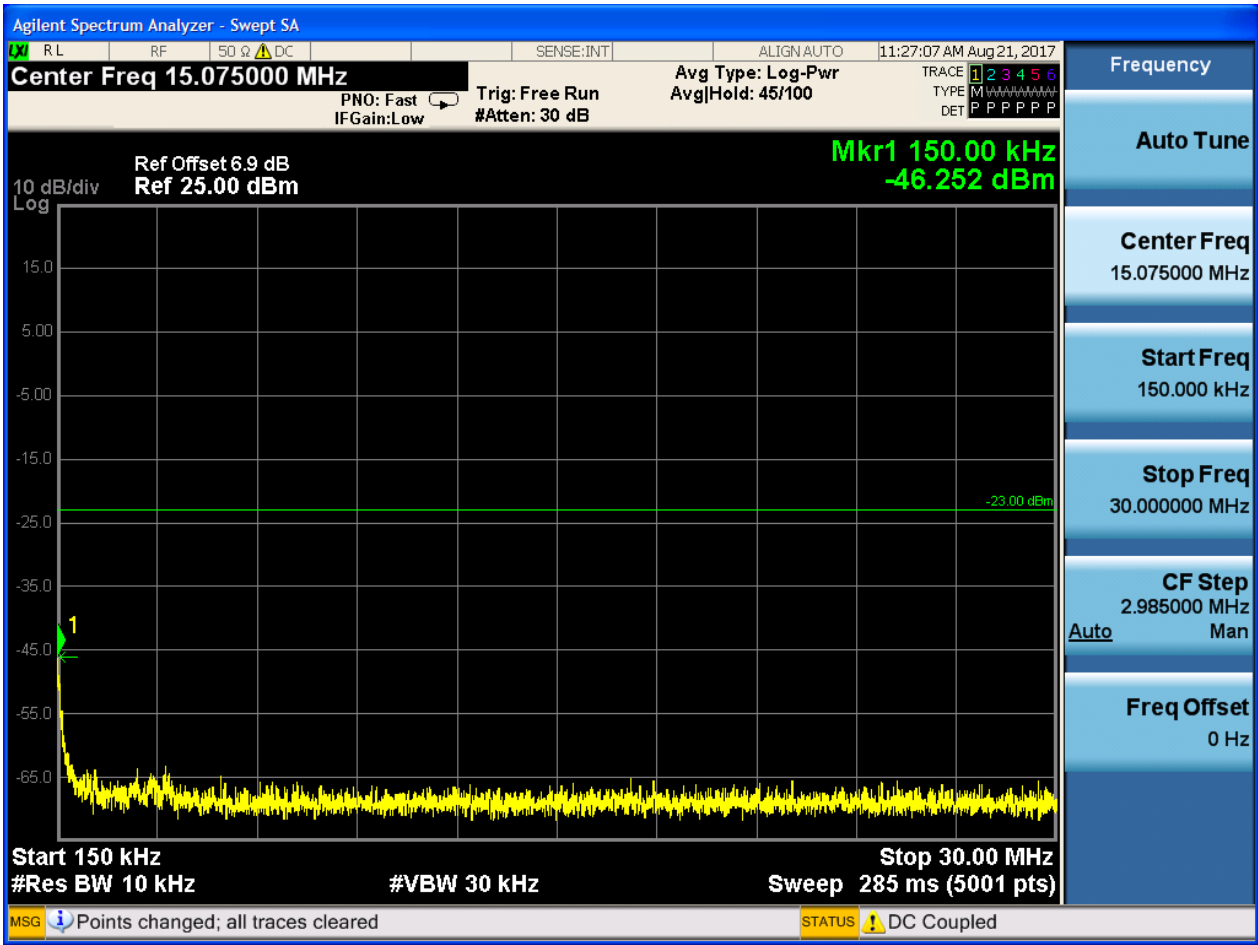


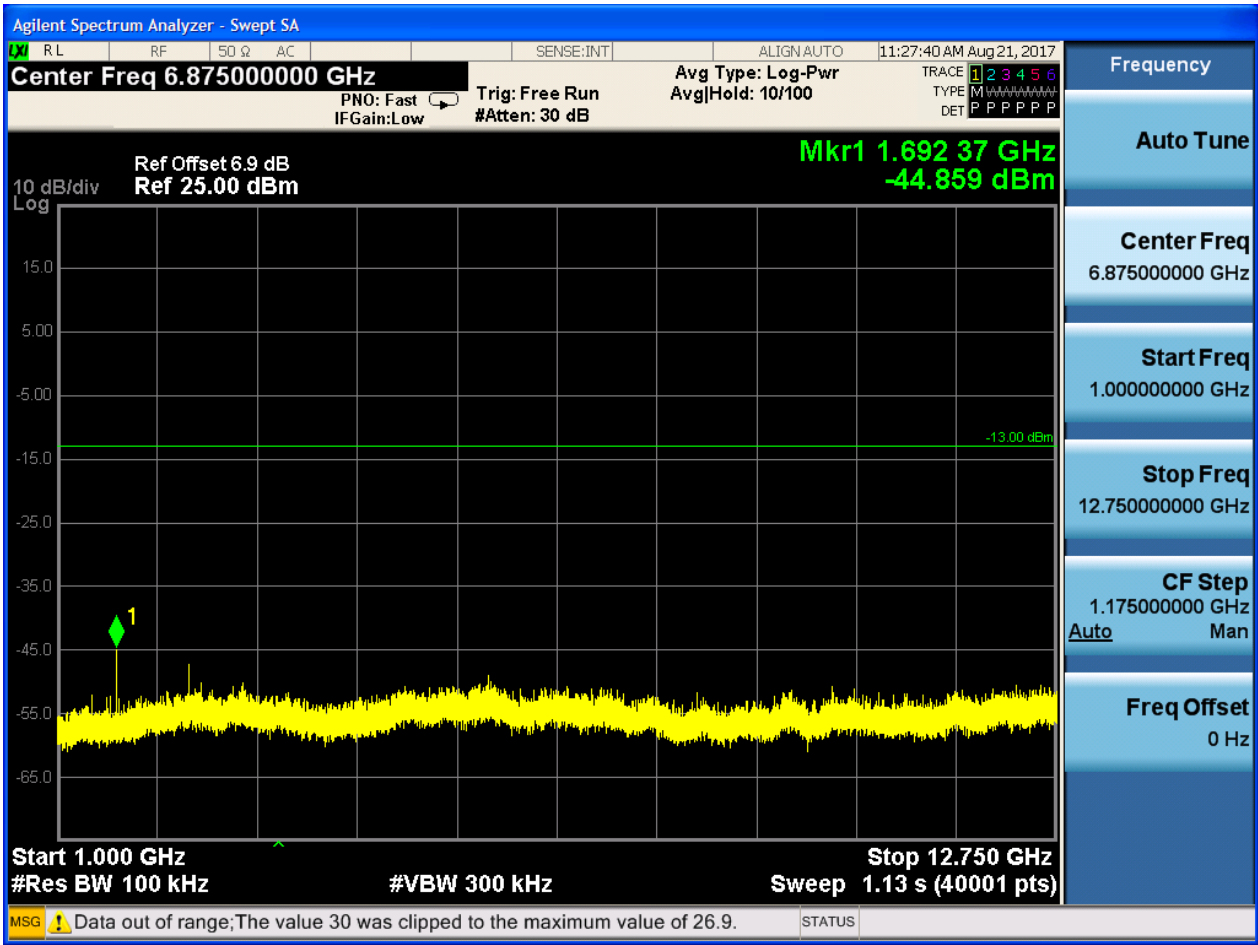


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





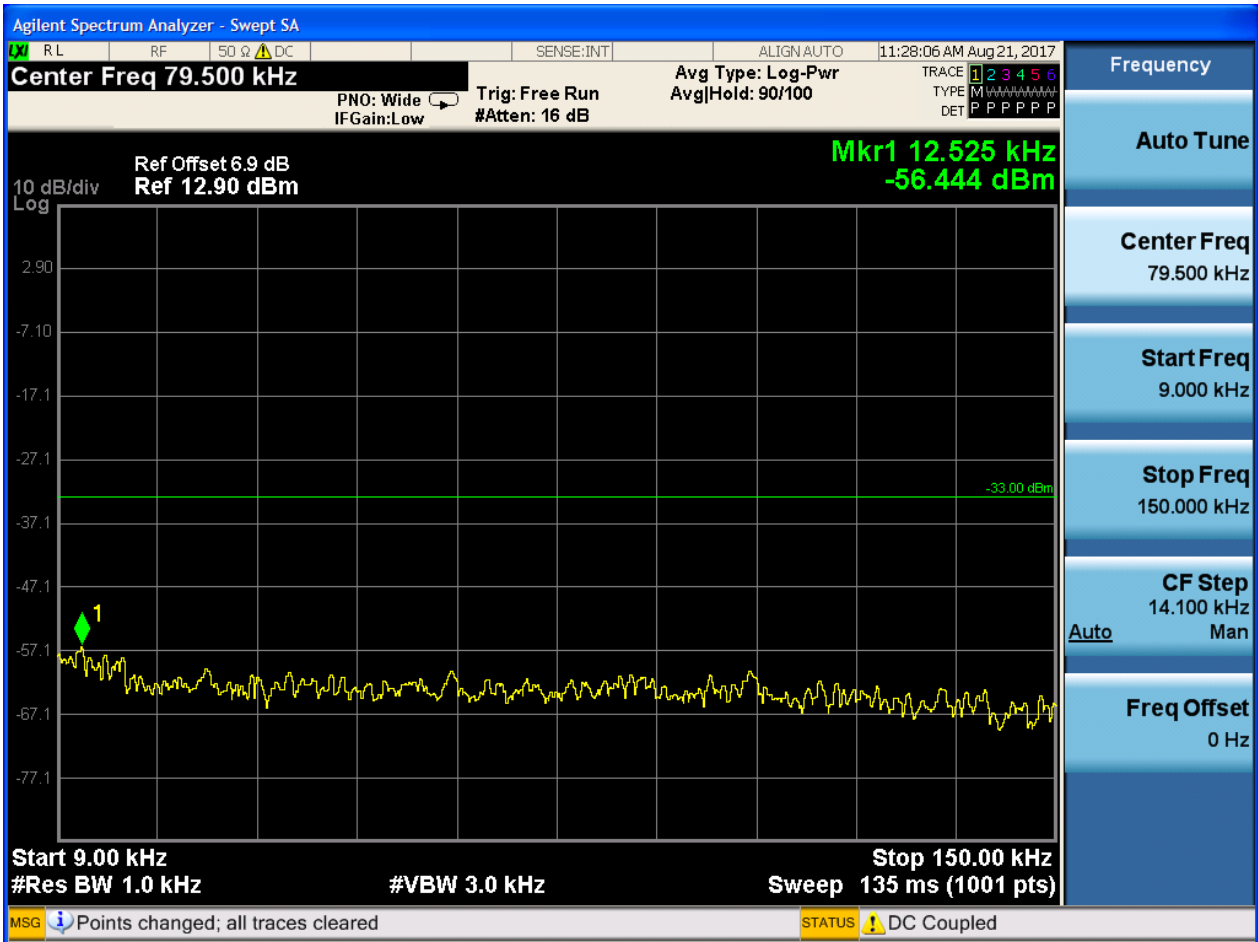


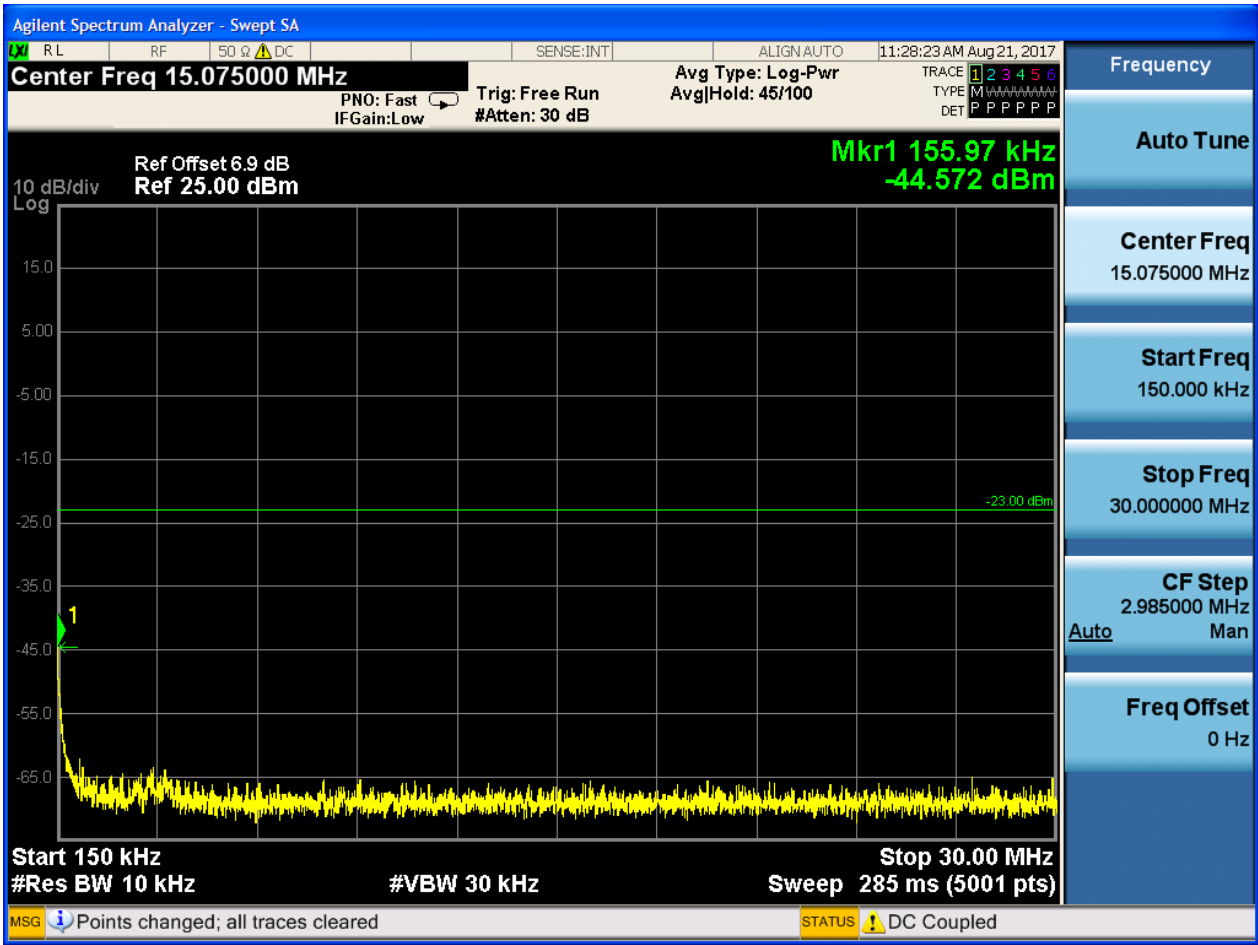


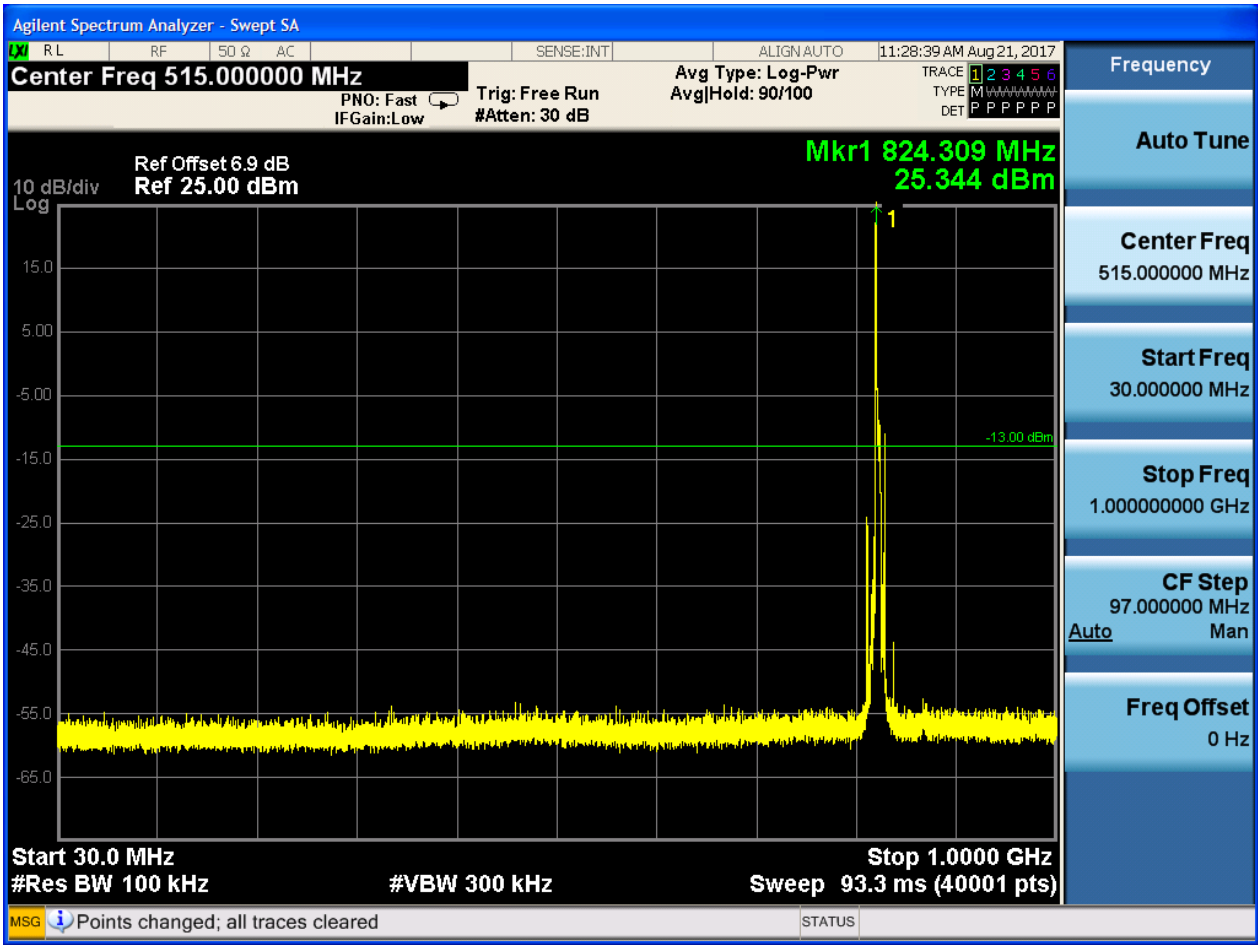
6.1.1.2.3 Test Bandwidth = 5

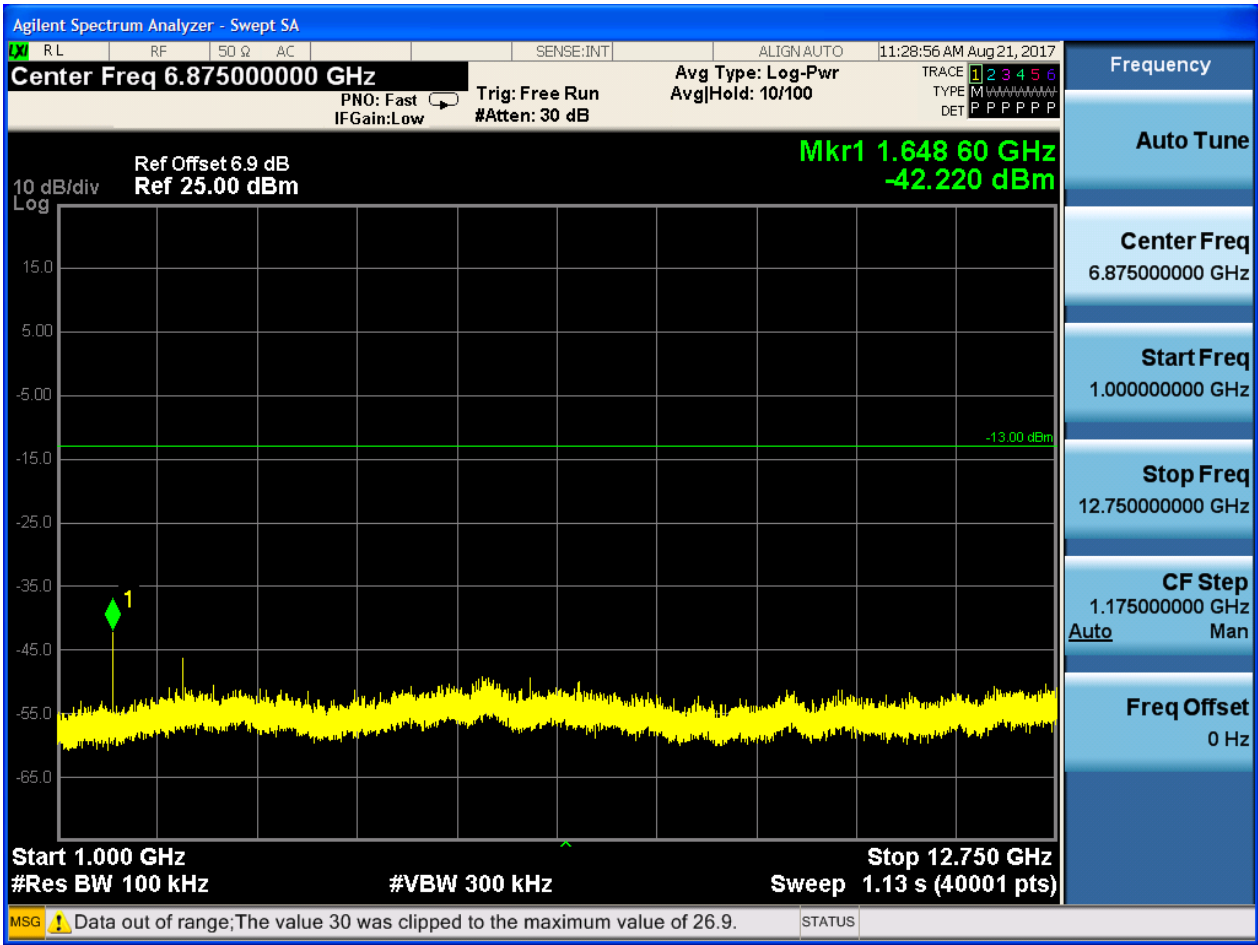
6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0





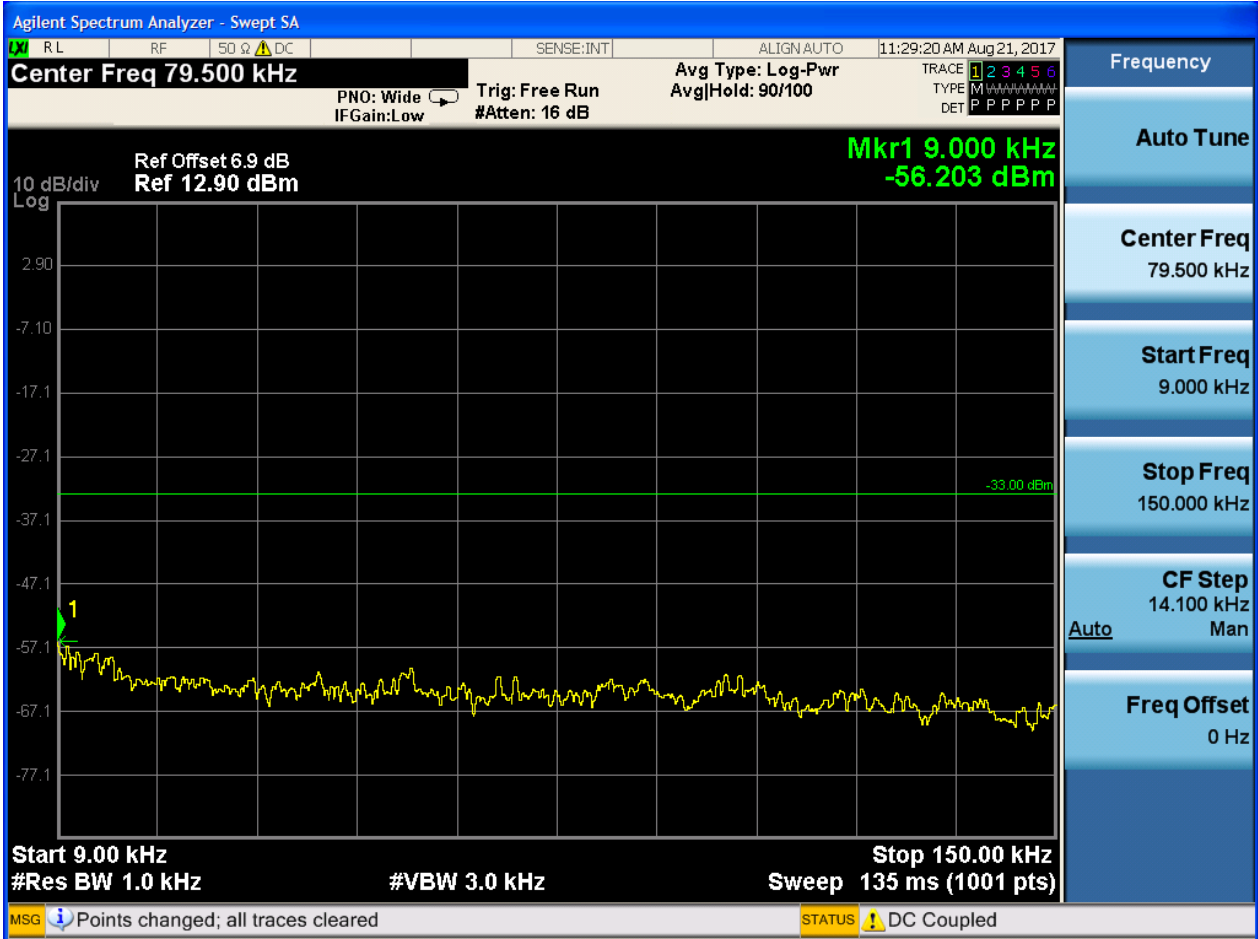


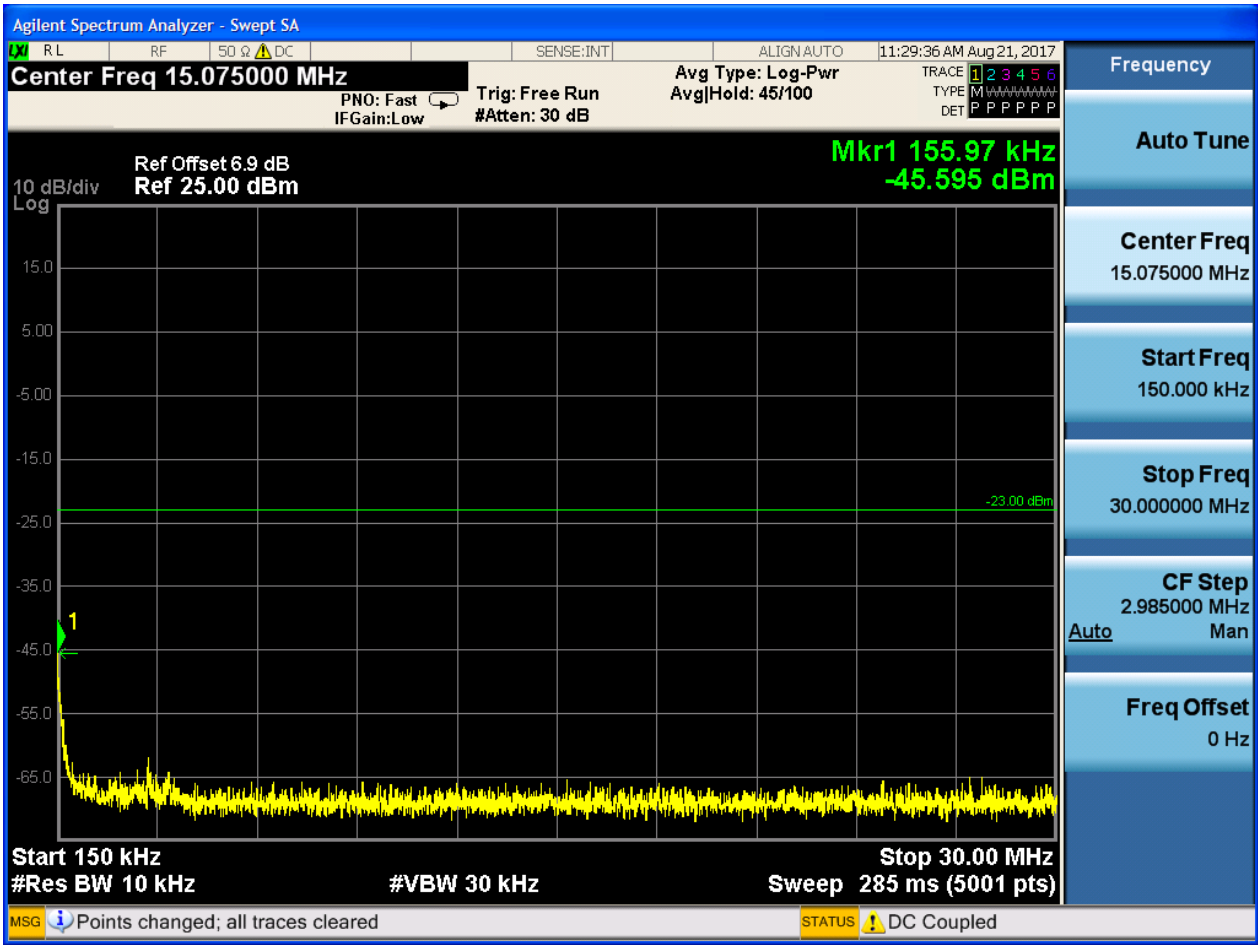


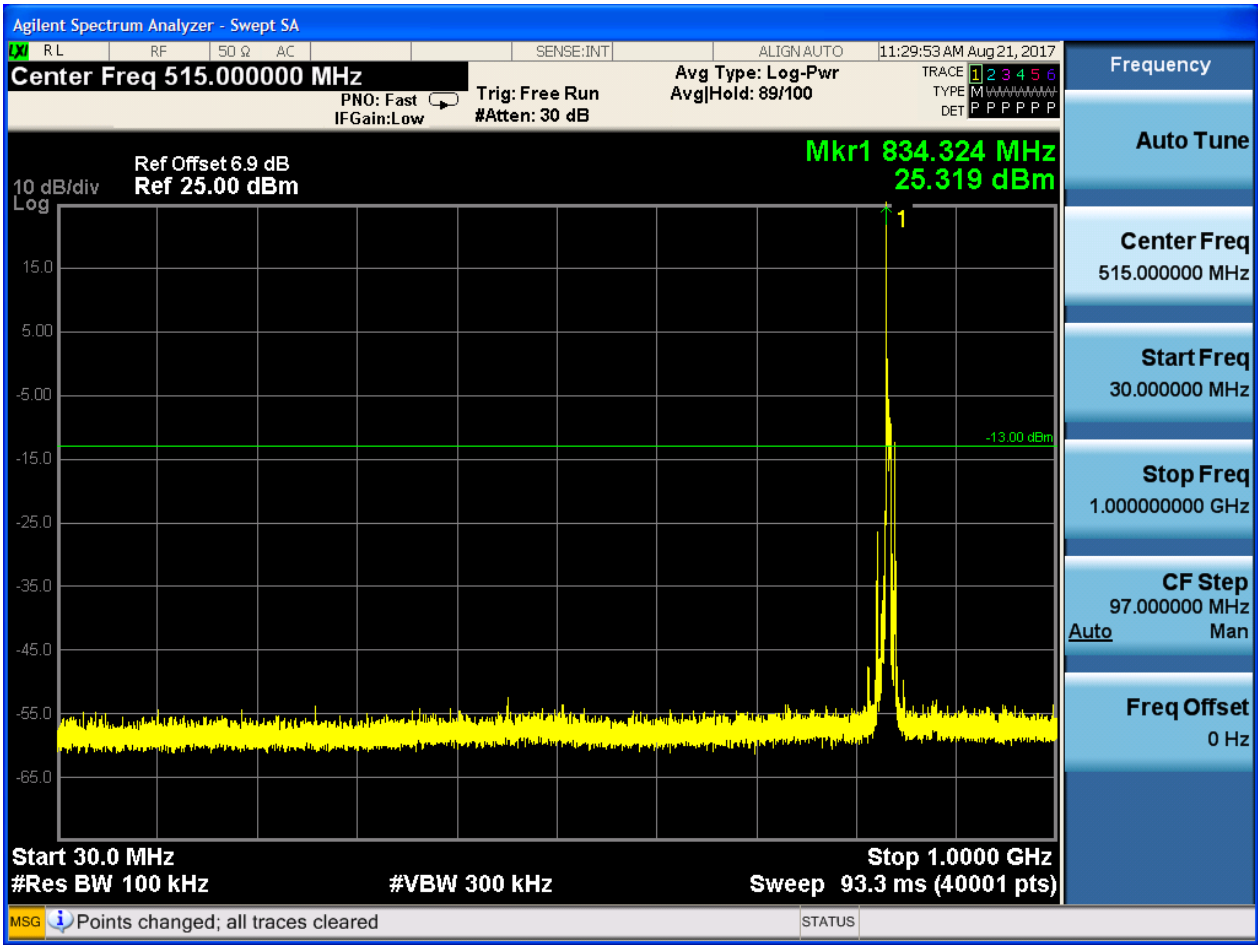


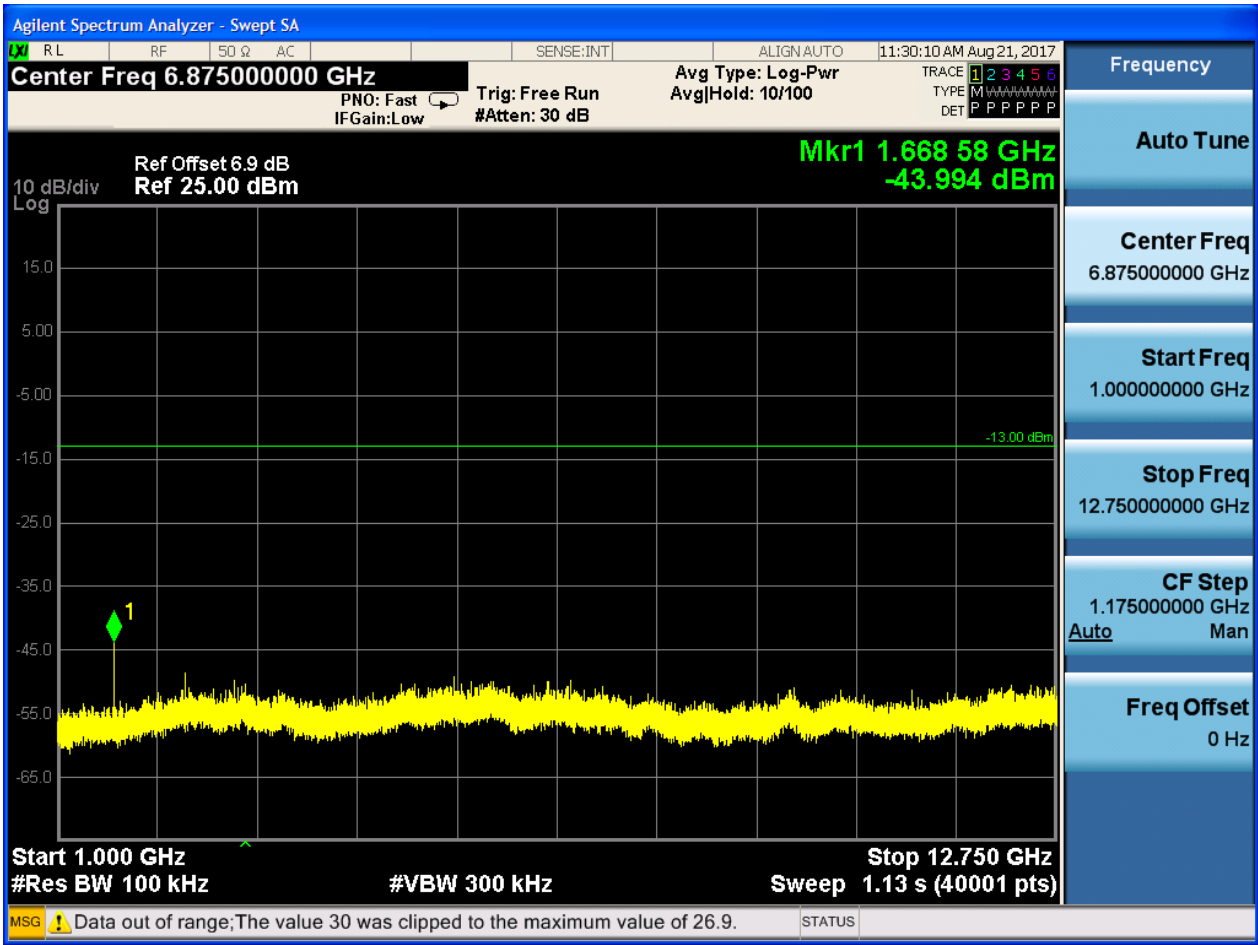
6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0





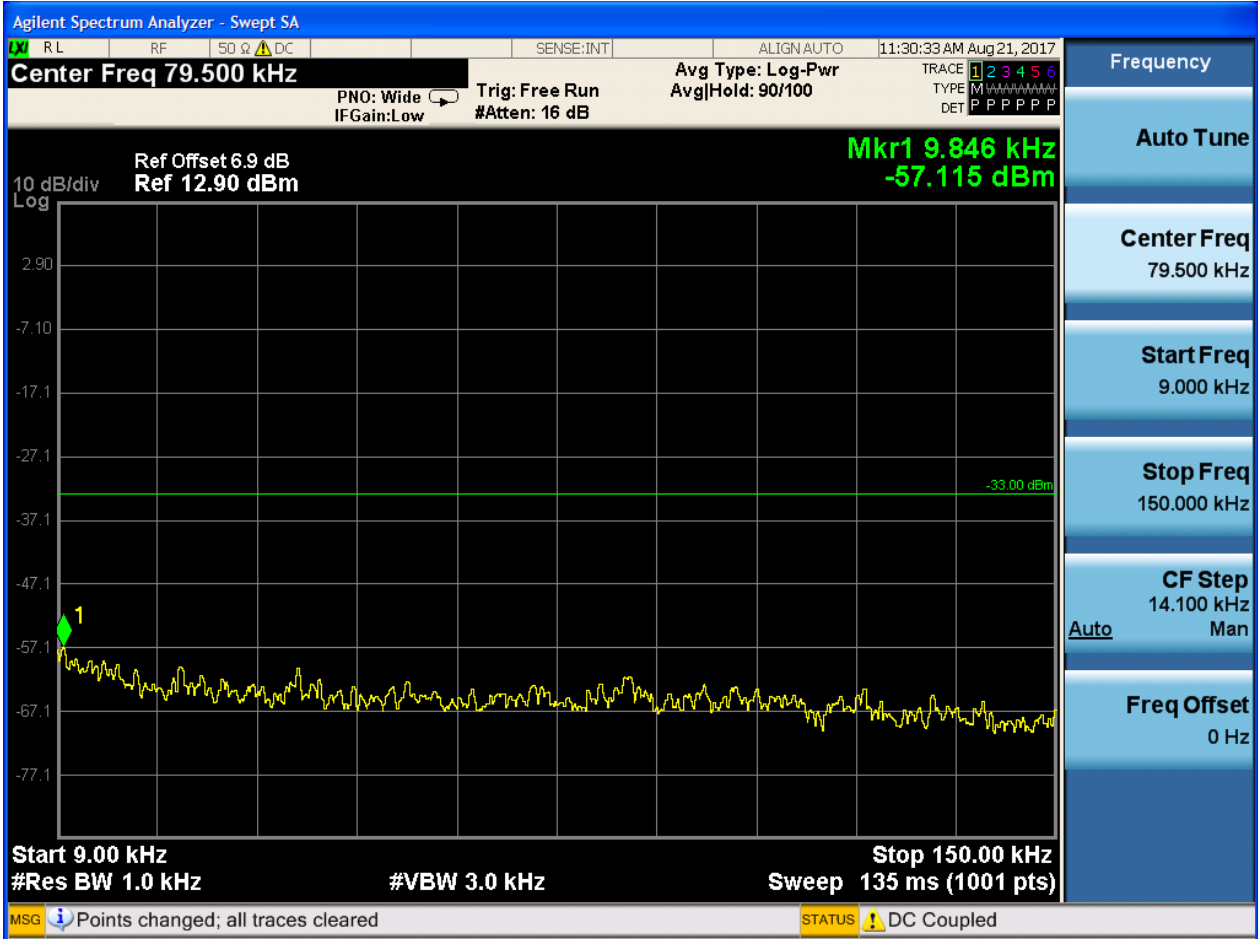


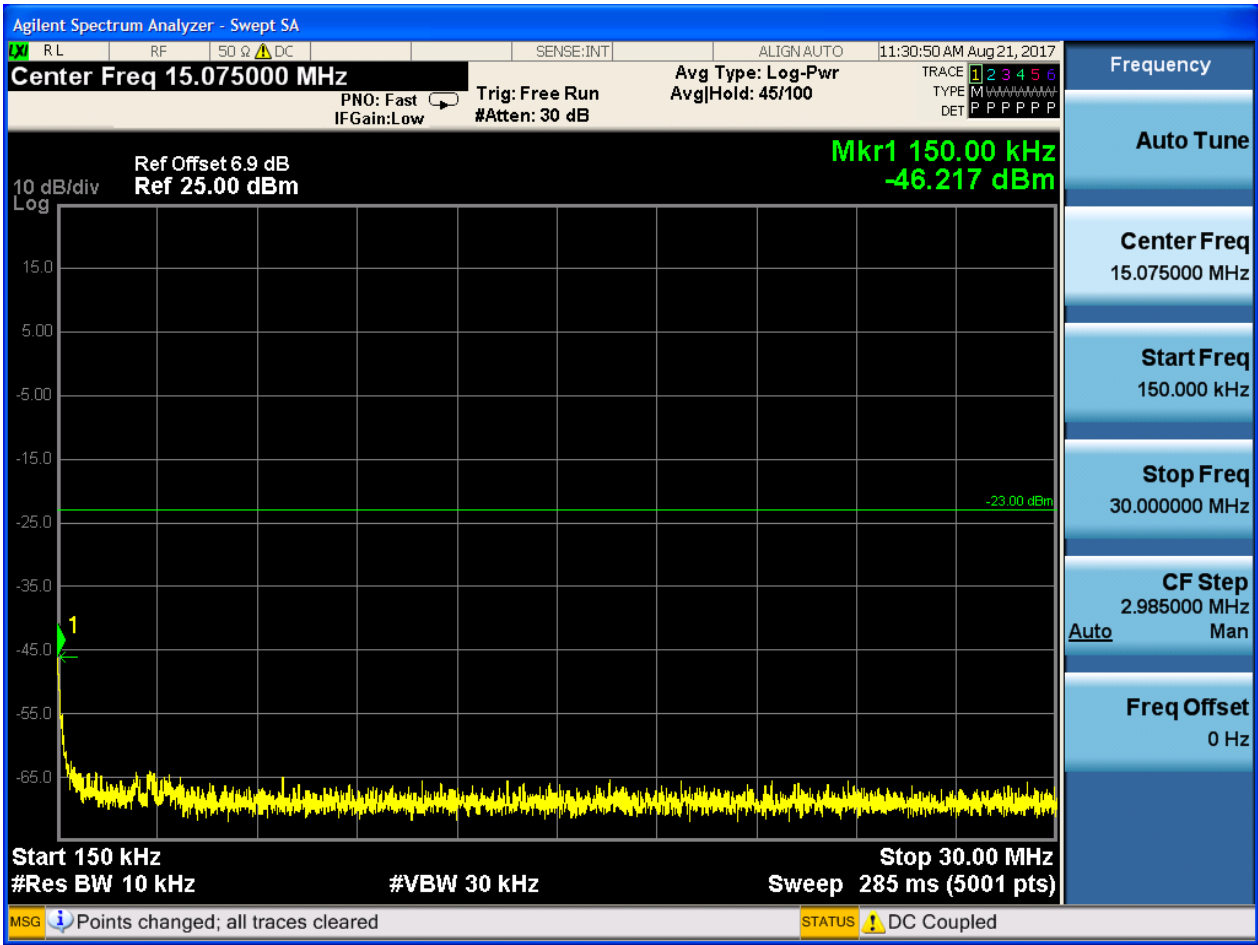


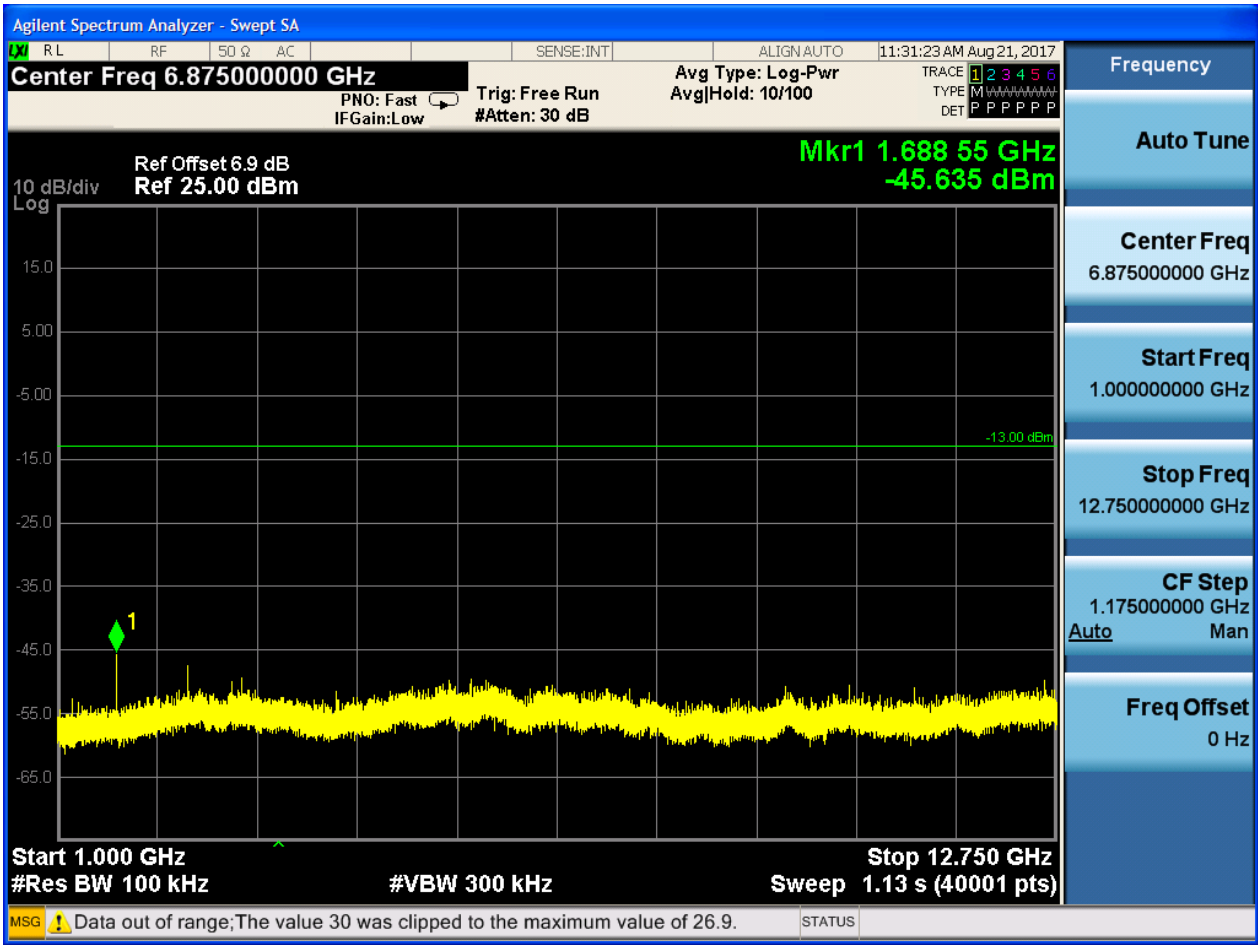


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





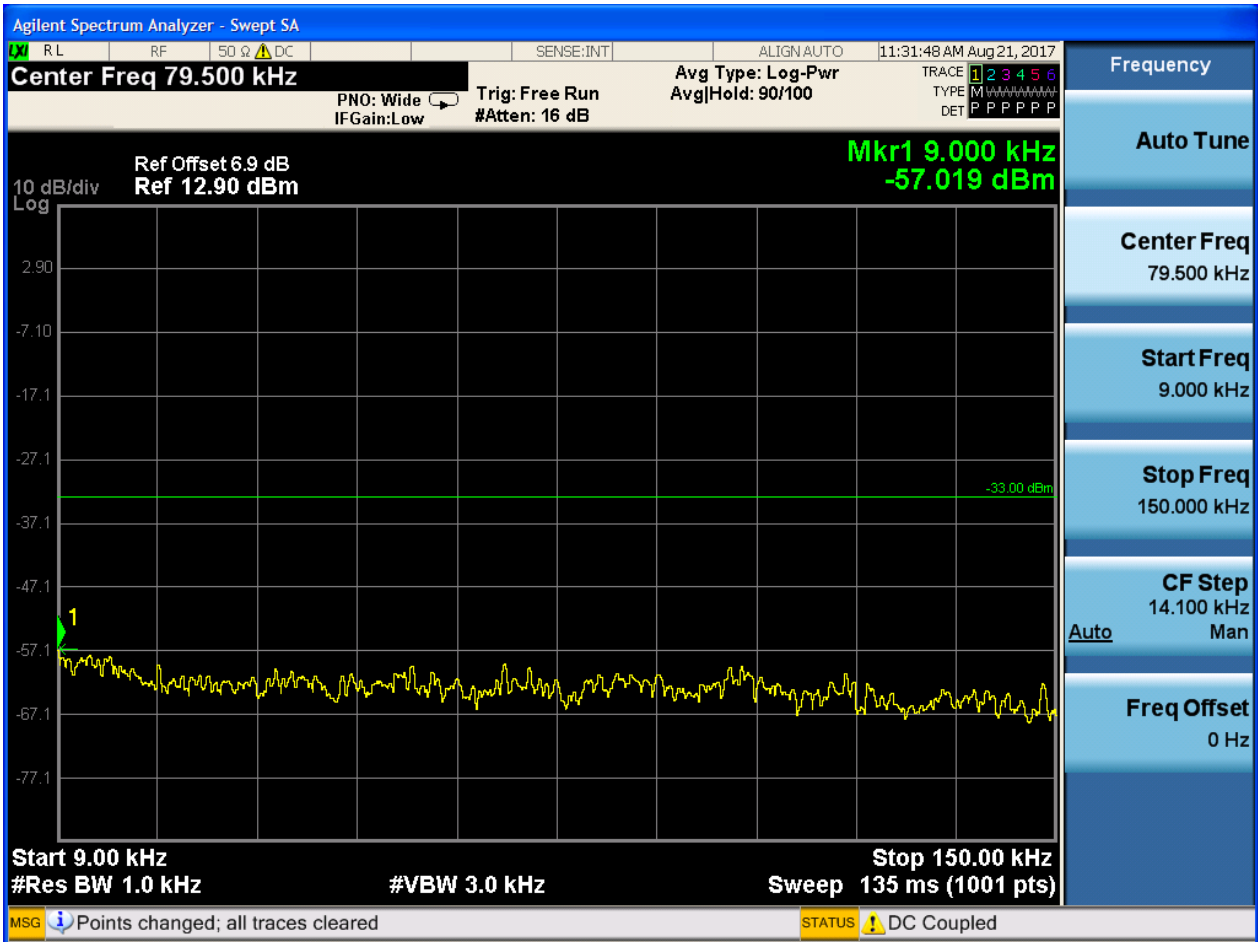


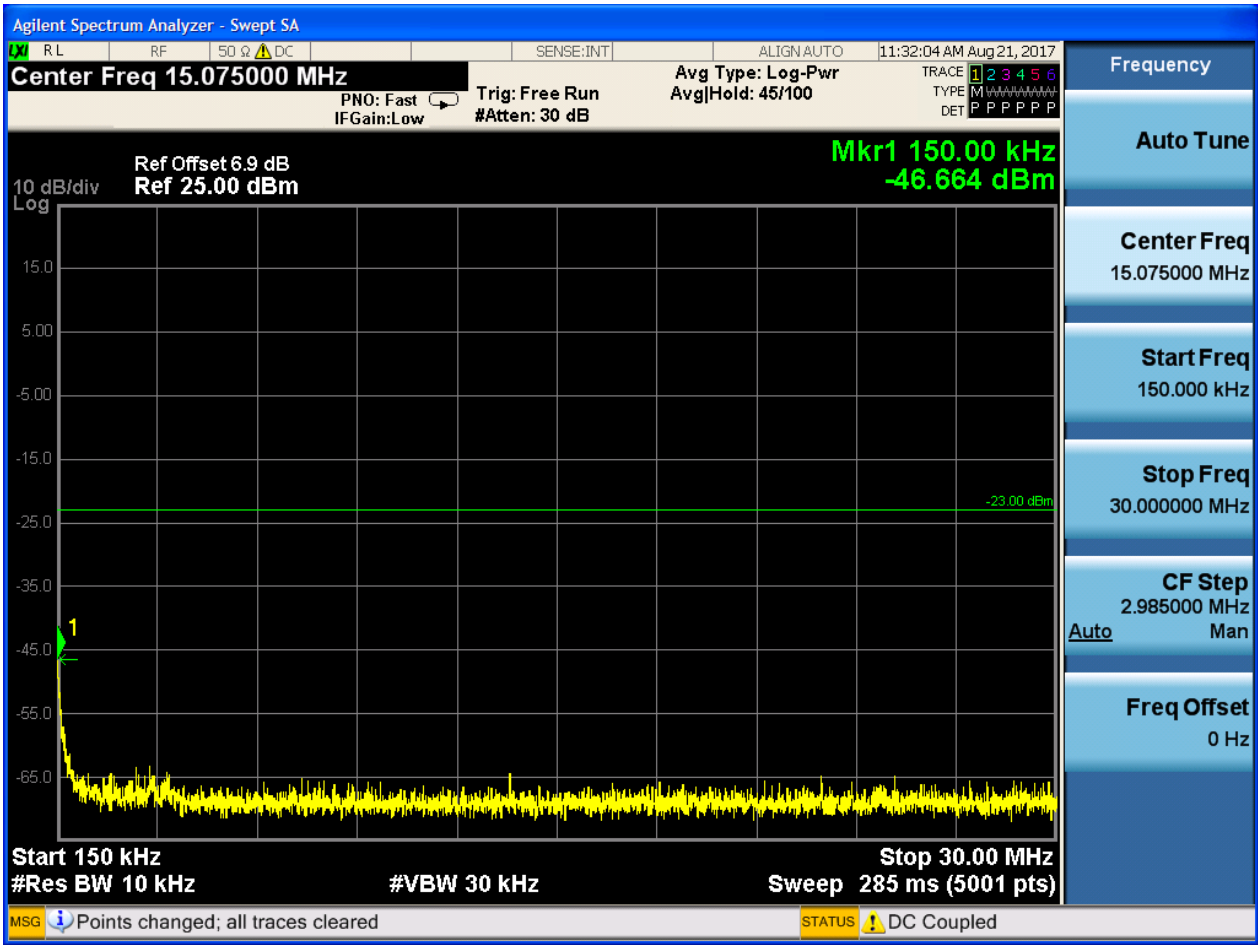


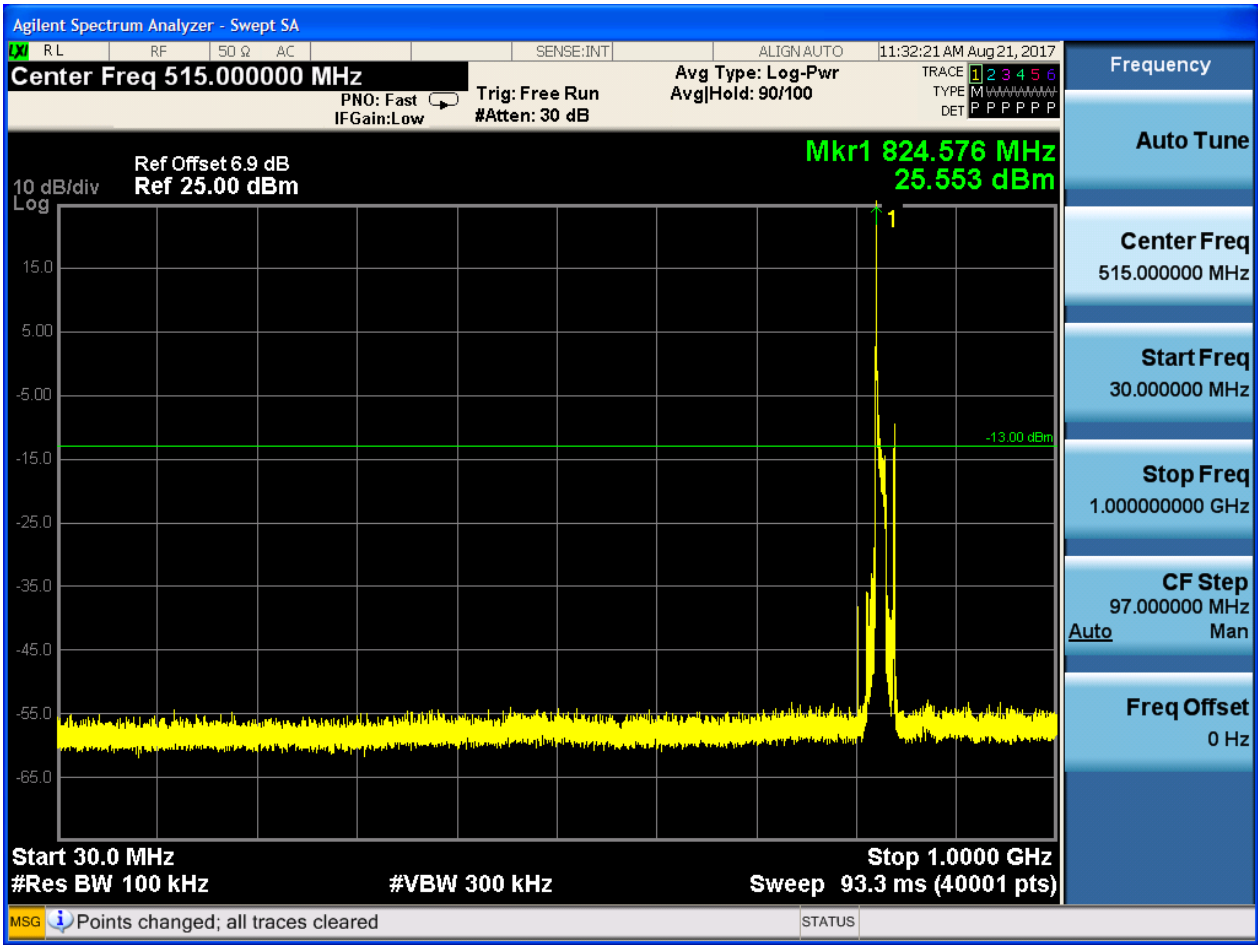
6.1.1.2.4 Test Bandwidth = 10

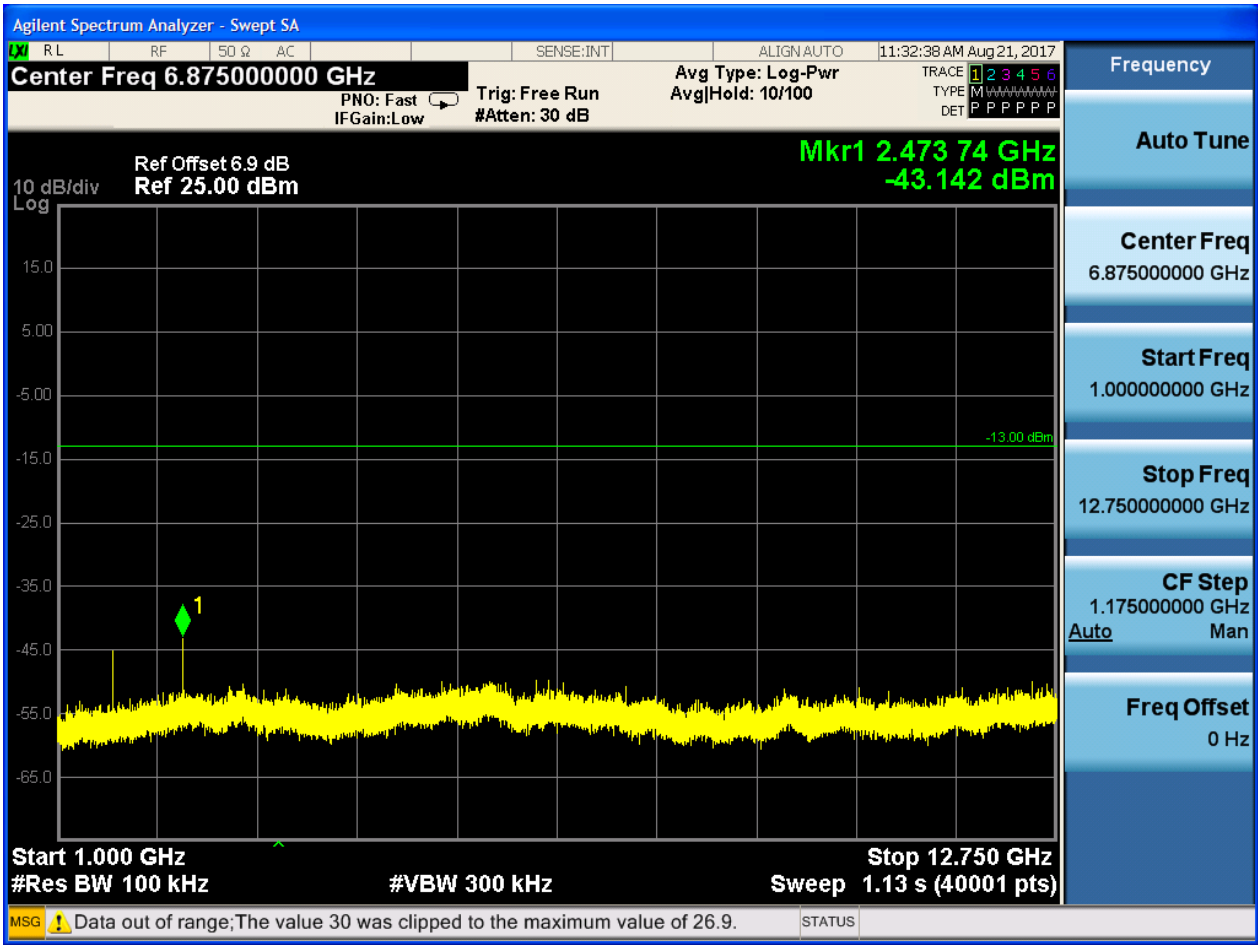
6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0





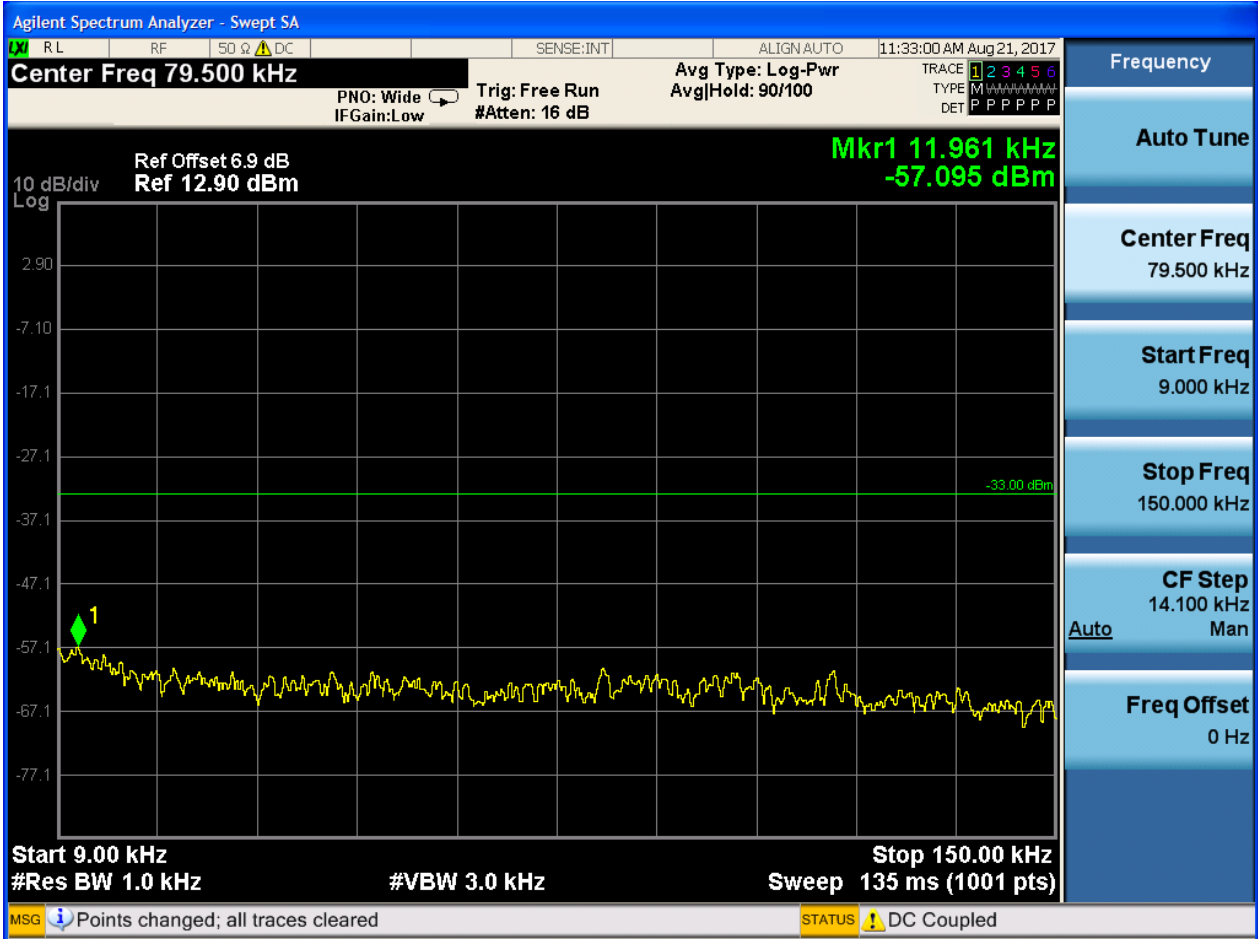


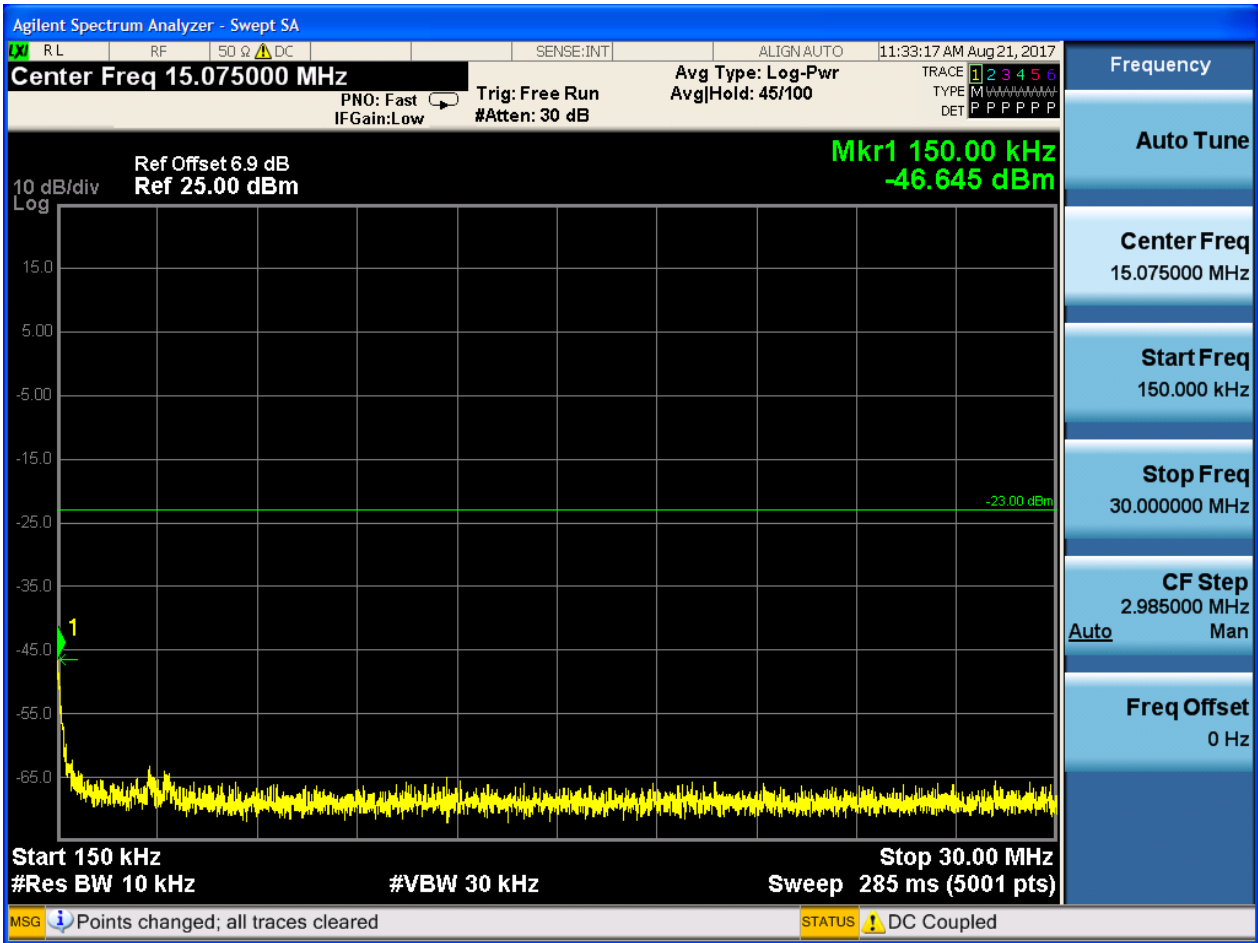


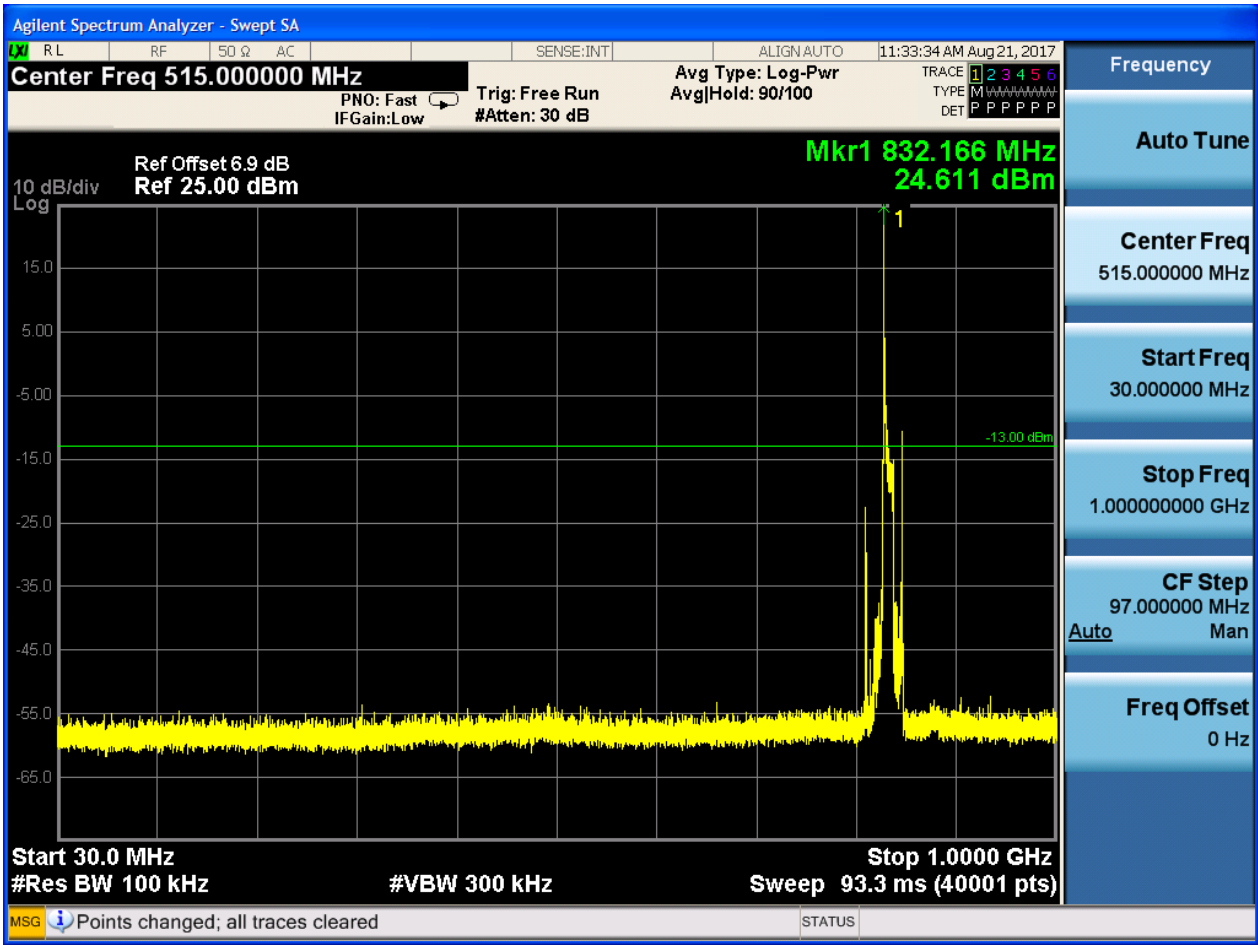


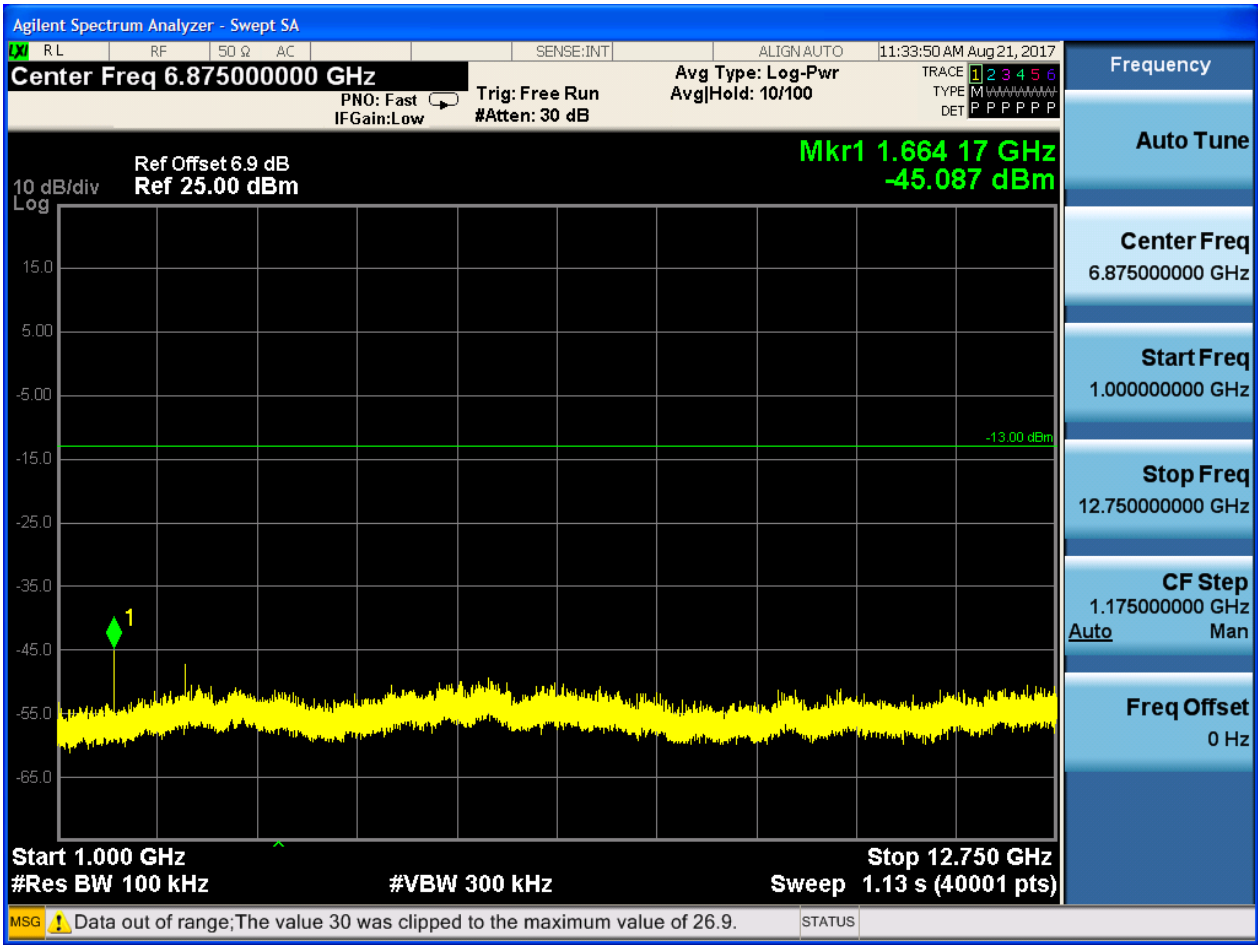
6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0





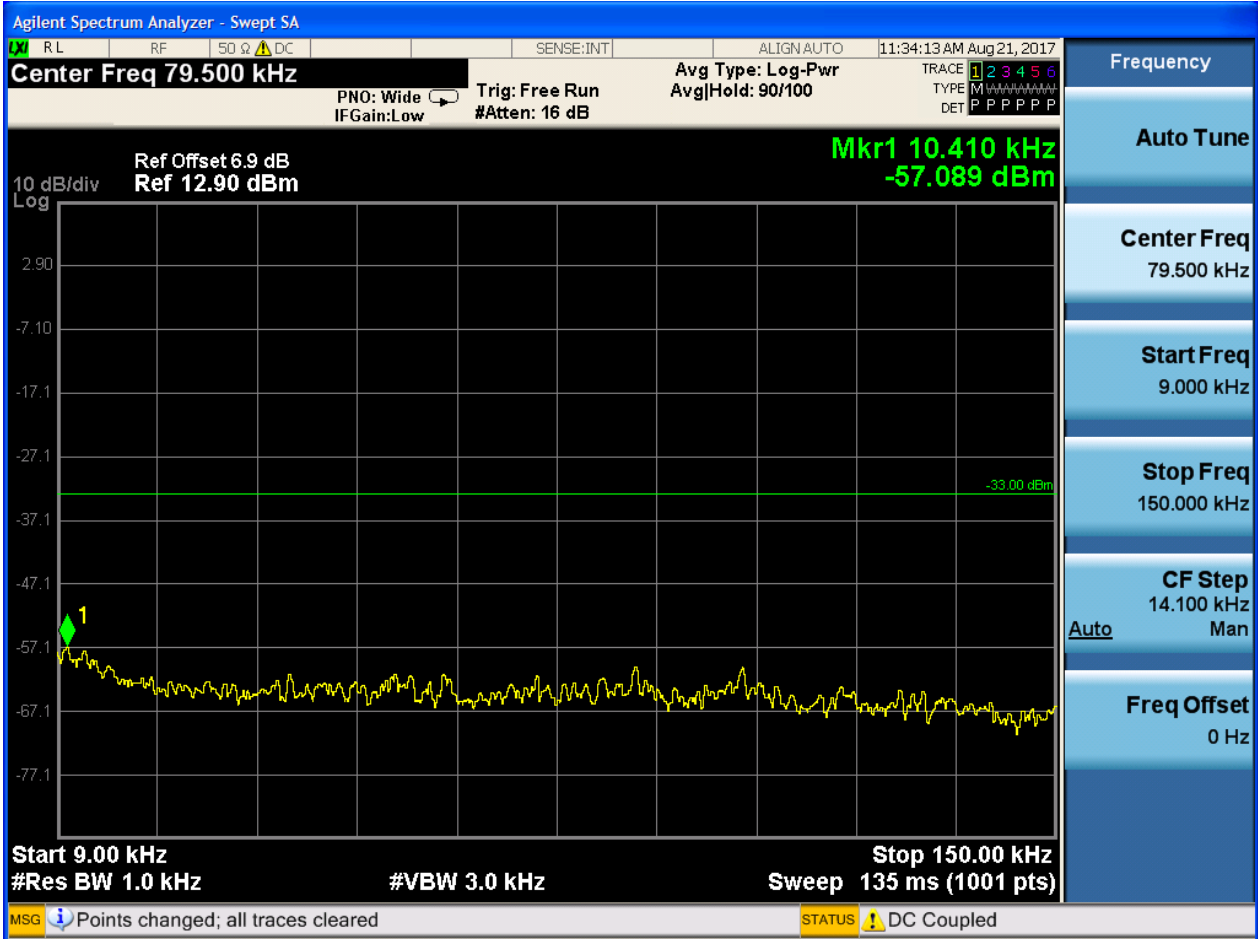


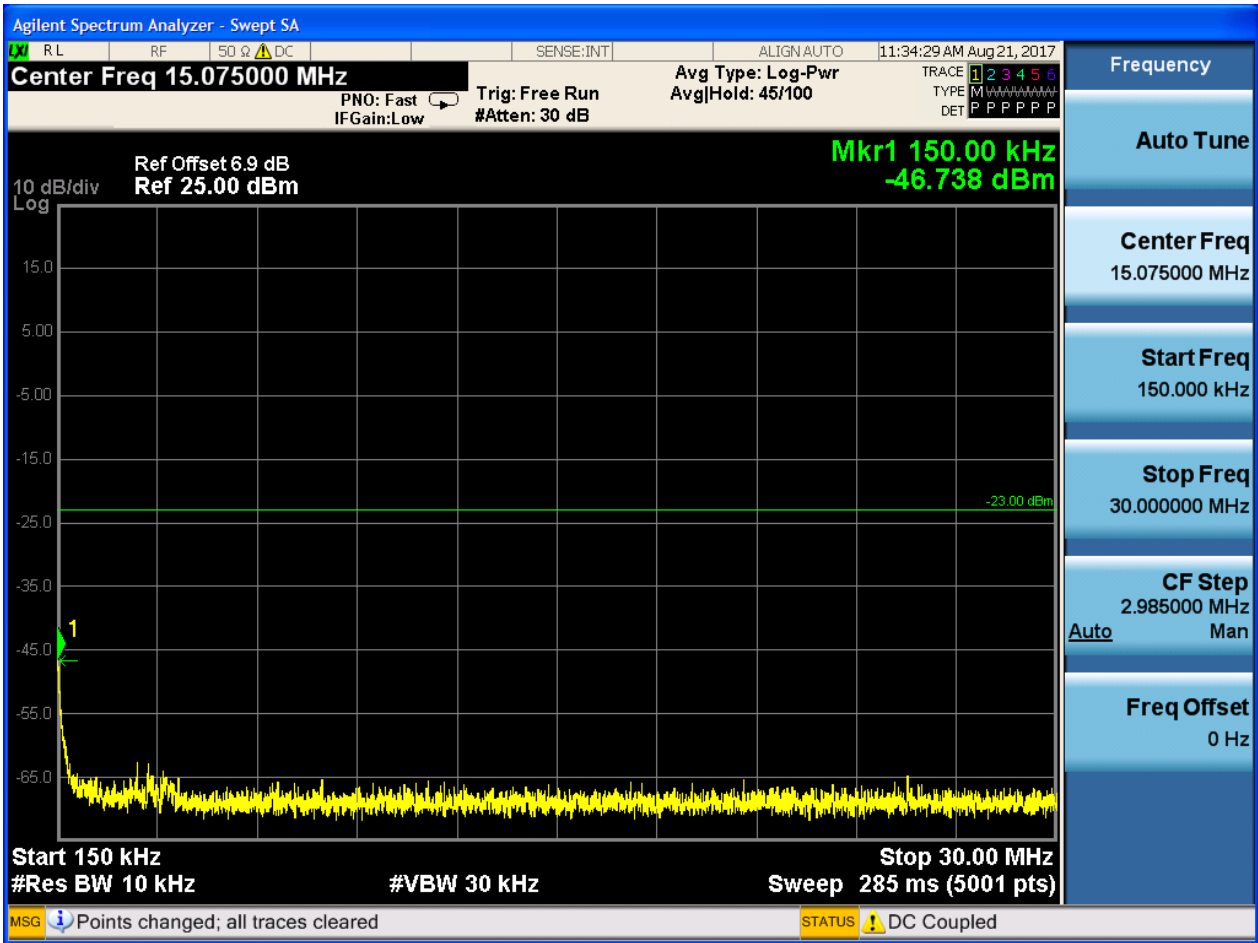


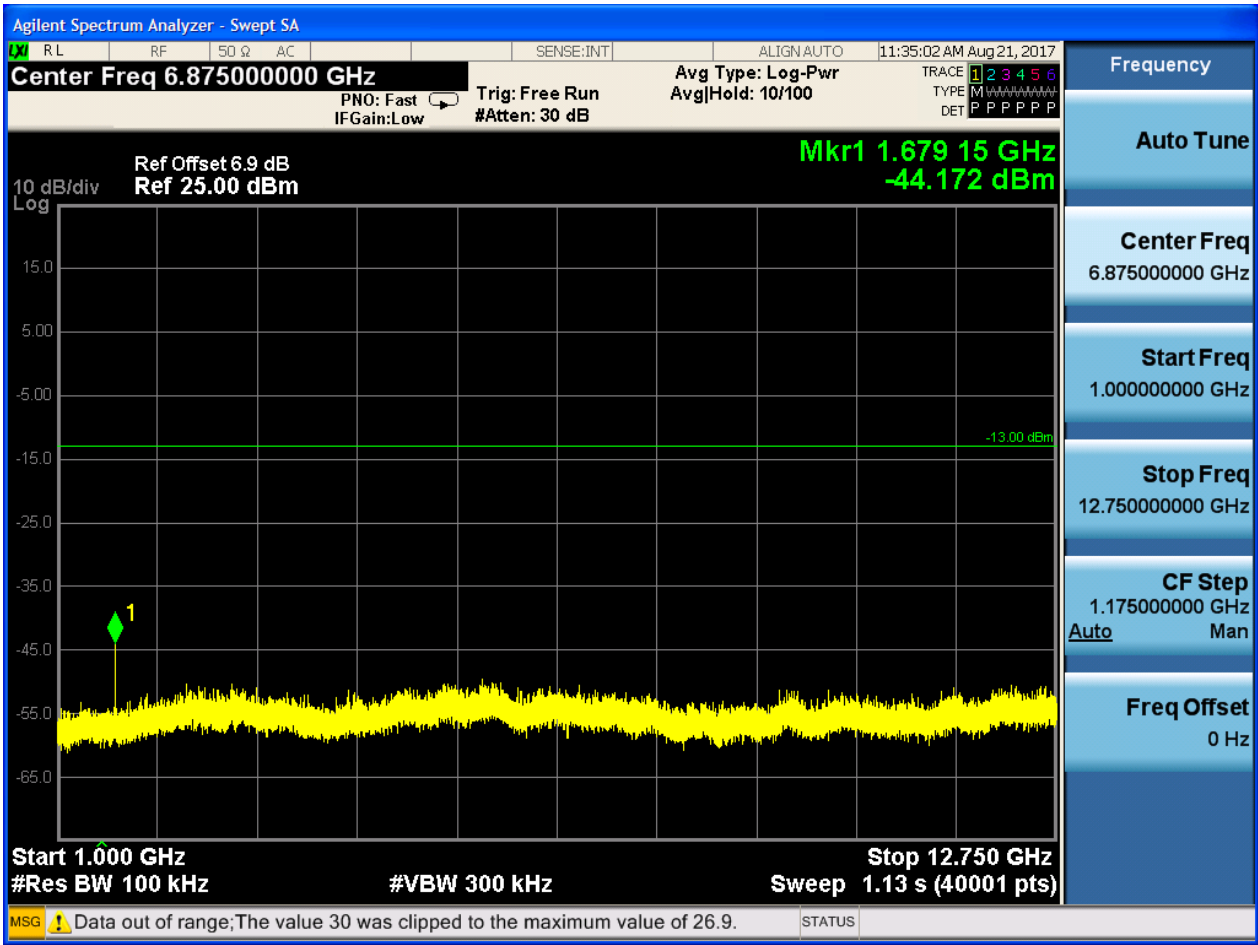


6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0







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

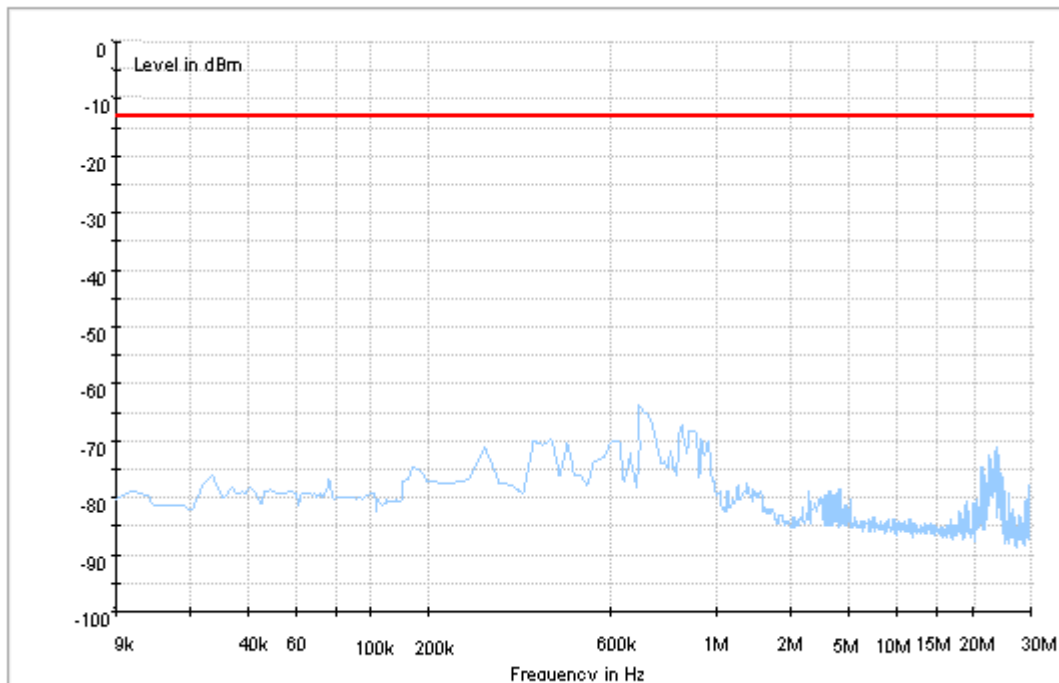
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

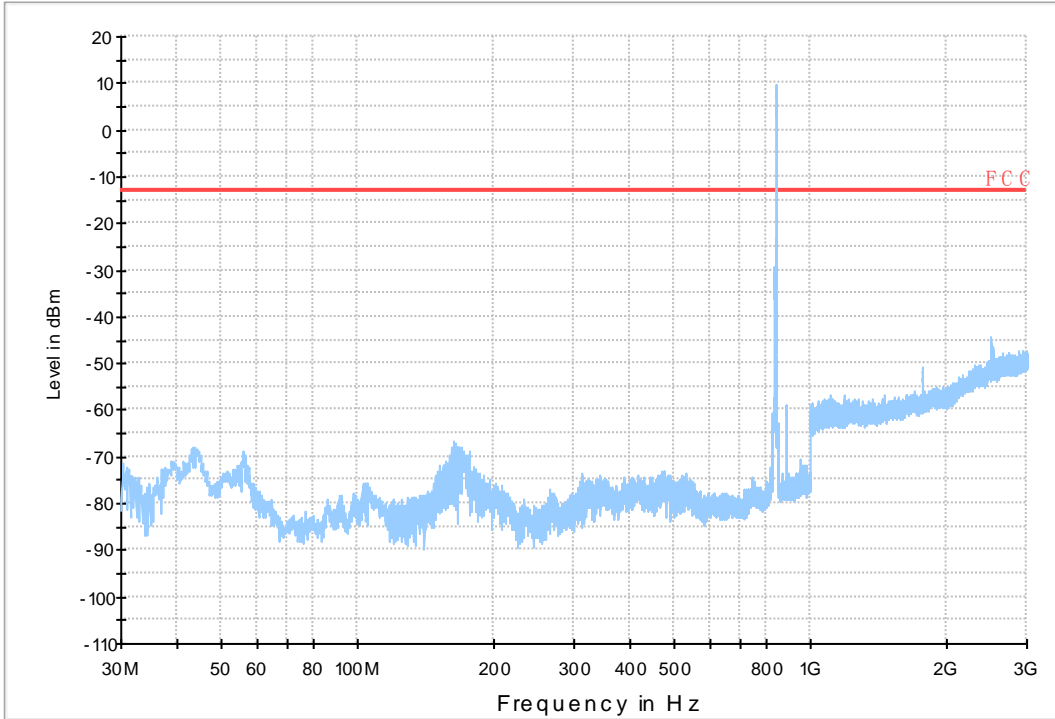
7.1 For LTE

7.1.1 Test Band = BAND5_ANT1

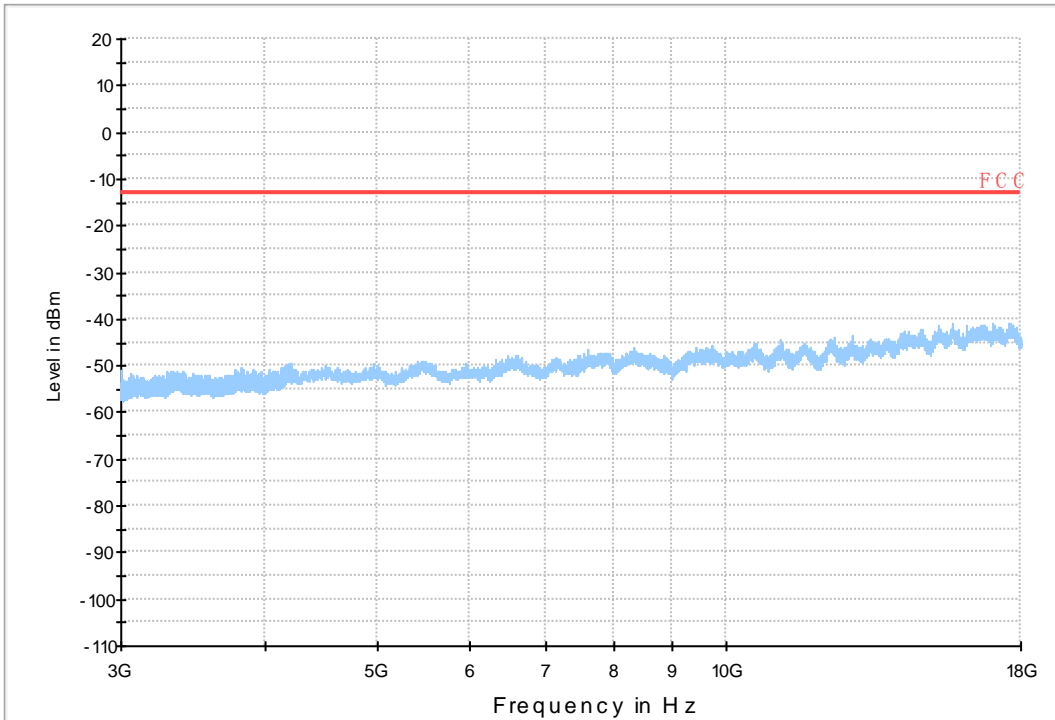
7.1.1.1 Test Bandwidth = 1.4



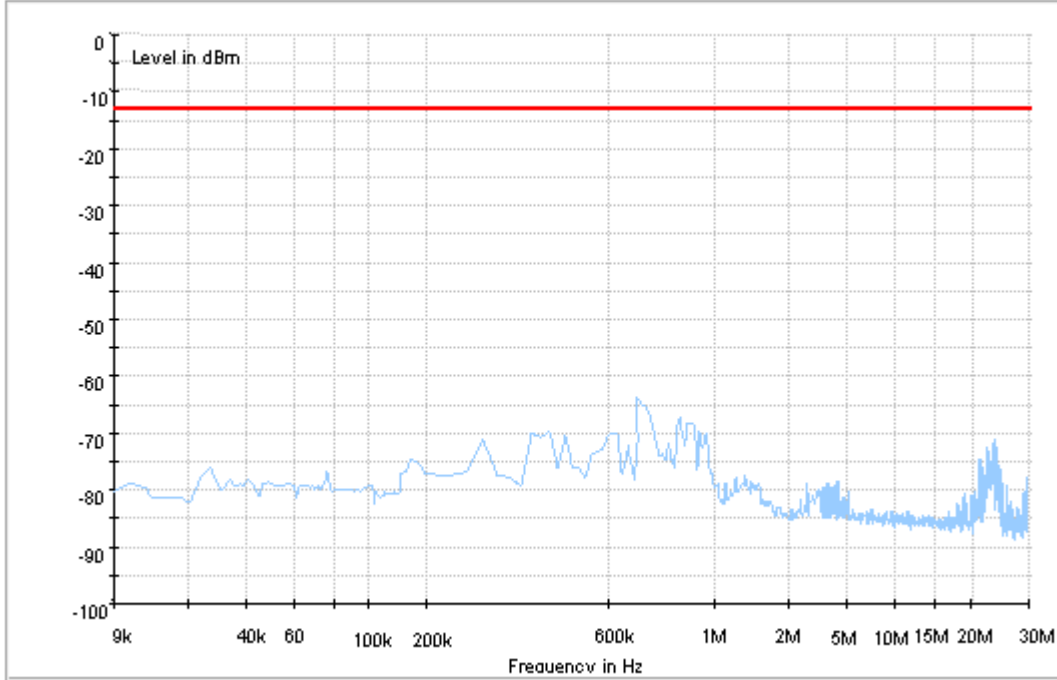
Copy of FCC PART22 LTE Band 5_L



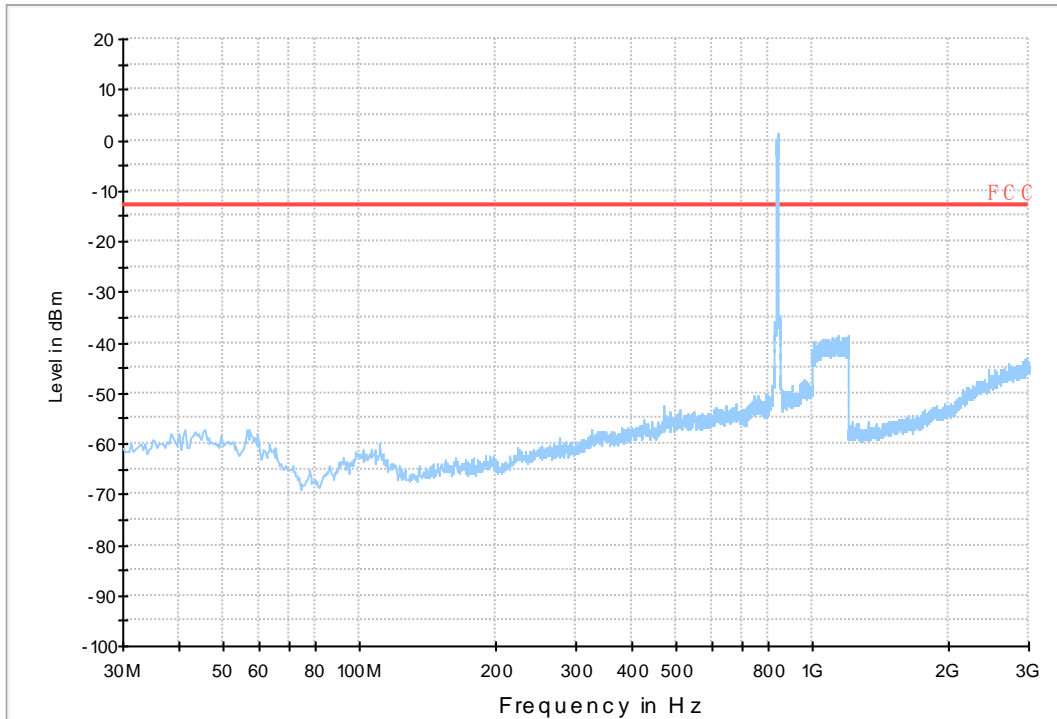
Copy of FCC PART22 LTE Band 5_H



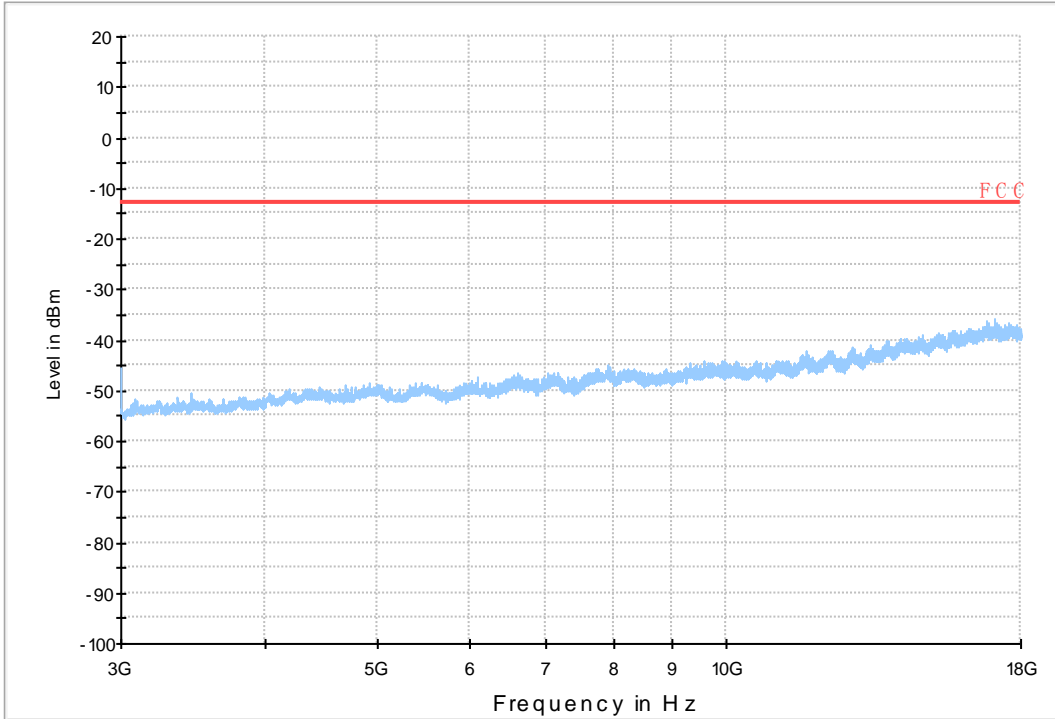
7.1.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L

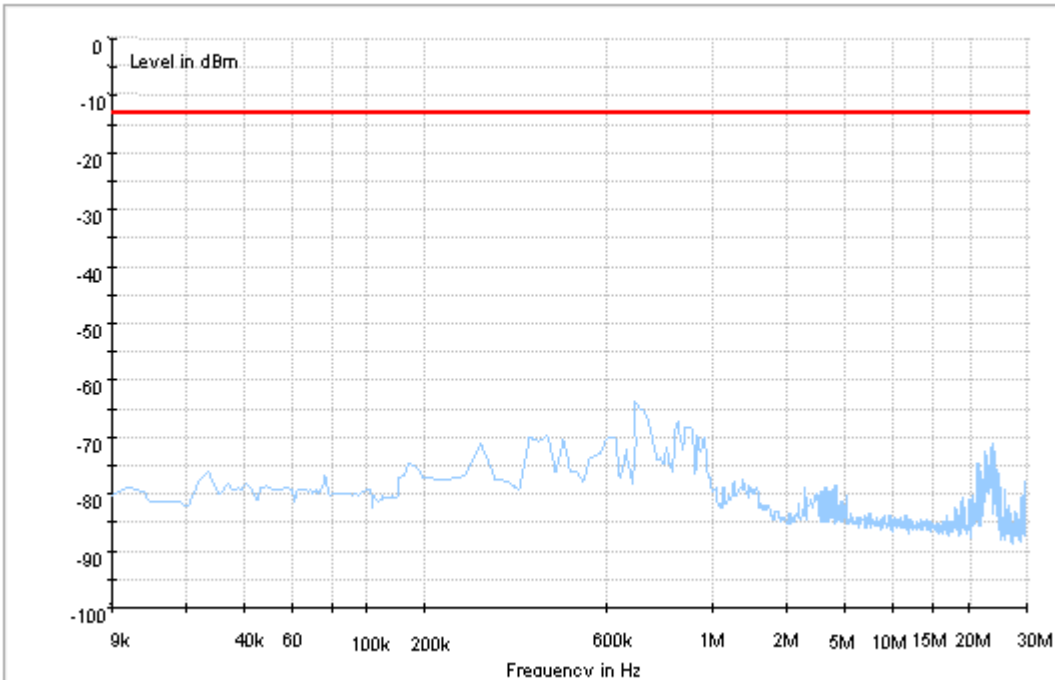


Copy of RSE-TX-DIRECTOR BELOW 1G_H

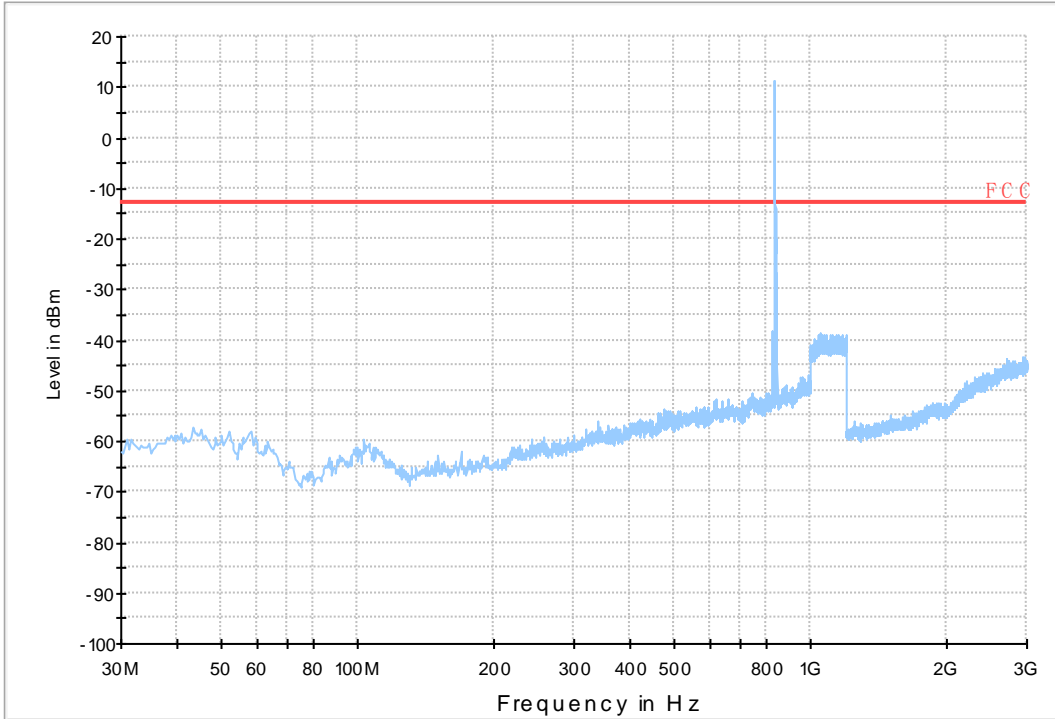


7.2.1 Test Band = BAND5_ANT2

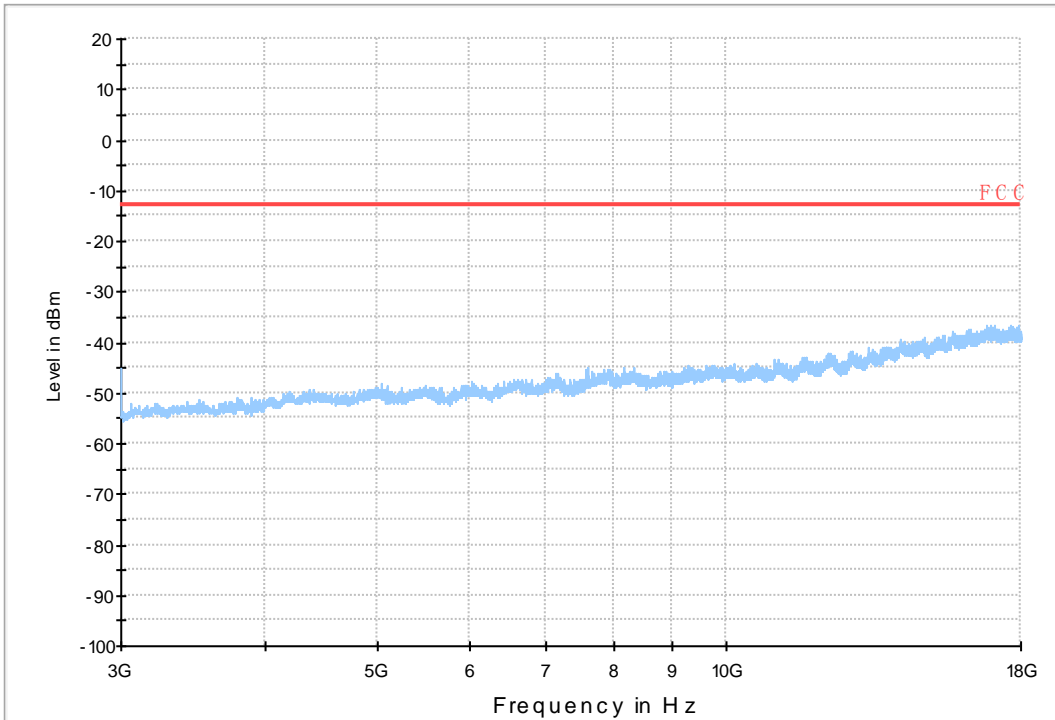
7.2.1.1 Test Bandwidth = 1.4



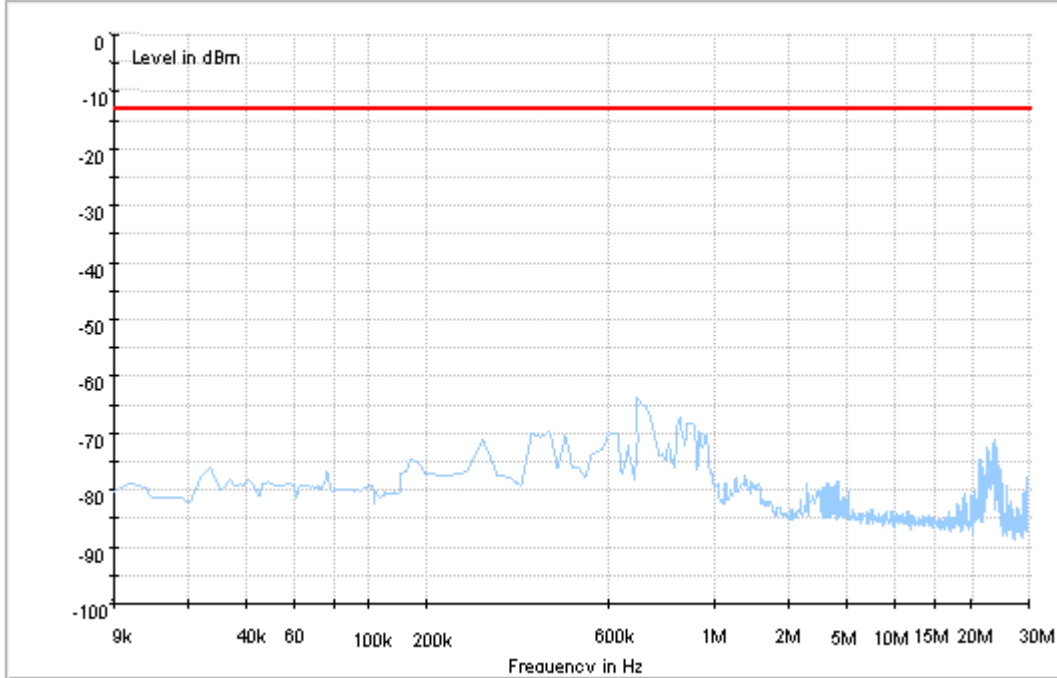
Copy of RSE-TX-DIRECTOR BELOW 1G_L



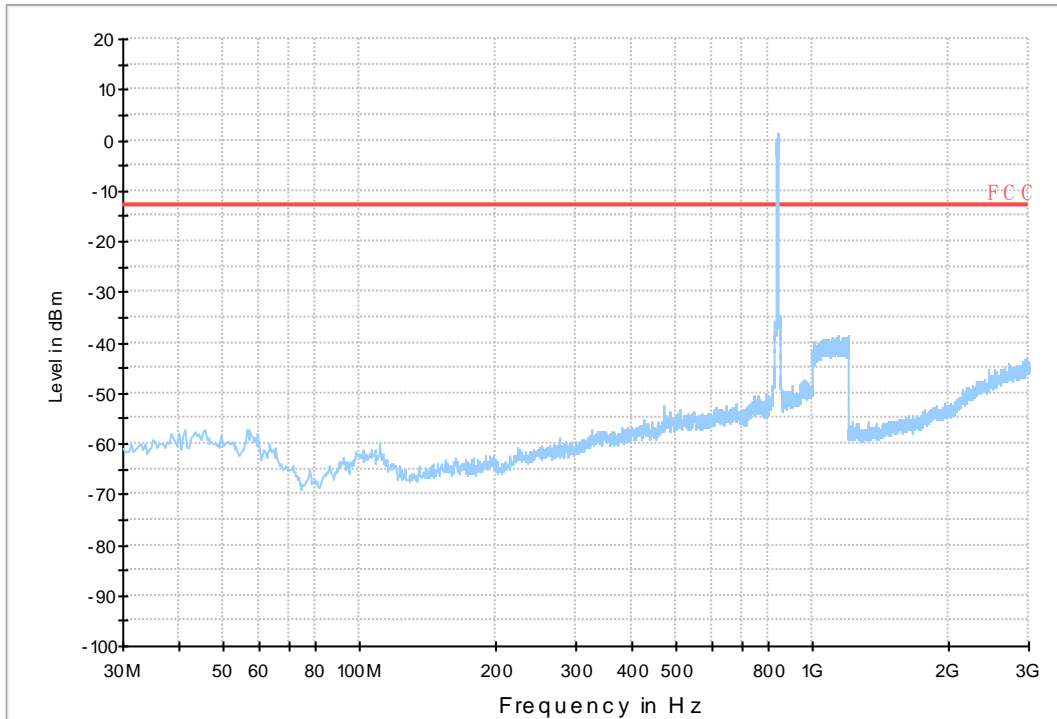
Copy of RSE-TX-DIRECTOR BELOW 1G_H



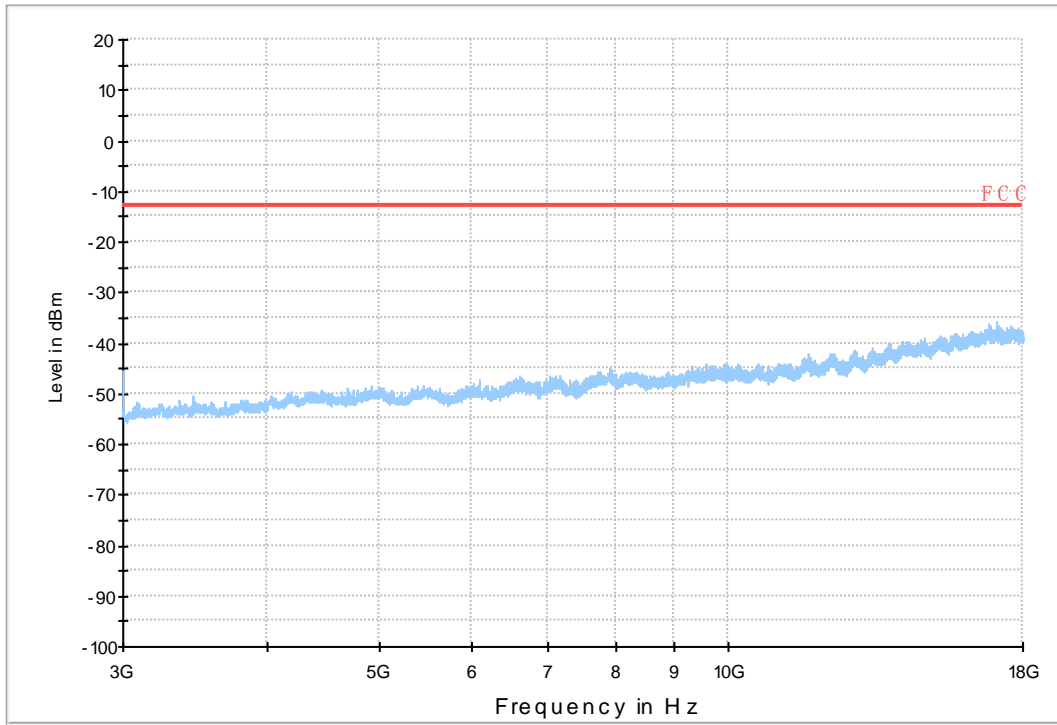
7.2.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of RSE-TX-DIRECTOR BELOW 1G_H



8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	LTE/TM1	1.4	LCH	TN	VL	11.73	0.01422	PASS
					VN	3.43	0.00416	PASS
					VH	-0.40	-0.00049	PASS
			MCH	TN	VL	0.99	0.00118	PASS
					VN	17.15	0.0205	PASS
					VH	-12.96	-0.01549	PASS
			HCH	TN	VL	-47.16	-0.05559	PASS
					VN	22.00	0.02593	PASS
					VH	-70.65	-0.08328	PASS
		3	LCH	TN	VL	3.28	0.00397	PASS
					VN	3.78	0.00458	PASS
					VH	2.86	0.00346	PASS
			MCH	TN	VL	5.94	0.0071	PASS
					VN	-13.52	-0.01616	PASS
					VH	0.47	0.00056	PASS
			HCH	TN	VL	9.36	0.01104	PASS
					VN	2.79	0.00329	PASS
					VH	0.89	0.00105	PASS
		5	LCH	TN	VL	-0.94	-0.00114	PASS
					VN	2.30	0.00278	PASS
					VH	-1.07	-0.00129	PASS
			MCH	TN	VL	3.92	0.00469	PASS
					VN	2.68	0.0032	PASS
					VH	6.29	0.00752	PASS
			HCH	TN	VL	1.00	0.00118	PASS
					VN	0.66	0.00078	PASS
					VH	2.29	0.00271	PASS
10	LCH	TN	VL	2.19	0.00264	PASS		
			VN	-0.21	-0.00025	PASS		
			VH	-0.64	-0.00077	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2		MCH	TN	VL	0.19	0.00023	PASS
					VN	2.19	0.00262	PASS
					VH	-2.92	-0.00349	PASS
			HCH	TN	VL	-8.38	-0.00993	PASS
					VN	-5.25	-0.00622	PASS
					VH	-10.33	-0.01224	PASS
		1.4	LCH	TN	VL	-1.97	-0.00239	PASS
					VN	-0.14	-0.00017	PASS
					VH	1.97	0.00239	PASS
			MCH	TN	VL	-13.73	-0.01641	PASS
					VN	-7.52	-0.00899	PASS
					VH	8.15	0.00974	PASS
			HCH	TN	VL	-0.09	-0.00011	PASS
					VN	1.65	0.00195	PASS
					VH	6.54	0.00771	PASS
		3	LCH	TN	VL	1.42	0.00172	PASS
					VN	0.10	0.00012	PASS
					VH	3.02	0.00366	PASS
			MCH	TN	VL	4.38	0.00524	PASS
					VN	1.83	0.00219	PASS
					VH	2.57	0.00307	PASS
			HCH	TN	VL	0.33	0.00039	PASS
					VN	-3.53	-0.00417	PASS
					VH	-3.99	-0.00471	PASS
		5	LCH	TN	VL	-1.97	-0.00238	PASS
					VN	-1.00	-0.00121	PASS
					VH	-1.54	-0.00186	PASS
			MCH	TN	VL	1.80	0.00215	PASS
					VN	5.35	0.0064	PASS
					VH	-4.52	-0.0054	PASS
			HCH	TN	VL	10.81	0.01277	PASS
					VN	11.47	0.01355	PASS
					VH	4.21	0.00497	PASS
		10	LCH	TN	VL	6.49	0.00783	PASS
					VN	1.34	0.00162	PASS
					VH	6.31	0.00761	PASS
			MCH	TN	VL	3.68	0.0044	PASS
					VN	3.88	0.00464	PASS
					VH	-0.73	-0.00087	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			HCH	TN	VL	-7.98	-0.00945	PASS
					VN	-8.51	-0.01008	PASS
					VH	-6.31	-0.00748	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	-30	LTE/TM1	1.4	LCH	VN	-2.40	-0.00291	PASS
				MCH	VN	-9.71	-0.01161	PASS
				HCH	VN	0.06	0.00007	PASS
			3	LCH	VN	2.76	0.00334	PASS
				MCH	VN	-3.95	-0.00472	PASS
				HCH	VN	0.82	0.00097	PASS
			5	LCH	VN	0.43	0.00052	PASS
				MCH	VN	-0.86	-0.00103	PASS
				HCH	VN	-3.30	-0.0039	PASS
		10	LCH	VN	-1.80	-0.00217	PASS	
			MCH	VN	3.39	0.00405	PASS	
			HCH	VN	-5.05	-0.00598	PASS	
		LTE/TM2	1.4	LCH	VN	-3.99	-0.00484	PASS
				MCH	VN	2.59	0.0031	PASS
				HCH	VN	0.36	0.00042	PASS
			3	LCH	VN	2.93	0.00355	PASS
				MCH	VN	1.77	0.00212	PASS
				HCH	VN	-2.68	-0.00316	PASS
	5		LCH	VN	-3.29	-0.00398	PASS	
			MCH	VN	-4.12	-0.00493	PASS	
			HCH	VN	2.02	0.00239	PASS	
	10	LCH	VN	1.20	0.00145	PASS		
		MCH	VN	0.11	0.00013	PASS		
		HCH	VN	-5.58	-0.00661	PASS		
	-20	LTE/TM1	1.4	LCH	VN	-0.72	-0.00087	PASS
				MCH	VN	18.71	0.02237	PASS
				HCH	VN	-0.31	-0.00037	PASS
3			LCH	VN	-1.82	-0.0022	PASS	
			MCH	VN	-2.06	-0.00246	PASS	
			HCH	VN	0.11	0.00013	PASS	



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
		LTE/TM2	5	LCH	VN	-1.66	-0.00201	PASS	
				MCH	VN	1.93	0.00231	PASS	
				HCH	VN	0.67	0.00079	PASS	
			10	LCH	VN	0.13	0.00016	PASS	
				MCH	VN	4.09	0.00489	PASS	
				HCH	VN	-3.92	-0.00464	PASS	
			1.4	LCH	VN	1.09	0.00132	PASS	
				MCH	VN	0.74	0.00088	PASS	
				HCH	VN	-11.40	-0.01344	PASS	
				3	LCH	VN	3.71	0.00449	PASS
					MCH	VN	7.48	0.00894	PASS
					HCH	VN	-1.57	-0.00185	PASS
				5	LCH	VN	2.13	0.00258	PASS
					MCH	VN	2.42	0.00289	PASS
					HCH	VN	1.53	0.00181	PASS
			10	LCH	VN	-0.87	-0.00105	PASS	
				MCH	VN	-2.07	-0.00247	PASS	
				HCH	VN	-5.02	-0.00595	PASS	
		LTE/TM1	1.4	LCH	VN	1.19	0.00144	PASS	
				MCH	VN	2.73	0.00326	PASS	
				HCH	VN	-5.36	-0.00632	PASS	
			3	LCH	VN	1.56	0.00189	PASS	
				MCH	VN	-3.96	-0.00473	PASS	
				HCH	VN	-0.62	-0.00073	PASS	
			5	LCH	VN	0.44	0.00053	PASS	
				MCH	VN	5.81	0.00695	PASS	
				HCH	VN	-2.55	-0.00301	PASS	
			10	LCH	VN	4.16	0.00502	PASS	
				MCH	VN	3.49	0.00417	PASS	
				HCH	VN	-9.66	-0.01145	PASS	
			LTE/TM2	1.4	LCH	VN	-3.26	-0.00395	PASS
					MCH	VN	7.42	0.00887	PASS
					HCH	VN	9.66	0.01139	PASS
				3	LCH	VN	1.39	0.00168	PASS
					MCH	VN	-5.32	-0.00636	PASS
					HCH	VN	-1.07	-0.00126	PASS
		5		LCH	VN	2.02	0.00244	PASS	
				MCH	VN	2.65	0.00317	PASS	
				HCH	VN	-0.73	-0.00086	PASS	



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	0	LTE/TM1	10	LCH	VN	0.77	0.00093	PASS
				MCH	VN	-1.79	-0.00214	PASS
				HCH	VN	-3.53	-0.00418	PASS
			1.4	LCH	VN	8.53	0.01034	PASS
				MCH	VN	-22.70	-0.02714	PASS
				HCH	VN	9.68	0.01141	PASS
			3	LCH	VN	-2.85	-0.00345	PASS
				MCH	VN	8.10	0.00968	PASS
				HCH	VN	2.73	0.00322	PASS
		5	LCH	VN	1.10	0.00133	PASS	
			MCH	VN	0.39	0.00047	PASS	
			HCH	VN	1.04	0.00123	PASS	
		10	LCH	VN	0.54	0.00065	PASS	
			MCH	VN	1.50	0.00179	PASS	
			HCH	VN	-8.98	-0.01064	PASS	
	LTE/TM2	1.4	LCH	VN	4.49	0.00544	PASS	
			MCH	VN	4.94	0.00591	PASS	
			HCH	VN	3.22	0.0038	PASS	
		3	LCH	VN	2.06	0.0025	PASS	
			MCH	VN	0.63	0.00075	PASS	
			HCH	VN	-2.56	-0.00302	PASS	
		5	LCH	VN	0.07	0.00008	PASS	
			MCH	VN	-2.69	-0.00322	PASS	
			HCH	VN	-2.62	-0.0031	PASS	
	10	LCH	VN	2.42	0.00292	PASS		
		MCH	VN	-3.99	-0.00477	PASS		
		HCH	VN	-5.42	-0.00642	PASS		
	10	LTE/TM1	1.4	LCH	VN	1.75	0.00212	PASS
				MCH	VN	4.01	0.00479	PASS
				HCH	VN	-0.93	-0.0011	PASS
3			LCH	VN	1.32	0.0016	PASS	
			MCH	VN	-1.87	-0.00224	PASS	
			HCH	VN	1.49	0.00176	PASS	
5			LCH	VN	0.89	0.00108	PASS	
			MCH	VN	2.55	0.00305	PASS	
			HCH	VN	0.77	0.00091	PASS	
10		LCH	VN	1.42	0.00171	PASS		
		MCH	VN	0.64	0.00077	PASS		
		HCH	VN	-6.31	-0.00748	PASS		



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
	20	LTE/TM2	1.4	LCH	VN	0.56	0.00068	PASS		
				MCH	VN	8.01	0.00958	PASS		
				HCH	VN	13.16	0.01551	PASS		
			3	LCH	VN	1.63	0.00197	PASS		
				MCH	VN	4.88	0.00583	PASS		
				HCH	VN	4.15	0.0049	PASS		
			5	LCH	VN	1.09	0.00132	PASS		
				MCH	VN	-4.91	-0.00587	PASS		
				HCH	VN	0.13	0.00015	PASS		
		10	LCH	VN	1.90	0.00229	PASS			
			MCH	VN	3.59	0.00429	PASS			
			HCH	VN	-10.24	-0.01213	PASS			
		30	LTE/TM1	LTE/TM1	1.4	LCH	VN	2.80	0.0034	PASS
						MCH	VN	2.88	0.00344	PASS
						HCH	VN	2.60	0.00306	PASS
					3	LCH	VN	0.44	0.00053	PASS
						MCH	VN	-1.96	-0.00234	PASS
						HCH	VN	5.65	0.00667	PASS
	5				LCH	VN	-1.20	-0.00145	PASS	
					MCH	VN	2.39	0.00286	PASS	
					HCH	VN	2.23	0.00263	PASS	
	10			LCH	VN	1.17	0.00141	PASS		
				MCH	VN	3.81	0.00455	PASS		
				HCH	VN	-4.98	-0.0059	PASS		
	LTE/TM2			1.4	LCH	VN	2.05	0.00249	PASS	
					MCH	VN	4.88	0.00583	PASS	
					HCH	VN	5.72	0.00674	PASS	
				3	LCH	VN	3.20	0.00388	PASS	
					MCH	VN	9.64	0.01152	PASS	
					HCH	VN	-2.93	-0.00346	PASS	
		5	LCH	VN	-2.16	-0.00261	PASS			
			MCH	VN	10.19	0.01218	PASS			
			HCH	VN	-0.24	-0.00028	PASS			
	10	LCH	VN	0.76	0.00092	PASS				
		MCH	VN	2.33	0.00279	PASS				
		HCH	VN	-0.23	-0.00027	PASS				
LTE/TM1	1.4	LCH	VN	5.36	0.0065	PASS				
		MCH	VN	6.82	0.00815	PASS				
		HCH	VN	7.85	0.00925	PASS				



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
	40	LTE/TM2	3	LCH	VN	-6.92	-0.00838	PASS	
				MCH	VN	8.94	0.01069	PASS	
				HCH	VN	2.00	0.00236	PASS	
			5	LCH	VN	0.77	0.00093	PASS	
				MCH	VN	-6.21	-0.00742	PASS	
				HCH	VN	3.65	0.00431	PASS	
			10	LCH	VN	2.43	0.00293	PASS	
				MCH	VN	5.51	0.00659	PASS	
				HCH	VN	5.76	0.00682	PASS	
			LTE/TM2	1.4	LCH	VN	4.86	0.00589	PASS
					MCH	VN	-12.80	-0.0153	PASS
					HCH	VN	-8.04	-0.00948	PASS
				3	LCH	VN	0.92	0.00111	PASS
					MCH	VN	3.89	0.00465	PASS
					HCH	VN	-7.12	-0.0084	PASS
		5		LCH	VN	1.06	0.00128	PASS	
				MCH	VN	5.56	0.00665	PASS	
				HCH	VN	8.87	0.01048	PASS	
		10		LCH	VN	4.25	0.00513	PASS	
				MCH	VN	6.78	0.00811	PASS	
				HCH	VN	-1.12	-0.00133	PASS	
		LTE/TM1	1.4	LCH	VN	2.13	0.00258	PASS	
				MCH	VN	-9.31	-0.01113	PASS	
				HCH	VN	51.60	0.06083	PASS	
			3	LCH	VN	4.56	0.00552	PASS	
				MCH	VN	6.97	0.00833	PASS	
				HCH	VN	3.06	0.00361	PASS	
			5	LCH	VN	0.70	0.00085	PASS	
				MCH	VN	9.34	0.01117	PASS	
				HCH	VN	-7.87	-0.0093	PASS	
			10	LCH	VN	-0.94	-0.00113	PASS	
				MCH	VN	2.46	0.00294	PASS	
				HCH	VN	-9.61	-0.01139	PASS	
			LTE/TM2	1.4	LCH	VN	5.28	0.0064	PASS
					MCH	VN	12.45	0.01488	PASS
					HCH	VN	6.48	0.00764	PASS
		3		LCH	VN	-3.93	-0.00476	PASS	
				MCH	VN	-9.16	-0.01095	PASS	
				HCH	VN	5.49	0.00648	PASS	



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	50		5	LCH	VN	0.53	0.00064	PASS
				MCH	VN	13.28	0.01588	PASS
				HCH	VN	2.42	0.00286	PASS
			10	LCH	VN	0.26	0.00031	PASS
				MCH	VN	0.34	0.00041	PASS
				HCH	VN	-7.81	-0.00925	PASS
		LTE/TM1	1.4	LCH	VN	2.62	0.00318	PASS
				MCH	VN	-4.68	-0.00559	PASS
				HCH	VN	-18.94	-0.02233	PASS
			3	LCH	VN	5.18	0.00627	PASS
				MCH	VN	7.20	0.00861	PASS
				HCH	VN	1.47	0.00173	PASS
			5	LCH	VN	-3.15	-0.00381	PASS
				MCH	VN	-31.70	-0.0379	PASS
				HCH	VN	0.51	0.0006	PASS
	10		LCH	VN	1.76	0.00212	PASS	
			MCH	VN	-0.57	-0.00068	PASS	
			HCH	VN	-7.71	-0.00914	PASS	
	LTE/TM2	1.4	LCH	VN	-0.26	-0.00032	PASS	
			MCH	VN	-3.95	-0.00472	PASS	
			HCH	VN	13.49	0.0159	PASS	
		3	LCH	VN	1.50	0.00182	PASS	
			MCH	VN	3.99	0.00477	PASS	
			HCH	VN	2.60	0.00307	PASS	
		5	LCH	VN	-0.19	-0.00023	PASS	
			MCH	VN	11.89	0.01421	PASS	
			HCH	VN	0.44	0.00052	PASS	
		10	LCH	VN	1.24	0.0015	PASS	
			MCH	VN	-1.80	-0.00215	PASS	
			HCH	VN	-3.43	-0.00406	PASS	

END