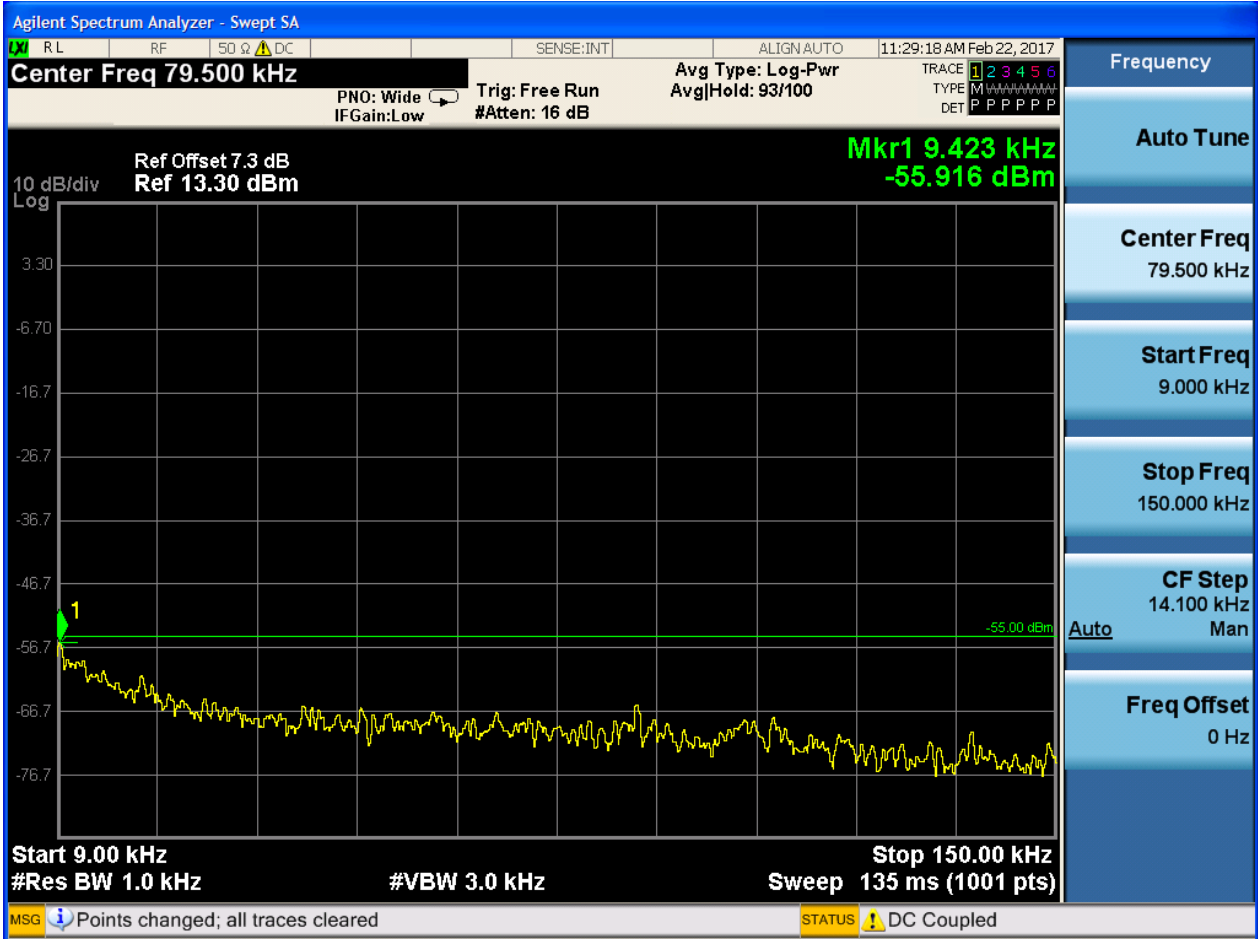
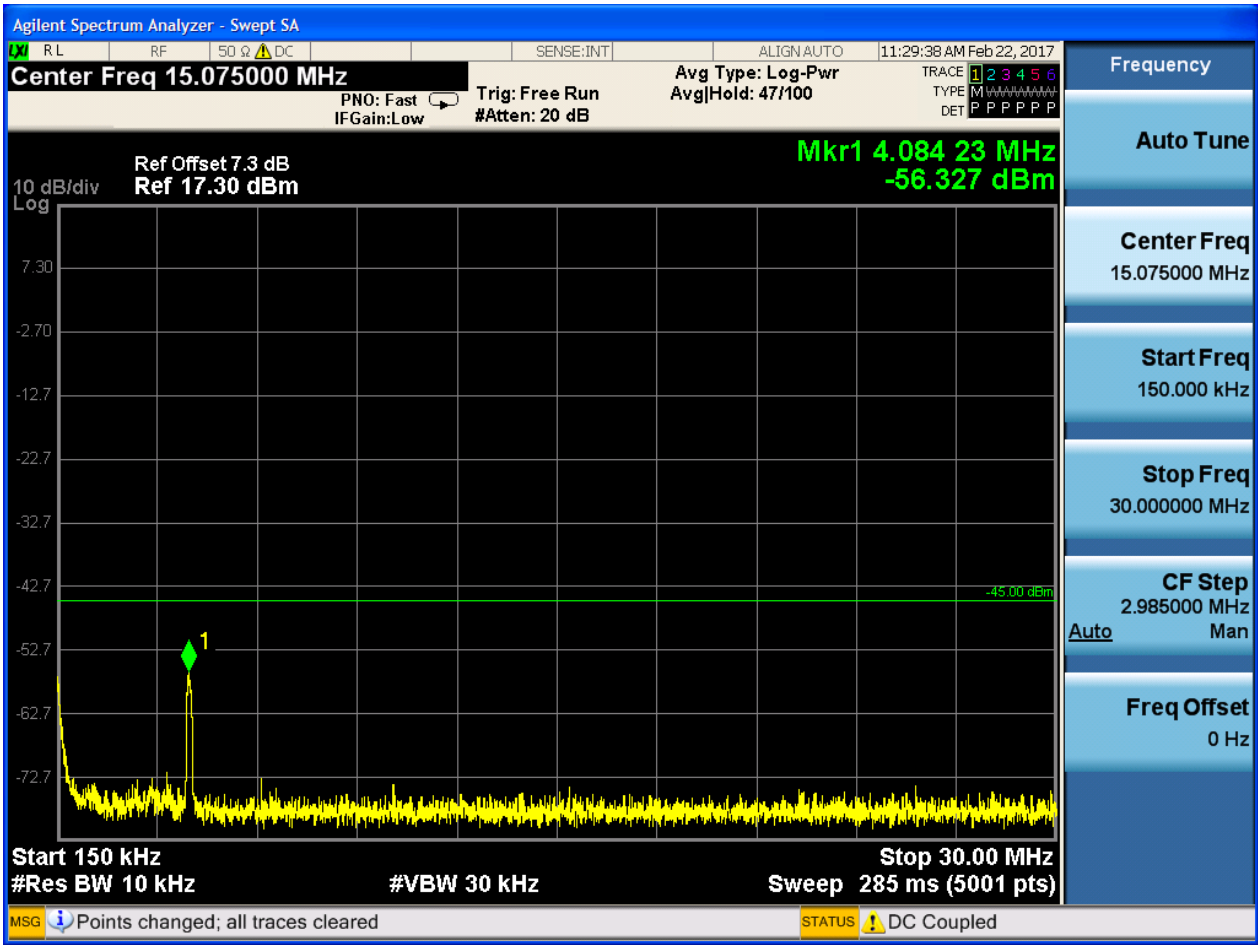


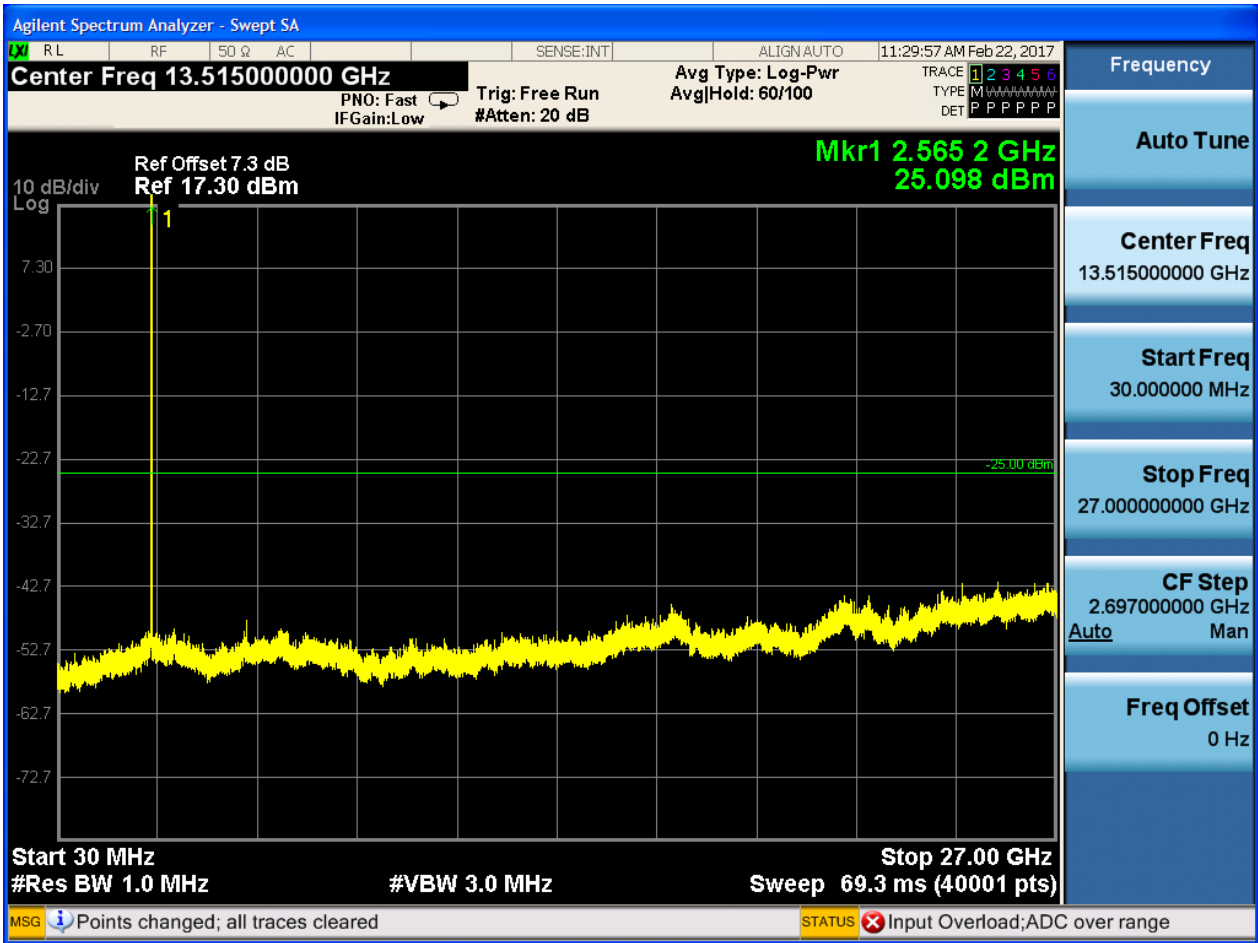


6.1.1.1.3 Test Channel = HCH

6.1.1.1.3.1 Test RB = RB1#0





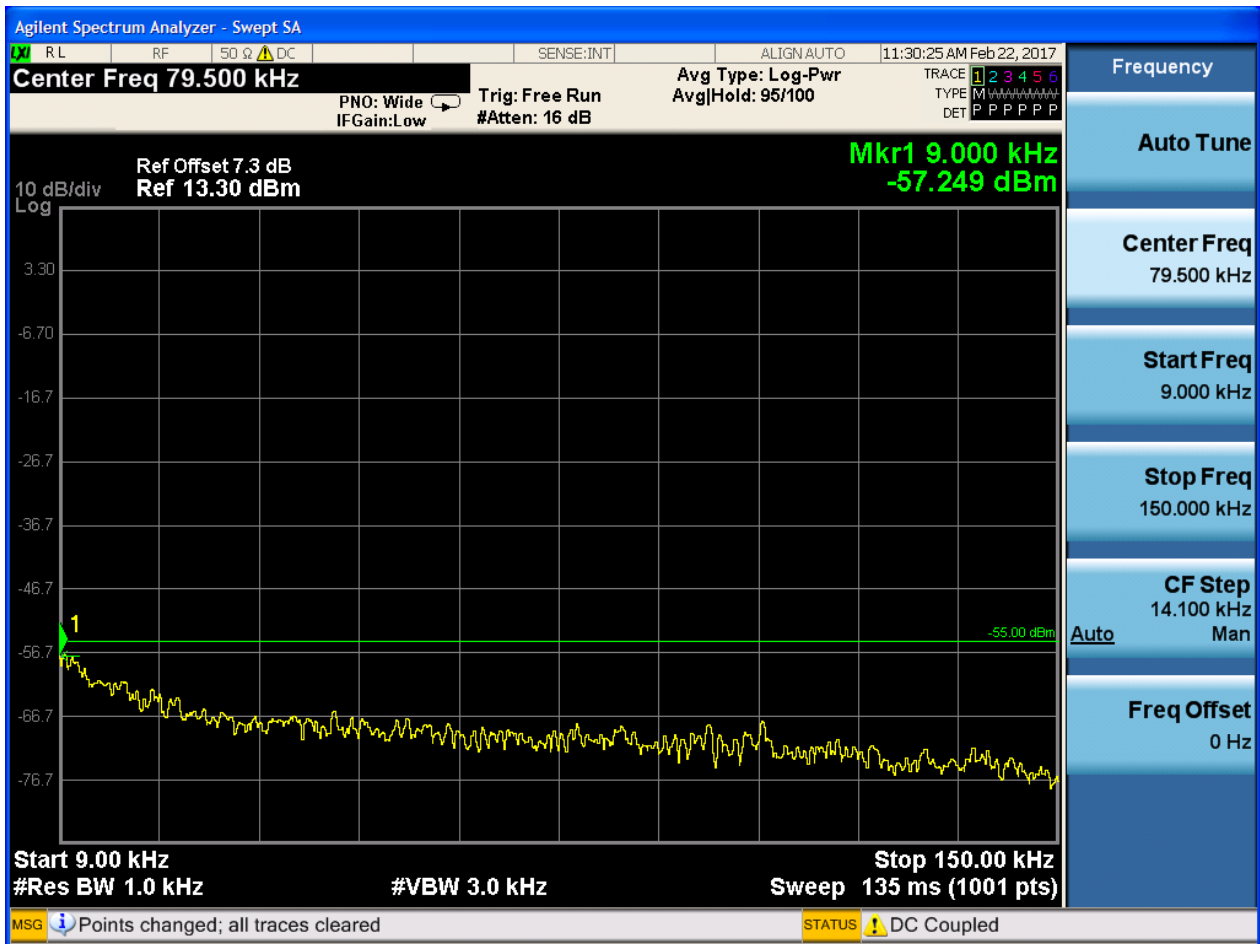


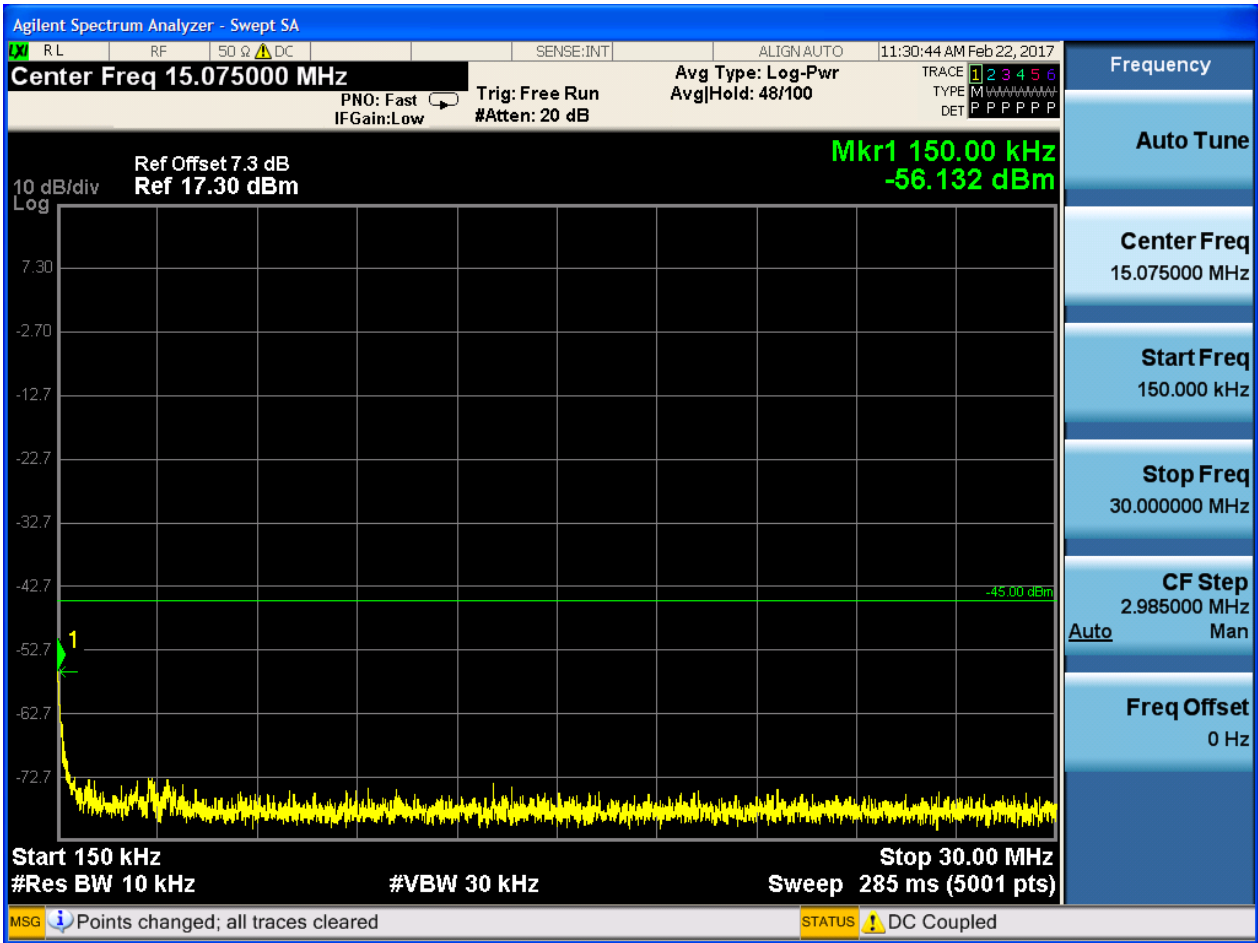


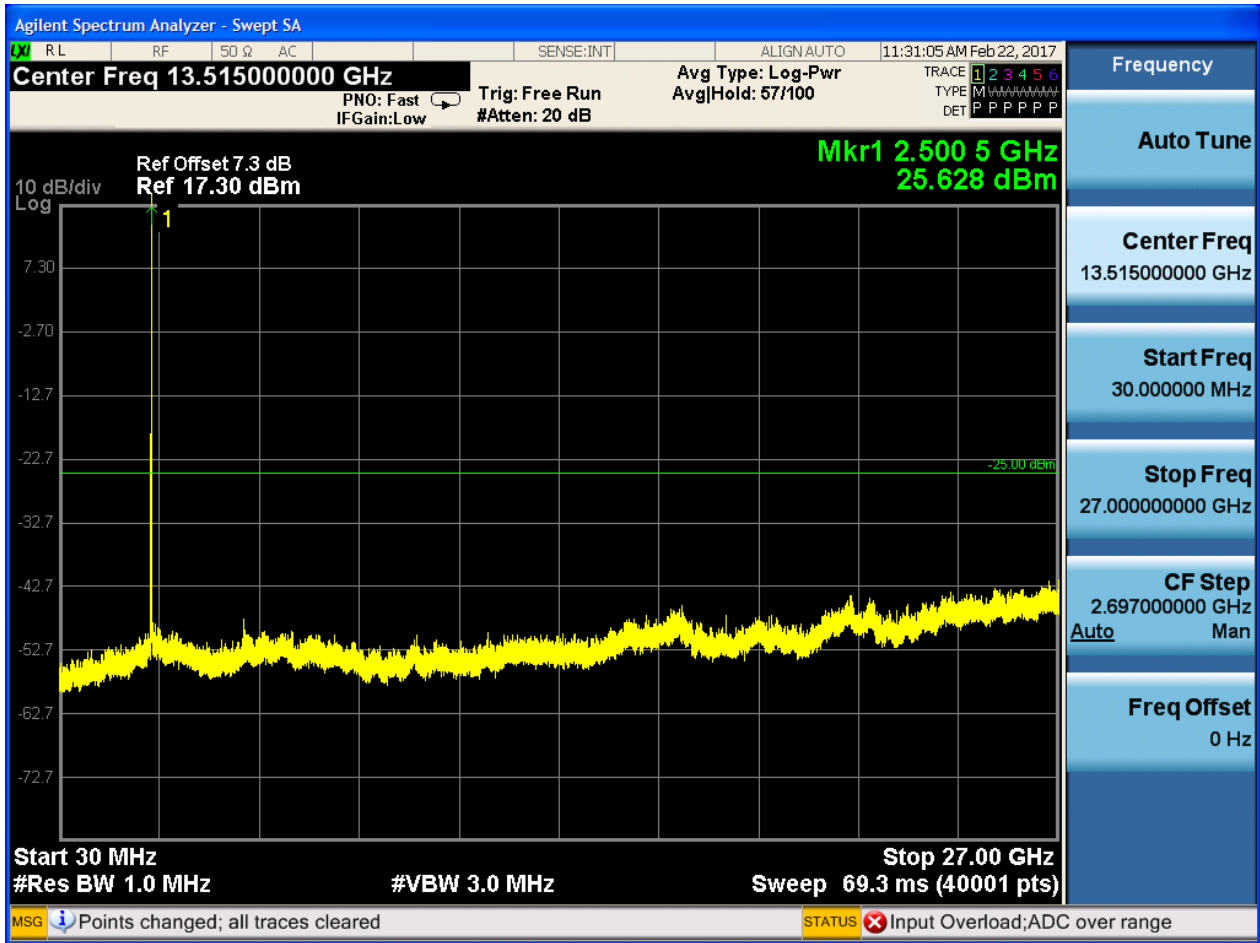
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



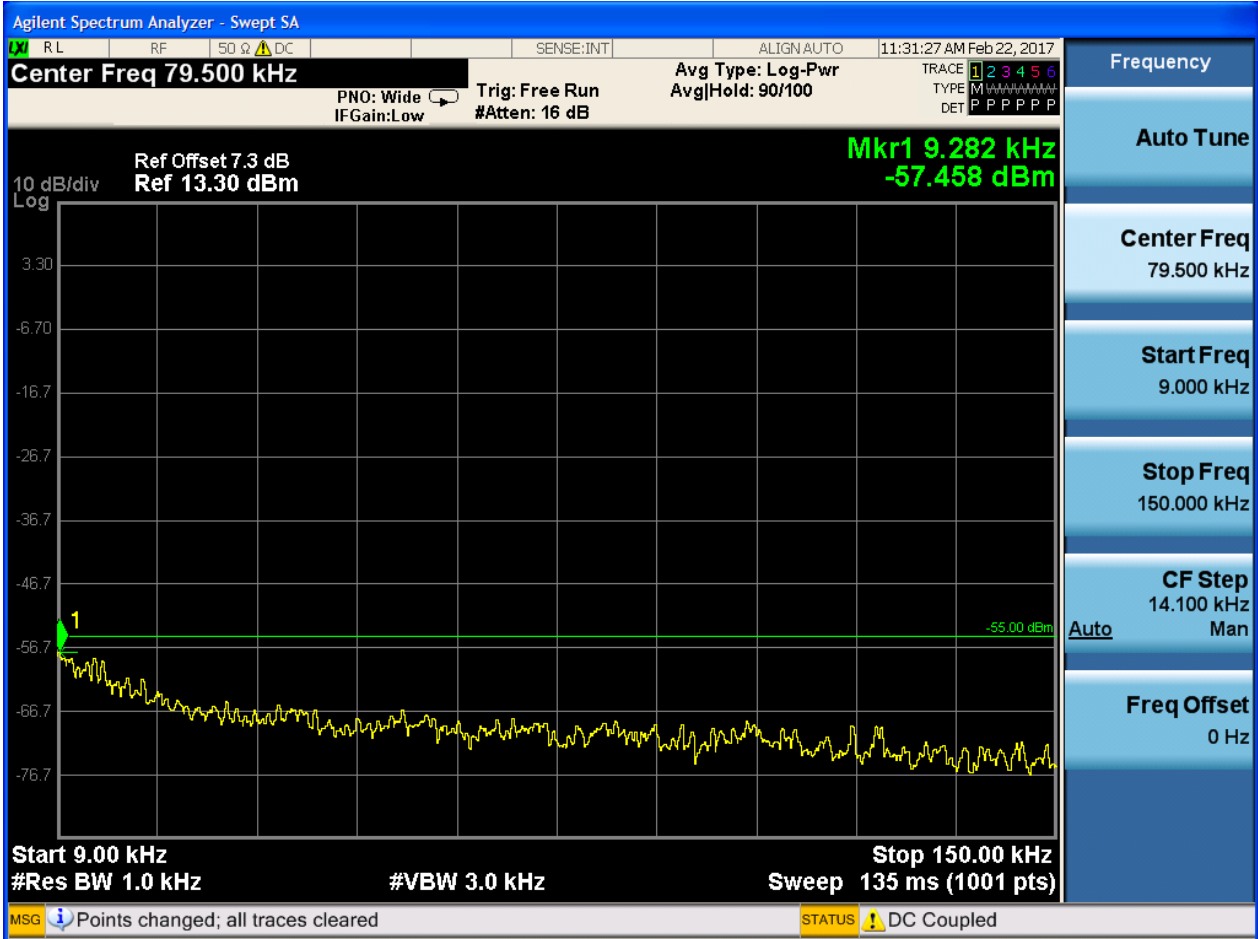


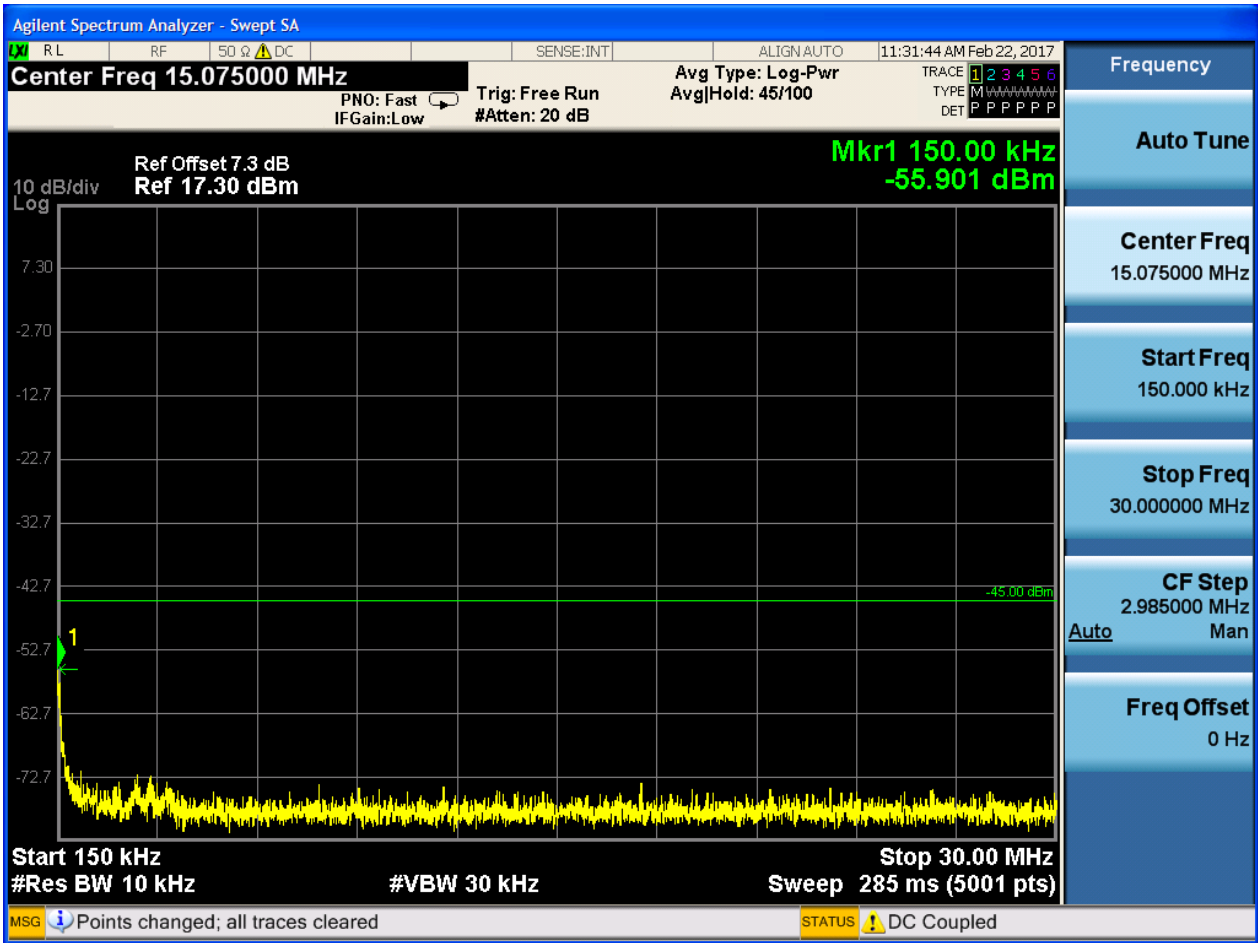


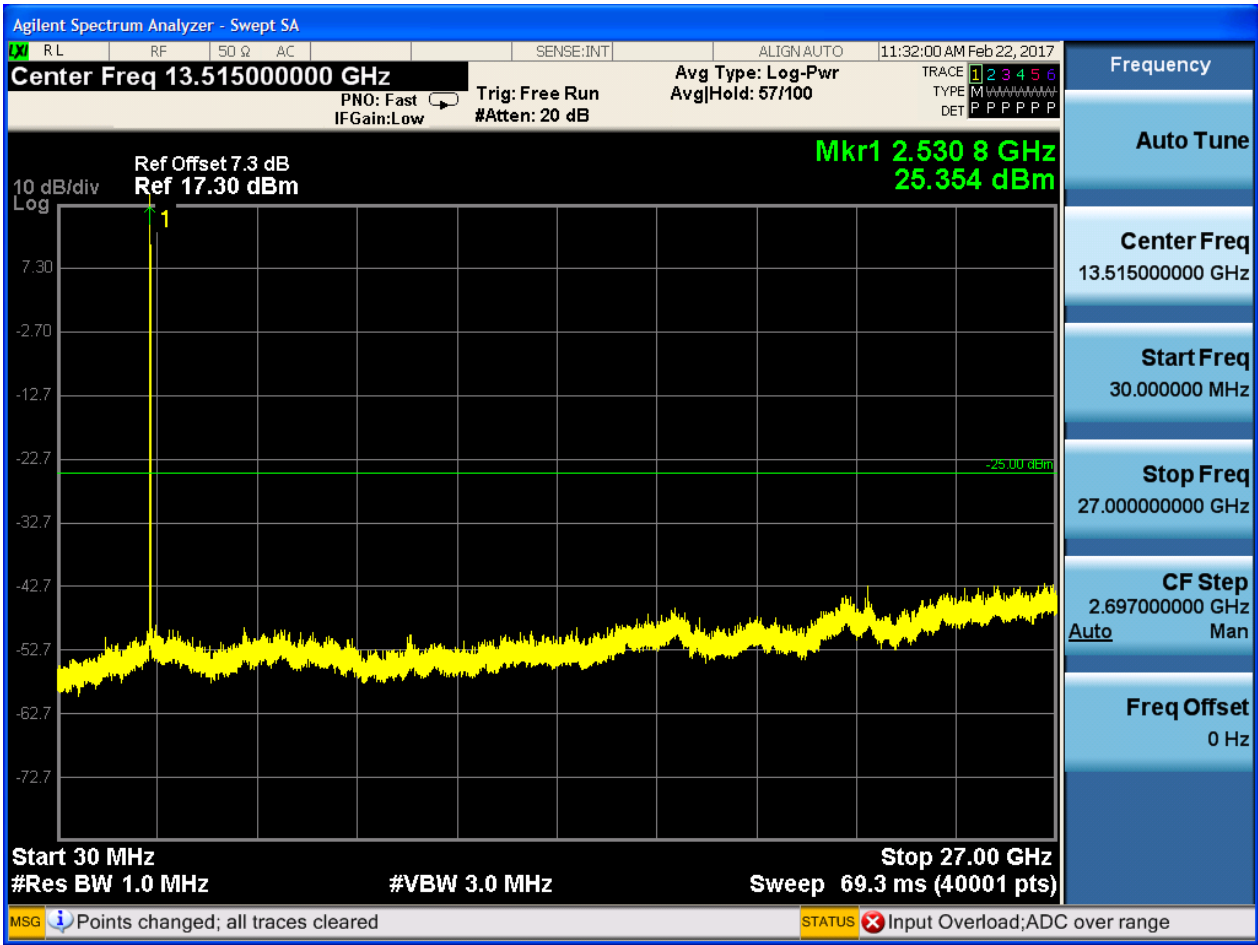


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



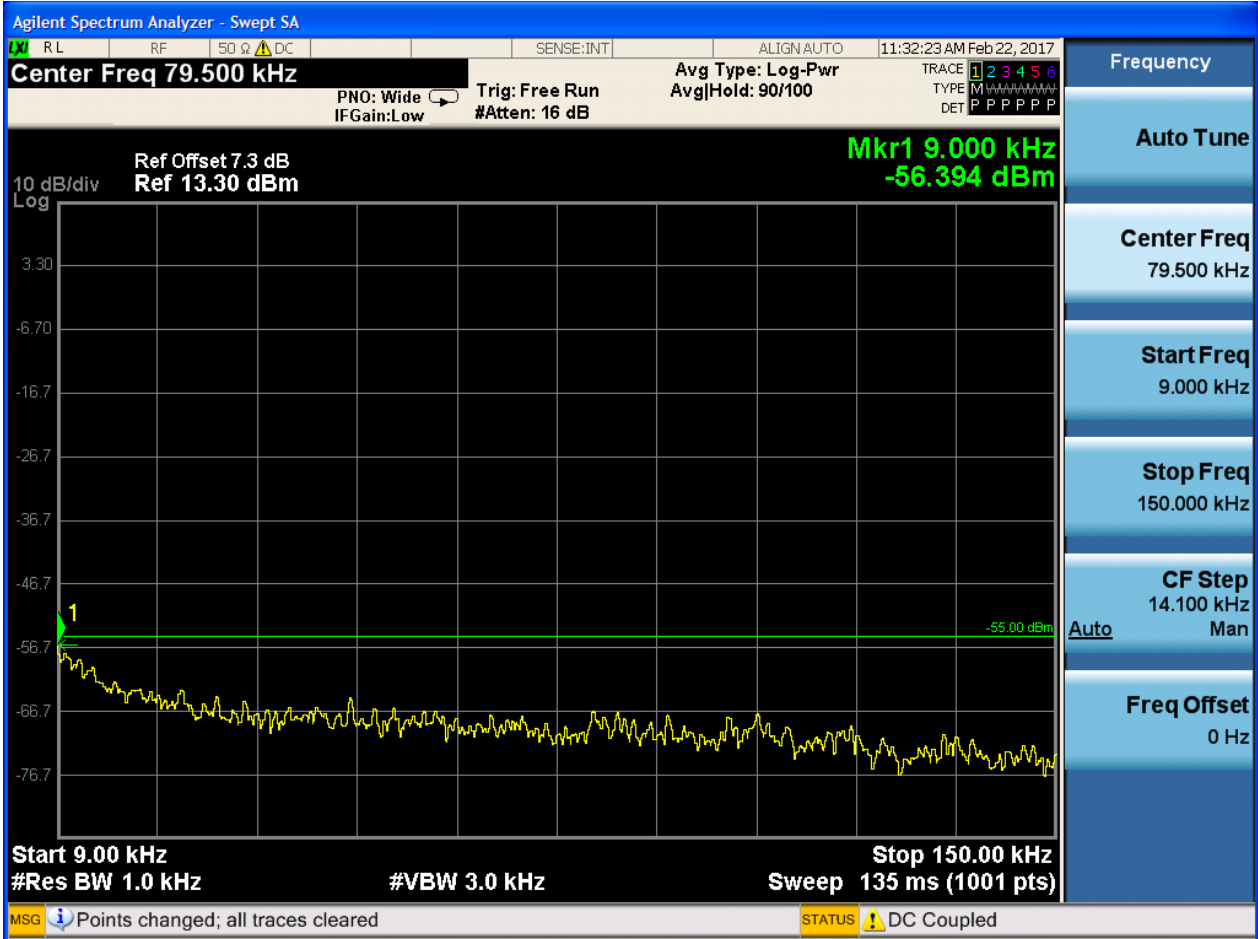


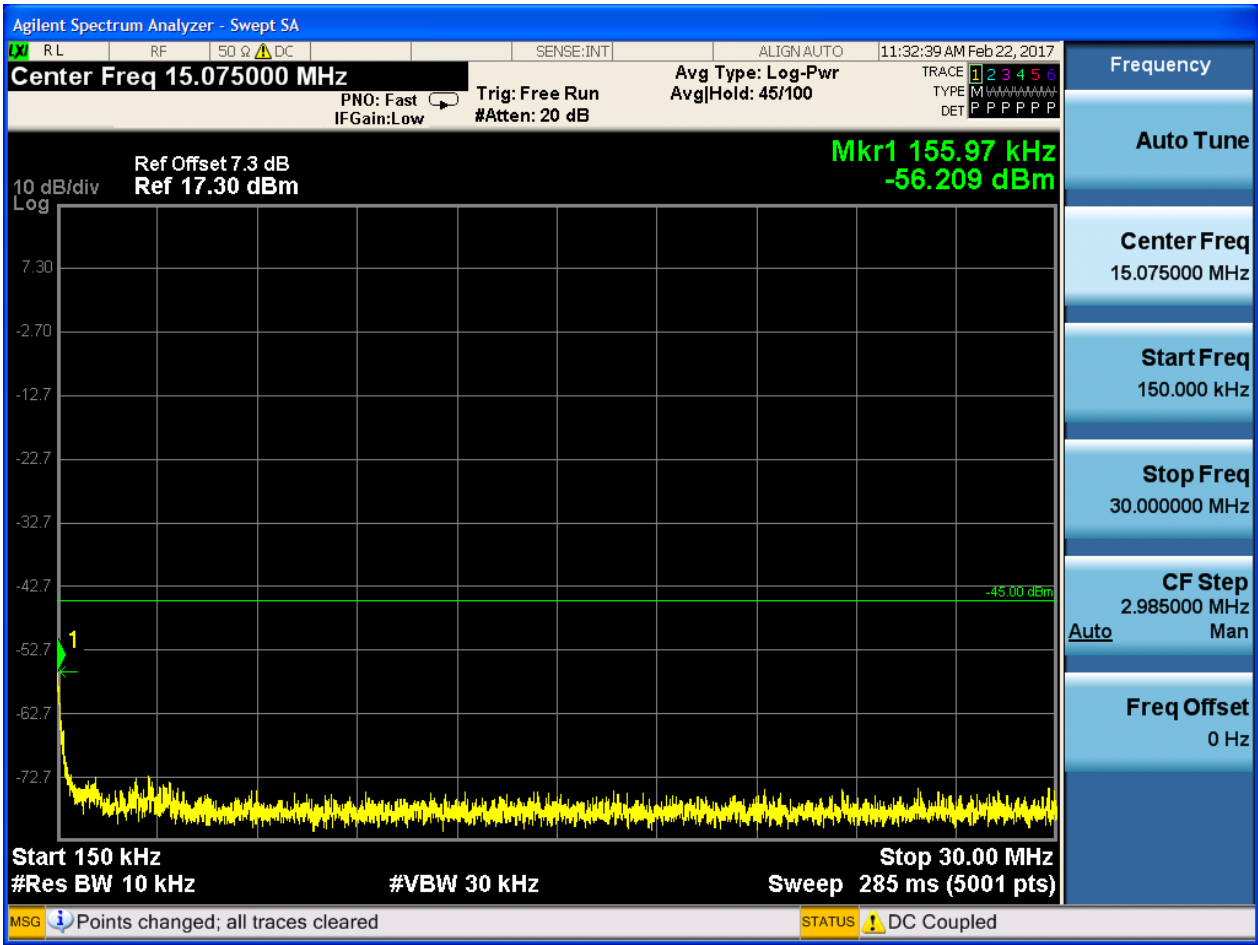


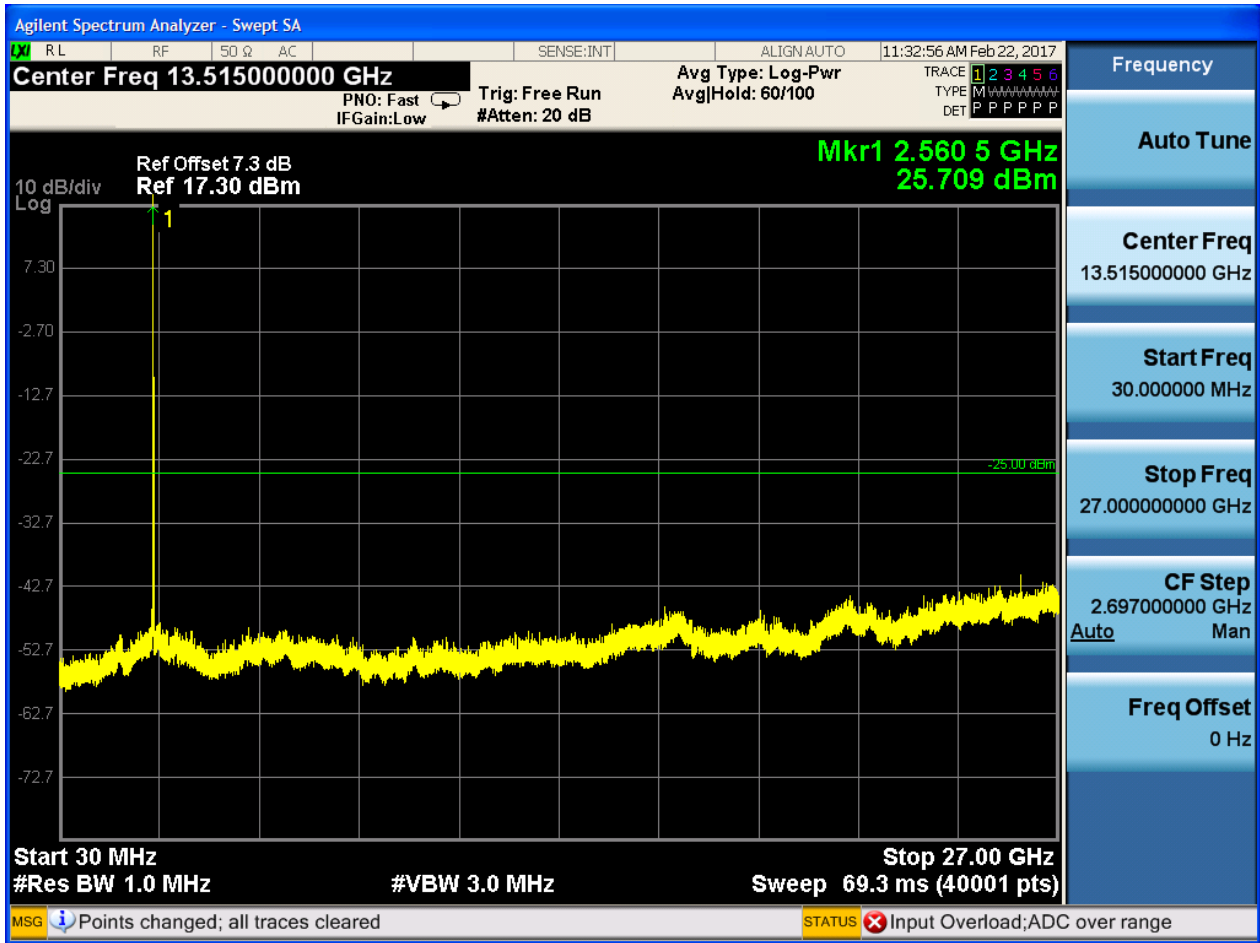


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





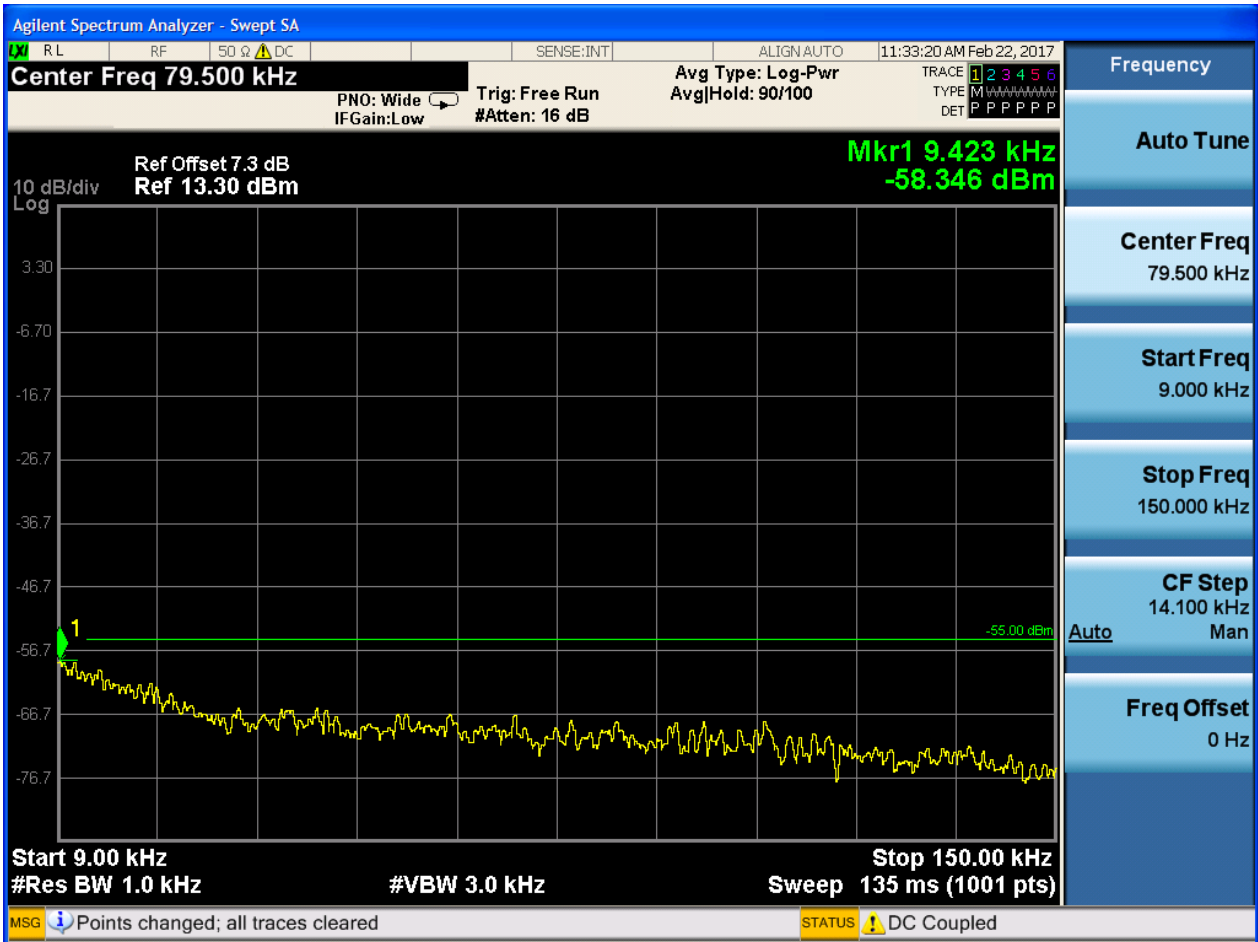


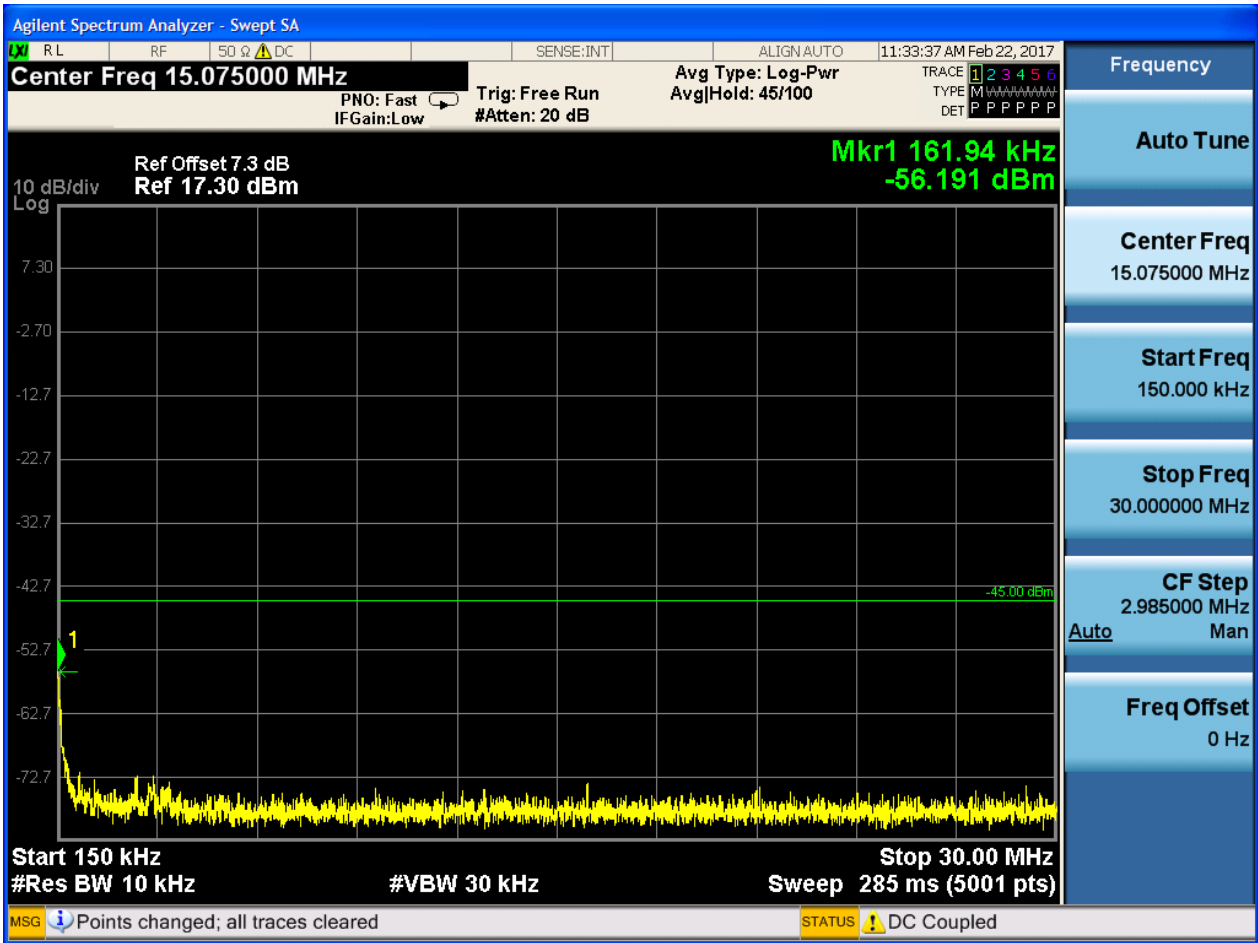


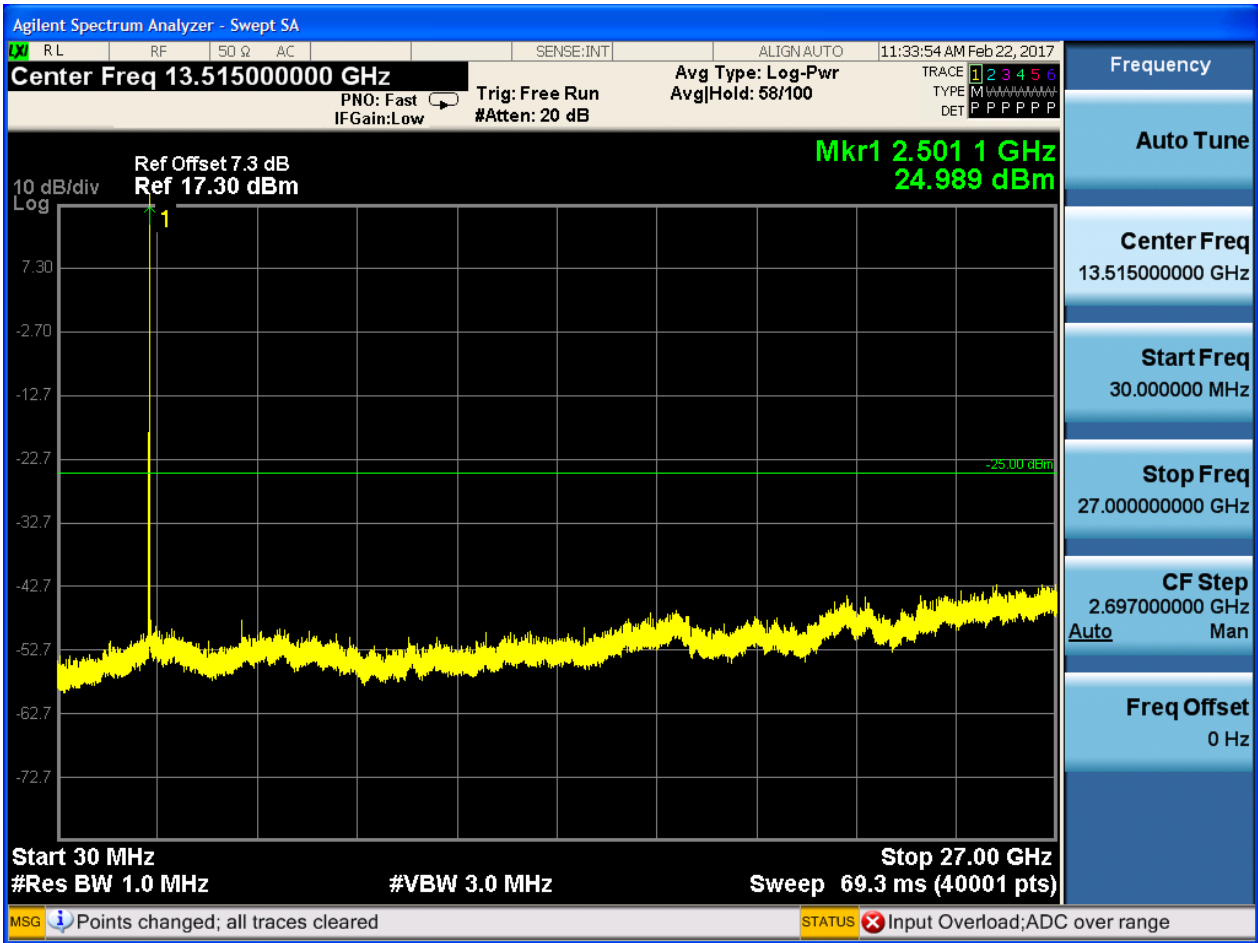
6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



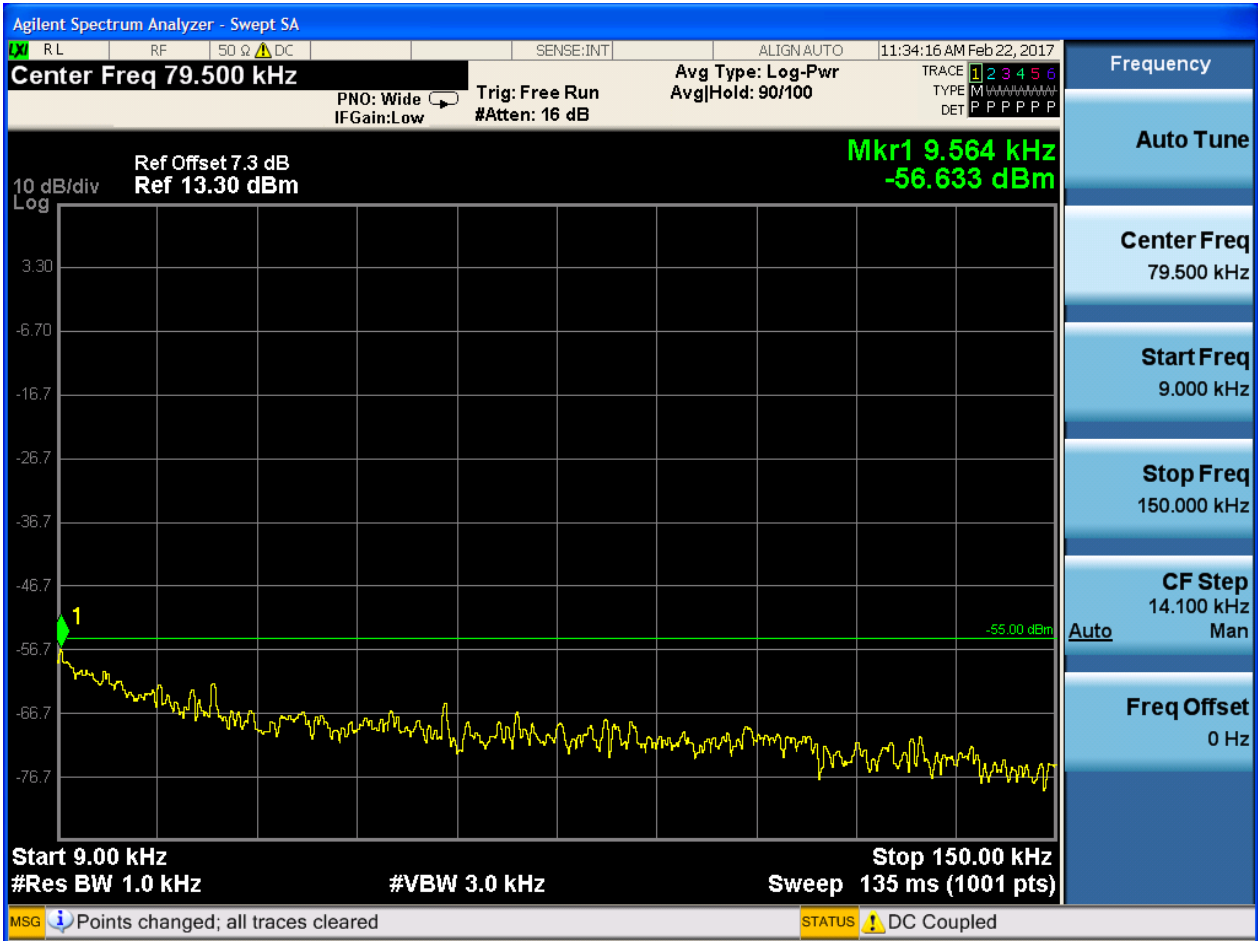


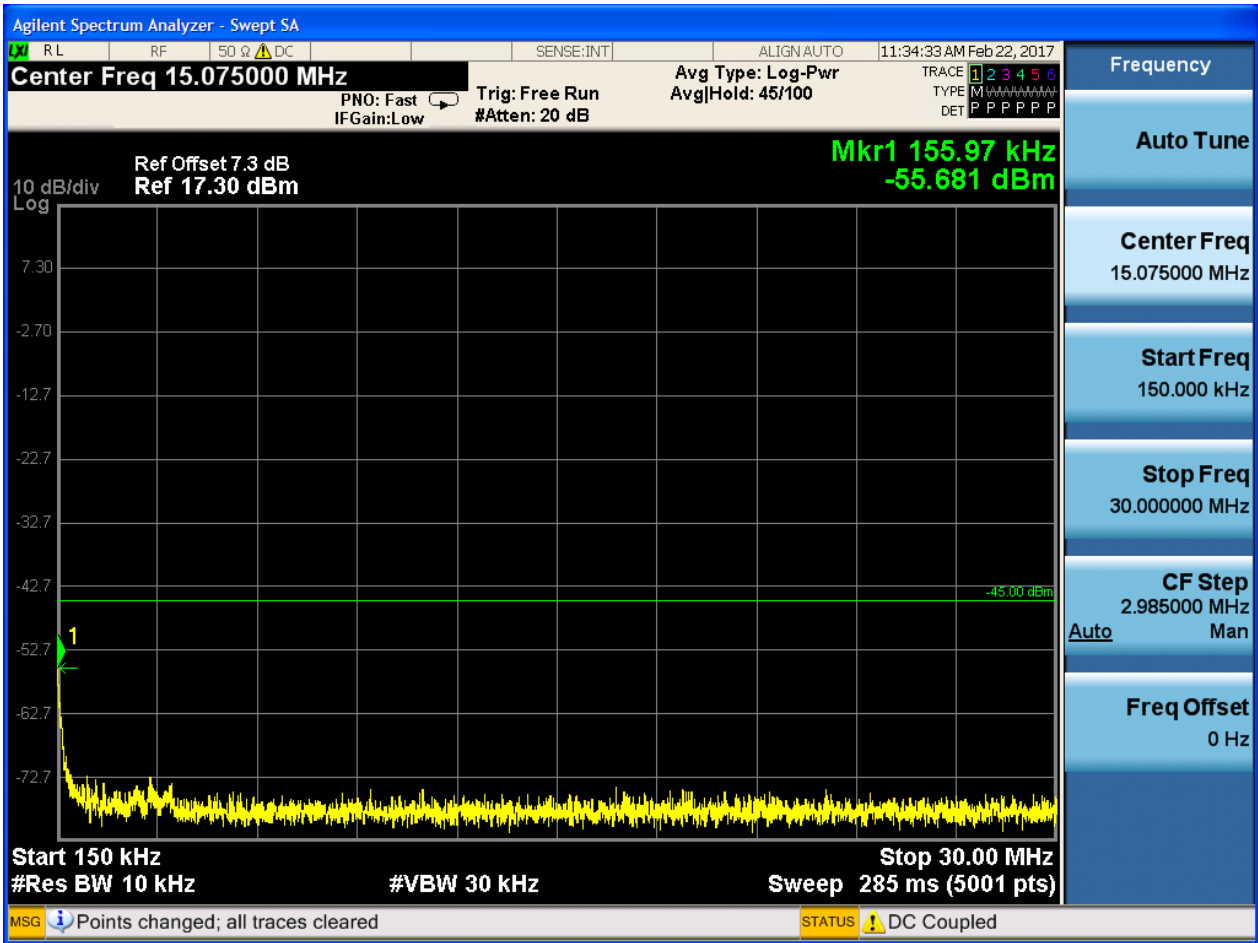


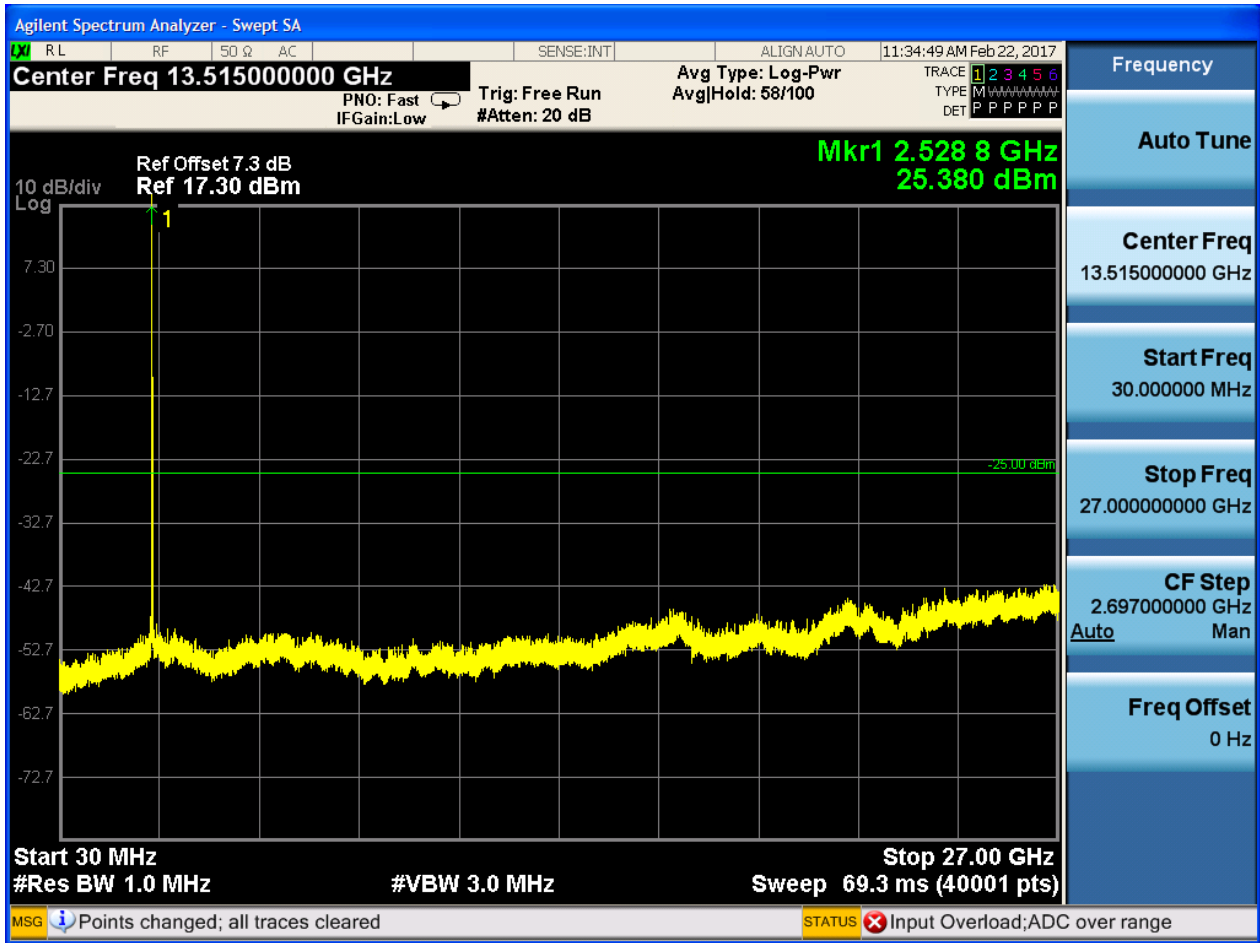


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



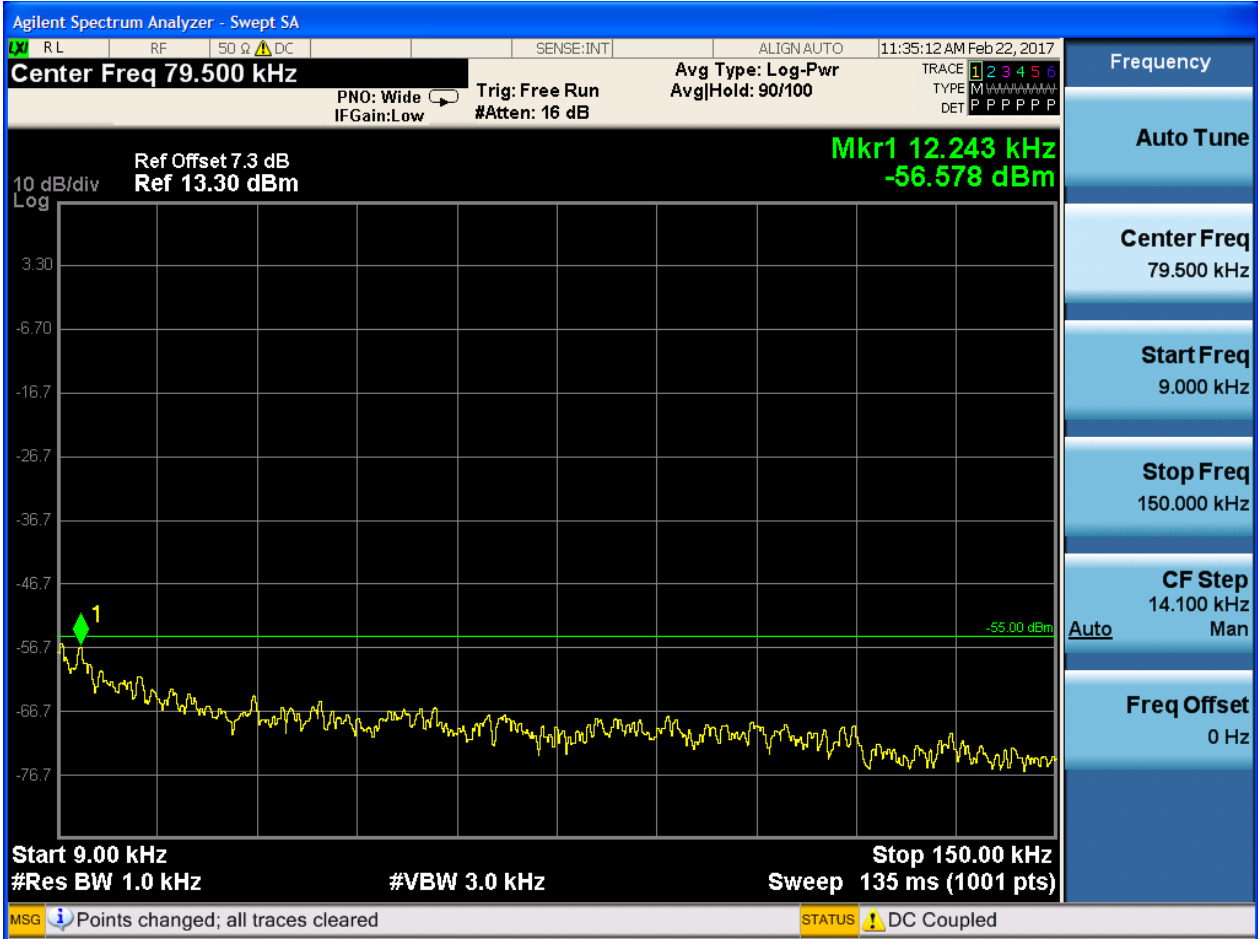


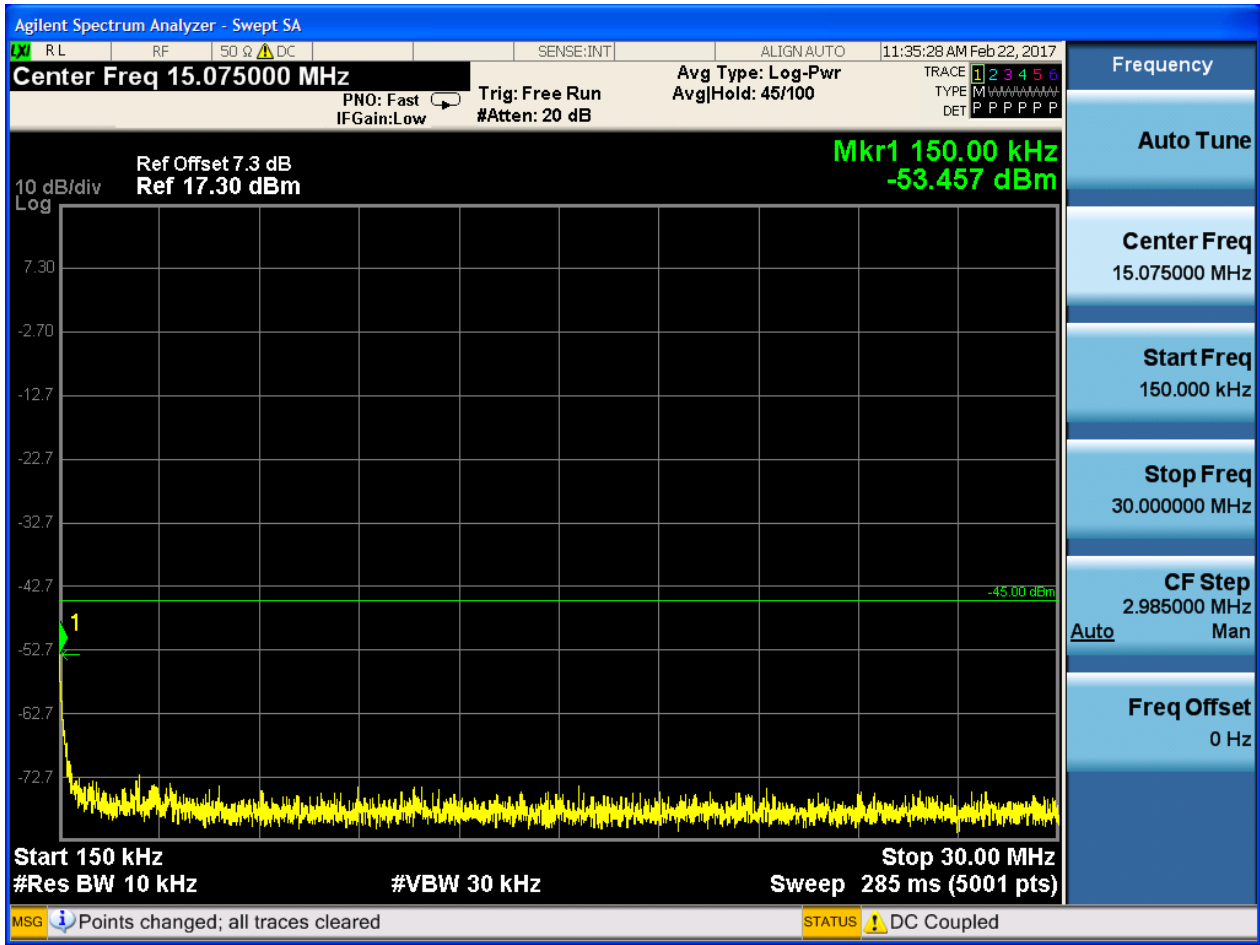


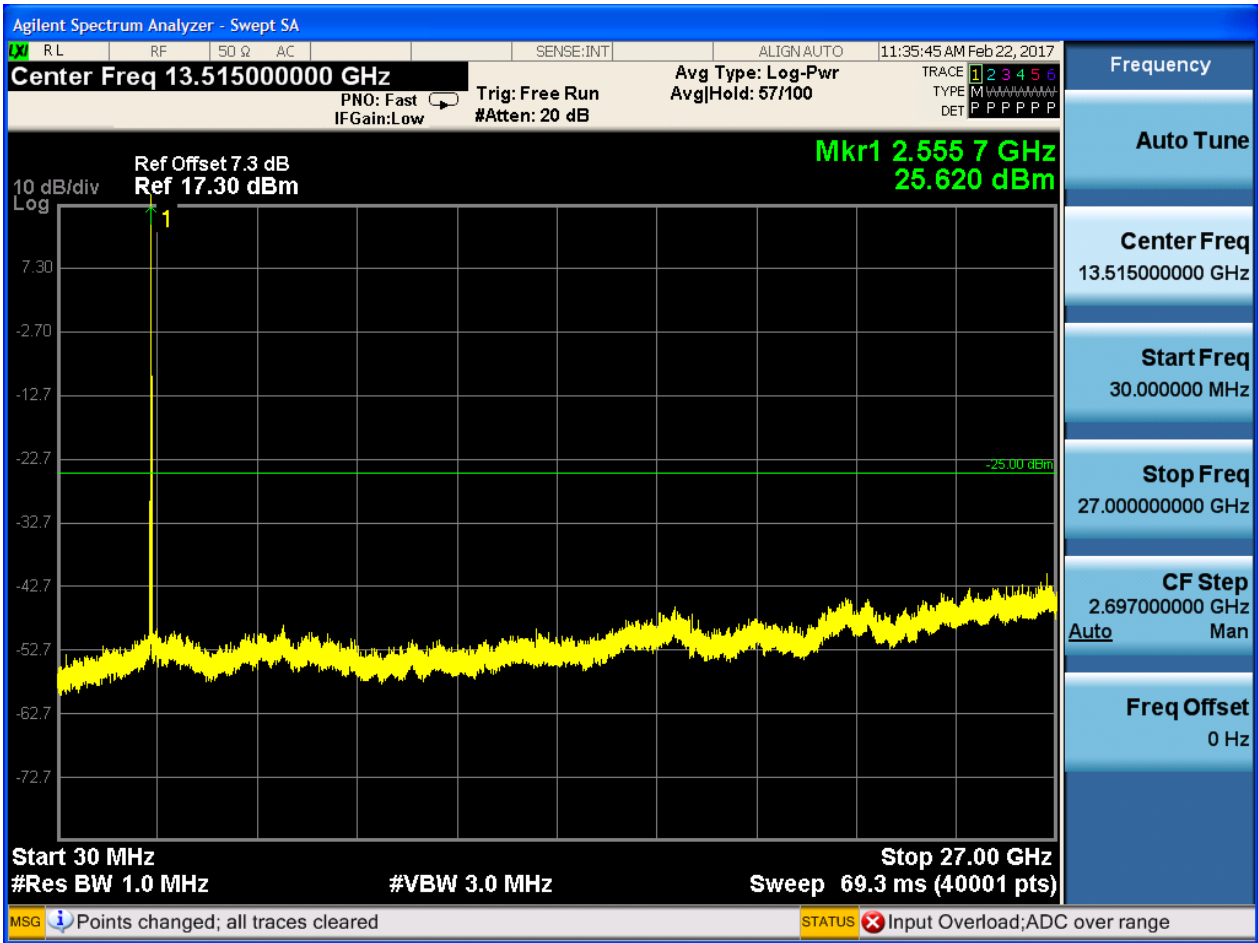


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





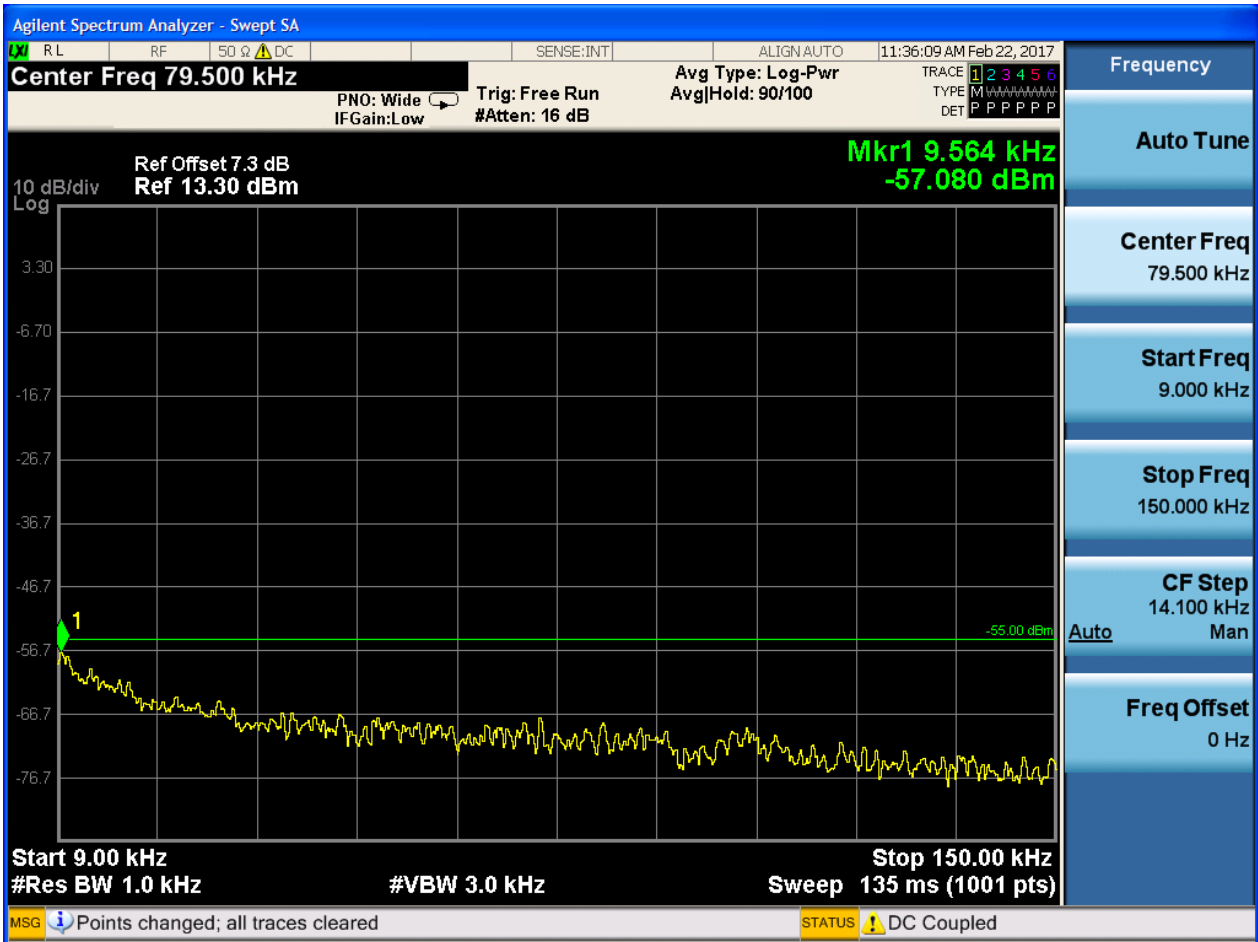


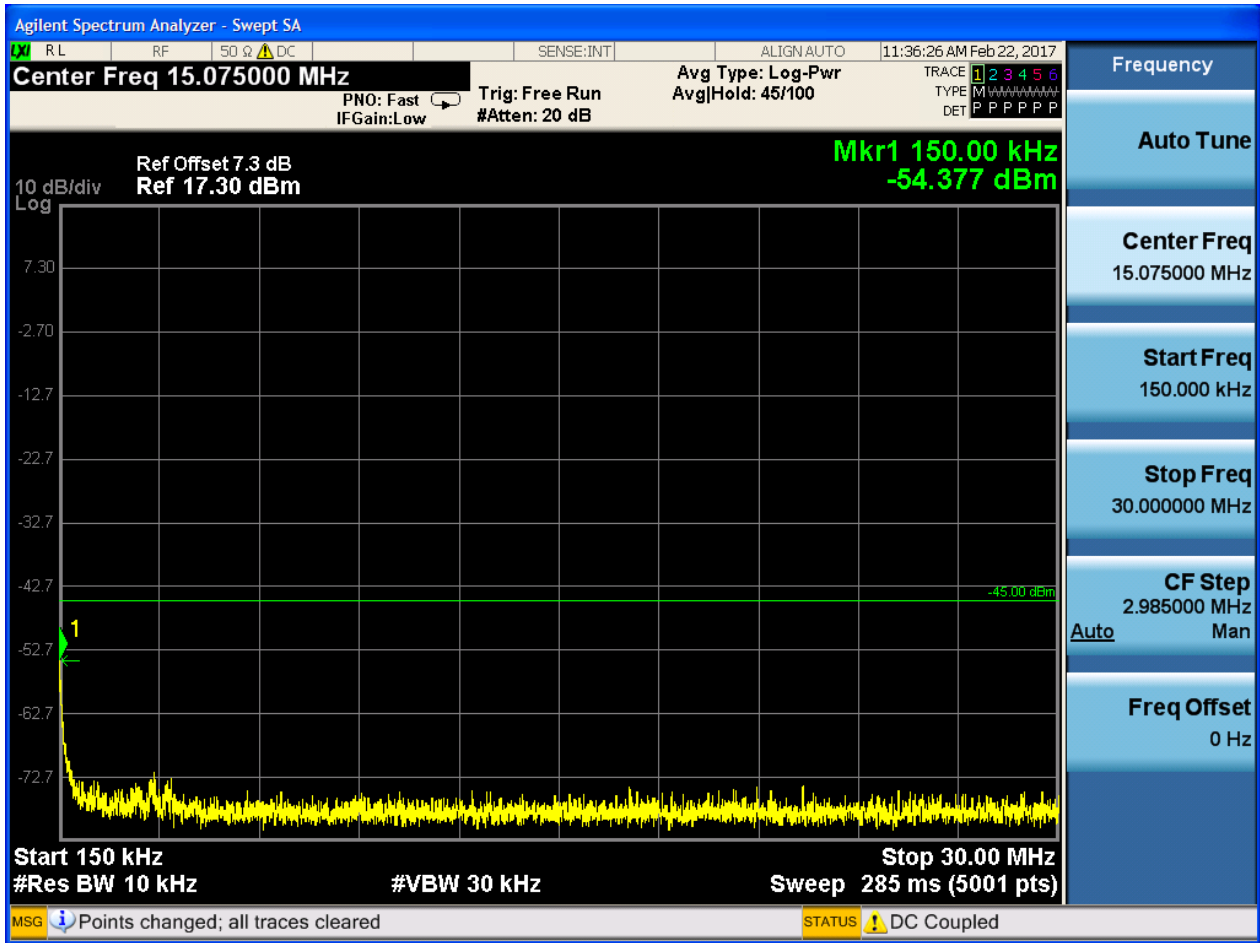


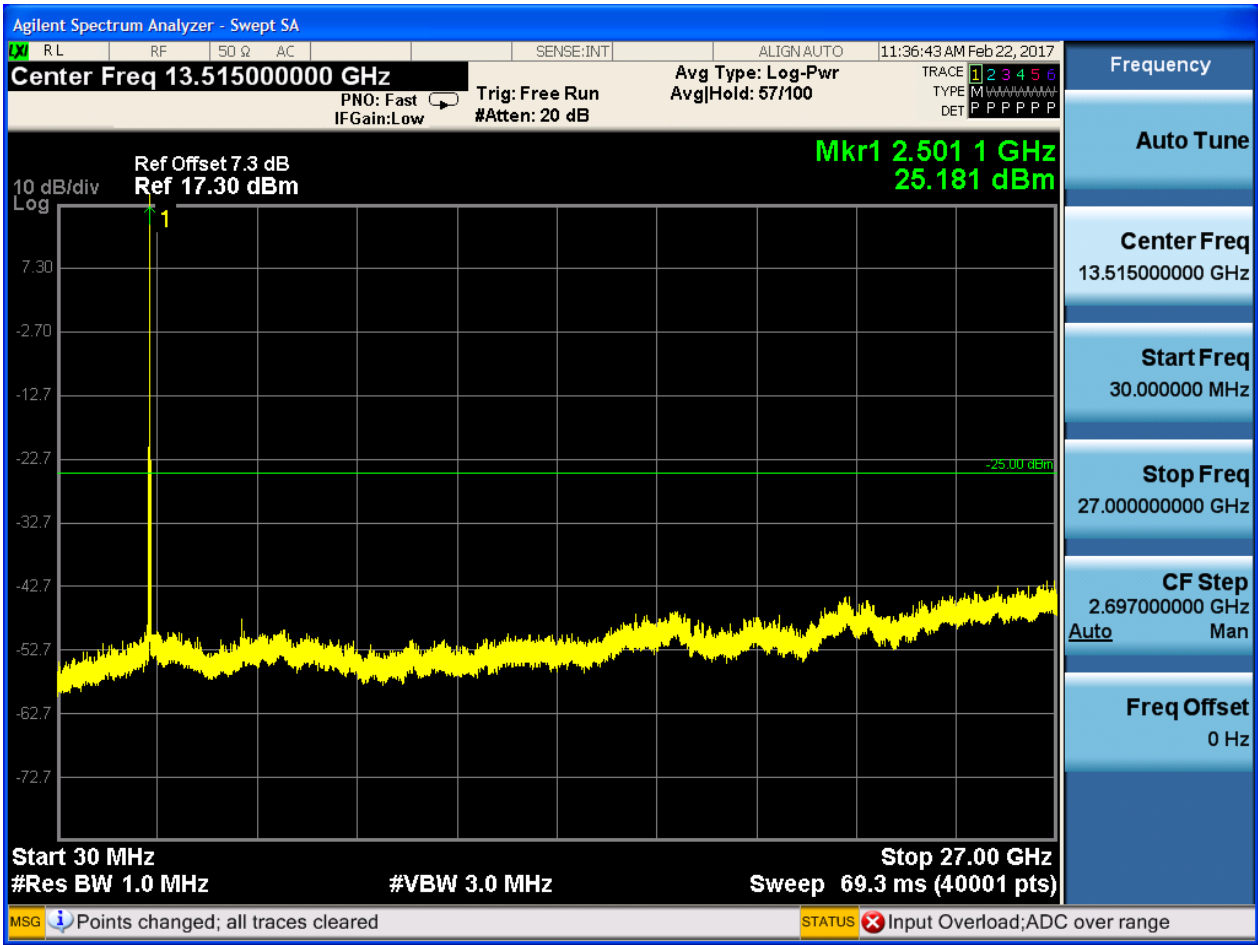
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



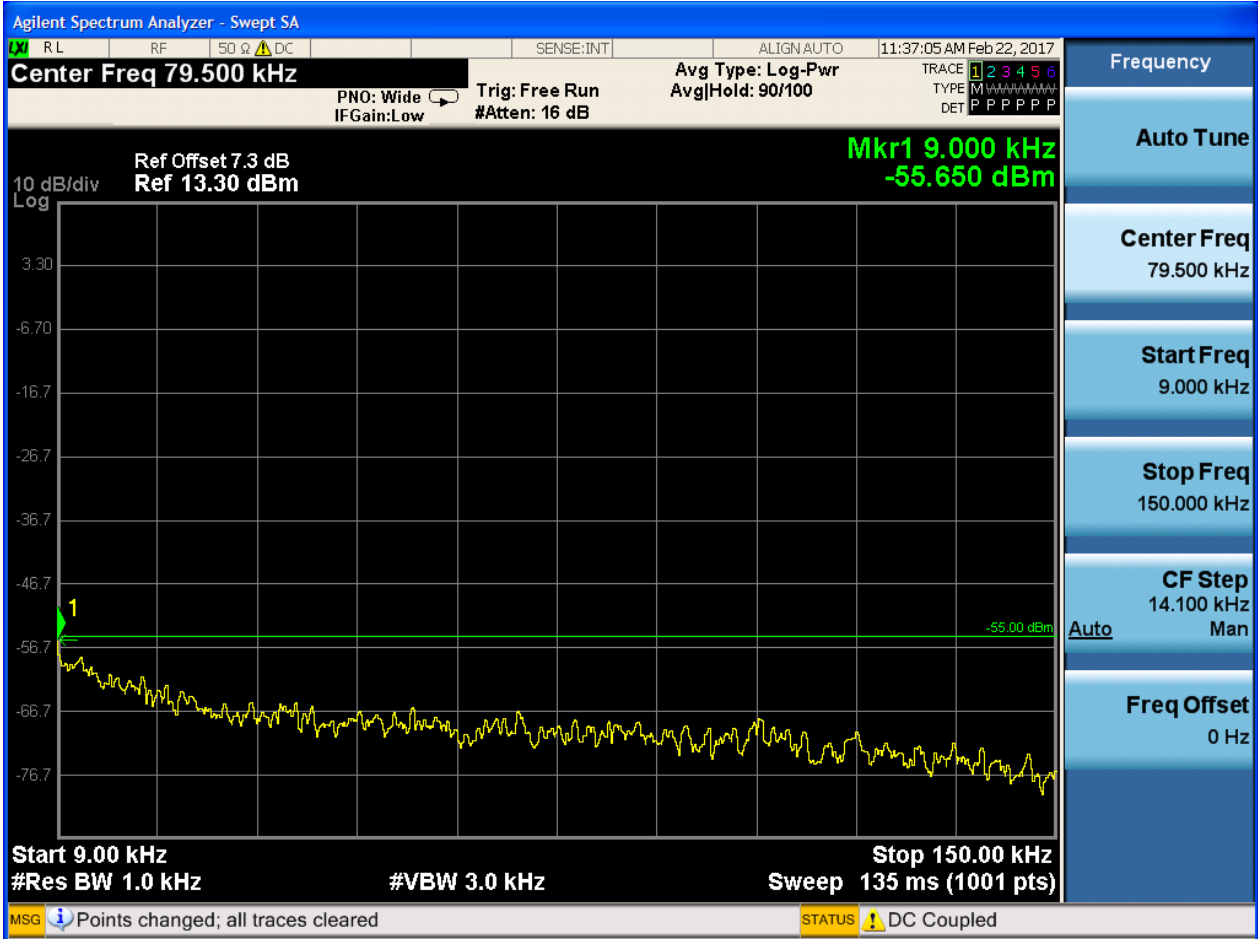


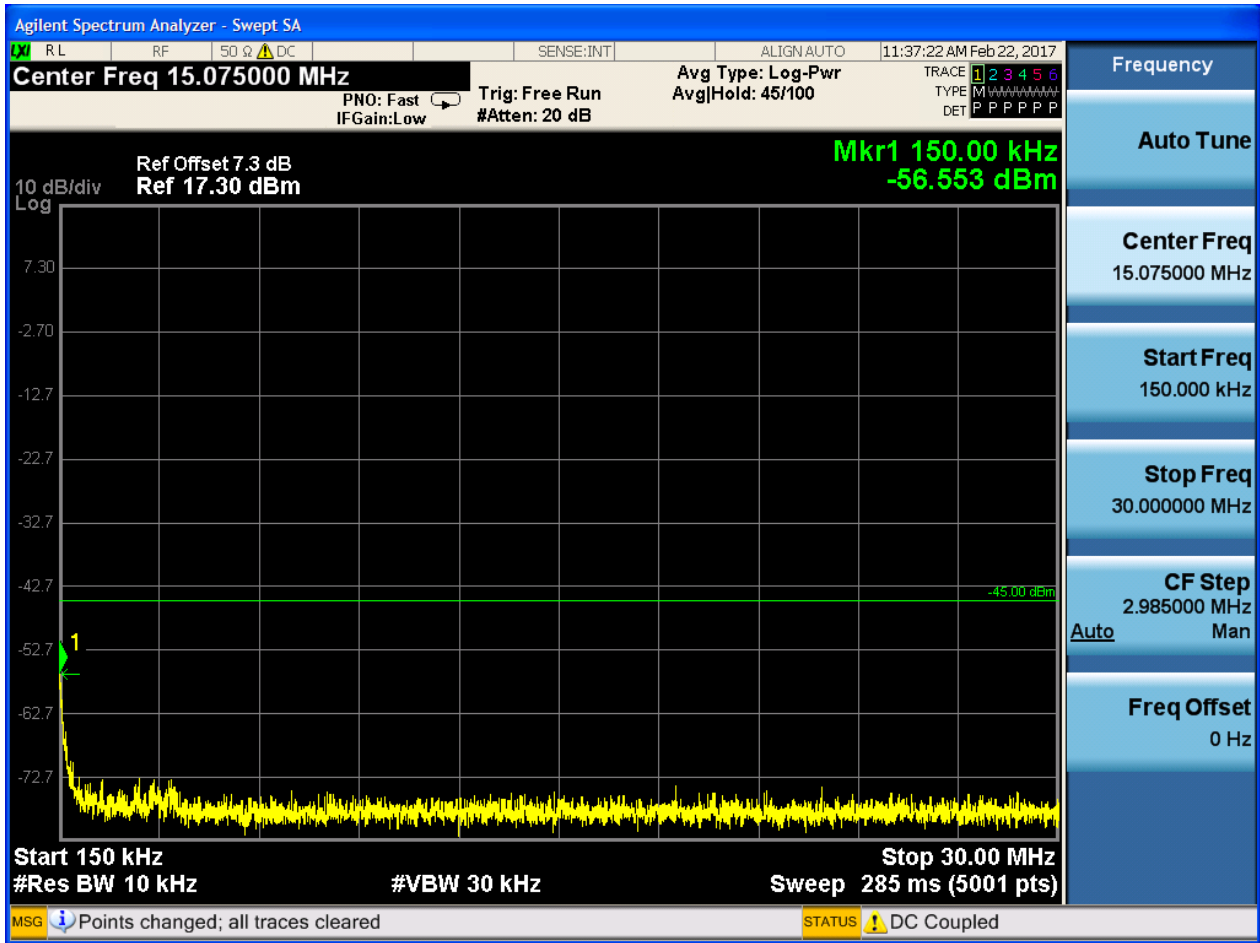


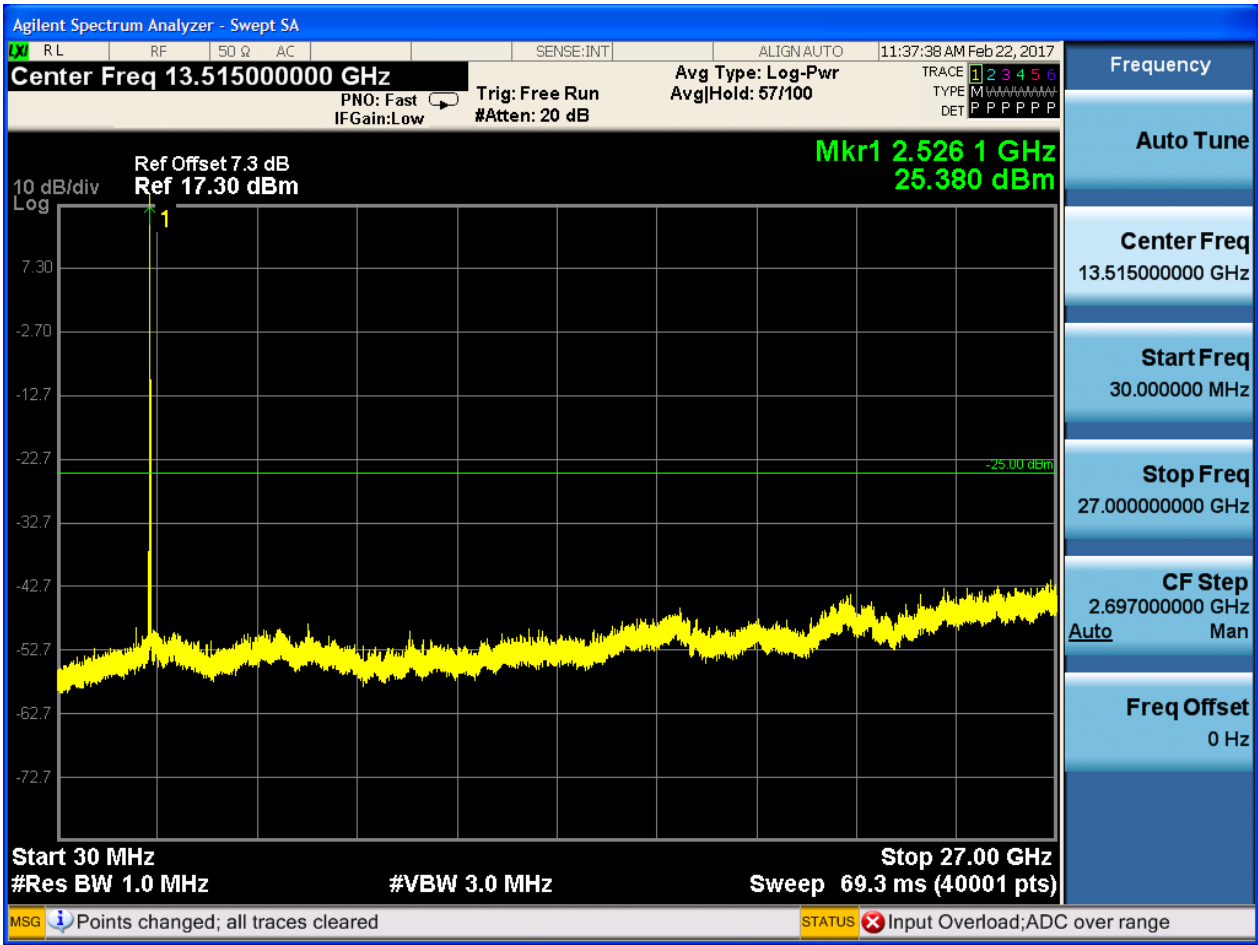


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



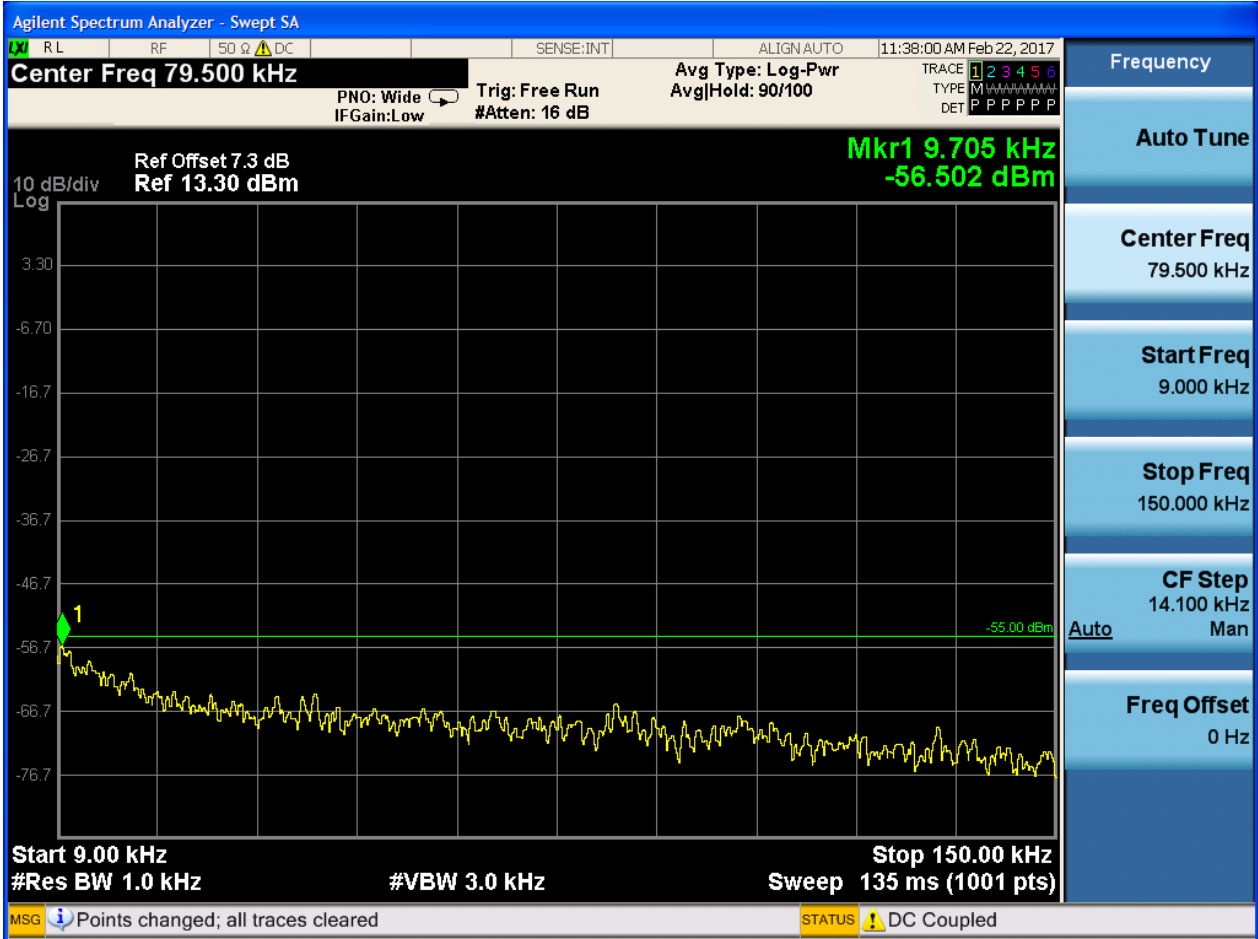


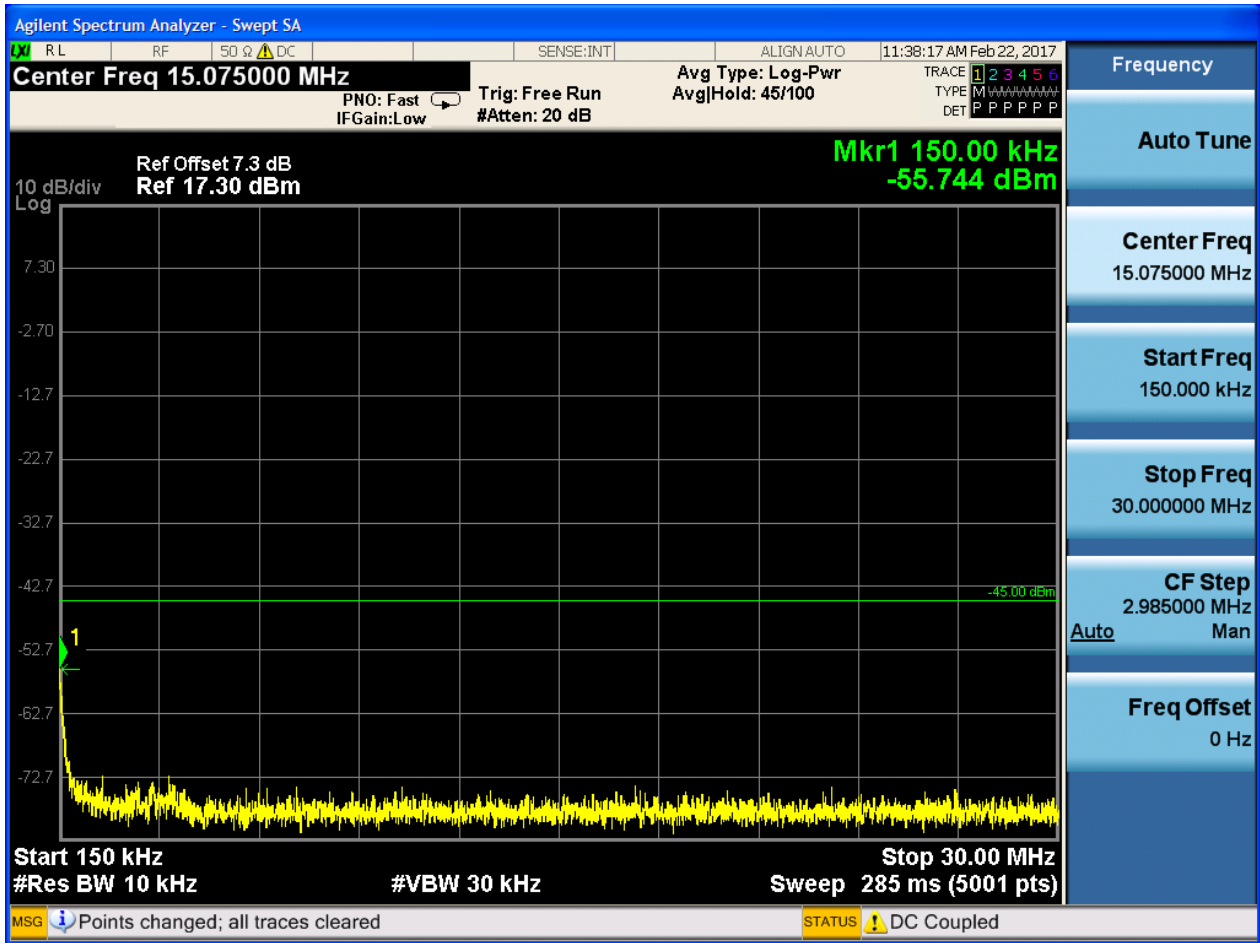


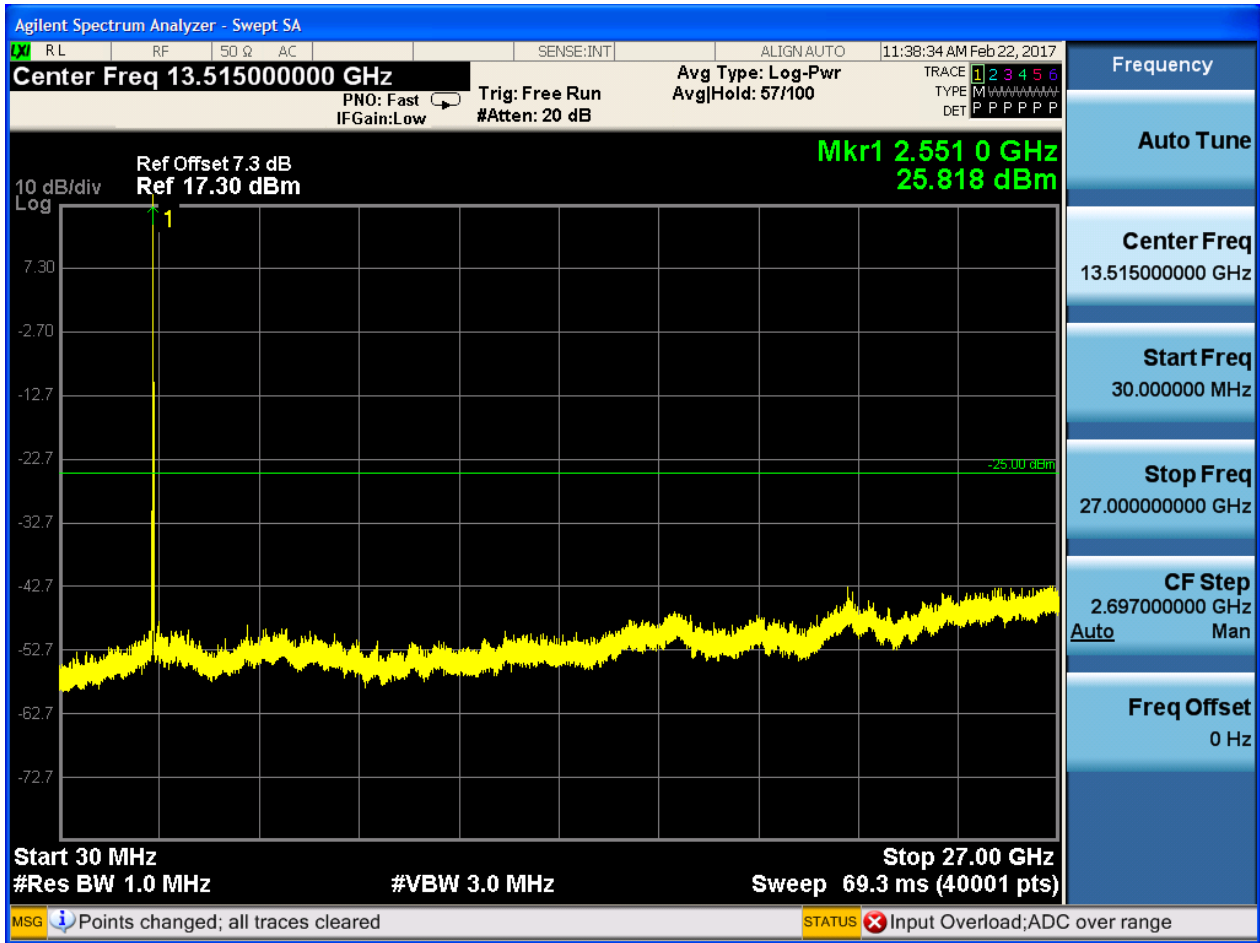


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







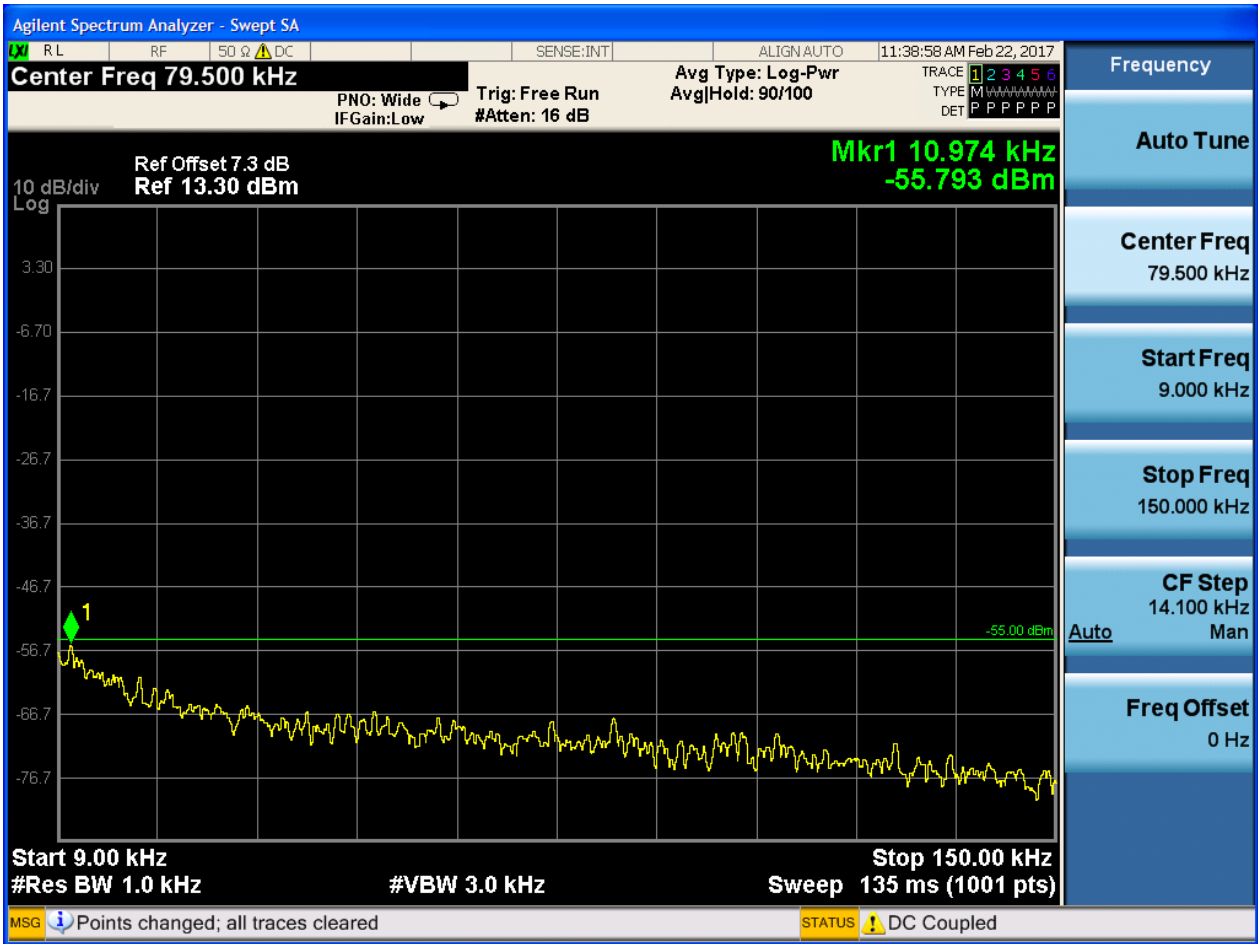


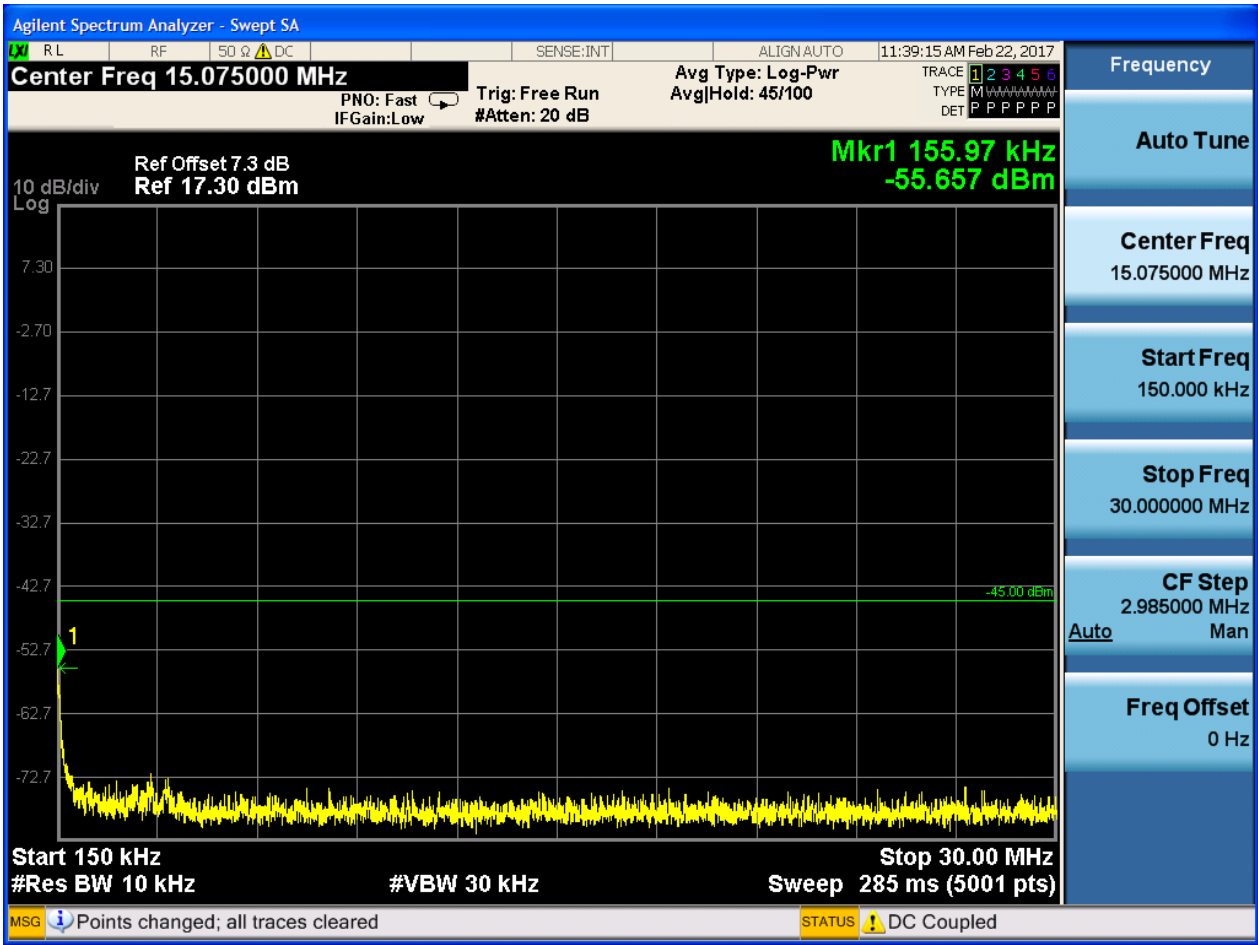
6.1.1.2 Test Mode = LTE/TM2

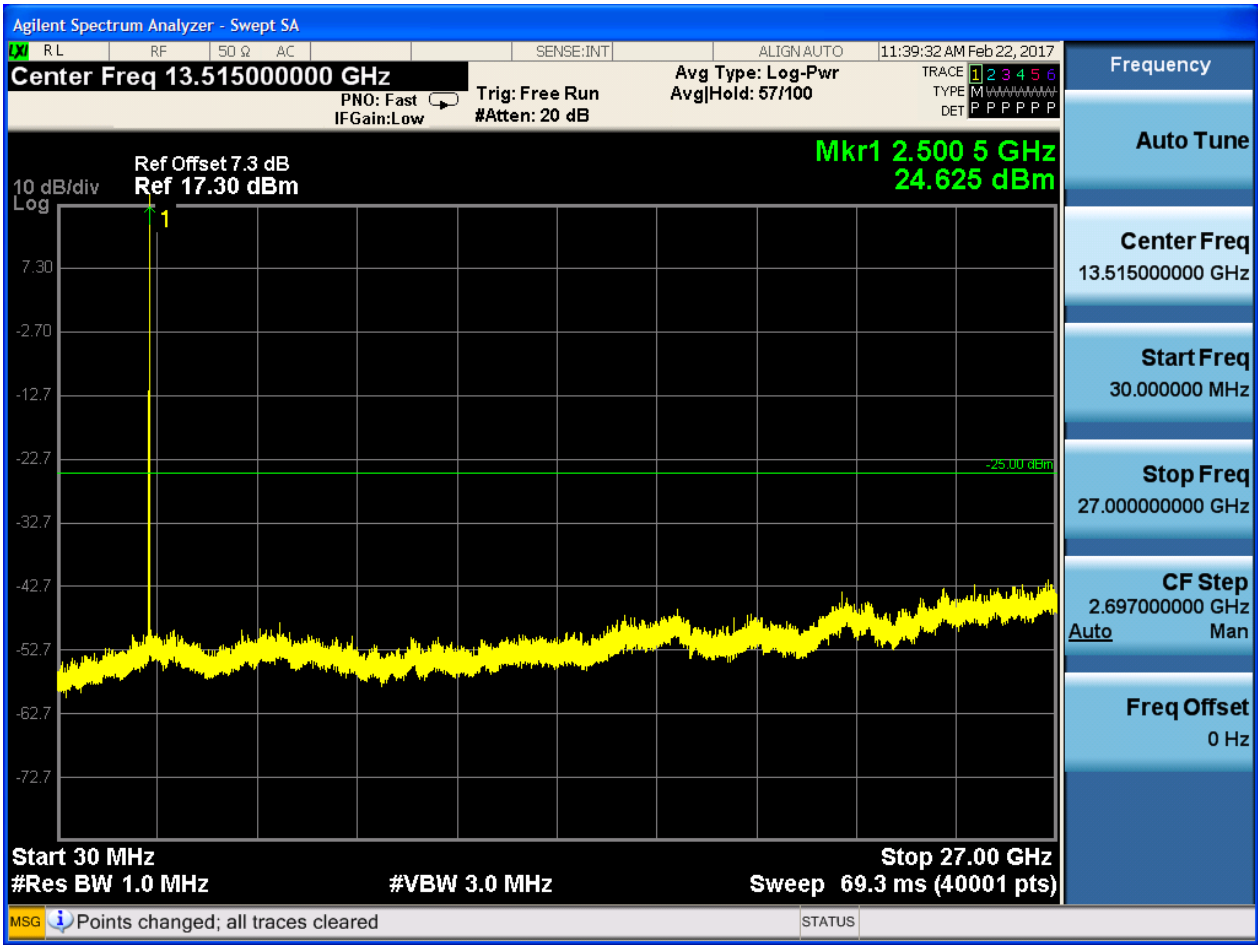
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



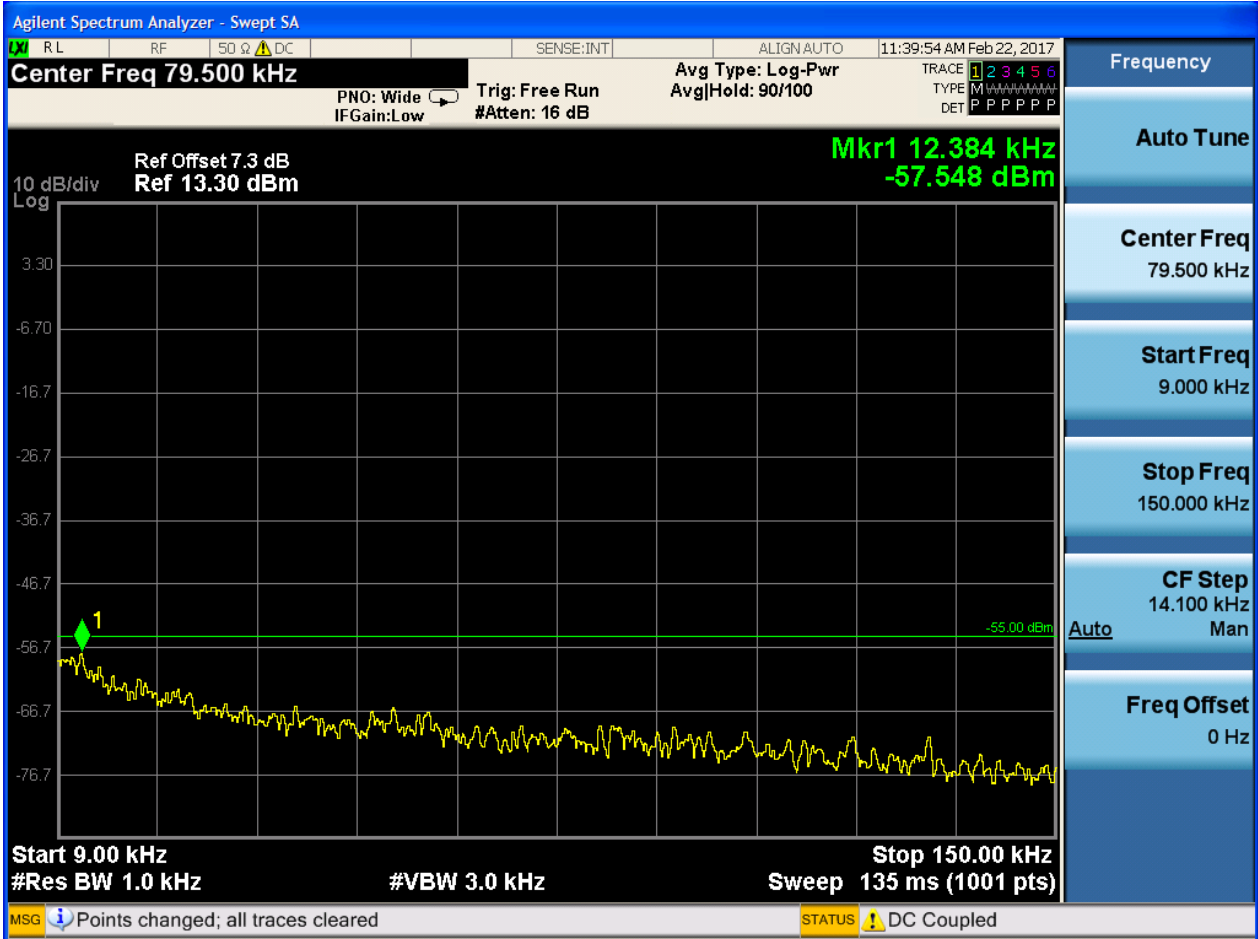


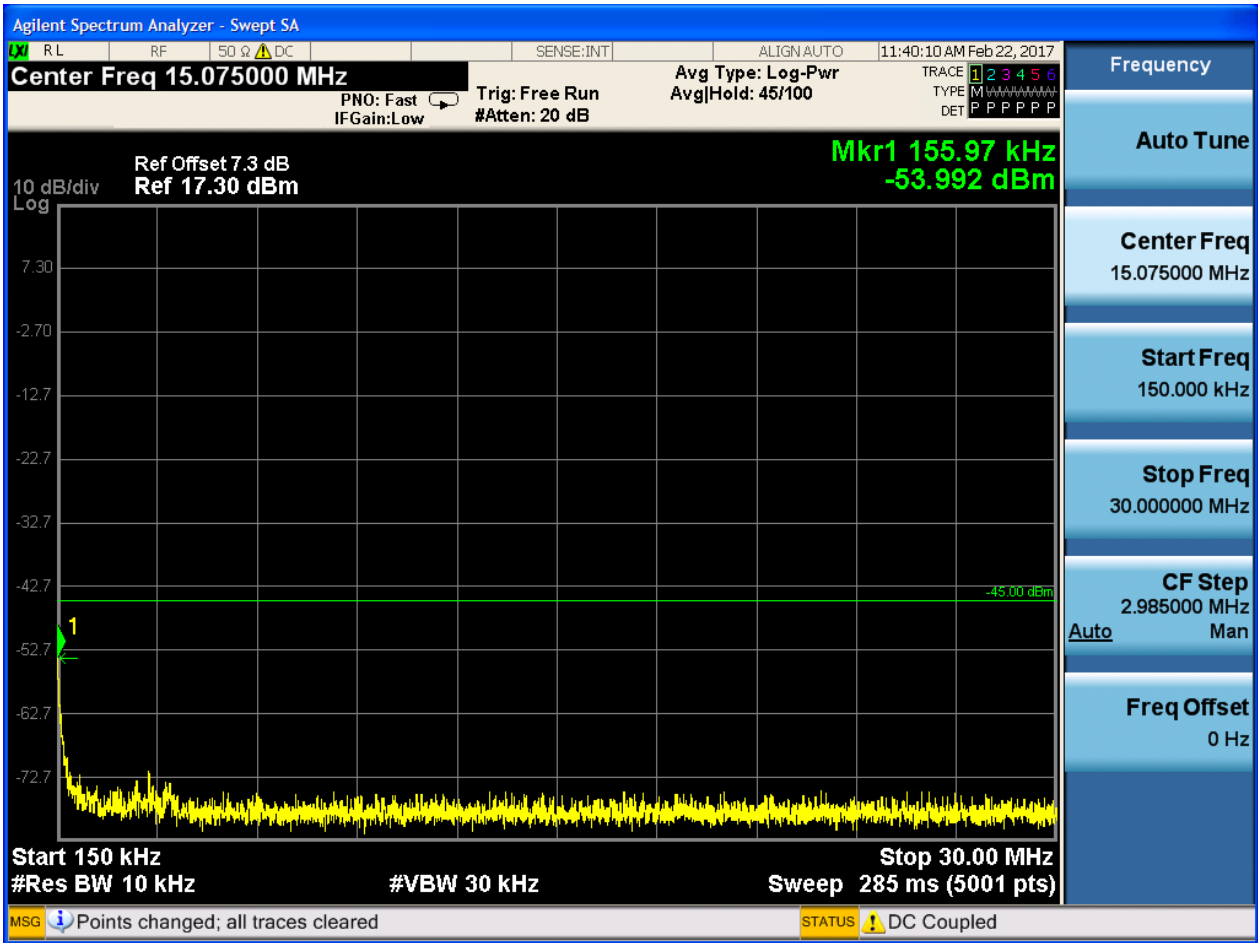


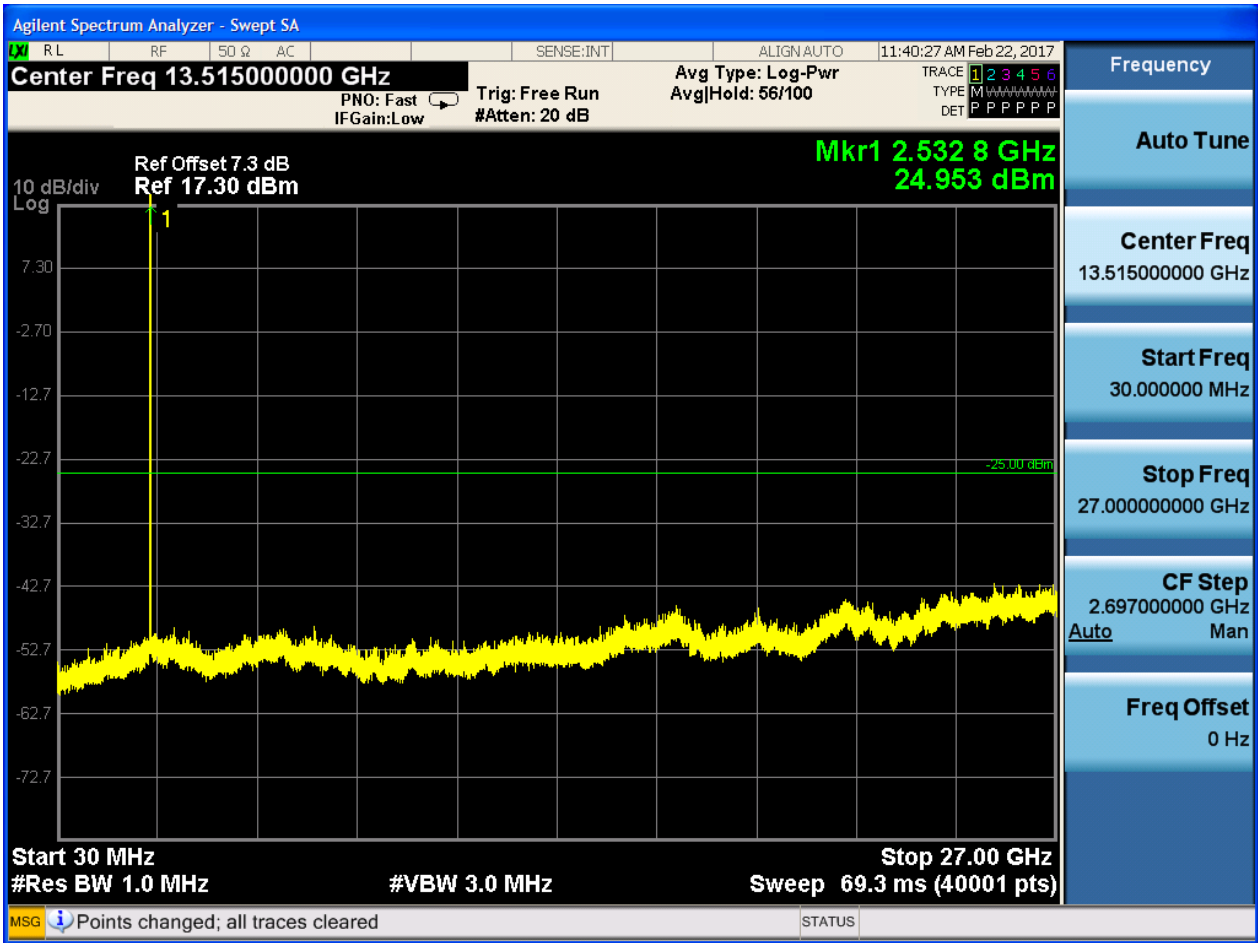


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



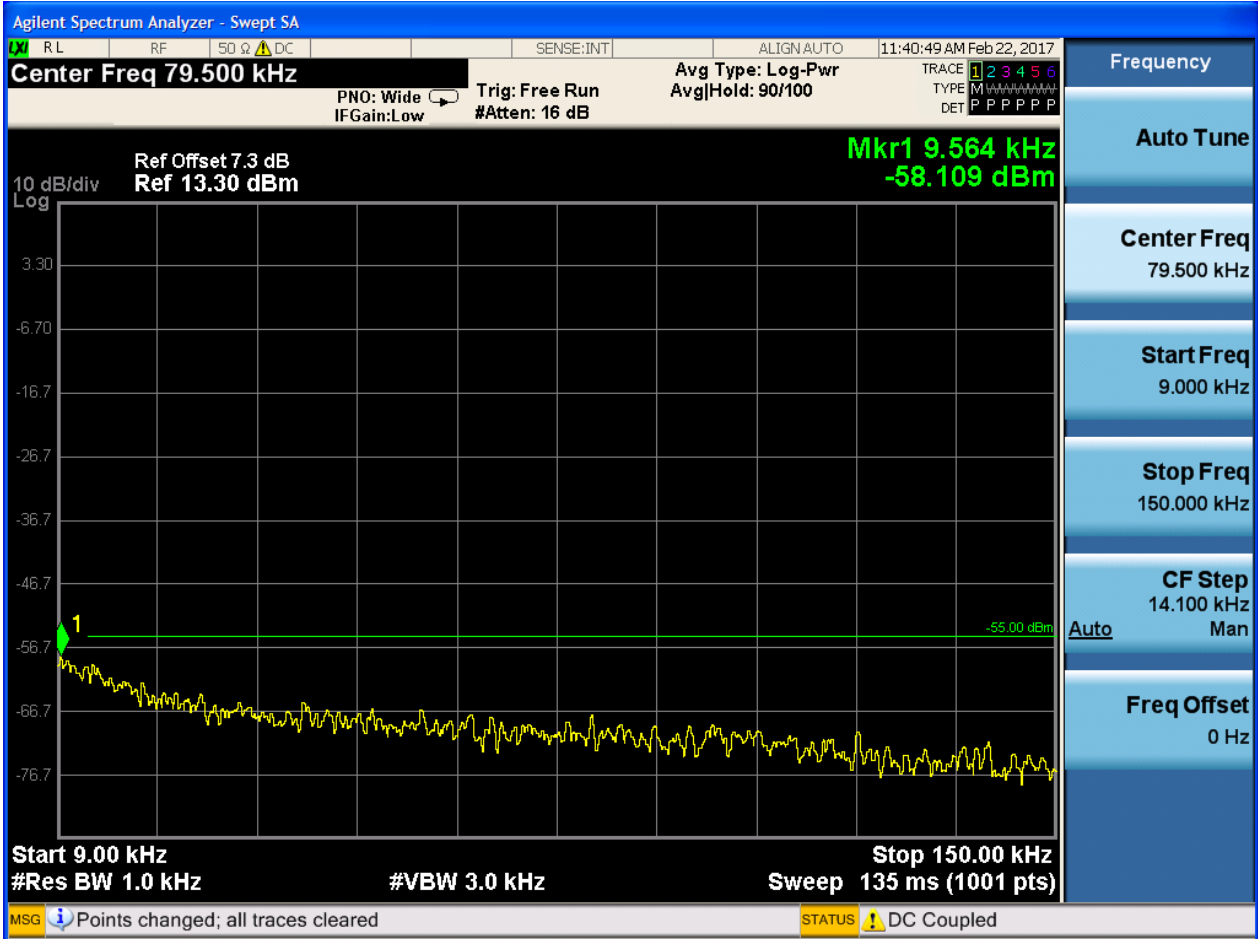


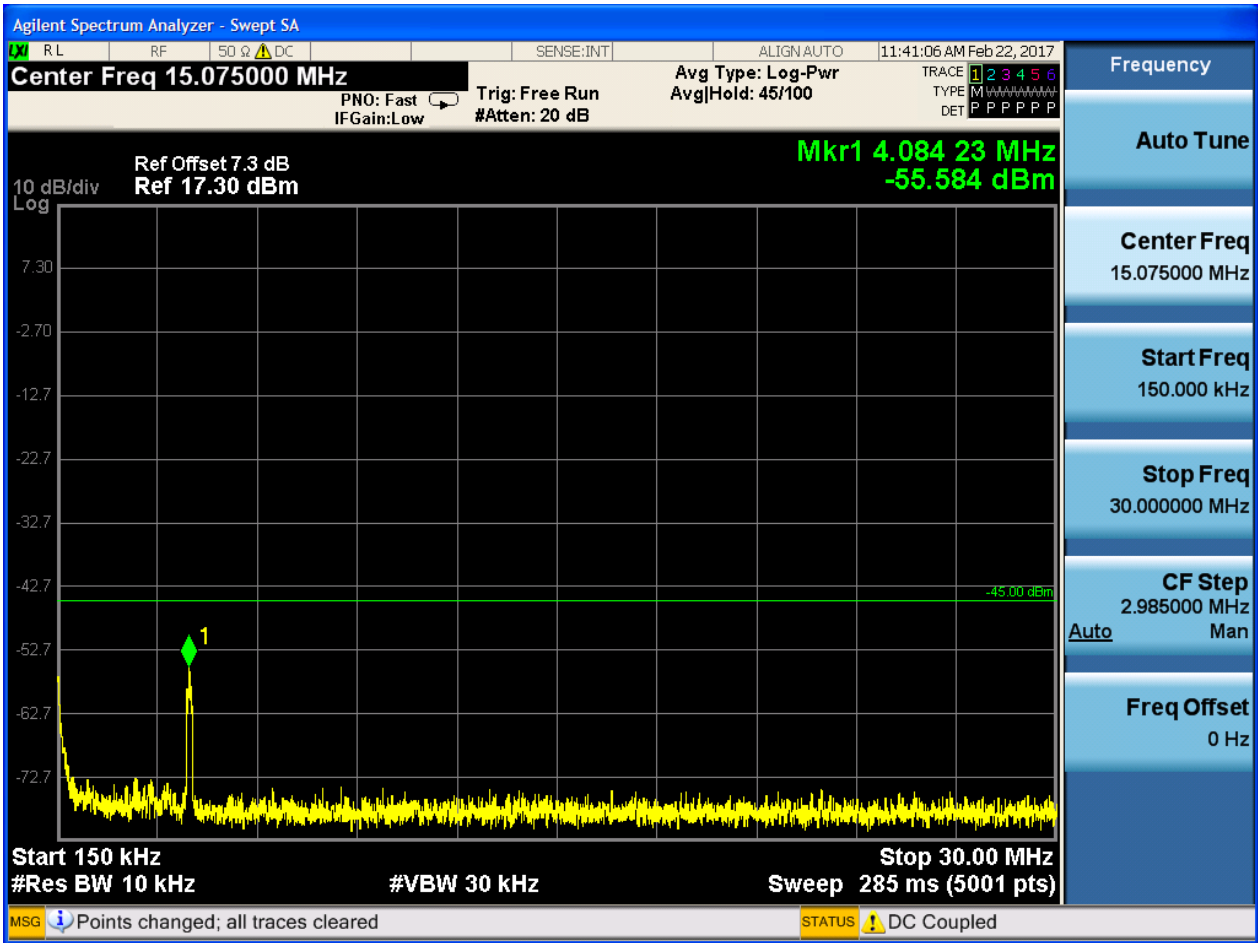


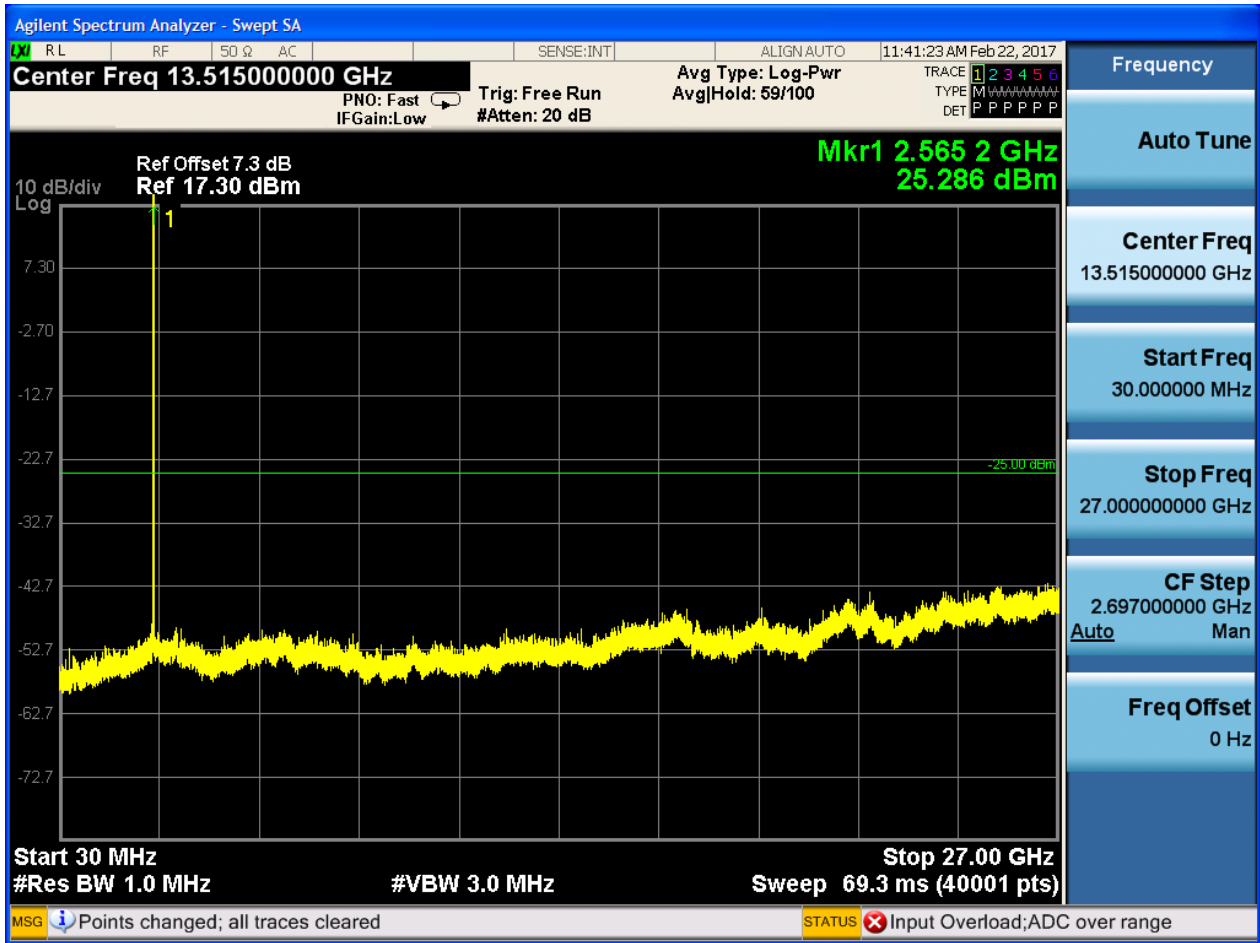


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





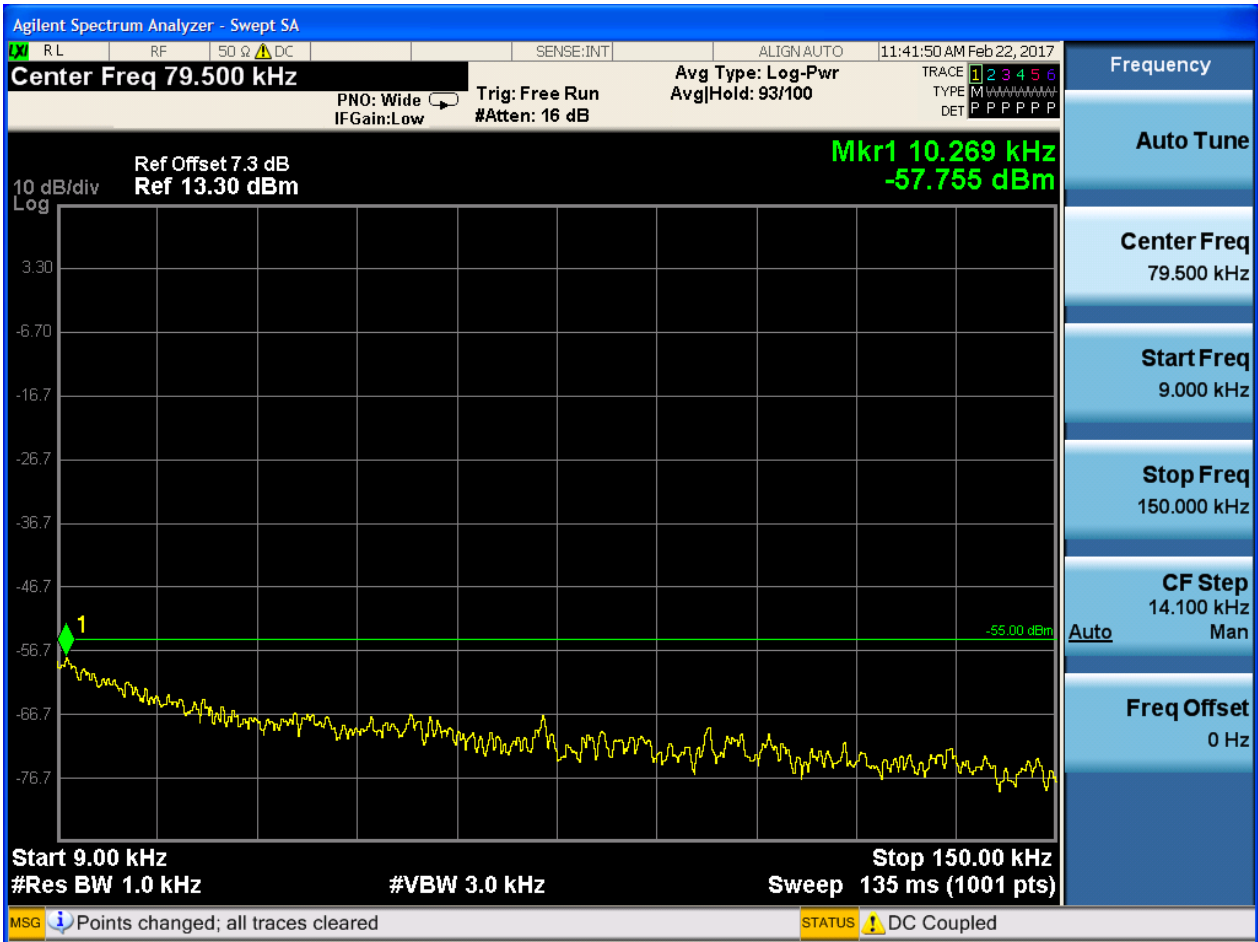


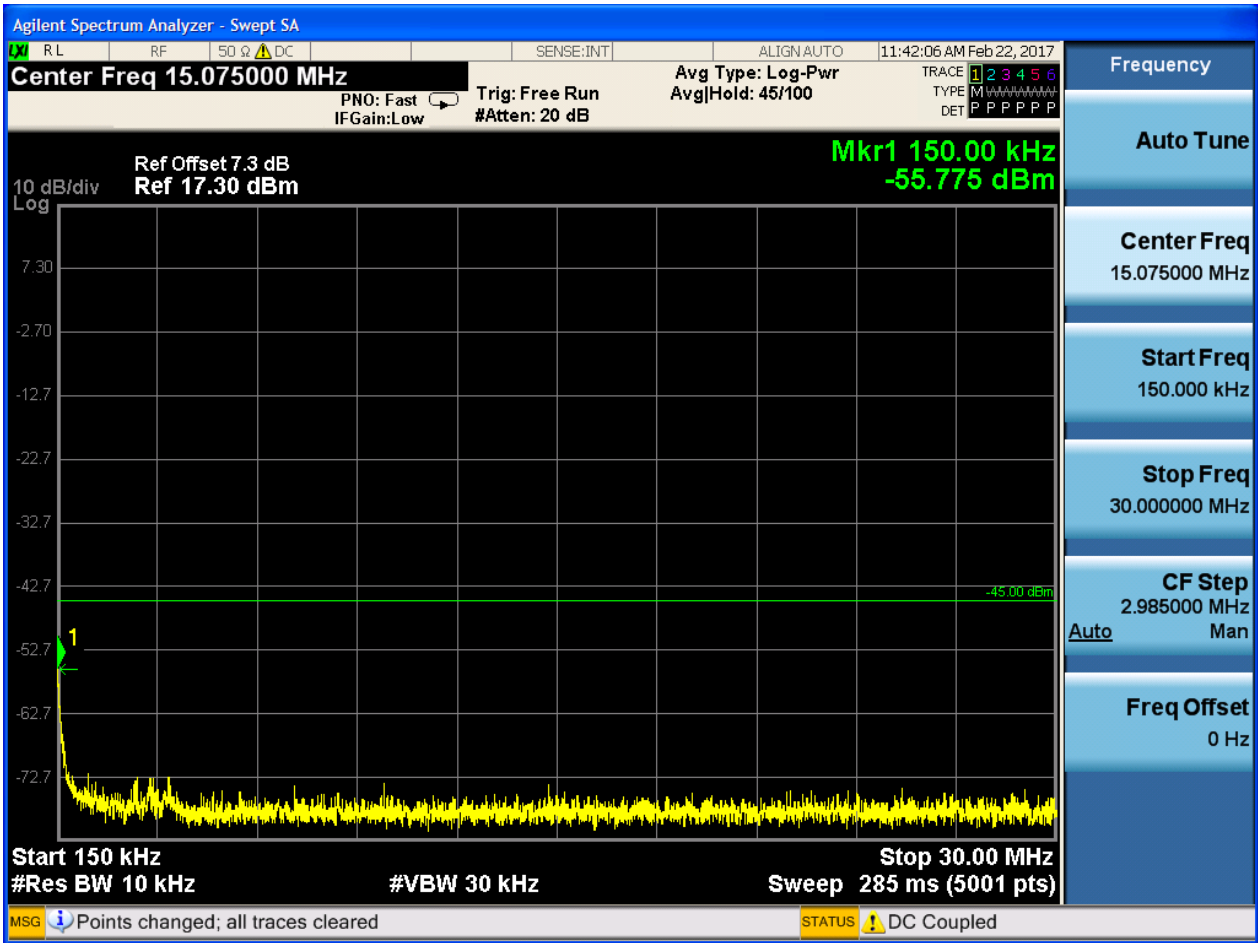


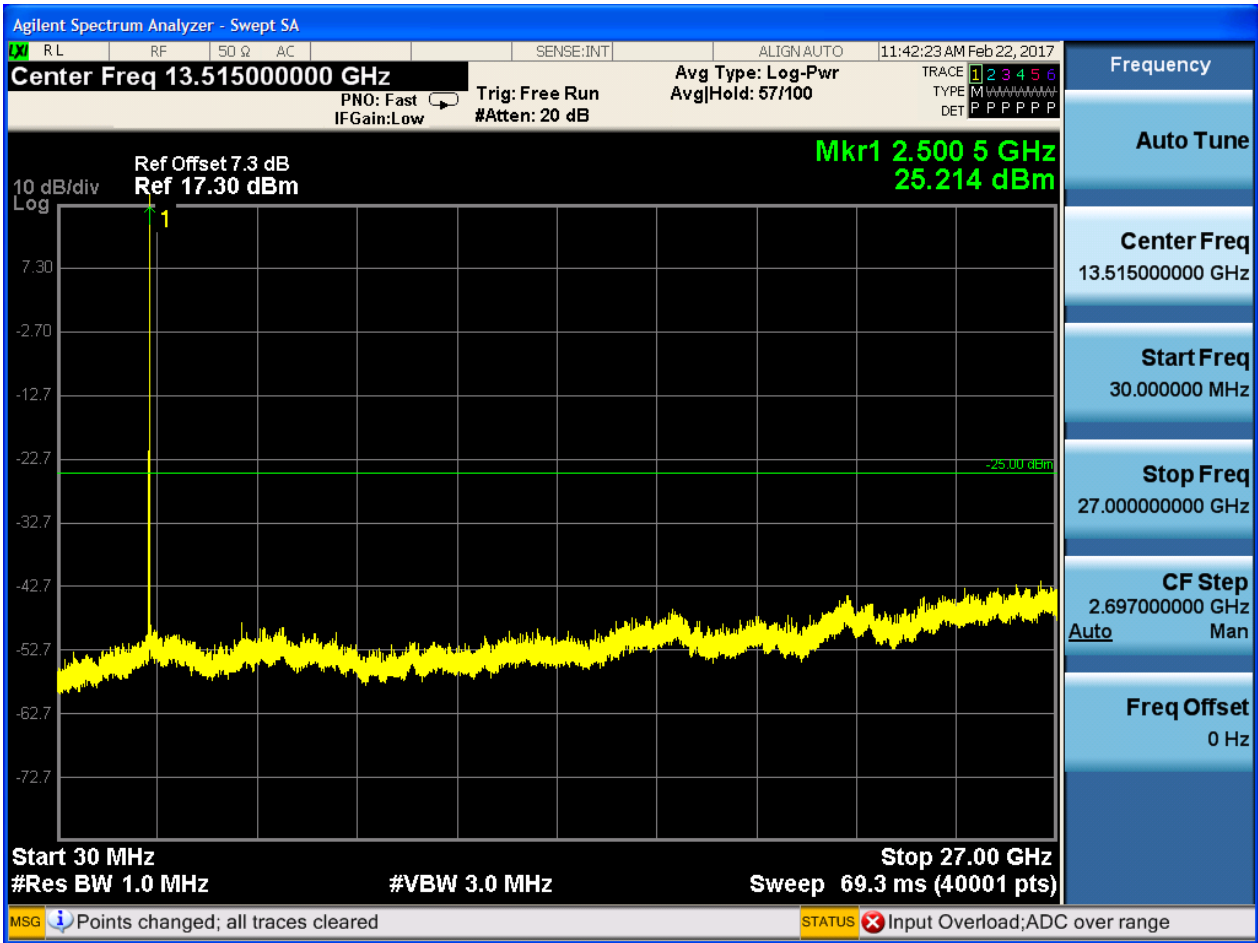
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



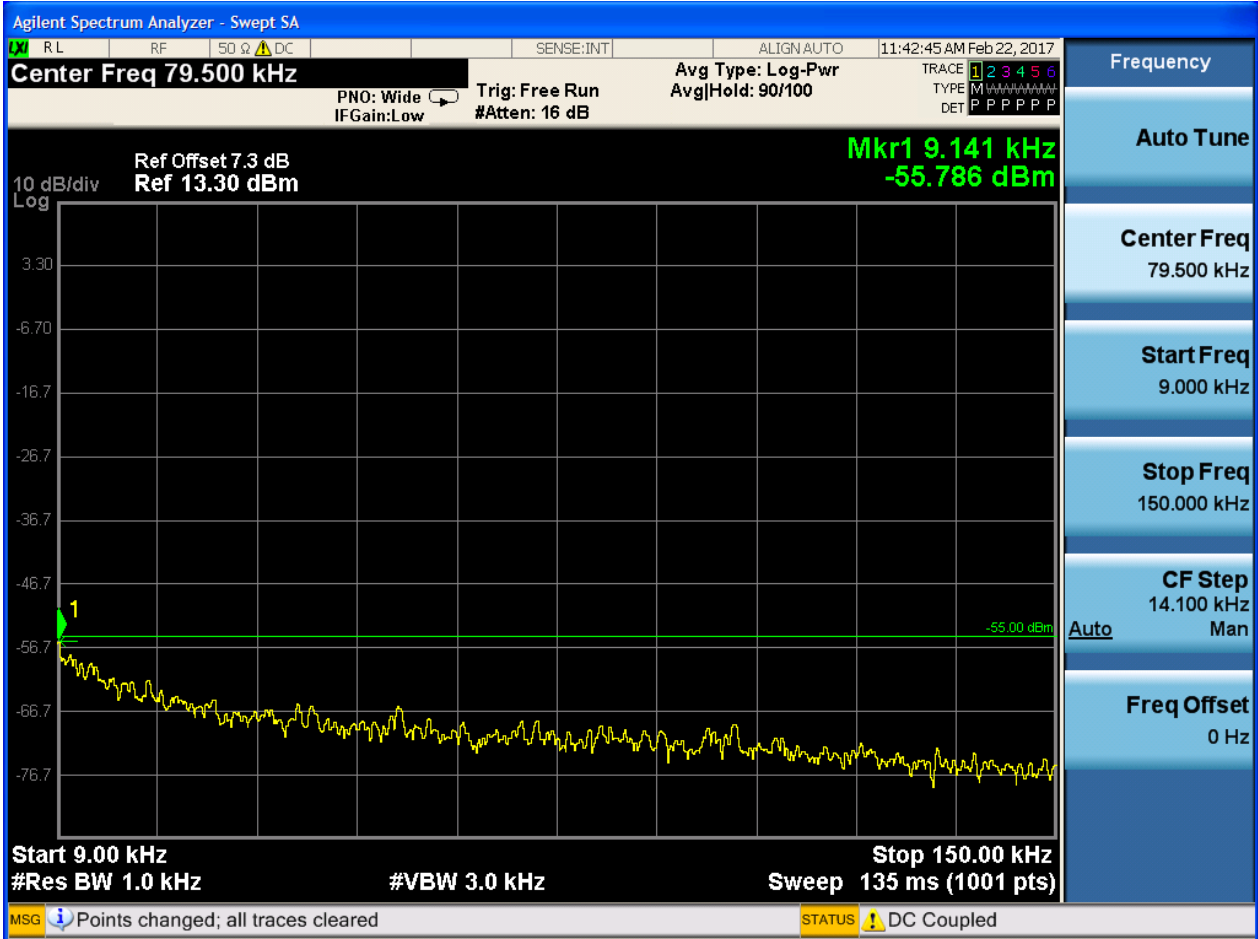


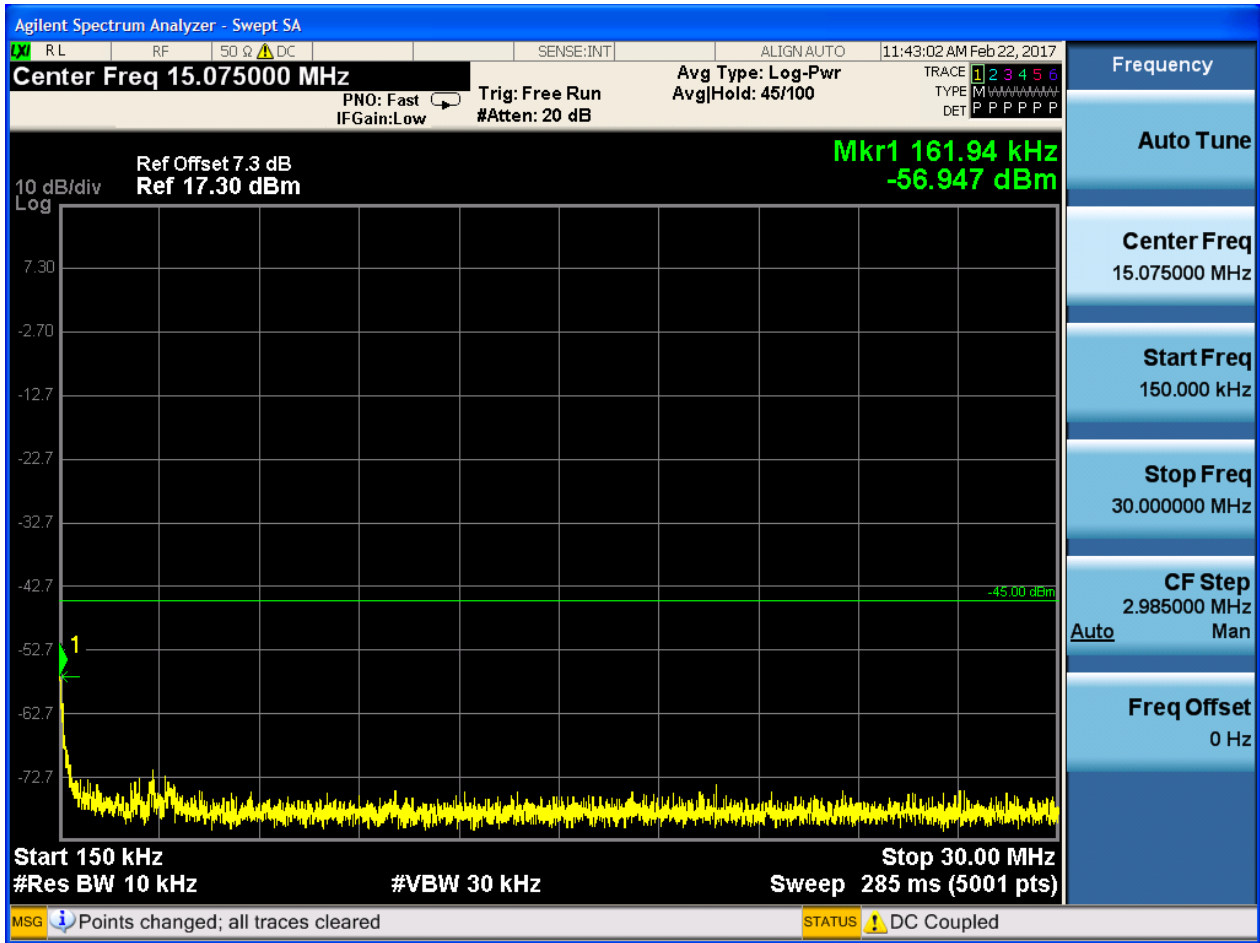


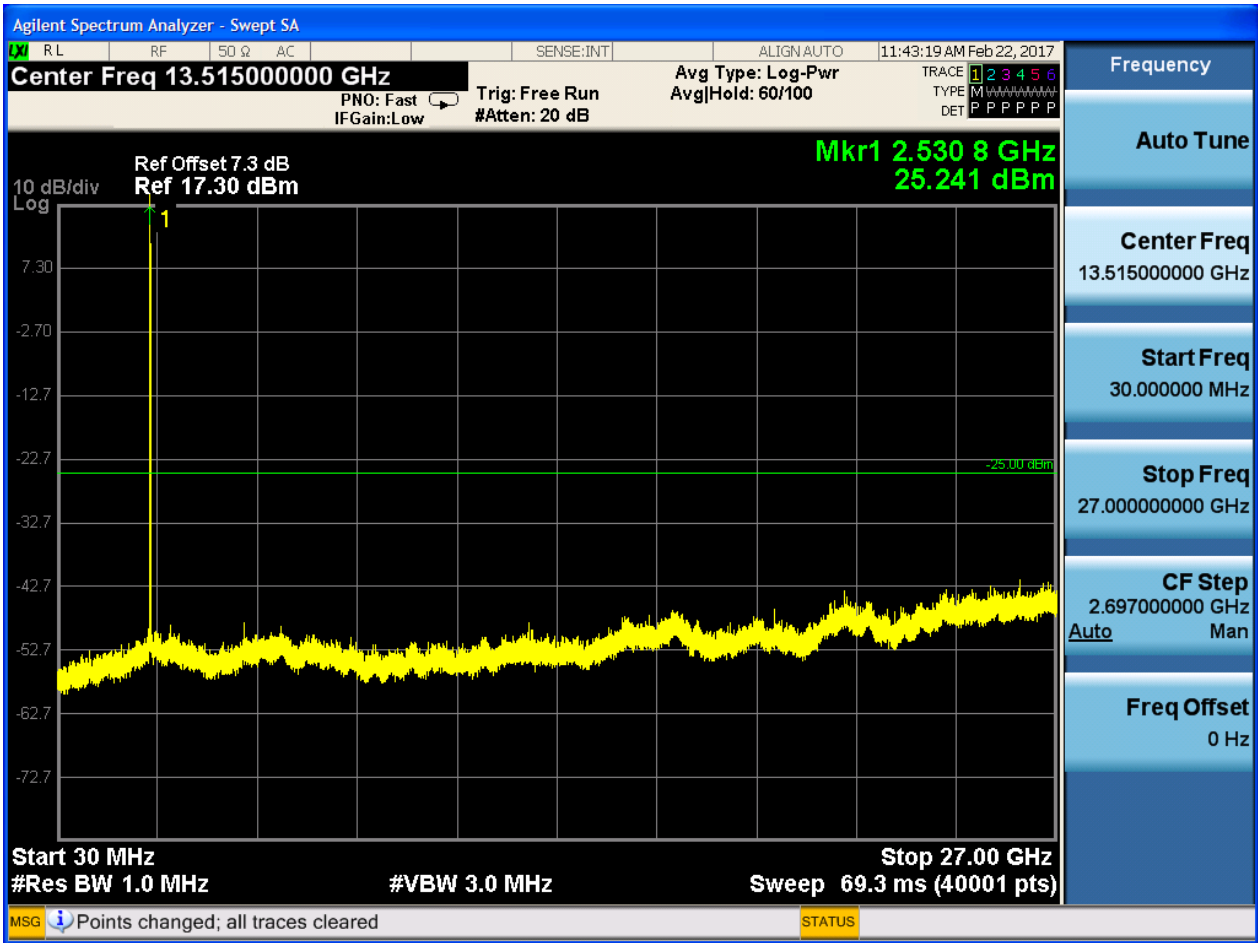


6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0



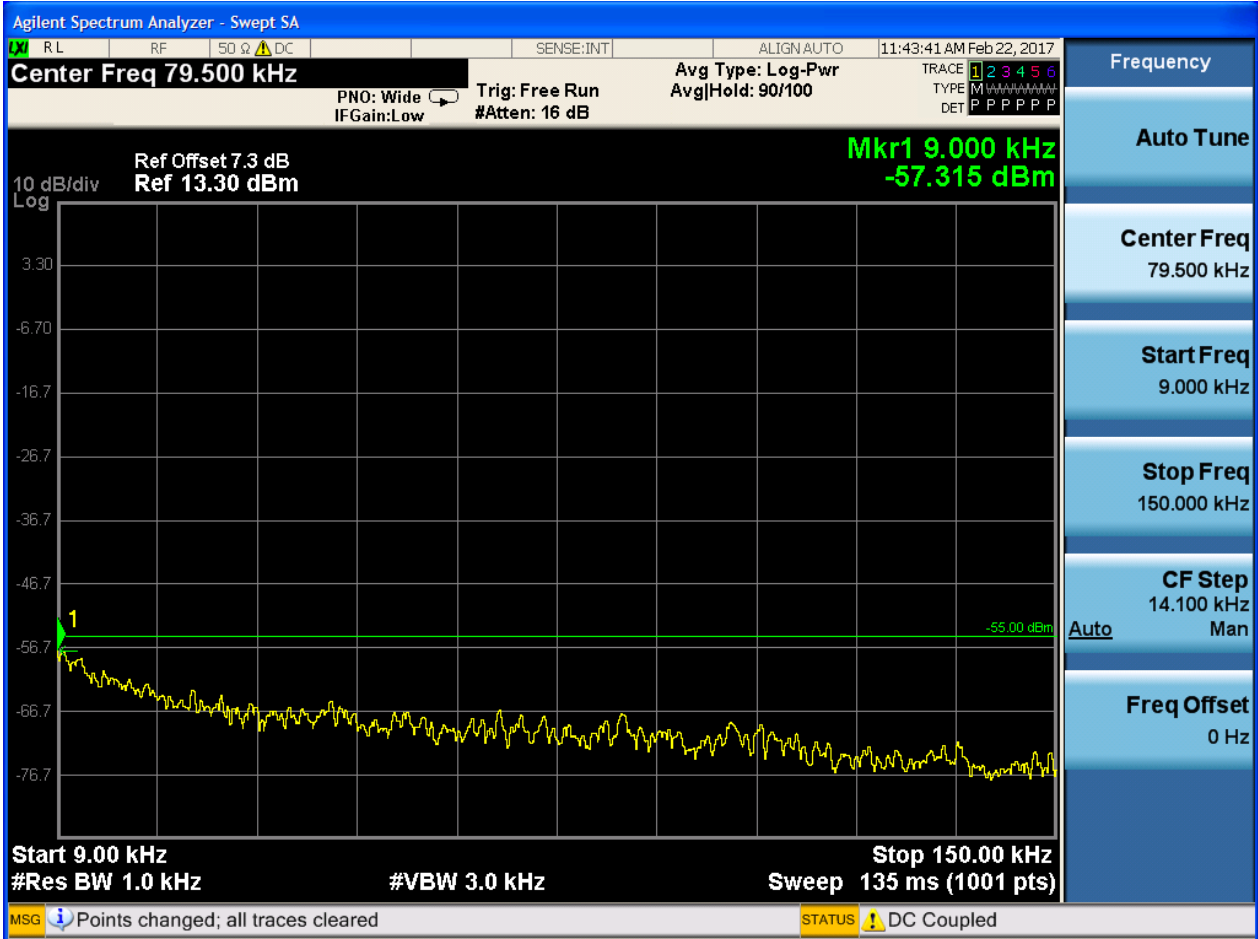


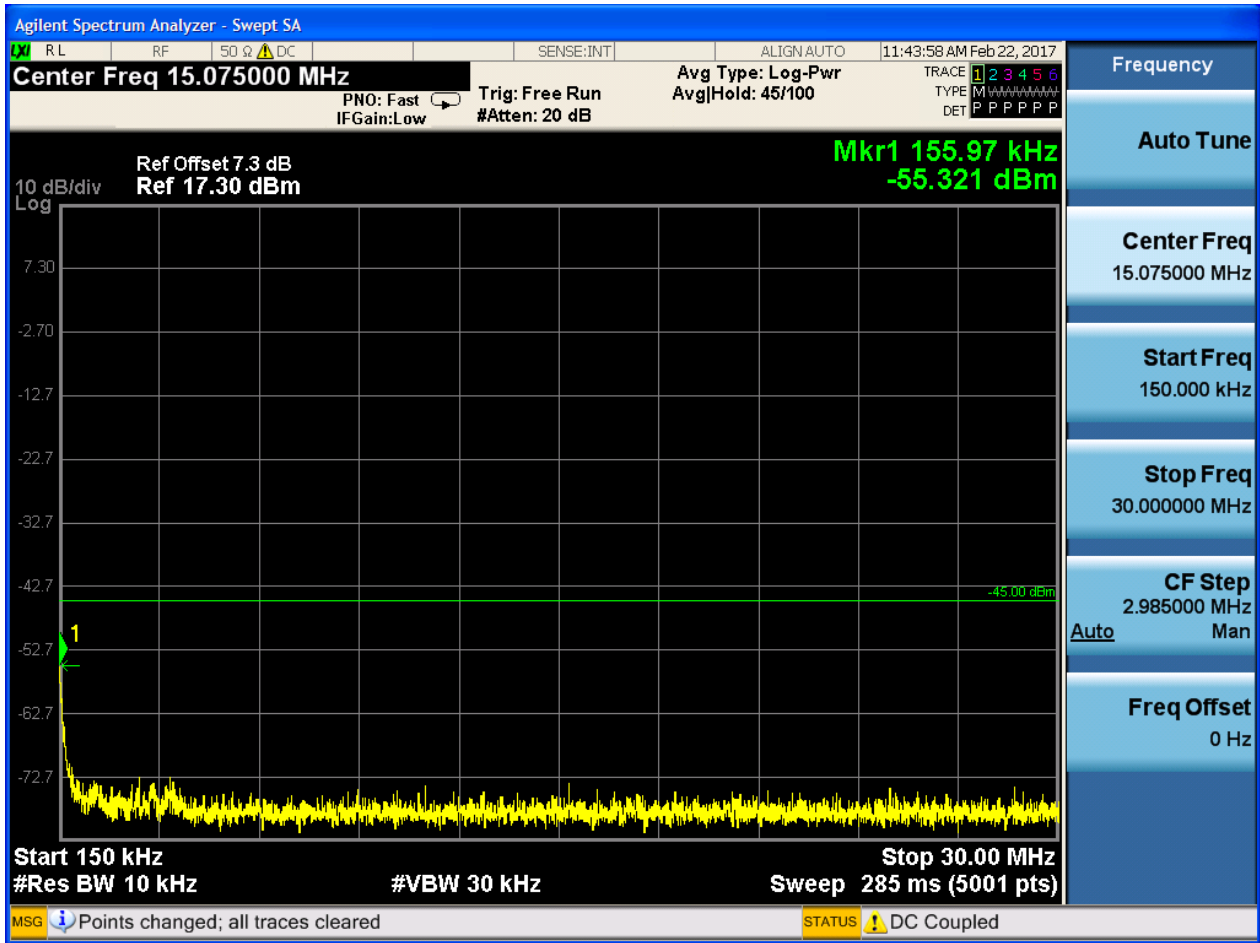


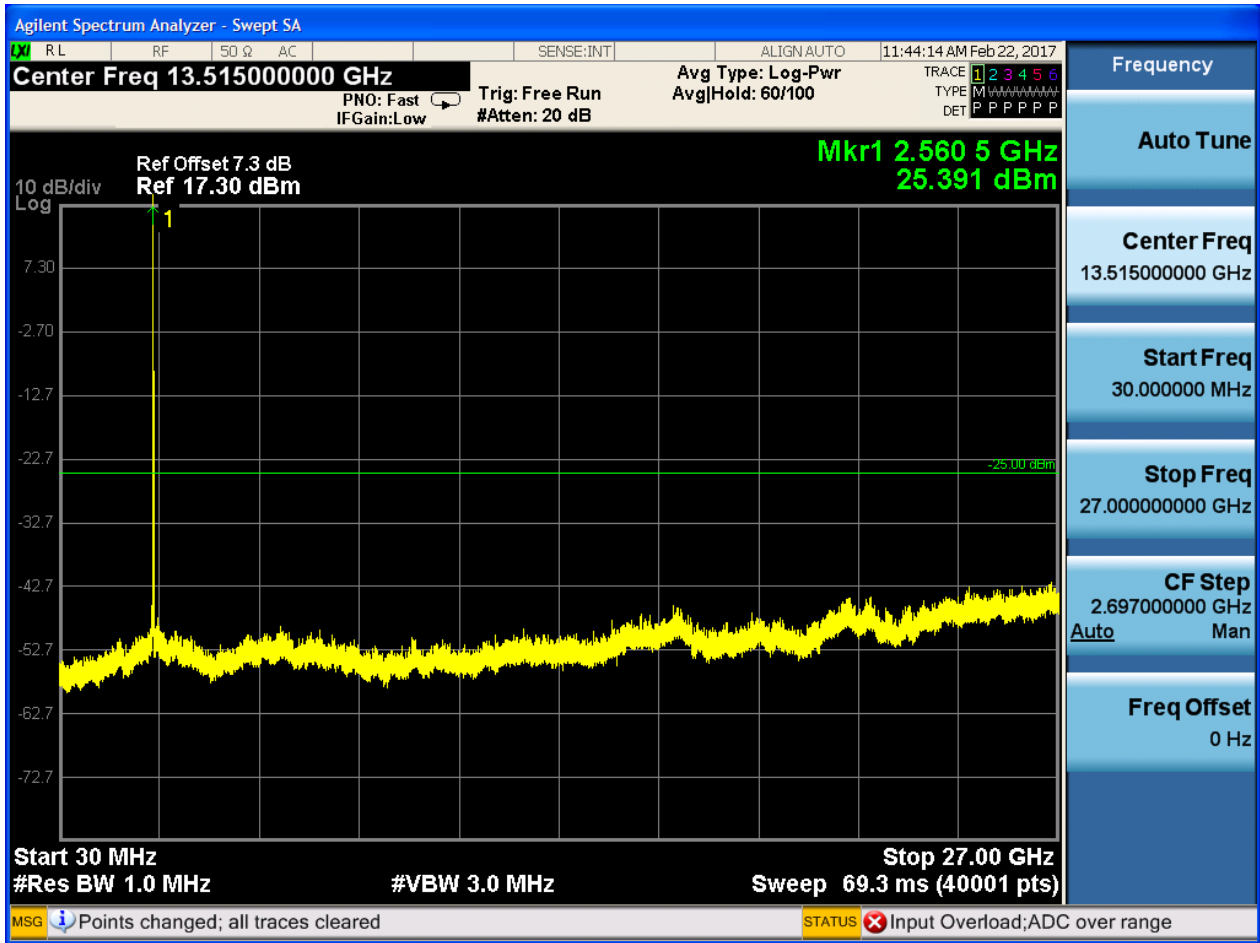


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





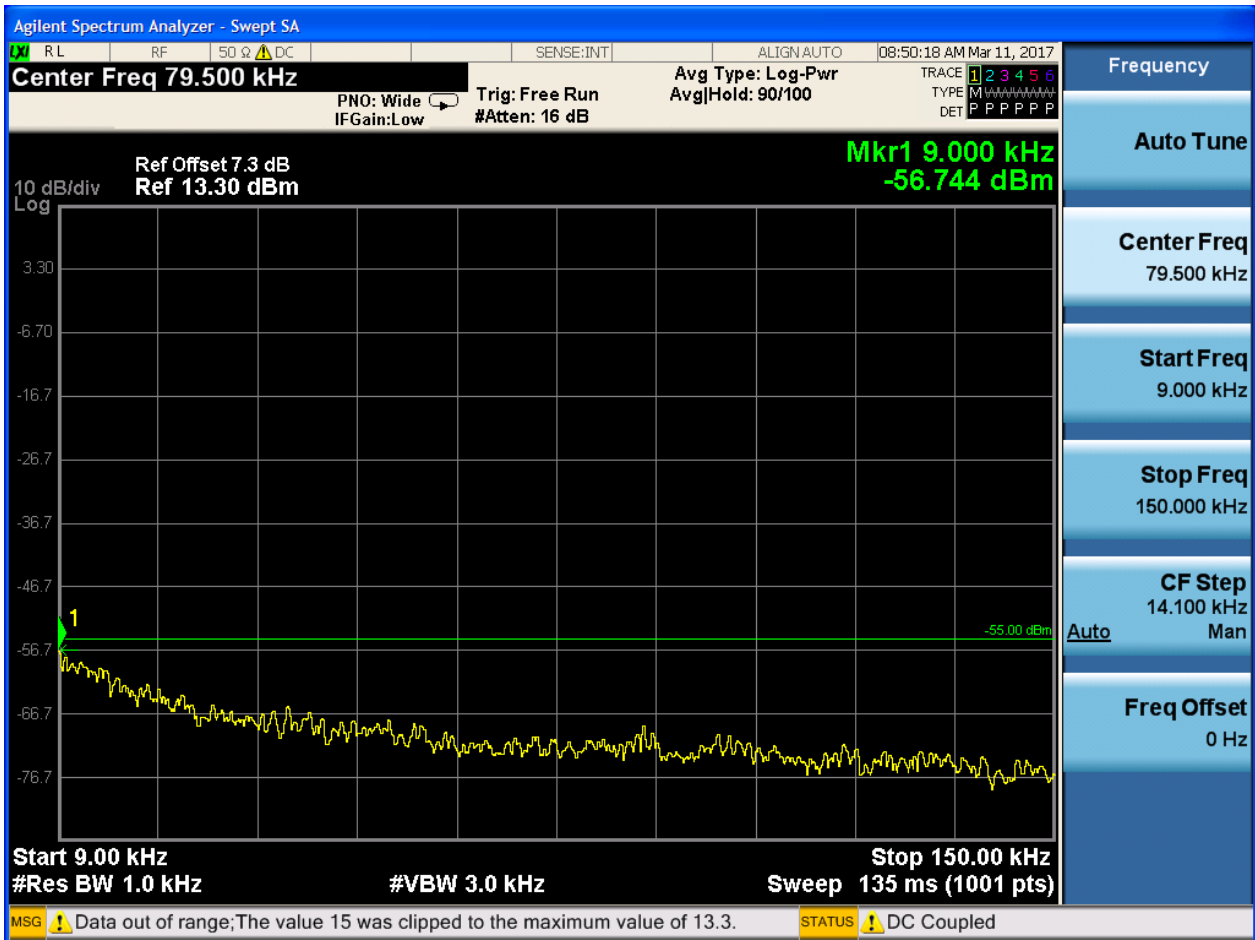


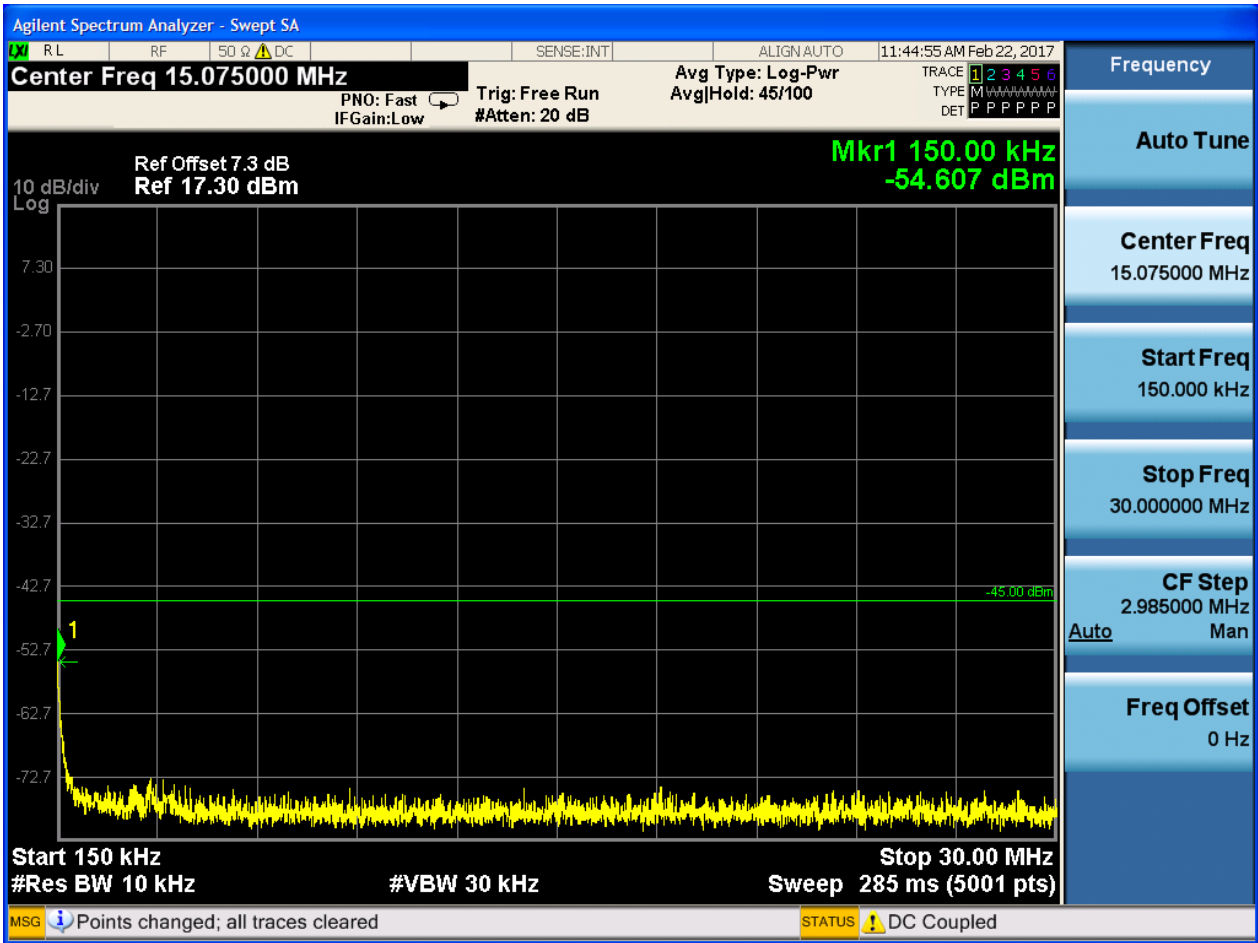


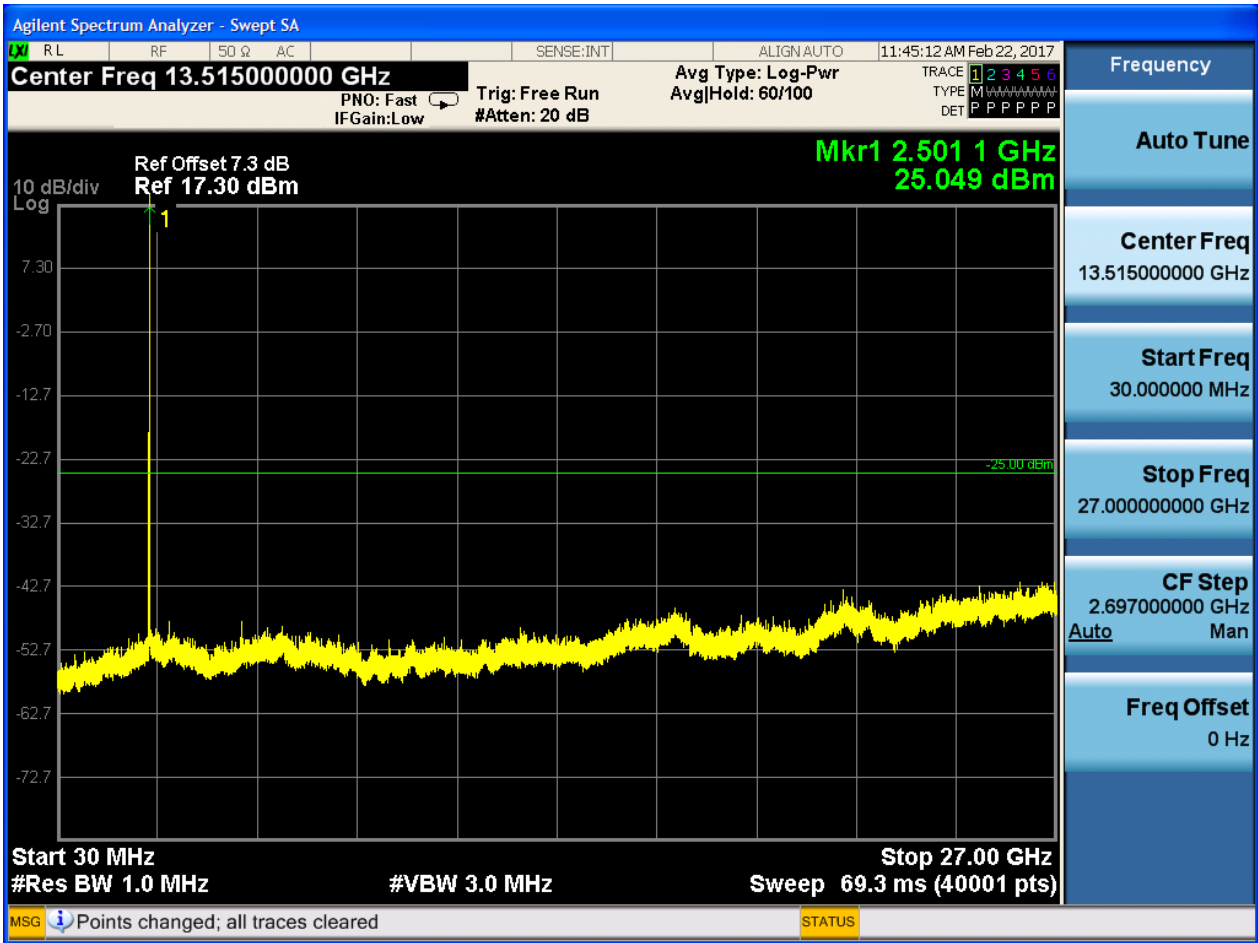
6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



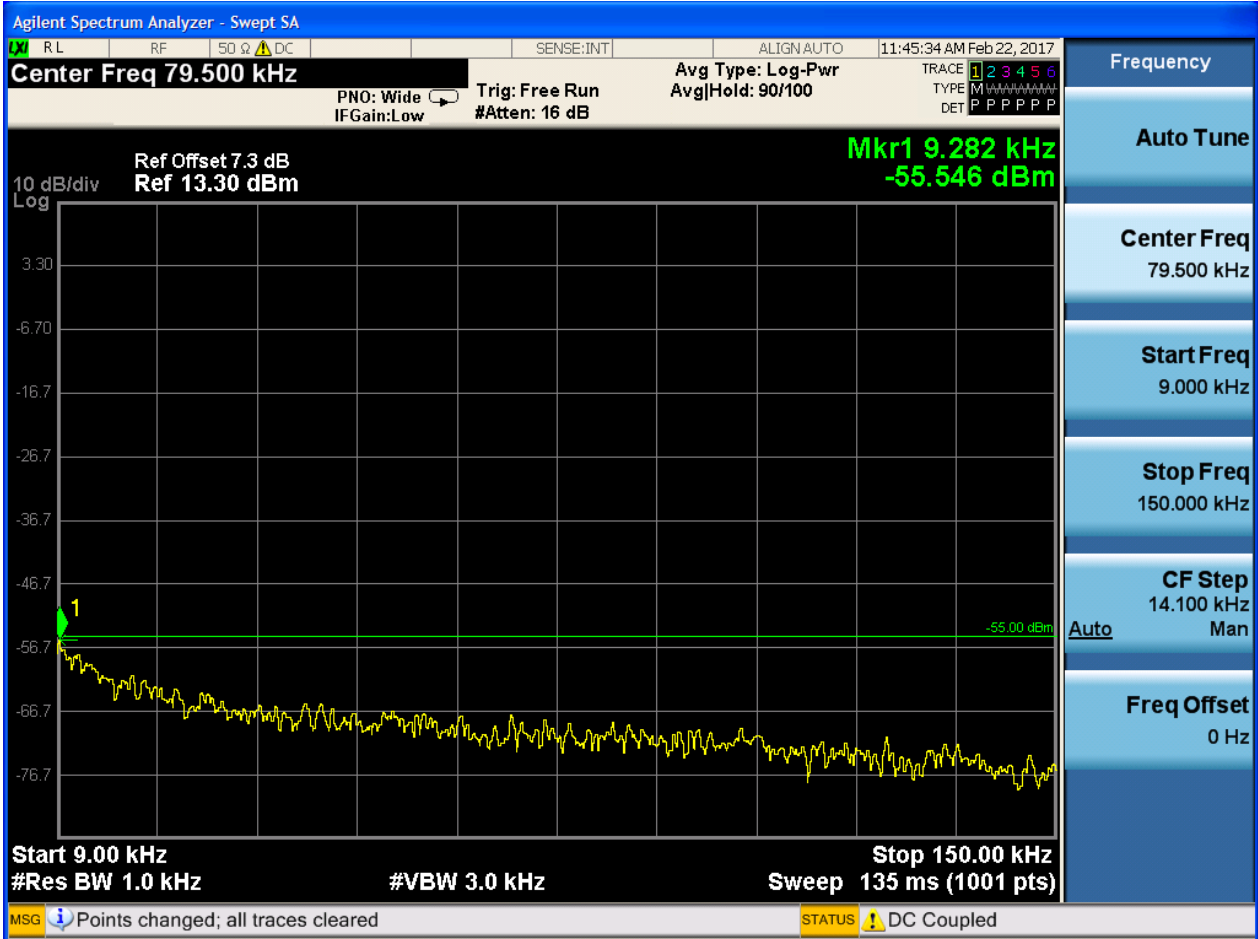


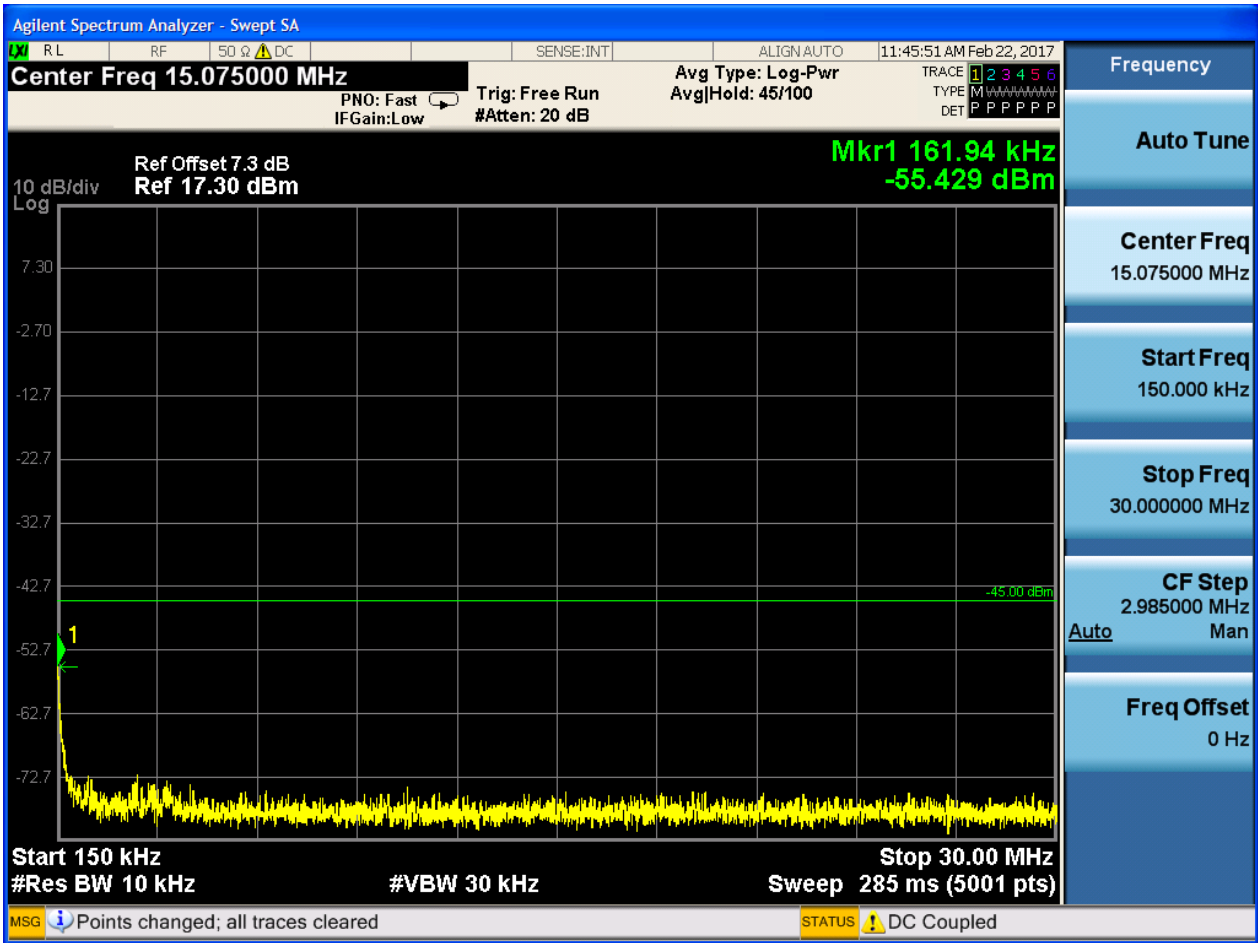


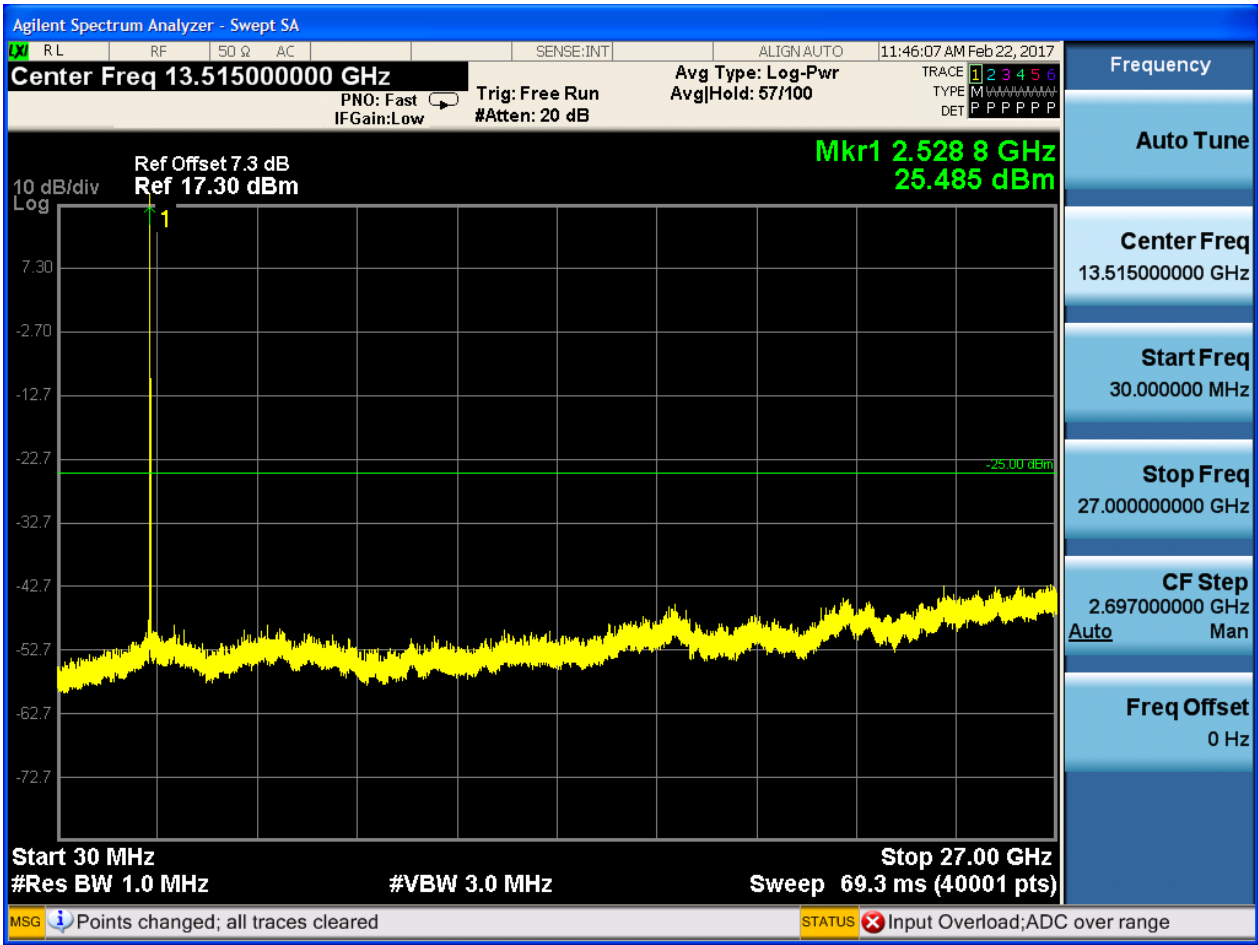


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



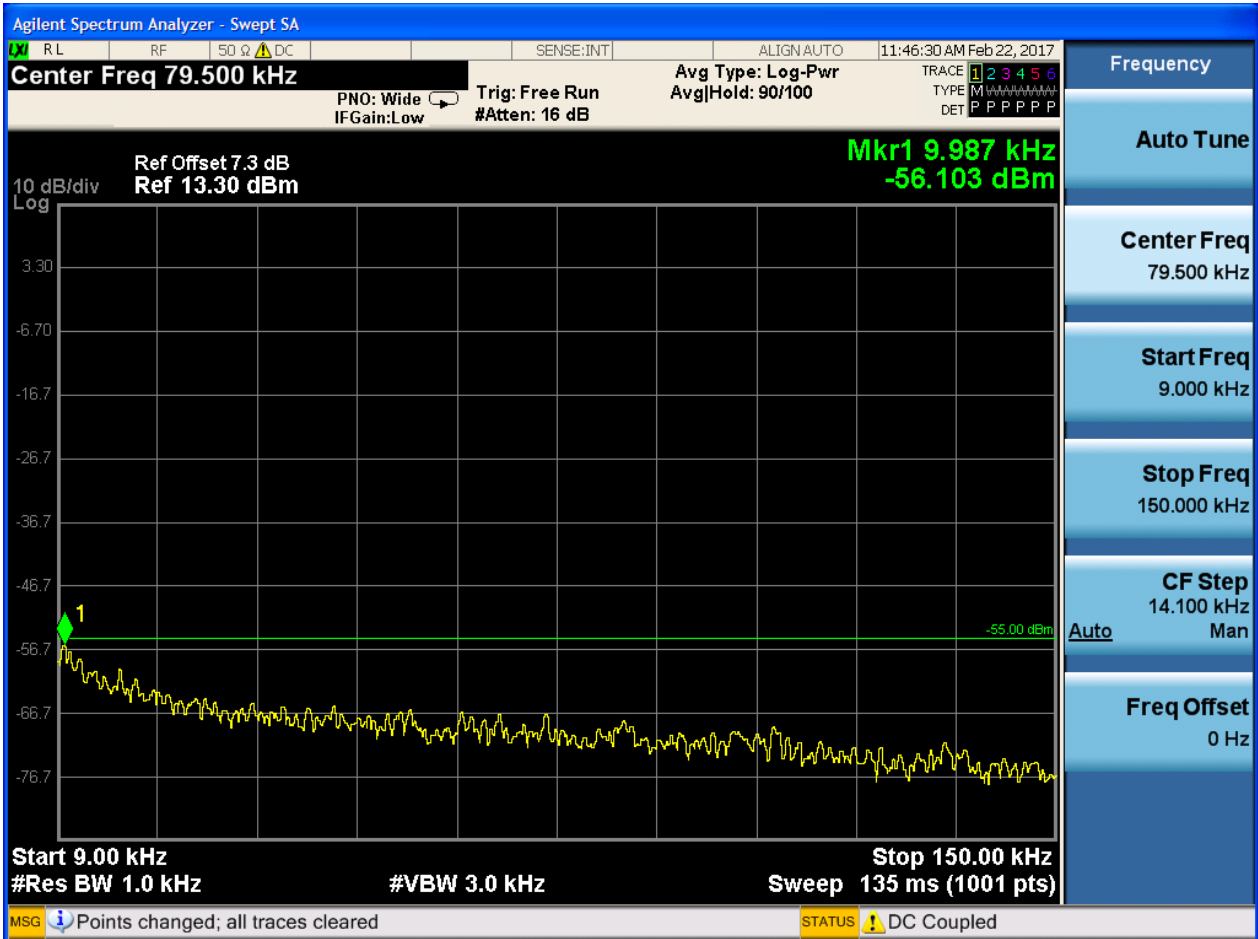


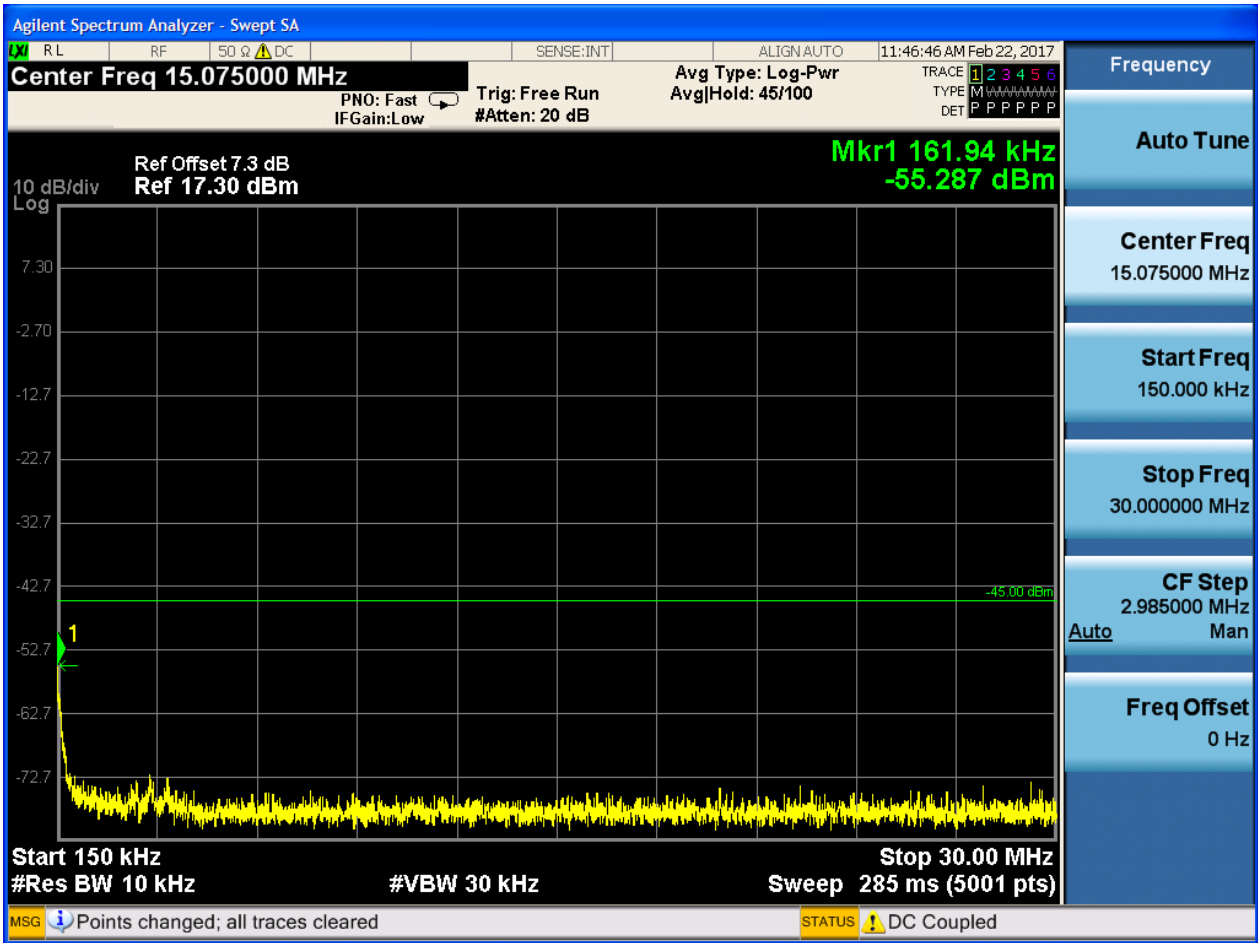


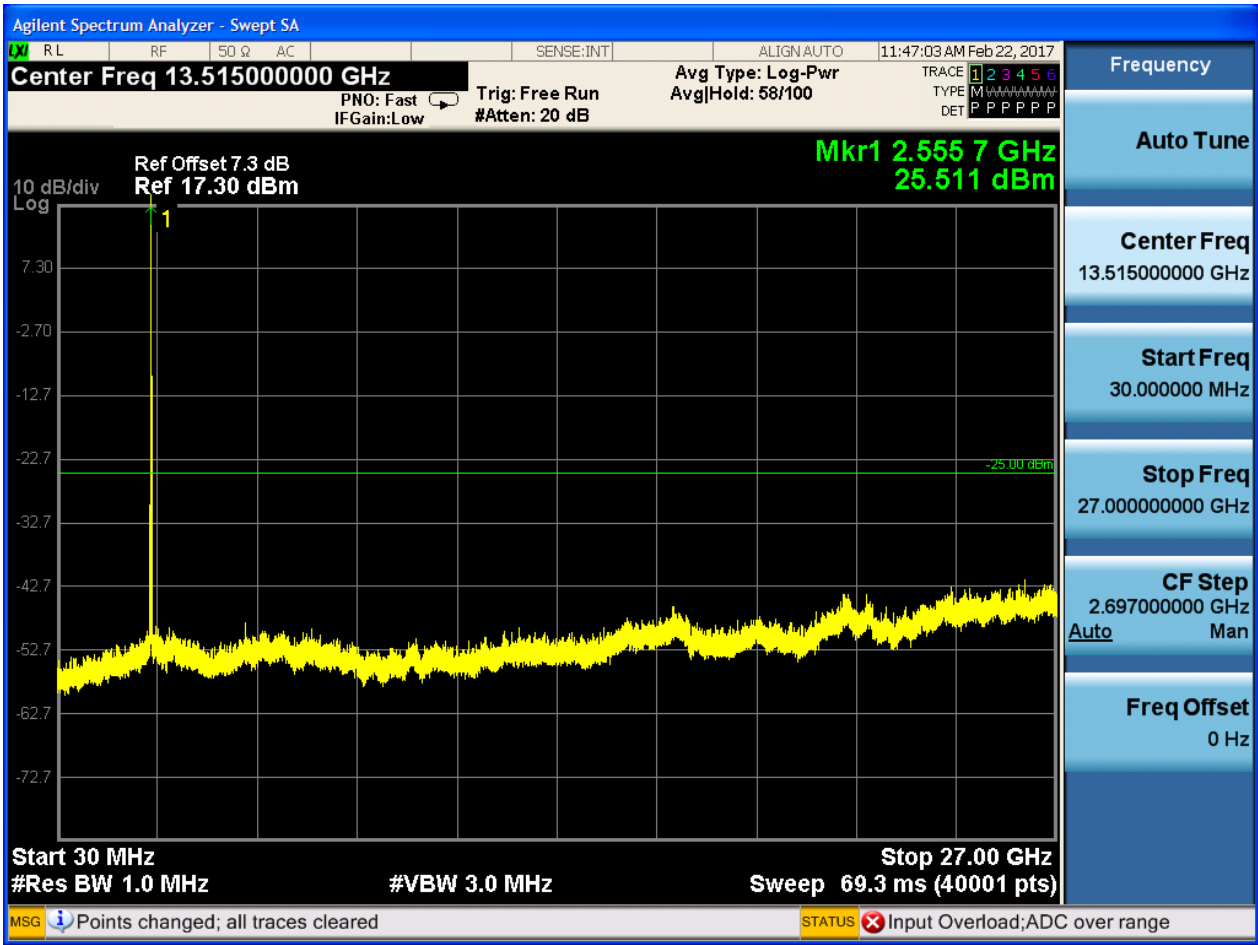


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





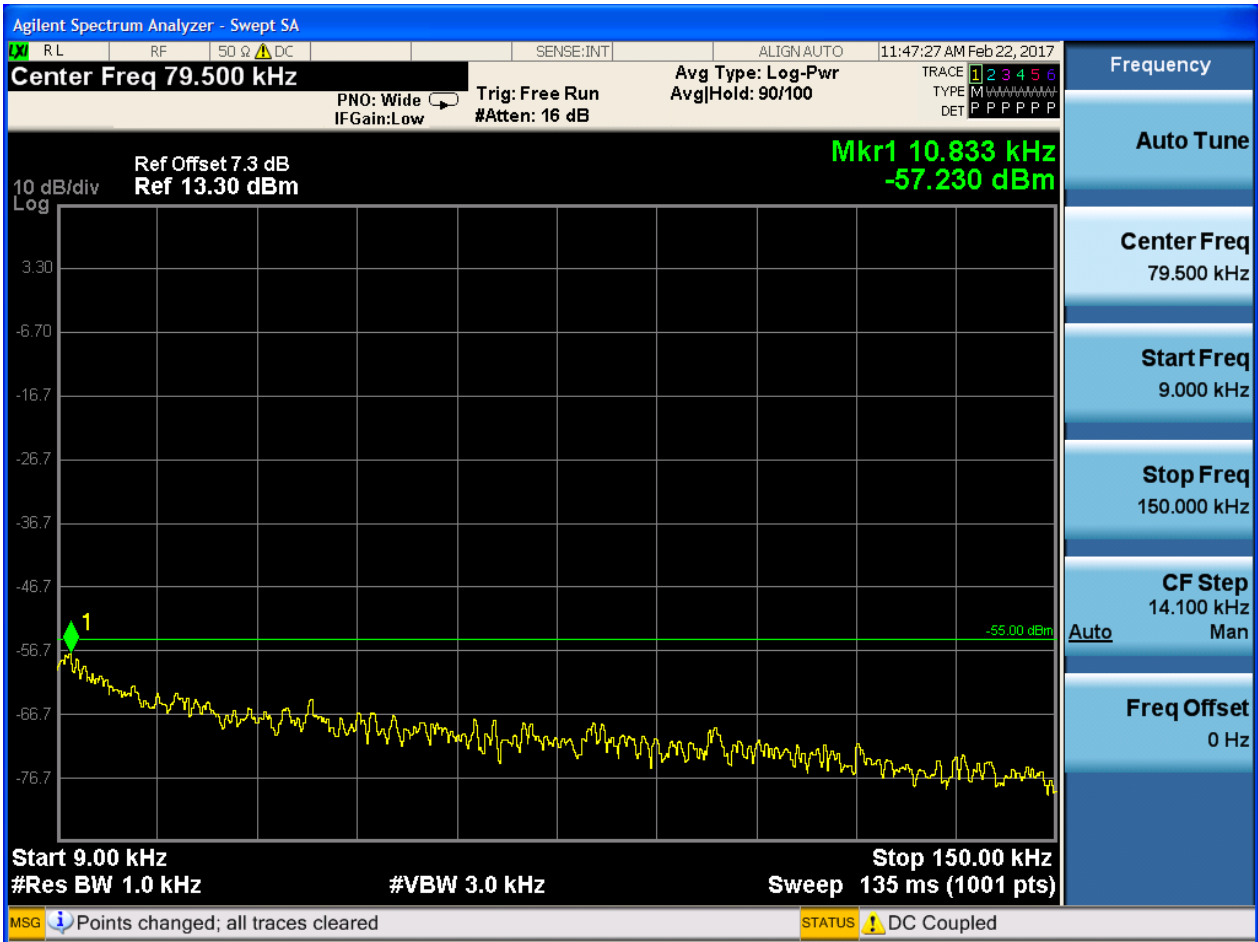


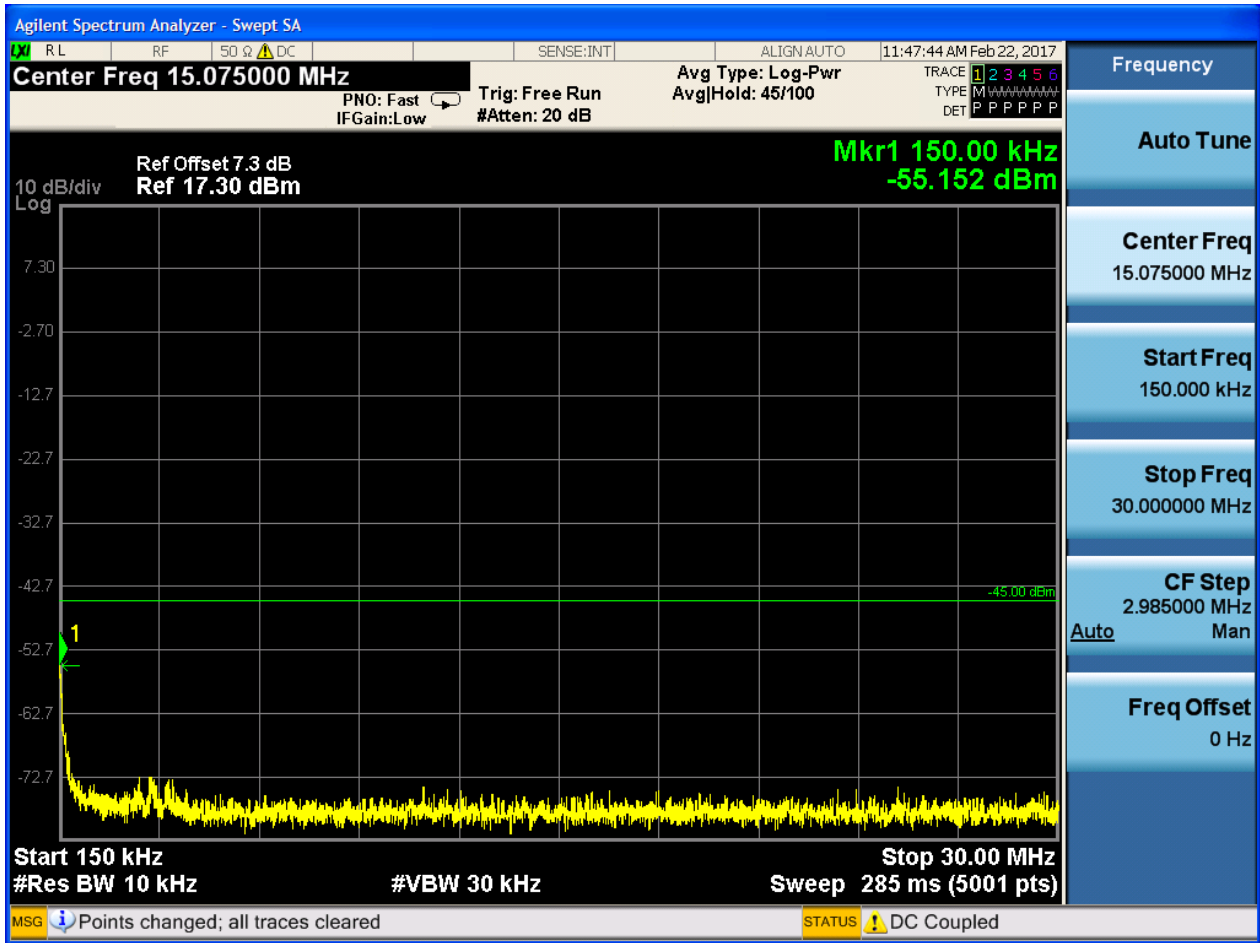


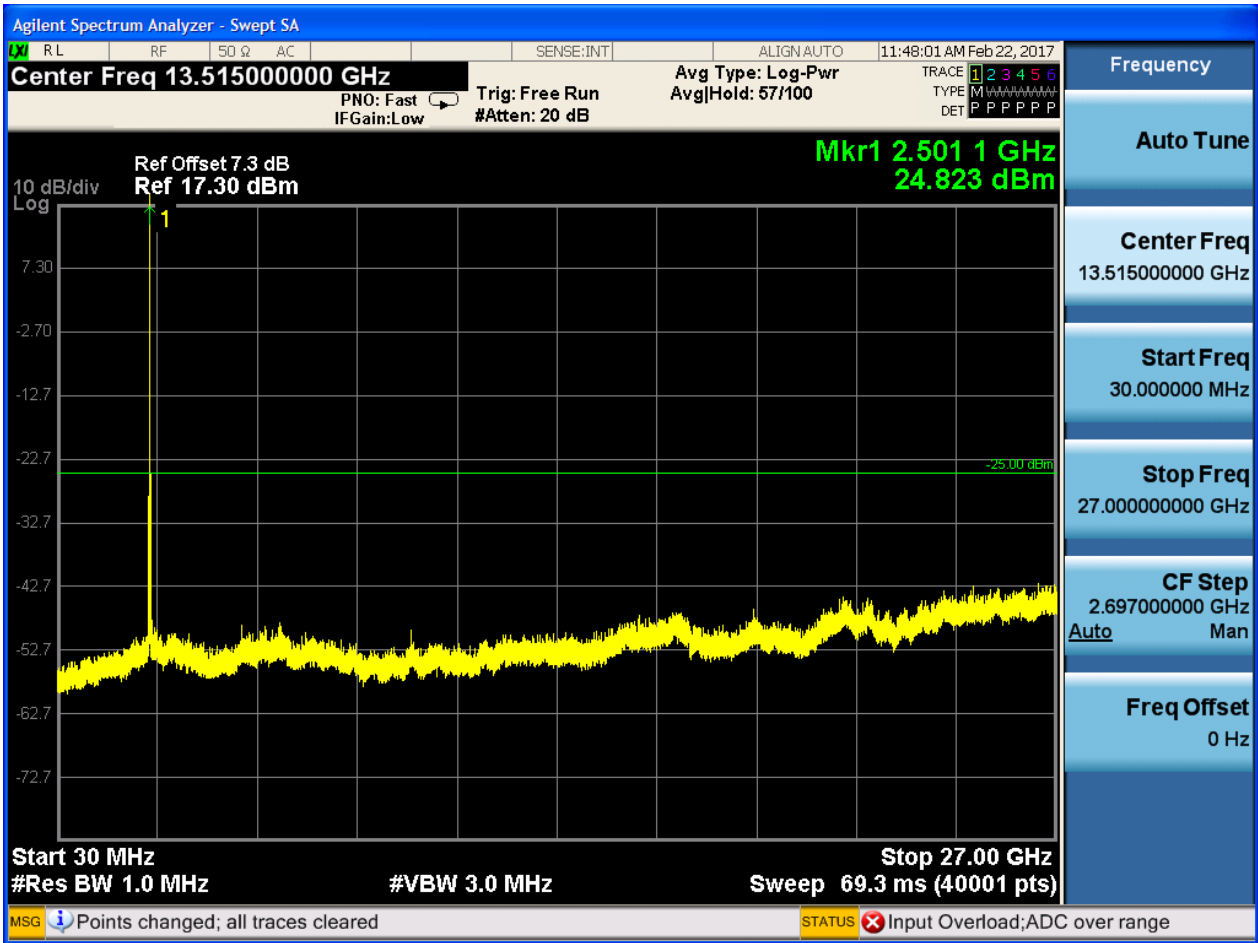
6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



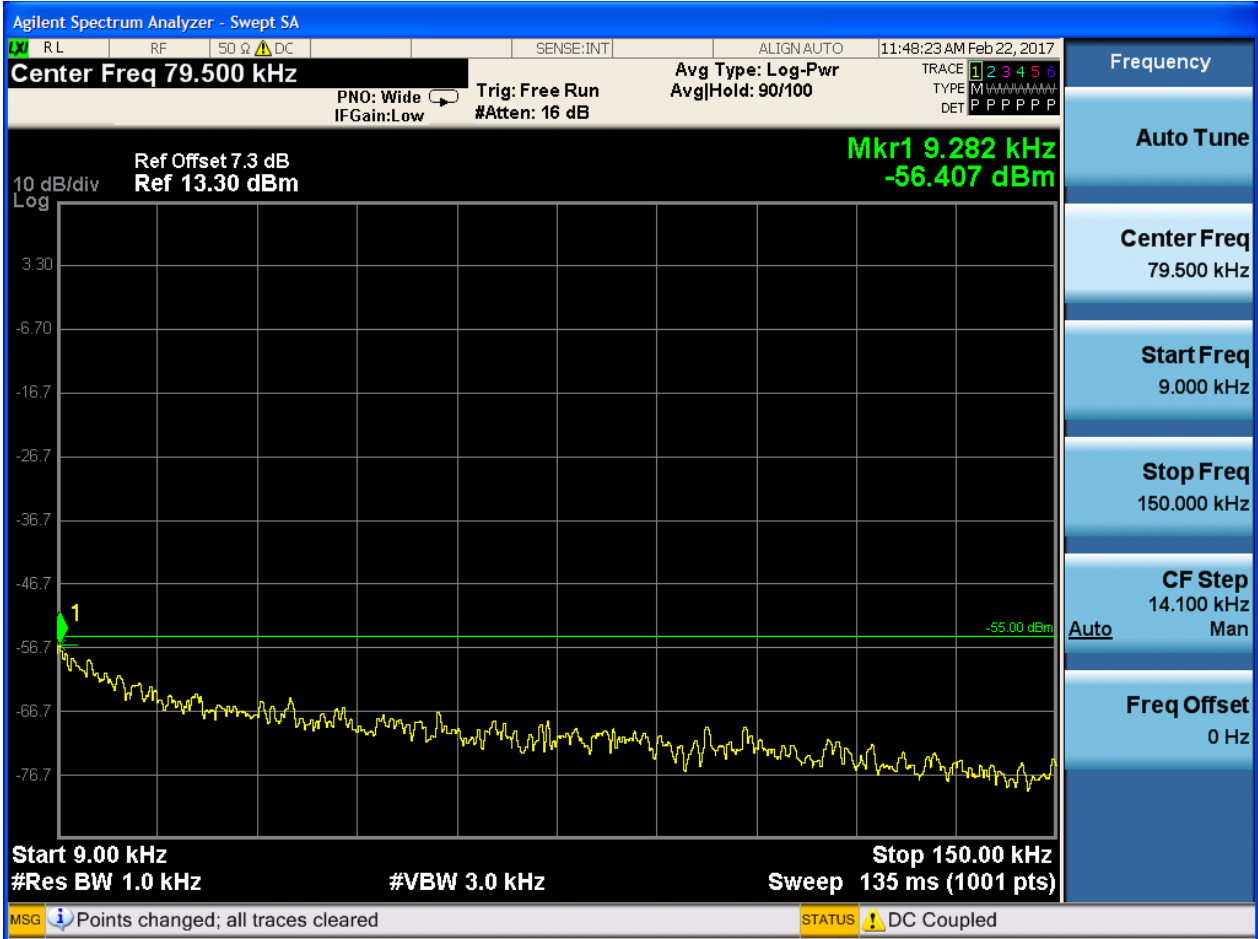


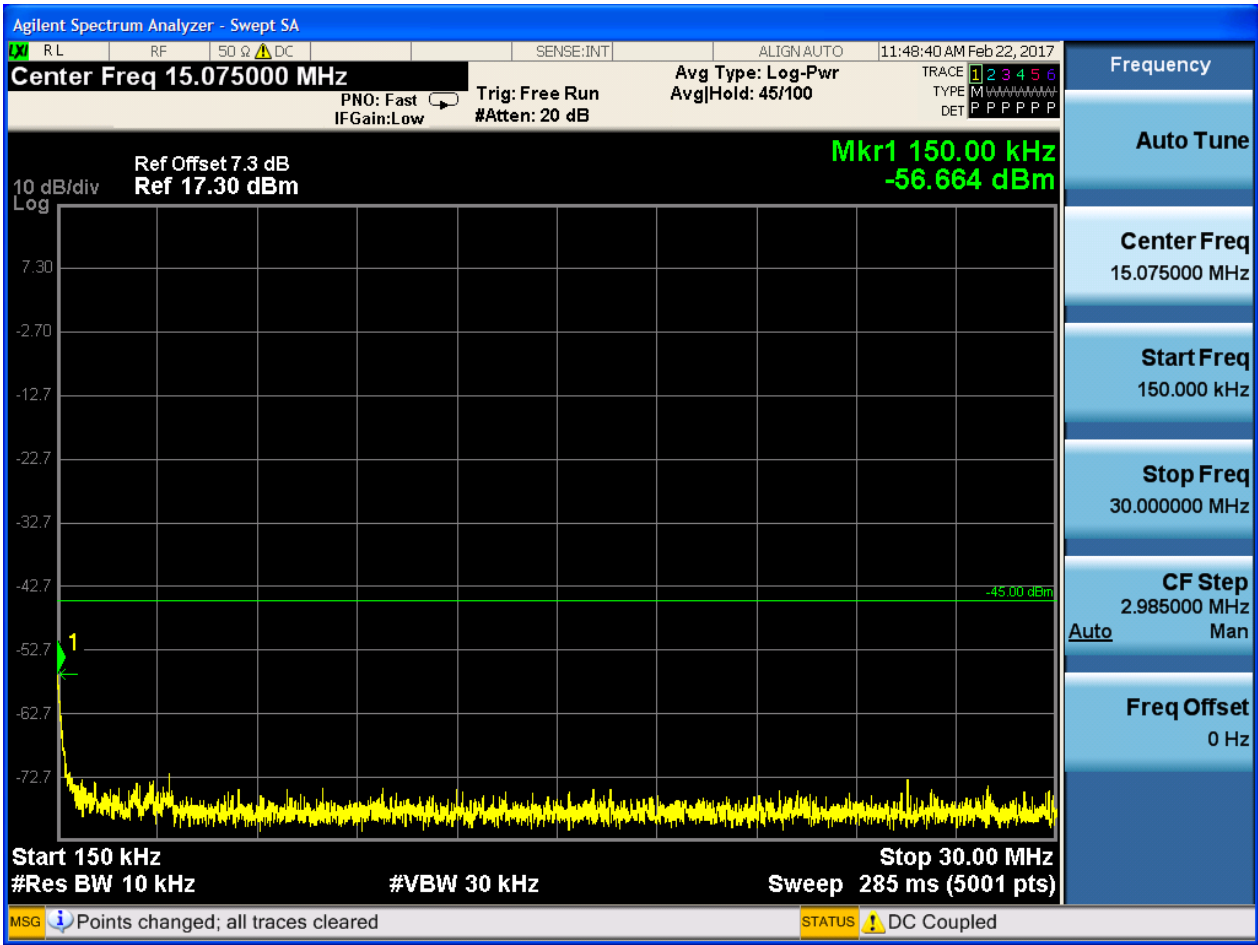


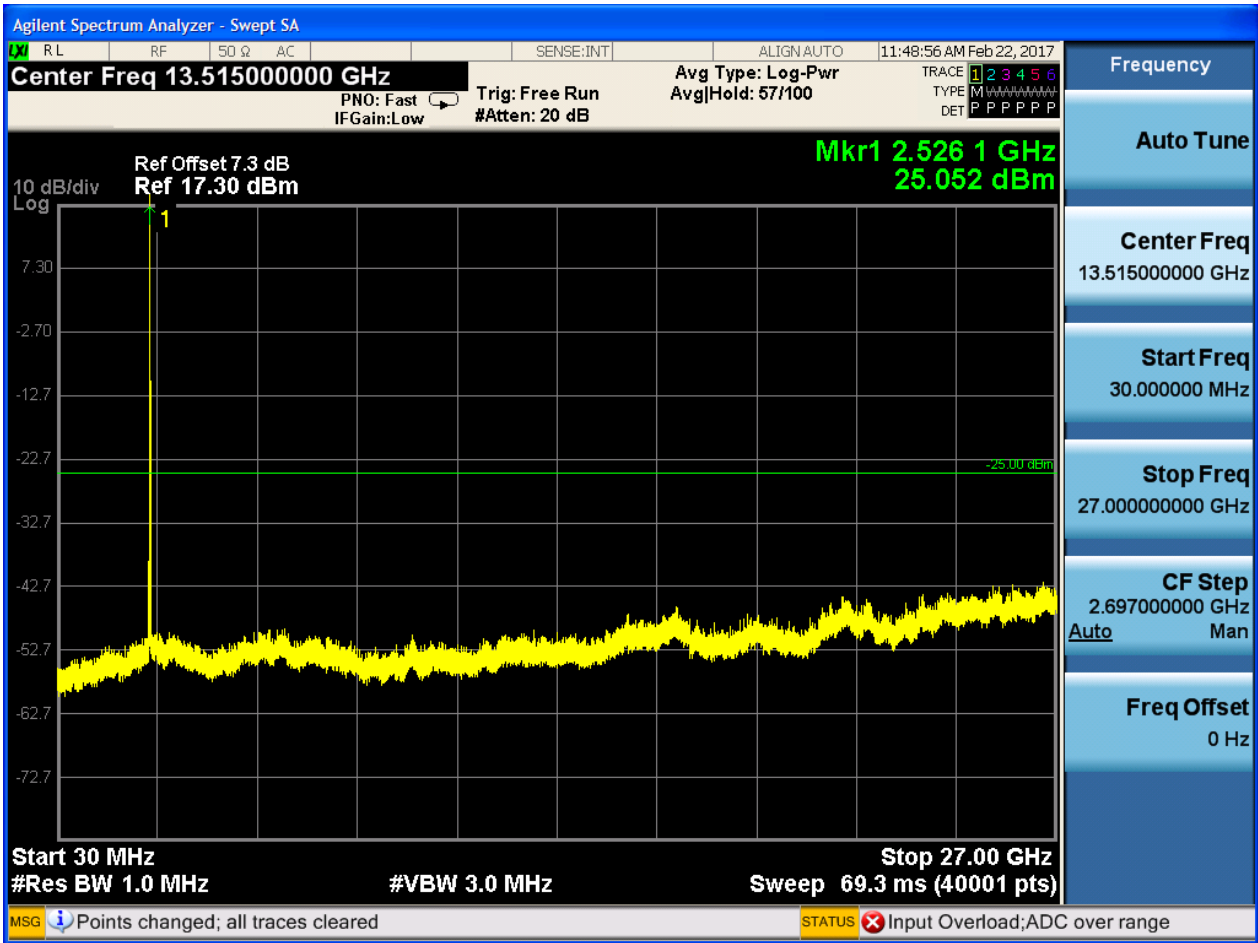


6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0



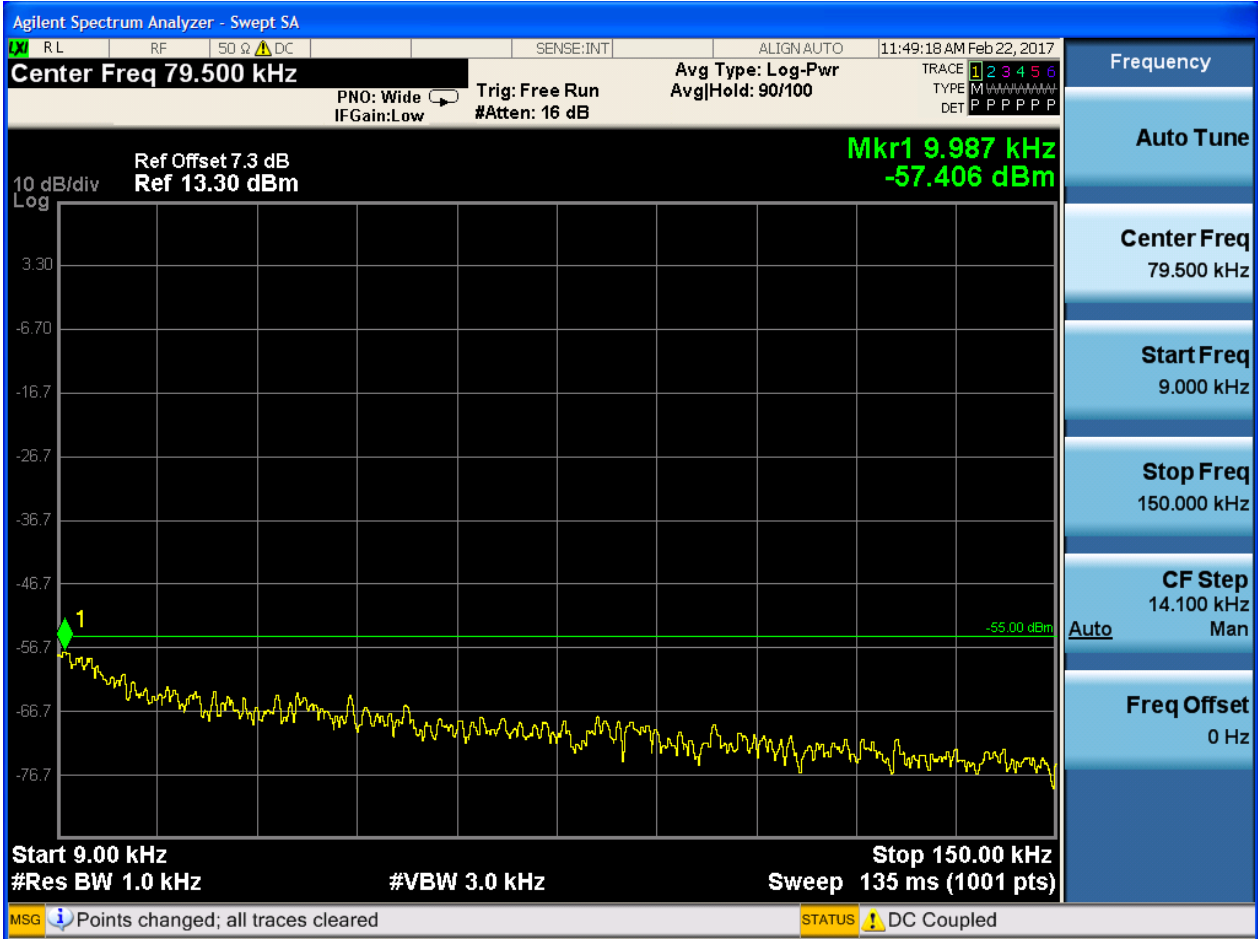


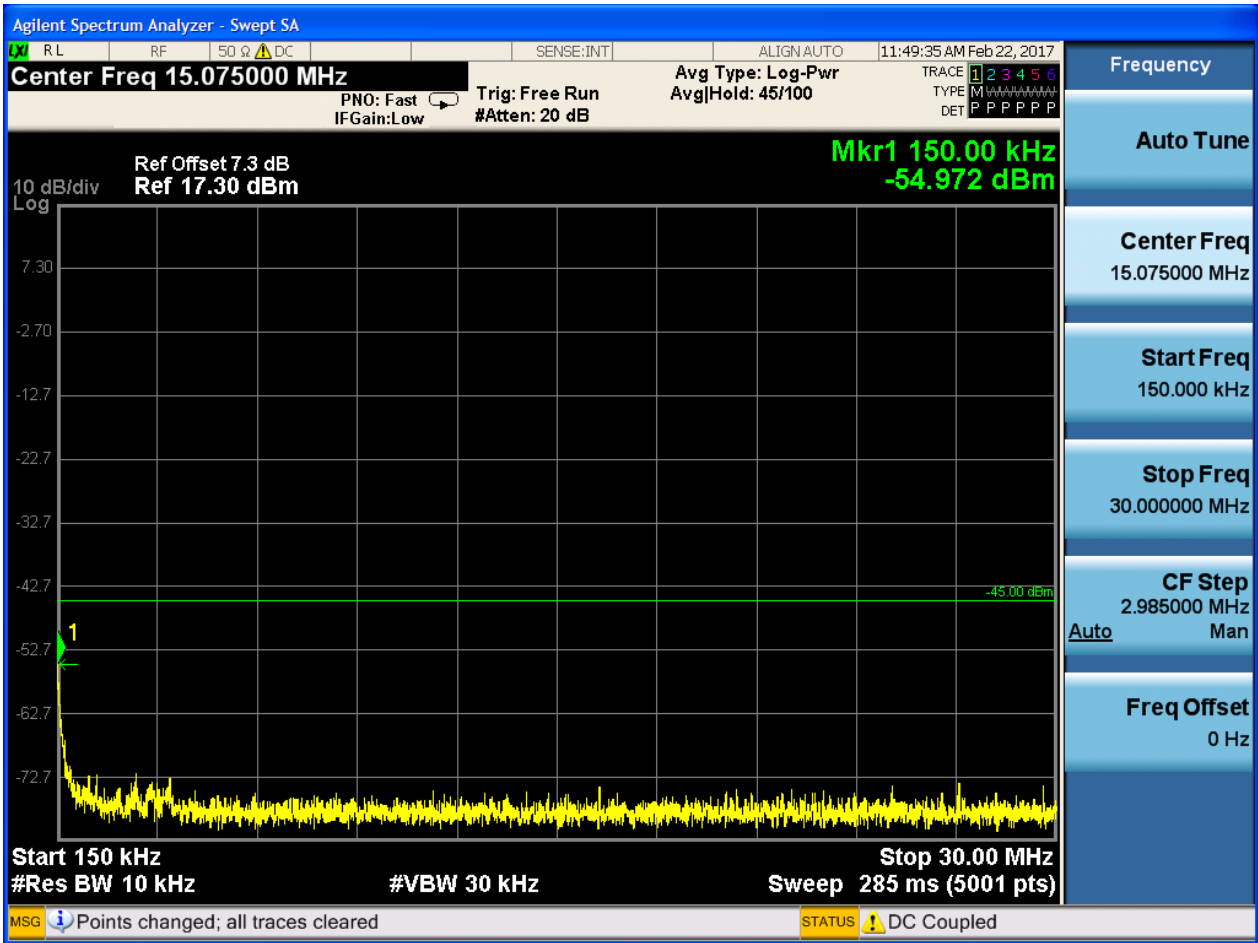


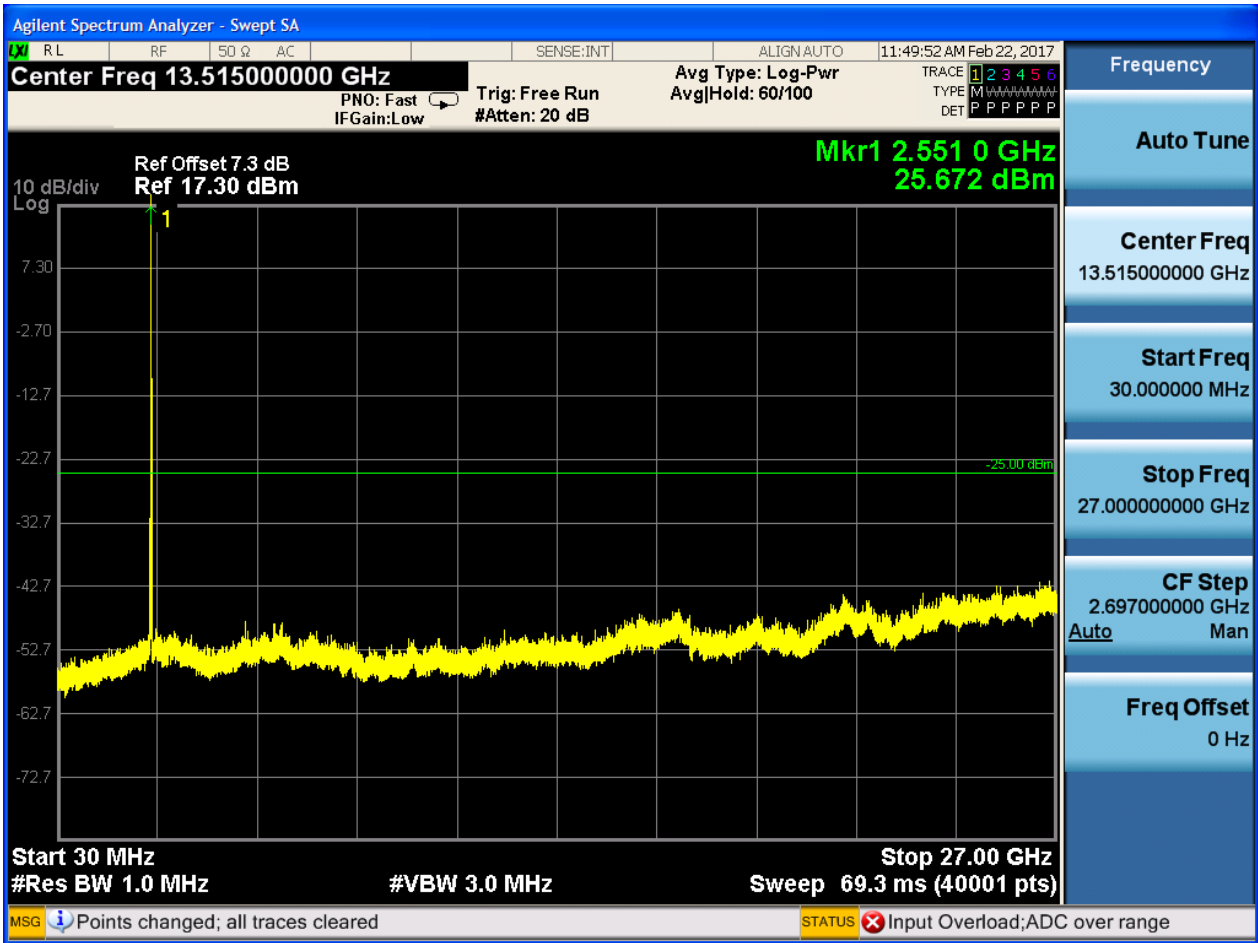


6.1.1.2.4.3 Test Channel = HCH

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

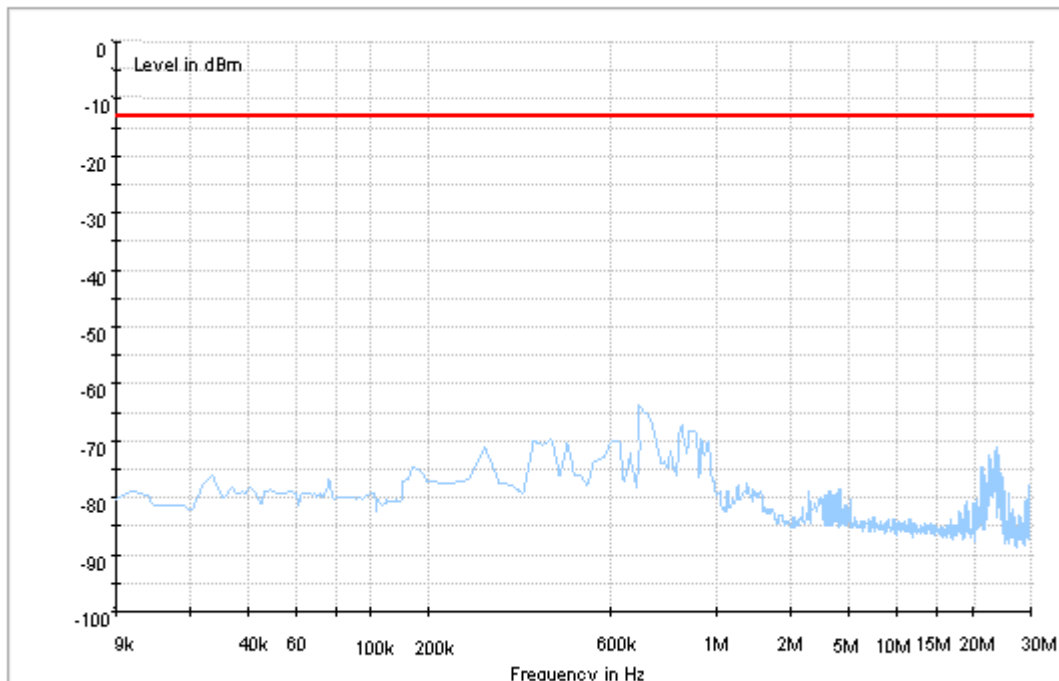
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

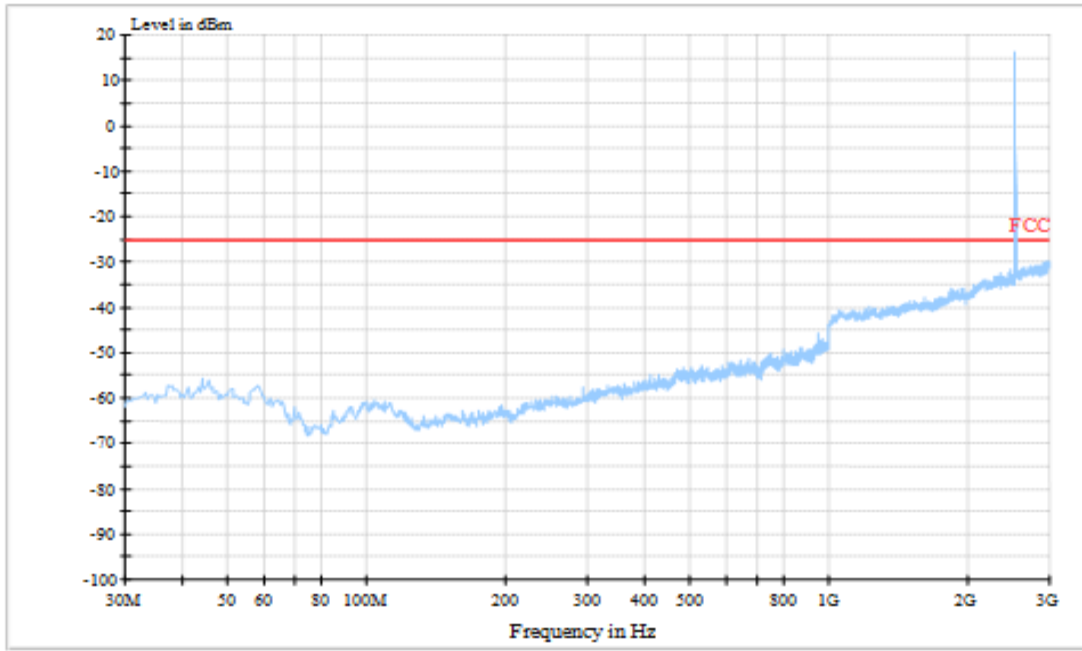
Part I - Test Plots

7.1 For LTE

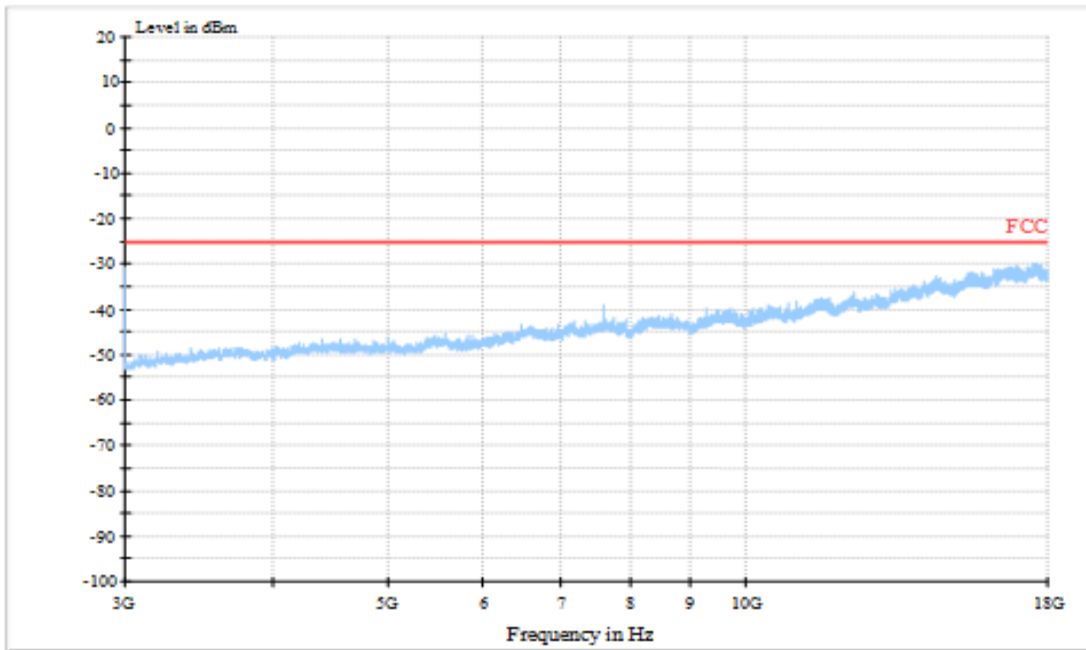
7.1.1 Test Band = BAND7

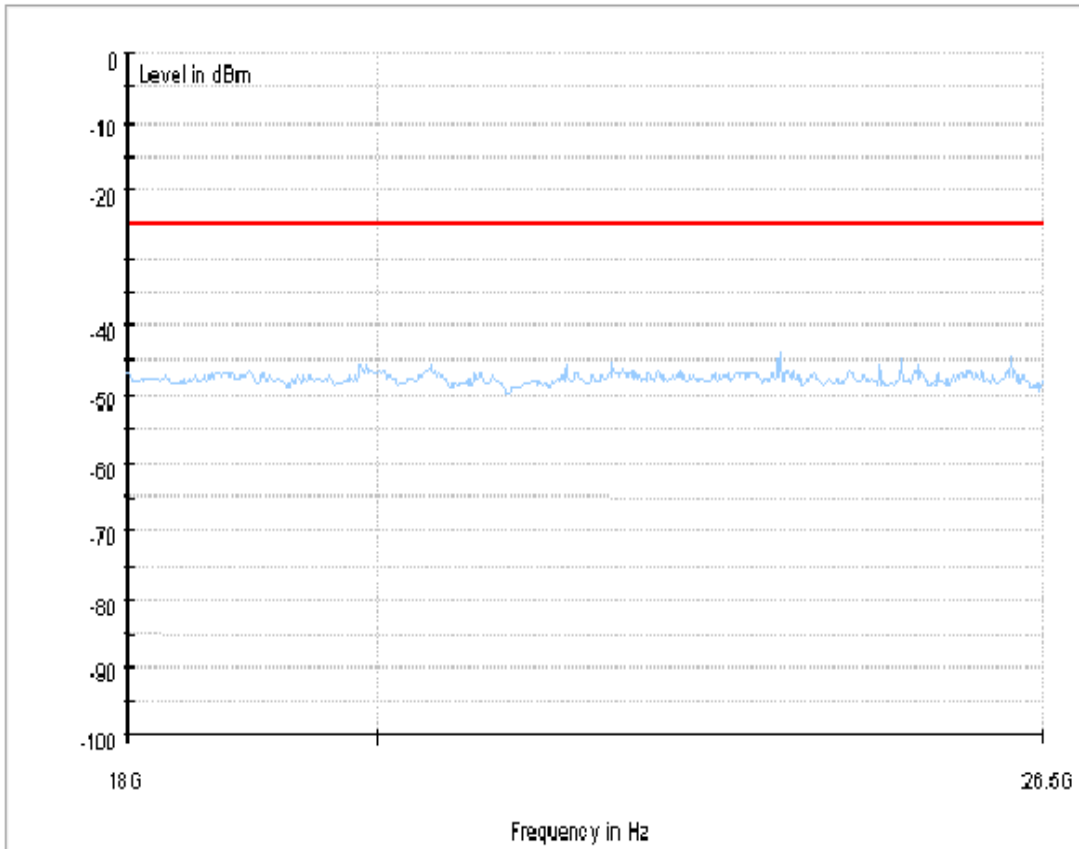
7.1.1.1 Test Bandwidth = 5



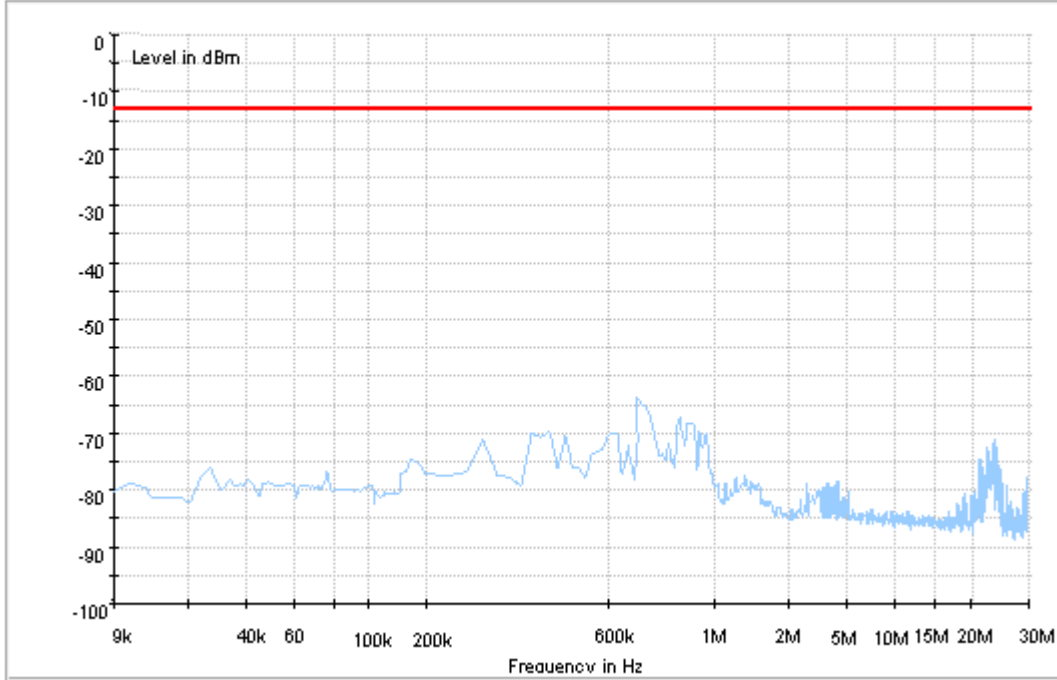


Copy of RSE-TX-DIRECTOR.ABOVE 1.5G_H

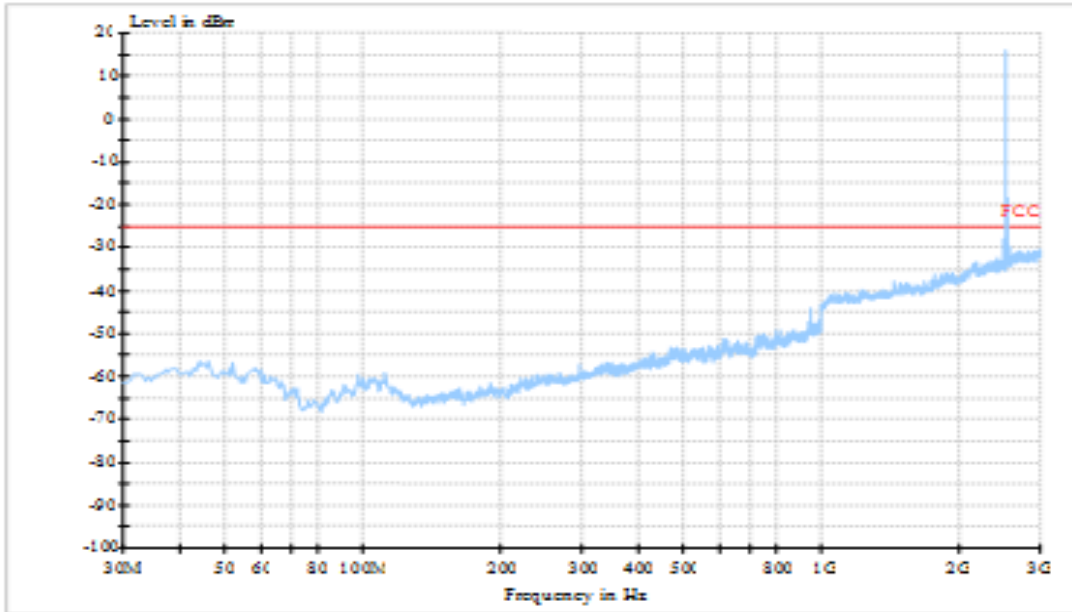




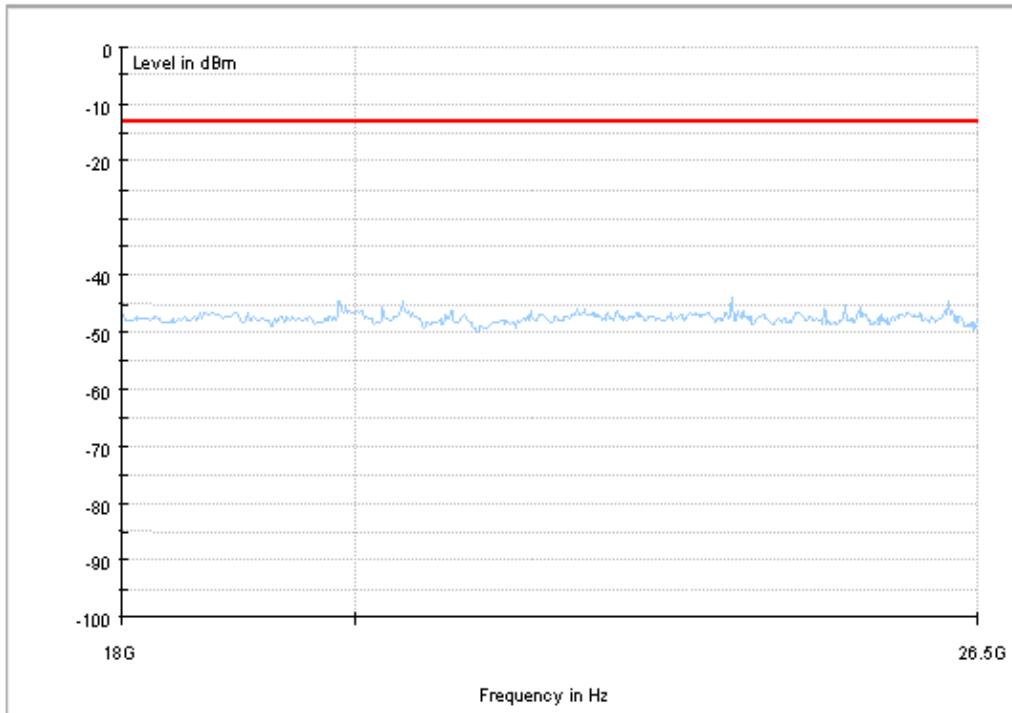
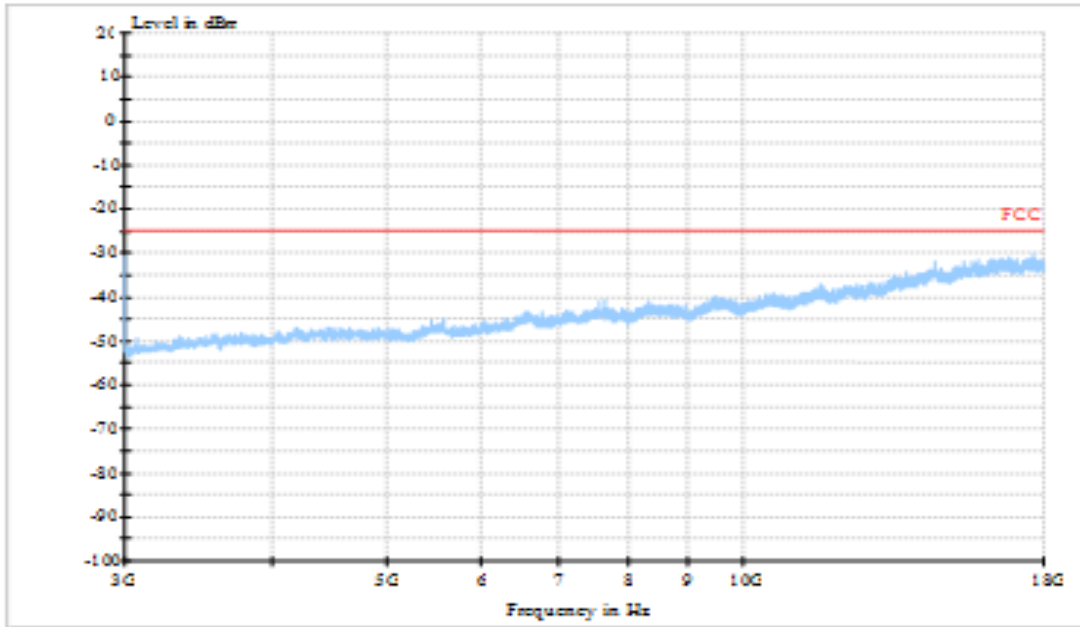
7.1.1.2 Test Bandwidth = 20



Copy of RSE-TX-DIRECTOR_ABOVE 1.5G_1



Copy of RSE-TX-DIRECTOR_ABOVE 1.5G_H



8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND7	LTE/TM1	5	LCH	TN	VL	-0.60	-0.00024	PASS
					VN	-0.94	-0.00038	PASS
					VH	8.00	0.0032	PASS
			MCH	TN	VL	-5.22	-0.00206	PASS
					VN	-3.02	-0.00119	PASS
					VH	-3.83	-0.00151	PASS
			HCH	TN	VL	0.62	0.00024	PASS
					VN	1.47	0.00057	PASS
					VH	-5.81	-0.00226	PASS
		10	LCH	TN	VL	-0.20	-0.00008	PASS
					VN	-2.09	-0.00083	PASS
					VH	-3.81	-0.00152	PASS
			MCH	TN	VL	-5.55	-0.00219	PASS
					VN	-4.21	-0.00166	PASS
					VH	-3.79	-0.0015	PASS
			HCH	TN	VL	-4.92	-0.00192	PASS
					VN	-1.16	-0.00045	PASS
					VH	-3.96	-0.00154	PASS
		15	LCH	TN	VL	3.18	0.00127	PASS
					VN	0.20	0.00008	PASS
					VH	1.90	0.00076	PASS
			MCH	TN	VL	-1.95	-0.00077	PASS
					VN	-6.42	-0.00253	PASS
					VH	-5.66	-0.00223	PASS
HCH	TN		VL	-0.99	-0.00039	PASS		
			VN	1.99	0.00078	PASS		
			VH	-0.36	-0.00014	PASS		
20	LCH	TN	VL	0.23	0.00009	PASS		
			VN	0.29	0.00012	PASS		
			VH	2.92	0.00116	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	-3.83	-0.00151	PASS	
					VN	-3.35	-0.00132	PASS	
					VH	-3.58	-0.00141	PASS	
			HCH	TN	VL	-1.62	-0.00063	PASS	
					VN	2.25	0.00088	PASS	
					VH	0.01	0	PASS	
		5	LCH	TN	VL	0.51	0.0002	PASS	
					VN	-7.04	-0.00281	PASS	
					VH	1.49	0.0006	PASS	
			MCH	TN	VL	-3.36	-0.00133	PASS	
					VN	1.56	0.00062	PASS	
					VH	-3.52	-0.00139	PASS	
			HCH	TN	VL	-0.83	-0.00032	PASS	
					VN	-2.60	-0.00101	PASS	
					VH	0.77	0.0003	PASS	
			10	LCH	TN	VL	-4.38	-0.00175	PASS
						VN	-2.15	-0.00086	PASS
						VH	-1.65	-0.00066	PASS
		MCH		TN	VL	-0.44	-0.00017	PASS	
					VN	-4.81	-0.0019	PASS	
					VH	-5.46	-0.00215	PASS	
		HCH		TN	VL	-1.47	-0.00057	PASS	
					VN	-6.14	-0.00239	PASS	
					VH	-4.05	-0.00158	PASS	
		15	LCH	TN	VL	2.62	0.00104	PASS	
					VN	-2.00	-0.0008	PASS	
					VH	-0.40	-0.00016	PASS	
			MCH	TN	VL	-3.49	-0.00138	PASS	
					VN	-2.76	-0.00109	PASS	
					VH	-1.23	-0.00049	PASS	
			HCH	TN	VL	2.49	0.00097	PASS	
					VN	2.25	0.00088	PASS	
					VH	2.05	0.0008	PASS	
		20	LCH	TN	VL	1.89	0.00075	PASS	
					VN	1.14	0.00045	PASS	
					VH	1.52	0.00061	PASS	
			MCH	TN	VL	-3.60	-0.00142	PASS	
					VN	-3.75	-0.00148	PASS	
					VH	-2.98	-0.00118	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	-1.00	-0.00039	PASS
					VN	0.63	0.00025	PASS
					VH	0.79	0.00031	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND7	LTE/TM1	5	LCH	VN	-30	3.18	0.00127	PASS
					-20	-0.67	-0.00027	PASS
					-10	3.96	0.00158	PASS
					0	1.49	0.0006	PASS
					10	1.73	0.00069	PASS
					20	-2.20	-0.00088	PASS
					30	0.90	0.00036	PASS
					40	0.93	0.00037	PASS
			50	0.77	0.00031	PASS		
			MCH	VN	-30	-2.53	-0.001	PASS
					-20	-4.82	-0.0019	PASS
					-10	-3.40	-0.00134	PASS
					0	-2.80	-0.0011	PASS
					10	-9.28	-0.00366	PASS
					20	-0.77	-0.0003	PASS
					30	-4.16	-0.00164	PASS
					40	-1.96	-0.00077	PASS
			HCH	VN	-30	-2.13	-0.00083	PASS
					-20	0.37	0.00014	PASS
					-10	0.50	0.00019	PASS
					0	-1.99	-0.00078	PASS
					10	-1.23	-0.00048	PASS
					20	0.62	0.00024	PASS
					30	-2.52	-0.00098	PASS
		40			2.63	0.00102	PASS	
		50	3.35	0.0013	PASS			
		10	LCH	VN	-30	-1.26	-0.0005	PASS
					-20	-4.86	-0.00194	PASS
					-10	-2.89	-0.00115	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					0	-3.43	-0.00137	PASS	
					10	-2.23	-0.00089	PASS	
					20	-5.34	-0.00213	PASS	
					30	-3.40	-0.00136	PASS	
					40	-0.33	-0.00013	PASS	
					50	-3.23	-0.00129	PASS	
			MCH	VN	-30	-3.39	-0.00134	PASS	
					-20	-1.69	-0.00067	PASS	
					-10	-0.40	-0.00016	PASS	
					0	-4.63	-0.00183	PASS	
					10	-2.42	-0.00095	PASS	
					20	-6.07	-0.00239	PASS	
					30	-2.36	-0.00093	PASS	
					40	-5.31	-0.00209	PASS	
			HCH	VN	-30	-3.00	-0.00117	PASS	
					-20	-3.42	-0.00133	PASS	
					-10	-6.94	-0.00271	PASS	
					0	-5.99	-0.00234	PASS	
					10	-4.49	-0.00175	PASS	
					20	-2.20	-0.00086	PASS	
					30	-3.81	-0.00149	PASS	
					40	-2.25	-0.00088	PASS	
			15	LCH	VN	-30	0.89	0.00035	PASS
						-20	-2.50	-0.001	PASS
						-10	0.21	0.00008	PASS
						0	1.67	0.00067	PASS
						10	1.26	0.0005	PASS
						20	0.63	0.00025	PASS
						30	1.77	0.00071	PASS
						40	0.77	0.00031	PASS
						50	-2.59	-0.00103	PASS
						MCH	VN	-30	-4.91
			-20	-1.32	-0.00052			PASS	
			-10	-4.25	-0.00168			PASS	
			0	-3.59	-0.00142			PASS	
			10	-0.41	-0.00016			PASS	
			20	-0.97	-0.00038			PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					30	-2.88	-0.00114	PASS			
					40	-0.86	-0.00034	PASS			
					50	-5.51	-0.00217	PASS			
			HCH	VN	-30	1.10	0.00043	PASS			
					-20	1.50	0.00059	PASS			
					-10	0.23	0.00009	PASS			
					0	-0.23	-0.00009	PASS			
					10	0.11	0.00004	PASS			
					20	1.19	0.00046	PASS			
					30	-0.50	-0.0002	PASS			
					40	1.26	0.00049	PASS			
					50	0.06	0.00002	PASS			
					20	LCH	VN	-30	2.33	0.00093	PASS
								-20	2.13	0.00085	PASS
								-10	3.13	0.00125	PASS
		0	2.55	0.00102				PASS			
		10	2.66	0.00106				PASS			
		20	0.41	0.00016				PASS			
		30	2.56	0.00102				PASS			
		40	3.53	0.00141				PASS			
		50	1.40	0.00056				PASS			
		MCH	VN	-30				-3.45	-0.00136	PASS	
				-20				-6.01	-0.00237	PASS	
				-10				-3.30	-0.0013	PASS	
				0				-2.95	-0.00116	PASS	
				10				-2.62	-0.00103	PASS	
				20				-3.96	-0.00156	PASS	
				30	-4.52	-0.00178	PASS				
				40	-3.48	-0.00137	PASS				
		HCH	VN	-30	0.21	0.00008	PASS				
				-20	-0.19	-0.00007	PASS				
				-10	1.34	0.00052	PASS				
				0	1.65	0.00064	PASS				
				10	-0.64	-0.00025	PASS				
				20	1.06	0.00041	PASS				
				30	-0.79	-0.00031	PASS				
				40	1.62	0.00063	PASS				
				50	0.69	0.00027	PASS				

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	5	LCH	VN	-30	3.75	0.0015	PASS
					-20	-4.84	-0.00193	PASS
					-10	-7.64	-0.00305	PASS
					0	4.38	0.00175	PASS
					10	2.79	0.00111	PASS
					20	3.49	0.00139	PASS
					30	0.53	0.00021	PASS
					40	-2.82	-0.00113	PASS
					50	2.90	0.00116	PASS
			MCH	VN	-30	-1.36	-0.00054	PASS
					-20	-0.83	-0.00033	PASS
					-10	-3.73	-0.00147	PASS
					0	1.54	0.00061	PASS
					10	-2.33	-0.00092	PASS
					20	-1.32	-0.00052	PASS
					30	-1.04	-0.00041	PASS
					40	-1.90	-0.00075	PASS
					50	-4.19	-0.00165	PASS
		HCH	VN	-30	-0.39	-0.00015	PASS	
				-20	4.35	0.00169	PASS	
				-10	-4.48	-0.00174	PASS	
				0	2.33	0.00091	PASS	
				10	-4.68	-0.00182	PASS	
				20	1.09	0.00042	PASS	
				30	-1.65	-0.00064	PASS	
				40	-1.54	-0.0006	PASS	
				50	1.99	0.00078	PASS	
		10	LCH	VN	-30	-6.77	-0.0027	PASS
					-20	-2.73	-0.00109	PASS
					-10	-0.77	-0.00031	PASS
					0	-3.89	-0.00155	PASS
					10	-3.30	-0.00132	PASS
					20	-5.54	-0.00221	PASS
					30	-2.70	-0.00108	PASS
					40	-4.43	-0.00177	PASS
					50	-5.08	-0.00203	PASS
MCH	VN		-30	-5.28	-0.00208	PASS		
			-20	-0.31	-0.00012	PASS		
			-10	-5.09	-0.00201	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					0	-2.78	-0.0011	PASS		
					10	-4.02	-0.00159	PASS		
					20	-3.58	-0.00141	PASS		
					30	-0.66	-0.00026	PASS		
					40	-3.30	-0.0013	PASS		
					50	-2.03	-0.0008	PASS		
			HCH	VN	-30	-0.86	-0.00034	PASS		
					-20	-5.02	-0.00196	PASS		
					-10	-1.89	-0.00074	PASS		
					0	-3.15	-0.00123	PASS		
					10	-5.55	-0.00216	PASS		
					20	-4.51	-0.00176	PASS		
			LCH	VN	30	-4.23	-0.00165	PASS		
					40	-5.21	-0.00203	PASS		
					50	-2.02	-0.00079	PASS		
					-30	-0.73	-0.00029	PASS		
					-20	-2.12	-0.00085	PASS		
					-10	-1.80	-0.00072	PASS		
		MCH	VN	0	-3.83	-0.00153	PASS			
				10	-2.88	-0.00115	PASS			
				20	0.57	0.00023	PASS			
				30	2.95	0.00118	PASS			
				40	-1.77	-0.00071	PASS			
				50	-1.26	-0.0005	PASS			
				-30	-1.66	-0.00065	PASS			
				-20	-2.55	-0.00101	PASS			
				-10	-3.38	-0.00133	PASS			
				0	-3.49	-0.00138	PASS			
				10	-1.92	-0.00076	PASS			
				20	-1.20	-0.00047	PASS			
		HCH	VN	30	-2.76	-0.00109	PASS			
				40	-1.77	-0.0007	PASS			
				50	-1.93	-0.00076	PASS			
				-30	3.09	0.00121	PASS			
				-20	1.37	0.00053	PASS			
				-10	1.40	0.00055	PASS			
							0	-2.16	-0.00084	PASS
							10	0.87	0.00034	PASS
							20	1.06	0.00041	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	2.73	0.00107	PASS
					40	-1.32	-0.00052	PASS
					50	1.10	0.00043	PASS
					-30	2.37	0.00094	PASS
					-20	2.49	0.00099	PASS
					-10	-0.41	-0.00016	PASS
					0	2.20	0.00088	PASS
			LCH	VN	10	-0.06	-0.00002	PASS
					20	1.93	0.00077	PASS
					30	3.43	0.00137	PASS
					40	1.76	0.0007	PASS
					50	1.72	0.00069	PASS
					-30	-2.32	-0.00092	PASS
					-20	-3.26	-0.00129	PASS
					-10	-3.63	-0.00143	PASS
					0	-3.55	-0.0014	PASS
			MCH	VN	10	-2.92	-0.00115	PASS
					20	-3.02	-0.00119	PASS
					30	-3.23	-0.00127	PASS
					40	-3.02	-0.00119	PASS
					50	-1.13	-0.00045	PASS
					-30	-0.86	-0.00034	PASS
					-20	-0.16	-0.00006	PASS
					-10	1.00	0.00039	PASS
					0	1.83	0.00071	PASS
			HCH	VN	10	-1.76	-0.00069	PASS
					20	0.67	0.00026	PASS
					30	3.12	0.00122	PASS
					40	0.90	0.00035	PASS
					50	-1.76	-0.00069	PASS

END