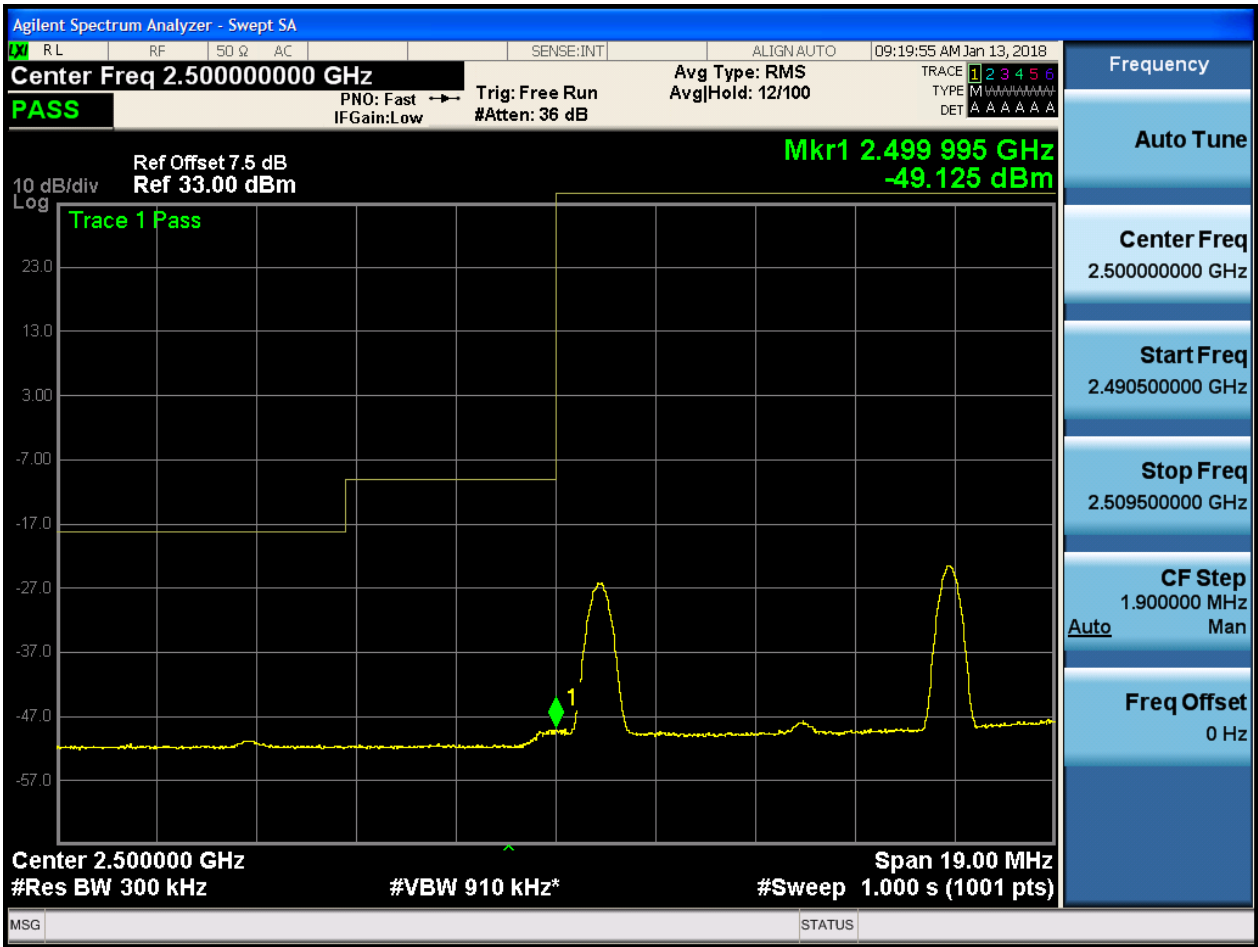


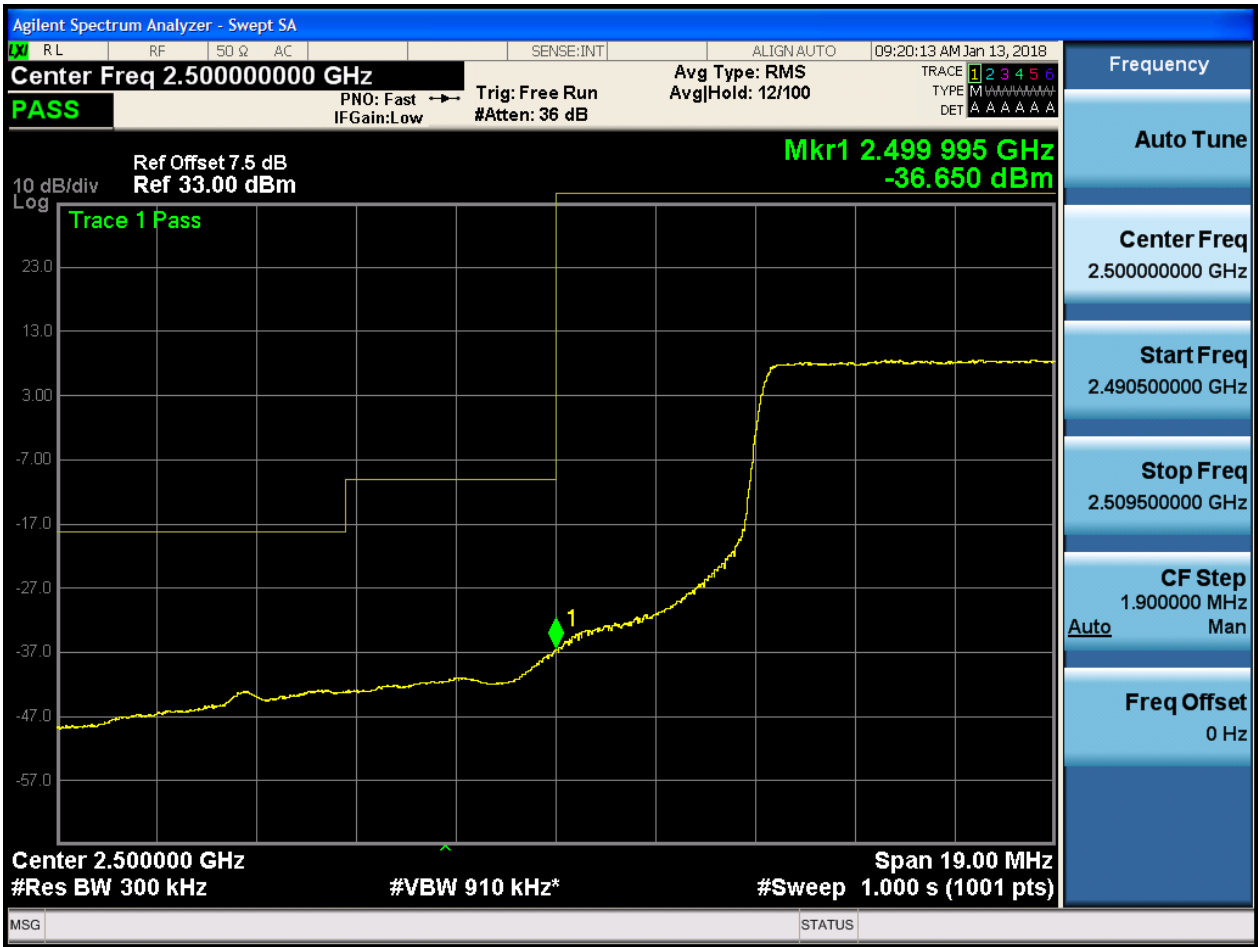


5.1.1.2.3.1.2 Test RB = RB1#74





5.1.1.2.3.1.3 Test RB = RB36#18





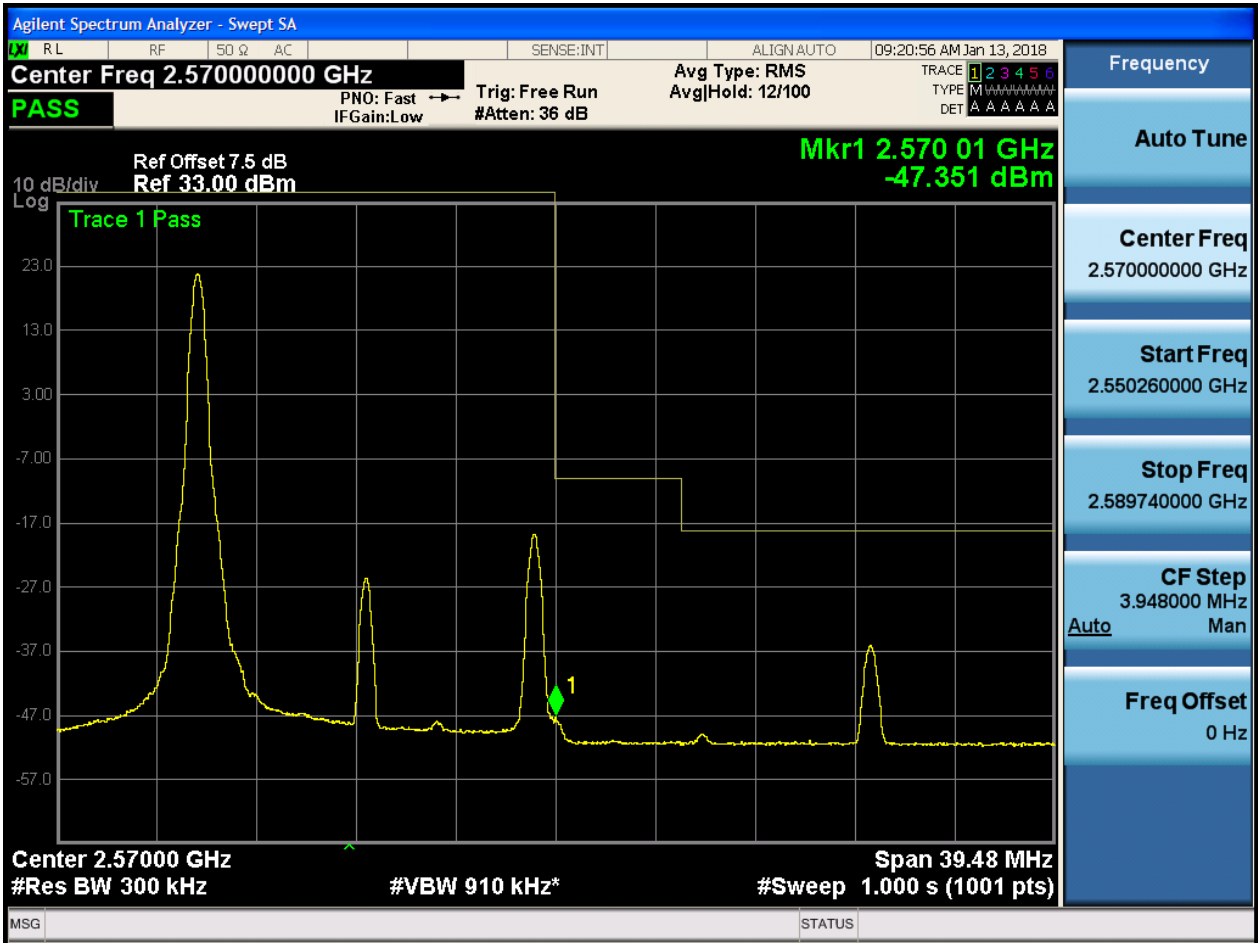
5.1.1.2.3.1.4 Test RB = RB75#0





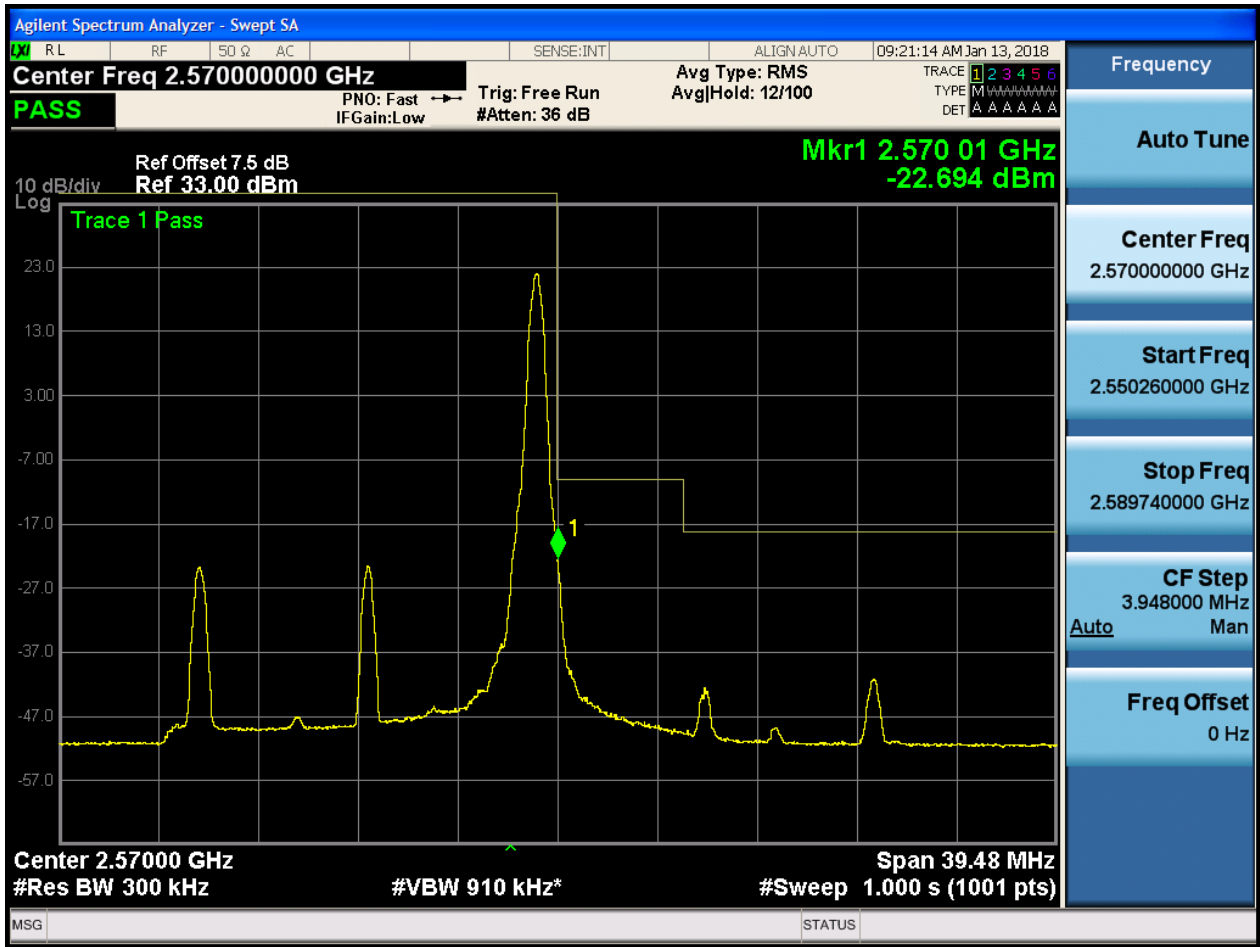
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#74





5.1.1.2.3.2.3 Test RB = RB36#18





5.1.1.2.3.2.4 Test RB = RB75#0

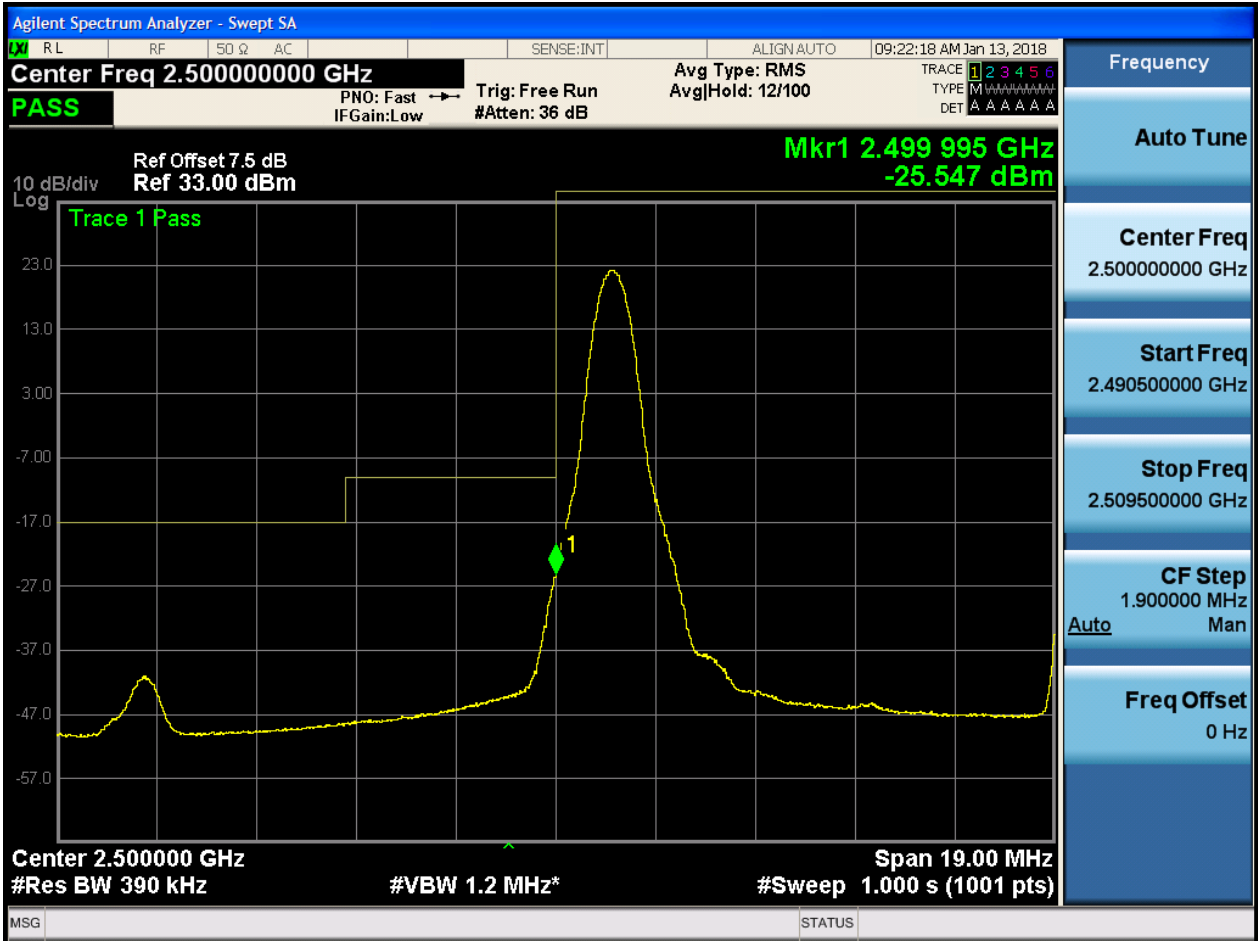




5.1.1.2.4 Test Bandwidth = 20

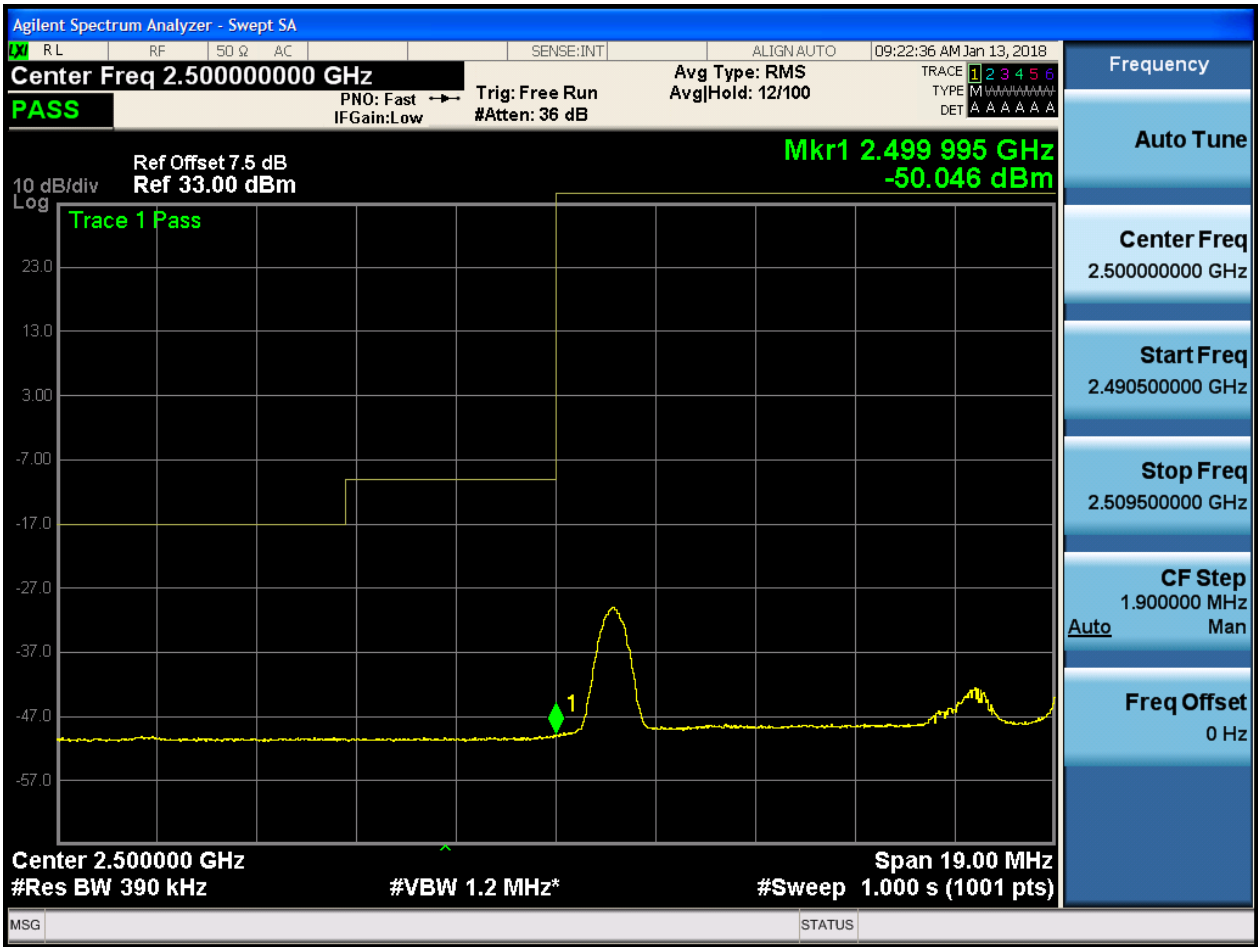
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



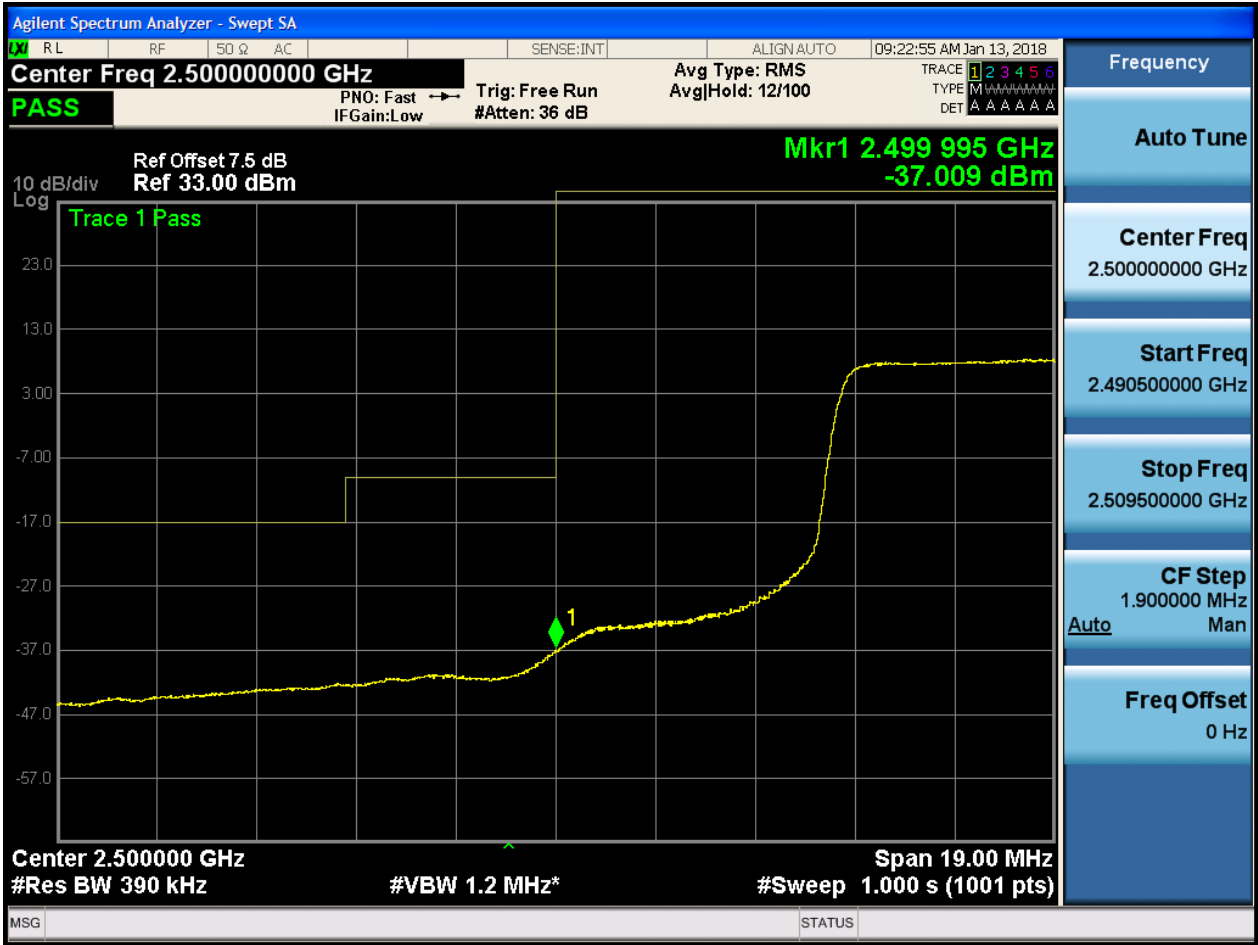


5.1.1.2.4.1.2 Test RB = RB1#99



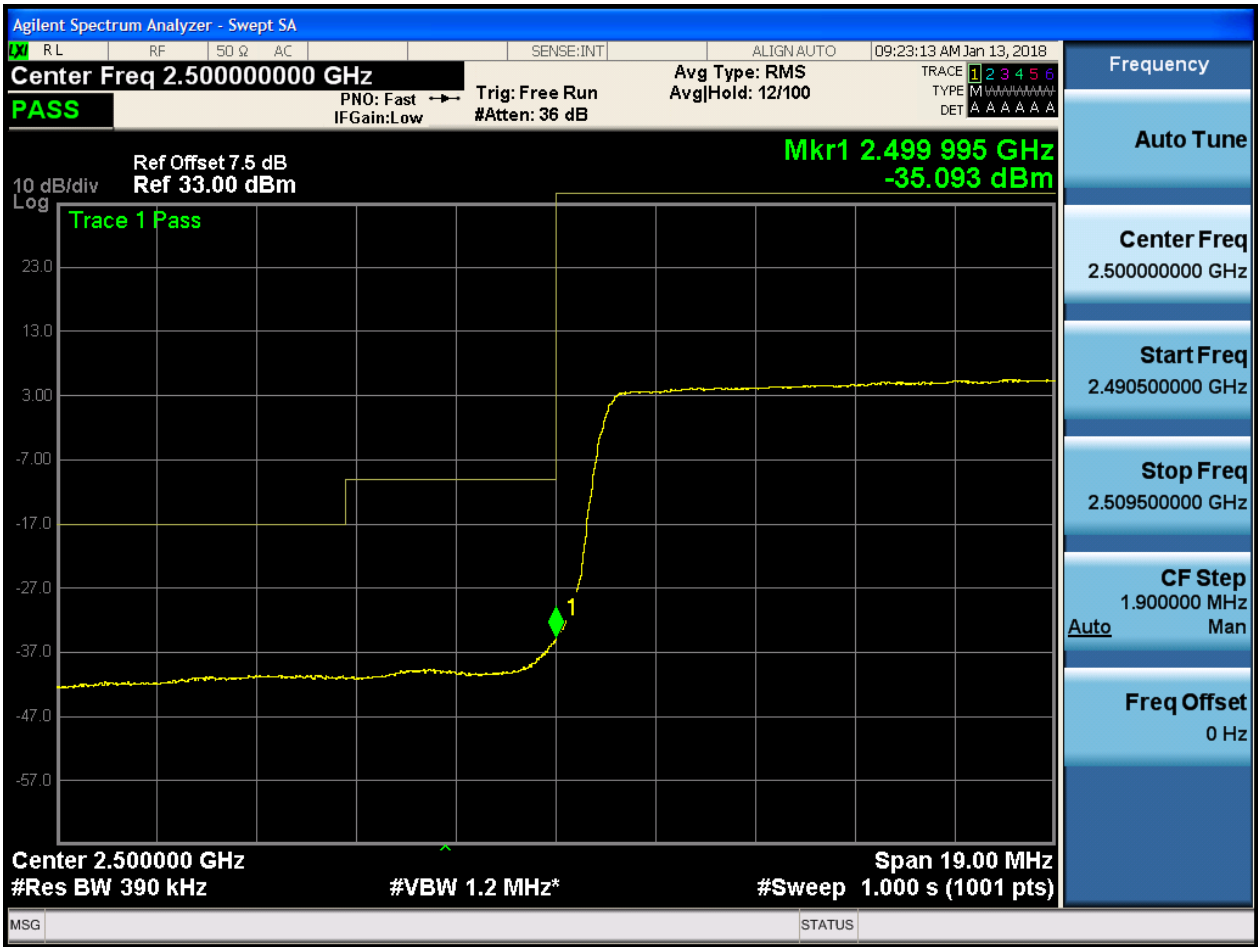


5.1.1.2.4.1.3 Test RB = RB50#25





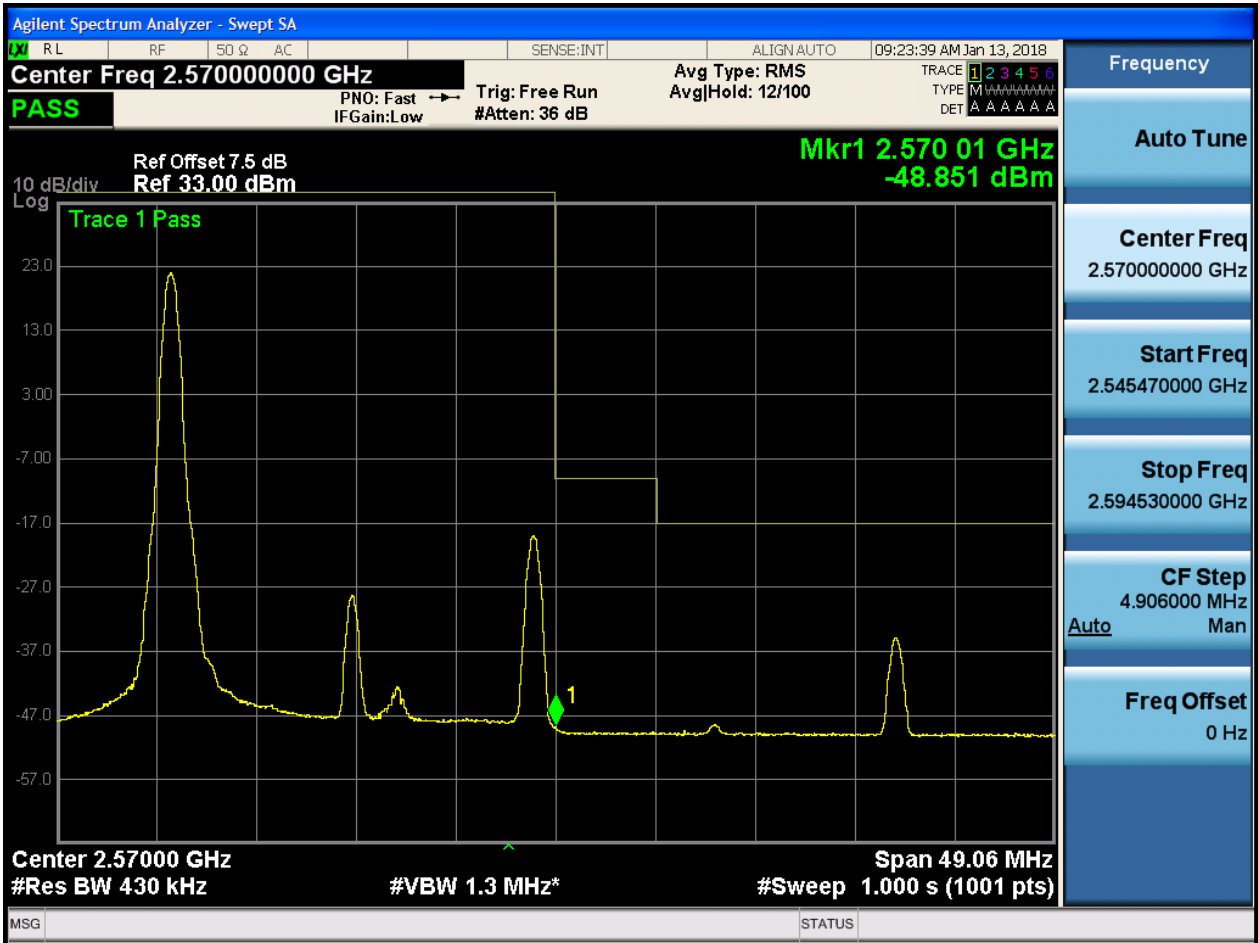
5.1.1.2.4.1.4 Test RB = RB100#0





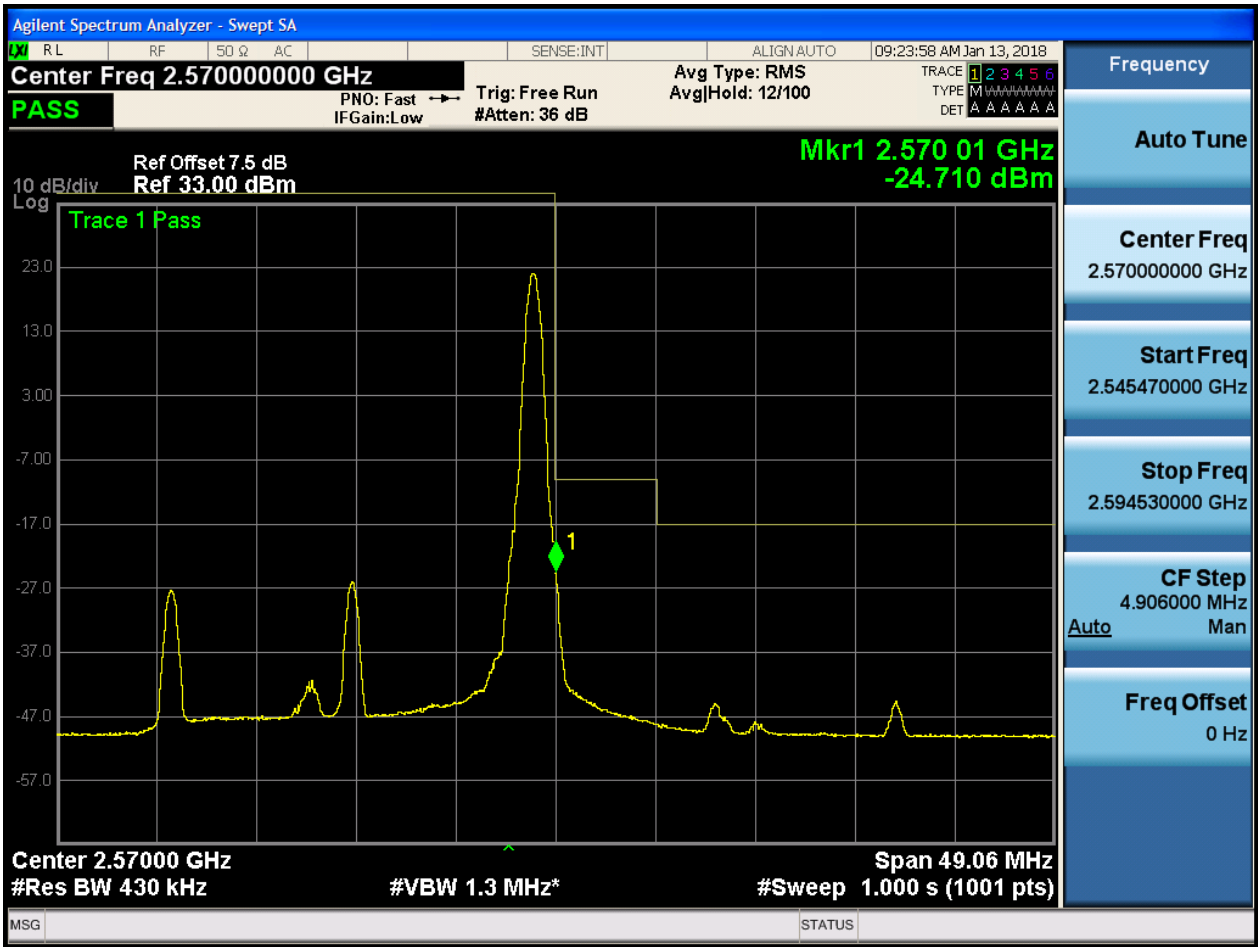
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0



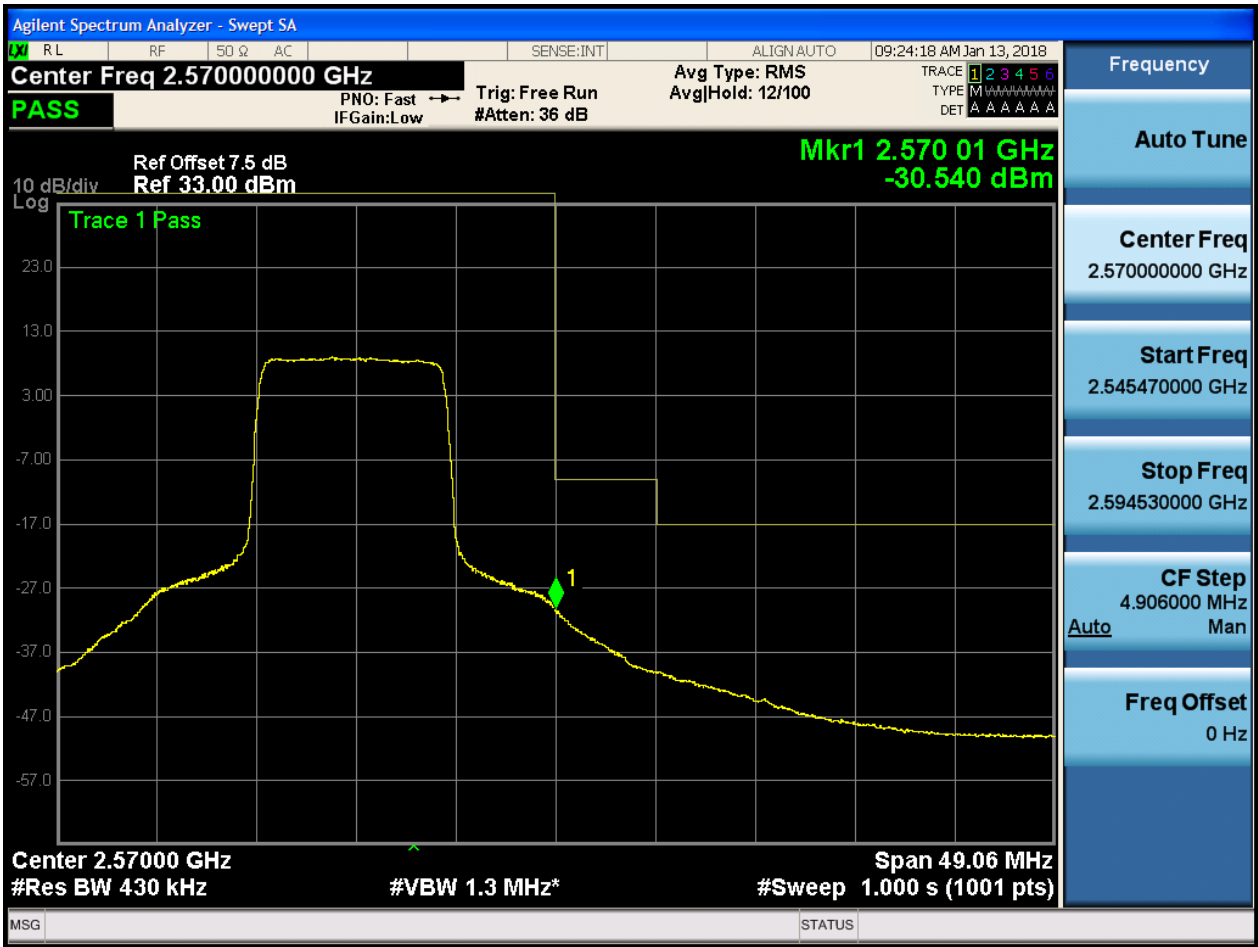


5.1.1.2.4.2.2 Test RB = RB1#99





5.1.1.2.4.2.3 Test RB = RB50#25





5.1.1.2.4.2.4 Test RB = RB100#0





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 LTE

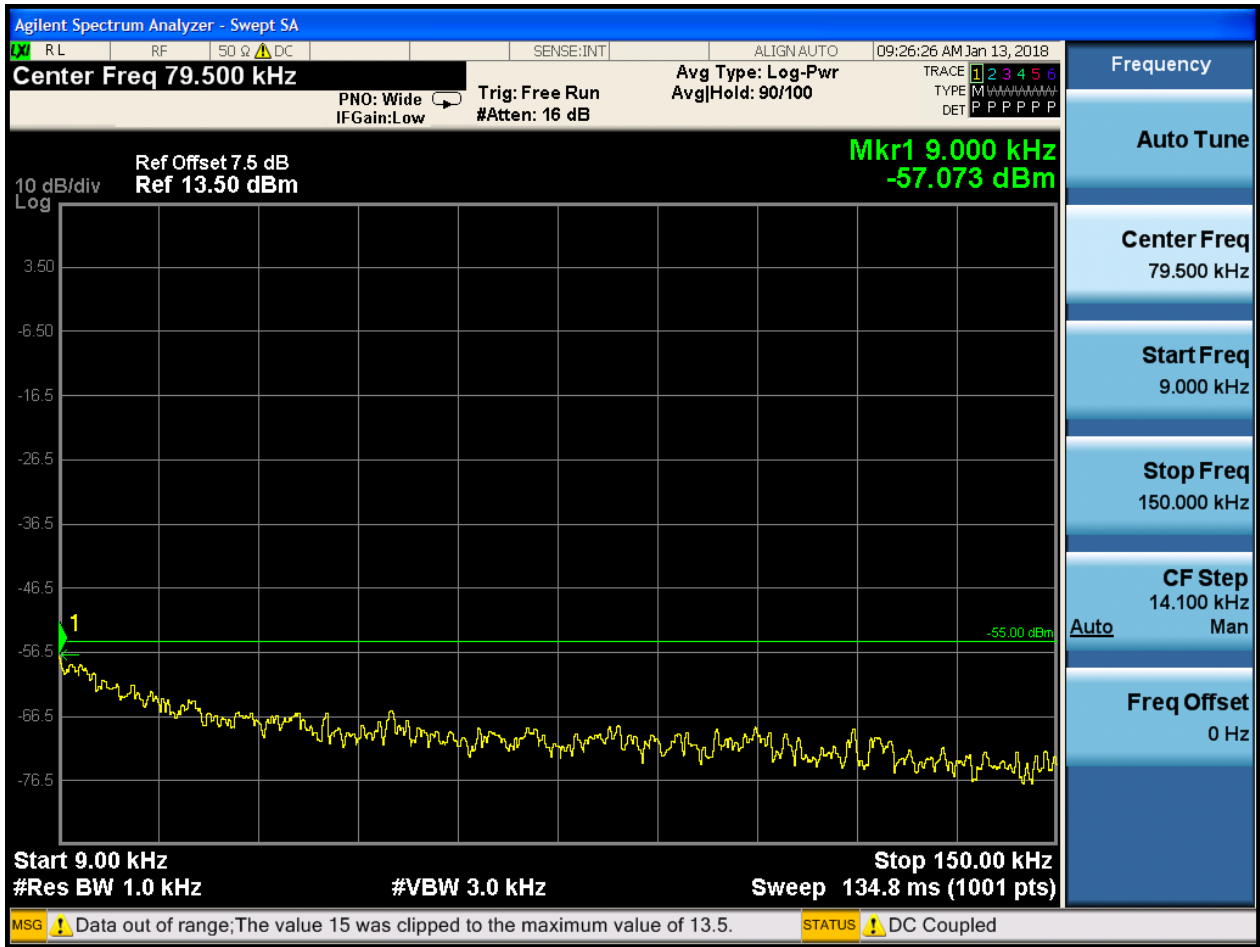
6.1.1 Test Band = BAND7

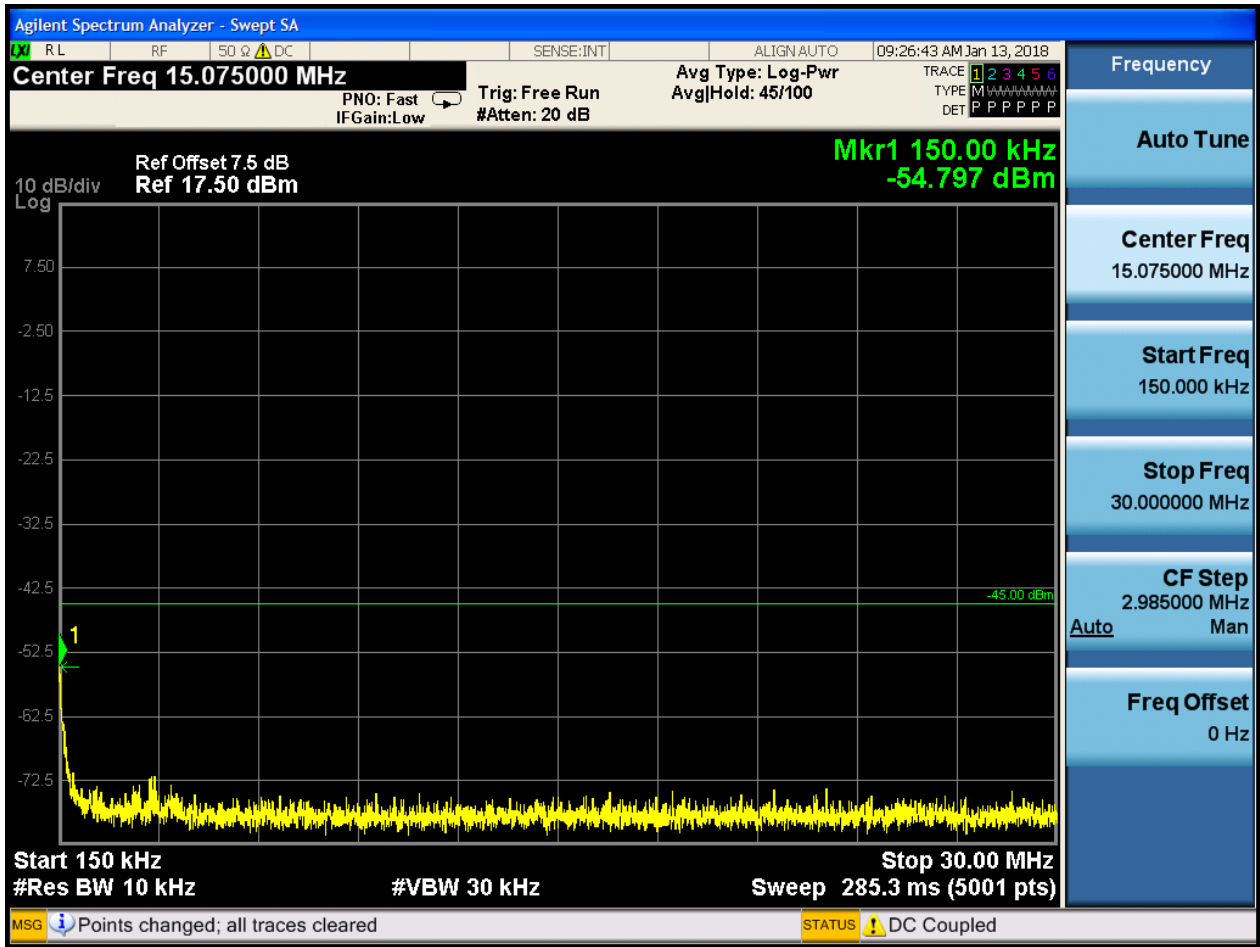
6.1.1.1 Test Mode = LTE/TM1

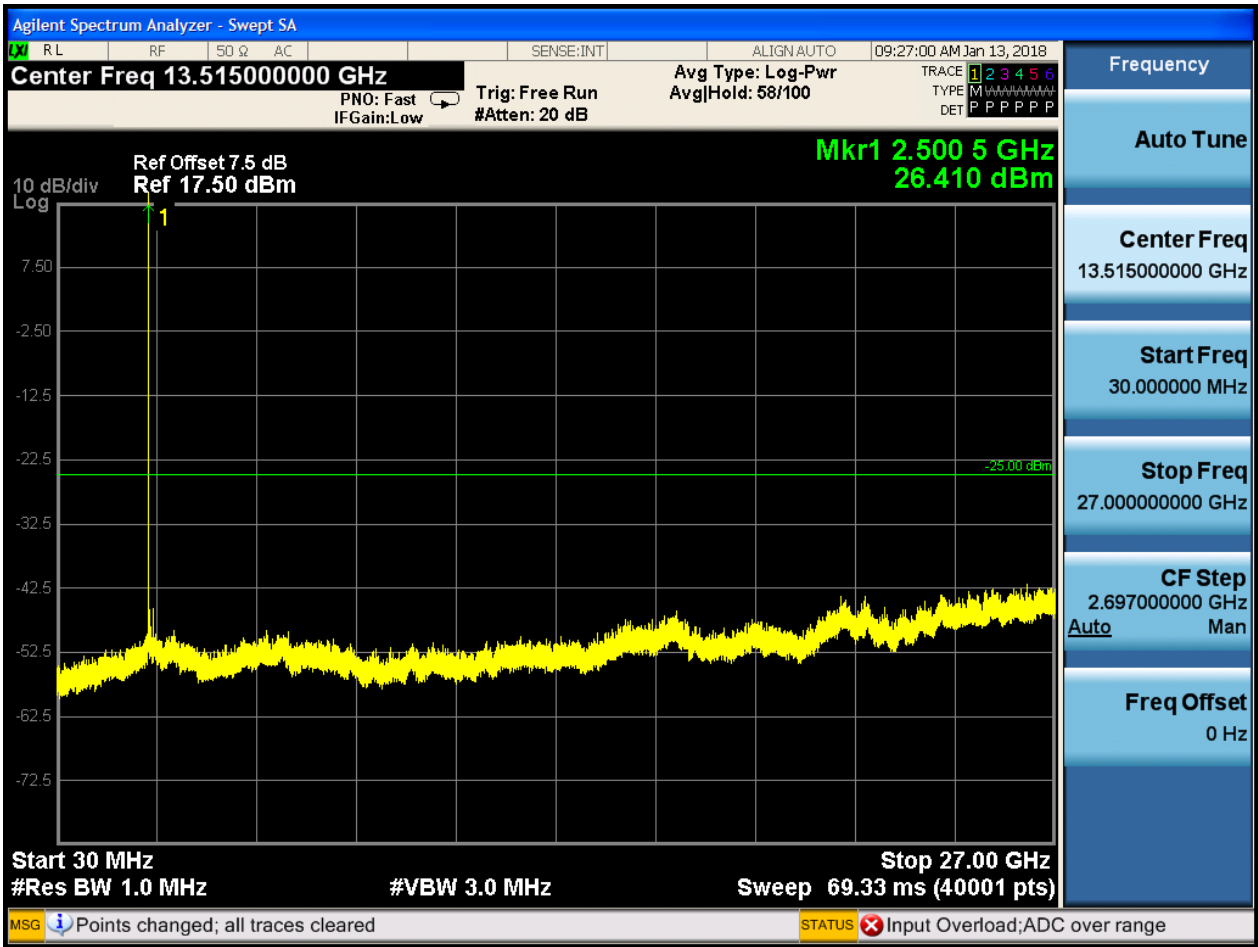
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



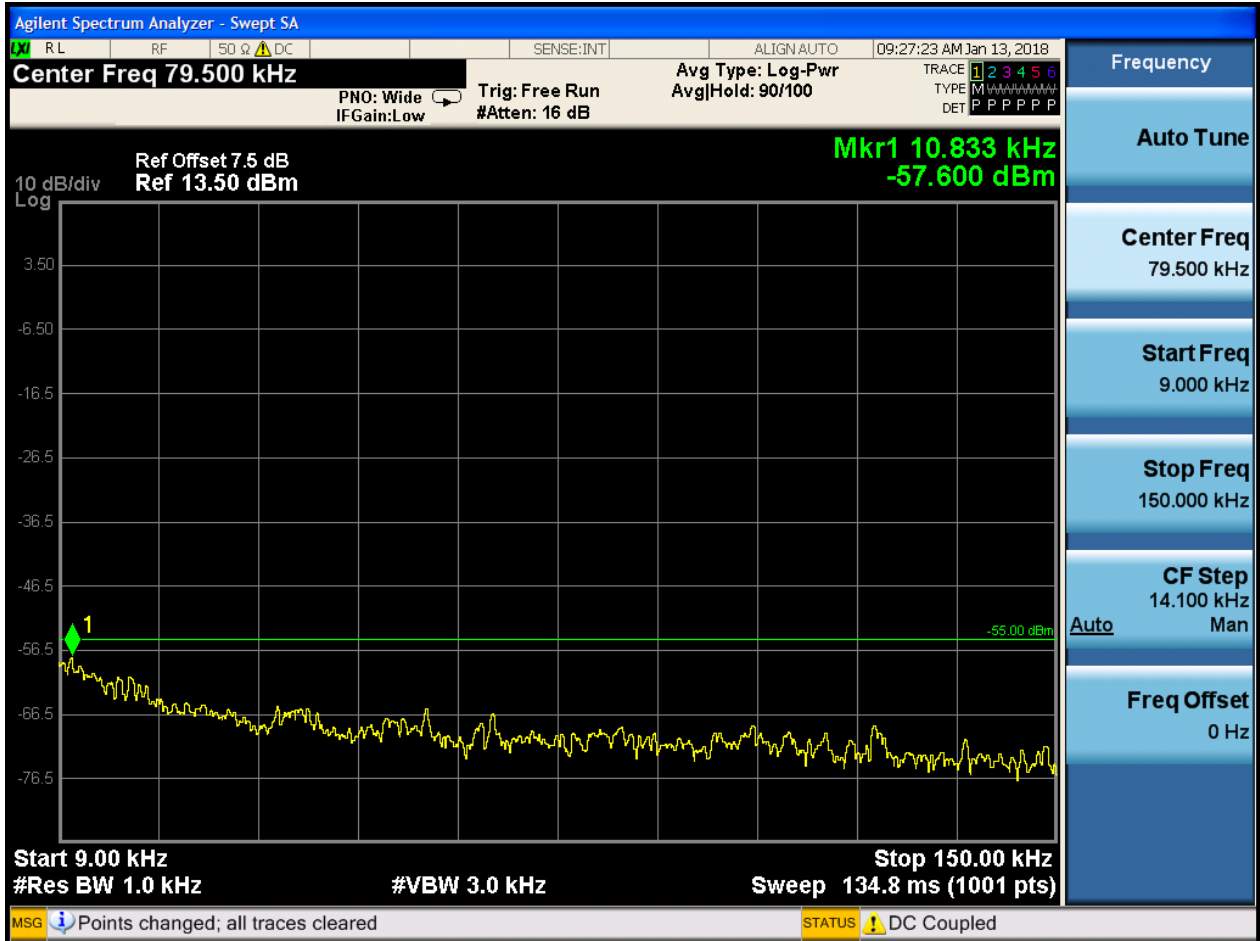


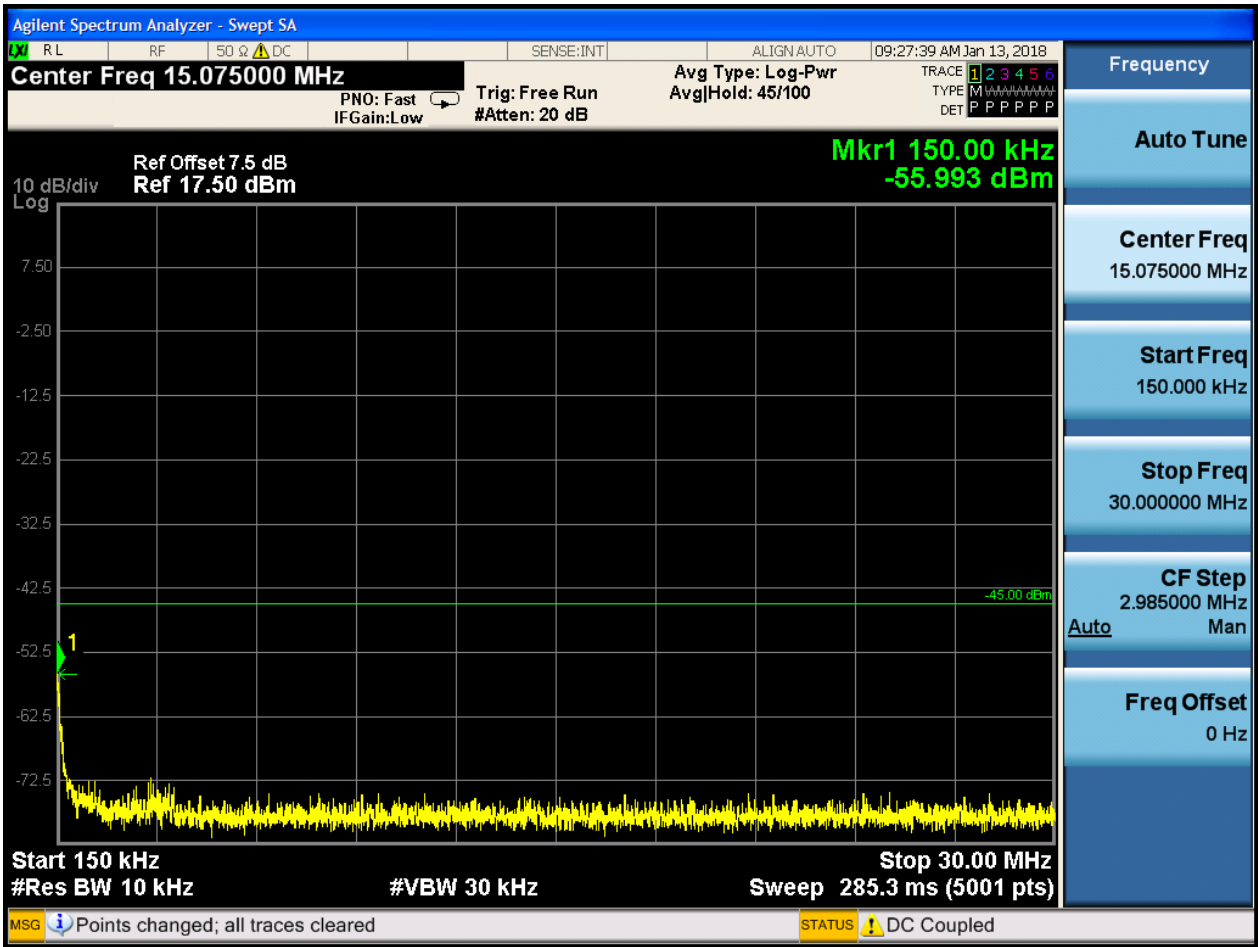


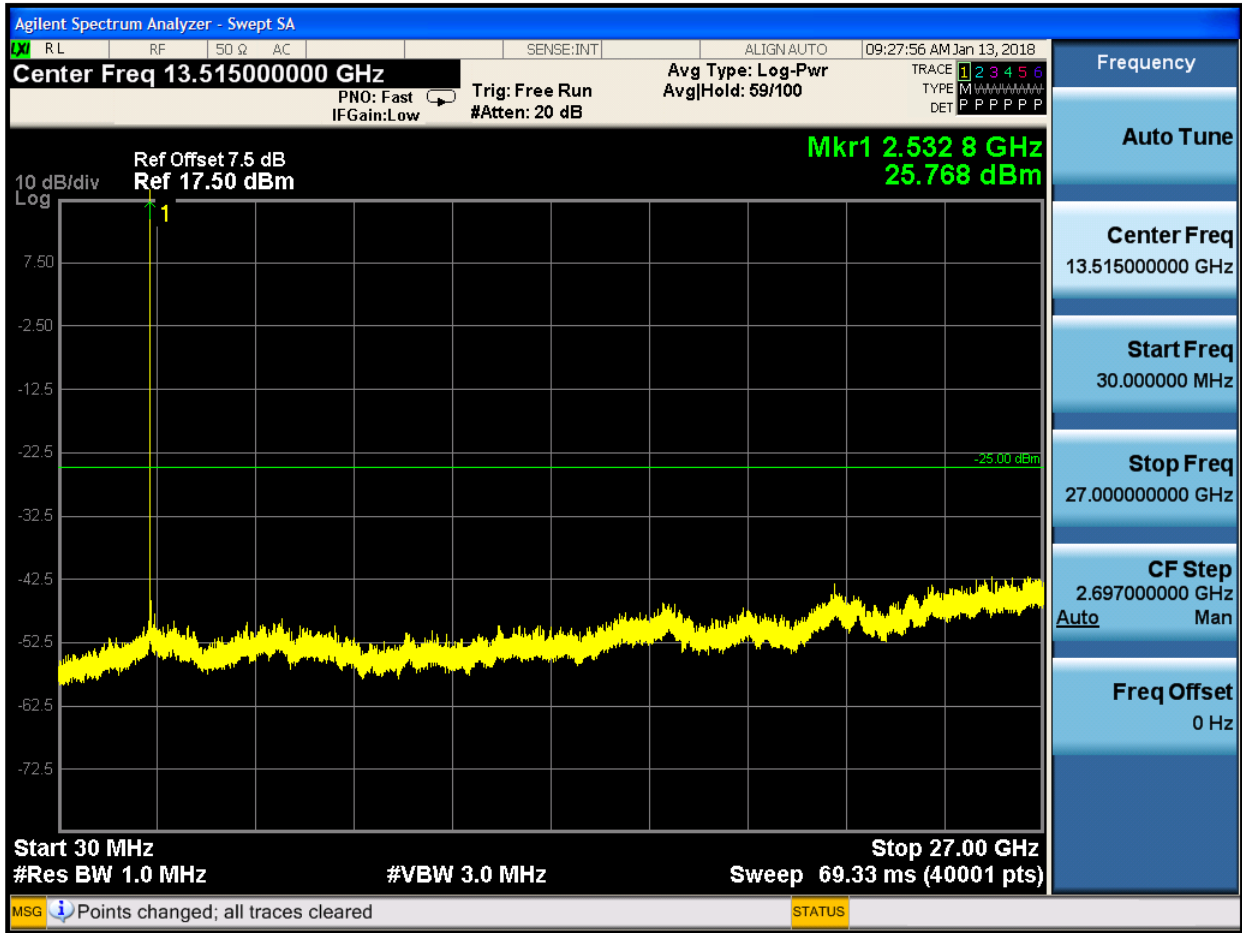


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



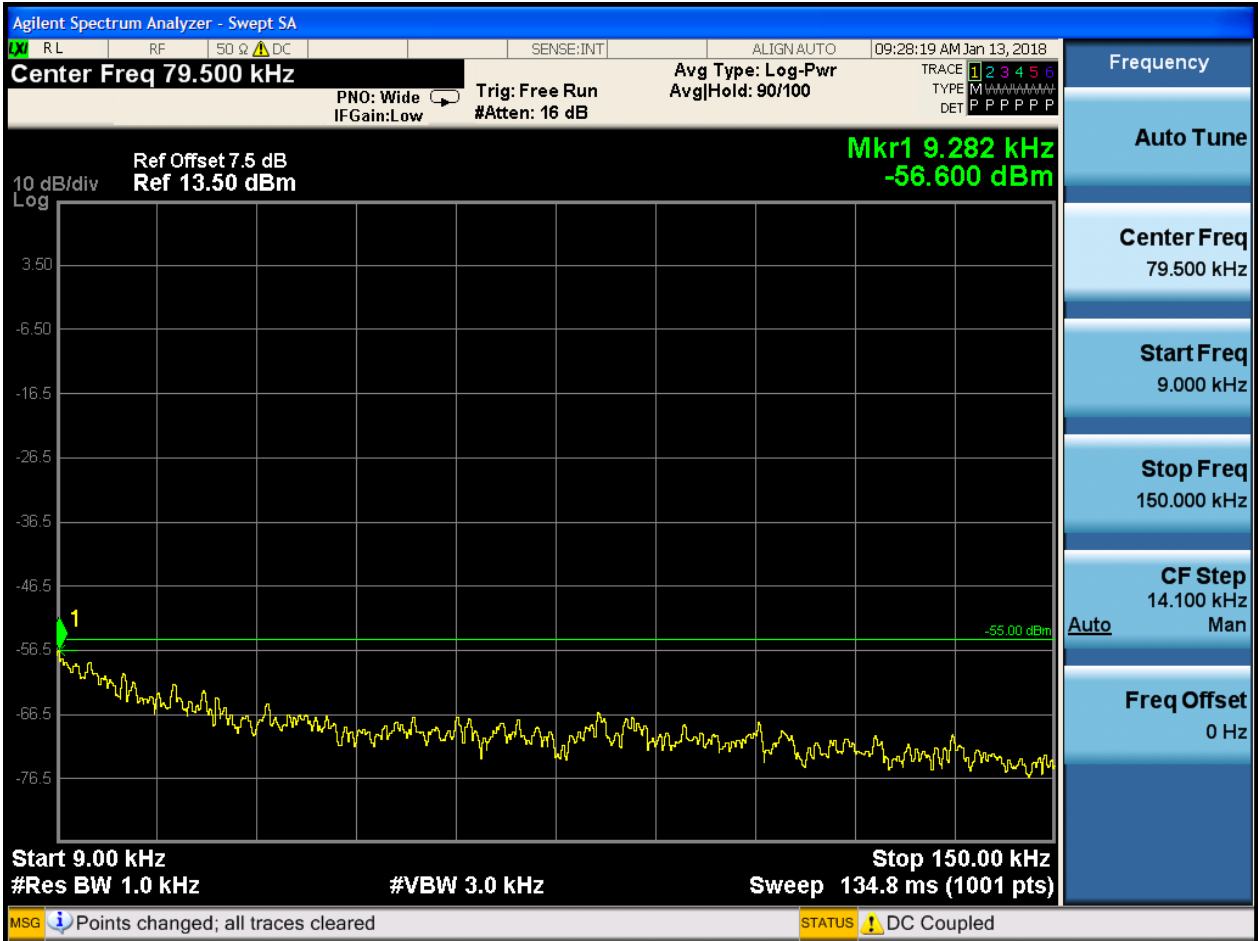


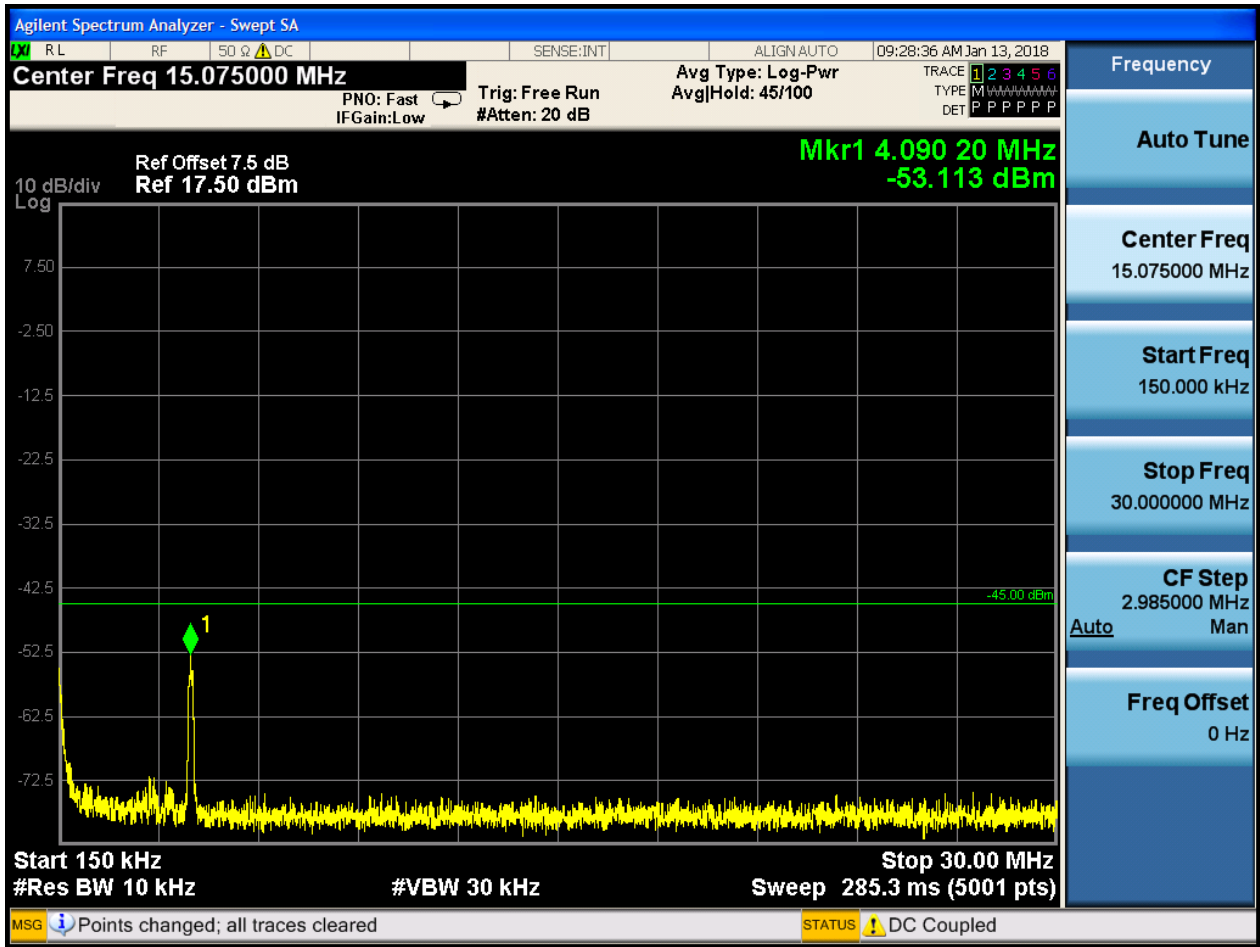


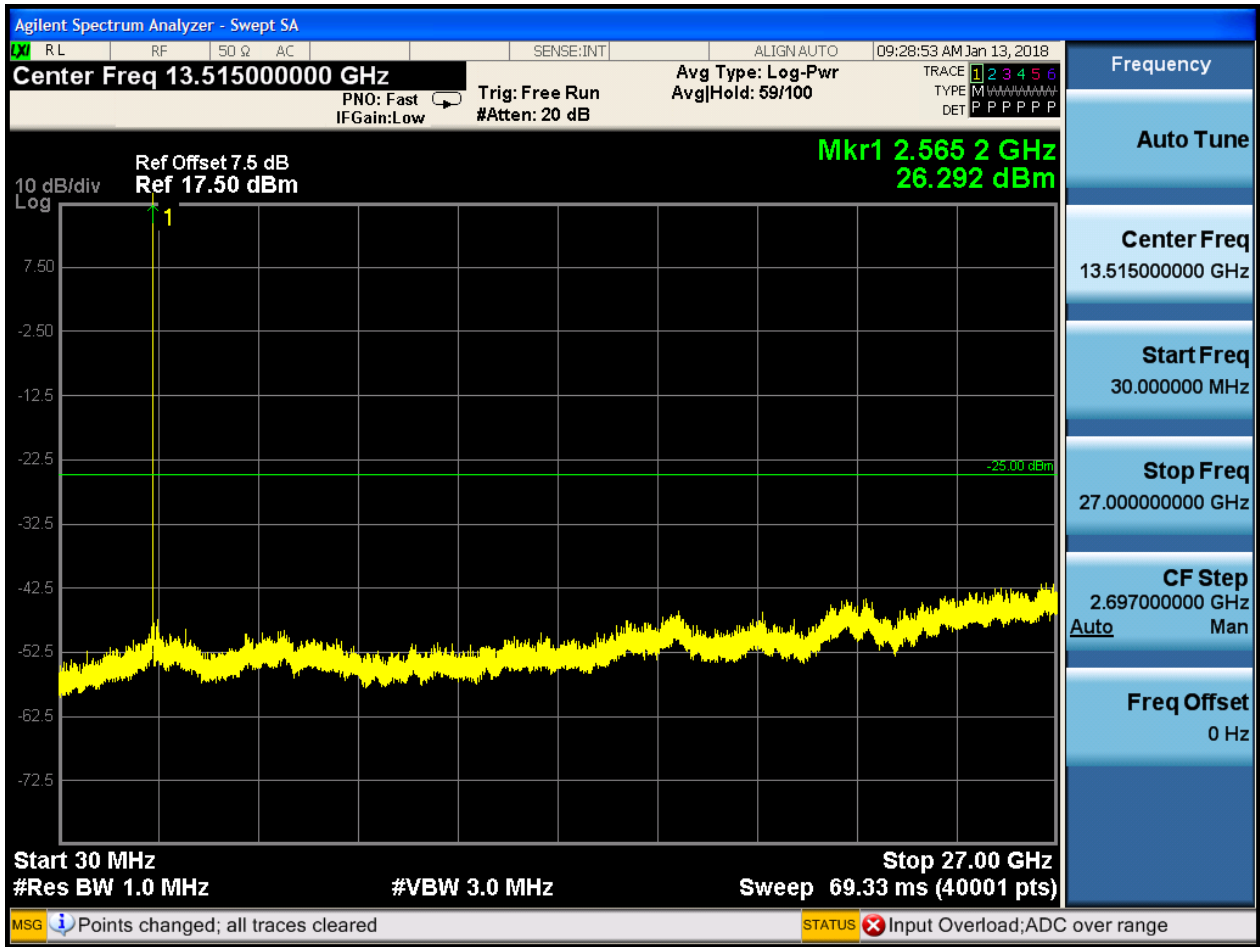


6.1.1.1.3 Test Channel = HCH

6.1.1.1.3.1 Test RB = RB1#0





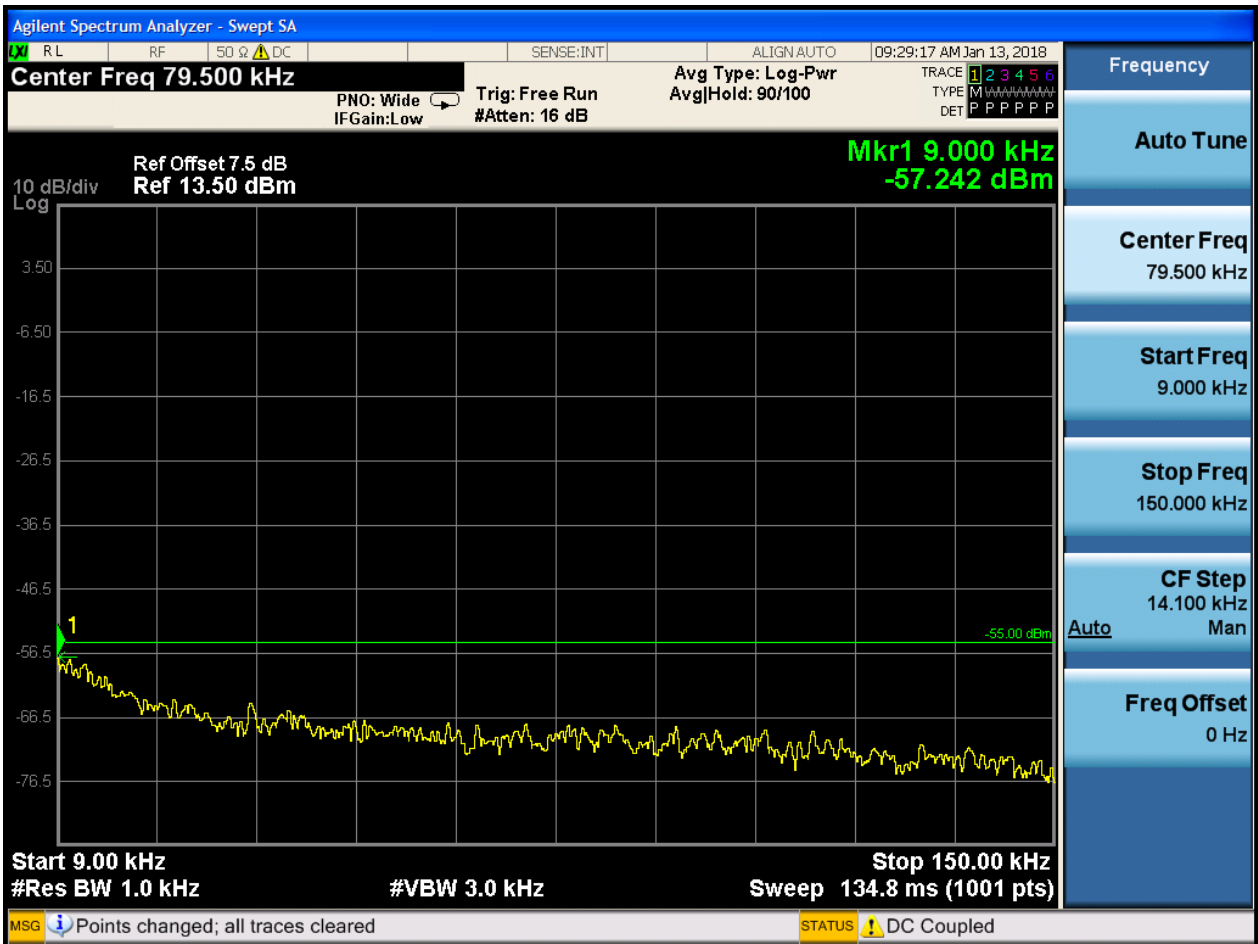


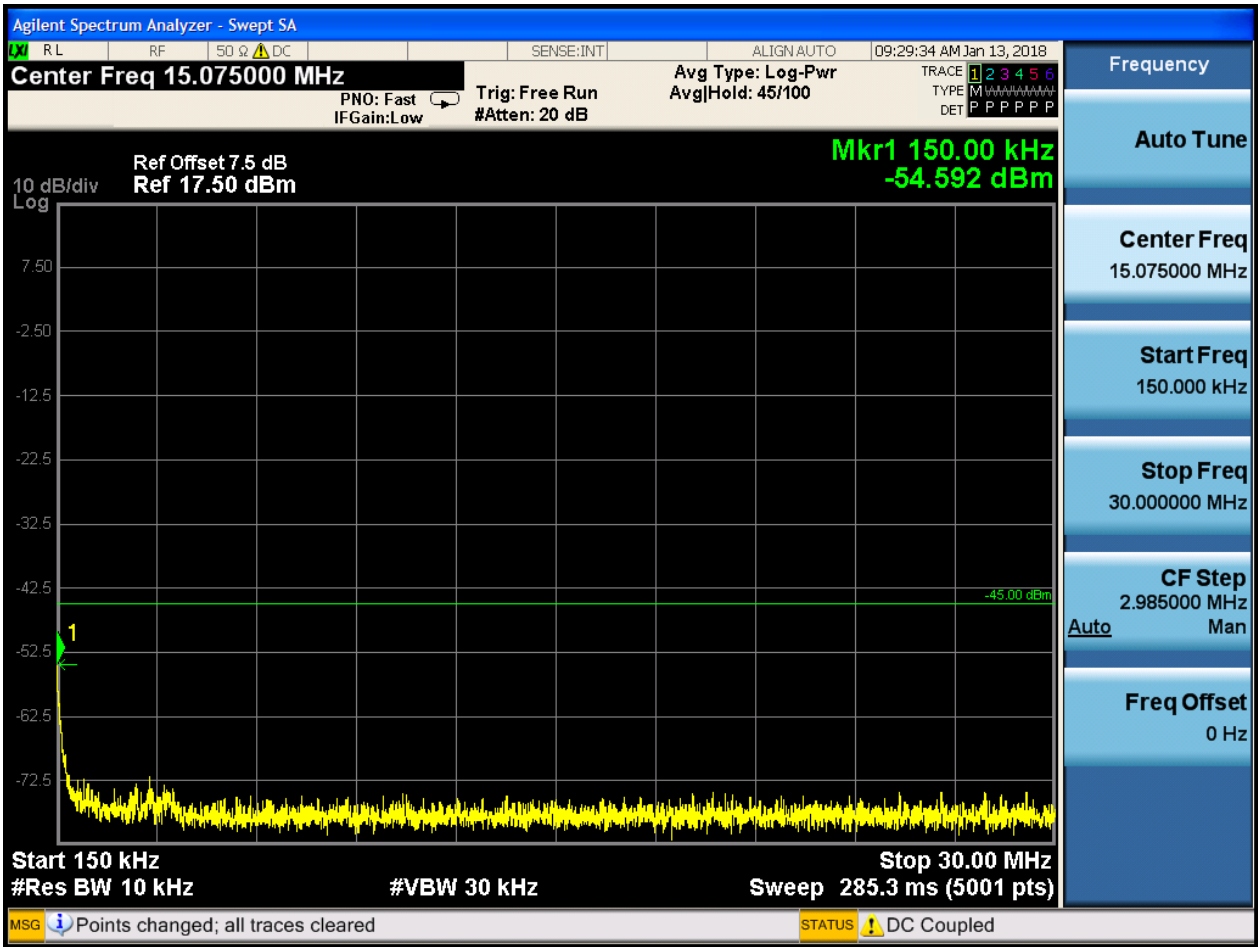


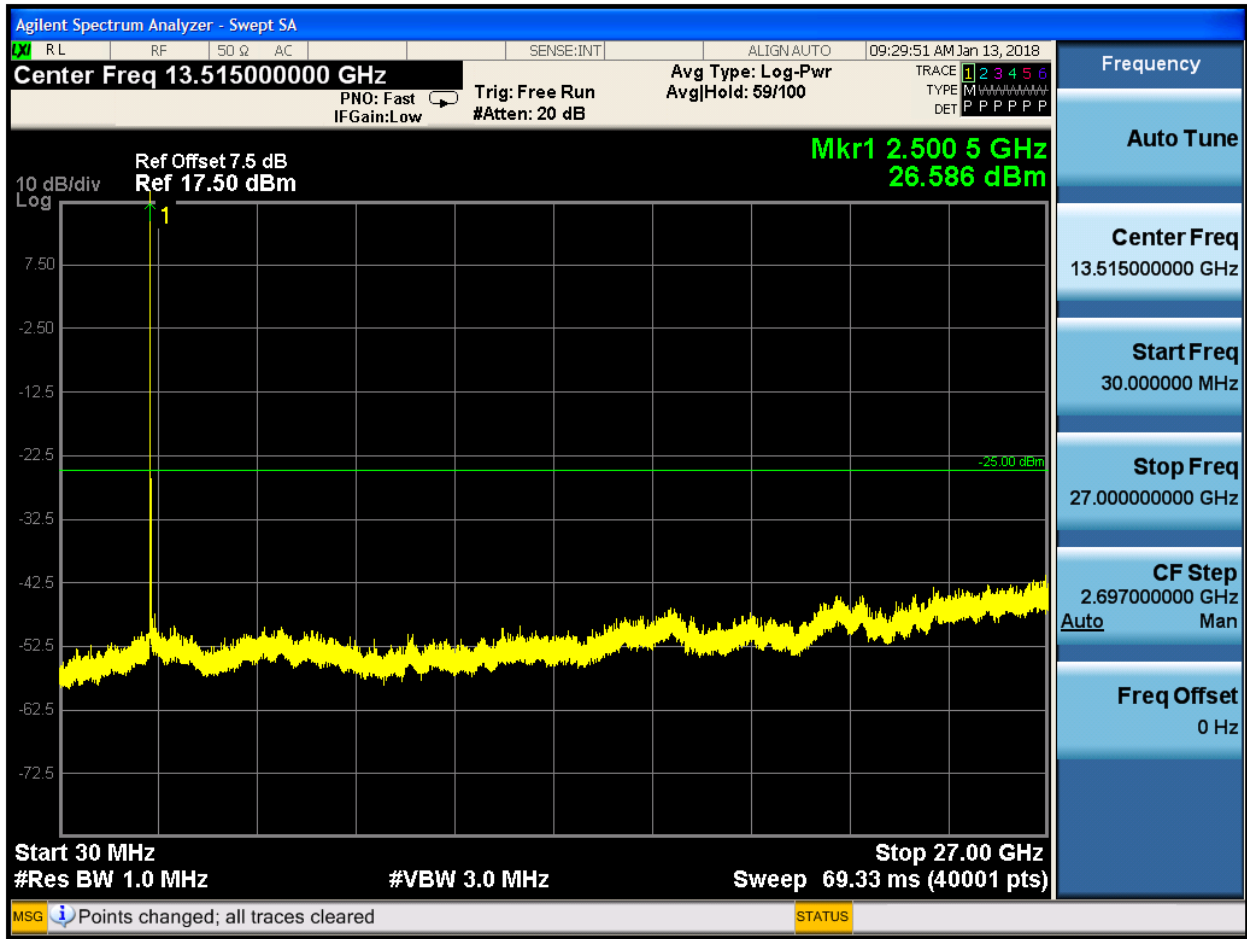
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



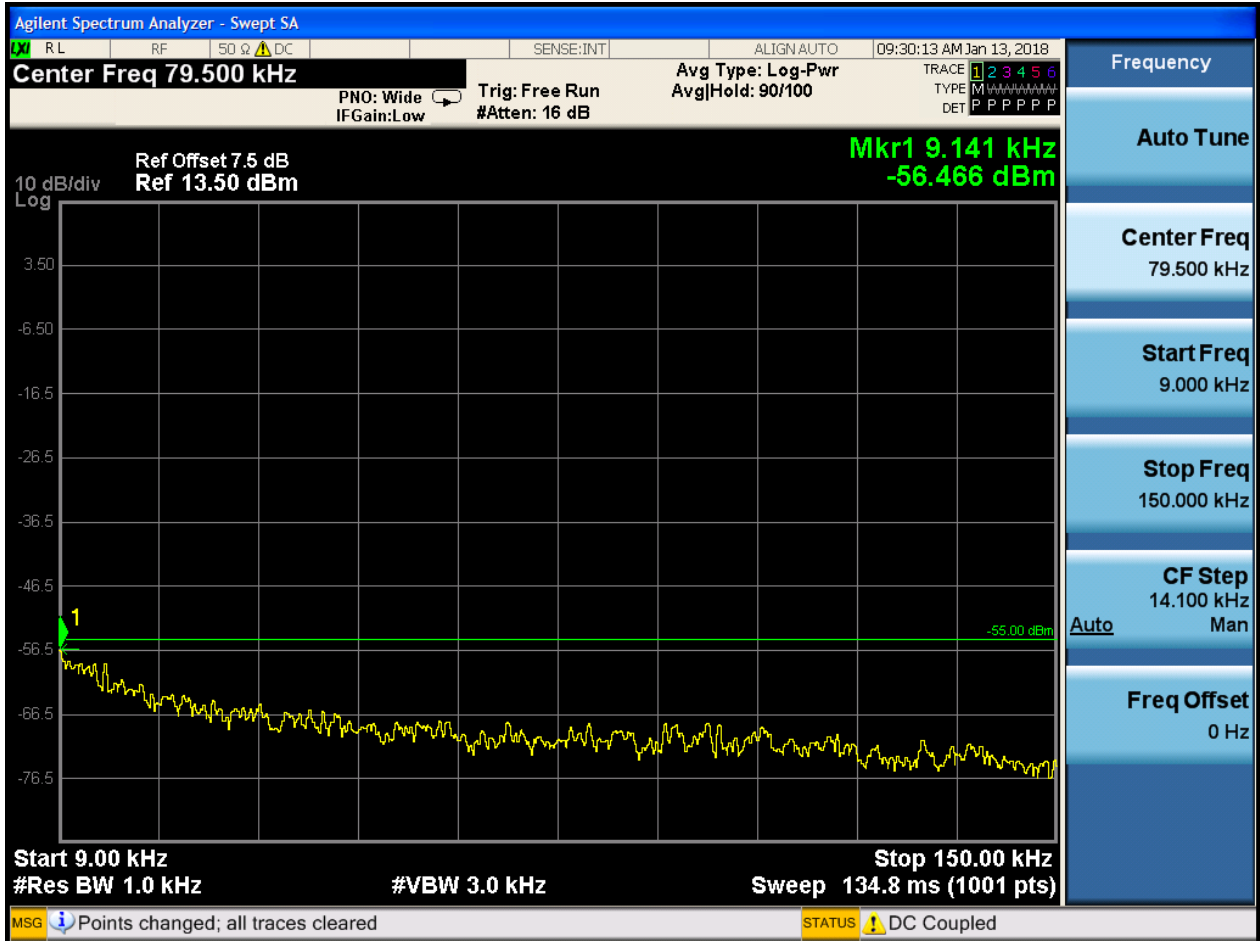


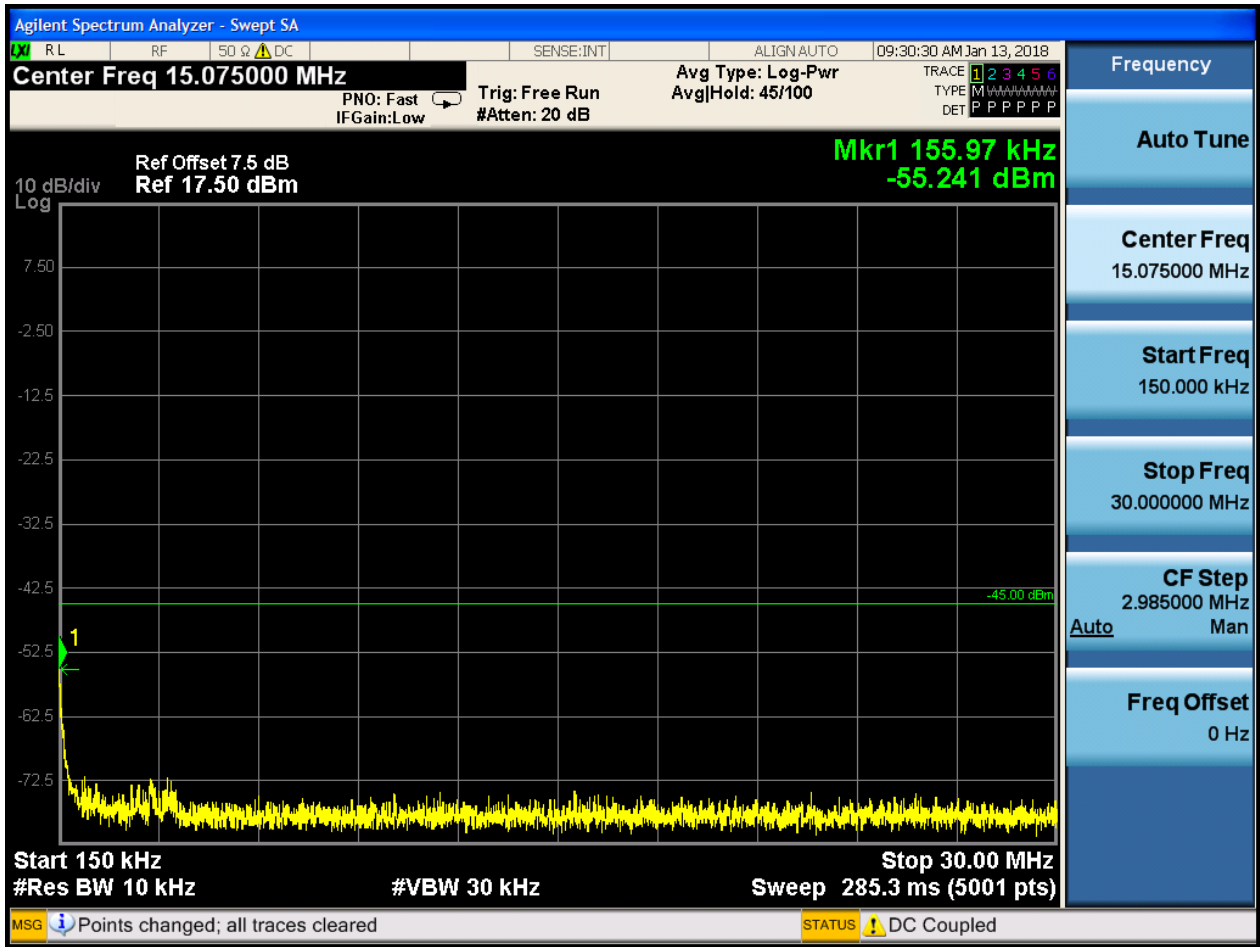


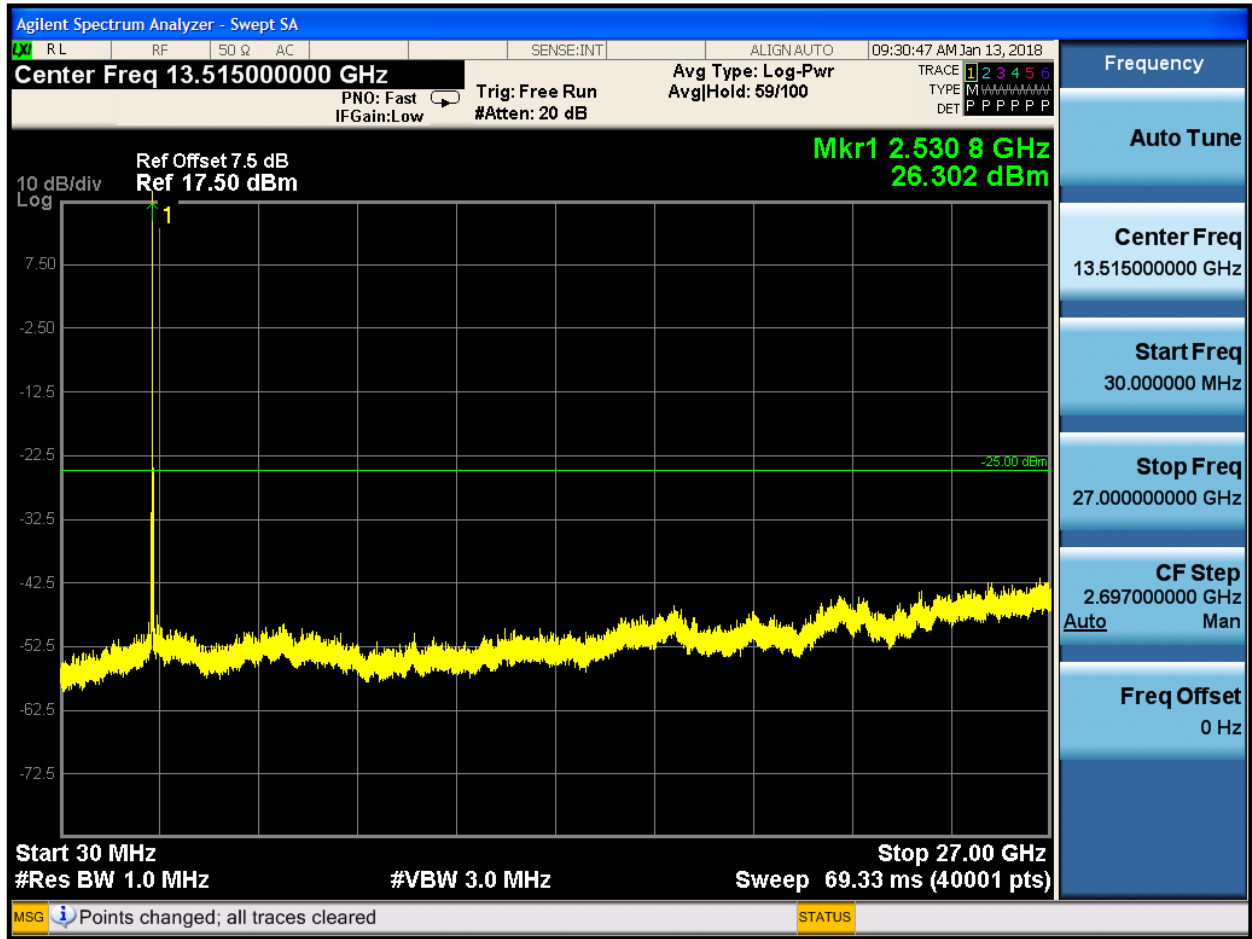


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



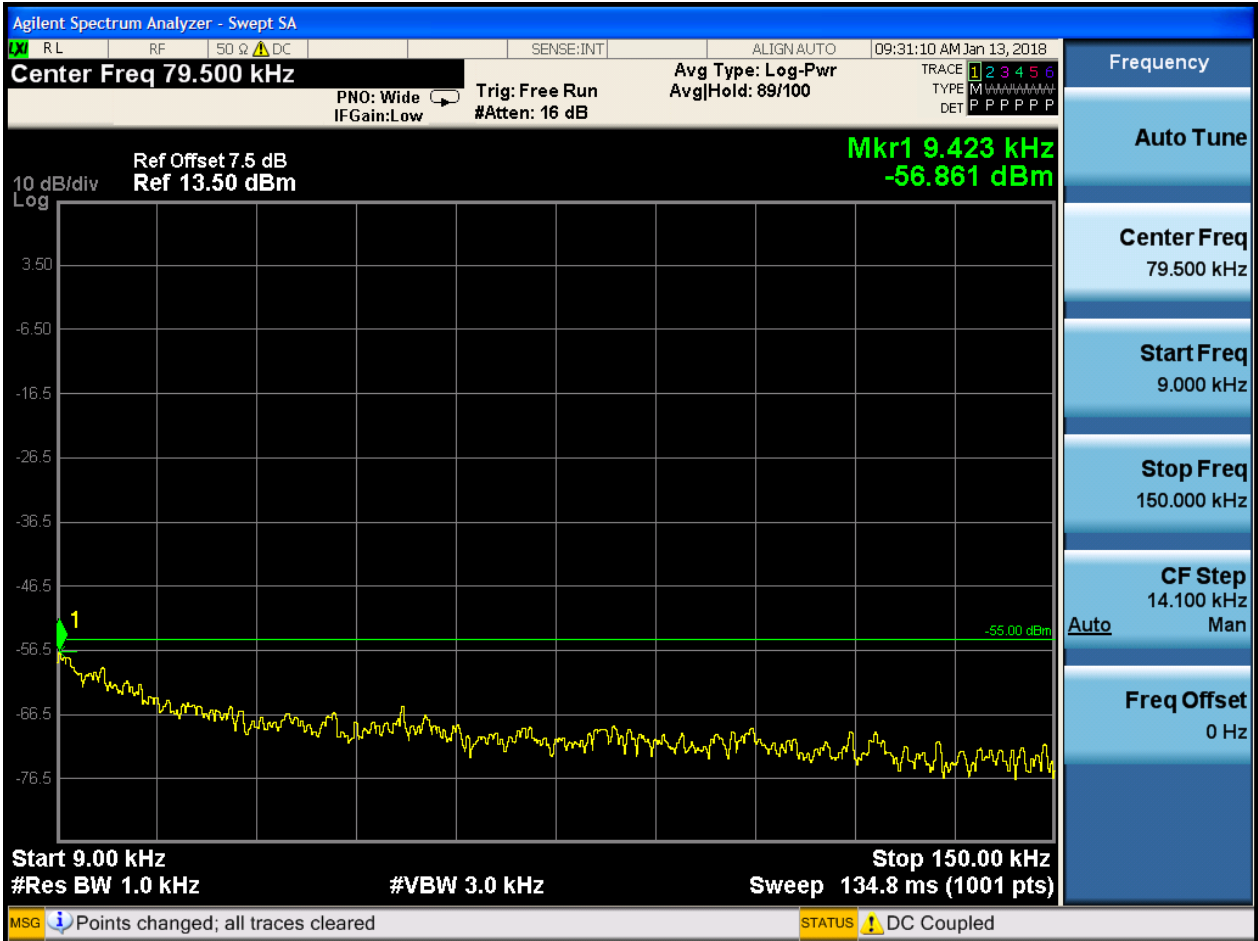


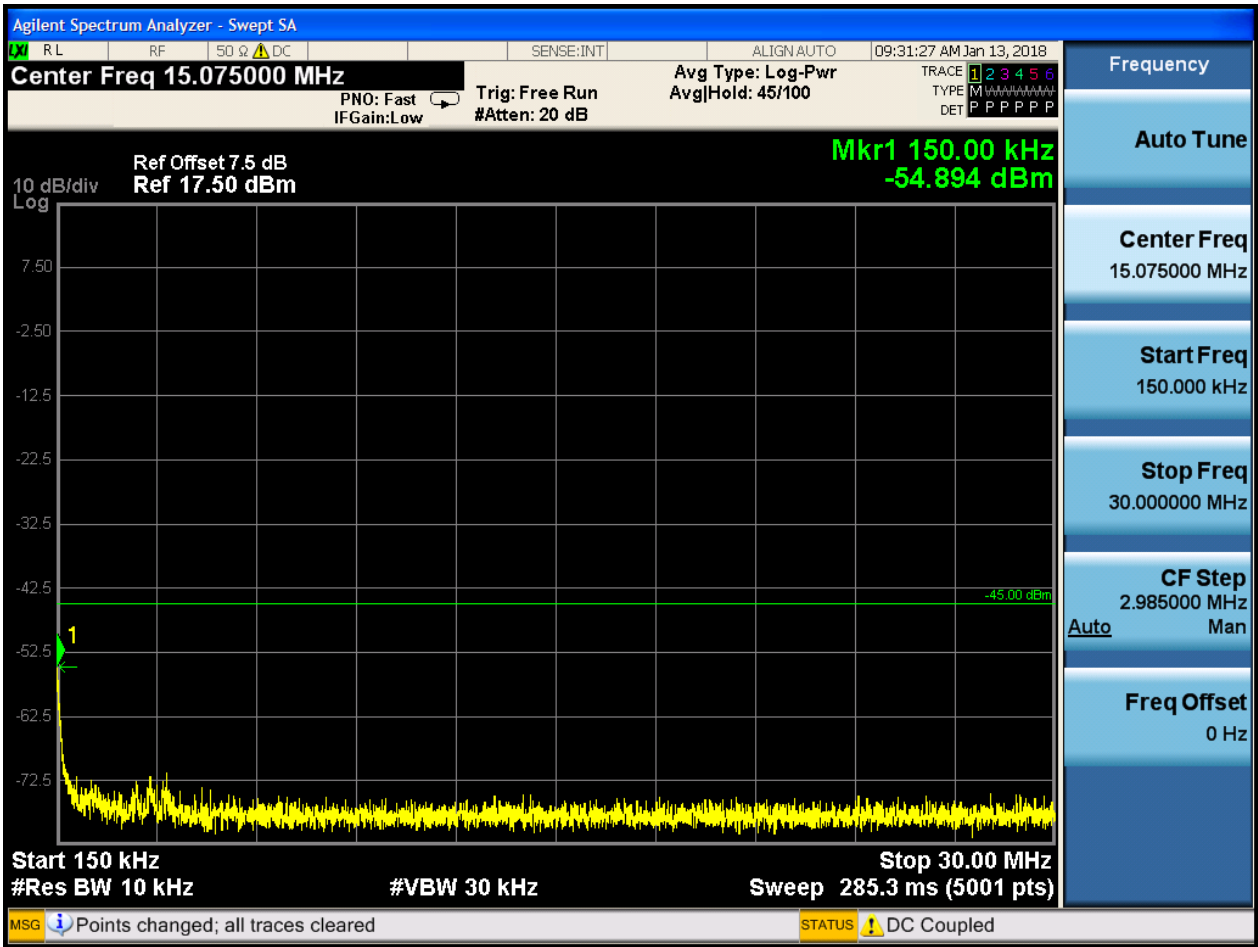


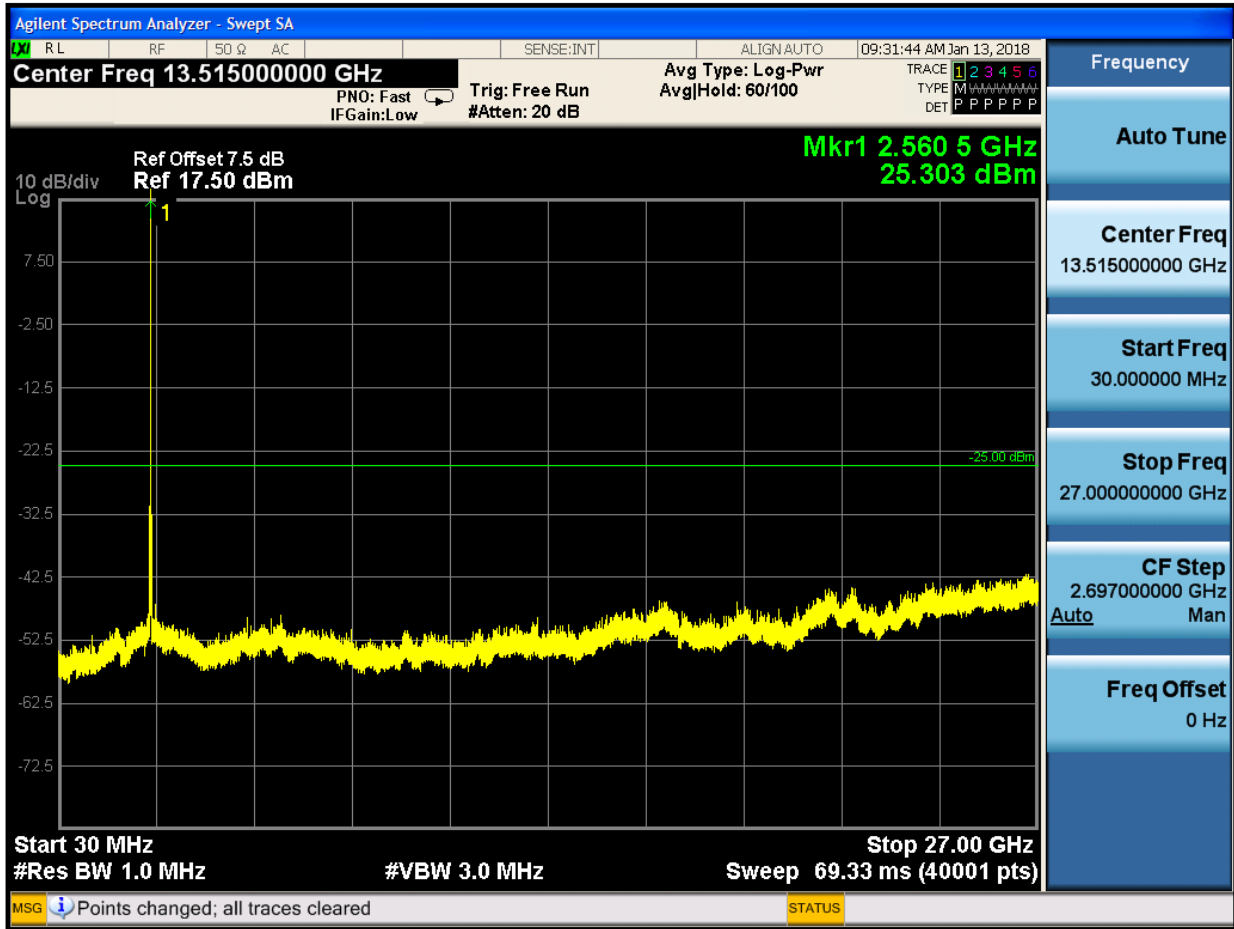


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





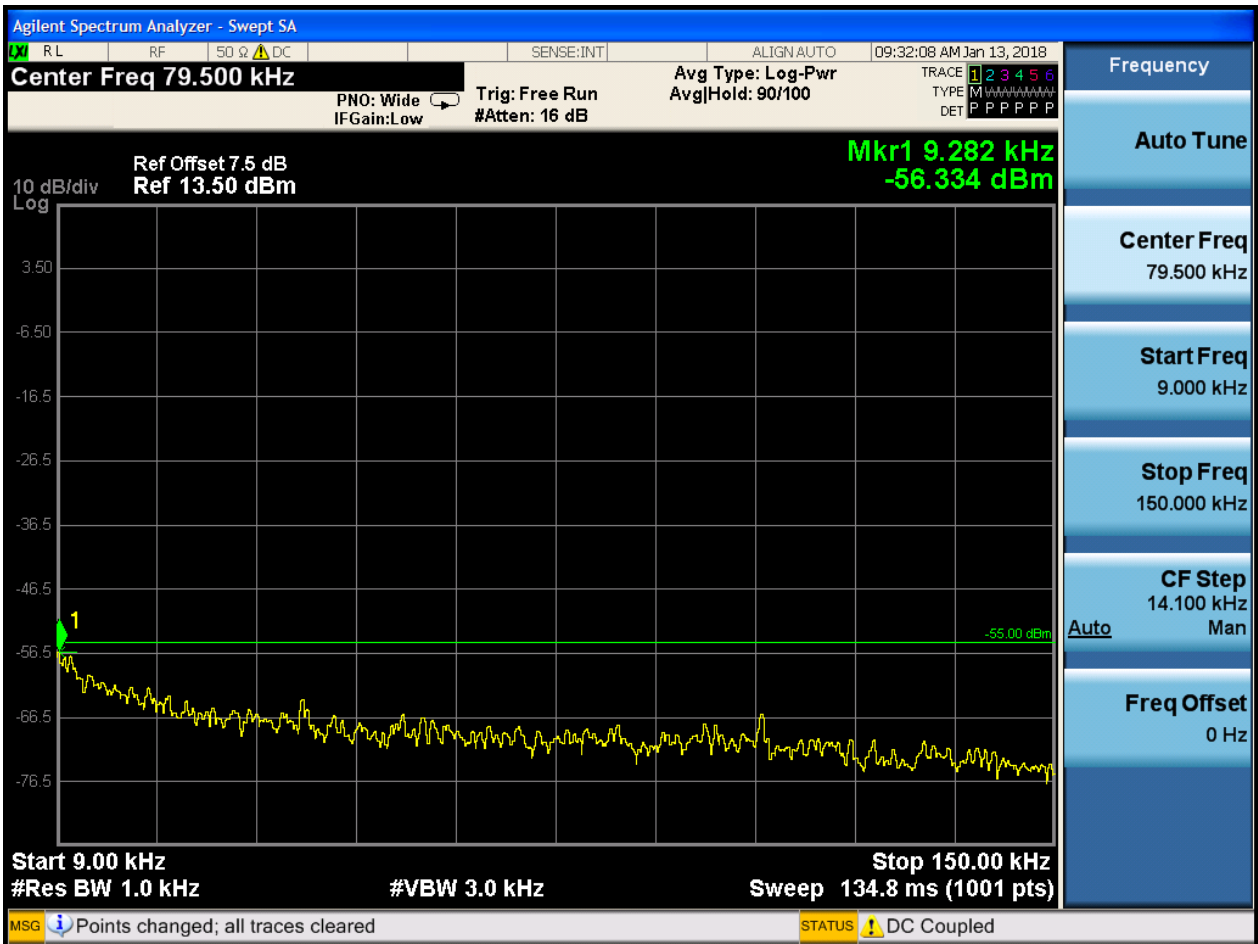


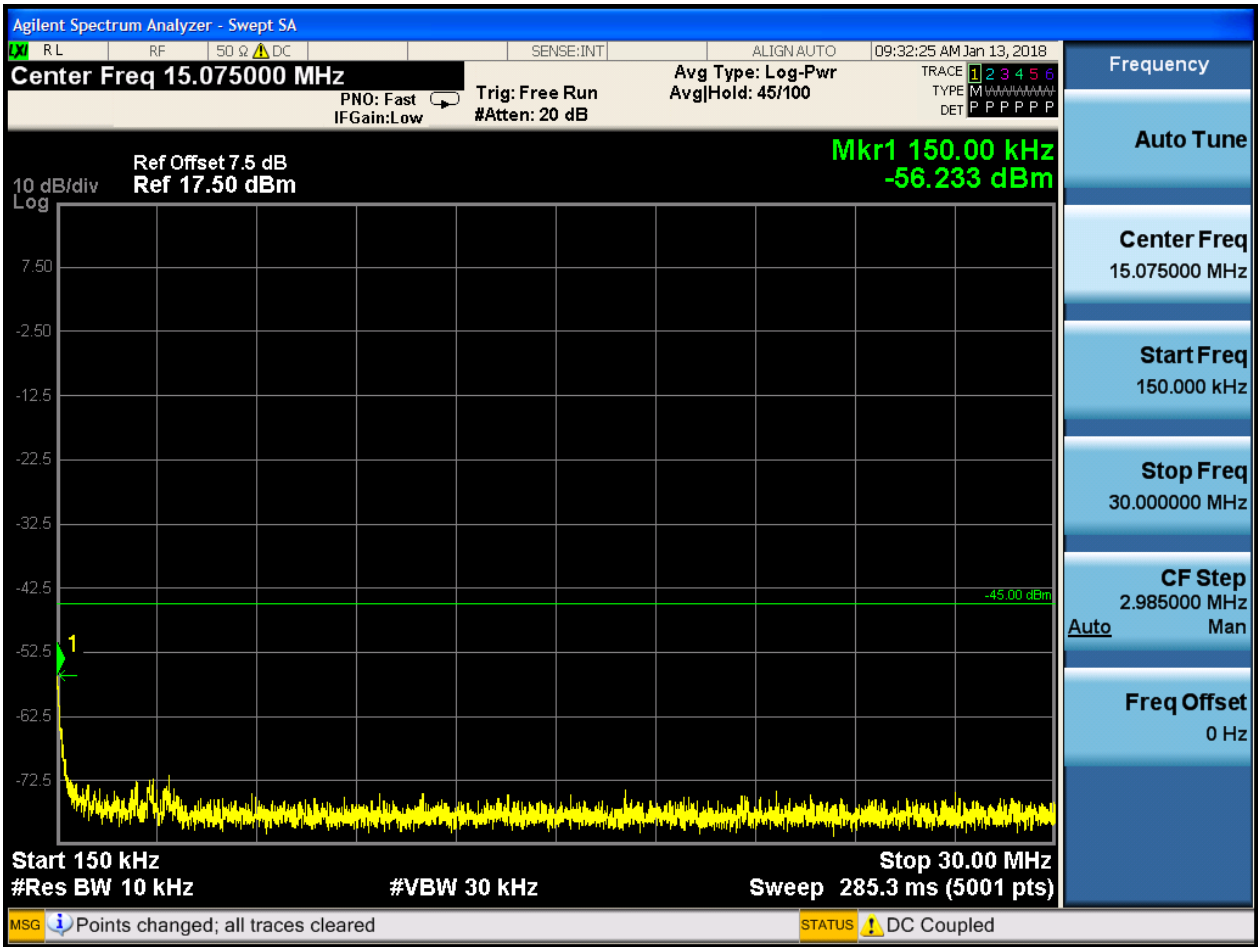


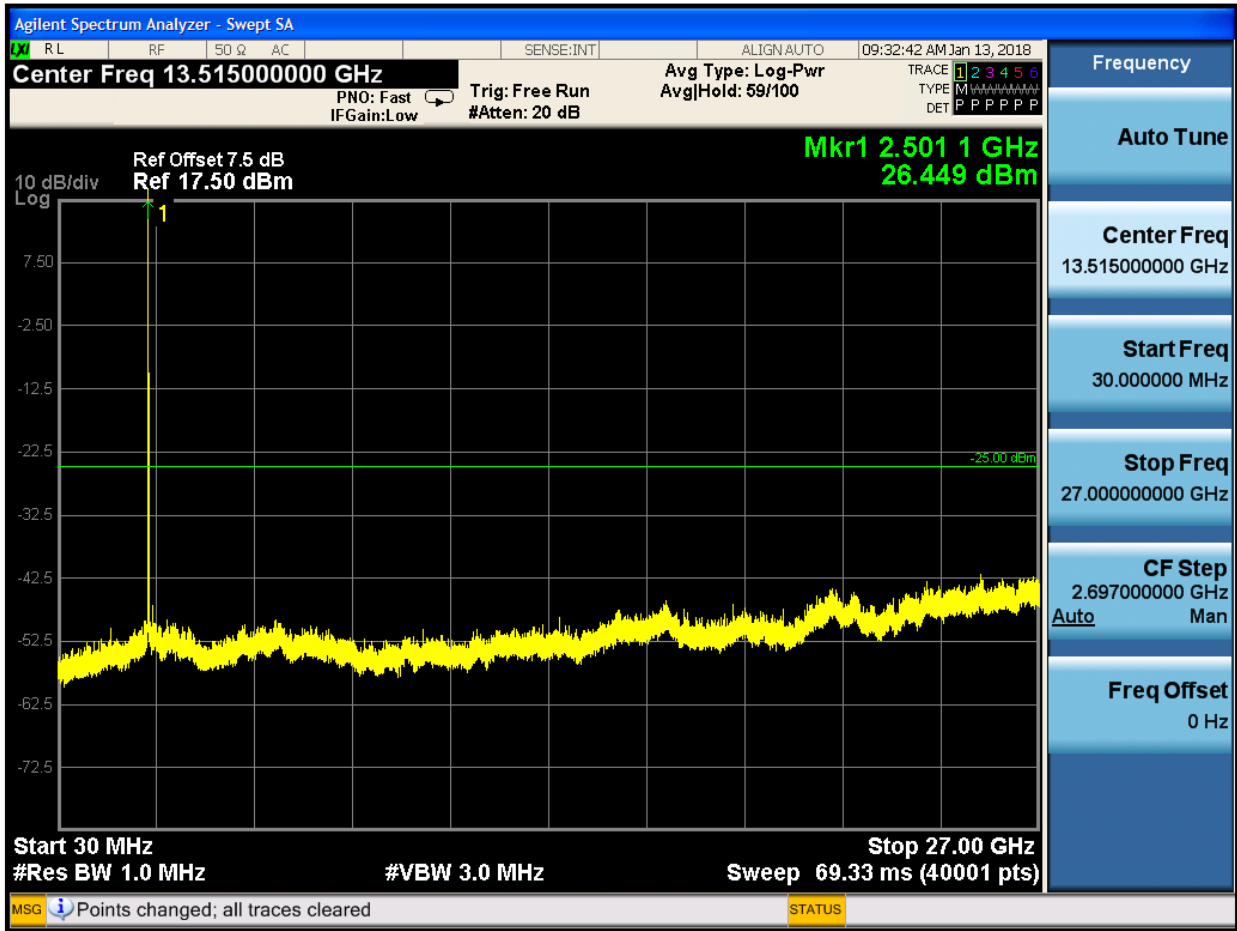
6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



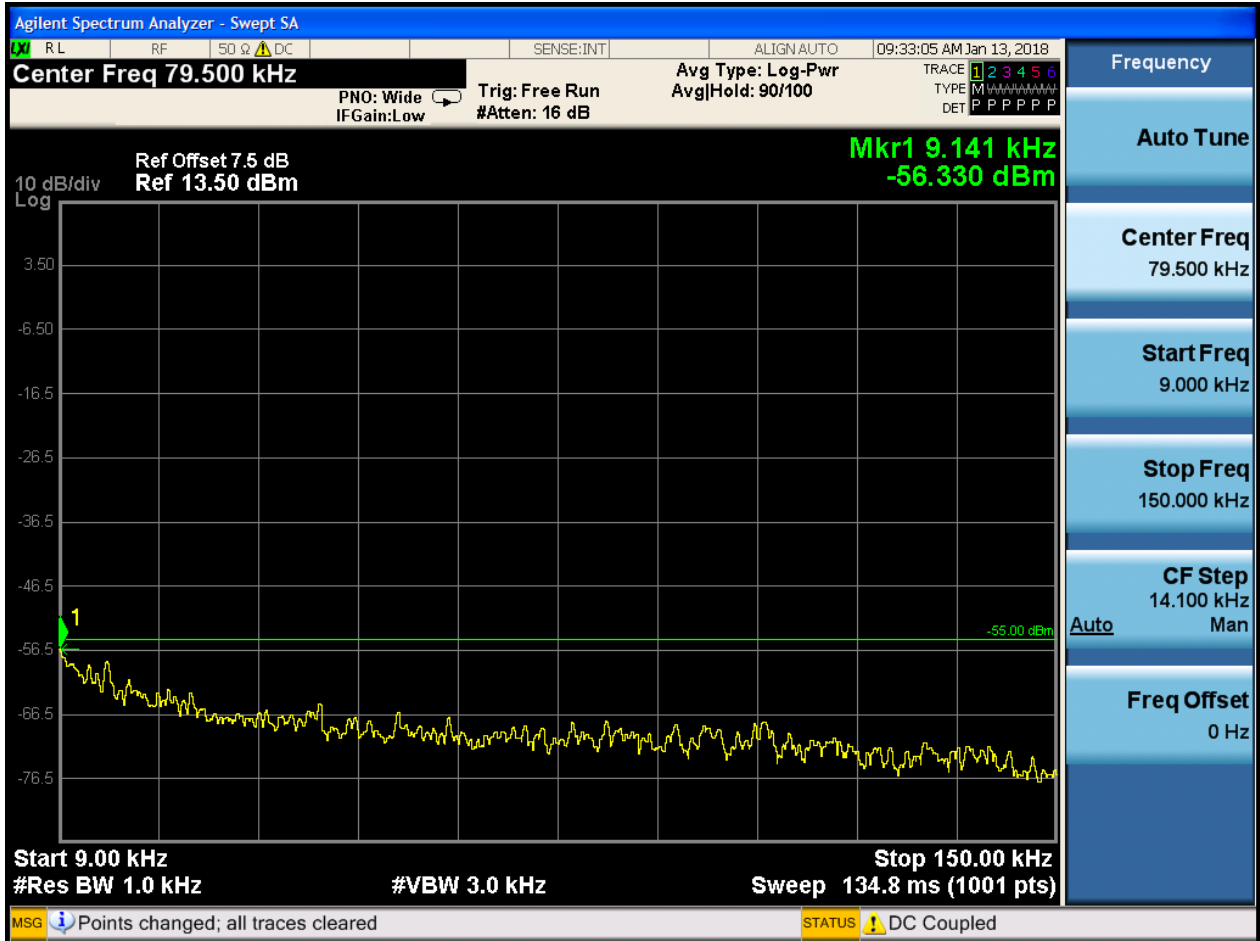


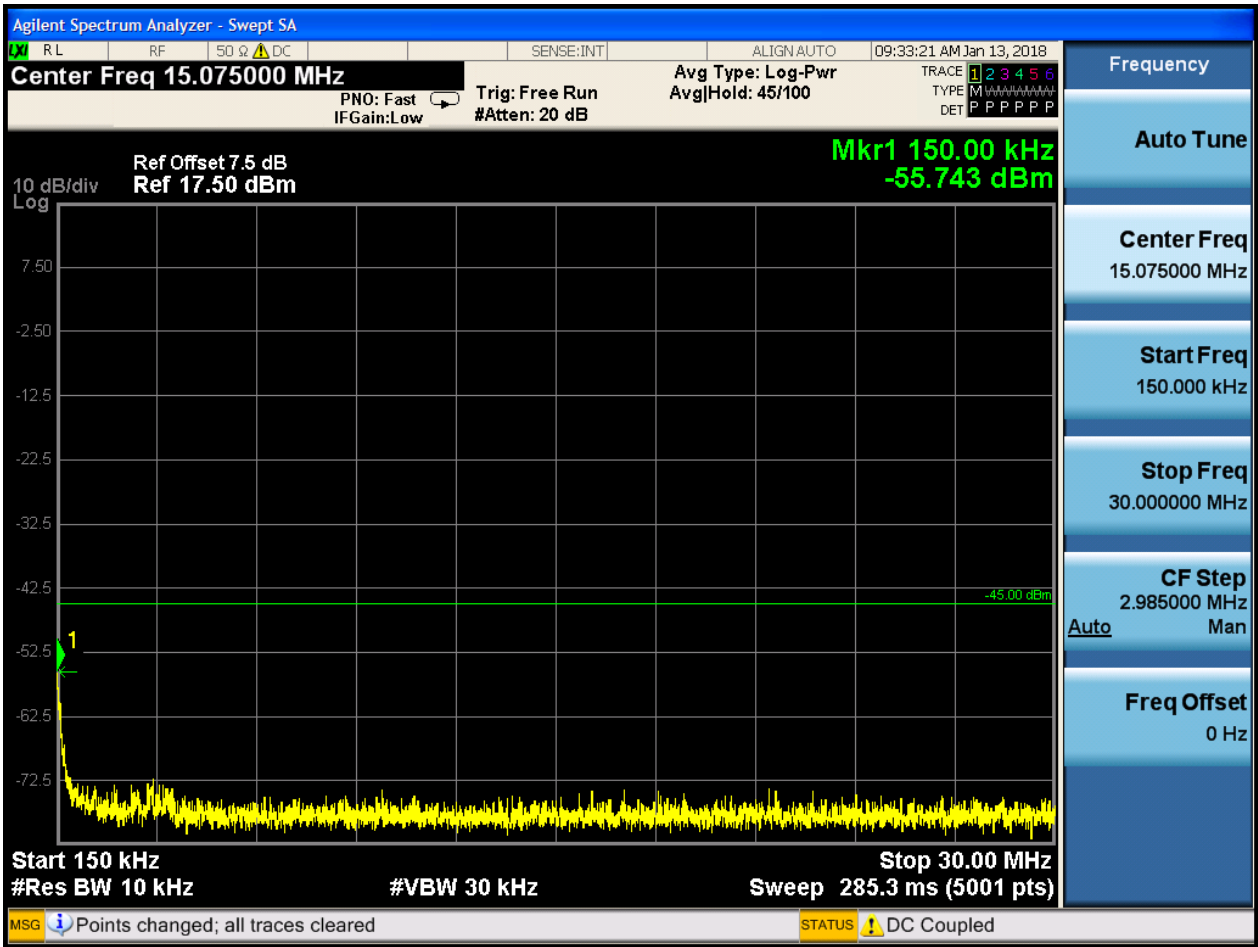


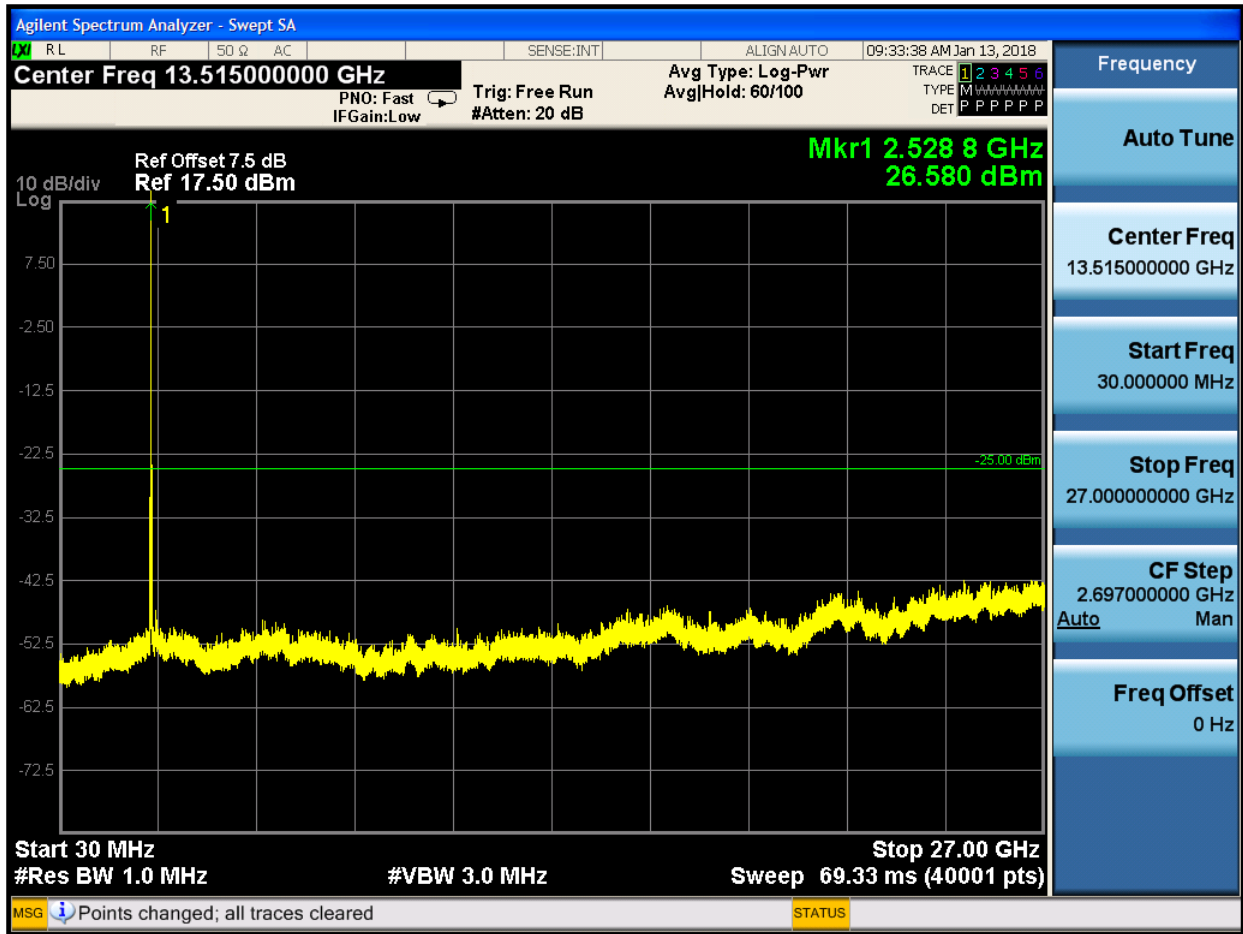


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



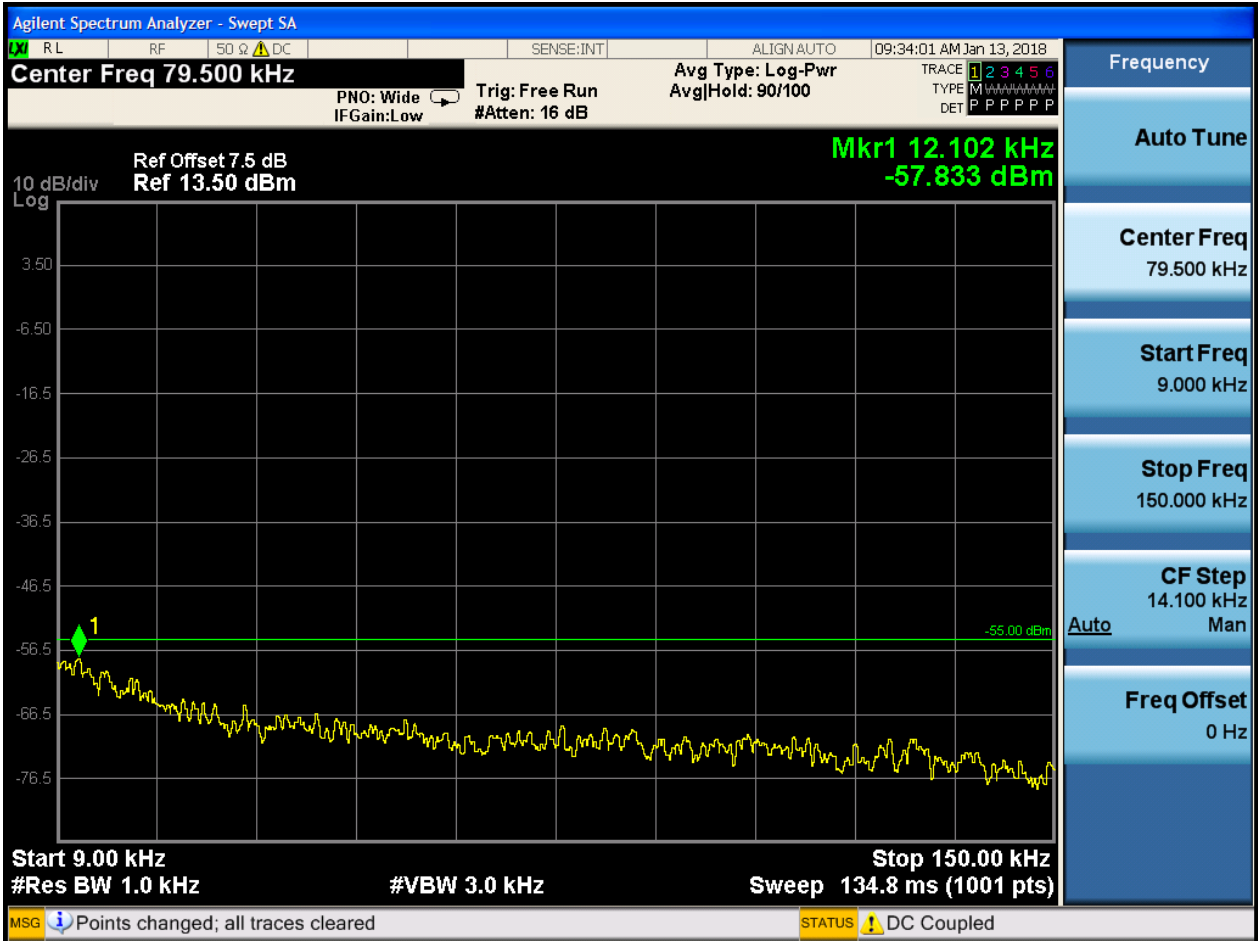


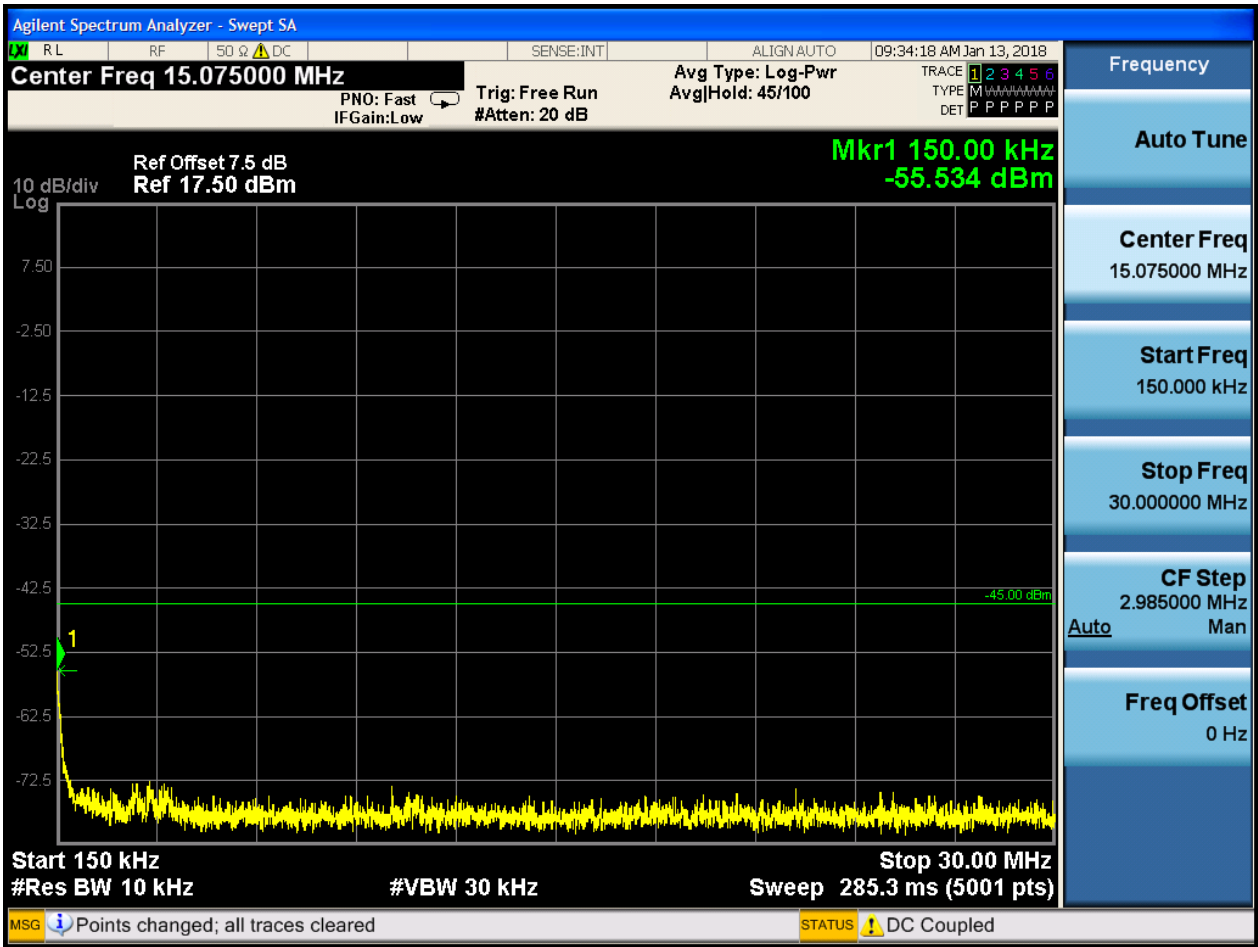


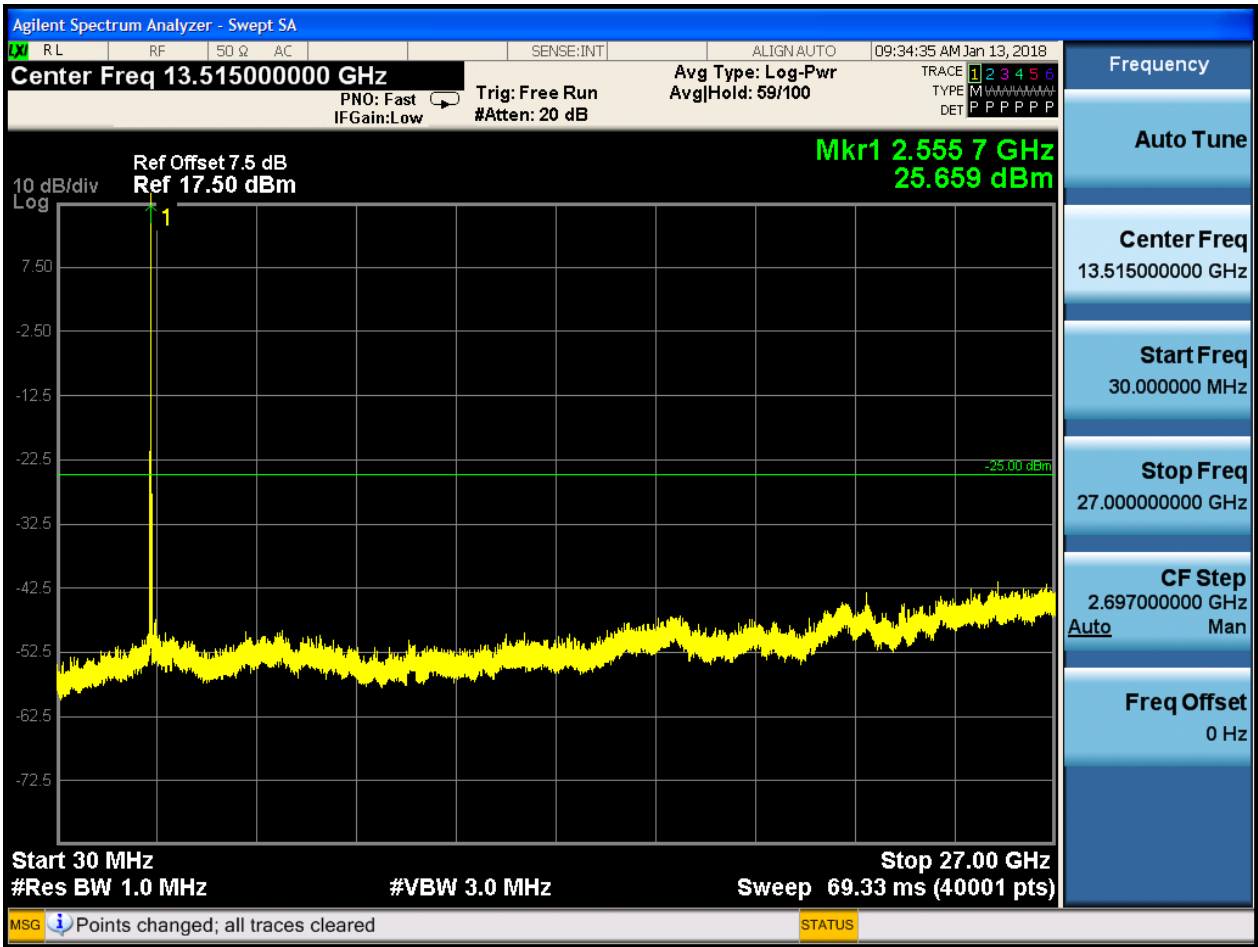


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





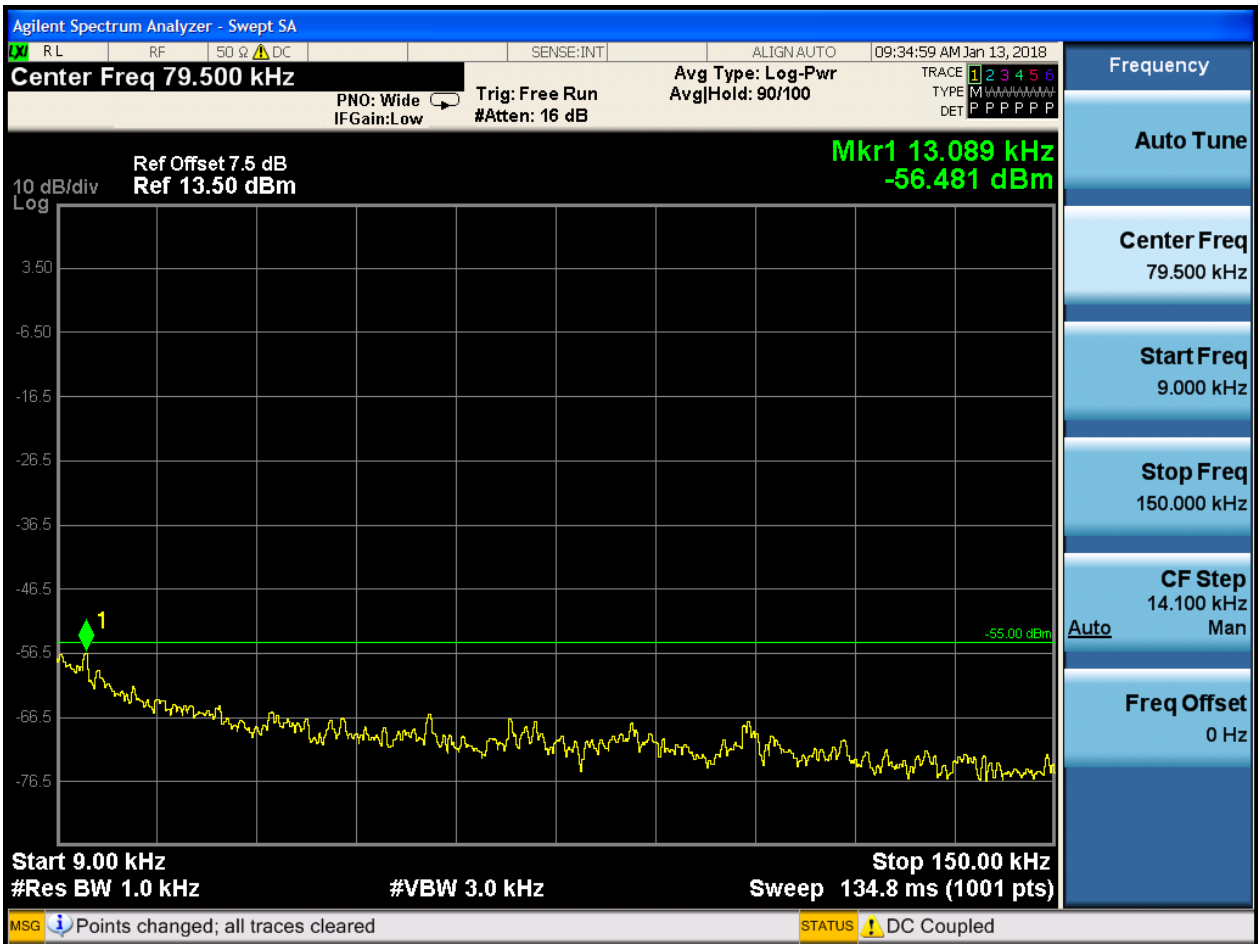


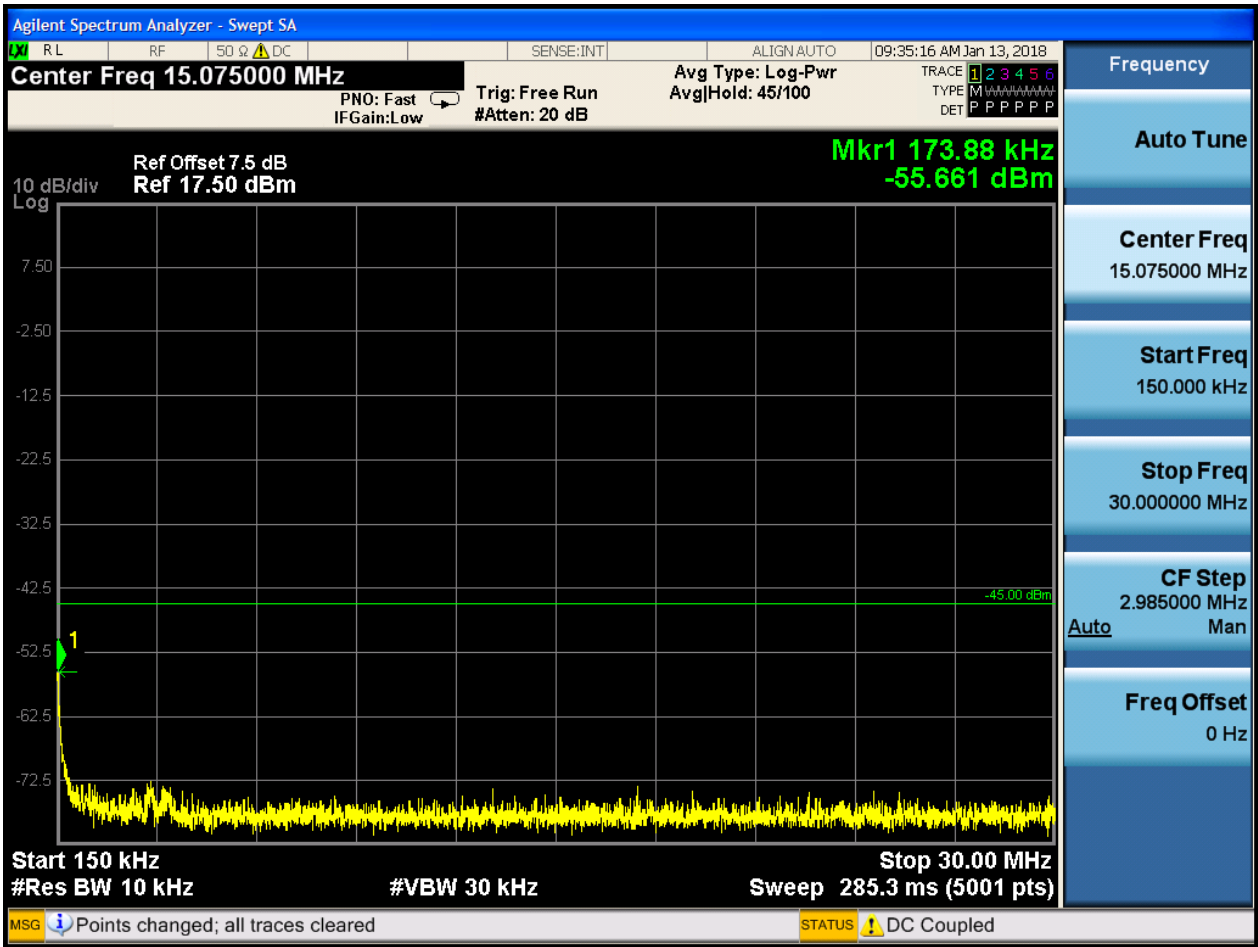


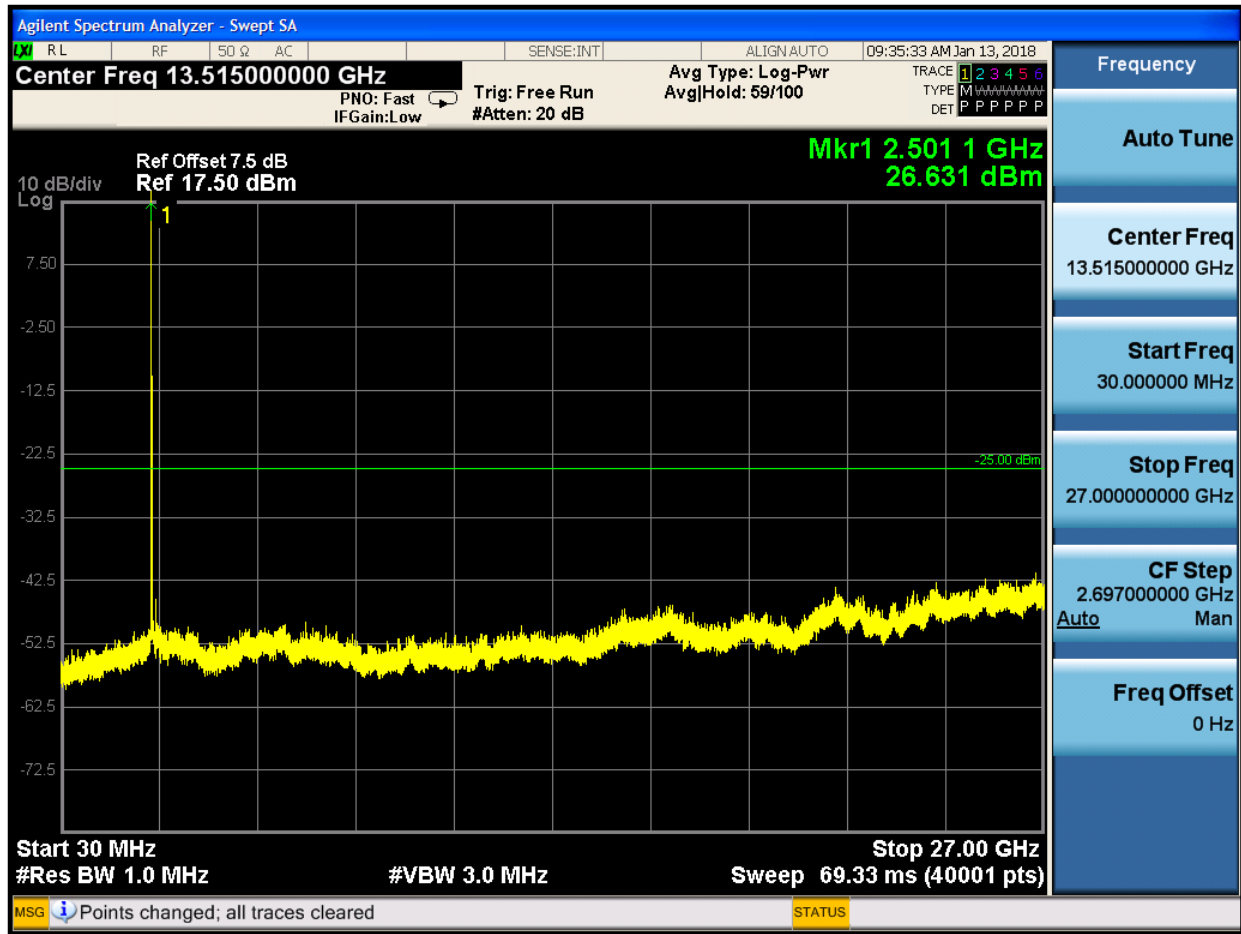
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



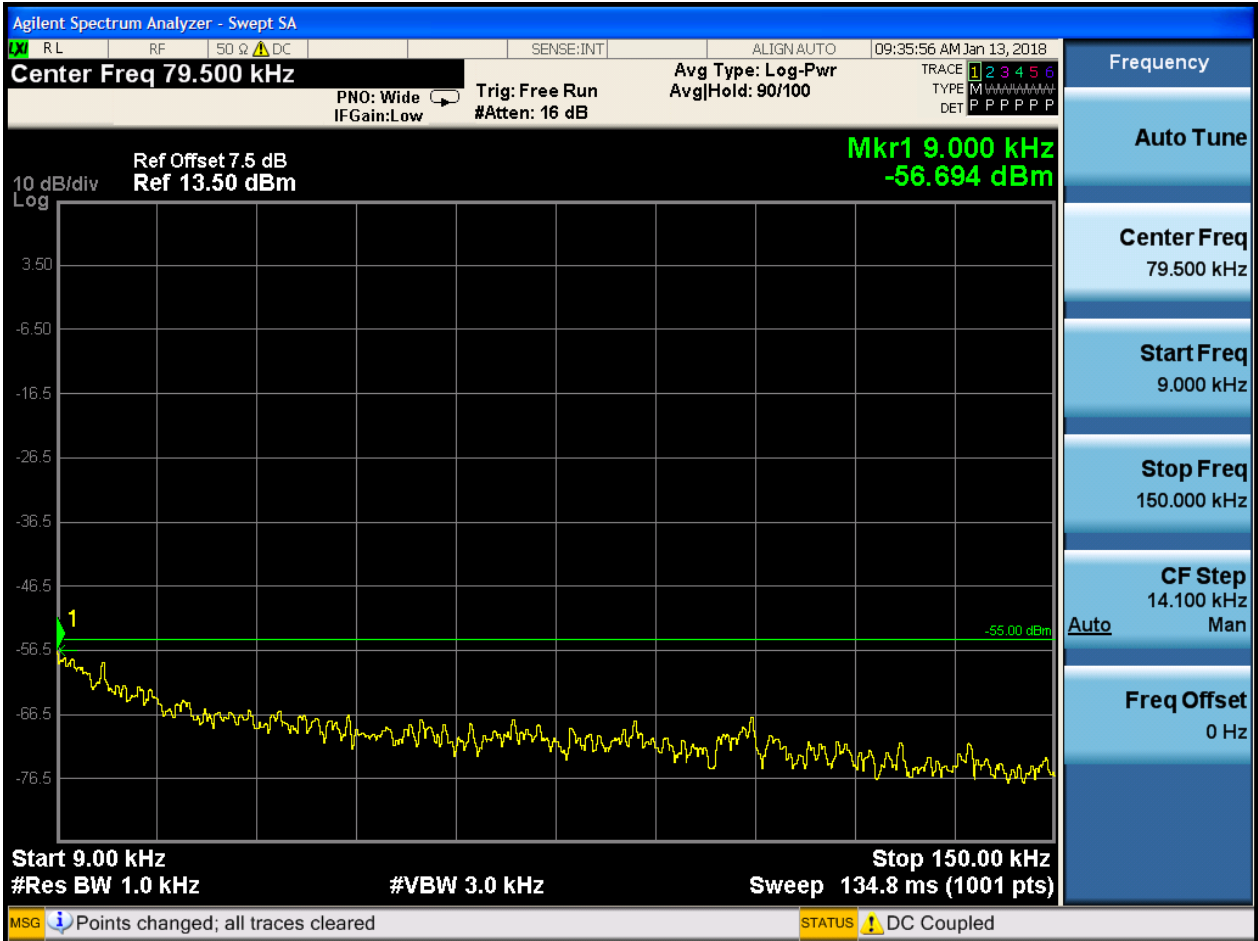


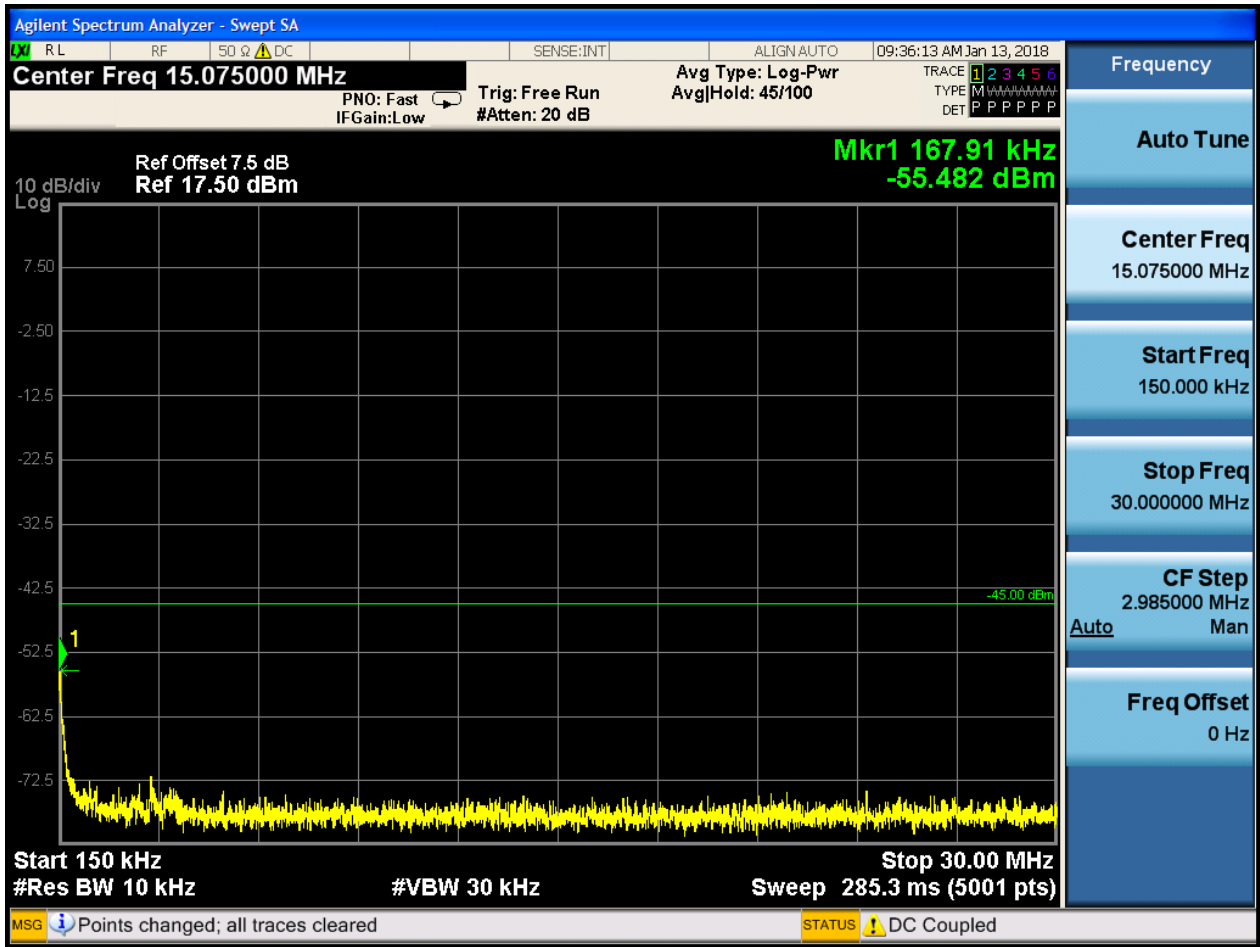


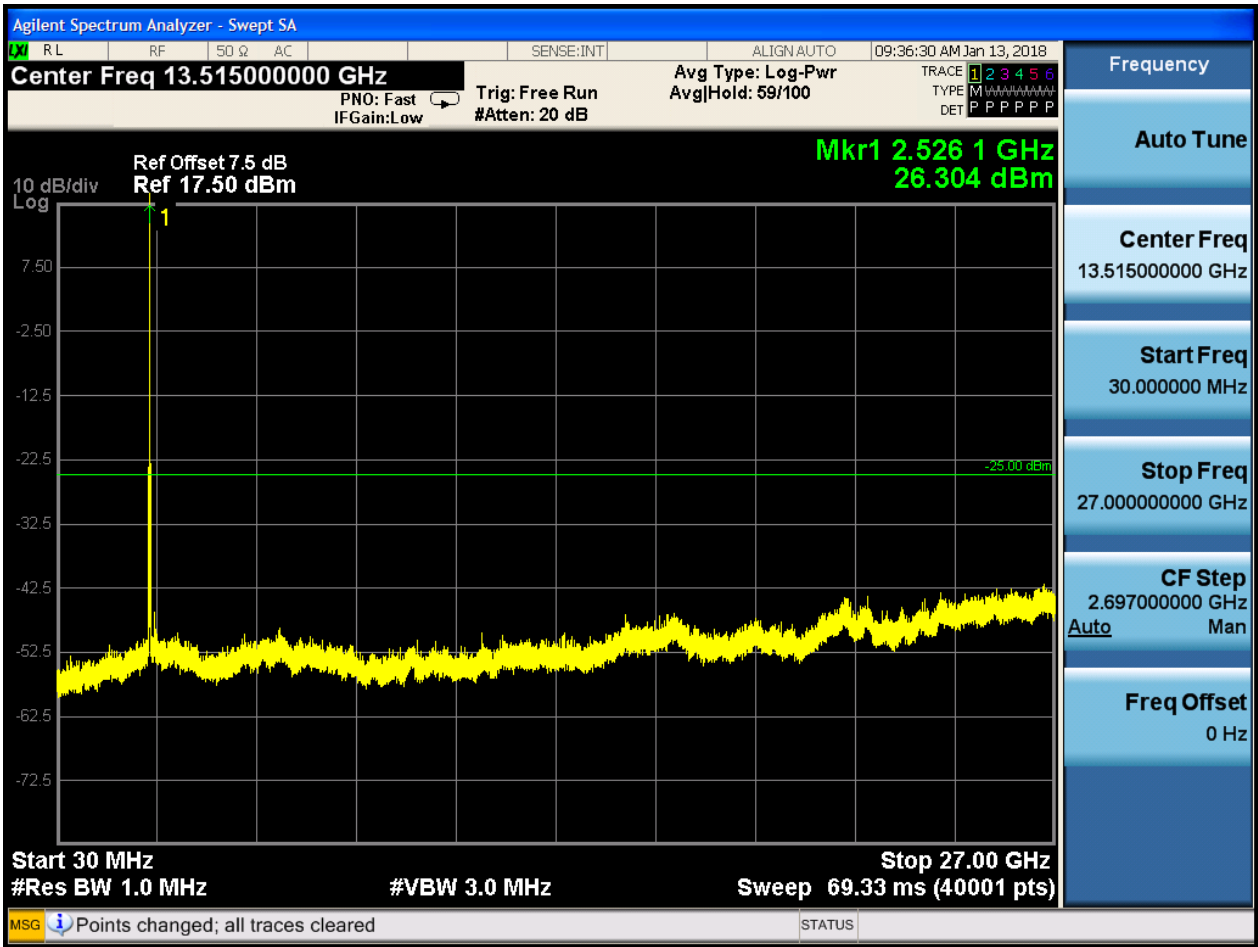


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



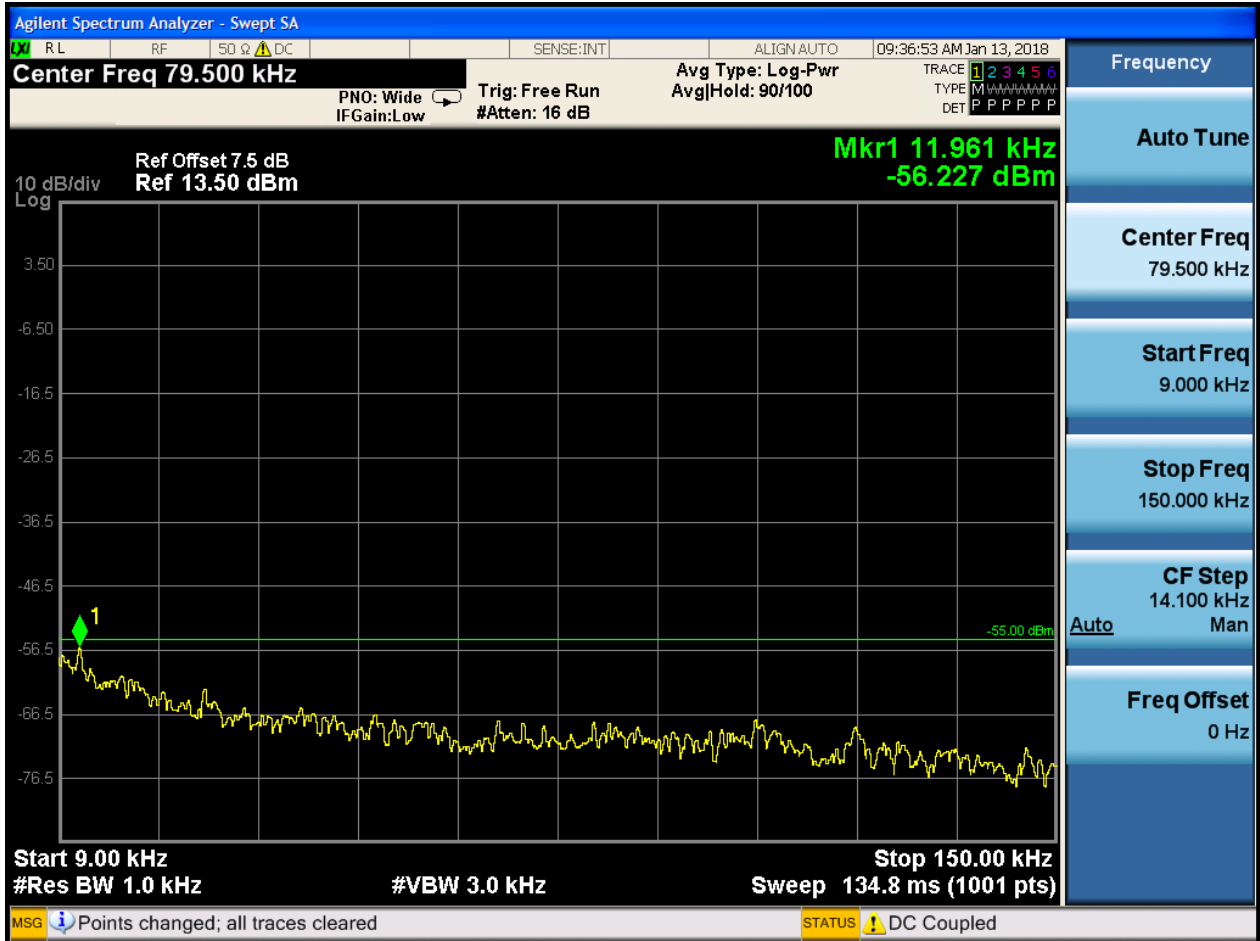


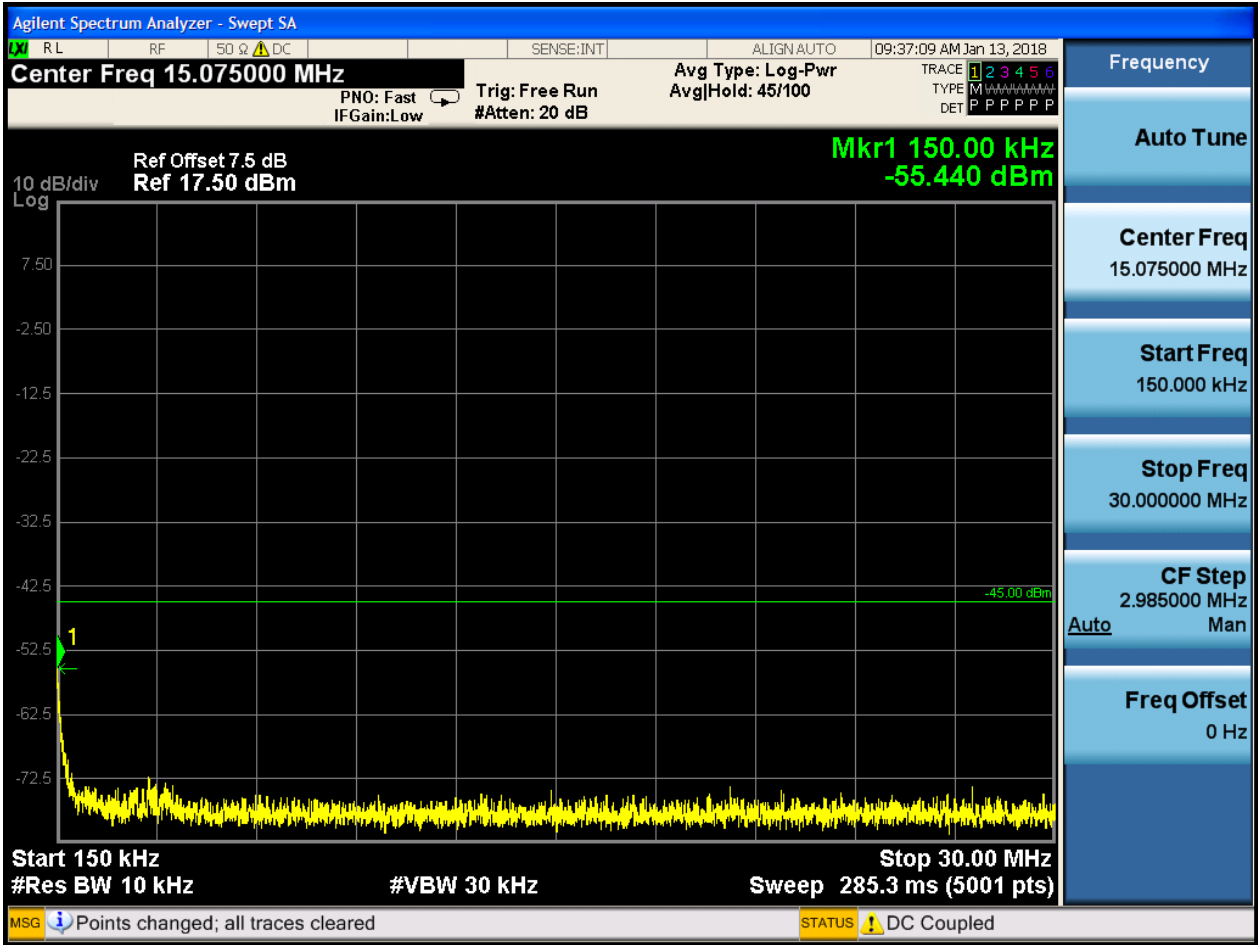


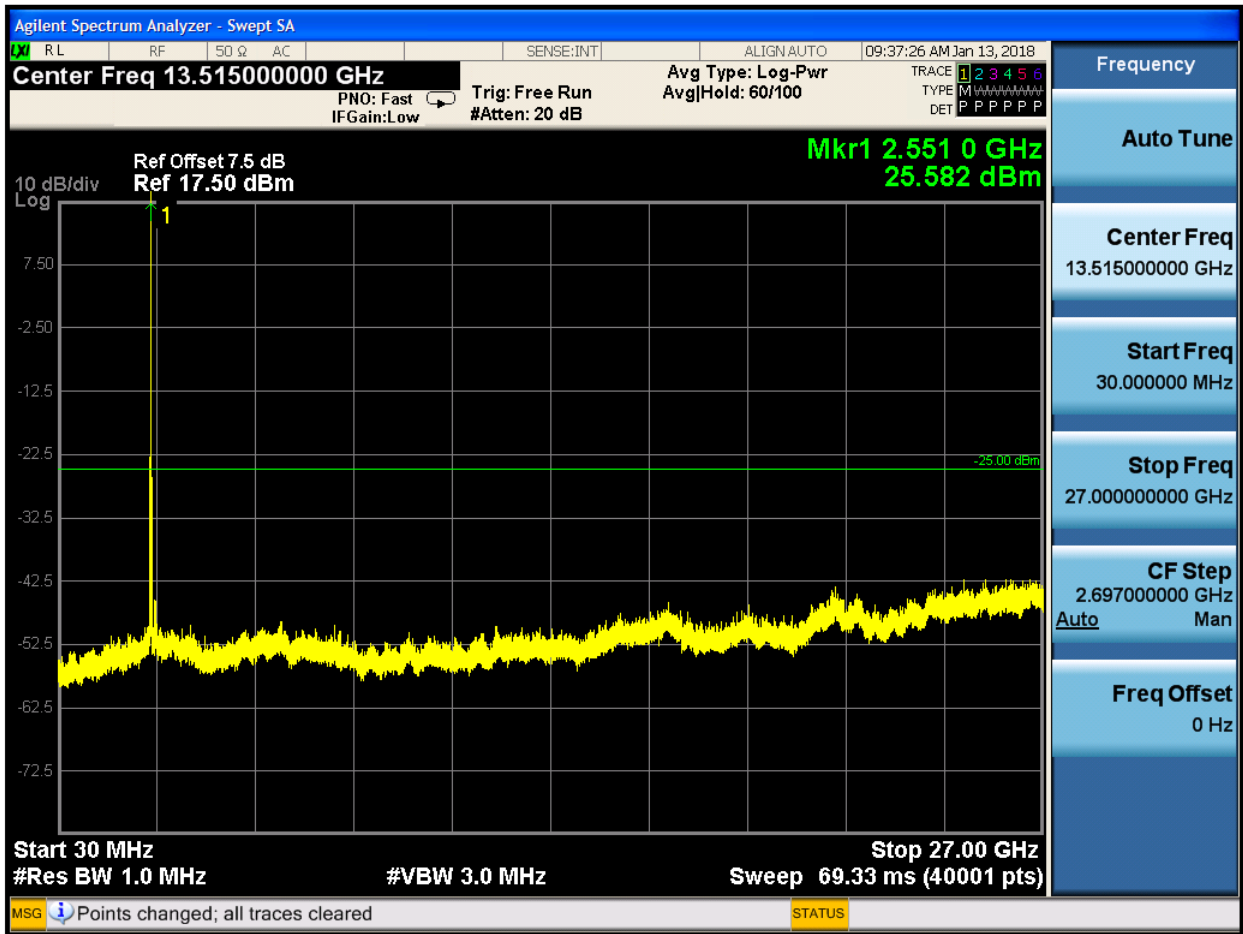


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







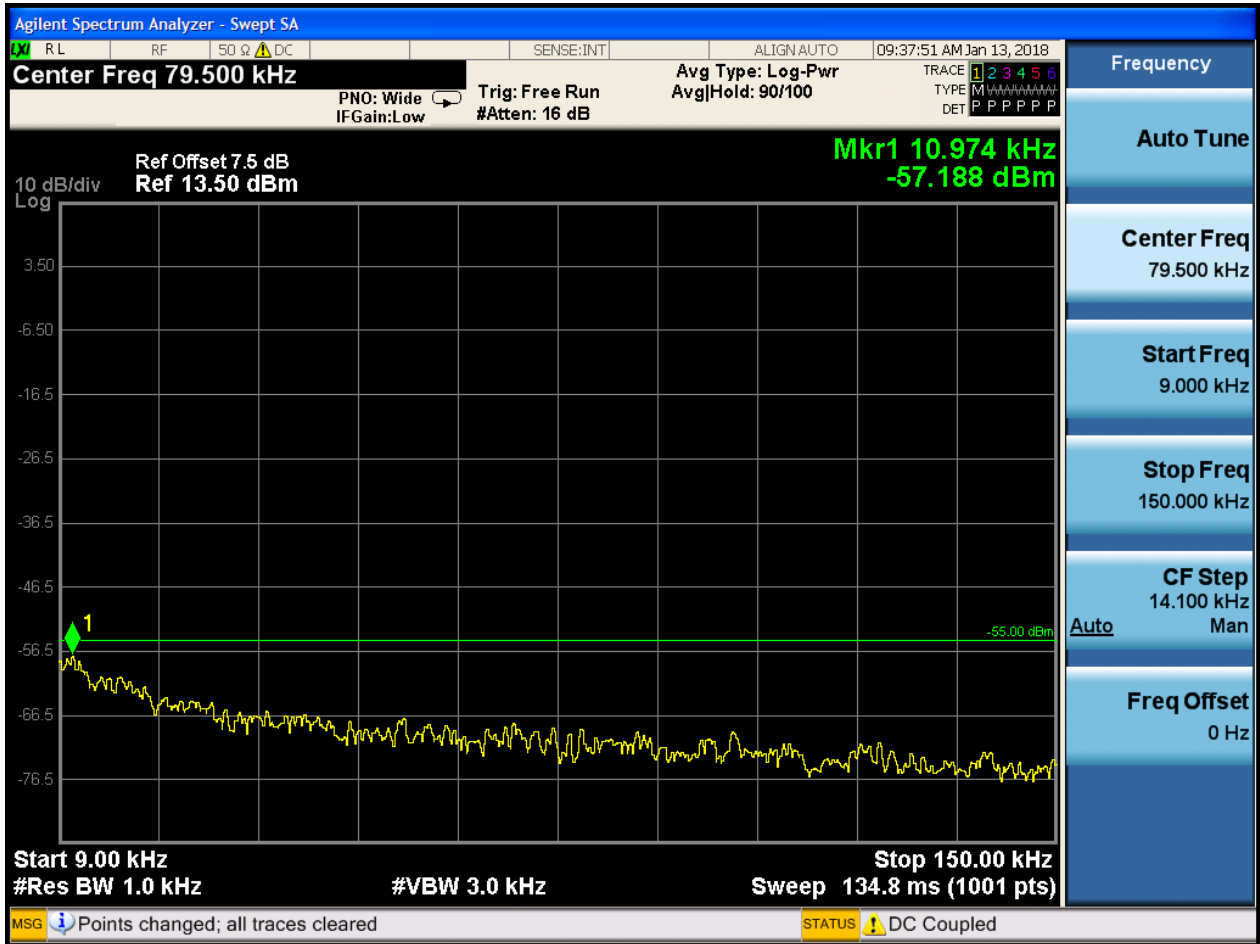


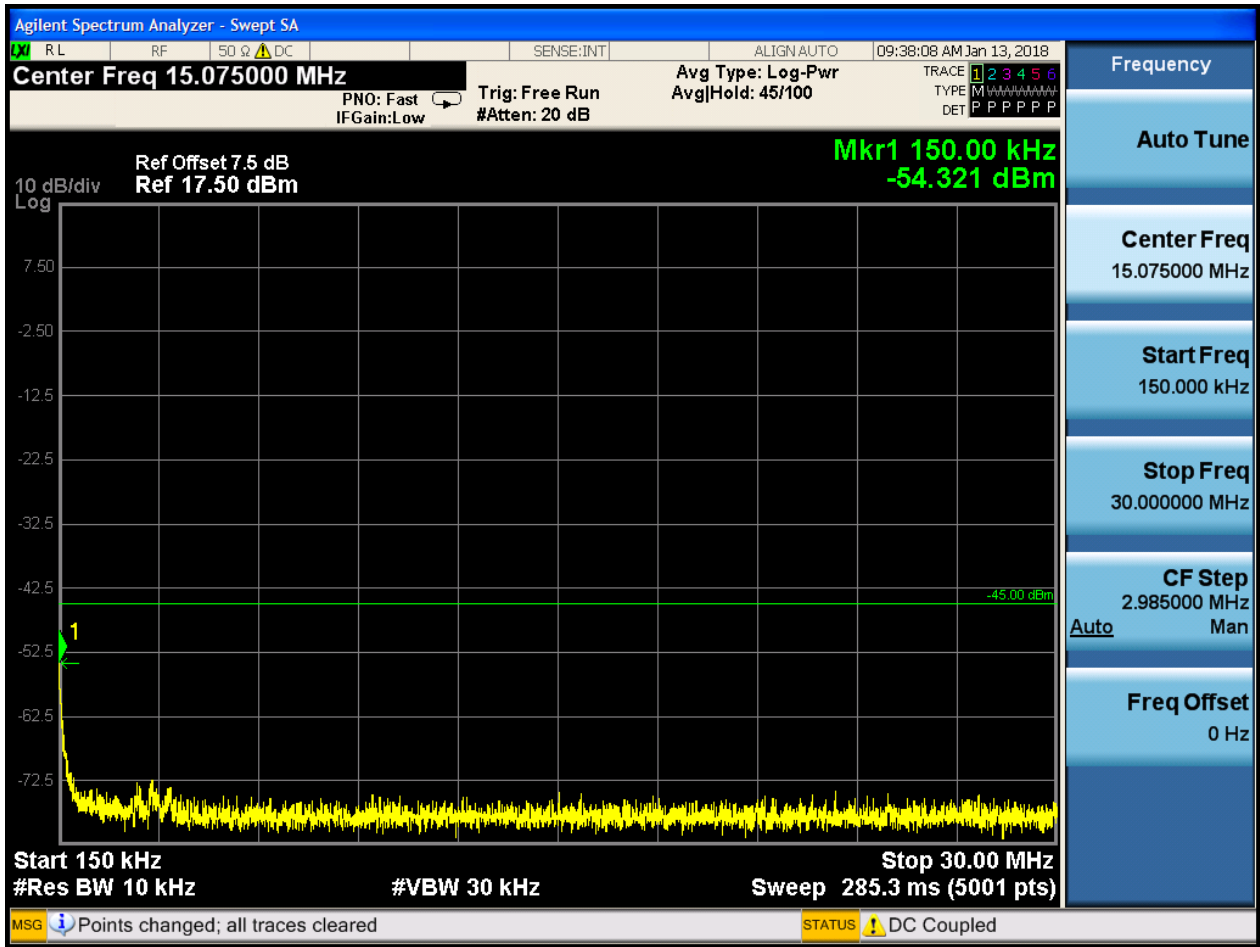
6.1.1.2 Test Mode = LTE/TM2

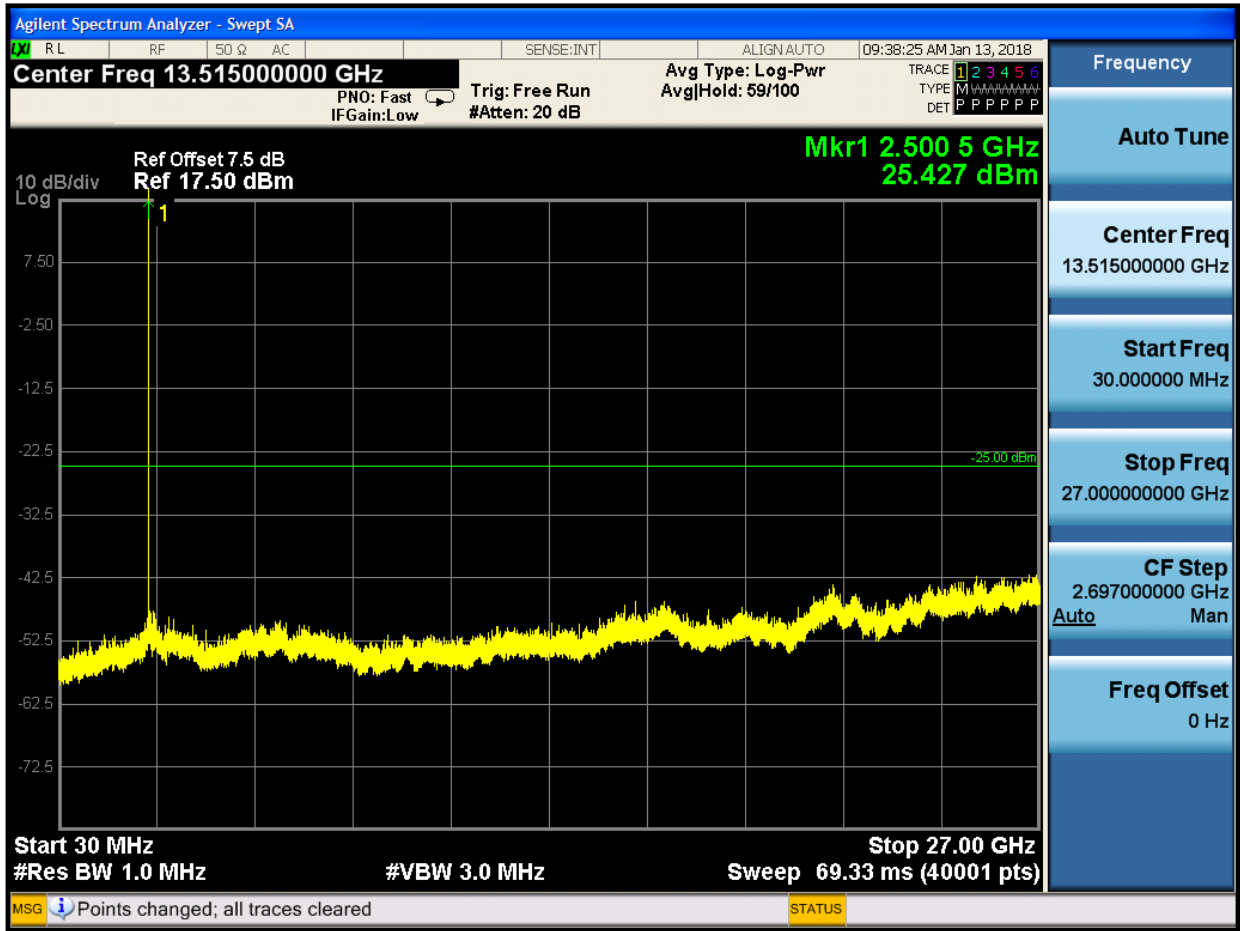
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



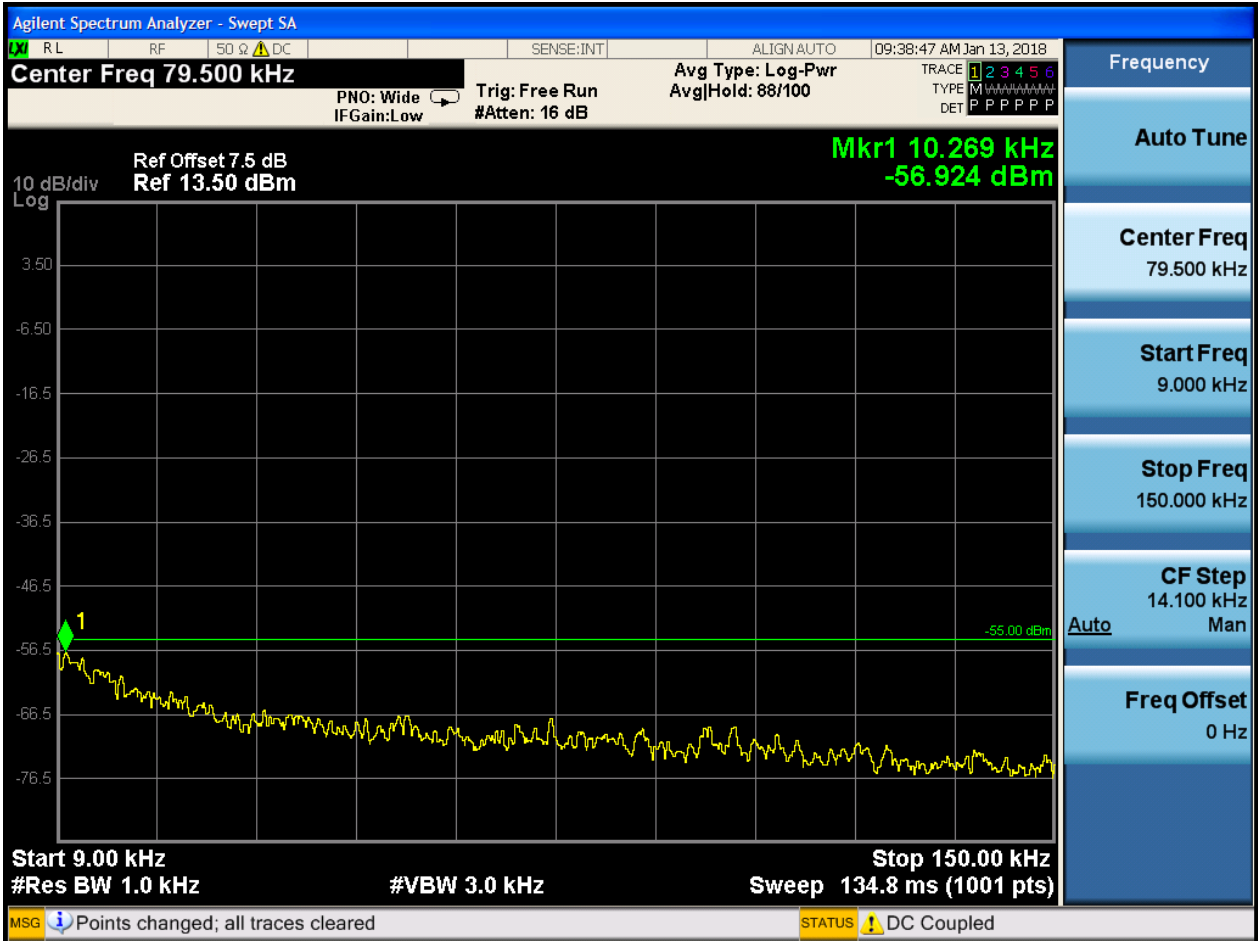


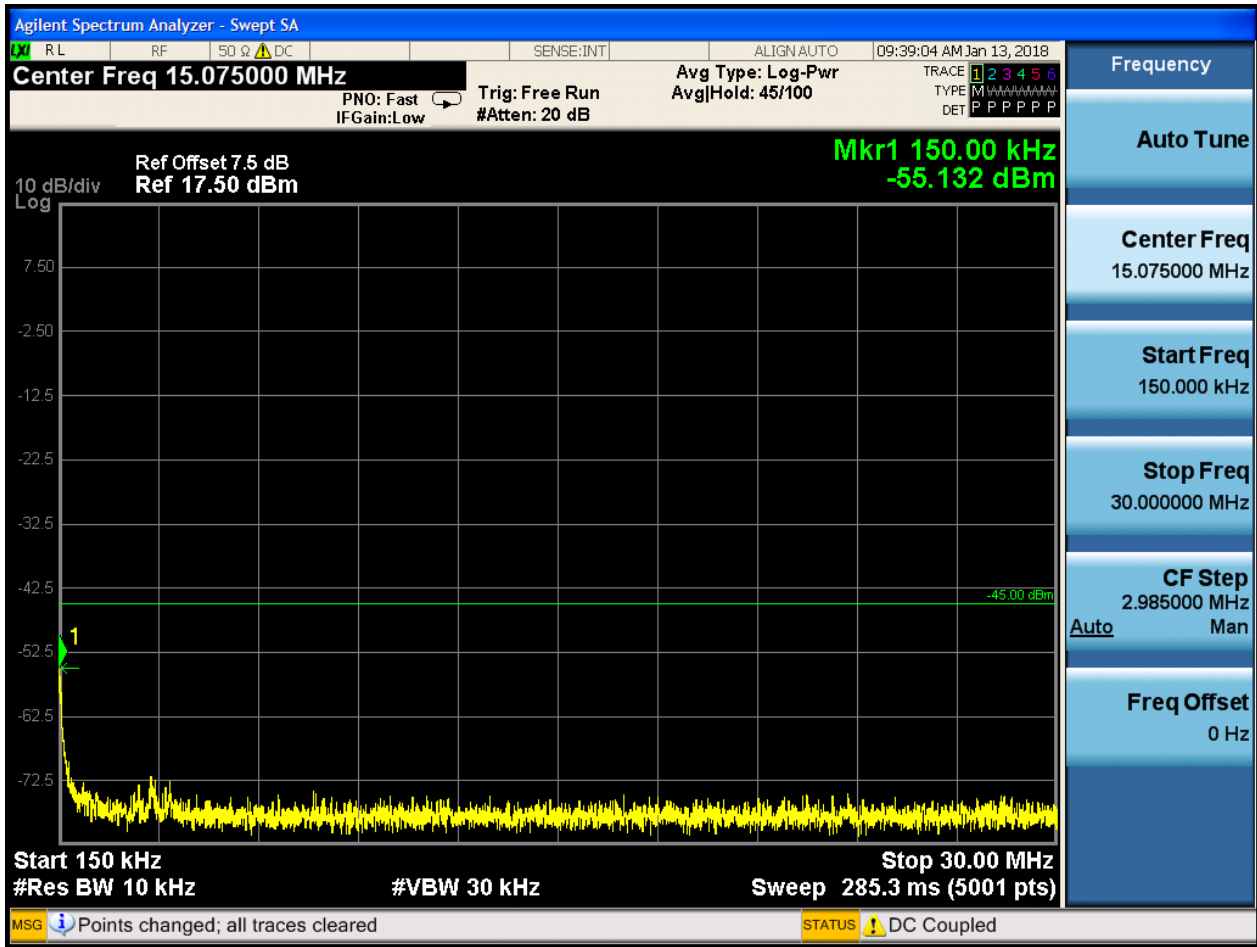


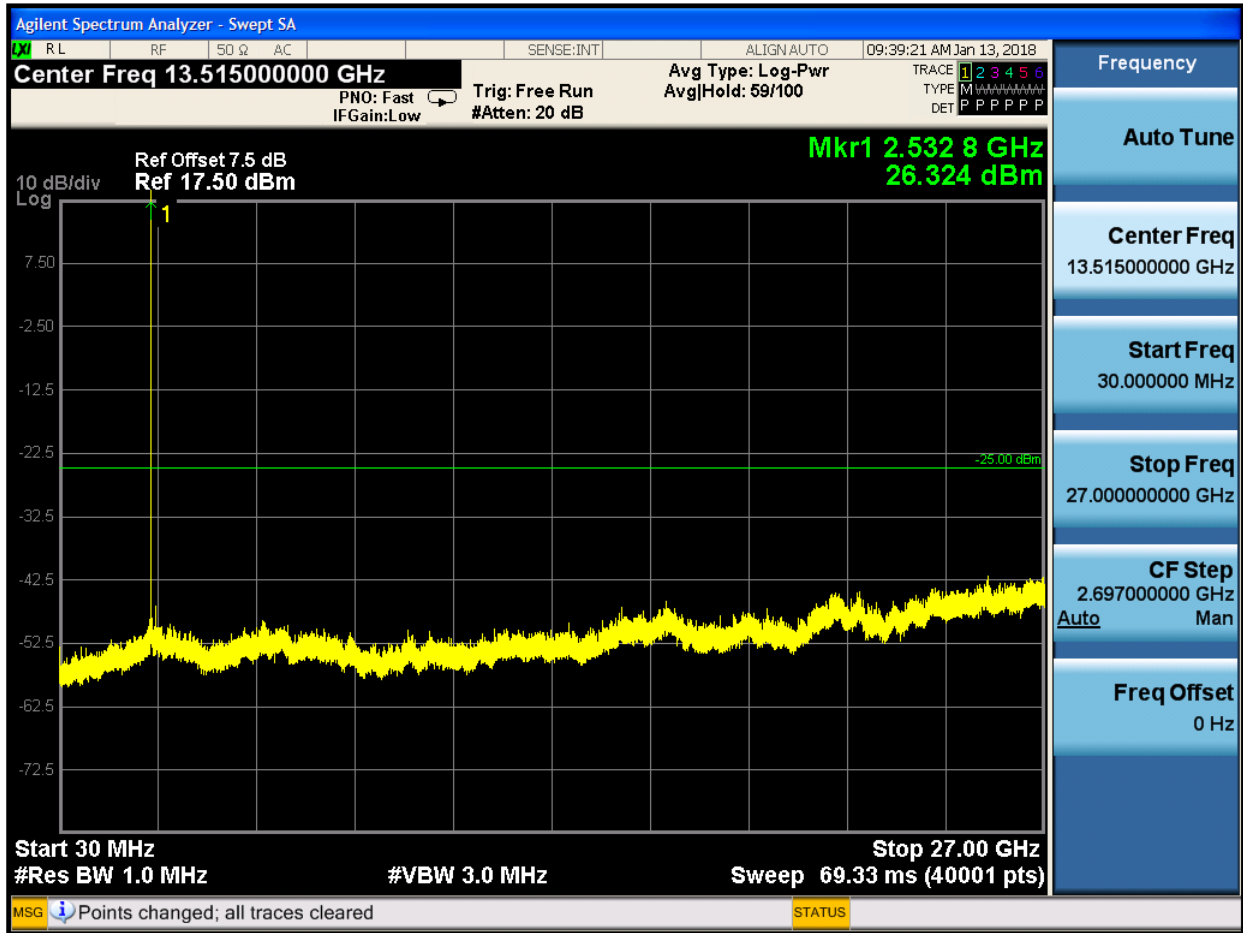


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



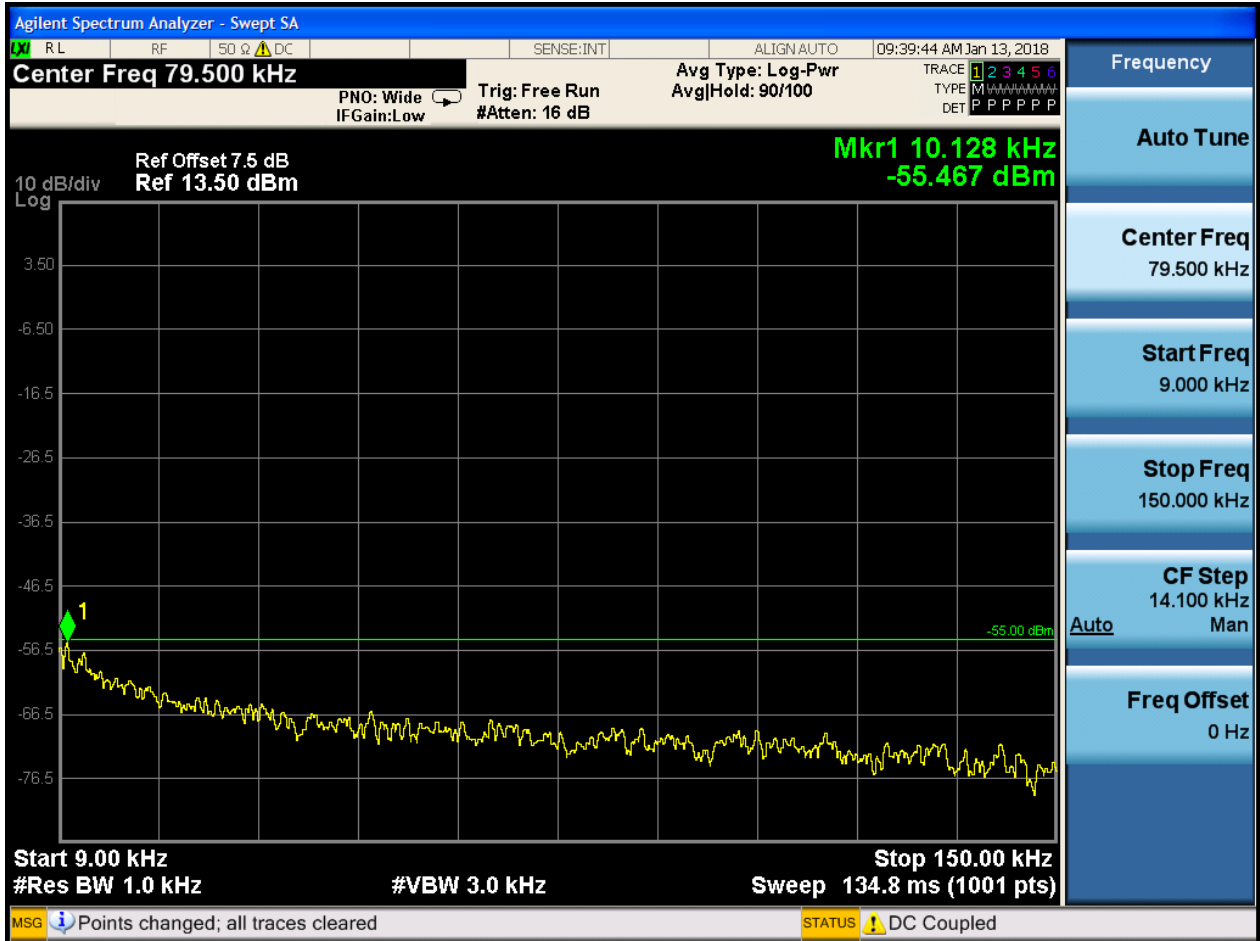


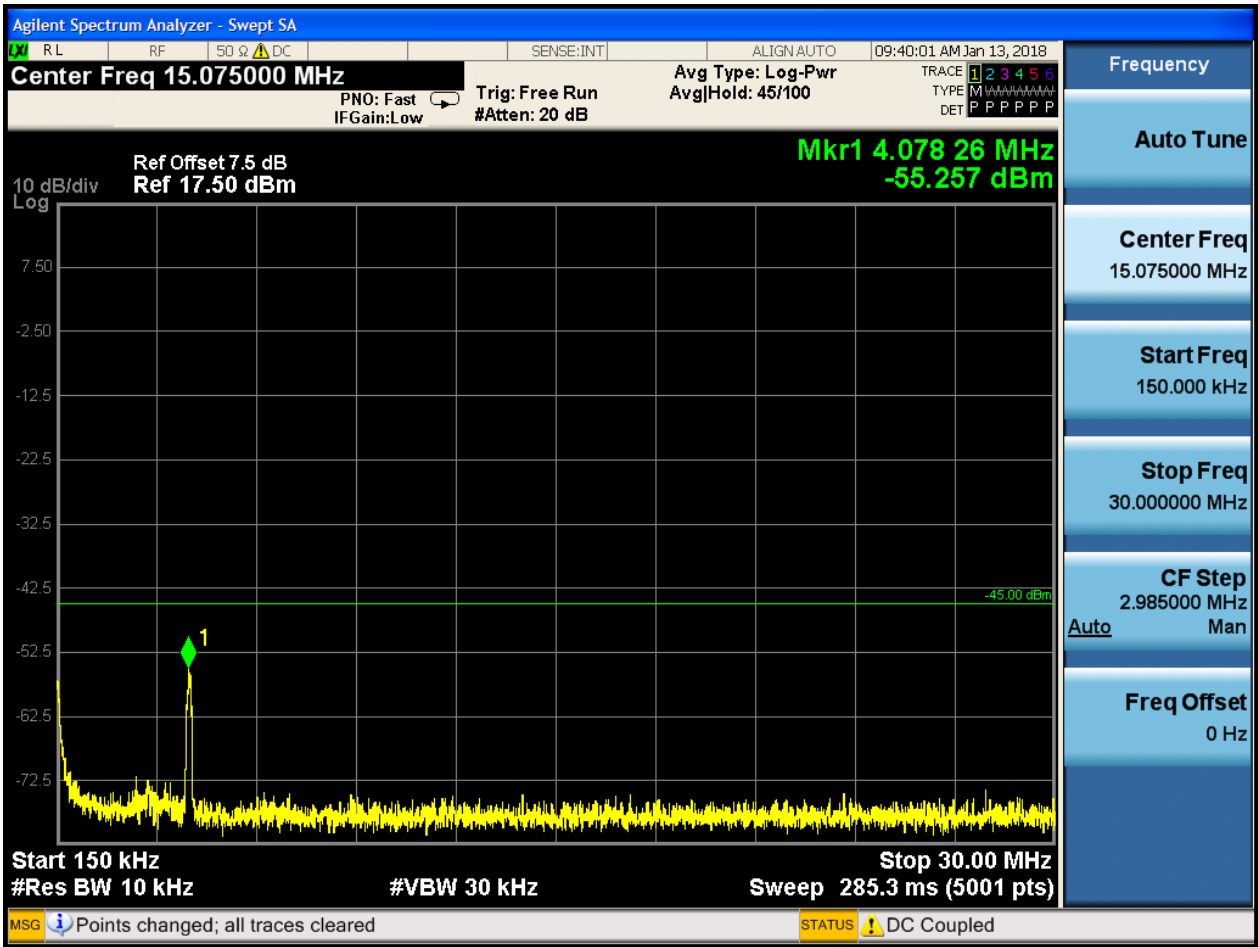


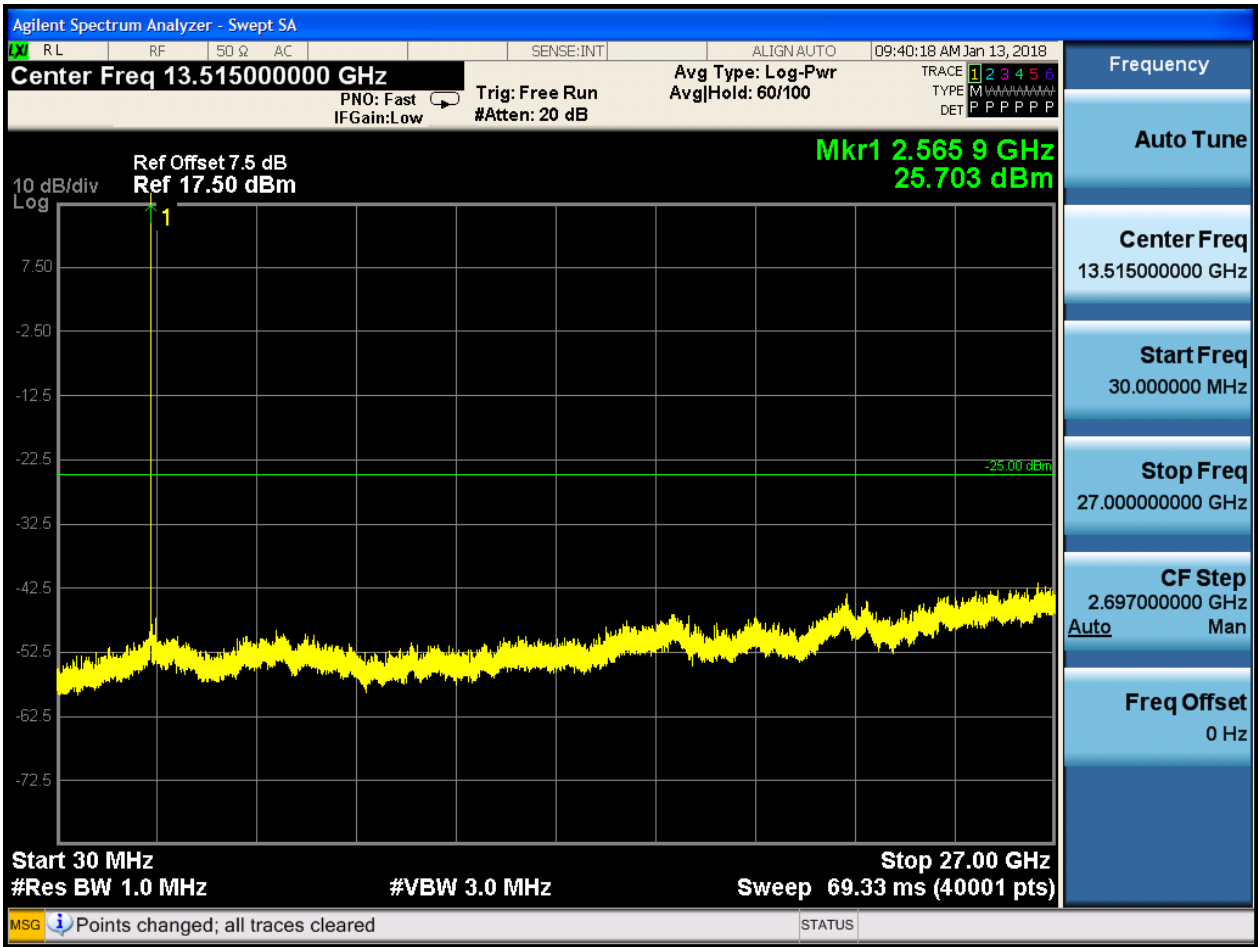


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





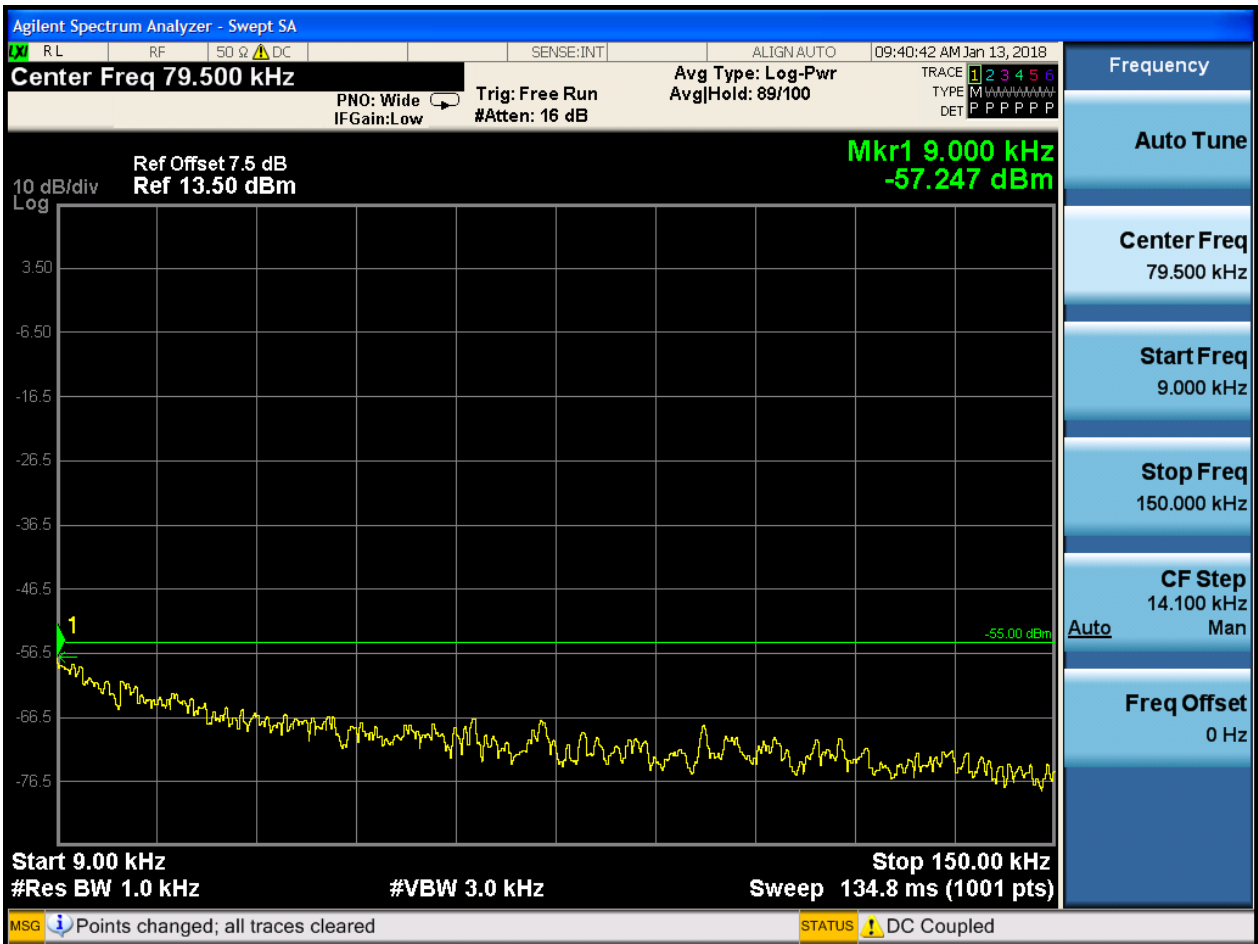


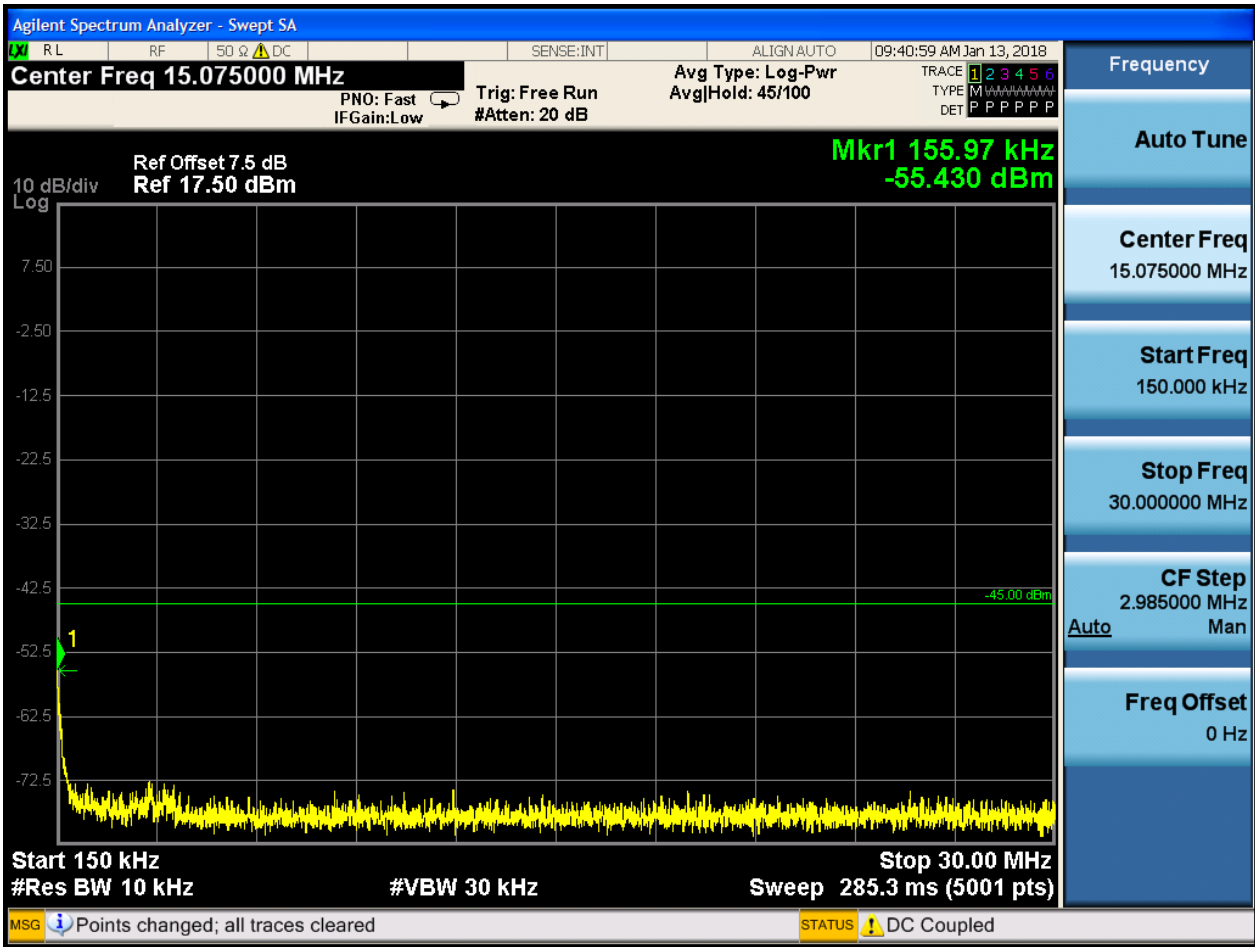


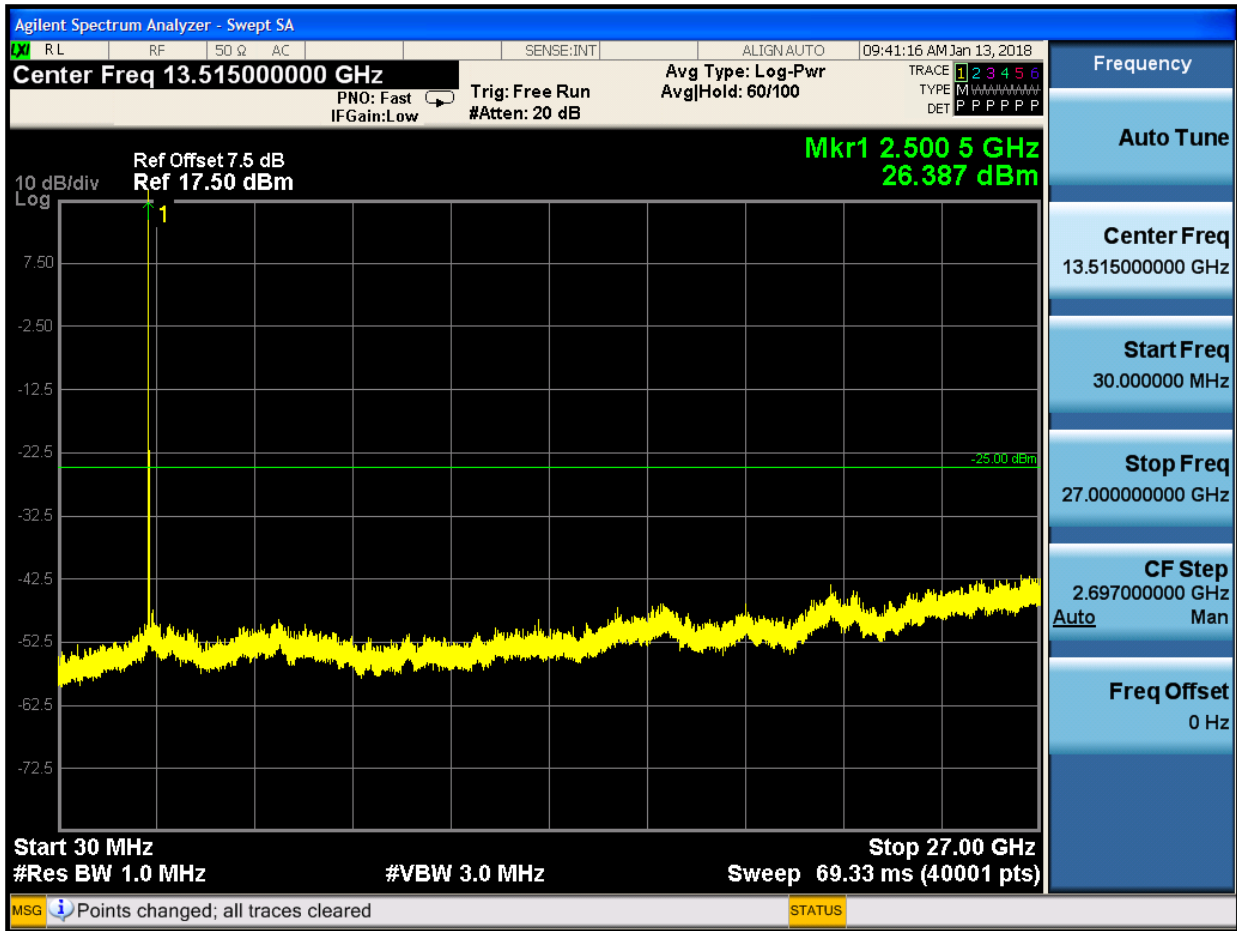
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



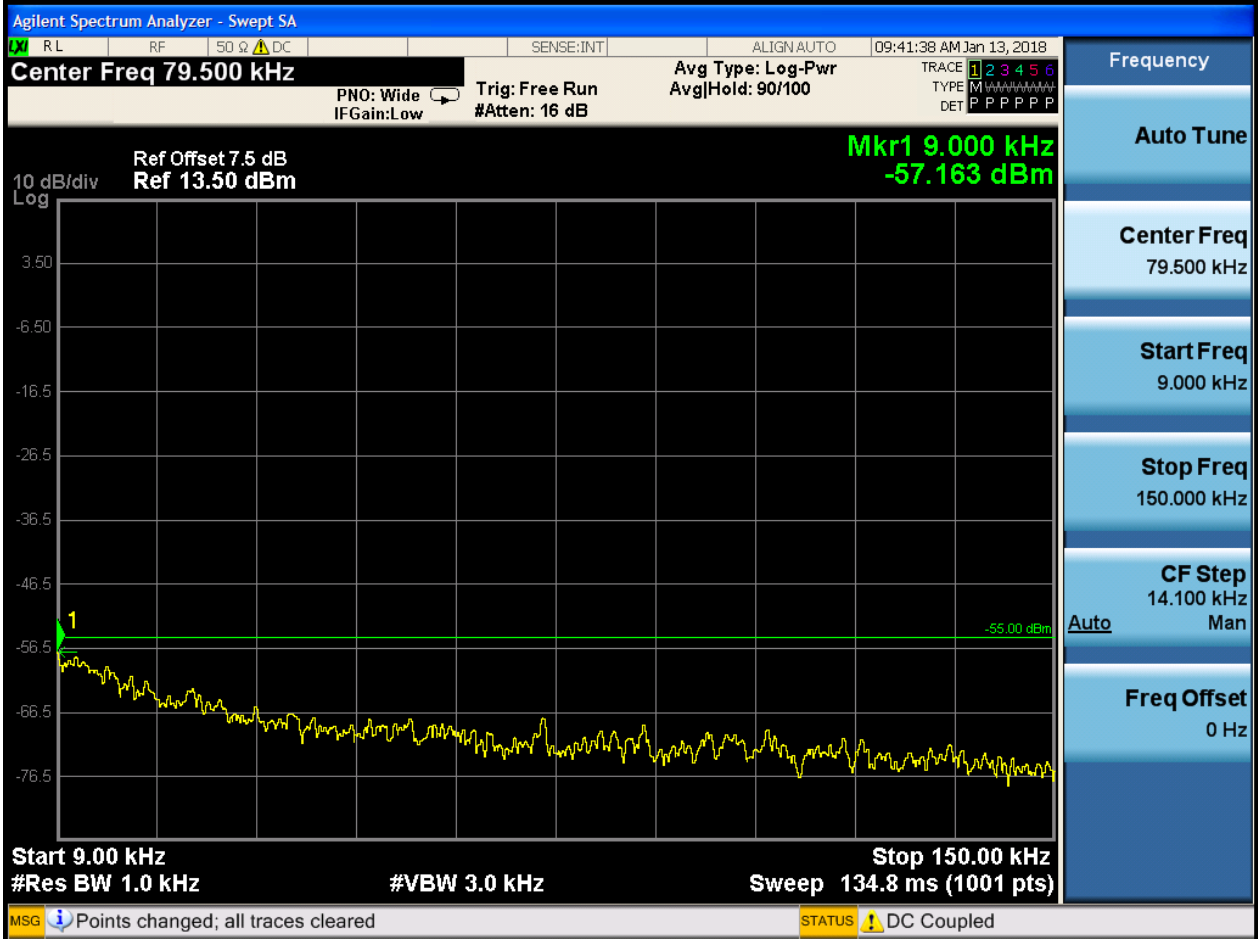


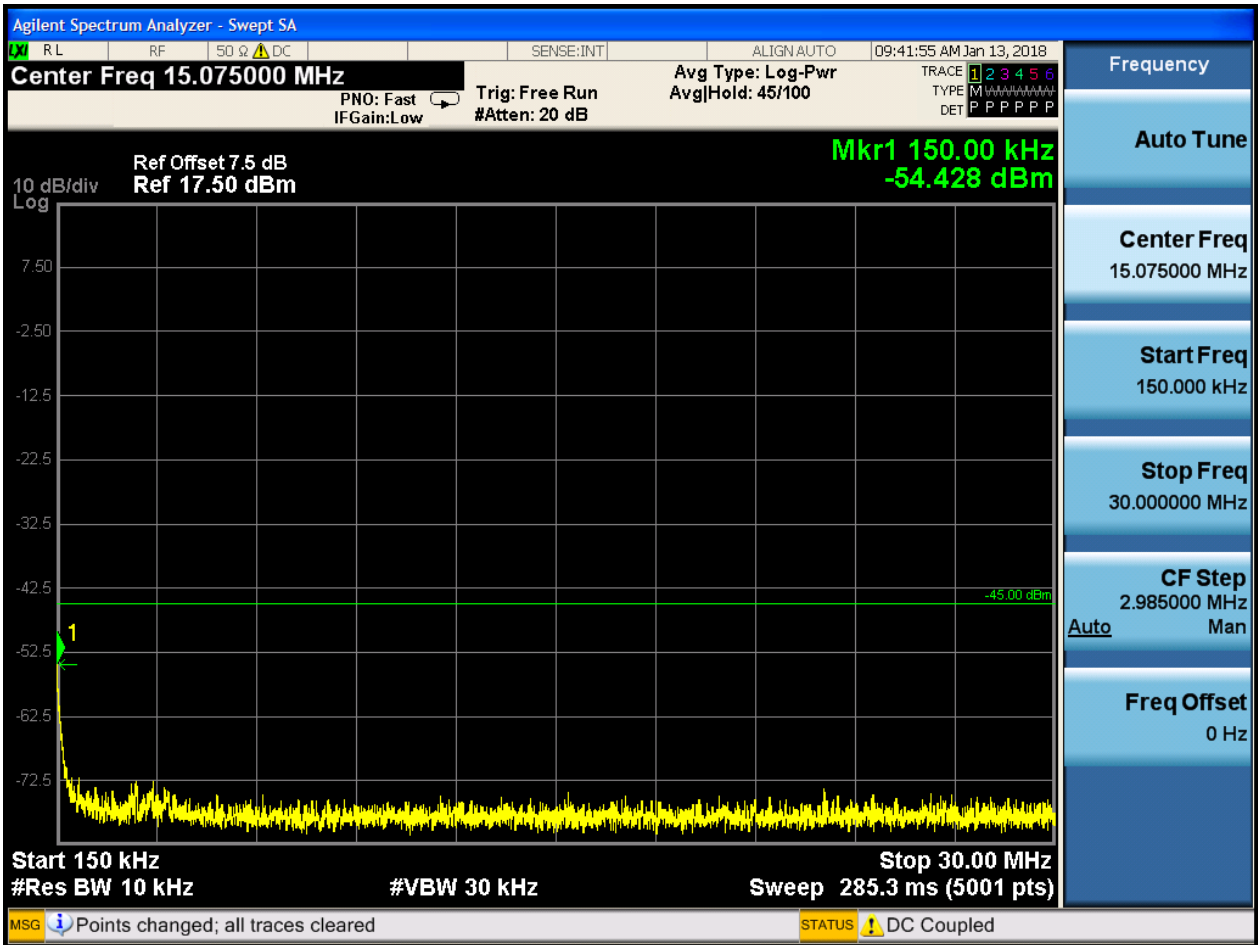


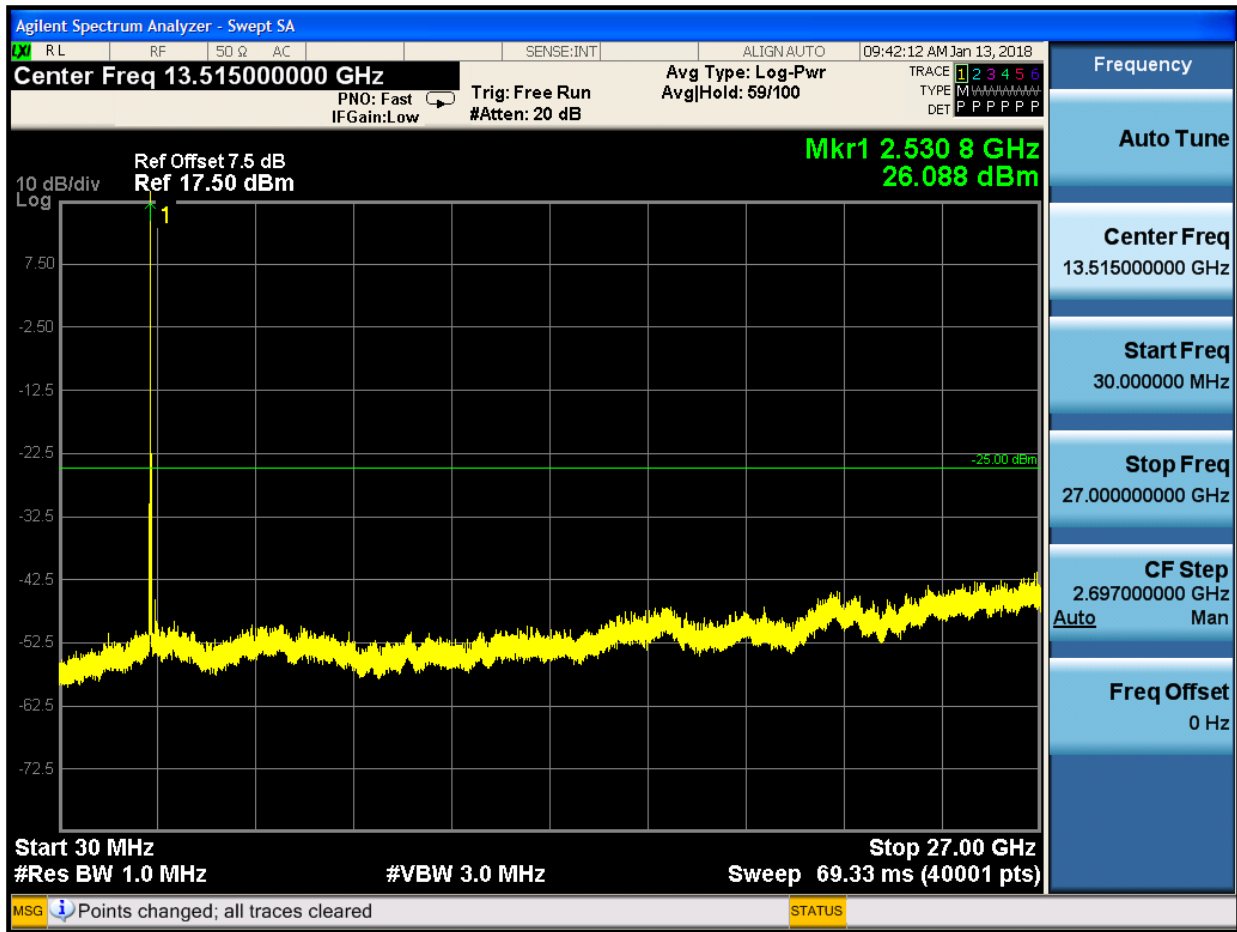


6.1.1.2.2 Test Channel = MCH

6.1.1.2.2.1 Test RB = RB1#0



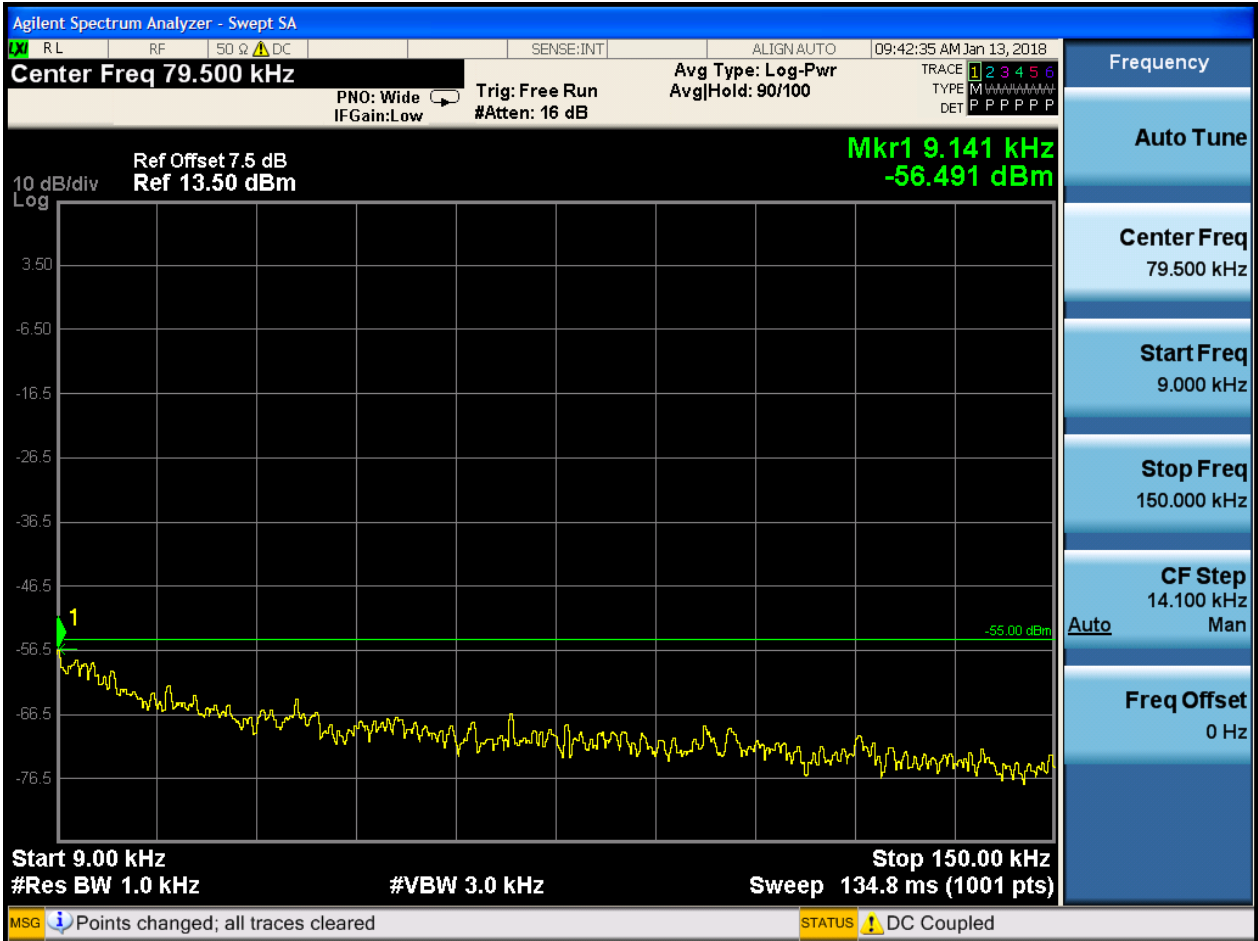


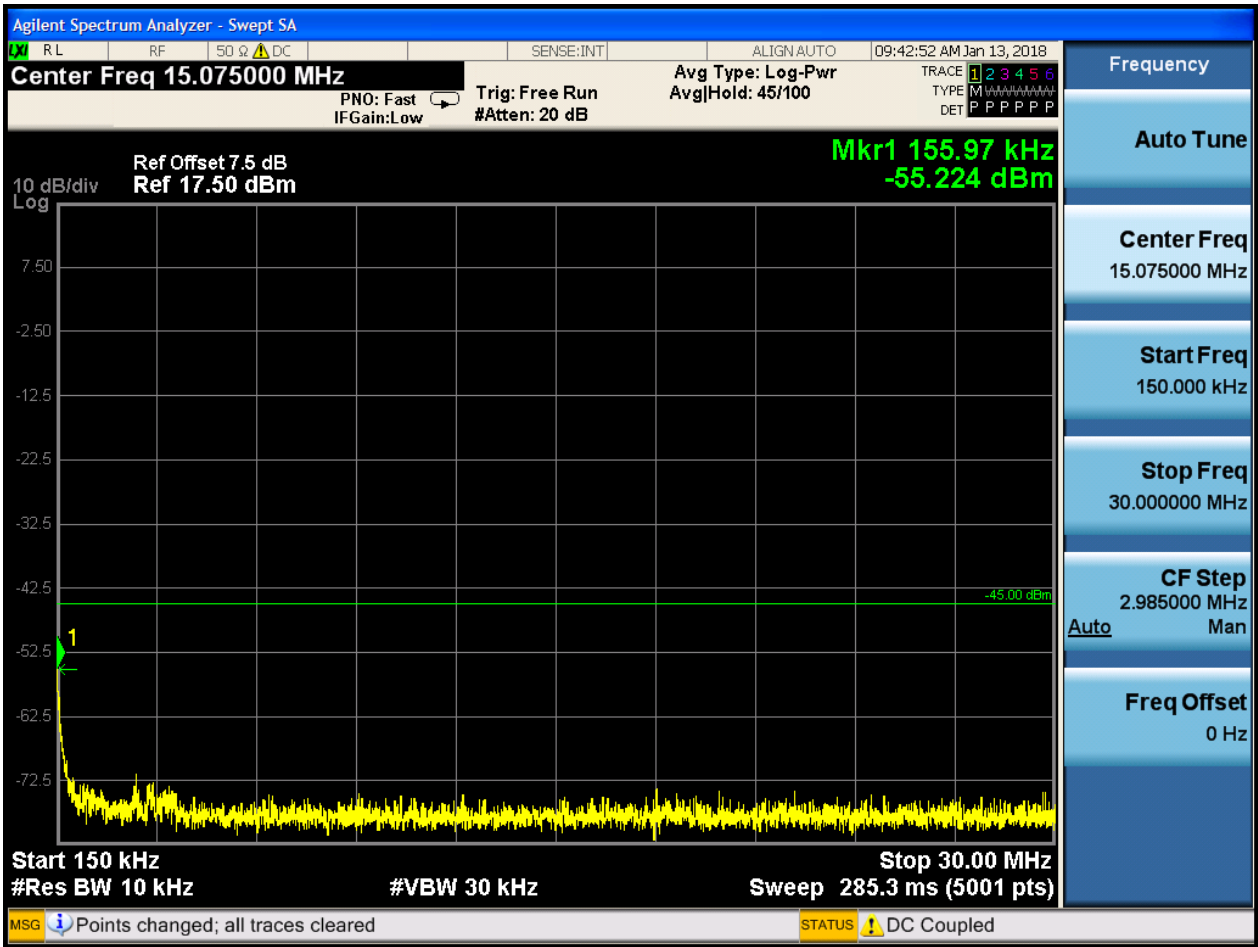


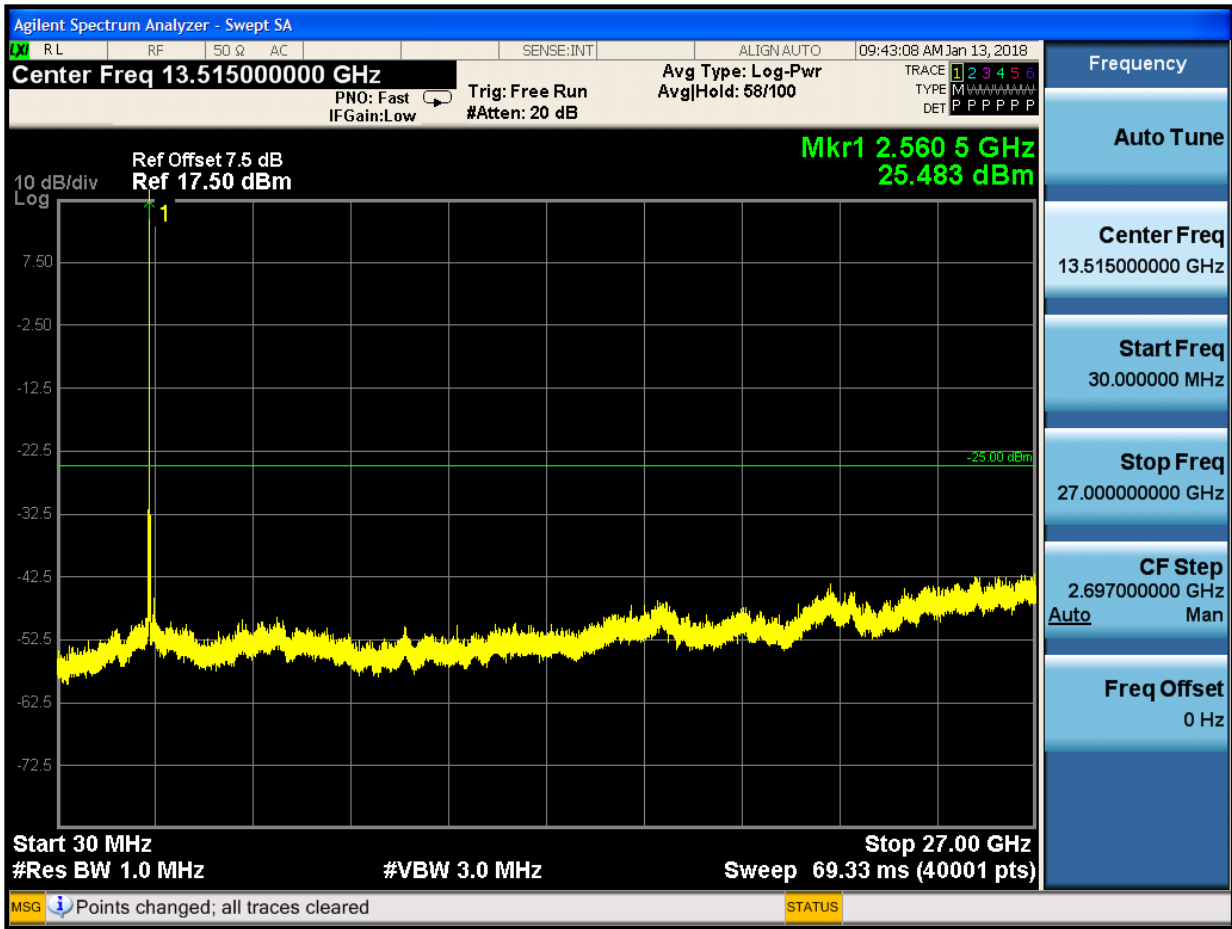


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





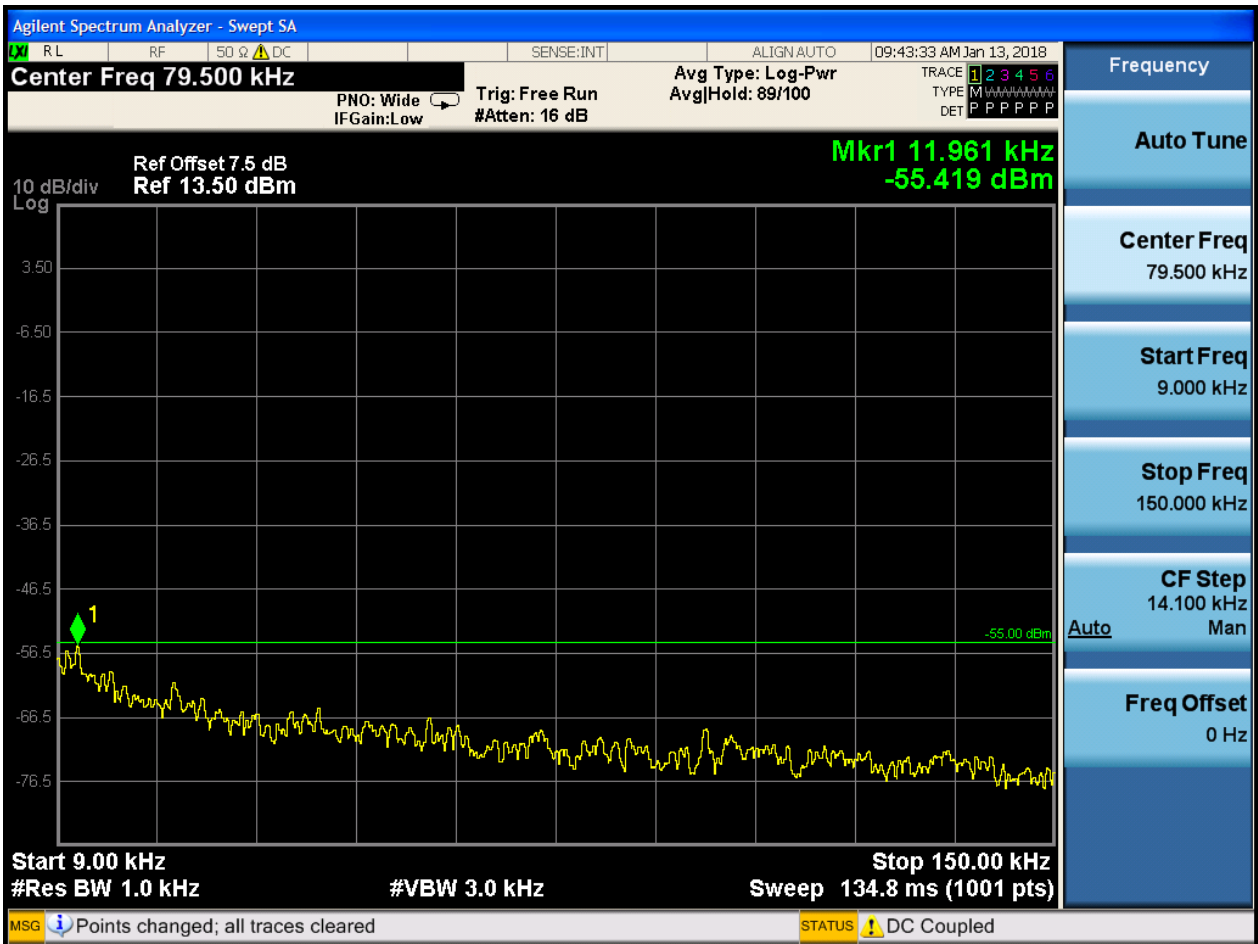


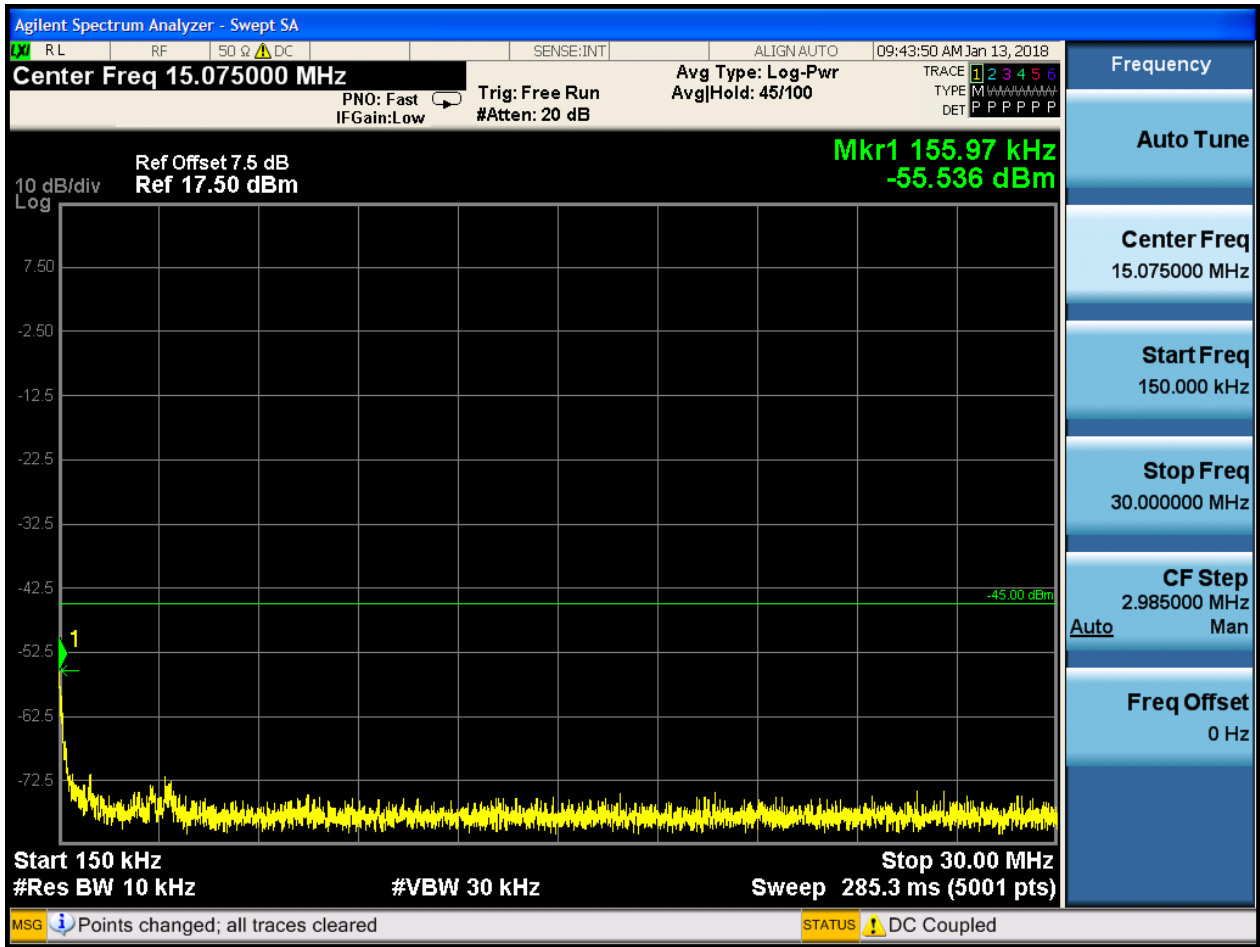


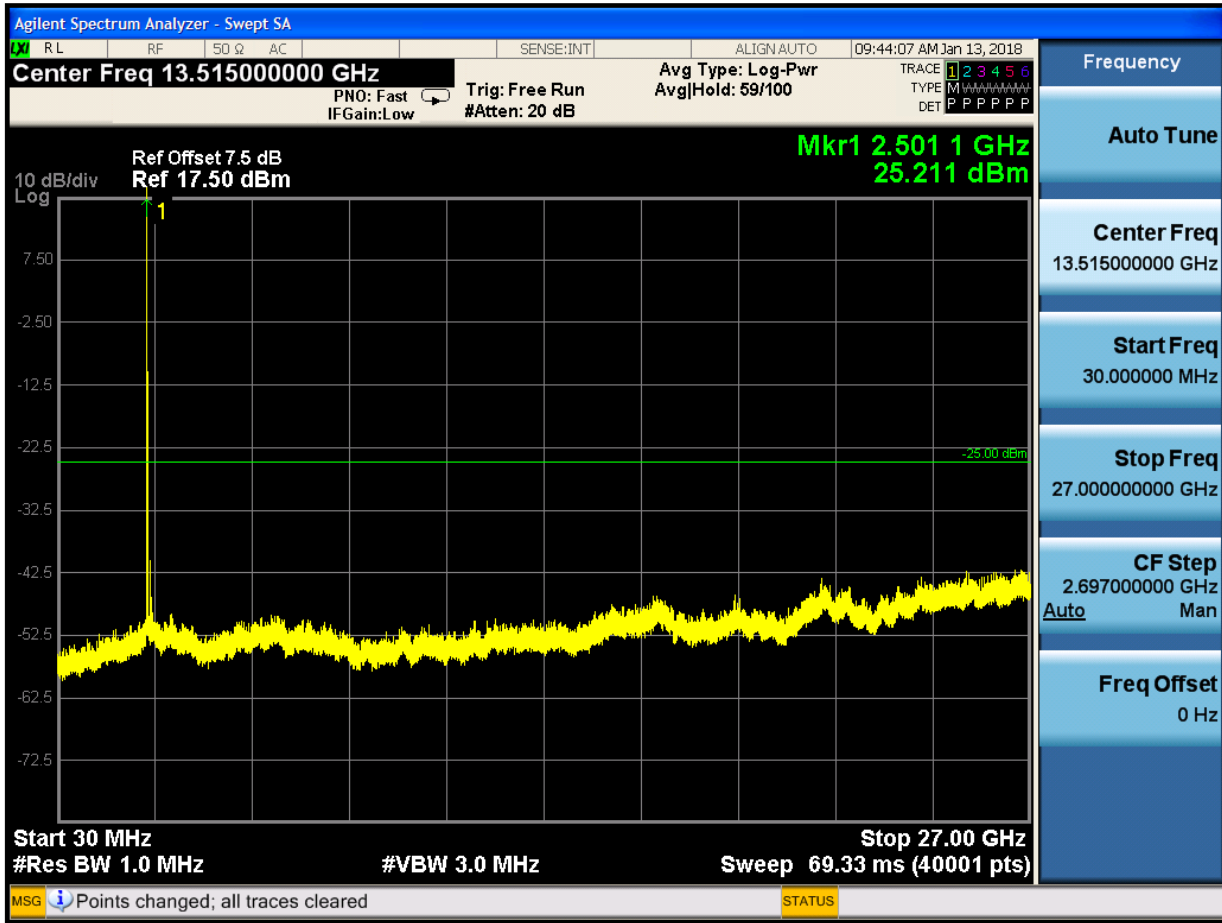
6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



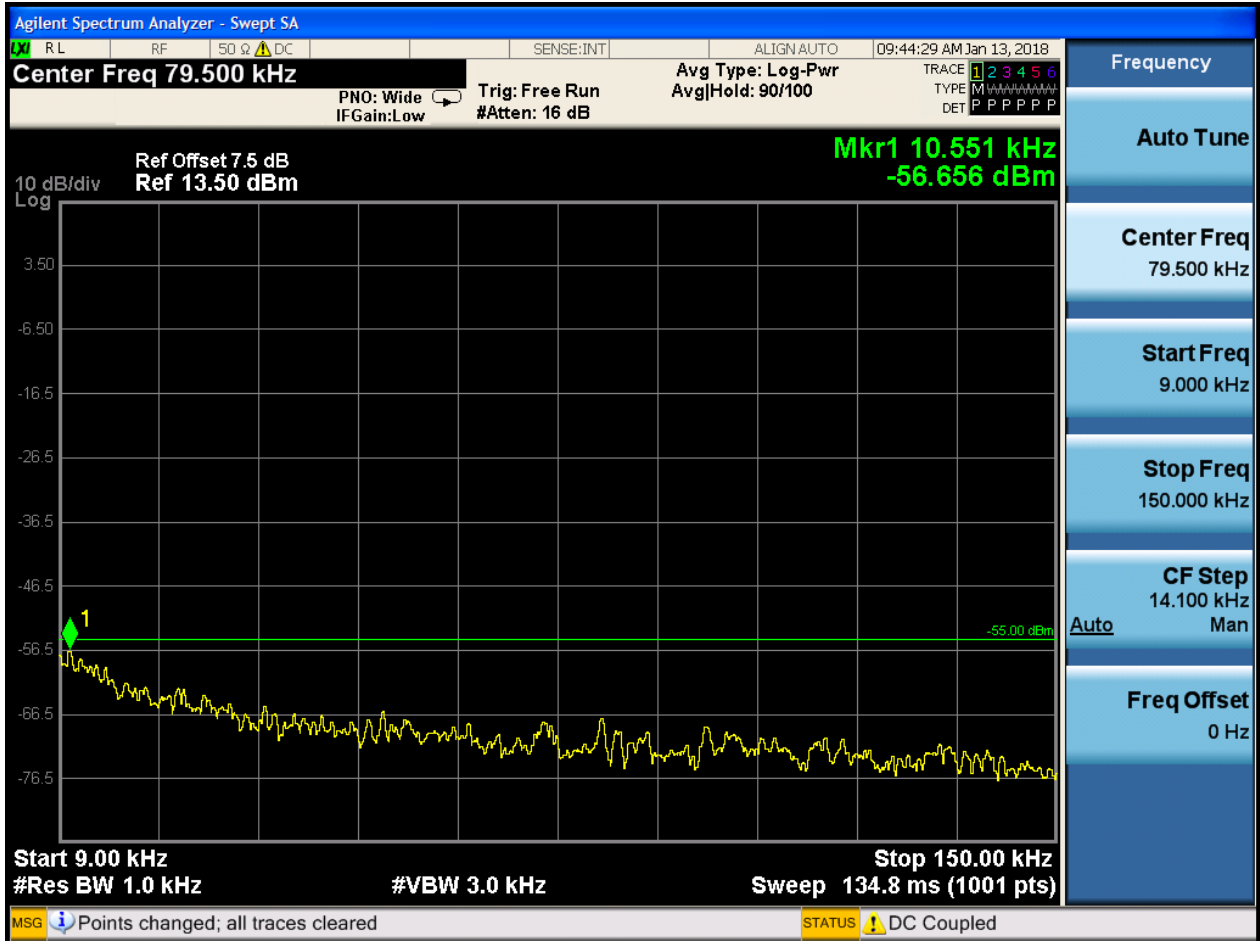


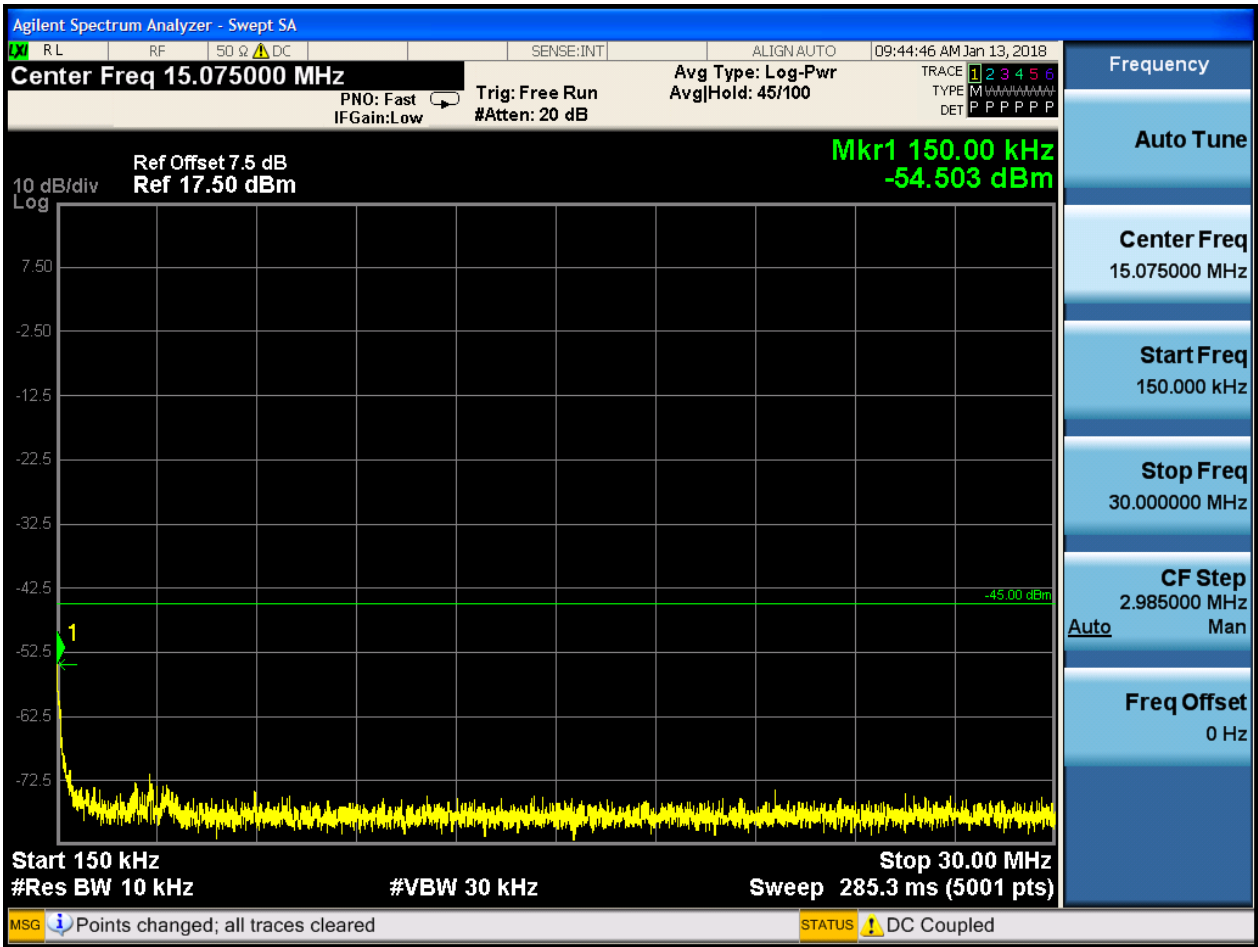


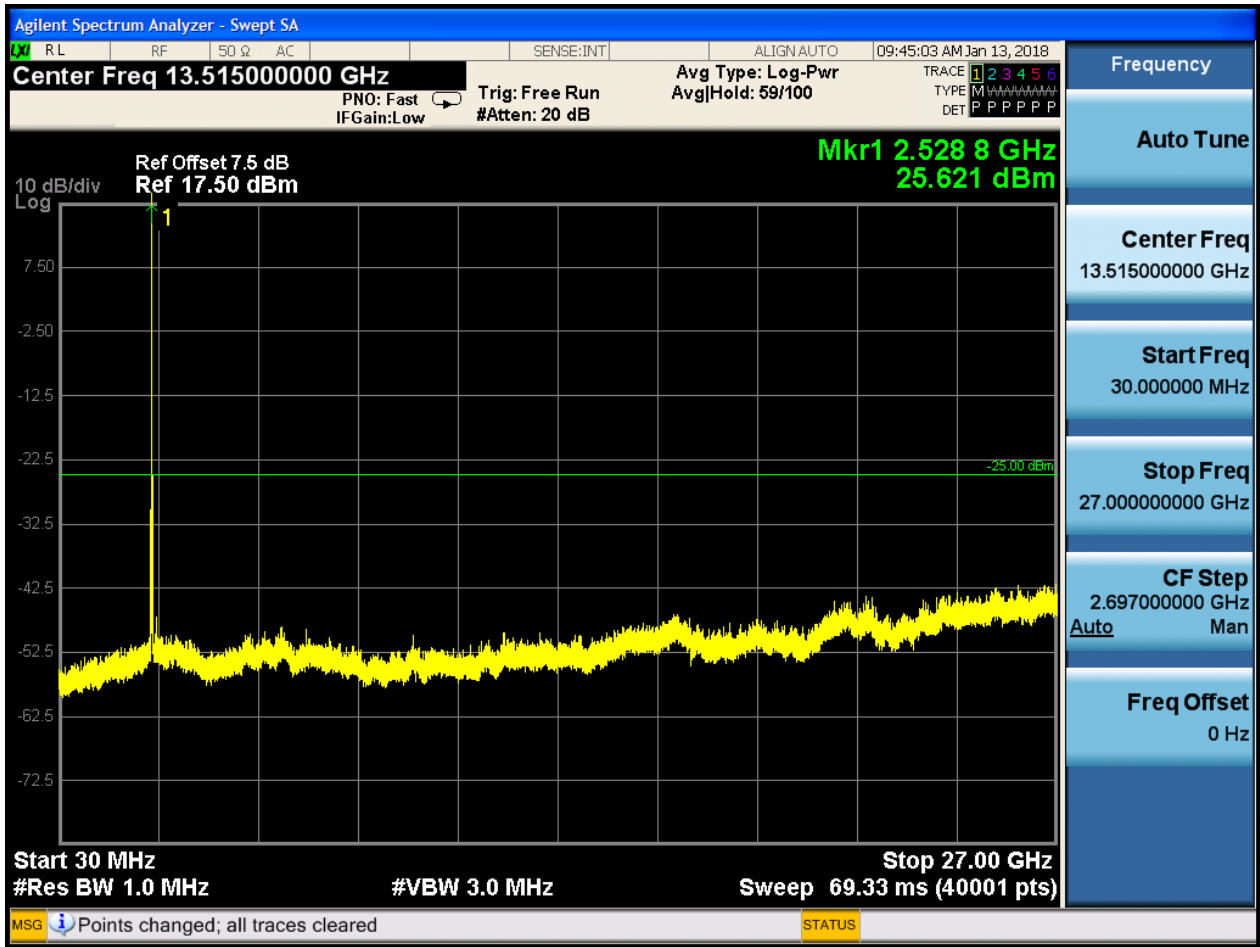


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



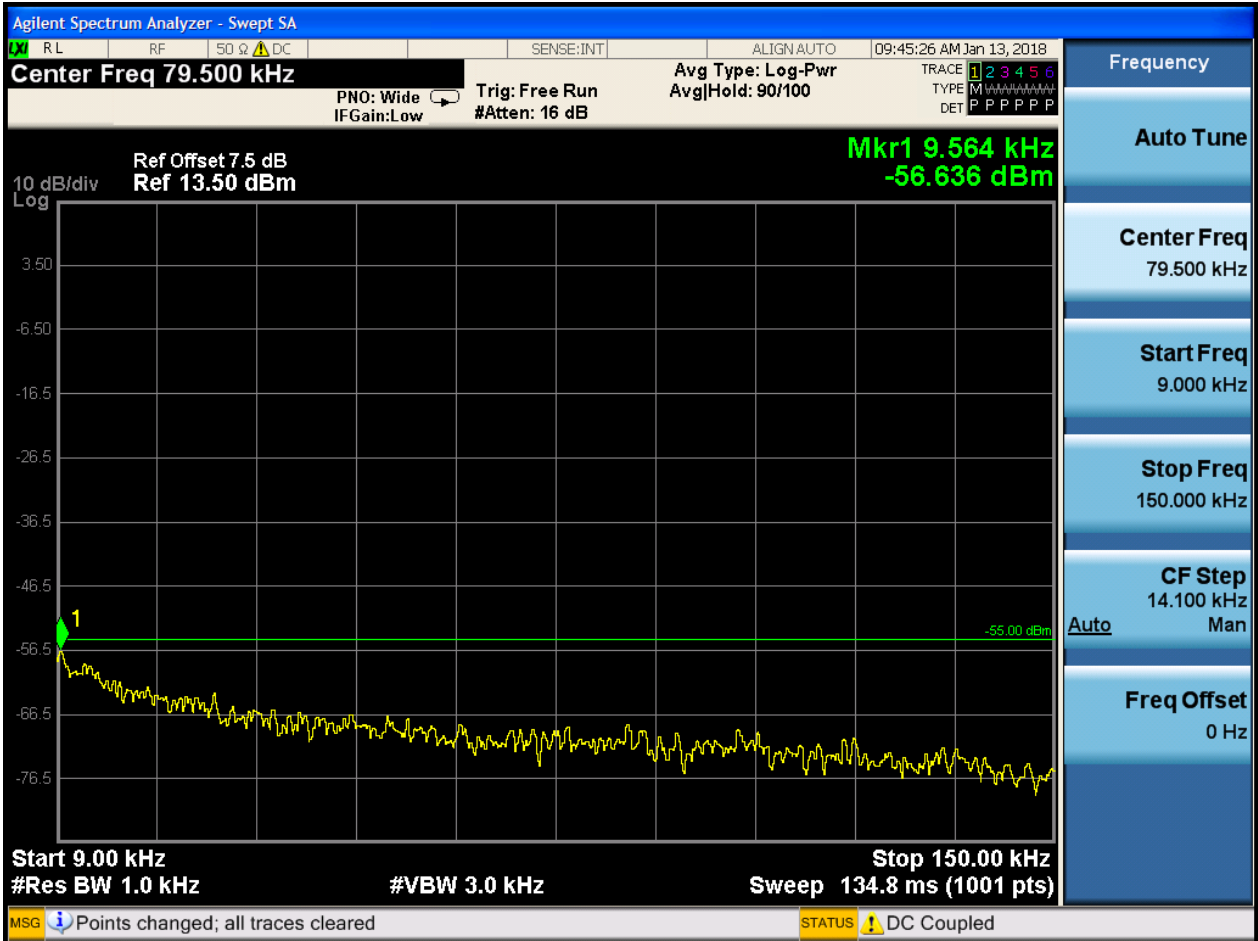


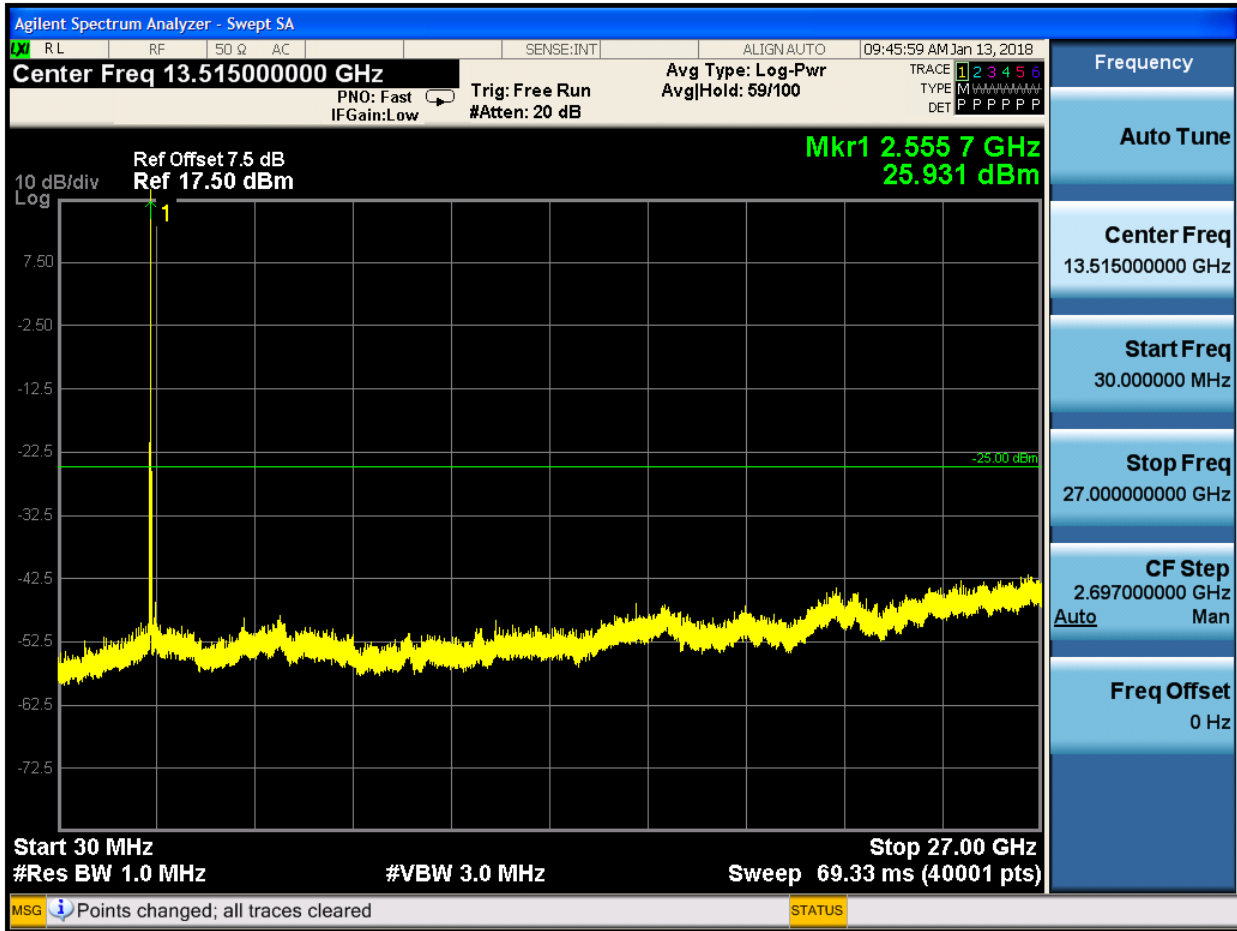




6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0



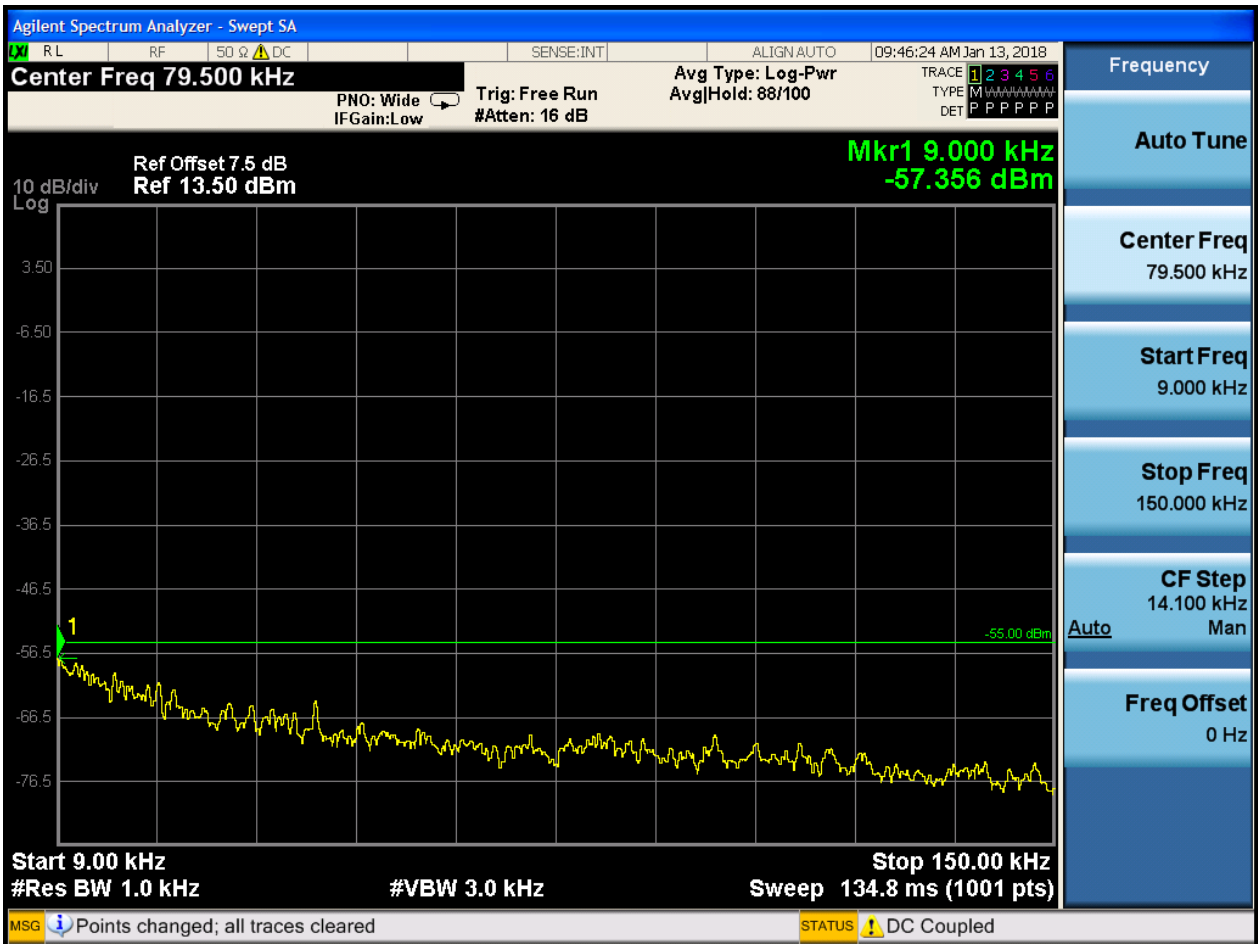


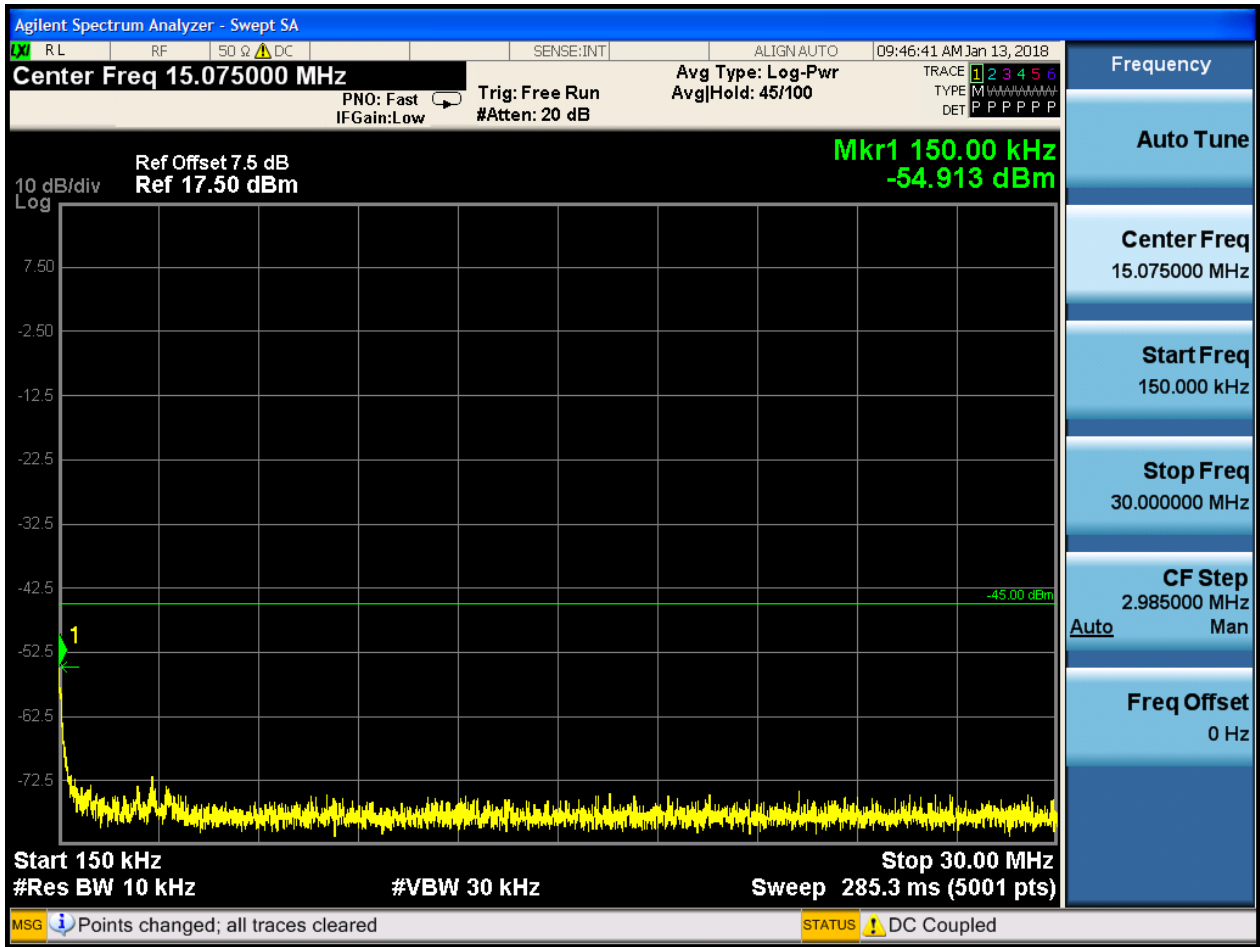


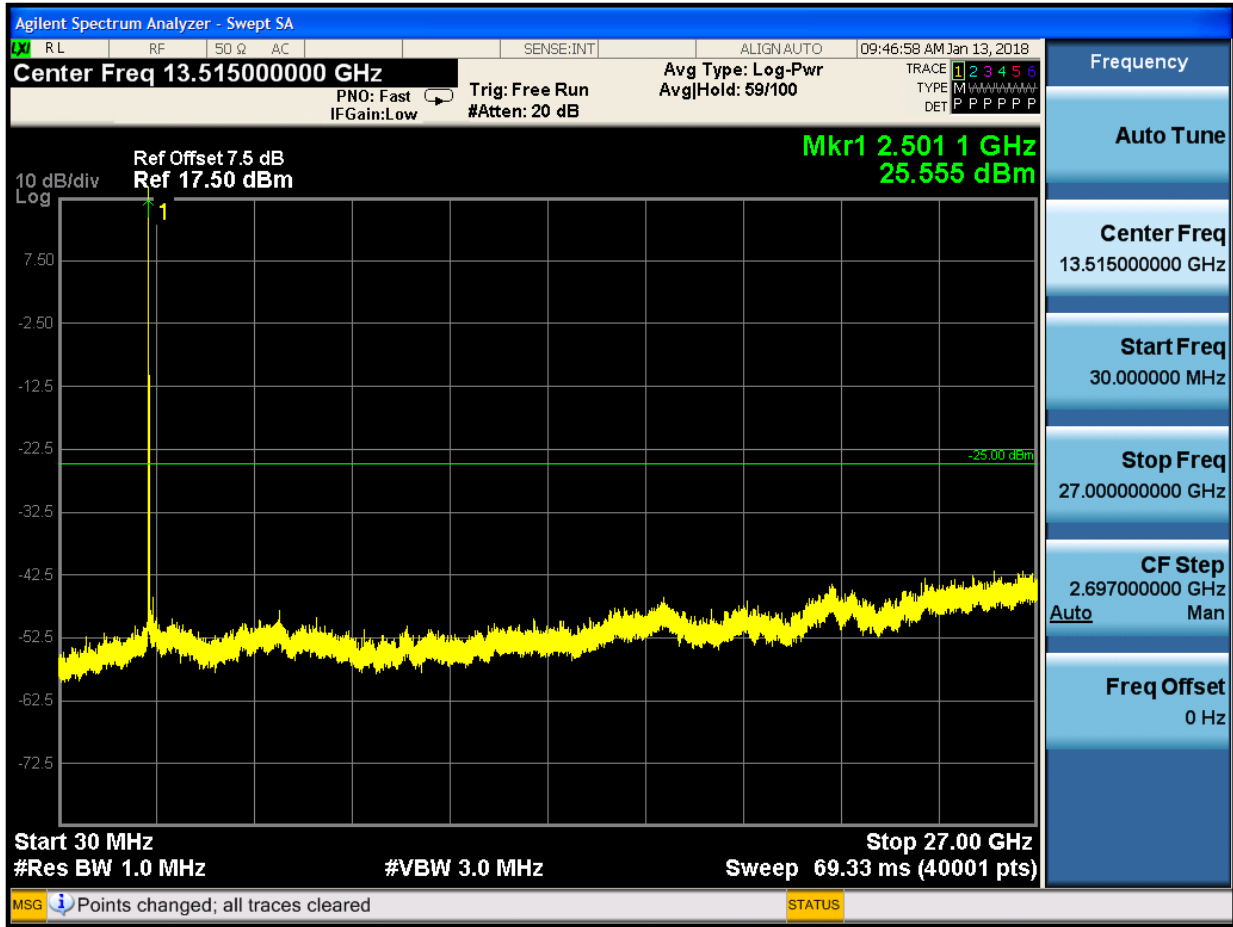
6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



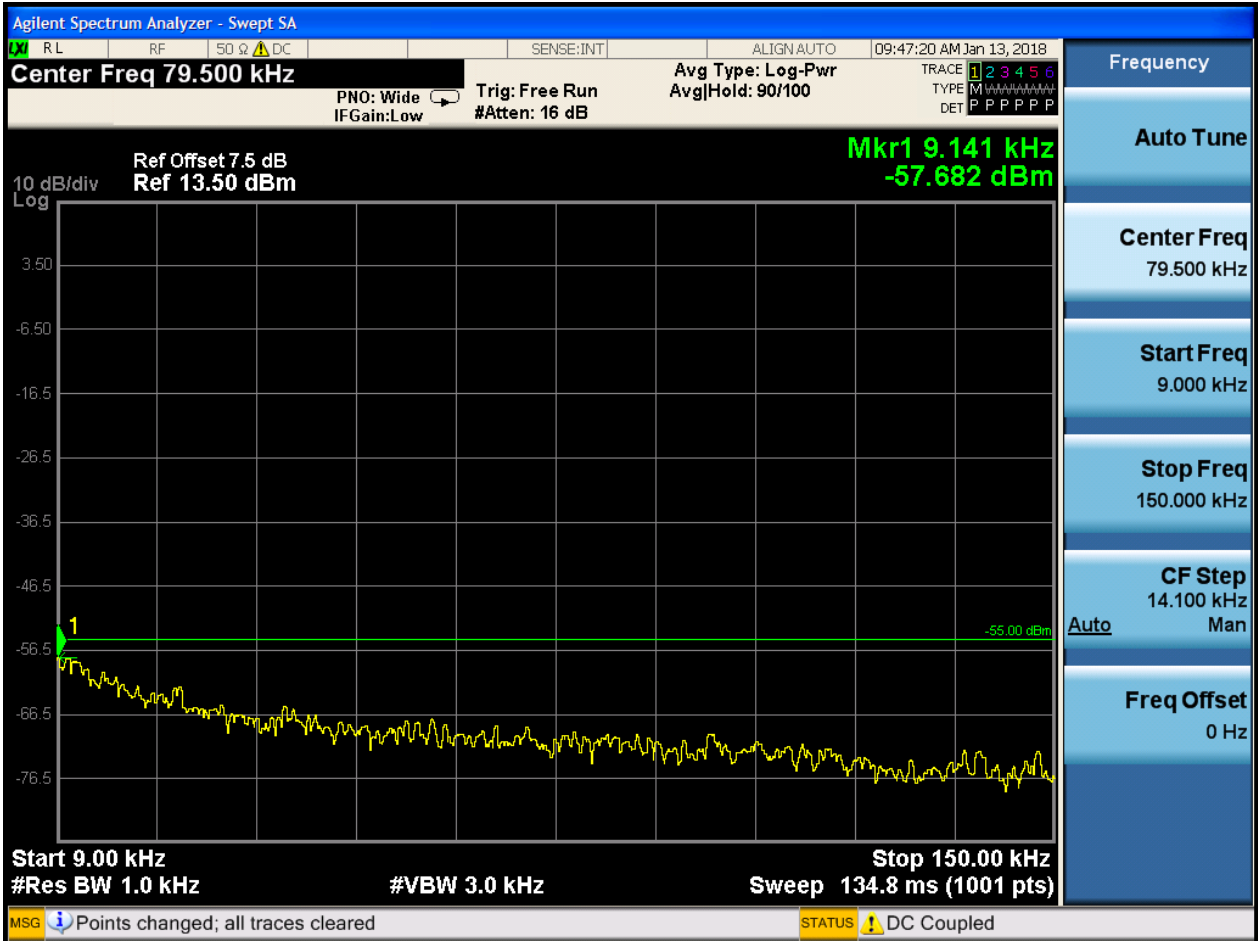


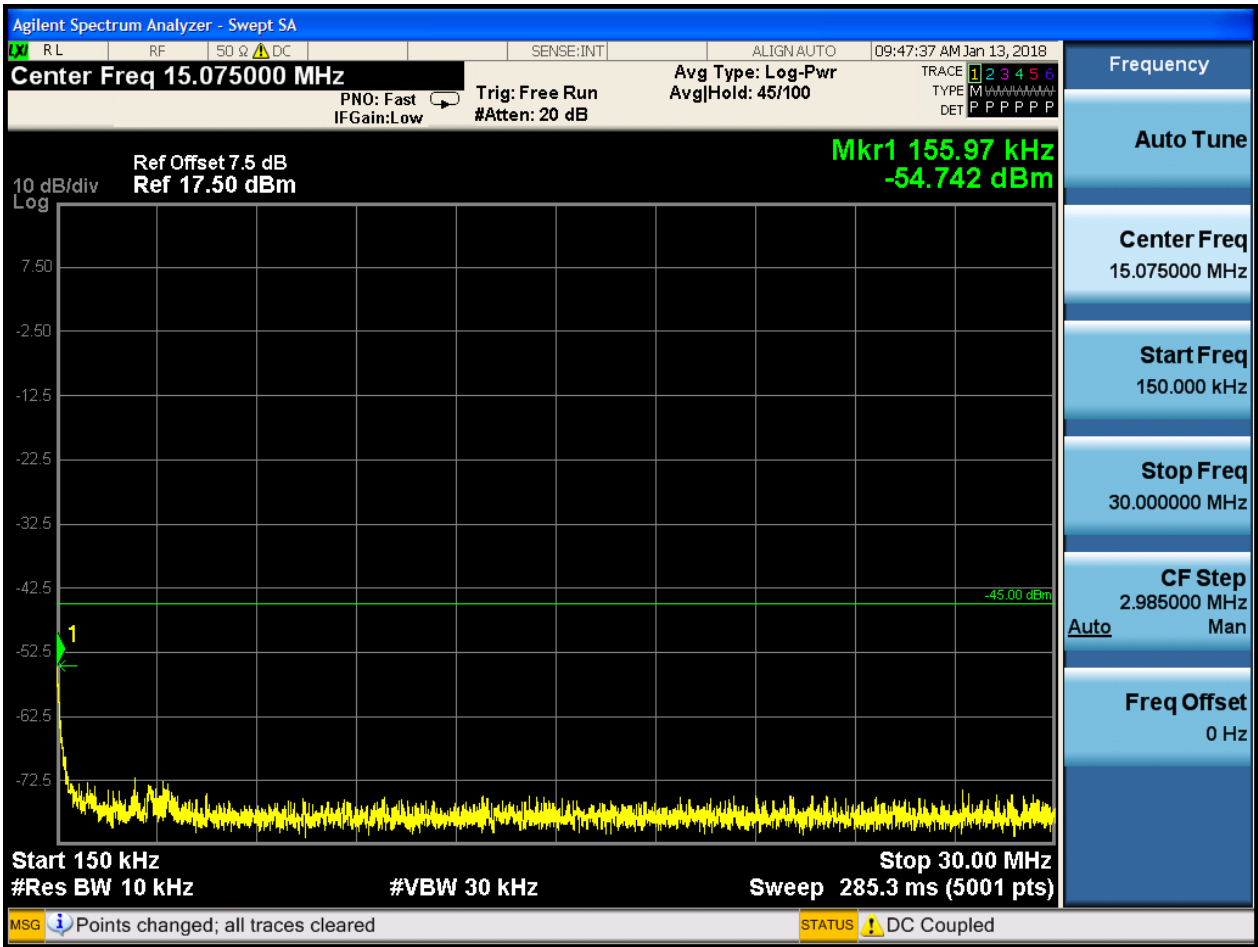


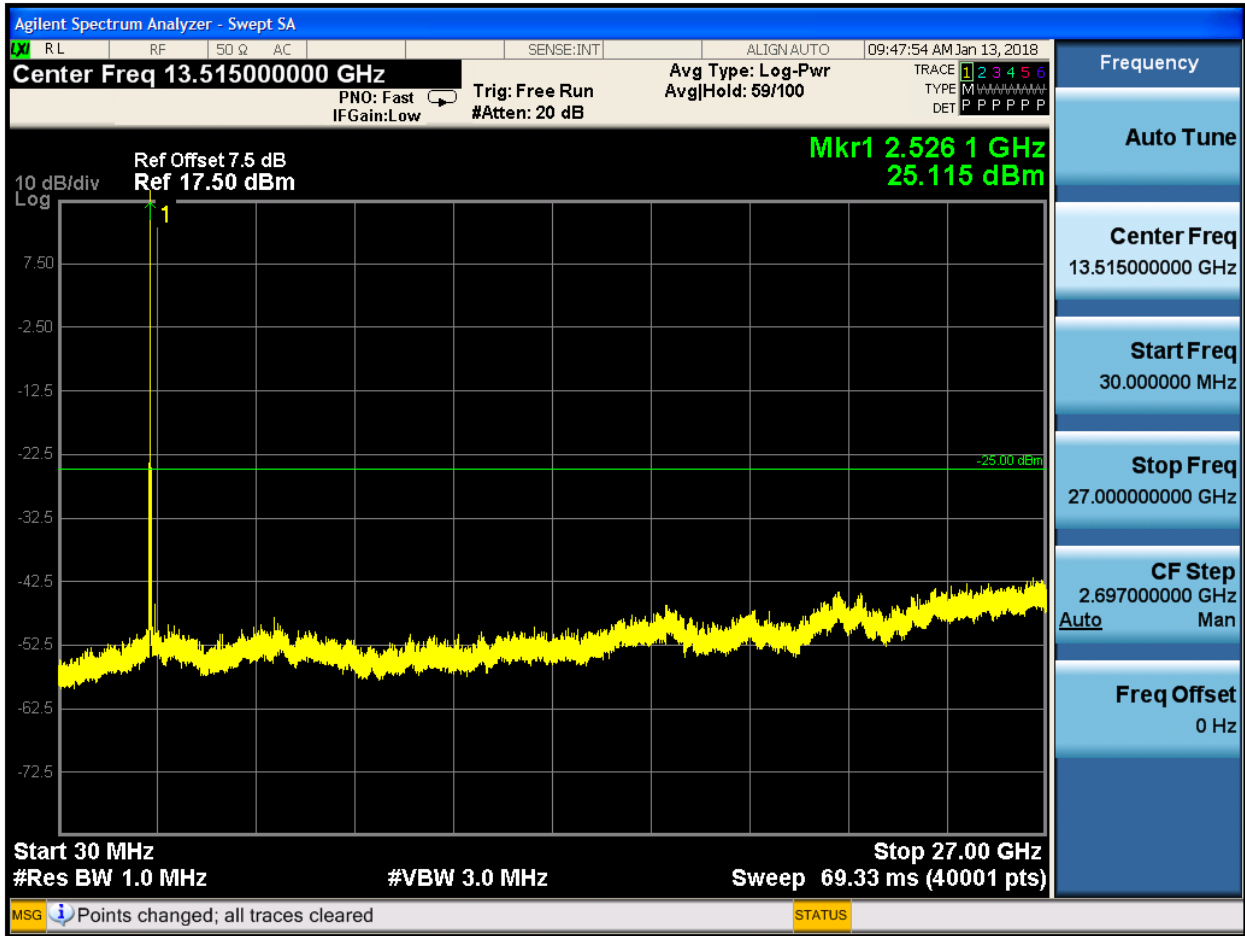


6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0



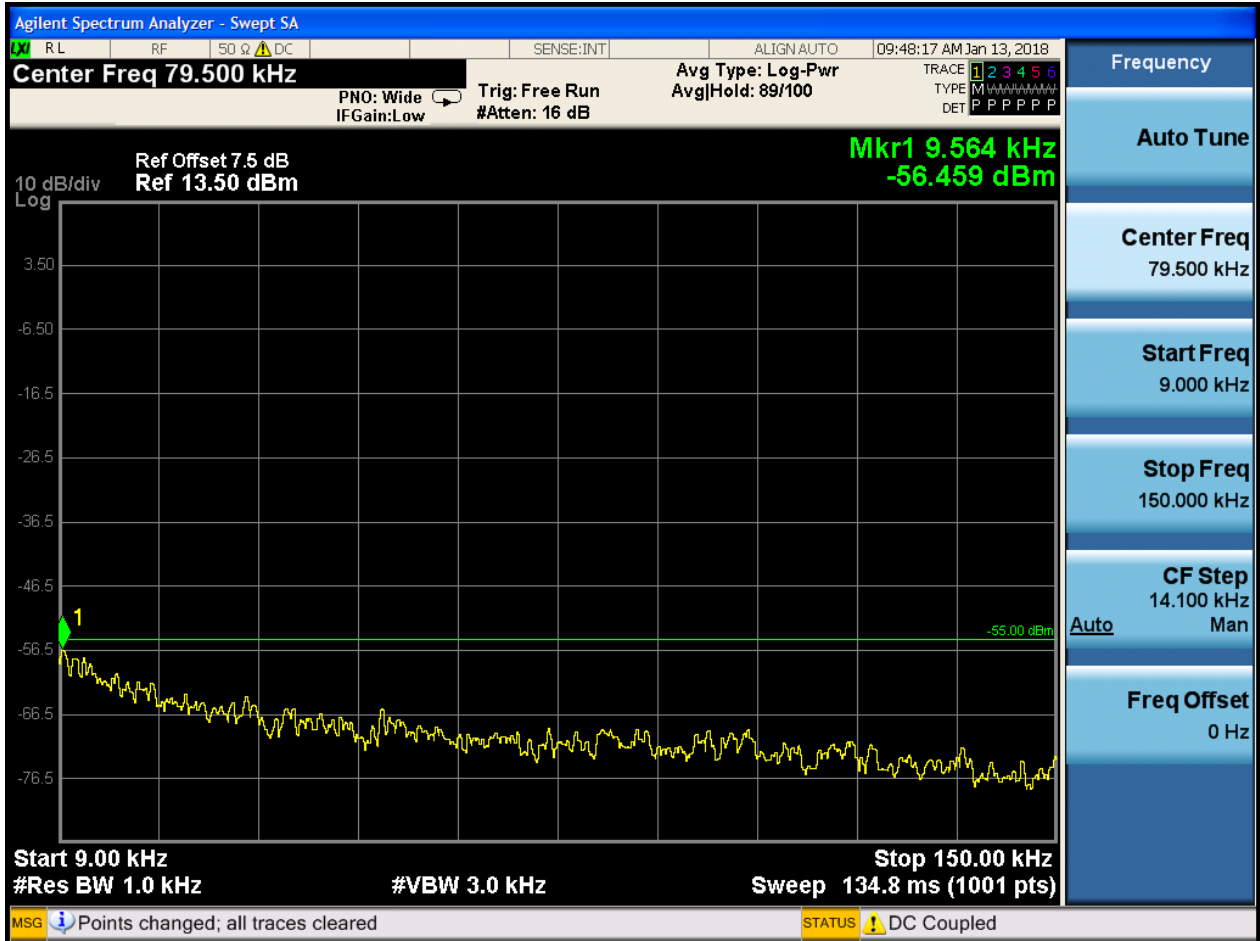


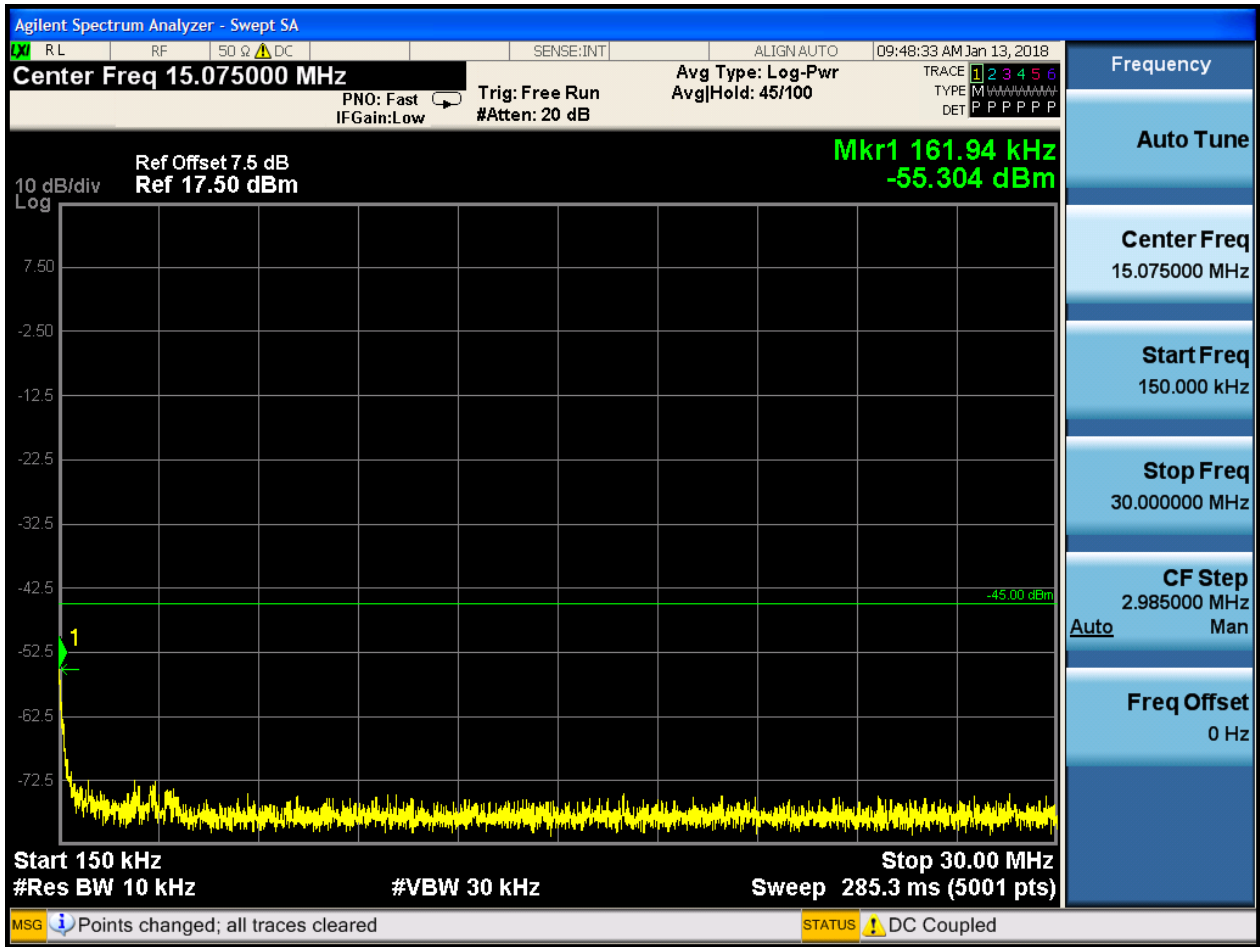


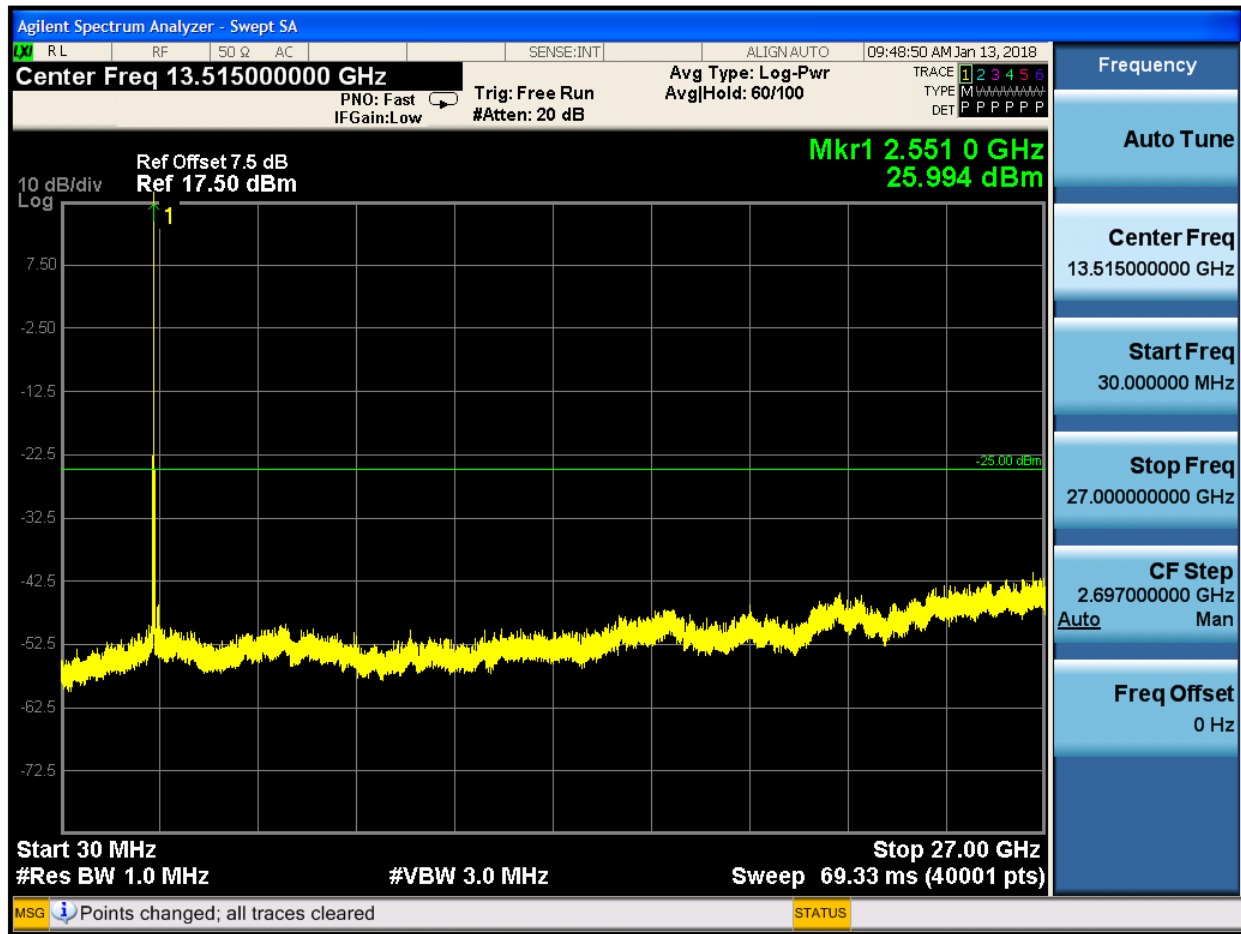


6.1.1.2.4.3 Test Channel = HCH

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, RBW = 200Hz, VBW = 600 Hz, Detector: PK

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

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

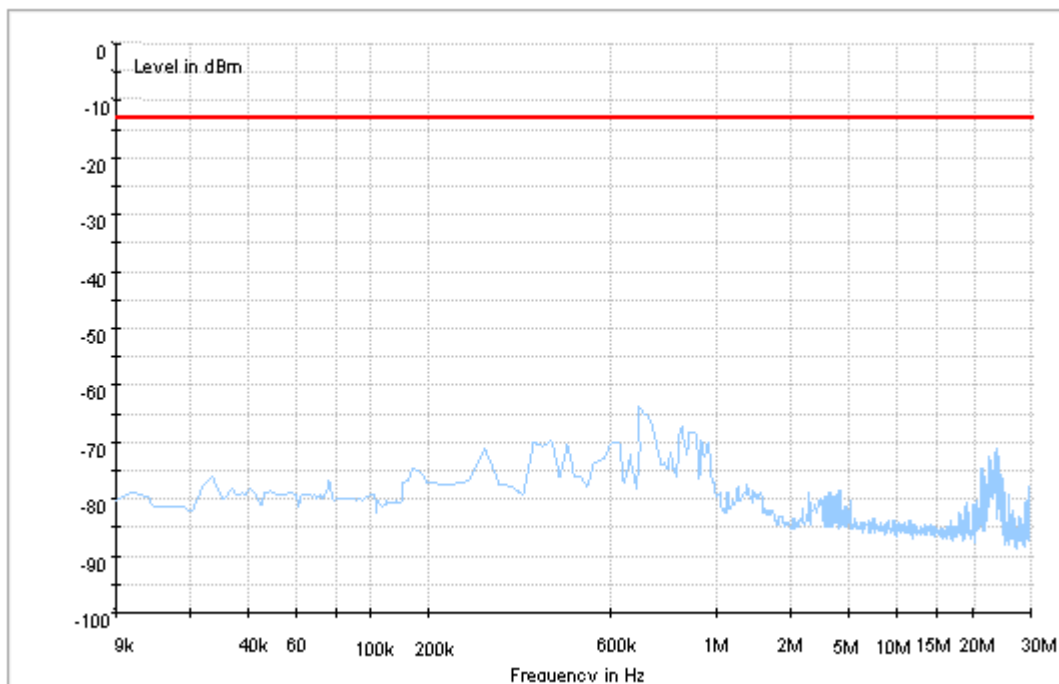
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

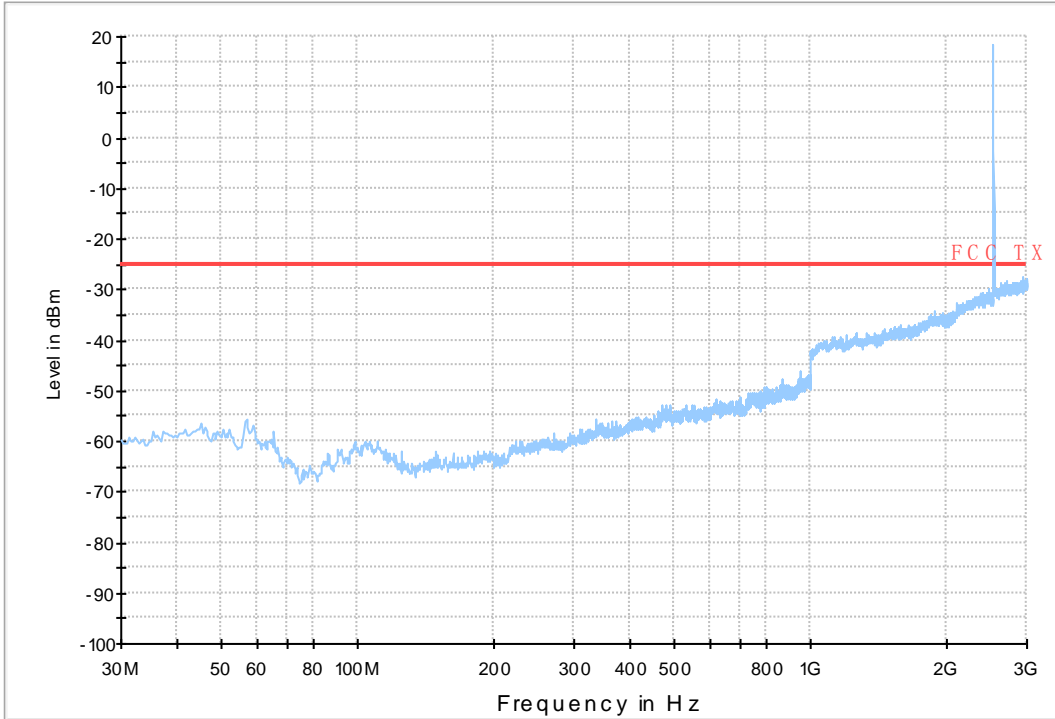
7.1 For LTE

7.1.1 Test Band = BAND7

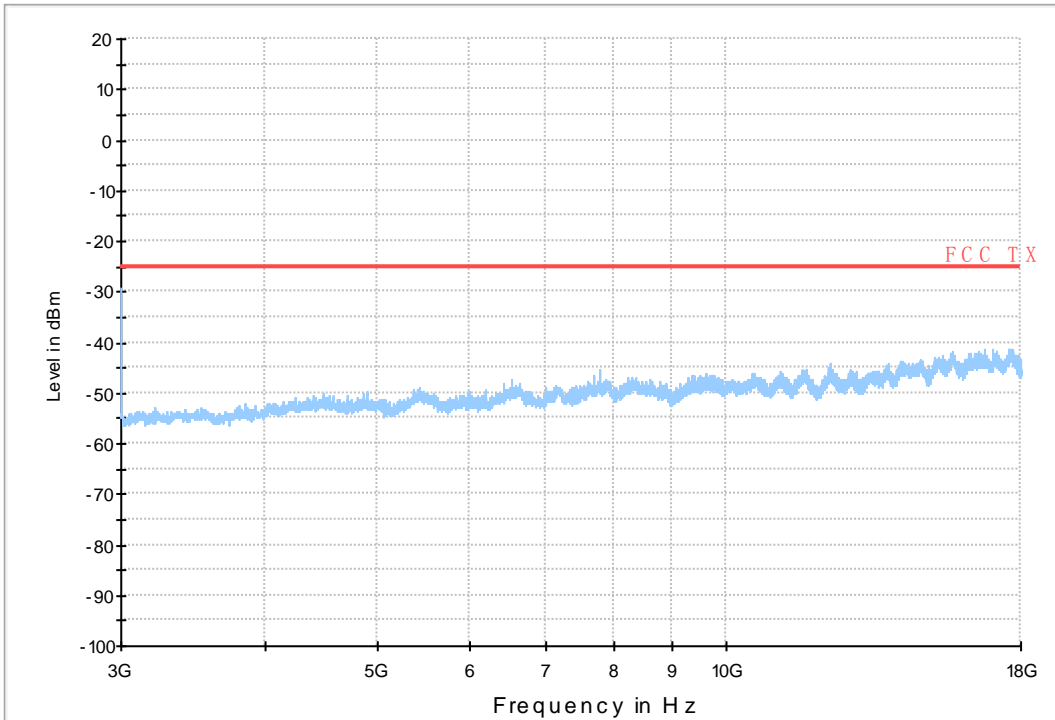
7.1.1.1 Test Bandwidth = 5

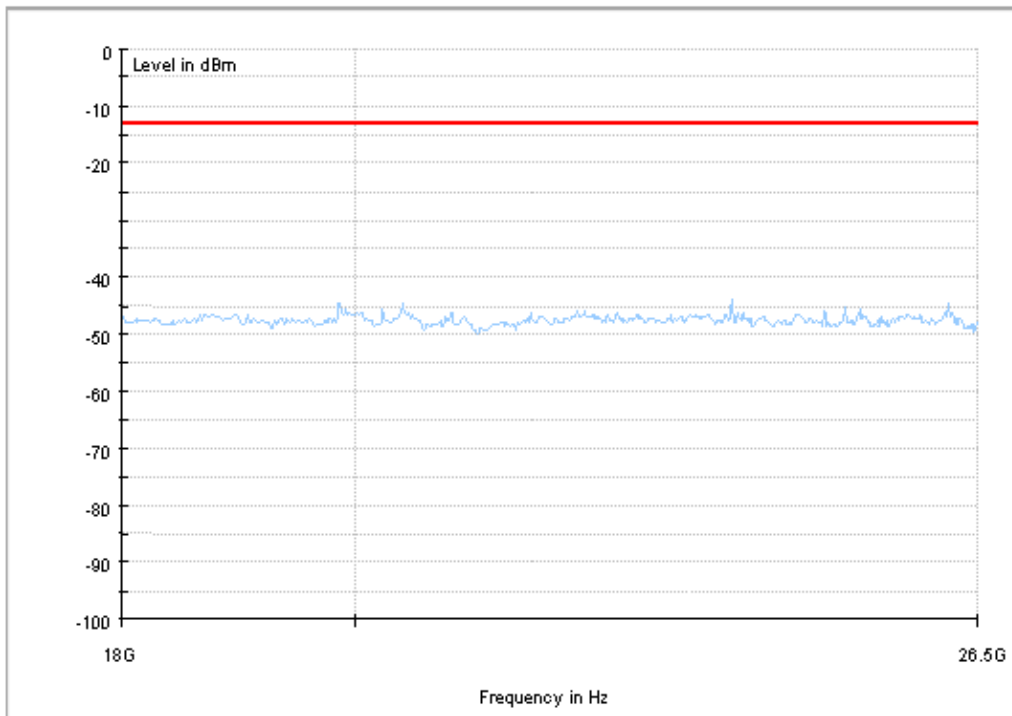


Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_L

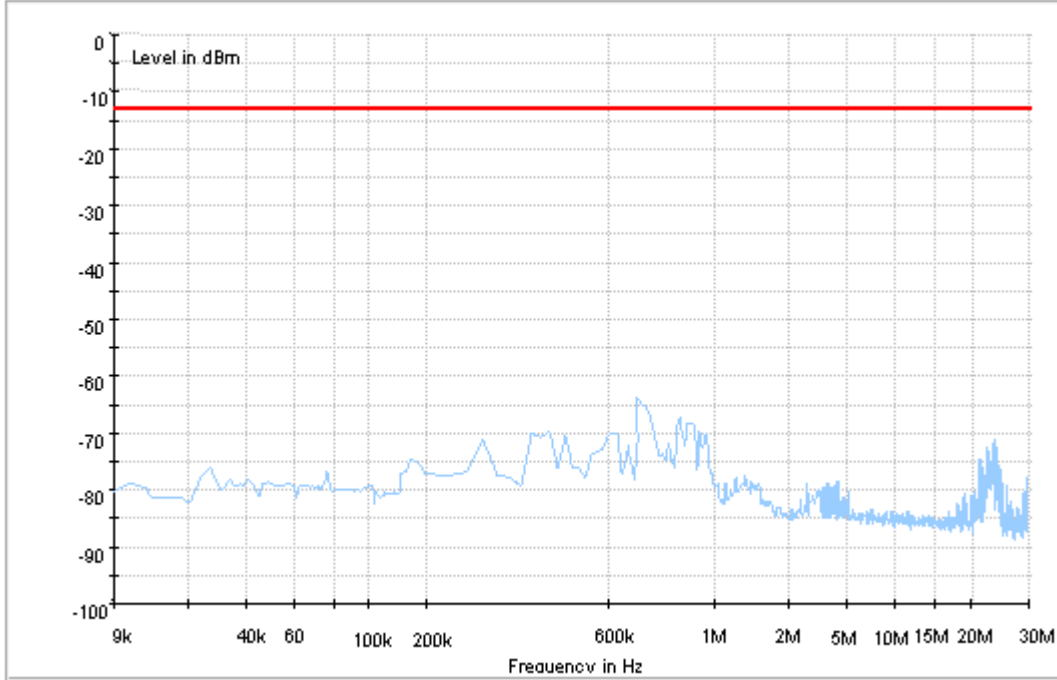


Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_H

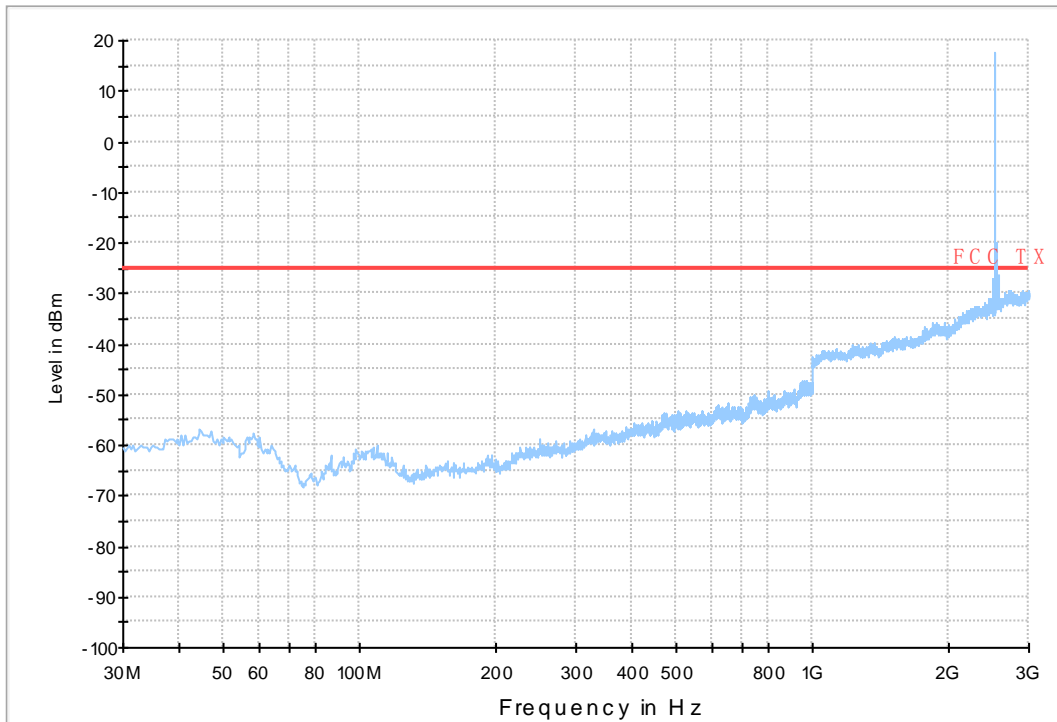




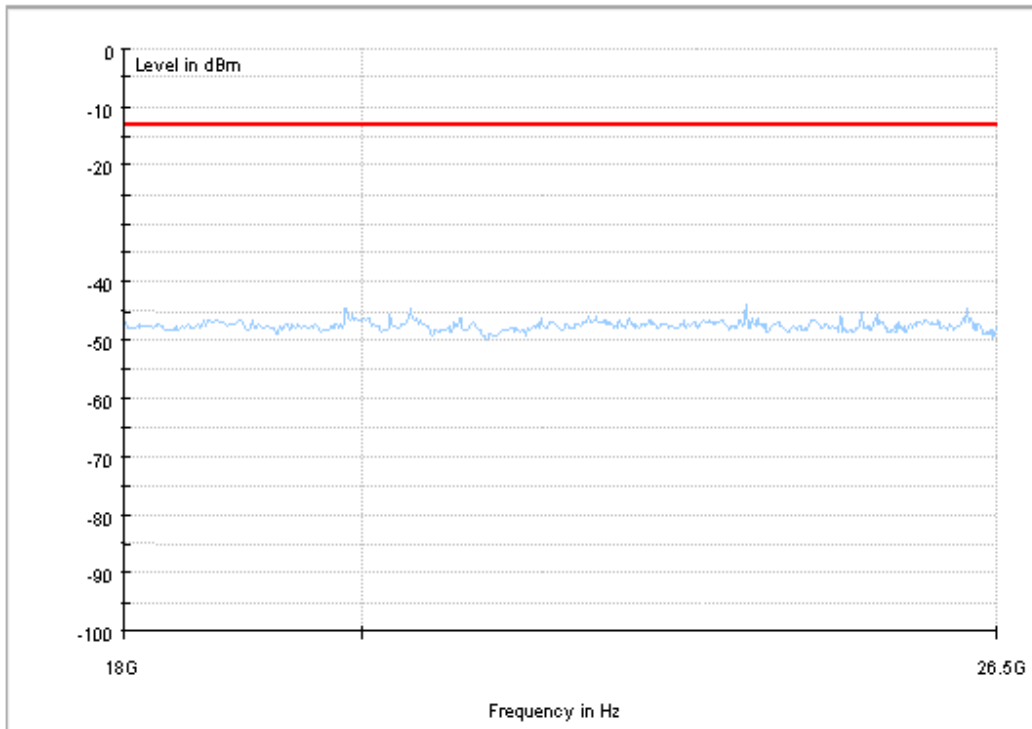
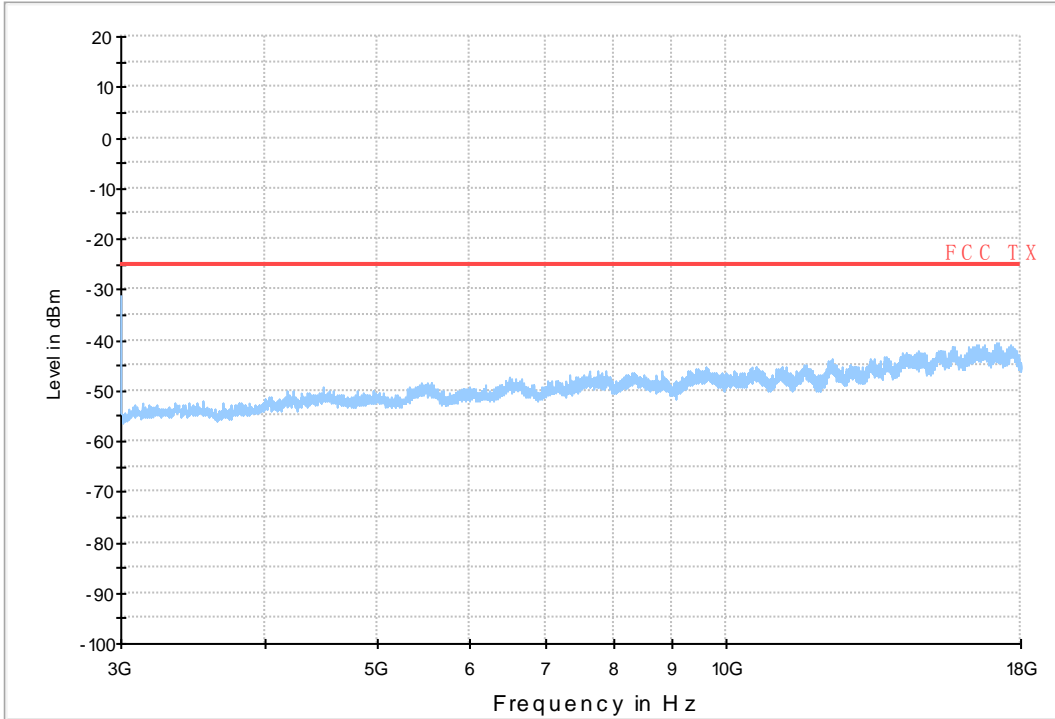
7.1.1.2 Test Bandwidth = 20



Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_L



Copy of RSE-TX-DIRECTOR ABOVE 1.5G Limit -25_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	2.25	0.0009	PASS
					VN	1.36	0.00054	PASS
					VH	1.80	0.00072	PASS
			MCH	TN	VL	-4.66	-0.00184	PASS
					VN	-2.92	-0.00115	PASS
					VH	-4.56	-0.0018	PASS
			HCH	TN	VL	0.69	0.00027	PASS
					VN	-0.34	-0.00013	PASS
					VH	-0.37	-0.00014	PASS
		10	LCH	TN	VL	-3.81	-0.00152	PASS
					VN	-3.06	-0.00122	PASS
					VH	-1.87	-0.00075	PASS
			MCH	TN	VL	-4.65	-0.00183	PASS
					VN	-4.06	-0.0016	PASS
					VH	-4.72	-0.00186	PASS
			HCH	TN	VL	-2.73	-0.00106	PASS
					VN	-1.43	-0.00056	PASS
					VH	-2.40	-0.00094	PASS
		15	LCH	TN	VL	1.57	0.00063	PASS
					VN	-0.76	-0.0003	PASS
					VH	-0.69	-0.00028	PASS
			MCH	TN	VL	1.65	0.00065	PASS
					VN	-3.53	-0.00139	PASS
					VH	-3.19	-0.00126	PASS
HCH	TN		VL	3.59	0.0014	PASS		
			VN	3.00	0.00117	PASS		
			VH	1.95	0.00076	PASS		
20	LCH	TN	VL	1.93	0.00077	PASS		
			VN	1.90	0.00076	PASS		
			VH	0.36	0.00014	PASS		
		MCH	TN	VL	-3.48	-0.00137	PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-2.36	-0.00093	PASS
					VH	-3.25	-0.00128	PASS
					VL	0.56	0.00022	PASS
			HCH	TN	VN	0.13	0.00005	PASS
					VH	0.27	0.00011	PASS
					VL	1.42	0.00057	PASS
		5	LCH	TN	VN	1.57	0.00063	PASS
					VH	1.76	0.0007	PASS
					VL	-2.59	-0.00102	PASS
			MCH	TN	VN	-4.49	-0.00177	PASS
					VH	-4.23	-0.00167	PASS
					VL	-0.09	-0.00004	PASS
	10	HCH	TN	VN	-0.13	-0.00005	PASS	
				VH	2.42	0.00094	PASS	
				VL	-3.33	-0.00133	PASS	
		LCH	TN	VN	-4.39	-0.00175	PASS	
				VH	-3.42	-0.00137	PASS	
				VL	-3.71	-0.00146	PASS	
	15	MCH	TN	VN	-3.12	-0.00123	PASS	
				VH	-3.06	-0.00121	PASS	
				VL	-3.20	-0.00125	PASS	
		HCH	TN	VN	-2.92	-0.00114	PASS	
				VH	-2.89	-0.00113	PASS	
				VL	1.37	0.00055	PASS	
	20	LCH	TN	VN	-0.41	-0.00016	PASS	
				VH	-1.67	-0.00067	PASS	
				VL	-4.19	-0.00165	PASS	
		MCH	TN	VN	-2.93	-0.00116	PASS	
				VH	-6.28	-0.00248	PASS	
				VL	2.25	0.00088	PASS	
	20	HCH	TN	VN	0.80	0.00031	PASS	
				VH	1.67	0.00065	PASS	
				VL	1.56	0.00062	PASS	
		LCH	TN	VN	2.65	0.00106	PASS	
				VH	-1.70	-0.00068	PASS	
				VL	-1.86	-0.00073	PASS	
	MCH	TN	VN	-2.79	-0.0011	PASS		
			VH	-3.53	-0.00139	PASS		
			VL	0.00	0	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-0.43	-0.00017	PASS
					VH	1.49	0.00058	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	2.46	0.00098	PASS
					-20	1.07	0.00043	PASS
					-10	-0.01	0	PASS
					0	1.36	0.00054	PASS
					10	-0.06	-0.00002	PASS
					20	2.89	0.00115	PASS
					30	3.05	0.00122	PASS
			MCH	VN	40	1.10	0.00044	PASS
					50	1.99	0.0008	PASS
					-30	-1.97	-0.00078	PASS
					-20	-3.59	-0.00142	PASS
					-10	-3.85	-0.00152	PASS
					0	-4.86	-0.00192	PASS
					10	-3.82	-0.00151	PASS
		HCH	VN	20	-3.03	-0.0012	PASS	
				30	-4.09	-0.00161	PASS	
				40	-3.13	-0.00123	PASS	
				50	-4.26	-0.00168	PASS	
				-30	1.13	0.00044	PASS	
				-20	1.60	0.00062	PASS	
				-10	-0.87	-0.00034	PASS	
		10	LCH	VN	0	0.46	0.00018	PASS
					10	-0.93	-0.00036	PASS
					20	0.90	0.00035	PASS
					30	-0.80	-0.00031	PASS
					40	-0.10	-0.00004	PASS
					50	0.40	0.00016	PASS
					-30	-4.33	-0.00173	PASS
-20	-2.45	-0.00098	PASS					
-10	-2.52	-0.00101	PASS					
0	-3.36	-0.00134	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
		15			10	-3.48	-0.00139	PASS		
					20	-2.50	-0.001	PASS		
					30	-4.22	-0.00168	PASS		
					40	-4.81	-0.00192	PASS		
					50	-3.68	-0.00147	PASS		
			MCH	VN	-30	-3.62	-0.00143	PASS		
					-20	-1.36	-0.00054	PASS		
					-10	-2.45	-0.00097	PASS		
					0	-2.96	-0.00117	PASS		
					10	-3.02	-0.00119	PASS		
					20	-3.10	-0.00122	PASS		
					30	-4.73	-0.00187	PASS		
					40	-4.29	-0.00169	PASS		
					50	-3.73	-0.00147	PASS		
					HCH	VN	-30	-3.08	-0.0012	PASS
			-20	-3.82			-0.00149	PASS		
			-10	-3.35			-0.00131	PASS		
			0	-2.06			-0.0008	PASS		
			10	-2.55			-0.00099	PASS		
			20	-4.61			-0.0018	PASS		
			30	-3.79			-0.00148	PASS		
			40	-3.10			-0.00121	PASS		
			LCH	VN	-30	0.47	0.00019	PASS		
					-20	0.01	0	PASS		
					-10	0.00	0	PASS		
					0	1.23	0.00049	PASS		
					10	1.77	0.00071	PASS		
					20	0.01	0	PASS		
					30	-0.03	-0.00001	PASS		
					40	-1.19	-0.00047	PASS		
					50	0.36	0.00014	PASS		
					MCH	VN	-30	-1.86	-0.00073	PASS
							-20	-3.45	-0.00136	PASS
-10	-1.99	-0.00079					PASS			
0	-4.52	-0.00178					PASS			
10	-1.85	-0.00073					PASS			
20	-2.68	-0.00106					PASS			
30	-3.96	-0.00156	PASS							

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					40	-4.32	-0.0017	PASS			
					50	-3.42	-0.00135	PASS			
			HCH	VN	-30	2.47	0.00096	PASS			
					-20	2.39	0.00093	PASS			
					-10	1.86	0.00073	PASS			
					0	1.22	0.00048	PASS			
					10	1.03	0.0004	PASS			
					20	2.47	0.00096	PASS			
					30	1.59	0.00062	PASS			
					40	2.13	0.00083	PASS			
					50	2.53	0.00099	PASS			
					20	LCH	VN	-30	2.03	0.00081	PASS
								-20	2.39	0.00095	PASS
								-10	0.09	0.00004	PASS
								0	2.15	0.00086	PASS
		10	1.07	0.00043				PASS			
		20	1.07	0.00043				PASS			
		30	1.42	0.00057				PASS			
		40	1.95	0.00078				PASS			
		50	1.49	0.00059		PASS					
		MCH	VN	-30		-3.85	-0.00152	PASS			
				-20		-2.90	-0.00114	PASS			
				-10		-4.35	-0.00172	PASS			
				0		-2.85	-0.00112	PASS			
				10		-4.48	-0.00177	PASS			
				20		-2.62	-0.00103	PASS			
				30	-3.32	-0.00131	PASS				
		40	-3.66	-0.00144	PASS						
		50	-3.03	-0.0012	PASS						
		HCH	VN	-30	-0.53	-0.00021	PASS				
				-20	-0.31	-0.00012	PASS				
				-10	-0.70	-0.00027	PASS				
				0	-0.49	-0.00019	PASS				
				10	0.80	0.00031	PASS				
				20	-0.72	-0.00028	PASS				
				30	0.01	0	PASS				
				40	1.04	0.00041	PASS				
		50	0.27	0.00011	PASS						
		LTE/TM2	5	LCH	VN	-30	1.82	0.00073	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	2.40	0.00096	PASS
					-10	1.90	0.00076	PASS
					0	1.29	0.00052	PASS
					10	1.49	0.0006	PASS
					20	1.63	0.00065	PASS
					30	2.40	0.00096	PASS
					40	0.29	0.00012	PASS
					50	0.64	0.00026	PASS
			MCH	VN	-30	-2.70	-0.00107	PASS
					-20	-4.13	-0.00163	PASS
					-10	-4.12	-0.00163	PASS
					0	-2.50	-0.00099	PASS
					10	-3.40	-0.00134	PASS
					20	-2.53	-0.001	PASS
					30	-2.55	-0.00101	PASS
					40	-3.30	-0.0013	PASS
			HCH	VN	-30	-0.67	-0.00026	PASS
					-20	0.40	0.00016	PASS
					-10	1.29	0.0005	PASS
					0	0.66	0.00026	PASS
		10			0.66	0.00026	PASS	
		20			-0.41	-0.00016	PASS	
		30			-0.40	-0.00016	PASS	
		40			1.99	0.00078	PASS	
		10	LCH	VN	-30	-2.98	-0.00119	PASS
					-20	-2.66	-0.00106	PASS
					-10	-4.21	-0.00168	PASS
					0	-3.40	-0.00136	PASS
					10	-3.18	-0.00127	PASS
					20	-4.52	-0.0018	PASS
					30	-4.32	-0.00172	PASS
					40	-2.73	-0.00109	PASS
			50	-3.48	-0.00139	PASS		
			MCH	VN	-30	-4.49	-0.00177	PASS
					-20	-3.99	-0.00157	PASS
					-10	-3.29	-0.0013	PASS
		0			-4.16	-0.00164	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict				
					10	-3.58	-0.00141	PASS				
					20	-2.98	-0.00118	PASS				
					30	-4.32	-0.0017	PASS				
					40	-3.15	-0.00124	PASS				
					50	-3.22	-0.00127	PASS				
			HCH	VN				-30	-3.96	-0.00154	PASS	
								-20	-3.05	-0.00119	PASS	
								-10	-3.93	-0.00153	PASS	
								0	-2.55	-0.00099	PASS	
								10	-3.82	-0.00149	PASS	
						20	-3.36	-0.00131	PASS			
						30	-4.85	-0.00189	PASS			
						40	-2.78	-0.00108	PASS			
						50	-1.40	-0.00055	PASS			
						LCH	VN				-30	-0.62
			-20	-0.96							-0.00038	PASS
			-10	-2.92							-0.00116	PASS
			0	-0.24							-0.0001	PASS
			10	-1.73							-0.00069	PASS
			20	-0.29					-0.00012	PASS		
		30	-0.54	-0.00022					PASS			
		40	-0.63	-0.00025					PASS			
		50	-1.23	-0.00049					PASS			
		MCH	VN								-30	-3.09
						-20	-2.86				-0.00113	PASS
					-10	-2.86	-0.00113				PASS	
					0	-3.65	-0.00144				PASS	
					10	-4.28	-0.00169				PASS	
					20	0.10	0.00004		PASS			
					30	-2.55	-0.00101		PASS			
					40	-4.06	-0.0016		PASS			
					50	-3.38	-0.00133		PASS			
					HCH	VN					-30	2.52
		-20	1.67								0.00065	PASS
		-10	1.02					0.0004			PASS	
		0	2.65					0.00103			PASS	
		10	-0.07					-0.00003			PASS	
		20	0.96					0.00037	PASS			
		30	0.84					0.00033	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	1.90	0.00074	PASS
					50	1.57	0.00061	PASS
		20	LCH	VN	-30	3.49	0.00139	PASS
					-20	1.70	0.00068	PASS
					-10	0.47	0.00019	PASS
					0	1.02	0.00041	PASS
					10	2.80	0.00112	PASS
					20	2.43	0.00097	PASS
					30	0.39	0.00016	PASS
					40	1.60	0.00064	PASS
					50	6.27	0.0025	PASS
					MCH	VN	-30	-3.43
			-20	-4.06			-0.0016	PASS
			-10	-1.67			-0.00066	PASS
			0	-4.11			-0.00162	PASS
			10	-3.00			-0.00118	PASS
			20	-5.05			-0.00199	PASS
			30	-4.22			-0.00166	PASS
			40	-4.71			-0.00186	PASS
			HCH	VN	50	-4.78	-0.00189	PASS
					-30	1.44	0.00056	PASS
					-20	-1.32	-0.00052	PASS
					-10	1.29	0.0005	PASS
					0	-2.62	-0.00102	PASS
					10	-0.43	-0.00017	PASS
					20	-0.64	-0.00025	PASS
		30			-0.90	-0.00035	PASS	
		40	-1.95	-0.00076	PASS			
					50	-0.17	-0.00007	PASS

END