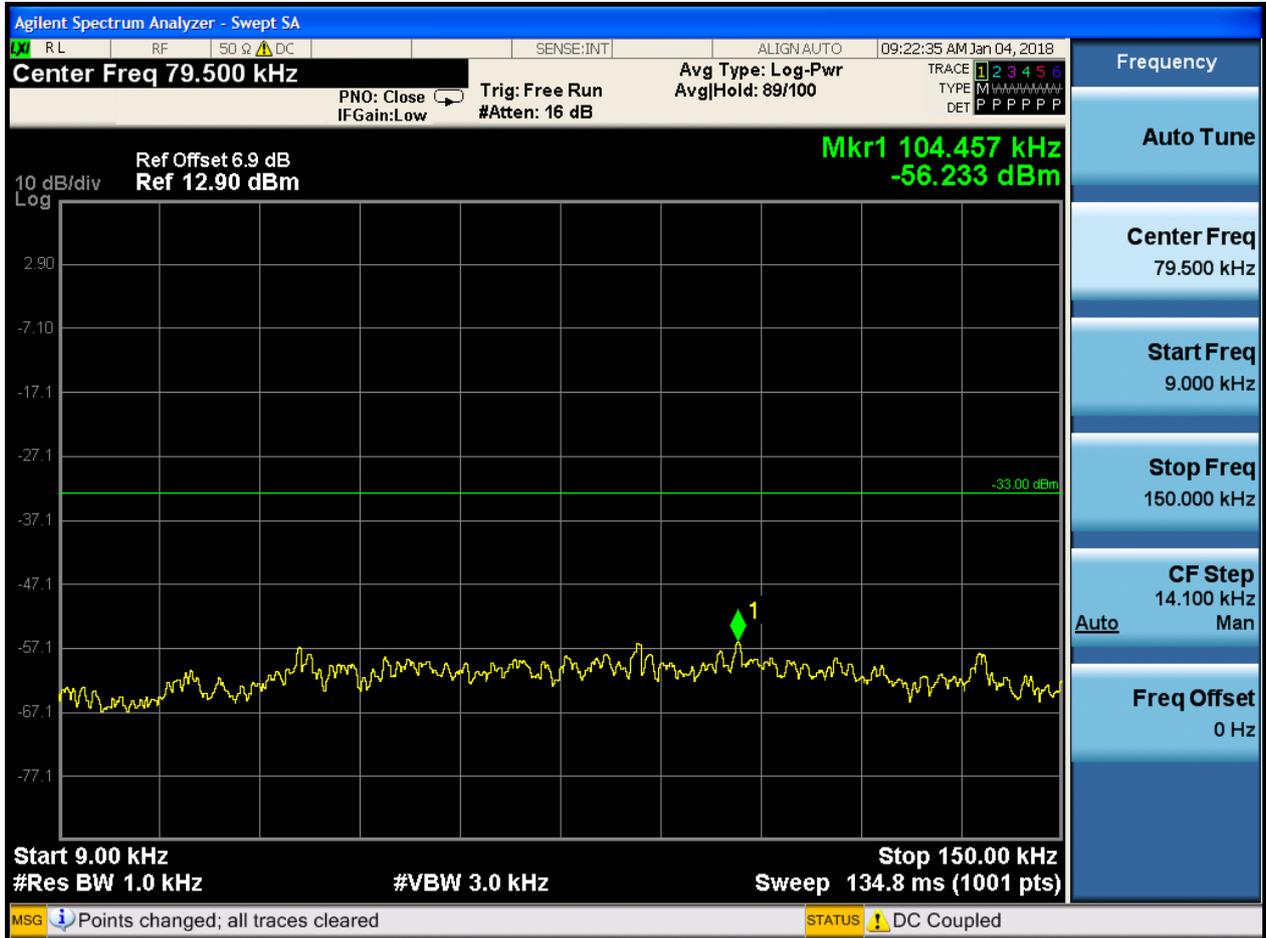
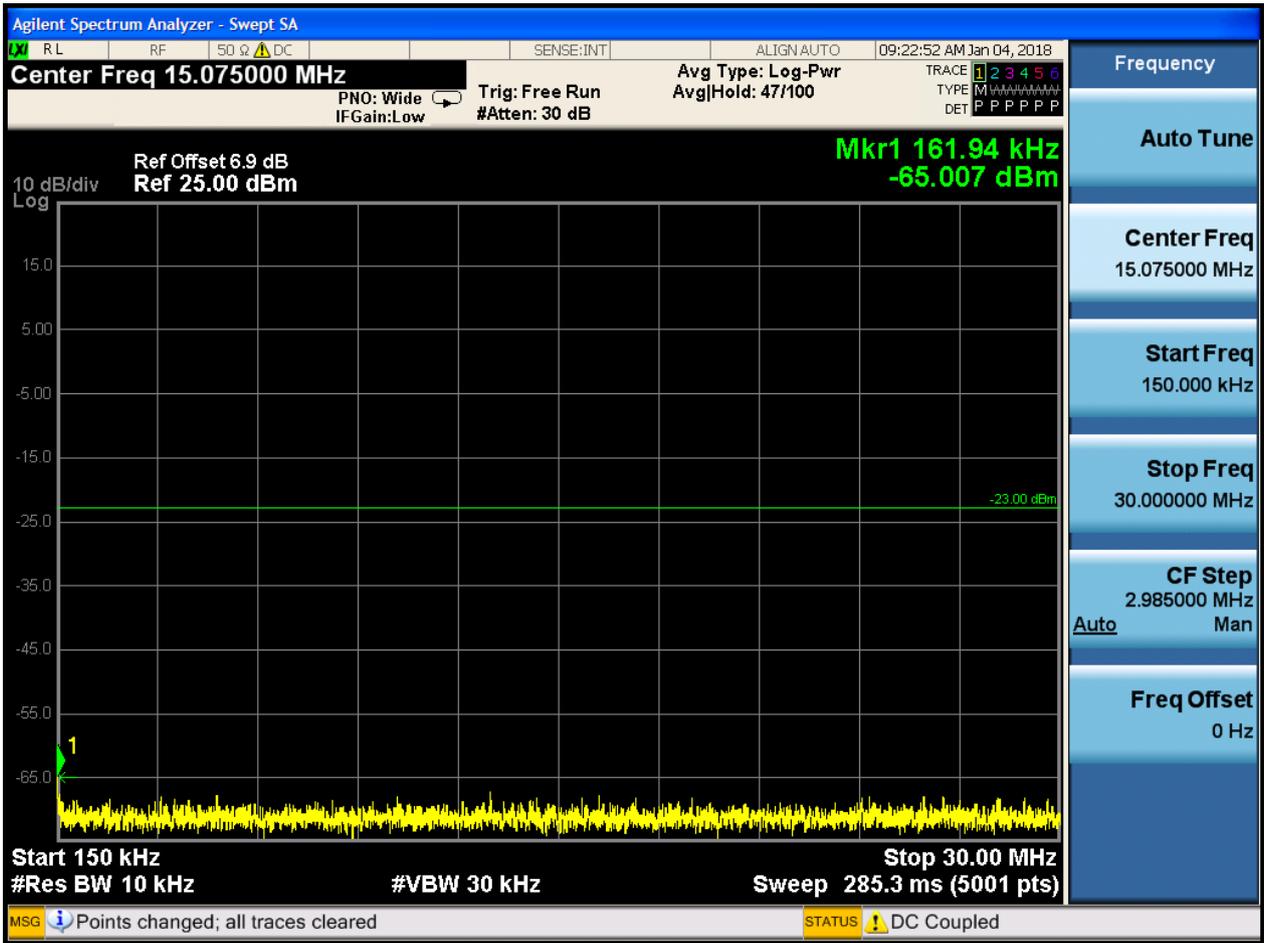




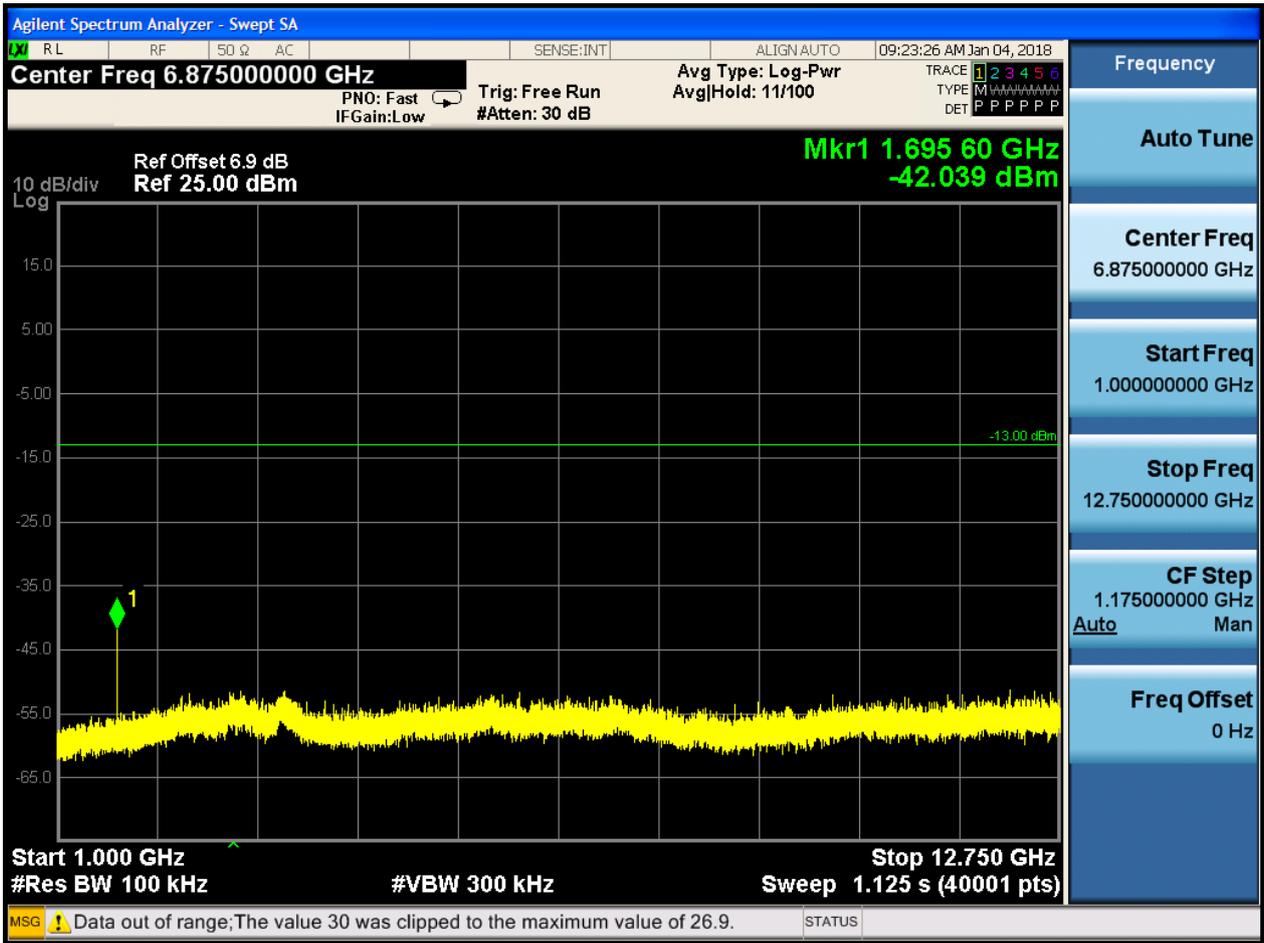
6.1.1.1.3 Test Channel = HCH

6.1.1.1.3.1 Test RB = RB1#0







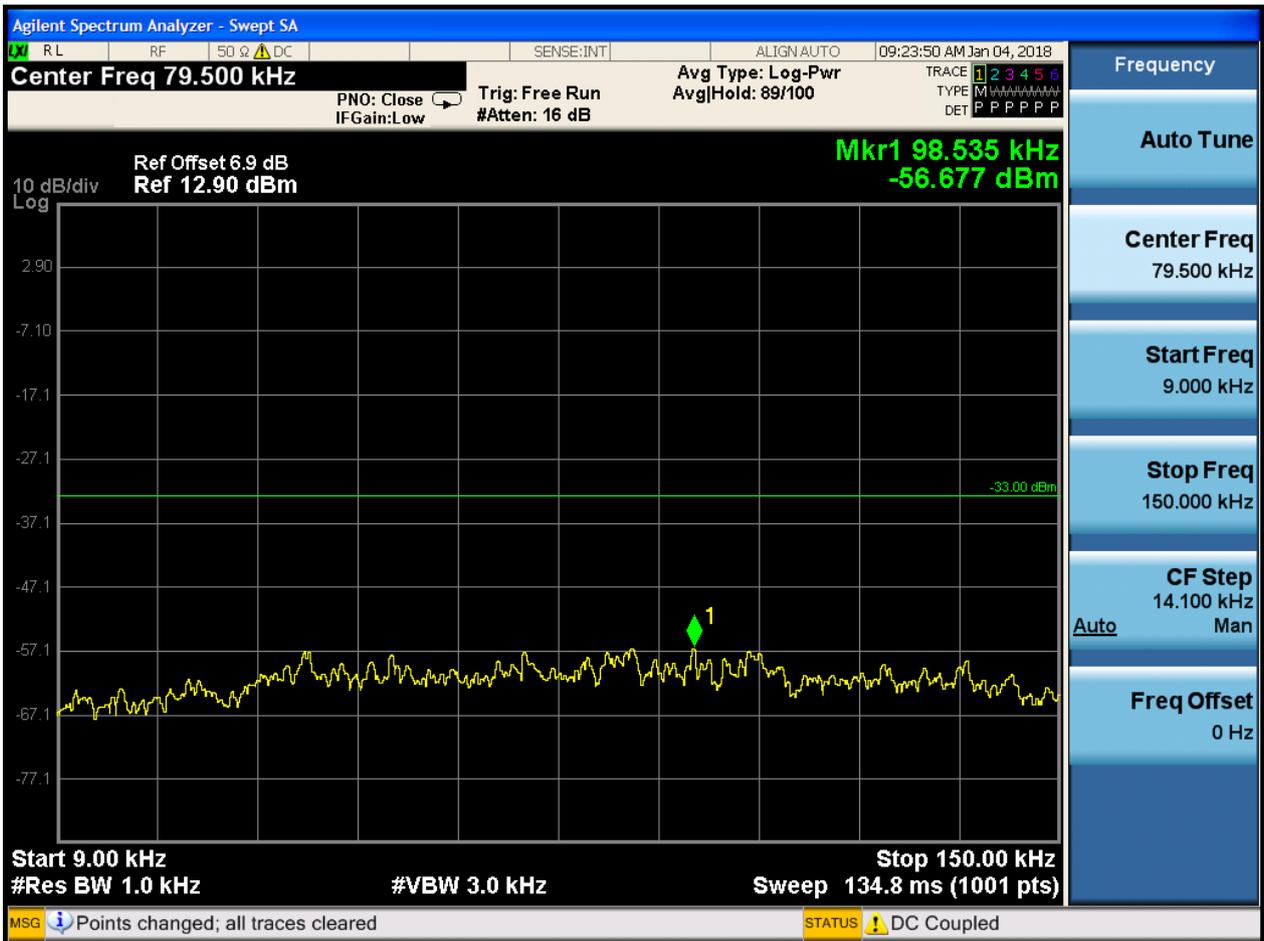


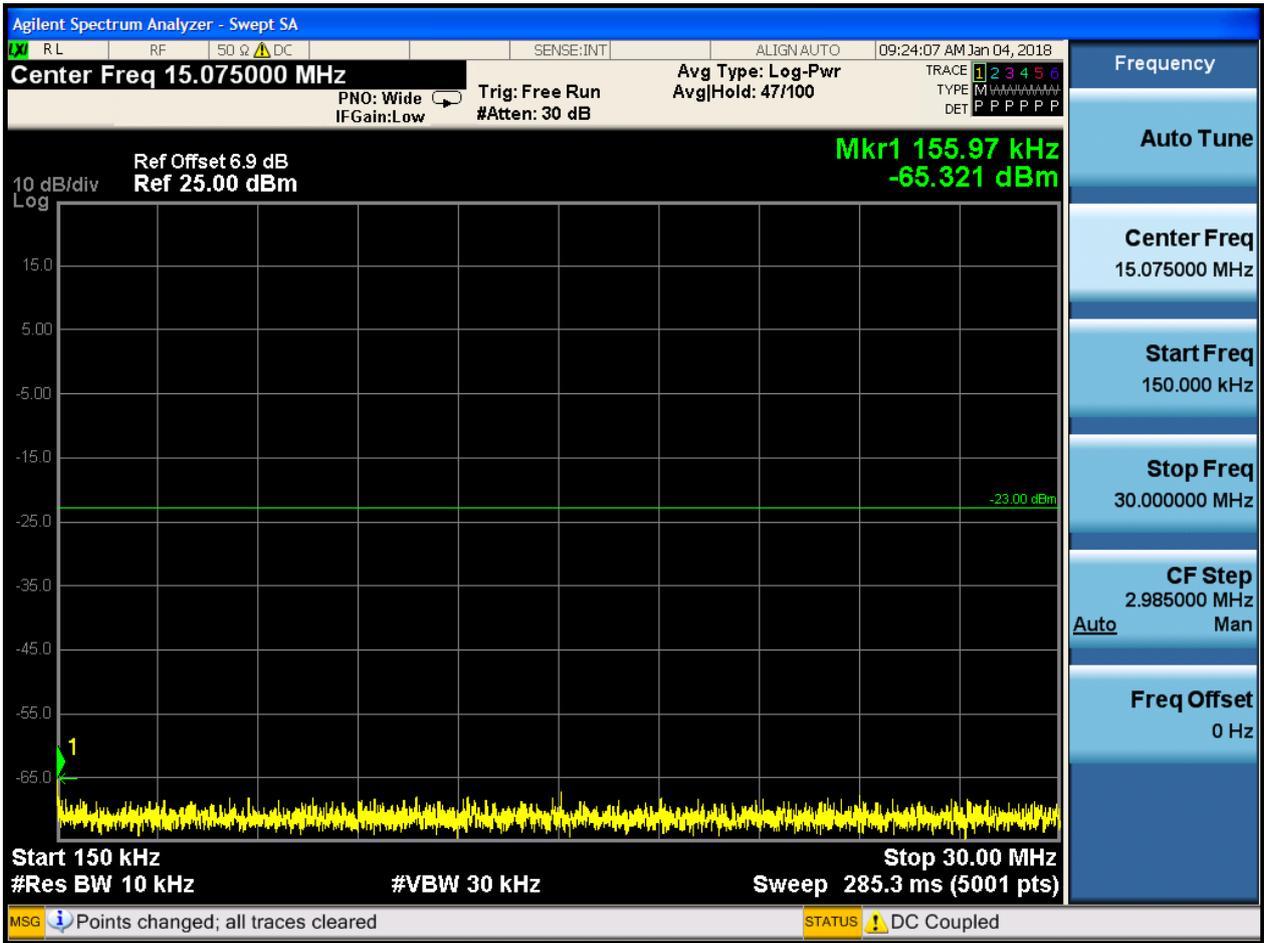


6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0





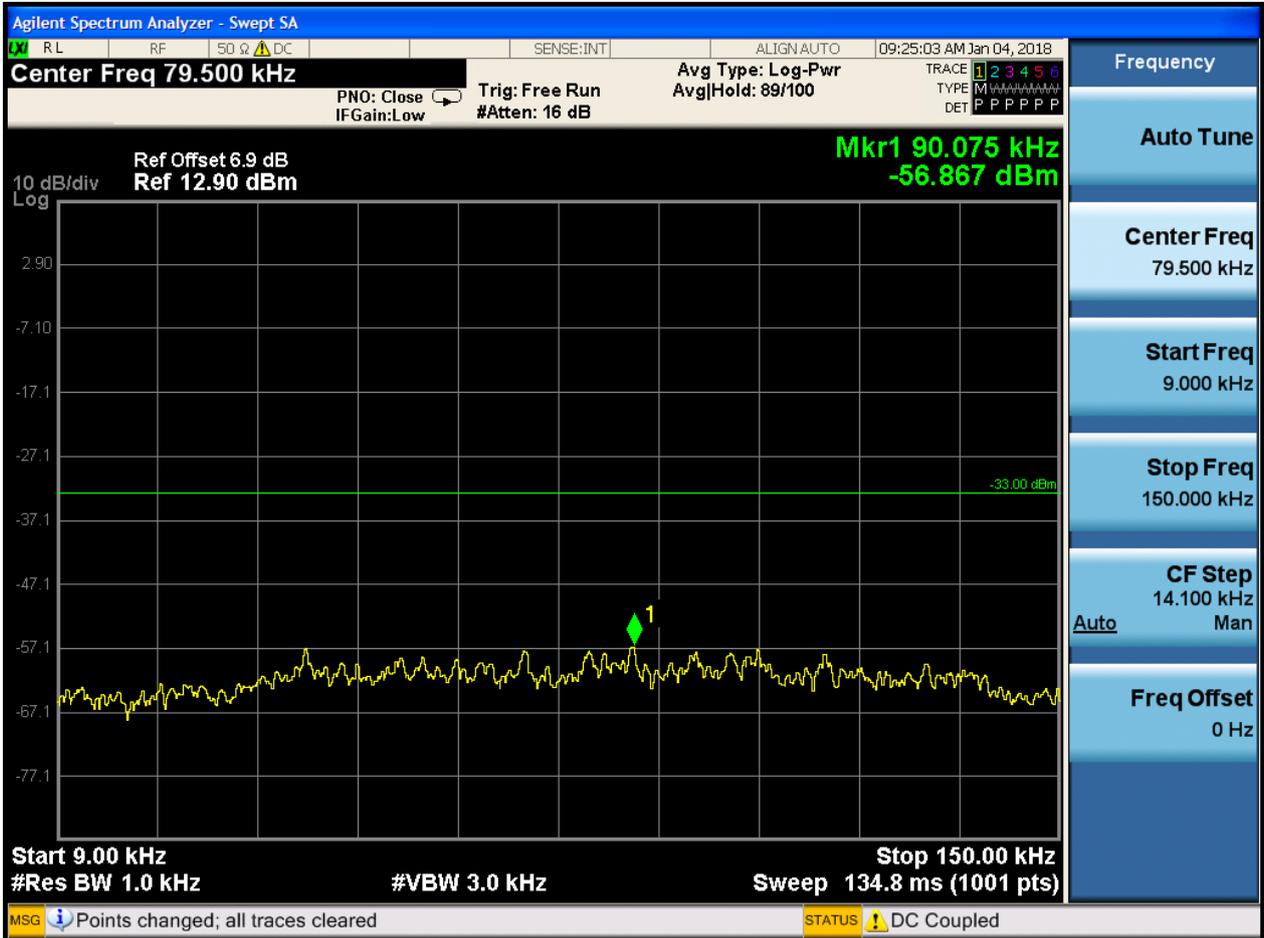


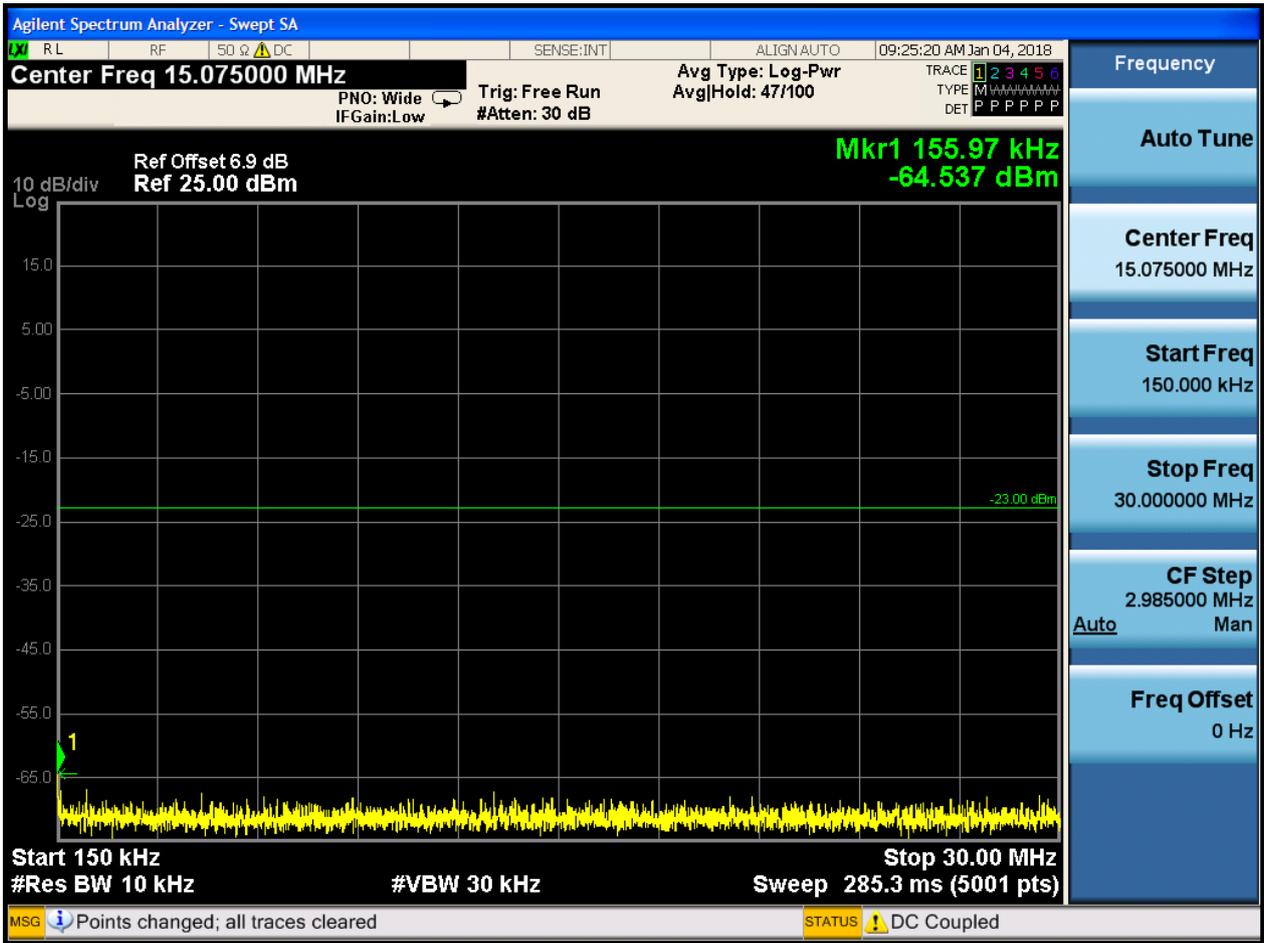


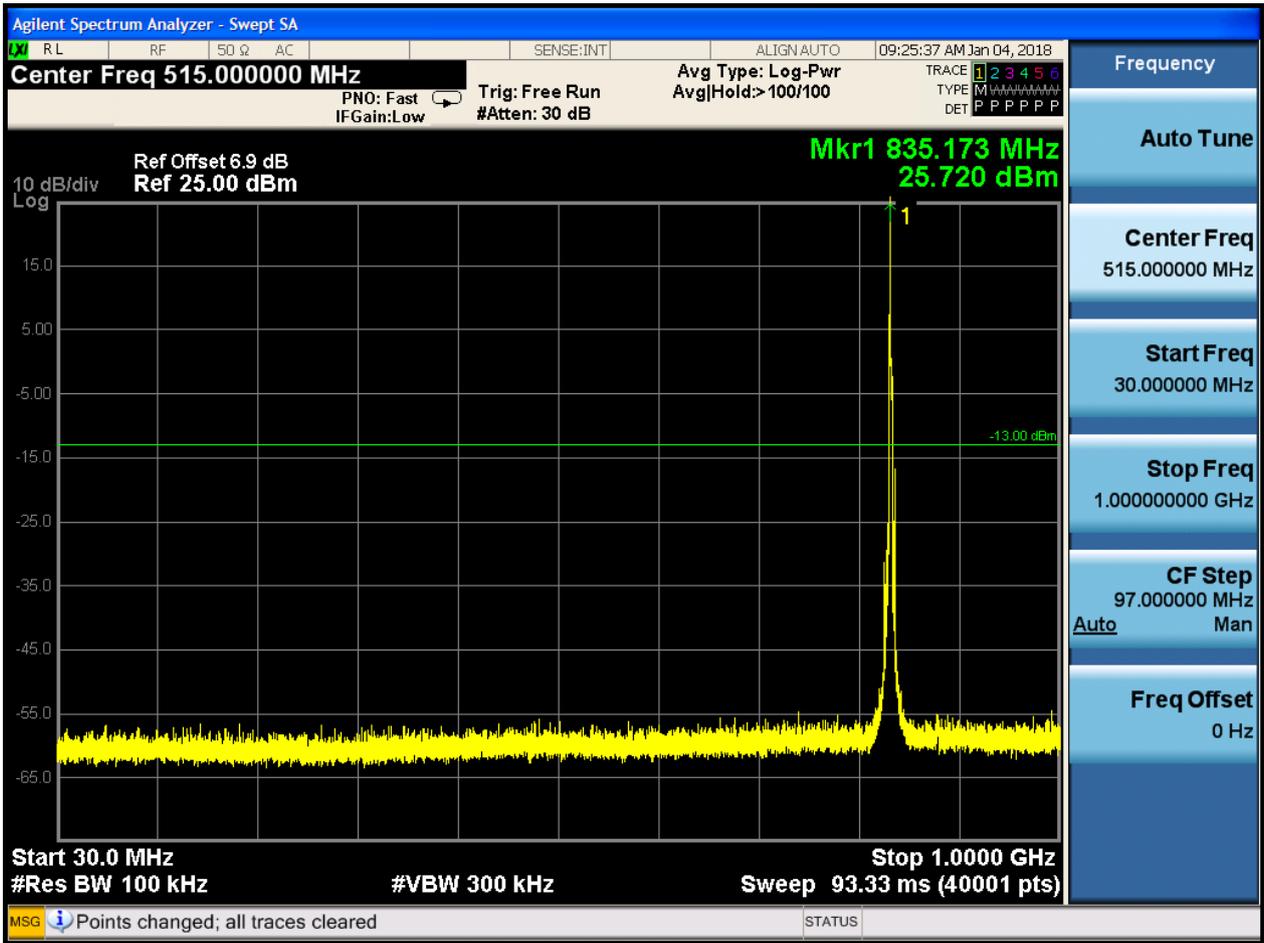


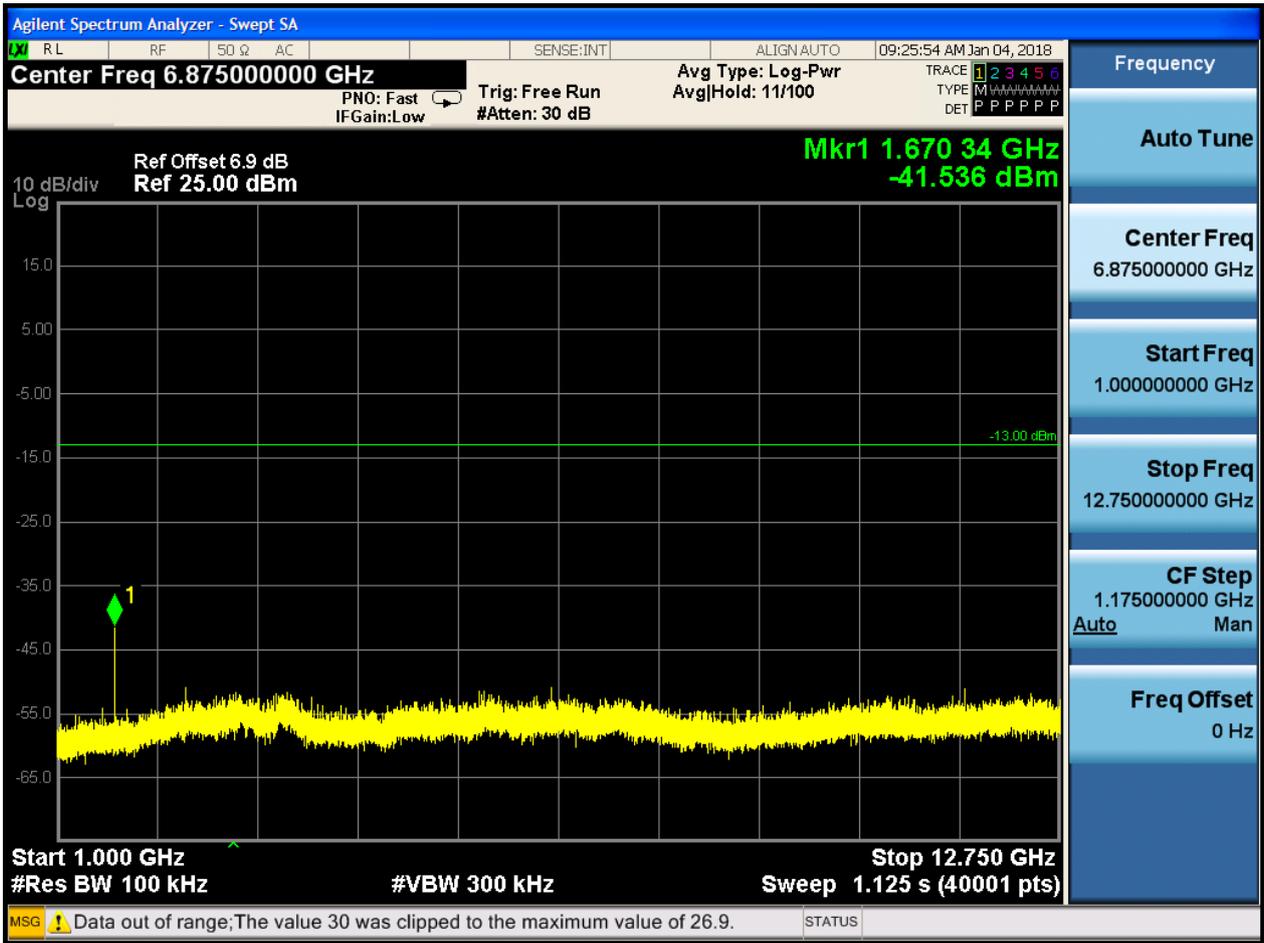
6.1.1.1.2.2 Test Channel = MCH

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







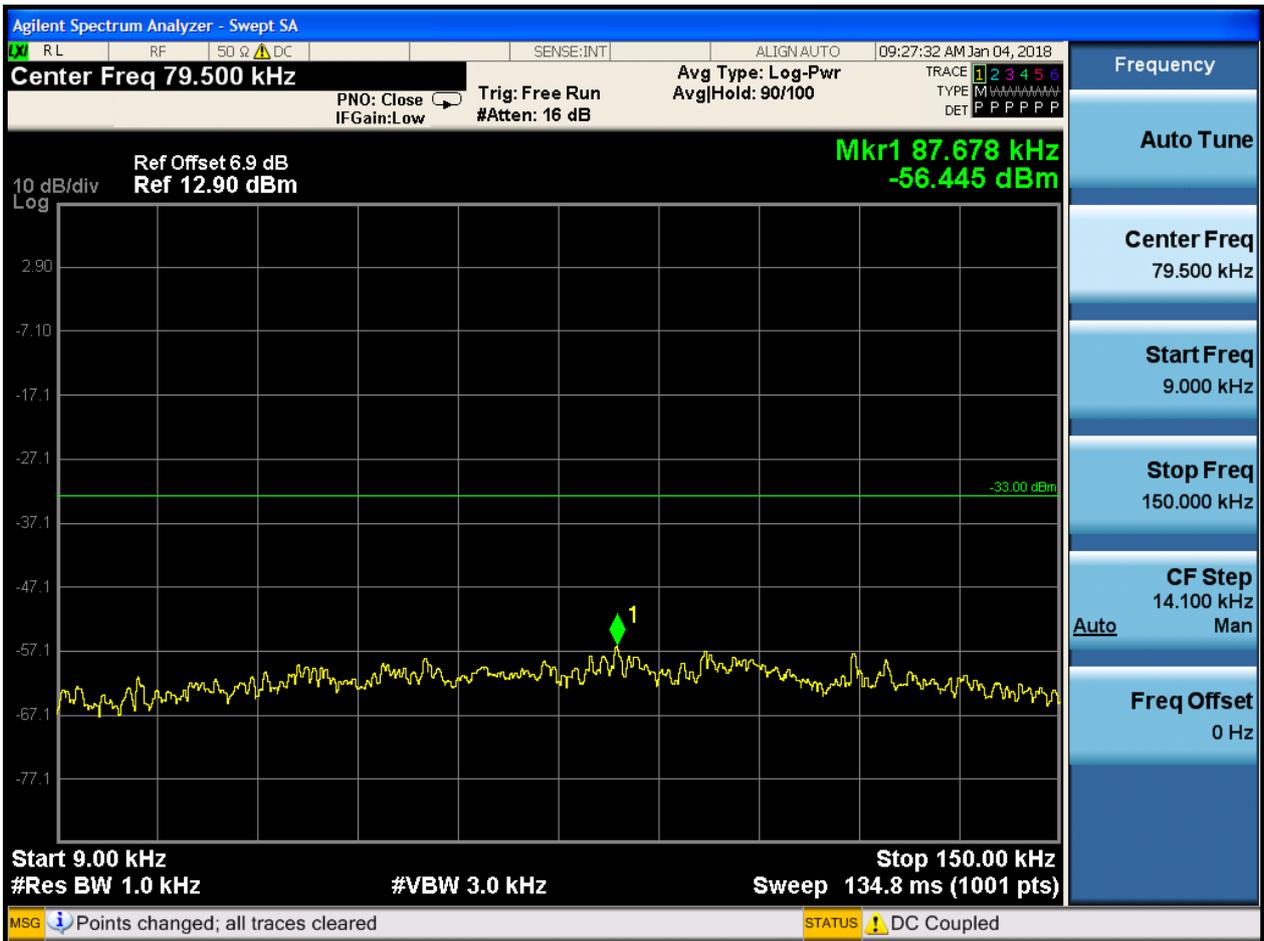




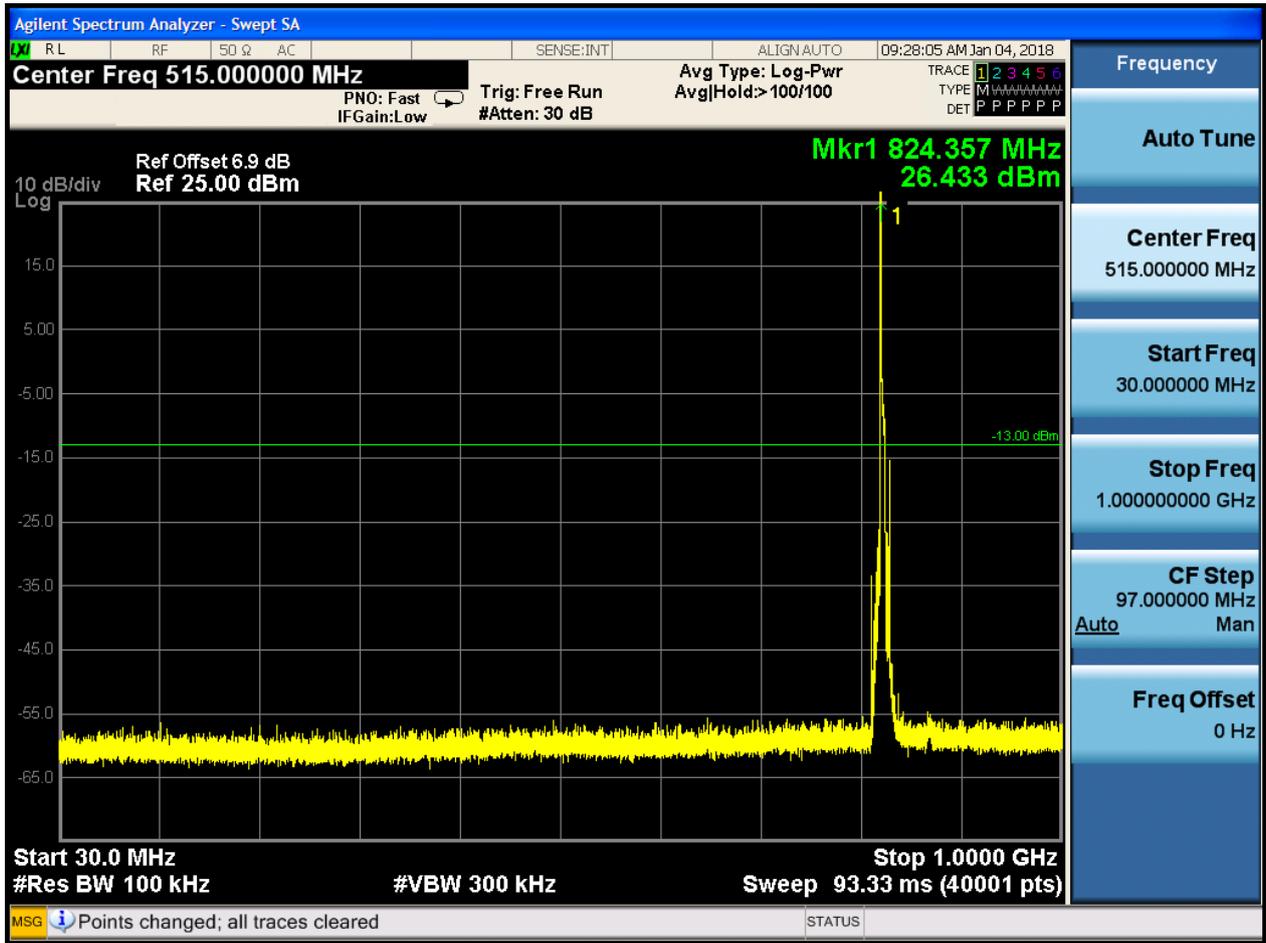
6.1.1.1.3 Test Bandwidth = 5

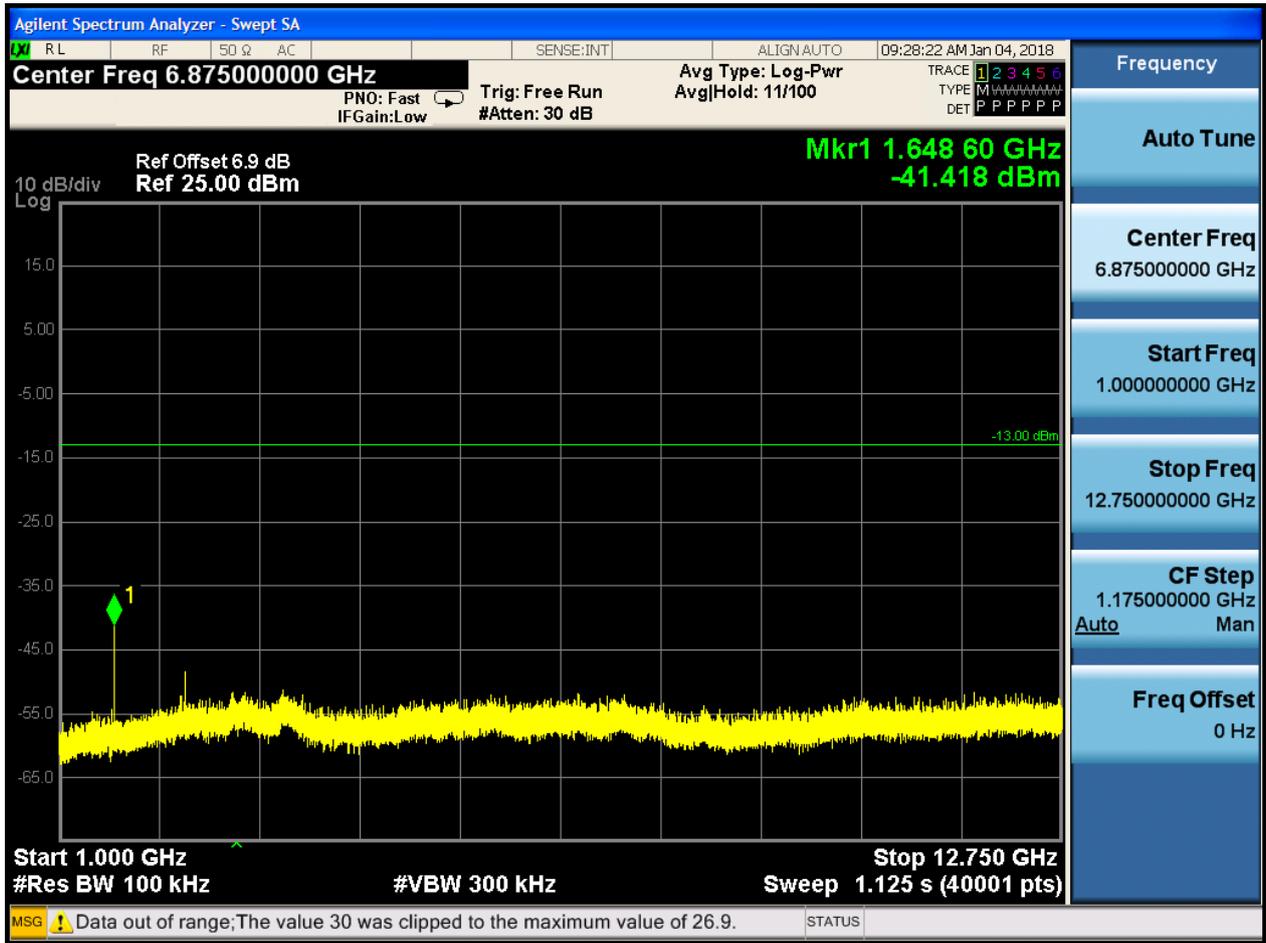
6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0







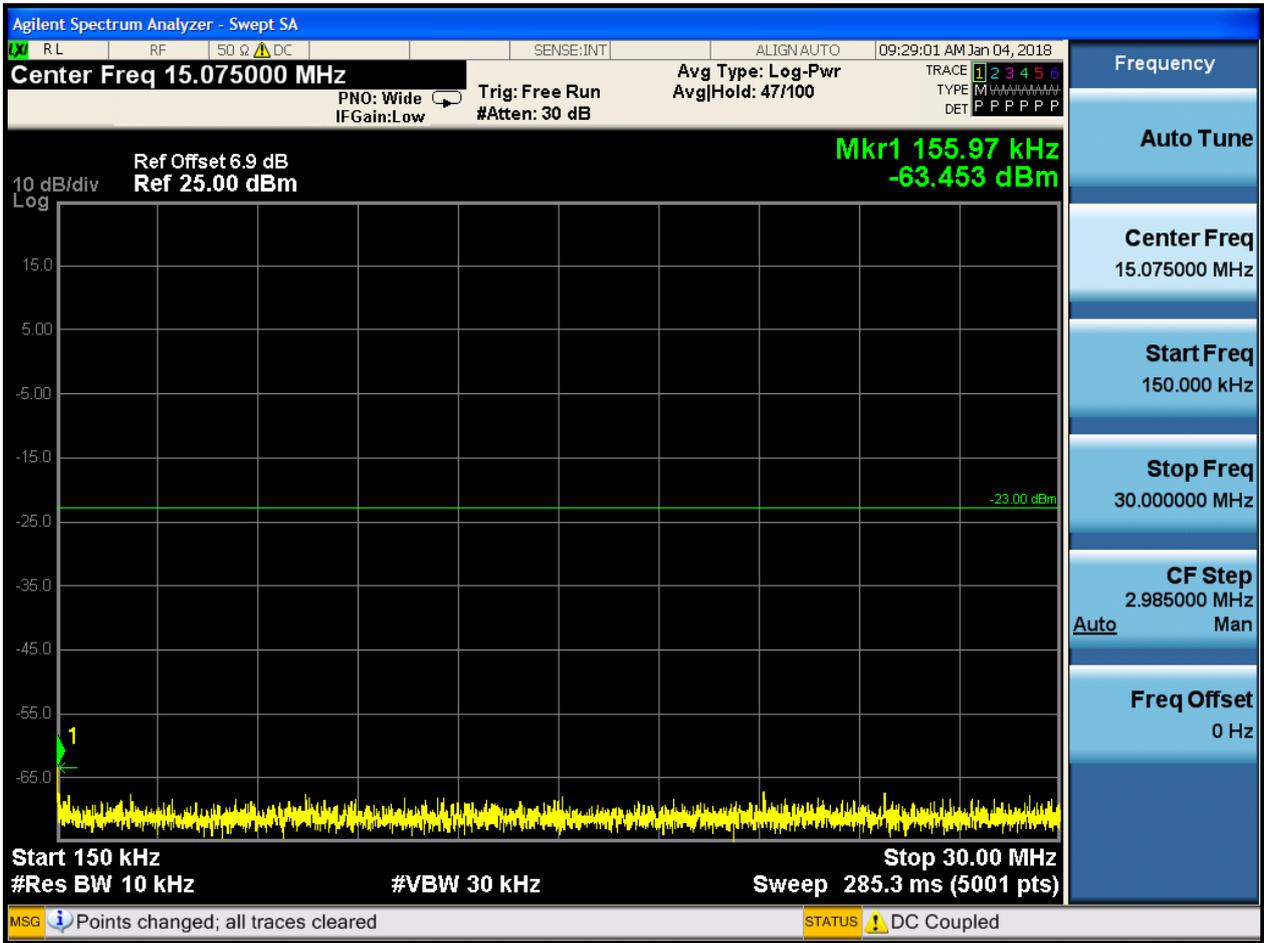


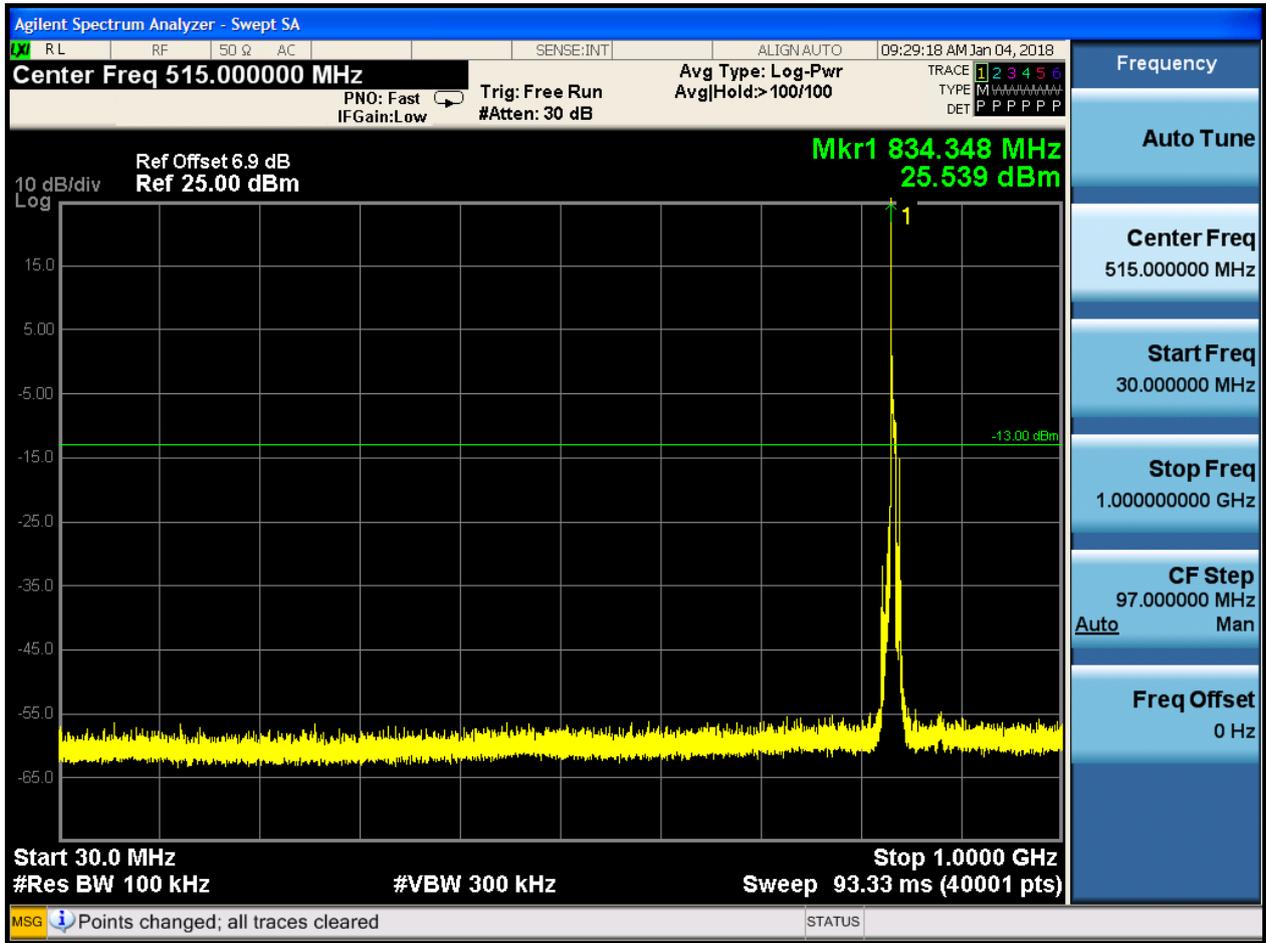


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0





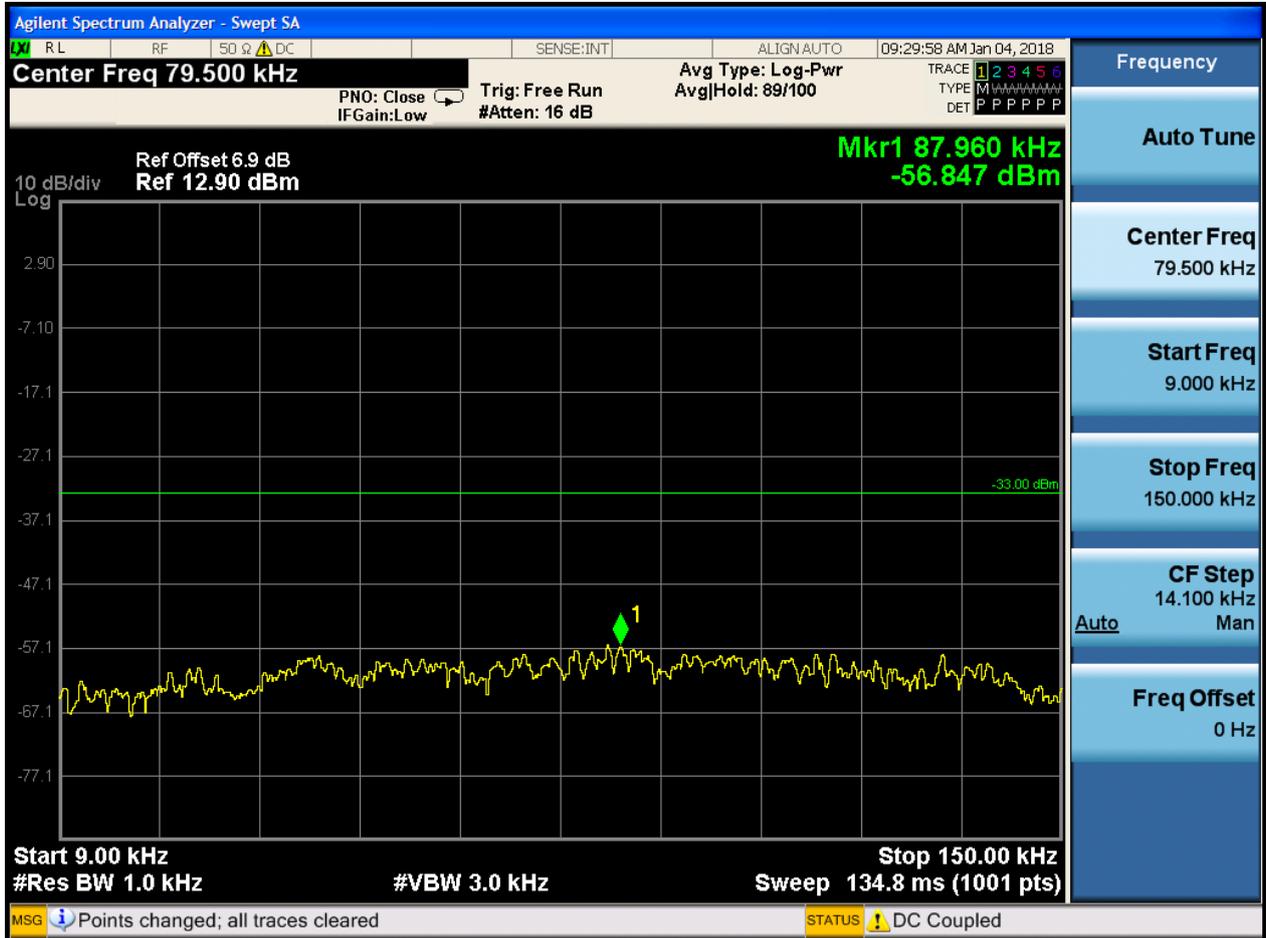


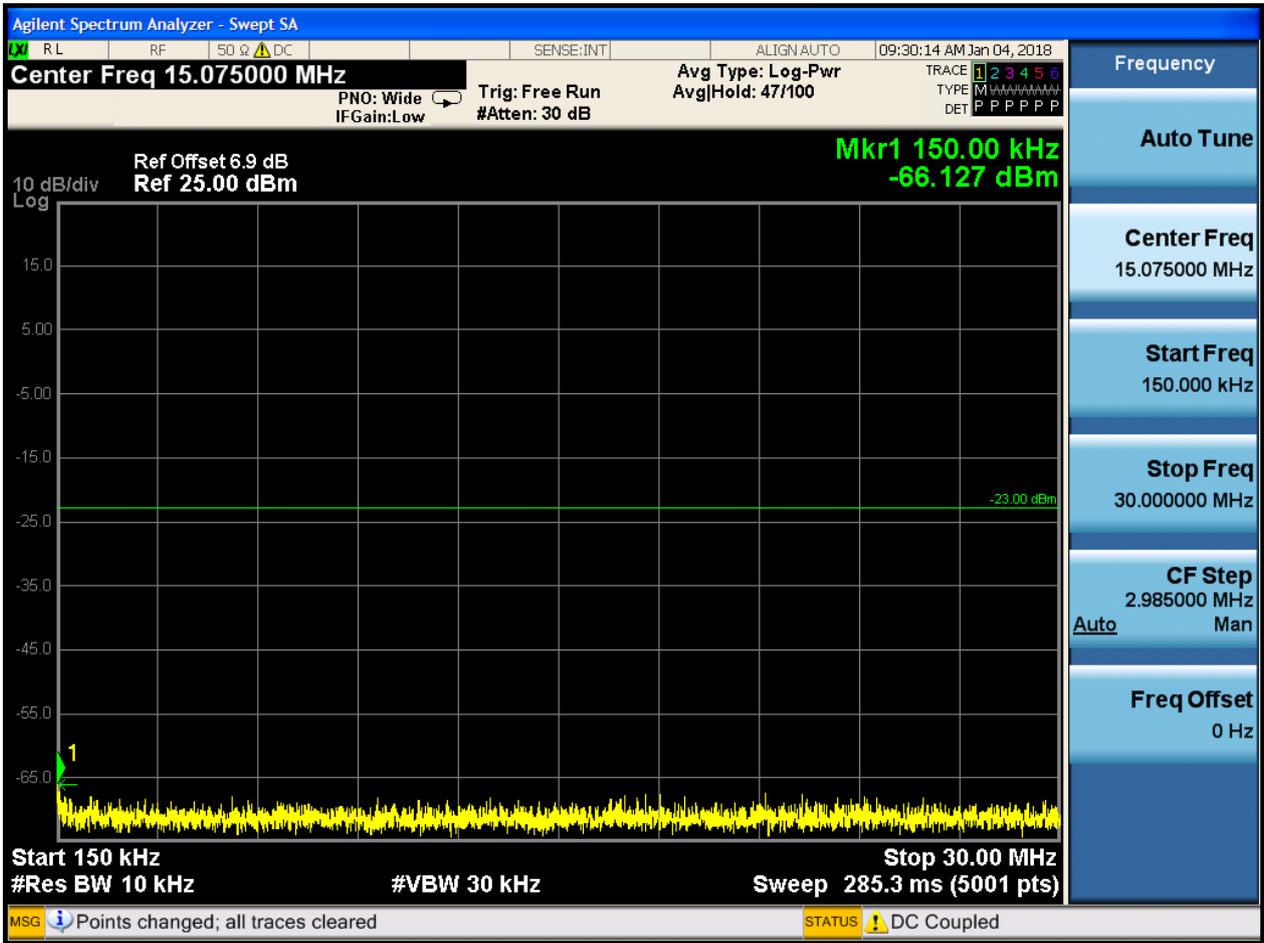




6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0







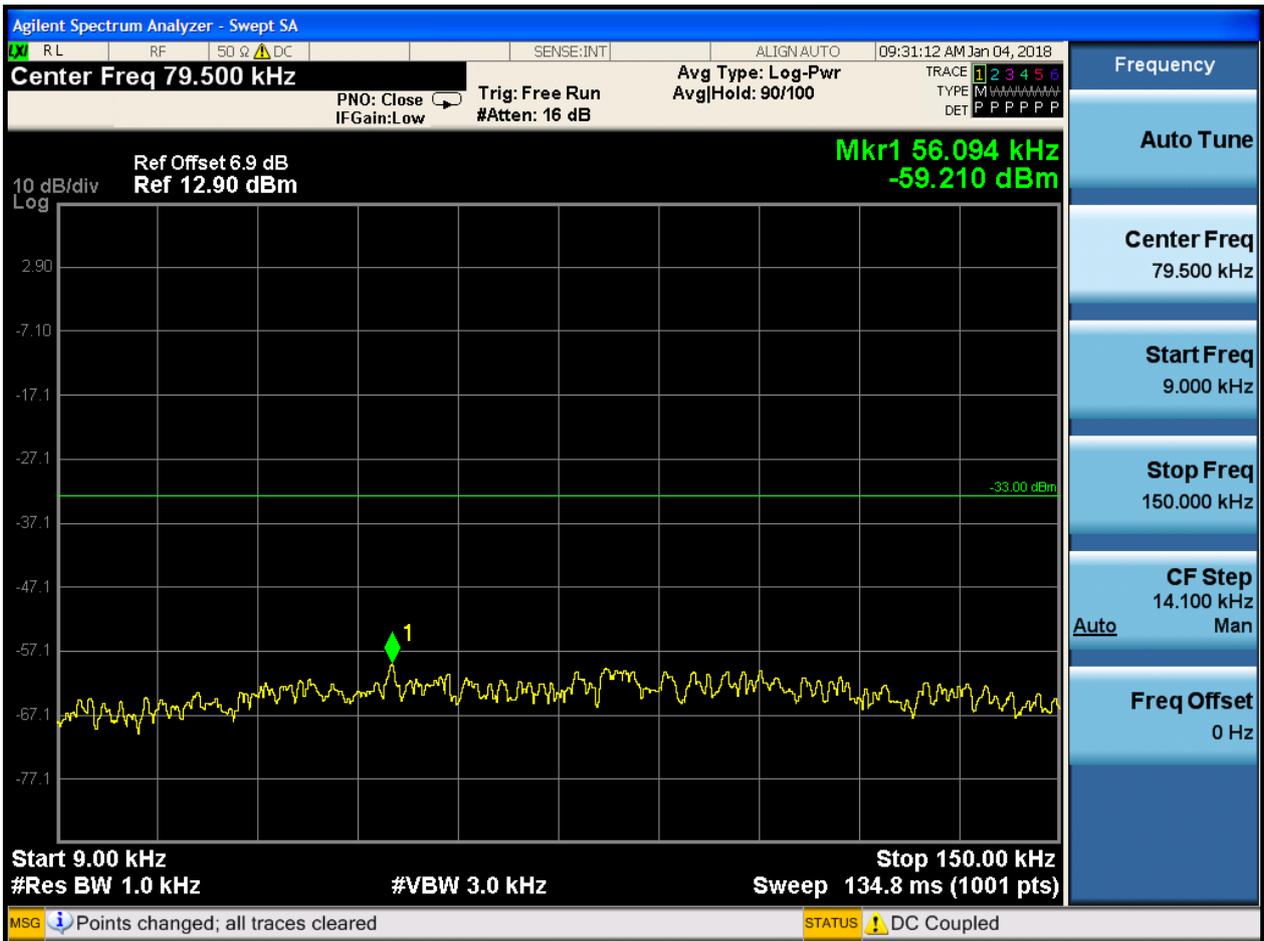


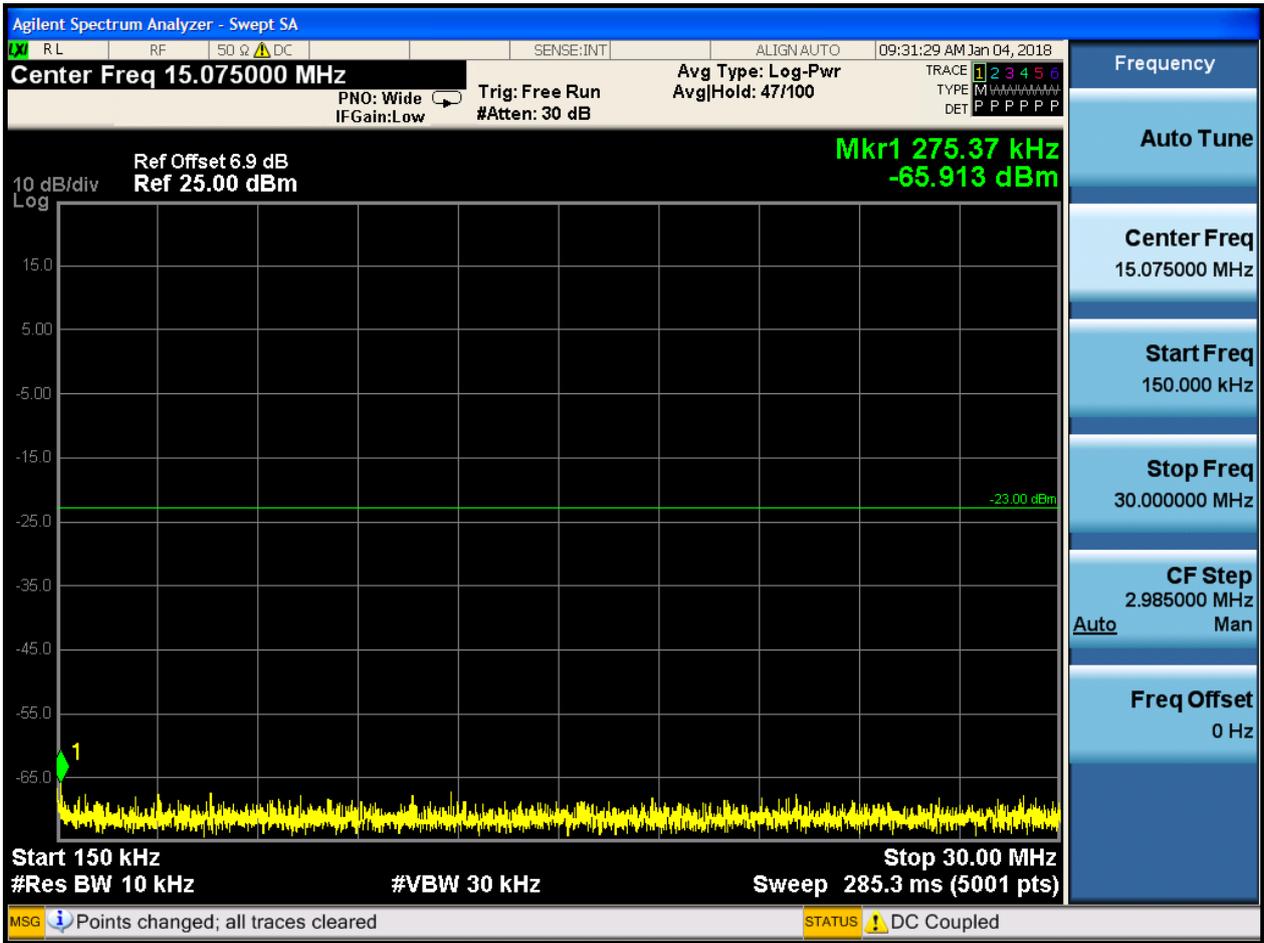


6.1.1.1.4 Test Bandwidth = 10

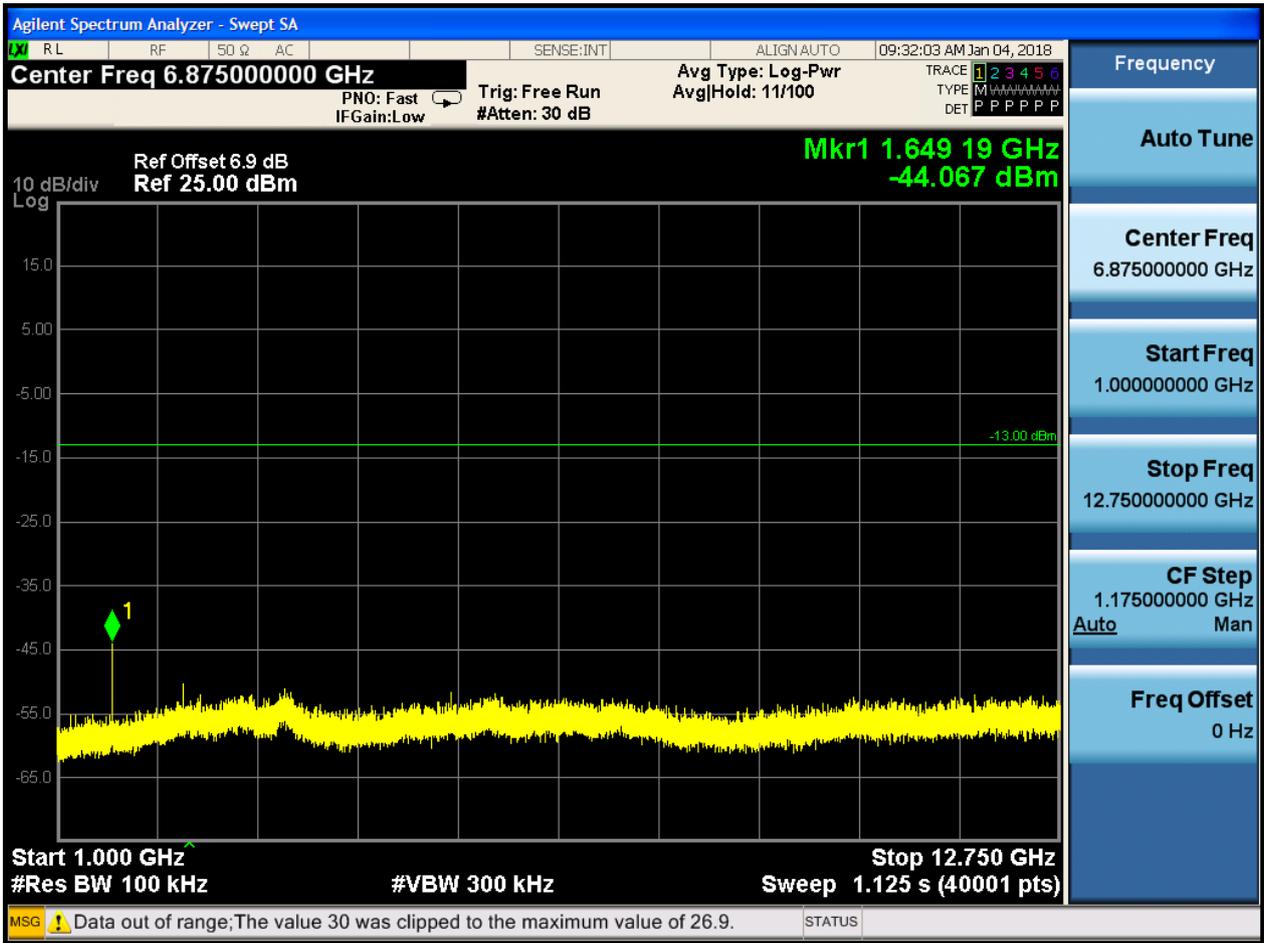
6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0









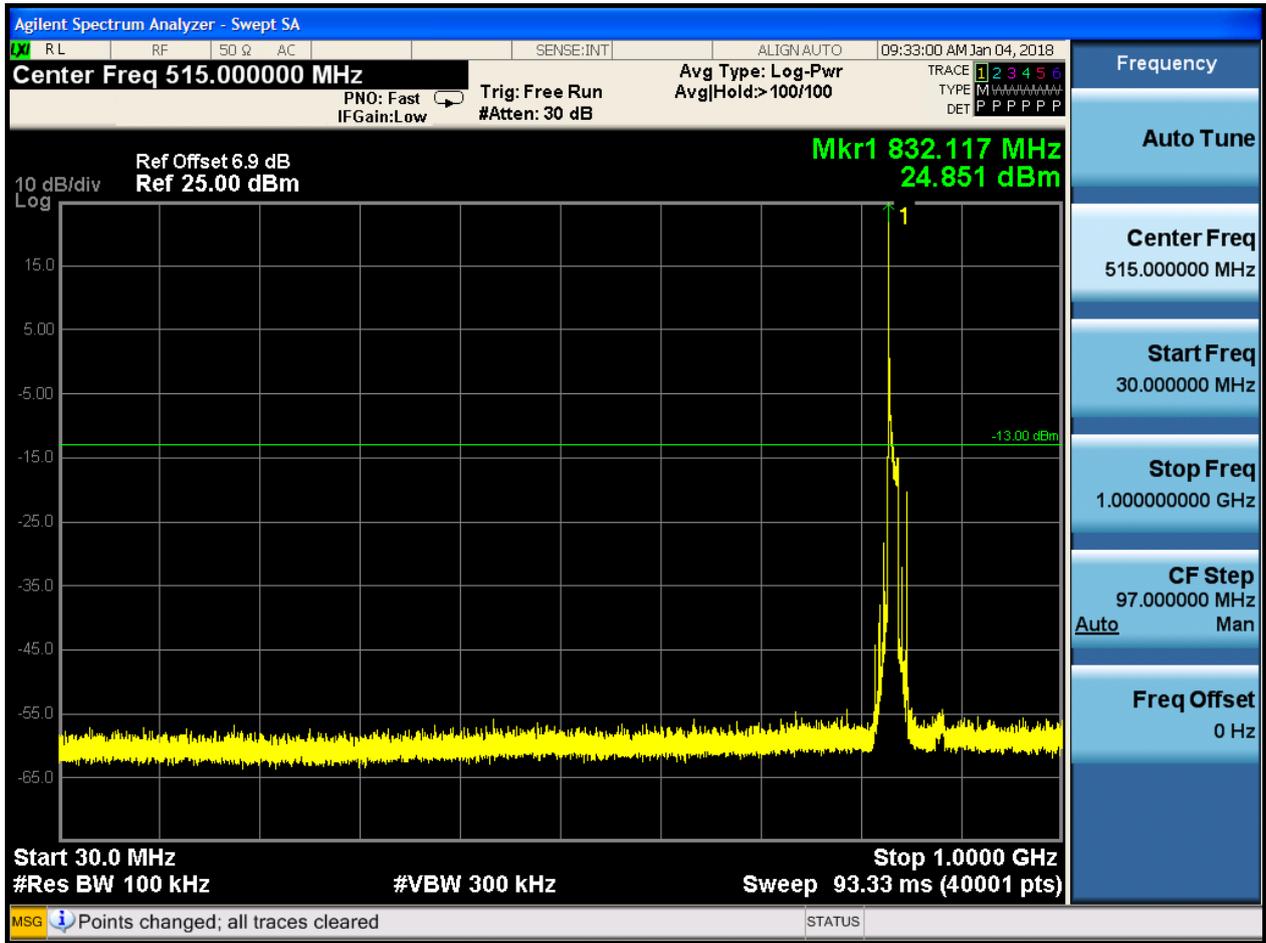


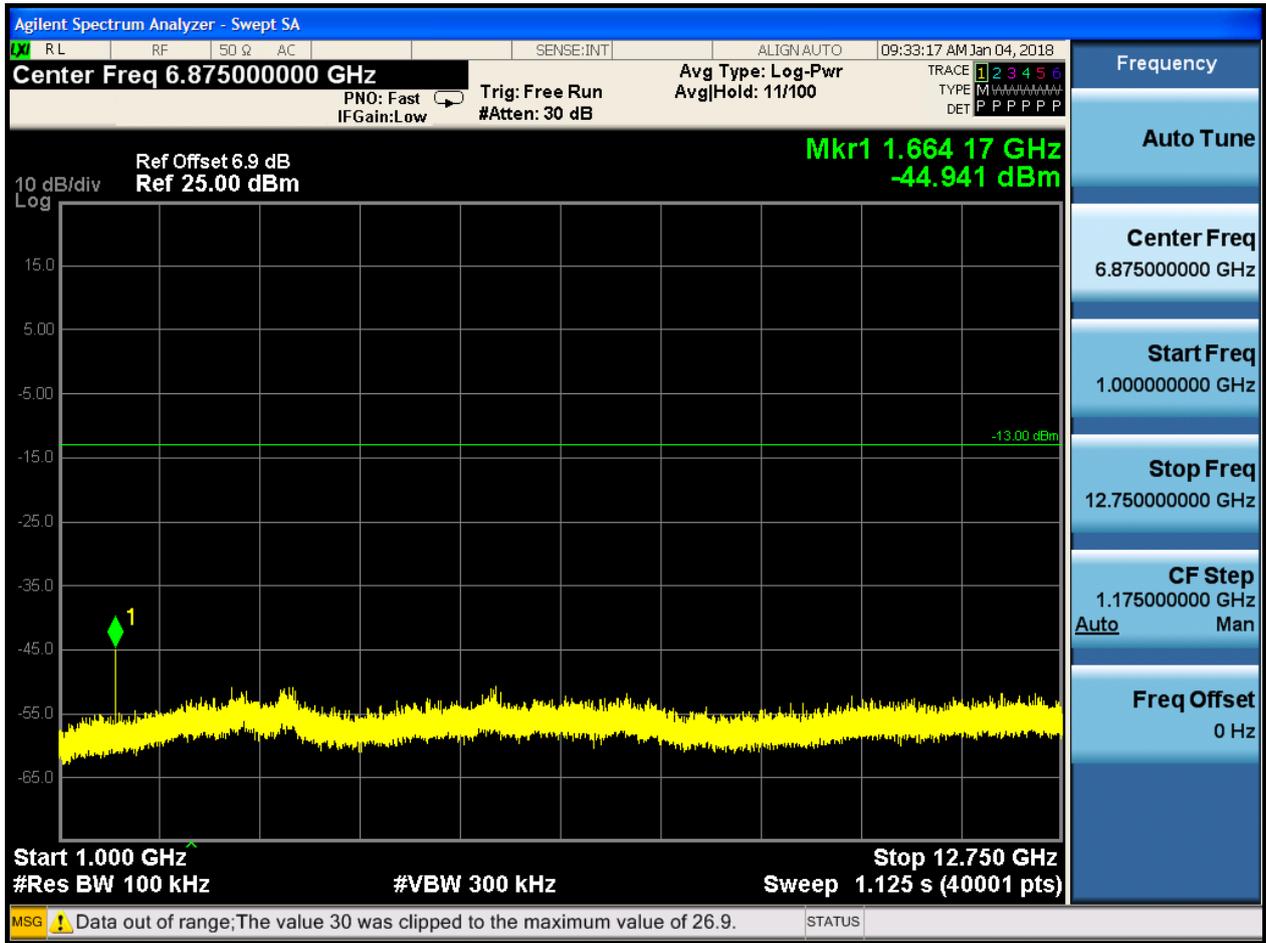
6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0





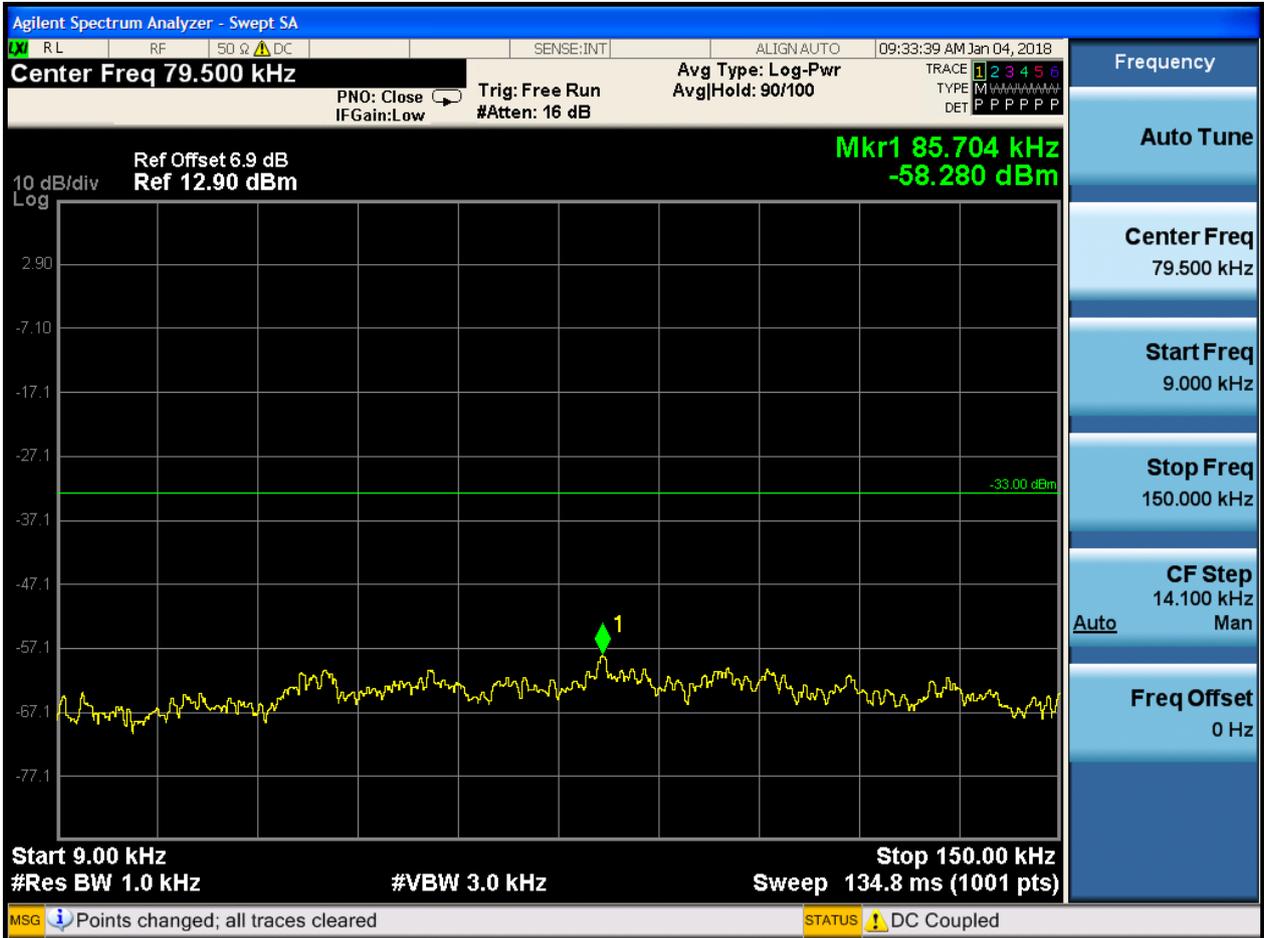




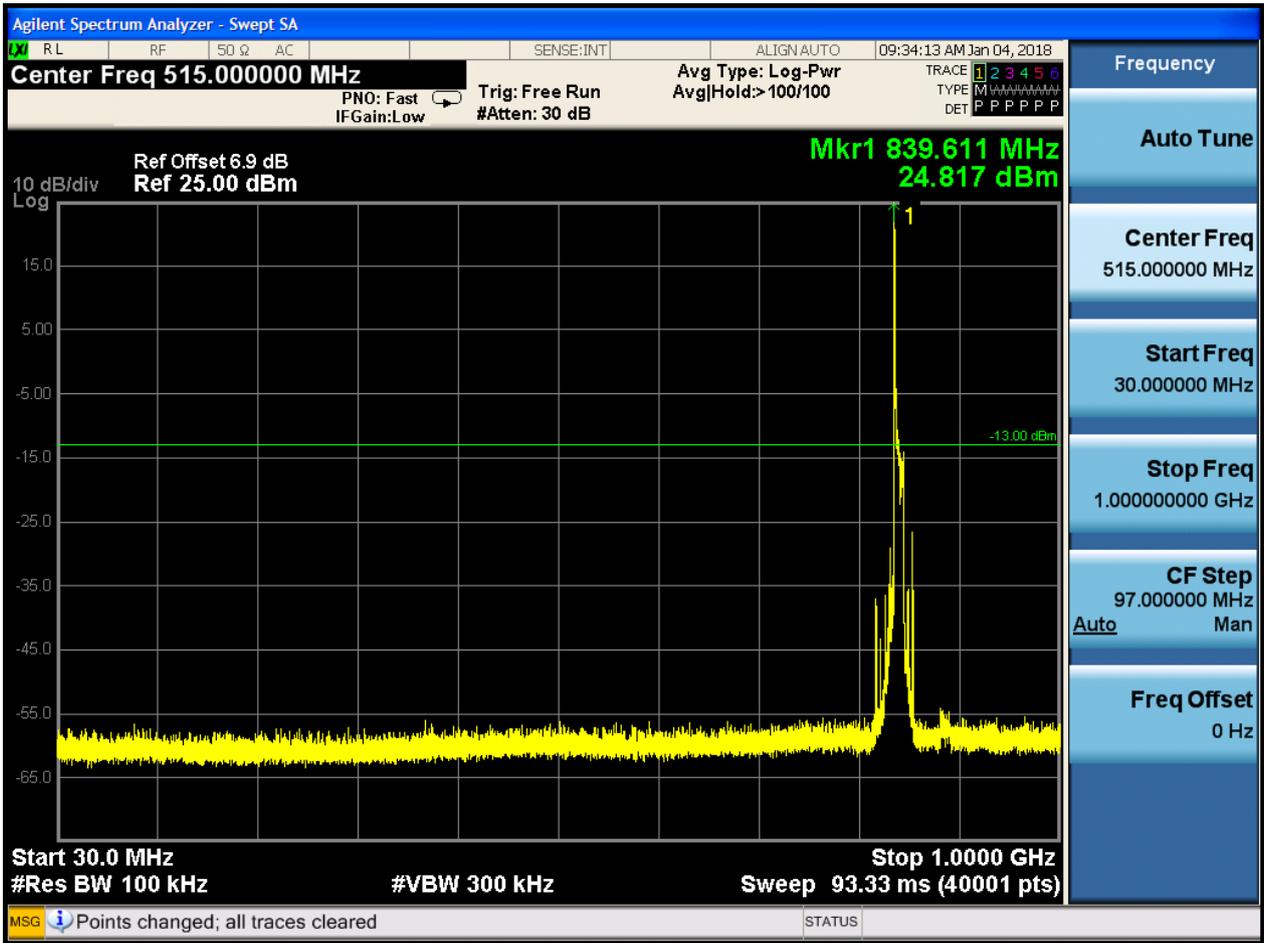


6.1.1.1.4.3 Test Channel = HCH

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





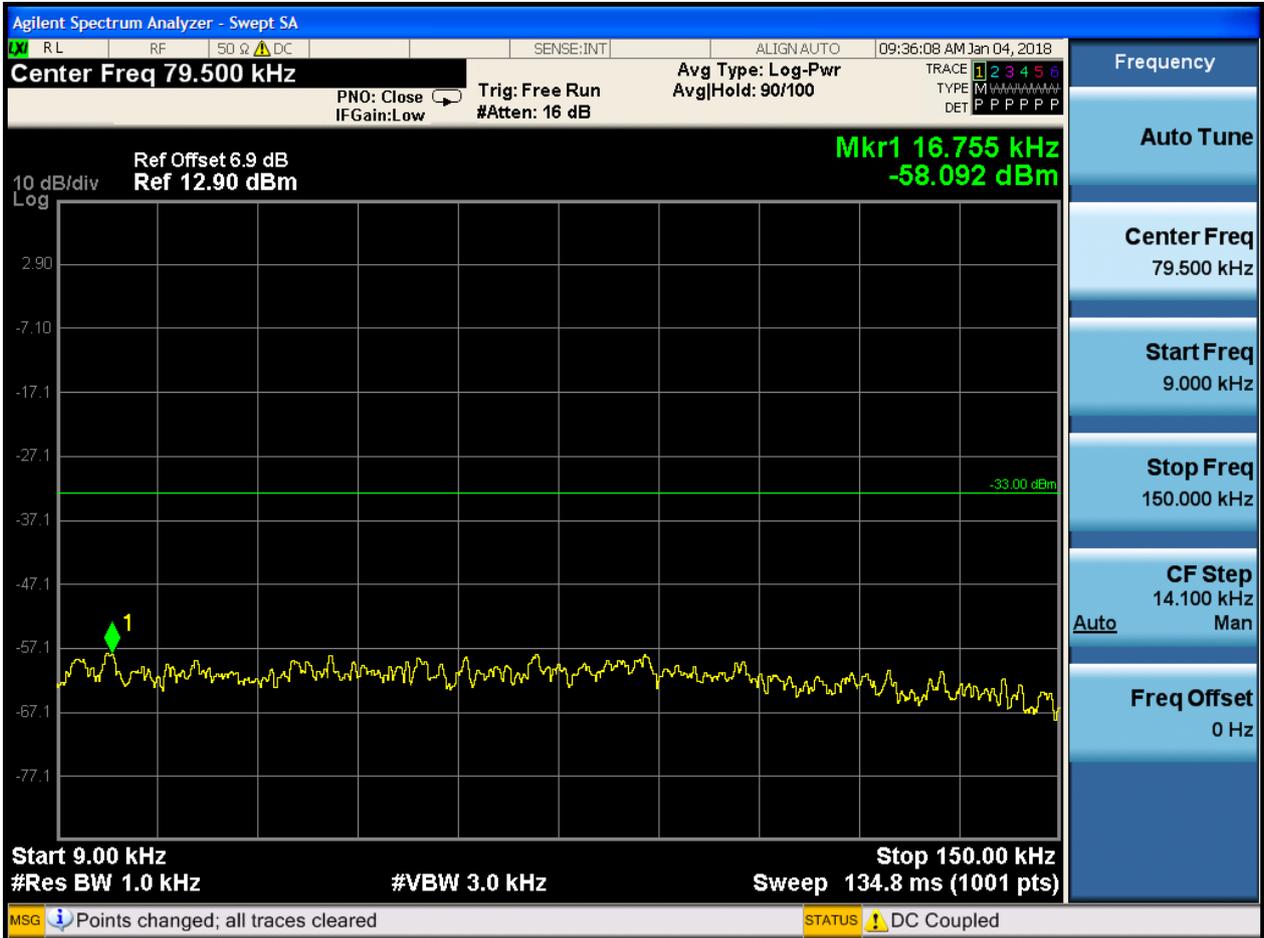






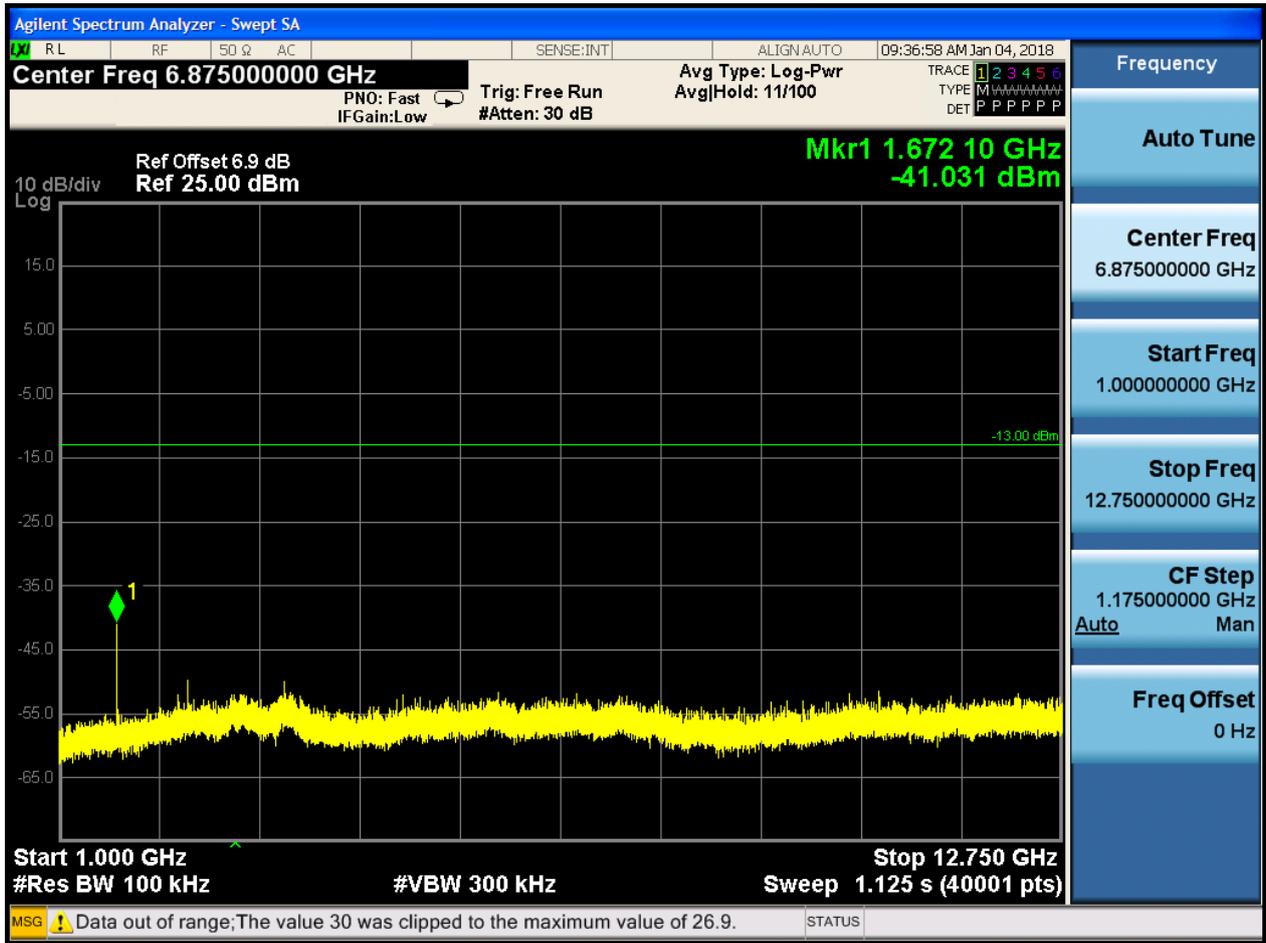
6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0







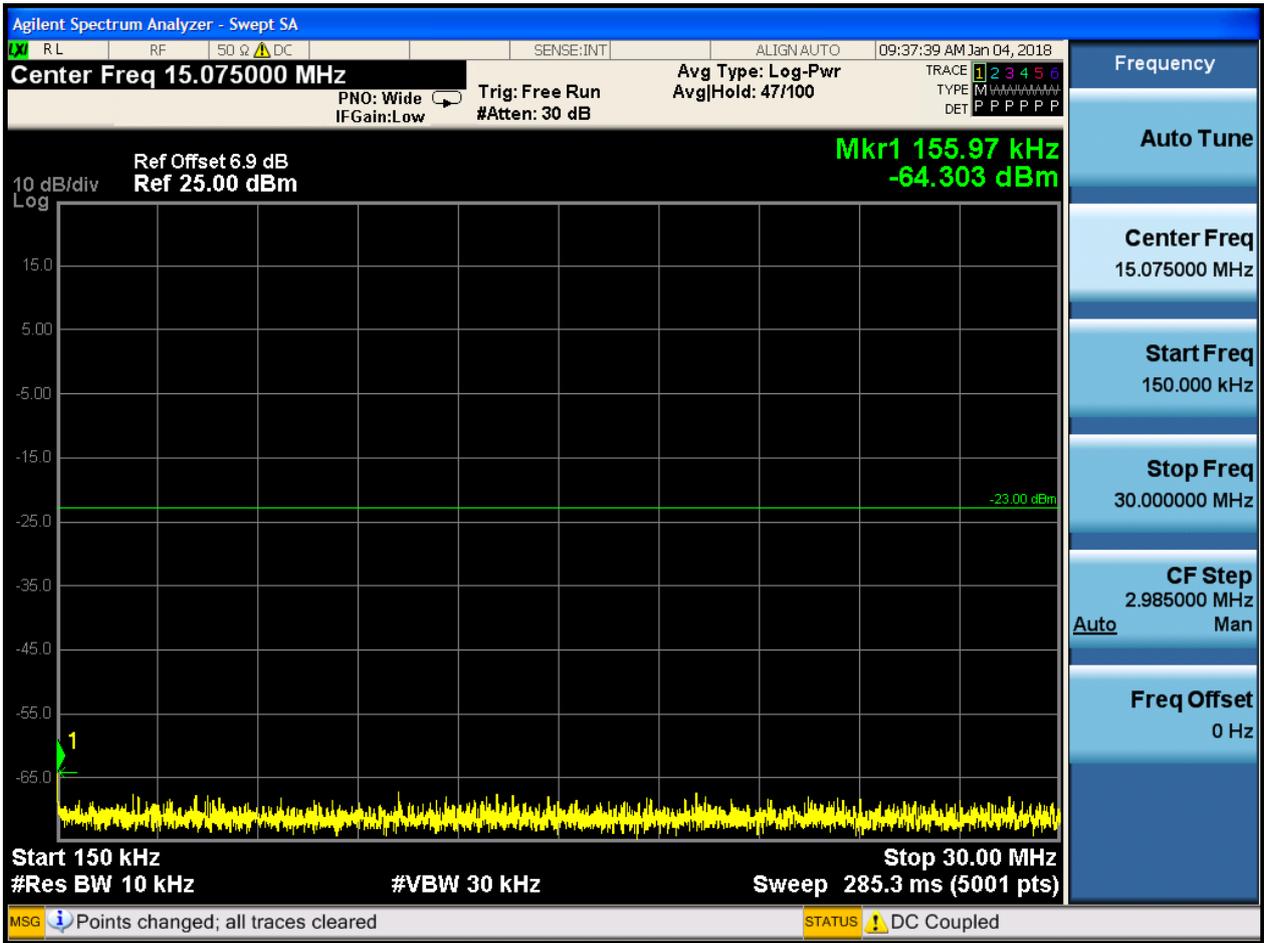


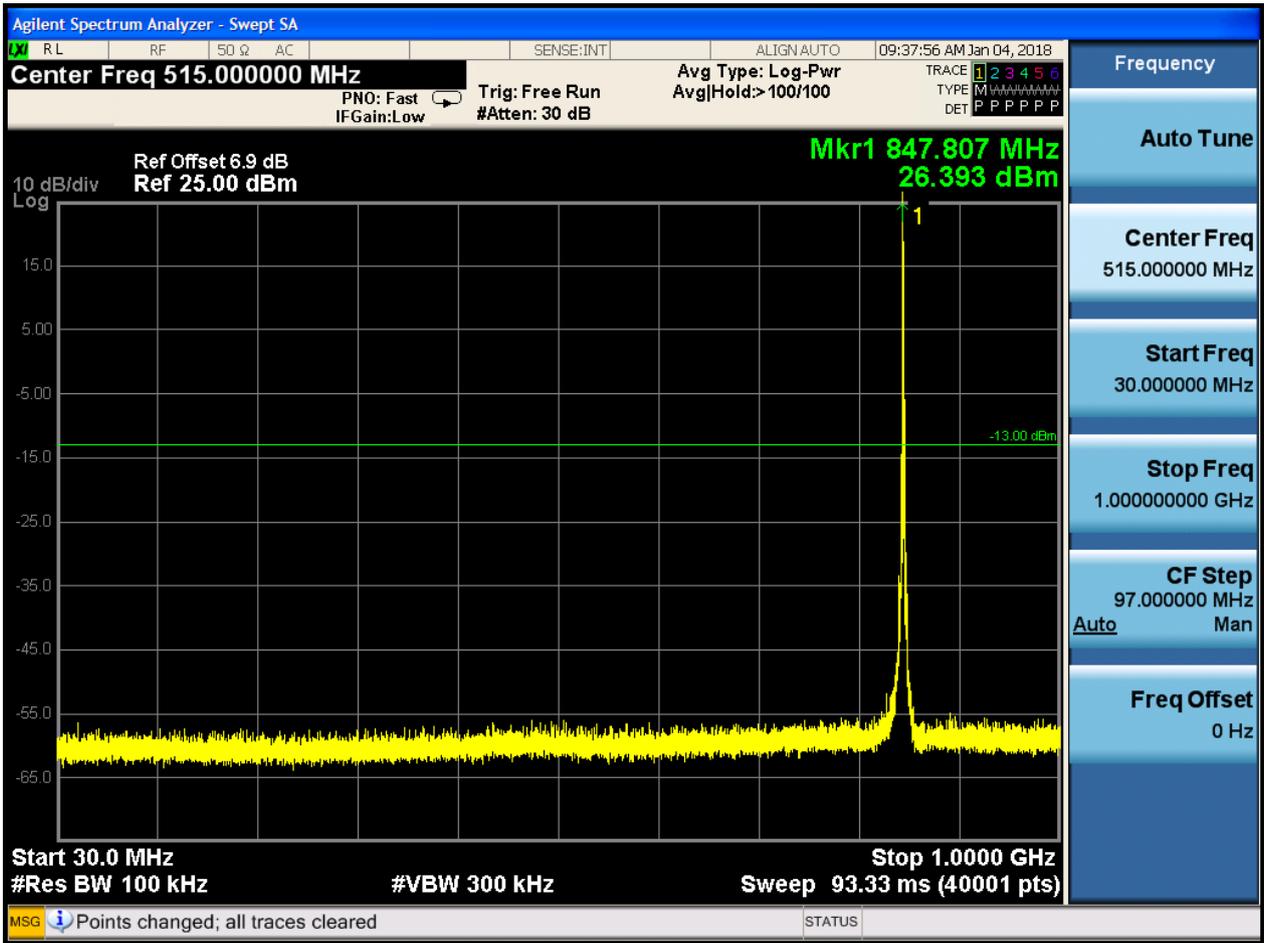


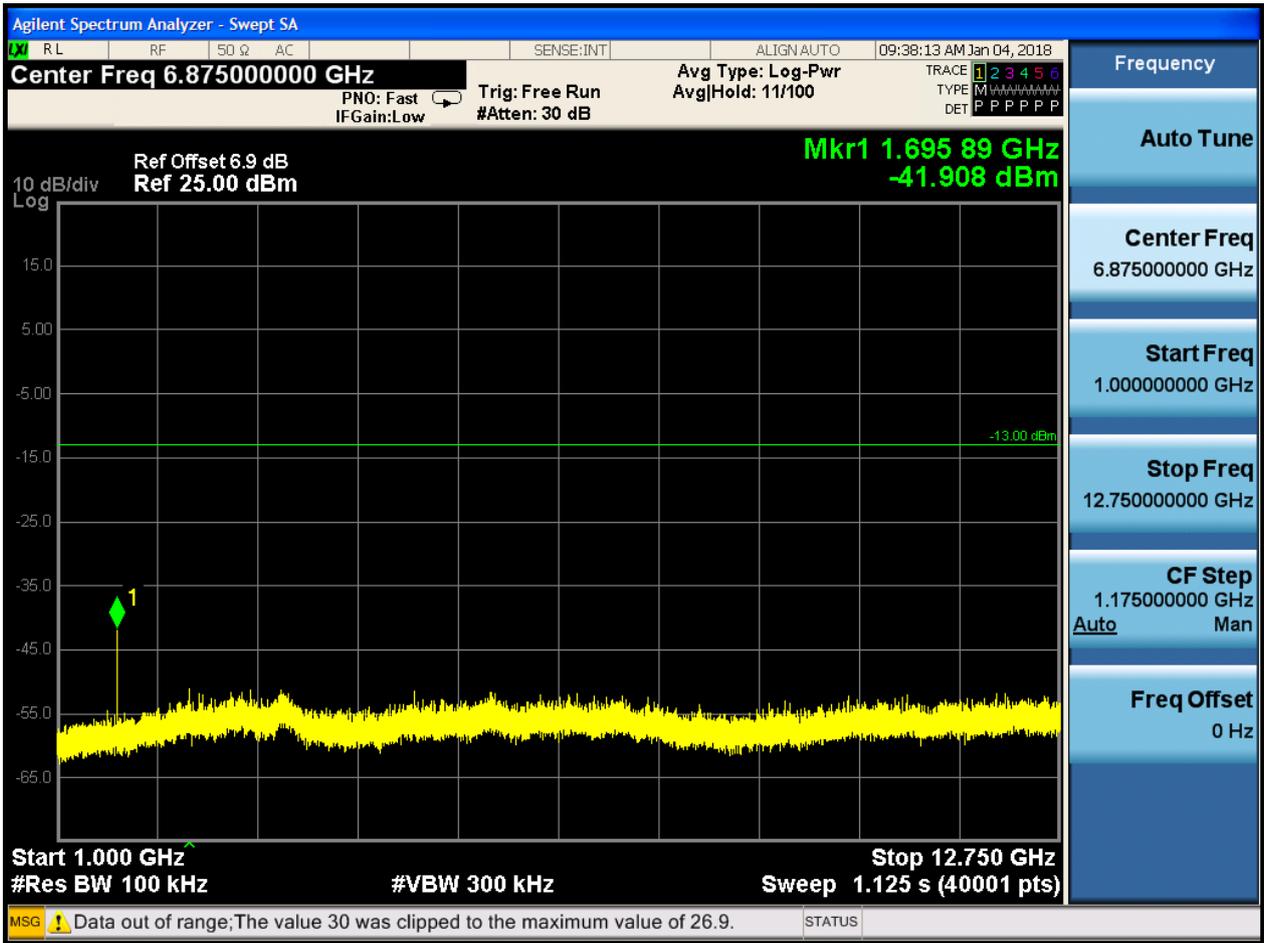
6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0







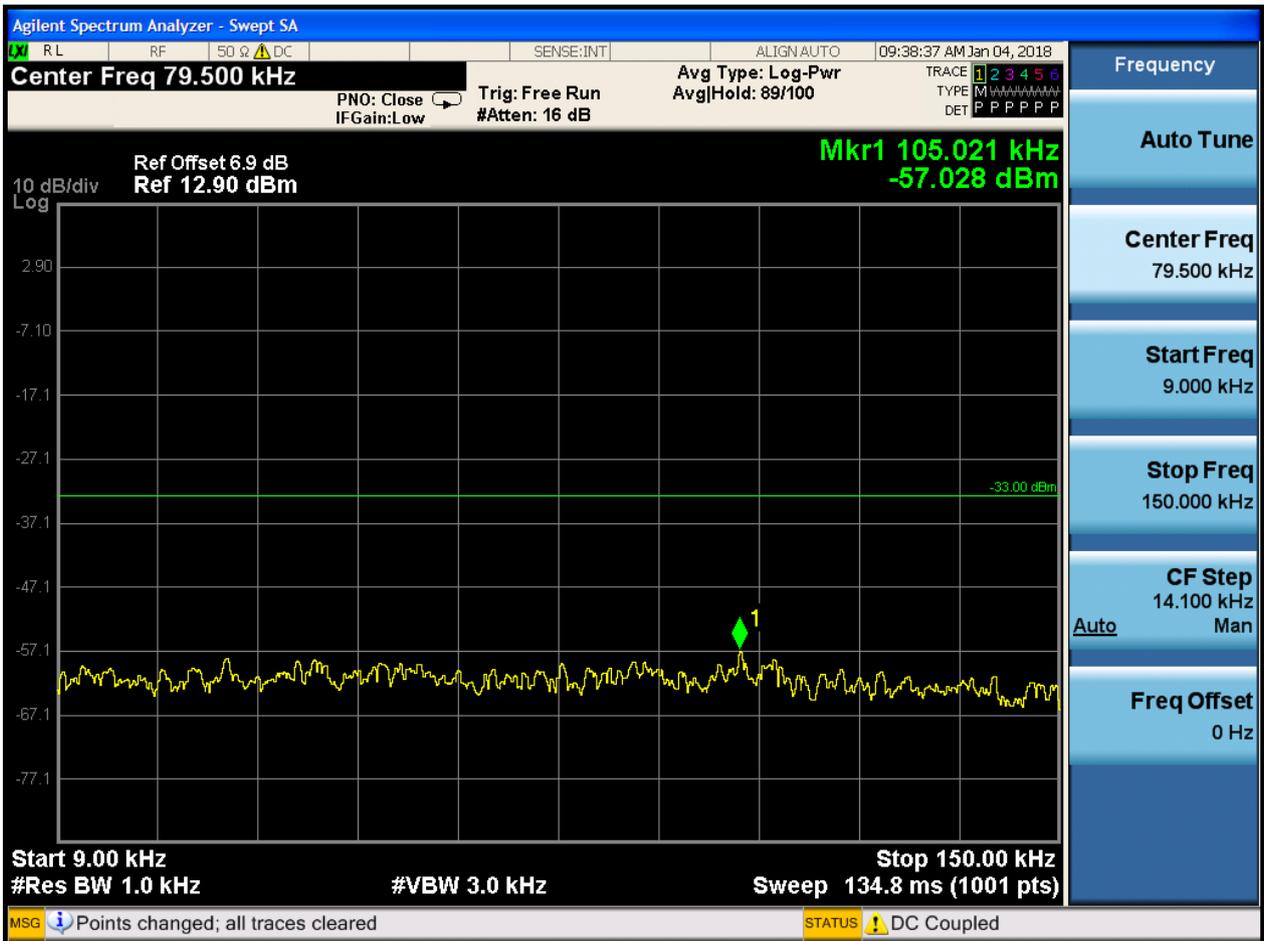


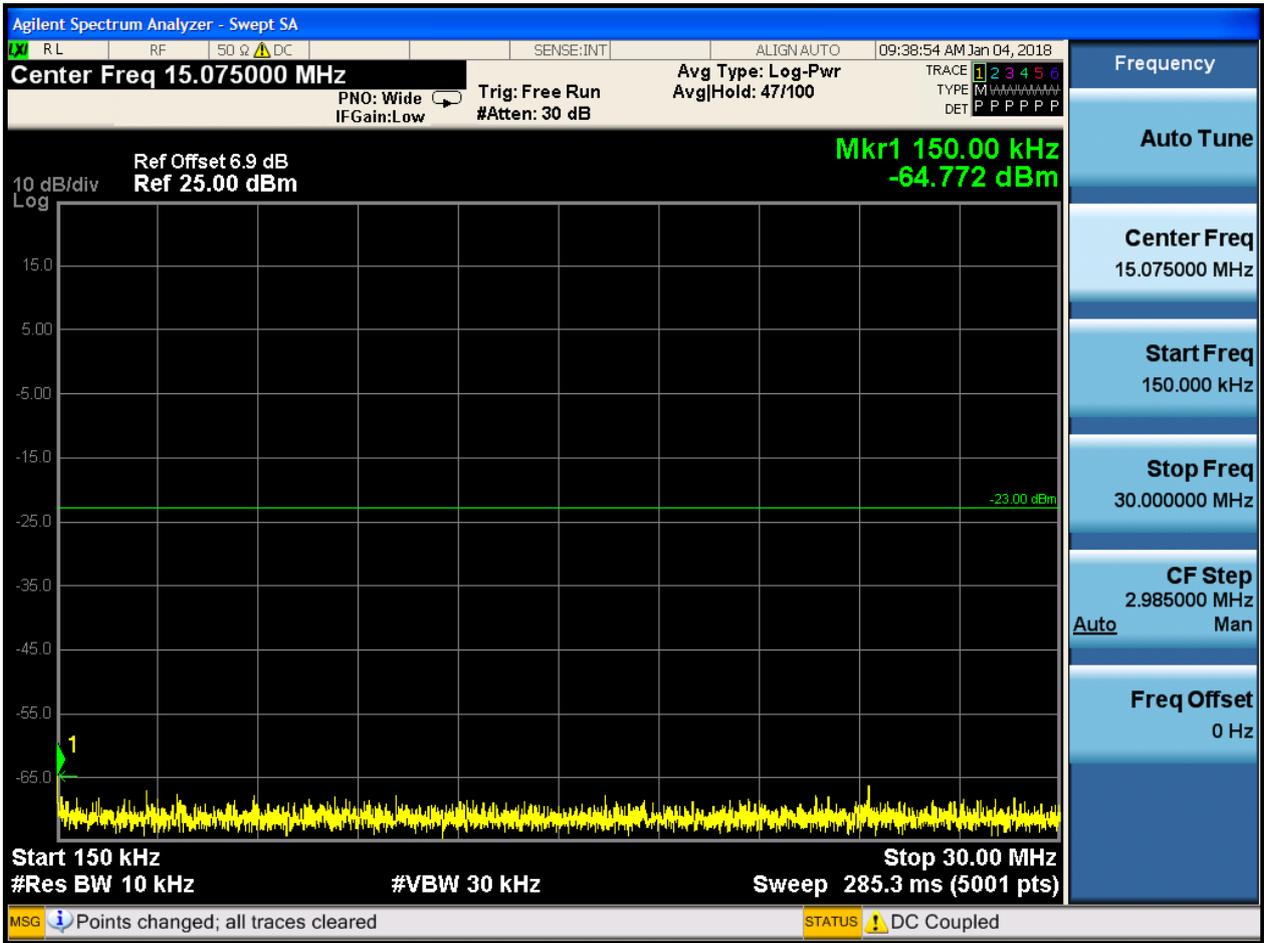


6.1.1.2.2 Test Bandwidth = 3

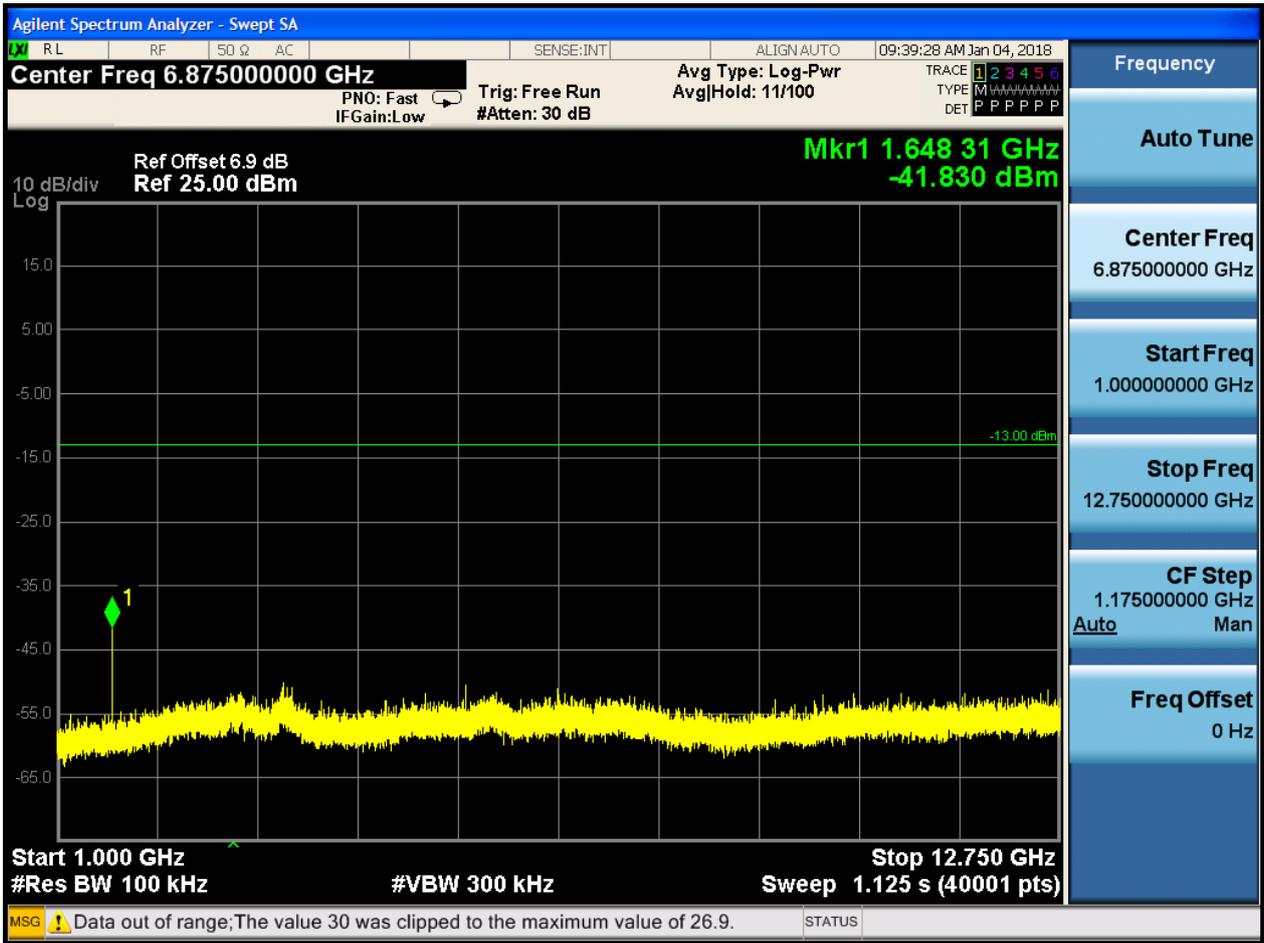
6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0





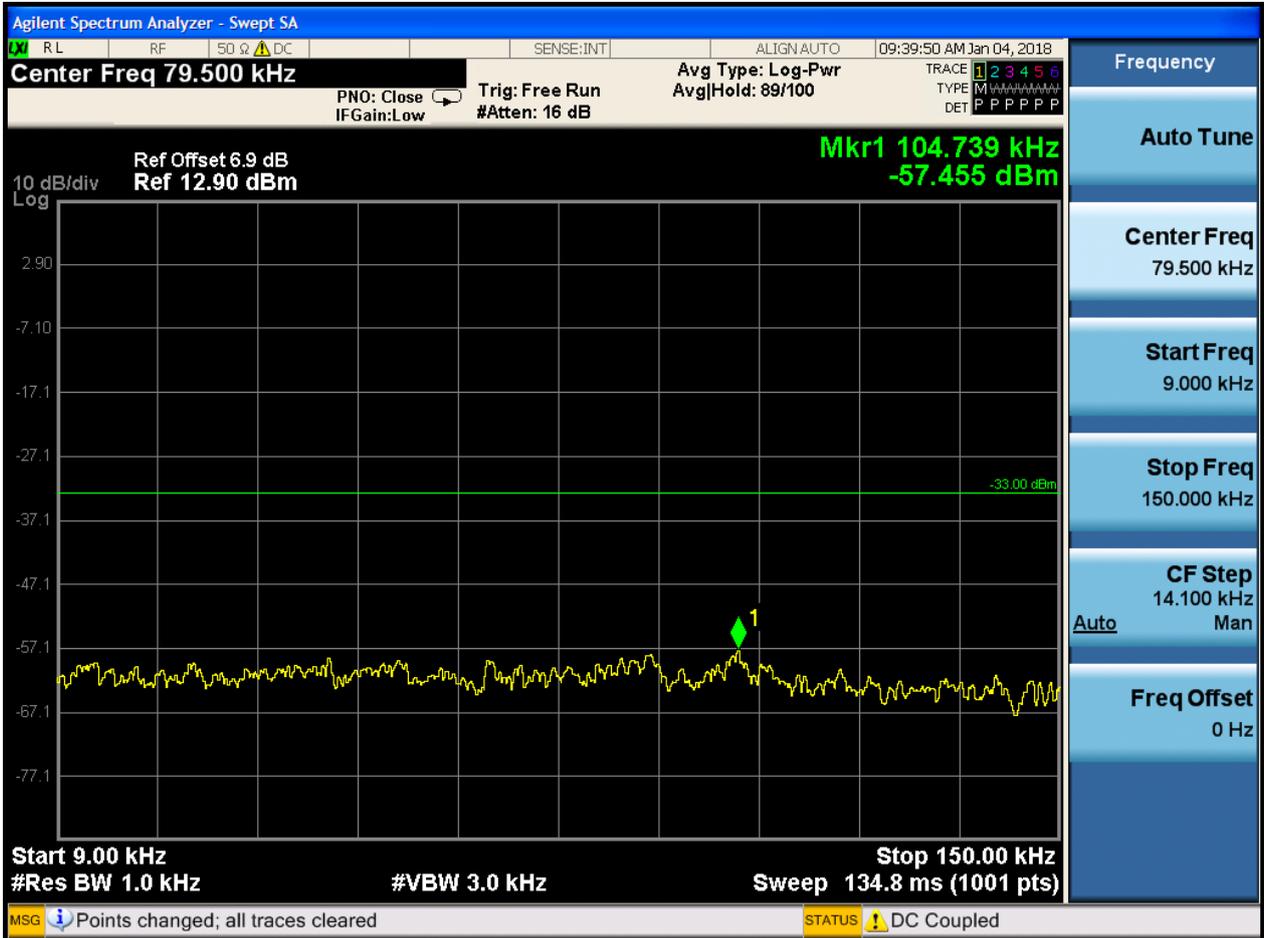






6.1.1.2.2 Test Channel = MCH

6.1.1.2.2.1 Test RB = RB1#0





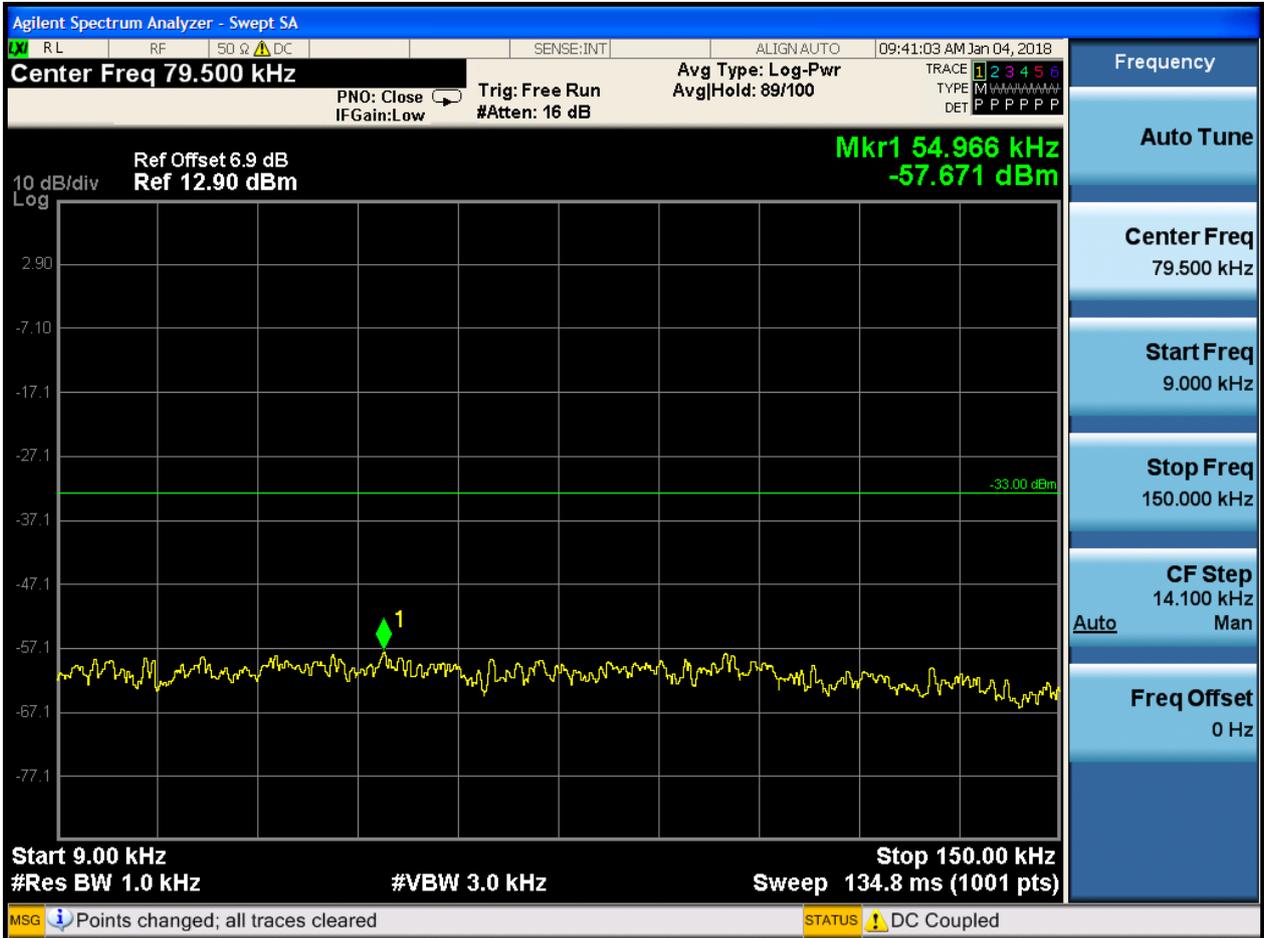


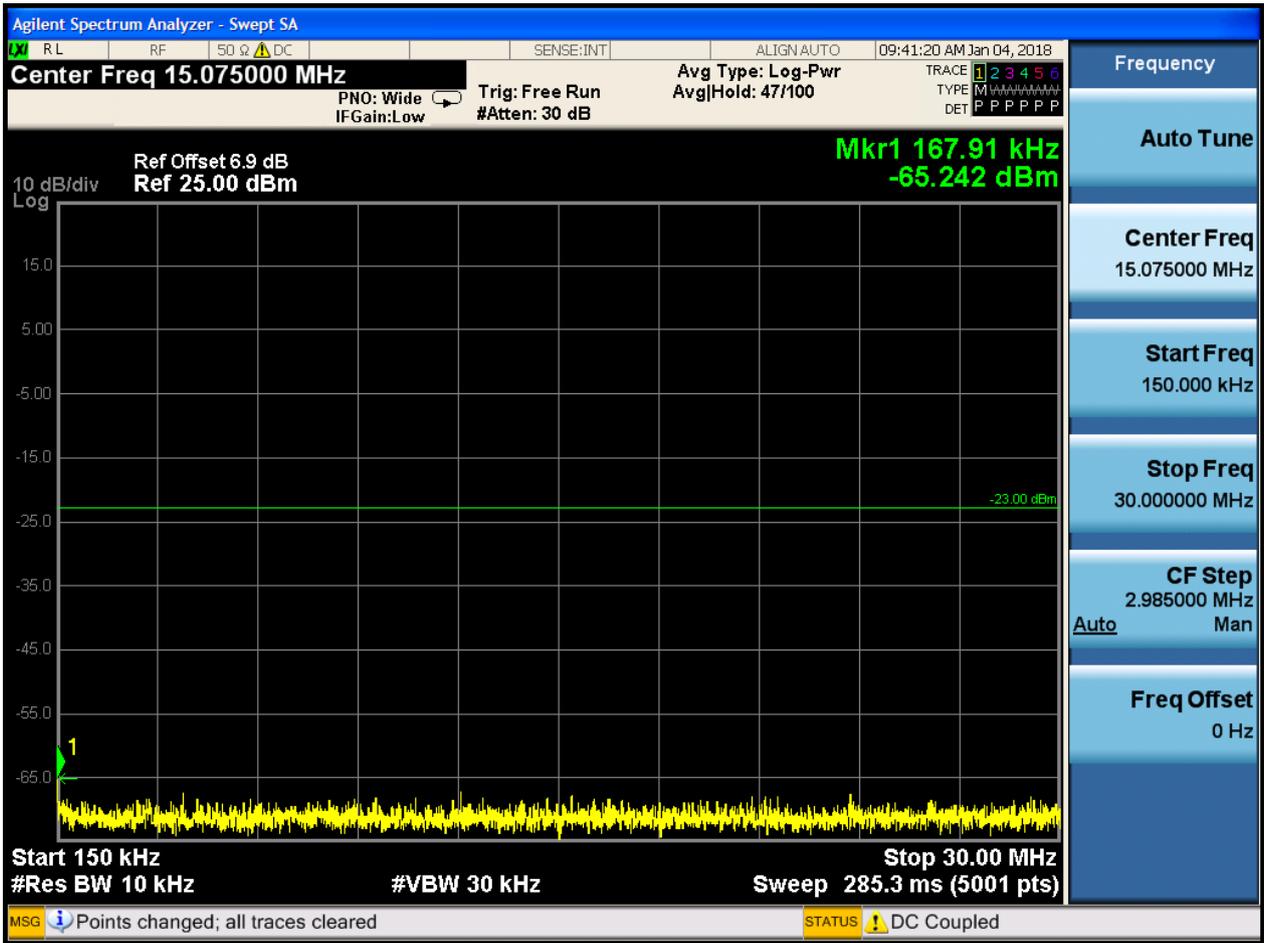




6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0







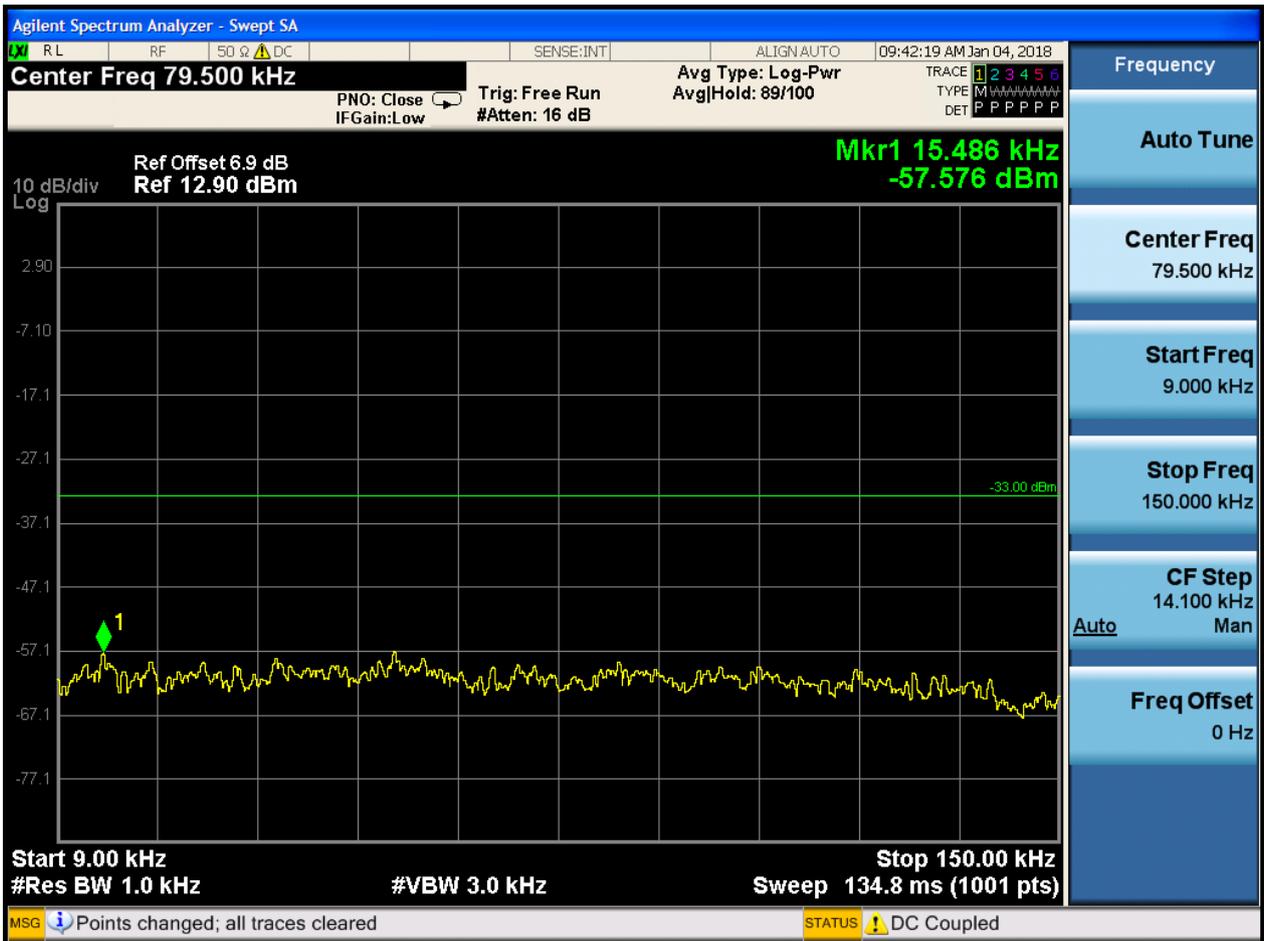


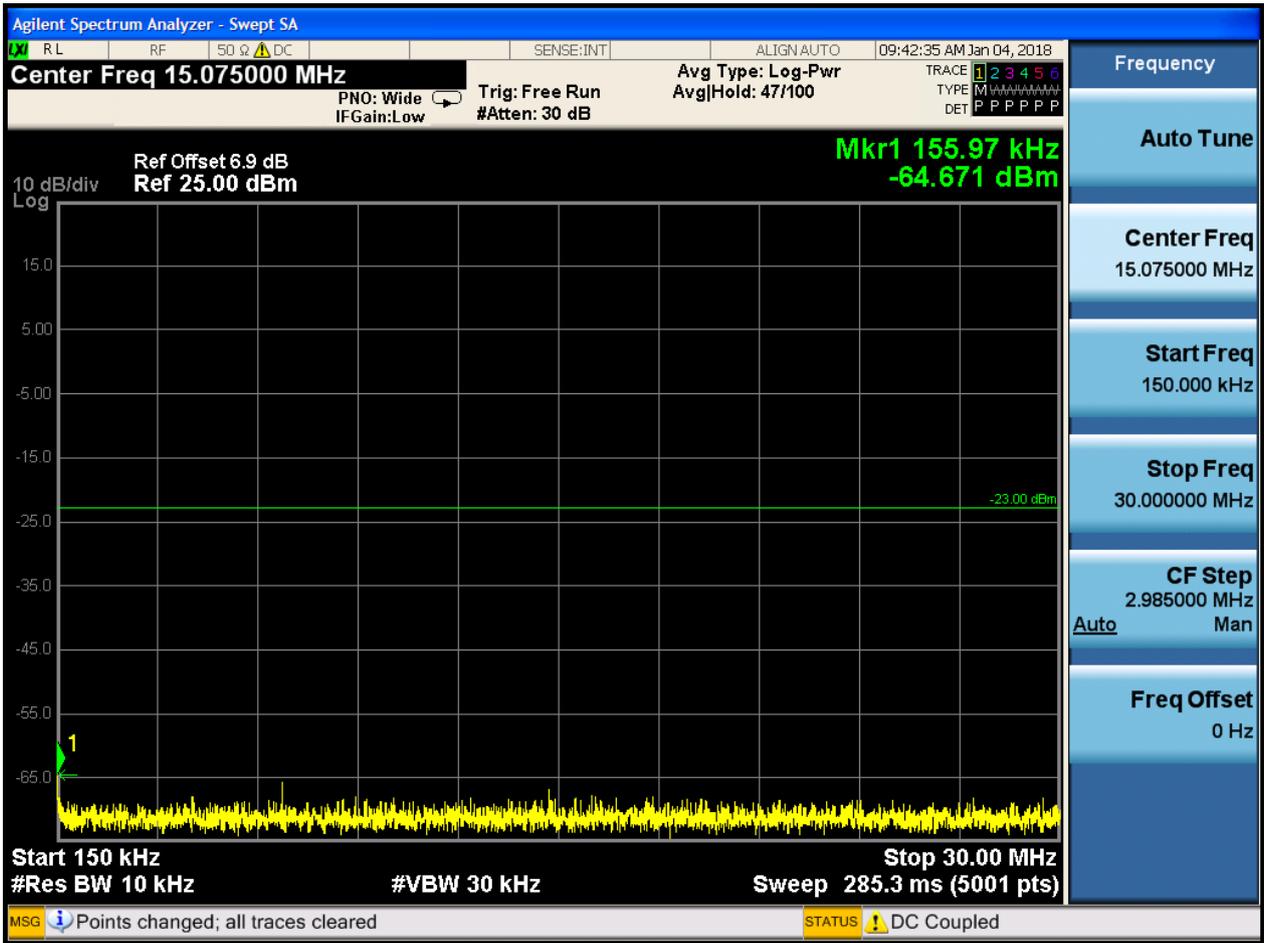


6.1.1.2.3 Test Bandwidth = 5

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0





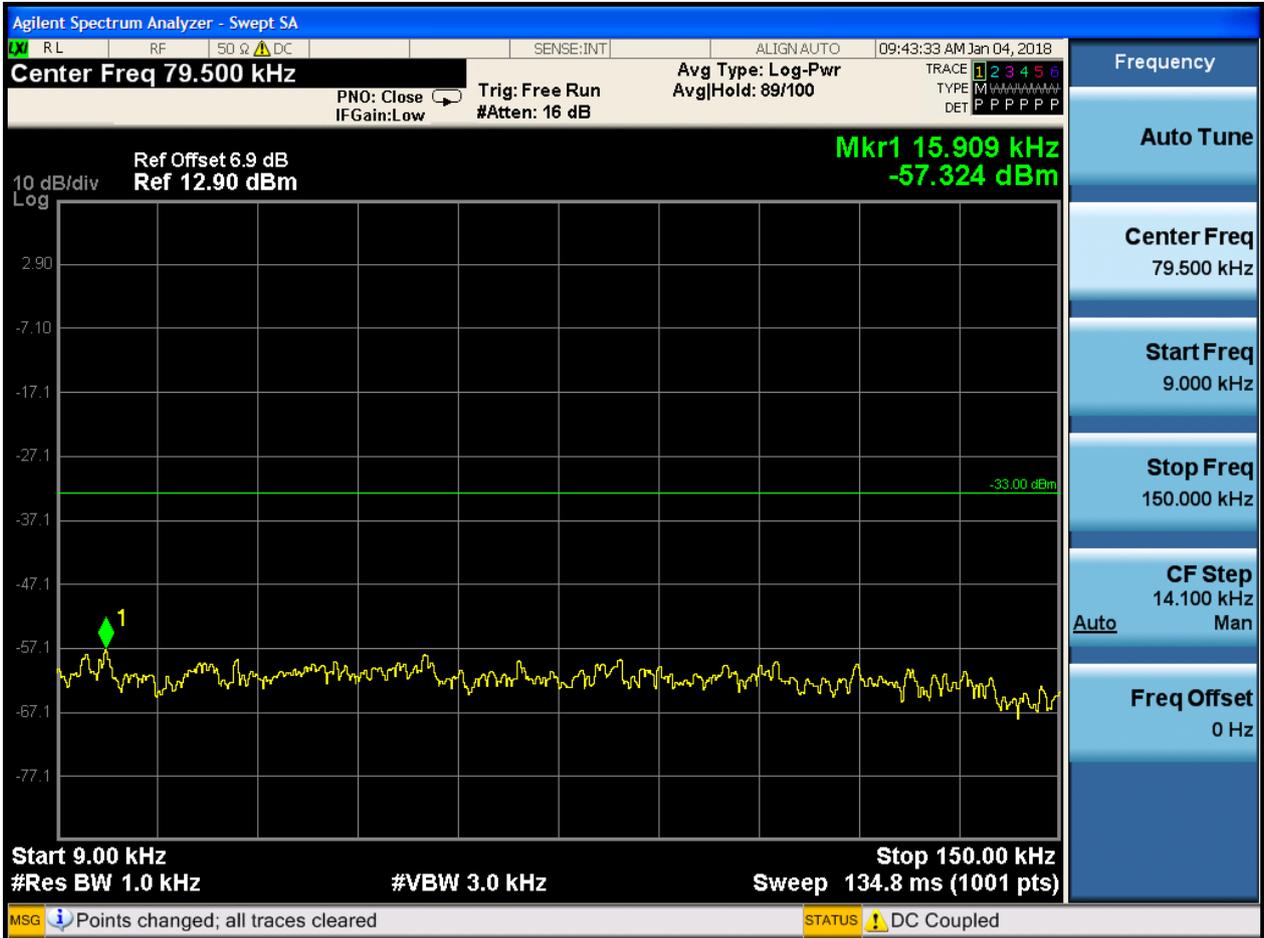






6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0





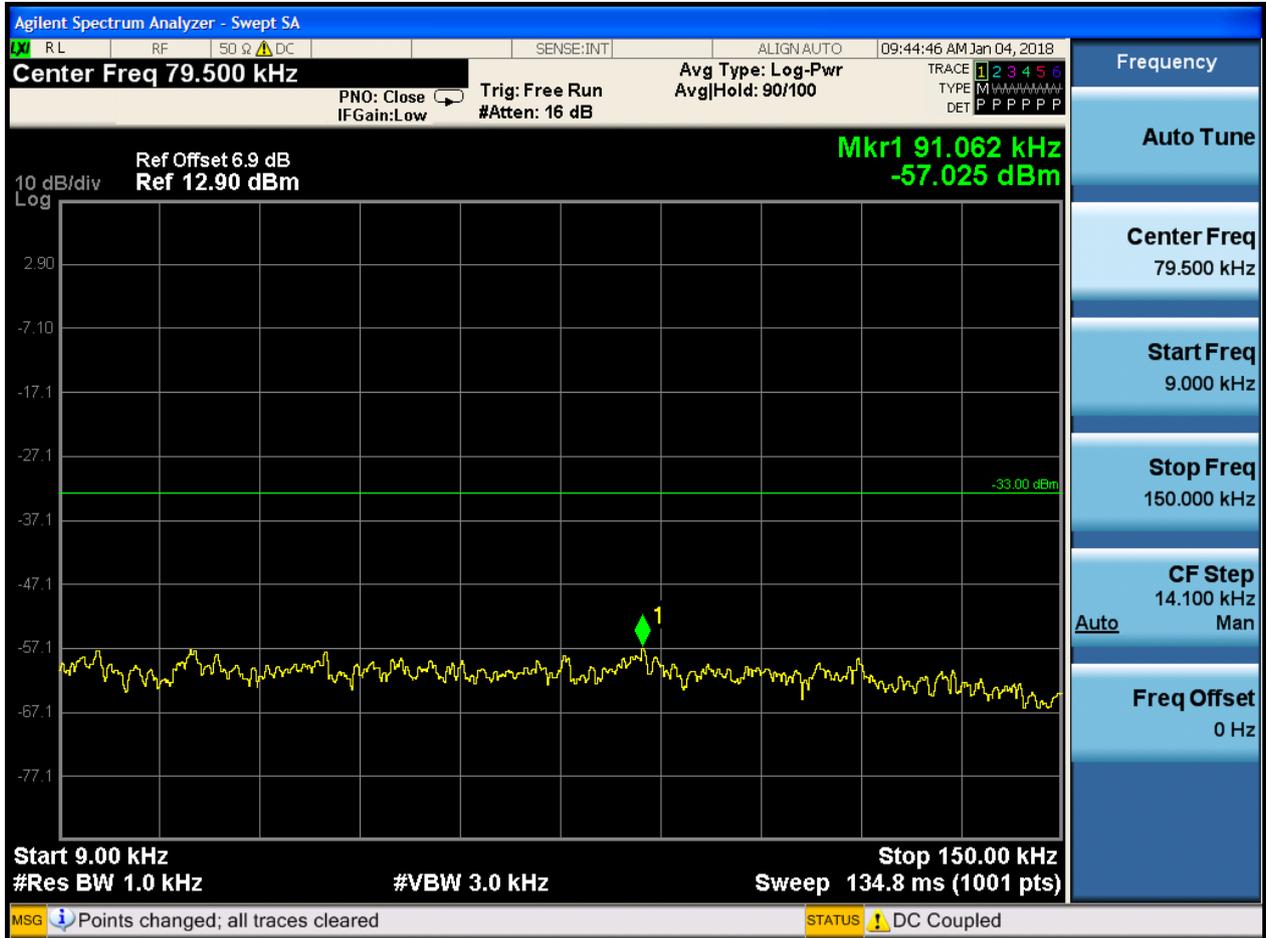


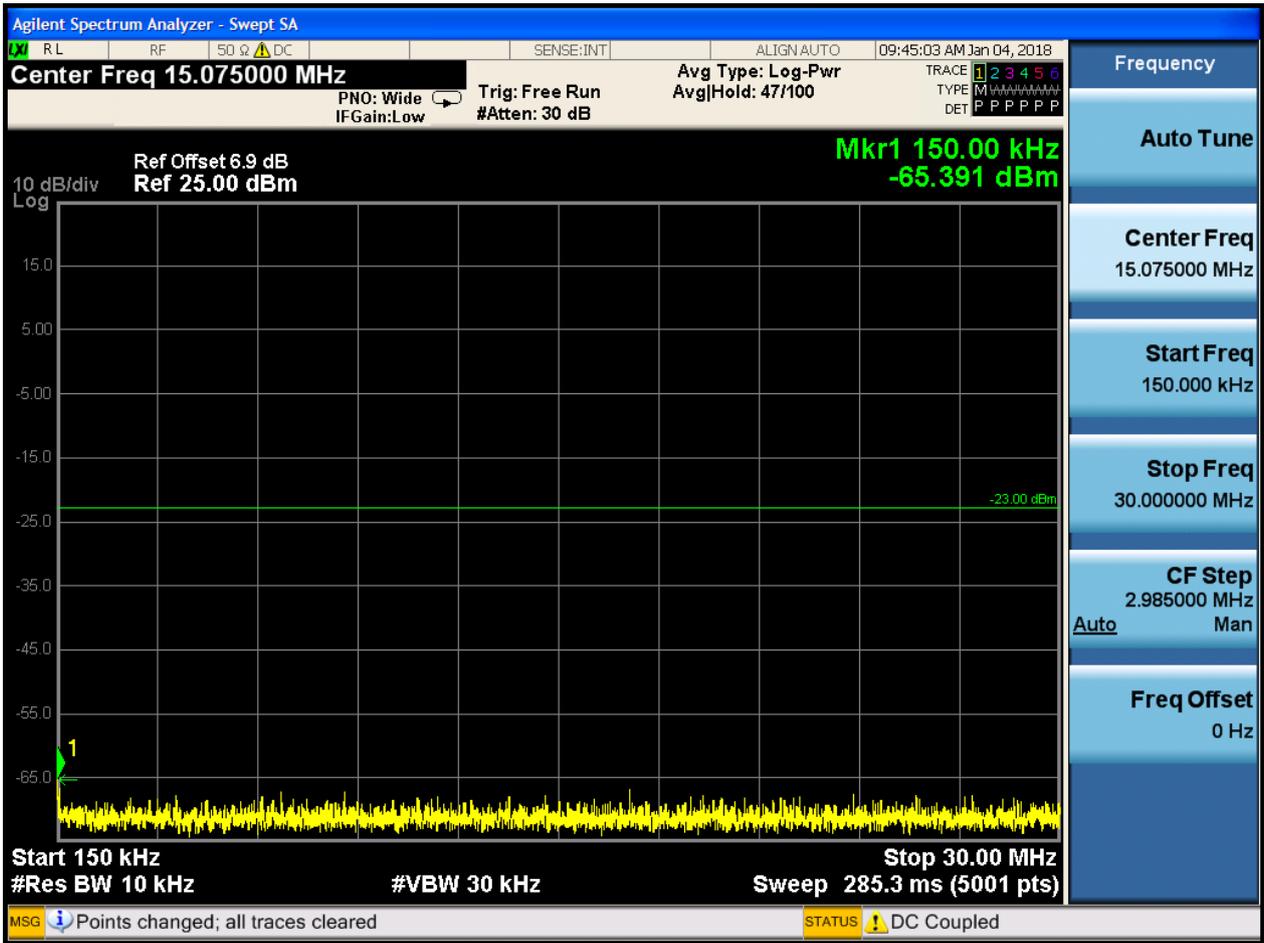




6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0







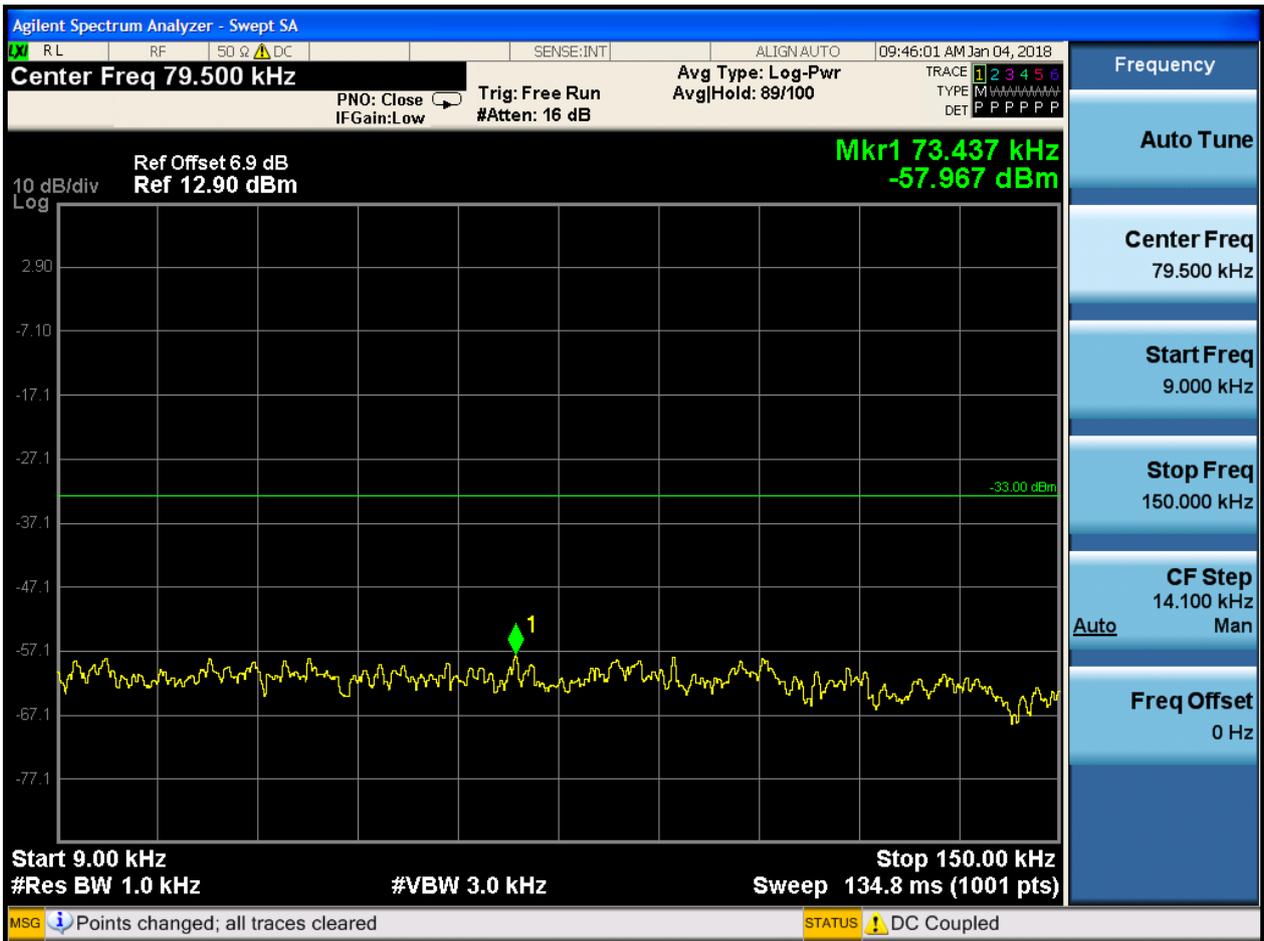




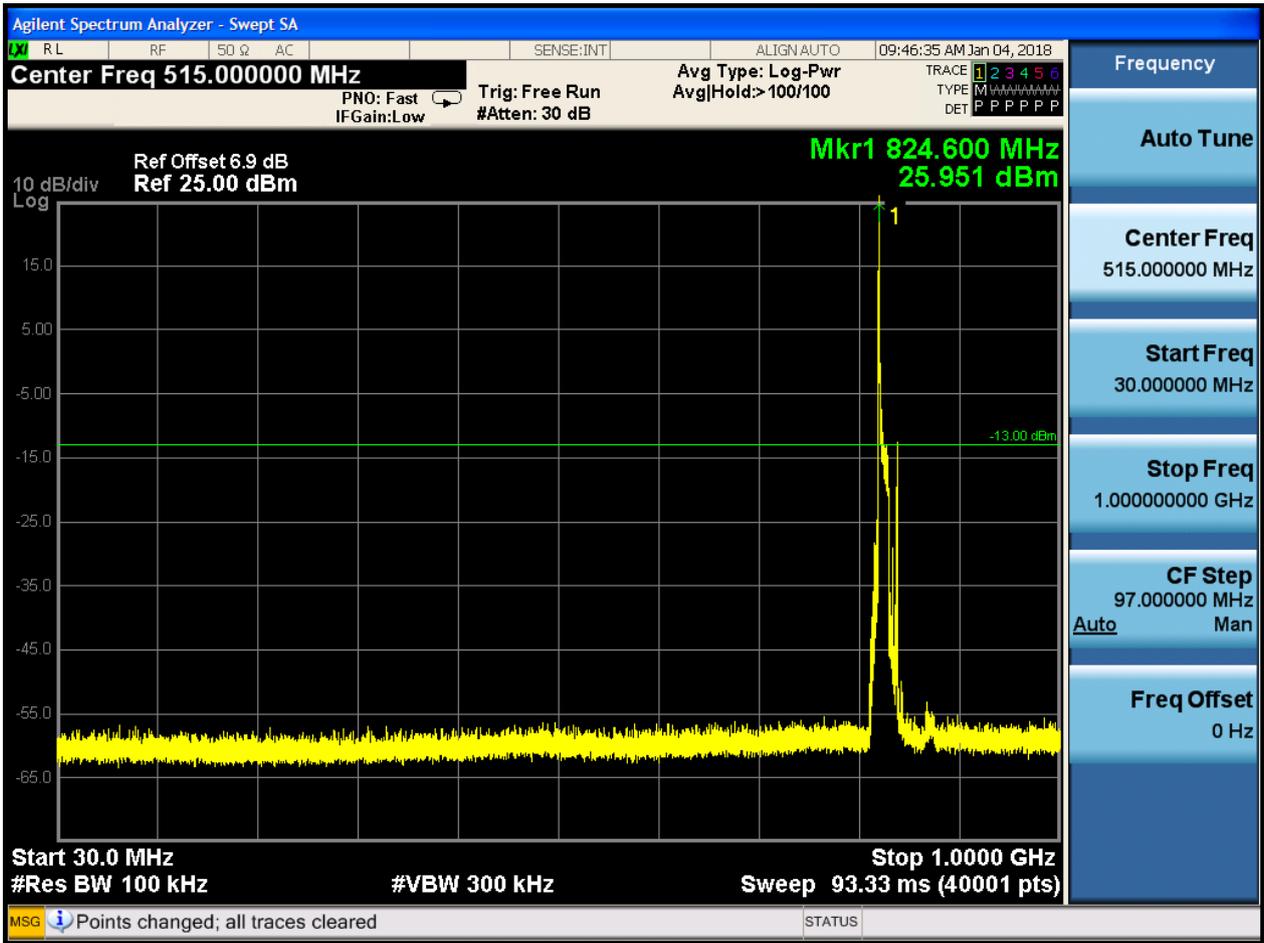
6.1.1.2.4 Test Bandwidth = 10

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0





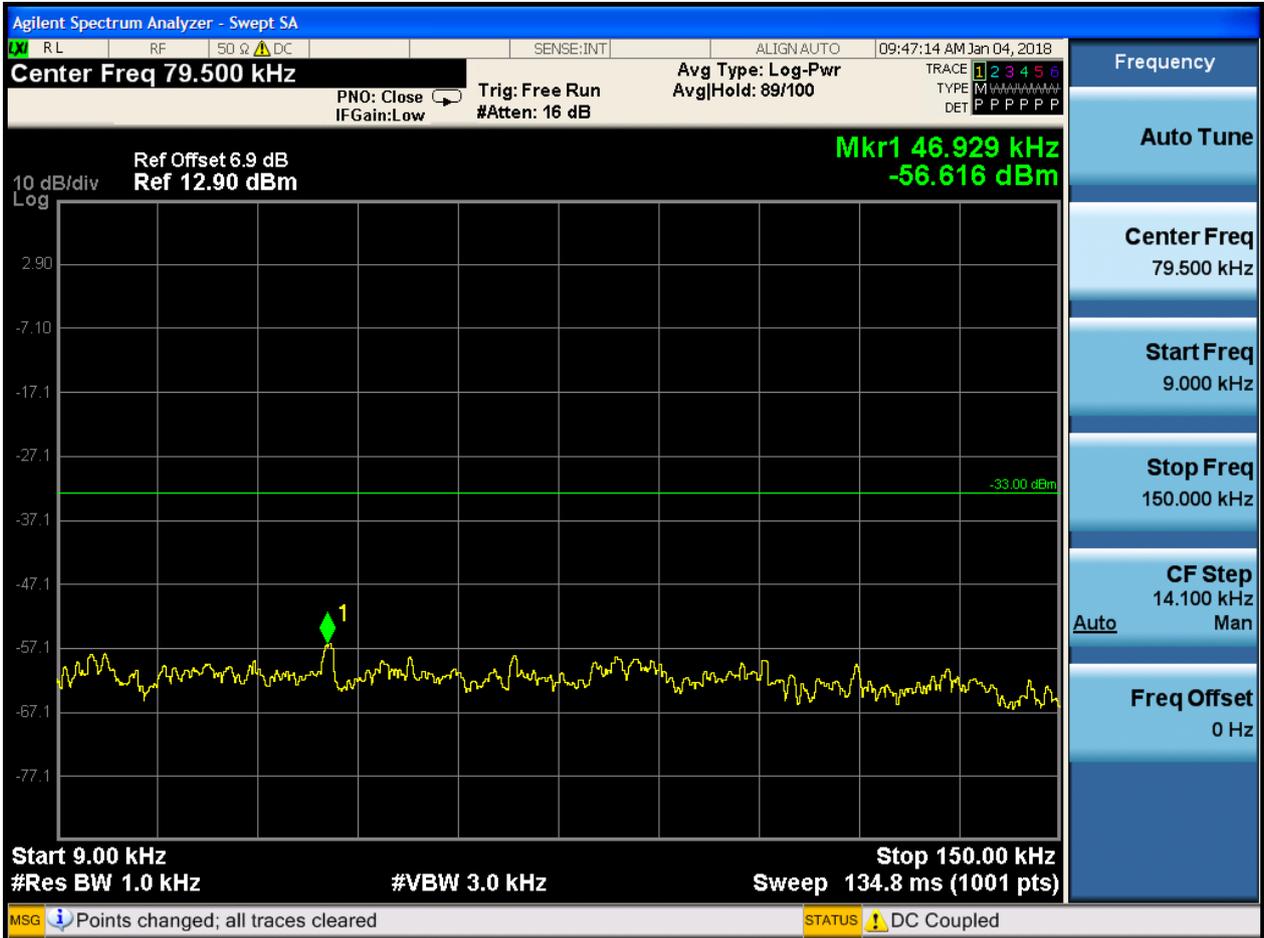






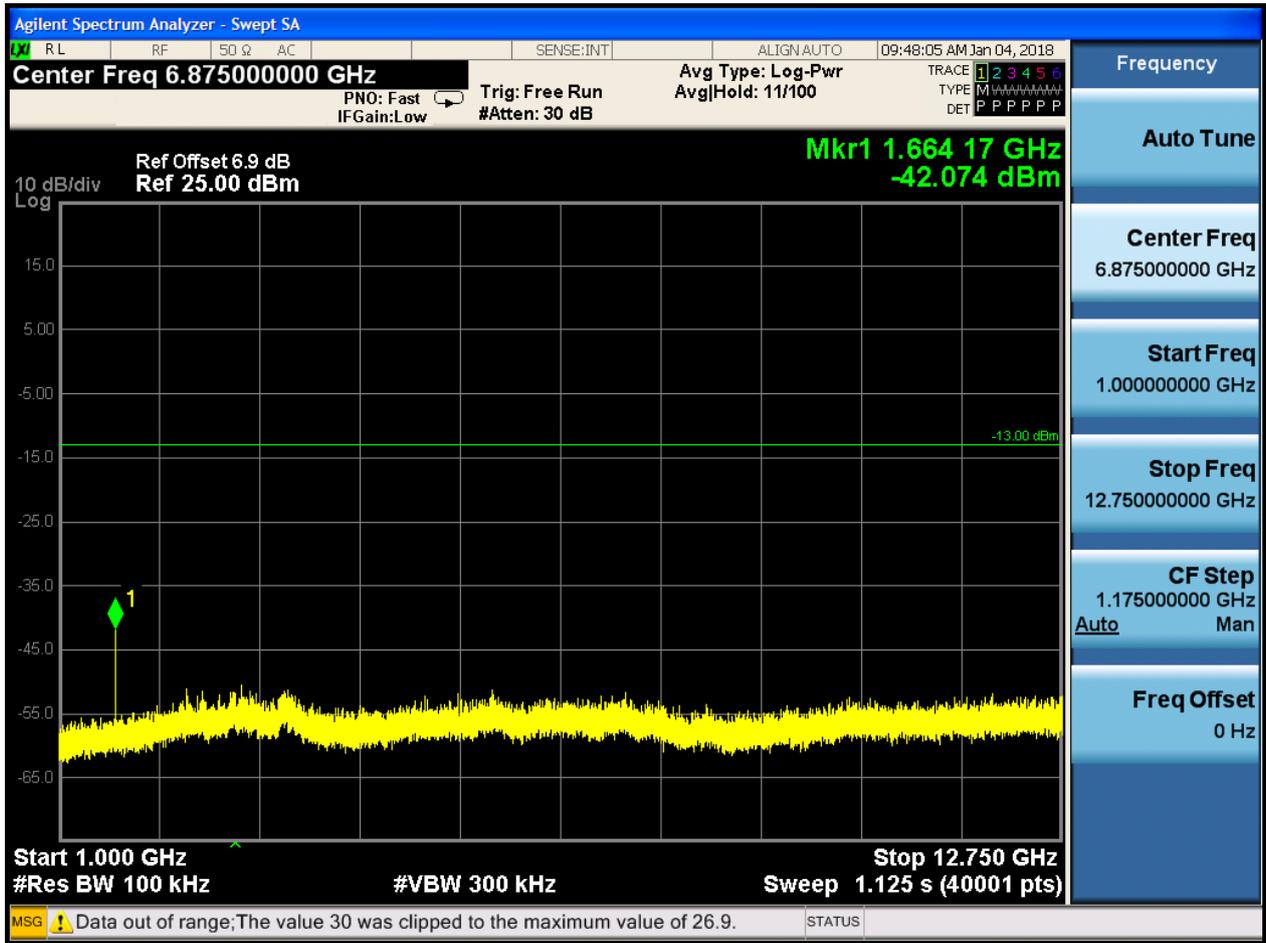
6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0





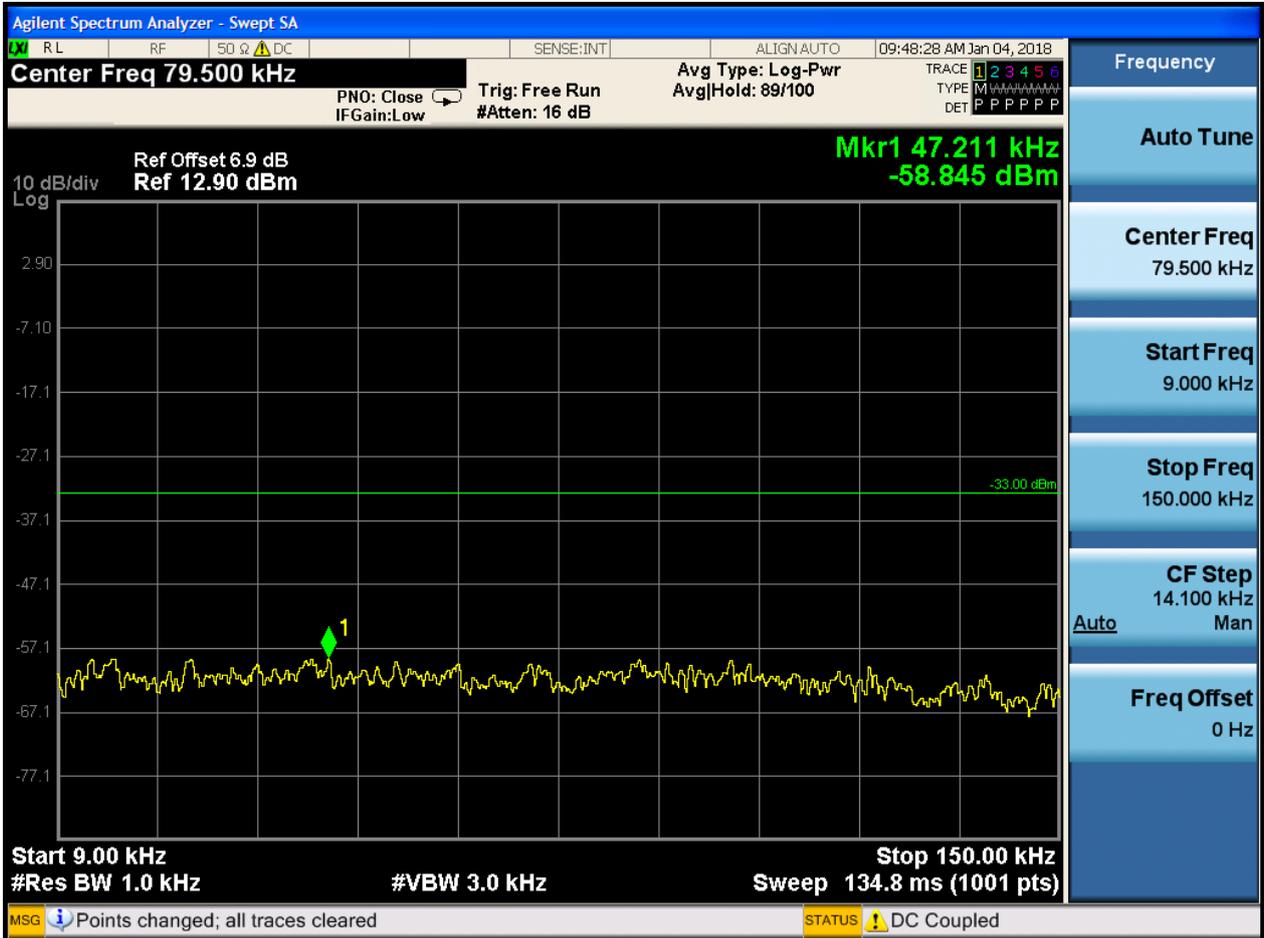




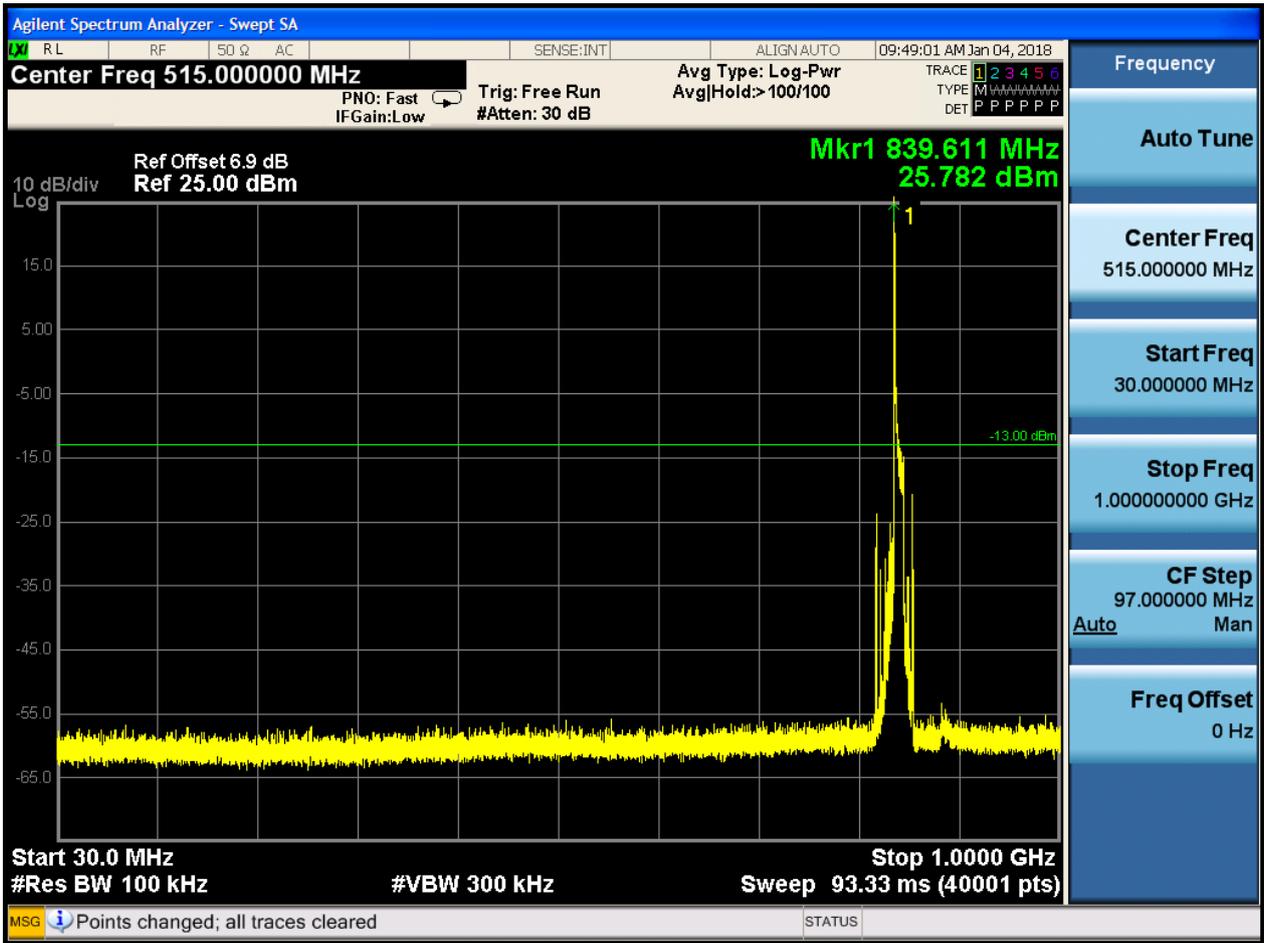


6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0











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

Note:

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

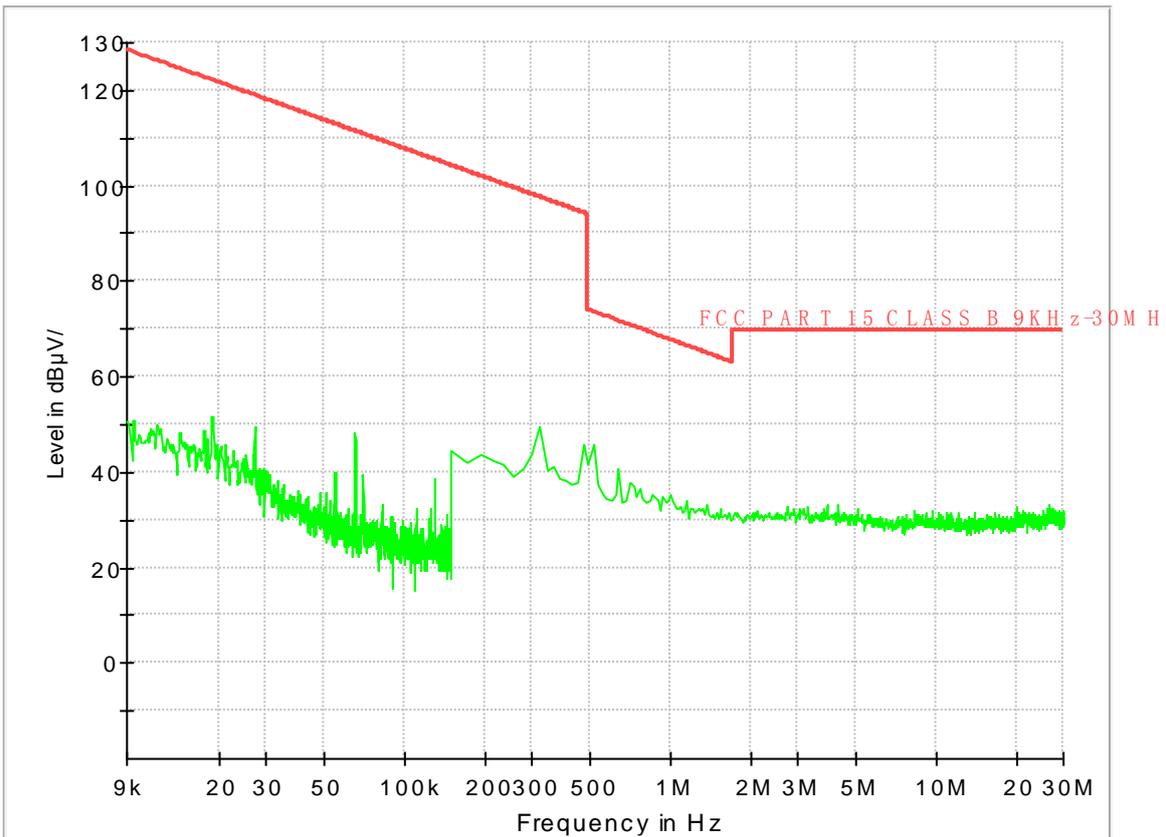
We tested all modes, but the data presented below is the worst case.

## Part I - Test Plots

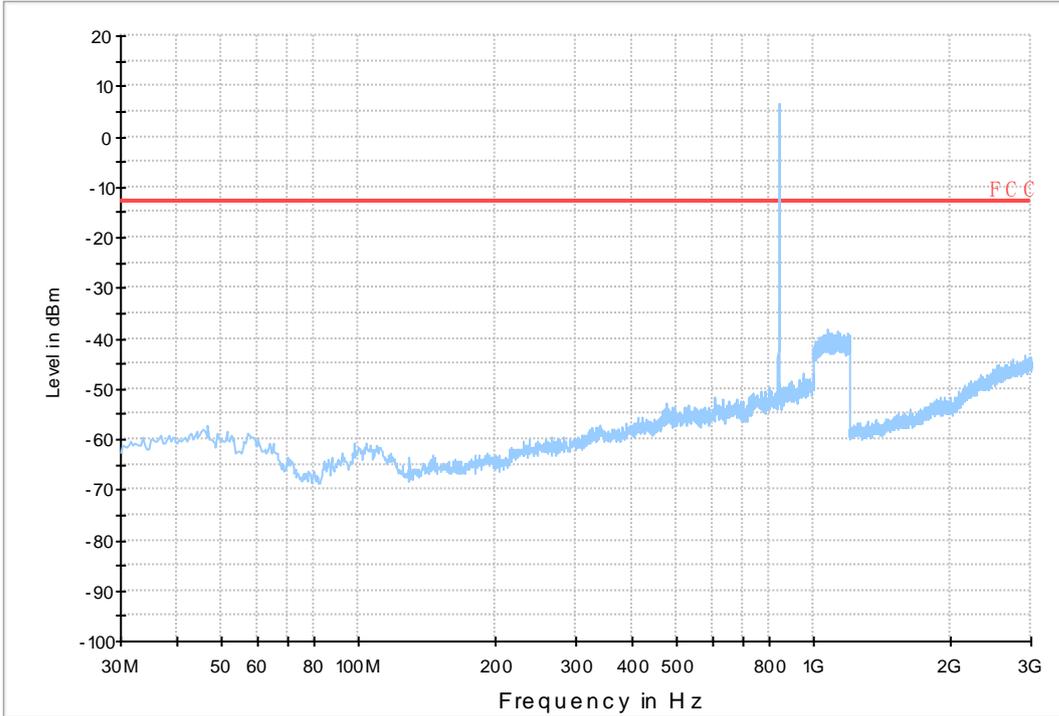
### 7.1 For LTE

#### 7.1.1 Test Band = BAND5\_ANT1

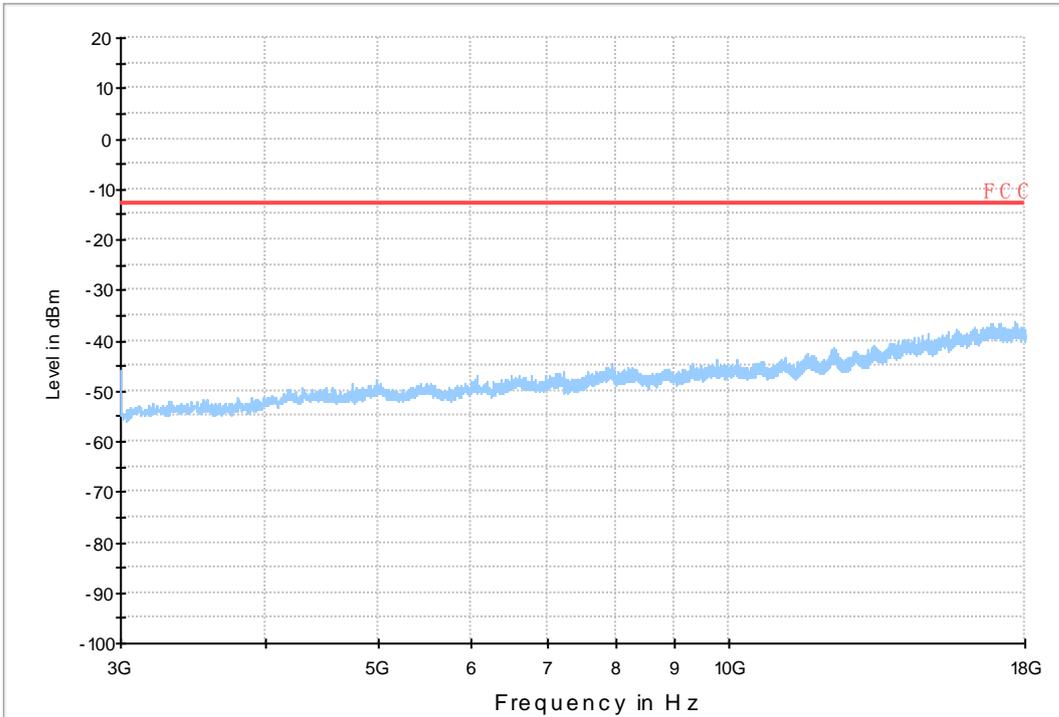
##### 7.1.1.1 Test Bandwidth = 1.4



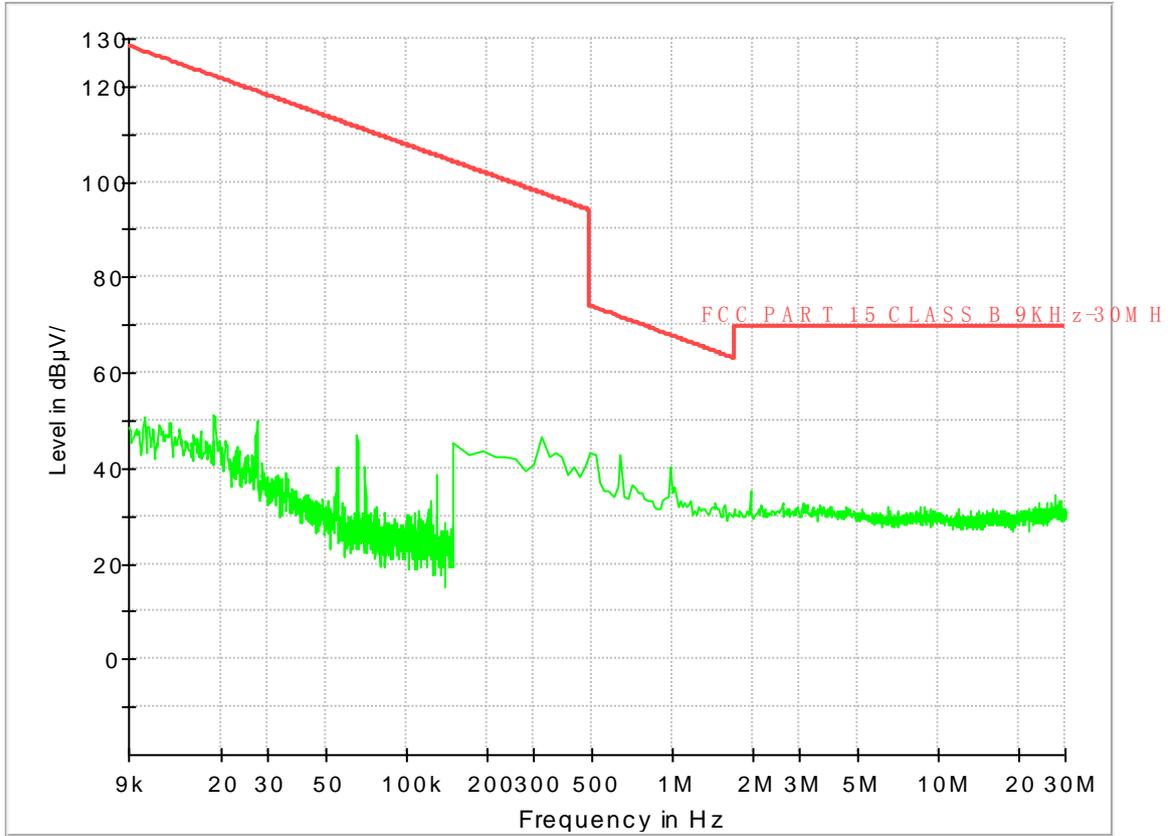
Copy of RSE-TX-DIRECTOR BELOW 1G\_L



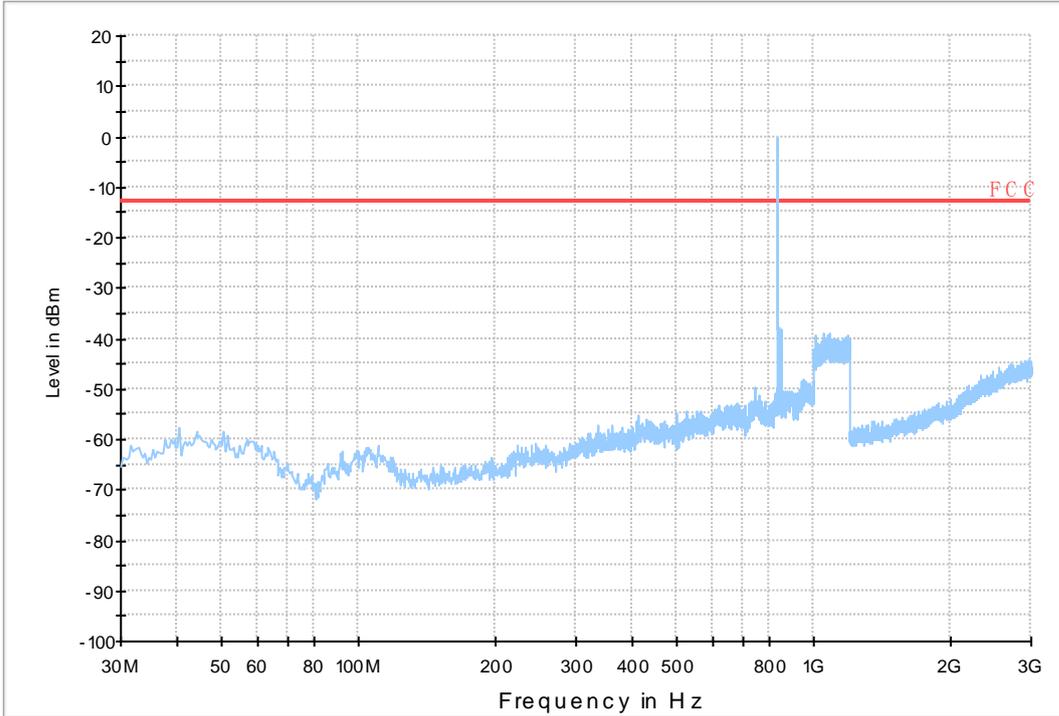
Copy of RSE-TX-DIRECTOR BELOW 1G\_H



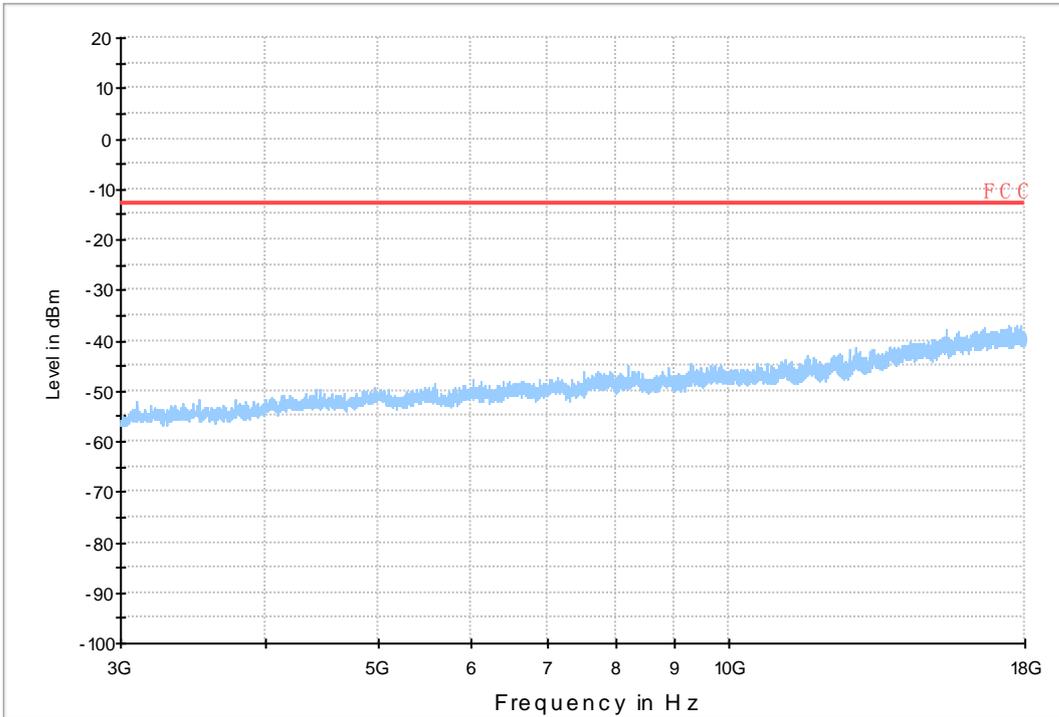
### 7.1.1.3 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G\_L

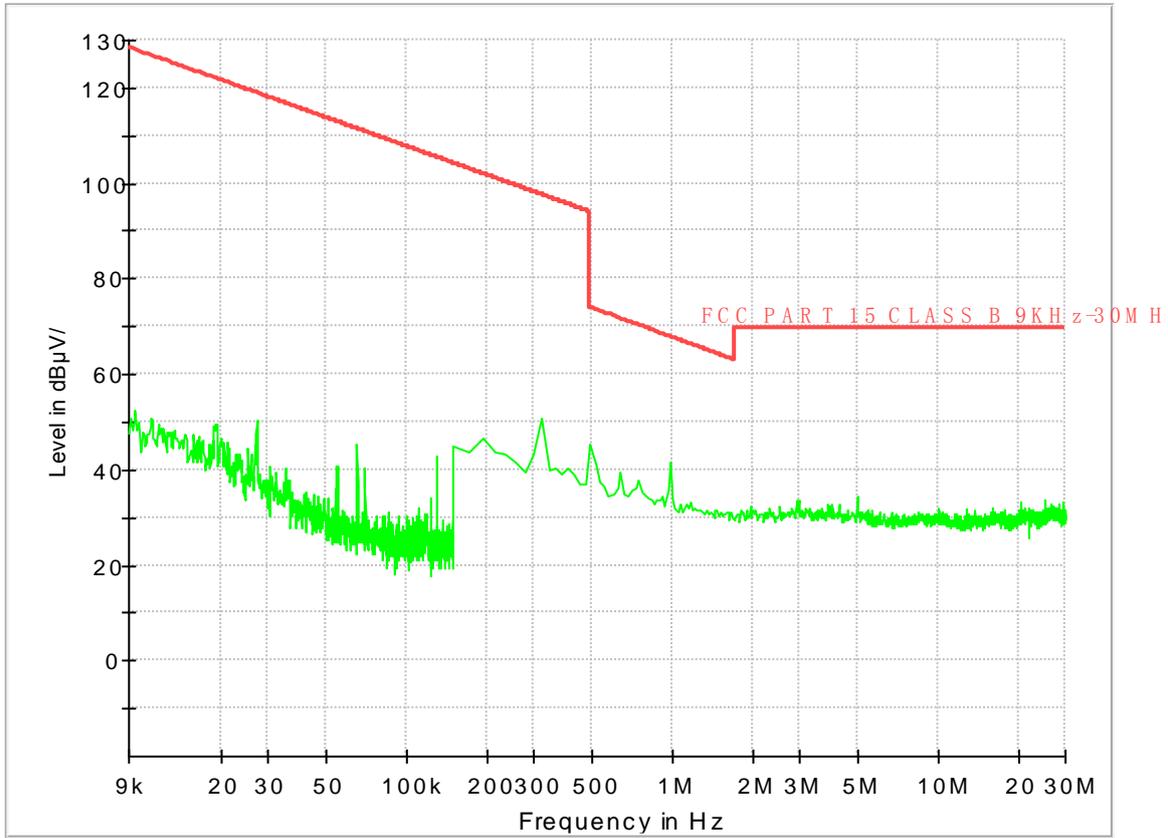


Copy of RSE-TX-DIRECTOR BELOW 1G\_H

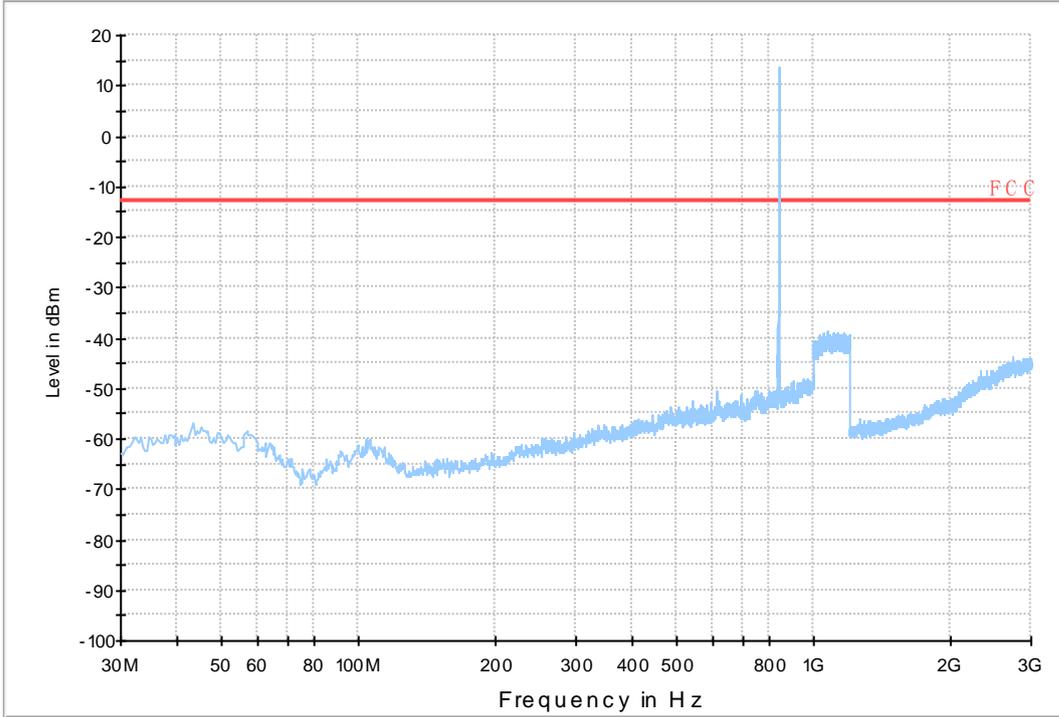


### 7.1.2 Test Band = BAND5\_ANT2

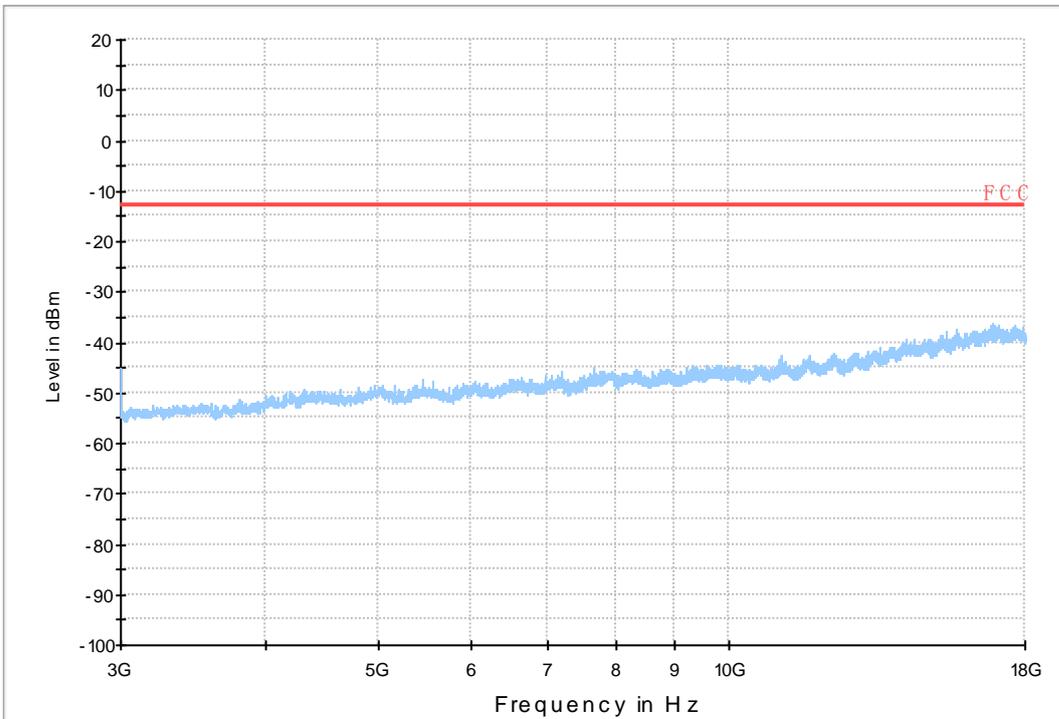
#### 7.1.2.1 Test Bandwidth = 1.4



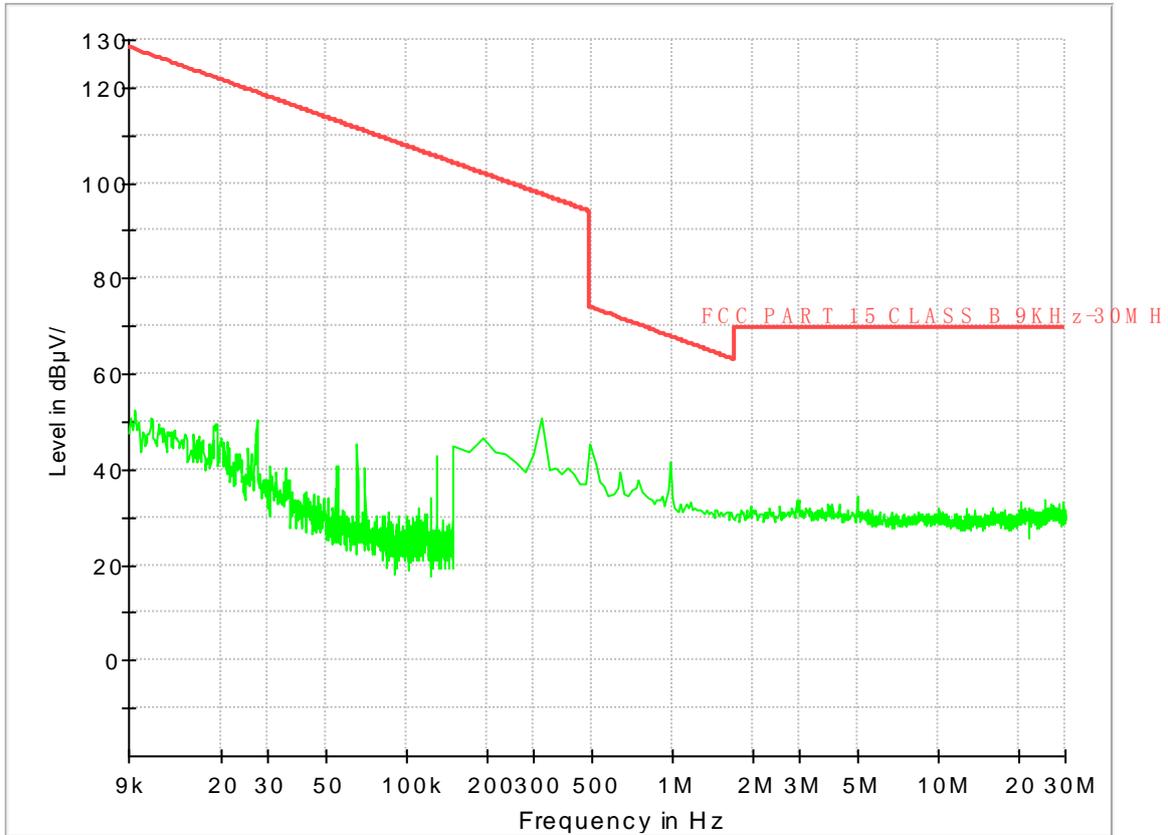
Copy of RSE-TX-DIRECTOR BELOW 1G\_L



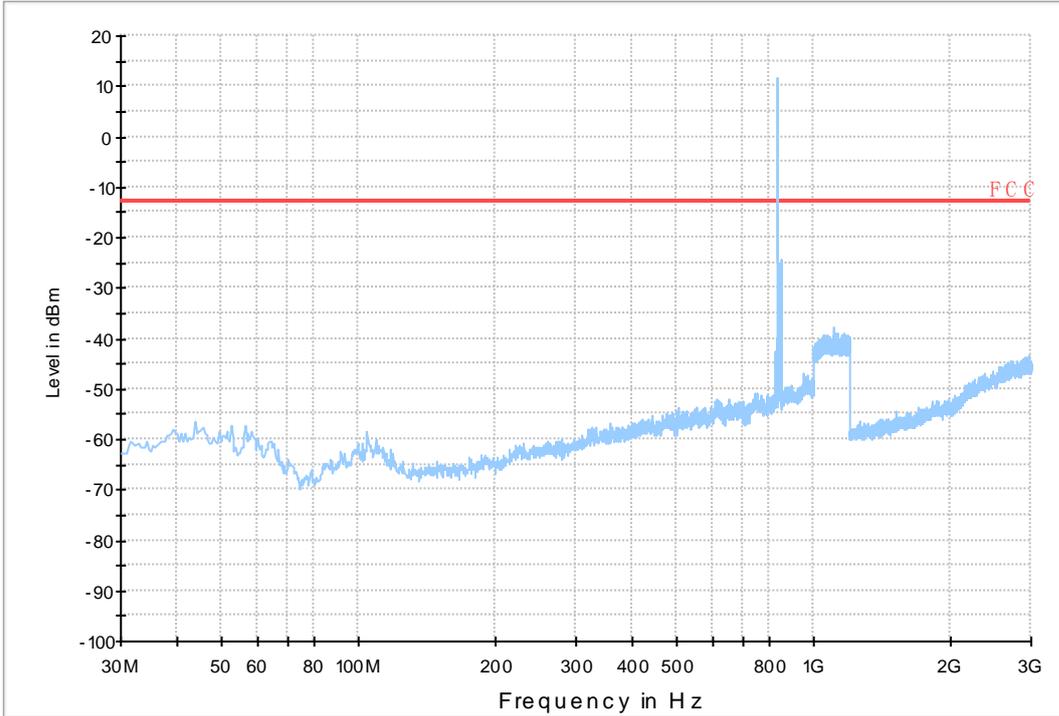
Copy of RSE-TX-DIRECTOR BELOW 1G\_H



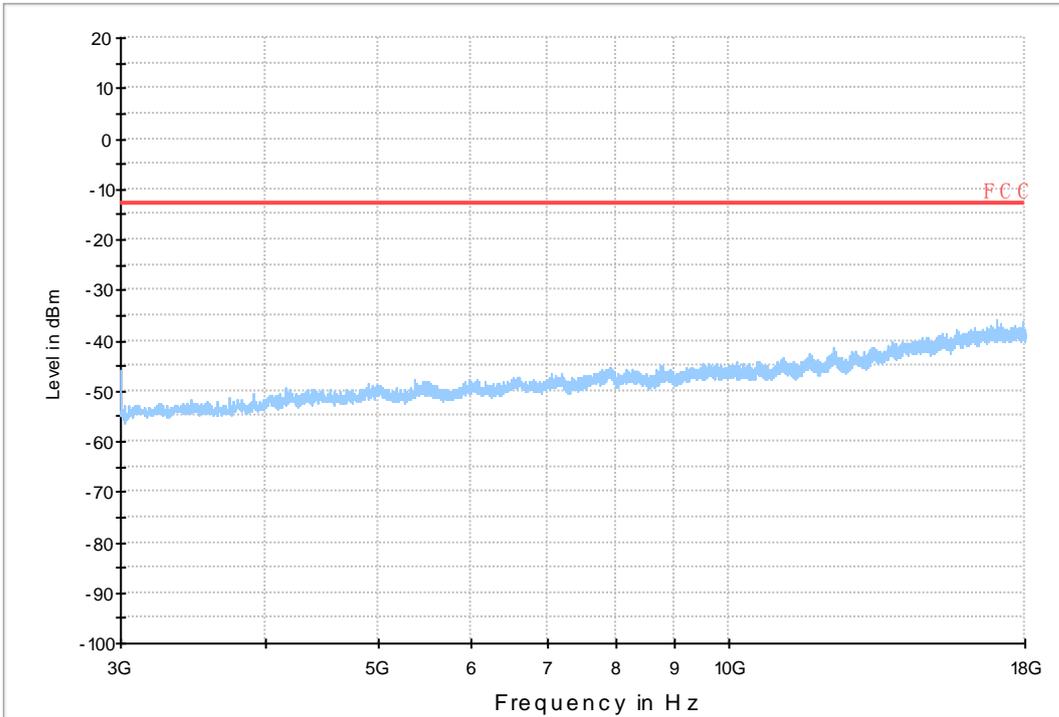
### 7.1.2.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G\_L



Copy of RSE-TX-DIRECTOR BELOW 1G\_H





## 8Appendix\_H: Frequency Stability

### 8.1 For LTE

#### 8.1.1 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
BAND5	LTE/TM1	1.4	LCH	TN	VL	-7.74	-0.00939	PASS
					VN	-2.29	-0.00278	PASS
					VH	1.95	0.00236	PASS
			MCH	TN	VL	7.97	0.00953	PASS
					VN	5.48	0.00655	PASS
					VH	-3.26	-0.0039	PASS
			HCH	TN	VL	5.32	0.00627	PASS
					VN	-7.21	-0.0085	PASS
					VH	4.09	0.00482	PASS
		3	LCH	TN	VL	3.29	0.00399	PASS
					VN	3.72	0.00451	PASS
					VH	1.27	0.00154	PASS
			MCH	TN	VL	-0.53	-0.00063	PASS
					VN	1.89	0.00226	PASS
					VH	1.73	0.00207	PASS
			HCH	TN	VL	3.16	0.00373	PASS
					VN	-1.14	-0.00135	PASS
					VH	-3.35	-0.00395	PASS
		5	LCH	TN	VL	-5.71	-0.00691	PASS
					VN	-3.63	-0.00439	PASS
					VH	-0.49	-0.00059	PASS
			MCH	TN	VL	-1.75	-0.00209	PASS
					VN	3.12	0.00373	PASS
					VH	-0.2	-0.00024	PASS
			HCH	TN	VL	-1.72	-0.00203	PASS
					VN	4.25	0.00502	PASS
					VH	1.29	0.00152	PASS
		10	LCH	TN	VL	1.76	0.00212	PASS
					VN	3.08	0.00372	PASS
					VH	0.46	0.00055	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	-3.55	-0.00424	PASS
					VN	1.87	0.00224	PASS
					VH	3.22	0.00385	PASS
			HCH	TN	VL	-1.77	-0.0021	PASS
					VN	-2.12	-0.00251	PASS
					VH	-1.16	-0.00137	PASS
		1.4	LCH	TN	VL	-0.37	-0.00045	PASS
					VN	-6.88	-0.00834	PASS
					VH	1.6	0.00194	PASS
			MCH	TN	VL	14.22	0.017	PASS
					VN	-1.37	-0.00164	PASS
					VH	-14.86	-0.01776	PASS
			HCH	TN	VL	-1.19	-0.0014	PASS
					VN	-4.01	-0.00473	PASS
					VH	-7.71	-0.00909	PASS
		3	LCH	TN	VL	4.56	0.00552	PASS
					VN	-1.6	-0.00194	PASS
					VH	1.4	0.0017	PASS
			MCH	TN	VL	-0.99	-0.00118	PASS
					VN	-2	-0.00239	PASS
					VH	-0.8	-0.00096	PASS
			HCH	TN	VL	-5.39	-0.00636	PASS
					VN	0.7	0.00083	PASS
					VH	3.12	0.00368	PASS
		5	LCH	TN	VL	-1.27	-0.00154	PASS
					VN	-2.27	-0.00275	PASS
					VH	-3.12	-0.00377	PASS
			MCH	TN	VL	-9.61	-0.01149	PASS
					VN	0.82	0.00098	PASS
					VH	-2.27	-0.00271	PASS
			HCH	TN	VL	0.6	0.00071	PASS
					VN	-0.49	-0.00058	PASS
					VH	1.19	0.00141	PASS
		10	LCH	TN	VL	4.78	0.00577	PASS
					VN	3.68	0.00444	PASS
					VH	2.73	0.00329	PASS
MCH	TN		VL	3.35	0.004	PASS		
			VN	-2.19	-0.00262	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VH	4.33	0.00518	PASS
			HCH	TN	VL	0.56	0.00066	PASS
					VN	4.11	0.00487	PASS
					VH	1.13	0.00134	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
BAND5	LTE/TM1	1.4	LCH	VN	-30	-6.42	-0.00778	PASS
					-20	-7.02	-0.00851	PASS
					-10	-2.6	-0.00315	PASS
					0	-4.46	-0.00541	PASS
					10	-5.29	-0.00641	PASS
					20	3.53	0.00428	PASS
					30	0.19	0.00023	PASS
					40	-2.52	-0.00306	PASS
					50	-4.39	-0.00532	PASS
			MCH	VN	-30	7.84	0.00937	PASS
					-20	-5.02	-0.006	PASS
					-10	-11.03	-0.01319	PASS
					0	-14.1	-0.01686	PASS
					10	-19.21	-0.02296	PASS
					20	-5.87	-0.00702	PASS
					30	7.12	0.00851	PASS
					40	26.95	0.03222	PASS
					50	17.05	0.02038	PASS
		HCH	VN	-30	2.33	0.00275	PASS	
				-20	3.68	0.00434	PASS	
				-10	-5.08	-0.00599	PASS	
				0	1.49	0.00176	PASS	
				10	1.66	0.00196	PASS	
				20	4.71	0.00555	PASS	
				30	-2.57	-0.00303	PASS	
				40	-8.61	-0.01015	PASS	
				50	24.98	0.02945	PASS	
3	LCH	VN	-30	-1.27	-0.00154	PASS		
			-20	1.63	0.00197	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					-10	-1.53	-0.00185	PASS	
					0	-1.86	-0.00225	PASS	
					10	2.8	0.00339	PASS	
					20	-0.14	-0.00017	PASS	
					30	1.33	0.00161	PASS	
					40	2.72	0.00329	PASS	
					50	3.68	0.00446	PASS	
			MCH	VN	-30	2.35	0.00281	PASS	
					-20	5.72	0.00684	PASS	
					-10	-5.22	-0.00624	PASS	
					0	-3.65	-0.00436	PASS	
					10	4.11	0.00491	PASS	
					20	3.69	0.00441	PASS	
					30	-2.69	-0.00322	PASS	
					40	3.56	0.00426	PASS	
			HCH	VN	-30	2	0.00236	PASS	
					-20	1.09	0.00129	PASS	
					-10	-0.94	-0.00111	PASS	
					0	1.5	0.00177	PASS	
					10	0.64	0.00076	PASS	
					20	-0.3	-0.00035	PASS	
					30	-5.66	-0.00668	PASS	
					40	0.63	0.00074	PASS	
			5	LCH	VN	-30	2.05	0.00248	PASS
						-20	1.79	0.00217	PASS
						-10	-3.82	-0.00462	PASS
						0	-1.24	-0.0015	PASS
						10	1.17	0.00142	PASS
						20	2.26	0.00273	PASS
						30	-3.28	-0.00397	PASS
						40	-3.02	-0.00365	PASS
						50	-1.86	-0.00225	PASS
						MCH	VN	-30	-13.92
			-20	-2.62	-0.00313			PASS	
			-10	-3.66	-0.00438			PASS	
			0	-6.82	-0.00815			PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	-2.12	-0.00253	PASS		
					20	-6.38	-0.00763	PASS		
					30	-14.59	-0.01744	PASS		
					40	-4.36	-0.00521	PASS		
					50	-12.45	-0.01488	PASS		
			HCH	VN	-30	2.12	0.0025	PASS		
					-20	-0.54	-0.00064	PASS		
					-10	-1.34	-0.00158	PASS		
					0	1.04	0.00123	PASS		
					10	-3.02	-0.00357	PASS		
					20	-4.03	-0.00476	PASS		
					30	3.52	0.00416	PASS		
					40	1.89	0.00223	PASS		
					50	-2.89	-0.00341	PASS		
					LCH	VN	-30	4.51	0.00544	PASS
			-20	-0.67			-0.00081	PASS		
			-10	0.74			0.00089	PASS		
			0	3.16			0.00381	PASS		
			10	6.28			0.00758	PASS		
			20	0.53			0.00064	PASS		
		30	4.91	0.00592			PASS			
		40	3.3	0.00398			PASS			
		50	2.19	0.00264			PASS			
		MCH	VN	-30			5.76	0.00689	PASS	
				-20	3.06	0.00366	PASS			
				-10	3.93	0.0047	PASS			
				0	-0.86	-0.00103	PASS			
				10	0.44	0.00053	PASS			
				20	7.98	0.00954	PASS			
				30	-4.46	-0.00533	PASS			
				40	11.44	0.01368	PASS			
				50	1.07	0.00128	PASS			
				HCH	VN	-30	1.39	0.00165	PASS	
		-20	2.05			0.00243	PASS			
		-10	-0.26			-0.00031	PASS			
		0	-0.43			-0.00051	PASS			
		10	-0.44			-0.00052	PASS			
		20	-1.02			-0.00121	PASS			
				10			-30	4.51	0.00544	PASS
							-20	-0.67	-0.00081	PASS
-10	0.74						0.00089	PASS		
0	3.16						0.00381	PASS		
10	6.28						0.00758	PASS		
LCH	VN				20	0.53	0.00064	PASS		
					30	4.91	0.00592	PASS		
					40	3.3	0.00398	PASS		
					50	2.19	0.00264	PASS		
					-30	5.76	0.00689	PASS		
		-20	3.06		0.00366	PASS				
		-10	3.93		0.0047	PASS				
		0	-0.86		-0.00103	PASS				
		10	0.44		0.00053	PASS				
		20	7.98		0.00954	PASS				
MCH	VN	30	-4.46		-0.00533	PASS				
		40	11.44		0.01368	PASS				
		50	1.07		0.00128	PASS				
		-30	1.39		0.00165	PASS				
		-20	2.05		0.00243	PASS				
		-10	-0.26	-0.00031	PASS					
HCH	VN	0	-0.43	-0.00051	PASS					
		10	-0.44	-0.00052	PASS					
		20	-1.02	-0.00121	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
	LTE/TM2	1.4			30	-0.07	-0.00008	PASS		
					40	-1.47	-0.00174	PASS		
					50	0.27	0.00032	PASS		
			LCH	VN	-30	-6.77	-0.00821	PASS		
					-20	-4.49	-0.00544	PASS		
					-10	-2.82	-0.00342	PASS		
					0	-5.68	-0.00689	PASS		
					10	3.22	0.0039	PASS		
					20	3.16	0.00383	PASS		
					30	-1.99	-0.00241	PASS		
					40	2.57	0.00312	PASS		
					50	-9.54	-0.01157	PASS		
					MCH	VN	-30	-17.54	-0.02097	PASS
							-20	-10.11	-0.01209	PASS
							-10	4.62	0.00552	PASS
		0	-6.19	-0.0074			PASS			
		10	10.57	0.01264			PASS			
		20	9.26	0.01107			PASS			
		HCH	VN	30	-20.01	-0.02392	PASS			
				40	10.2	0.01219	PASS			
				50	-24.08	-0.02879	PASS			
				-30	7	0.00825	PASS			
				-20	3.32	0.00391	PASS			
				-10	8.53	0.01006	PASS			
				0	-40.7	-0.04798	PASS			
				10	-14.83	-0.01748	PASS			
		3	LCH	VN	20	-0.11	-0.00013	PASS		
					30	-4.19	-0.00494	PASS		
					40	11.86	0.01398	PASS		
					50	24.75	0.02918	PASS		
					-30	-7.61	-0.00922	PASS		
					-20	3.09	0.00374	PASS		
-10	1.54				0.00187	PASS				
0	3.36				0.00407	PASS				
10	-3.98	-0.00482	PASS							
20	-1.27	-0.00154	PASS							
30	0.76	0.00092	PASS							
40	0.69	0.00084	PASS							



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	VN	50	-7.64	-0.00925	PASS
					-30	0.5	0.0006	PASS
					-20	-2.06	-0.00246	PASS
					-10	-0.57	-0.00068	PASS
					0	-0.51	-0.00061	PASS
					10	0.01	0.00001	PASS
					20	3.91	0.00467	PASS
					30	2.37	0.00283	PASS
					40	-0.33	-0.00039	PASS
			50	3.46	0.00414	PASS		
			HCH	VN	-30	1.14	0.00135	PASS
					-20	0.73	0.00086	PASS
					-10	-0.51	-0.0006	PASS
					0	-0.24	-0.00028	PASS
					10	-0.5	-0.00059	PASS
					20	-2.88	-0.0034	PASS
					30	-0.07	-0.00008	PASS
					40	0.51	0.0006	PASS
		50			-3.55	-0.00419	PASS	
		5	LCH	VN	-30	-3.75	-0.00454	PASS
					-20	-2.19	-0.00265	PASS
					-10	2.89	0.0035	PASS
					0	-0.54	-0.00065	PASS
					10	-5.11	-0.00618	PASS
					20	-2.37	-0.00287	PASS
					30	-1.67	-0.00202	PASS
					40	-1.67	-0.00202	PASS
					50	0.37	0.00045	PASS
			MCH	VN	-30	-1.59	-0.0019	PASS
					-20	-9.61	-0.01149	PASS
					-10	-6.45	-0.00771	PASS
					0	-6.71	-0.00802	PASS
					10	-20.54	-0.02455	PASS
20	-12.09				-0.01445	PASS		
30	-21.77	-0.02603			PASS			
40	-16.67	-0.01993			PASS			
50	-9.66	-0.01155	PASS					
HCH	VN	-30	-0.5	-0.00059	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					-20	-1.33	-0.00157	PASS		
					-10	0.34	0.0004	PASS		
					0	-0.67	-0.00079	PASS		
					10	-3.09	-0.00365	PASS		
					20	0.13	0.00015	PASS		
					30	-2.09	-0.00247	PASS		
					40	-1.67	-0.00197	PASS		
					50	-0.49	-0.00058	PASS		
		10	LCH	VN	-30	4.38	0.00528	PASS		
					-20	3.96	0.00478	PASS		
					-10	-3.66	-0.00441	PASS		
					0	2.76	0.00333	PASS		
					10	4.63	0.00559	PASS		
					20	-0.37	-0.00045	PASS		
					30	3.58	0.00432	PASS		
					40	5.38	0.00649	PASS		
					50	6.51	0.00785	PASS		
					MCH	VN	-30	5.62	0.00672	PASS
							-20	-6.15	-0.00735	PASS
							-10	-2.43	-0.0029	PASS
		0	5.06	0.00605			PASS			
		10	5.01	0.00599			PASS			
		20	6.14	0.00734			PASS			
		30	5.82	0.00696			PASS			
		40	10.5	0.01255			PASS			
		HCH	VN	-30	-0.01	-0.00001	PASS			
				-20	0.13	0.00015	PASS			
				-10	0.82	0.00097	PASS			
				0	-2.36	-0.0028	PASS			
				10	0.31	0.00037	PASS			
20	-0.5			-0.00059	PASS					
30	-1.63			-0.00193	PASS					
40	-1.89			-0.00224	PASS					
50	-0.92	-0.00109	PASS							

END