

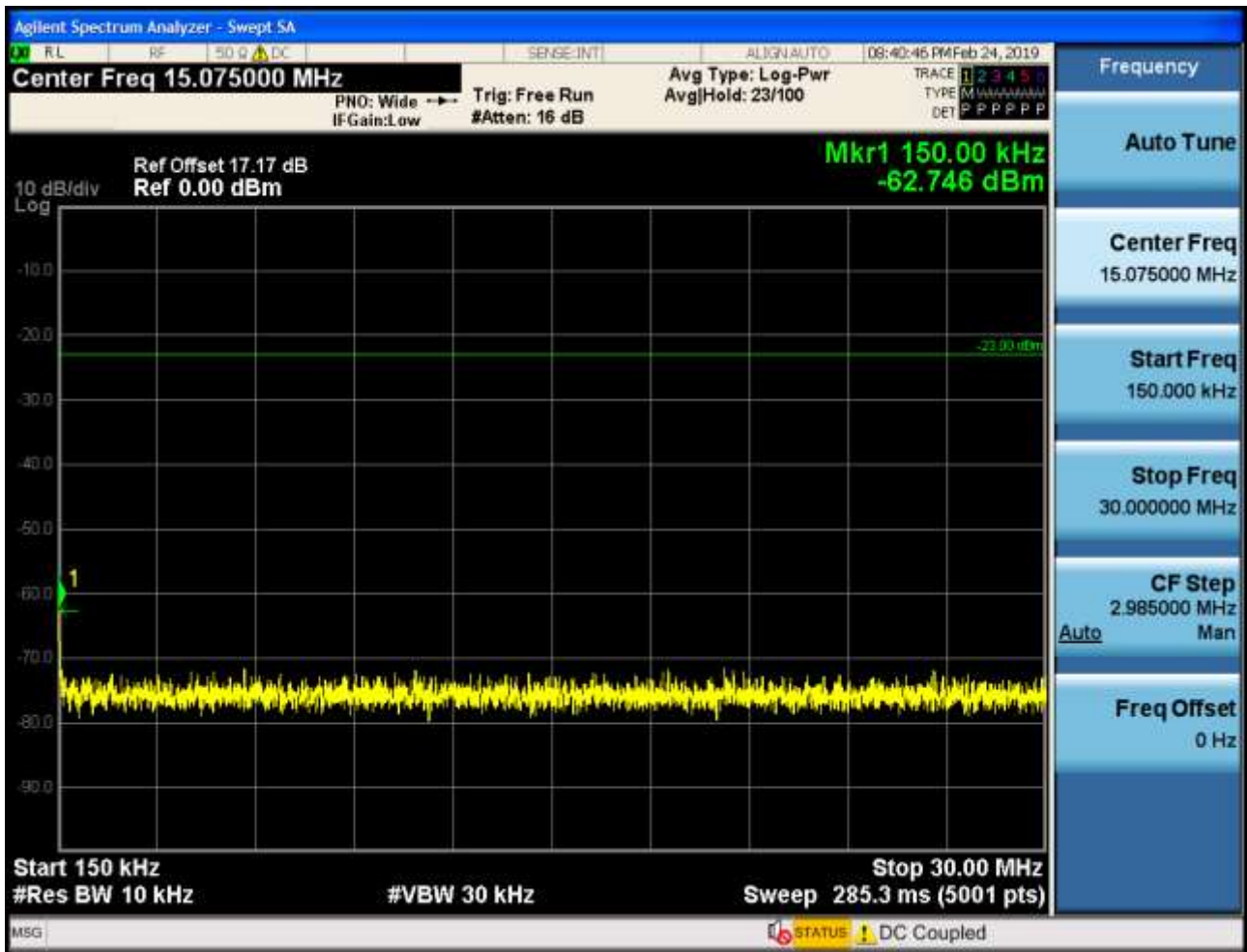


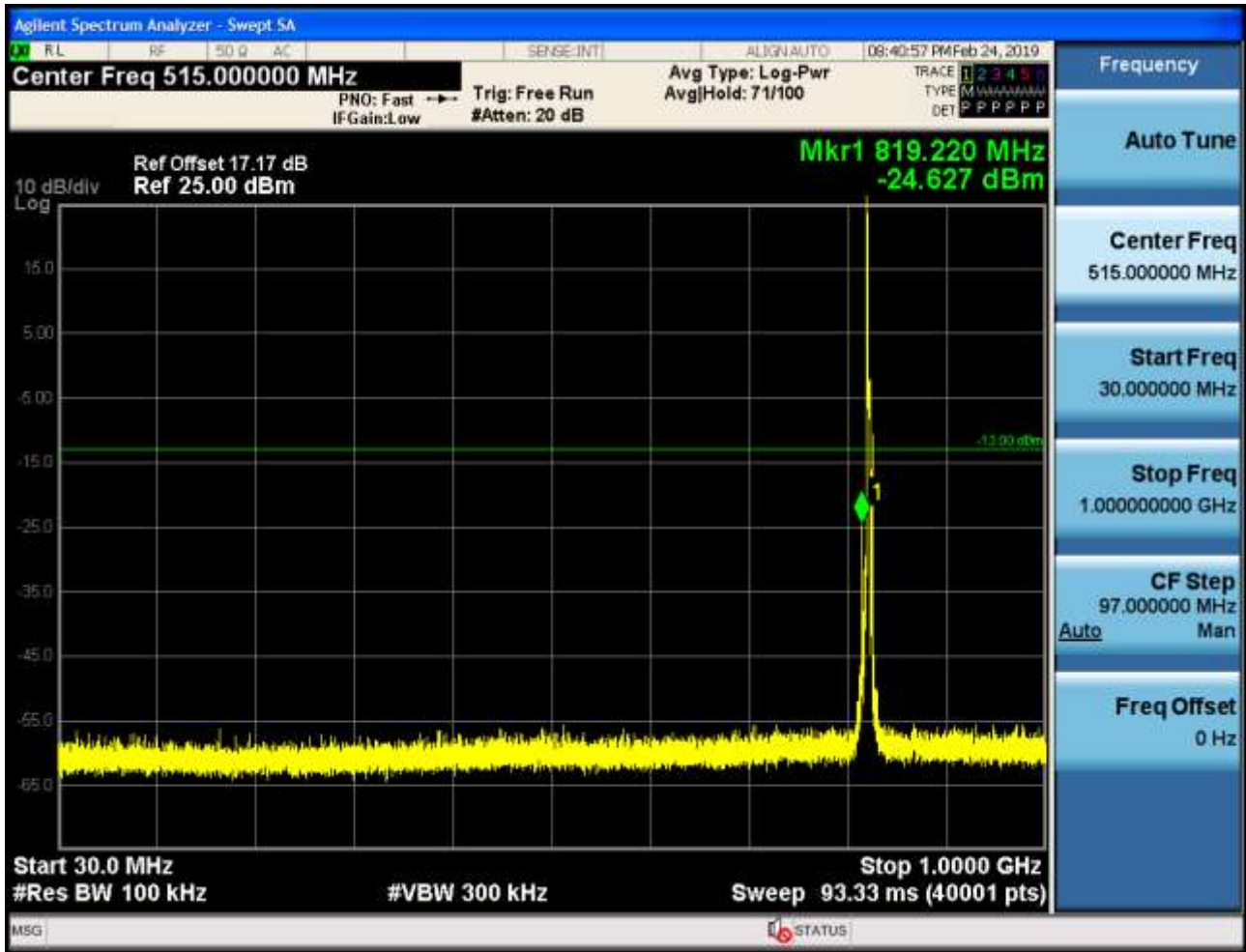
6.2.1.1.2 Test Bandwidth = 3

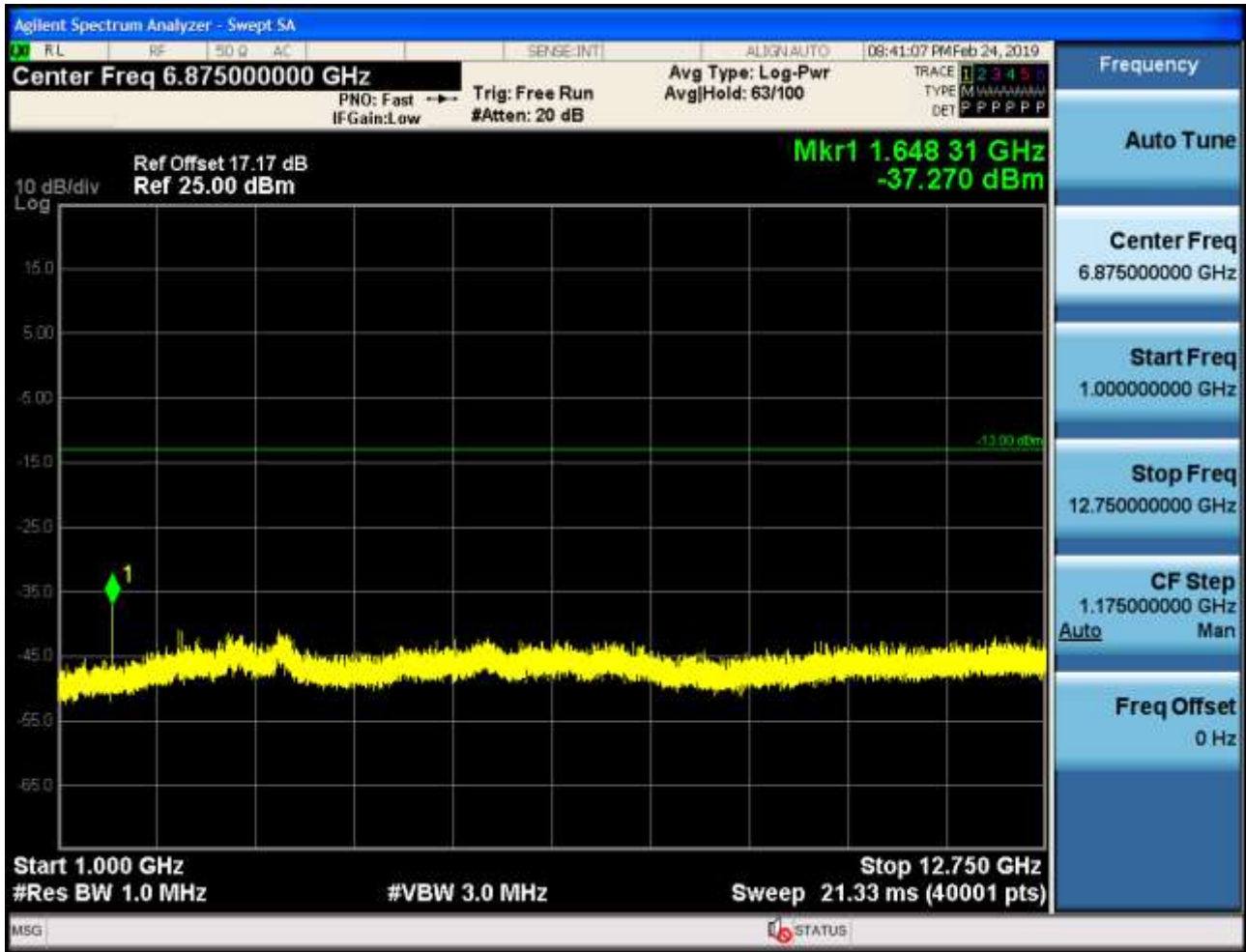
6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0



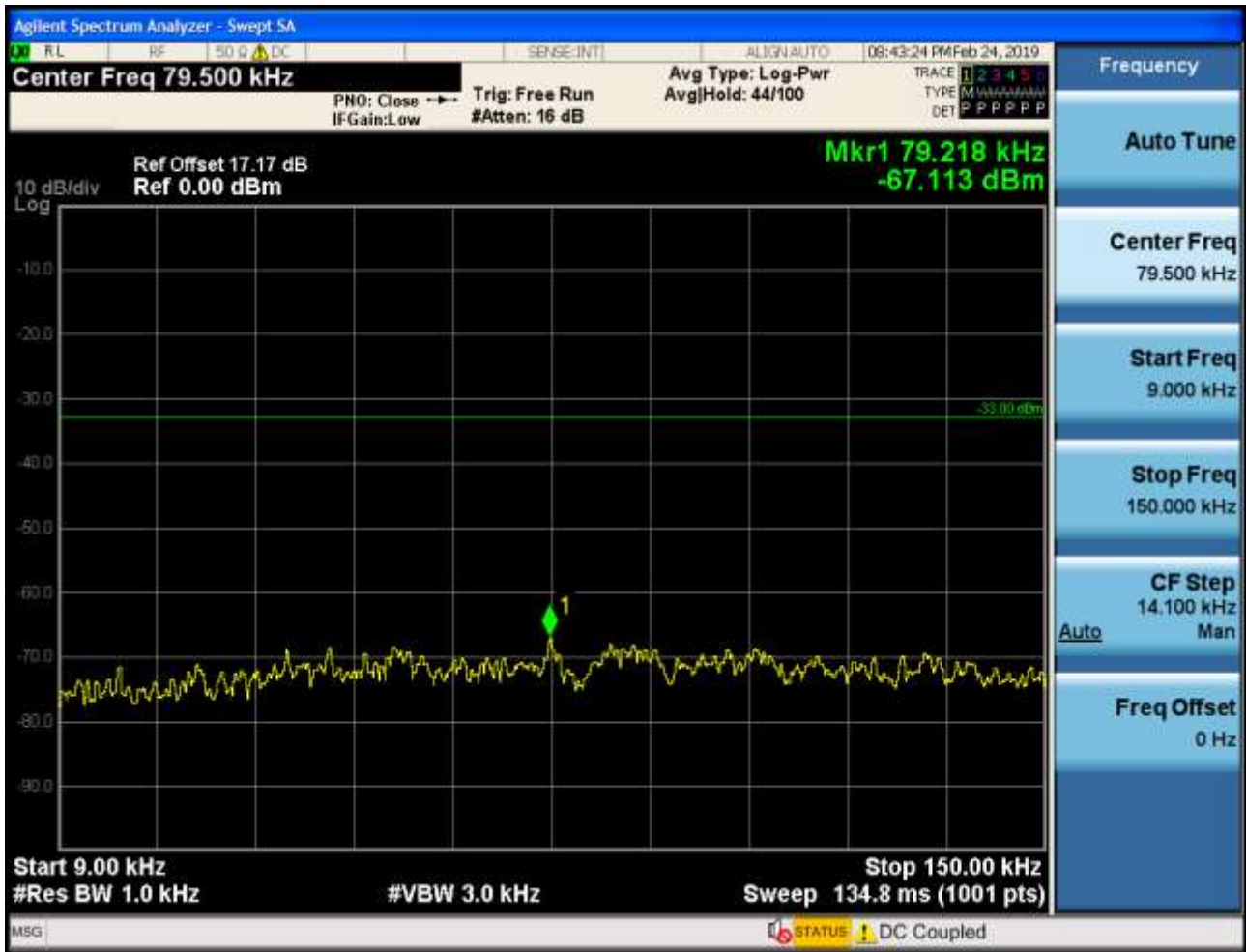


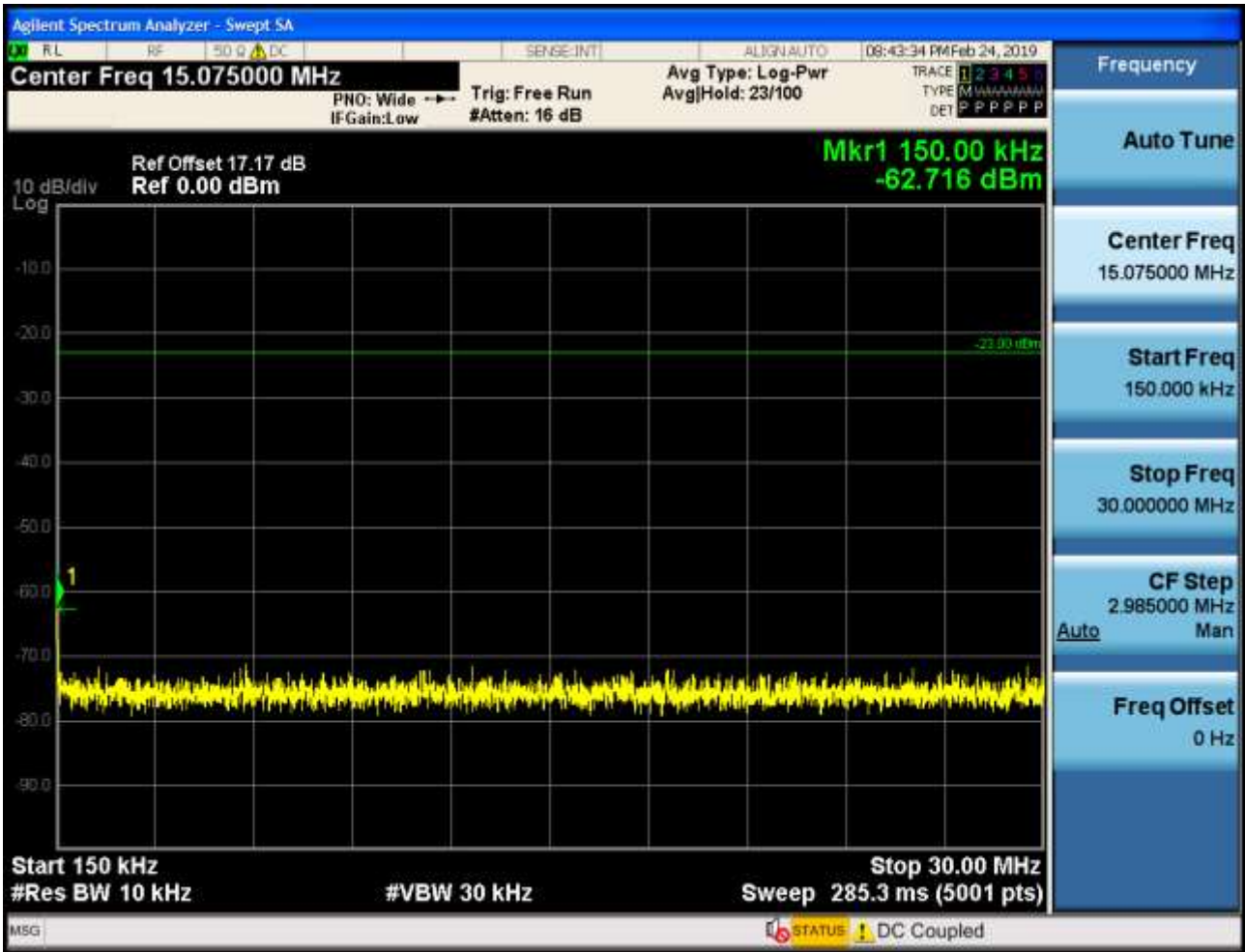


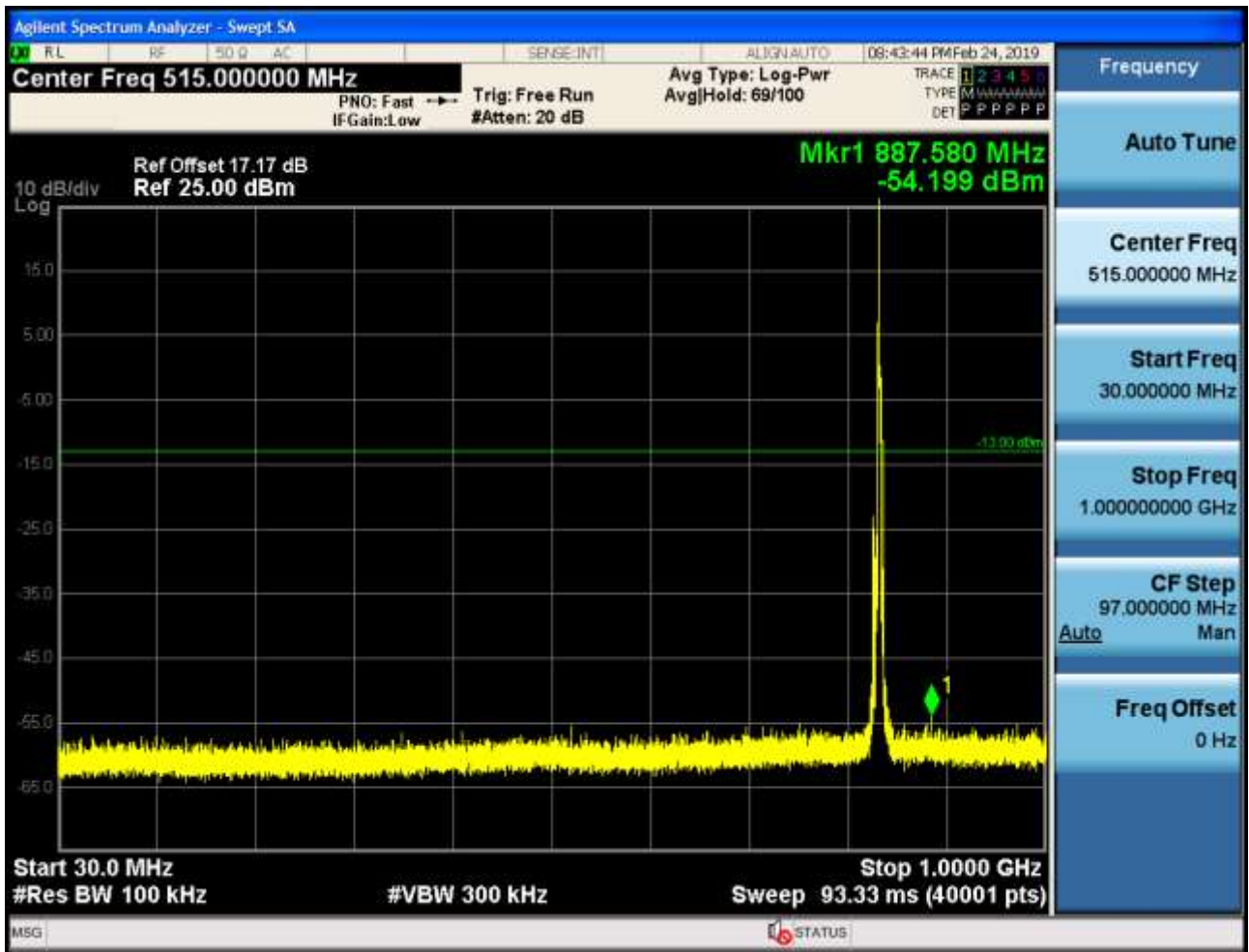


6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0



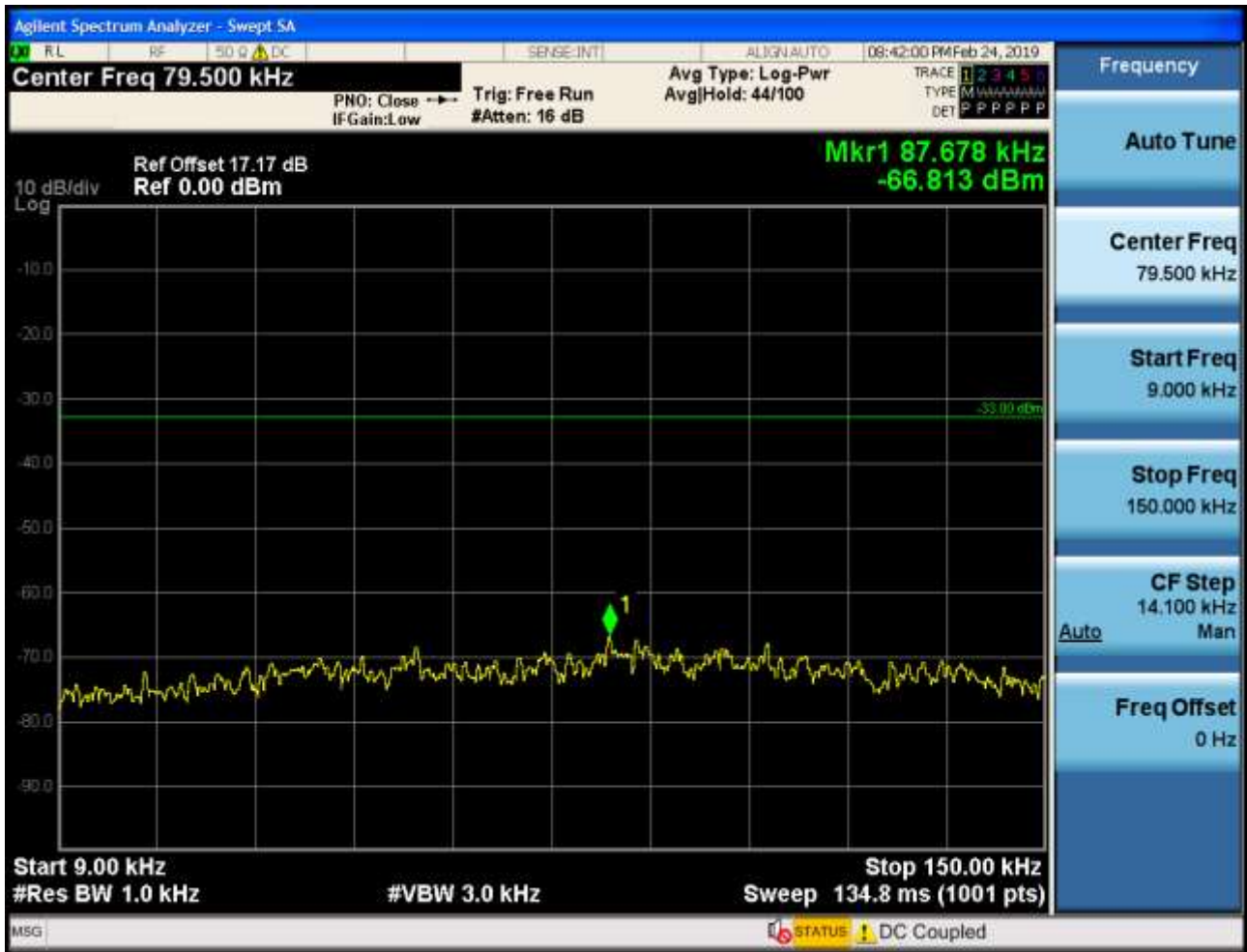


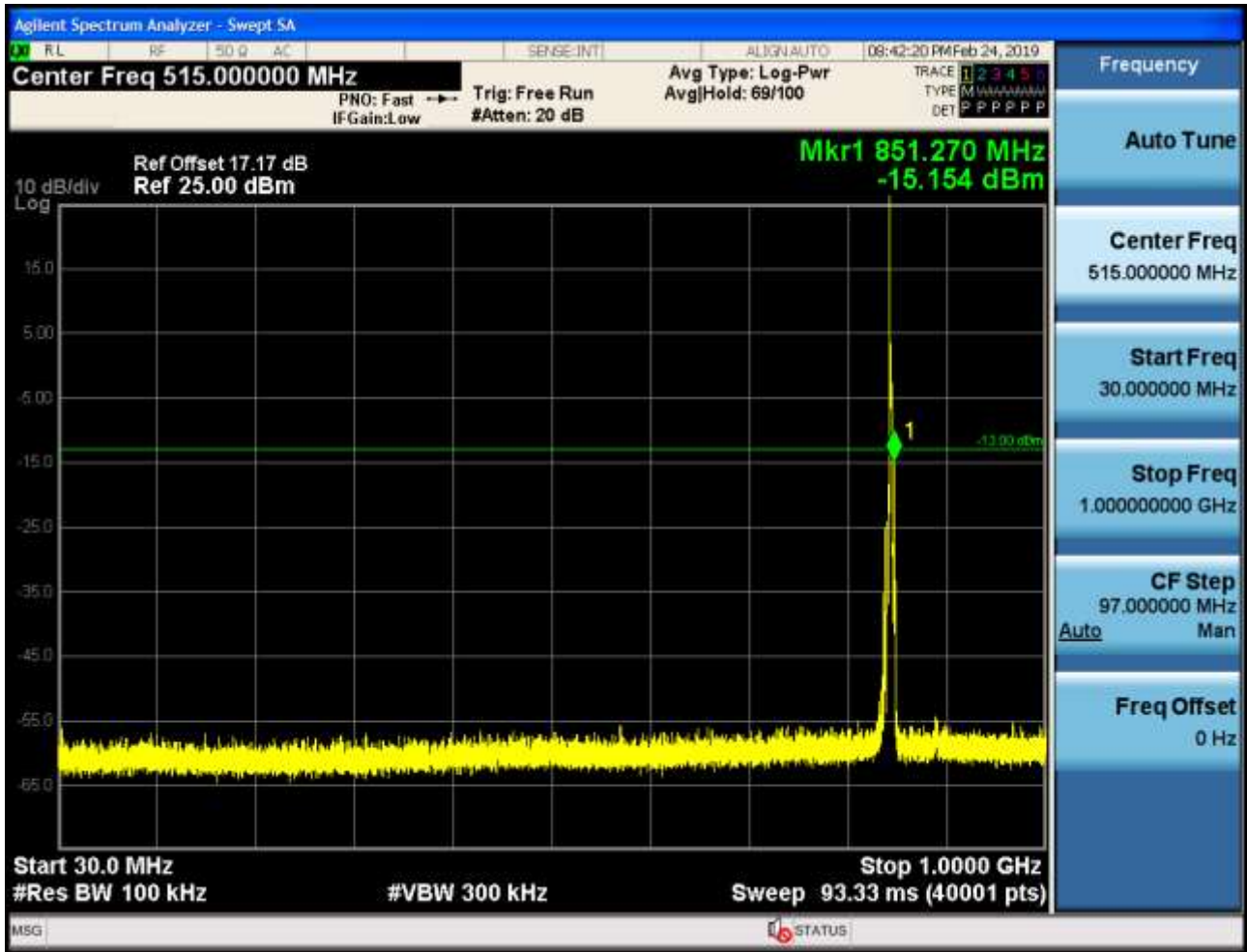




6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0

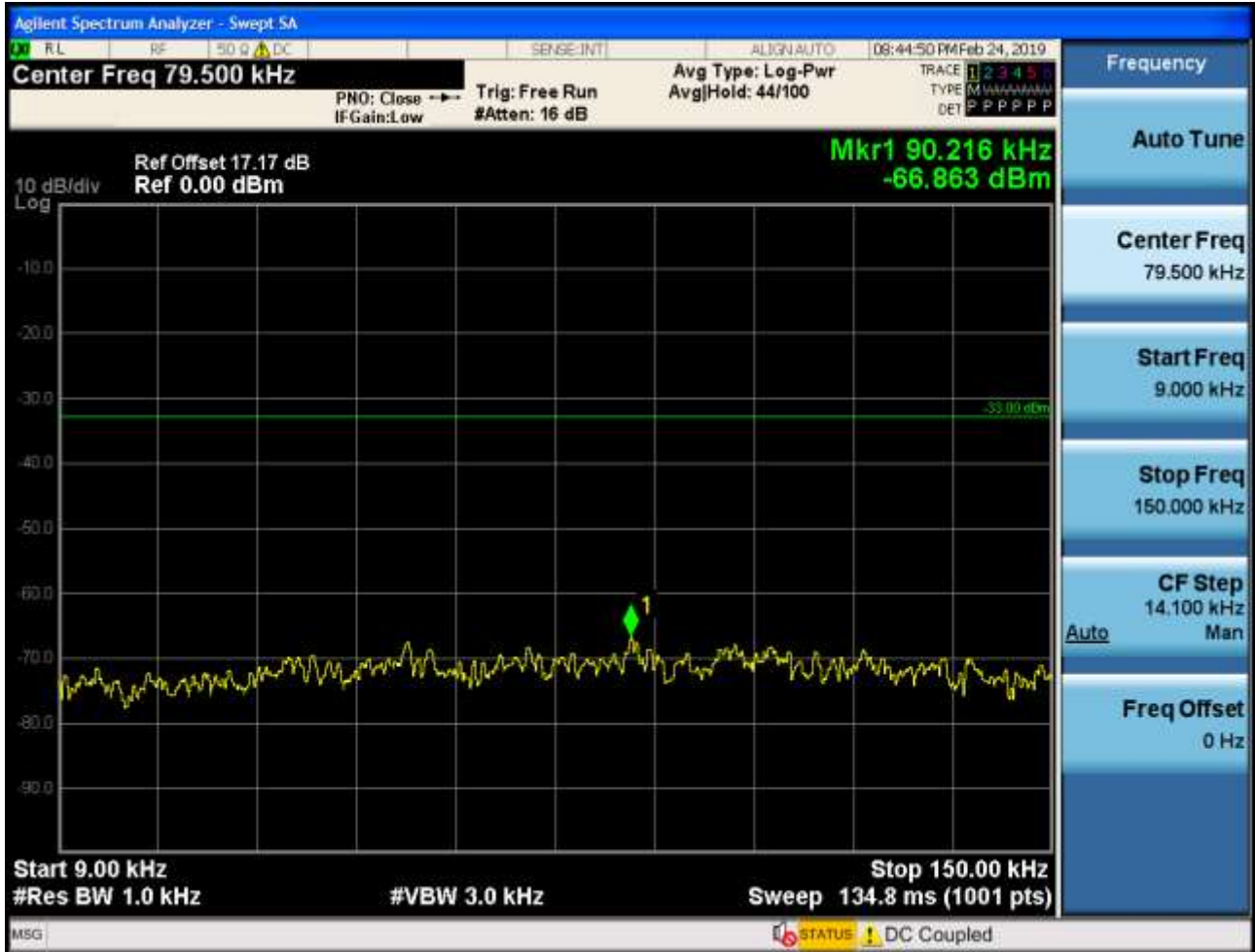


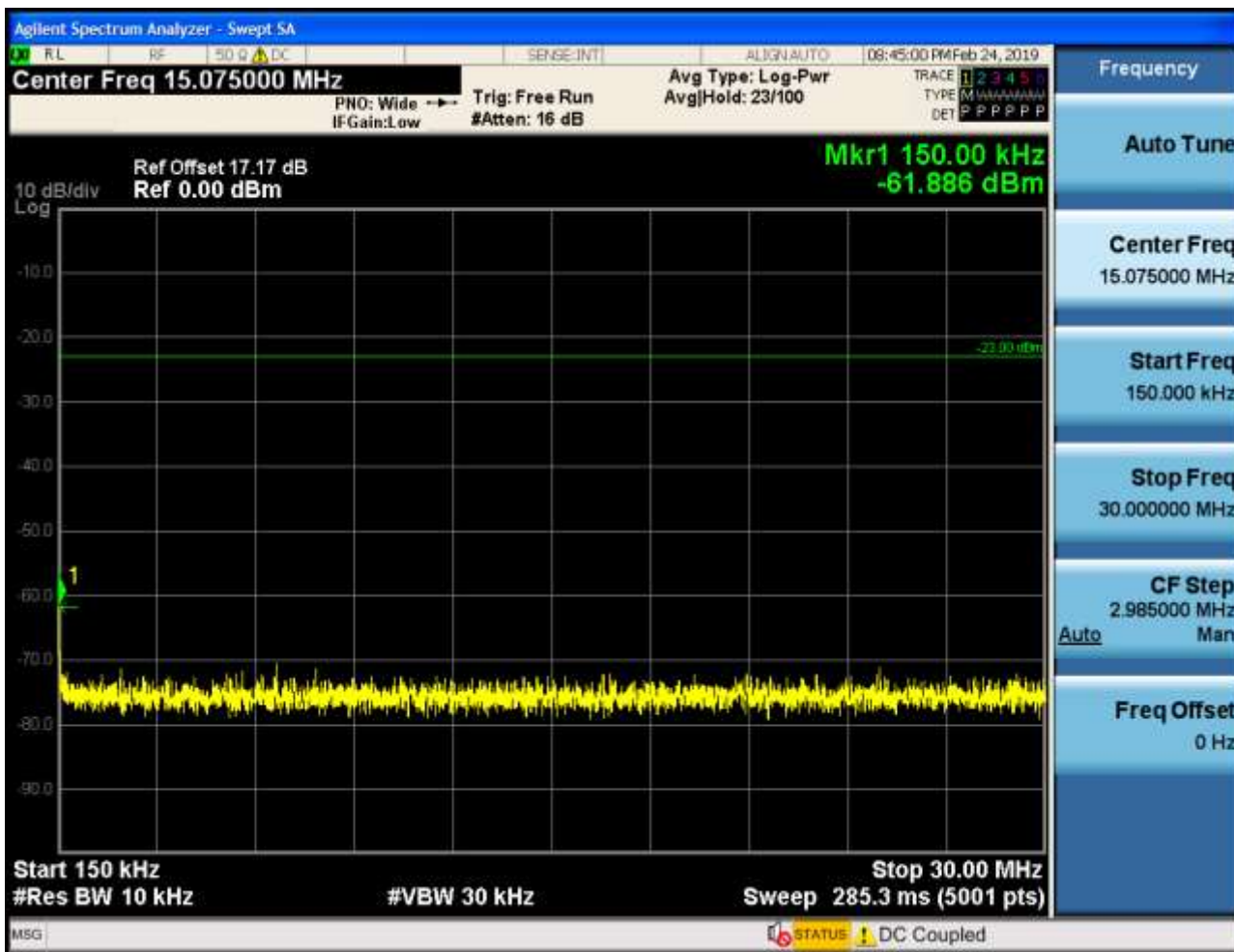


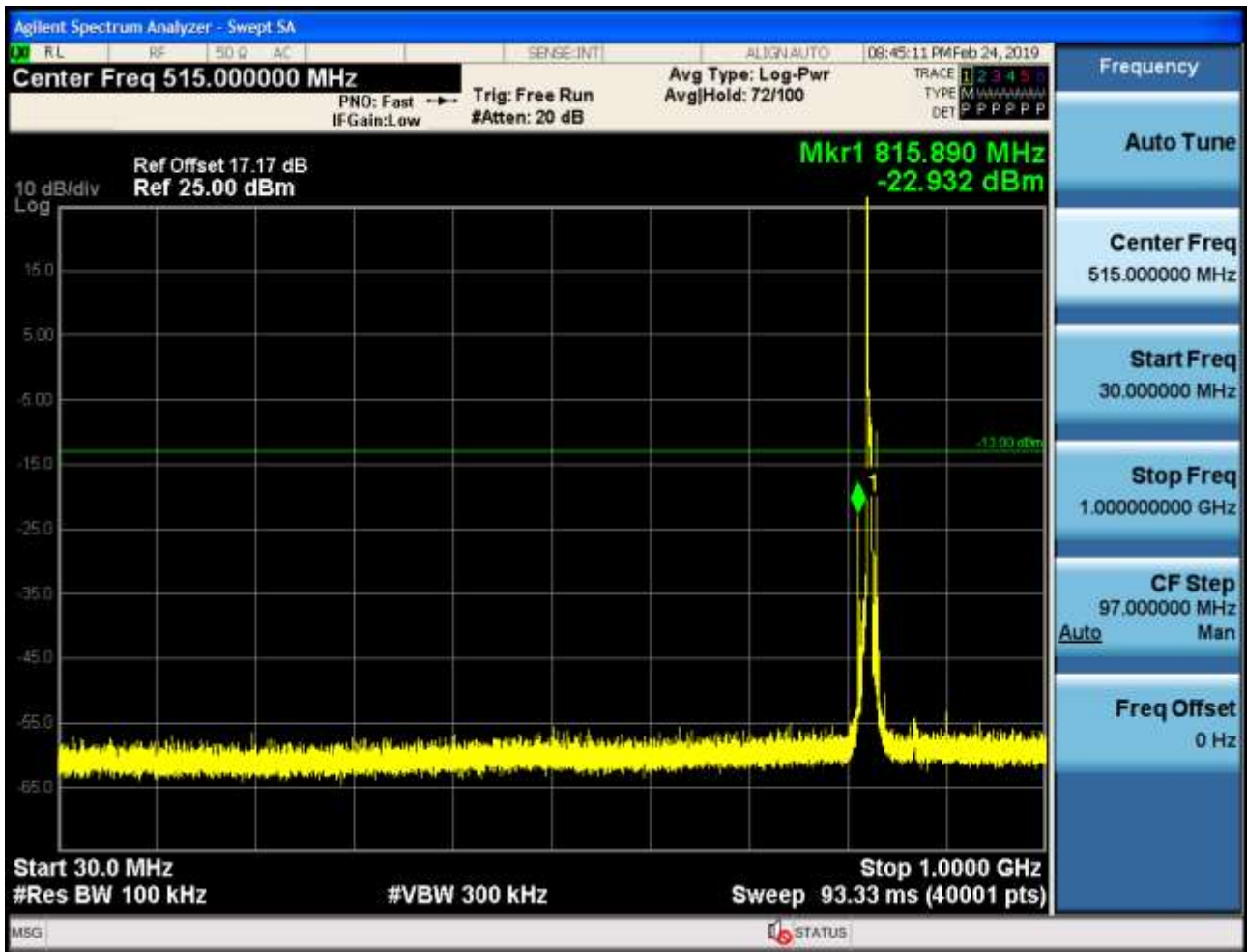
6.2.1.1.3 Test Bandwidth = 5

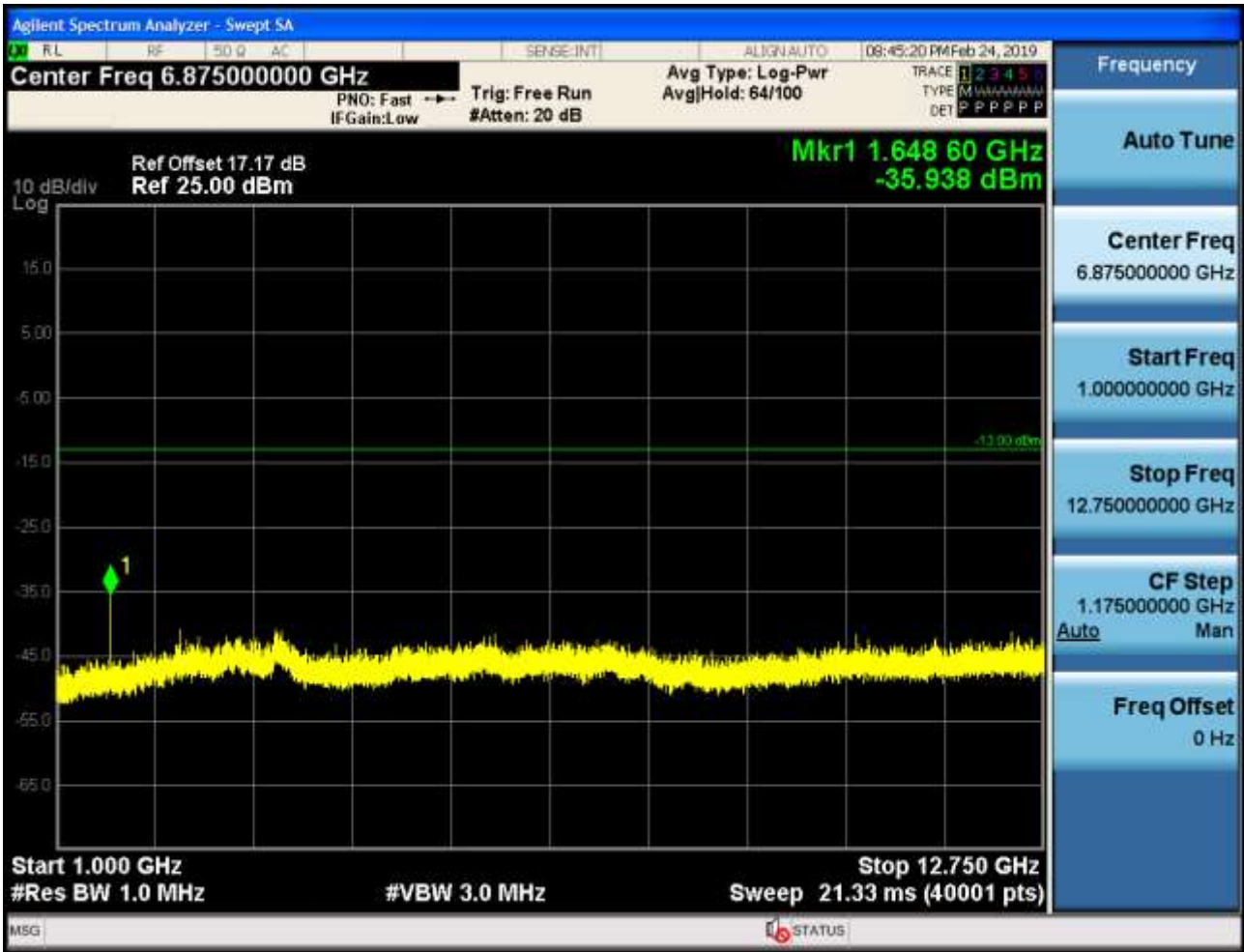
6.2.1.1.3.1 Test Channel = LCH

6.2.1.1.3.1.1 Test RB = RB1#0





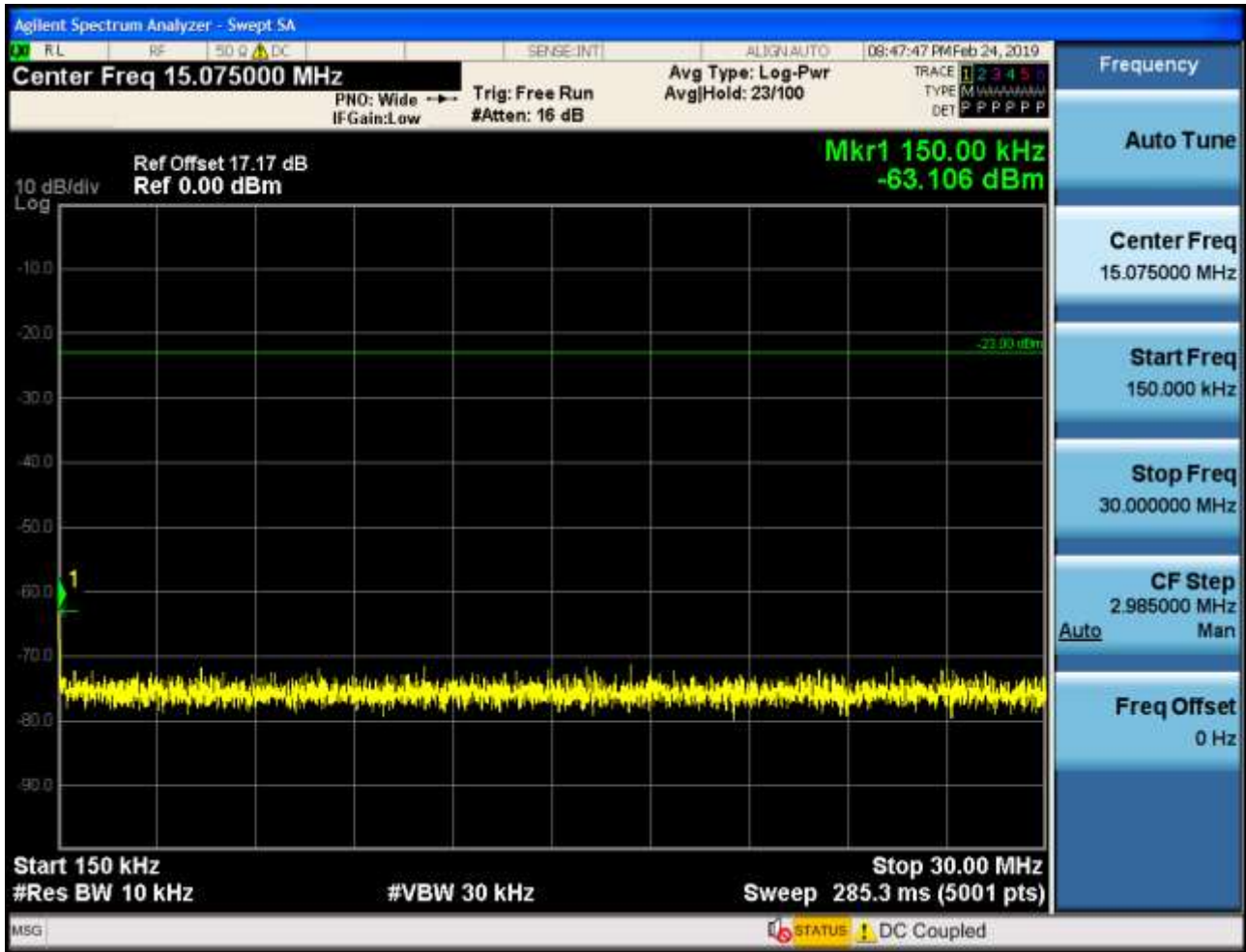


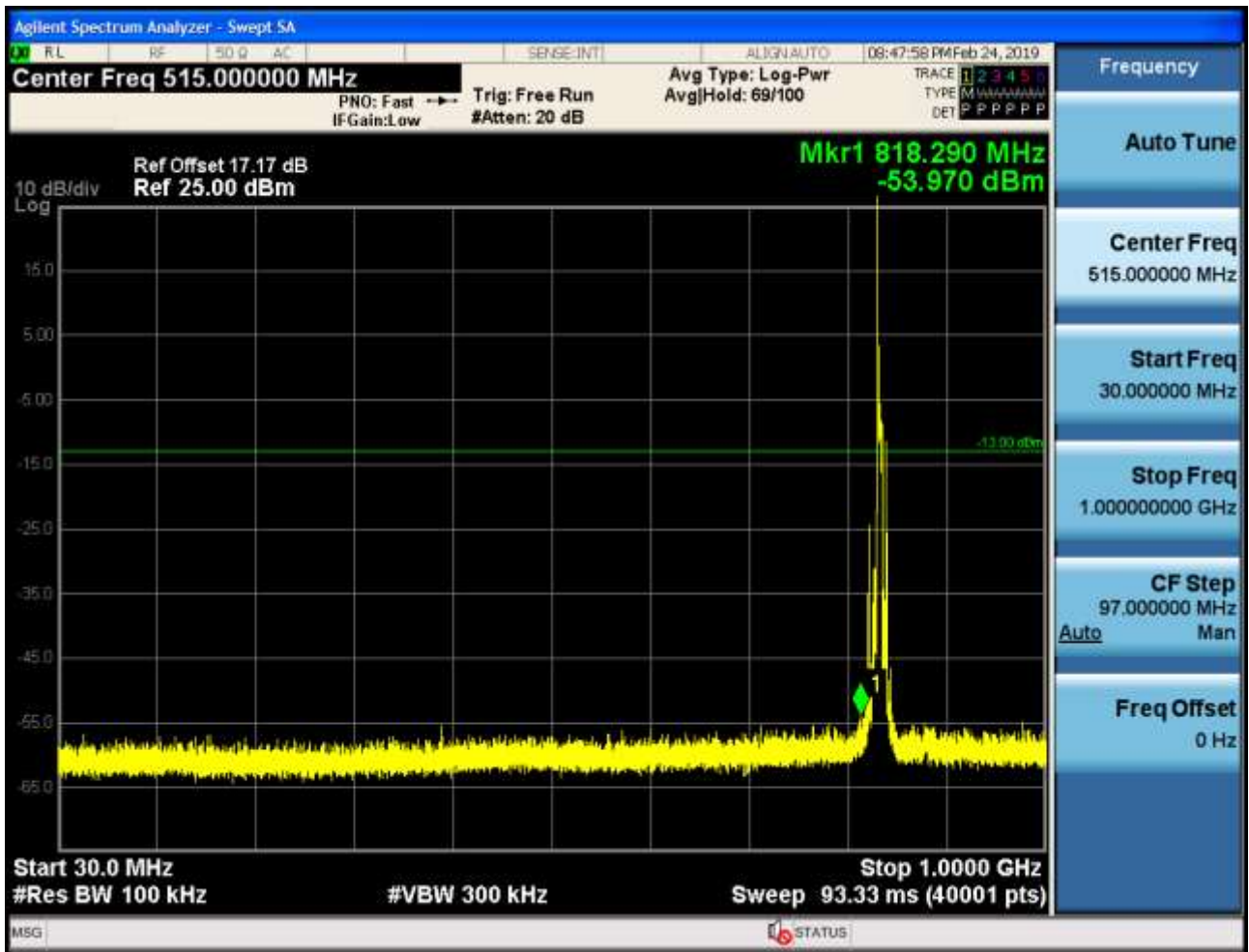


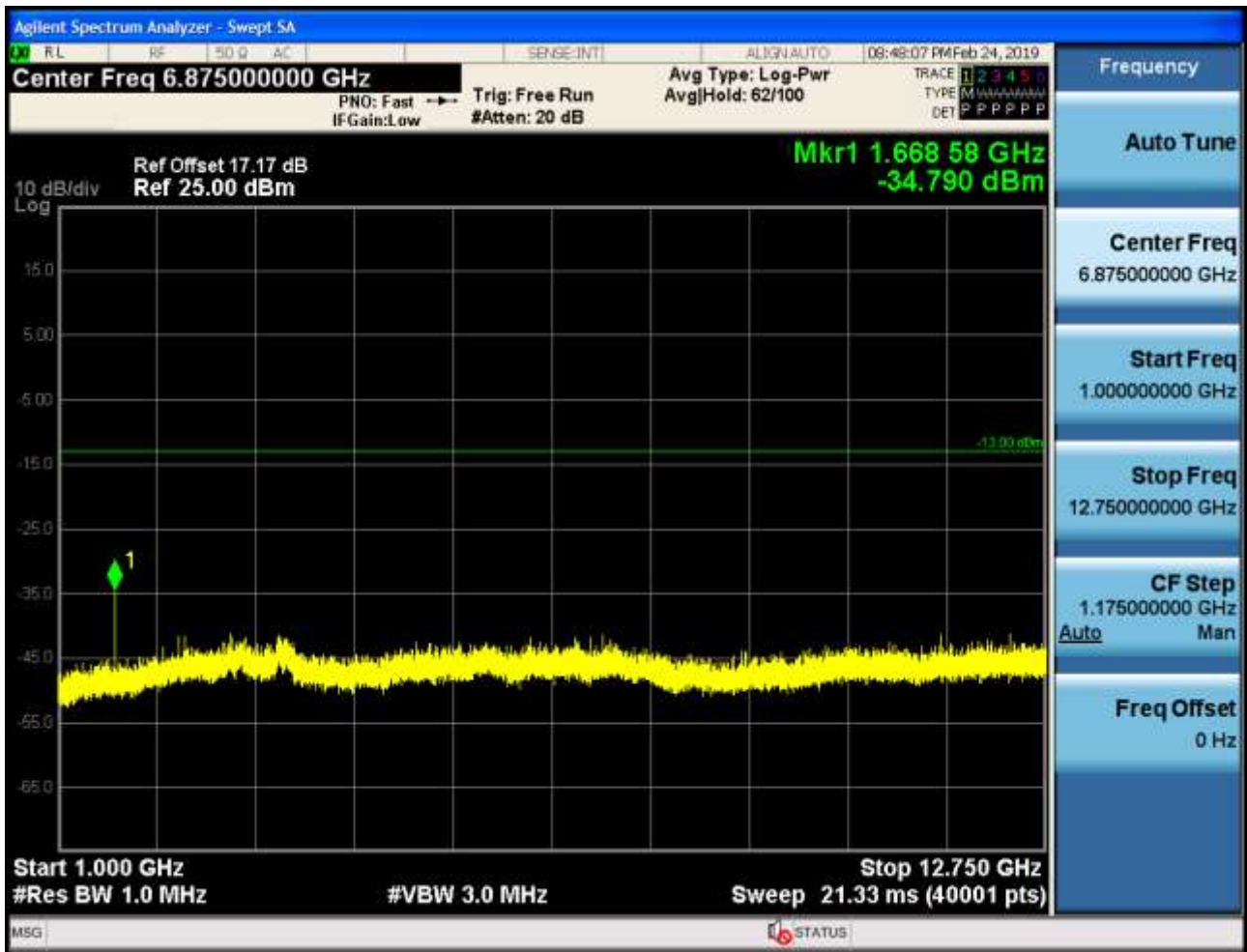
6.2.1.1.3.2 Test Channel = MCH

6.2.1.1.3.2.1 Test RB = RB1#0



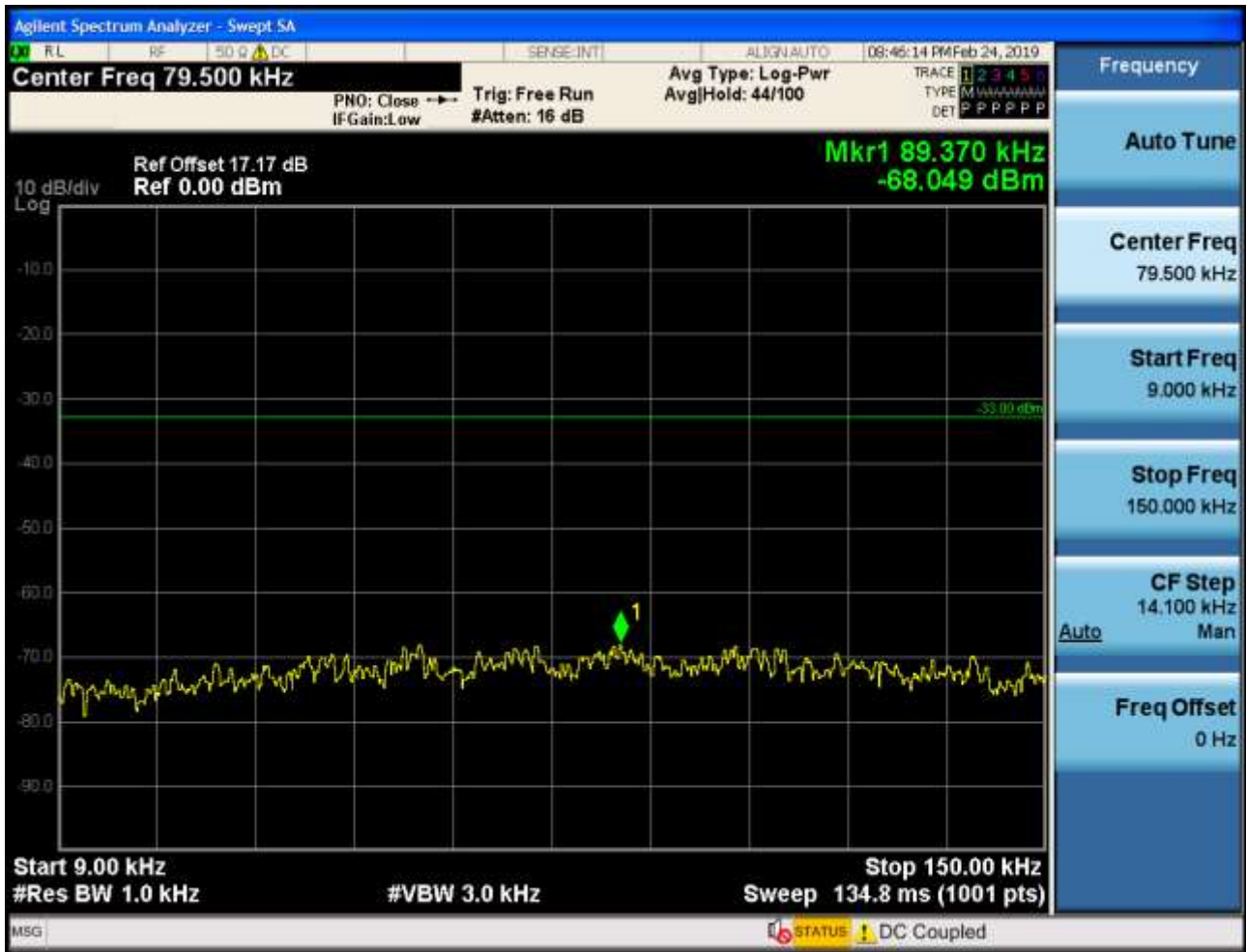


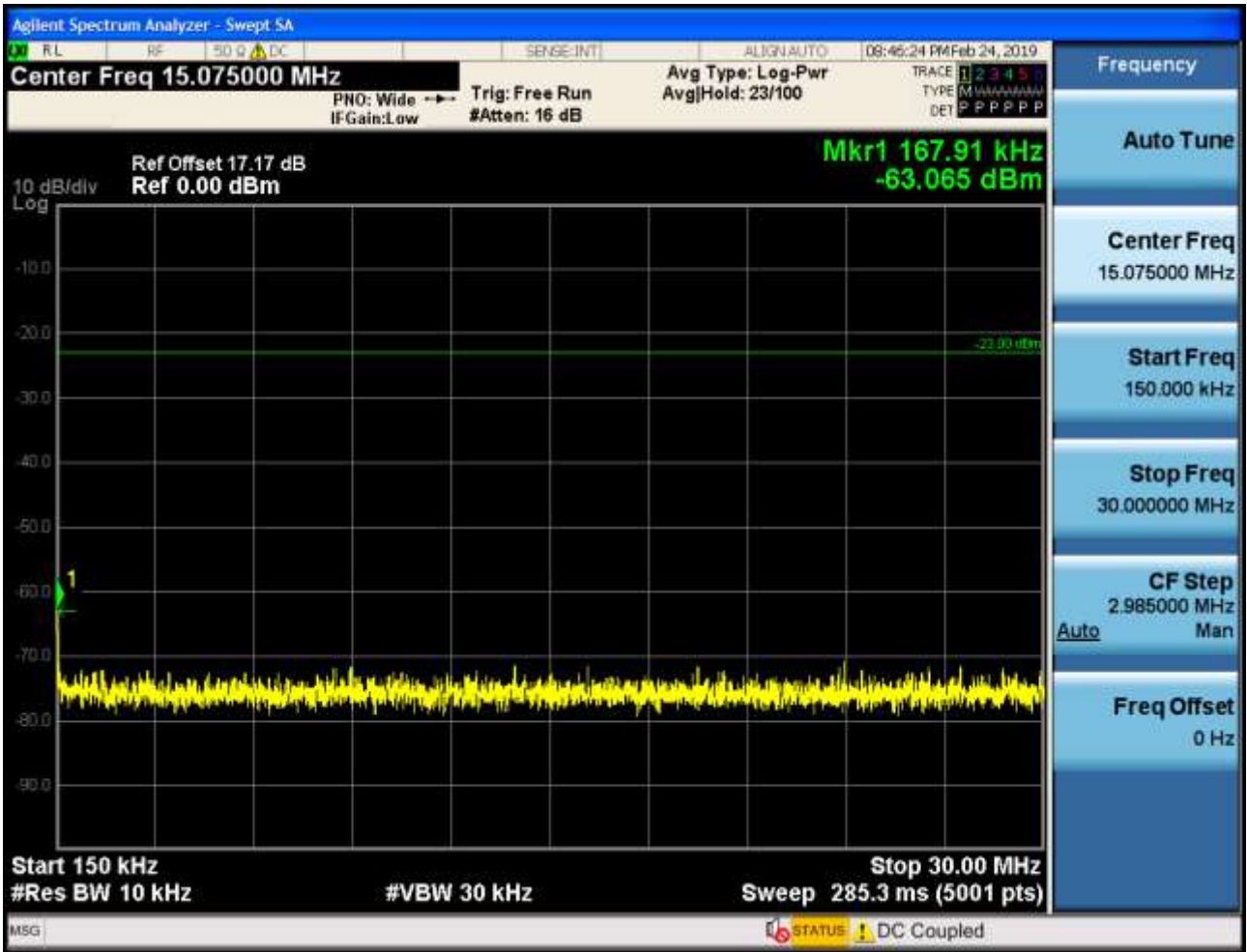


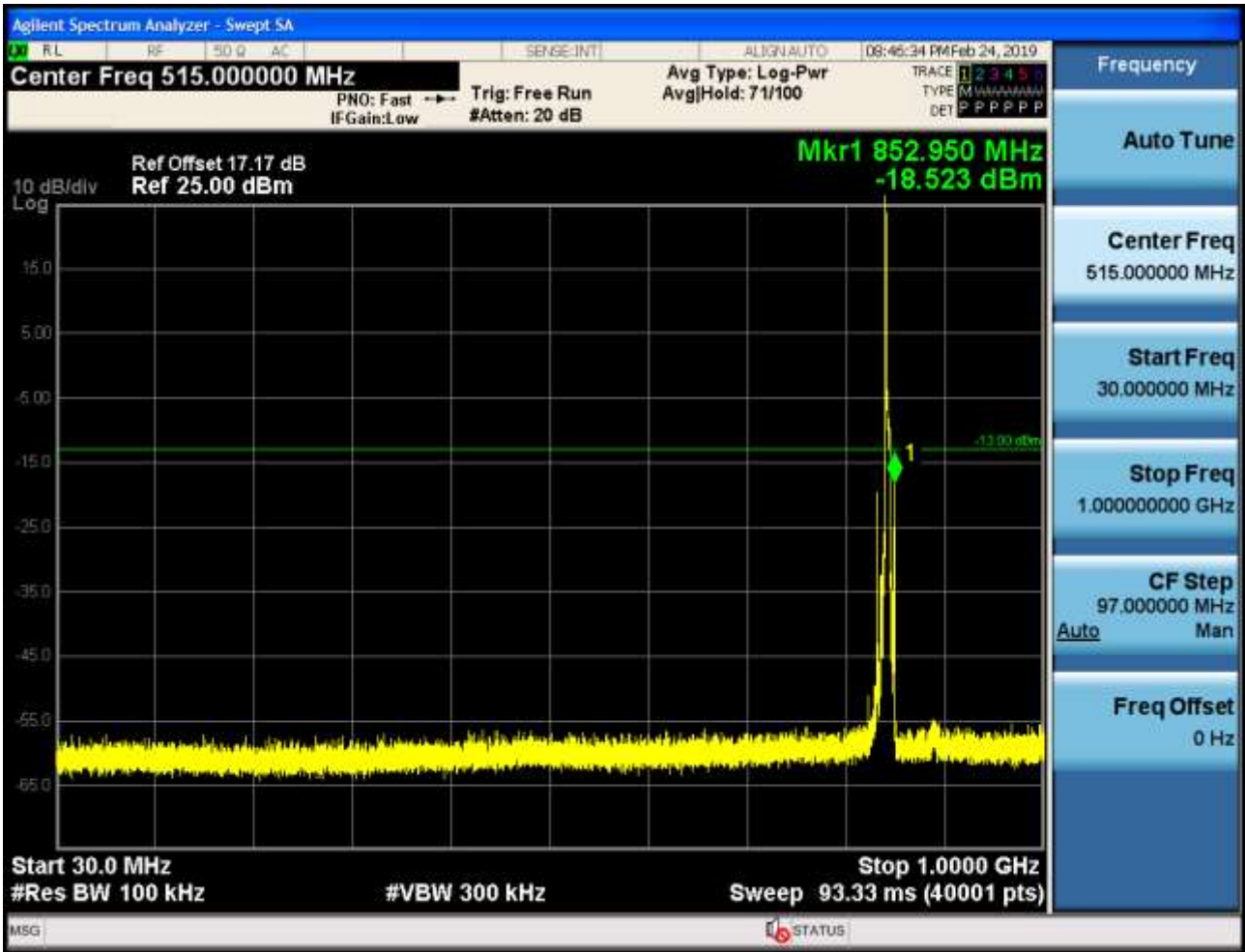


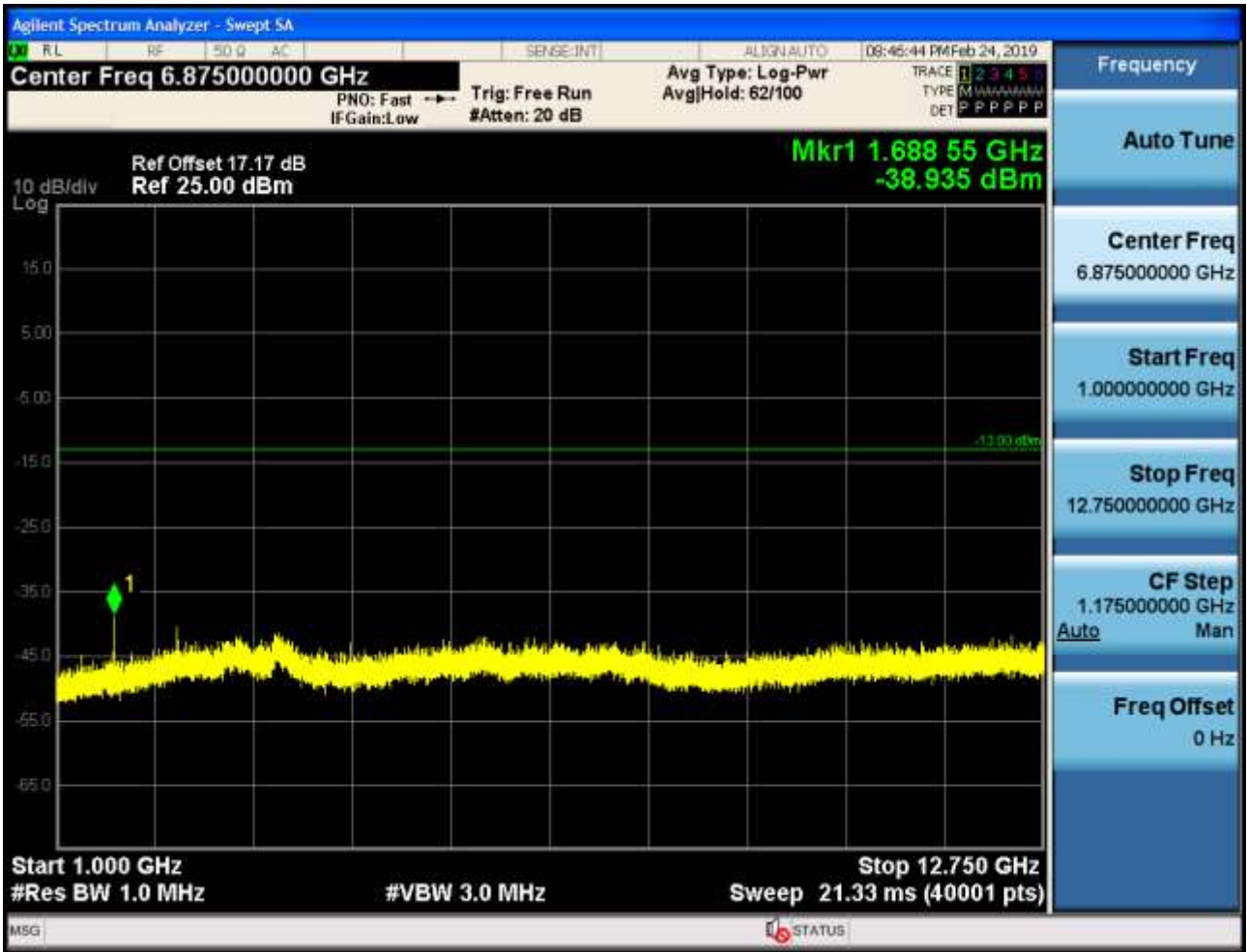
6.2.1.1.3.3 Test Channel = HCH

6.2.1.1.3.3.1 Test RB = RB1#0





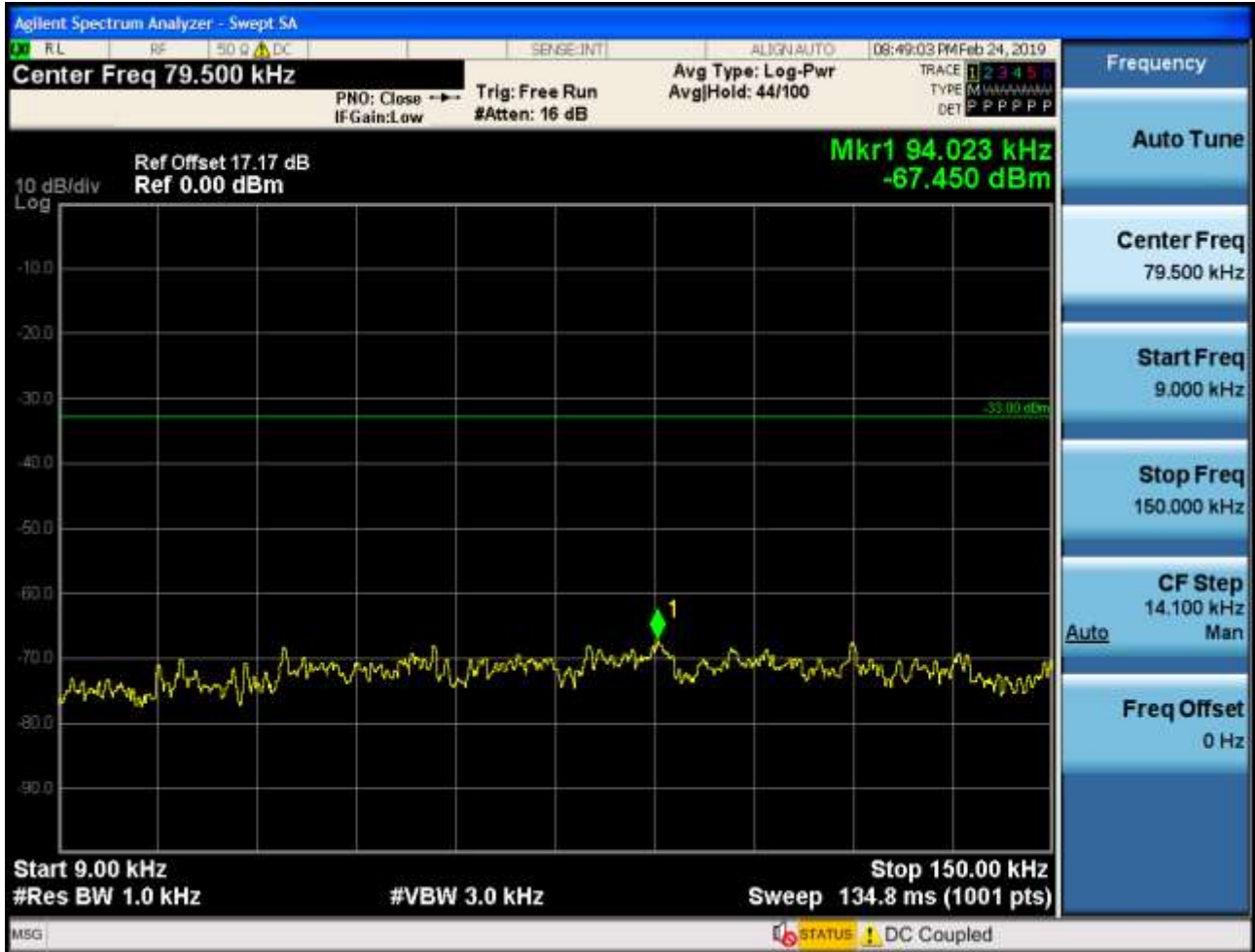


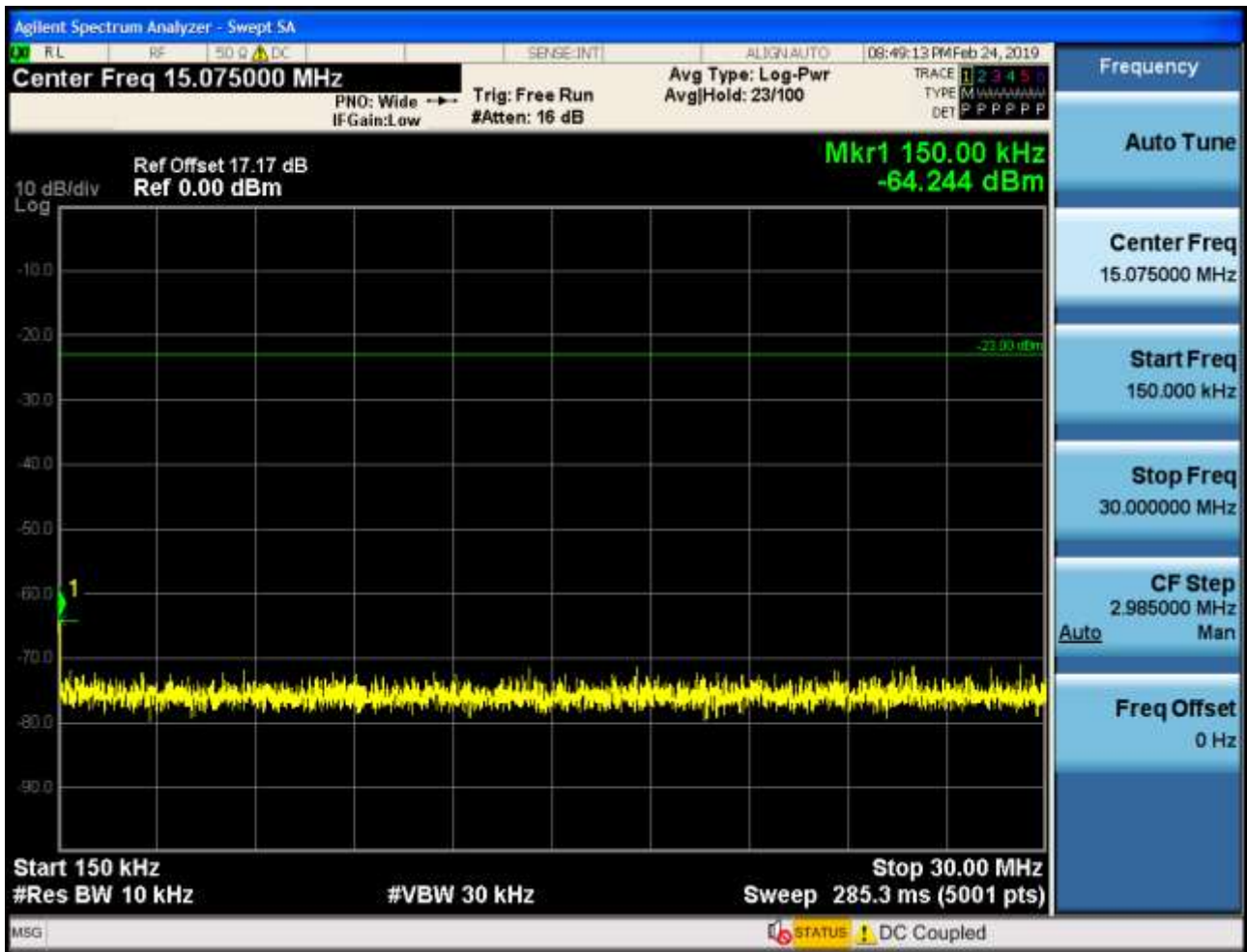


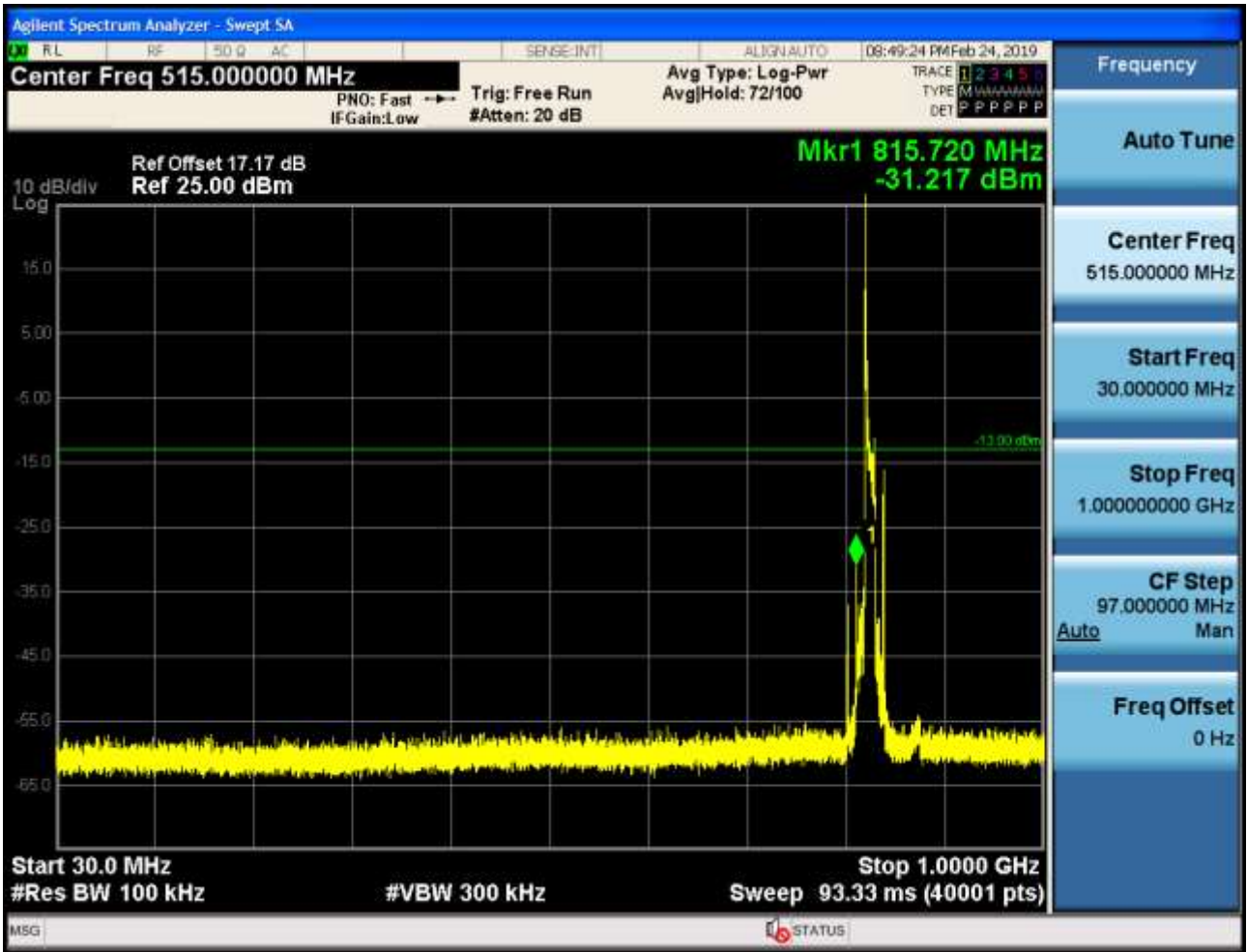
6.2.1.1.4 Test Bandwidth = 10

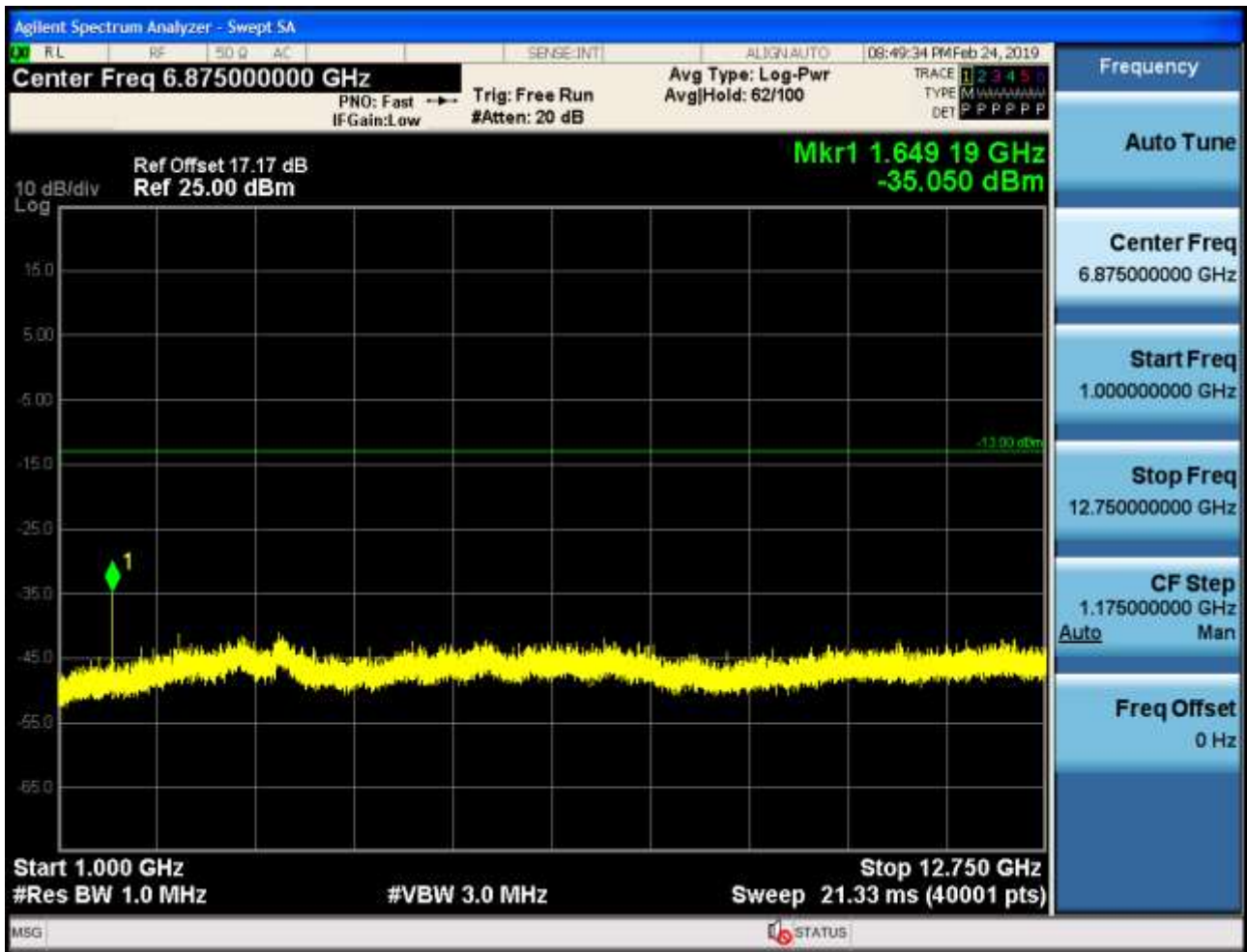
6.2.1.1.4.1 Test Channel = LCH

6.2.1.1.4.1.1 Test RB = RB1#0





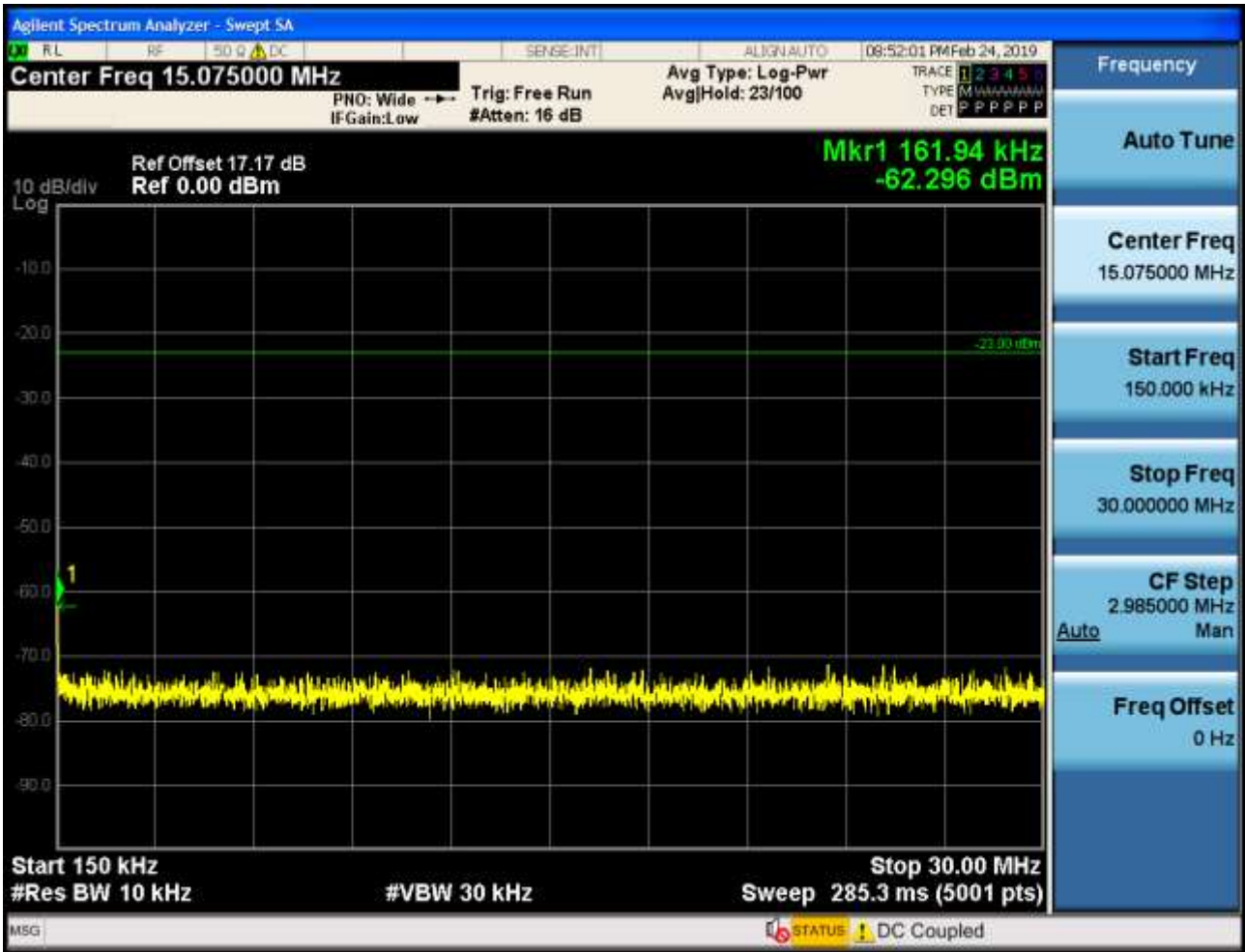


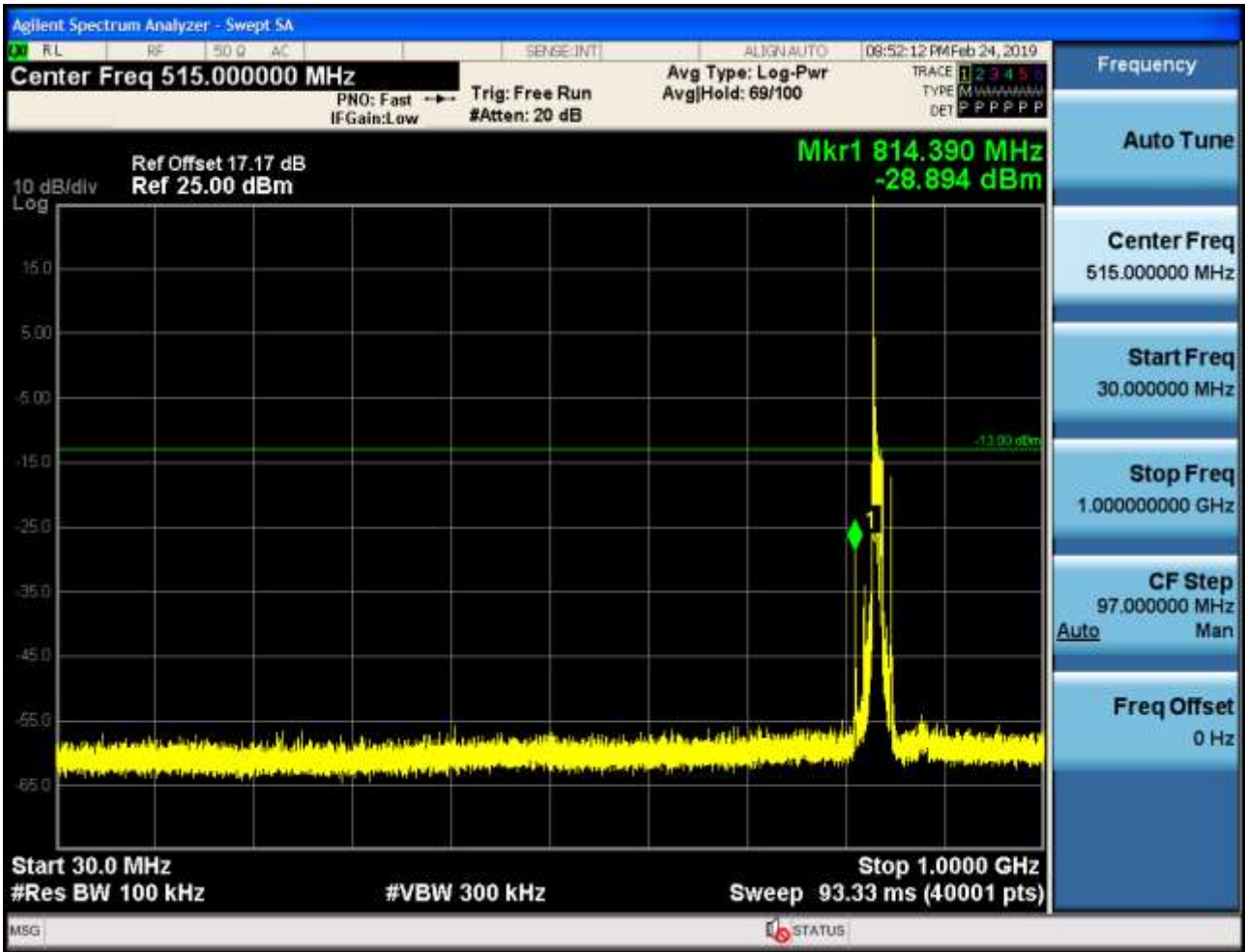


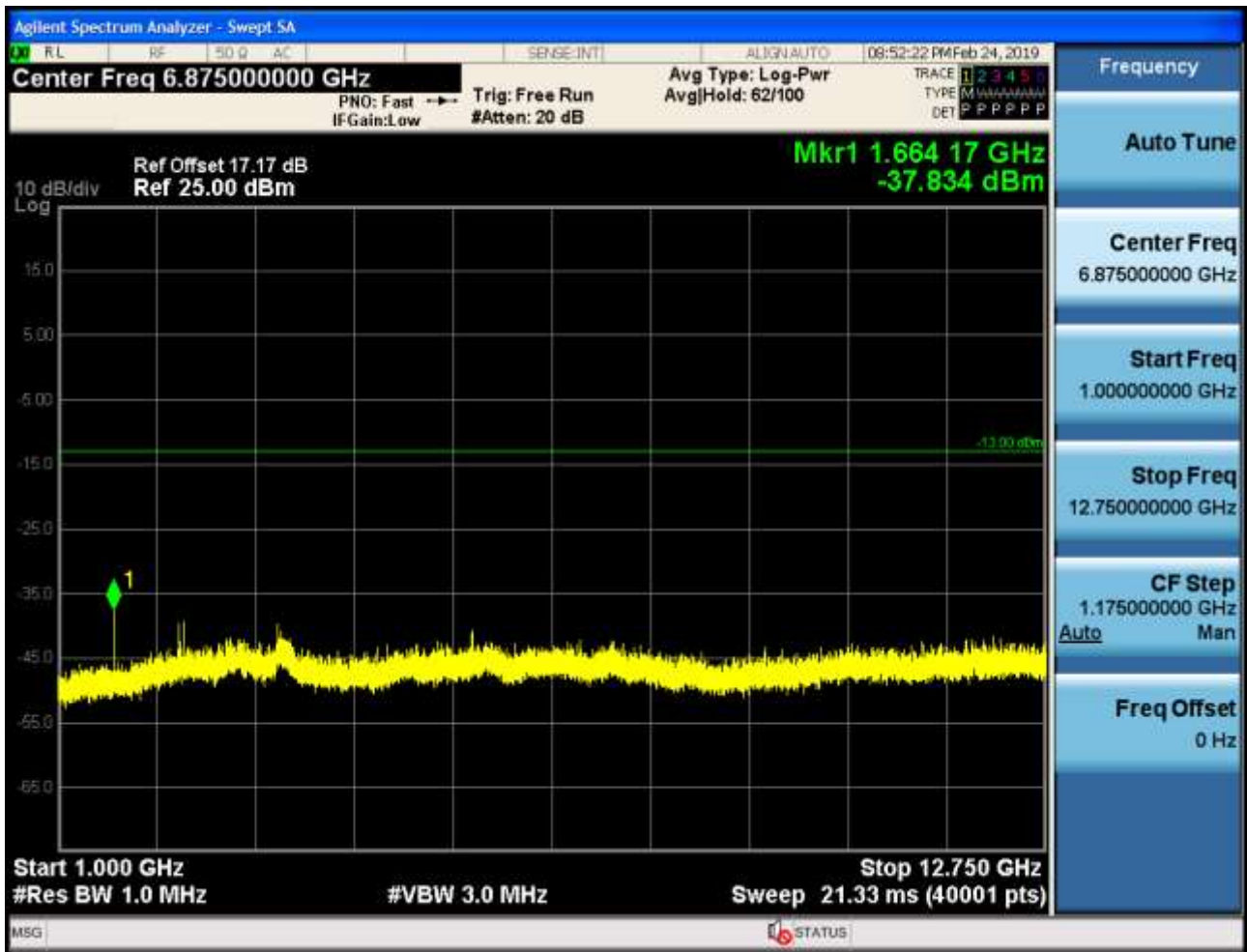
6.2.1.1.4.2 Test Channel = MCH

6.2.1.1.4.2.1 Test RB = RB1#0



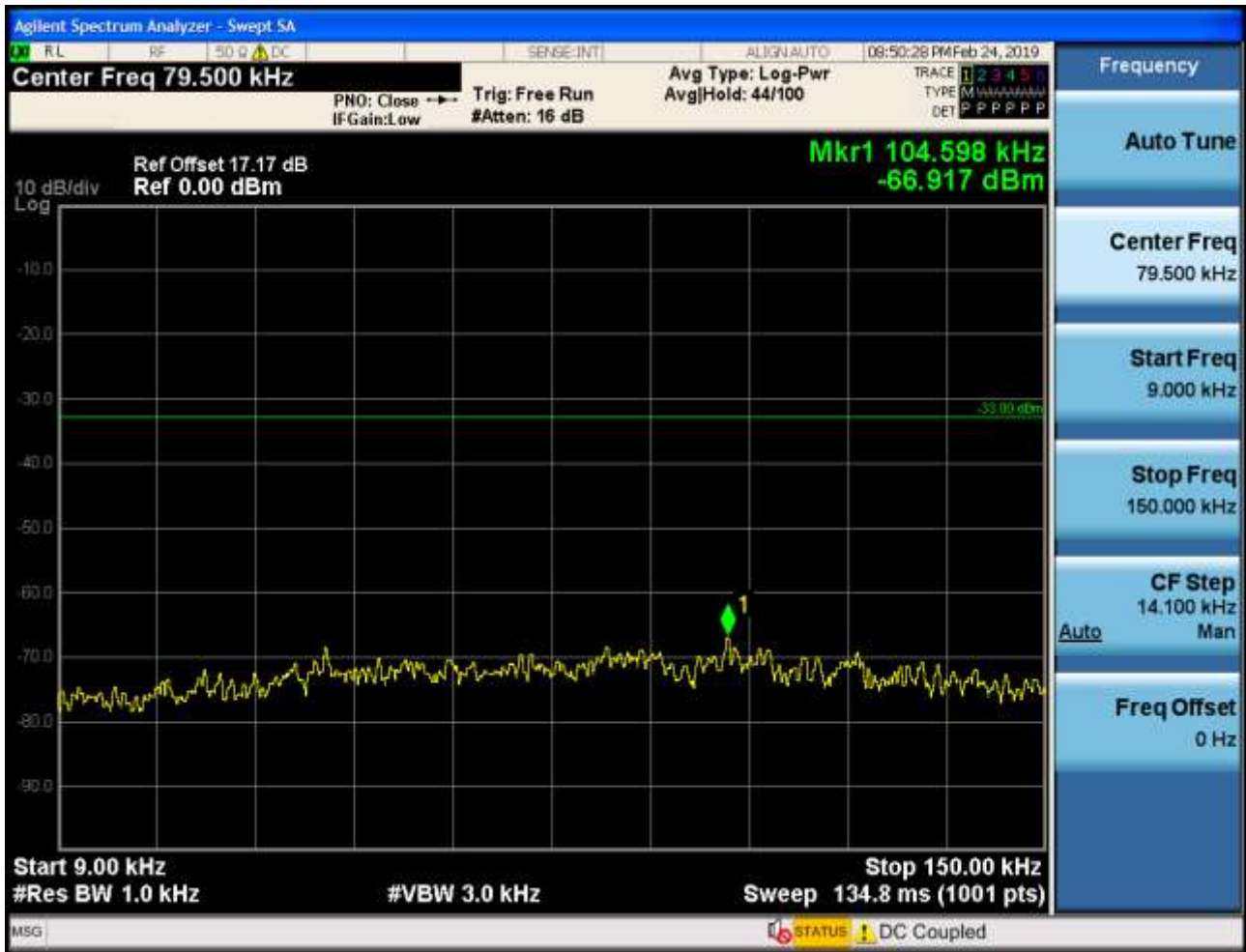


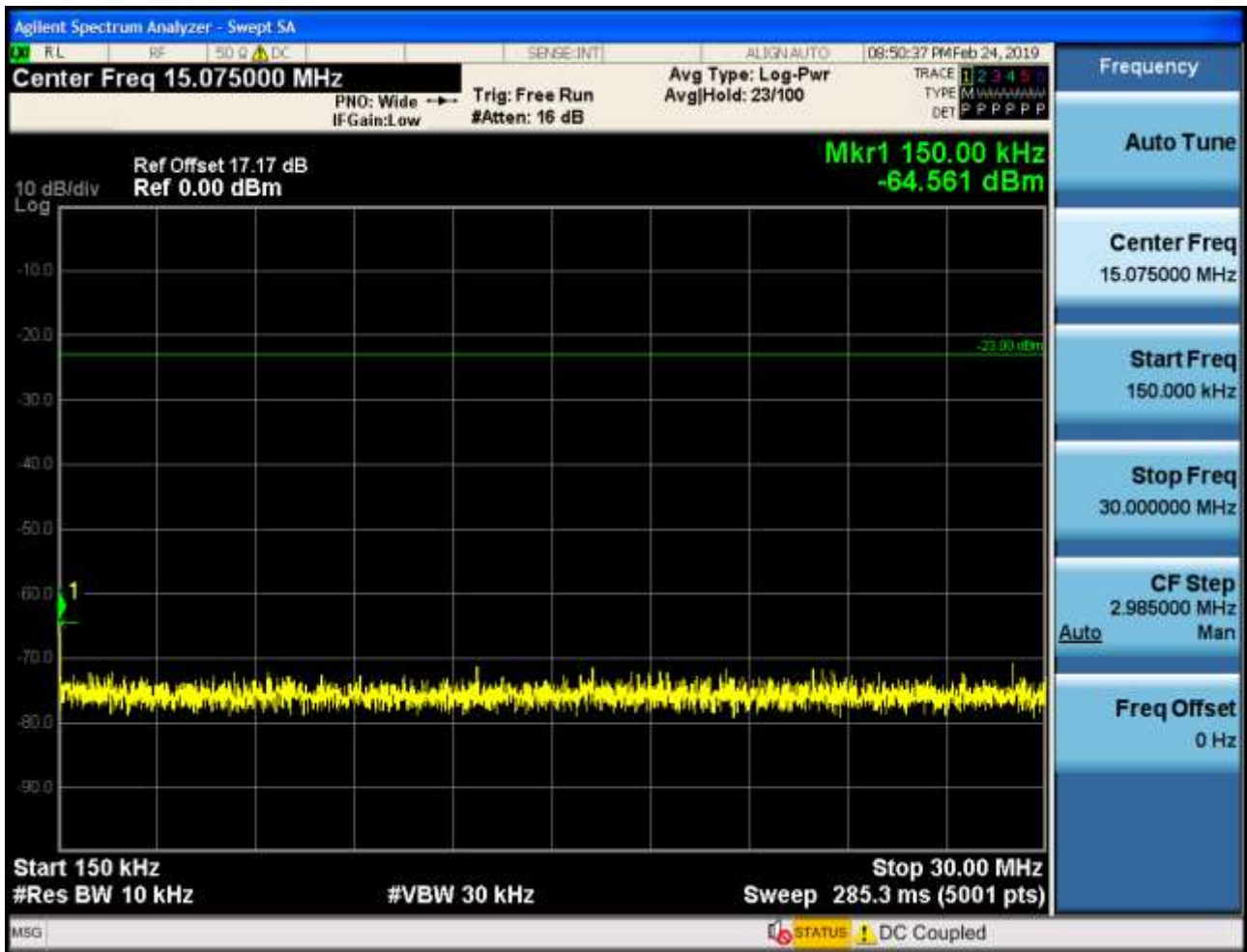


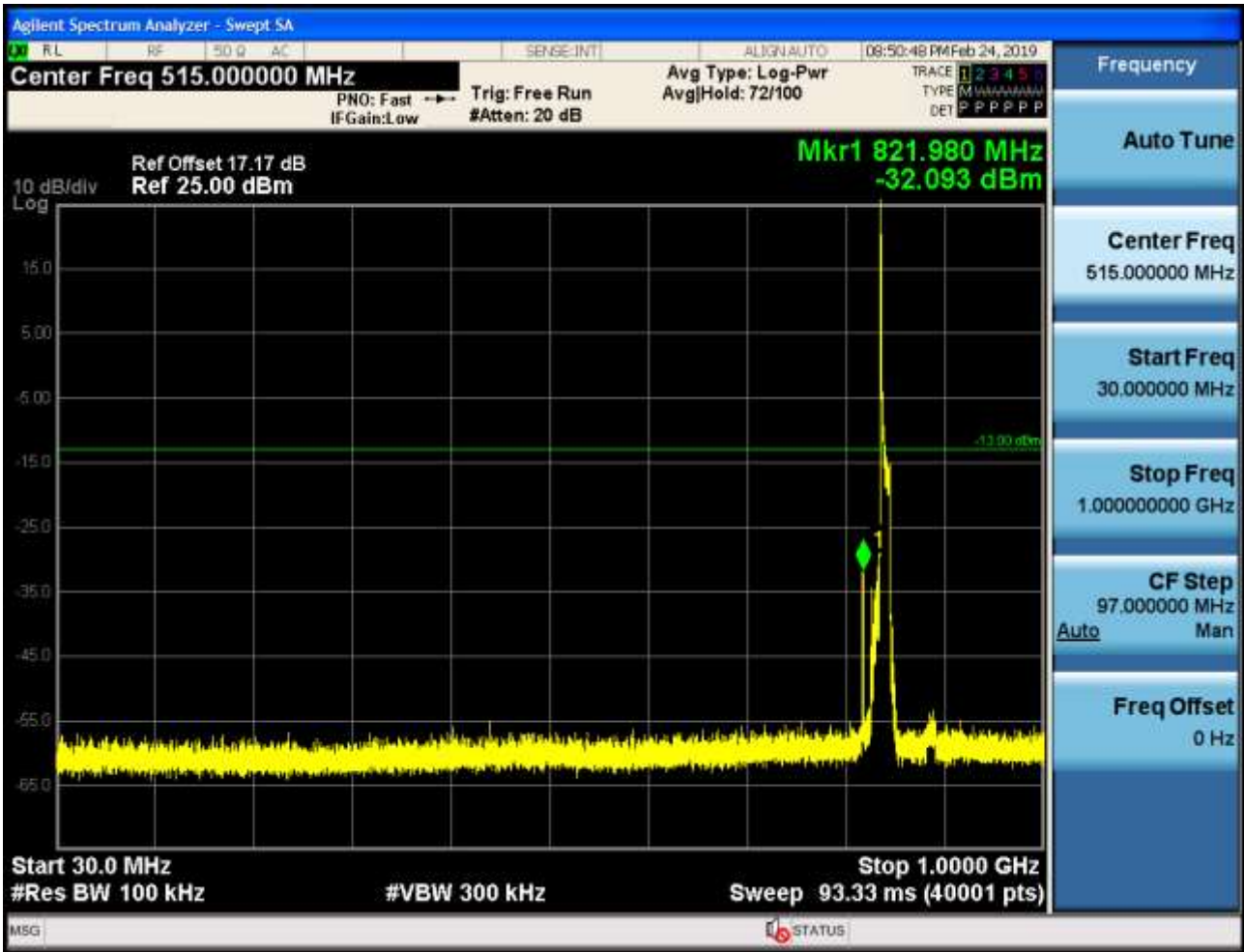


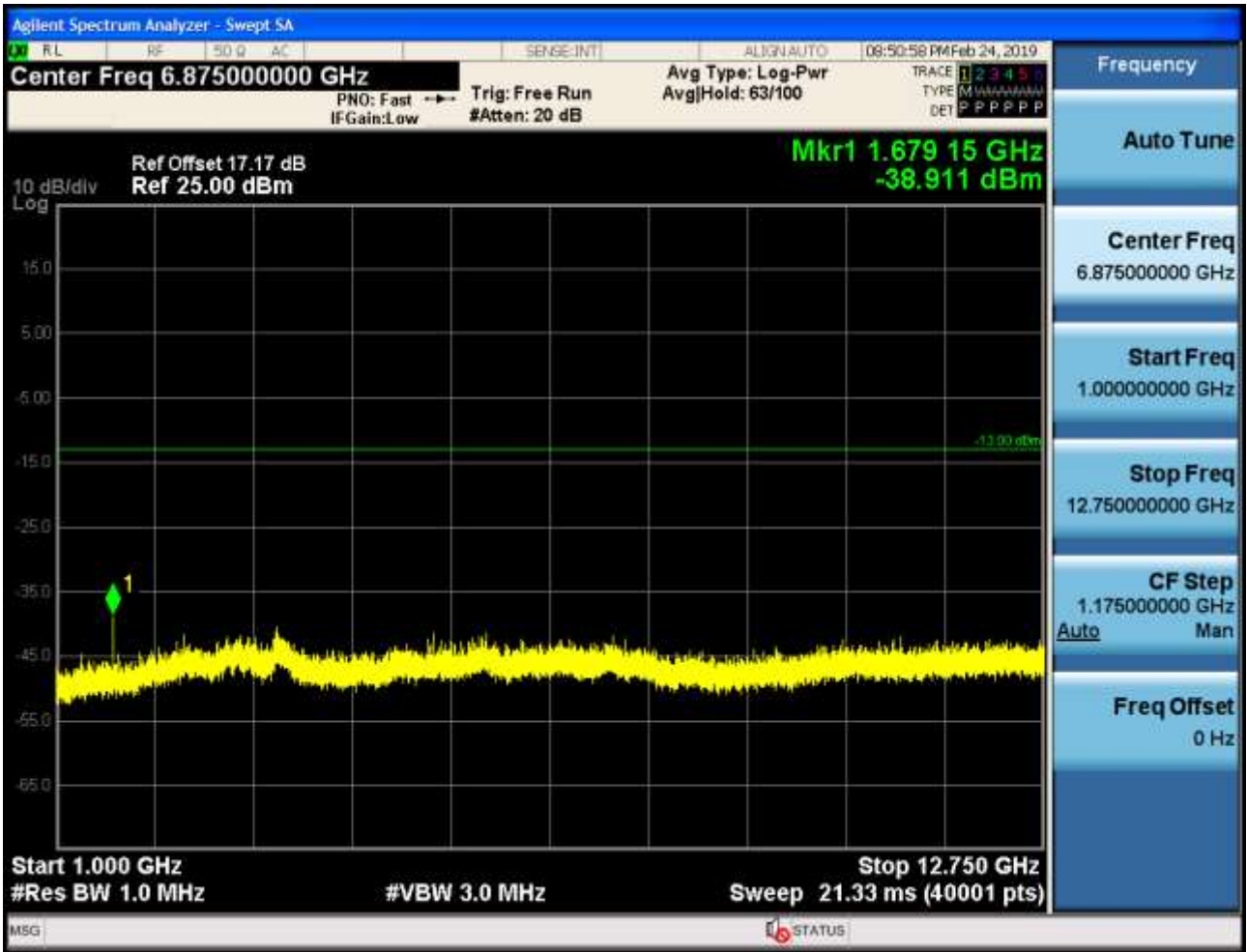
6.2.1.1.4.3 Test Channel = HCH

6.2.1.1.4.3.1 Test RB = RB1#0







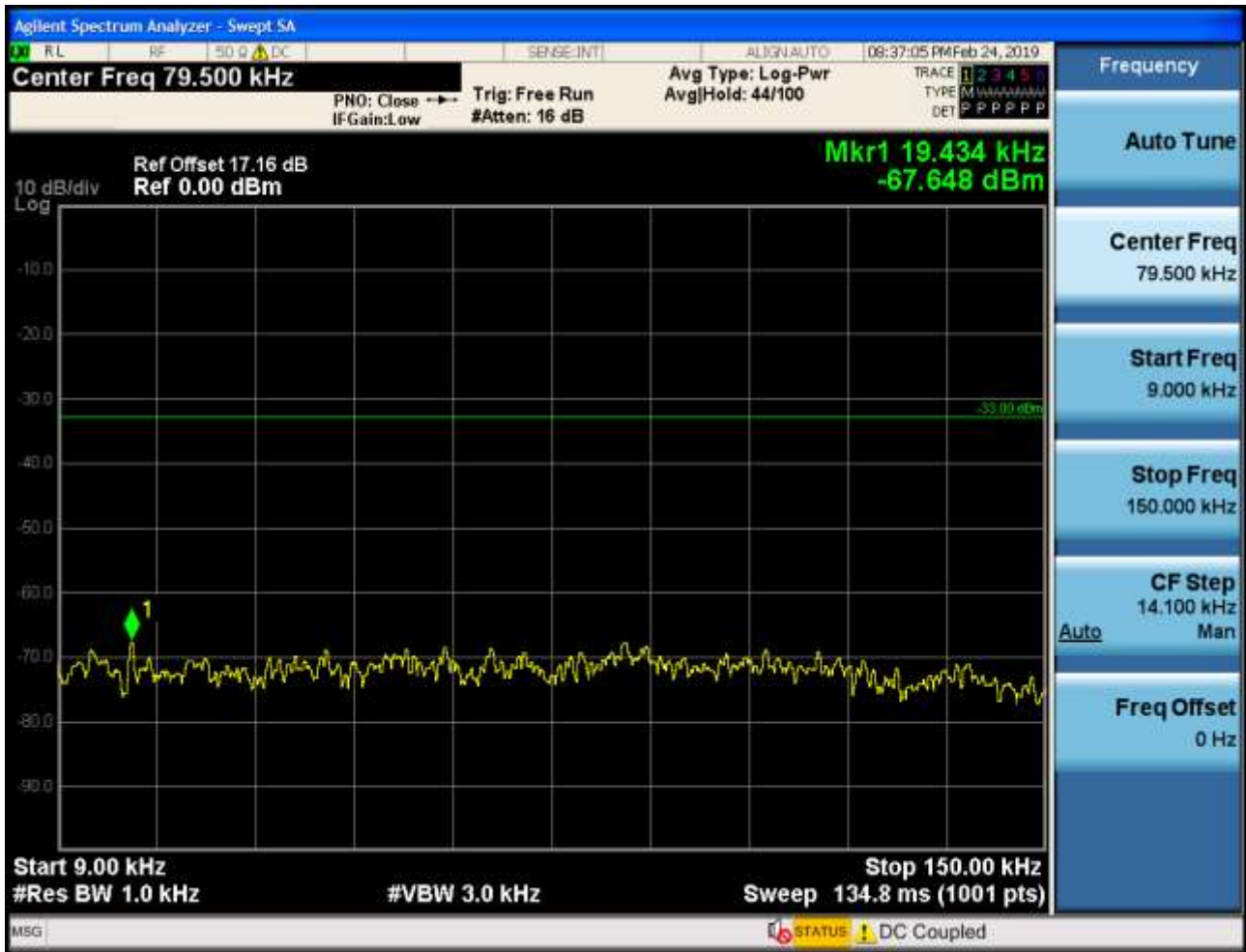


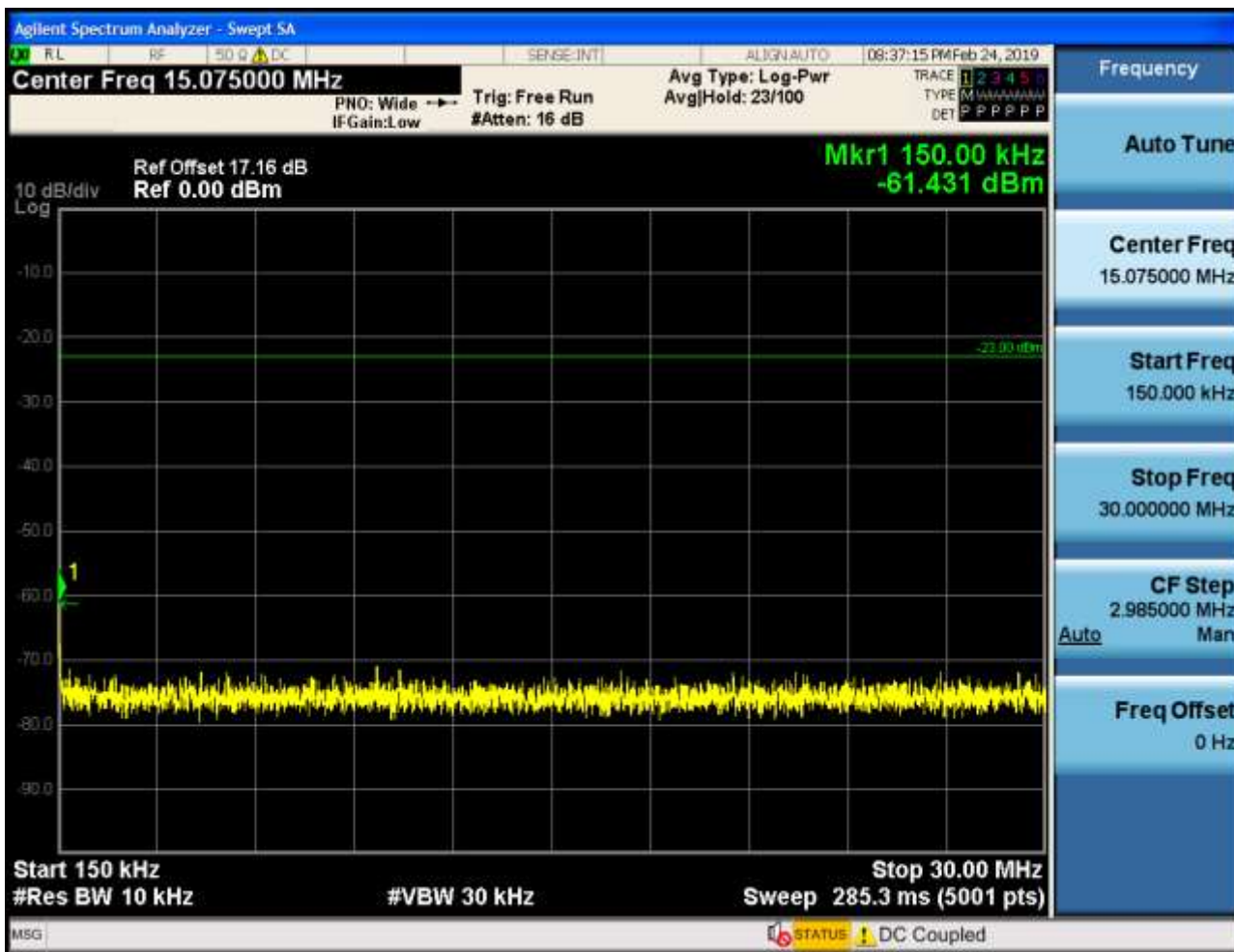
6.2.1.2 Test Mode = LTE/TM2

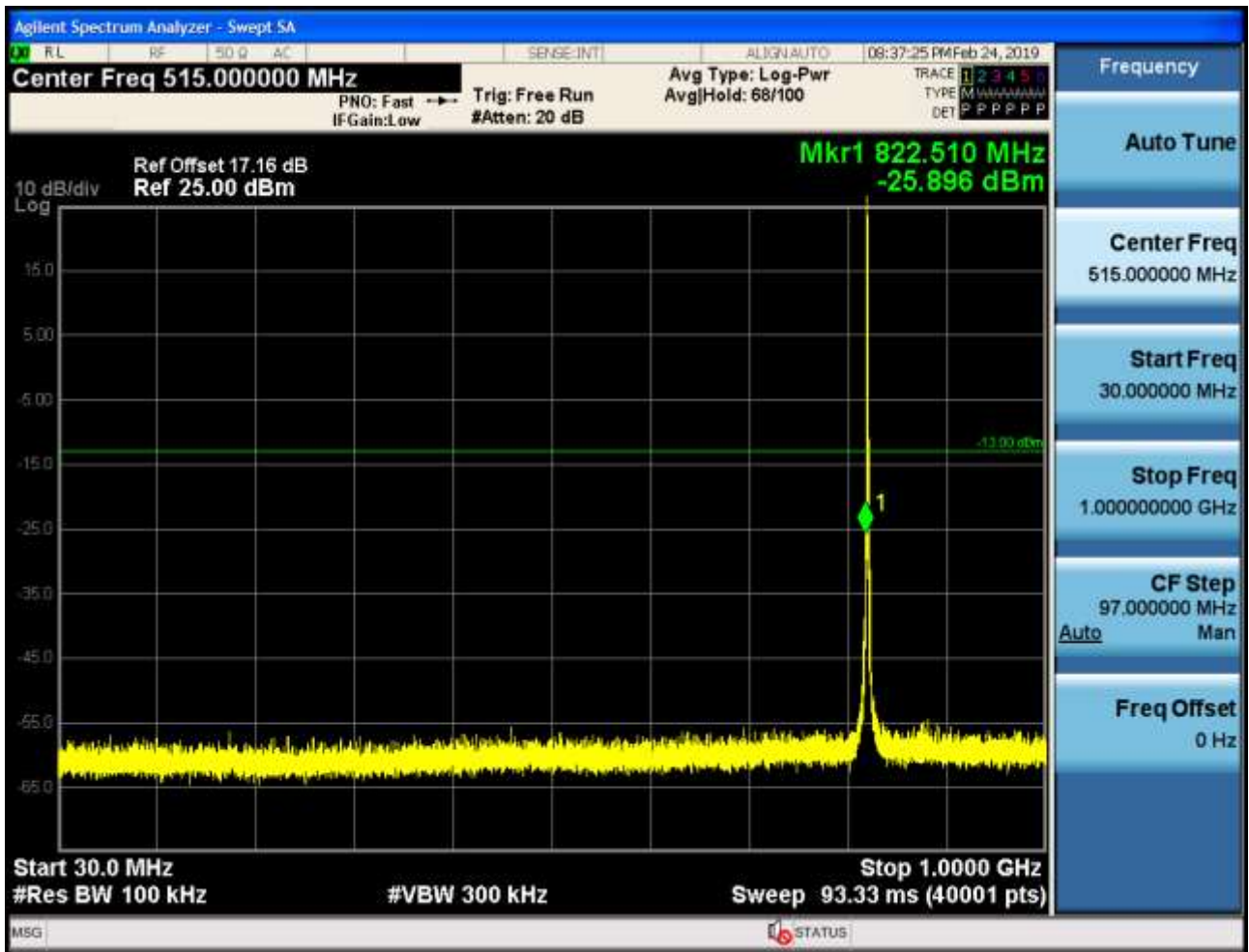
6.2.1.2.1 Test Bandwidth = 1.4

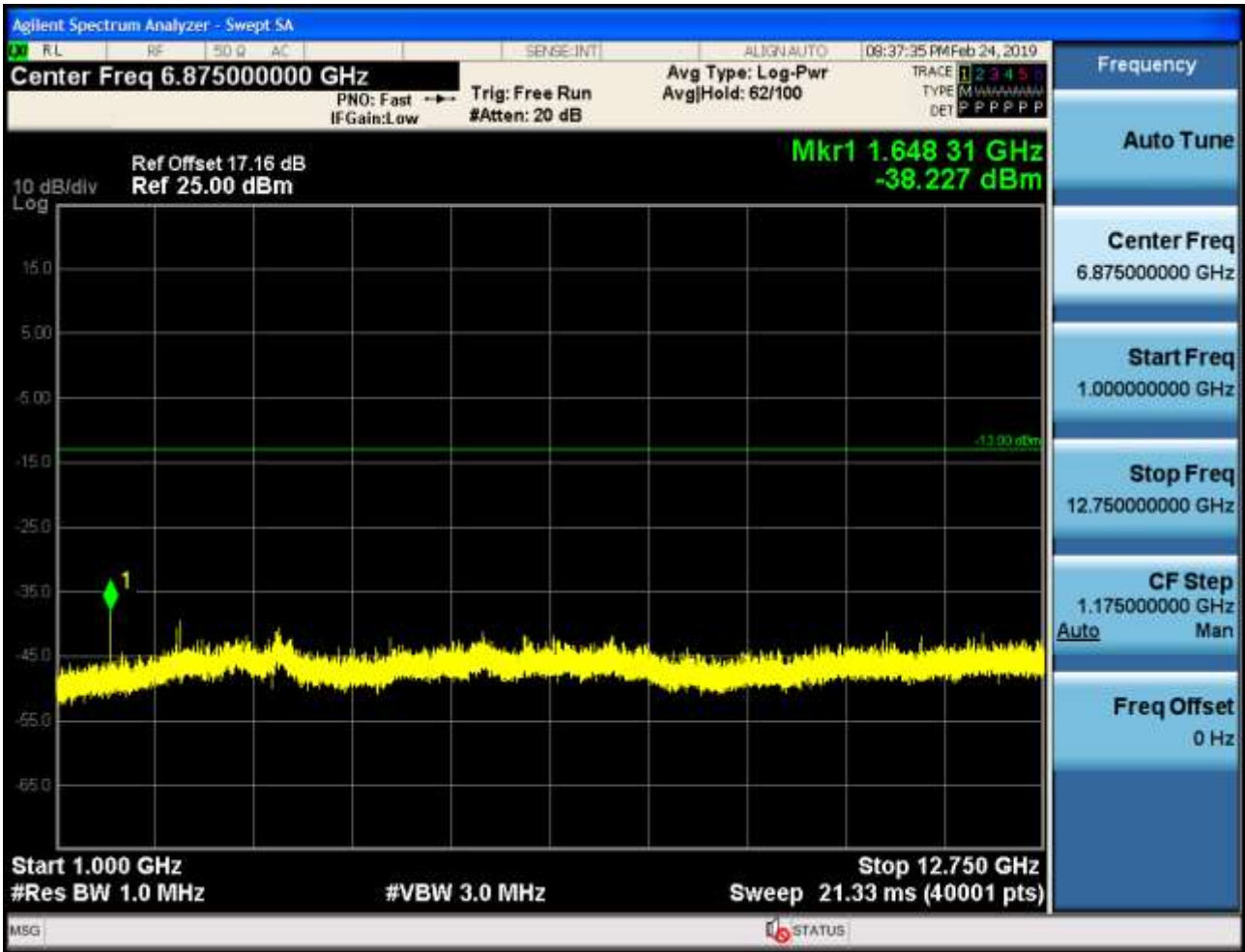
6.2.1.2.1.1 Test Channel = LCH

6.2.1.2.1.1.1 Test RB = RB1#0



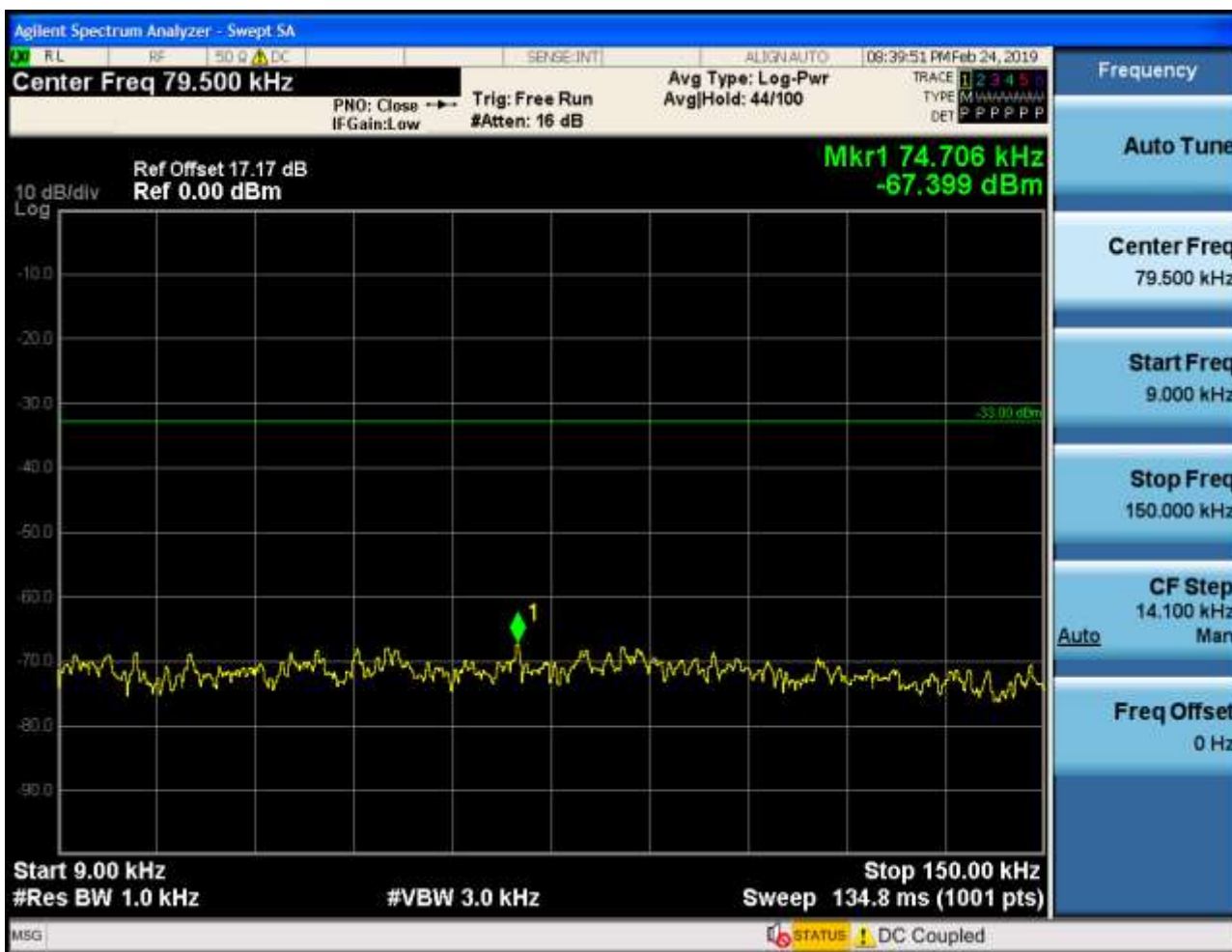


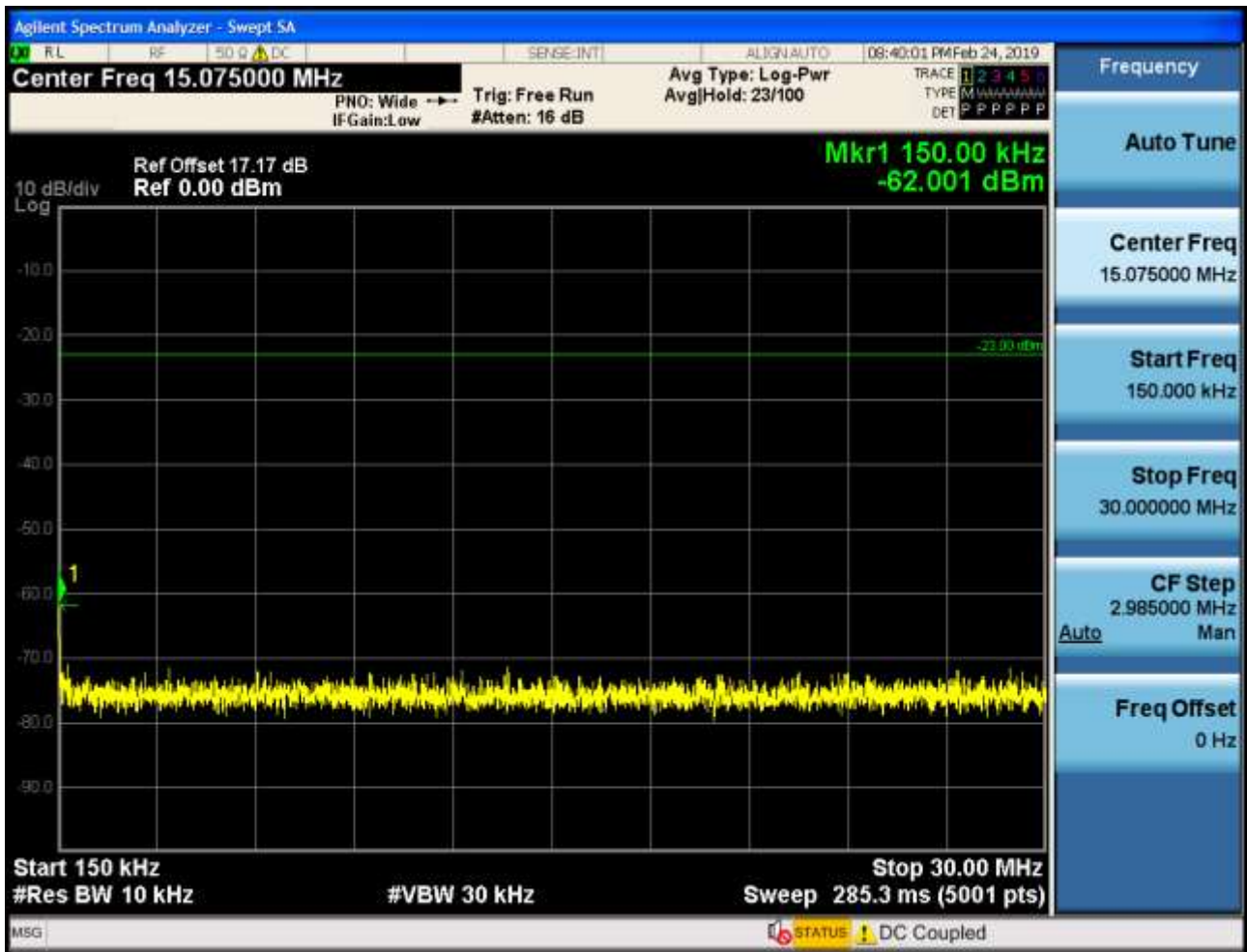


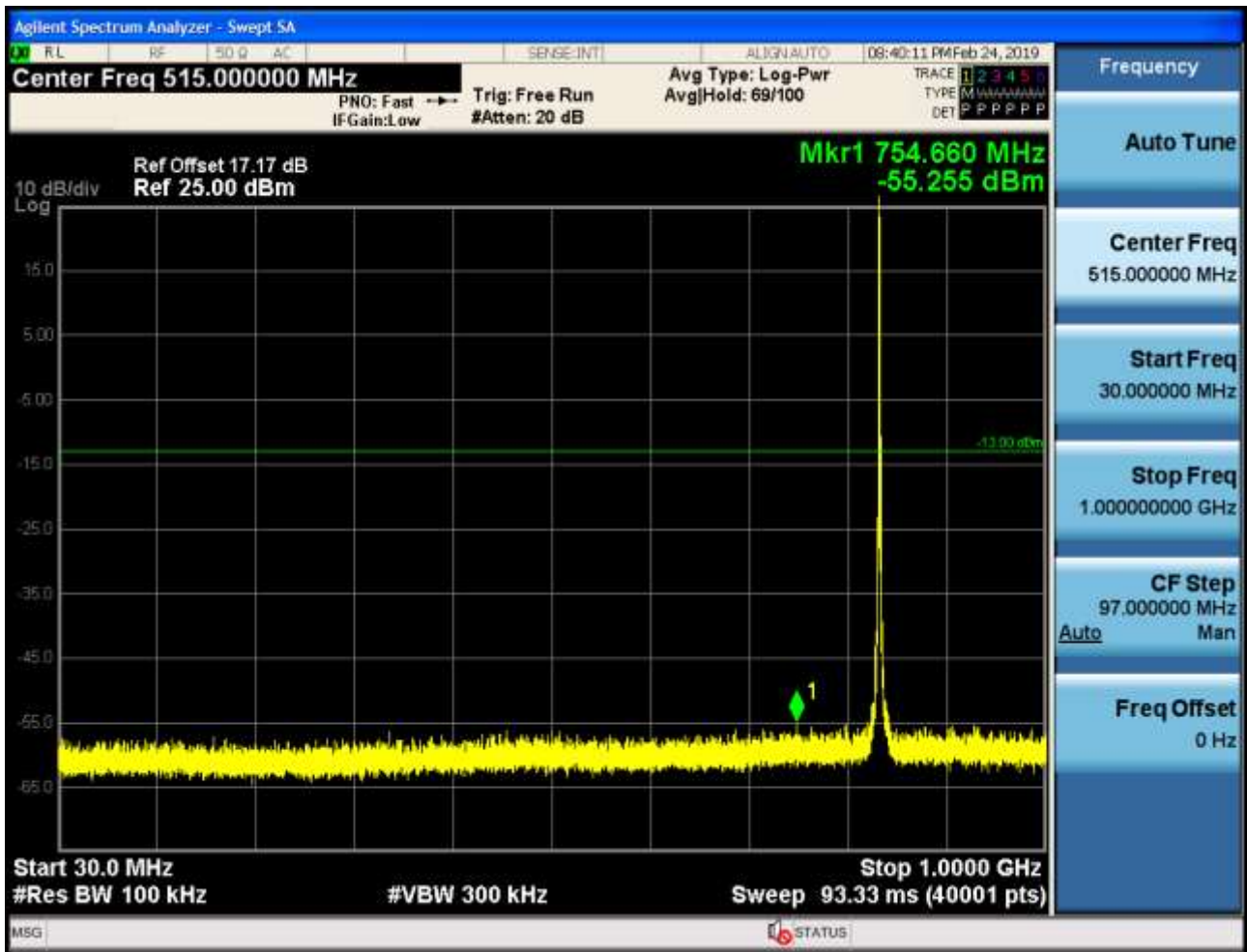


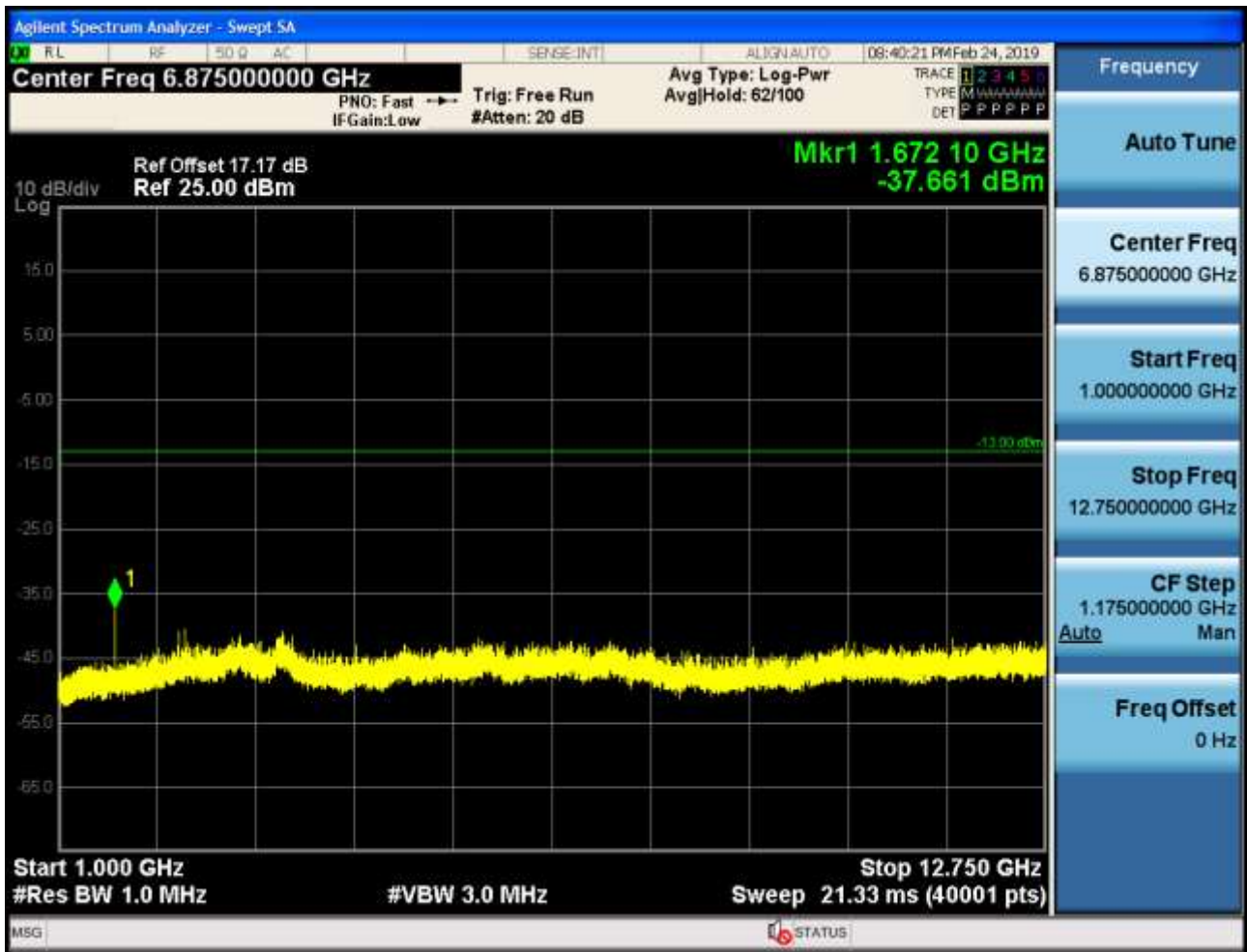
6.2.1.2.1.2 Test Channel = MCH

6.2.1.2.1.2.1 Test RB = RB1#0



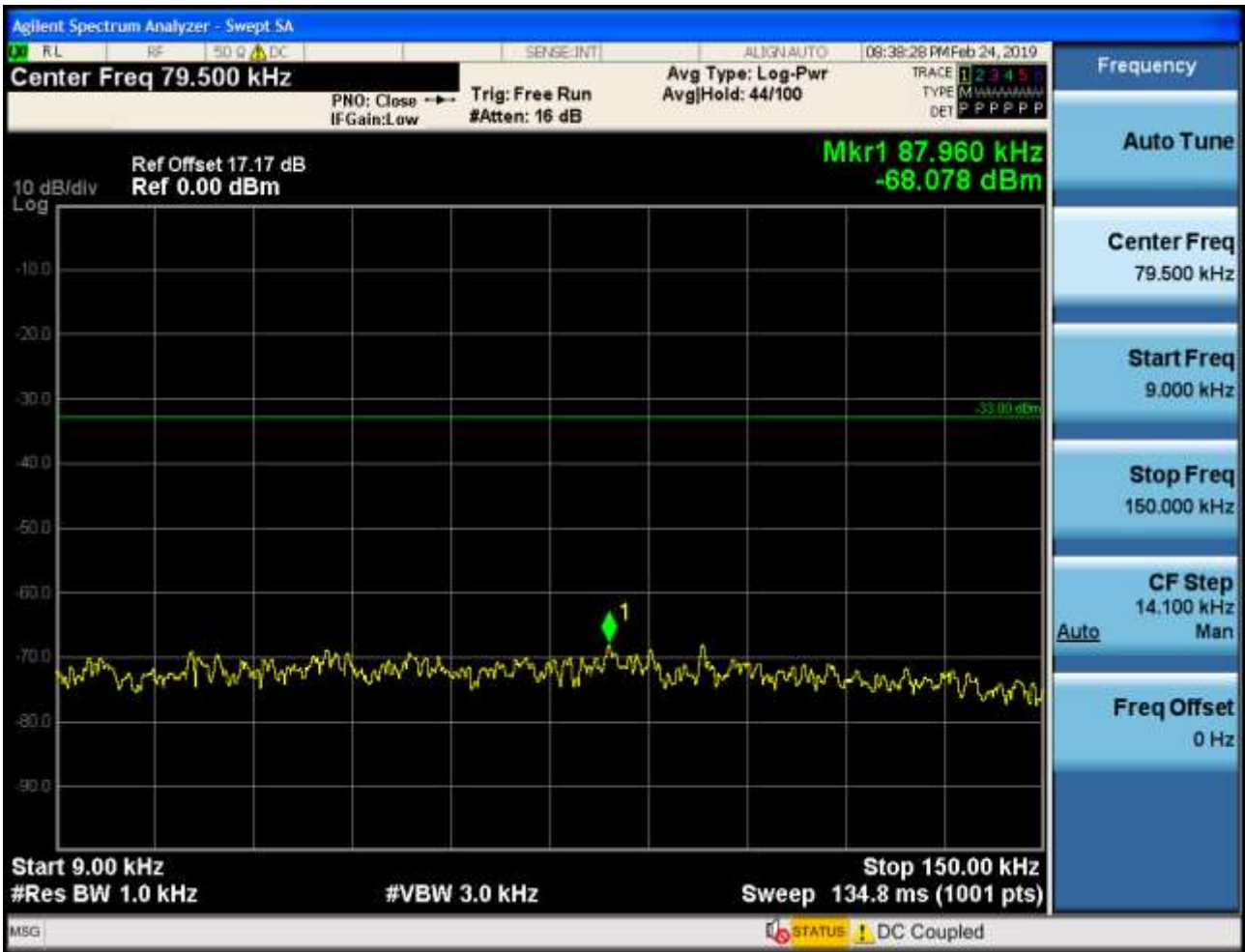


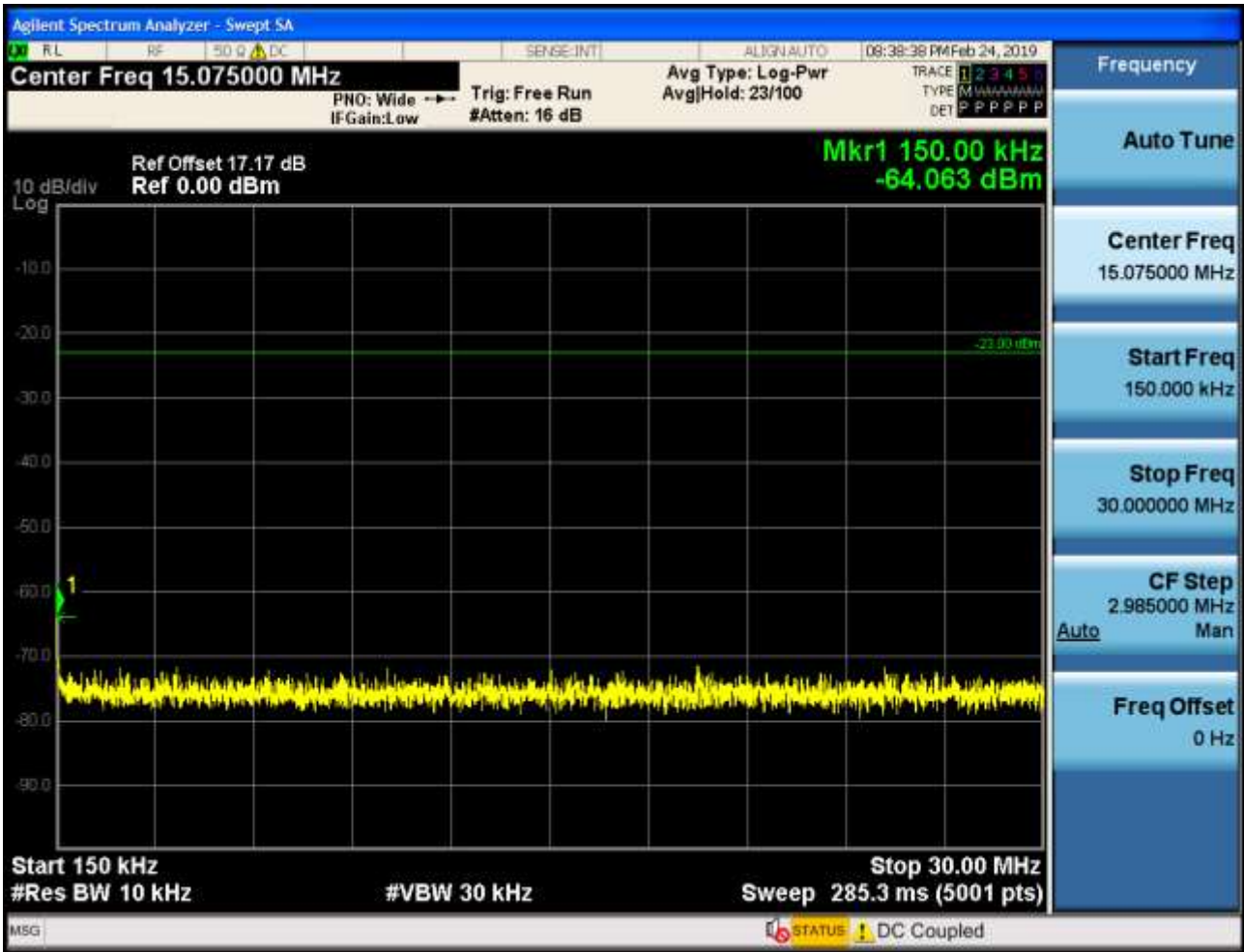


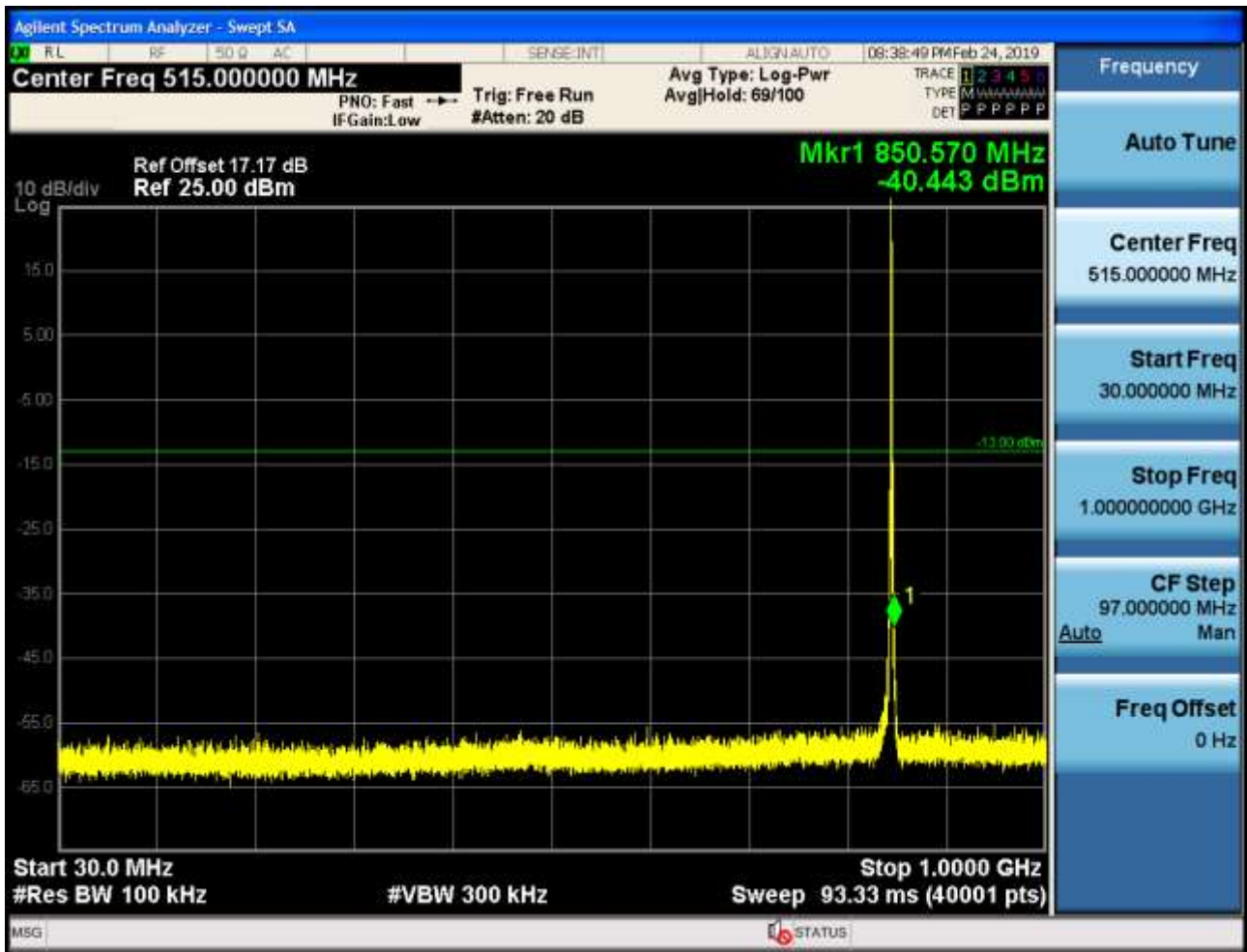


6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0





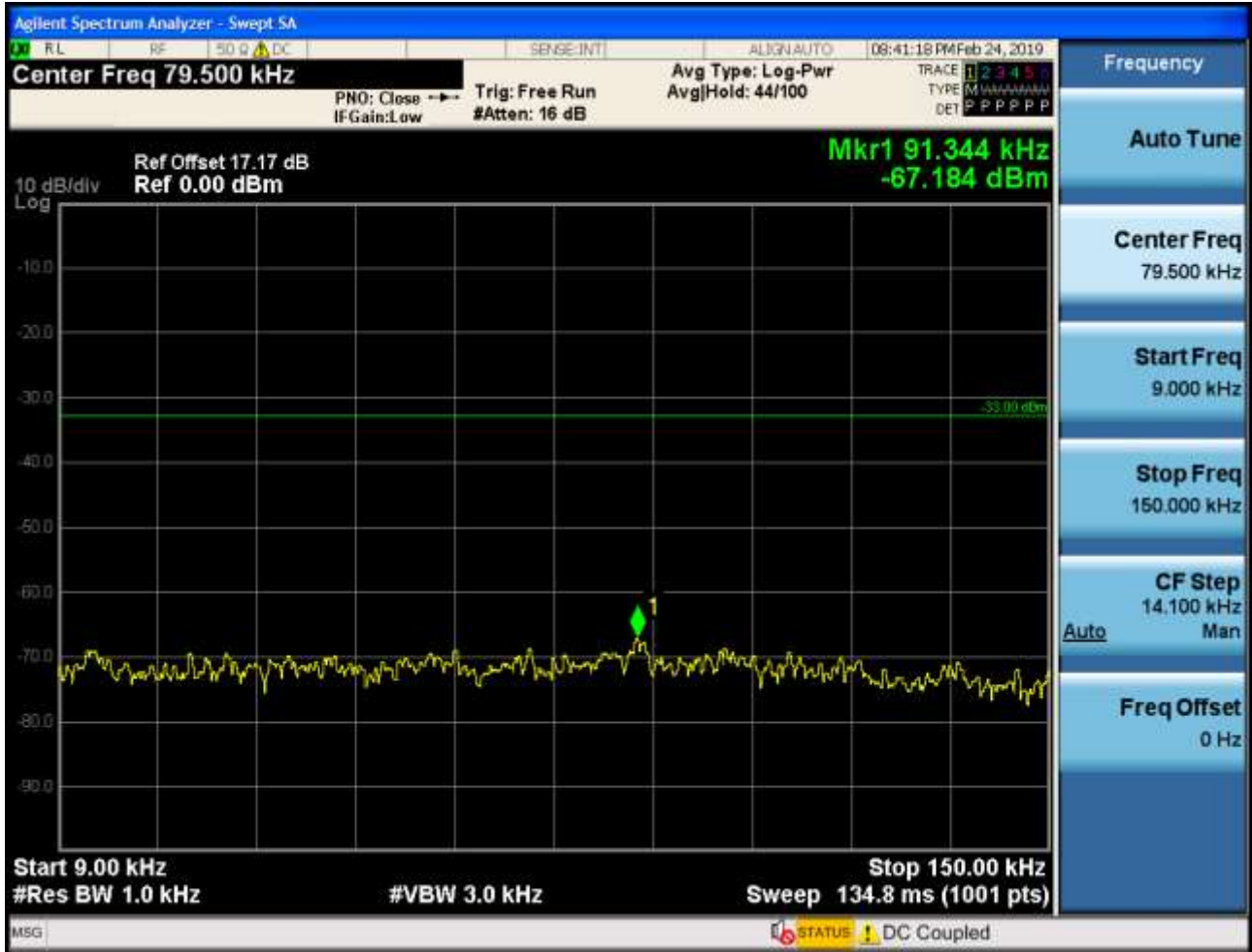


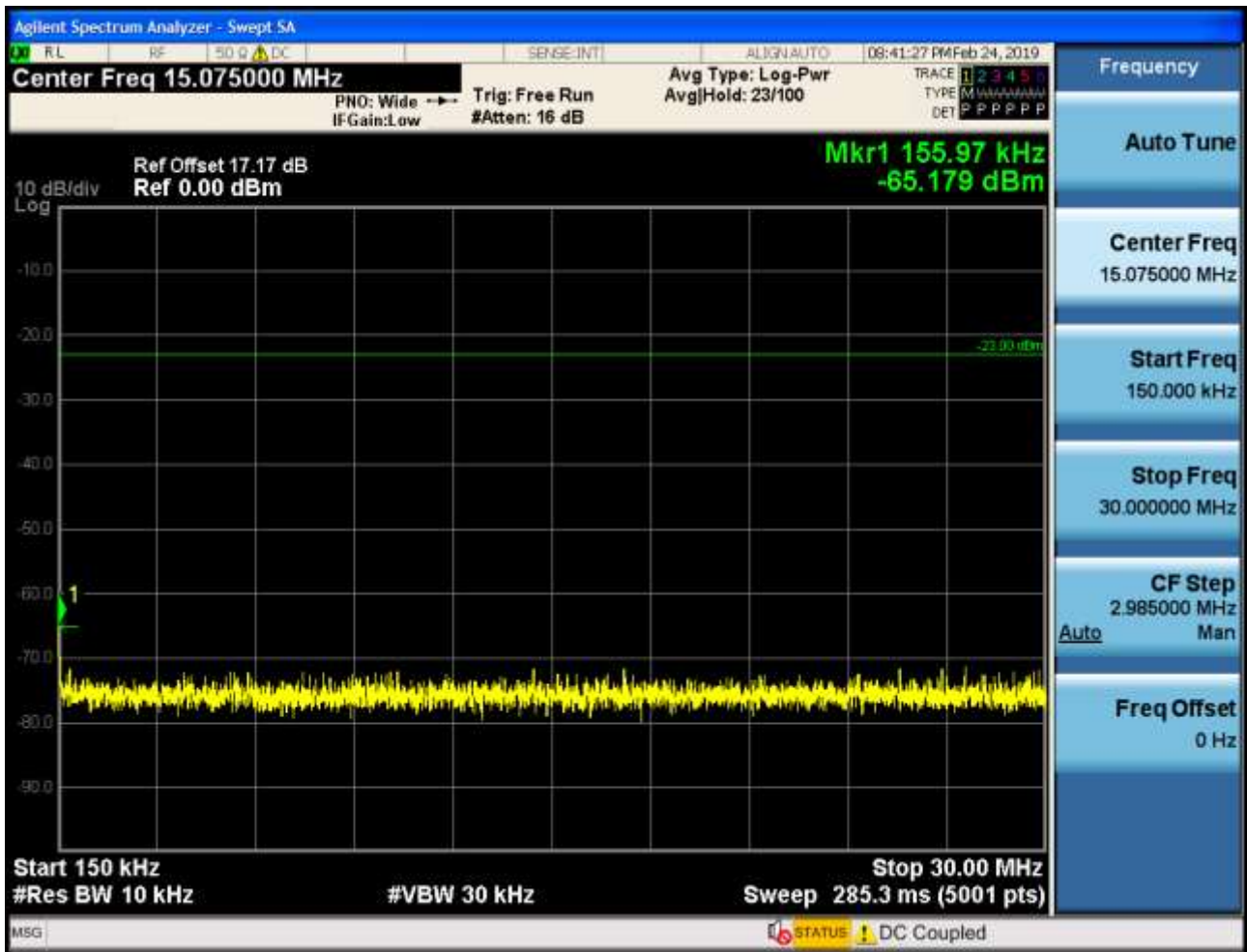


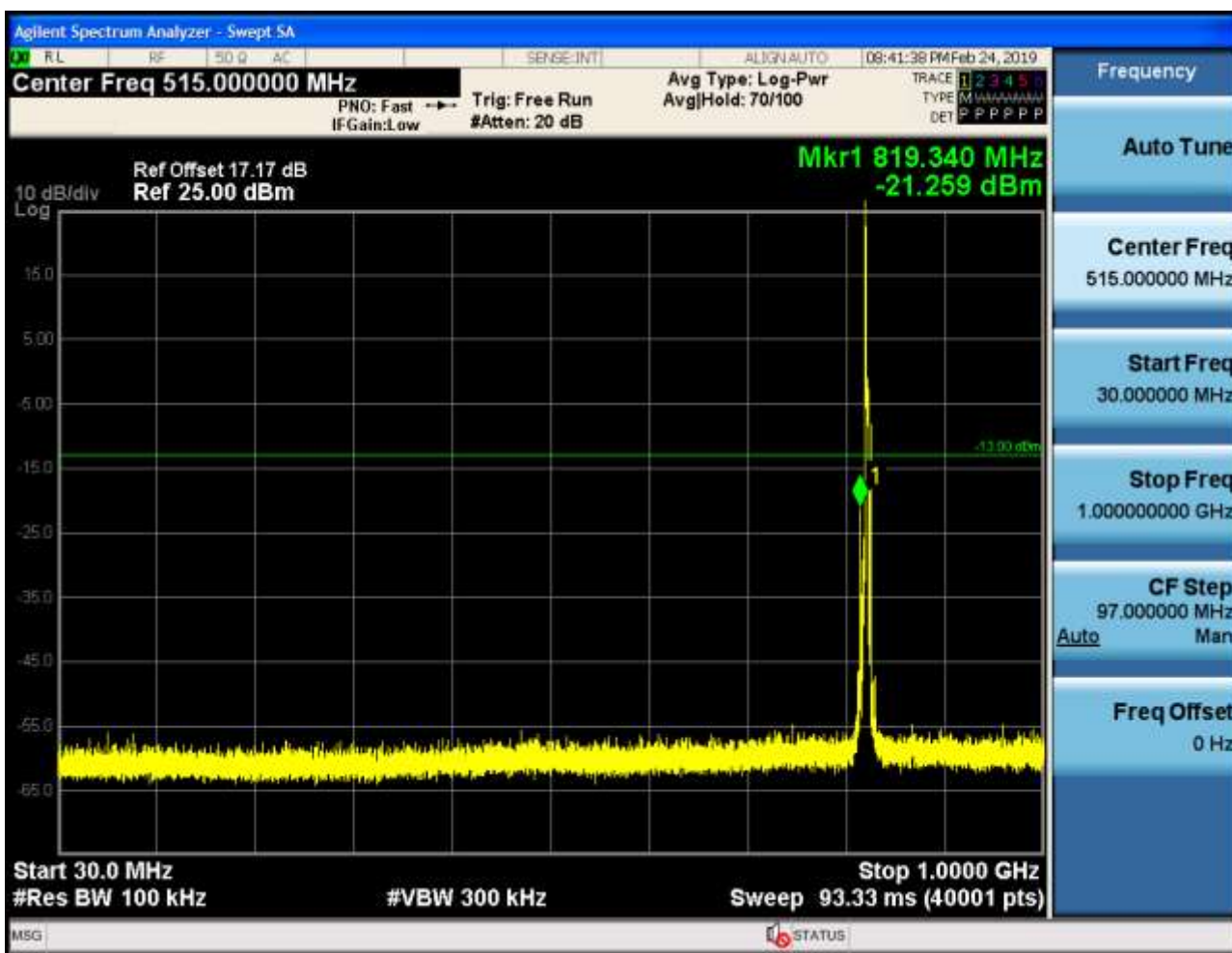
6.2.1.2.2 Test Bandwidth = 3

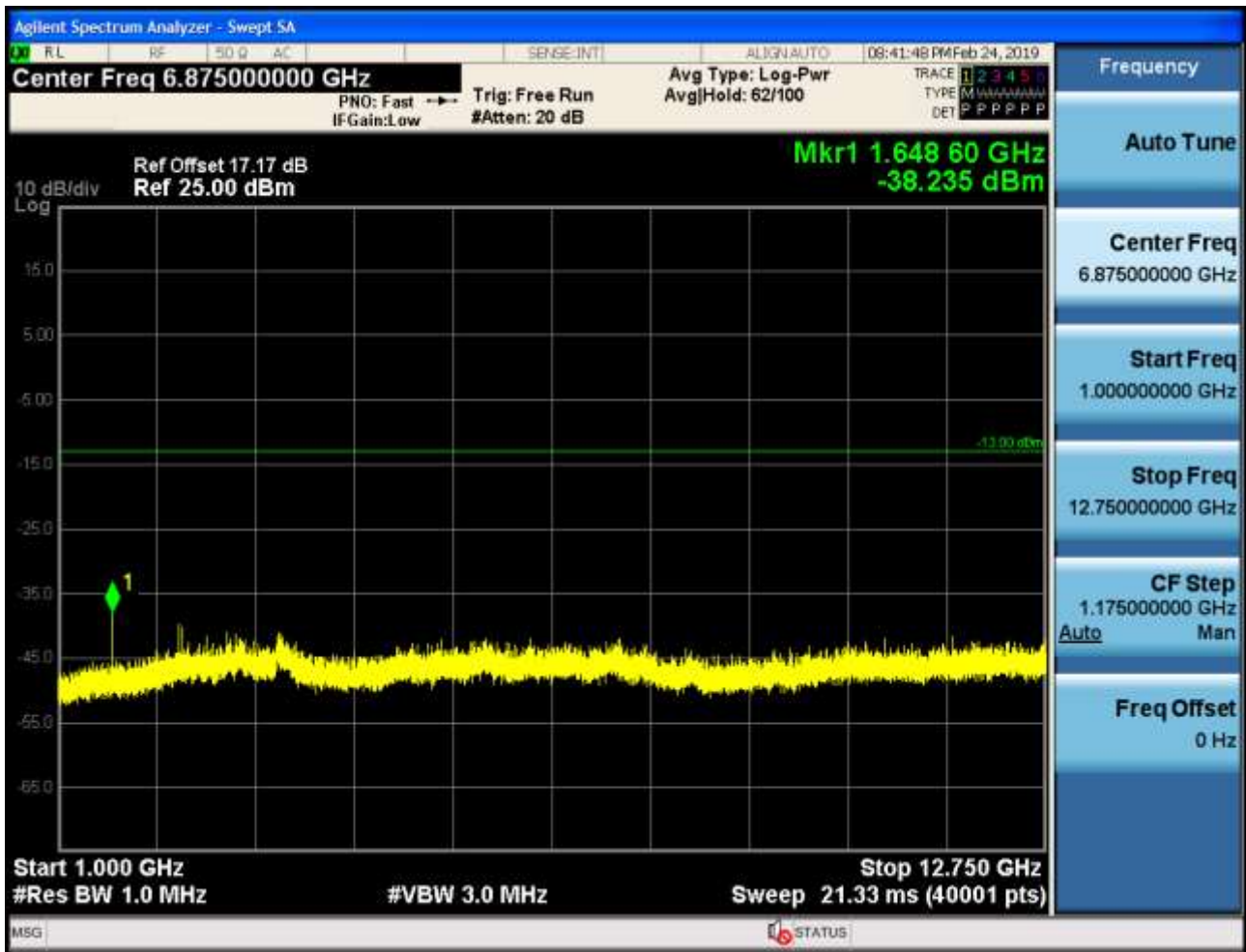
6.2.1.2.2.1 Test Channel = LCH

6.2.1.2.2.1.1 Test RB = RB1#0



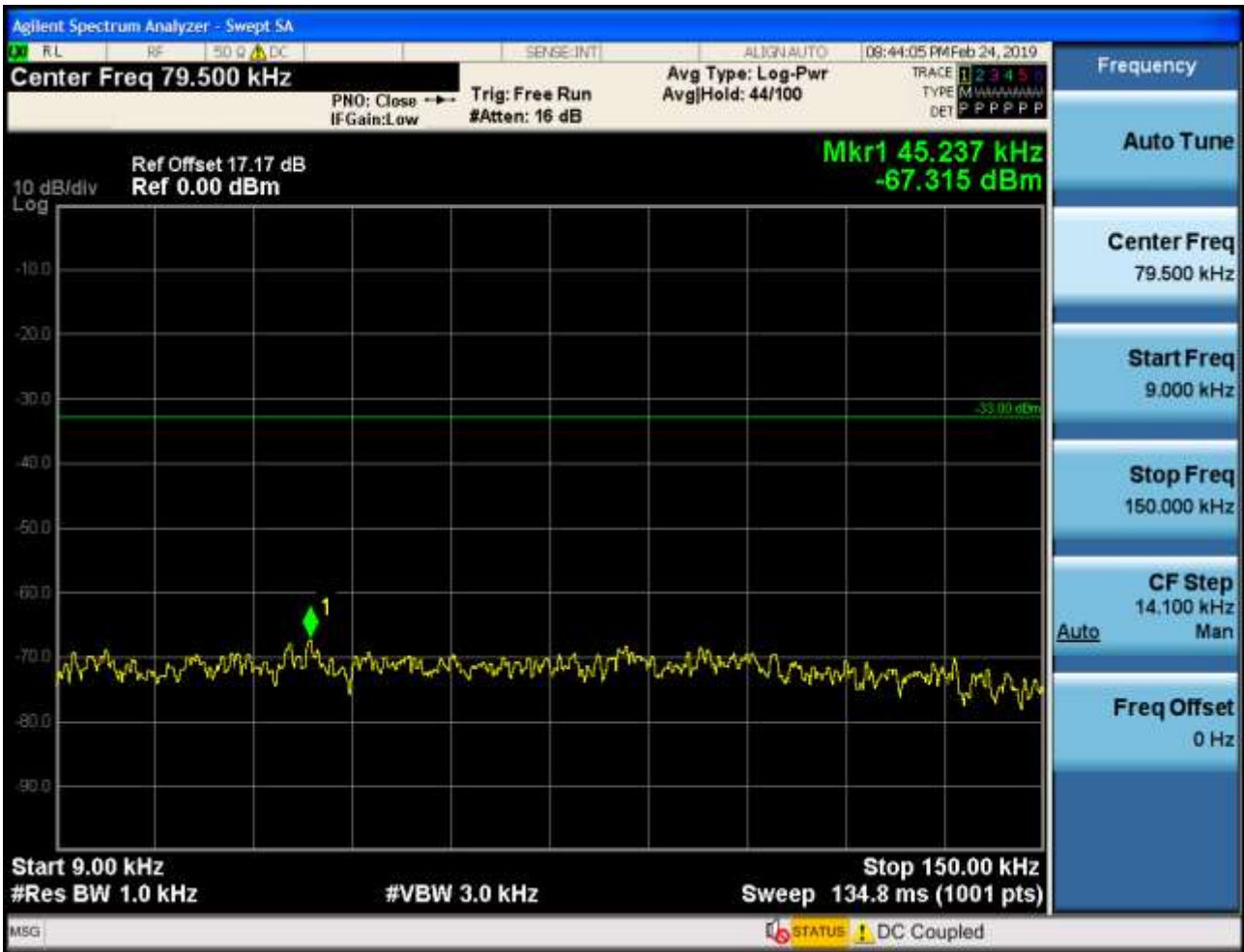


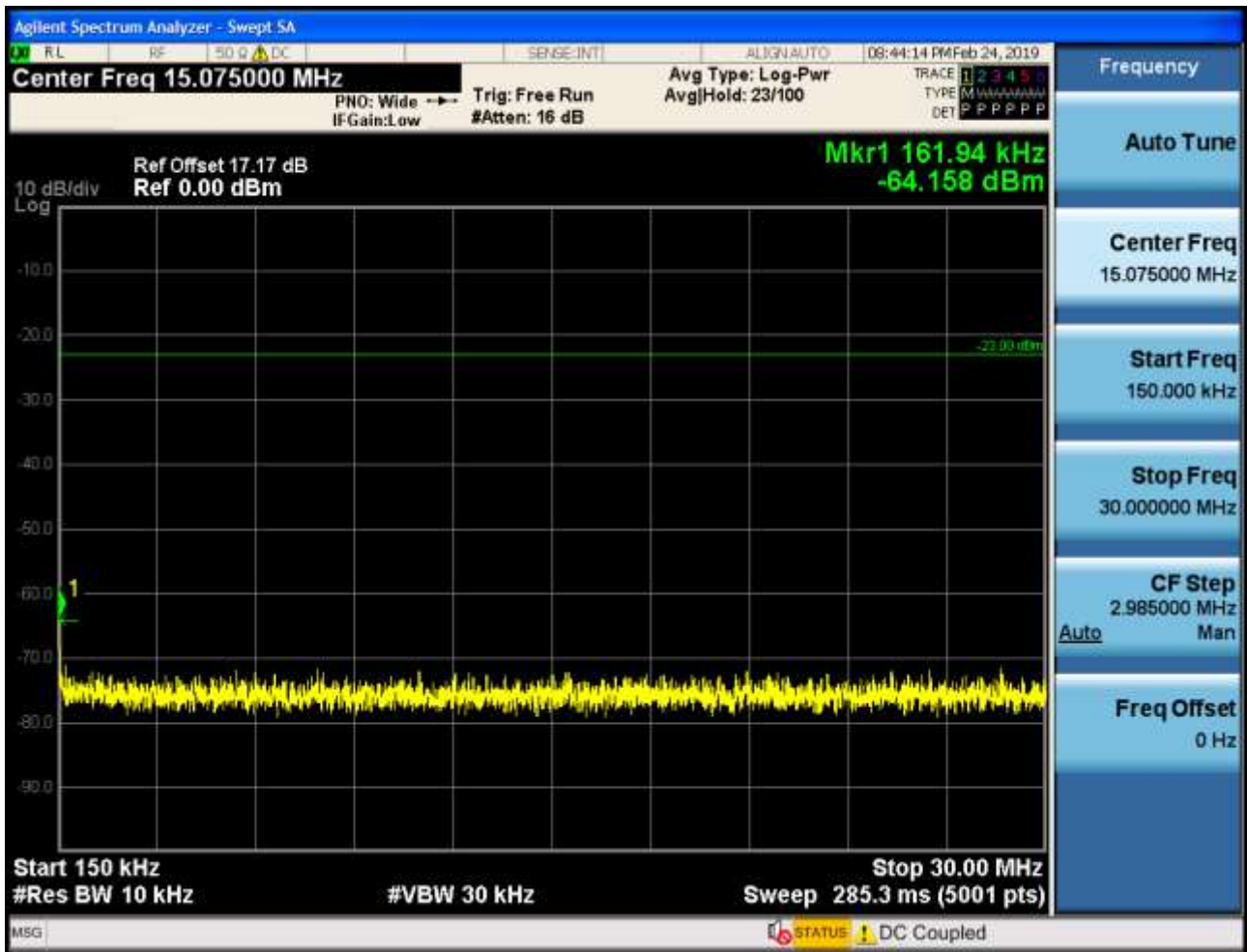


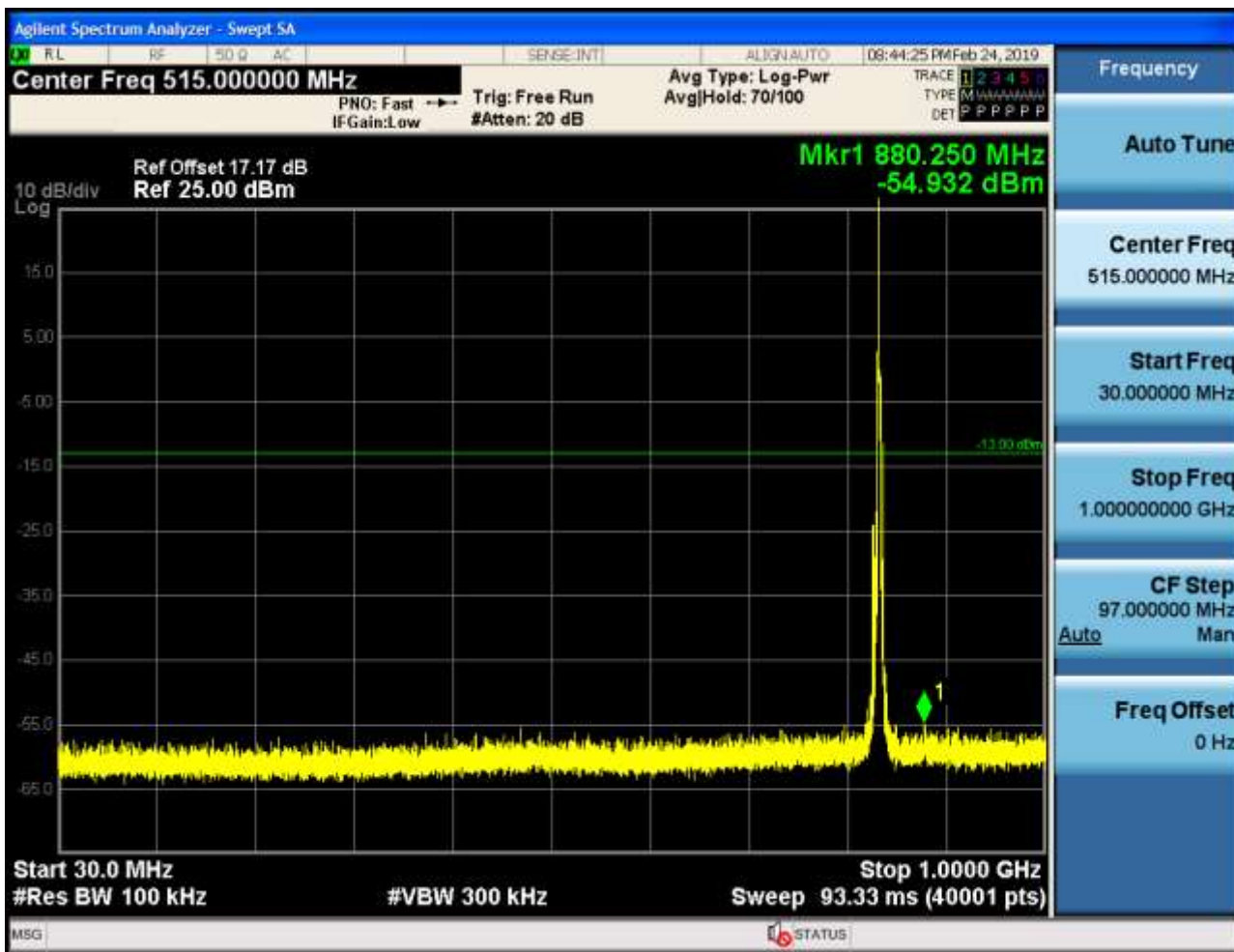


6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0



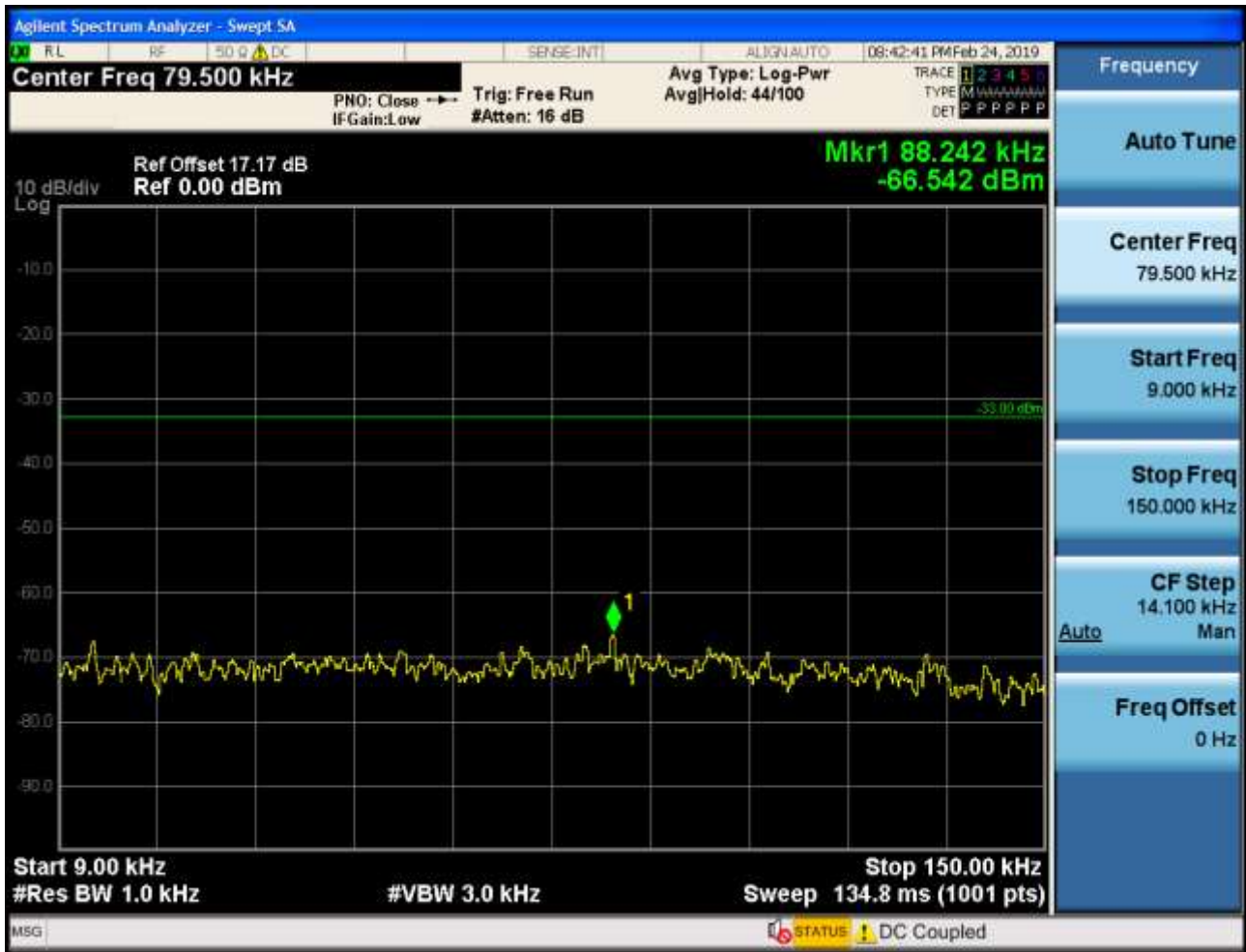


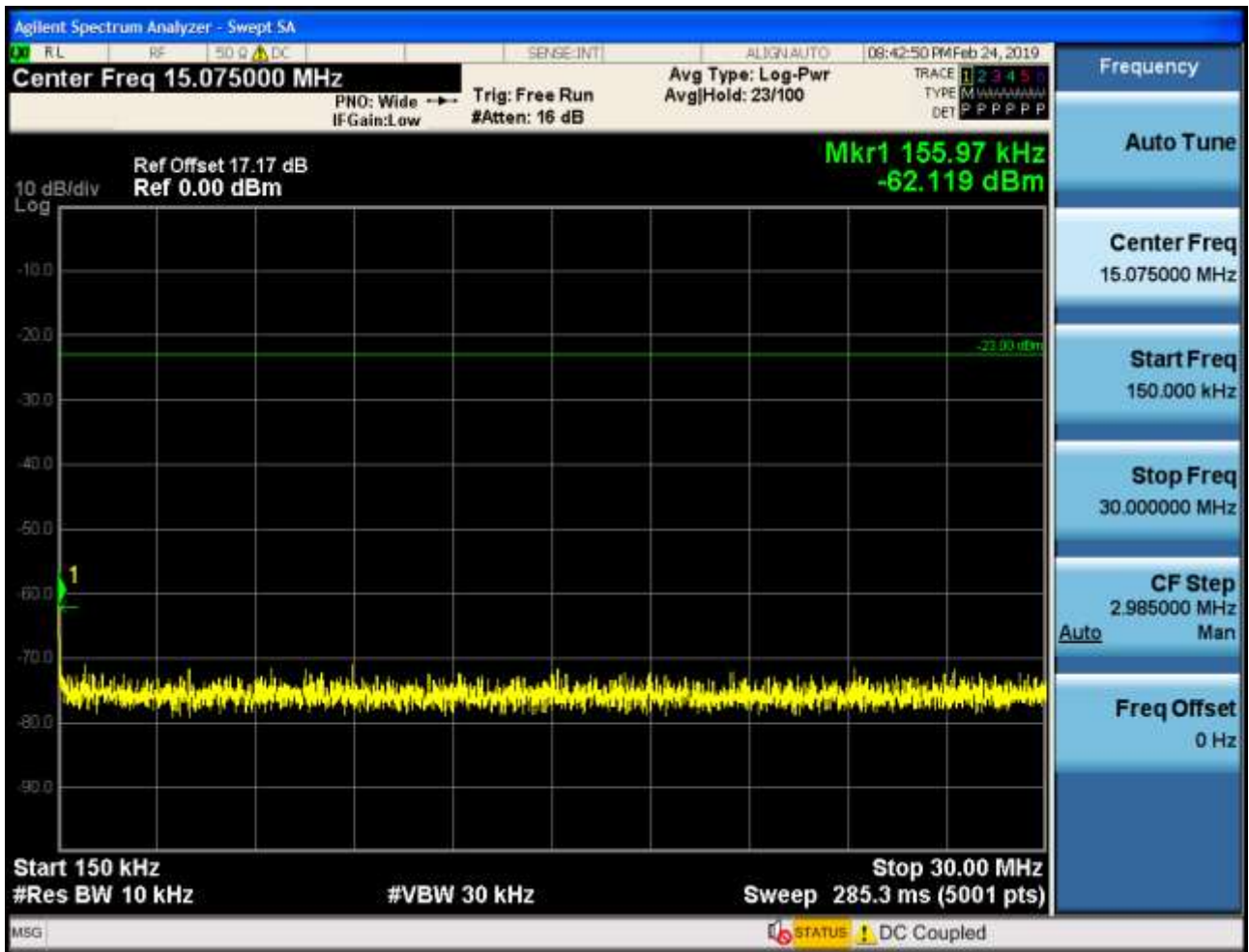


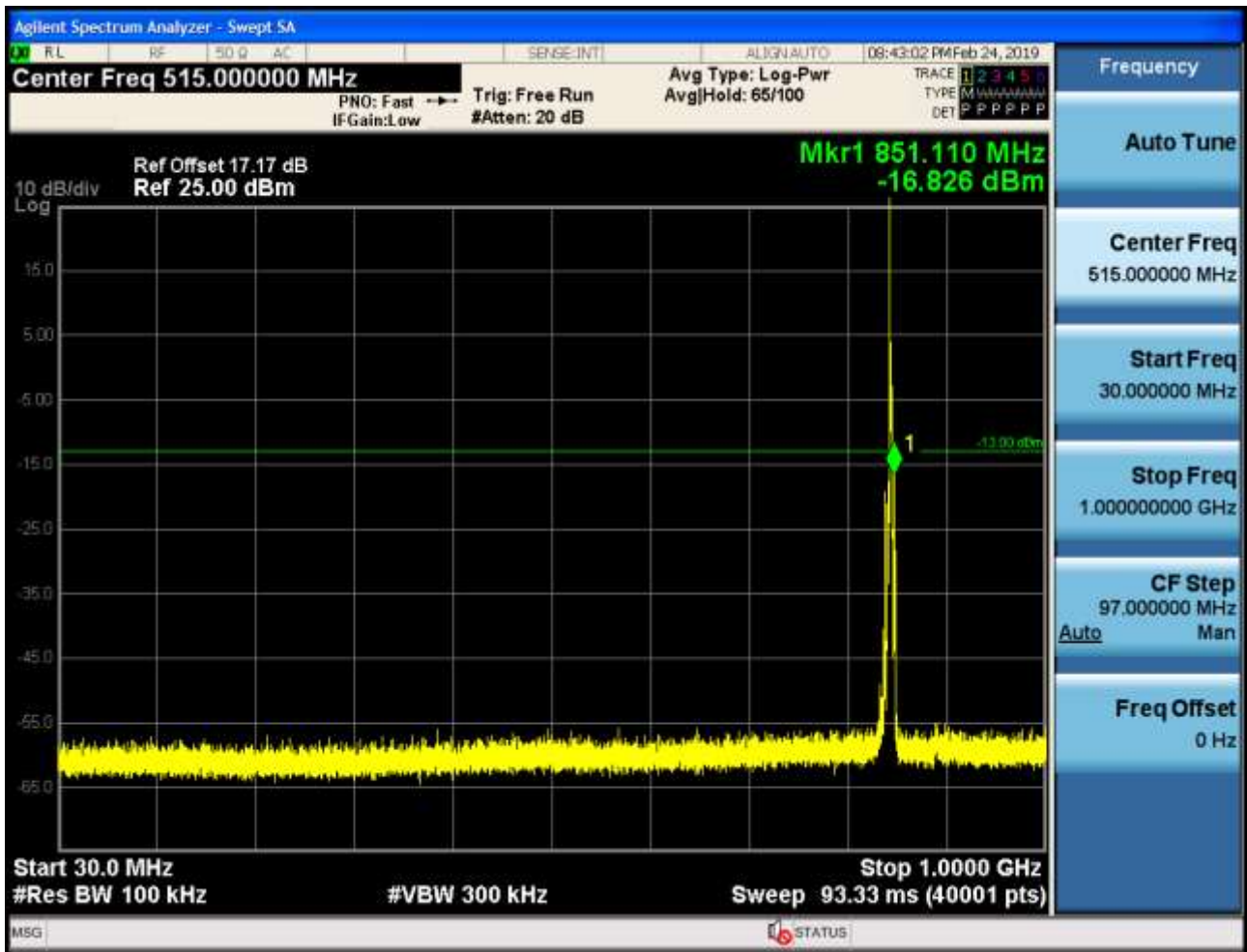


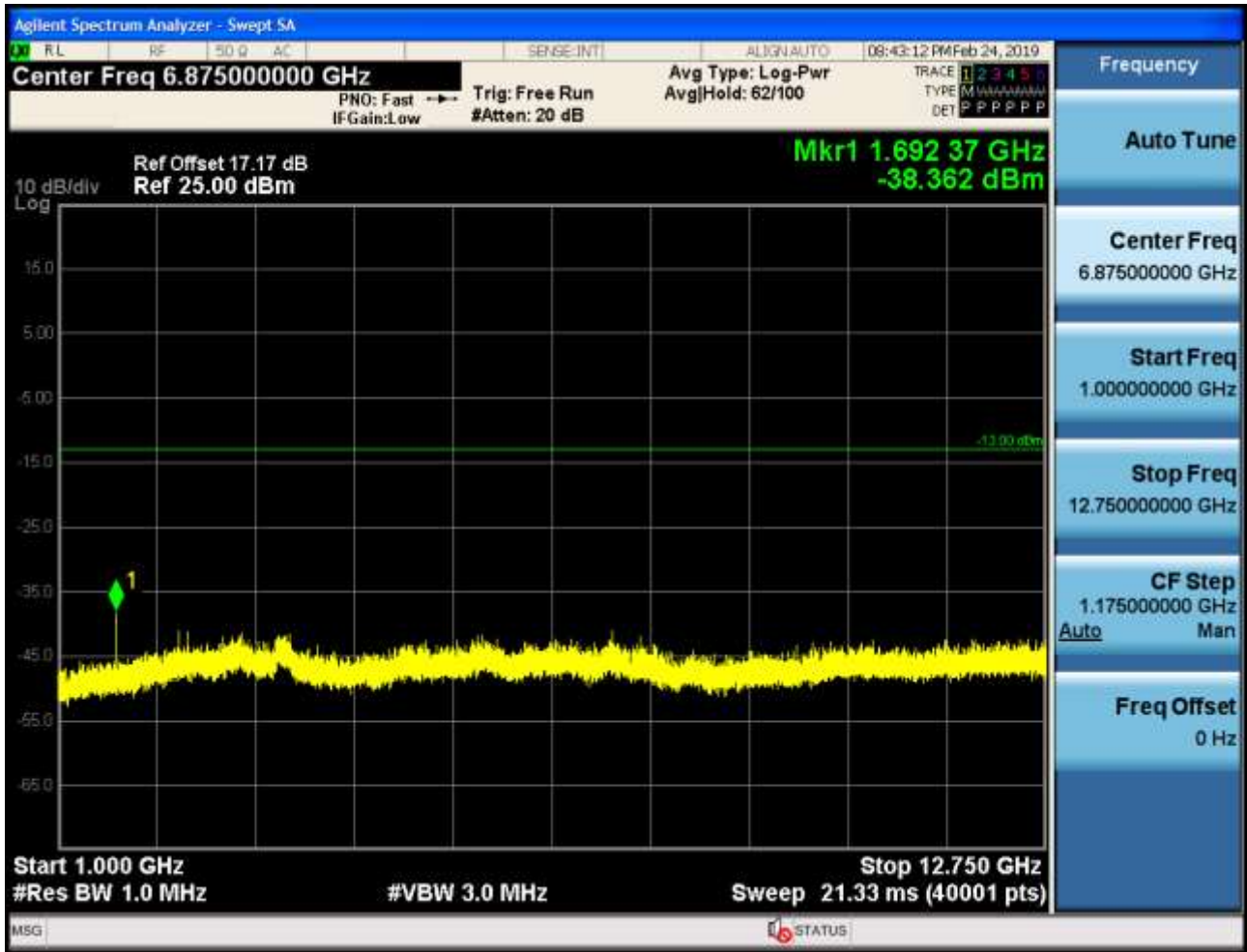
6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0





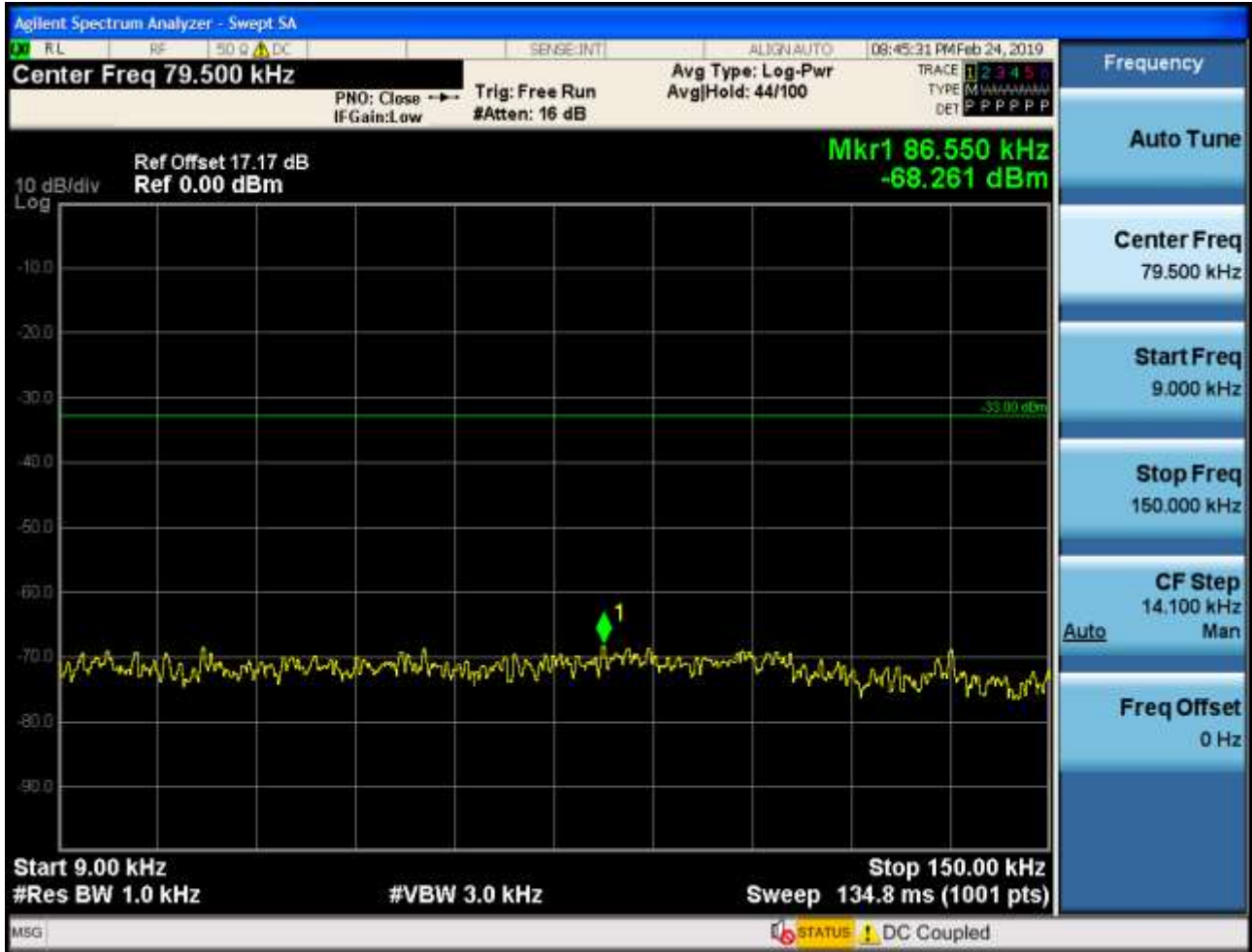


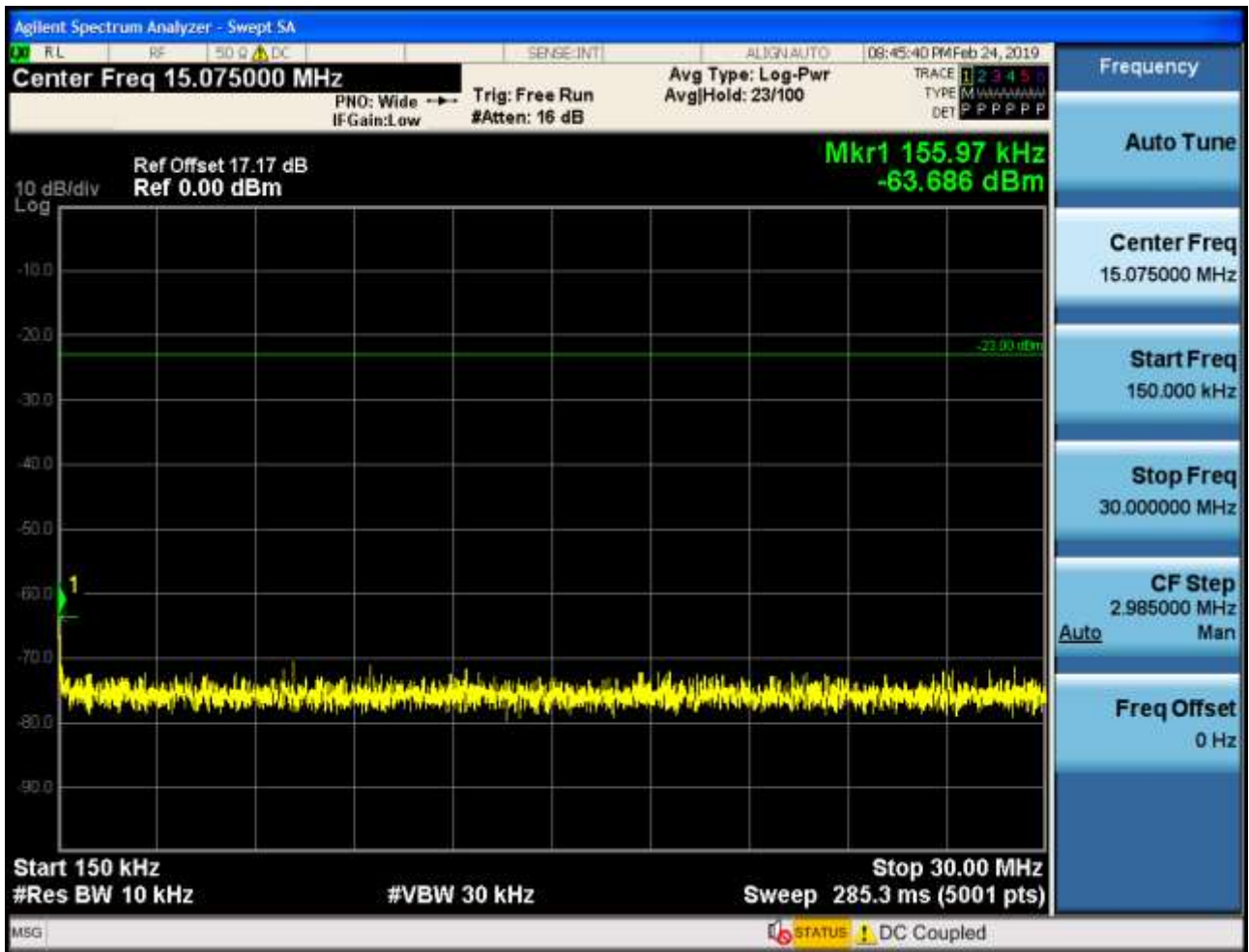


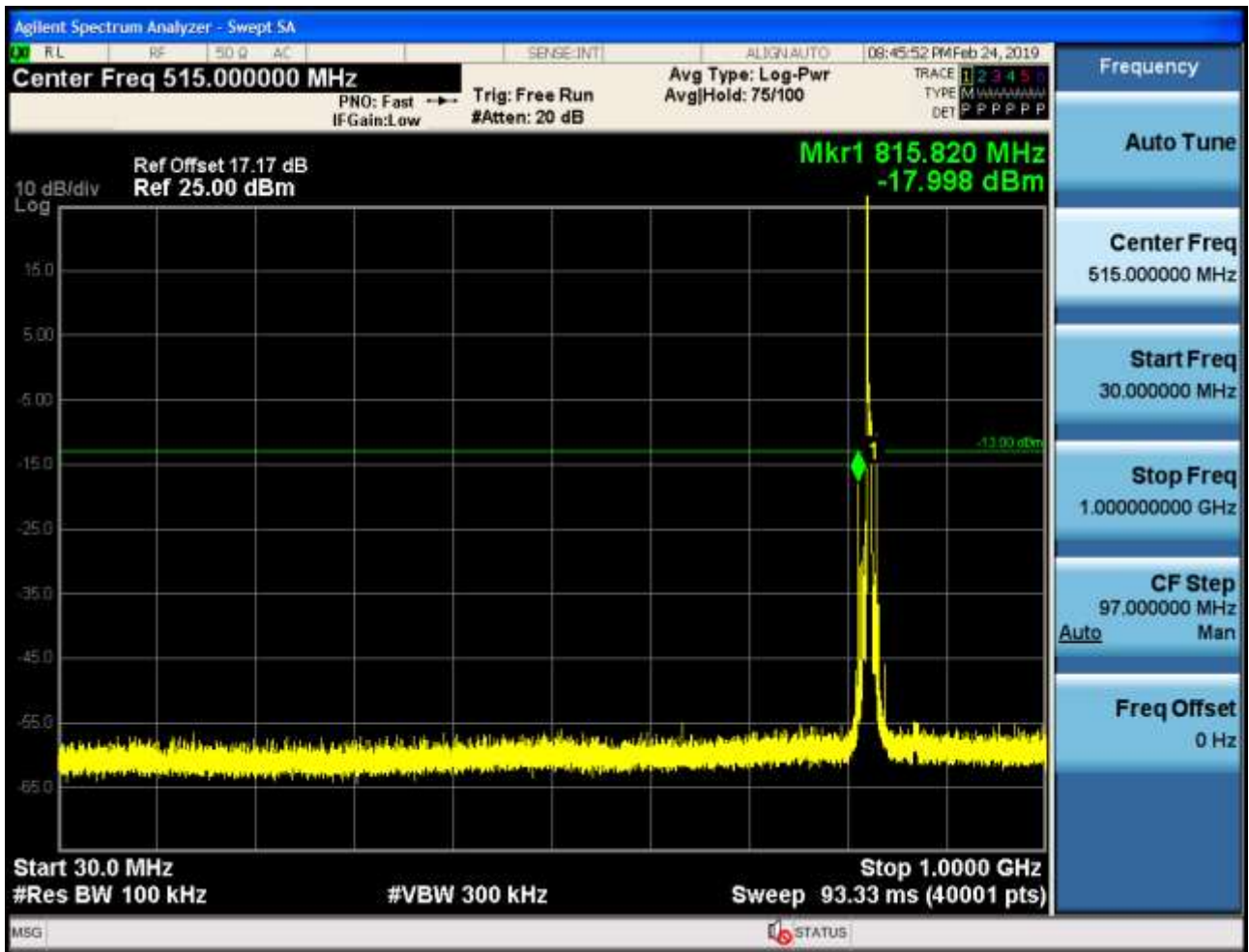
6.2.1.2.3 Test Bandwidth = 5

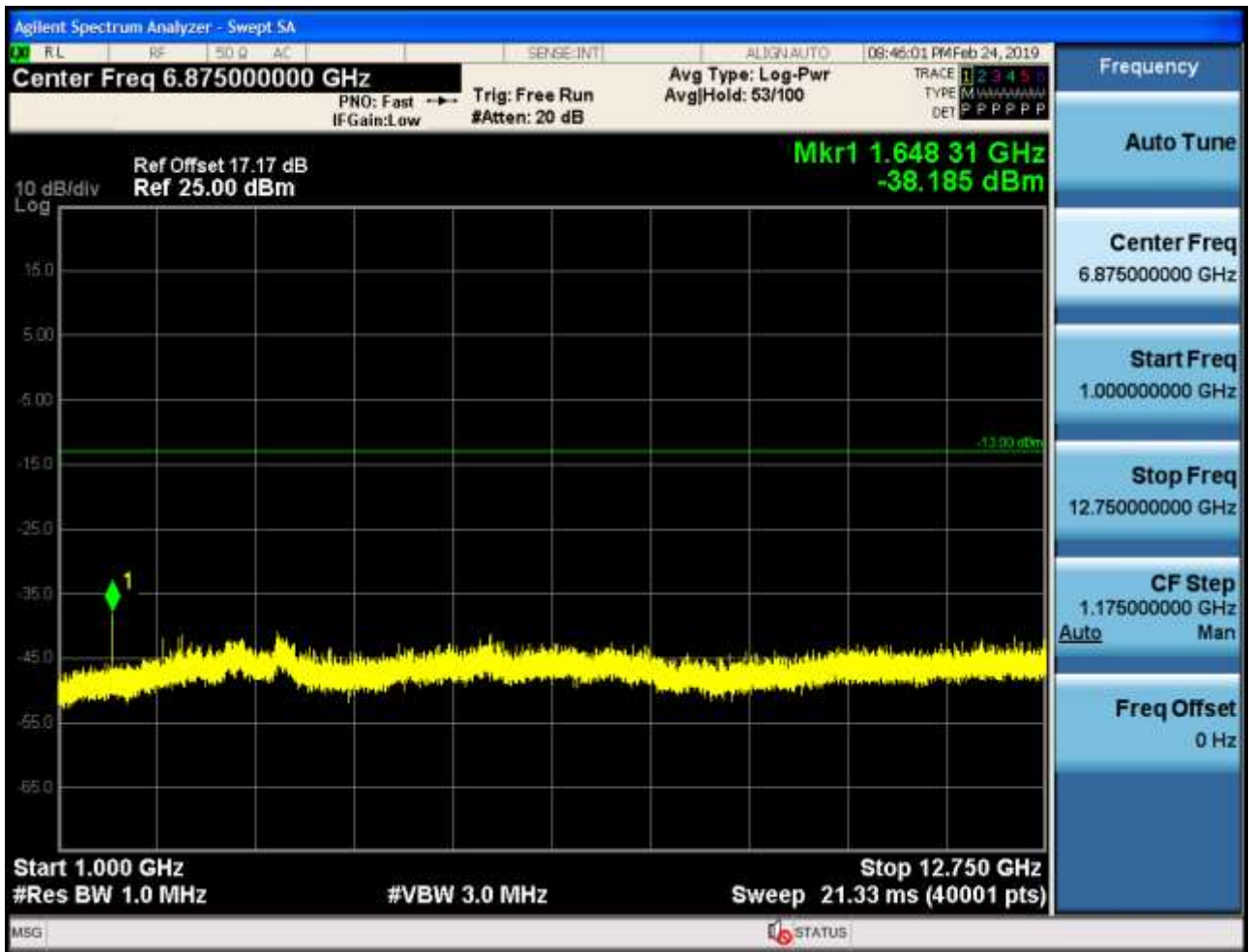
6.2.1.2.3.1 Test Channel = LCH

6.2.1.2.3.1.1 Test RB = RB1#0





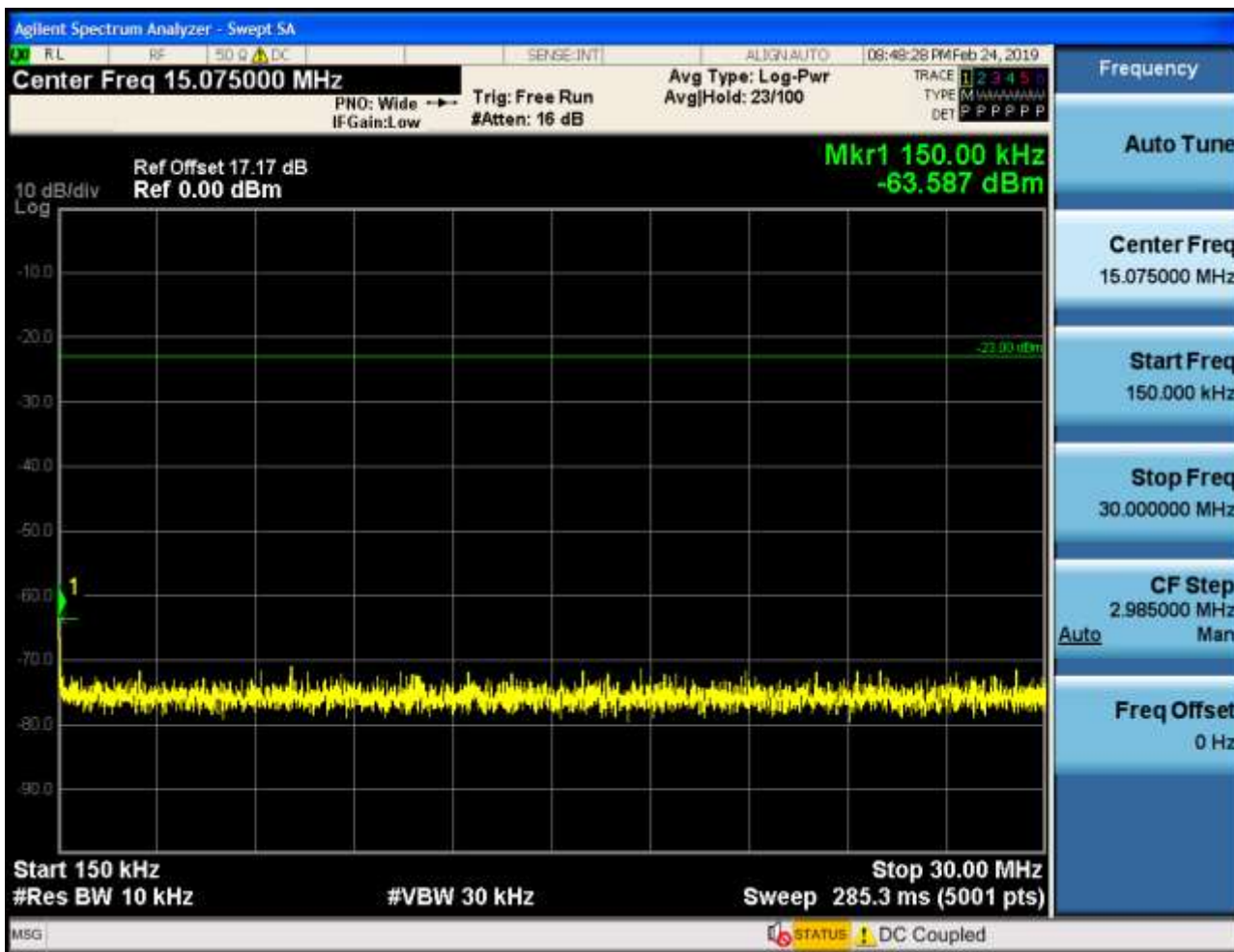


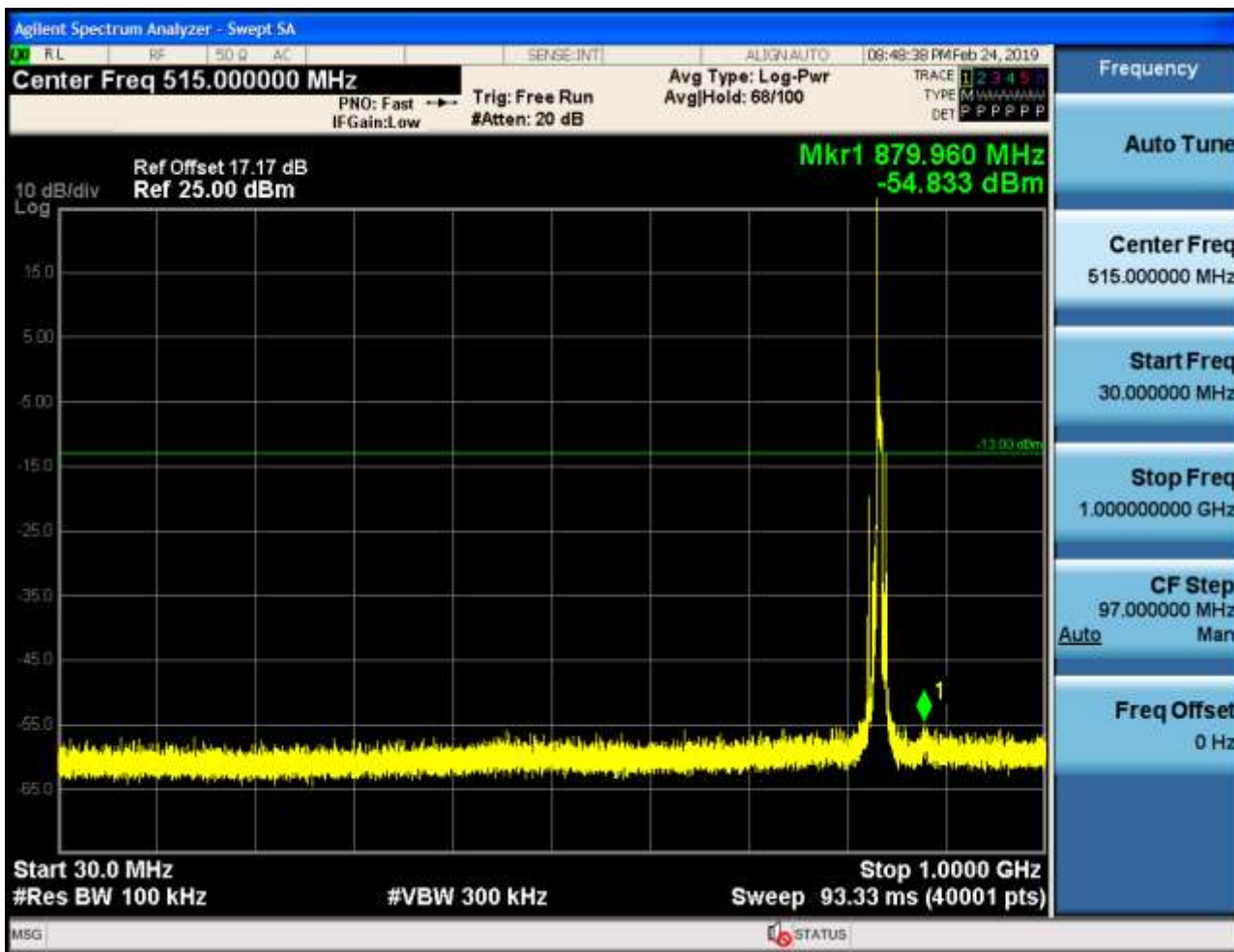


6.2.1.2.3.2 Test Channel = MCH

6.2.1.2.3.2.1 Test RB = RB1#0



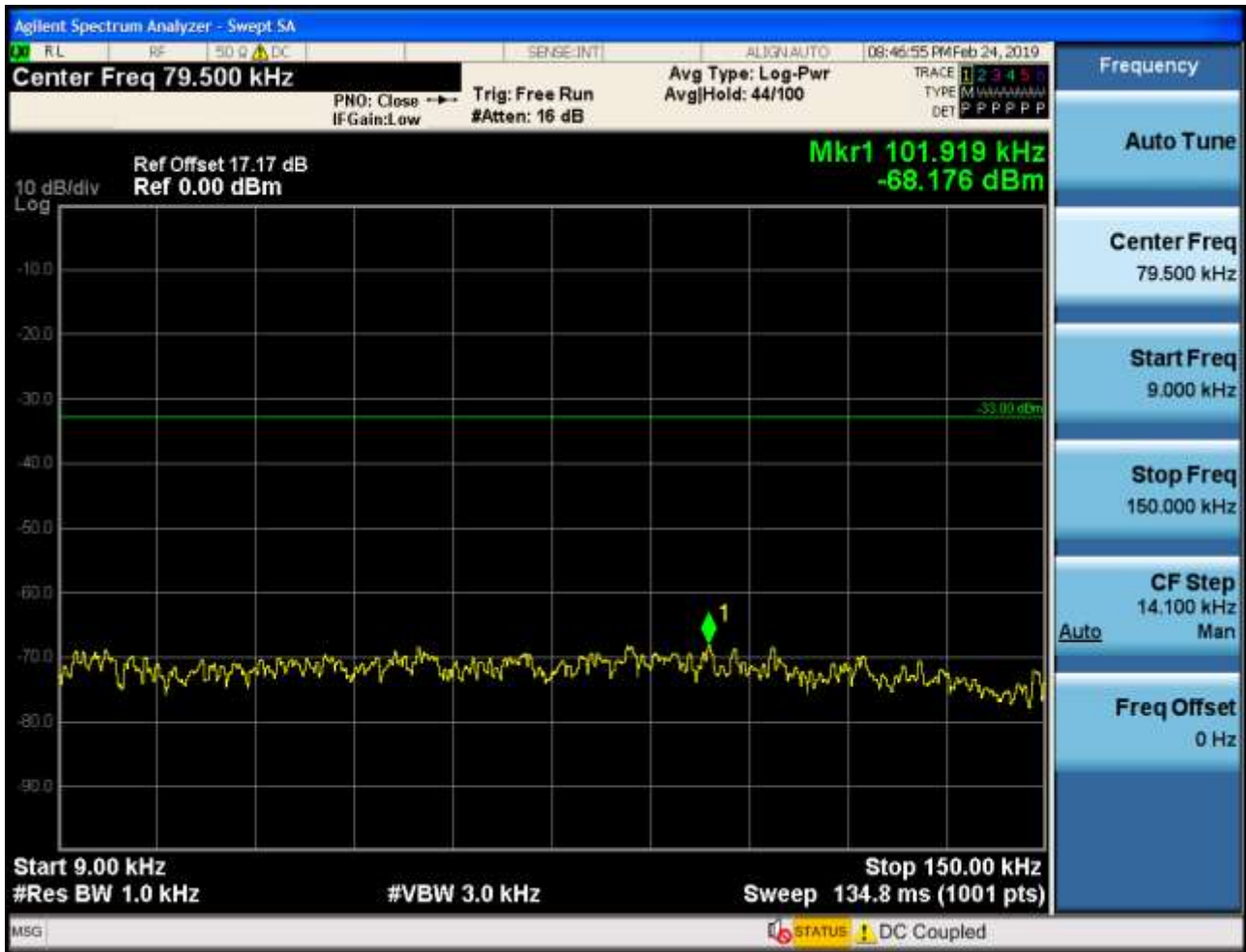


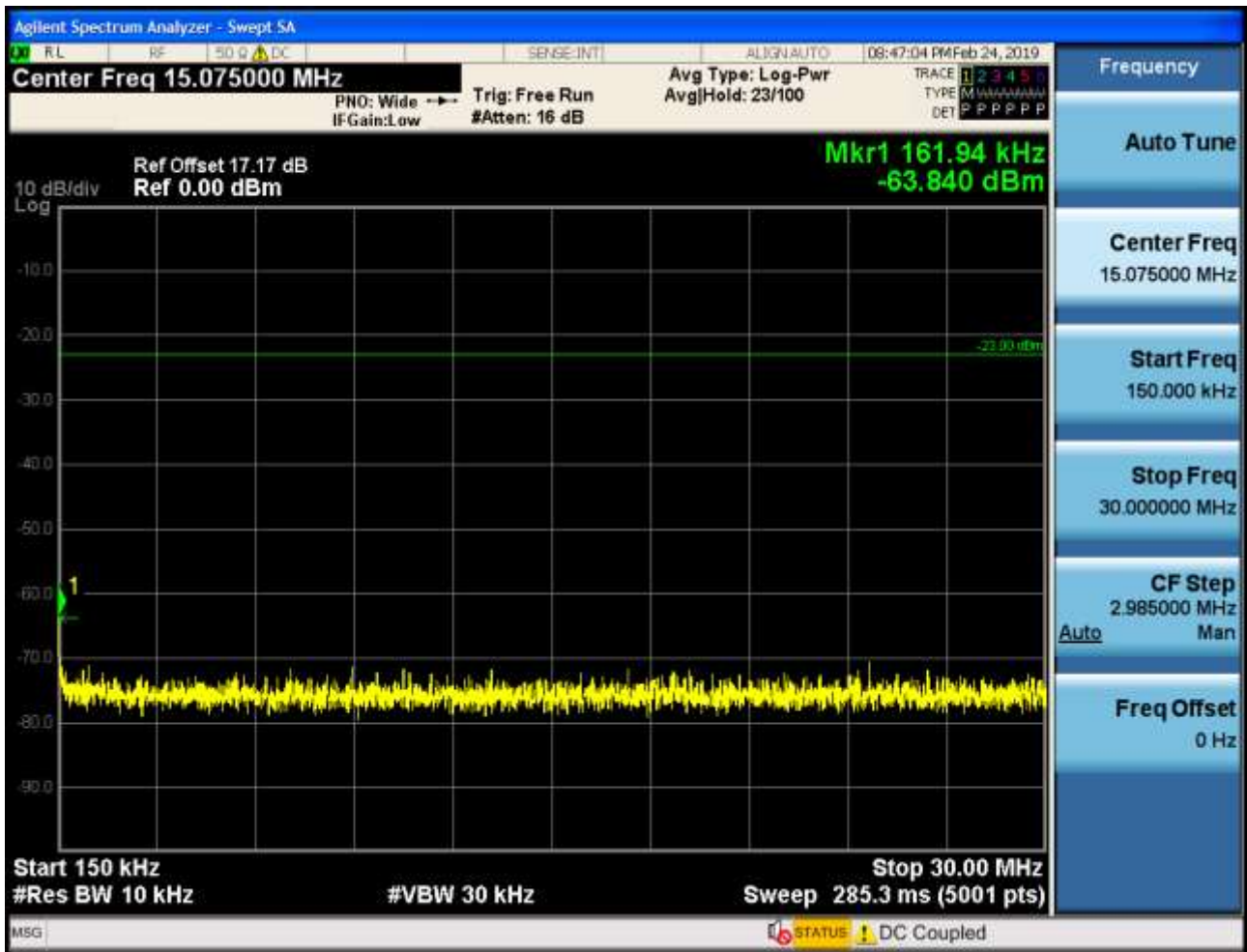


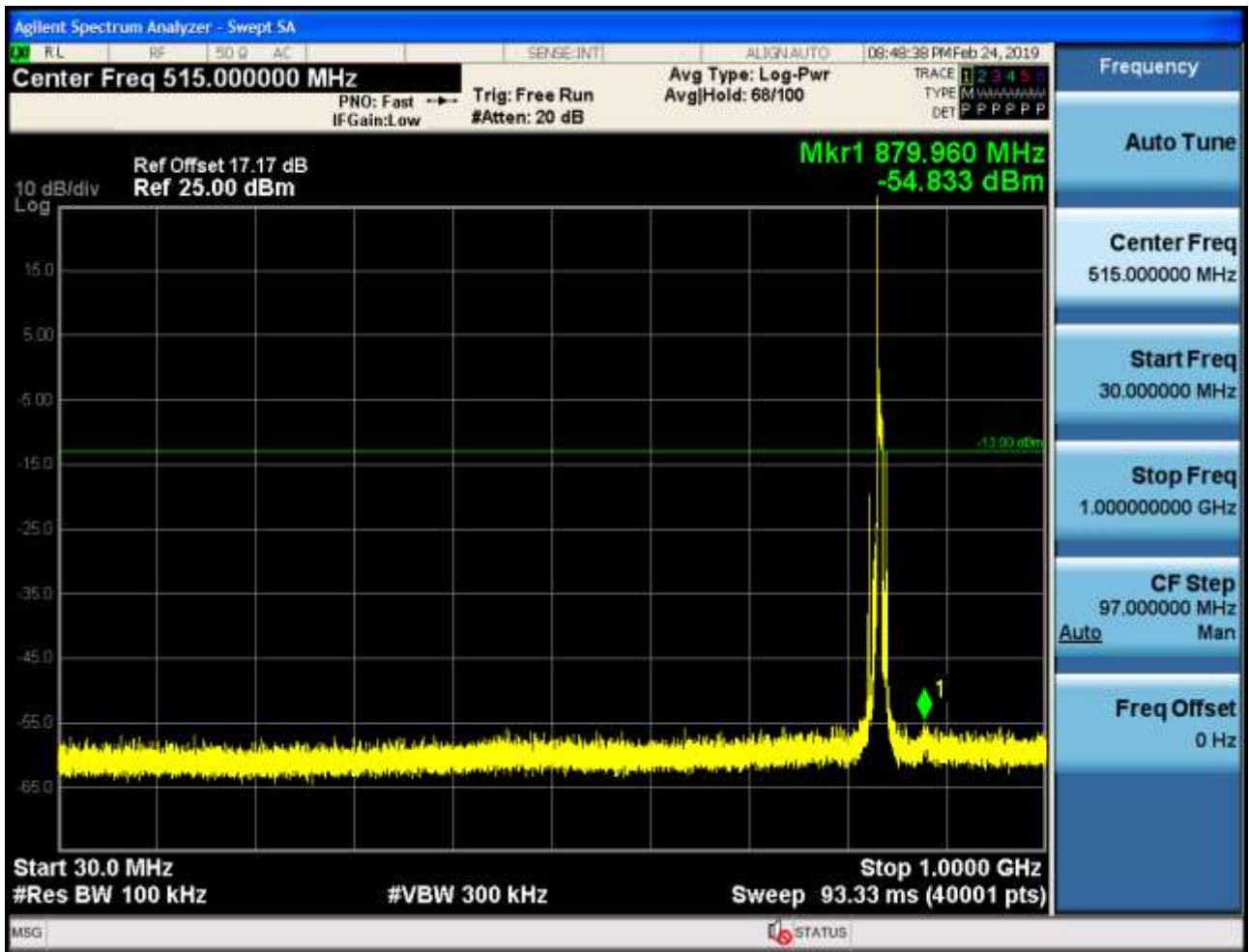


6.2.1.2.3.3 Test Channel = HCH

6.2.1.2.3.3.1 Test RB = RB1#0





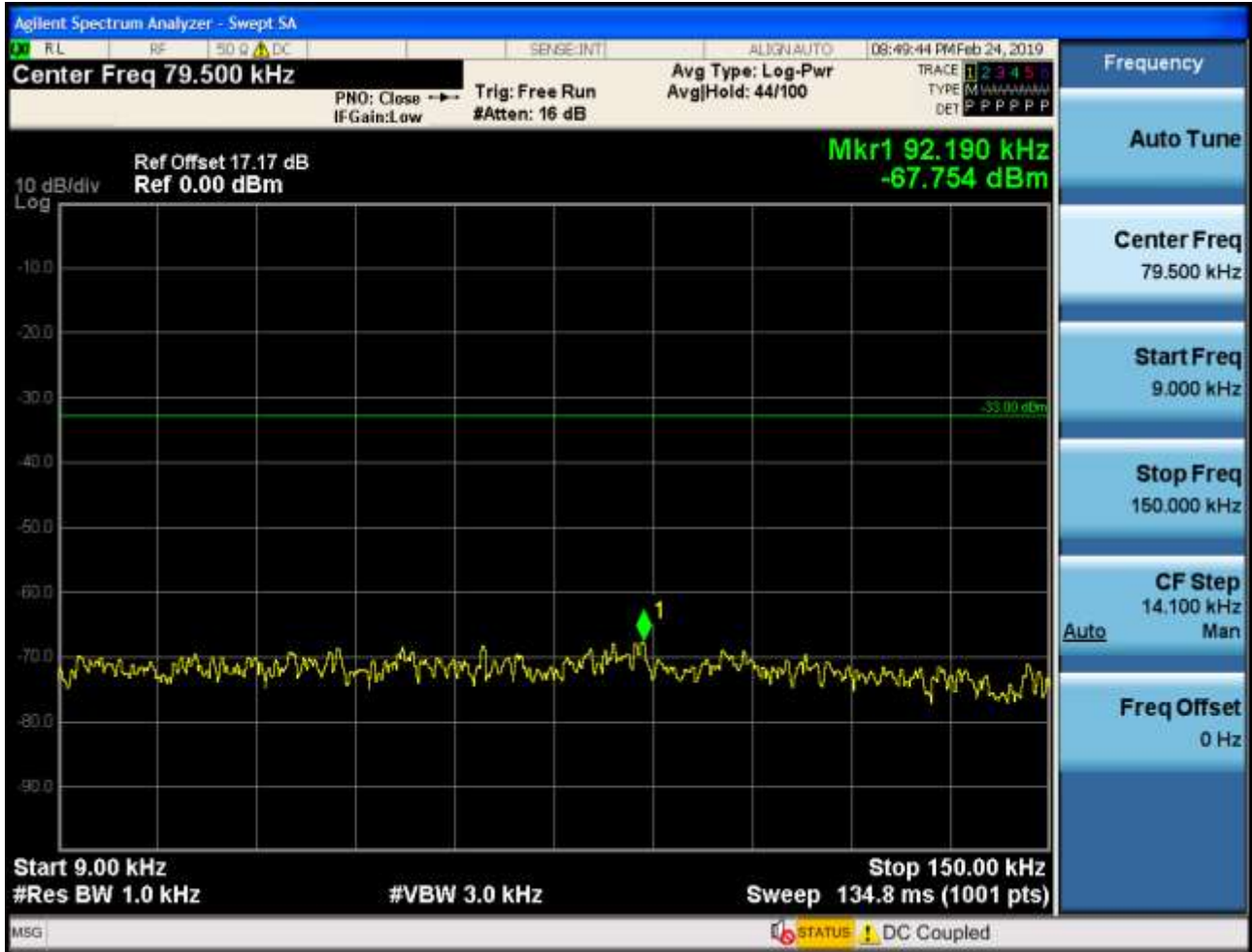


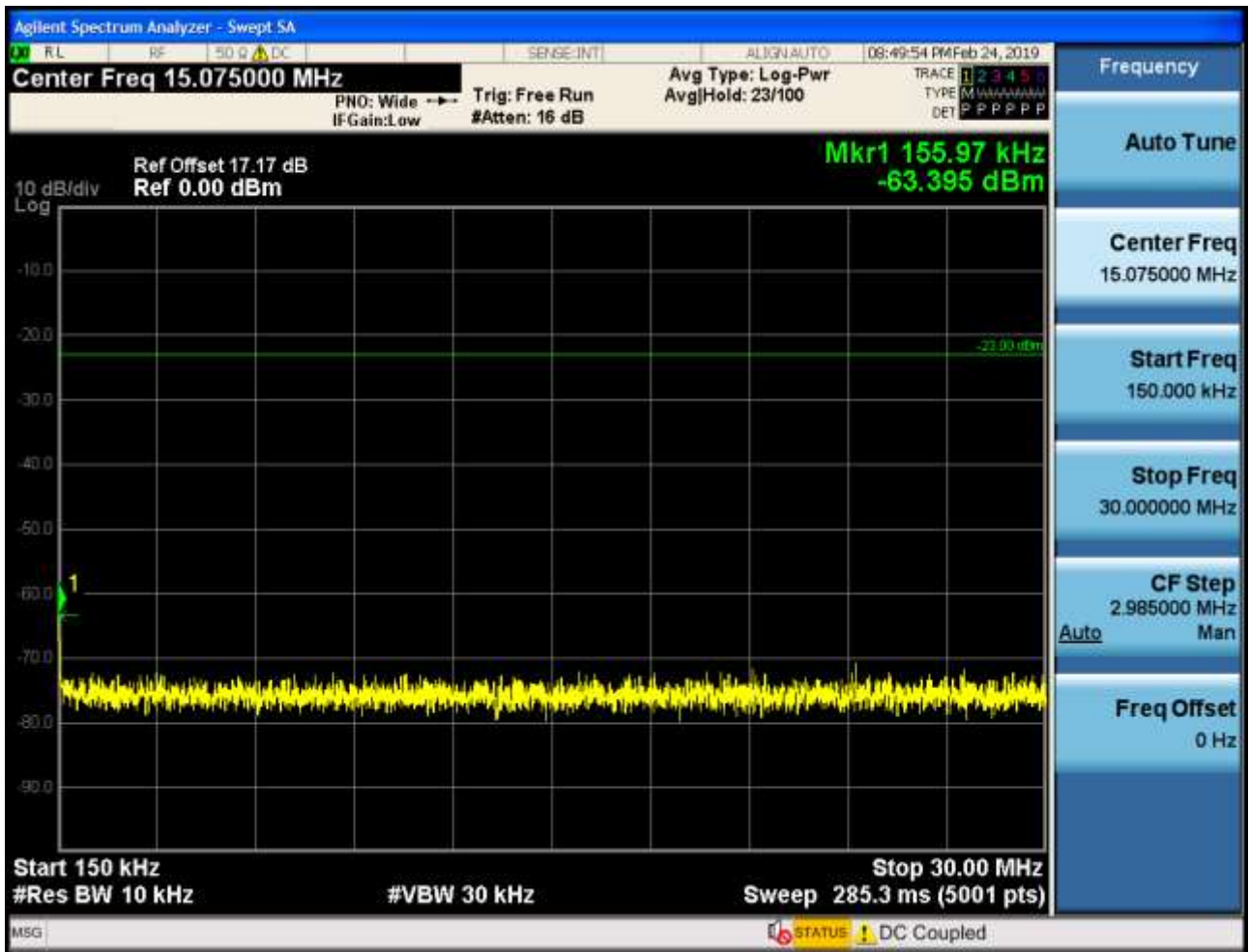


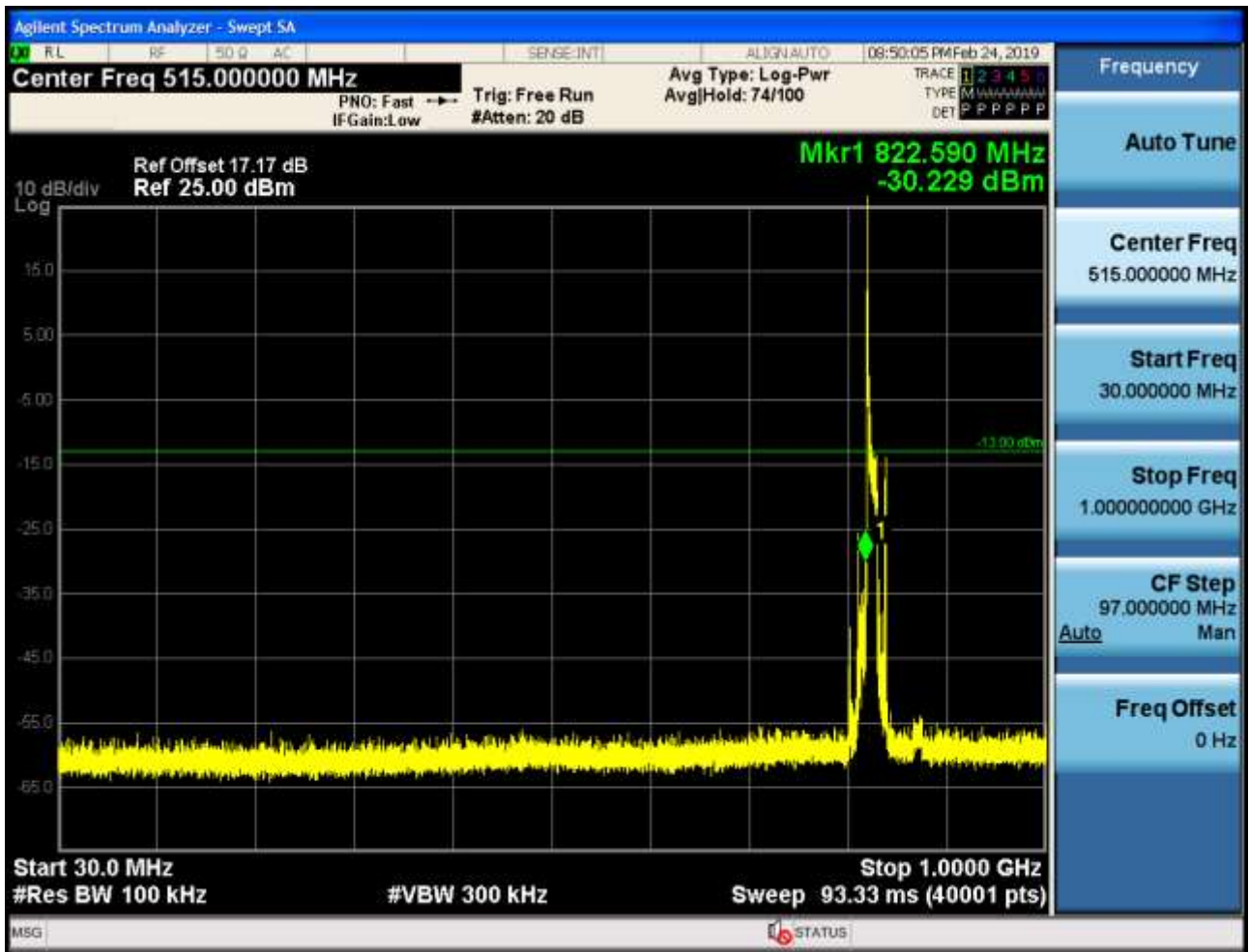
6.2.1.2.4 Test Bandwidth = 10

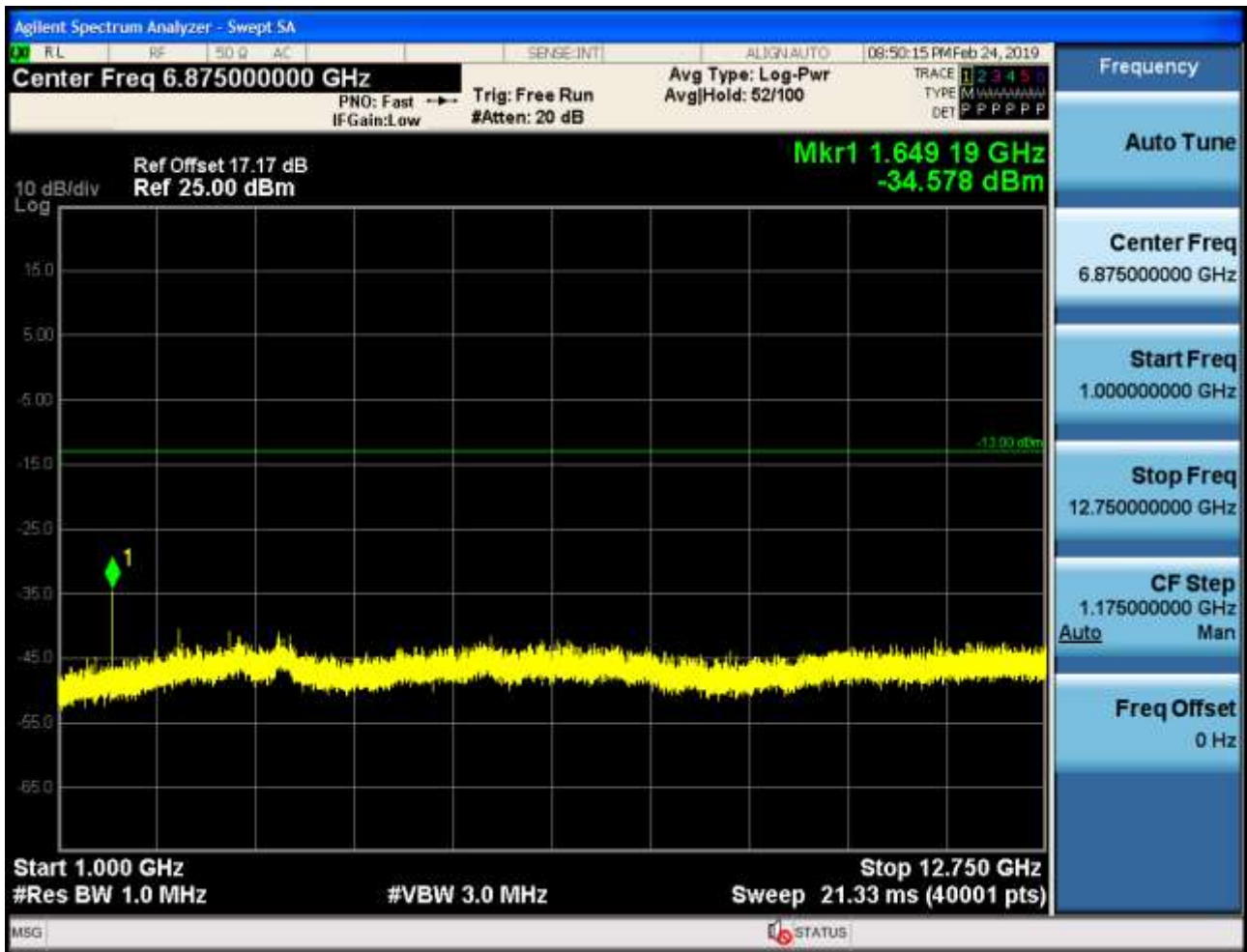
6.2.1.2.4.1 Test Channel = LCH

6.2.1.2.4.1.1 Test RB = RB1#0





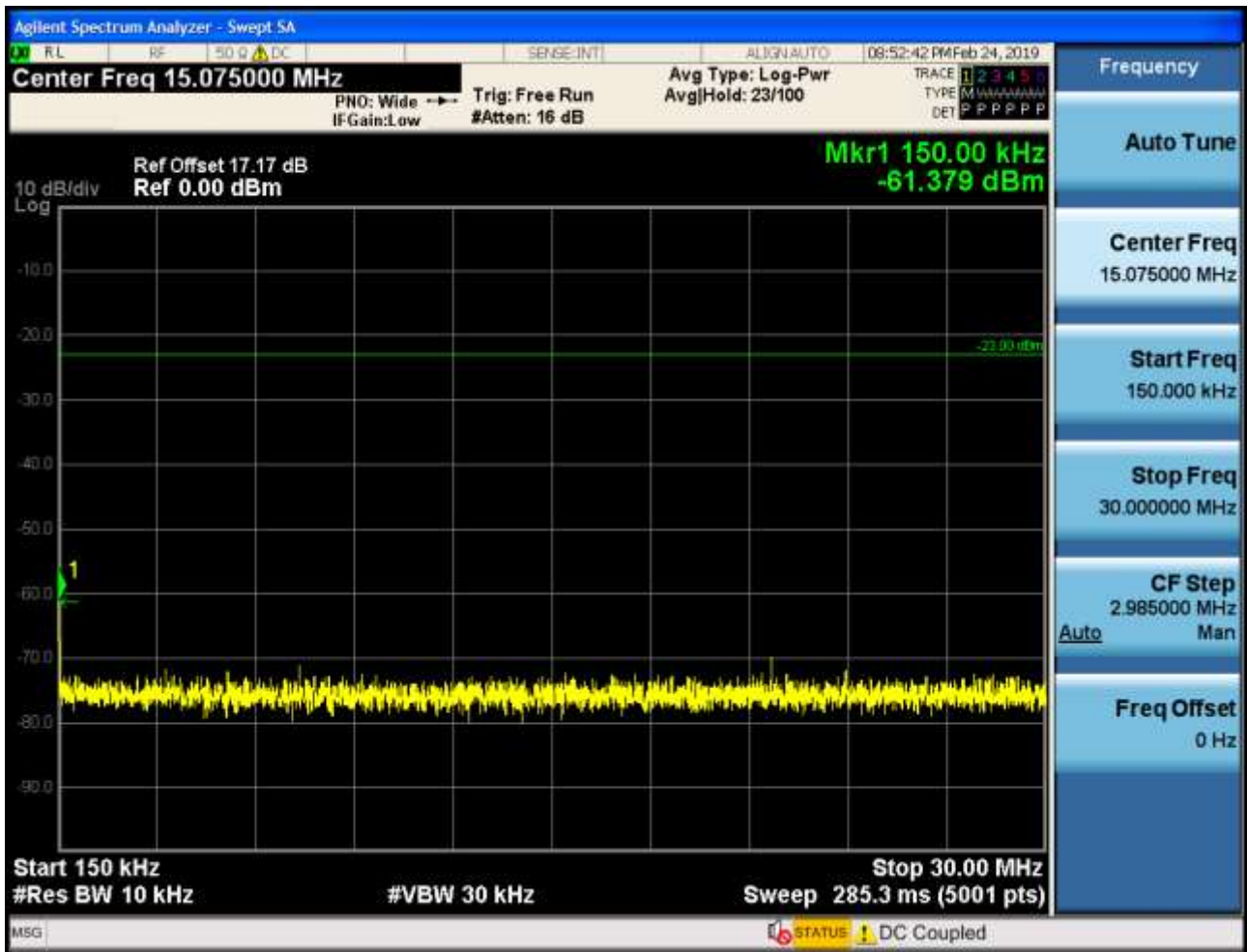


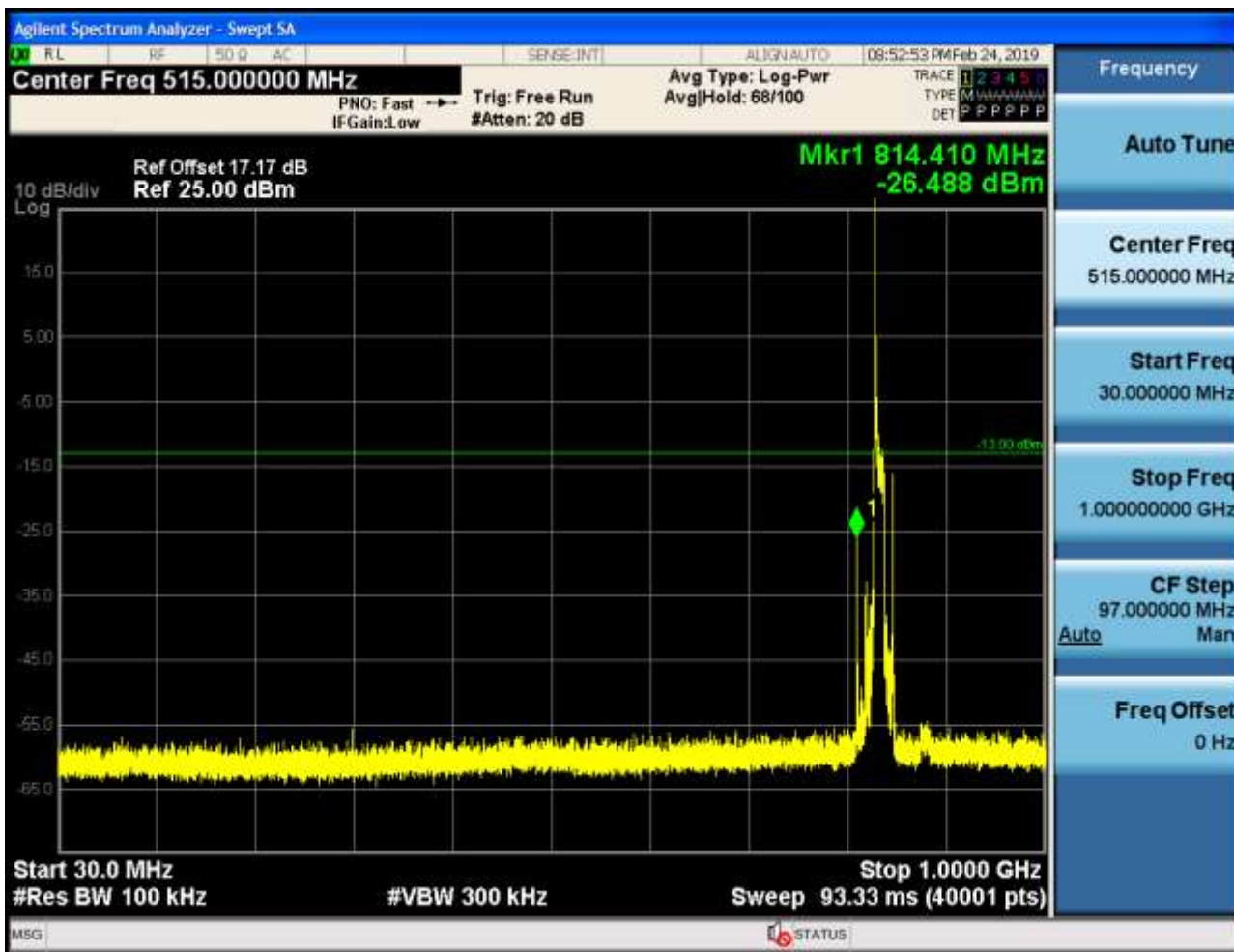


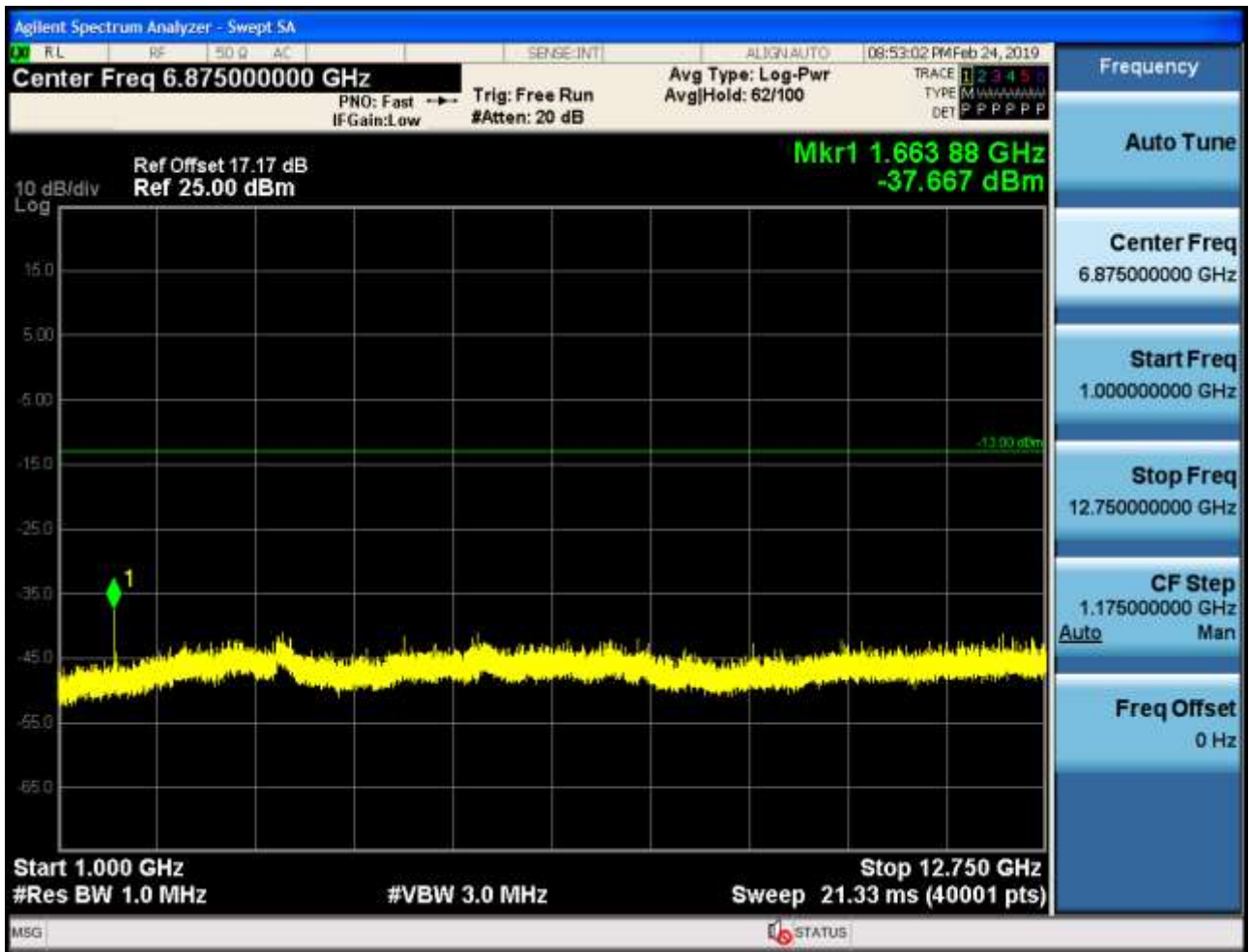
6.2.1.2.4.2 Test Channel = MCH

6.2.1.2.4.2.1 Test RB = RB1#0





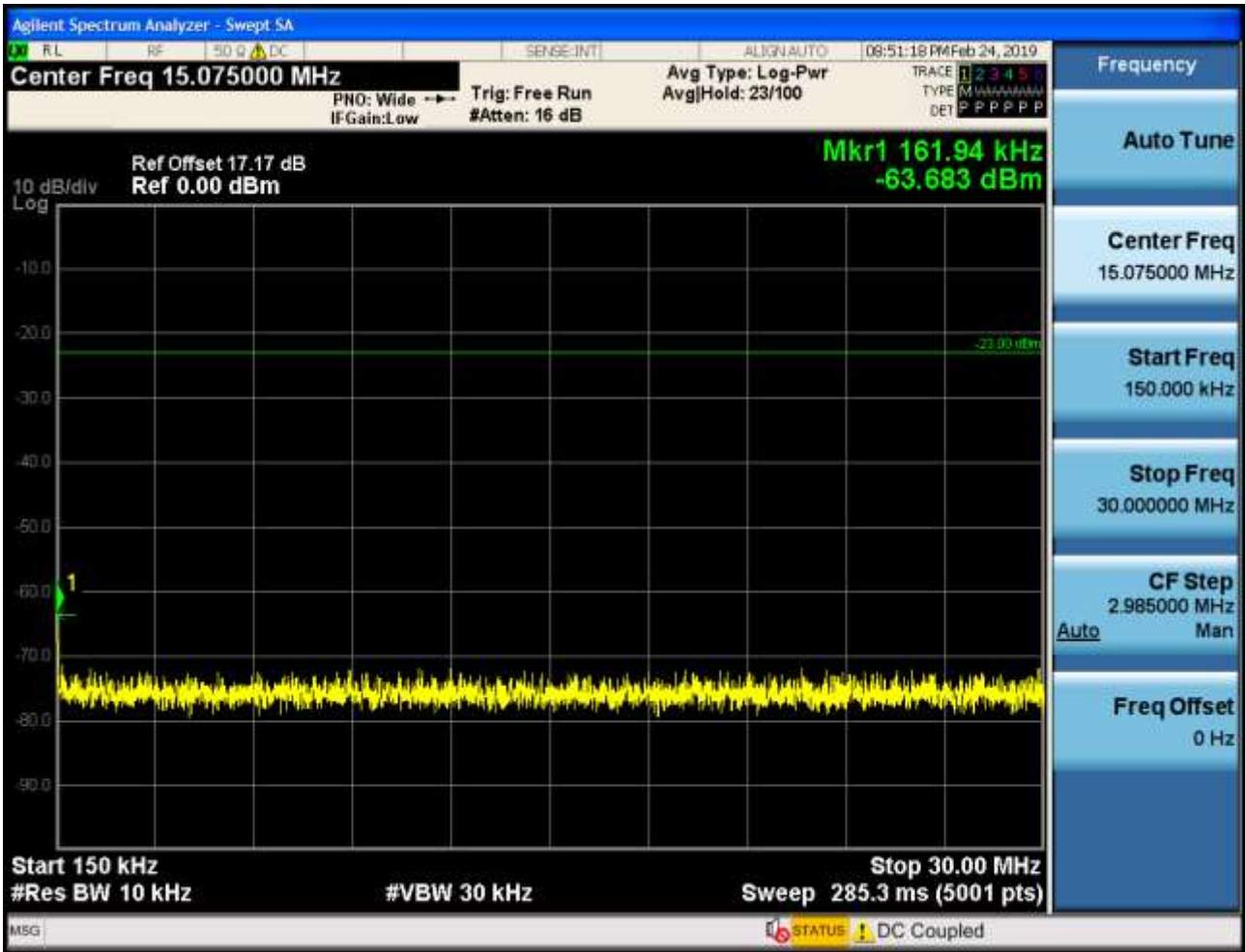


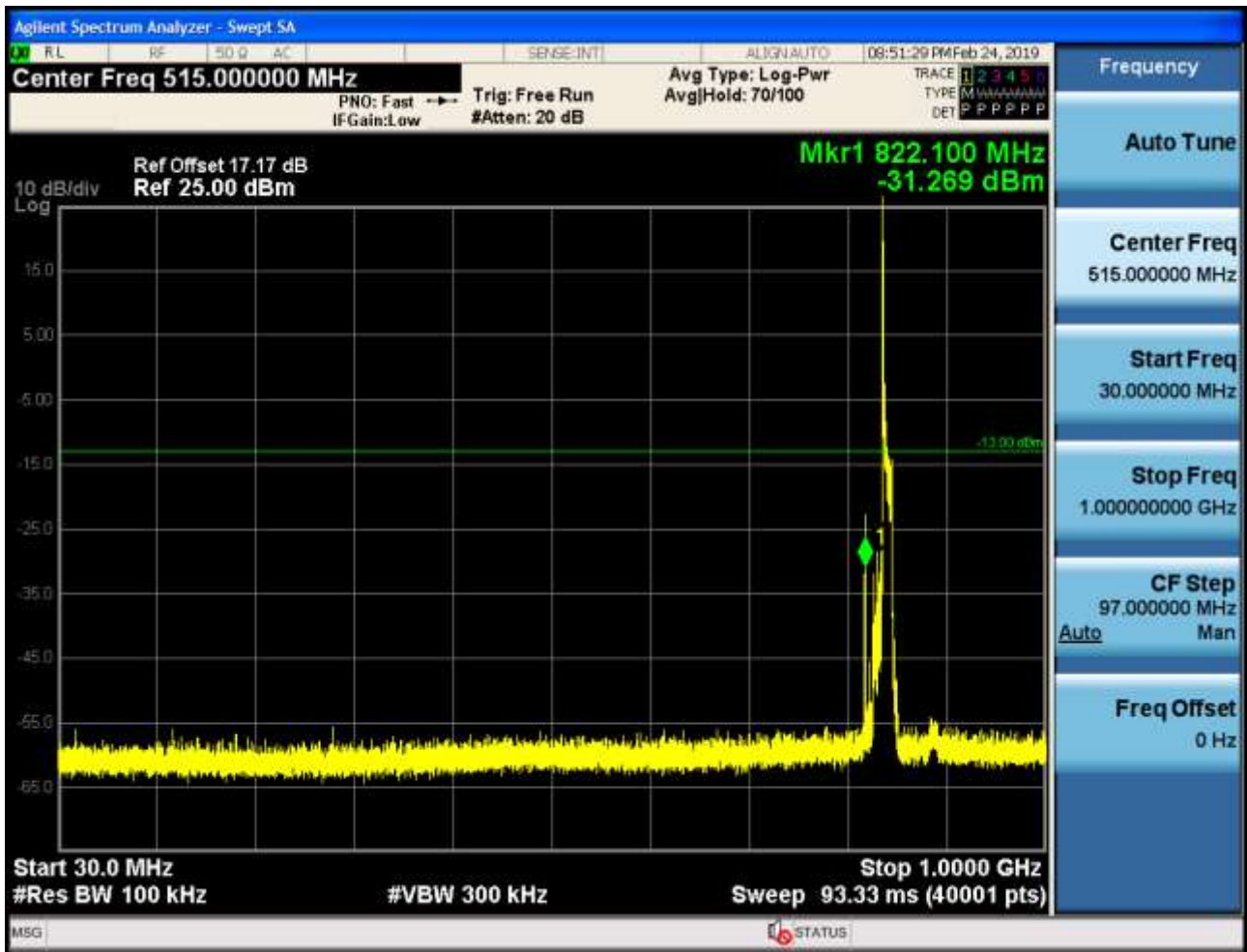


6.2.1.2.4.3 Test Channel = HCH

6.2.1.2.4.3.1 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

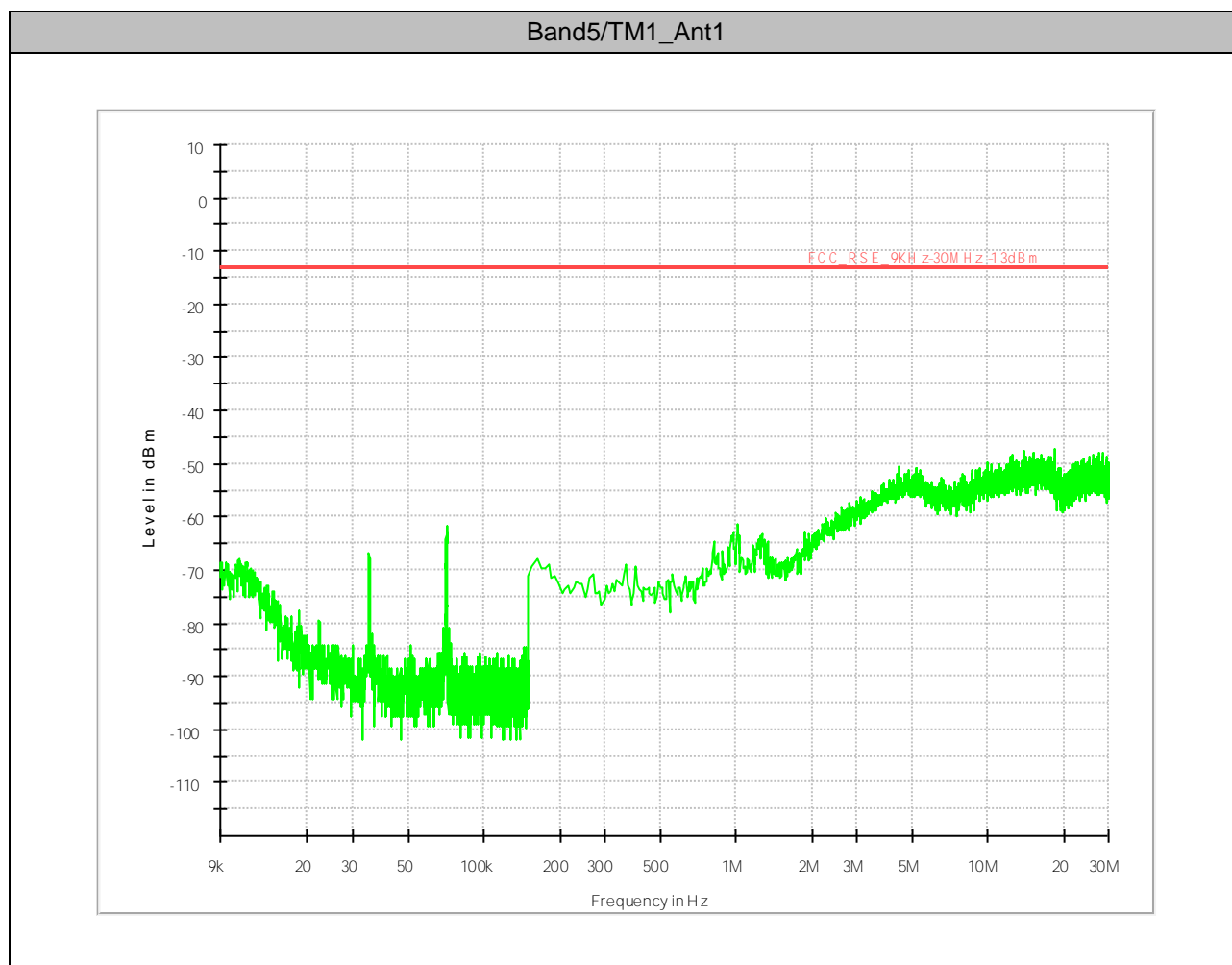
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

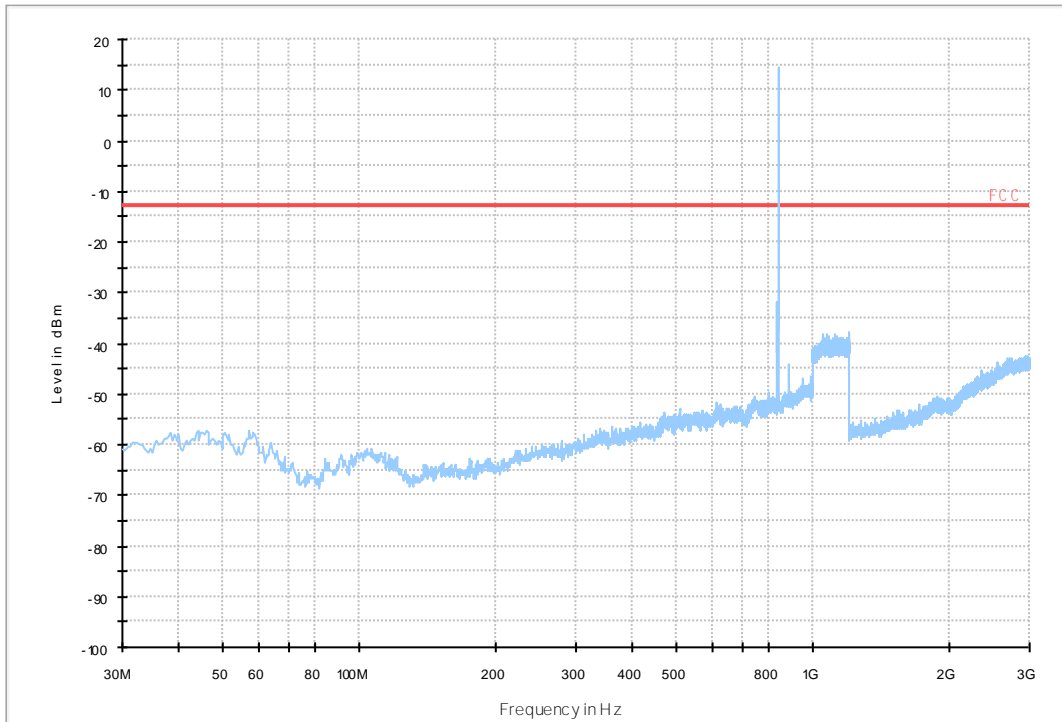
7.1 For LTE

7.1.1 Test Band = Band5

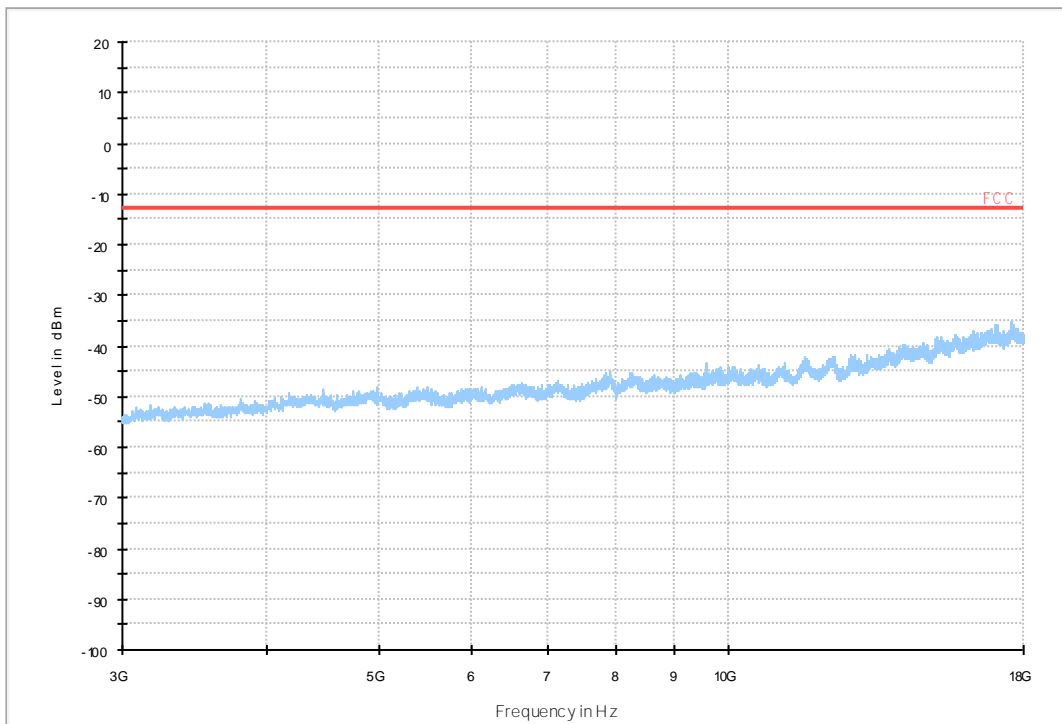
7.1.1.1 Test Bandwidth = 1.4



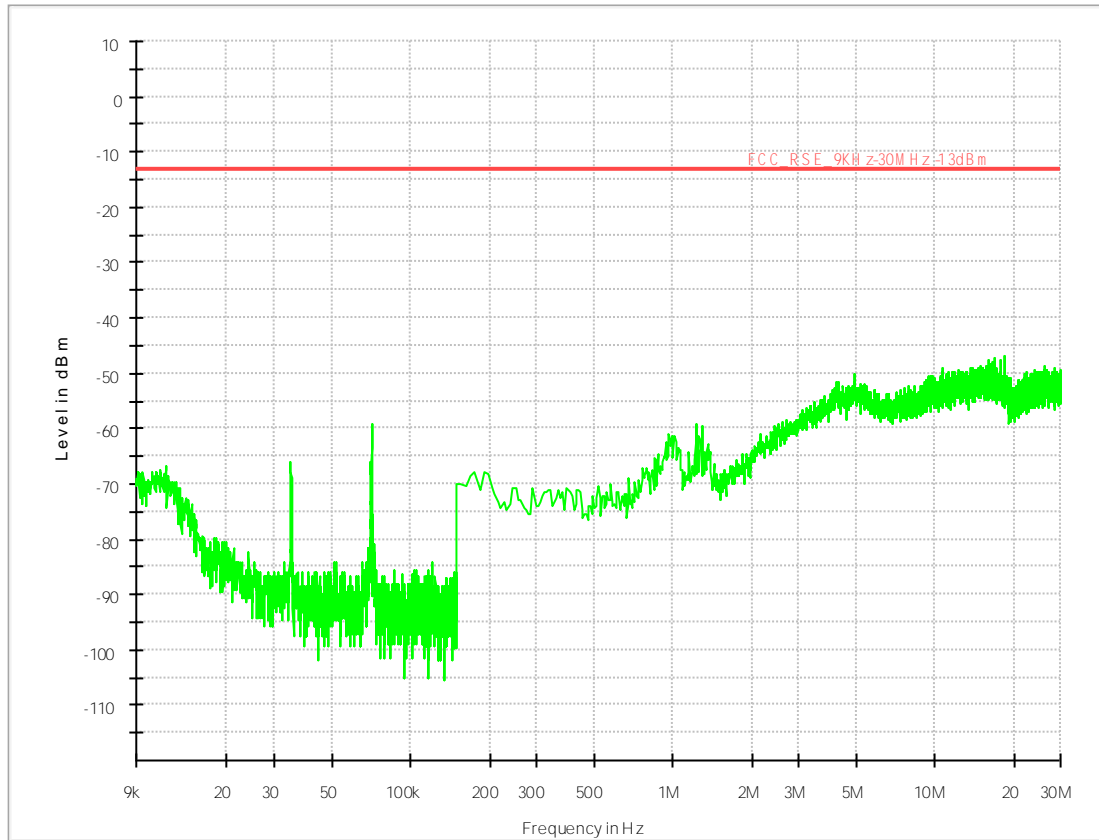
LTE FDD RSE-TX-DIRECTOR BELOW 1G_L



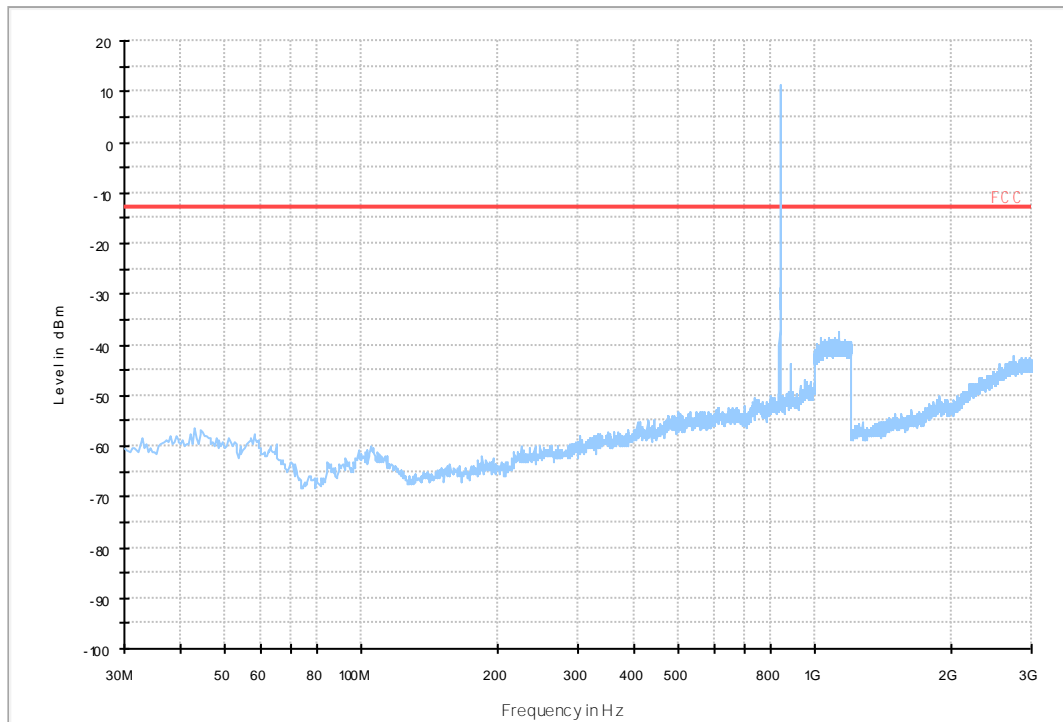
LTE FDD RSE-TX-DIRECTOR BELOW 1G_H

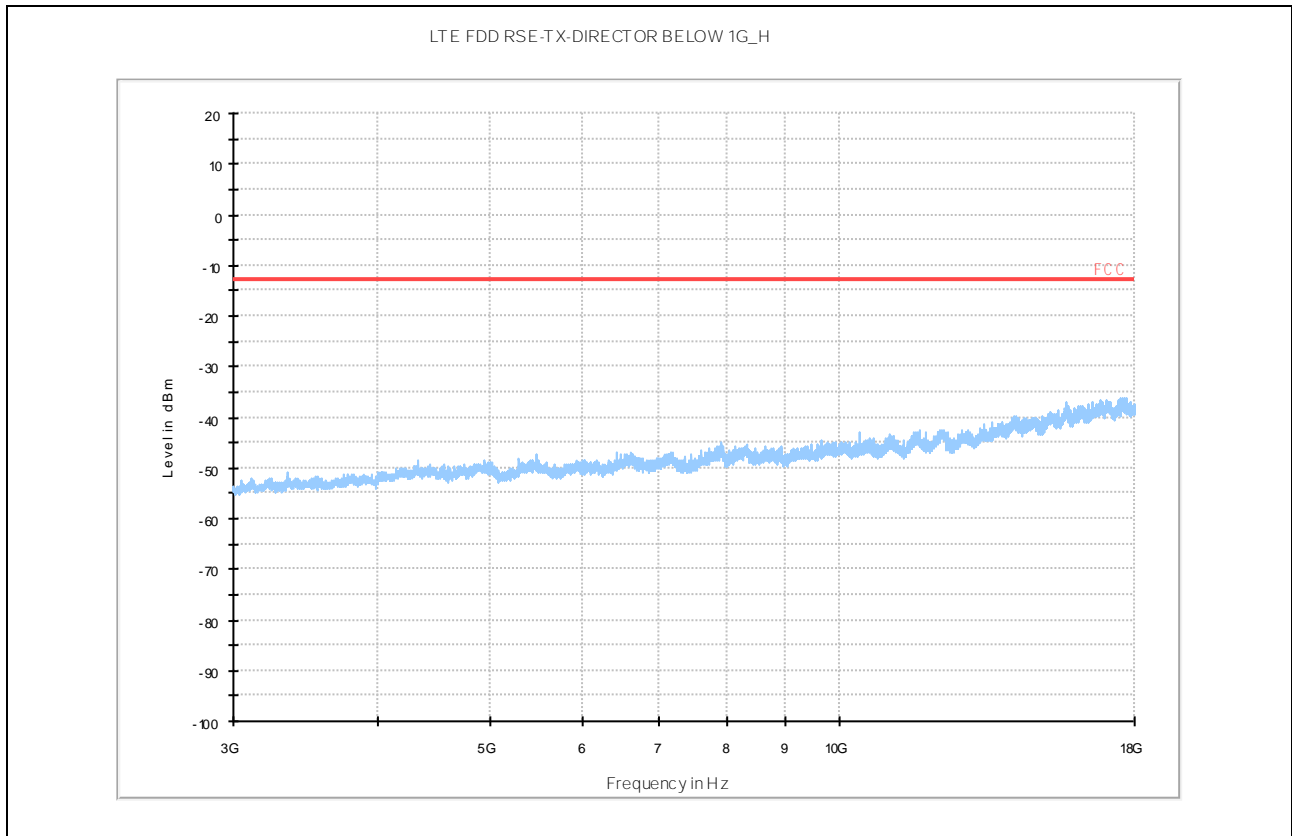


Band5/TM1_Ant2

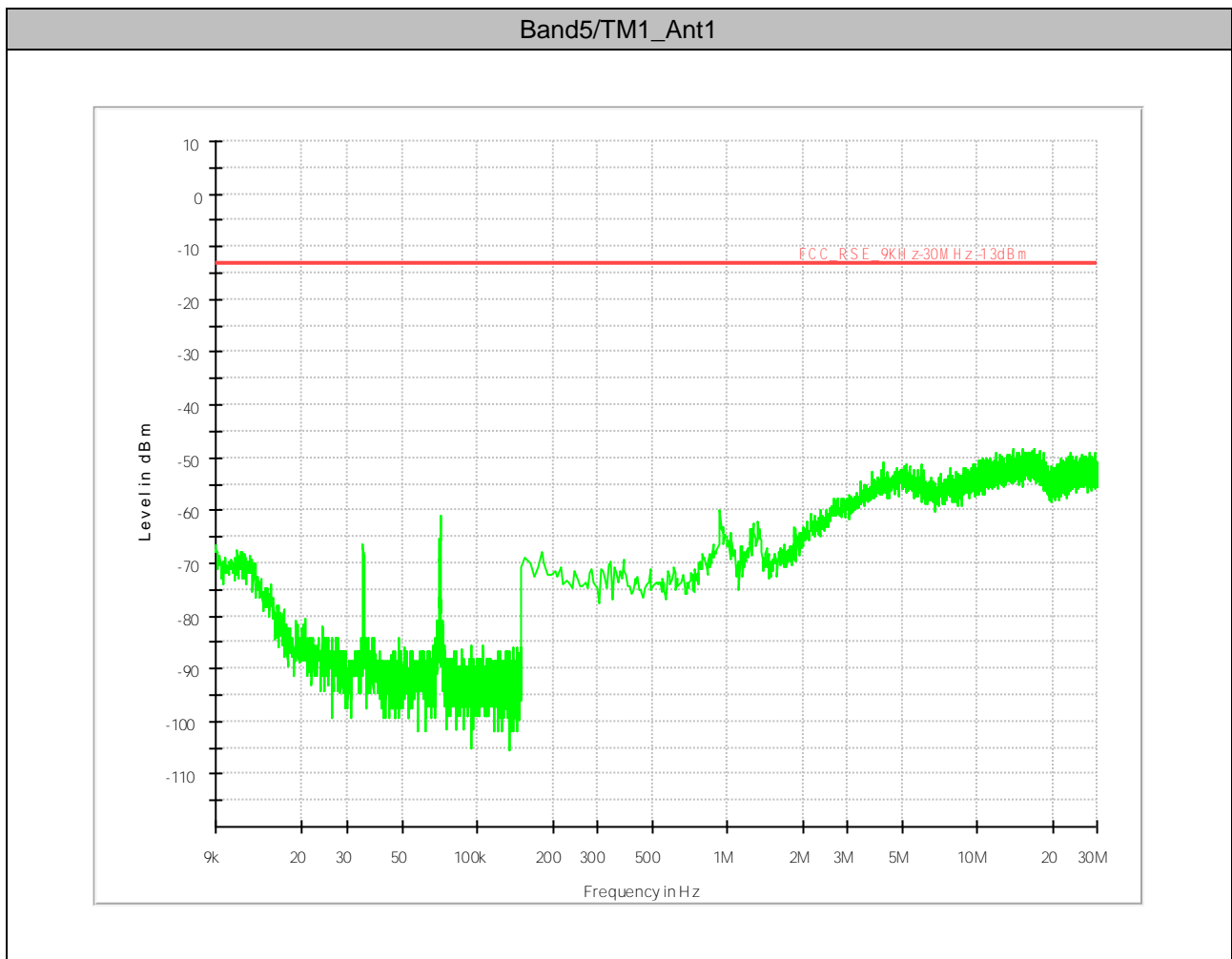


LTE FDD RSE-TX-DIRECTOR BELOW 1G_L

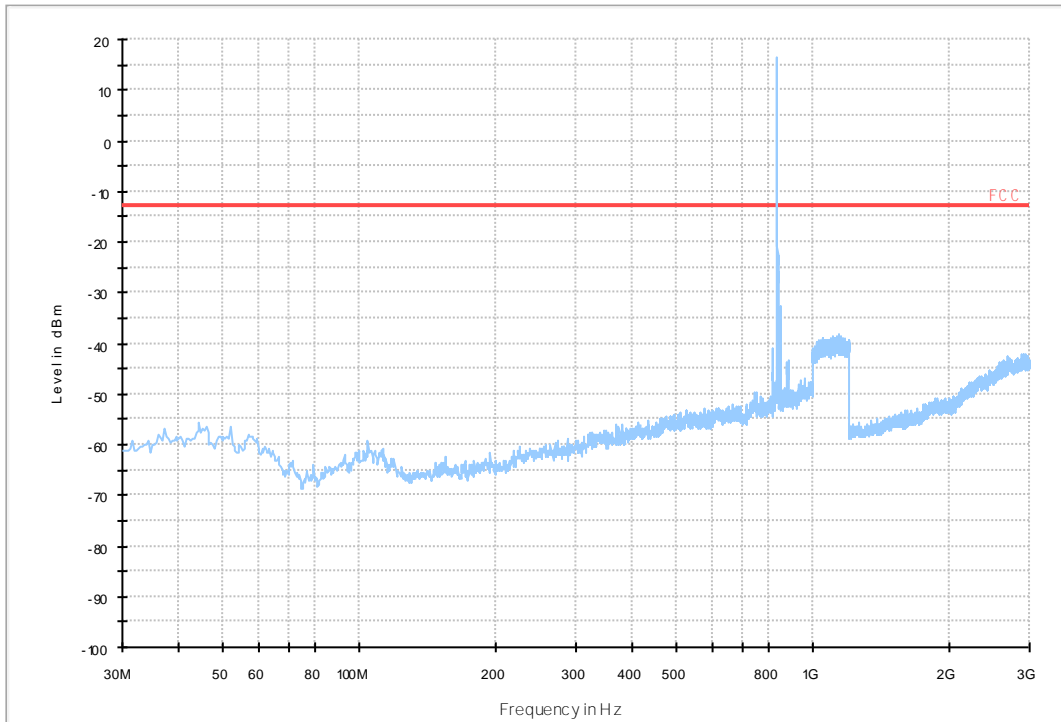




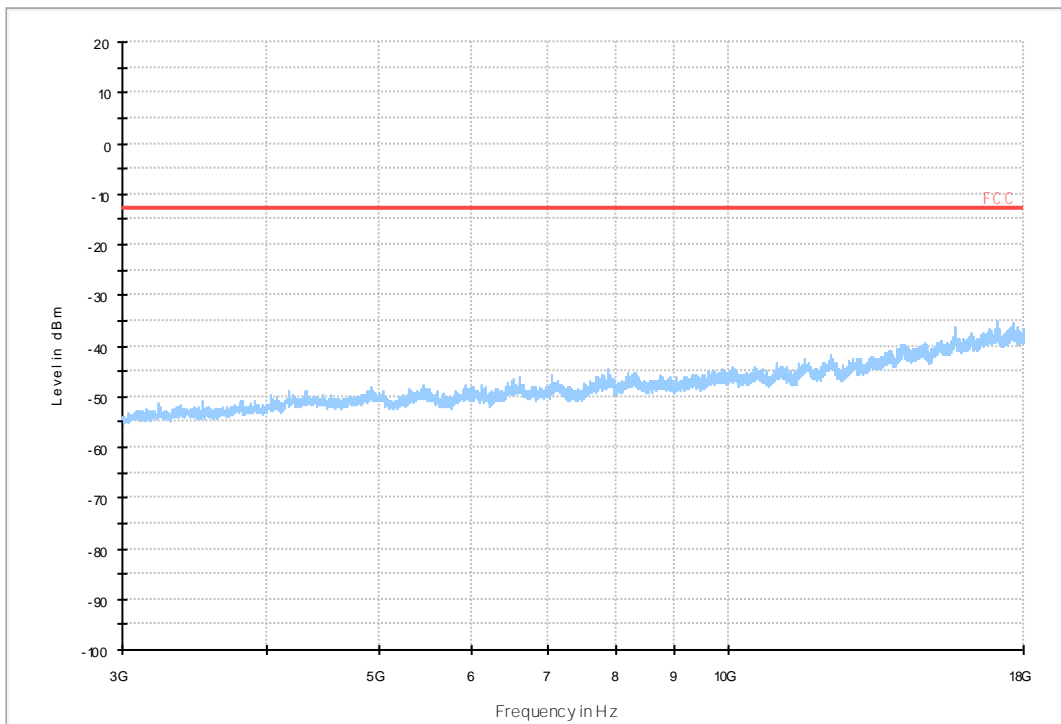
7.1.1.2 Test Bandwidth = 10



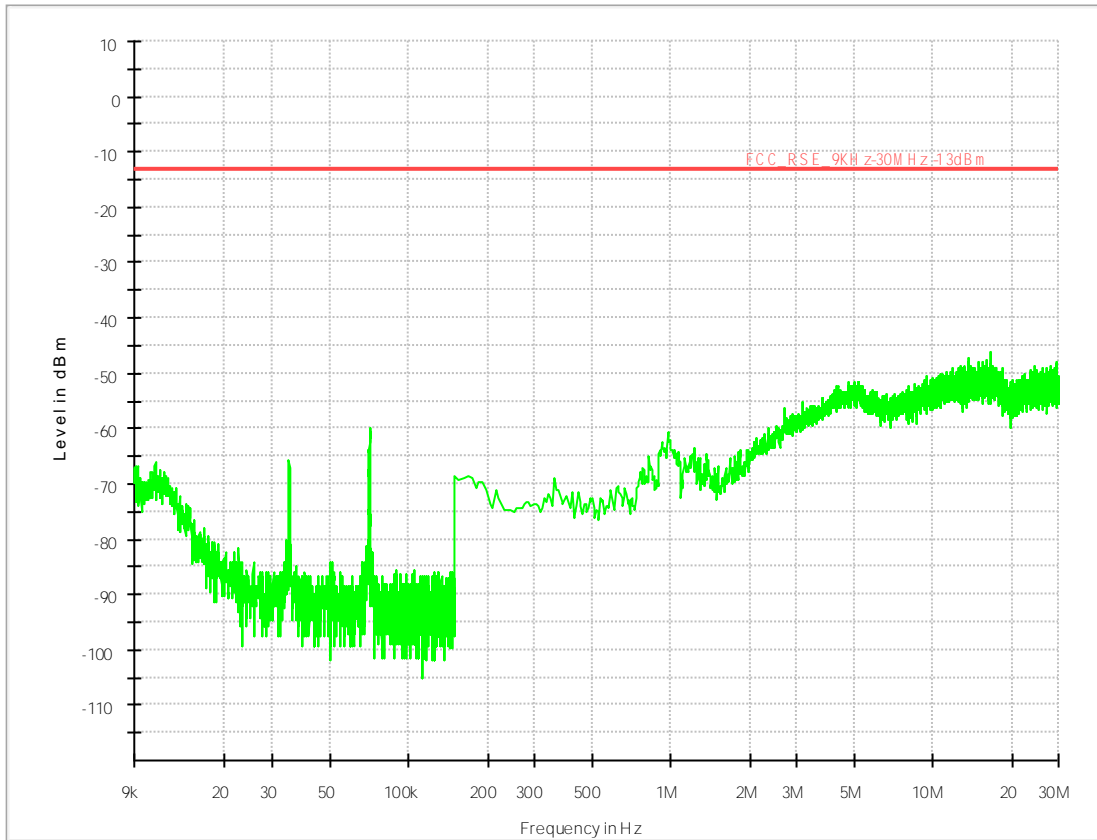
LTE FDD RSE-TX-DIRECTOR BELOW 1G_L



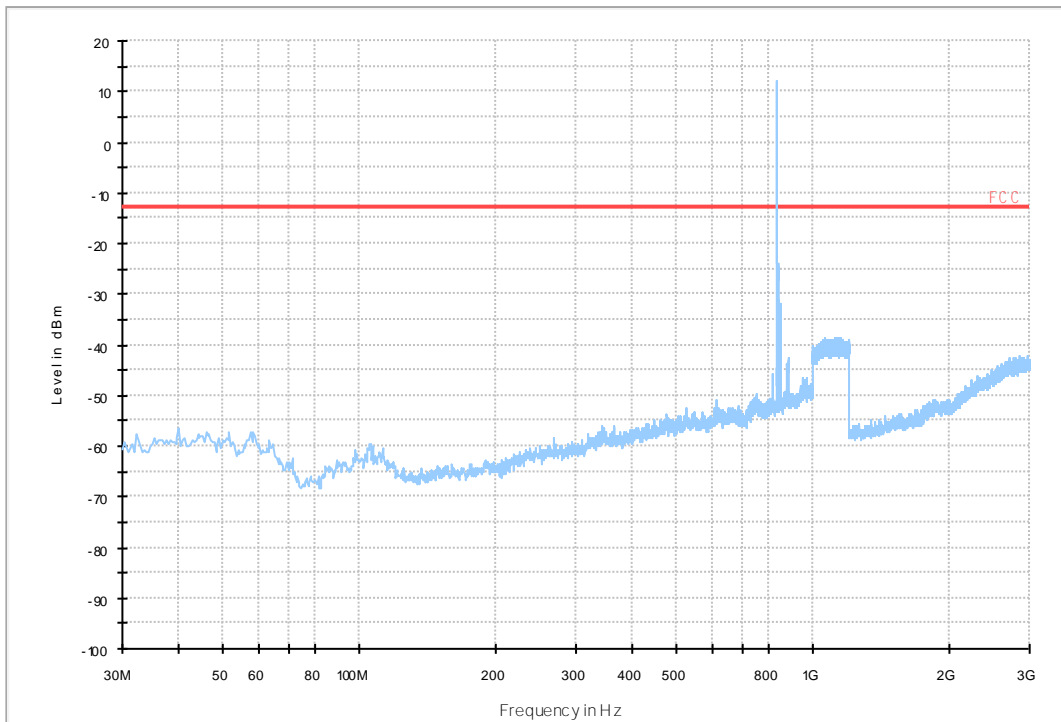
LTE FDD RSE-TX-DIRECTOR BELOW 1G_H

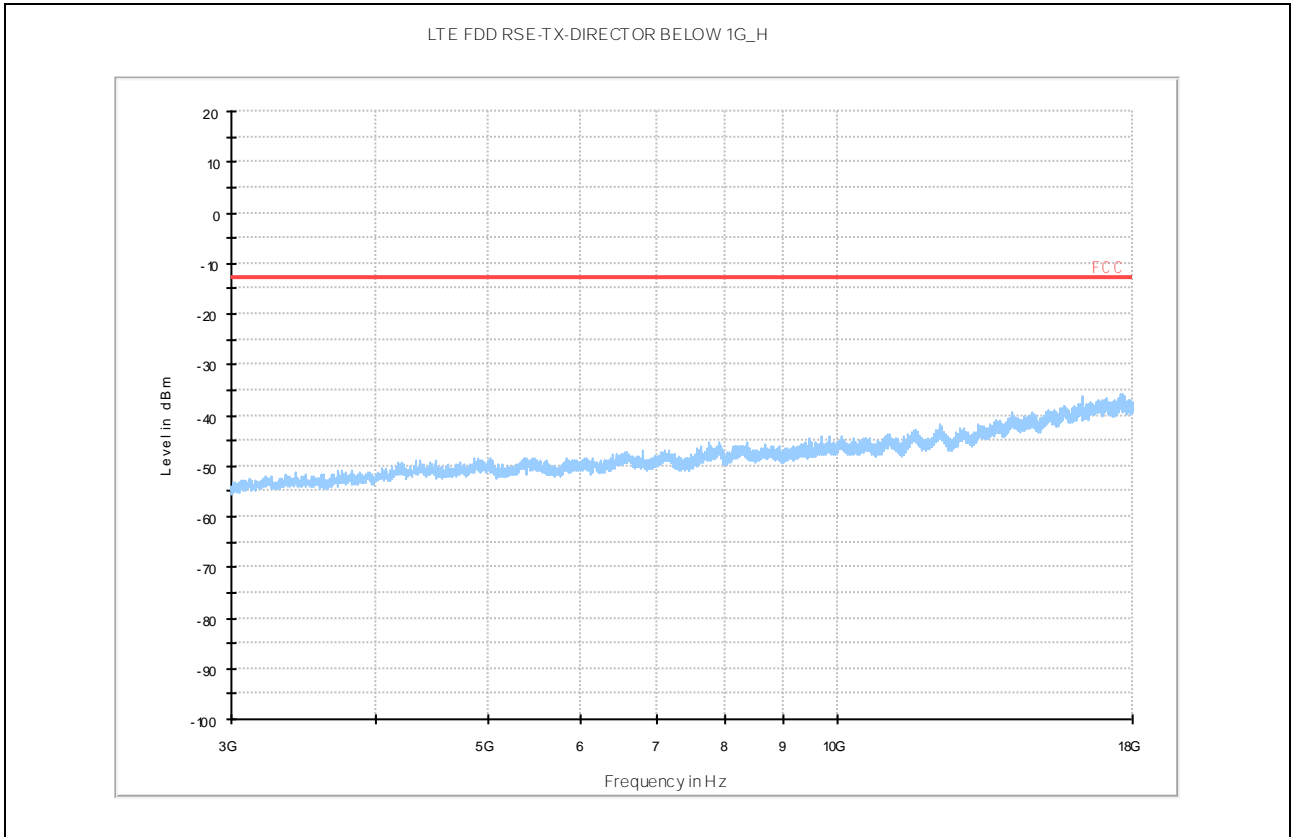


Band5/TM1_Ant2



LTE FDD RSE-TX-DIRECTOR BELOW 1G_L





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	9.39846	0.01140	PASS
					VN	1.98841	0.00241	PASS
					VH	17.65251	0.02140	PASS
			MCH	TN	VL	-10.49995	-0.01255	PASS
					VN	-0.70095	-0.00084	PASS
					VH	2.10285	0.00251	PASS
			HCH	TN	VL	-7.10964	-0.00838	PASS
					VN	21.57211	0.02543	PASS
					VH	-8.39710	-0.00990	PASS
		3	LCH	TN	VL	-7.22408	-0.00875	PASS
					VN	-6.49452	-0.00787	PASS
					VH	-1.50204	-0.00182	PASS
			MCH	TN	VL	-0.08583	-0.00010	PASS
					VN	-0.91553	-0.00109	PASS
					VH	1.84536	0.00221	PASS
			HCH	TN	VL	5.02109	0.00592	PASS
					VN	-5.60761	-0.00662	PASS
					VH	6.99520	0.00825	PASS
		5	LCH	TN	VL	-6.45161	-0.00781	PASS
					VN	-5.53608	-0.00670	PASS
					VH	-6.00815	-0.00727	PASS
			MCH	TN	VL	6.58035	0.00787	PASS
					VN	6.93798	0.00829	PASS
					VH	7.58171	0.00906	PASS
			HCH	TN	VL	0.90122	0.00106	PASS
					VN	0.10014	0.00012	PASS
					VH	1.33038	0.00157	PASS
		10	LCH	TN	VL	5.75066	0.00694	PASS
					VN	-2.23160	-0.00269	PASS
					VH	9.18388	0.01108	PASS
MCH	TN		VL	6.80924	0.00814	PASS		
			VN	5.87940	0.00703	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2		HCH	TN	VH	7.68185	0.00918	PASS
					VL	-2.56062	-0.00303	PASS
					VN	-0.57220	-0.00068	PASS
			LCH	TN	VH	1.90258	0.00225	PASS
					VL	18.48221	0.02241	PASS
					VN	-4.94957	-0.00600	PASS
		1.4	MCH	TN	VH	-4.96387	-0.00602	PASS
					VL	-3.43323	-0.00410	PASS
					VN	-1.64509	-0.00197	PASS
			HCH	TN	VH	-4.80652	-0.00575	PASS
					VL	10.38551	0.01224	PASS
					VN	4.77791	0.00563	PASS
		3	LCH	TN	VH	-8.16822	-0.00963	PASS
					VL	-1.71661	-0.00208	PASS
					VN	-9.82761	-0.01191	PASS
			MCH	TN	VH	-0.62943	-0.00076	PASS
					VL	2.00272	0.00239	PASS
					VN	3.83377	0.00458	PASS
		5	HCH	TN	VH	4.14848	0.00496	PASS
					VL	0.82970	0.00098	PASS
					VN	-4.89235	-0.00577	PASS
			LCH	TN	VH	0.05722	0.00007	PASS
					VL	-3.41892	-0.00414	PASS
					VN	-2.40326	-0.00291	PASS
		10	MCH	TN	VH	2.47478	0.00299	PASS
					VL	4.47750	0.00535	PASS
					VN	6.07967	0.00727	PASS
			HCH	TN	VH	6.02245	0.00720	PASS
					VL	1.34468	0.00159	PASS
					VN	1.50204	0.00177	PASS
			LCH	TN	VH	4.80652	0.00568	PASS
					VL	-1.67370	-0.00202	PASS
					VN	1.84536	0.00223	PASS
			MCH	TN	VH	3.63350	0.00438	PASS
					VL	7.45296	0.00891	PASS
					VN	8.28266	0.00990	PASS
		HCH	TN	VH	10.41412	0.01245	PASS	
				VL	1.45912	0.00173	PASS	
				VN				

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	0.21458	0.00025	PASS
					VH	0.14305	0.00017	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	-1.97411	-0.00239	PASS
					-20	-3.39031	-0.00411	PASS
					-10	-0.47207	-0.00057	PASS
					0	2.60353	0.00316	PASS
					10	-2.90394	-0.00352	PASS
					20	1.98841	0.00241	PASS
			MCH	VN	30	-1.84536	-0.00224	PASS
					40	0.15736	0.00019	PASS
					50	8.78334	0.01065	PASS
					-30	-2.37465	-0.00284	PASS
					-20	2.30312	0.00275	PASS
					-10	-5.90801	-0.00706	PASS
		HCH	VN	0	-5.93662	-0.00710	PASS	
				10	-20.38479	-0.02437	PASS	
				20	-0.70095	-0.00084	PASS	
				30	-12.21657	-0.01460	PASS	
				40	8.12531	0.00971	PASS	
				50	-1.07288	-0.00128	PASS	
		3	LCH	VN	-30	0.92983	0.00110	PASS
					-20	-9.95636	-0.01174	PASS
					-10	-4.73499	-0.00558	PASS
					0	-1.48773	-0.00175	PASS
					10	4.94957	0.00583	PASS
					20	21.57211	0.02543	PASS
30	-32.60136				-0.03843	PASS		
40	0.11444				0.00013	PASS		
-30	2.57492	0.00312	PASS					
-20	-4.62055	-0.00560	PASS					
-10	0.68665	0.00083	PASS					
0	-3.13282	-0.00380	PASS					

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		5			10	-2.73228	-0.00331	PASS
					20	-6.49452	-0.00787	PASS
					30	-9.19819	-0.01114	PASS
					40	3.40462	0.00412	PASS
					50	-2.68936	-0.00326	PASS
			MCH	VN	-30	-14.49108	-0.01732	PASS
					-20	3.93391	0.00470	PASS
					-10	-1.31607	-0.00157	PASS
					0	-1.40190	-0.00168	PASS
					10	1.65939	0.00198	PASS
					20	-0.91553	-0.00109	PASS
					30	-15.49244	-0.01852	PASS
					40	6.42300	0.00768	PASS
					50	-3.47614	-0.00416	PASS
					HCH	VN	-30	-1.58787
			-20	0.71526			0.00084	PASS
			-10	0.48637			0.00057	PASS
			0	-1.20163			-0.00142	PASS
			10	-2.66075			-0.00314	PASS
			20	-5.60761			-0.00662	PASS
			30	0.41485			0.00049	PASS
			40	1.81675			0.00214	PASS
			LCH	VN	50	-1.64509	-0.00194	PASS
					-30	-9.34124	-0.01130	PASS
					-20	0.35763	0.00043	PASS
		-10			1.33038	0.00161	PASS	
		0			-6.52313	-0.00789	PASS	
		10			3.61919	0.00438	PASS	
		20			-5.53608	-0.00670	PASS	
		30			-1.65939	-0.00201	PASS	
		40			0.97275	0.00118	PASS	
		50			-1.83106	-0.00222	PASS	
		MCH	VN	-30	3.30448	0.00395	PASS	
-20	17.75265			0.02122	PASS			
-10	11.25813			0.01346	PASS			
0	8.21114			0.00982	PASS			
10	17.03739			0.02037	PASS			
20	6.93798			0.00829	PASS			
30	4.29153			0.00513	PASS			

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			HCH	VN	40	7.18117	0.00858	PASS
					50	7.33852	0.00877	PASS
					-30	0.08583	0.00010	PASS
					-20	0.90122	0.00106	PASS
					-10	0.05722	0.00007	PASS
					0	1.95980	0.00232	PASS
					10	0.45776	0.00054	PASS
					20	0.10014	0.00012	PASS
					30	1.28746	0.00152	PASS
					40	-1.40190	-0.00166	PASS
					50	-0.17166	-0.00020	PASS
					-30	-0.90122	-0.00109	PASS
					-20	-1.85966	-0.00224	PASS
					-10	6.85215	0.00827	PASS
					0	-5.76496	-0.00695	PASS
		10	-5.70774	-0.00689	PASS			
		20	-2.23160	-0.00269	PASS			
		30	5.76496	0.00695	PASS			
		40	0.91553	0.00110	PASS			
		50	0.11444	0.00014	PASS			
		-30	5.16415	0.00617	PASS			
		-20	10.44273	0.01248	PASS			
		-10	4.32015	0.00516	PASS			
		0	7.18117	0.00858	PASS			
		10	3.70503	0.00443	PASS			
		20	5.87940	0.00703	PASS			
		30	1.87397	0.00224	PASS			
		40	3.93391	0.00470	PASS			
		50	9.41277	0.01125	PASS			
		-30	-0.67234	-0.00080	PASS			
-20	5.43594	0.00644	PASS					
-10	-1.00136	-0.00119	PASS					
0	-2.04563	-0.00242	PASS					
10	-1.38760	-0.00164	PASS					
20	-0.57220	-0.00068	PASS					
30	-1.11580	-0.00132	PASS					
40	-0.15736	-0.00019	PASS					
50	-1.85966	-0.00220	PASS					
LTE/TM2	1.4	LCH	VN	-30	-15.70702	-0.01905	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		3			-20	11.95908	0.01450	PASS
					-10	-13.96179	-0.01693	PASS
					0	-12.88891	-0.01563	PASS
					10	-15.03468	-0.01823	PASS
					20	-4.94957	-0.00600	PASS
					30	-0.71526	-0.00087	PASS
					40	-20.44201	-0.02479	PASS
					50	4.66347	0.00565	PASS
			MCH	VN	-30	-3.69072	-0.00441	PASS
					-20	-0.47207	-0.00056	PASS
					-10	-16.79420	-0.02008	PASS
					0	-4.26292	-0.00510	PASS
					10	-2.11716	-0.00253	PASS
					20	-1.64509	-0.00197	PASS
					30	-23.61774	-0.02823	PASS
					40	6.35147	0.00759	PASS
			HCH	VN	-30	2.80380	0.00331	PASS
					-20	0.54359	0.00064	PASS
					-10	8.91209	0.01051	PASS
					0	1.38760	0.00164	PASS
					10	7.10964	0.00838	PASS
					20	4.77791	0.00563	PASS
					30	4.49181	0.00530	PASS
					40	-3.03268	-0.00358	PASS
		LCH	VN	-30	-1.64509	-0.00199	PASS	
				-20	-2.27451	-0.00276	PASS	
				-10	-7.58171	-0.00918	PASS	
				0	-3.43323	-0.00416	PASS	
				10	3.77655	0.00457	PASS	
				20	-9.82761	-0.01191	PASS	
				30	-9.52721	-0.01154	PASS	
				40	-2.77519	-0.00336	PASS	
		MCH	VN	-30	8.91209	0.01065	PASS	
				-20	-6.10828	-0.00730	PASS	
				-10	2.16007	0.00258	PASS	
				0	-8.45432	-0.01011	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict								
					10	-4.60625	-0.00551	PASS								
					20	3.83377	0.00458	PASS								
					30	-6.62327	-0.00792	PASS								
					40	-5.03540	-0.00602	PASS								
					50	-14.92023	-0.01784	PASS								
			HCH	VN				-30	1.93119	0.00228	PASS					
								-20	-1.23024	-0.00145	PASS					
								-10	0.27180	0.00032	PASS					
								0	-0.70095	-0.00083	PASS					
								10	-3.37601	-0.00398	PASS					
								20	-4.89235	-0.00577	PASS					
								30	-0.70095	-0.00083	PASS					
								40	-4.29153	-0.00506	PASS					
								50	5.63621	0.00665	PASS					
								LCH	VN	5			-30	1.81675	0.00220	PASS
													-20	0.45776	0.00055	PASS
													-10	0.88692	0.00107	PASS
													0	1.25885	0.00152	PASS
													10	-3.53336	-0.00428	PASS
													20	-2.40326	-0.00291	PASS
		30	-1.61648	-0.00196	PASS											
		40	1.61648	0.00196	PASS											
		50	-0.08583	-0.00010	PASS											
		MCH	VN	5			-30						13.14640	0.01572	PASS	
							-20	6.86646	0.00821	PASS						
							-10	3.08990	0.00369	PASS						
							0	-1.01566	-0.00121	PASS						
							10	14.61983	0.01748	PASS						
							20	6.07967	0.00727	PASS						
							30	6.38008	0.00763	PASS						
							40	23.68927	0.02832	PASS						
		HCH	VN	5			50	10.14233	0.01212	PASS						
							-30	0.78678	0.00093	PASS						
							-20	1.81675	0.00215	PASS						
							-10	1.10149	0.00130	PASS						
							0	0.05722	0.00007	PASS						
							10	2.03133	0.00240	PASS						
							20	1.50204	0.00177	PASS						
		30	1.30177	0.00154	PASS											



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-0.20027	-0.00024	PASS
					50	1.20163	0.00142	PASS
		10	LCH	VN	-30	-95.37220	-0.11504	PASS
					-20	11.68728	0.01410	PASS
					-10	1.71661	0.00207	PASS
					0	-74.48673	-0.08985	PASS
					10	-13.96179	-0.01684	PASS
					20	1.84536	0.00223	PASS
					30	3.96252	0.00478	PASS
					40	-1.44482	-0.00174	PASS
					50	-1.43051	-0.00173	PASS
					MCH	VN	-30	1.20163
			-20	12.08782			0.01445	PASS
			-10	6.86646			0.00821	PASS
			0	11.64436			0.01392	PASS
			10	5.29289			0.00633	PASS
			20	8.28266			0.00990	PASS
			30	5.72205			0.00684	PASS
			40	3.00407			0.00359	PASS
			50	5.53608	0.00662	PASS		
			HCH	VN	-30	-1.94550	-0.00231	PASS
					-20	-4.29153	-0.00508	PASS
					-10	-2.64645	-0.00314	PASS
					0	-0.70095	-0.00083	PASS
					10	1.13010	0.00134	PASS
					20	0.21458	0.00025	PASS
					30	-1.05858	-0.00125	PASS
		40			-2.48909	-0.00295	PASS	
		50	-1.88827	-0.00224	PASS			

END