

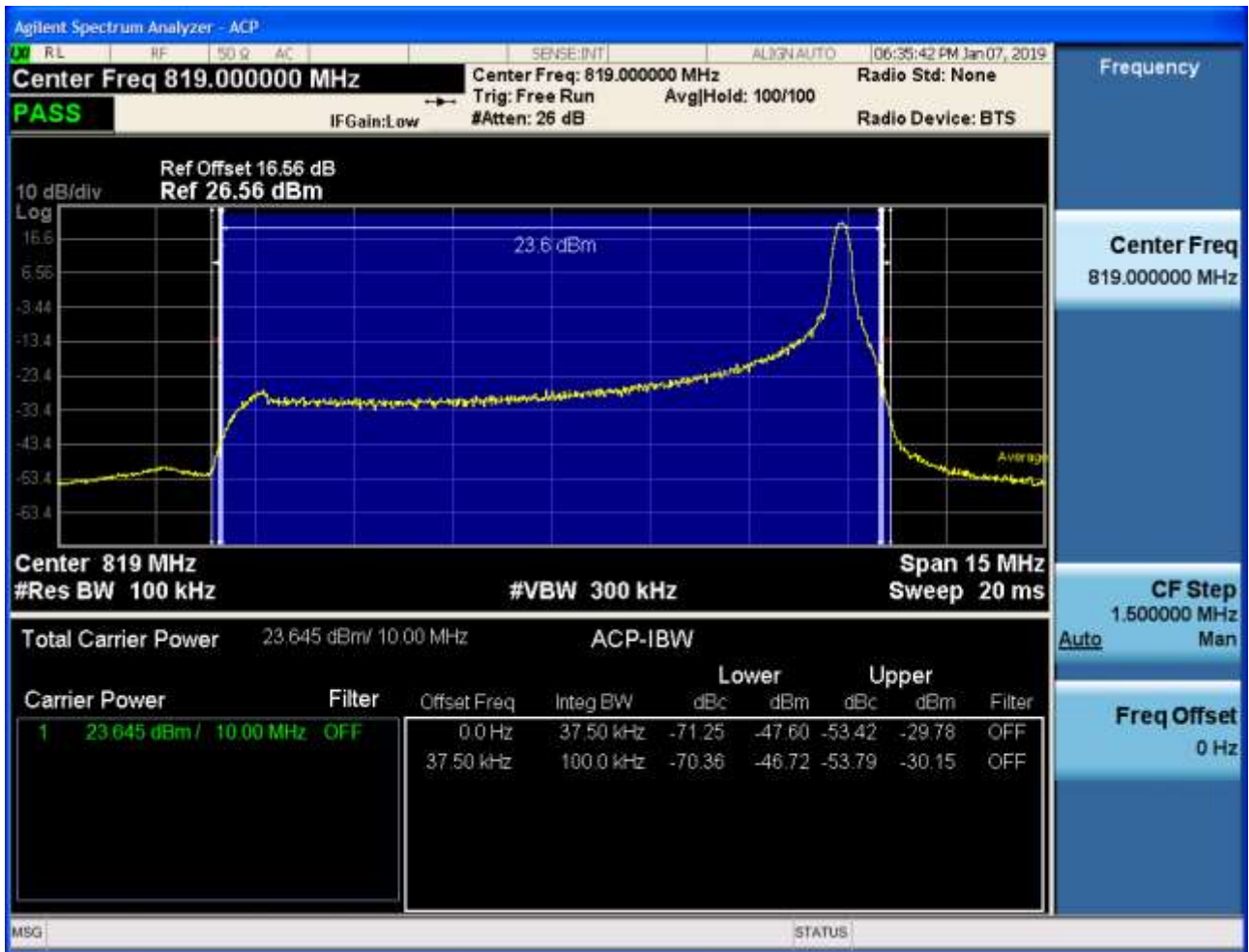
5.1.1.2.4 Test Bandwidth = 10

5.1.1.2.4.1 Test Channel = LCH

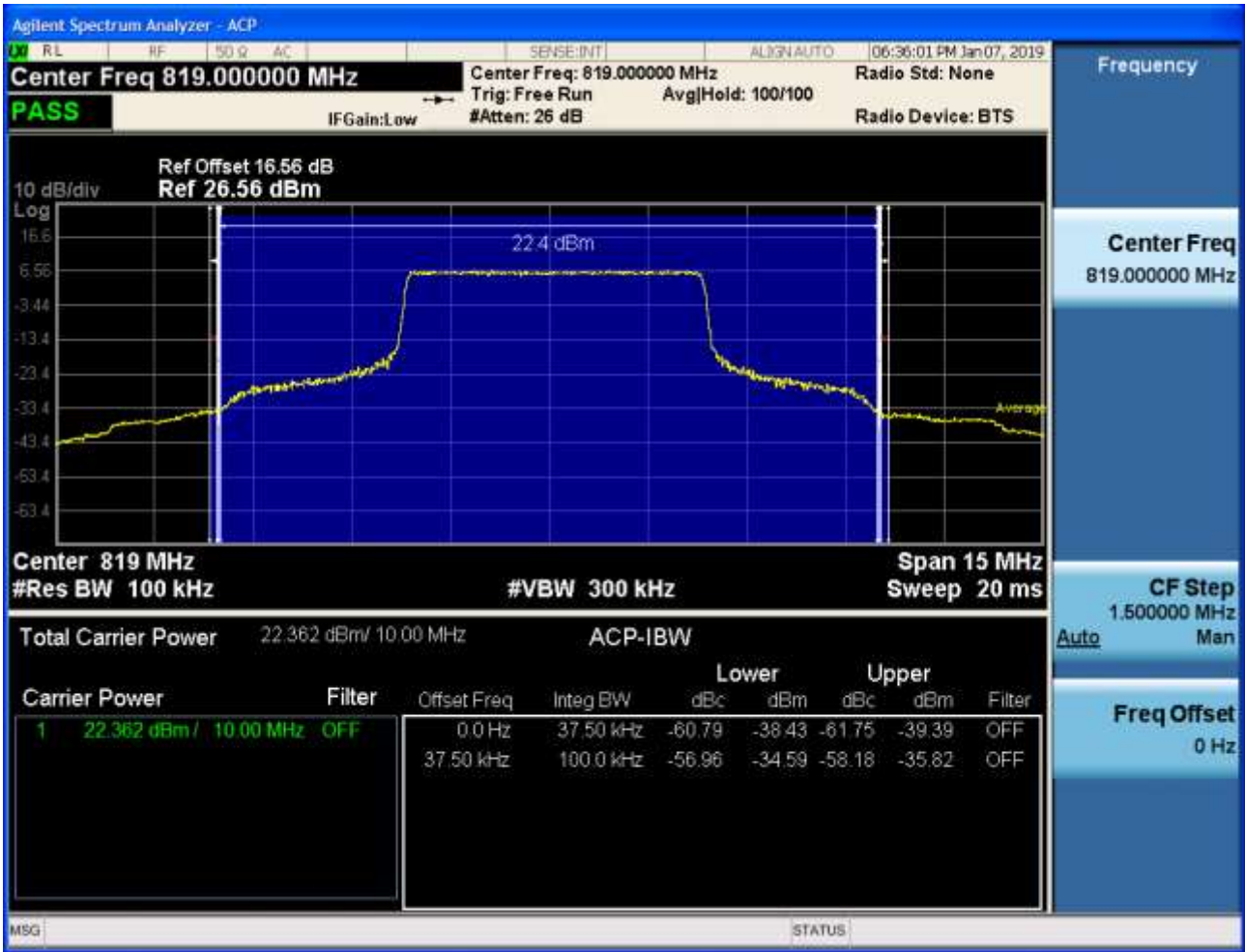
5.1.1.2.4.1.1 Test RB = RB1#0



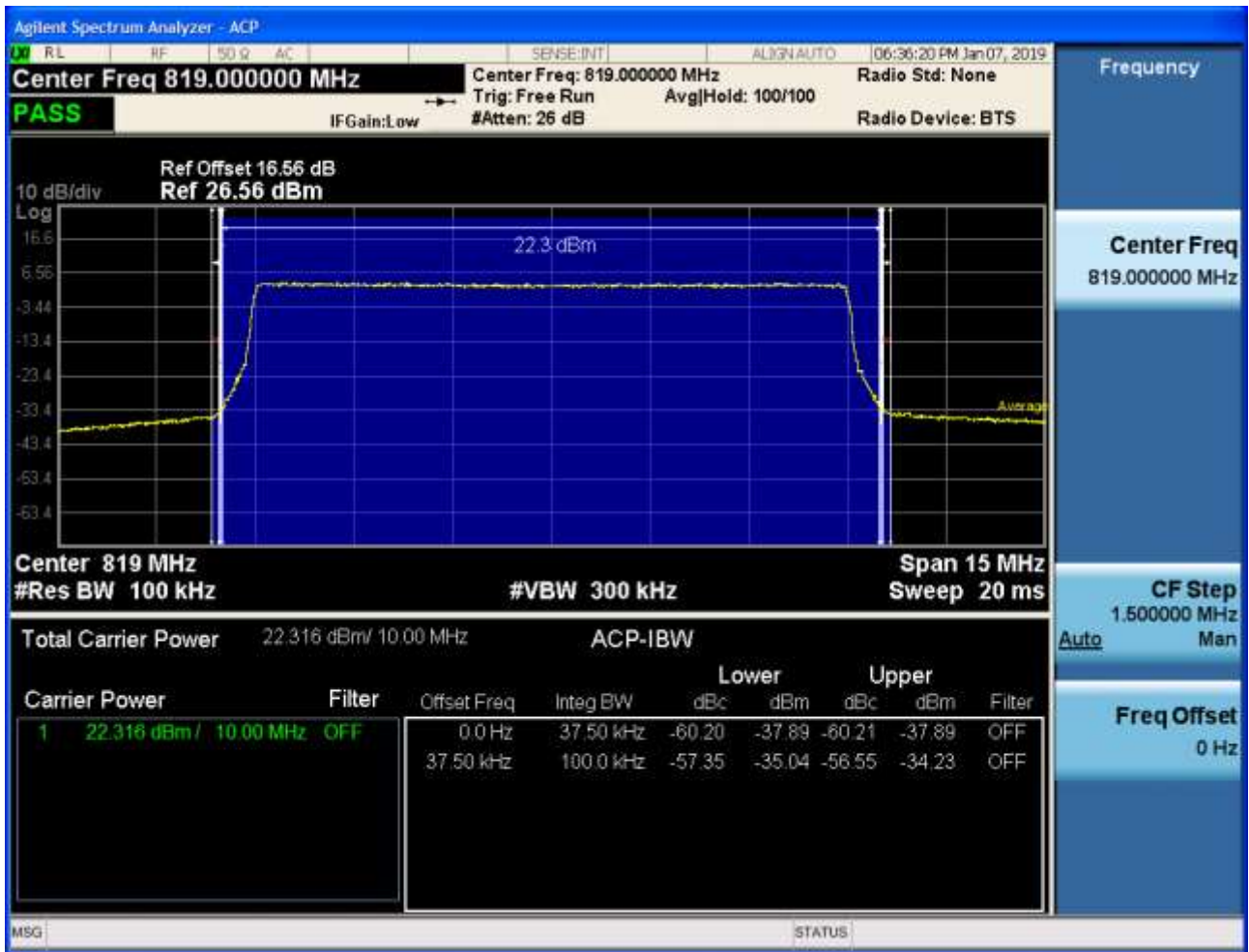
5.1.1.2.4.1.2 Test RB = RB1#49



5.1.1.2.4.1.3 Test RB = RB25#13



5.1.1.2.4.1.4 Test RB = RB50#0



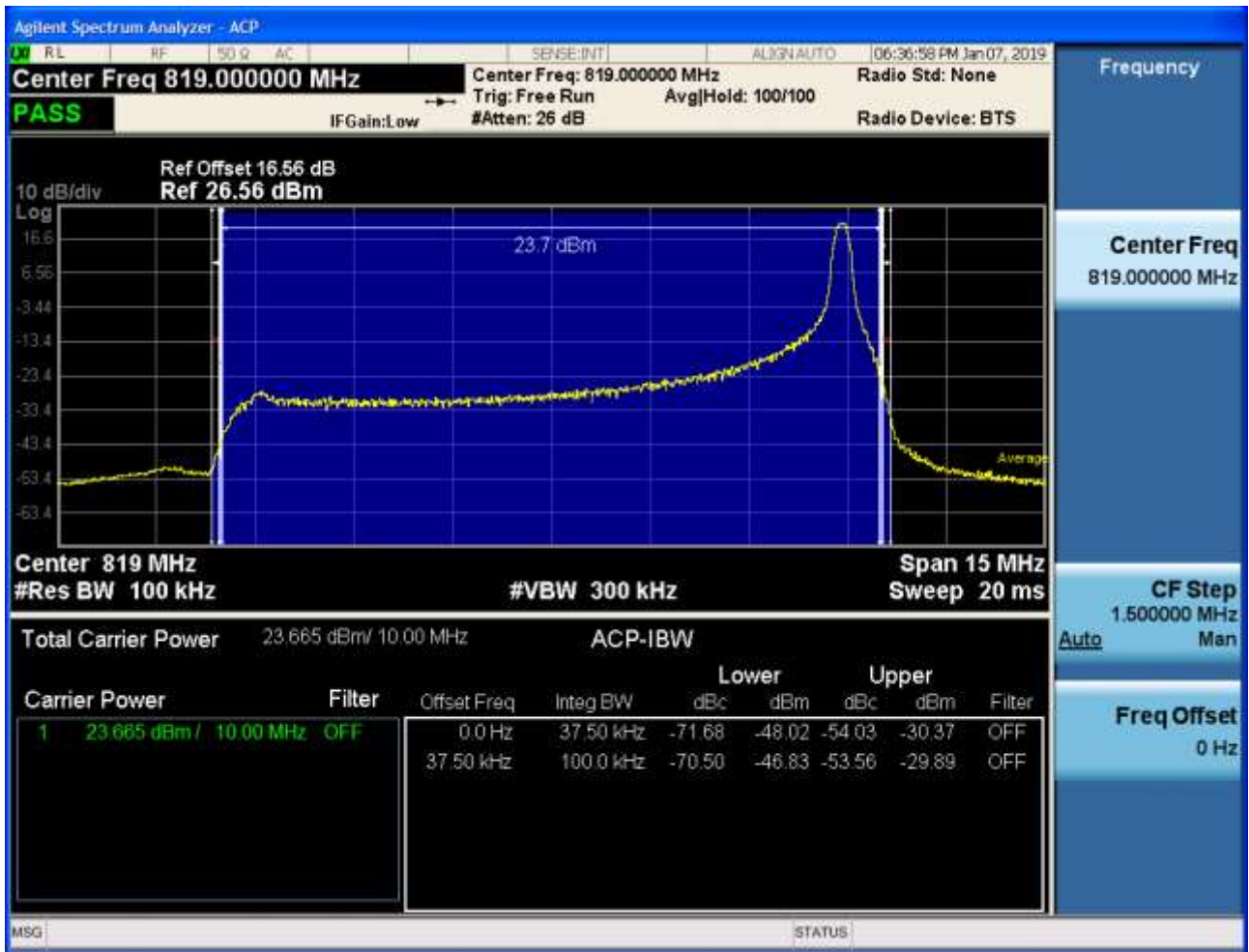
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0

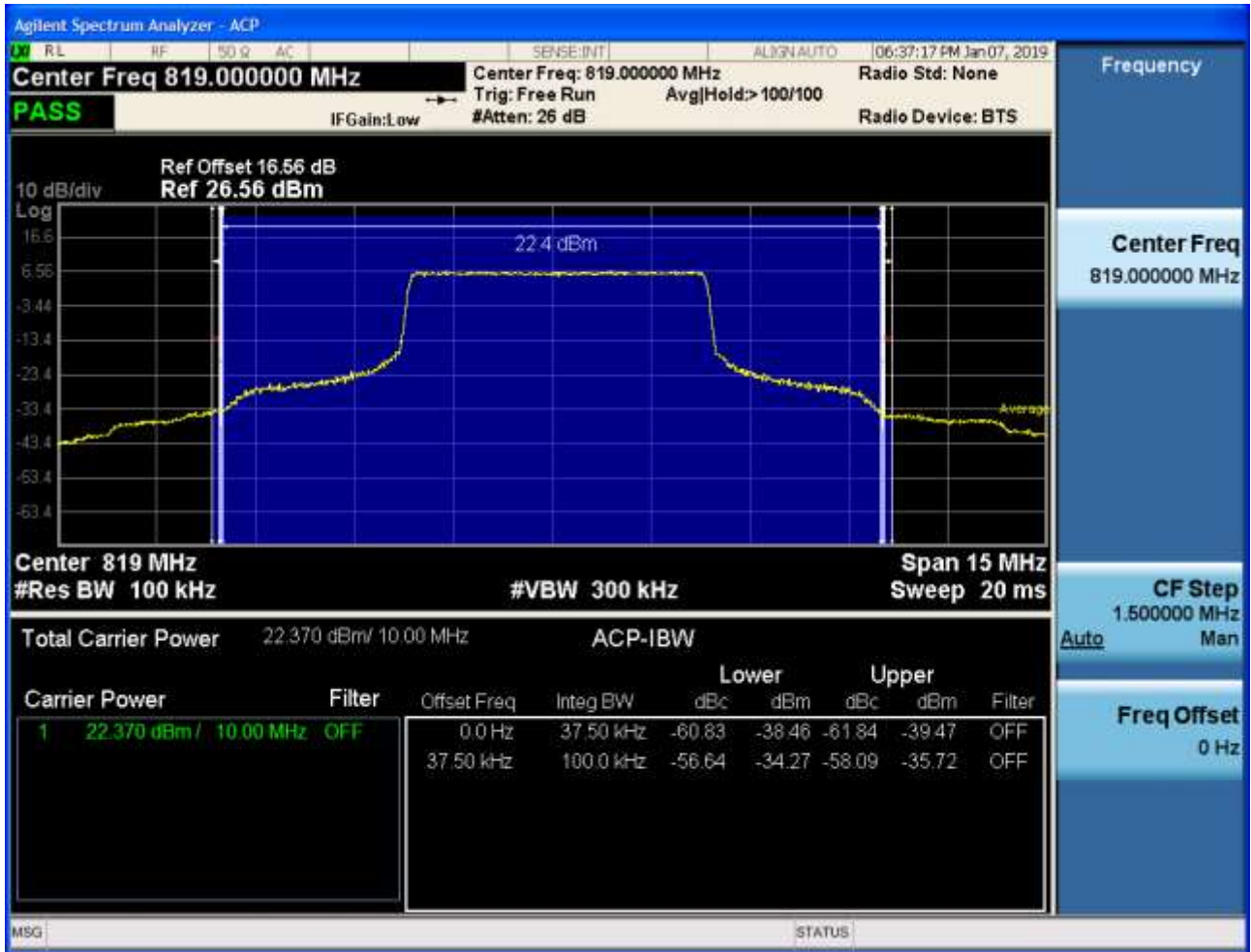




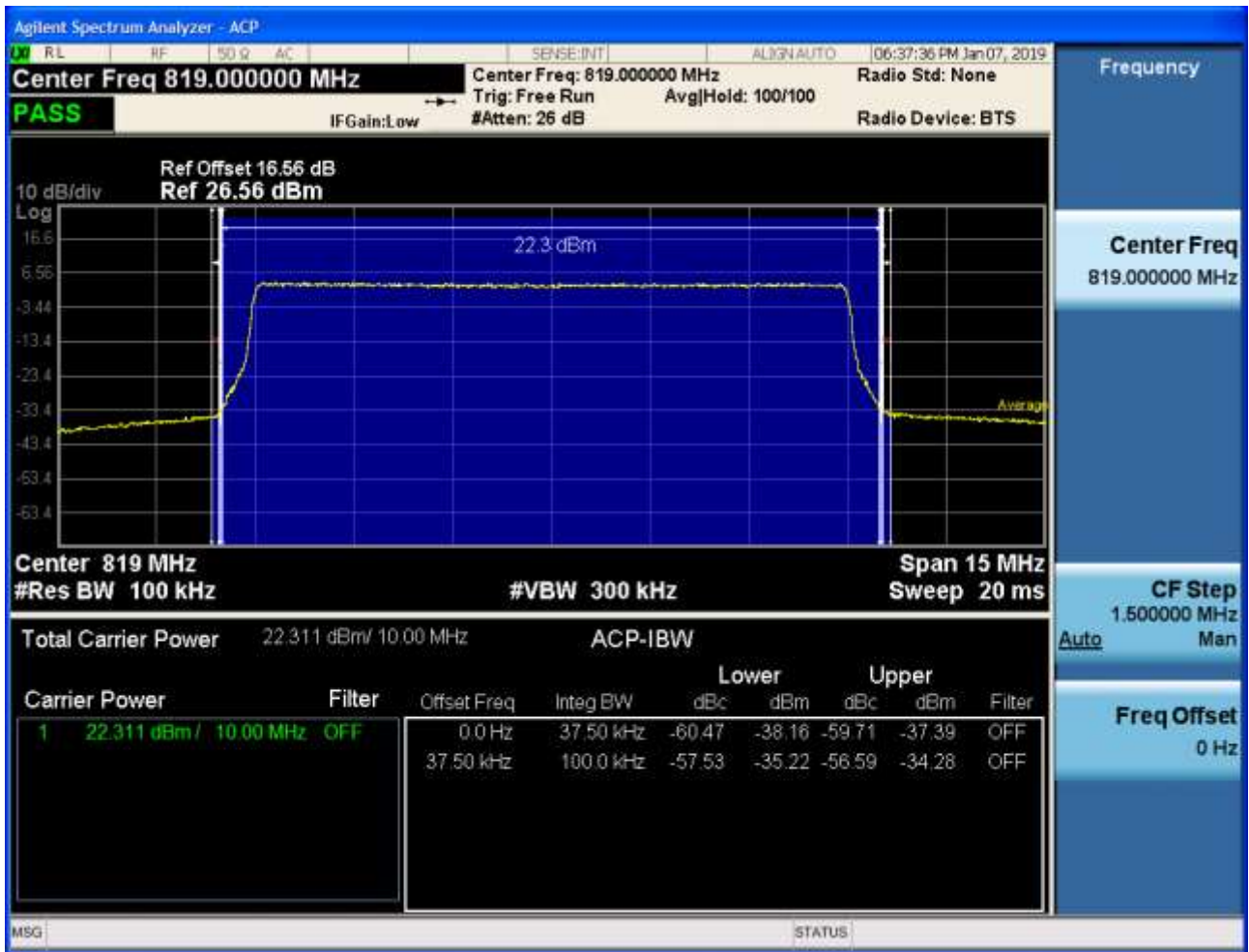
5.1.1.2.4.2.2 Test RB = RB1#49



5.1.1.2.4.2.3 Test RB = RB25#13



5.1.1.2.4.2.4 Test RB = RB50#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 = Band26 (814-824 MHz)

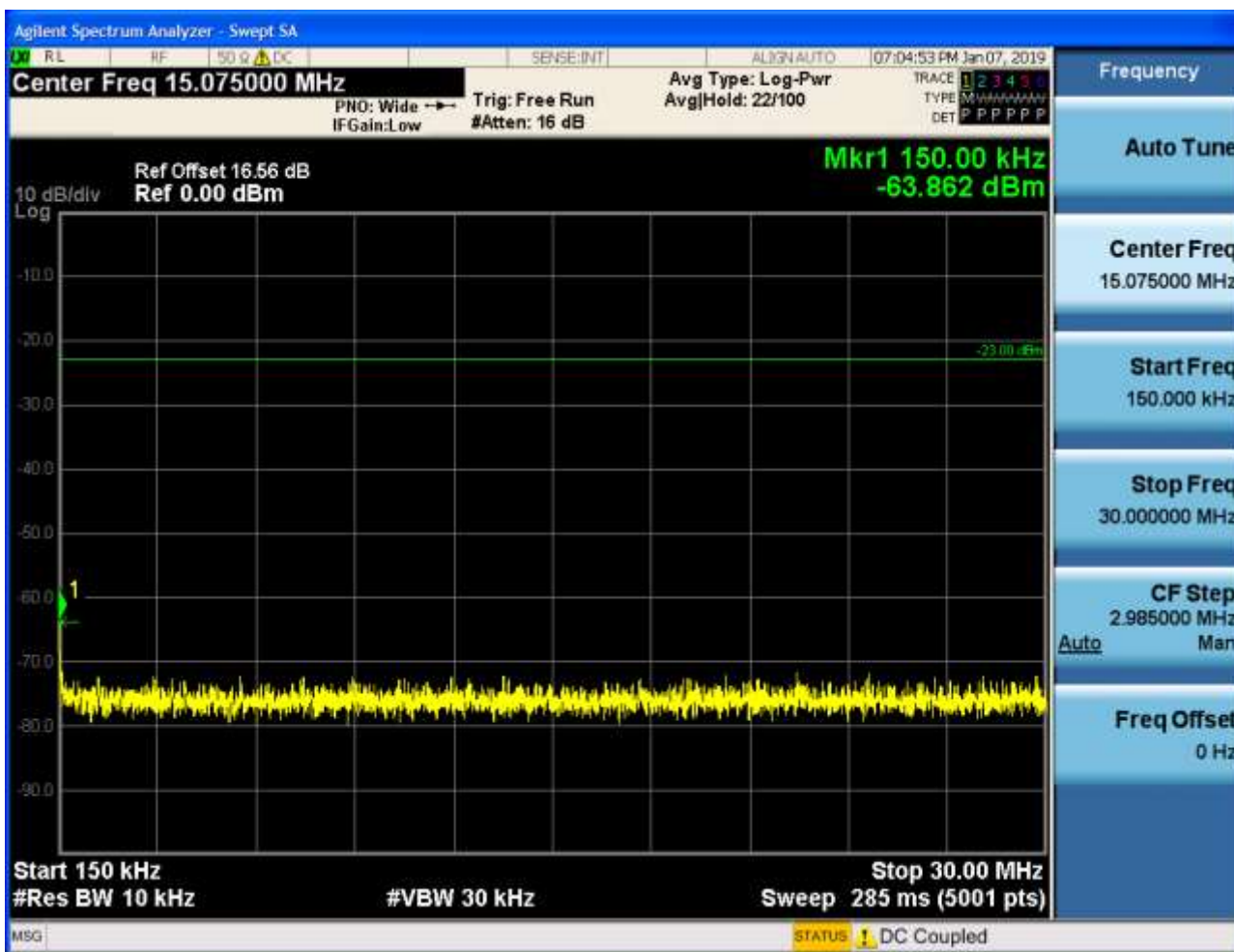
##### 6.1.1.1 Test Mode = LTE/TM1

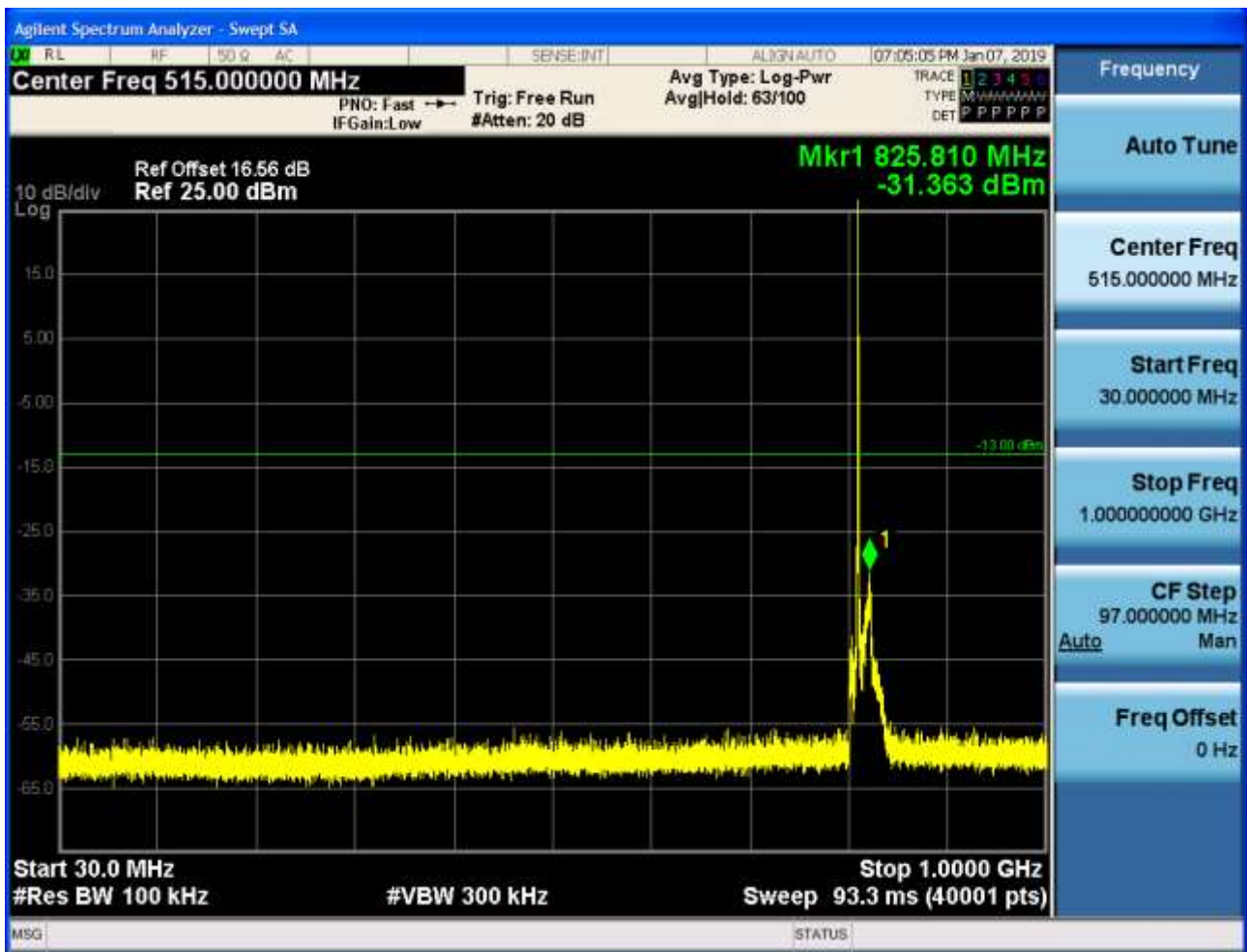
##### 6.1.1.1.1 Test Bandwidth = 1.4

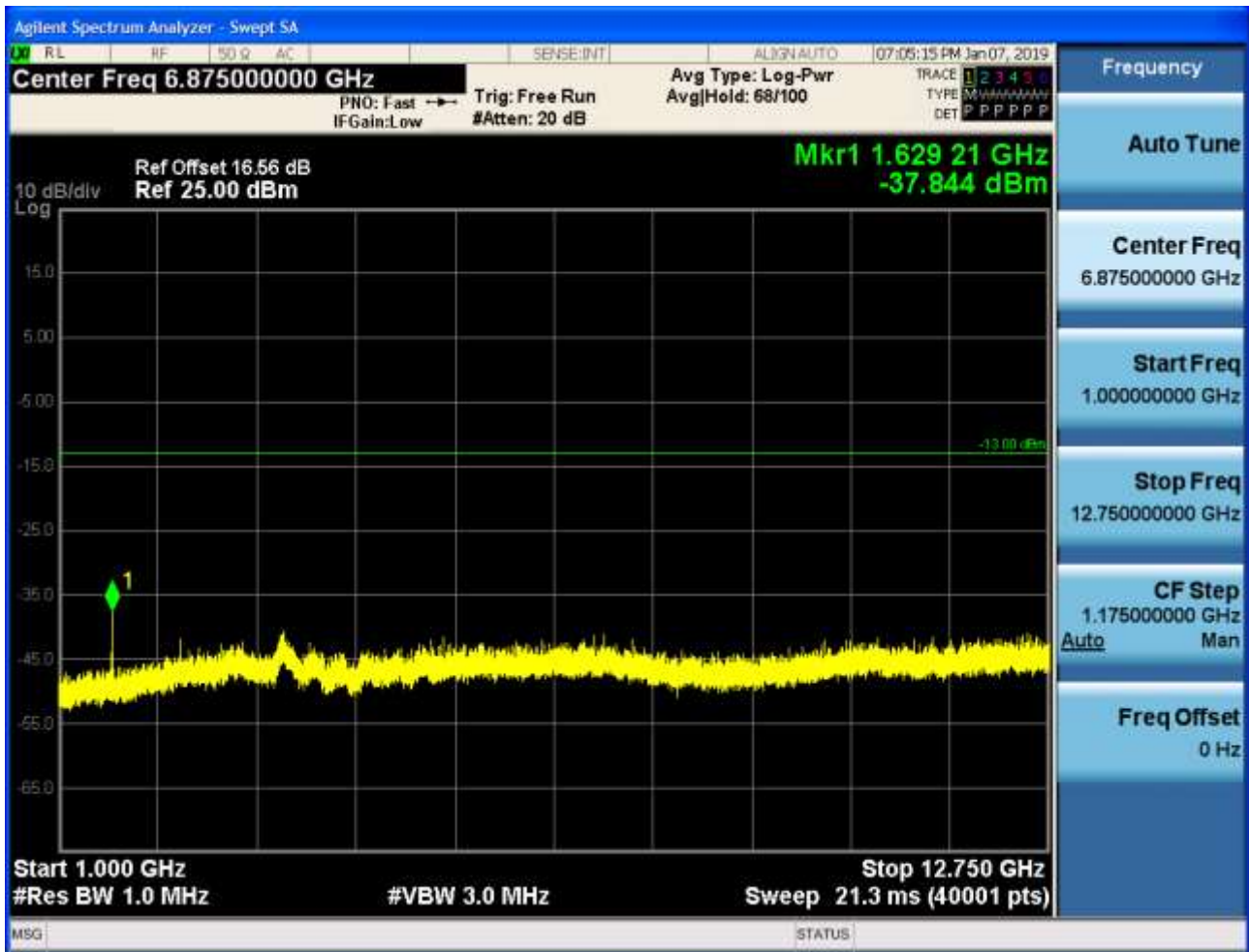
##### 6.1.1.1.1.1 Test Channel = LCH

##### 6.1.1.1.1.1.1 Test RB = RB1#0







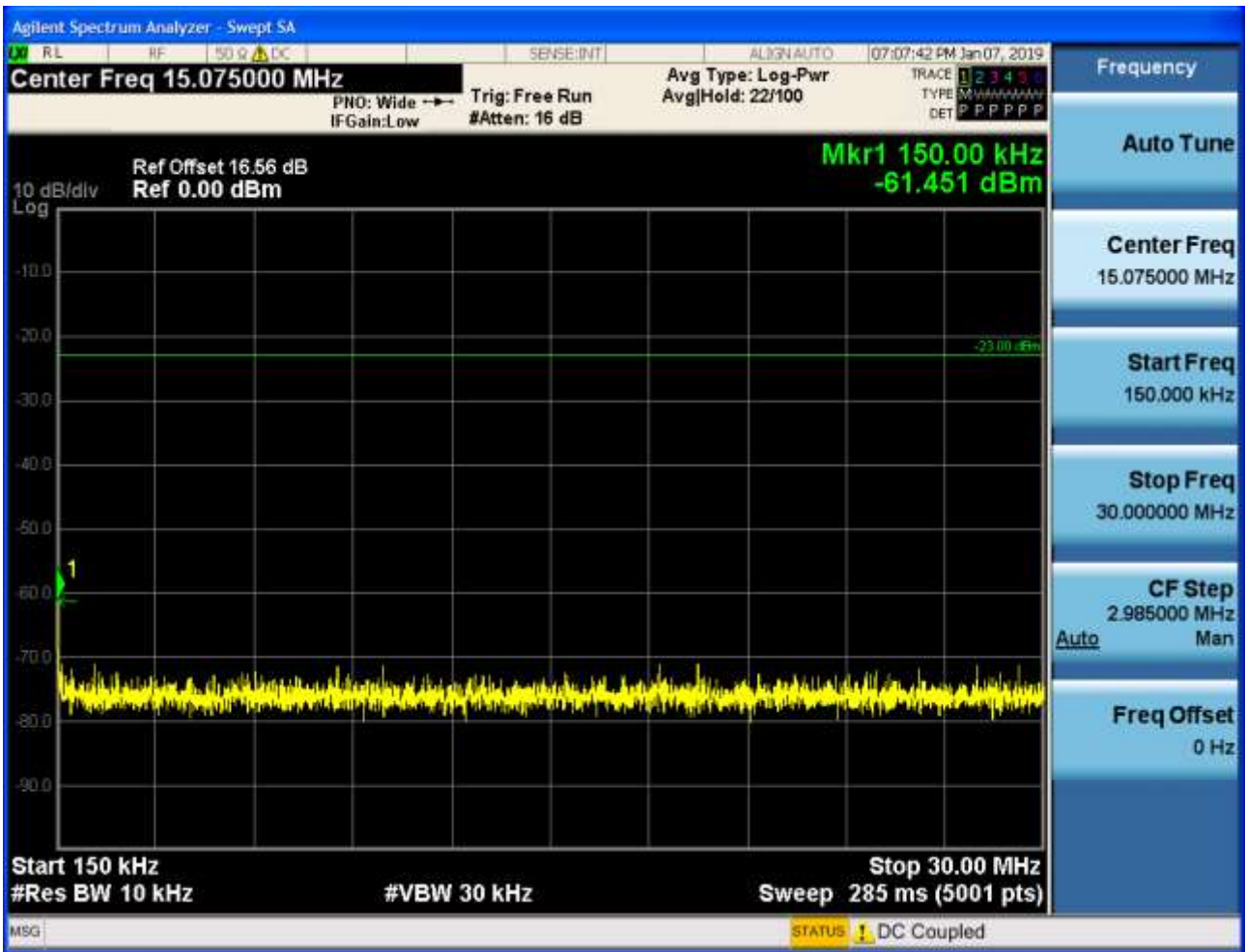


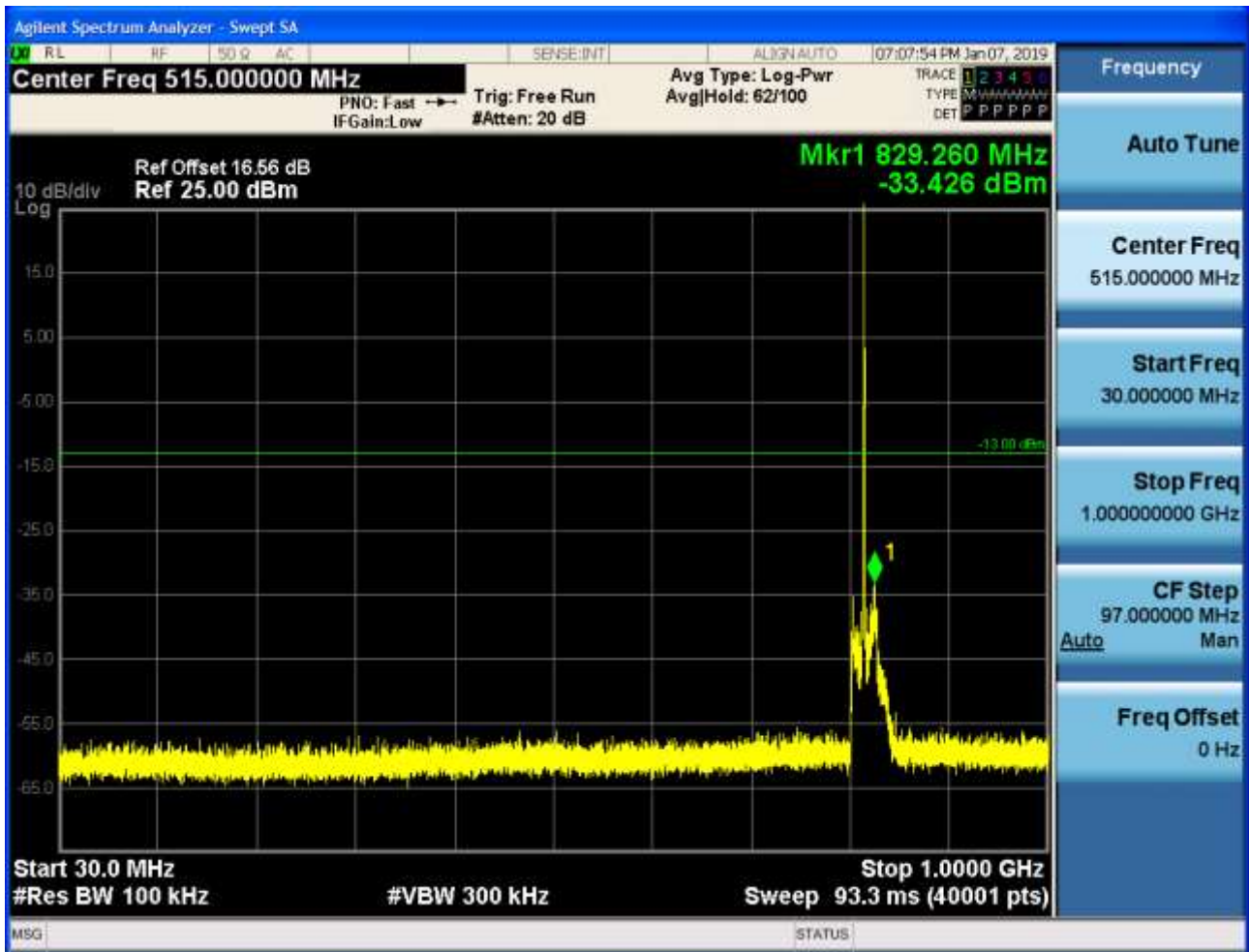


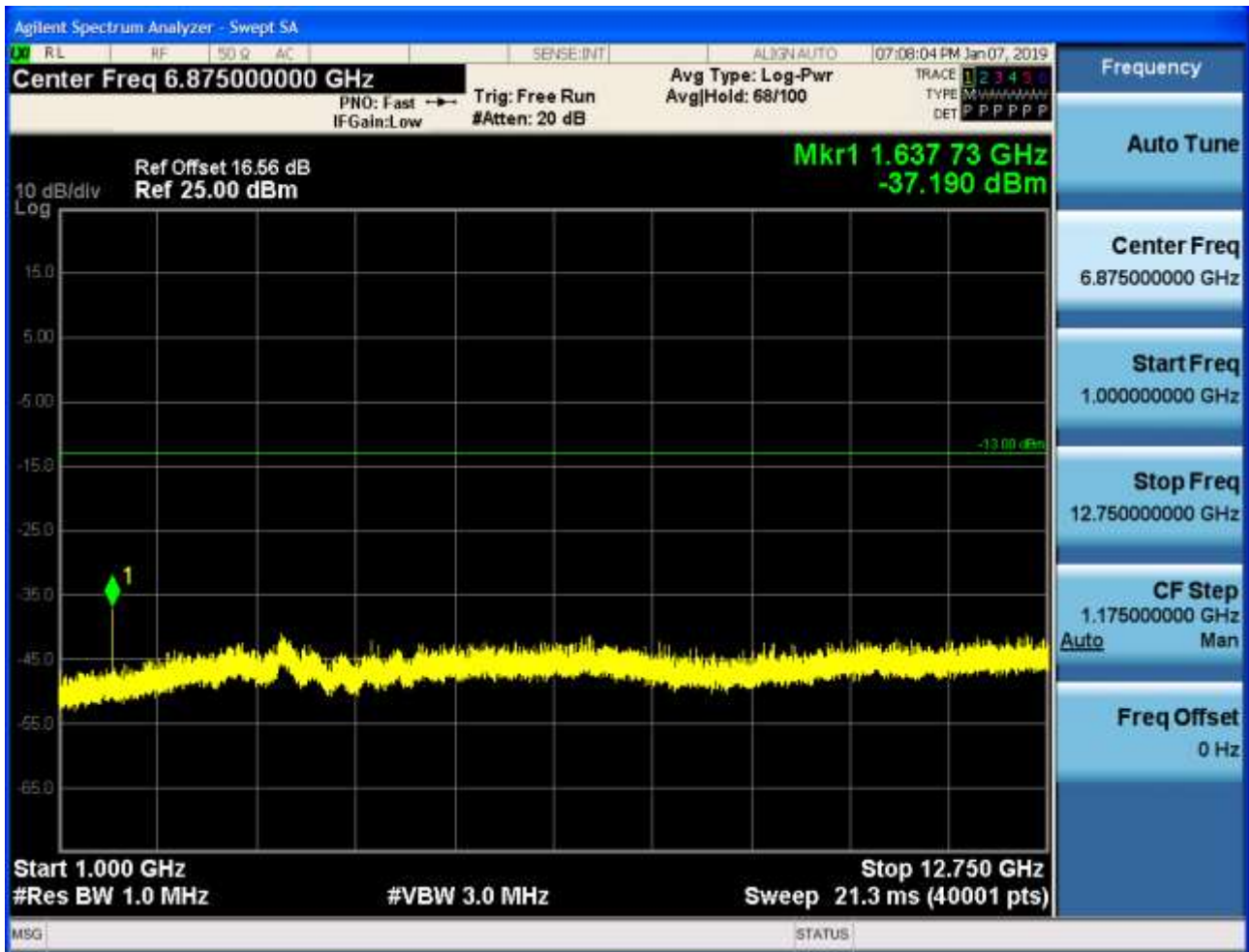
## 6.1.1.1.1.2 Test Channel = MCH

## 6.1.1.1.1.2.1 Test RB = RB1#0







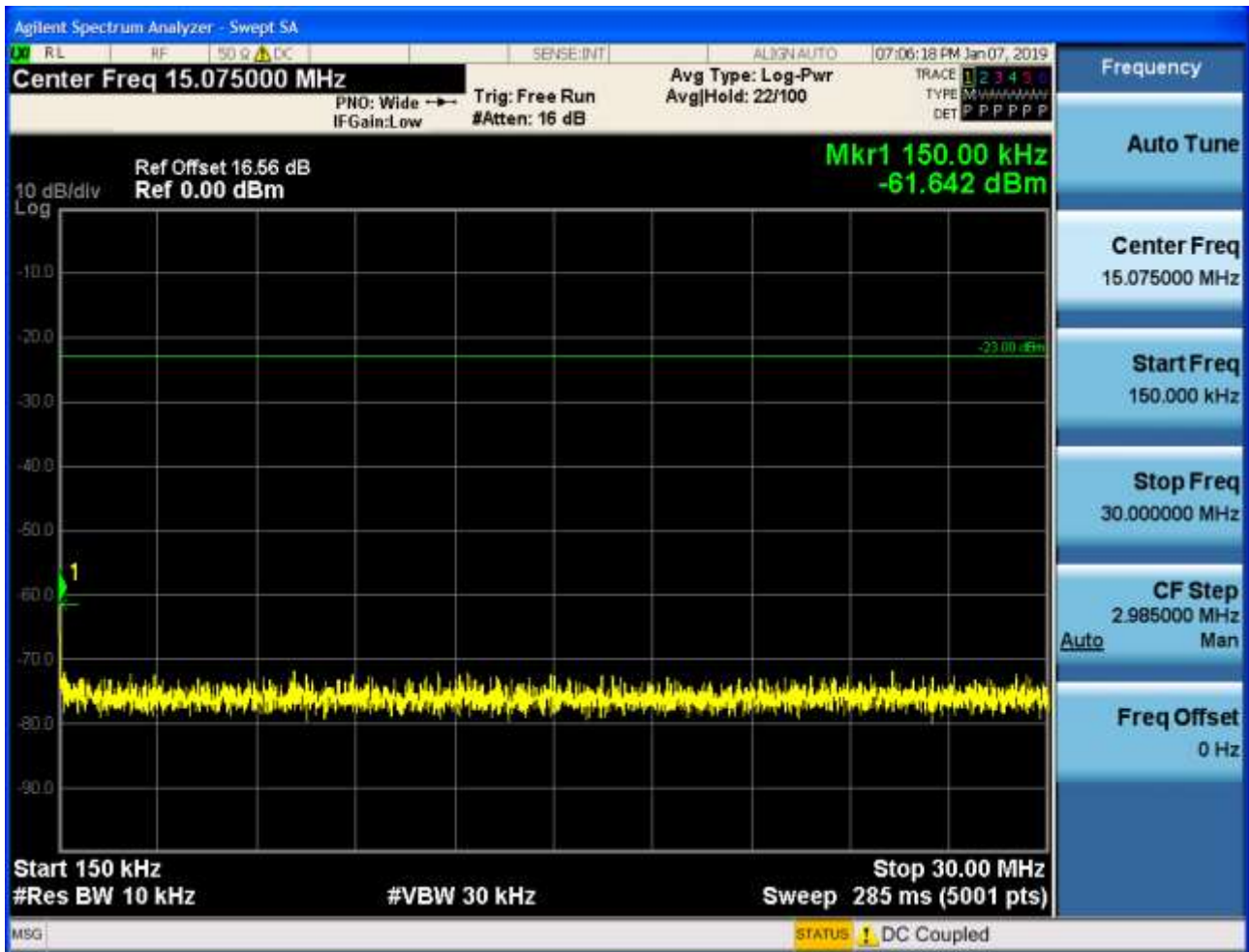


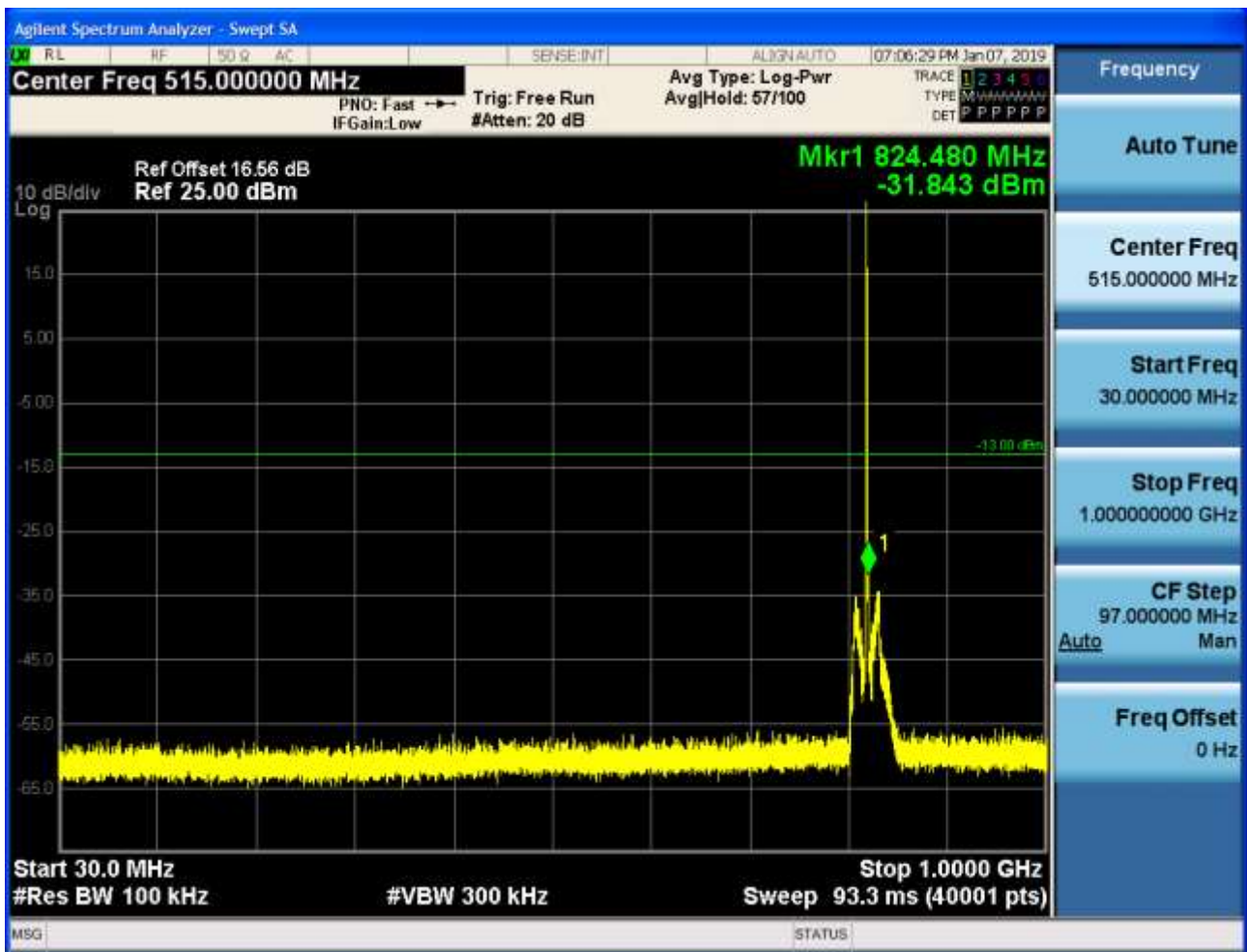
## 6.1.1.1.1.3 Test Channel = HCH

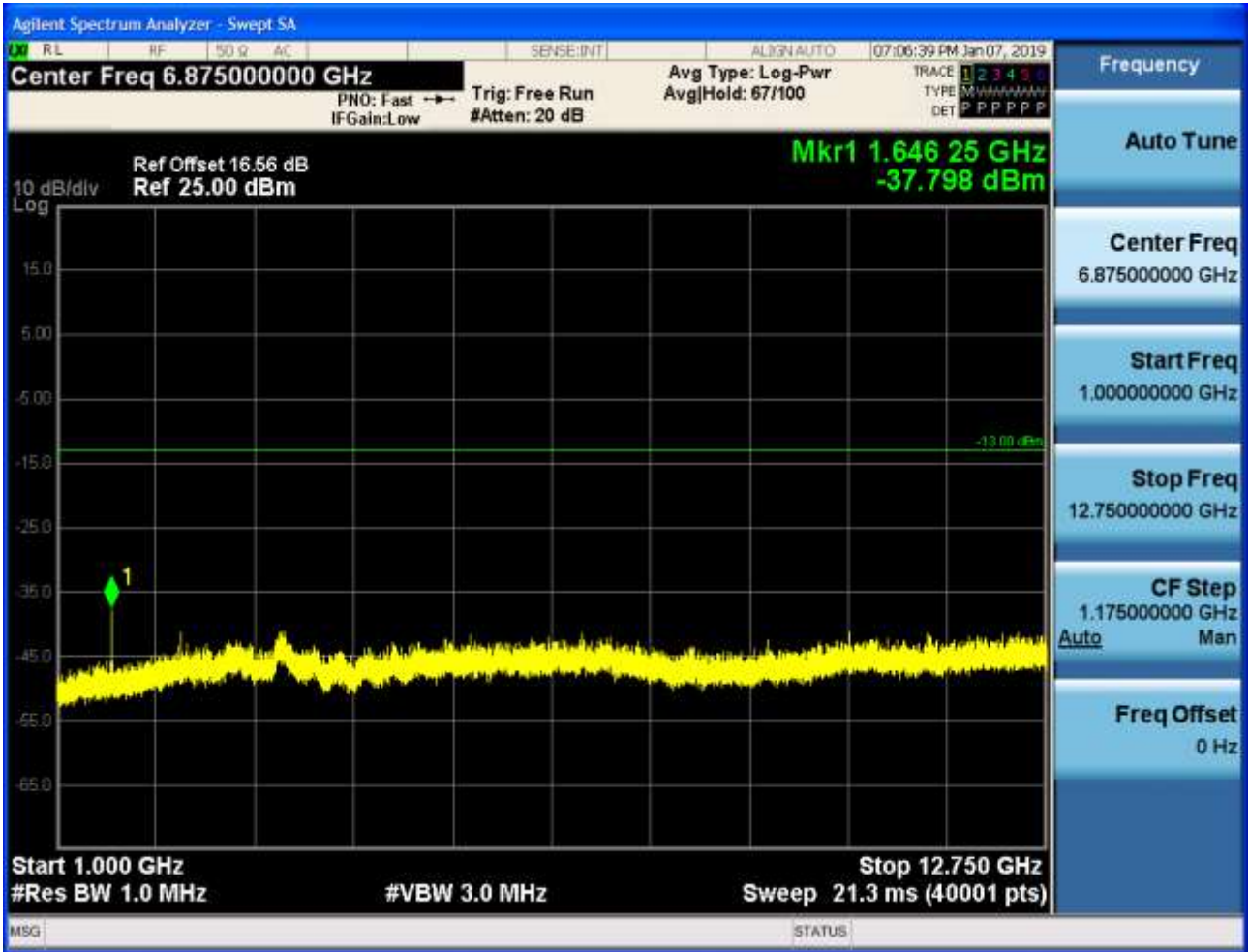
## 6.1.1.1.1.3.1 Test RB = RB1#0







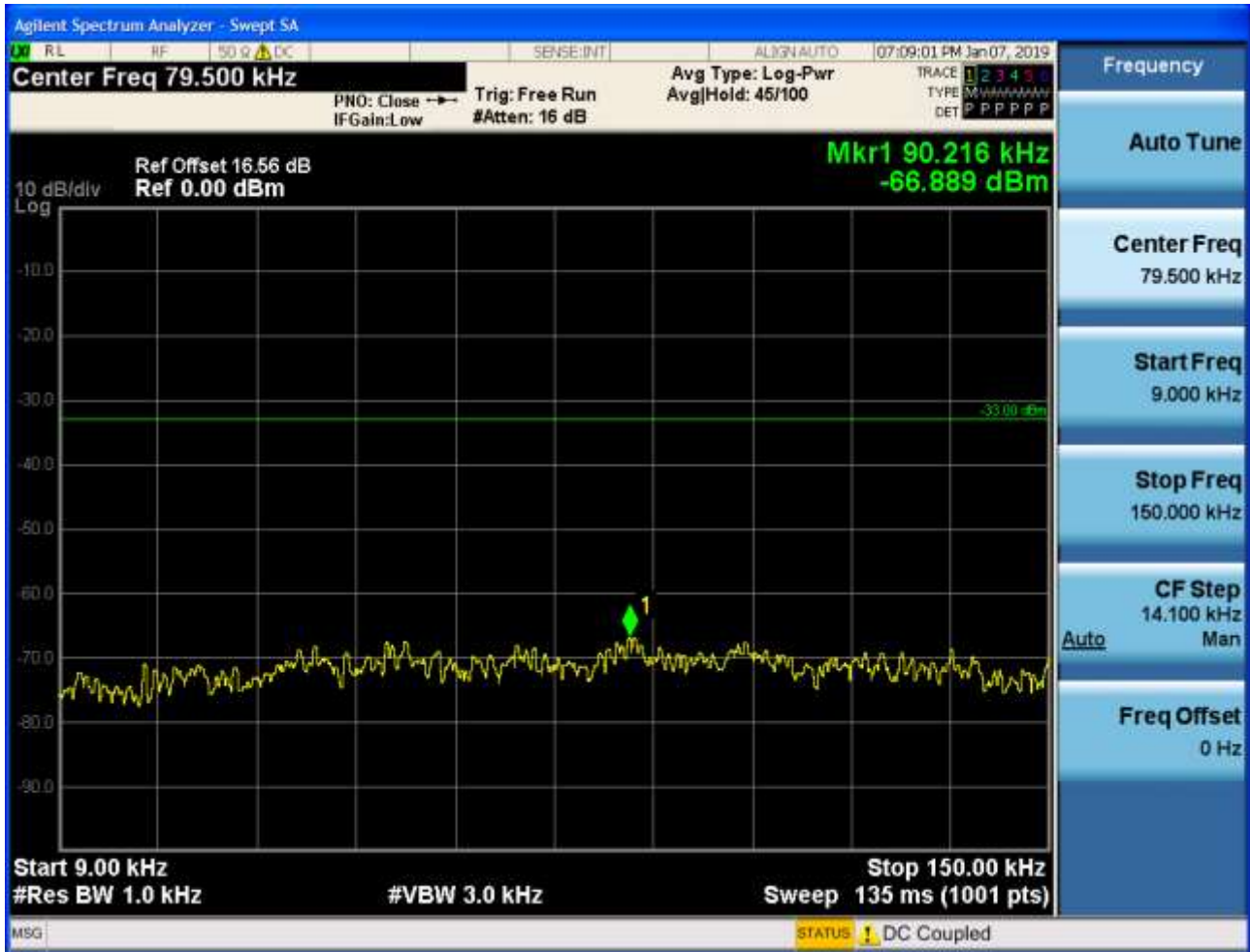


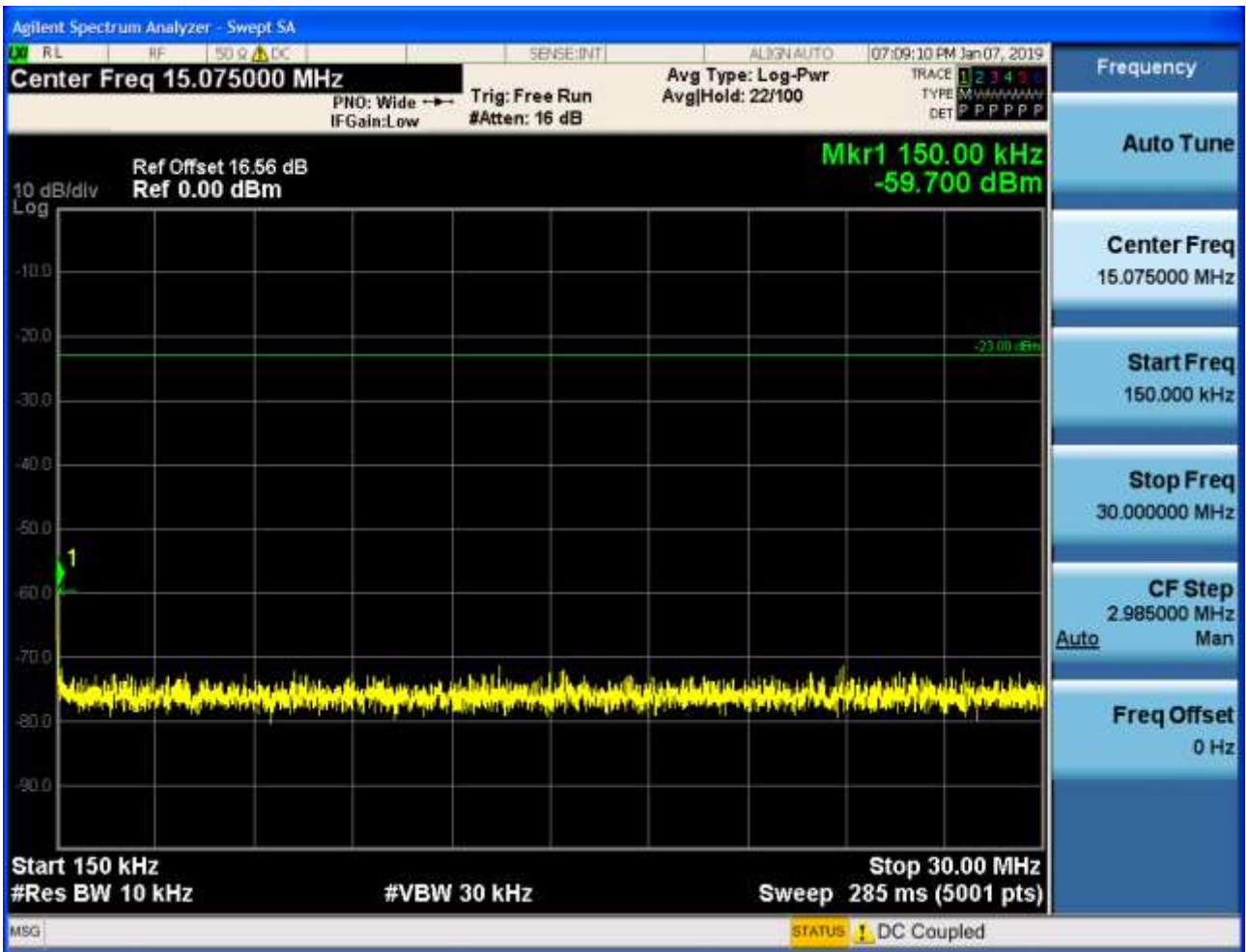


## 6.2.1.1.2 Test Bandwidth = 3

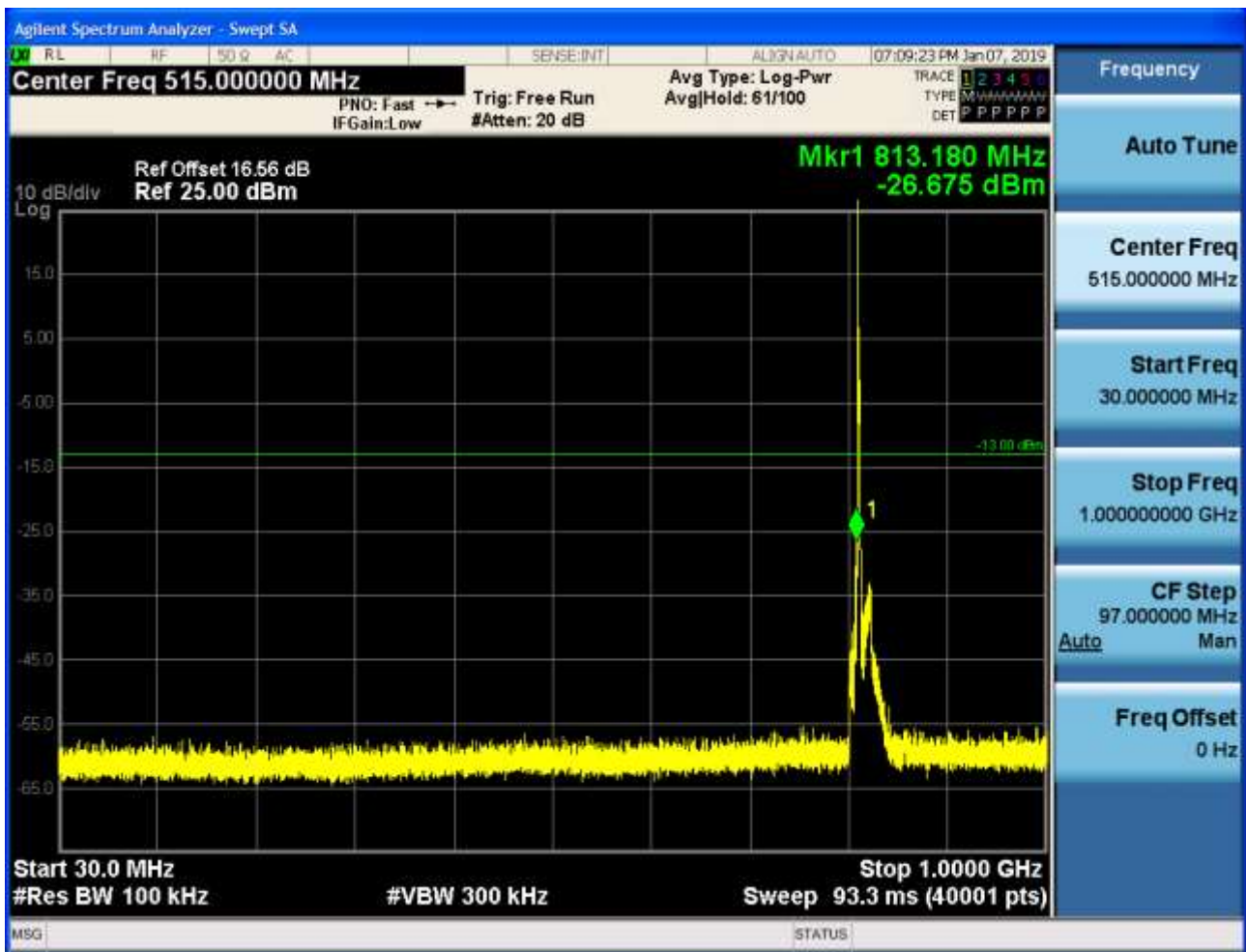
## 6.2.1.1.2.1 Test Channel = LCH

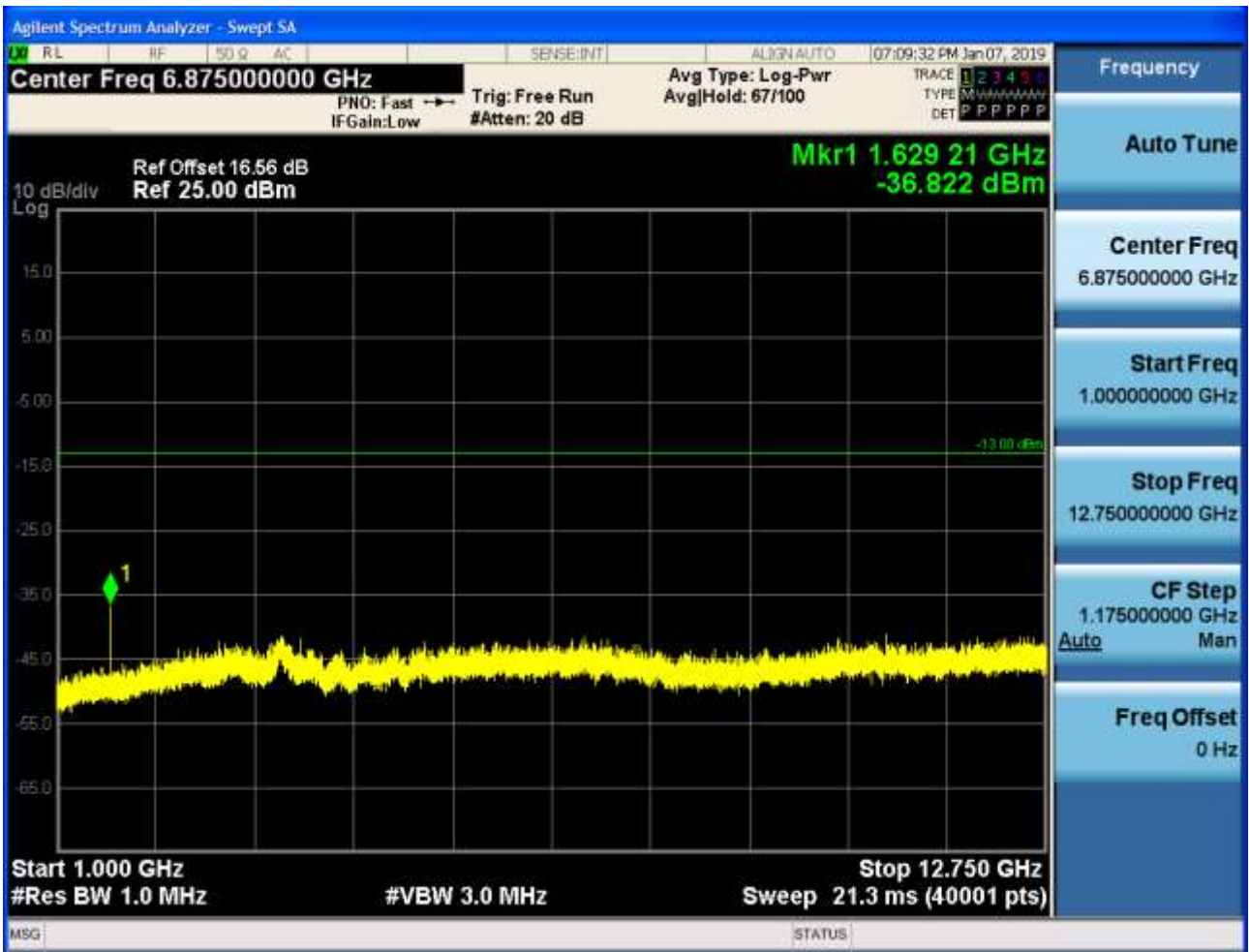
## 6.2.1.1.2.1.1 Test RB = RB1#0





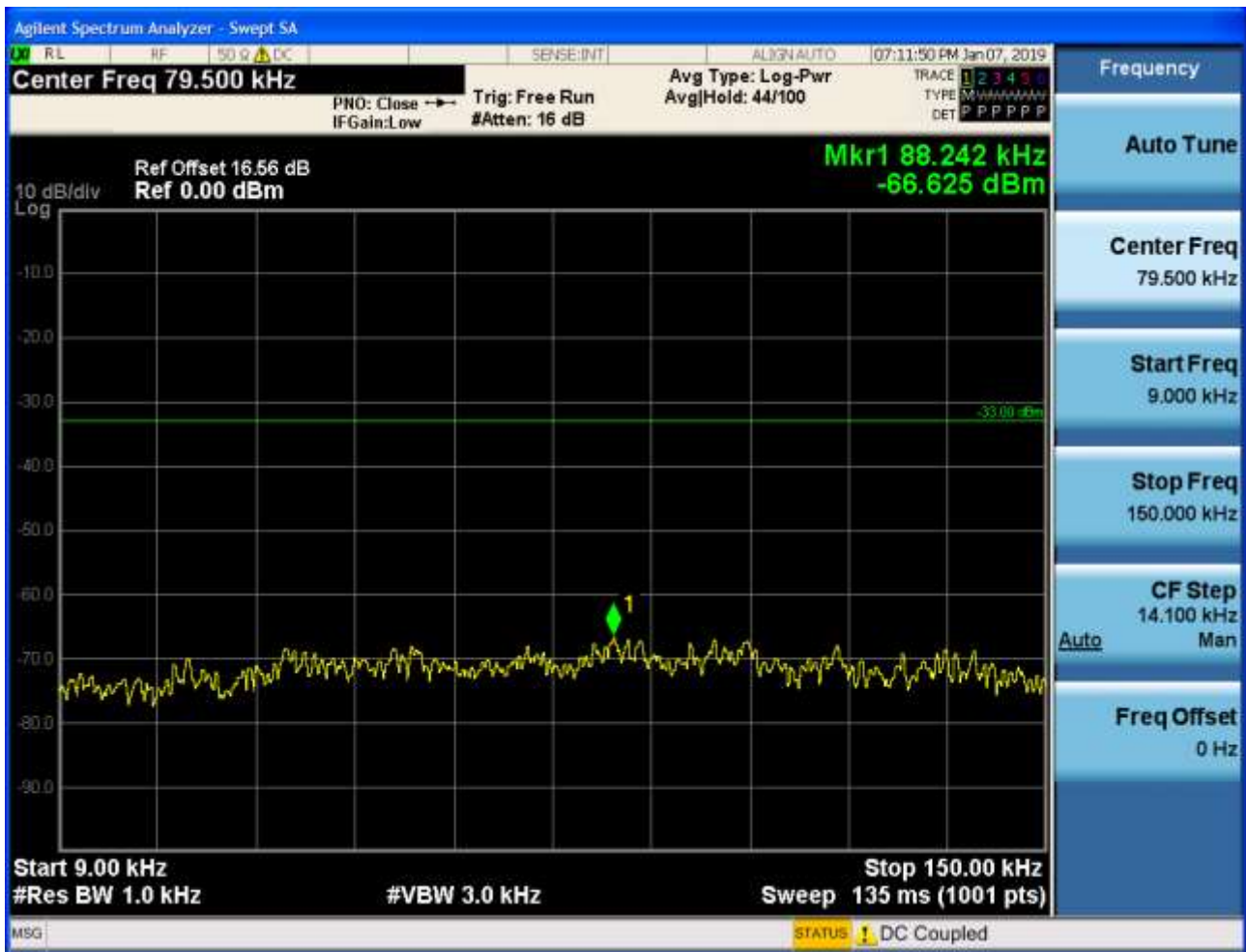


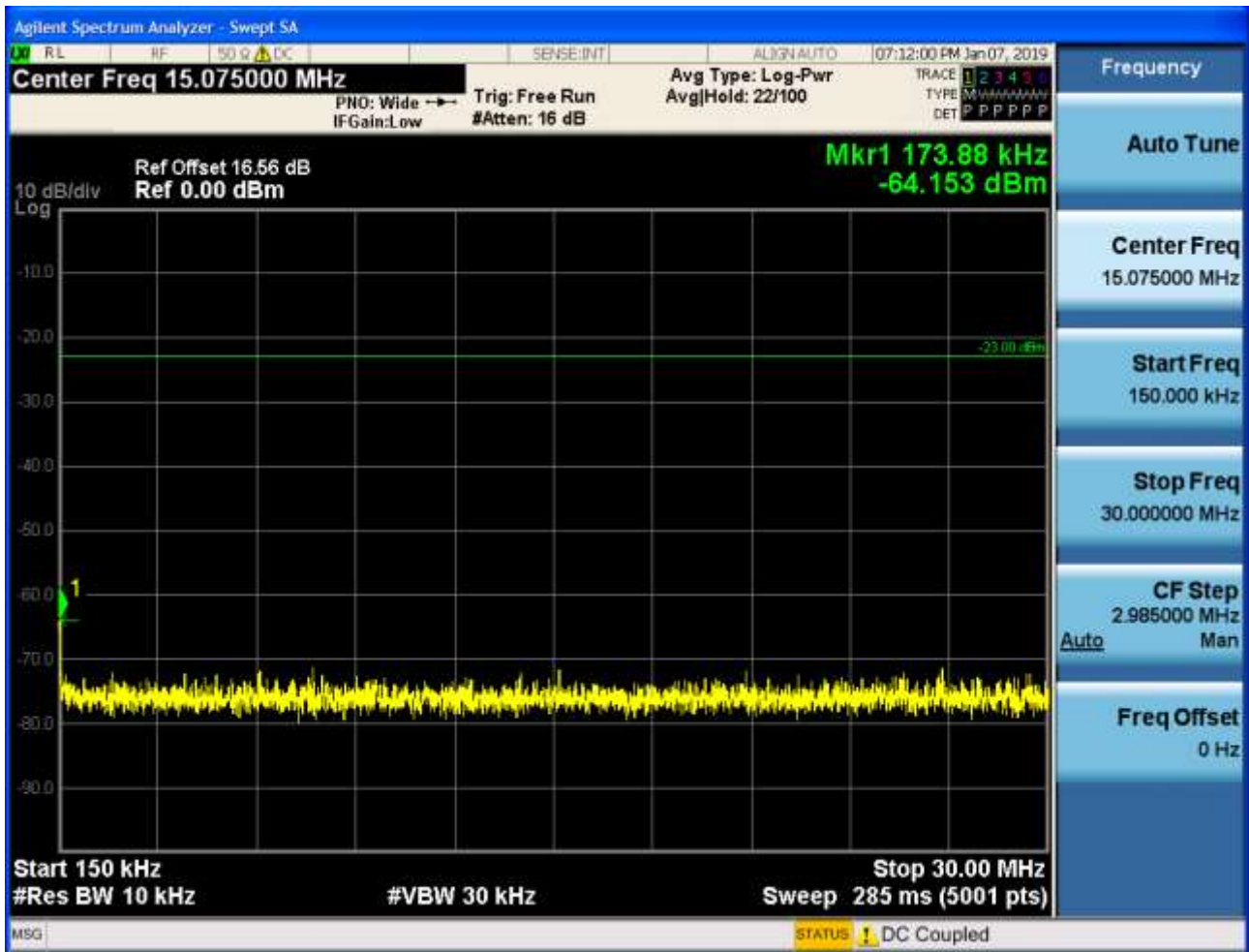


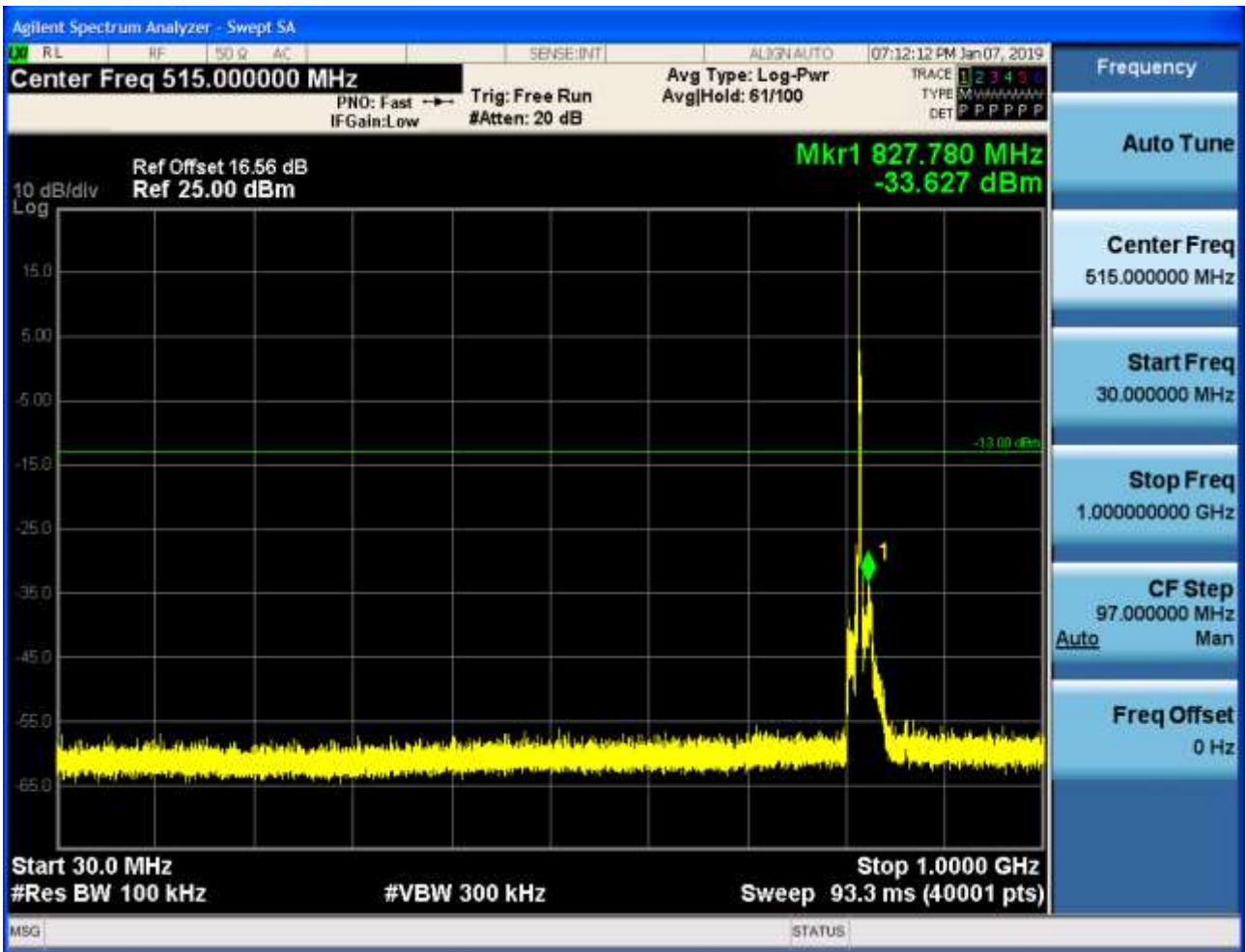


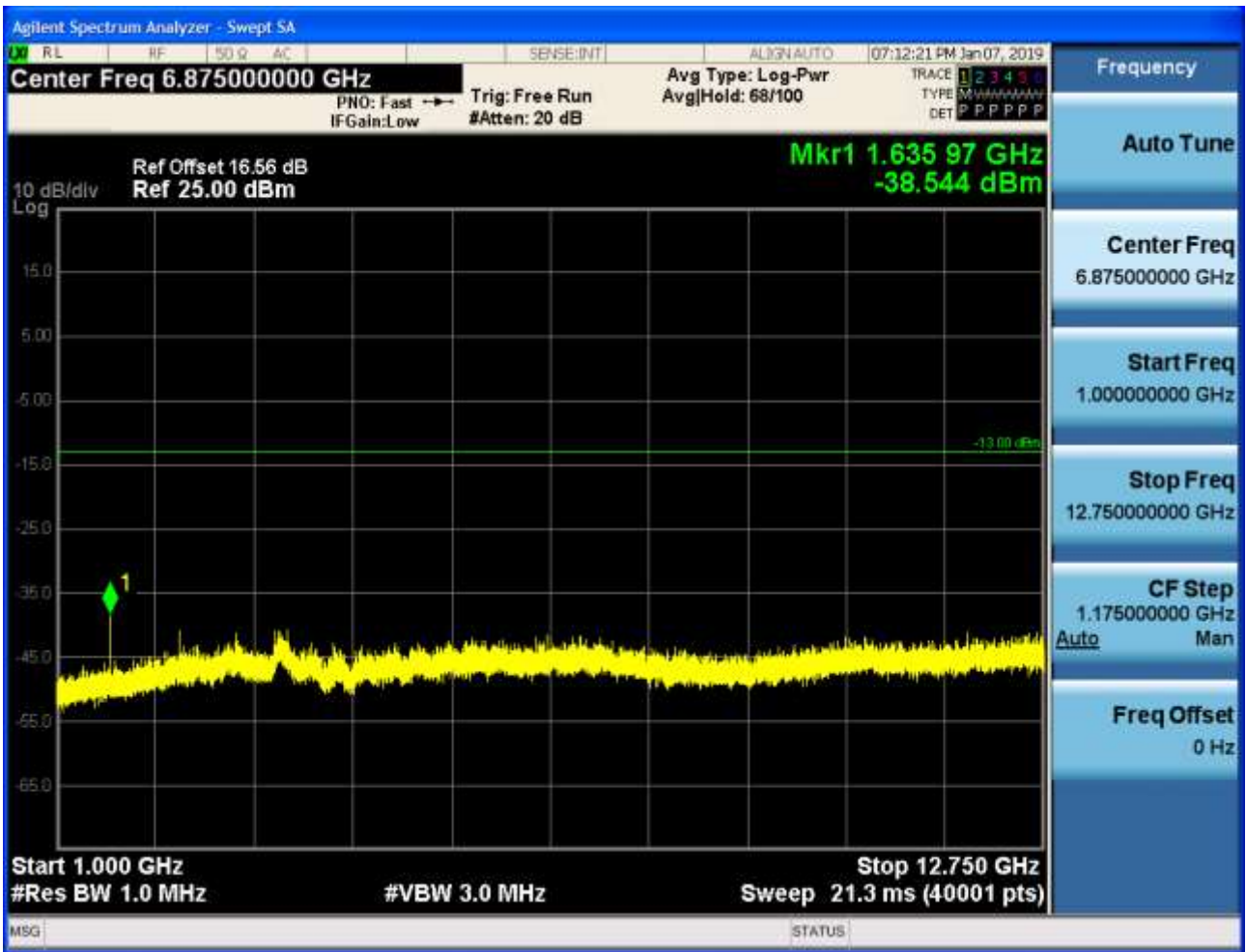
## 6.2.1.1.2.2 Test Channel = MCH

## 6.2.1.1.2.2.1 Test RB = RB1#0





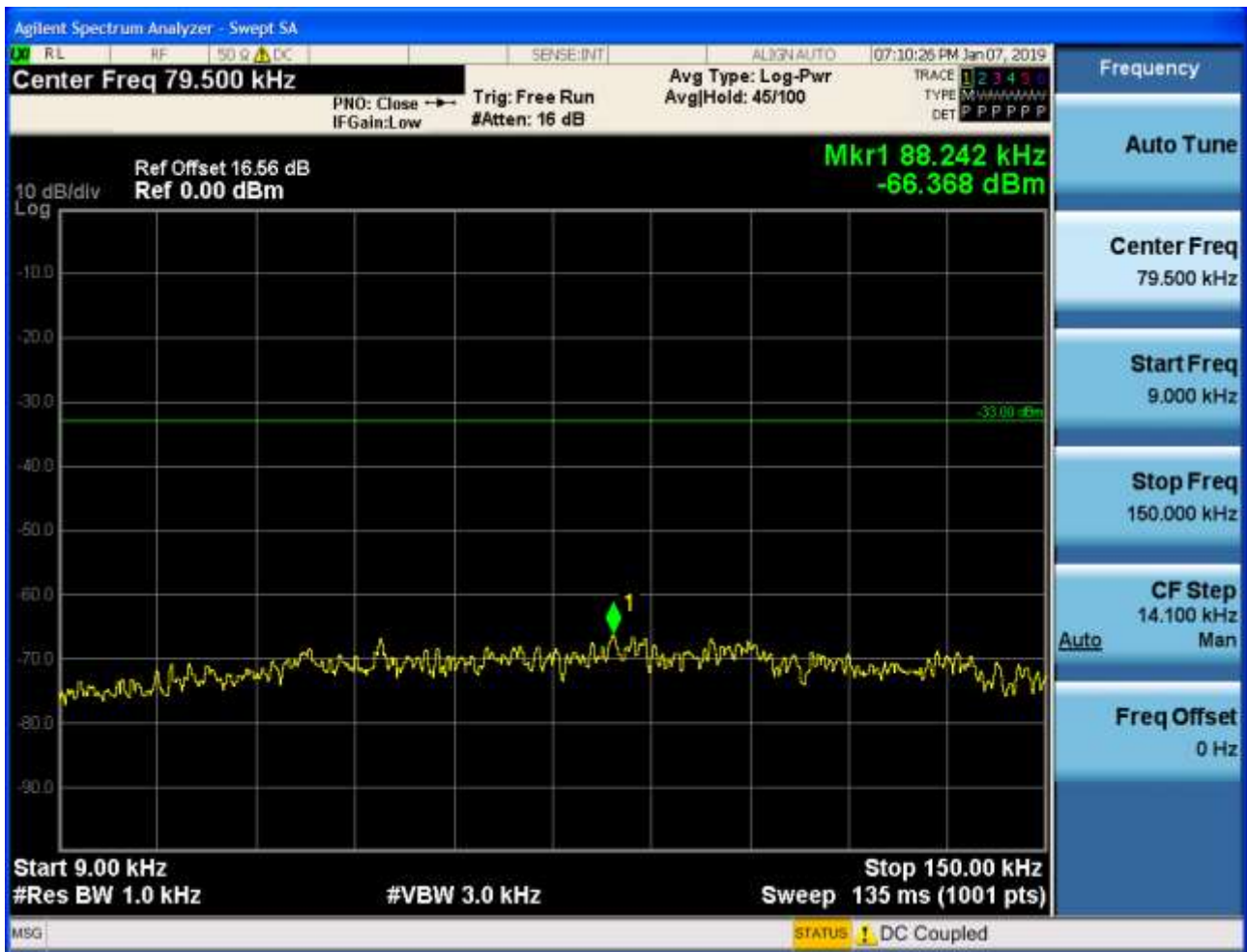


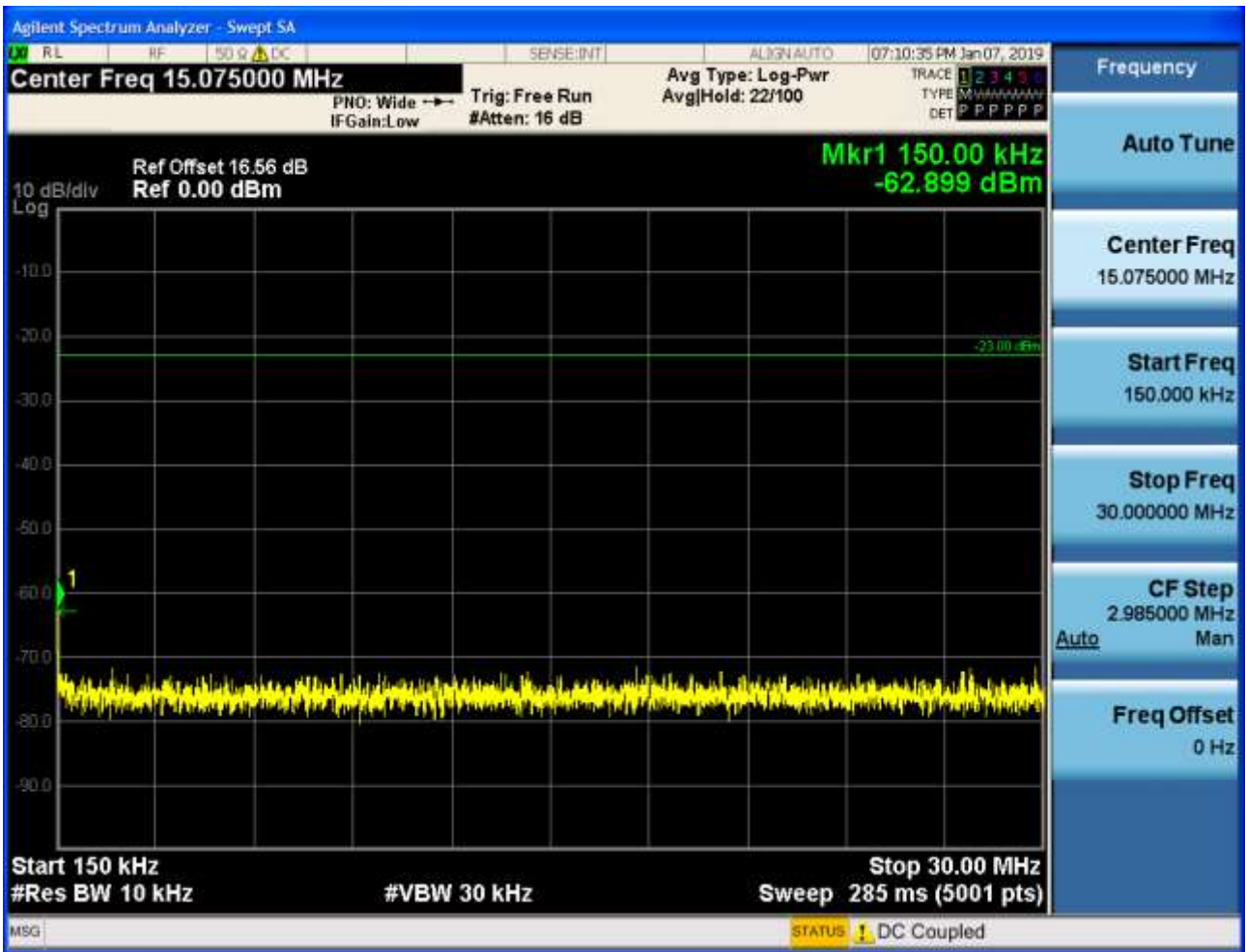


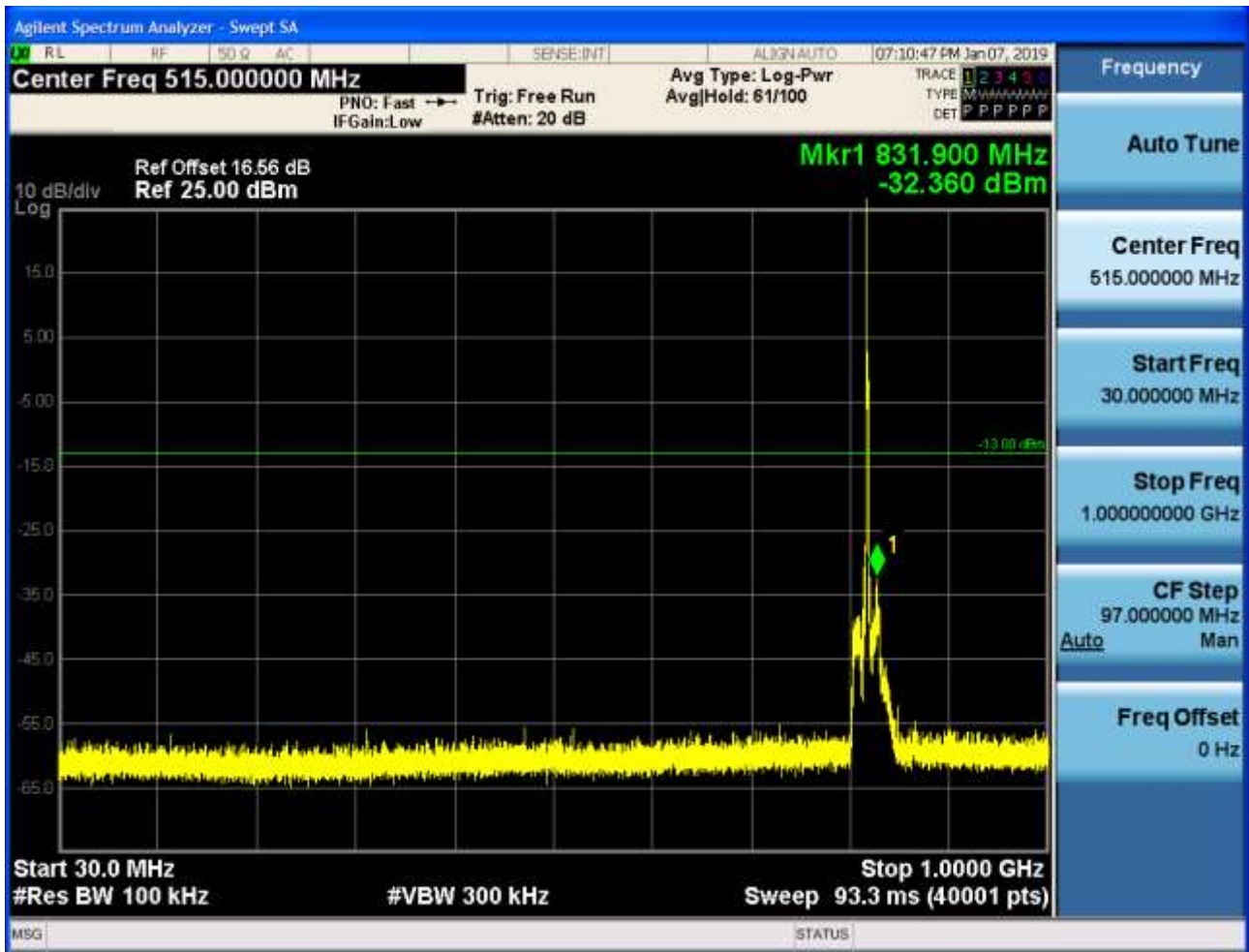


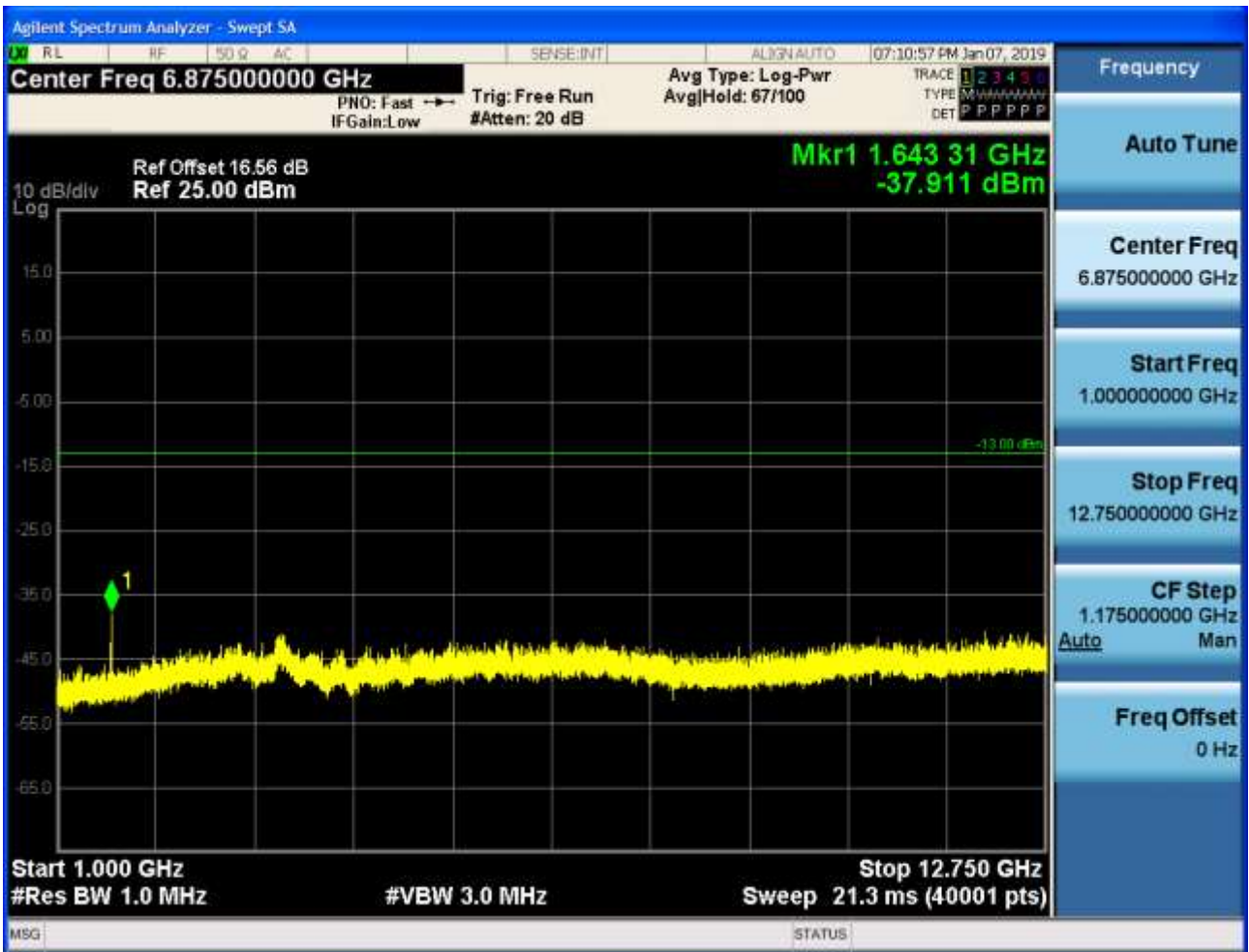
## 6.2.1.1.2.3 Test Channel = HCH

## 6.2.1.1.2.3.1 Test RB = RB1#0





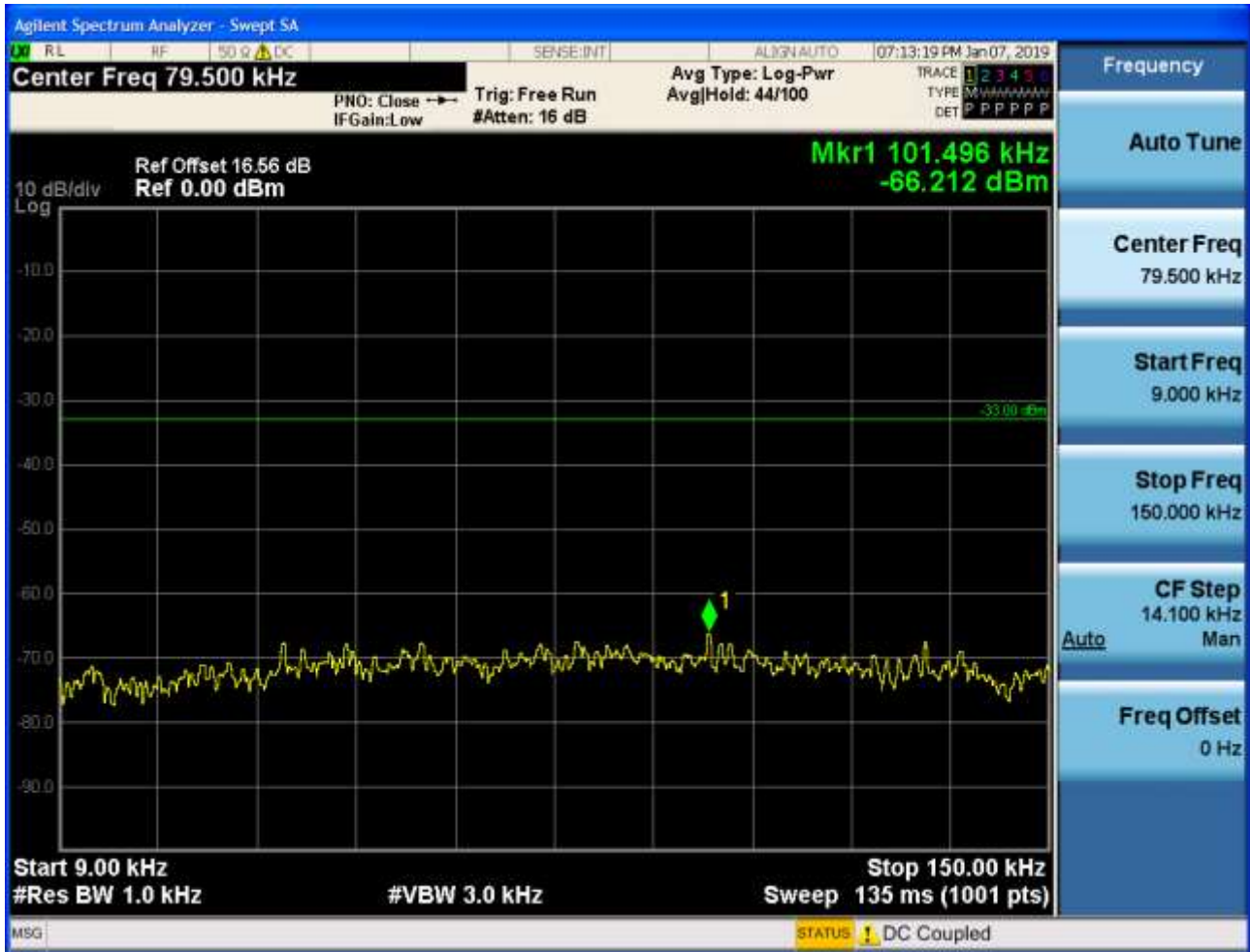


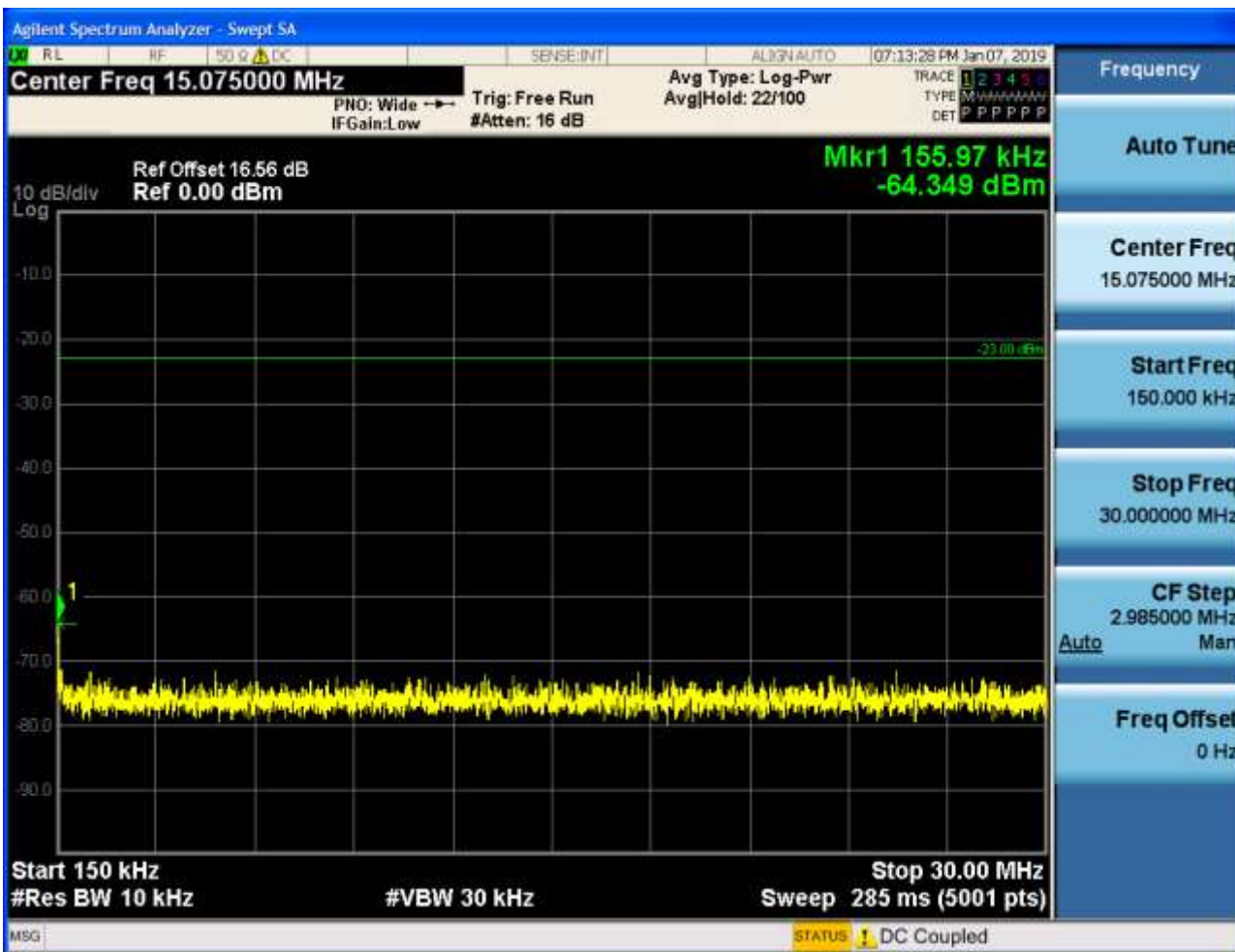


## 6.2.1.1.3 Test Bandwidth = 5

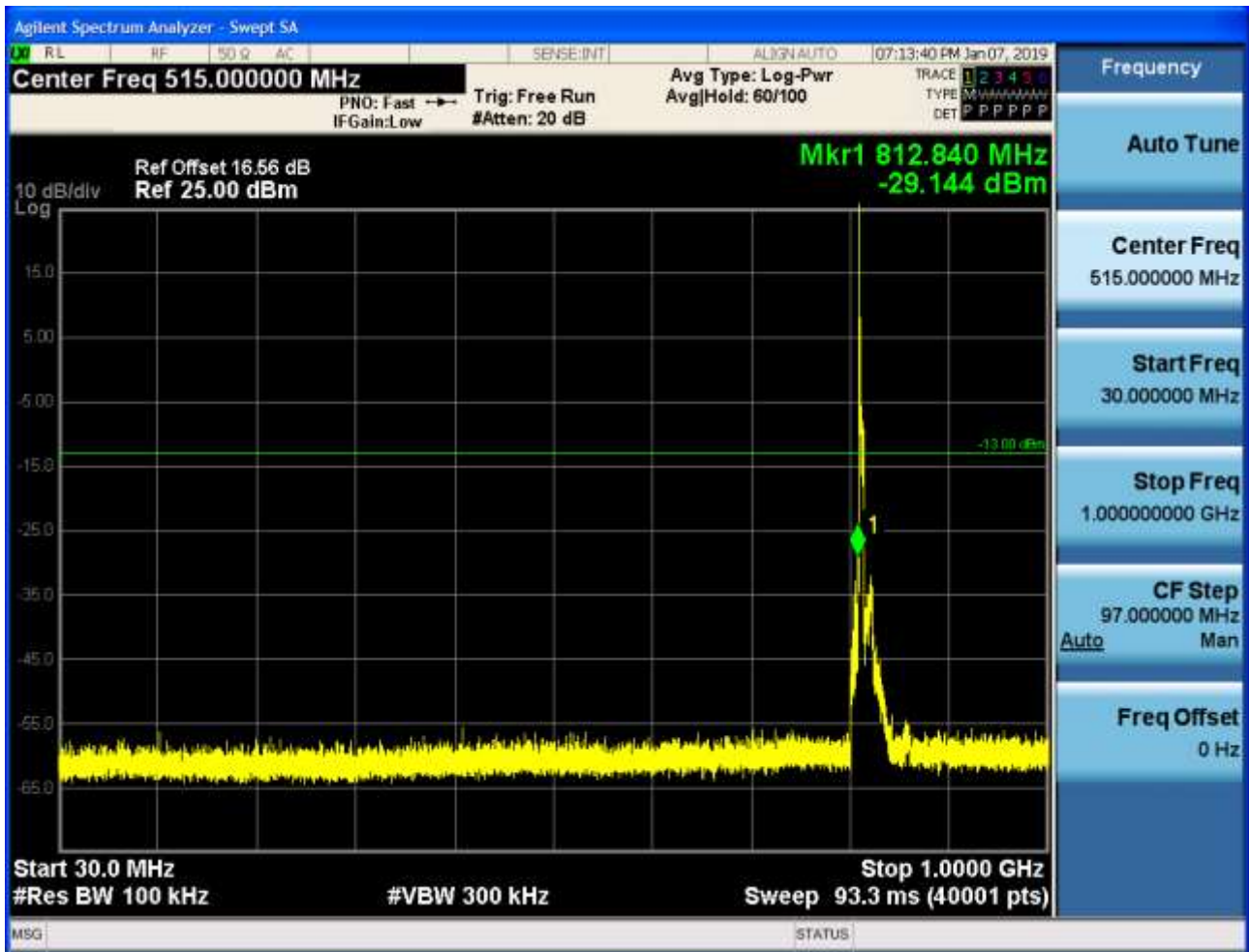
## 6.2.1.1.3.1 Test Channel = LCH

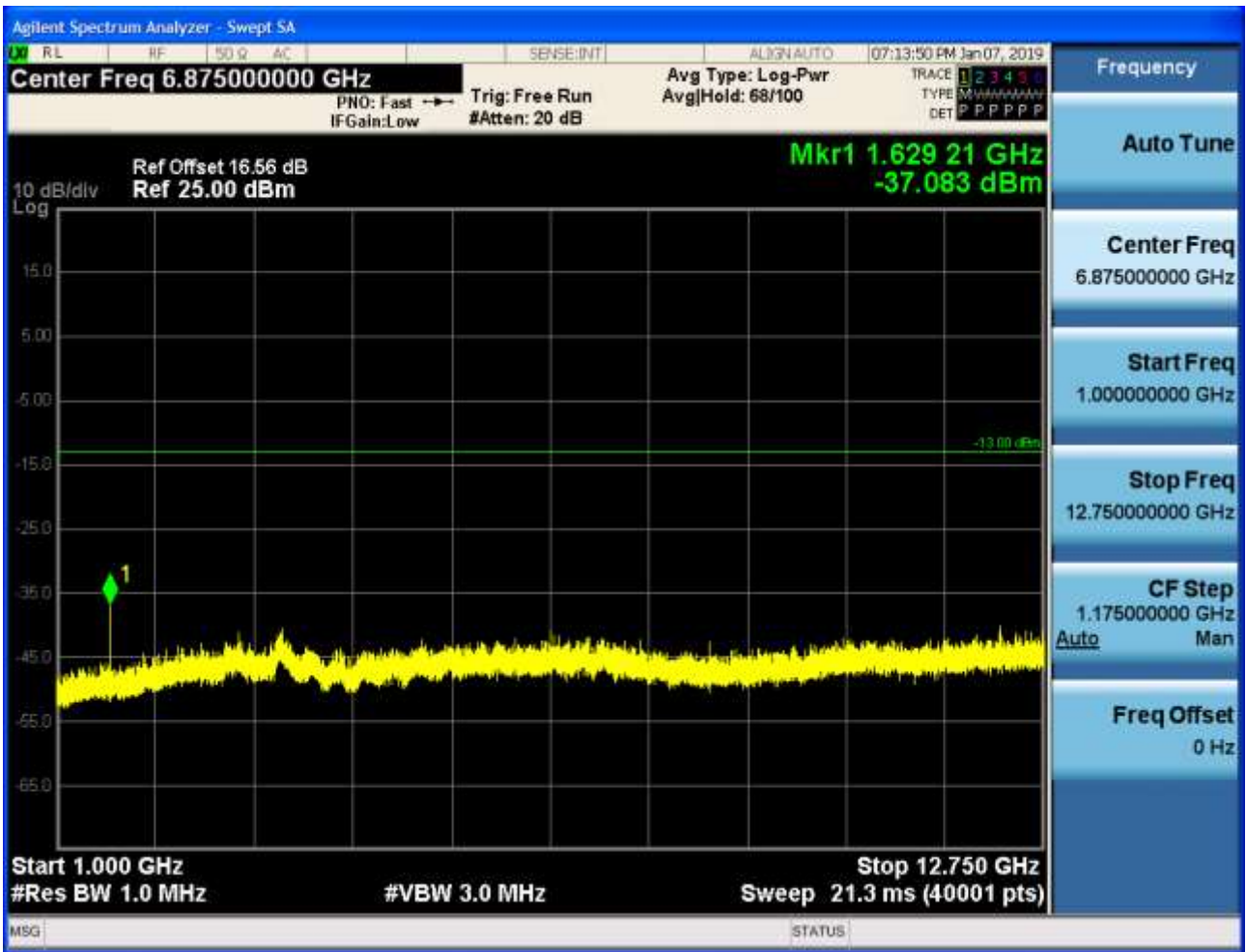
## 6.2.1.1.3.1.1 Test RB = RB1#0







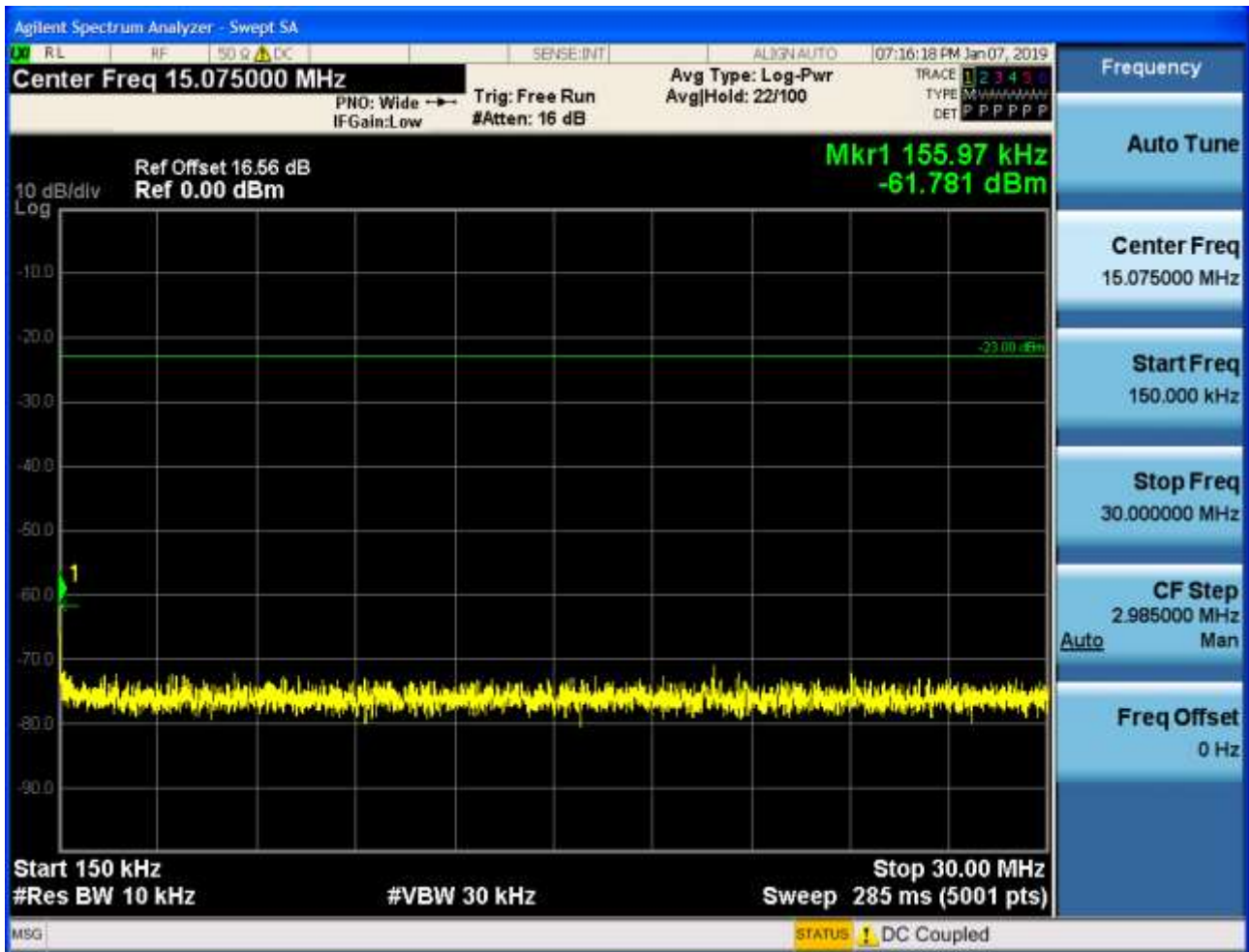


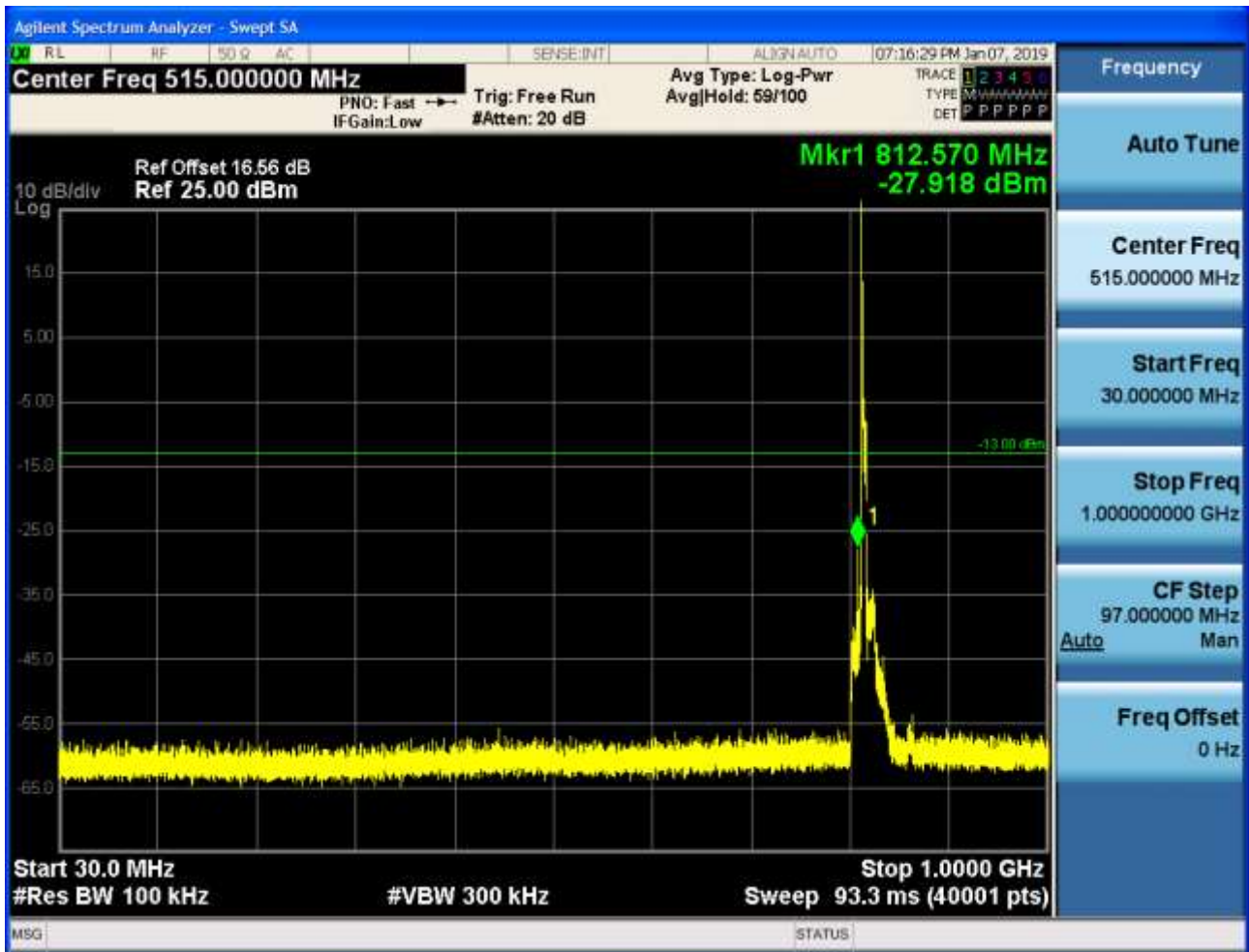


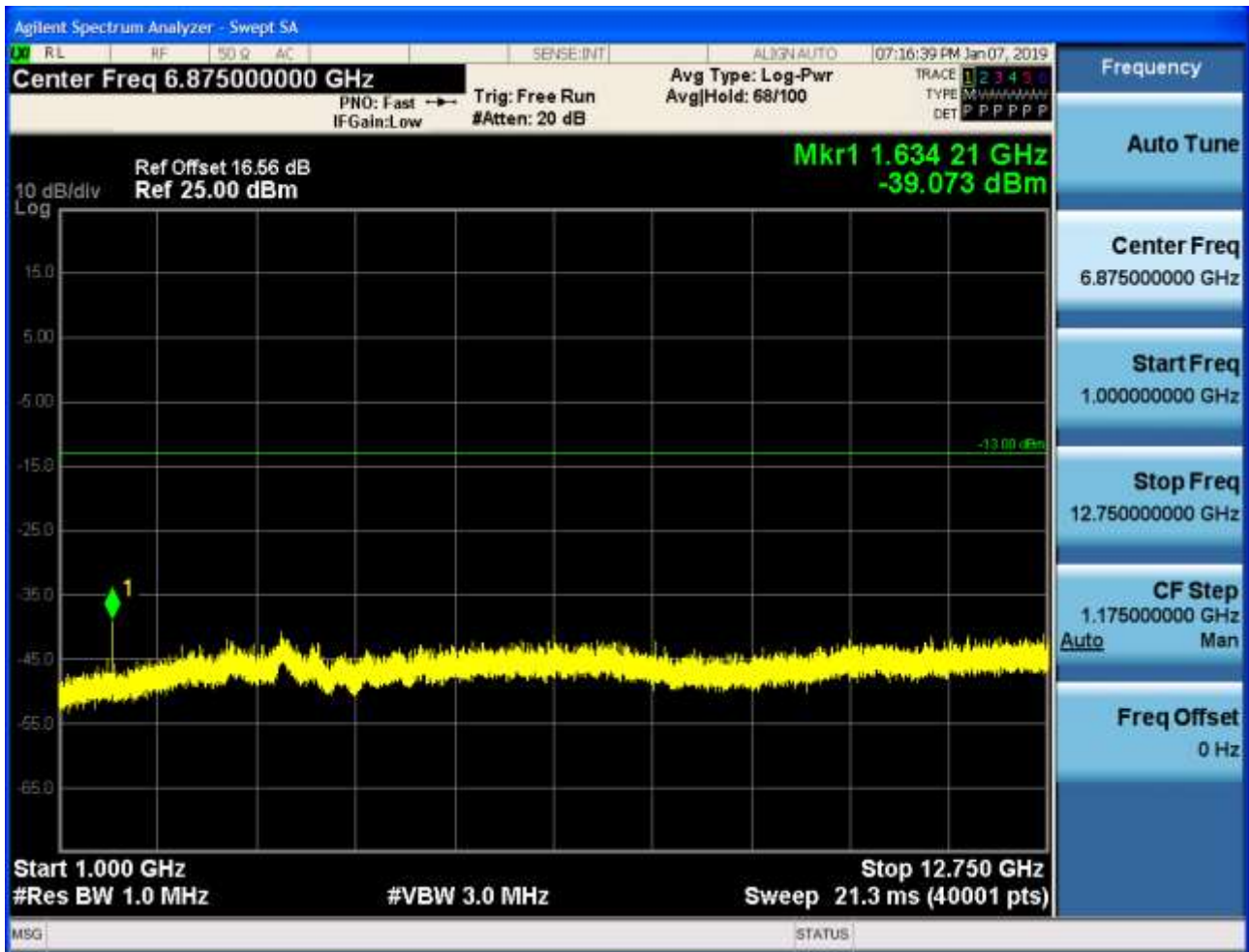
## 6.2.1.1.3.2 Test Channel = MCH

## 6.2.1.1.3.2.1 Test RB = RB1#0







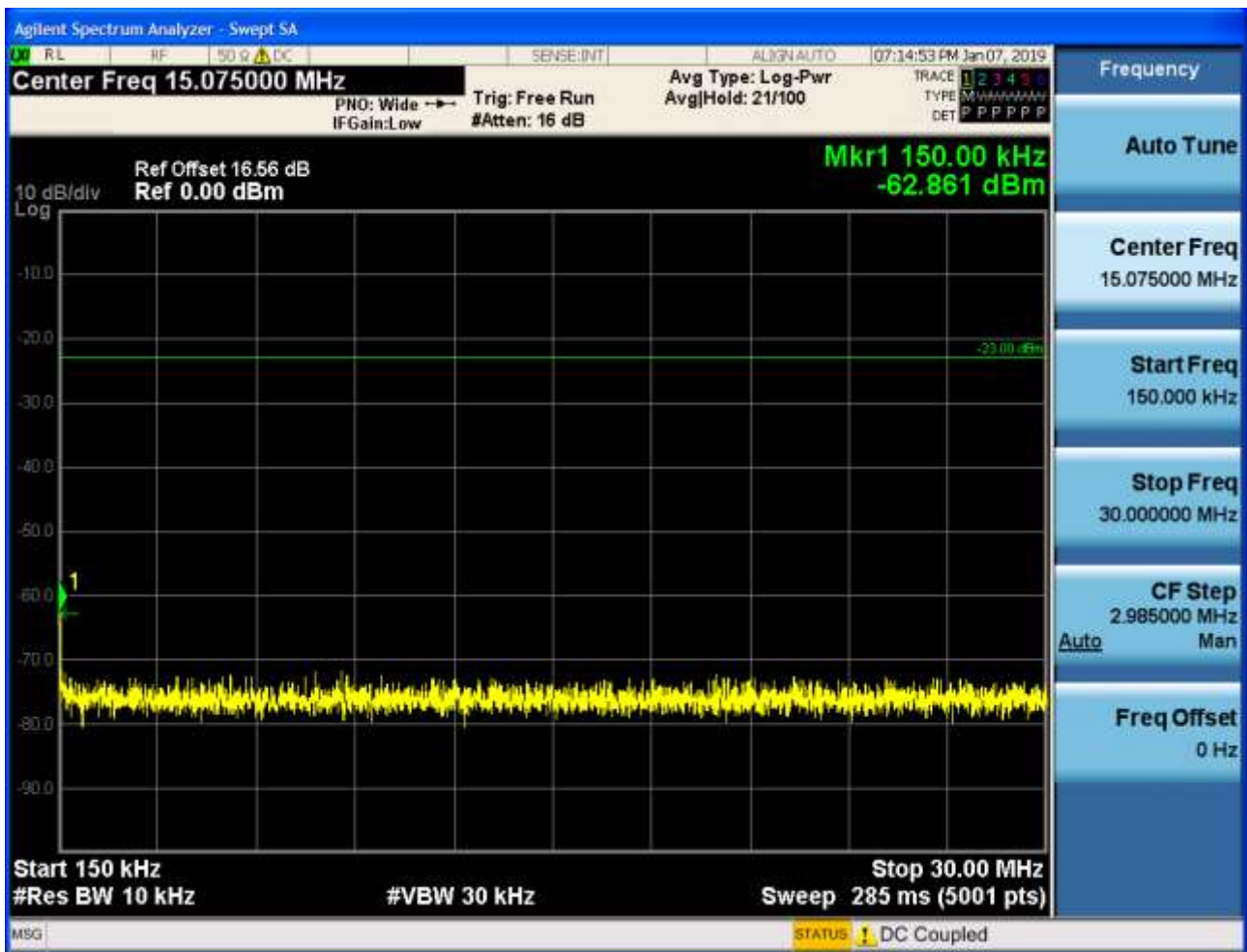


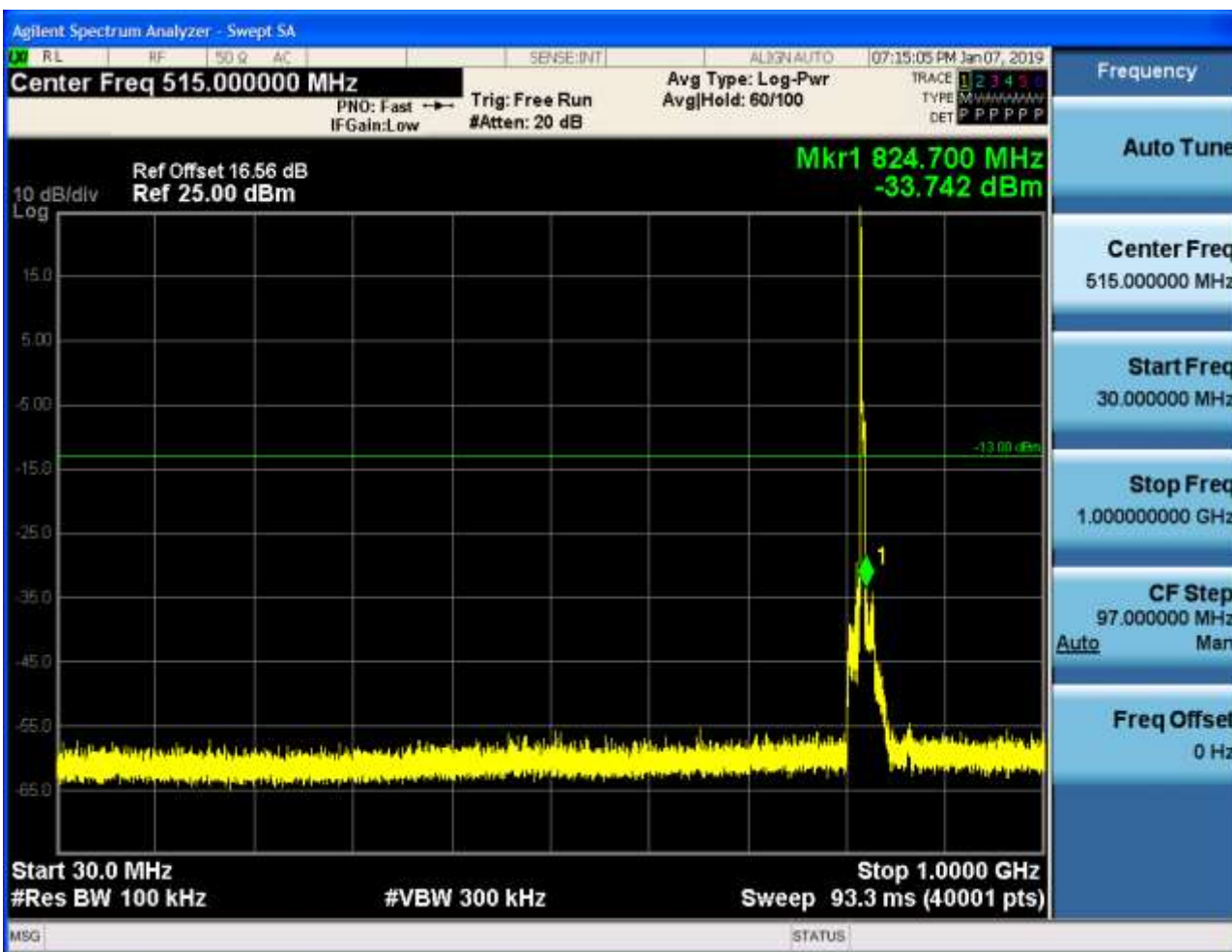


## 6.2.1.1.3.3 Test Channel = HCH

## 6.2.1.1.3.3.1 Test RB = RB1#0





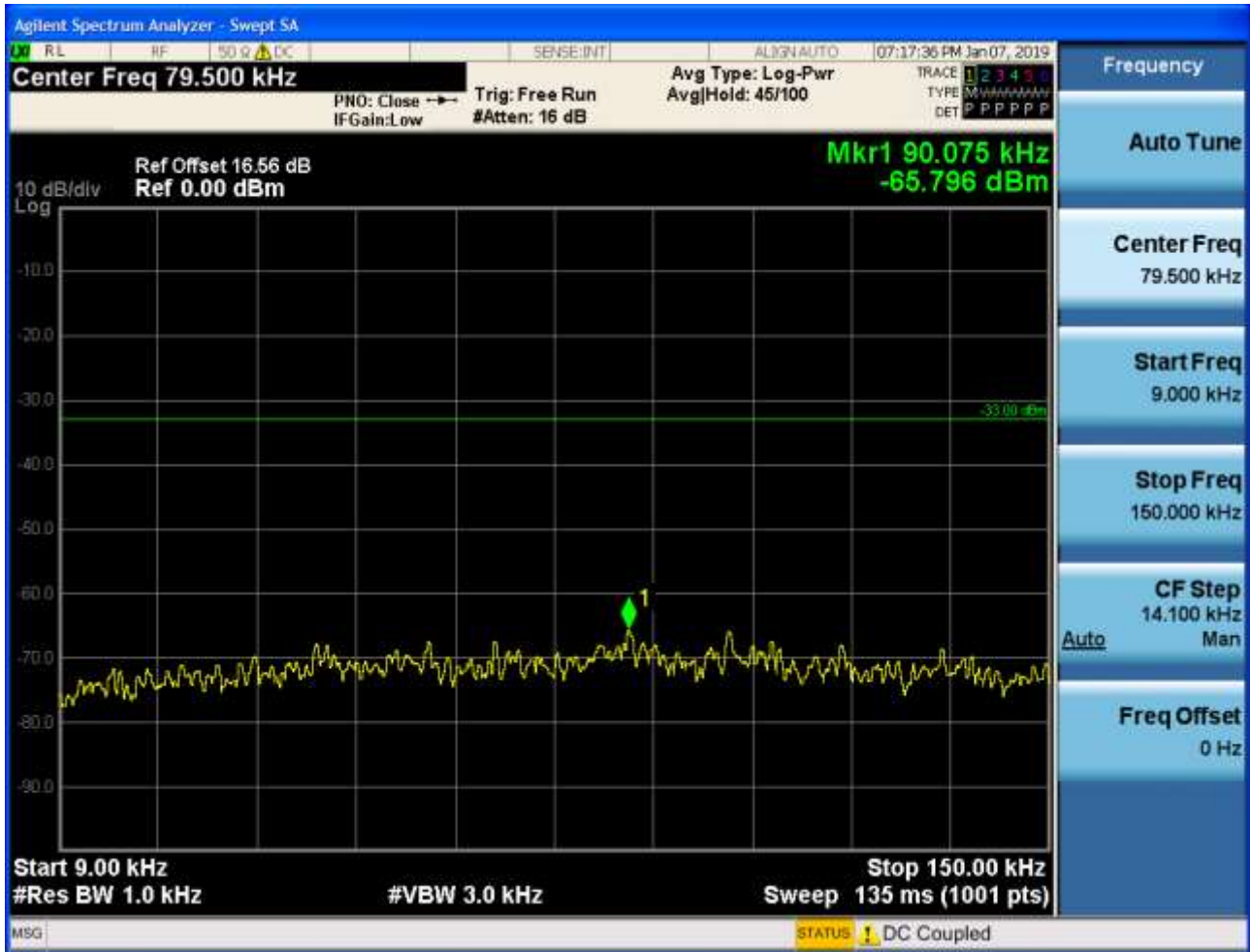


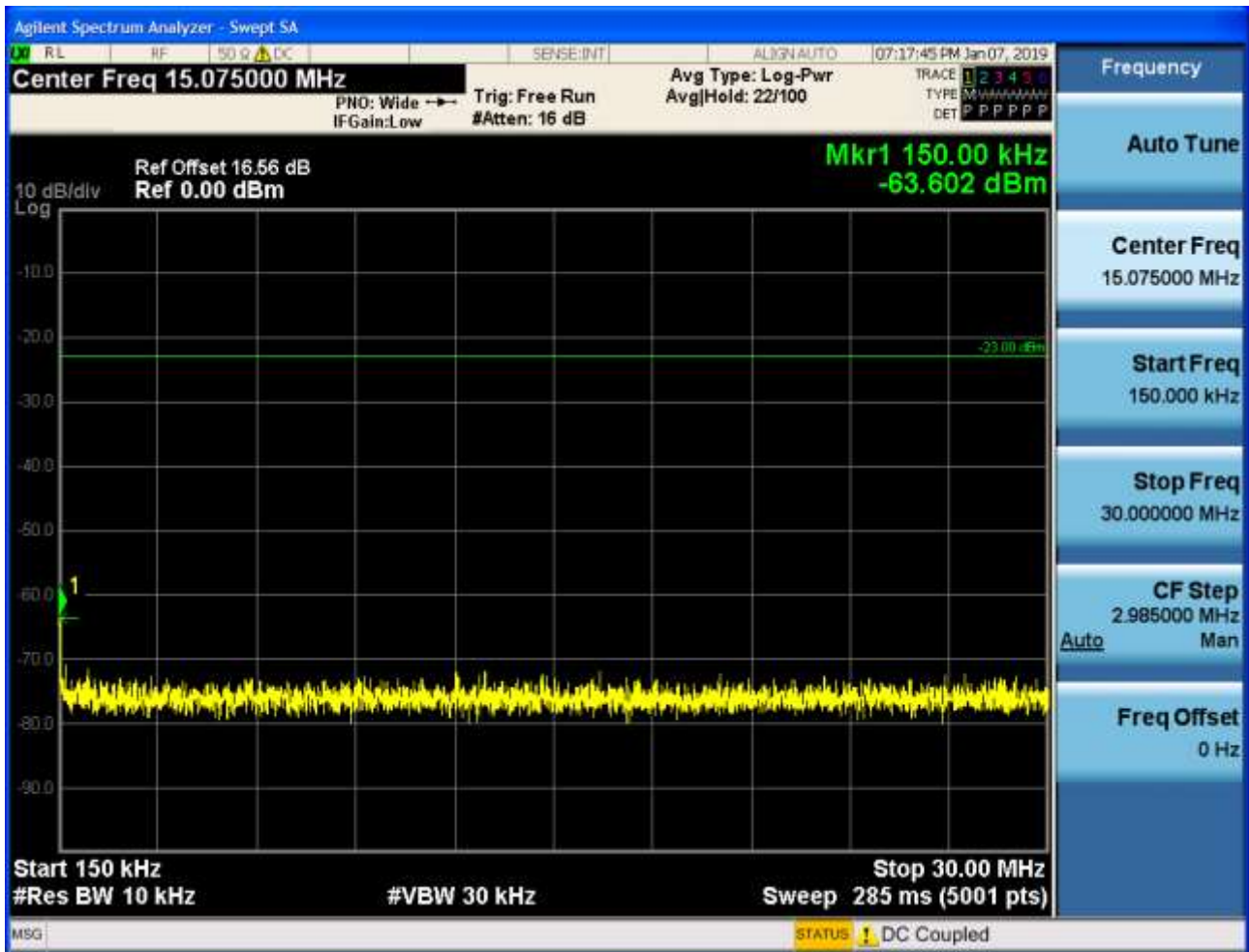


## 6.2.1.1.4 Test Bandwidth = 10

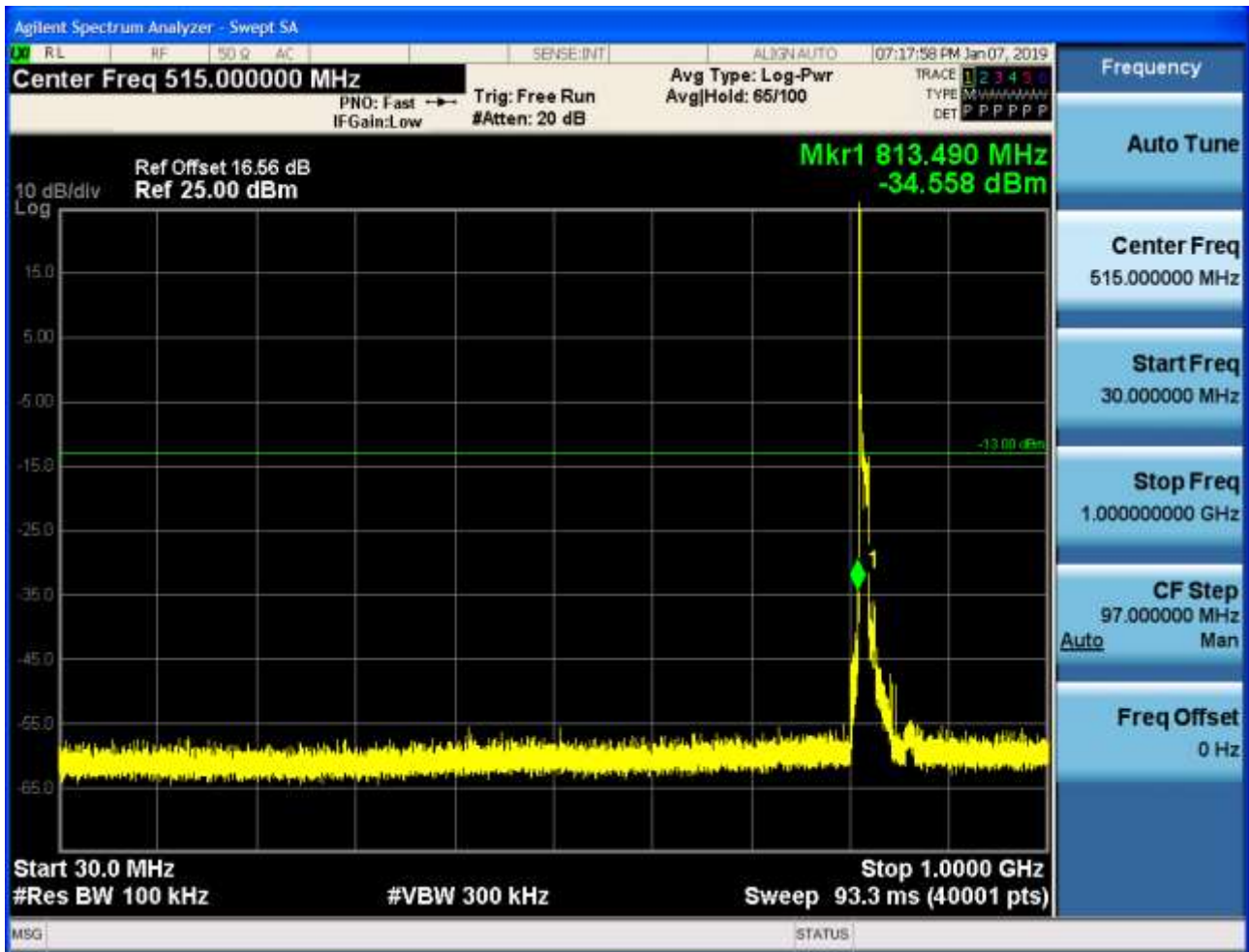
## 6.2.1.1.4.1 Test Channel = MCH

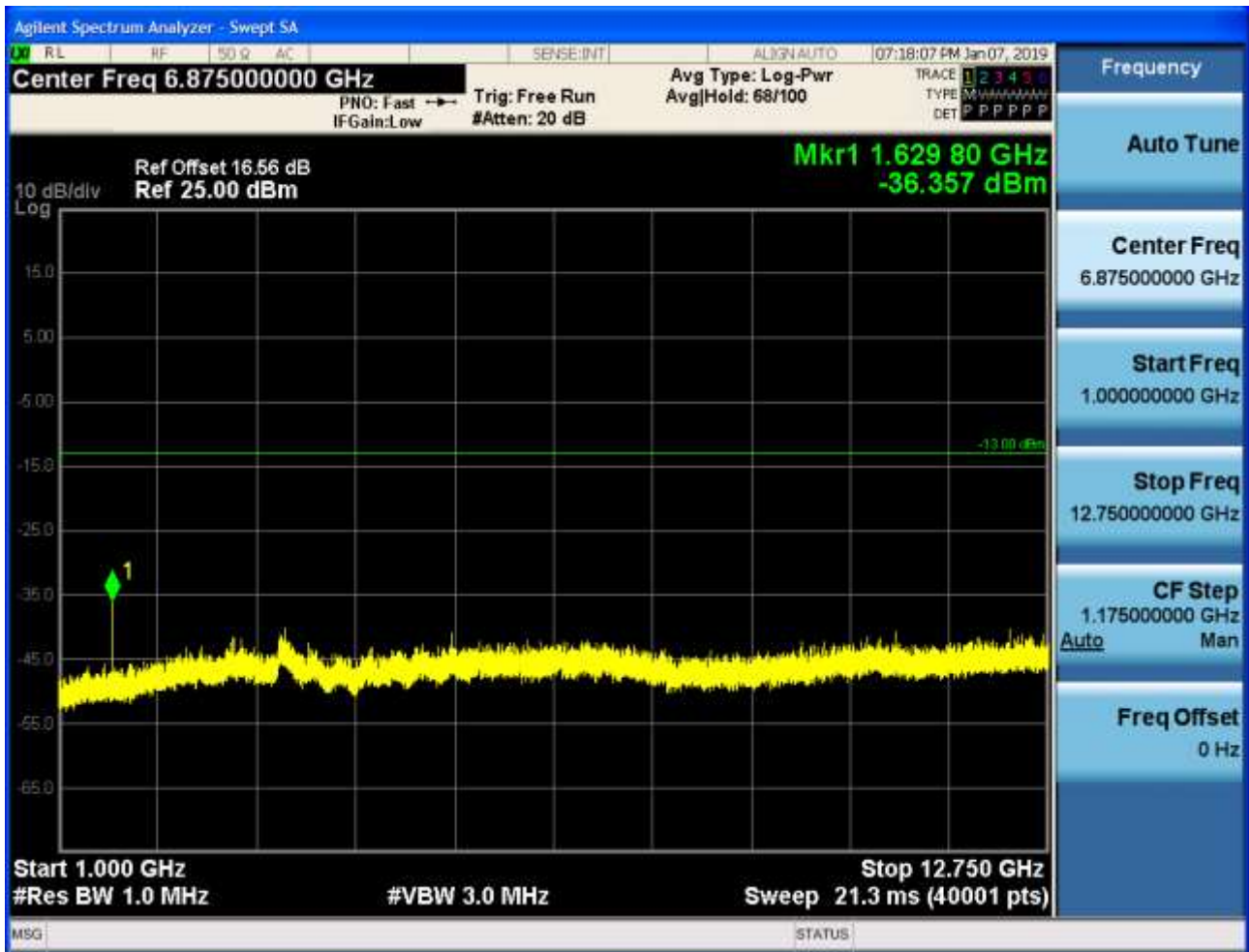
## 6.2.1.1.4.1.1 Test RB = RB1#0











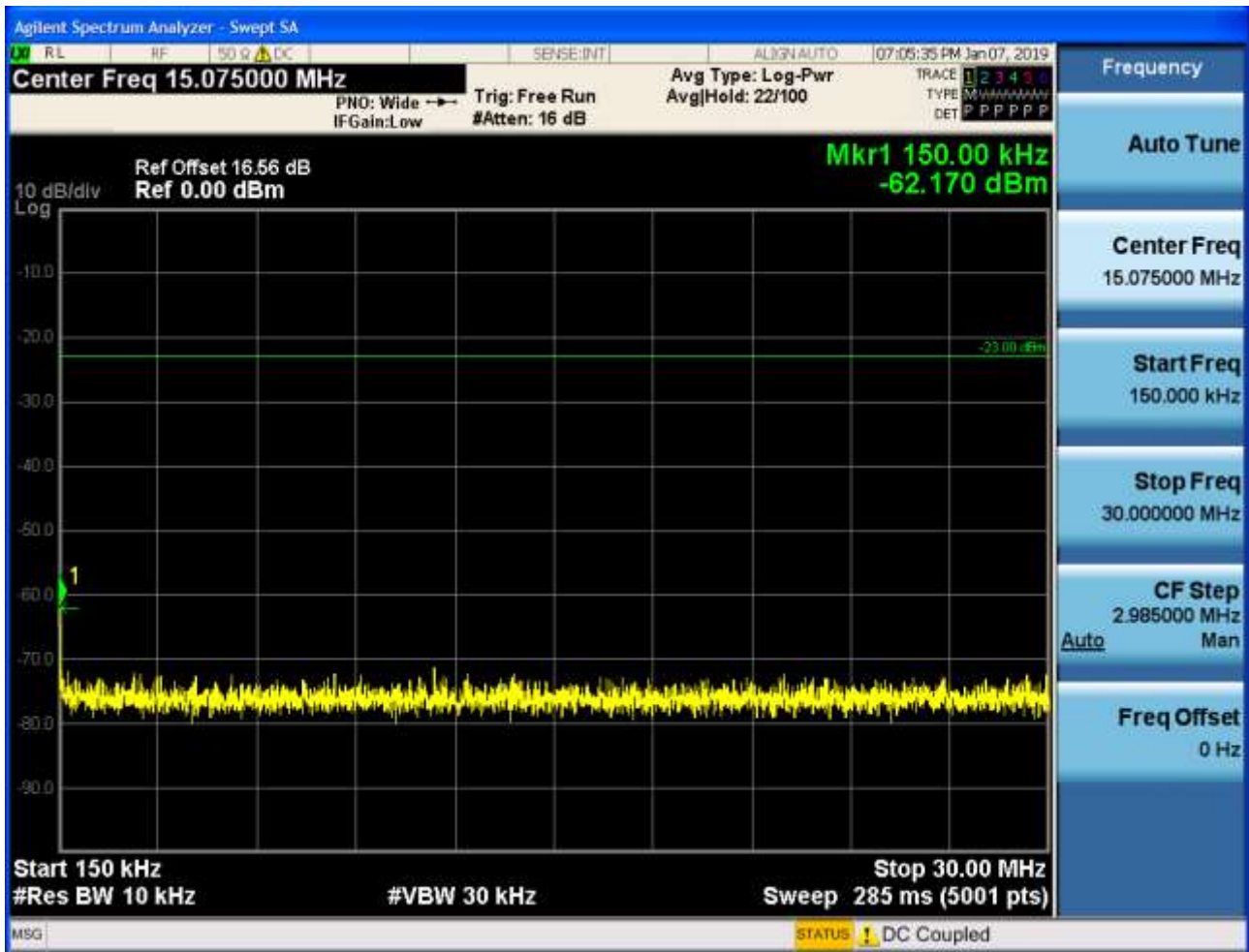
## 6.2.1.2 Test Mode = LTE/TM2

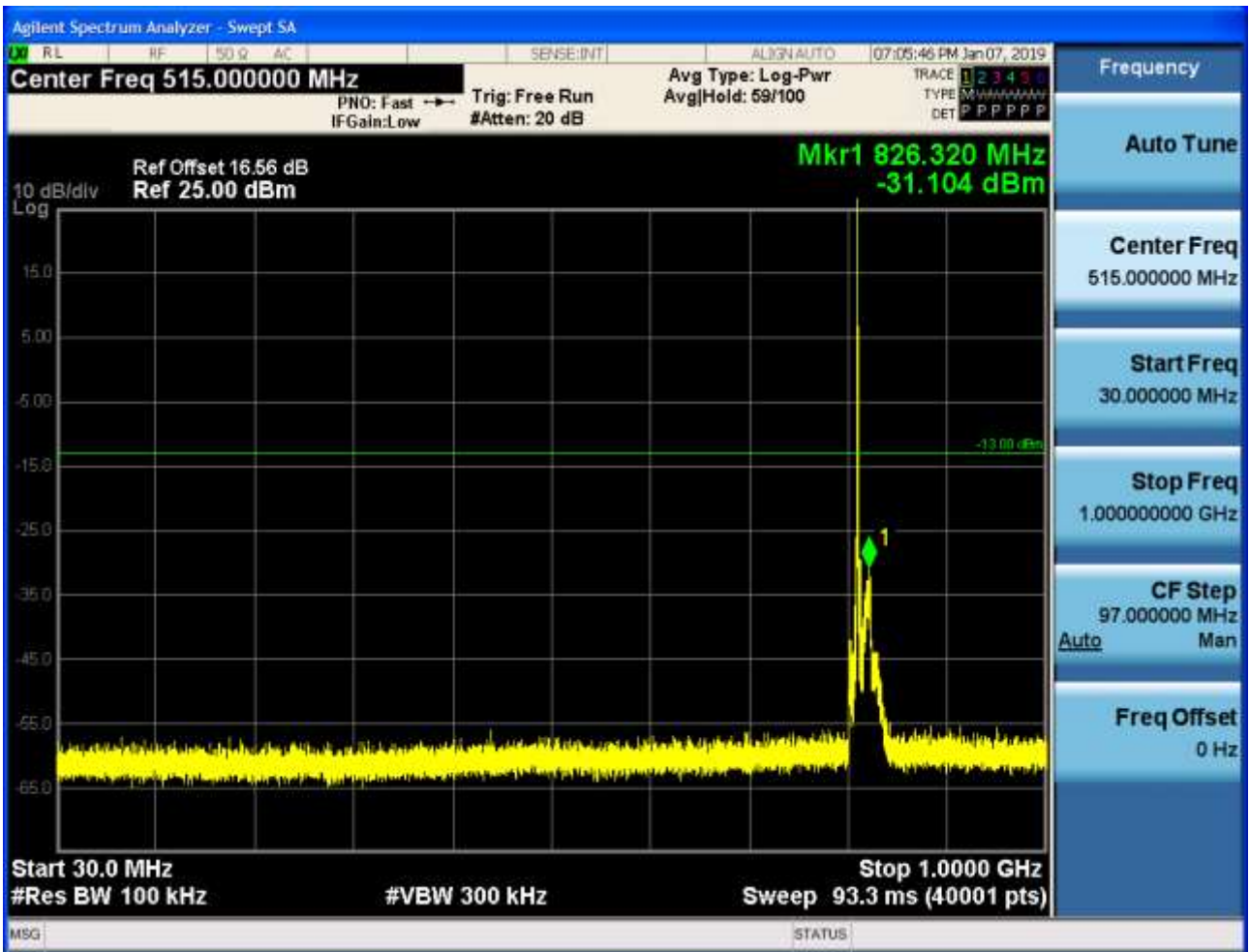
### 6.2.1.2.1 Test Bandwidth = 1.4

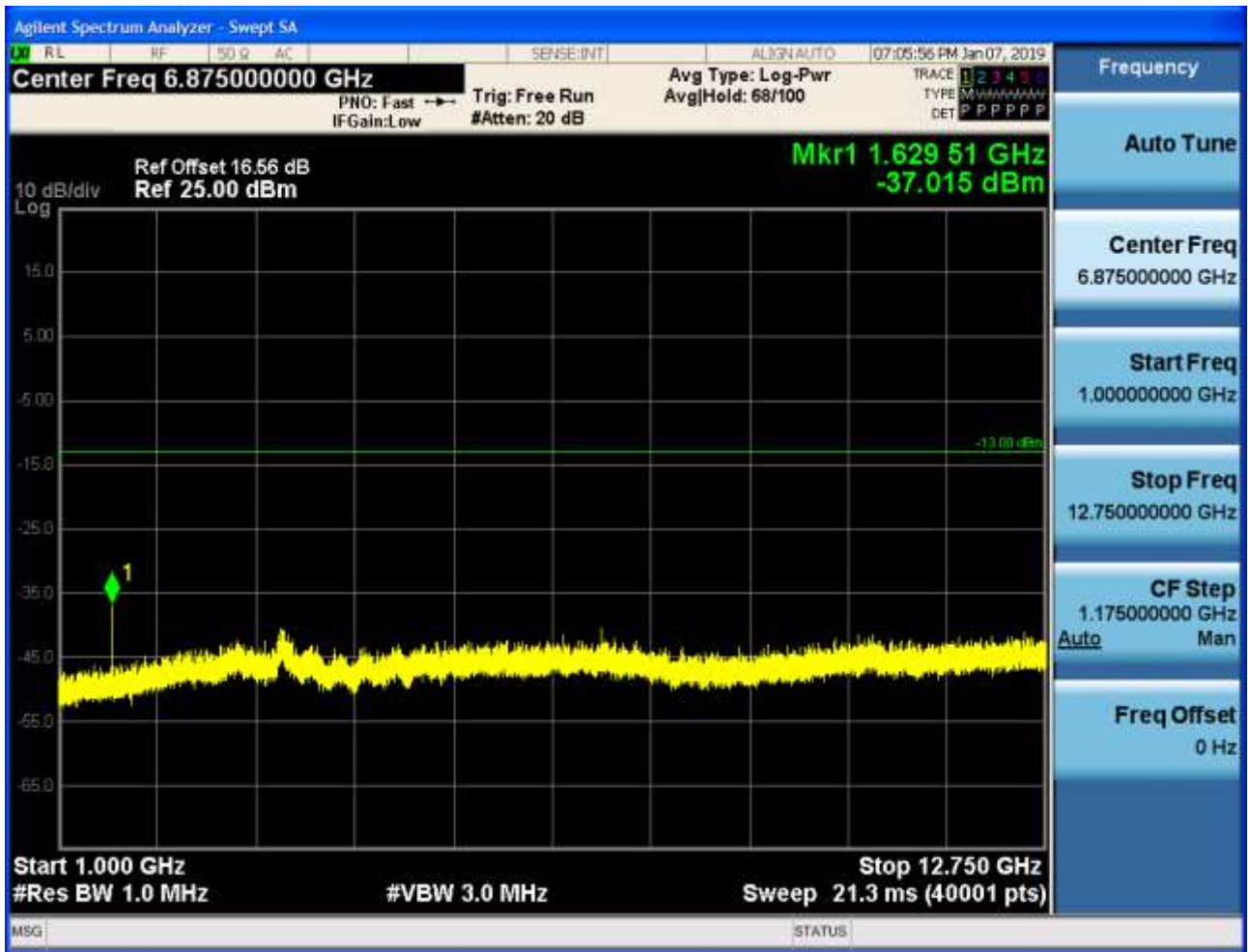
#### 6.2.1.2.1.1 Test Channel = LCH

##### 6.2.1.2.1.1.1 Test RB = RB1#0





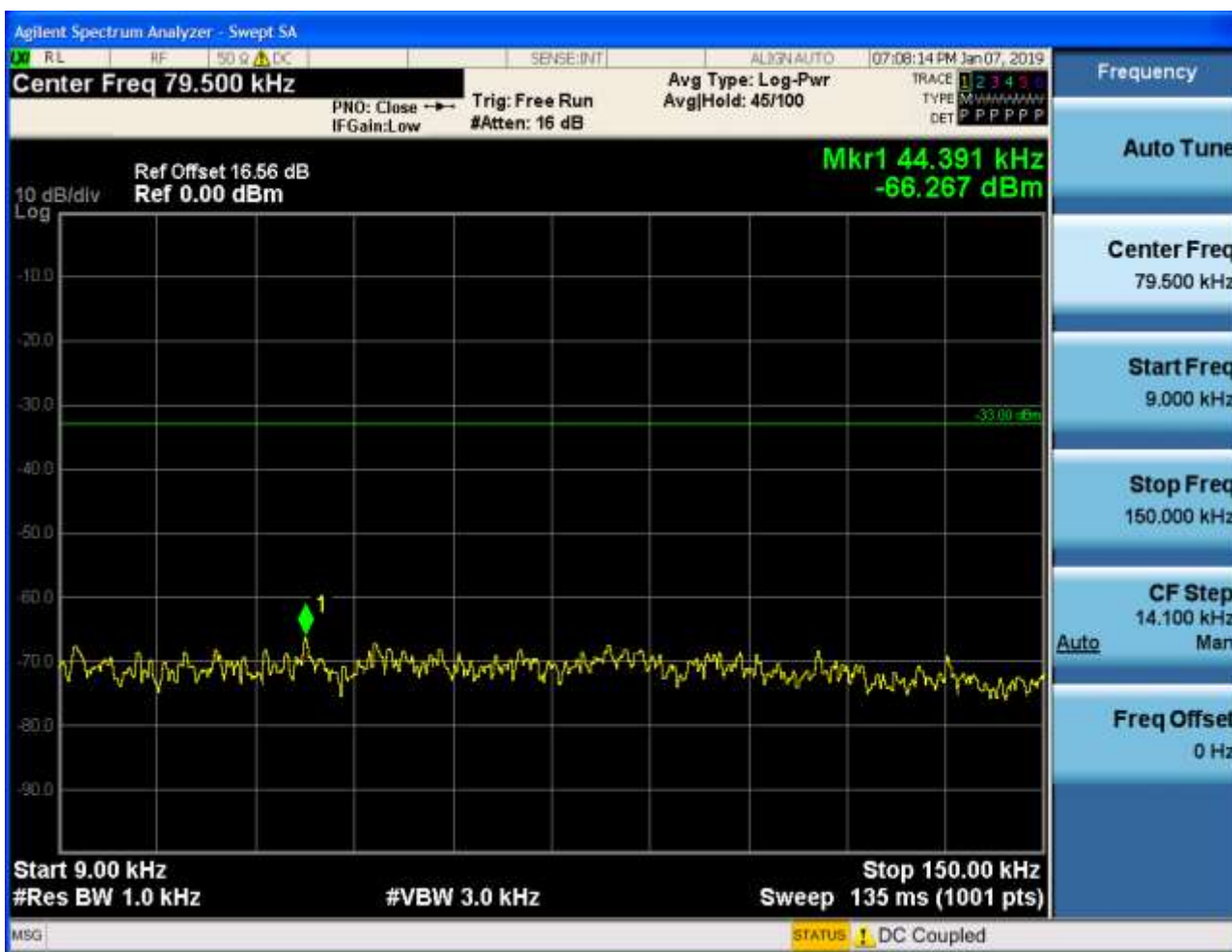


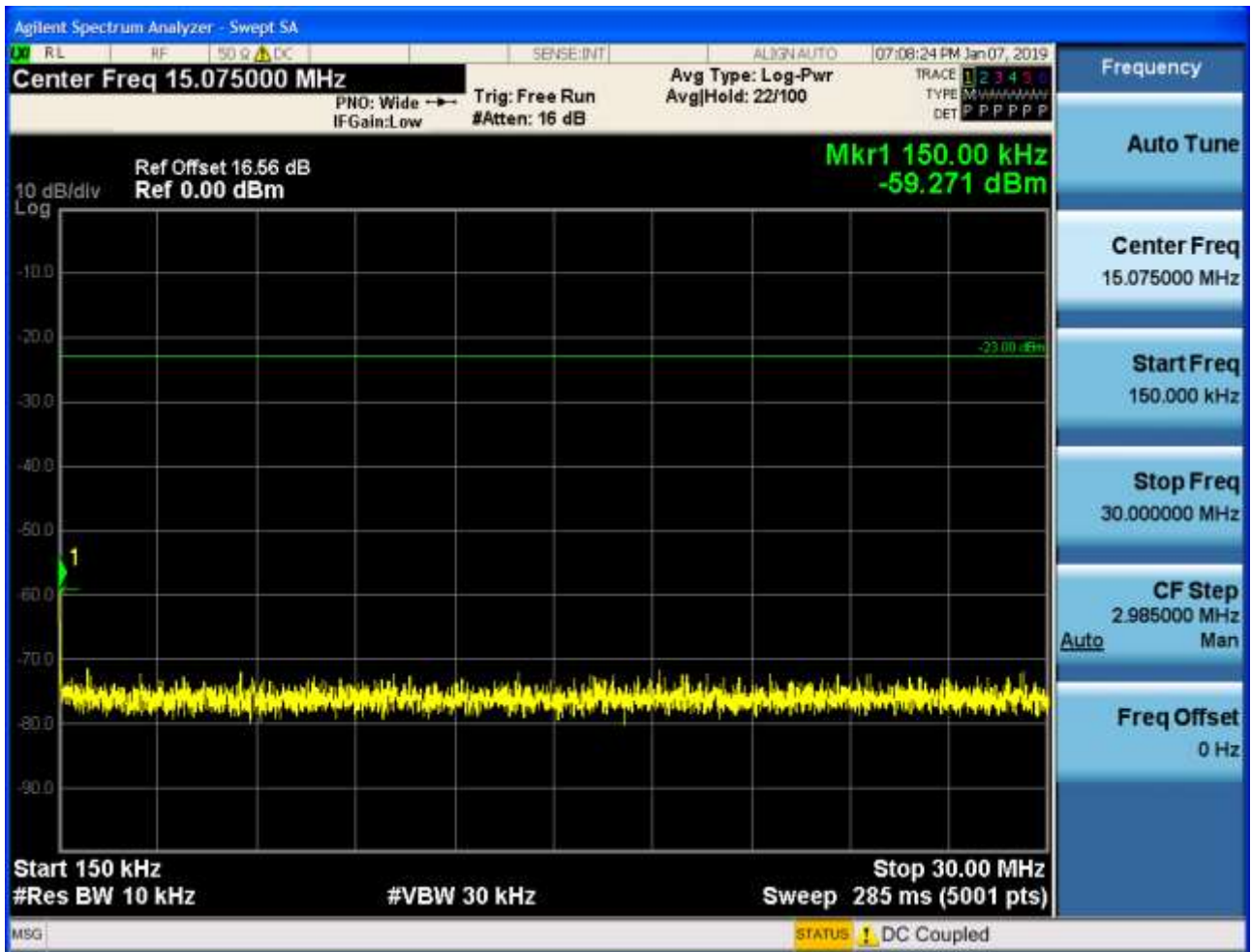


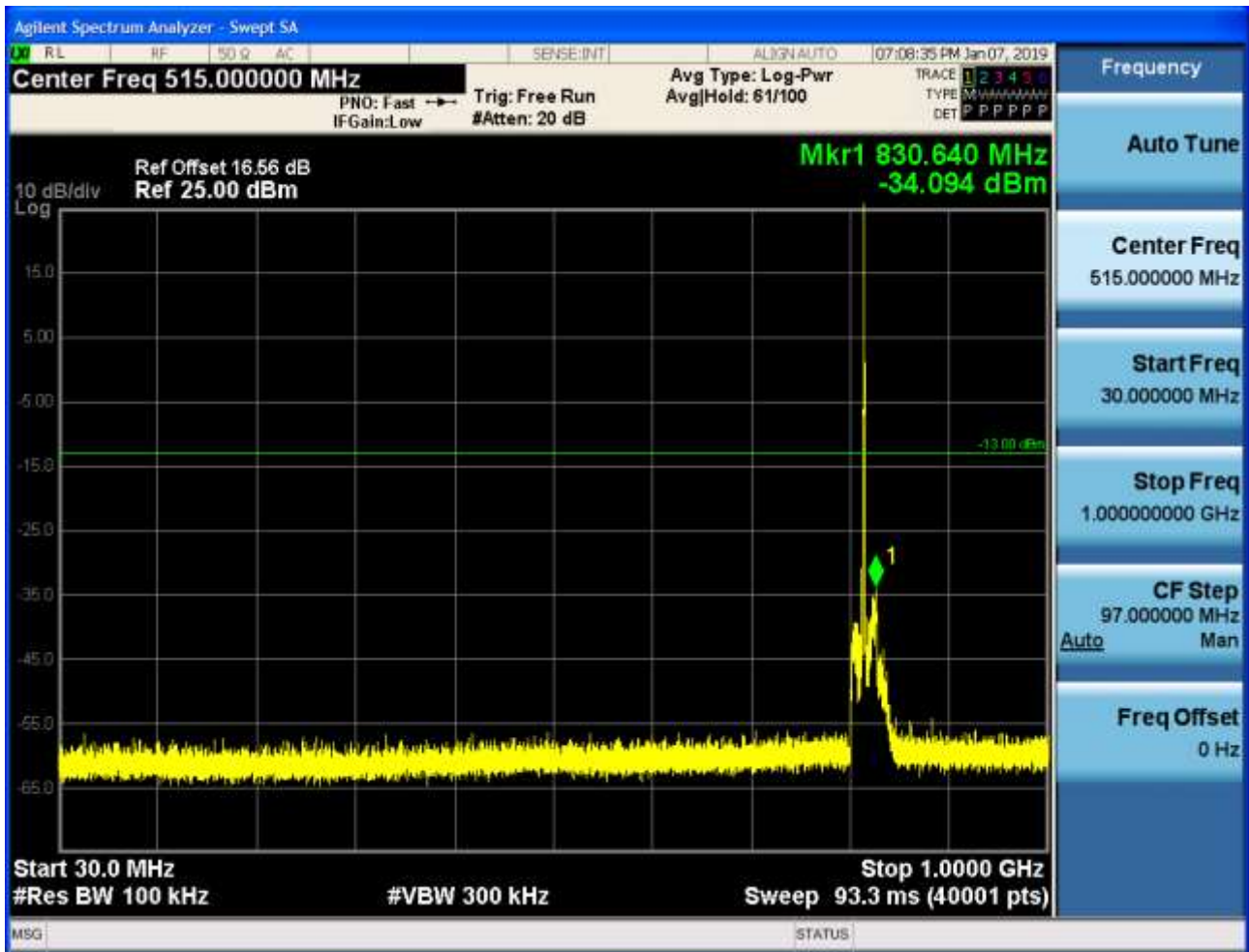


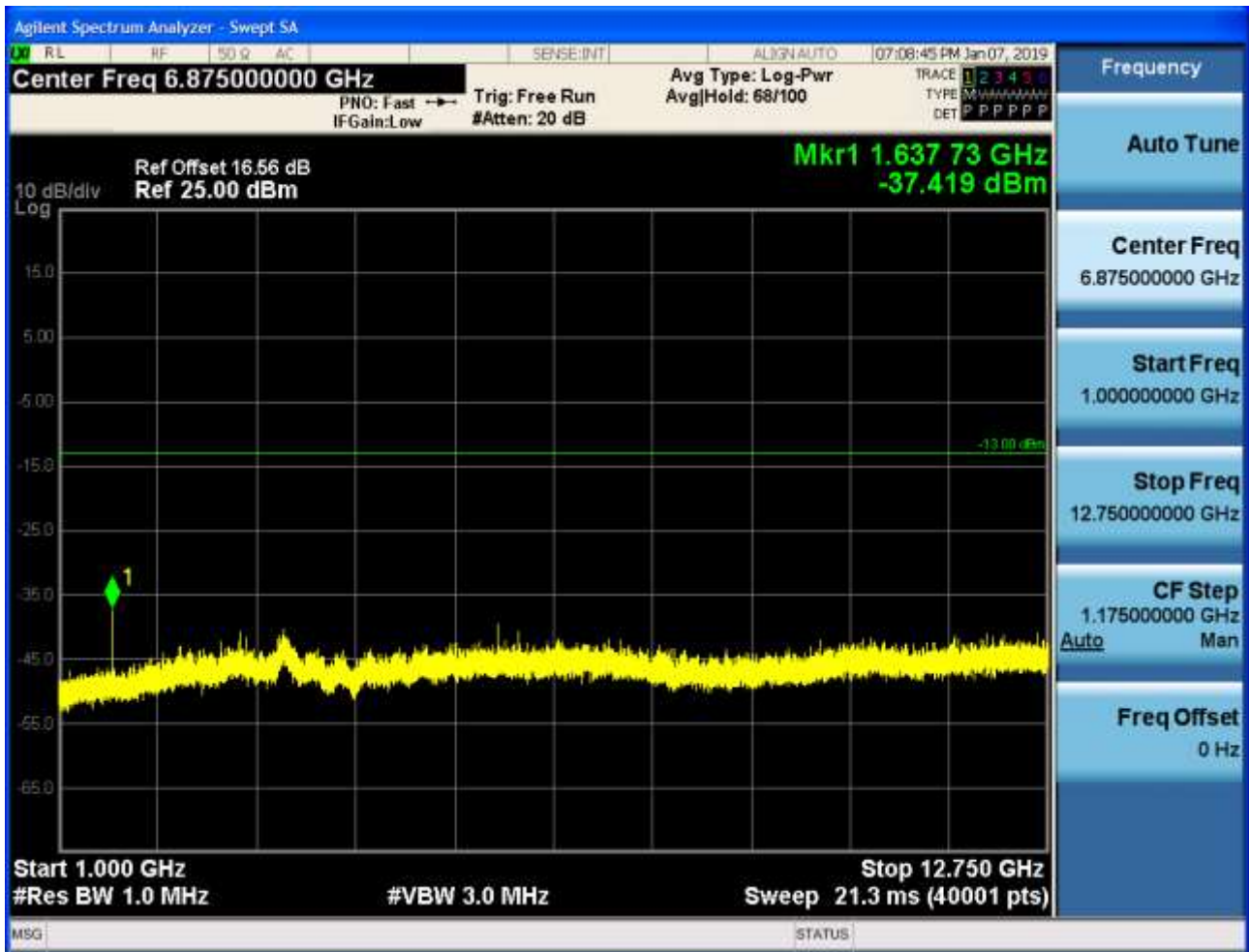
## 6.2.1.2.1.2 Test Channel = MCH

## 6.2.1.2.1.2.1 Test RB = RB1#0



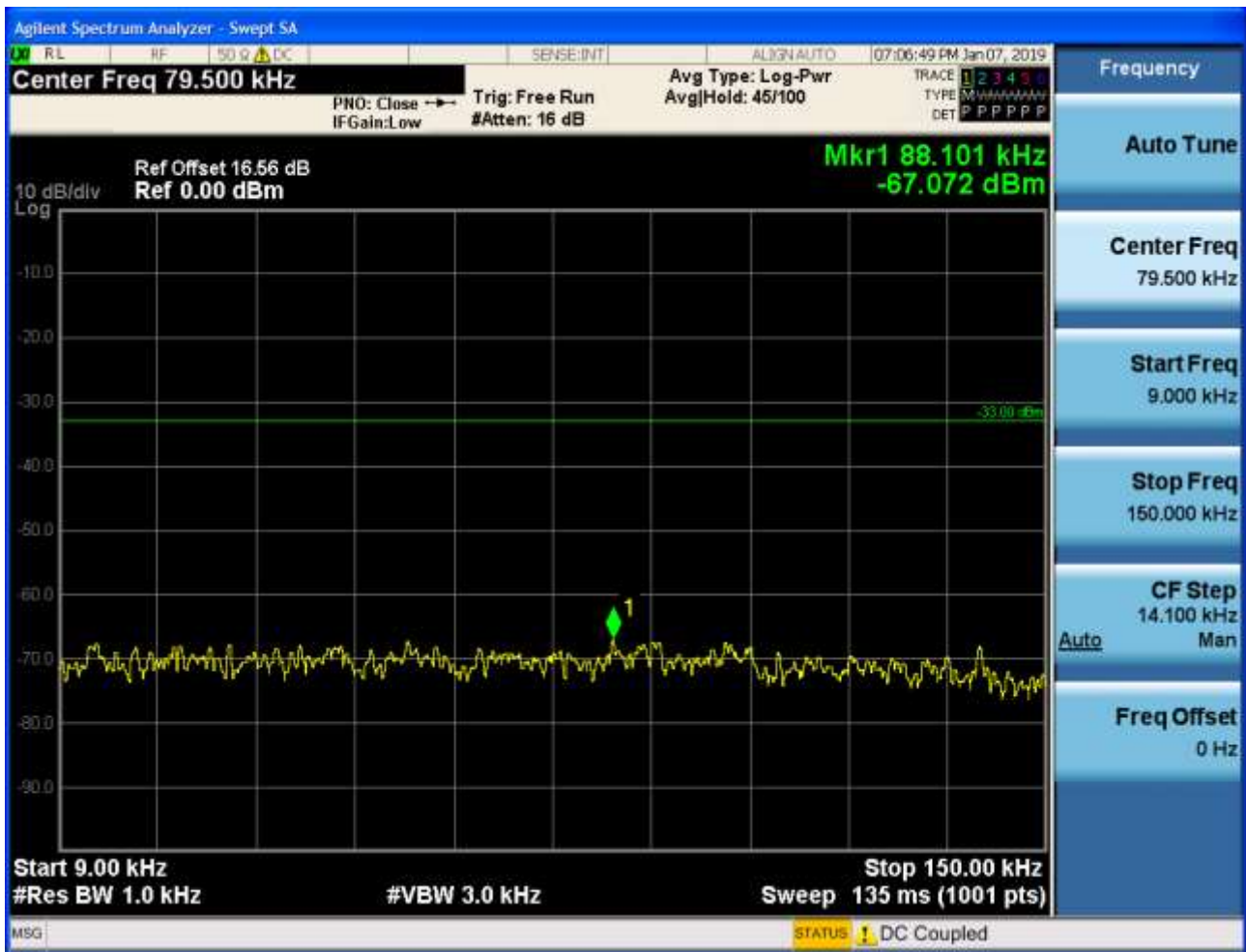


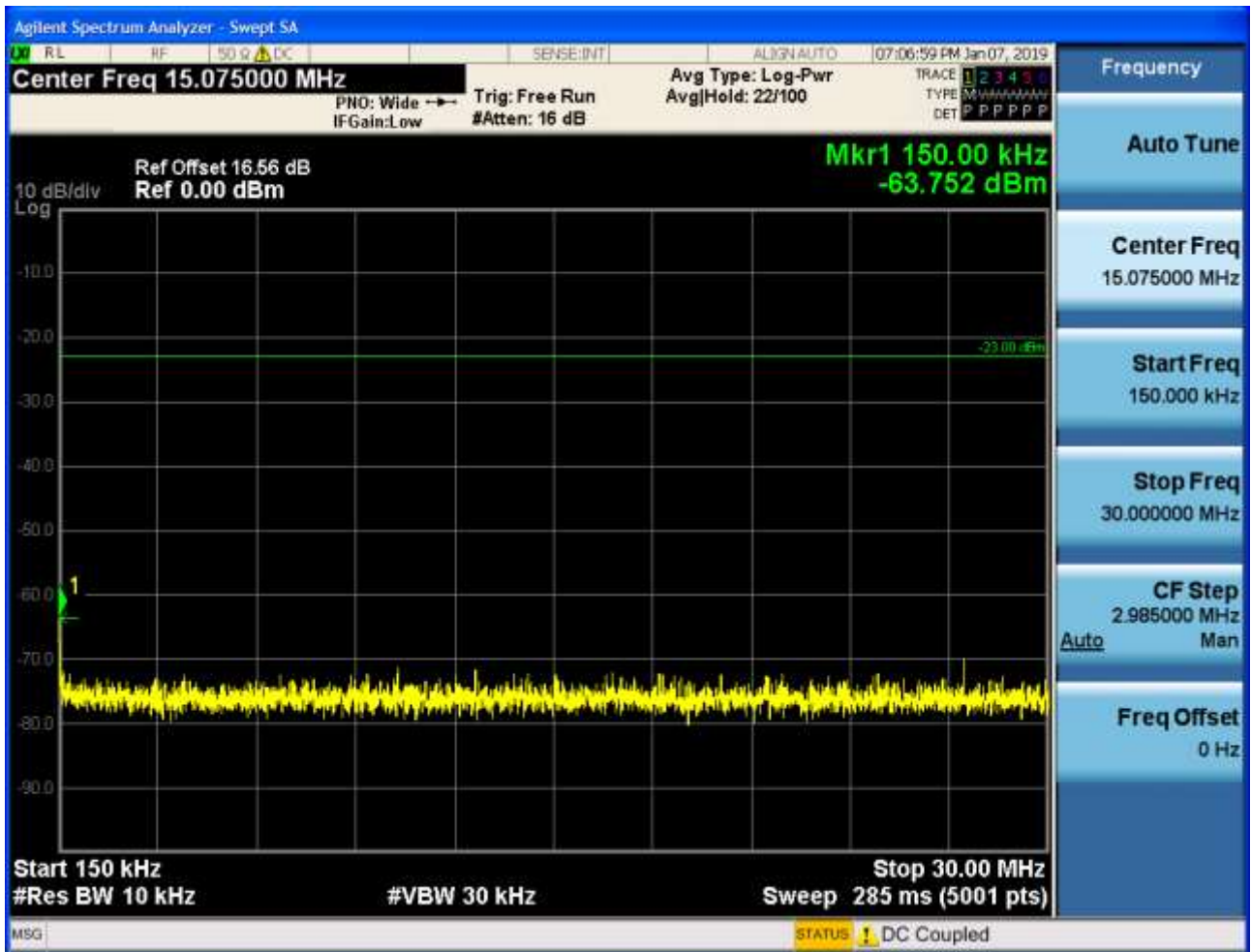




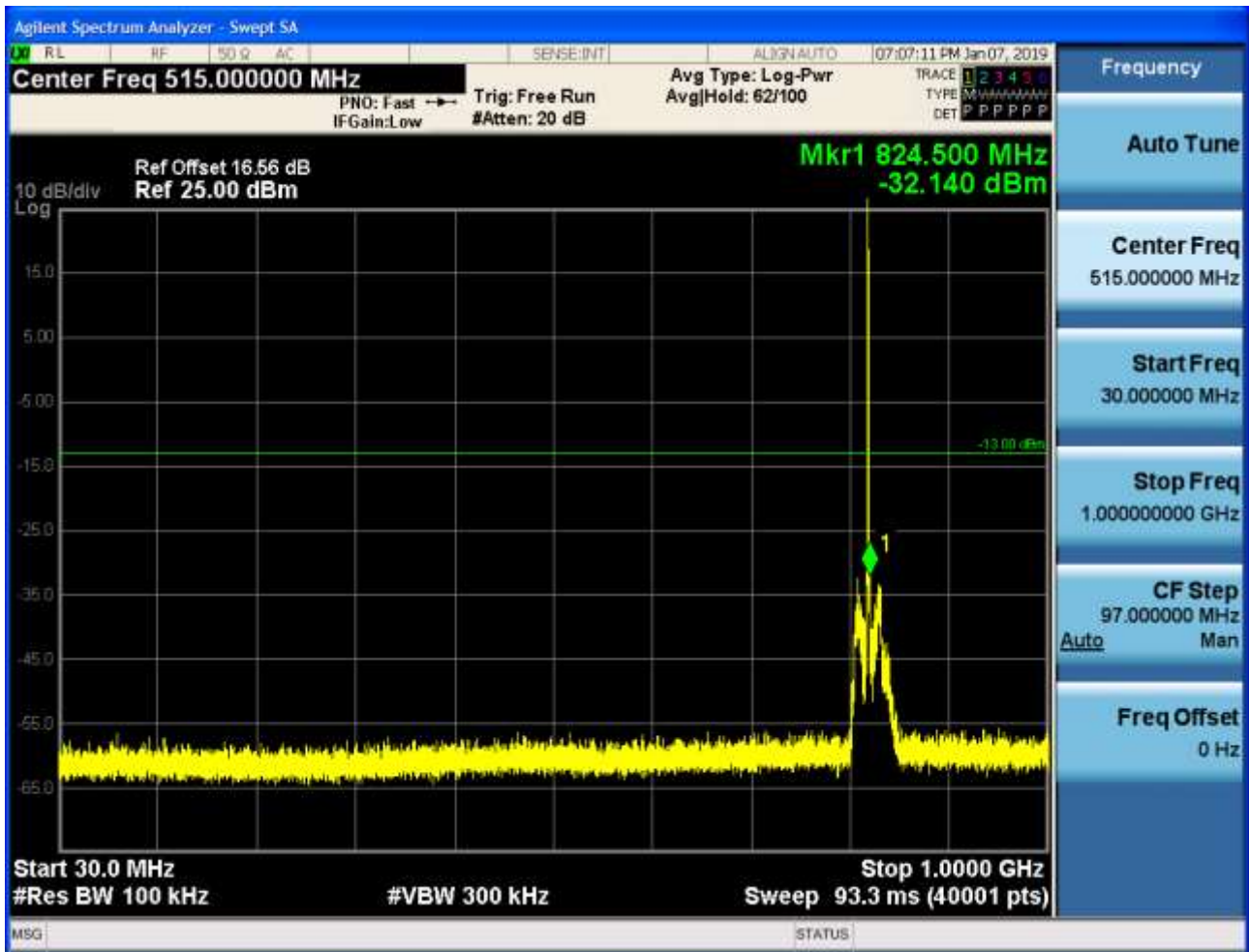
## 6.2.1.2.1.3 Test Channel = HCH

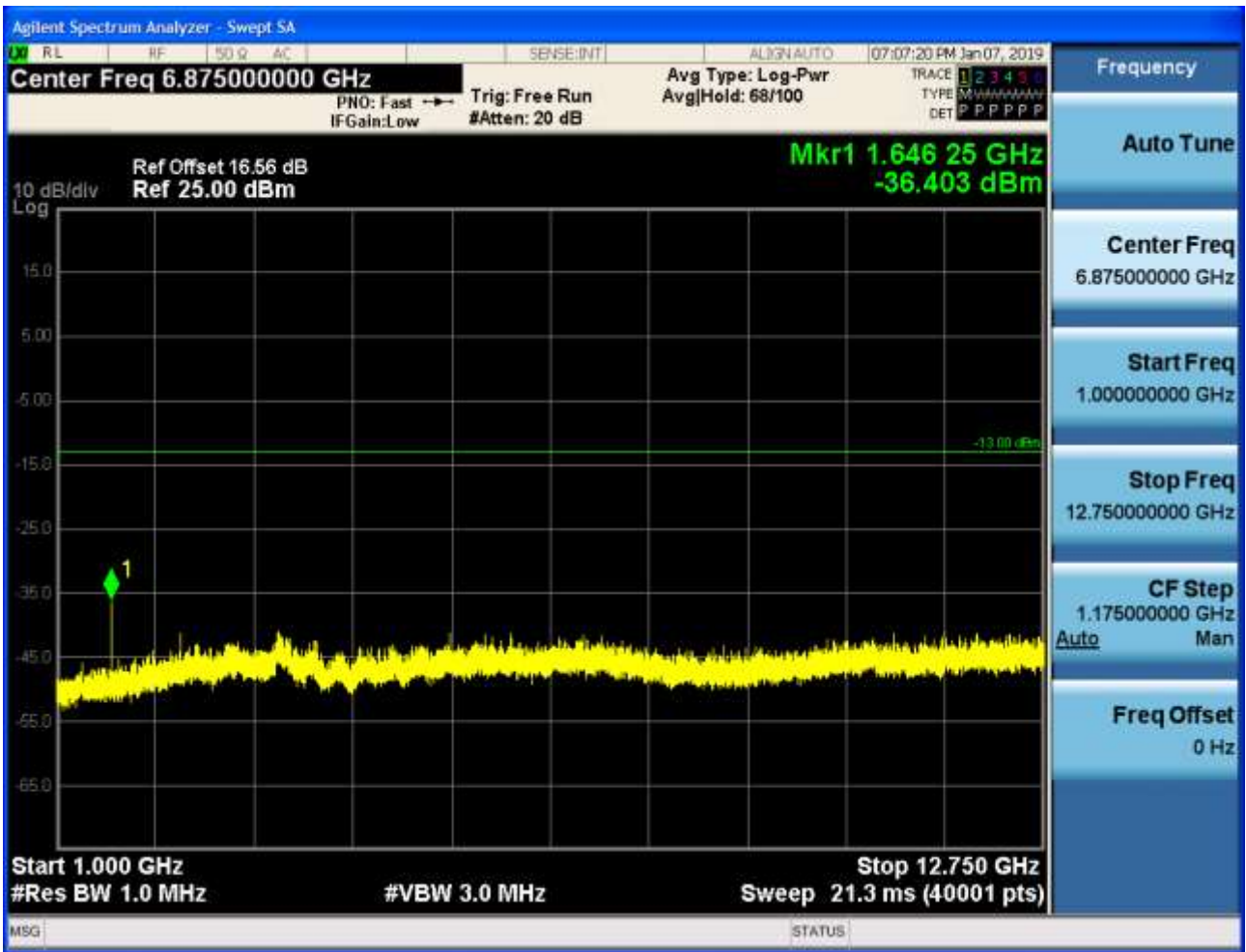
## 6.2.1.2.1.3.1 Test RB = RB1#0







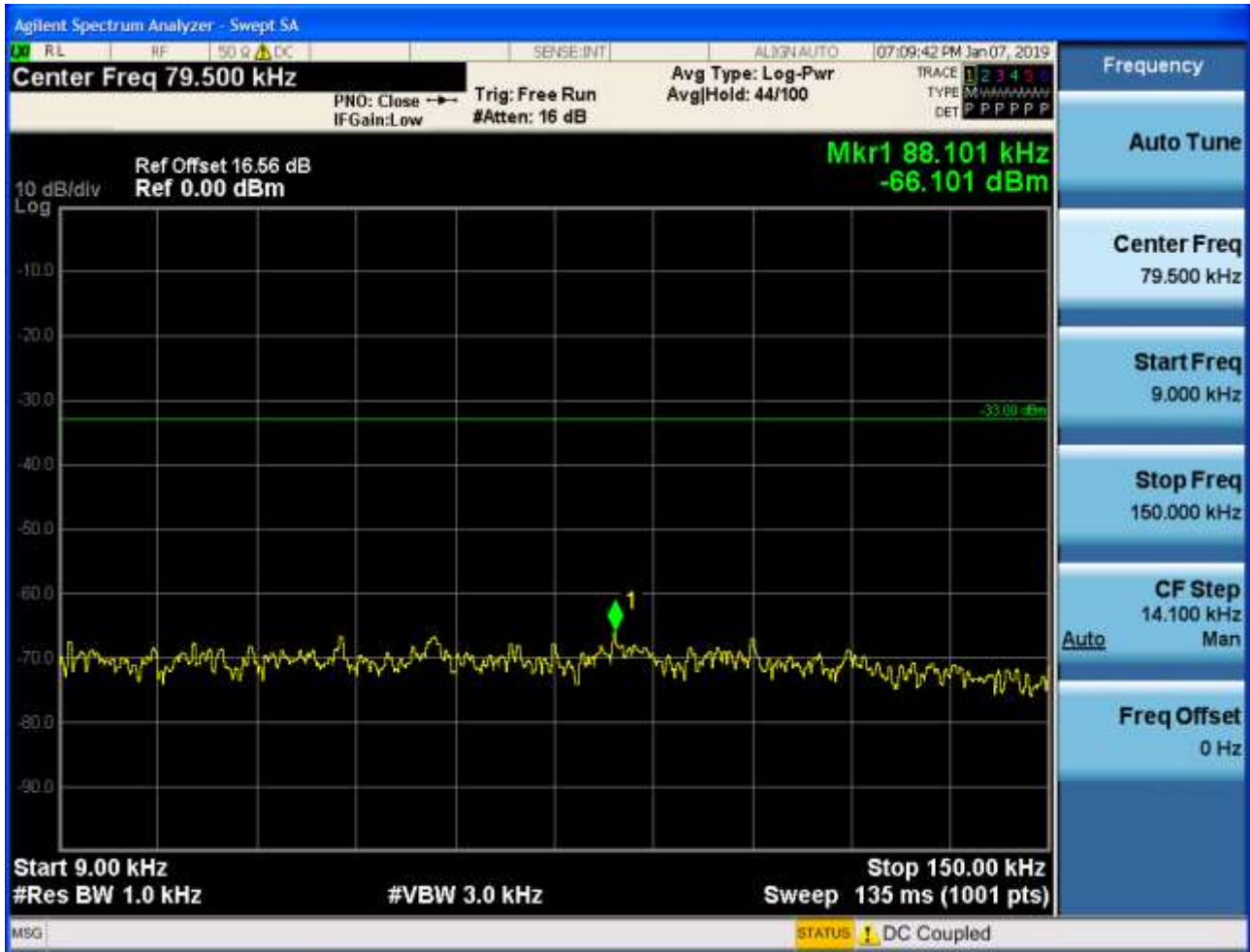


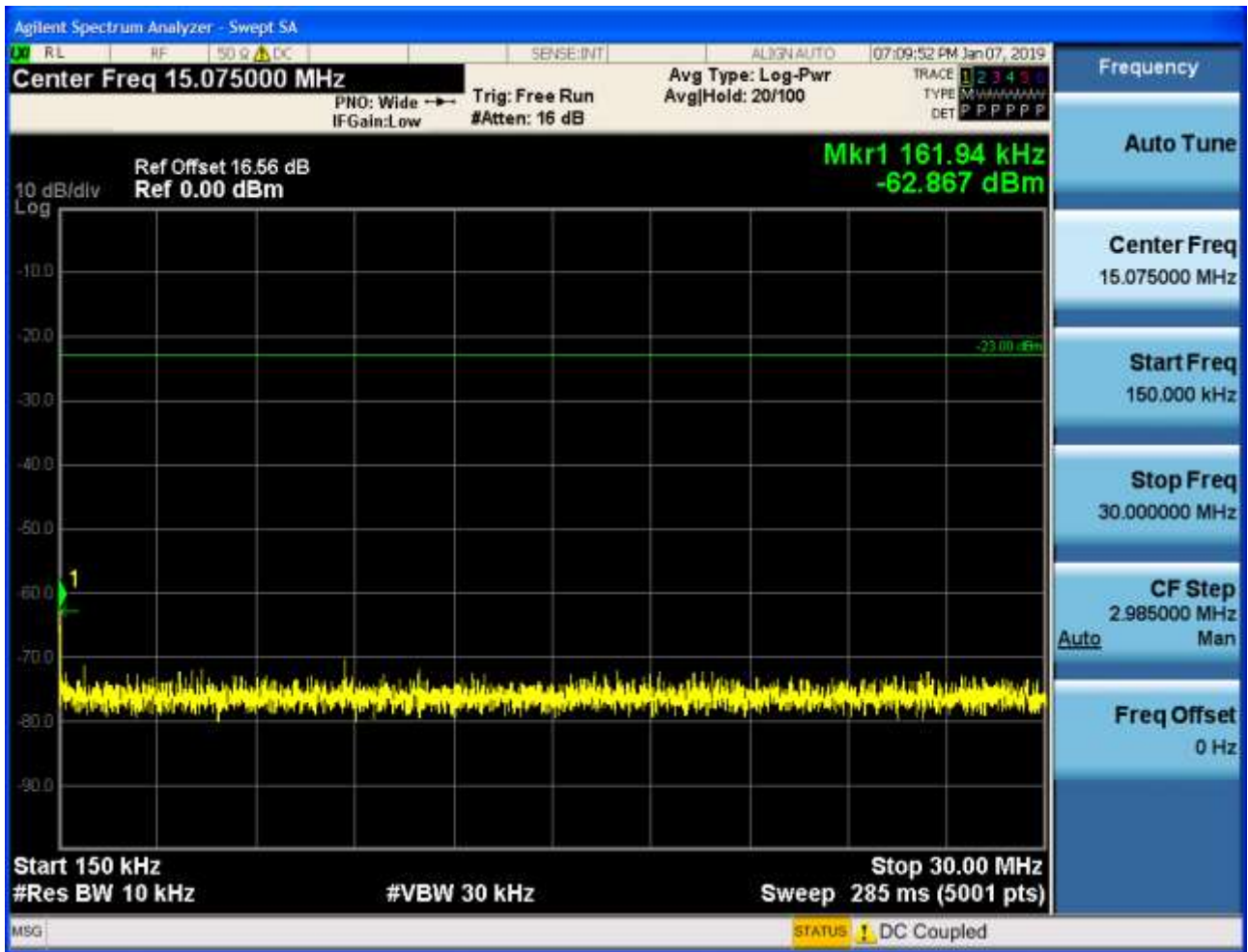


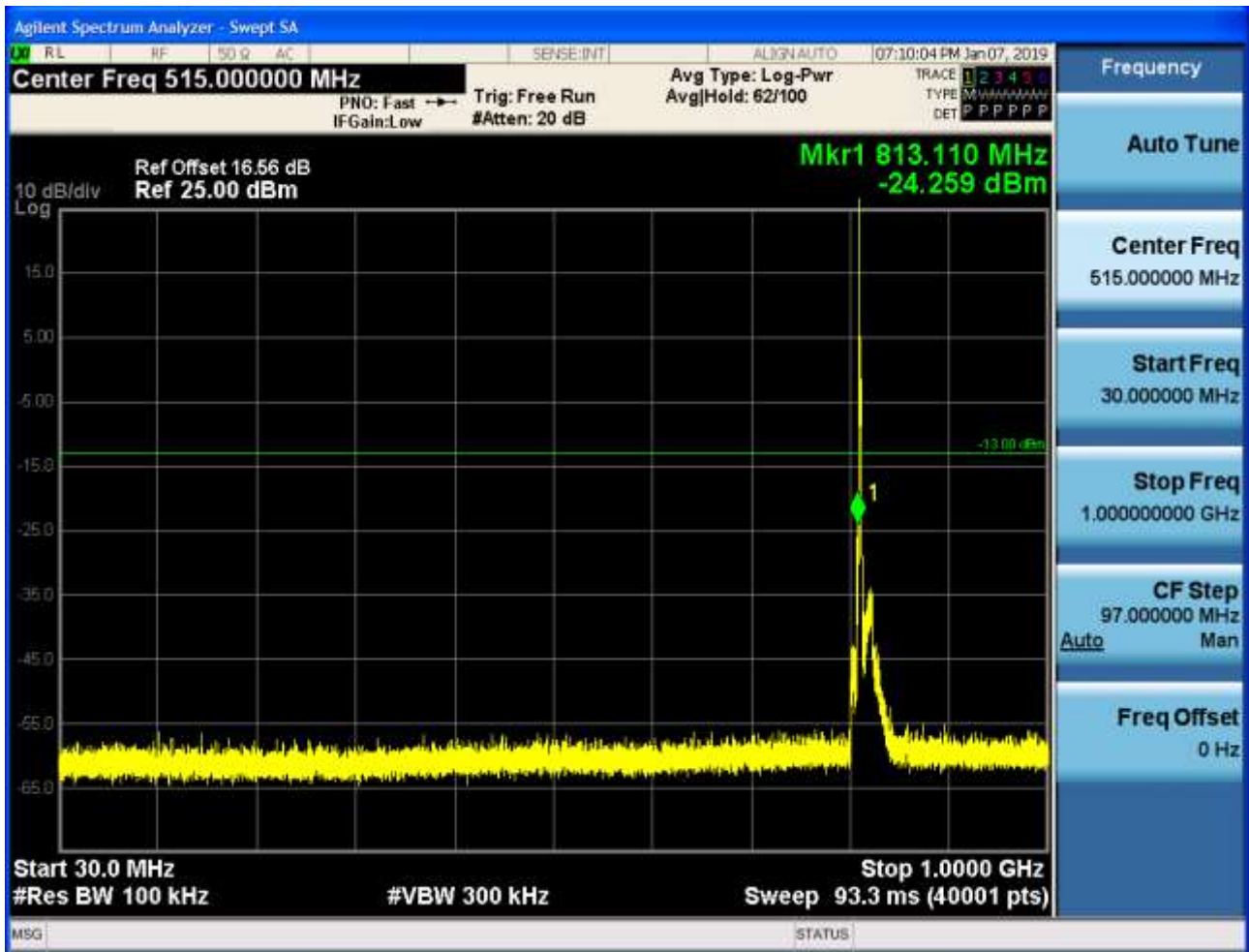
## 6.2.1.2.2 Test Bandwidth = 3

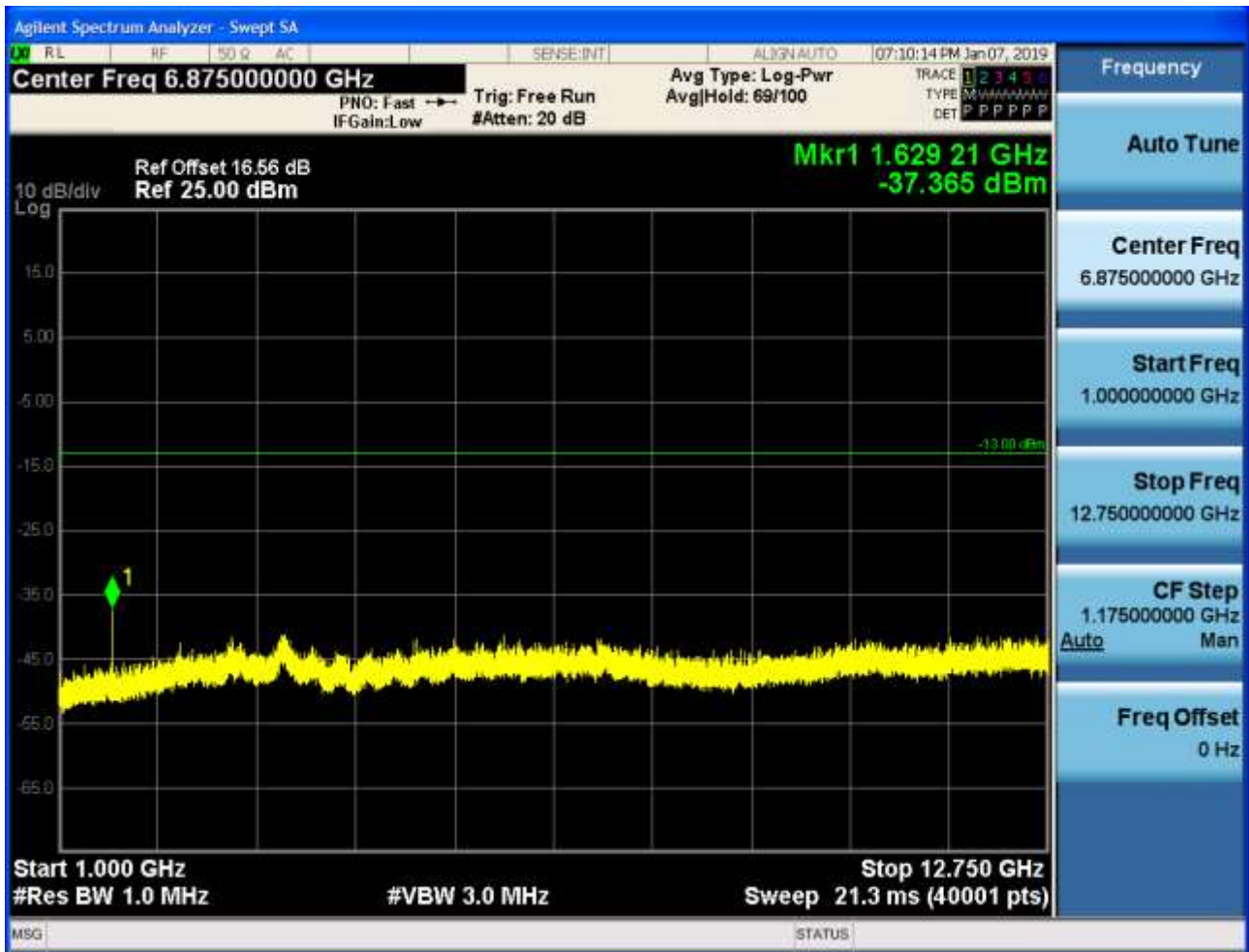
## 6.2.1.2.2.1 Test Channel = LCH

## 6.2.1.2.2.1.1 Test RB = RB1#0







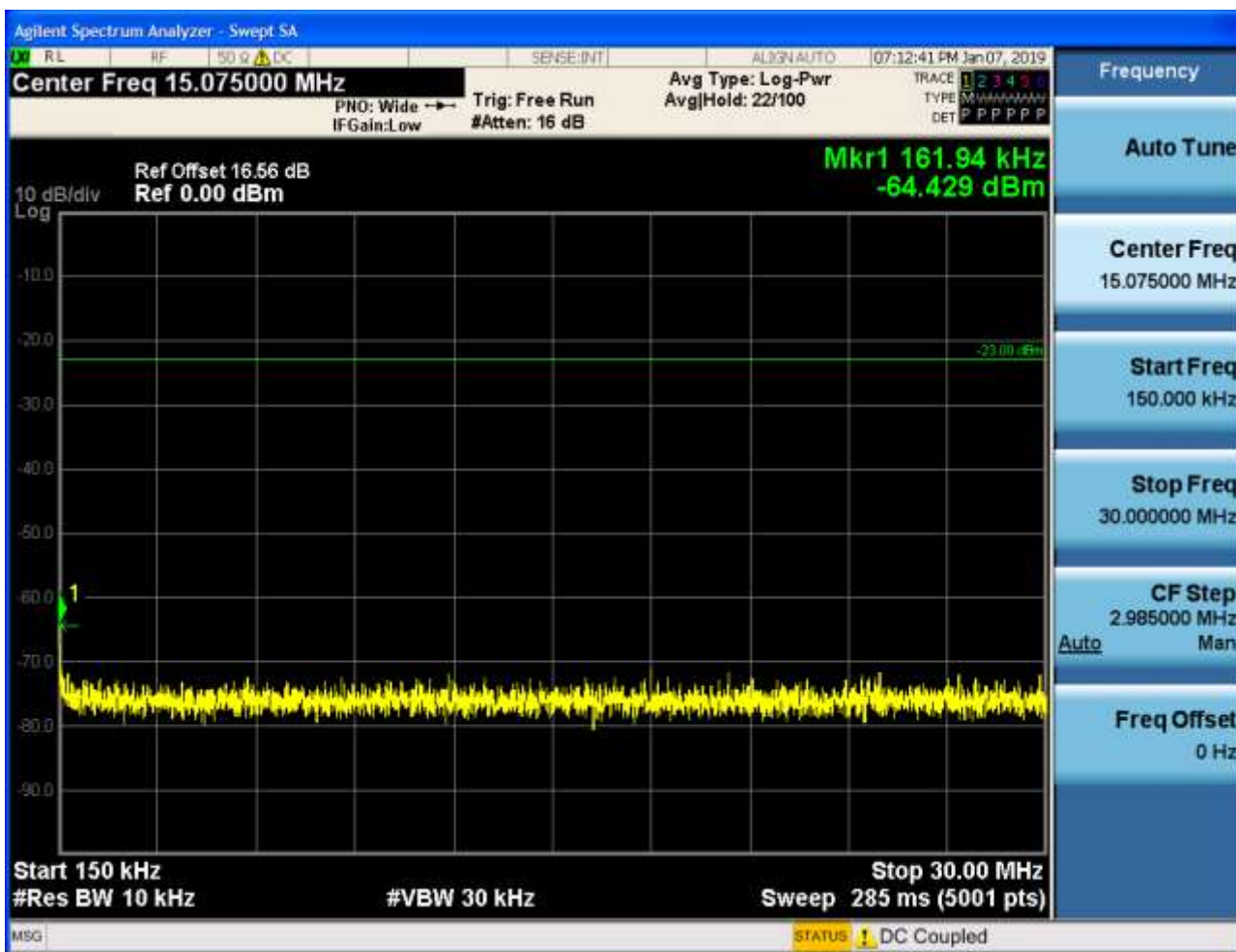


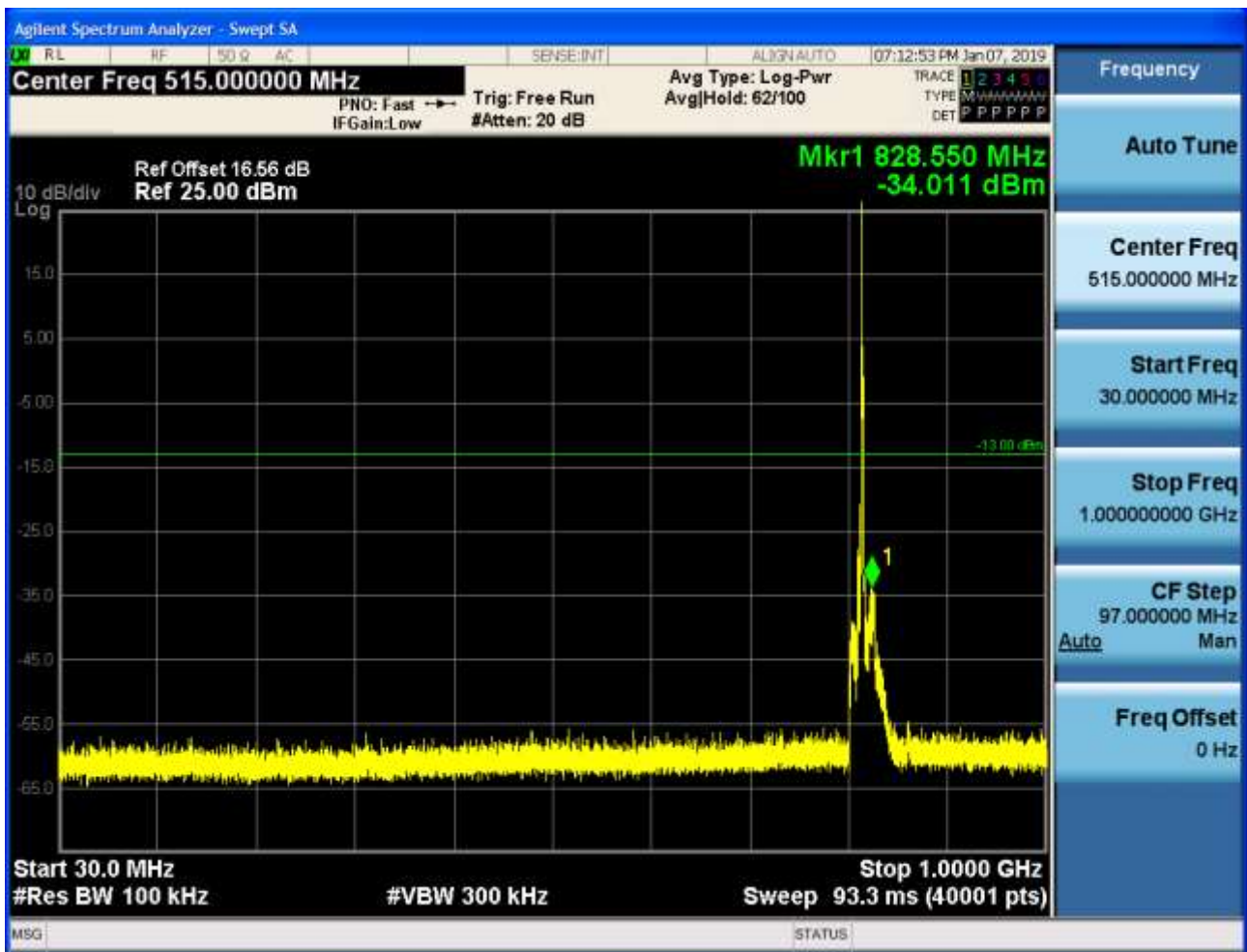


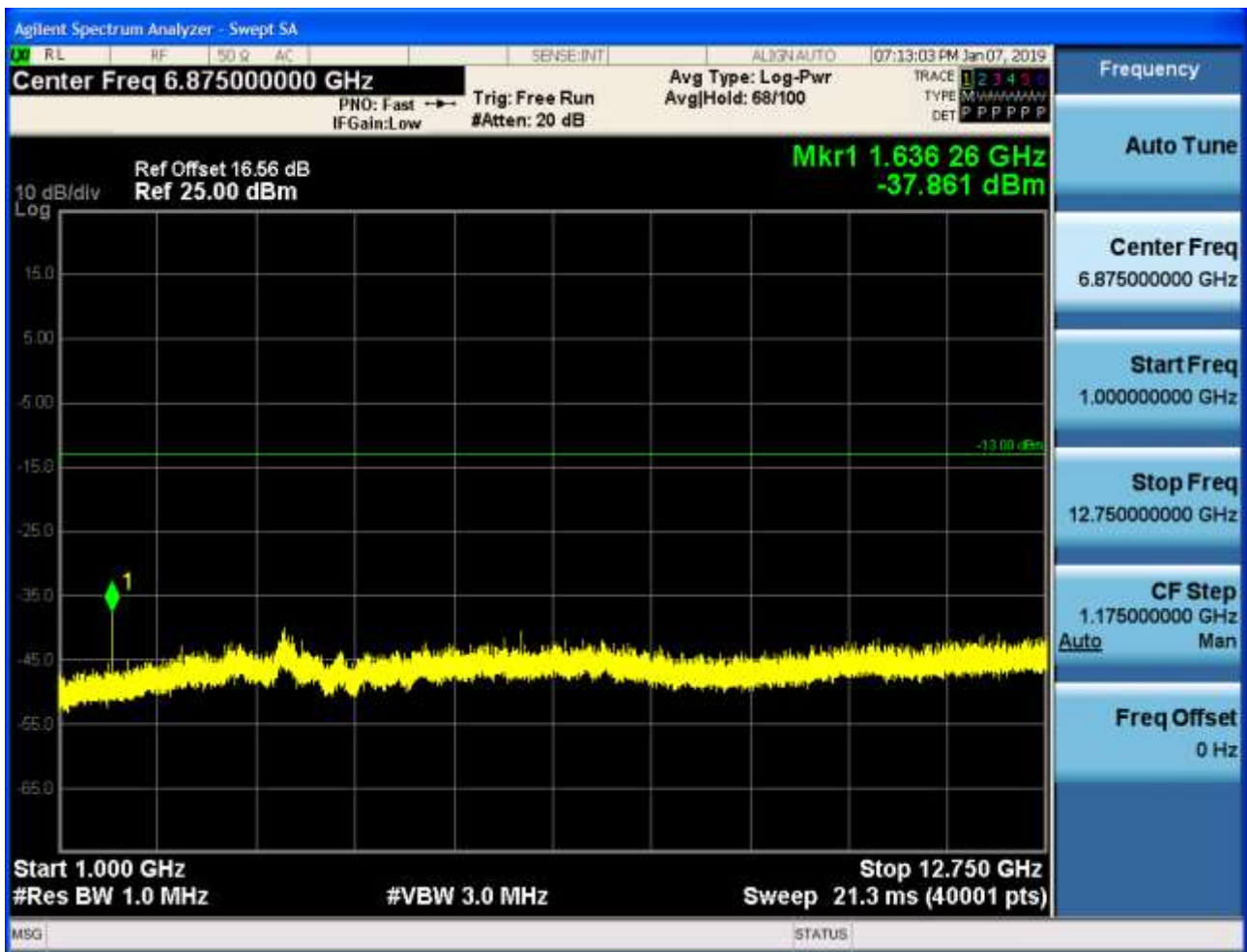
## 6.2.1.2.2.2 Test Channel = MCH

## 6.2.1.2.2.2.1 Test RB = RB1#0





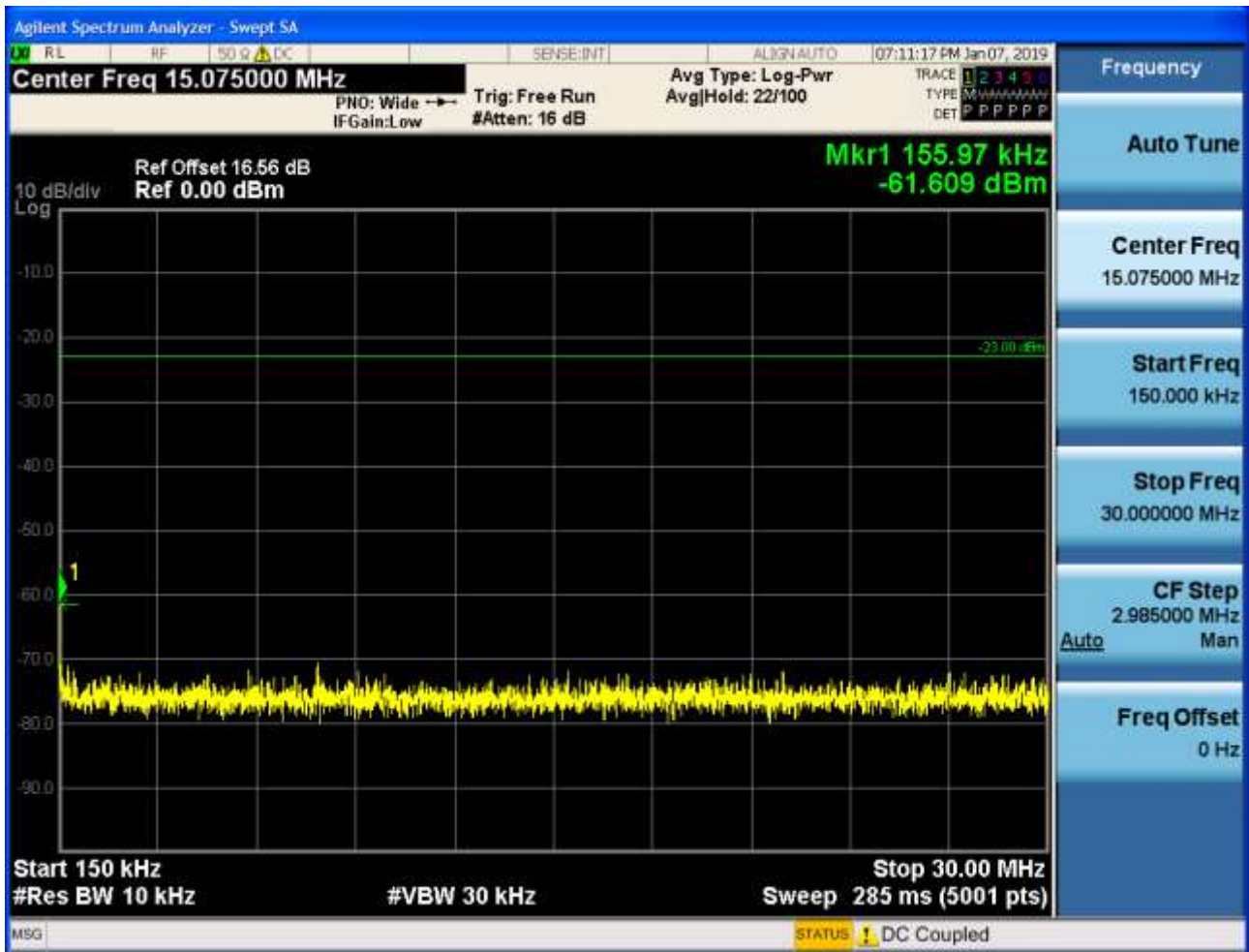




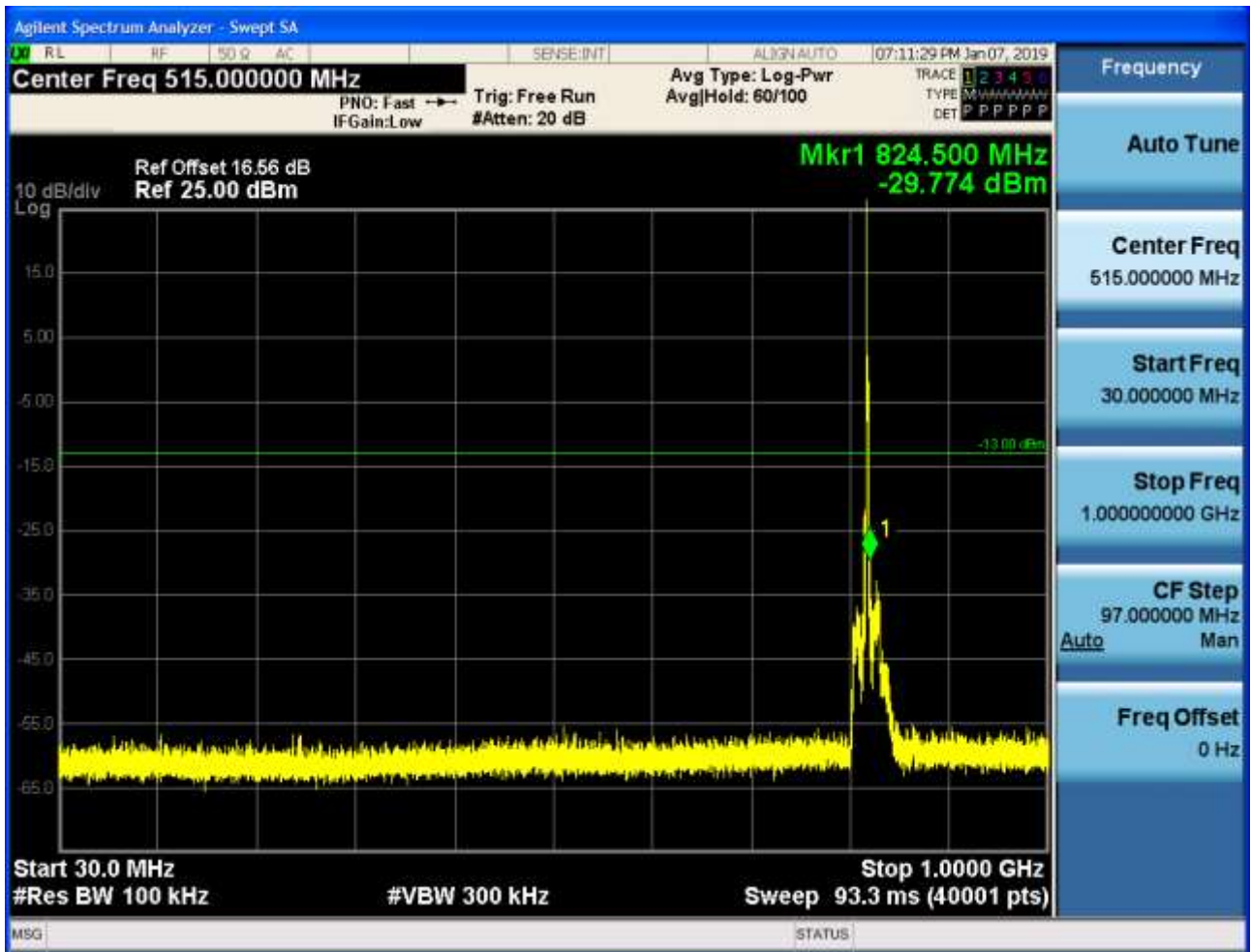
## 6.2.1.2.2.3 Test Channel = HCH

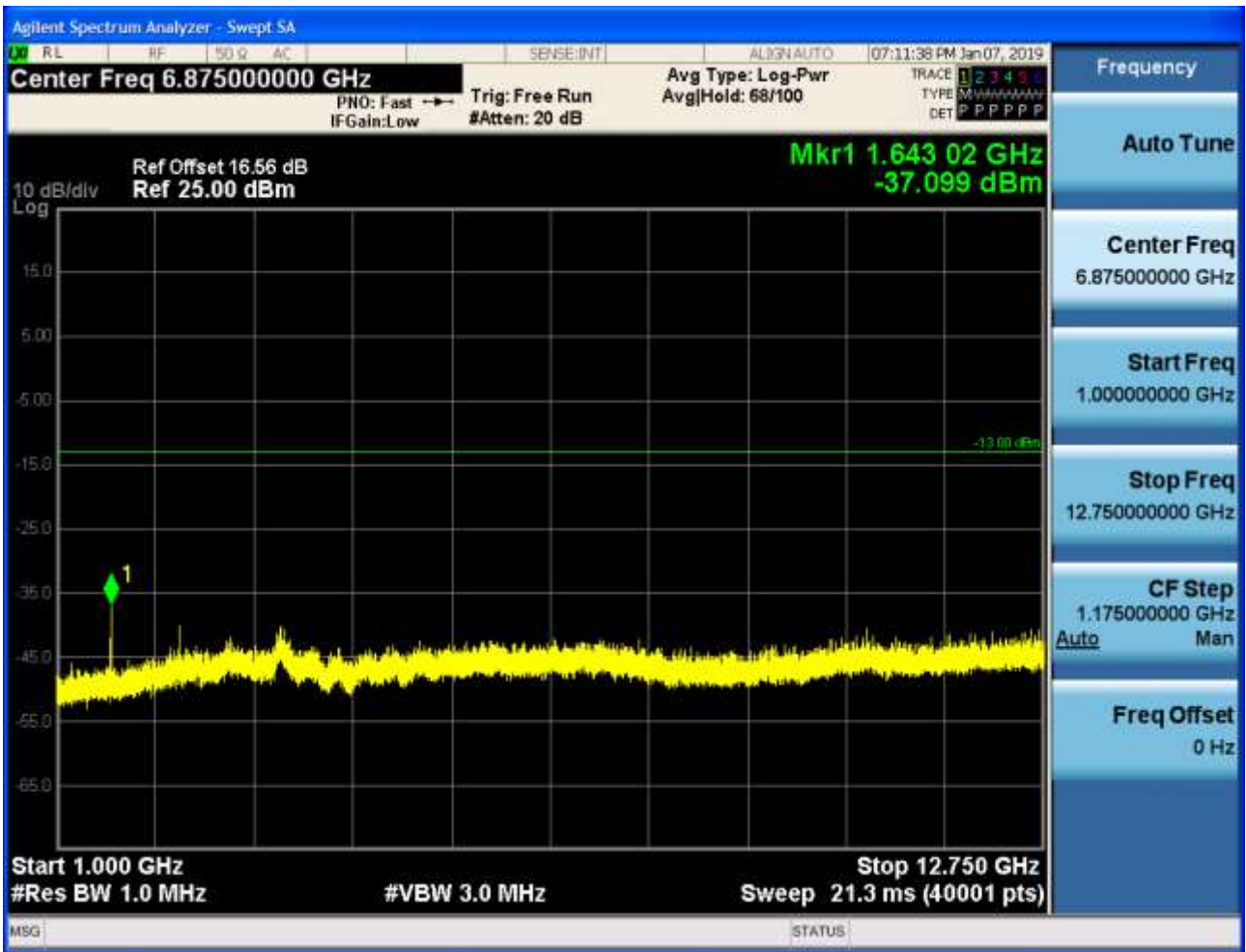
## 6.2.1.2.2.3.1 Test RB = RB1#0







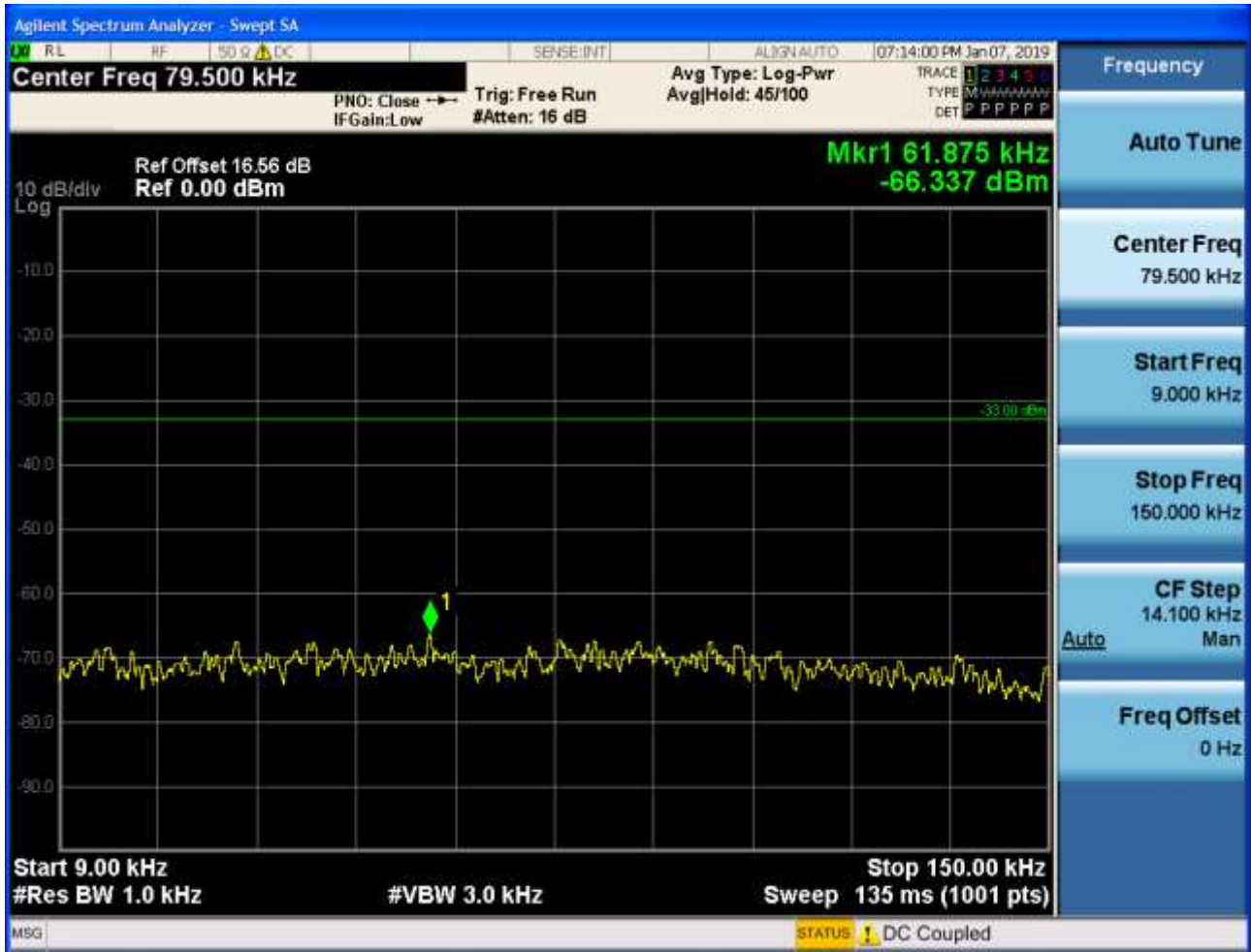


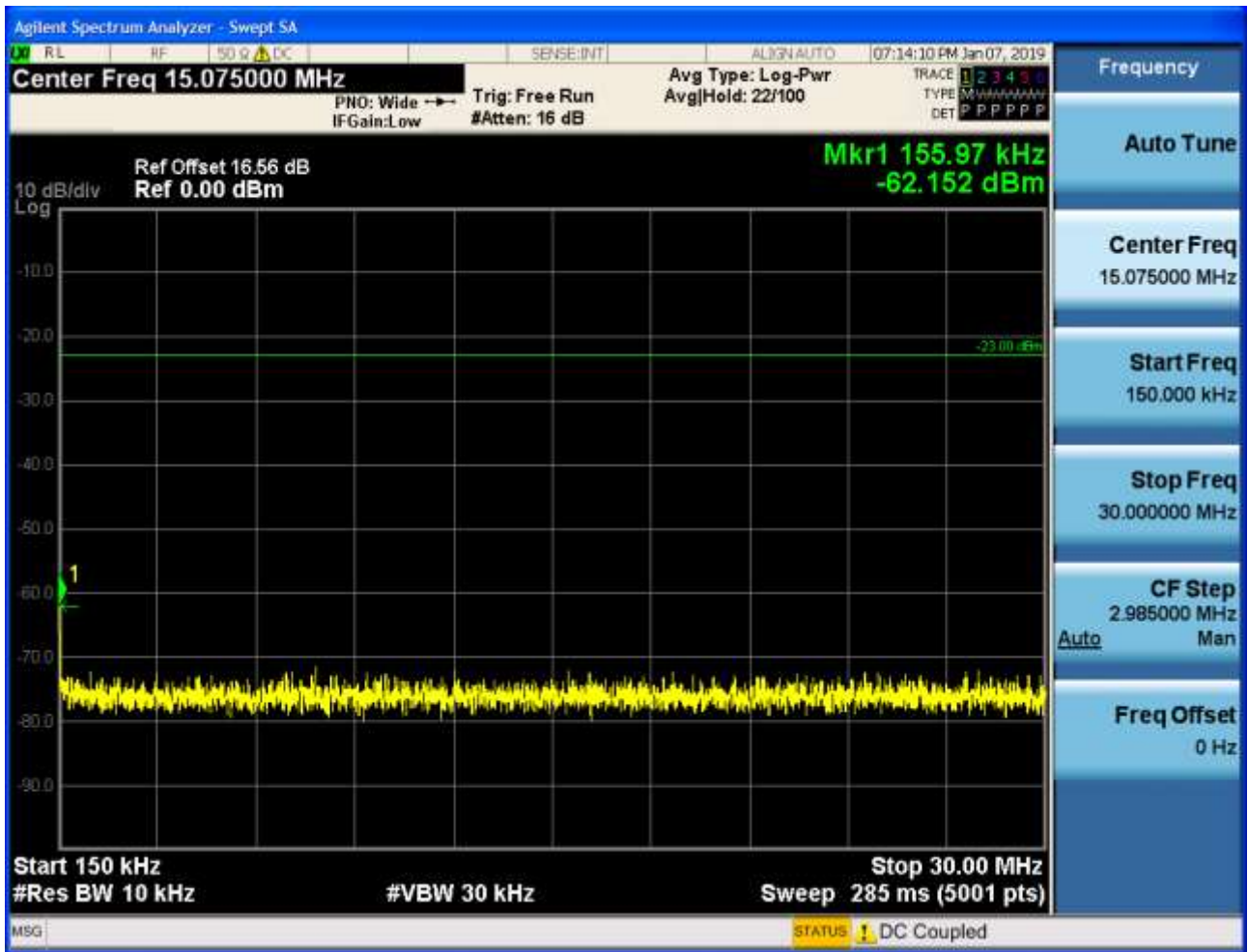


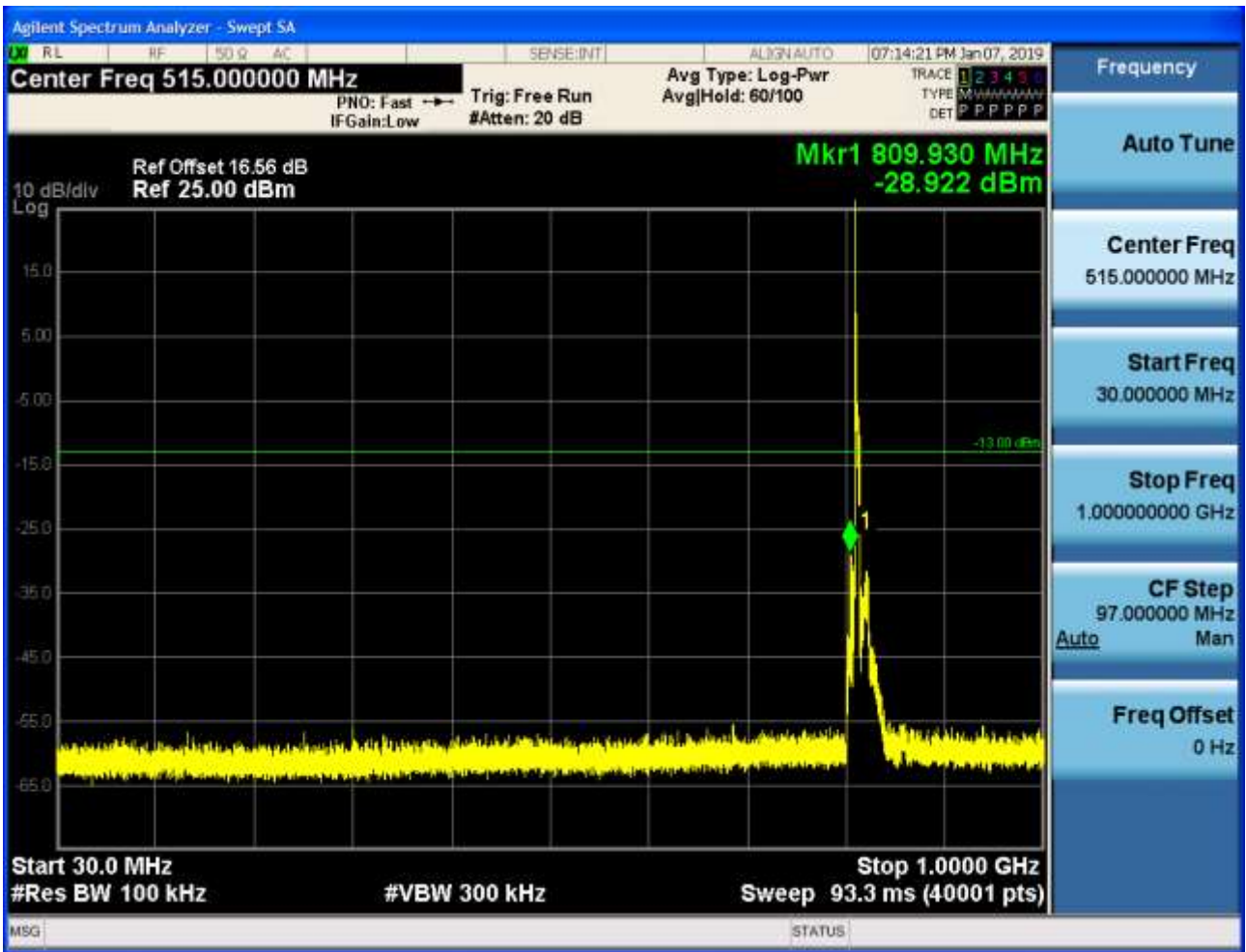
## 6.2.1.2.3 Test Bandwidth = 5

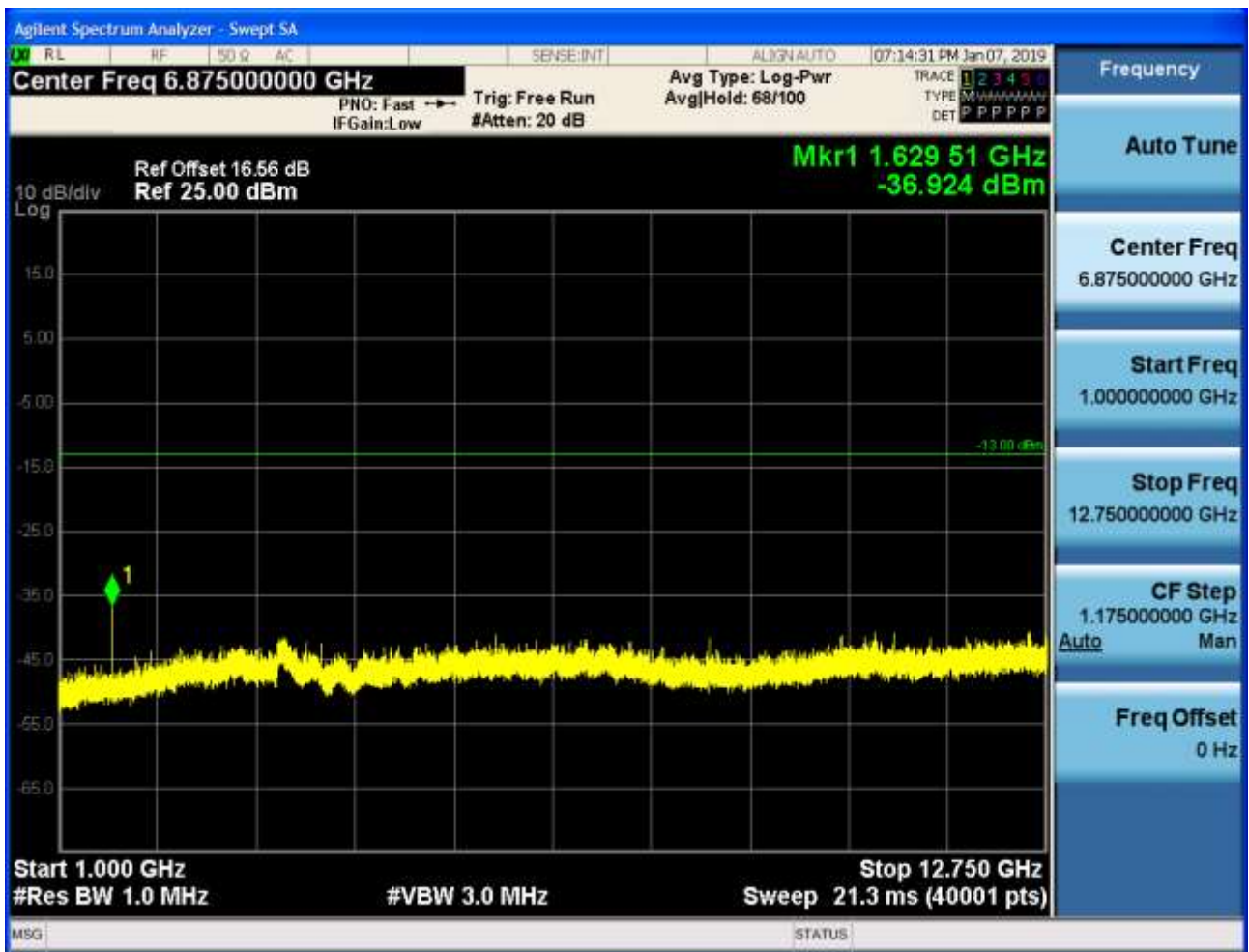
## 6.2.1.2.3.1 Test Channel = LCH

## 6.2.1.2.3.1.1 Test RB = RB1#0







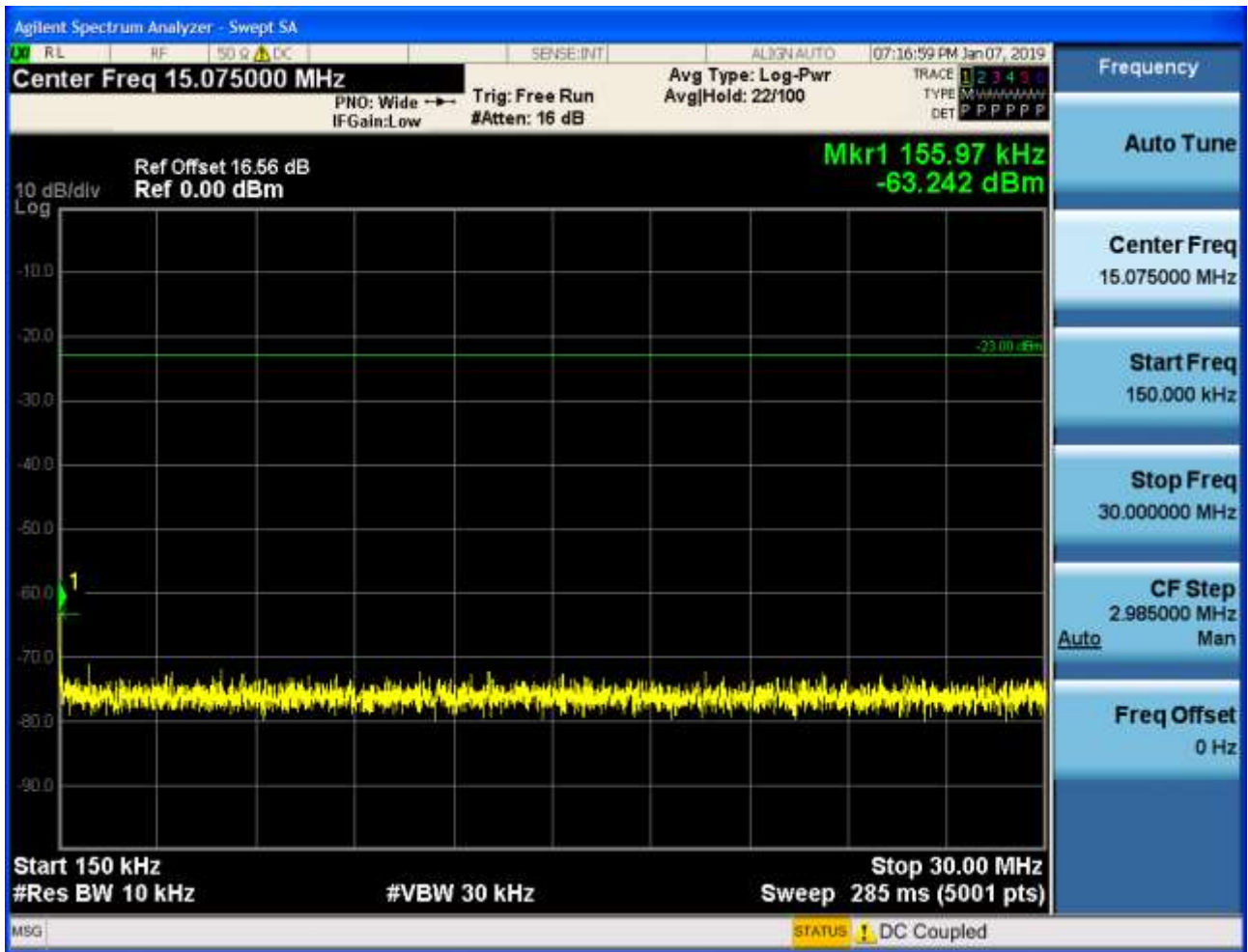


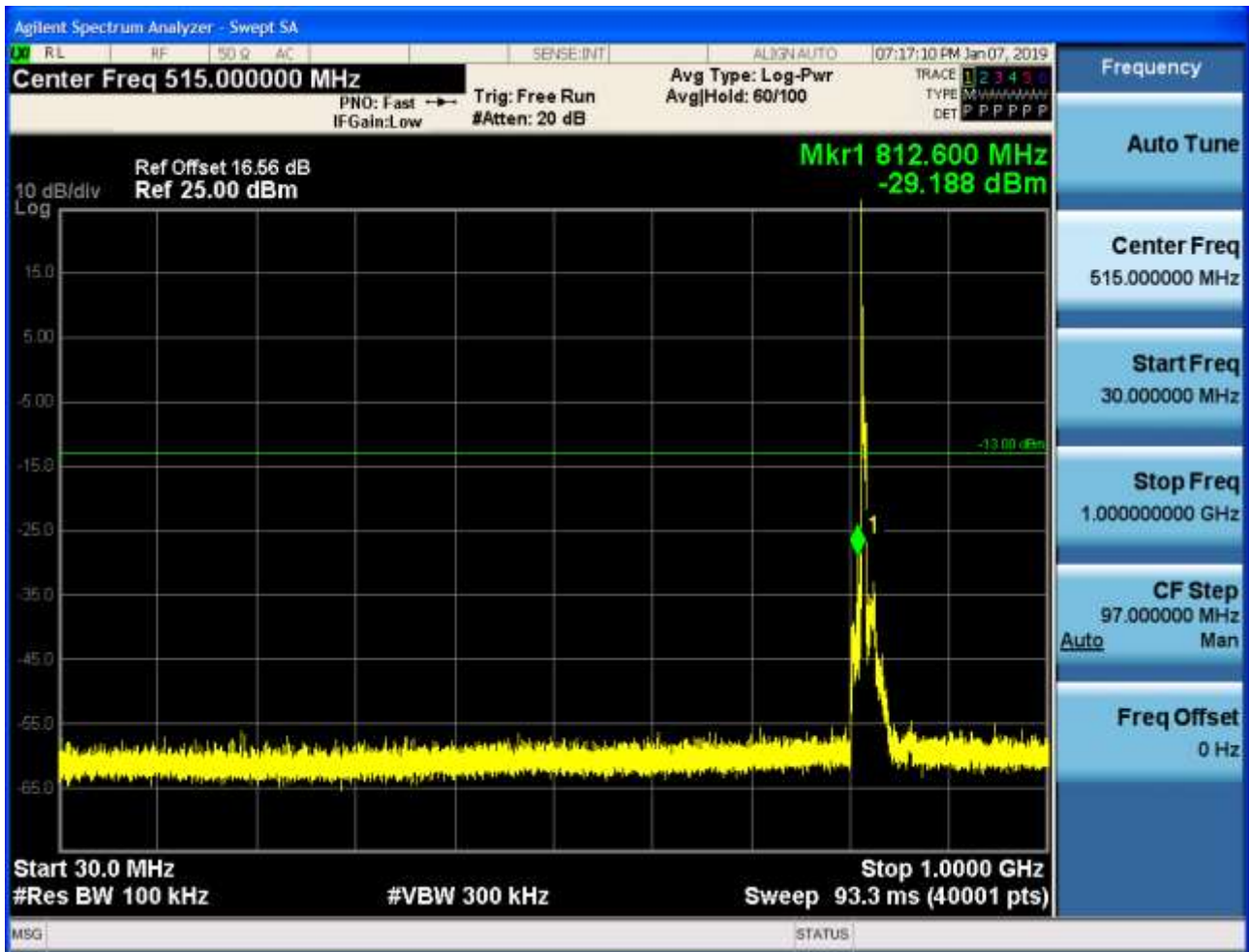


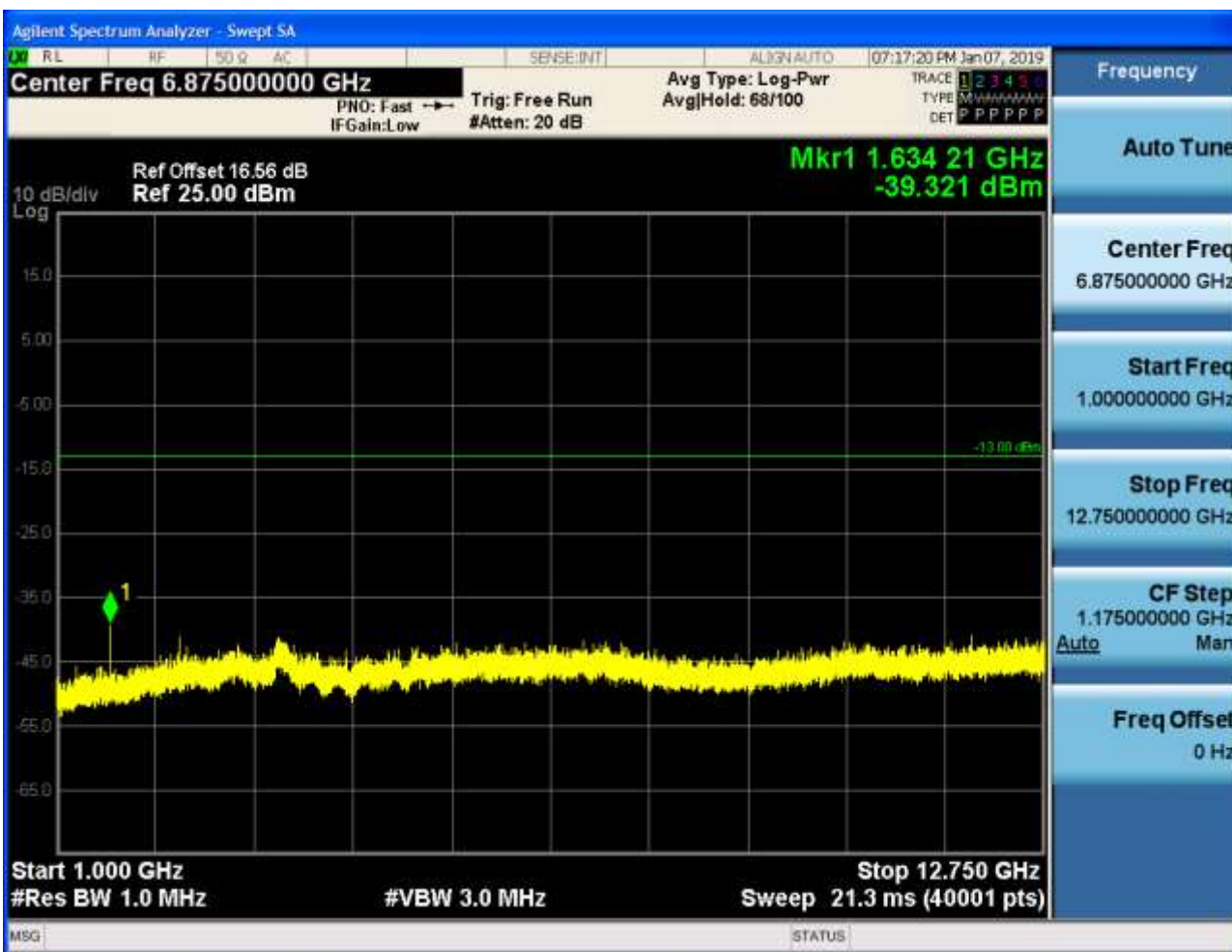
## 6.2.1.2.3.2 Test Channel = MCH

## 6.2.1.2.3.2.1 Test RB = RB1#0





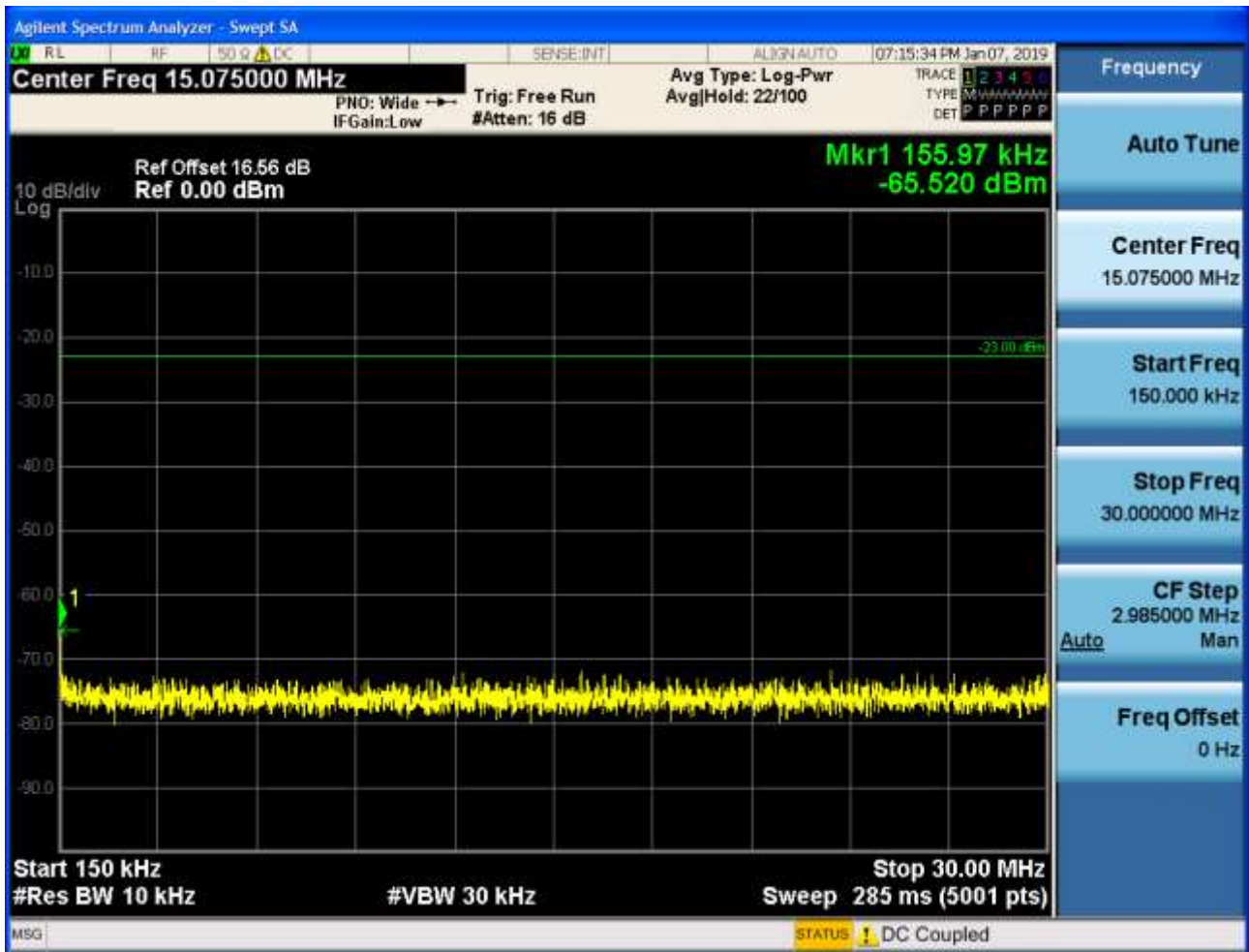




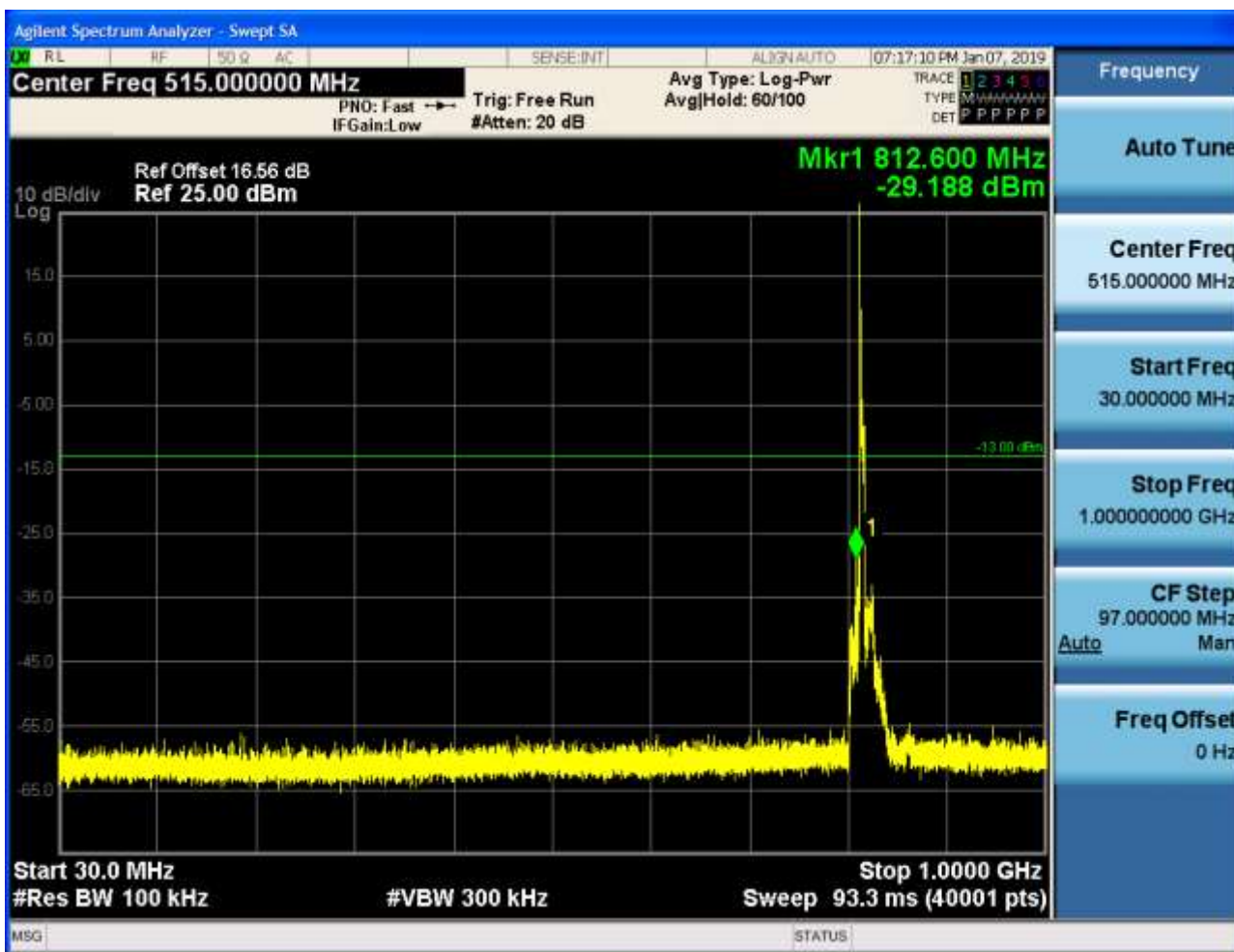
## 6.2.1.2.3.3 Test Channel = HCH

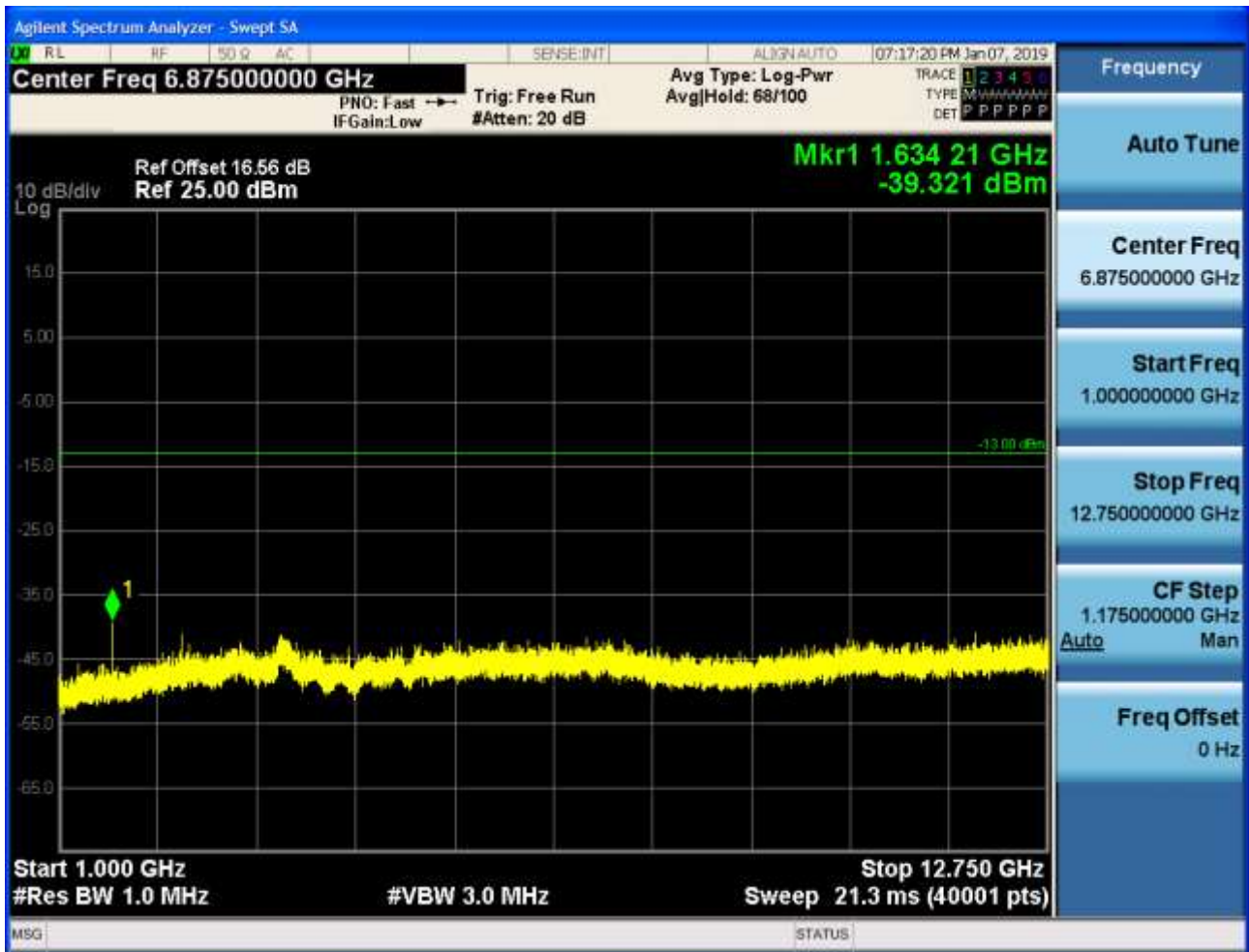
## 6.2.1.2.3.3.1 Test RB = RB1#0









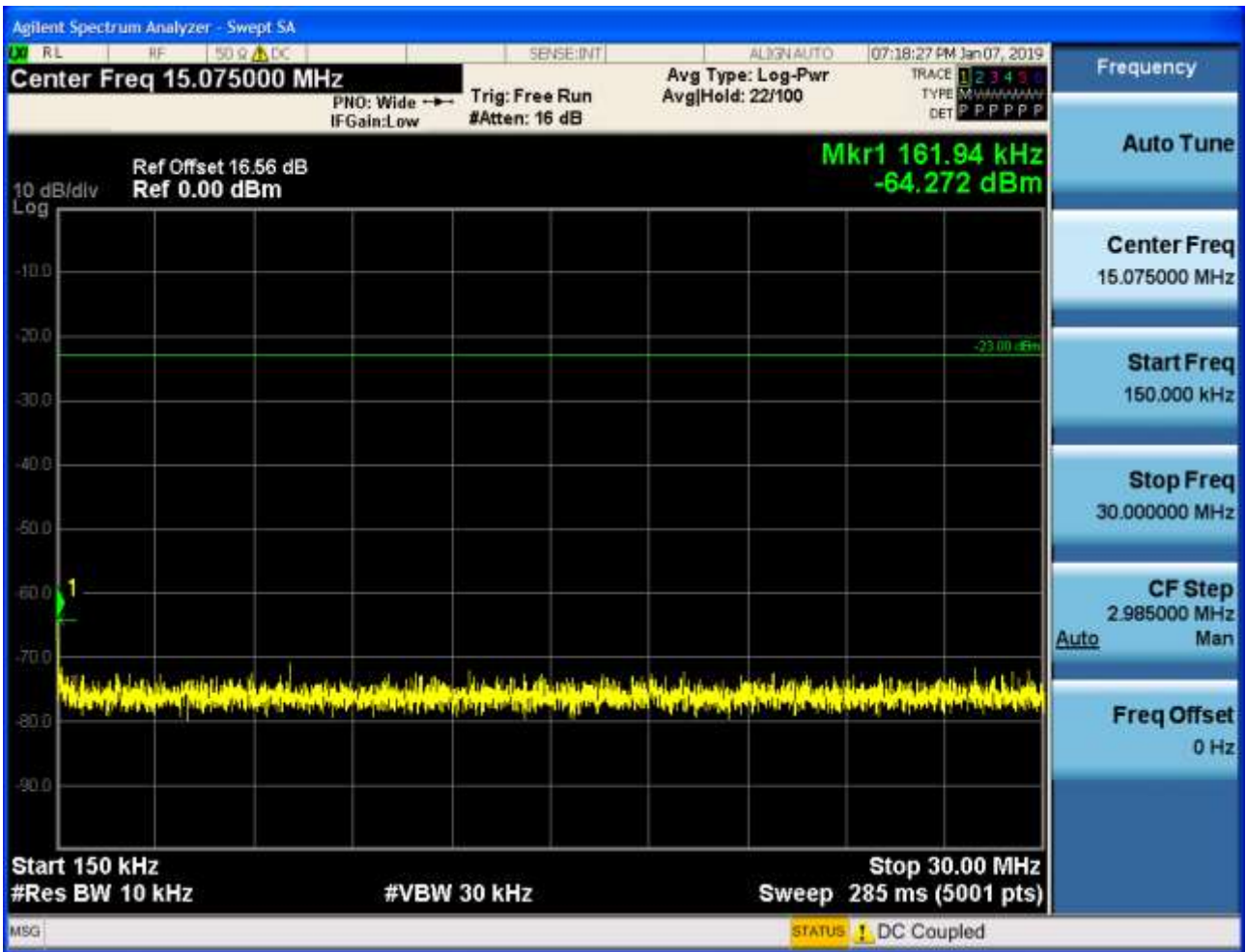


## 6.2.1.2.4 Test Bandwidth = 10

## 6.2.1.2.4.1 Test Channel = MCH

## 6.2.1.2.4.1.1 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

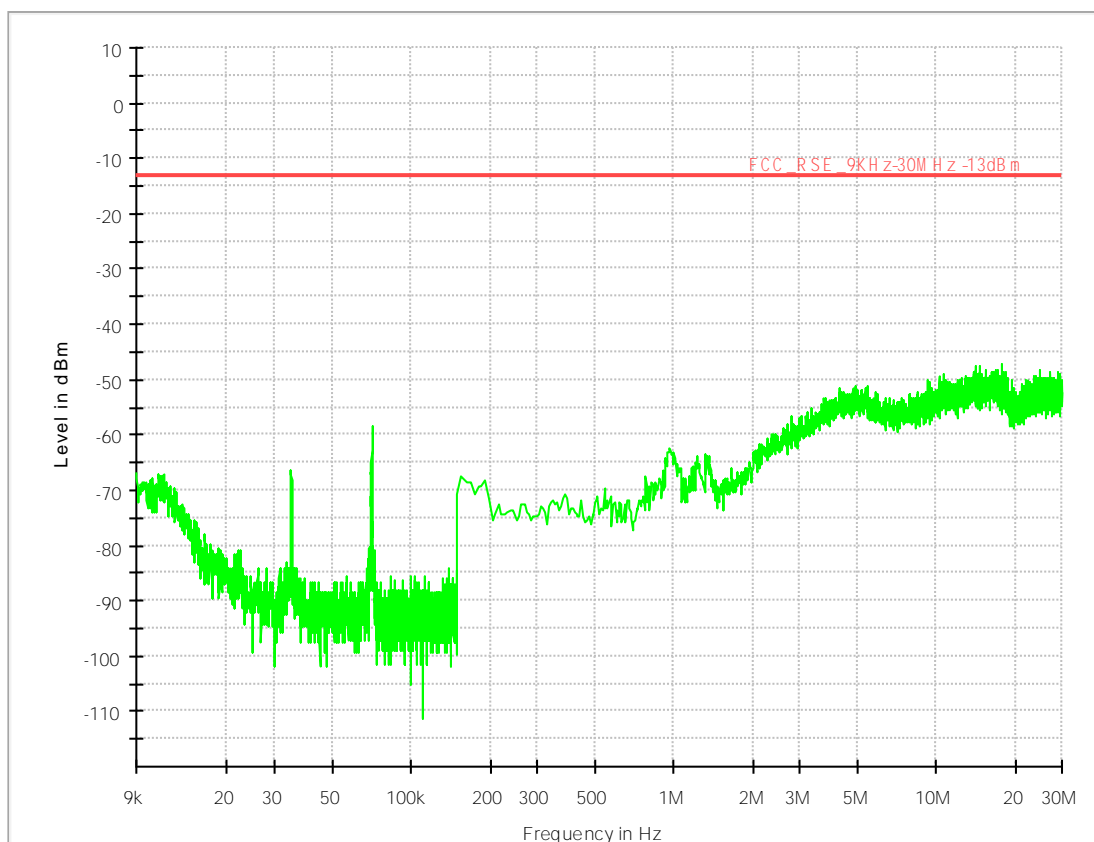
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz Detector: PK

### Part I - Test Plots

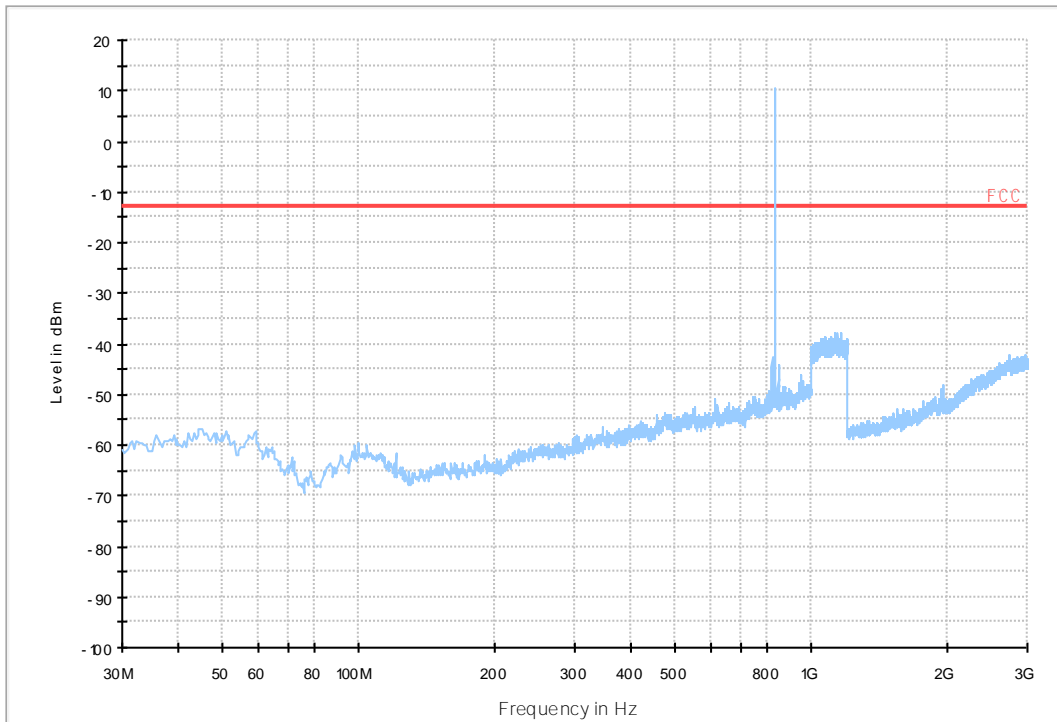
#### 7.1 For LTE

##### 7.1.1 Test Band = Band26 (814-824 MHz) \_ ANT1

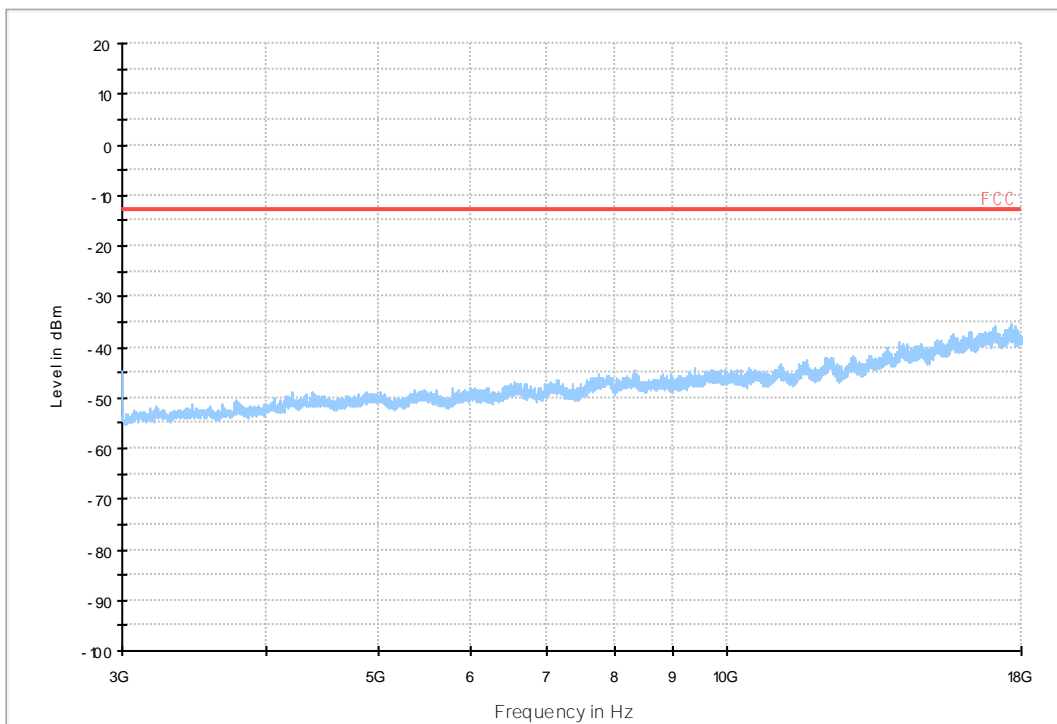
##### 7.1.1.1 Test Bandwidth = 1.4



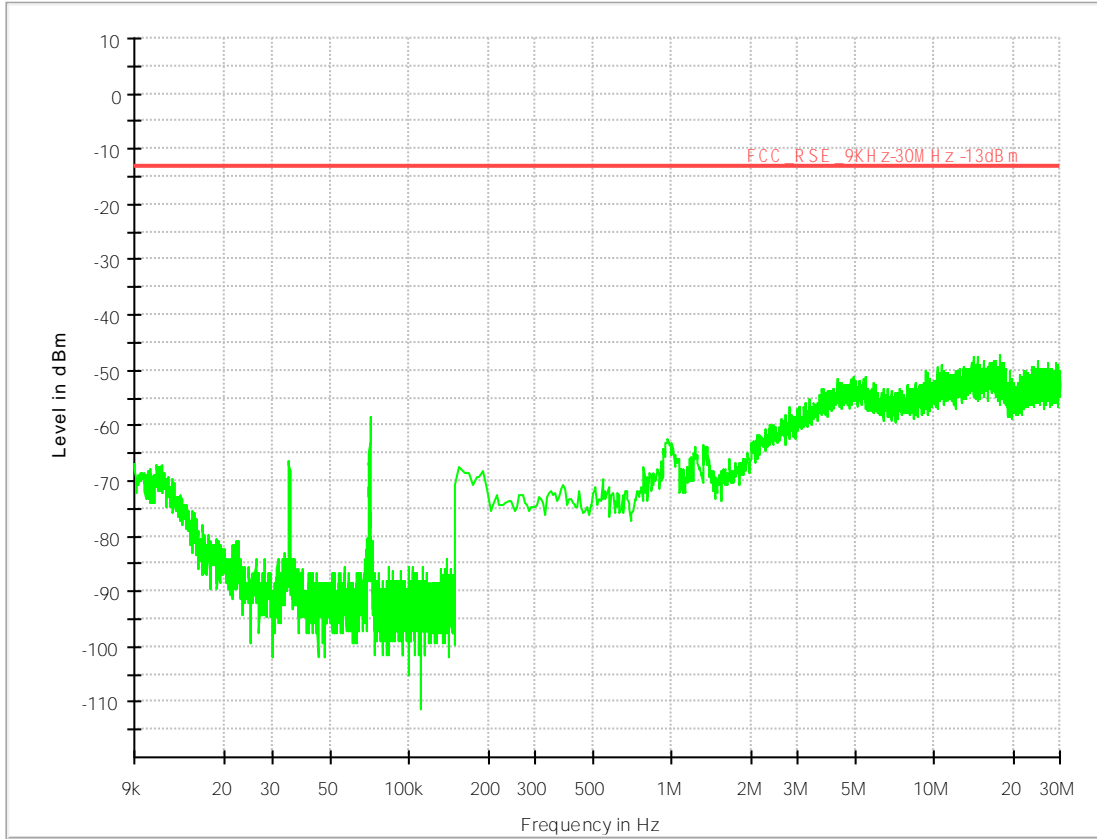
LTE FDD RSE-TX-DIRECTOR BELOW 1G\_L



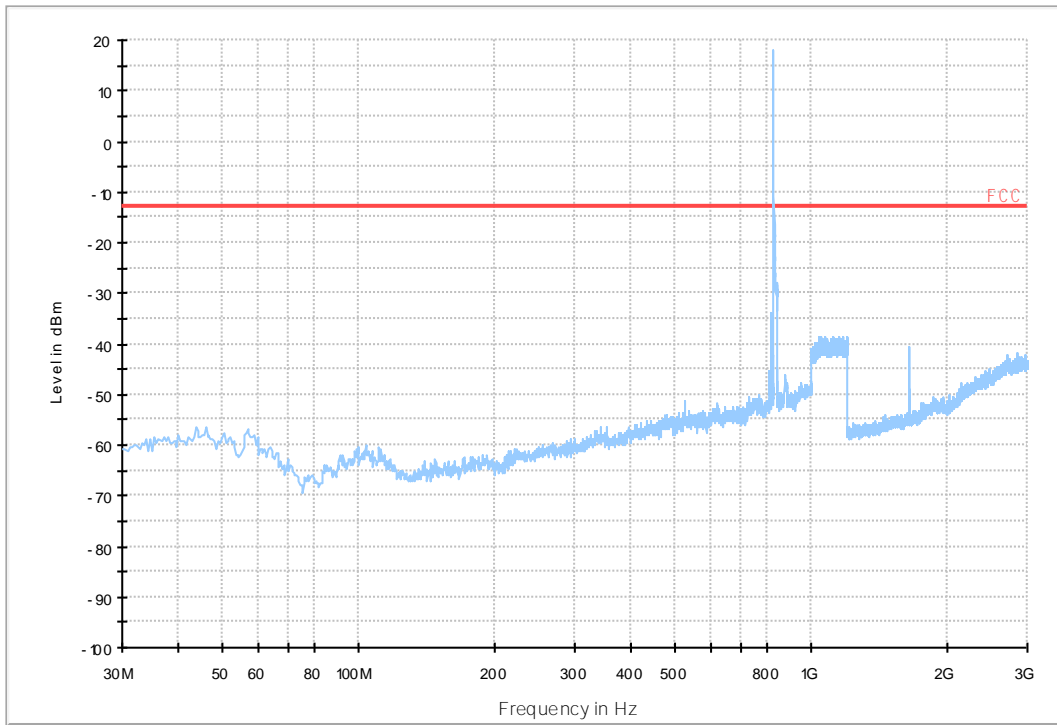
LTE FDD RSE-TX-DIRECTOR BELOW 1G\_H



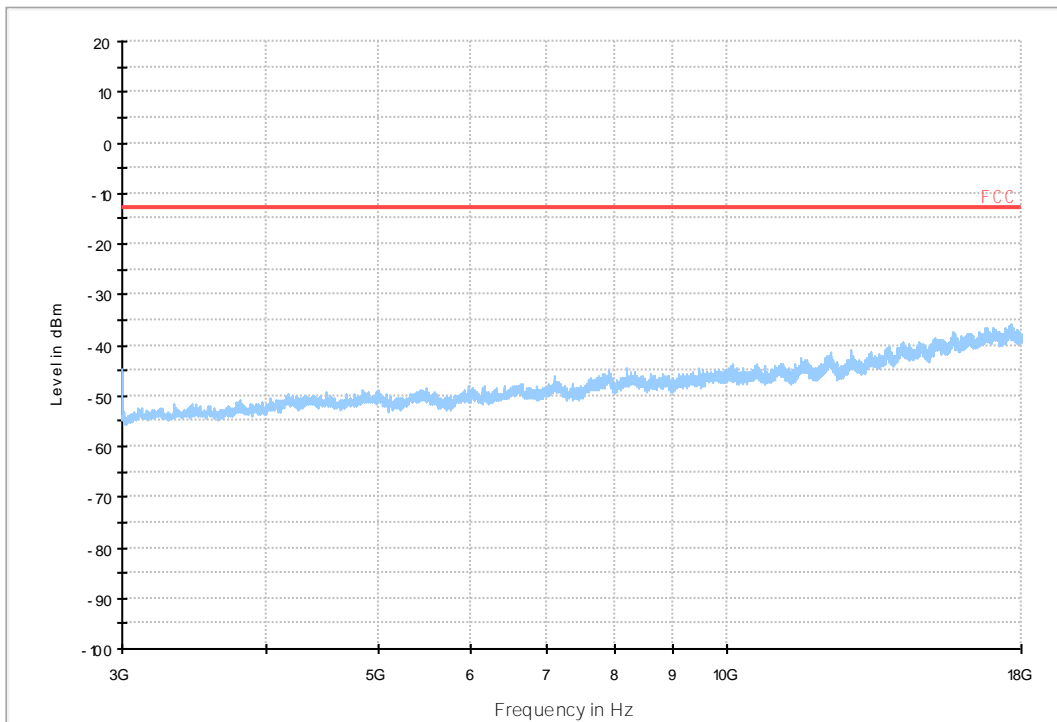
### 7.1.1.2 Test Bandwidth = 10



LTE FDD RSE-TX-DIRECTOR BELOW 1G\_L

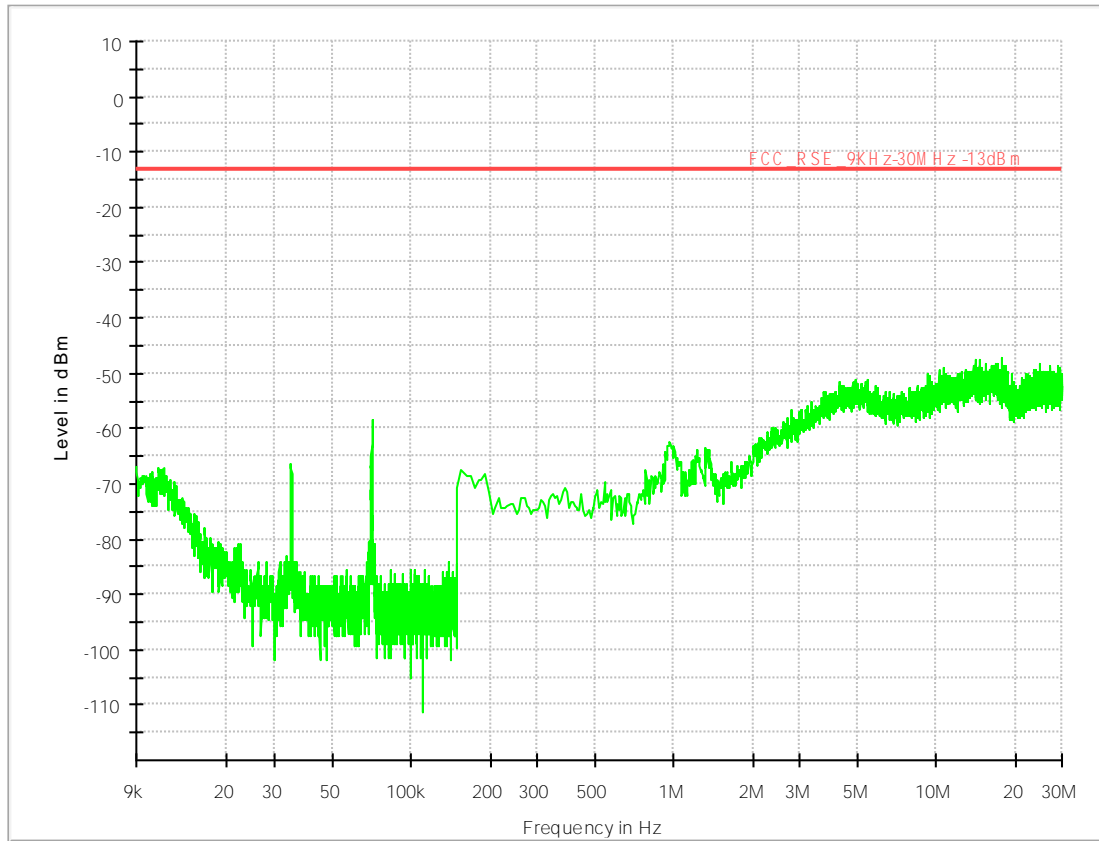


LTE FDD RSE-TX-DIRECTOR BELOW 1G\_H

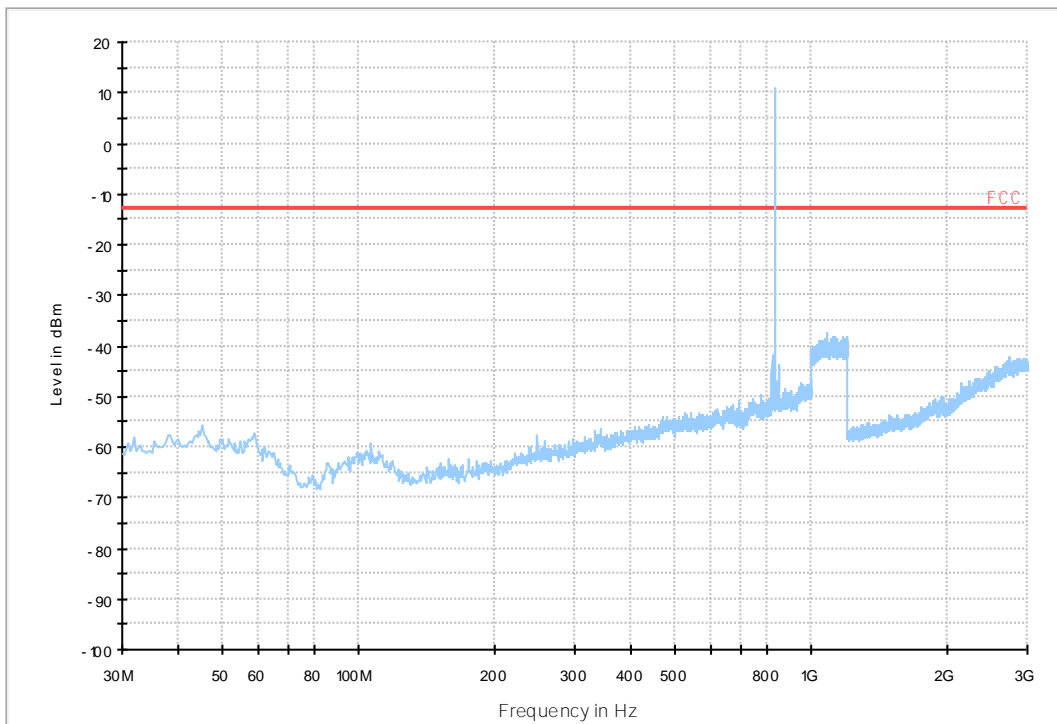


## 7.1.2 Test Band = Band26 (814-824 MHz) \_ ANT2

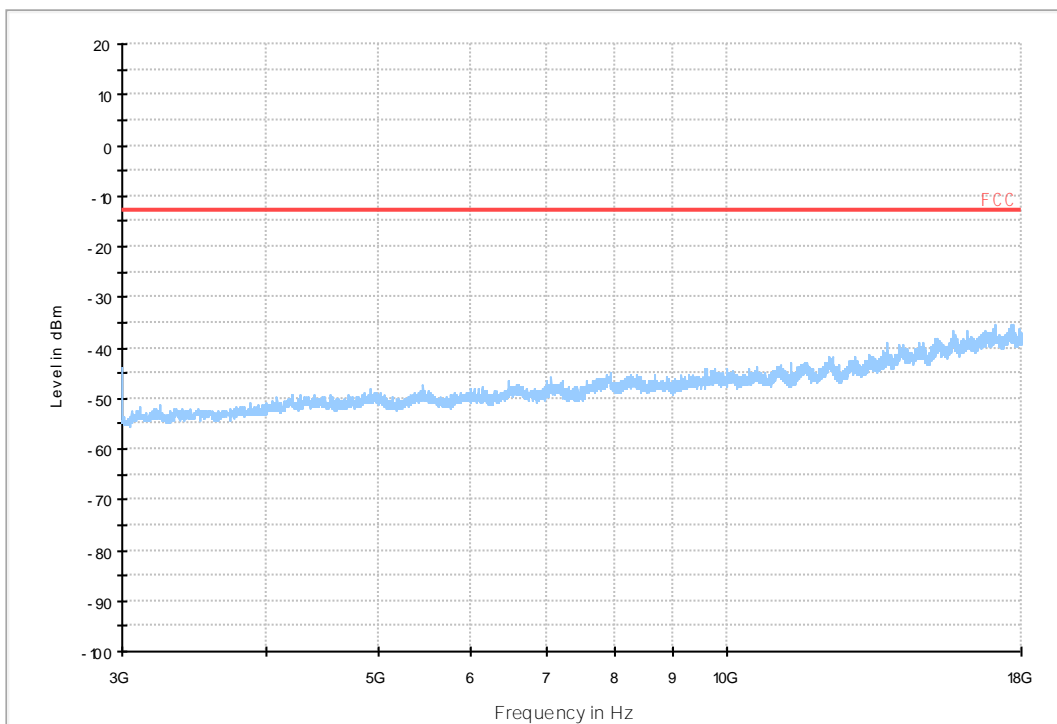
### 7.1.2.1 Test Bandwidth = 1.4



LTE FDD RSE-TX-DIRECTOR BELOW 1G\_L

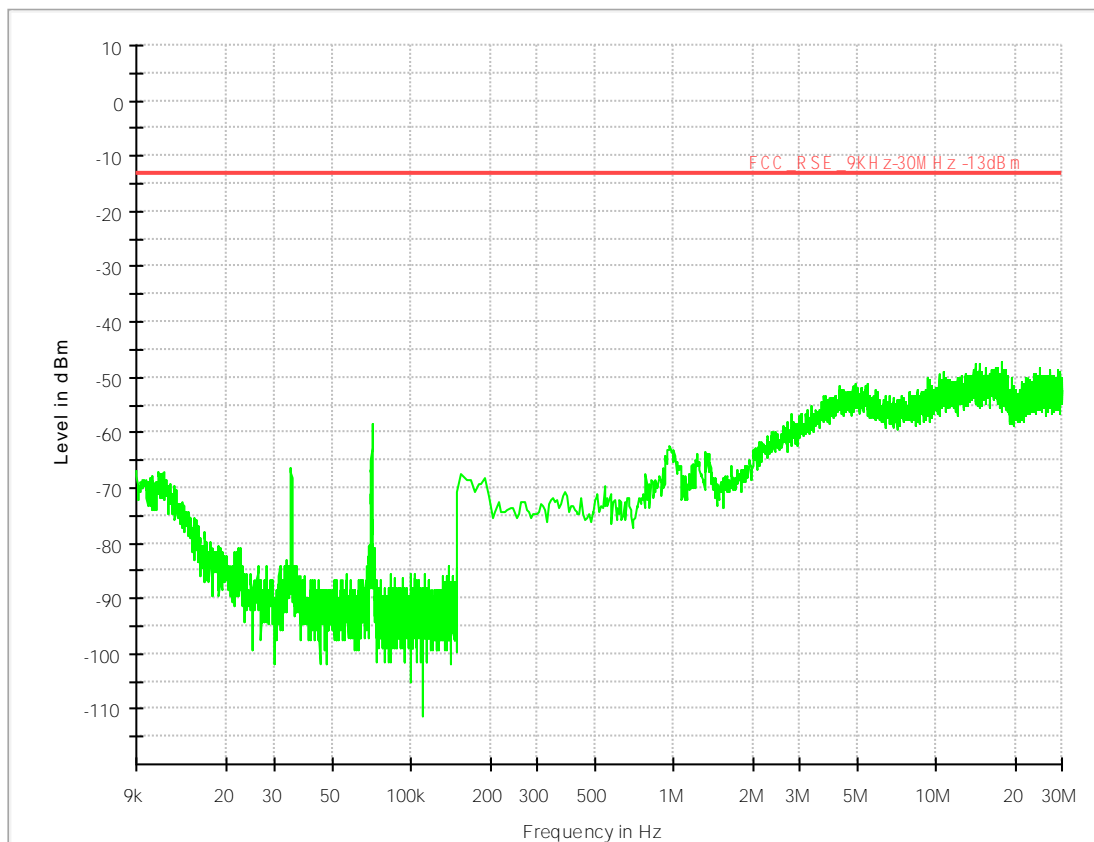


LTE FDD RSE-TX-DIRECTOR BELOW 1G\_H

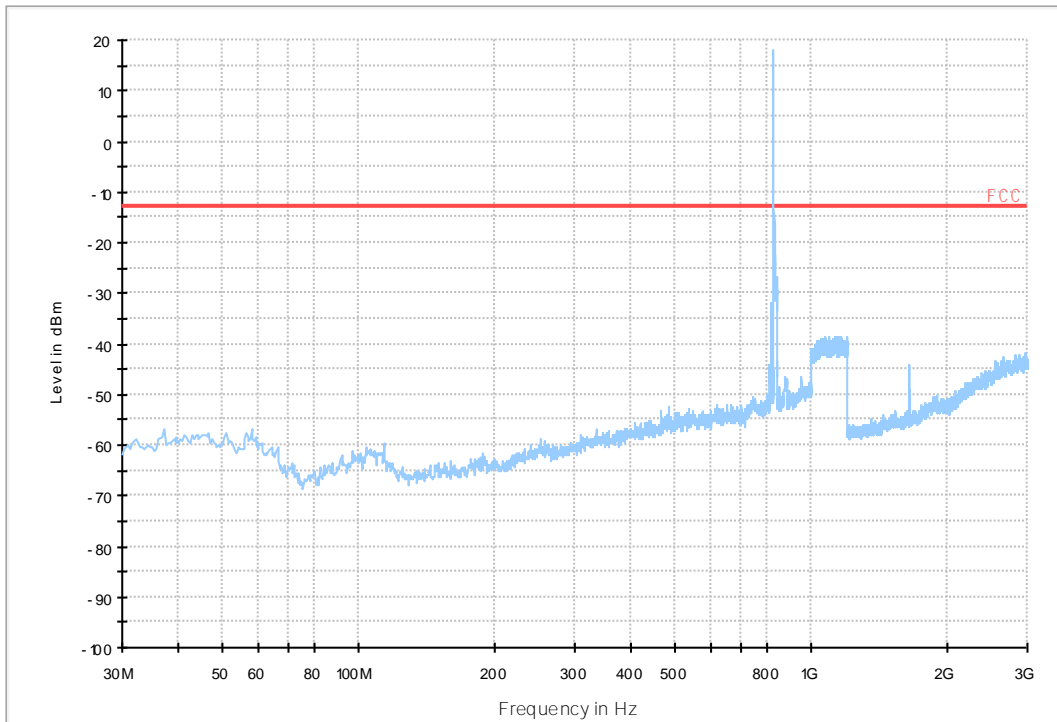




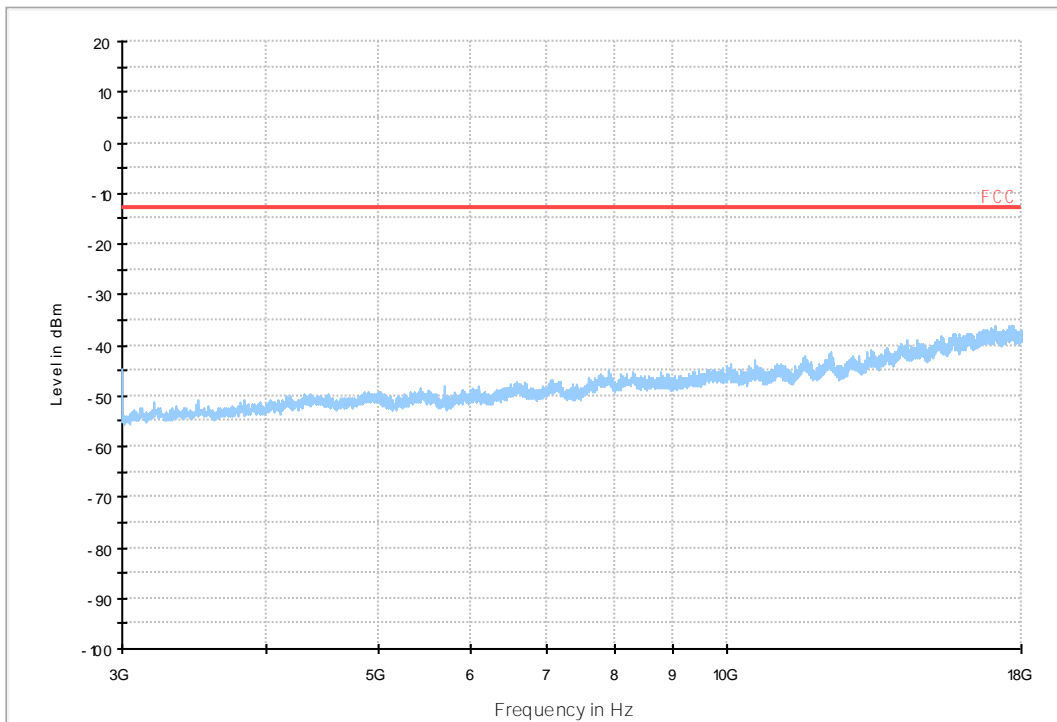
## 7.1.2.2 Test Bandwidth = 10



LTE FDD RSE-TX-DIRECTOR BELOW 1G\_L



LTE FDD 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
Band26 (814-824 MHz)	LTE/TM1	1.4	LCH	TN	VL	-3.97682	-0.00488	PASS
					VN	-7.43866	-0.00913	PASS
					VH	7.86781	0.00966	PASS
			MCH	TN	VL	-1.97411	-0.00241	PASS
					VN	-2.08855	-0.00255	PASS
					VH	6.13689	0.00749	PASS
			HCH	TN	VL	4.83513	0.00587	PASS
					VN	4.47750	0.00544	PASS
					VH	2.13146	0.00259	PASS
		3	LCH	TN	VL	0.22888	0.00028	PASS
					VN	-3.19004	-0.00391	PASS
					VH	1.75953	0.00216	PASS
			MCH	TN	VL	-2.58923	-0.00316	PASS
					VN	-1.11580	-0.00136	PASS
					VH	0.90122	0.00110	PASS
			HCH	TN	VL	-4.42028	-0.00537	PASS
					VN	1.02997	0.00125	PASS
					VH	-0.80109	-0.00097	PASS
		5	LCH	TN	VL	7.86781	0.00964	PASS
					VN	-1.37329	-0.00168	PASS
					VH	4.27723	0.00524	PASS
			MCH	TN	VL	-1.45912	-0.00178	PASS
					VN	-11.98769	-0.01464	PASS
					VH	-3.00407	-0.00367	PASS
			HCH	TN	VL	-3.33309	-0.00406	PASS
					VN	1.33038	0.00162	PASS
					VH	-1.64509	-0.00200	PASS
		10	MCH	TN	VL	0.27180	0.00033	PASS
					VN	-6.33717	-0.00774	PASS
					VH	-7.66754	-0.00936	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	1.4	LCH	TN	VL	-1.93119	-0.00237	PASS
					VN	8.76904	0.01076	PASS
					VH	-9.49860	-0.01166	PASS
			MCH	TN	VL	-5.97954	-0.00730	PASS
					VN	-14.13345	-0.01726	PASS
					VH	10.92911	0.01334	PASS
			HCH	TN	VL	2.73228	0.00332	PASS
					VN	5.43594	0.00660	PASS
					VH	5.36442	0.00652	PASS
		3	LCH	TN	VL	-4.76360	-0.00584	PASS
					VN	4.19140	0.00514	PASS
					VH	-3.79086	-0.00465	PASS
			MCH	TN	VL	-4.96387	-0.00606	PASS
					VN	2.33173	0.00285	PASS
					VH	7.71046	0.00941	PASS
			HCH	TN	VL	1.37329	0.00162	PASS
					VN	1.95980	0.00238	PASS
					VH	1.40190	0.00170	PASS
		5	LCH	TN	VL	1.93119	0.00237	PASS
					VN	7.86781	0.00964	PASS
					VH	0.10014	0.00012	PASS
			MCH	TN	VL	2.33173	0.00285	PASS
					VN	-5.39303	-0.00658	PASS
					VH	-0.30041	-0.00037	PASS
			HCH	TN	VL	2.50339	0.00305	PASS
					VN	1.87397	0.00228	PASS
					VH	-5.20706	-0.00634	PASS
		10	MCH	TN	VL	-0.15736	-0.00019	PASS
					VN	-0.52929	-0.00065	PASS
					VH	-2.21729	-0.00271	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
Band26 (814-82)	LTE/TM1	1.4	LCH	VN	-30	-8.68320	-0.01066	PASS
					-20	4.89235	0.00601	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
4 MHz)					-10	9.58443	0.01176	PASS
					0	-1.23024	-0.00151	PASS
					10	0.04292	0.00005	PASS
					20	-7.43866	-0.00913	PASS
					30	3.64780	0.00448	PASS
					40	11.95908	0.01468	PASS
			50	-2.34604	-0.00288	PASS		
			MCH	VN	-30	-13.01765	-0.01589	PASS
					-20	6.29425	0.00769	PASS
					-10	-3.69072	-0.00451	PASS
					0	-3.51906	-0.00430	PASS
					10	1.85966	0.00227	PASS
					20	-2.08855	-0.00255	PASS
			HCH	VN	30	-2.36034	-0.00288	PASS
					40	-0.37193	-0.00045	PASS
					50	-9.84192	-0.01202	PASS
					-30	0.51498	0.00063	PASS
					-20	9.58443	0.01164	PASS
		-10			-7.16686	-0.00871	PASS	
		3	LCH	VN	0	1.33038	0.00162	PASS
					10	6.03676	0.00733	PASS
					20	4.47750	0.00544	PASS
					30	-2.10285	-0.00255	PASS
					40	-5.59330	-0.00679	PASS
					50	15.19203	0.01845	PASS
			MCH	VN	-30	-2.08855	-0.00256	PASS
					-20	-0.85831	-0.00105	PASS
					-10	3.37601	0.00414	PASS
					0	4.16279	0.00510	PASS
					10	-1.10149	-0.00135	PASS
					20	-3.19004	-0.00391	PASS
					30	-6.17981	-0.00758	PASS
					40	3.86238	0.00474	PASS
					50	6.98090	0.00856	PASS
					-30	-0.50068	-0.00061	PASS
					-20	0.38624	0.00047	PASS
-10	-2.05994				-0.00252	PASS		
0	-2.03133	-0.00248	PASS					
10	4.07696	0.00498	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					20	-1.11580	-0.00136	PASS		
					30	-7.41005	-0.00905	PASS		
					40	-5.49316	-0.00671	PASS		
					50	-0.37193	-0.00045	PASS		
			HCH	VN	-30	-1.63078	-0.00198	PASS		
					-20	-0.85831	-0.00104	PASS		
					-10	1.53065	0.00186	PASS		
					0	-2.73228	-0.00332	PASS		
					10	4.47750	0.00544	PASS		
					20	1.02997	0.00125	PASS		
					30	0.08583	0.00010	PASS		
					40	1.31607	0.00160	PASS		
			LCH	VN	50	6.93798	0.00844	PASS		
					-30	1.68800	0.00207	PASS		
					-20	-0.77248	-0.00095	PASS		
					-10	-0.74387	-0.00091	PASS		
		0			2.47478	0.00303	PASS			
		10			1.98841	0.00244	PASS			
		20			-1.37329	-0.00168	PASS			
		30			0.04292	0.00005	PASS			
		MCH	VN	40	8.75473	0.01072	PASS			
				50	-4.84943	-0.00594	PASS			
				-30	-7.12395	-0.00870	PASS			
				-20	-3.17573	-0.00388	PASS			
				-10	0.51498	0.00063	PASS			
				0	0.08583	0.00010	PASS			
				10	-1.01566	-0.00124	PASS			
				20	-11.98769	-0.01464	PASS			
		HCH	VN	30	-0.92983	-0.00114	PASS			
				40	0.61512	0.00075	PASS			
				50	-2.33173	-0.00285	PASS			
				-30	-3.49045	-0.00425	PASS			
				-20	1.90258	0.00232	PASS			
				-10	4.24862	0.00517	PASS			
				0	0.00000	0.00000	PASS			
				10	-0.92983	-0.00113	PASS			
				5			20	1.33038	0.00162	PASS
							30	1.17302	0.00143	PASS
							40	4.77791	0.00582	PASS
							40	4.77791	0.00582	PASS





Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict				
		10	MCH	VN	50	0.20027	0.00024	PASS				
					-30	-6.20842	-0.00758	PASS				
					-20	-3.91960	-0.00479	PASS				
					-10	-5.67913	-0.00693	PASS				
					0	3.17573	0.00388	PASS				
					10	4.29153	0.00524	PASS				
					20	-6.33717	-0.00774	PASS				
					30	-0.07153	-0.00009	PASS				
					40	1.54495	0.00189	PASS				
		50	1.65939	0.00203	PASS							
				1.4	LCH	VN	-30	-3.33309	-0.00409	PASS		
							-20	6.48022	0.00795	PASS		
							-10	3.21865	0.00395	PASS		
							0	-0.25749	-0.00032	PASS		
							10	8.46863	0.01039	PASS		
							20	8.76904	0.01076	PASS		
							30	-3.56197	-0.00437	PASS		
							40	10.84328	0.01331	PASS		
	50						9.64165	0.01183	PASS			
							MCH	VN	-30	-12.00199	-0.01465	PASS
									-20	-1.25885	-0.00154	PASS
									-10	-5.57899	-0.00681	PASS
									0	19.89841	0.02430	PASS
									10	1.13010	0.00138	PASS
									20	-14.13345	-0.01726	PASS
									30	-4.87804	-0.00596	PASS
									40	-4.30584	-0.00526	PASS
									50	2.13146	0.00260	PASS
				HCH	VN	-30	6.60896	0.00803	PASS			
						-20	-9.59873	-0.01166	PASS			
						-10	-0.91553	-0.00111	PASS			
						0	8.11100	0.00985	PASS			
						10	3.30448	0.00401	PASS			
						20	5.43594	0.00660	PASS			
						30	-2.30312	-0.00280	PASS			
						40	1.94550	0.00236	PASS			
50						0.02861	0.00003	PASS				
		3	LCH	VN	-30	-3.44753	-0.00423	PASS				
					-20	-2.84672	-0.00349	PASS				



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					-10	3.79086	0.00465	PASS			
					0	-10.41412	-0.01277	PASS			
					10	1.41621	0.00174	PASS			
					20	4.19140	0.00514	PASS			
					30	-3.66211	-0.00449	PASS			
					40	-1.60217	-0.00196	PASS			
					50	-3.14712	-0.00386	PASS			
			MCH	VN	-30	-3.61919	-0.00442	PASS			
					-20	-5.30720	-0.00648	PASS			
					-10	3.20435	0.00391	PASS			
					0	-3.14712	-0.00384	PASS			
					10	0.15736	0.00019	PASS			
					20	2.33173	0.00285	PASS			
					30	0.64373	0.00079	PASS			
			HCH	VN	-30	-7.95364	-0.00967	PASS			
					-20	-3.60489	-0.00438	PASS			
					-10	-2.38895	-0.00290	PASS			
					0	-1.60217	-0.00195	PASS			
					10	-7.18117	-0.00873	PASS			
					20	1.95980	0.00238	PASS			
					30	2.24590	0.00273	PASS			
			5					40	0.37193	0.00045	PASS
								50	-1.28746	-0.00157	PASS
								-30	1.23024	0.00151	PASS
								-20	-2.40326	-0.00294	PASS
								-10	5.53608	0.00678	PASS
								0	0.45776	0.00056	PASS
								10	2.53200	0.00310	PASS
								20	7.86781	0.00964	PASS
								30	3.41892	0.00419	PASS
40	2.23160	0.00273						PASS			
MCH	VN				50	3.06129	0.00375	PASS			
					-30	-0.34332	-0.00042	PASS			
					-20	-0.37193	-0.00045	PASS			
					-10	5.62191	0.00686	PASS			
					0	-0.85831	-0.00105	PASS			
					10	-1.38760	-0.00169	PASS			

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					20	-5.39303	-0.00658	PASS			
					30	2.56062	0.00313	PASS			
					40	-2.87533	-0.00351	PASS			
					50	-4.44889	-0.00543	PASS			
			HCH	VN				-30	-0.28610	-0.00035	PASS
								-20	-2.13146	-0.00259	PASS
								-10	-2.24590	-0.00273	PASS
								0	0.52929	0.00064	PASS
								10	-2.27451	-0.00277	PASS
								20	1.87397	0.00228	PASS
								30	1.70231	0.00207	PASS
								40	1.41621	0.00172	PASS
								50	0.22888	0.00028	PASS
								MCH	VN	10	
		-20	-0.38624	-0.00047		PASS					
		-10	-0.50068	-0.00061		PASS					
		0	-4.52042	-0.00552		PASS					
		10	-0.25749	-0.00031		PASS					
		20	-0.52929	-0.00065	PASS						
		30	-1.83106	-0.00224	PASS						
		40	-1.18732	-0.00145	PASS						
		50	-1.43051	-0.00175	PASS						

END