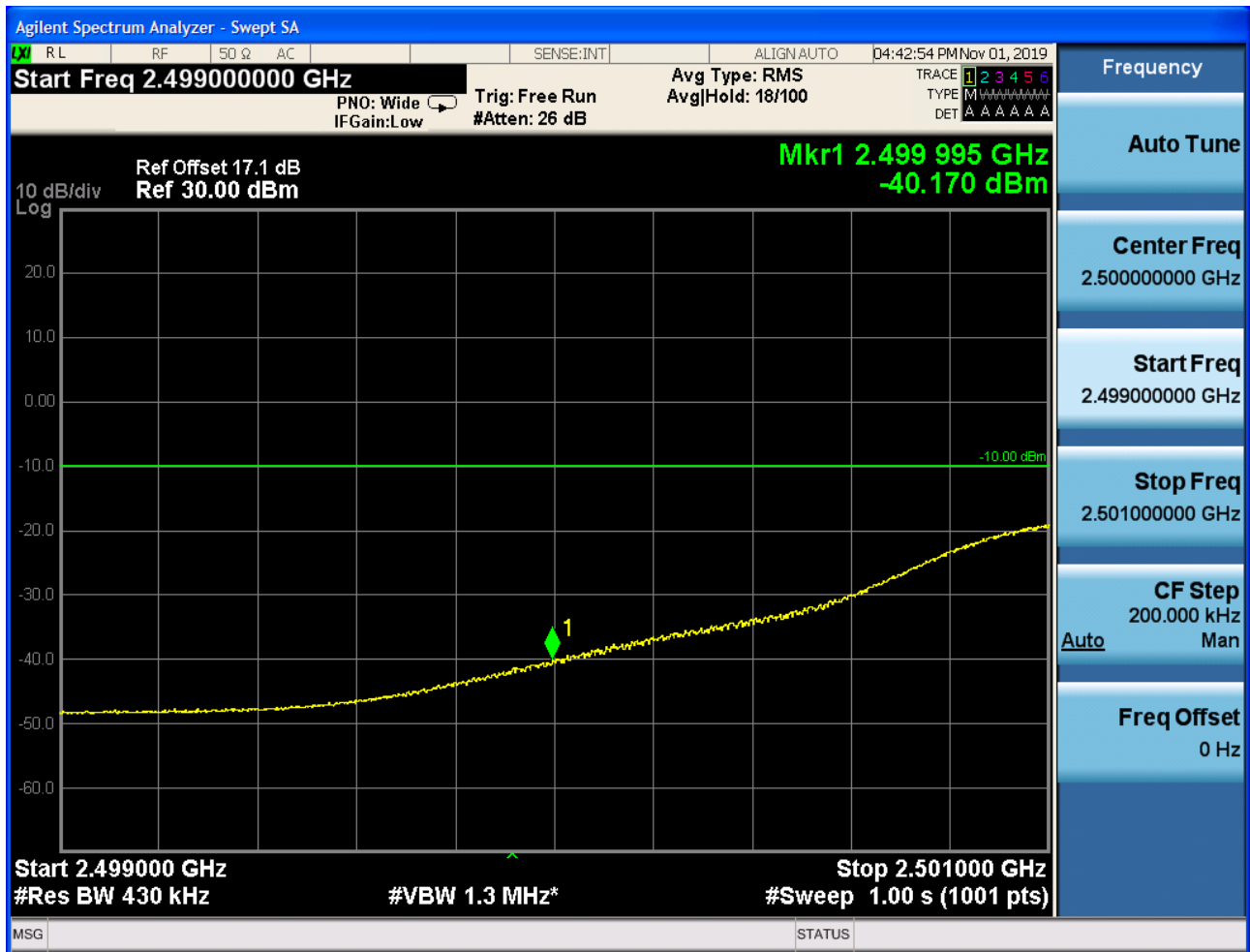






5.1.1.2.4.1.3 Test RB = RB50#25



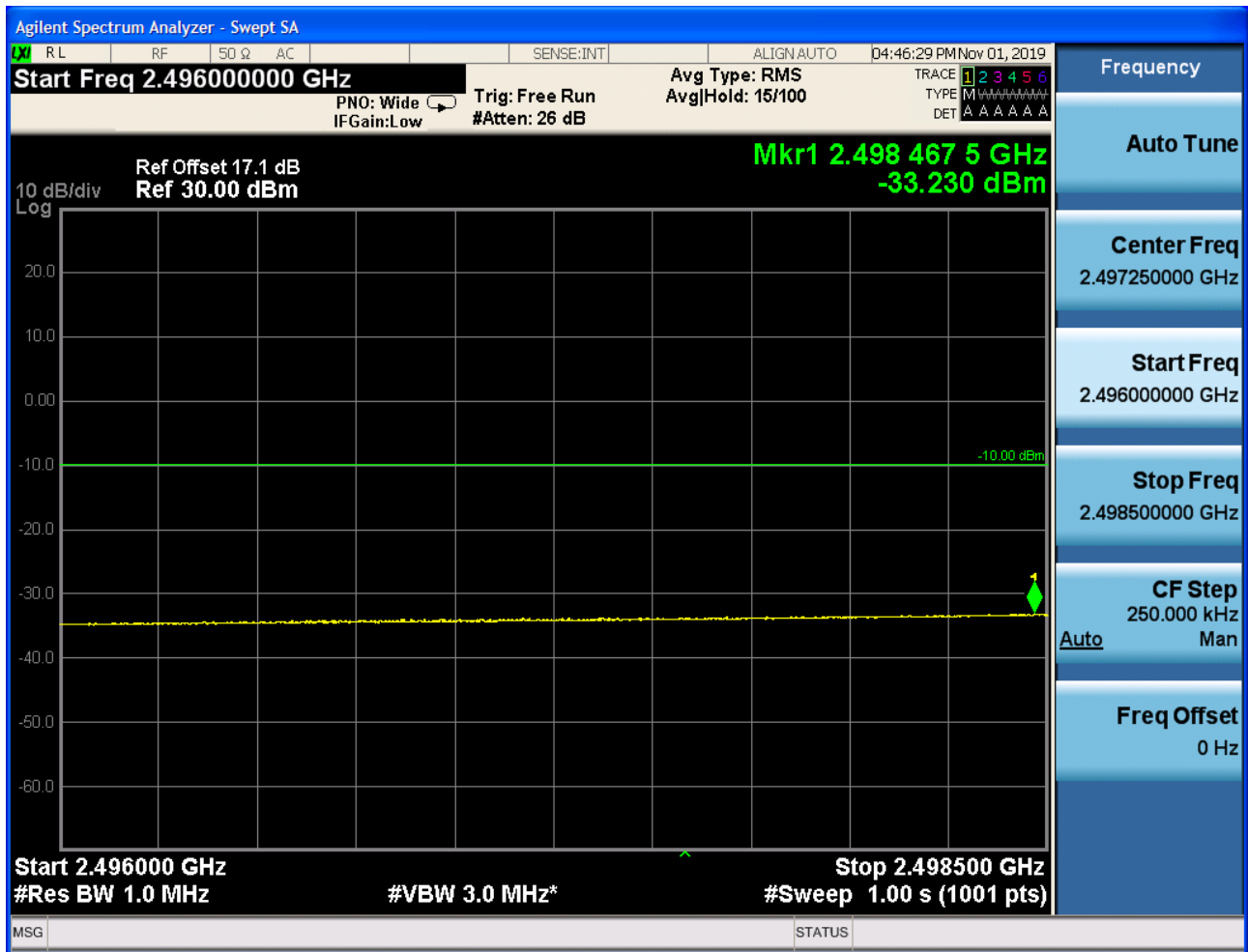


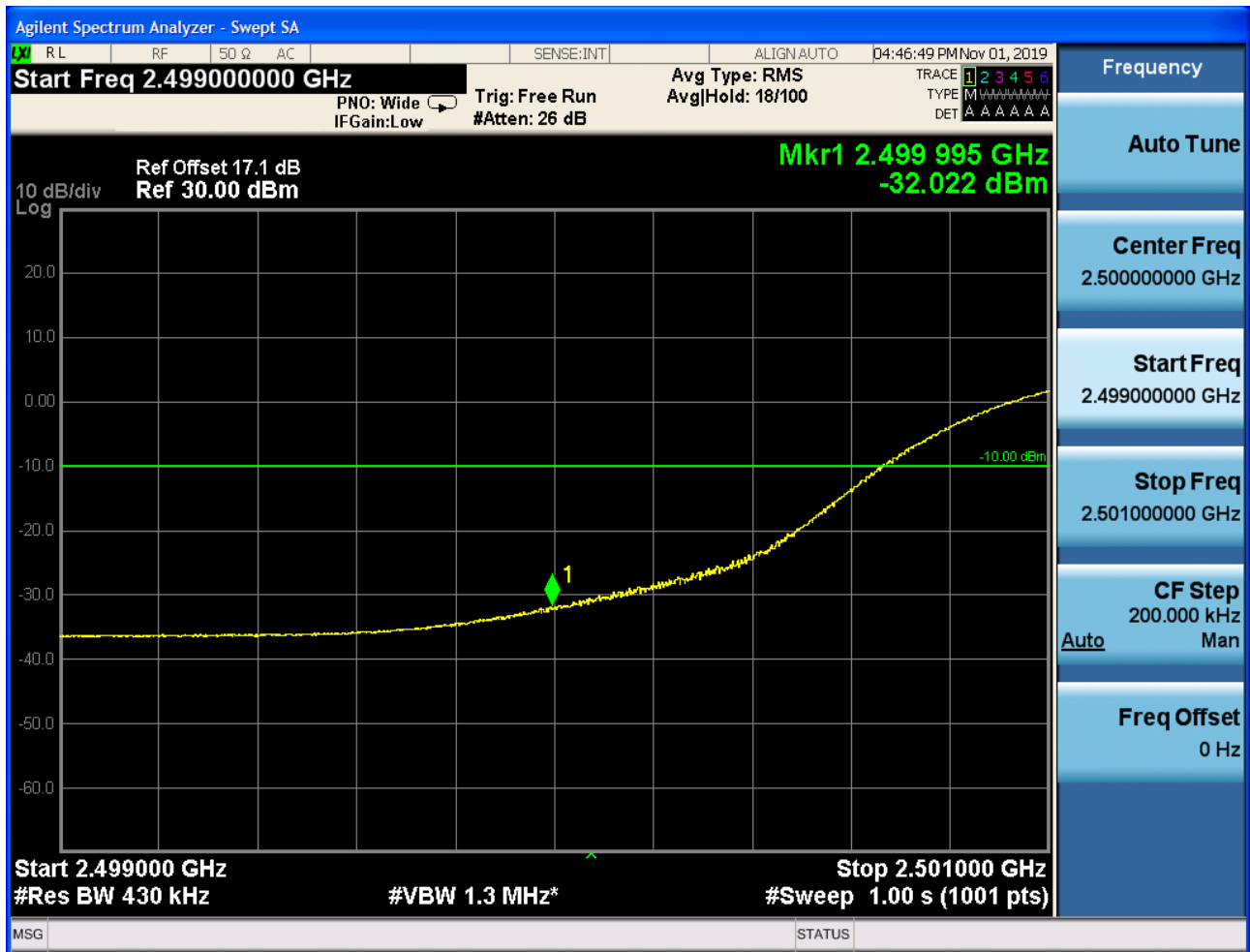




5.1.1.2.4.1.4 Test RB = RB100#0

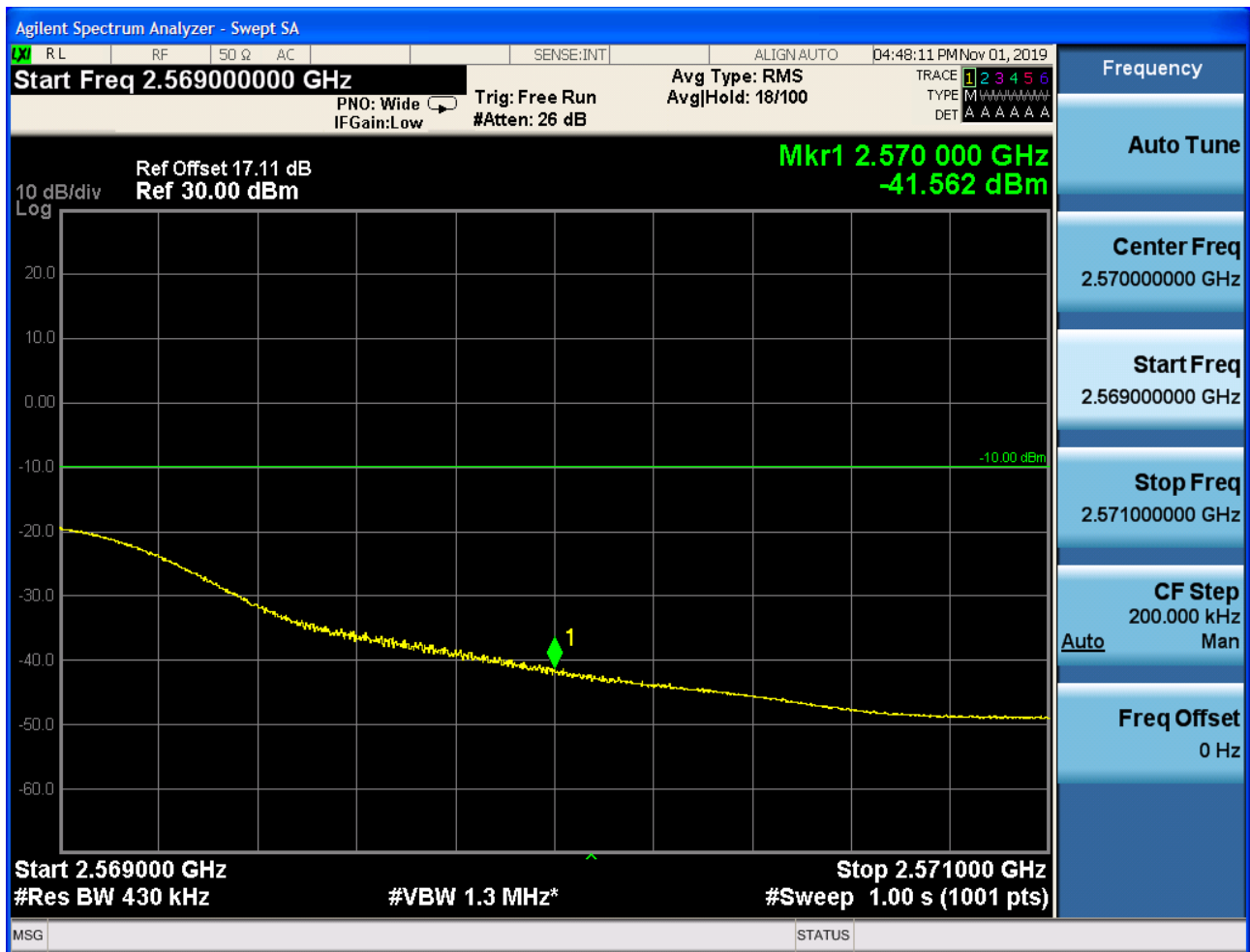


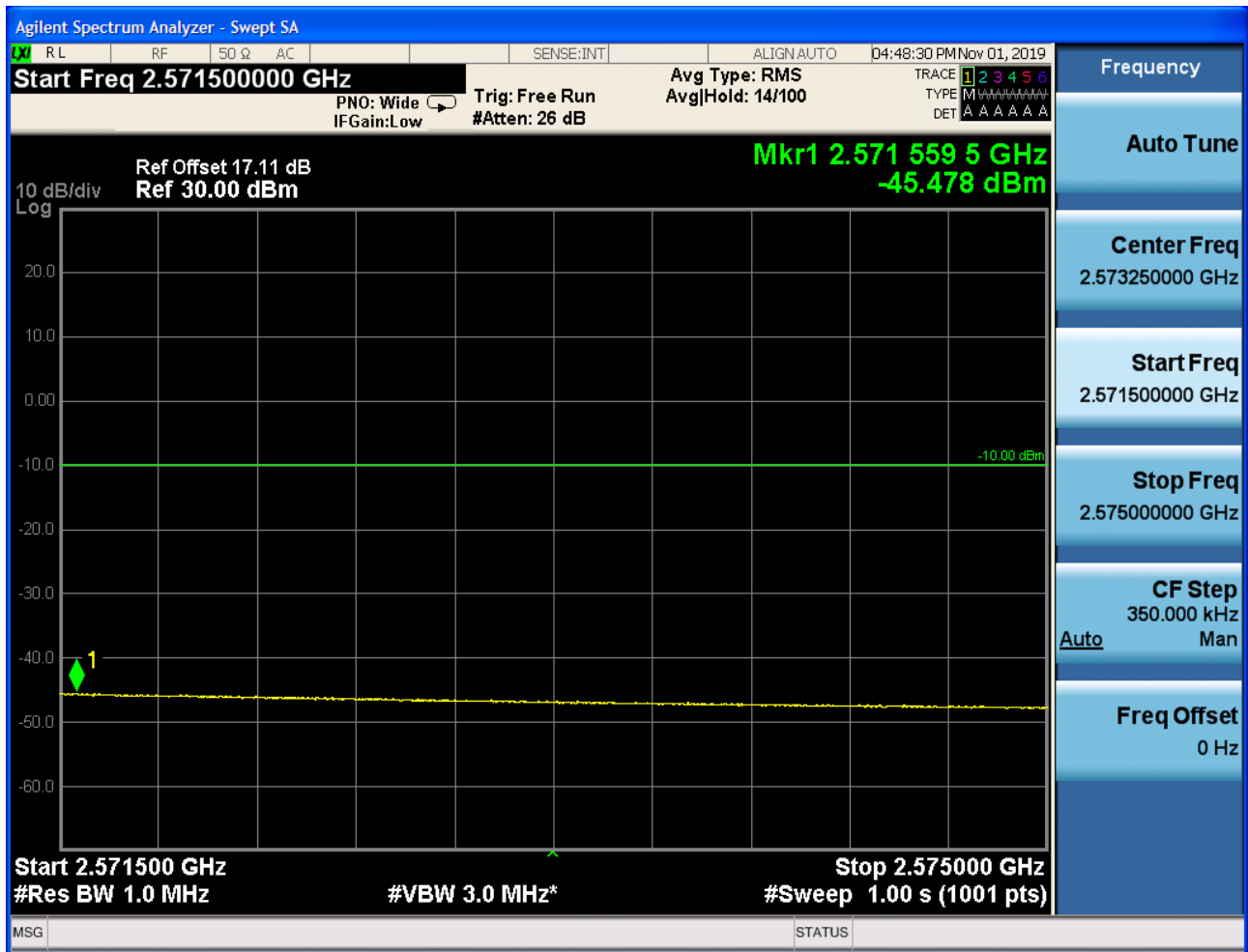


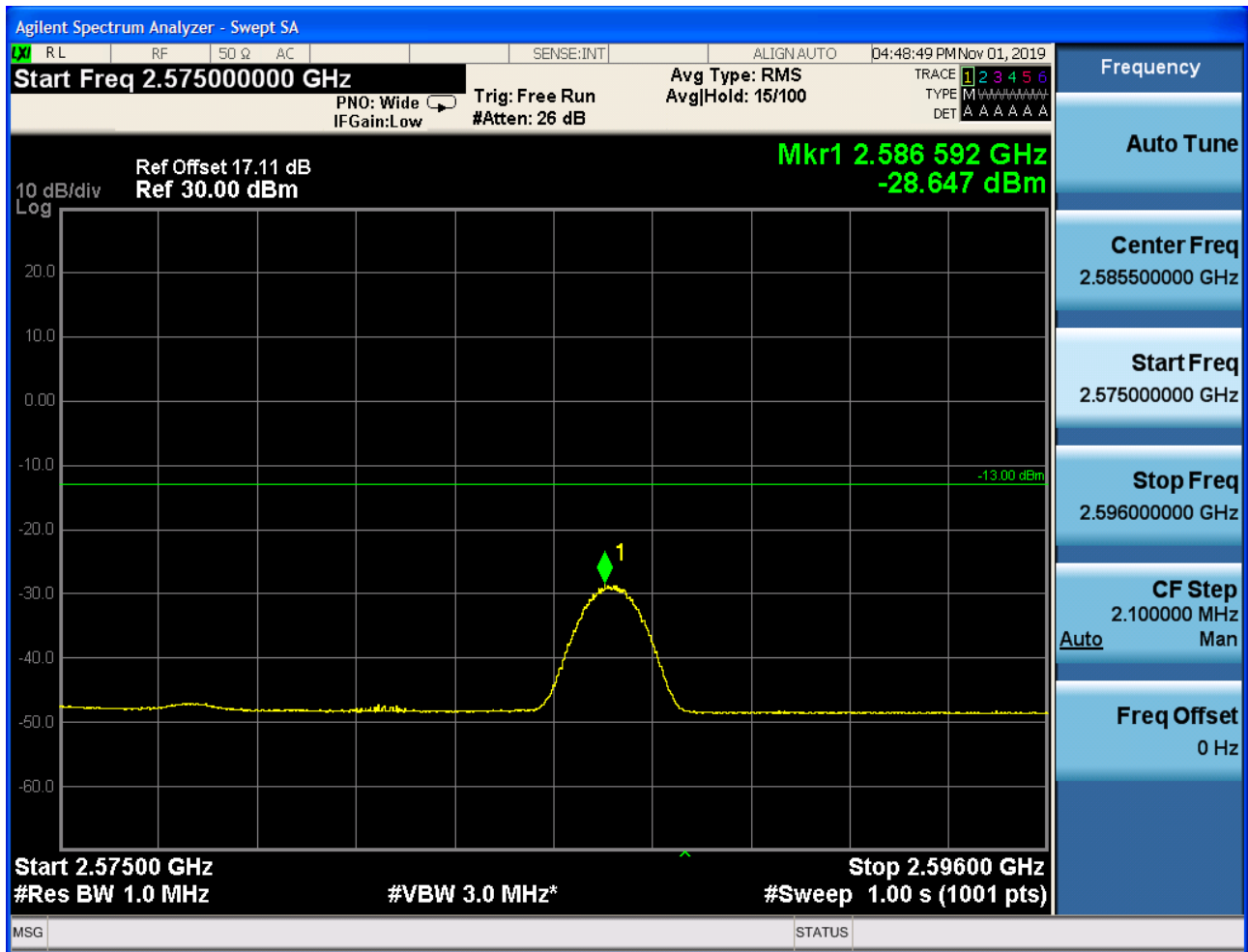


5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0

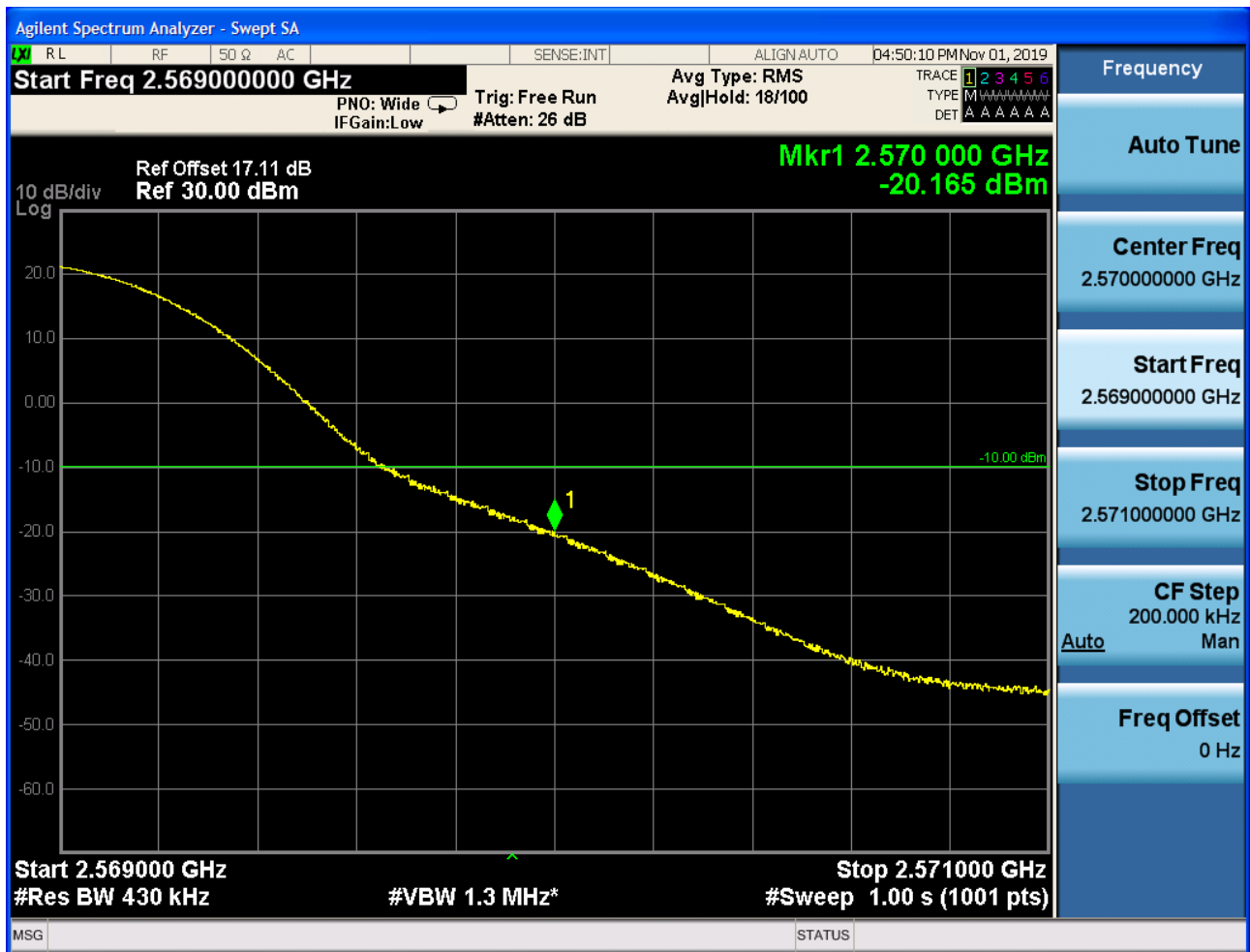


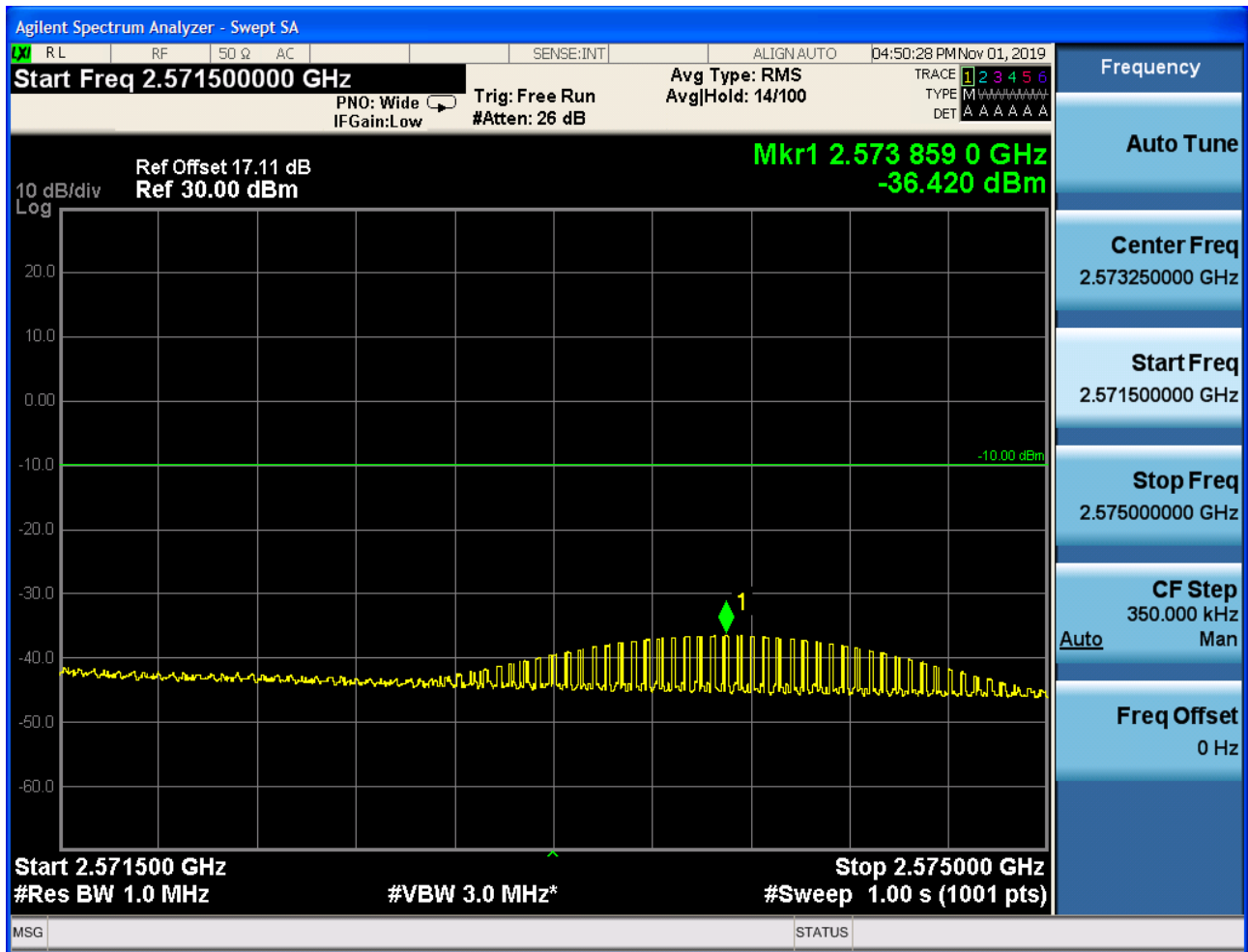


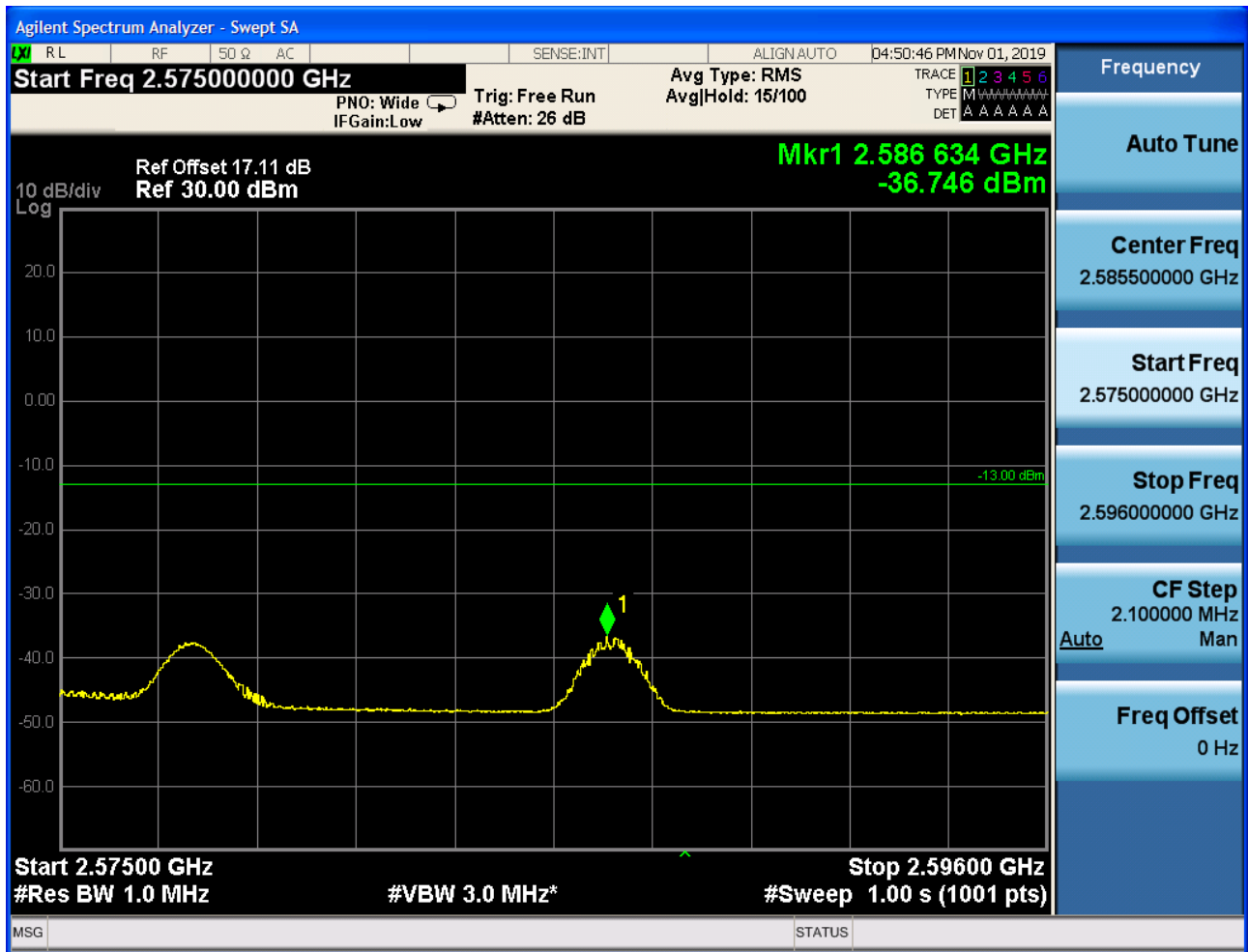




5.1.1.2.4.2.2 Test RB = RB1#99



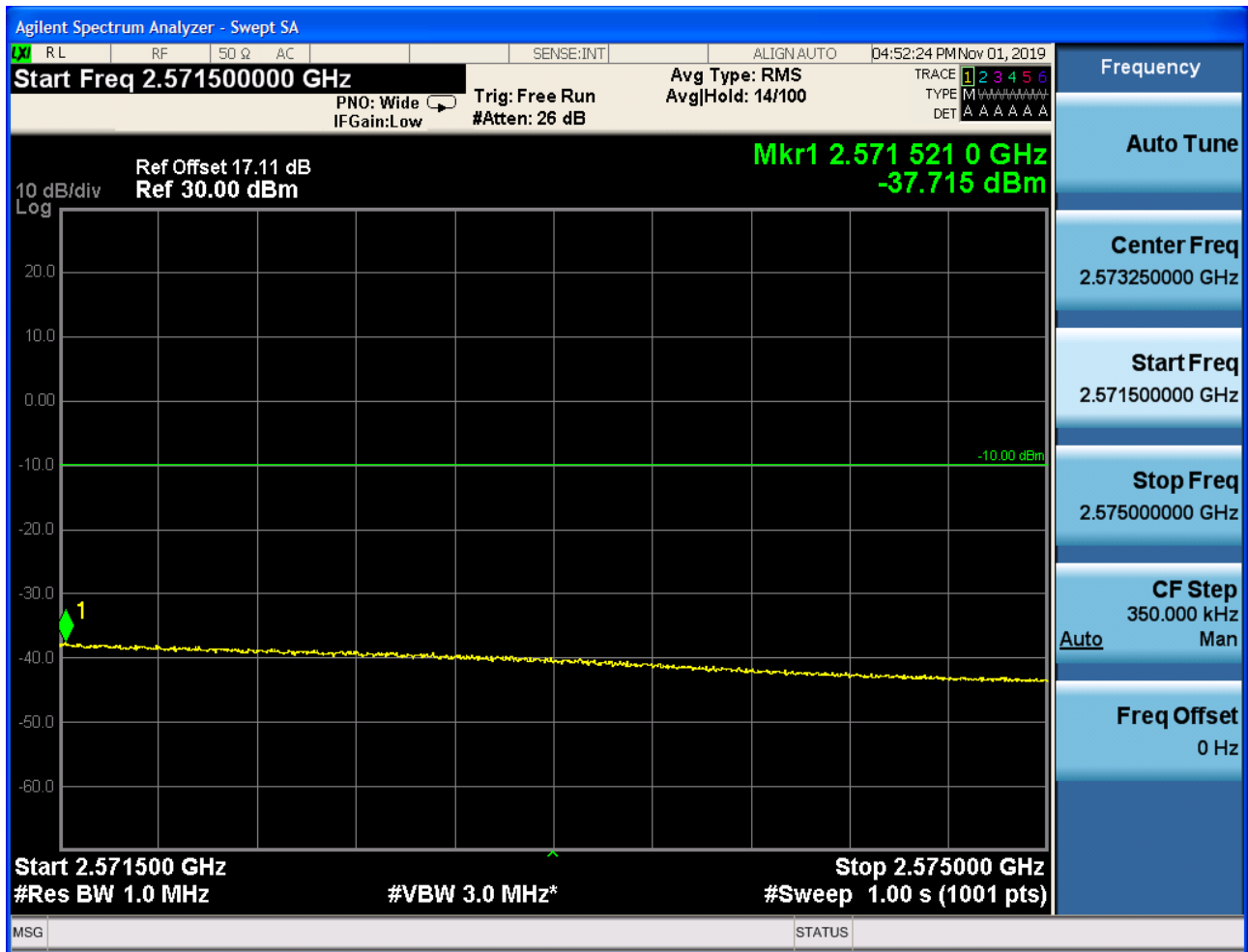






5.1.1.2.4.2.3 Test RB = RB50#25



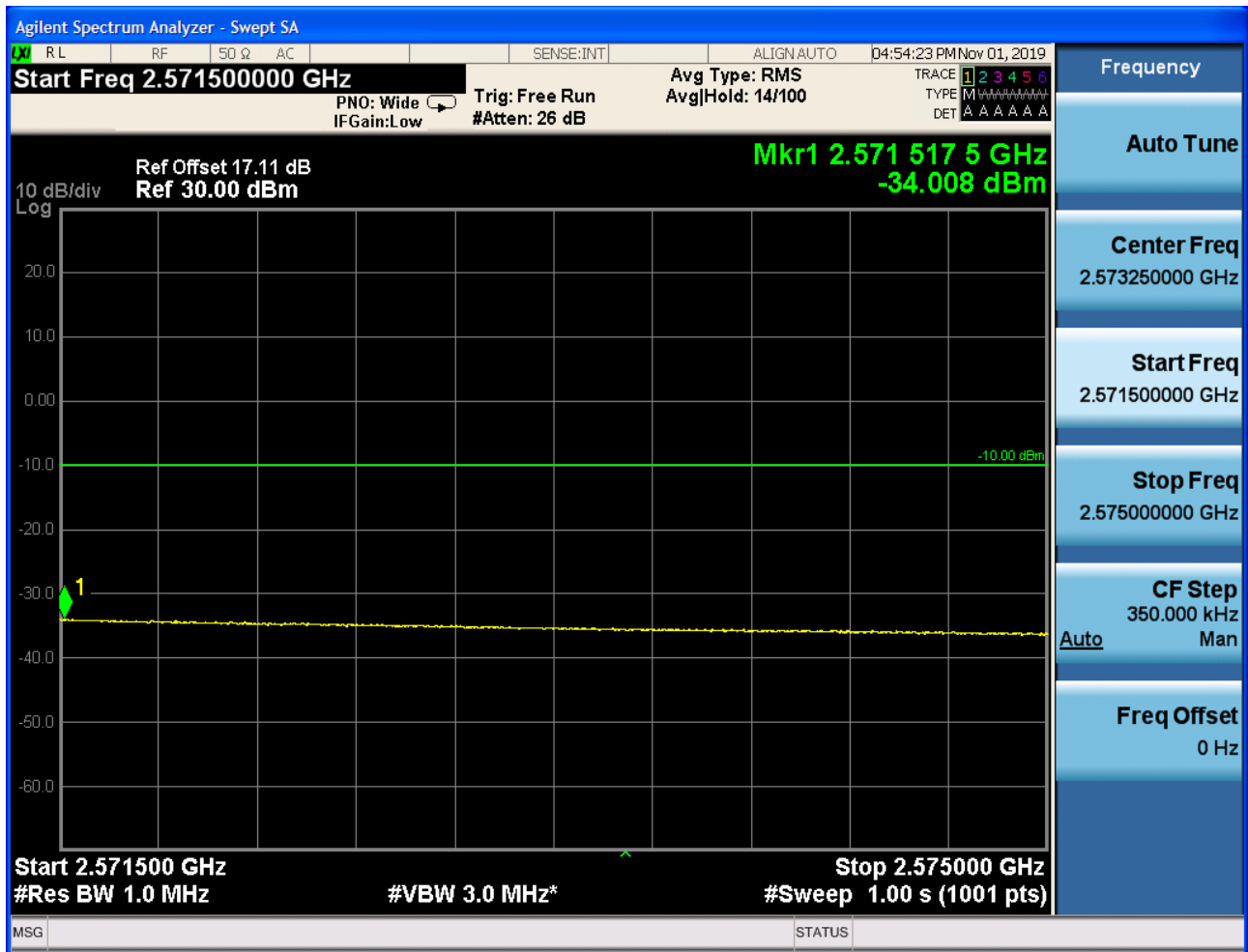






5.1.1.2.4.2.4 Test RB = RB100#0







6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Part I - Test Plots

6.1 For LTE

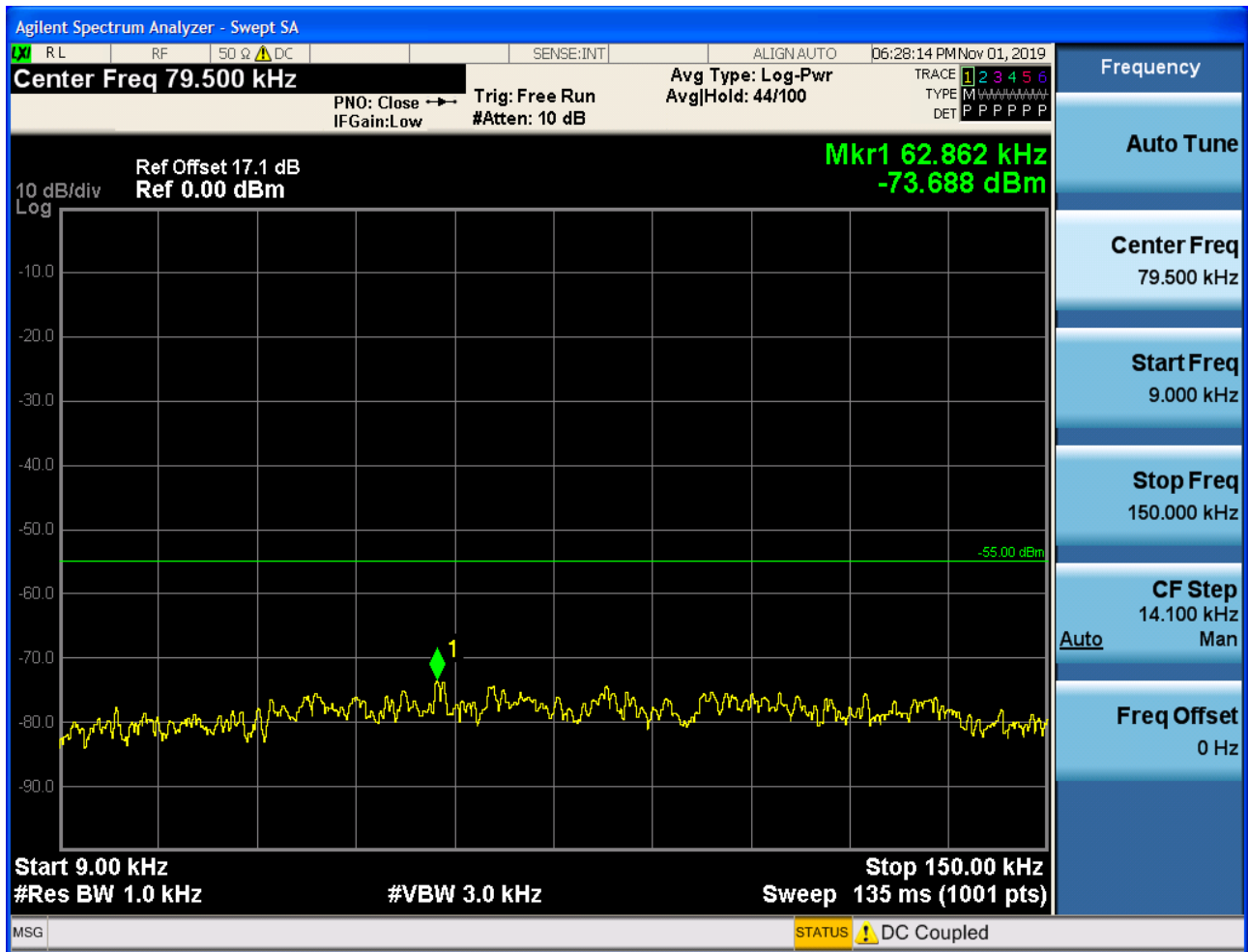
6.1.1 Test Band = Band7

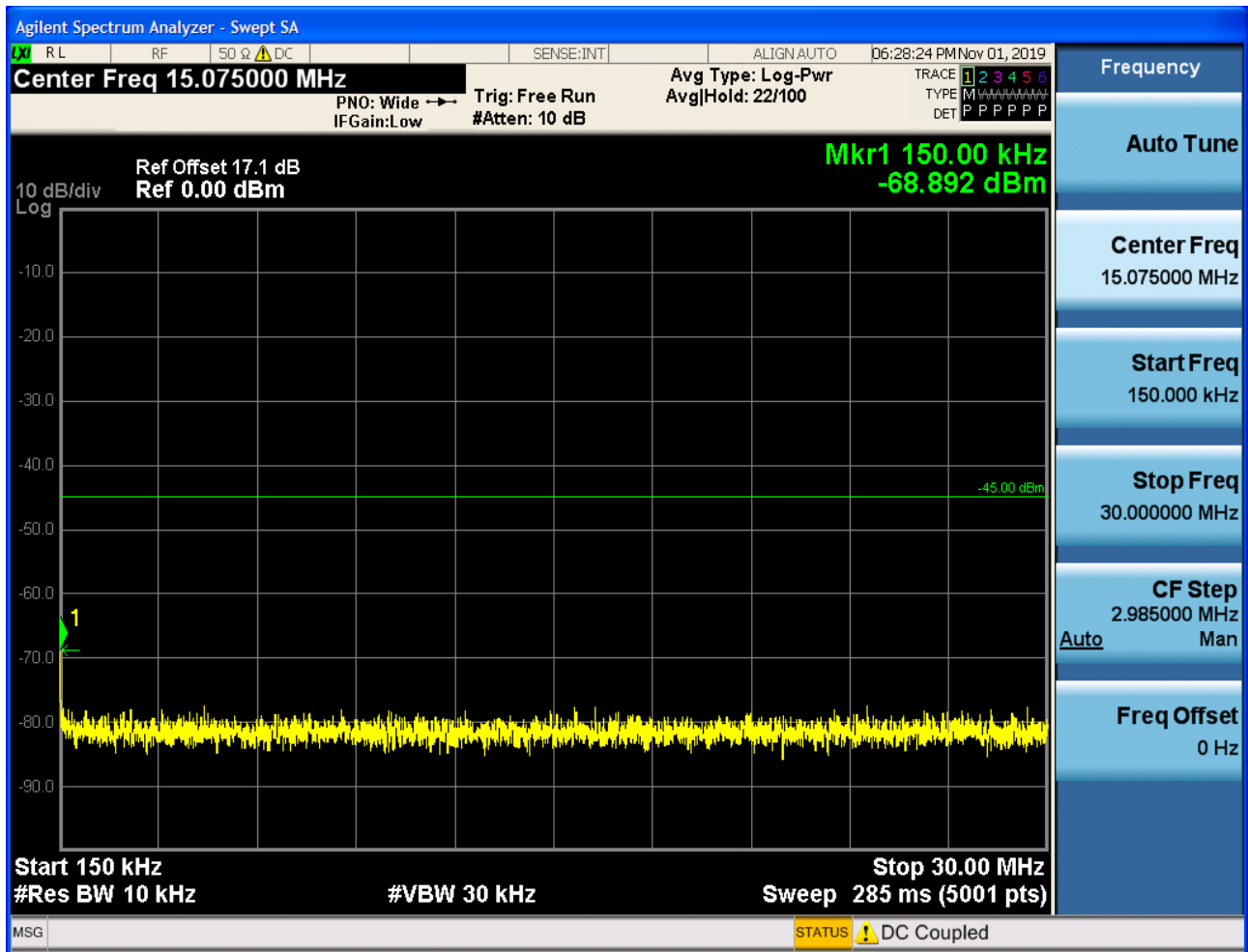
6.1.1.1 Test Mode = LTE/TM1

6.2.1.1.1 Test Bandwidth = 5

6.2.1.1.1.1 Test Channel = LCH

6.2.1.1.1.1.1 Test RB = RB1#0

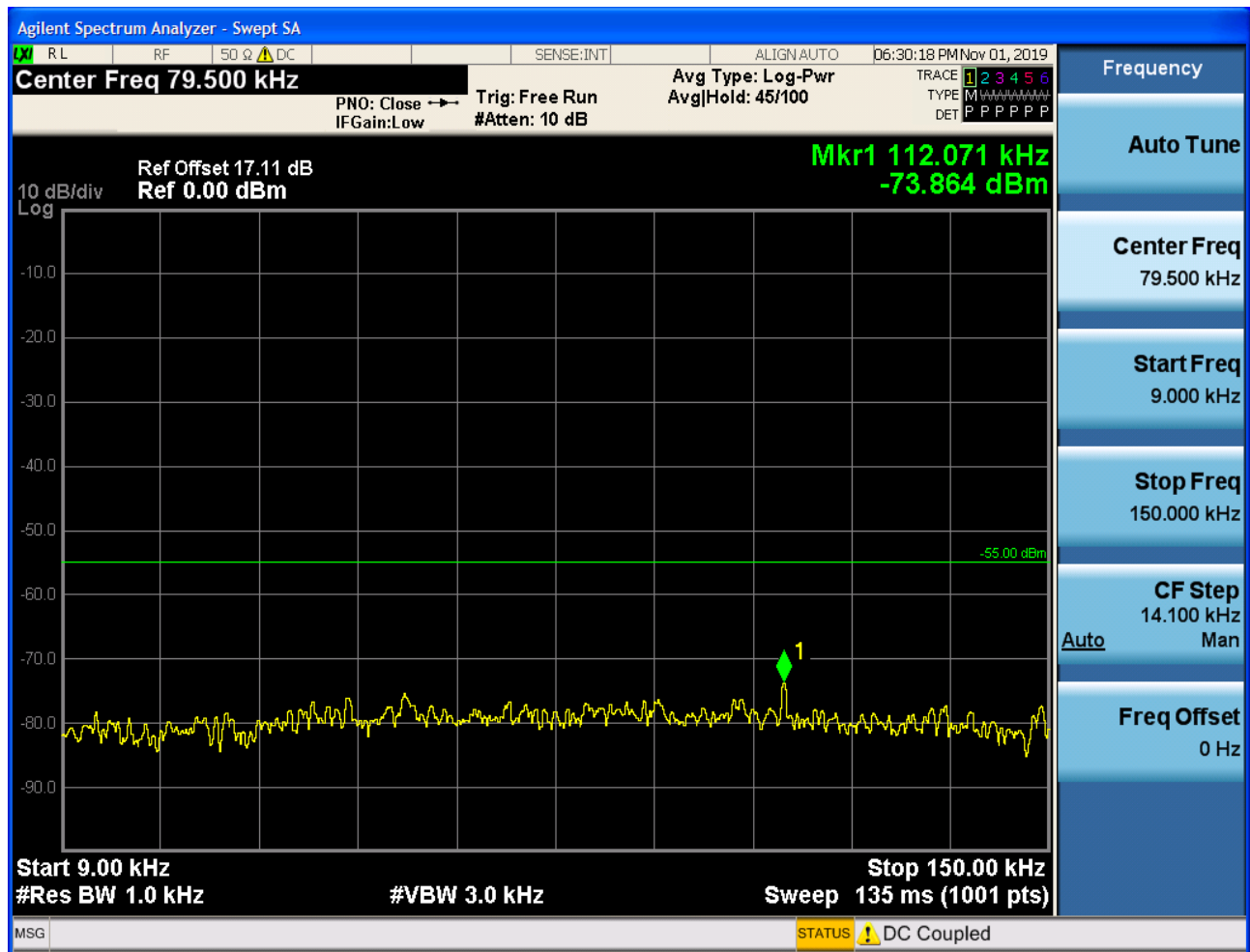


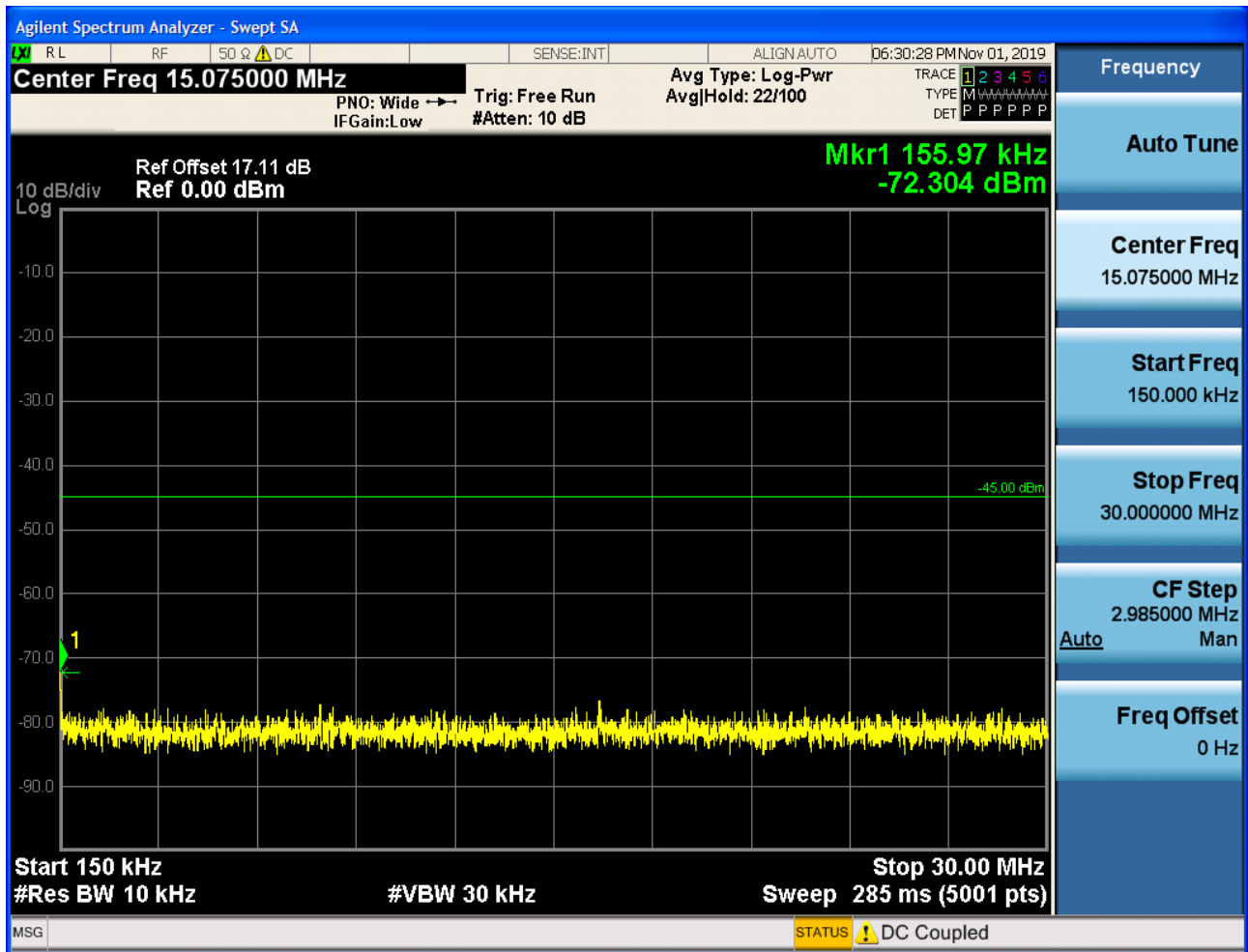


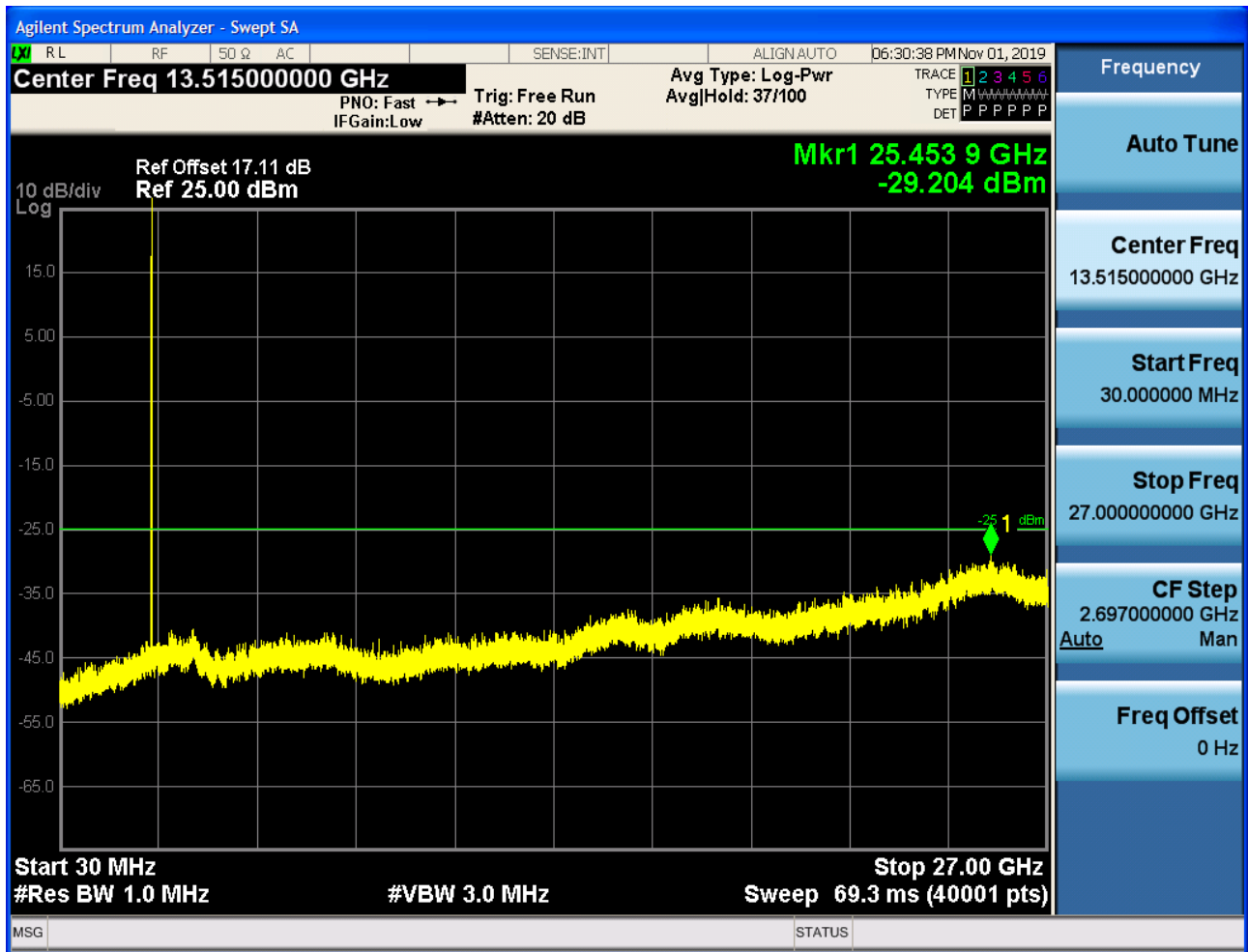


6.2.1.1.1.2 Test Channel = MCH

6.2.1.1.1.2.1 Test RB = RB1#0

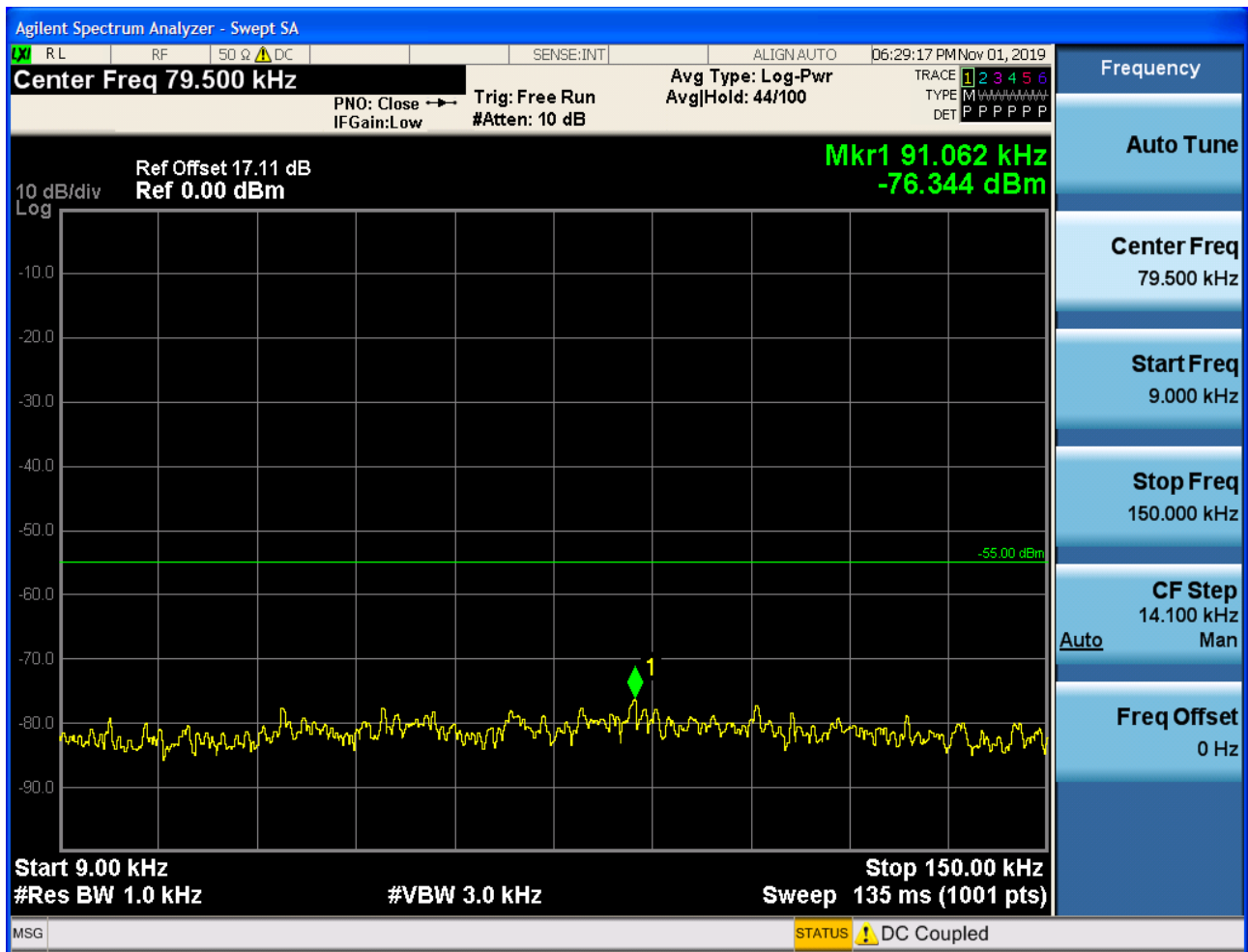


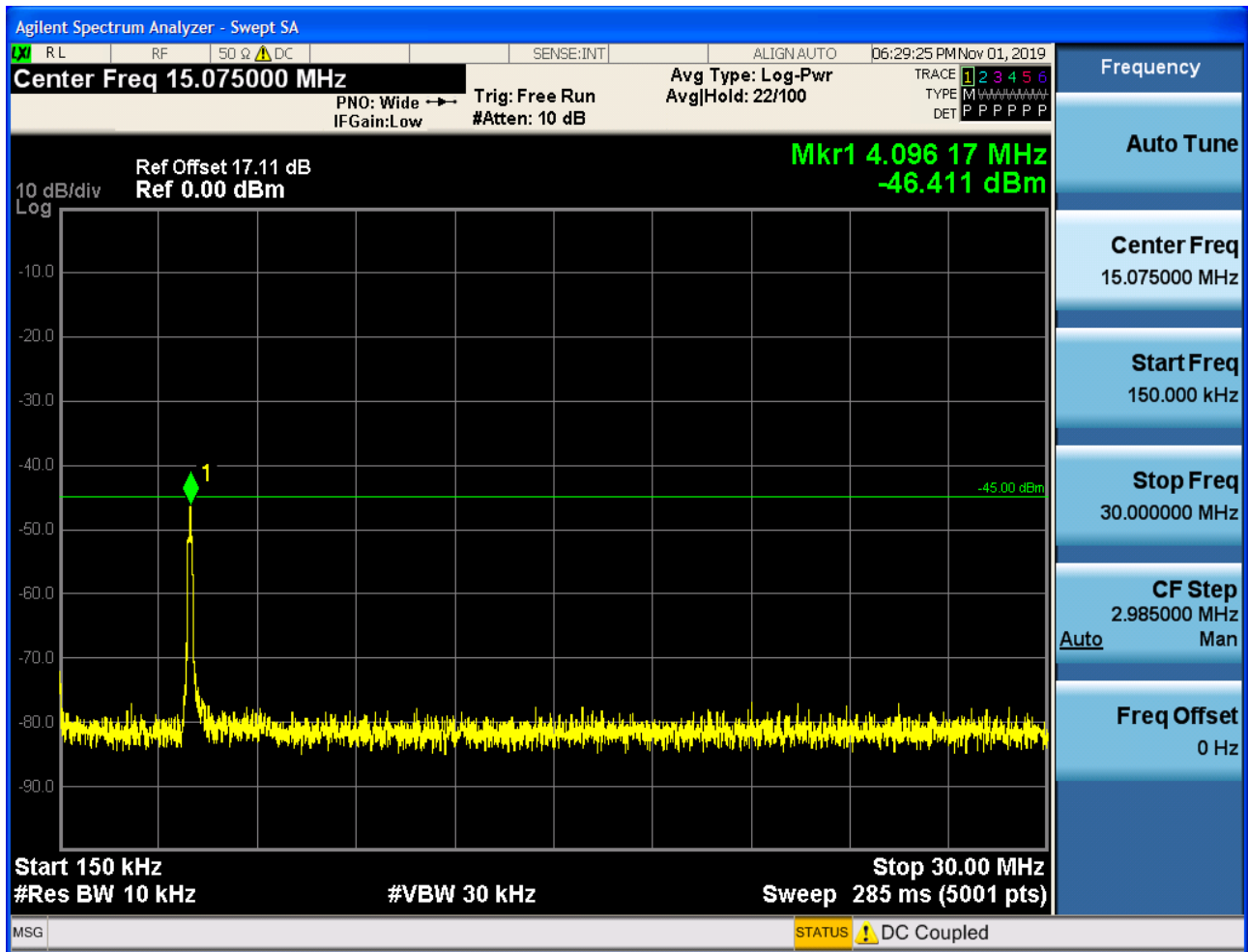


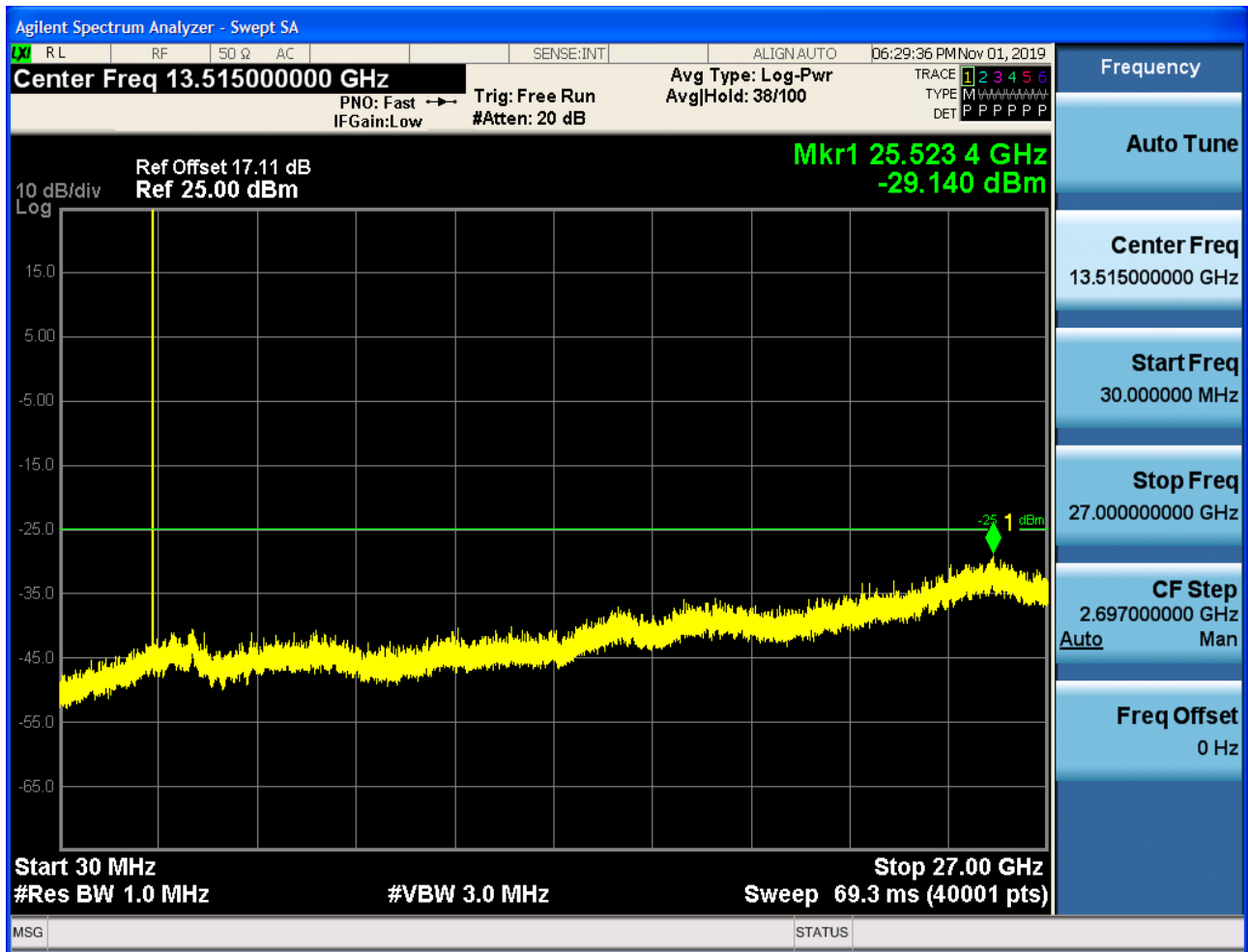


6.2.1.1.1.3 Test Channel = HCH

6.2.1.1.1.3.1 Test RB = RB1#0



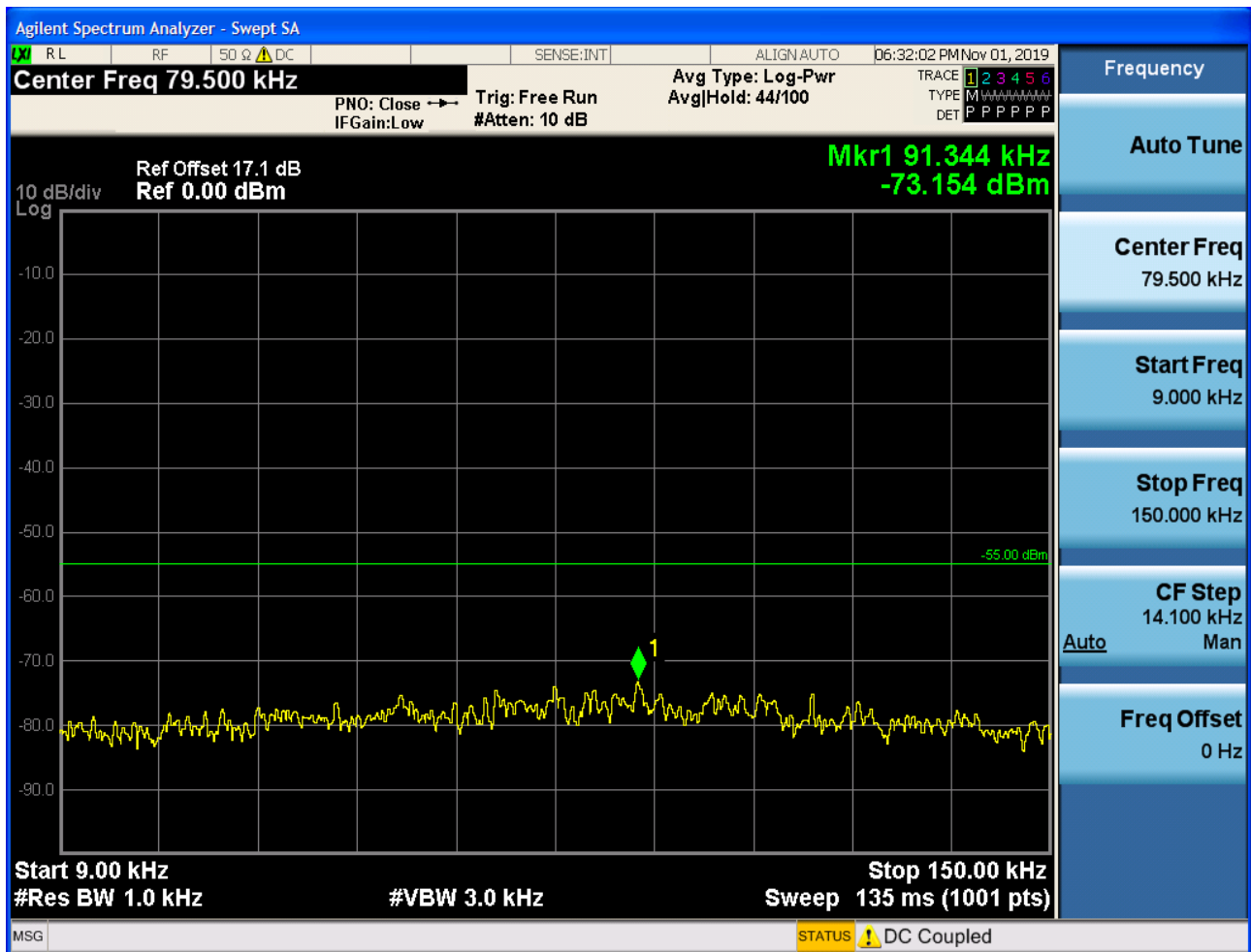


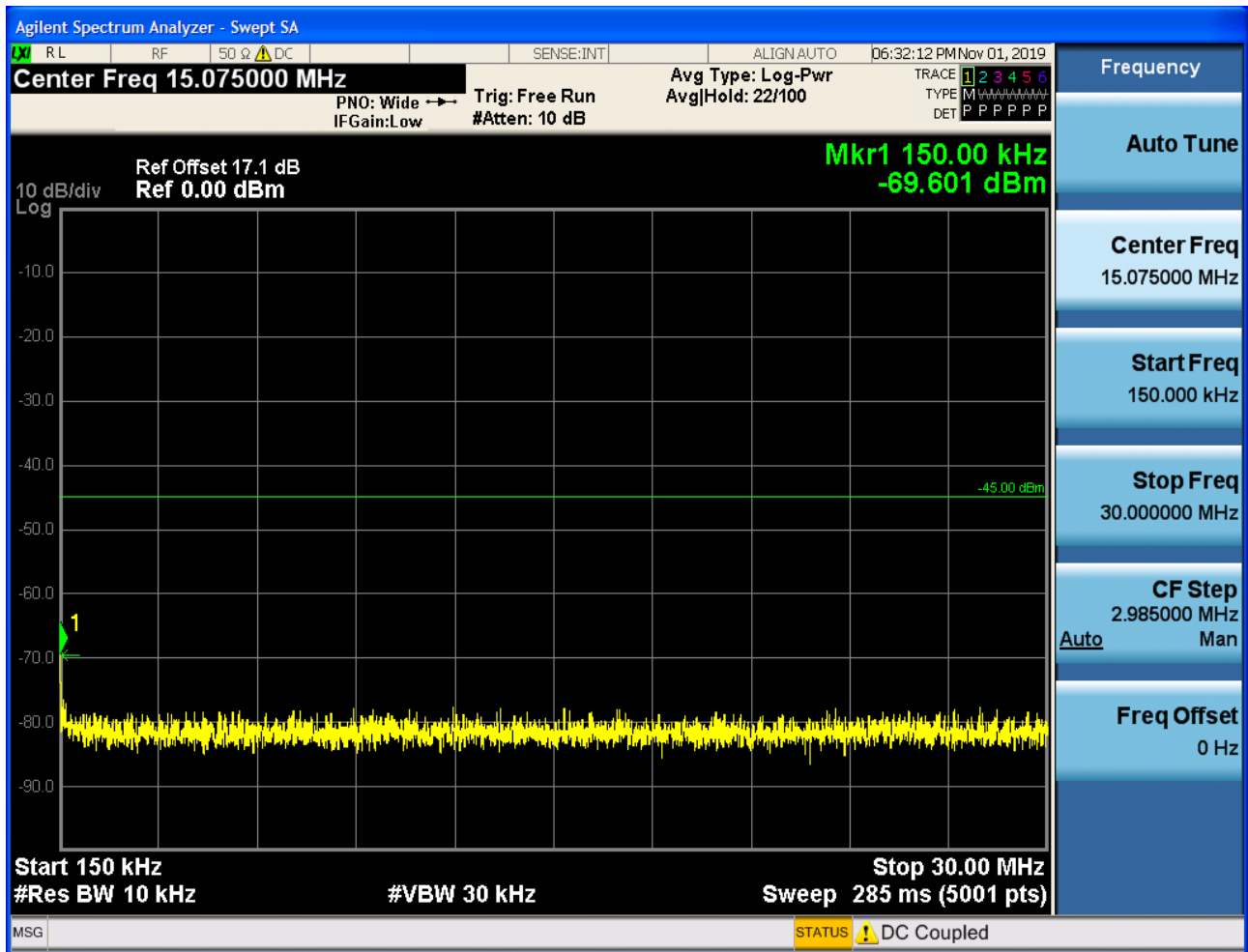


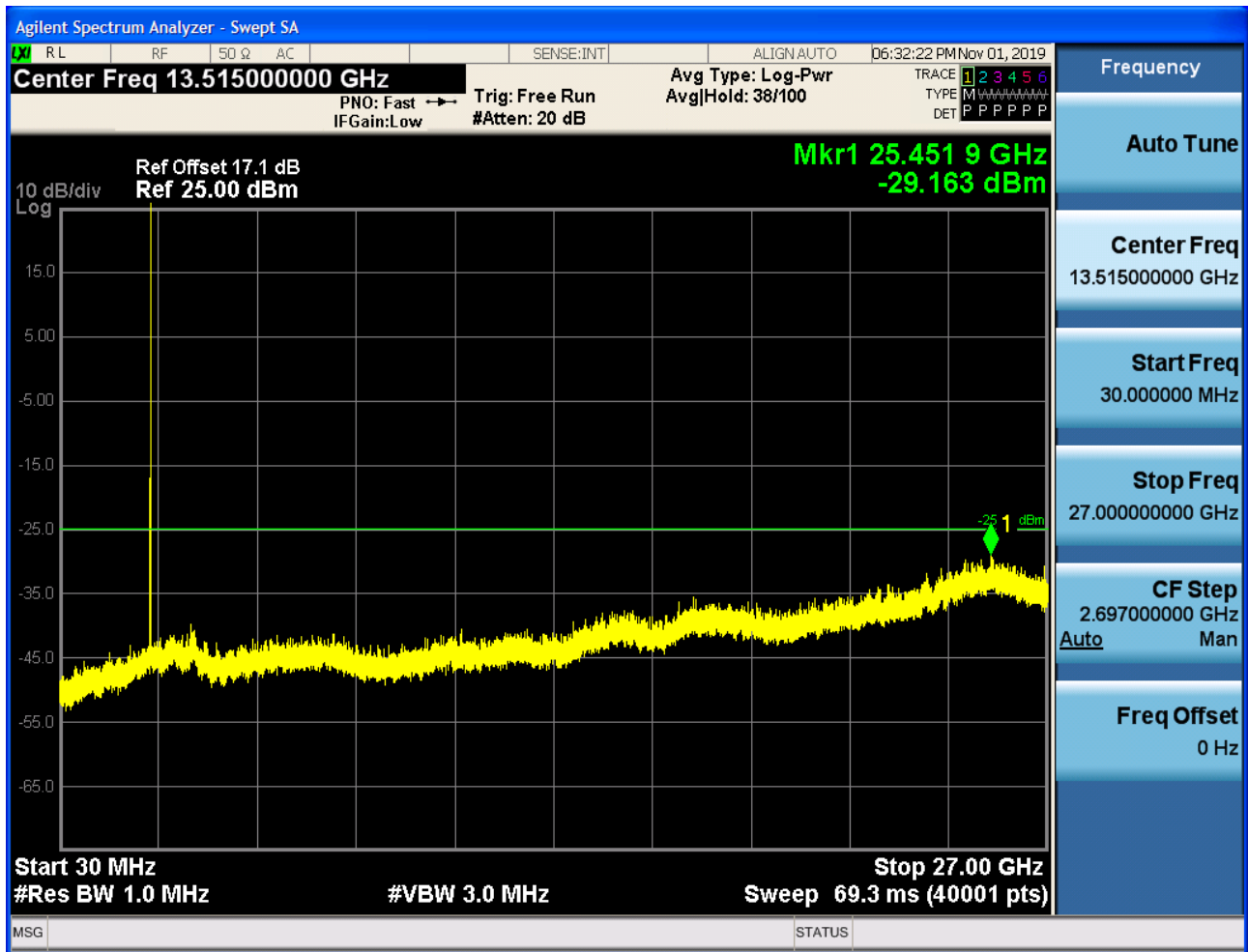
6.2.1.1.2 Test Bandwidth = 10

6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0

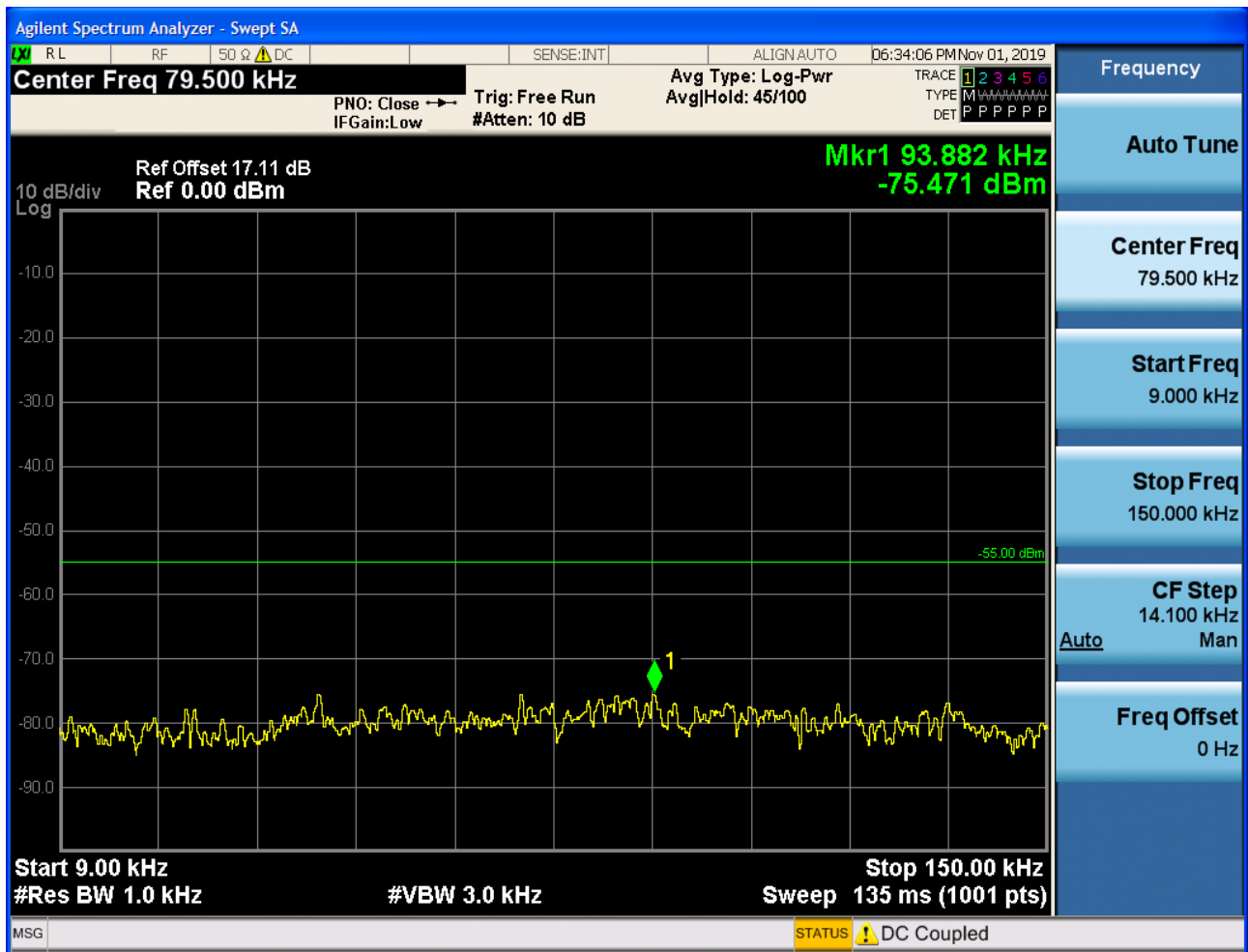


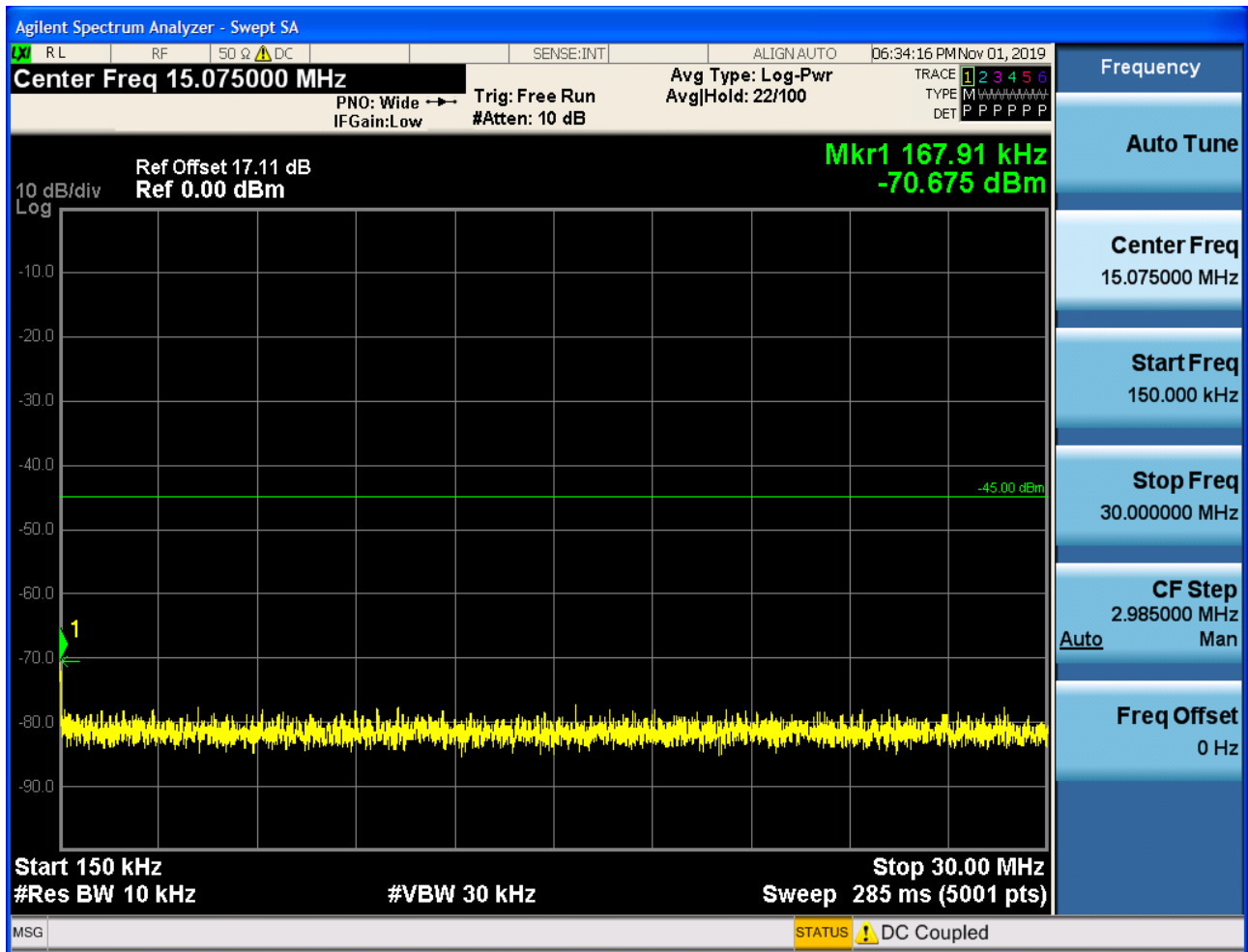


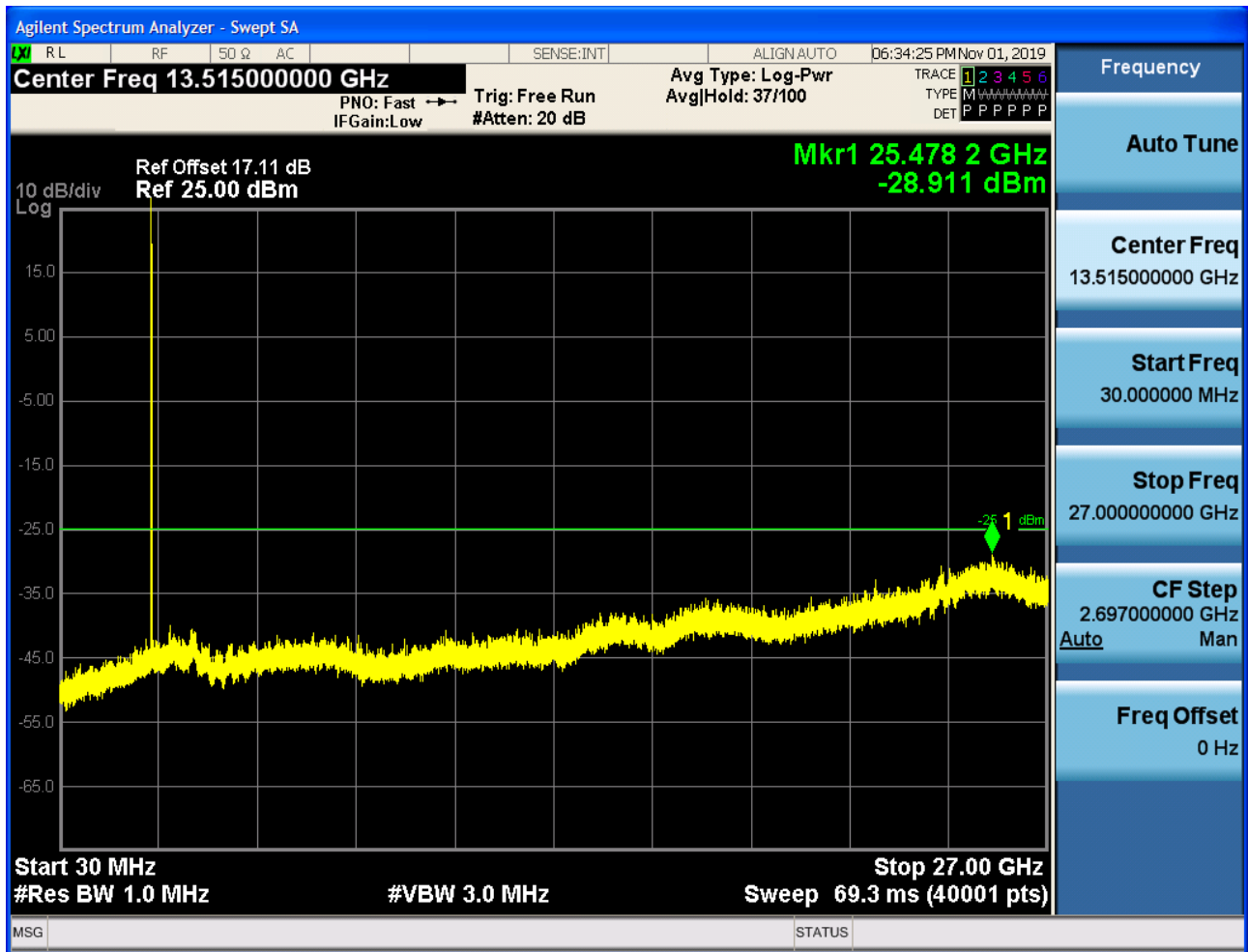


6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0

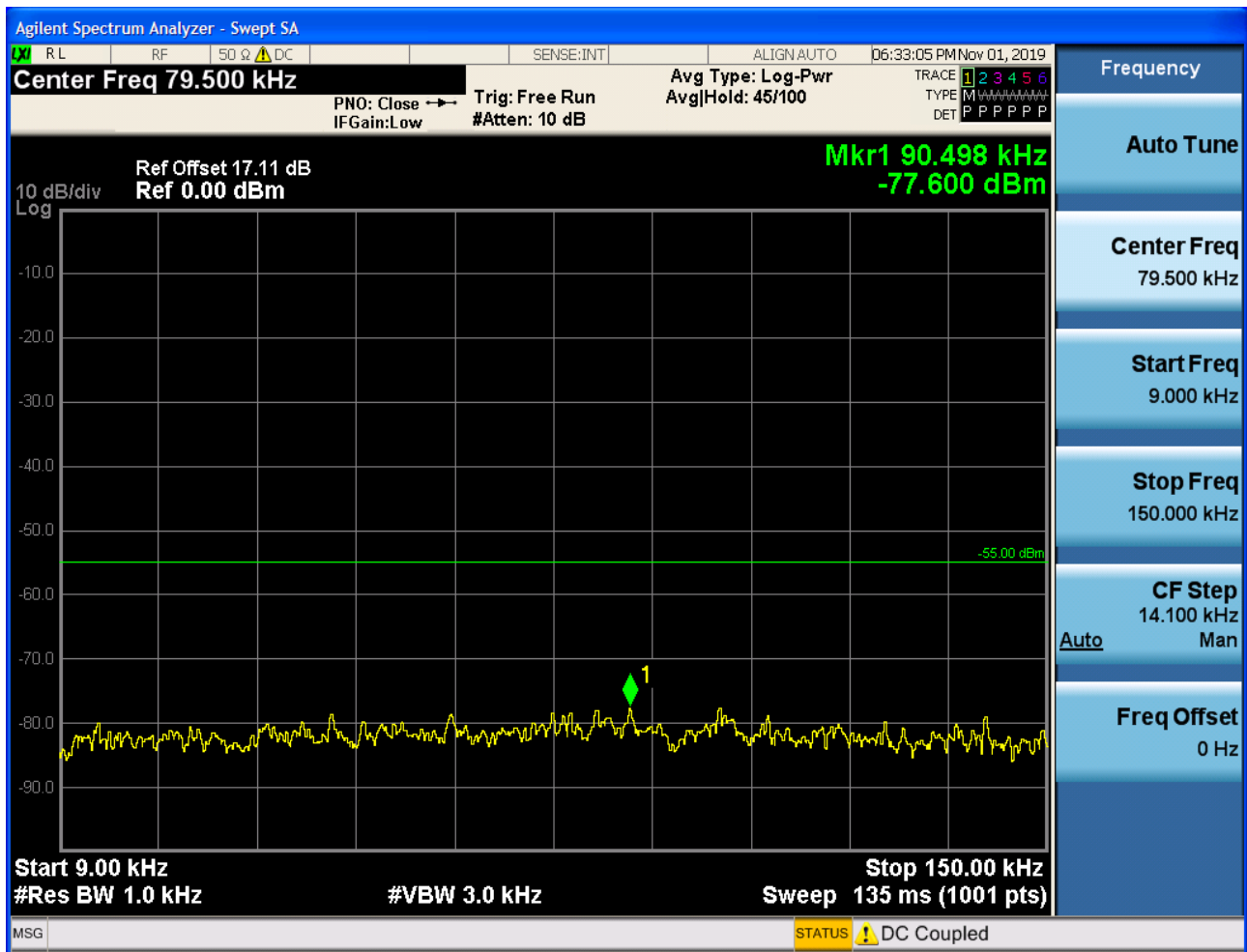


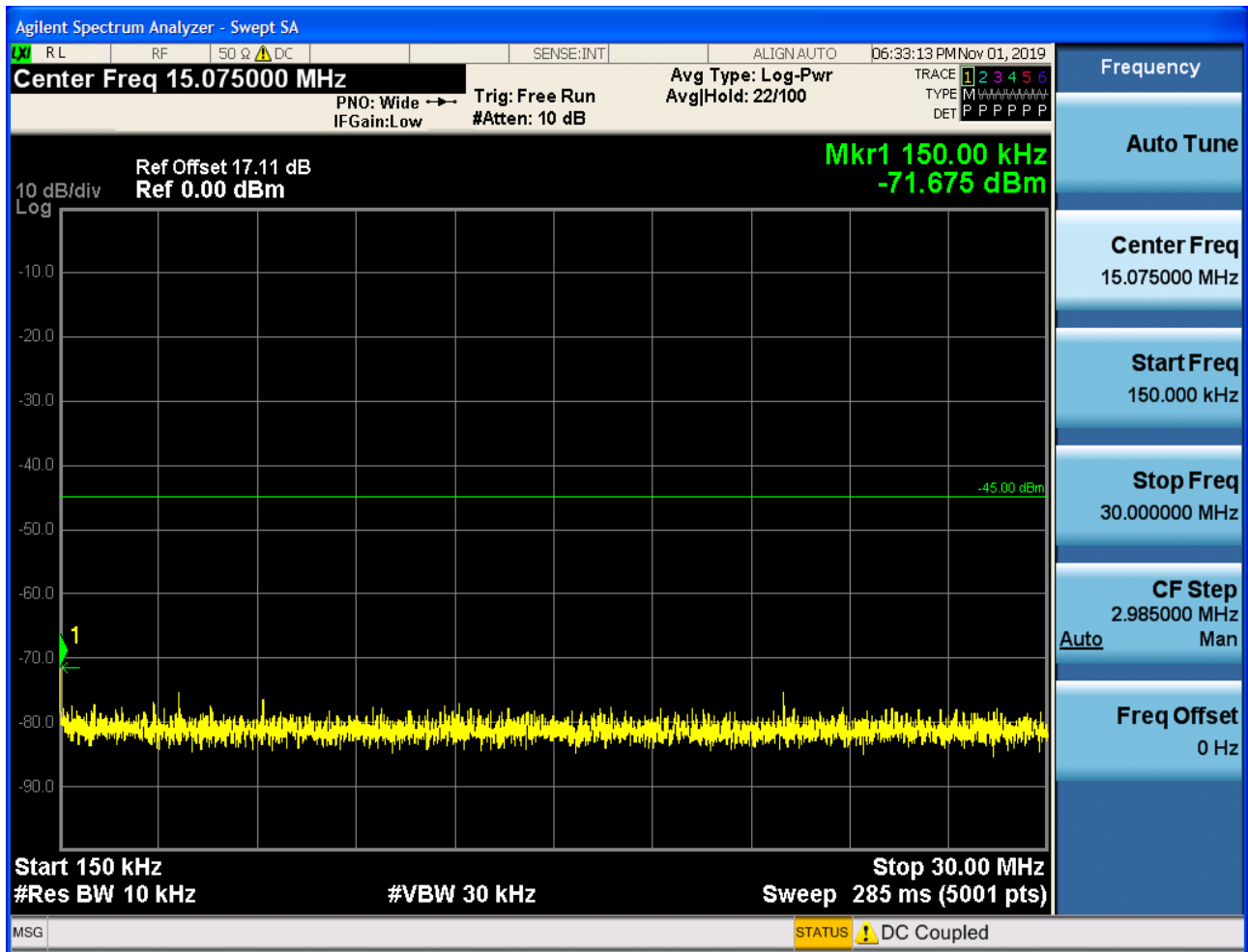


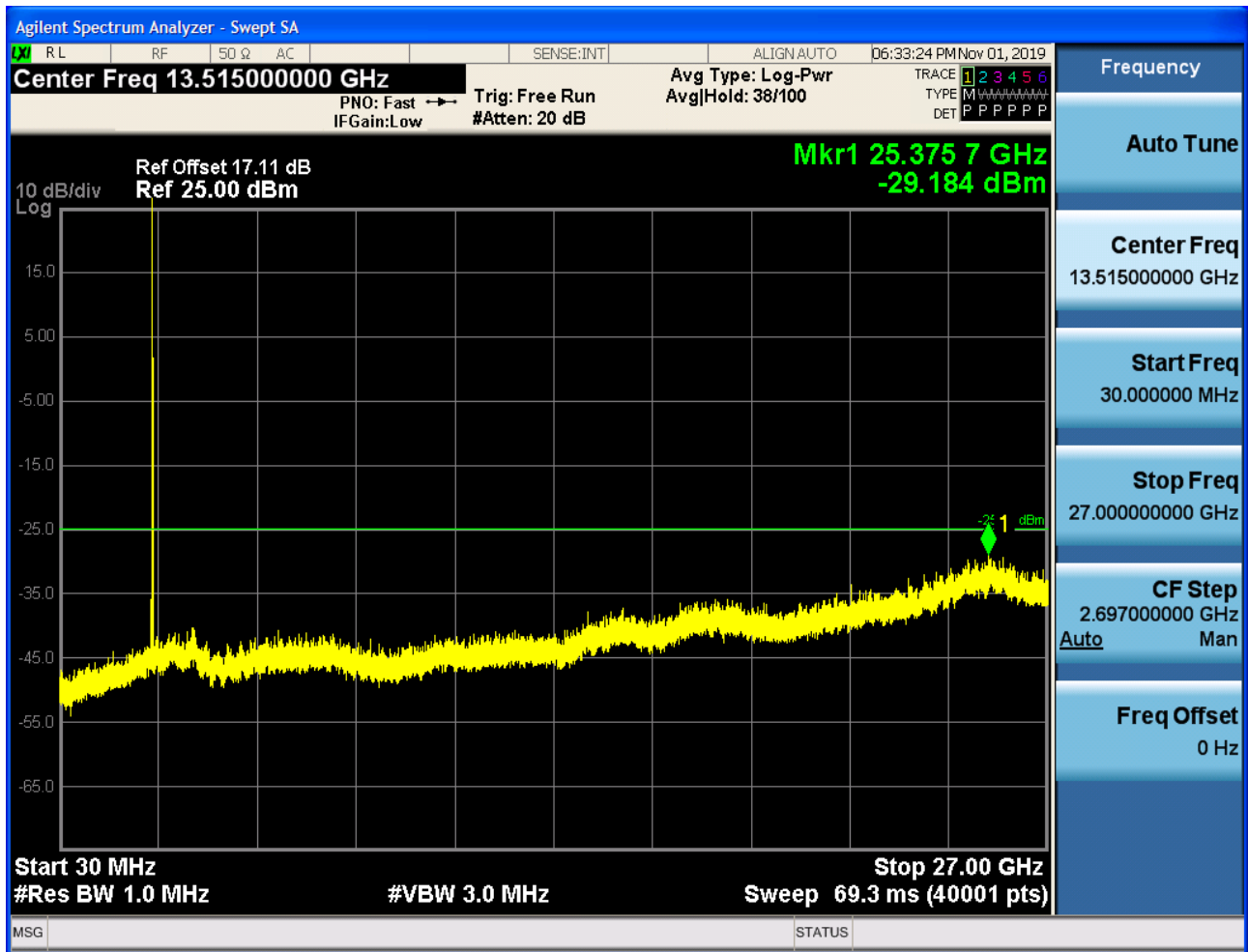


6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0



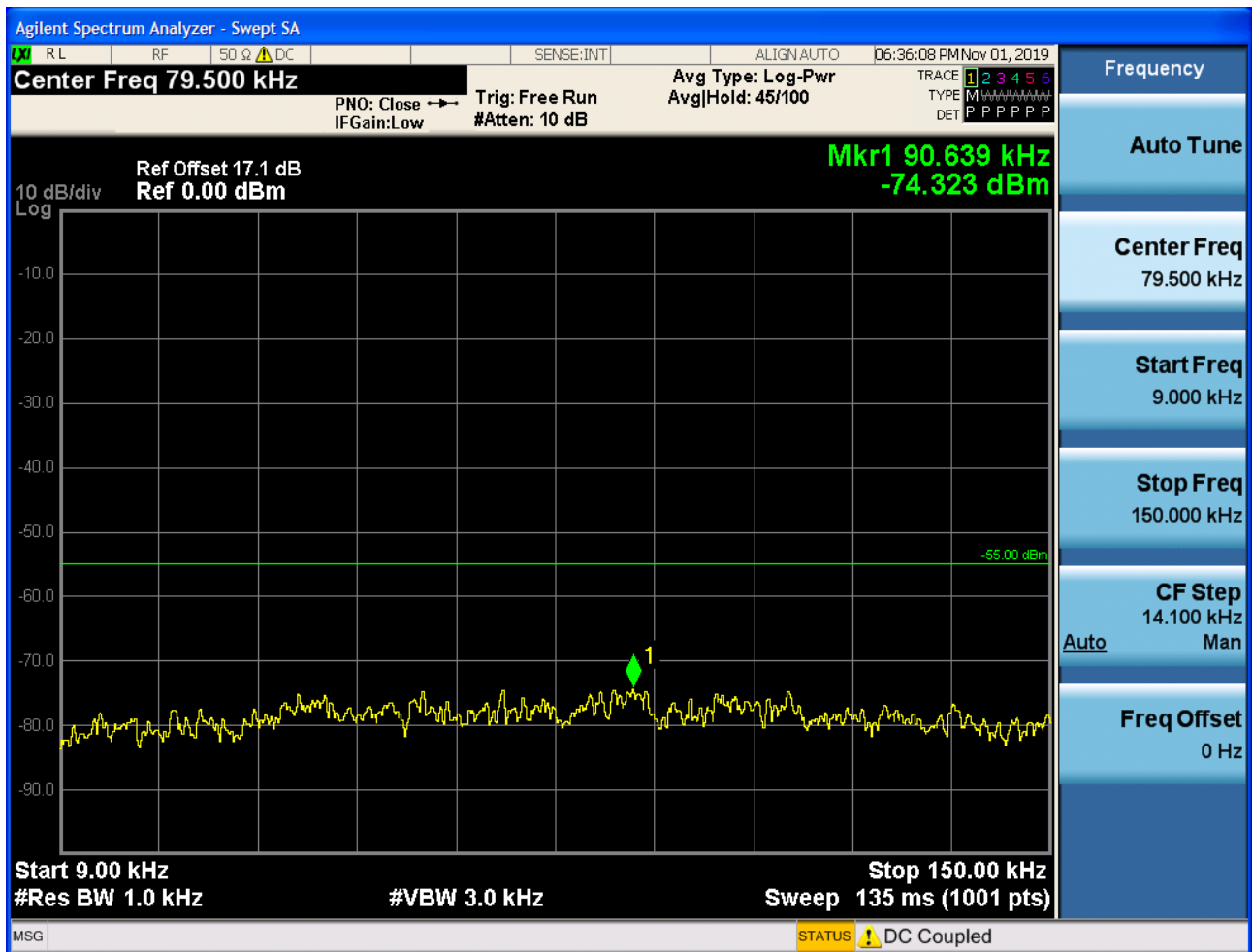


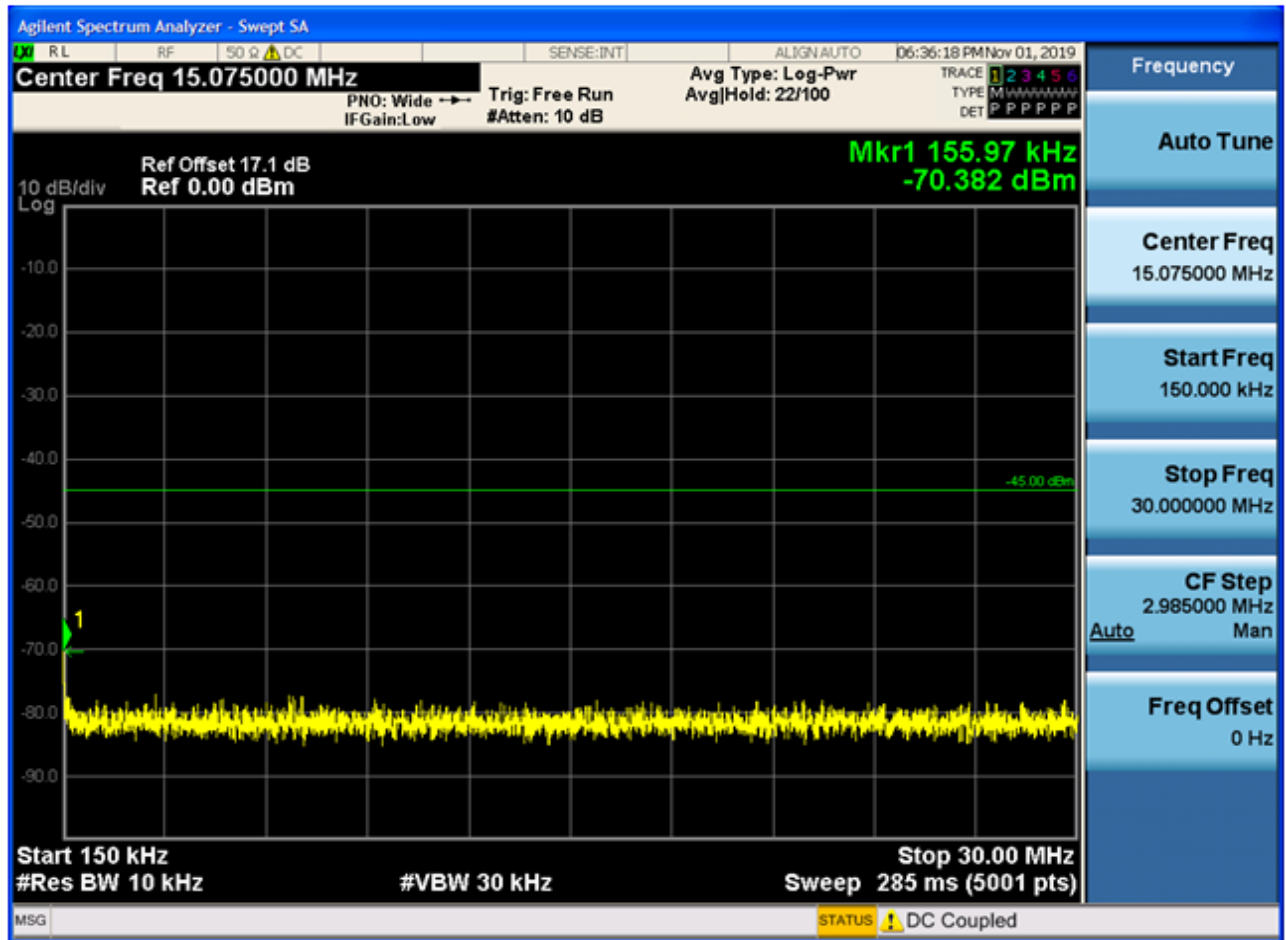


6.2.1.1.3 Test Bandwidth = 15

6.2.1.1.3.1 Test Channel = LCH

6.2.1.1.3.1.1 Test RB = RB1#0

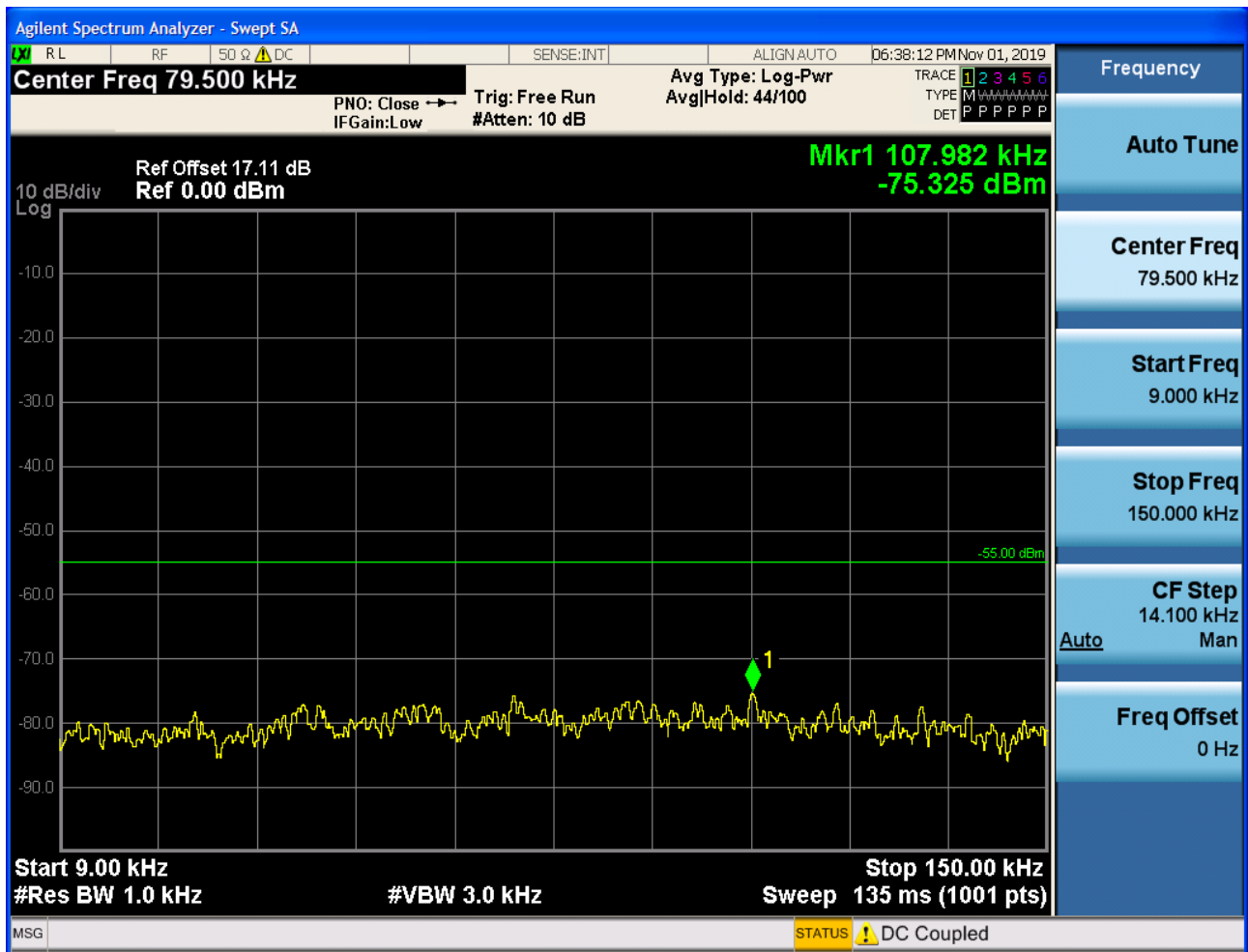


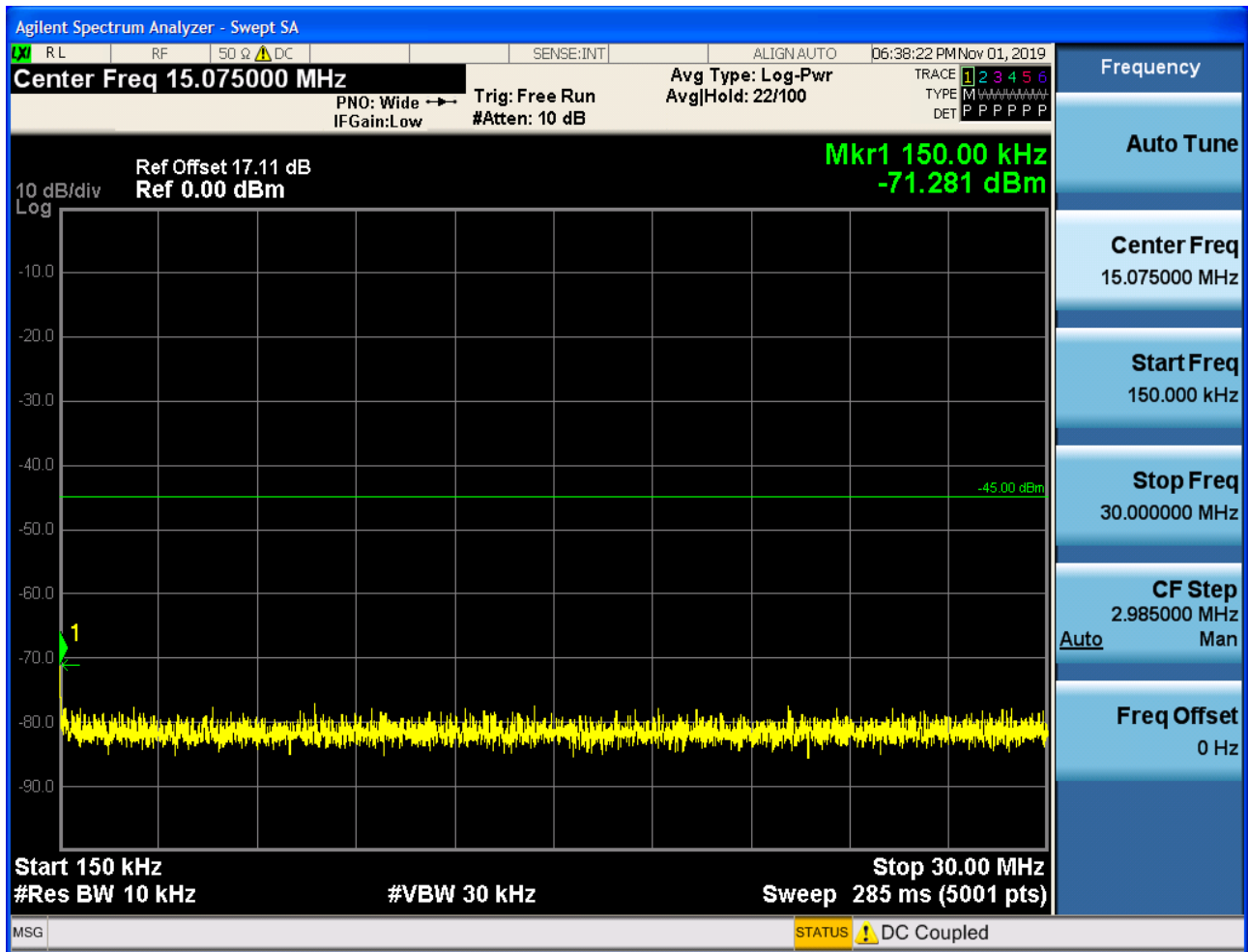




6.2.1.1.3.2 Test Channel = MCH

6.2.1.1.3.2.1 Test RB = RB1#0

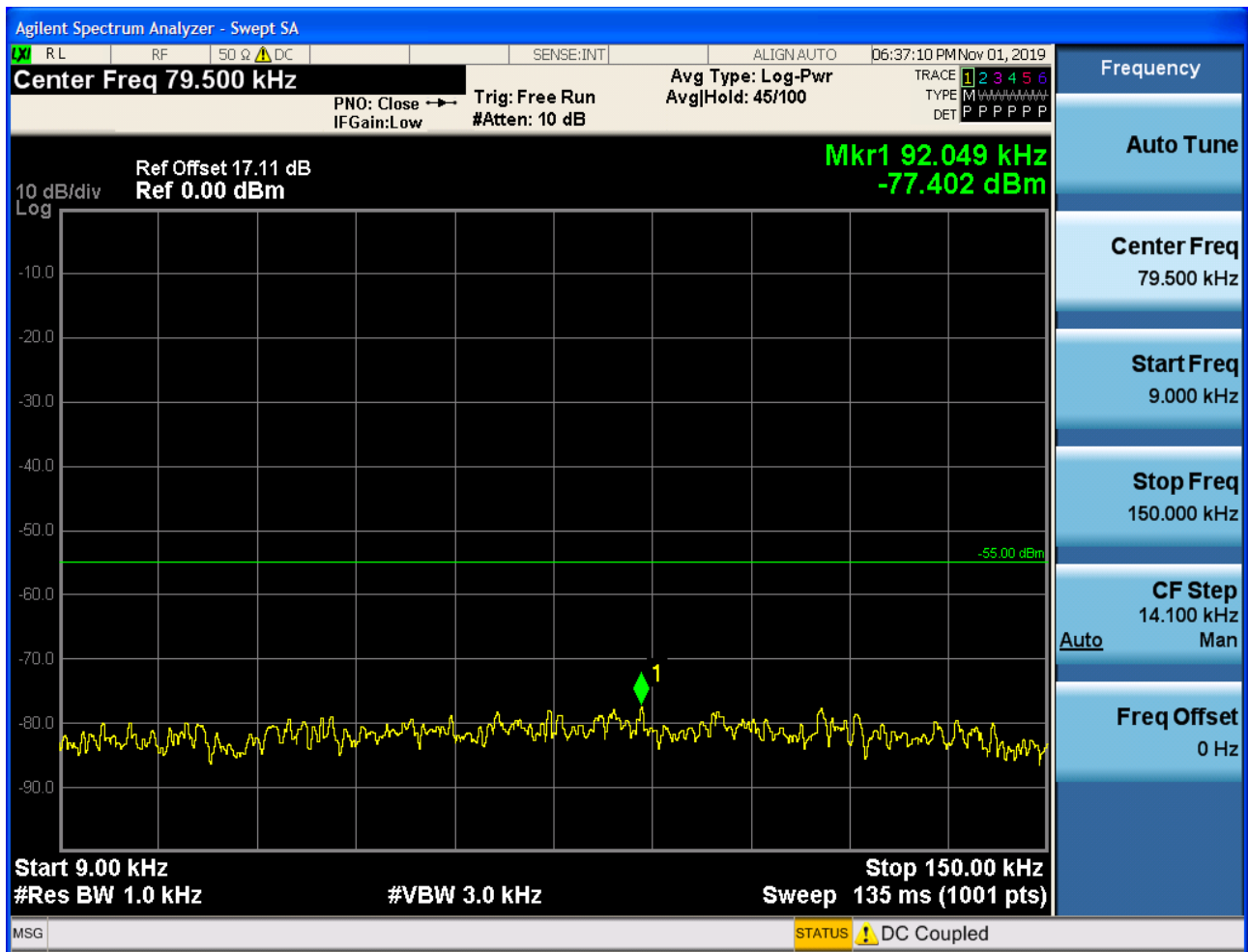


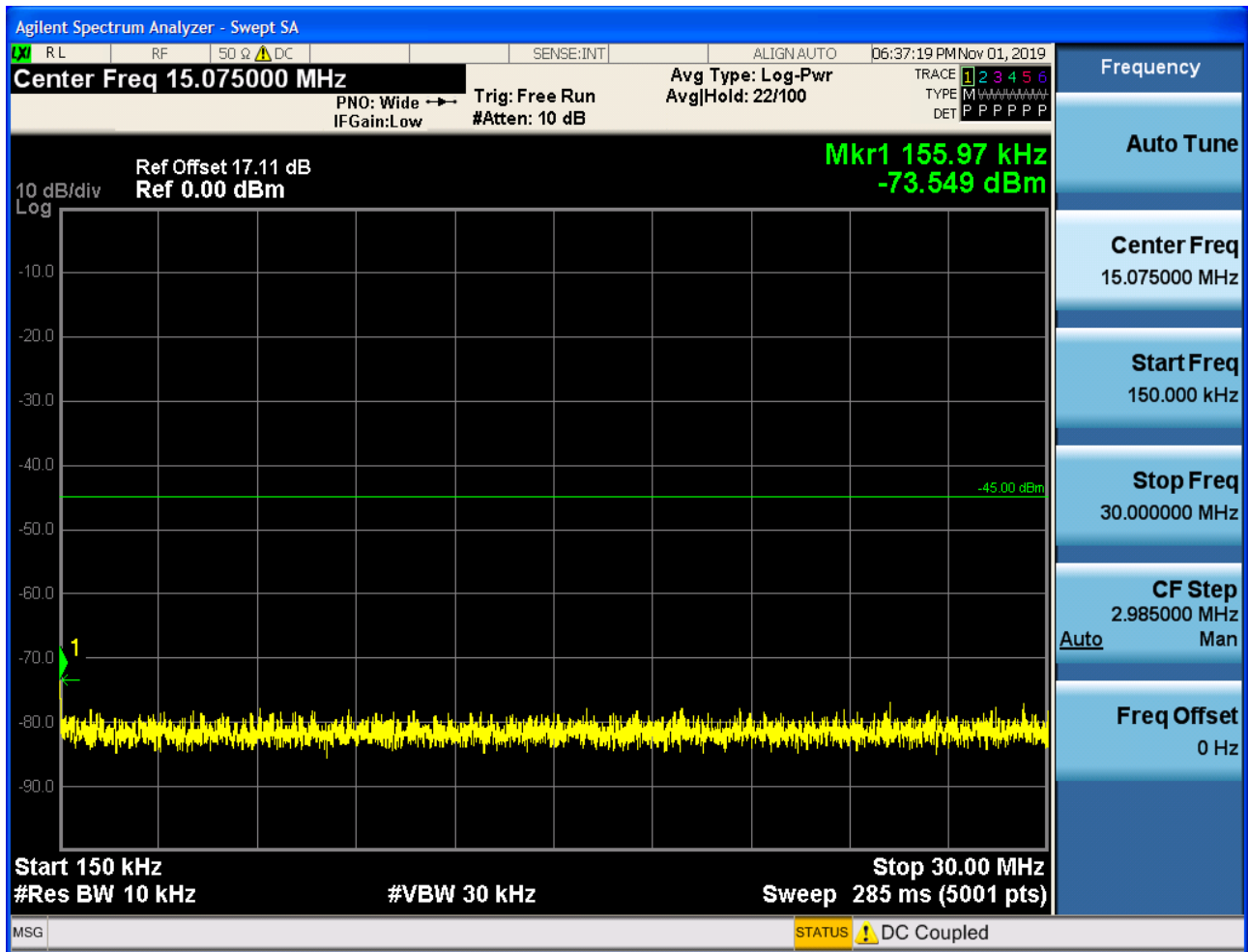


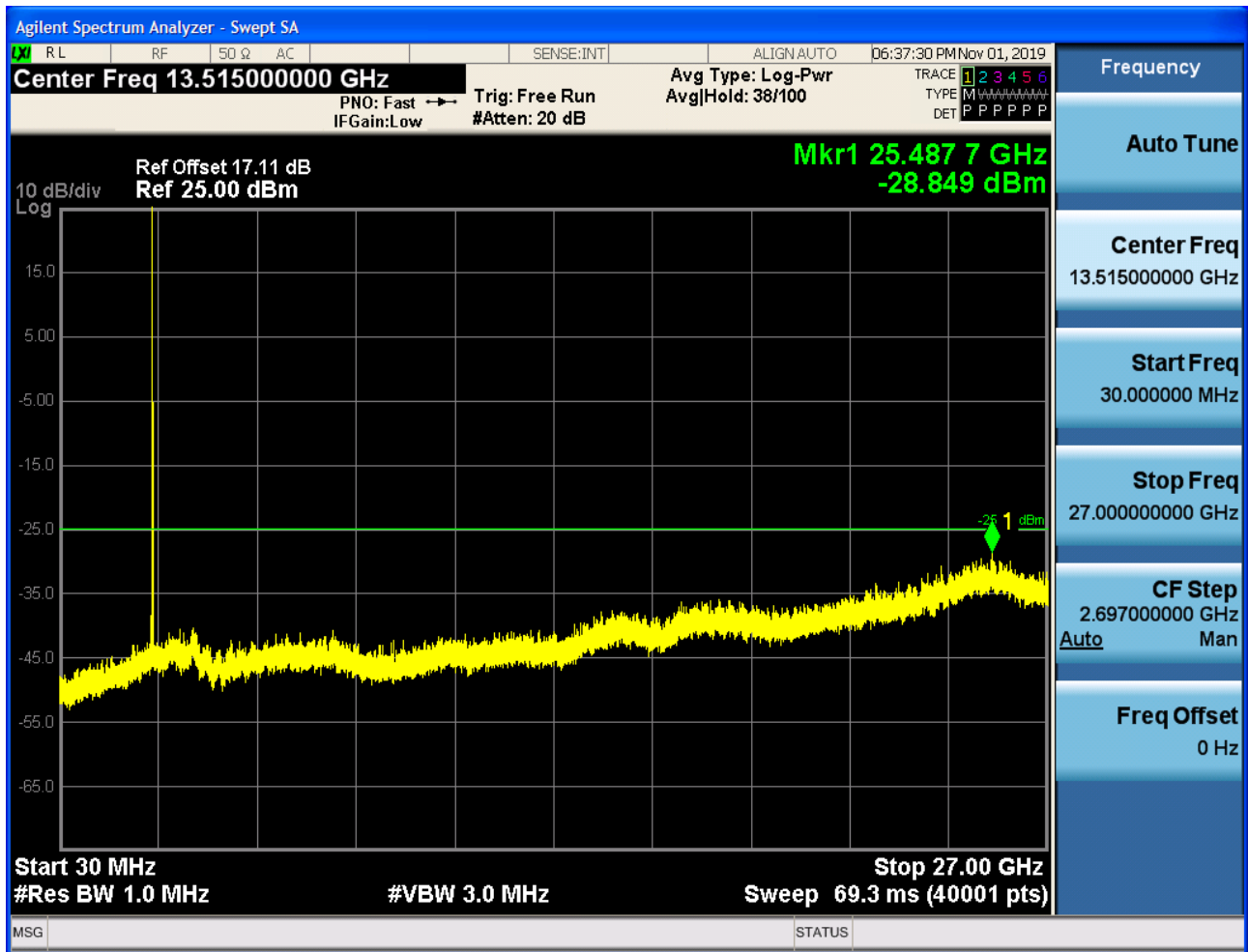


6.2.1.1.3.3 Test Channel = HCH

6.2.1.1.3.3.1 Test RB = RB1#0



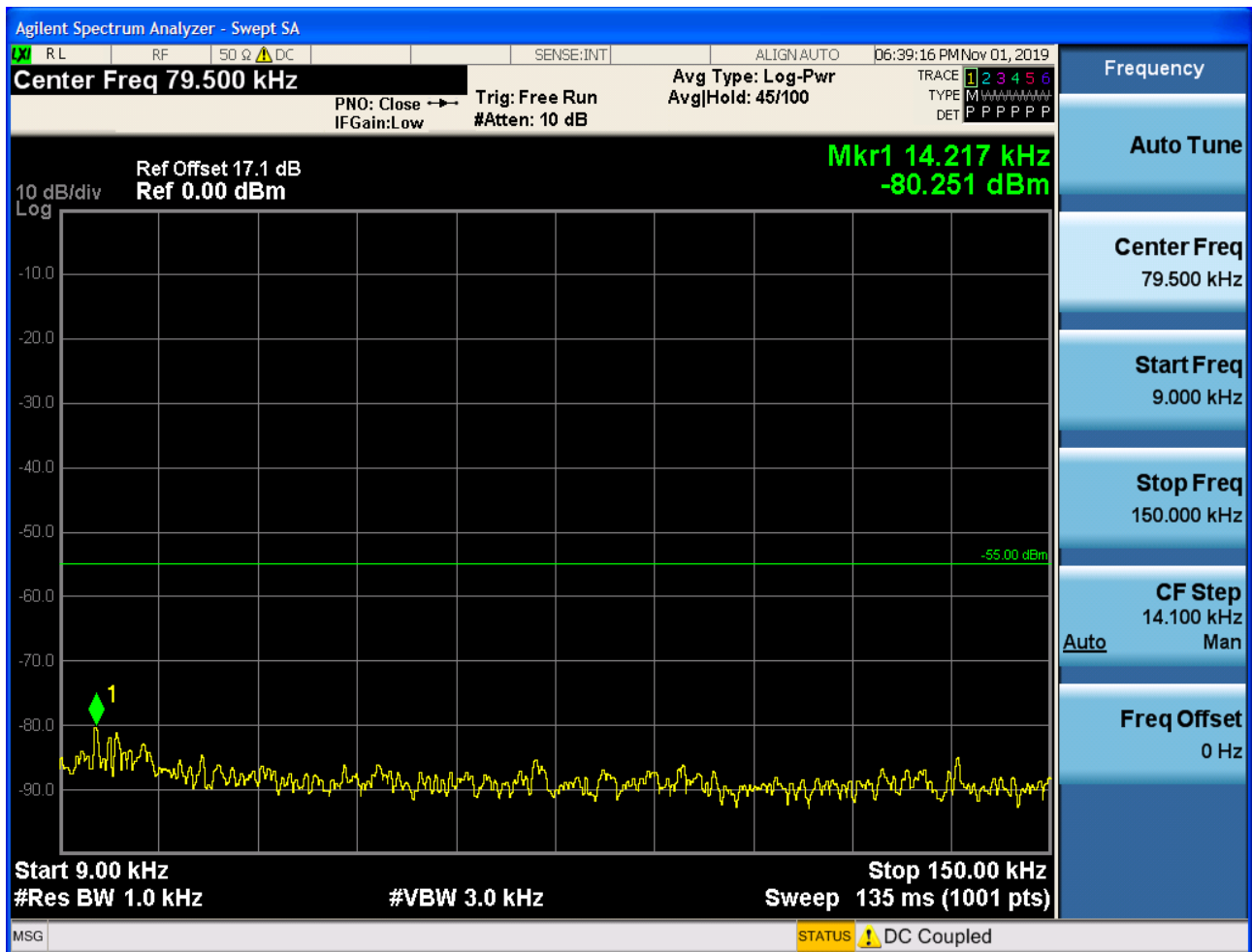


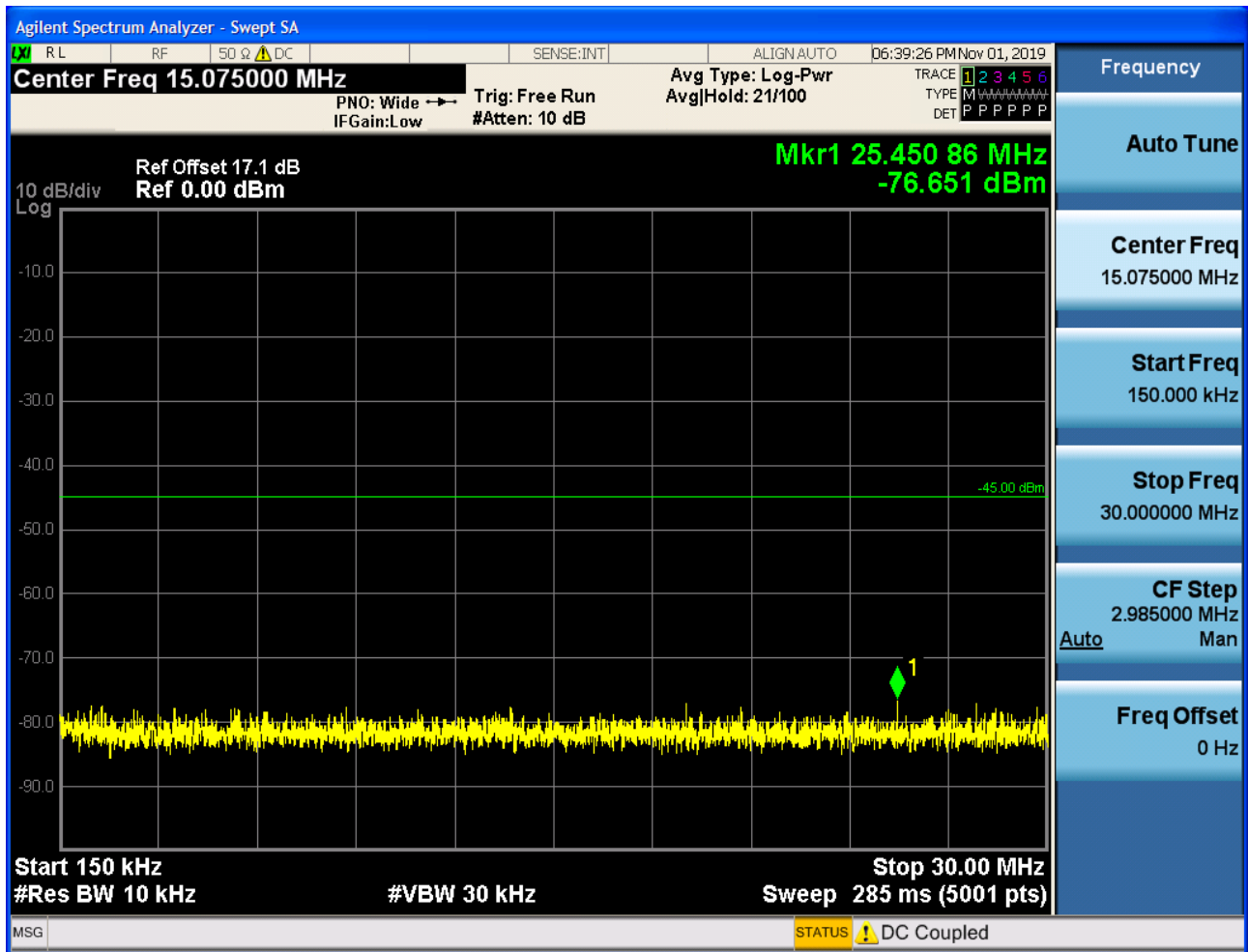


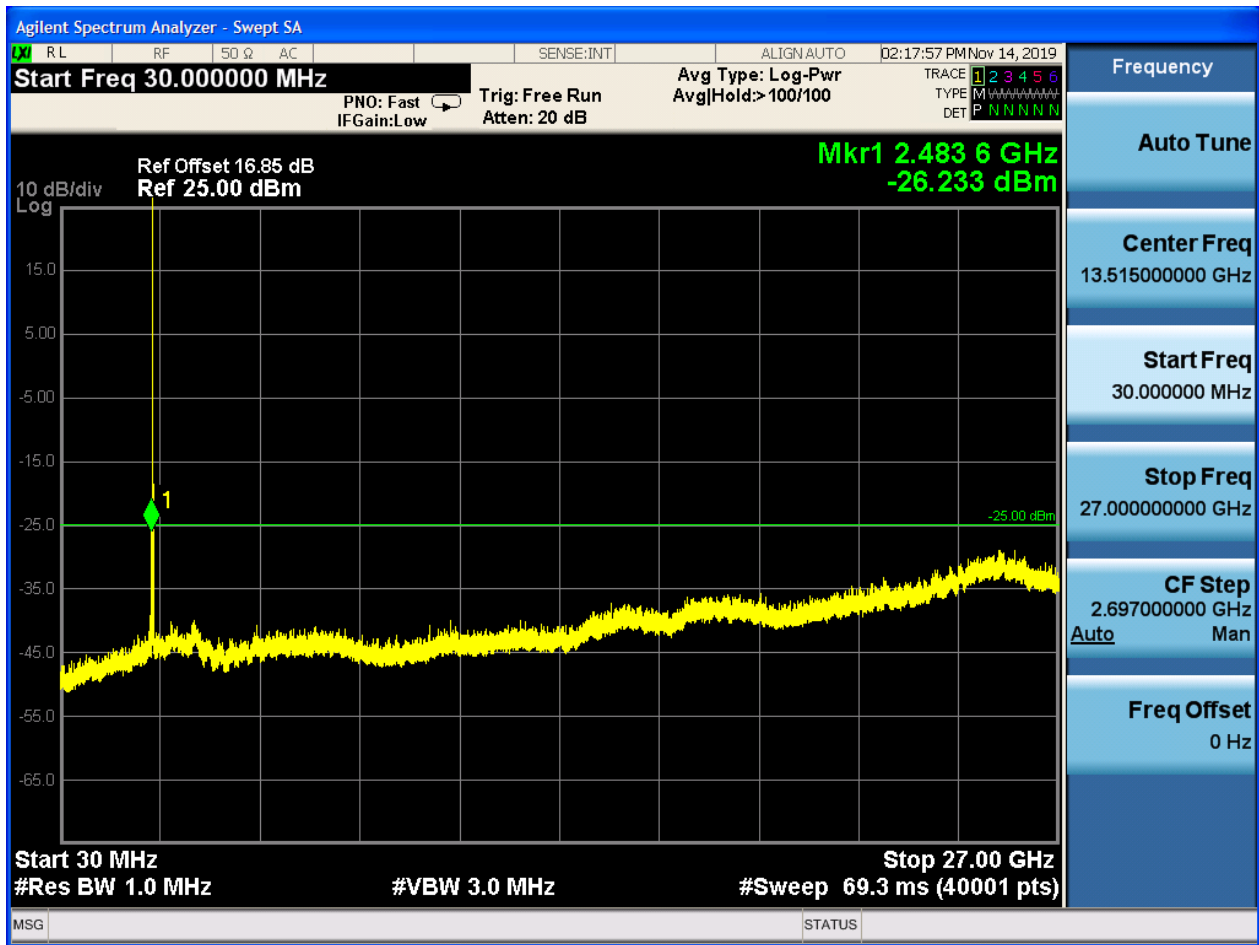
6.2.1.1.4 Test Bandwidth = 20

6.2.1.1.4.1 Test Channel = LCH

6.2.1.1.4.1.1 Test RB = RB1#0

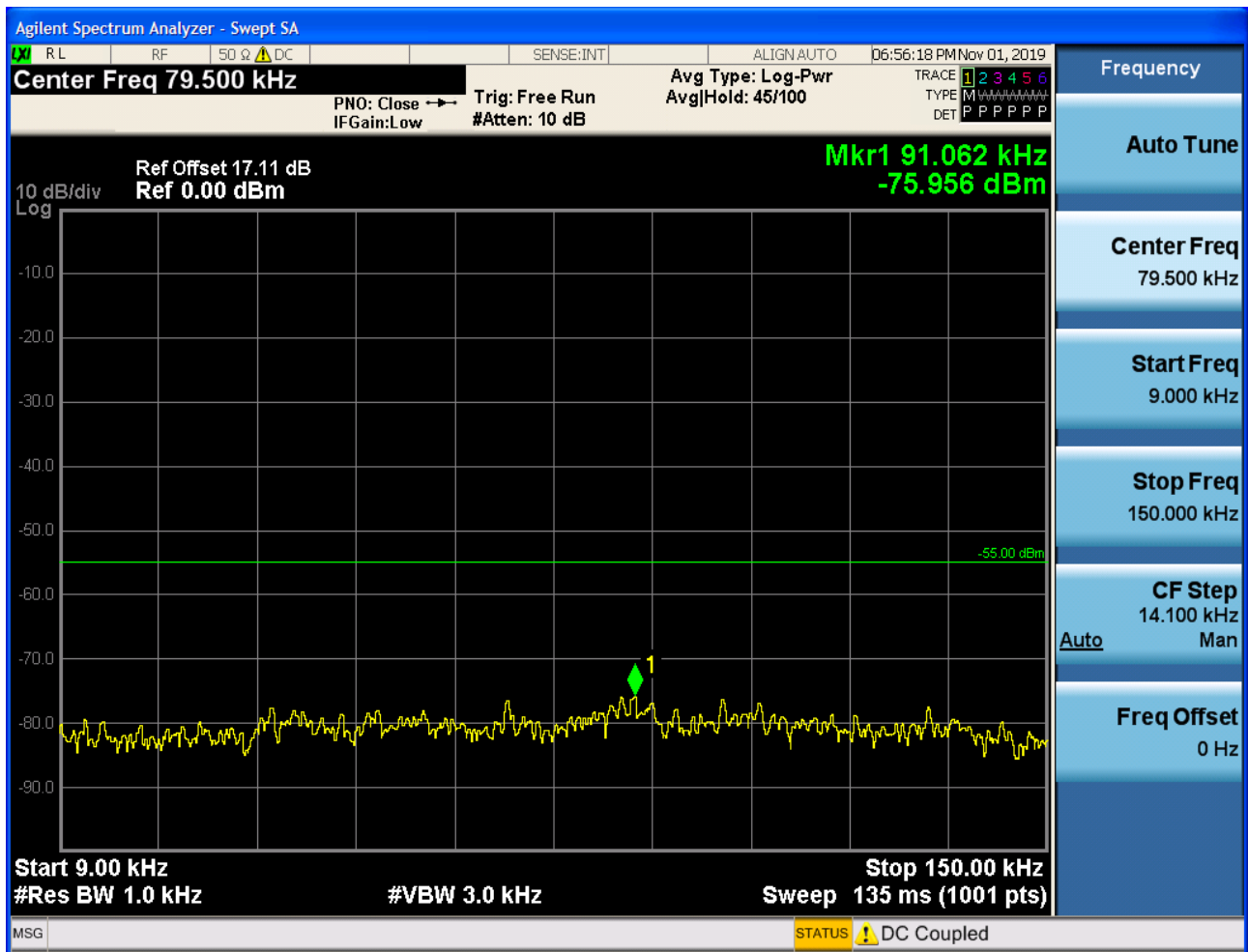


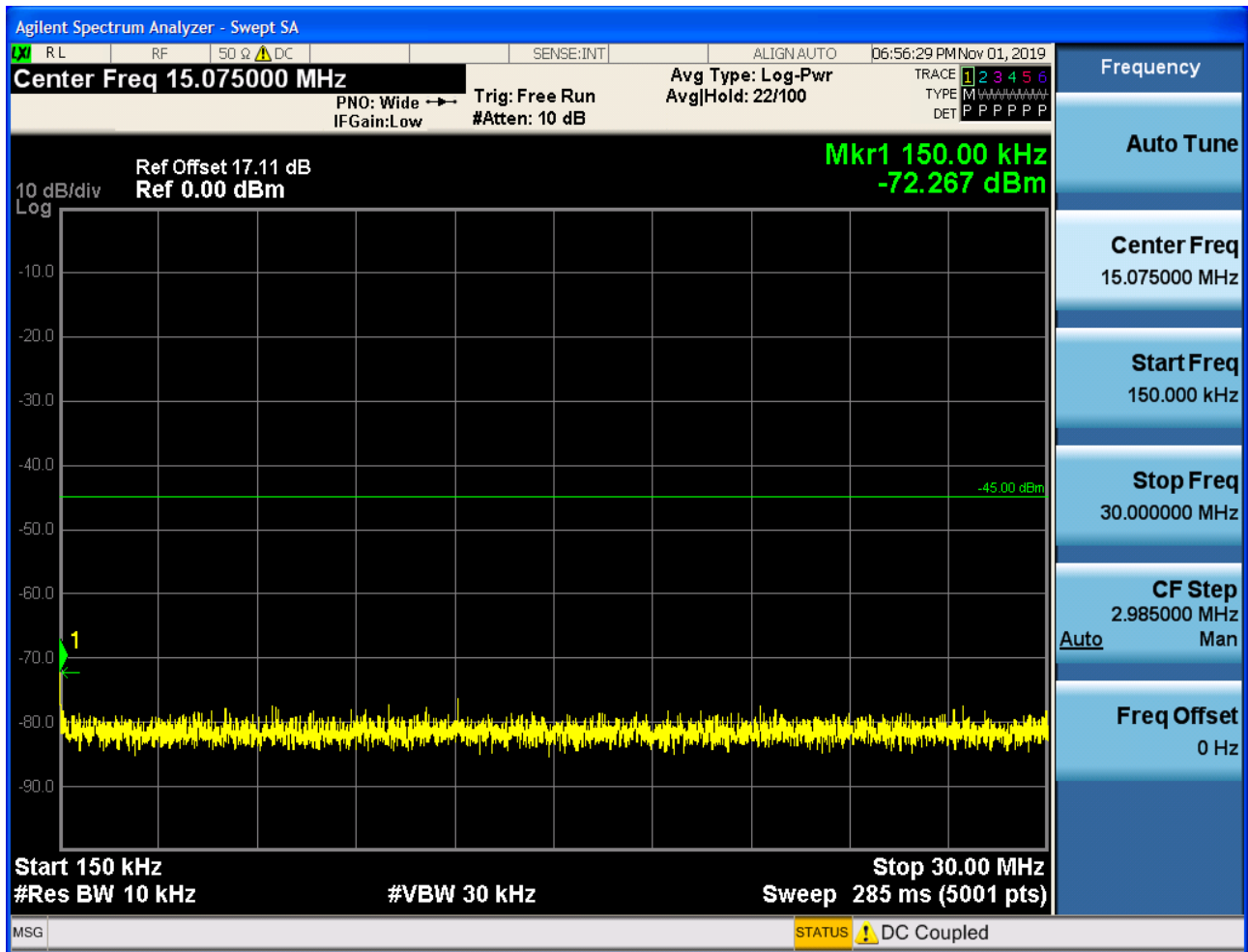


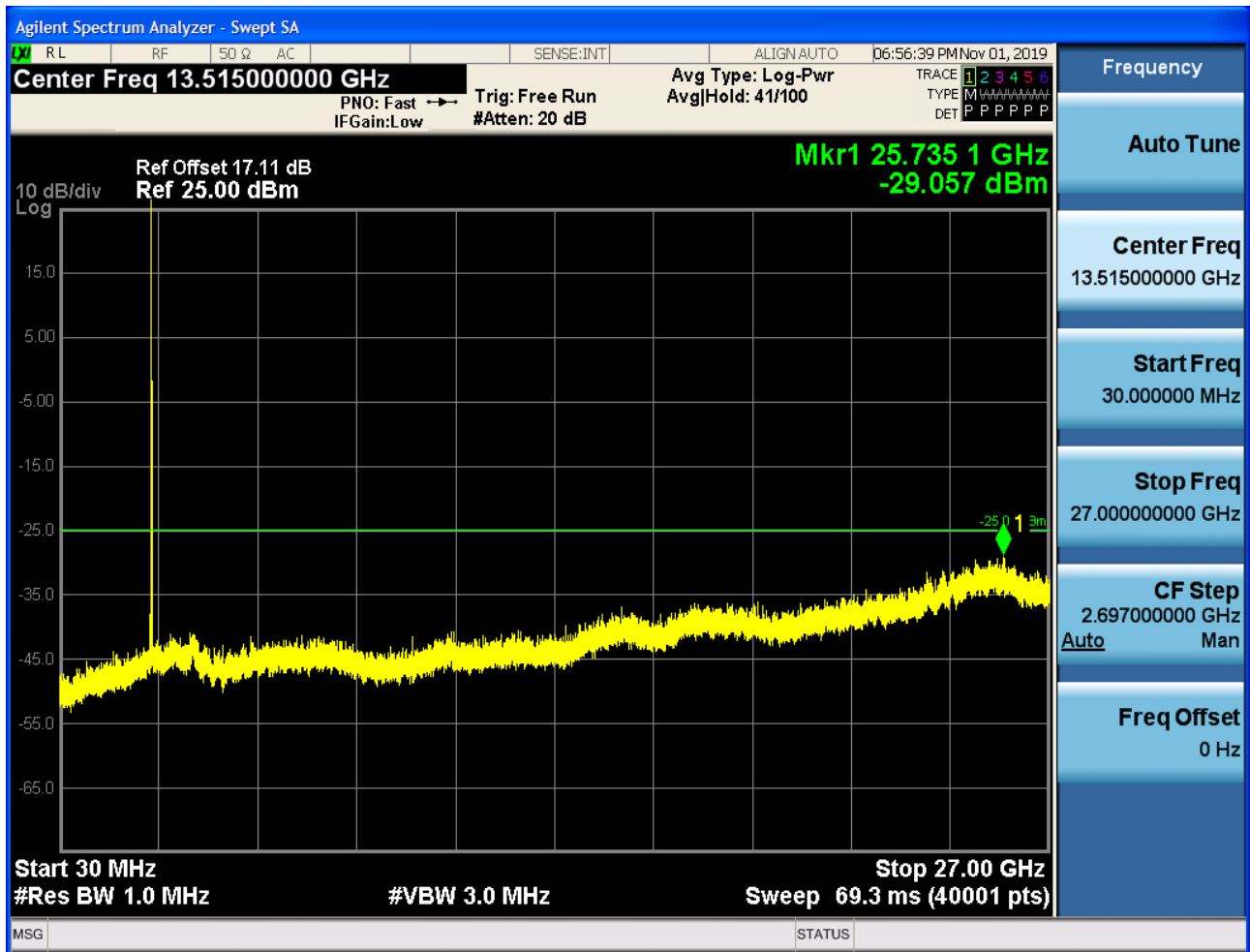


6.2.1.1.4.2 Test Channel = MCH

6.2.1.1.4.2.1 Test RB = RB1#0



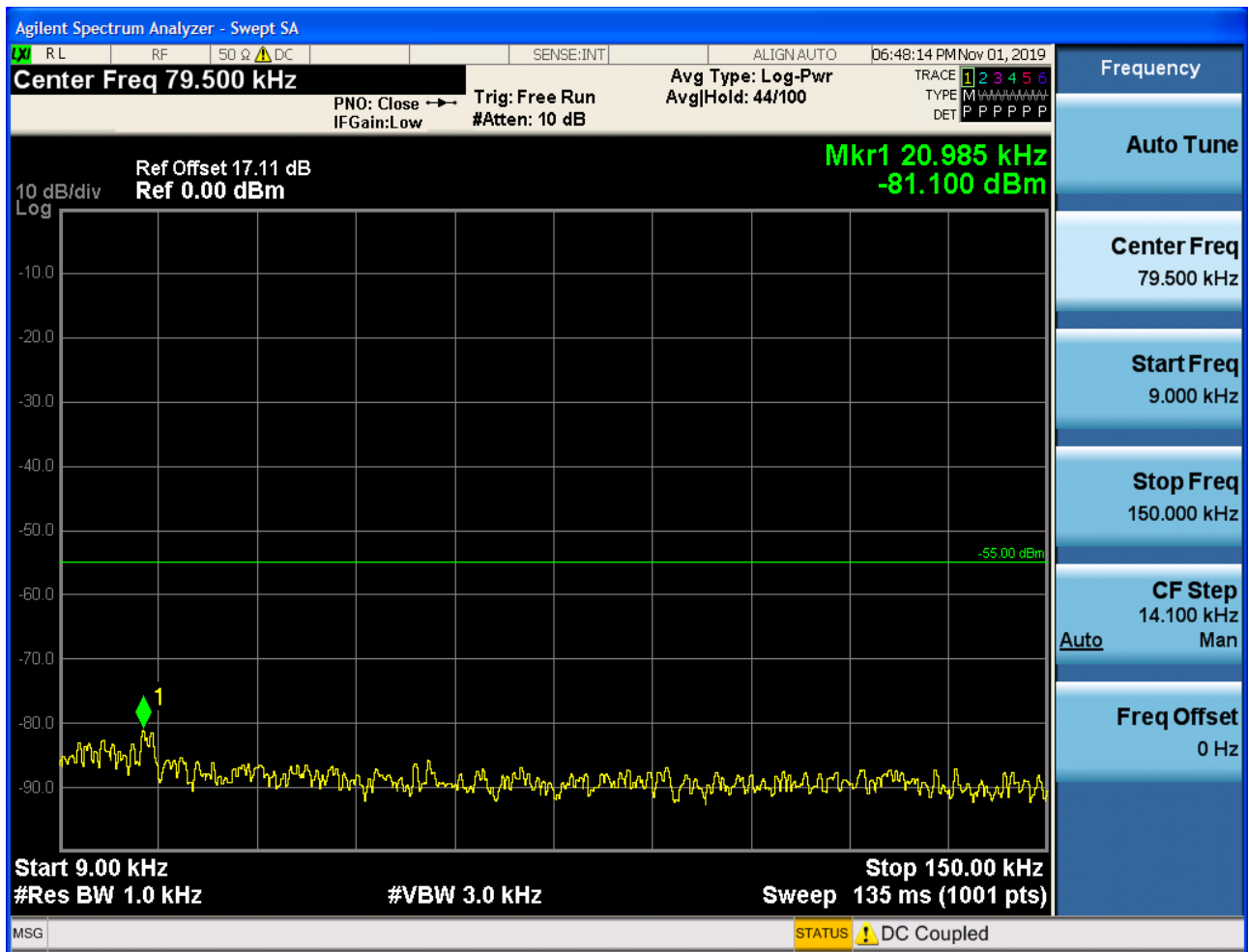


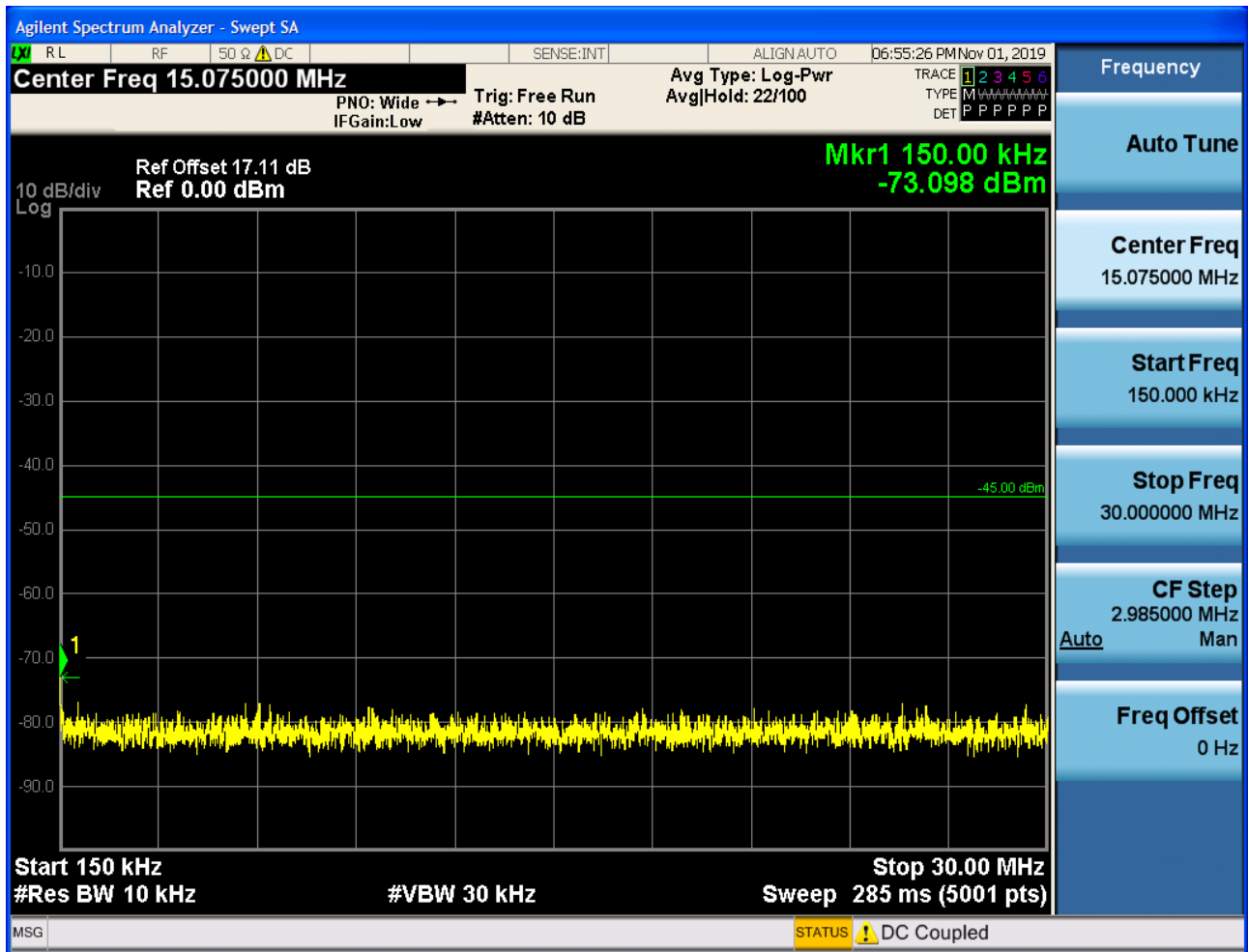


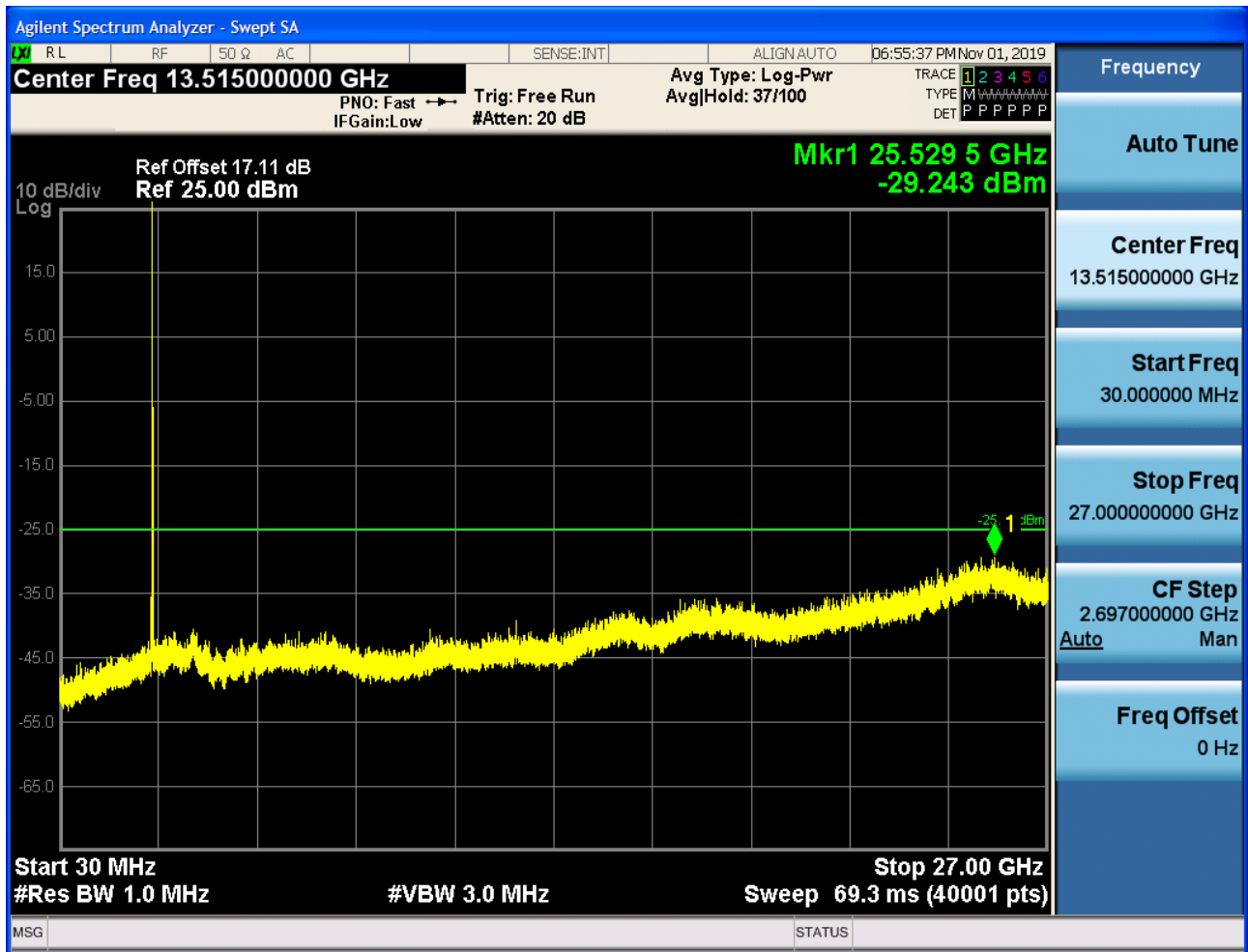


6.2.1.1.4.3 Test Channel = HCH

6.2.1.1.4.3.1 Test RB = RB1#0







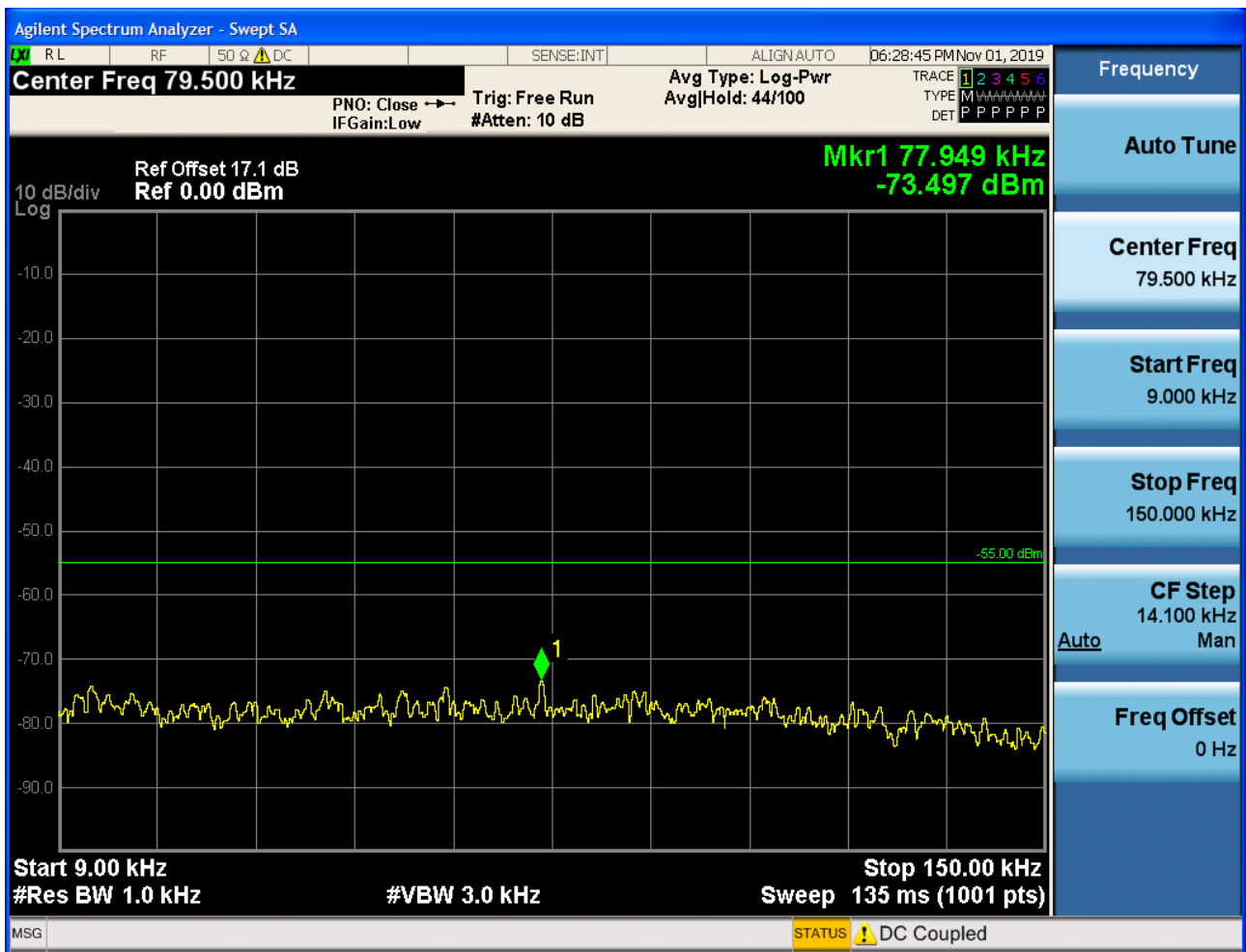


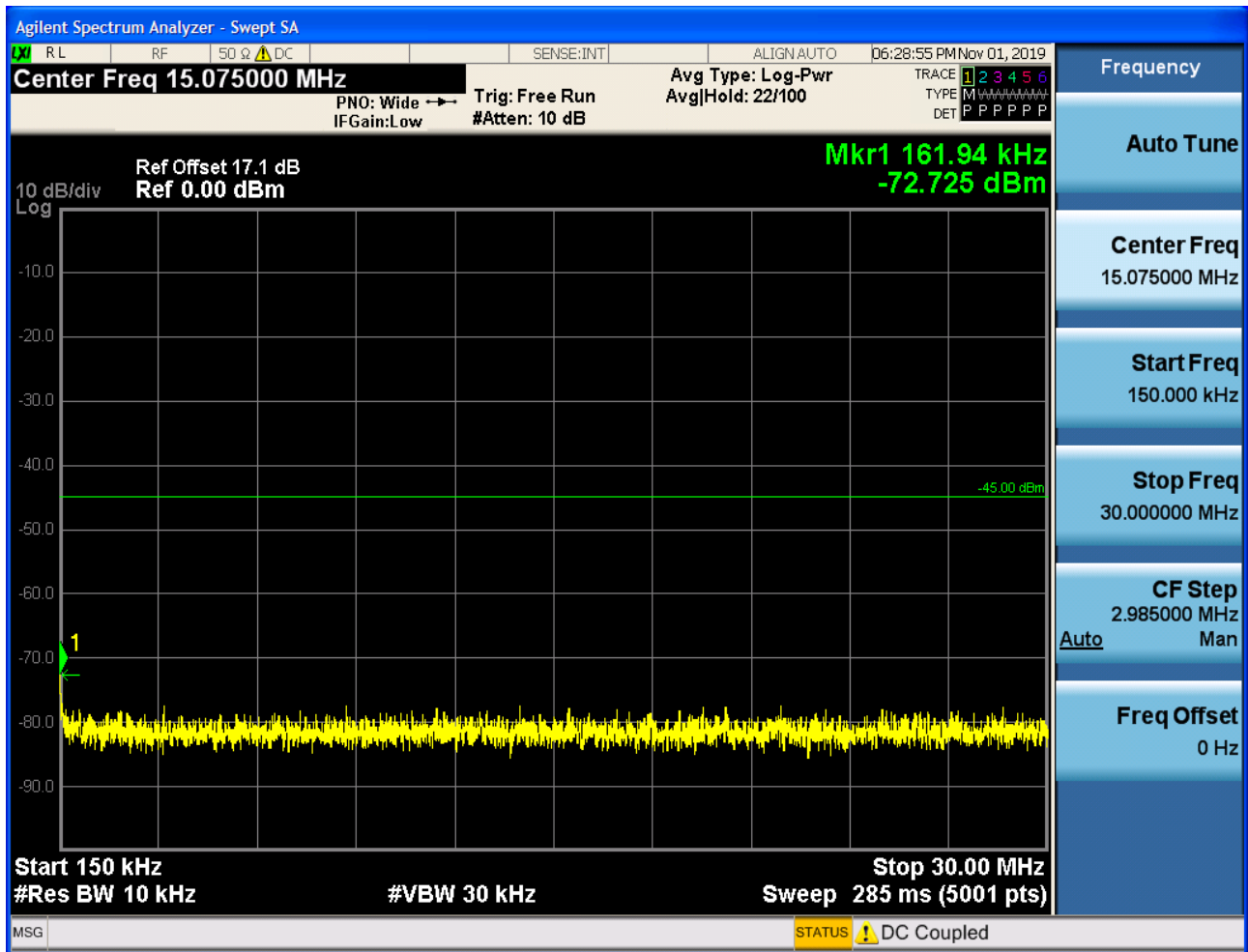
6.2.1.2 Test Mode = LTE/TM2

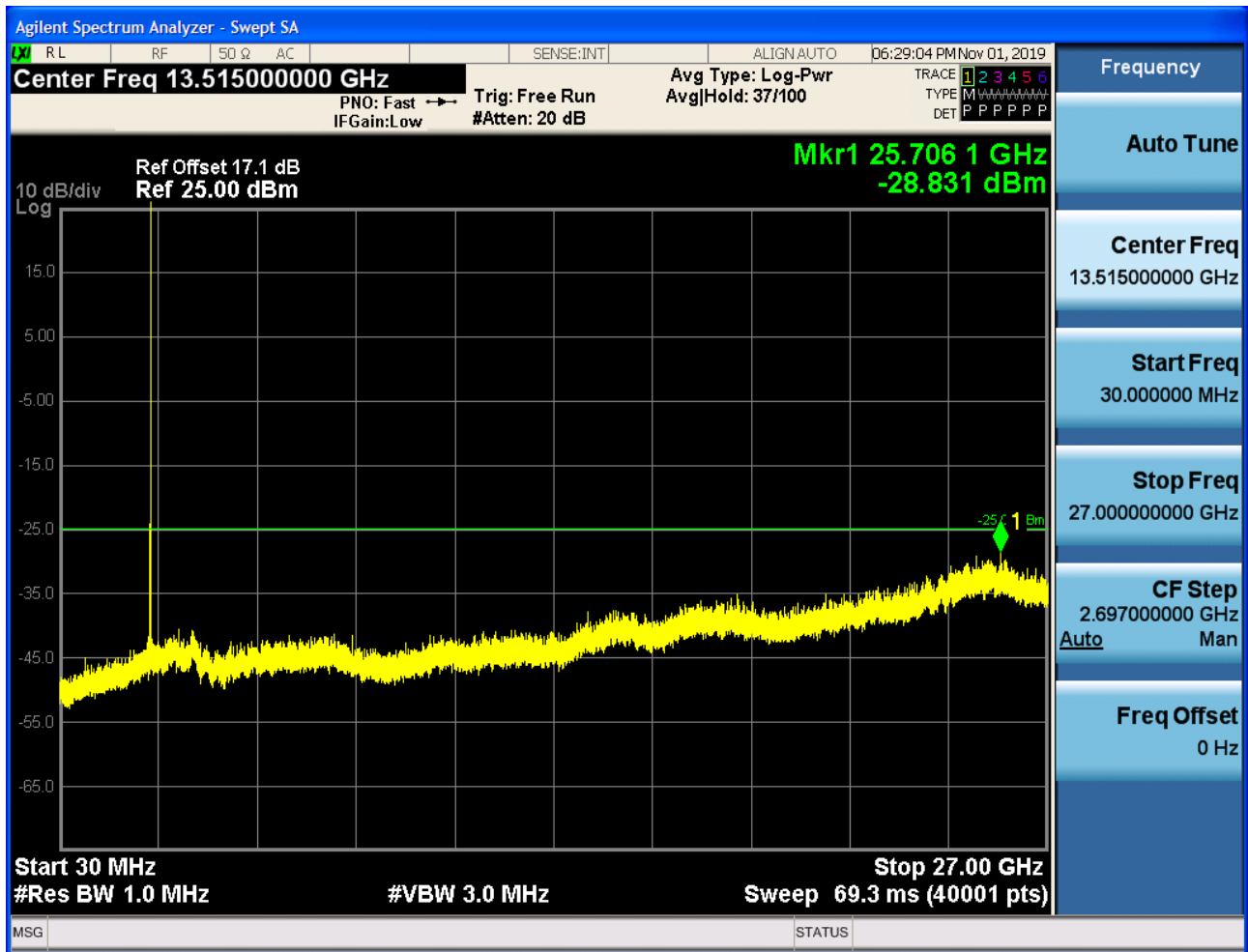
6.2.1.2.1 Test Bandwidth = 5

6.2.1.2.1.1 Test Channel = LCH

6.2.1.2.1.1.1 Test RB = RB1#0

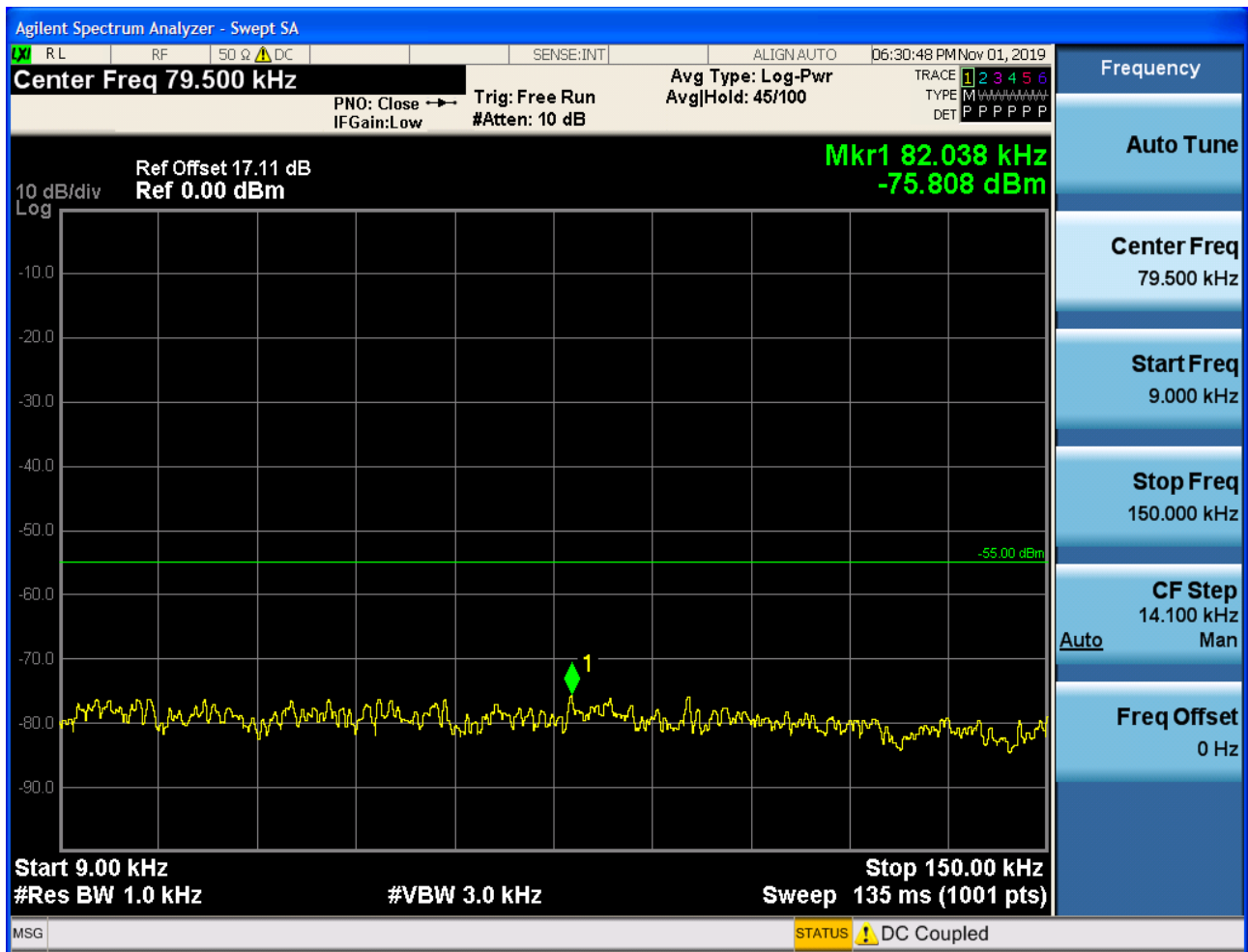


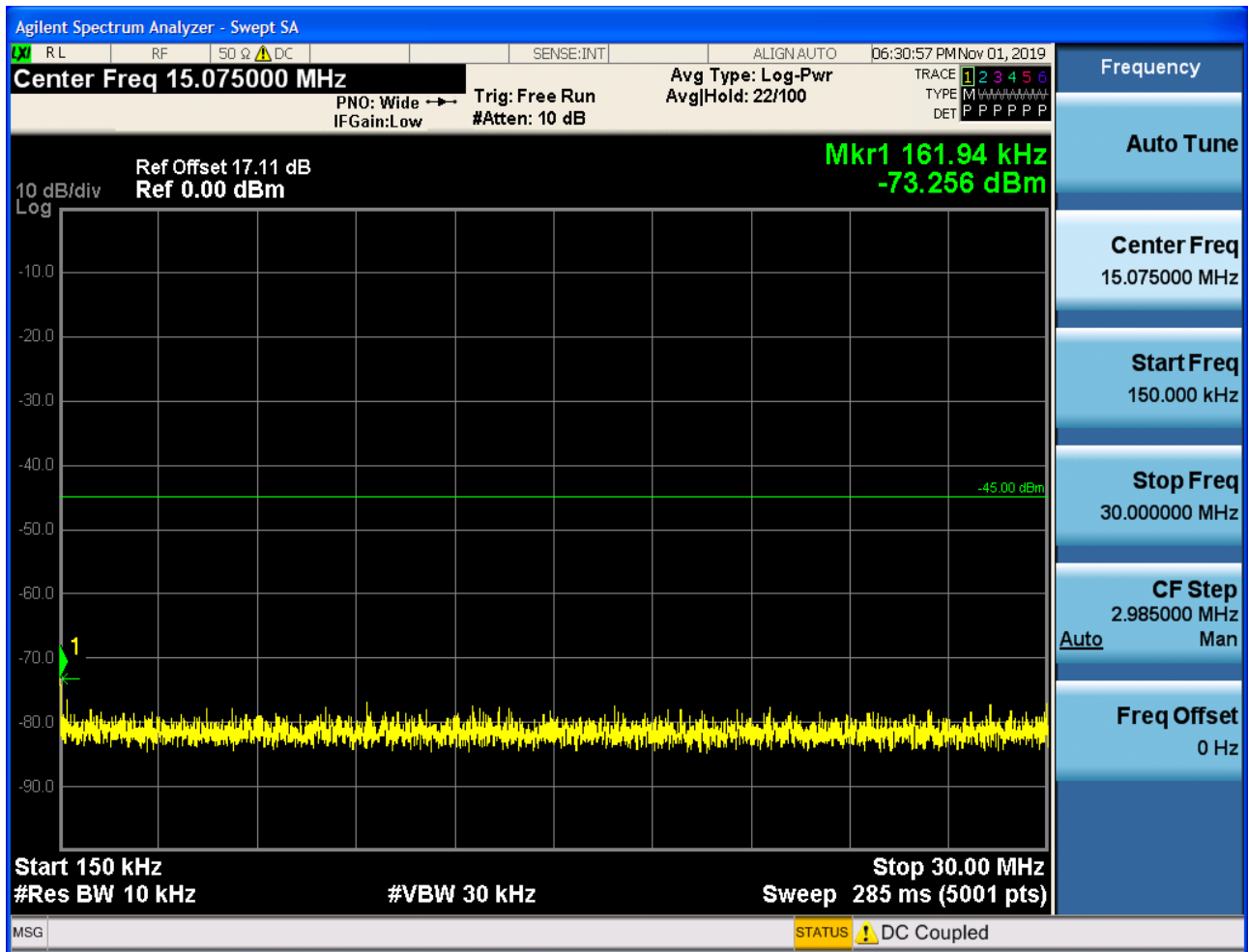


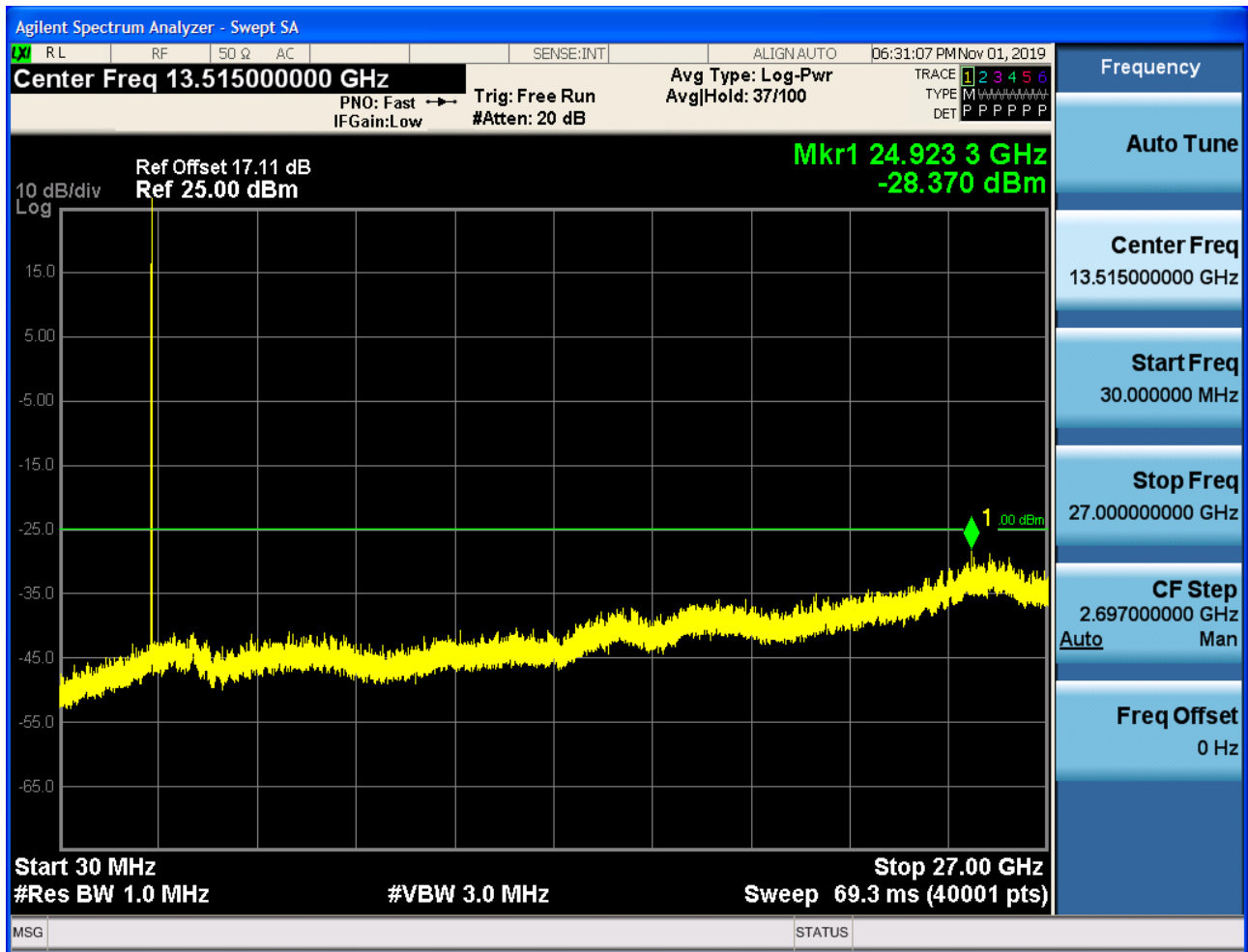


6.2.1.2.1.2 Test Channel = MCH

6.2.1.2.1.2.1 Test RB = RB1#0

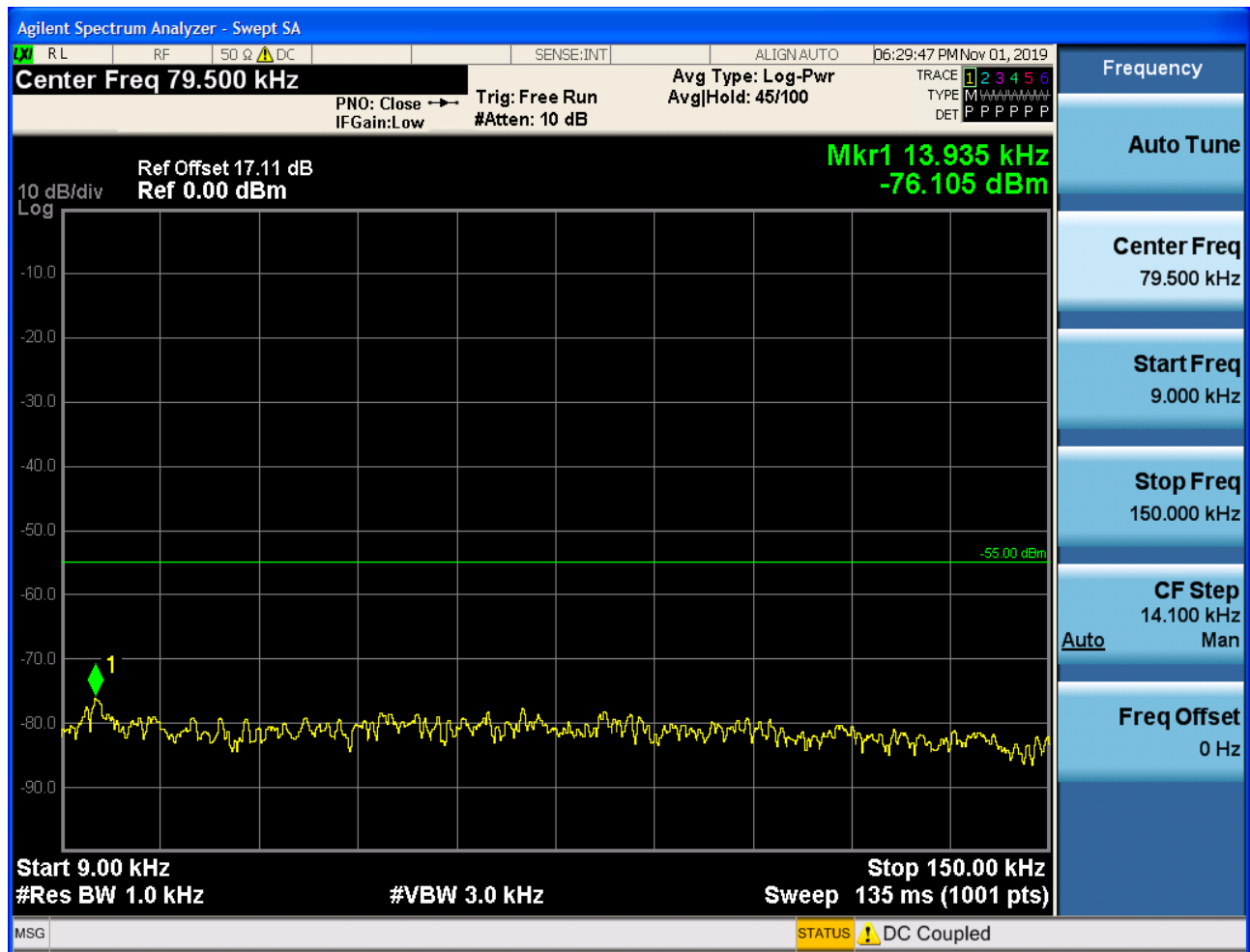


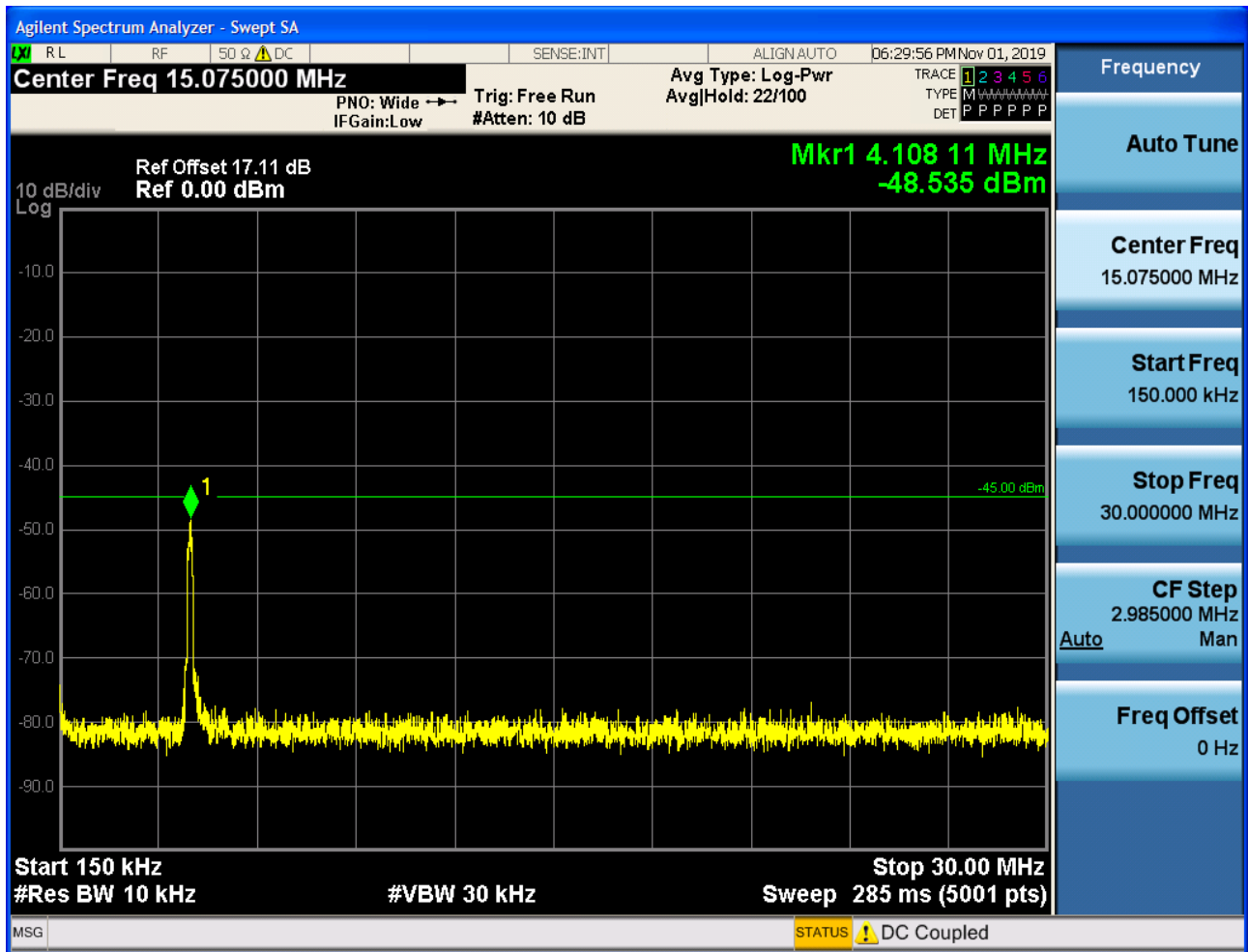


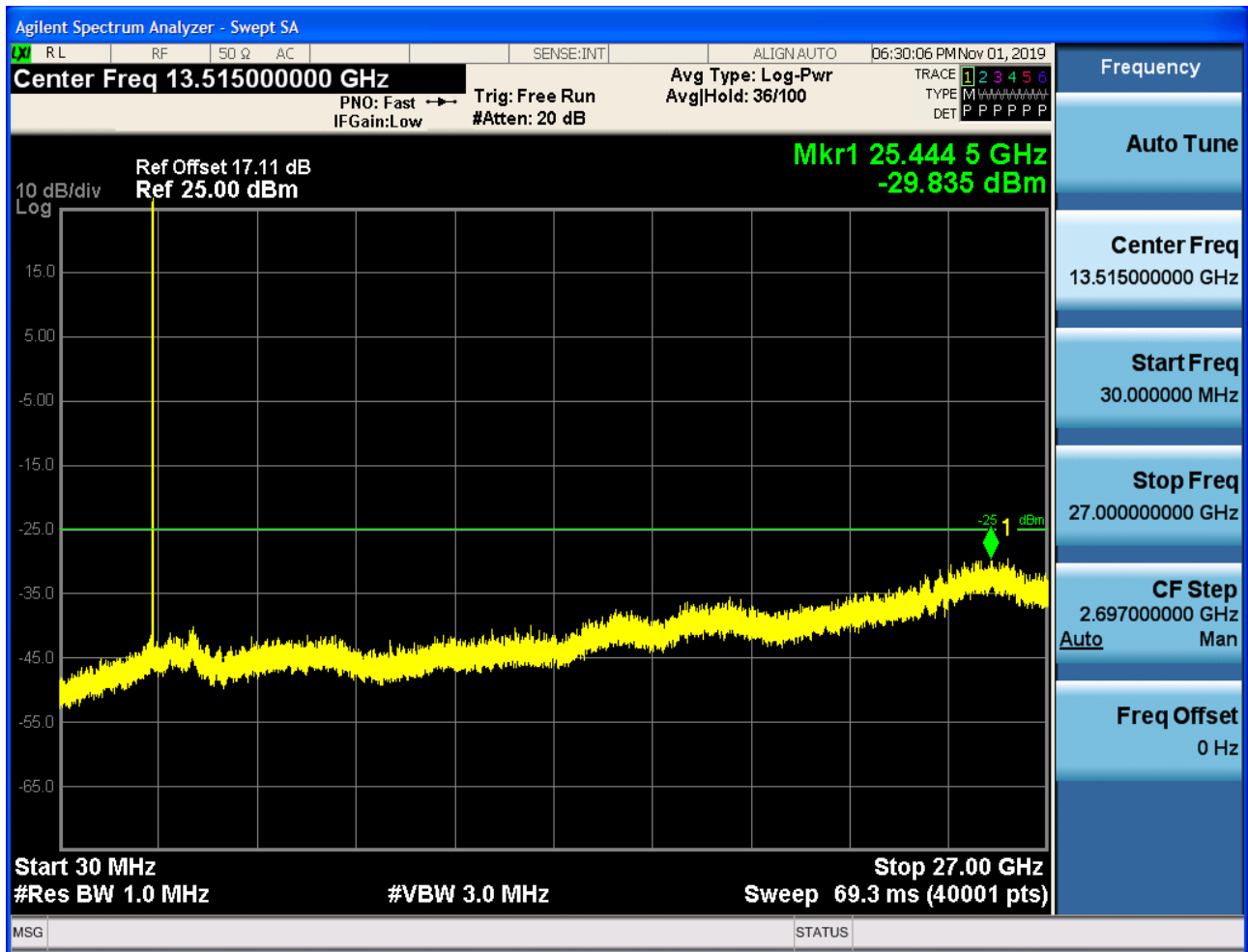


6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0



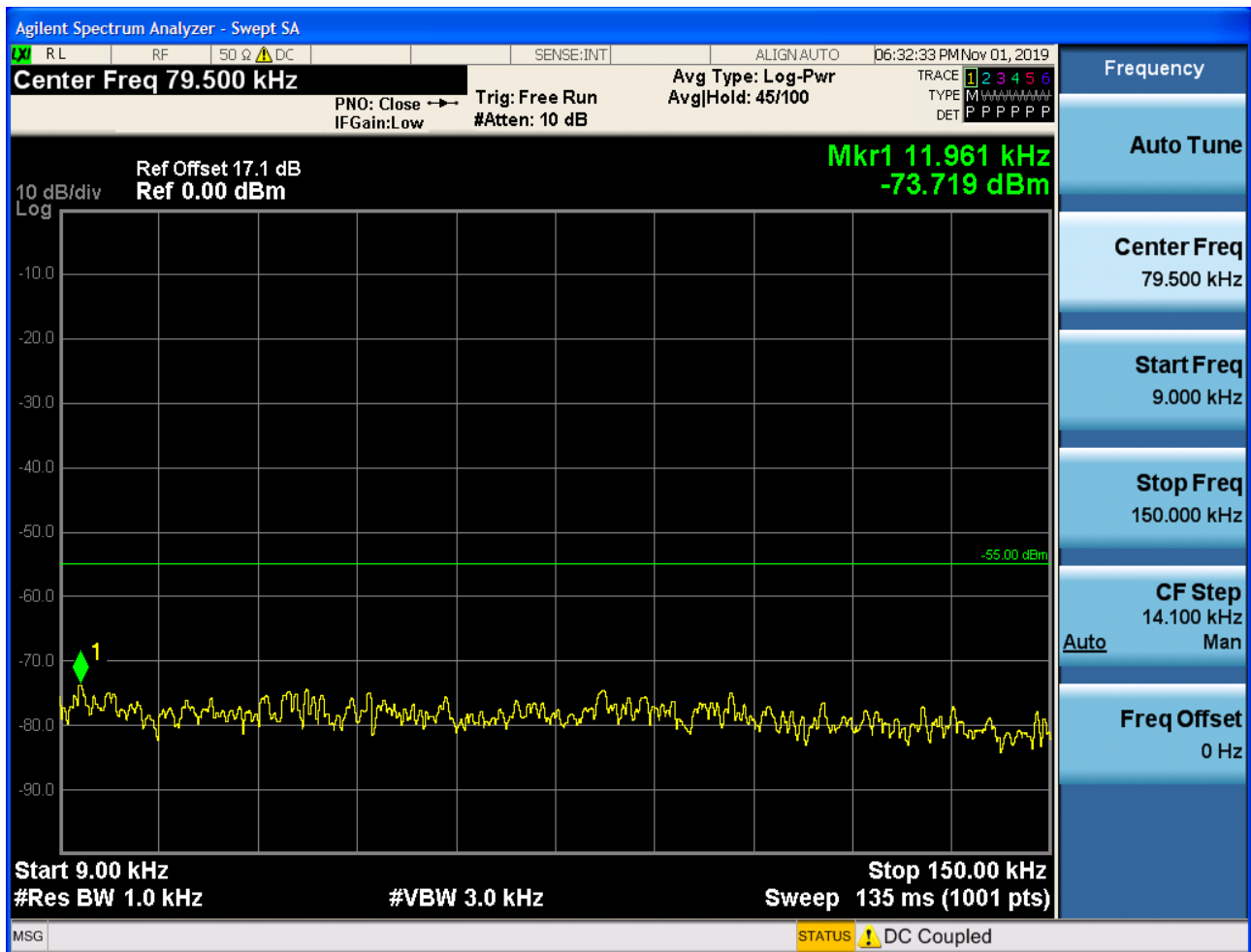


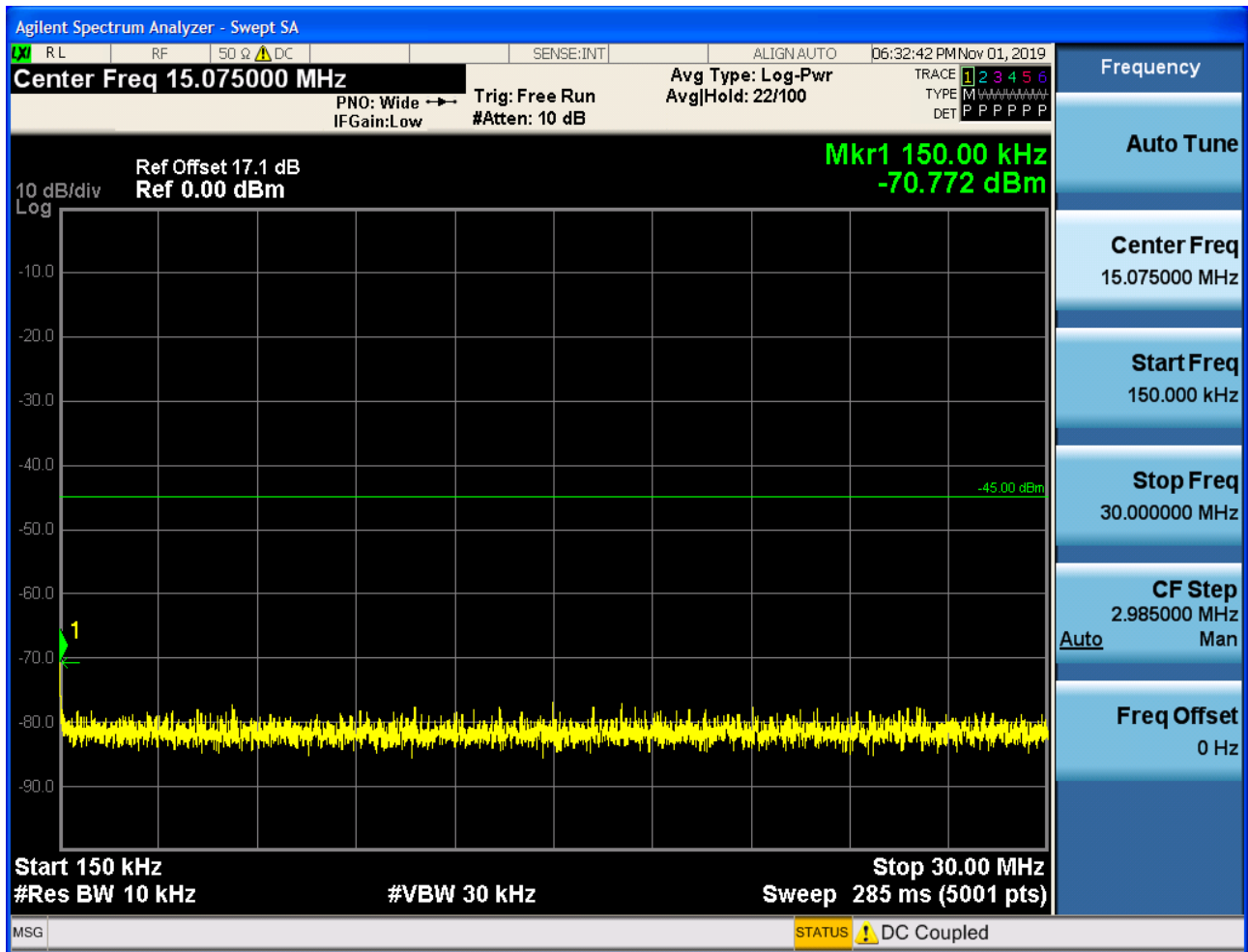


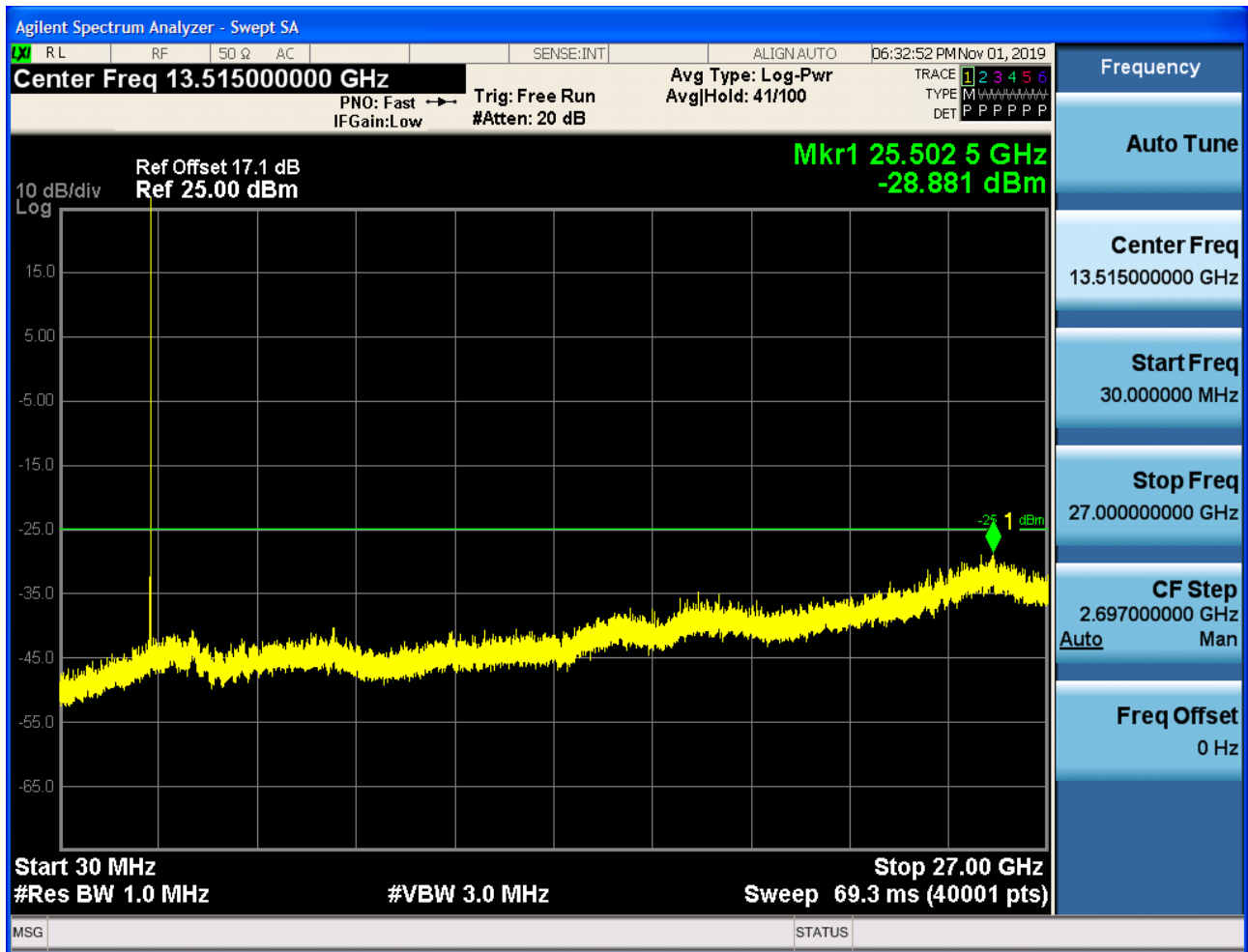
6.2.1.2.2 Test Bandwidth = 10

6.2.1.2.2.1 Test Channel = LCH

6.2.1.2.2.1.1 Test RB = RB1#0

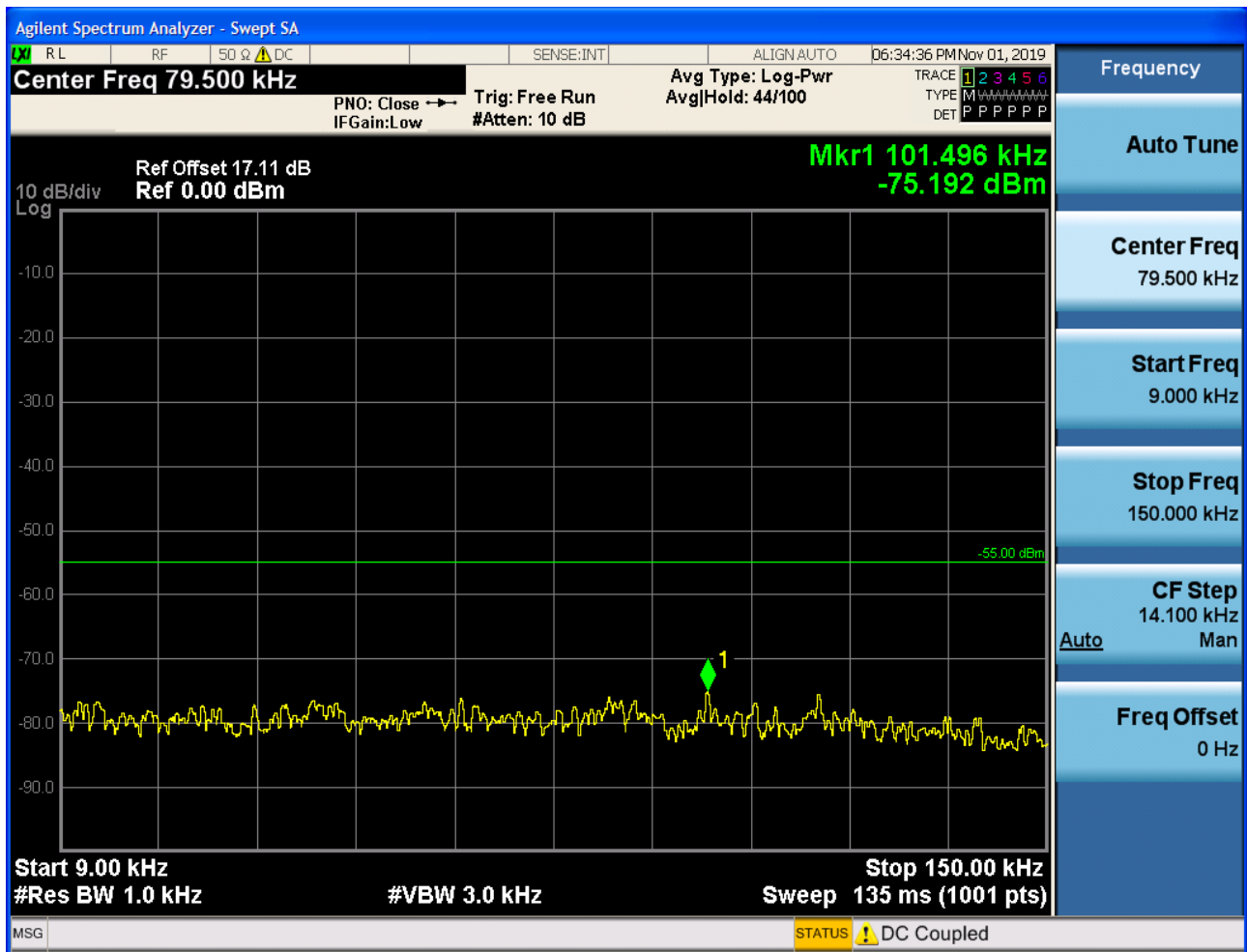


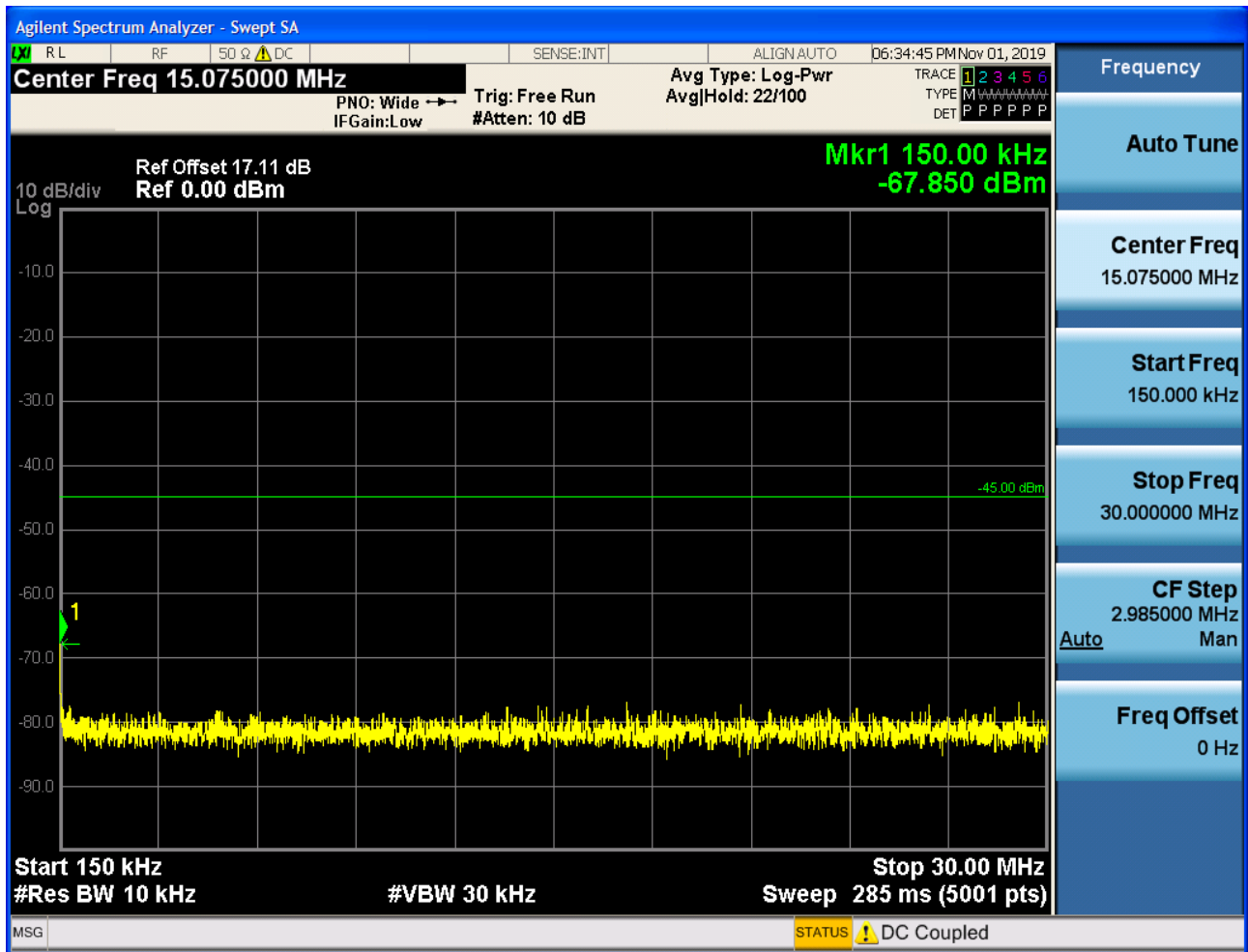


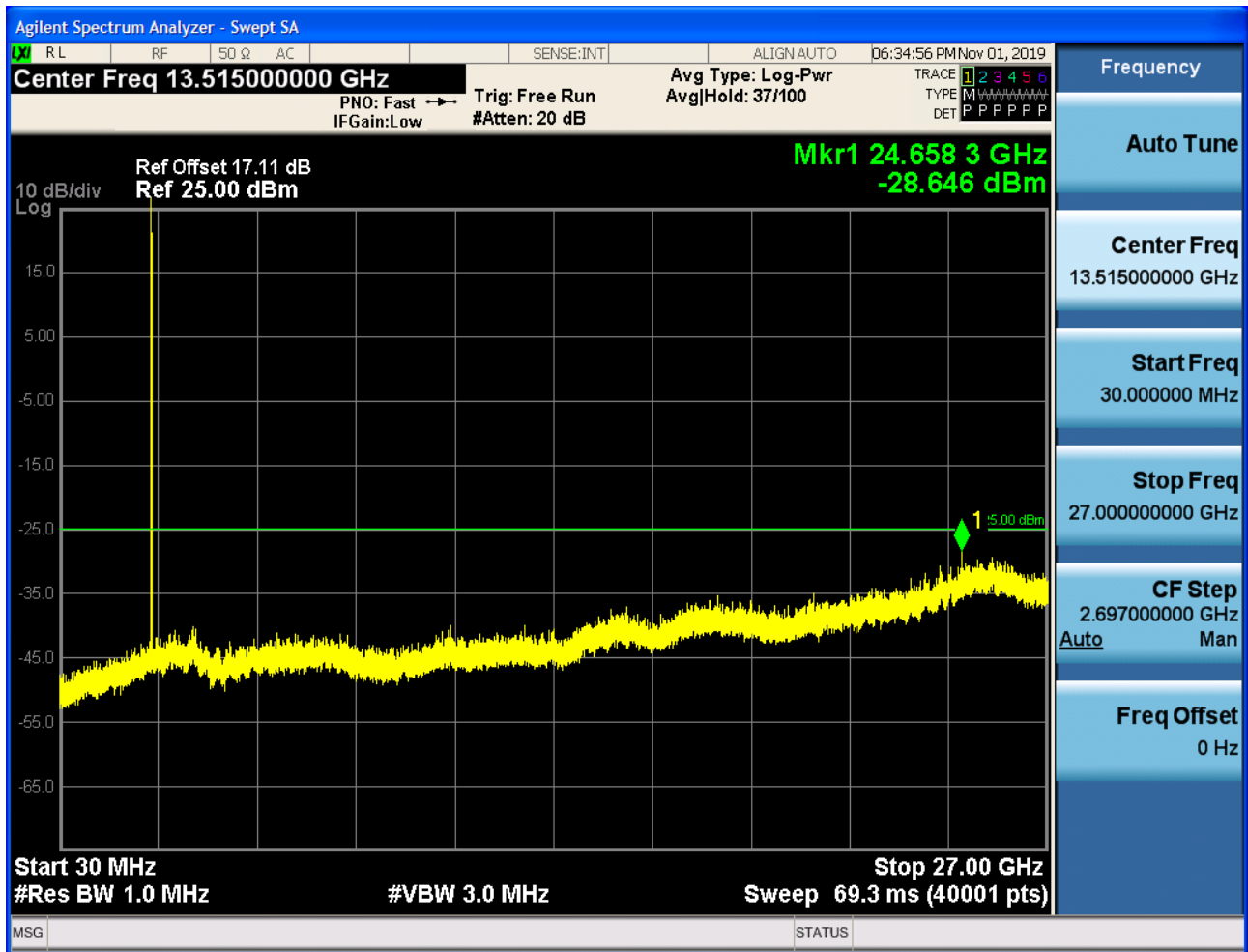


6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0

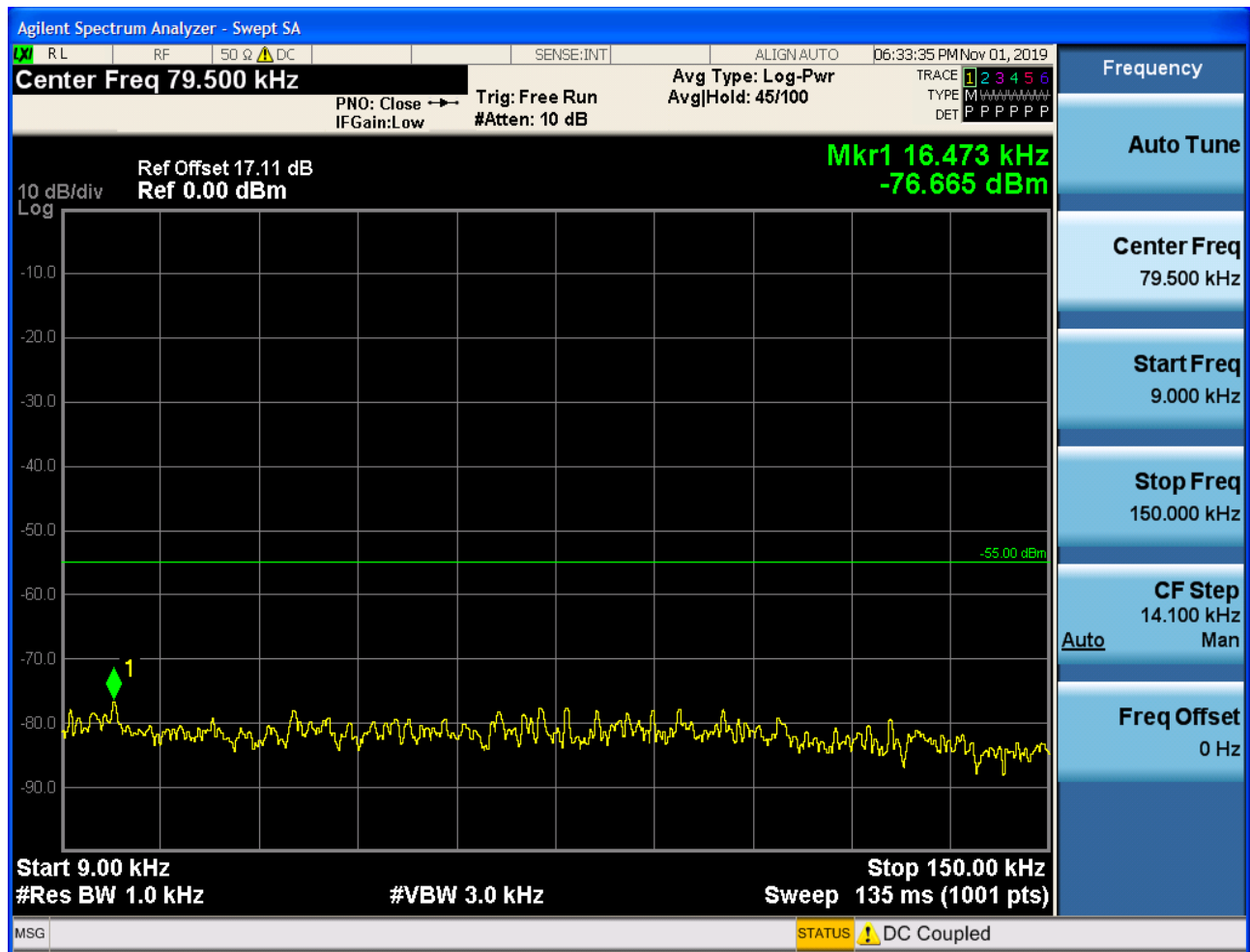


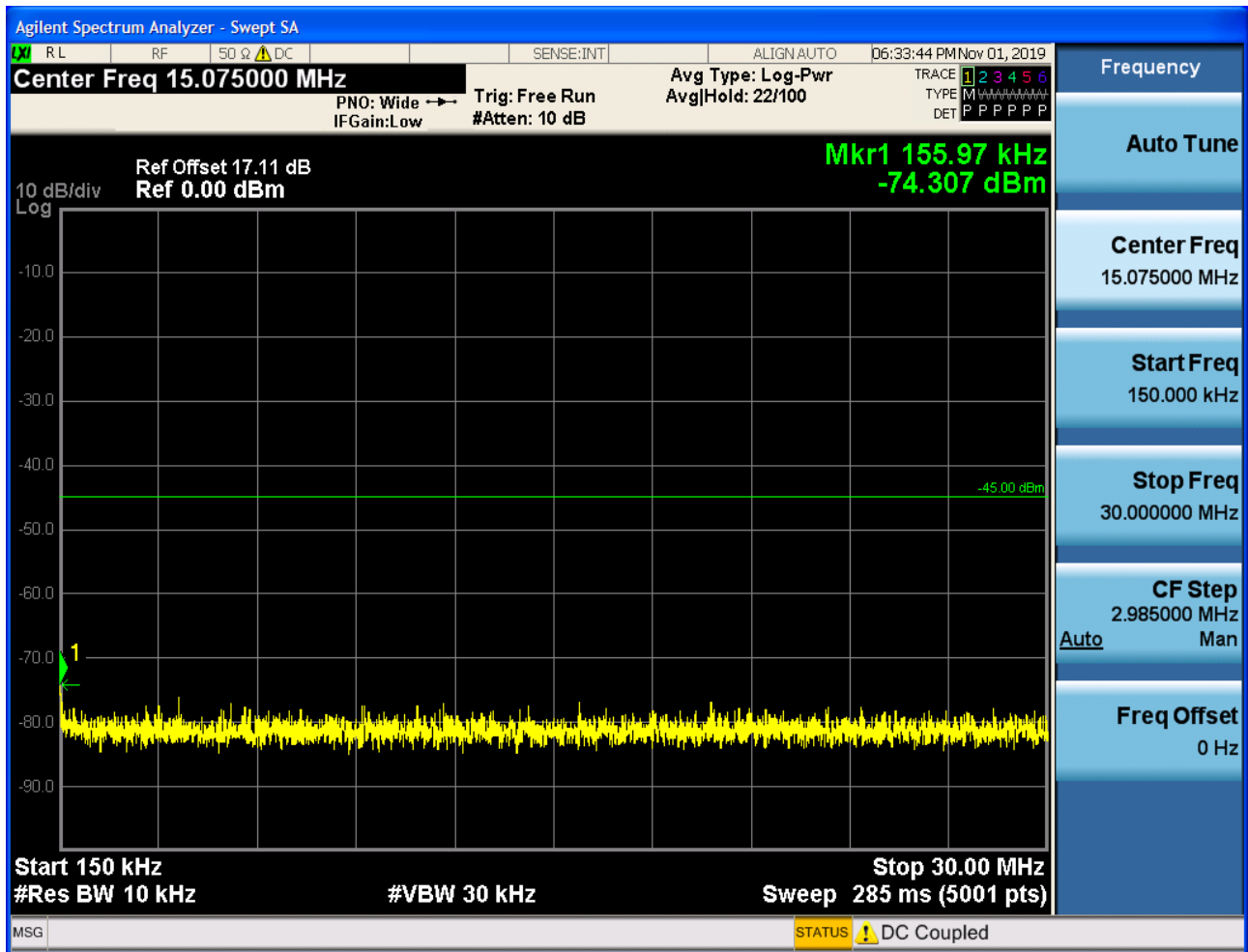


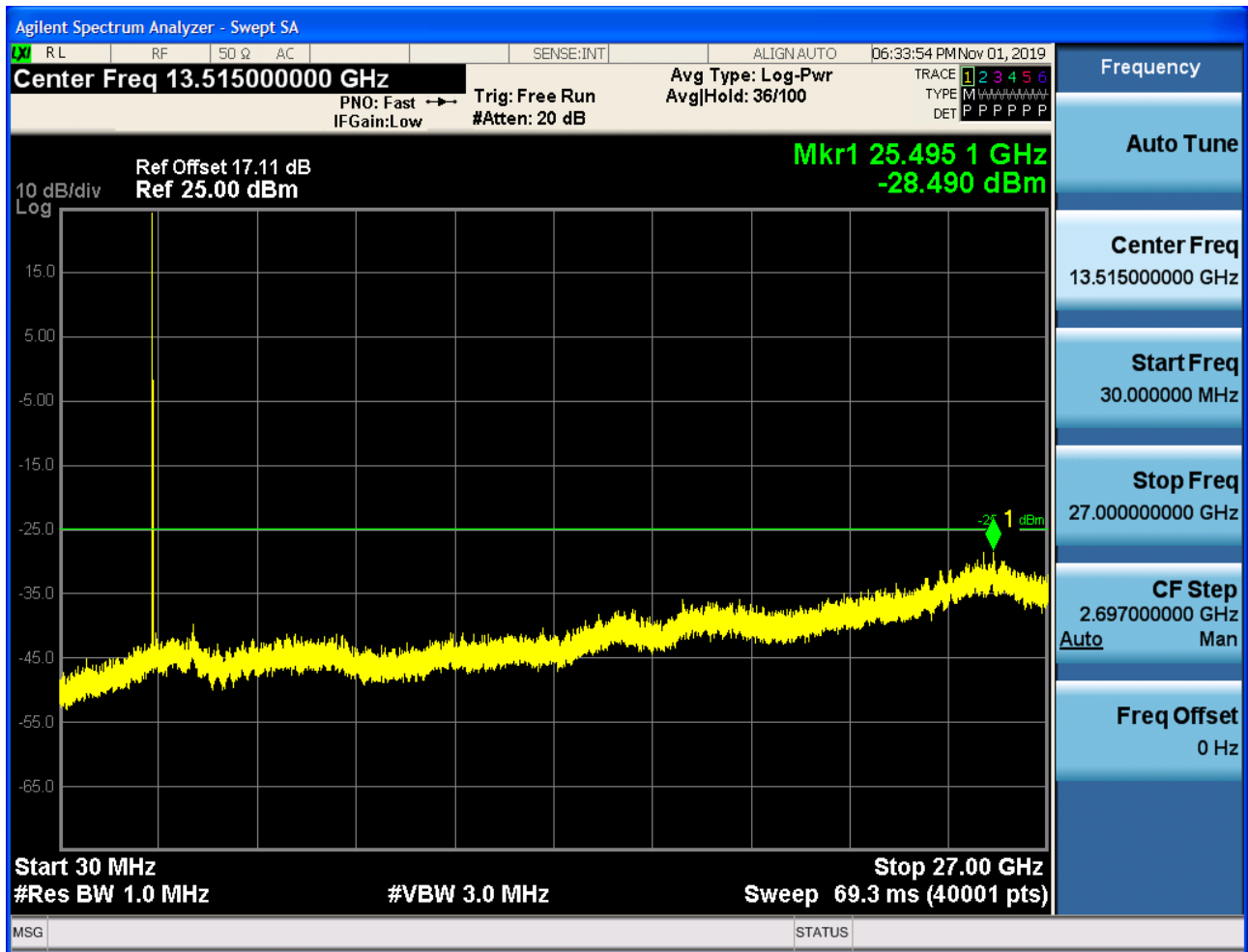


6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0



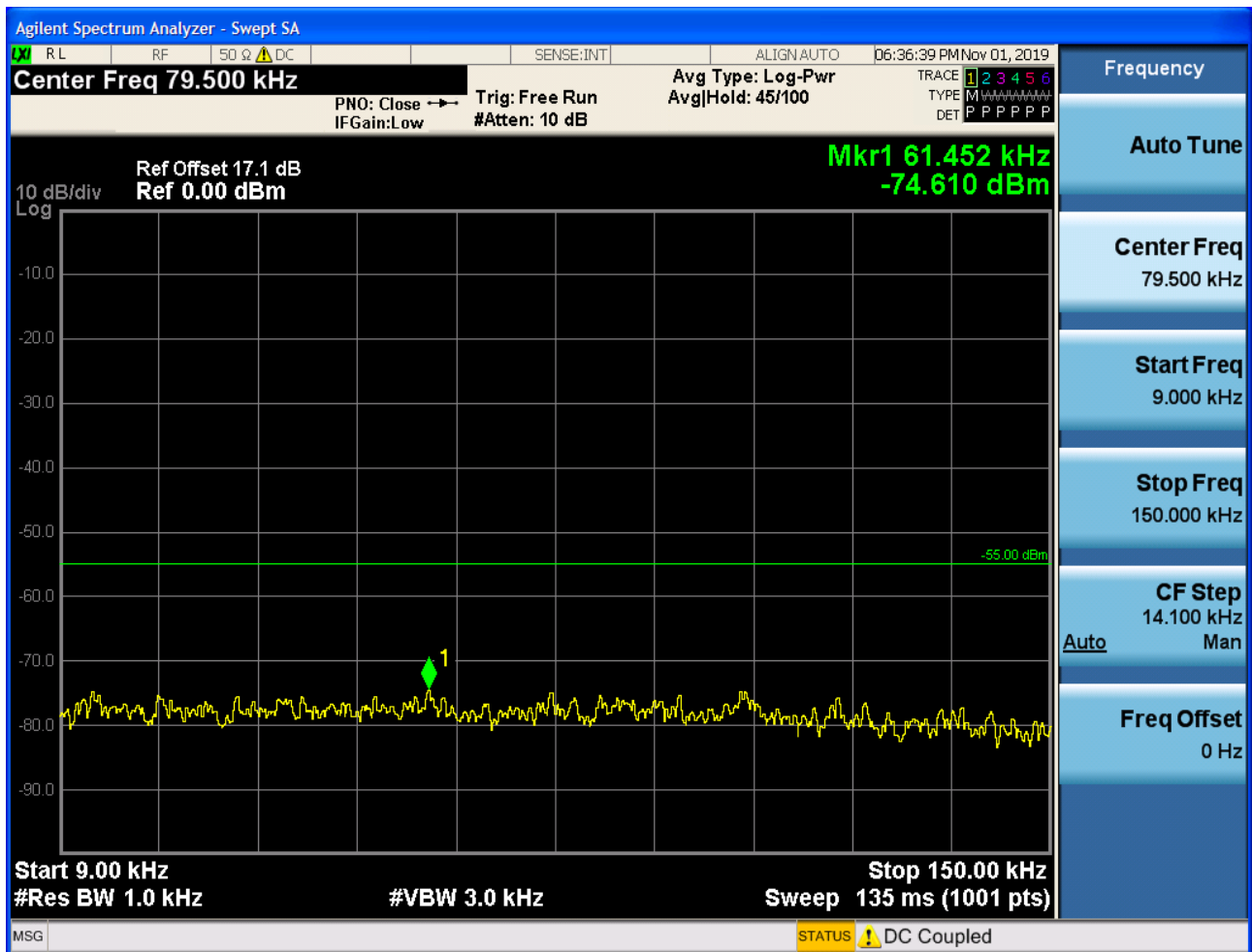


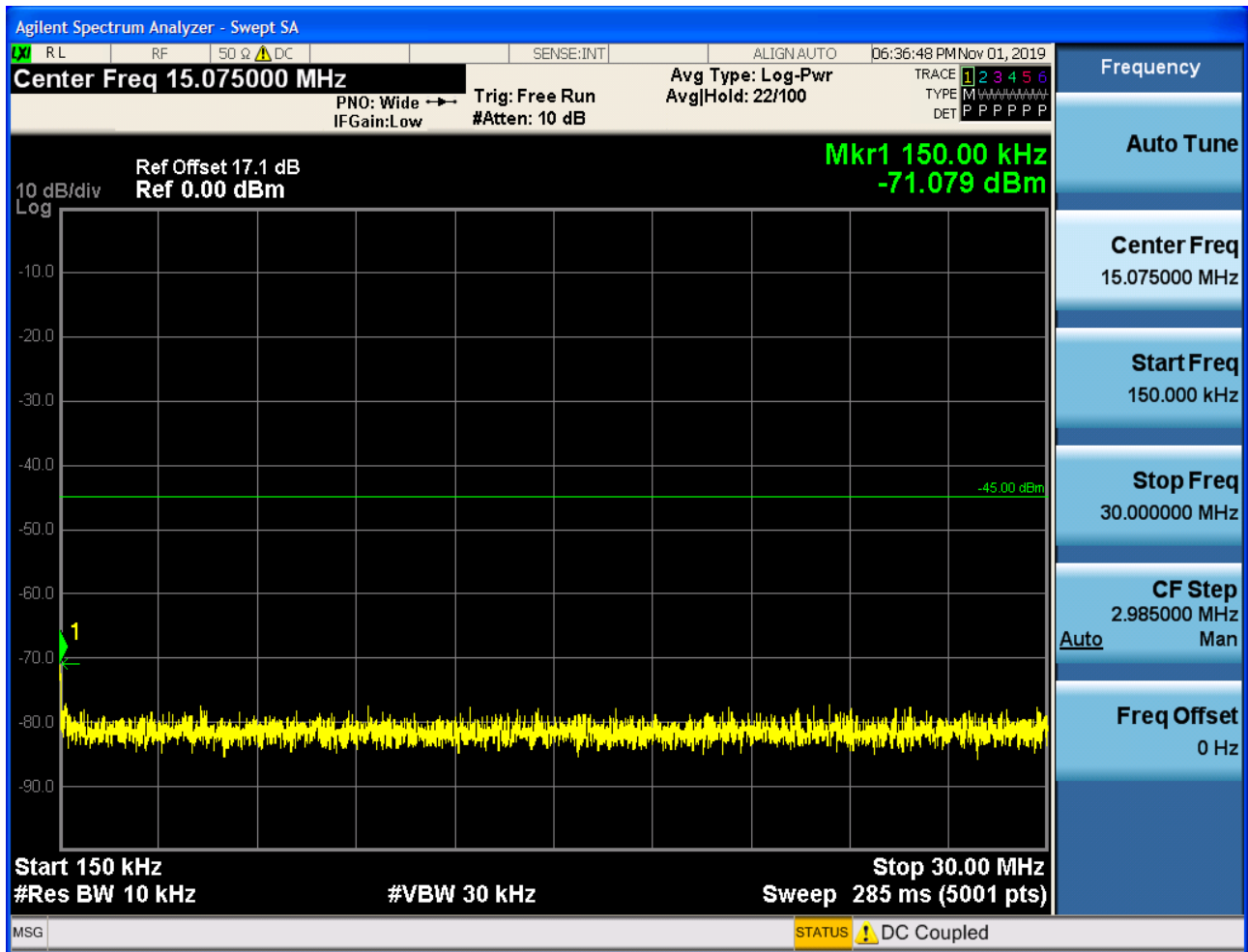


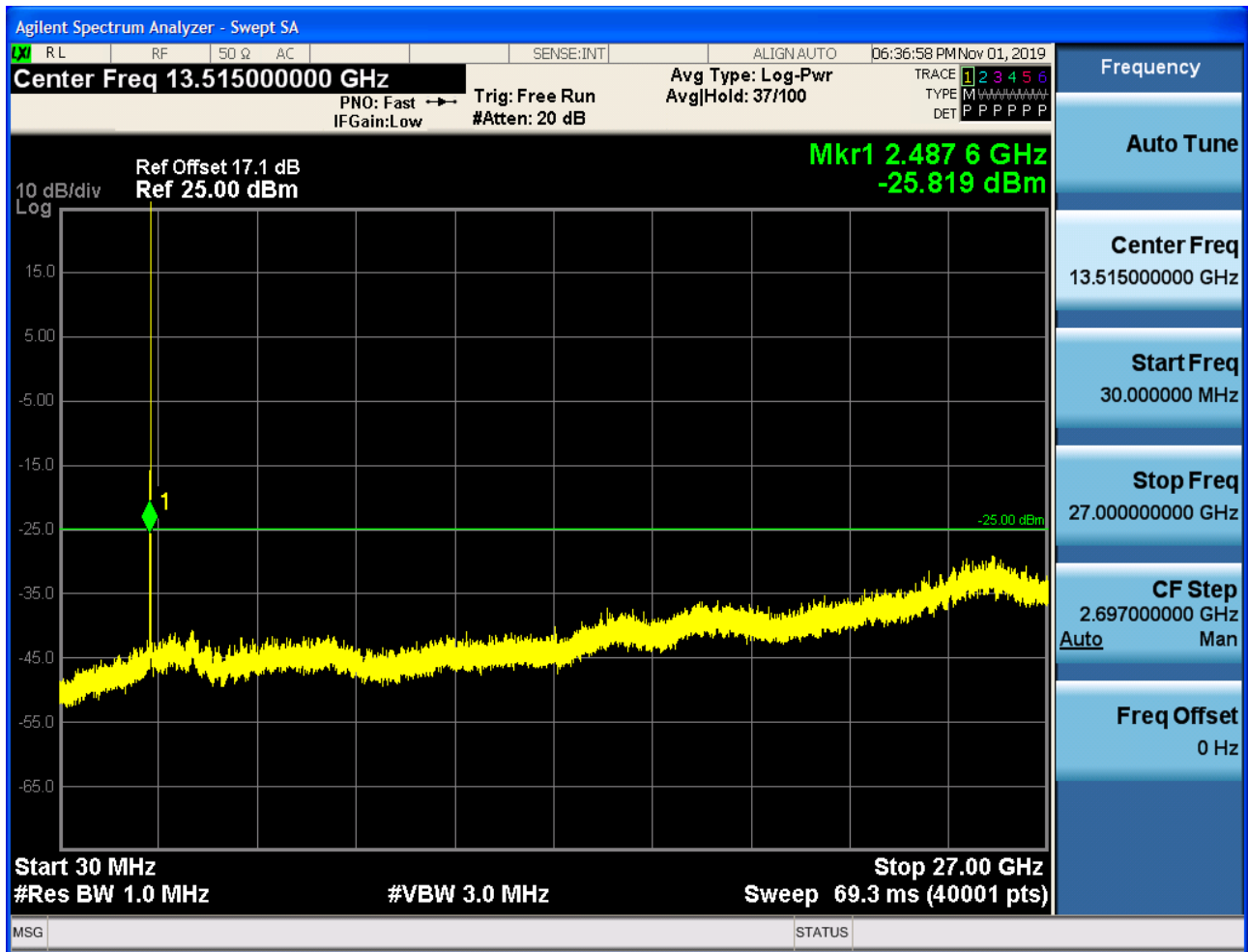
6.2.1.2.3 Test Bandwidth = 15

6.2.1.2.3.1 Test Channel = LCH

6.2.1.2.3.1.1 Test RB = RB1#0

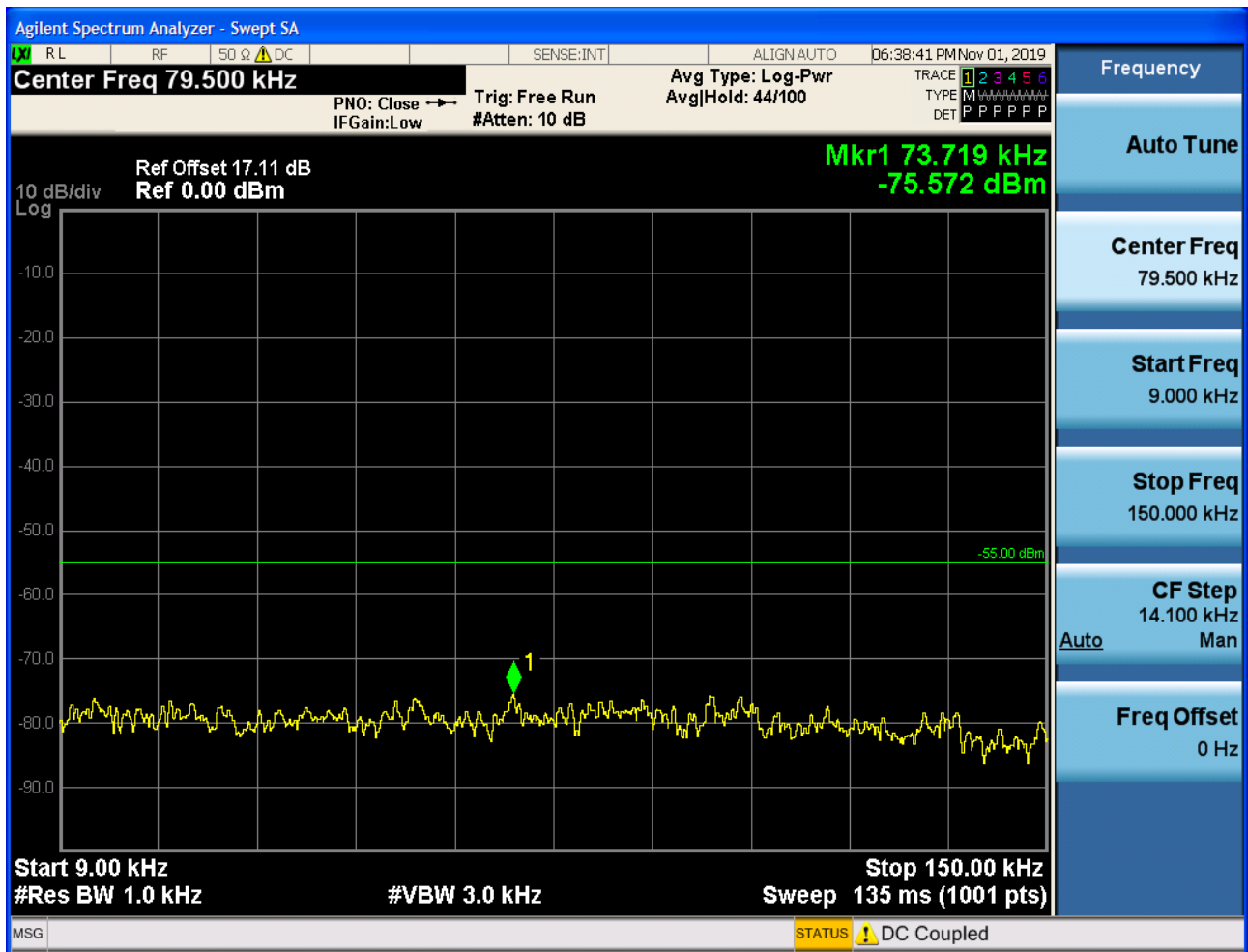


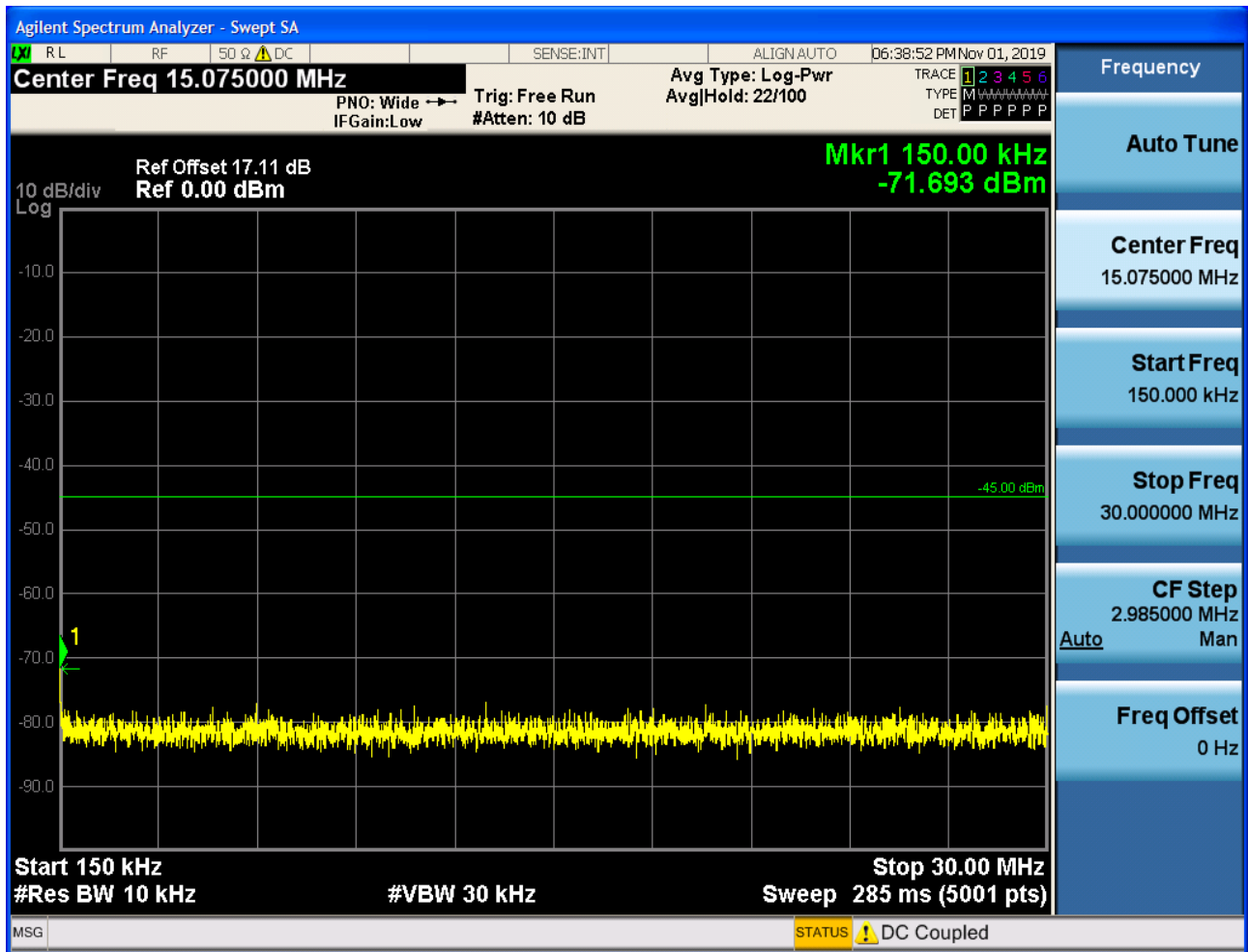


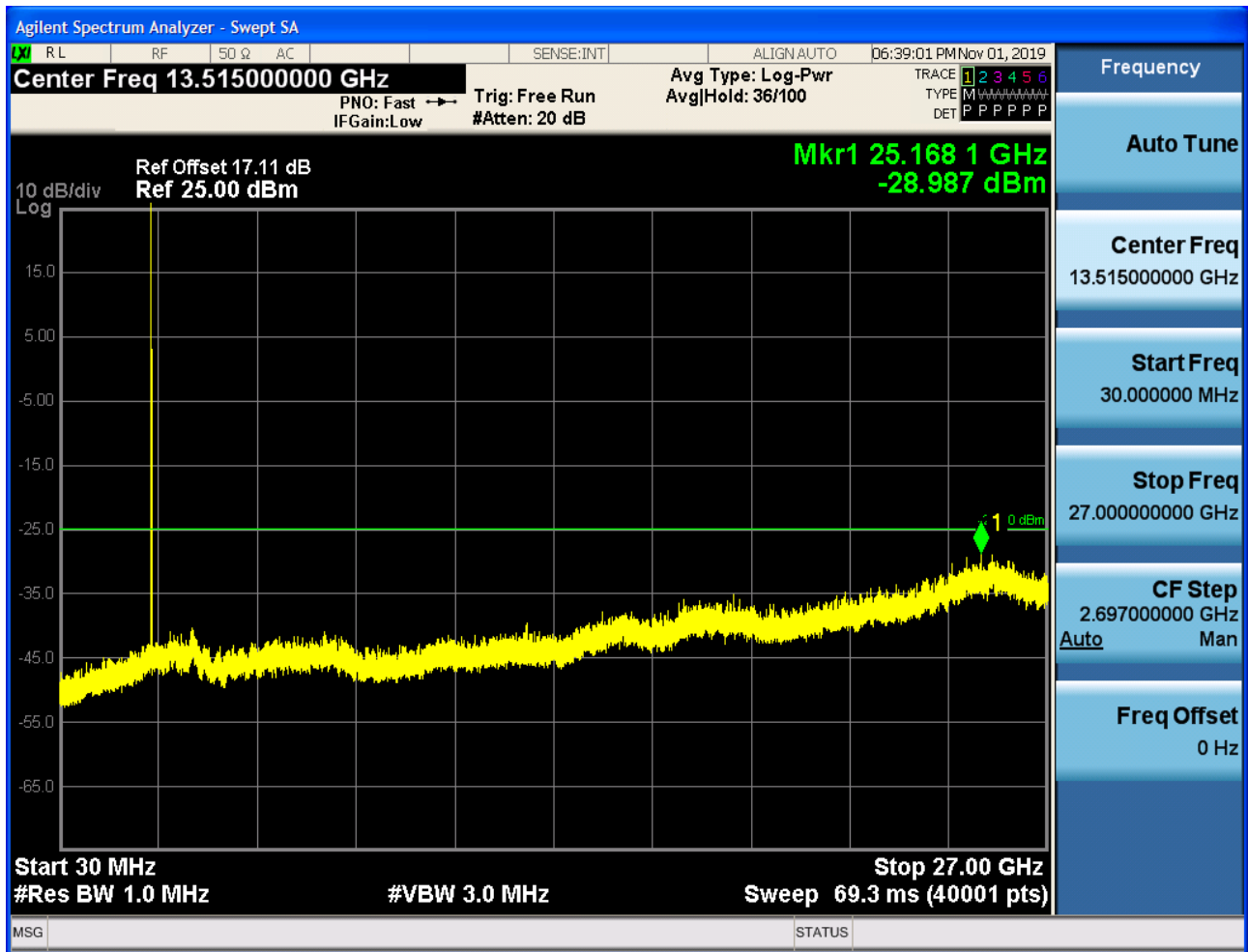


6.2.1.2.3.2 Test Channel = MCH

6.2.1.2.3.2.1 Test RB = RB1#0

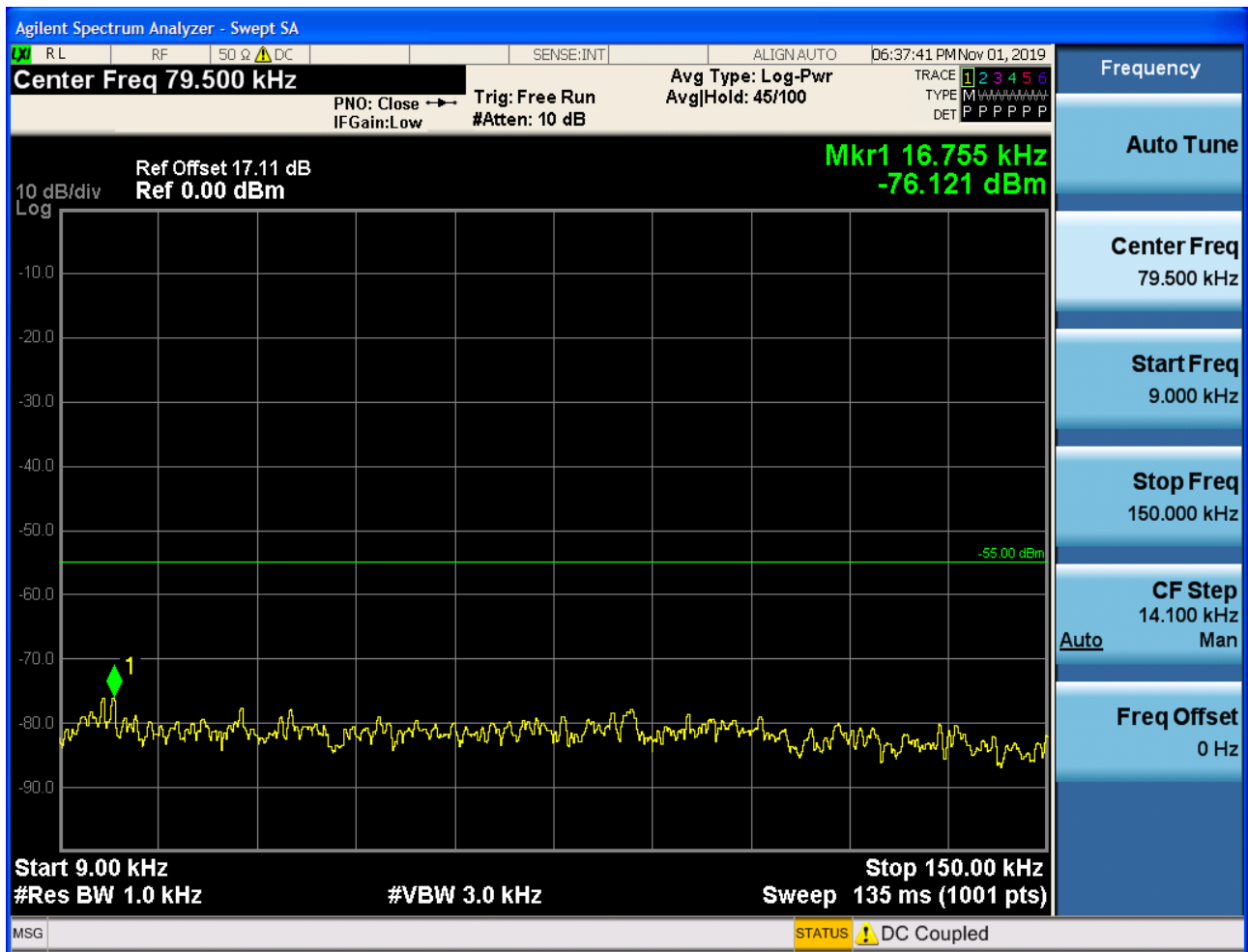


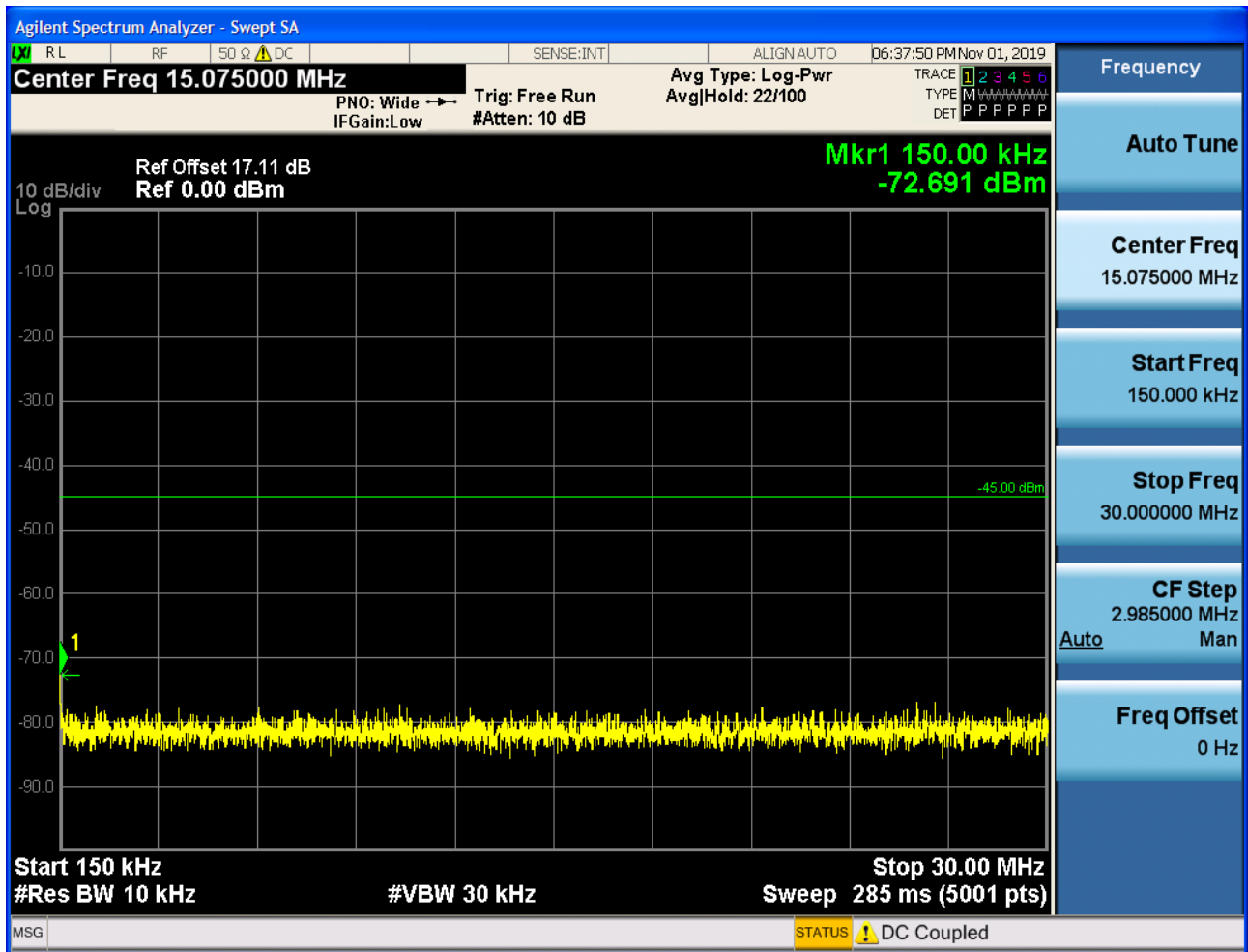


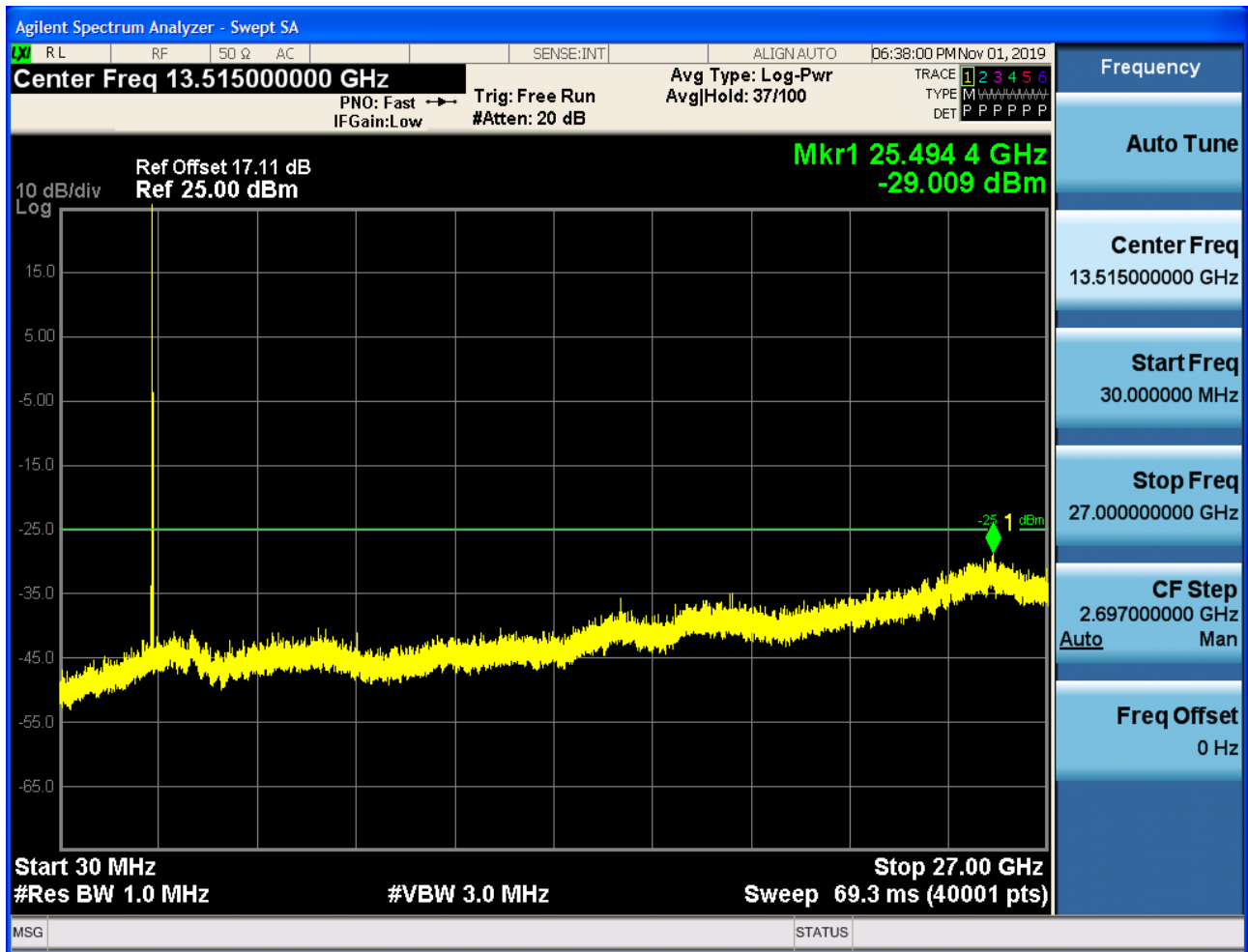


6.2.1.2.3.3 Test Channel = HCH

6.2.1.2.3.3.1 Test RB = RB1#0



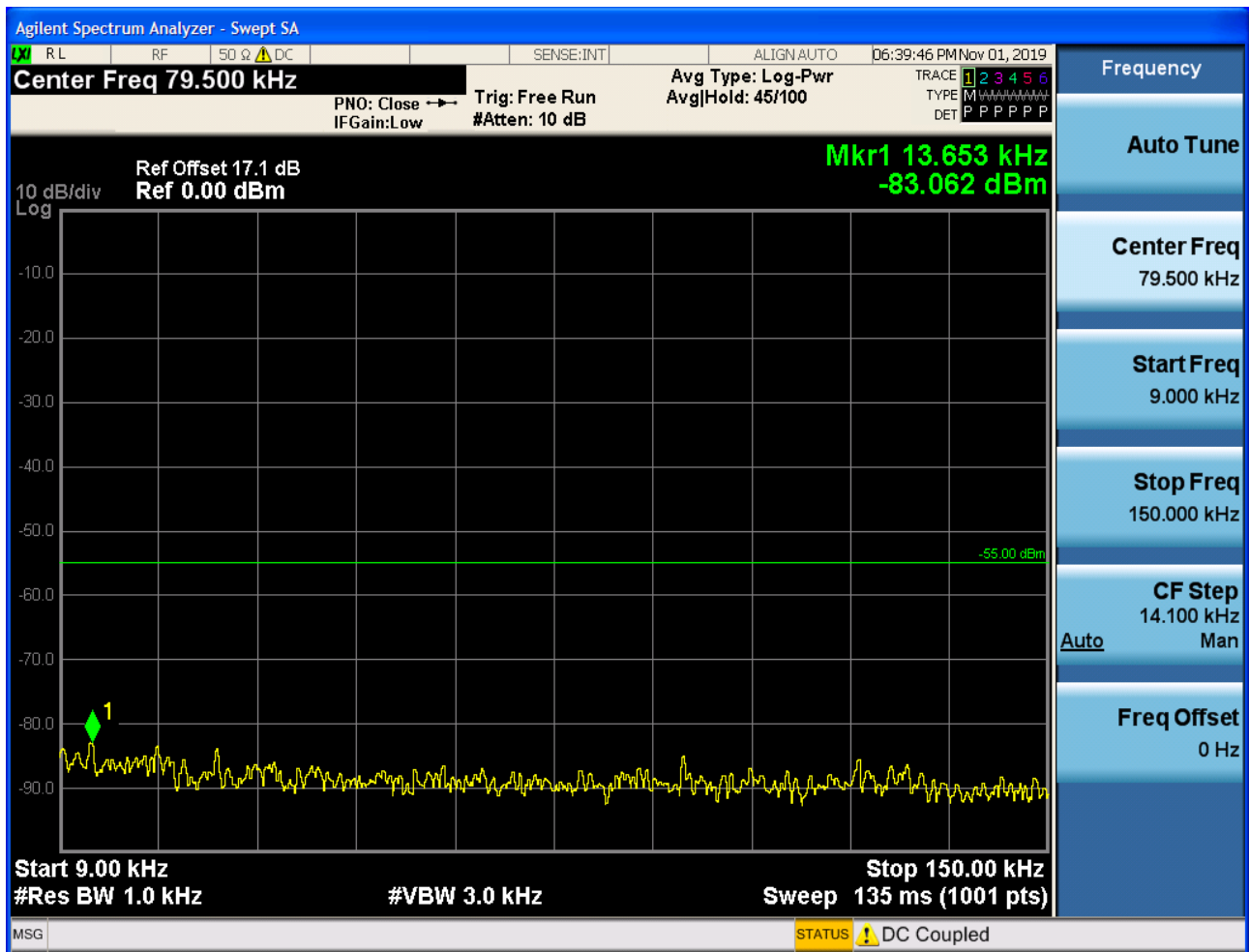


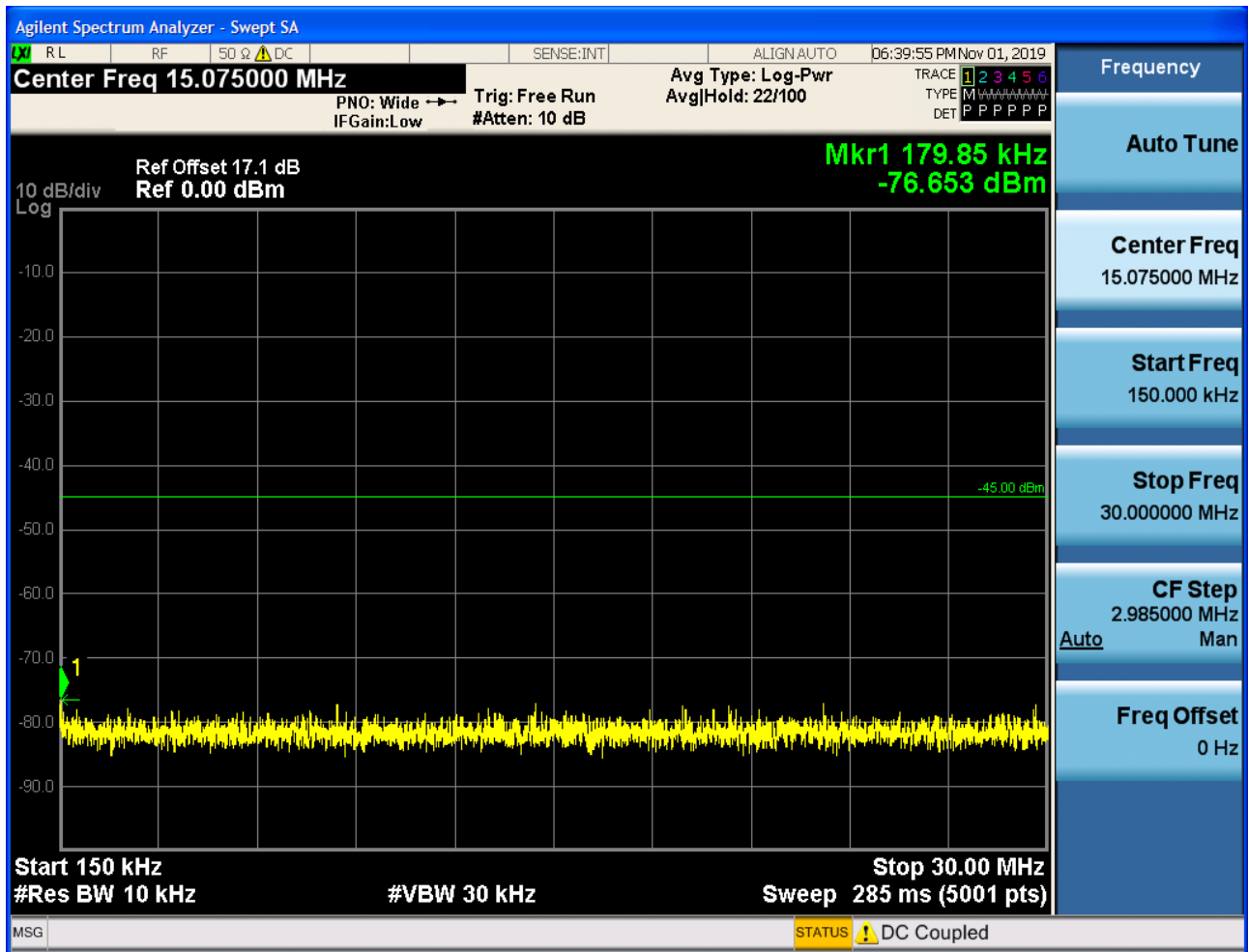


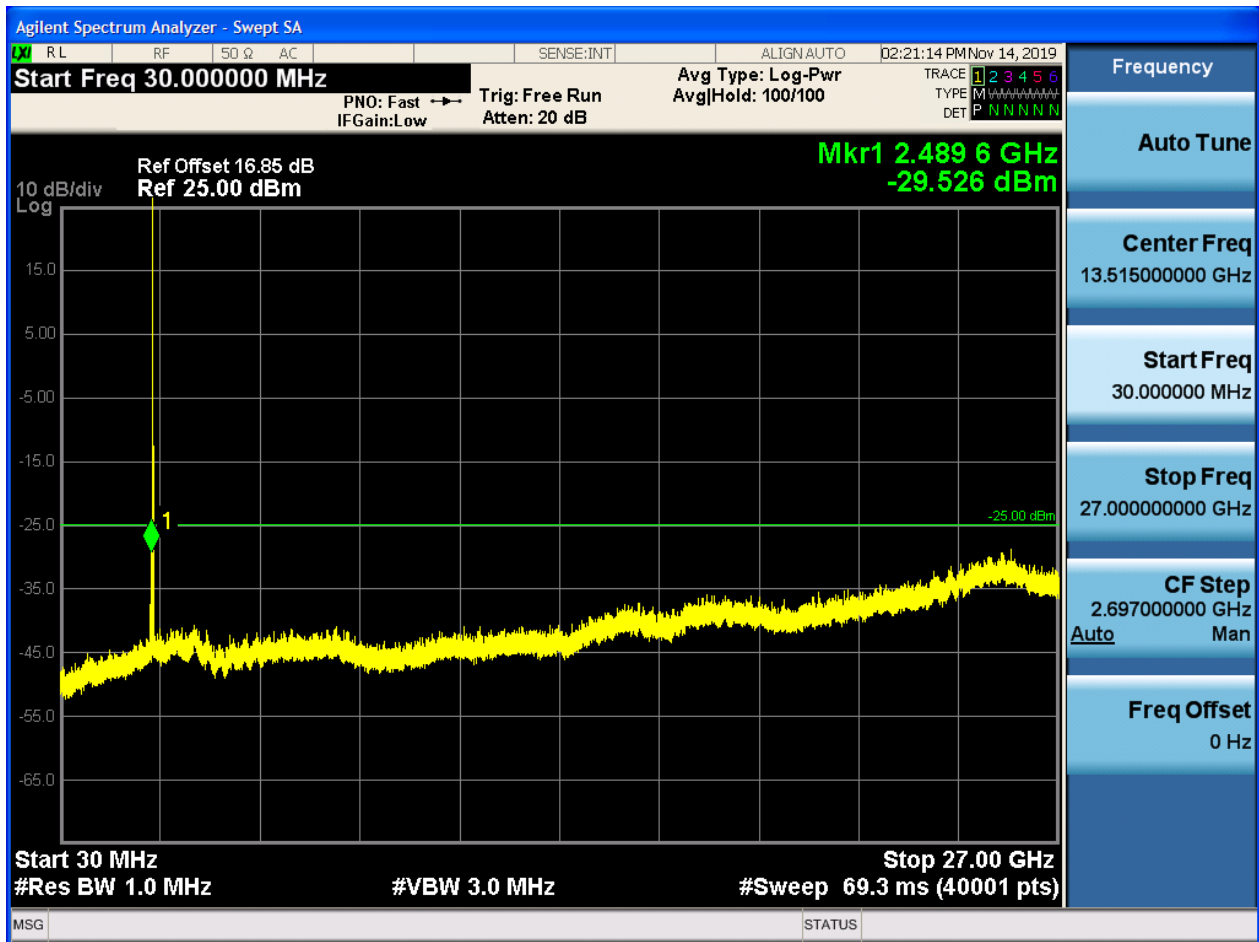
6.2.1.2.4 Test Bandwidth = 20

6.2.1.2.4.1 Test Channel = LCH

6.2.1.2.4.1.1 Test RB = RB1#0

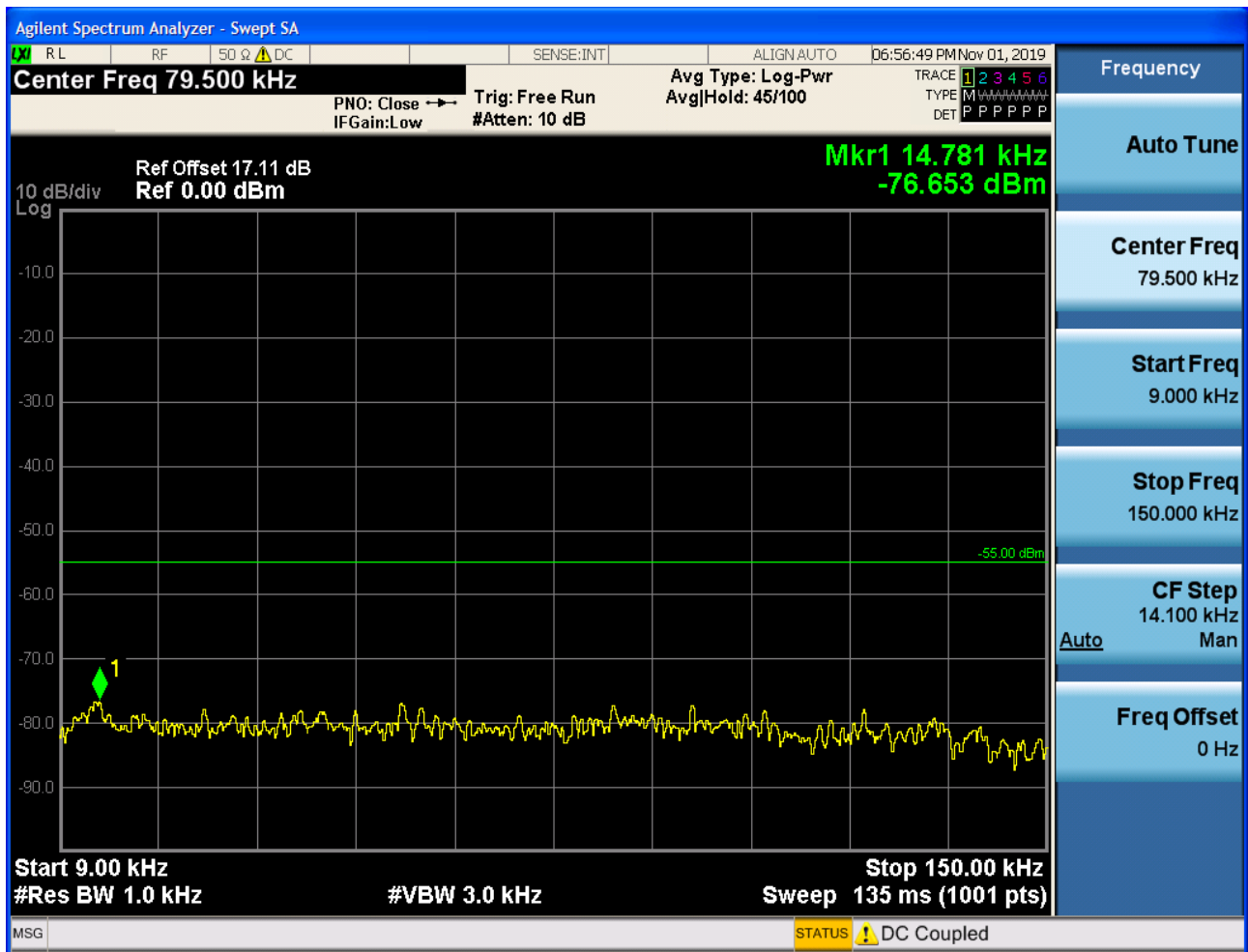


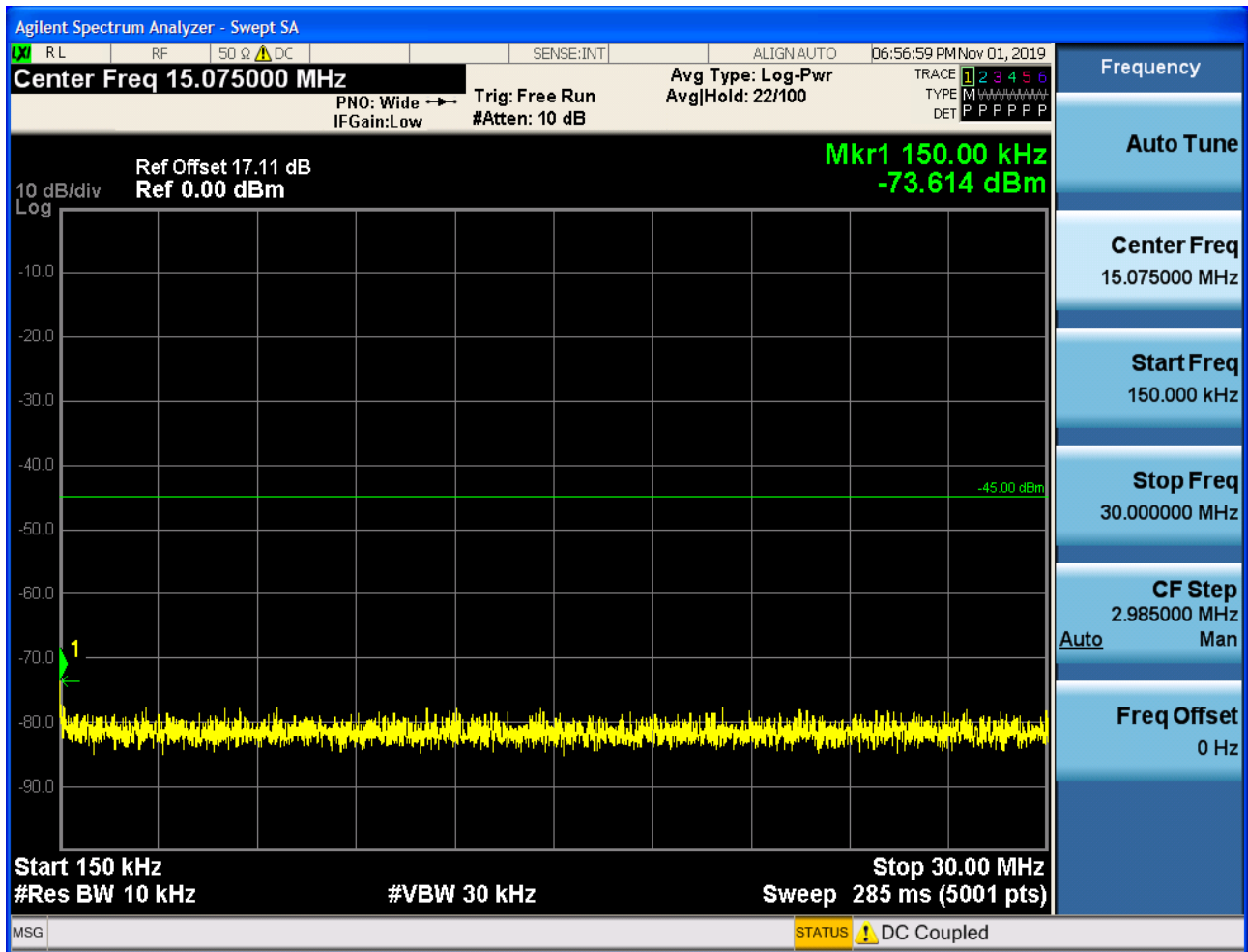


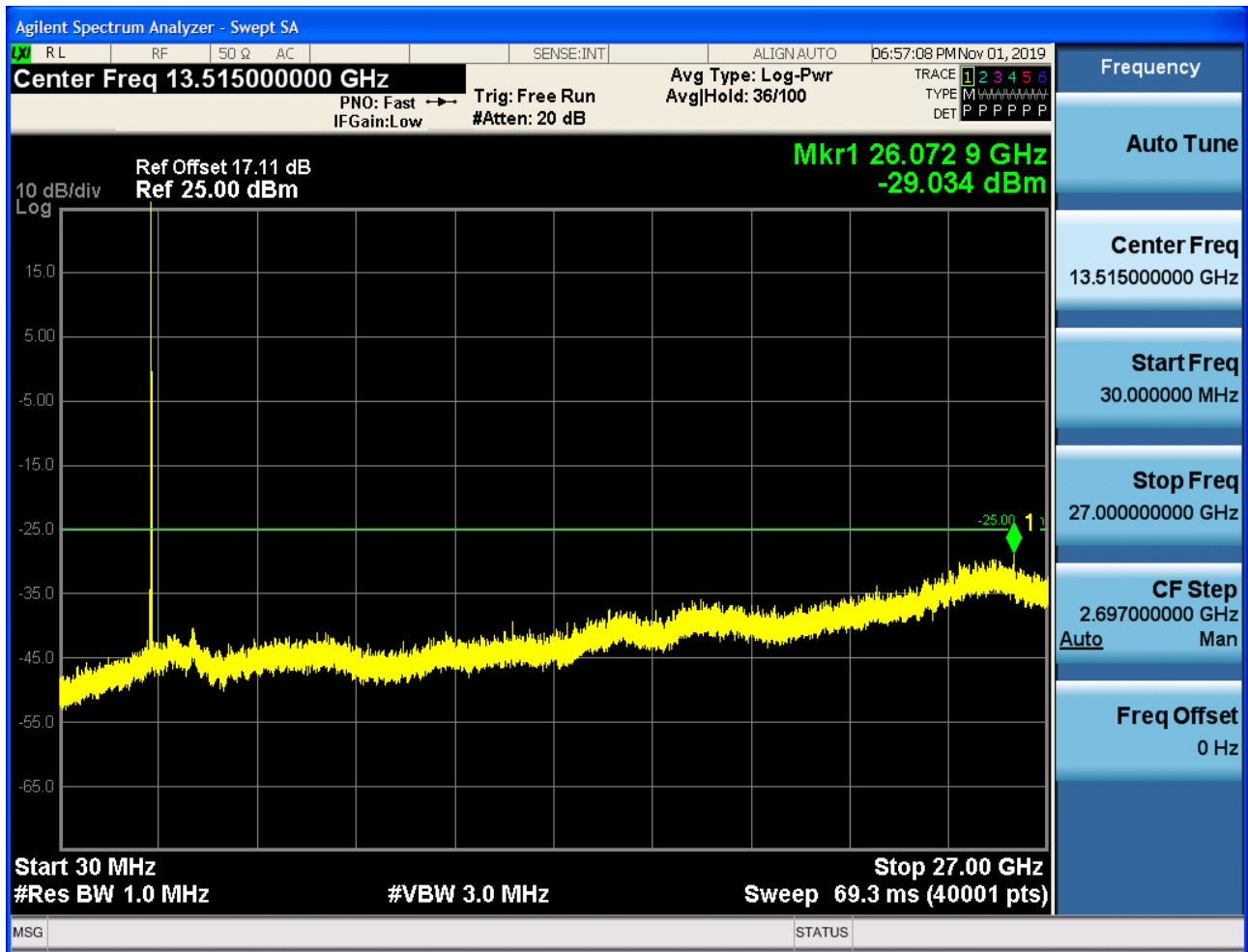


6.2.1.2.4.2 Test Channel = MCH

6.2.1.2.4.2.1 Test RB = RB1#0

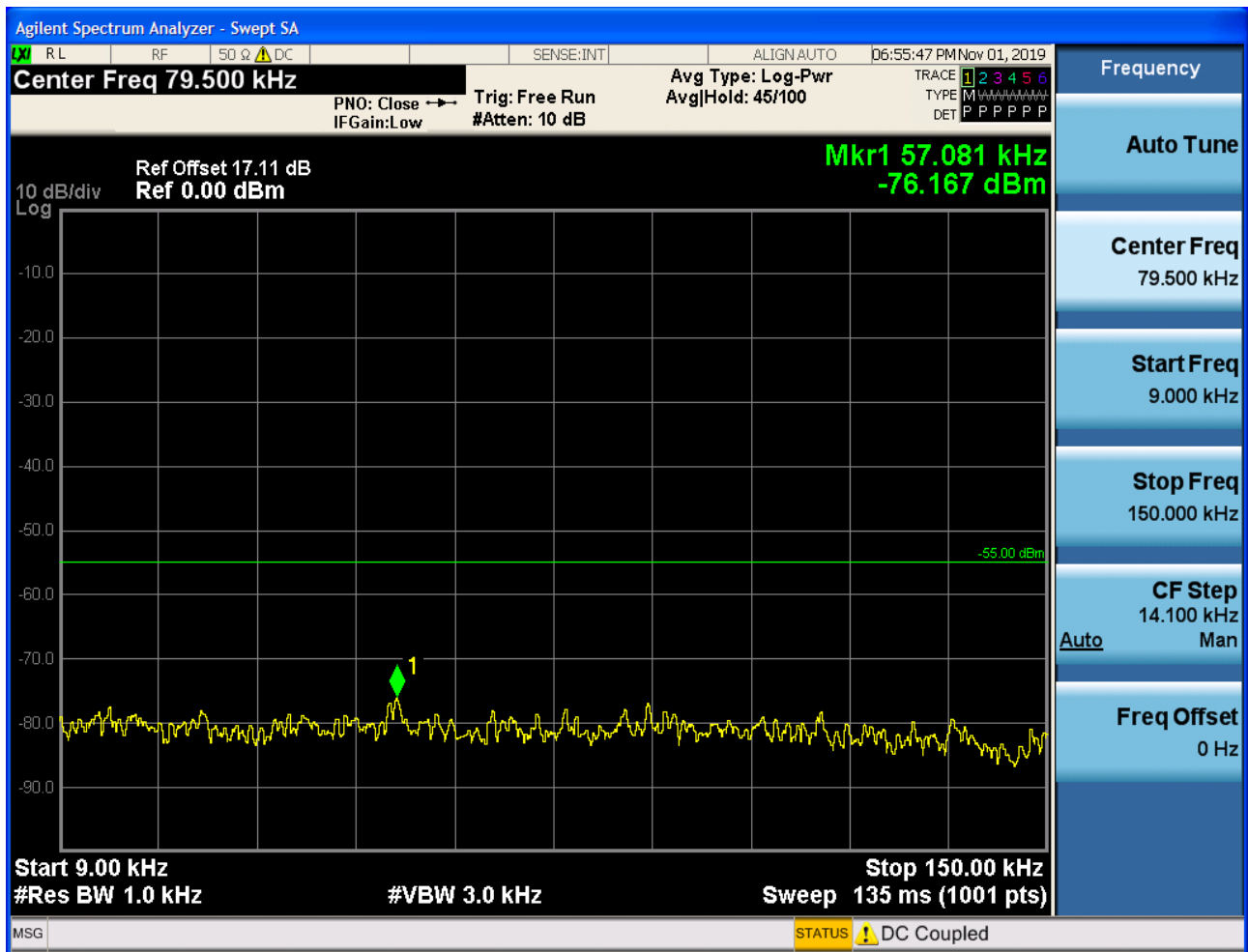


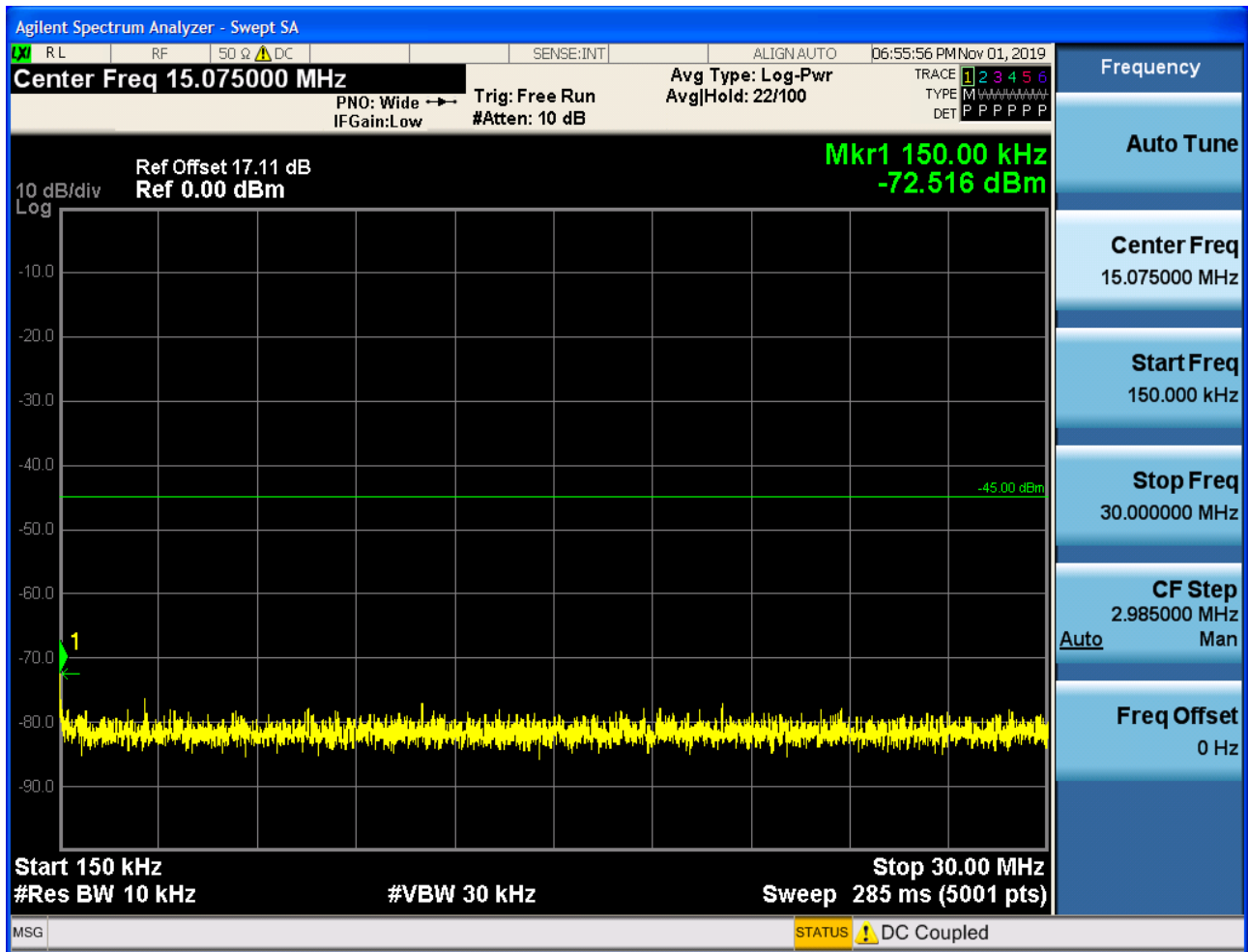


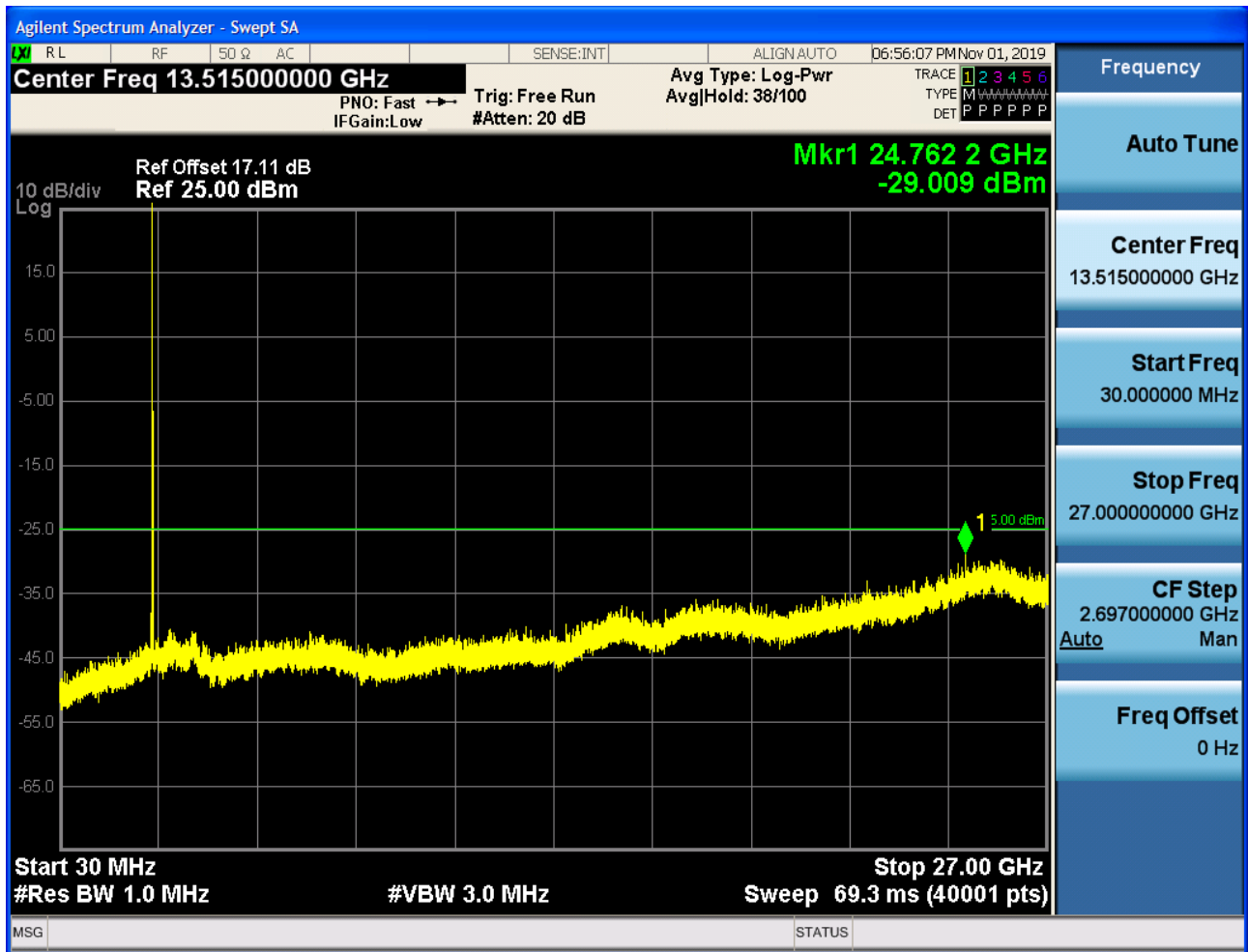


6.2.1.2.4.3 Test Channel = HCH

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

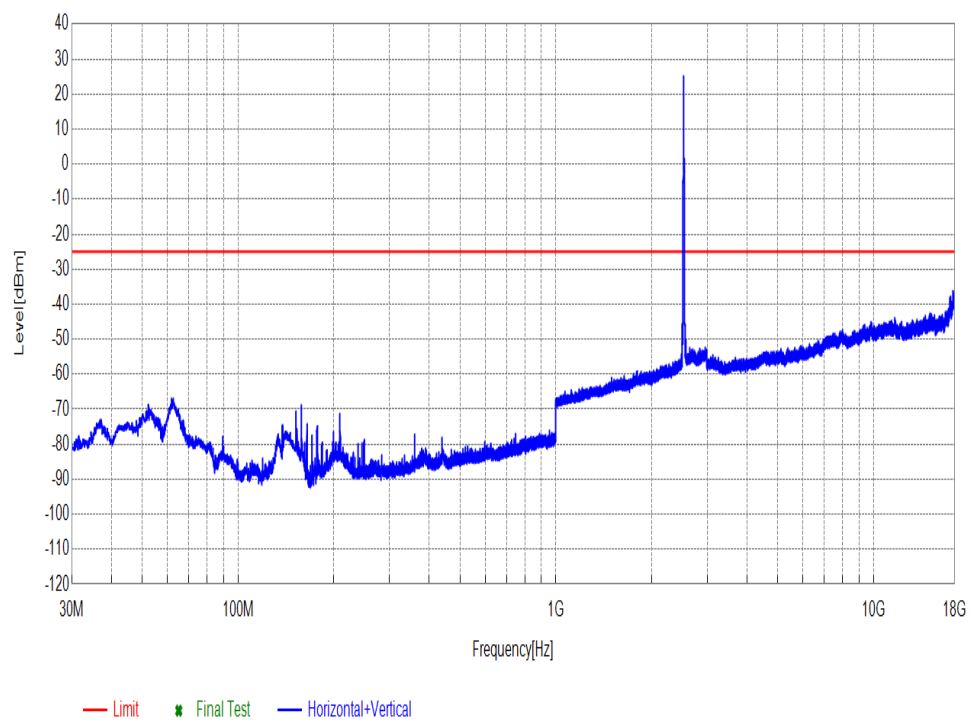
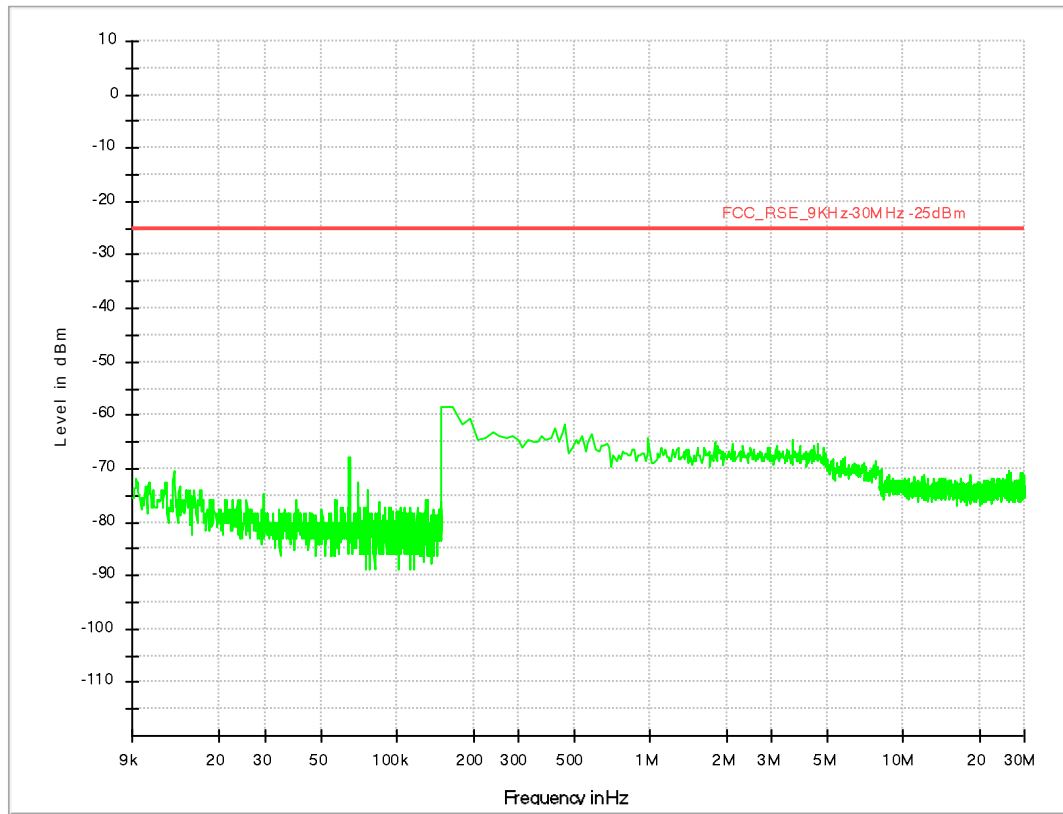
Part I - Test Plots

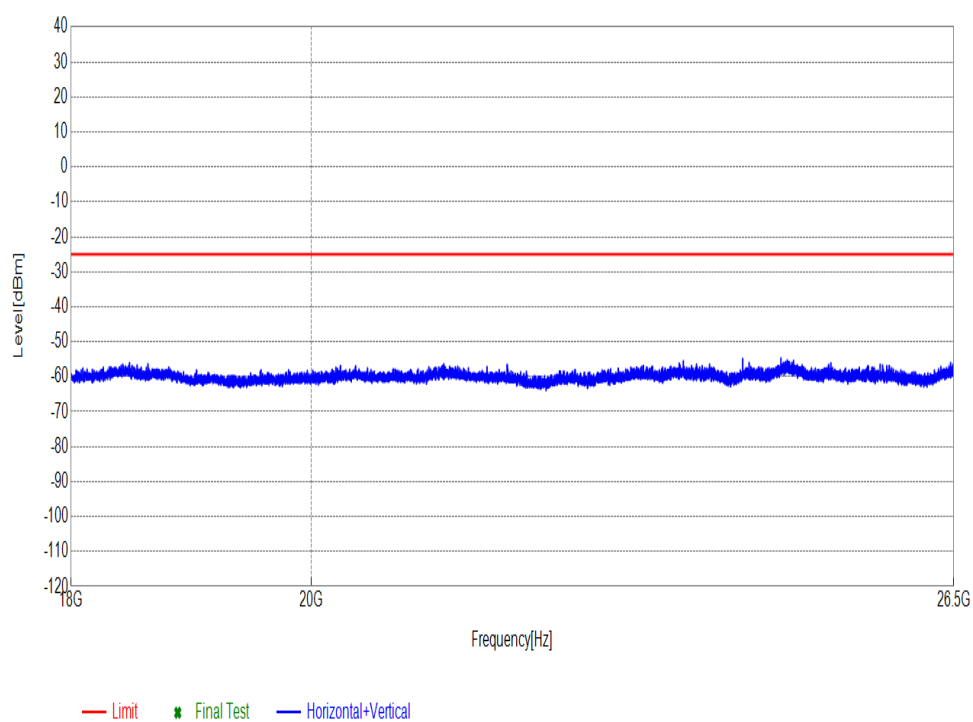
7.1 For LTE

7.1.1 Test Band = Band7

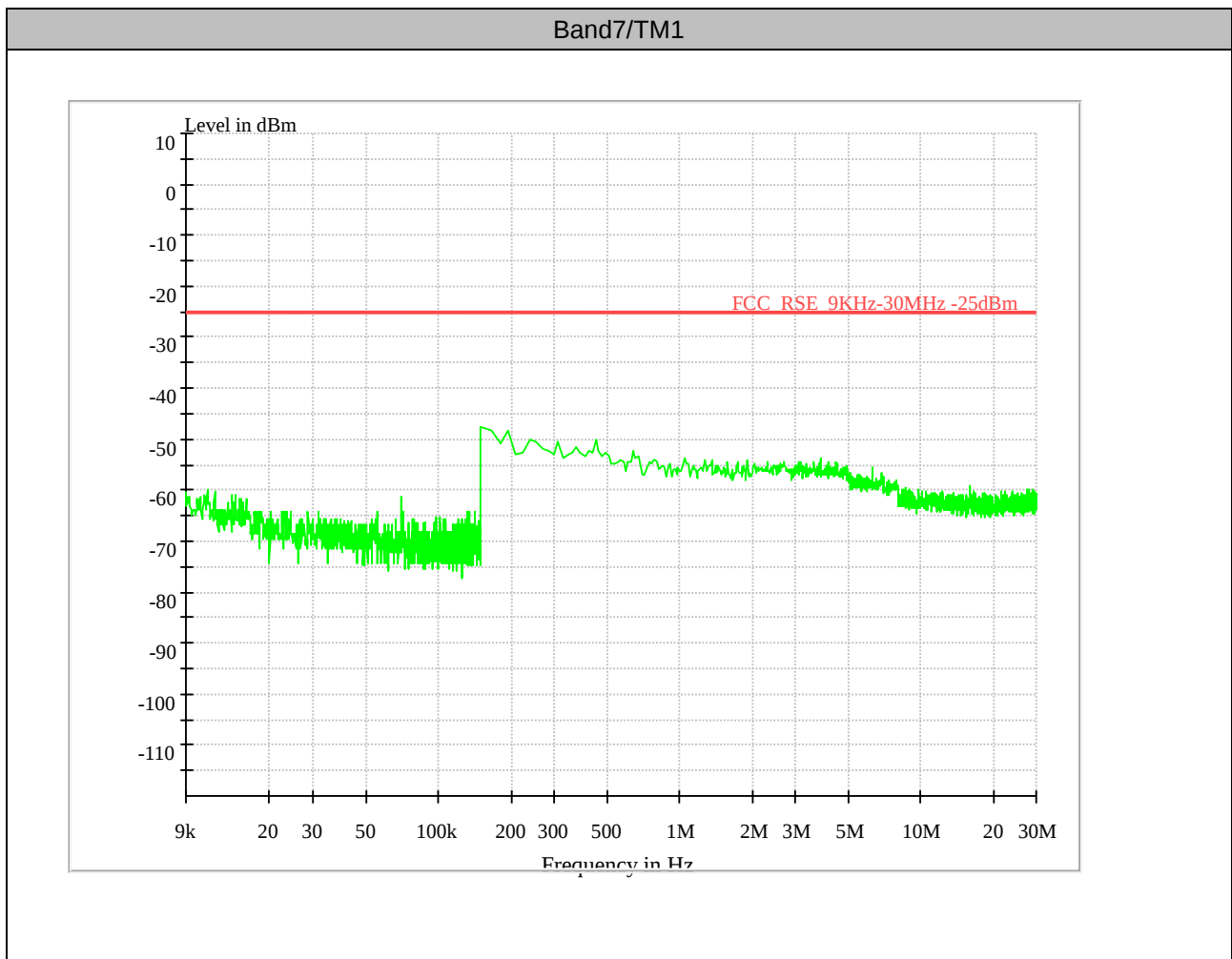
7.1.1.1 Test Bandwidth = 5

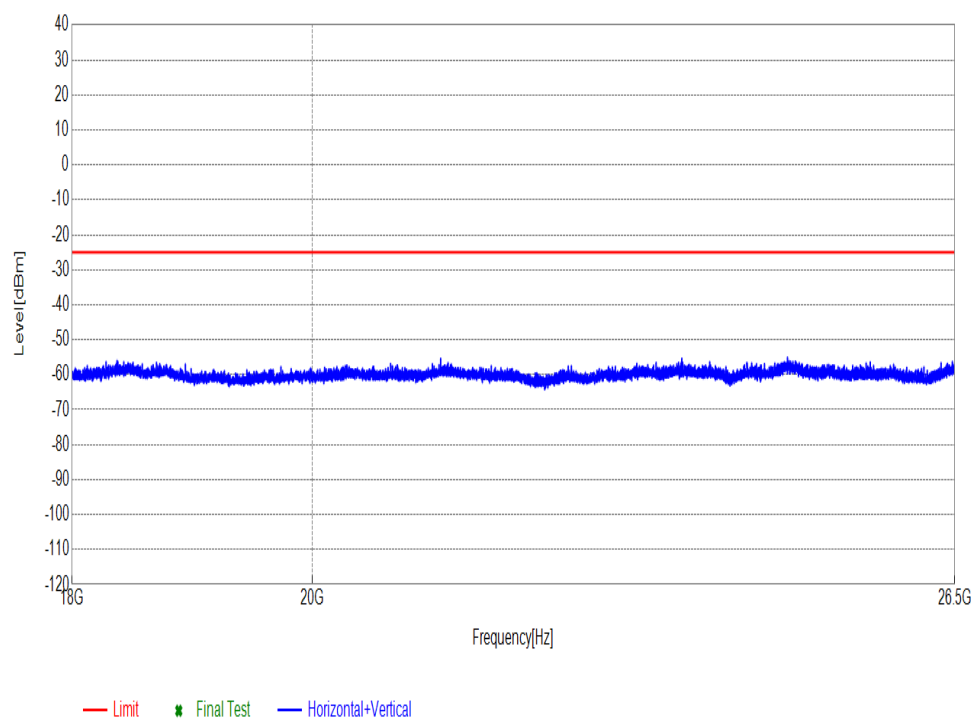
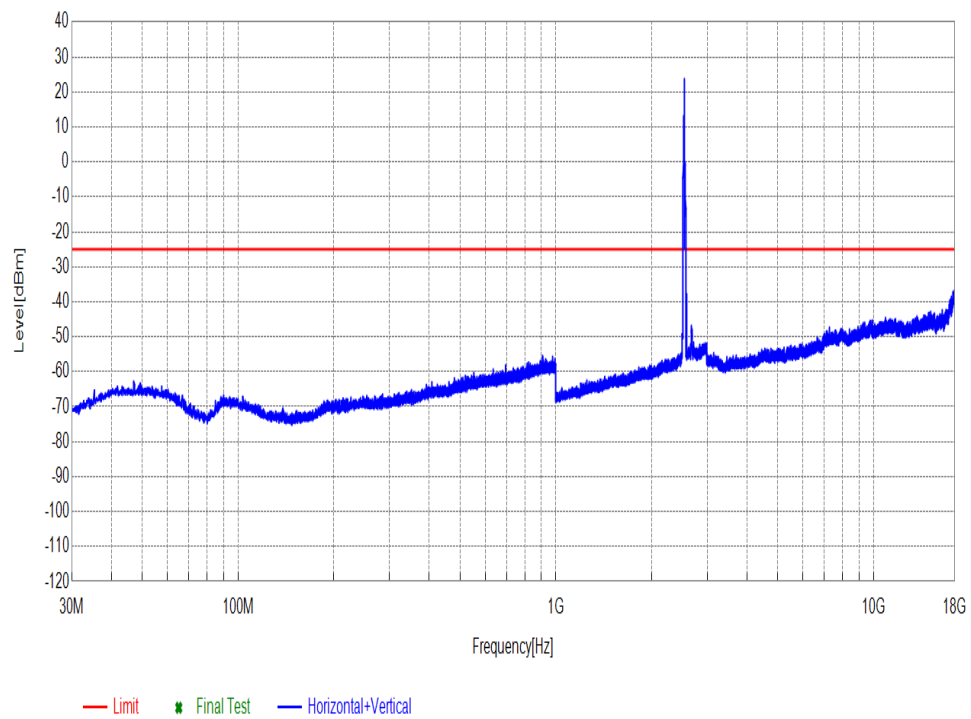
Band7/TM1





7.1.1.2 Test Bandwidth = 20





8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band7	LTE/TM1	5	LCH	TN	VL	-1.61648	-0.00065	PASS
					VN	-1.80244	-0.00072	PASS
					VH	-2.63214	-0.00105	PASS
			MCH	TN	VL	-1.37329	-0.00054	PASS
					VN	2.33173	0.00092	PASS
					VH	-2.53200	-0.00100	PASS
			HCH	TN	VL	-2.43187	-0.00095	PASS
					VN	0.58651	0.00023	PASS
					VH	-2.83241	-0.00110	PASS
		10	LCH	TN	VL	1.33038	0.00053	PASS
					VN	-0.18597	-0.00007	PASS
					VH	0.57220	0.00023	PASS
			MCH	TN	VL	-2.01702	-0.00080	PASS
					VN	-0.90122	-0.00036	PASS
					VH	4.23431	0.00167	PASS
			HCH	TN	VL	1.54495	0.00060	PASS
					VN	-6.13689	-0.00239	PASS
					VH	-4.59194	-0.00179	PASS
		15	LCH	TN	VL	-0.01431	-0.00001	PASS
					VN	-1.93119	-0.00077	PASS
					VH	0.27180	0.00011	PASS
			MCH	TN	VL	-1.43051	-0.00056	PASS
					VN	0.24319	0.00010	PASS
					VH	-0.31471	-0.00012	PASS
			HCH	TN	VL	-0.31471	-0.00012	PASS
					VN	-1.13010	-0.00044	PASS
					VH	-1.83106	-0.00071	PASS
		20	LCH	TN	VL	-0.61512	-0.00025	PASS
					VN	1.80244	0.00072	PASS
					VH	0.71526	0.00028	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	TN	VL	-1.04427	-0.00041	PASS
					VN	-4.40597	-0.00174	PASS
					VH	-0.88692	-0.00035	PASS
			HCH	TN	VL	-0.92983	-0.00036	PASS
					VN	-2.11716	-0.00083	PASS
					VH	-2.80380	-0.00110	PASS
	LTE/TM2	5	LCH	TN	VL	-0.10014	-0.00004	PASS
					VN	5.20706	0.00208	PASS
					VH	3.11851	0.00125	PASS
			MCH	TN	VL	-1.67370	-0.00066	PASS
					VN	1.95980	0.00077	PASS
					VH	2.30312	0.00091	PASS
			HCH	TN	VL	-1.51634	-0.00059	PASS
					VN	1.43051	0.00056	PASS
					VH	-0.08583	-0.00003	PASS
		10	LCH	TN	VL	-2.88963	-0.00115	PASS
					VN	-0.42915	-0.00017	PASS
					VH	0.90122	0.00036	PASS
			MCH	TN	VL	3.54767	0.00140	PASS
					VN	5.60761	0.00221	PASS
					VH	-0.80109	-0.00032	PASS
			HCH	TN	VL	3.80516	0.00148	PASS
					VN	-2.00272	-0.00078	PASS
					VH	-1.24455	-0.00049	PASS
		15	LCH	TN	VL	2.46048	0.00098	PASS
					VN	-0.58651	-0.00023	PASS
					VH	2.43187	0.00097	PASS
			MCH	TN	VL	-0.84400	-0.00033	PASS
					VN	-1.67370	-0.00066	PASS
					VH	0.81539	0.00032	PASS
			HCH	TN	VL	-1.88827	-0.00074	PASS
					VN	0.00000	0.00000	PASS
					VH	0.84400	0.00033	PASS
		20	LCH	TN	VL	-0.97275	-0.00039	PASS
					VN	-1.14441	-0.00046	PASS
					VH	0.61512	0.00025	PASS
			MCH	TN	VL	-2.63214	-0.00104	PASS
					VN	-0.15736	-0.00006	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			HCH	TN	VH	2.41756	0.00095	PASS
					VL	0.11444	0.00004	PASS
					VN	0.32902	0.00013	PASS
					VH	-0.80109	-0.00031	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band7	LTE/TM1	5	LCH	VN	-30	-0.30041	-0.00012	PASS
					-20	-3.08990	-0.00123	PASS
					-10	-0.11444	-0.00005	PASS
					0	-2.08855	-0.00083	PASS
					10	-2.68936	-0.00107	PASS
					20	-1.80244	-0.00072	PASS
					30	-2.83241	-0.00113	PASS
					40	-0.61512	-0.00025	PASS
					50	-2.60353	-0.00104	PASS
			MCH	VN	-30	-1.95980	-0.00077	PASS
					-20	1.64509	0.00065	PASS
					-10	0.74387	0.00029	PASS
					0	1.61648	0.00064	PASS
					10	3.49045	0.00138	PASS
					20	2.33173	0.00092	PASS
					30	0.51498	0.00020	PASS
					40	-0.69237	-0.00028	PASS
					50	0.77248	0.00030	PASS
			HCH	VN	-30	-0.90122	-0.00035	PASS
					-20	0.71526	0.00028	PASS
					-10	3.34740	0.00130	PASS
					0	3.53336	0.00138	PASS
					10	2.71797	0.00106	PASS
					20	0.58651	0.00023	PASS
					30	1.61648	0.00063	PASS
					40	-0.99346	-0.00078	PASS
					50	0.55790	0.00022	PASS
		10	LCH	VN	-30	43.94531	0.01754	PASS
					-20	-6.90937	-0.00276	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-10	-4.56333	-0.00182	PASS
					0	61.29742	0.02447	PASS
					10	-17.45224	-0.00697	PASS
					20	-0.18597	-0.00007	PASS
					30	-26.72195	-0.01067	PASS
					40	0.44346	0.00018	PASS
					50	-1.38760	-0.00055	PASS
			MCH	VN	-30	3.49045	0.00138	PASS
					-20	-1.07288	-0.00042	PASS
					-10	-1.50204	-0.00059	PASS
					0	0.28610	0.00011	PASS
					10	1.40190	0.00055	PASS
					20	-0.90122	-0.00036	PASS
					30	0.55790	0.00022	PASS
					40	-4.23431	-0.00167	PASS
					50	-6.42300	-0.00253	PASS
			HCH	VN	-30	-1.88827	-0.00074	PASS
					-20	4.54903	0.00177	PASS
					-10	-2.74658	-0.00107	PASS
					0	4.90665	0.00191	PASS
					10	4.19140	0.00163	PASS
					20	-6.13689	-0.00239	PASS
					30	-0.64373	-0.00025	PASS
					40	2.48909	0.00097	PASS
					50	-2.61784	-0.00102	PASS
		15	LCH	VN	-30	4.76360	0.00190	PASS
					-20	-6.09398	-0.00243	PASS
					-10	4.29153	0.00171	PASS
					0	0.50068	0.00020	PASS
					10	3.71933	0.00148	PASS
					20	-1.93119	-0.00077	PASS
					30	9.58443	0.00382	PASS
					40	1.01566	0.00041	PASS
					50	2.26021	0.00090	PASS
			MCH	VN	-30	-0.57220	-0.00023	PASS
					-20	2.01702	0.00080	PASS
					-10	1.57356	0.00062	PASS
					0	0.74387	0.00029	PASS
					10	0.40054	0.00016	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					20	0.24319	0.00010	PASS
					30	1.48773	0.00059	PASS
					40	-0.32902	-0.00013	PASS
					50	3.17573	0.00125	PASS
			HCH	VN	-30	2.64645	0.00103	PASS
					-20	0.81539	0.00032	PASS
					-10	3.44753	0.00135	PASS
					0	-4.13418	-0.00161	PASS
					10	-0.01431	-0.00001	PASS
					20	-1.13010	-0.00044	PASS
					30	0.85831	0.00033	PASS
					40	0.38624	0.00015	PASS
					50	-1.68800	-0.00066	PASS
		20	LCH	VN	-30	19.38343	0.00772	PASS
					-20	-2.24590	-0.00089	PASS
					-10	-1.63078	-0.00065	PASS
					0	-2.46048	-0.00098	PASS
					10	0.30041	0.00012	PASS
					20	1.80244	0.00072	PASS
					30	-1.71661	-0.00068	PASS
					40	-1.90258	-0.00076	PASS
					50	-19.19746	-0.00765	PASS
			MCH	VN	-30	0.97400	0.00049	PASS
					-20	-2.23160	-0.00088	PASS
					-10	-2.38895	-0.00094	PASS
					0	-0.22888	-0.00009	PASS
					10	-0.08583	-0.00003	PASS
					20	-4.40597	-0.00174	PASS
					30	0.14305	0.00006	PASS
					40	-0.04292	-0.00002	PASS
					50	0.88692	0.00035	PASS
			HCH	VN	-30	0.84400	0.00033	PASS
					-20	-0.21458	-0.00008	PASS
					-10	1.37329	0.00054	PASS
					0	-0.82970	-0.00032	PASS
					10	3.06129	0.00120	PASS
					20	-2.11716	-0.00083	PASS
					30	-1.47343	-0.00058	PASS
					40	-0.17166	-0.00007	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	5	LCH	VN	50	-1.67370	-0.00065	PASS
					-30	2.07424	0.00083	PASS
					-20	1.23024	0.00049	PASS
					-10	0.17166	0.00007	PASS
					0	1.64509	0.00066	PASS
					10	4.44889	0.00178	PASS
					20	5.20706	0.00208	PASS
					30	1.45912	0.00058	PASS
					40	2.73228	0.00109	PASS
					50	-0.35763	-0.00014	PASS
			MCH	VN	-30	2.86102	0.00113	PASS
					-20	2.18868	0.00086	PASS
					-10	1.20163	0.00047	PASS
					0	-1.07288	-0.00042	PASS
					10	0.51498	0.00020	PASS
					20	1.95980	0.00077	PASS
					30	-0.25749	-0.00010	PASS
					40	1.72195	0.00114	PASS
					50	2.05994	0.00081	PASS
			HCH	VN	-30	2.16007	0.00084	PASS
					-20	0.37193	0.00014	PASS
					-10	3.76225	0.00147	PASS
					0	5.79357	0.00226	PASS
					10	0.72956	0.00028	PASS
					20	1.43051	0.00056	PASS
					30	-0.25749	-0.00010	PASS
					40	2.32186	0.00172	PASS
					50	0.18597	0.00007	PASS
		10	LCH	VN	-30	1.75953	0.00070	PASS
					-20	1.31607	0.00053	PASS
					-10	0.40054	0.00016	PASS
					0	-2.05994	-0.00082	PASS
					10	5.40733	0.00216	PASS
					20	-0.42915	-0.00017	PASS
					30	10.07080	0.00402	PASS
					40	2.64645	0.00106	PASS
					50	-1.97411	-0.00079	PASS
			MCH	VN	-30	-2.98977	-0.00118	PASS
					-20	1.54495	0.00061	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-10	5.09262	0.00201	PASS
					0	8.21114	0.00324	PASS
					10	2.14577	0.00085	PASS
					20	5.60761	0.00221	PASS
					30	-0.35763	-0.00014	PASS
					40	1.87397	0.00074	PASS
					50	1.97411	0.00078	PASS
			HCH	VN	-30	1.73092	0.00067	PASS
					-20	4.00543	0.00156	PASS
					-10	-0.18597	-0.00007	PASS
					0	0.61512	0.00024	PASS
					10	1.38760	0.00054	PASS
					20	-2.00272	-0.00078	PASS
					30	-4.19140	-0.00163	PASS
					40	-4.96387	-0.00194	PASS
					50	-2.04563	-0.00080	PASS
		15	LCH	VN	-30	0.60081	0.00024	PASS
					-20	0.18597	0.00007	PASS
					-10	4.77791	0.00191	PASS
					0	1.15871	0.00046	PASS
					10	-0.91553	-0.00037	PASS
					20	-0.58651	-0.00023	PASS
					30	9.12666	0.00364	PASS
					40	2.21729	0.00088	PASS
					50	1.07288	0.00043	PASS
			MCH	VN	-30	1.44482	0.00057	PASS
					-20	1.01566	0.00040	PASS
					-10	-1.10149	-0.00043	PASS
					0	1.41621	0.00056	PASS
					10	-0.14305	-0.00006	PASS
					20	-1.67370	-0.00066	PASS
					30	-5.22137	-0.00206	PASS
					40	-1.74522	-0.00069	PASS
					50	1.70231	0.00067	PASS
			HCH	VN	-30	-0.05722	-0.00002	PASS
					-20	1.37329	0.00054	PASS
					-10	-0.08583	-0.00003	PASS
					0	1.02997	0.00040	PASS
					10	2.64645	0.00103	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					20	0.00000	0.00000	PASS
					30	-0.58651	-0.00023	PASS
					40	-5.55039	-0.00217	PASS
					50	-2.23160	-0.00087	PASS
		20	LCH	VN	-30	-18.38207	-0.00732	PASS
					-20	0.45776	0.00018	PASS
					-10	-2.58923	-0.00103	PASS
					0	0.45776	0.00018	PASS
					10	-10.61440	-0.00423	PASS
					20	-1.14441	-0.00046	PASS
					30	-3.56197	-0.00142	PASS
					40	1.88827	0.00075	PASS
					50	-0.71526	-0.00028	PASS
			MCH	VN	-30	0.10121	0.00013	PASS
					-20	-2.81811	-0.00111	PASS
					-10	-2.68936	-0.00106	PASS
					0	0.00000	0.00000	PASS
					10	-2.20299	-0.00087	PASS
					20	-0.15736	-0.00006	PASS
					30	-3.94821	-0.00156	PASS
					40	-1.07288	-0.00042	PASS
					50	-1.48773	-0.00059	PASS
			HCH	VN	-30	1.10149	0.00043	PASS
					-20	-0.48637	-0.00019	PASS
					-10	-0.02861	-0.00001	PASS
					0	-0.12875	-0.00005	PASS
					10	-2.78950	-0.00109	PASS
					20	0.32902	0.00013	PASS
					30	-2.07424	-0.00081	PASS
					40	-2.31743	-0.00091	PASS
					50	0.81539	0.00032	PASS

END