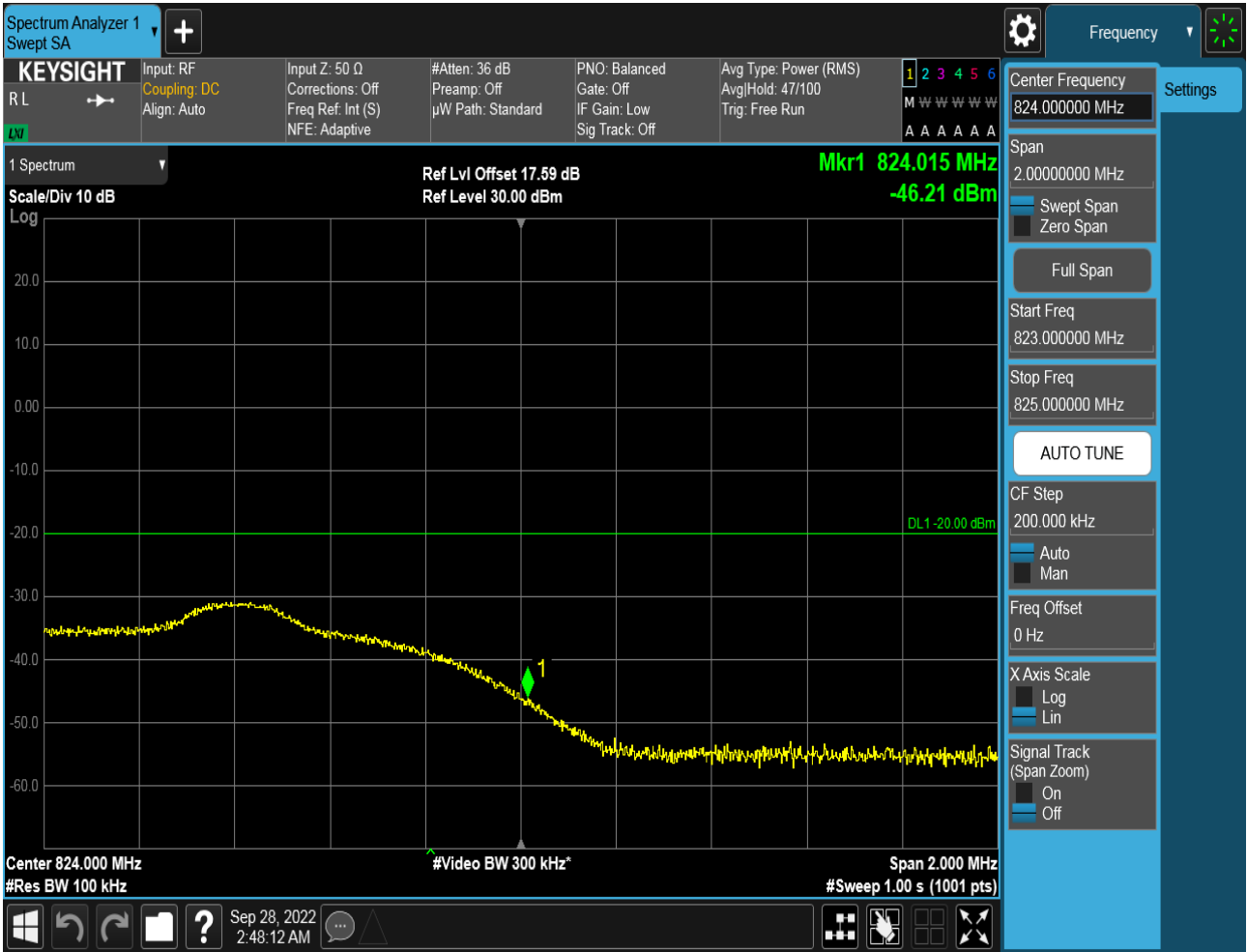




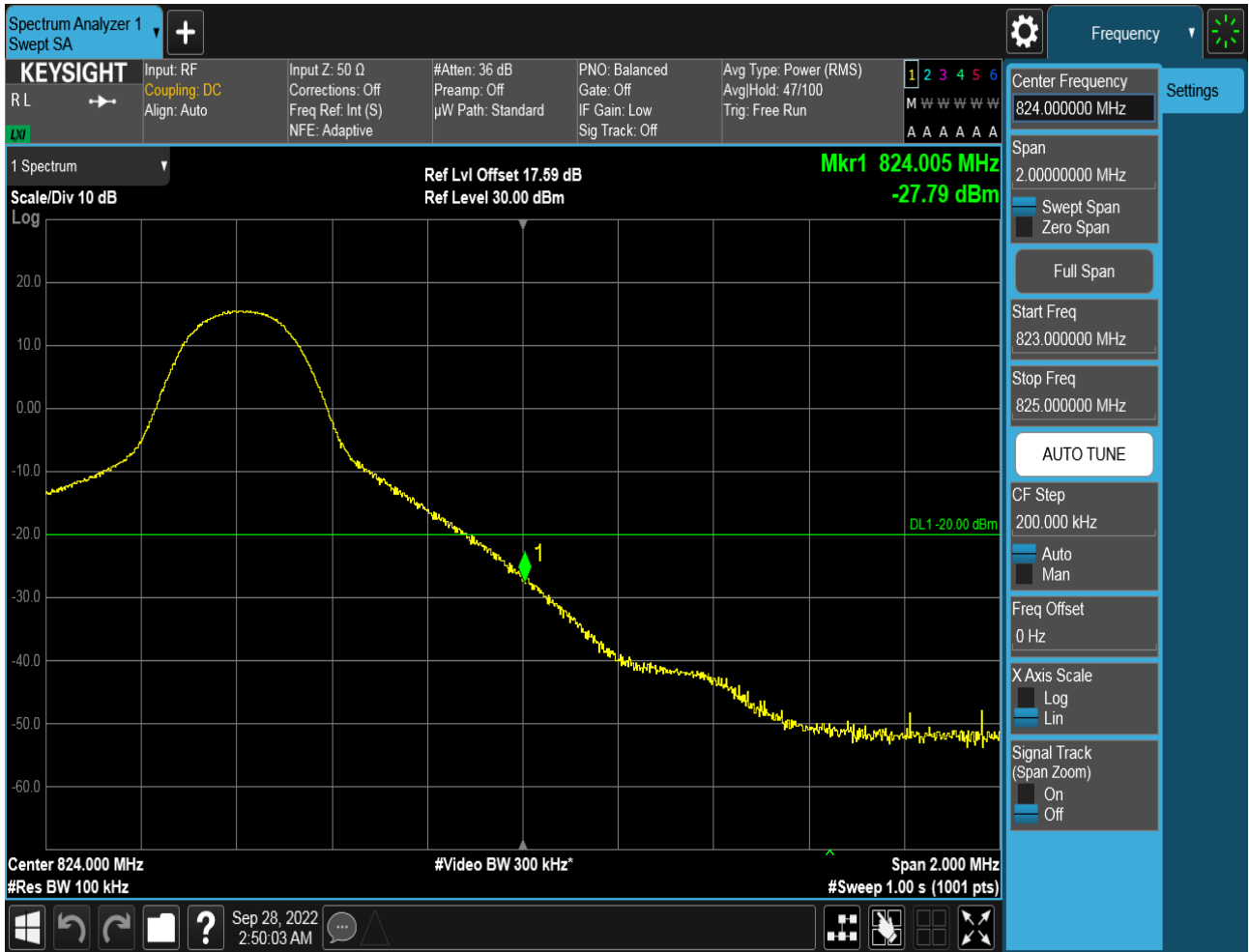
5.1.1.2.4.2 Test Channel = HCH

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

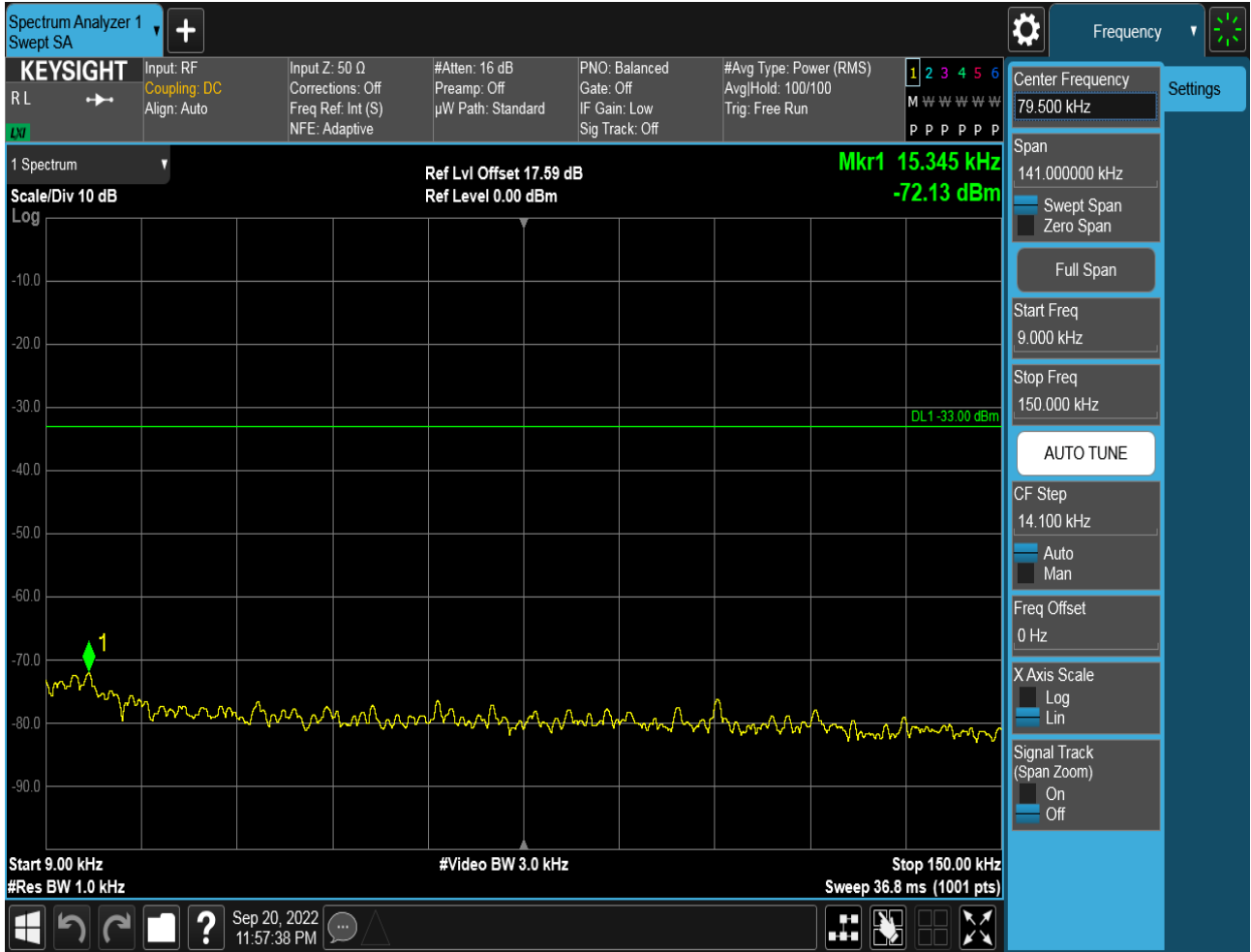
6.1.1 Test Band = Band26(814-824MHz)

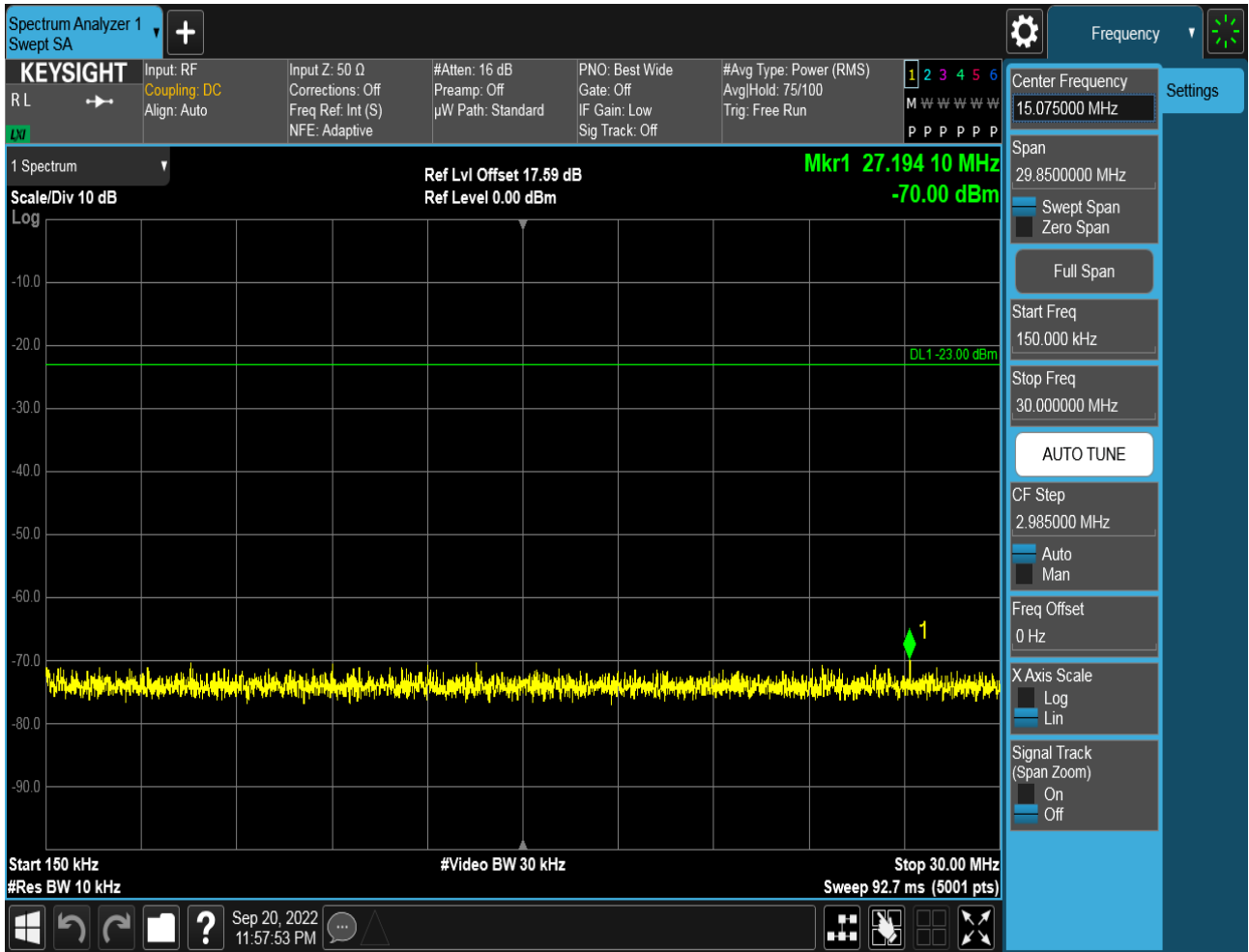
6.1.1.1 Test Mode = LTE/TM1

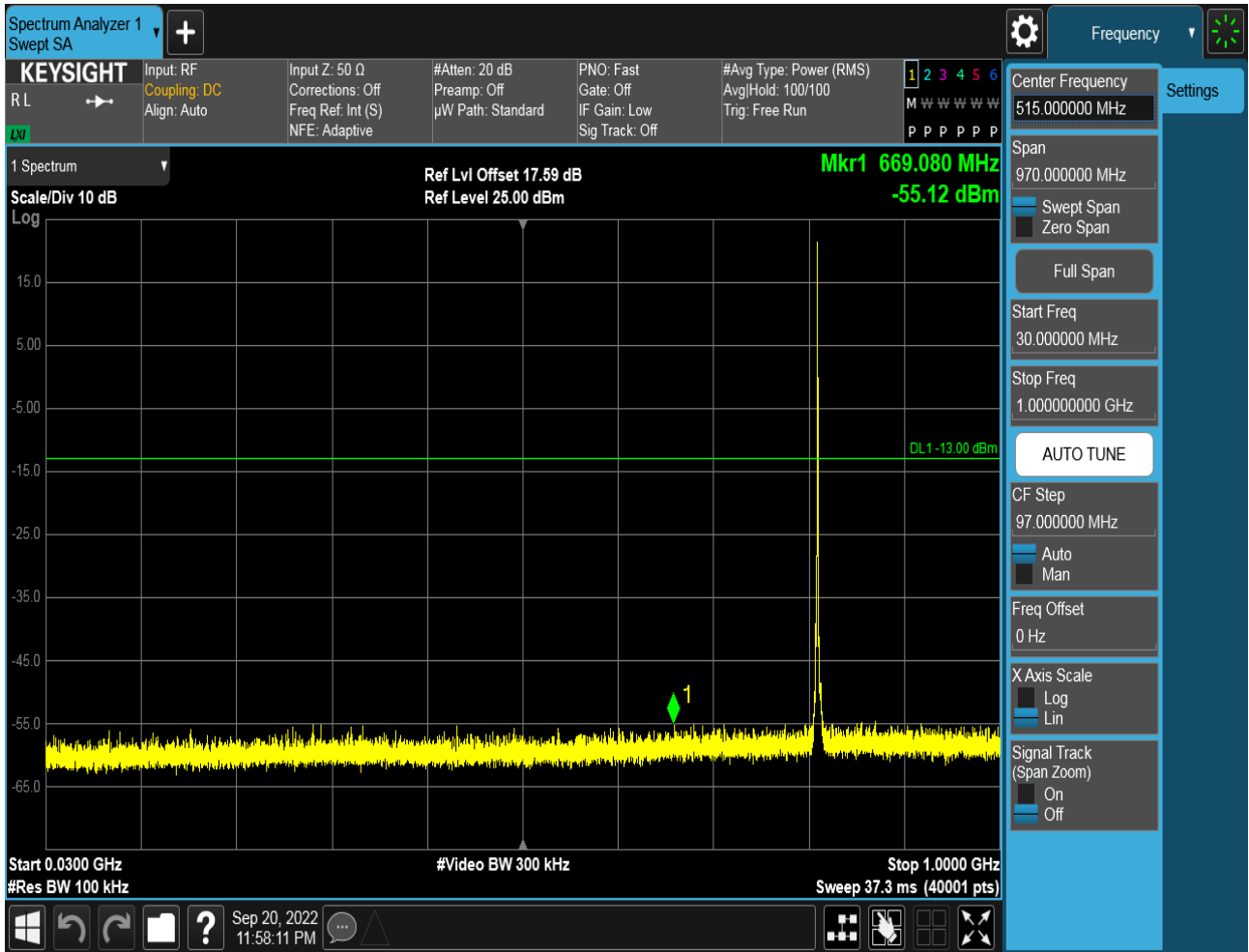
6.1.1.1.1 Test Bandwidth = 1.4MHz

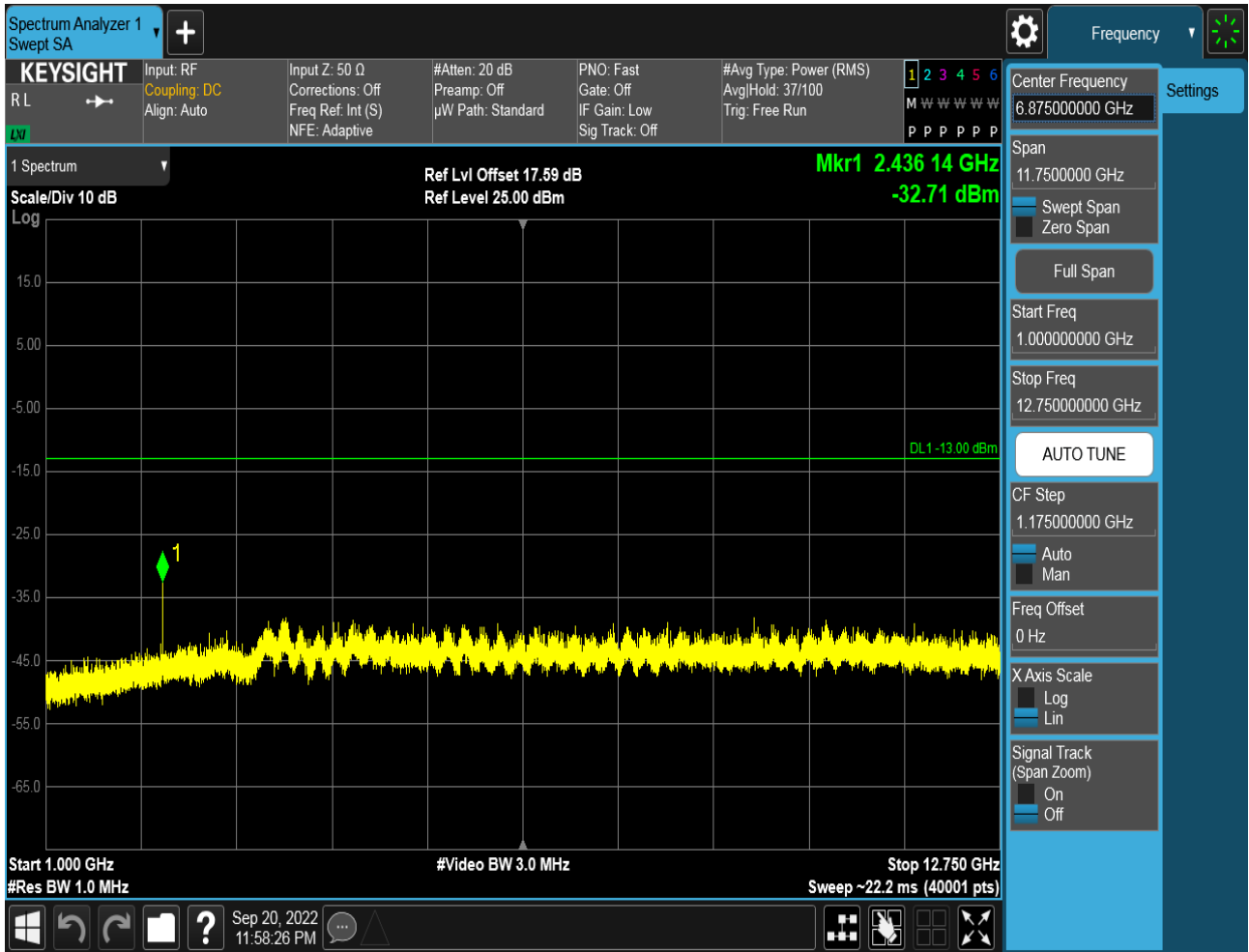
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0





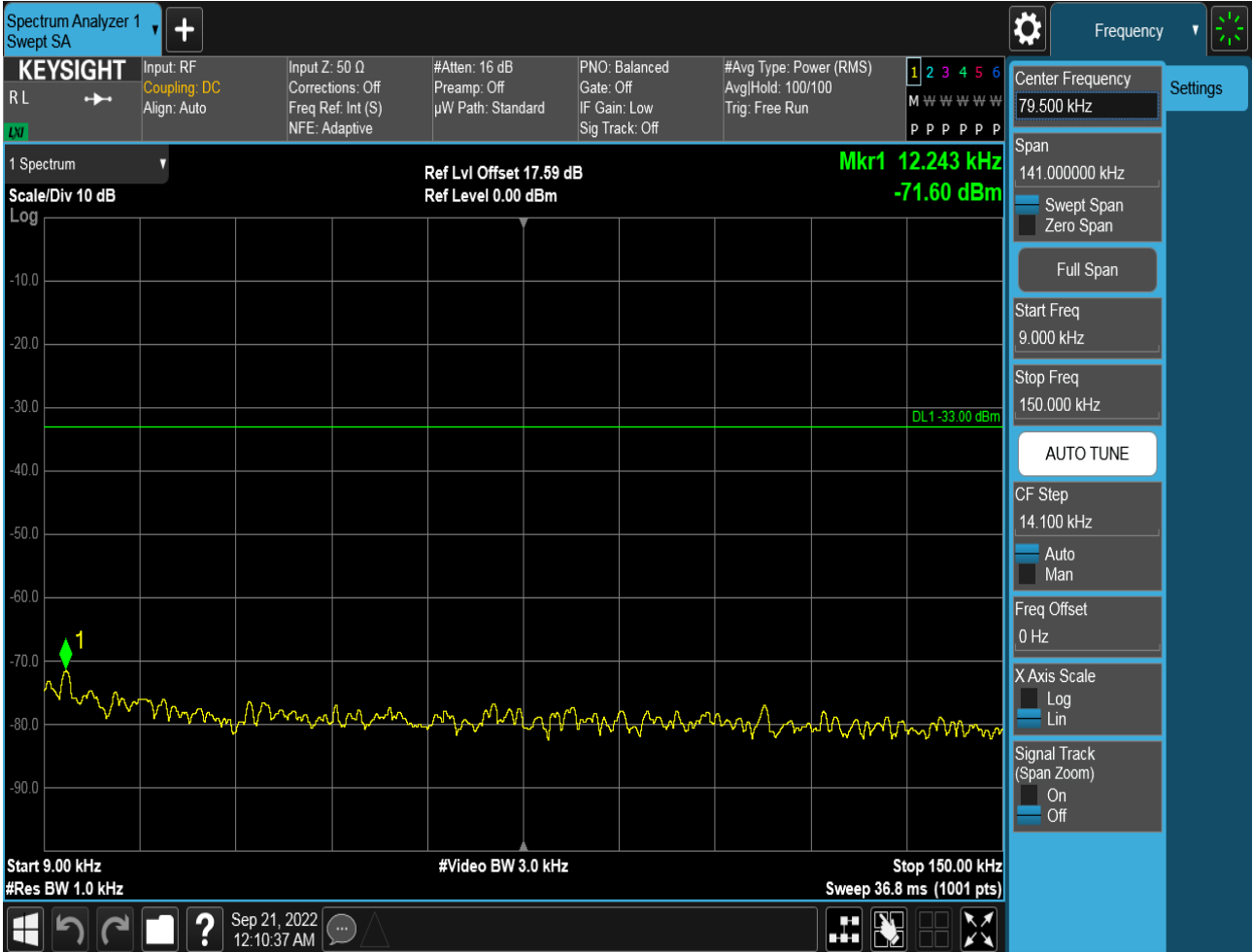


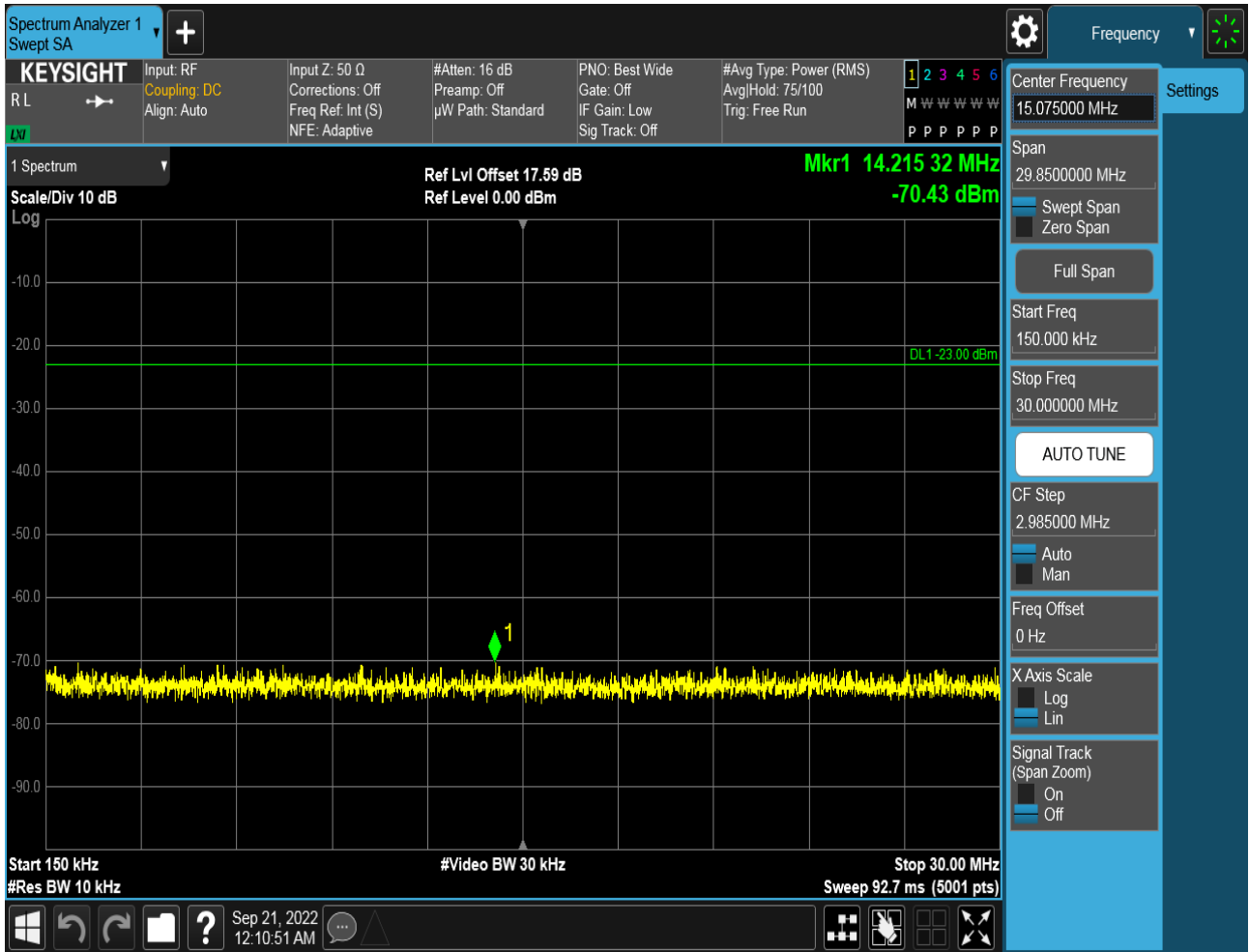


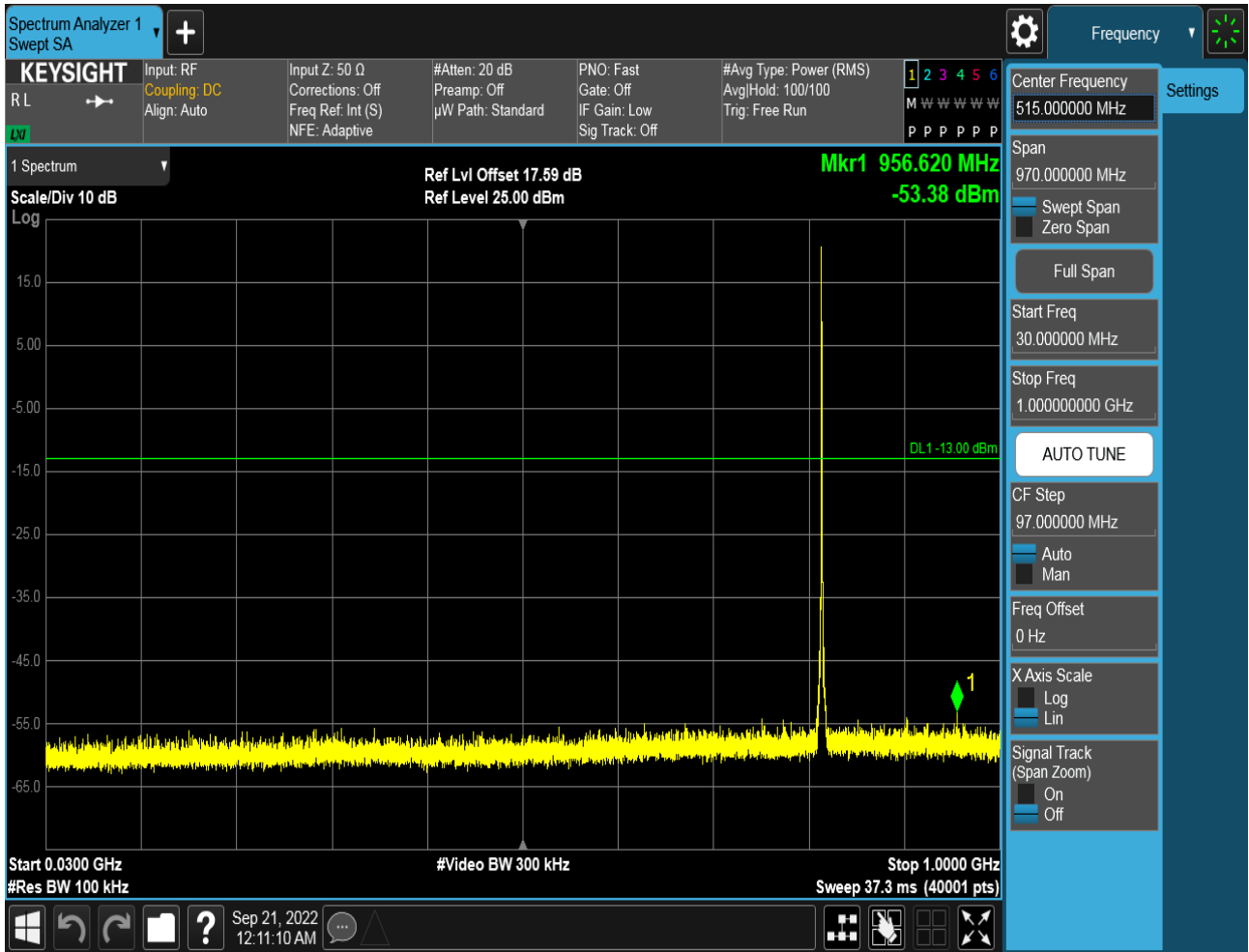


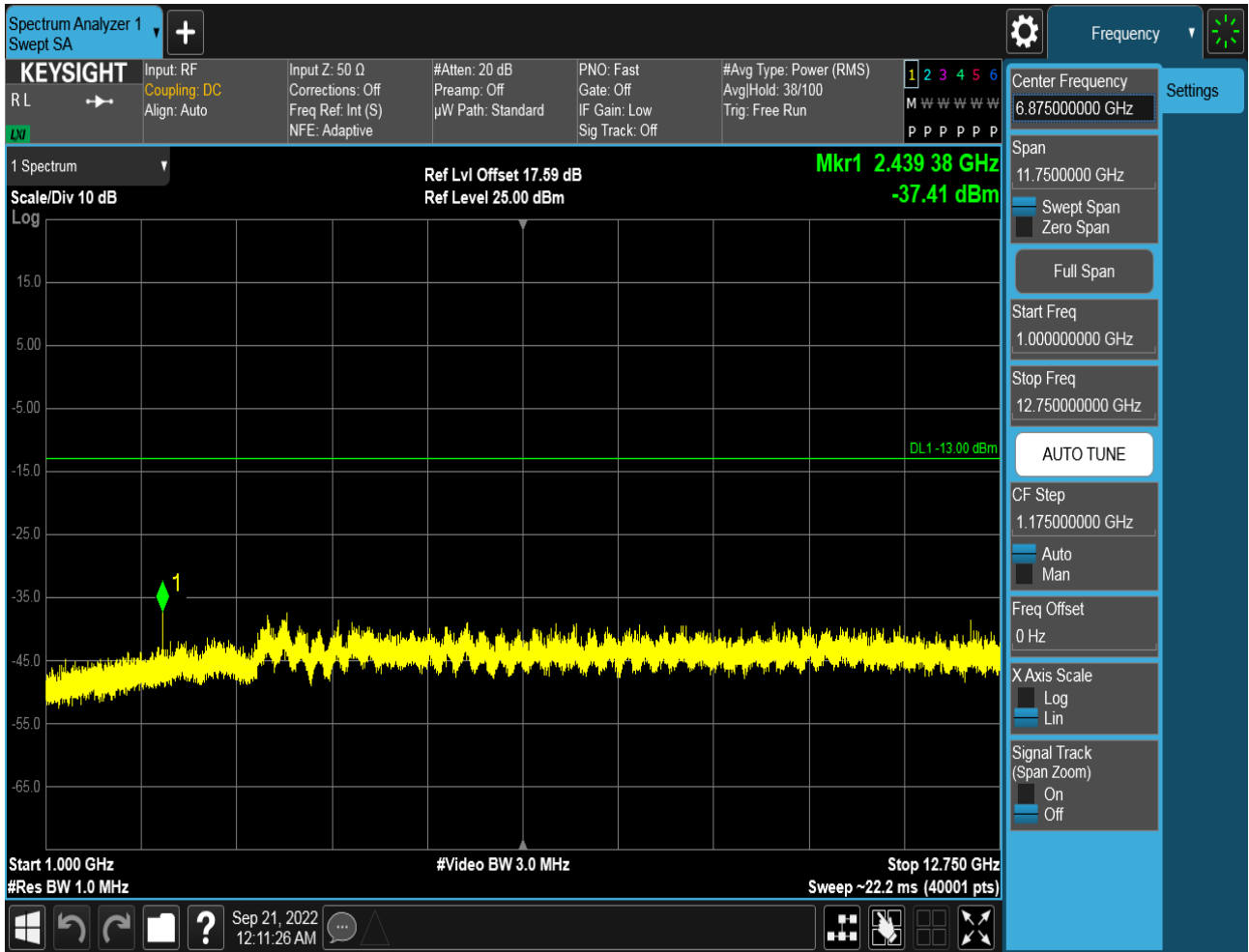
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0





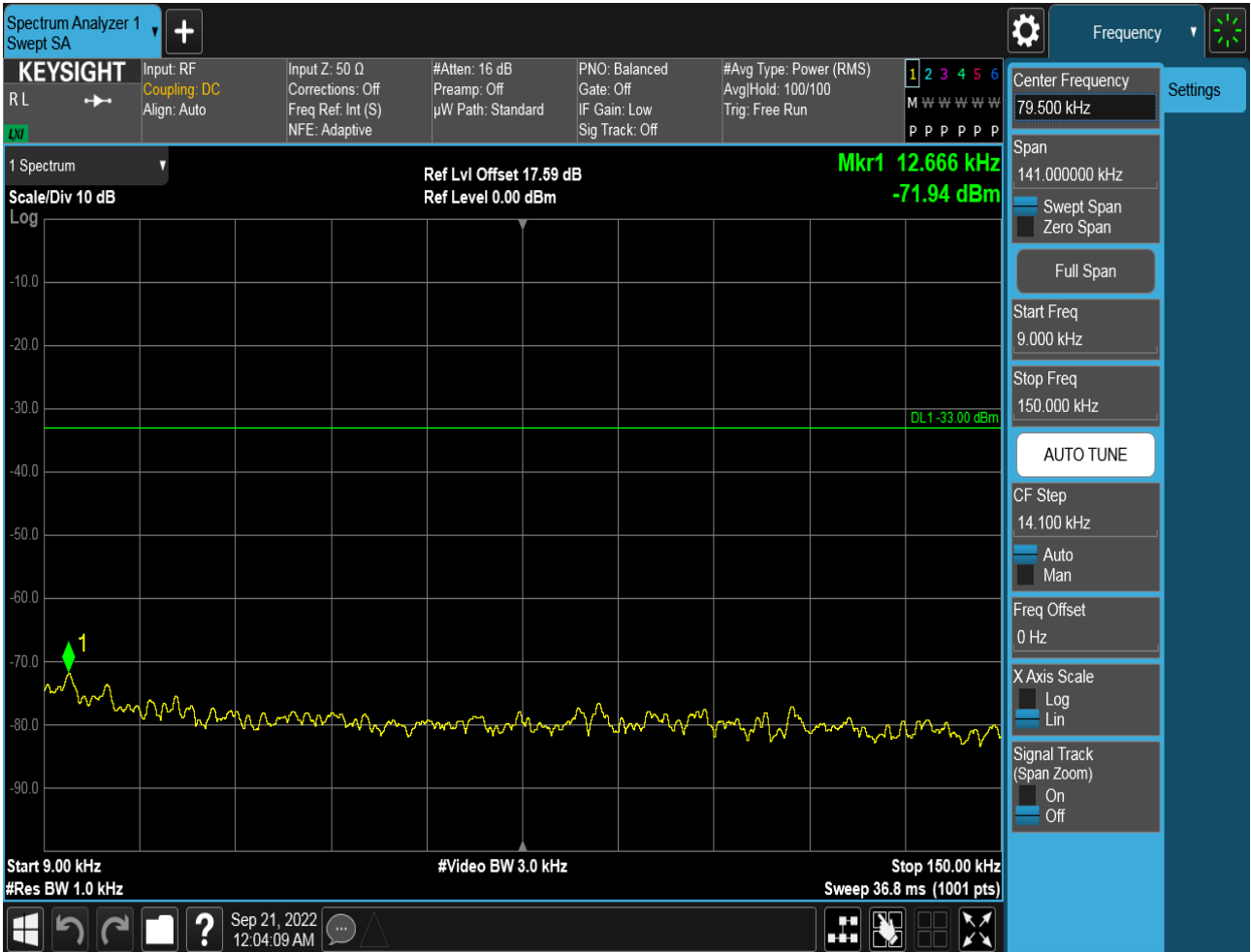


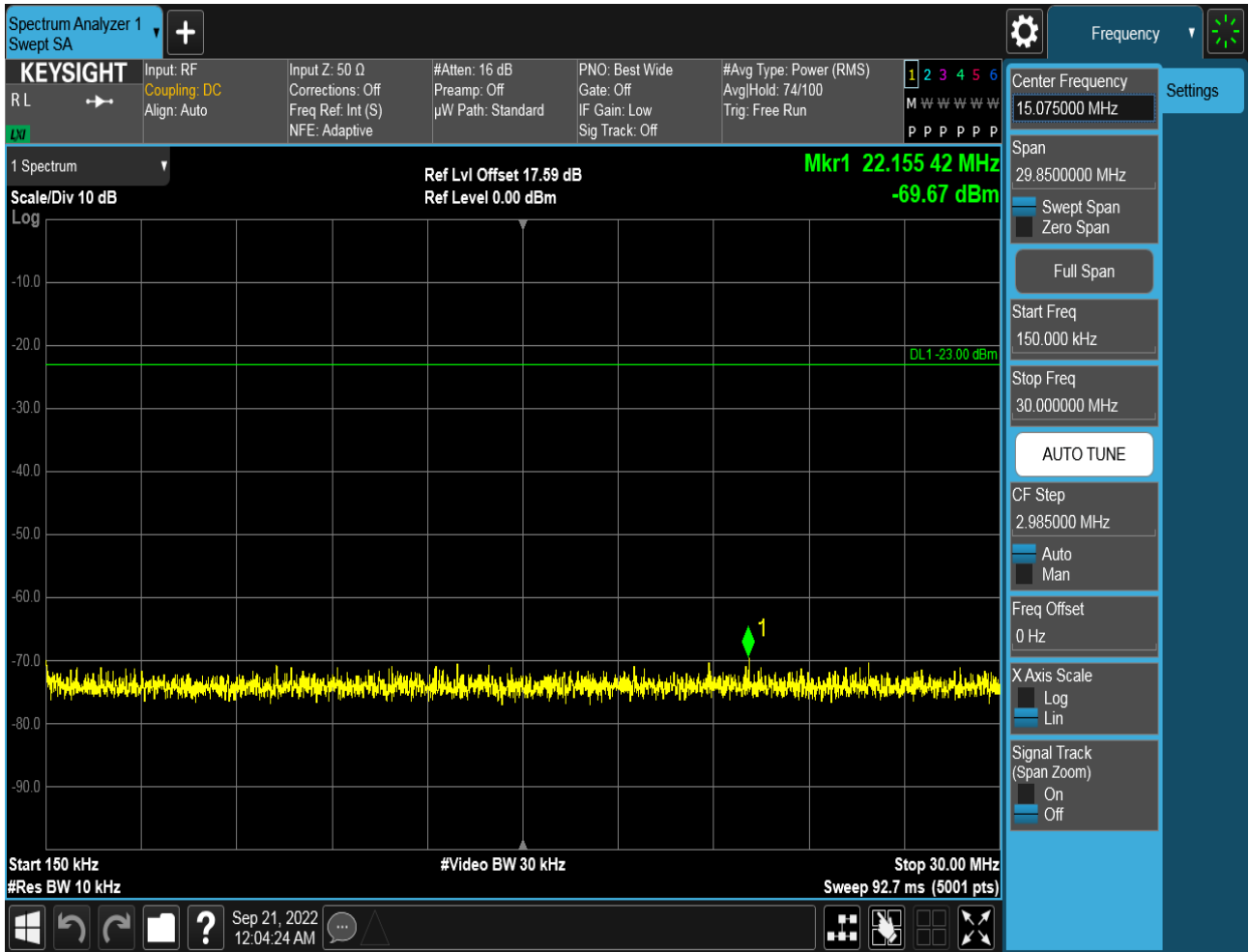


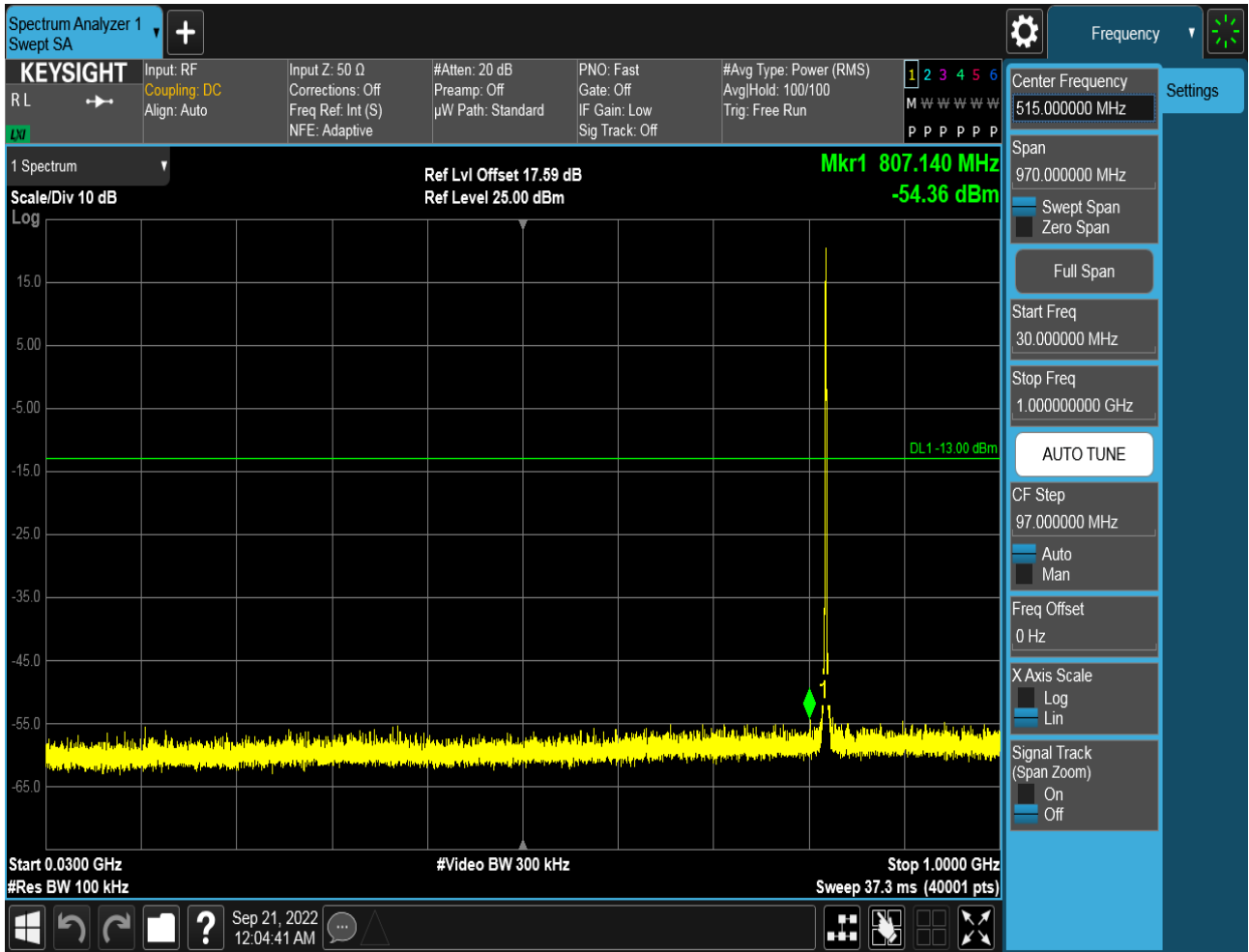


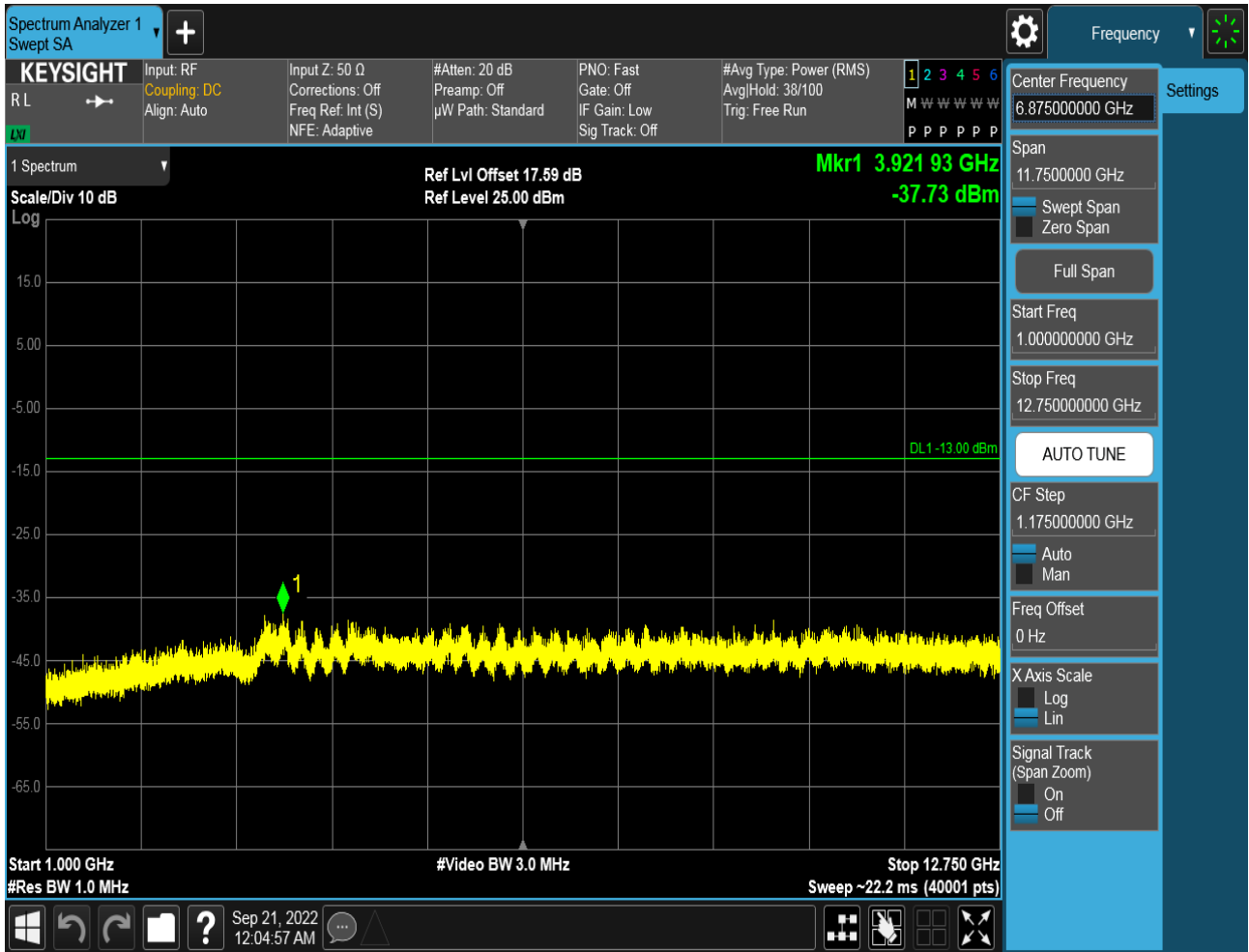
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0







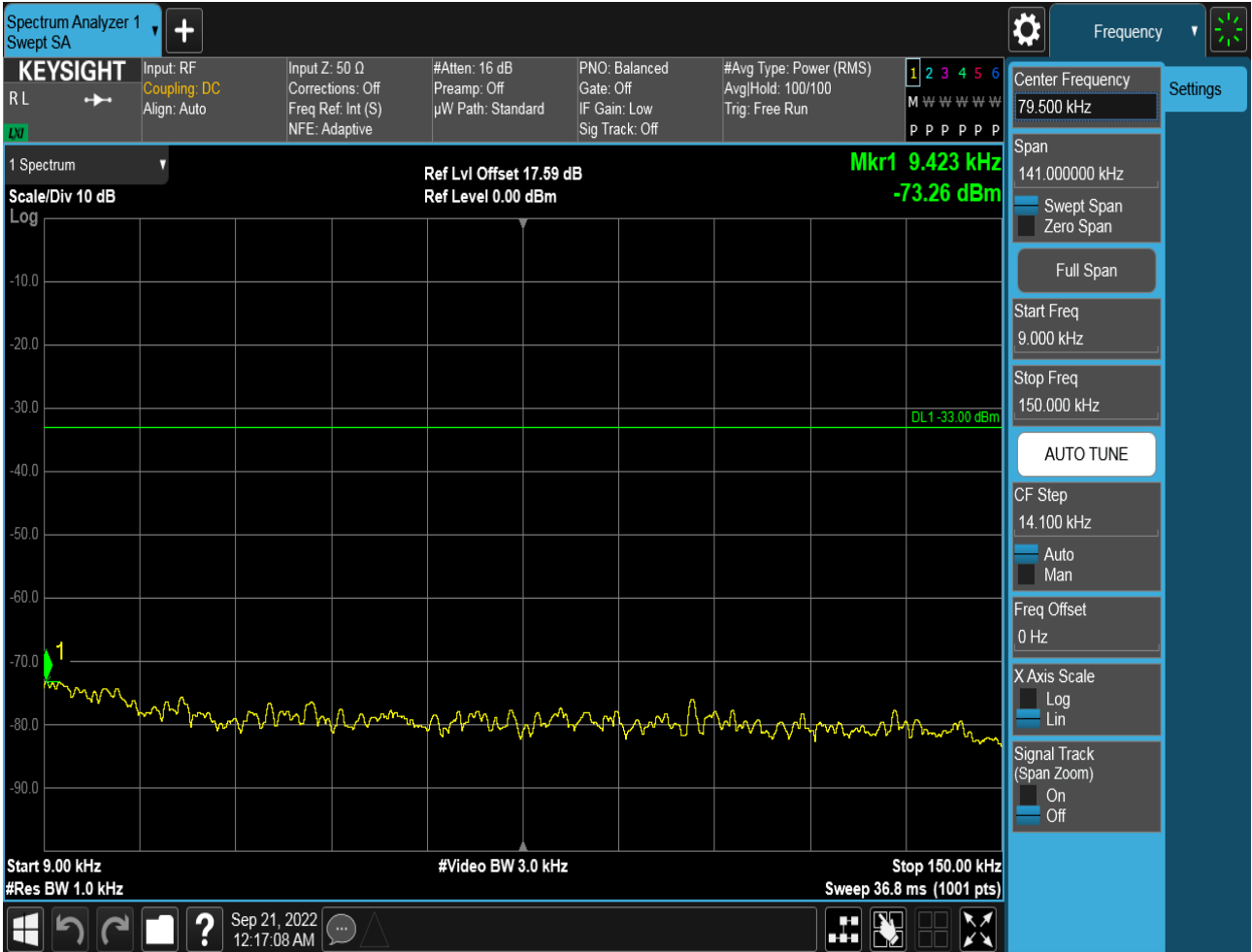


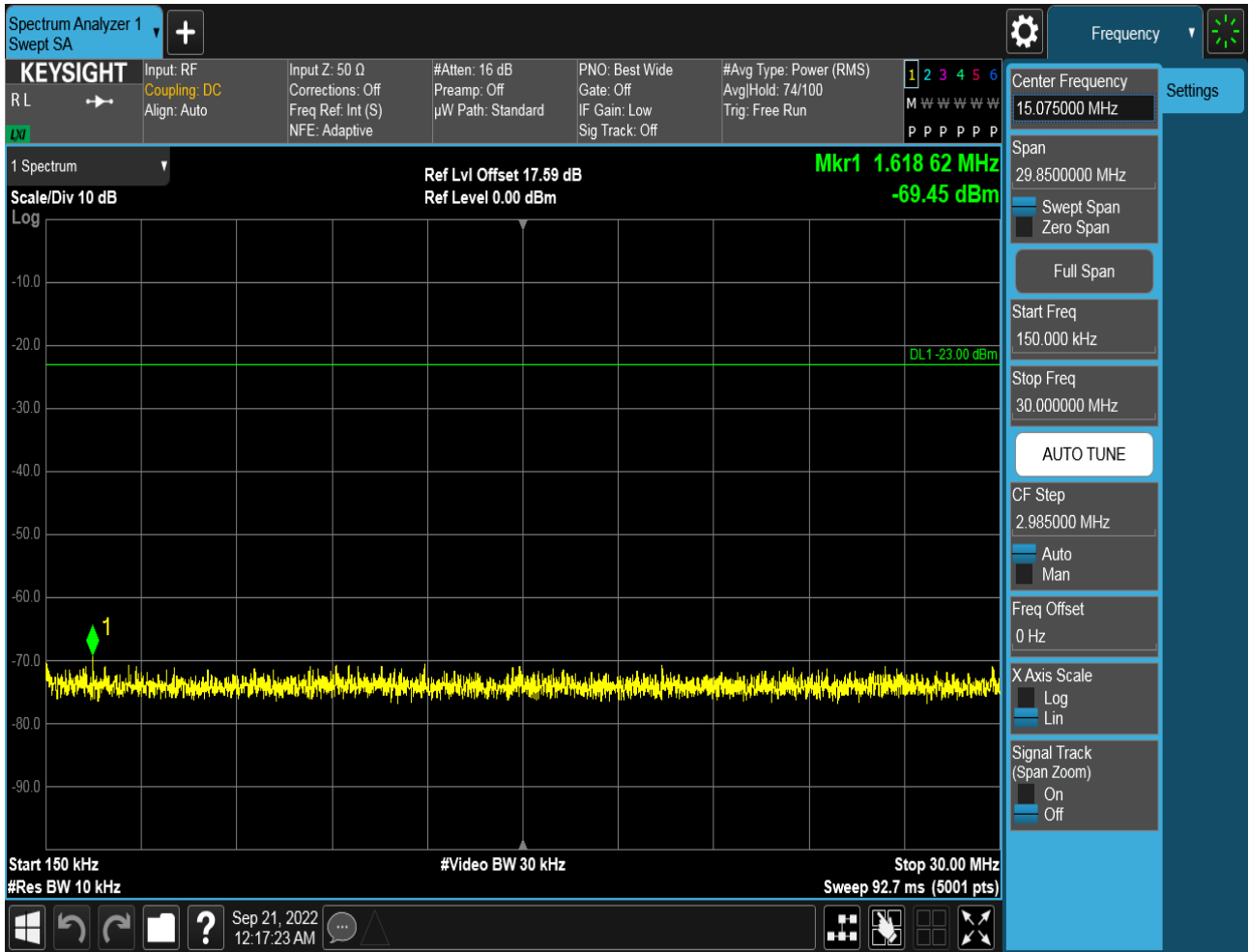


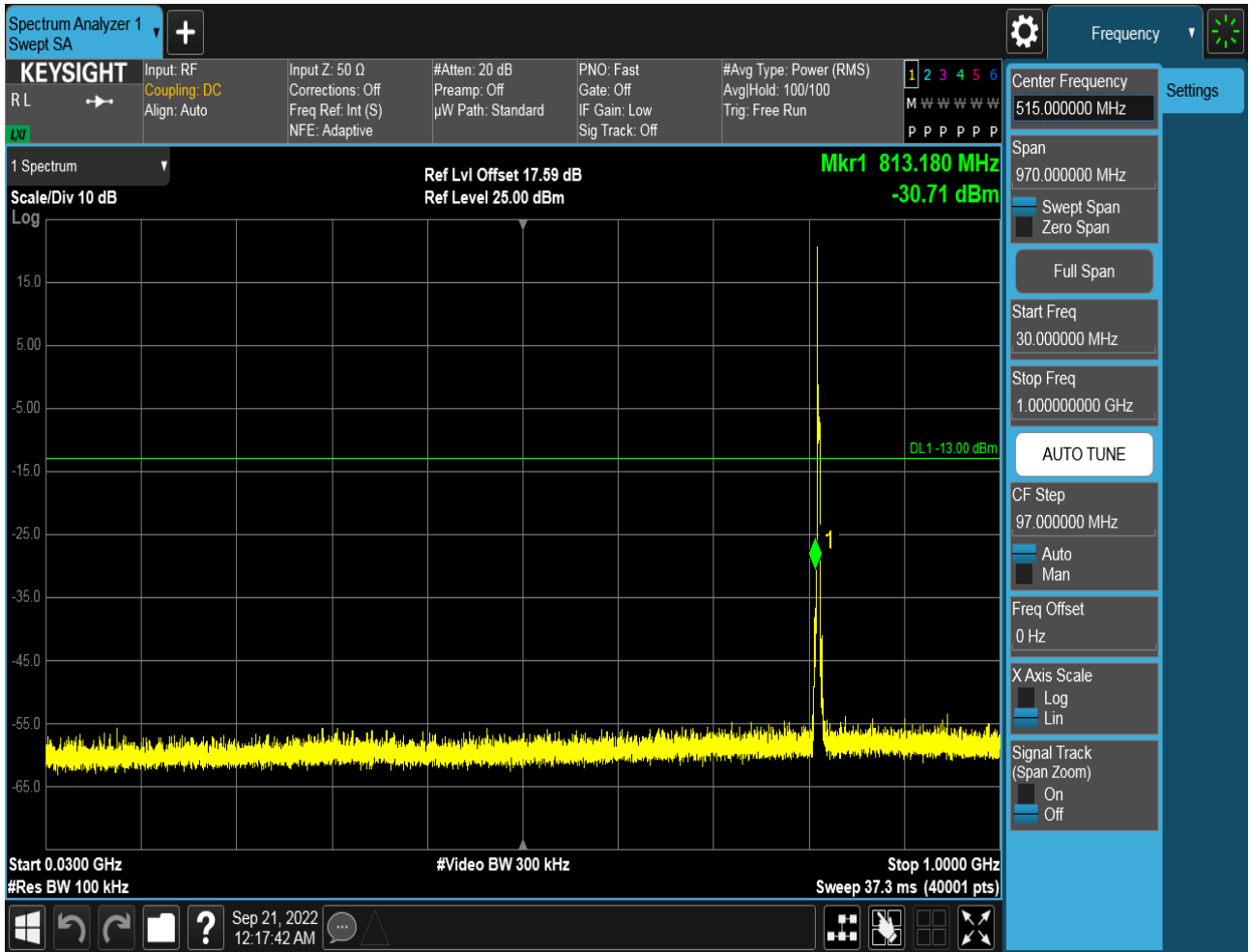
6.2.1.1.2 Test Bandwidth = 3MHz

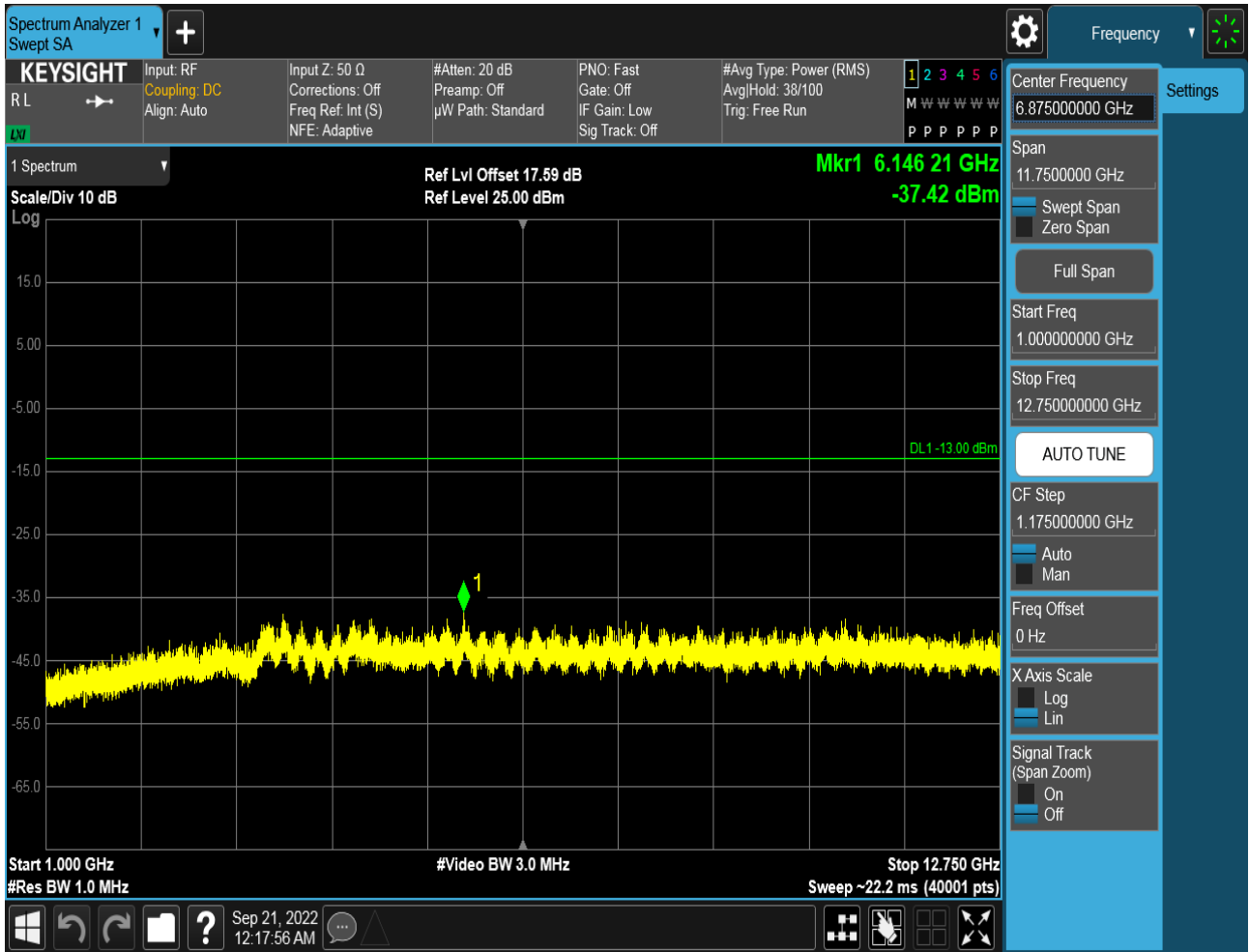
6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0





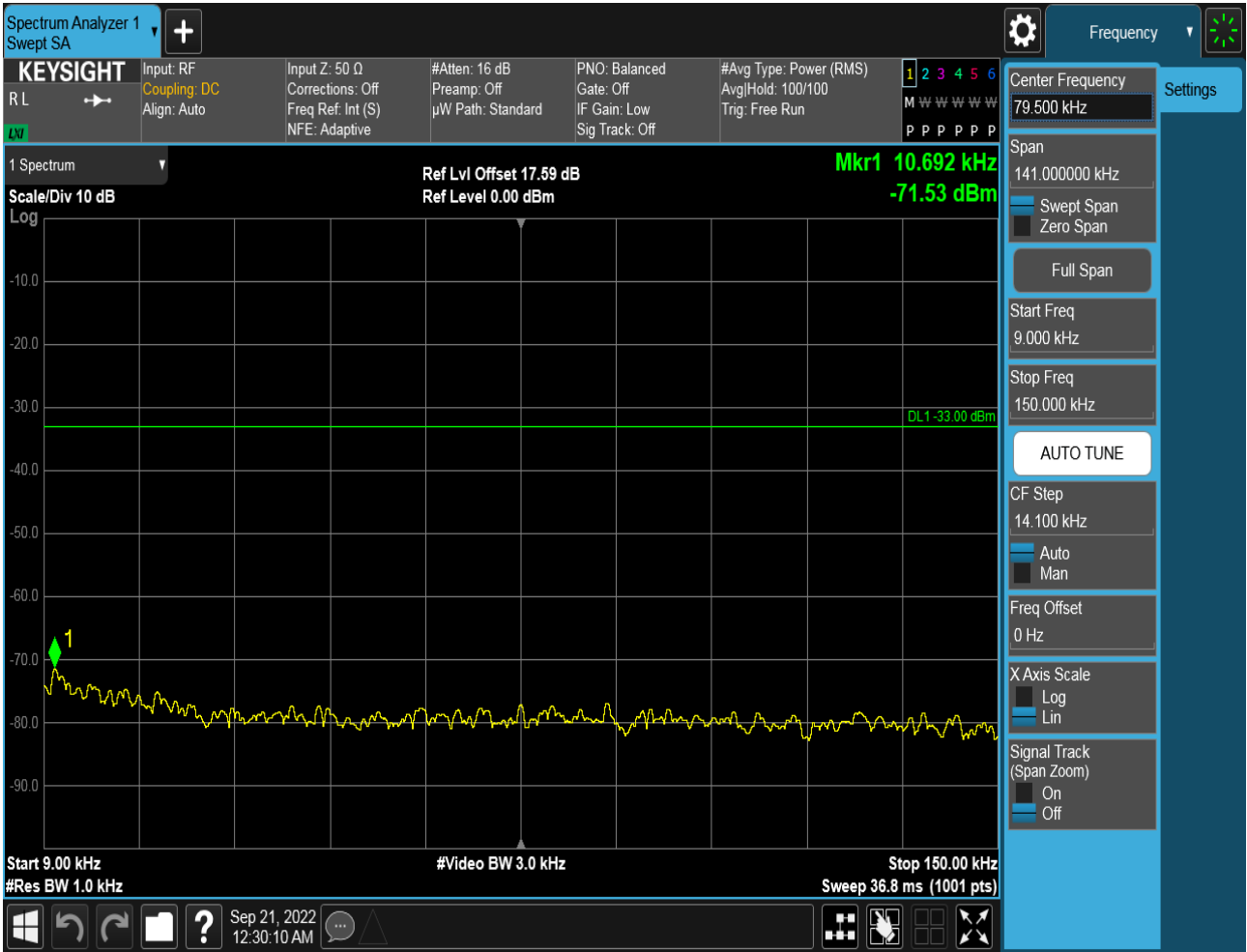


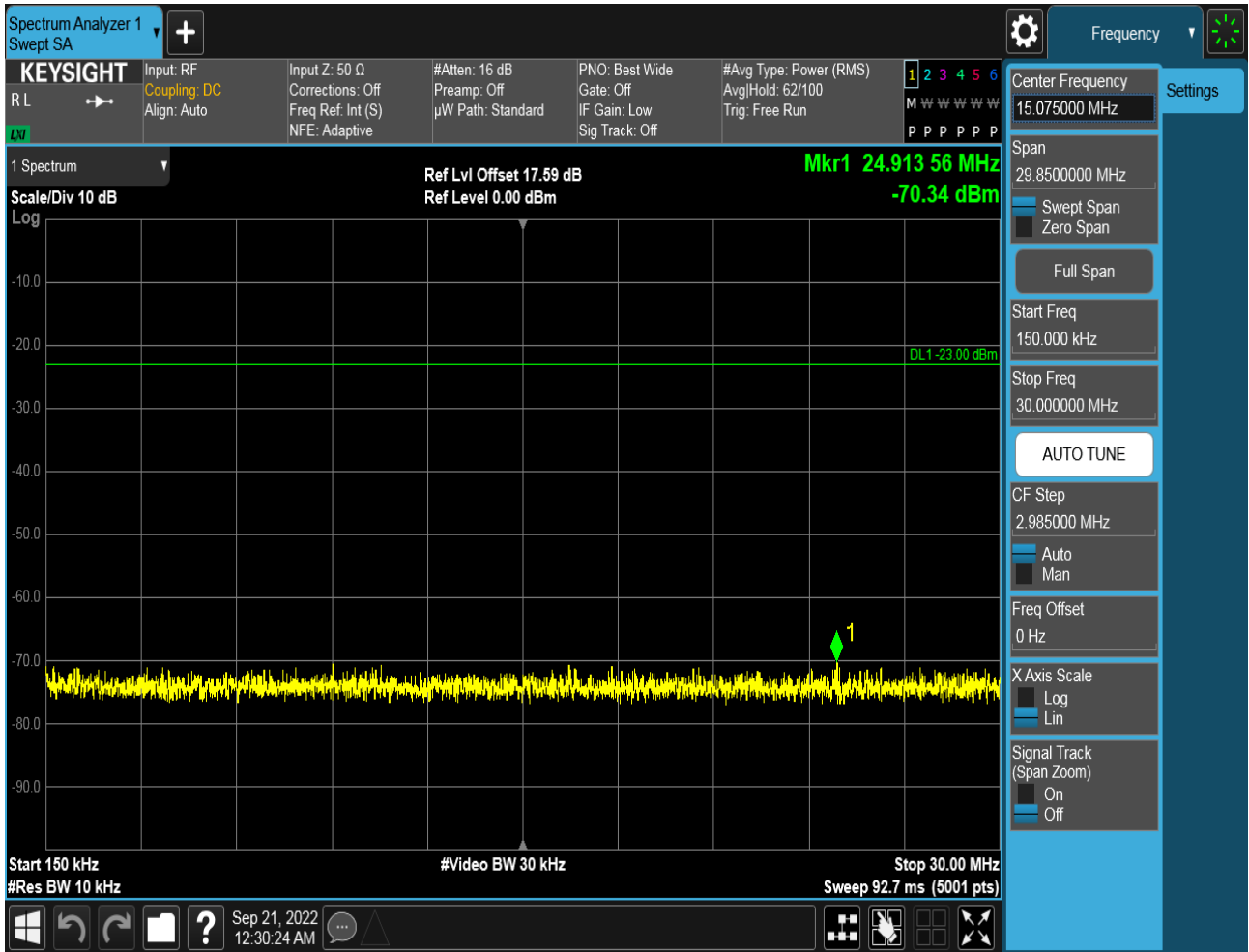


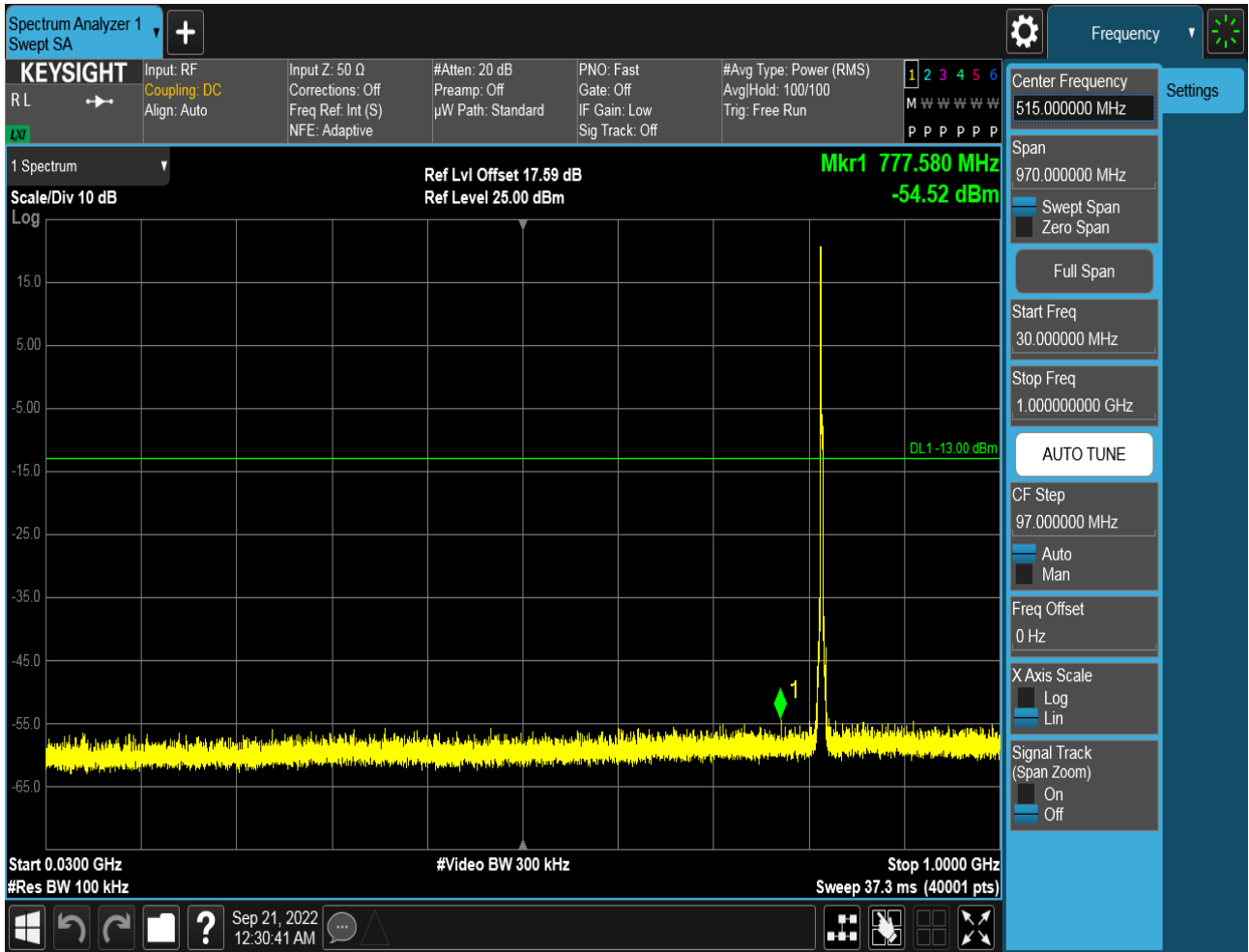


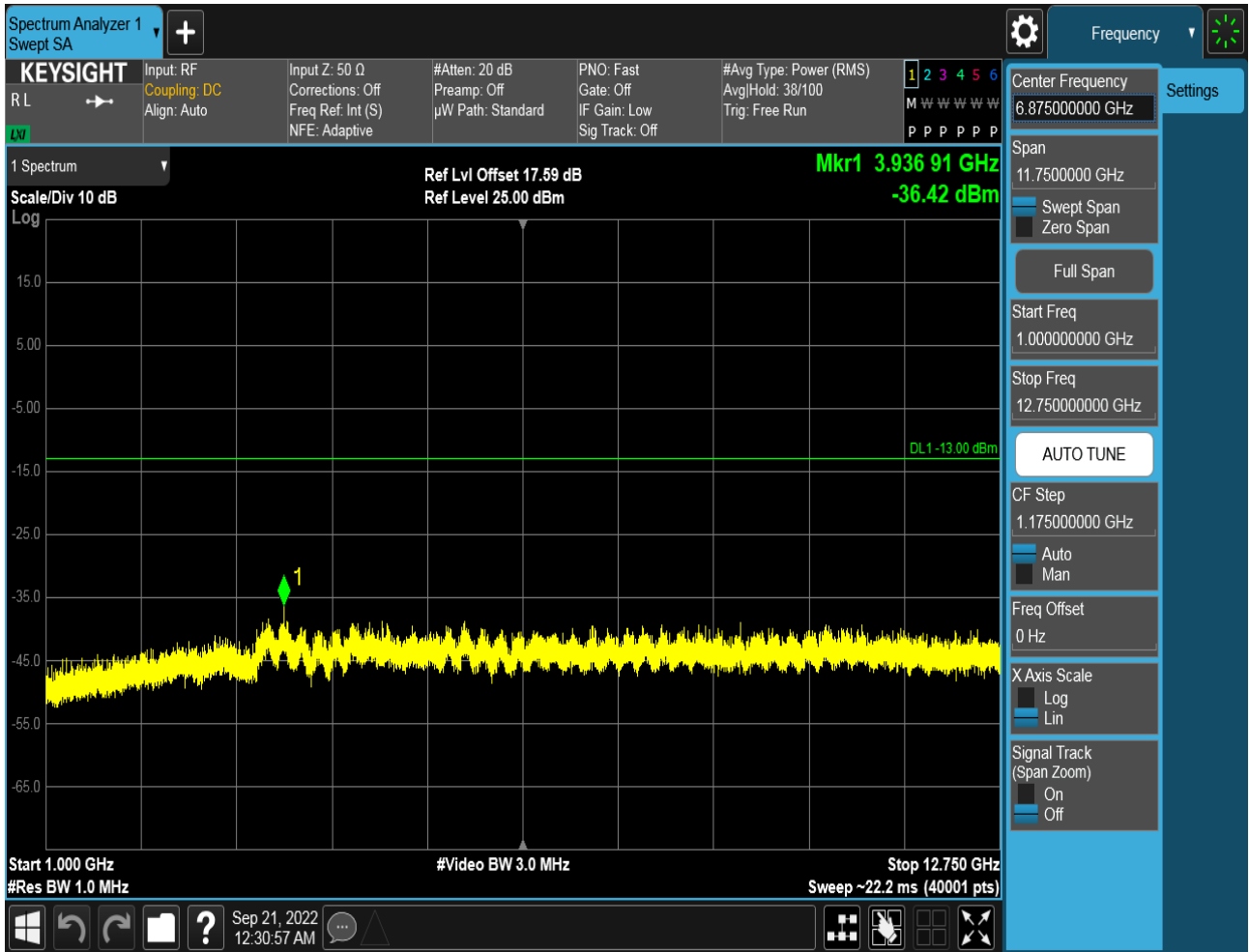
6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0





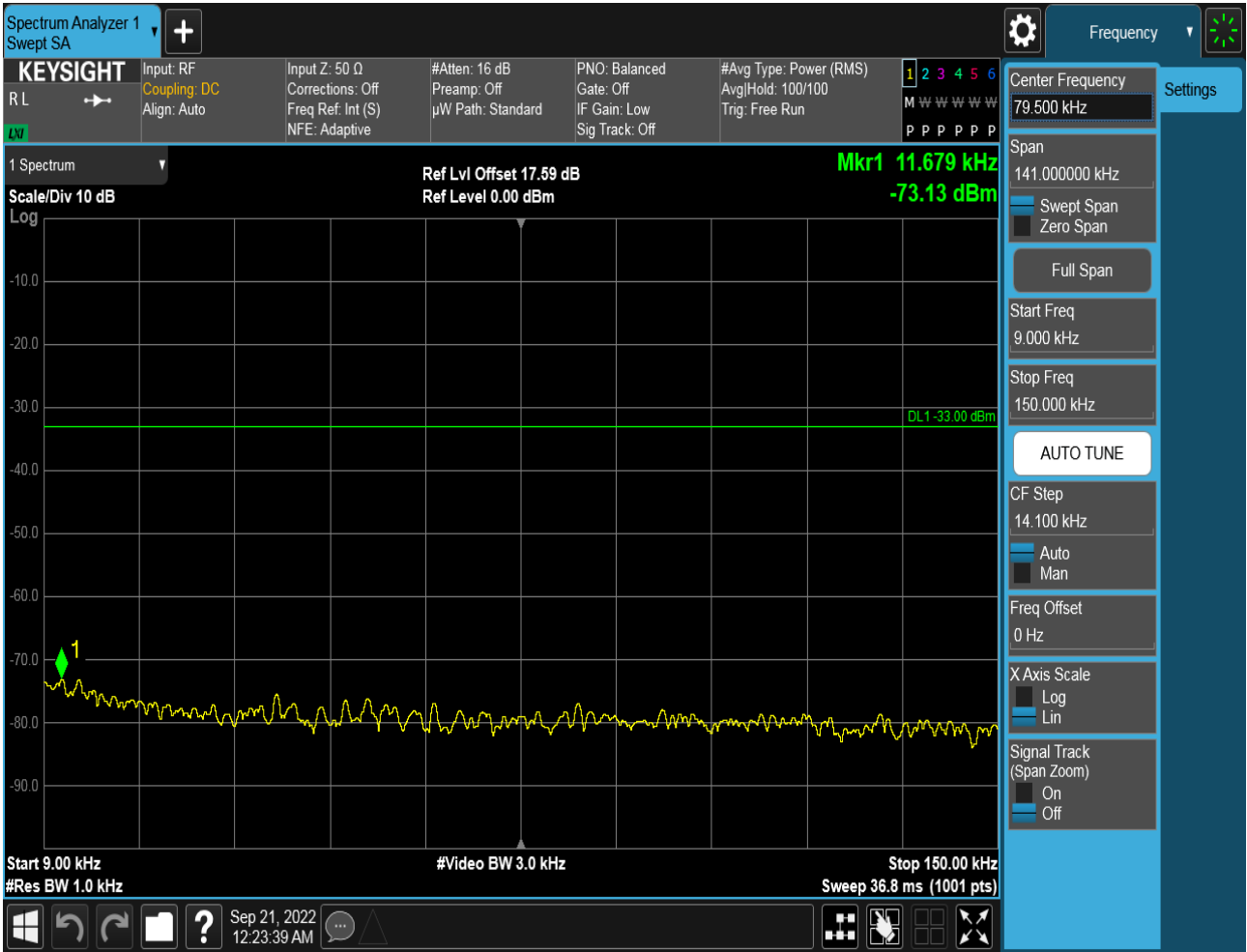


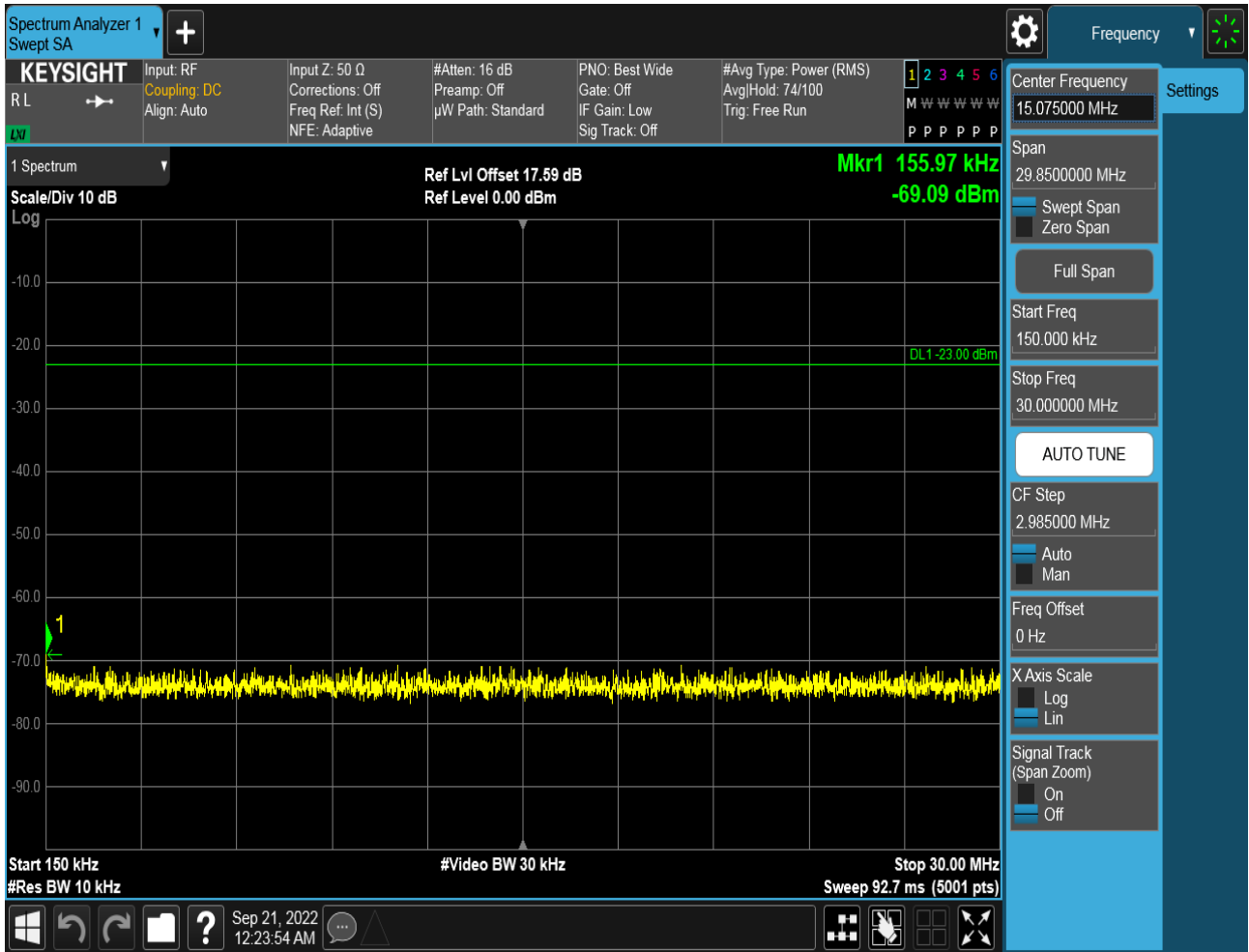


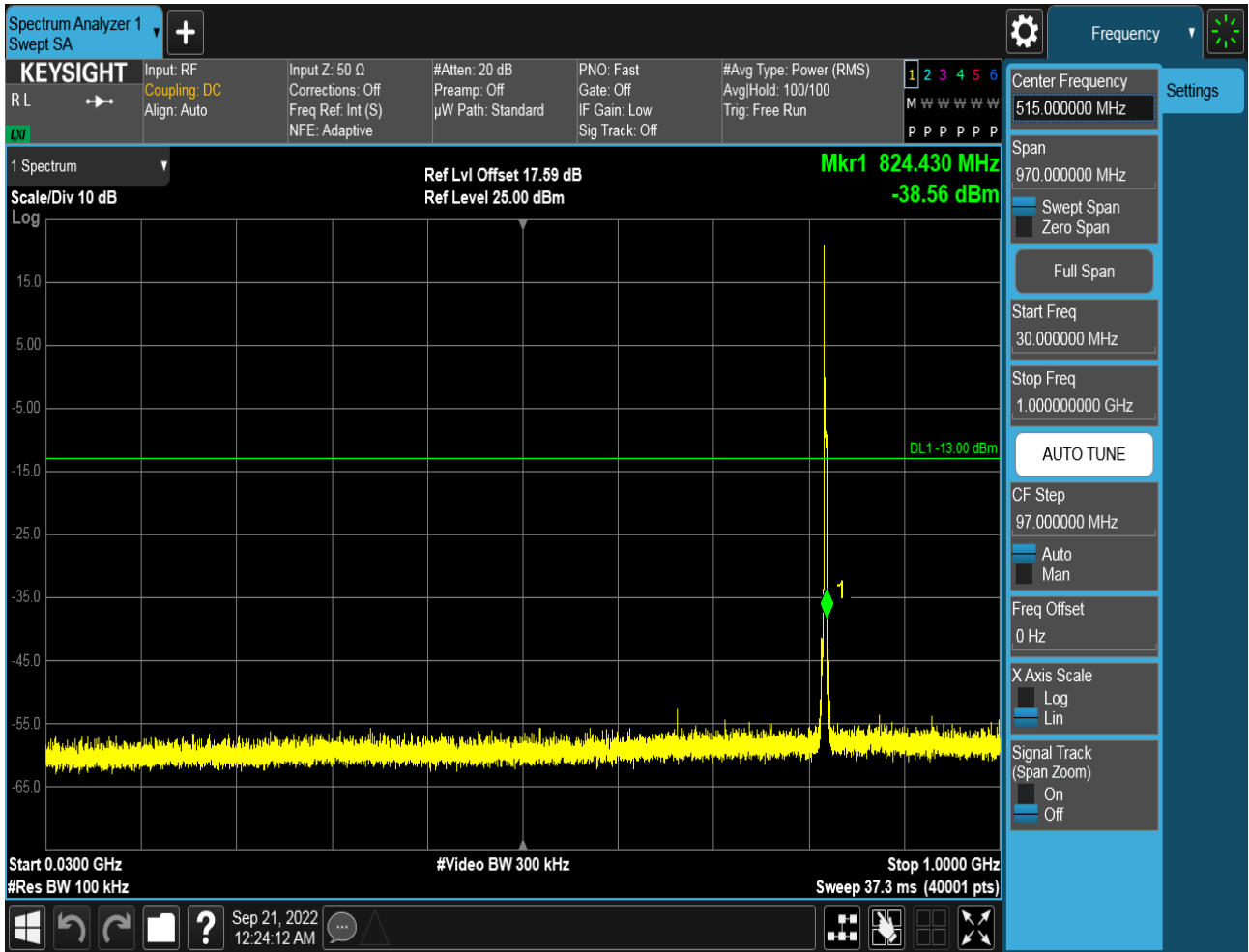


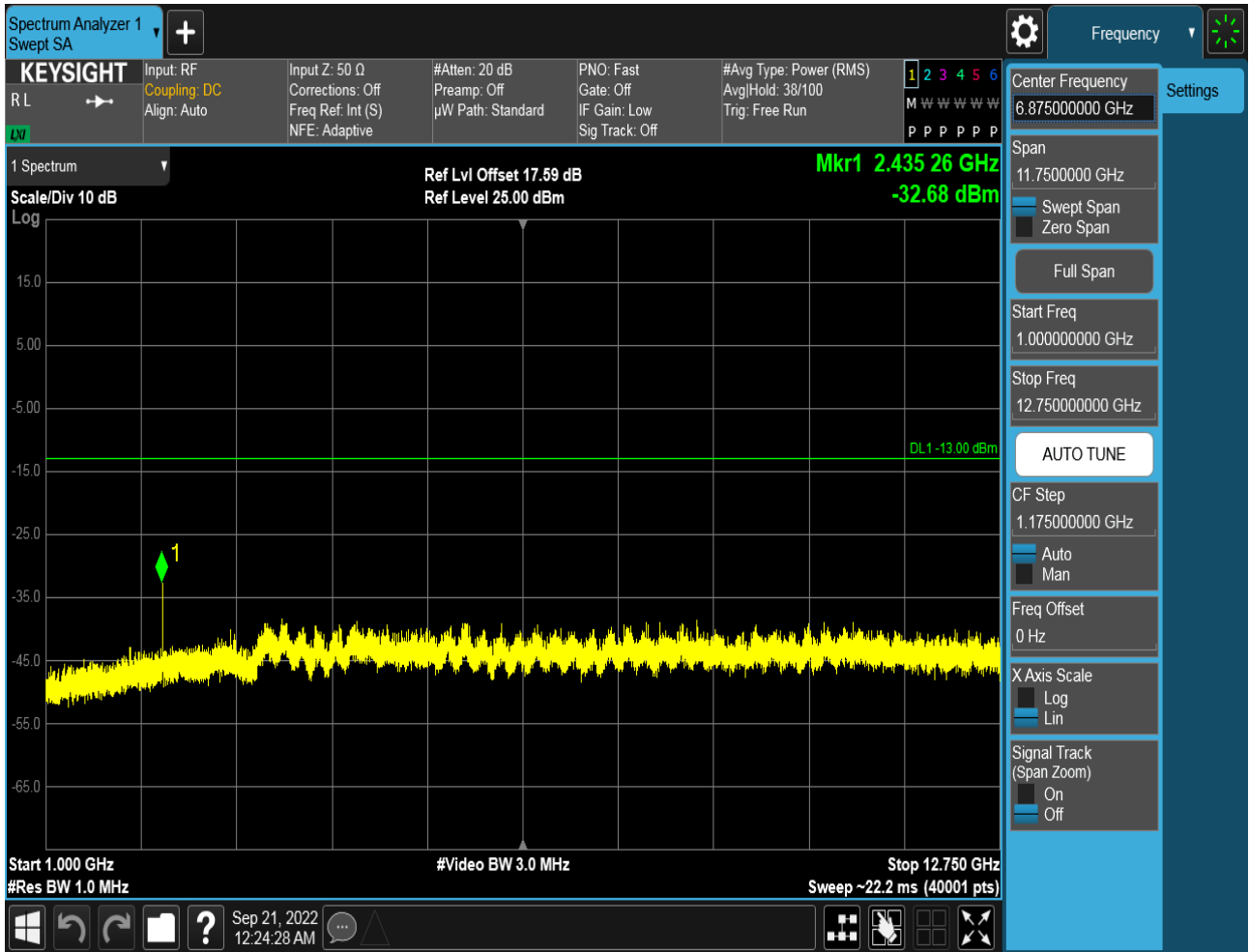
6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0







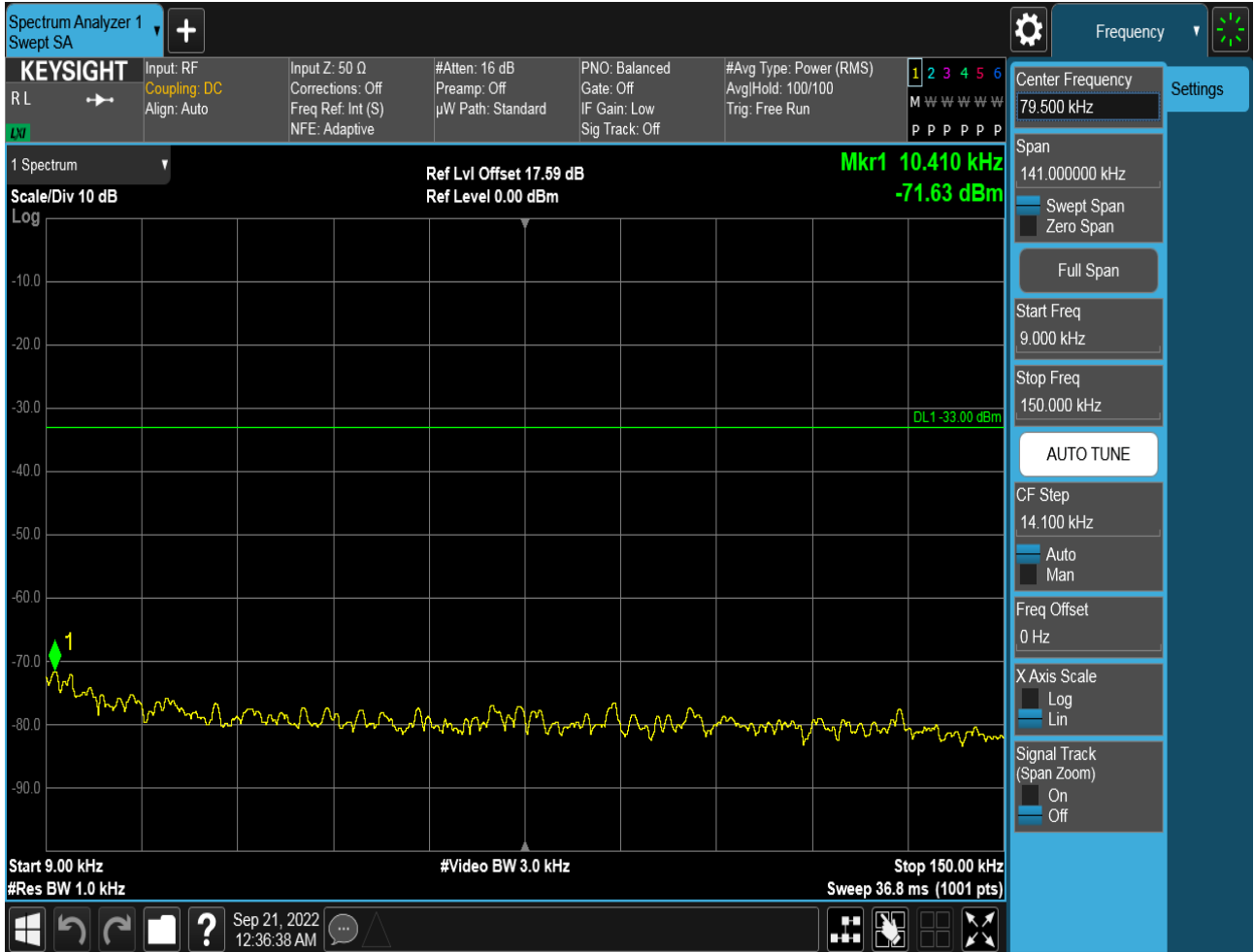


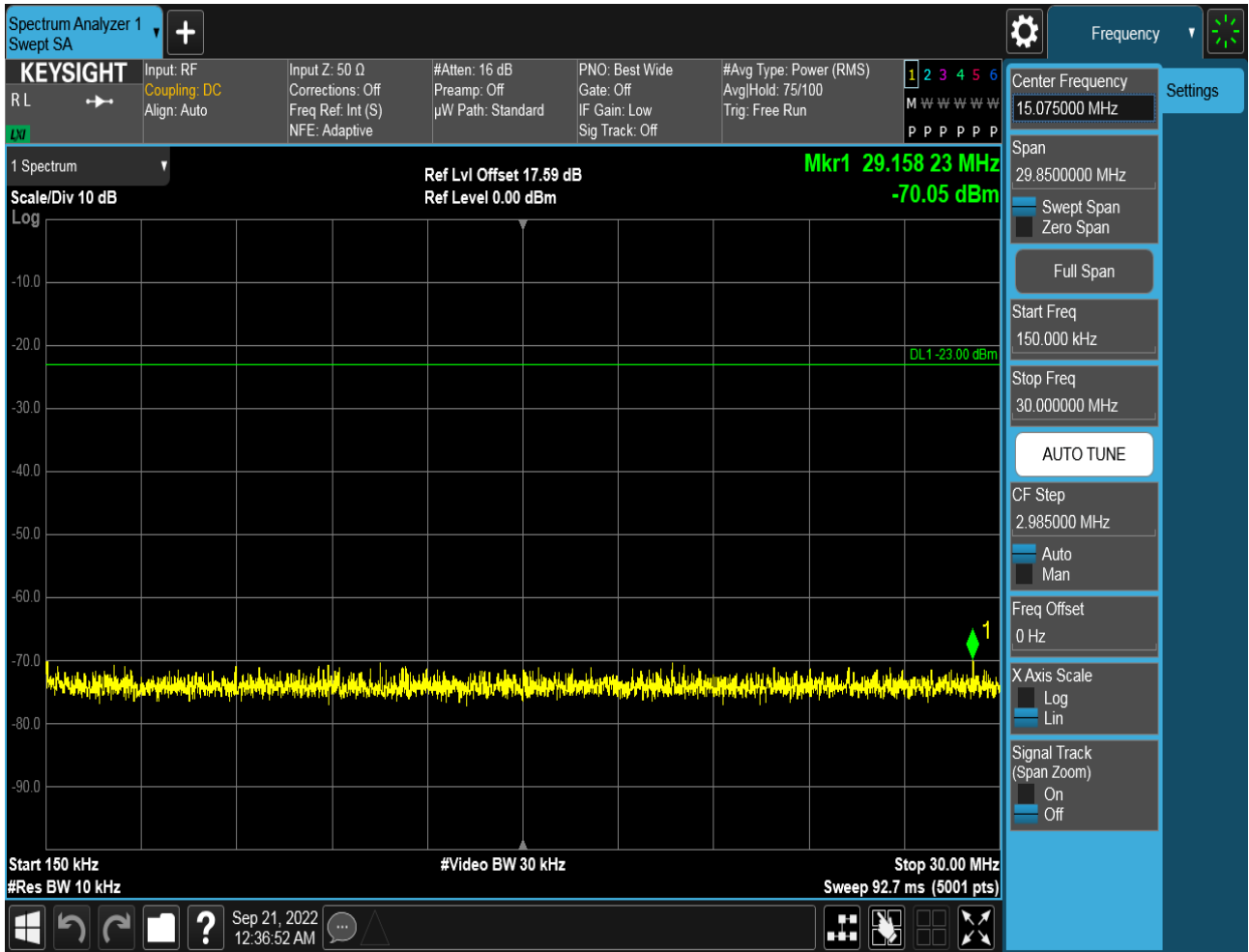


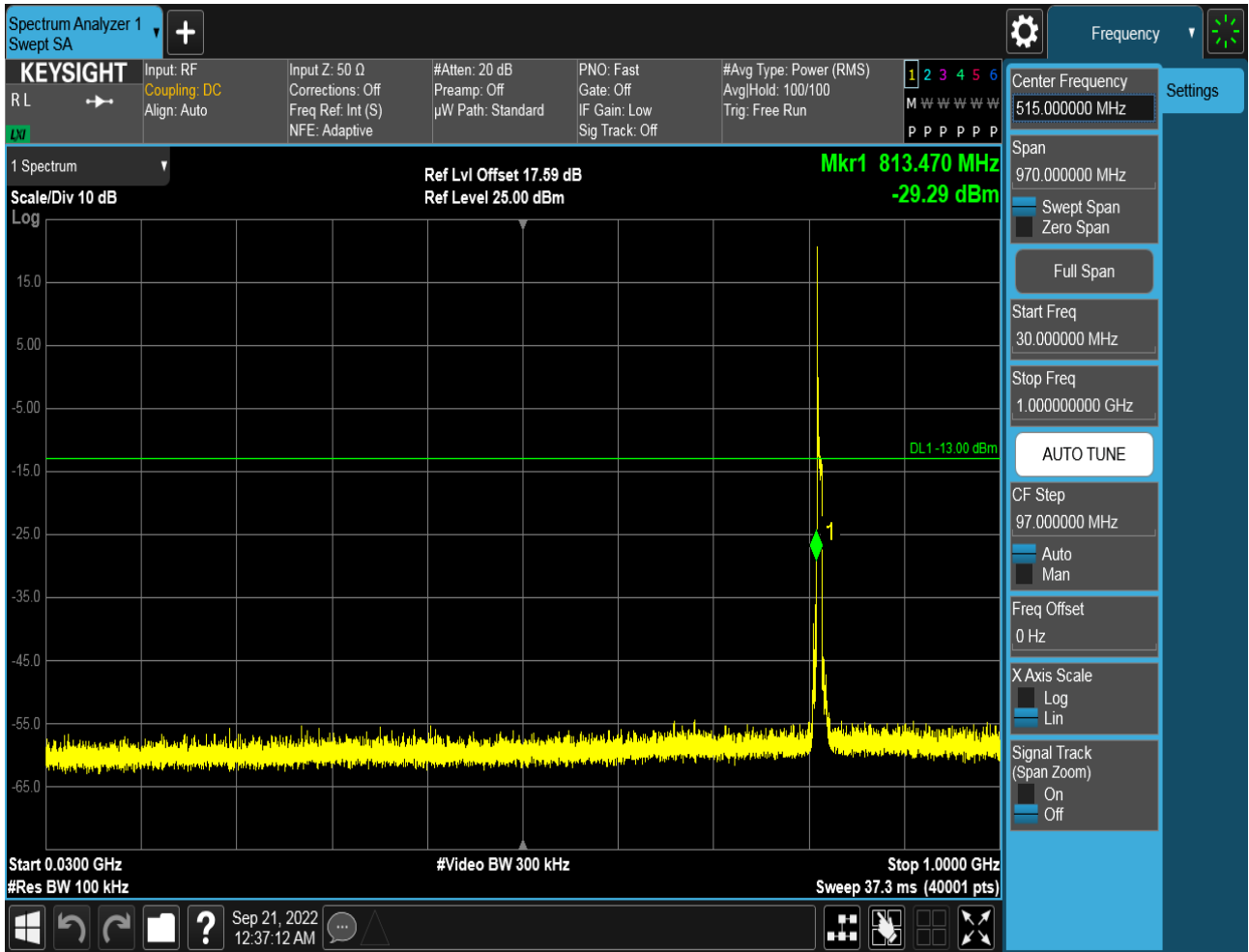
6.2.1.1.3 Test Bandwidth = 5MHz

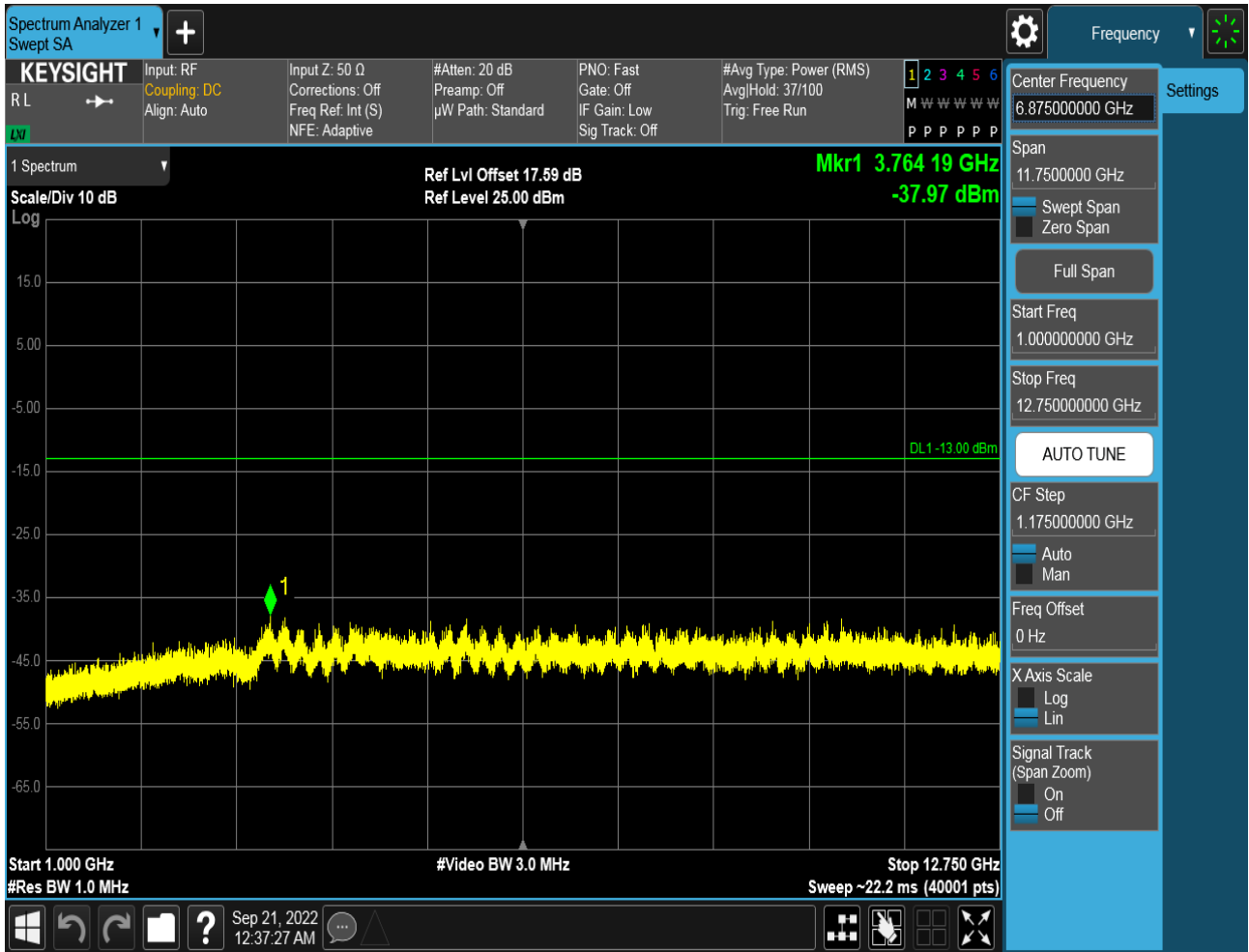
6.2.1.1.3.1 Test Channel = LCH

6.2.1.1.3.1.1 Test RB = RB1#0





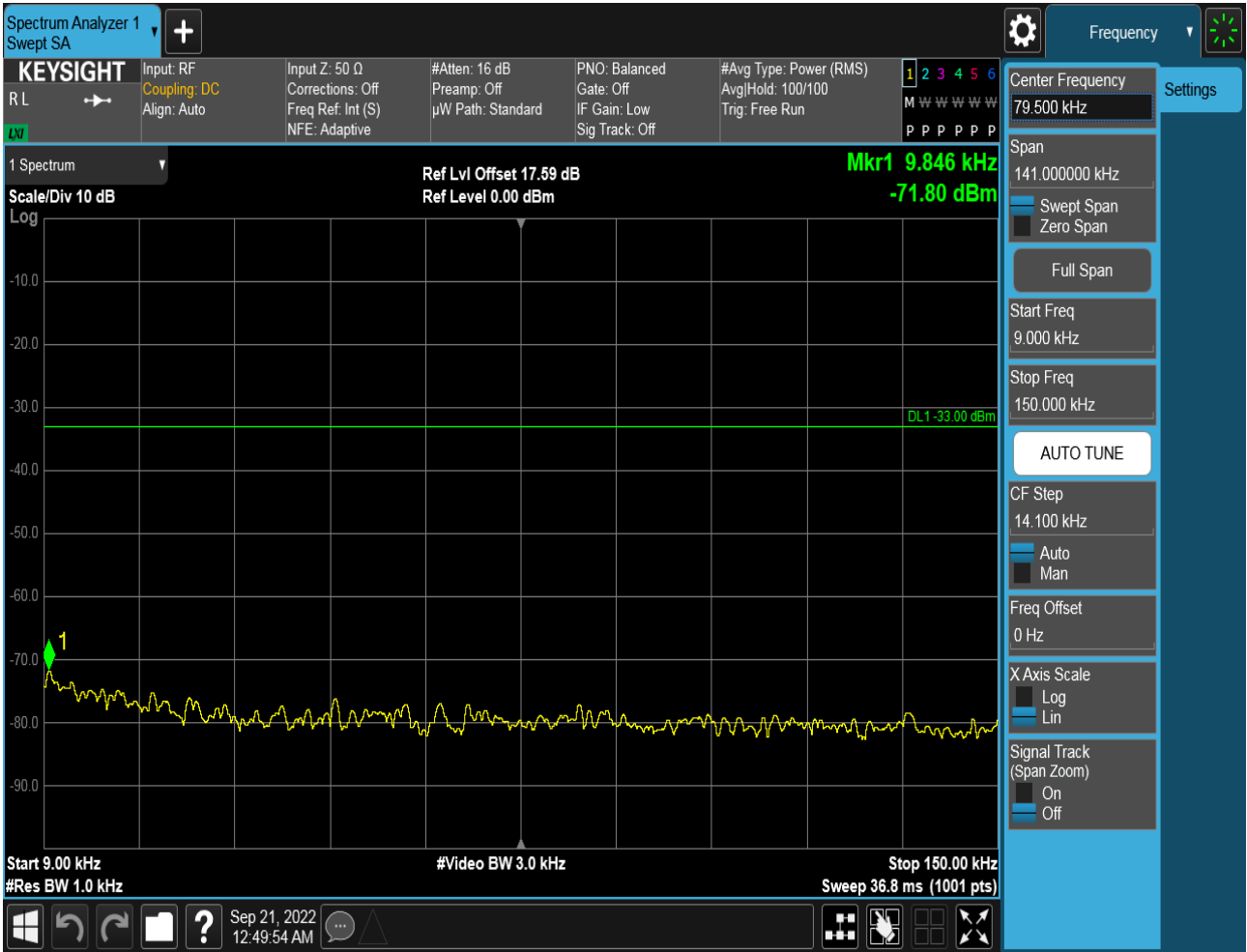


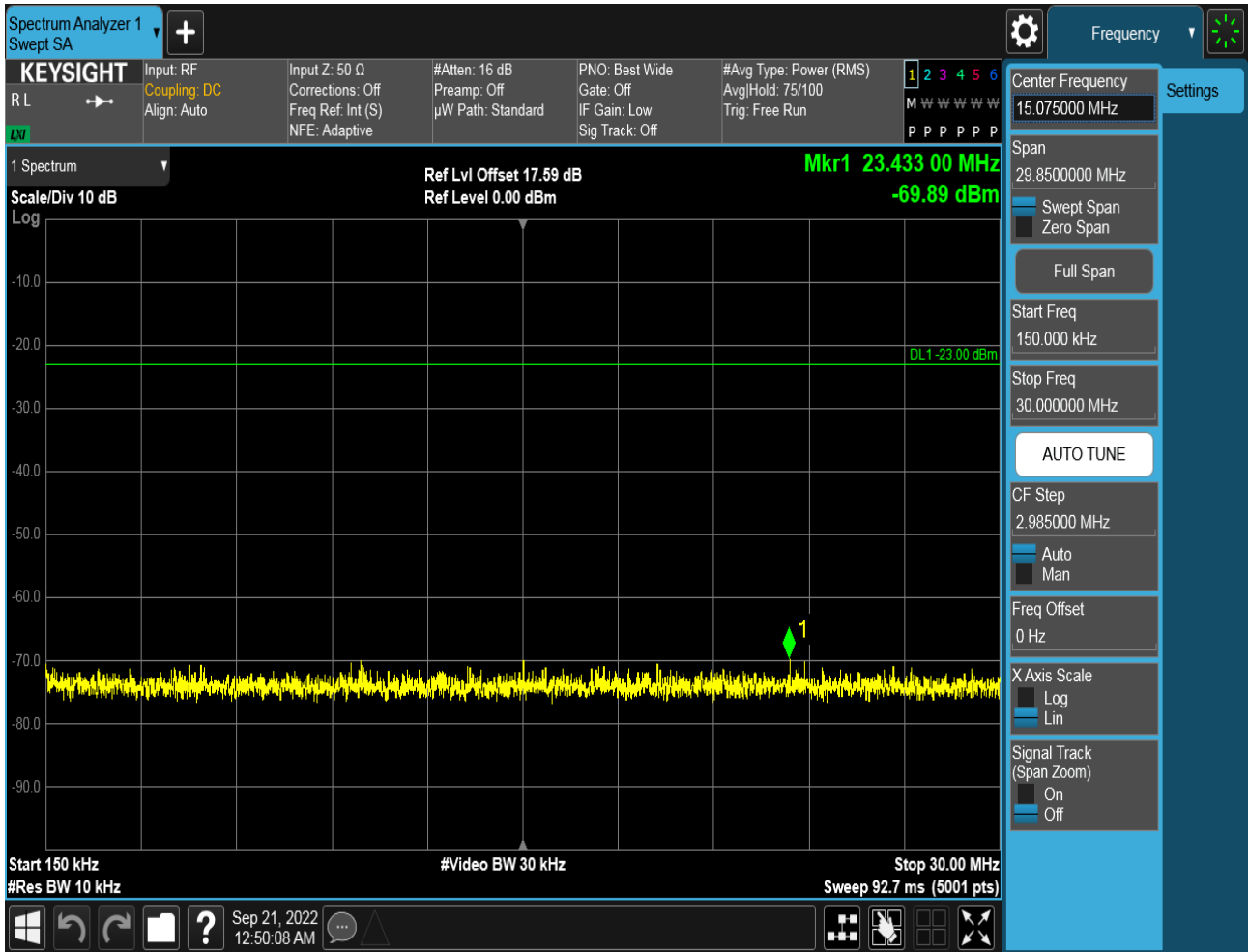


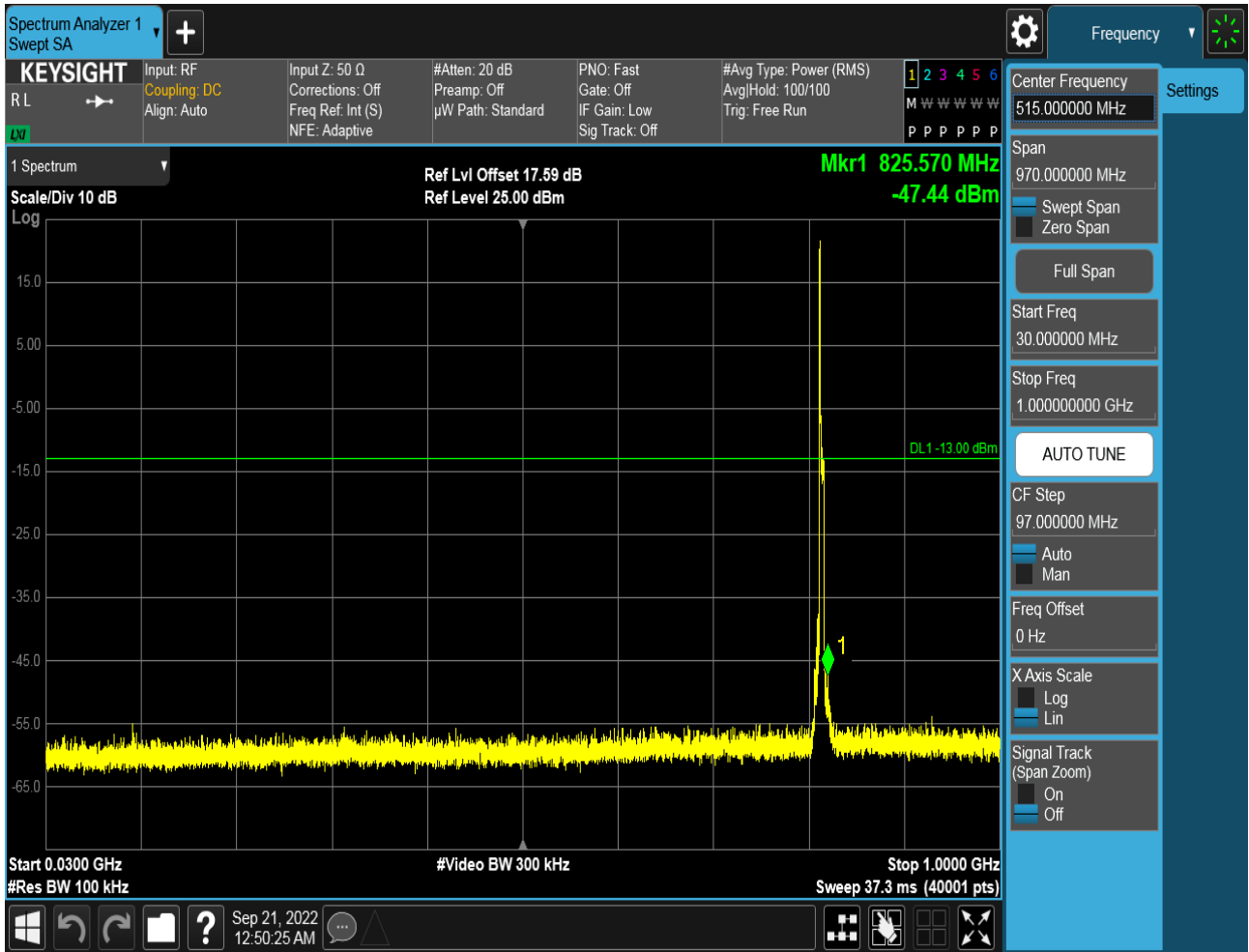


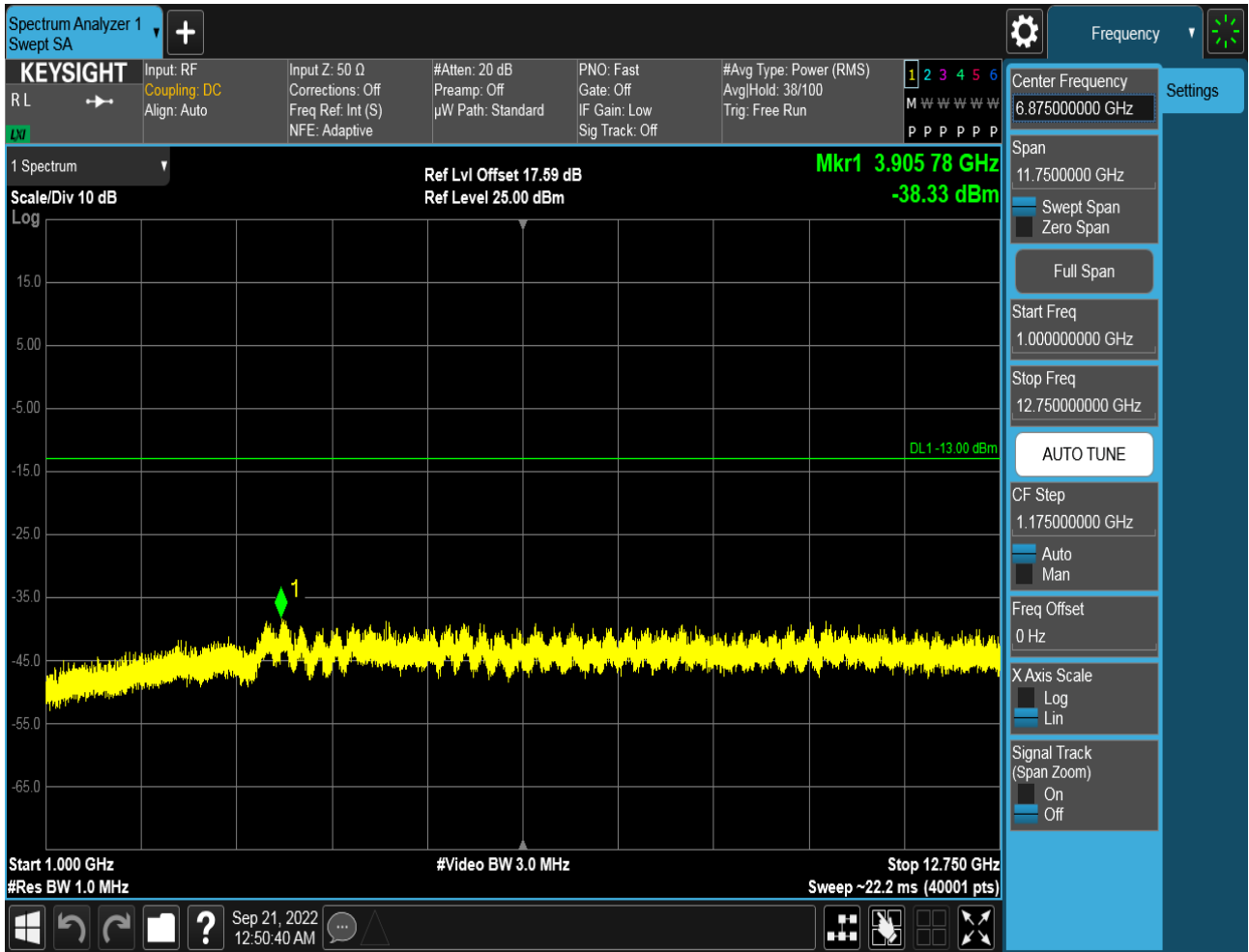
6.2.1.1.3.2 Test Channel = MCH

6.2.1.1.3.2.1 Test RB = RB1#0





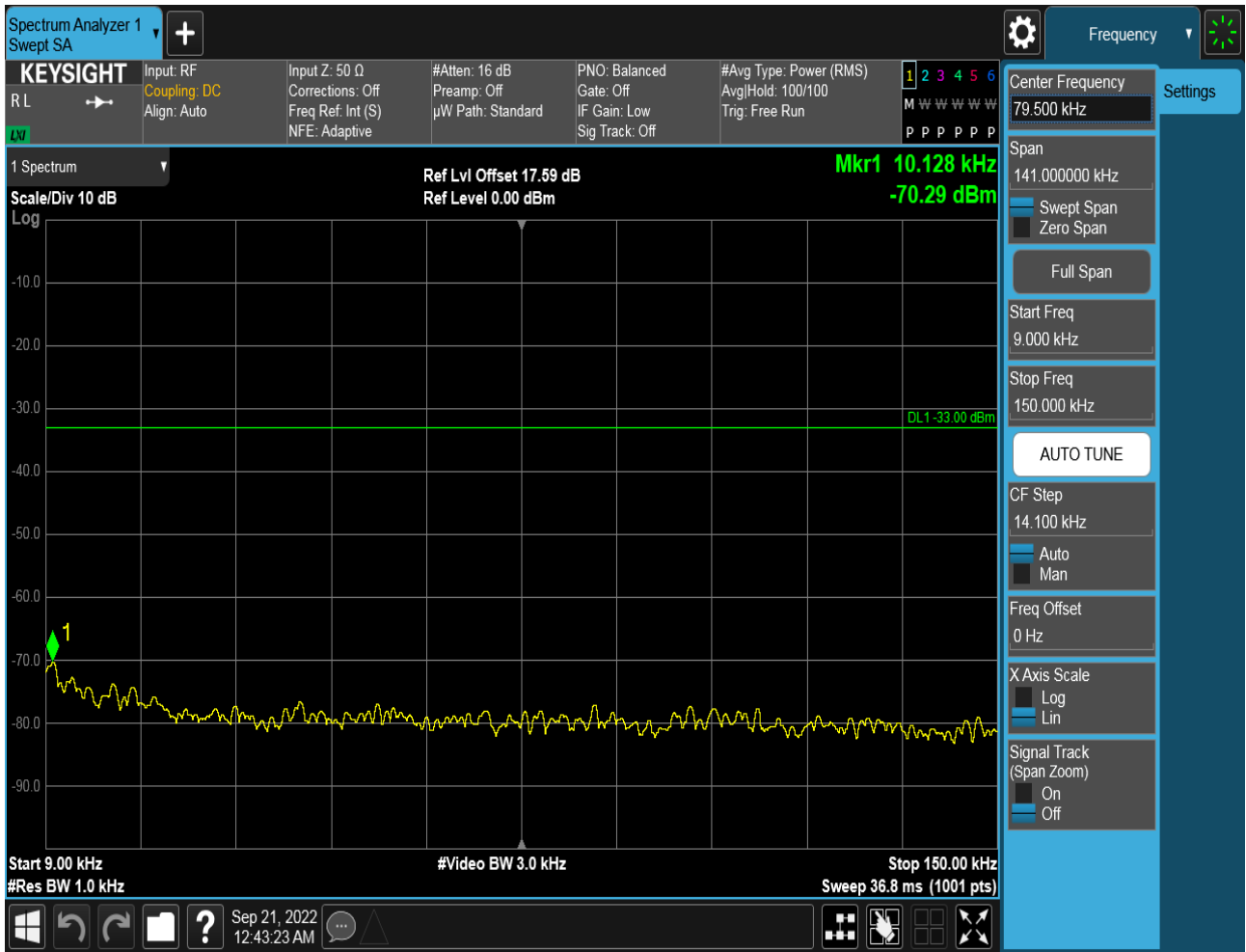


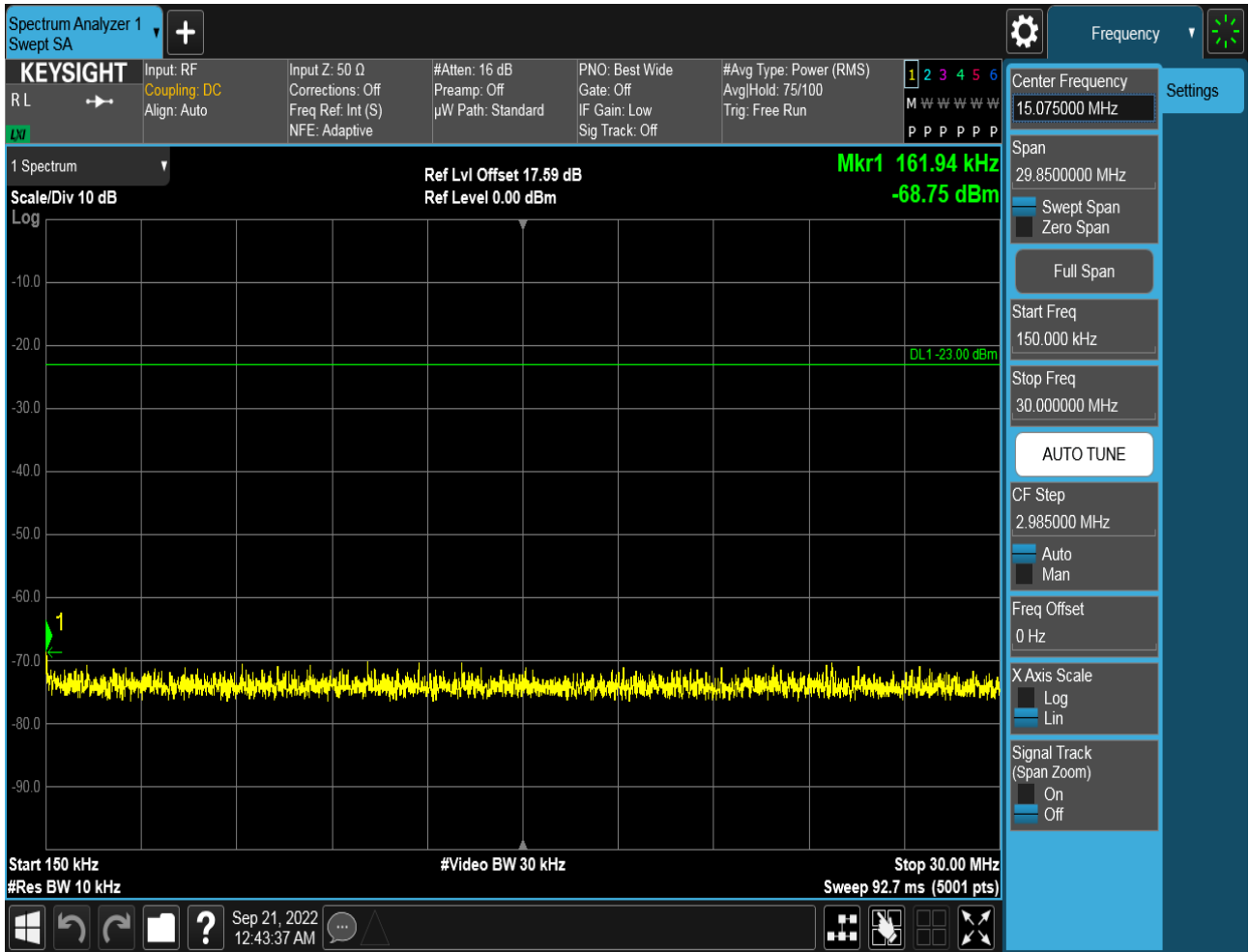


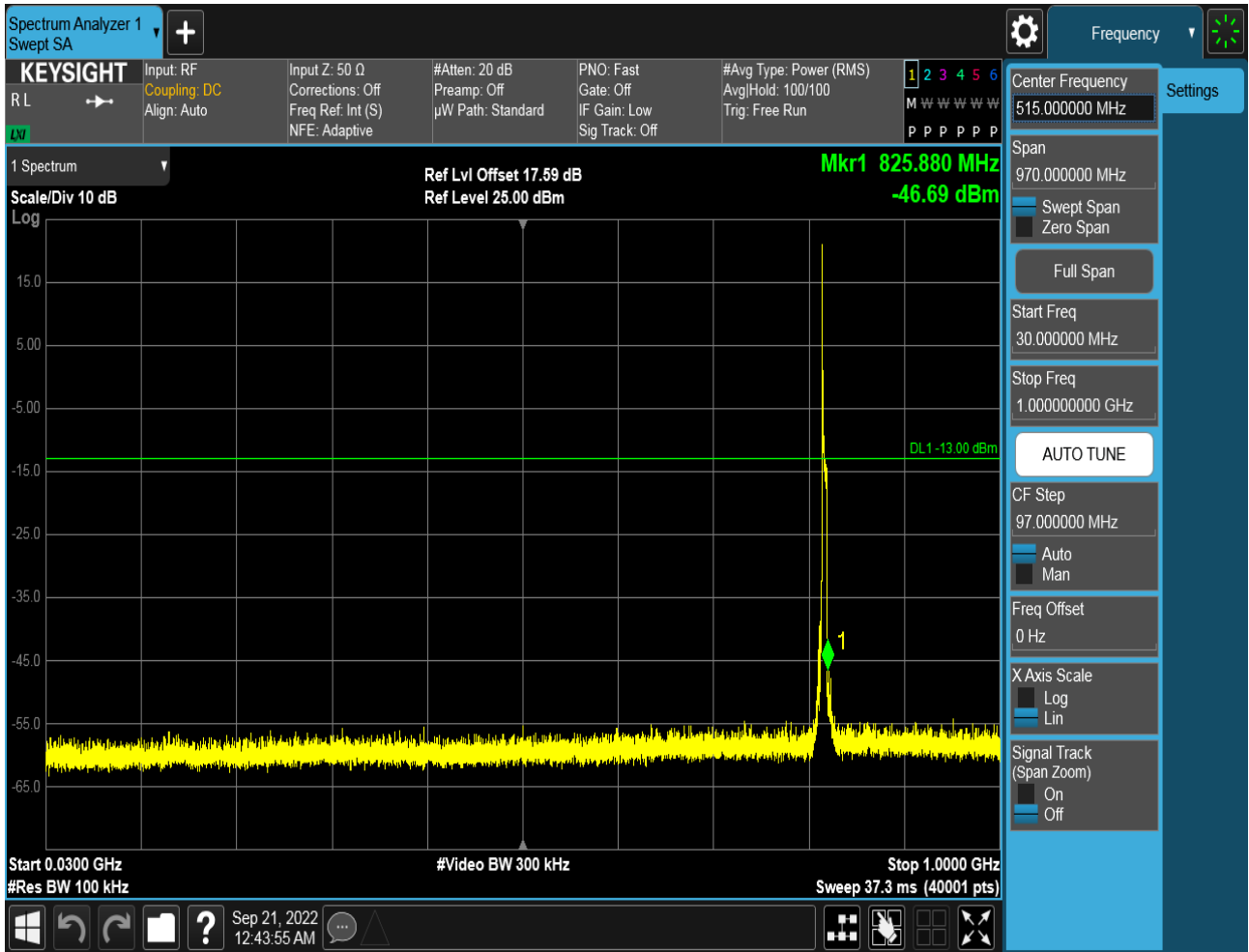


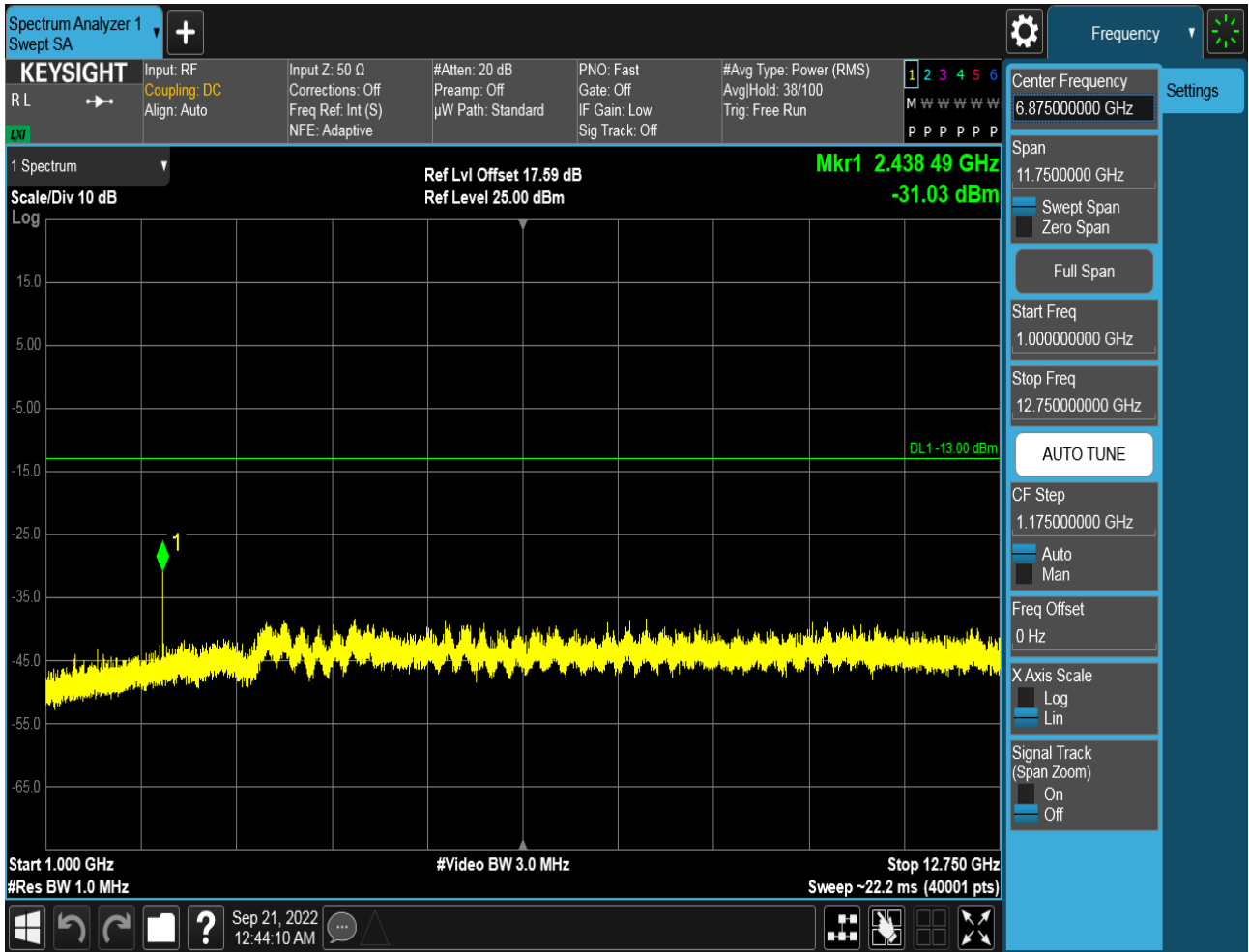
6.2.1.1.3.3 Test Channel = HCH

6.2.1.1.3.3.1 Test RB = RB1#0







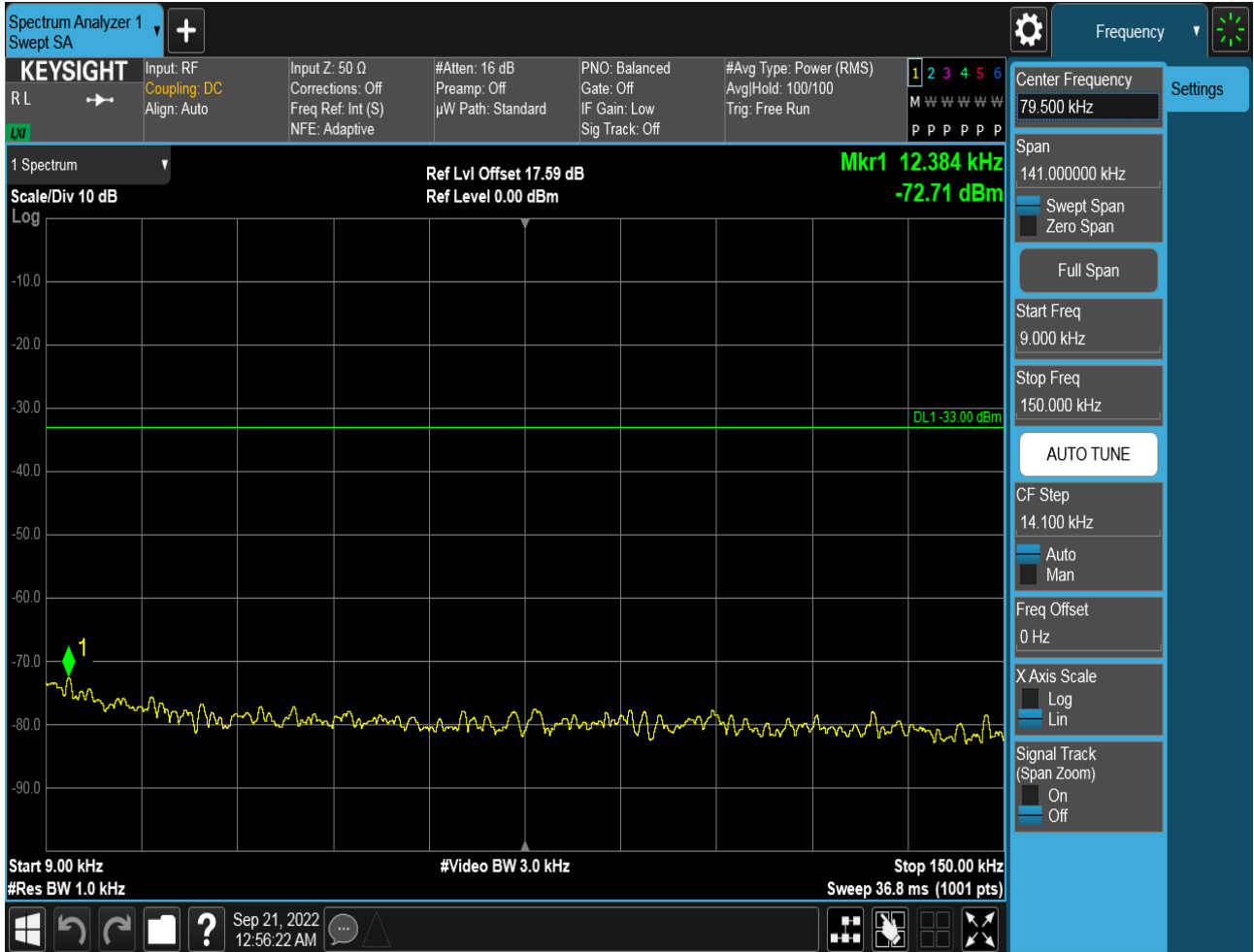


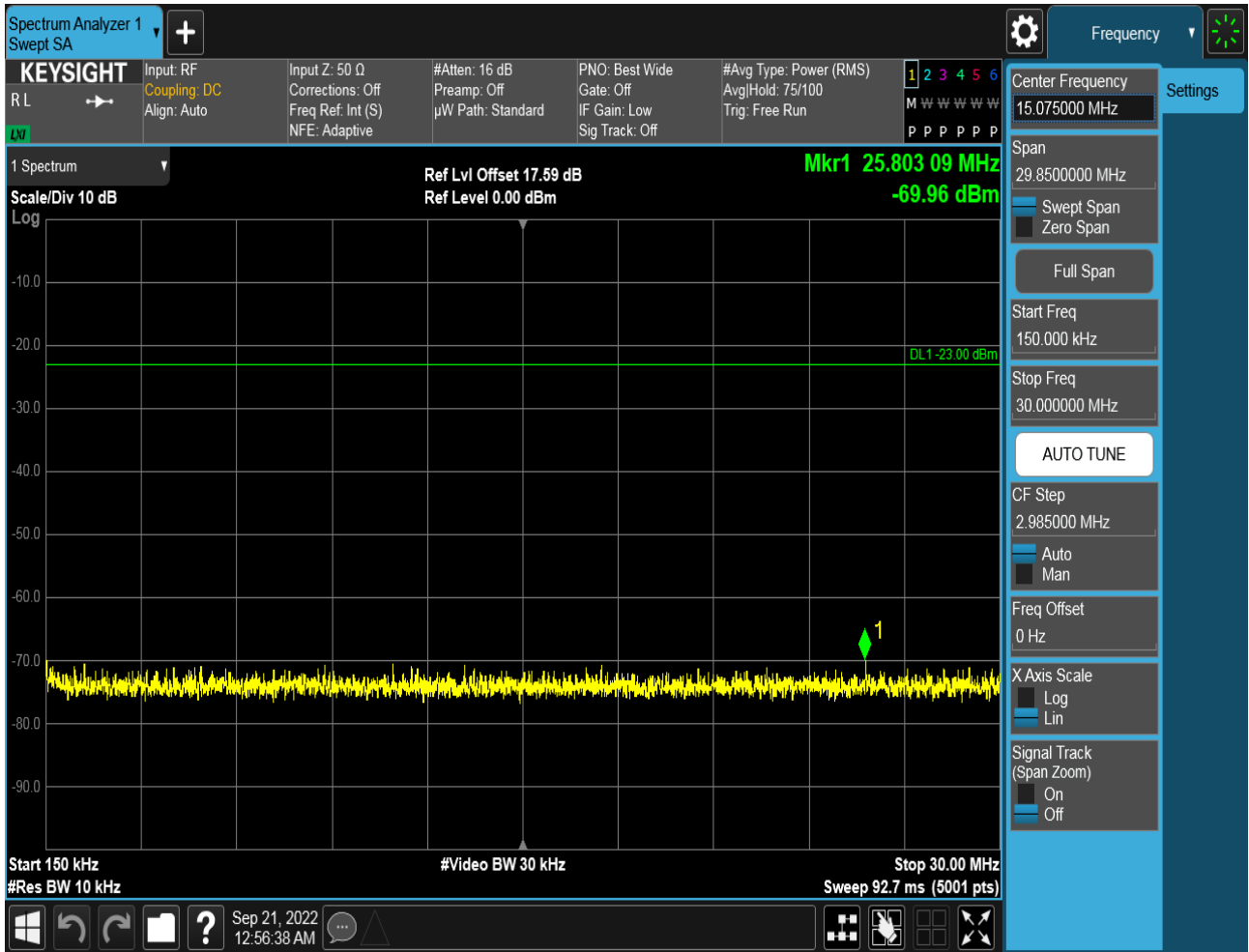


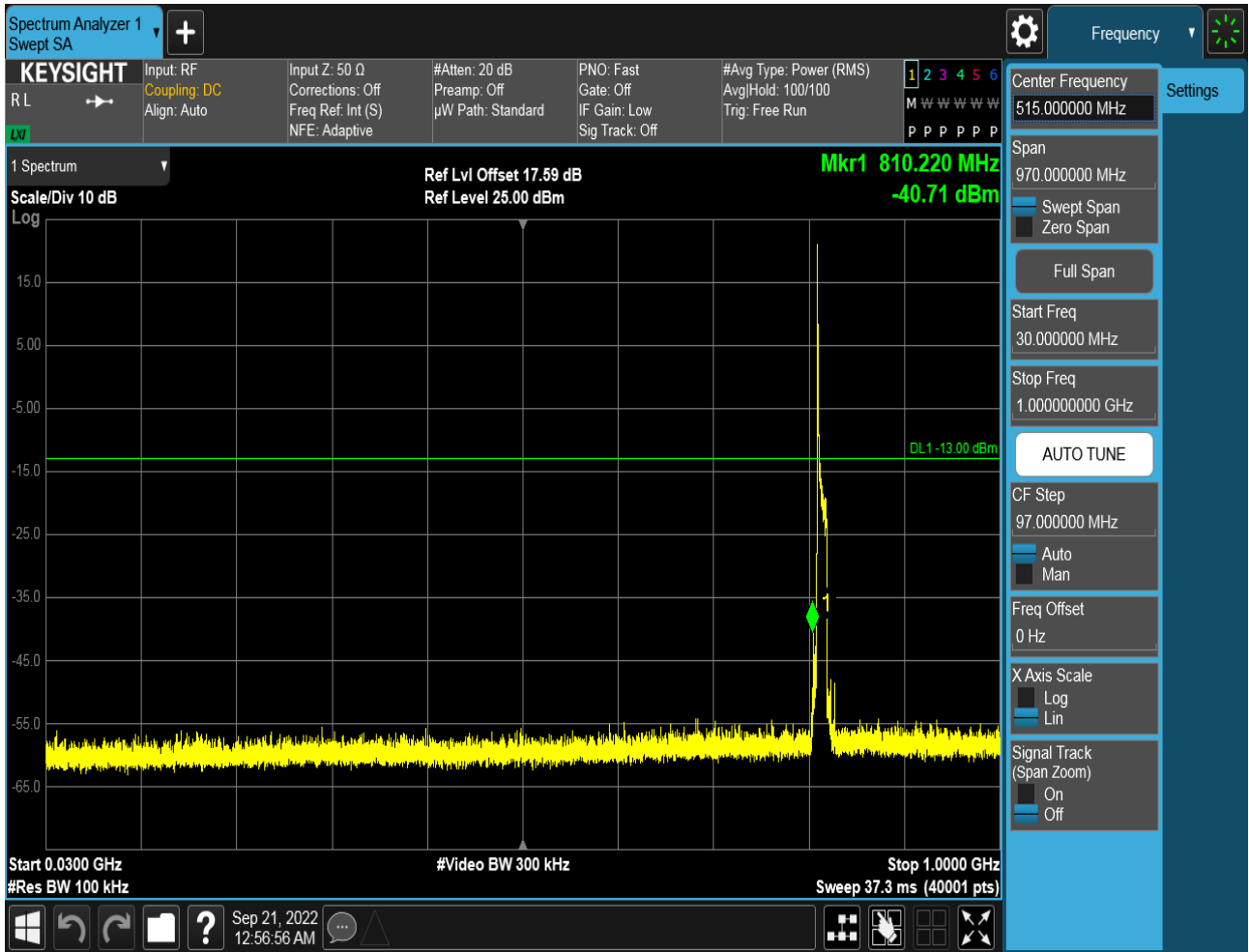
6.2.1.1.4 Test Bandwidth = 10MHz

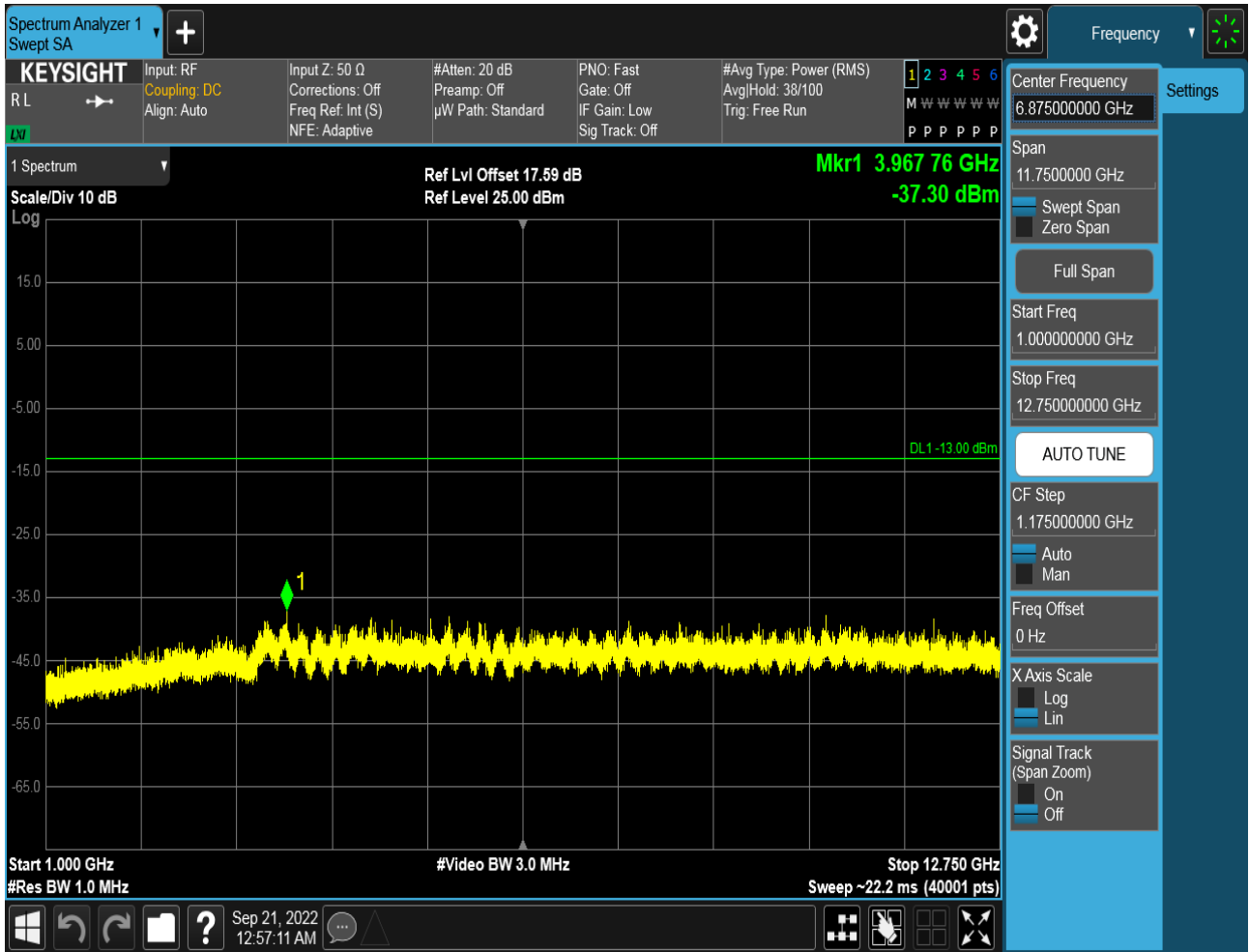
6.2.1.1.4.1 Test Channel = MCH

6.2.1.1.4.1.1 Test RB = RB1#0









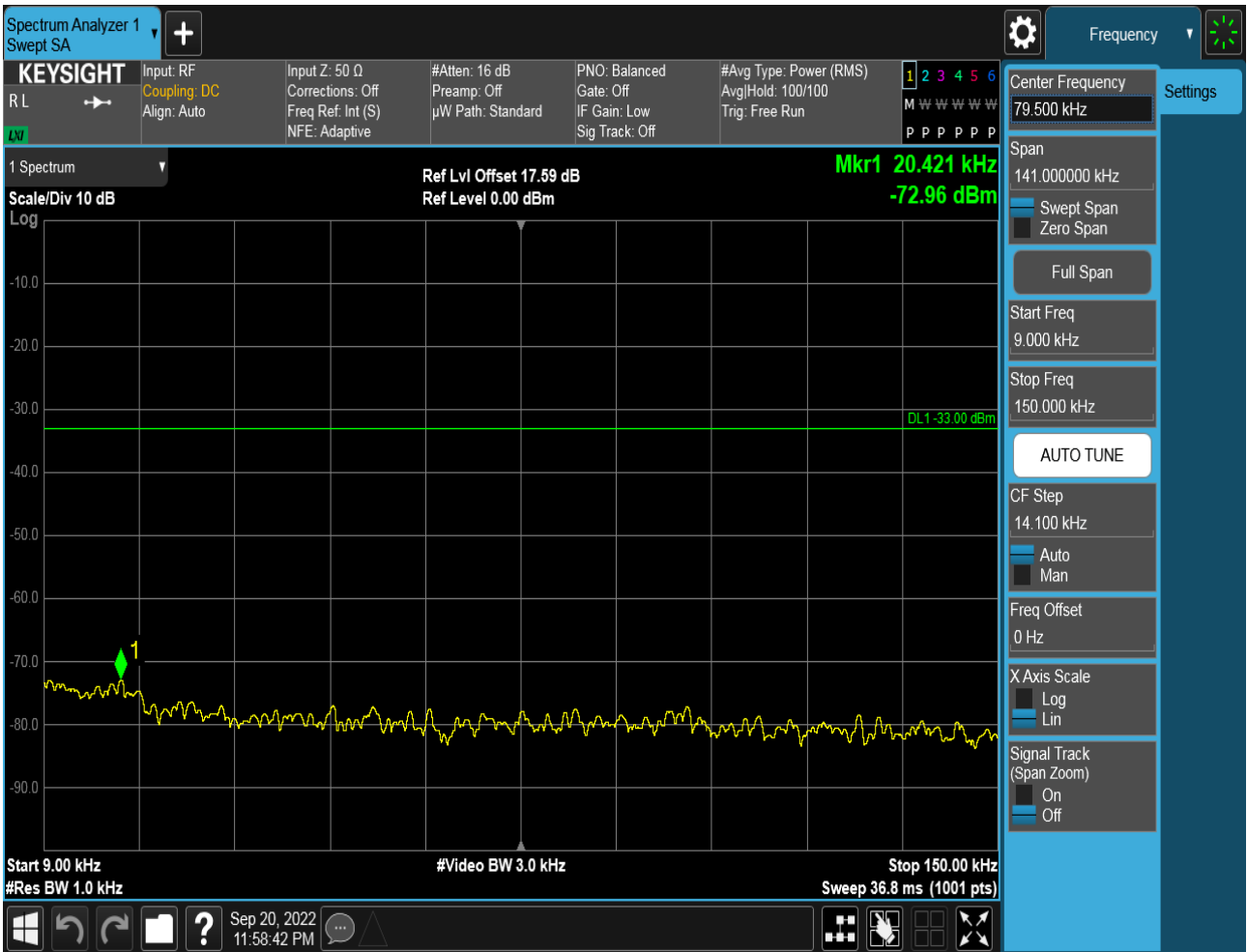


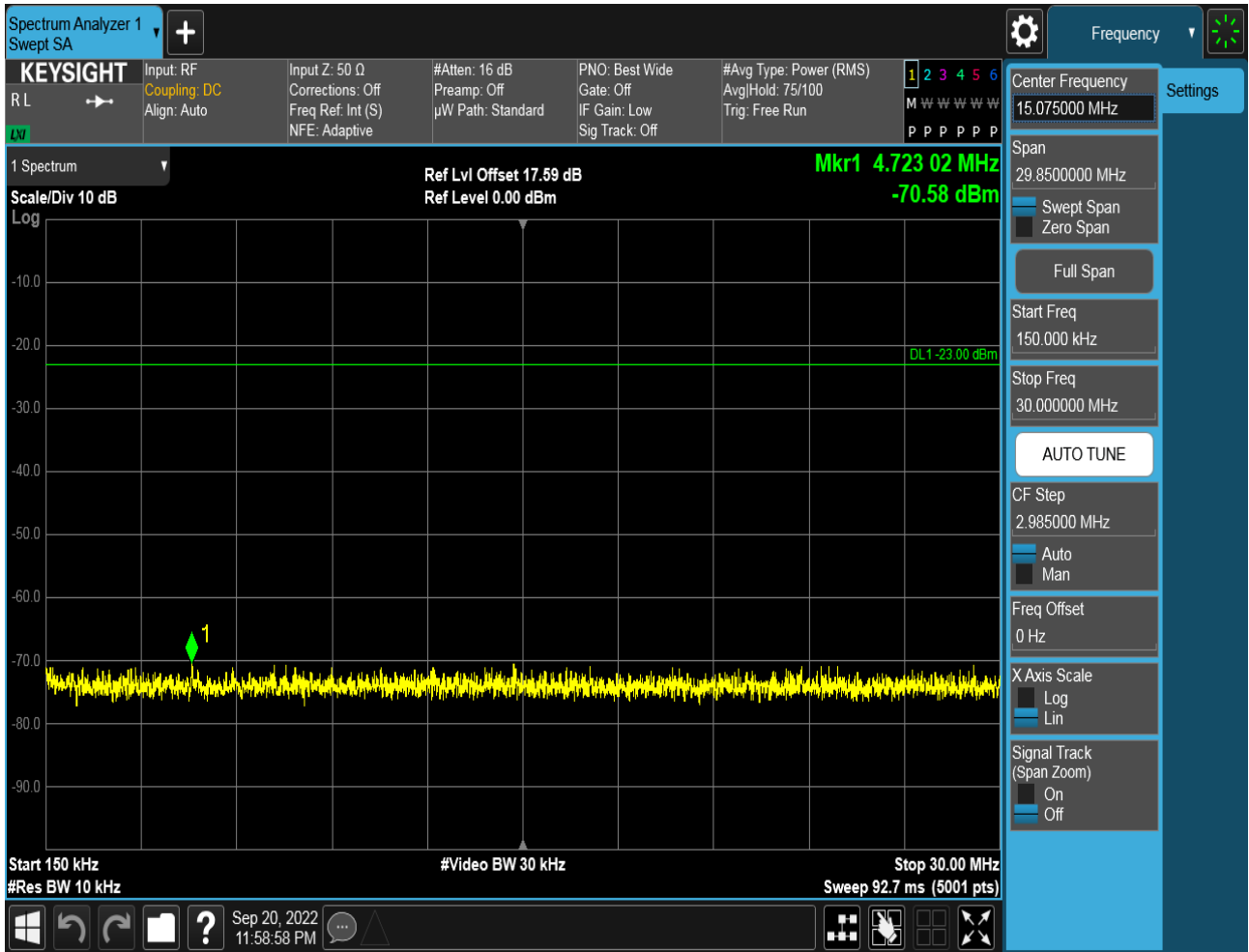
6.2.1.2 Test Mode = LTE/TM2

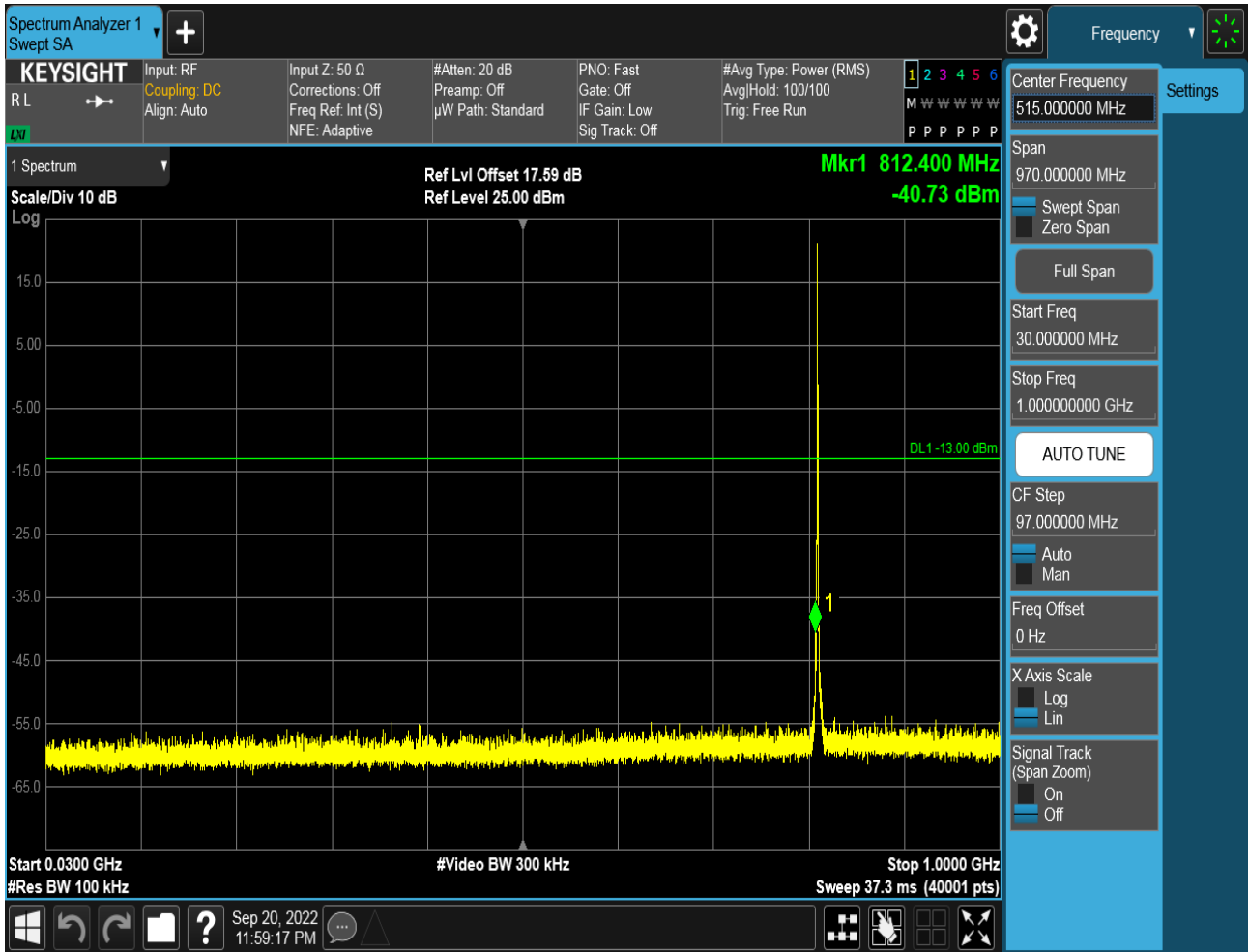
6.2.1.2.1 Test Bandwidth = 1.4MHz

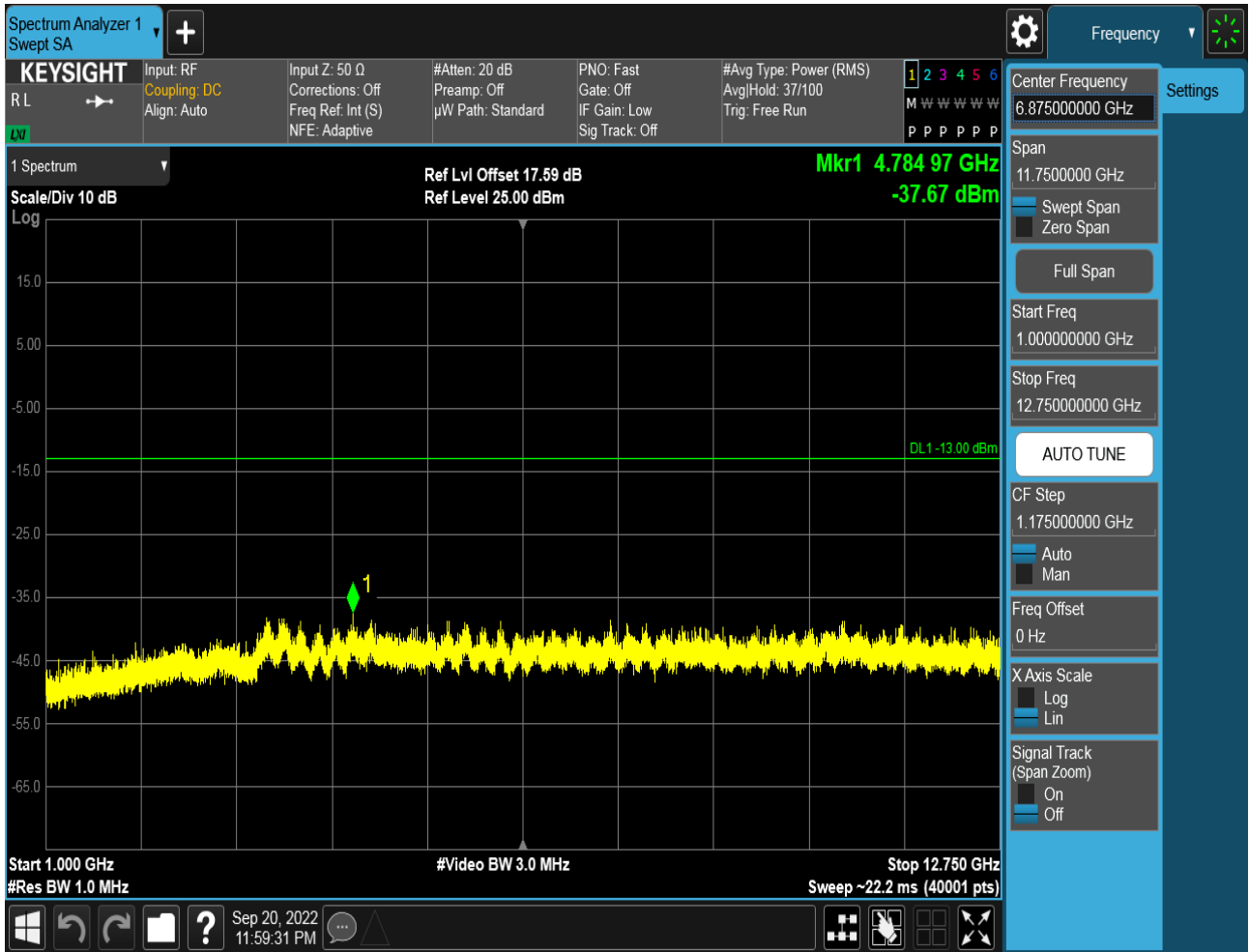
6.2.1.2.1.1 Test Channel = LCH

6.2.1.2.1.1.1 Test RB = RB1#0





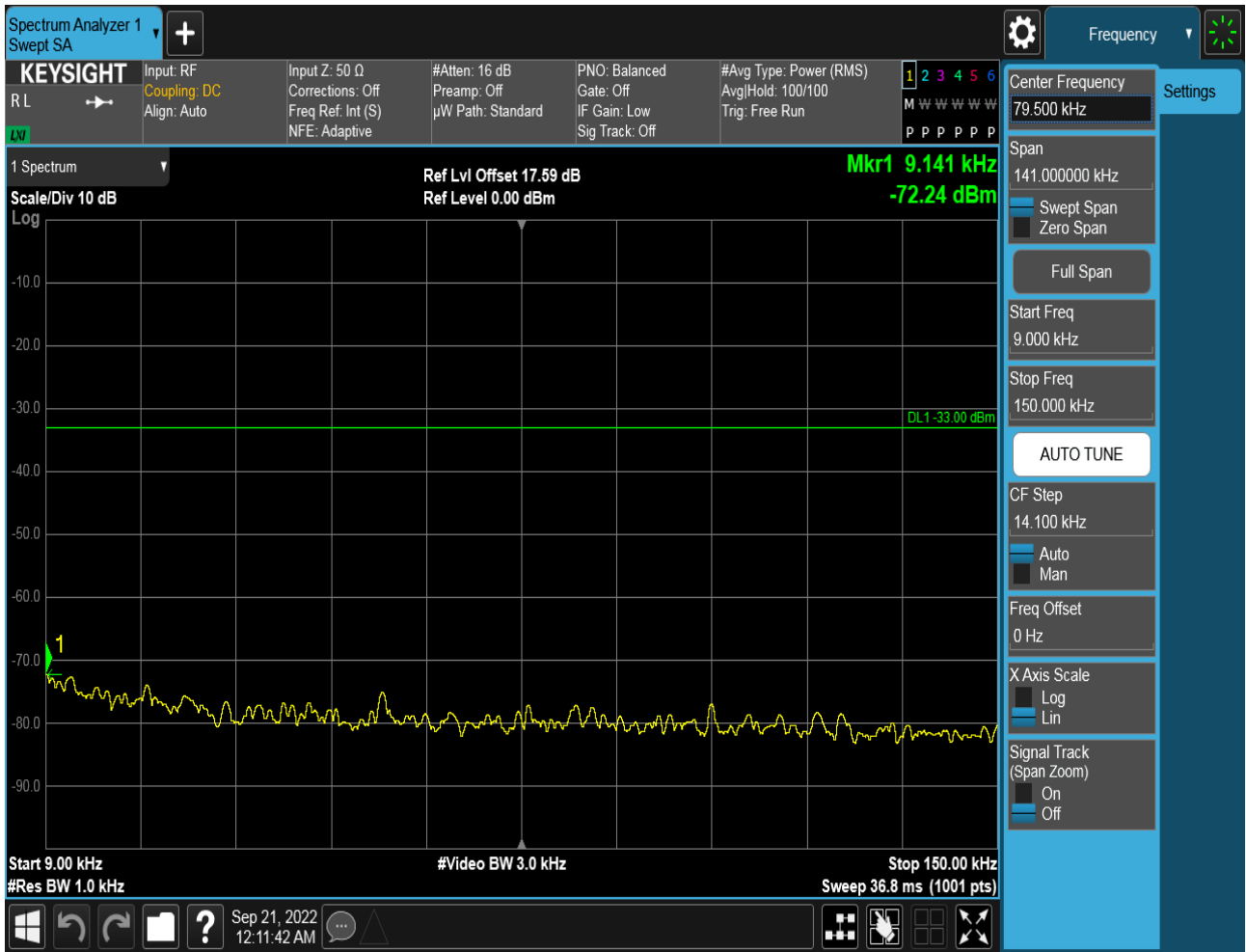


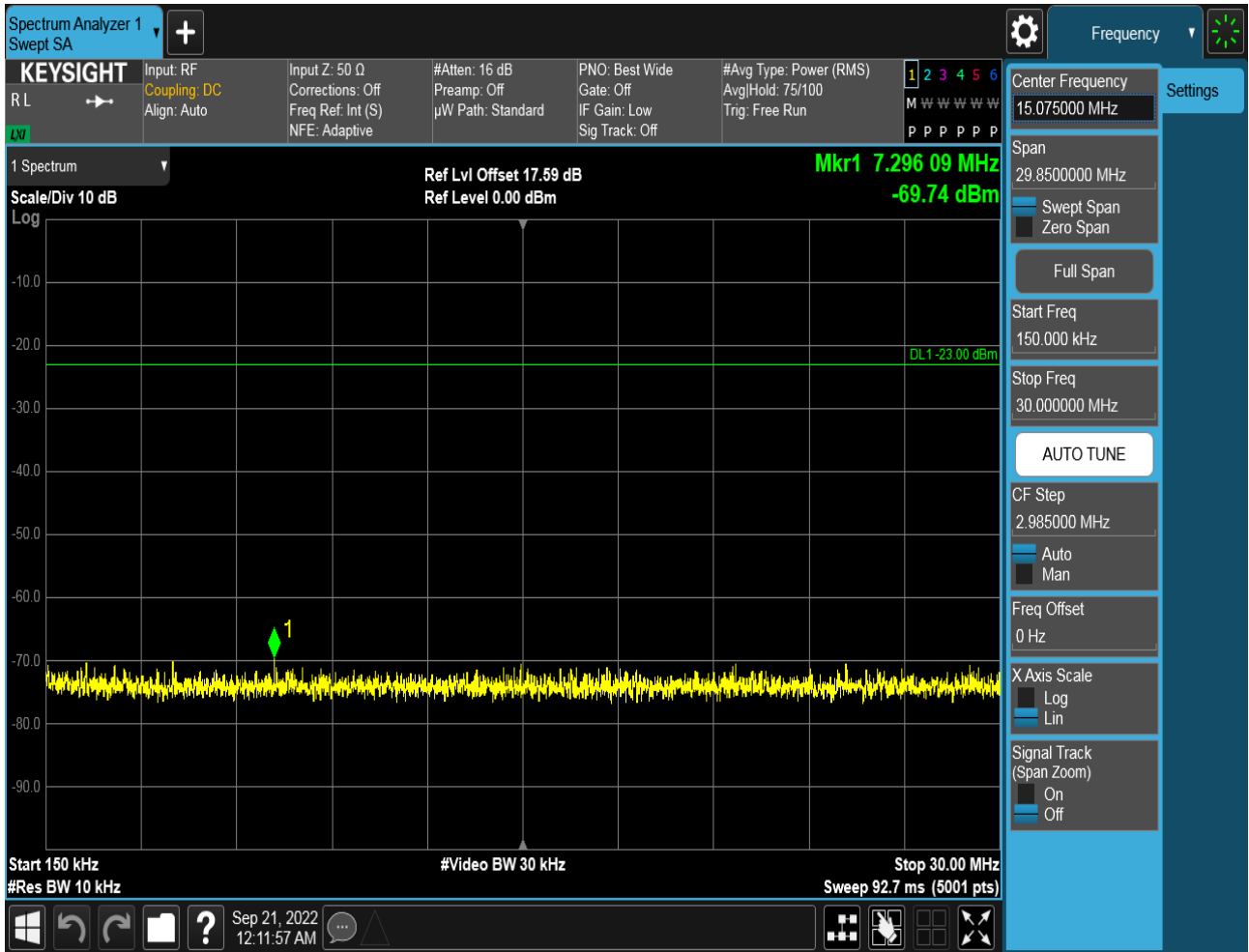


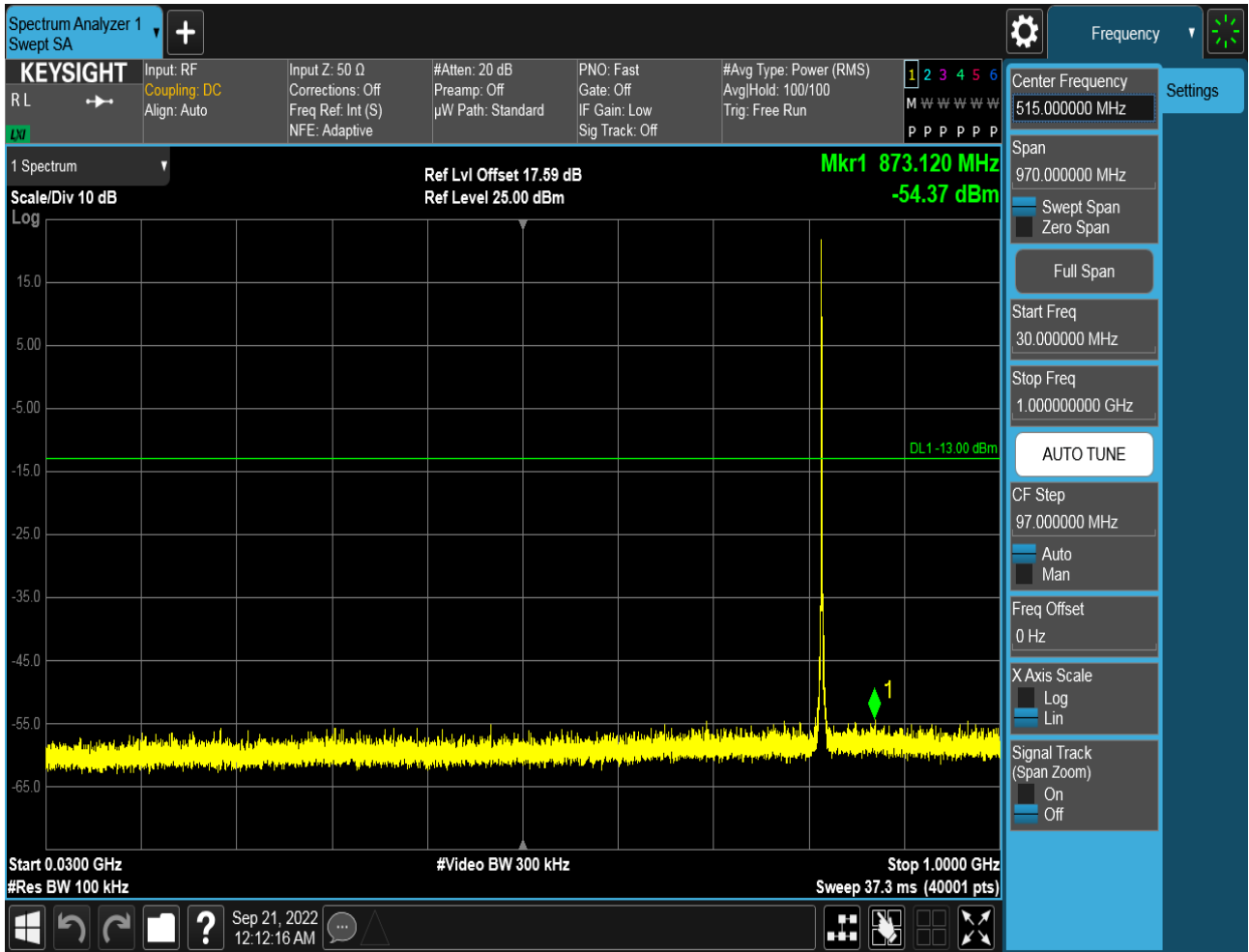


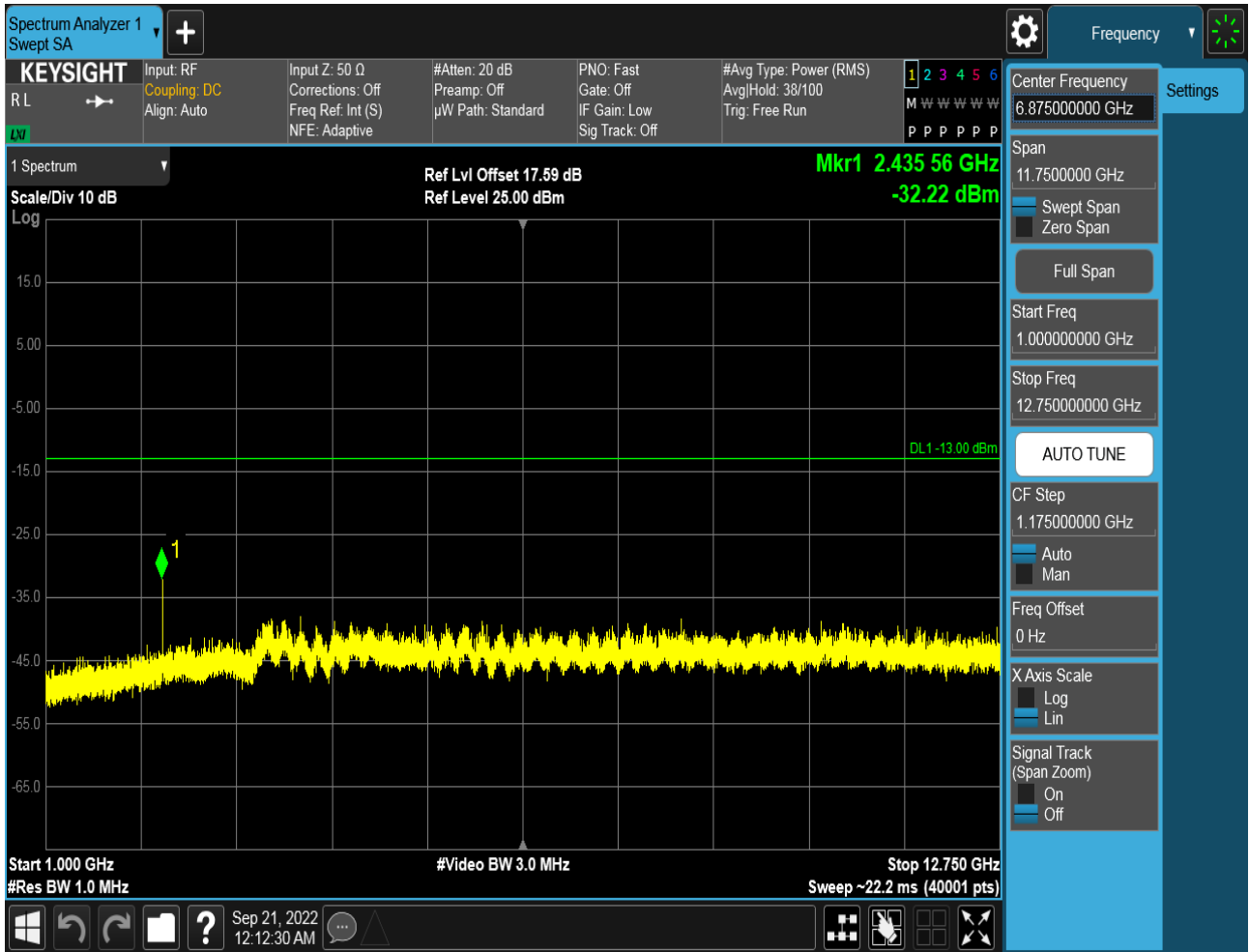
6.2.1.2.1.2 Test Channel = MCH

6.2.1.2.1.2.1 Test RB = RB1#0





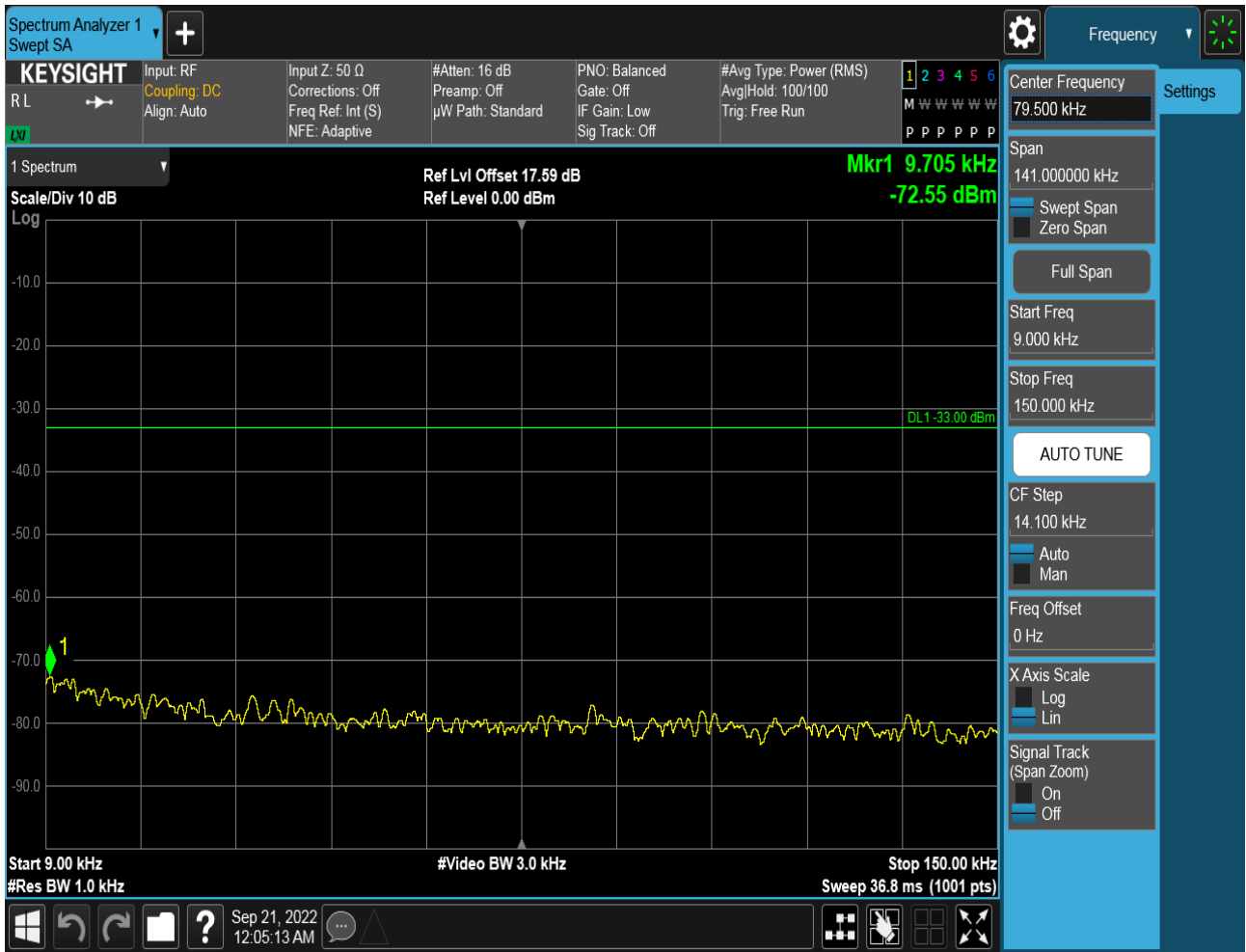


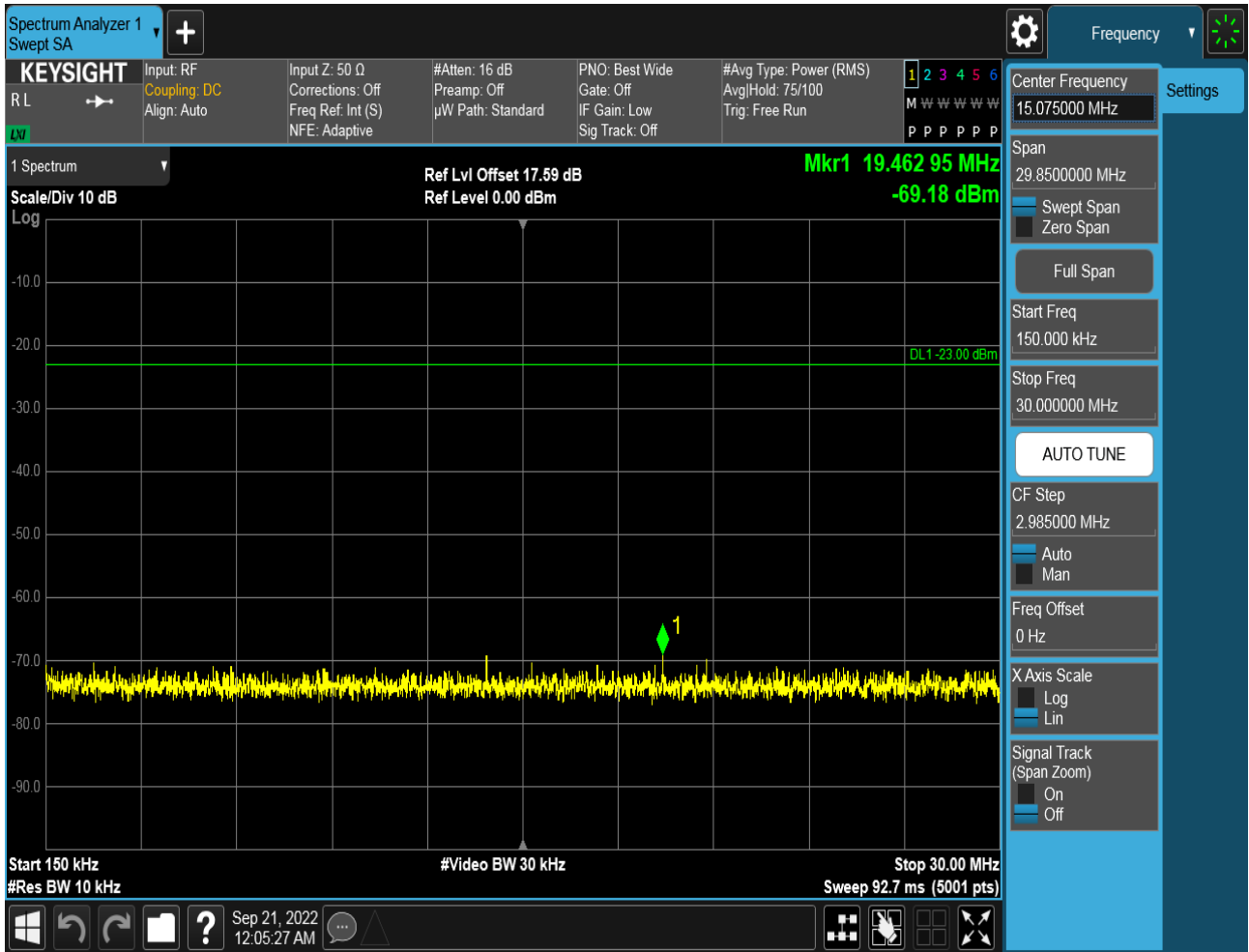


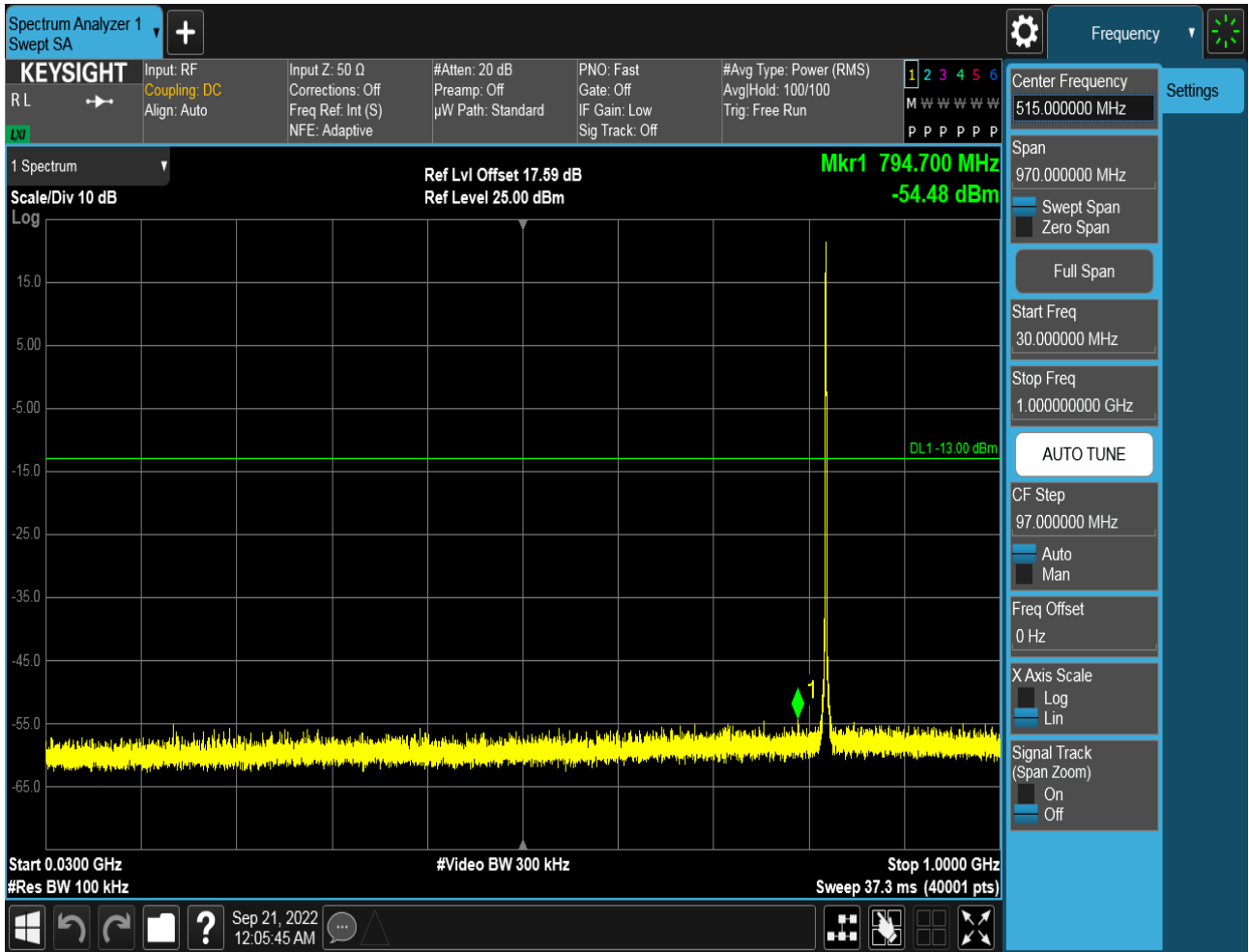


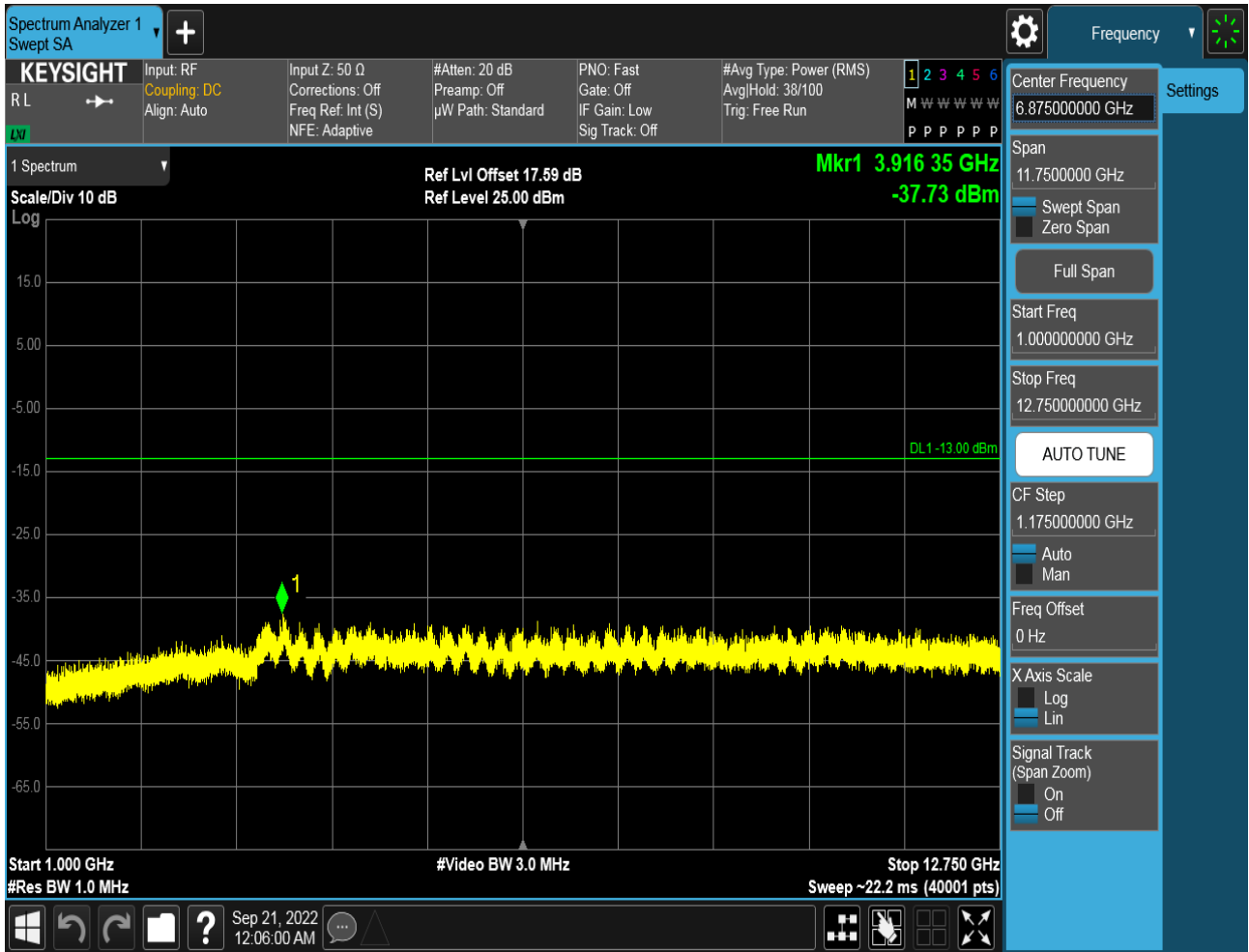
6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0







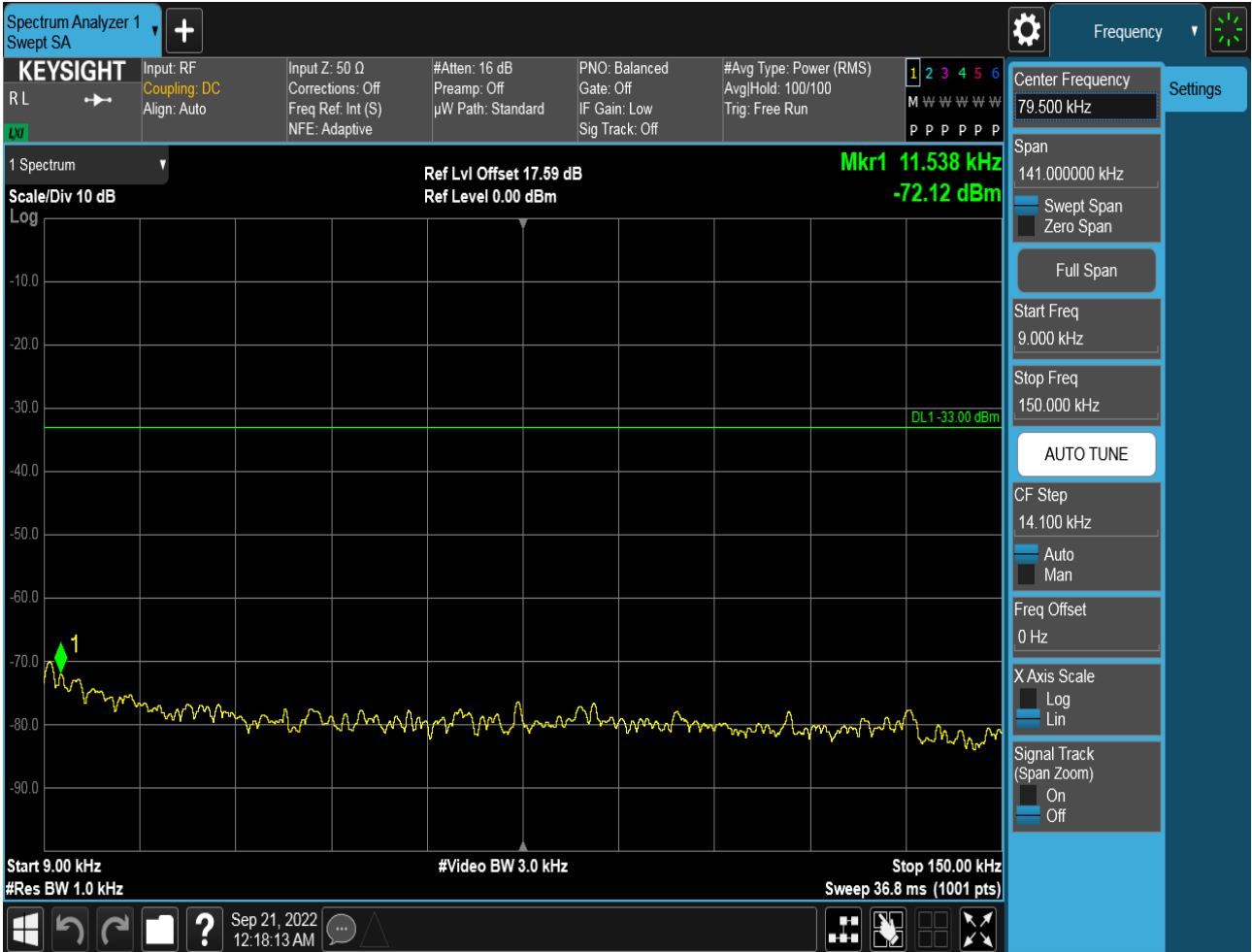


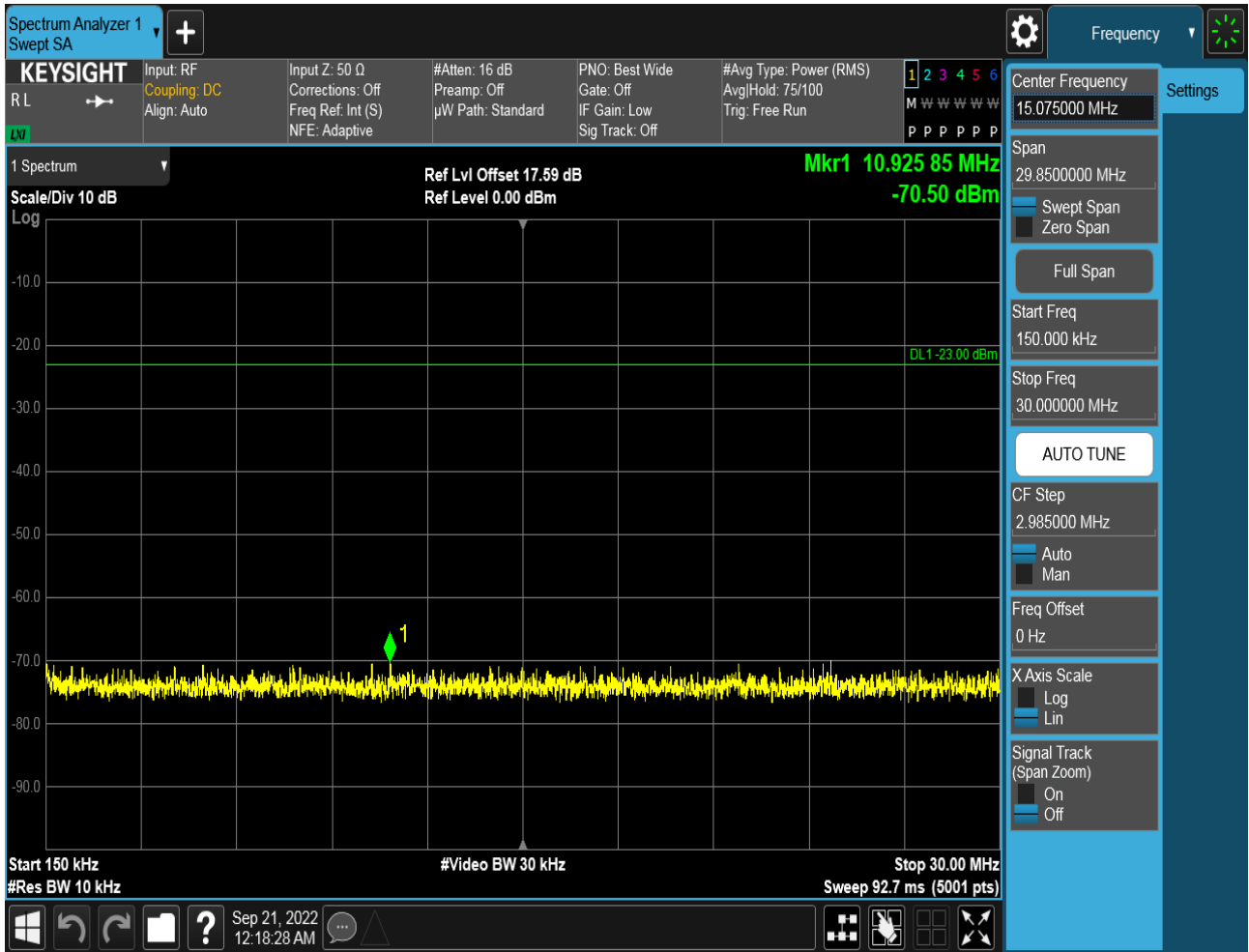


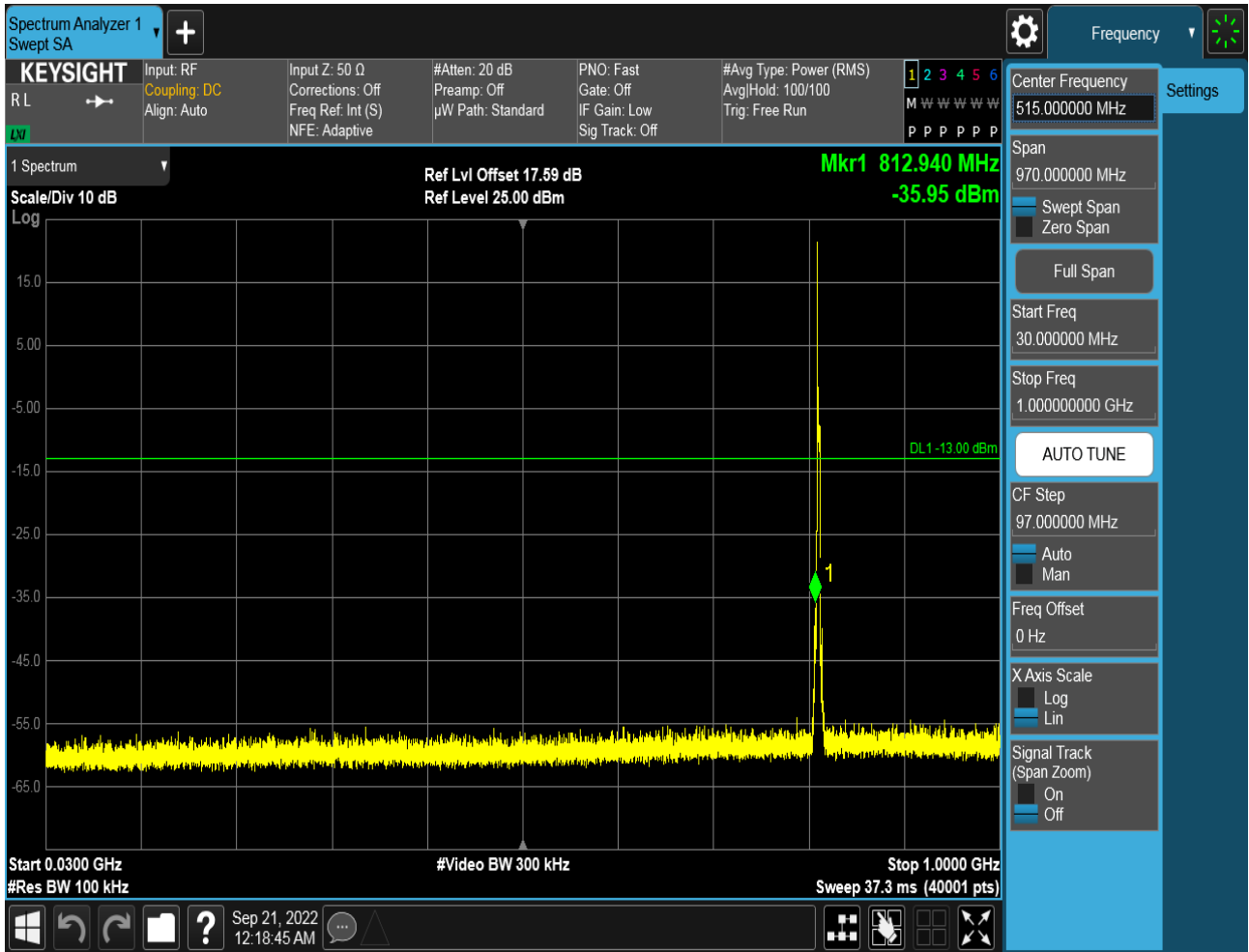
6.2.1.2.2 Test Bandwidth = 3MHz

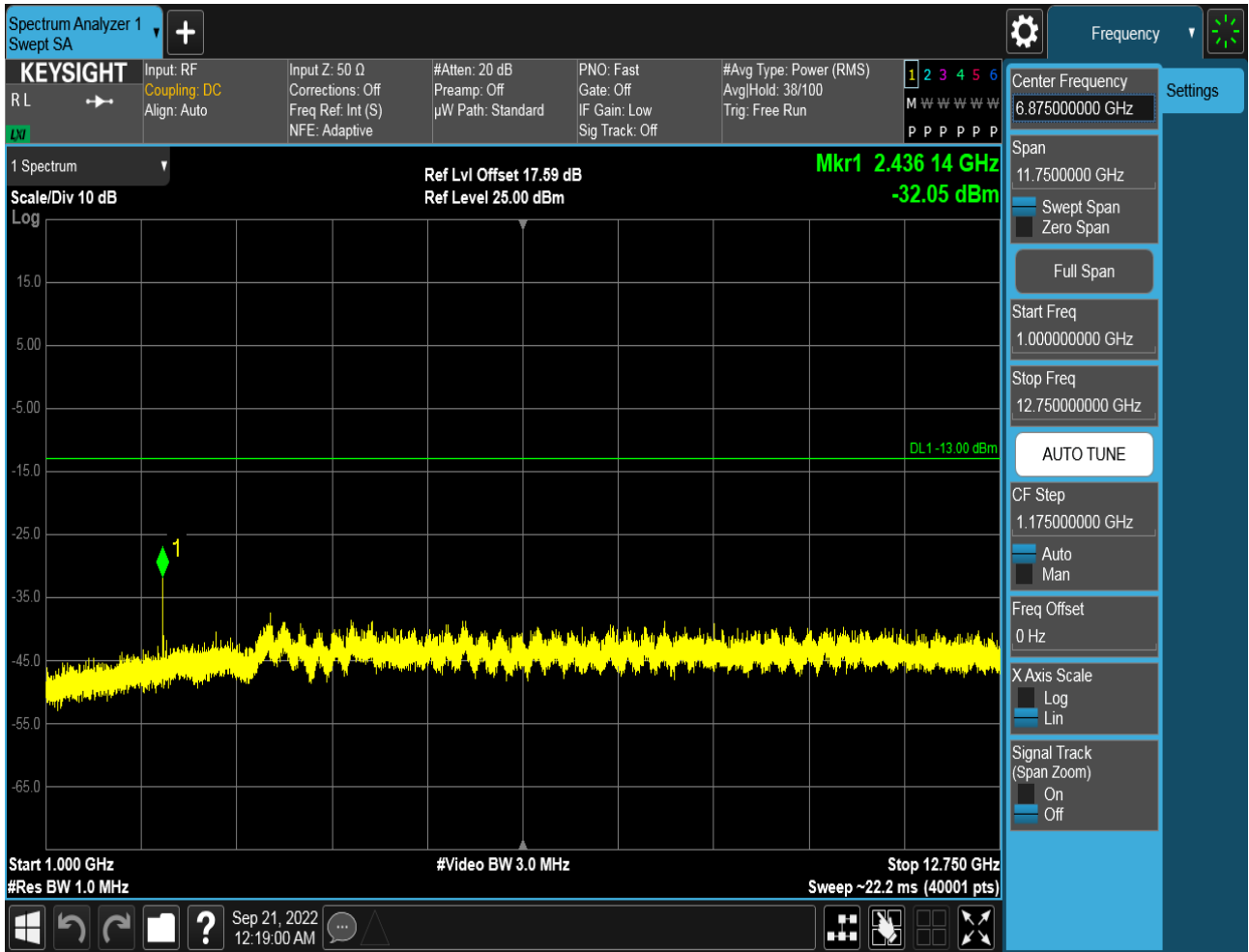
6.2.1.2.2.1 Test Channel = LCH

6.2.1.2.2.1.1 Test RB = RB1#0





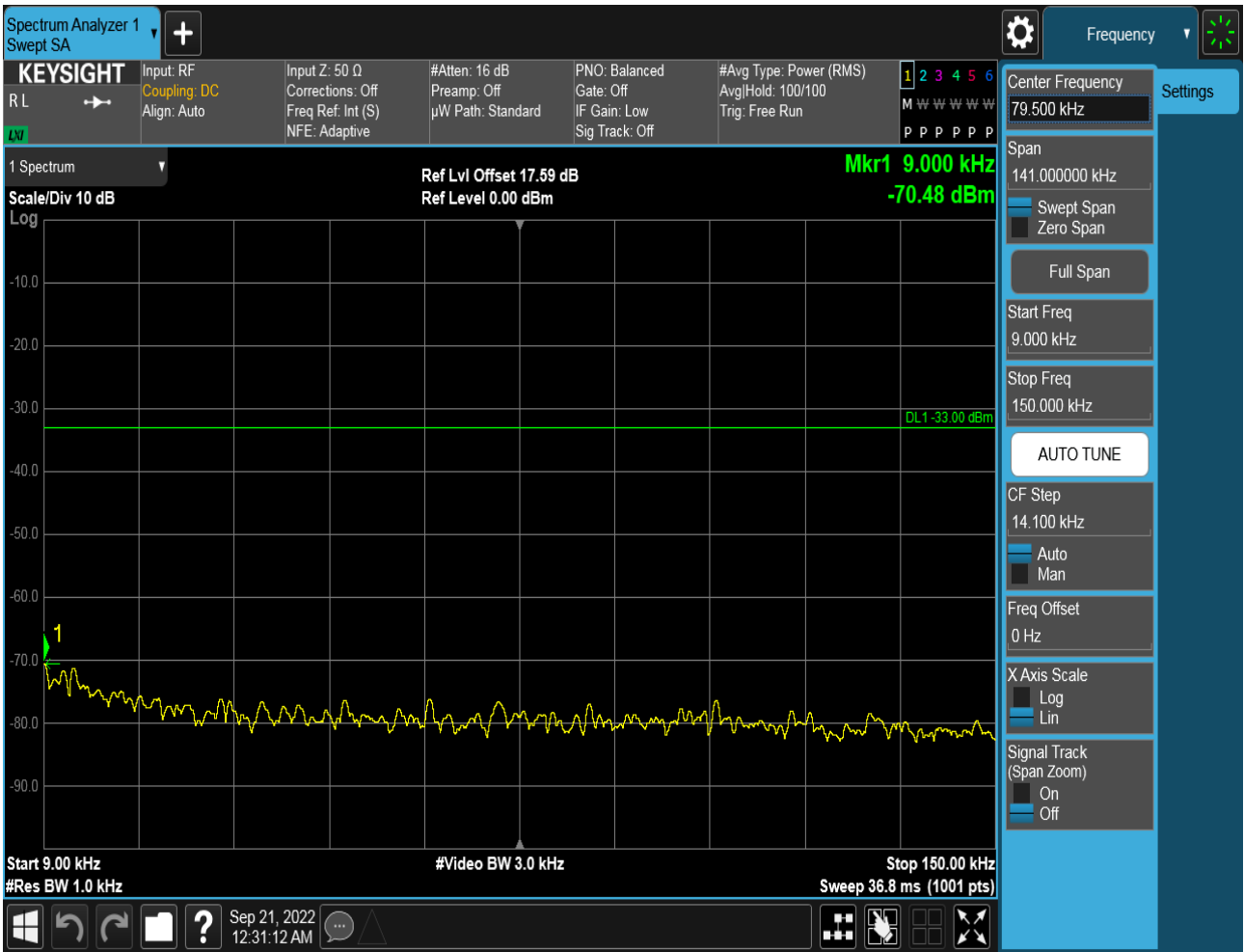


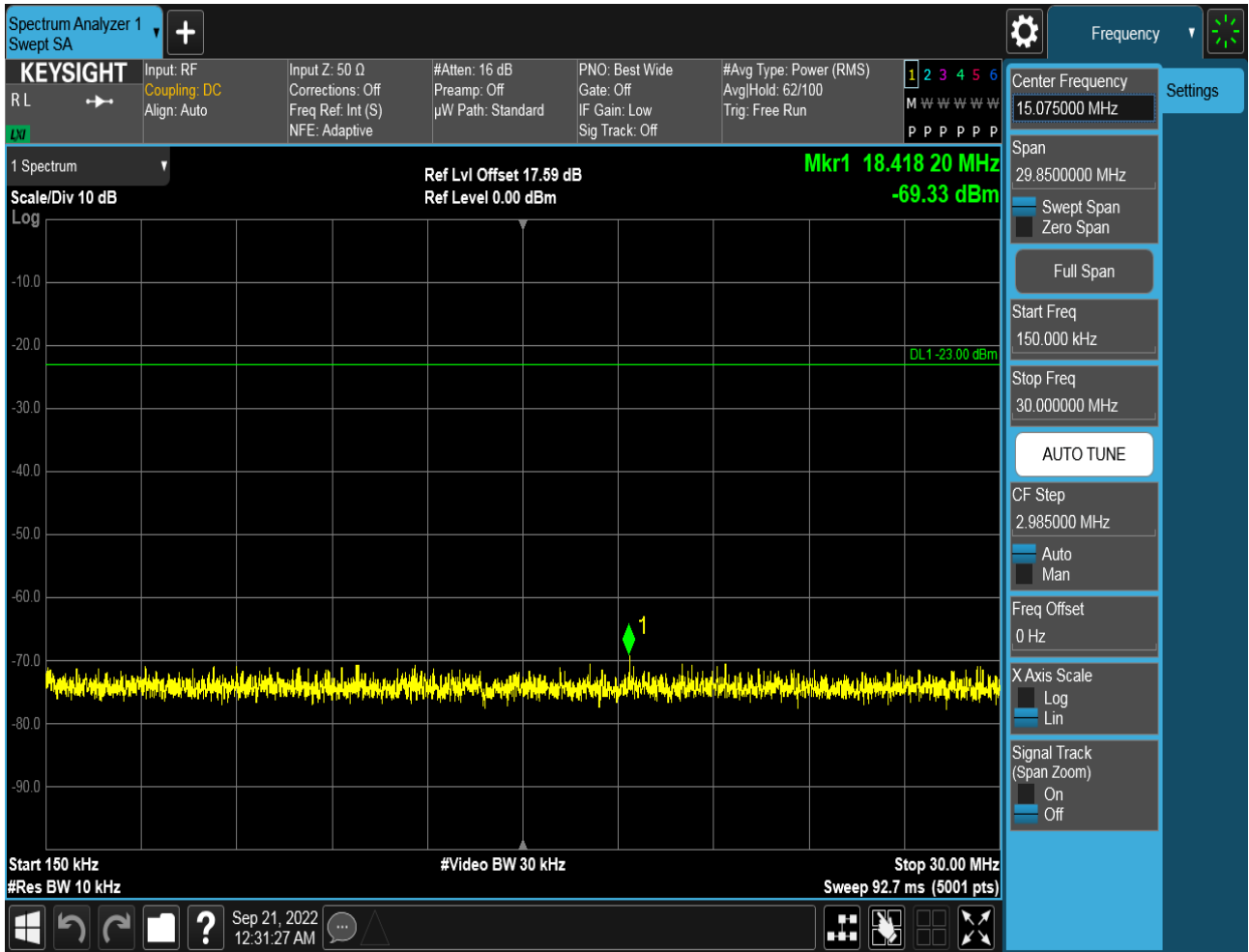


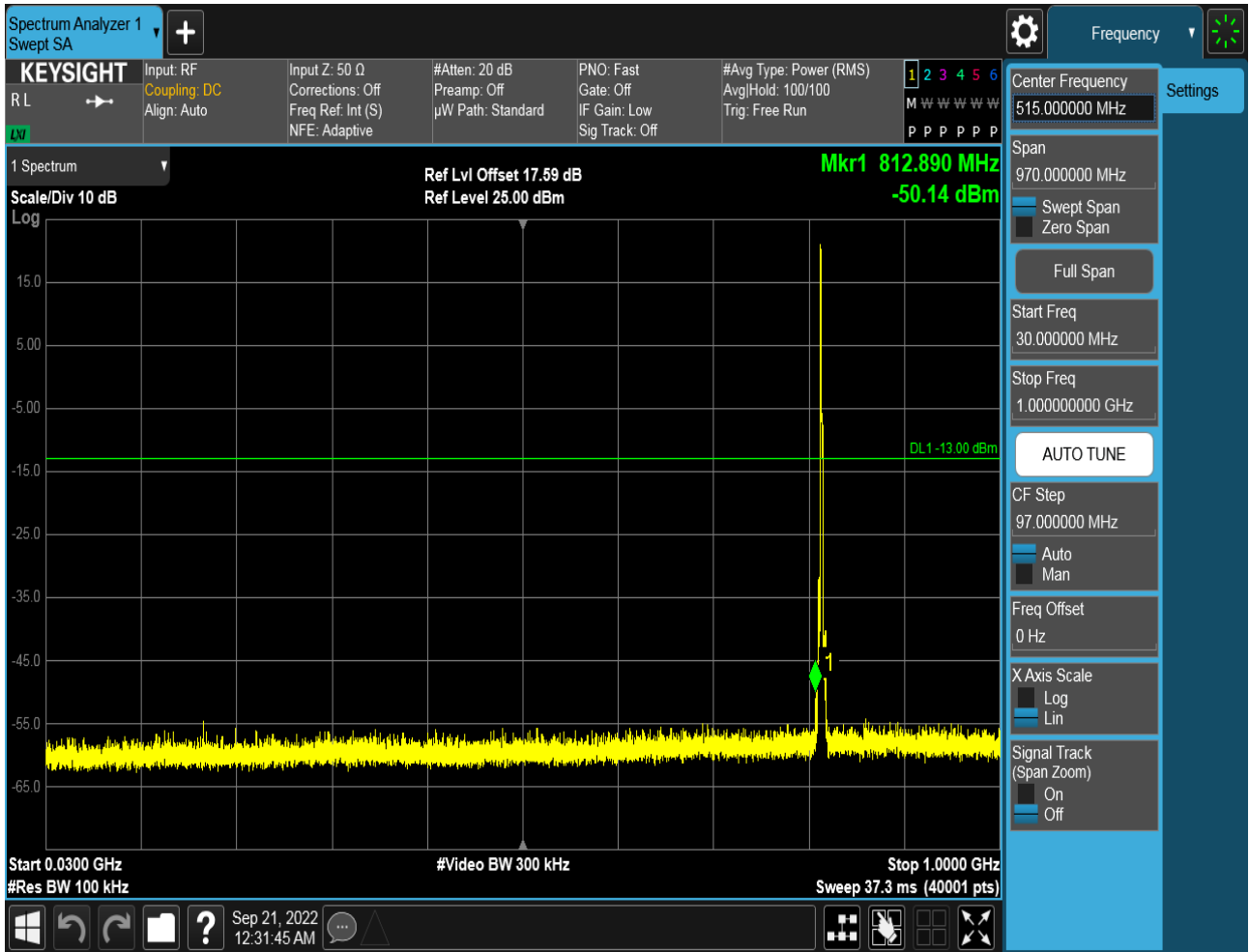


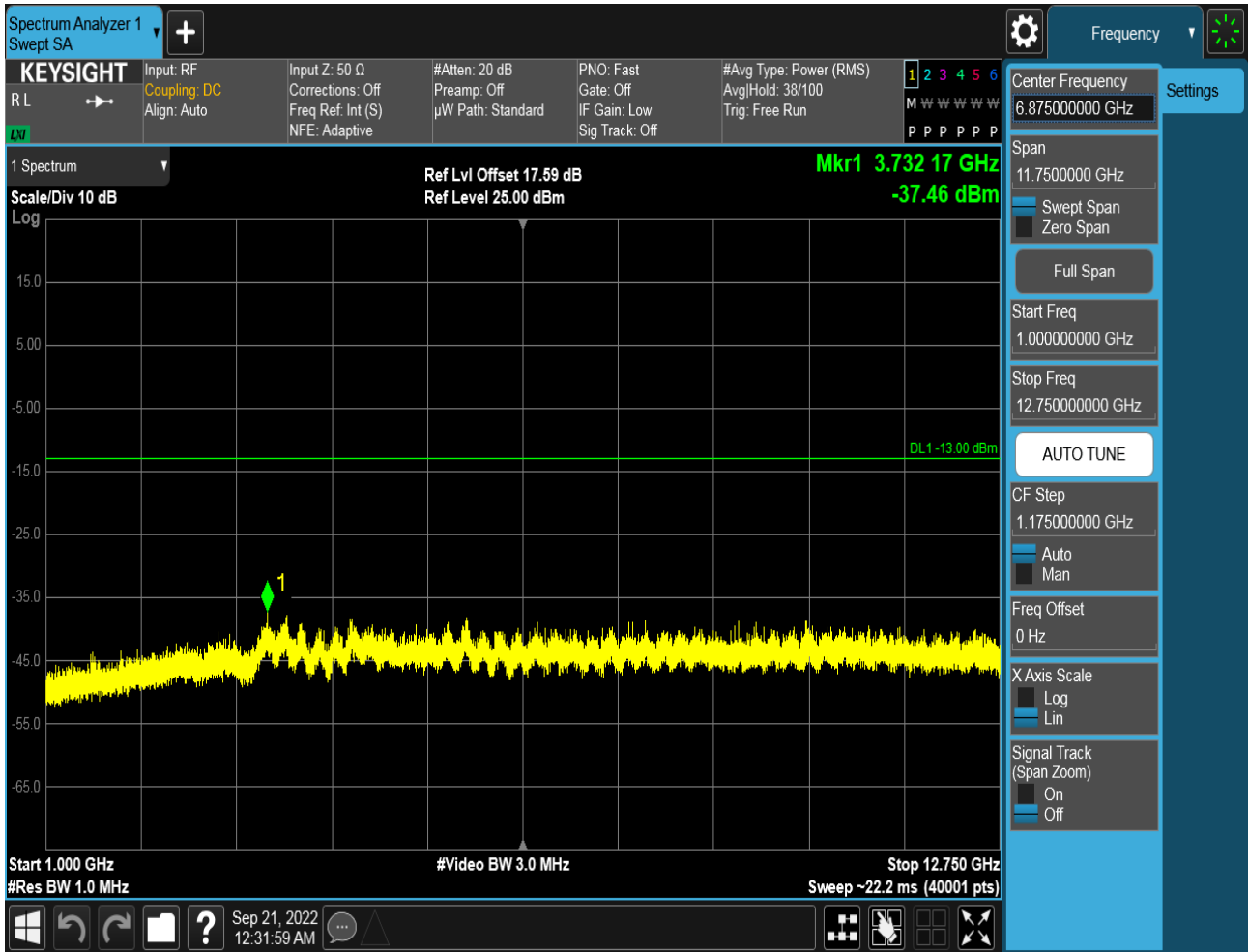
6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0





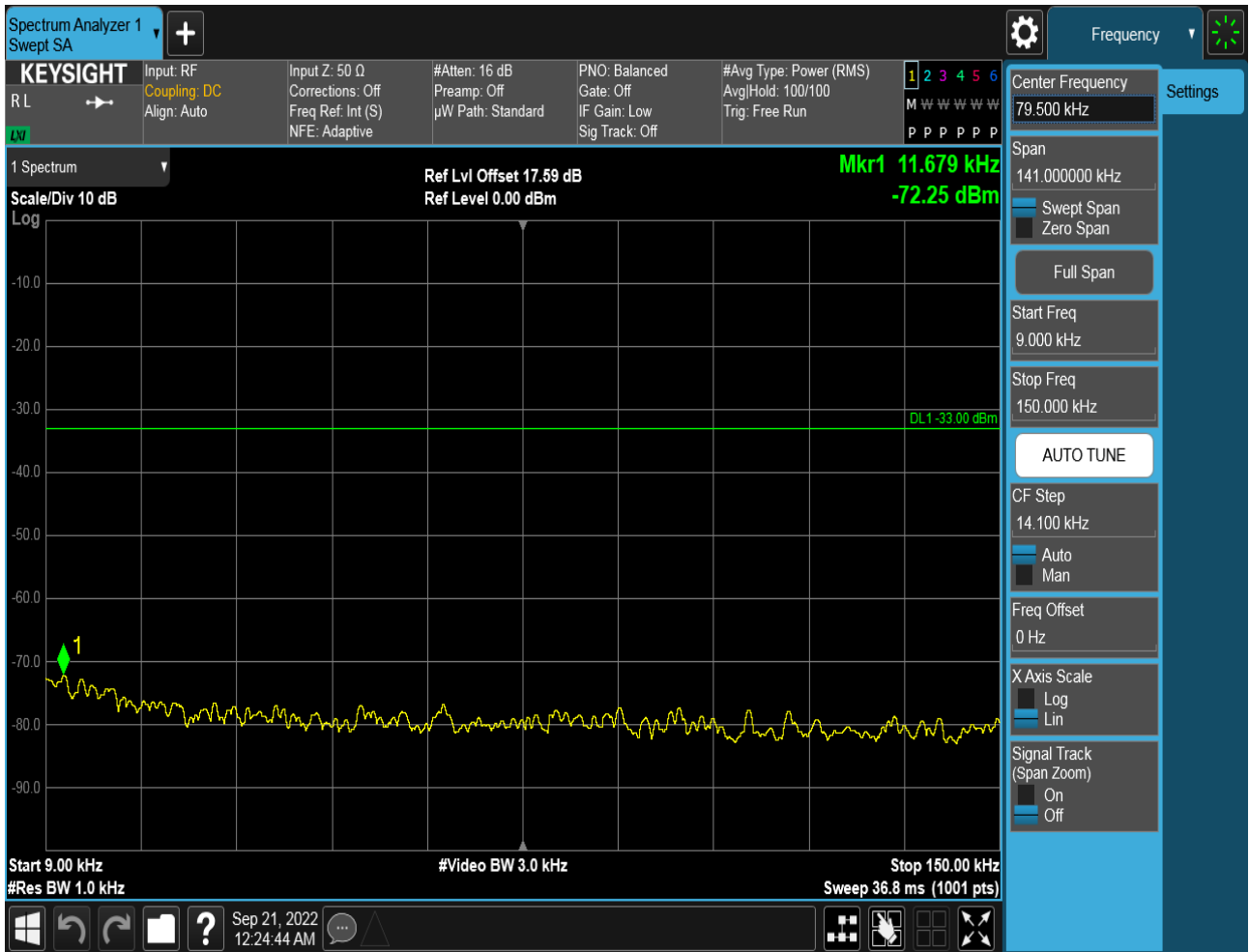


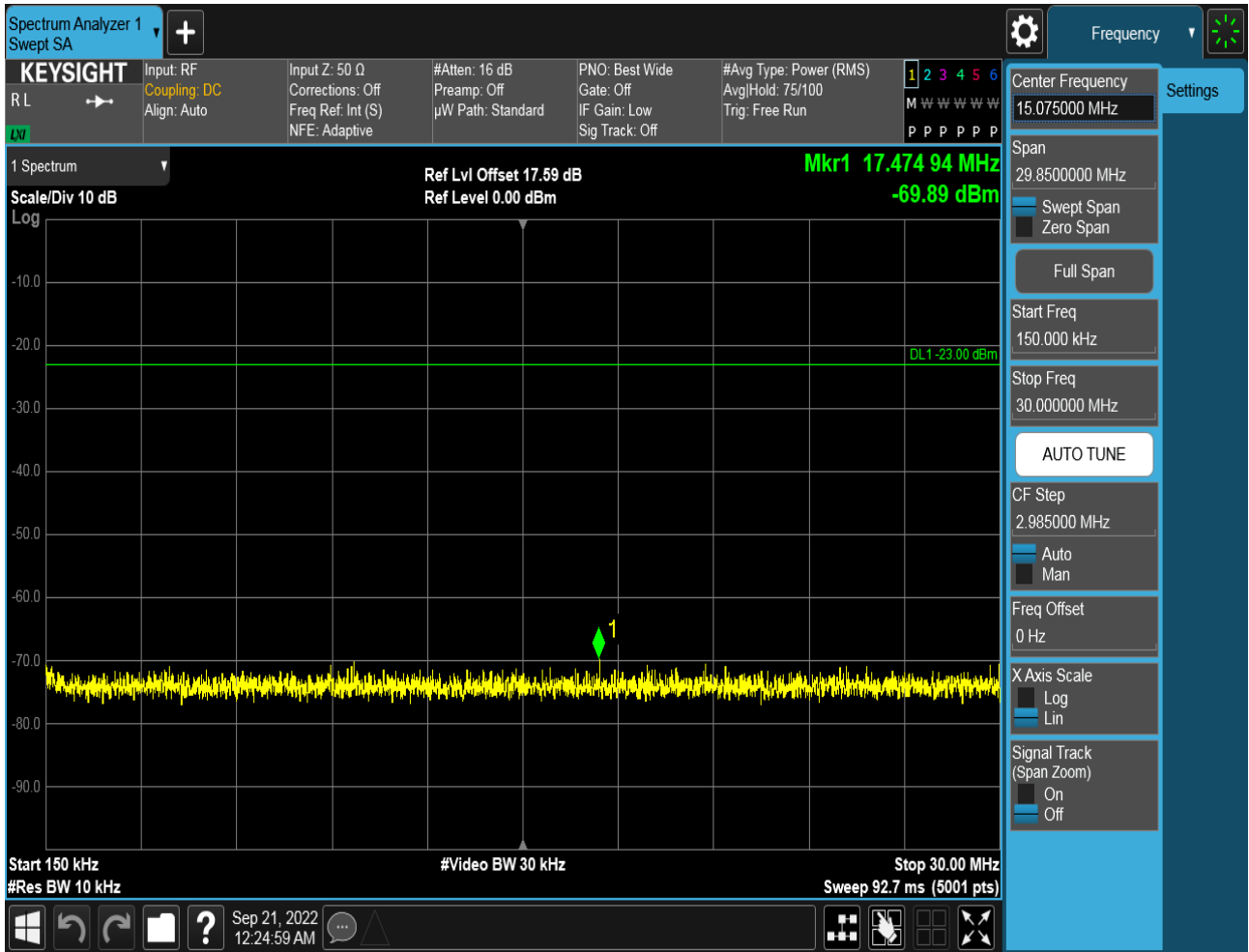


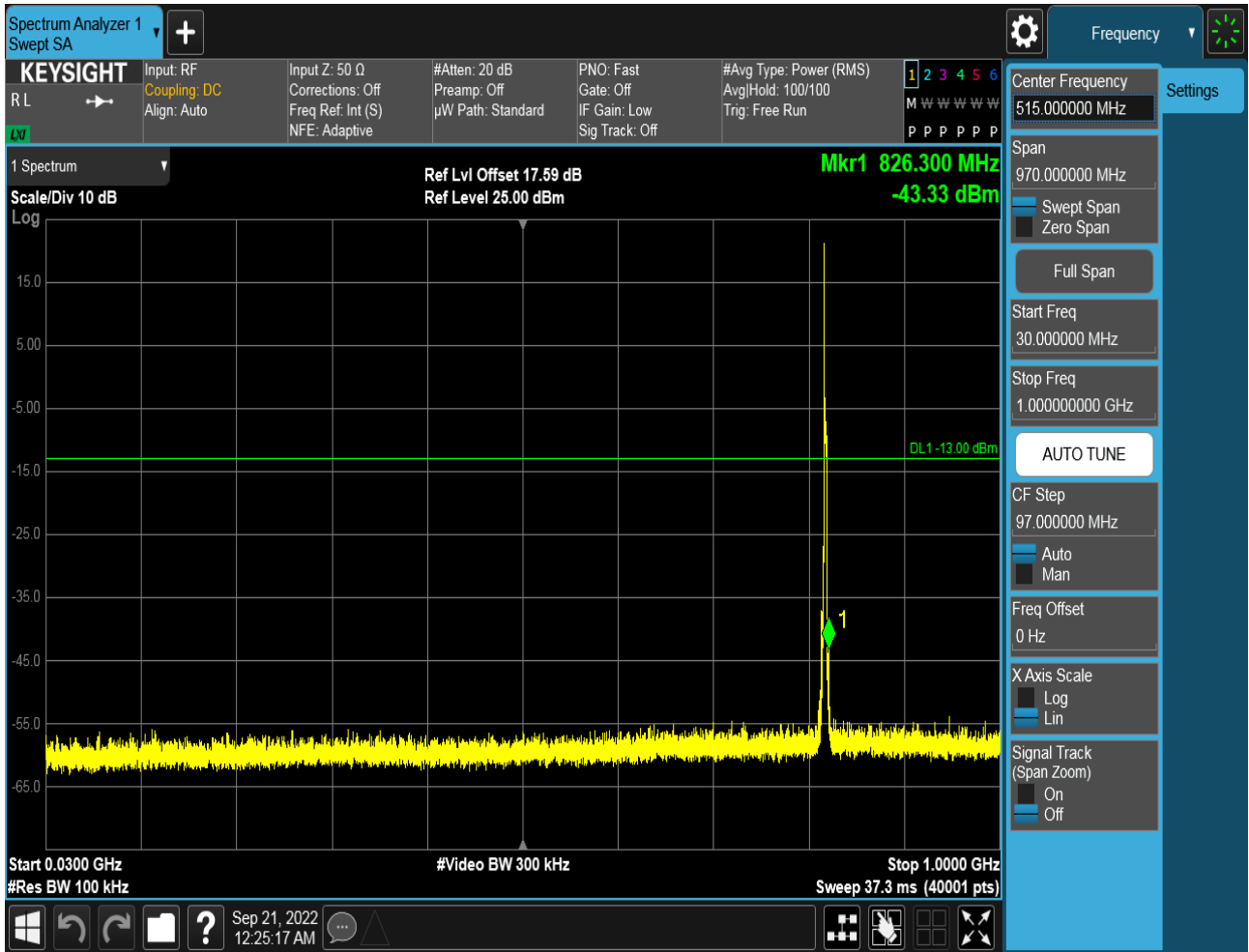


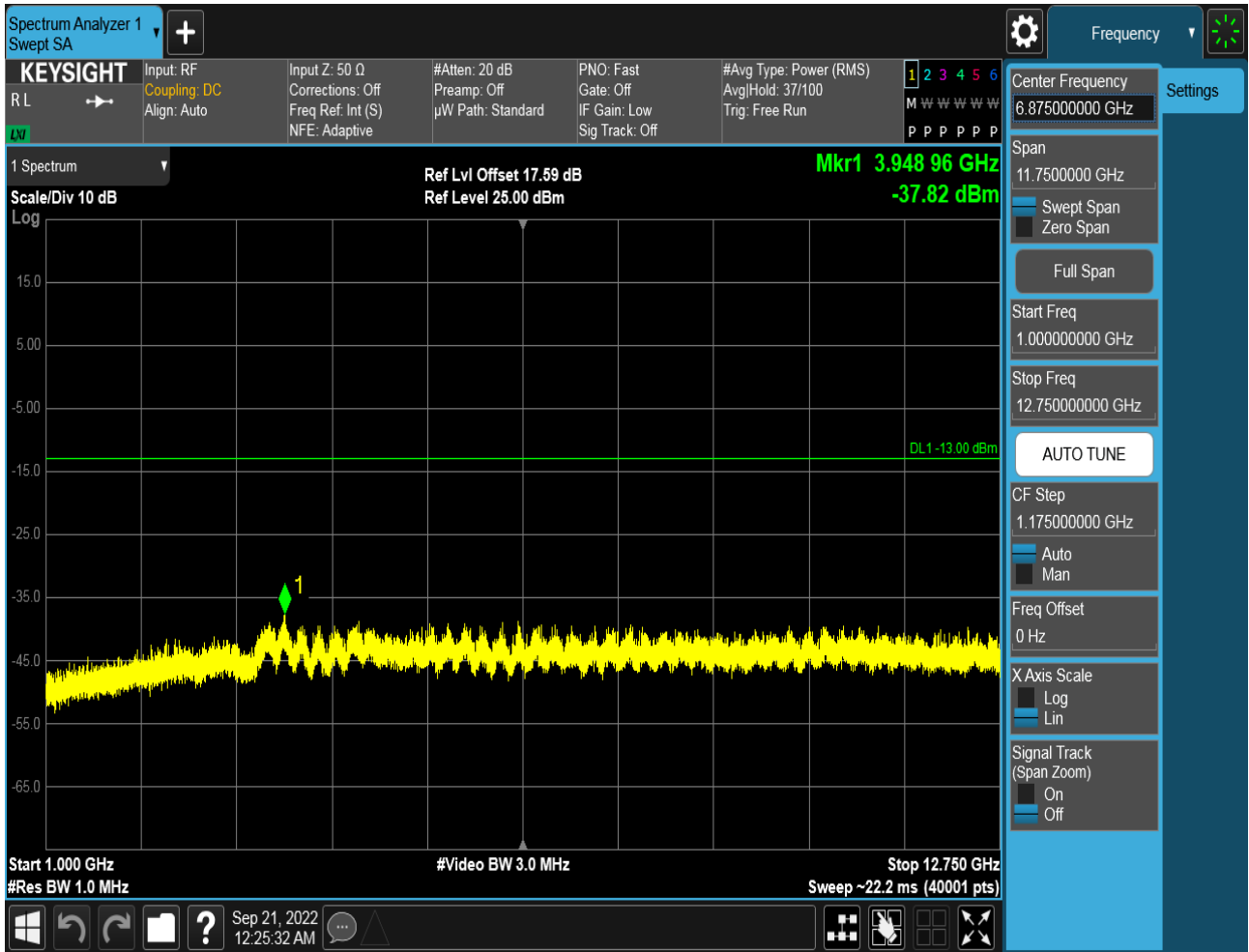
6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0







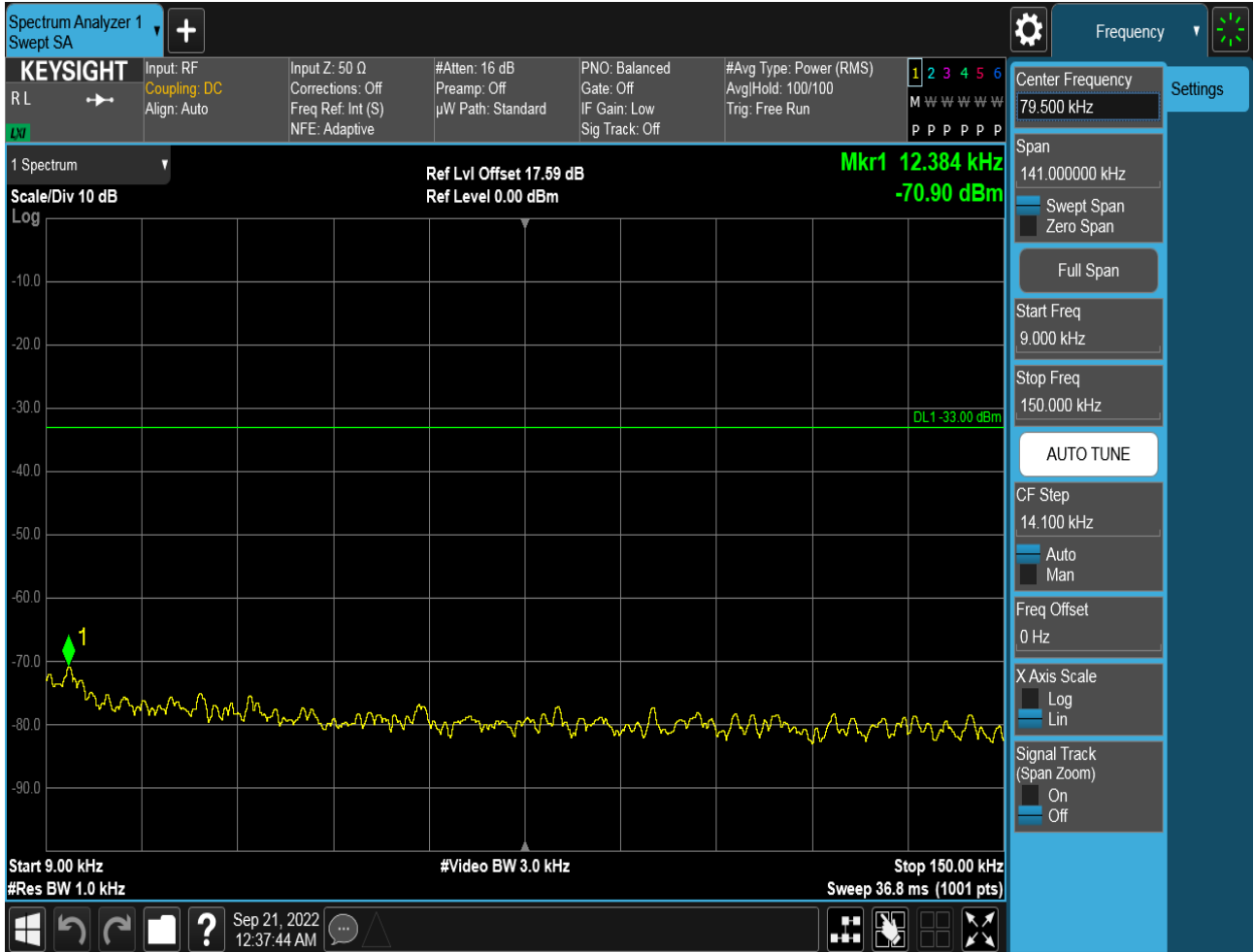


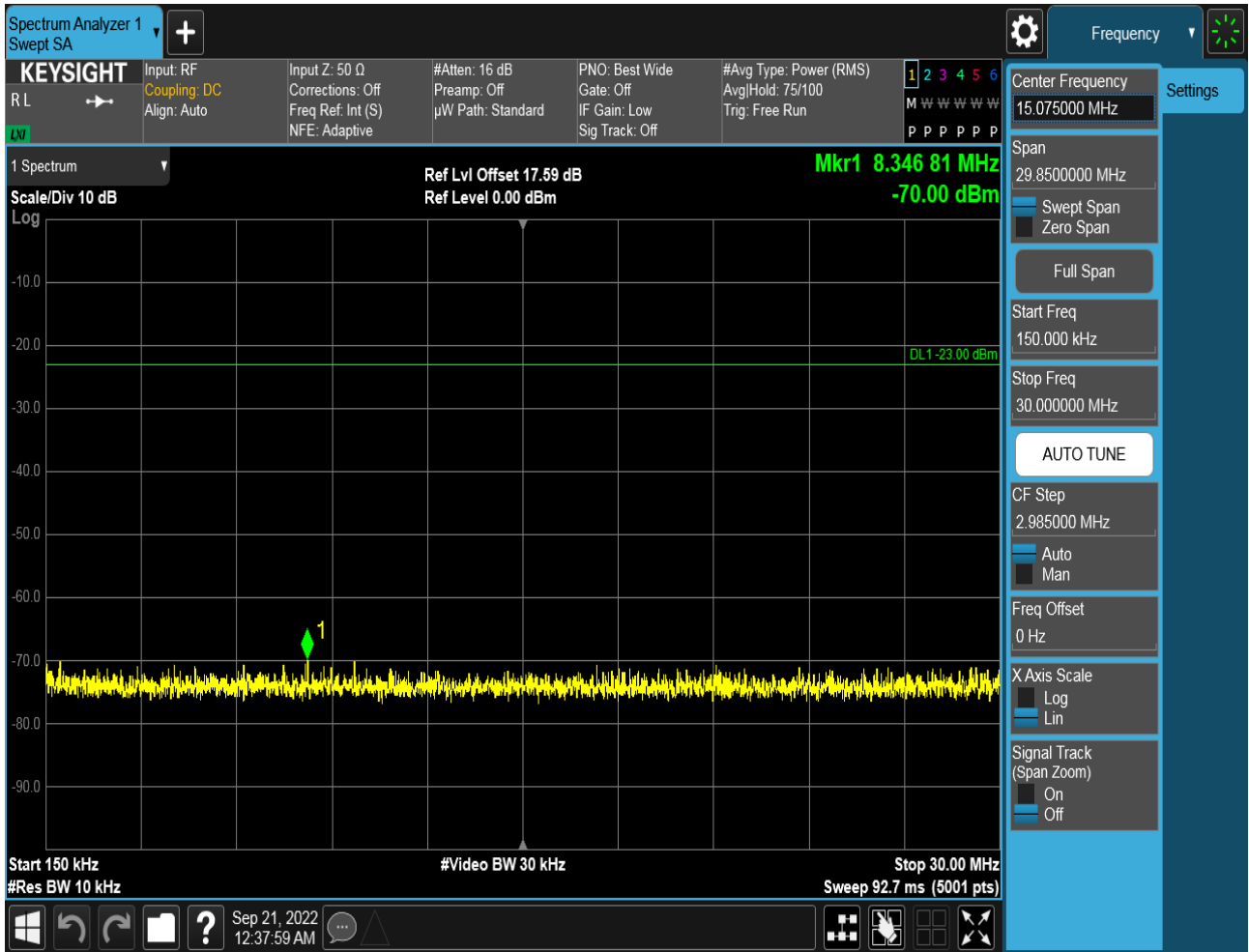


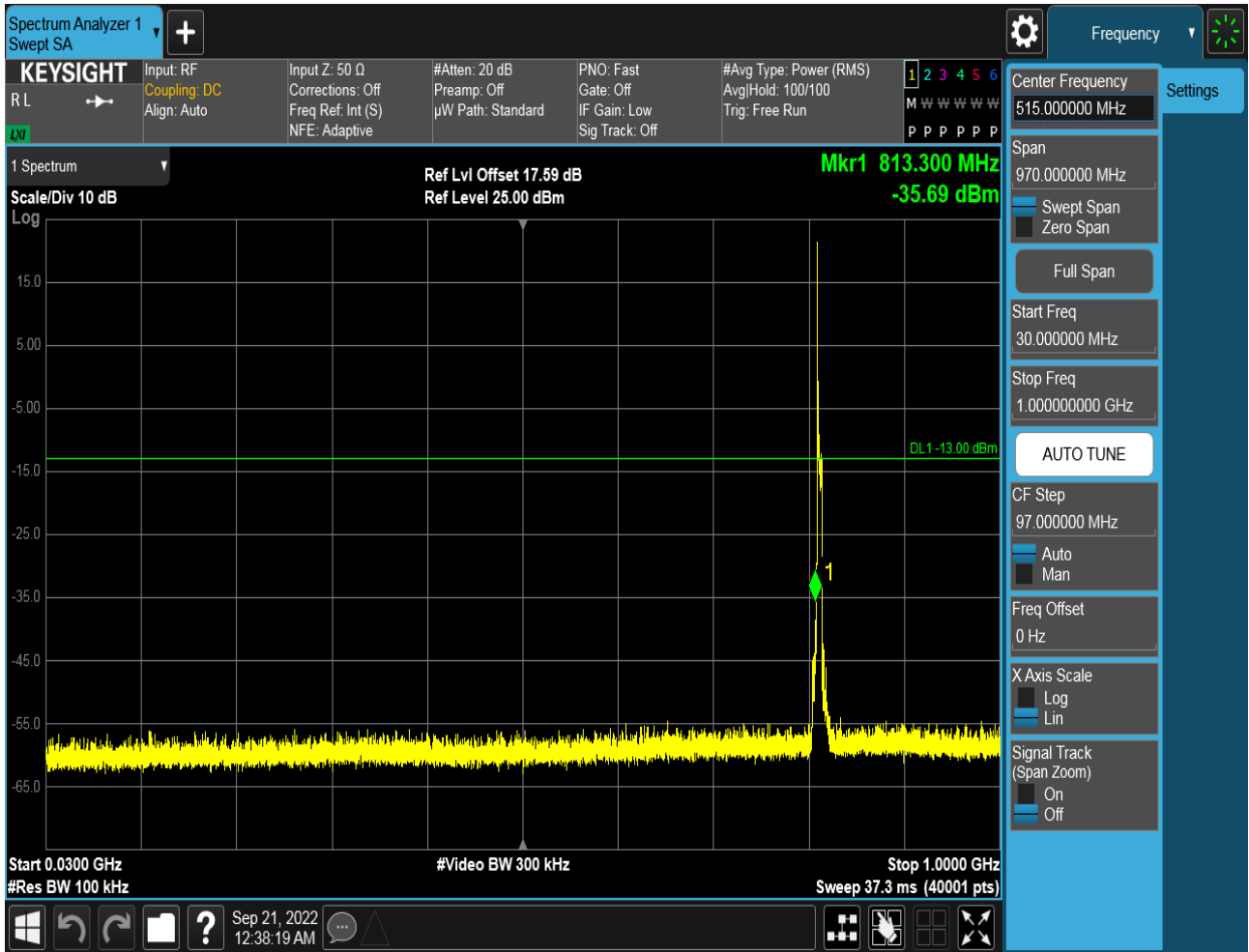
6.2.1.2.3 Test Bandwidth = 5MHz

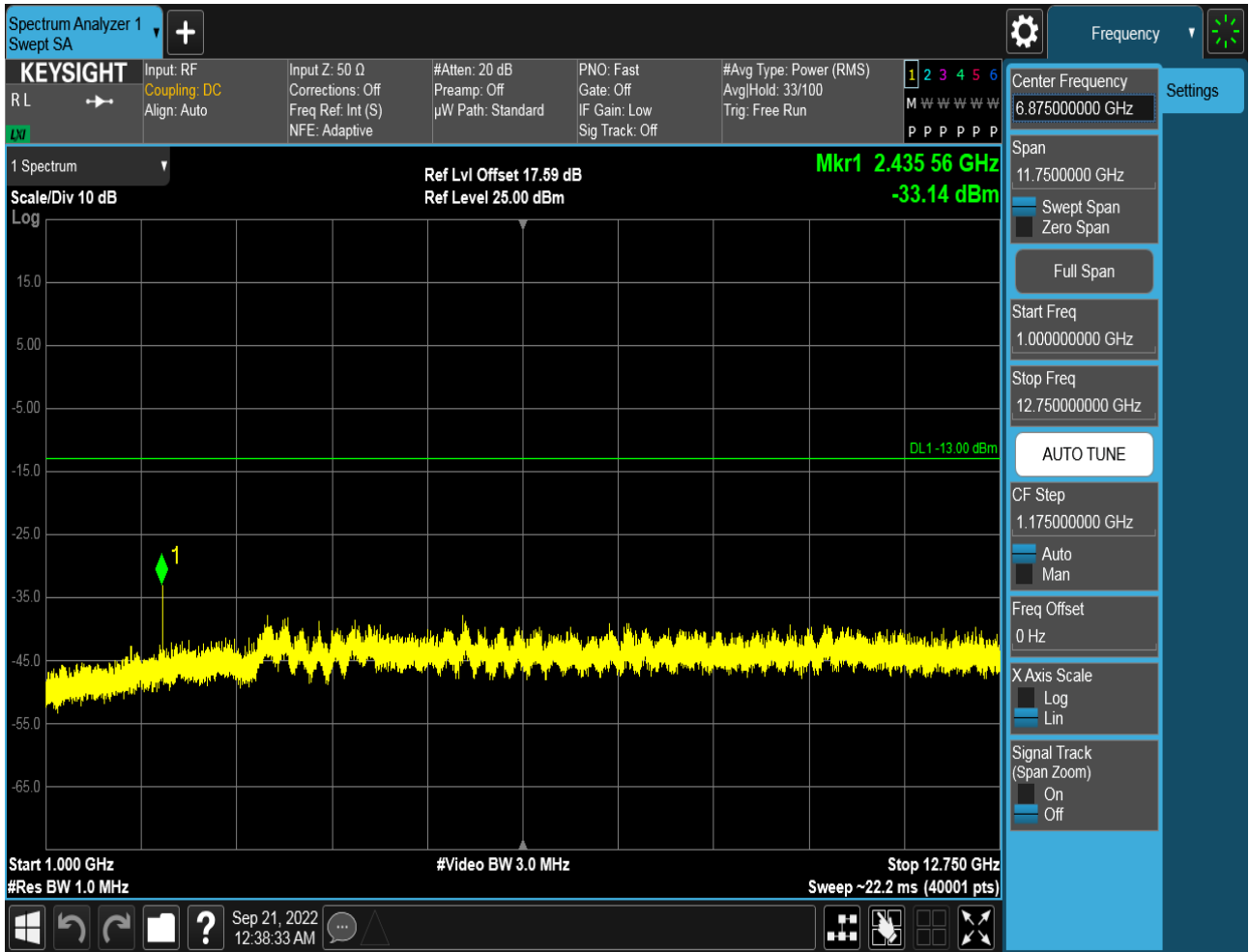
6.2.1.2.3.1 Test Channel = LCH

6.2.1.2.3.1.1 Test RB = RB1#0





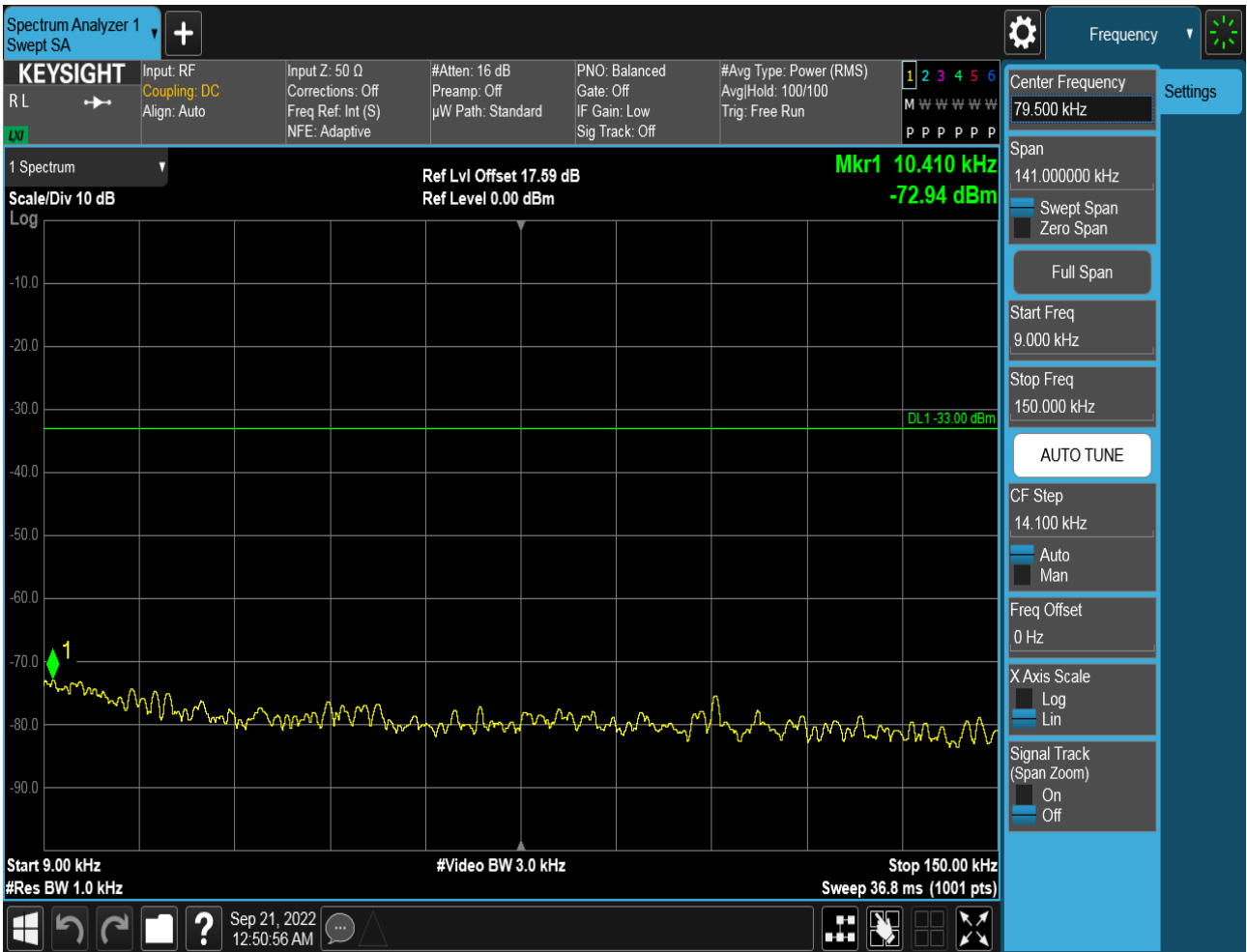


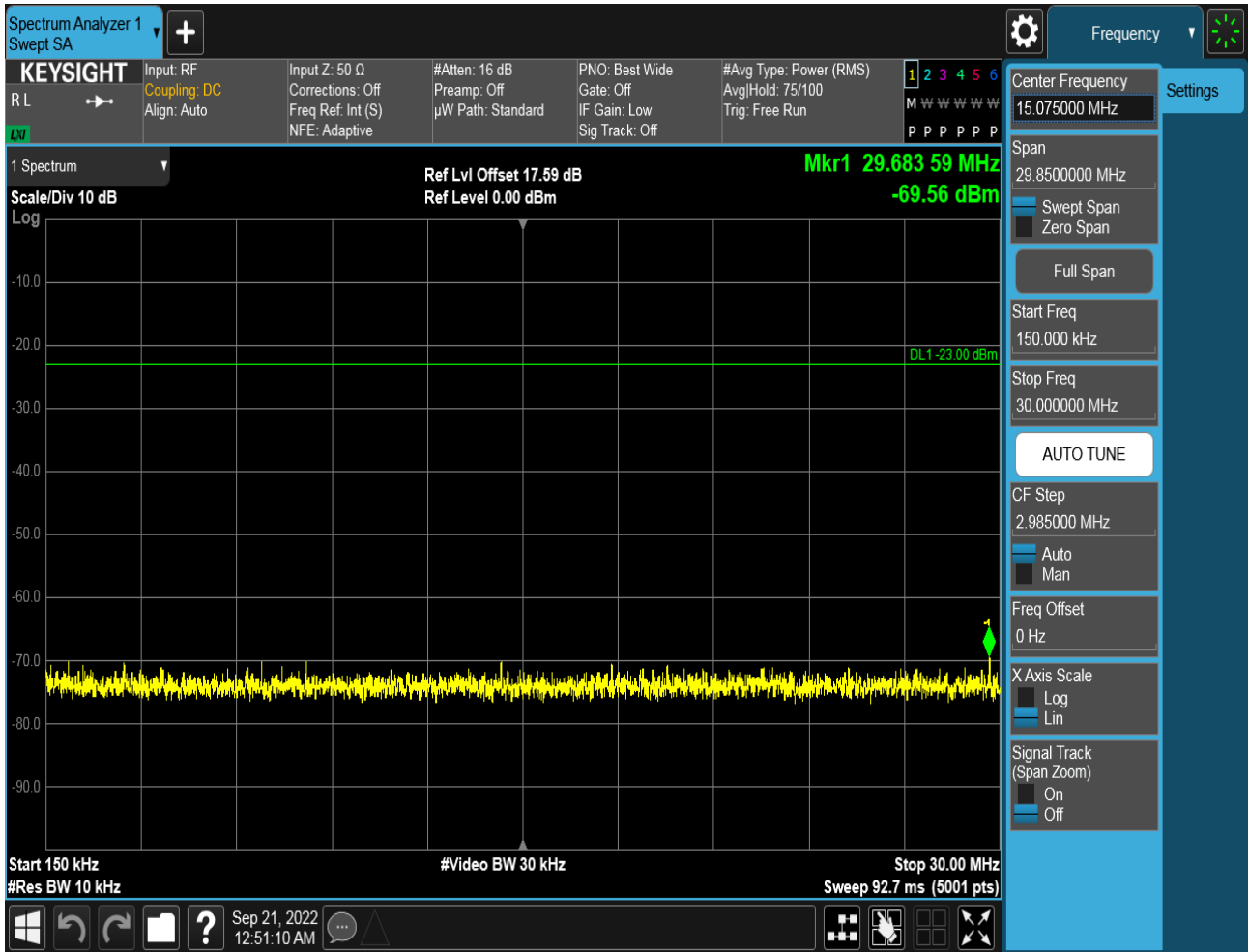


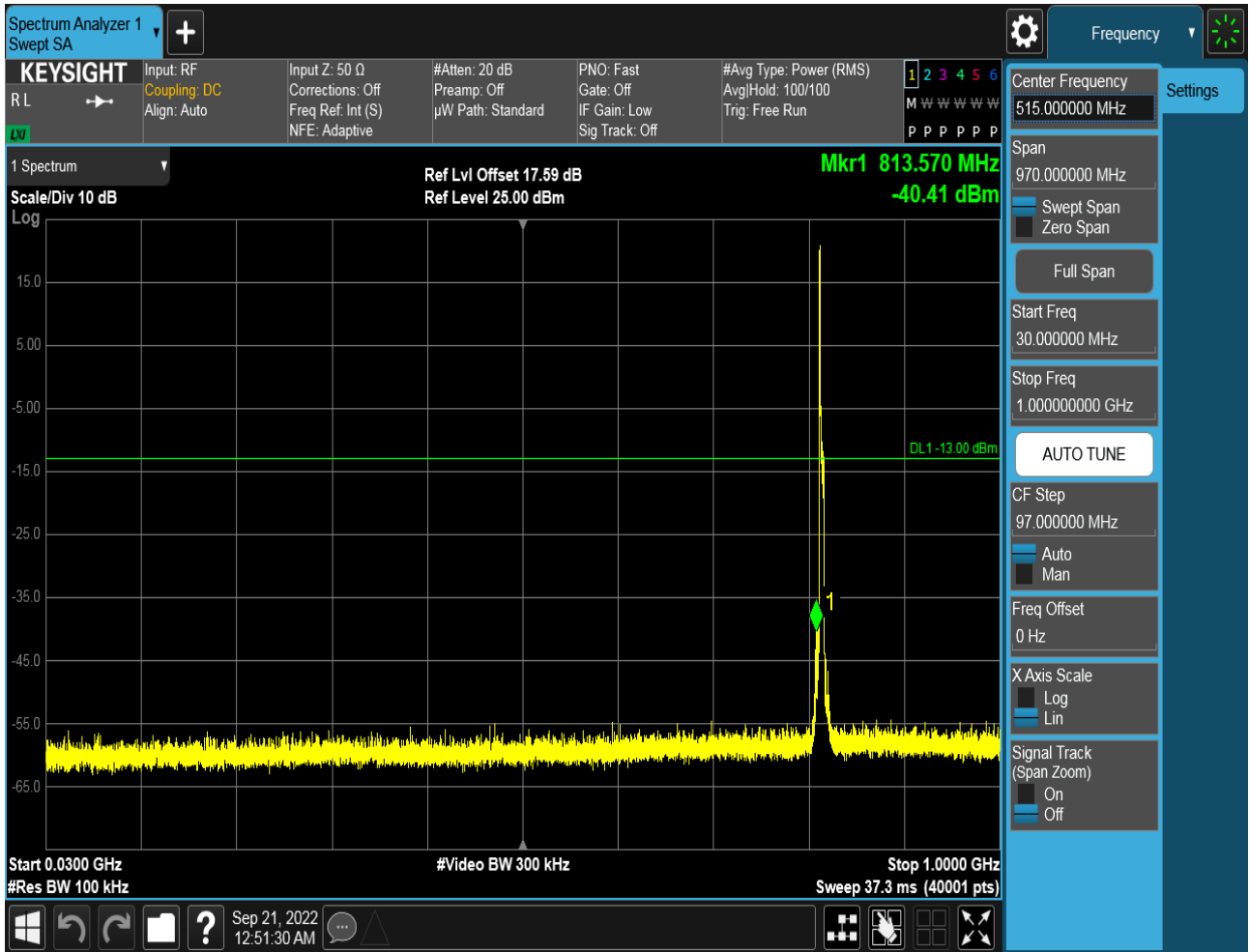


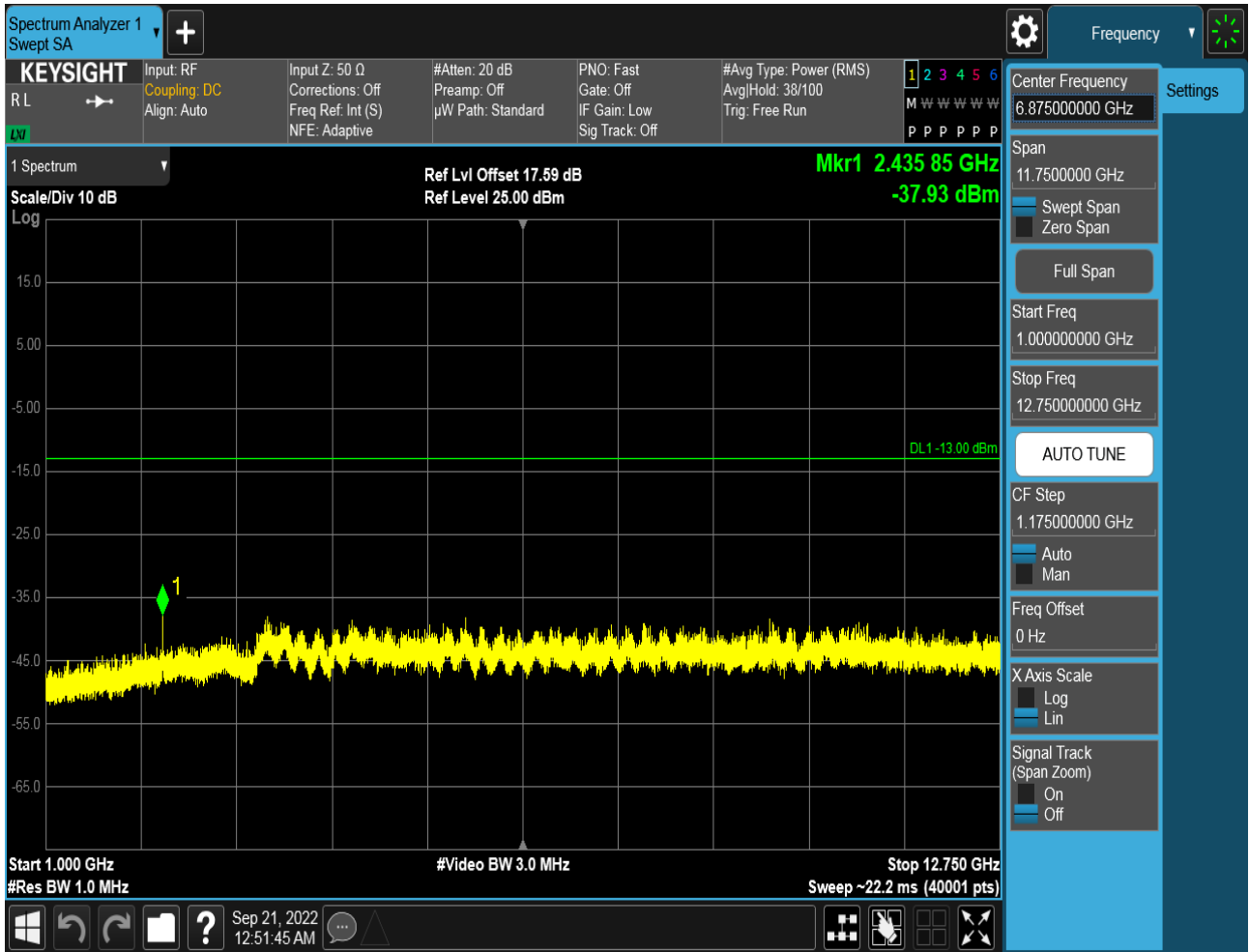
6.2.1.2.3.2 Test Channel = MCH

6.2.1.2.3.2.1 Test RB = RB1#0





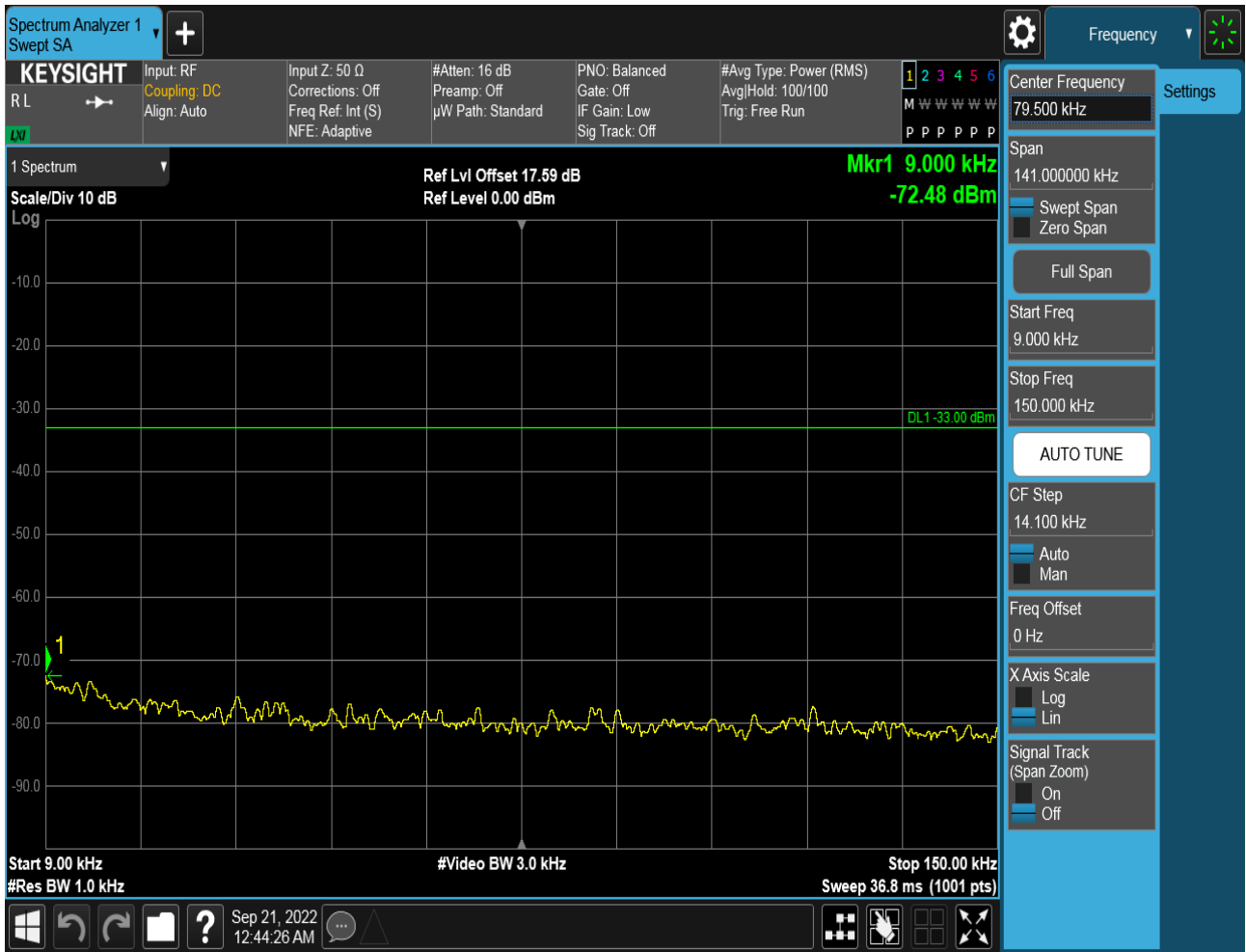


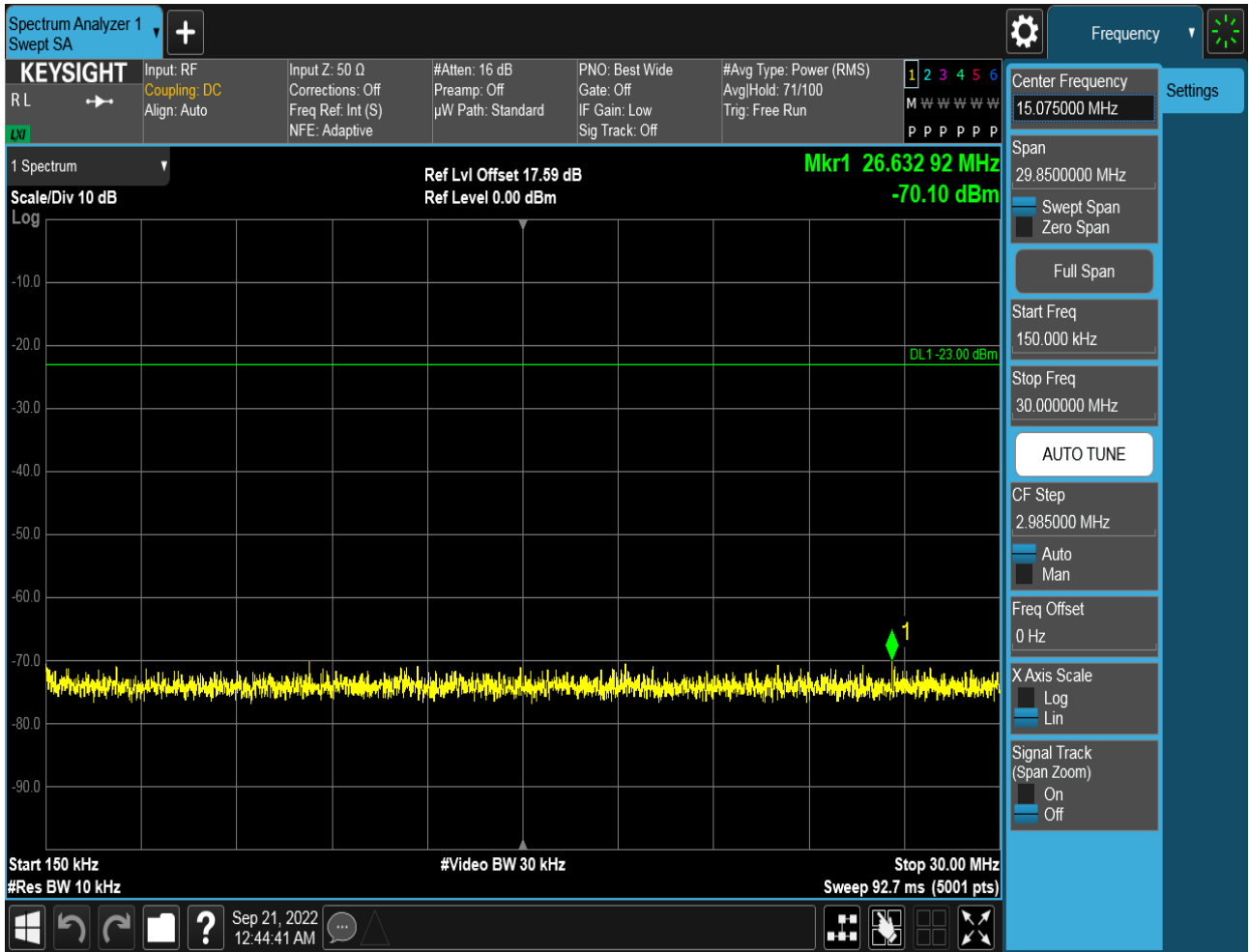


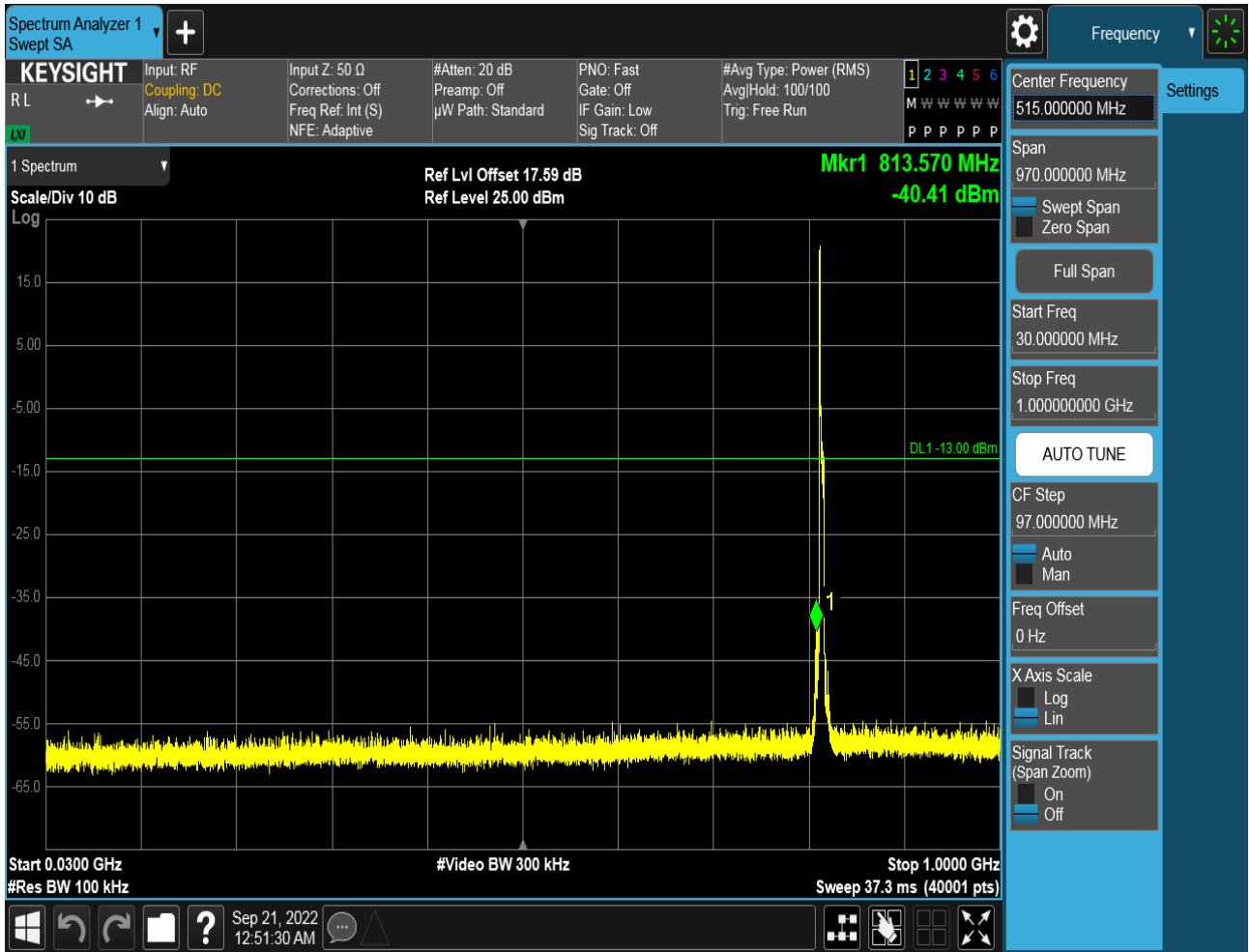


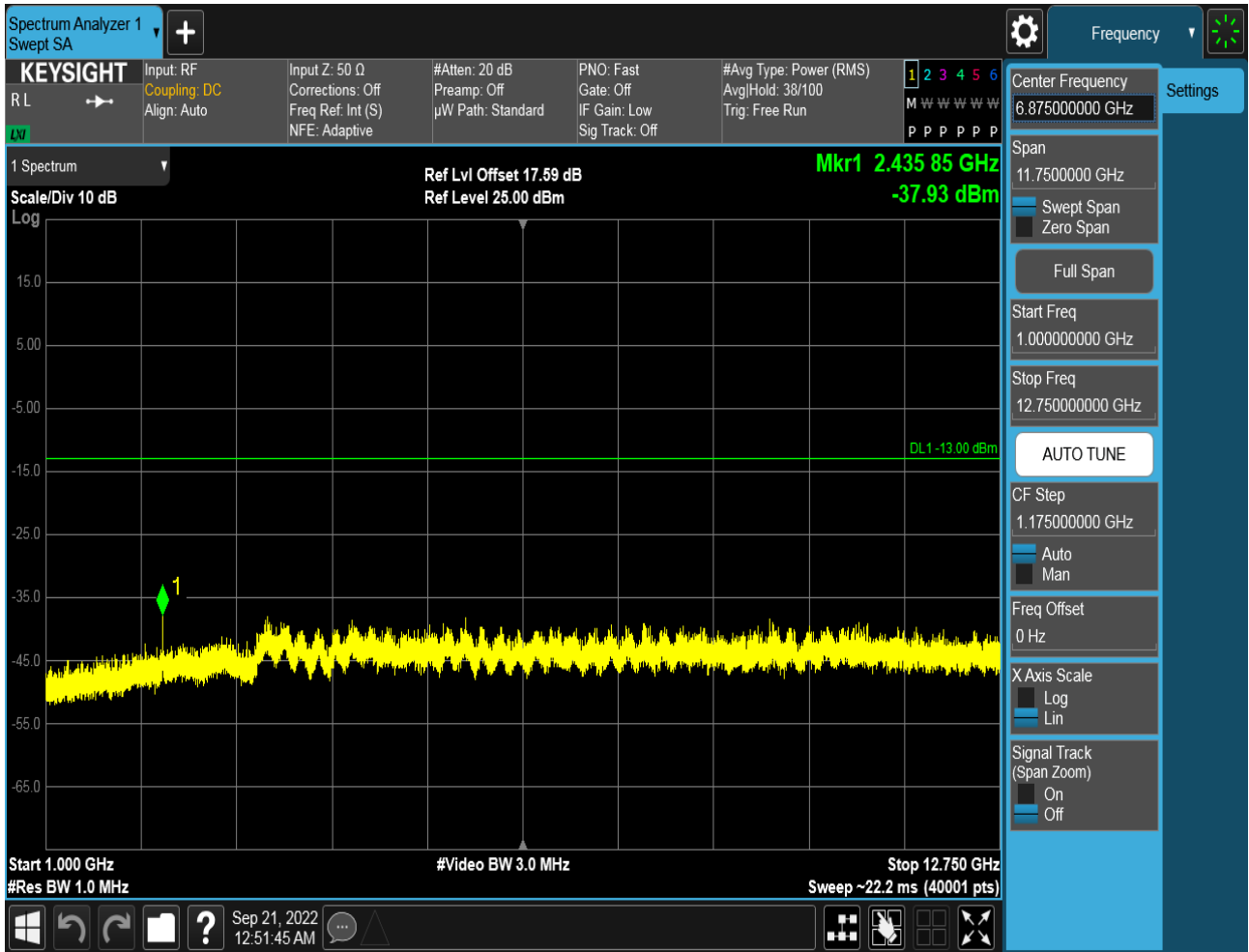
6.2.1.2.3.3 Test Channel = HCH

6.2.1.2.3.3.1 Test RB = RB1#0







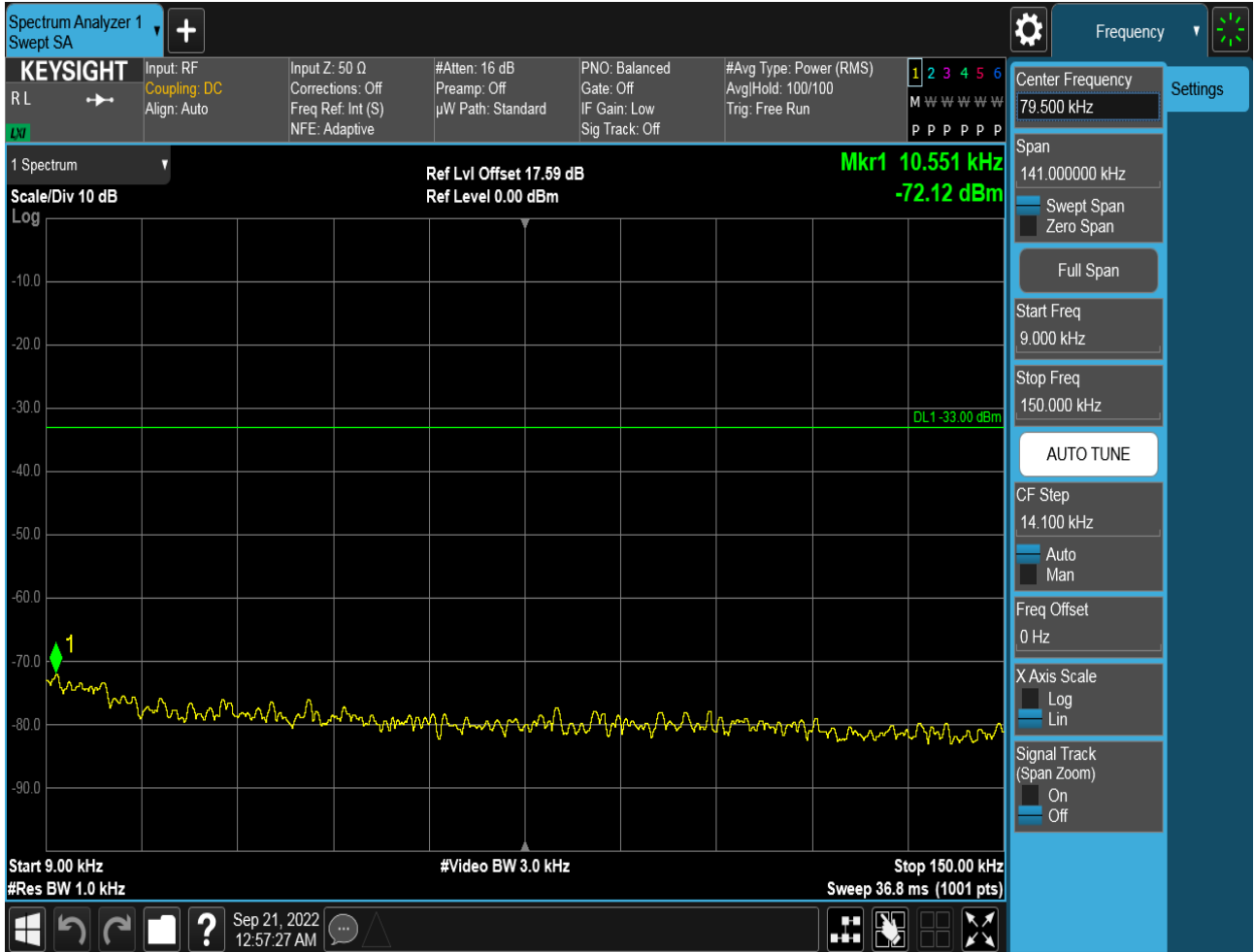


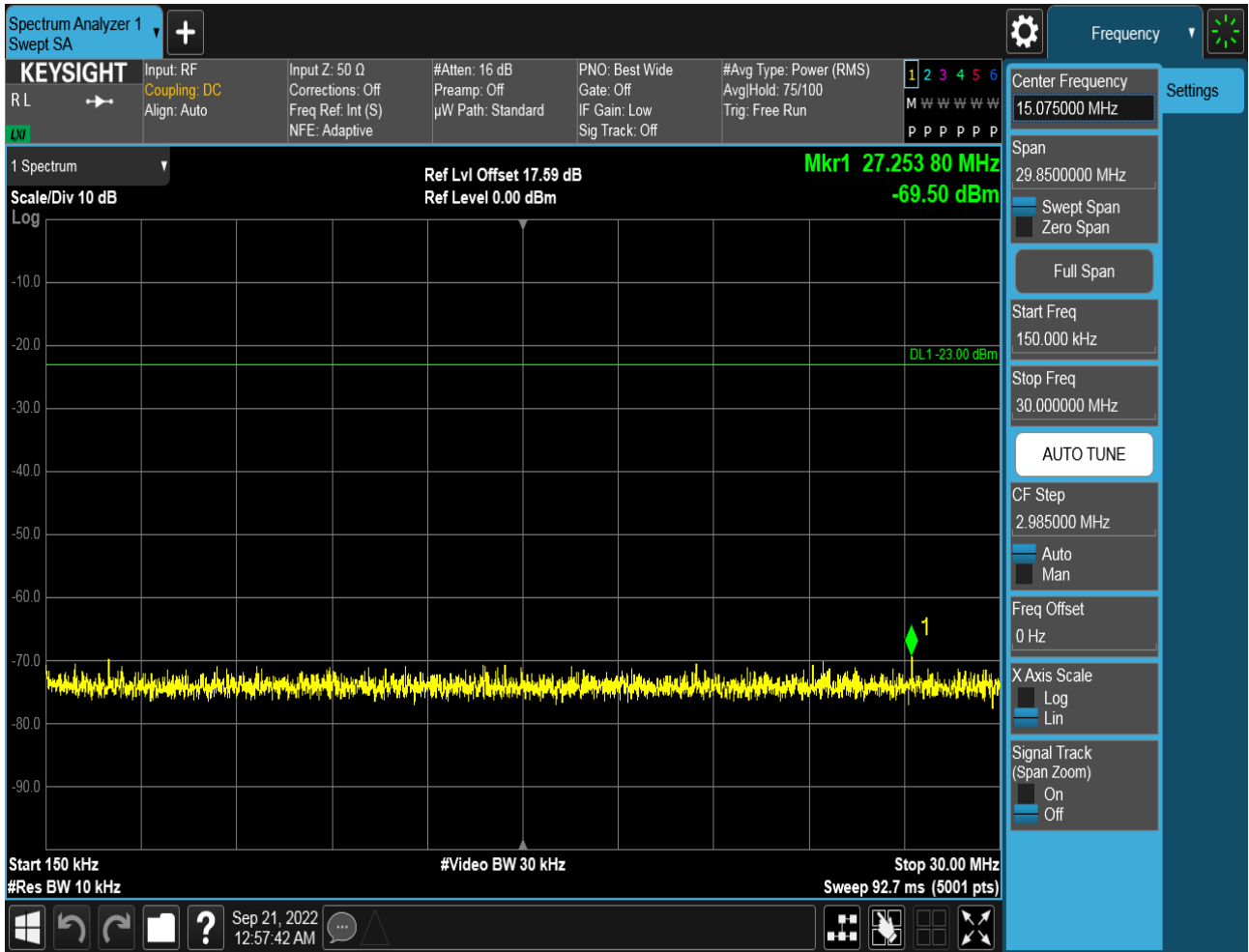


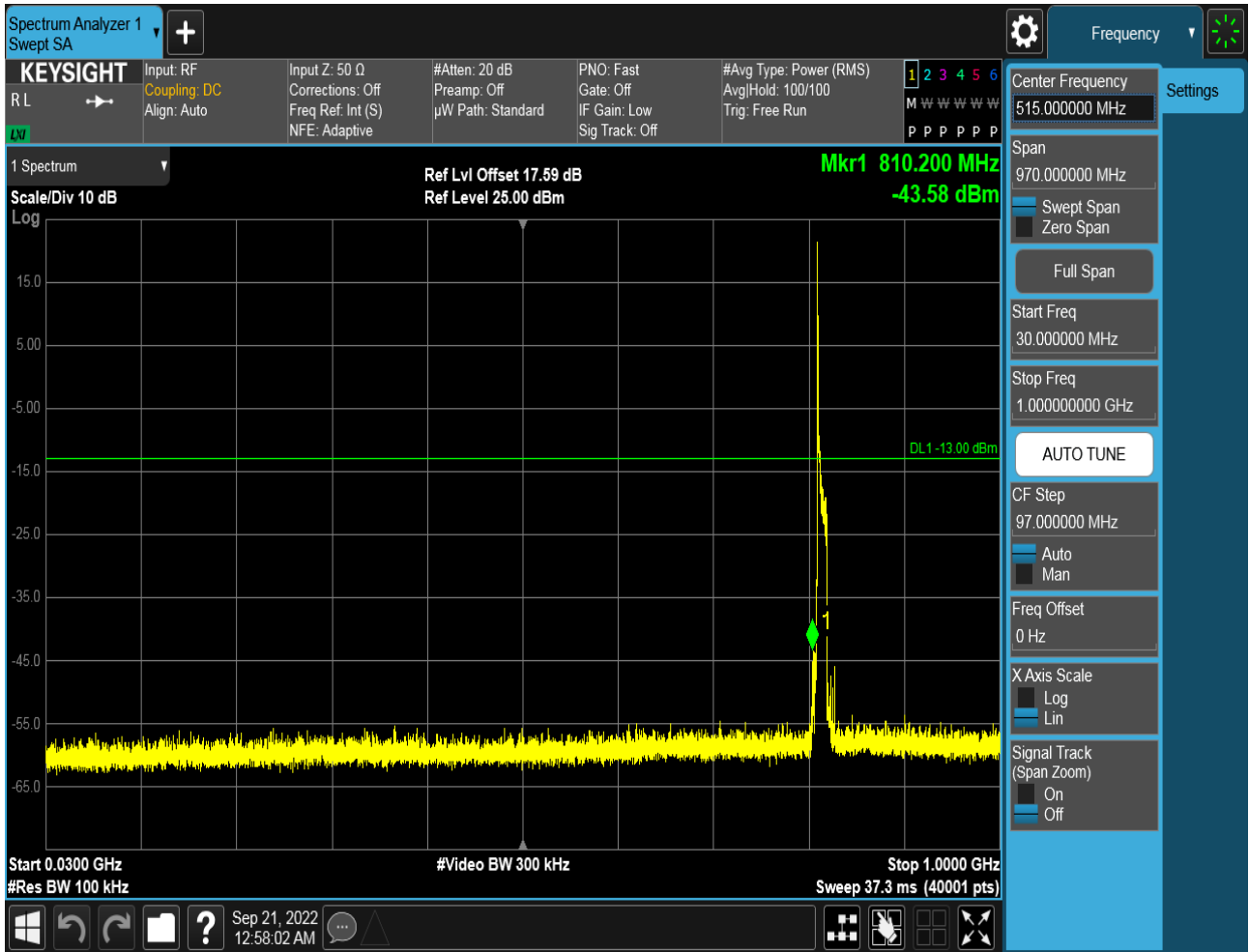
6.2.1.2.4 Test Bandwidth = 10MHz

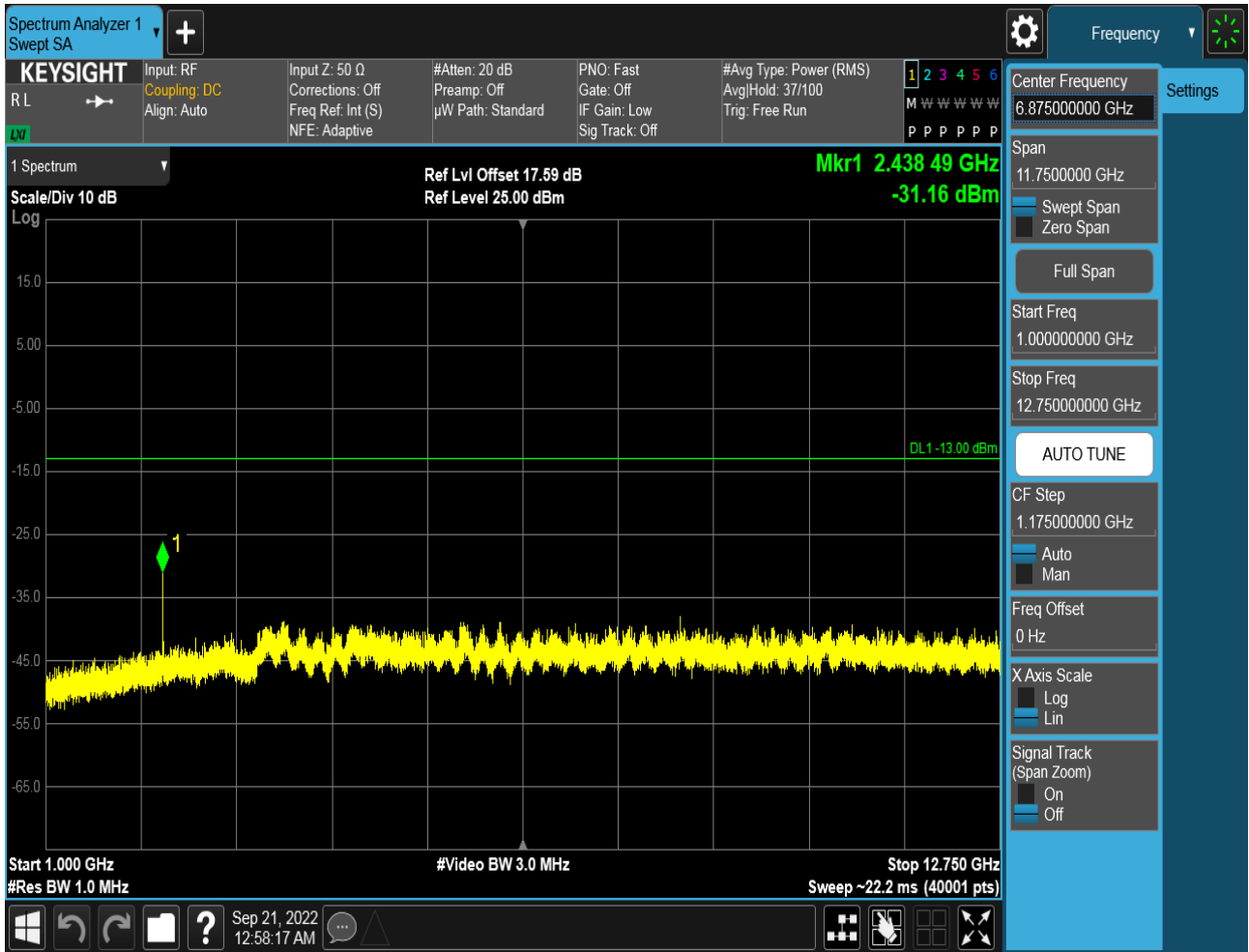
6.2.1.2.4.1 Test Channel = MCH

6.2.1.2.4.1.1 Test RB = RB1#0









7Appendix_G: Field Strength of Spurious Radiation

Note 1: We tested all modes & antennas, the data presented below is the worst case.

Note 2: For Below 30MHz, the data presented below is the worst case for all Channel Bandwidth.

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

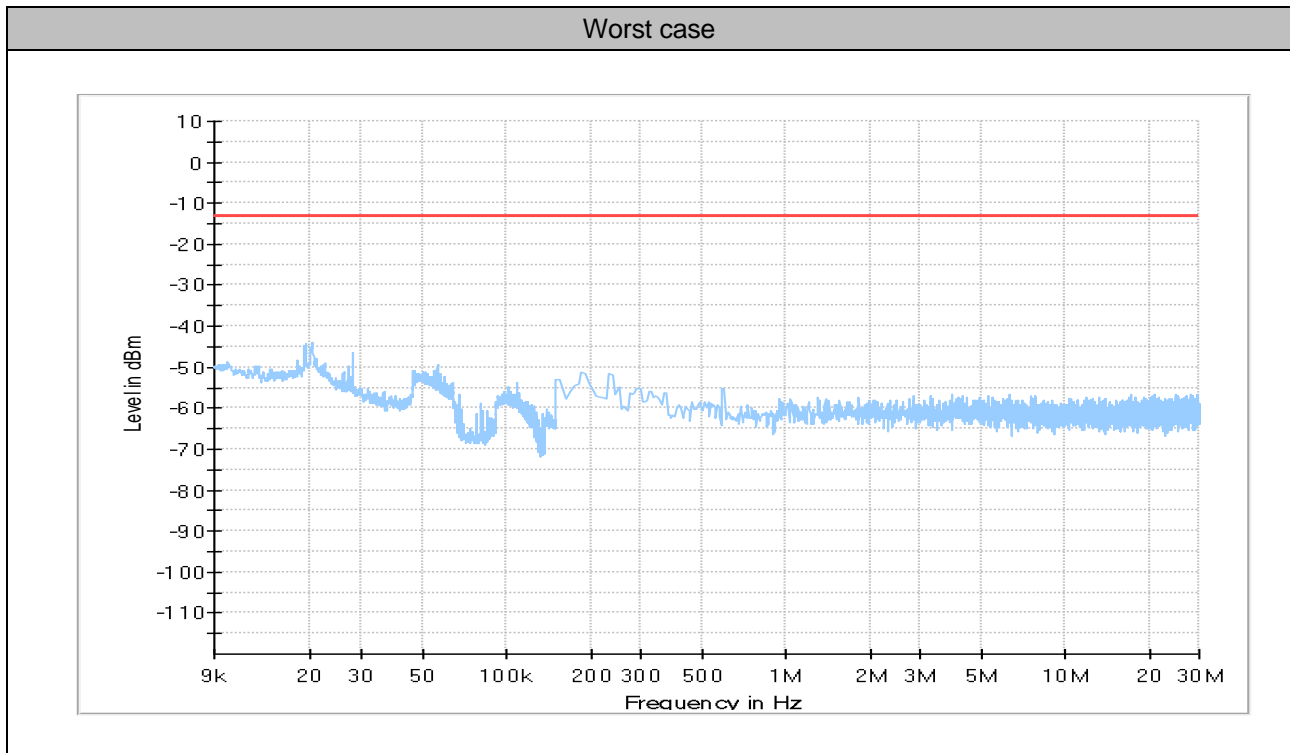
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

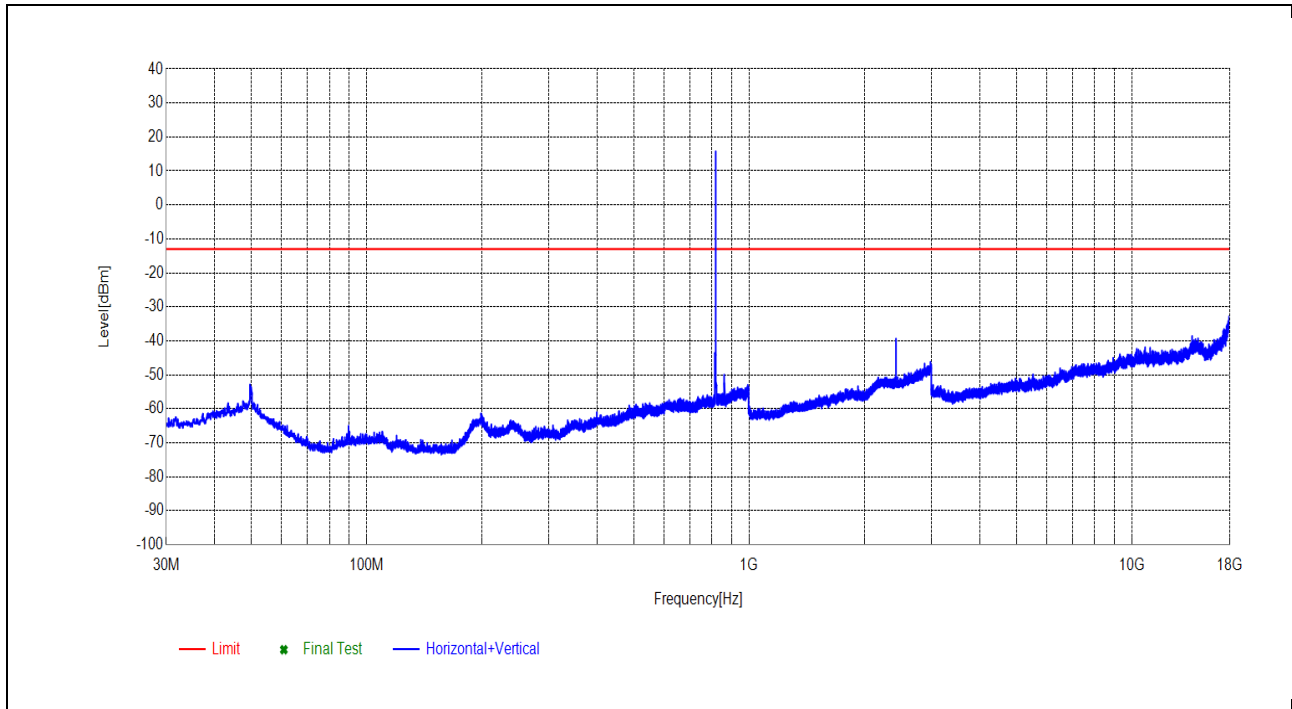
Part I - Test Plots

7.1 For LTE

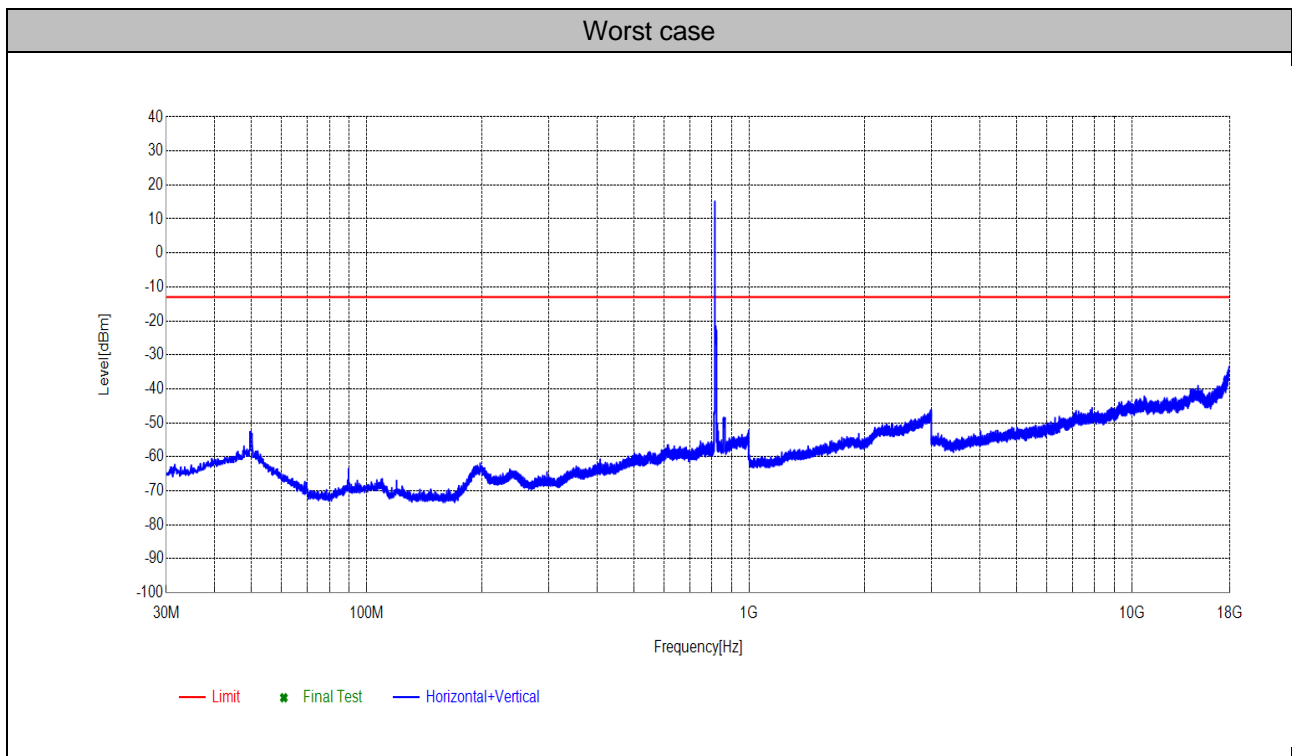
7.1.1 Test Band = Band26(814-824MHz)

7.1.1.1 Test Bandwidth = 1.4MHz





7.1.1.2 Test Bandwidth = 10MHz





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
Band26(814-824 MHz)	LTE/TM1	1.4	LCH	TN	VL	-1.47934	-0.00182	PASS
					VN	-7.40035	-0.00908	PASS
					VH	11.18919	0.01373	PASS
			MCH	TN	VL	17.77871	0.02171	PASS
					VN	3.14617	0.00384	PASS
					VH	12.23634	0.01494	PASS
			HCH	TN	VL	-12.53737	-0.01523	PASS
					VN	-10.96089	-0.01331	PASS
					VH	-2.03747	-0.00247	PASS
		3	LCH	TN	VL	0.18772	0.00023	PASS
					VN	-8.18248	-0.01003	PASS
					VH	-6.93996	-0.00851	PASS
			MCH	TN	VL	2.93766	0.00359	PASS
					VN	5.98839	0.00731	PASS
					VH	15.76135	0.01924	PASS
			HCH	TN	VL	13.61258	0.01655	PASS
					VN	-12.60025	-0.01532	PASS
					VH	5.07354	0.00617	PASS
		5	LCH	TN	VL	0.23032	0.00028	PASS
					VN	-8.90359	-0.01090	PASS
					VH	-5.47809	-0.00671	PASS
			MCH	TN	VL	8.50236	0.01038	PASS
					VN	0.63377	0.00077	PASS
					VH	0.90245	0.00110	PASS
			HCH	TN	VL	-10.68623	-0.01301	PASS
					VN	5.61360	0.00683	PASS
					VH	-1.94812	-0.00237	PASS
		10	MCH	TN	VL	7.12125	0.00870	PASS
					VN	-2.00618	-0.00245	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
Band 26	LTE/TM2	1.4	LCH	TN	VH	-0.36755	-0.00045	PASS		
					VL	-18.86637	-0.02316	PASS		
					VN	-4.36634	-0.00536	PASS		
			MCH	TN	VH	7.40663	0.00909	PASS		
					VL	13.60144	0.01661	PASS		
					VN	-4.45477	-0.00544	PASS		
			HCH	TN	VH	25.04985	0.03059	PASS		
					VL	-12.80227	-0.01555	PASS		
					VN	0.71508	0.00087	PASS		
		3	LCH	TN	VH	-12.05932	-0.01465	PASS		
					VL	0.18435	0.00023	PASS		
					VN	-1.58116	-0.00194	PASS		
			MCH	TN	VH	1.32042	0.00162	PASS		
					VL	-6.67743	-0.00815	PASS		
					VN	2.06961	0.00253	PASS		
			HCH	TN	VH	-3.17638	-0.00388	PASS		
					VL	-6.52483	-0.00793	PASS		
					VN	-7.23906	-0.00880	PASS		
		5	LCH	TN	VH	-0.05434	-0.00007	PASS		
					VL	-1.60495	-0.00197	PASS		
					VN	2.46209	0.00302	PASS		
			MCH	TN	VH	11.22589	0.01375	PASS		
					VL	6.85189	0.00837	PASS		
					VN	-1.12858	-0.00138	PASS		
			HCH	TN	VH	-0.37414	-0.00046	PASS		
					VL	-5.63177	-0.00686	PASS		
					VN	-0.21760	-0.00026	PASS		
		10	MCH	TN	VH	-0.46050	-0.00056	PASS		
					VL	1.21585	0.00148	PASS		
					VN	-0.08392	-0.00010	PASS		
							VH	-1.47967	-0.00181	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	LTE/TM1	1.4	LCH	VN	-30	-1.86015	-0.00228	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
814-824 MHz)					-20	4.89585	0.00601	PASS		
					-10	-0.92090	-0.00113	PASS		
					0	-1.63704	-0.00201	PASS		
					10	3.52322	0.00432	PASS		
					20	-7.40035	-0.00908	PASS		
					30	-20.11421	-0.02469	PASS		
					40	21.19586	0.02602	PASS		
					50	10.31089	0.01266	PASS		
					MCH	VN	-30	15.20148	0.01856	PASS
			-20	-9.93287			-0.01213	PASS		
			-10	10.26893			0.01254	PASS		
			0	-12.16015			-0.01485	PASS		
			10	11.01531			0.01345	PASS		
			20	3.14617			0.00384	PASS		
			30	-5.80624			-0.00709	PASS		
			40	-7.04193			-0.00860	PASS		
			50	-4.23767			-0.00517	PASS		
			HCH	VN	-30	1.51569	0.00184	PASS		
		-20			5.18921	0.00630	PASS			
		-10			-8.24275	-0.01001	PASS			
		0			13.52775	0.01643	PASS			
		10			4.90702	0.00596	PASS			
		20			-10.96089	-0.01331	PASS			
		30			8.22942	0.01000	PASS			
		40			-12.10634	-0.01470	PASS			
		50			2.81389	0.00342	PASS			
		3			LCH	VN	-30	5.93429	0.00728	PASS
							-20	2.77029	0.00340	PASS
							-10	0.75448	0.00093	PASS
							0	0.07083	0.00009	PASS
							10	0.31248	0.00038	PASS
							20	-8.18248	-0.01003	PASS
							30	-3.36688	-0.00413	PASS
							40	3.38087	0.00415	PASS
							50	10.14164	0.01244	PASS
				MCH	VN	-30	4.72729	0.00577	PASS	
-20	1.75154					0.00214	PASS			
-10	-2.87016					-0.00350	PASS			
0	-3.70452					-0.00452	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	-2.20684	-0.00269	PASS		
					20	5.98839	0.00731	PASS		
					30	-5.04102	-0.00616	PASS		
					40	-6.40490	-0.00782	PASS		
					50	-7.89893	-0.00964	PASS		
			HCH	VN	-30	2.28665	0.00278	PASS		
					-20	0.75205	0.00091	PASS		
					-10	-4.67971	-0.00569	PASS		
					0	-4.57409	-0.00556	PASS		
					10	6.46913	0.00787	PASS		
					20	-12.60025	-0.01532	PASS		
					30	-4.48735	-0.00546	PASS		
					40	-13.61379	-0.01655	PASS		
					50	10.86817	0.01321	PASS		
					LCH	VN	-30	-3.98275	-0.00488	PASS
							-20	5.57026	0.00682	PASS
							-10	4.52980	0.00555	PASS
							0	5.77840	0.00708	PASS
							10	-1.69146	-0.00207	PASS
							20	-8.90359	-0.01090	PASS
		30	8.12052	0.00995			PASS			
		40	-5.80120	-0.00710			PASS			
		50	3.39921	0.00416			PASS			
		MCH	VN	-30			0.05693	0.00007	PASS	
				-20	-7.57651	-0.00925	PASS			
				-10	3.34029	0.00408	PASS			
				0	0.49361	0.00060	PASS			
				10	-10.11964	-0.01236	PASS			
				20	0.63377	0.00077	PASS			
				30	3.75431	0.00458	PASS			
				40	-1.81858	-0.00222	PASS			
		HCH	VN	50	5.23037	0.00639	PASS			
				-30	3.91503	0.00477	PASS			
				-20	5.52888	0.00673	PASS			
				-10	3.51247	0.00428	PASS			
				0	4.24857	0.00517	PASS			
				10	-3.23041	-0.00393	PASS			
				20	5.61360	0.00683	PASS			
		30	-3.61183	-0.00440	PASS					
		5								



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		10	MCH	VN	40	-0.80333	-0.00098	PASS
					50	-0.92876	-0.00113	PASS
					-30	-1.78054	-0.00217	PASS
					-20	-1.10012	-0.00134	PASS
					-10	-1.69396	-0.00207	PASS
					0	1.69664	0.00207	PASS
					10	0.52838	0.00065	PASS
					20	-2.00618	-0.00245	PASS
					30	-11.68746	-0.01427	PASS
					40	-3.52369	-0.00430	PASS
					50	-4.57031	-0.00558	PASS
					-30	-5.24336	-0.00644	PASS
					-20	-1.36183	-0.00167	PASS
					-10	8.16376	0.01002	PASS
					0	1.72950	0.00212	PASS
	10	-5.91249	-0.00726	PASS				
	20	-4.36634	-0.00536	PASS				
	30	-17.28408	-0.02122	PASS				
	40	-2.65307	-0.00326	PASS				
	50	8.27912	0.01016	PASS				
	-30	-2.41596	-0.00295	PASS				
	-20	-15.09904	-0.01844	PASS				
	-10	2.02566	0.00247	PASS				
	0	-2.24284	-0.00274	PASS				
	10	-1.66895	-0.00204	PASS				
	20	-4.45477	-0.00544	PASS				
	30	6.93020	0.00846	PASS				
	40	-7.78746	-0.00951	PASS				
	50	5.61603	0.00686	PASS				
	-30	-4.00803	-0.00487	PASS				
	-20	4.97365	0.00604	PASS				
	-10	-8.53877	-0.01037	PASS				
	0	-1.05584	-0.00128	PASS				
	10	4.71153	0.00572	PASS				
	20	0.71508	0.00087	PASS				
	30	-8.64284	-0.01050	PASS				
	40	15.17525	0.01843	PASS				
	50	4.72132	0.00573	PASS				
	3	LCH	VN	-30	-2.02136	-0.00248	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		5			-20	-5.62417	-0.00690	PASS
					-10	4.10051	0.00503	PASS
					0	-0.69121	-0.00085	PASS
					10	3.98938	0.00489	PASS
					20	-1.58116	-0.00194	PASS
					30	0.11497	0.00014	PASS
					40	-1.45106	-0.00178	PASS
					50	0.72603	0.00089	PASS
			MCH	VN	-30	12.08630	0.01476	PASS
					-20	3.63589	0.00444	PASS
					-10	-2.24376	-0.00274	PASS
					0	-1.64731	-0.00201	PASS
					10	-9.26090	-0.01131	PASS
					20	2.06961	0.00253	PASS
					30	-0.06564	-0.00008	PASS
					40	2.68250	0.00328	PASS
			HCH	VN	-30	-7.81286	-0.00950	PASS
					-20	-2.02537	-0.00246	PASS
					-10	1.39787	0.00170	PASS
					0	2.37071	0.00288	PASS
					10	1.81724	0.00221	PASS
					20	-7.23906	-0.00880	PASS
					30	-3.55962	-0.00433	PASS
					40	0.82390	0.00100	PASS
			LCH	VN	-30	-0.35795	-0.00044	PASS
					-20	3.97870	0.00487	PASS
					-10	4.40941	0.00540	PASS
					0	7.72300	0.00946	PASS
		10			0.32213	0.00039	PASS	
		20			2.46209	0.00302	PASS	
		30			4.25965	0.00522	PASS	
		40			0.83743	0.00103	PASS	
		MCH	VN	-30	-1.44837	-0.00177	PASS	
				-20	0.05708	0.00007	PASS	
				-10	0.01065	0.00001	PASS	
				0	3.38776	0.00414	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					10	8.34832	0.01019	PASS			
					20	-1.12858	-0.00138	PASS			
					30	5.18077	0.00633	PASS			
					40	0.01116	0.00001	PASS			
					50	5.37151	0.00656	PASS			
			HCH		VN	-30	1.34231	0.00163	PASS		
					-20	0.26781	0.00033	PASS			
					-10	-0.23718	-0.00029	PASS			
					0	7.90435	0.00962	PASS			
					10	-5.59460	-0.00681	PASS			
		10	MCH				20	-0.21760	-0.00026	PASS	
							30	-2.74486	-0.00334	PASS	
							40	5.62215	0.00684	PASS	
							50	1.86924	0.00228	PASS	
							-30	-7.52933	-0.00919	PASS	
			VN				VN	-20	-1.68608	-0.00206	PASS
							-10	-2.40915	-0.00294	PASS	
							0	0.62084	0.00076	PASS	
							10	-0.54914	-0.00067	PASS	
							20	-0.08392	-0.00010	PASS	
							30	4.17835	0.00510	PASS	
40	-4.54396						-0.00555	PASS			
50	0.58000						0.00071	PASS			

END