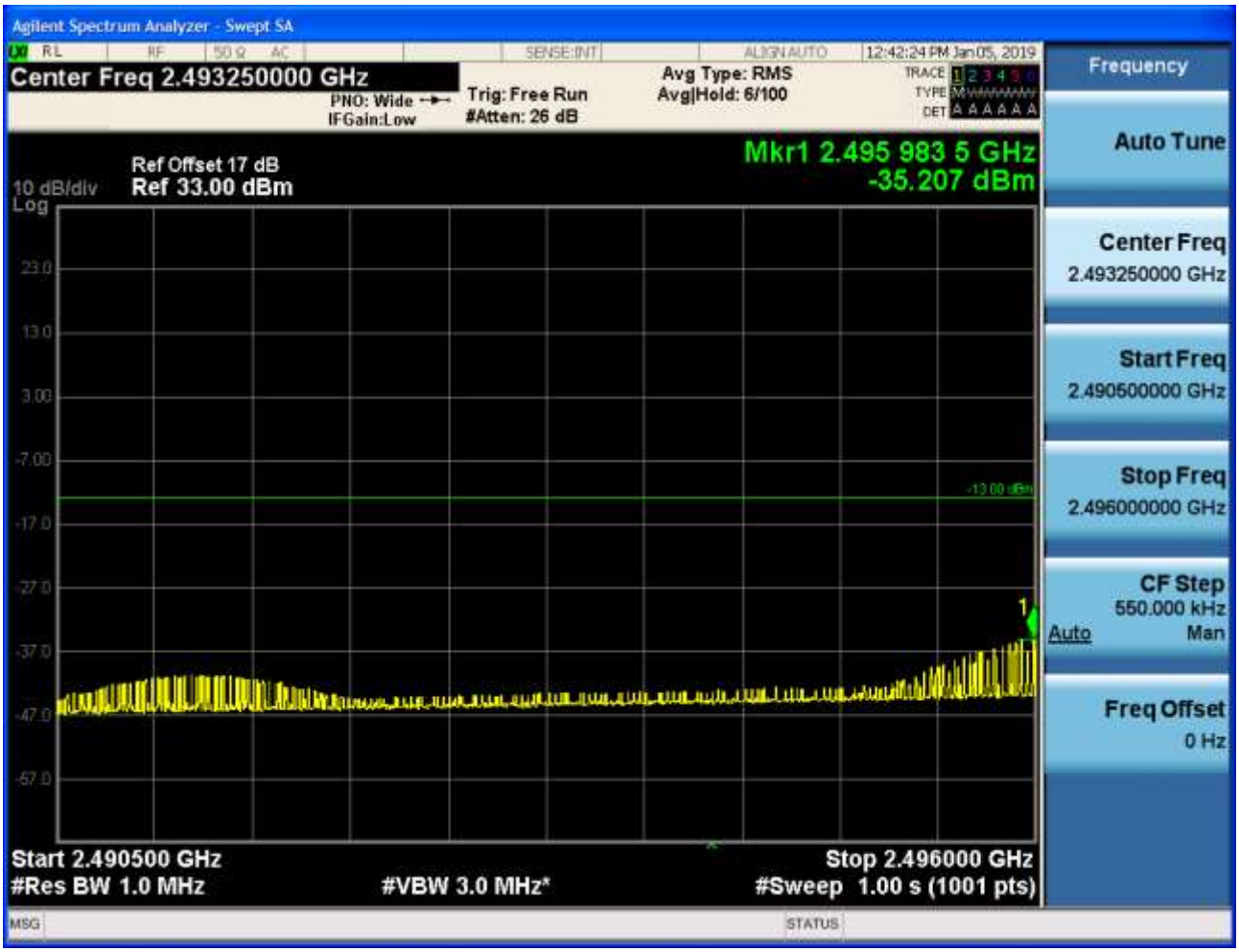
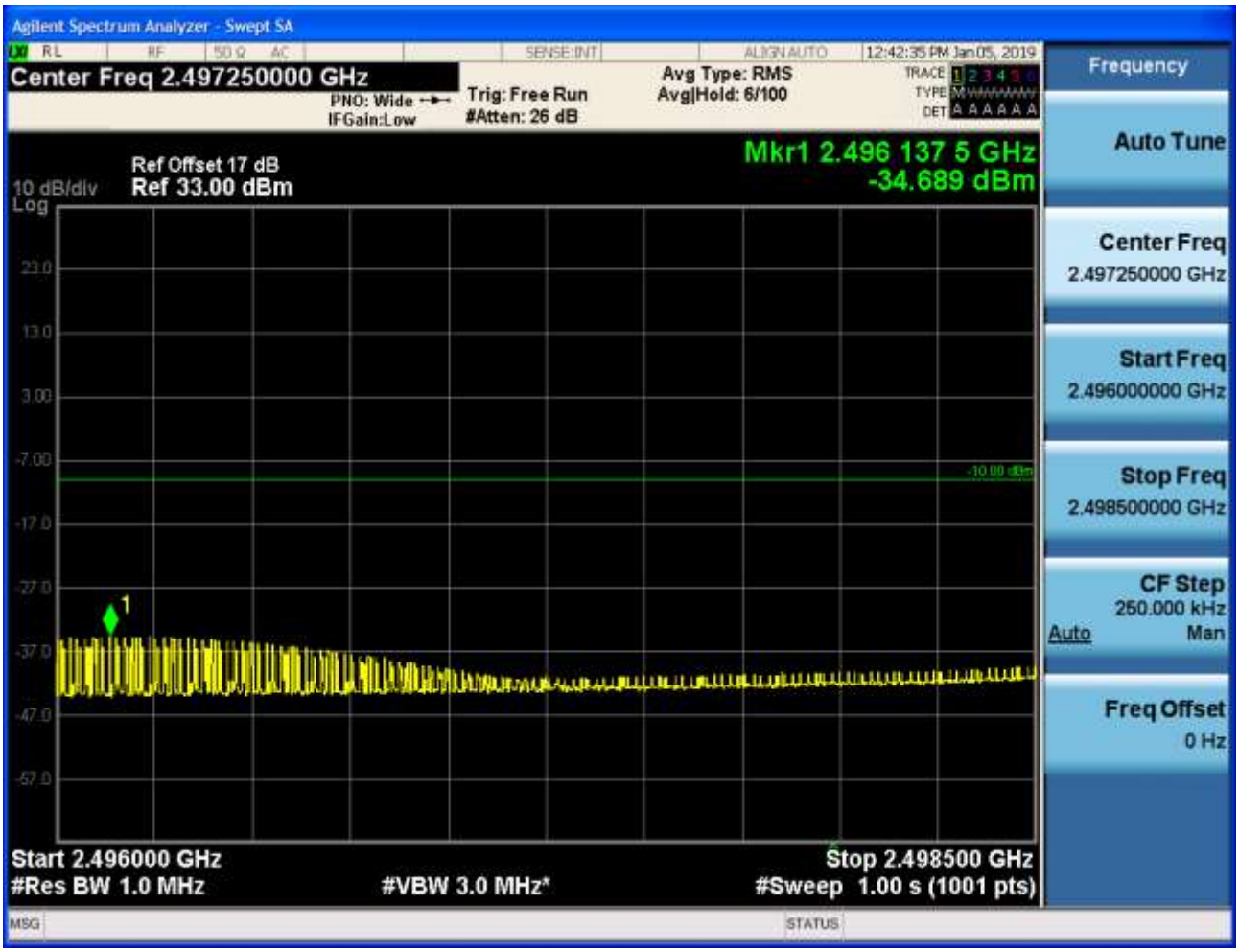
5.1.1.2.2 Test Bandwidth = 20MHz+20MHz

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0





5.1.1.2.2.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0

5.1.1.2.2.1.3 PCC Test RB = full RBs & SCC Test RB = 0

5.1.1.2.2.1.4 PCC Test RB = full RBs & SCC Test RB = full RBs

5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 PCC Test RB = 0 & SCC Test RB = 1 # max

5.1.1.2.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max

5.1.1.2.2.3 PCC Test RB = 0 & SCC Test RB = full RBs

5.1.1.2.2.4 PCC Test RB = full RBs & SCC Test RB = full RBs

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

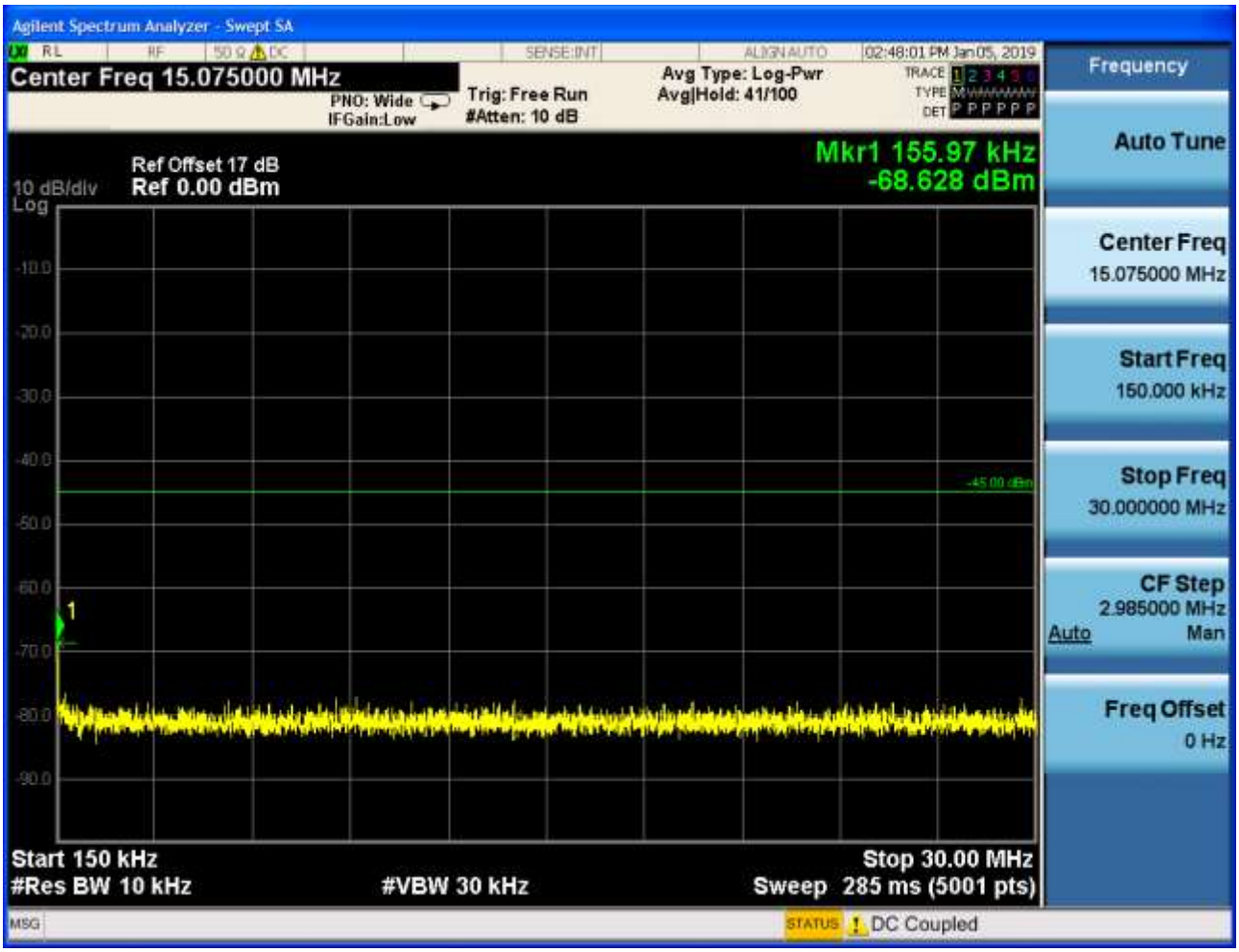
6.1.1 Test Band = CA_7C

6.1.1.1 Test Mode = LTE/TM1

6.1.1.1.1 Test Bandwidth = 15MHz+15MHz

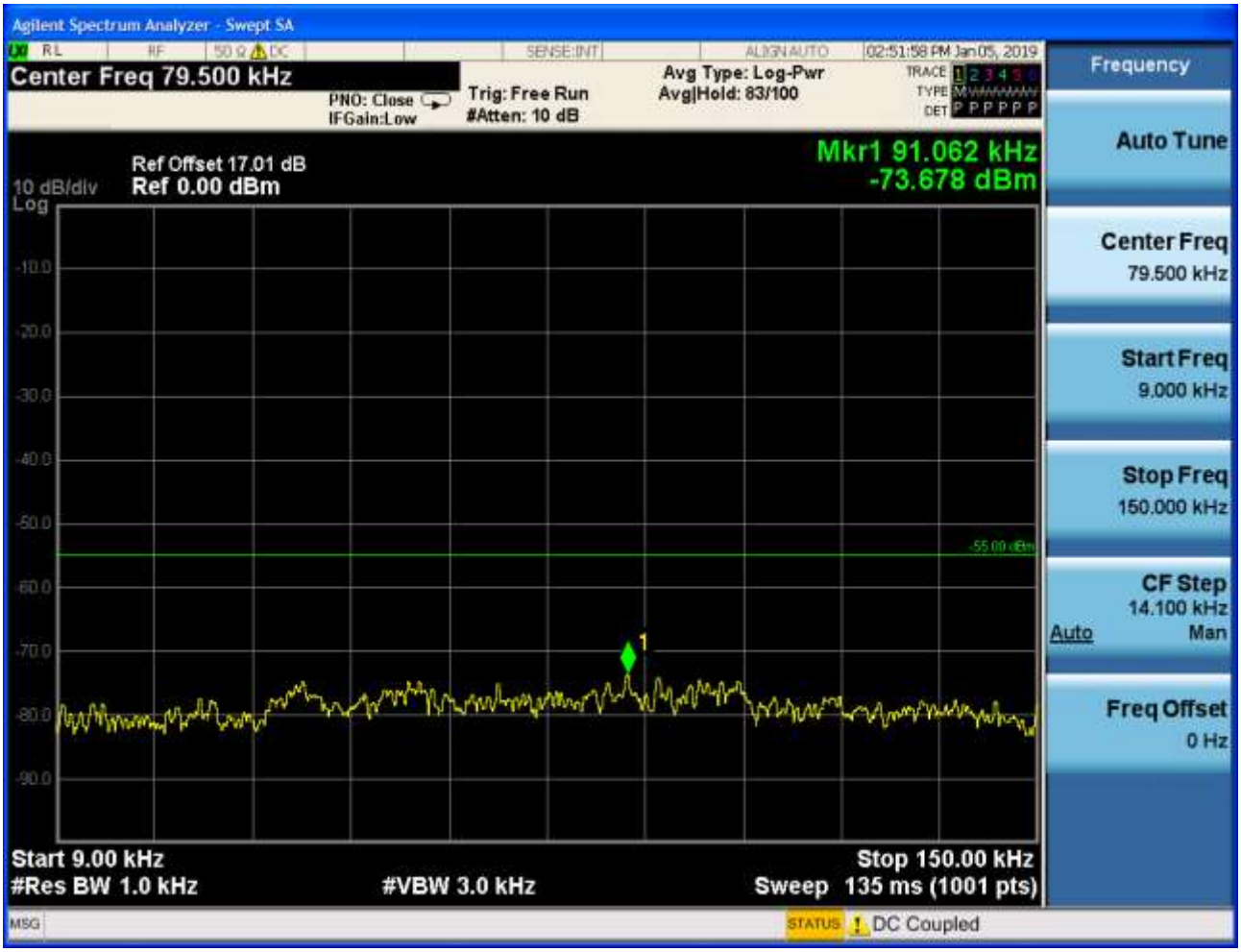
6.1.1.1.1.1 Test Channel = LCH

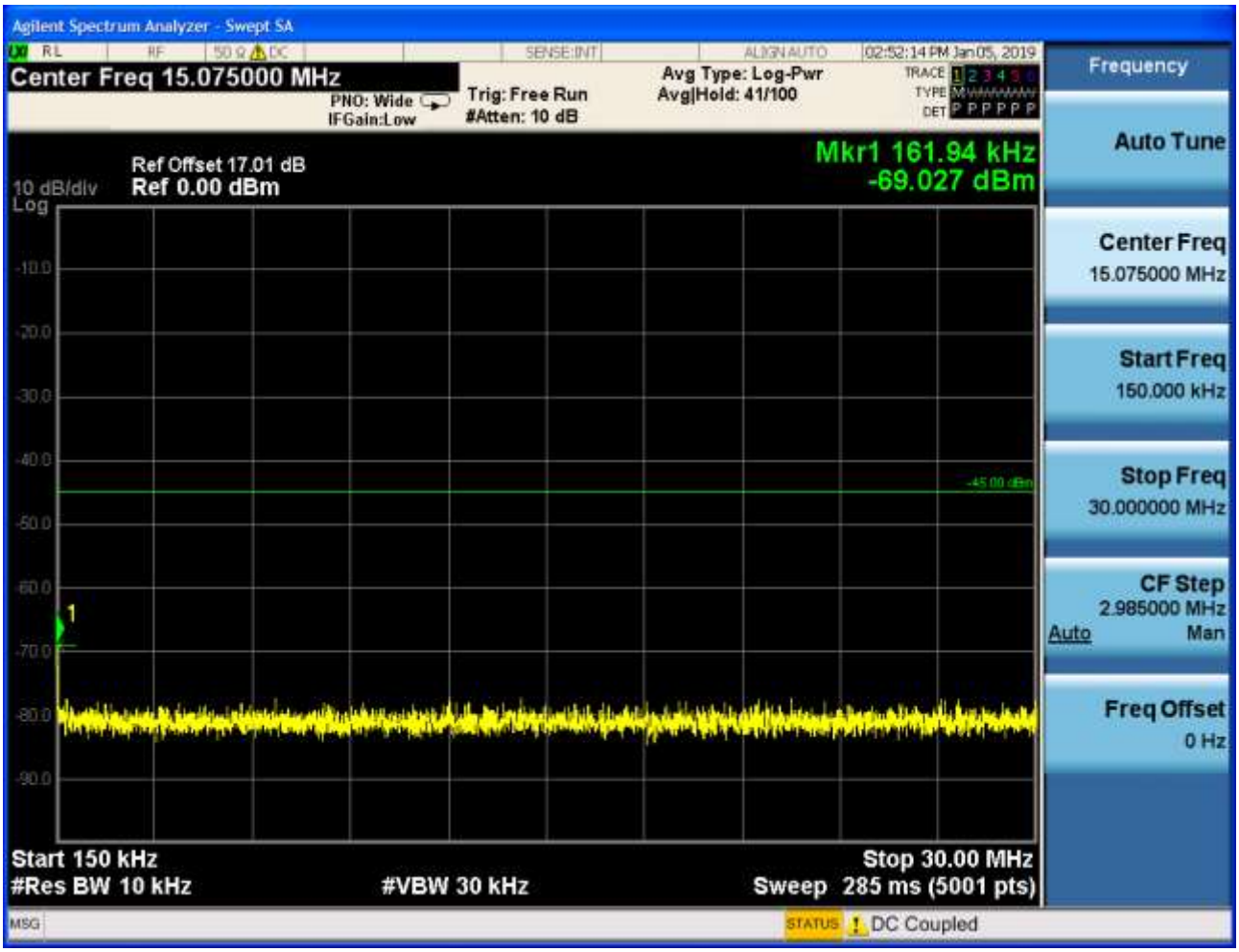
6.1.1.1.1.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



6.1.1.1.1.2 Test Channel = MCH

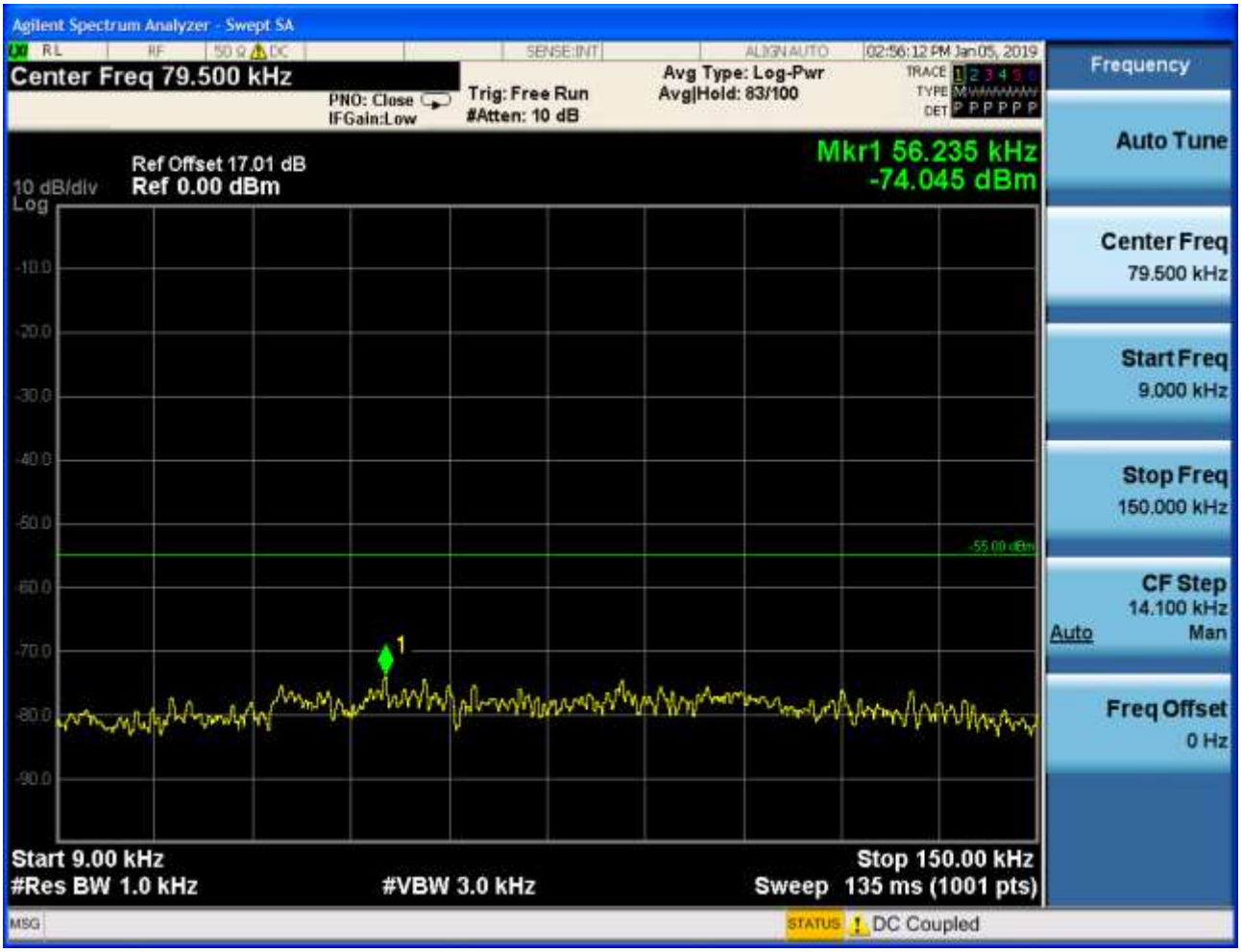
6.1.1.1.1.2.1 PCC Test RB = 1 # 0 & SCC Test RB = 0

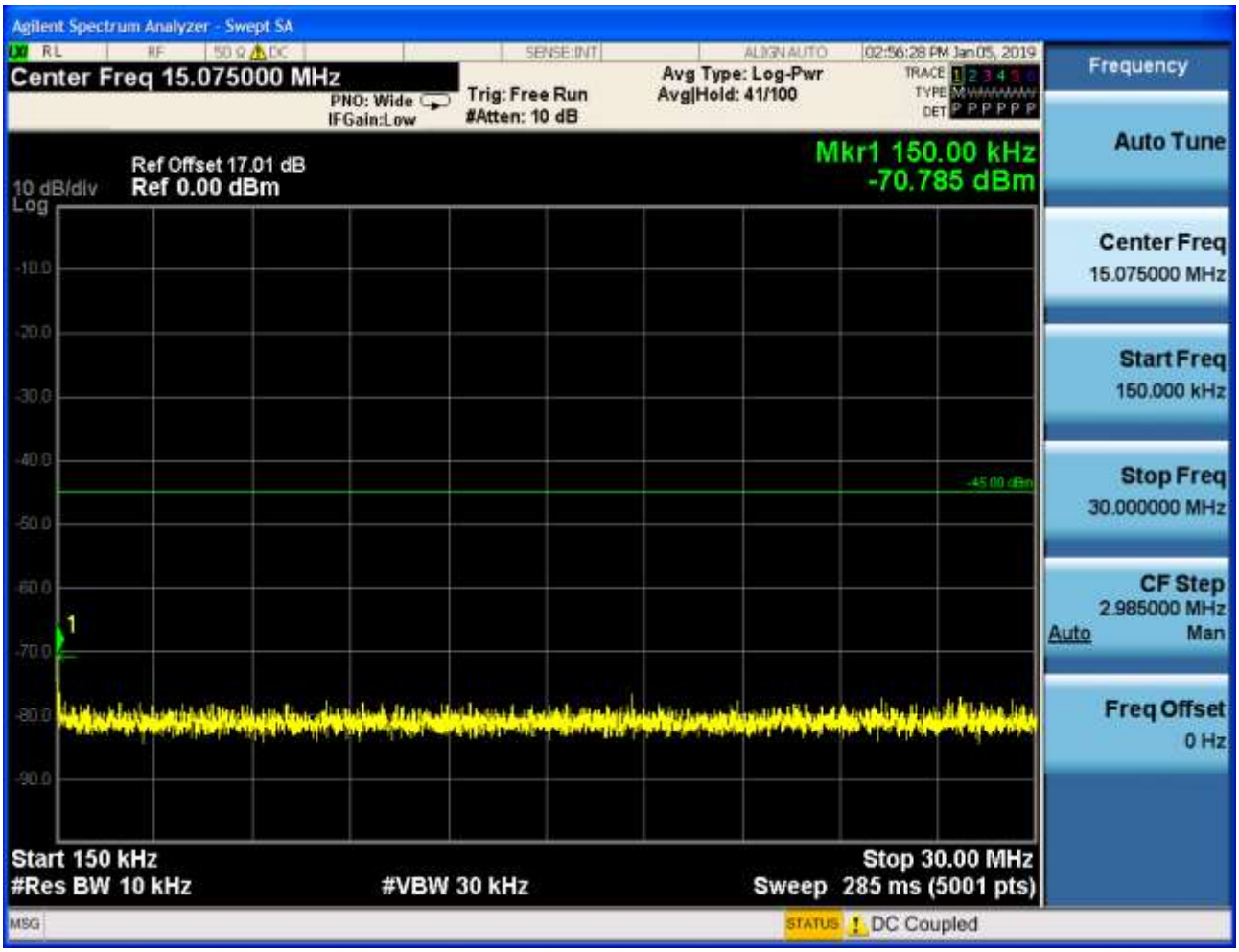




6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 PCC Test RB = 1 # 0 & SCC Test RB = 0

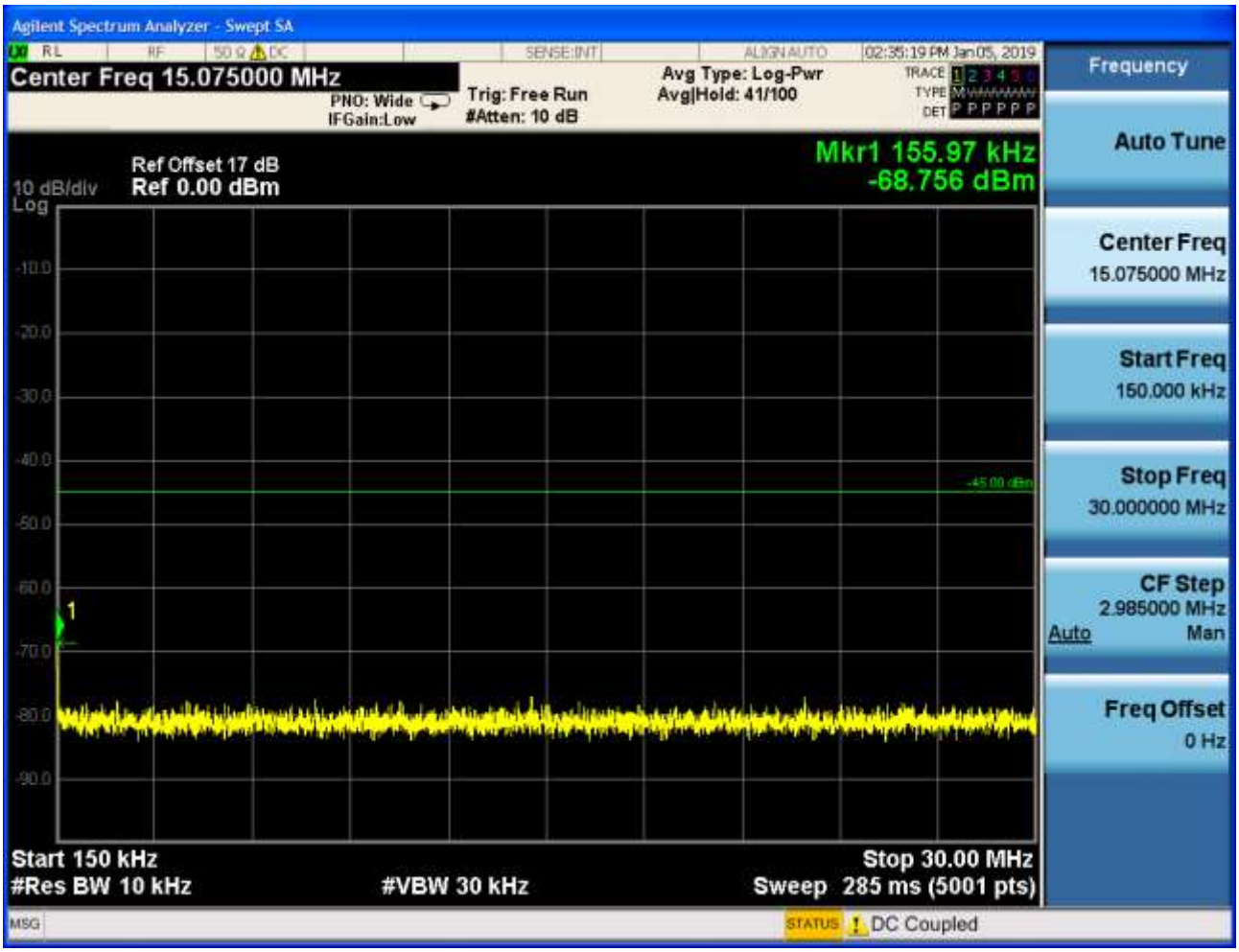




6.2.1.1.2 Test Bandwidth = 20MHz+20MHz

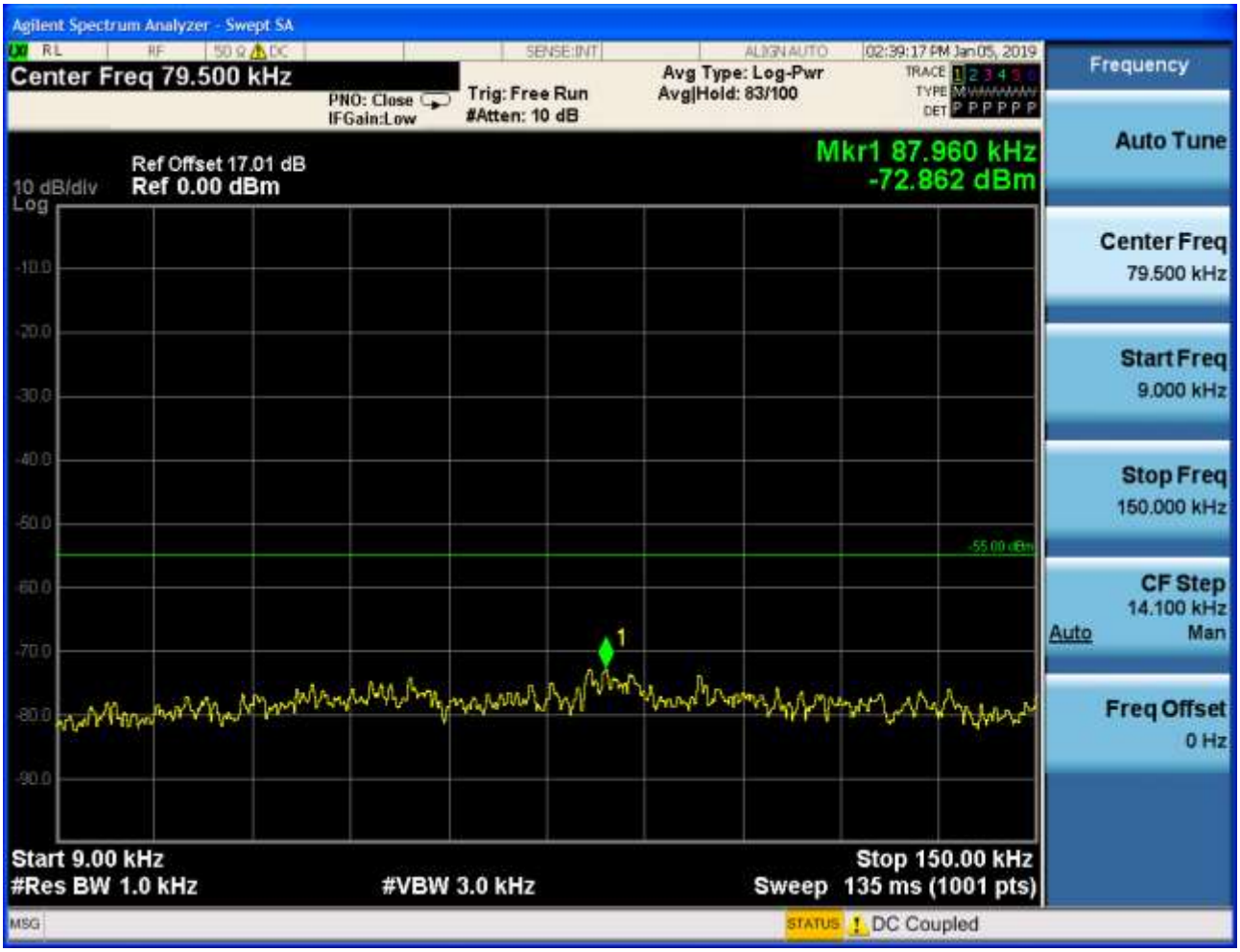
6.2.1.1.2.1 Test Channel = LCH

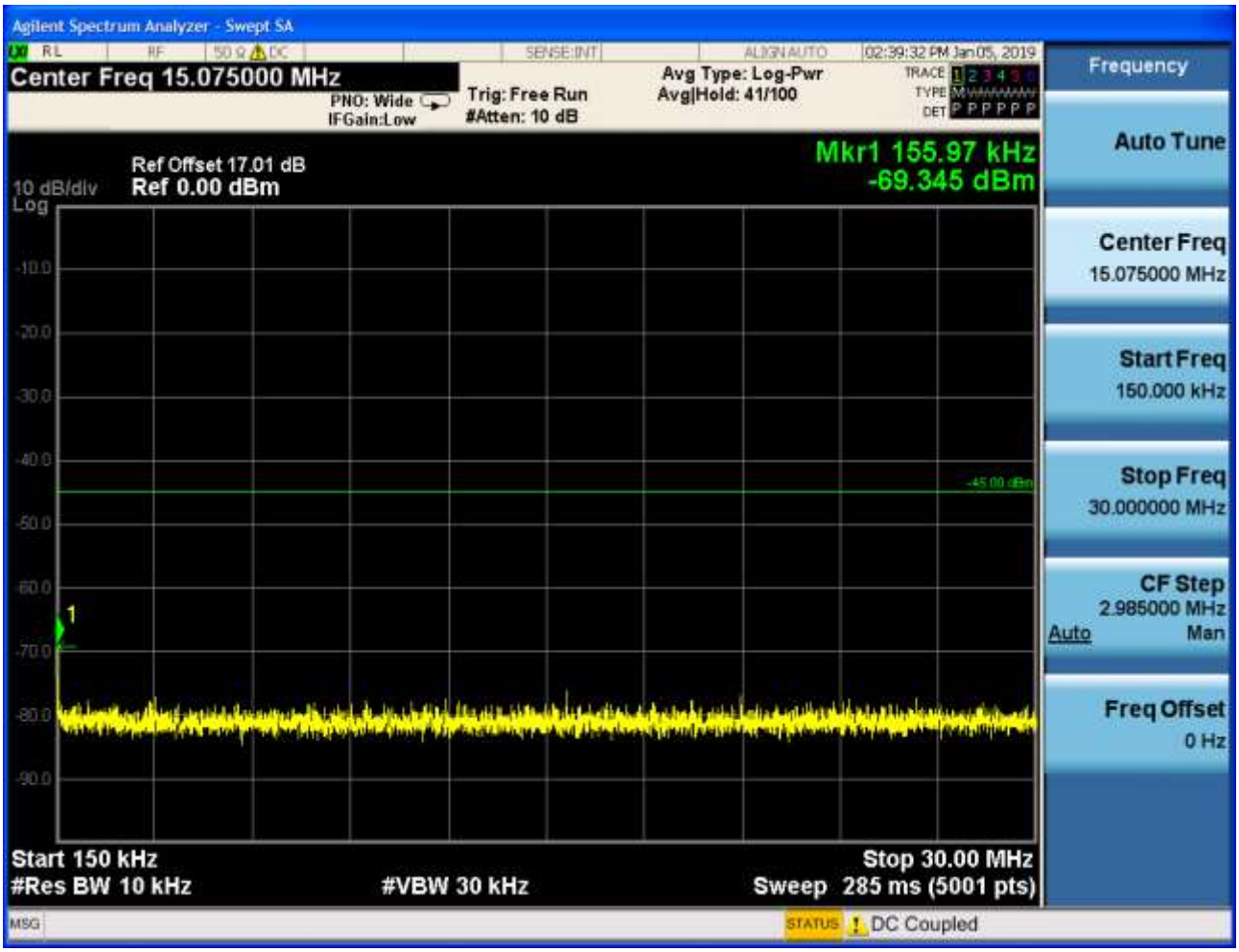
6.1.1.1.2.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



6.2.1.1.2.2 Test Channel = MCH

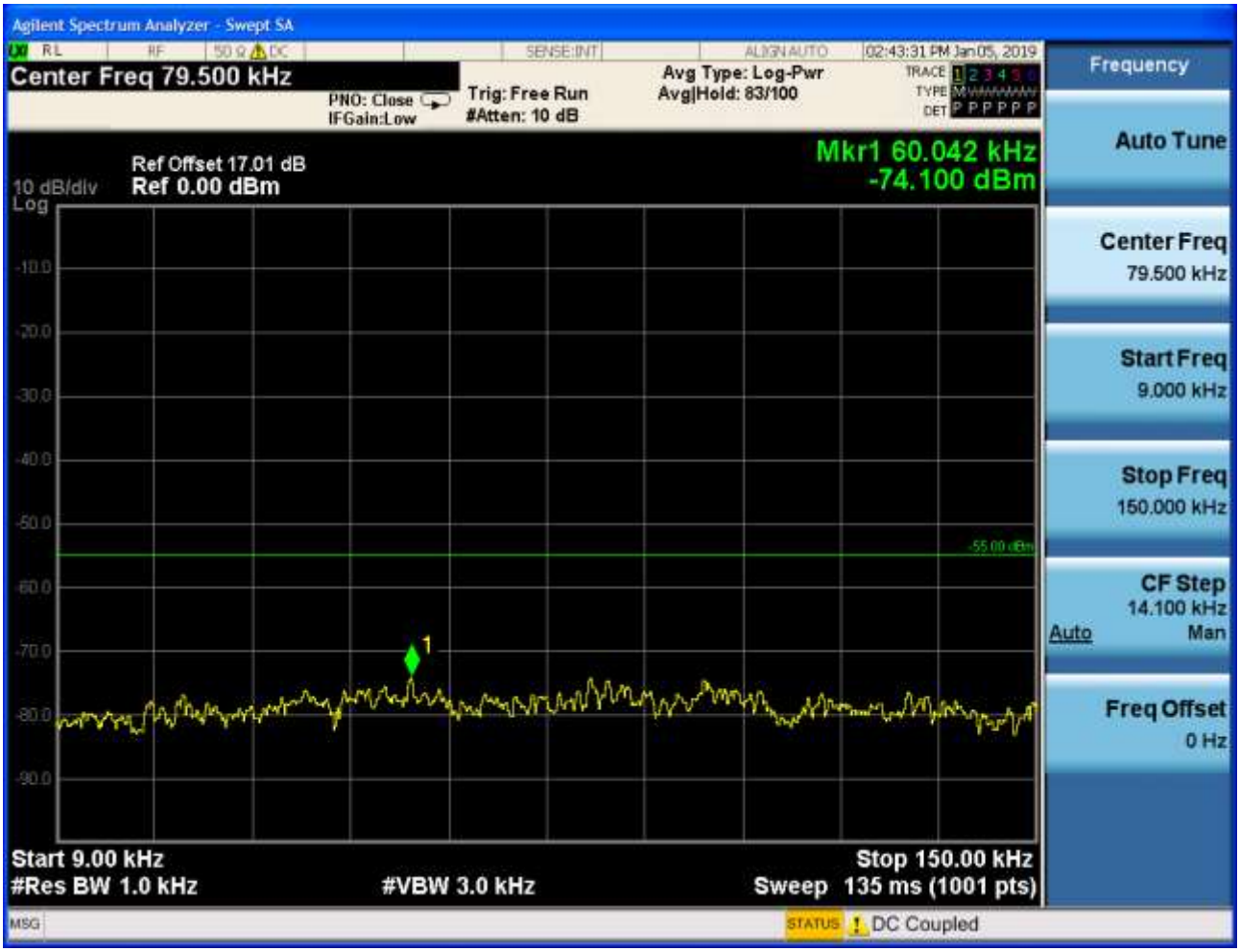
6.1.1.1.2.2.1 PCC Test RB = 1 # 0 & SCC Test RB = 0

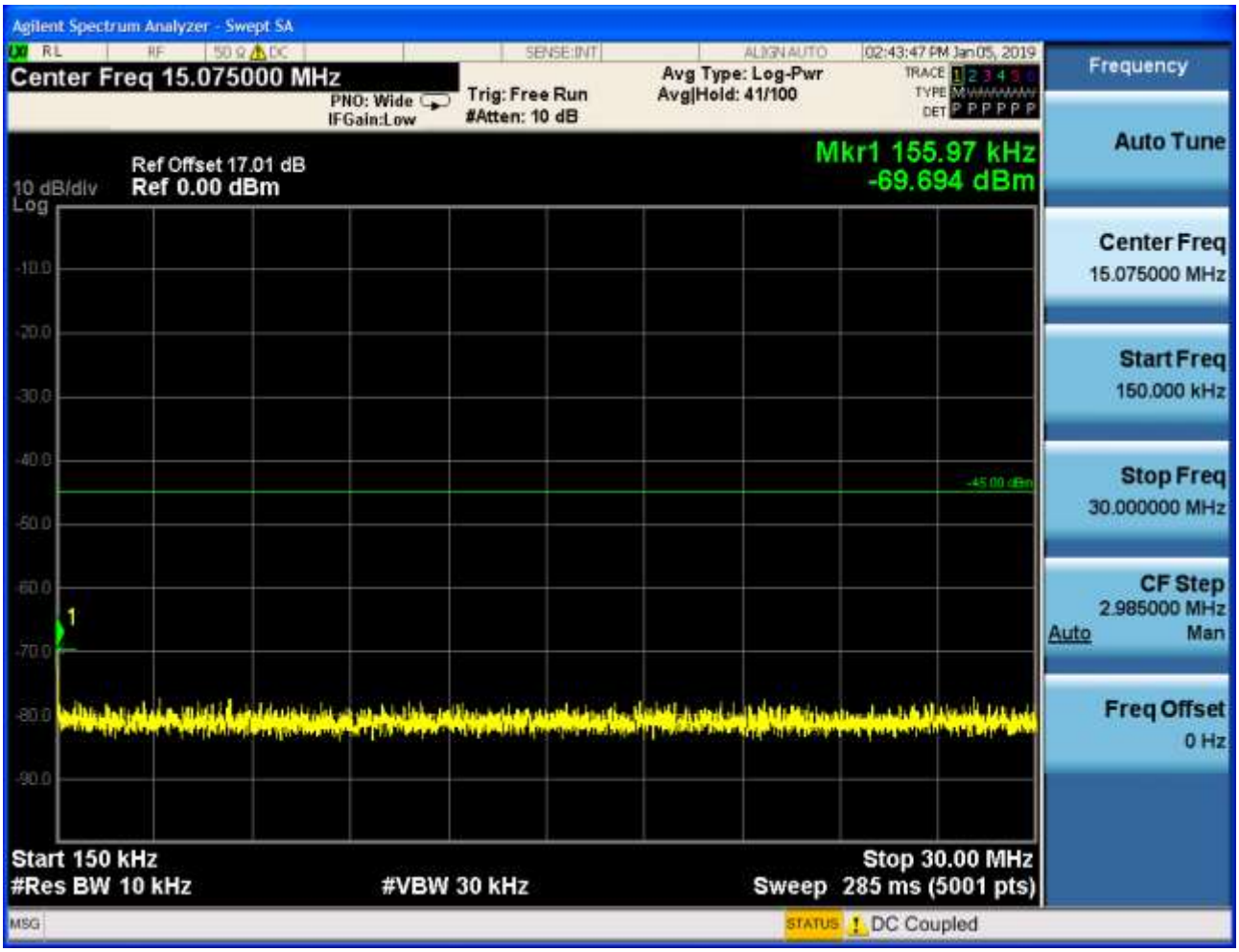




6.2.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



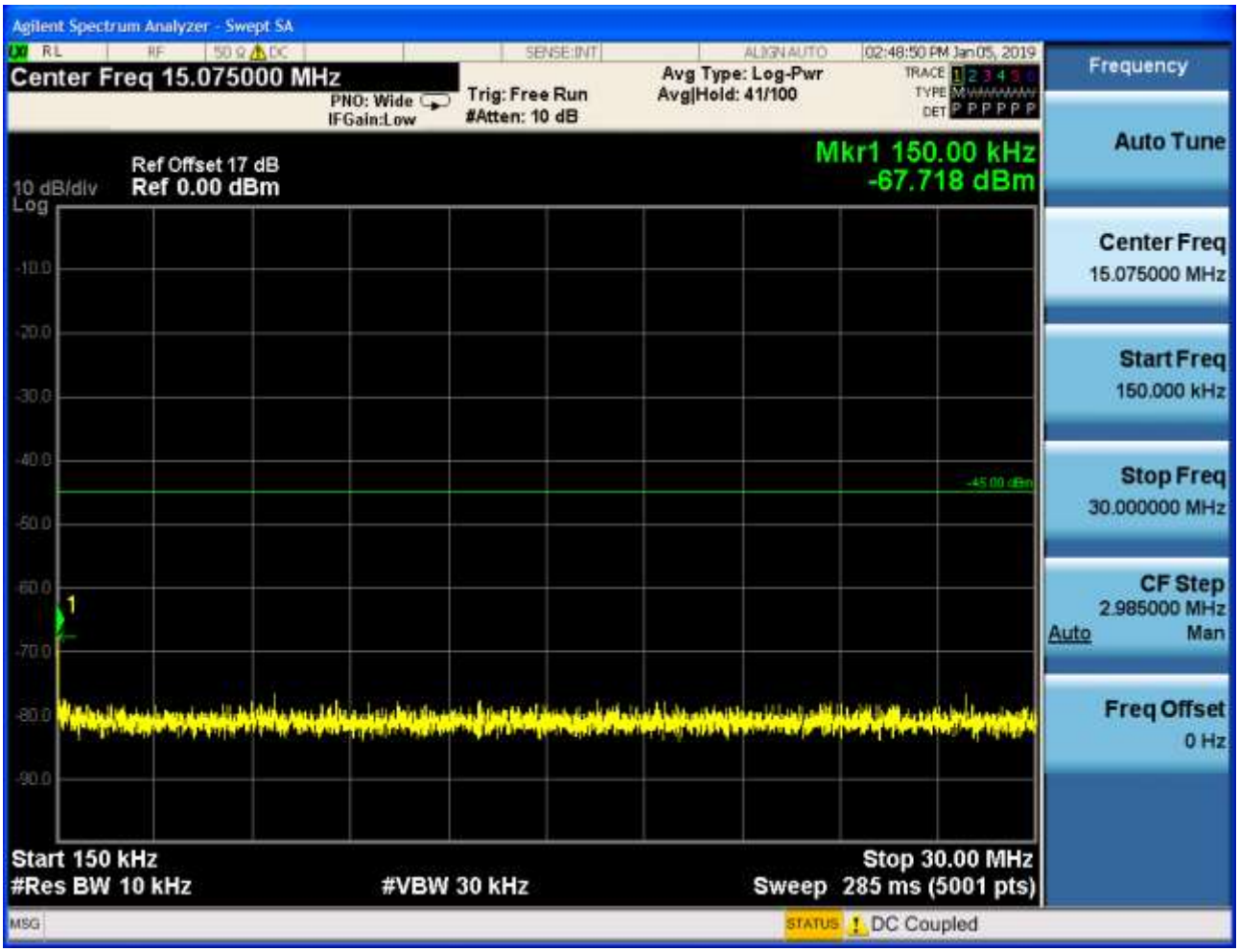


6.2.1.2 Test Mode = LTE/TM2

6.2.1.2.1 Test Bandwidth = 15MHz+15MHz

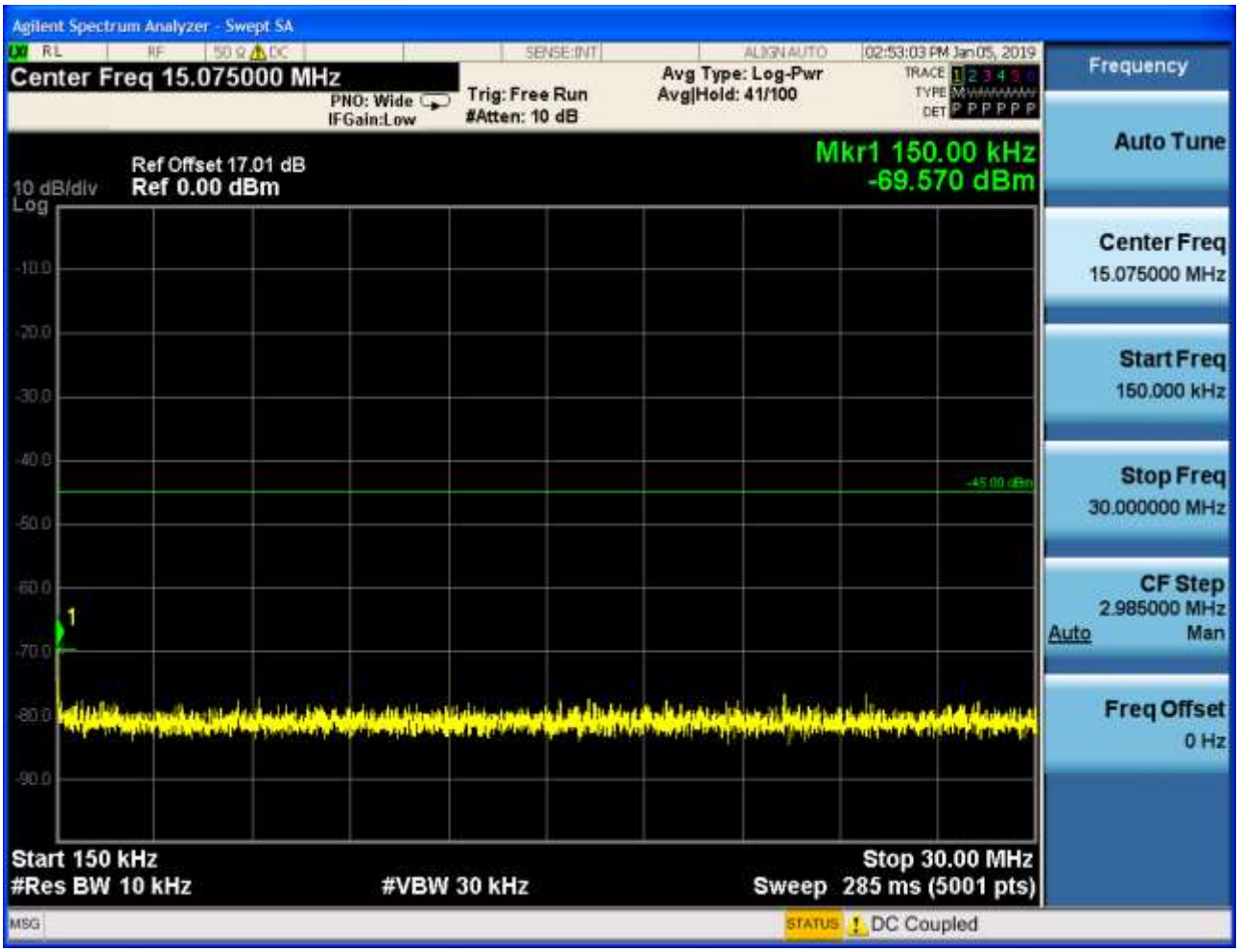
6.2.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



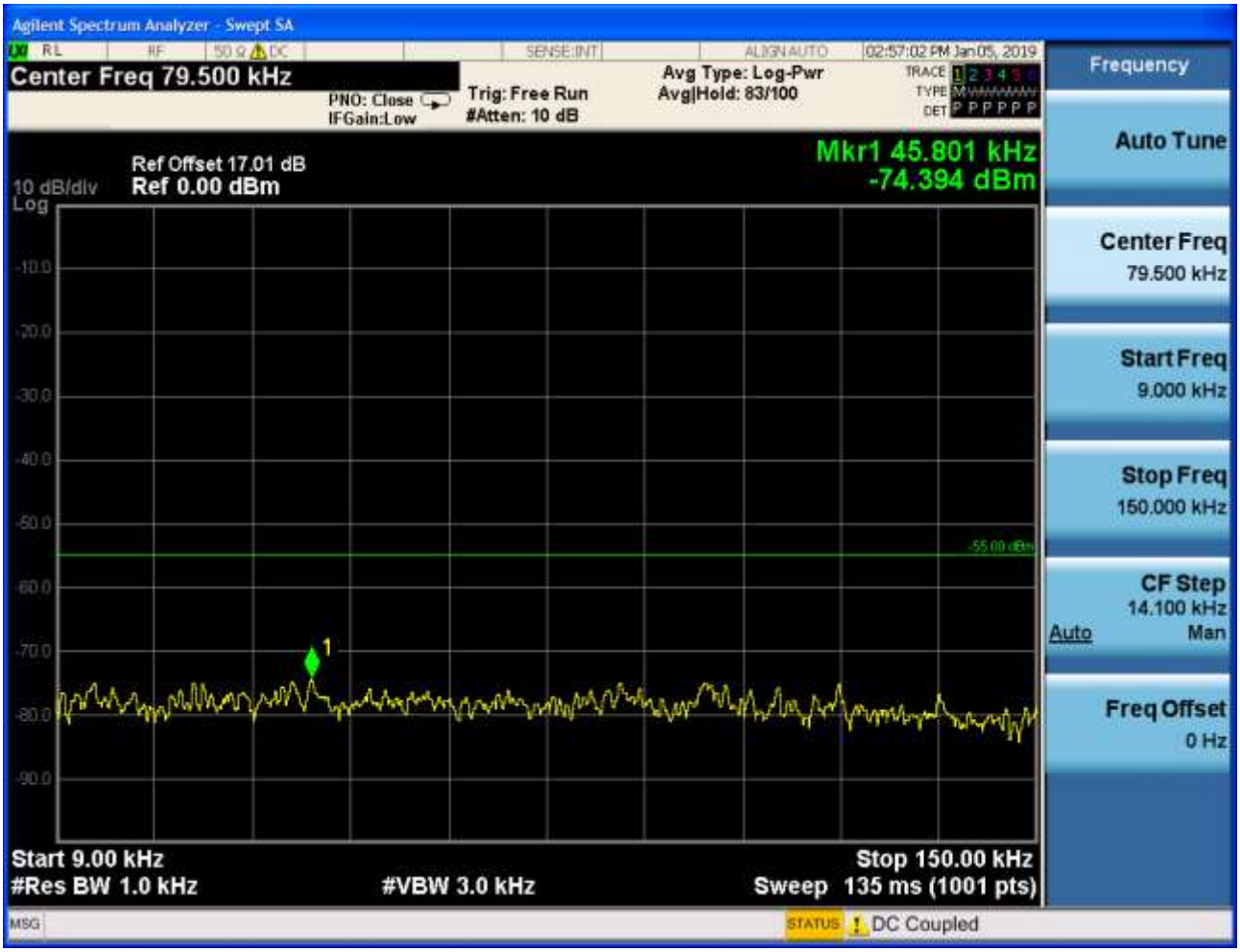
6.2.1.2.1.2 Test Channel = MCH

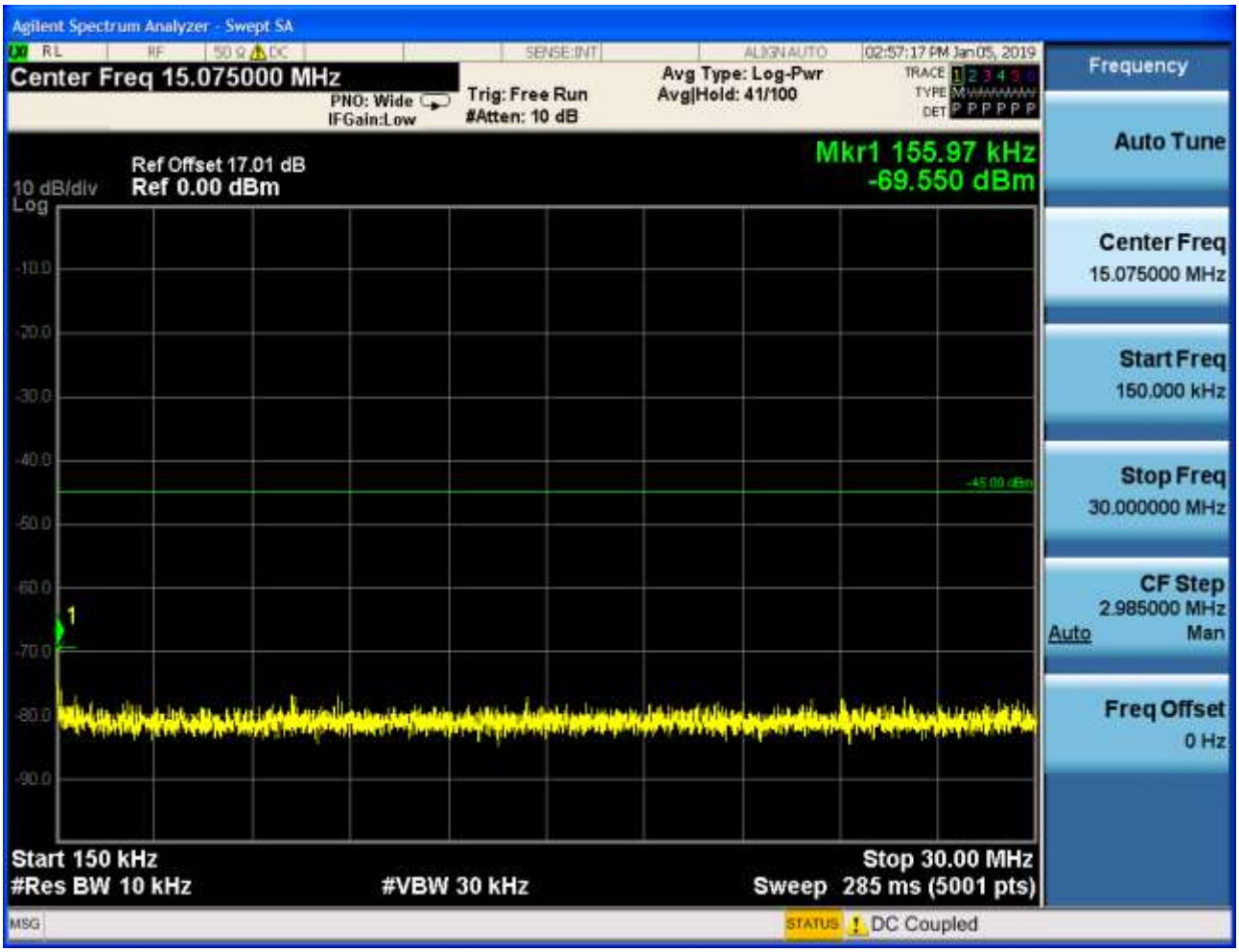
6.1.1.2.1.2.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



6.2.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 PCC Test RB = 1 # 0 & SCC Test RB = 0

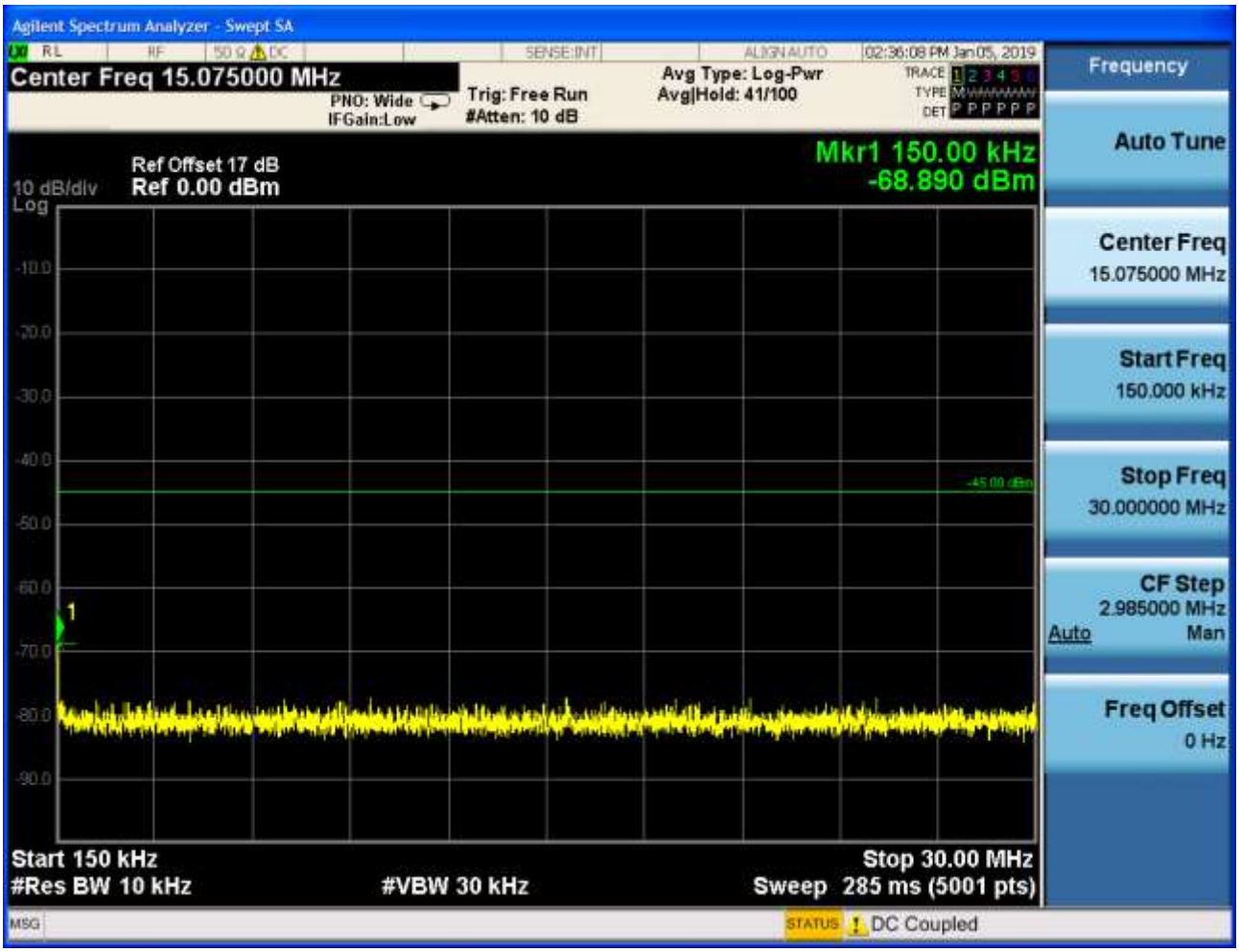




6.2.1.2.2 Test Bandwidth = 20MHz+20MHz

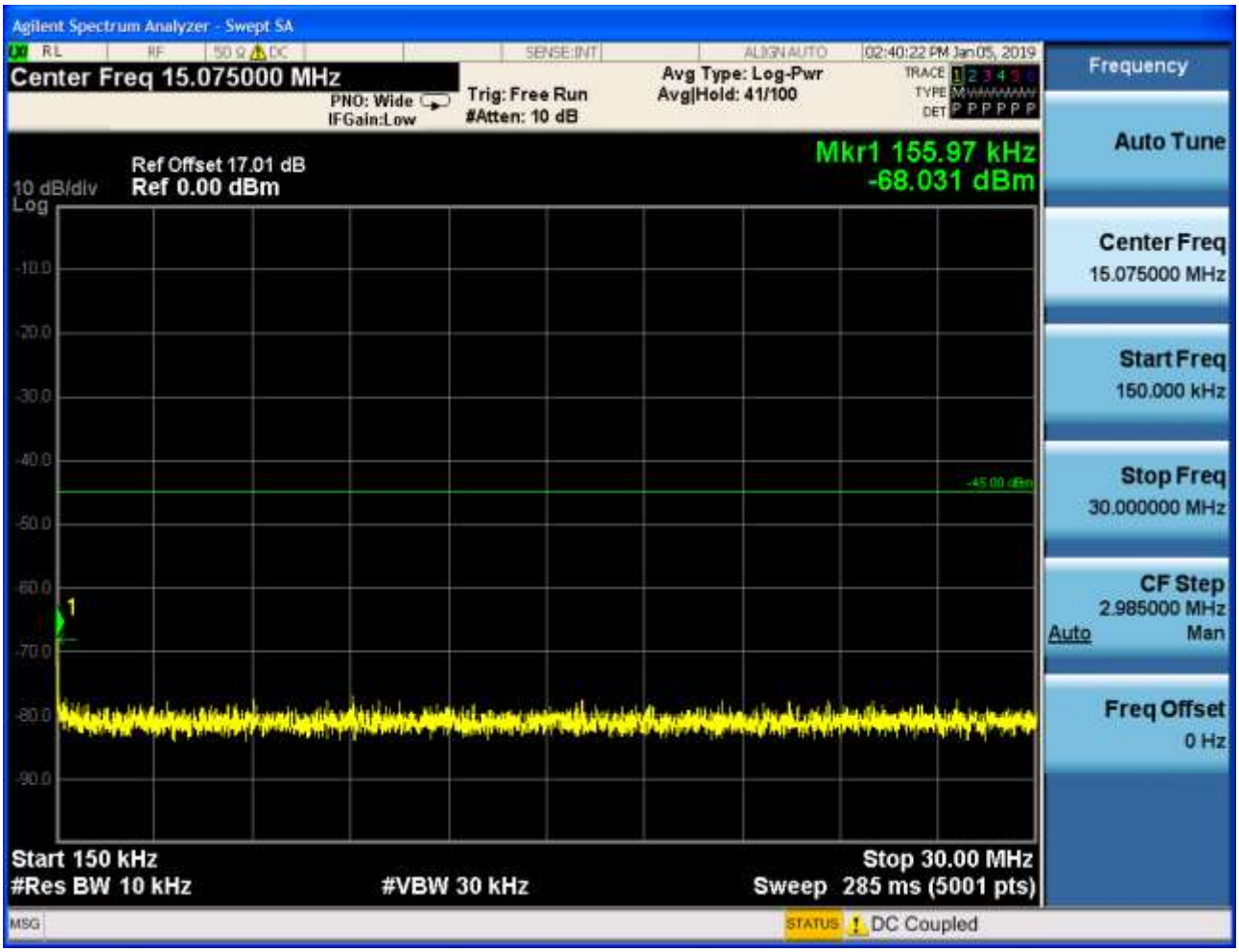
6.2.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



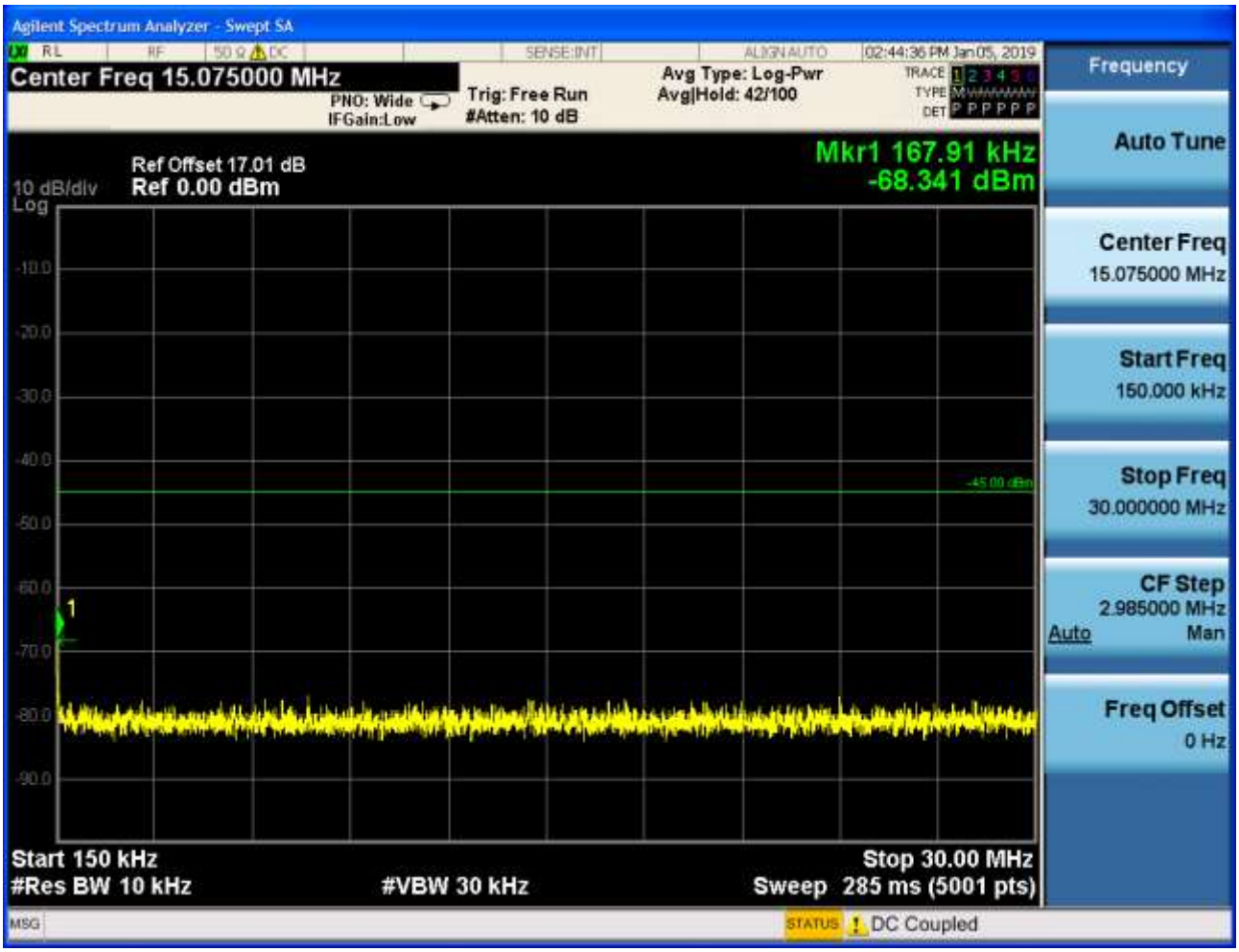
6.2.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



6.2.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 PCC Test RB = 1 # 0 & SCC Test RB = 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

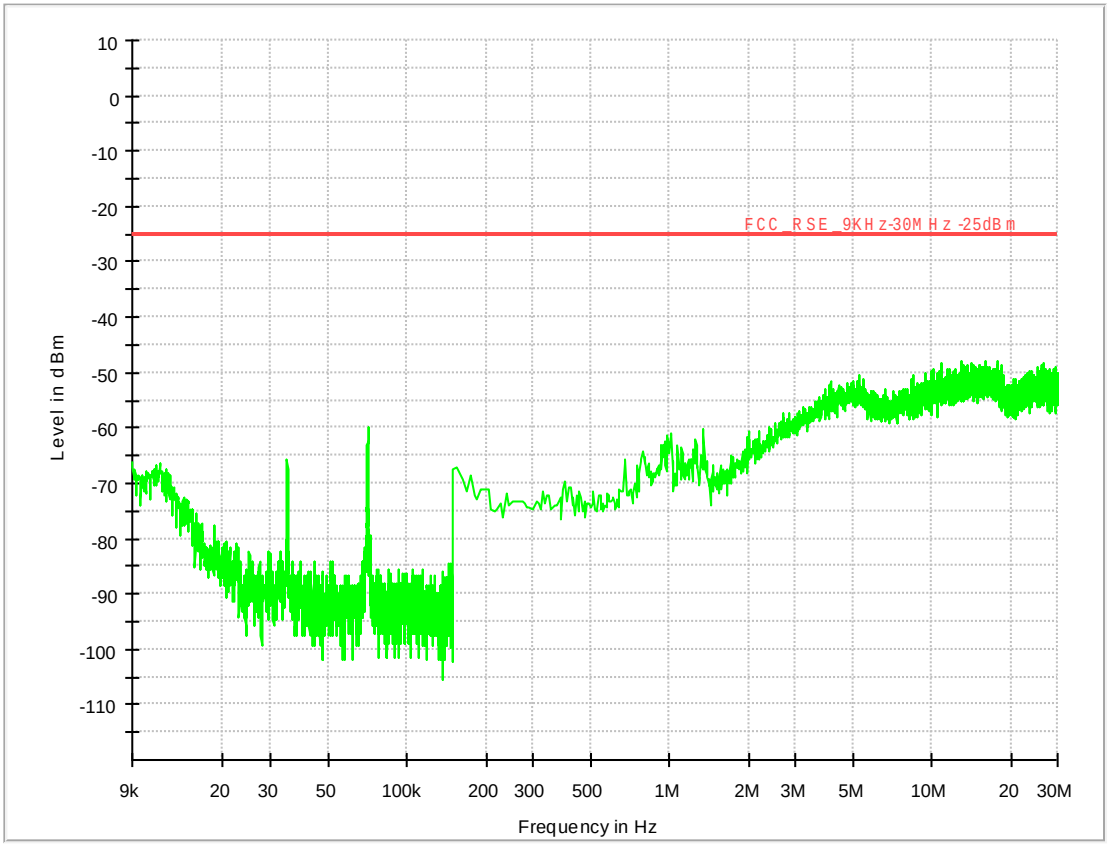
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

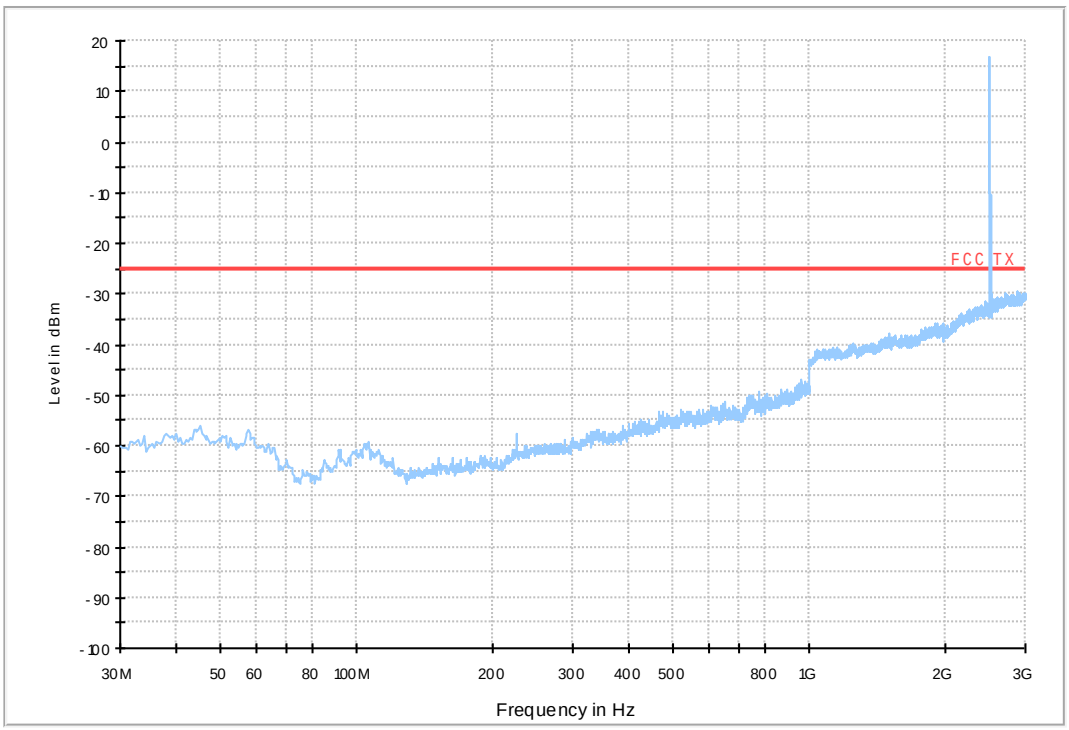
7.1 For LTE

7.1.1 Test Band = CA_7C_ANT1

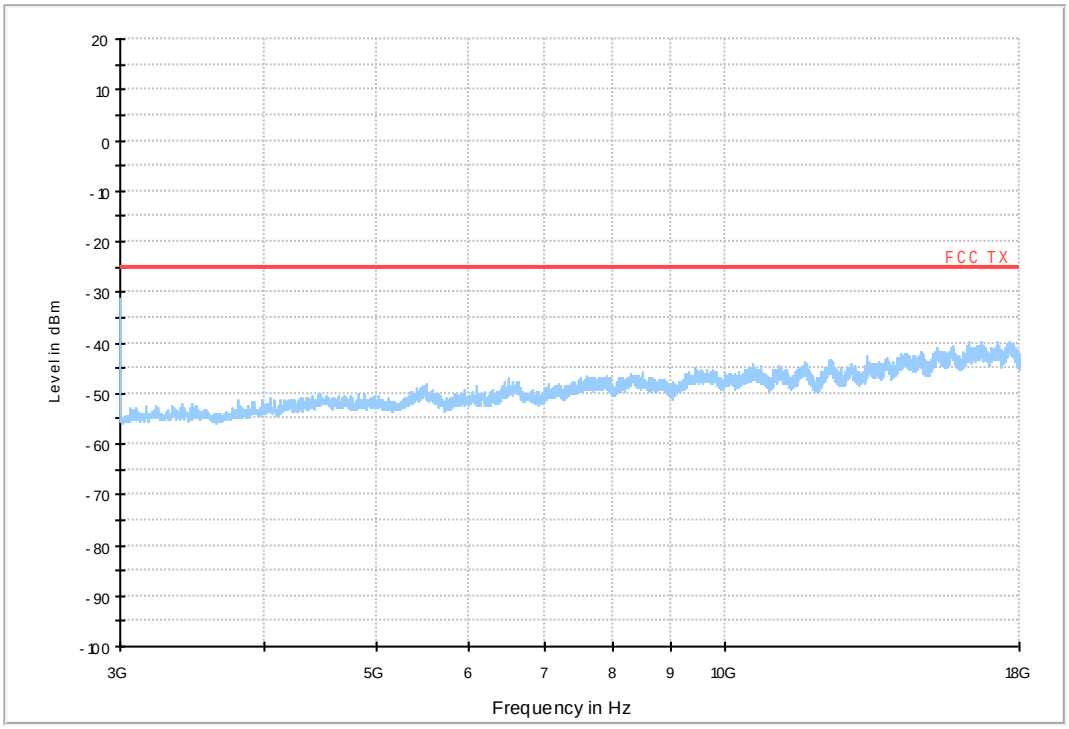
7.1.1.1 Test Bandwidth = 15MHz+15MHz



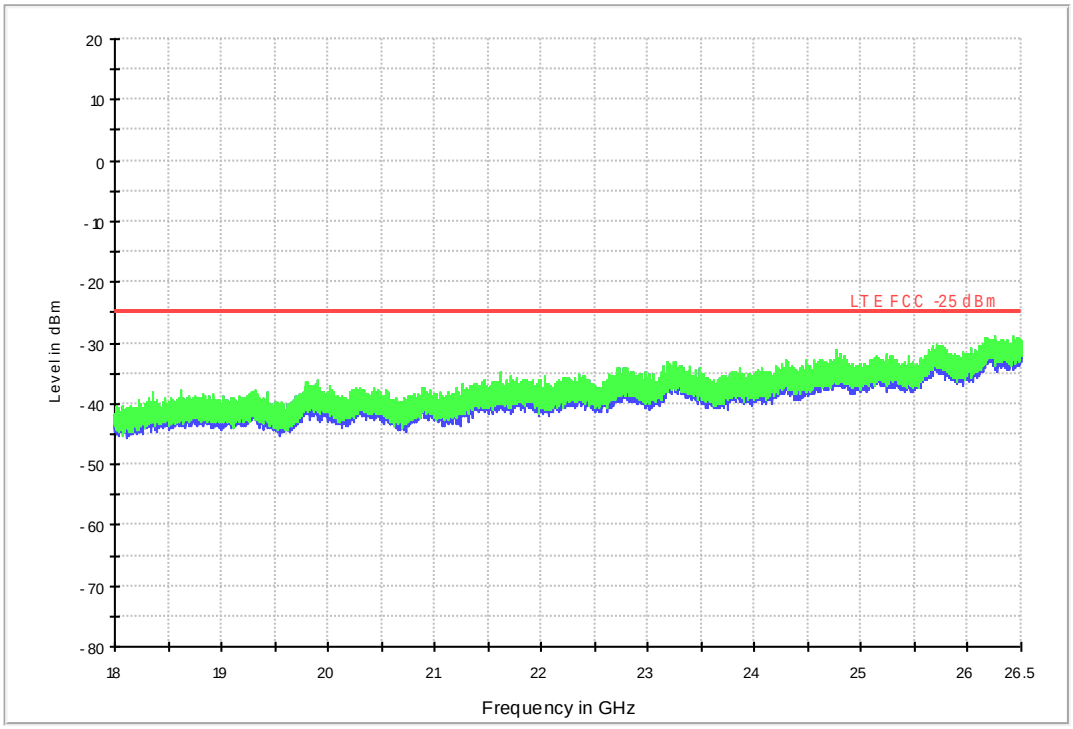
LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit



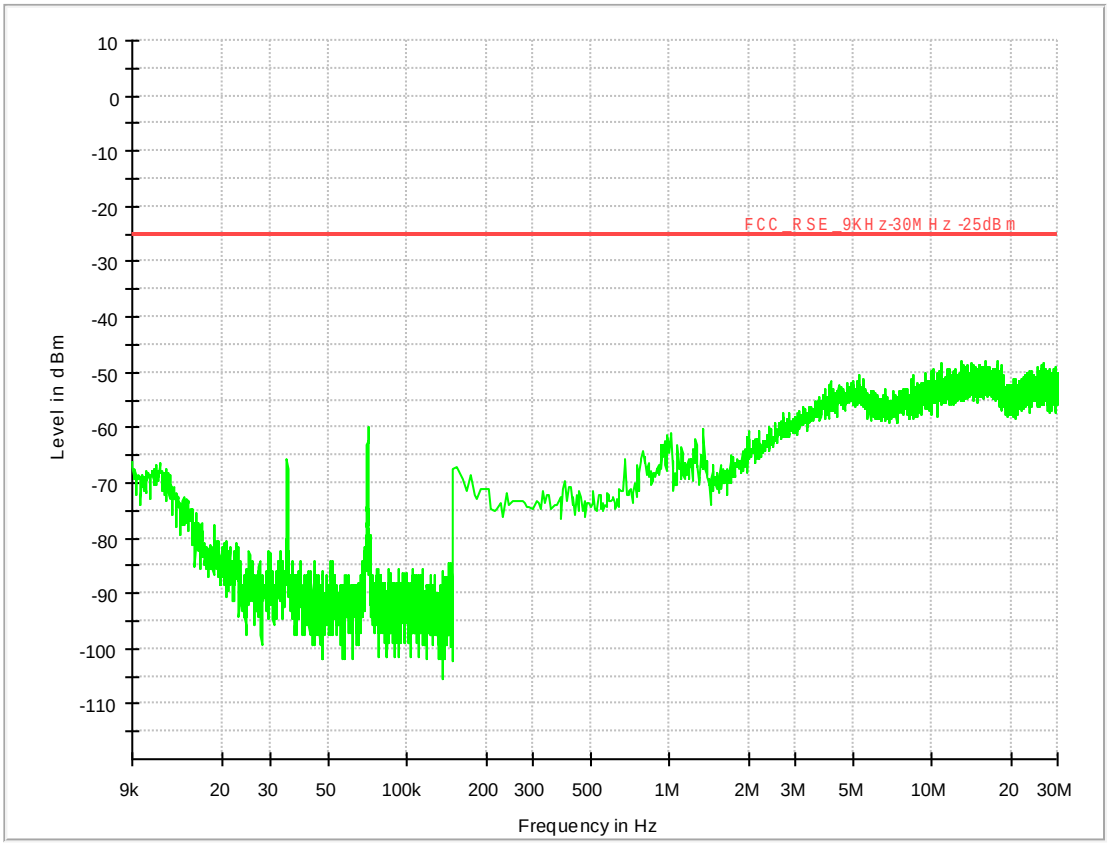
LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit



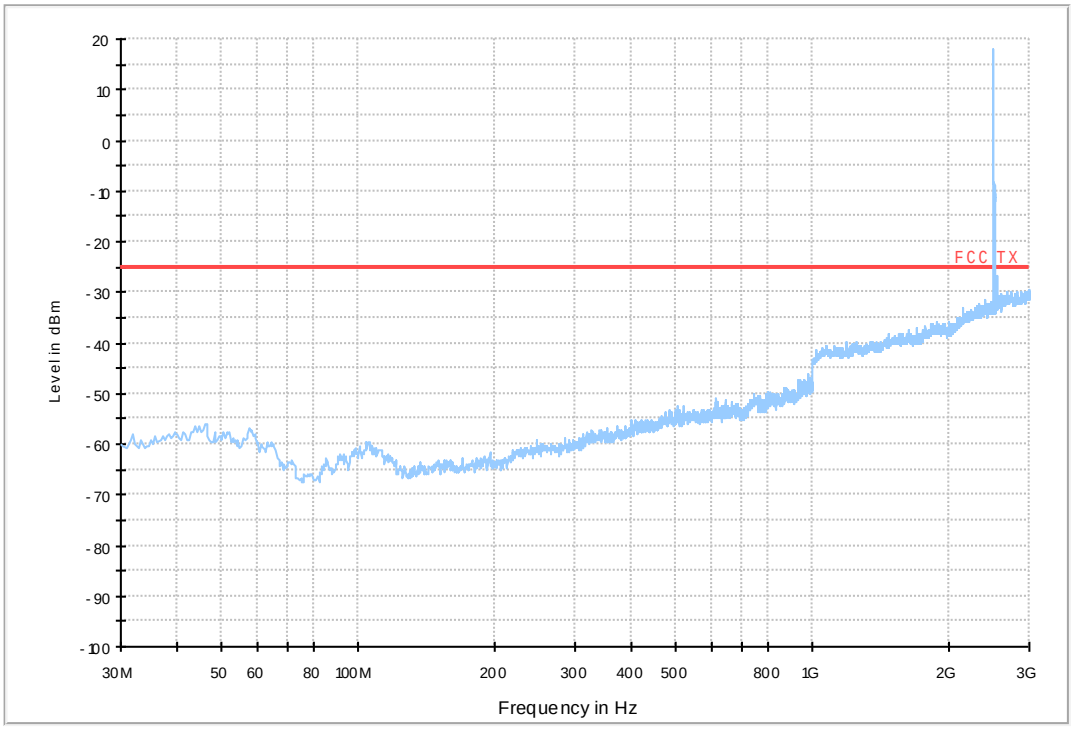
18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK



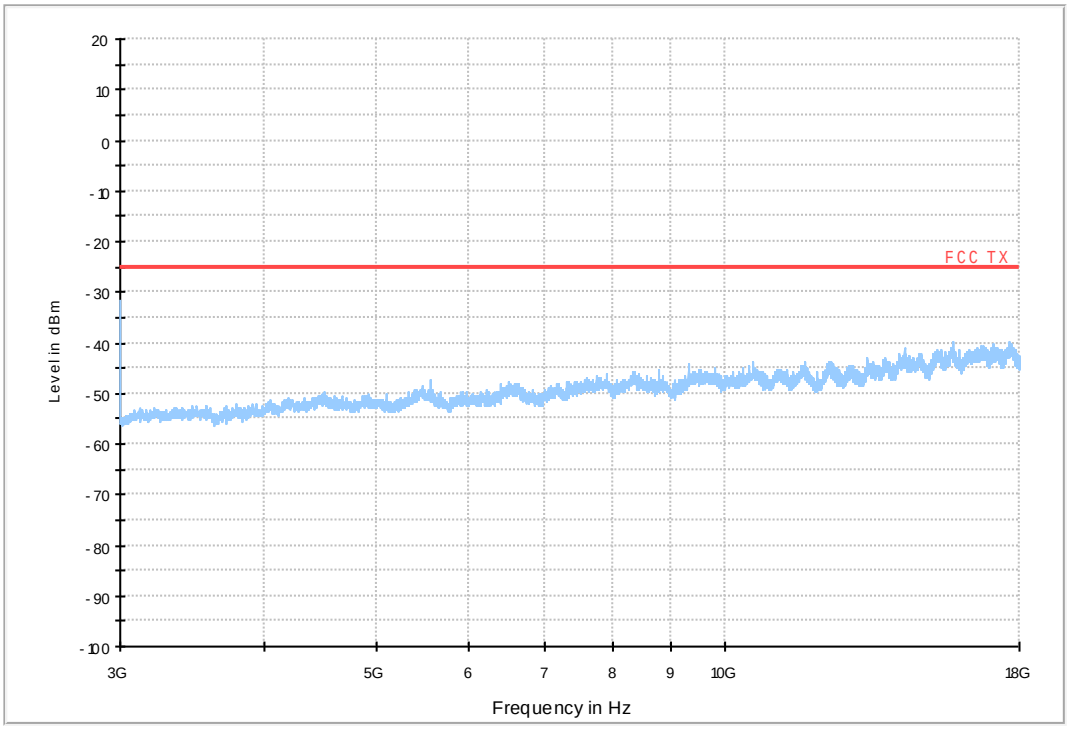
7.1.1.2 Test Bandwidth = 20MHz+20MHz



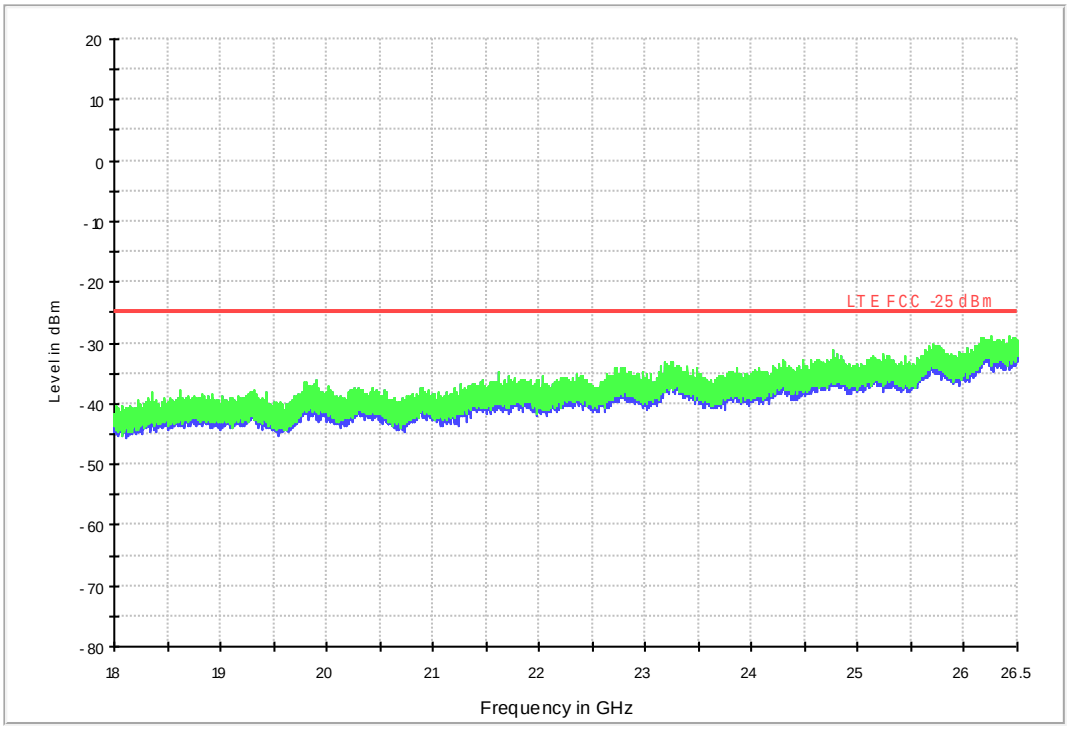
LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit



LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit

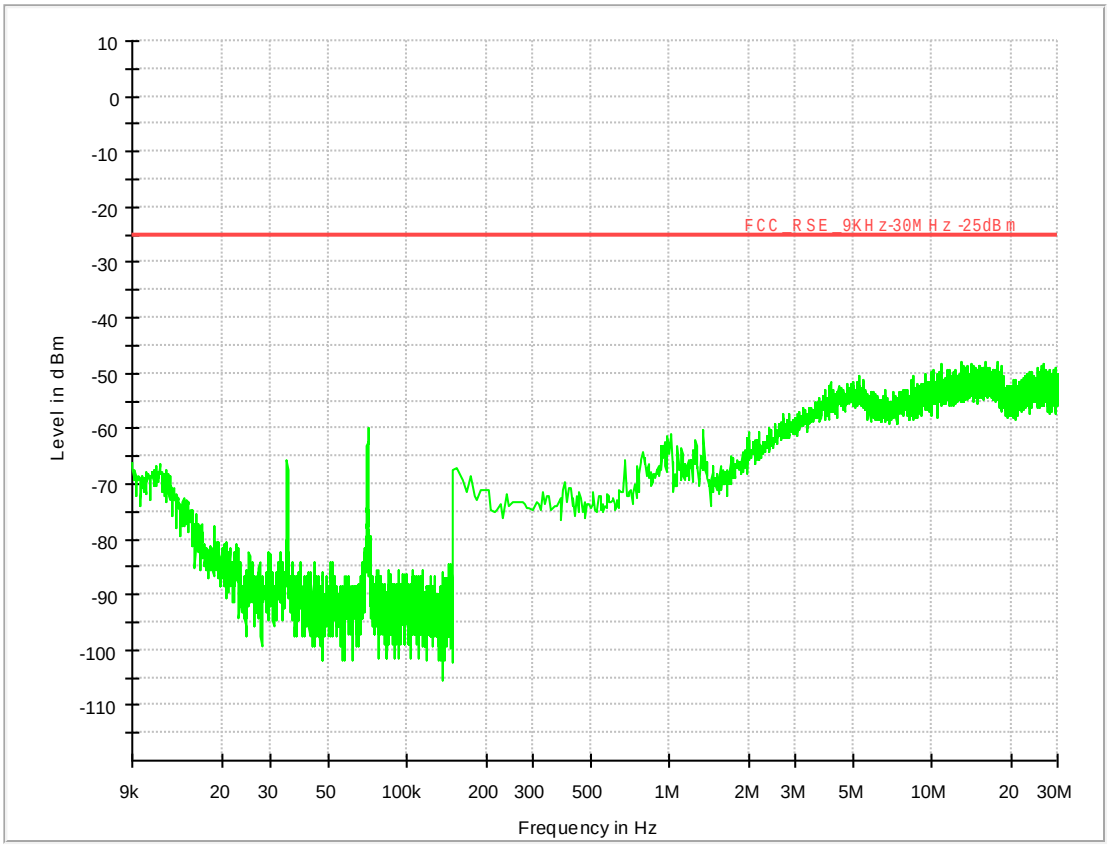


18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK

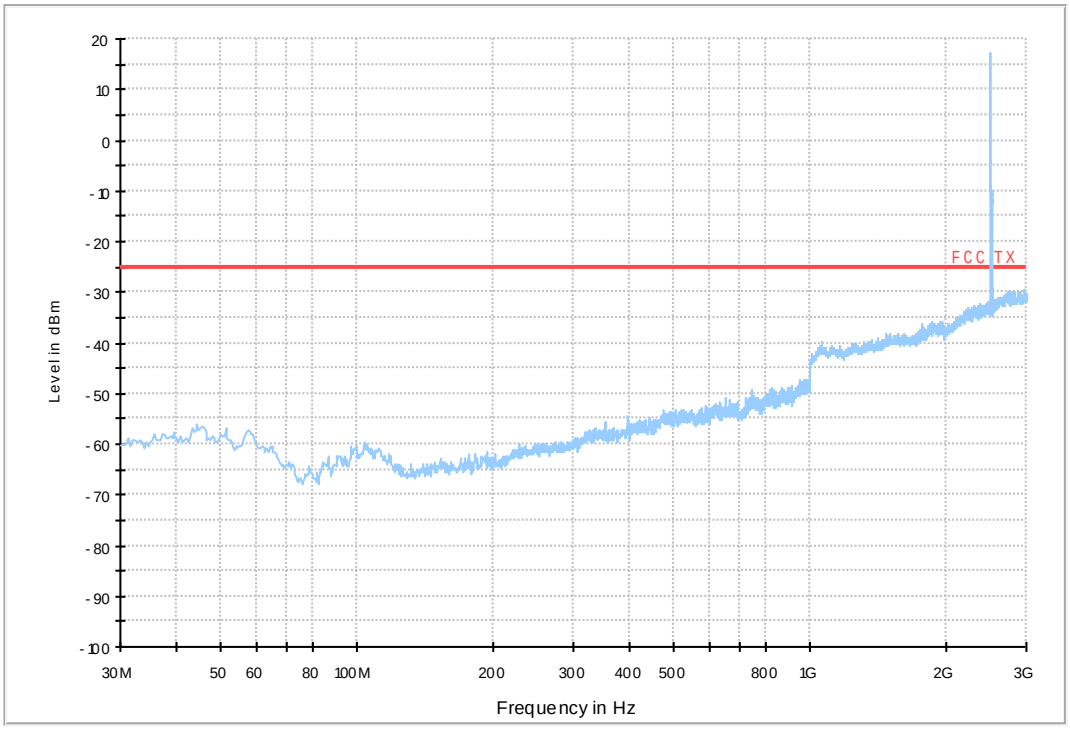


7.1.2 Test Band = CA_7C_ANT2

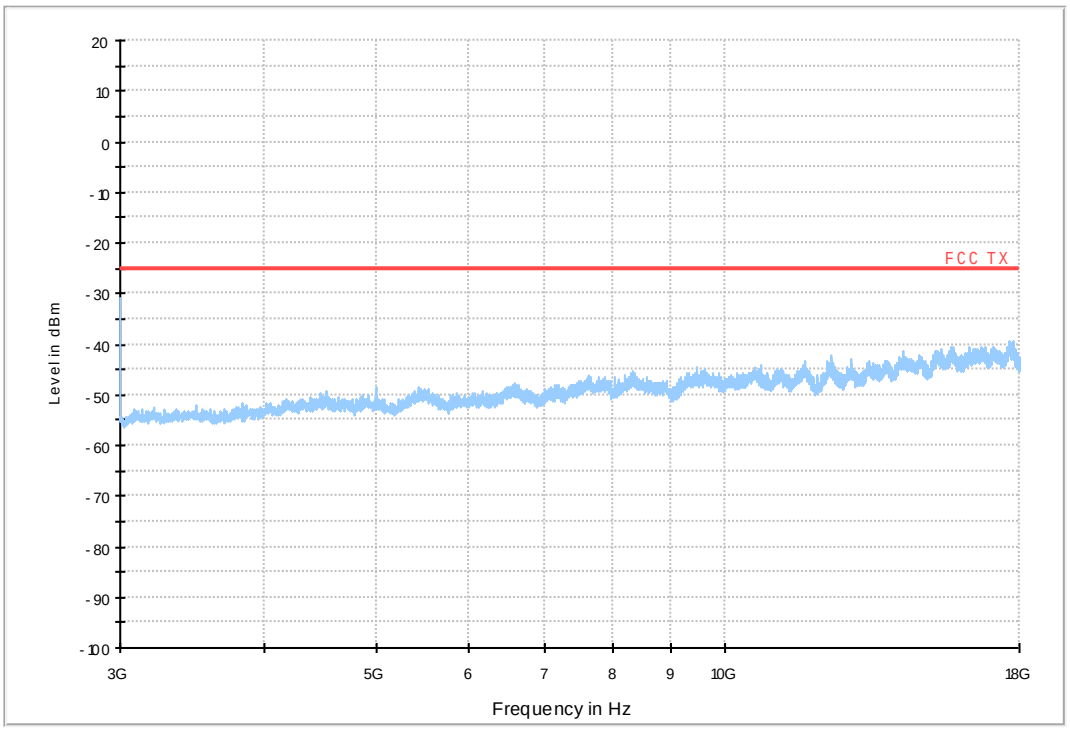
7.1.2.1 Test Bandwidth = 15MHz+15MHz



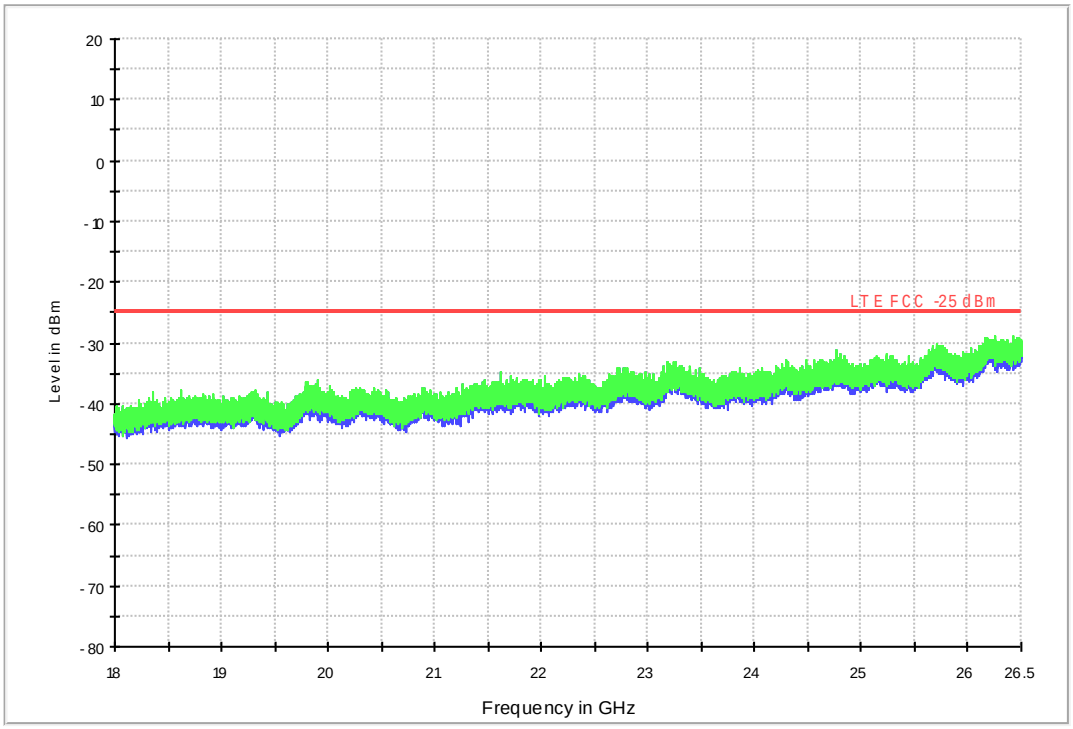
LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit



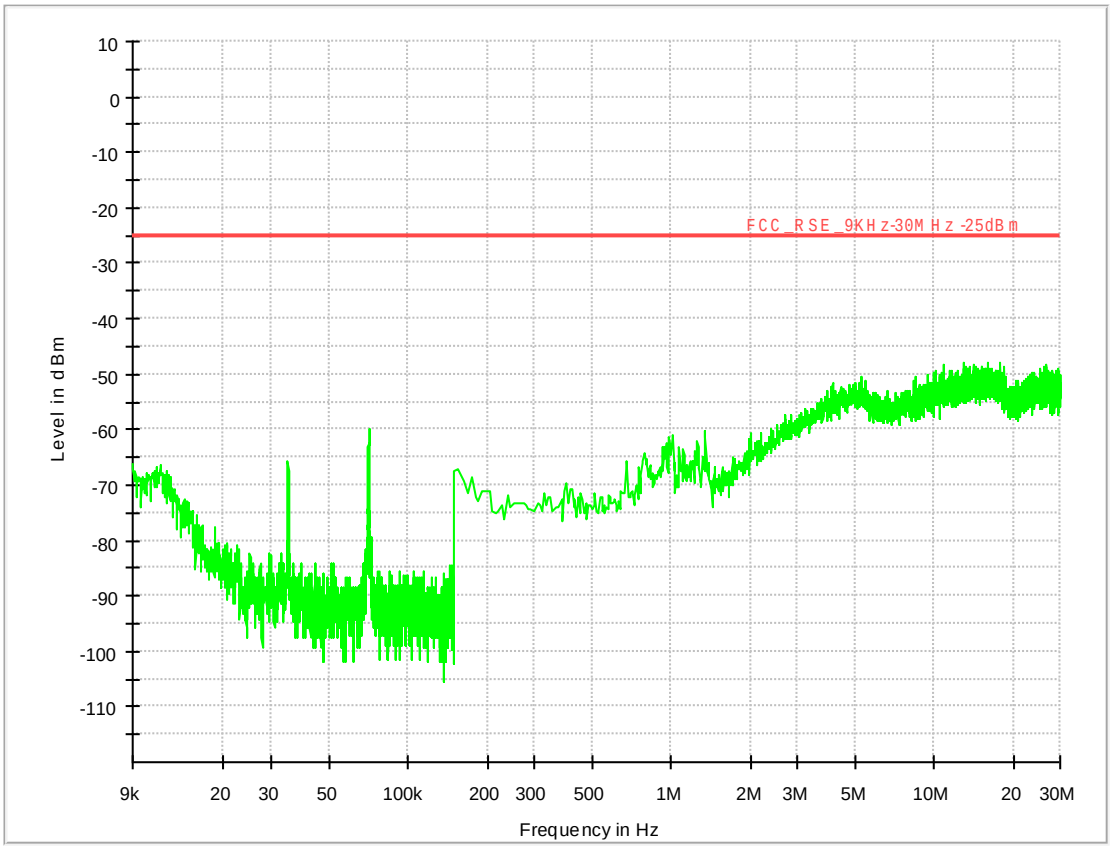
LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit



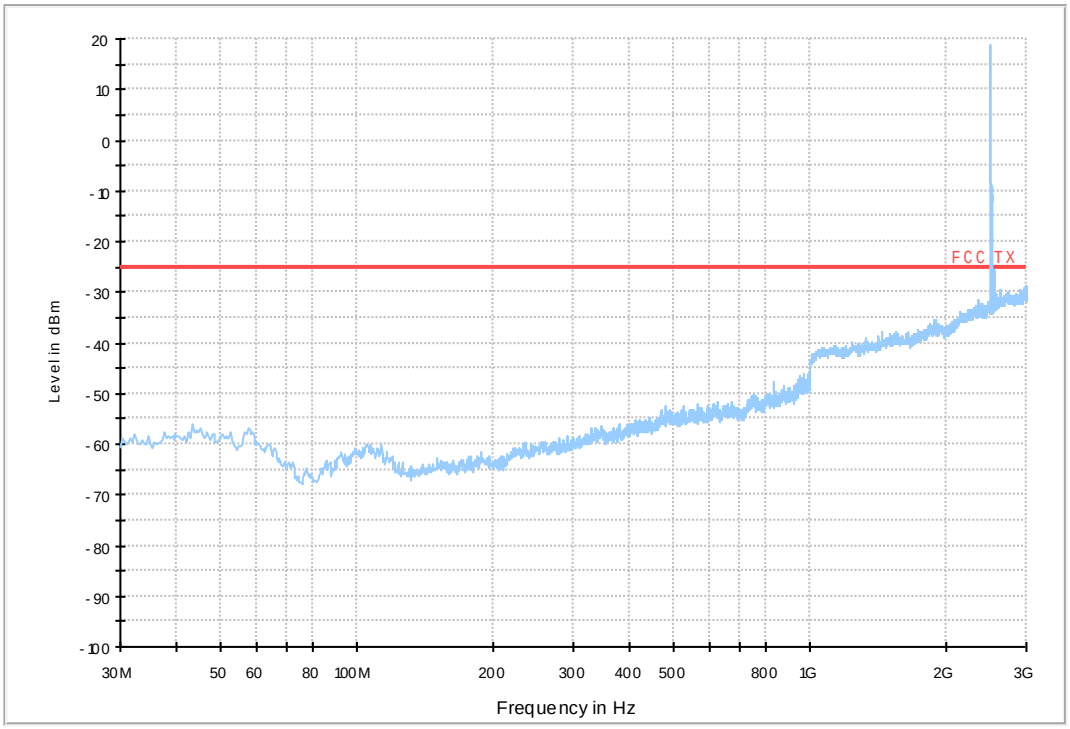
18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK



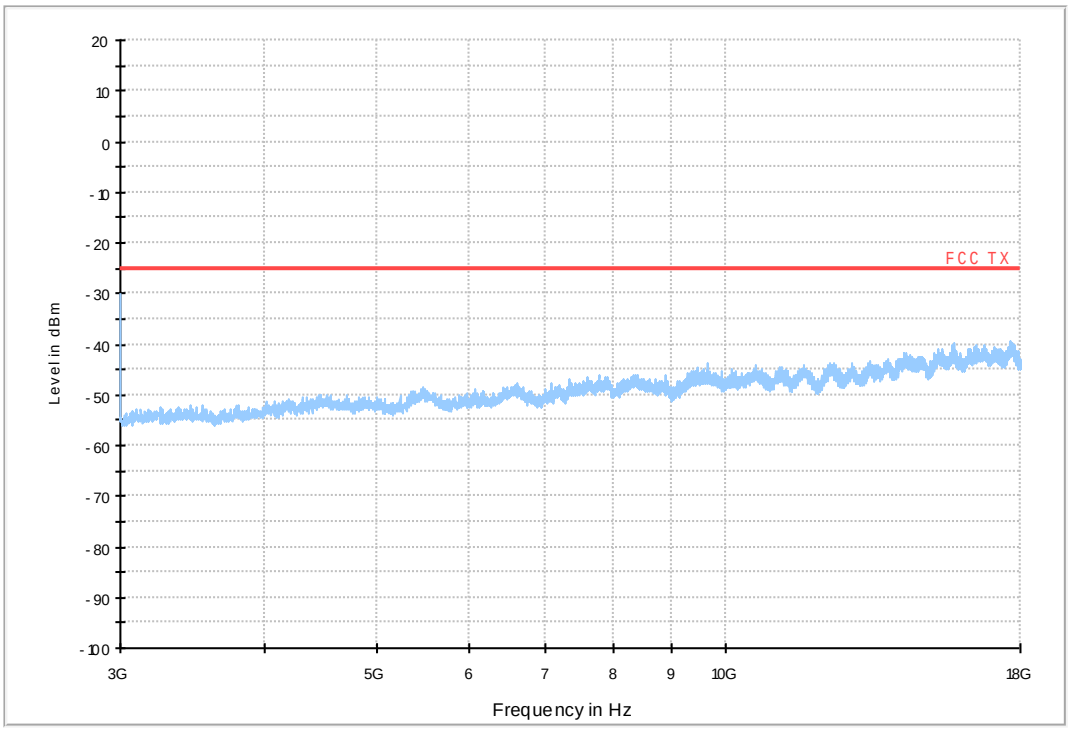
7.1.2.2 Test Bandwidth = 20MHz+20MHz



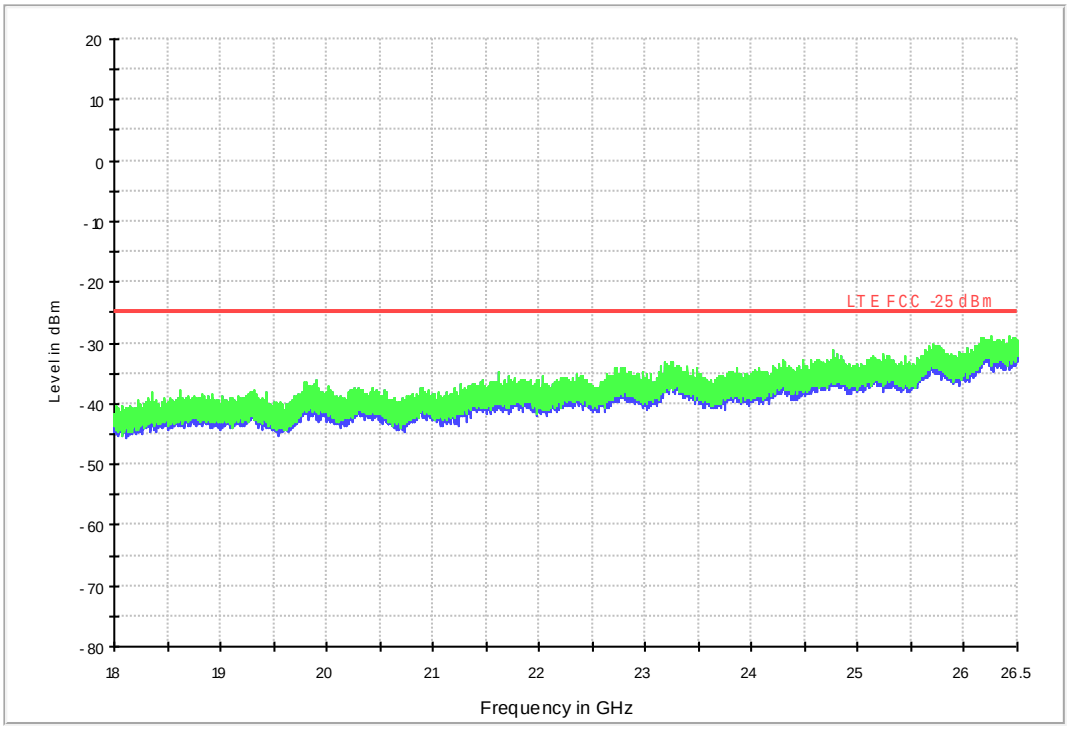
LTE Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_L -25dBm limit



LTE FDD Band 7 RSE-TX-DIRECTOR ABOVE 1.5G_H -25dBm limit



18G~26.5G RSE-TX-DIRECTOR ABOVE 1.5G PK



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
CA_7C	LTE/TM1	15MHz +15MHz	LCH	TN	VL	-19.74000	-0.00787	PASS
					VN	-16.35000	-0.00652	PASS
					VH	-14.03000	-0.00560	PASS
			MCH	TN	VL	-18.95000	-0.00750	PASS
					VN	-10.97000	-0.00434	PASS
					VH	-12.85000	-0.00508	PASS
			HCH	TN	VL	-18.84000	-0.00740	PASS
					VN	-16.58000	-0.00651	PASS
					VH	-10.29000	-0.00404	PASS
		20MHz +20MHz	LCH	TN	VL	-14.78000	-0.00589	PASS
					VN	-13.07000	-0.00521	PASS
					VH	-12.35000	-0.00492	PASS
			MCH	TN	VL	-18.04000	-0.00714	PASS
					VN	-14.20000	-0.00562	PASS
					VH	-12.40000	-0.00491	PASS
			HCH	TN	VL	-16.38000	-0.00645	PASS
					VN	-13.23000	-0.00521	PASS
					VH	-10.50000	-0.00413	PASS
	LTE/TM2	15MHz +15MHz	LCH	TN	VL	-8.21000	-0.00327	PASS
					VN	-20.87000	-0.00832	PASS
					VH	-12.89000	-0.00514	PASS
			MCH	TN	VL	-10.23000	-0.00405	PASS
					VN	-22.90000	-0.00906	PASS
					VH	-13.80000	-0.00546	PASS
			HCH	TN	VL	-10.94000	-0.00429	PASS
					VN	-22.95000	-0.00901	PASS
					VH	-12.79000	-0.00502	PASS
		20MHz +20MHz	LCH	TN	VL	-11.90000	-0.00474	PASS
					VN	-20.18000	-0.00804	PASS
					VH	-13.22000	-0.00527	PASS
			MCH	TN	VL	-7.70000	-0.00305	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-23.00000	-0.00911	PASS
					VH	-10.74000	-0.00425	PASS
			HCH	TN	VL	-8.65000	-0.00341	PASS
					VN	-18.54000	-0.00730	PASS
					VH	-13.83000	-0.00544	PASS

8.1.2Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CA_7C	LTE/TM1	15MHz+15MHz	LCH	VN	-30	-15.74000	-0.00628	PASS
					-20	-12.40000	-0.00495	PASS
					-10	-16.02000	-0.00639	PASS
					0	-13.82000	-0.00551	PASS
					10	-14.86000	-0.00593	PASS
					20	-16.35000	-0.00652	PASS
					30	-13.56000	-0.00541	PASS
					40	-12.13000	-0.00484	PASS
					50	-15.15000	-0.00604	PASS
			MCH	VN	-30	-13.39000	-0.00530	PASS
					-20	-16.38000	-0.00648	PASS
					-10	-10.56000	-0.00418	PASS
					0	-12.26000	-0.00485	PASS
					10	-11.54000	-0.00457	PASS
					20	-10.97000	-0.00434	PASS
					30	-9.71000	-0.00384	PASS
					40	-15.92000	-0.00630	PASS
					50	-17.12000	-0.00677	PASS
			HCH	VN	-30	-15.61000	-0.00613	PASS
					-20	-12.59000	-0.00494	PASS
					-10	-14.35000	-0.00563	PASS
					0	-15.29000	-0.00600	PASS
					10	-12.45000	-0.00489	PASS
					20	-16.58000	-0.00651	PASS
					30	-15.88000	-0.00623	PASS
					40	-9.87000	-0.00387	PASS
					50	-13.53000	-0.00531	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		20MHz+20MHz	LCH	VN	-30	-18.80000	-0.00749	PASS
					-20	-15.31000	-0.00610	PASS
					-10	-17.75000	-0.00707	PASS
					0	-9.67000	-0.00385	PASS
					10	-11.10000	-0.00442	PASS
					20	-13.07000	-0.00521	PASS
					30	-18.45000	-0.00735	PASS
					40	-14.19000	-0.00565	PASS
					50	-13.98000	-0.00557	PASS
			MCH	VN	-30	-12.83000	-0.00508	PASS
					-20	-18.88000	-0.00748	PASS
					-10	-14.32000	-0.00567	PASS
					0	-14.72000	-0.00583	PASS
					10	-12.03000	-0.00476	PASS
					20	-14.20000	-0.00562	PASS
					30	-11.50000	-0.00455	PASS
					40	-14.69000	-0.00582	PASS
					50	-14.08000	-0.00558	PASS
			HCH	VN	-30	-12.92000	-0.00509	PASS
					-20	-12.06000	-0.00475	PASS
					-10	-15.23000	-0.00600	PASS
					0	-10.21000	-0.00402	PASS
					10	-15.65000	-0.00616	PASS
					20	-13.23000	-0.00521	PASS
					30	-14.29000	-0.00563	PASS
					40	-16.38000	-0.00645	PASS
					50	-16.67000	-0.00656	PASS
	LTE/TM2	15MHz+15MHz	LCH	VN	-30	-17.29000	-0.00690	PASS
					-20	-21.29000	-0.00849	PASS
					-10	-21.11000	-0.00842	PASS
					0	-24.50000	-0.00977	PASS
					10	-19.70000	-0.00786	PASS
					20	-20.87000	-0.00832	PASS
					30	-19.60000	-0.00782	PASS
					40	-20.04000	-0.00799	PASS
					50	-21.43000	-0.00855	PASS
			MCH	VN	-30	-19.54000	-0.00773	PASS
					-20	-17.64000	-0.00698	PASS
					-10	-20.11000	-0.00796	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					0	-19.88000	-0.00787	PASS
					10	-20.59000	-0.00815	PASS
					20	-22.90000	-0.00906	PASS
					30	-18.98000	-0.00751	PASS
					40	-18.45000	-0.00730	PASS
					50	-18.31000	-0.00724	PASS
			HCH	VN	-30	-24.22000	-0.00951	PASS
					-20	-18.55000	-0.00728	PASS
					-10	-22.19000	-0.00871	PASS
					0	-22.87000	-0.00898	PASS
					10	-23.89000	-0.00938	PASS
					20	-22.95000	-0.00901	PASS
					30	-21.20000	-0.00832	PASS
					40	-19.81000	-0.00778	PASS
					50	-22.89000	-0.00899	PASS
		20MHz+20MHz	LCH	VN	-30	-21.37000	-0.00851	PASS
					-20	-21.46000	-0.00855	PASS
					-10	-21.87000	-0.00871	PASS
					0	-17.37000	-0.00692	PASS
					10	-21.93000	-0.00874	PASS
					20	-20.18000	-0.00804	PASS
					30	-22.43000	-0.00894	PASS
					40	-16.24000	-0.00647	PASS
					50	-22.23000	-0.00886	PASS
			MCH	VN	-30	-22.54000	-0.00893	PASS
					-20	-21.60000	-0.00855	PASS
					-10	-20.79000	-0.00823	PASS
					0	-20.31000	-0.00804	PASS
					10	-17.01000	-0.00674	PASS
					20	-23.00000	-0.00911	PASS
					30	-20.31000	-0.00804	PASS
					40	-22.89000	-0.00906	PASS
					50	-17.97000	-0.00712	PASS
			HCH	VN	-30	-19.24000	-0.00757	PASS
					-20	-18.91000	-0.00744	PASS
					-10	-19.10000	-0.00752	PASS
					0	-24.08000	-0.00948	PASS
					10	-17.60000	-0.00693	PASS
					20	-18.54000	-0.00730	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	-19.34000	-0.00761	PASS
					40	-16.68000	-0.00657	PASS
					50	-21.20000	-0.00835	PASS

END