Appendix for test report

1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]
BAND30	LTE/TM1	5	LCH	RB1#0	23.36	23.16
				RB1#13	23.4	23.2
				RB1#24	23.32	23.12
				RB12#0	22.27	22.07
				RB12#6	22.24	22.04
				RB12#13	22.21	22.01
				RB25#0	22.23	22.03
			MCH	RB1#0	23.22	23.02
				RB1#13	23.23	23.03
				RB1#24	23.1	22.9
				RB12#0	22.36	22.16
				RB12#6	22.39	22.19
				RB12#13	22.37	22.17
				RB25#0	22.36	22.16
			HCH	RB1#0	23.13	22.93
				RB1#13	23.14	22.94
				RB1#24	22.75	22.55
				RB12#0	22.37	22.17
				RB12#6	22.36	22.16
				RB12#13	22.18	21.98
				RB25#0	22.35	22.15
		10	LCH/ MCH/ HCH	RB1#0	23.6	23.4
				RB1#25	23.66	23.46
				RB1#49	23.43	23.23
				RB25#0	22.39	22.19
				RB25#13	22.42	22.22
				RB25#25	22.32	22.12
				RB50#0	22.38	22.18
	LTE/TM2	5	LCH	RB1#0	22.07	21.87
				RB1#13	21.97	21.77
				RB1#24	21.76	21.56
				RB12#0	21.39	21.19
				RB12#6	21.58	21.38
				RB12#13	21.39	21.19
				RB25#0	21.43	21.23
			MCH	RB1#0	21.8	21.6
				RB1#13	21.7	21.5
				RB1#24	21.57	21.37
				RB12#0	21.06	20.86

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]
				RB12#6	21.1	20.9
				RB12#13	21.17	20.97
				RB25#0	21.49	21.29
			HCH	RB1#0	22.43	22.23
				RB1#13	22.57	22.37
				RB1#24	22.19	21.99
				RB12#0	21.34	21.14
				RB12#6	21.4	21.2
				RB12#13	21.32	21.12
				RB25#0	21.34	21.14
		10	LCH/ MCH/ HCH	RB1#0	22.53	22.33
				RB1#25	22.57	22.37
				RB1#49	22.22	22.02
				RB25#0	21.51	21.31
				RB25#13	21.53	21.33
				RB25#25	21.4	21.2
				RB50#0	21.45	21.25

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm/5MHz]	EIRP[dBm/5MHz]	Limit [dBm/5MHz]	Verdict
BAND 30	LTE/TM1	5	LCH	RB25#0	23.4	23.2	43	PASS
			MCH	RB25#0	23.23	23.03	43	PASS
			HCH	RB25#0	23.14	22.94	43	PASS
		10	LCH/MCH/HCH	RB50#0	23.66	23.46	43	PASS
	LTE/TM2	5	LCH	RB25#0	22.07	21.87	43	PASS
			MCH	RB25#0	21.8	21.6	43	PASS
			HCH	RB25#0	22.57	22.37	43	PASS
		10	LCH/MCH/HCH	RB50#0	22.57	22.37	43	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBi]

b, SGP=Signal Generator Level

Note2:

SET Span=1.5*OBW

SET RBW=1%of the OBW,not to exceed 1MHz

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector:RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
BAND30	LTE/TM1	5	LCH	RB1#0	4.04	13	PASS
				RB1#13	3.74	13	PASS
				RB1#24	3.72	13	PASS
				RB12#0	4.81	13	PASS
				RB12#6	4.66	13	PASS
				RB12#13	4.61	13	PASS
				RB25#0	5.05	13	PASS
			MCH	RB1#0	3.96	13	PASS
				RB1#13	3.51	13	PASS
				RB1#24	3.45	13	PASS
				RB12#0	4.56	13	PASS
				RB12#6	4.32	13	PASS
				RB12#13	4.29	13	PASS
				RB25#0	4.91	13	PASS
			HCH	RB1#0	3.72	13	PASS
				RB1#13	3.32	13	PASS
				RB1#24	3.62	13	PASS
				RB12#0	4.33	13	PASS
				RB12#6	4.12	13	PASS
				RB12#13	4.2	13	PASS
				RB25#0	4.89	13	PASS
		10	LCH/ MCH/ HCH	RB1#0	3.95	13	PASS
				RB1#25	3.28	13	PASS
				RB1#49	3.2	13	PASS
				RB25#0	4.68	13	PASS
				RB25#13	4.38	13	PASS
				RB25#25	4.24	13	PASS
				RB50#0	4.96	13	PASS
	LTE/TM2	5	LCH	RB1#0	5.12	13	PASS
				RB1#13	4.84	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#24	4.96	13	PASS
				RB12#0	5.74	13	PASS
				RB12#6	5.54	13	PASS
				RB12#13	5.59	13	PASS
				RB25#0	6.13	13	PASS
			MCH	RB1#0	5.05	13	PASS
				RB1#13	4.56	13	PASS
				RB1#24	4.72	13	PASS
				RB12#0	5.45	13	PASS
				RB12#6	5.23	13	PASS
				RB12#13	5.33	13	PASS
				RB25#0	6.12	13	PASS
			HCH	RB1#0	4.22	13	PASS
				RB1#13	3.97	13	PASS
				RB1#24	4.19	13	PASS
				RB12#0	5.25	13	PASS
				RB12#6	5.02	13	PASS
				RB12#13	5.09	13	PASS
				RB25#0	5.69	13	PASS
		10	LCH/ MCH/ HCH	RB1#0	5.13	13	PASS
				RB1#25	4.25	13	PASS
				RB1#49	4.41	13	PASS
				RB25#0	5.71	13	PASS
				RB25#13	5.39	13	PASS
				RB25#25	5.33	13	PASS
				RB50#0	6.21	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

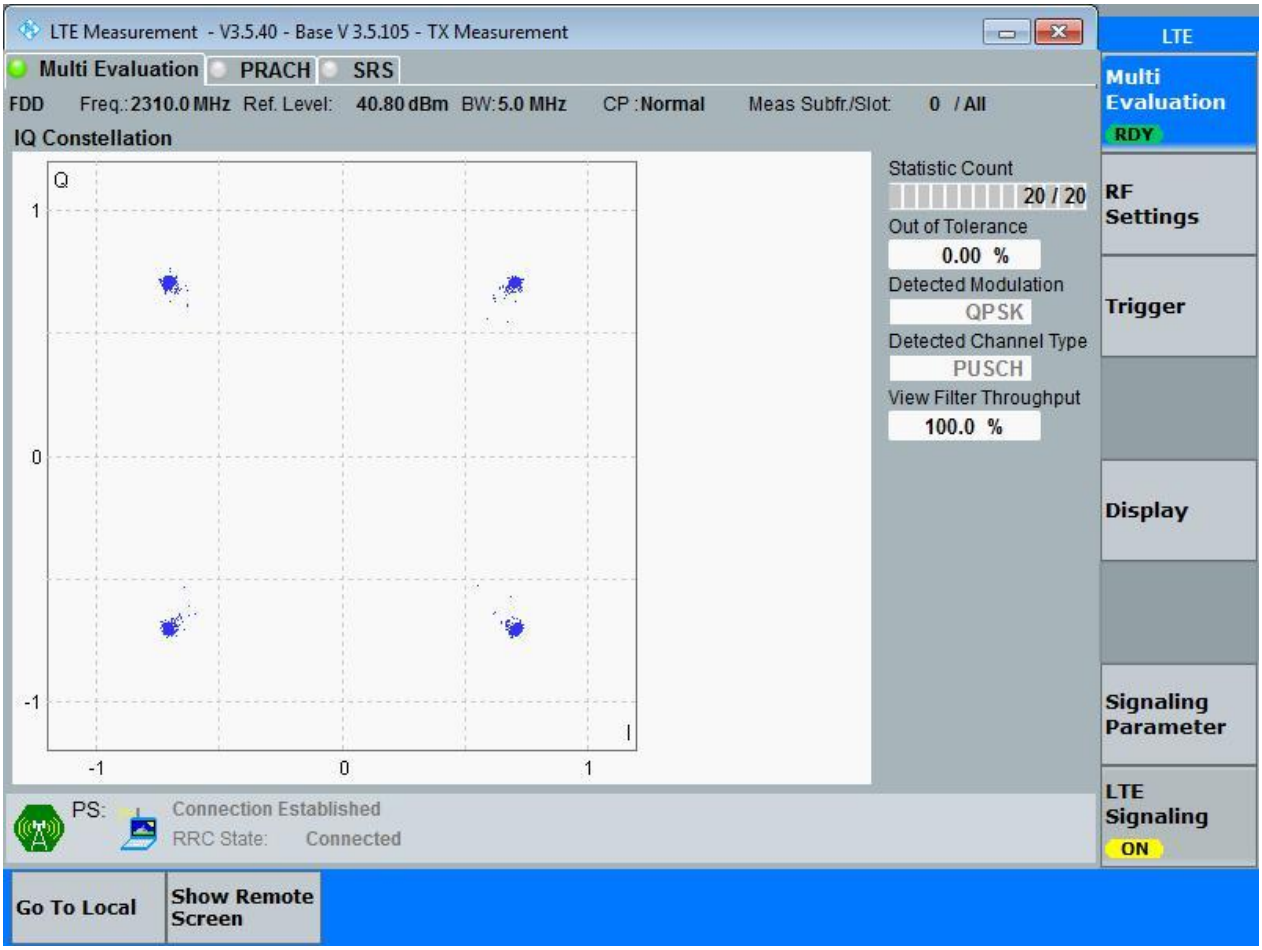
3.1.1 Test Band = BAND30

3.3.2.1 Test Mode = LTE/TM1

3.3.2.1.1 Test Bandwidth = 5

3.3.2.1.1.1 Test Channel = MCH

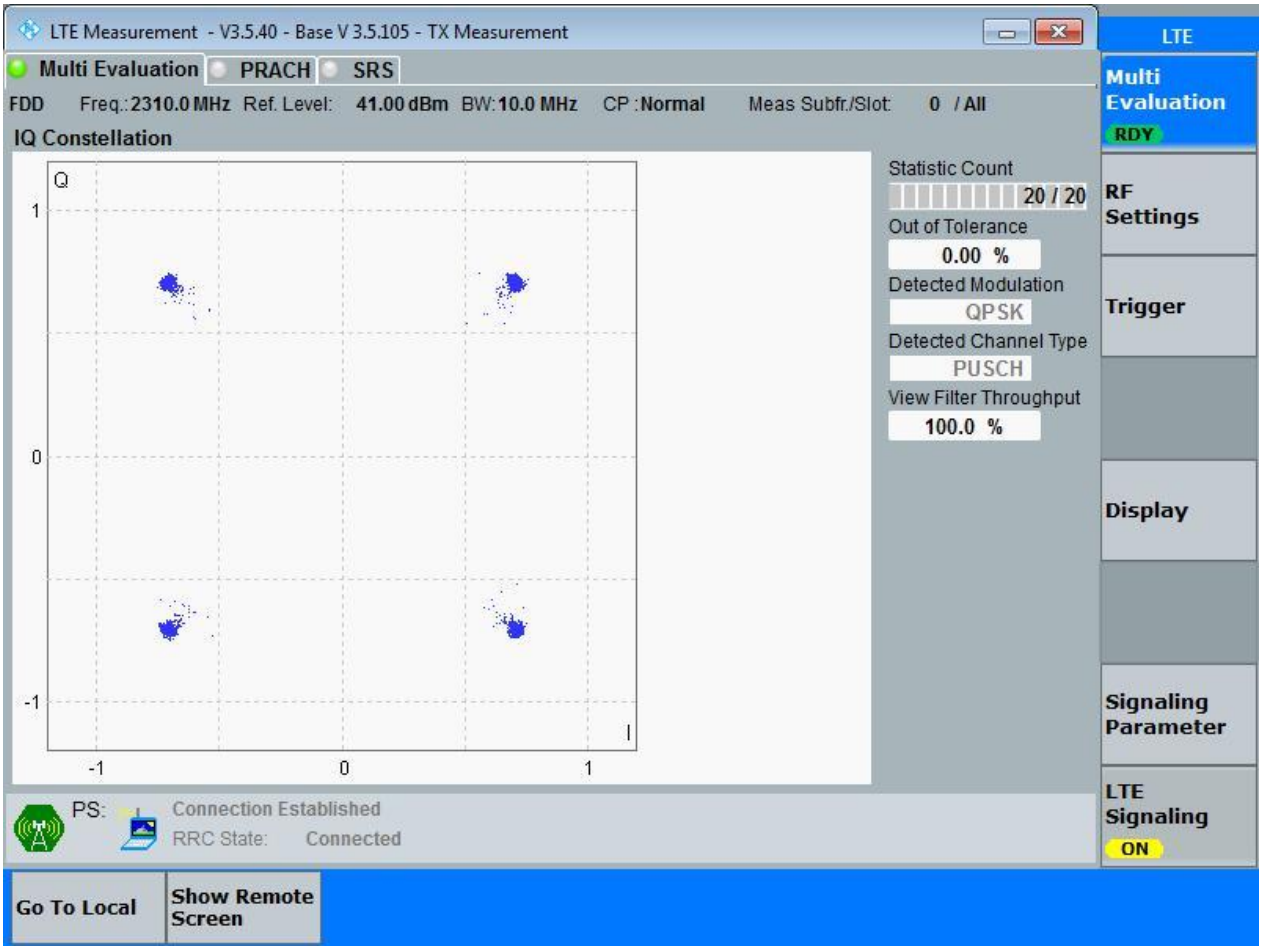
3.3.2.1.1.1.1 Test RB = RB25#0



3.3.2.1.2 Test Bandwidth = 10

3.3.2.1.2.1 Test Channel = MCH

3.3.2.1.2.1.1 Test RB = RB50#0

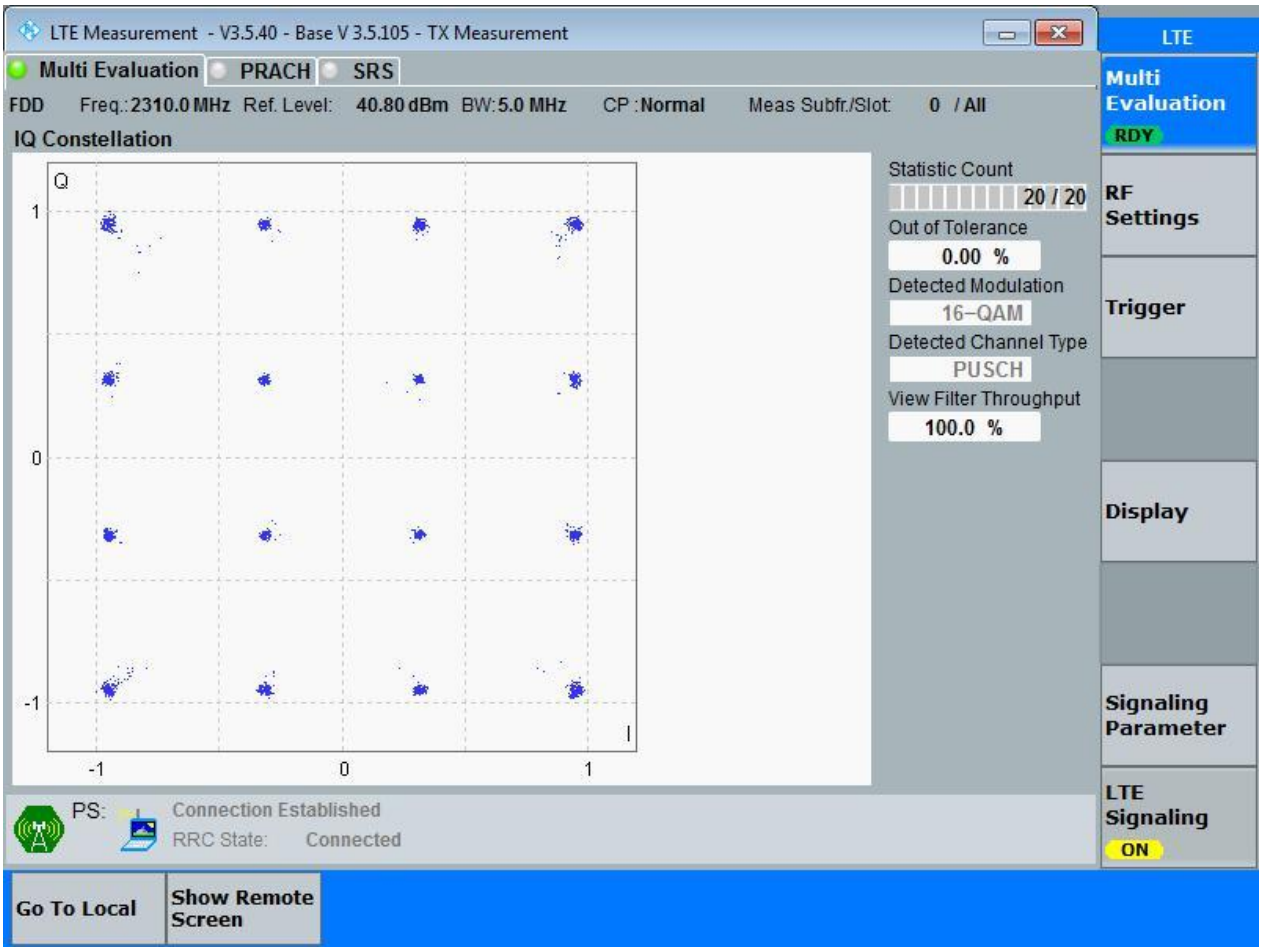


3.3.2.2 Test Mode = LTE/TM2

3.3.2.2.1 Test Bandwidth = 5

3.3.2.2.1.1 Test Channel = MCH

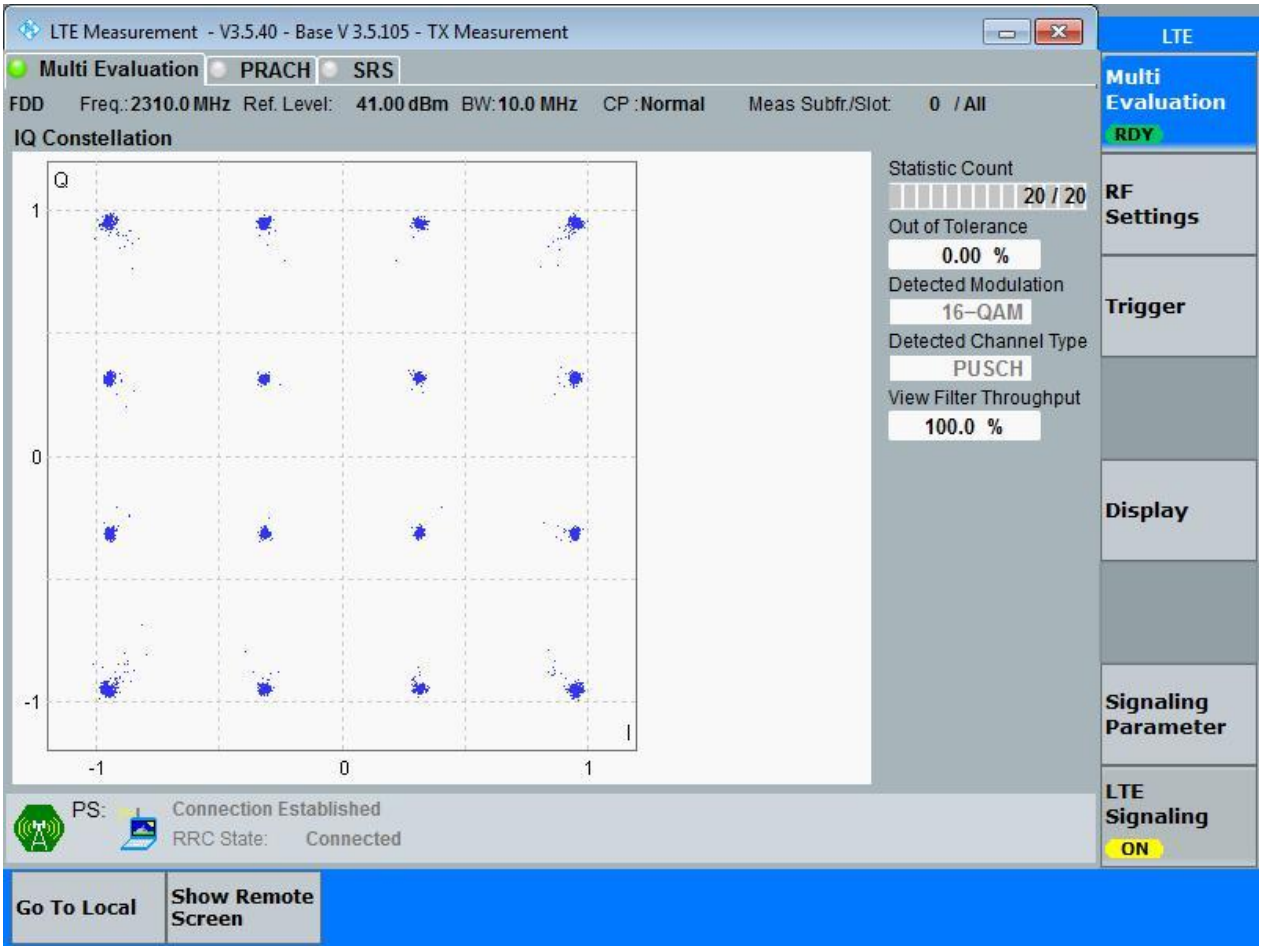
3.3.2.2.1.1.1 Test RB = RB25#0



3.3.2.2.2 Test Bandwidth = 10

3.3.2.2.2.1 Test Channel = MCH

3.3.2.2.2.1.1 Test RB = RB50#0



4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Bandwidth	Test Channel	Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
BAND30	LTE/TM1	5	LCH	RB25#0	4.50	4.97	Pass
			MCH	RB25#0	4.50	4.98	Pass
			HCH	RB25#0	4.50	4.96	Pass
		10	LCH/ MCH/ HCH	RB50#0	8.98	9.90	Pass
	LTE/TM2	5	LCH	RB25#0	4.50	5.01	Pass
			MCH	RB25#0	4.50	4.99	Pass
			HCH	RB25#0	4.50	5.00	Pass
		10	LCH/ MCH/ HCH	RB50#0	8.97	9.91	Pass

Part II - Test Plots

4.1 For LTE

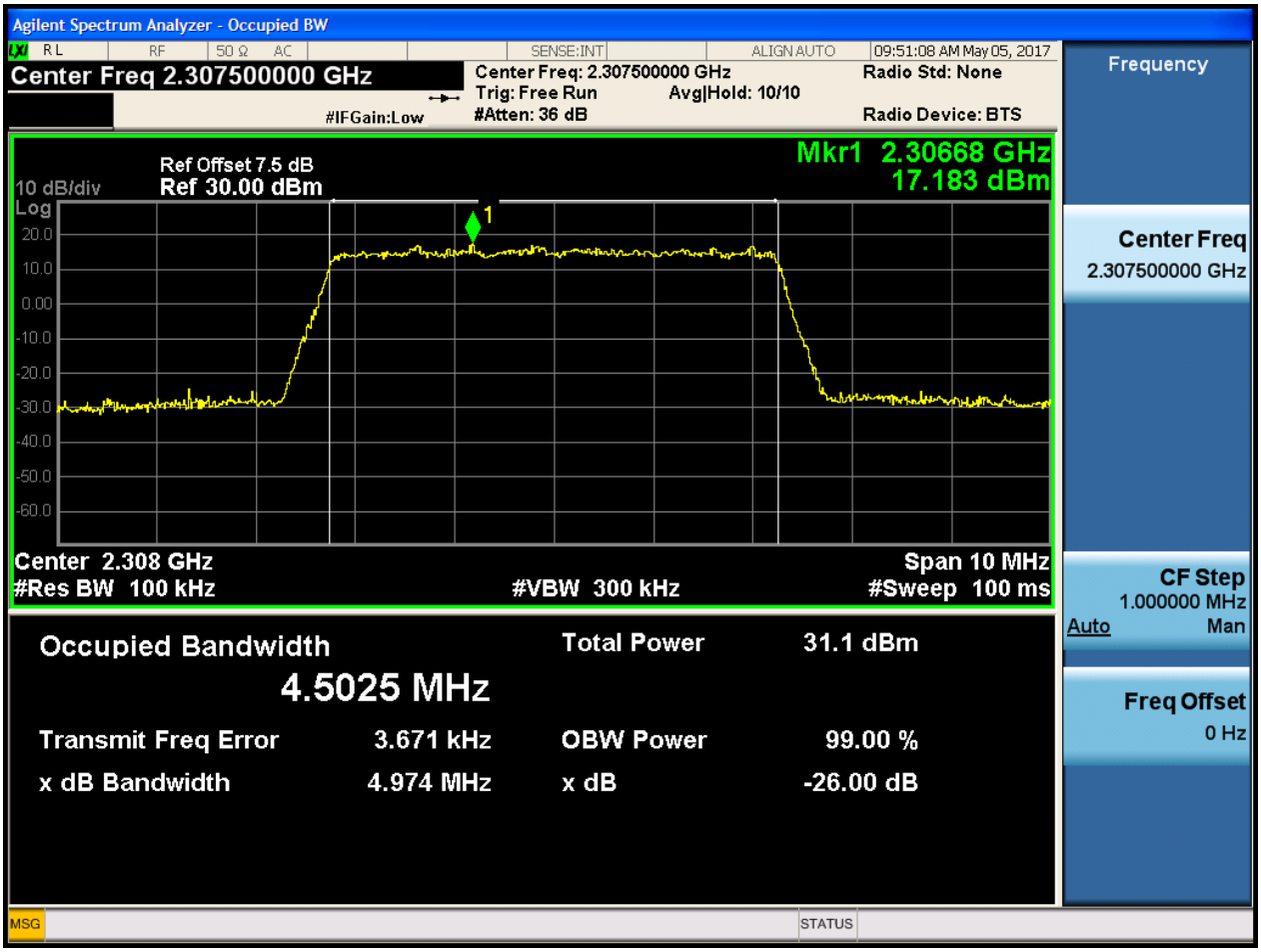
4.1.1 Test Band = BAND30

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 5

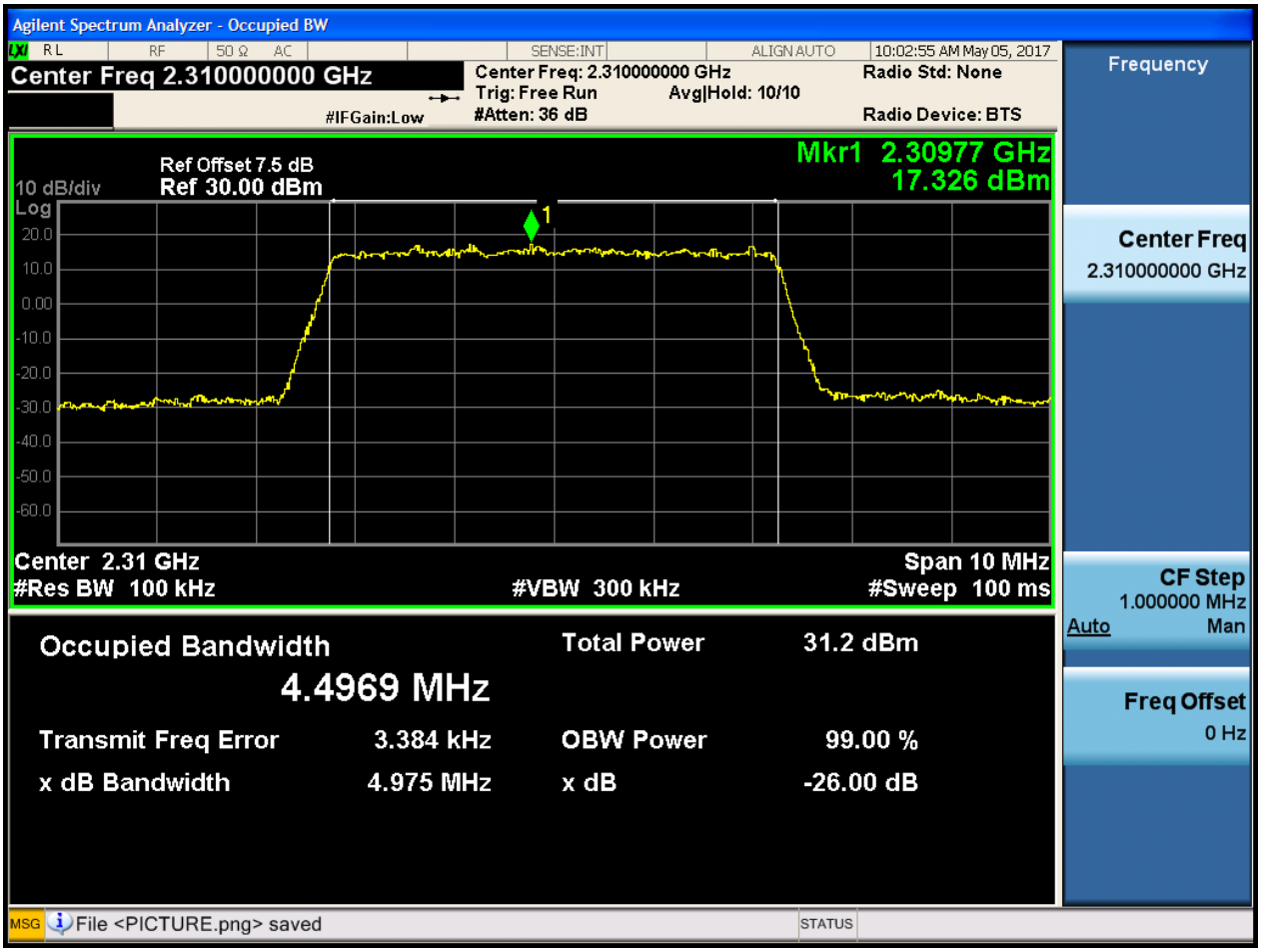
4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 Test RB = RB25#0



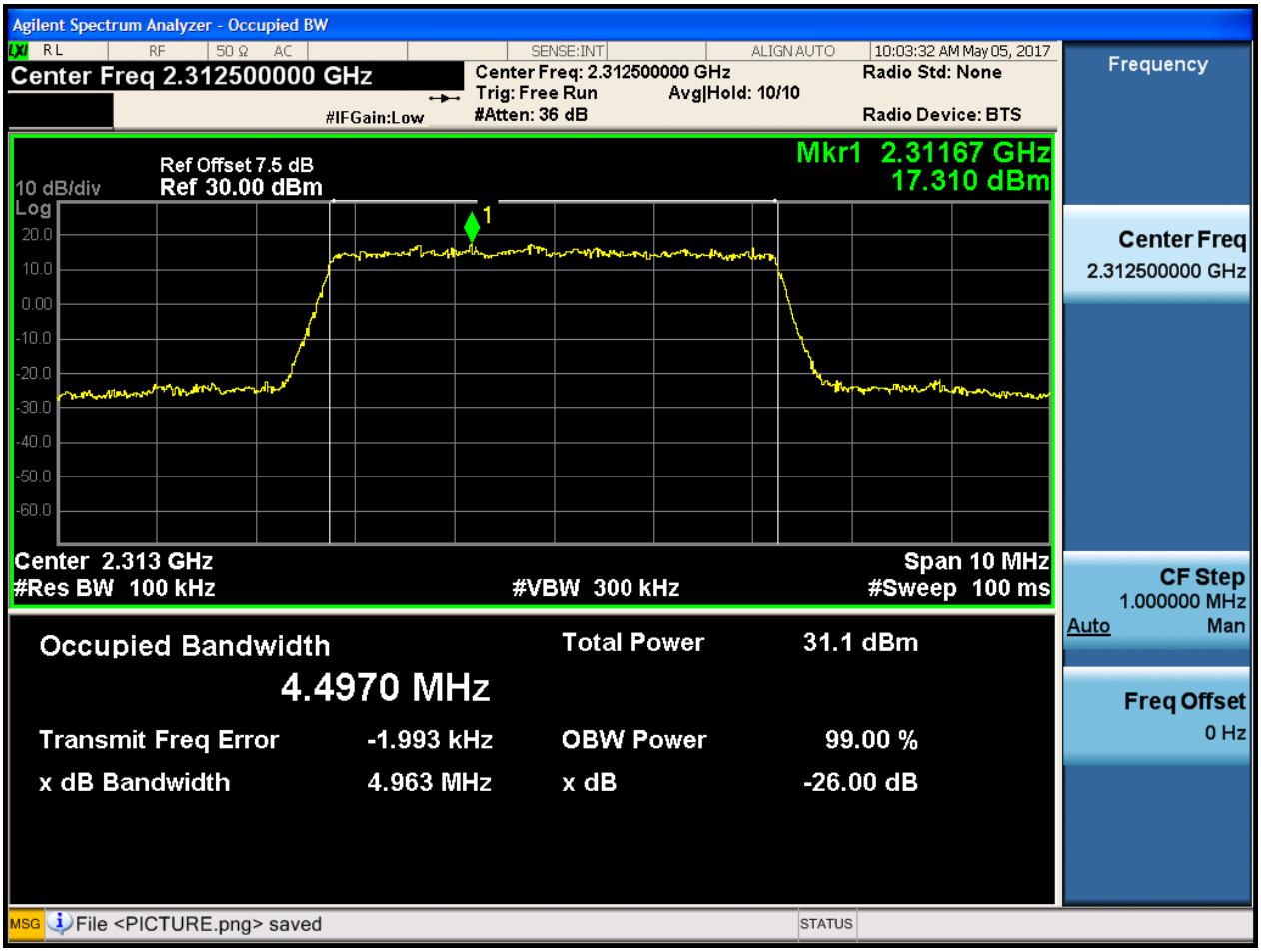
4.1.1.1.1.2 Test Channel = MCH

4.1.1.1.1.2.1 Test RB = RB25#0



4.1.1.1.1.3 Test Channel = HCH

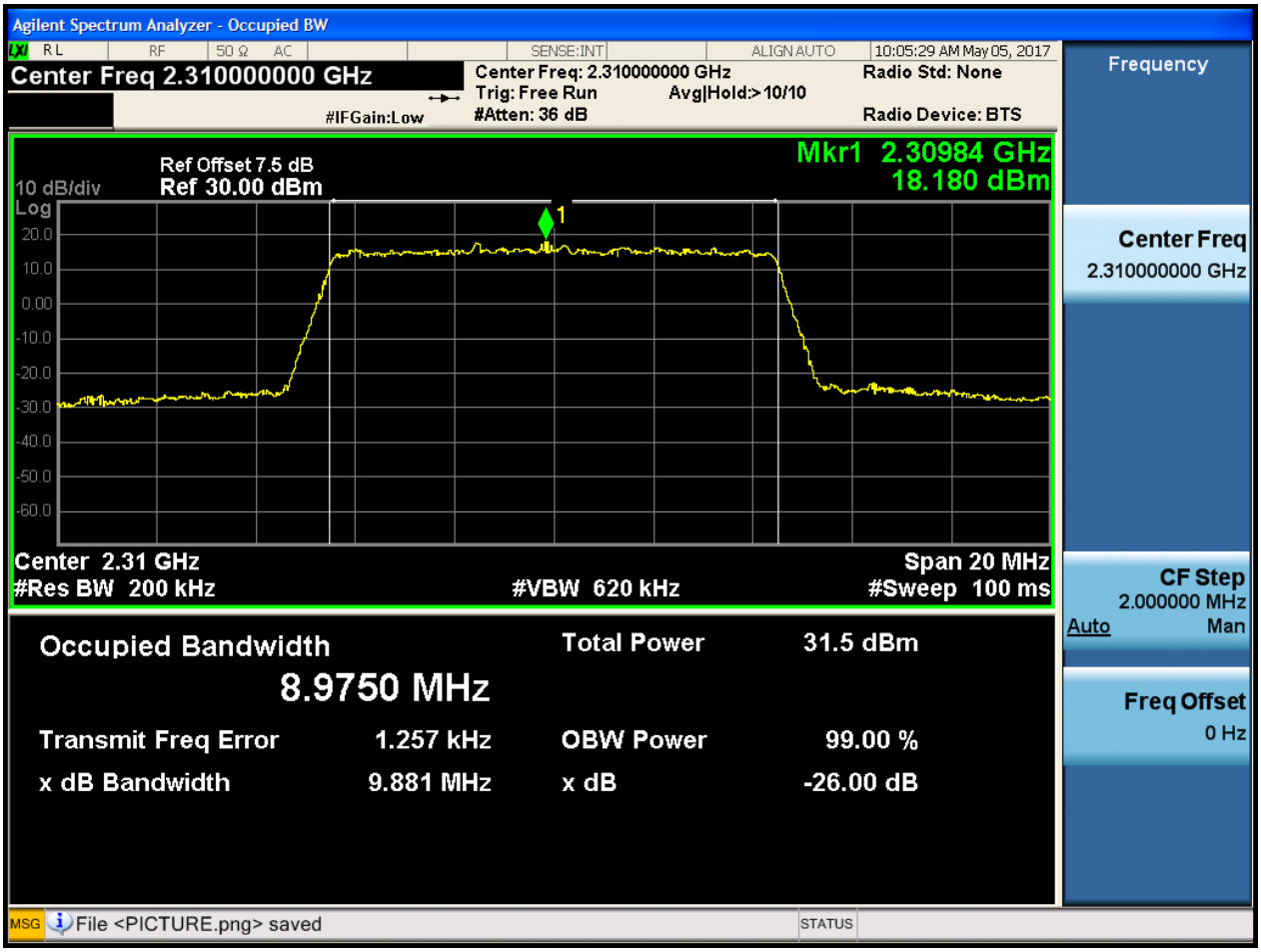
4.1.1.1.1.3.1 Test RB = RB25#0



4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH/ MCH/HCH

4.1.1.1.2.1.1 Test RB = RB50#0

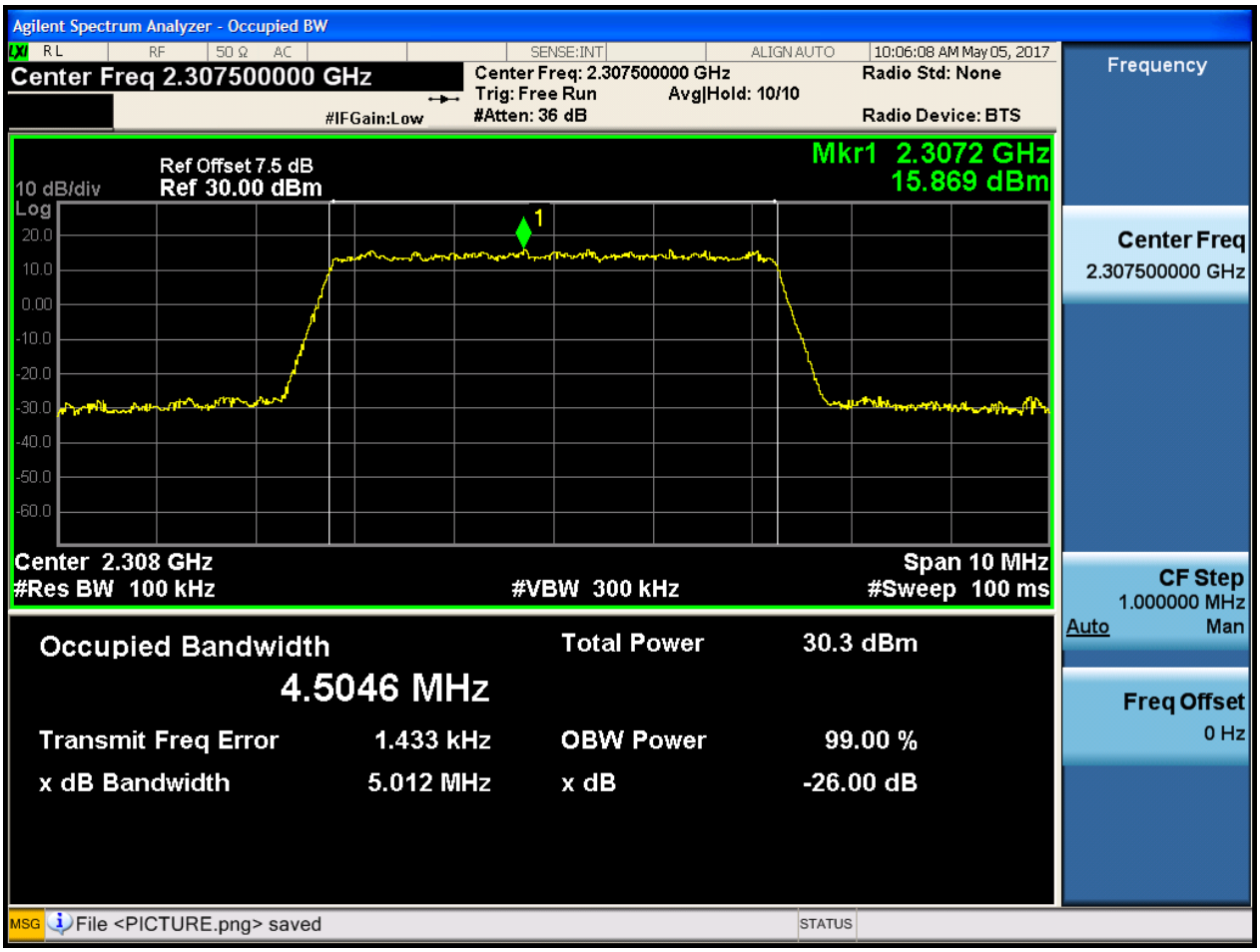


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

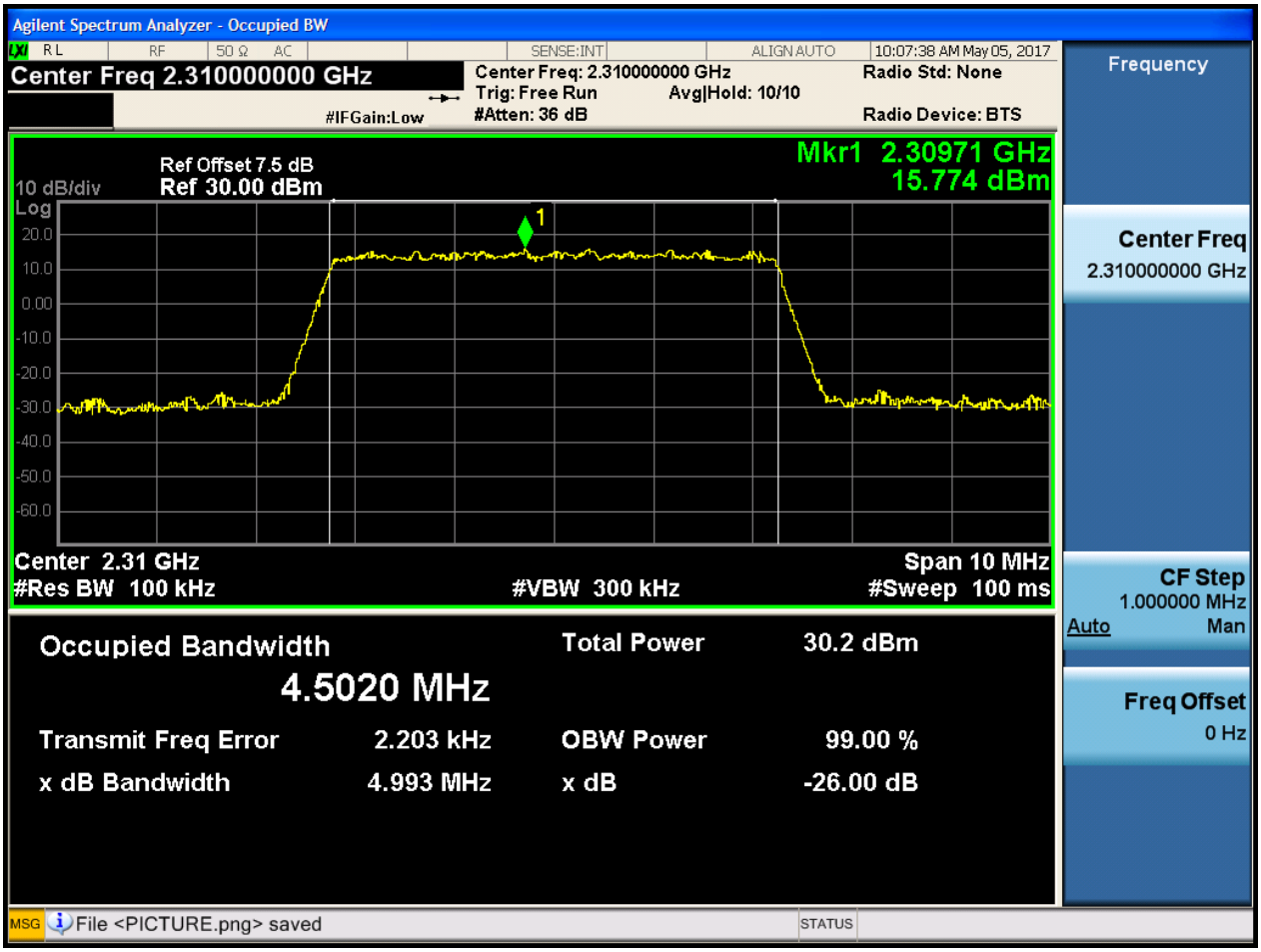
4.1.1.2.1.1 Test Channel = LCH

####### 4.1.1.2.1.1.1 Test RB = RB25#0



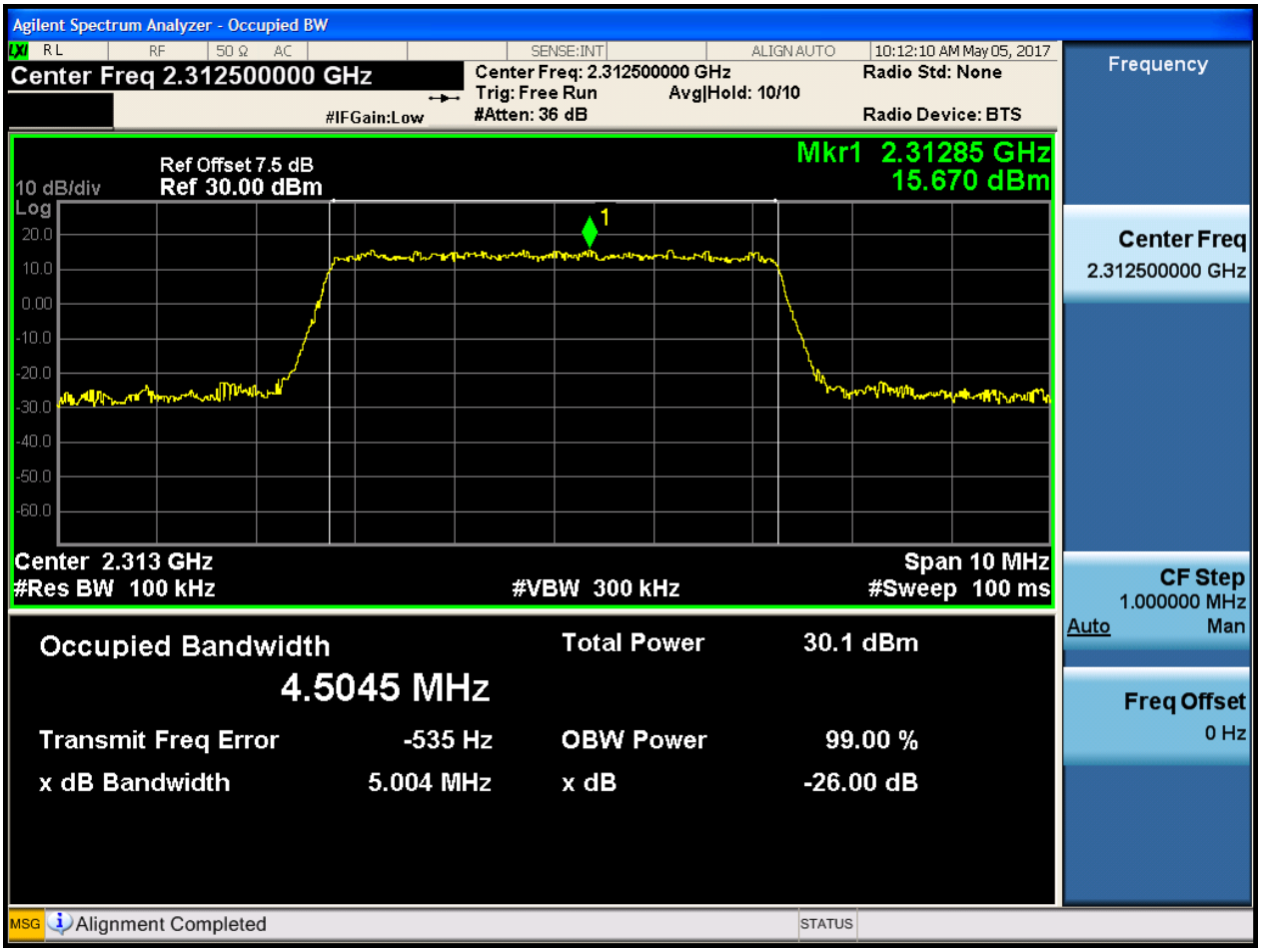
4.1.1.2.1.2 Test Channel = MCH

4.1.1.2.1.2.1 Test RB = RB25#0



4.1.1.2.1.3 Test Channel = HCH

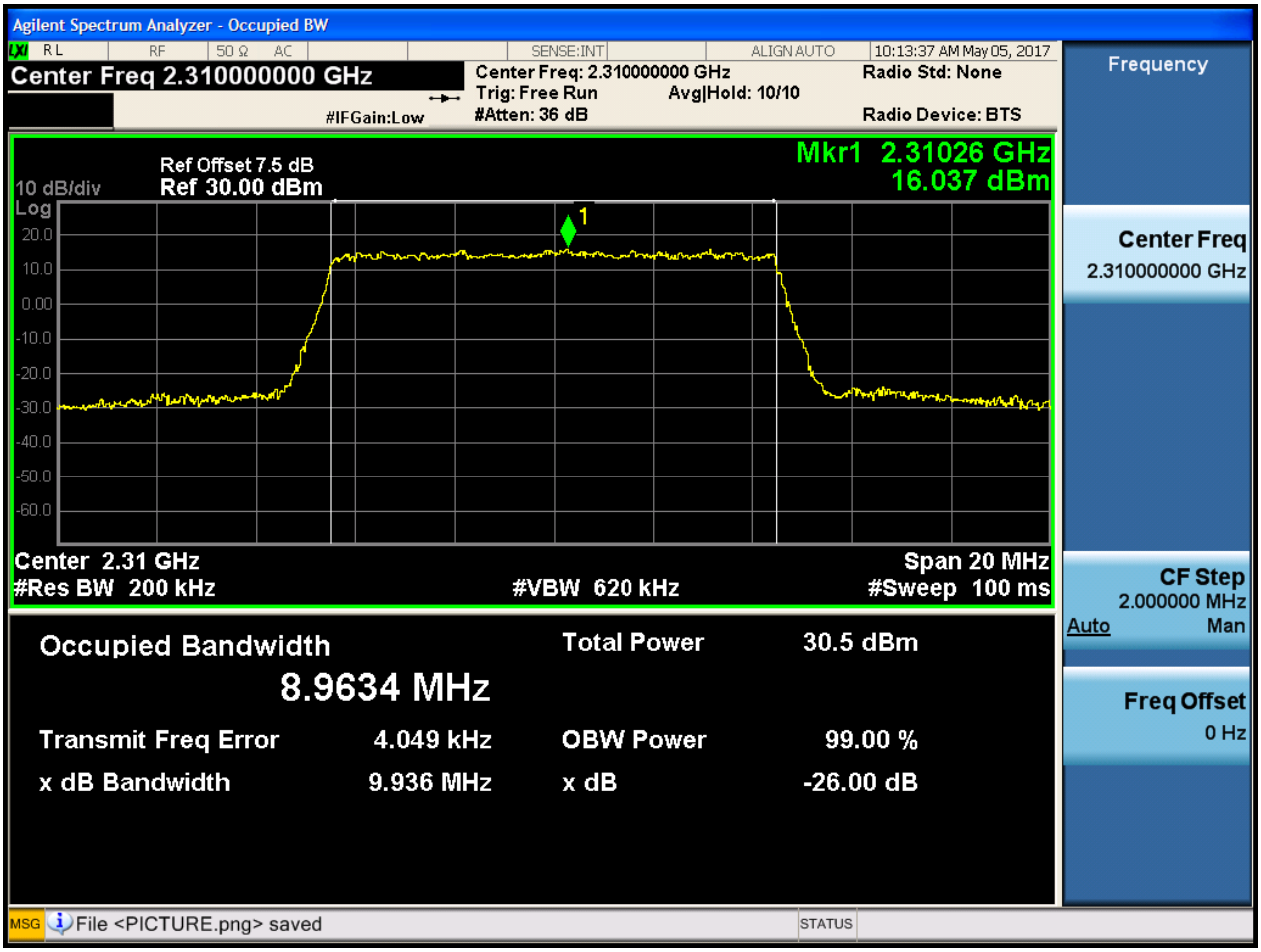
4.1.1.2.1.3.1 Test RB = RB25#0



4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH/ MCH/HCH

4.1.1.2.2.1.1 Test RB = RB50#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

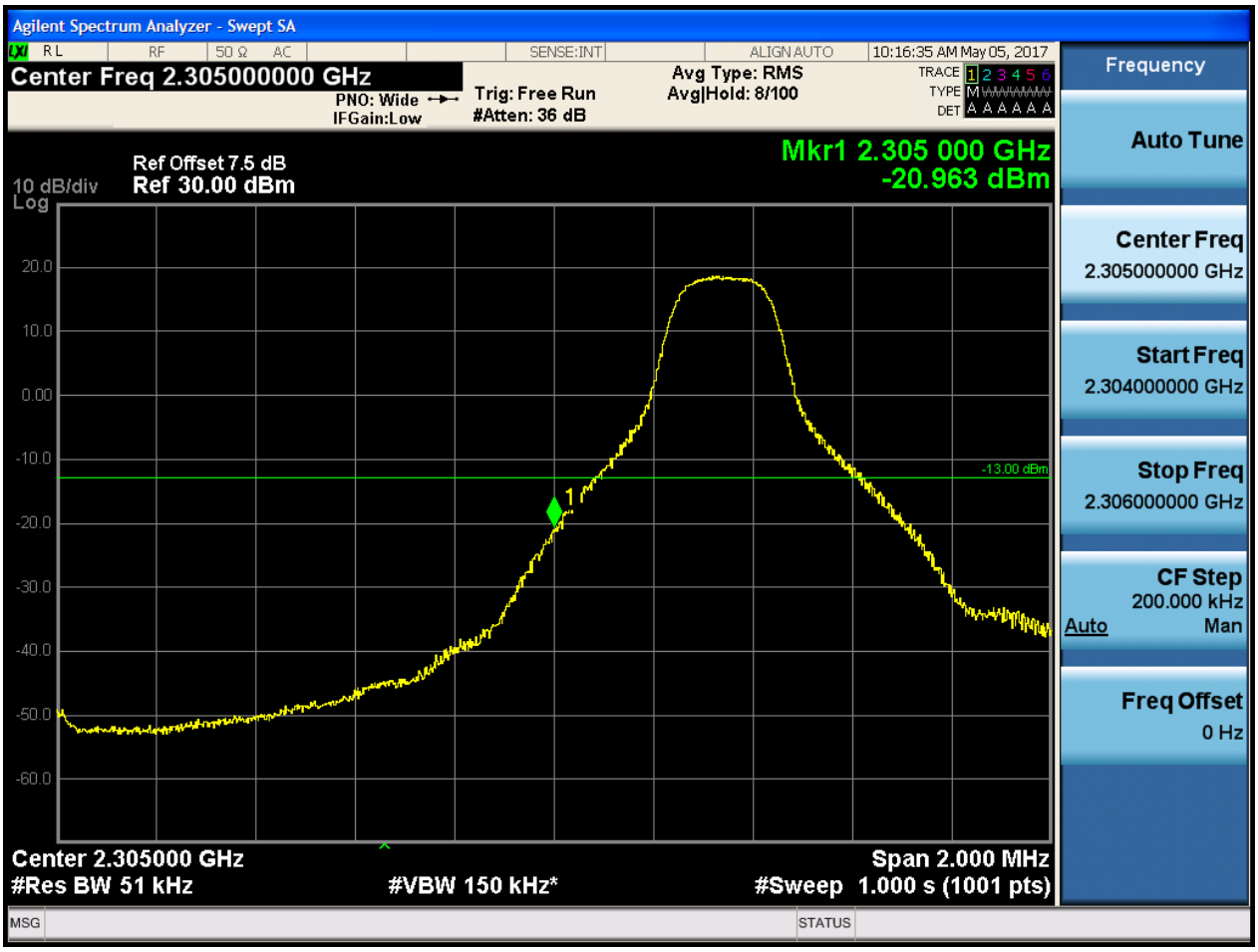
5.1.1 Test Band = BAND30

5.1.1.1 Test Mode = LTE/TM1

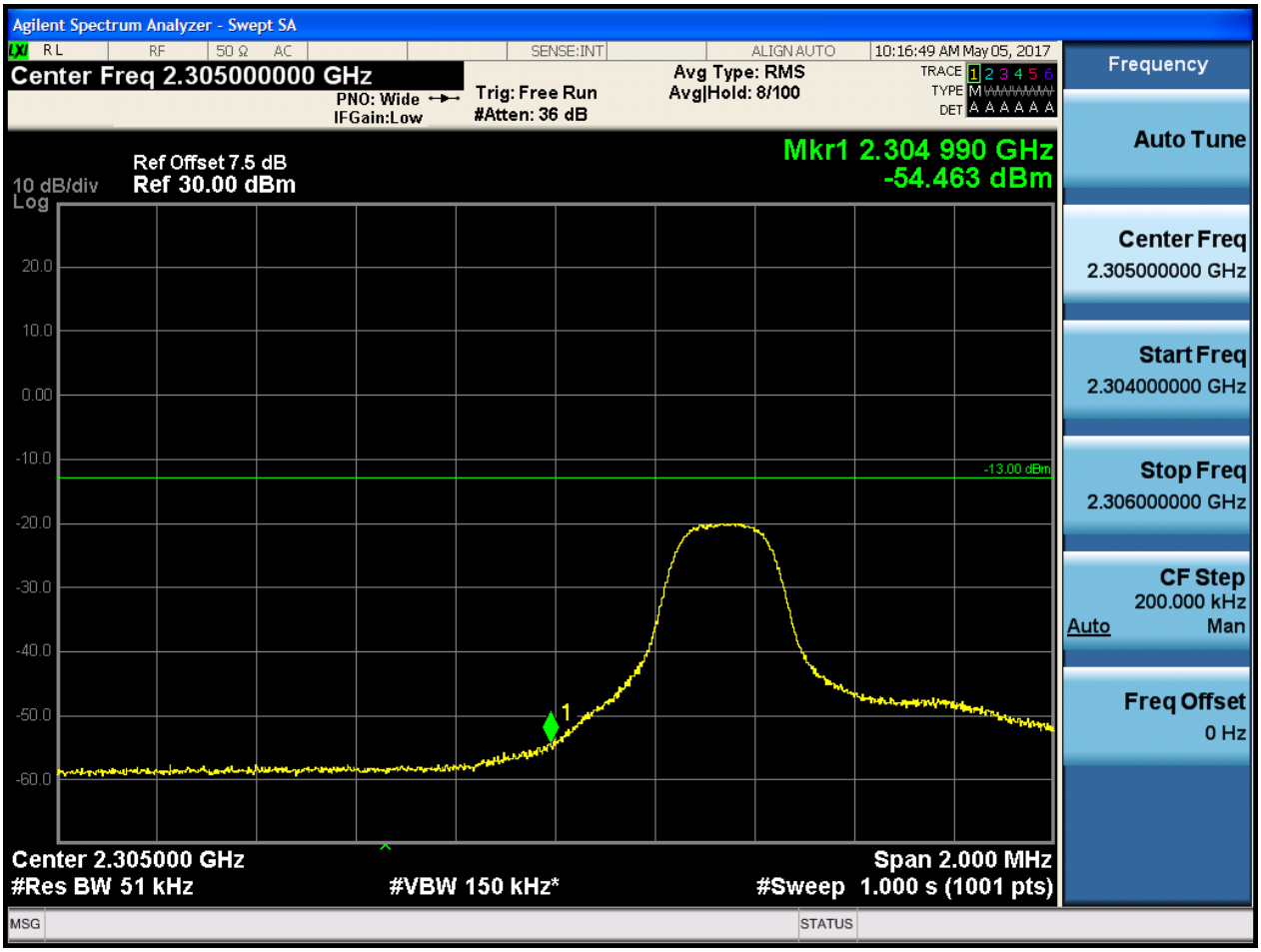
5.1.1.1.1 Test Bandwidth = 5

5.1.1.1.1.1 Test Channel = LCH

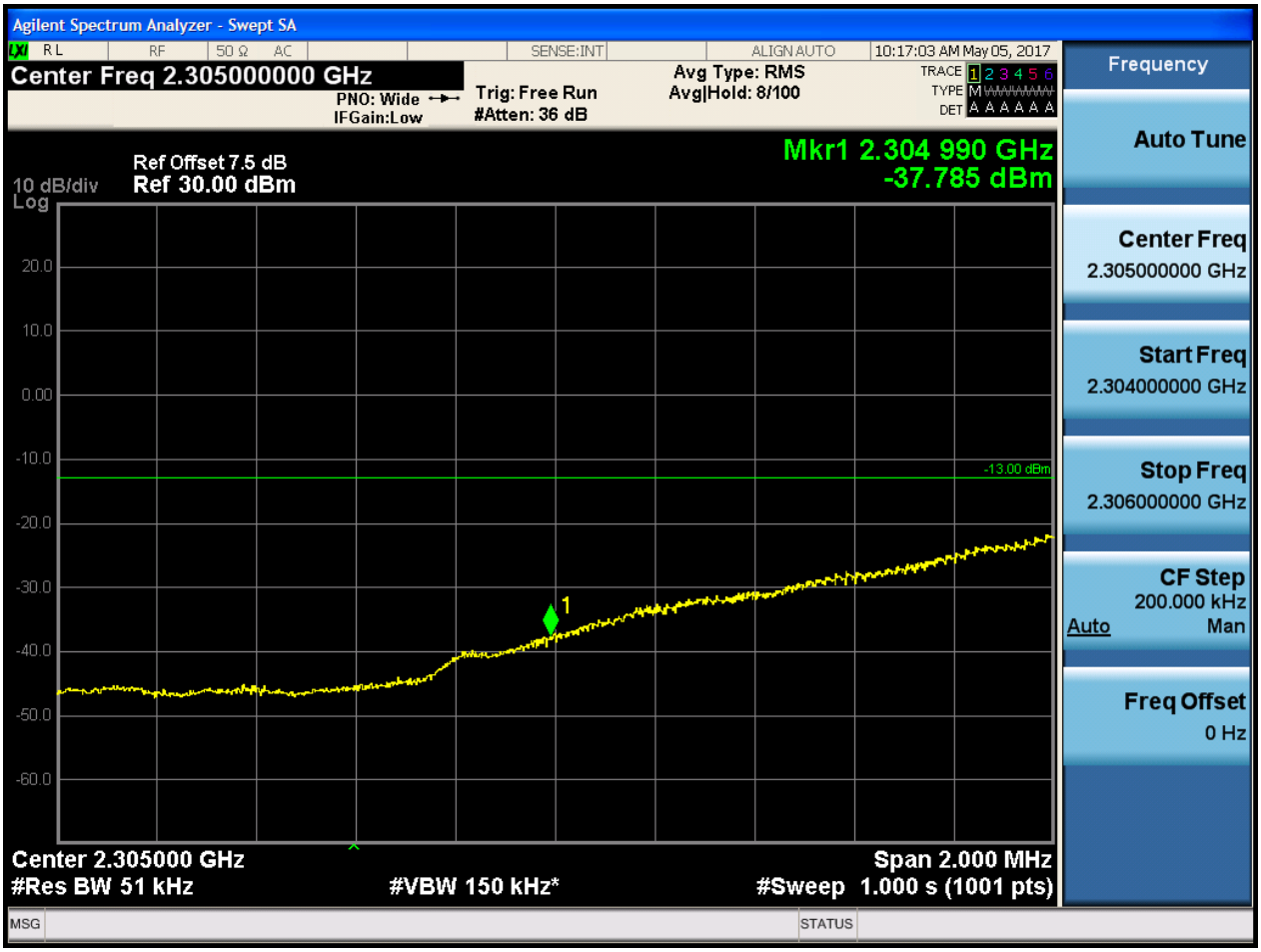
5.1.1.1.1.1.1 Test RB = RB1#0



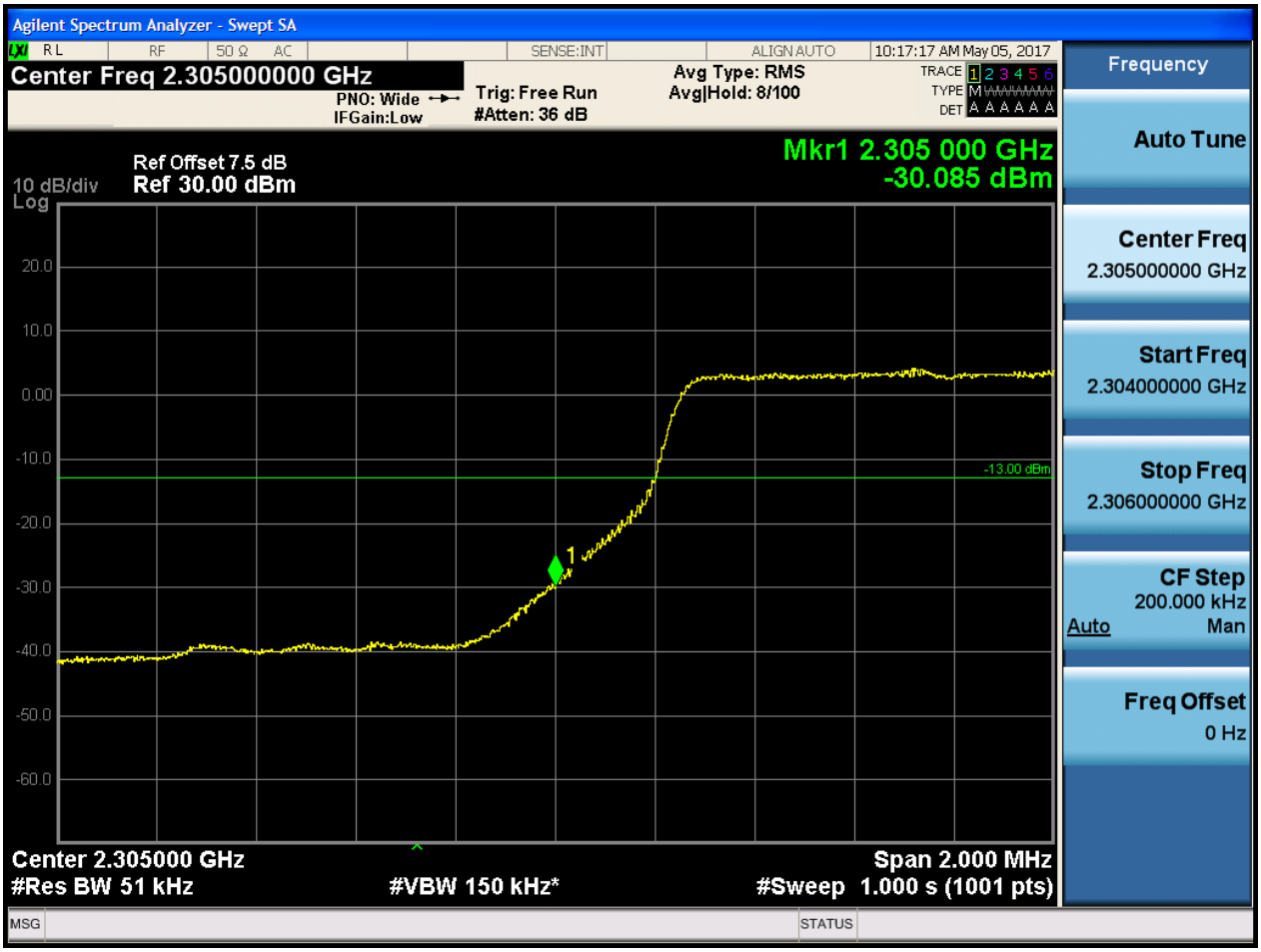
2.1.1.1.1.2 Test RB = RB1#24



2.1.1.1.1.1.3 Test RB = RB12#6

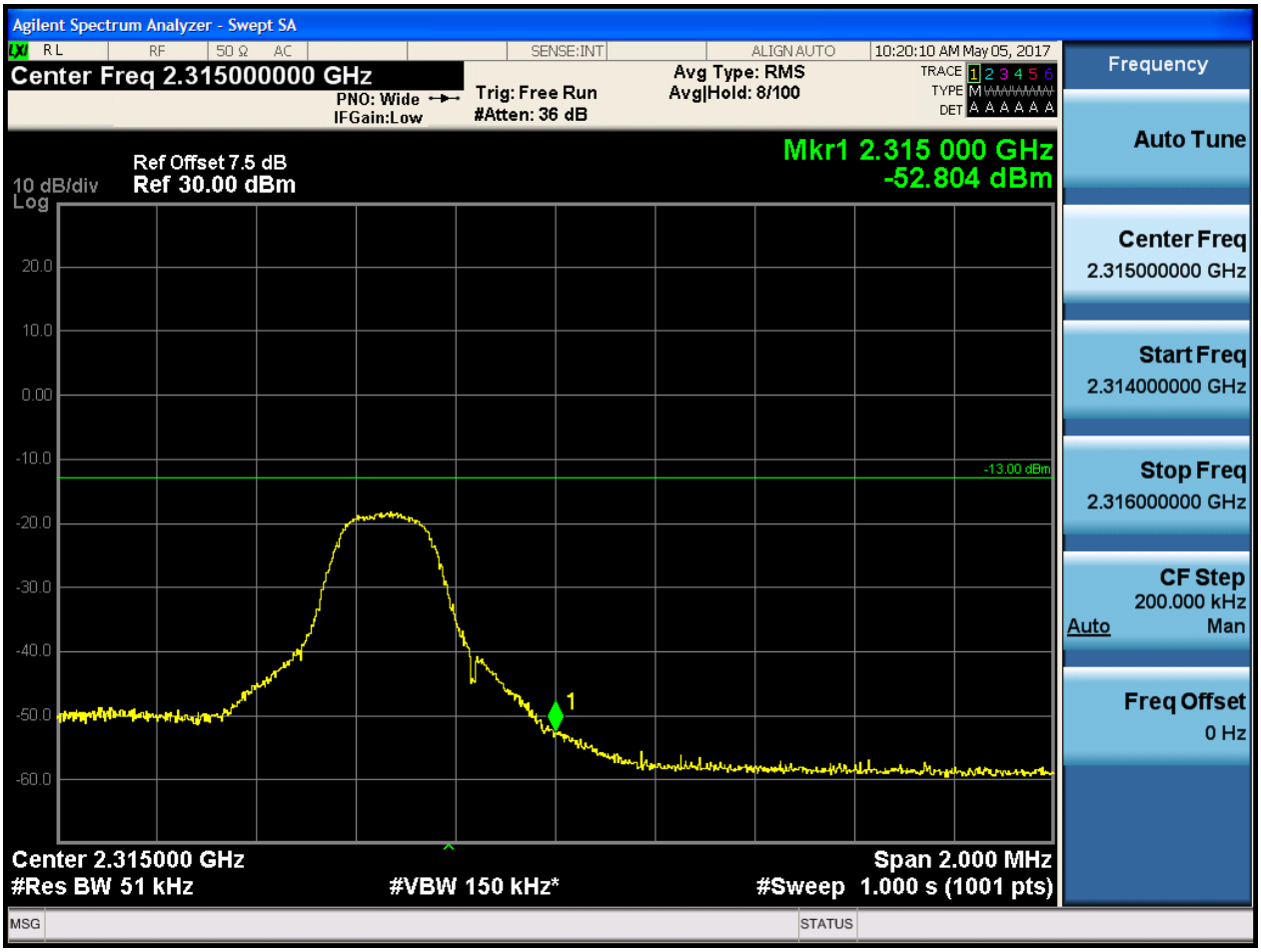


2.1.1.1.1.4 Test RB = RB25#0

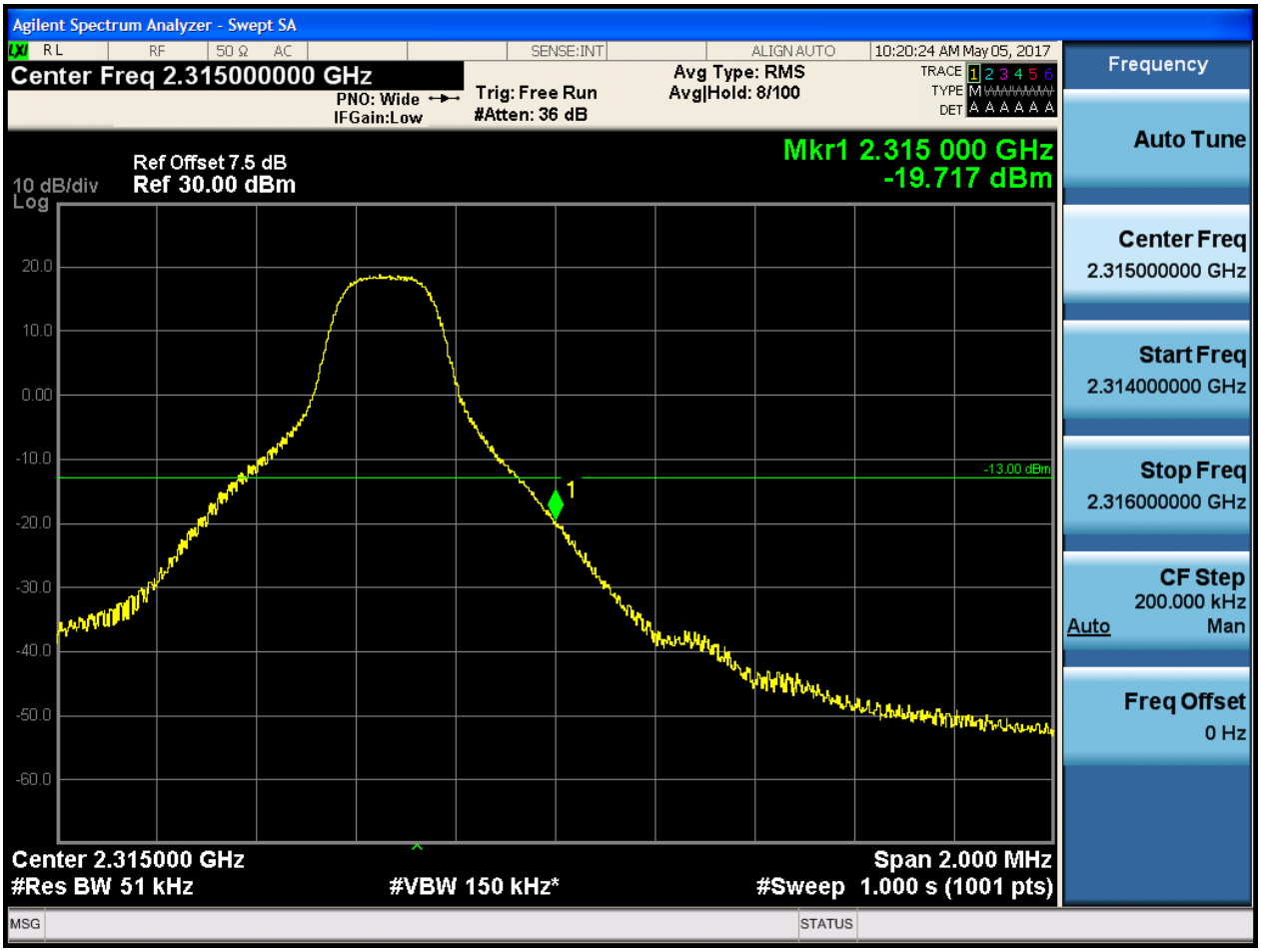


2.1.1.1.1.2 Test Channel = HCH

2.1.1.1.1.2.1 Test RB = RB1#0

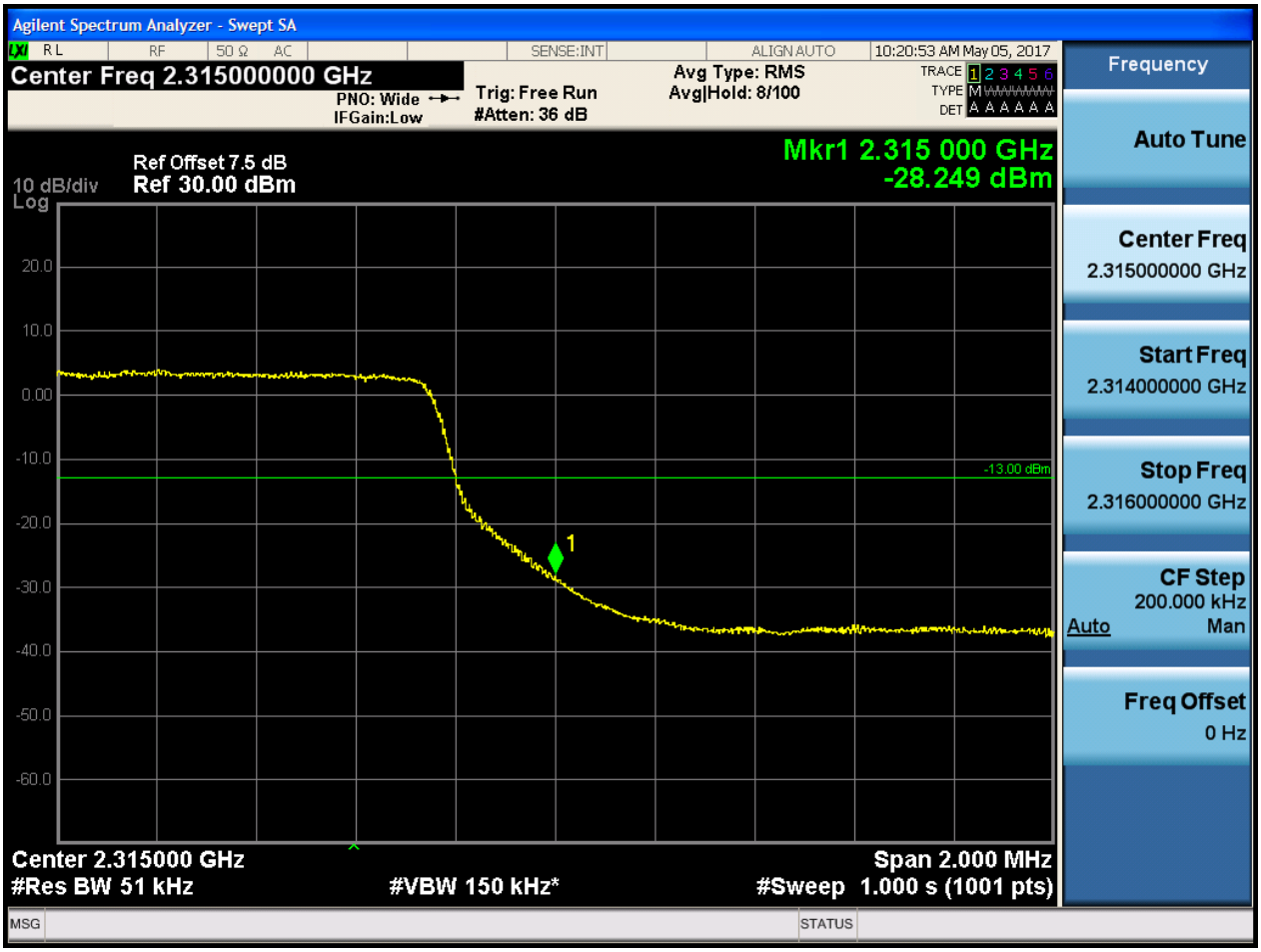


2.1.1.1.1.2.2 Test RB = RB1#24



2.1.1.1.1.2.3 Test RB = RB12#6

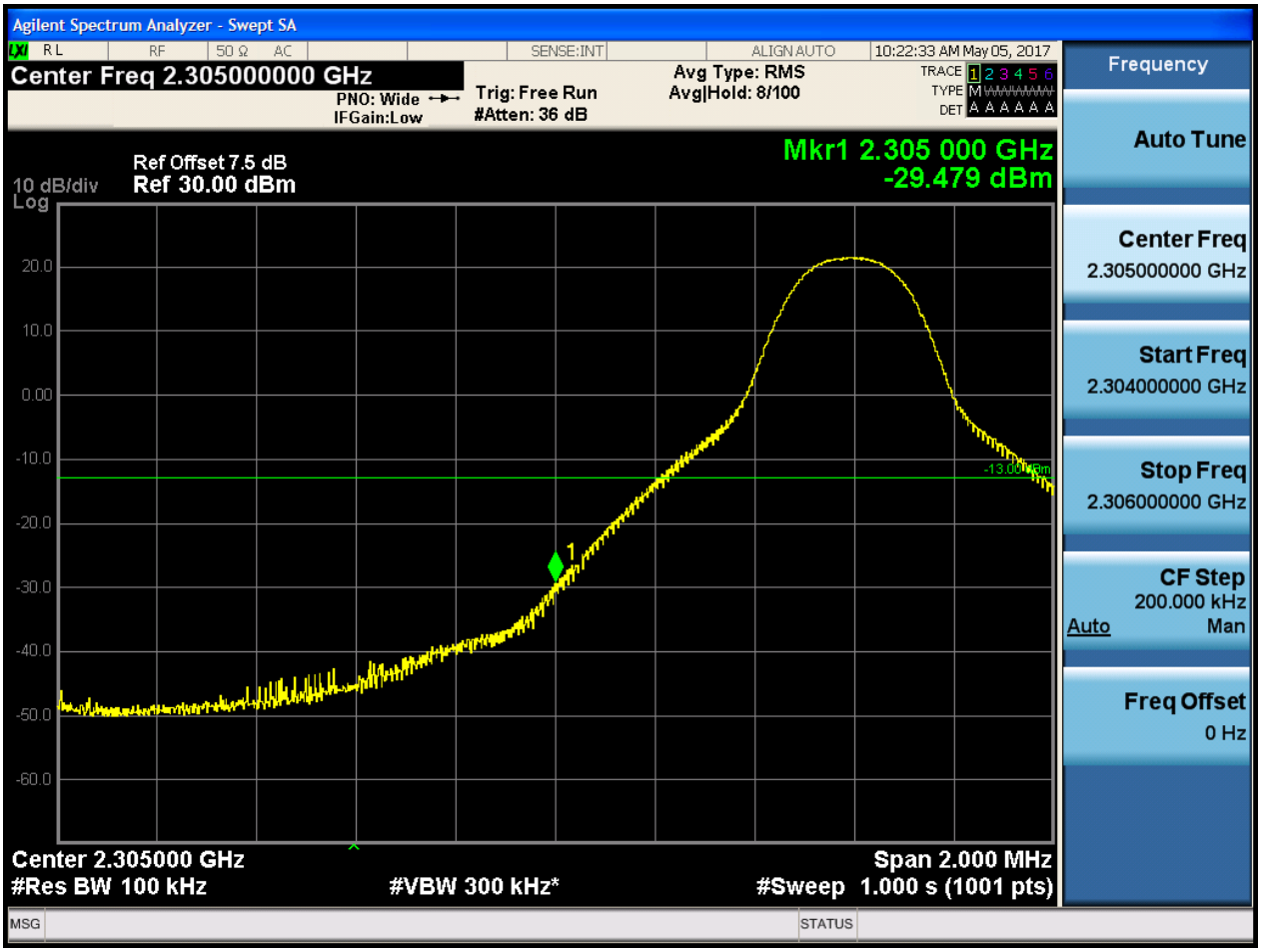
2.1.1.1.1.2.4 Test RB = RB25#0



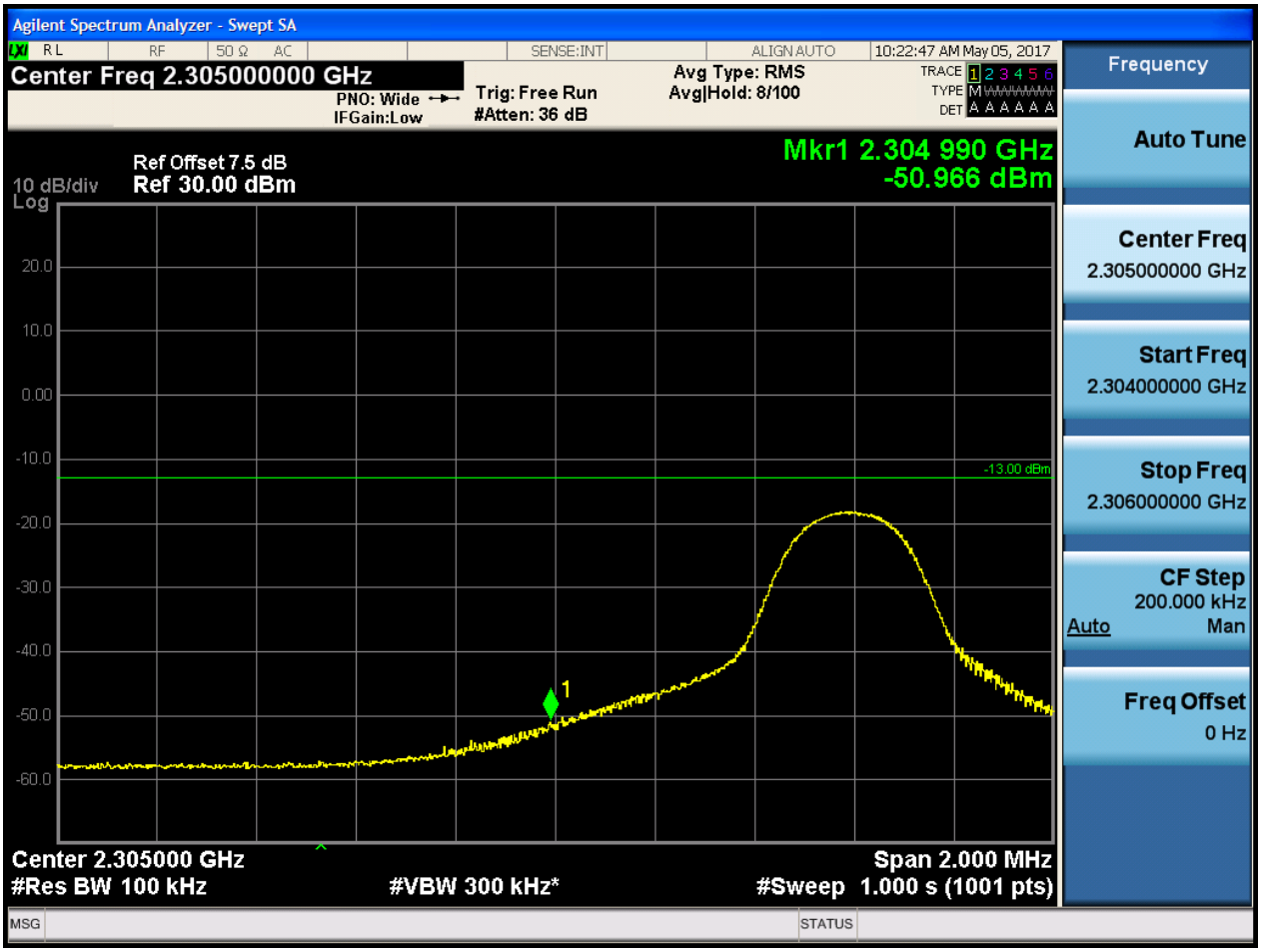
5.1.1.1.2 Test Bandwidth = 10

5.1.1.1.2.1 Test Channel = LCH

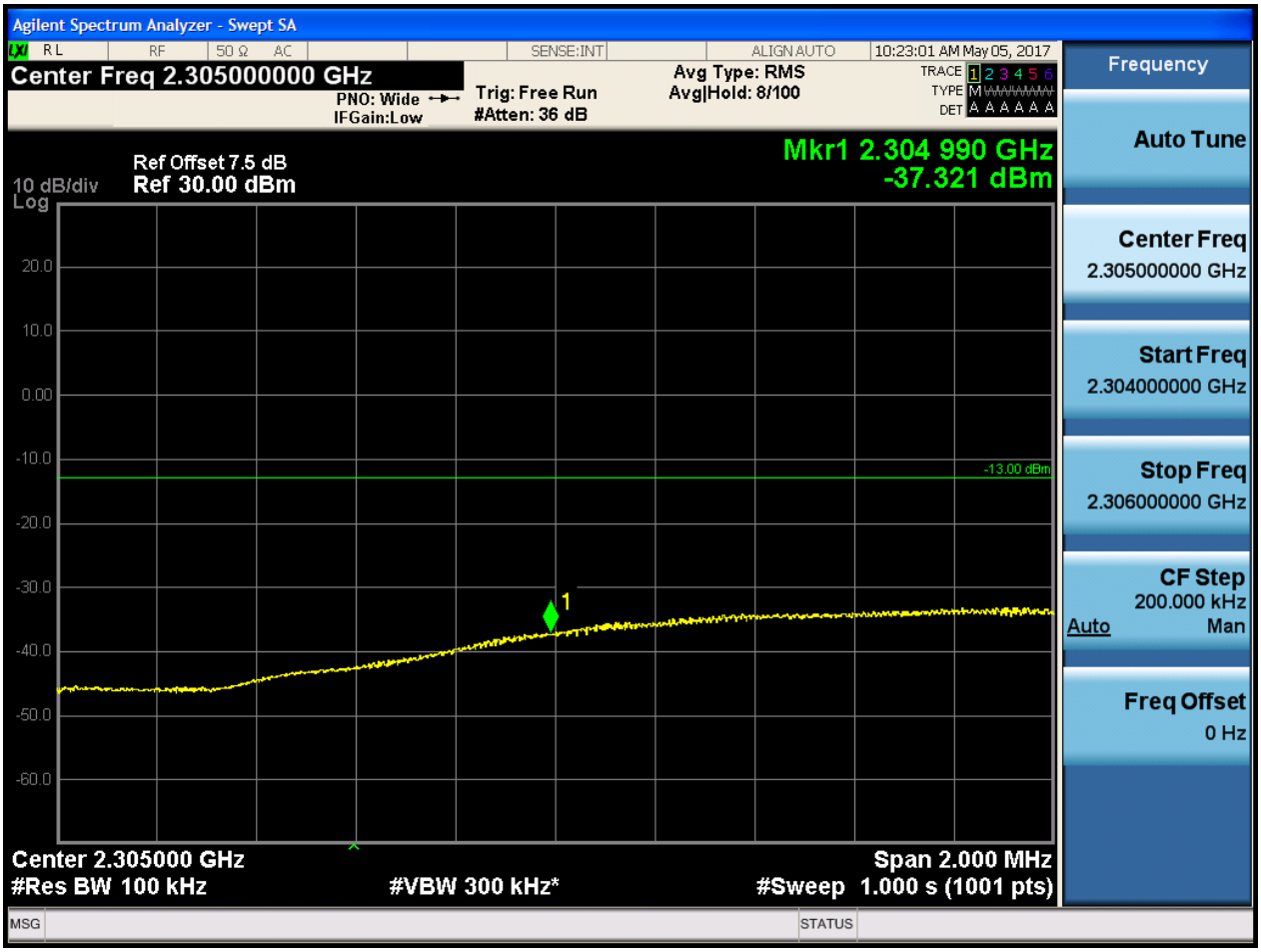
5.1.1.1.2.1.1 Test RB = RB1#0



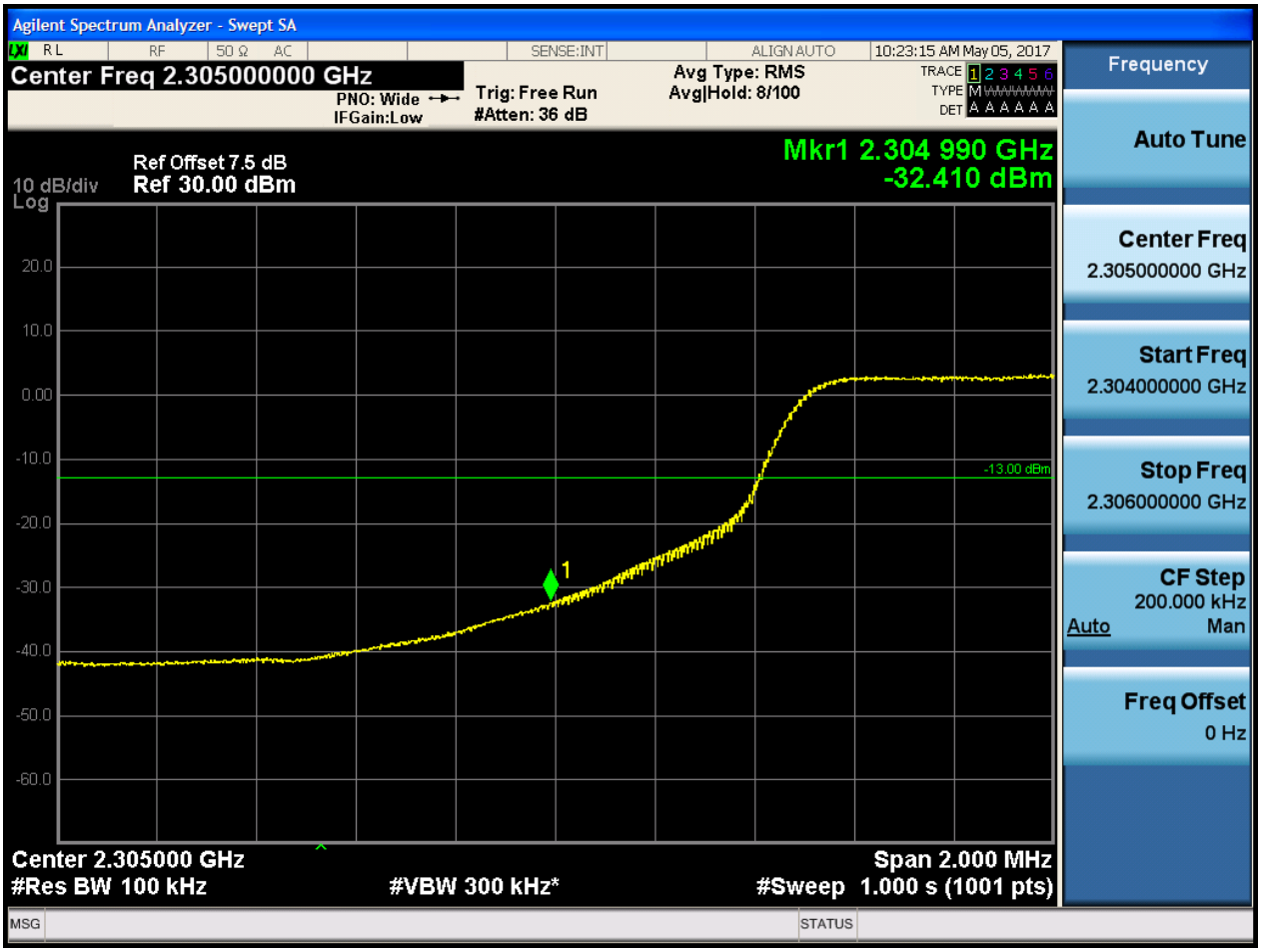
2.1.1.1.2.1.2 Test RB = RB1#49



2.1.1.1.2.1.3 Test RB = RB25#13

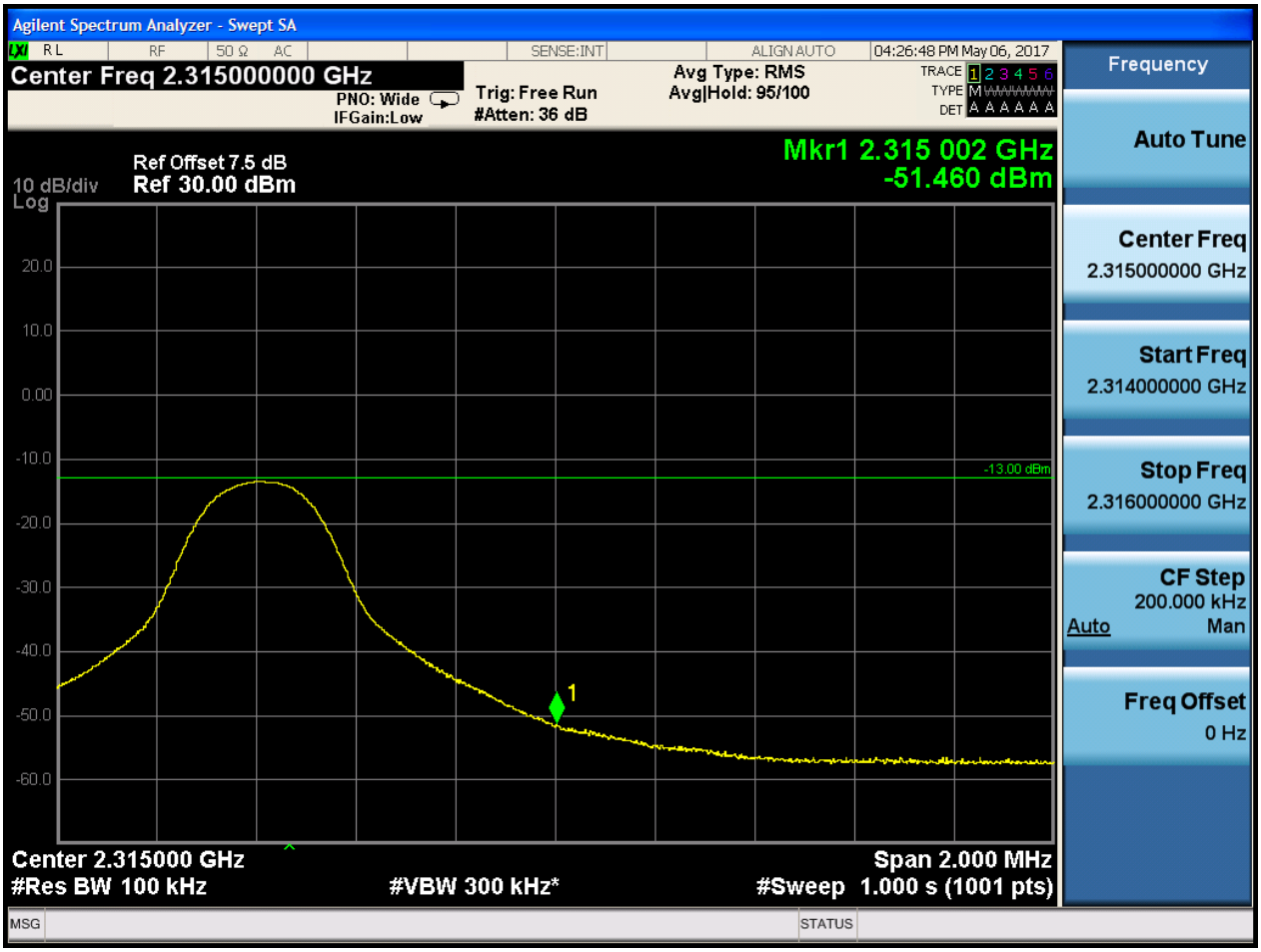


2.1.1.1.2.1.4 Test RB = RB50#0

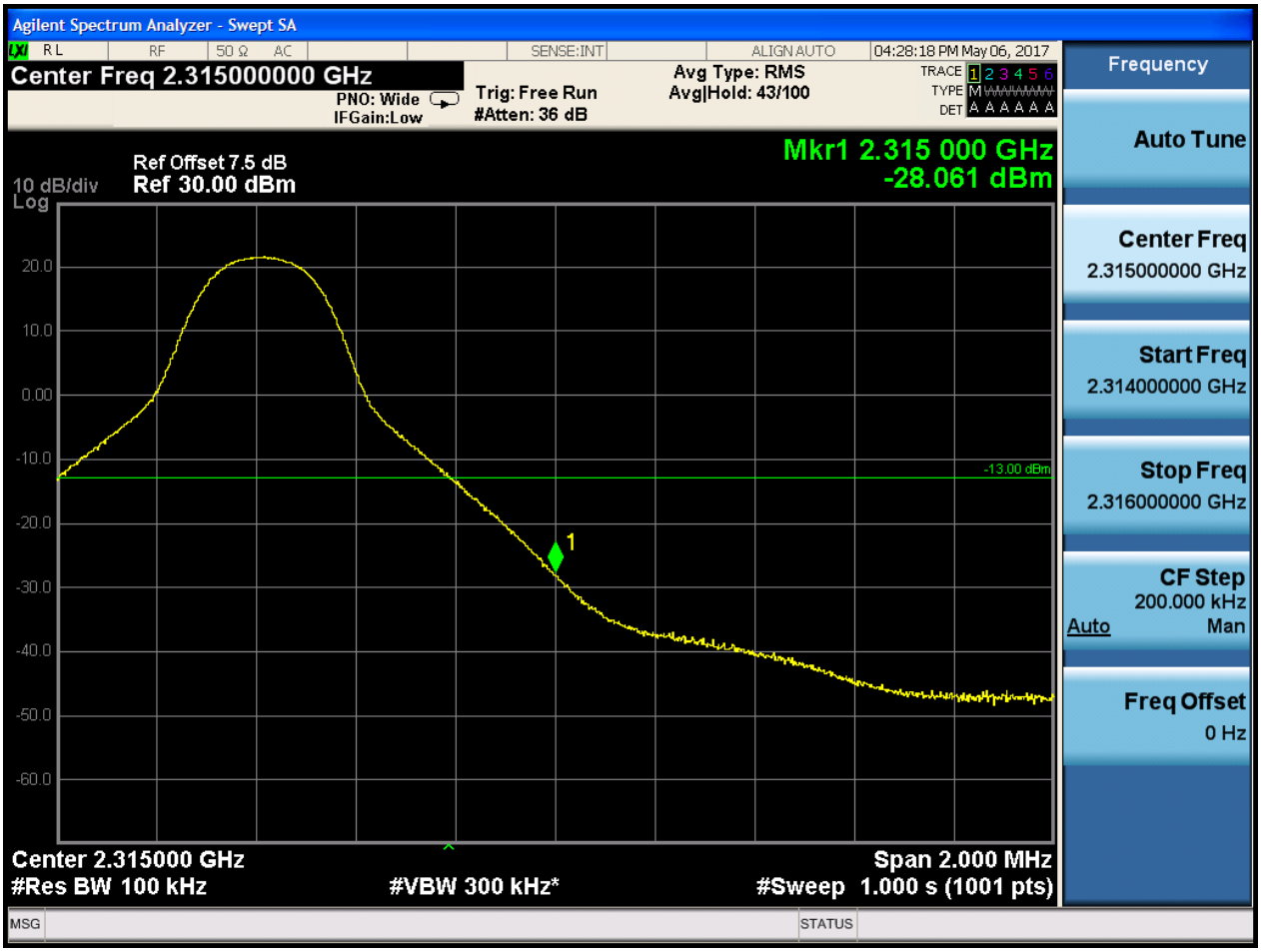


2.1.1.1.2.2 Test Channel = HCH

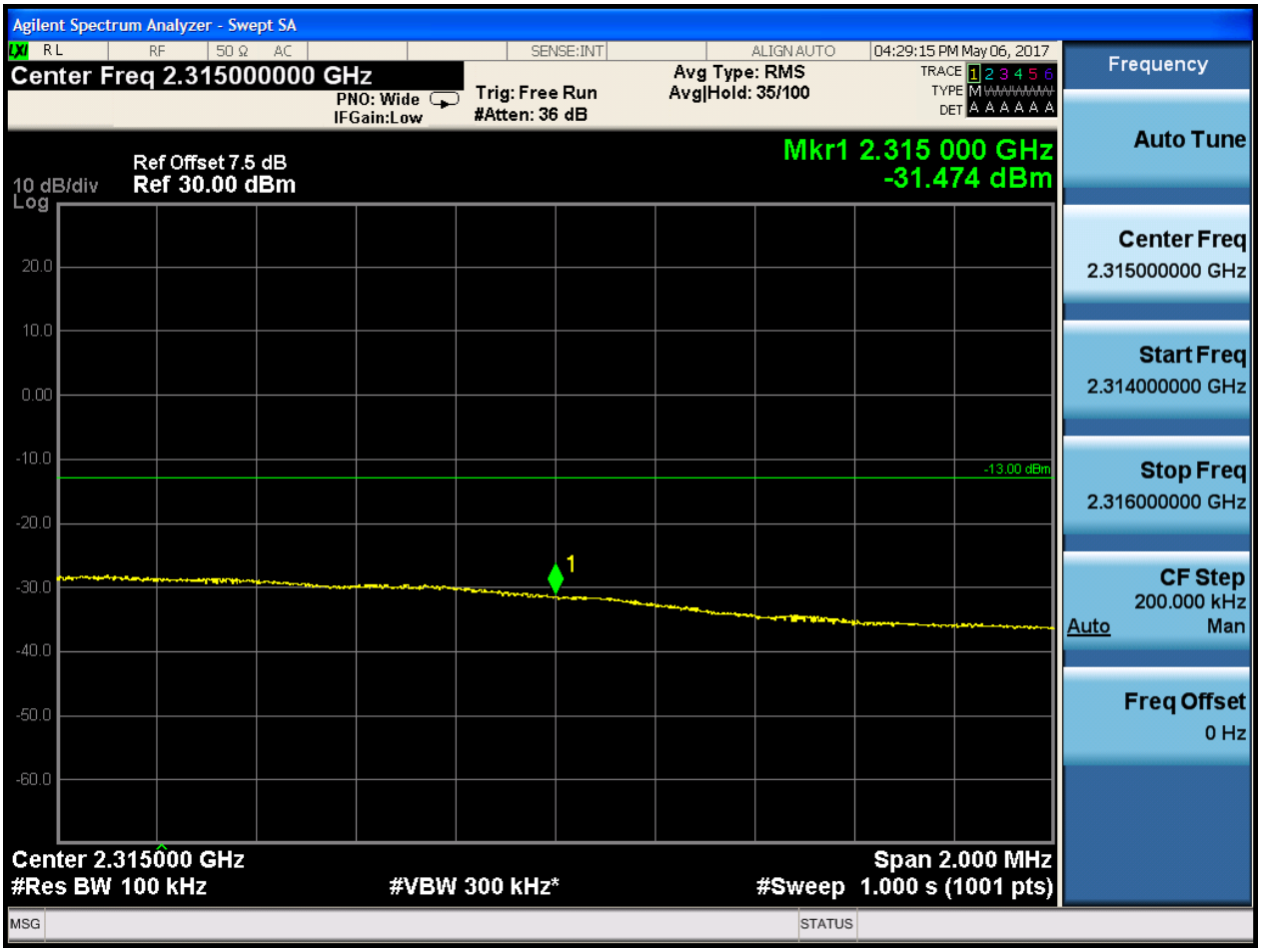
2.1.1.1.2.2.1 Test RB = RB1#0



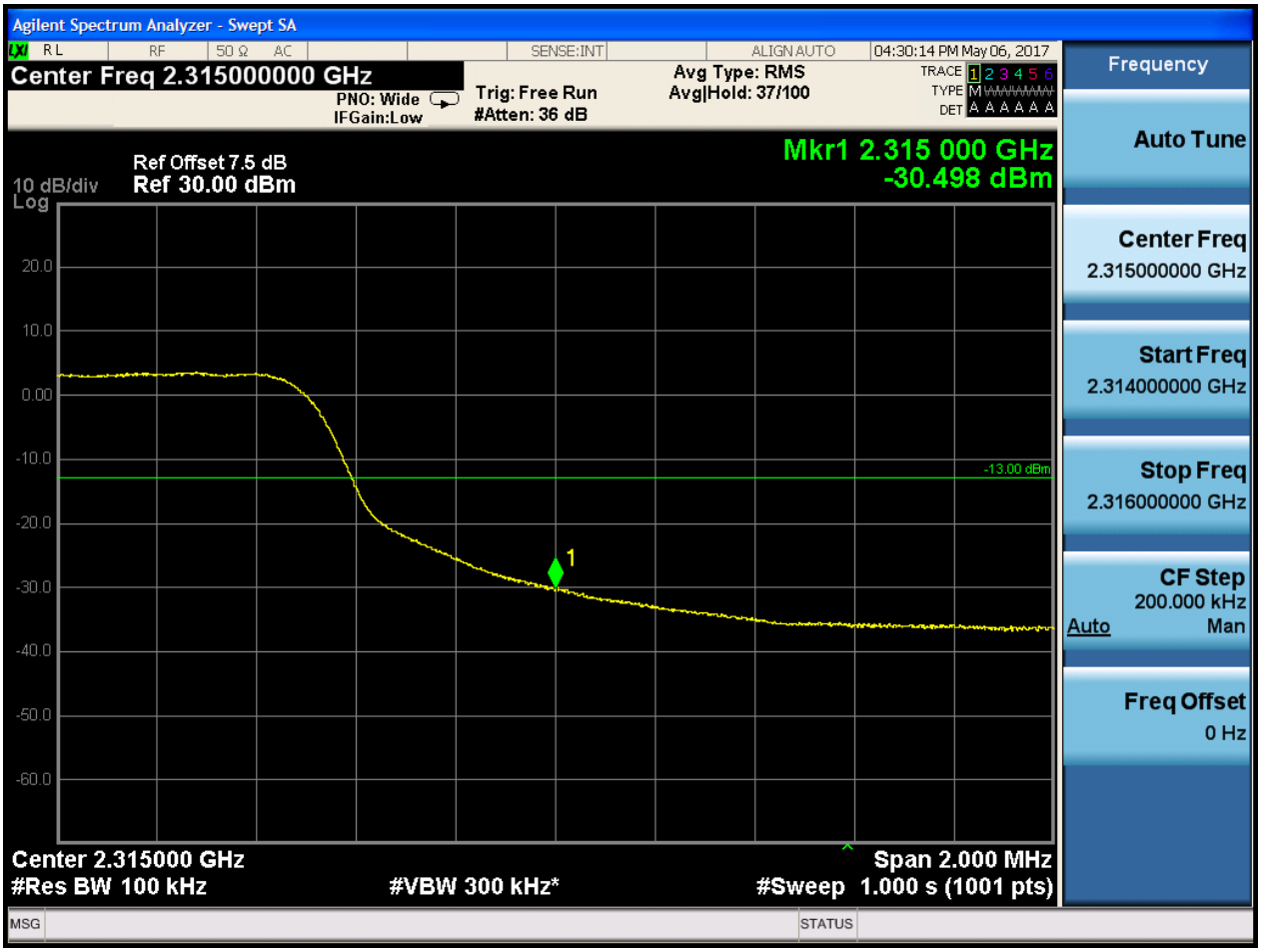
2.1.1.1.2.2.2 Test RB = RB1#49



2.1.1.1.2.2.3 Test RB = RB25#13



2.1.1.1.2.2.4 Test RB = RB50#0

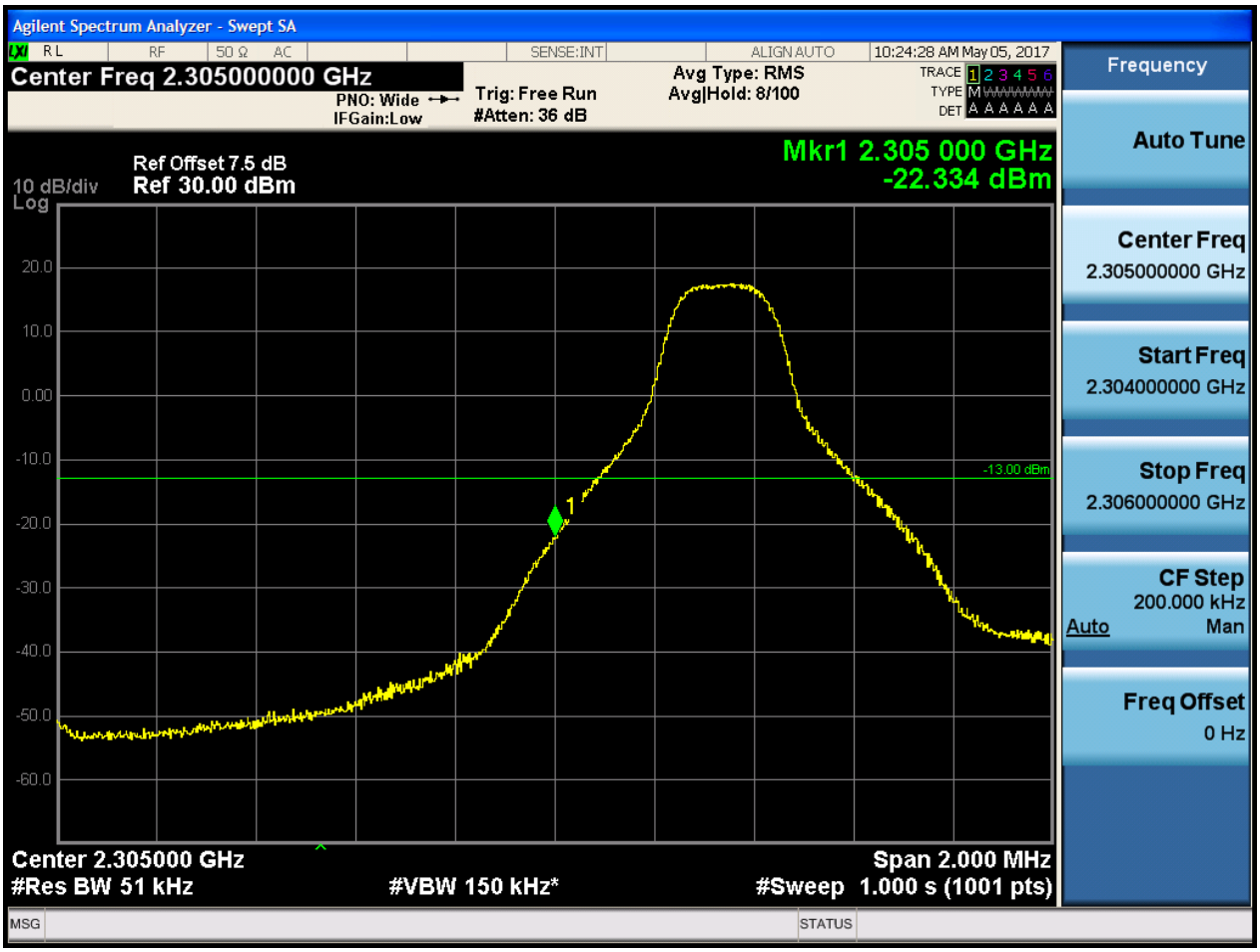


5.1.1.2 Test Mode = LTE/TM2

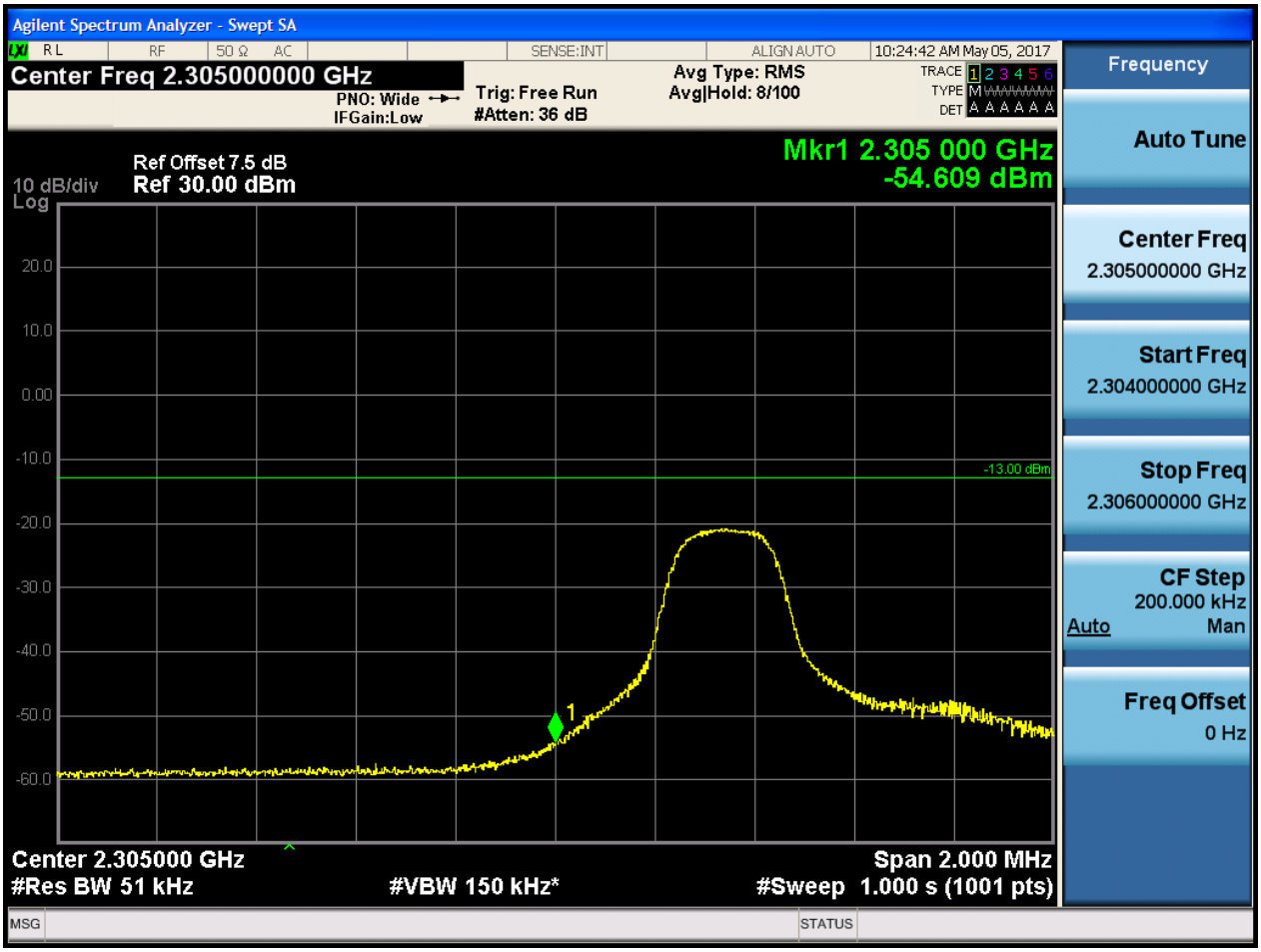
5.1.1.2.1 Test Bandwidth = 5

5.1.1.2.1.1 Test Channel = LCH

####### 5.1.1.2.1.1.1 Test RB = RB1#0

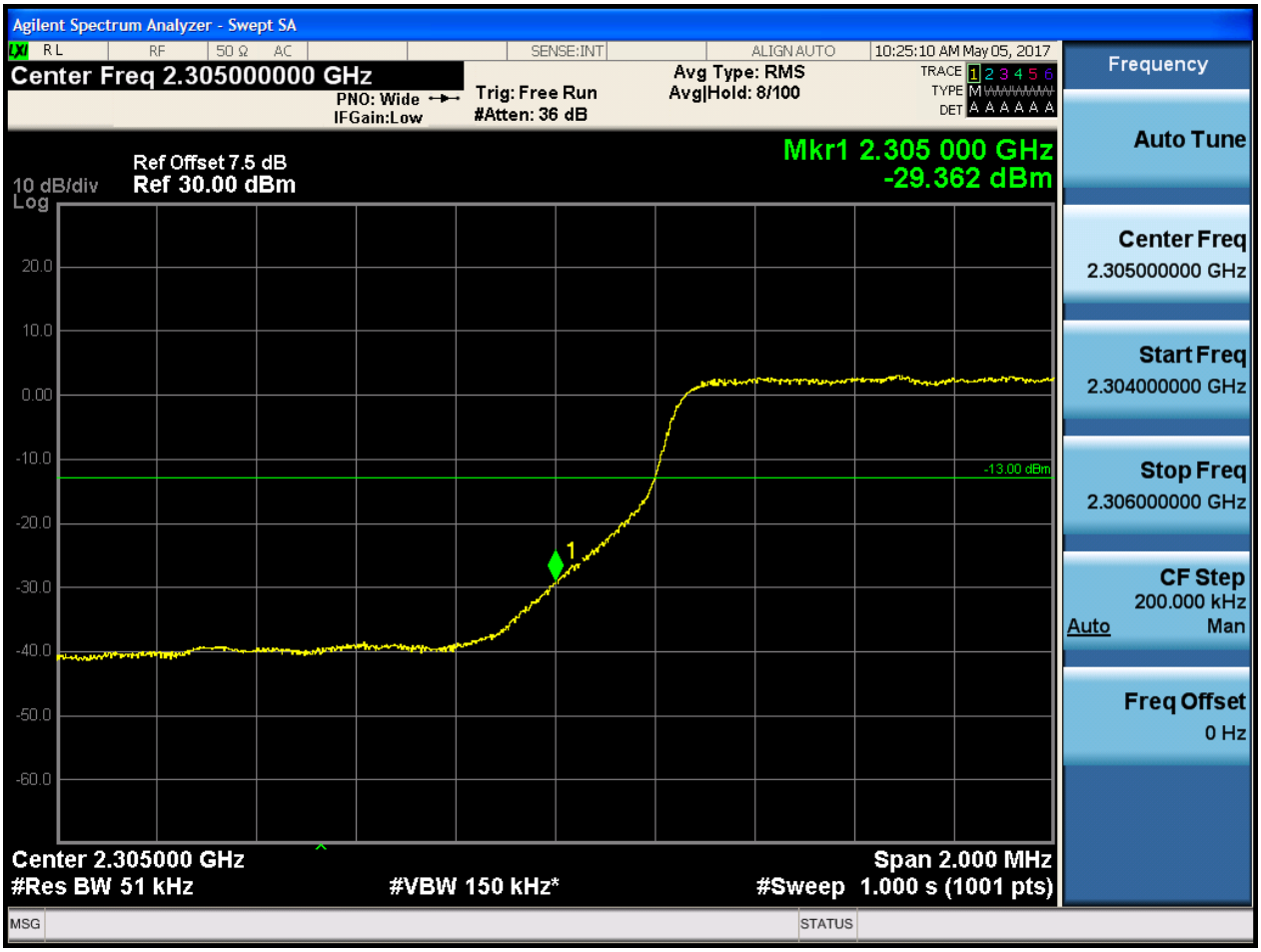


2.1.1.2.1.1.2 Test RB = RB1#24



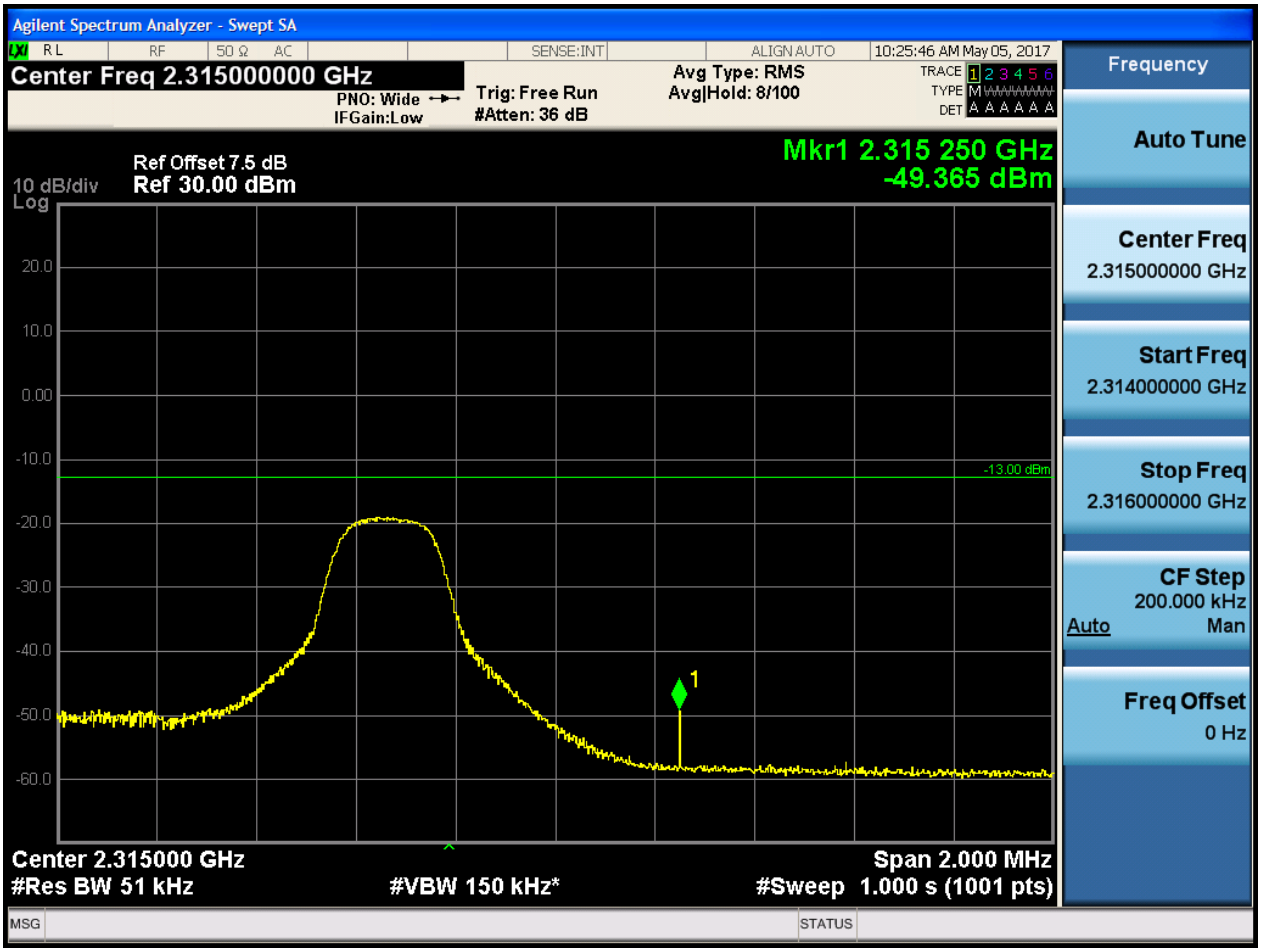
2.1.1.2.1.1.3 Test RB = RB12#6

2.1.1.2.1.1.4 Test RB = RB25#0

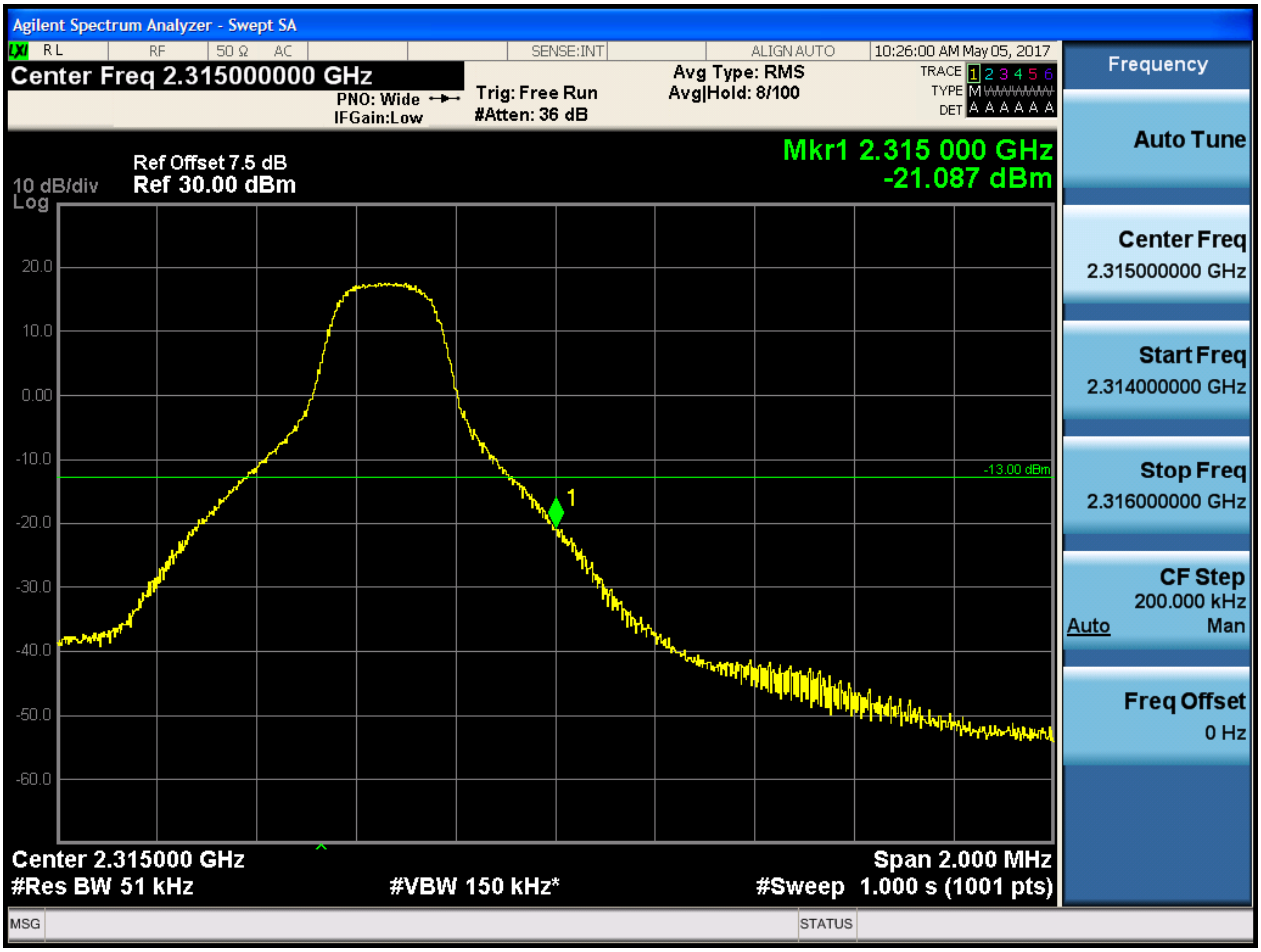


2.1.1.2.1.2 Test Channel = HCH

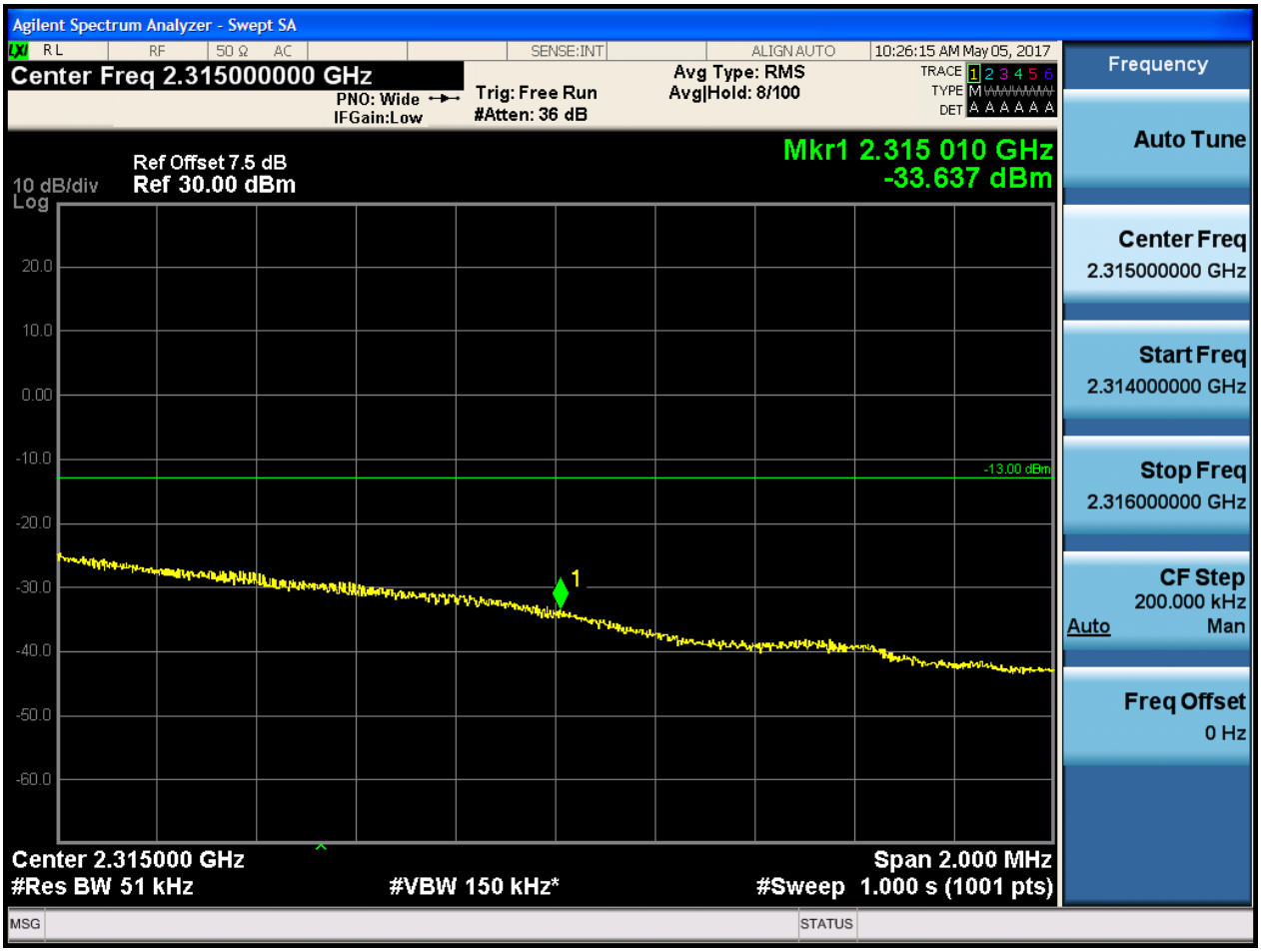
2.1.1.2.1.2.1 Test RB = RB1#0



2.1.1.2.1.2.2 Test RB = RB1#24



2.1.1.2.1.2.3 Test RB = RB12#6

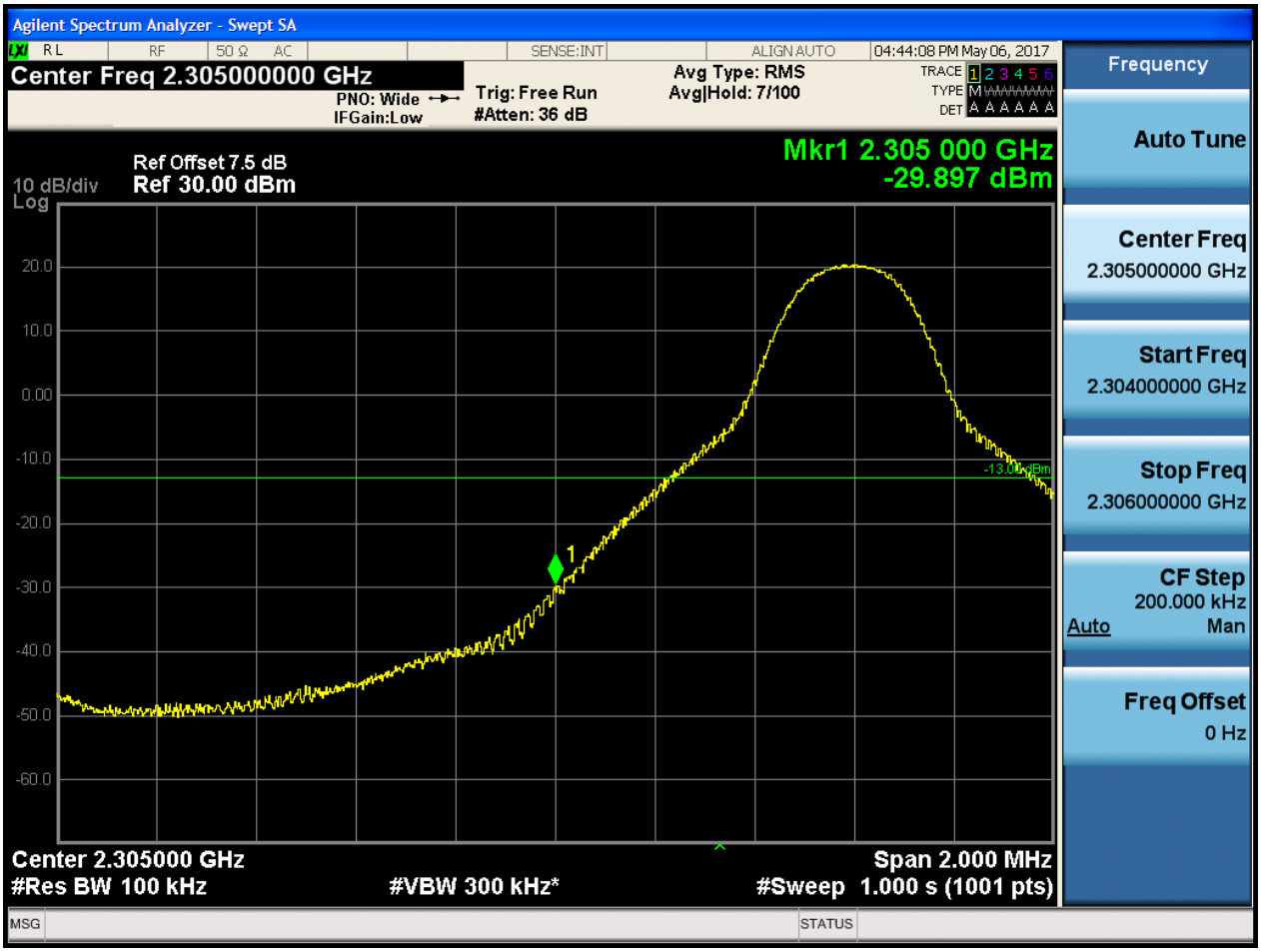


2.1.1.2.1.2.4 Test RB = RB25#0

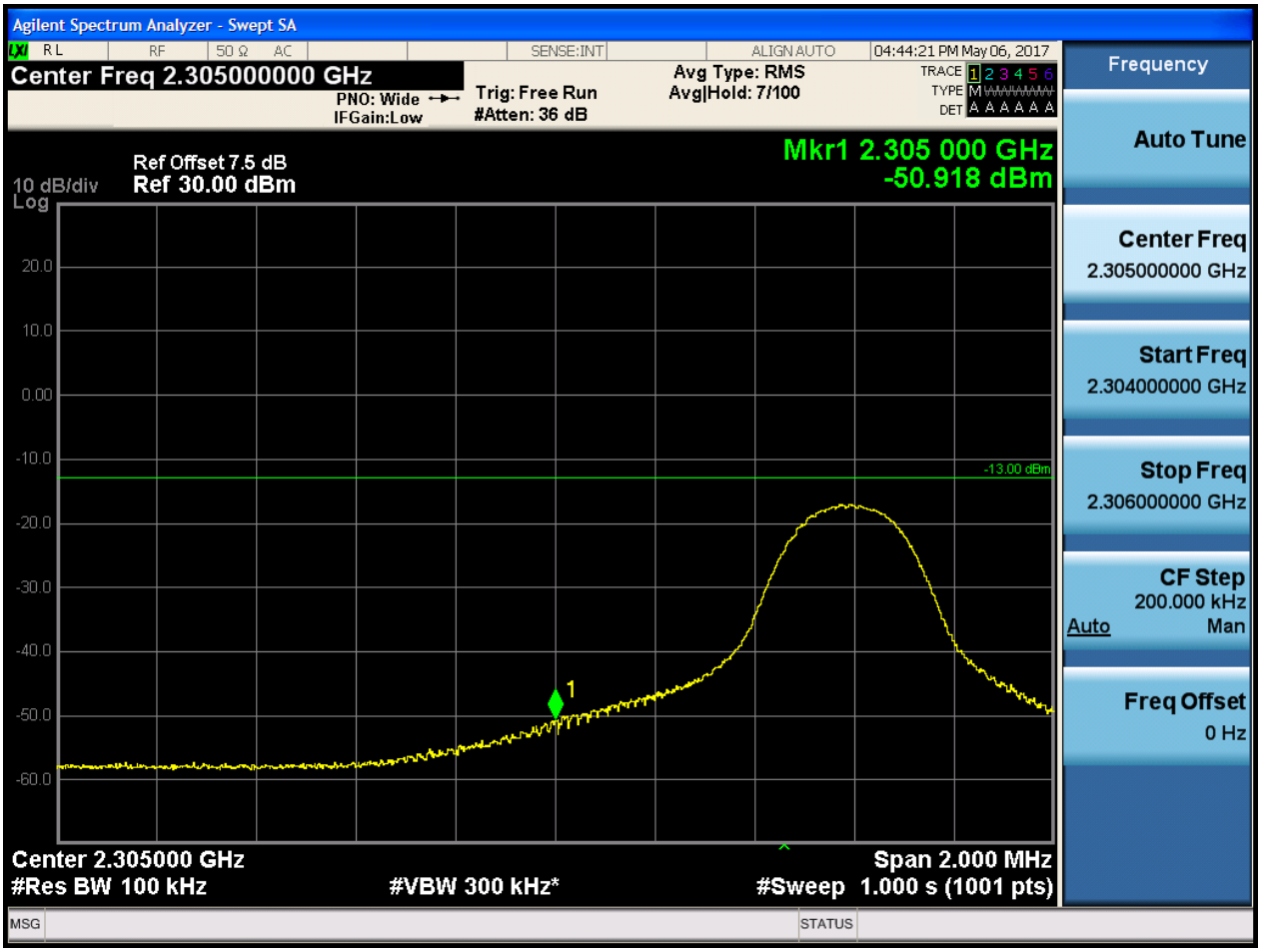
5.1.1.2.2 Test Bandwidth = 10

5.1.1.2.2.1 Test Channel = LCH

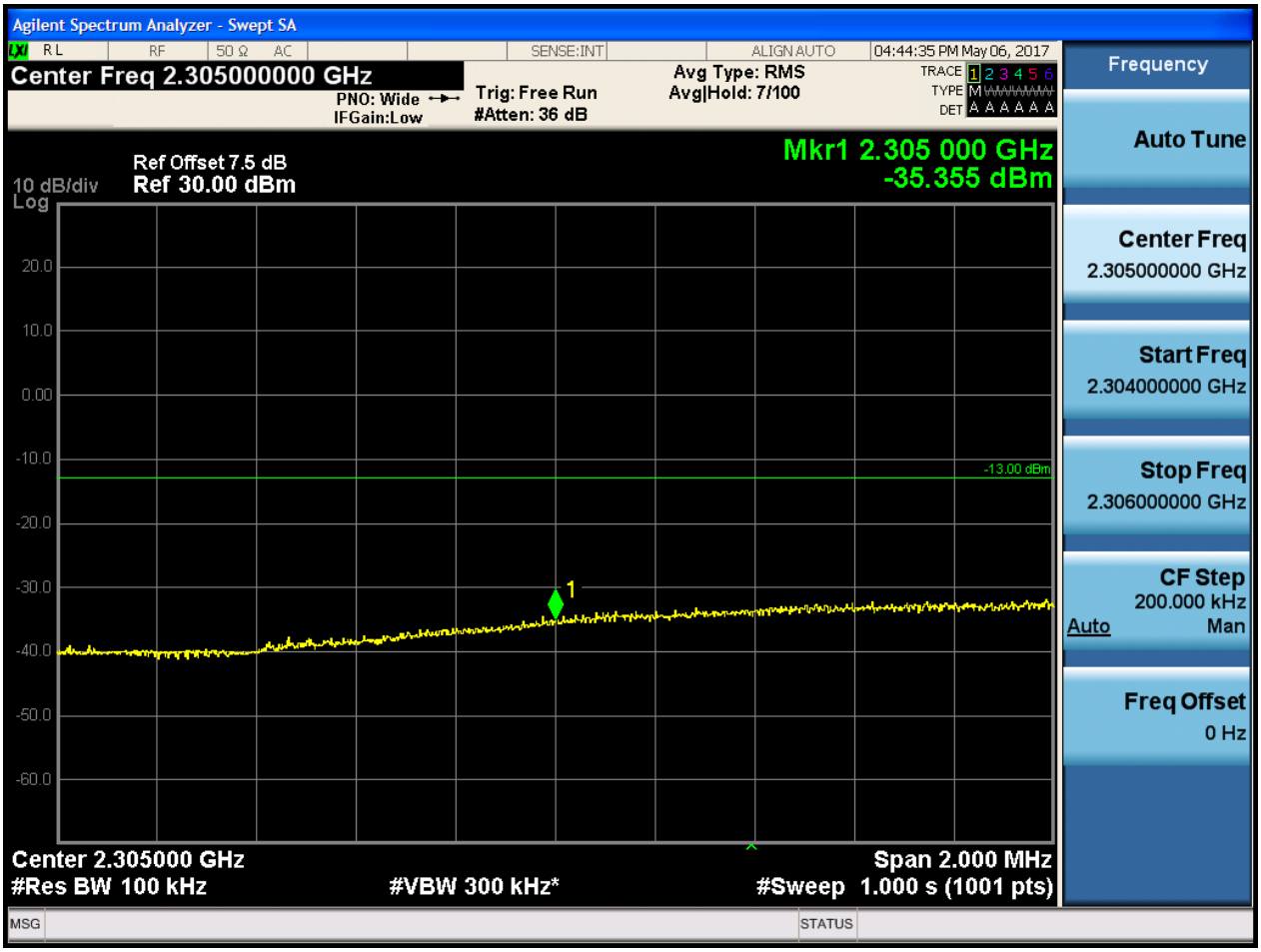
5.1.1.2.2.1.1 Test RB = RB1#0



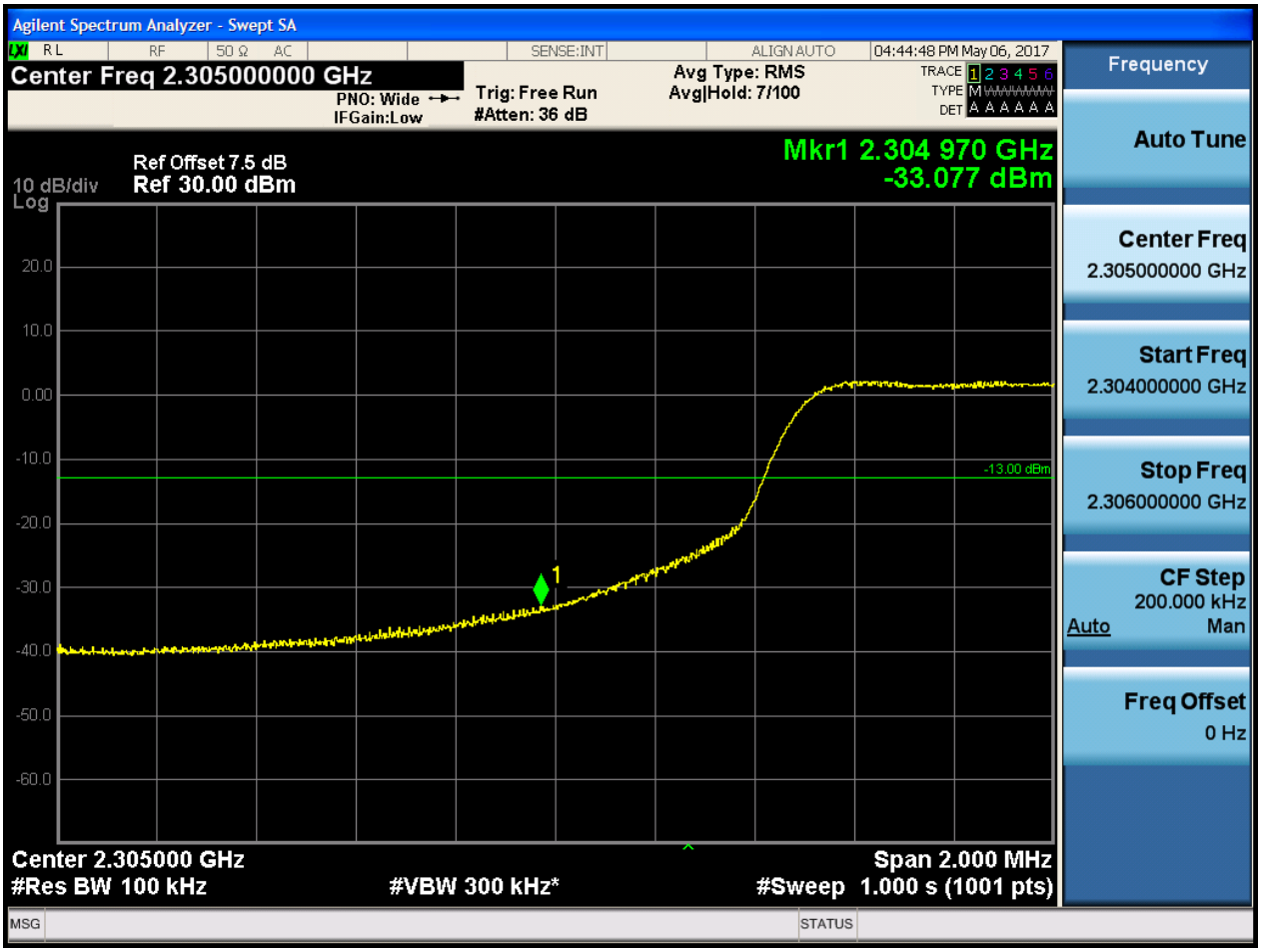
5.1.1.2.2.1.2 Test RB = RB1#49



5.1.1.2.2.1.3 Test RB = RB25#13

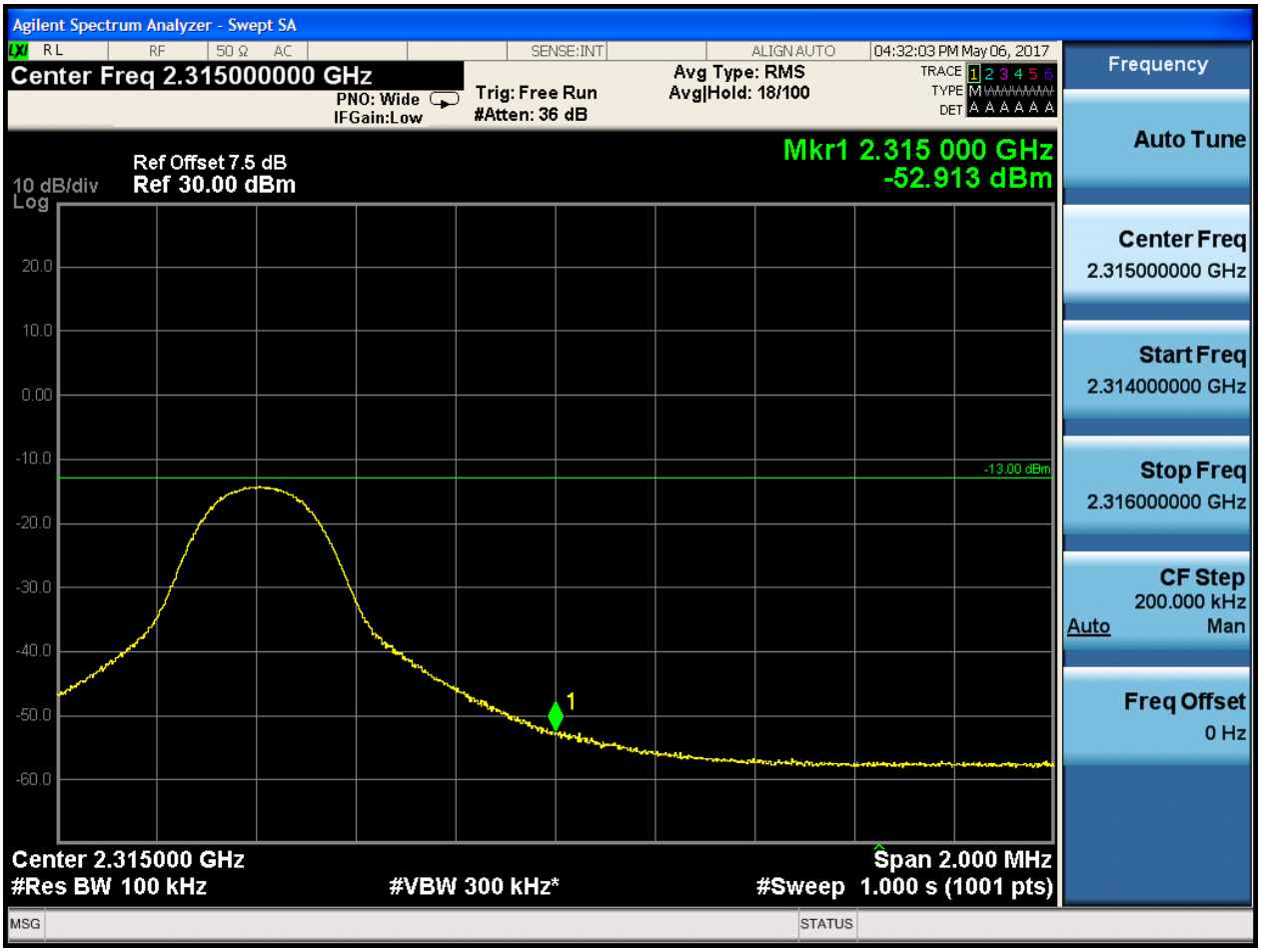


5.1.1.2.2.1.4 Test RB = RB50#0

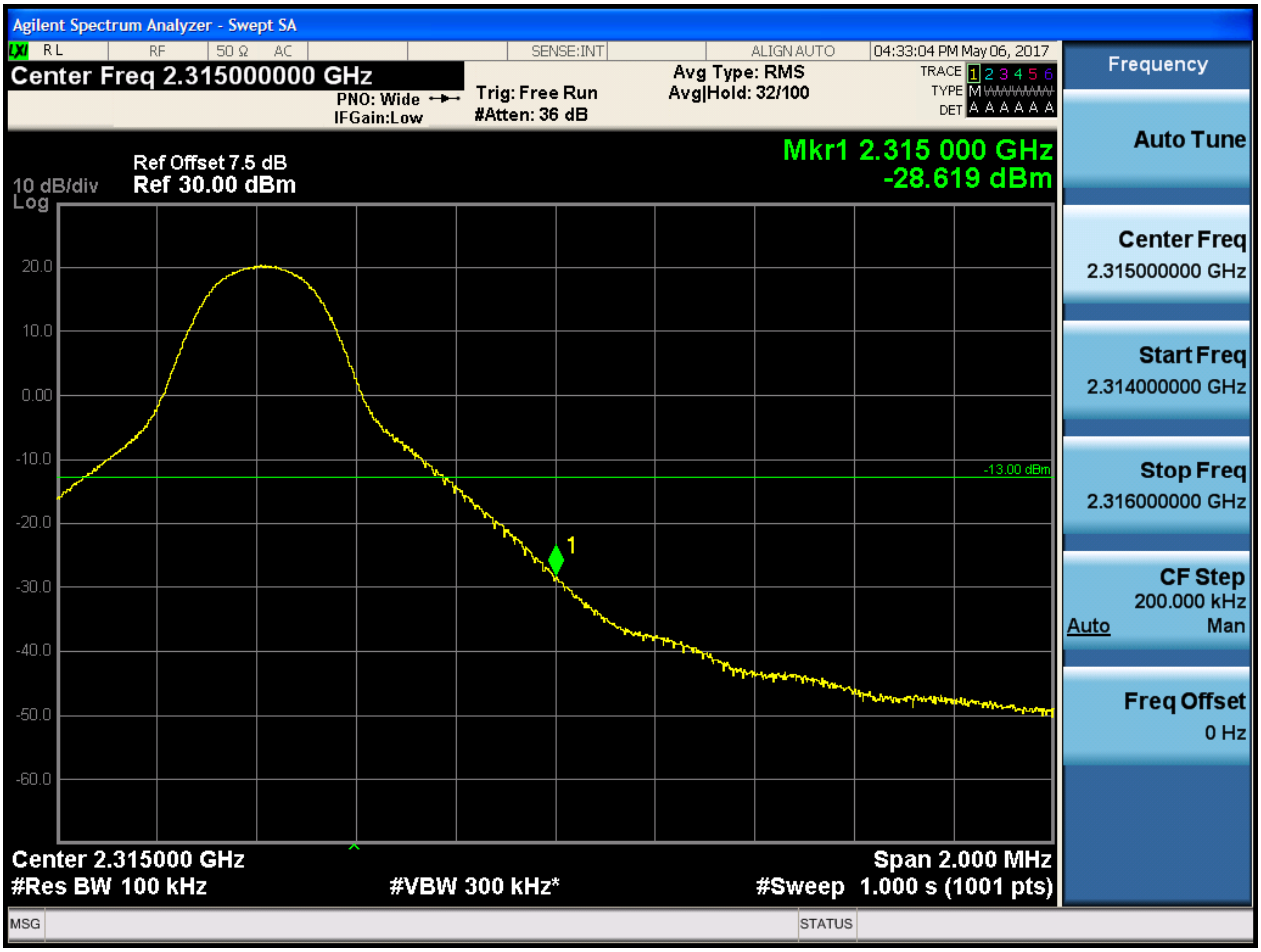


5.1.1.2.2.2 Test Channel = HCH

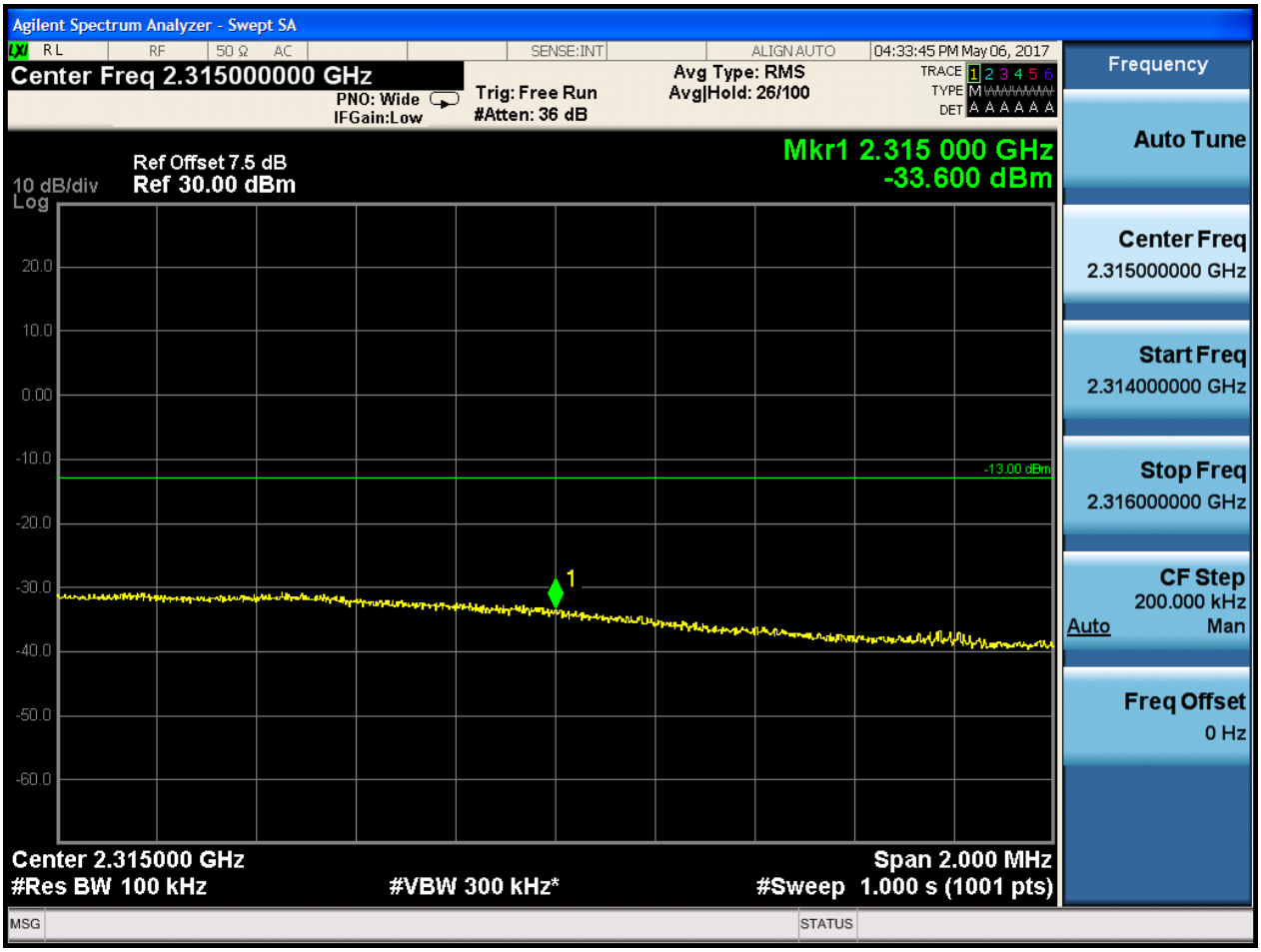
5.1.1.2.2.2.1 Test RB = RB1#0



5.1.1.2.2.2 Test RB = RB1#49



5.1.1.2.2.3 Test RB = RB25#13



5.1.1.2.2.2.4 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

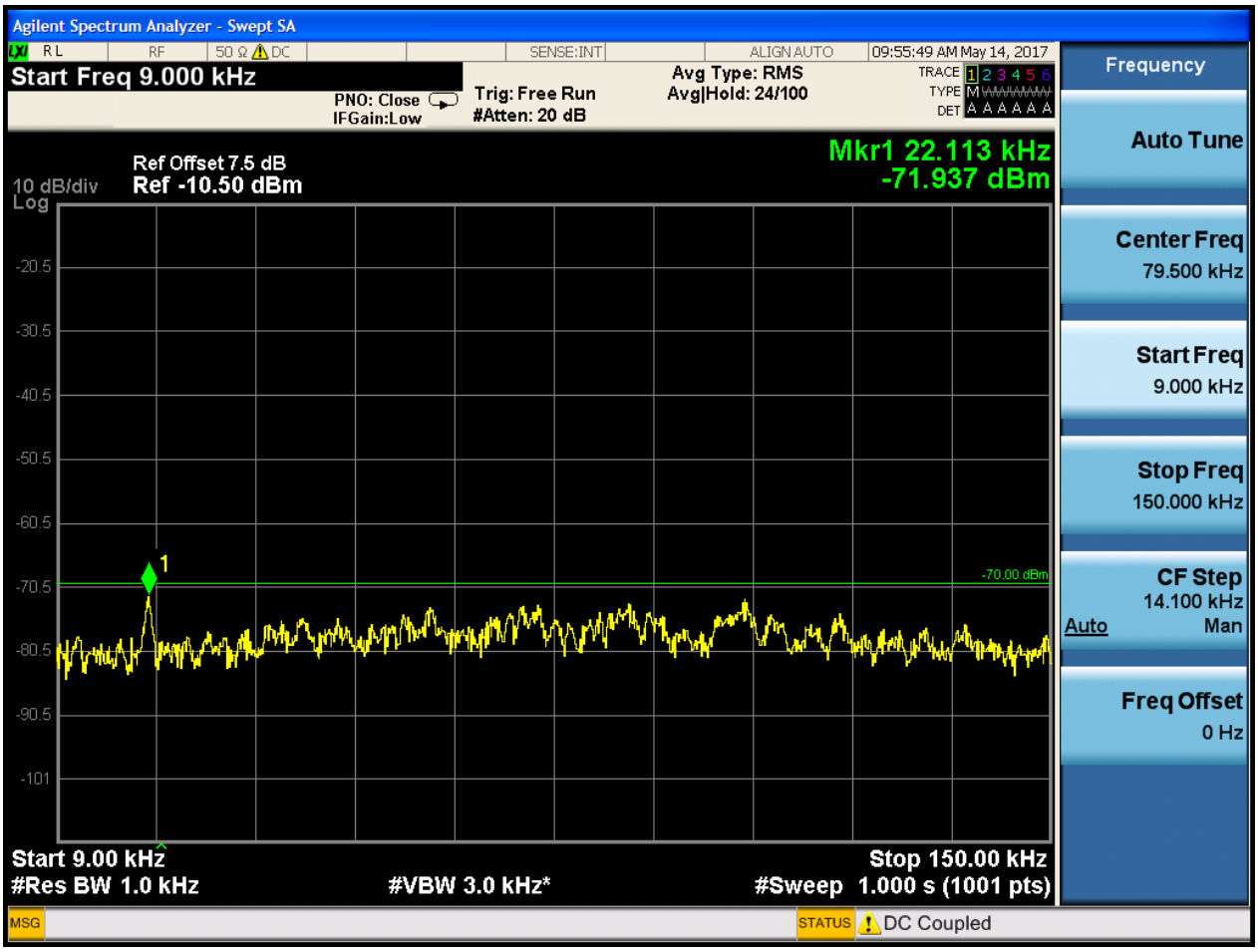
6.1.1 Test Band = BAND30

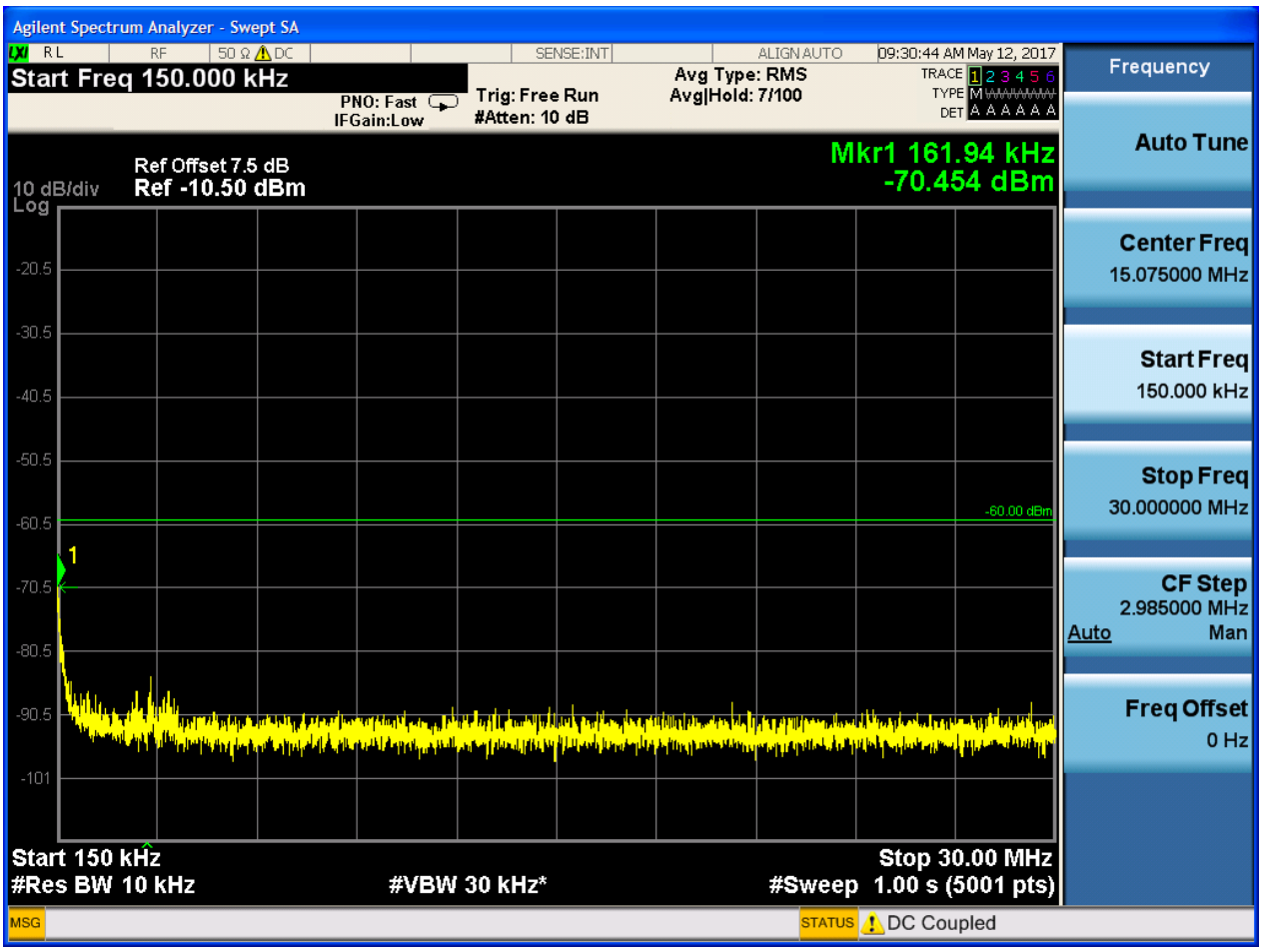
6.1.1.1 Test Mode = LTE/TM1

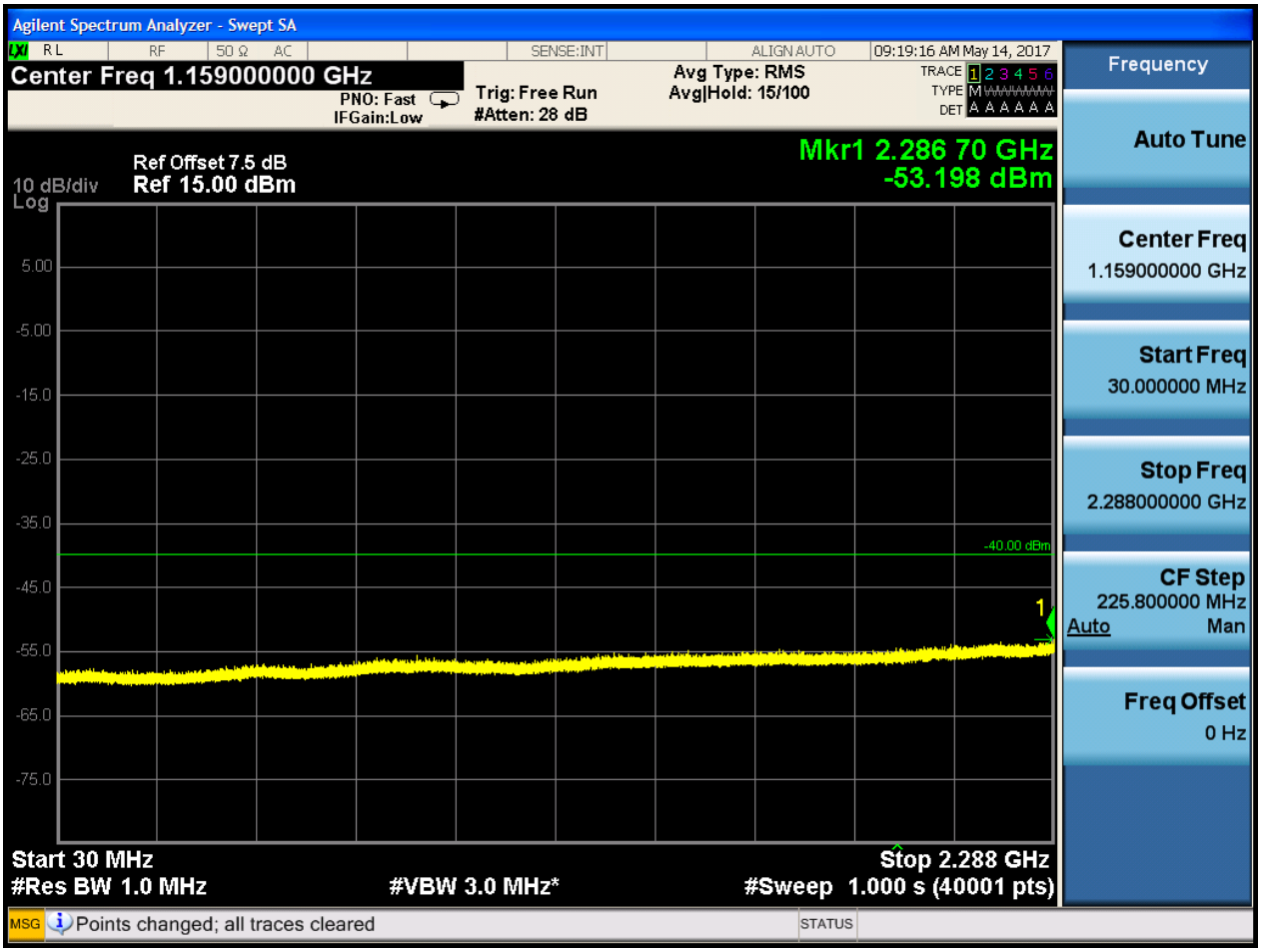
6.1.1.1.1 Test Bandwidth = 5

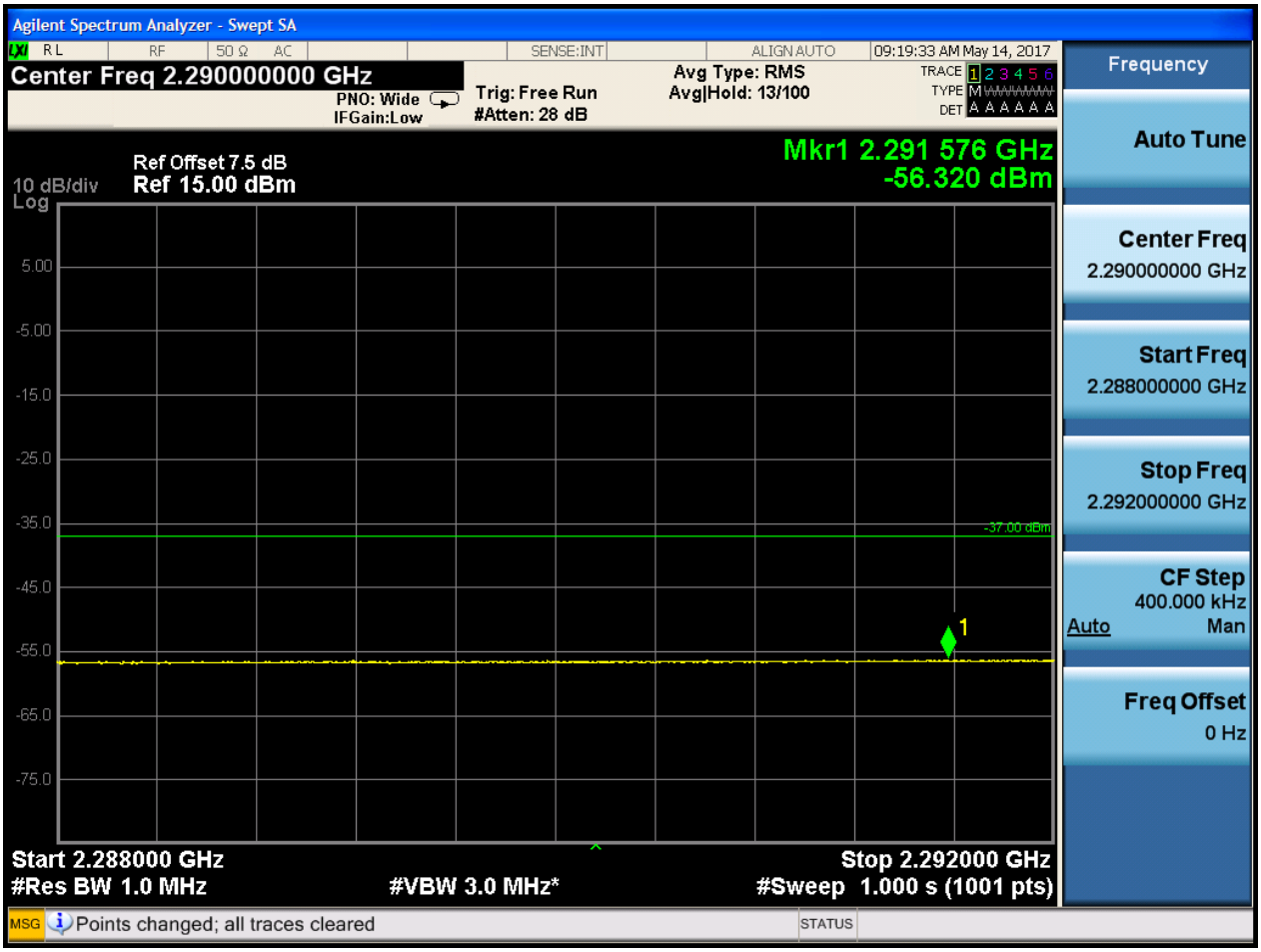
6.1.1.1.1.1 Test Channel = LCH

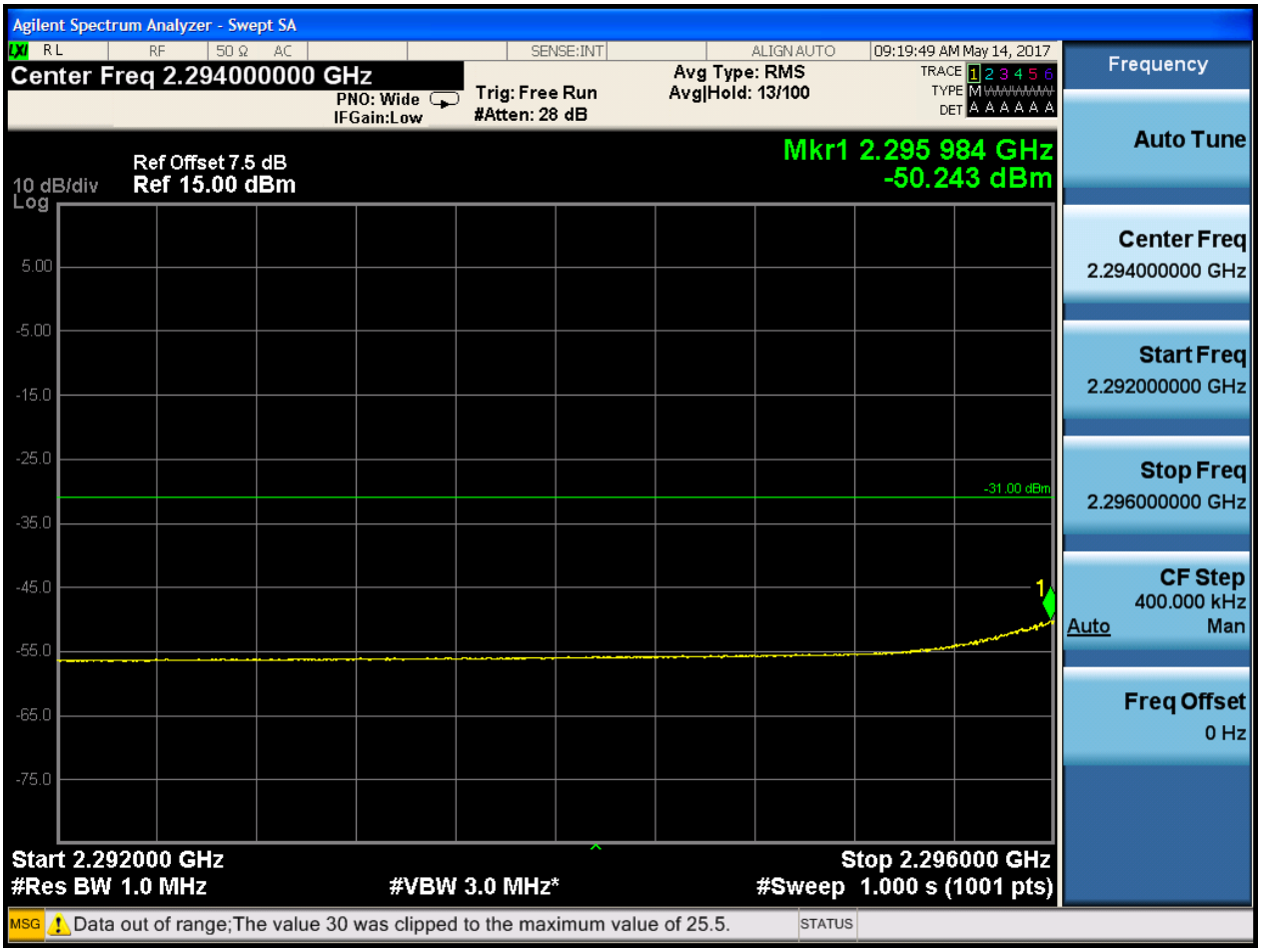
6.1.1.1.1.1.1 Test RB = RB1#0

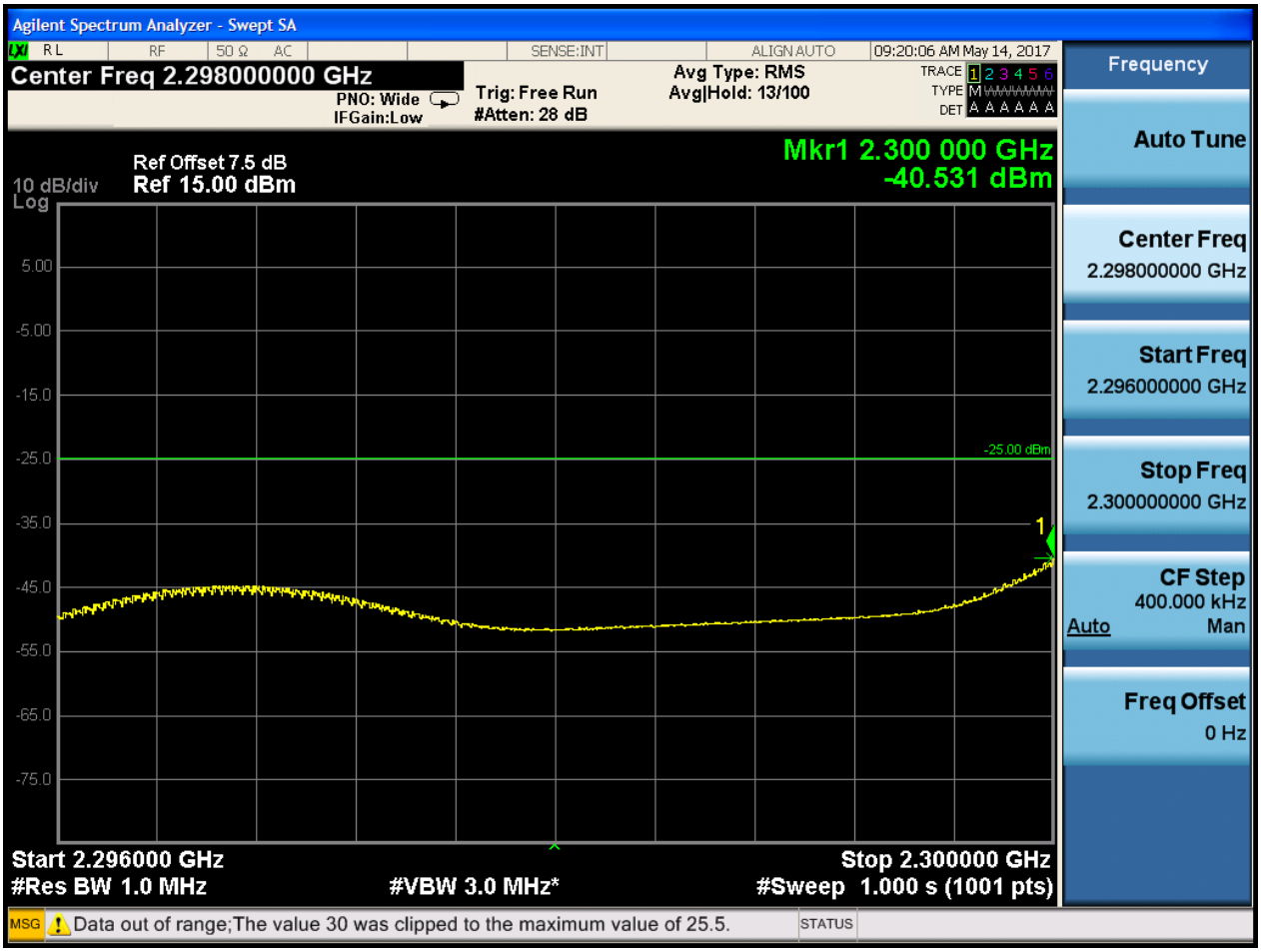


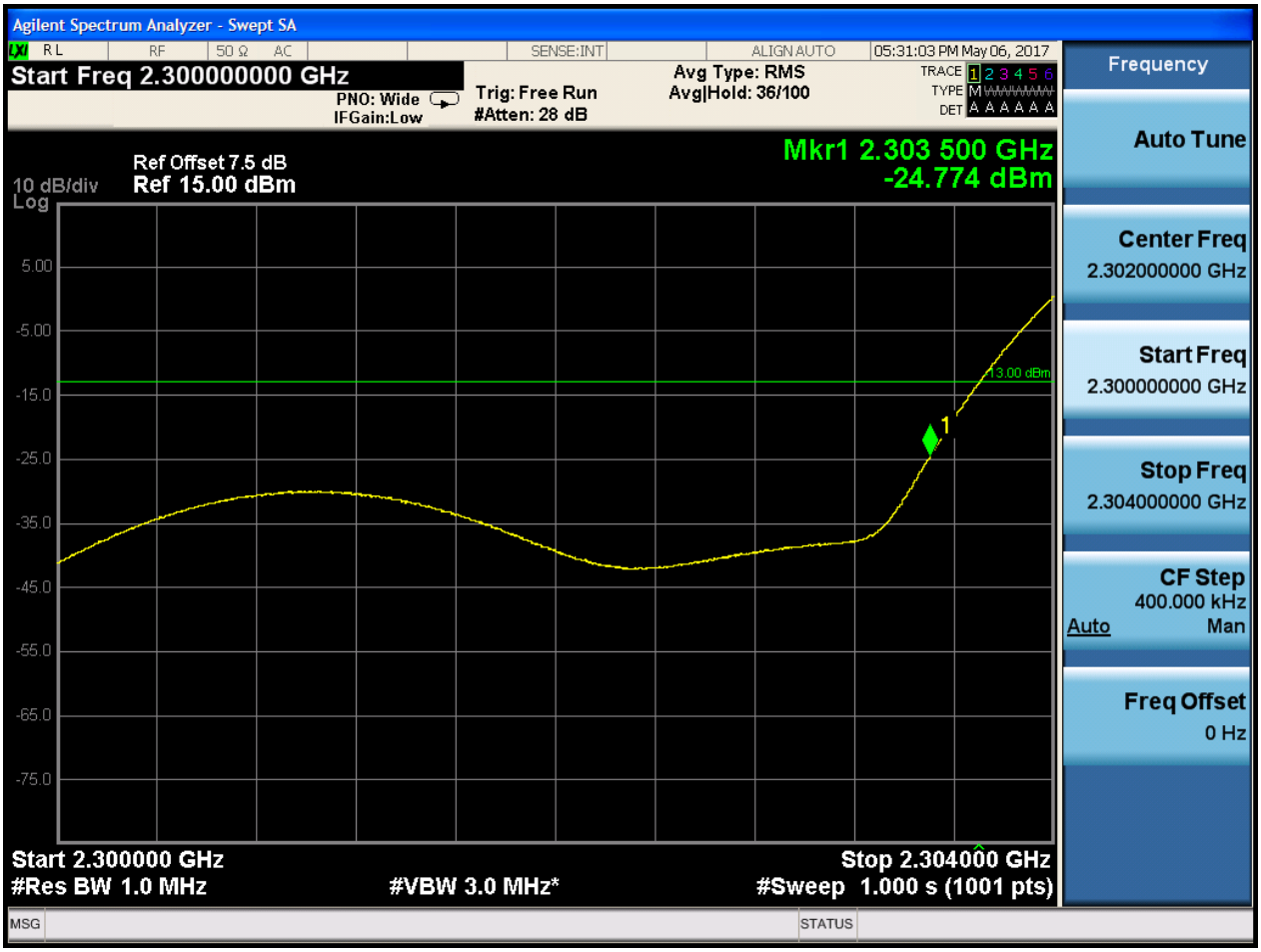


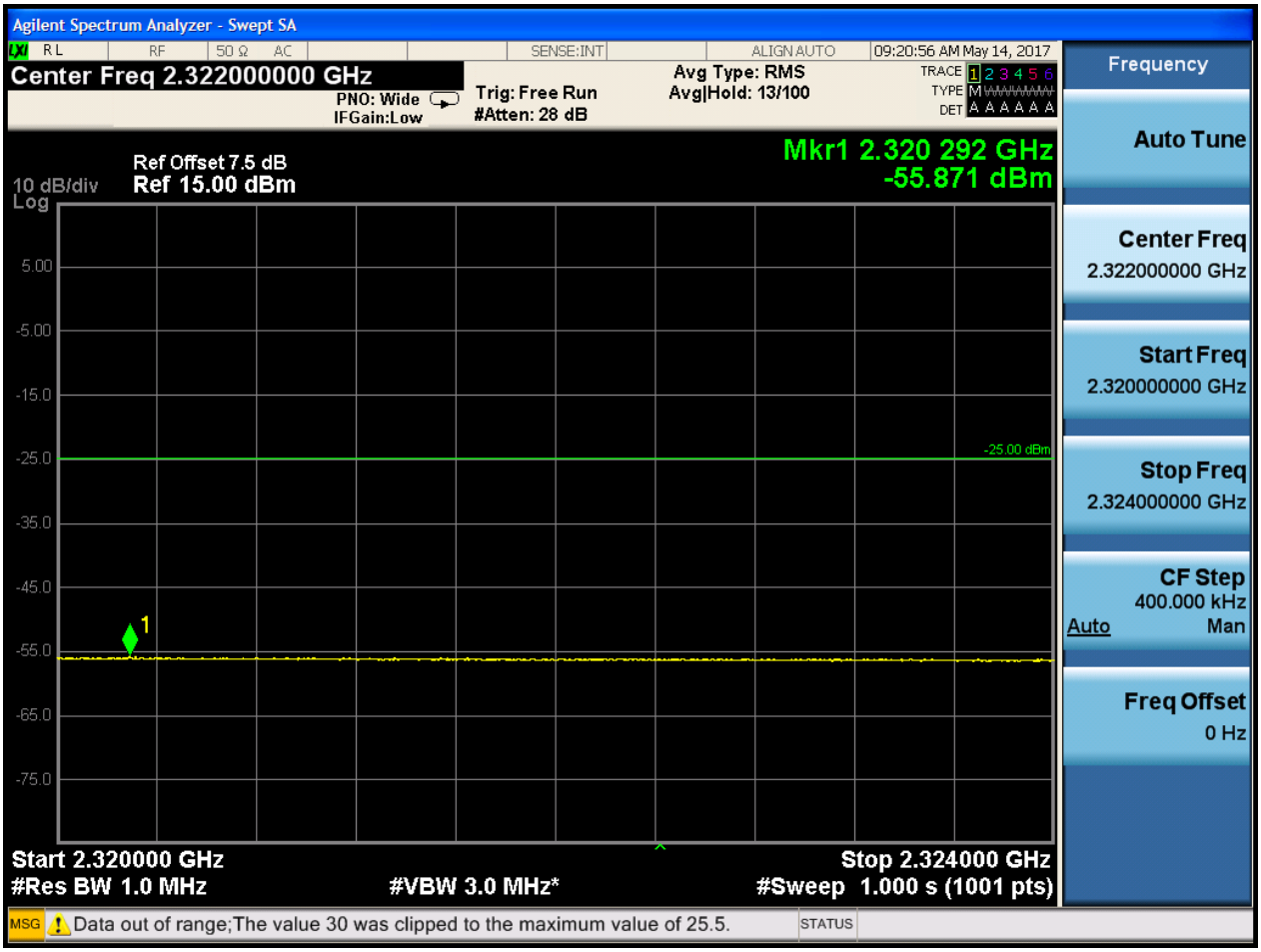


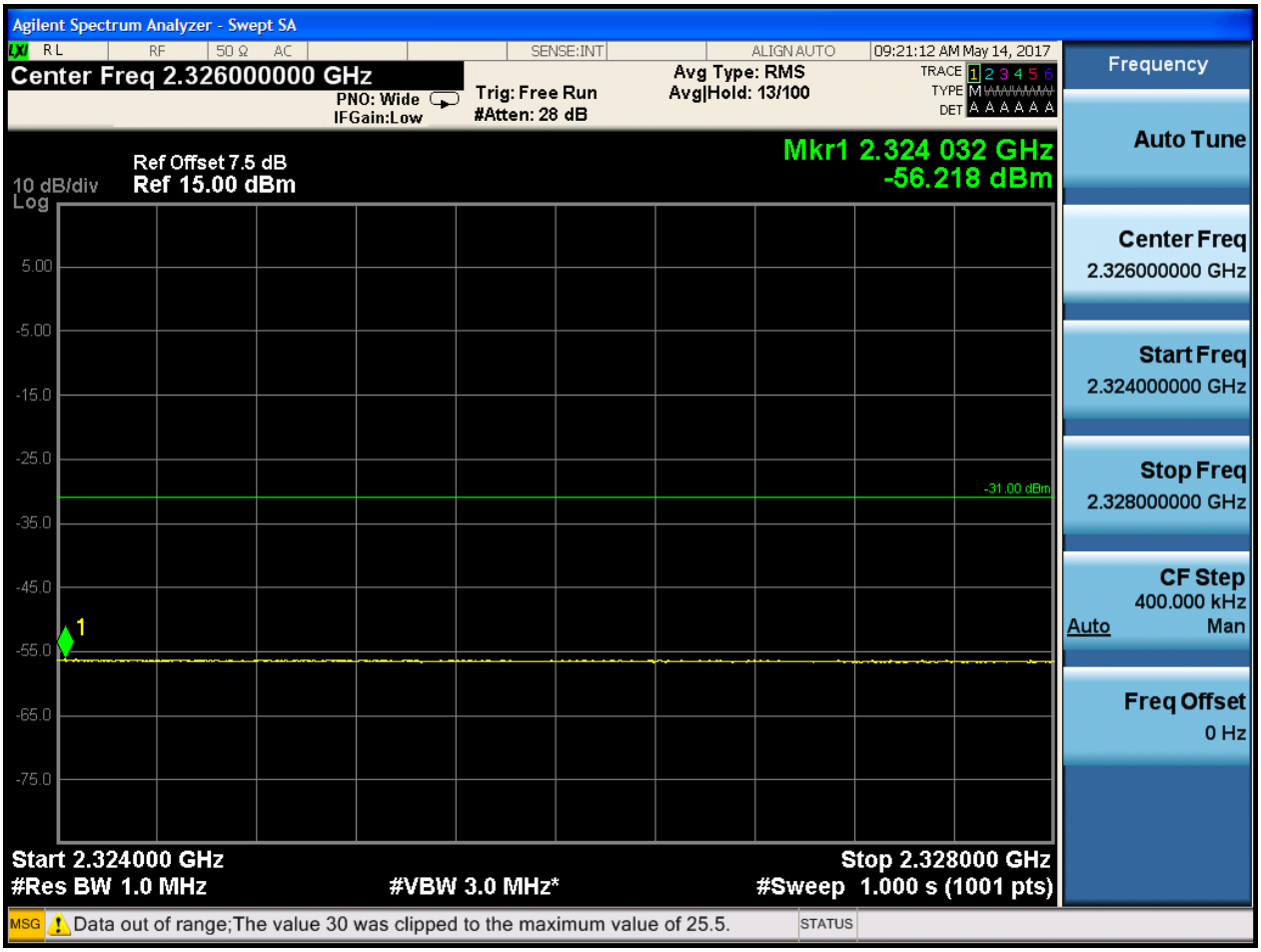


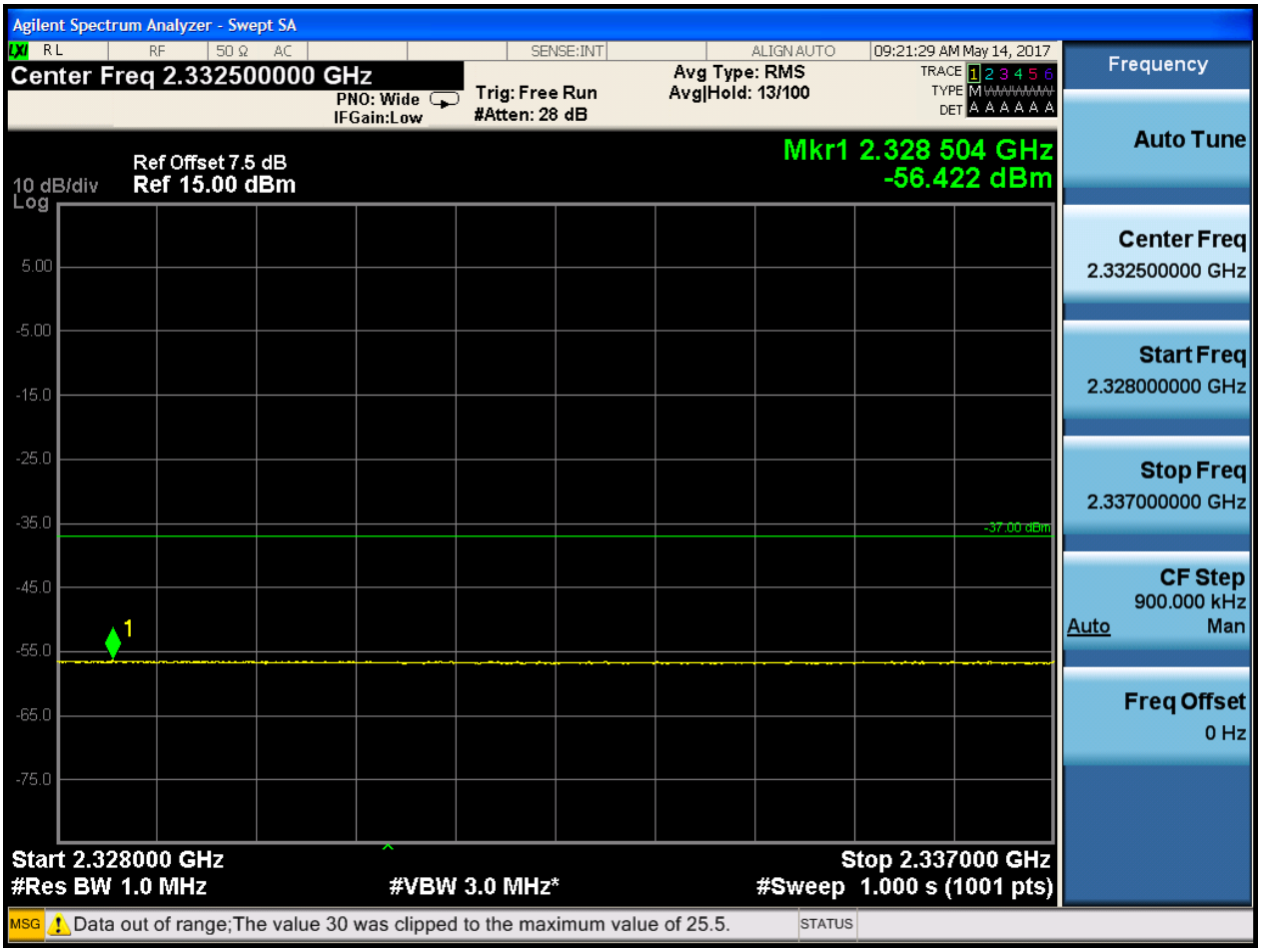


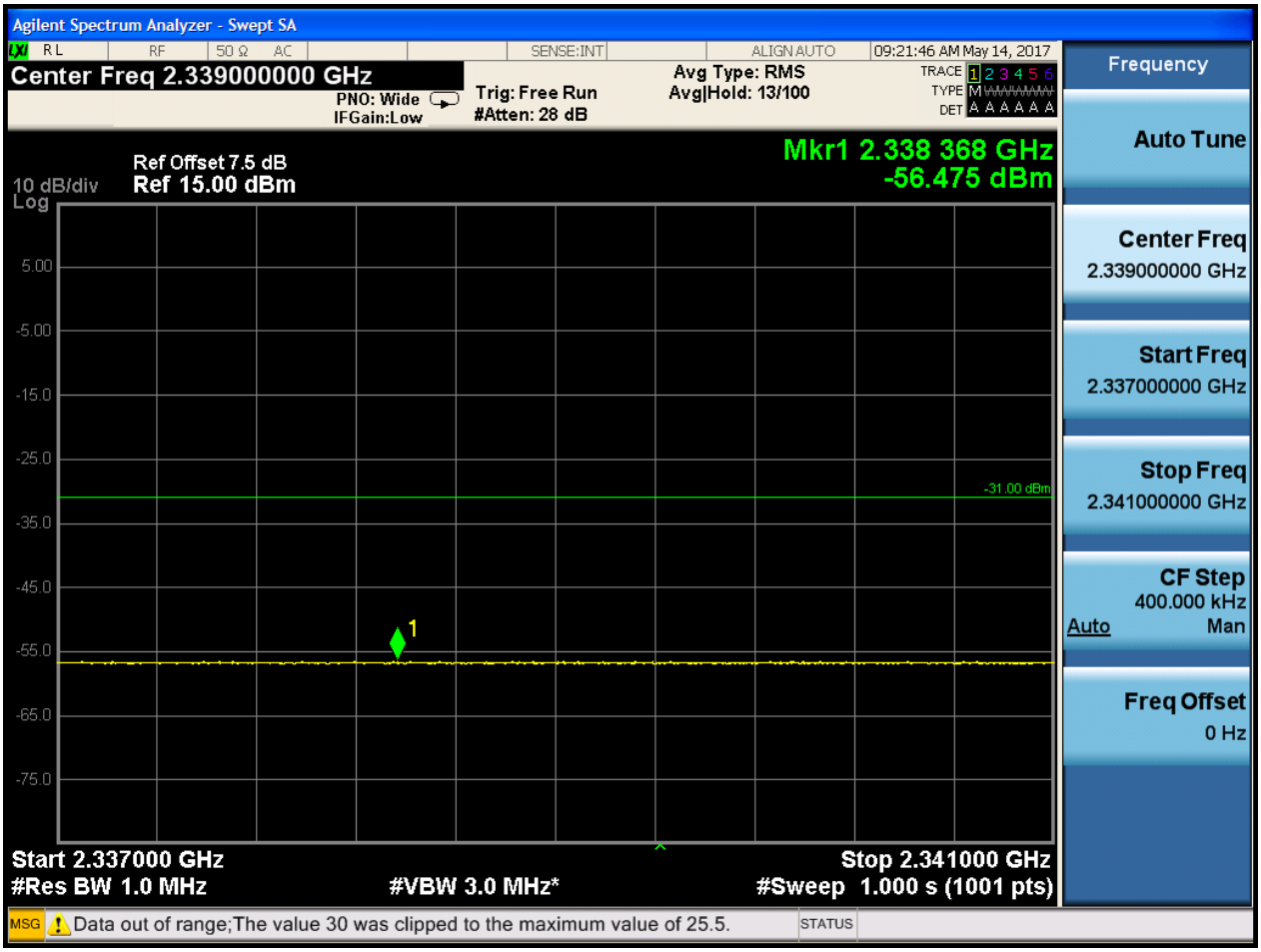


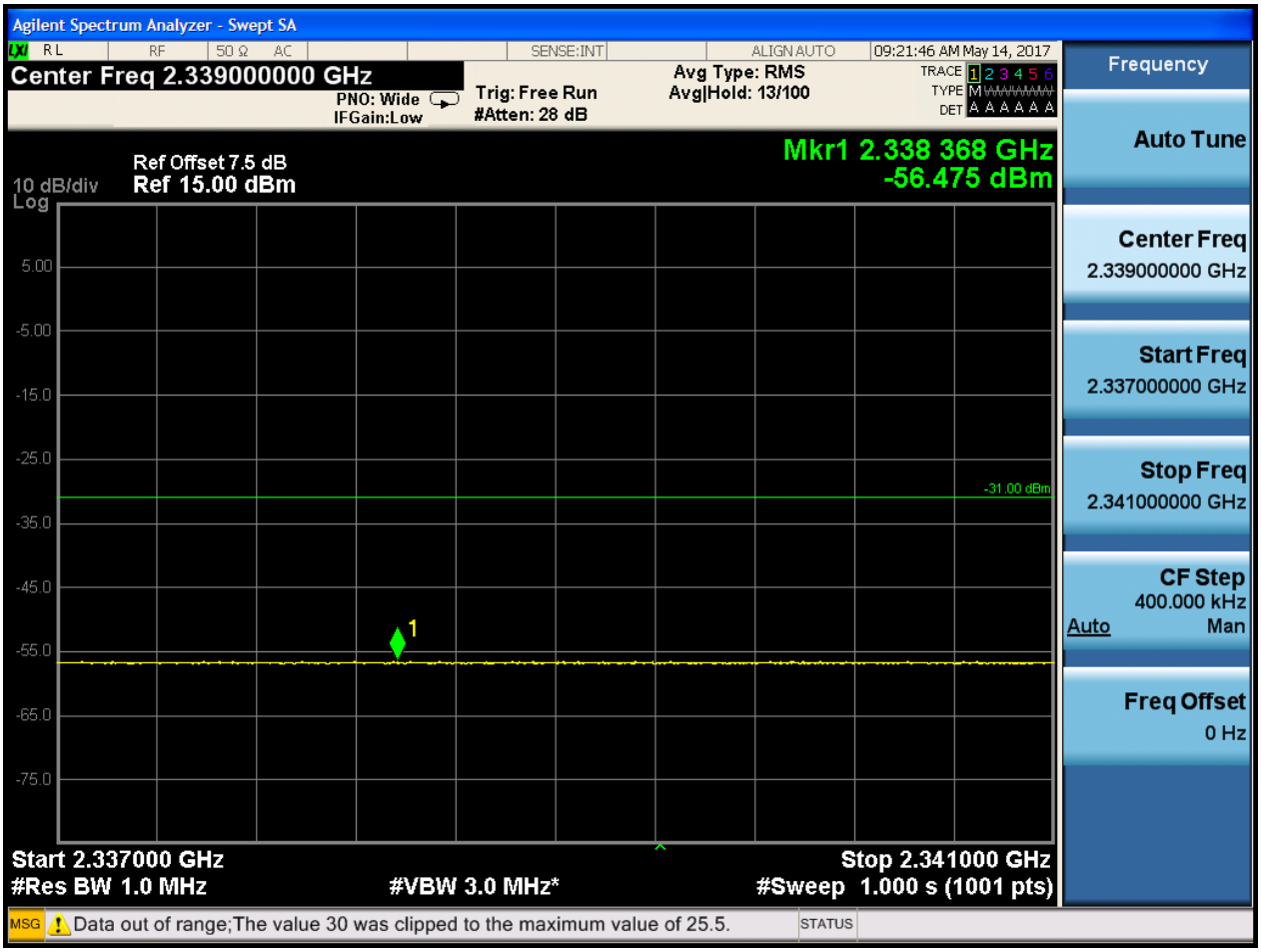


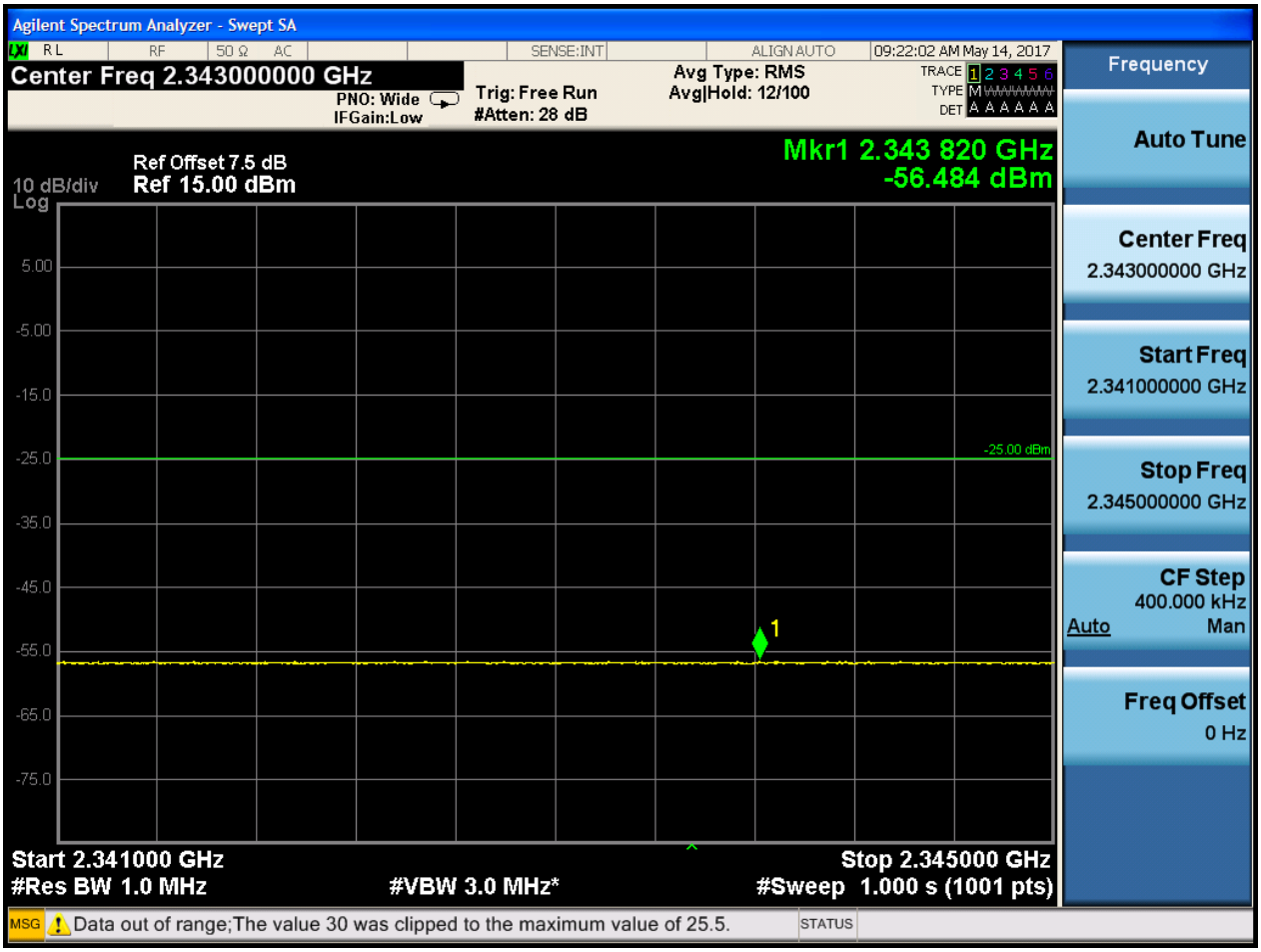


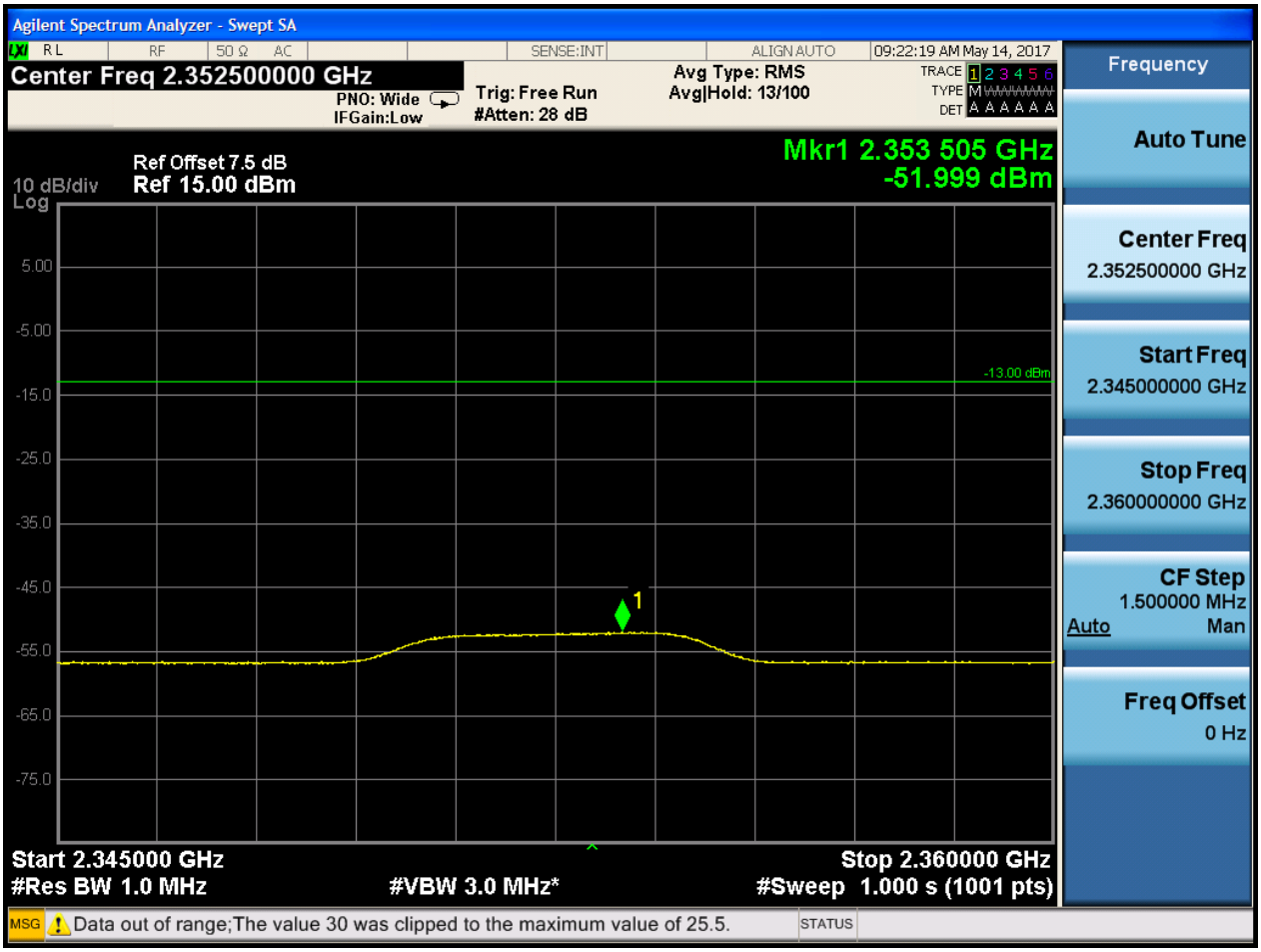


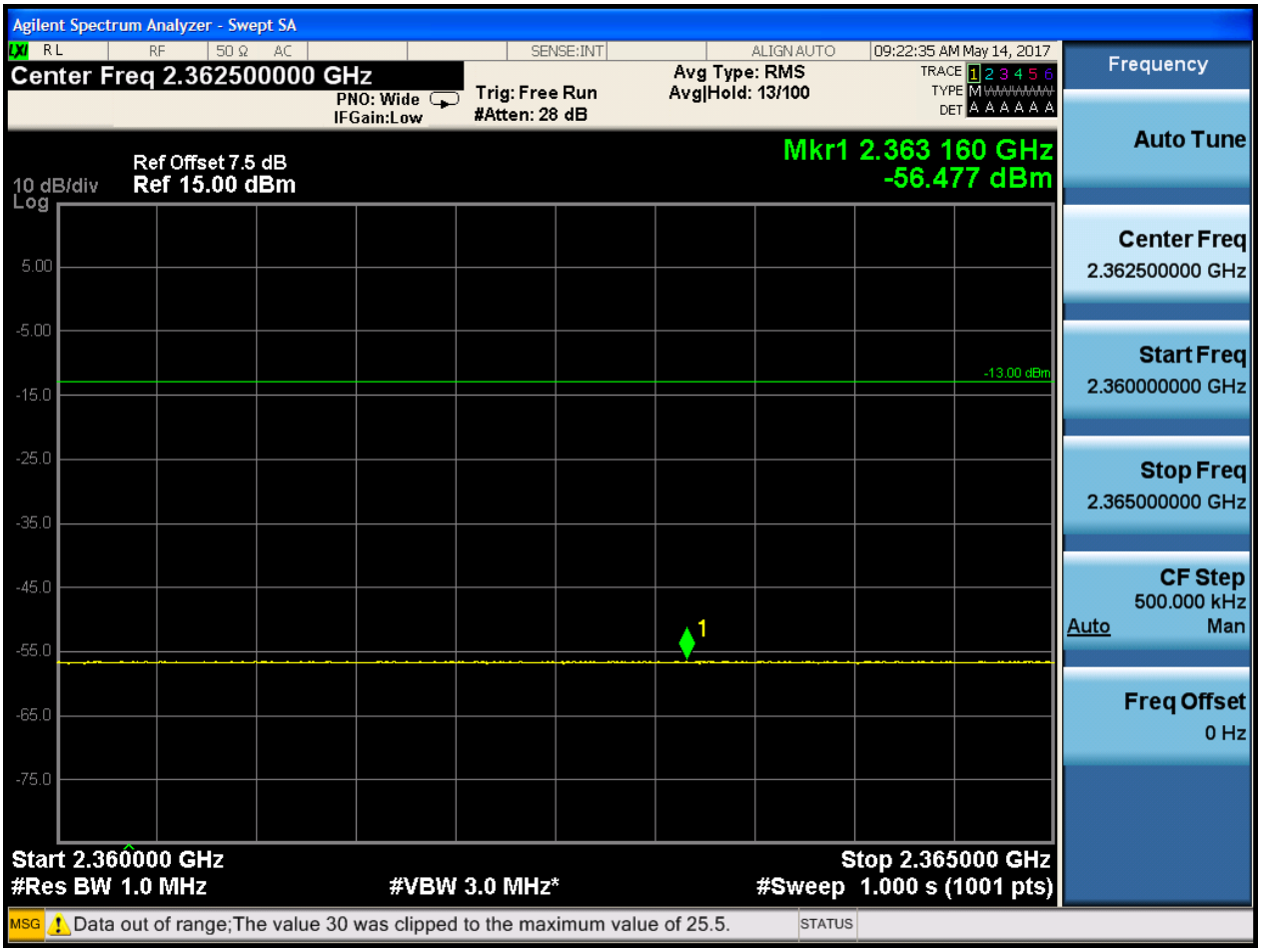






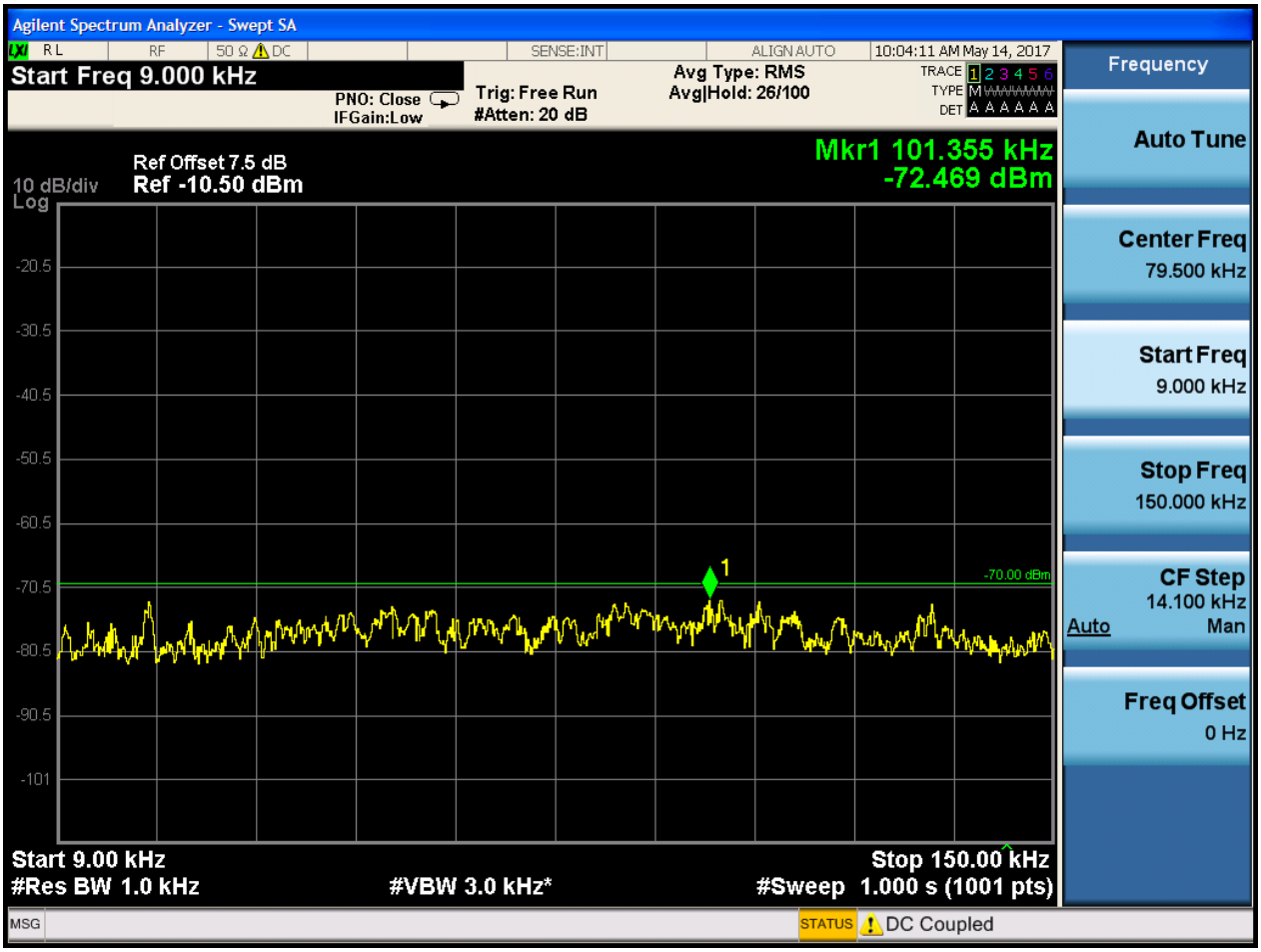


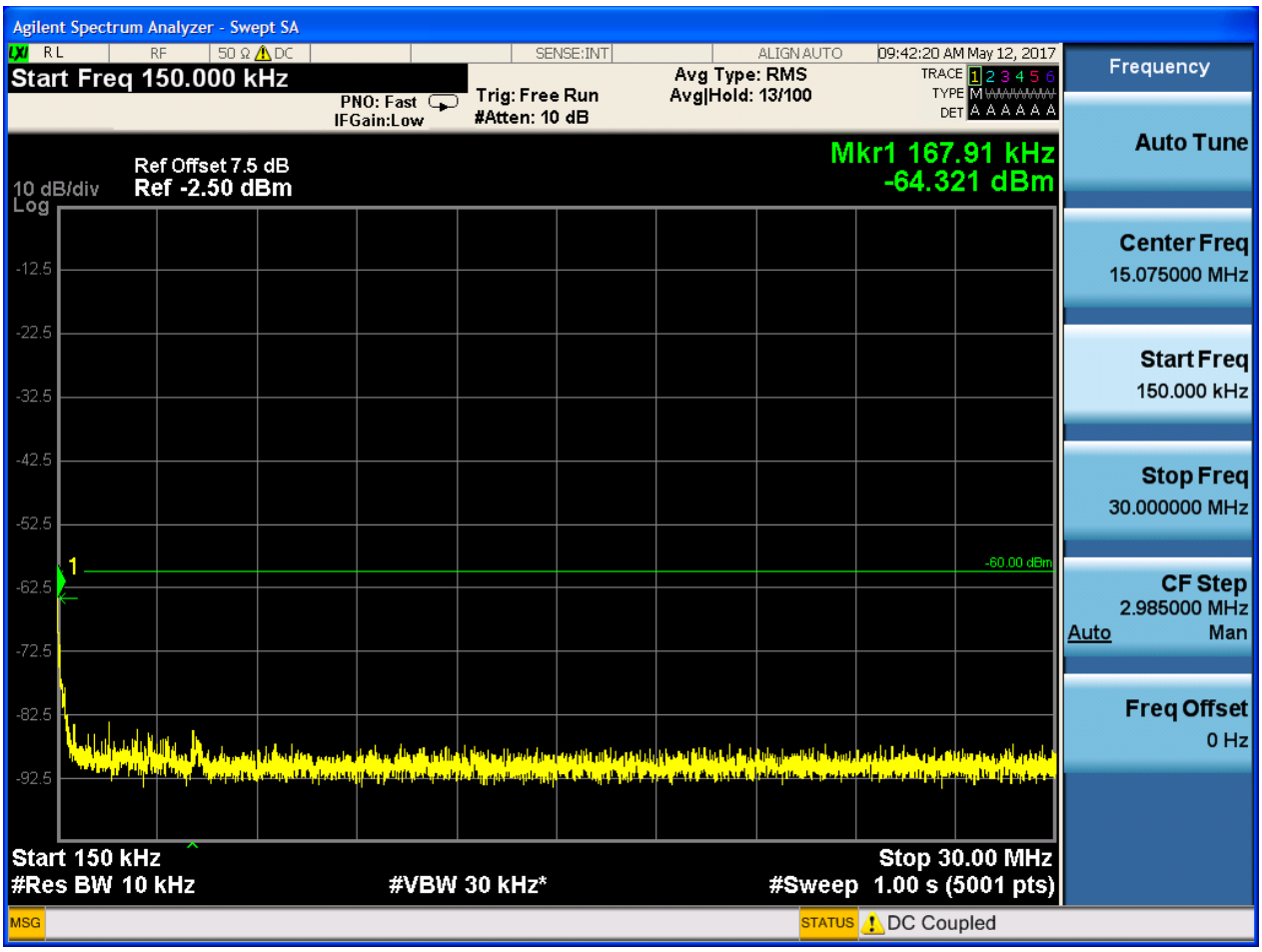


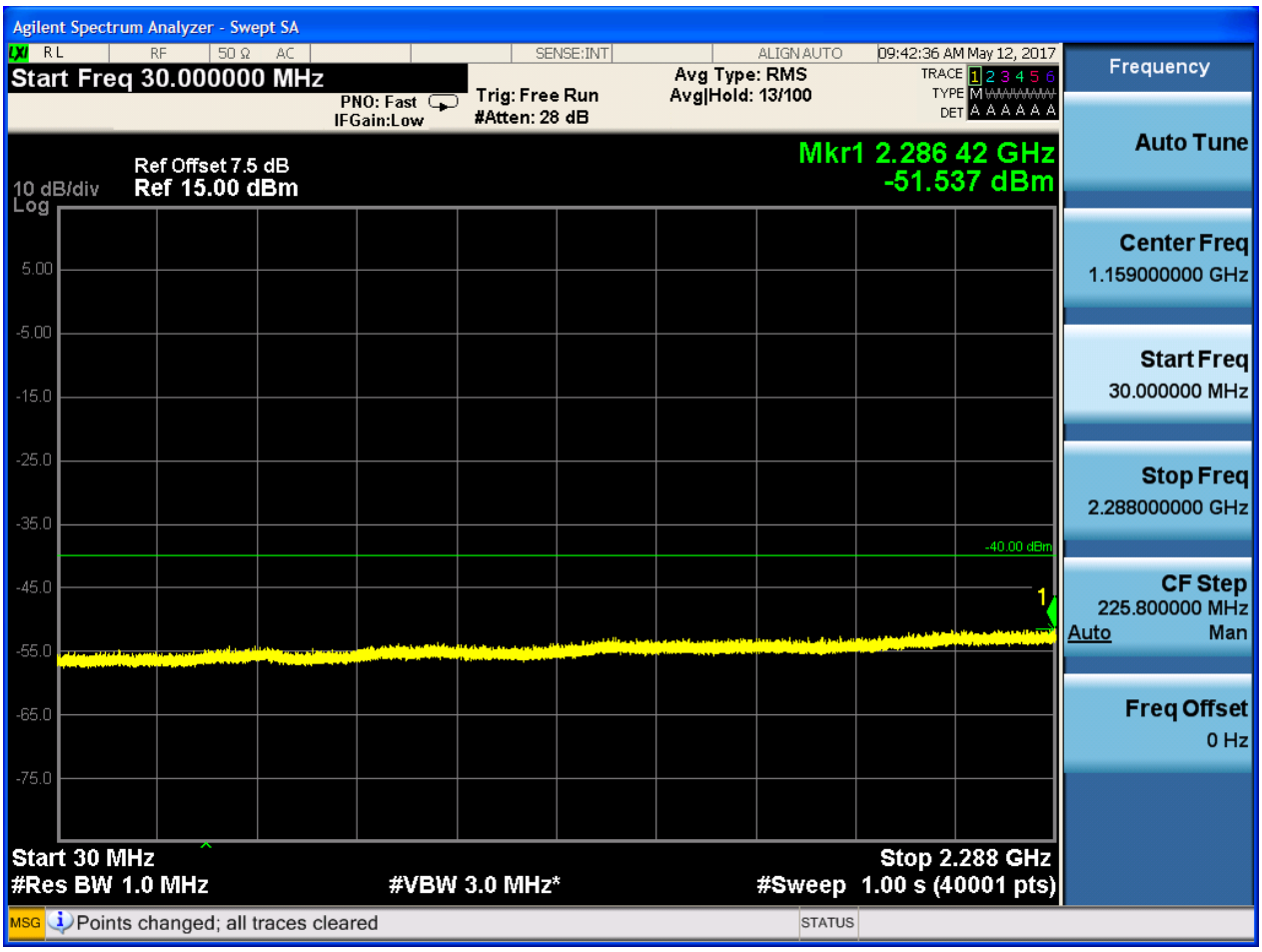


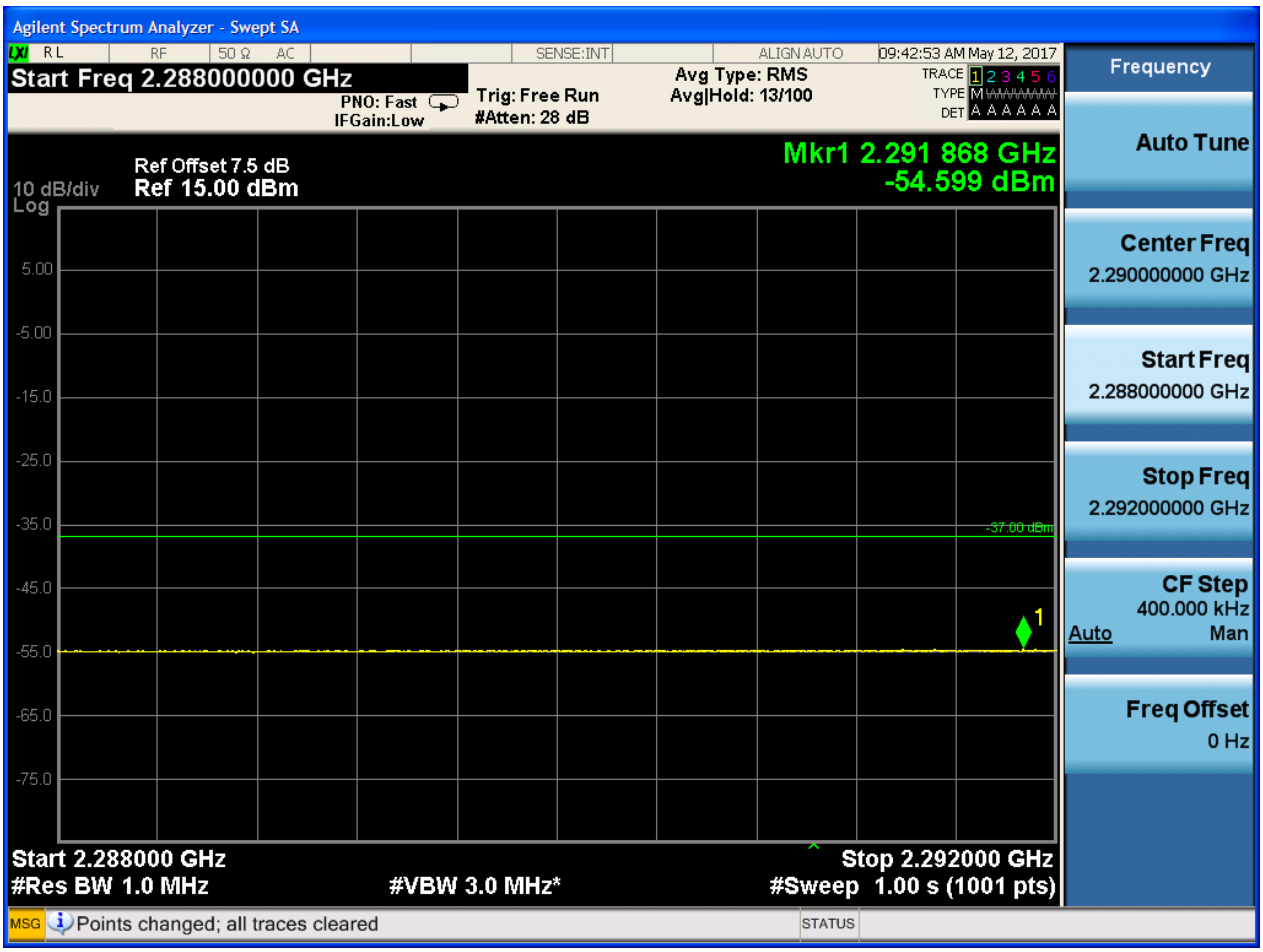
6.1.1.1.1.2 Test Channel = MCH

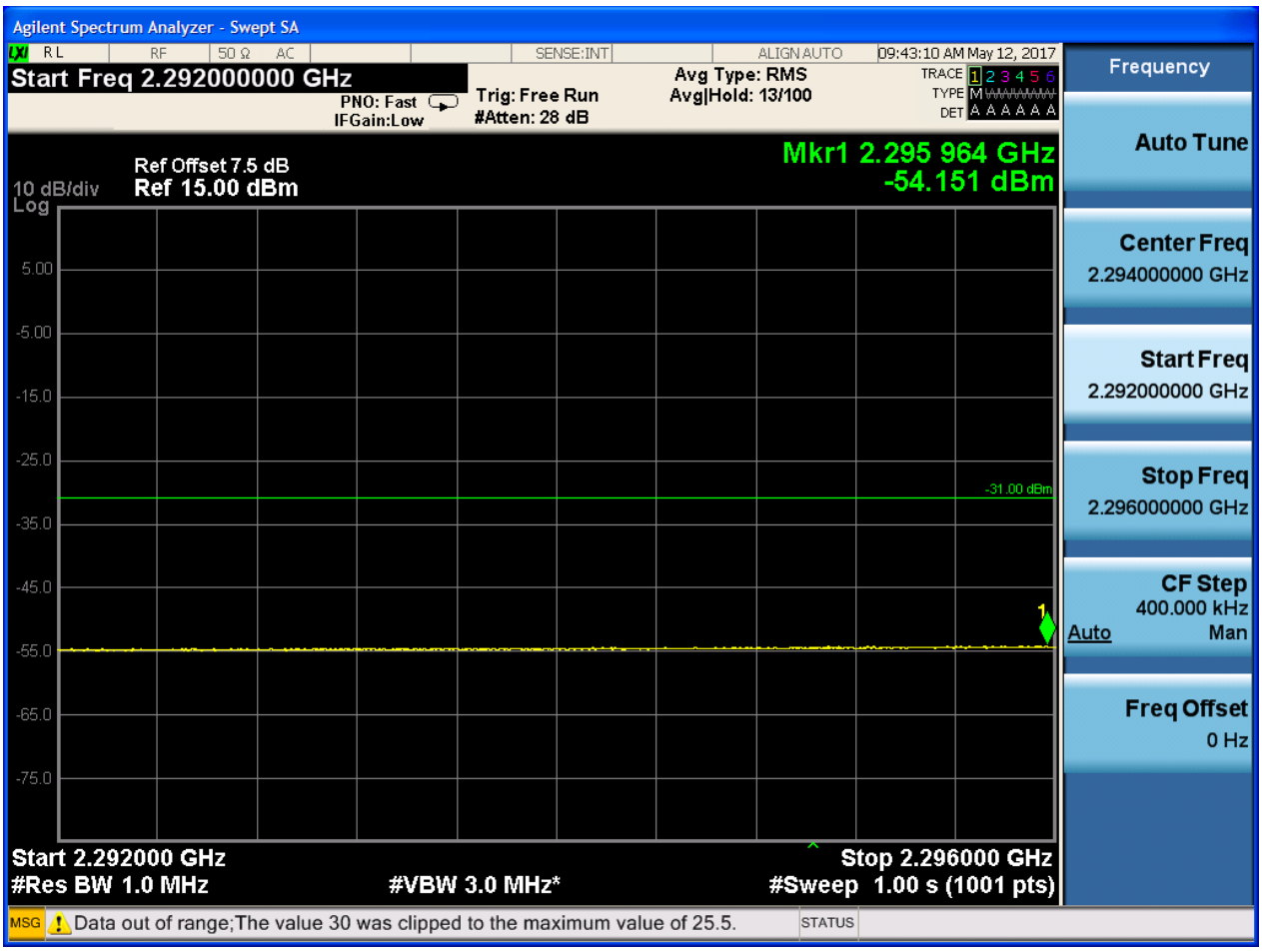
6.1.1.1.1.2.1 Test RB = RB1#0

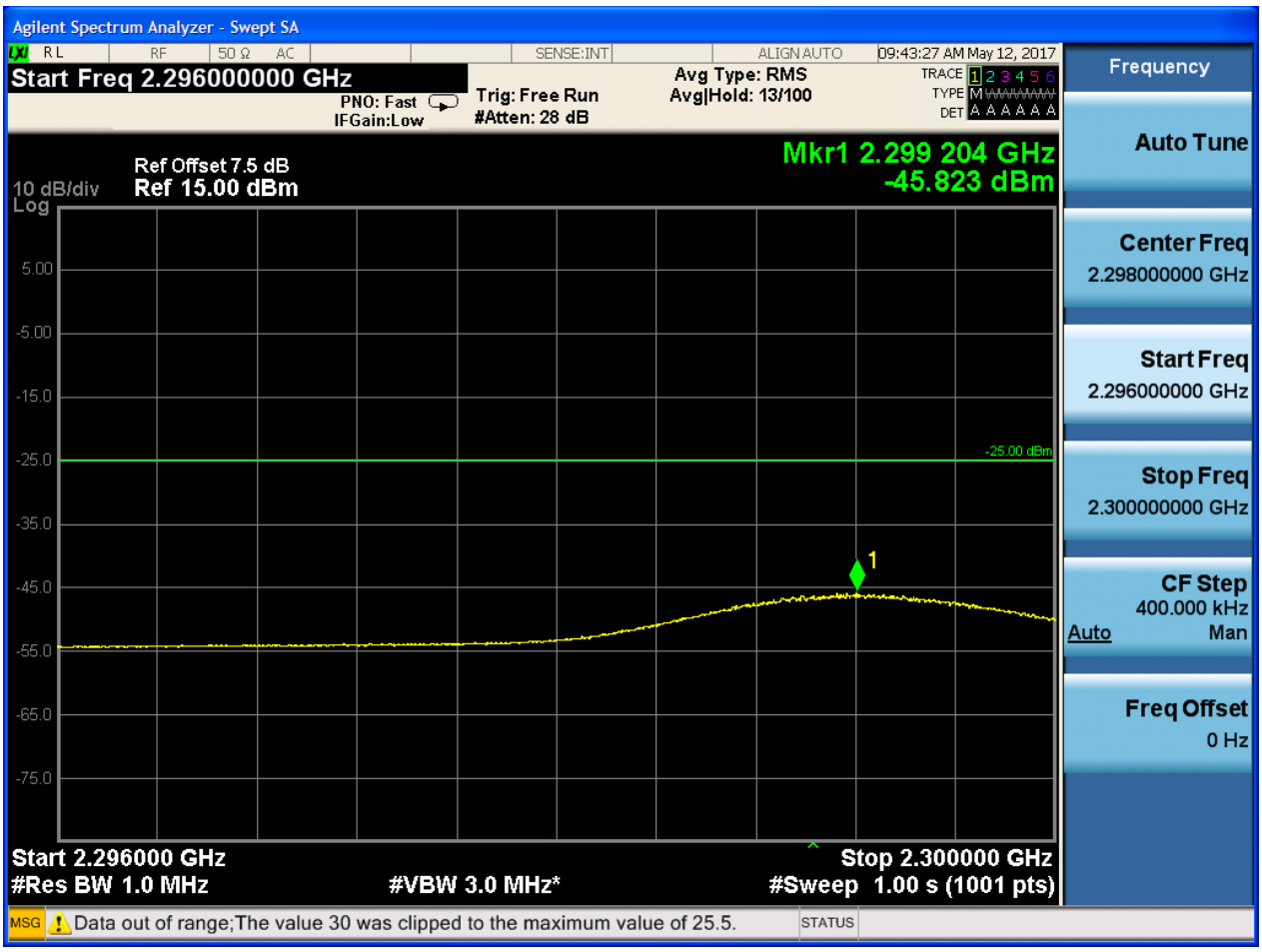


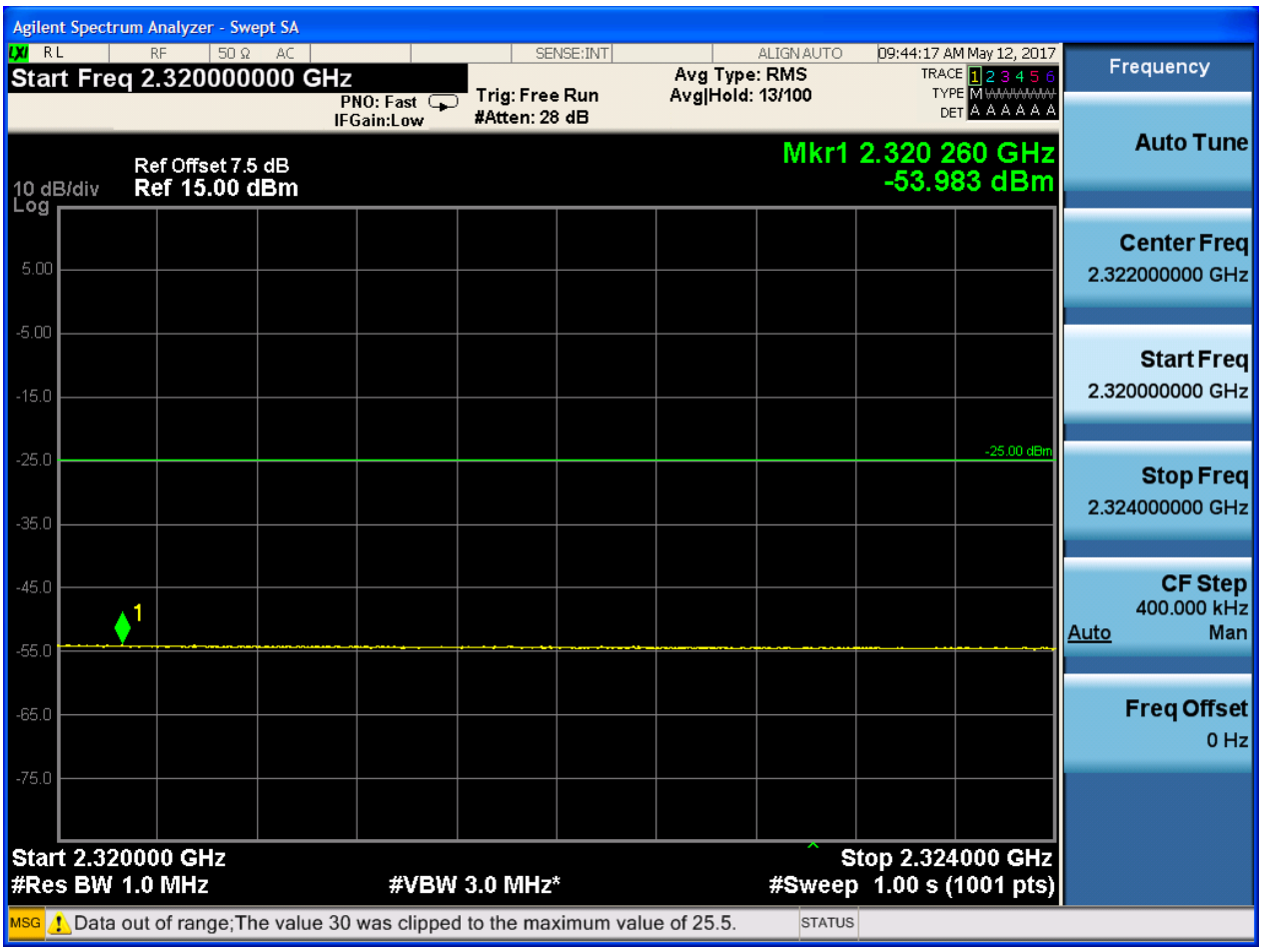


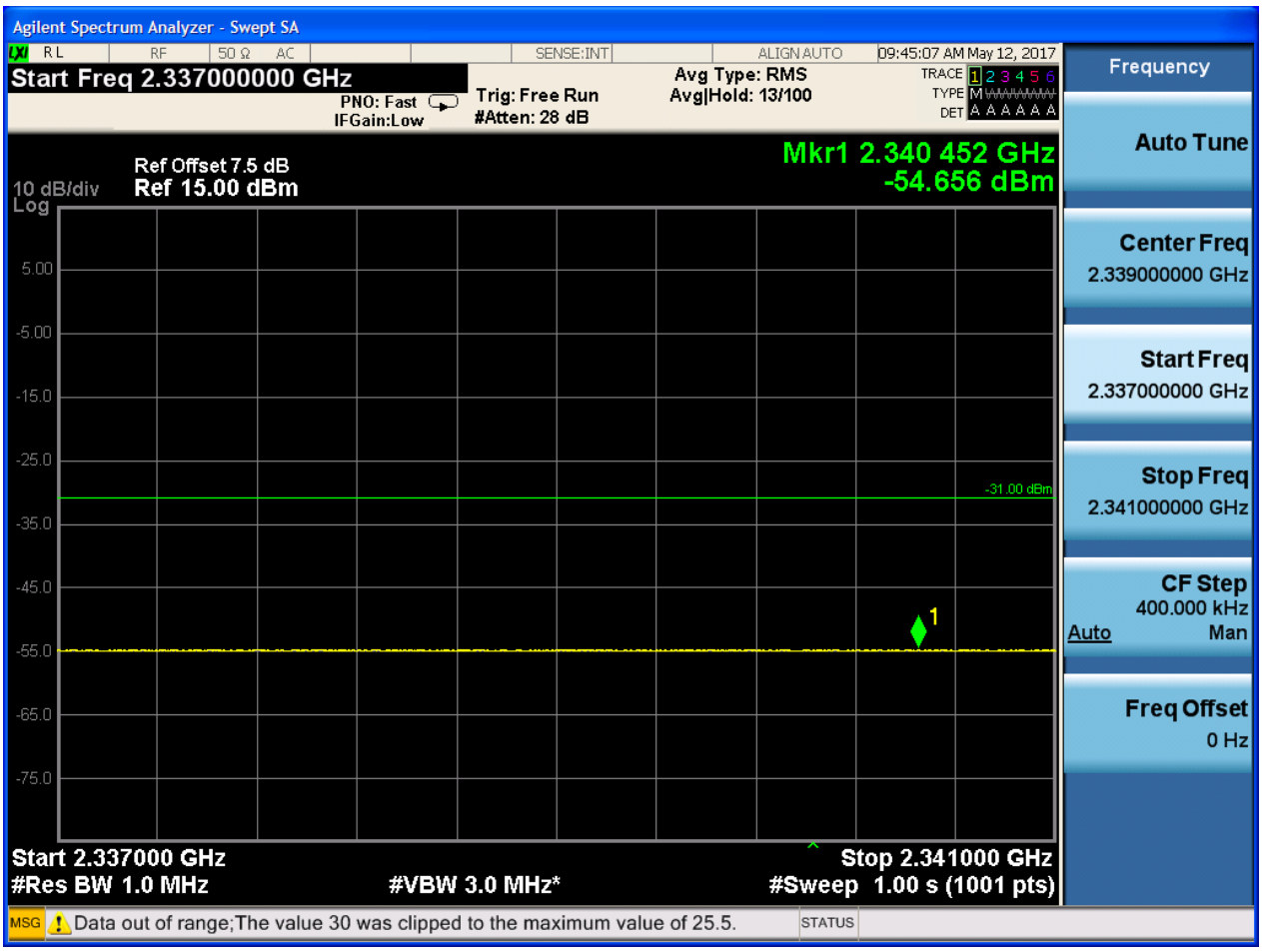


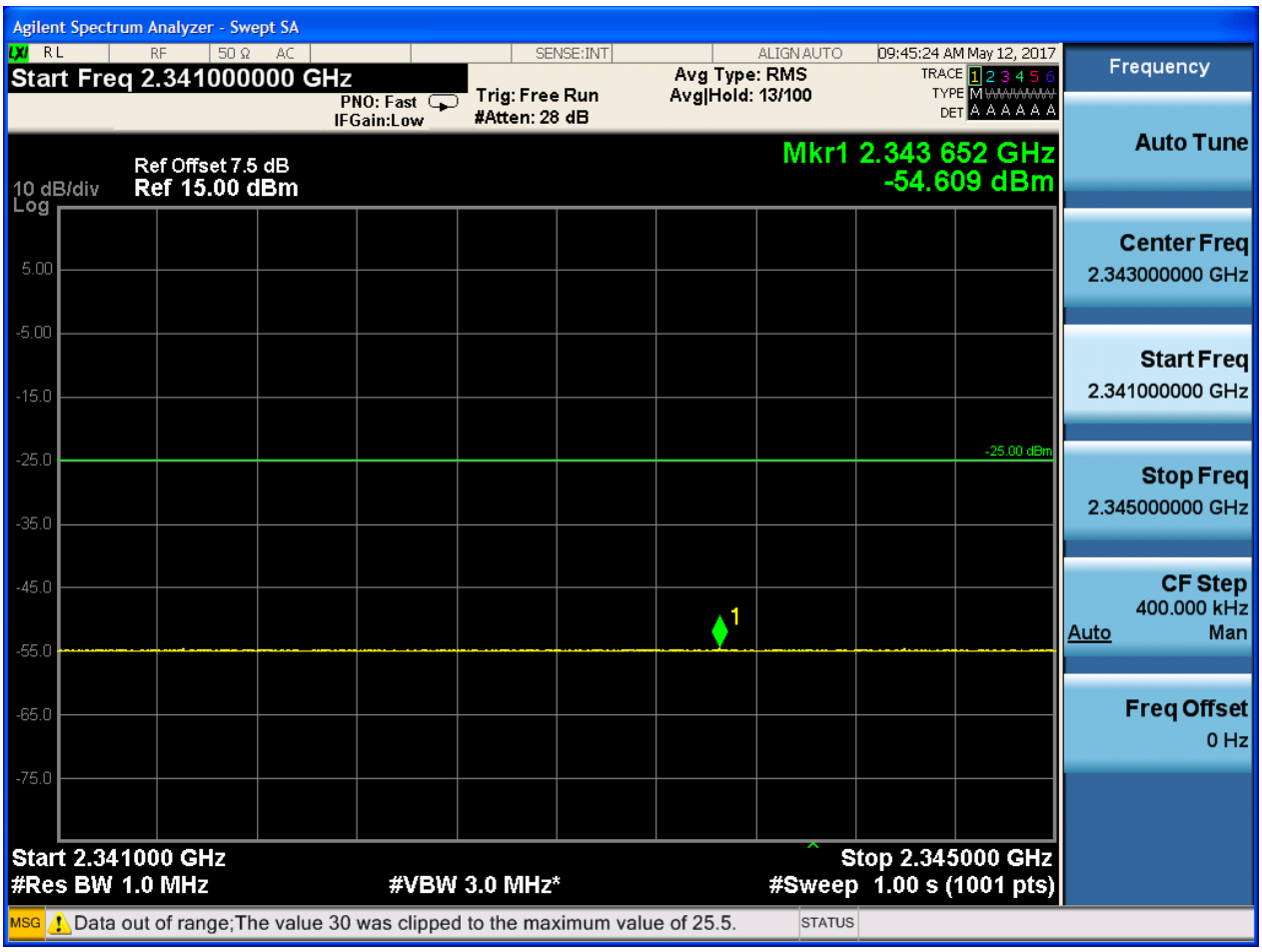


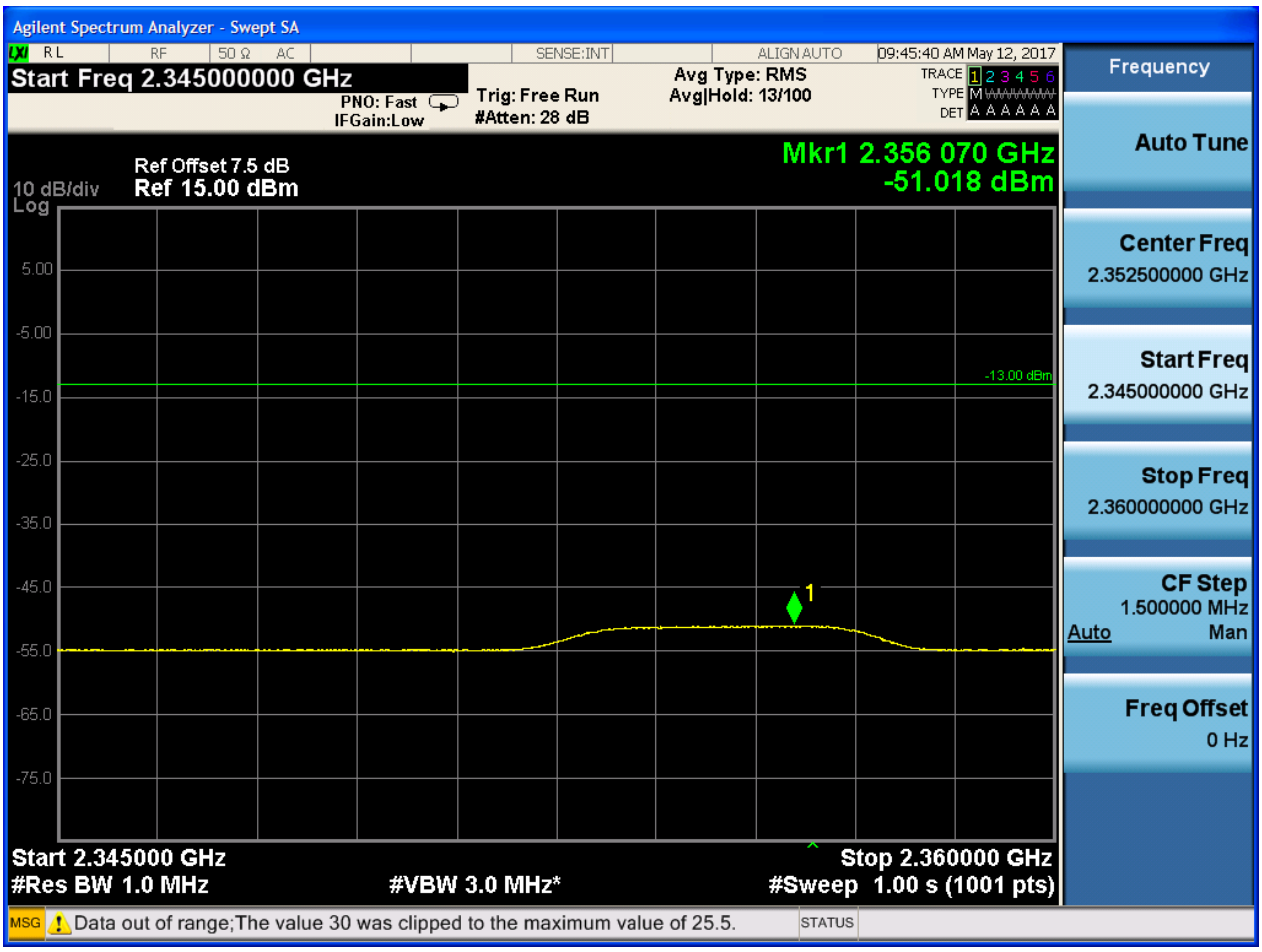


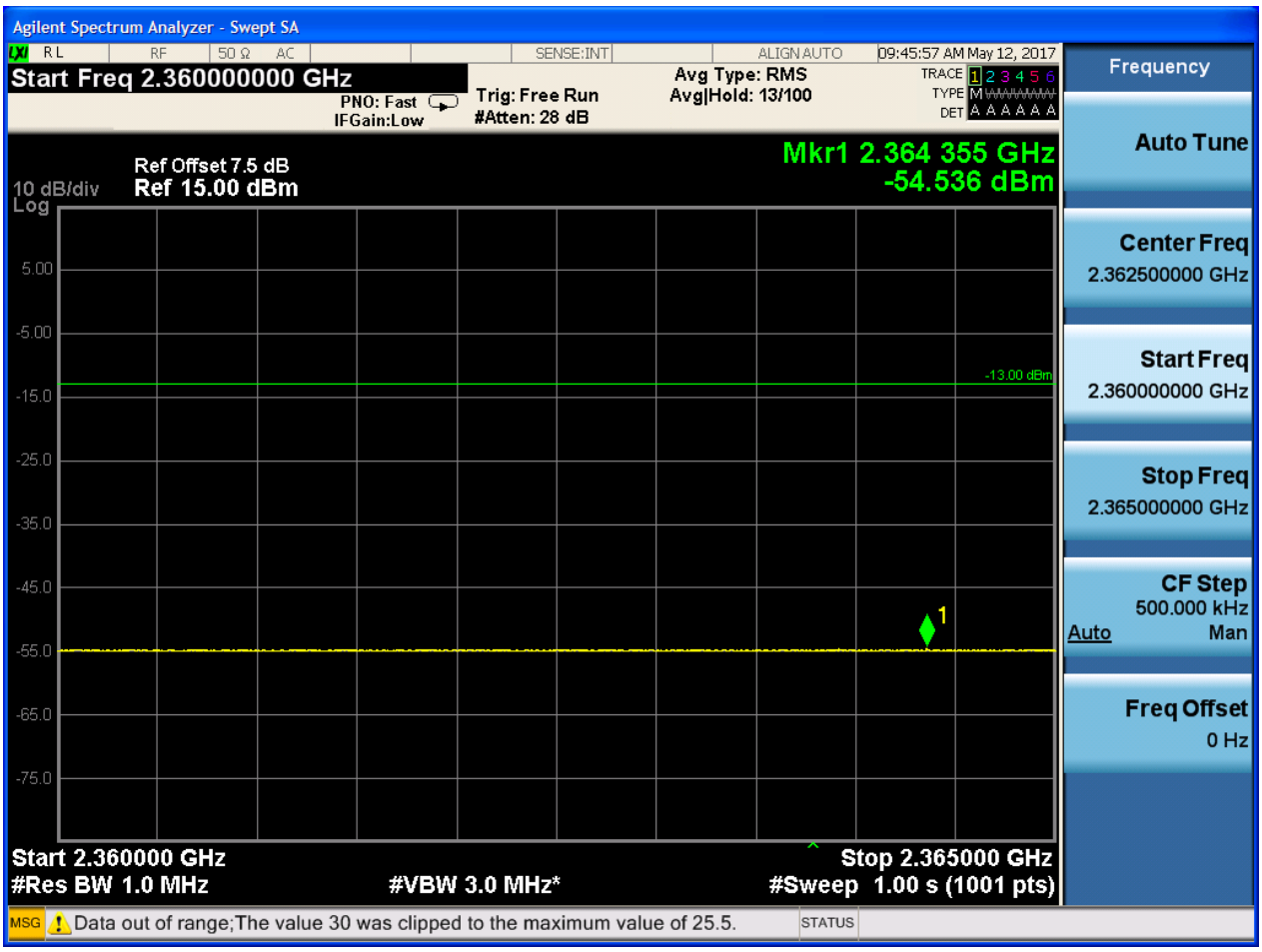






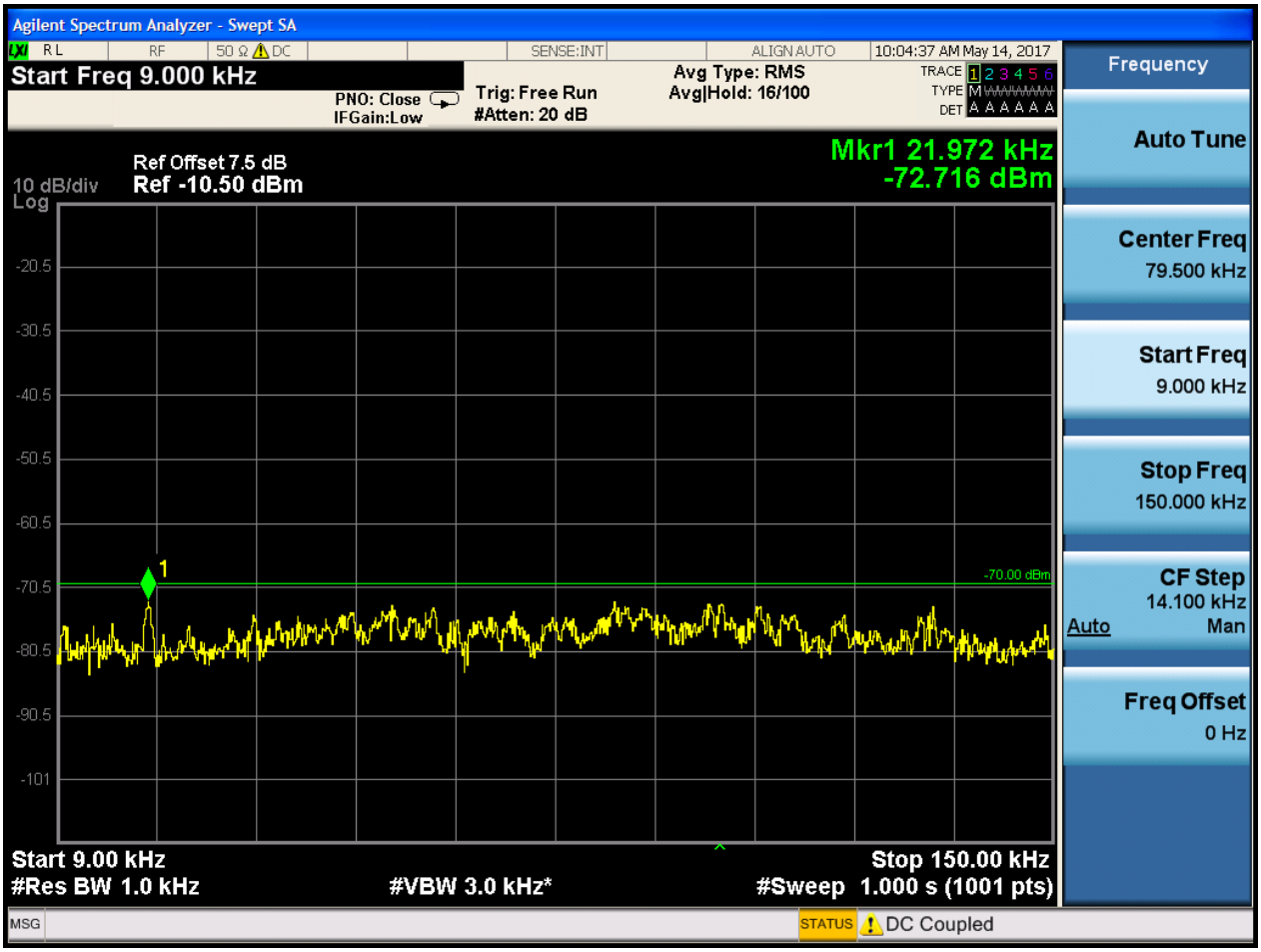


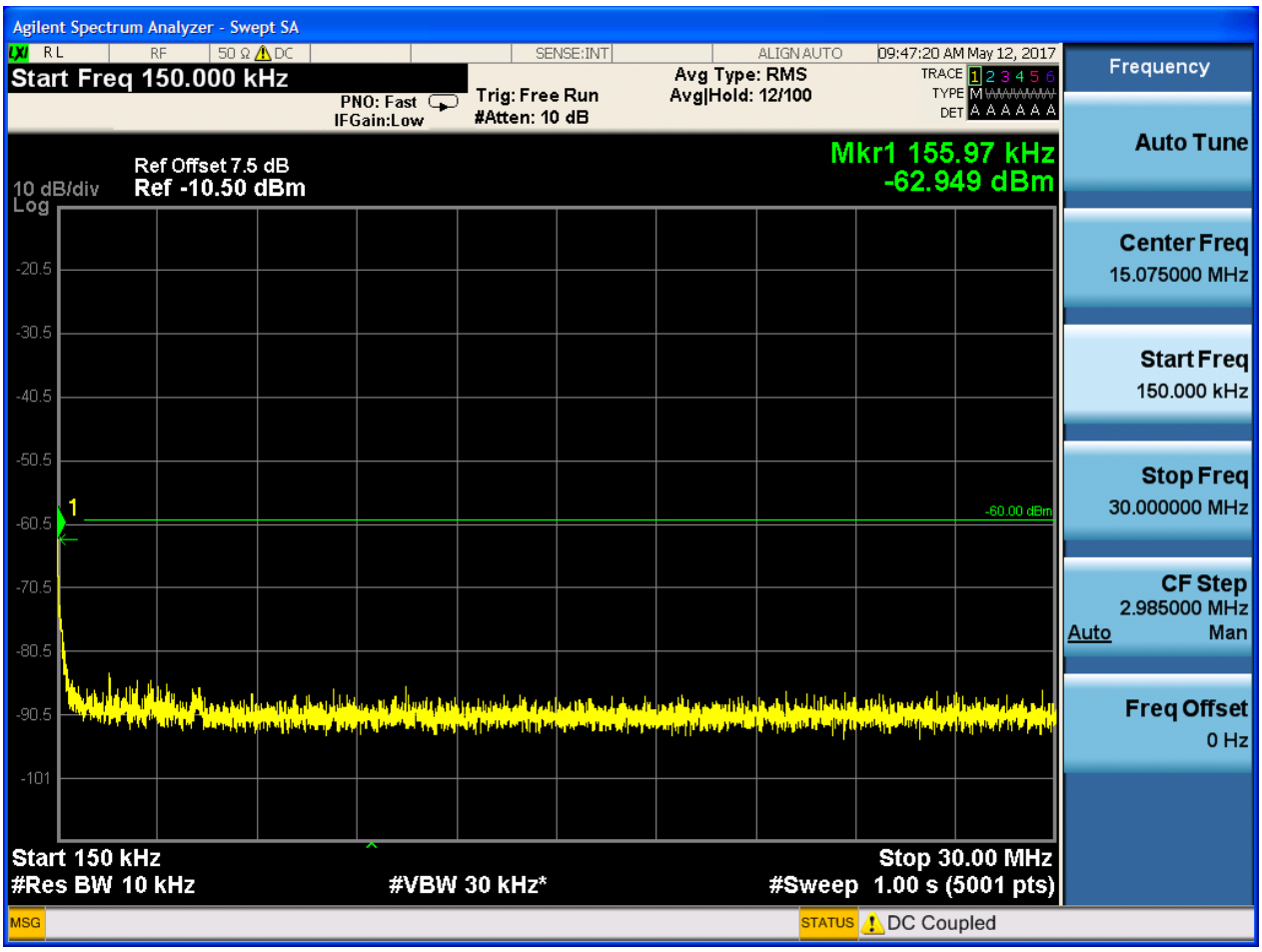


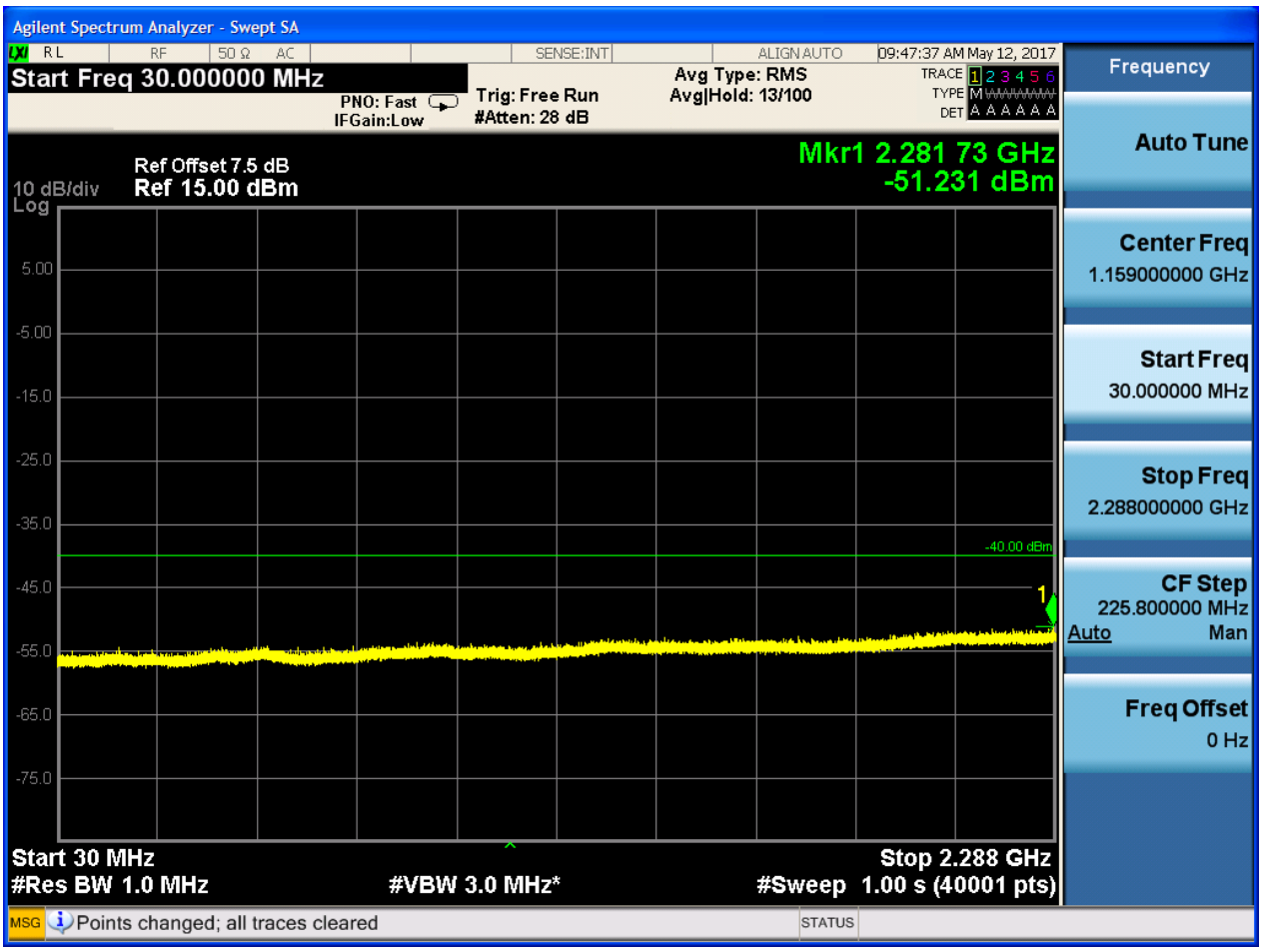


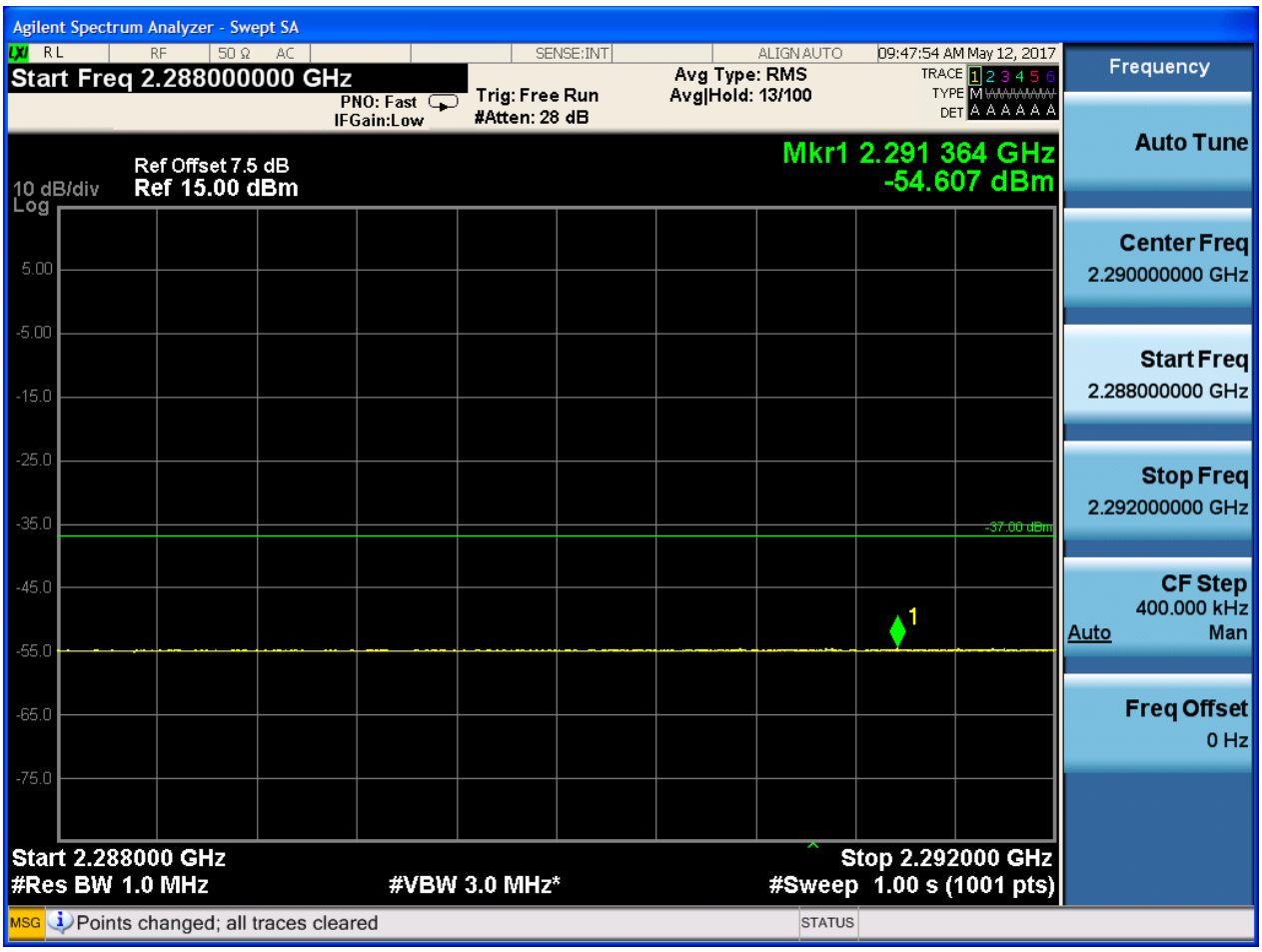
6.1.1.1.1.3 Test Channel = HCH

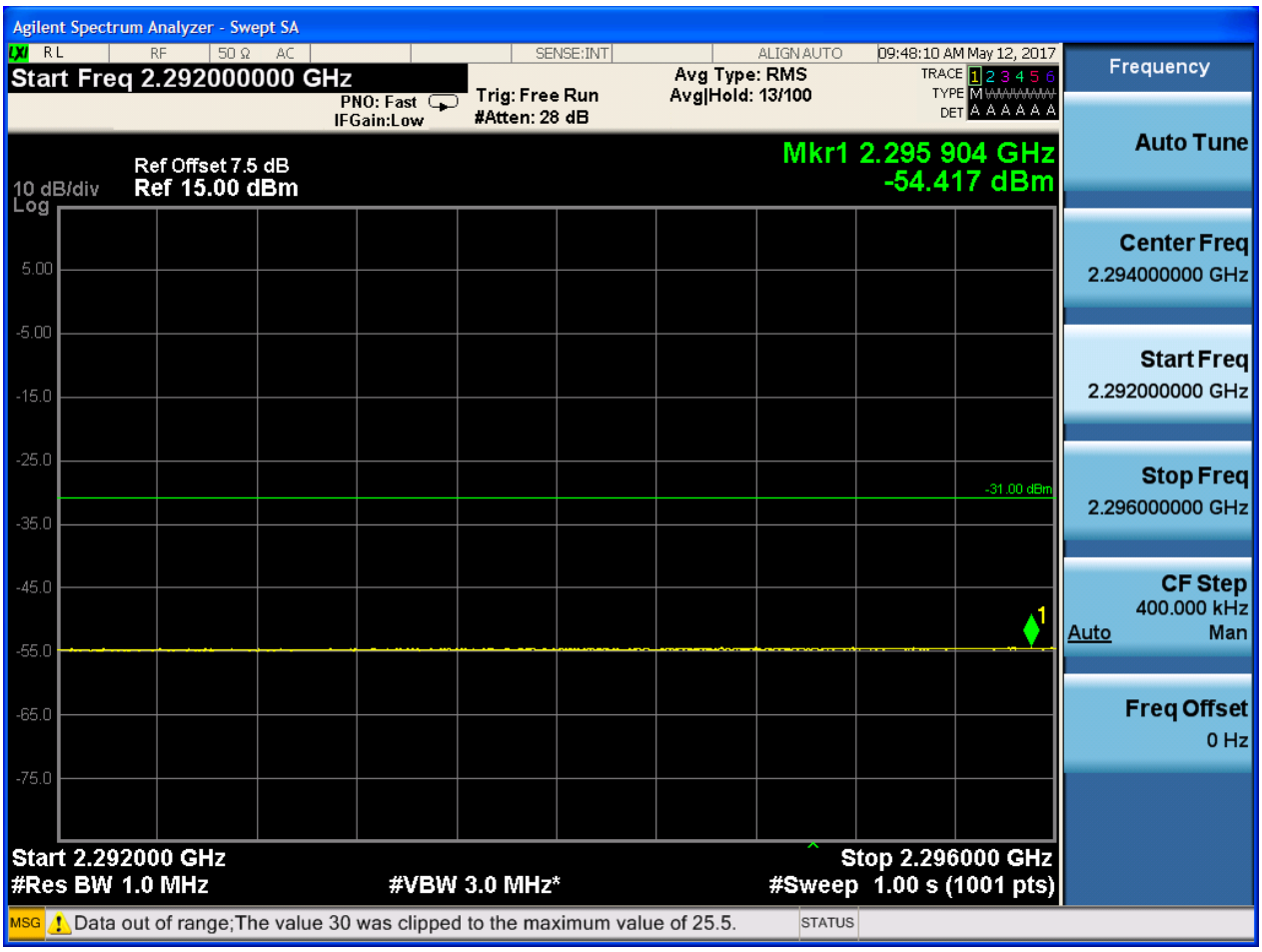
6.1.1.1.1.3.1 Test RB = RB1#0

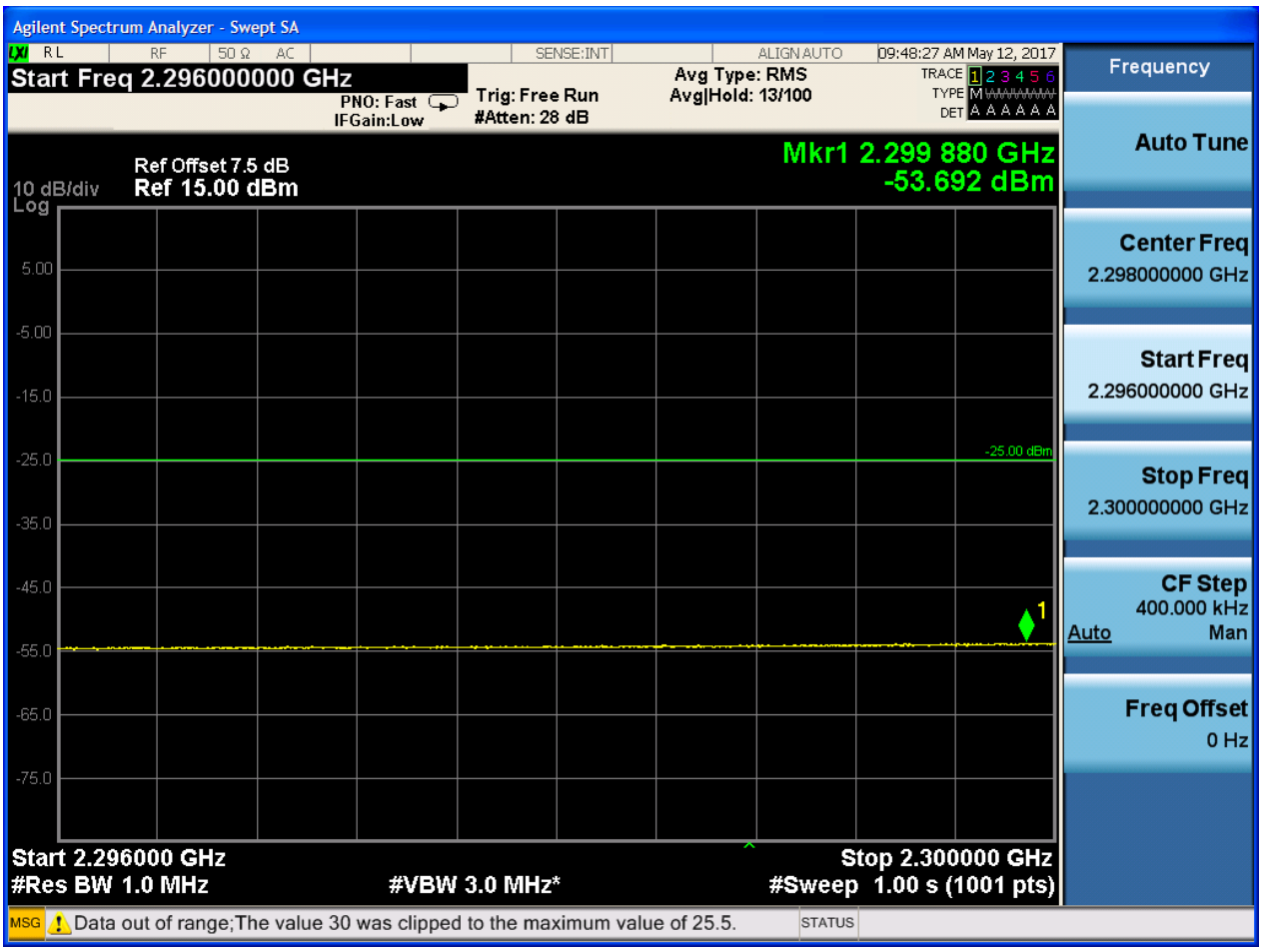


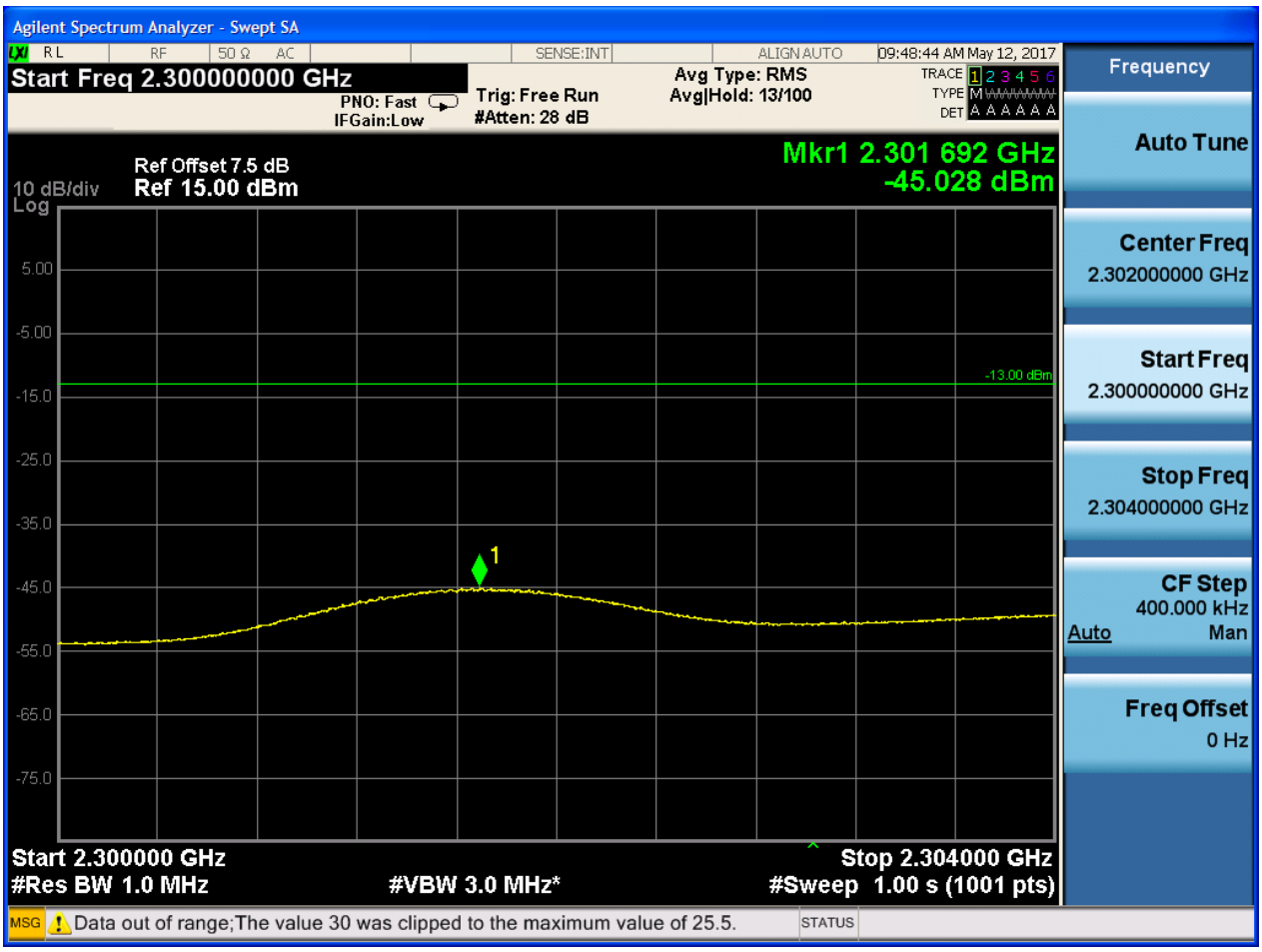


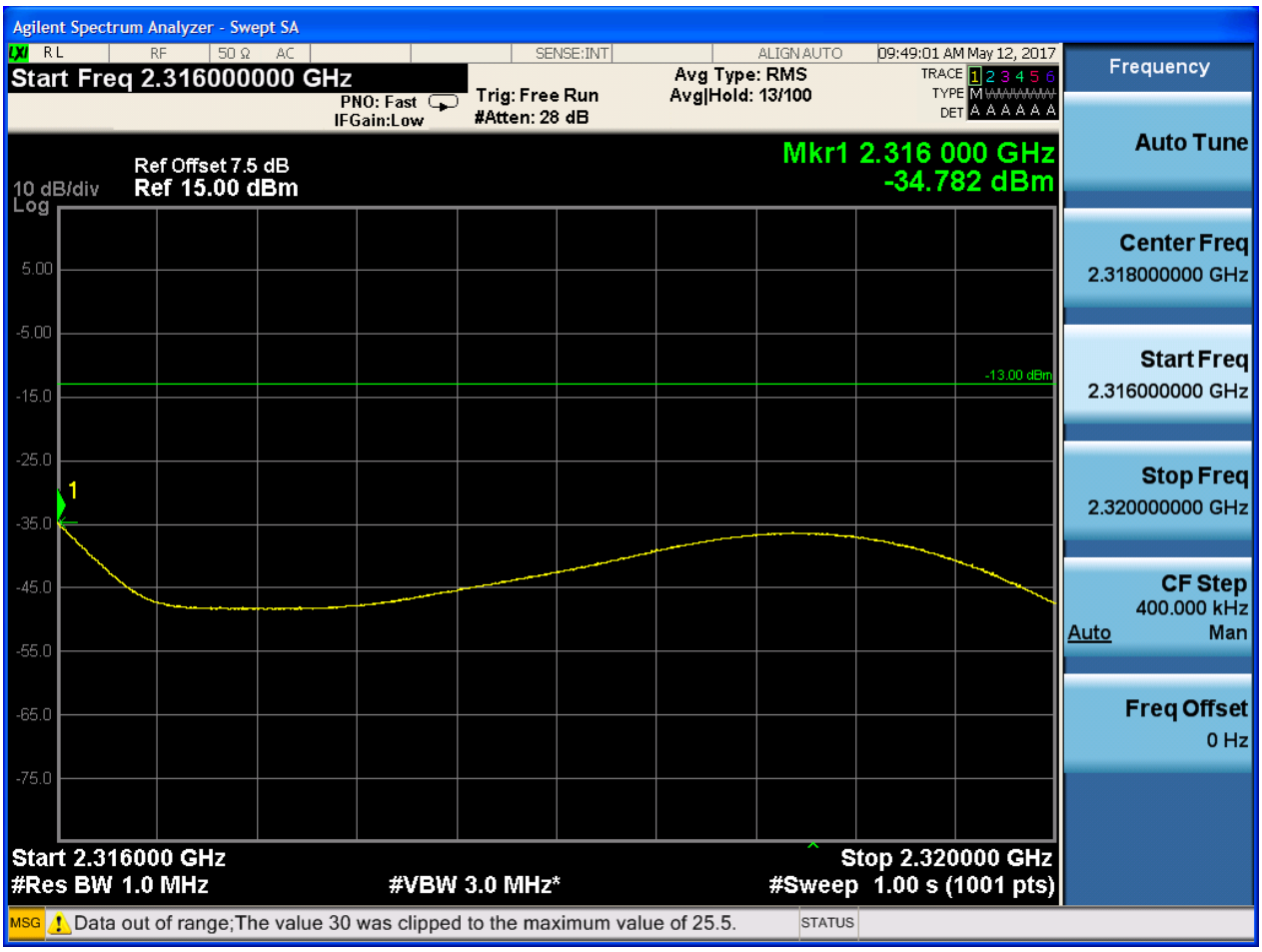


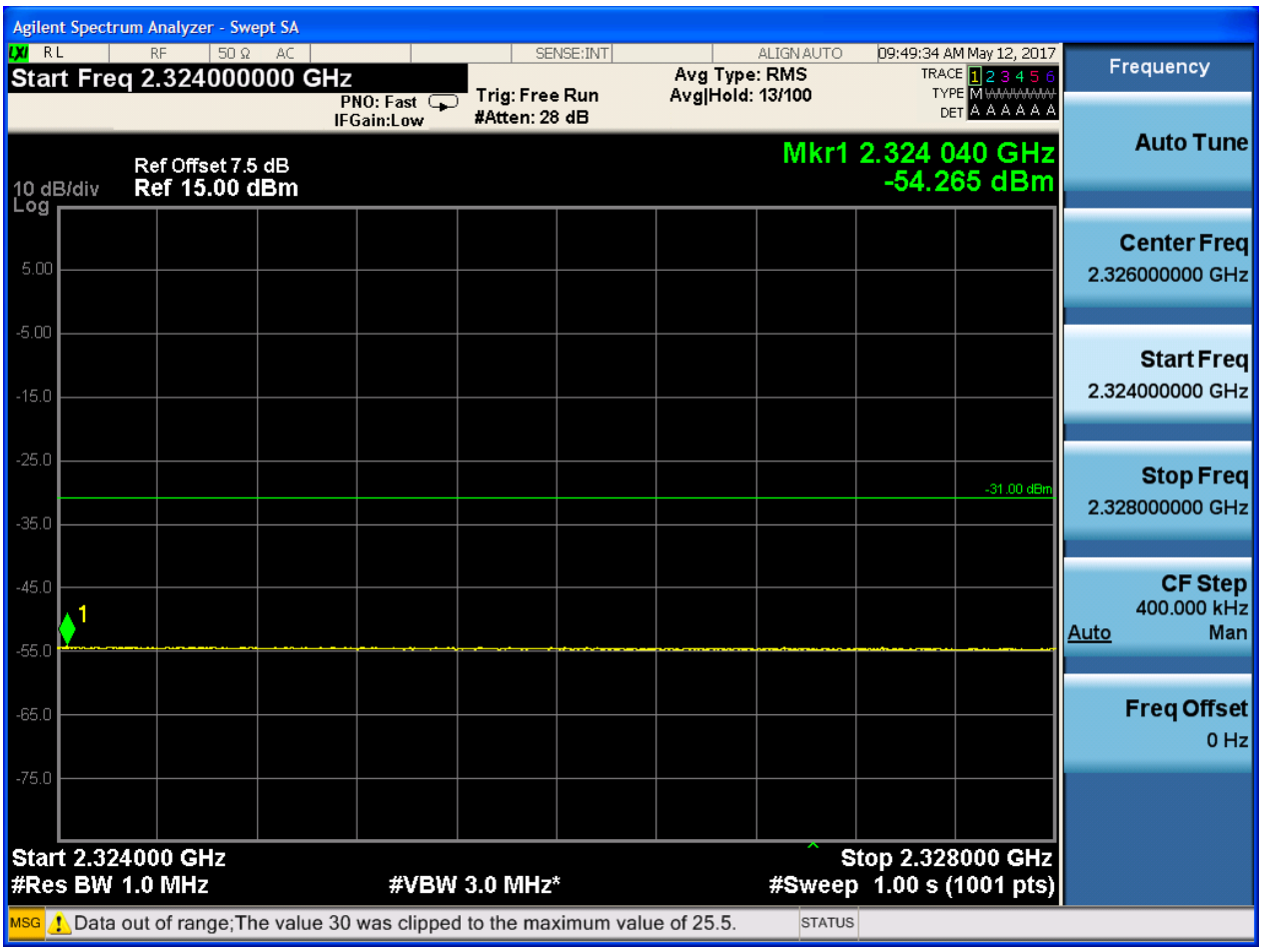


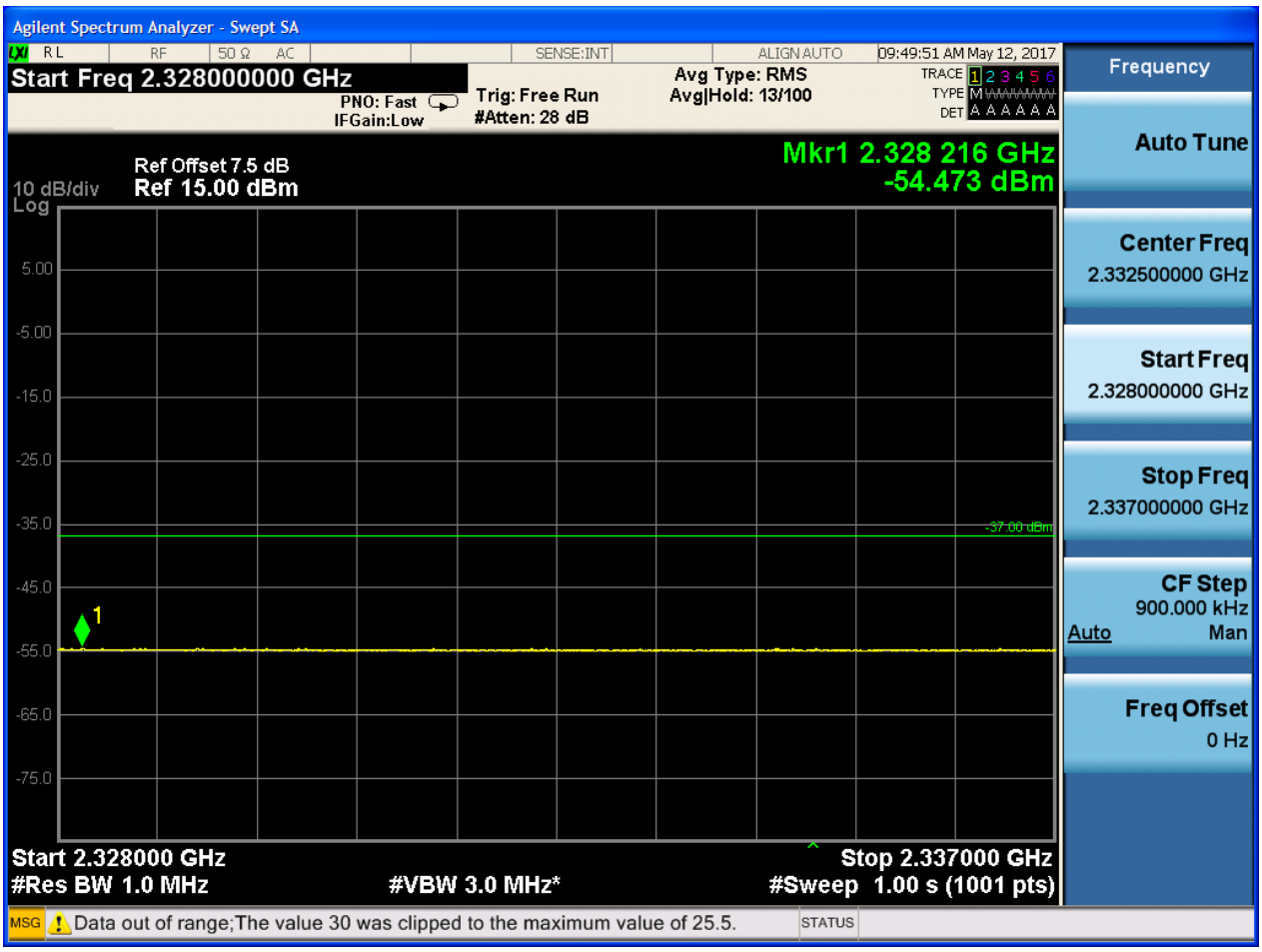


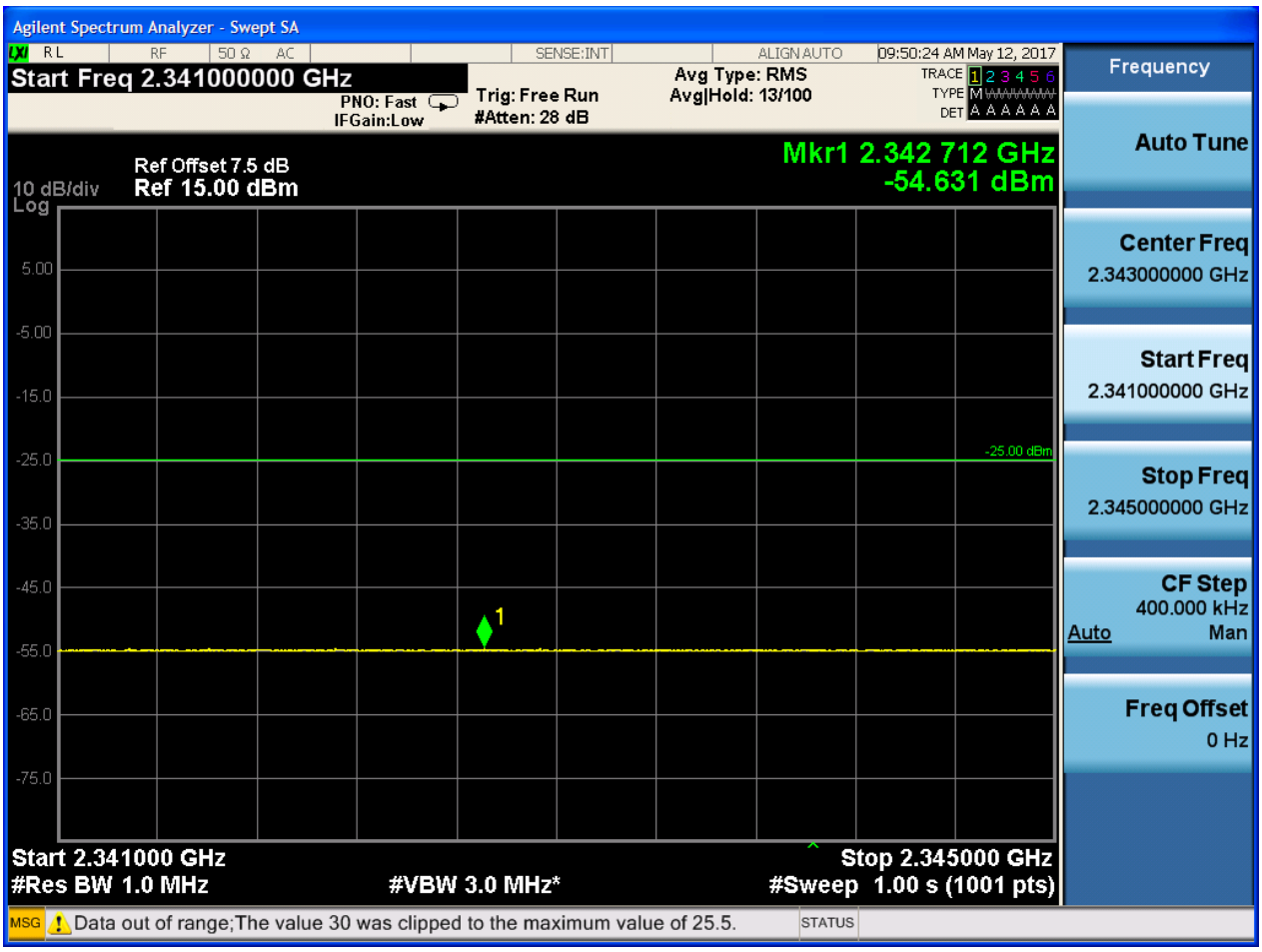


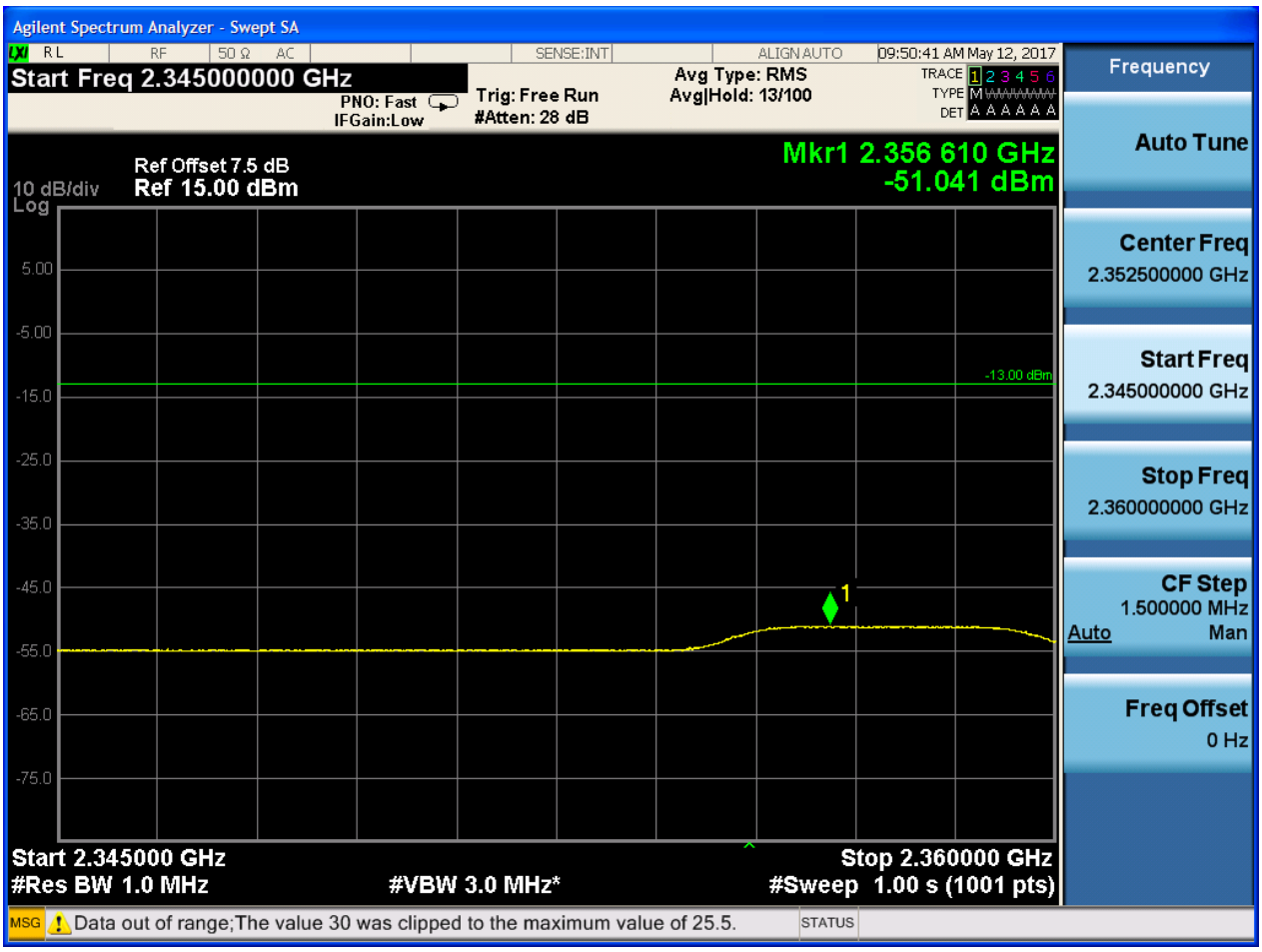


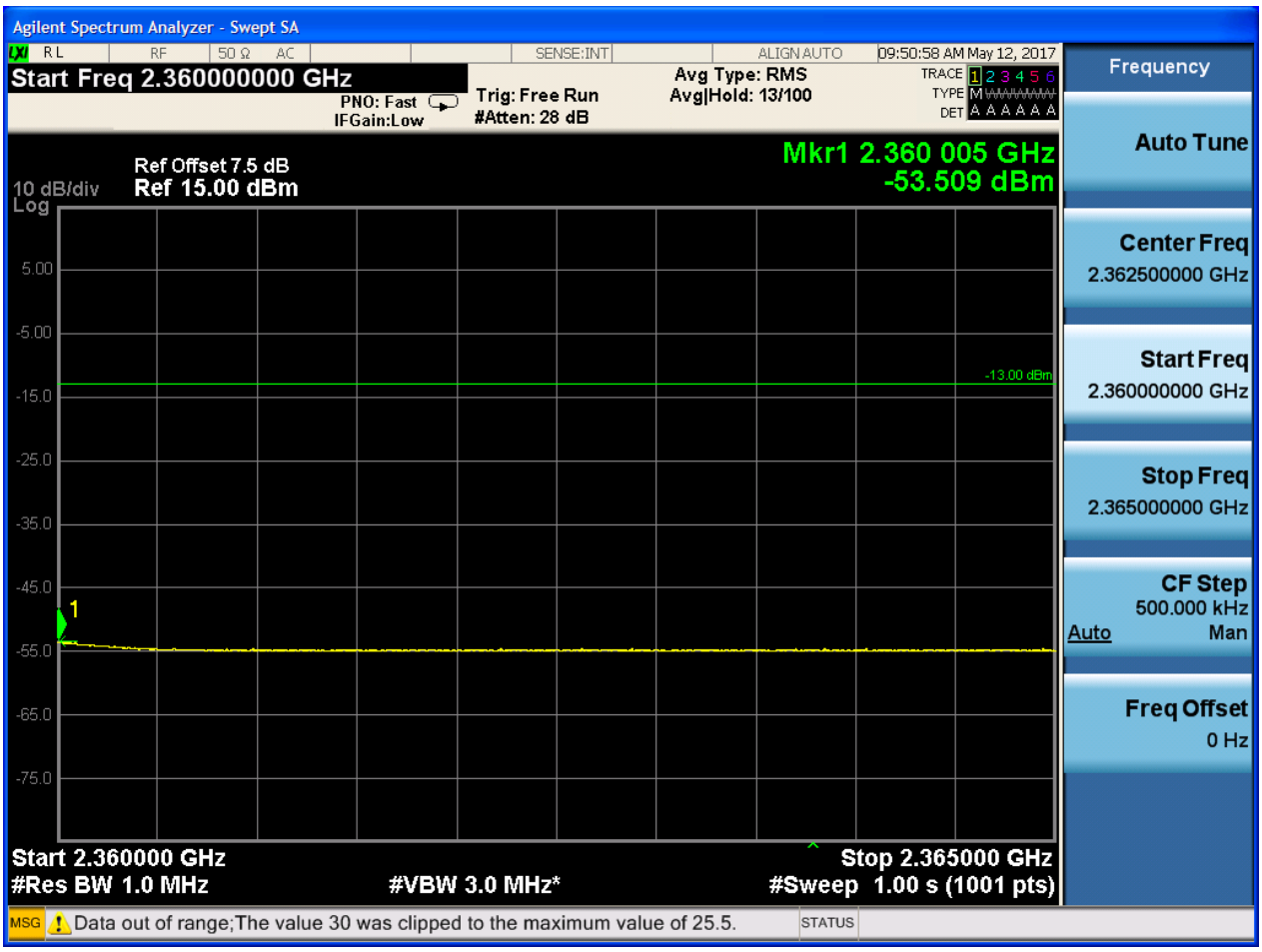


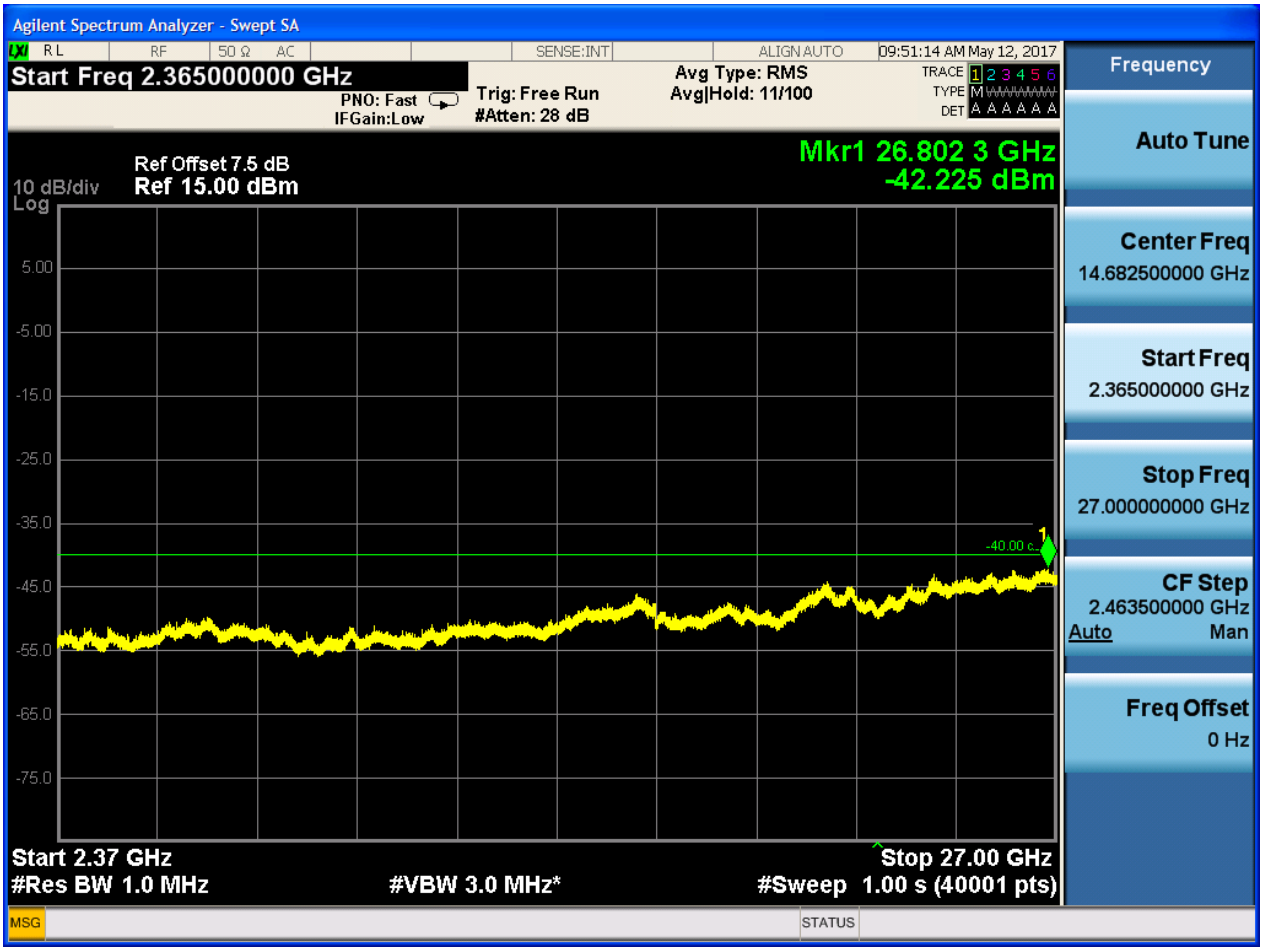








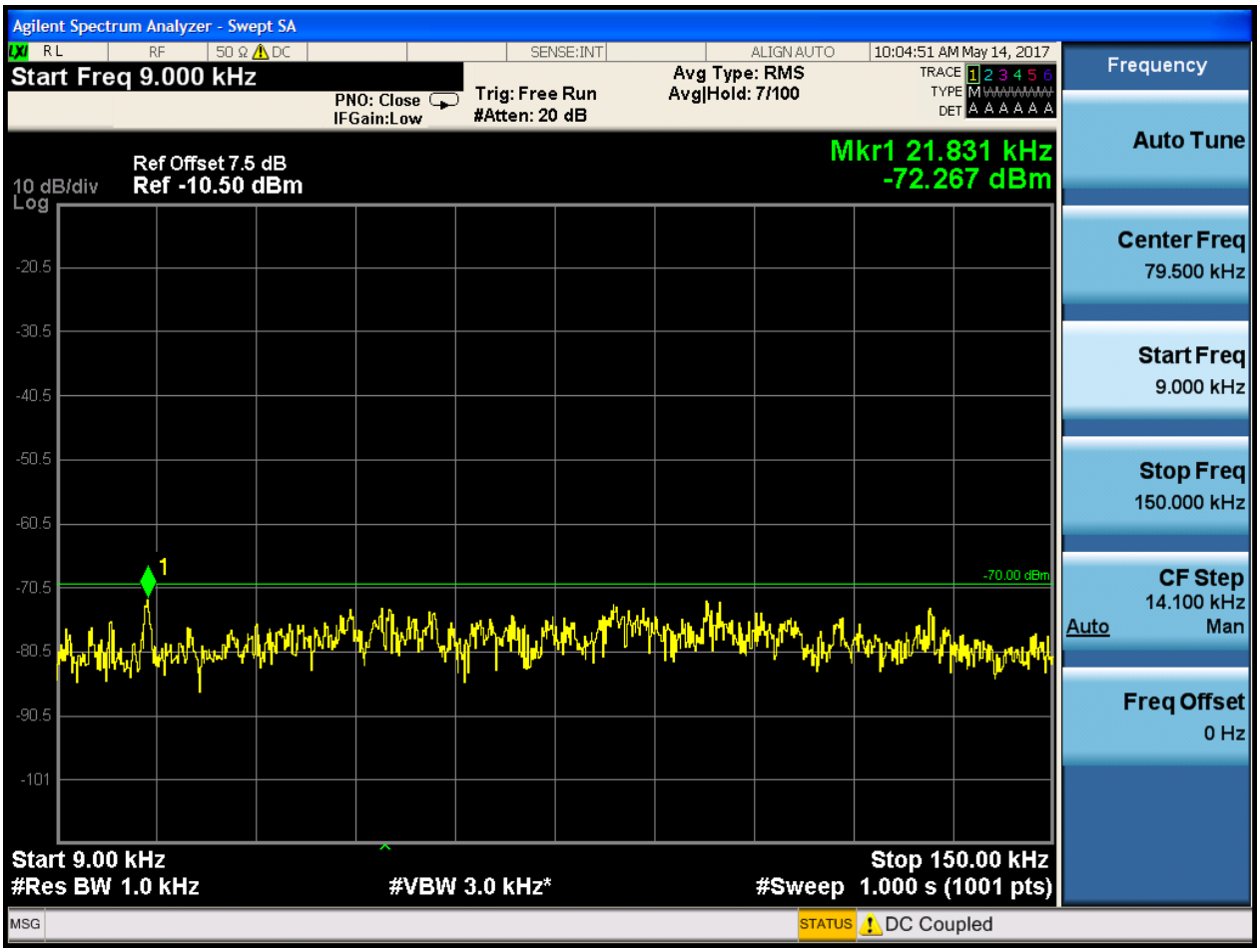


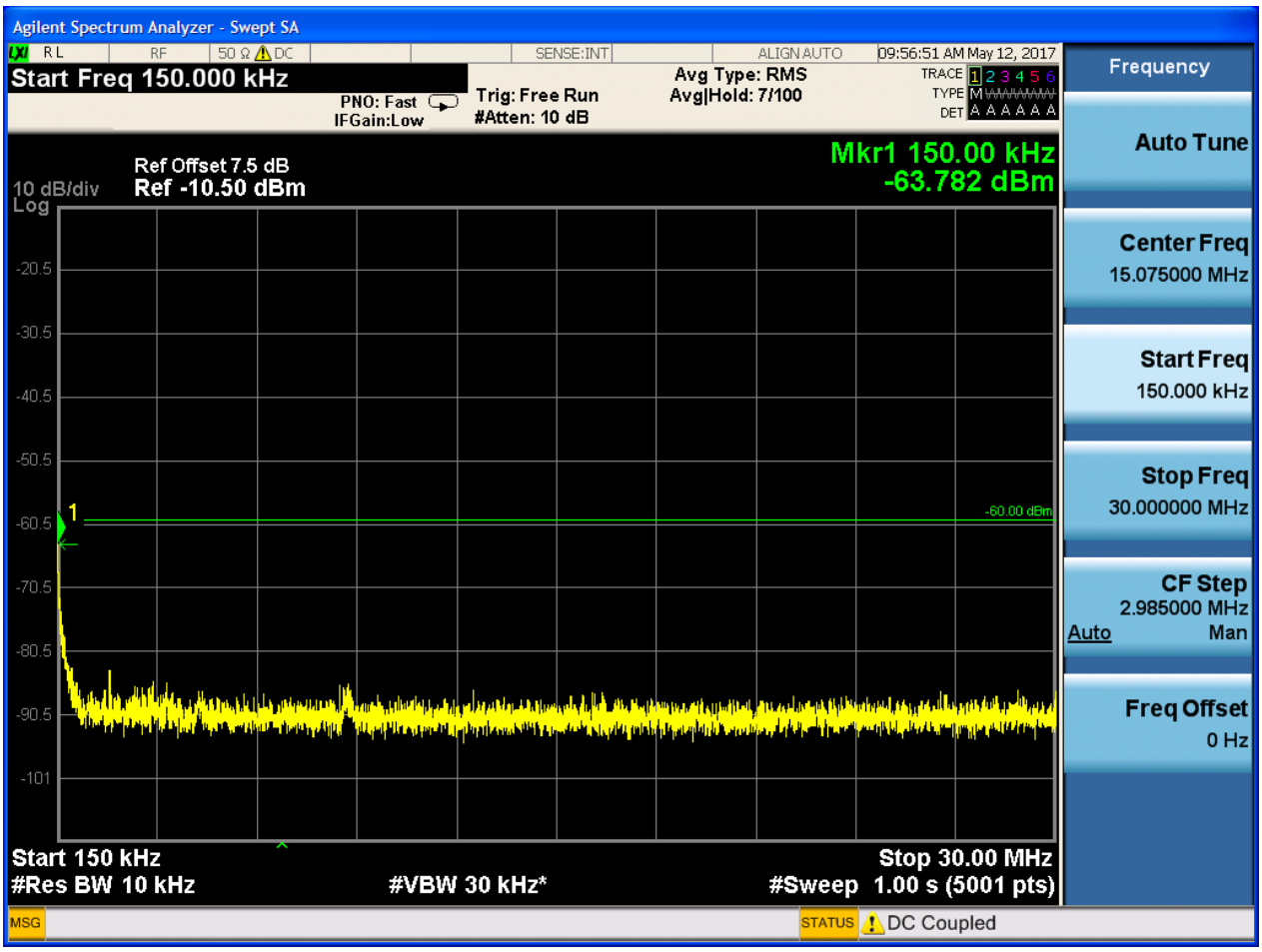


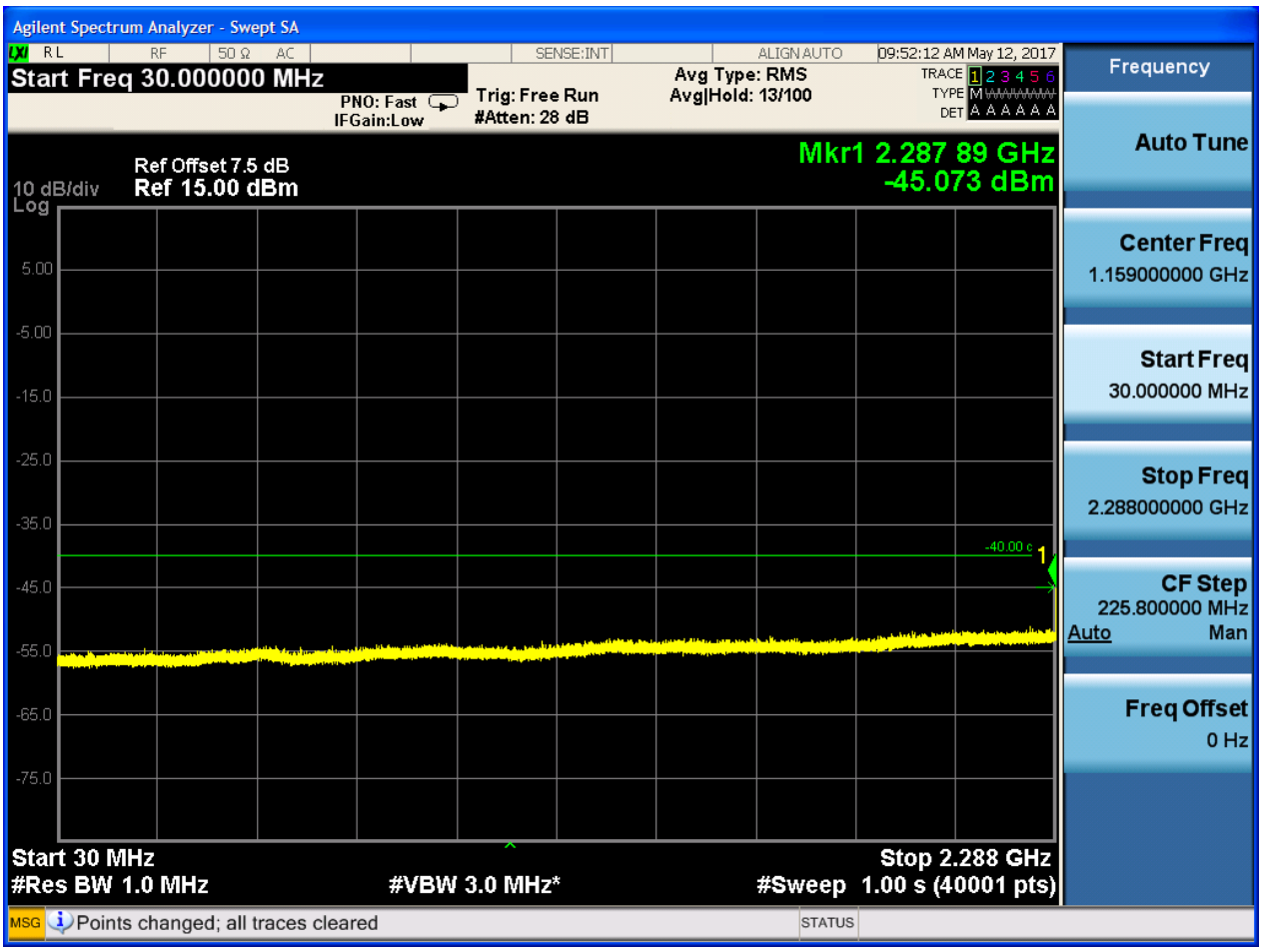
6.1.1.1.2 Test Bandwidth = 10

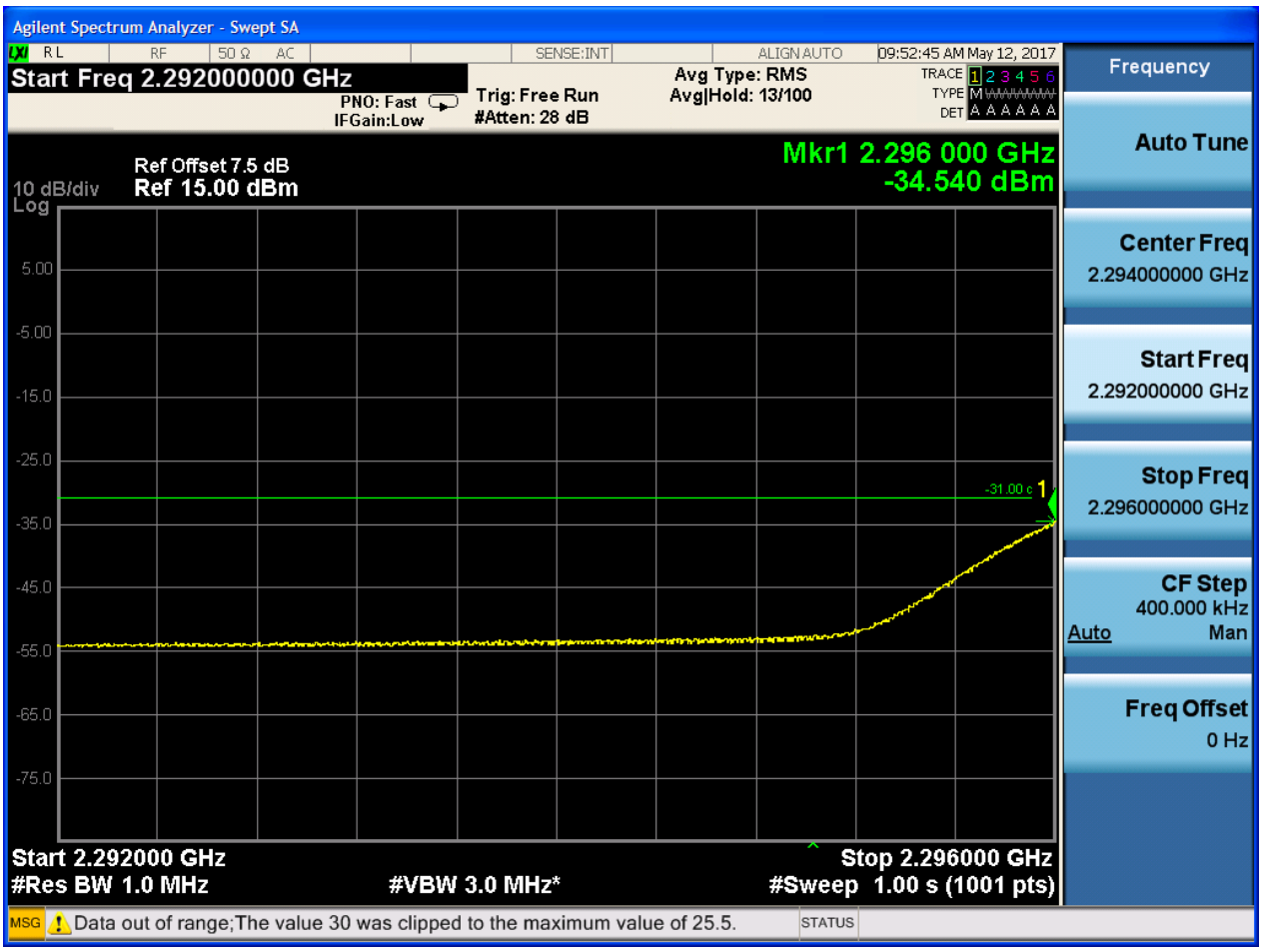
6.1.1.1.2.1 Test Channel = LCH/ MCH/HCH

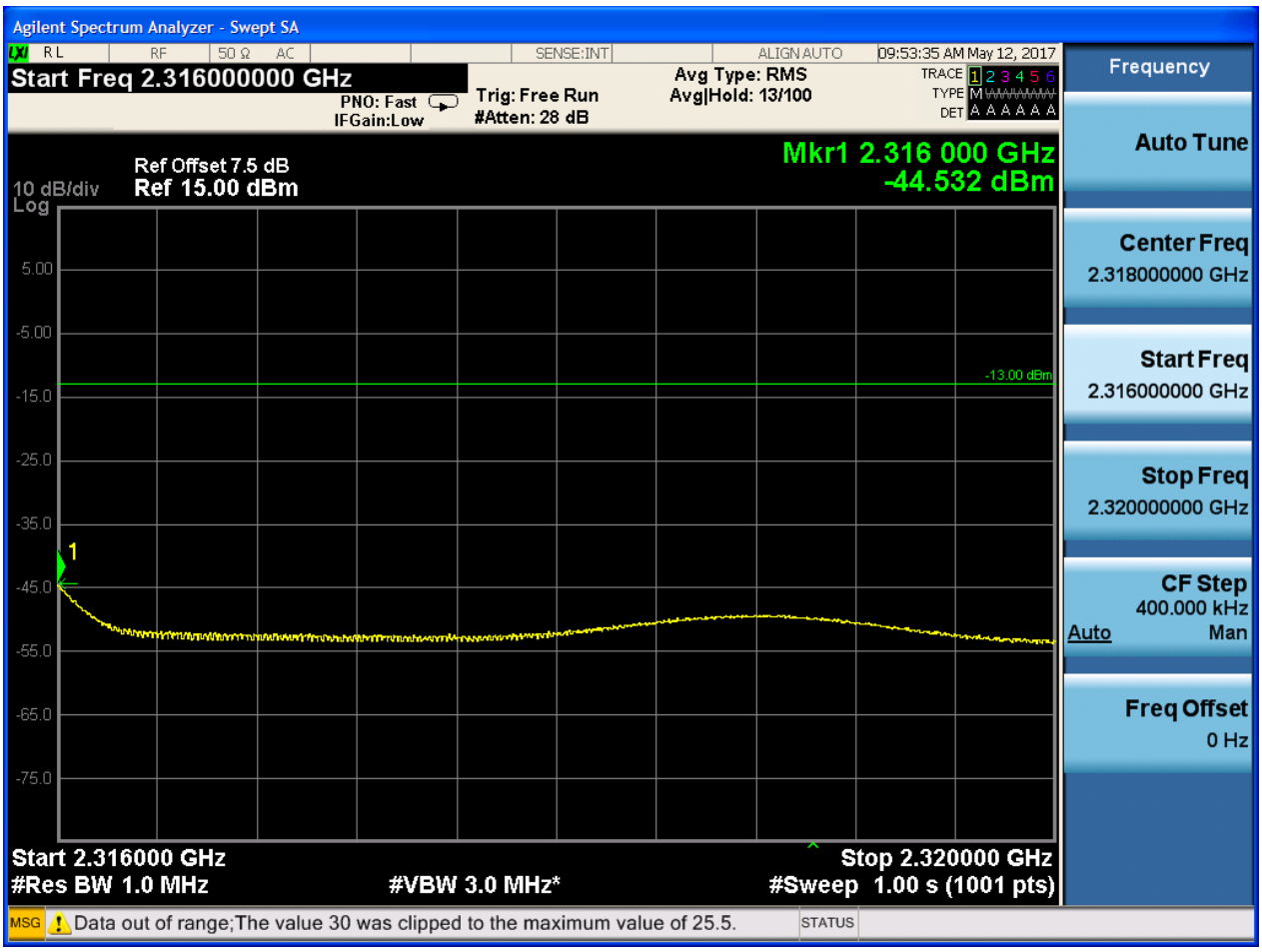
6.1.1.1.2.1.1 Test RB = RB1#0

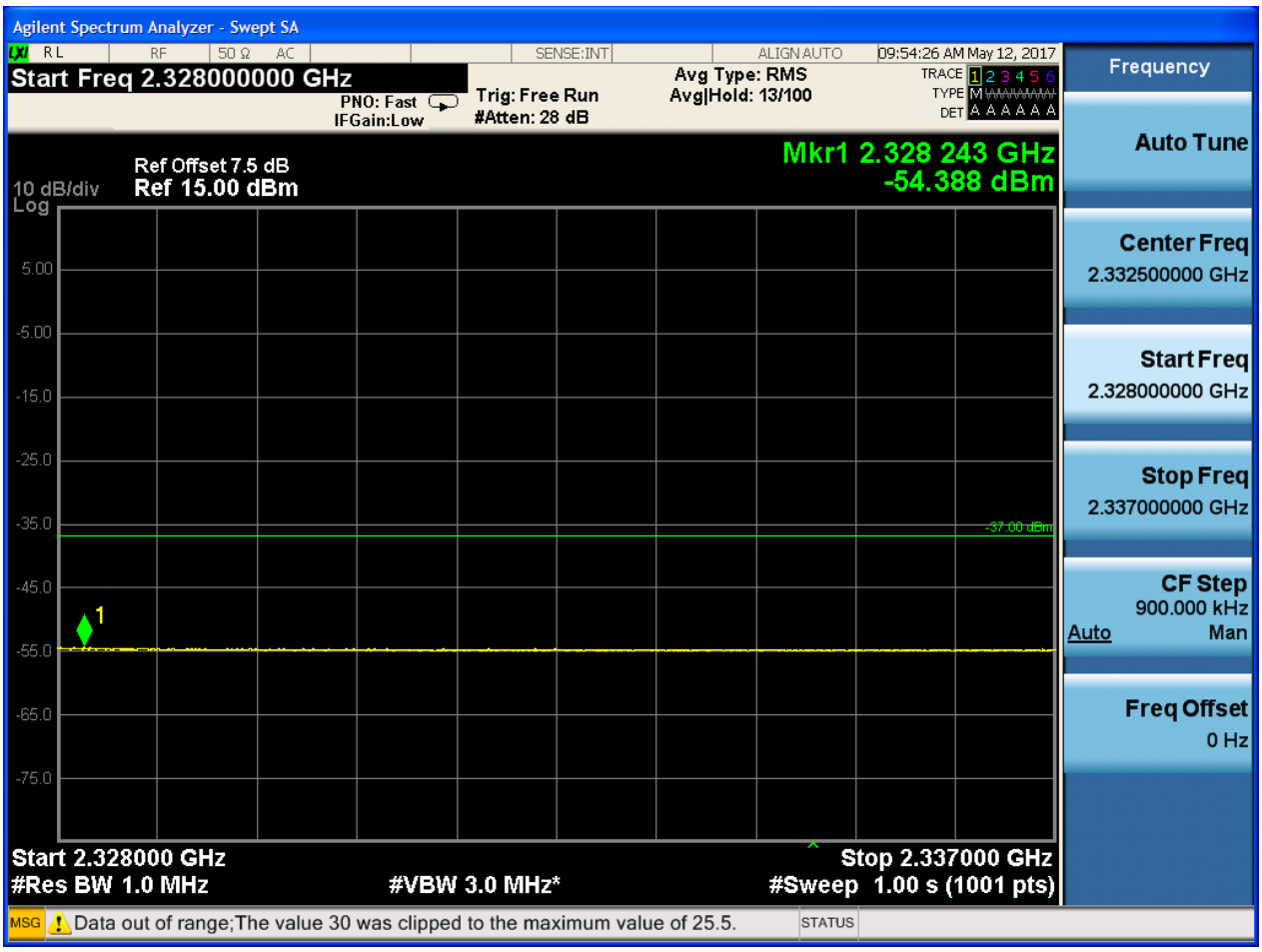


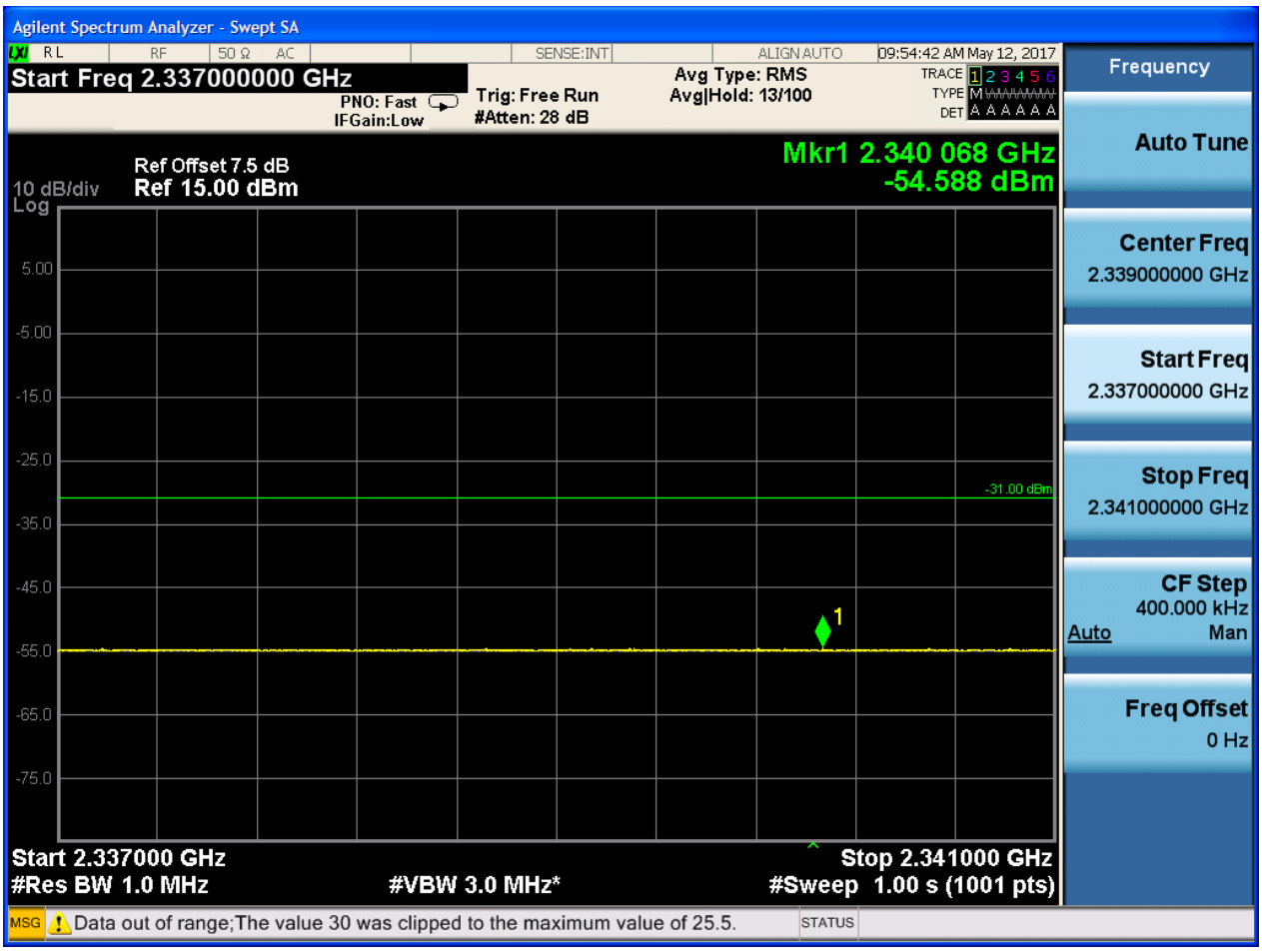


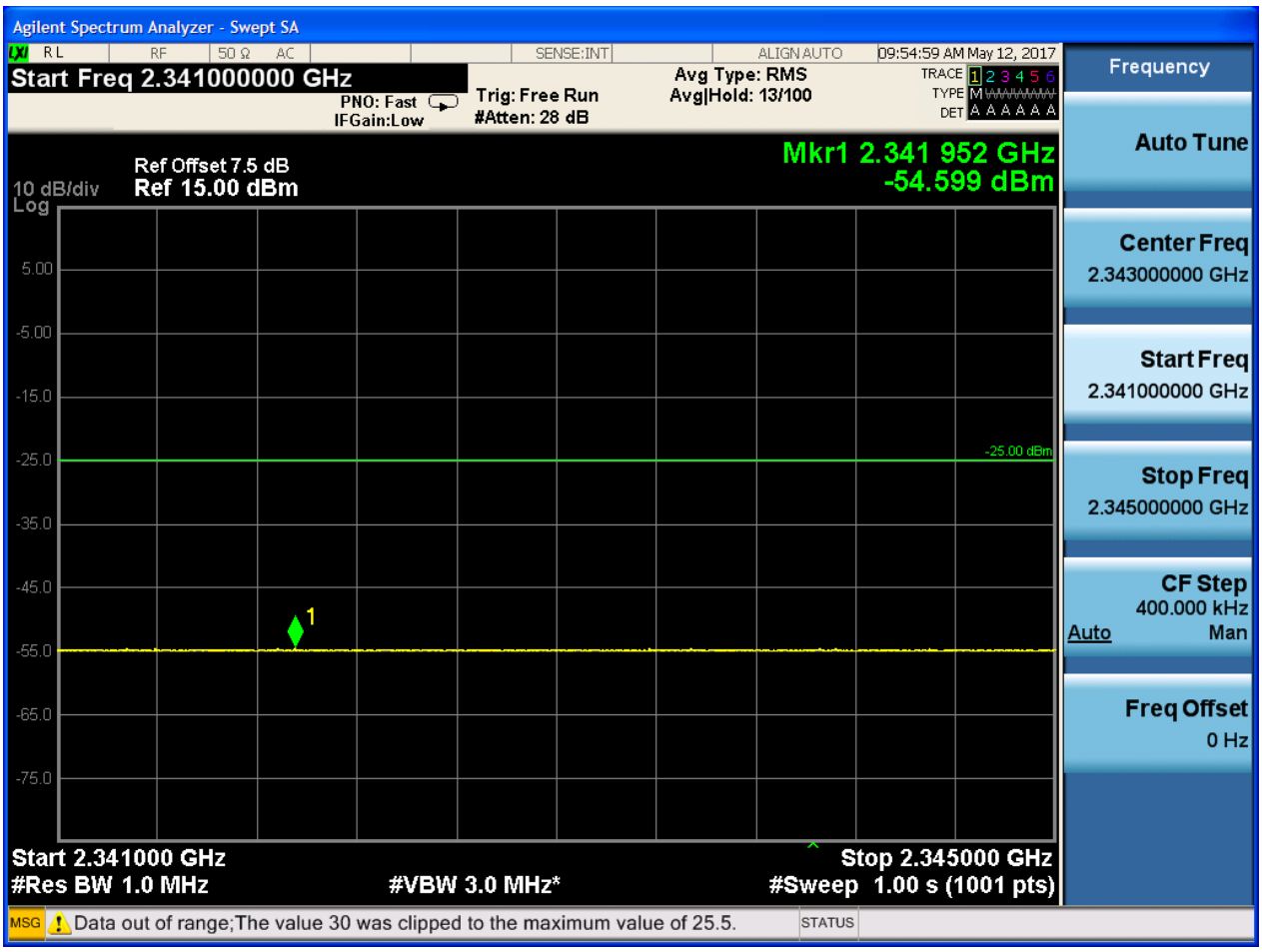


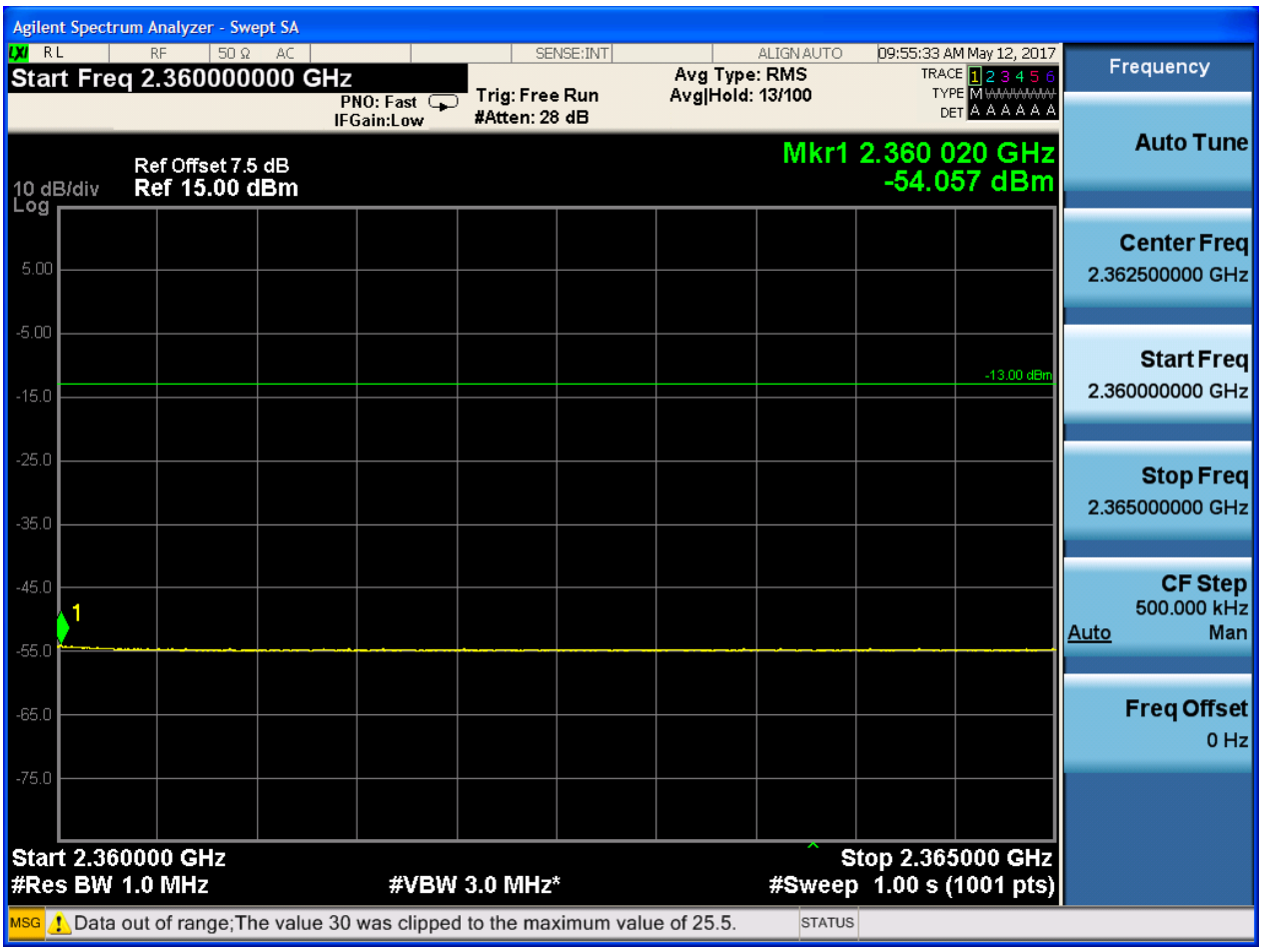












6.1.1.2 Test Mode = LTE/TM2

6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0