



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]	Verdict
BAND40	LTE/TM1	5	LCH	RB1#0	22.3	23.19	PASS
				RB1#13	22.32	23.25	PASS
				RB1#24	22.23	23.23	PASS
				RB12#0	21.28	22.51	PASS
				RB12#6	21.14	22.09	PASS
				RB12#13	21.22	22.42	PASS
				RB25#0	21.16	22.17	PASS
			MCH	RB1#0	22.15	23.39	PASS
				RB1#13	22.11	23.13	PASS
				RB1#24	22.1	23.20	PASS
				RB12#0	21.29	22.37	PASS
				RB12#6	21.16	22.35	PASS
				RB12#13	21.12	22.11	PASS
				RB25#0	21.12	22.14	PASS
		HCH	RB1#0	22.19	23.28	PASS	
			RB1#13	22.17	23.24	PASS	
			RB1#24	22.24	23.39	PASS	
			RB12#0	21.12	22.39	PASS	
			RB12#6	21.03	22.08	PASS	
			RB12#13	21.23	22.45	PASS	
			RB25#0	21.08	22.10	PASS	
	10	LCH/ MCH/ HCH	RB1#0	22.24	23.38	PASS	
			RB1#25	22.26	23.17	PASS	
			RB1#49	22.16	23.03	PASS	
			RB25#0	21.24	22.31	PASS	
			RB25#13	21.09	22.08	PASS	
			RB25#25	21.13	22.36	PASS	
			RB50#0	21.12	22.05	PASS	
	LTE/TM2	5	LCH	RB1#0	21.33	22.57	PASS
				RB1#13	21.25	22.14	PASS
RB1#24				21.18	22.42	PASS	
RB12#0				20.26	21.41	PASS	
RB12#6				20.03	21.19	PASS	
RB12#13				20.14	21.31	PASS	



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Verdict	
				RB25#0	20.2	21.35	PASS	
				MCH	RB1#0	21.25	22.32	PASS
					RB1#13	21.1	22.33	PASS
					RB1#24	21.28	22.28	PASS
					RB12#0	20.25	21.29	PASS
					RB12#6	20.13	21.06	PASS
					RB12#13	20.11	21.07	PASS
					RB25#0	20.08	21.28	PASS
				HCH	RB1#0	21.32	22.45	PASS
					RB1#13	21.41	22.42	PASS
					RB1#24	21.42	22.59	PASS
					RB12#0	20.22	21.32	PASS
					RB12#6	20.11	21.18	PASS
					RB12#13	20.2	21.22	PASS
		RB25#0	20.07		21.08	PASS		
		10	LCH/ MCH/ HCH	RB1#0	21.45	22.53	PASS	
				RB1#25	21.28	22.40	PASS	
				RB1#49	21.38	22.55	PASS	
				RB25#0	20.14	21.29	PASS	
				RB25#13	20.15	21.26	PASS	
				RB25#25	20.14	21.01	PASS	
RB50#0	20.08			21.22	PASS			

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm/5MHz]	EIRP[dBm/5MHz]	Limit [dBm/5MHz]	Verdict		
BAND 40	LTE/T M1	5	LCH	RB25#0	21.16	22.17	23.98	PASS		
			MCH	RB25#0	21.12	22.14	23.98	PASS		
			HCH	RB25#0	21.08	22.10	23.98	PASS		
		10	LCH/MCH/HCH	RB50#0	21.12	22.05	23.98	PASS		
			LTE/T M2	5	LCH	RB25#0	20.2	21.35	23.98	PASS
					MCH	RB25#0	20.08	21.28	23.98	PASS
	HCH	RB25#0			20.07	21.08	23.98	PASS		



				#0				
		10	LCH/MCH/ HCH	RB50 #0	20.08	21.18	23.98	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,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP = Signal Generator Level

Note2:

$$\text{SET Span} = 1.5 * \text{OBW}$$

$$\text{SET RBW} = 1\% \text{ of the OBW, not to exceed } 1\text{MHz}$$

$$\text{SET VBW} \geq 3 * \text{RBW}$$

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
B40	LTE/TM1	5	LCH	RB1#0	5.23	13	PASS
				RB1#13	5.13	13	PASS
				RB1#24	5.19	13	PASS
				RB12#0	5.94	13	PASS
				RB12#6	6.01	13	PASS
				RB12#13	5.93	13	PASS
			RB25#0	6.36	13	PASS	
			MCH	RB1#0	5.11	13	PASS
				RB1#13	5.16	13	PASS
				RB1#24	5.21	13	PASS
				RB12#0	6.63	13	PASS
				RB12#6	6.63	13	PASS
		RB12#13		6.55	13	PASS	
		HCH	RB25#0	6.48	13	PASS	
			RB1#0	5.73	13	PASS	
			RB1#13	5.69	13	PASS	
			RB1#24	5.67	13	PASS	
			RB12#0	6.58	13	PASS	
	RB12#6		6.59	13	PASS		
	10	LCH/ MCH/ HCH	RB12#13	6.61	13	PASS	
			RB25#0	6.47	13	PASS	
			RB1#0	4.90	13	PASS	
			RB1#25	4.85	13	PASS	
			RB1#49	4.89	13	PASS	
			RB25#0	6.72	13	PASS	
	LTE/TM2	5	LCH	RB25#13	6.75	13	PASS
				RB25#25	6.80	13	PASS
RB50#0				6.53	13	PASS	
RB1#0				6.01	13	PASS	
RB1#13				6.07	13	PASS	
RB1#24				6.07	13	PASS	
			RB12#0	6.75	13	PASS	
			RB12#6	6.75	13	PASS	
			RB12#13	6.86	13	PASS	



Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	7.00	13	PASS
			MCH	RB1#0	6.16	13	PASS
				RB1#13	6.18	13	PASS
				RB1#24	6.22	13	PASS
				RB12#0	6.78	13	PASS
				RB12#6	6.93	13	PASS
				RB12#13	7.03	13	PASS
				RB25#0	7.03	13	PASS
			HCH	RB1#0	5.77	13	PASS
				RB1#13	5.76	13	PASS
				RB1#24	5.80	13	PASS
				RB12#0	7.37	13	PASS
				RB12#6	7.45	13	PASS
				RB12#13	7.44	13	PASS
				RB25#0	7.07	13	PASS
		10	LCH/ MCH/ HCH	RB1#0	5.00	13	PASS
				RB1#25	5.09	13	PASS
				RB1#49	5.22	13	PASS
				RB25#0	7.78	13	PASS
				RB25#13	7.61	13	PASS
				RB25#25	7.60	13	PASS
				RB50#0	7.97	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

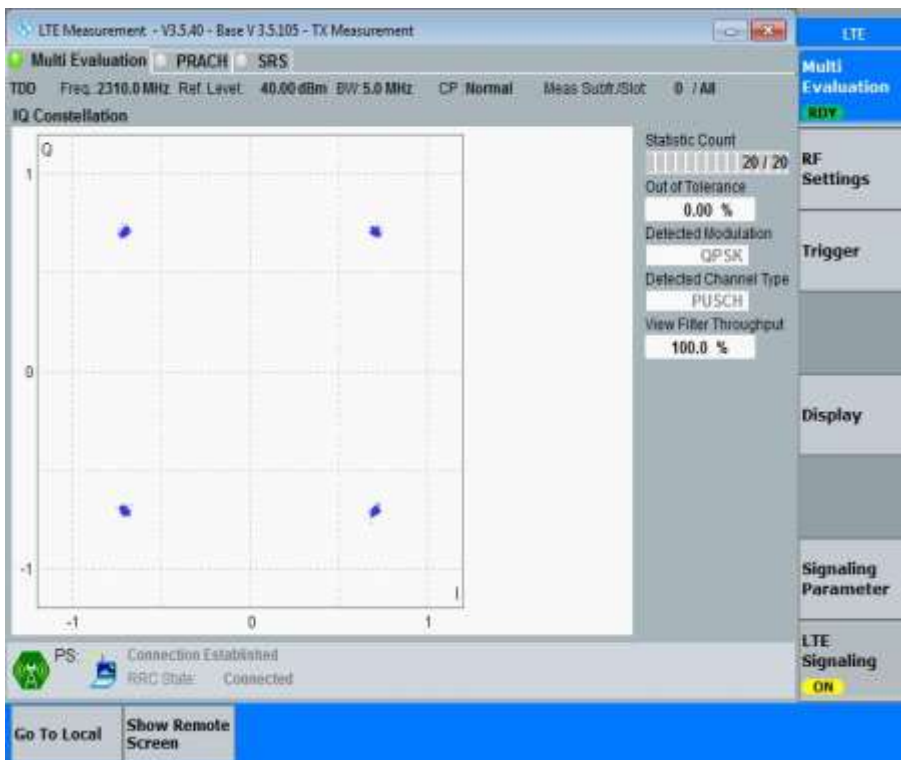
3.1.1 Test Band = B40

3.1.1.1 Test Mode = LTE/TM1

3.1.1.1.1 Test Bandwidth = 5

3.1.1.1.1.1 Test Channel = MCH

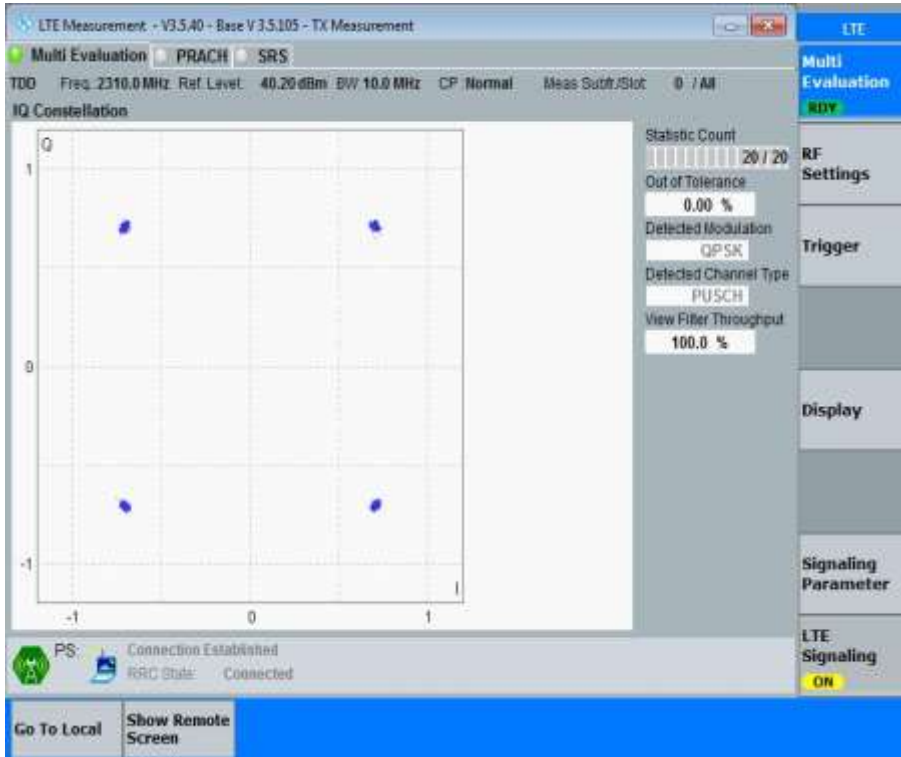
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

3.1.1.1.2.1.1 Test RB = RB50#0

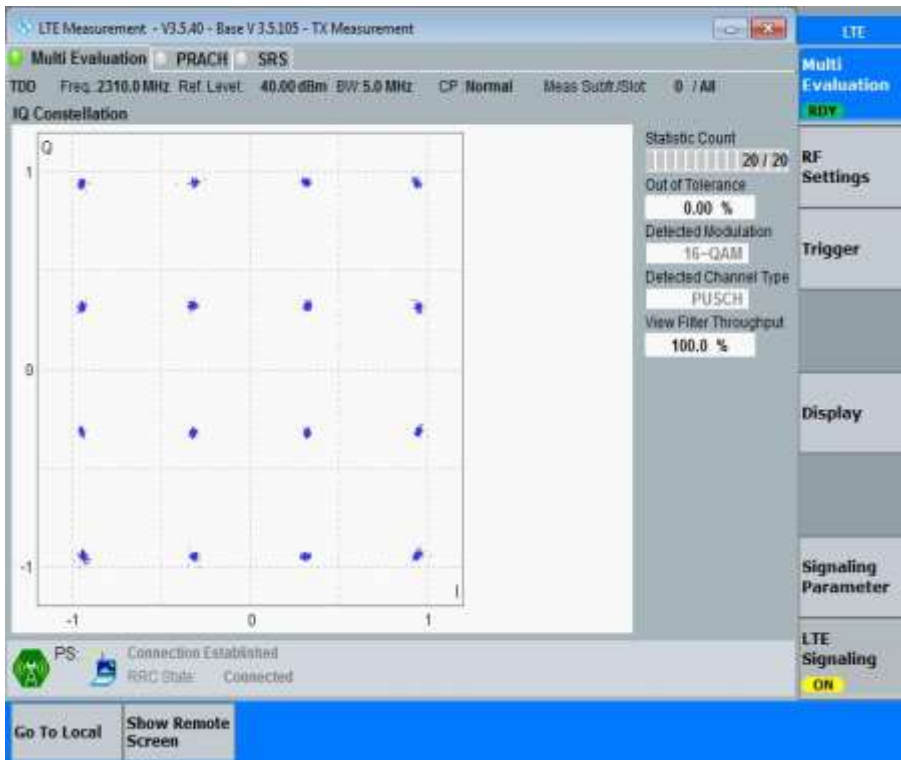


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

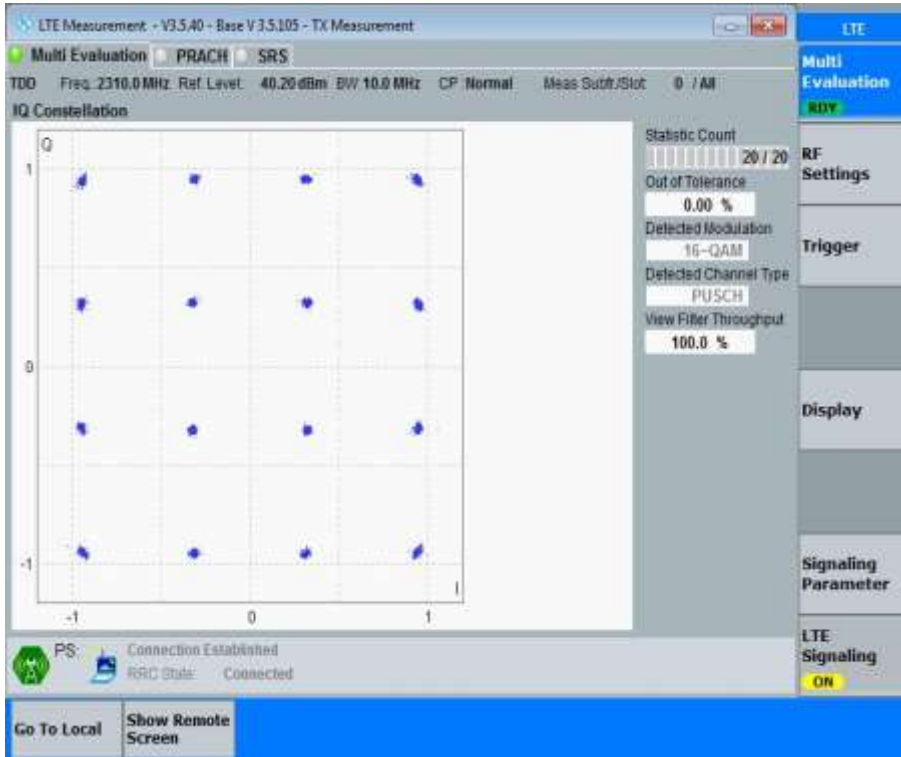
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.4 Test Bandwidth = 10

3.1.1.2.4.1 Test Channel = MCH

3.1.1.2.4.1.1 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
B40	LTE/TM1	5	LCH	RB25#0	4.51	4.95	Pass
			MCH	RB25#0	4.53	5.04	Pass
			HCH	RB25#0	4.51	5.12	Pass
		10	LCH/ MCH/ HCH	RB50#0	9.00	9.87	Pass
	LTE/TM2	5	LCH	RB25#0	4.51	5.00	Pass
			MCH	RB25#0	4.52	4.99	Pass
			HCH	RB25#0	4.53	4.93	Pass
		10	LCH/ MCH/ HCH	RB50#0	9.03	9.94	Pass

Part II - Test Plots

4.1 For LTE

4.1.1 Test Band = B40

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

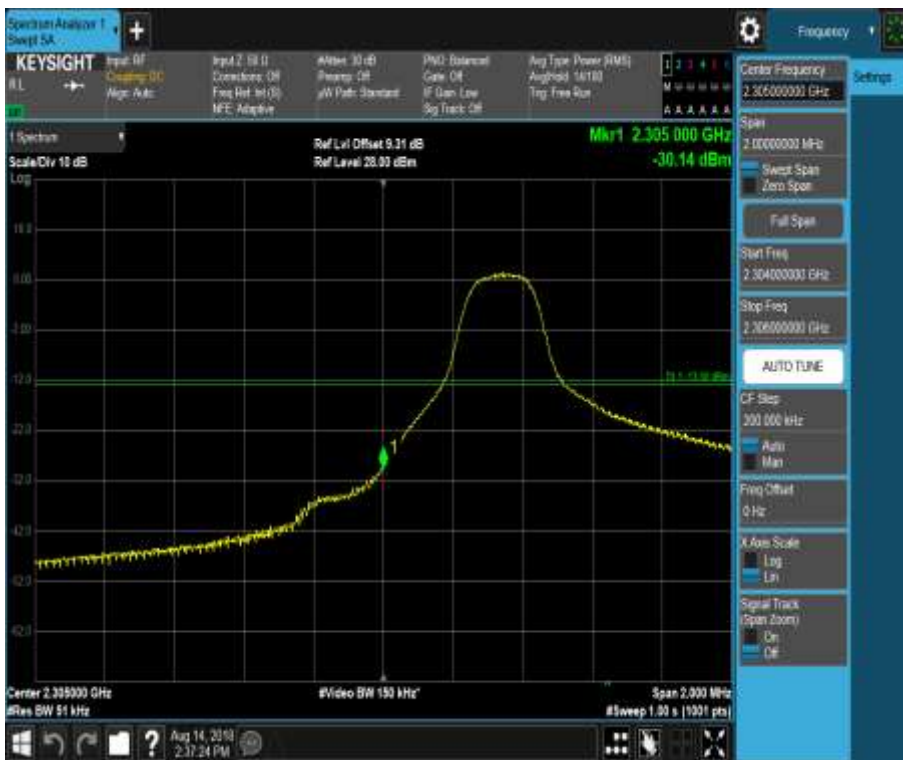
5.1.1 Test Band = B40

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





5.1.1.1.1.2 Test RB = RB1#24





5.1.1.1.1.3 Test RB = RB12#6





5.1.1.1.1.4 Test RB = RB25#0

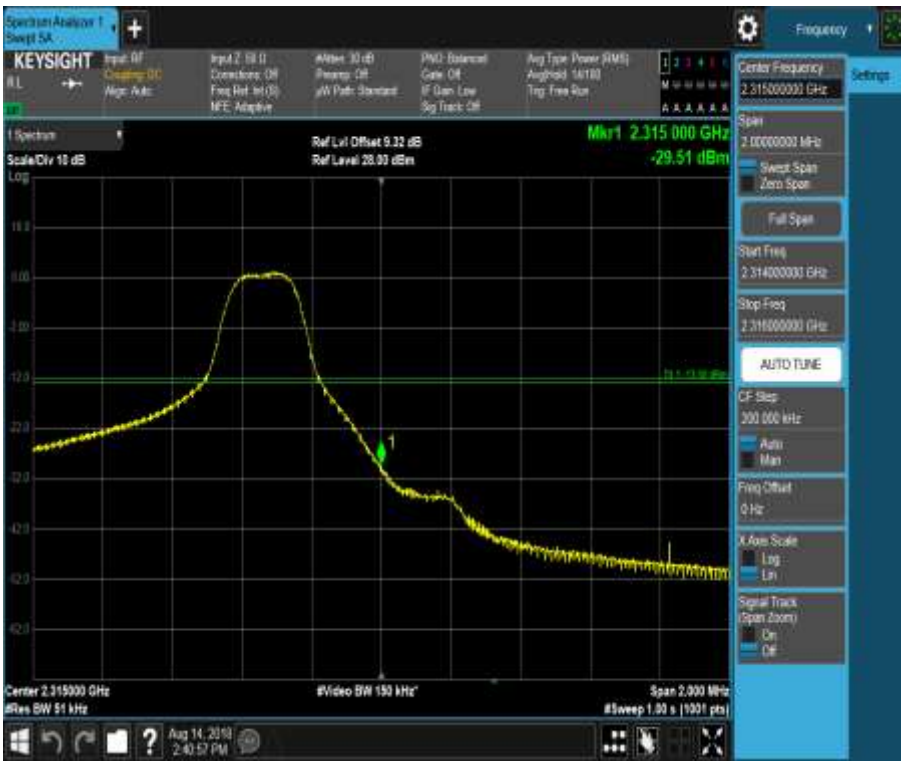


5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0



5.1.1.1.2.2 Test RB = RB1#24





5.1.1.1.1.2.3 Test RB = RB12#6





5.1.1.1.1.2.4 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





5.1.1.1.2.1.2 Test RB = RB1#49





5.1.1.1.2.1.3 Test RB = RB25#13



5.1.1.1.2.1.4 Test RB = RB50#0



5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0



5.1.1.1.2.2.2 Test RB = RB1#49





5.1.1.1.2.3 Test RB = RB25#13



5.1.1.1.2.4 Test RB = RB50#0

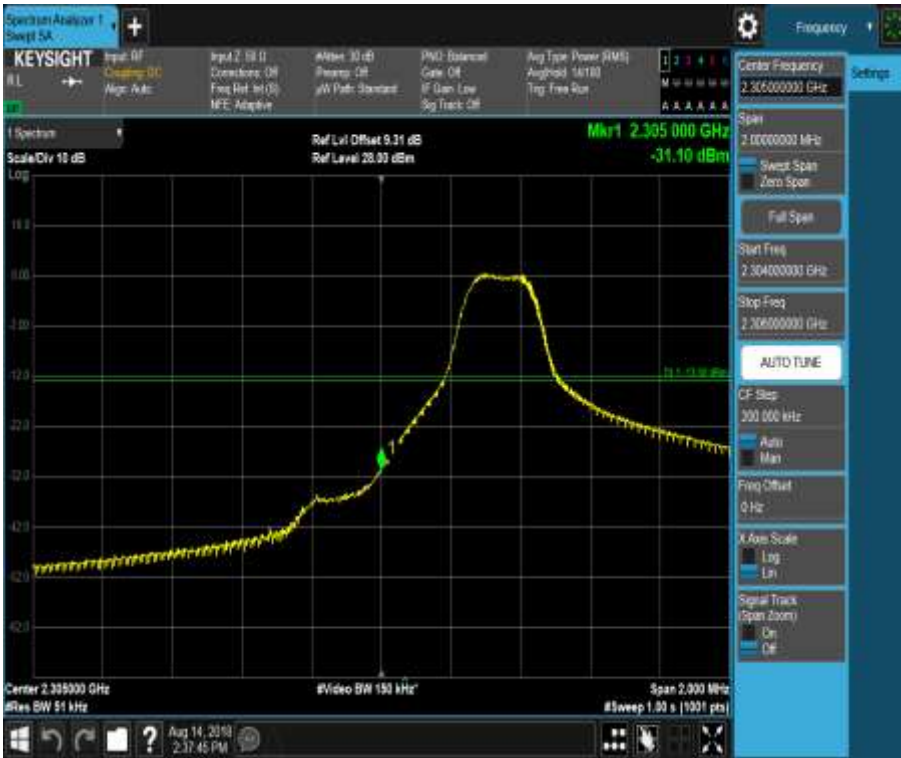


5.1.1.2 Test Mode = LTE/TM2

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





5.1.1.2.1.1.2 Test RB = RB1#24





5.1.1.2.1.1.3 Test RB = RB12#6





5.1.1.2.1.1.4 Test RB = RB25#0



5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0



5.1.1.2.1.2.2 Test RB = RB1#24





5.1.1.2.1.2.3 Test RB = RB12#6



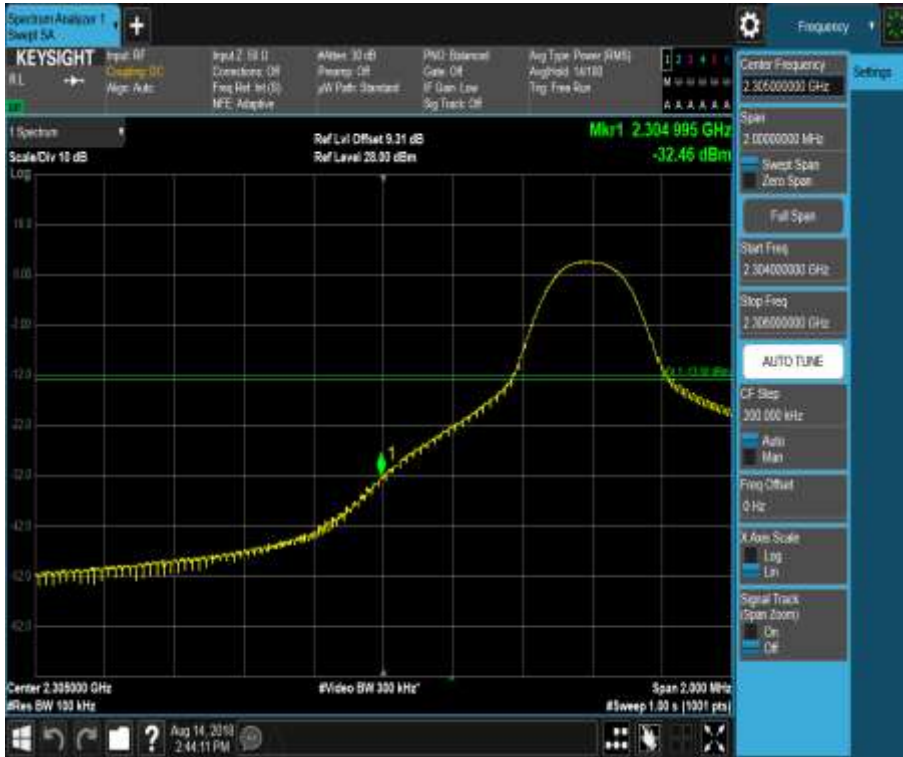
5.1.1.2.1.2.4 Test RB = RB25#0



5.1.1.2.2 Test Bandwidth = 10

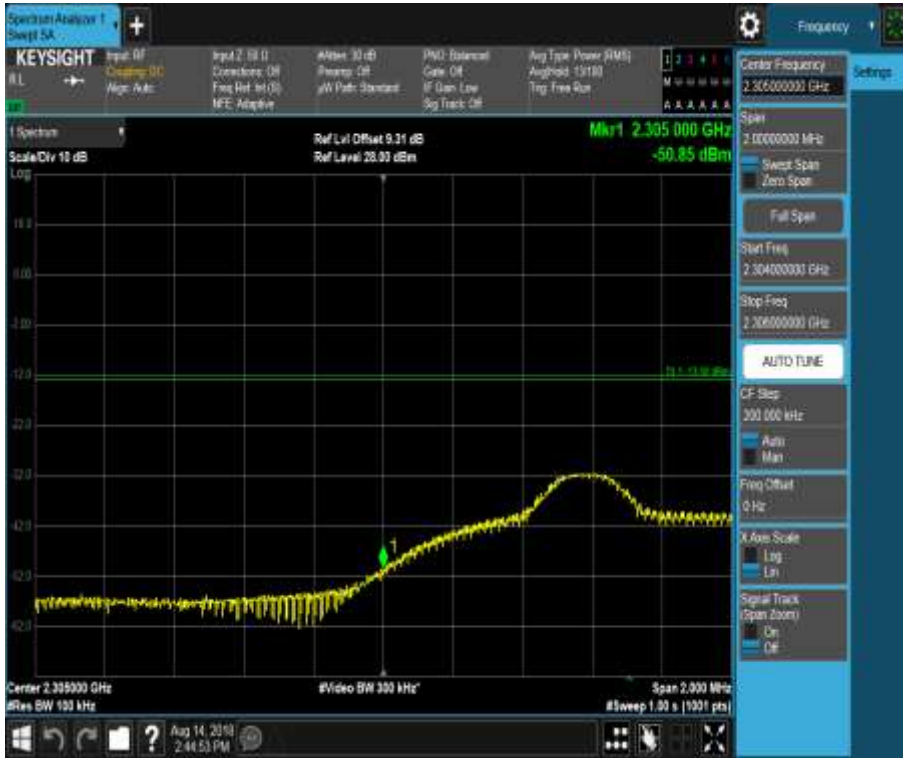
5.1.1.2.2.1 Test Channel = LCH

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





5.1.1.2.2.4 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

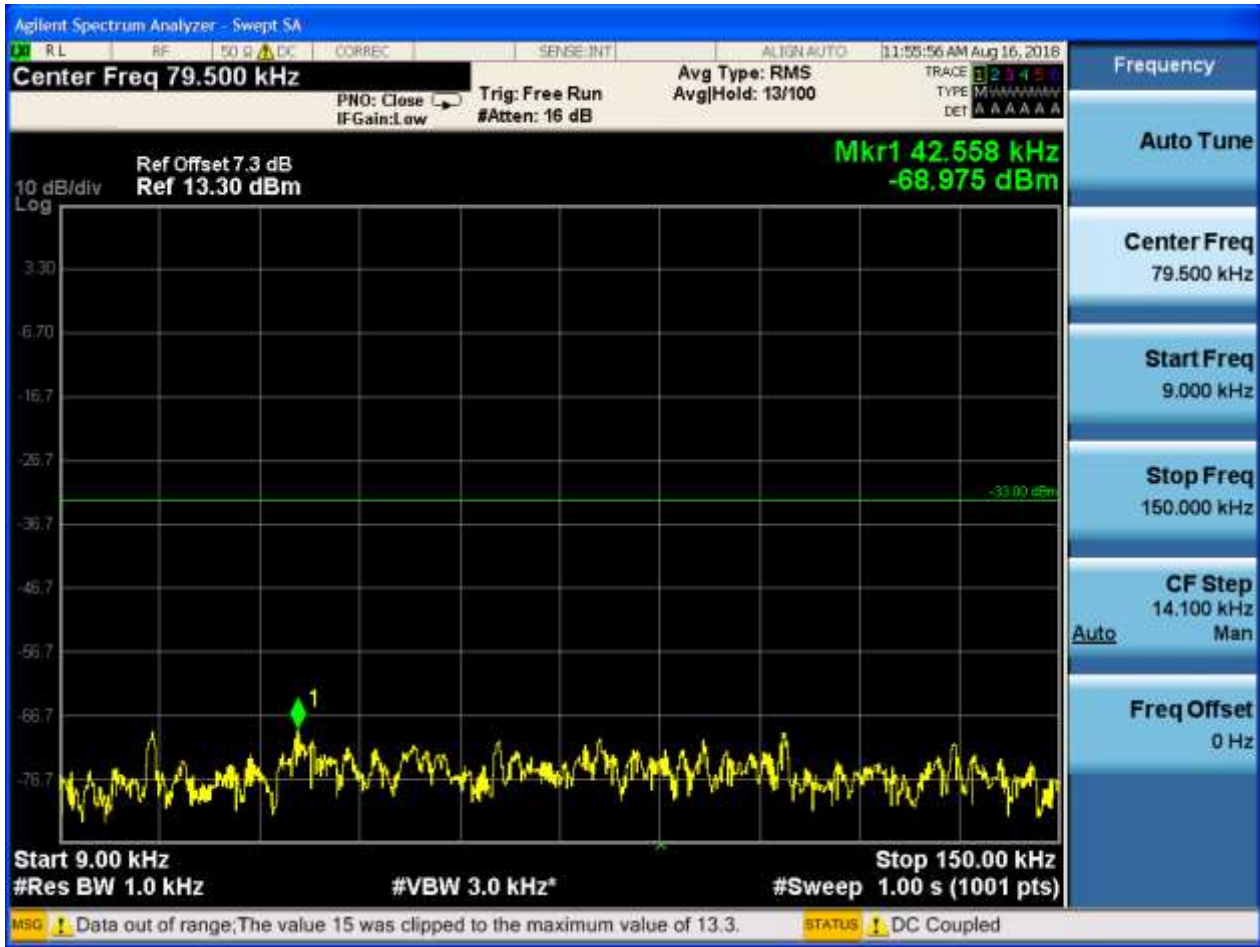
6.1.1 Test Band = B40

6.1.1.1 Test Mode = LTE/TM1

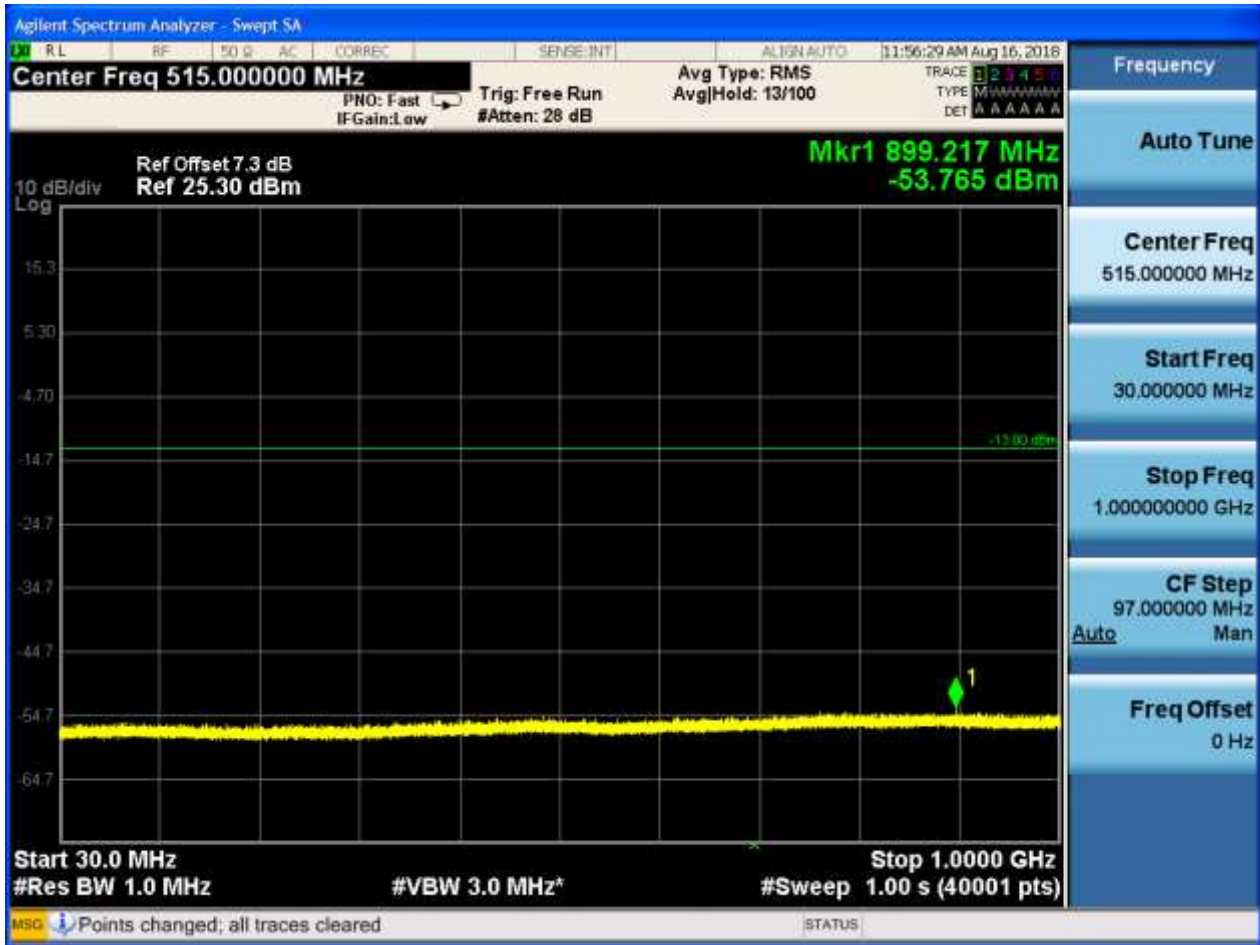
6.2.1.1.1 Test Bandwidth = 5

6.2.1.1.1.1 Test Channel = LCH

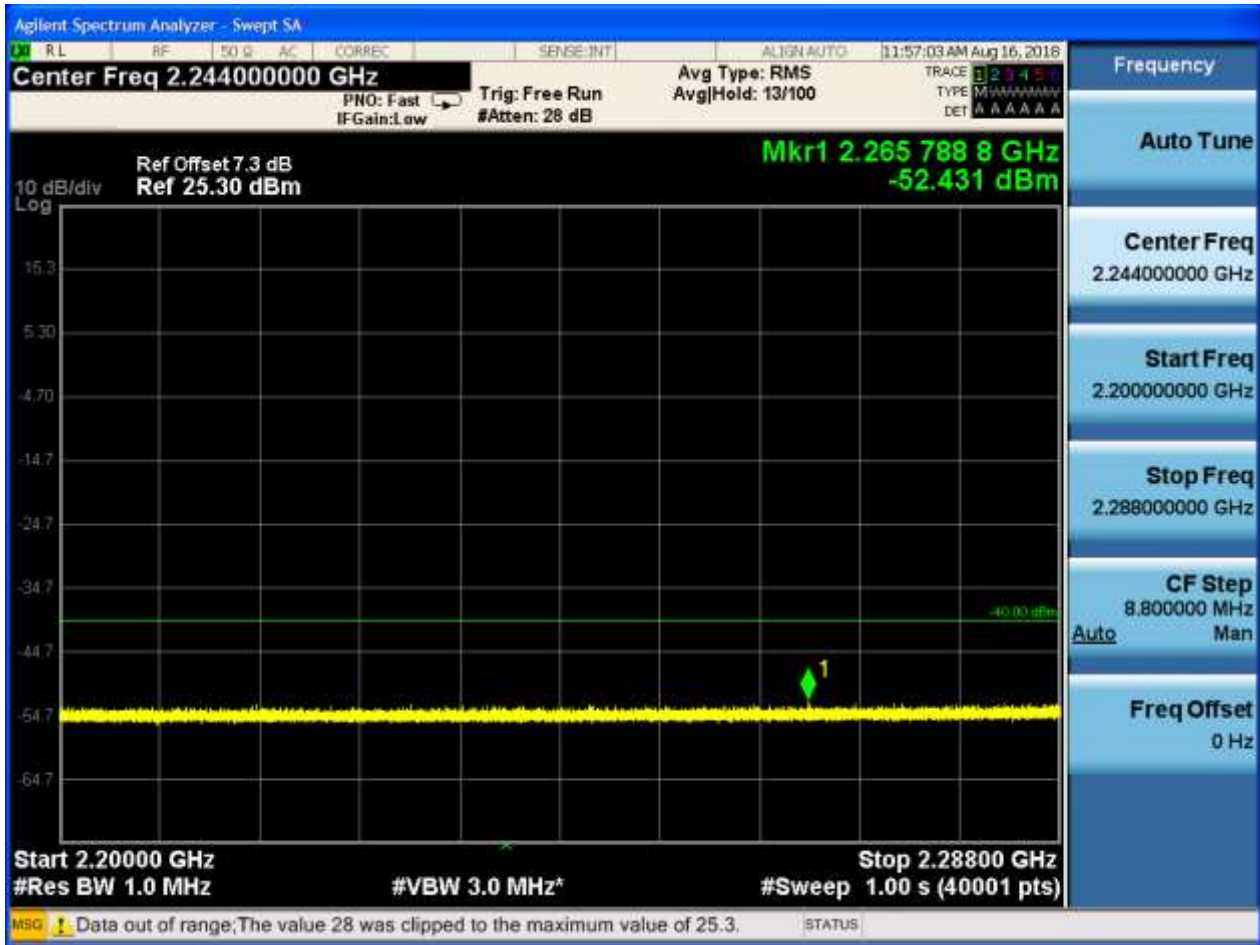
6.2.1.1.1.1.1 Test RB = RB1#0

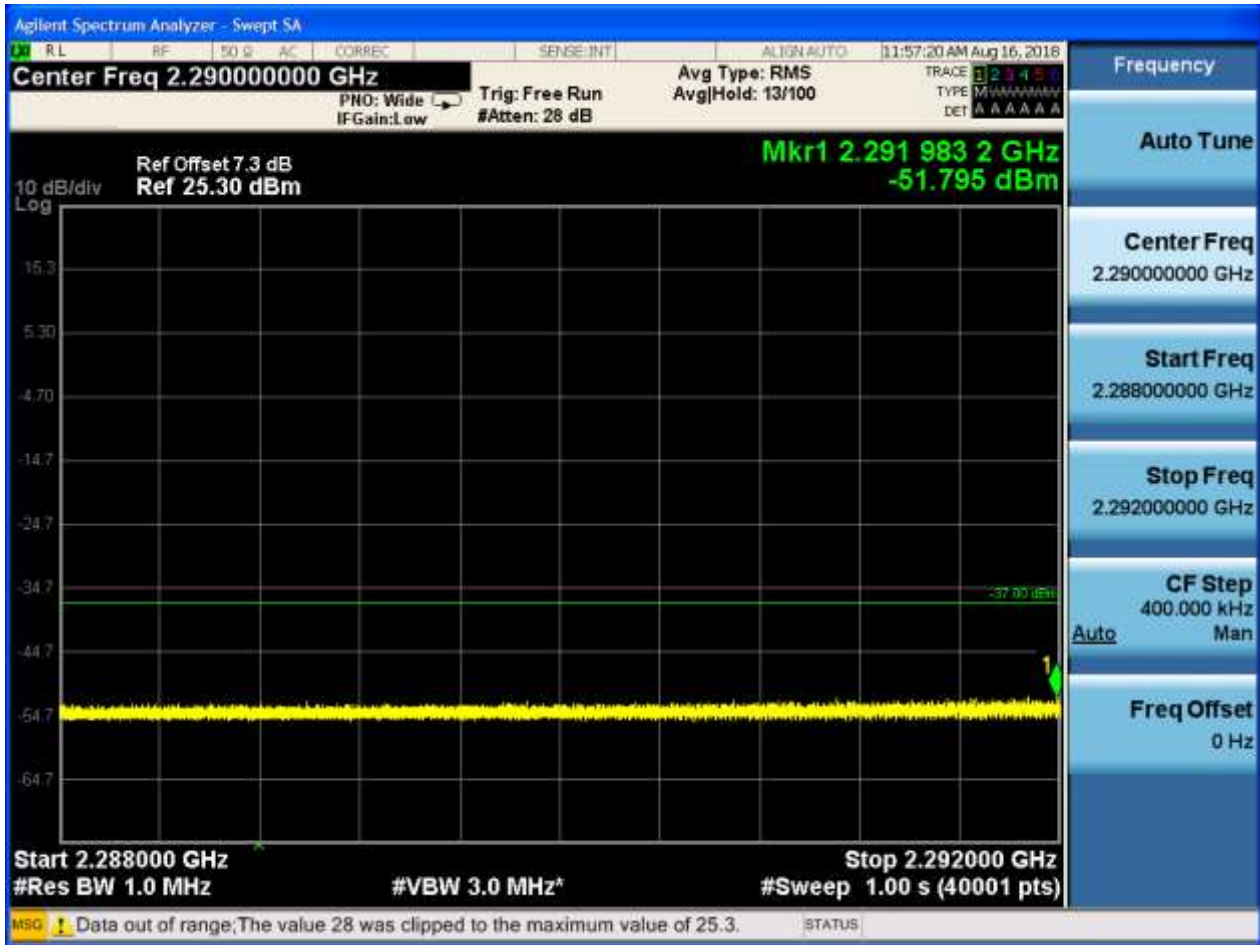


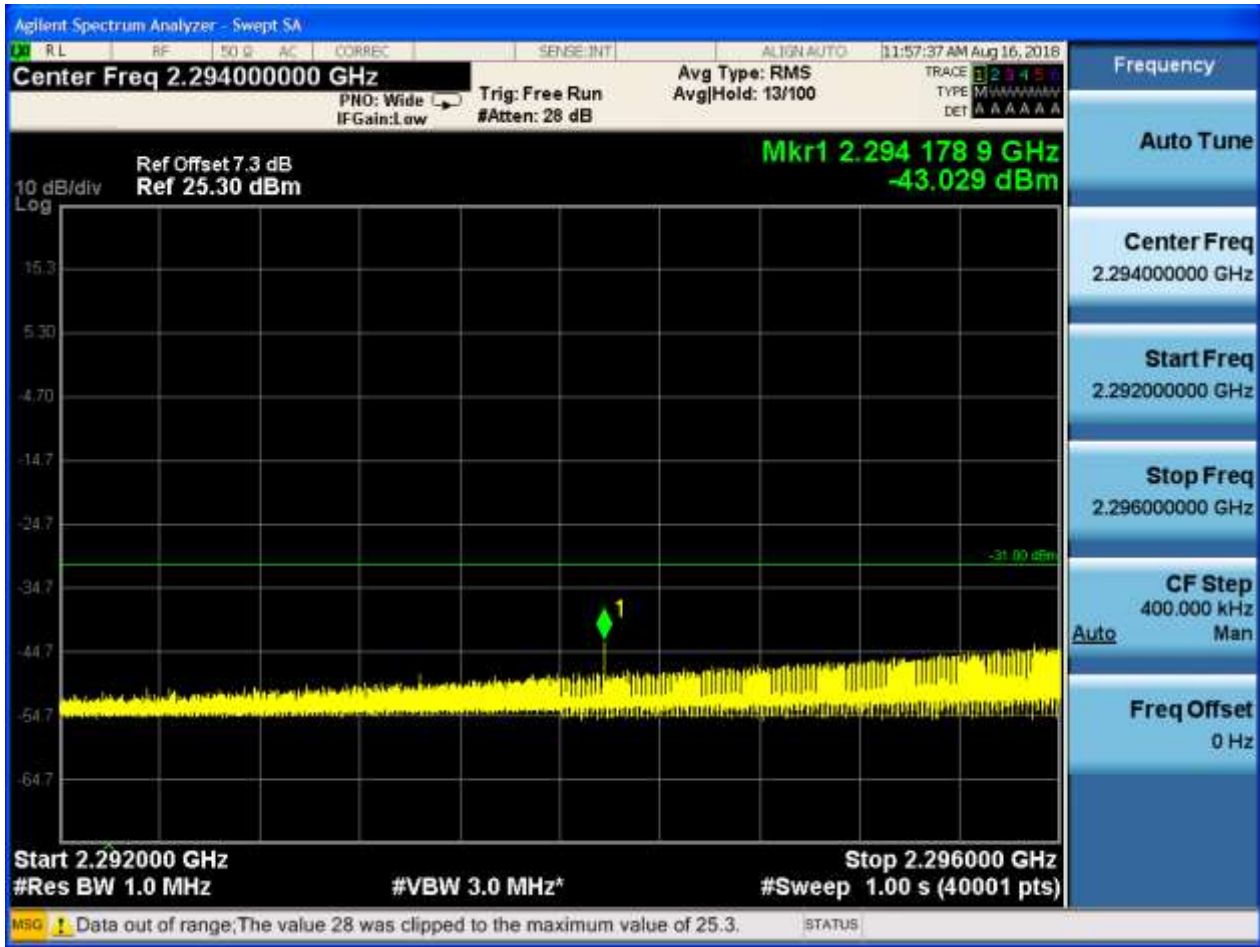










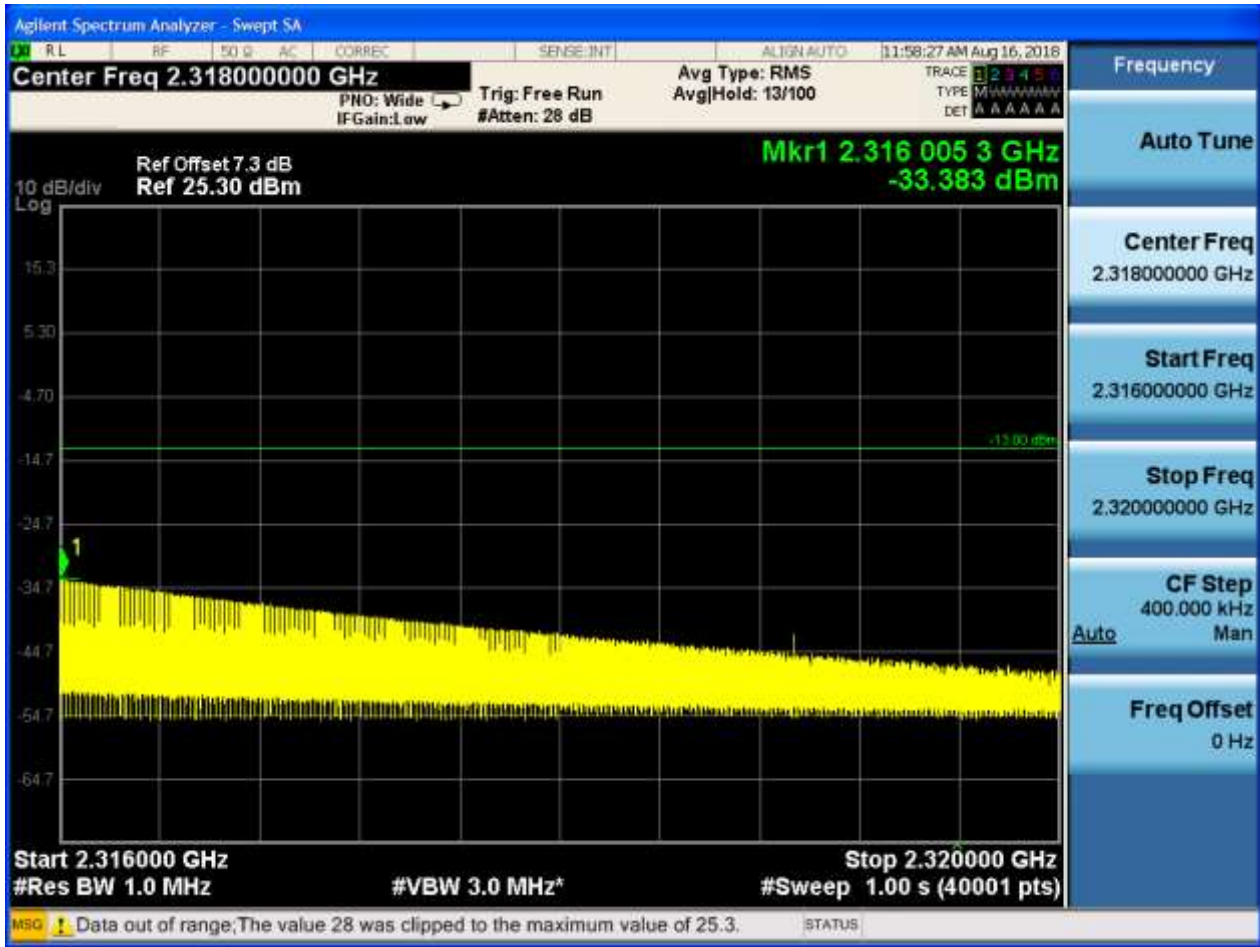






note: In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth is allowed to be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz 1%/2% of the occupied bandwidth, as applicable.





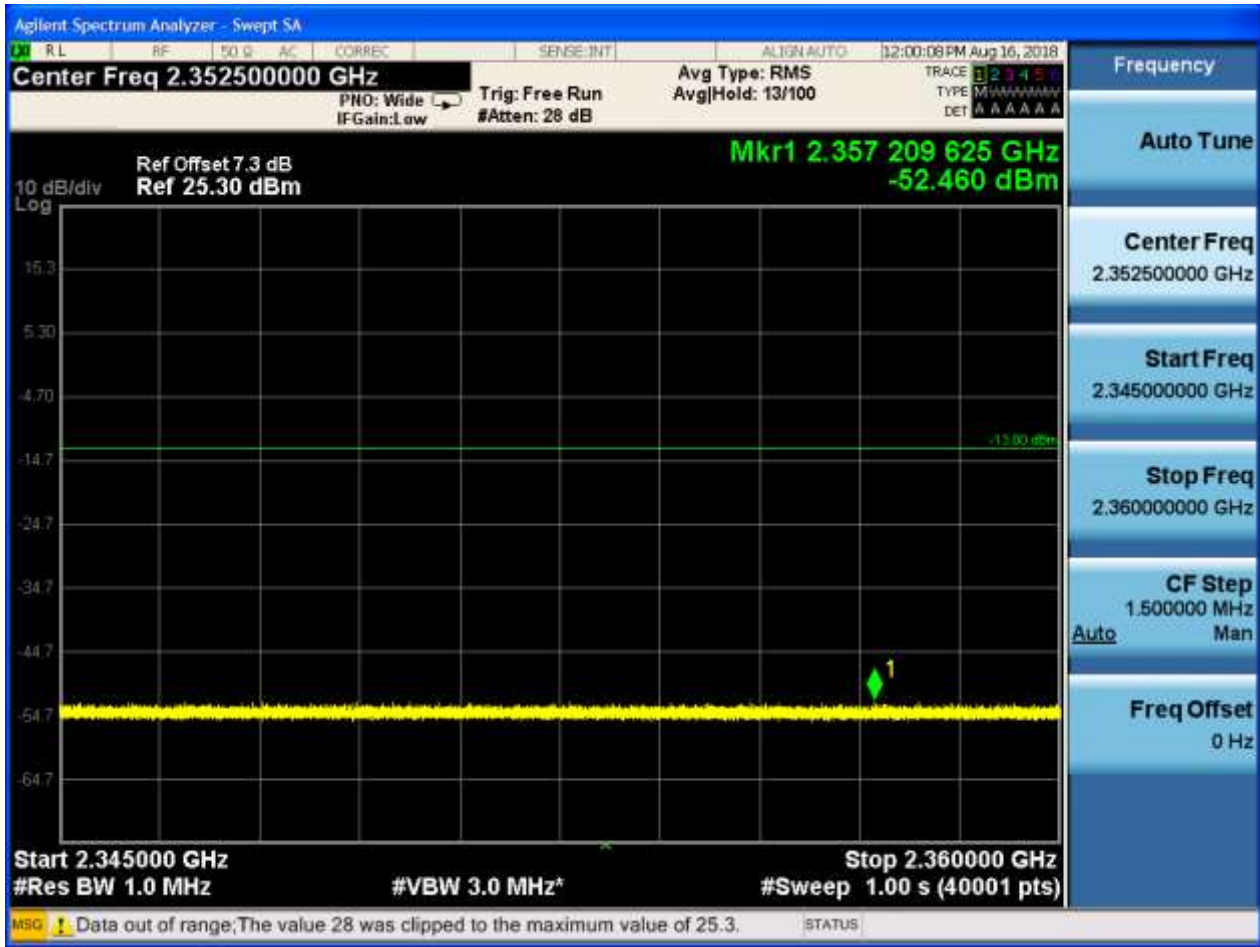




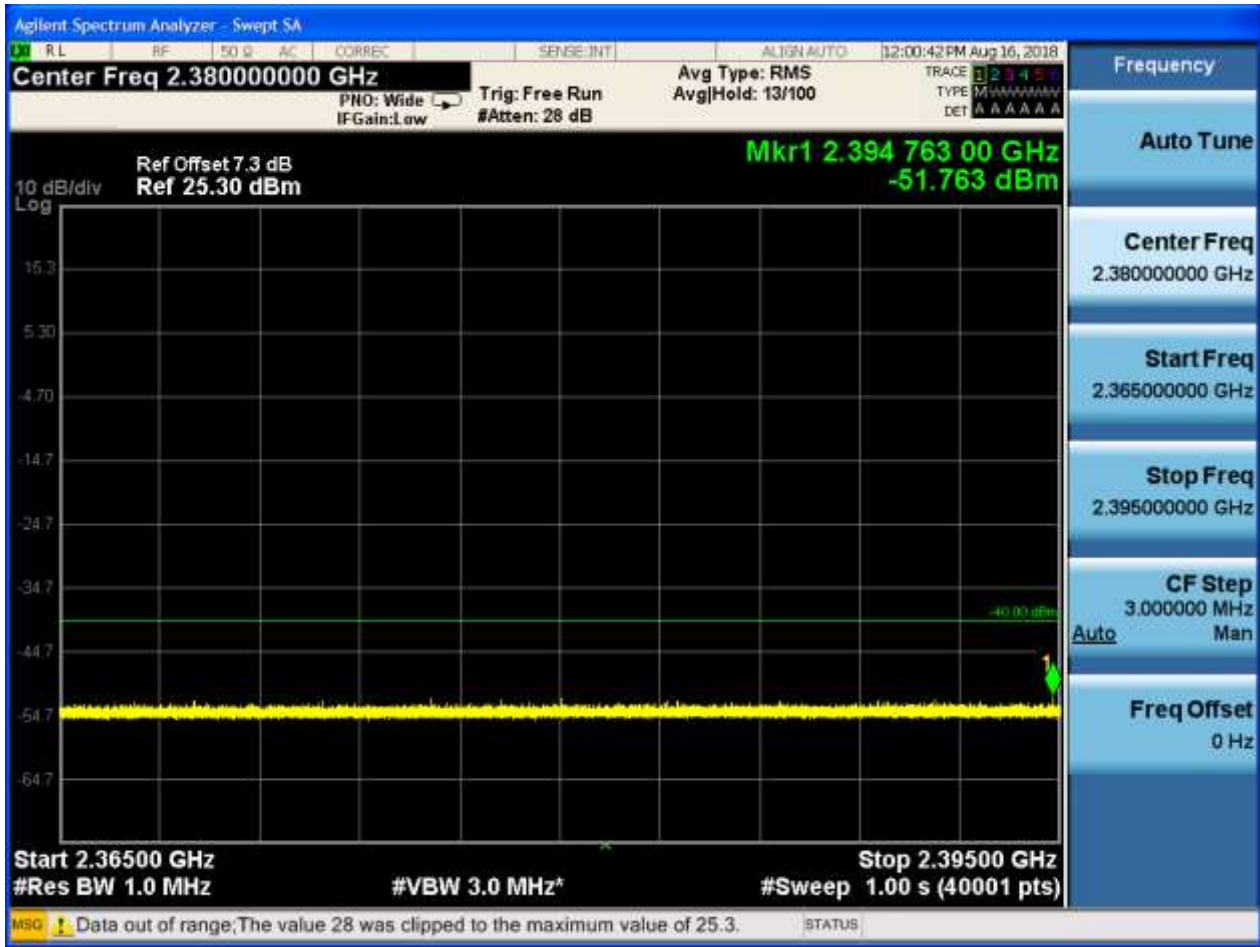














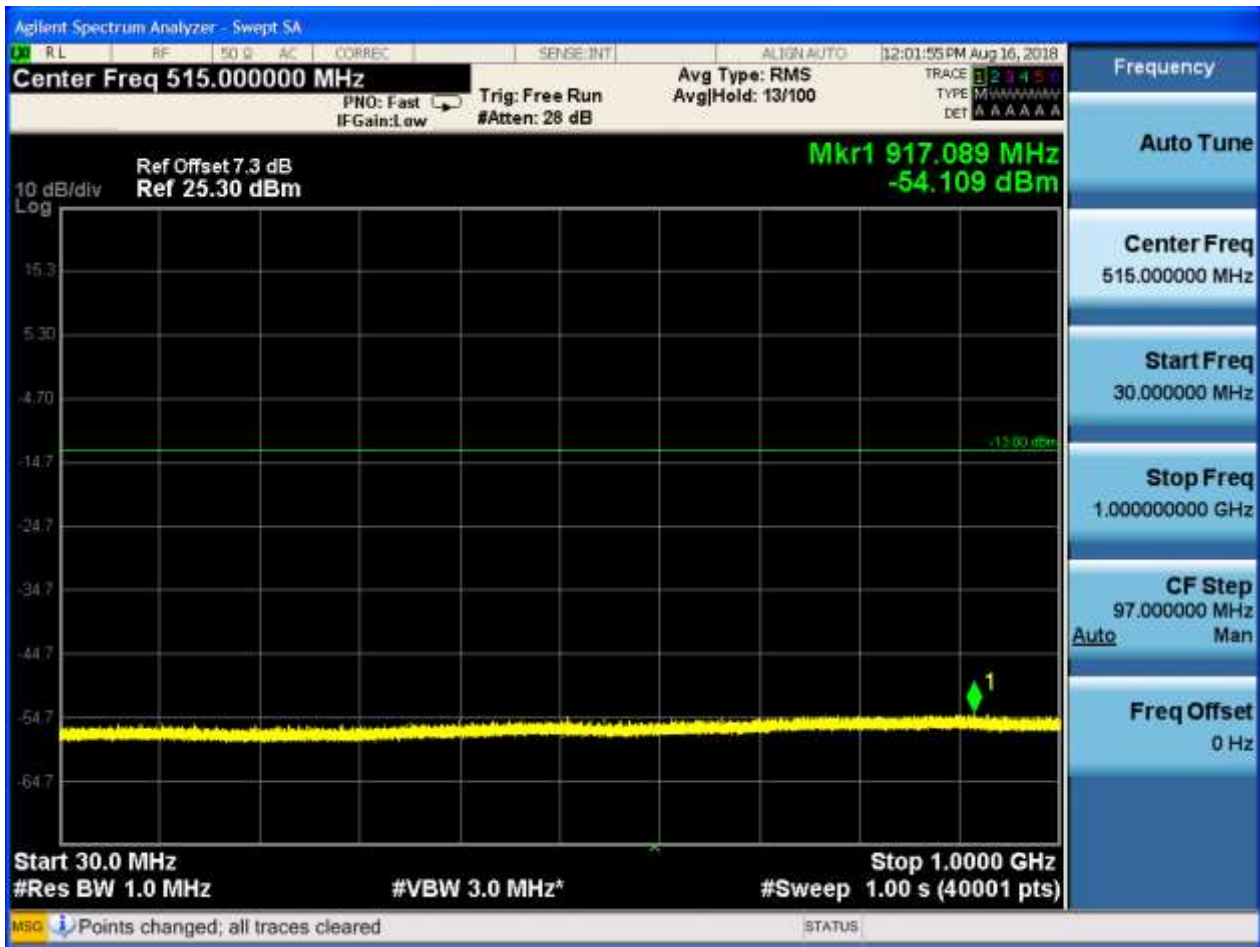


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0





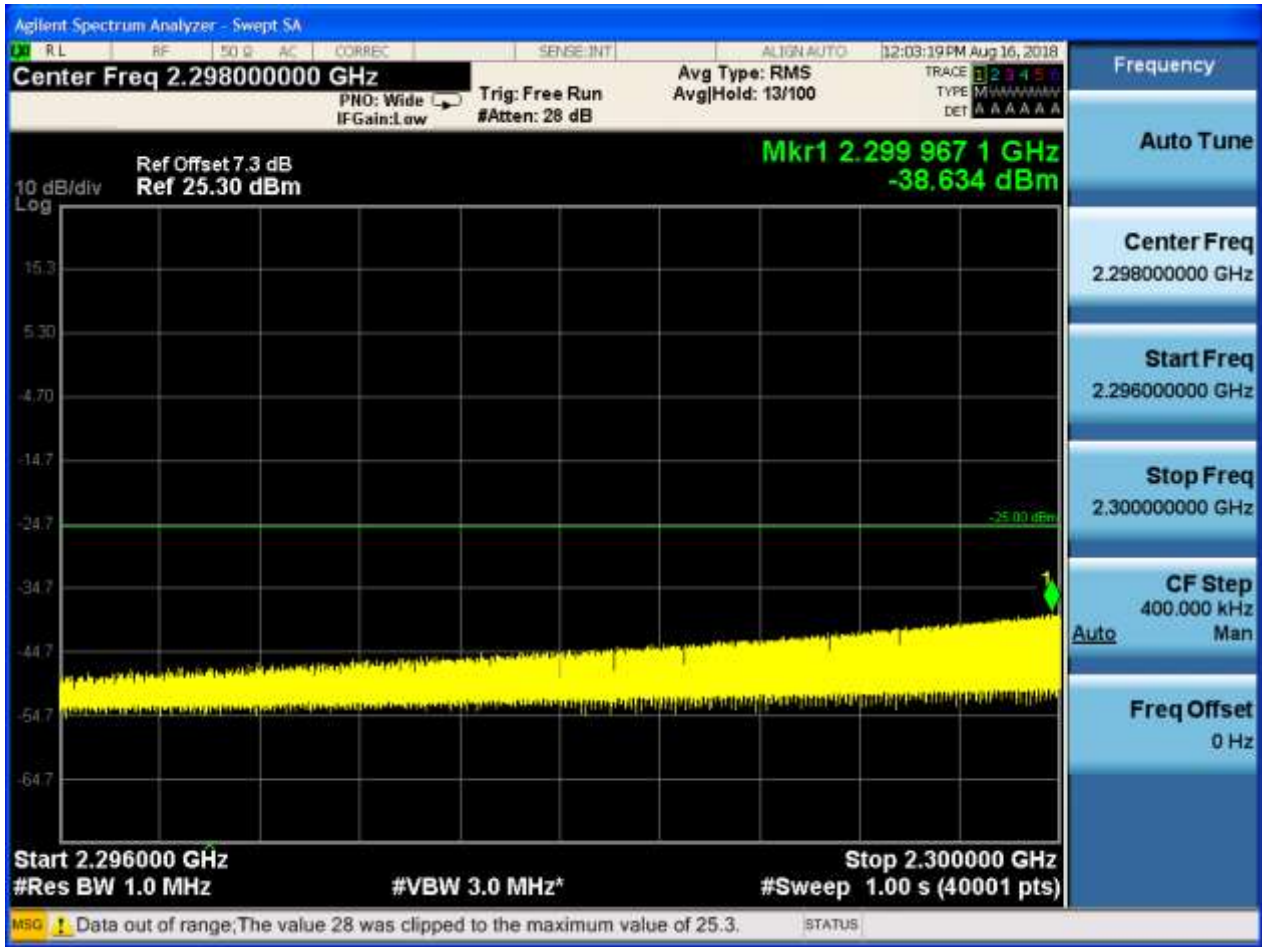


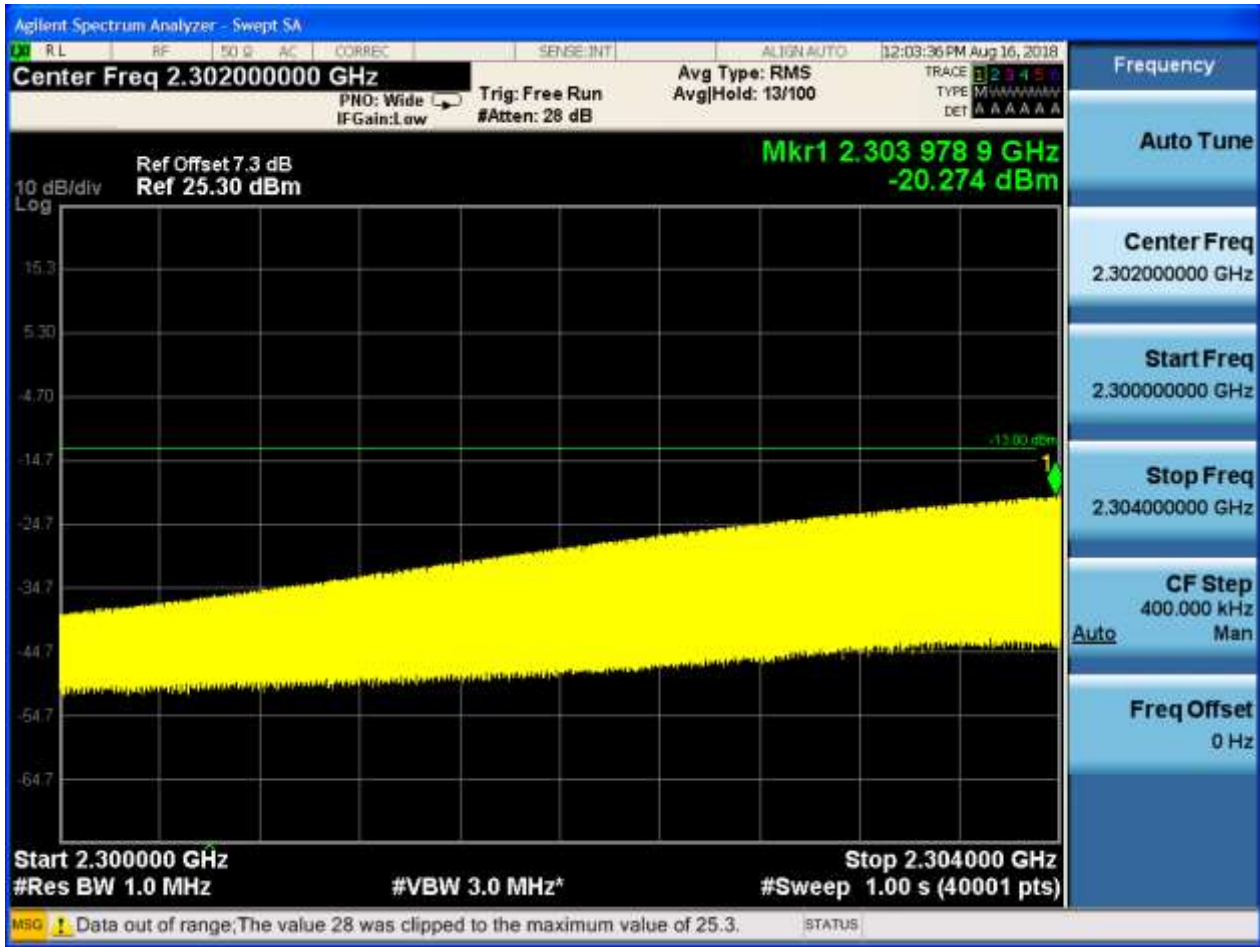


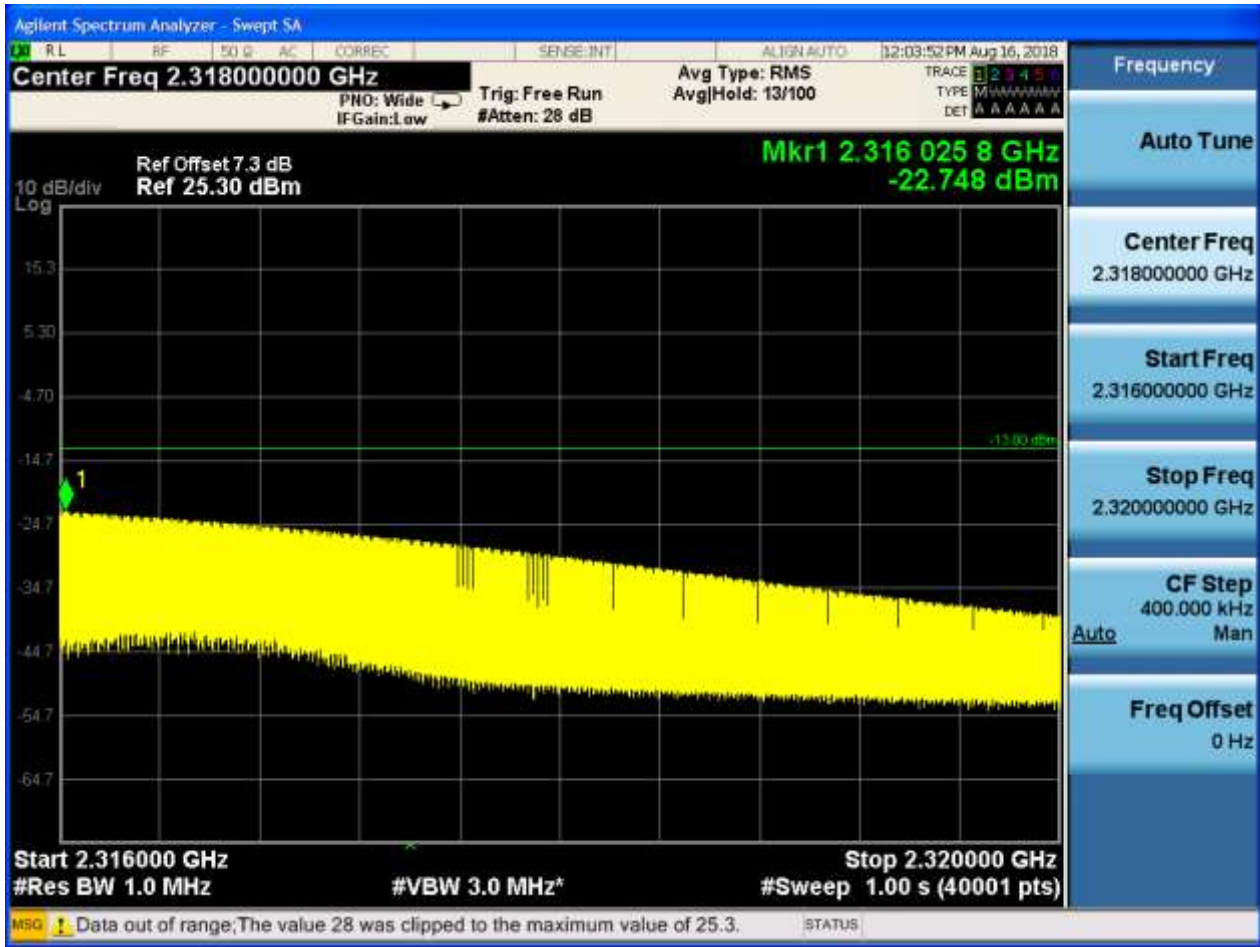


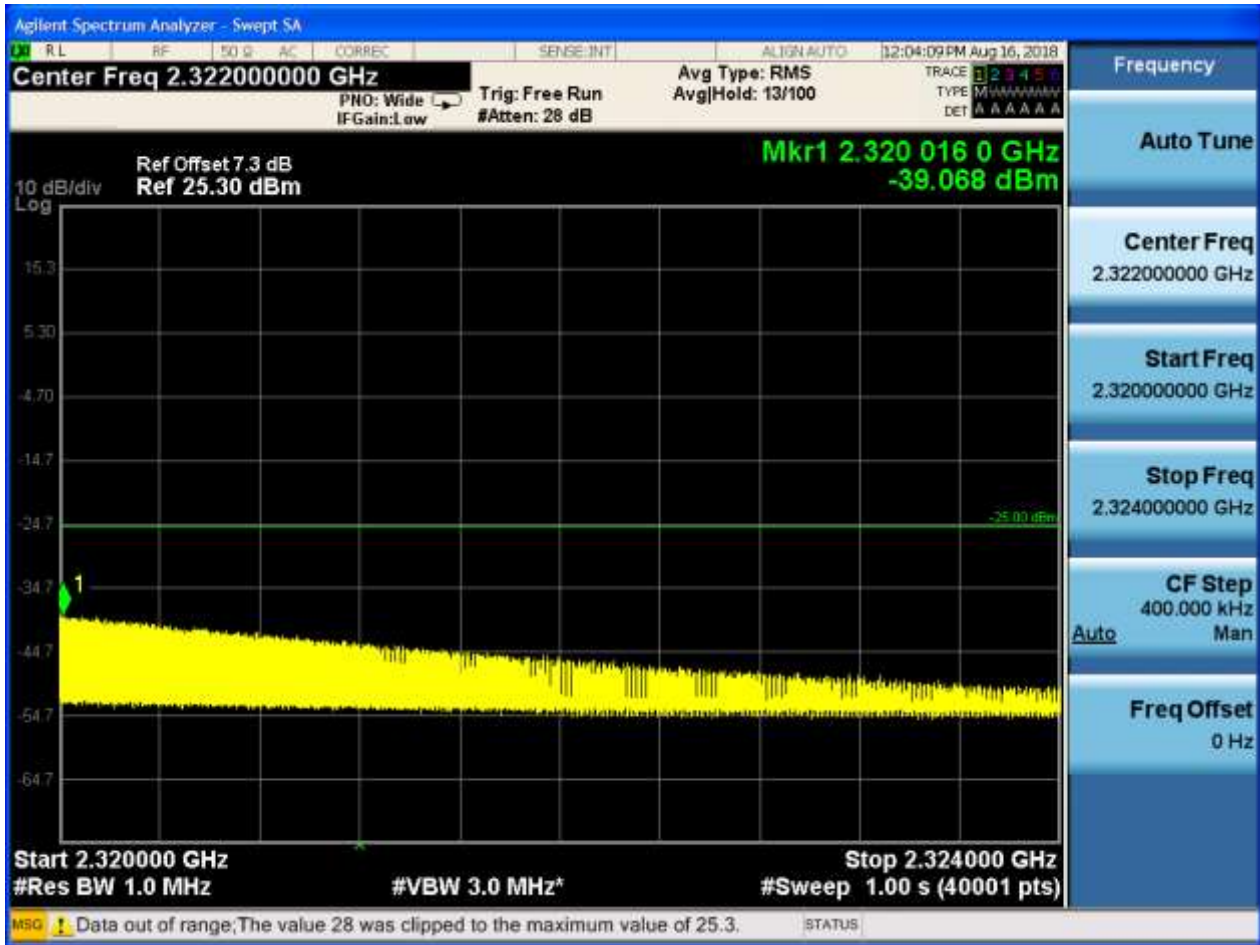


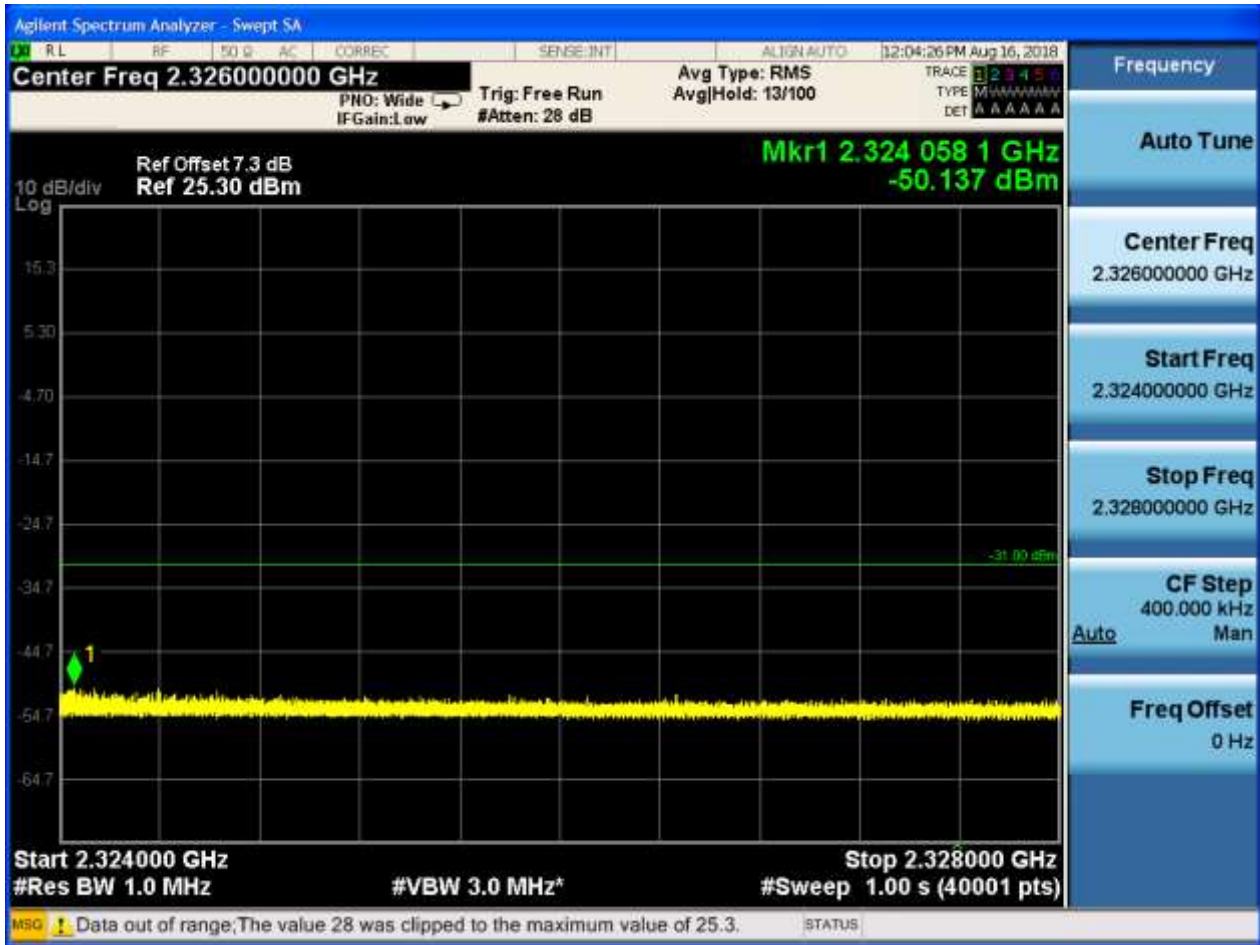


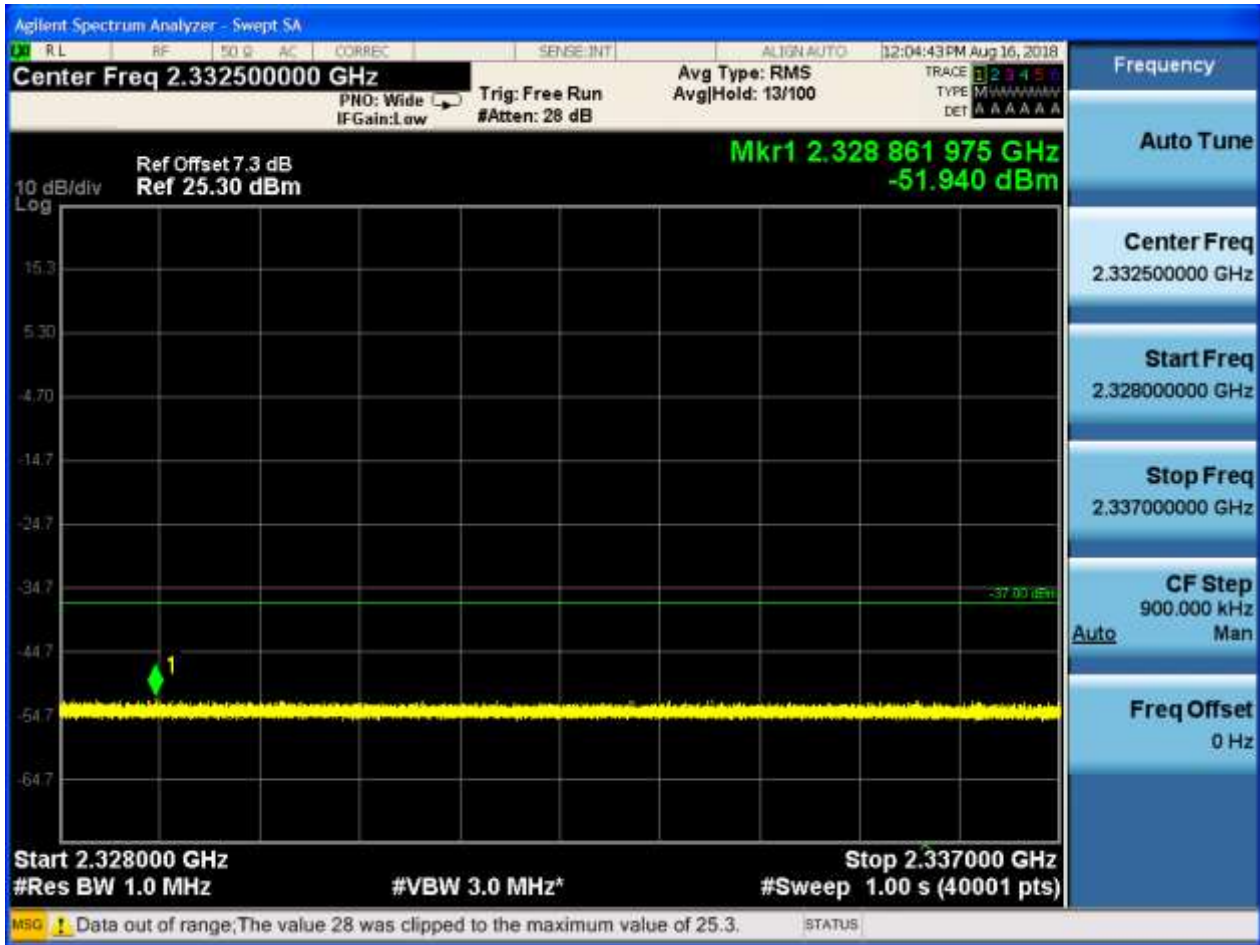


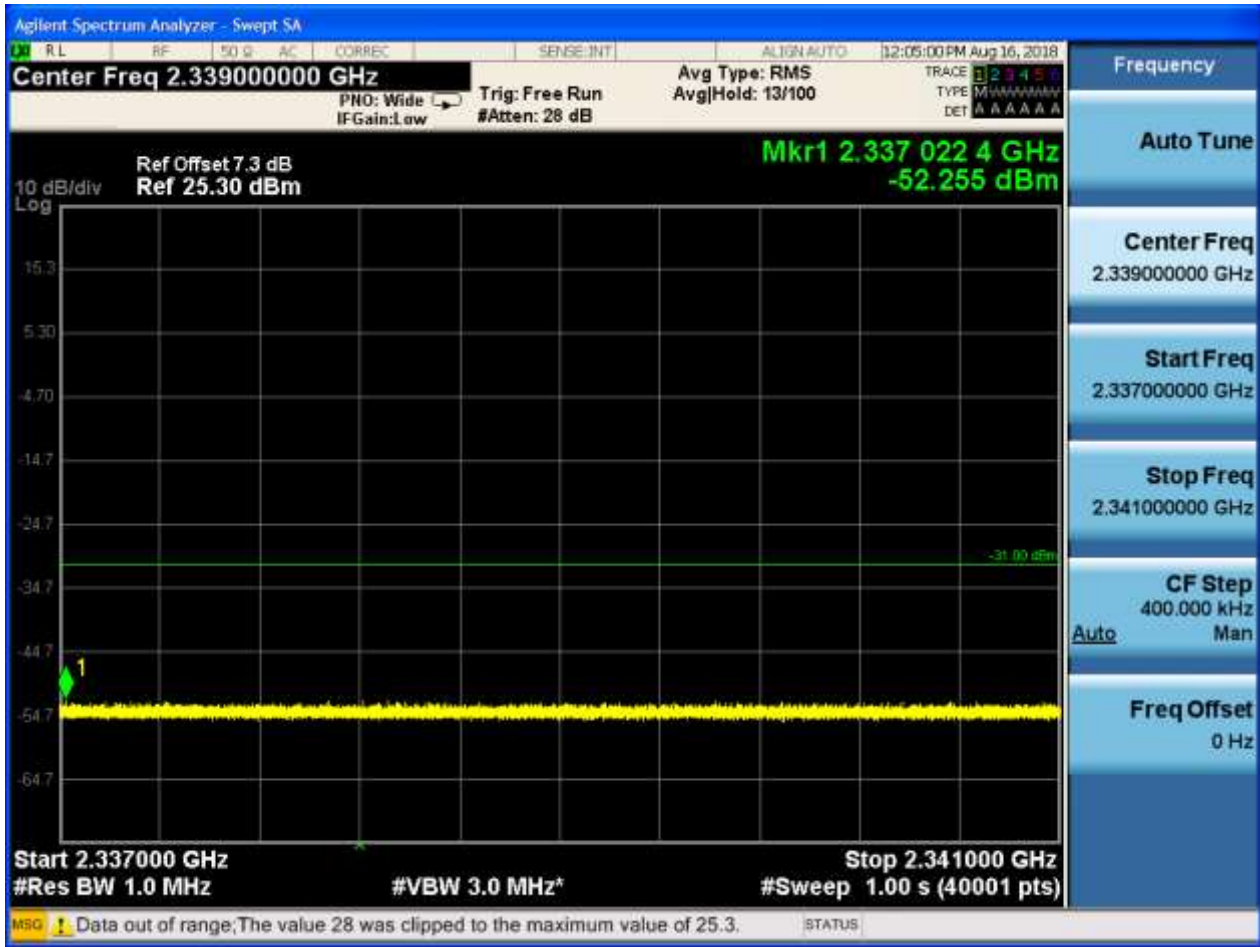




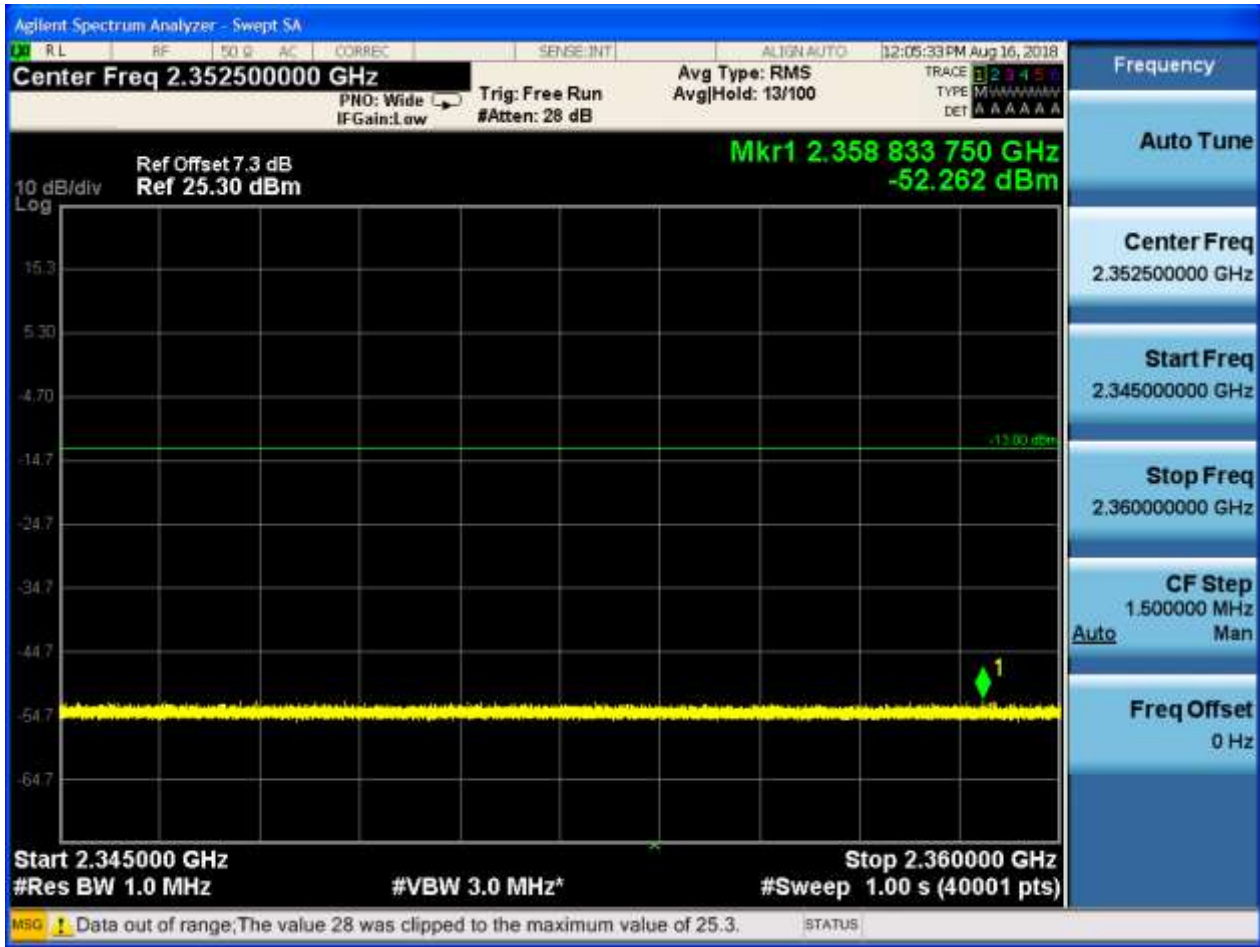






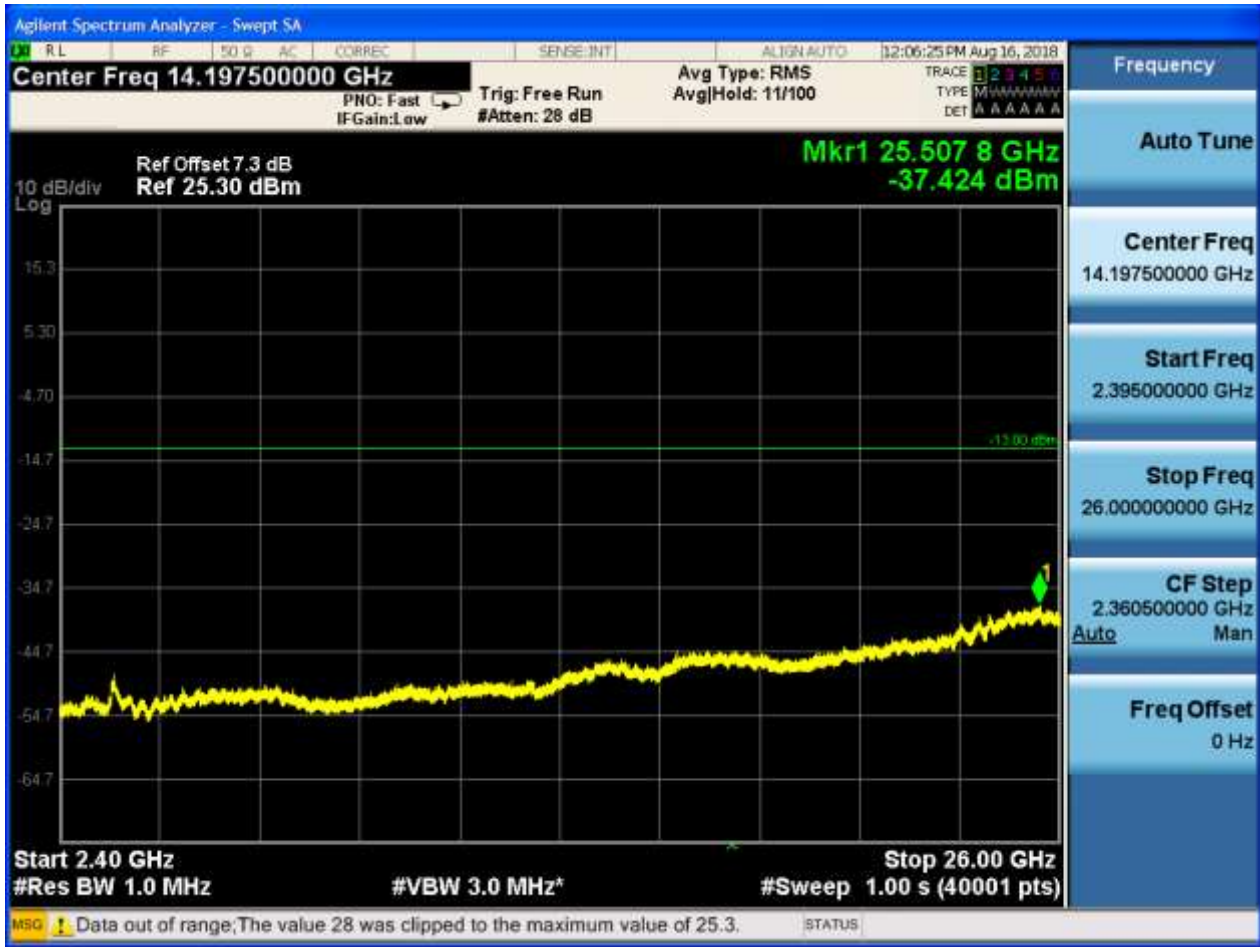








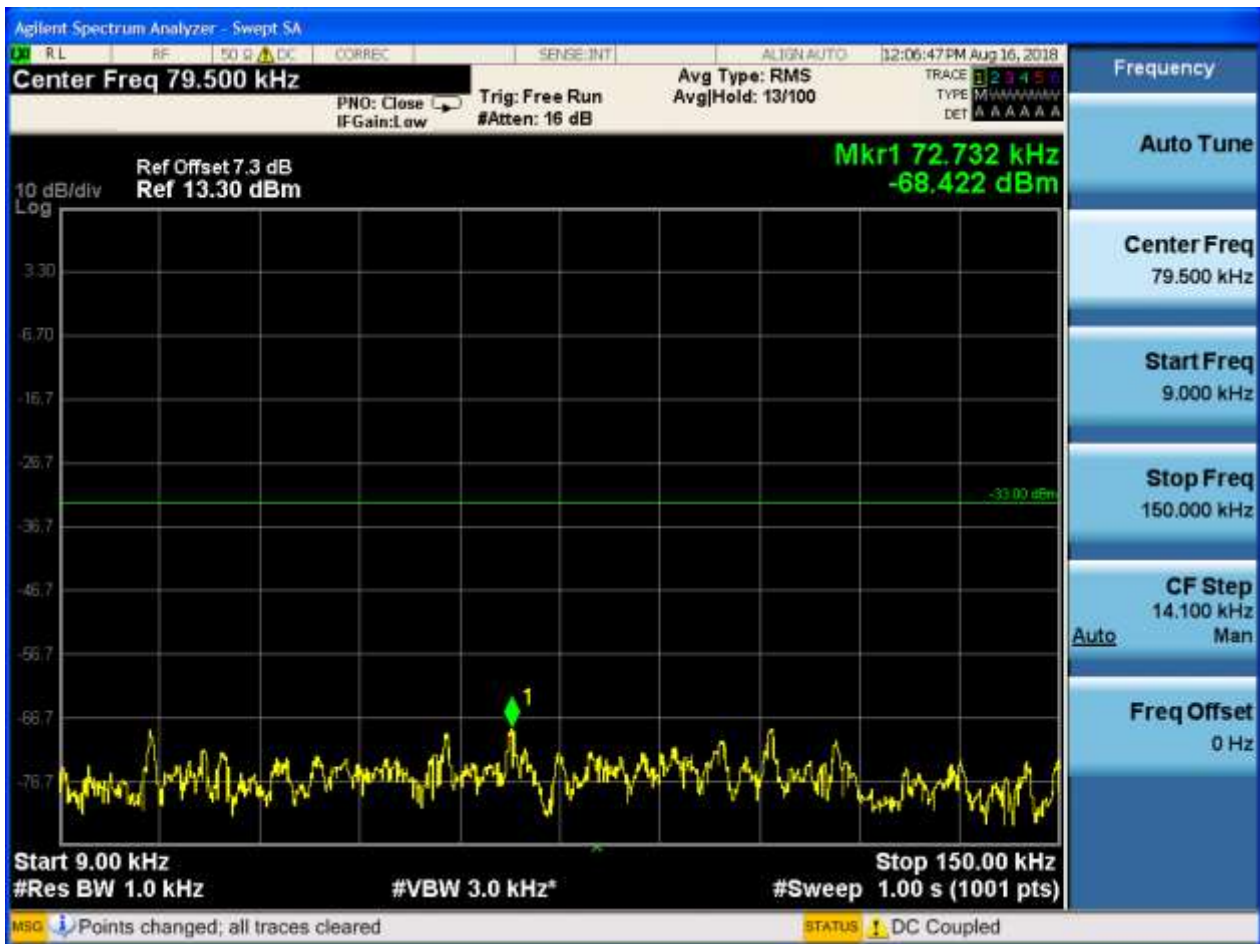




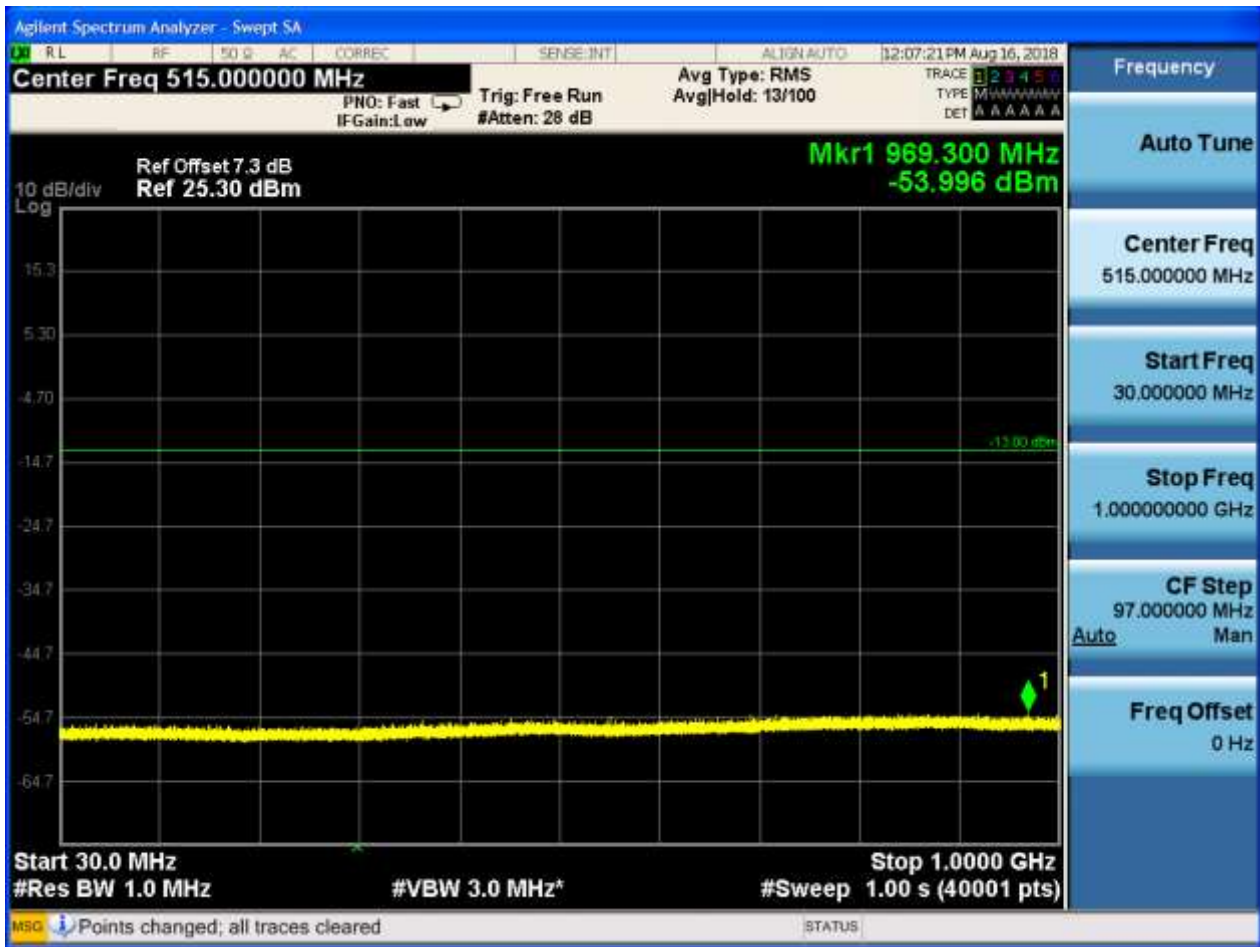


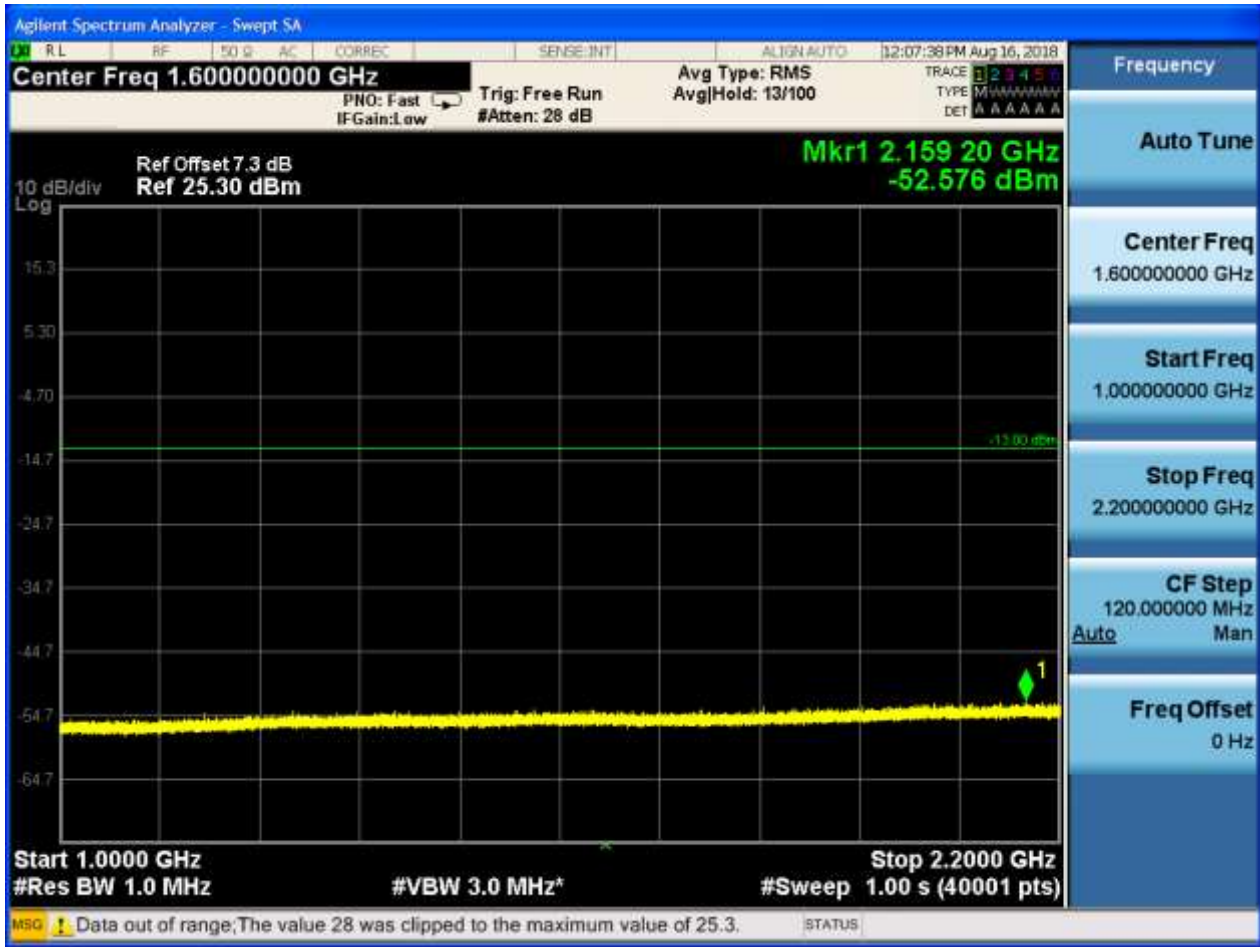
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0





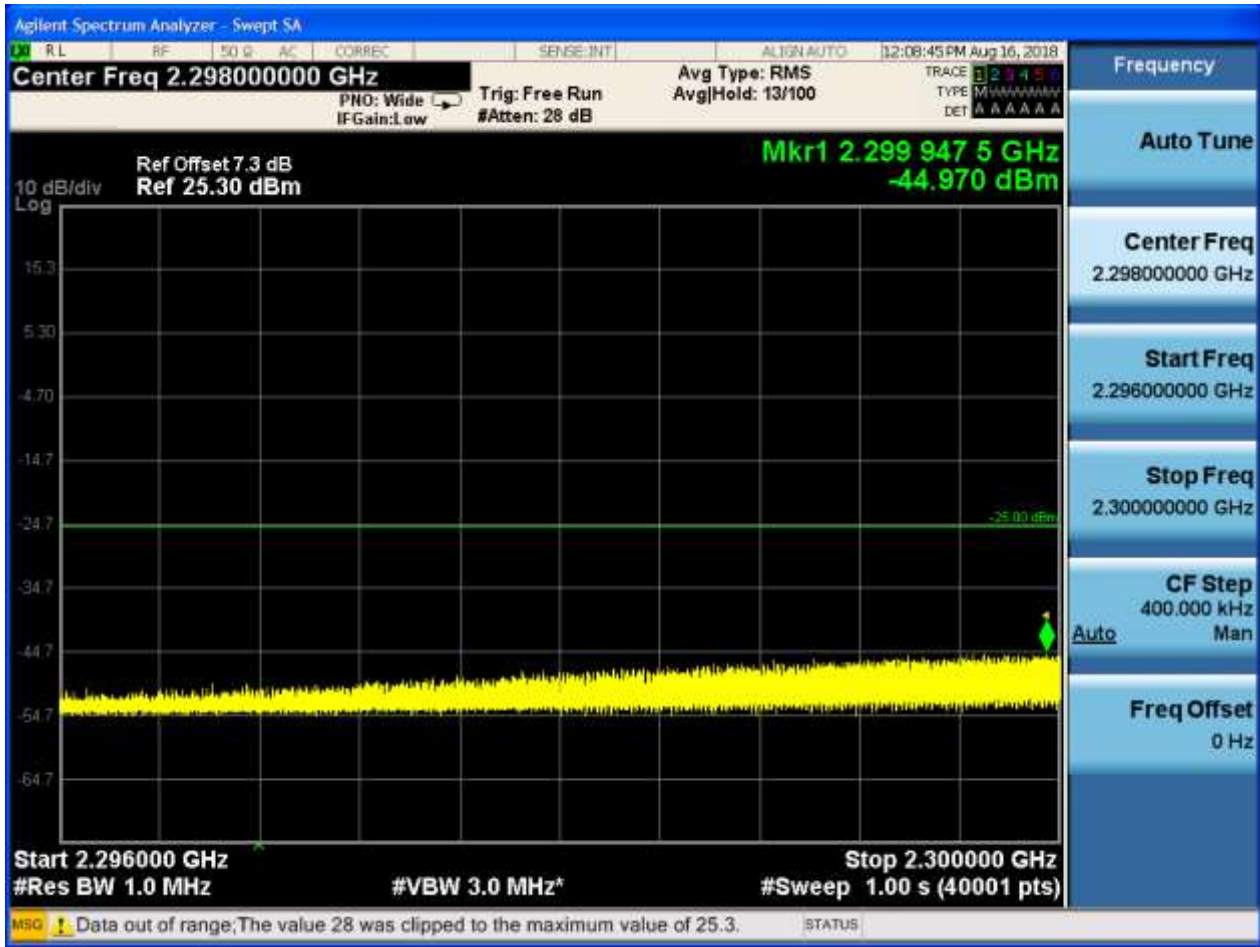


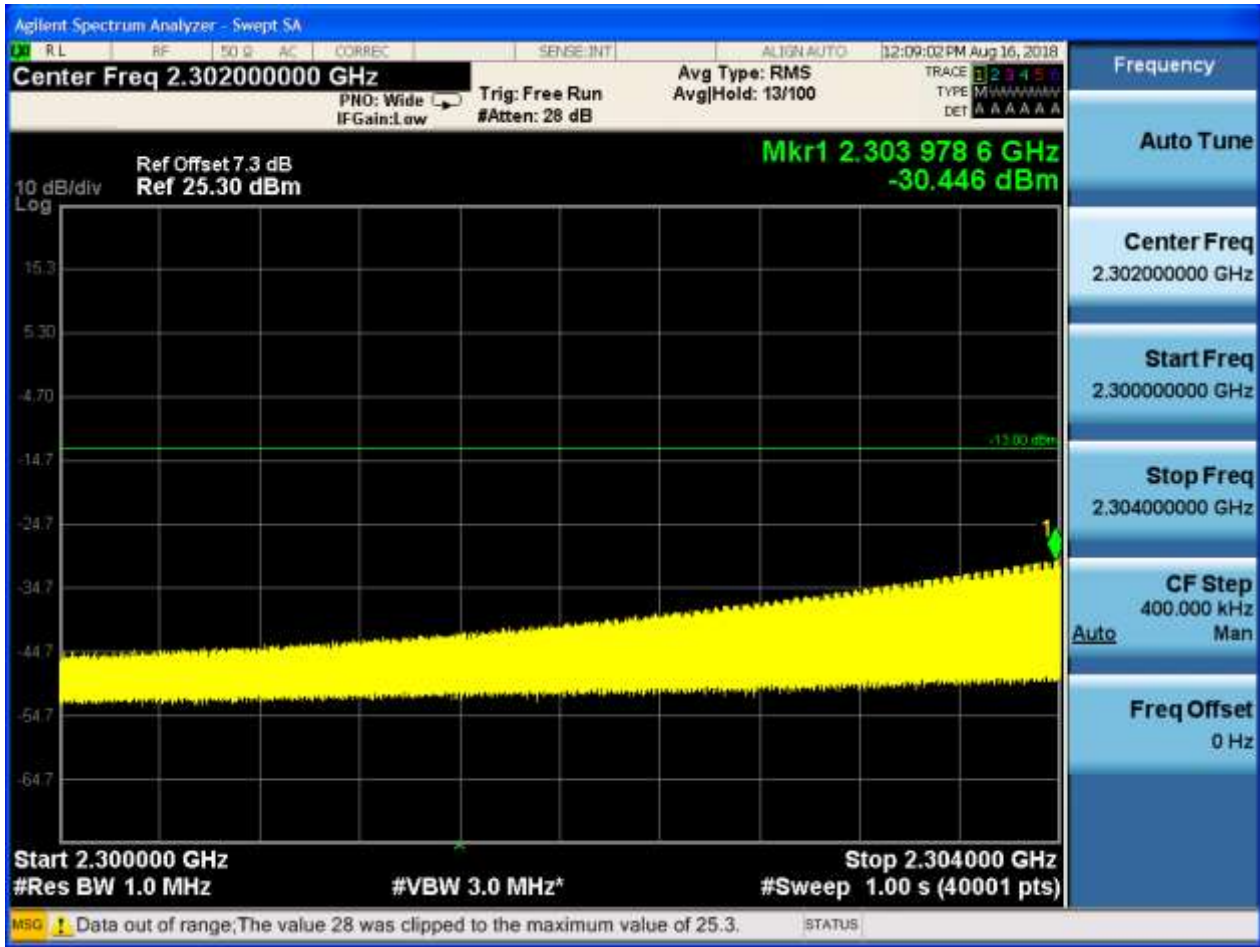


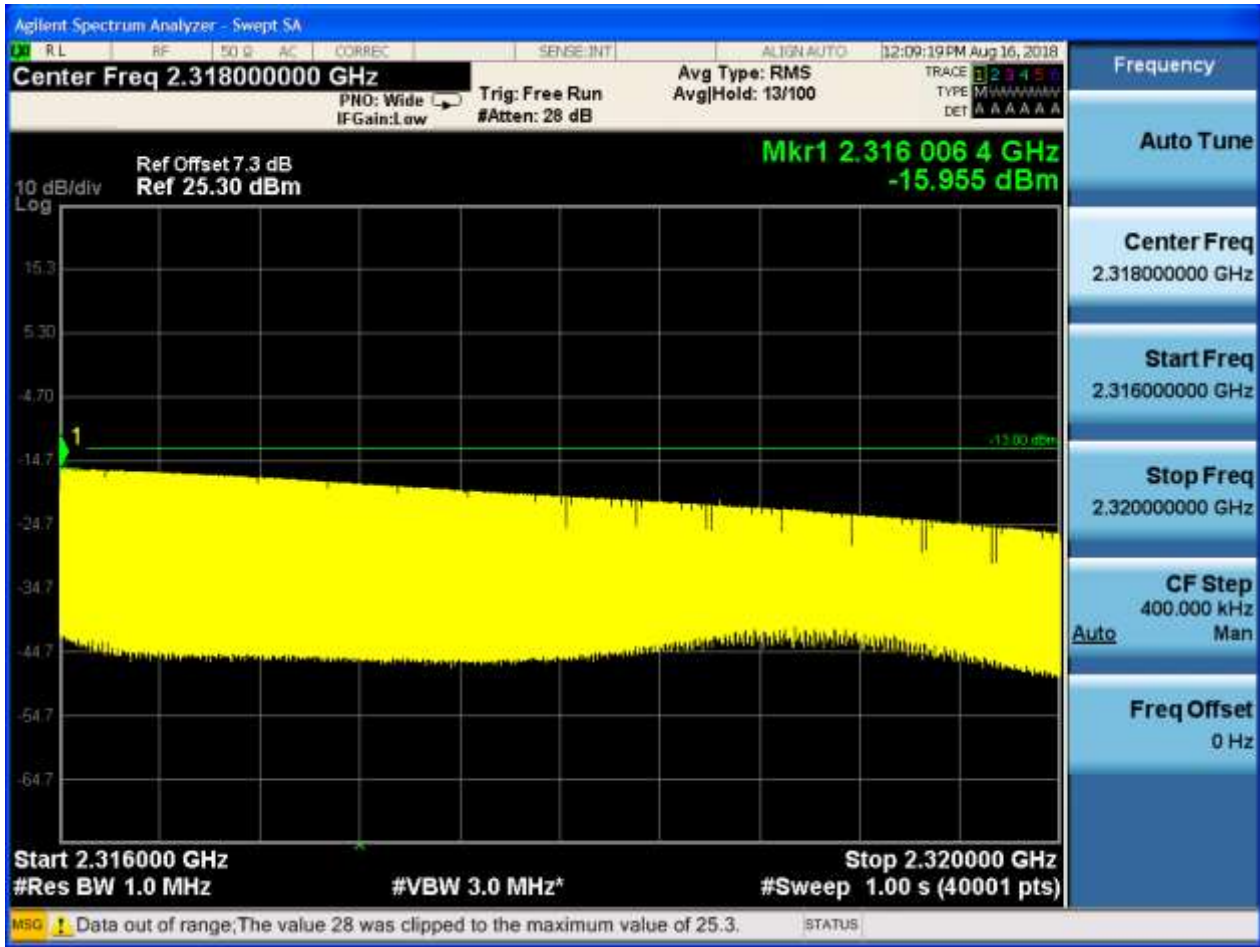


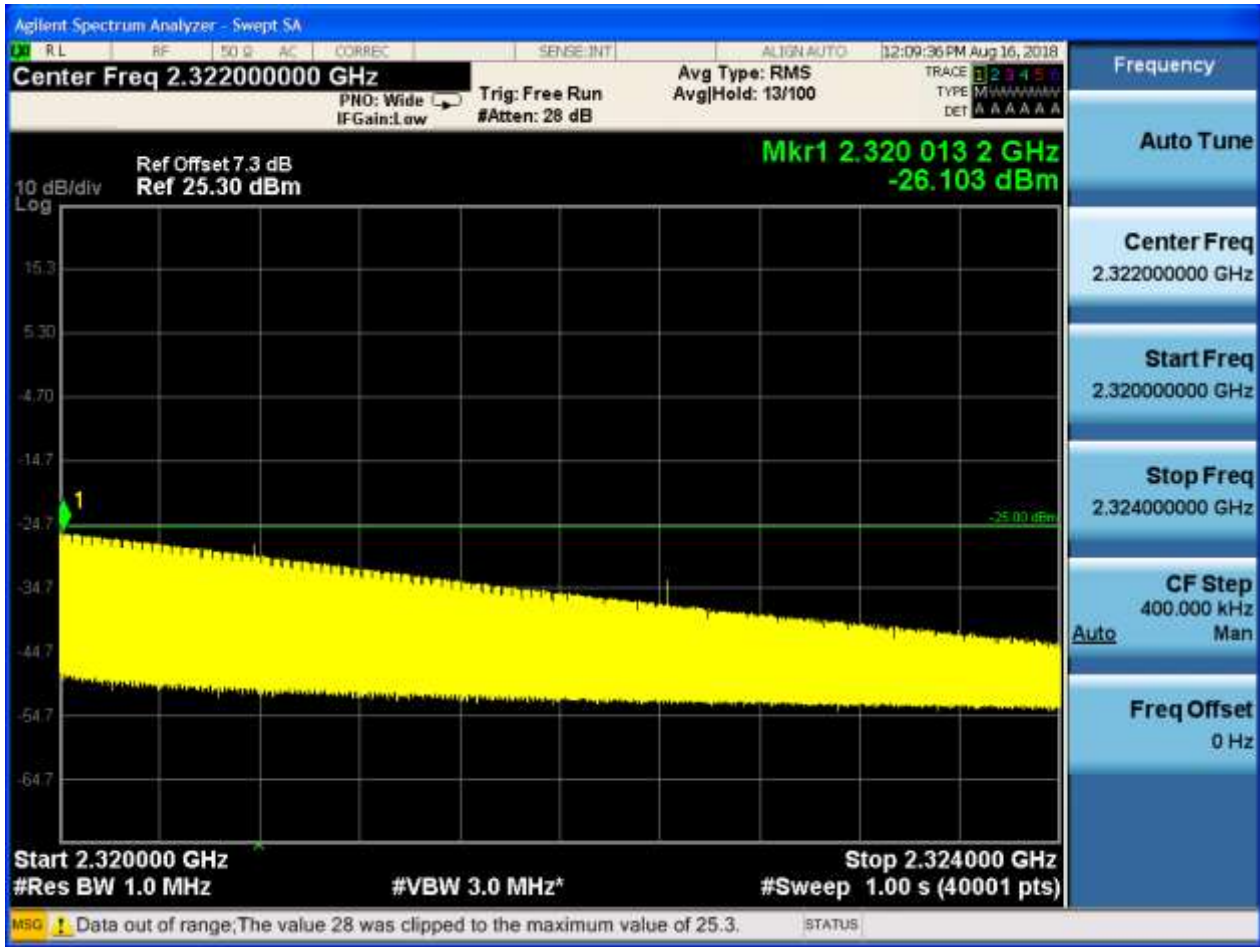


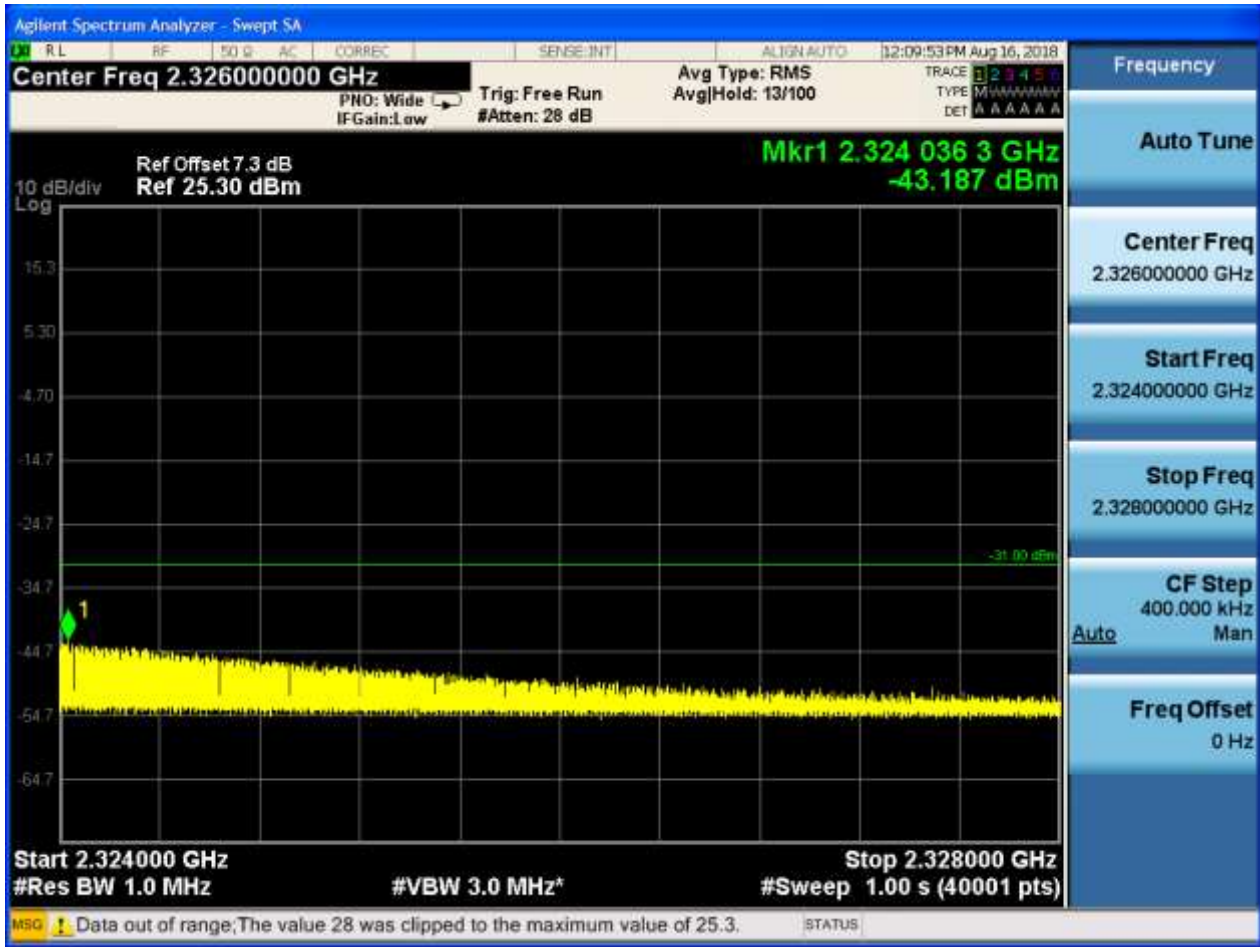


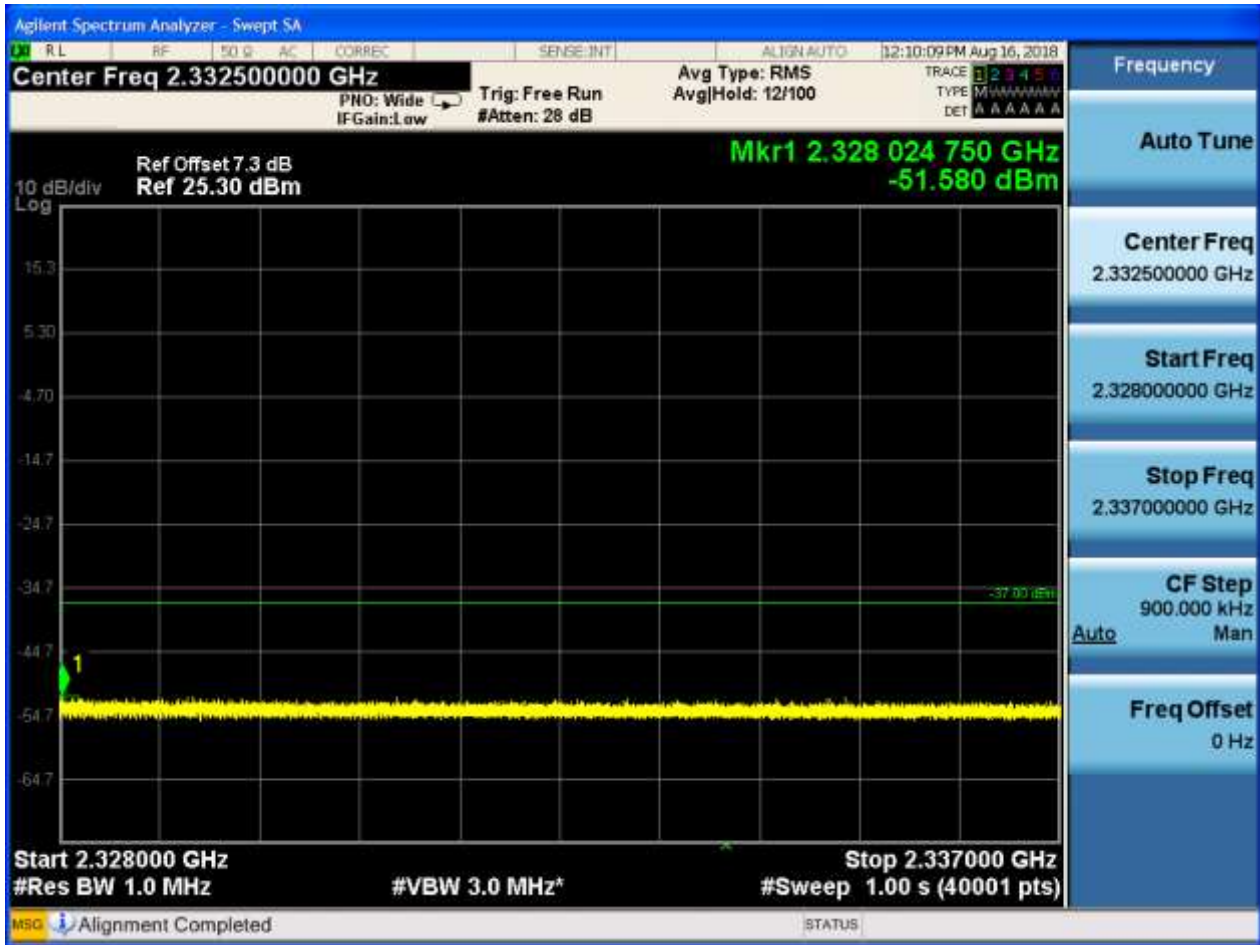






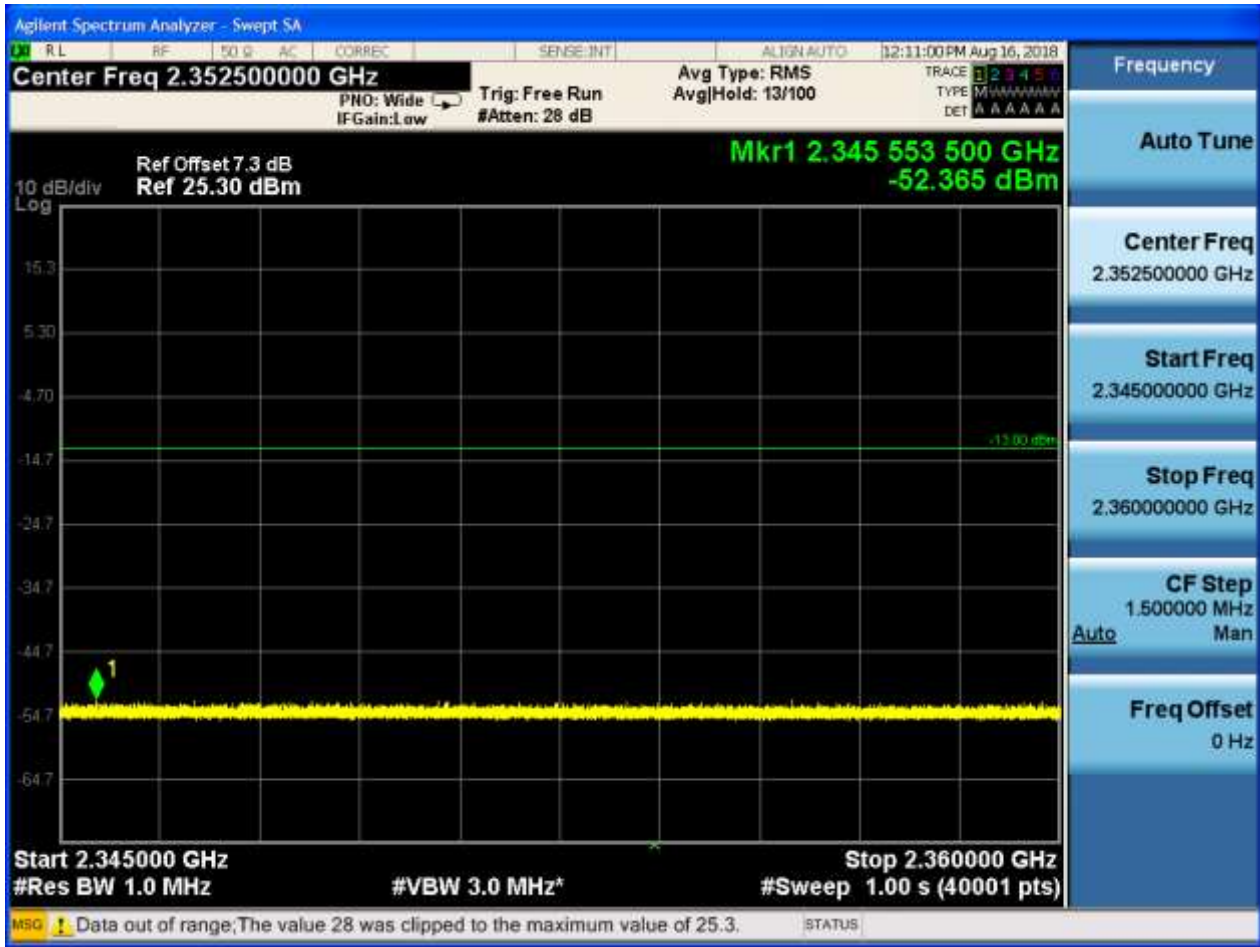






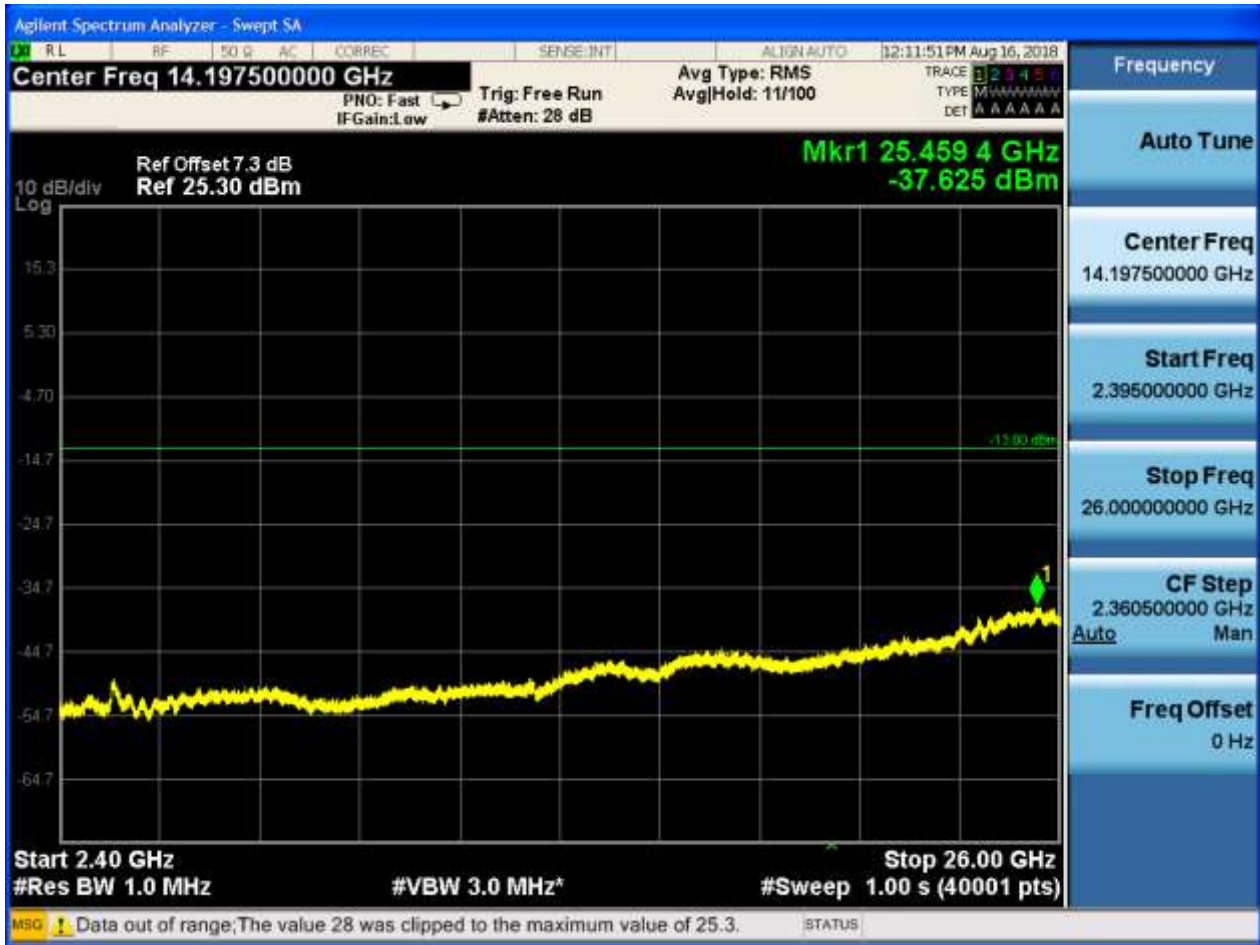










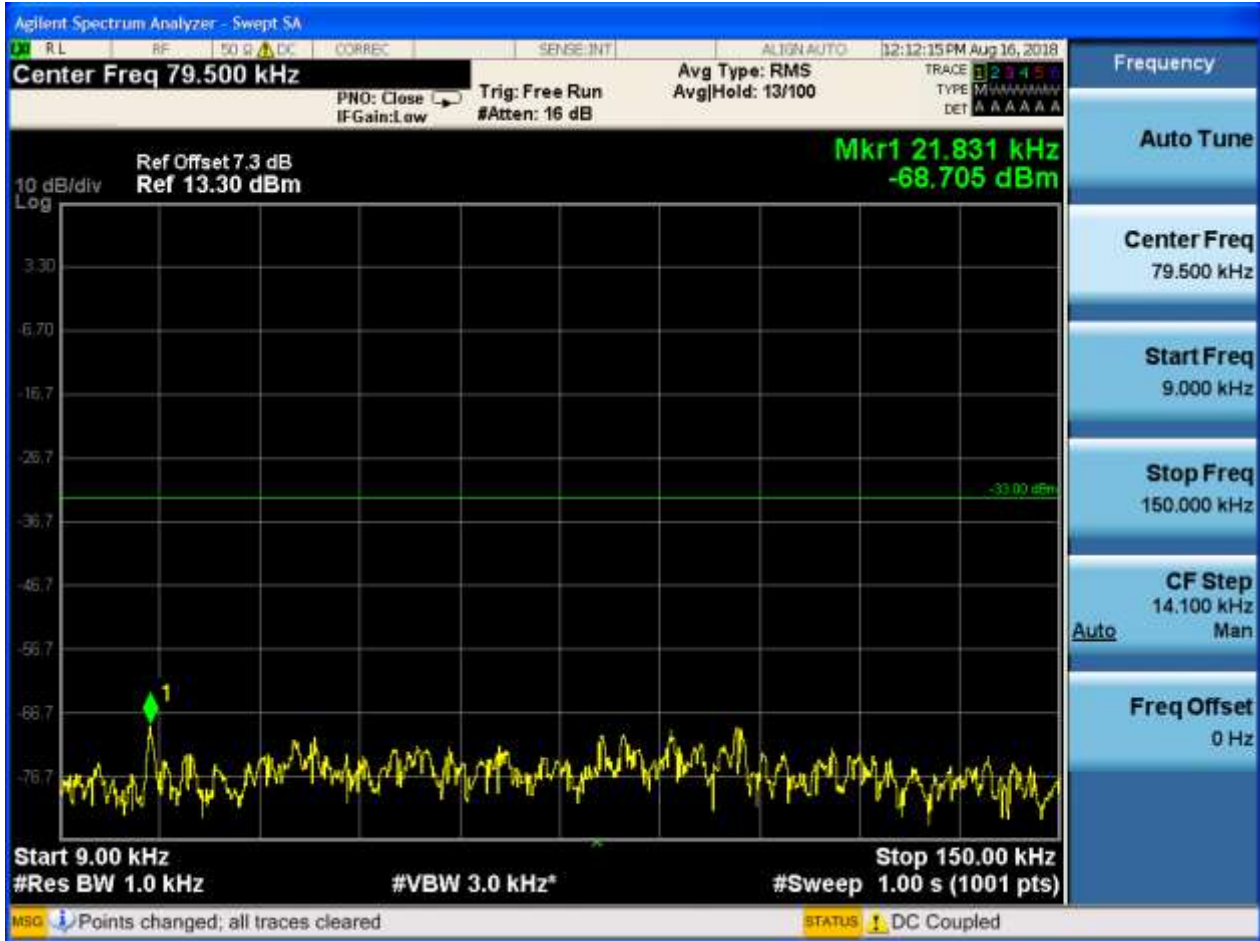




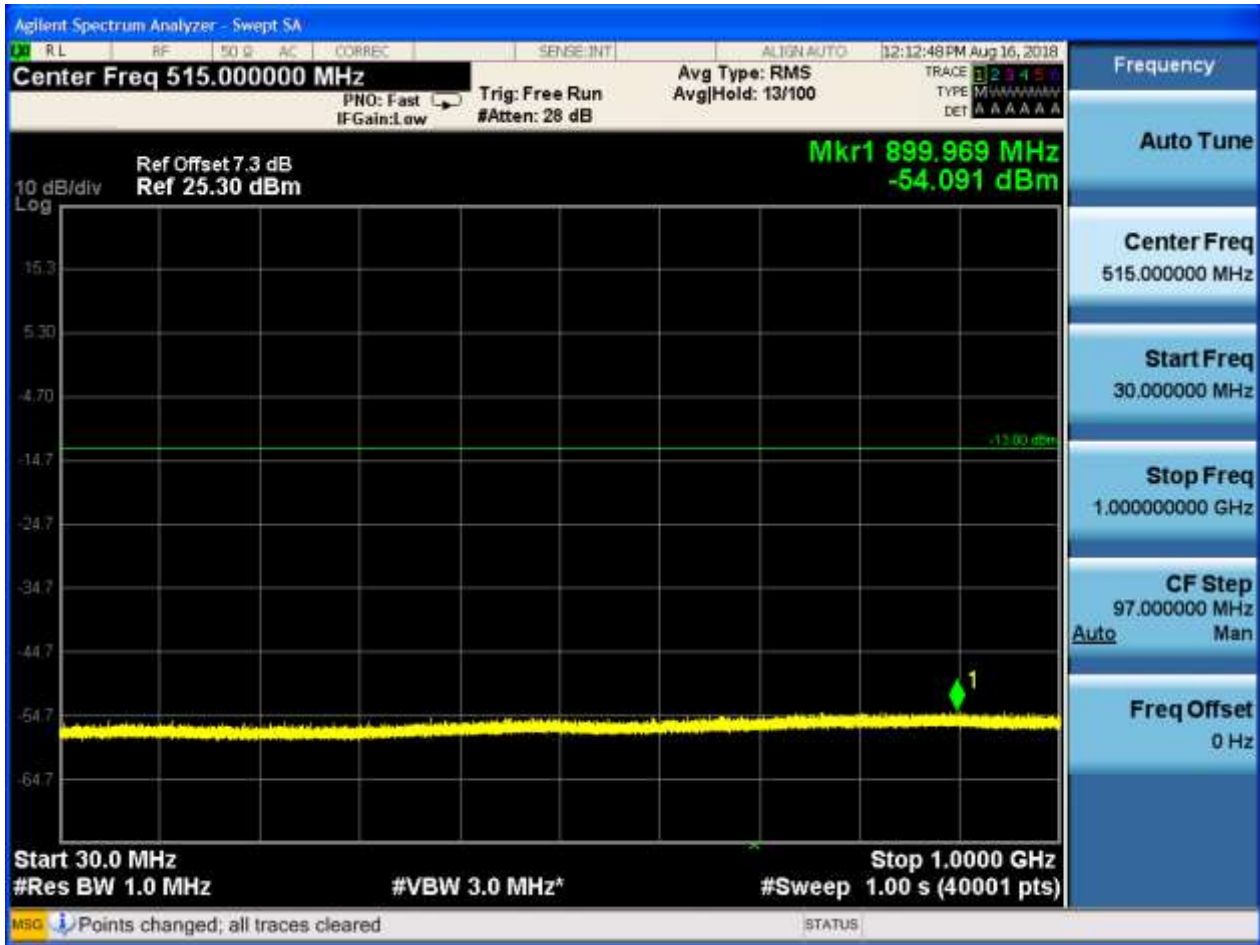
6.1.1.1.2 Test Bandwidth = 10

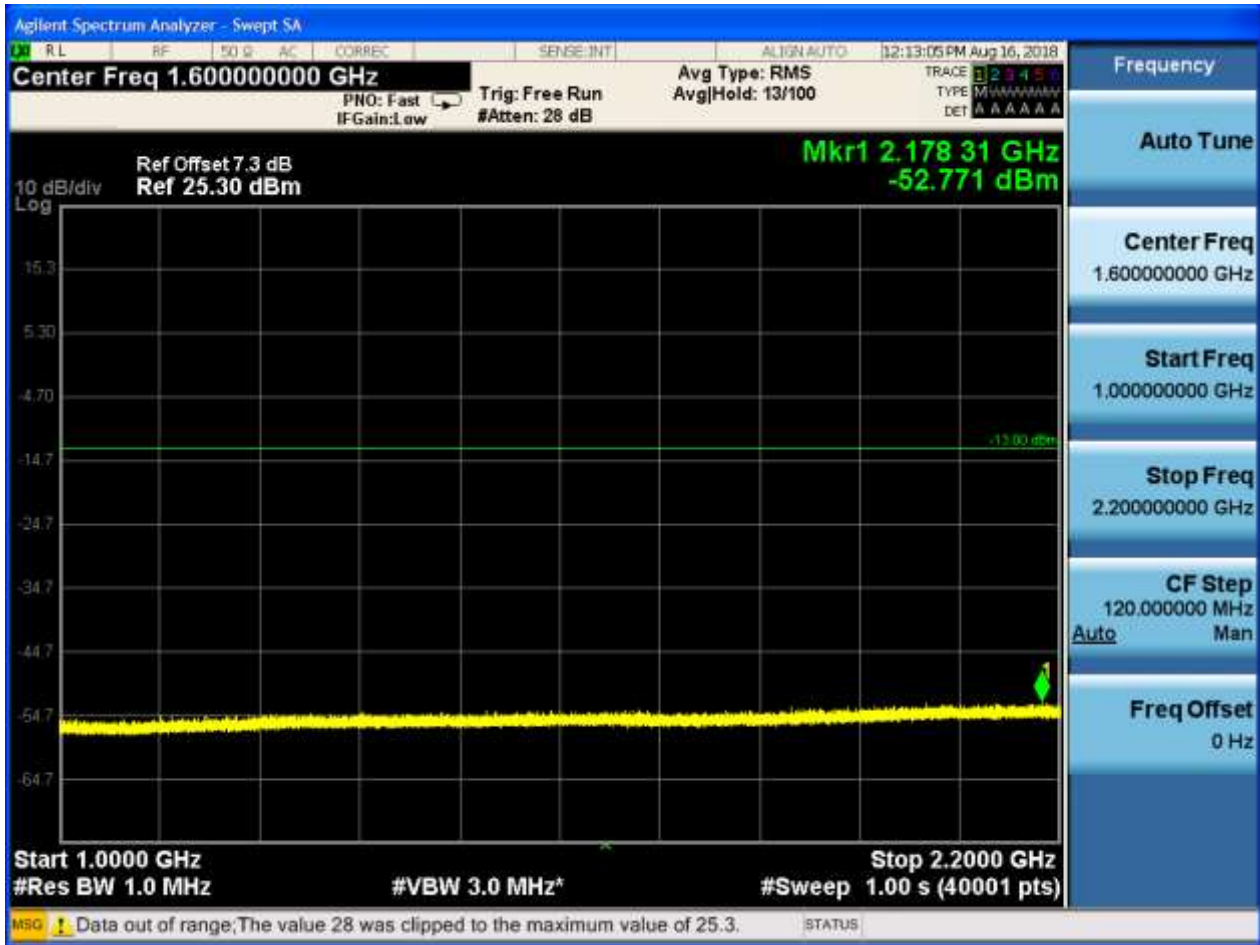
6.1.1.1.2.1 Test Channel = LCH/MCH/LCH

6.1.1.1.2.1.1 Test RB = RB1#0



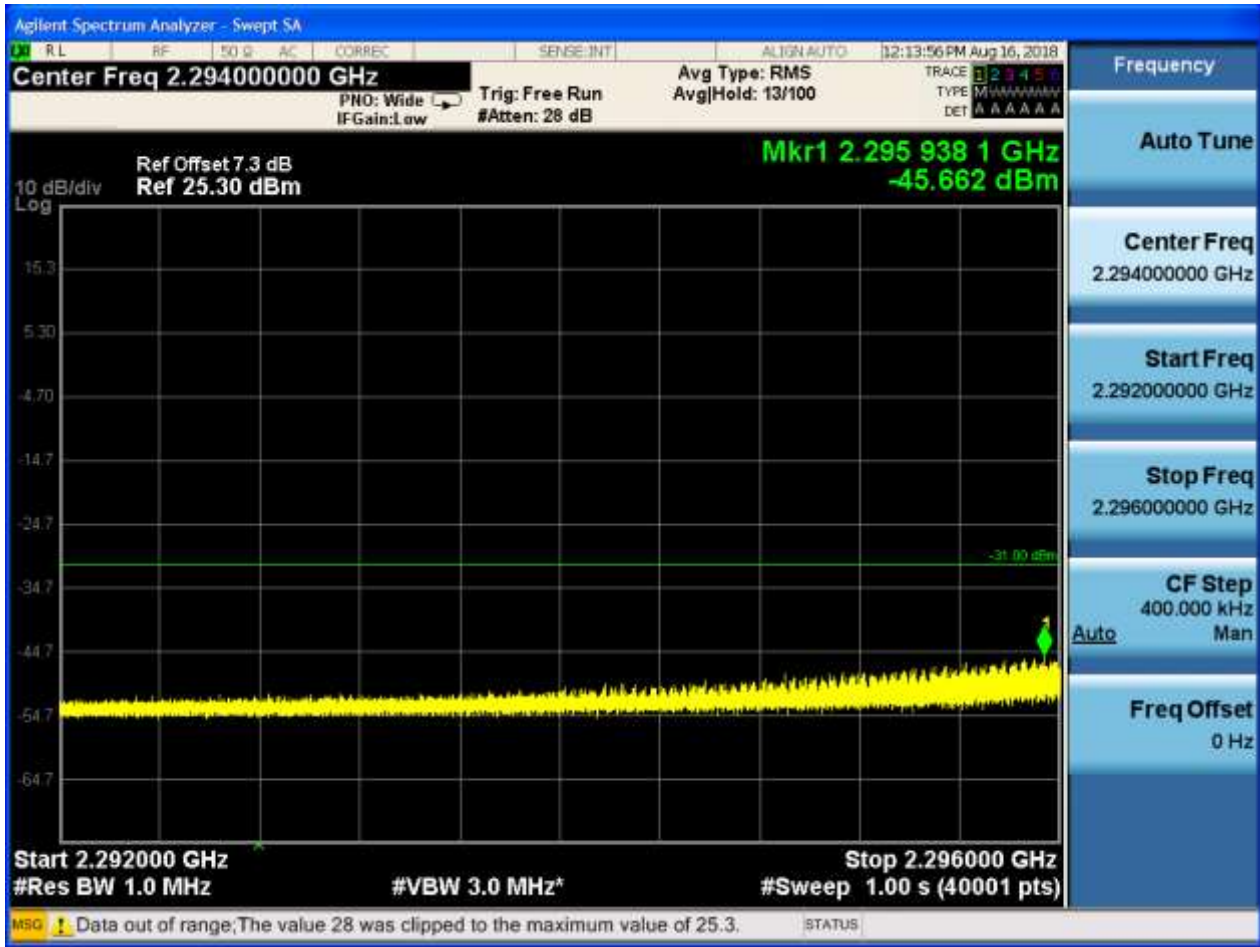


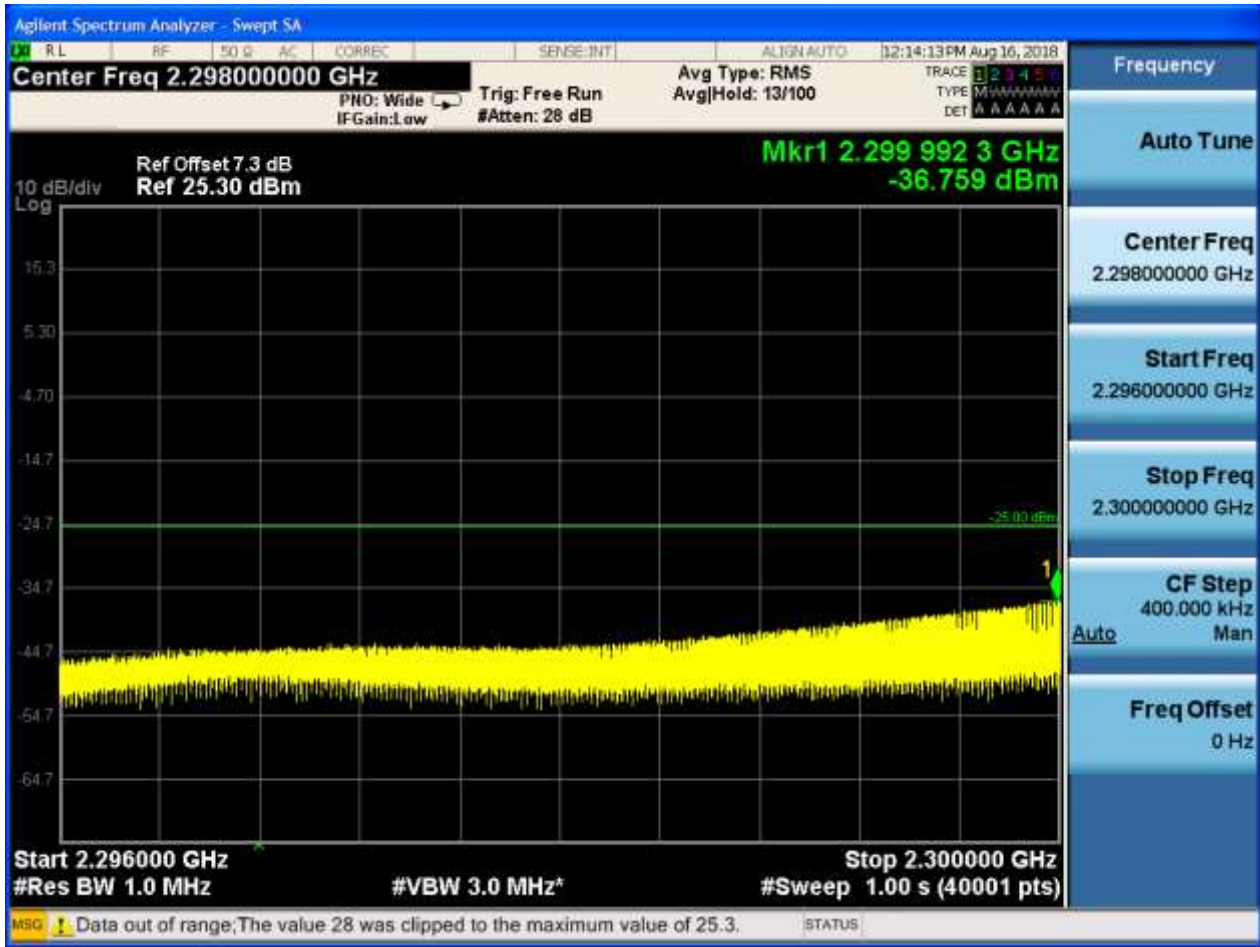


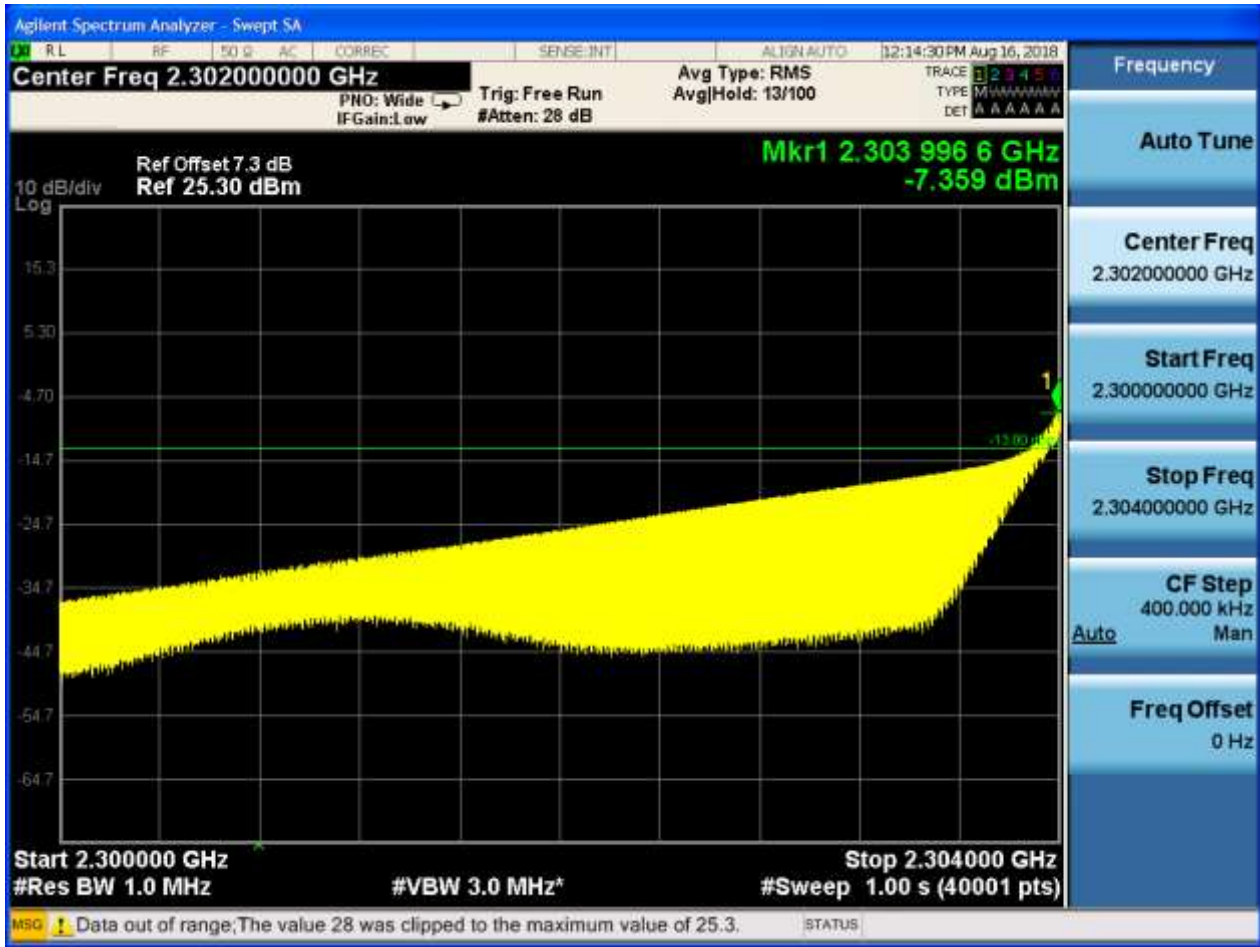










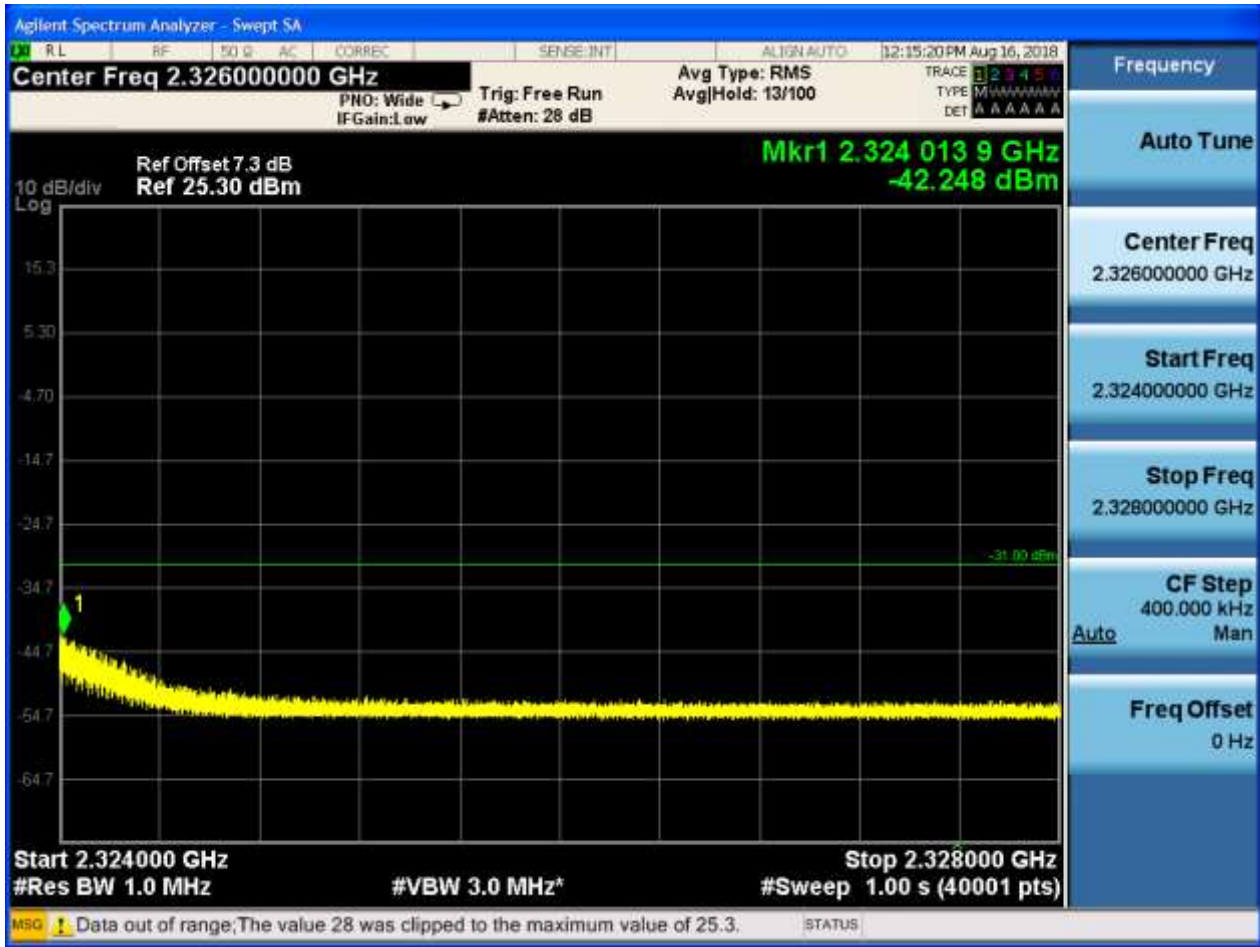


note: In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth is allowed to be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz 1%/2% of the occupied bandwidth, as applicable.





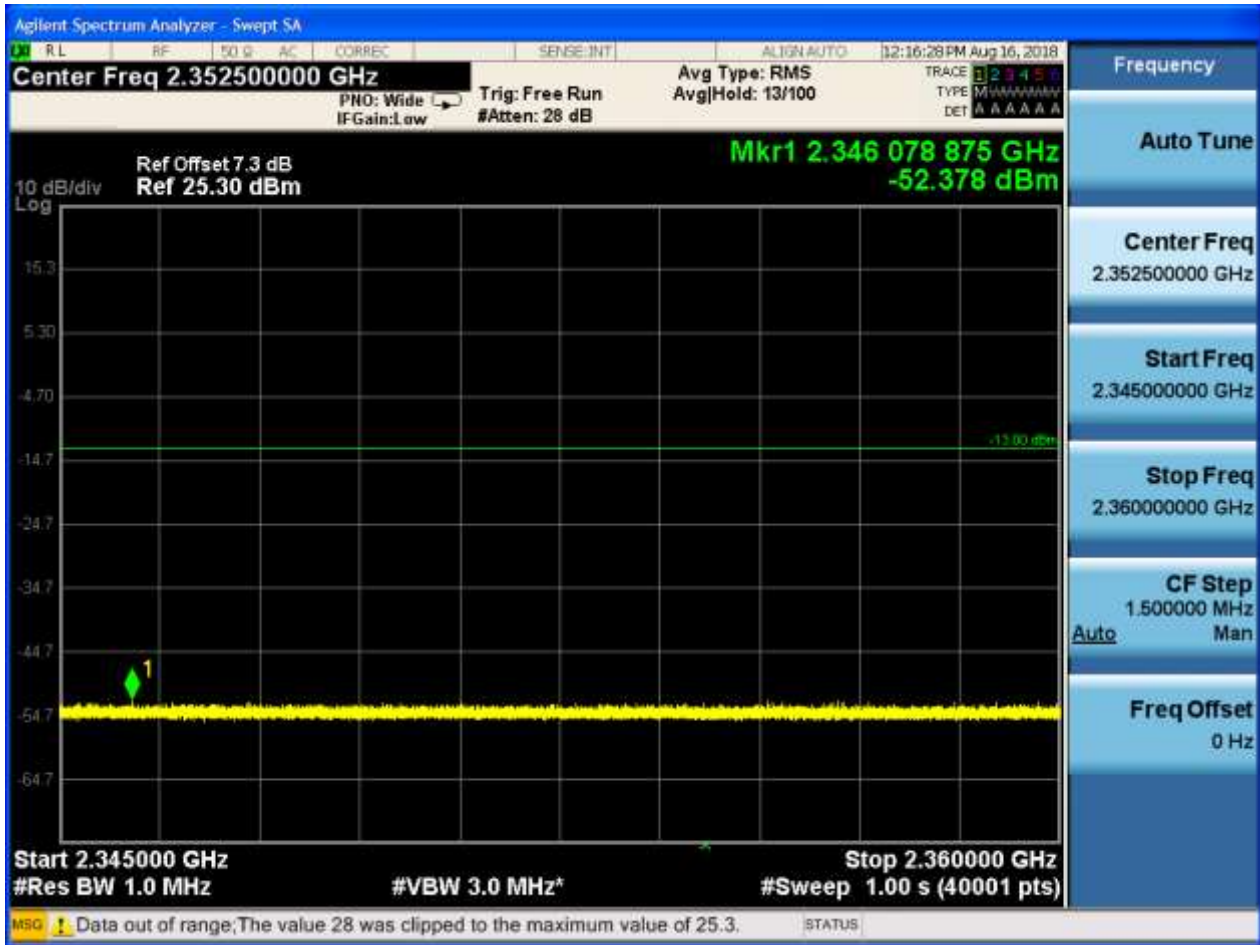


















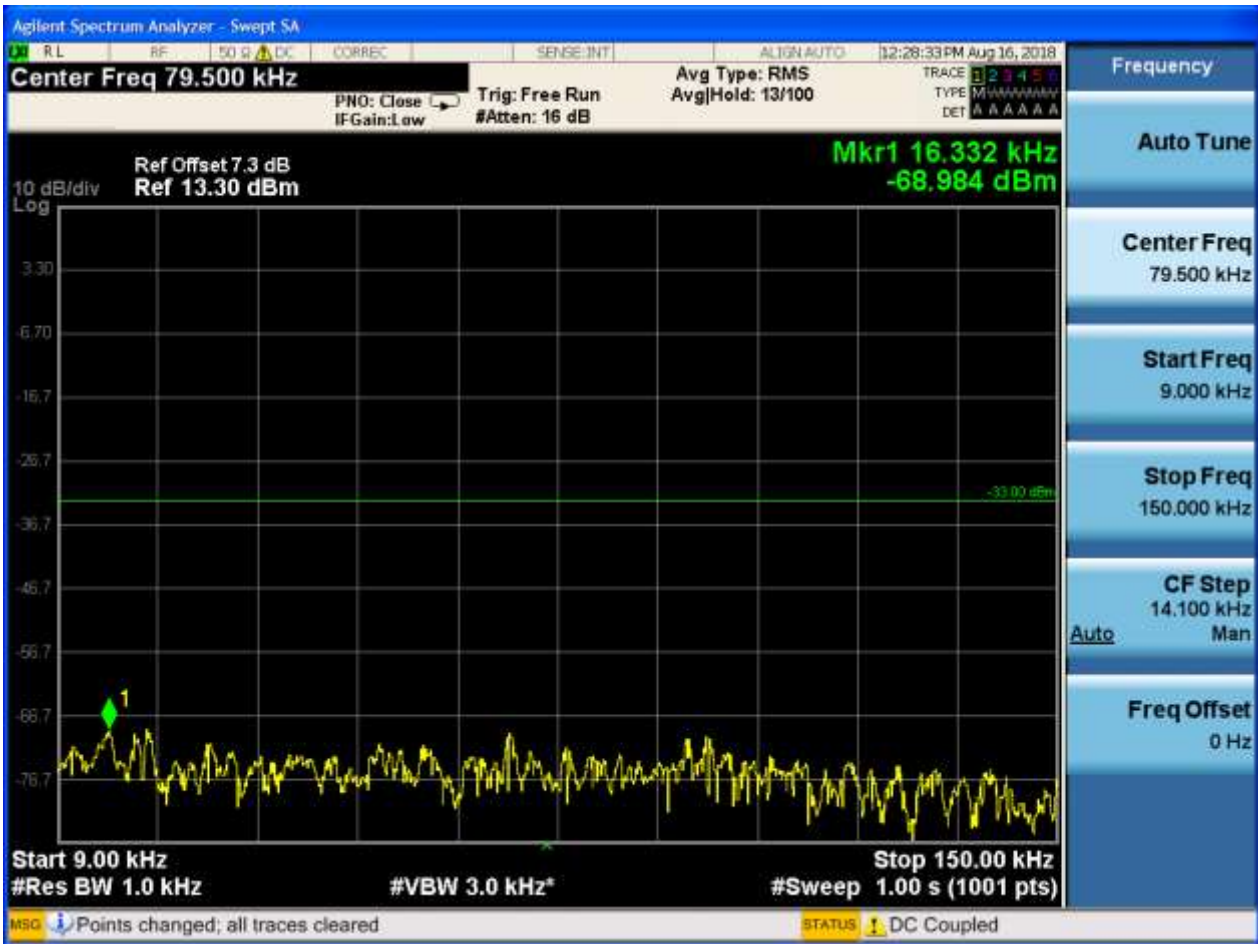


6.1.1.2 Test Mode = LTE/TM2

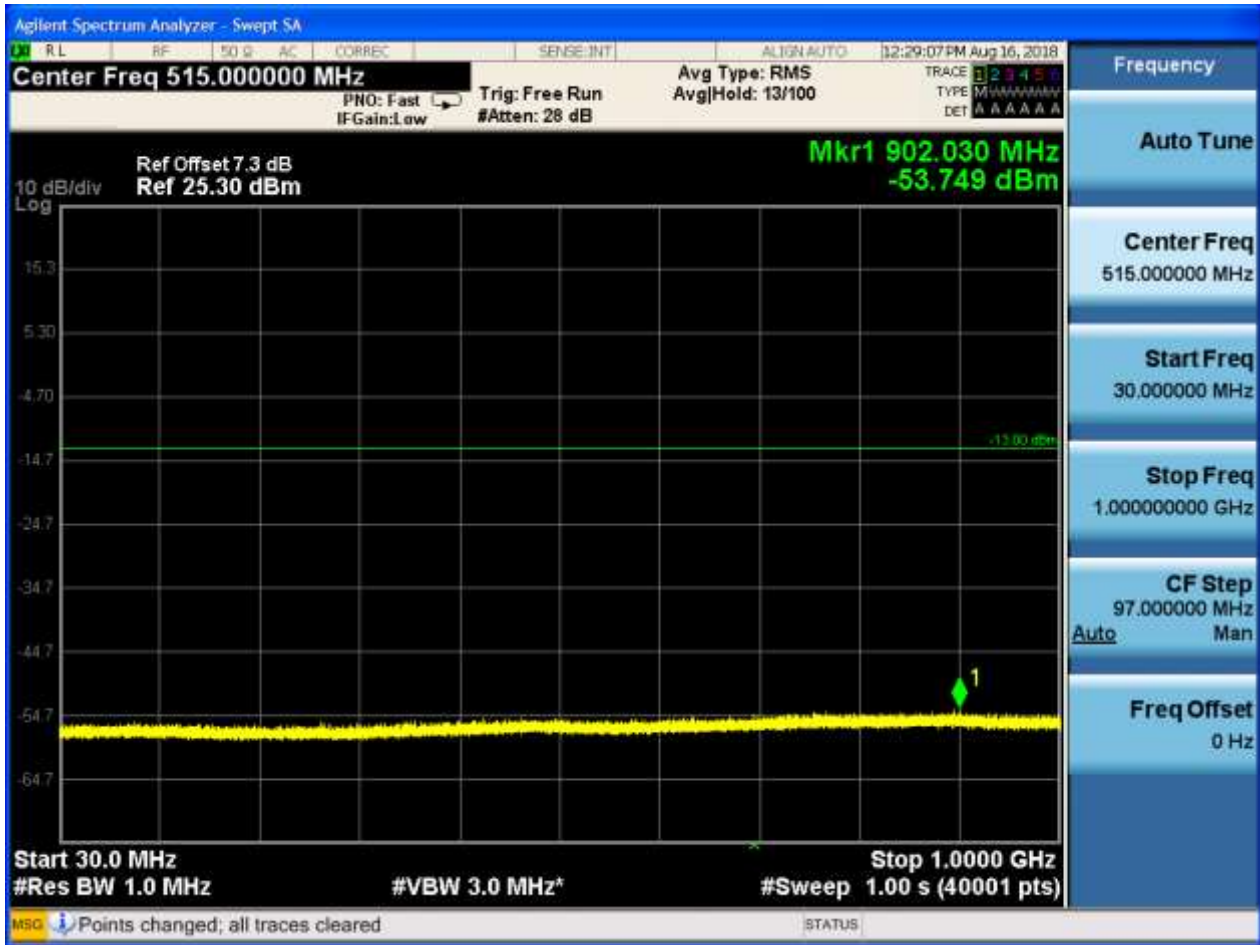
6.1.1.2.1 Test Bandwidth = 5

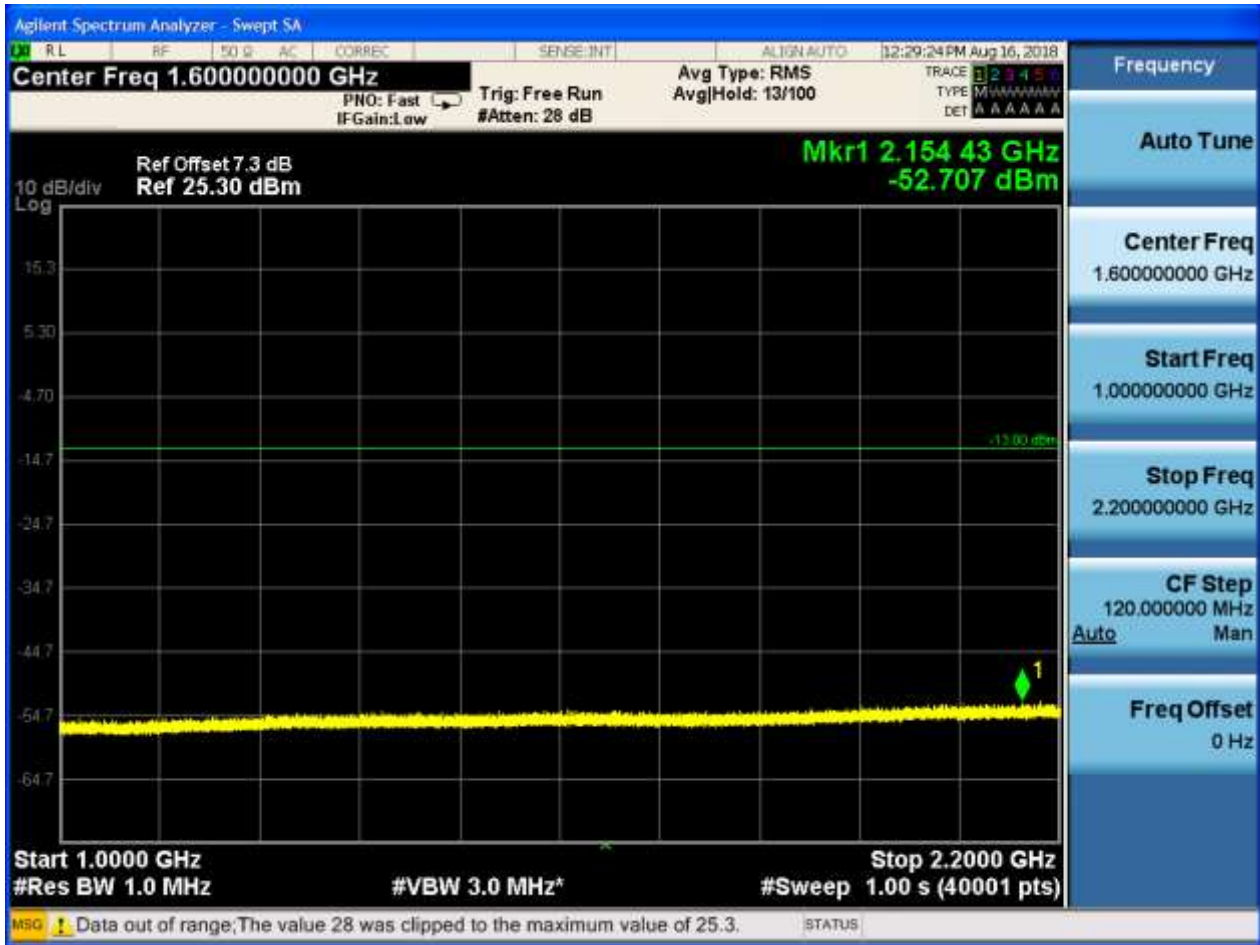
6.1.1.2.1.1 Test Channel = LCH

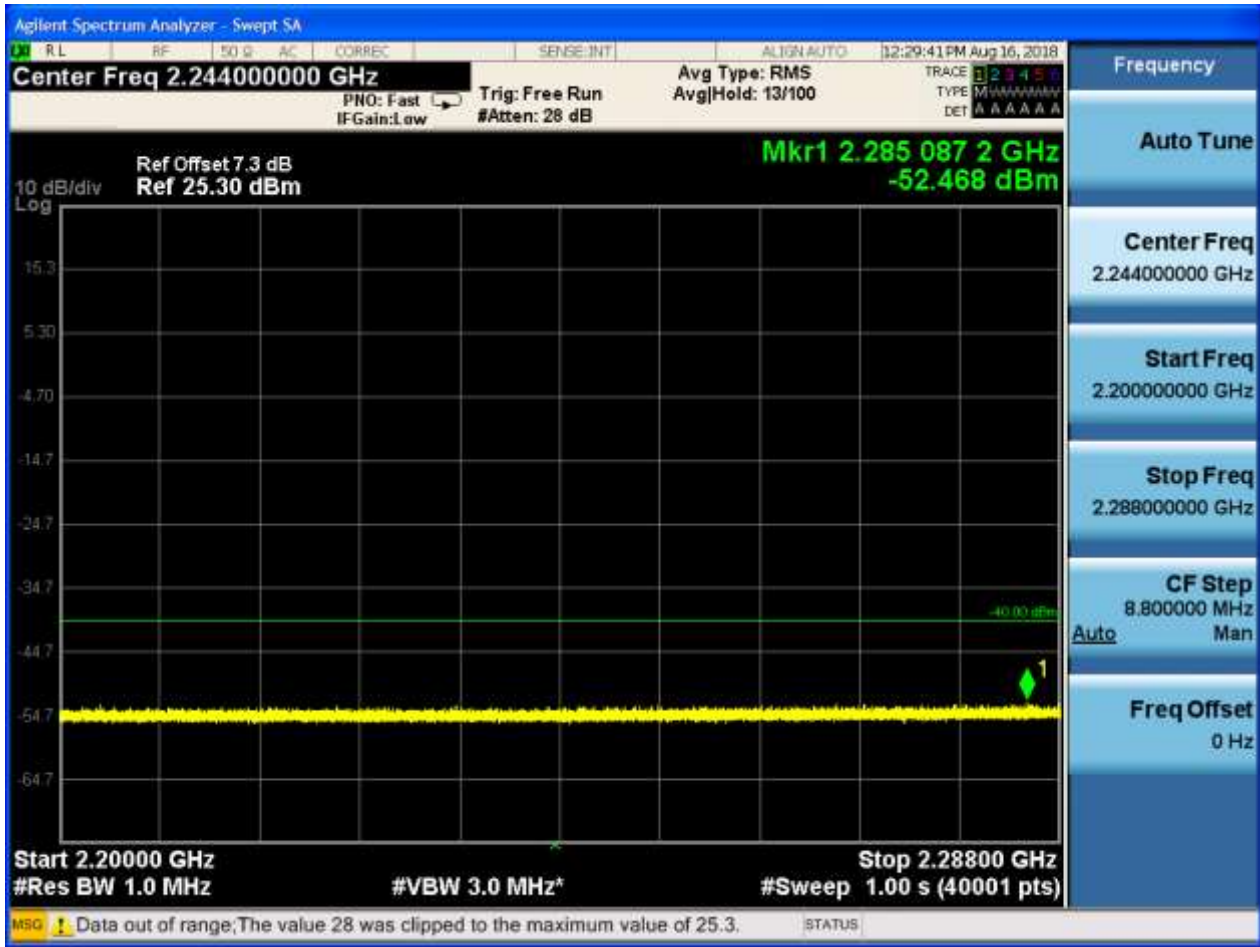
6.1.1.2.1.1.1 Test RB = RB1#0







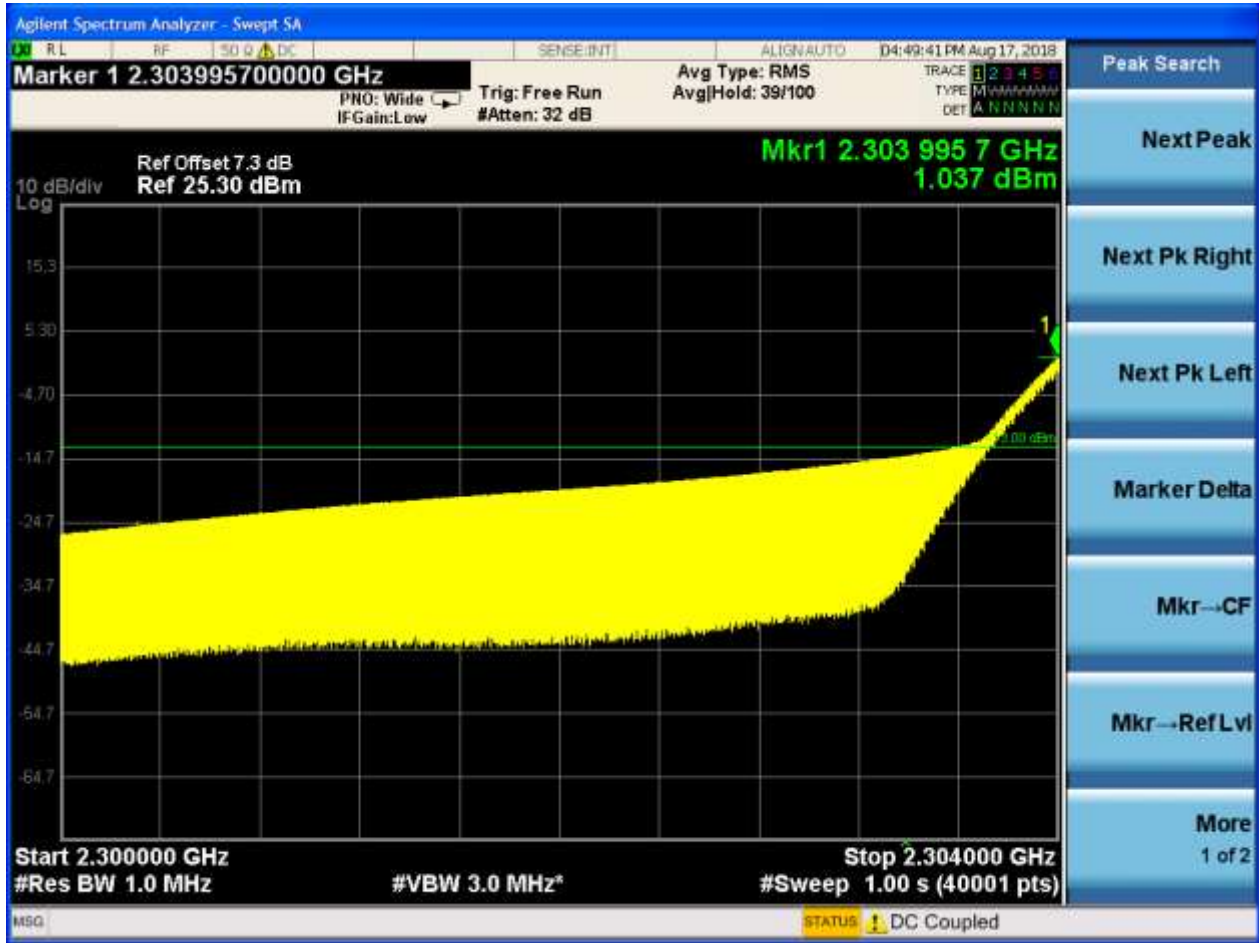






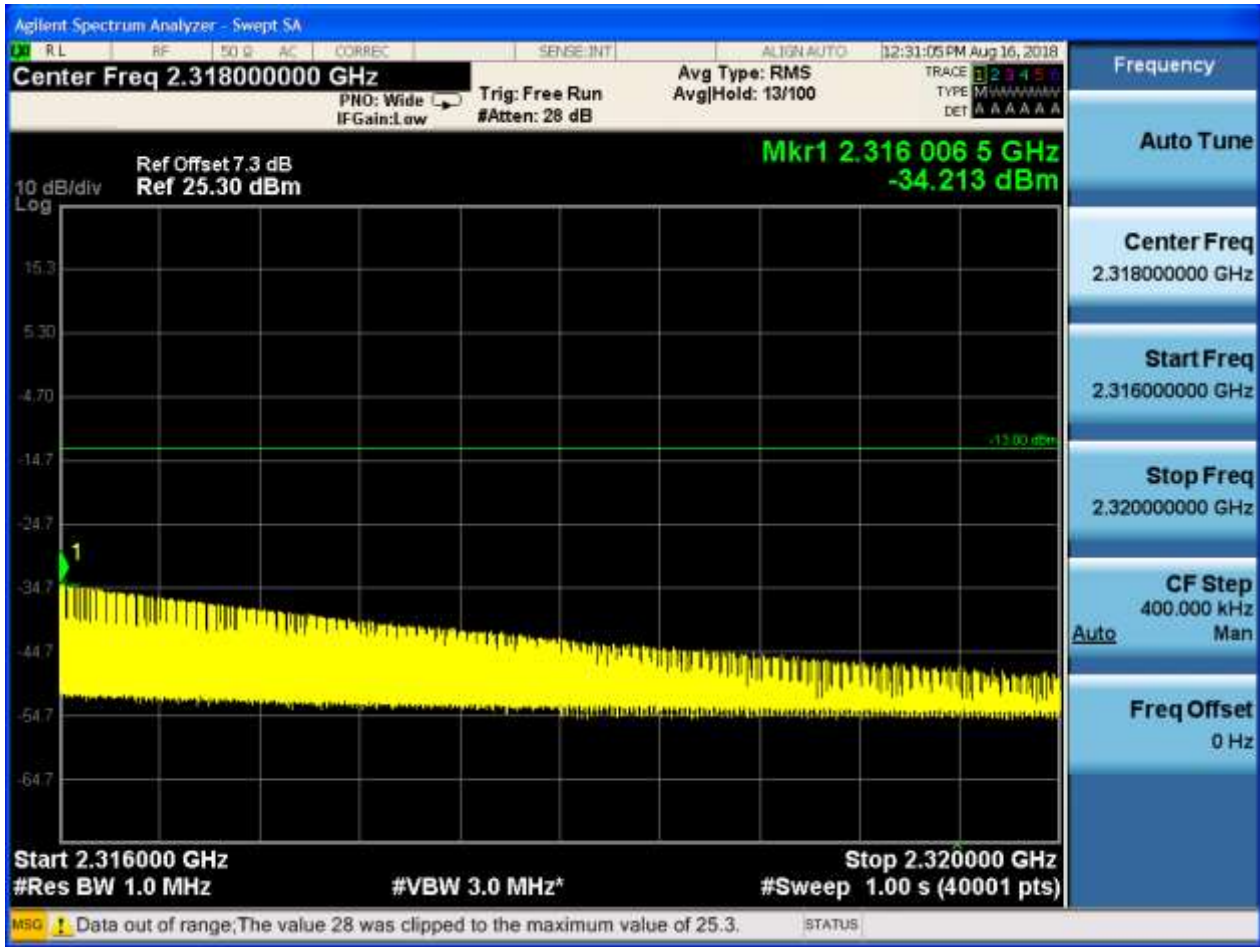






note: In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth is allowed to be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz 1%/2% of the occupied bandwidth, as applicable.



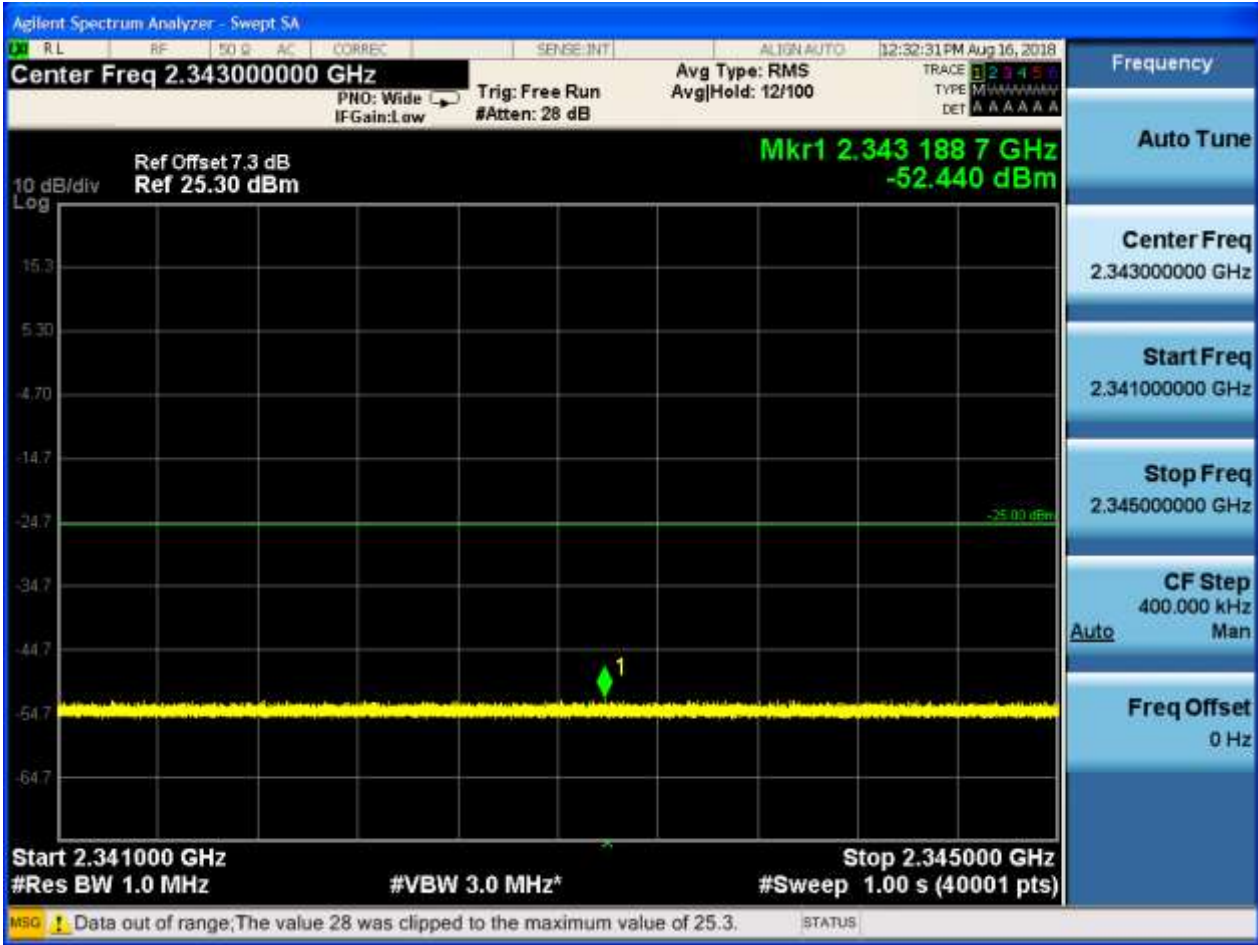




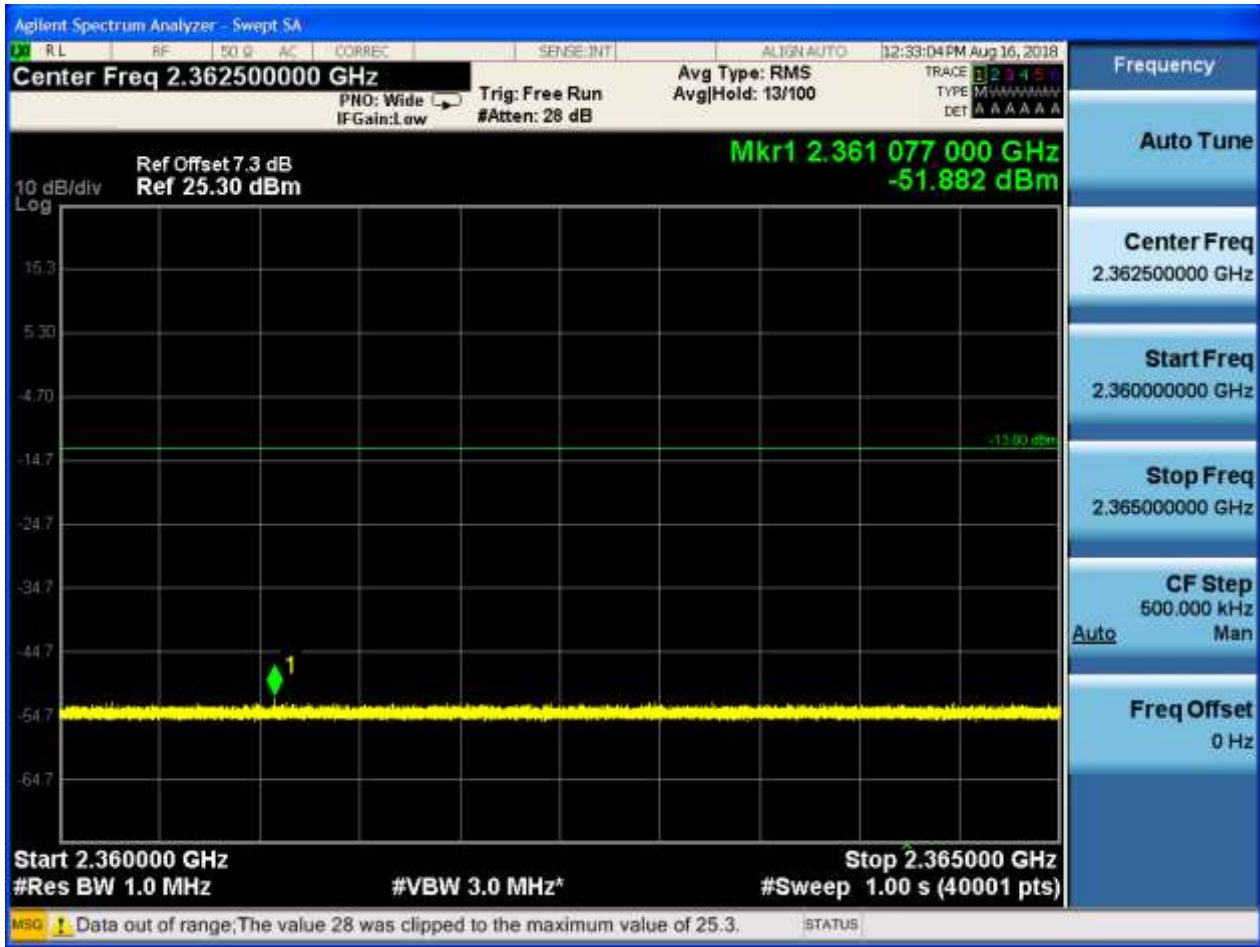




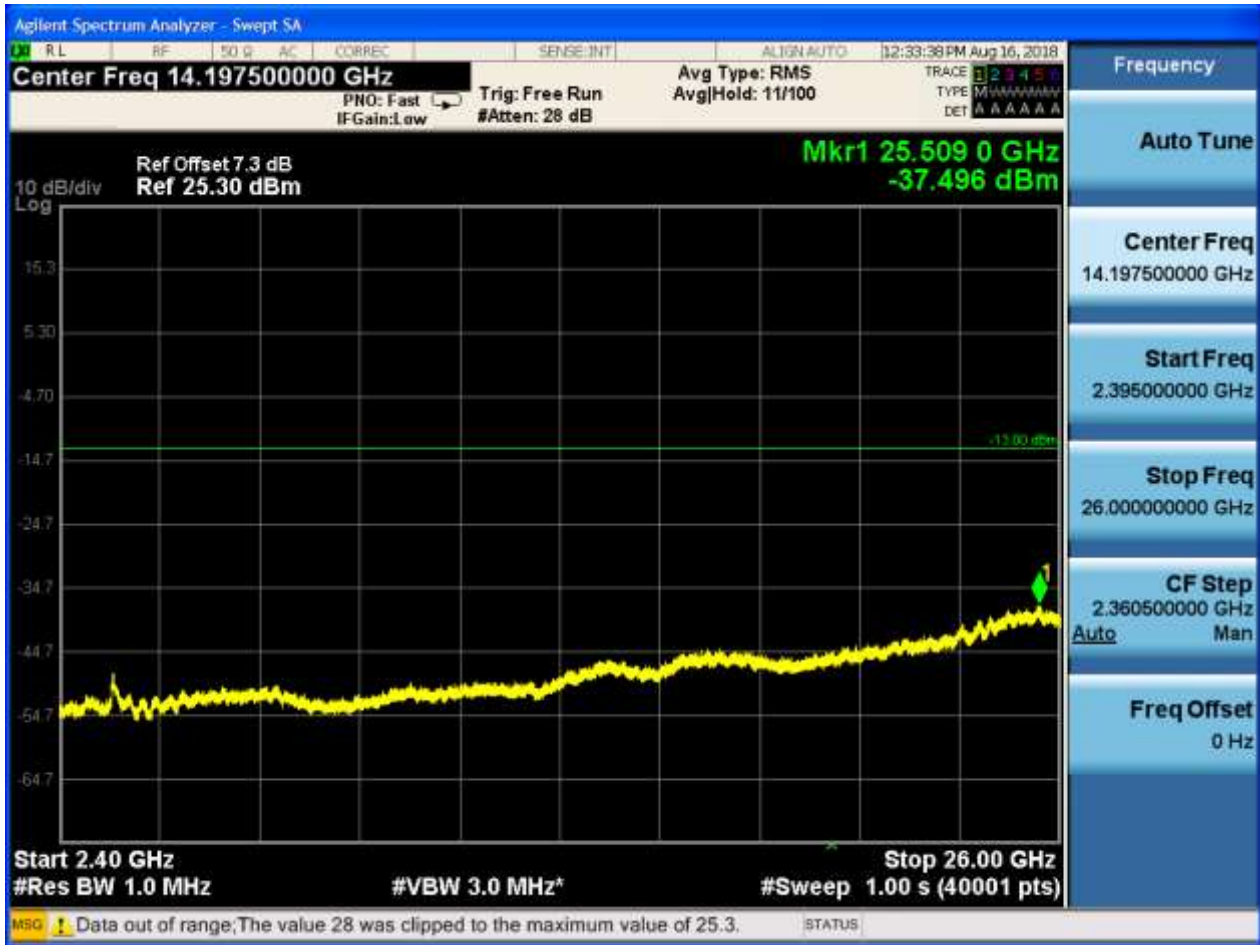














6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0

