



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]	ERP [dBm]	Limit [dBm]	Verdict
BAND17	LTE/TM1	5	LCH	RB1#0	23.24	18.39	34.7	PASS
				RB1#13	23.31	18.46	34.7	PASS
				RB1#24	23.22	18.37	34.7	PASS
				RB12#0	22.15	17.3	34.7	PASS
				RB12#6	22.13	17.28	34.7	PASS
				RB12#13	22.25	17.4	34.7	PASS
				RB25#0	22.2	17.35	34.7	PASS
			MCH	RB1#0	23.41	18.56	34.7	PASS
				RB1#13	23.15	18.3	34.7	PASS
				RB1#24	23.06	18.21	34.7	PASS
				RB12#0	22.04	17.19	34.7	PASS
				RB12#6	22.08	17.23	34.7	PASS
				RB12#13	22.17	17.32	34.7	PASS
				RB25#0	22.24	17.39	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	23.3	18.45	34.7	PASS
				RB1#13	23.17	18.32	34.7	PASS
				RB1#24	23.02	18.17	34.7	PASS
				RB12#0	22.29	17.44	34.7	PASS
				RB12#6	22.27	17.42	34.7	PASS
				RB12#13	22.15	17.3	34.7	PASS
				RB25#0	22.18	17.33	34.7	PASS
		10	LCH	RB1#0	23.44	18.59	34.7	PASS
				RB1#25	23.43	18.58	34.7	PASS
				RB1#49	23.46	18.61	34.7	PASS
				RB25#0	22.32	17.47	34.7	PASS
				RB25#13	22.27	17.42	34.7	PASS
				RB25#25	22.29	17.44	34.7	PASS
				RB50#0	22.36	17.51	34.7	PASS
			MCH	RB1#0	23.6	18.75	34.7	PASS
				RB1#25	23.37	18.52	34.7	PASS
				RB1#49	23.38	18.53	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			I	RB25#0	22.34	17.49	34.7	PASS
				RB25#13	22.23	17.38	34.7	PASS
				RB25#25	22.28	17.43	34.7	PASS
				RB50#0	22.29	17.44	34.7	PASS
			HCH	RB1#0	23.33	18.48	34.7	PASS
				RB1#25	23.24	18.39	34.7	PASS
				RB1#49	23.12	18.27	34.7	PASS
				RB25#0	22.32	17.47	34.7	PASS
				RB25#13	22.23	17.38	34.7	PASS
				RB25#25	22.15	17.3	34.7	PASS
				RB50#0	22.23	17.38	34.7	PASS
			LCH	RB1#0	22.44	17.59	34.7	PASS
				RB1#13	22.39	17.54	34.7	PASS
				RB1#24	22.5	17.65	34.7	PASS
	RB12#0	21.18		16.33	34.7	PASS		
	RB12#6	21.17		16.32	34.7	PASS		
	RB12#13	21.11		16.26	34.7	PASS		
	LTE/TM2	5						



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.18	16.33	34.7	PASS
			MCH	RB1#0	22.65	17.8	34.7	PASS
				RB1#13	22.29	17.44	34.7	PASS
				RB1#24	22.29	17.44	34.7	PASS
				RB12#0	21.12	16.27	34.7	PASS
				RB12#6	21.16	16.31	34.7	PASS
				RB12#13	21.25	16.4	34.7	PASS
				RB25#0	21.34	16.49	34.7	PASS
				HCH	RB1#0	22.69	17.84	34.7
			RB1#13		22.35	17.5	34.7	PASS
			RB1#24		22.24	17.39	34.7	PASS
			RB12#0		21.08	16.23	34.7	PASS
			RB12#6		21.1	16.25	34.7	PASS
			RB12#13		20.97	16.12	34.7	PASS
			RB25#0		21.17	16.32	34.7	PASS
		10	LCH	RB1#0	22.53	17.68	34.7	PASS
				RB1#25	22.47	17.62	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	22.47	17.62	34.7	PASS
				RB25#0	21.37	16.52	34.7	PASS
				RB25#13	21.2	16.35	34.7	PASS
				RB25#25	21.18	16.33	34.7	PASS
				RB50#0	21.22	16.37	34.7	PASS
			MCH	RB1#0	22.78	17.93	34.7	PASS
				RB1#25	22.5	17.65	34.7	PASS
				RB1#49	22.46	17.61	34.7	PASS
				RB25#0	21.36	16.51	34.7	PASS
				RB25#13	21.25	16.4	34.7	PASS
				RB25#25	21.38	16.53	34.7	PASS
				RB50#0	21.24	16.39	34.7	PASS
			HCH	RB1#0	22.64	17.79	34.7	PASS
				RB1#25	21.98	17.13	34.7	PASS
				RB1#49	21.99	17.14	34.7	PASS
				RB25#0	21.27	16.42	34.7	PASS
				RB25#13	21.27	16.42	34.7	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel I	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.28	16.43	34.7	PASS
				RB50#0	21.19	16.34	34.7	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
BAND17	LTE/TM1	5	LCH	RB1#0	3.78	13	PASS
				RB1#13	3.76	13	PASS
				RB1#24	3.81	13	PASS
				RB12#0	4.48	13	PASS
				RB12#6	4.41	13	PASS
				RB12#13	4.49	13	PASS
				RB25#0	5.2	13	PASS
			MCH	RB1#0	3.71	13	PASS
				RB1#13	3.9	13	PASS
				RB1#24	3.92	13	PASS
				RB12#0	4.52	13	PASS
				RB12#6	4.52	13	PASS
				RB12#13	4.63	13	PASS
				RB25#0	5.12	13	PASS
		HCH	RB1#0	3.88	13	PASS	
			RB1#13	3.77	13	PASS	
			RB1#24	3.71	13	PASS	
			RB12#0	4.63	13	PASS	
			RB12#6	4.42	13	PASS	
			RB12#13	4.49	13	PASS	
			RB25#0	5.2	13	PASS	
		10	LCH	RB1#0	3.62	13	PASS
				RB1#25	3.73	13	PASS
				RB1#49	3.67	13	PASS
				RB25#0	4.43	13	PASS
				RB25#13	4.46	13	PASS
				RB25#25	4.61	13	PASS
				RB50#0	5.57	13	PASS
MCH	RB1#0		3.45	13	PASS		
	RB1#25		3.81	13	PASS		
	RB1#49		3.6	13	PASS		
	RB25#0		4.45	13	PASS		
	RB25#13		4.52	13	PASS		



Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict			
				RB25#25	4.58	13	PASS			
				RB50#0	5.42	13	PASS			
			HCH	RB1#0	3.66	13	PASS			
				RB1#25	3.9	13	PASS			
				RB1#49	3.65	13	PASS			
				RB25#0	4.6	13	PASS			
				RB25#13	4.54	13	PASS			
				RB25#25	4.56	13	PASS			
				RB50#0	5.57	13	PASS			
			LCH	RB1#0	4.65	13	PASS			
				RB1#13	4.62	13	PASS			
				RB1#24	4.7	13	PASS			
				RB12#0	5.27	13	PASS			
				RB12#6	5.22	13	PASS			
				RB12#13	5.33	13	PASS			
	RB25#0	6.13		13	PASS					
	MCH	RB1#0	4.63	13	PASS					
		RB1#13	4.84	13	PASS					
		RB1#24	4.8	13	PASS					
		RB12#0	5.37	13	PASS					
		RB12#6	5.37	13	PASS					
		RB12#13	5.42	13	PASS					
		RB25#0	6.13	13	PASS					
	HCH	RB1#0	4.22	13	PASS					
		RB1#13	4.03	13	PASS					
		RB1#24	4.09	13	PASS					
		RB12#0	5.49	13	PASS					
		RB12#6	5.38	13	PASS					
		RB12#13	5.33	13	PASS					
		RB25#0	6.33	13	PASS					
5			LCH	RB1#0	4.68	13	PASS			
				RB1#25	4.48	13	PASS			
				RB1#49	4.54	13	PASS			
				RB25#0	5.46	13	PASS			
				RB25#13	5.45	13	PASS			
				RB25#25	5.62	13	PASS			
				RB50#0	6.2	13	PASS			
			MCH	RB1#0	4.71	13	PASS			
				RB1#25	4.51	13	PASS			
			10				RB1#0	4.65	13	PASS
							RB1#13	4.62	13	PASS
							RB1#24	4.7	13	PASS
							RB12#0	5.27	13	PASS
							RB12#6	5.22	13	PASS
							RB12#13	5.33	13	PASS
RB25#0	6.13	13					PASS			
MCH	RB1#0	4.63					13	PASS		
	RB1#13	4.84					13	PASS		
	RB1#24	4.8					13	PASS		
	RB12#0	5.37					13	PASS		
	RB12#6	5.37					13	PASS		
	RB12#13	5.42					13	PASS		
	RB25#0	6.13					13	PASS		
HCH	RB1#0	4.22					13	PASS		
	RB1#13	4.03	13	PASS						
	RB1#24	4.09	13	PASS						
	RB12#0	5.49	13	PASS						
	RB12#6	5.38	13	PASS						
	RB12#13	5.33	13	PASS						
	RB25#0	6.33	13	PASS						
LTE/TM2				RB1#0	4.65	13	PASS			
				RB1#13	4.62	13	PASS			
				RB1#24	4.7	13	PASS			
				RB12#0	5.27	13	PASS			
				RB12#6	5.22	13	PASS			
				RB12#13	5.33	13	PASS			
				RB25#0	6.13	13	PASS			
				MCH	RB1#0	4.63	13	PASS		
					RB1#13	4.84	13	PASS		
					RB1#24	4.8	13	PASS		
					RB12#0	5.37	13	PASS		
					RB12#6	5.37	13	PASS		
					RB12#13	5.42	13	PASS		
					RB25#0	6.13	13	PASS		
				HCH	RB1#0	4.22	13	PASS		
RB1#13	4.03	13	PASS							
RB1#24	4.09	13	PASS							
RB12#0	5.49	13	PASS							
RB12#6	5.38	13	PASS							
RB12#13	5.33	13	PASS							
RB25#0	6.33	13	PASS							

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#49	4.33	13	PASS
				RB25#0	5.5	13	PASS
				RB25#13	5.51	13	PASS
				RB25#25	5.65	13	PASS
				RB50#0	6.45	13	PASS
			HCH	RB1#0	4.56	13	PASS
				RB1#25	4.88	13	PASS
				RB1#49	4.52	13	PASS
				RB25#0	5.32	13	PASS
				RB25#13	5.39	13	PASS
				RB25#25	5.48	13	PASS
				RB50#0	6.14	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

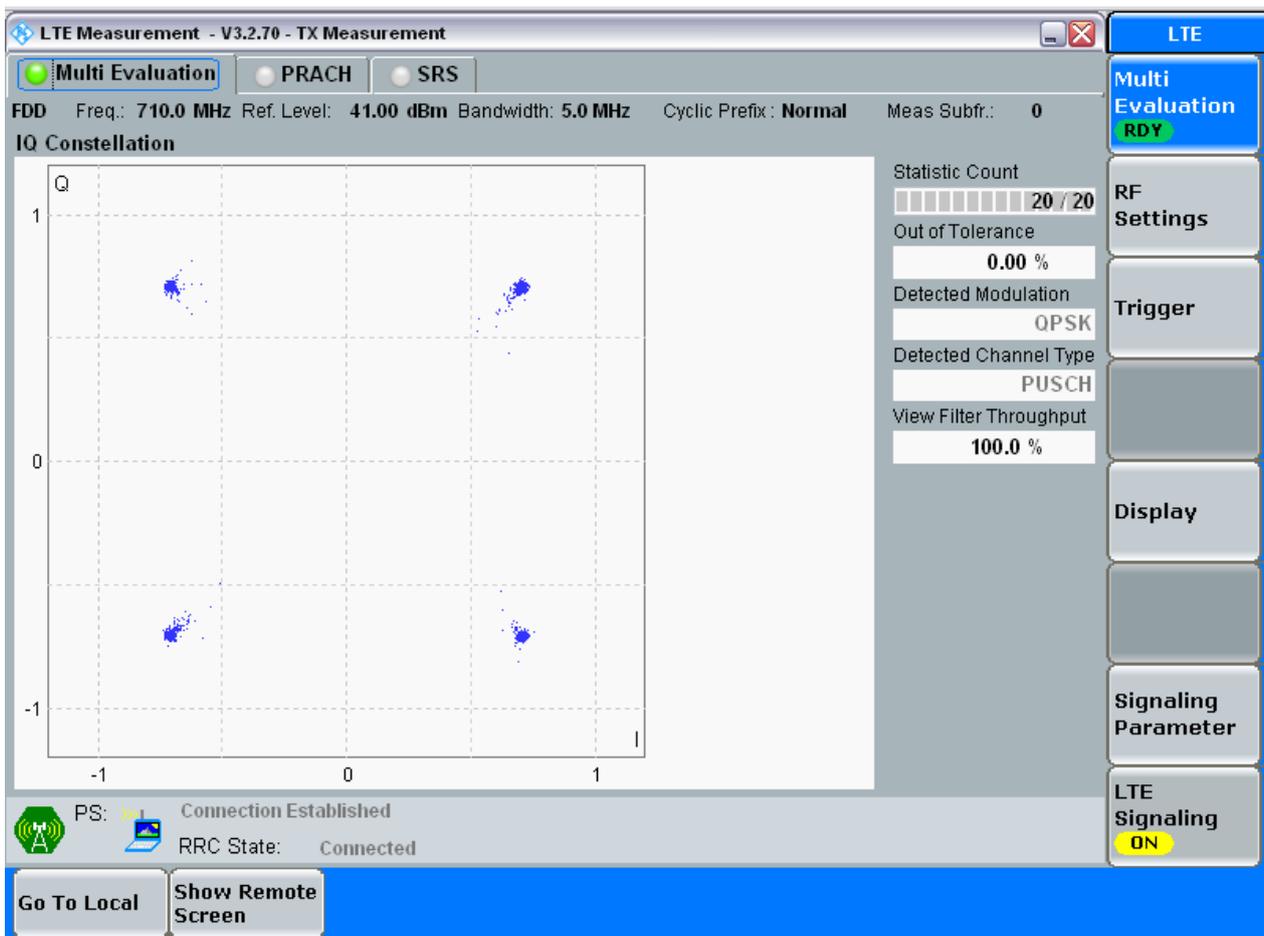
3.1.1 Test Band = BAND17

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

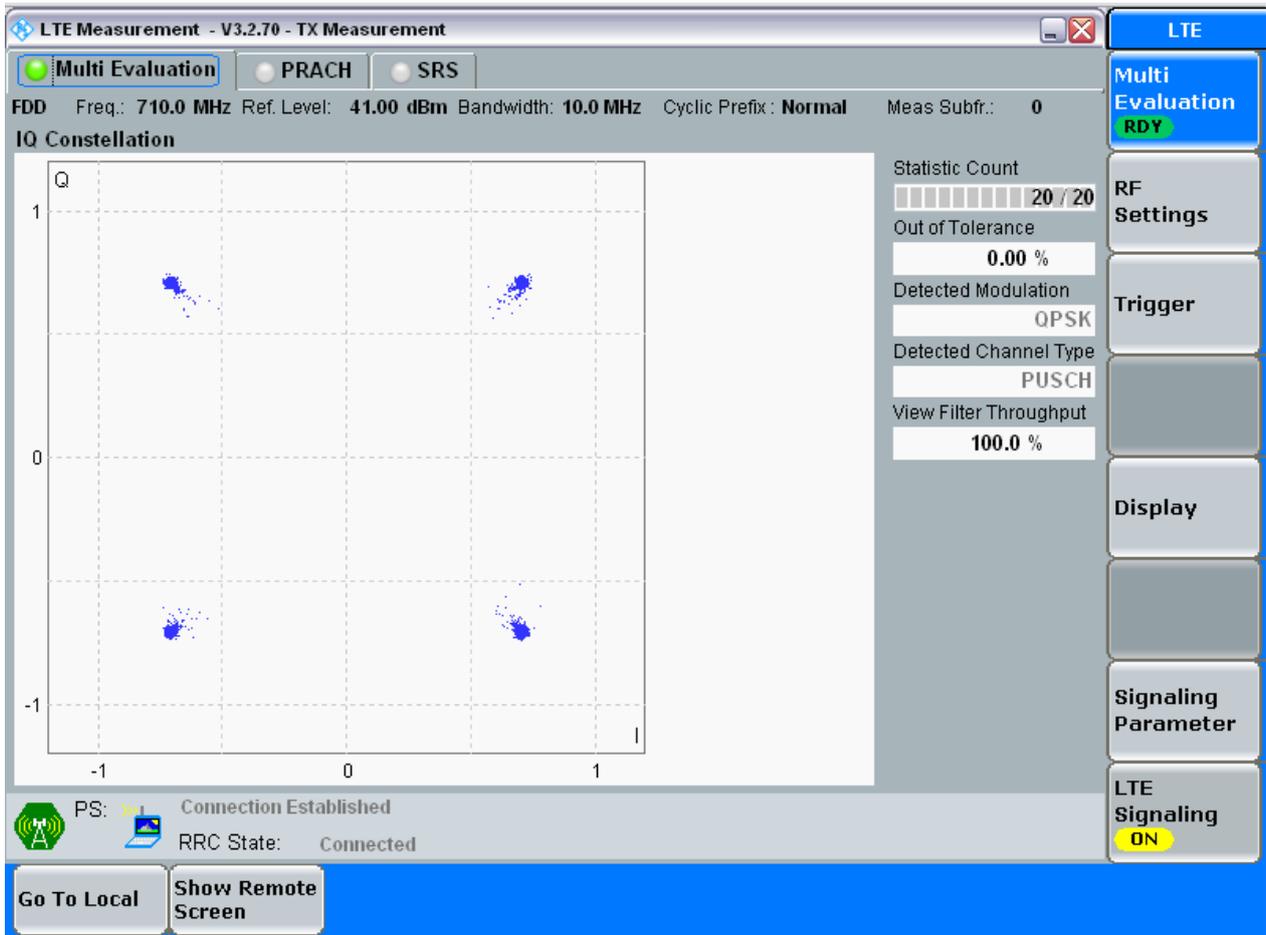
3.1.1.1.1.1.1 Test RB = RB25#0



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

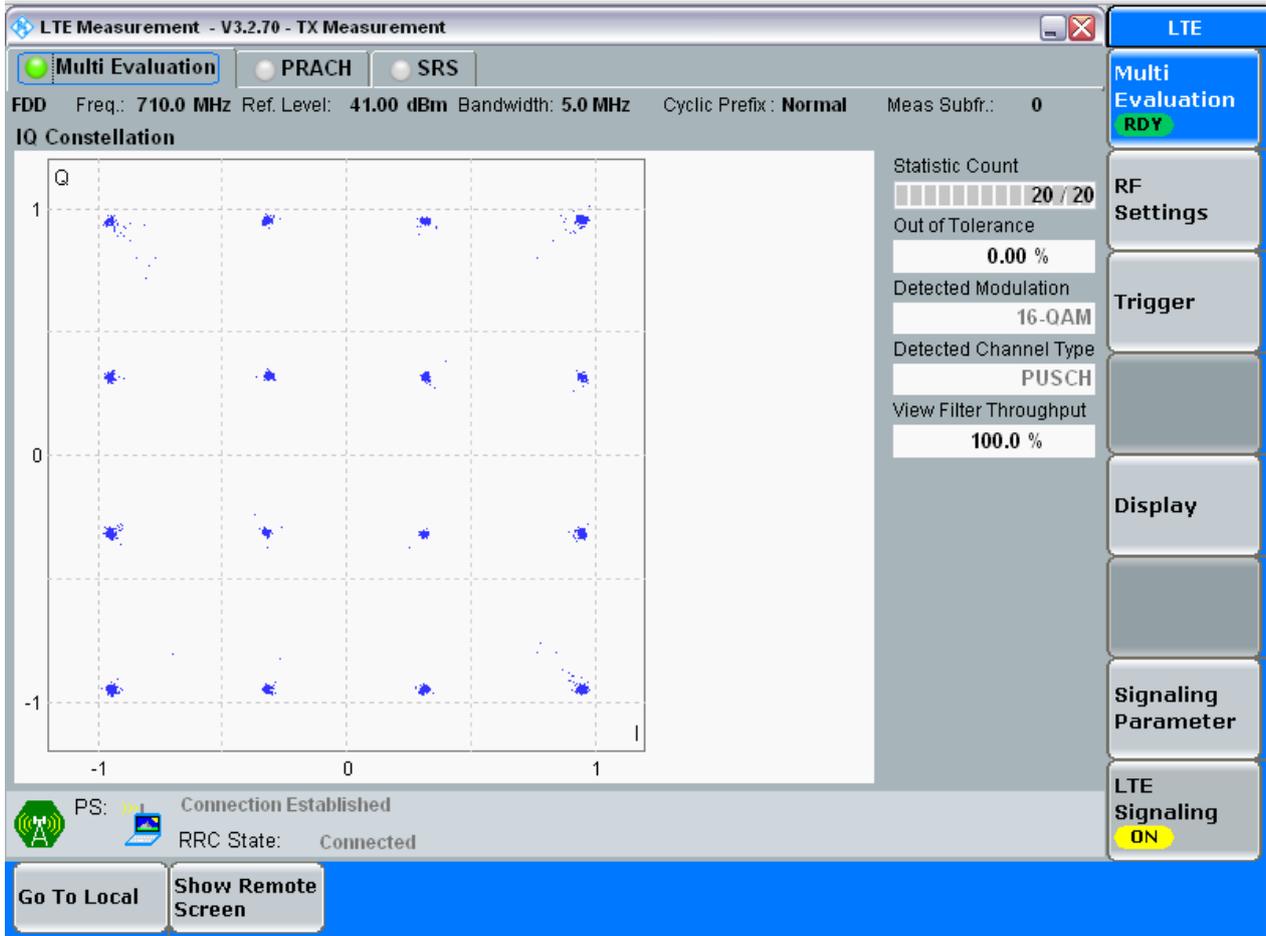


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

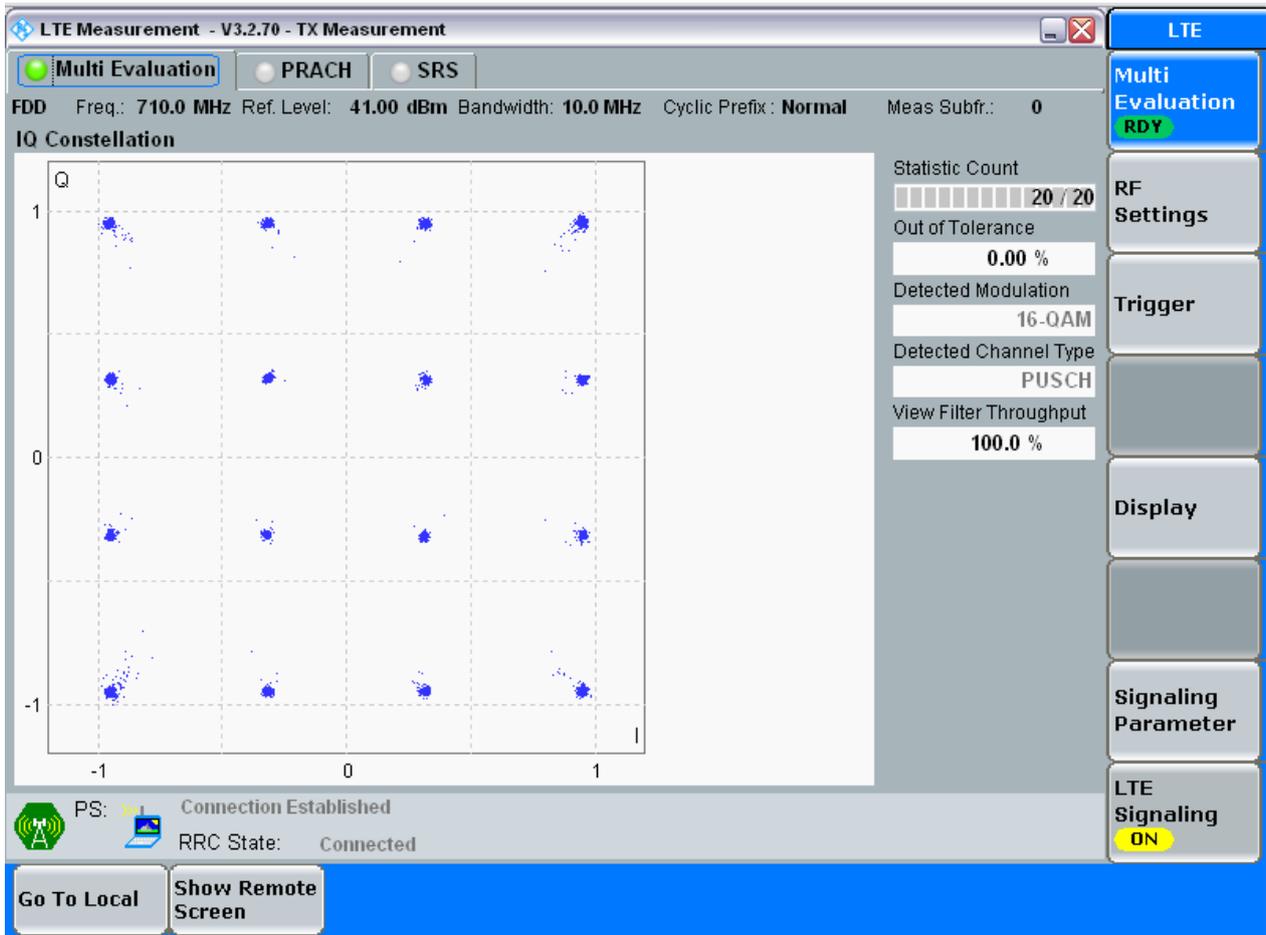
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

3.1.1.2.2.1.1 Test RB = RB50#0



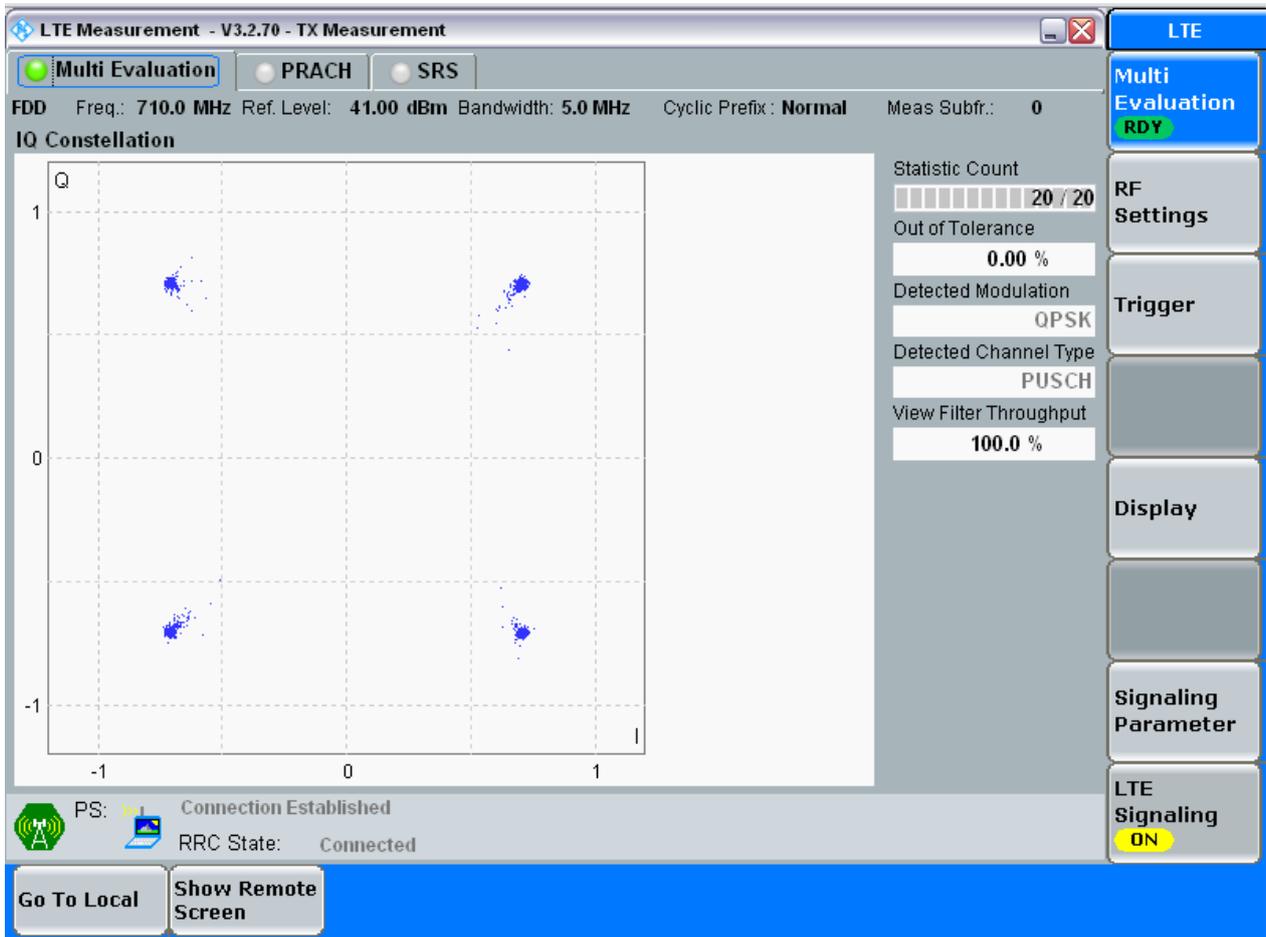
3.1.2 Test Band = BAND17

3.1.2.1 Test Mode = LTE/TM1

3.1.2.1.1 Test Bandwidth = 5

3.1.2.1.1.1 Test Channel = MCH

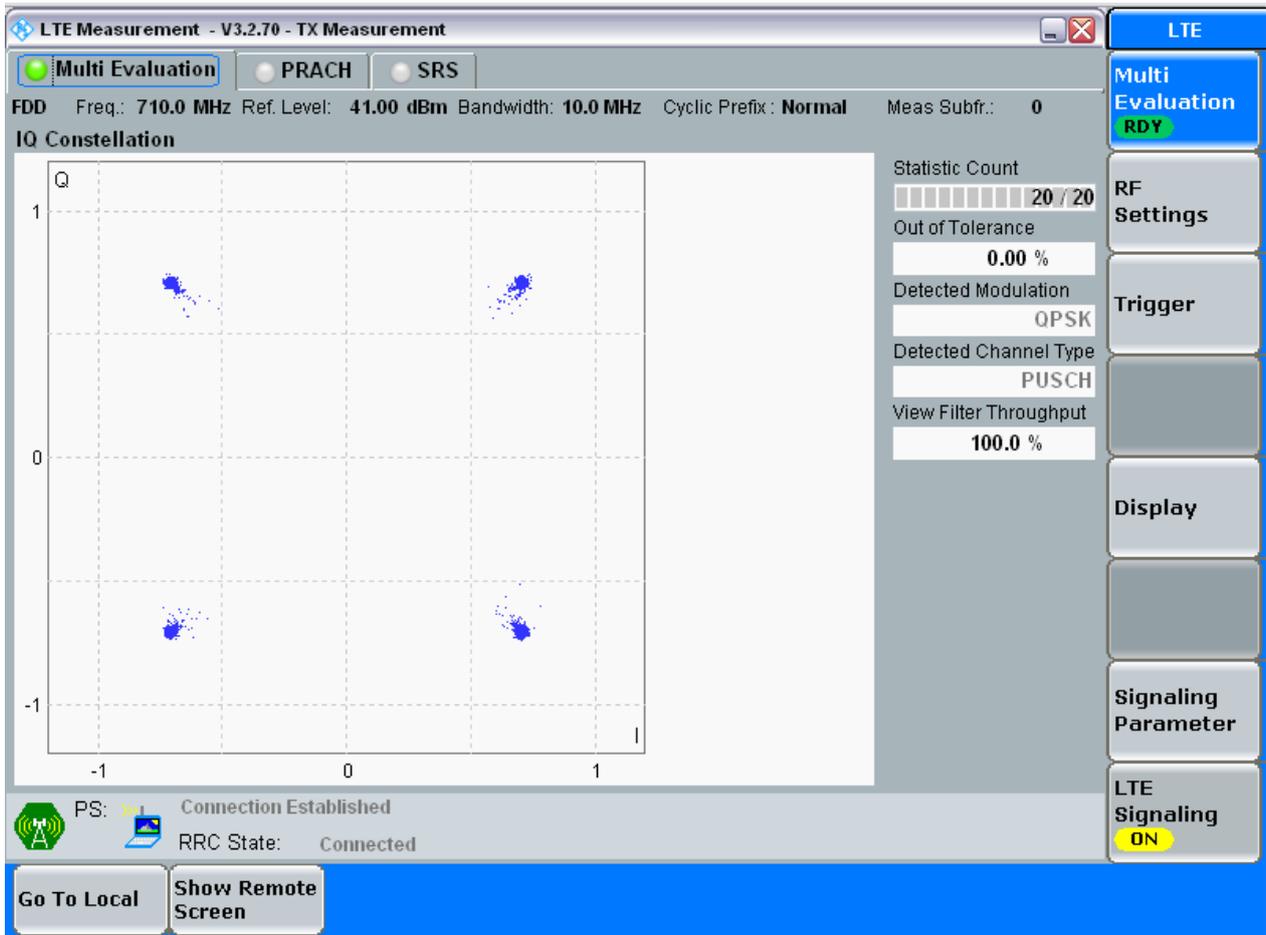
3.1.2.1.1.1.1 Test RB = RB25#0



3.1.2.1.2 Test Bandwidth = 10

3.1.2.1.2.1 Test Channel = MCH

3.1.2.1.2.1.1 Test RB = RB50#0

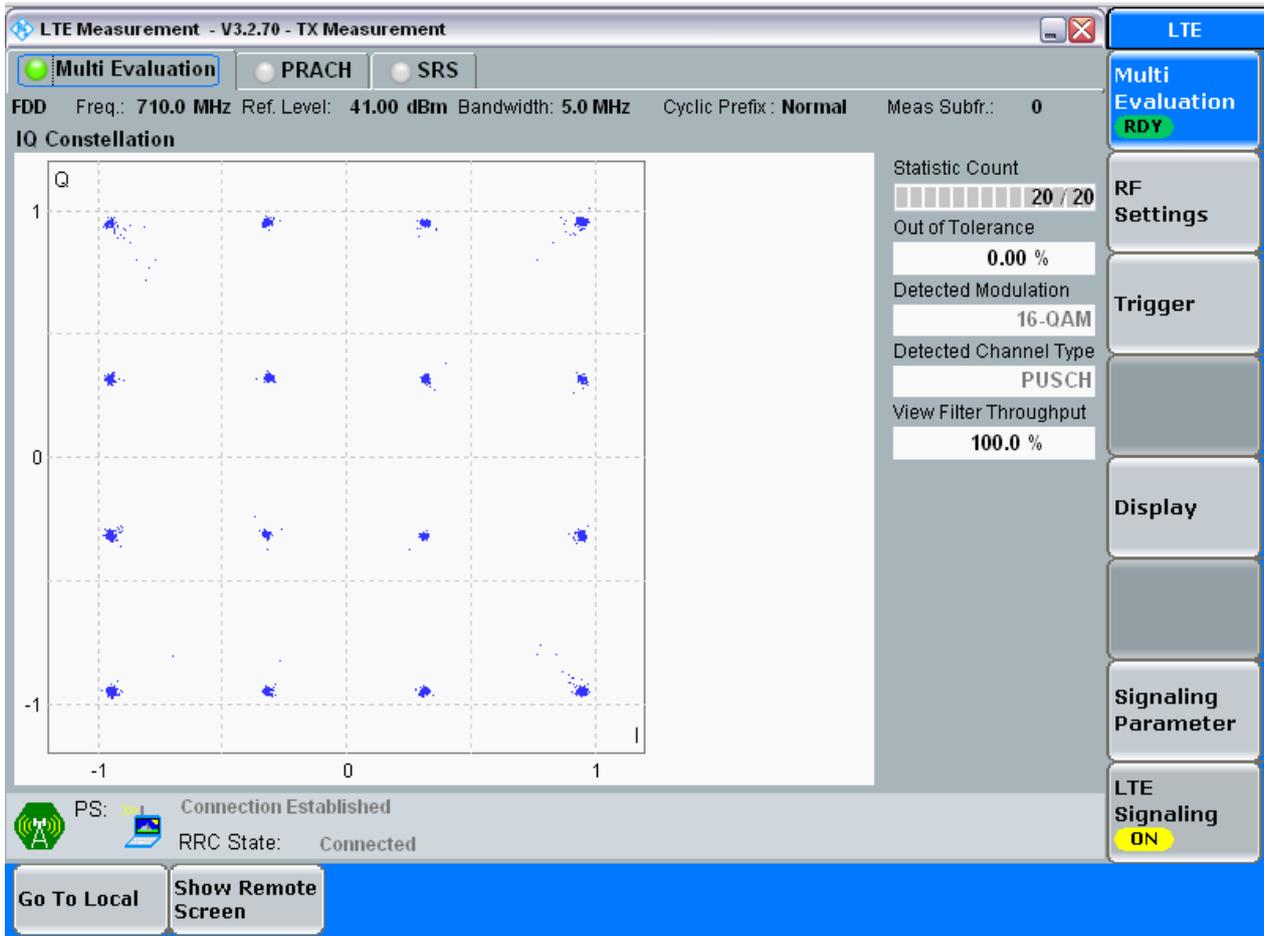


3.1.2.2 Test Mode = LTE/TM2

3.1.2.2.1 Test Bandwidth = 5

3.1.2.2.1.1 Test Channel = MCH

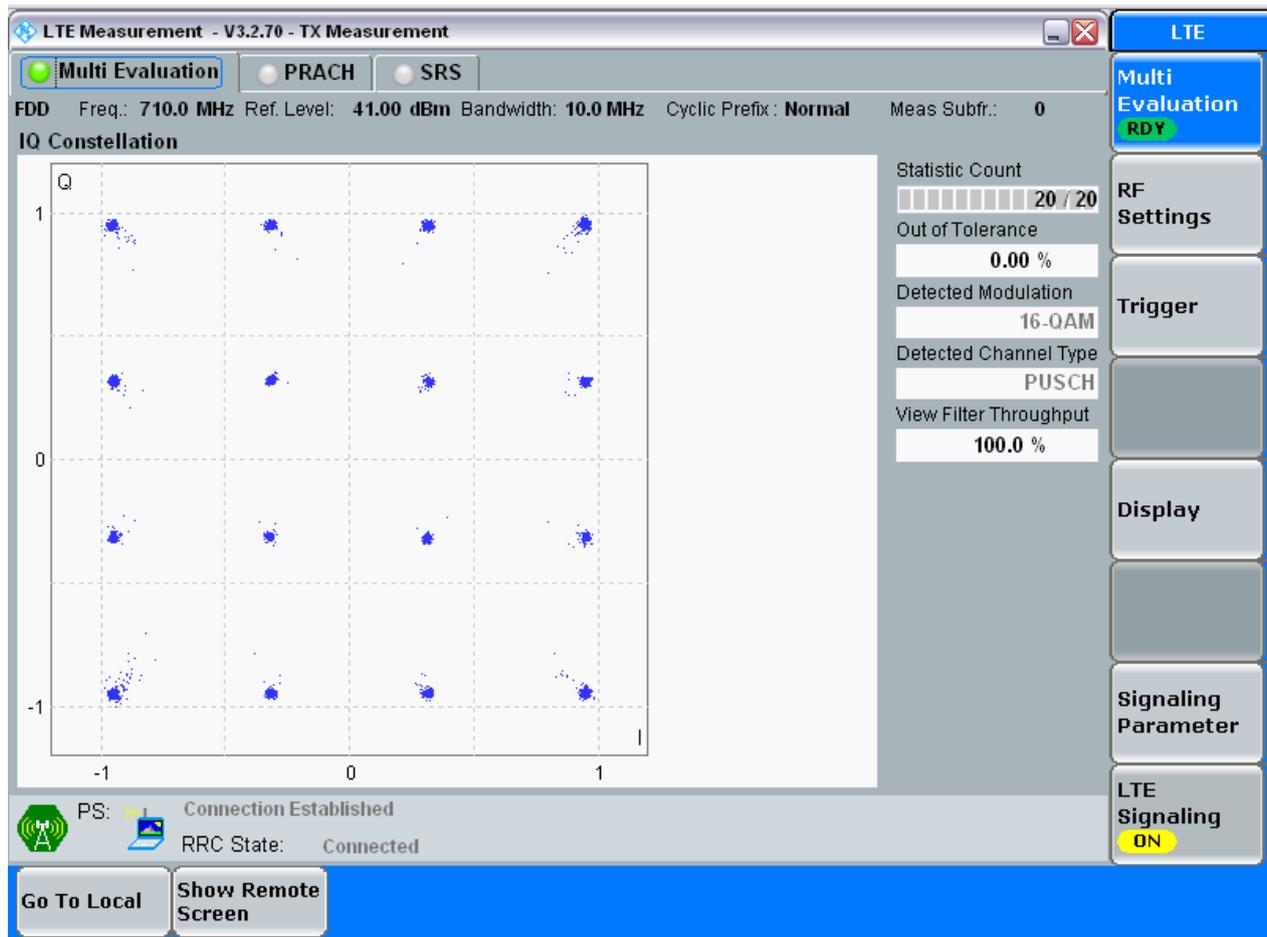
3.1.2.2.1.1.1 Test RB = RB25#0



3.1.2.2.2 Test Bandwidth = 10

3.1.2.2.2.1 Test Channel = MCH

3.1.2.2.2.1.1 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
BAND17	LTE/TM1	5	LCH	RB25#0	4.52	5.03	Pass
			MCH	RB25#0	4.52	5.01	Pass
			HCH	RB25#0	4.51	4.98	Pass
		10	LCH	RB50#0	9.02	9.95	Pass
			MCH	RB50#0	9.01	9.99	Pass
			HCH	RB50#0	8.98	9.95	Pass
	LTE/TM2	5	LCH	RB25#0	4.52	5.01	Pass
			MCH	RB25#0	4.53	5.03	Pass
			HCH	RB25#0	4.52	5.05	Pass
		10	LCH	RB50#0	9.01	9.95	Pass
			MCH	RB50#0	9.01	9.99	Pass
			HCH	RB50#0	9.01	9.94	Pass



Part II - Test Plots

4.1 For LTE

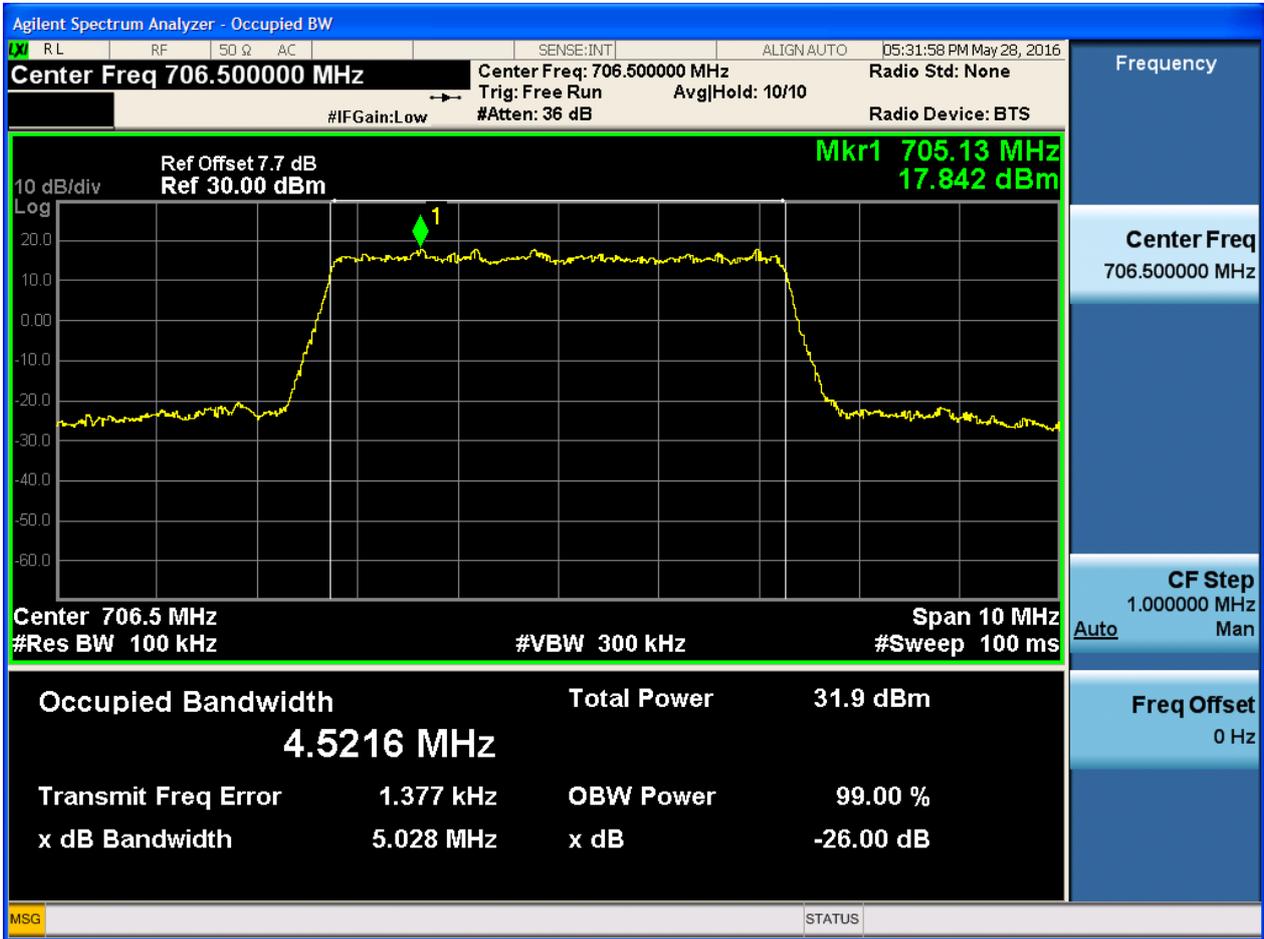
4.1.1 Test Band = BAND17

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

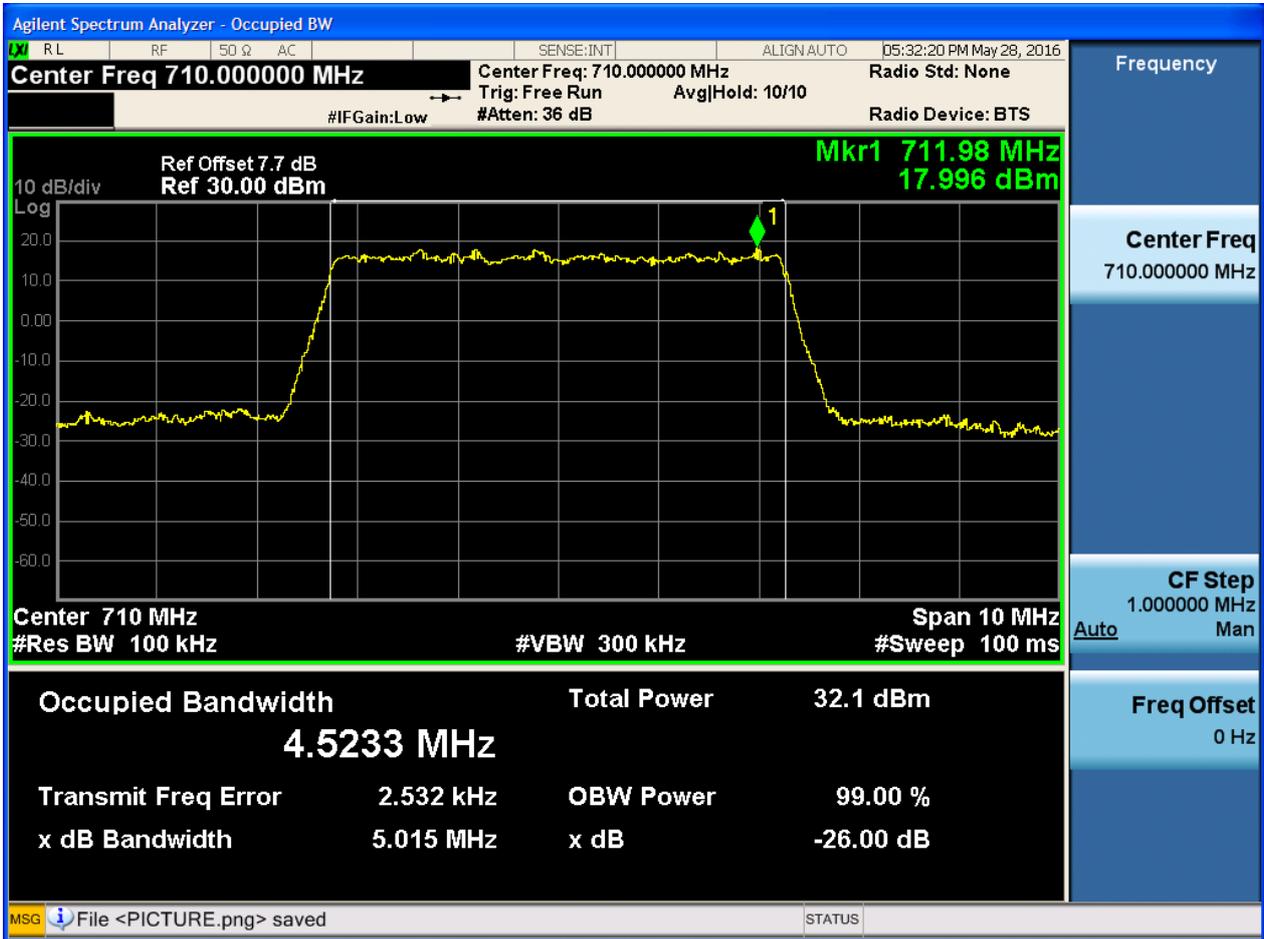
4.1.1.1.1.1.1 Test RB = RB25#0





4.1.1.1.1.2 Test Channel = MCH

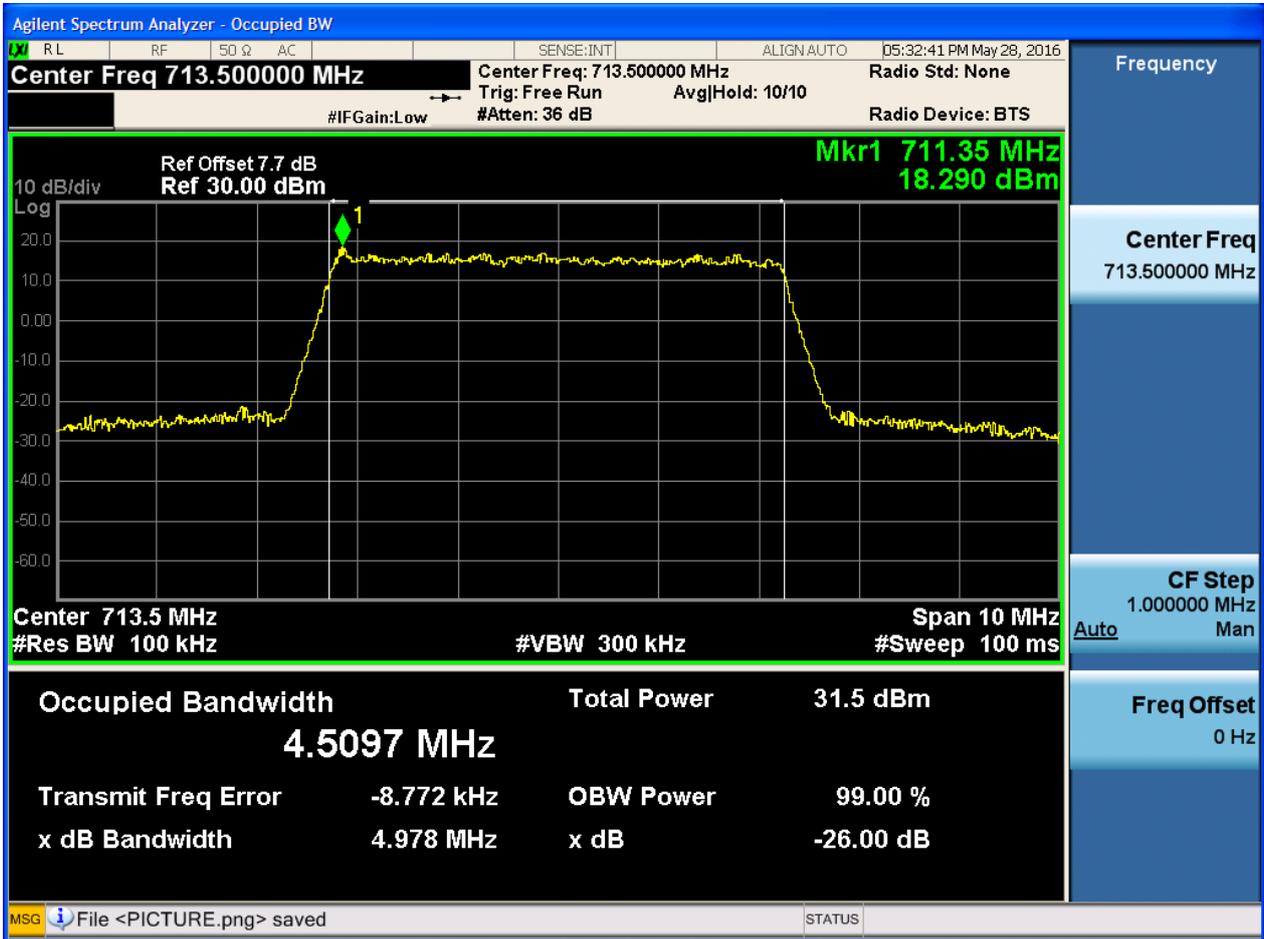
4.1.1.1.1.2.1 Test RB = RB25#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

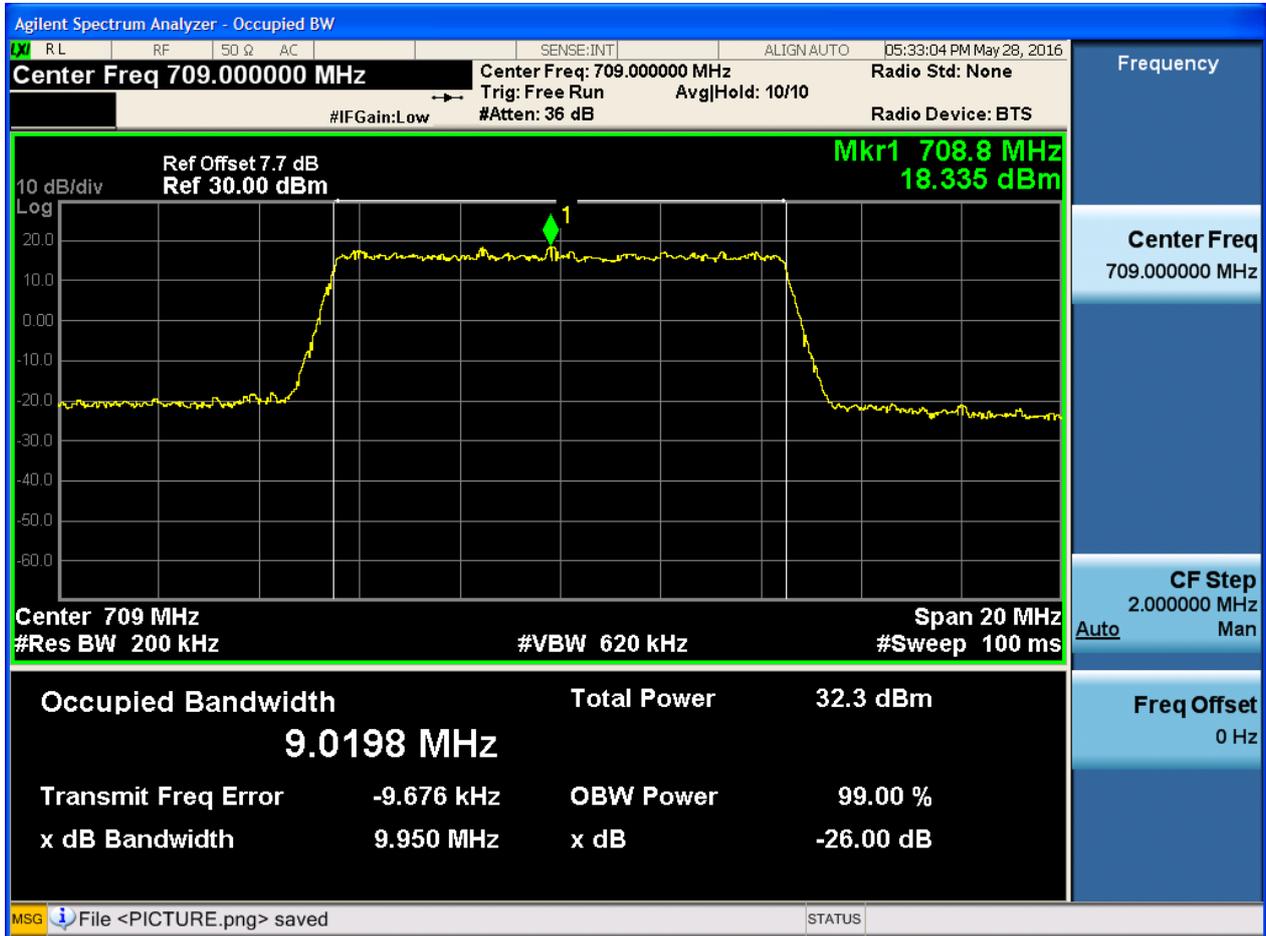




4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH

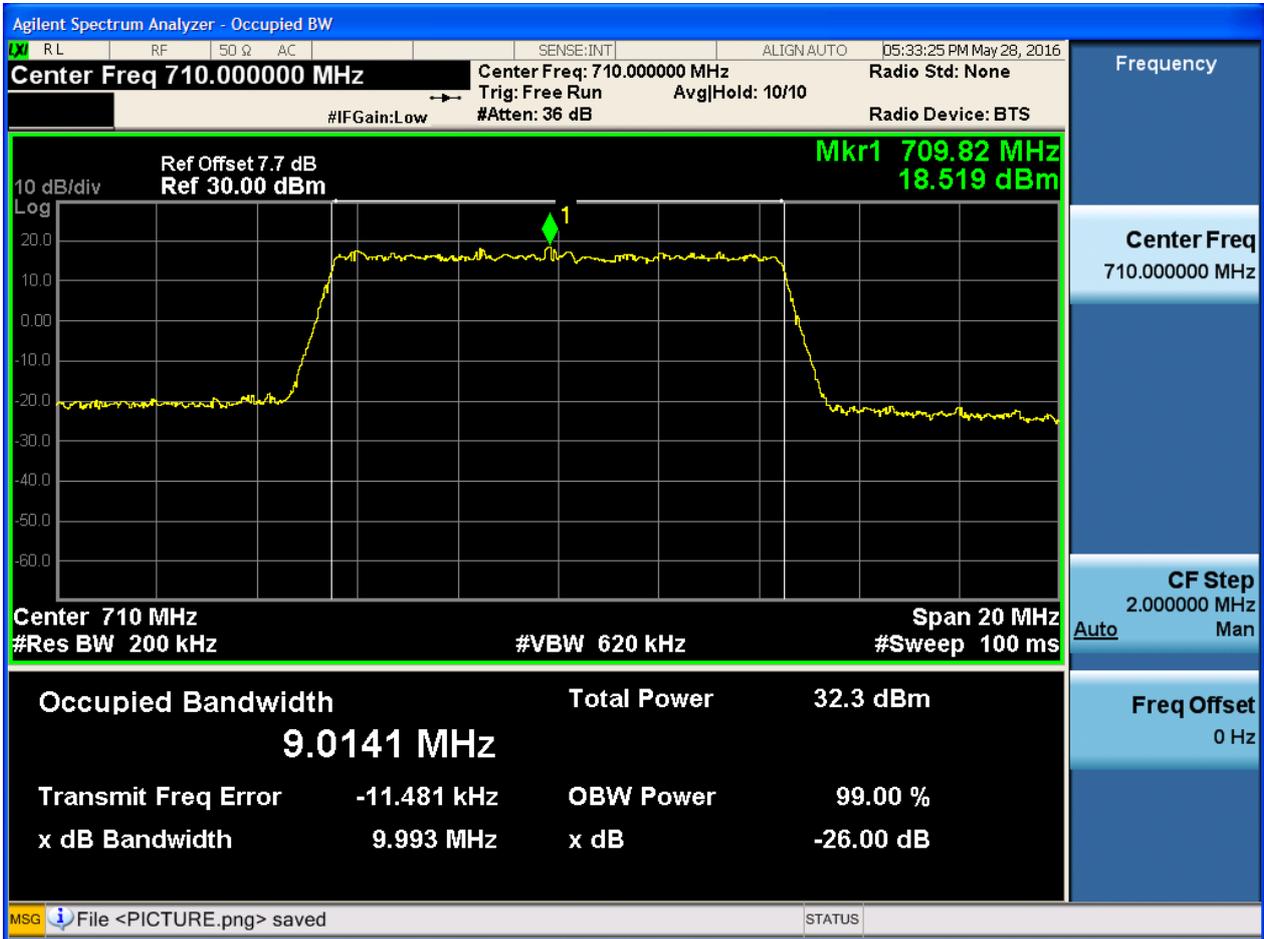
4.1.1.1.2.1.1 Test RB = RB50#0





4.1.1.1.2.2 Test Channel = MCH

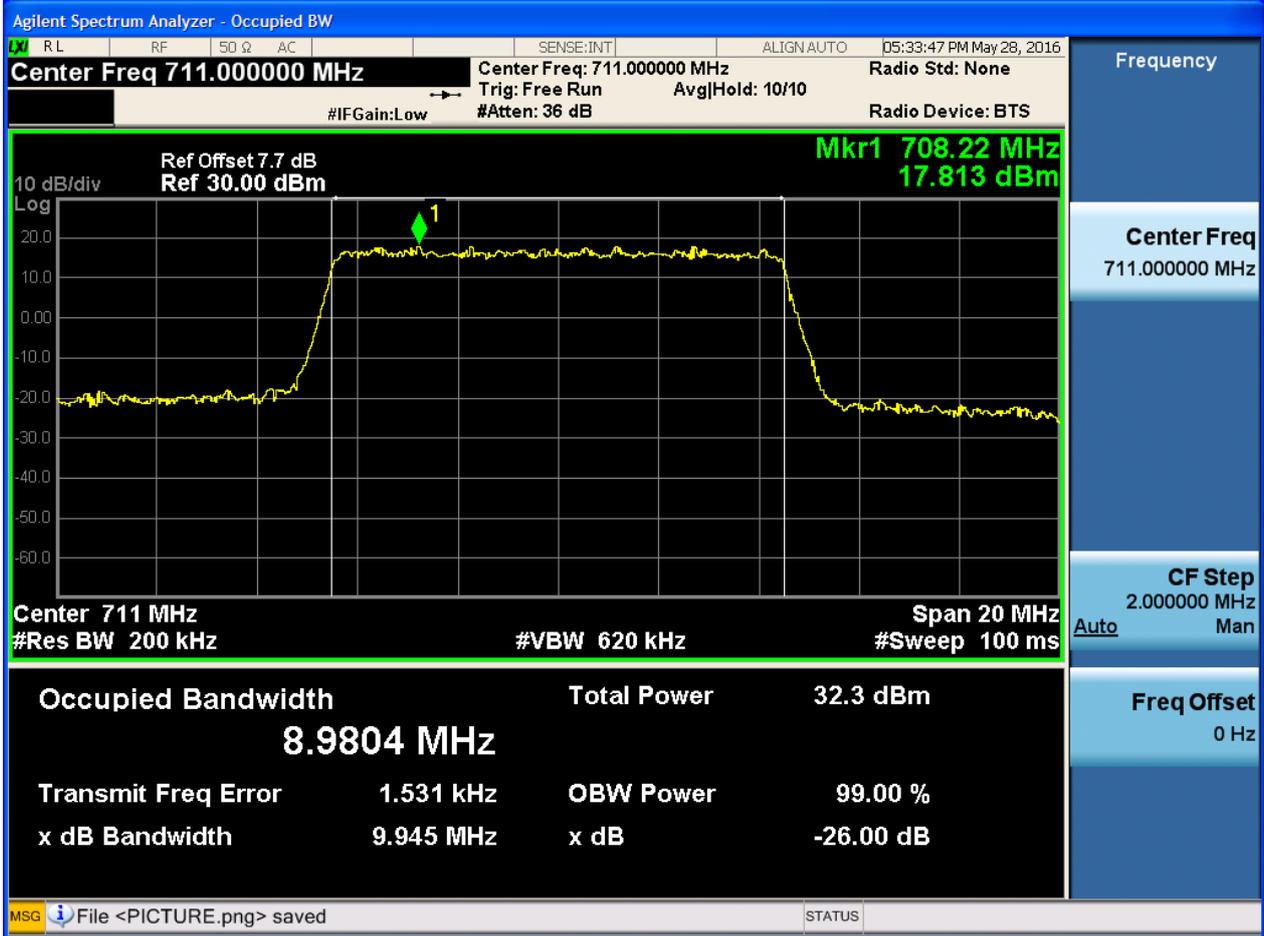
4.1.1.1.2.2.1 Test RB = RB50#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0



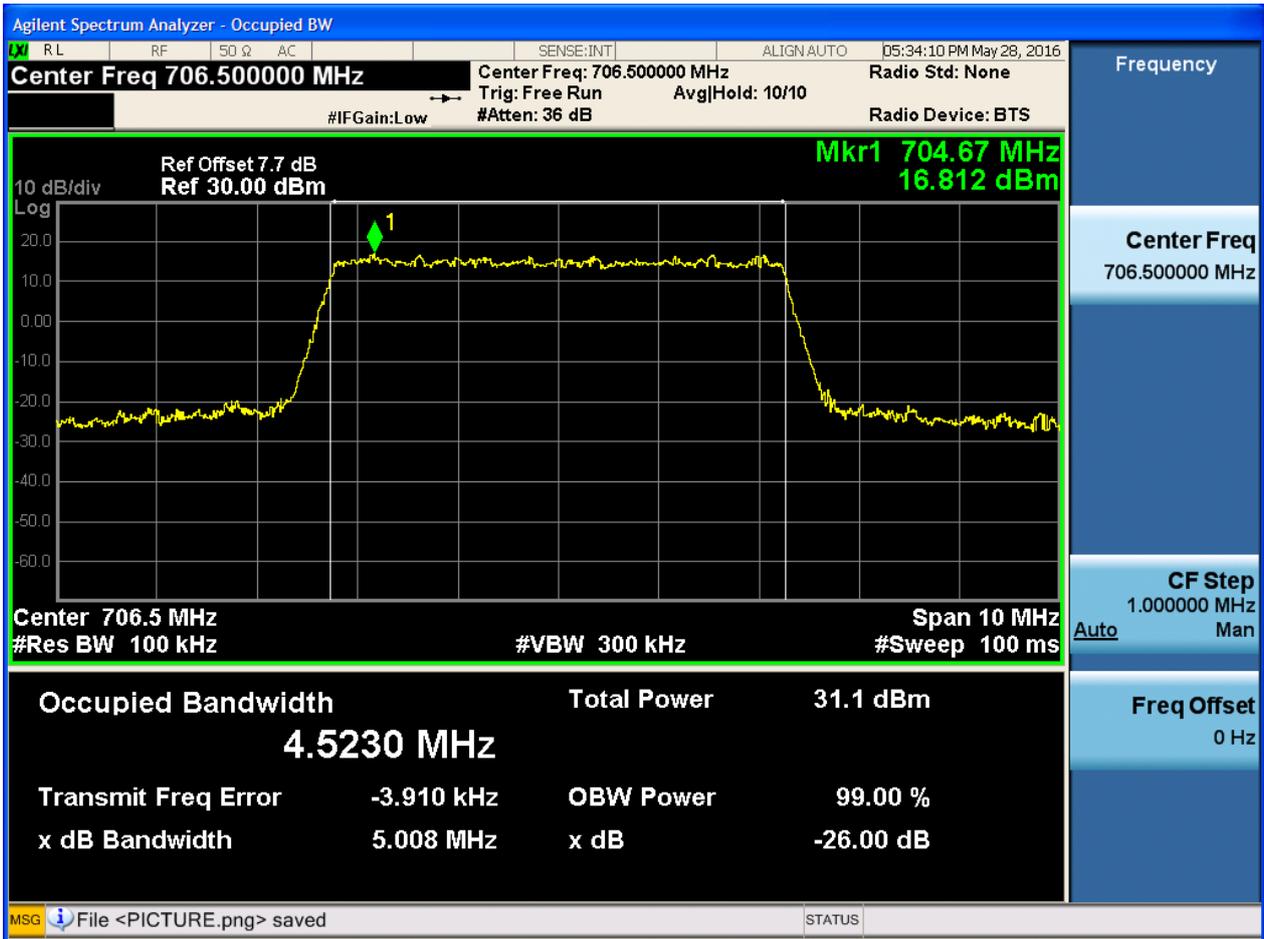


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

4.1.1.2.1.1 Test Channel = LCH

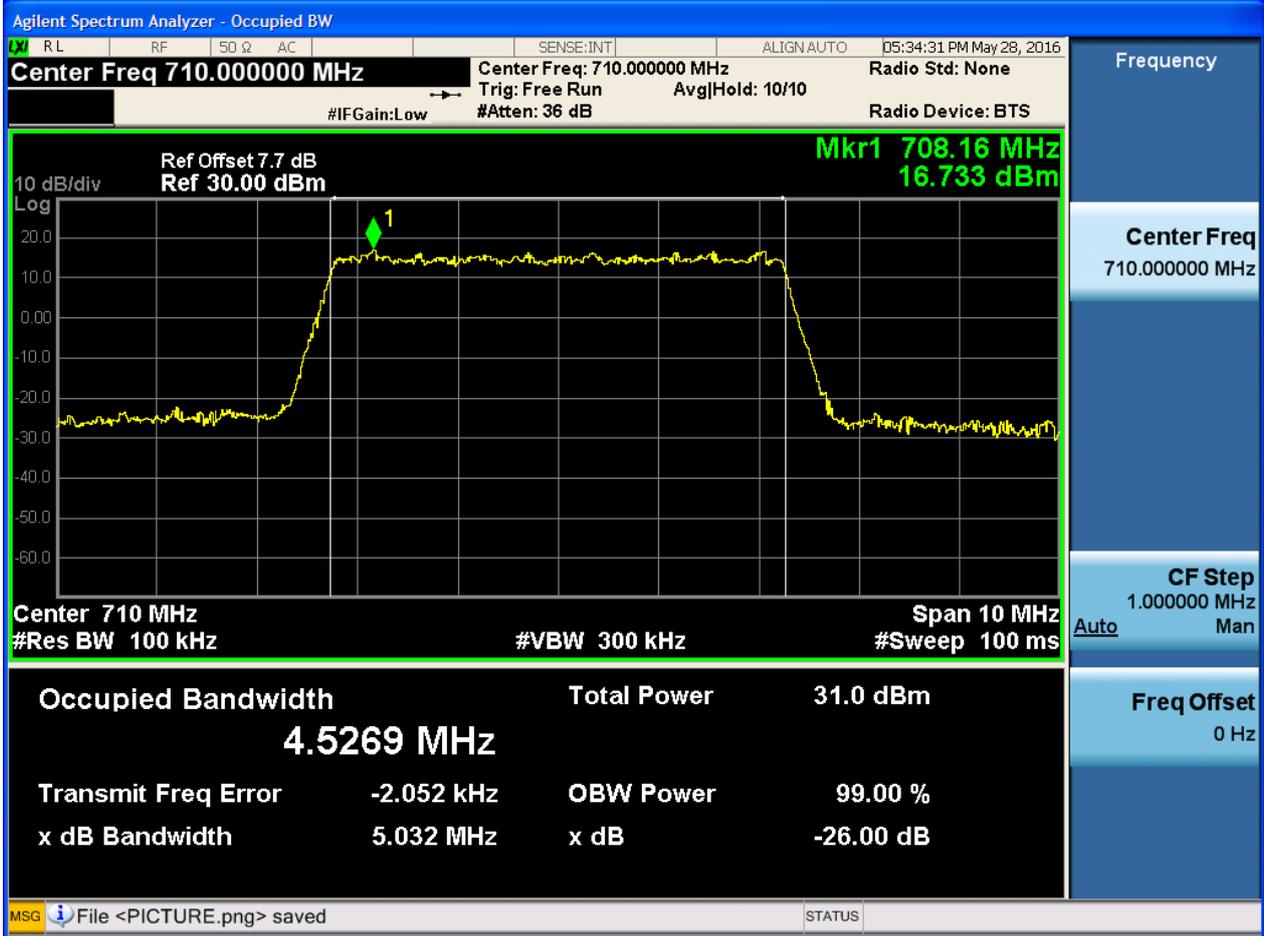
4.1.1.2.1.1.1 Test RB = RB25#0





4.1.1.2.1.2 Test Channel = MCH

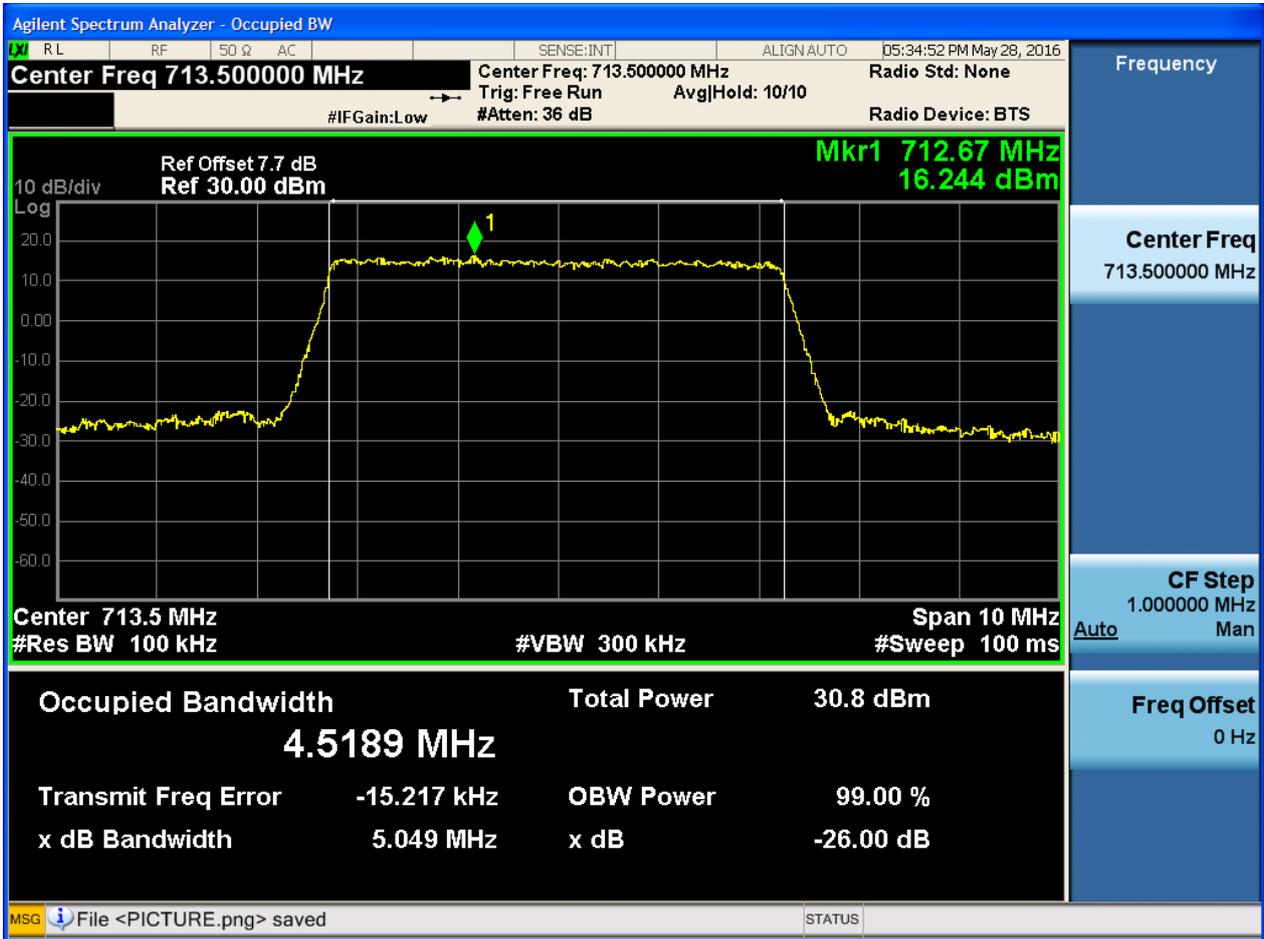
4.1.1.2.1.2.1 Test RB = RB25#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

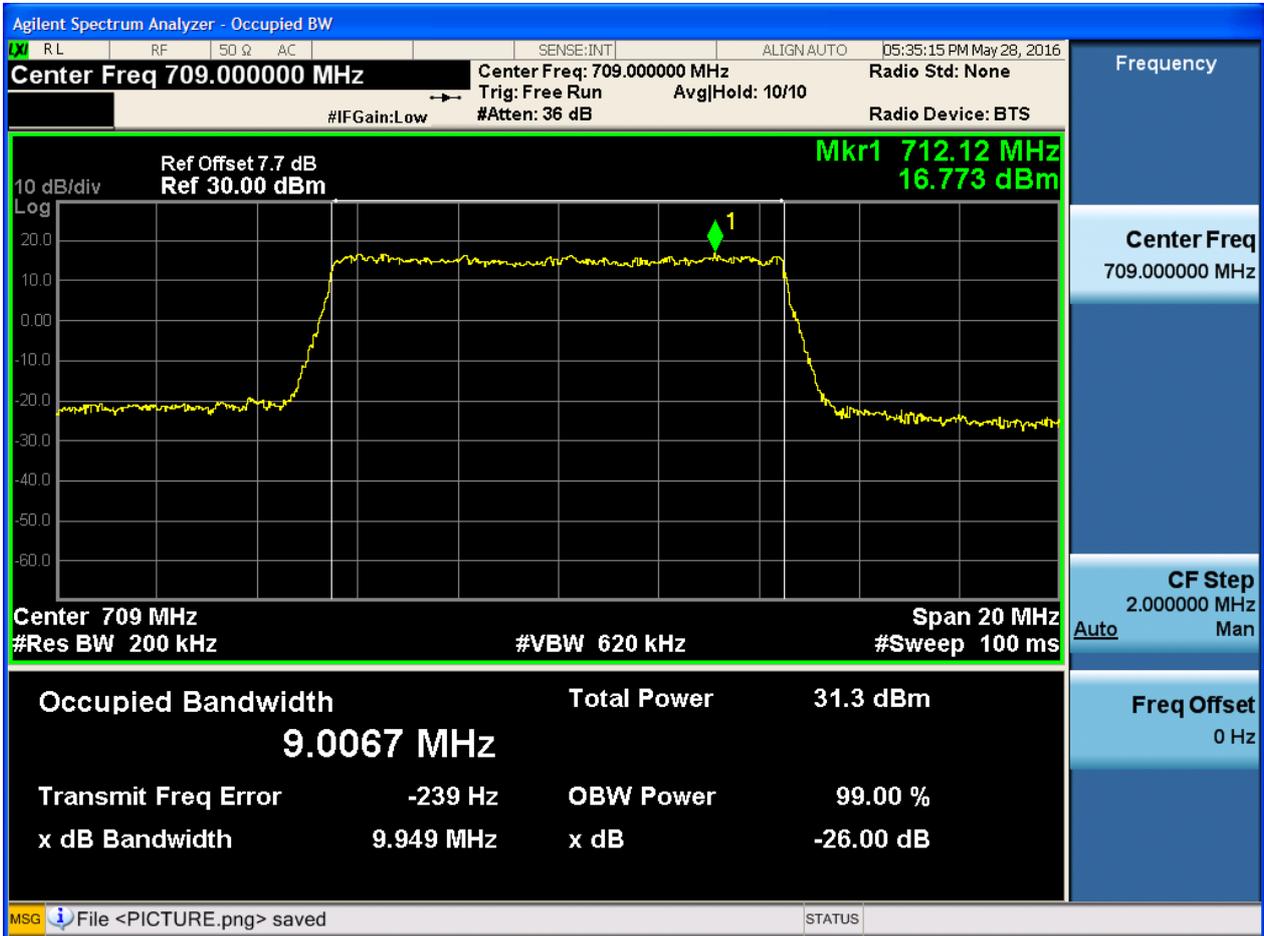




4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

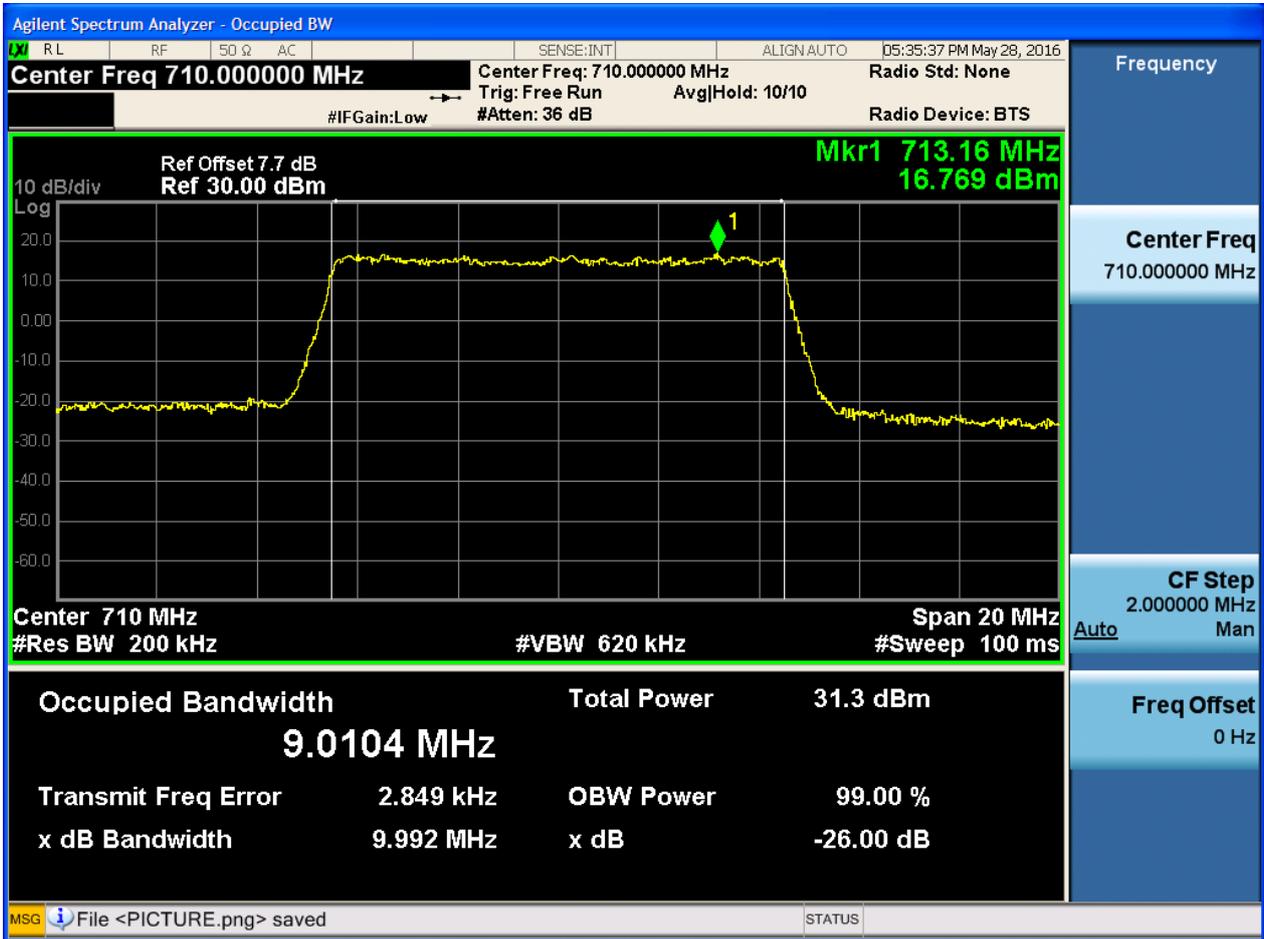
4.1.1.2.2.1.1 Test RB = RB50#0





4.1.1.2.2.2 Test Channel = MCH

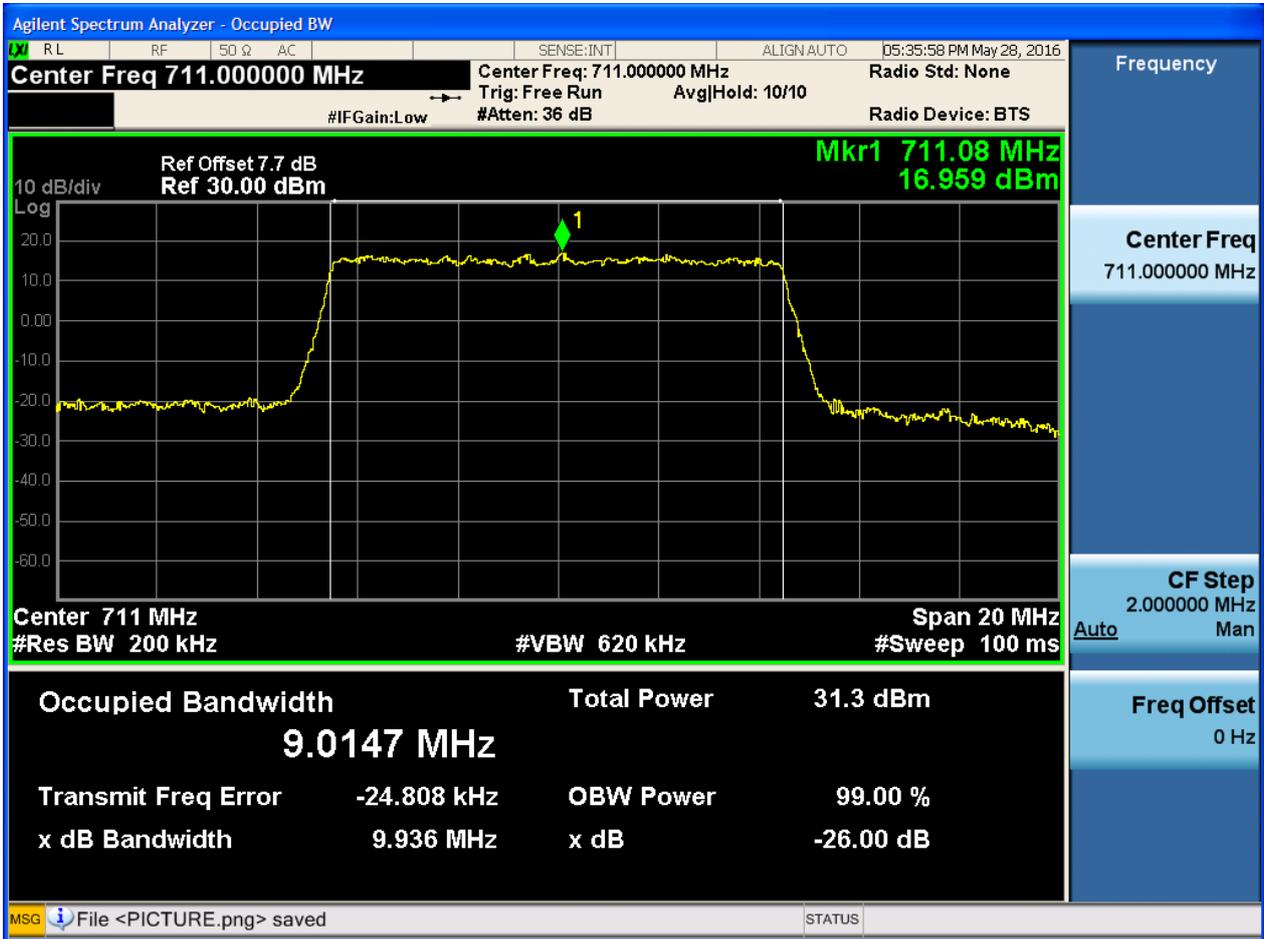
4.1.1.2.2.2.1 Test RB = RB50#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0





5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

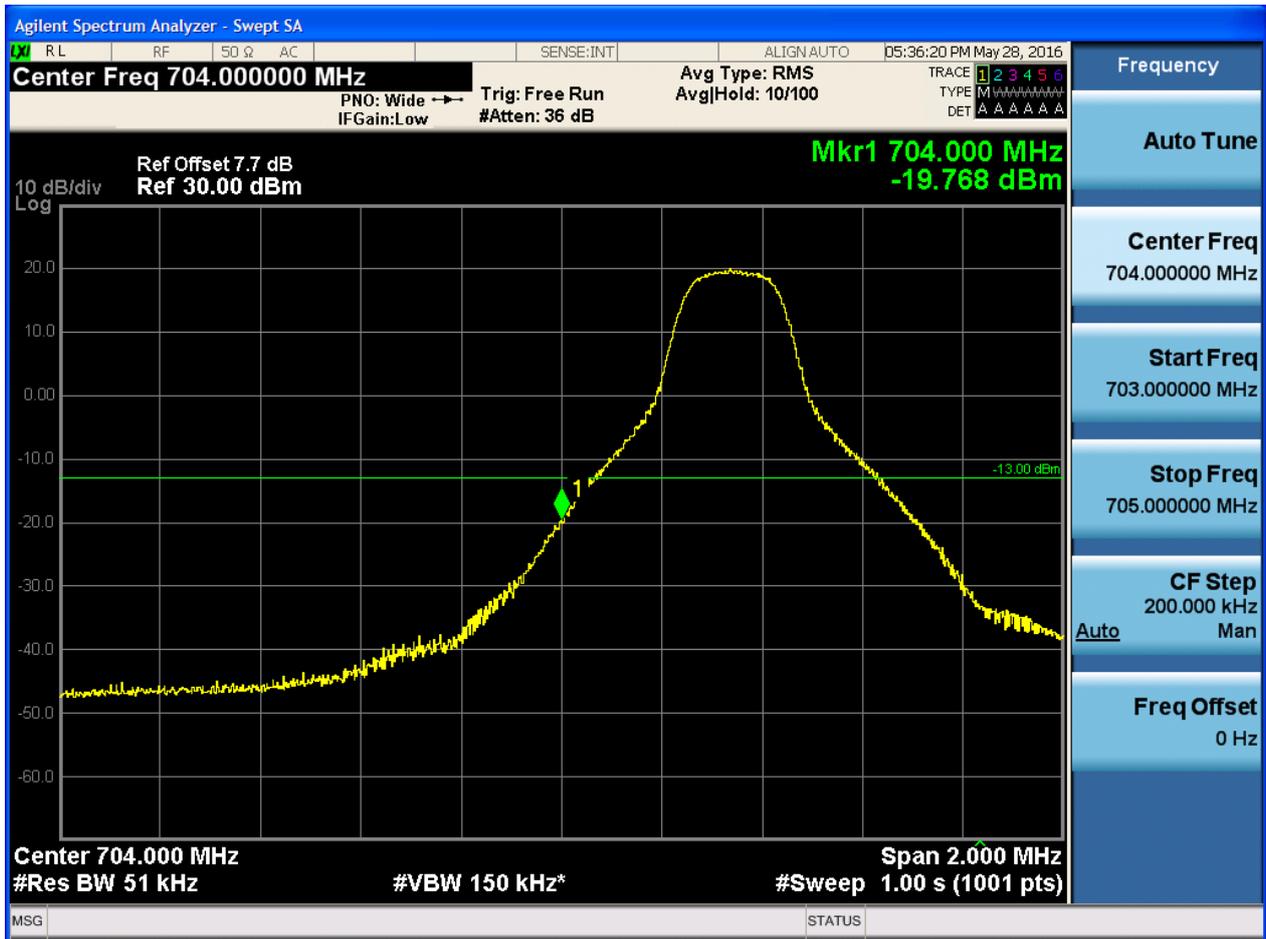
5.1.1 Test Band = BAND17

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 5

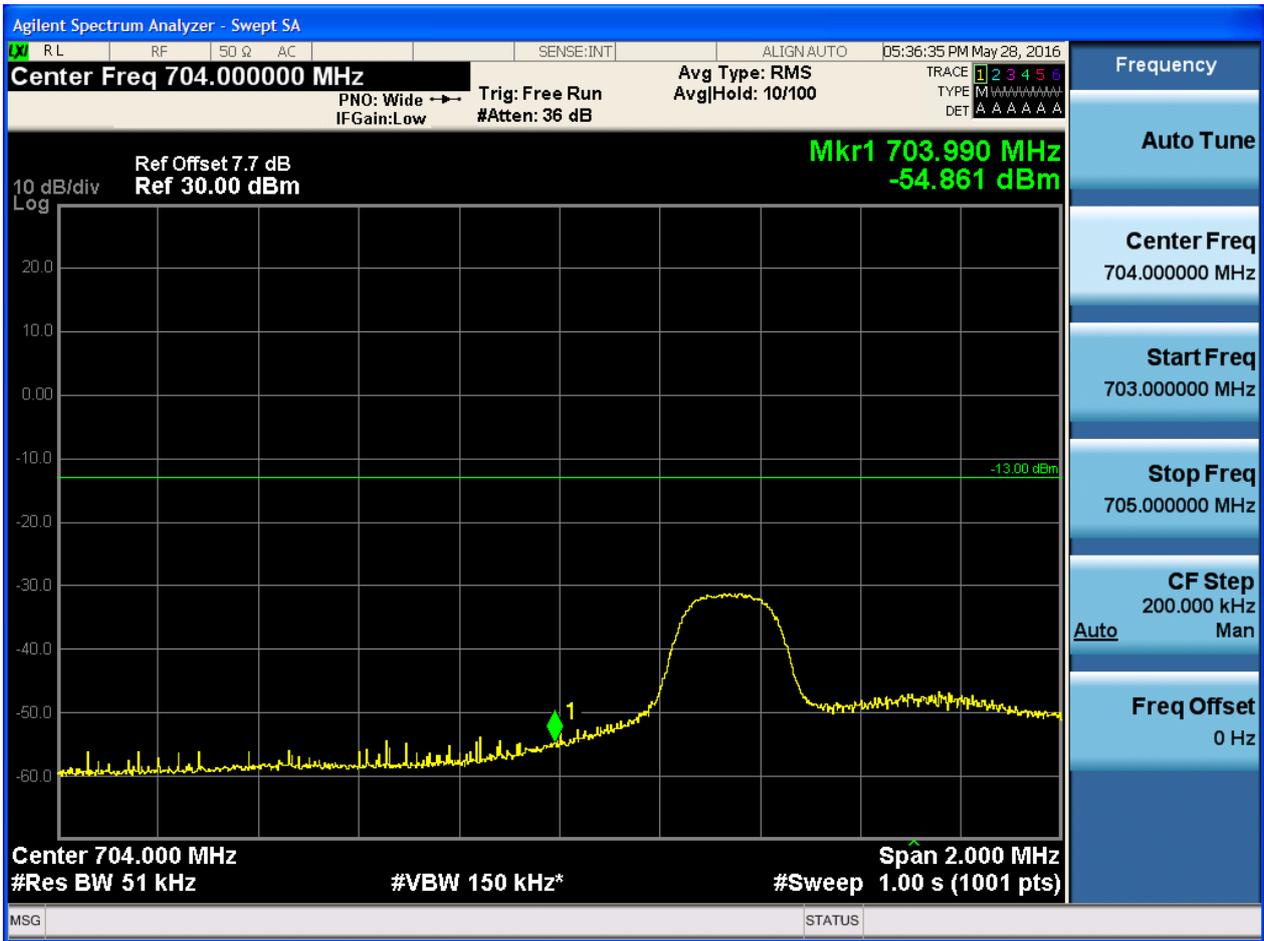
5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0



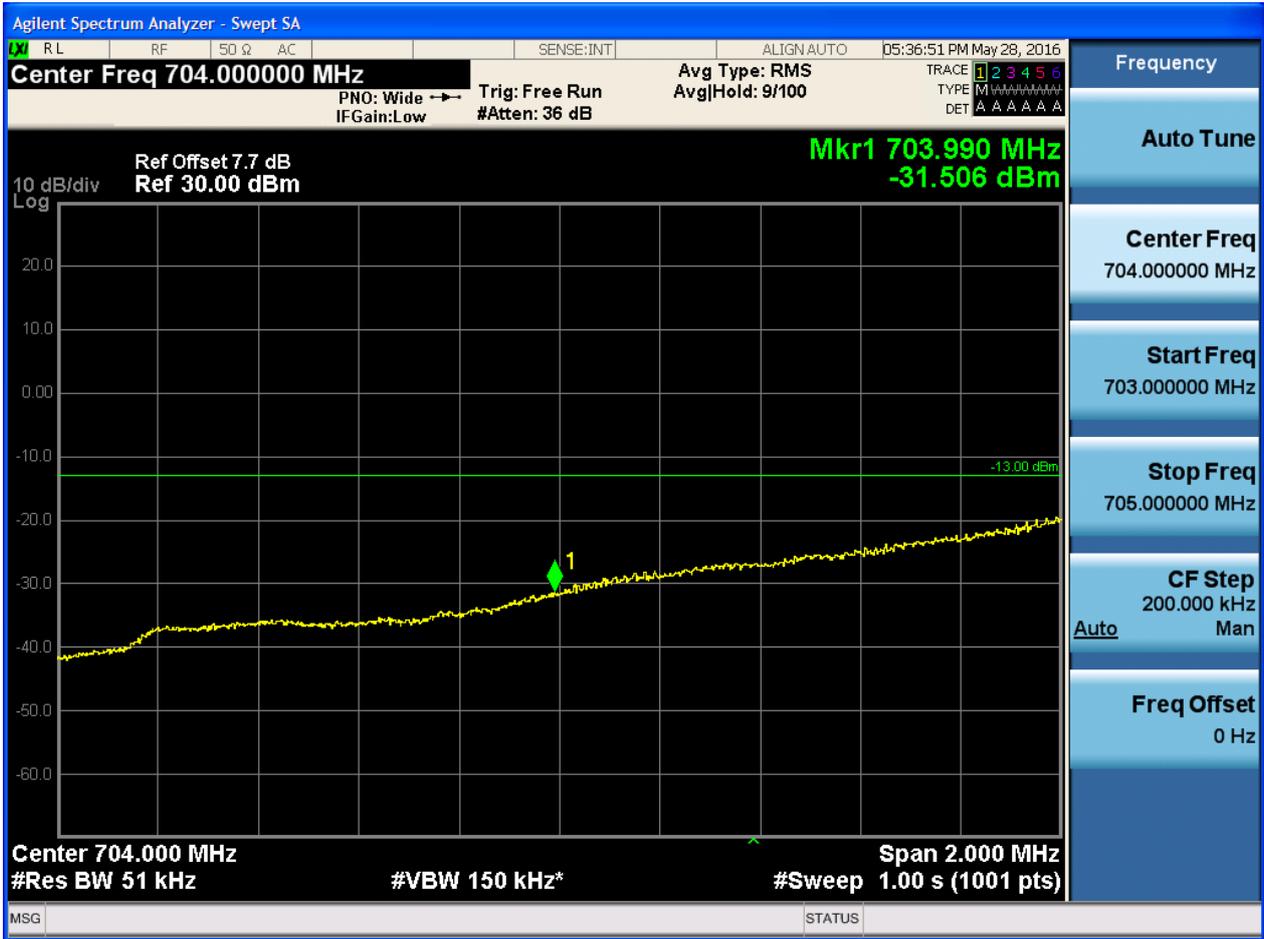


5.1.1.1.1.2 Test RB = RB1#24





5.1.1.1.1.3 Test RB = RB12#6





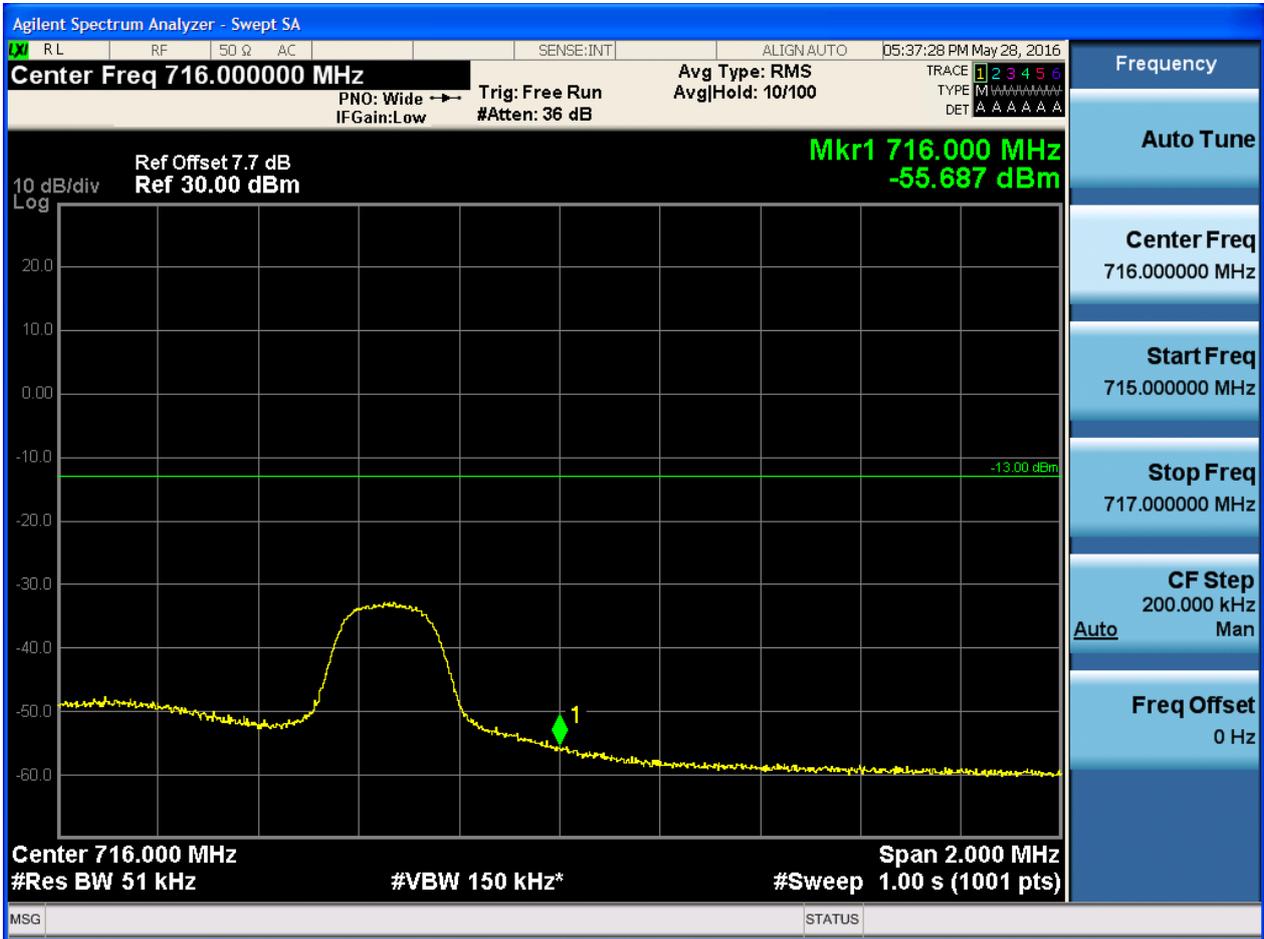
5.1.1.1.1.4 Test RB = RB25#0





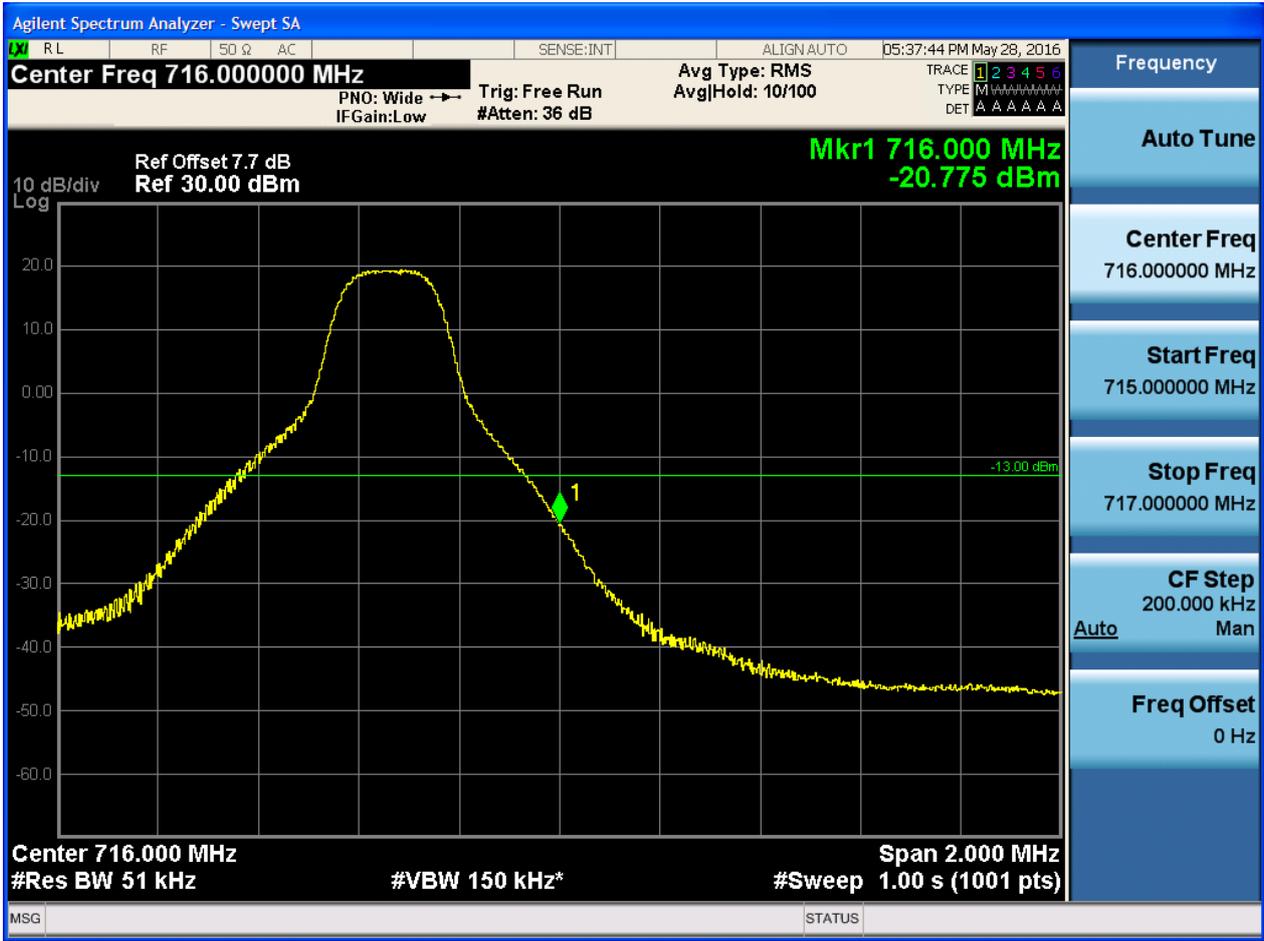
5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





5.1.1.1.2.2 Test RB = RB1#24





5.1.1.1.2.3 Test RB = RB12#6





5.1.1.1.2.4 Test RB = RB25#0

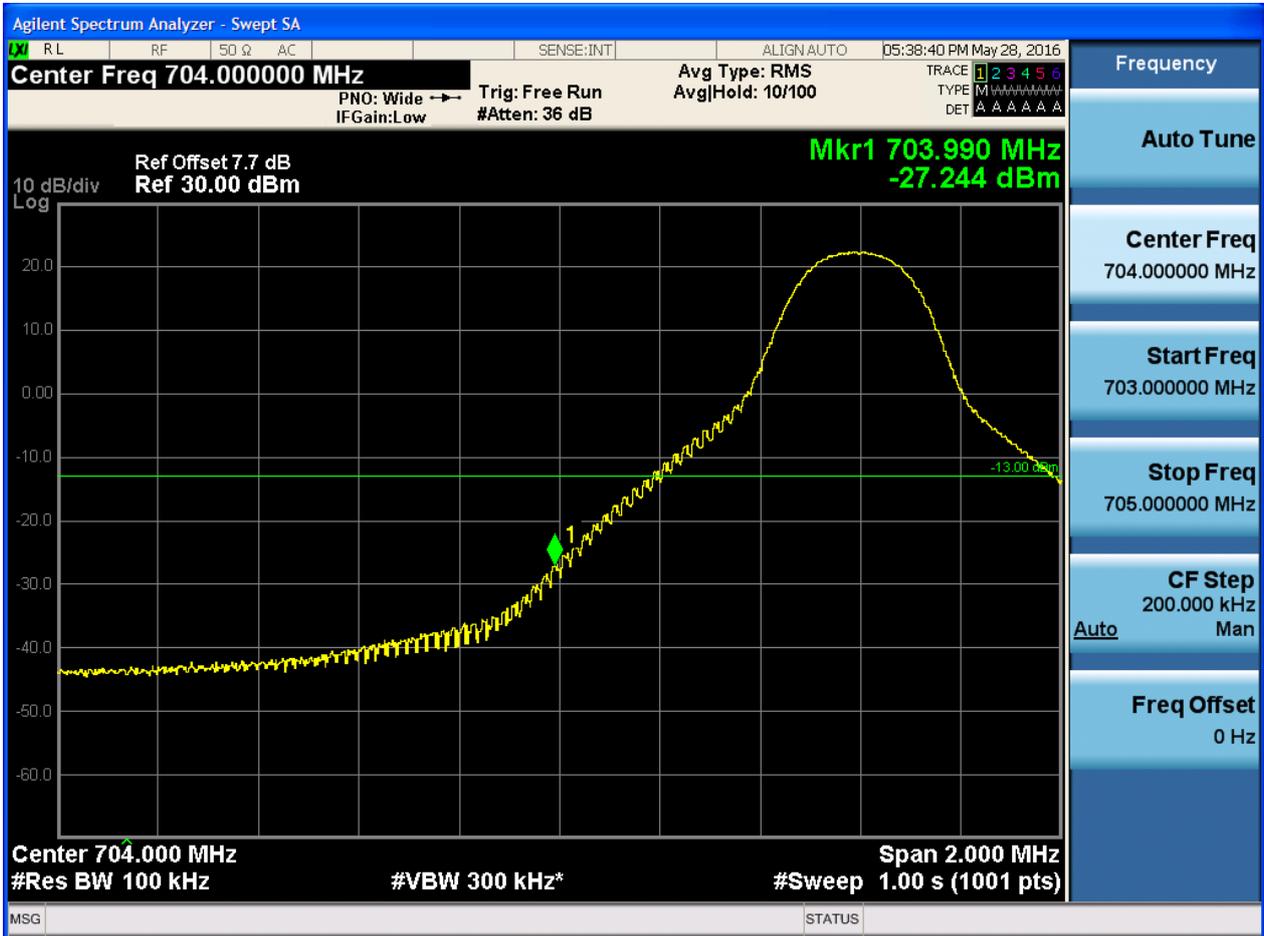




5.1.1.1.2 Test Bandwidth = 10

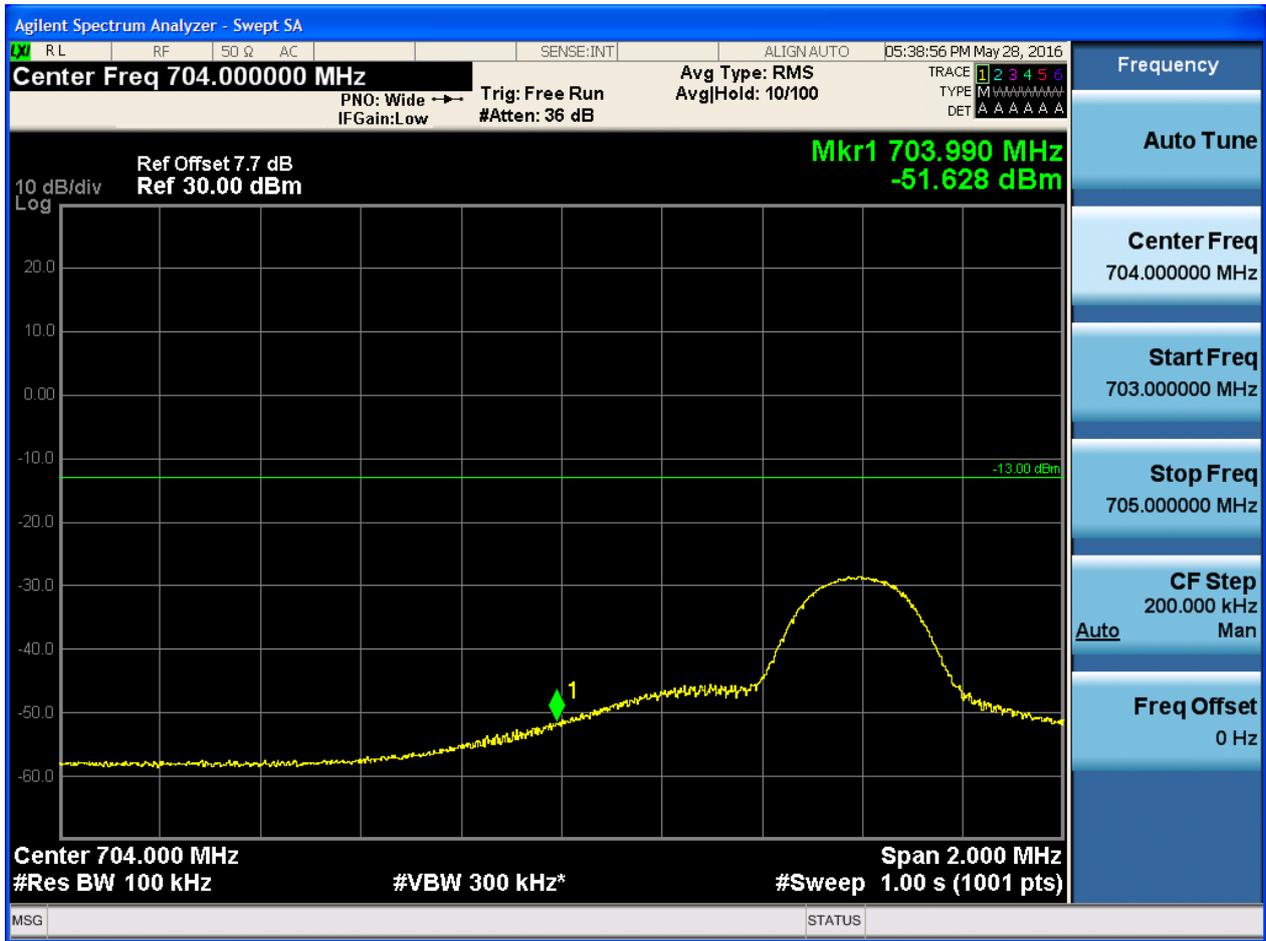
5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0



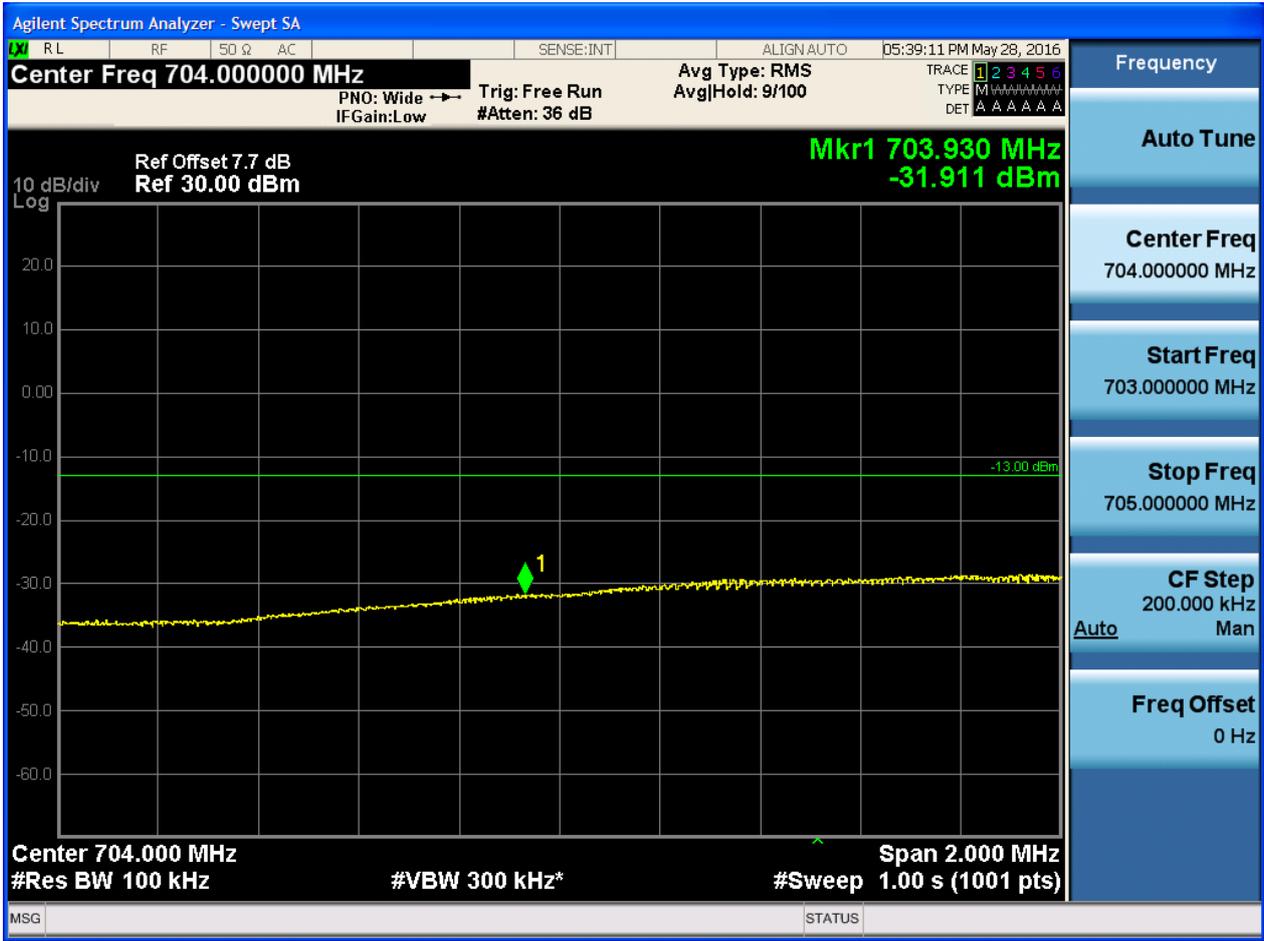


5.1.1.1.2.1.2 Test RB = RB1#49





5.1.1.1.2.1.3 Test RB = RB25#13





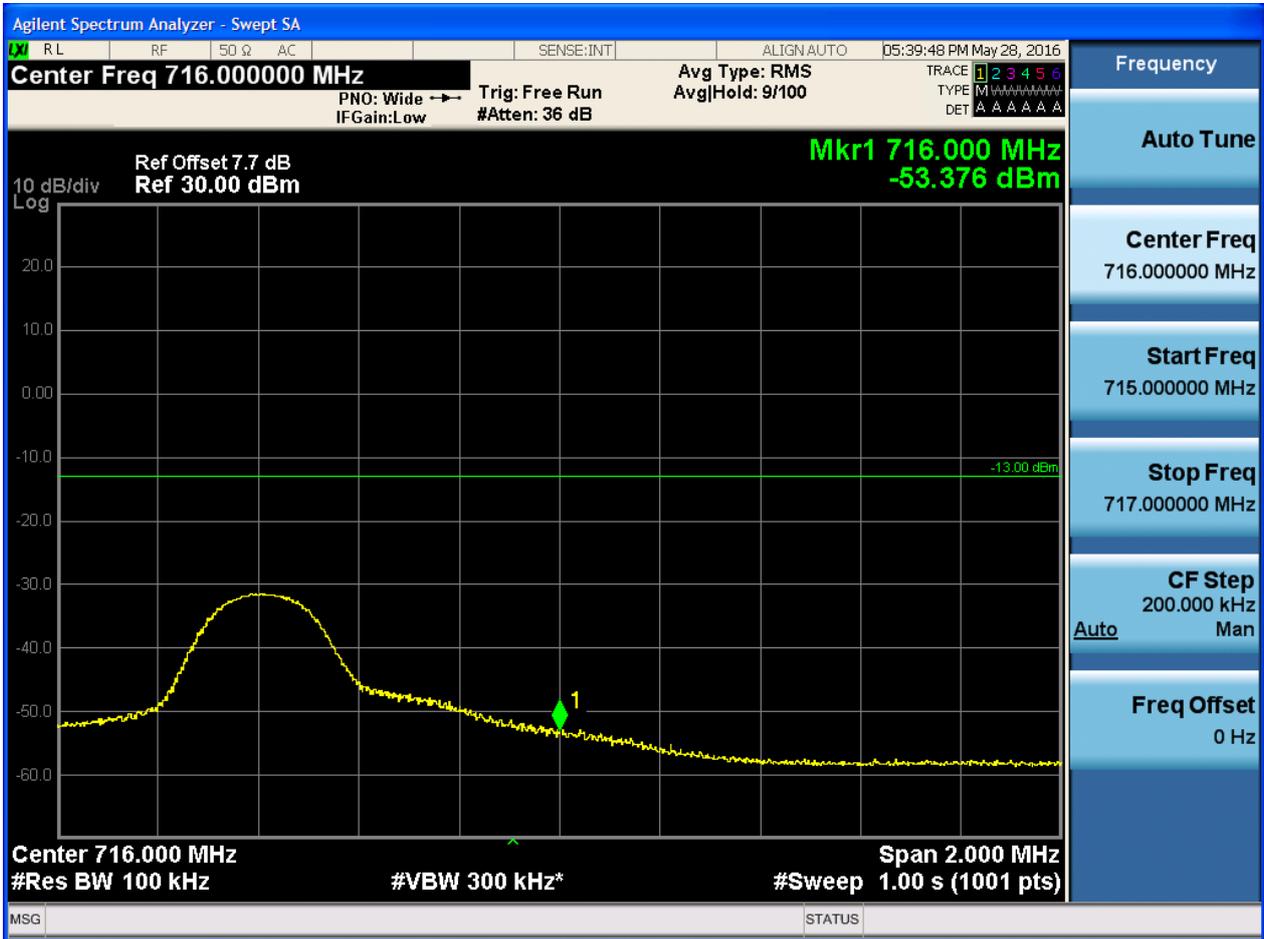
5.1.1.1.2.1.4 Test RB = RB50#0





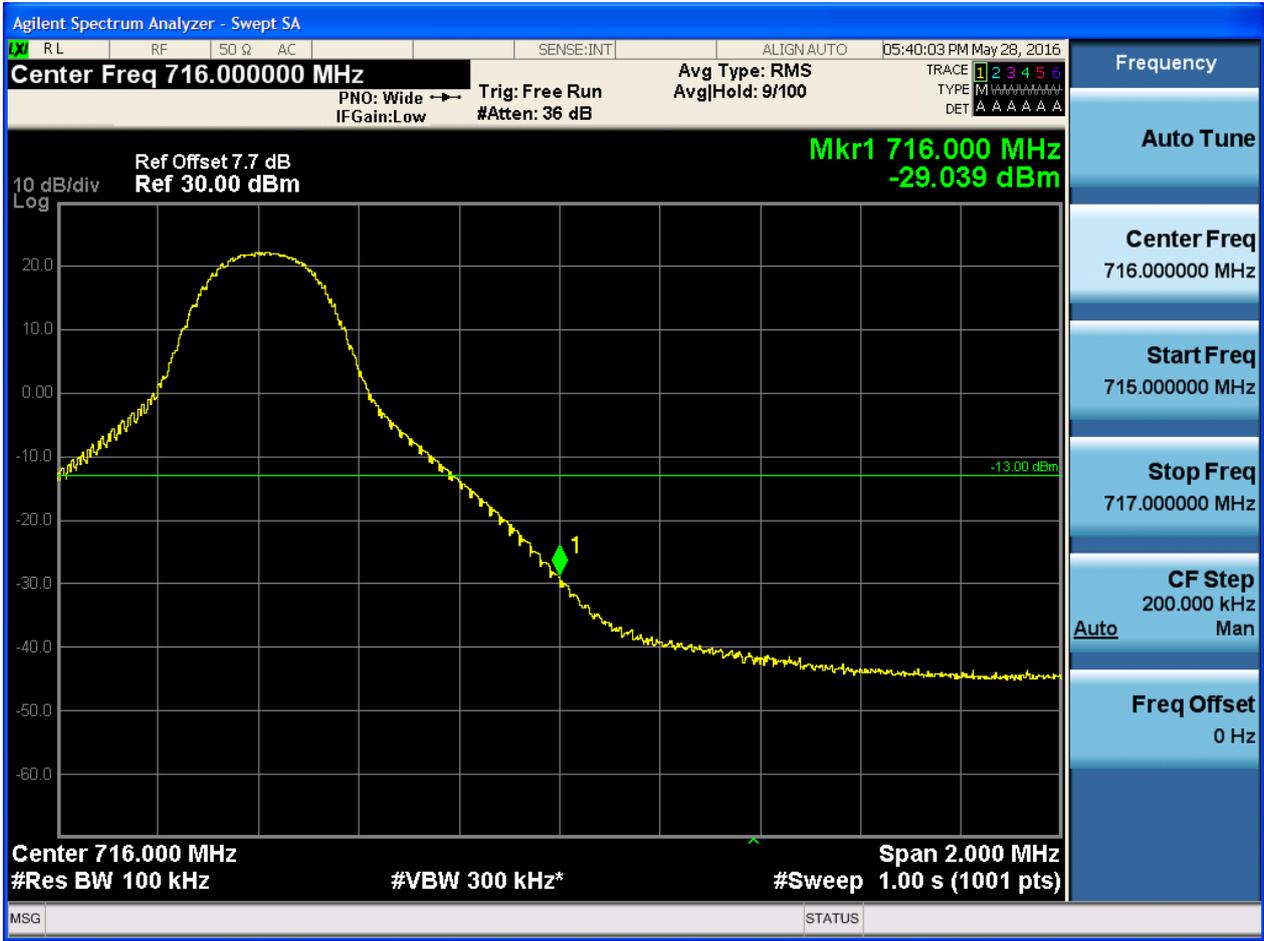
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0



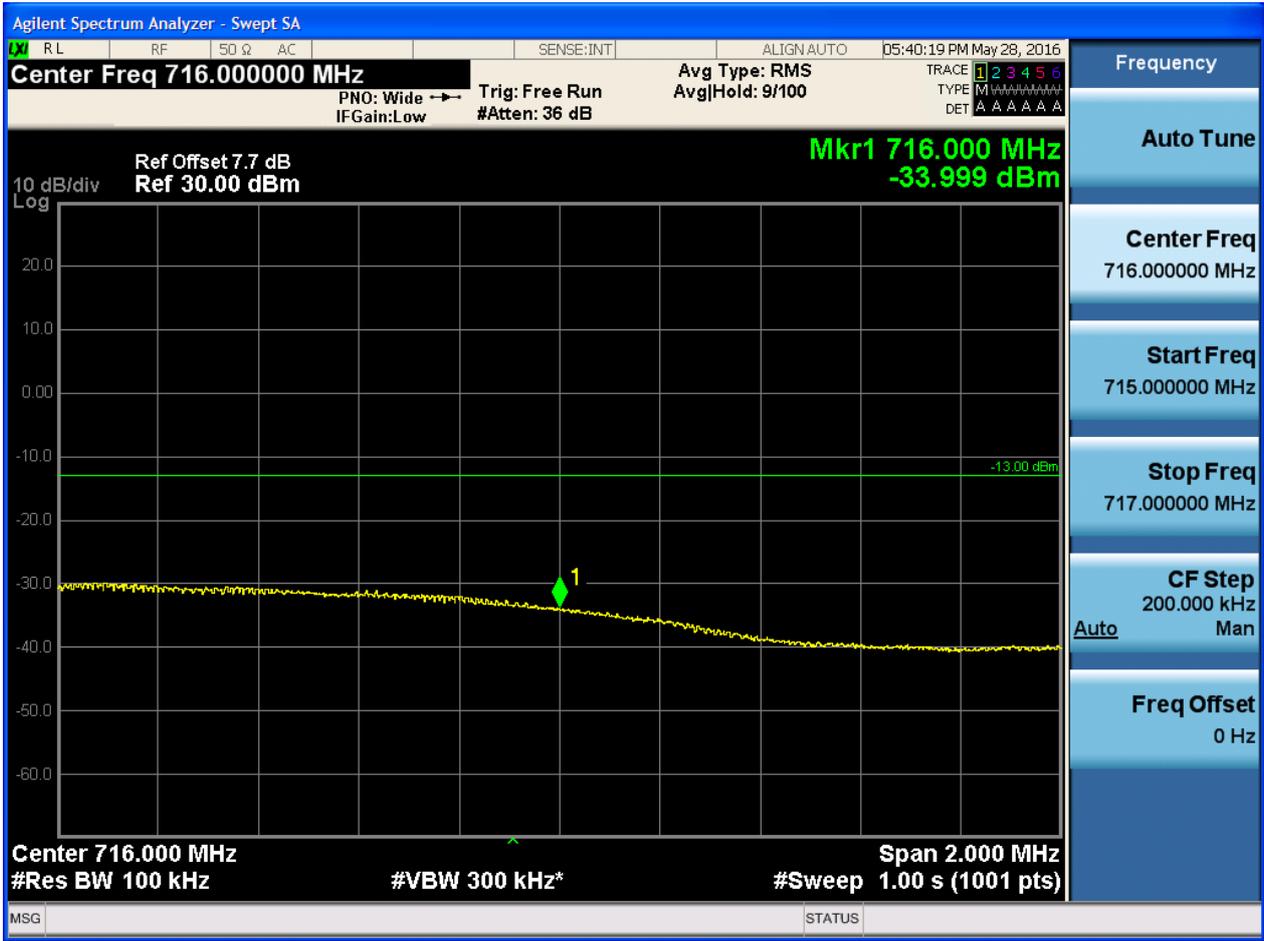


5.1.1.1.2.2.2 Test RB = RB1#49





5.1.1.1.2.2.3 Test RB = RB25#13





5.1.1.1.2.2.4 Test RB = RB50#0



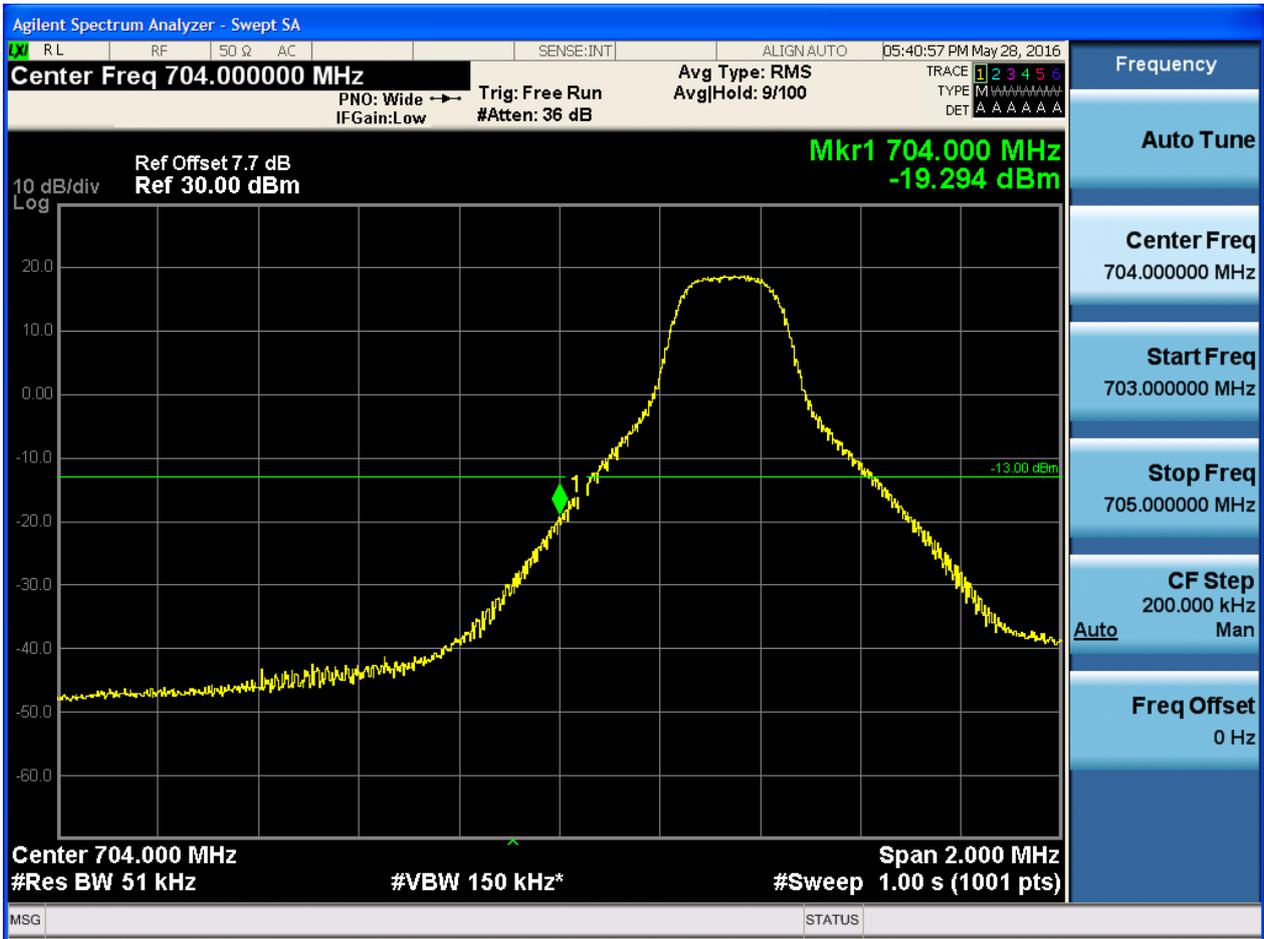


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 5

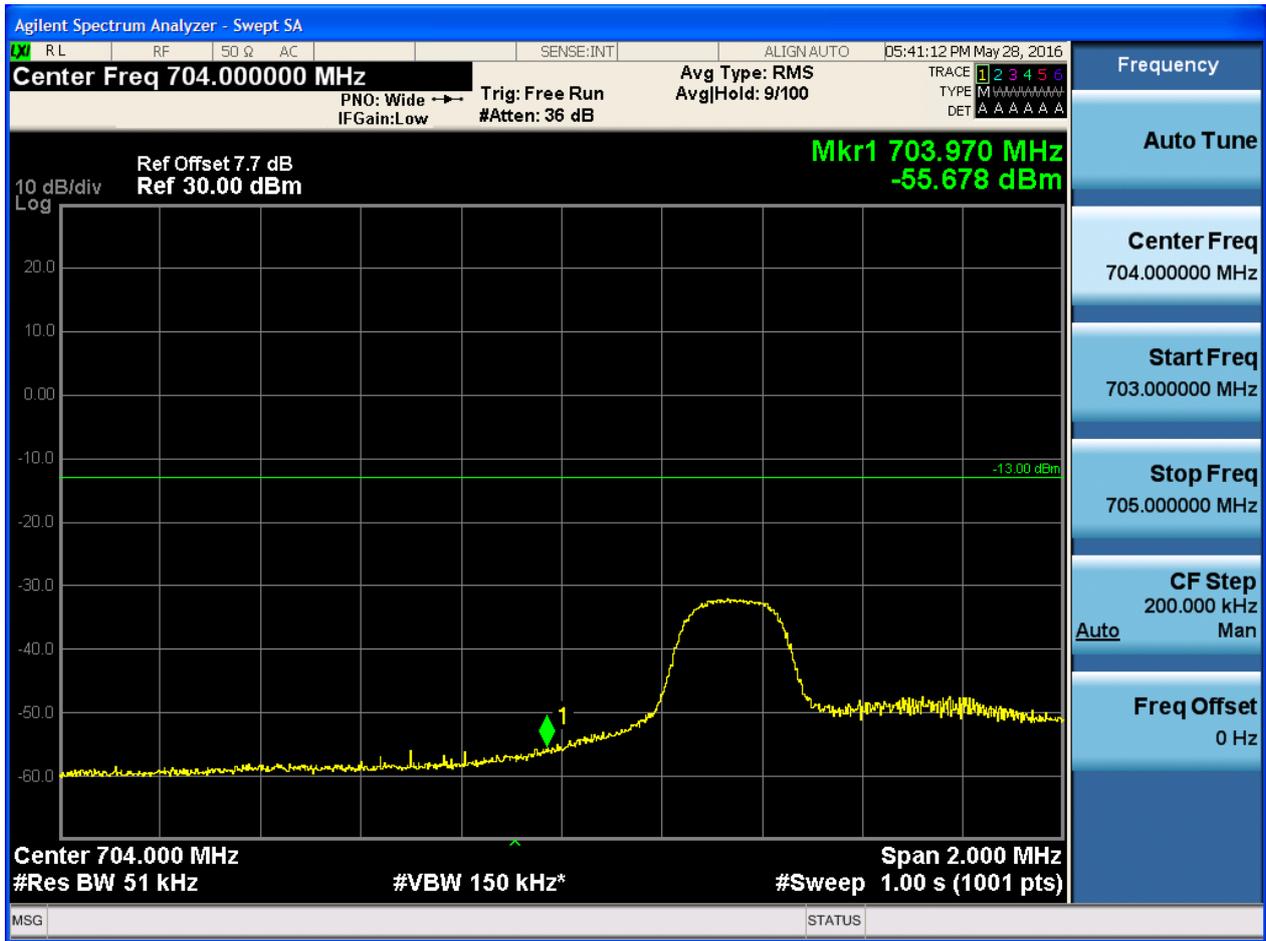
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0



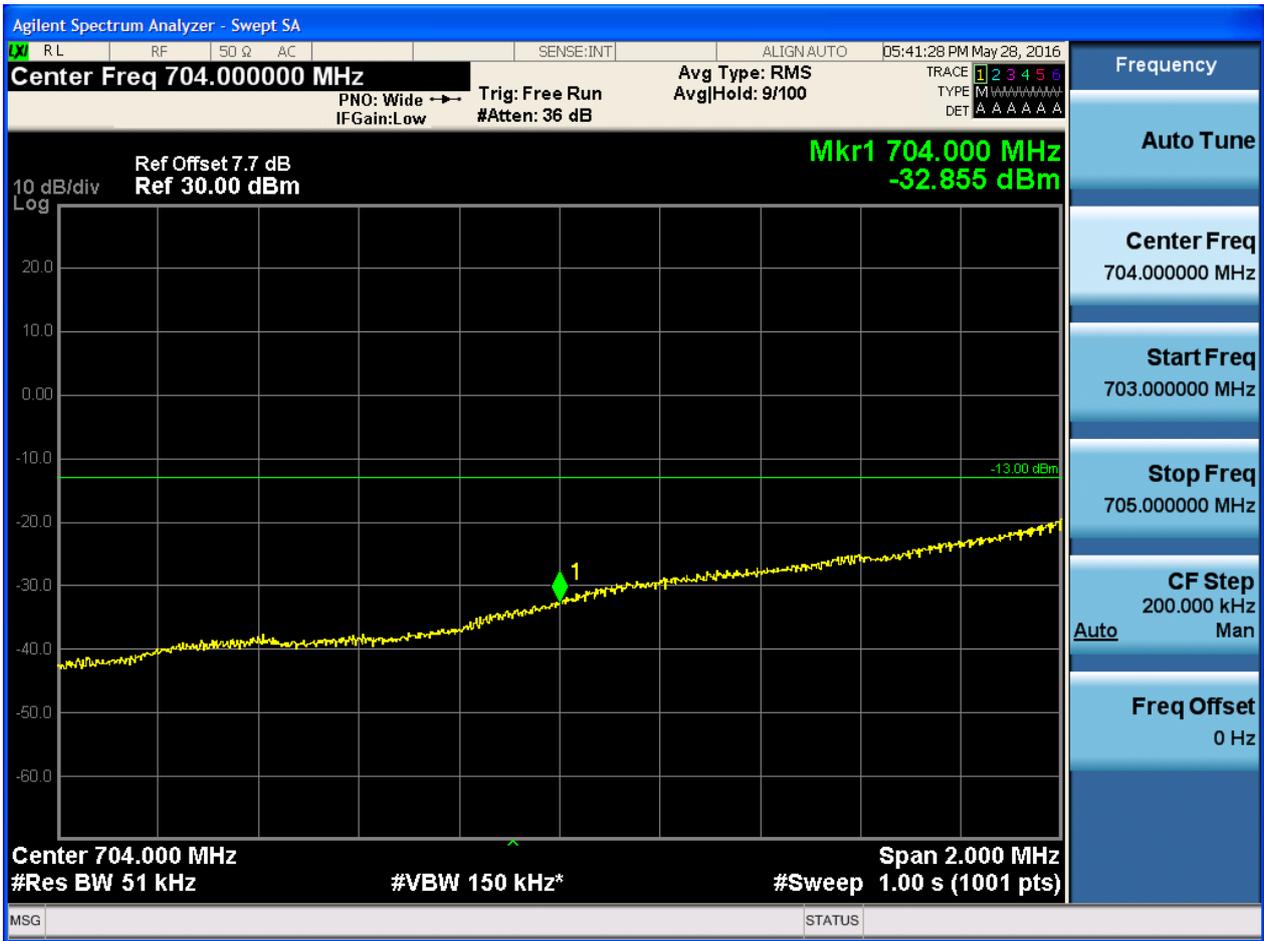


5.1.1.2.1.1.2 Test RB = RB1#24





5.1.1.2.1.1.3 Test RB = RB12#6





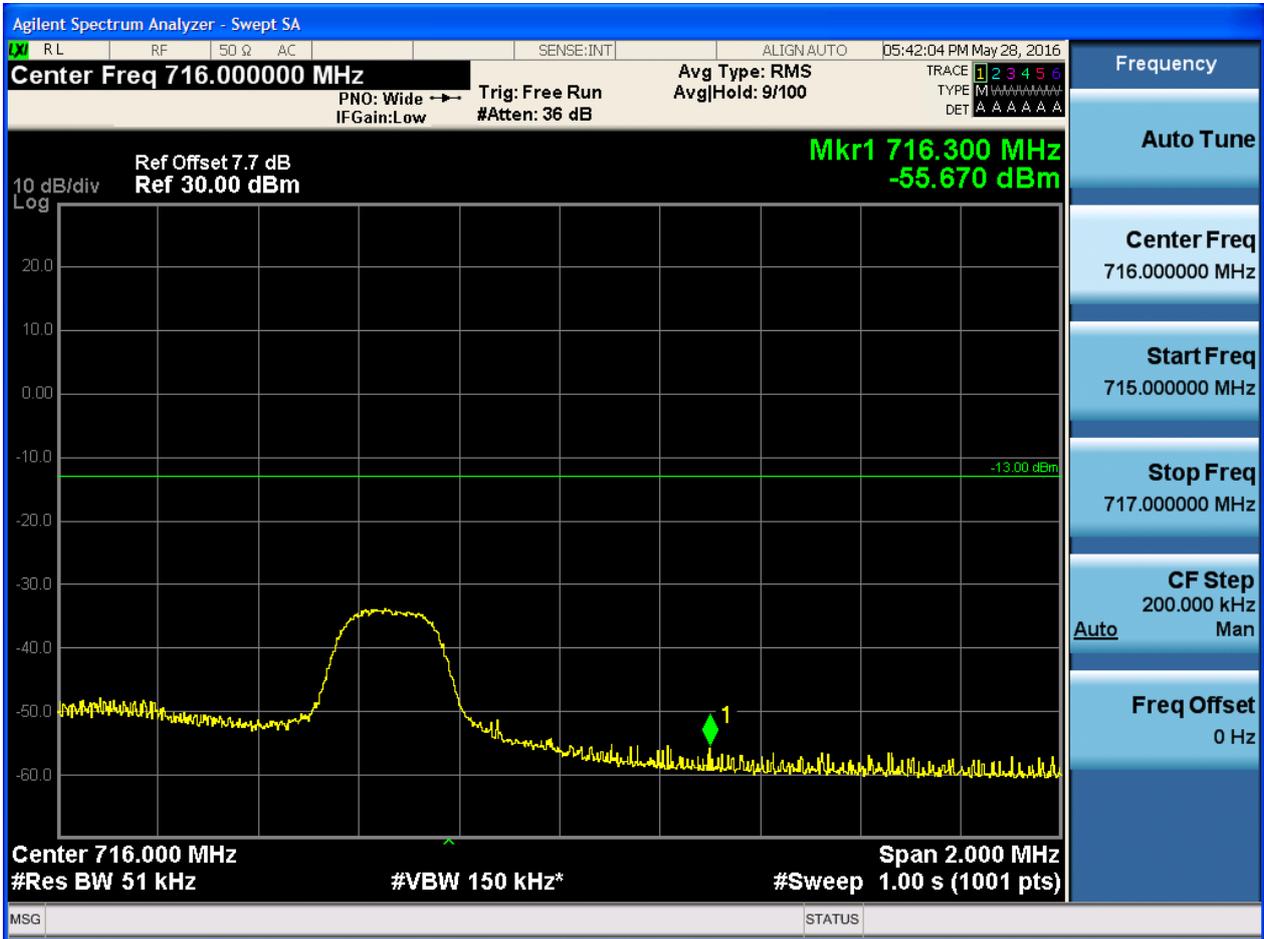
5.1.1.2.1.1.4 Test RB = RB25#0





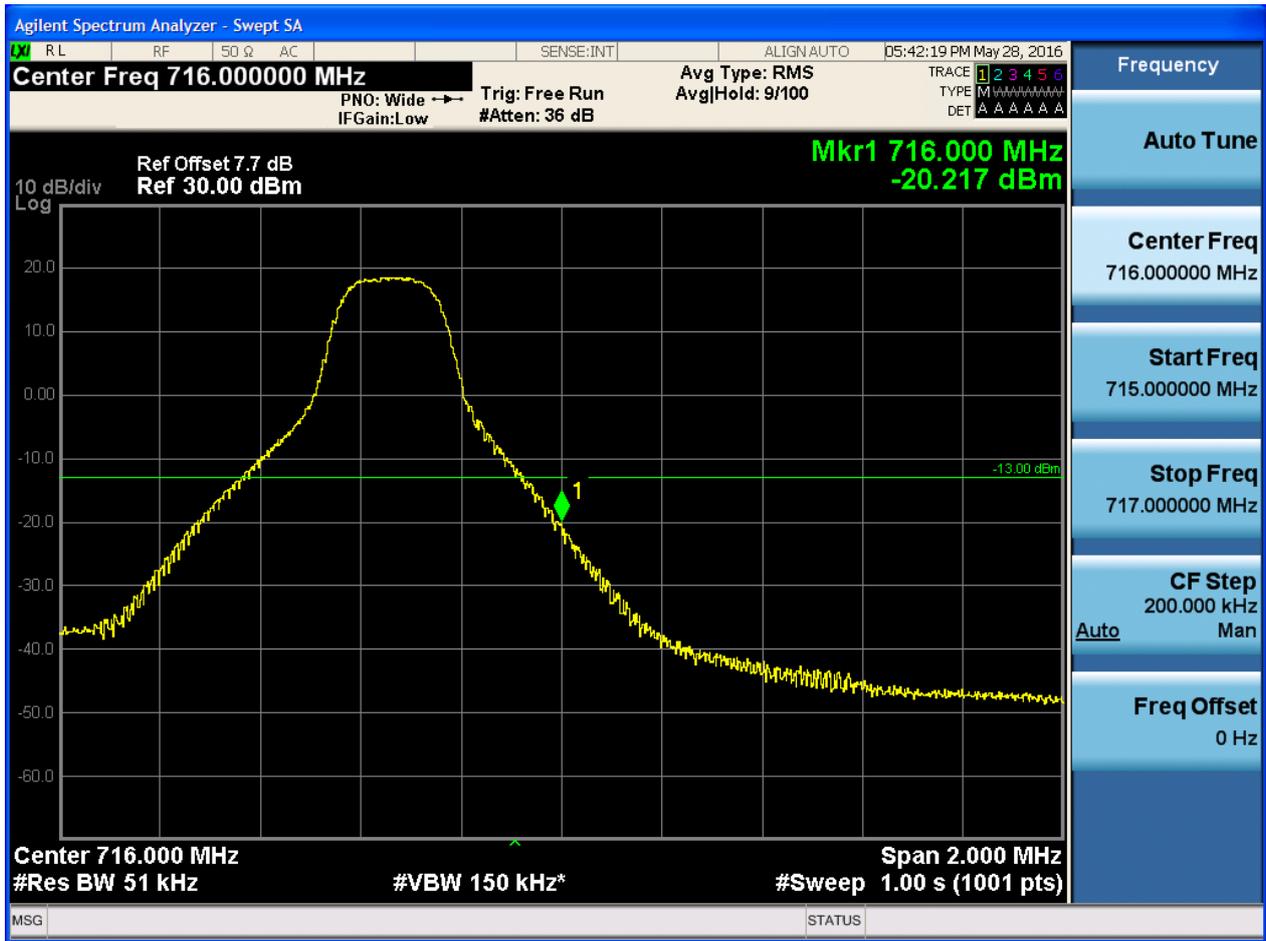
5.1.1.2.1.2 Test Channel = HCH

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

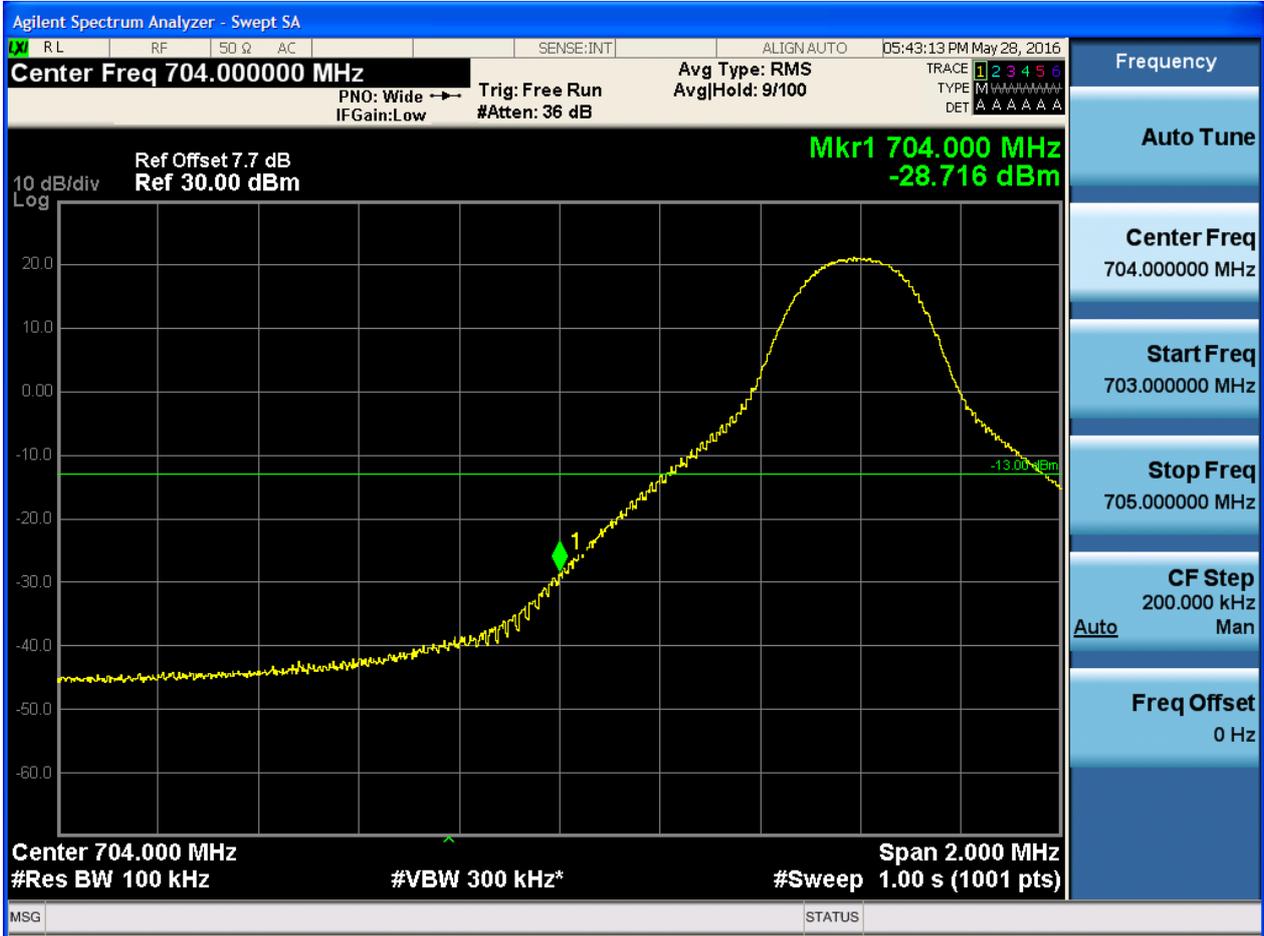




5.1.1.2.2 Test Bandwidth = 10

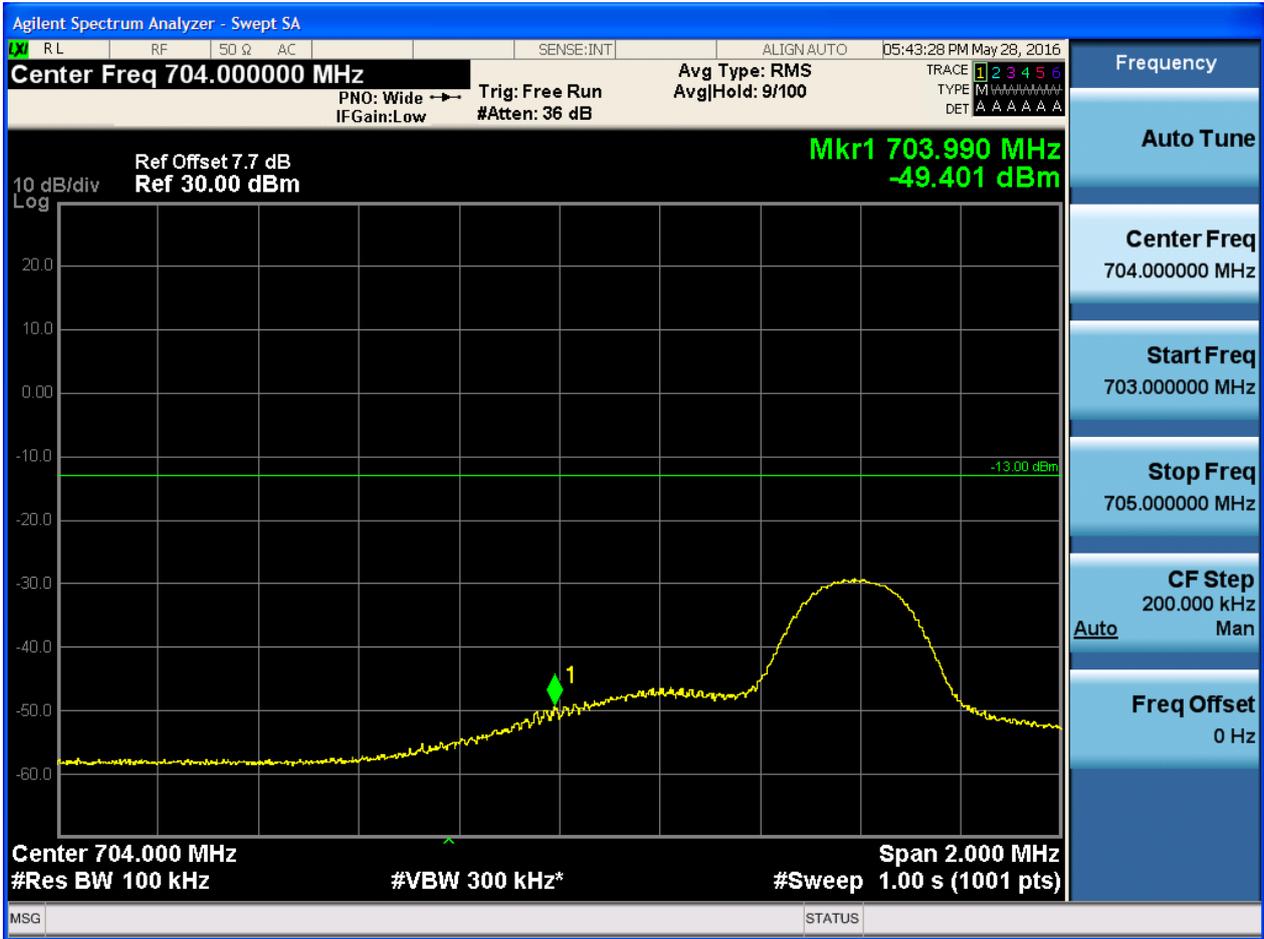
5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0



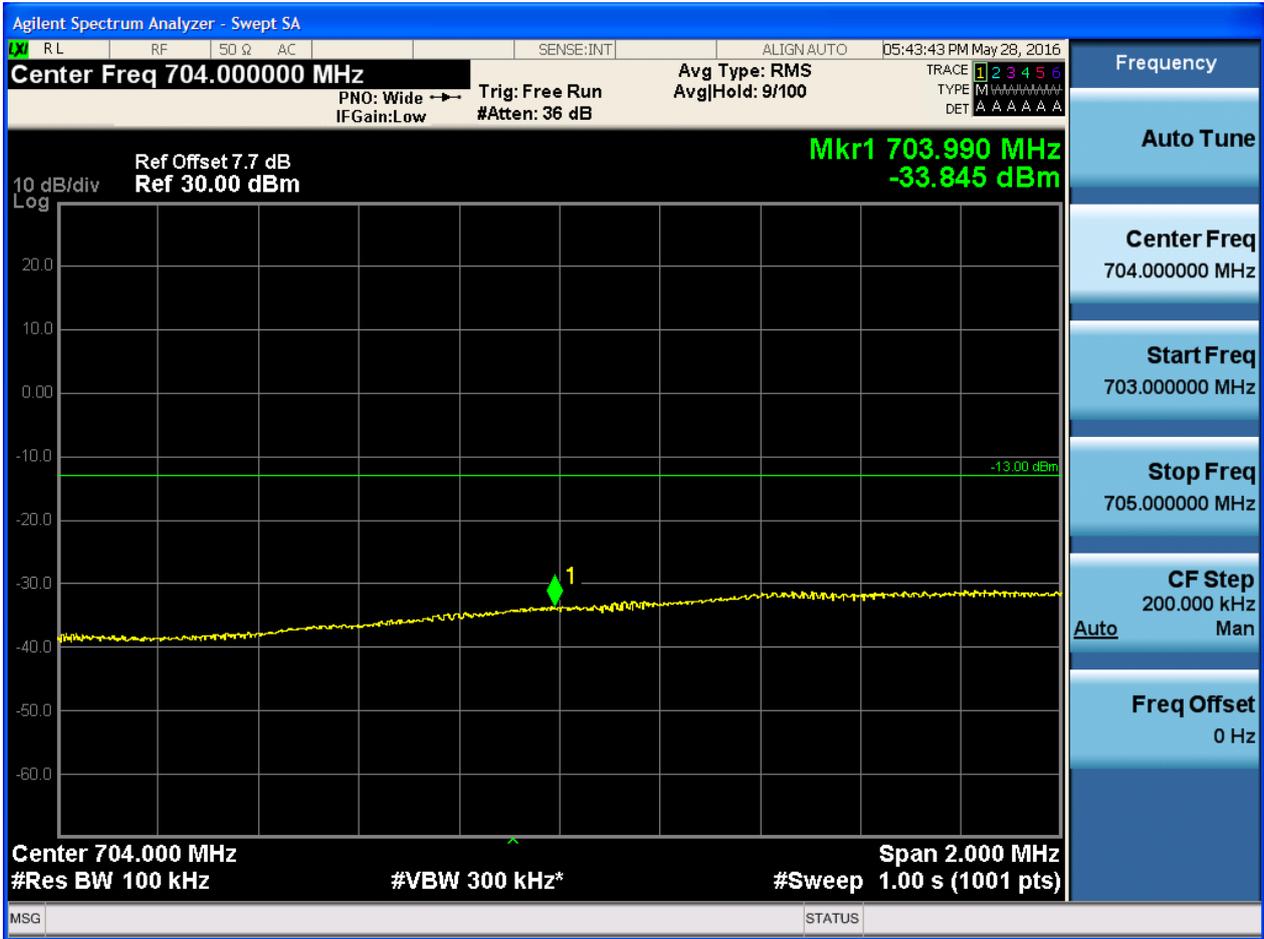


5.1.1.2.2.1.2 Test RB = RB1#49





5.1.1.2.2.1.3 Test RB = RB25#13



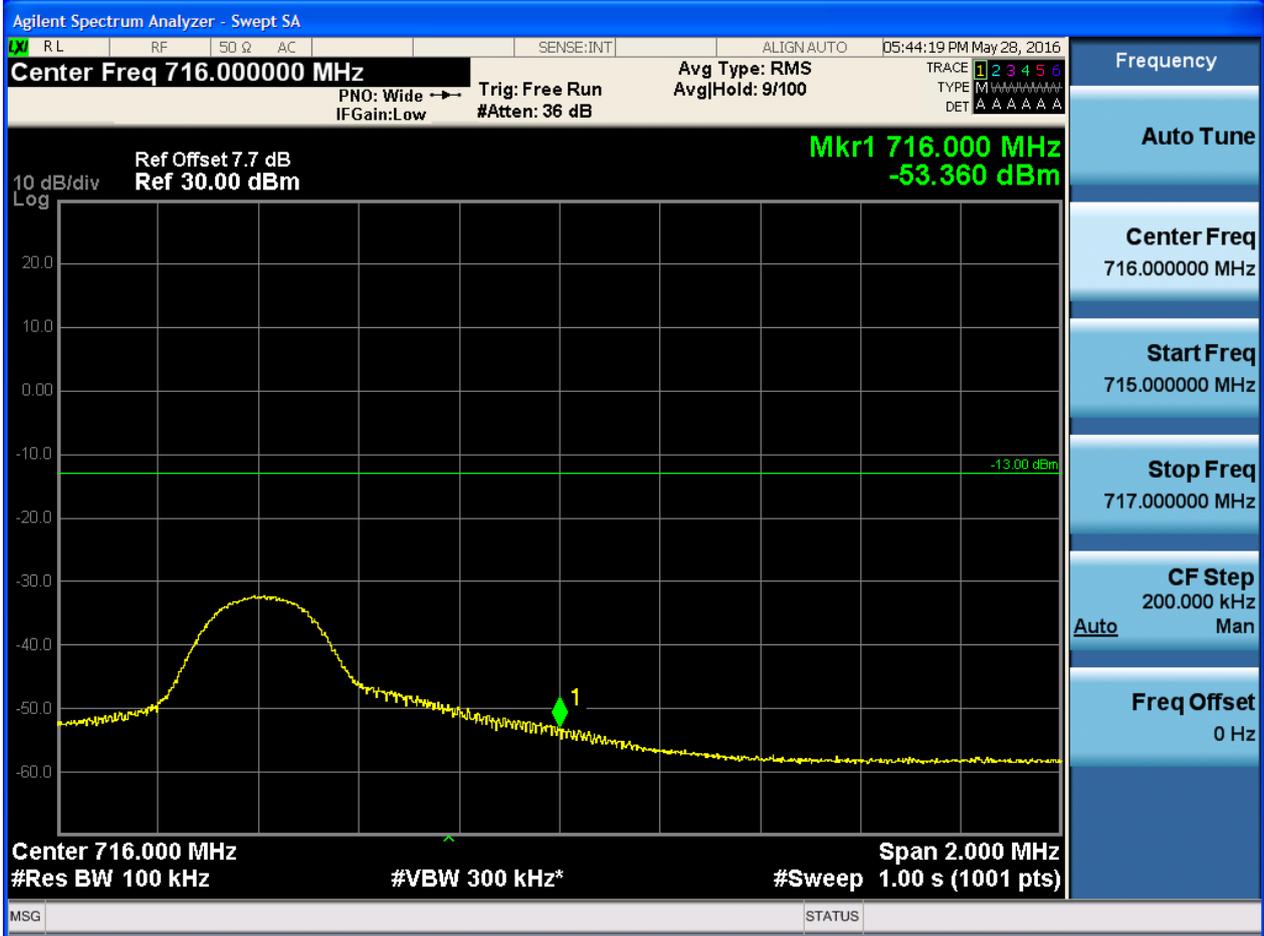


5.1.1.2.2.1.4 Test RB = RB50#0



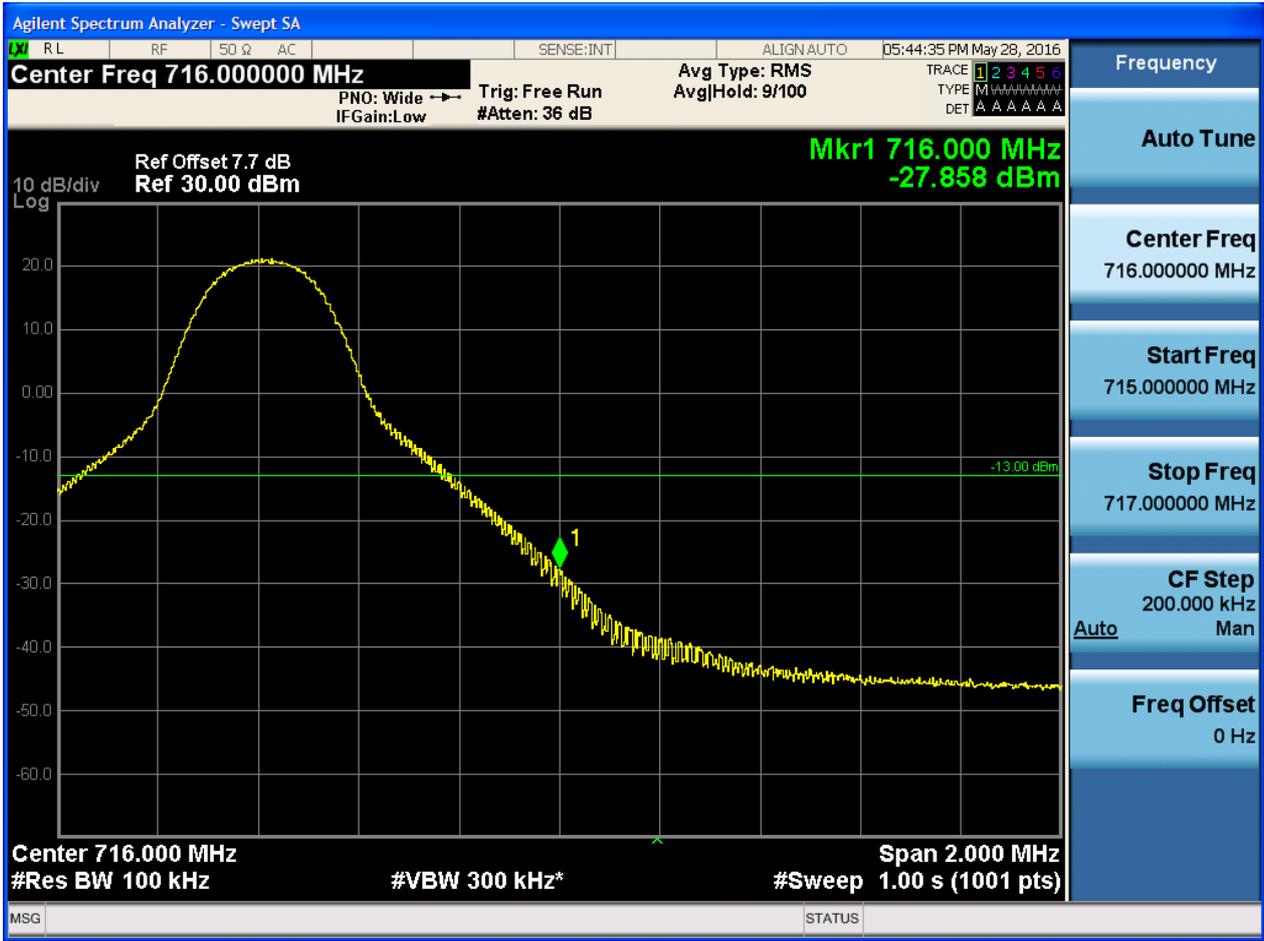
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0



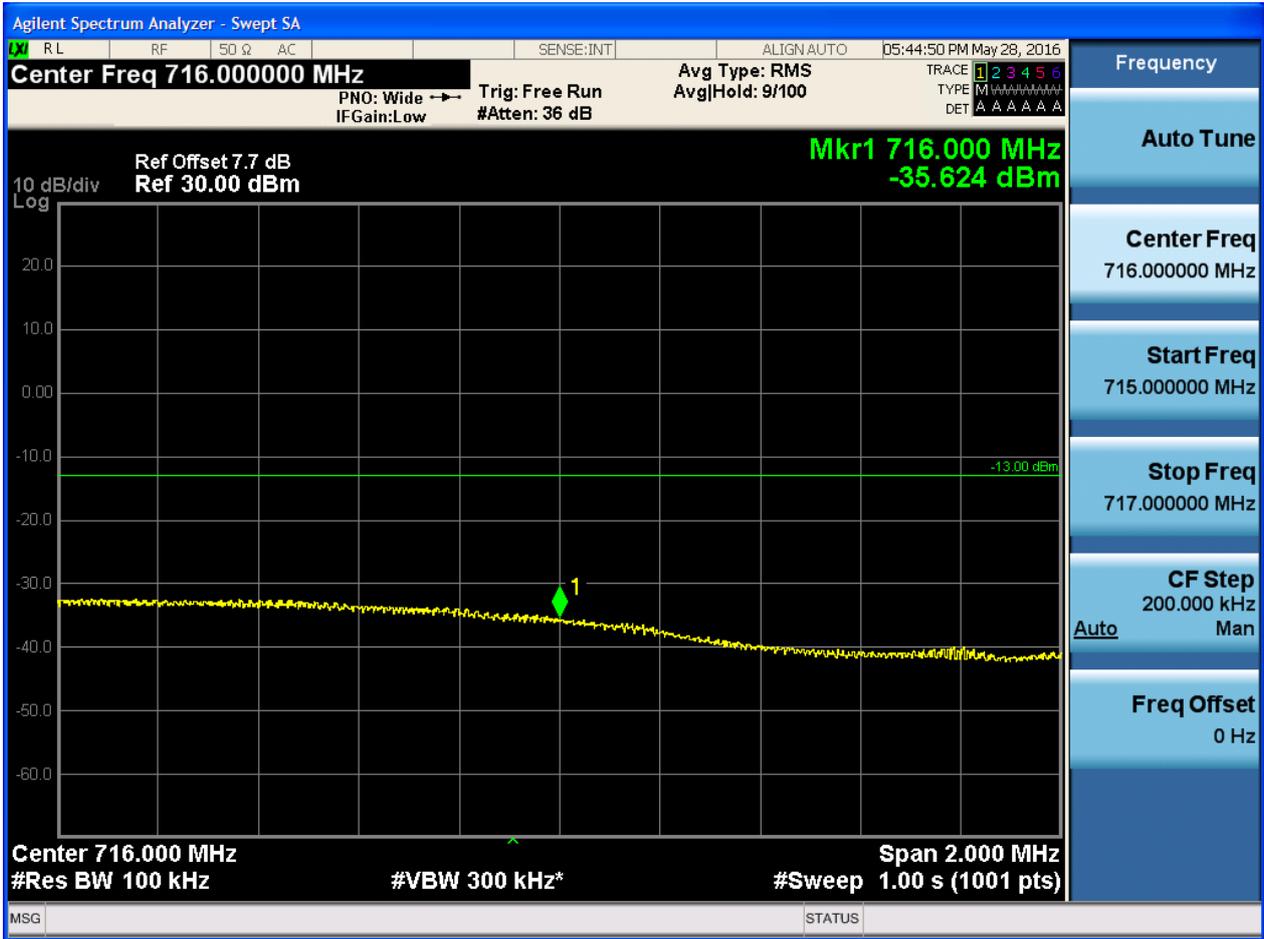


5.1.1.2.2.2 Test RB = RB1#49





5.1.1.2.2.2.3 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

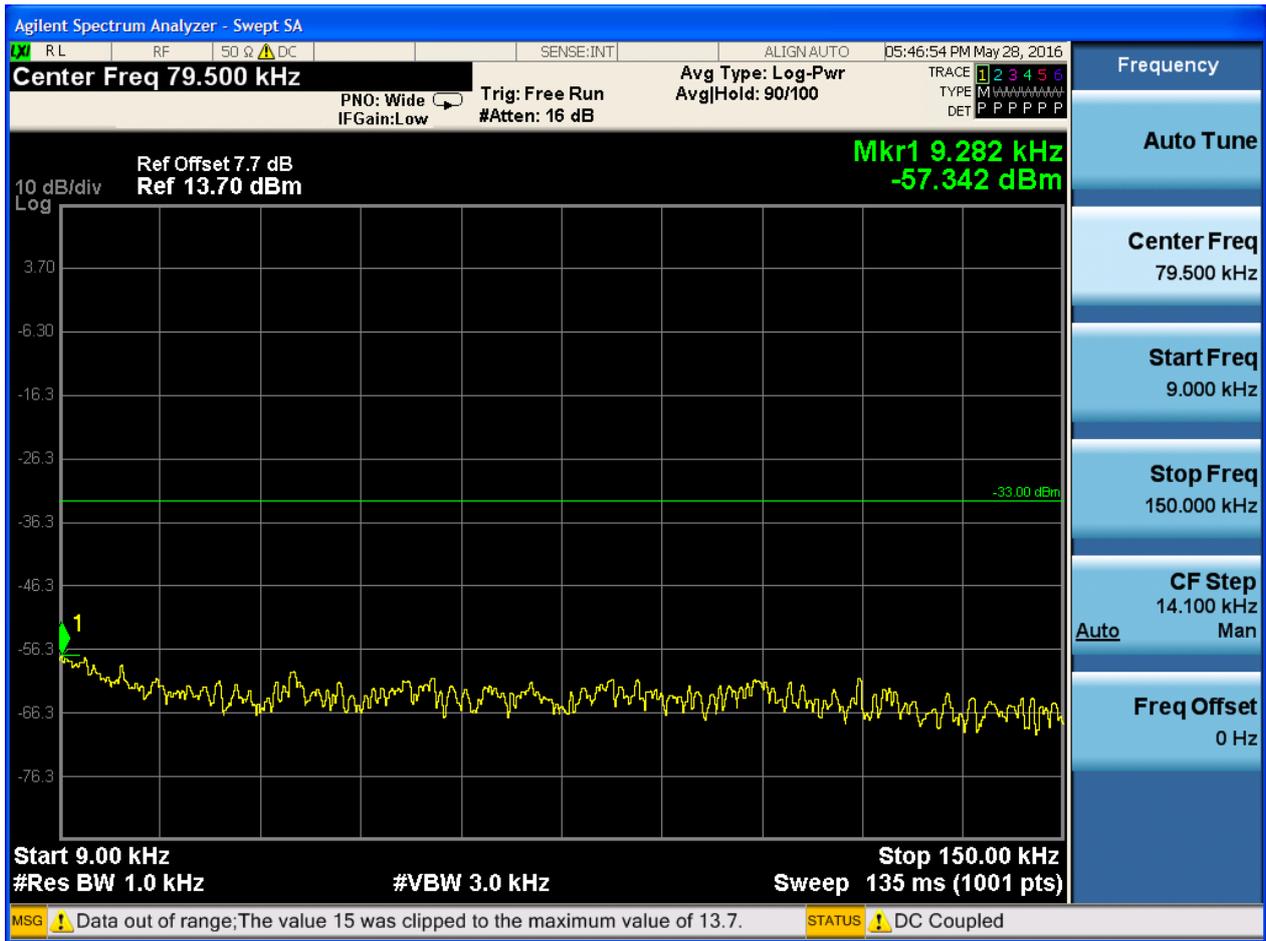
6.1.1 Test Band = BAND17

6.1.1.1 Test Mode = LTE/TM1

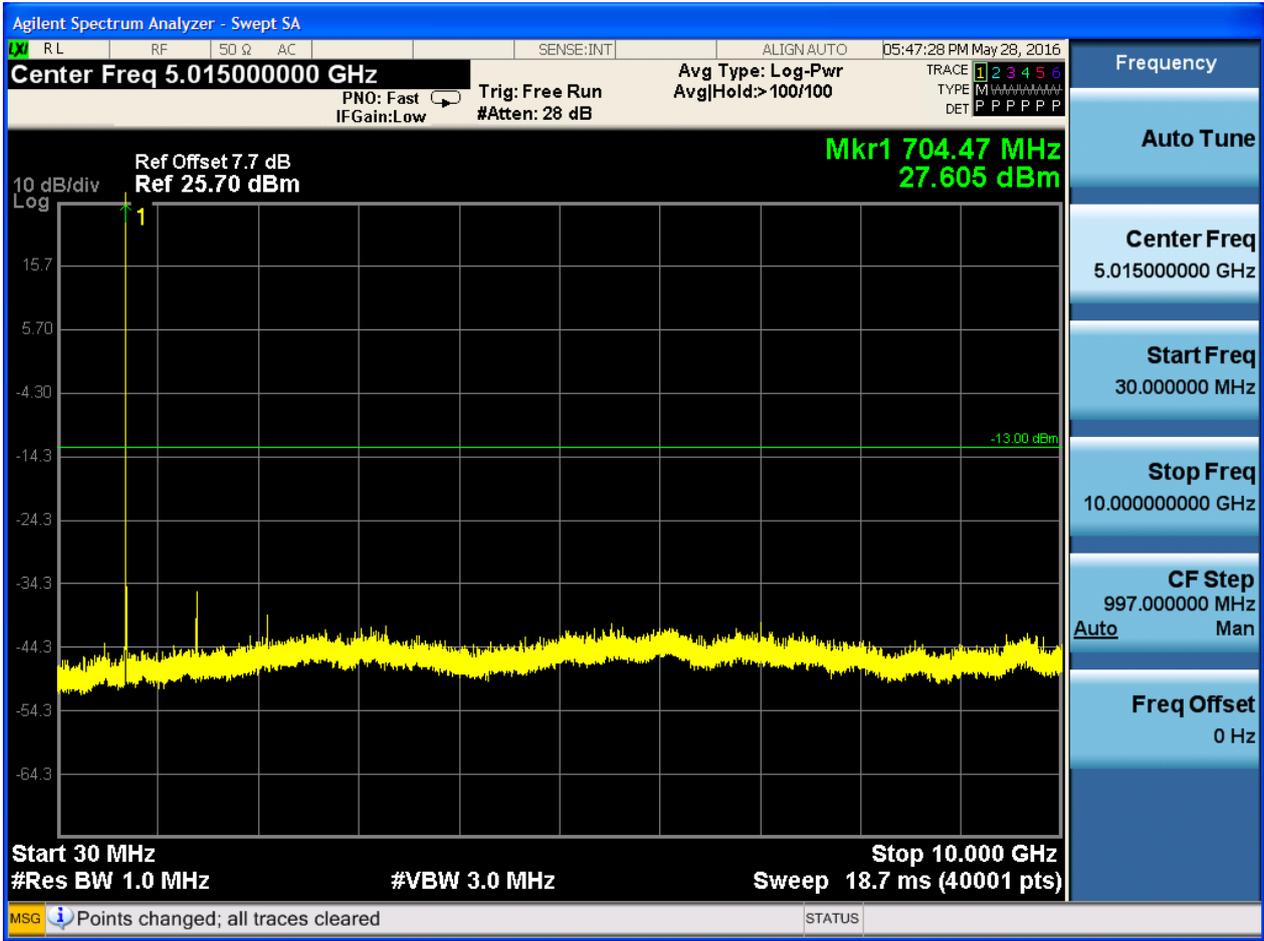
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

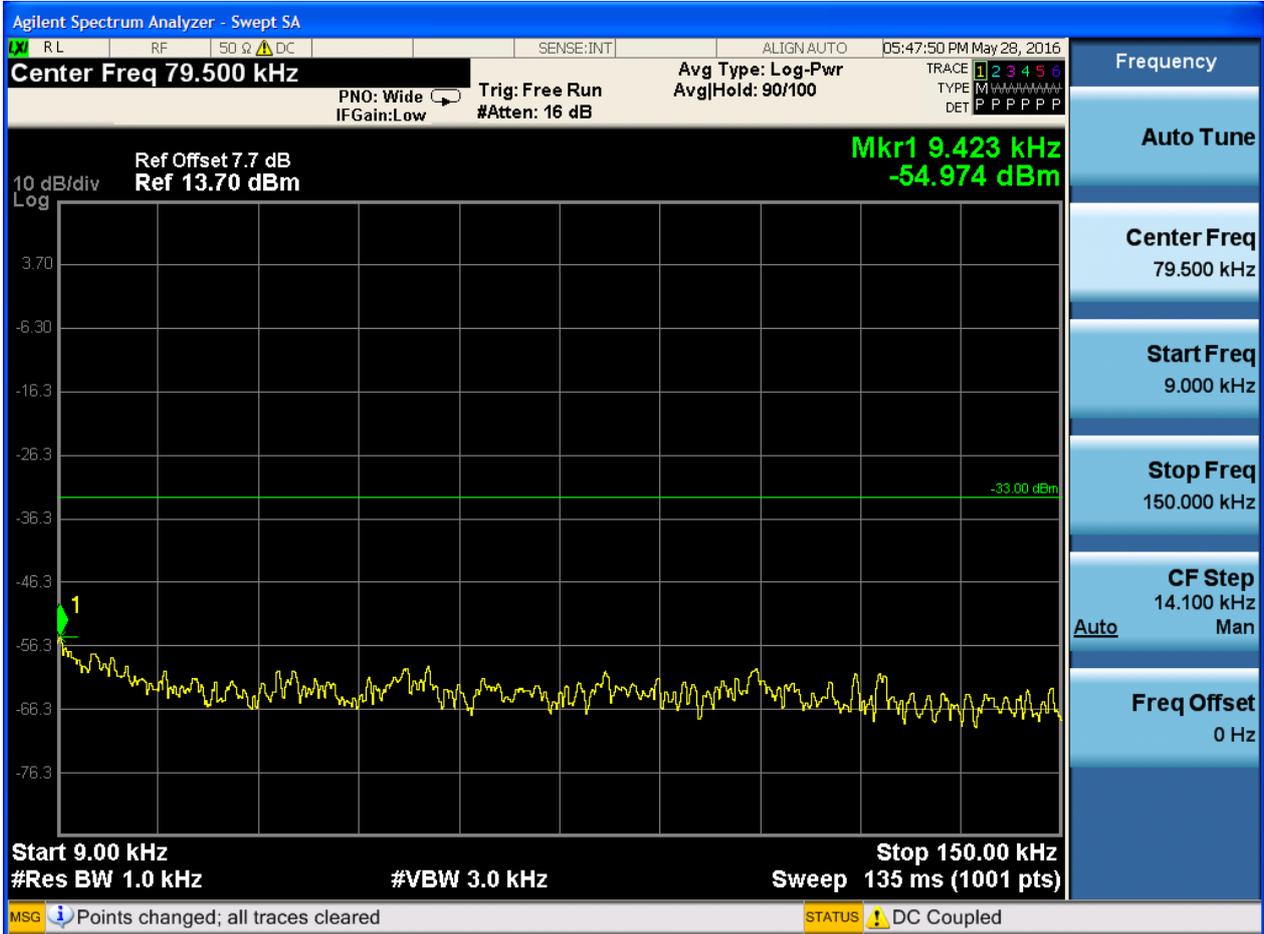




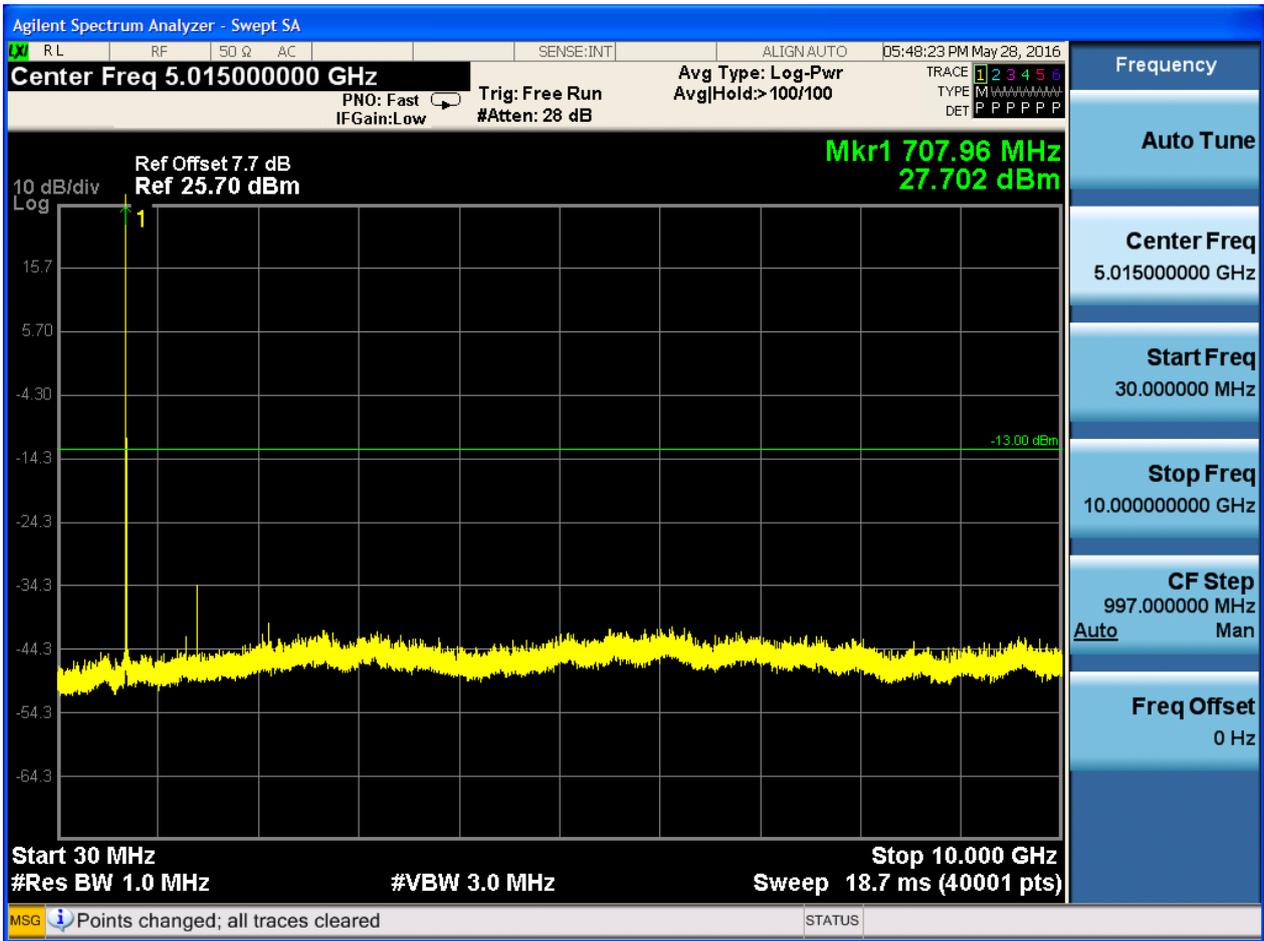


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

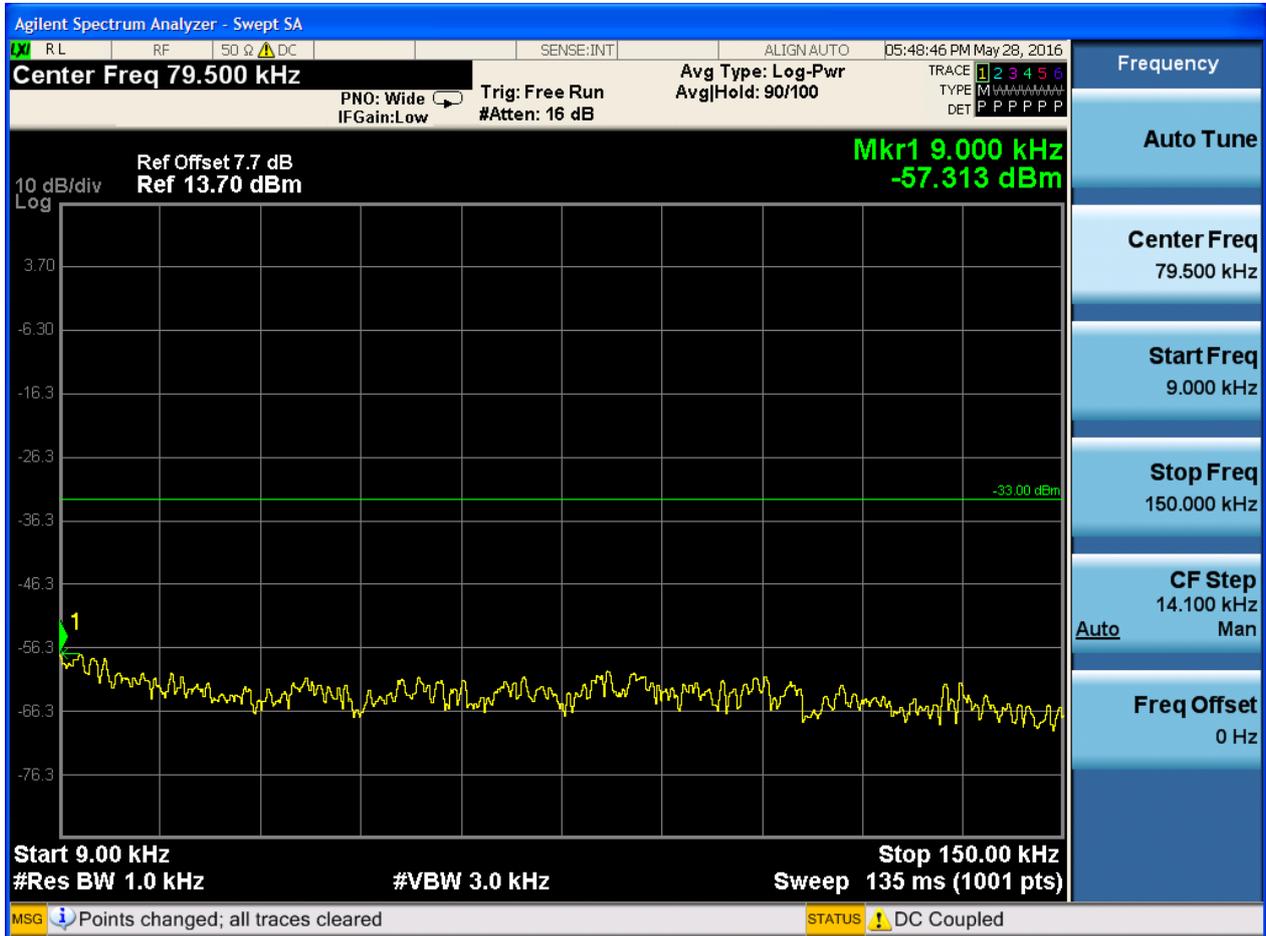


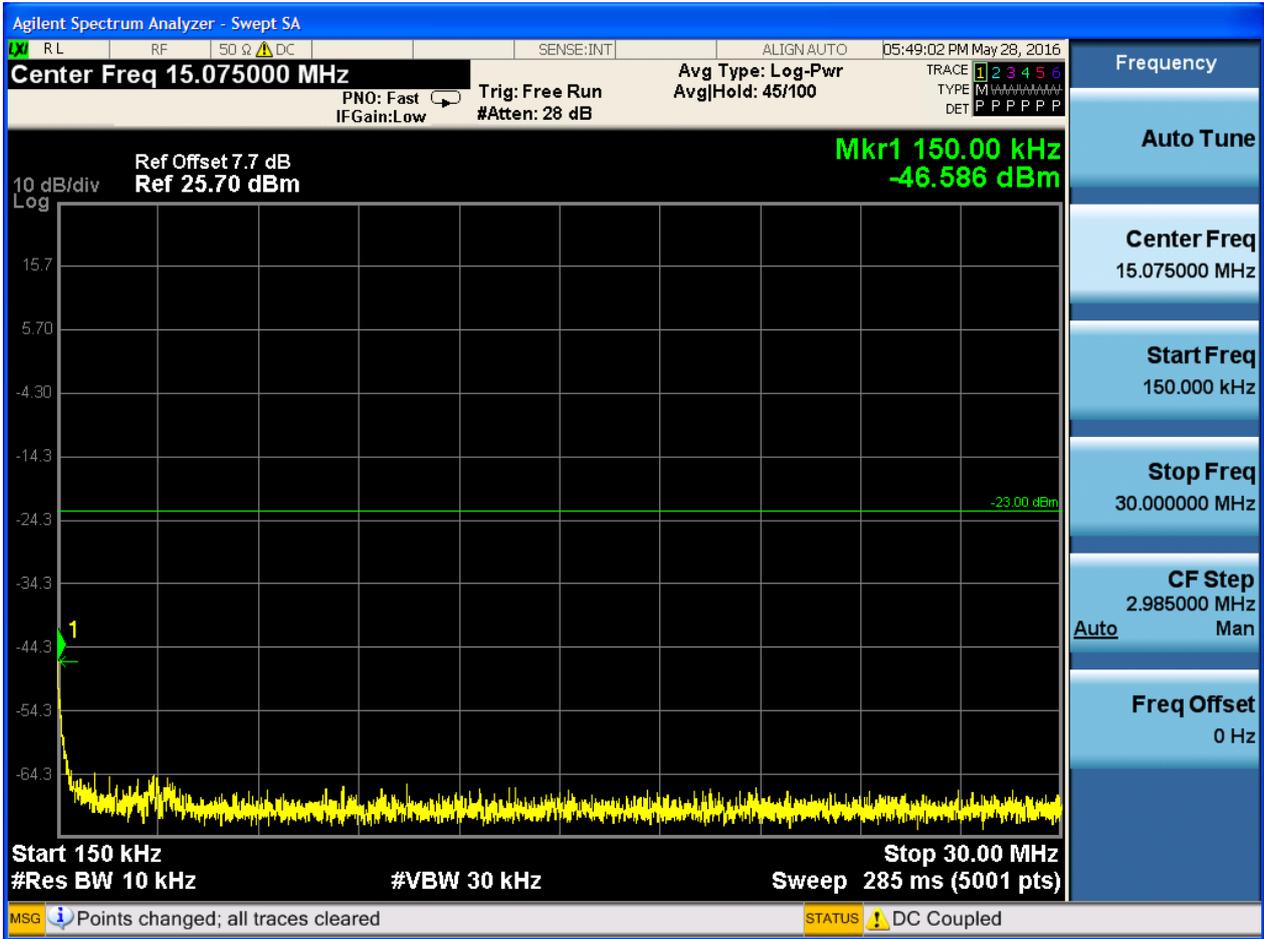


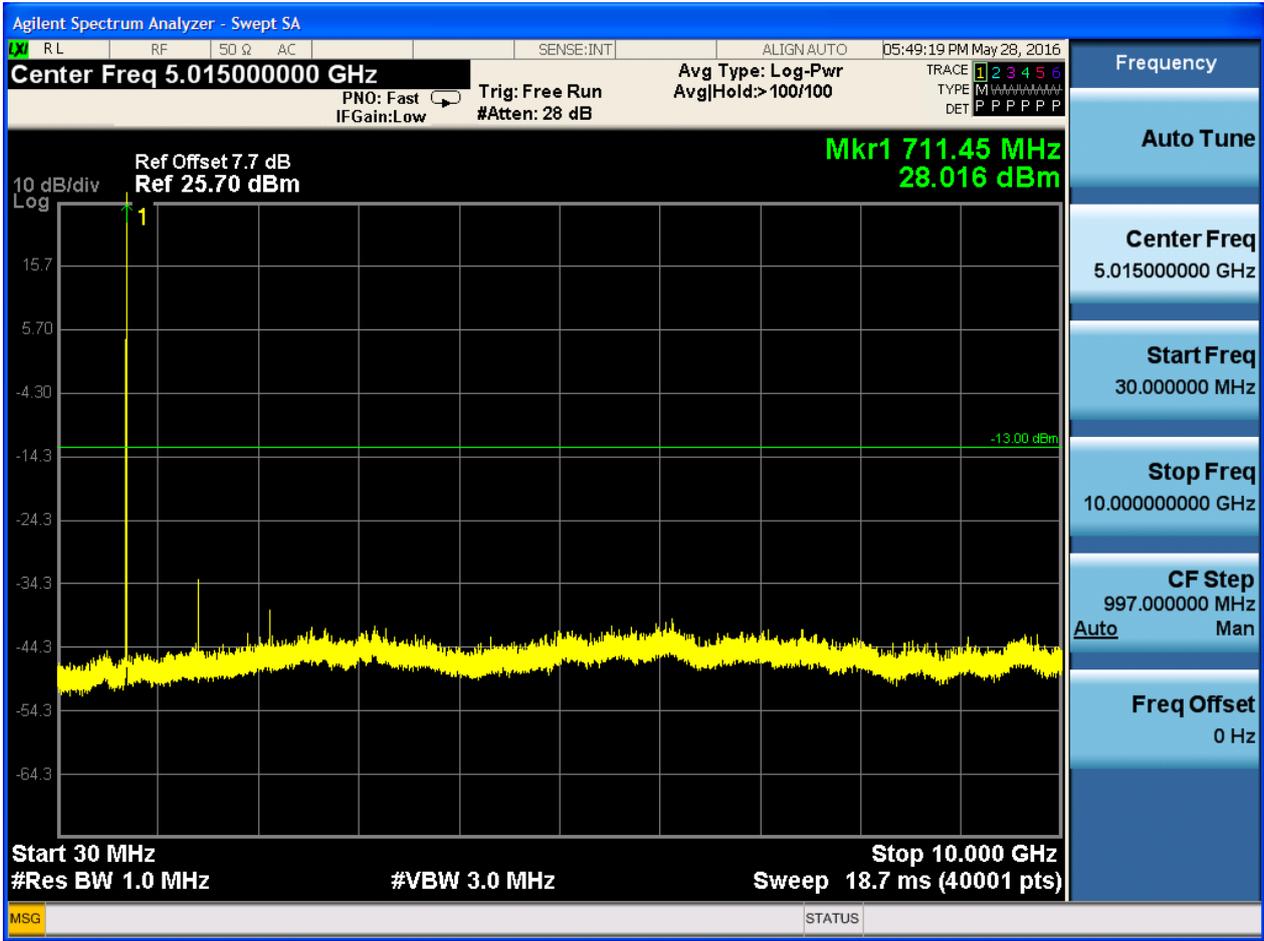


6.1.1.1.3 Test Channel = HCH

6.1.1.1.3.1 Test RB = RB1#0





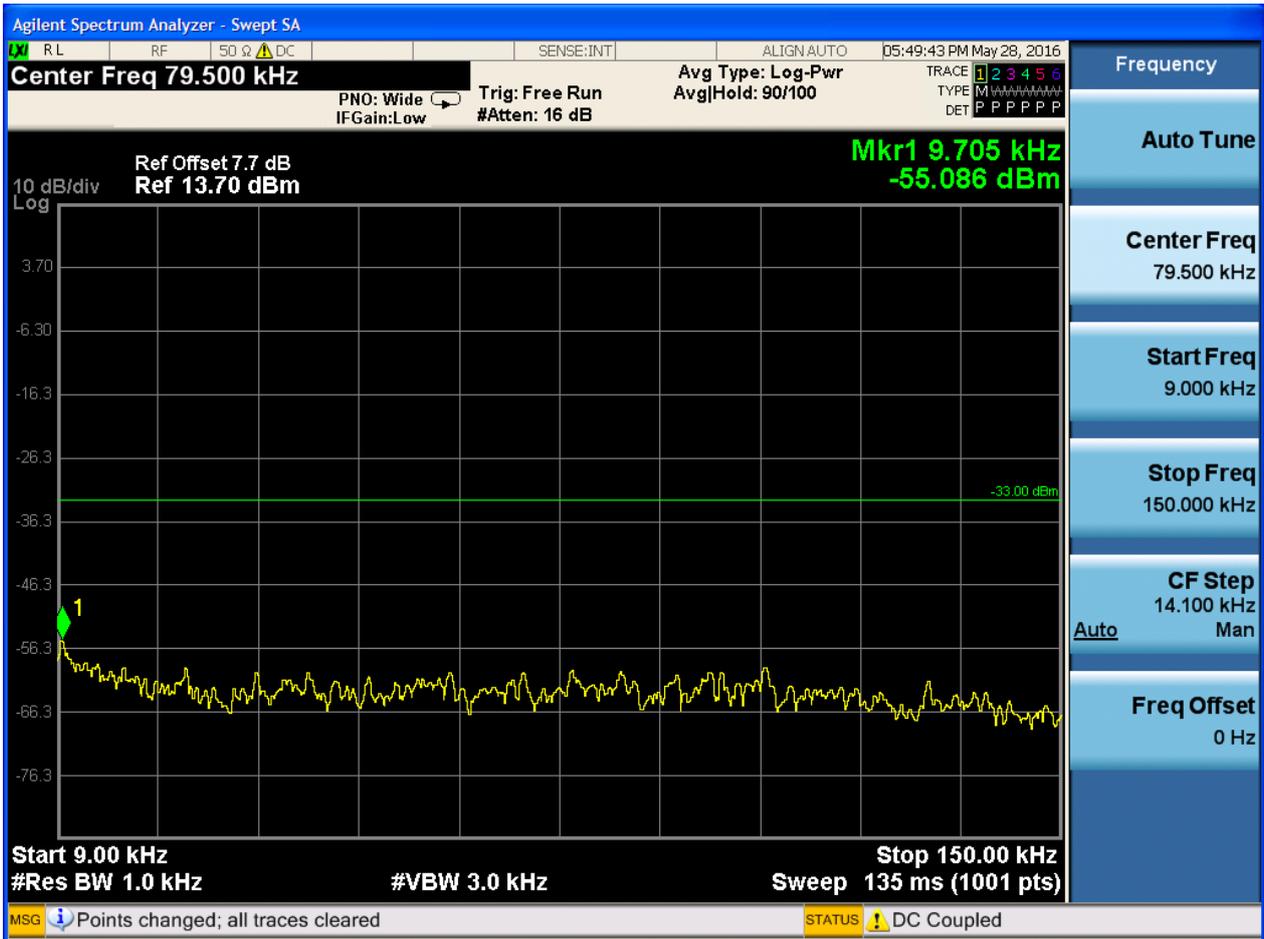


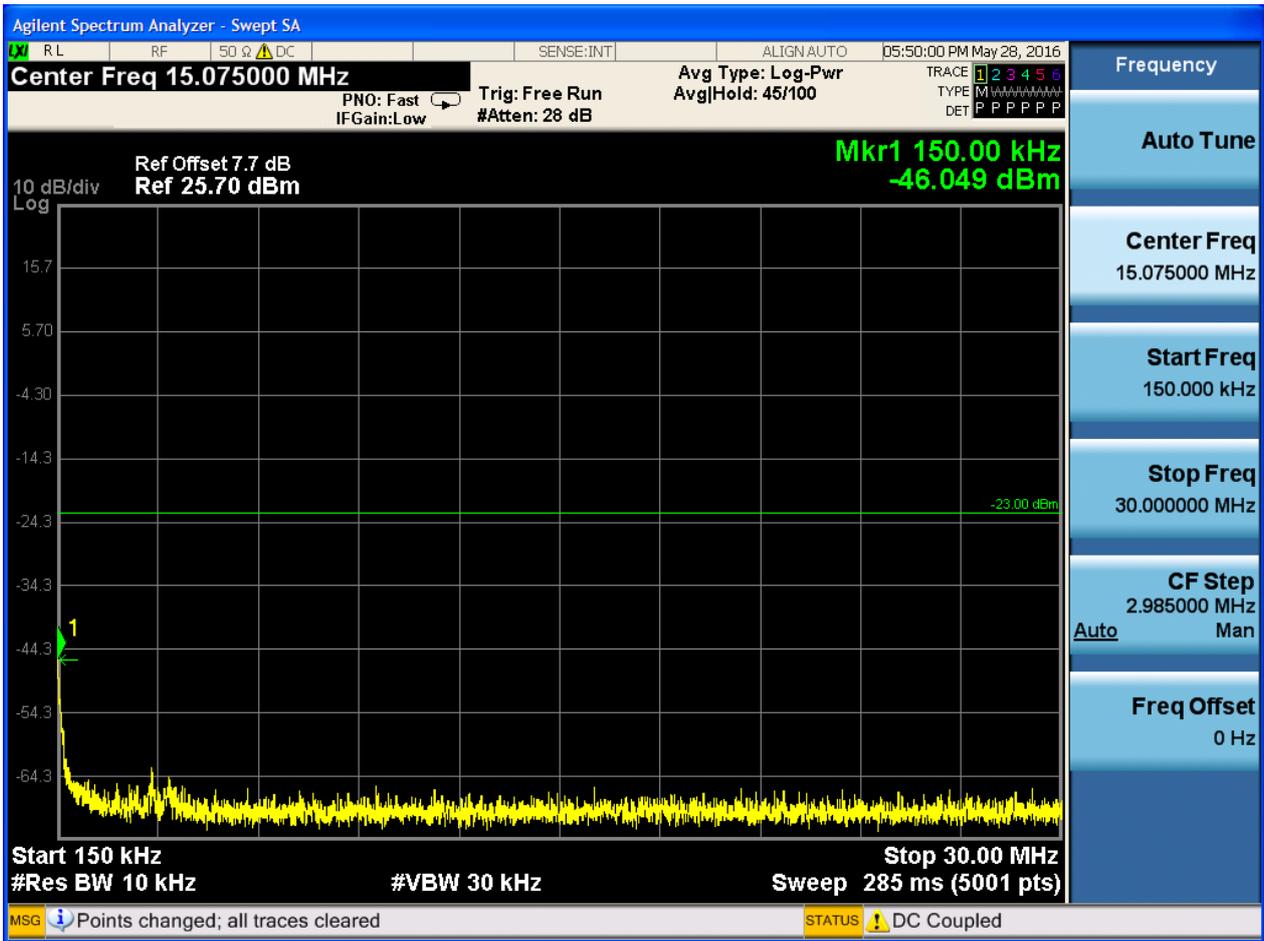


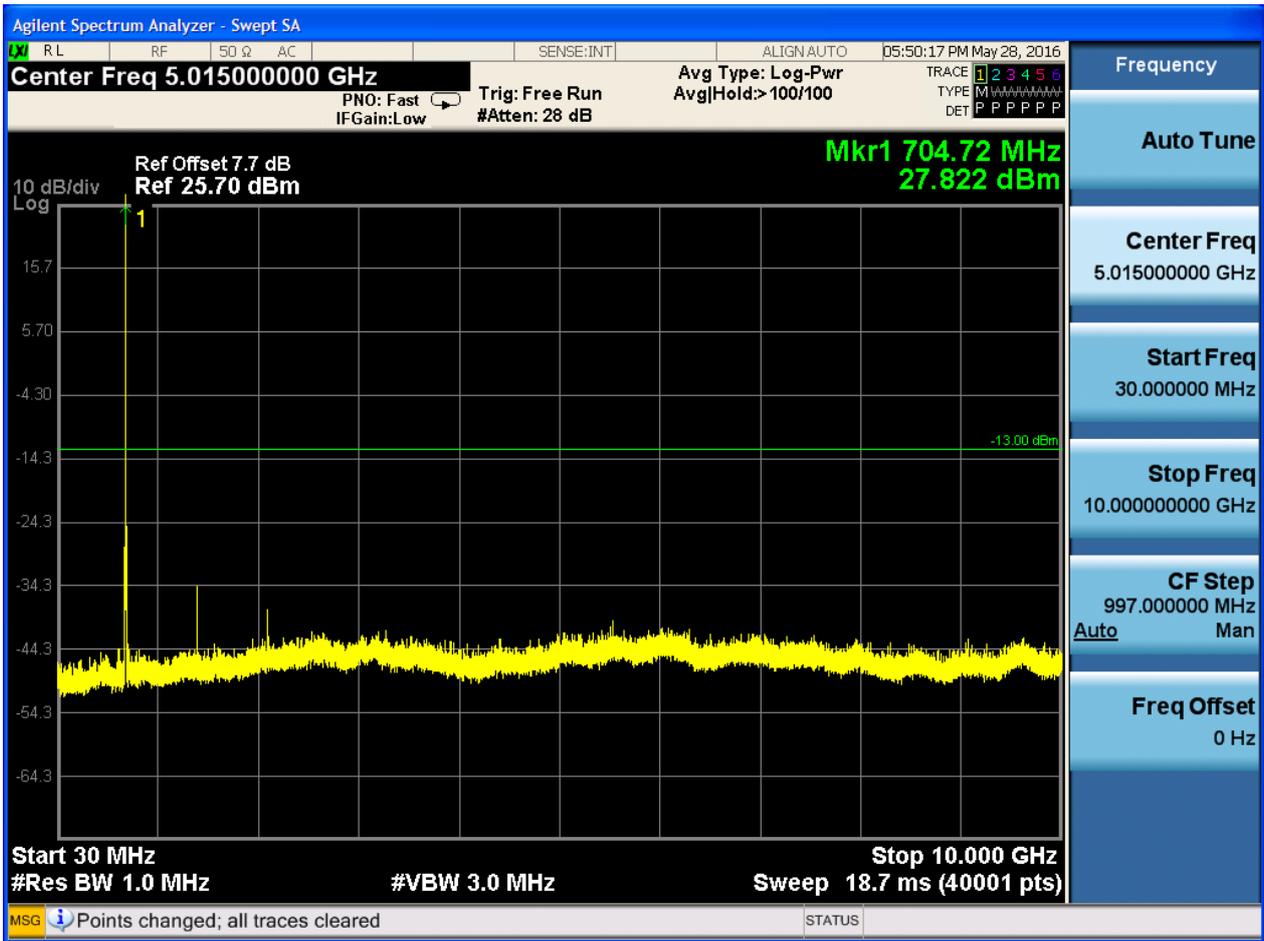
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

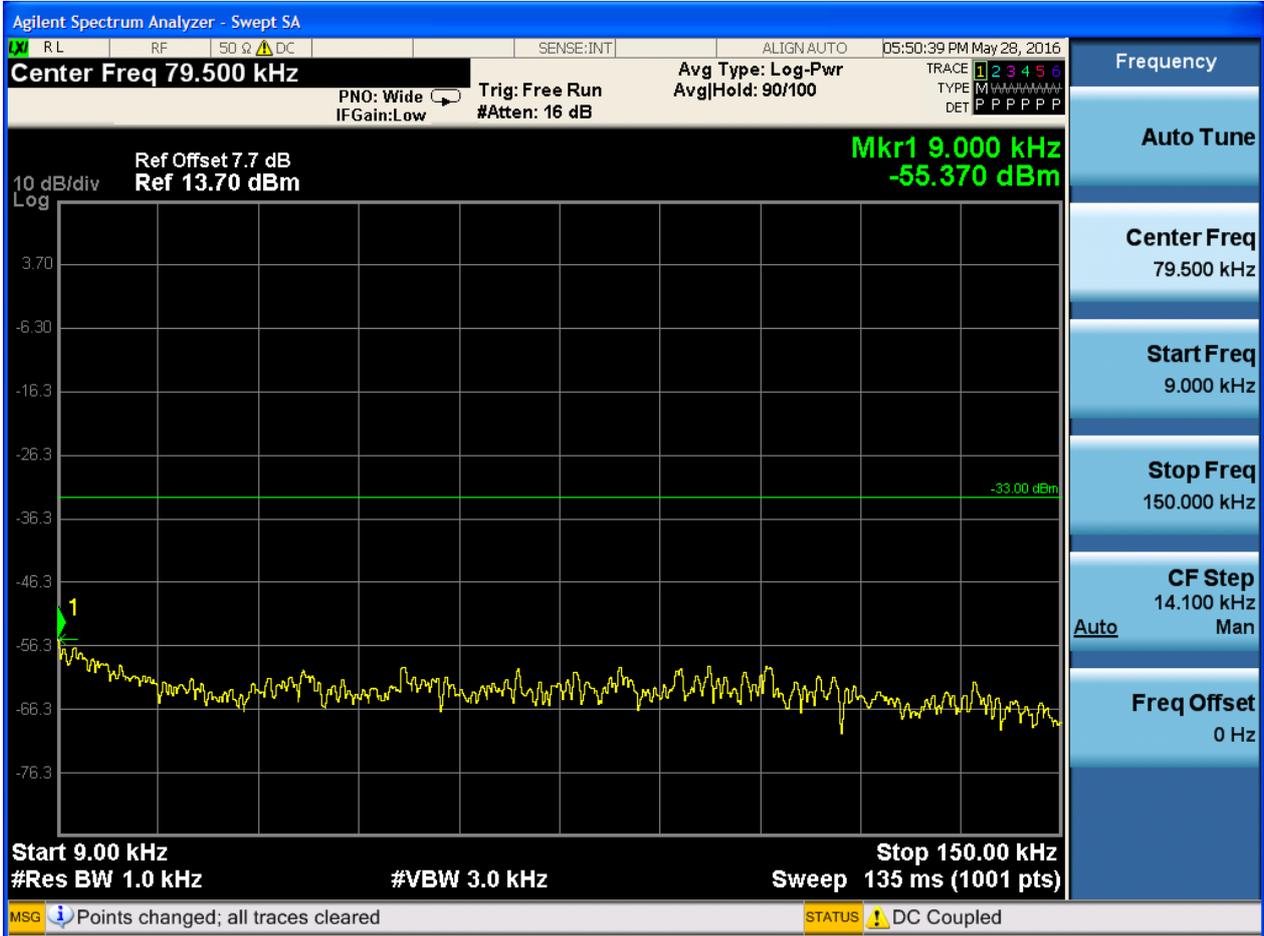


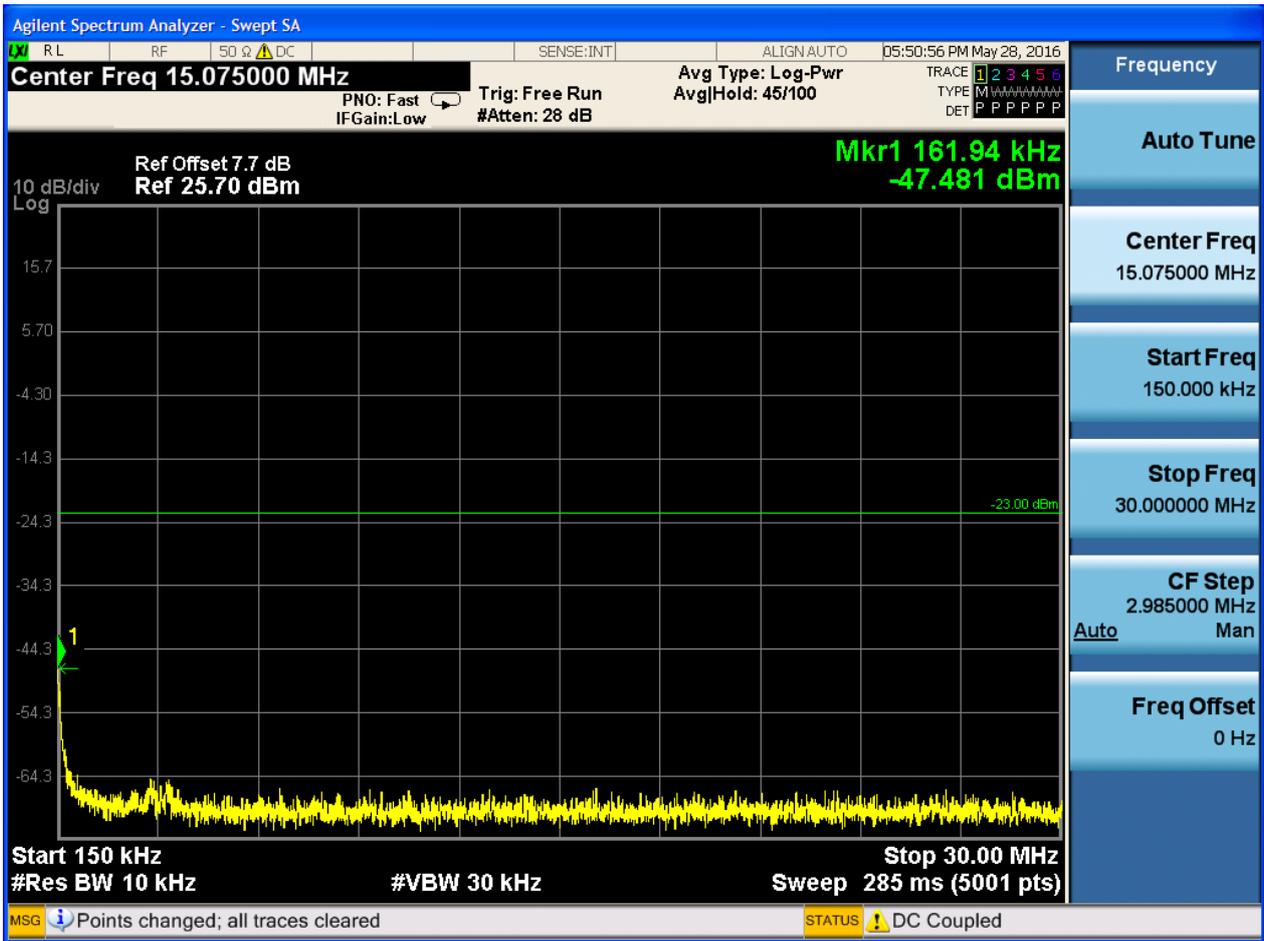


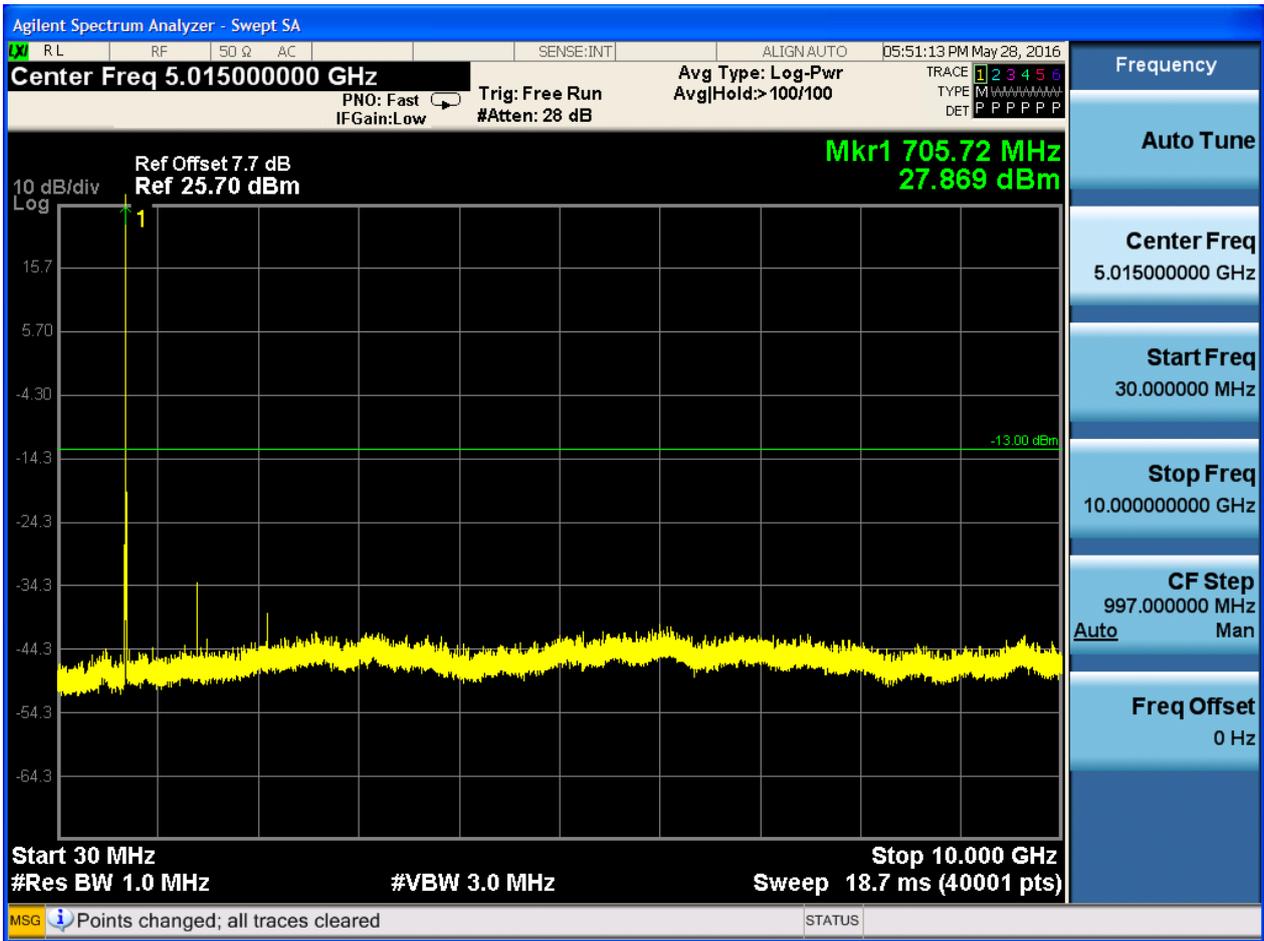


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



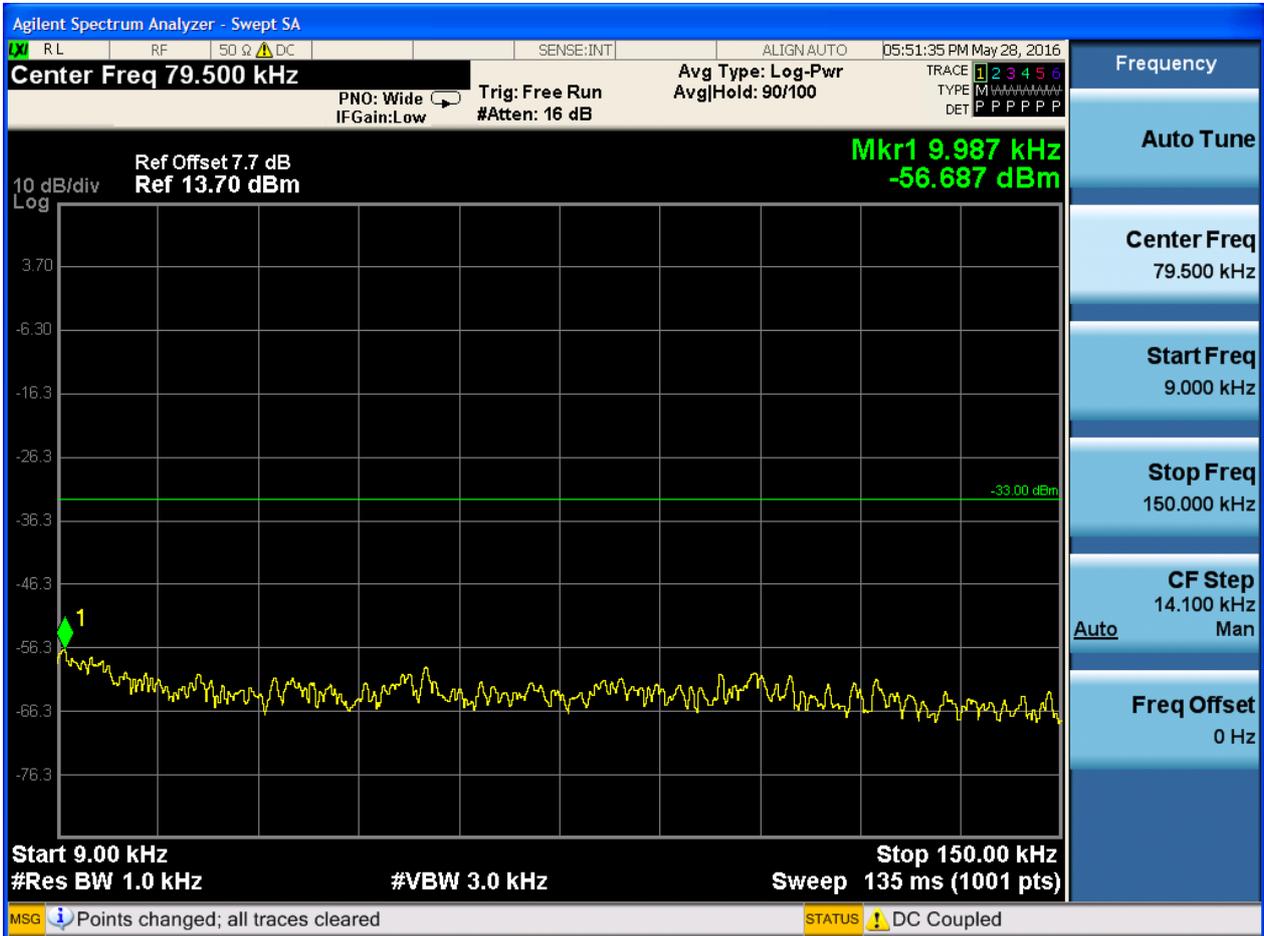




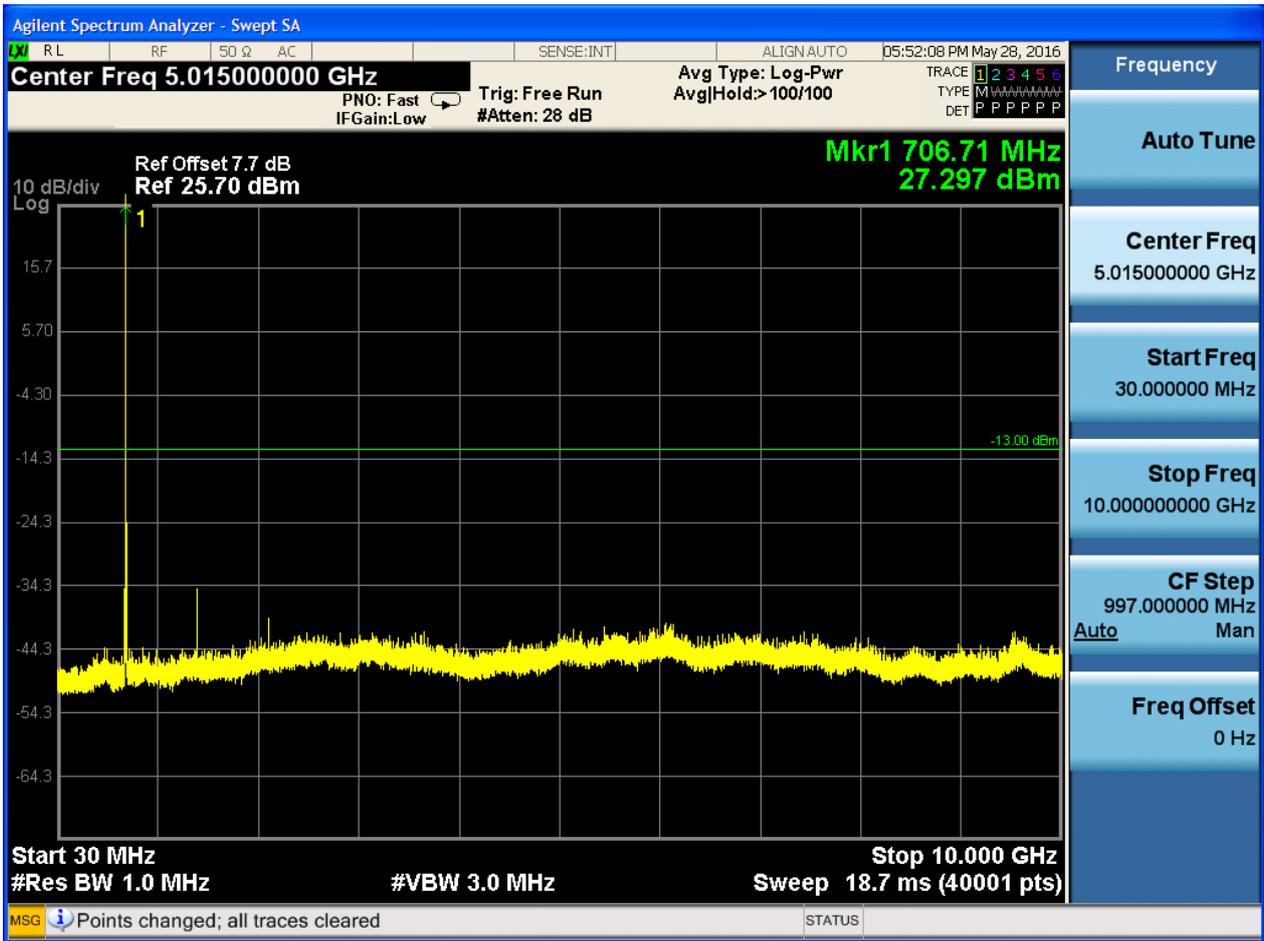


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0







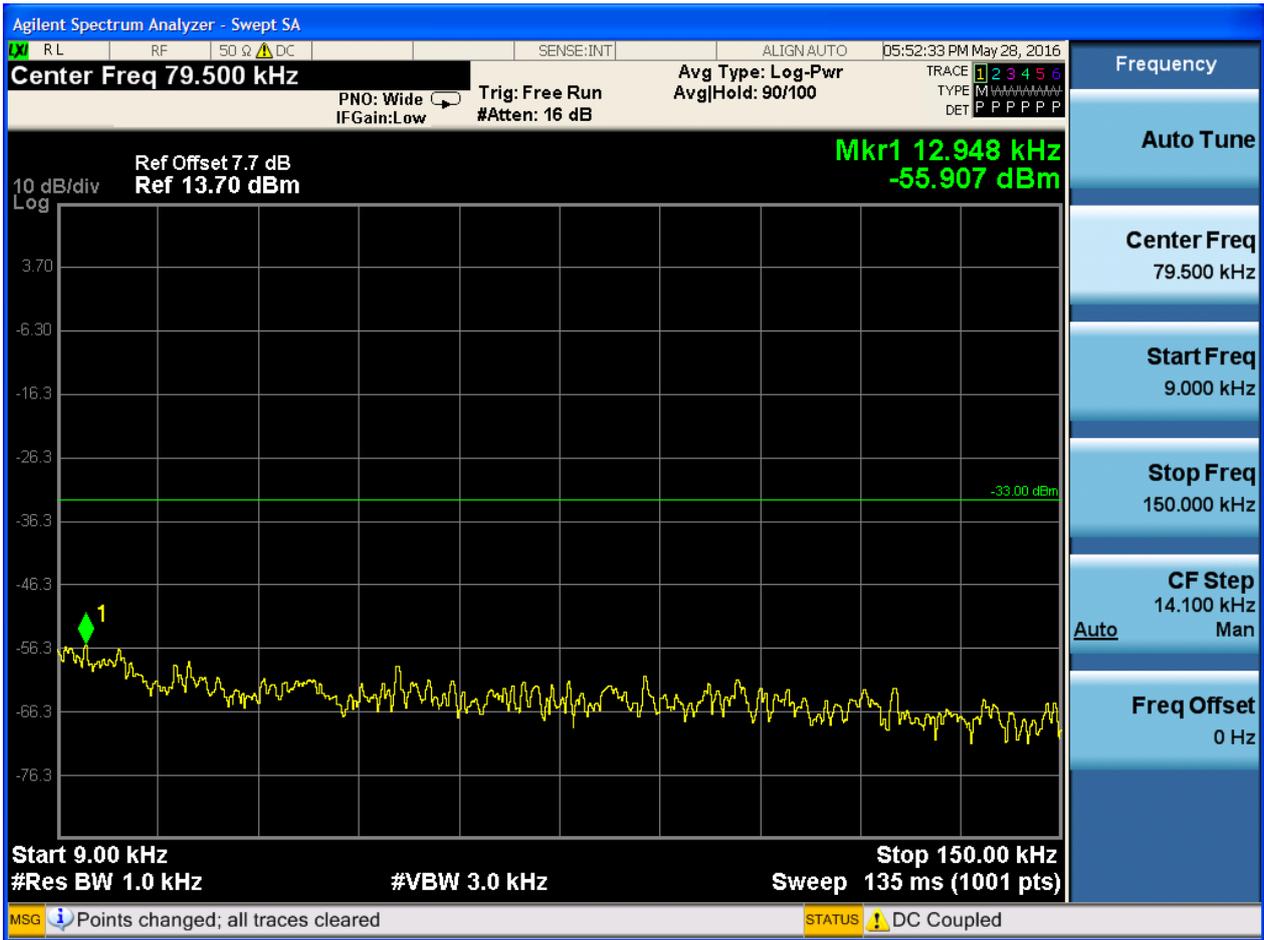


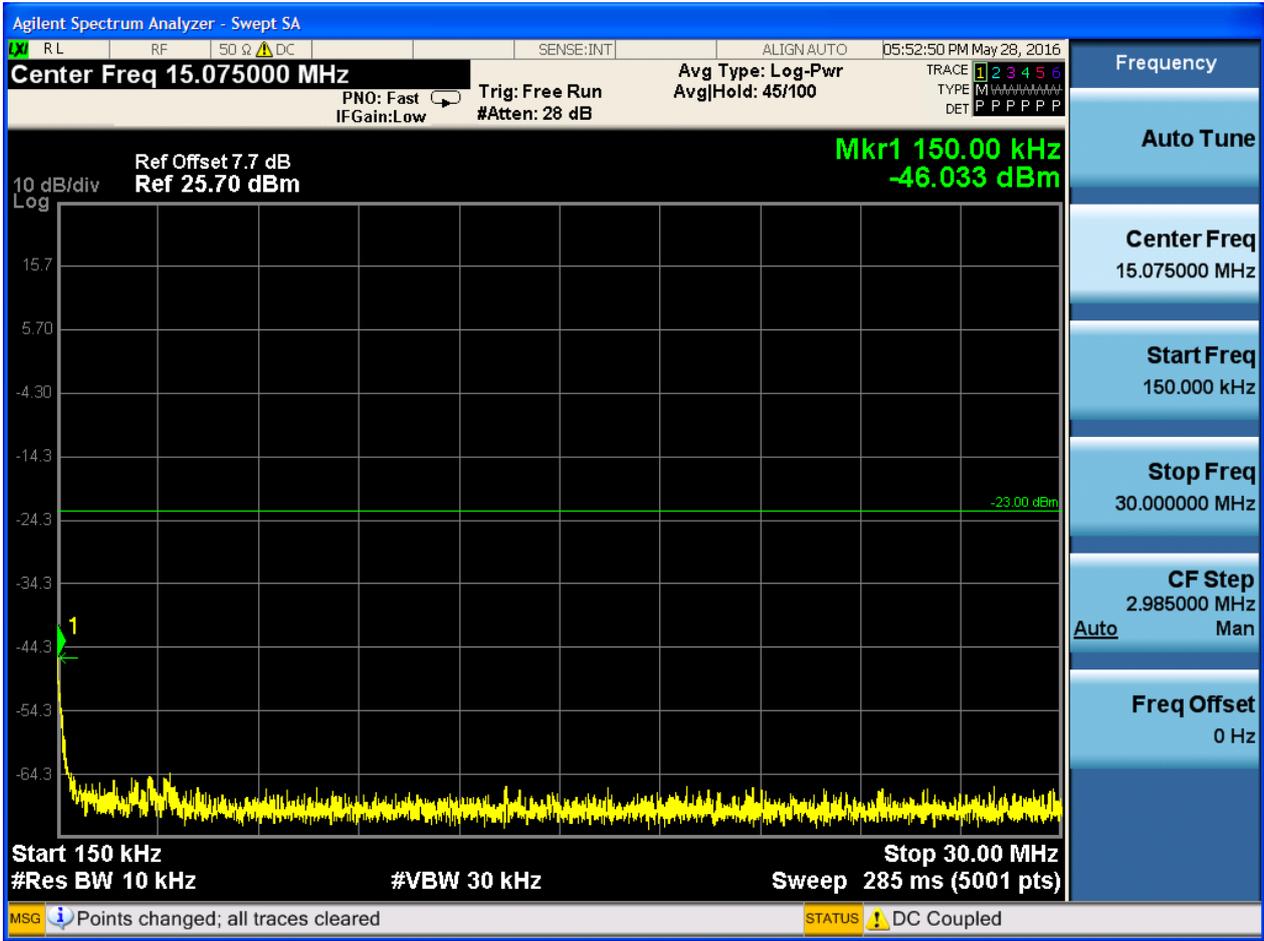
6.1.1.2 Test Mode = LTE/TM2

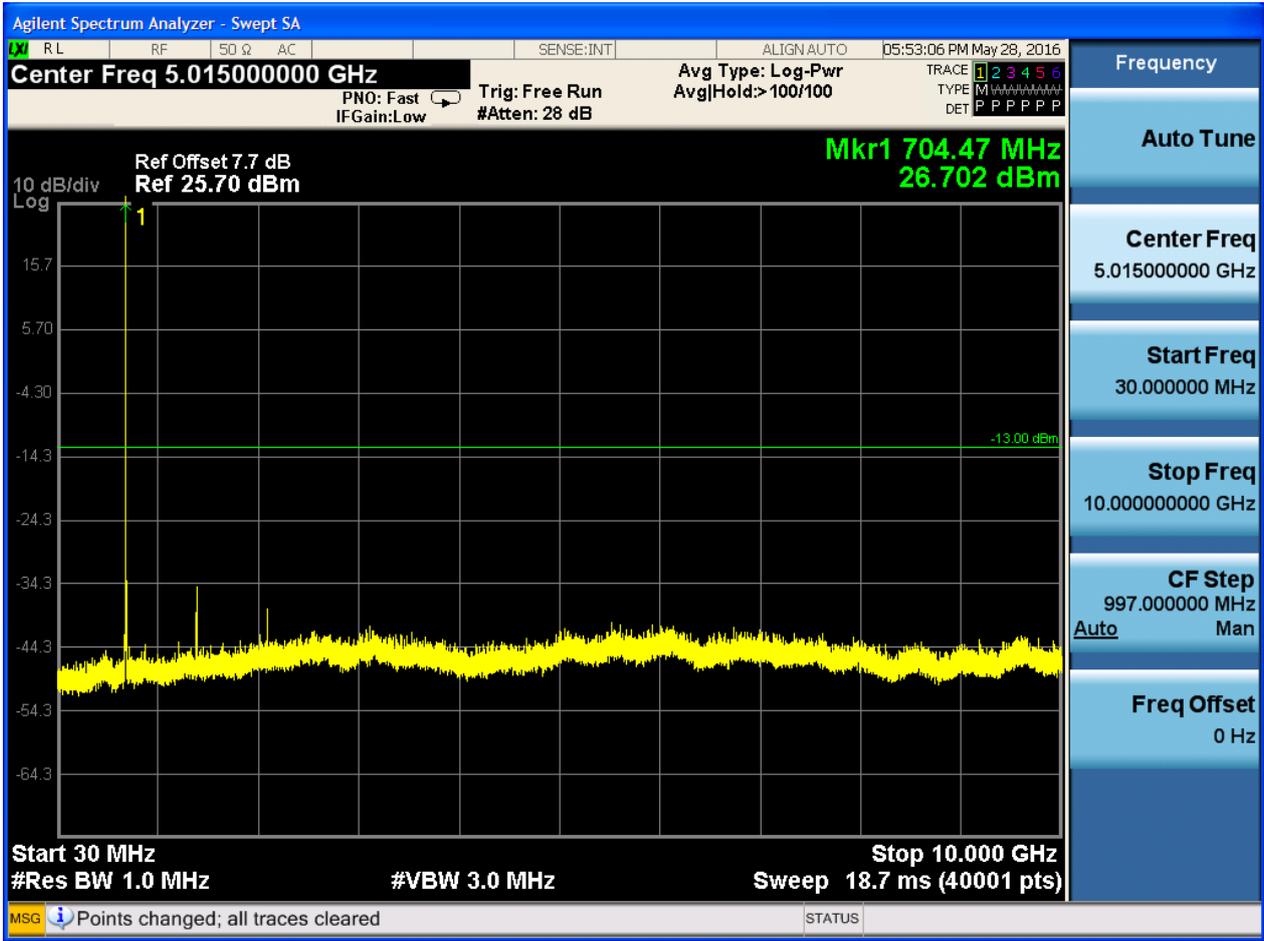
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



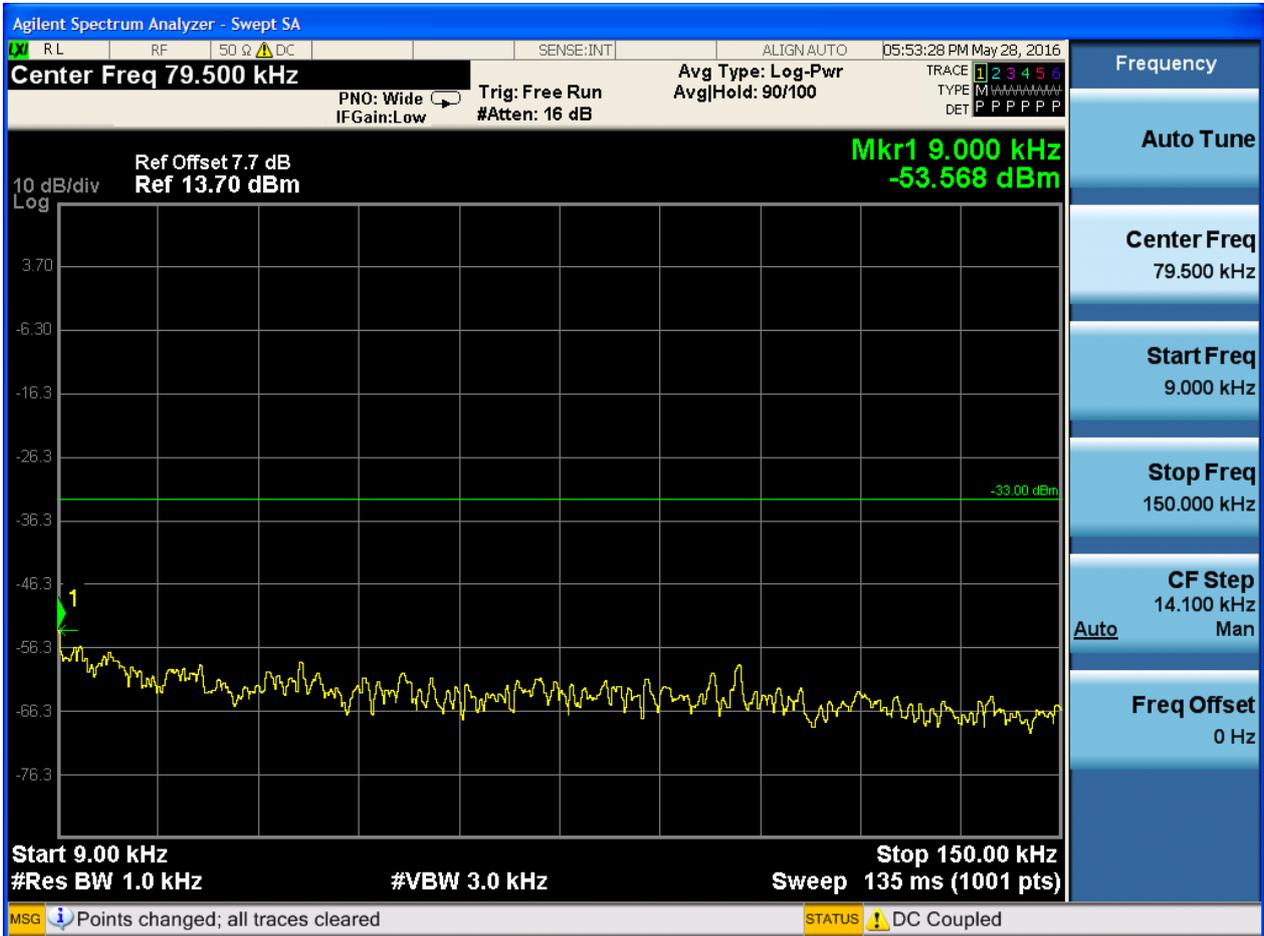


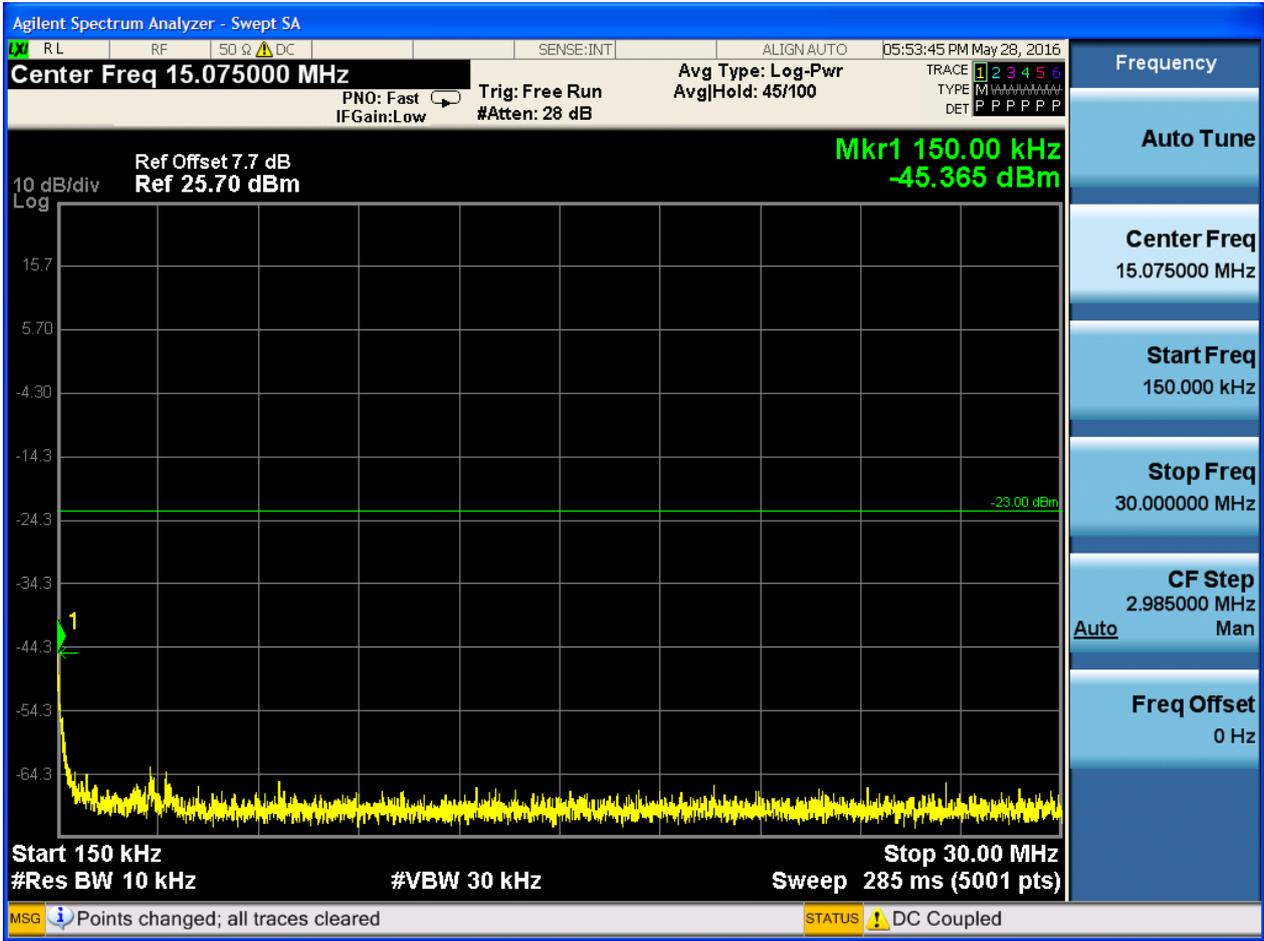


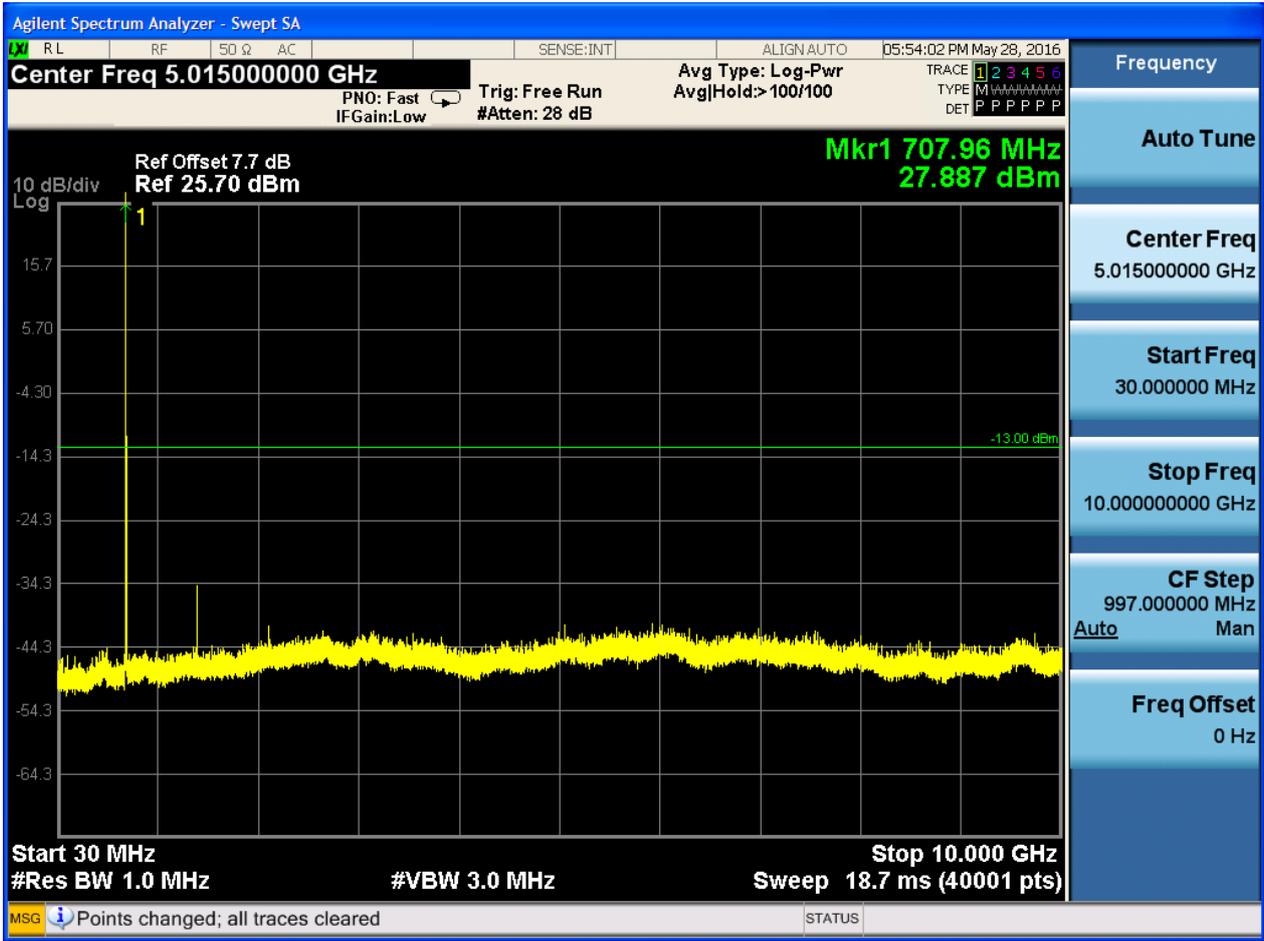


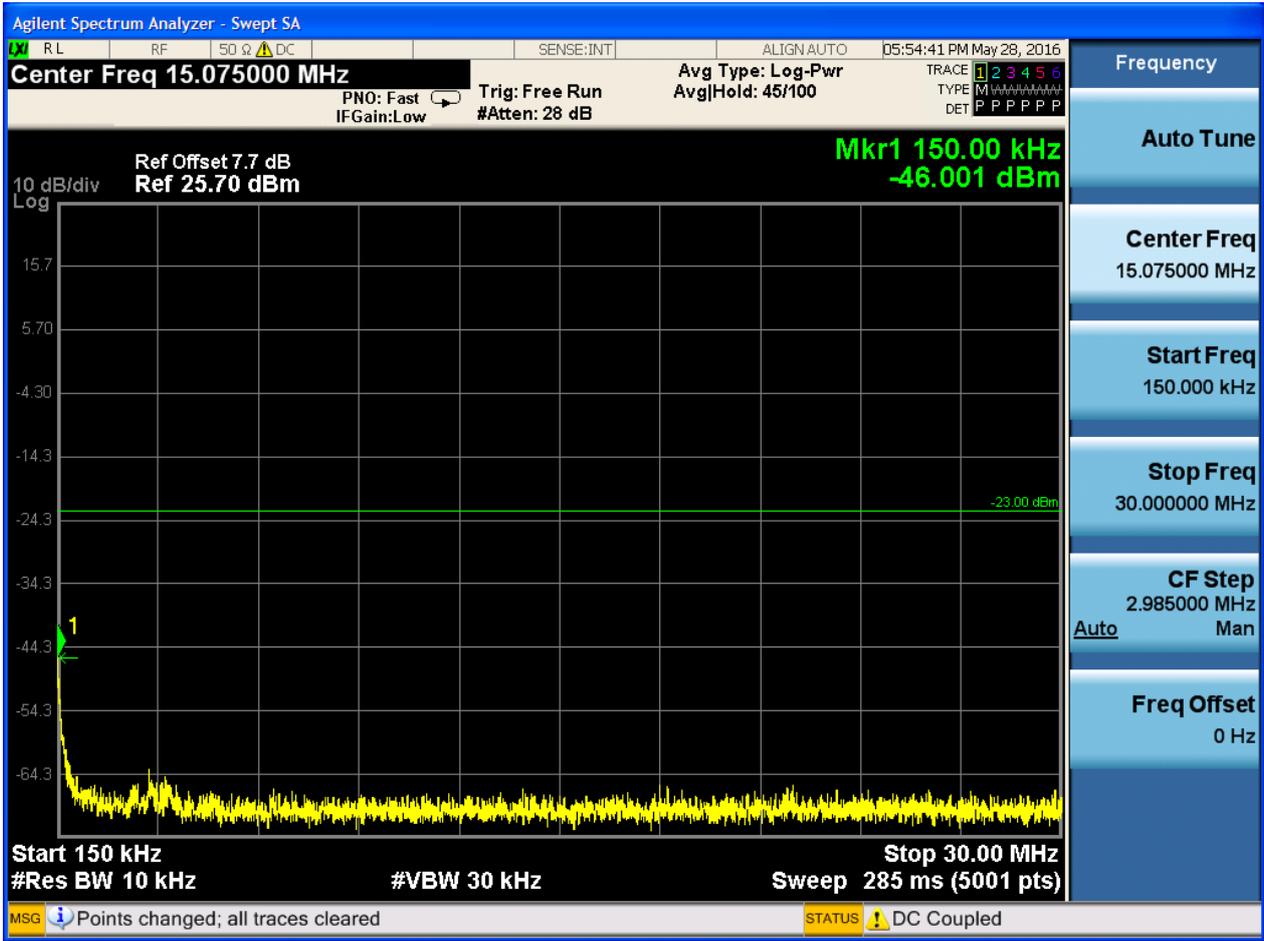
6.1.1.2.1.2 Test Channel = MCH

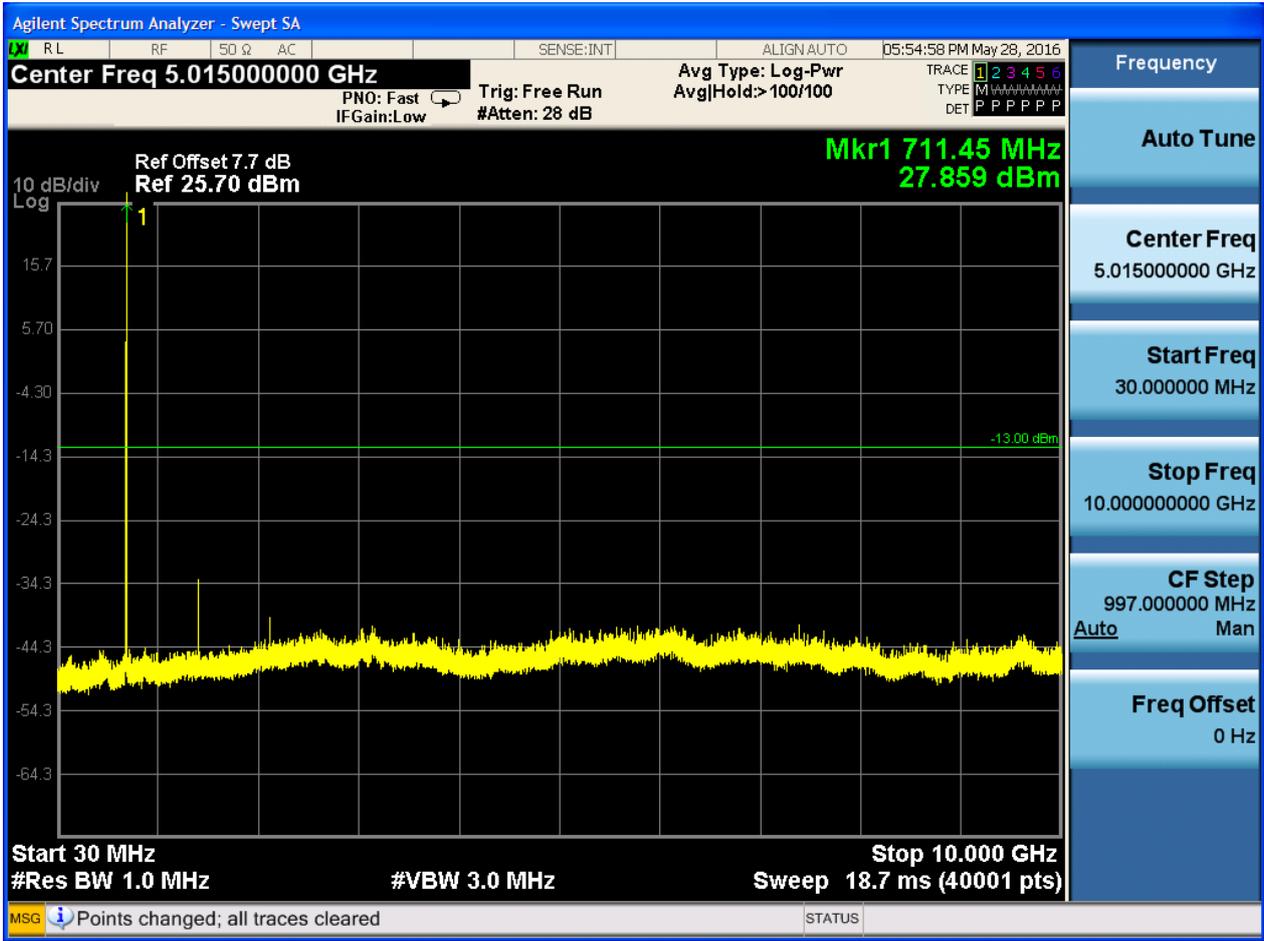
6.1.1.2.1.2.1 Test RB = RB1#0









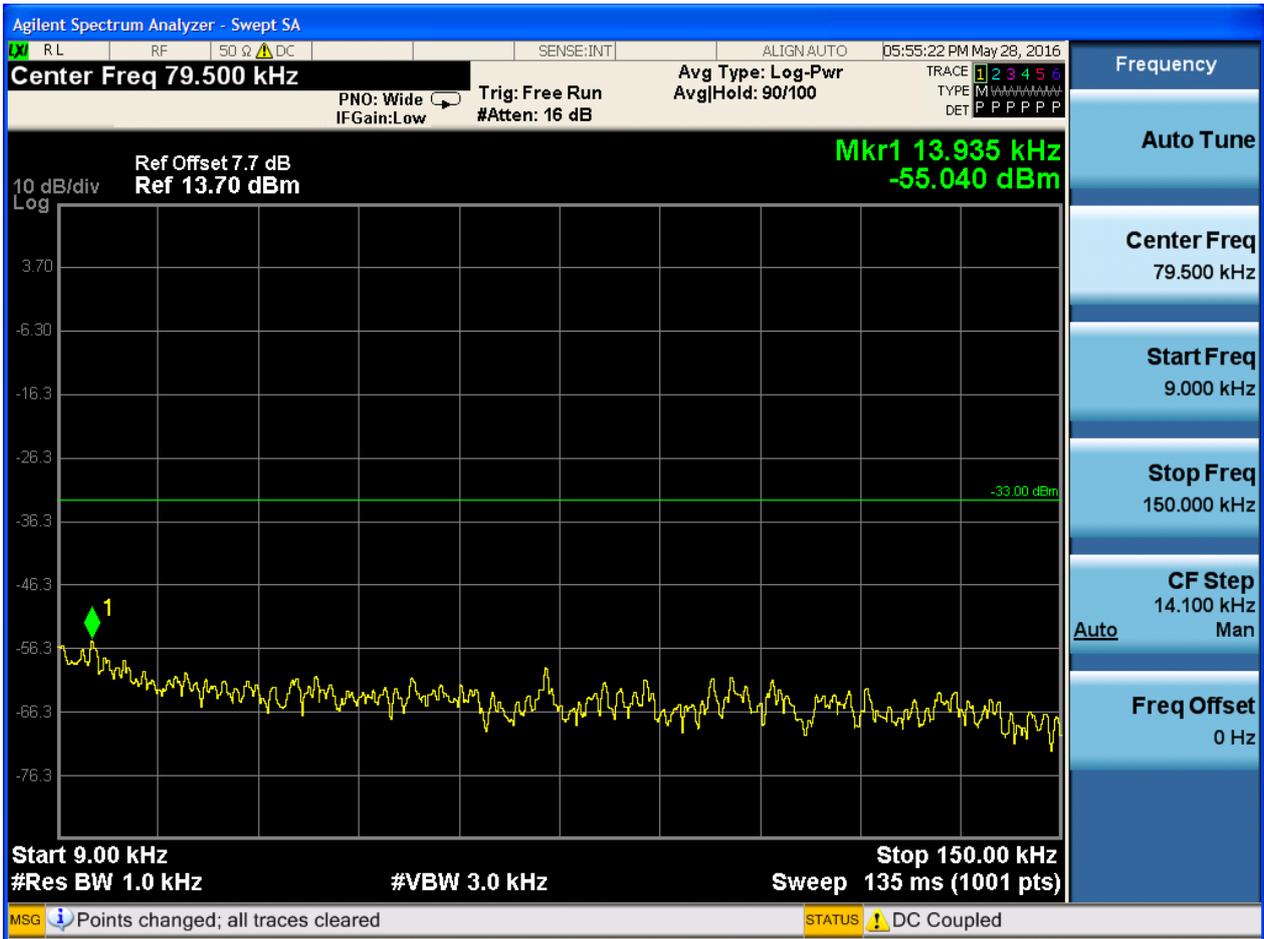




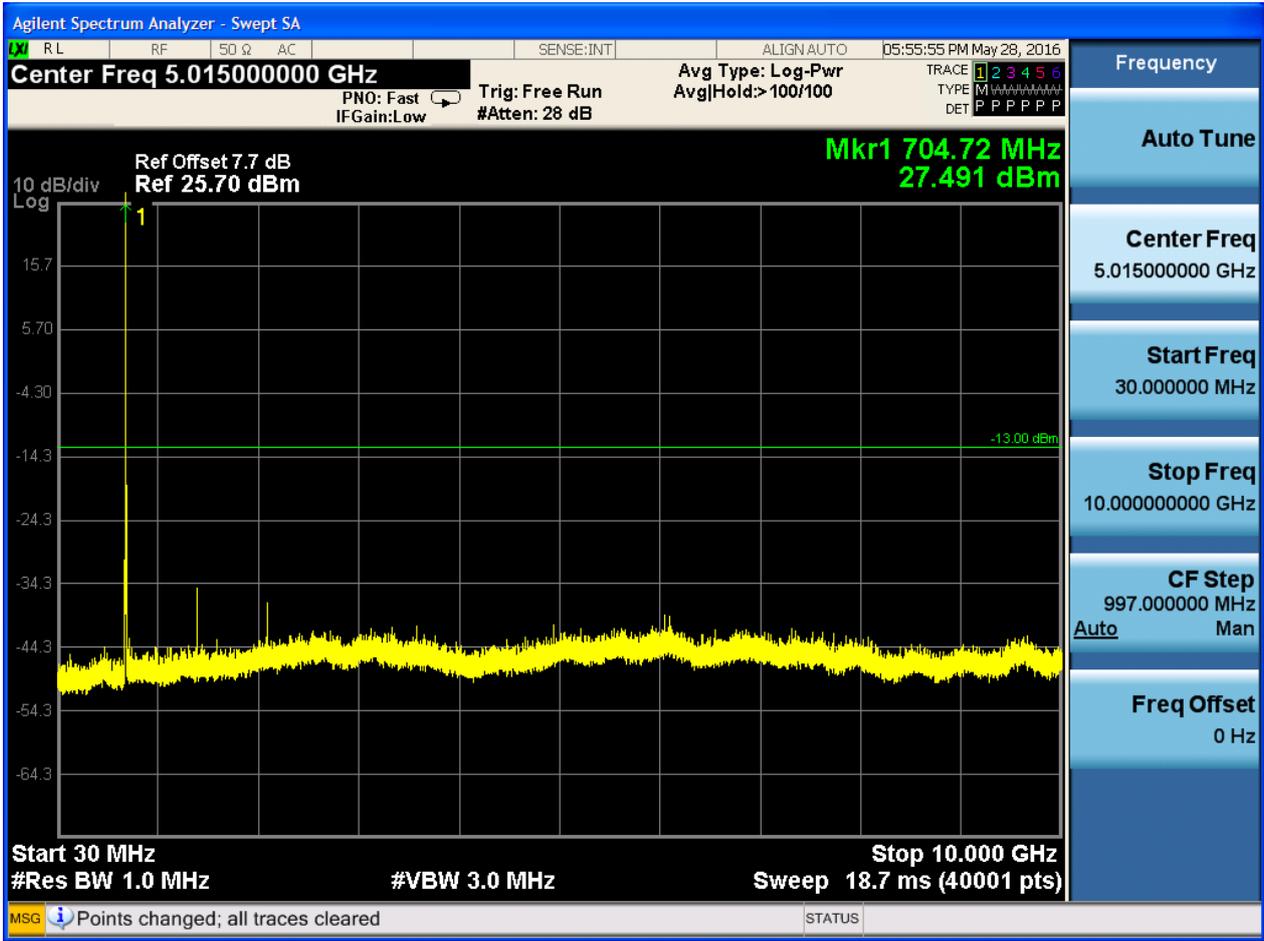
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



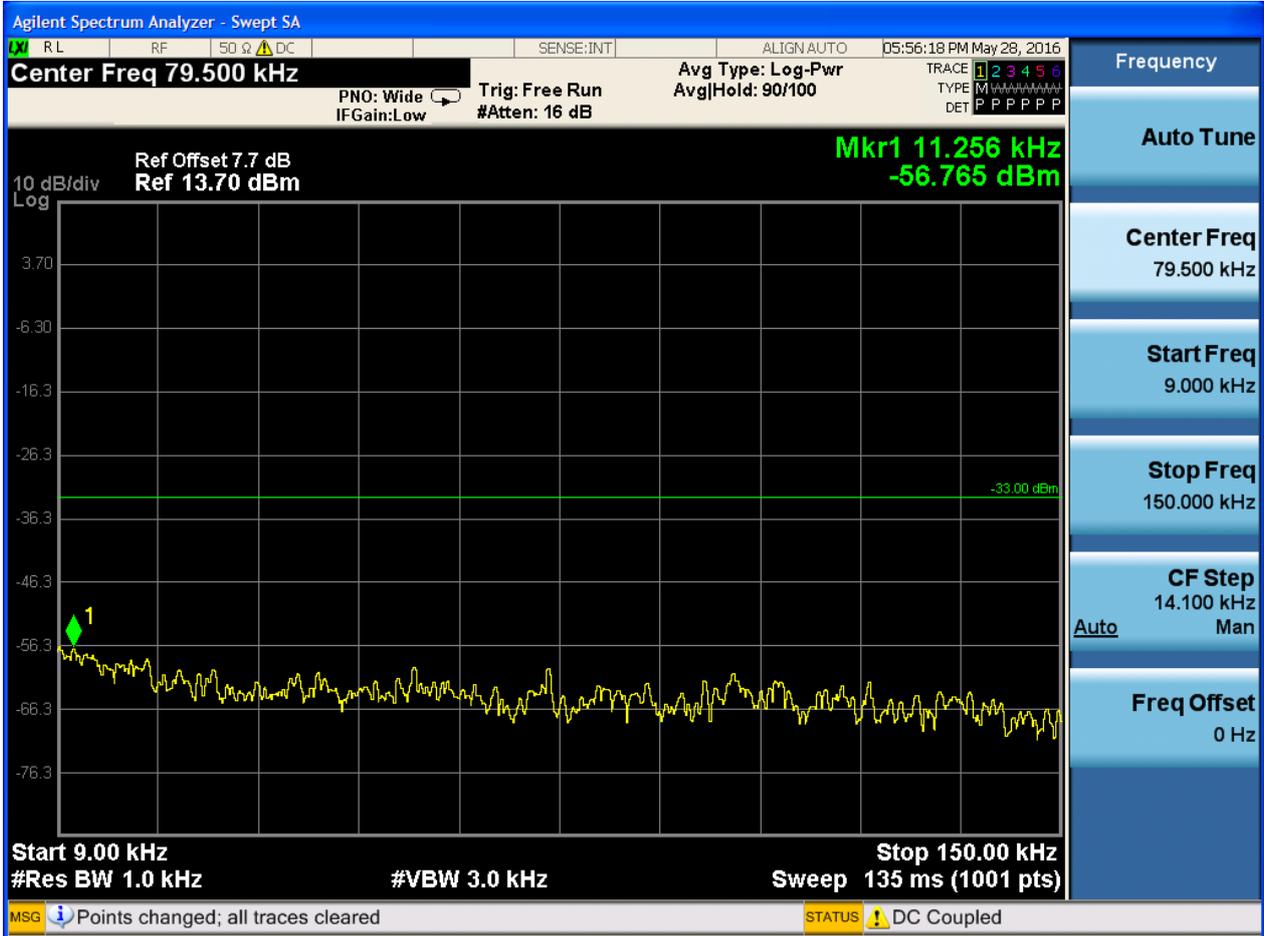


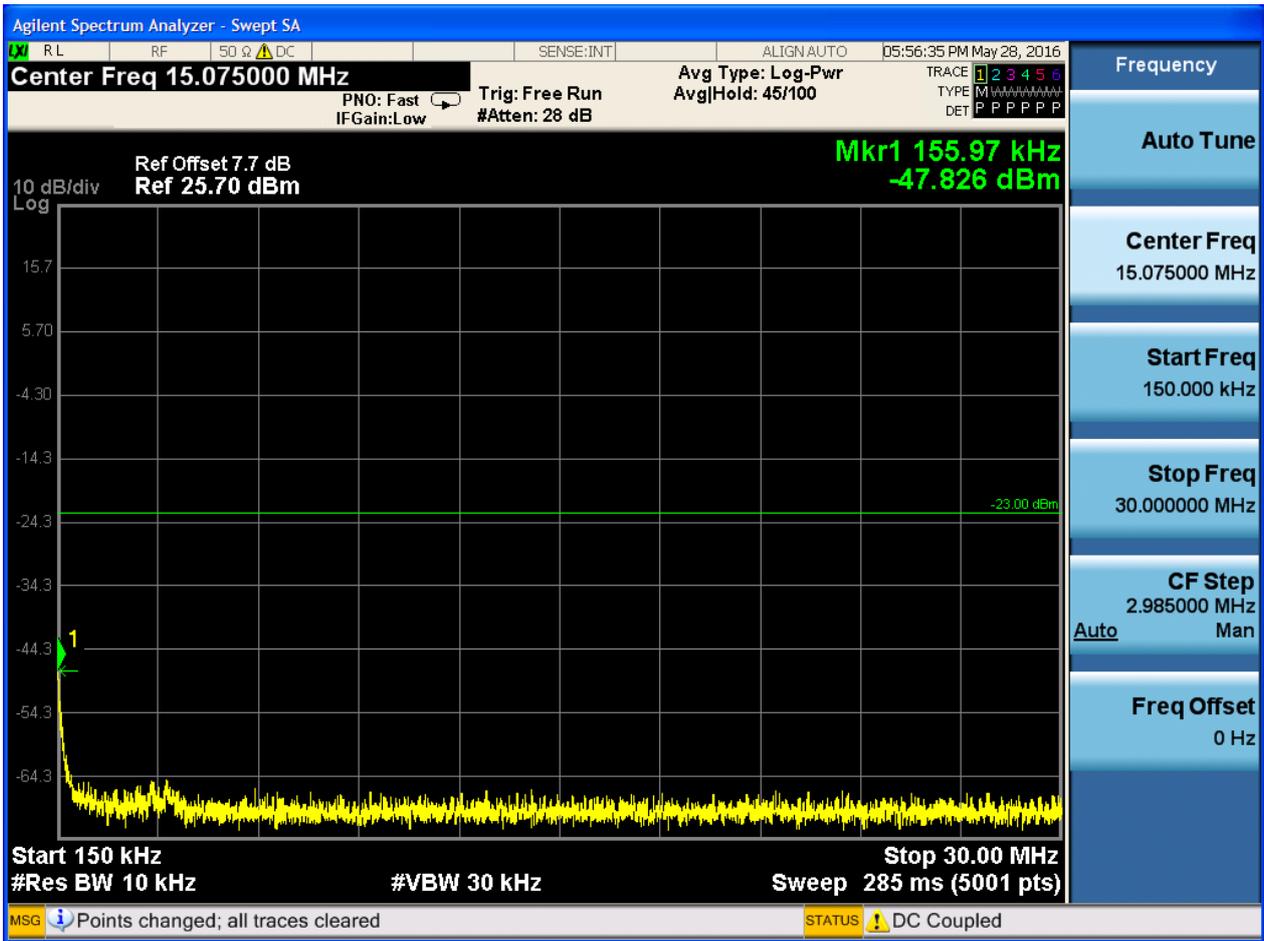


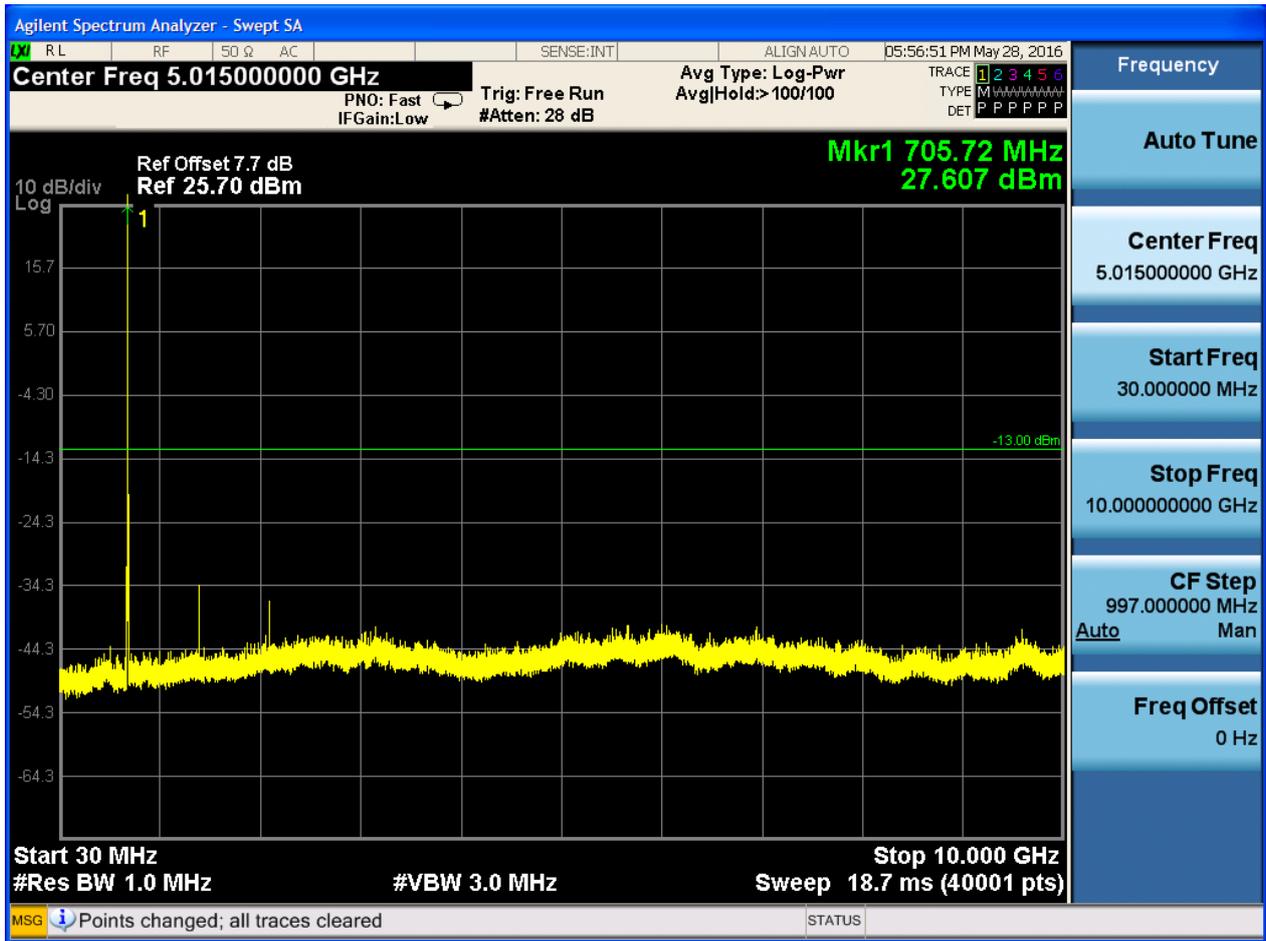


6.1.1.2.2 Test Channel = MCH

6.1.1.2.2.1 Test RB = RB1#0



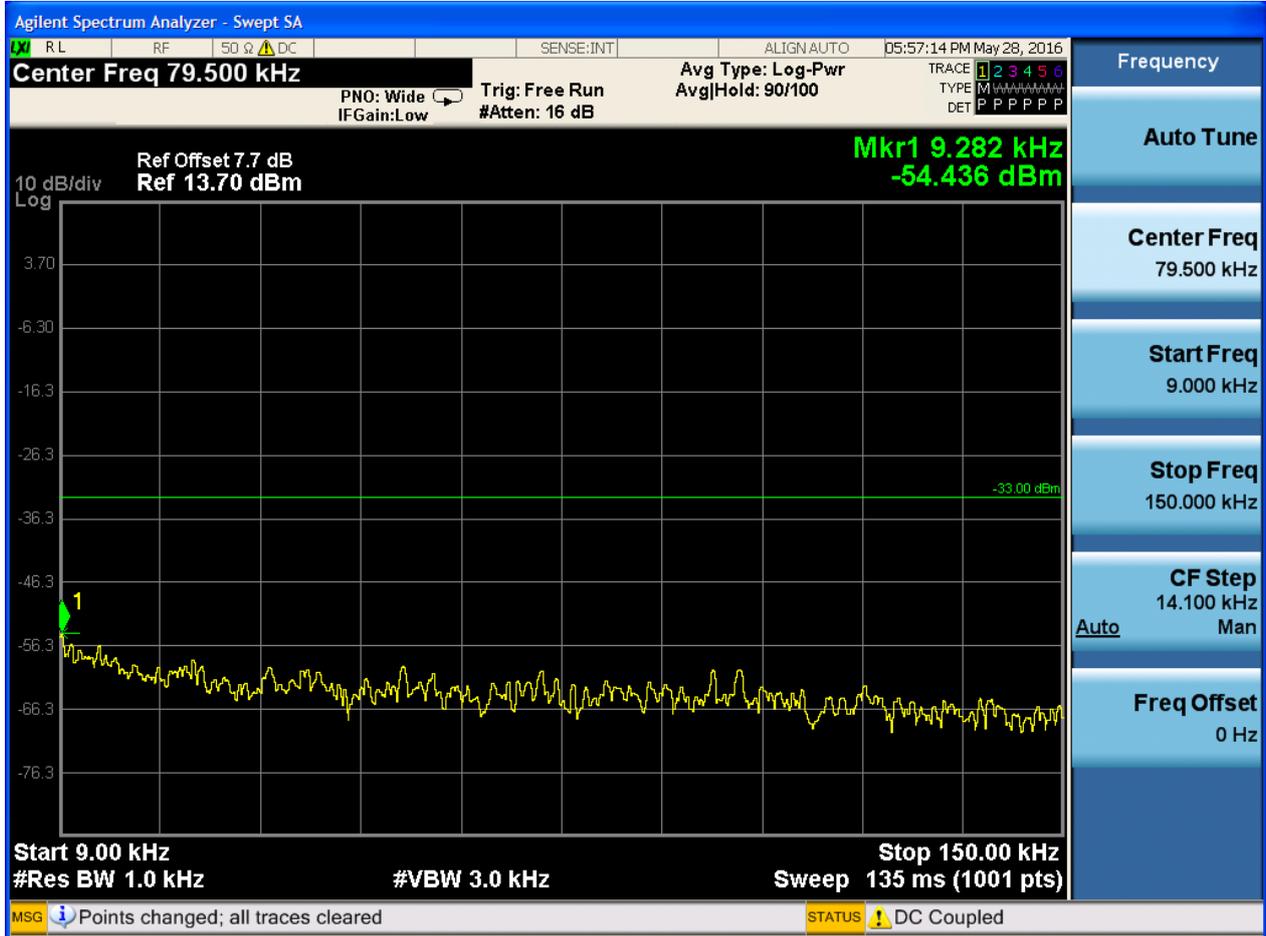




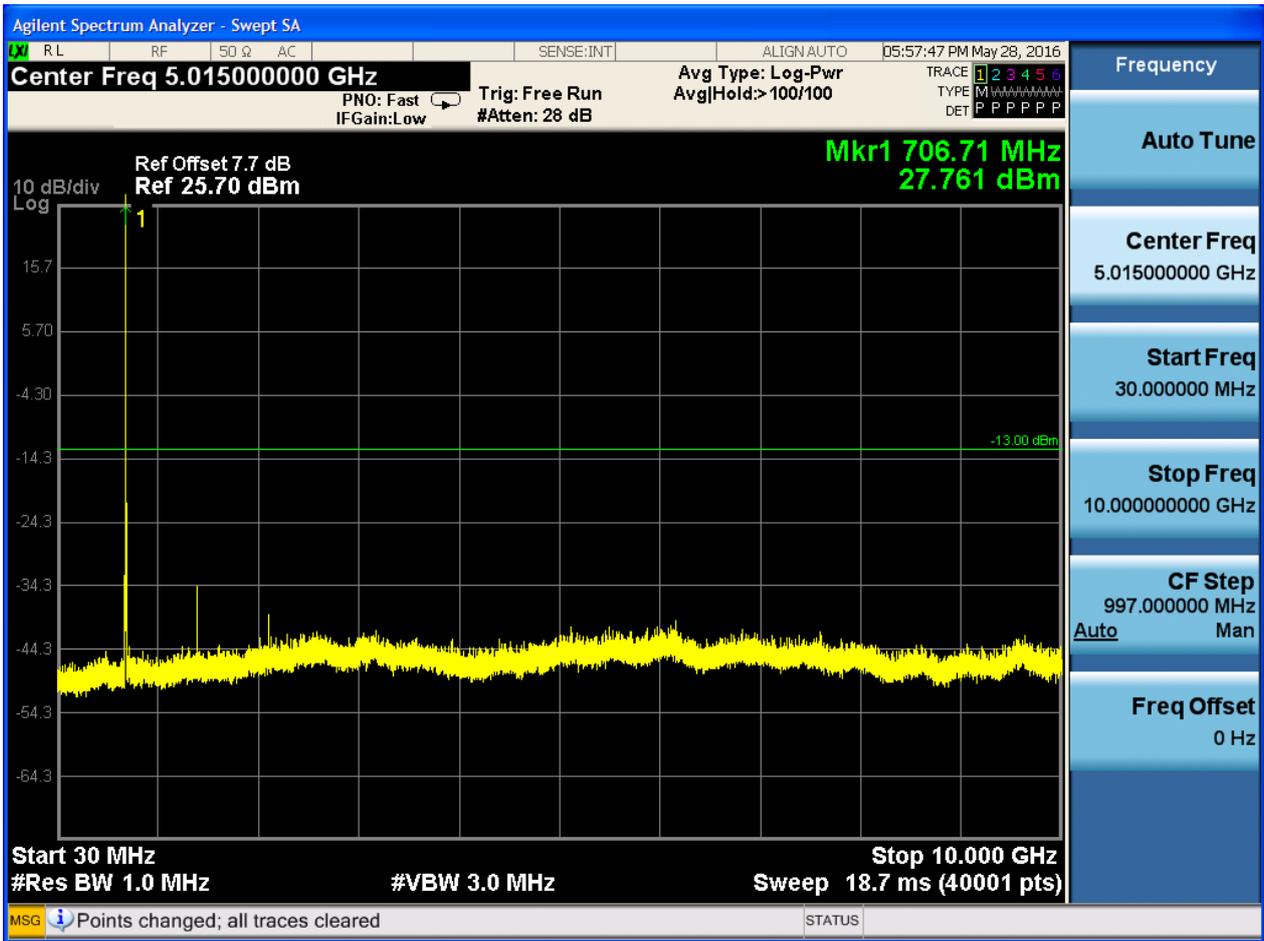


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0







7Appendix_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

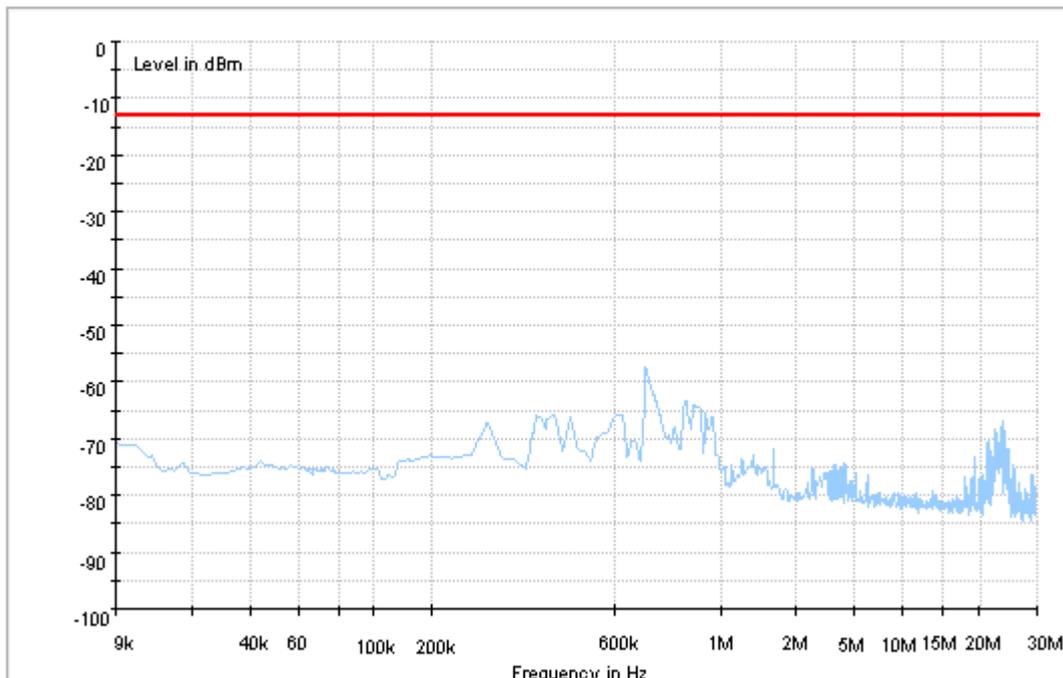
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

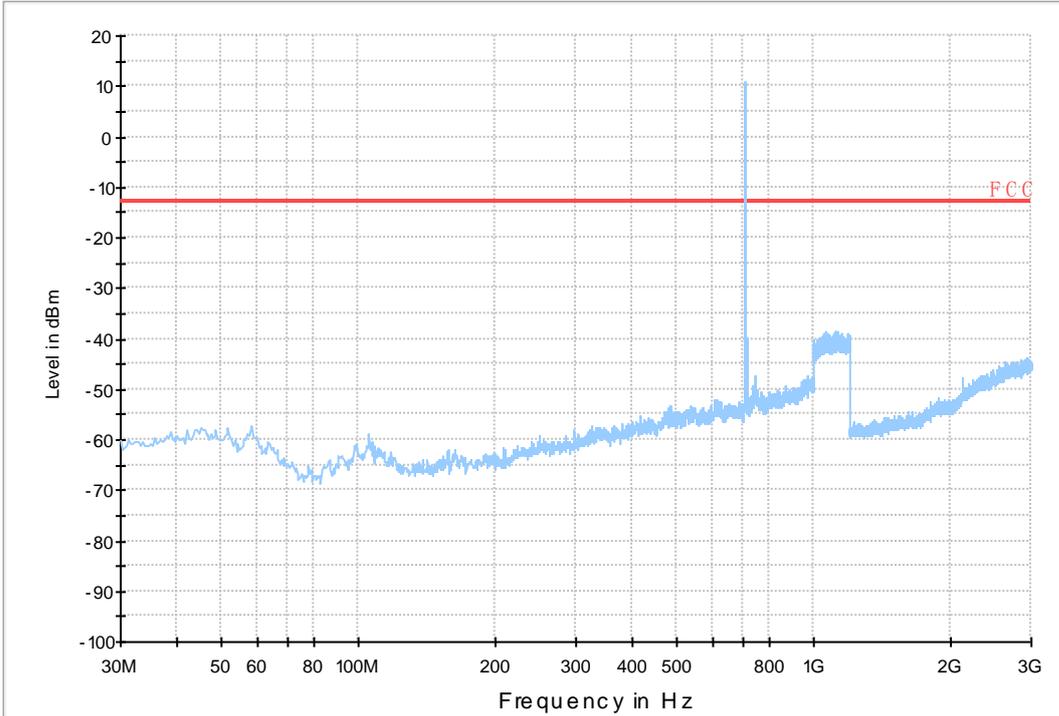
7.1 For LTE

7.1.1 Test Band = BAND17

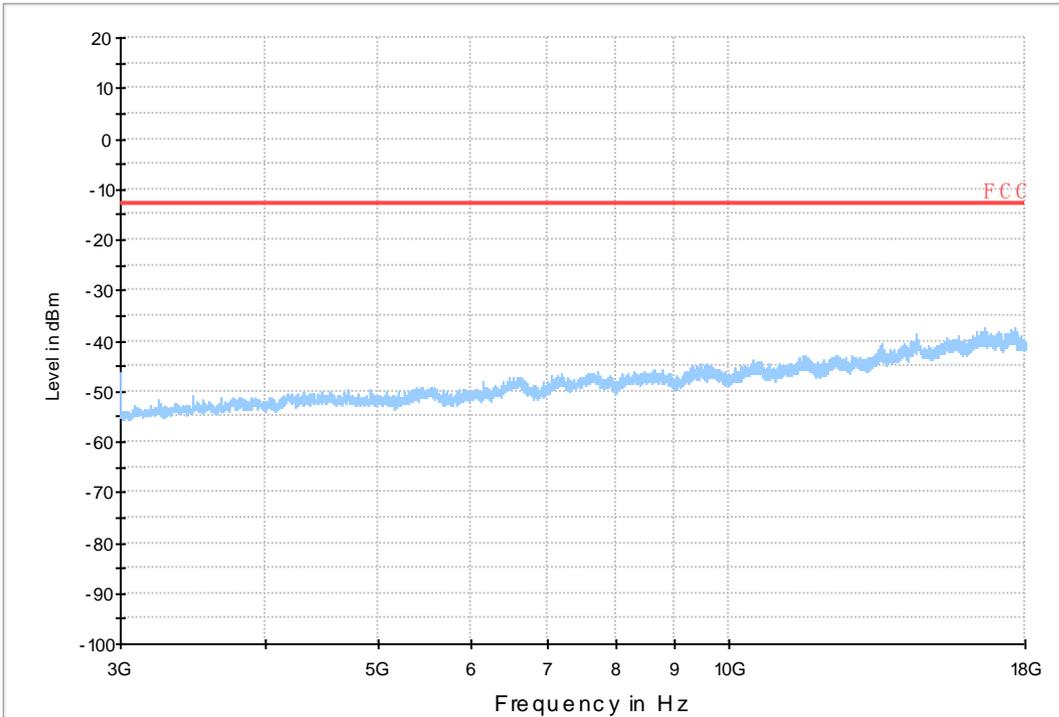
7.1.1.1 Test Bandwidth = 5



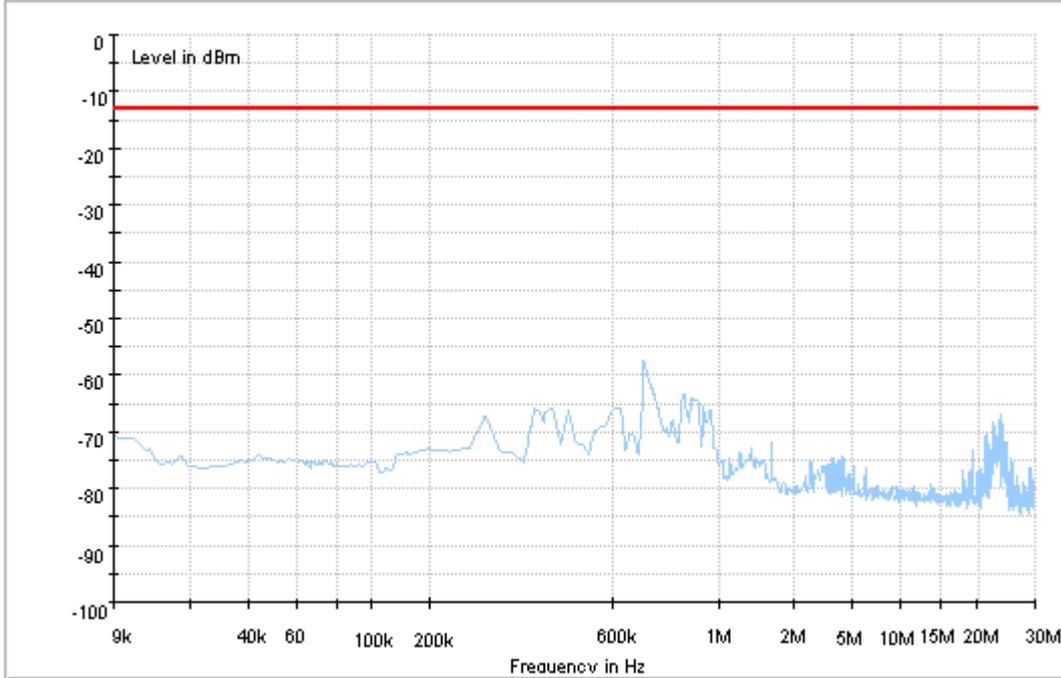
Copy of RSE-TX-DIRECTOR BELOW 1G_L



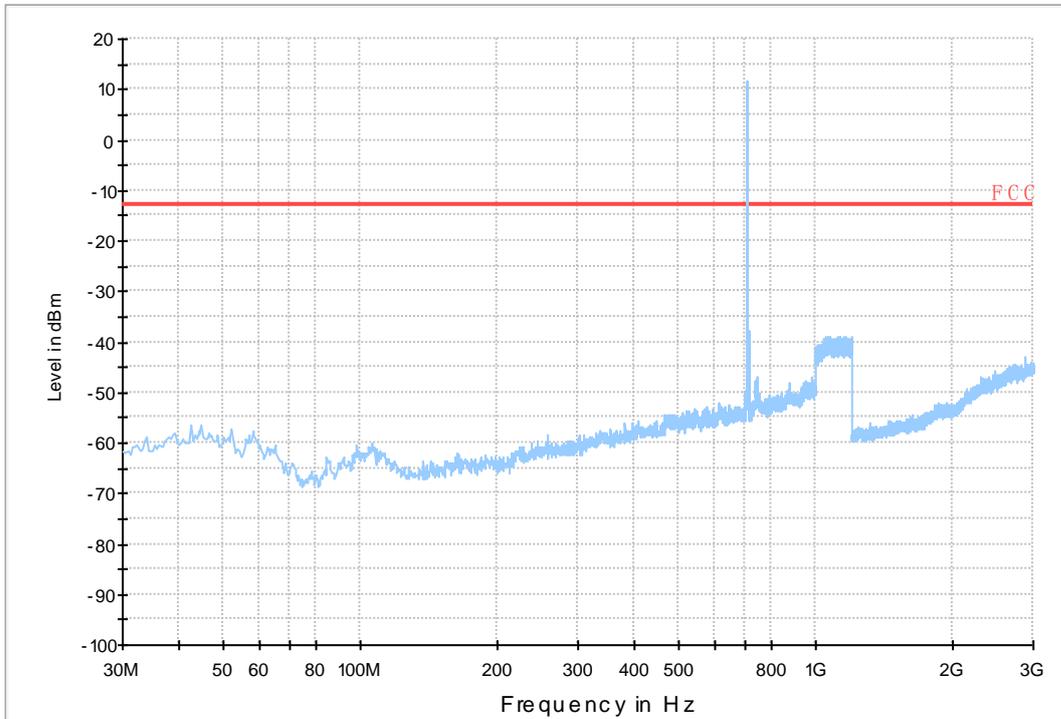
Copy of RSE-TX-DIRECTOR BELOW 1G_H



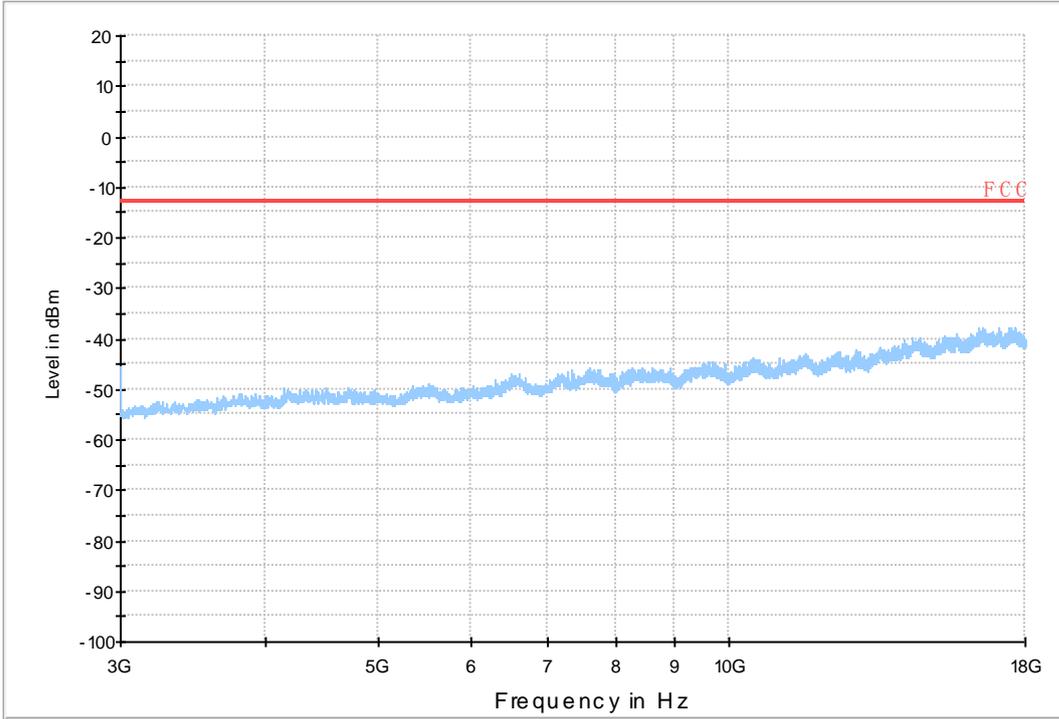
7.1.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of RSE-TX-DIRECTOR BELOW 1G_H



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
BAND17	LTE/TM1	5	LCH	TN	VL	0.54	0.00076	PASS
					VN	-1.16	-0.00164	PASS
					VH	-0.20	-0.00028	PASS
			MCH	TN	VL	-0.67	-0.00094	PASS
					VN	-1.04	-0.00146	PASS
					VH	-1.32	-0.00186	PASS
			HCH	TN	VL	-1.49	-0.00209	PASS
					VN	-1.16	-0.00163	PASS
					VH	-0.87	-0.00122	PASS
		10	LCH	TN	VL	-4.49	-0.00633	PASS
					VN	-4.78	-0.00674	PASS
					VH	-6.28	-0.00886	PASS
			MCH	TN	VL	-18.12	-0.02552	PASS
					VN	-15.89	-0.02238	PASS
					VH	-17.05	-0.02401	PASS
	HCH	TN	VL	-7.11	-0.01	PASS		
			VN	-5.45	-0.00767	PASS		
			VH	-5.18	-0.00729	PASS		
	LTE/TM2	5	LCH	TN	VL	-0.23	-0.00033	PASS
					VN	-1.59	-0.00225	PASS
					VH	0.19	0.00027	PASS
			MCH	TN	VL	-1.17	-0.00165	PASS
					VN	-0.49	-0.00069	PASS
					VH	-1.39	-0.00196	PASS
			HCH	TN	VL	-0.47	-0.00066	PASS
					VN	-0.57	-0.0008	PASS
					VH	0.16	0.00022	PASS
10		LCH	TN	VL	0.26	0.00037	PASS	
				VN	0.64	0.0009	PASS	
				VH	0.63	0.00089	PASS	
MCH	TN	VL	-5.25	-0.00739	PASS			

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-5.68	-0.008	PASS
					VH	-5.68	-0.008	PASS
			HCH		VL	0.60	0.00084	PASS
					VN	0.40	0.00056	PASS
					VH	0.30	0.00042	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
BAND17	LTE/TM1	5	LCH	VN	-30	0.87	0.00123	PASS
					-20	-0.46	-0.00065	PASS
					-10	0.26	0.00037	PASS
					0	-0.83	-0.00117	PASS
					10	-0.31	-0.00044	PASS
					20	-0.99	-0.0014	PASS
					30	-0.62	-0.00088	PASS
					40	-0.96	-0.00136	PASS
			50	-0.66	-0.00093	PASS		
			MCH	VN	-30	-0.92	-0.0013	PASS
					-20	-0.80	-0.00113	PASS
					-10	0.00	0	PASS
					0	-0.74	-0.00104	PASS
					10	-0.36	-0.00051	PASS
					20	-0.80	-0.00113	PASS
					30	-0.24	-0.00034	PASS
					40	-0.23	-0.00032	PASS
			50	-1.42	-0.002	PASS		
			HCH	VN	-30	0.10	0.00014	PASS
					-20	0.07	0.0001	PASS
					-10	0.64	0.0009	PASS
					0	0.14	0.0002	PASS
					10	0.19	0.00027	PASS
					20	-0.17	-0.00024	PASS
		30			0.04	0.00006	PASS	
		40			-0.20	-0.00028	PASS	
		50	0.49	0.00069	PASS			
10	LCH	VN	-30	-3.56	-0.00502	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt..	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					-20	-3.13	-0.00441	PASS		
					-10	-4.51	-0.00636	PASS		
					0	-4.66	-0.00657	PASS		
					10	-4.32	-0.00609	PASS		
					20	-4.65	-0.00656	PASS		
					30	-2.93	-0.00413	PASS		
					40	-2.66	-0.00375	PASS		
					50	-4.32	-0.00609	PASS		
			MCH	VN	-30	-21.97	-0.03094	PASS		
					-20	-23.66	-0.03332	PASS		
					-10	-24.40	-0.03437	PASS		
					0	-26.88	-0.03786	PASS		
					10	-26.52	-0.03735	PASS		
					20	-26.69	-0.03759	PASS		
					30	-26.09	-0.03675	PASS		
					40	-26.56	-0.03741	PASS		
			HCH	VN	-30	-5.95	-0.00837	PASS		
					-20	-6.49	-0.00913	PASS		
					-10	-5.72	-0.00805	PASS		
					0	-5.48	-0.00771	PASS		
					10	-5.29	-0.00744	PASS		
					20	-5.22	-0.00734	PASS		
					30	-6.24	-0.00878	PASS		
					40	-6.27	-0.00882	PASS		
			LTE/TM2	5	LCH	VN	-30	-0.13	-0.00018	PASS
							-20	-1.44	-0.00204	PASS
							-10	-0.67	-0.00095	PASS
							0	-1.06	-0.0015	PASS
	10	-0.86					-0.00122	PASS		
	20	0.03					0.00004	PASS		
	30	-1.07					-0.00151	PASS		
	40	-0.56					-0.00079	PASS		
	50	-1.63			-0.00231	PASS				
	MCH	VN			-30	-0.24	-0.00034	PASS		
					-20	0.41	0.00058	PASS		
					-10	0.29	0.00041	PASS		
			0	-0.51	-0.00072	PASS				



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt..	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-0.09	-0.00013	PASS
					20	-0.36	-0.00051	PASS
					30	-0.21	-0.0003	PASS
					40	-0.14	-0.0002	PASS
					50	-0.30	-0.00042	PASS
			HCH	VN	-30	-0.99	-0.00139	PASS
					-20	-0.06	-0.00008	PASS
					-10	0.56	0.00078	PASS
					0	-0.20	-0.00028	PASS
					10	-0.57	-0.0008	PASS
					20	-0.13	-0.00018	PASS
					30	-1.29	-0.00181	PASS
					40	0.04	0.00006	PASS
					50	1.50	0.0021	PASS
					LCH	VN	-30	0.46
		-20	-0.21	-0.0003			PASS	
		-10	0.84	0.00118			PASS	
		0	-0.47	-0.00066			PASS	
		10	0.34	0.00048			PASS	
		20	1.14	0.00161			PASS	
		30	1.36	0.00192			PASS	
		40	0.83	0.00117			PASS	
		MCH	VN	50	1.77	0.0025	PASS	
				-30	-1.70	-0.00239	PASS	
				-20	-0.23	-0.00032	PASS	
				-10	-2.30	-0.00324	PASS	
				0	-1.73	-0.00244	PASS	
				10	0.19	0.00027	PASS	
				20	-0.37	-0.00052	PASS	
				30	-2.75	-0.00387	PASS	
		HCH	VN	40	-1.49	-0.0021	PASS	
				50	-1.44	-0.00203	PASS	
				-30	-0.07	-0.0001	PASS	
-20	1.19			0.00167	PASS			
-10	-0.43			-0.0006	PASS			
0	1.00			0.00141	PASS			
10	-0.43			-0.0006	PASS			
					20	0.16	0.00023	PASS
					30	0.37	0.00052	PASS
10					10	-0.09	-0.00013	PASS
					20	-0.36	-0.00051	PASS
					30	-0.21	-0.0003	PASS
					40	-0.14	-0.0002	PASS
					50	-0.30	-0.00042	PASS
					-30	-0.99	-0.00139	PASS
					-20	-0.06	-0.00008	PASS
		HCH	VN	-10	0.56	0.00078	PASS	
				0	-0.20	-0.00028	PASS	
				10	-0.57	-0.0008	PASS	
				20	-0.13	-0.00018	PASS	
				30	-1.29	-0.00181	PASS	
				40	0.04	0.00006	PASS	
				50	1.50	0.0021	PASS	
				-30	0.46	0.00065	PASS	
LCH	VN	-20	-0.21	-0.0003	PASS			
		-10	0.84	0.00118	PASS			
		0	-0.47	-0.00066	PASS			
		10	0.34	0.00048	PASS			
		20	1.14	0.00161	PASS			
		30	1.36	0.00192	PASS			
		40	0.83	0.00117	PASS			
		50	1.77	0.0025	PASS			
MCH	VN	-30	-1.70	-0.00239	PASS			
		-20	-0.23	-0.00032	PASS			
		-10	-2.30	-0.00324	PASS			
		0	-1.73	-0.00244	PASS			
		10	0.19	0.00027	PASS			
		20	-0.37	-0.00052	PASS			
		30	-2.75	-0.00387	PASS			
		40	-1.49	-0.0021	PASS			
HCH	VN	50	-1.44	-0.00203	PASS			
		-30	-0.07	-0.0001	PASS			
		-20	1.19	0.00167	PASS			
		-10	-0.43	-0.0006	PASS			
		0	1.00	0.00141	PASS			
		10	-0.43	-0.0006	PASS			
		20	0.16	0.00023	PASS			
					30	0.37	0.00052	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt..	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	0.69	0.00097	PASS
					50	-0.11	-0.00015	PASS

END