



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
BAND26	LTE/TM1	1.4	LCH	RB1#0	22.6	19.15	50	PASS
				RB1#3	22.76	19.31	50	PASS
				RB1#5	22.47	19.02	50	PASS
				RB3#0	22.4	18.95	50	PASS
				RB3#2	22.37	18.92	50	PASS
				RB3#3	22.44	18.99	50	PASS
				RB6#0	21.38	17.93	50	PASS
			MCH	RB1#0	22.7	19.25	50	PASS
				RB1#3	23.29	19.84	50	PASS
				RB1#5	22.73	19.28	50	PASS
				RB3#0	22.6	19.15	50	PASS
				RB3#2	22.62	19.17	50	PASS
				RB3#3	22.56	19.11	50	PASS
				RB6#0	21.56	18.11	50	PASS
			HCH	RB1#0	22.6	19.15	50	PASS
				RB1#3	22.69	19.24	50	PASS
				RB1#5	22.61	19.16	50	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB3#0	22.79	19.34	50	PASS
				RB3#2	22.65	19.2	50	PASS
				RB3#3	22.54	19.09	50	PASS
				RB6#0	21.56	18.11	50	PASS
		3	LCH	RB1#0	23.12	19.67	50	PASS
				RB1#7	23.27	19.82	50	PASS
				RB1#14	23.09	19.64	50	PASS
				RB8#0	21.47	18.02	50	PASS
				RB8#4	21.37	17.92	50	PASS
				RB8#7	21.39	17.94	50	PASS
				RB15#0	21.56	18.11	50	PASS
			MCH	RB1#0	22.67	19.22	50	PASS
				RB1#7	22.85	19.4	50	PASS
				RB1#14	22.82	19.37	50	PASS
				RB8#0	21.61	18.16	50	PASS
				RB8#4	21.53	18.08	50	PASS
				RB8#7	21.68	18.23	50	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB15#0	21.64	18.19	50	PASS
			HCH	RB1#0	22.7	19.25	50	PASS
				RB1#7	22.92	19.47	50	PASS
				RB1#14	22.77	19.32	50	PASS
				RB8#0	21.74	18.29	50	PASS
				RB8#4	21.59	18.14	50	PASS
				RB8#7	21.64	18.19	50	PASS
				RB15#0	21.82	18.37	50	PASS
		5		LCH	RB1#0	22.73	19.28	50
			RB1#13		22.62	19.17	50	PASS
			RB1#24		22.82	19.37	50	PASS
			RB12#0		21.43	17.98	50	PASS
			RB12#6		21.38	17.93	50	PASS
			RB12#13		21.44	17.99	50	PASS
			RB25#0		21.54	18.09	50	PASS
			MCH	RB1#0	22.51	19.06	50	PASS
				RB1#13	22.63	19.18	50	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#24	22.56	19.11	50	PASS
				RB12#0	21.49	18.04	50	PASS
				RB12#6	21.64	18.19	50	PASS
				RB12#13	21.58	18.13	50	PASS
				RB25#0	21.57	18.12	50	PASS
			HCH	RB1#0	22.51	19.06	50	PASS
			HCH	RB1#13	22.65	19.2	50	PASS
			HCH	RB1#24	22.47	19.02	50	PASS
			HCH	RB12#0	21.67	18.22	50	PASS
			HCH	RB12#6	21.68	18.23	50	PASS
			HCH	RB12#13	21.6	18.15	50	PASS
			HCH	RB25#0	21.62	18.17	50	PASS
		10	LCH/MCH /HCH	RB1#0	22.88	19.43	50	PASS
		10	LCH/MCH /HCH	RB1#25	22.86	19.41	50	PASS
		10	LCH/MCH /HCH	RB1#49	22.99	19.54	50	PASS
		10	LCH/MCH /HCH	RB25#0	21.64	18.19	50	PASS
		10	LCH/MCH /HCH	RB25#13	21.67	18.22	50	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.64	18.19	50	PASS
				RB50#0	21.63	18.18	50	PASS
	LTE/TM2	1.4	LCH	RB1#0	22.17	18.72	50	PASS
				RB1#3	22.23	18.78	50	PASS
				RB1#5	22.15	18.7	50	PASS
				RB3#0	21.02	17.57	50	PASS
				RB3#2	20.92	17.47	50	PASS
				RB3#3	20.92	17.47	50	PASS
				RB6#0	20.25	16.8	50	PASS
			MCH	RB1#0	22.25	18.8	50	PASS
				RB1#3	22.43	18.98	50	PASS
				RB1#5	22.38	18.93	50	PASS
				RB3#0	21.61	18.16	50	PASS
				RB3#2	21.65	18.2	50	PASS
				RB3#3	21.67	18.22	50	PASS
HCH	RB1#0	22.08	18.63	50	PASS			



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#3	22.35	18.9	50	PASS
				RB1#5	22.56	19.11	50	PASS
				RB3#0	21.47	18.02	50	PASS
				RB3#2	21.54	18.09	50	PASS
				RB3#3	21.41	17.96	50	PASS
				RB6#0	20.58	17.13	50	PASS
		3	LCH	RB1#0	21.83	18.38	50	PASS
				RB1#7	21.75	18.3	50	PASS
				RB1#14	21.59	18.14	50	PASS
				RB8#0	20.73	17.28	50	PASS
				RB8#4	20.61	17.16	50	PASS
				RB8#7	20.65	17.2	50	PASS
				RB15#0	20.37	16.92	50	PASS
				MCH	RB1#0	21.82	18.37	50
		RB1#7	21.86		18.41	50	PASS	
		RB1#14	21.76		18.31	50	PASS	
RB8#0	20.76	17.31	50		PASS			



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#4	20.8	17.35	50	PASS
				RB8#7	20.83	17.38	50	PASS
				RB15#0	20.53	17.08	50	PASS
			HCH	RB1#0	21.8	18.35	50	PASS
				RB1#7	21.89	18.44	50	PASS
				RB1#14	21.72	18.27	50	PASS
				RB8#0	20.97	17.52	50	PASS
				RB8#4	20.93	17.48	50	PASS
				RB8#7	20.79	17.34	50	PASS
				RB15#0	20.91	17.46	50	PASS
					RB1#0	21.53	18.08	50
		5	LCH	RB1#13	21.49	18.04	50	PASS
				RB1#24	21.59	18.14	50	PASS
				RB12#0	20.44	16.99	50	PASS
				RB12#6	20.52	17.07	50	PASS
				RB12#13	20.58	17.13	50	PASS
				RB25#0	20.5	17.05	50	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			MCH	RB1#0	21.1	17.65	50	PASS
				RB1#13	21.23	17.78	50	PASS
				RB1#24	21.16	17.71	50	PASS
				RB12#0	20.76	17.31	50	PASS
				RB12#6	20.72	17.27	50	PASS
				RB12#13	20.74	17.29	50	PASS
			RB25#0	20.57	17.12	50	PASS	
			HCH	RB1#0	21.19	17.74	50	PASS
				RB1#13	21.19	17.74	50	PASS
				RB1#24	21.21	17.76	50	PASS
				RB12#0	20.75	17.3	50	PASS
				RB12#6	20.69	17.24	50	PASS
		RB12#13		20.69	17.24	50	PASS	
		10	LCH/MCH /HCH	RB1#0	21.93	18.48	50	PASS
				RB1#25	21.82	18.37	50	PASS
RB1#49	21.95			18.5	50	PASS		



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.55	17.1	50	PASS
				RB25#13	20.62	17.17	50	PASS
				RB25#25	20.51	17.06	50	PASS
				RB50#0	20.7	17.25	50	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: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS



2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Void

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

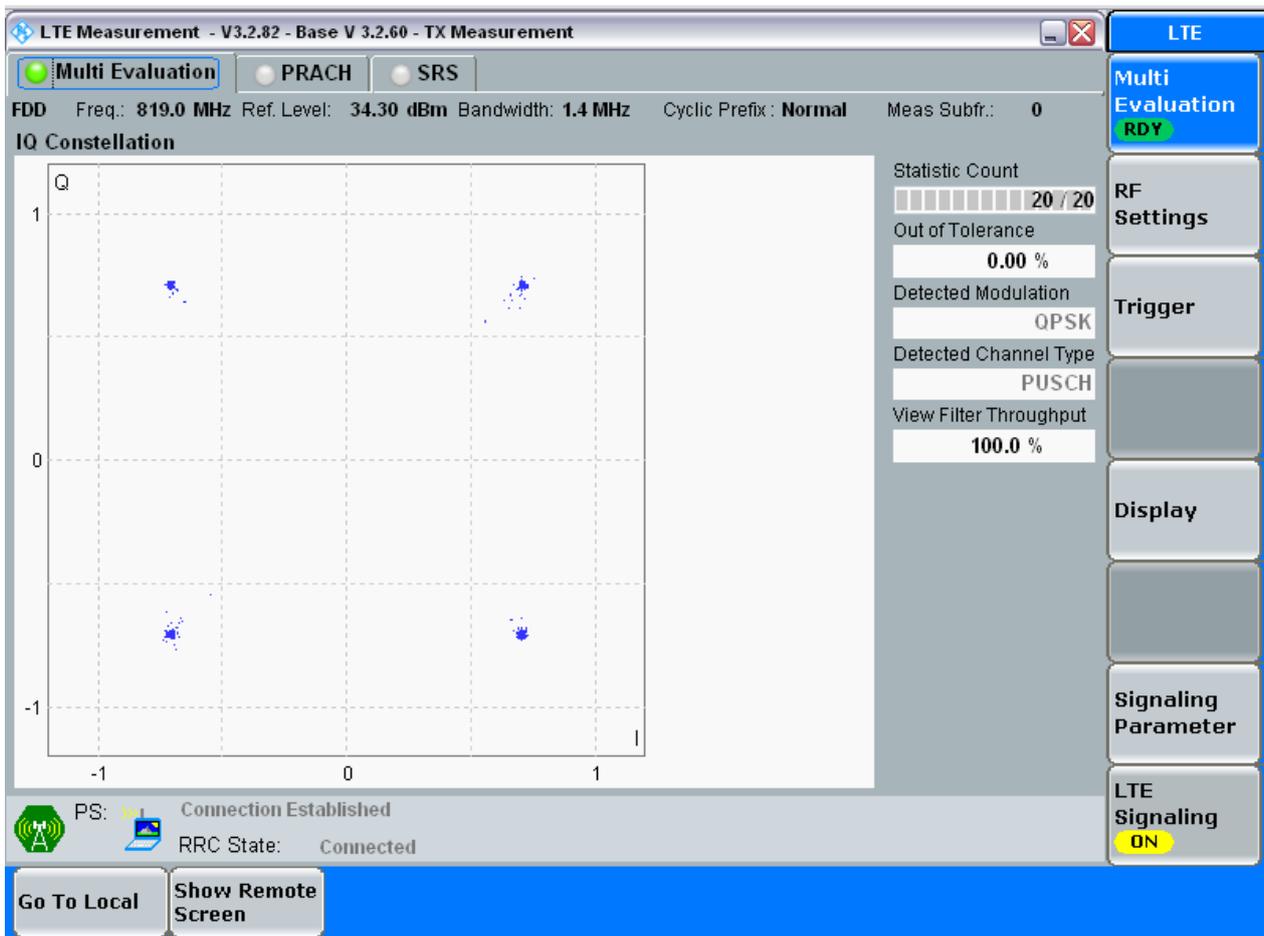
3.1.1 Test Band = BAND26

3.1.1.1 Test Mode = LTE/TM1

3.1.1.1.1 Test Bandwidth = 1.4

3.1.1.1.1.1 Test Channel = MCH

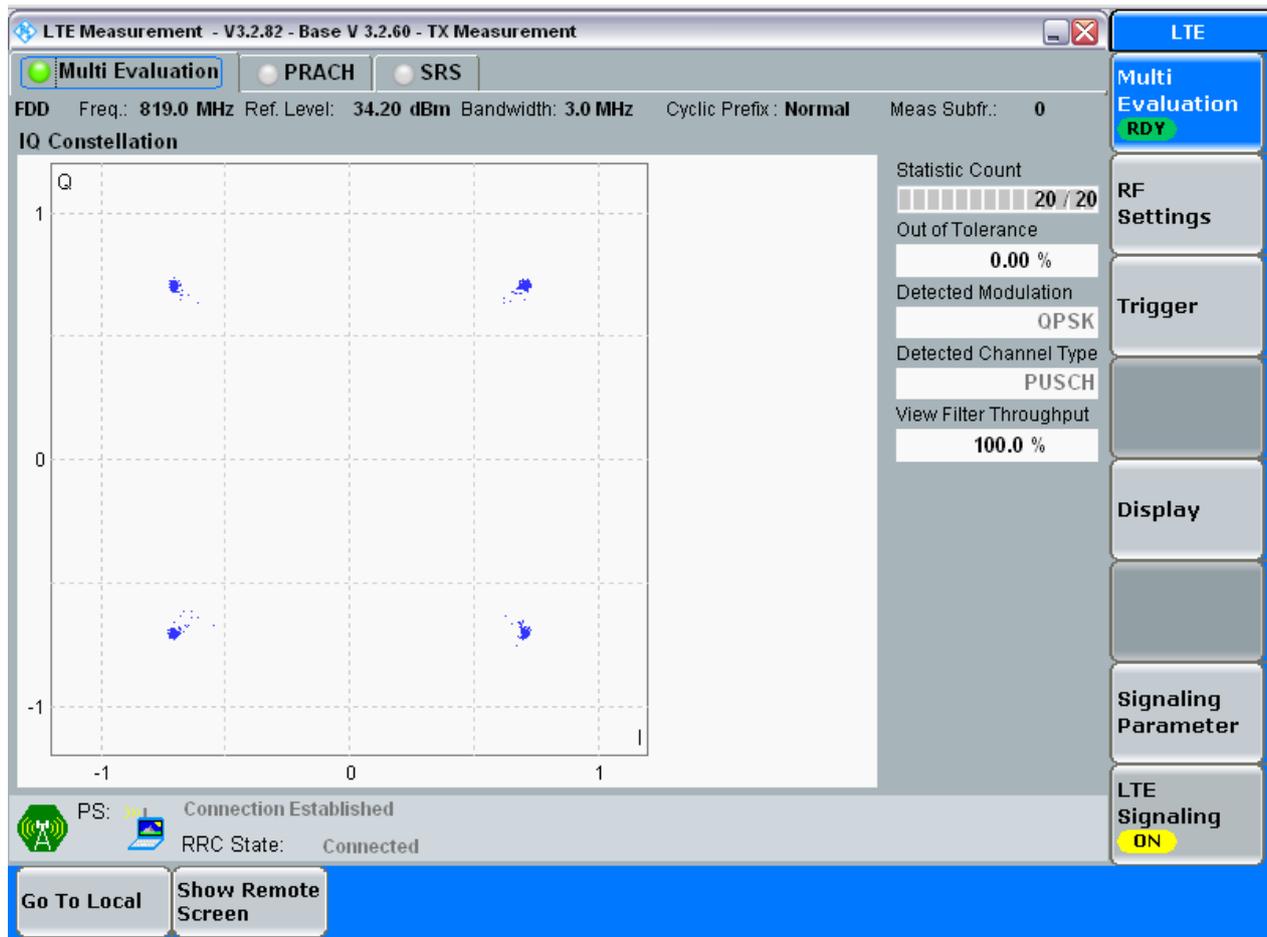
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

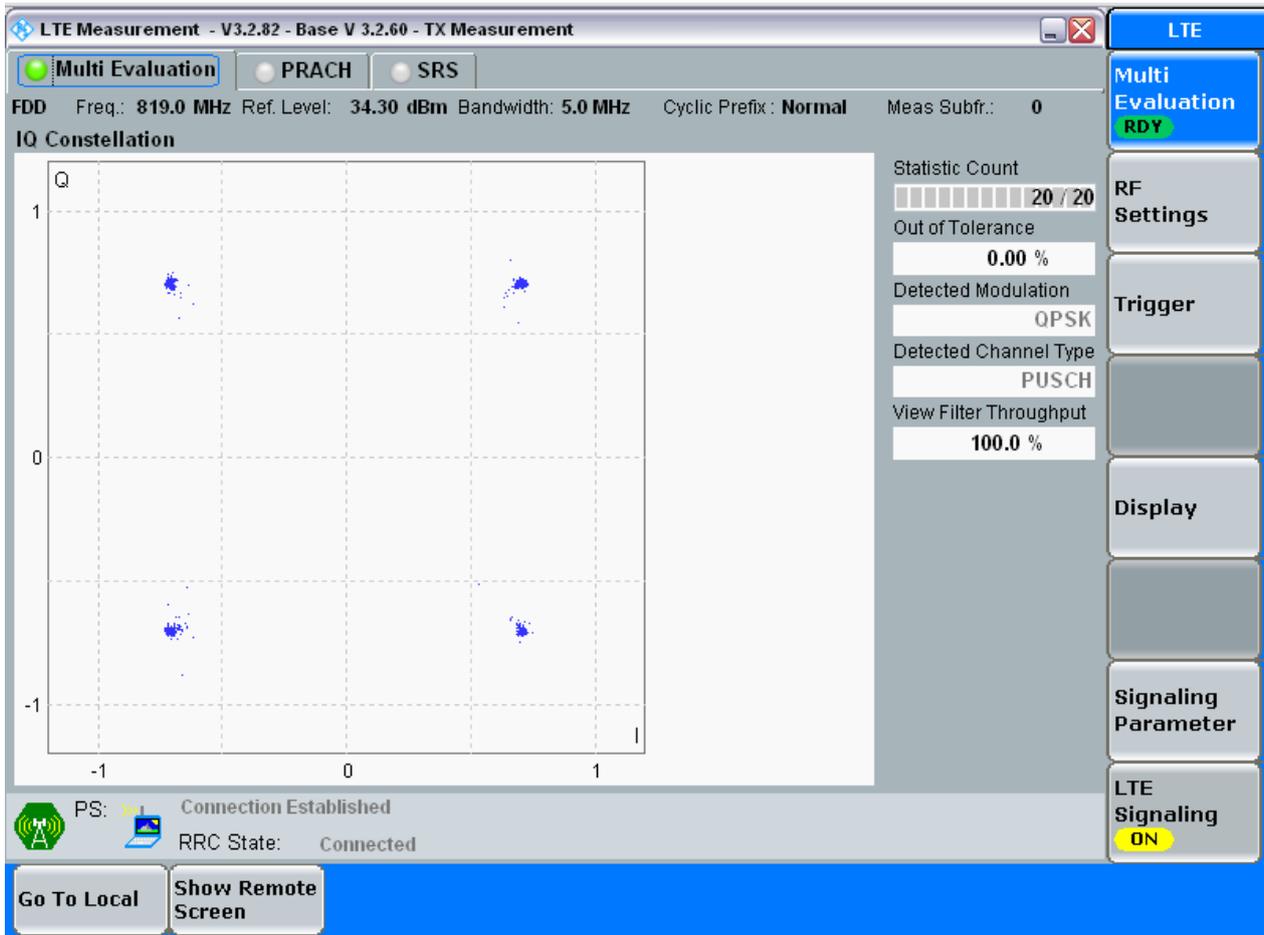
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

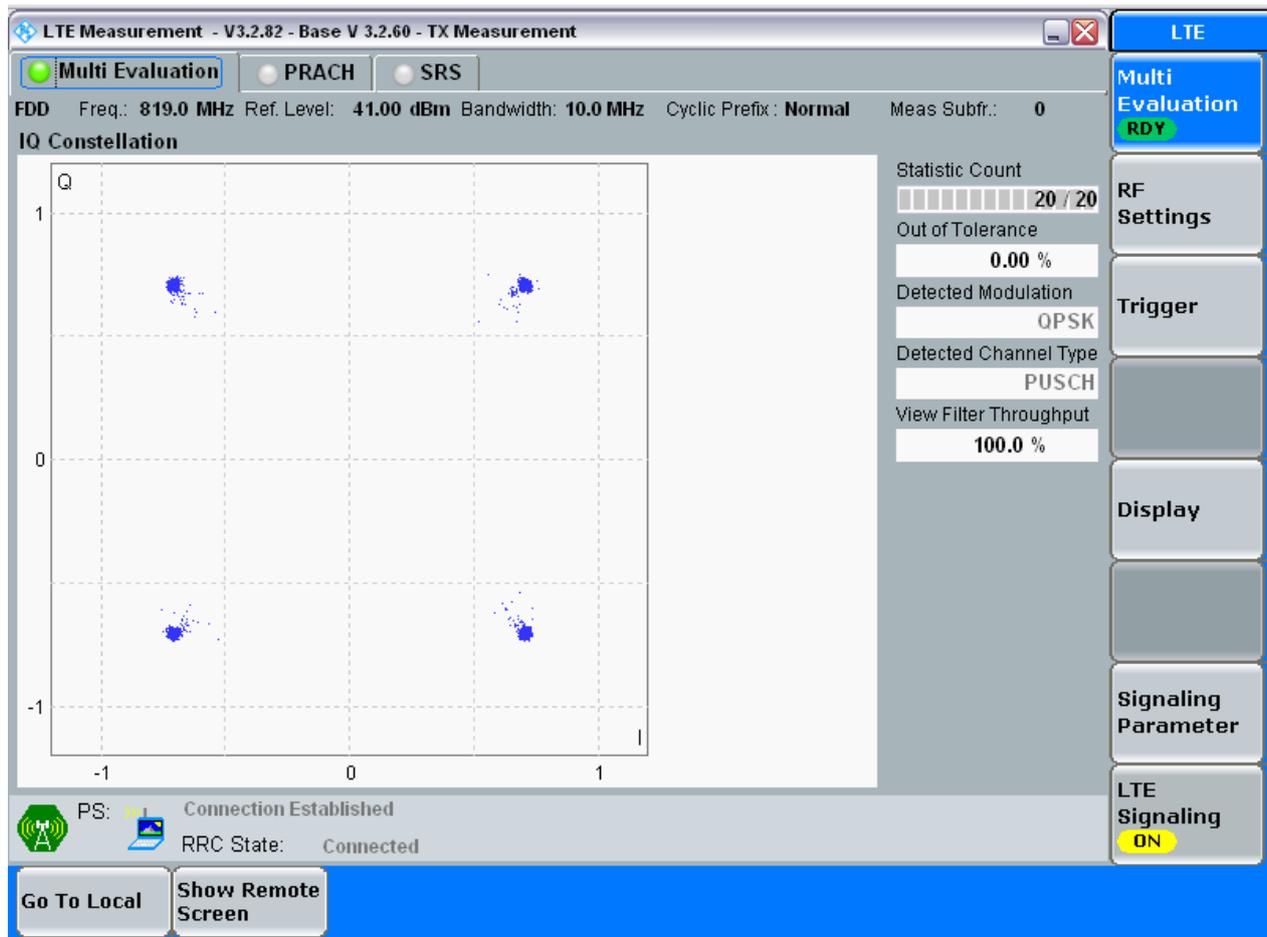
3.1.1.1.3.1.1 Test RB = RB25#0



3.1.1.1.4 Test Bandwidth = 10

3.1.1.1.4.1 Test Channel = MCH

3.1.1.1.4.1.1 Test RB = RB50#0

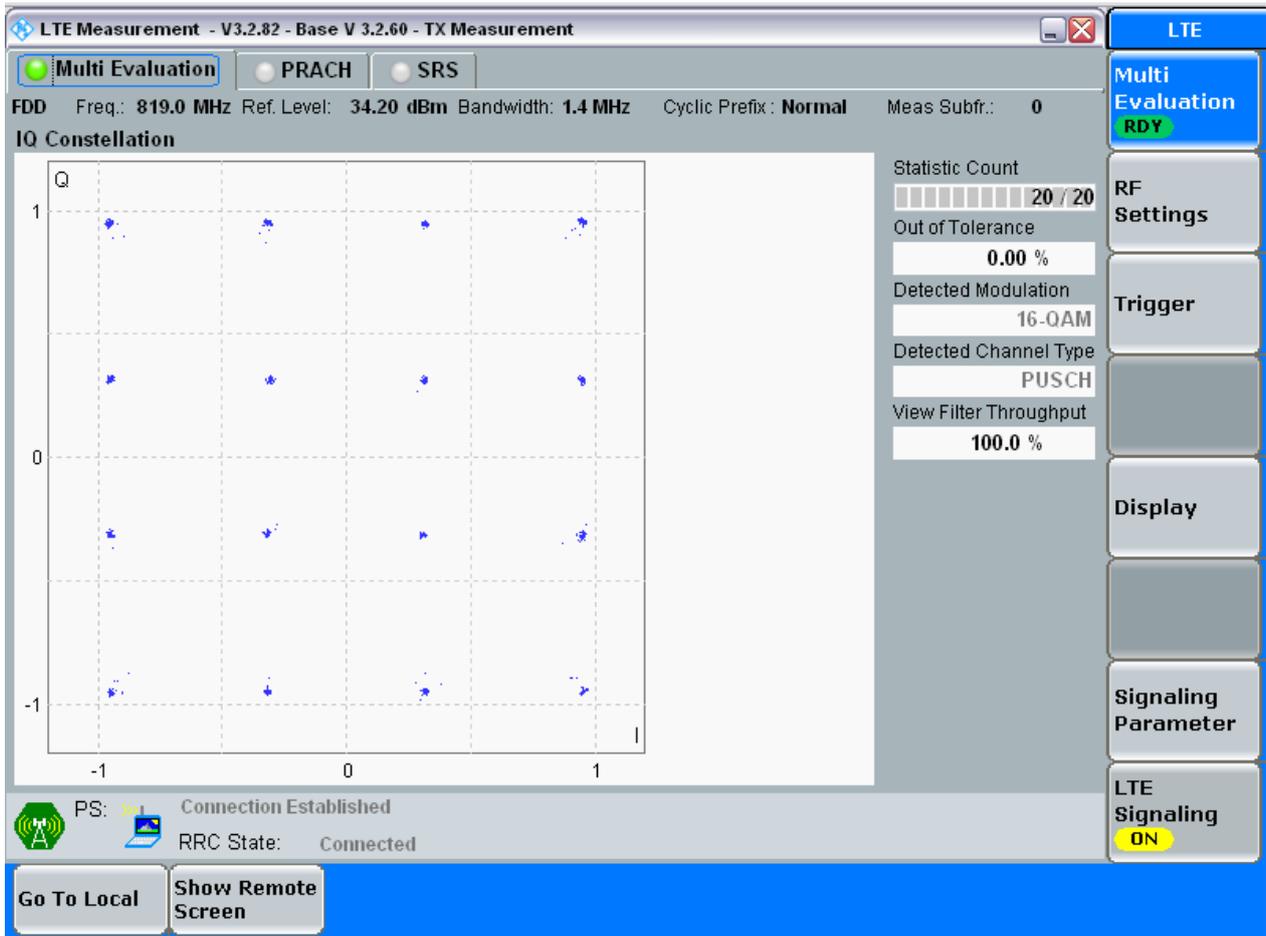


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

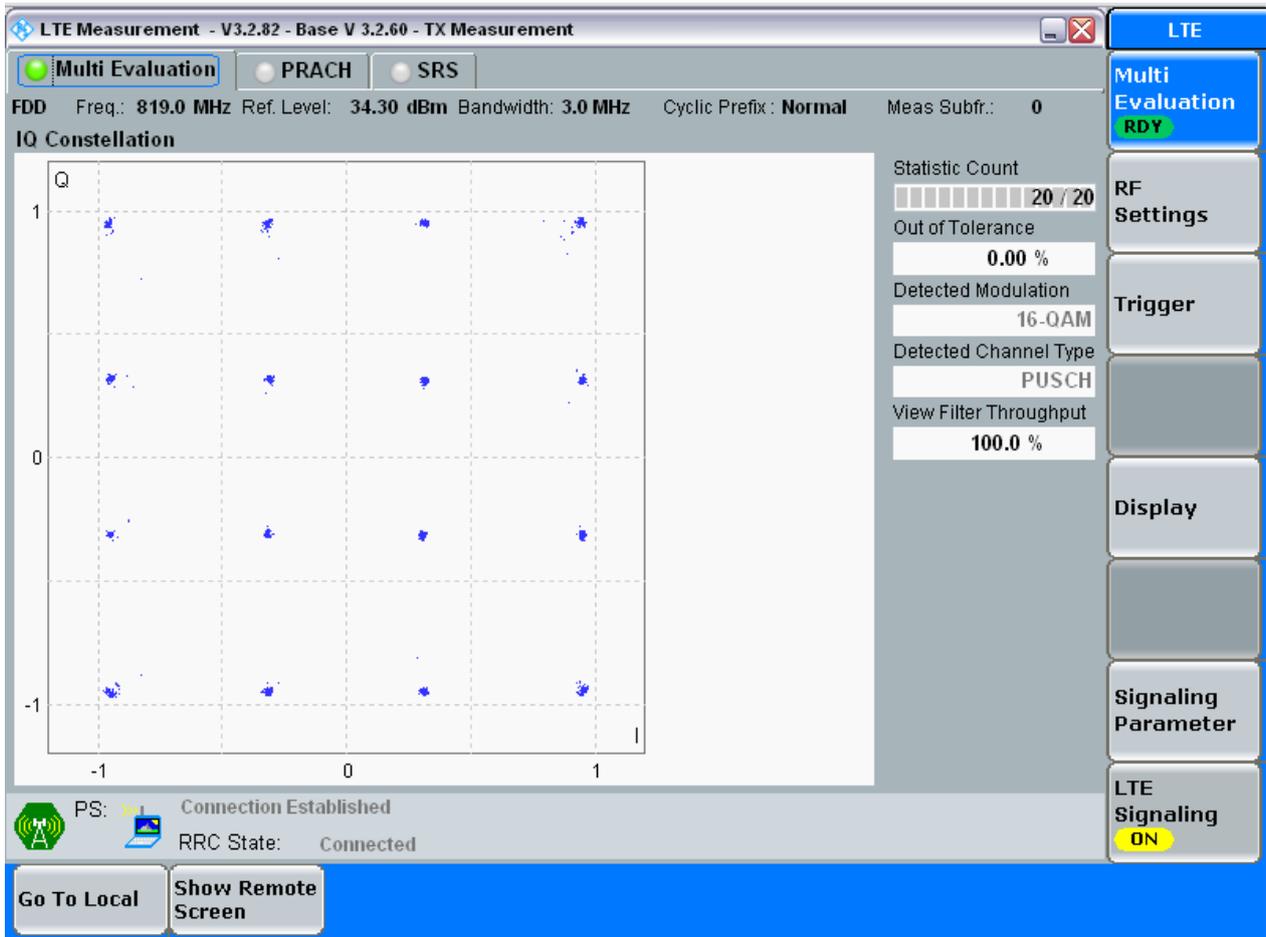
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

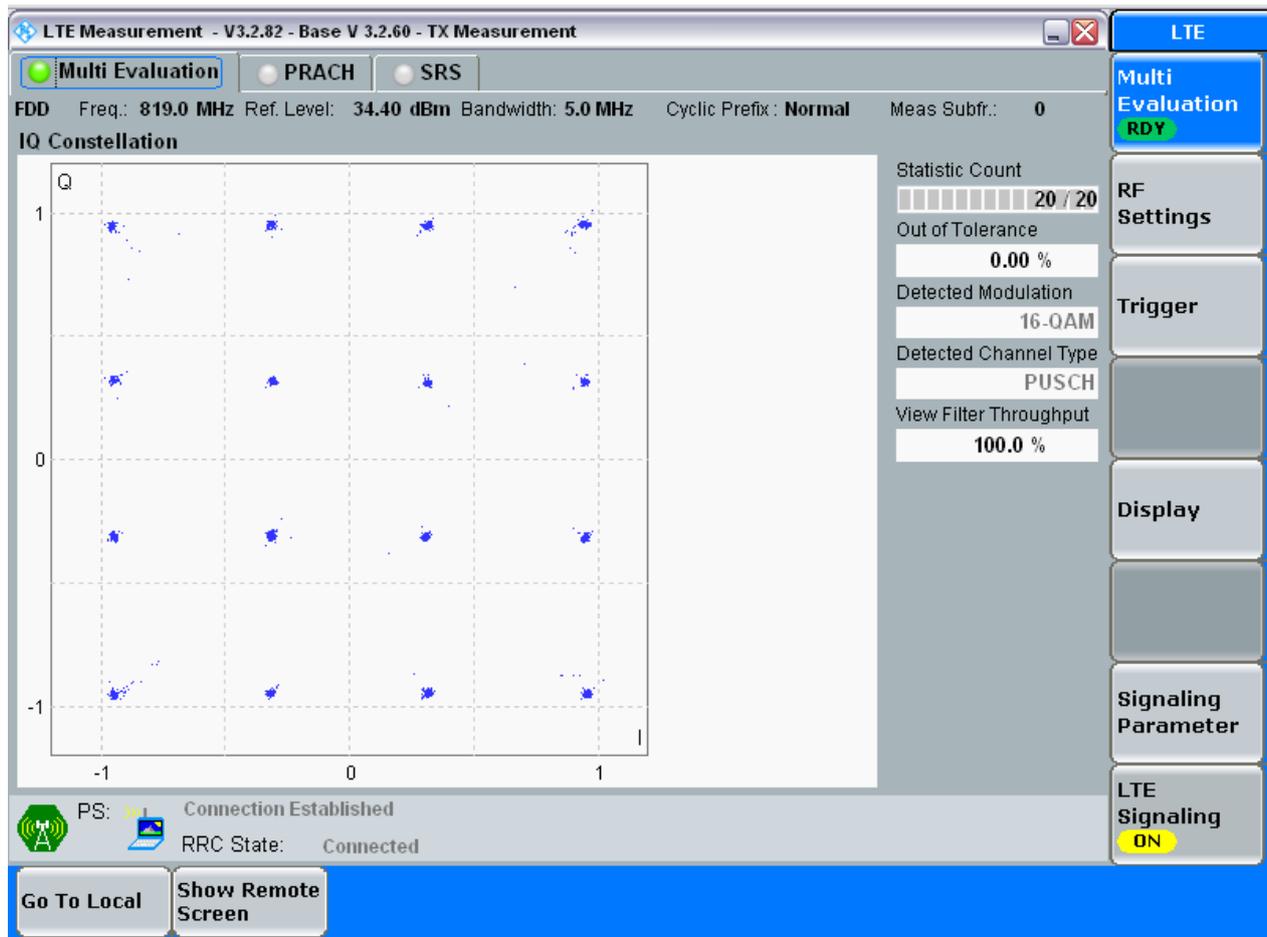
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

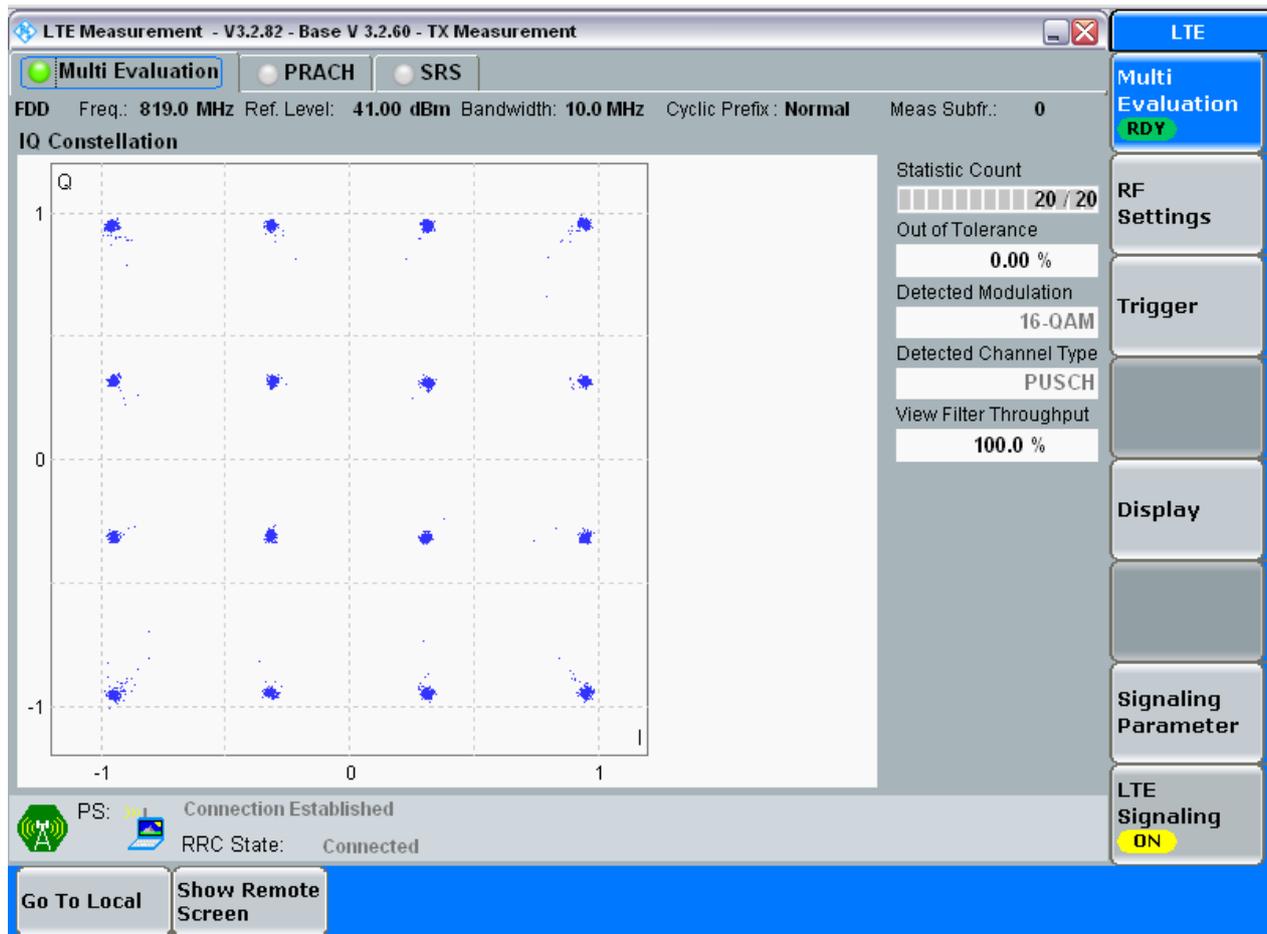
3.1.1.2.3.1.1 Test RB = RB25#0



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	
BAND26	LTE/TM1	1.4	LCH	RB6#0	1.09	1.26	Pass	
			MCH	RB6#0	1.09	1.26	Pass	
			HCH	RB6#0	1.09	1.26	Pass	
		3	LCH	RB15#0	2.70	2.93	Pass	
			MCH	RB15#0	2.70	2.94	Pass	
			HCH	RB15#0	2.70	2.93	Pass	
		5	LCH	RB25#0	4.51	4.92	Pass	
			MCH	RB25#0	4.50	4.87	Pass	
			HCH	RB25#0	4.50	4.89	Pass	
		10	LCH/ MCH/ HCH	RB50#0	9.00	9.63	Pass	
		LTE/TM2	1.4	LCH	RB6#0	1.09	1.26	Pass
				MCH	RB6#0	1.09	1.26	Pass
	HCH			RB6#0	1.09	1.27	Pass	
	3		LCH	RB15#0	2.70	2.93	Pass	
			MCH	RB15#0	2.70	2.92	Pass	
			HCH	RB15#0	2.70	2.92	Pass	
	5		LCH	RB25#0	4.52	4.87	Pass	
			MCH	RB25#0	4.51	4.89	Pass	
			HCH	RB25#0	4.50	4.90	Pass	
	10		LCH MCH HCH	RB50#0	8.98	9.55	Pass	



Part II - Test Plots

4.1 For LTE

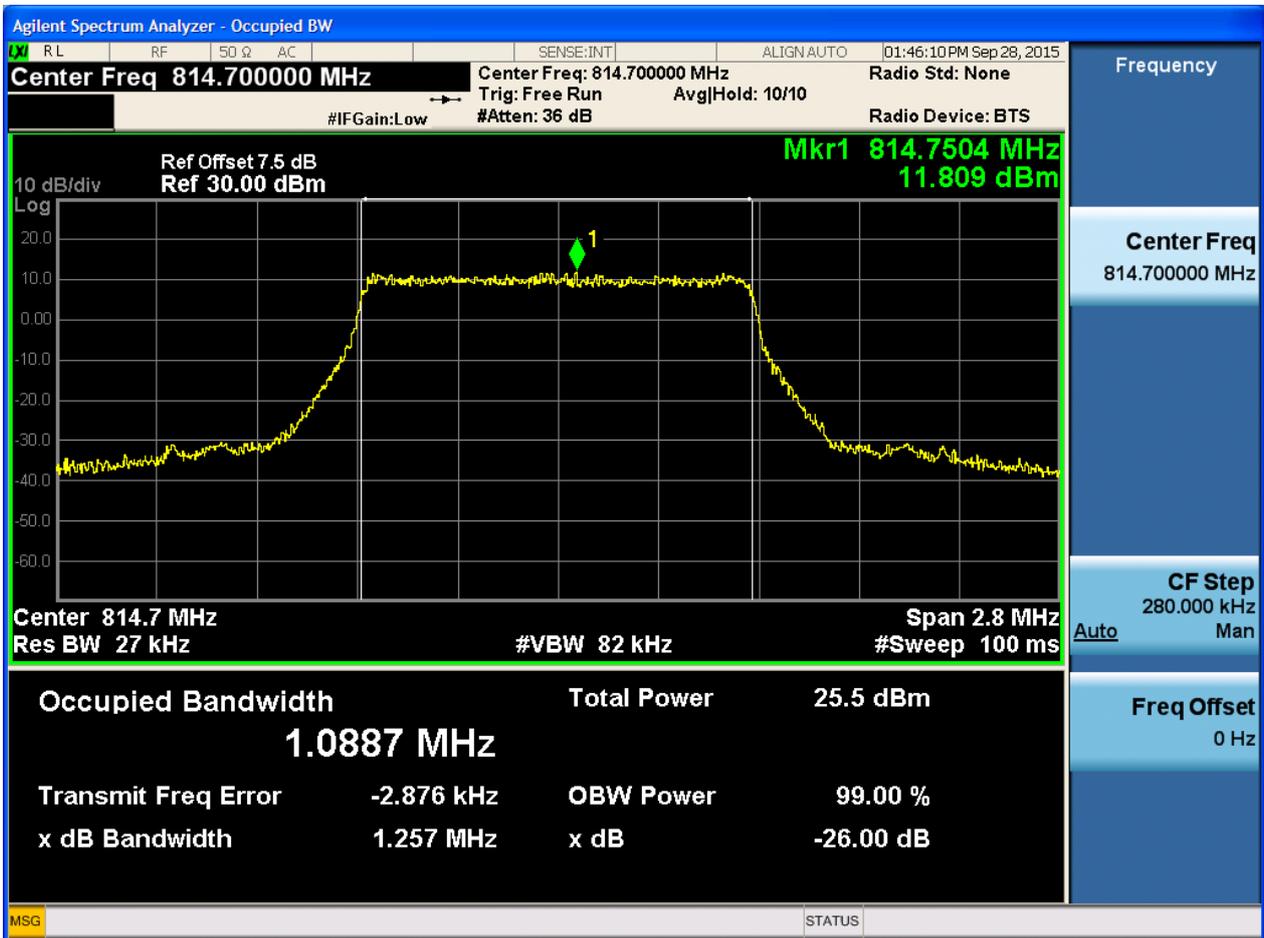
4.1.1 Test Band = BAND26

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 1.4

4.1.1.1.1.1 Test Channel = LCH

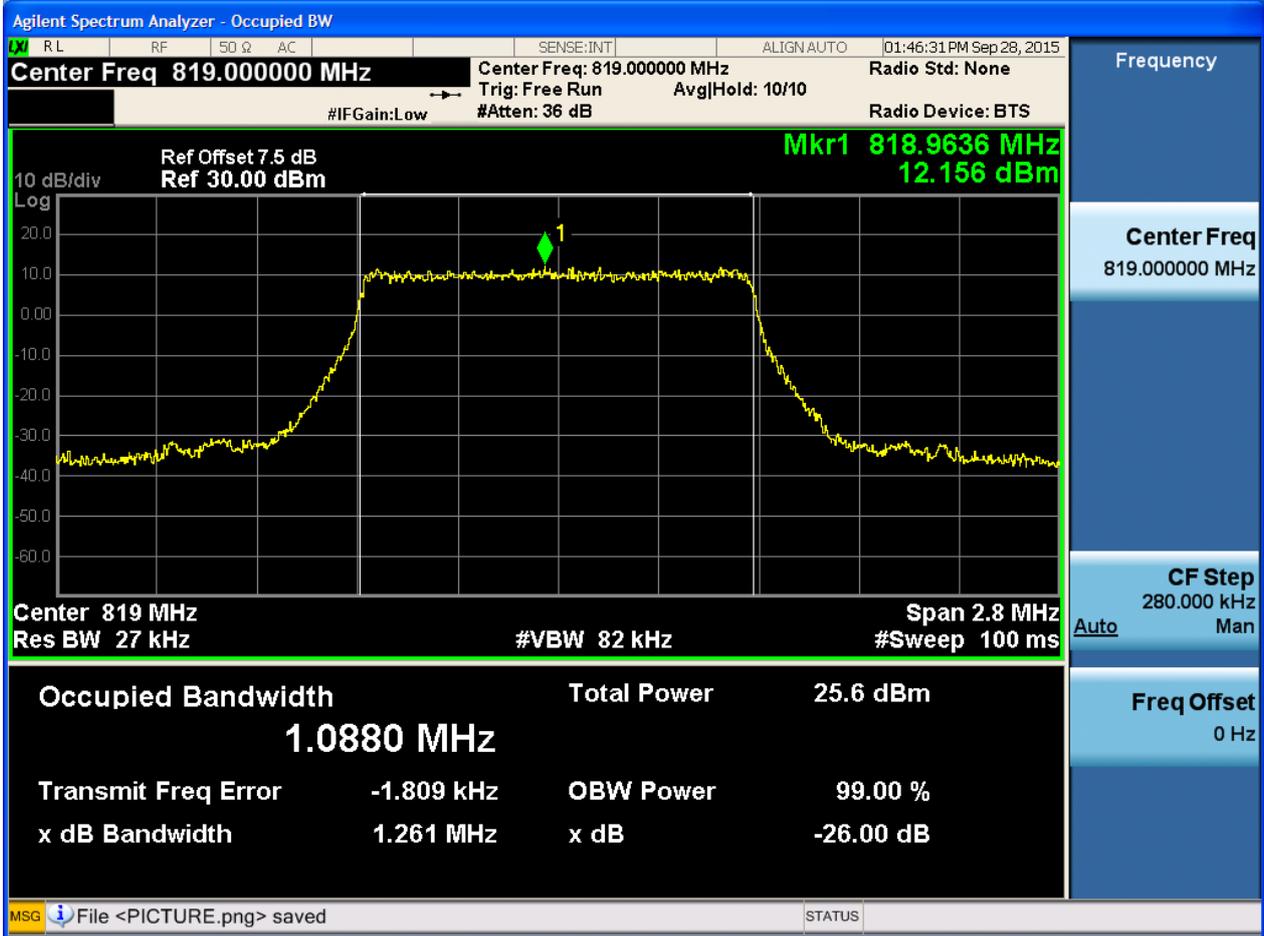
4.1.1.1.1.1.1 Test RB = RB6#0





4.1.1.1.1.2 Test Channel = MCH

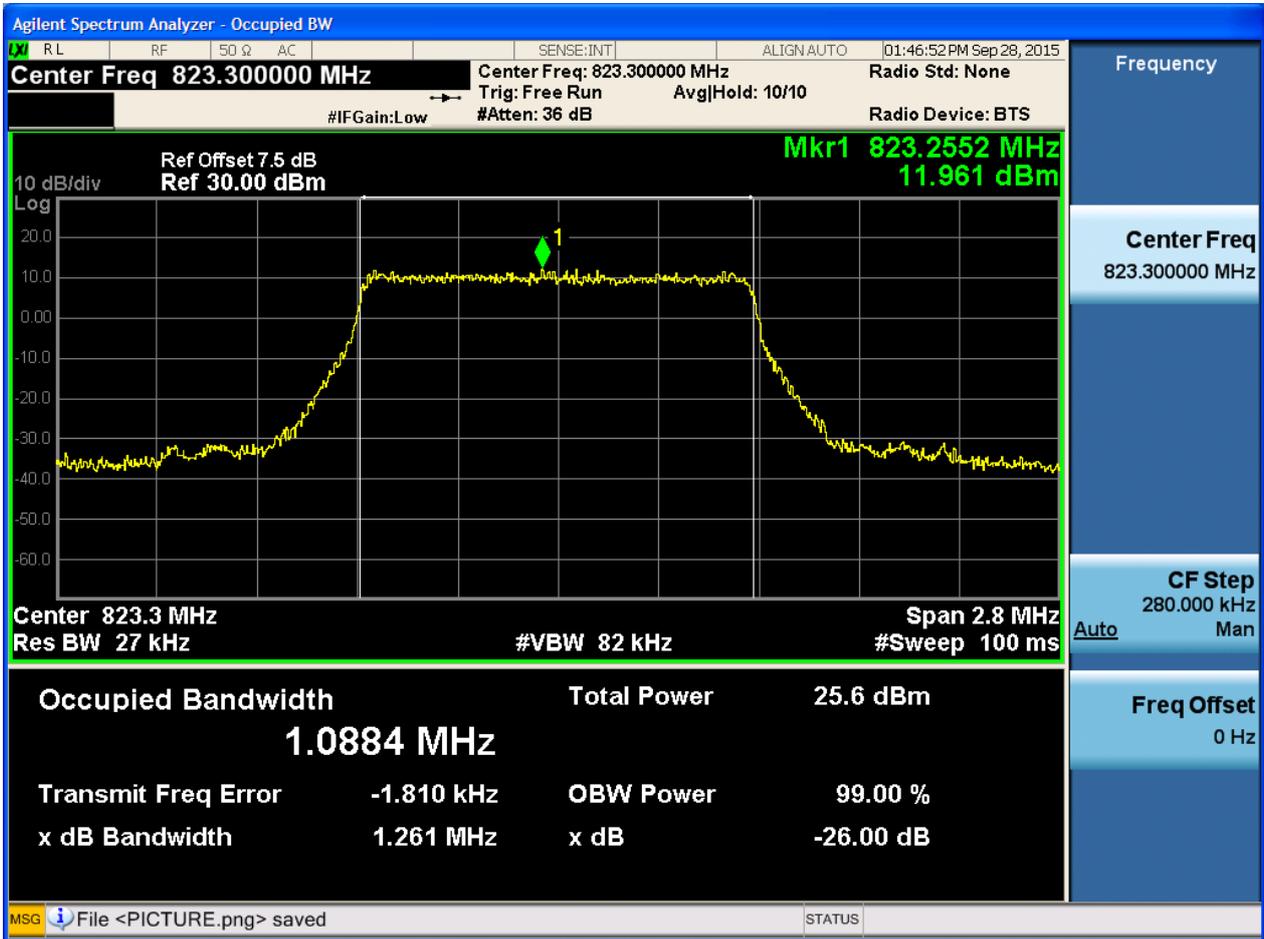
4.1.1.1.1.2.1 Test RB = RB6#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB6#0

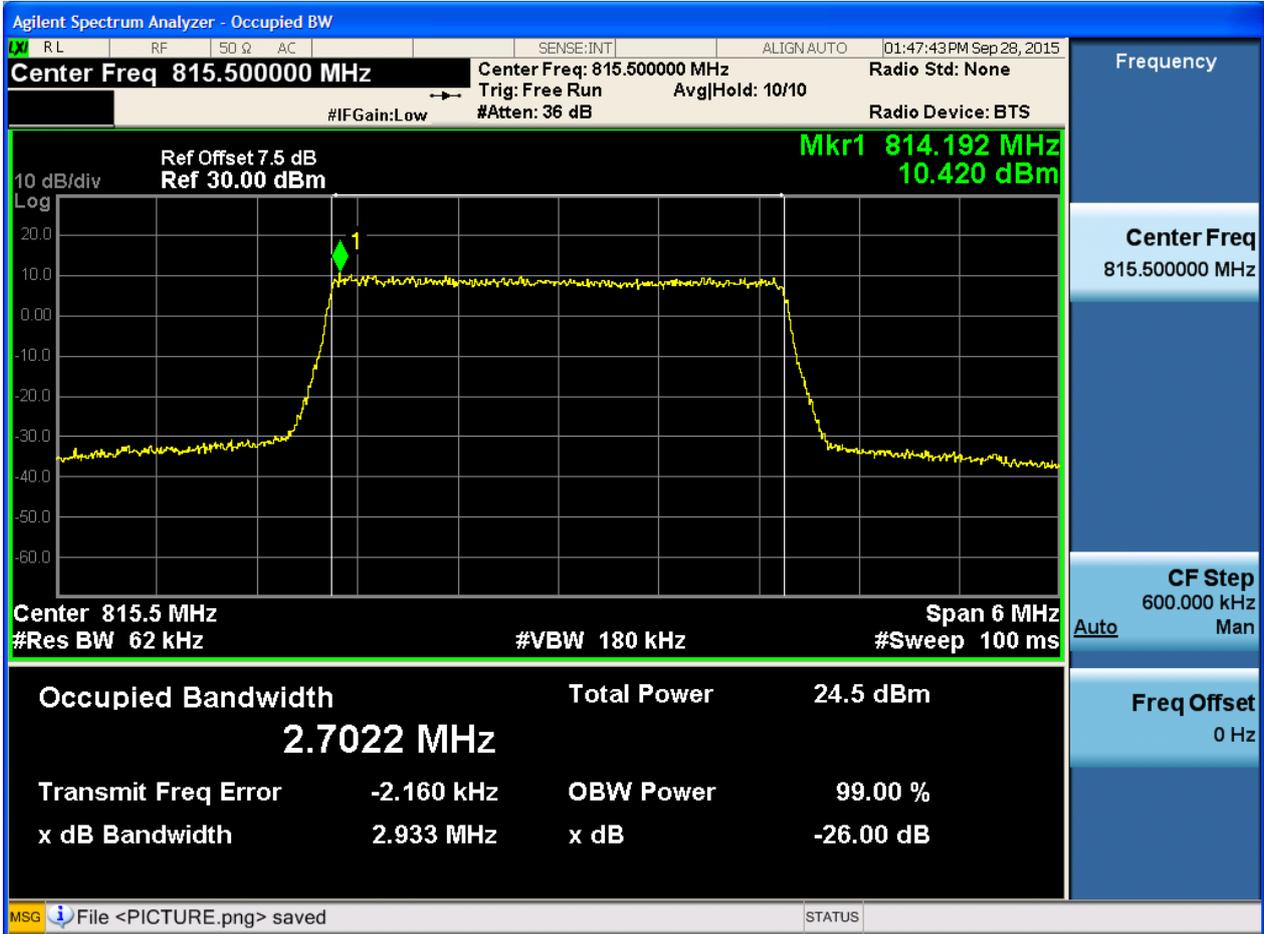




4.1.1.1.2 Test Bandwidth = 3

4.1.1.1.2.1 Test Channel = LCH

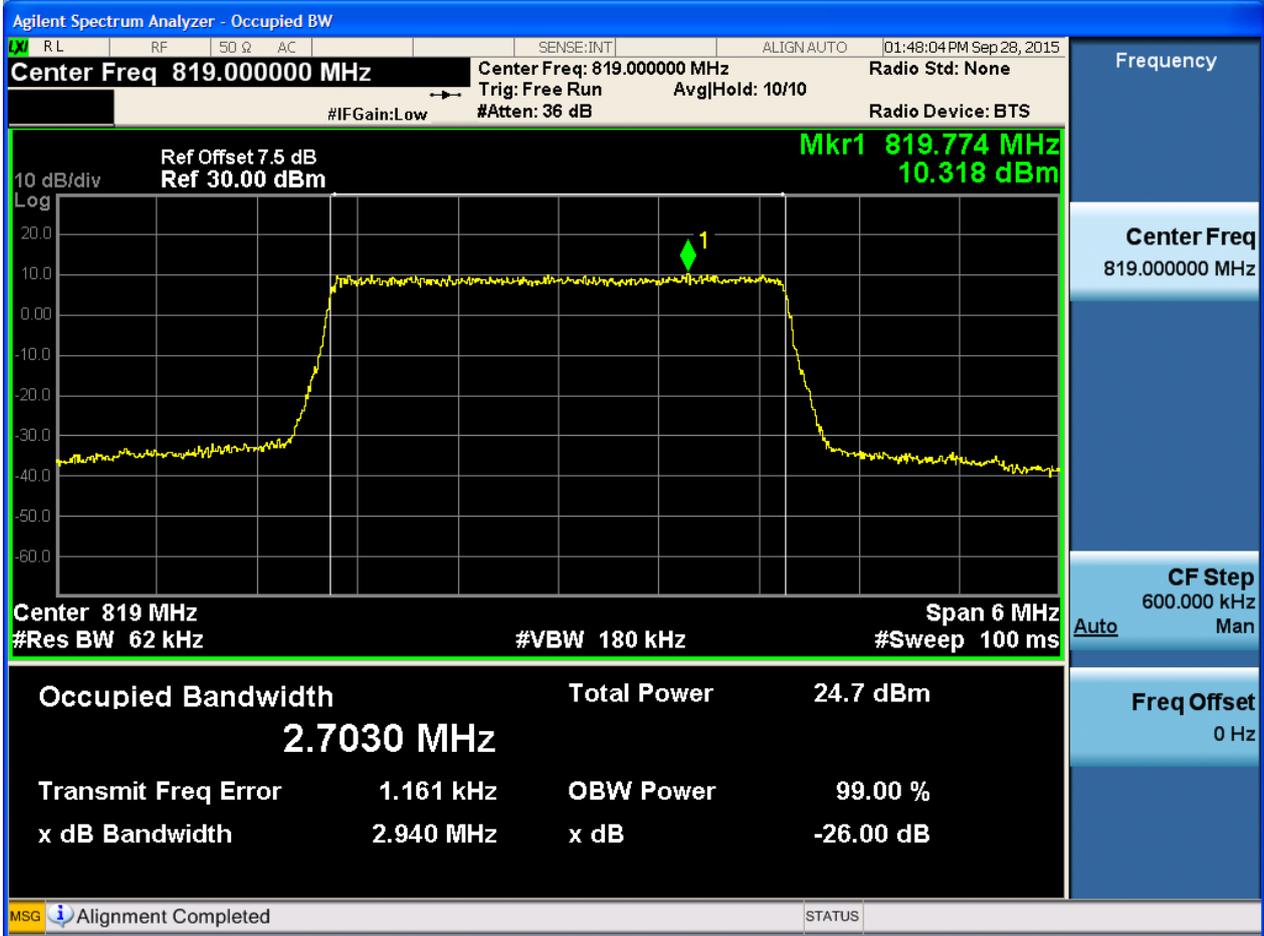
4.1.1.1.2.1.1 Test RB = RB15#0





4.1.1.1.2.2 Test Channel = MCH

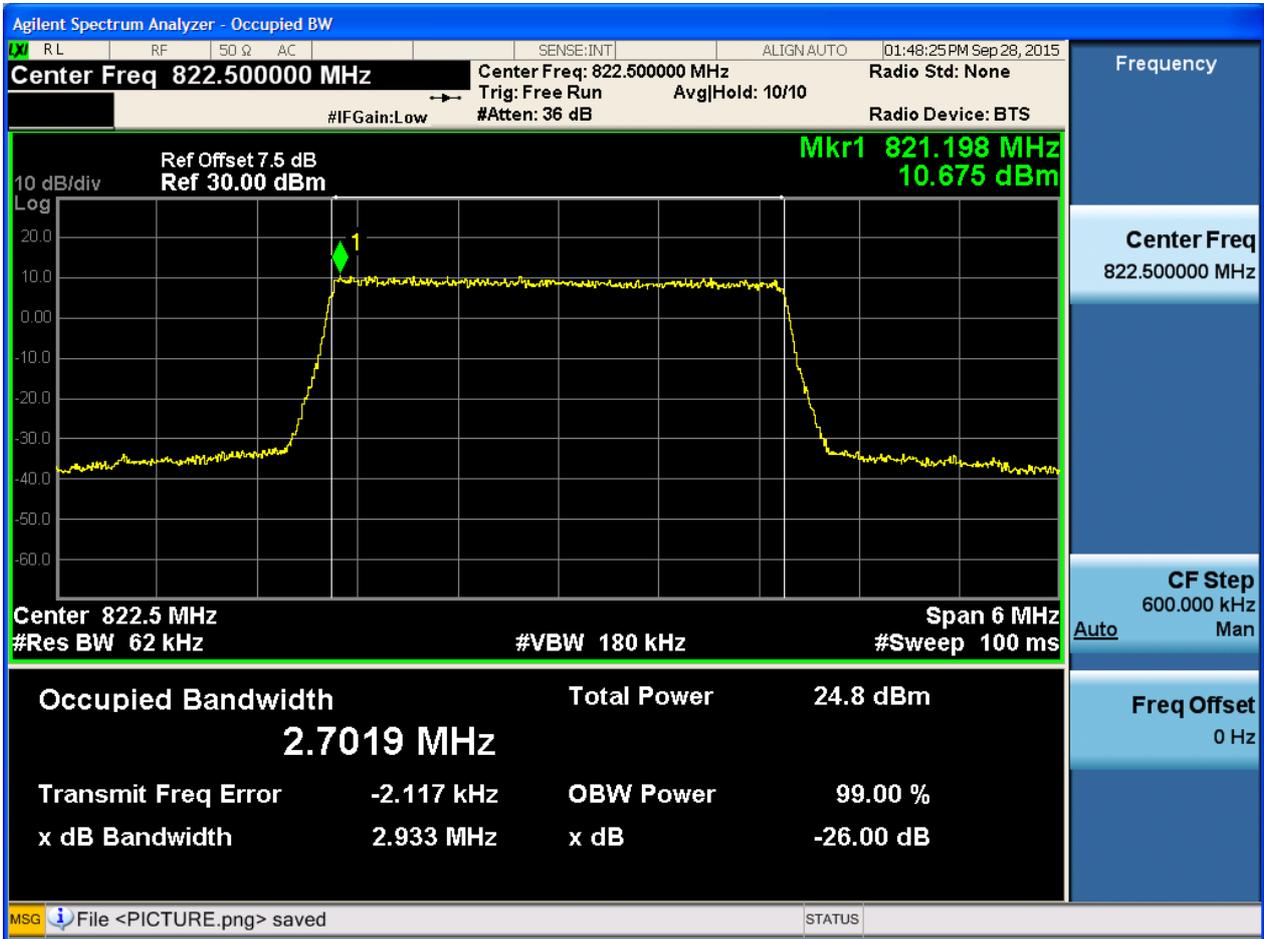
4.1.1.1.2.2.1 Test RB = RB15#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB15#0

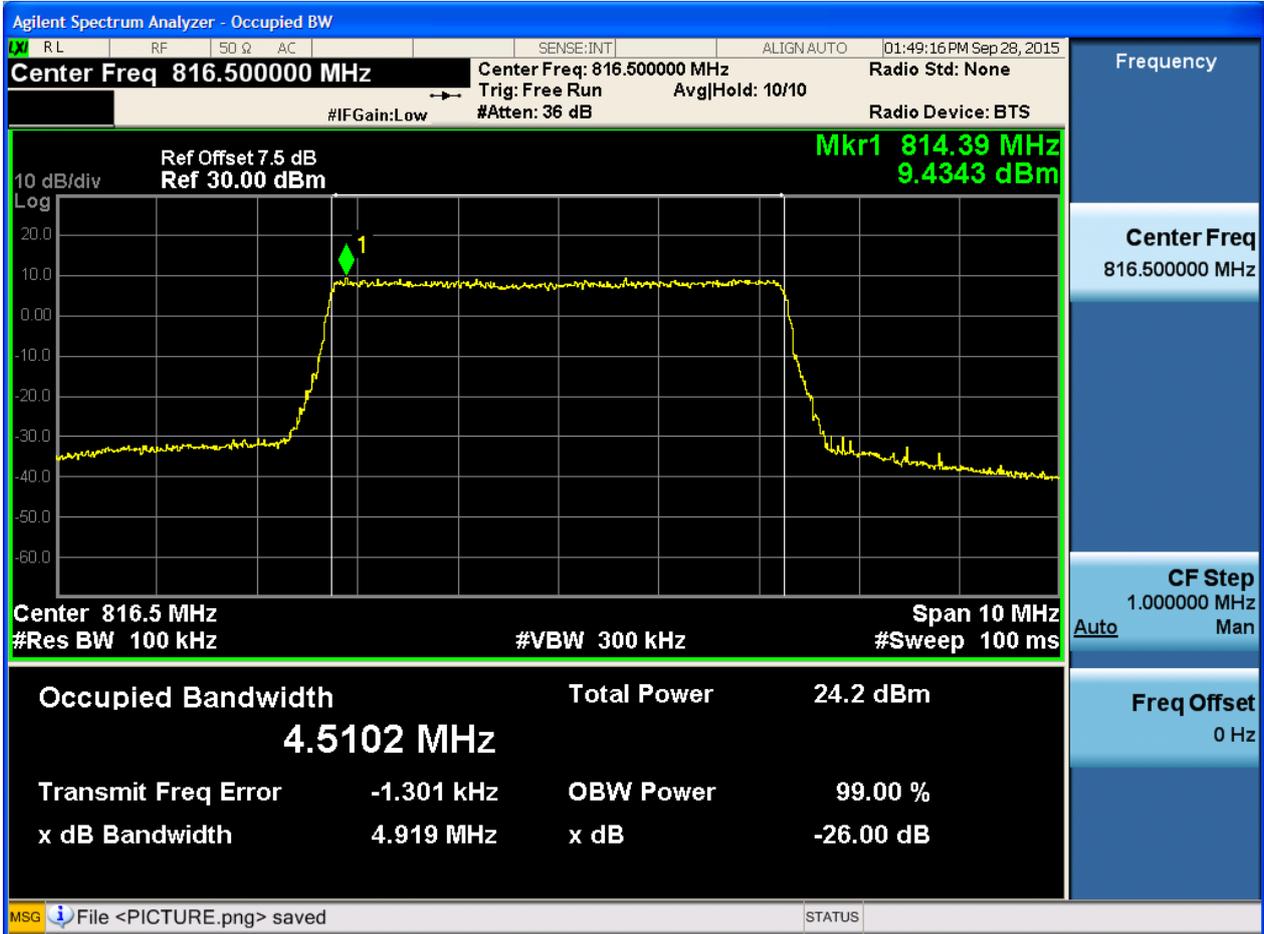




4.1.1.1.3 Test Bandwidth = 5

4.1.1.1.3.1 Test Channel = LCH

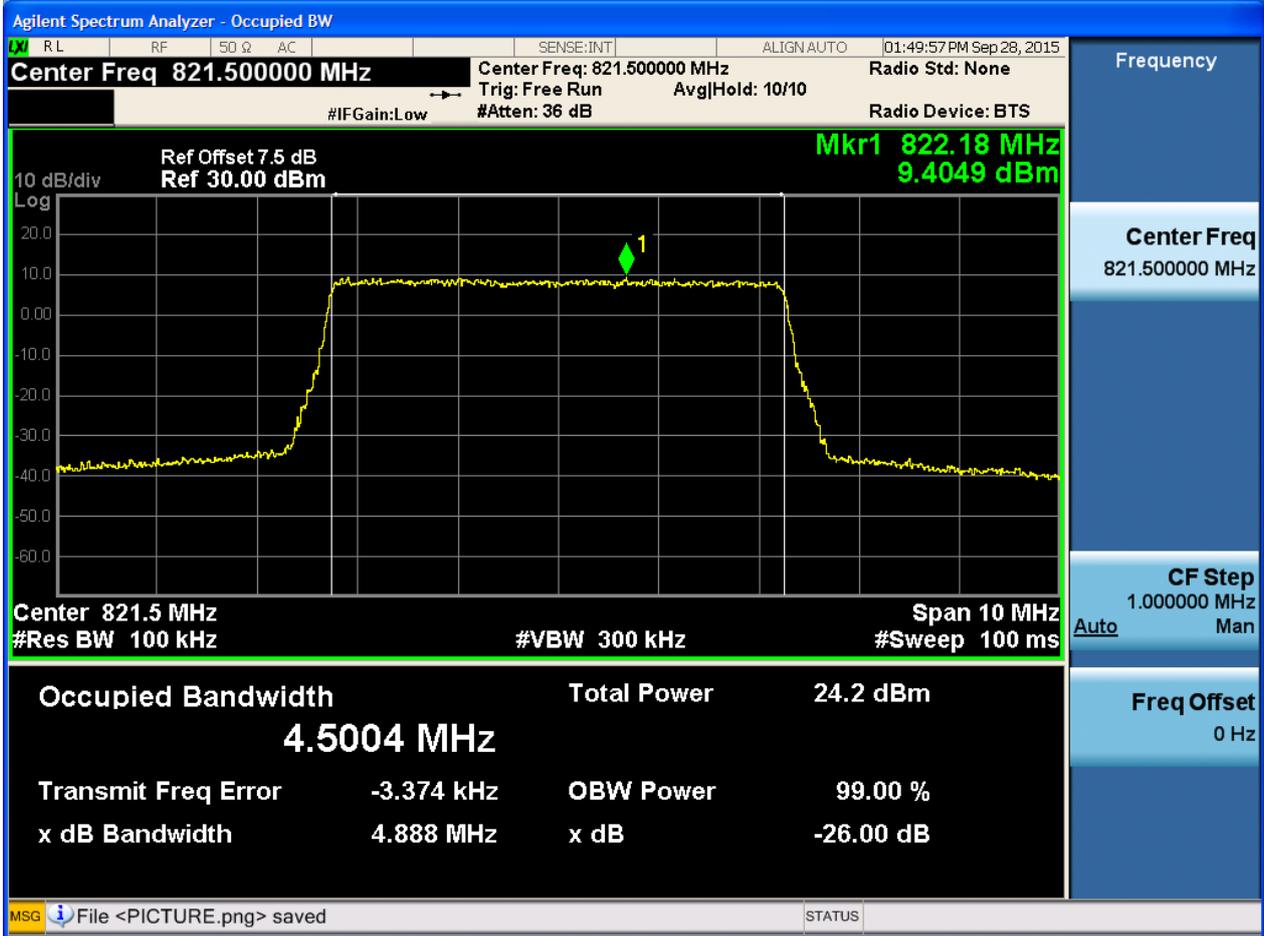
4.1.1.1.3.1.1 Test RB = RB25#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB25#0





4.1.1.1.4 Test Bandwidth = 10

4.1.1.1.4.1 Test Channel = LCH/MCH/HCH

4.1.1.1.4.1.1 Test RB = RB50#0



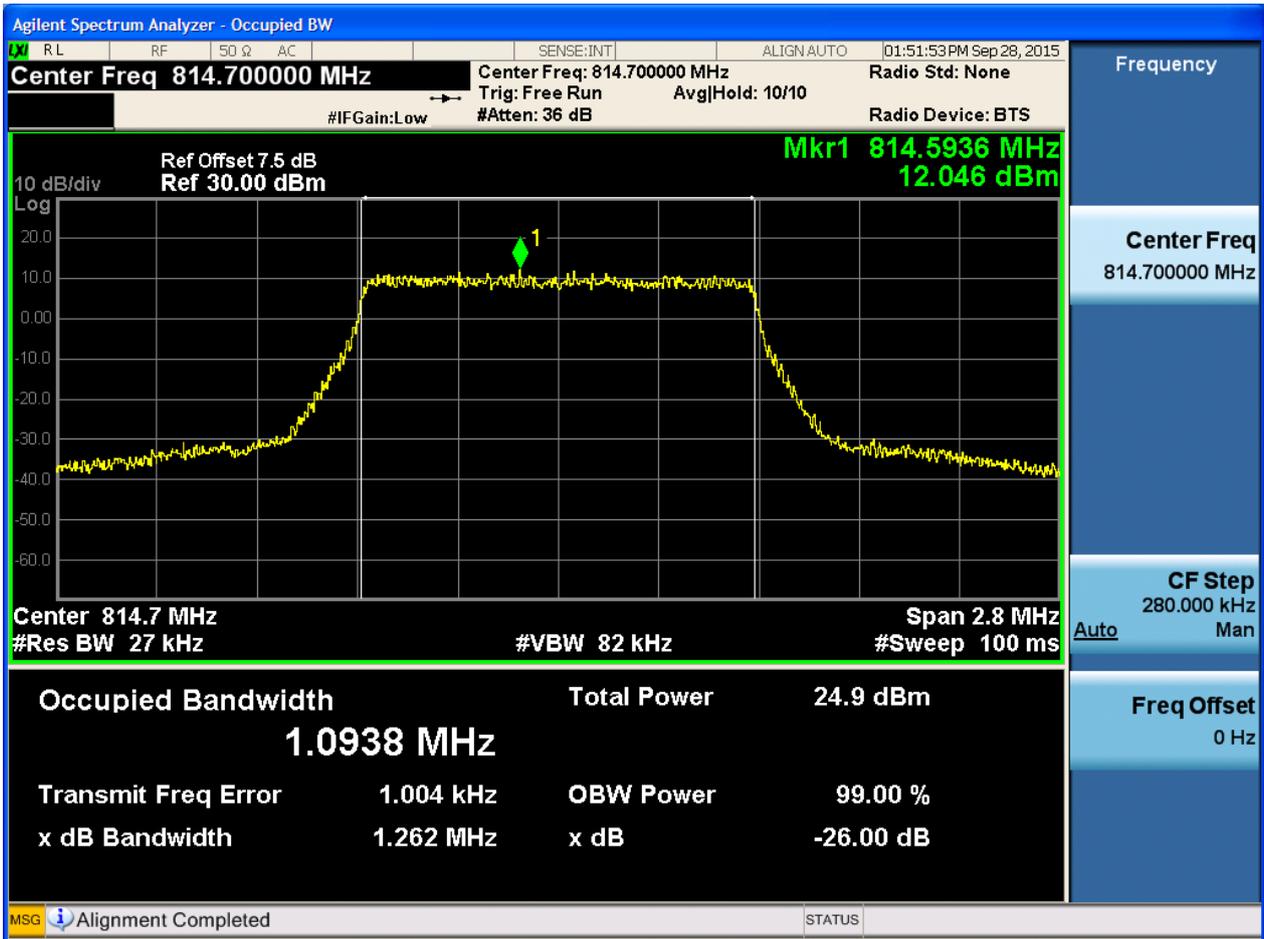


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 1.4

4.1.1.2.1.1 Test Channel = LCH

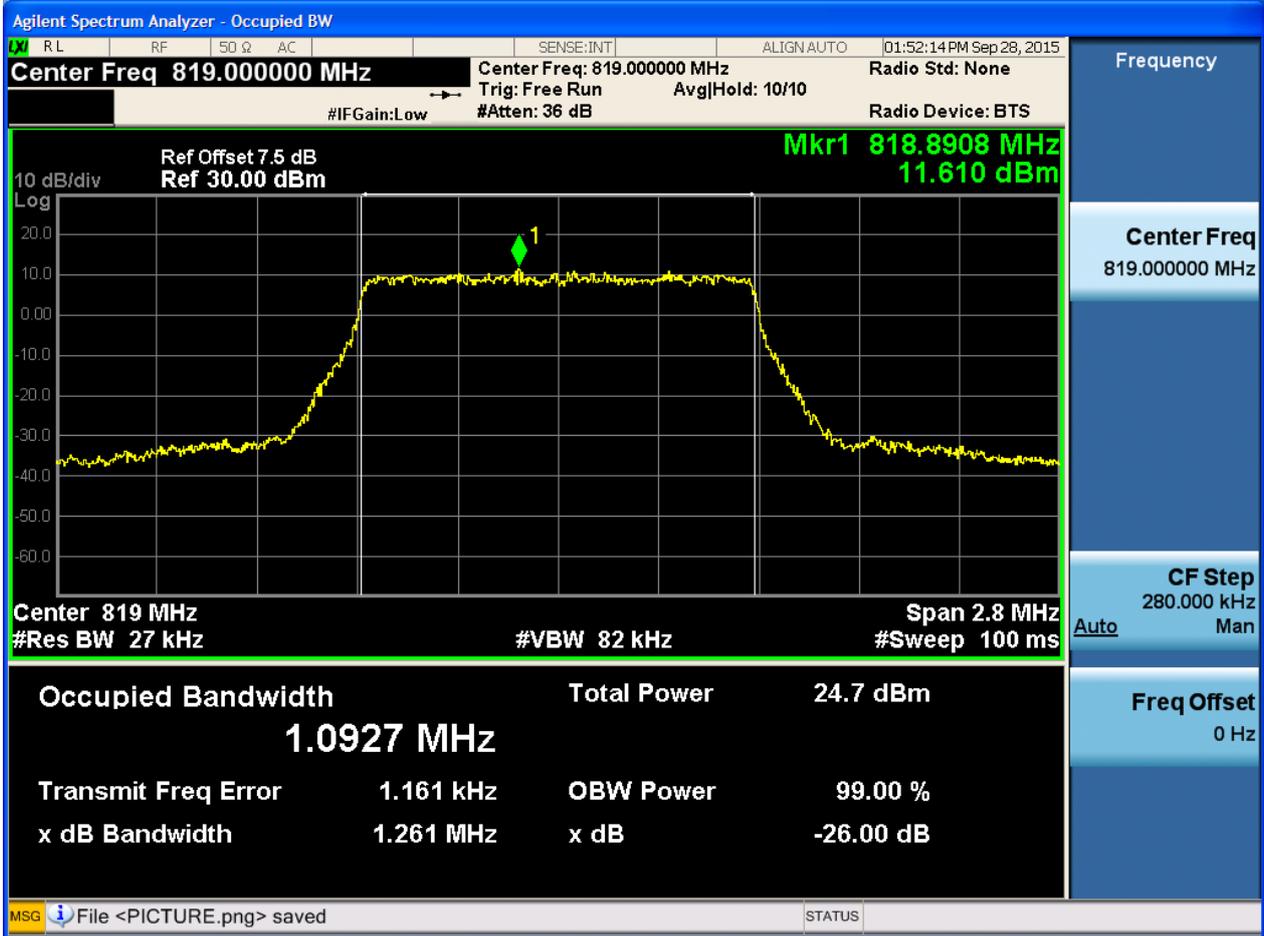
4.1.1.2.1.1.1 Test RB = RB6#0





4.1.1.2.1.2 Test Channel = MCH

4.1.1.2.1.2.1 Test RB = RB6#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB6#0

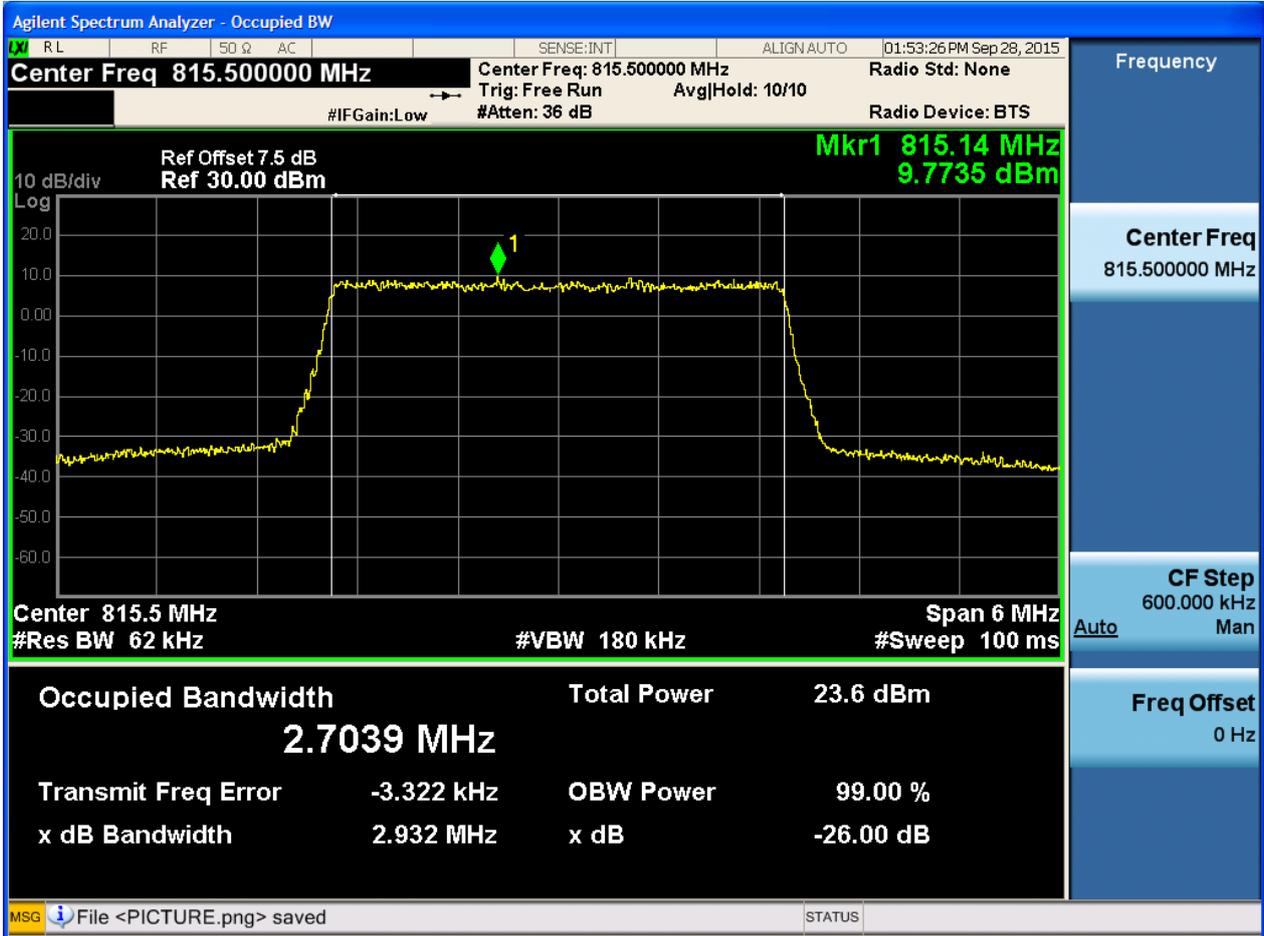




4.1.1.2.2 Test Bandwidth = 3

4.1.1.2.2.1 Test Channel = LCH

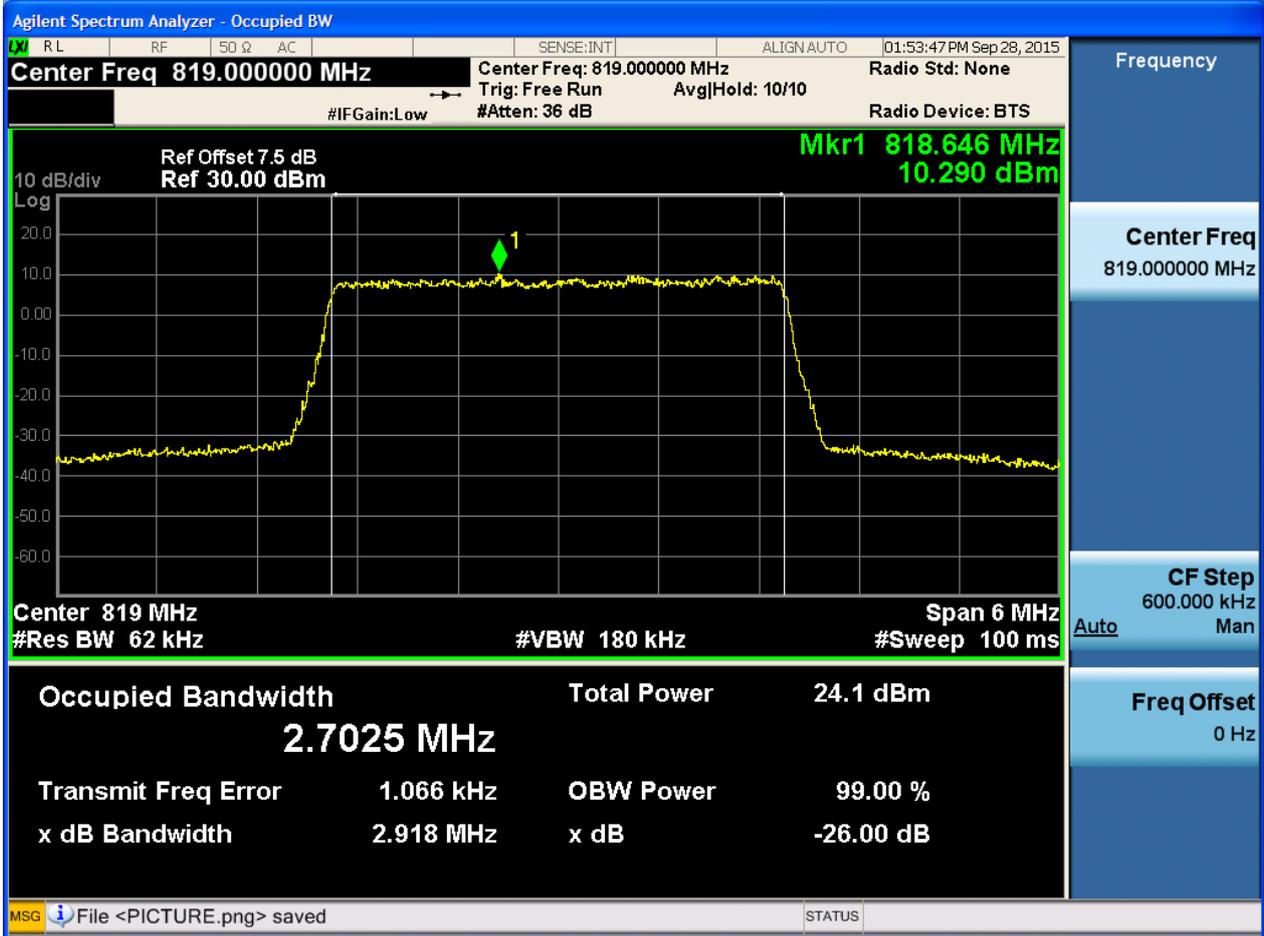
4.1.1.2.2.1.1 Test RB = RB15#0





4.1.1.2.2.2 Test Channel = MCH

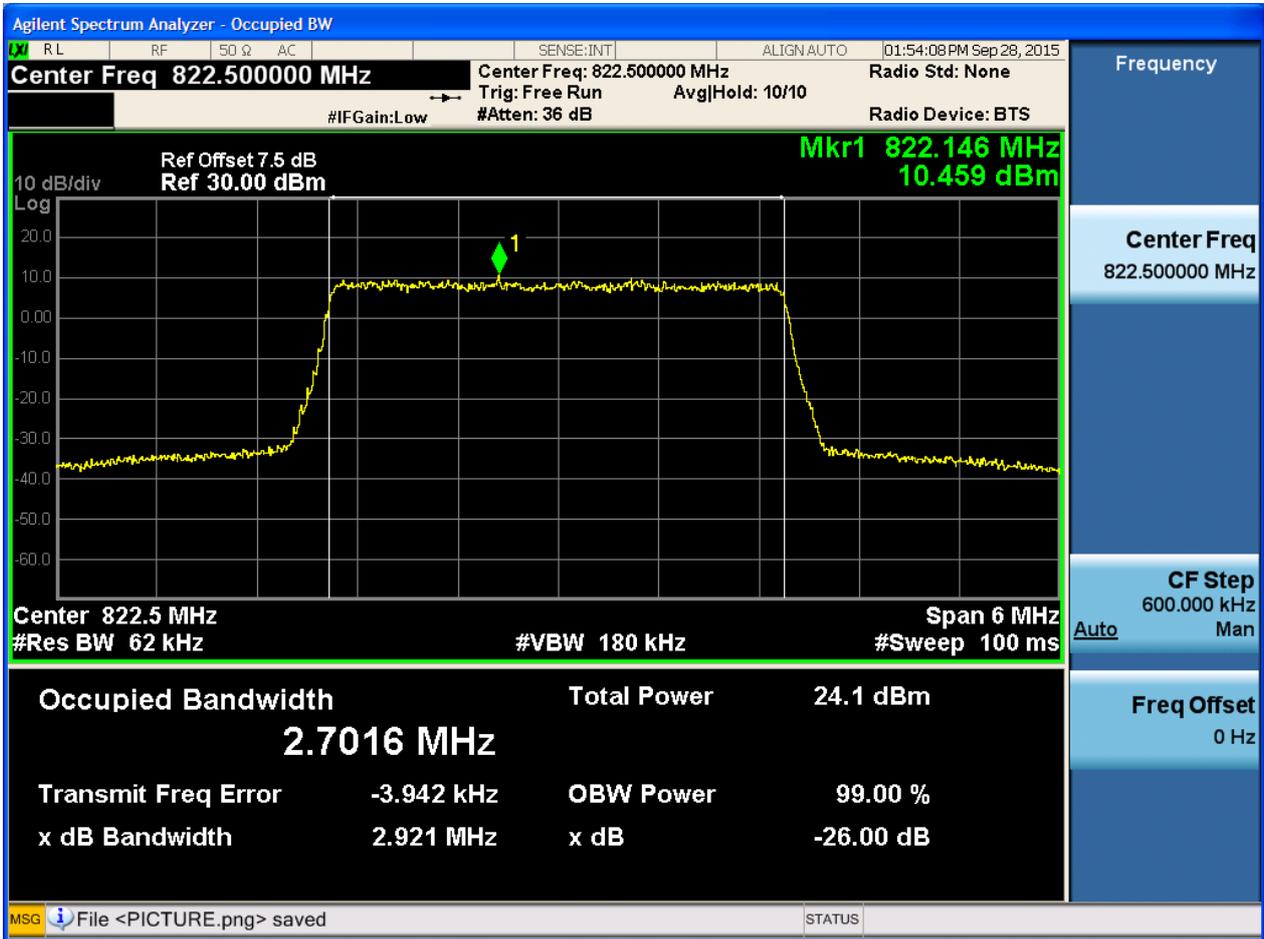
4.1.1.2.2.2.1 Test RB = RB15#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB15#0

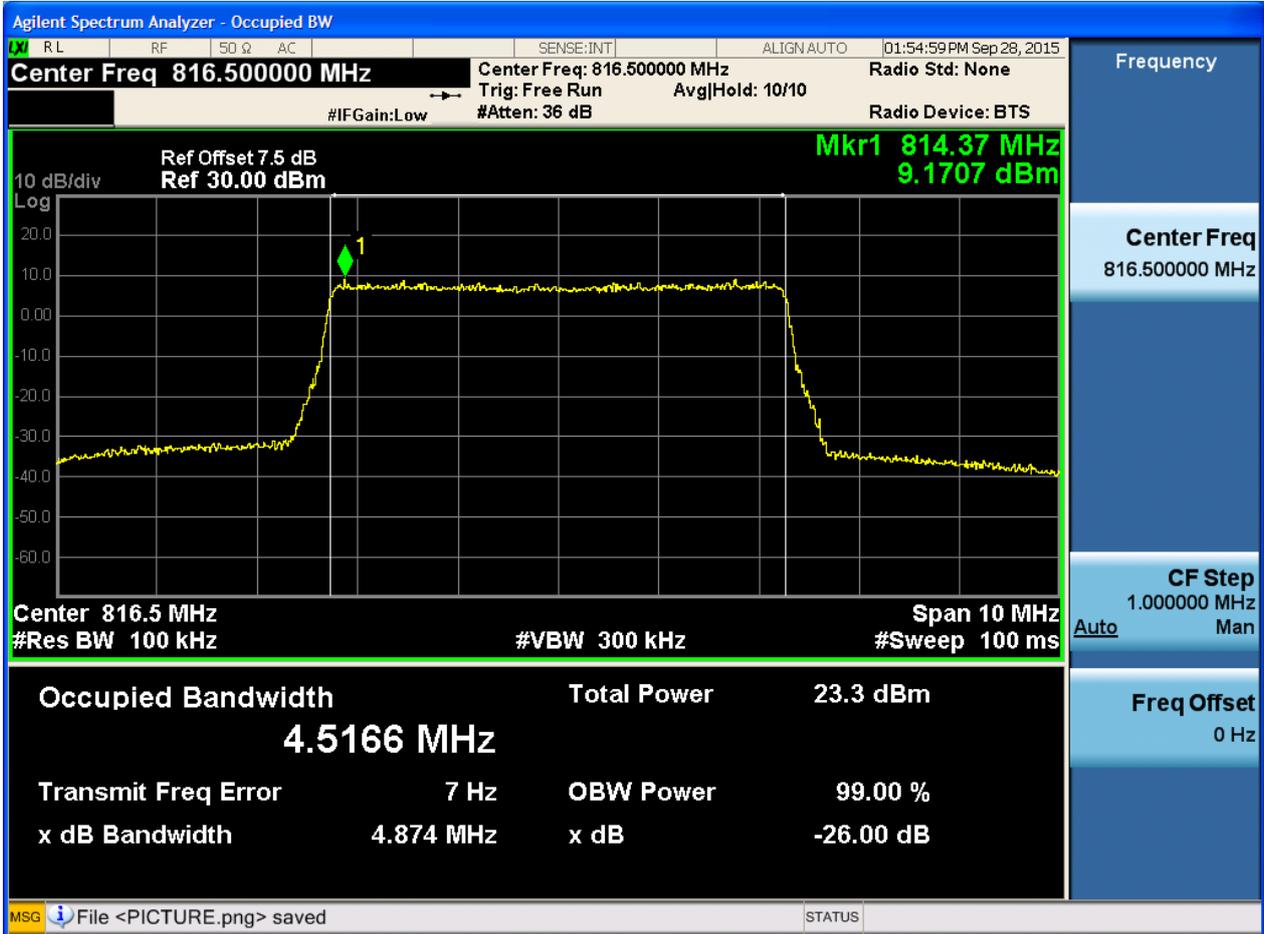




4.1.1.2.3 Test Bandwidth = 5

4.1.1.2.3.1 Test Channel = LCH

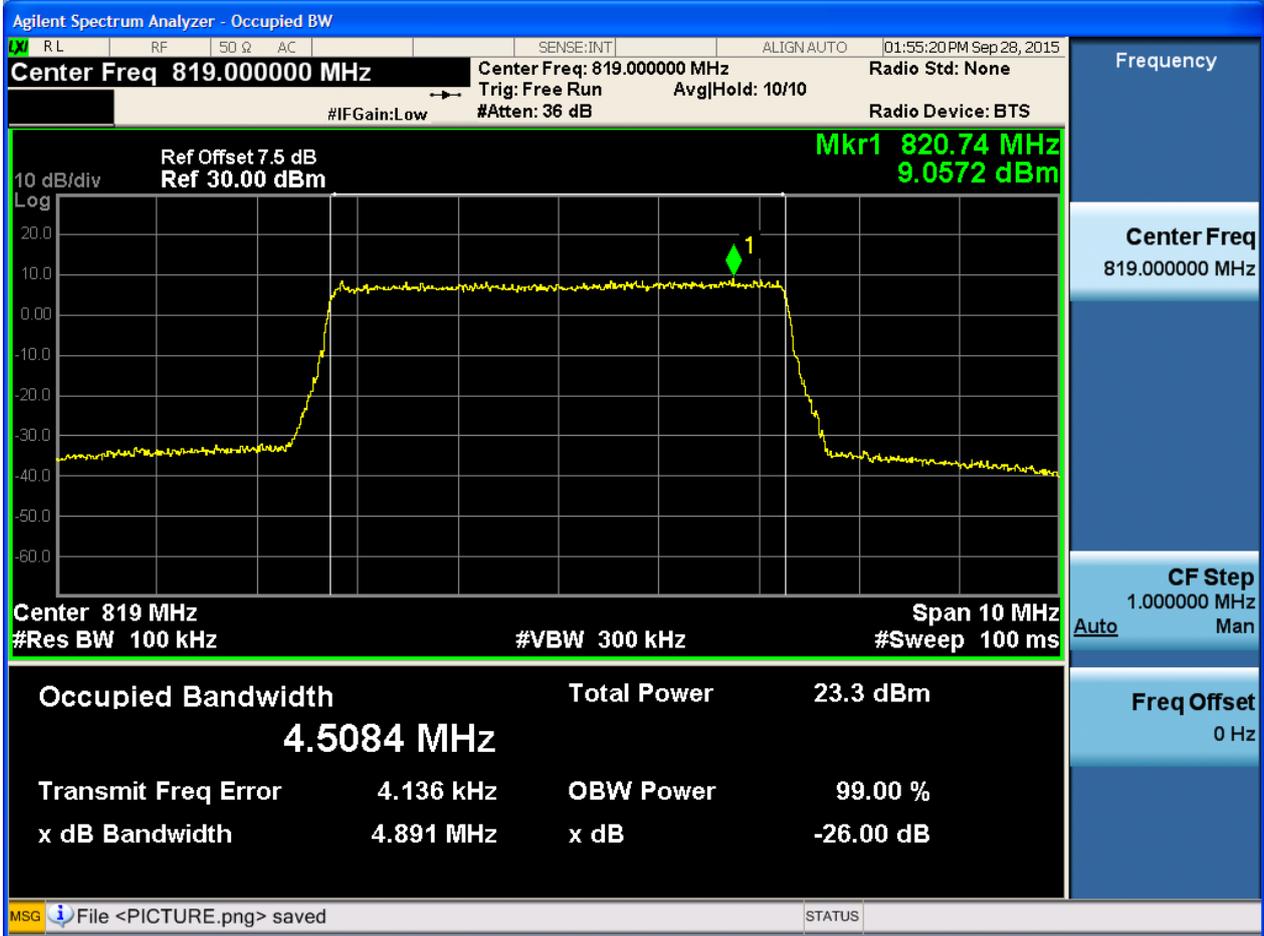
4.1.1.2.3.1.1 Test RB = RB25#0





4.1.1.2.3.2 Test Channel = MCH

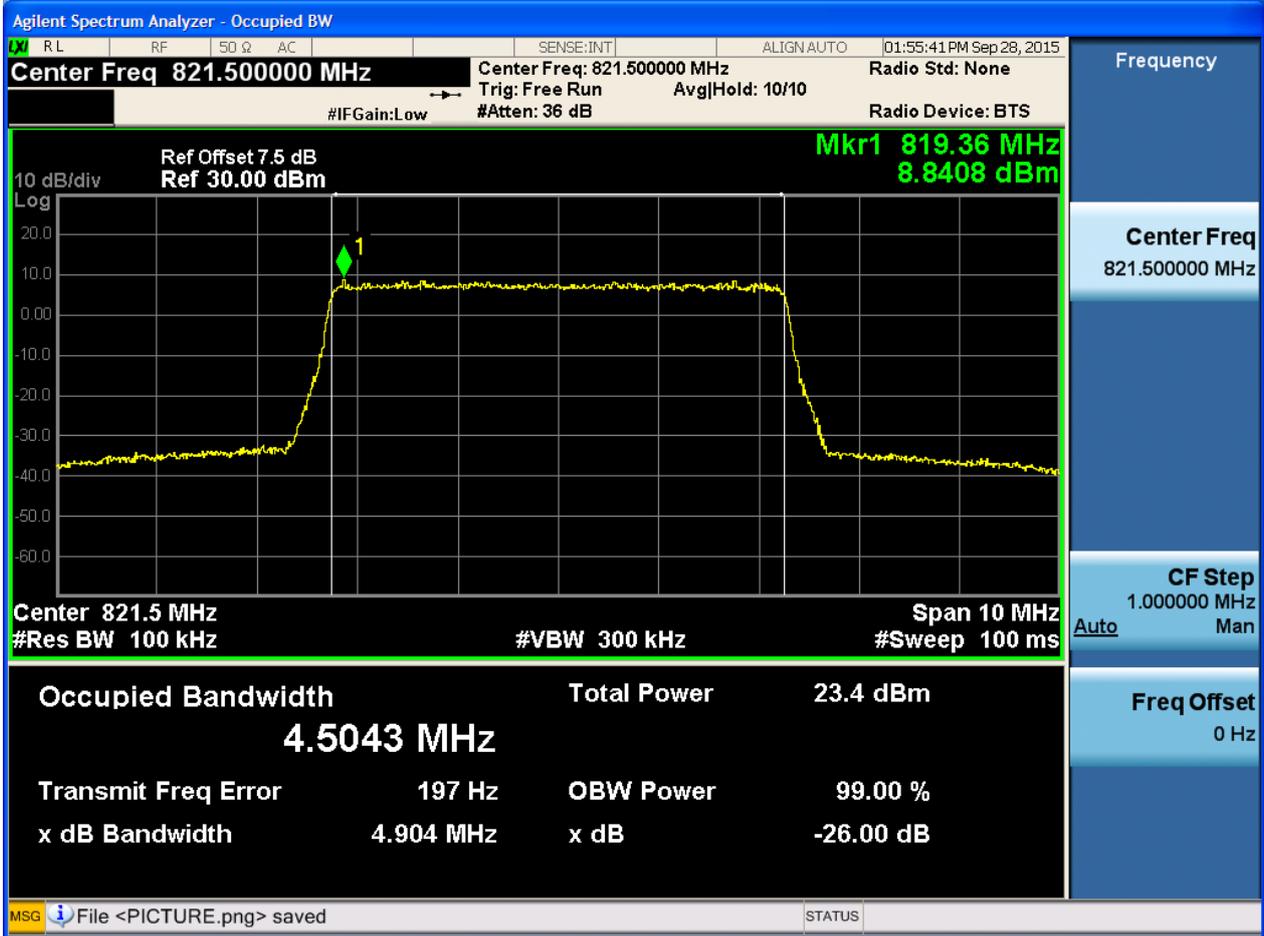
4.1.1.2.3.2.1 Test RB = RB25#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB25#0





4.1.1.2.4 Test Bandwidth = 10

4.1.1.2.4.1 Test Channel = LCH/MCH/HCH

4.1.1.2.4.1.1 Test RB = RB50#0





5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

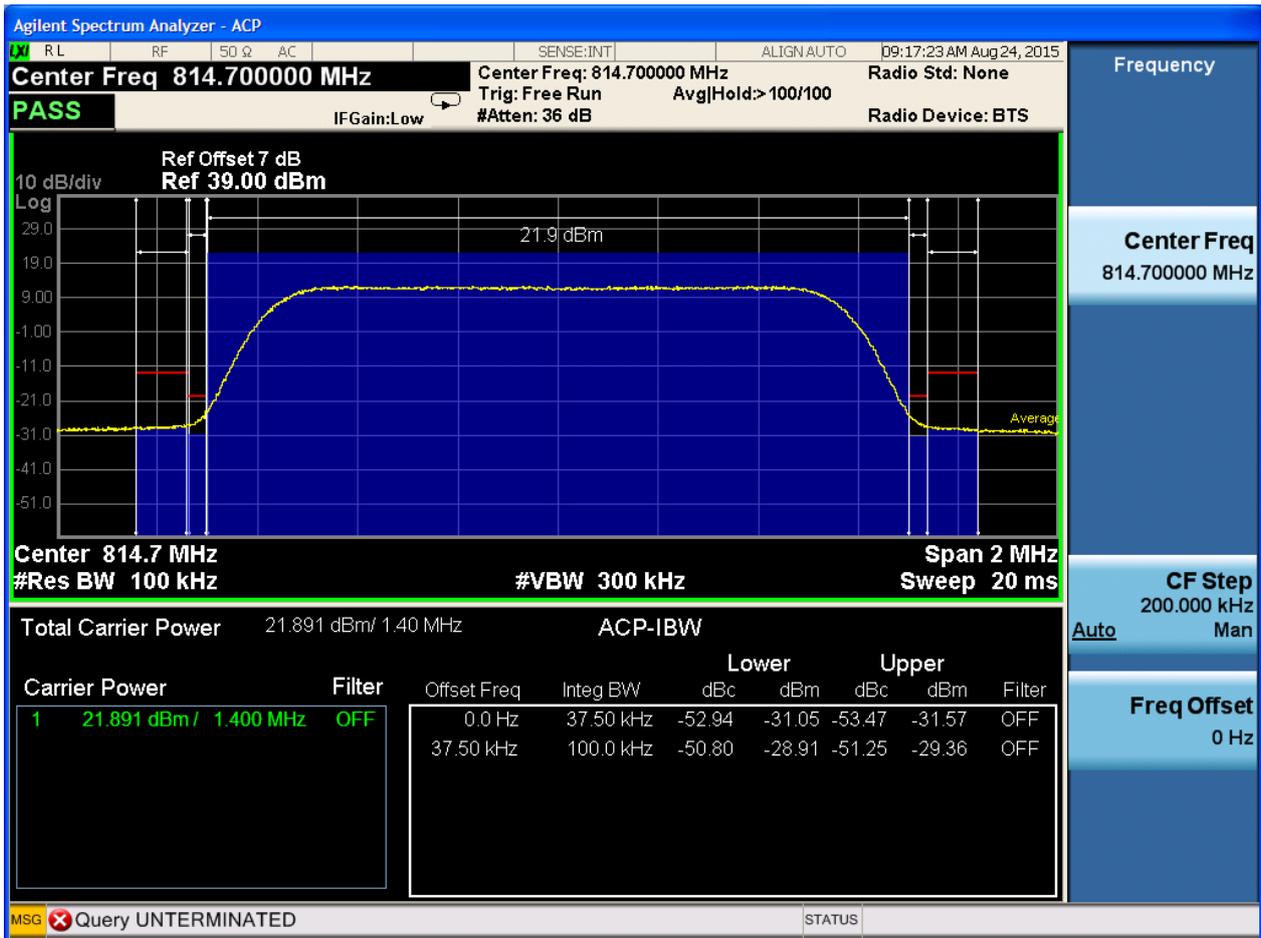
5.1.1 Test Band = BAND26

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 1.4

5.1.1.1.1.1 Test Channel = LCH

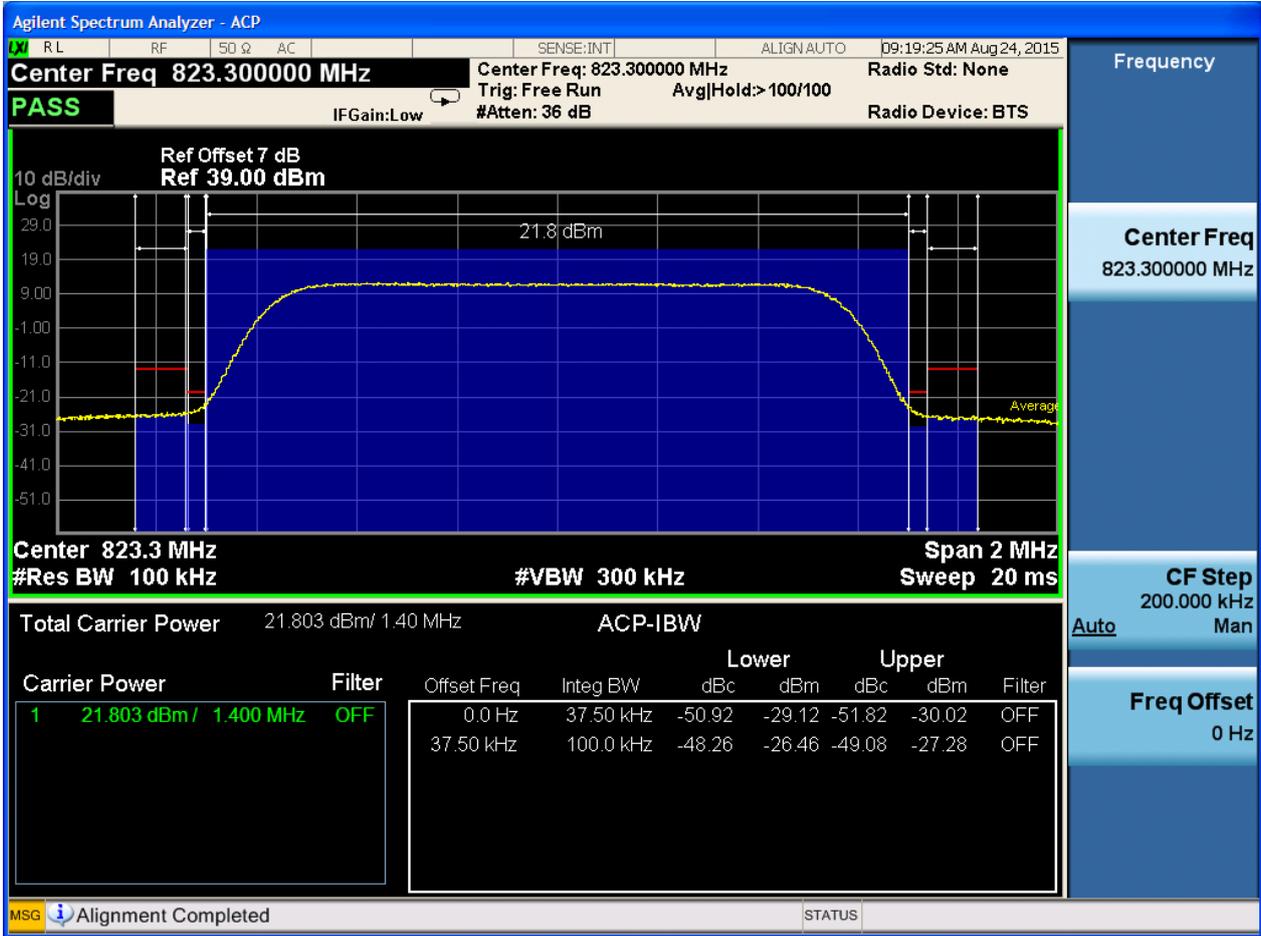
5.1.1.1.1.1.1 Test RB = RB6#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB6#0

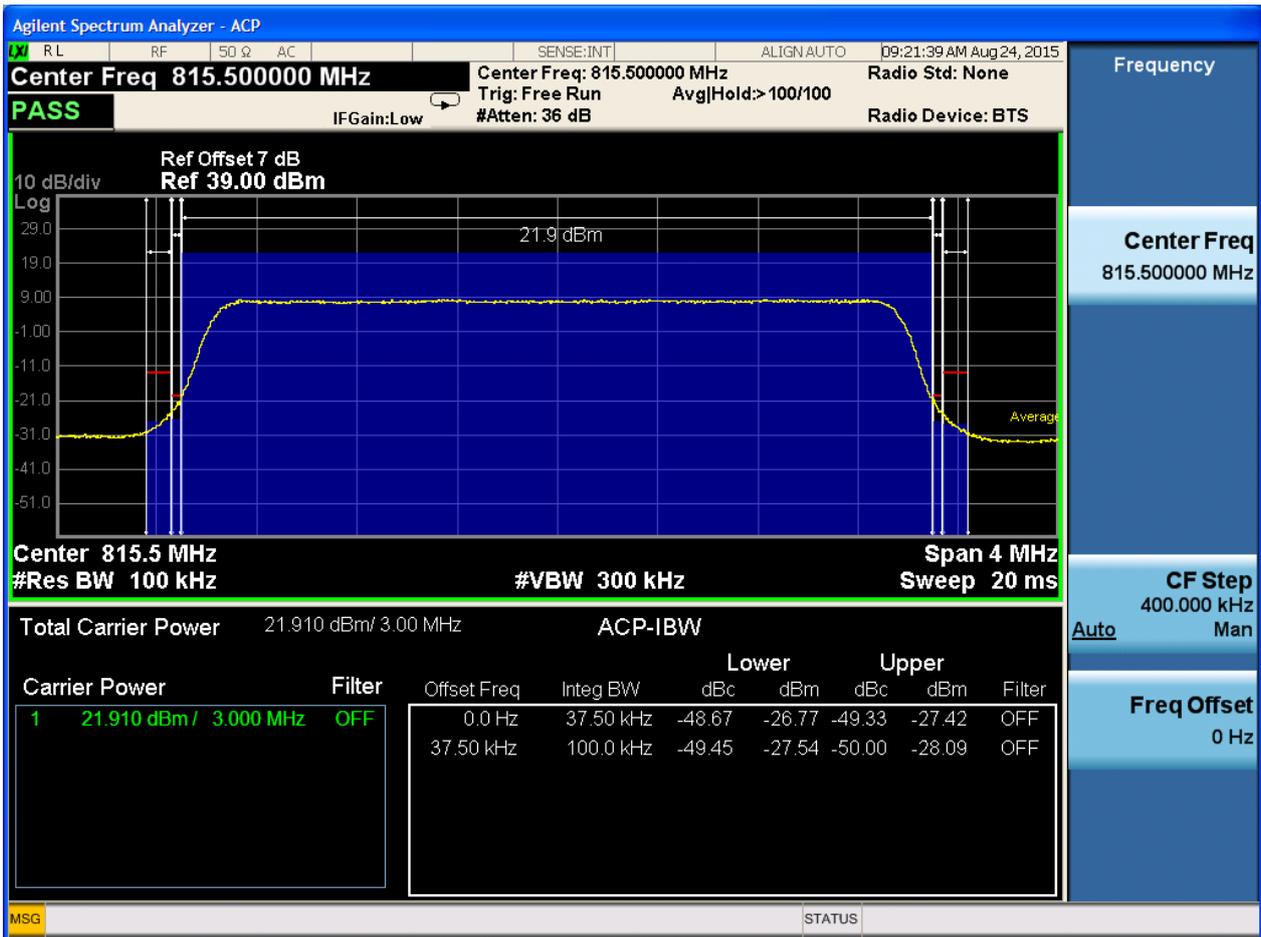




5.1.1.1.2 Test Bandwidth = 3

5.1.1.1.2.1 Test Channel = LCH

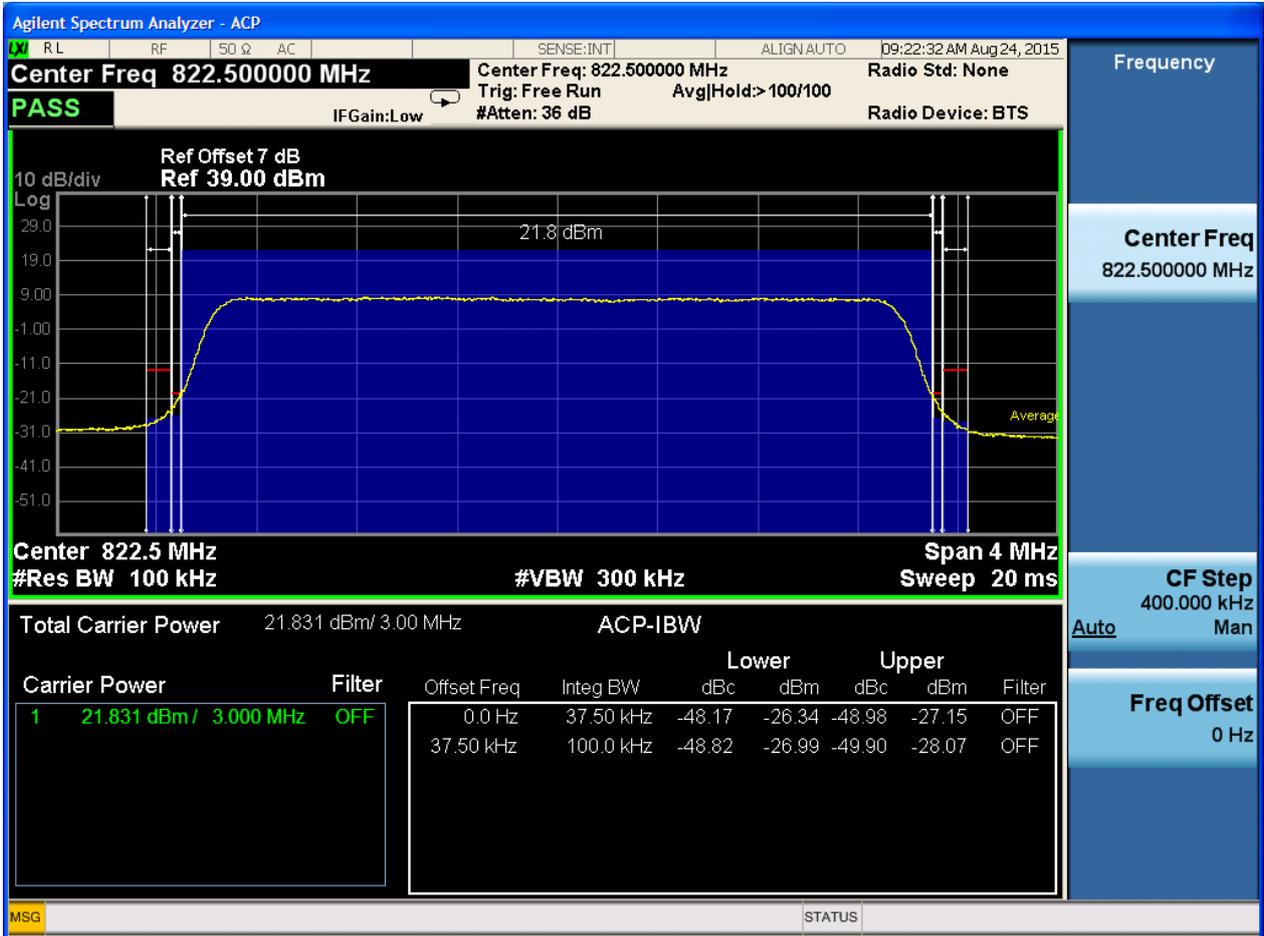
5.1.1.1.2.1.4 Test RB = RB15#0





5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.4 Test RB = RB15#0

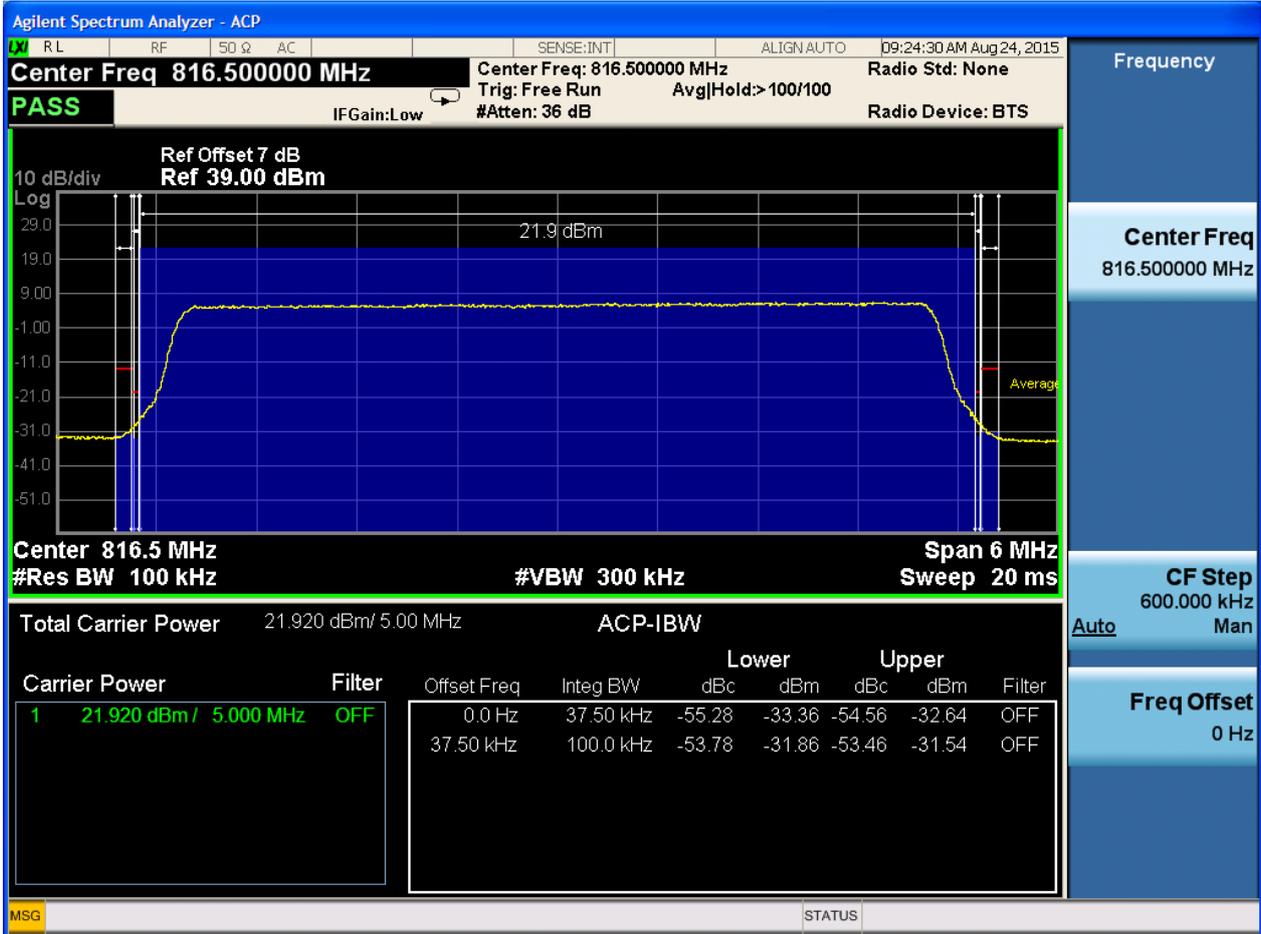




5.1.1.1.3 Test Bandwidth = 5

5.1.1.1.3.1 Test Channel = LCH

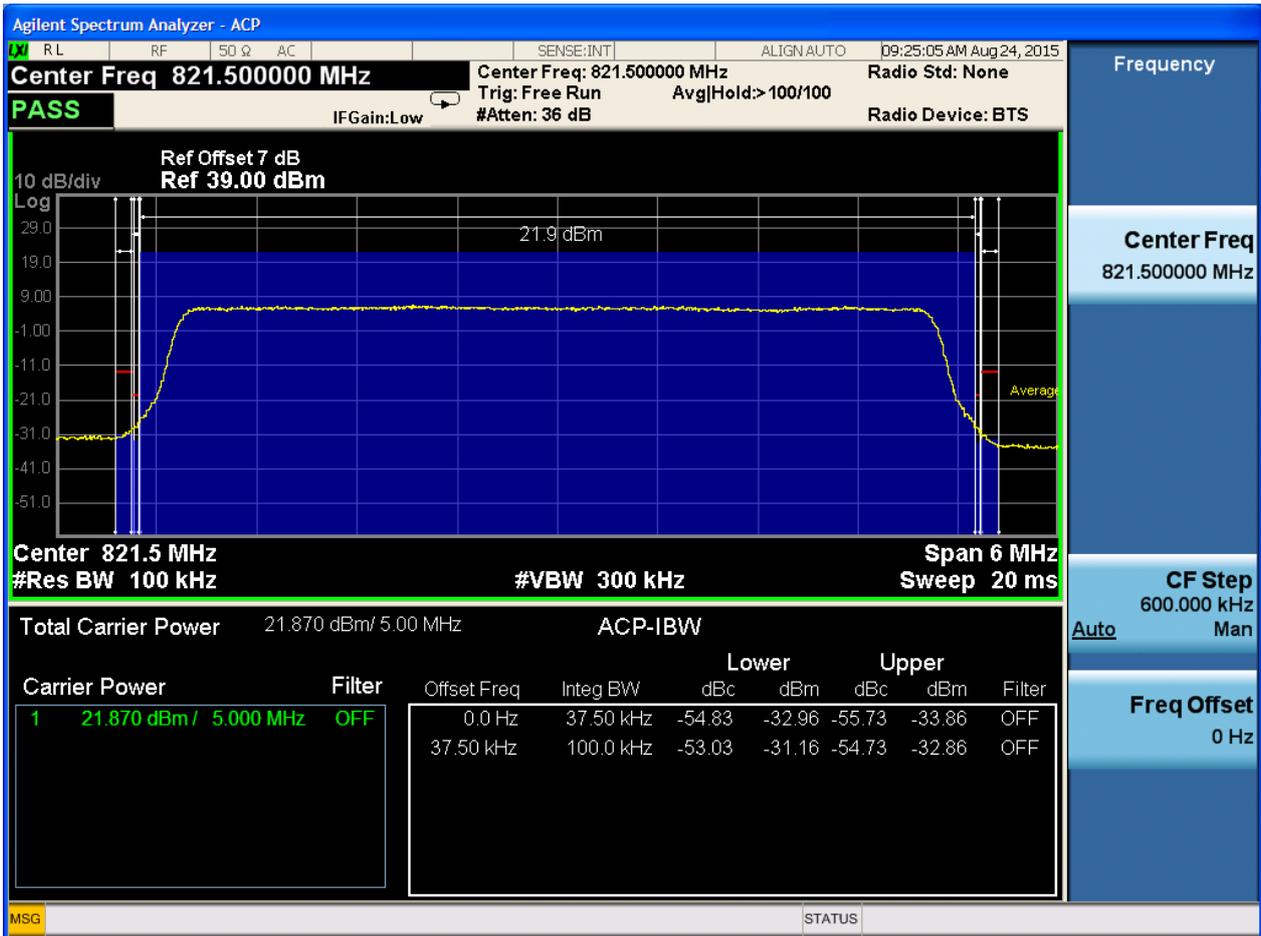
5.1.1.1.3.1.1 Test RB = RB25#0





5.1.1.1.3.1 Test Channel = HCH

5.1.1.1.3.1.1 Test RB = RB25#0

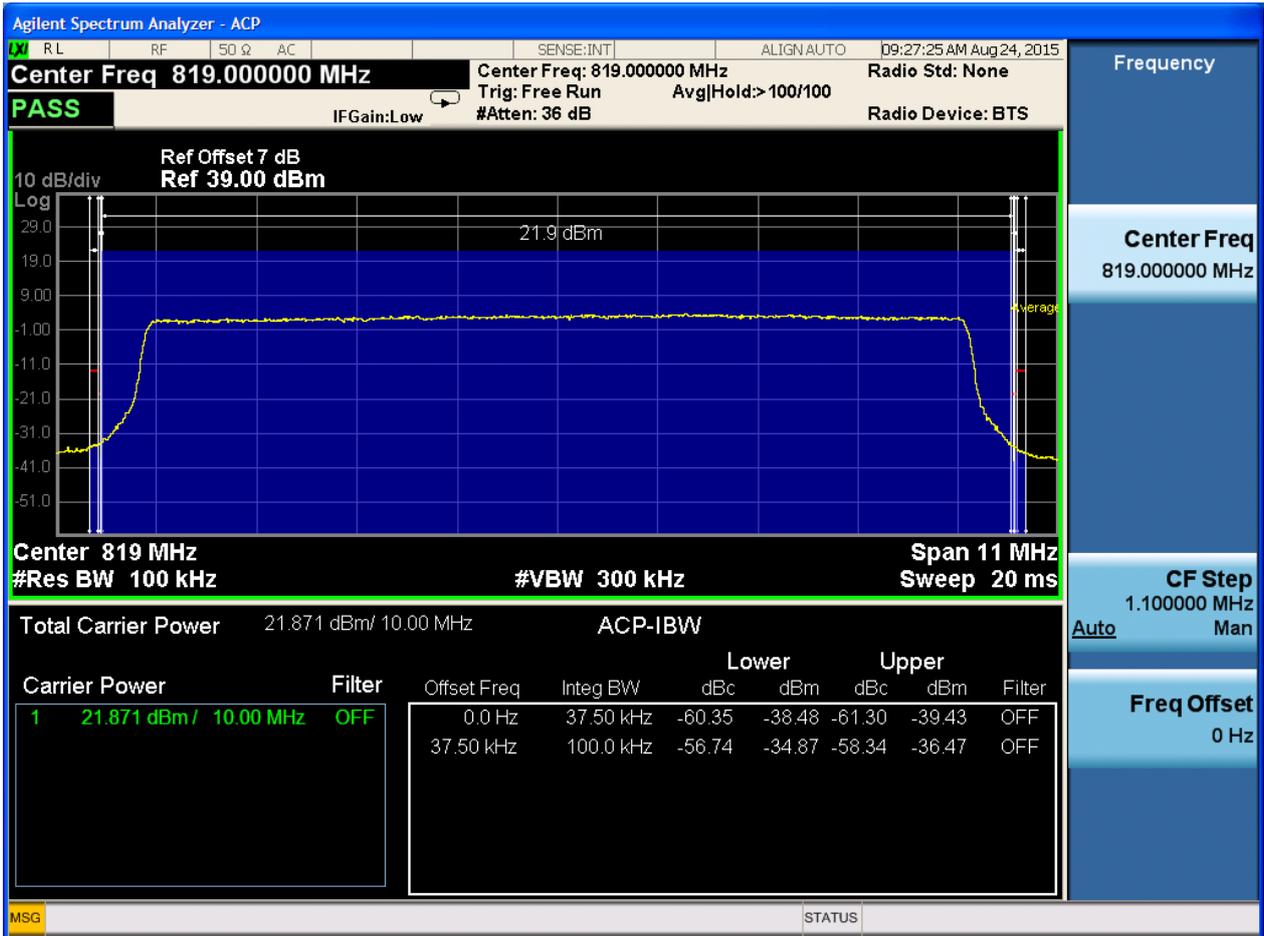




5.1.1.1.3 Test Bandwidth = 10

5.1.1.1.3.1 Test Channel = LCH/MCH/HCH

5.1.1.1.3.1.1 Test RB = RB50#0

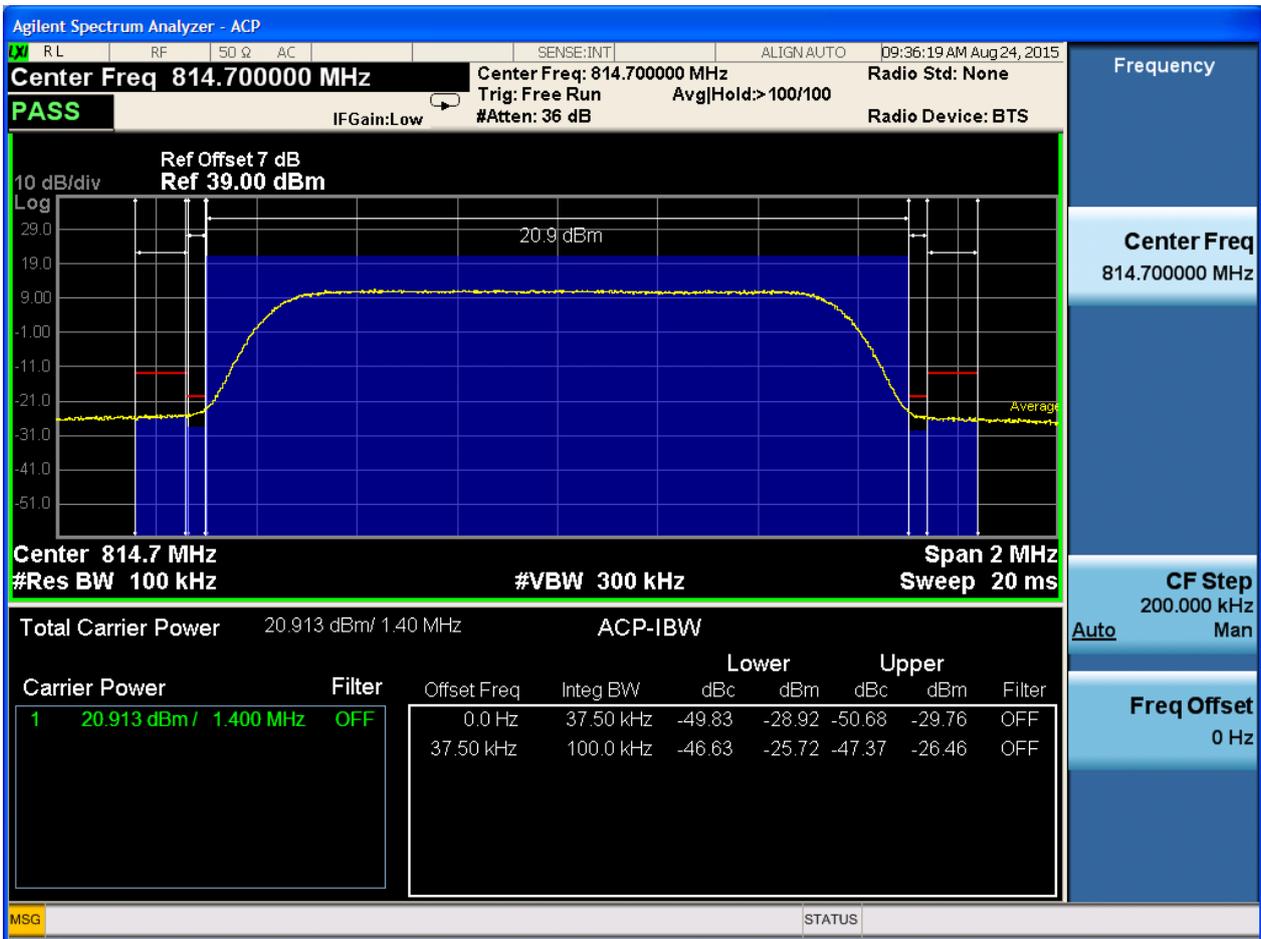


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 1.4

5.1.1.2.1.1 Test Channel = LCH

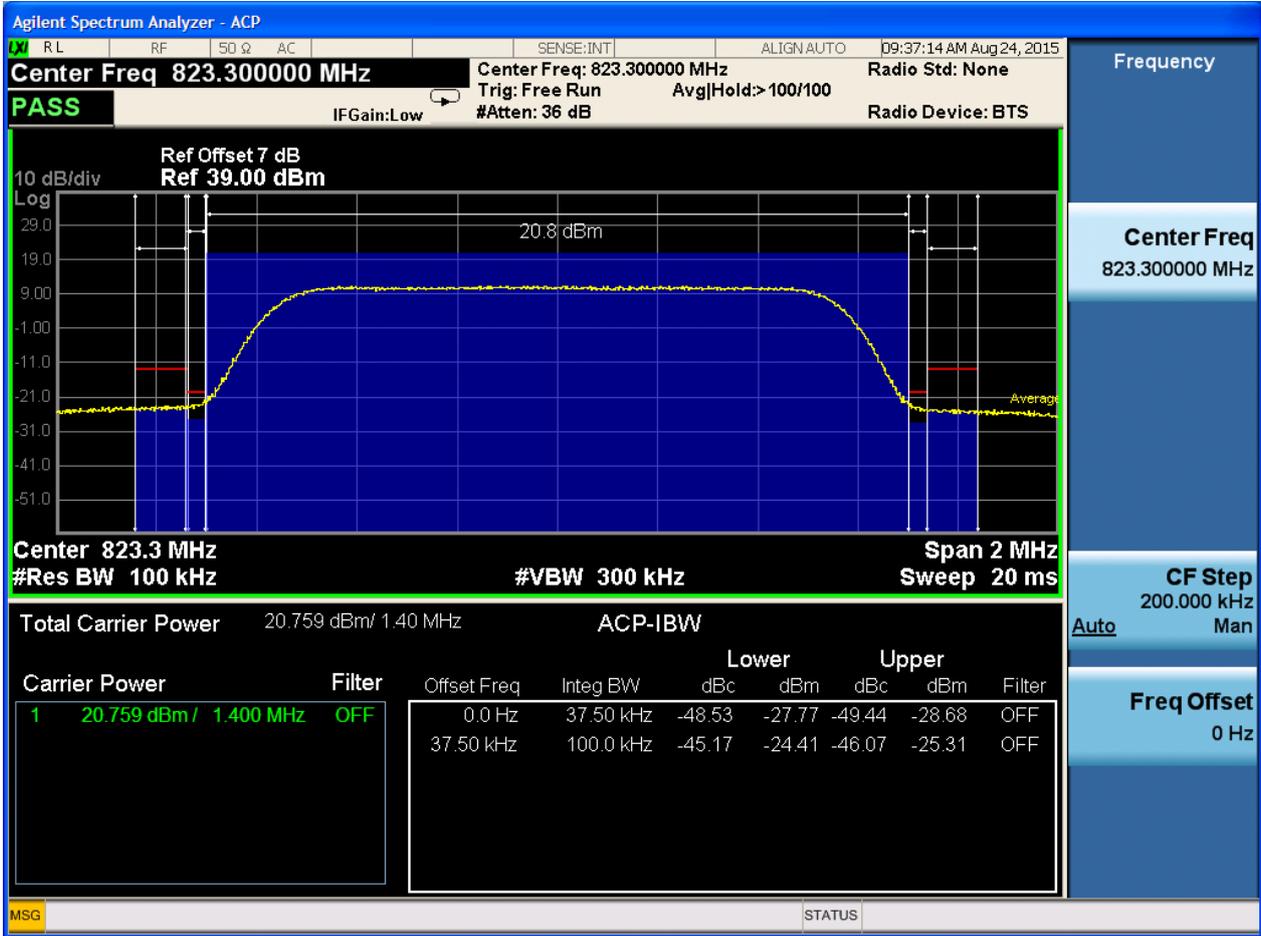
5.1.1.2.1.1.1 Test RB = RB6#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB6#0

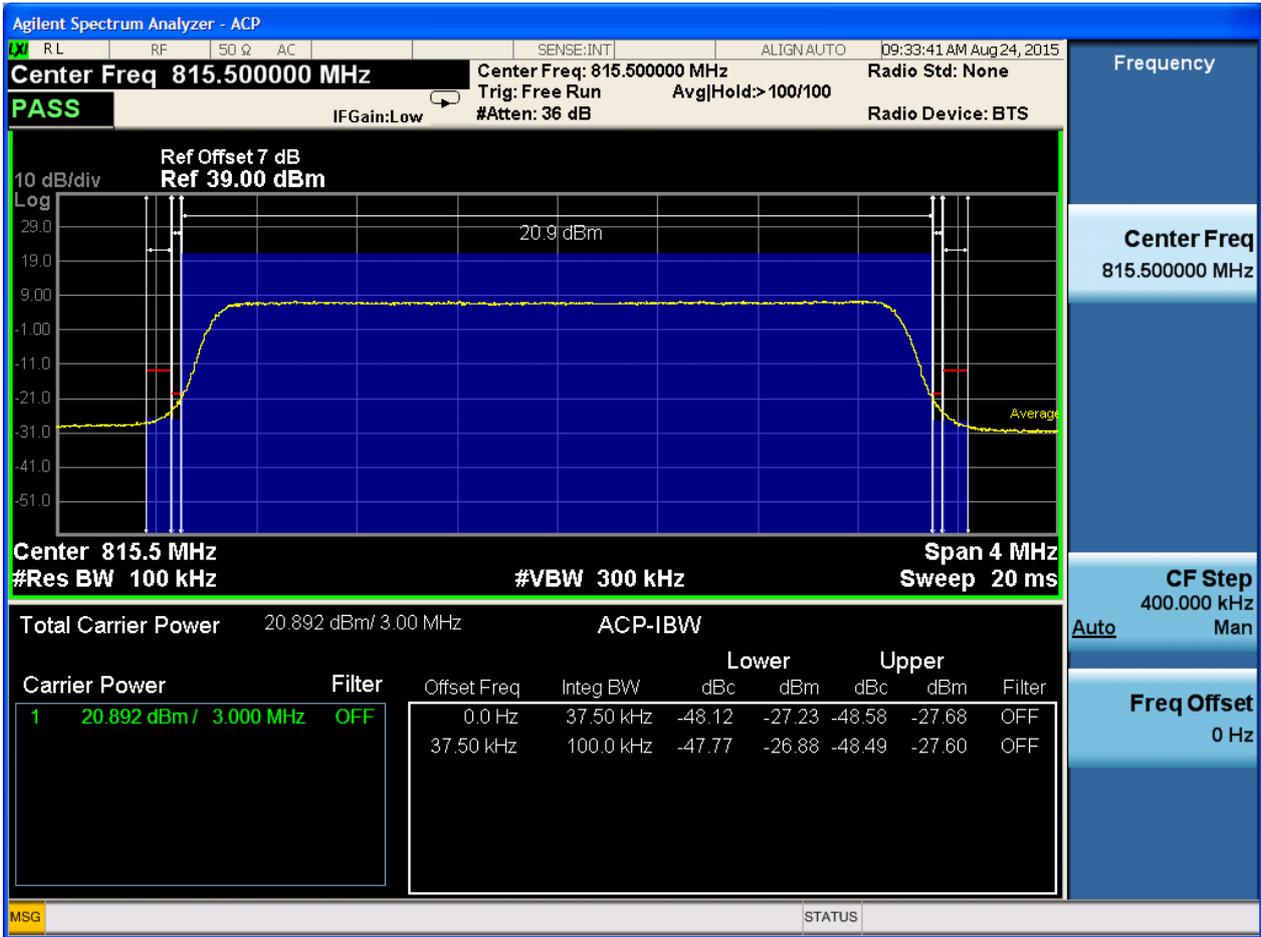




5.1.1.2.2 Test Bandwidth = 3

5.1.1.2.2.1 Test Channel = LCH

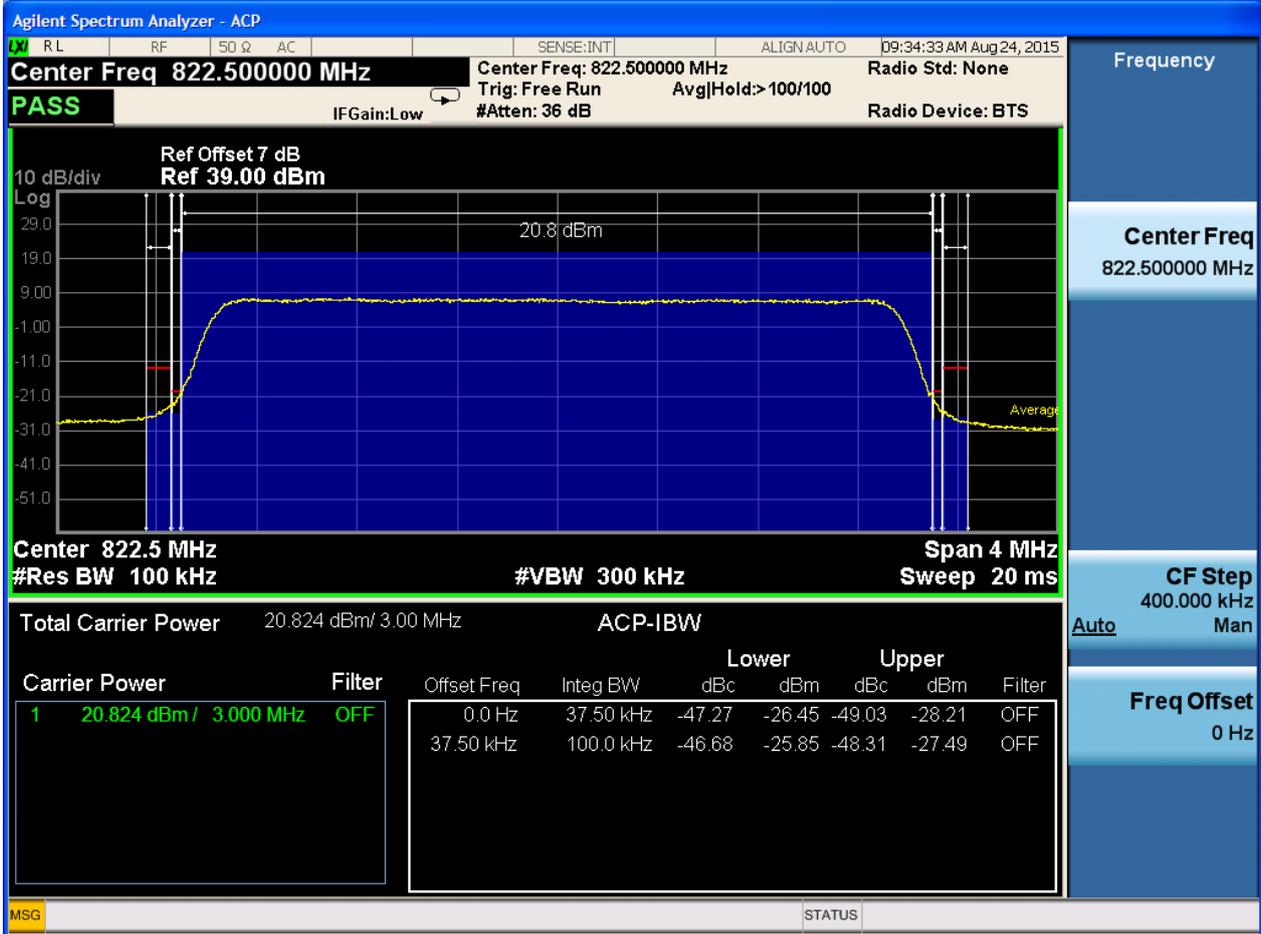
5.1.1.2.2.1.4 Test RB = RB15#0





5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.4 Test RB = RB15#0

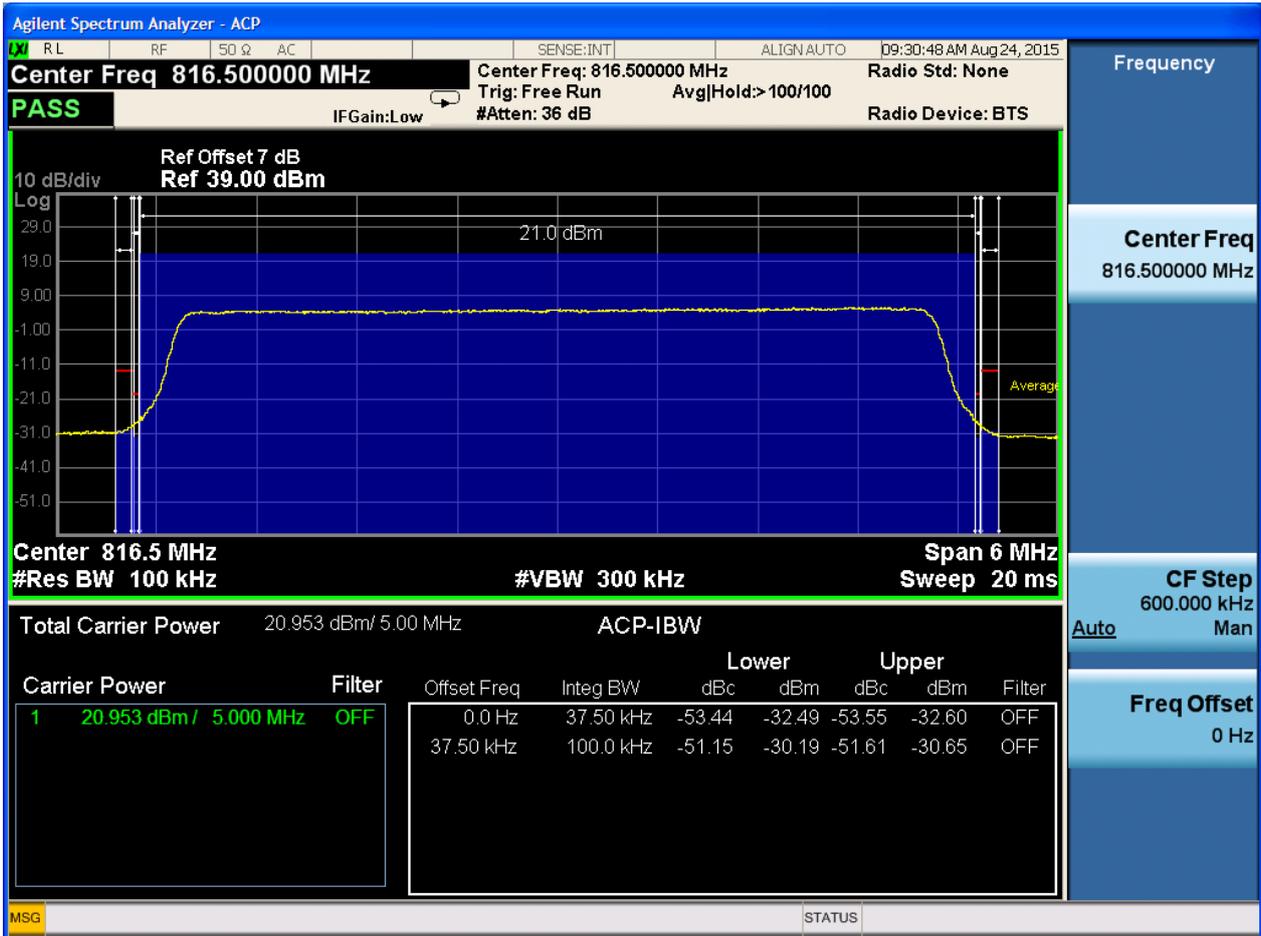




5.1.1.2.3 Test Bandwidth = 5

5.1.1.2.3.1 Test Channel = LCH

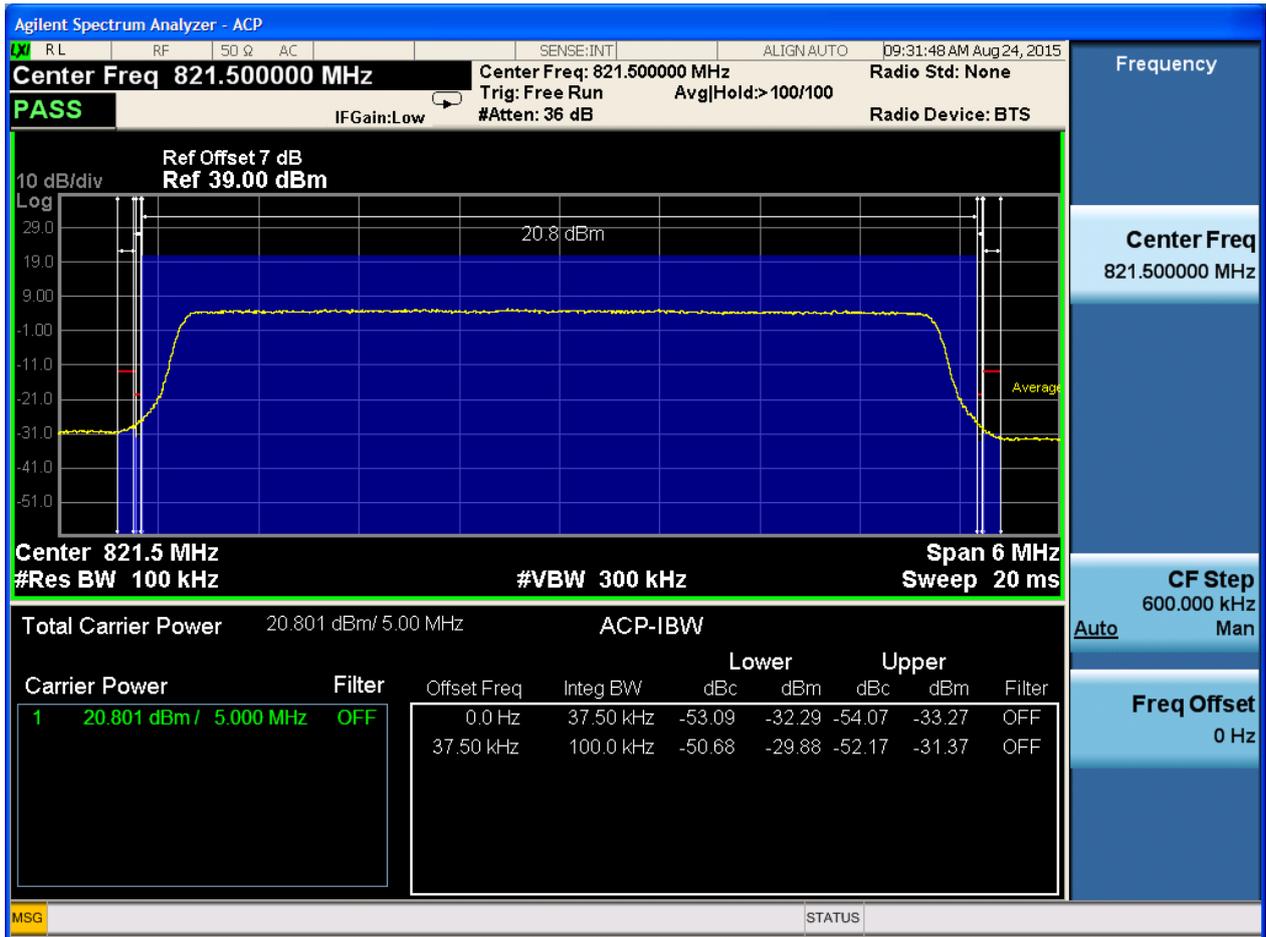
5.1.1.2.3.1.1 Test RB = RB25#0





5.1.1.2.3.1 Test Channel = HCH

5.1.1.2.3.1.1 Test RB = RB25#0

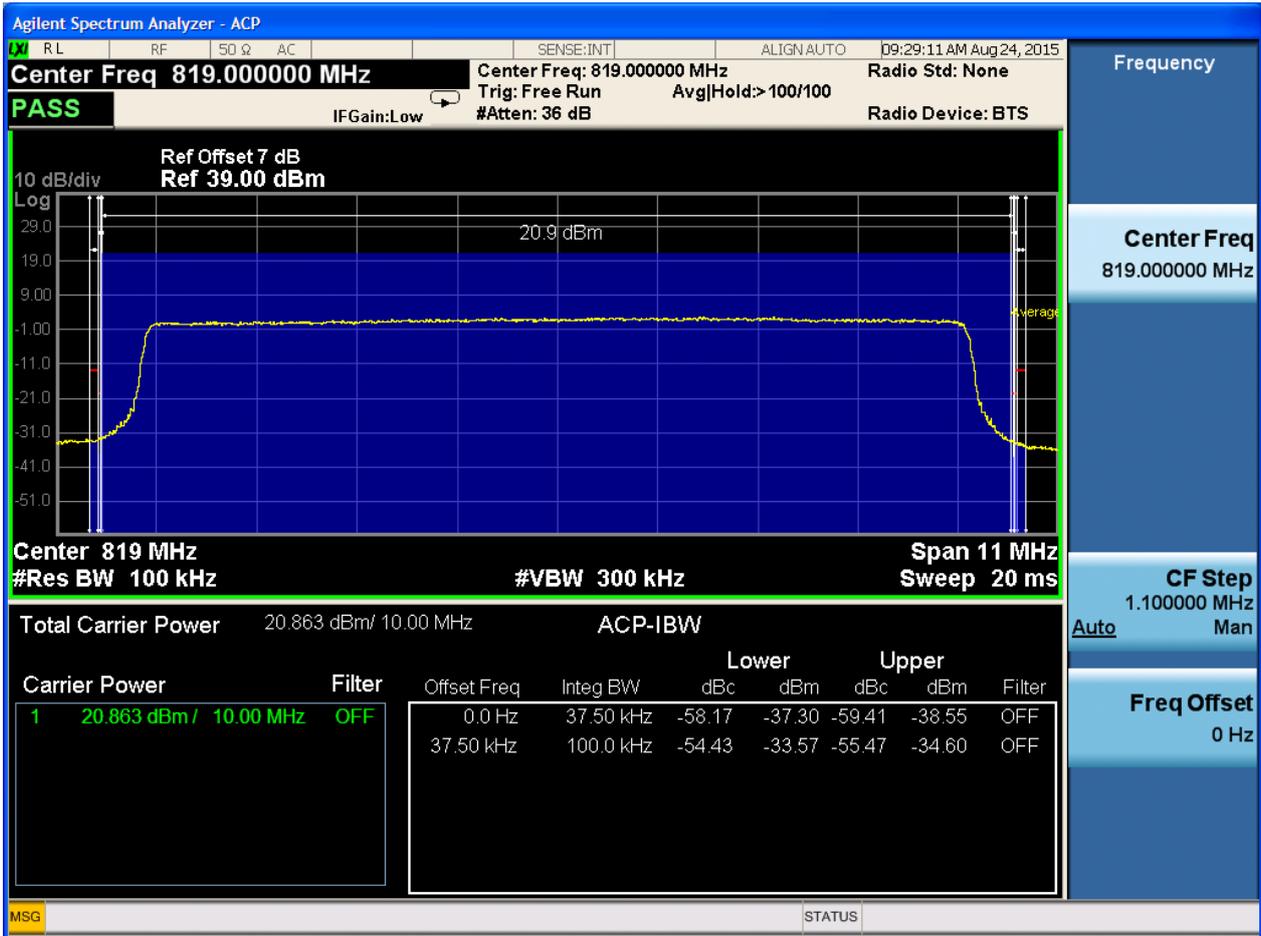




5.1.1.2.3 Test Bandwidth = 10

5.1.1.2.3.1 Test Channel = LCH/MCH/HCH

5.1.1.2.3.1.1 Test RB = RB50#0





6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Part I - Test Plots

6.1 For LTE

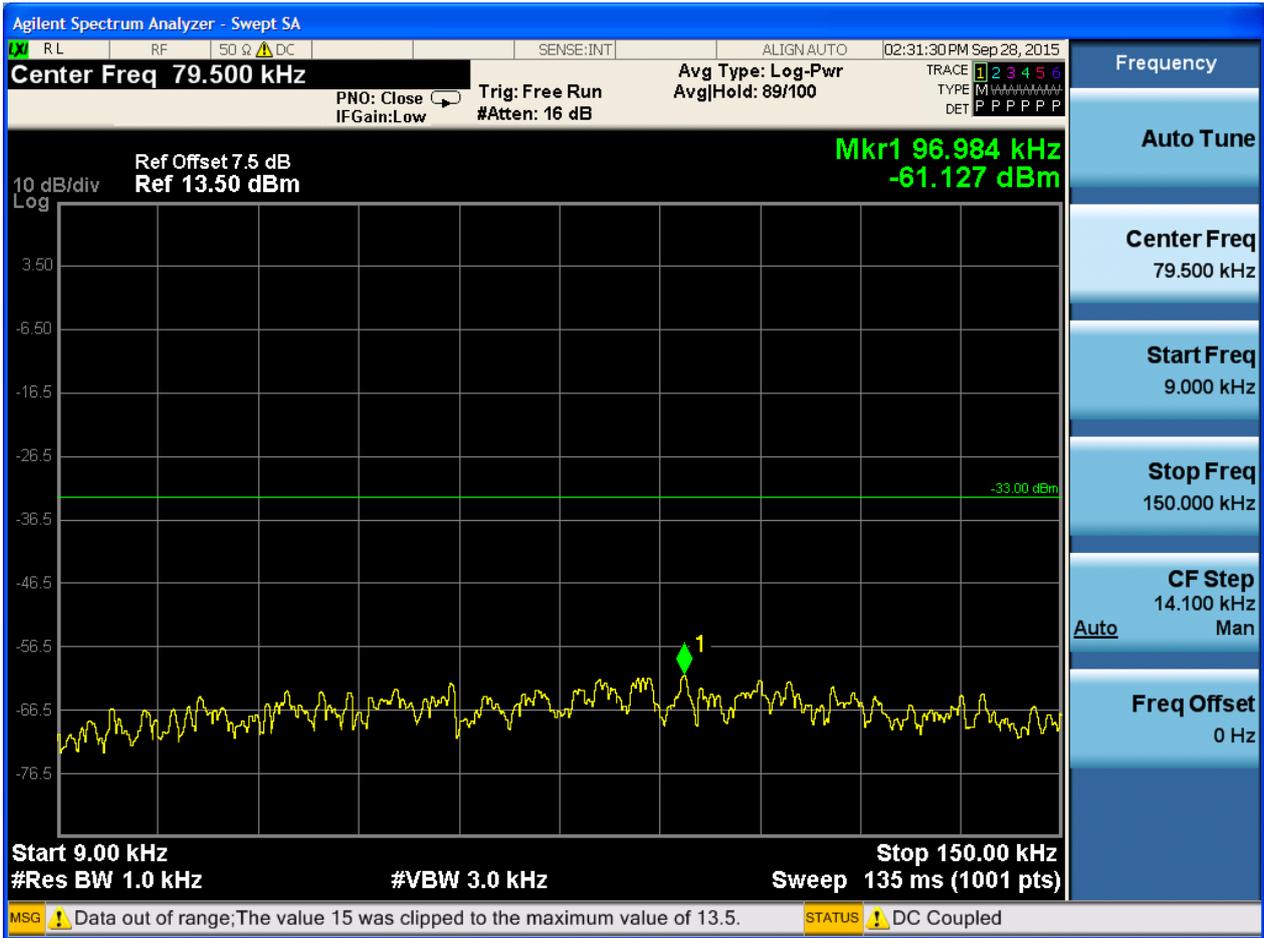
6.1.1 Test Band = BAND26

6.1.1.1 Test Mode = LTE/TM1

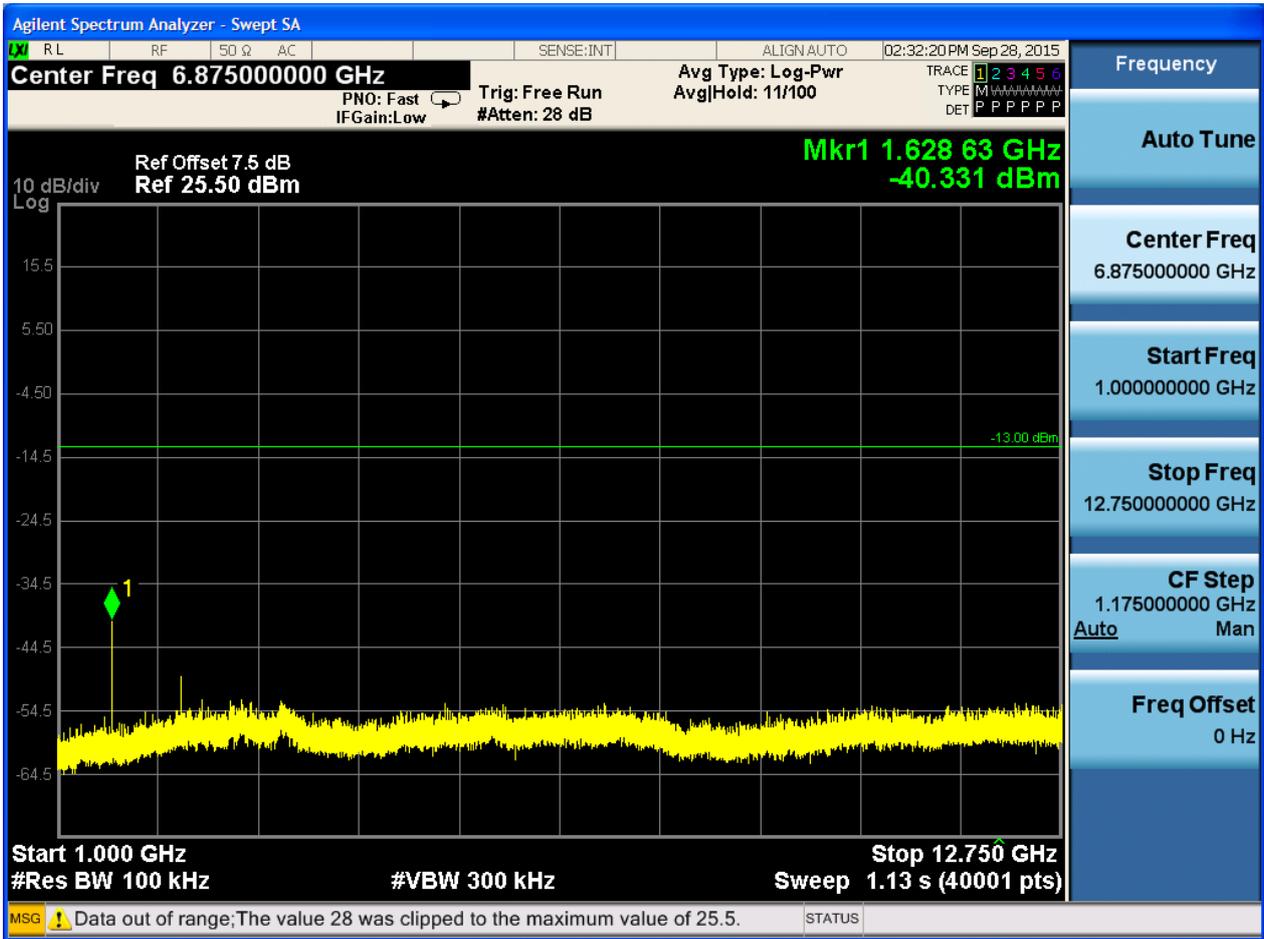
6.1.1.1.1 Test Bandwidth = 1.4

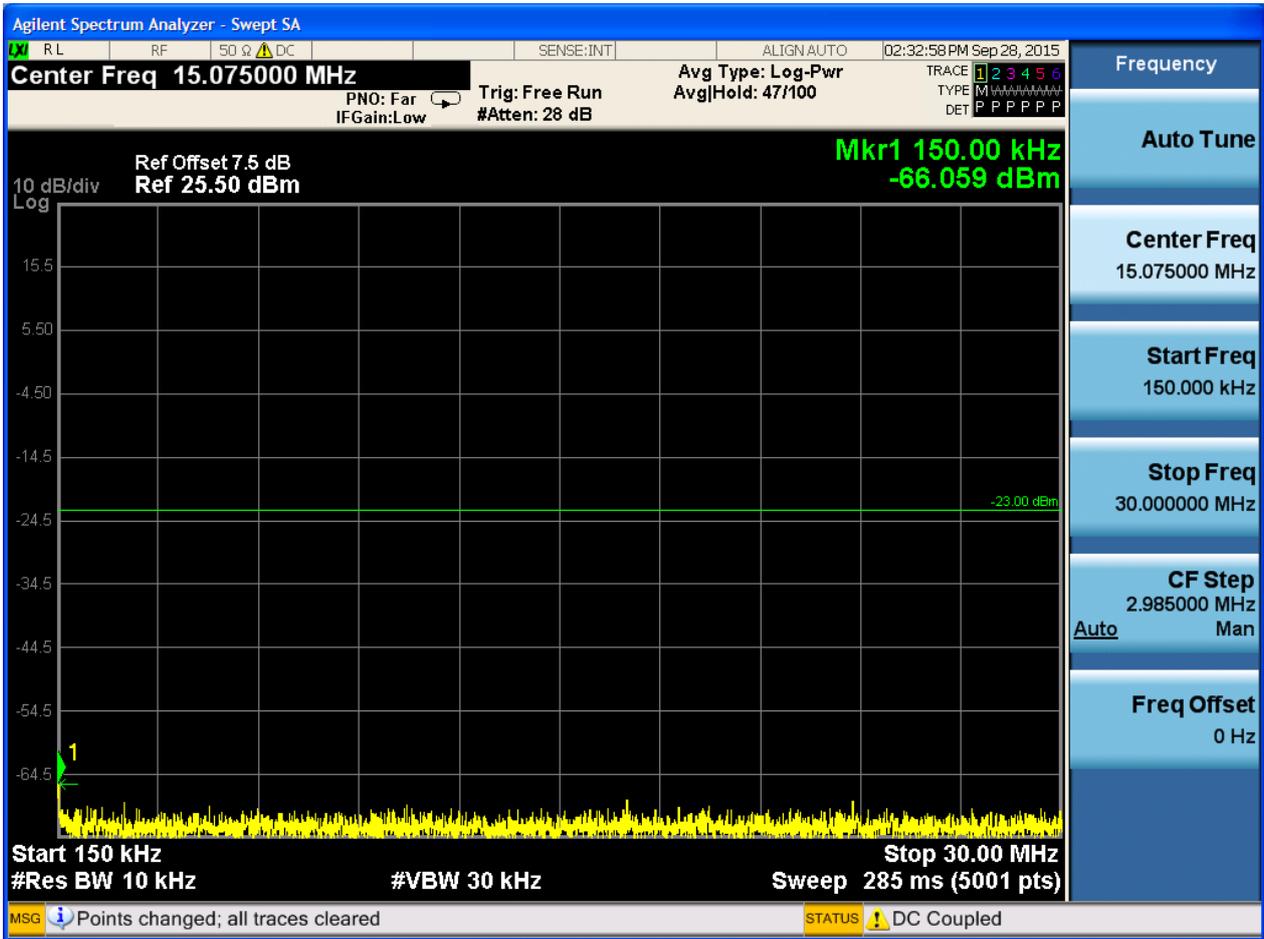
6.1.1.1.1.1 Test Channel = LCH

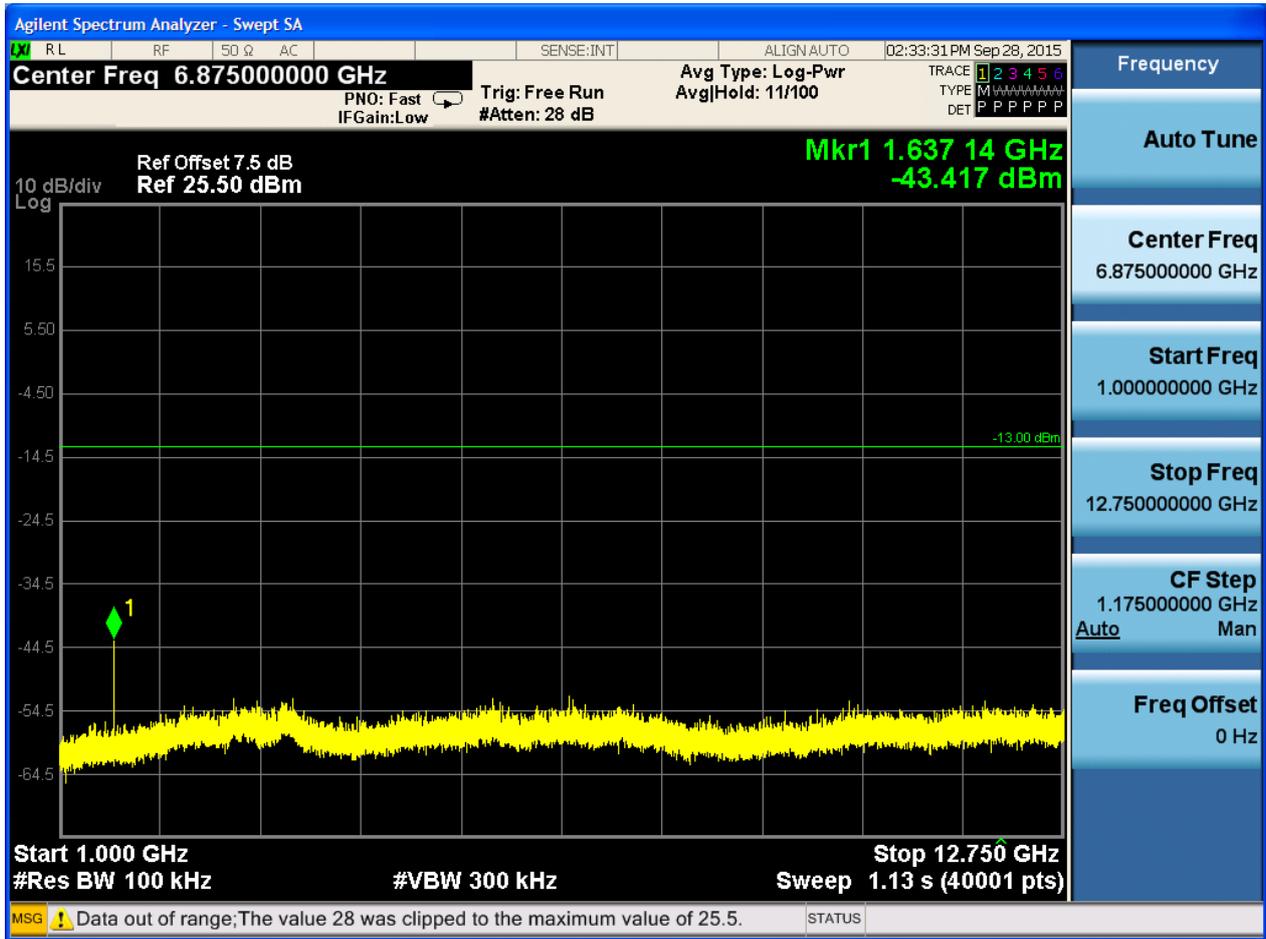
6.1.1.1.1.1.1 Test RB = RB1#0







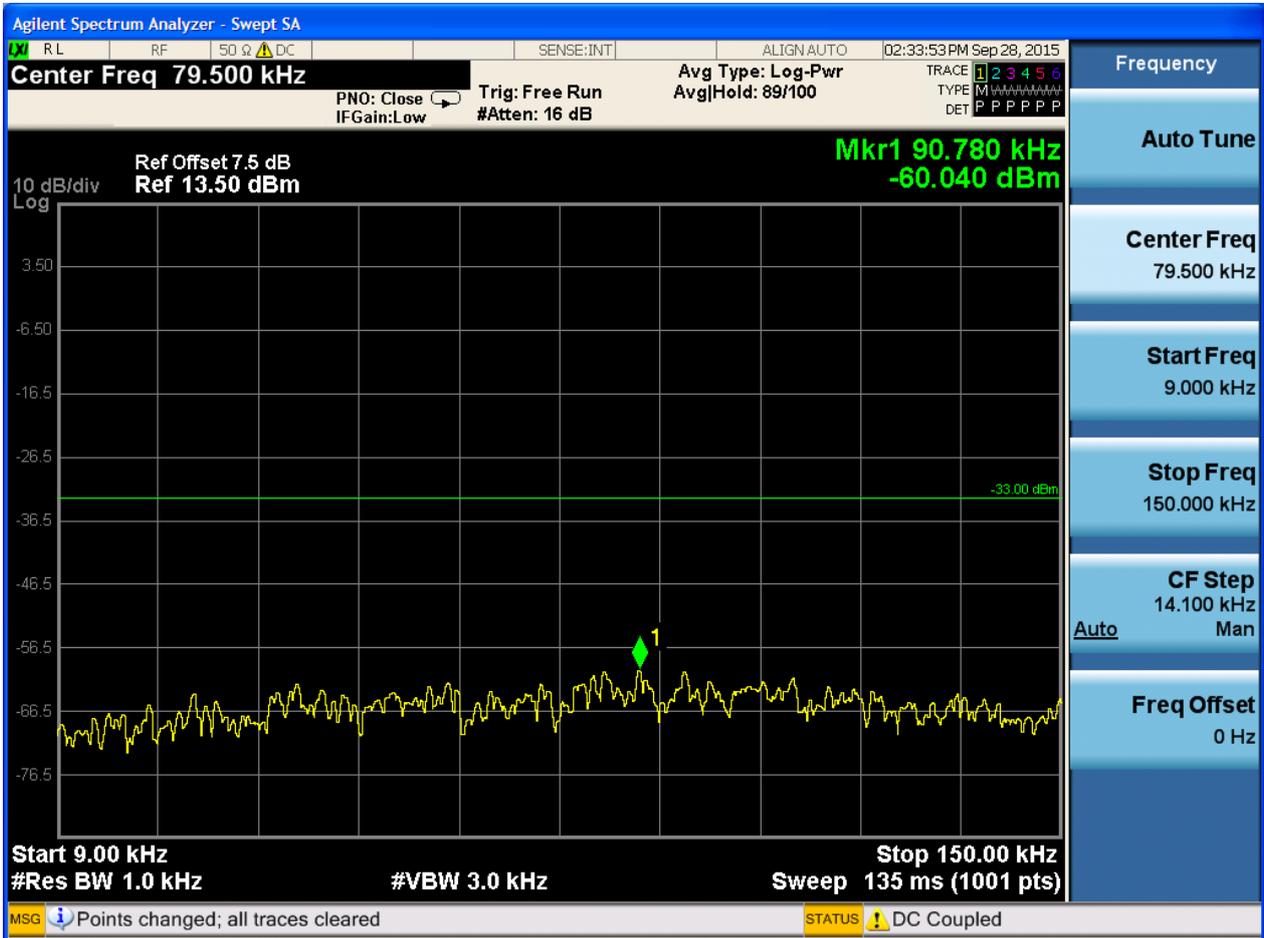




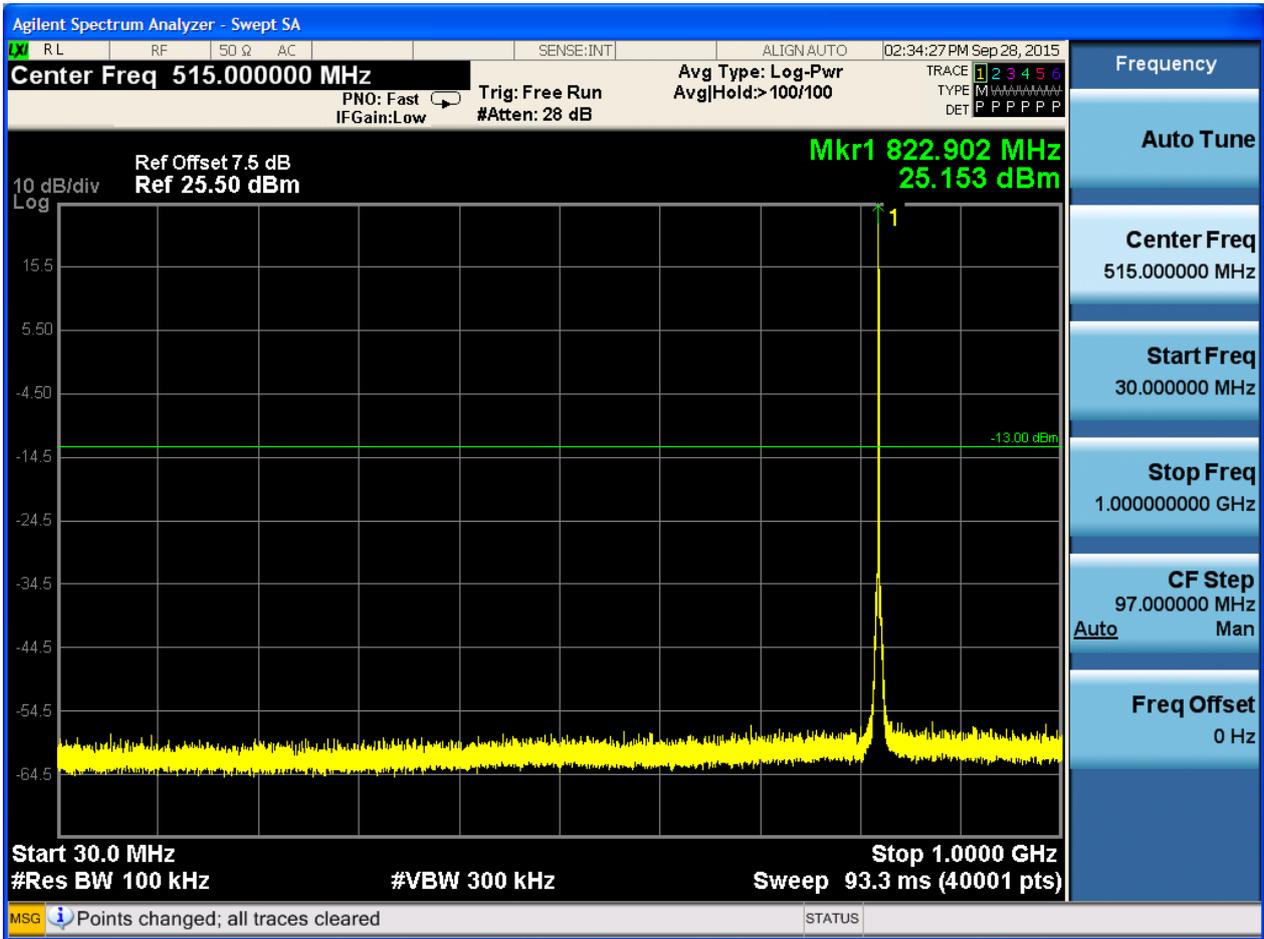


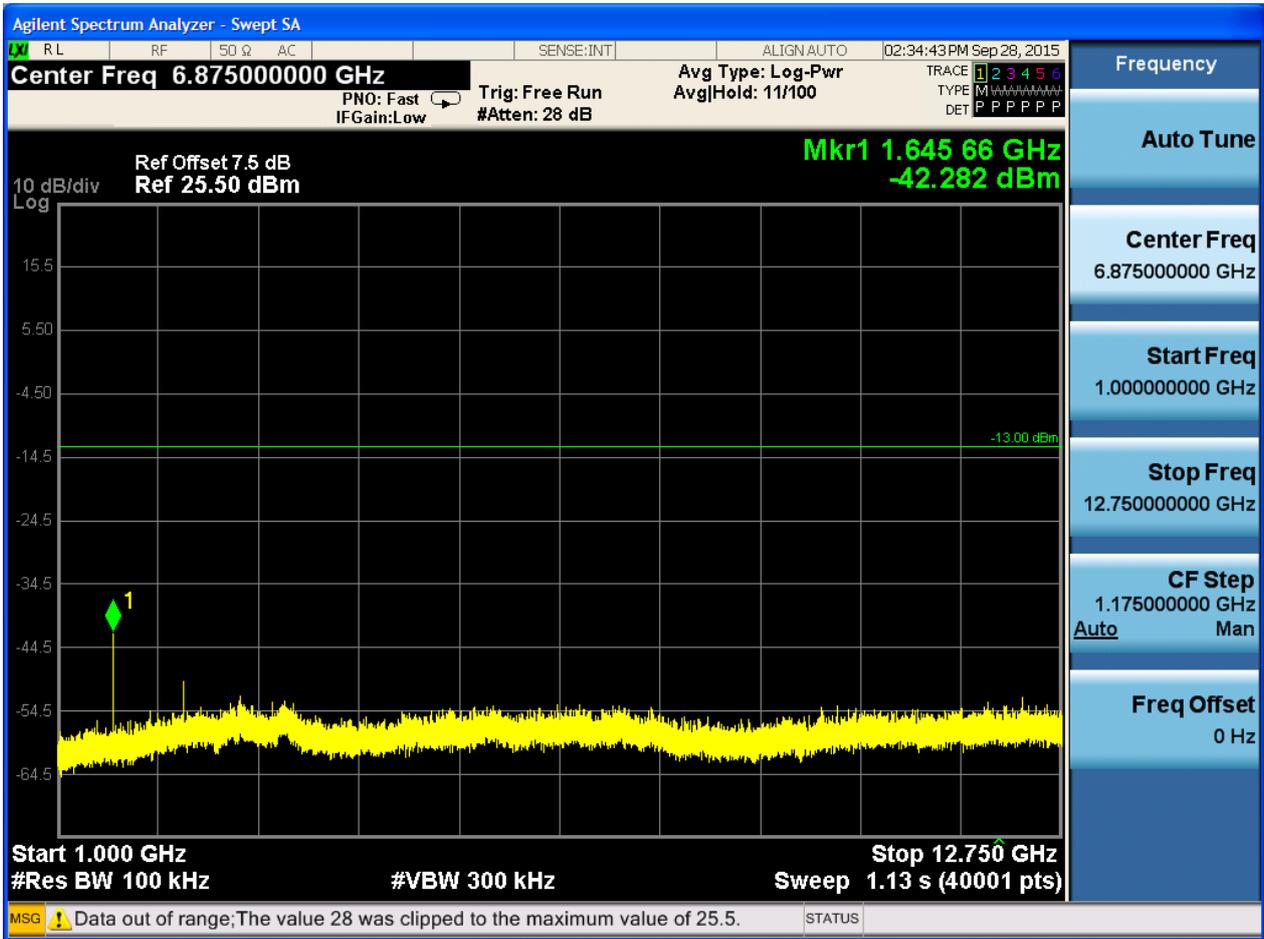
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0







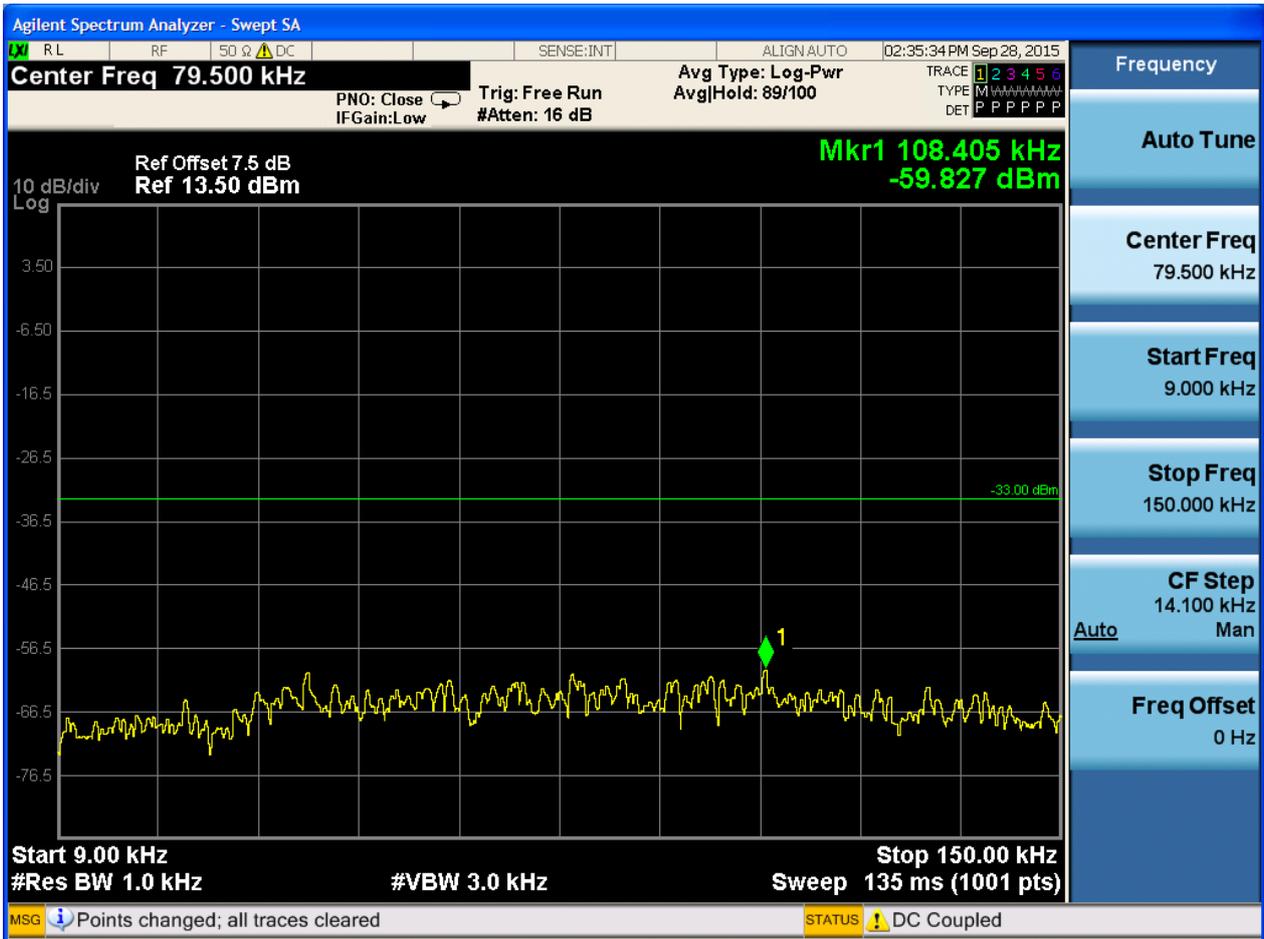




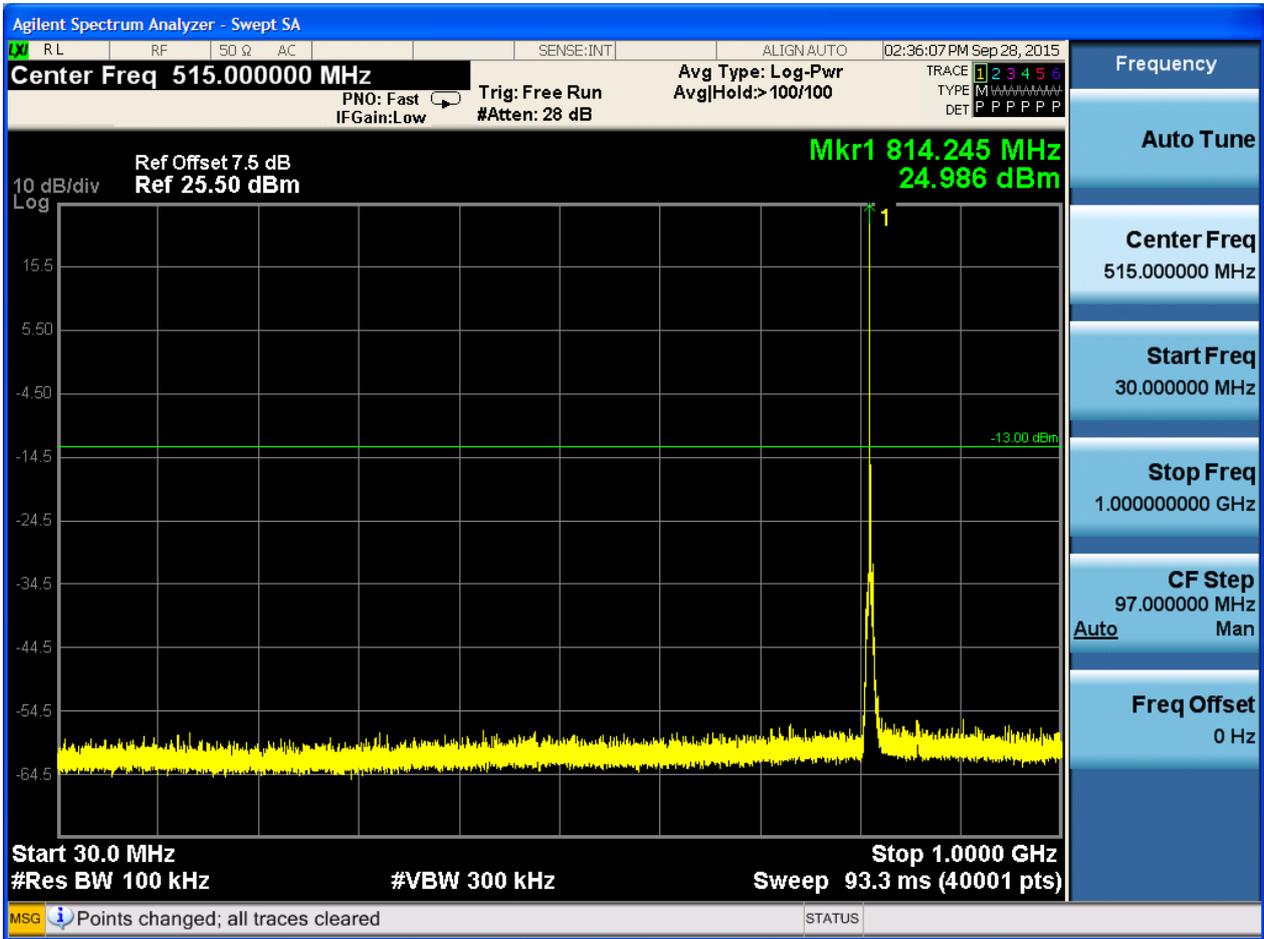
6.1.1.1.2 Test Bandwidth = 3

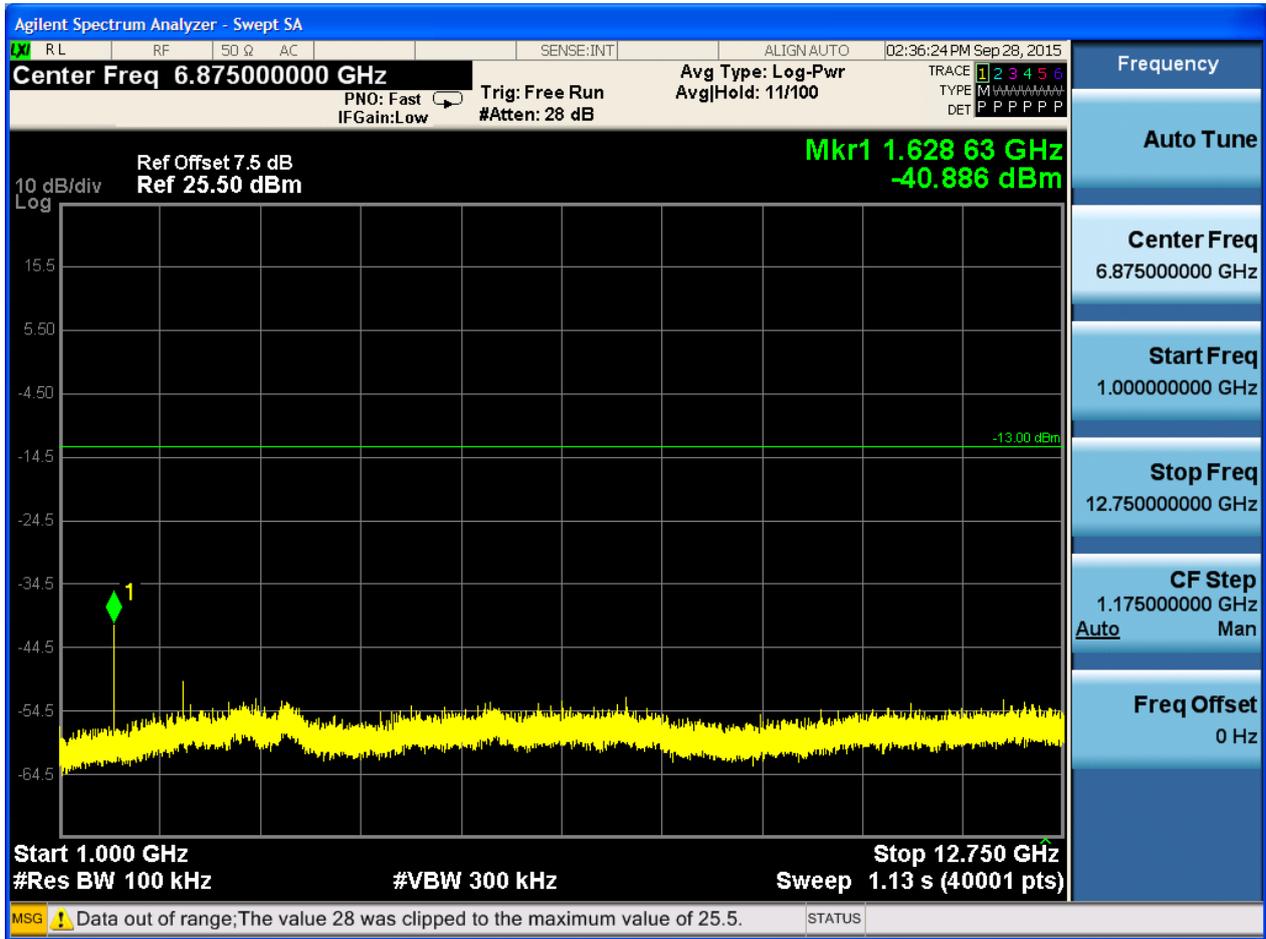
6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0





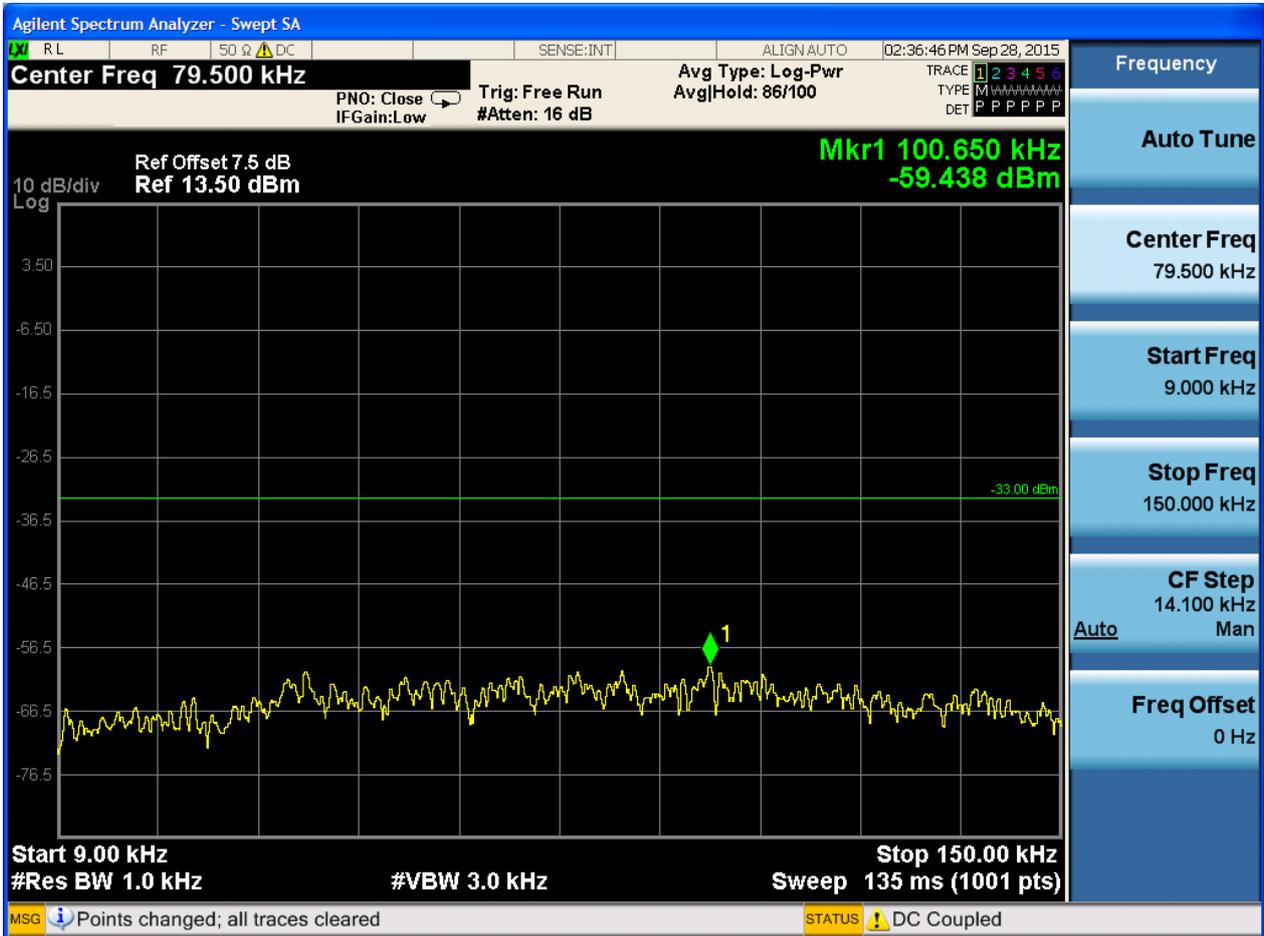


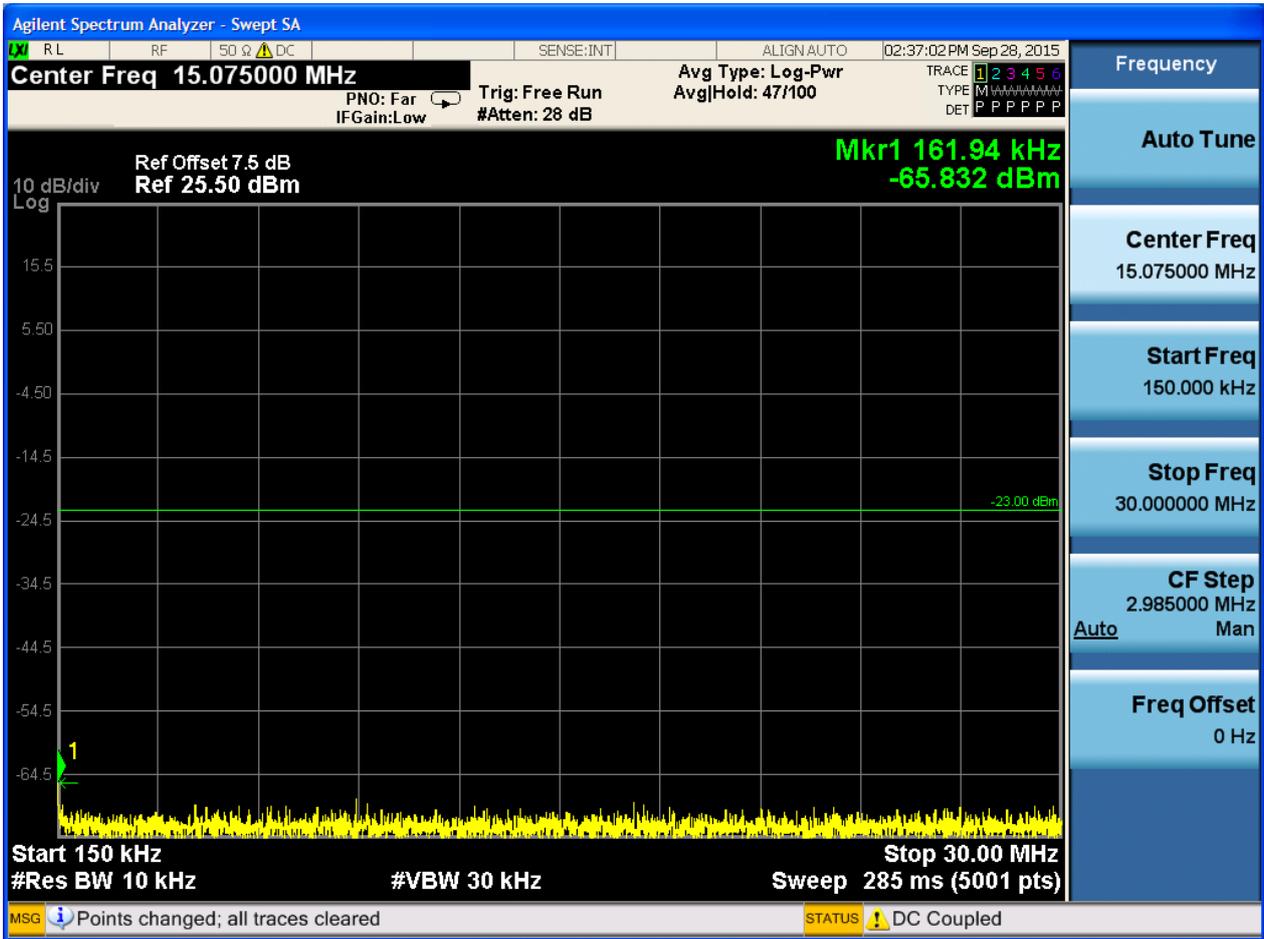


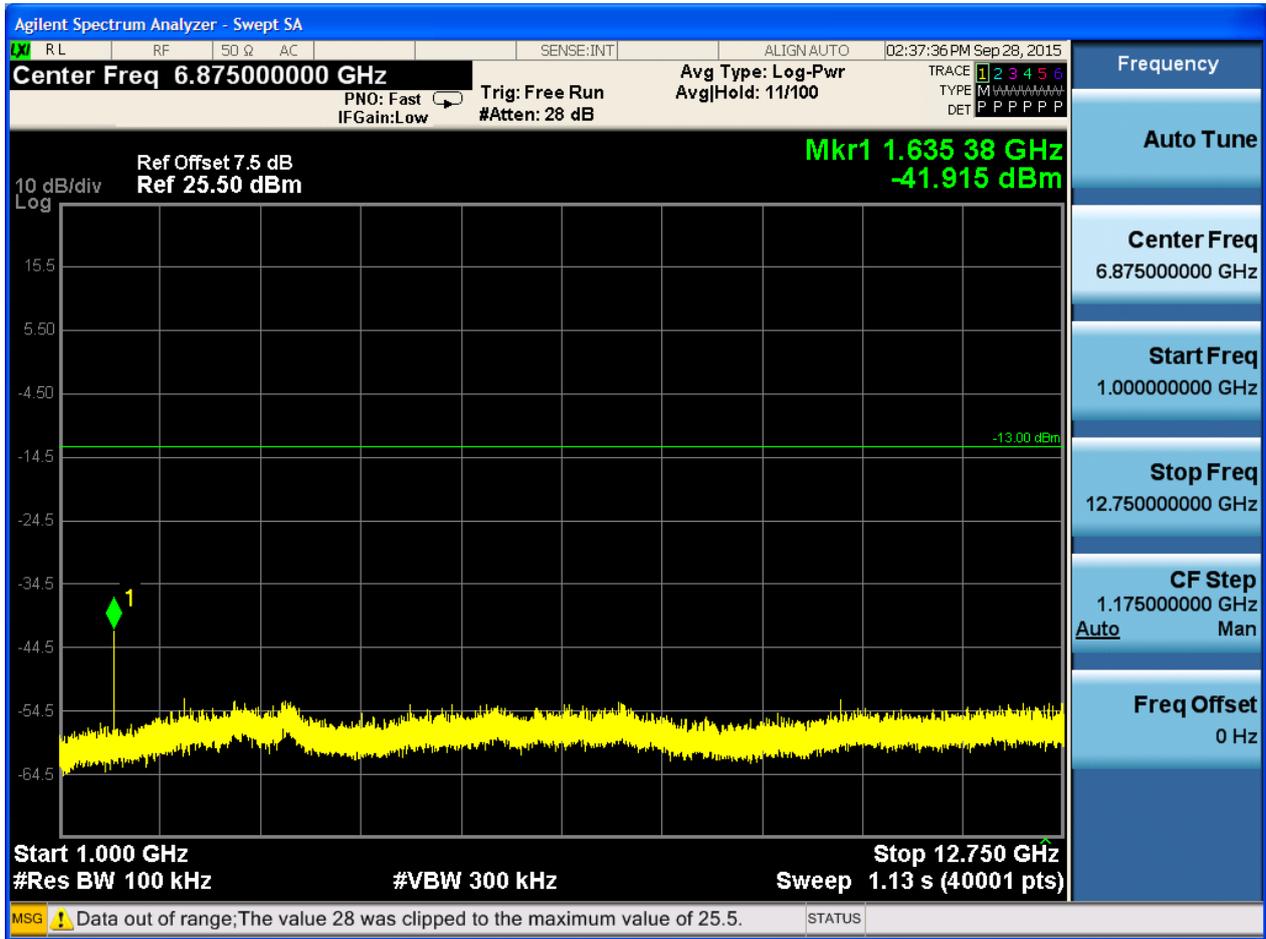


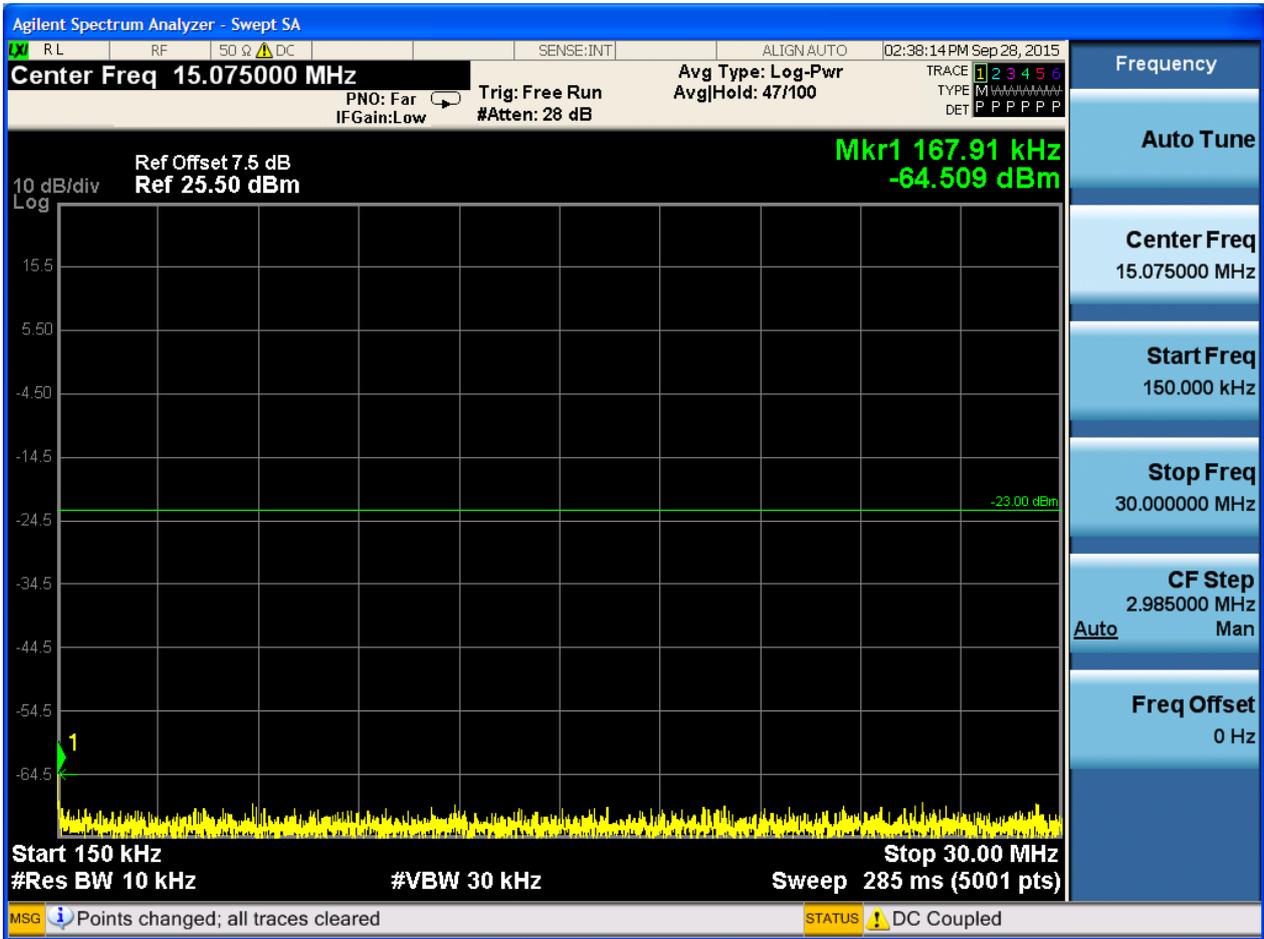
6.1.1.1.2.2 Test Channel = MCH

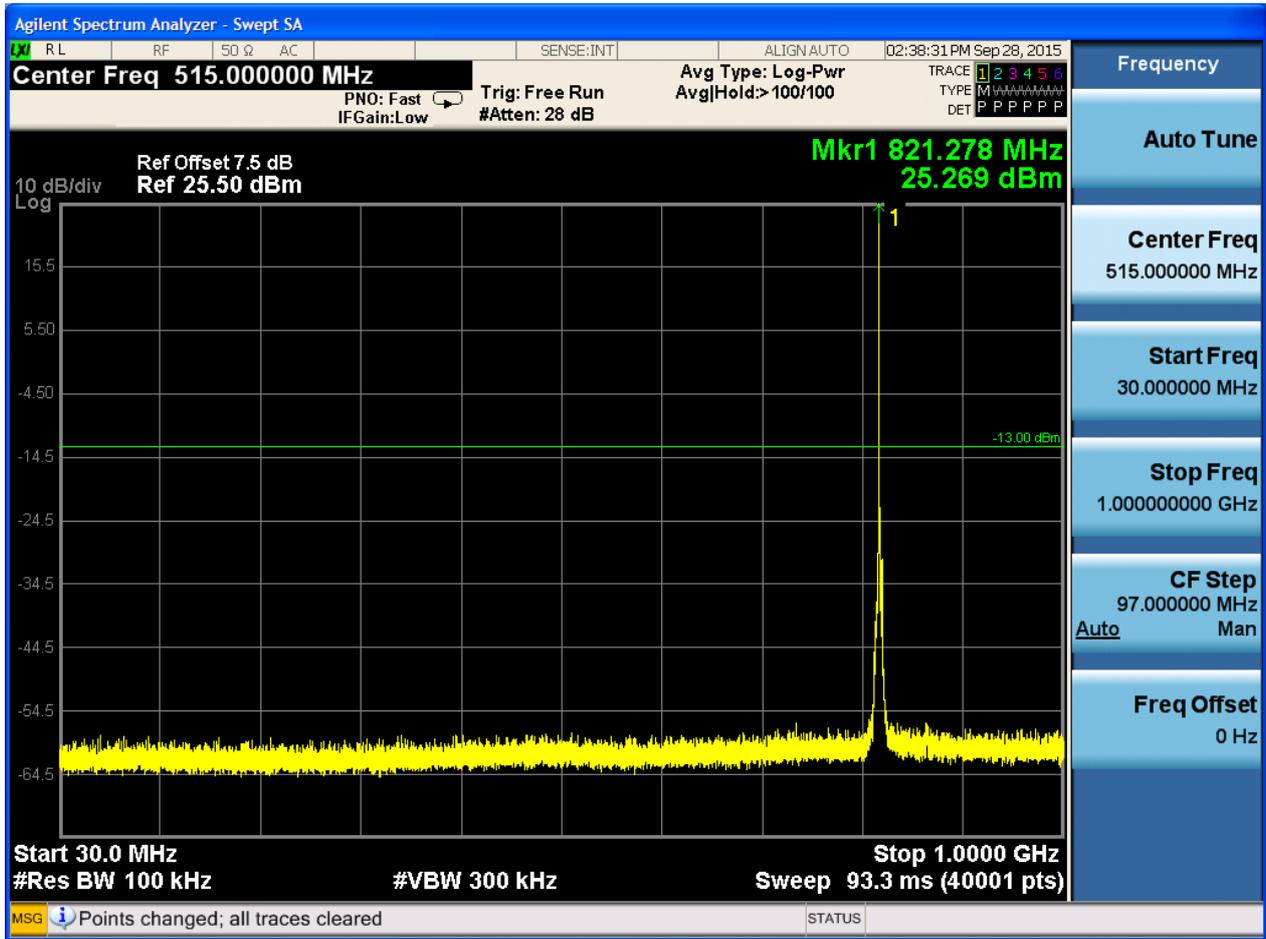
6.1.1.1.2.2.1 Test RB = RB1#0

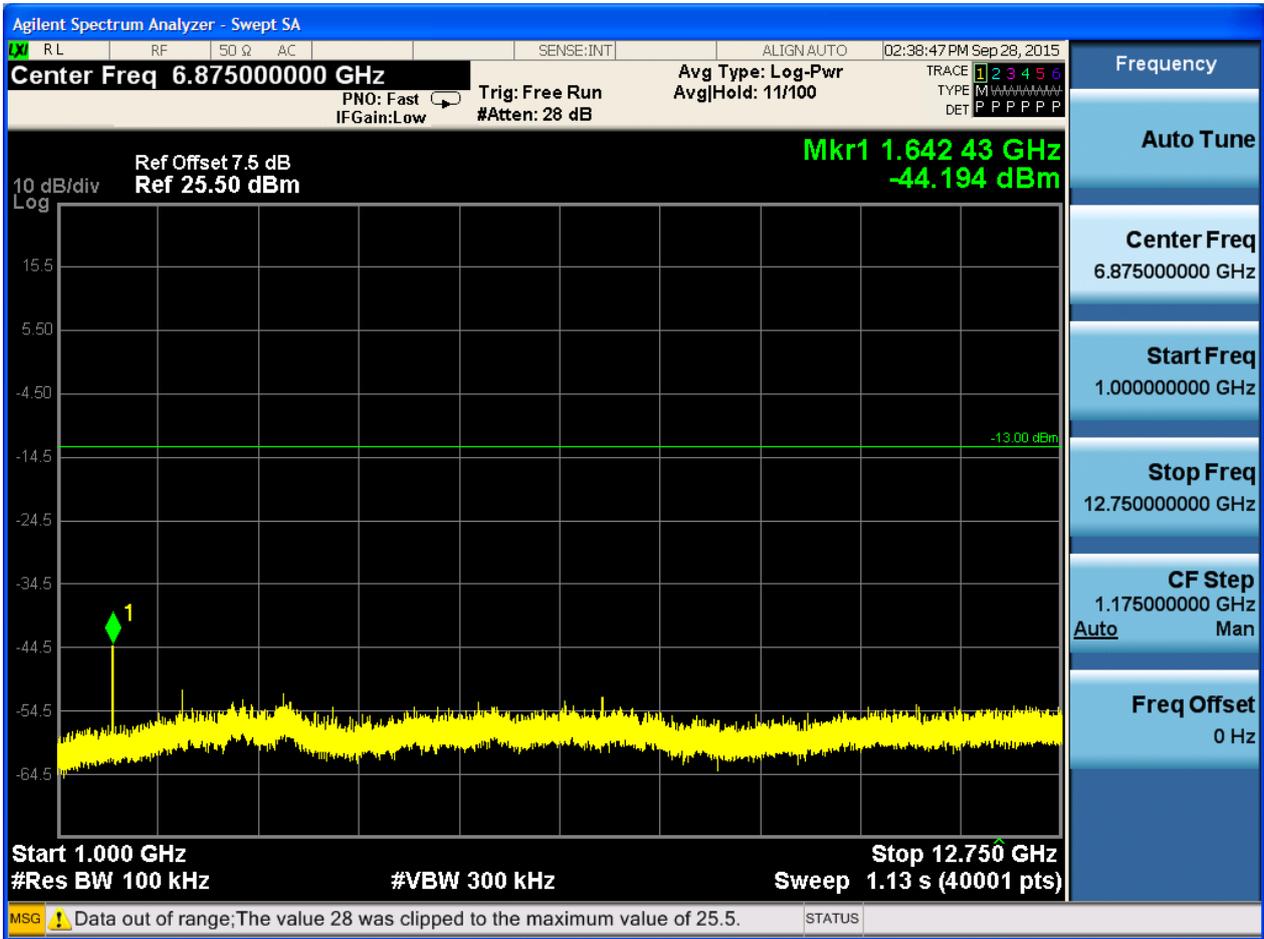










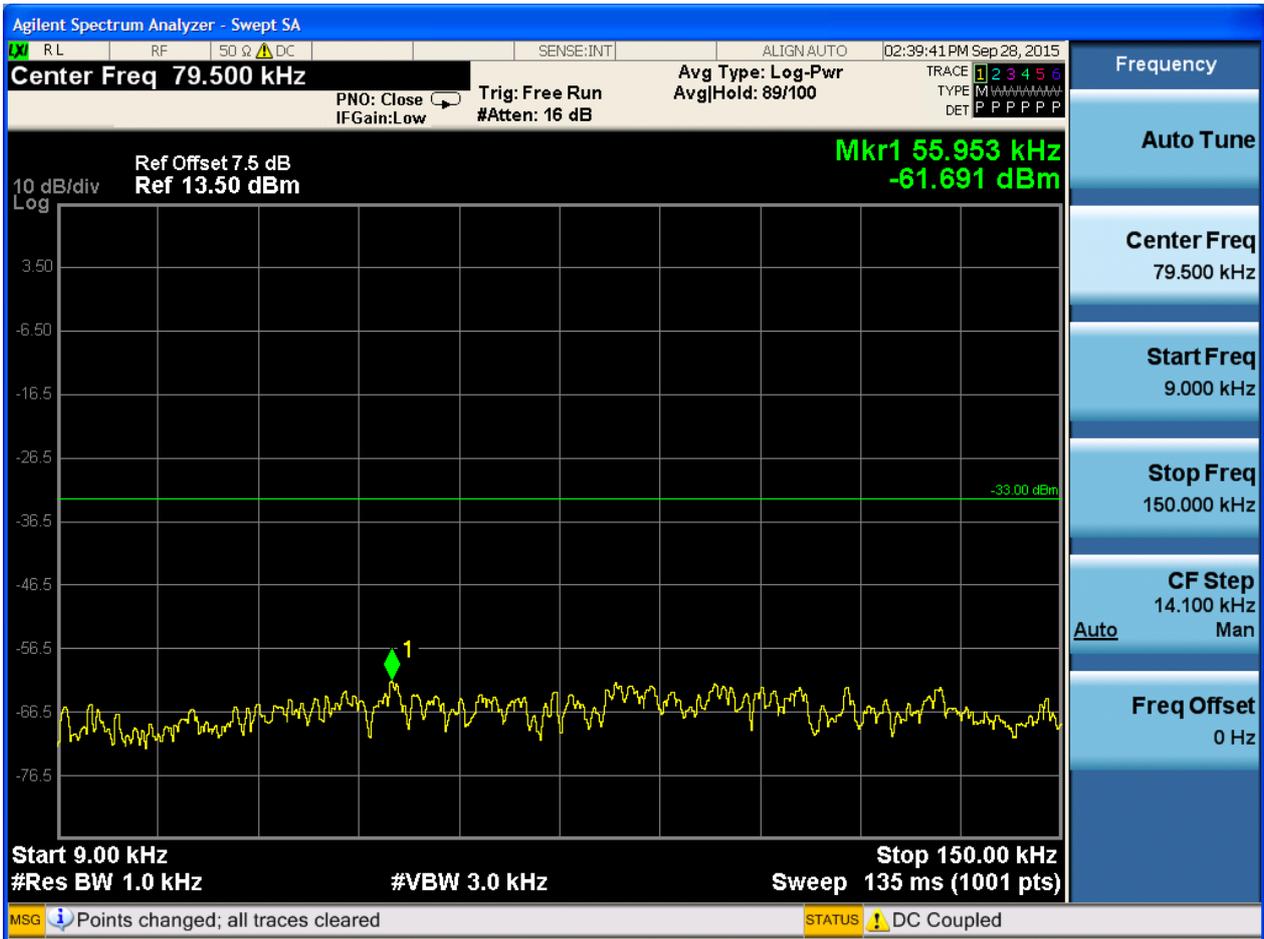




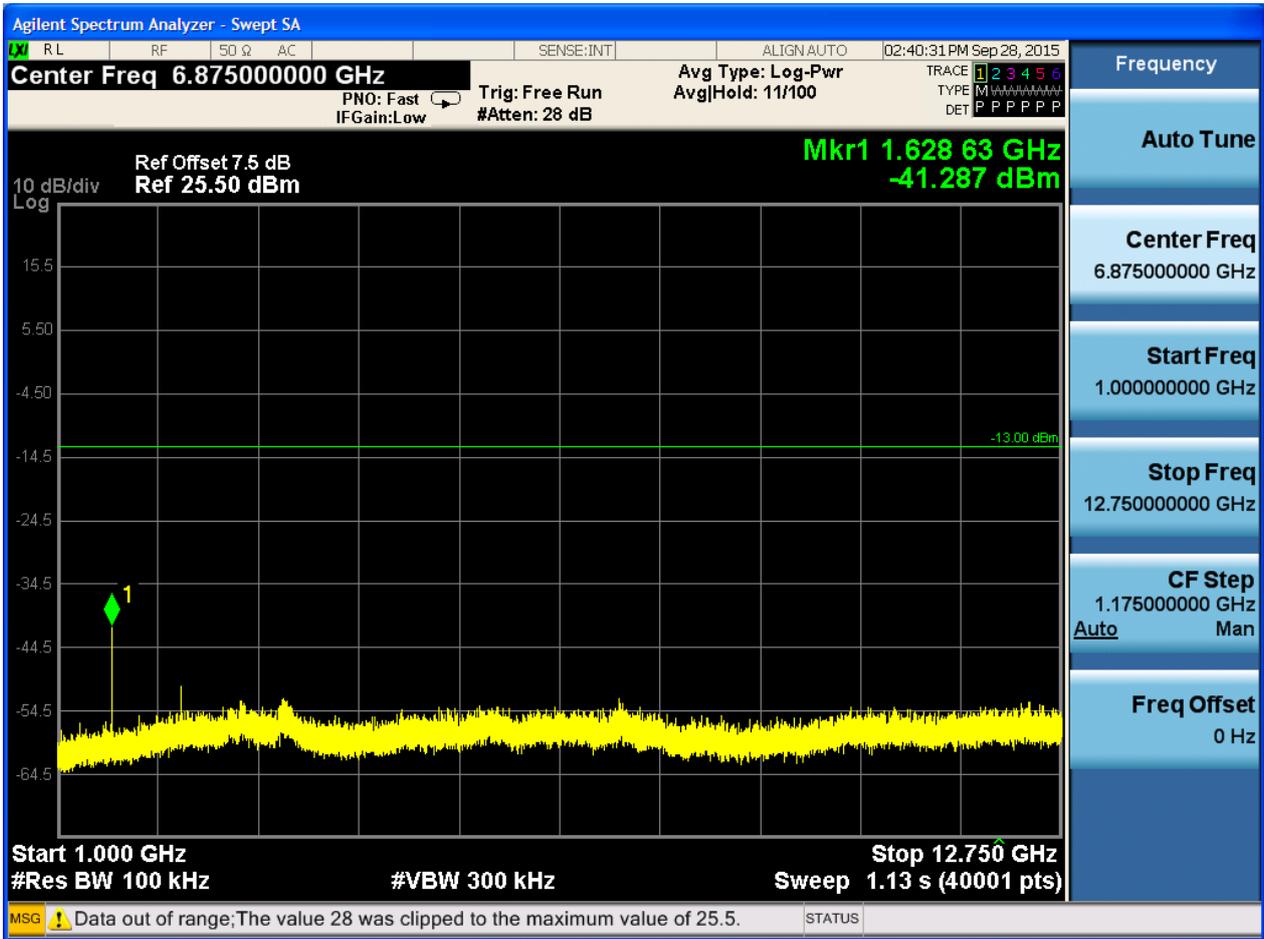
6.1.1.1.3 Test Bandwidth = 5

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



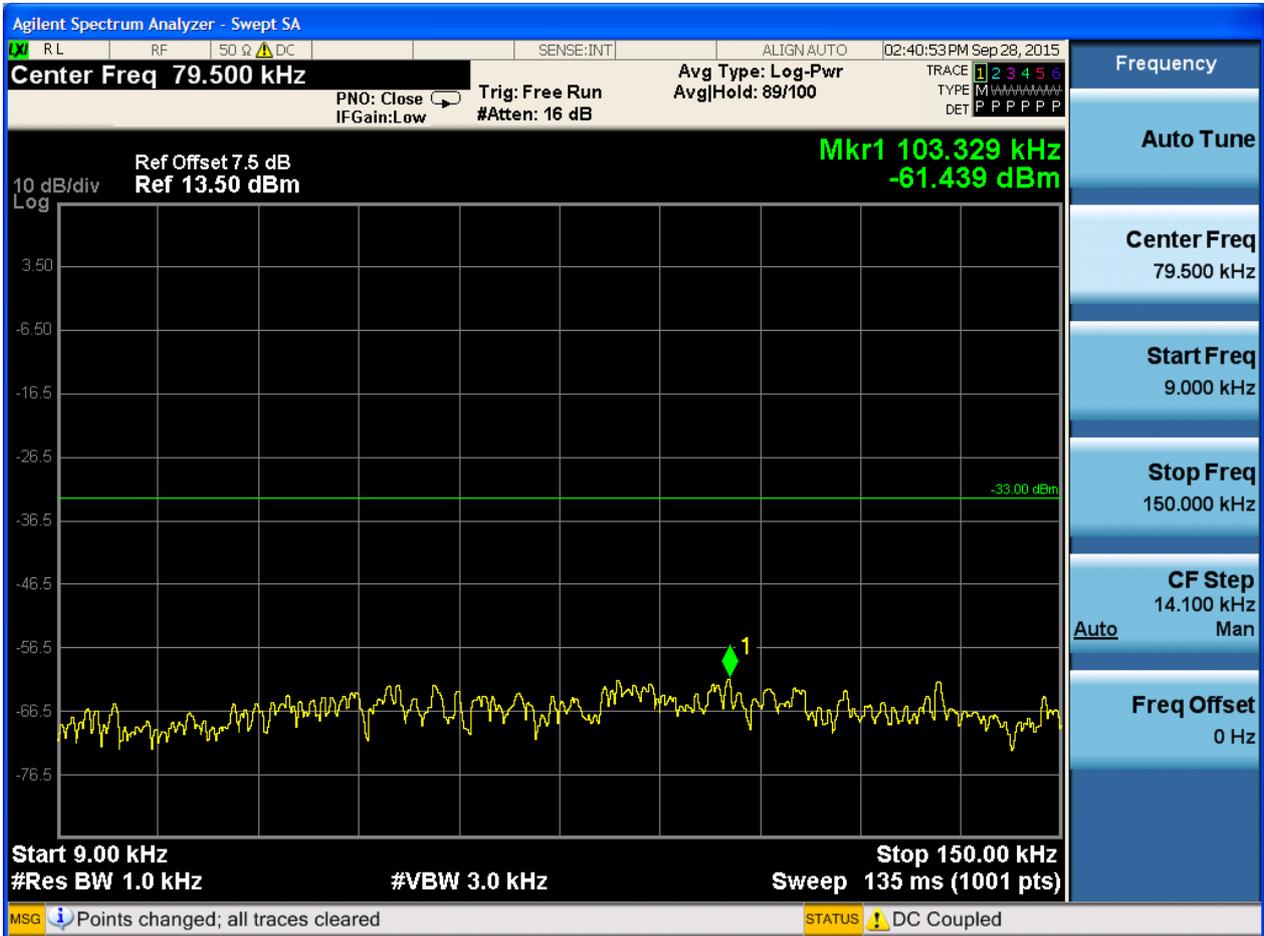


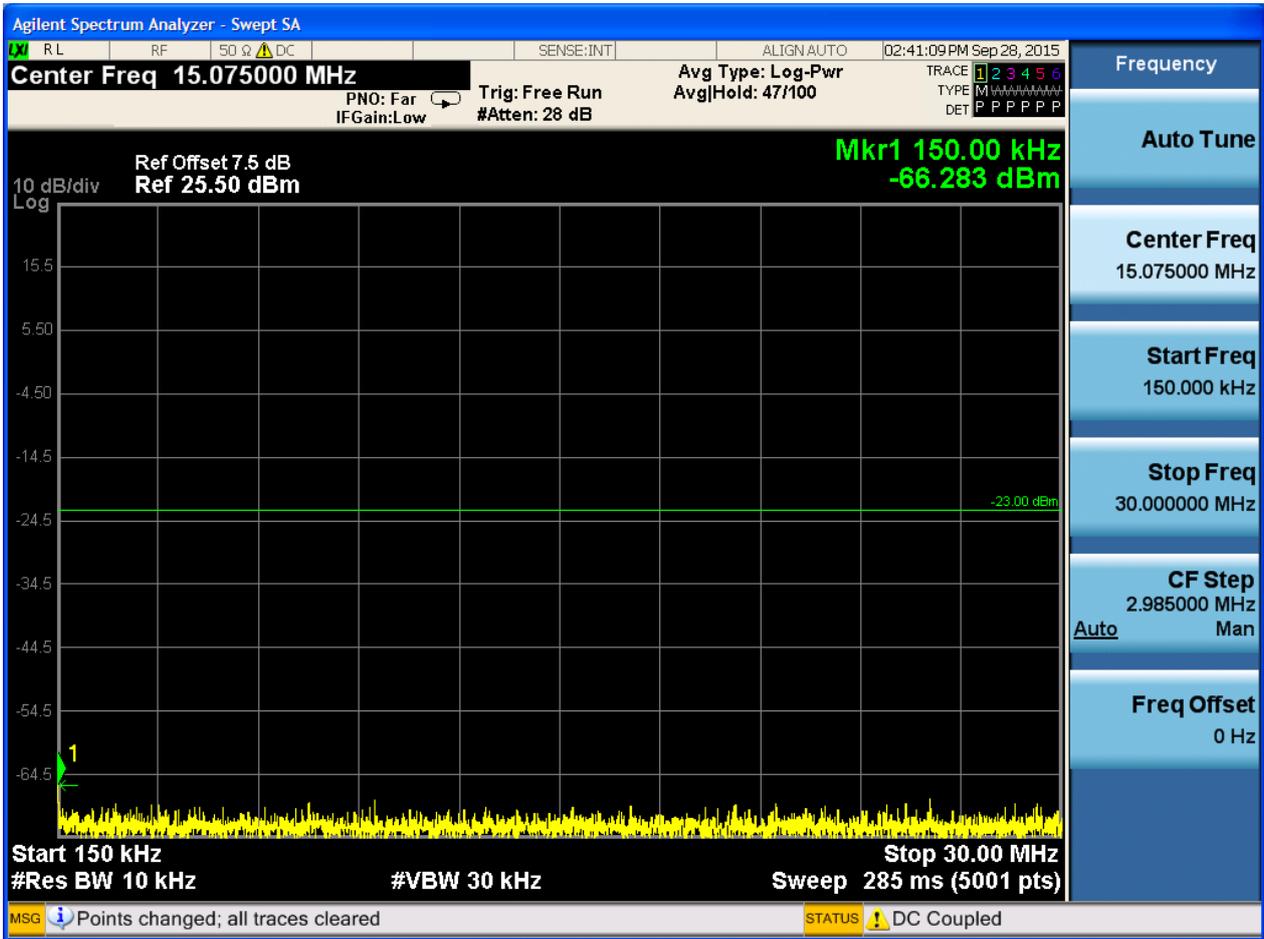


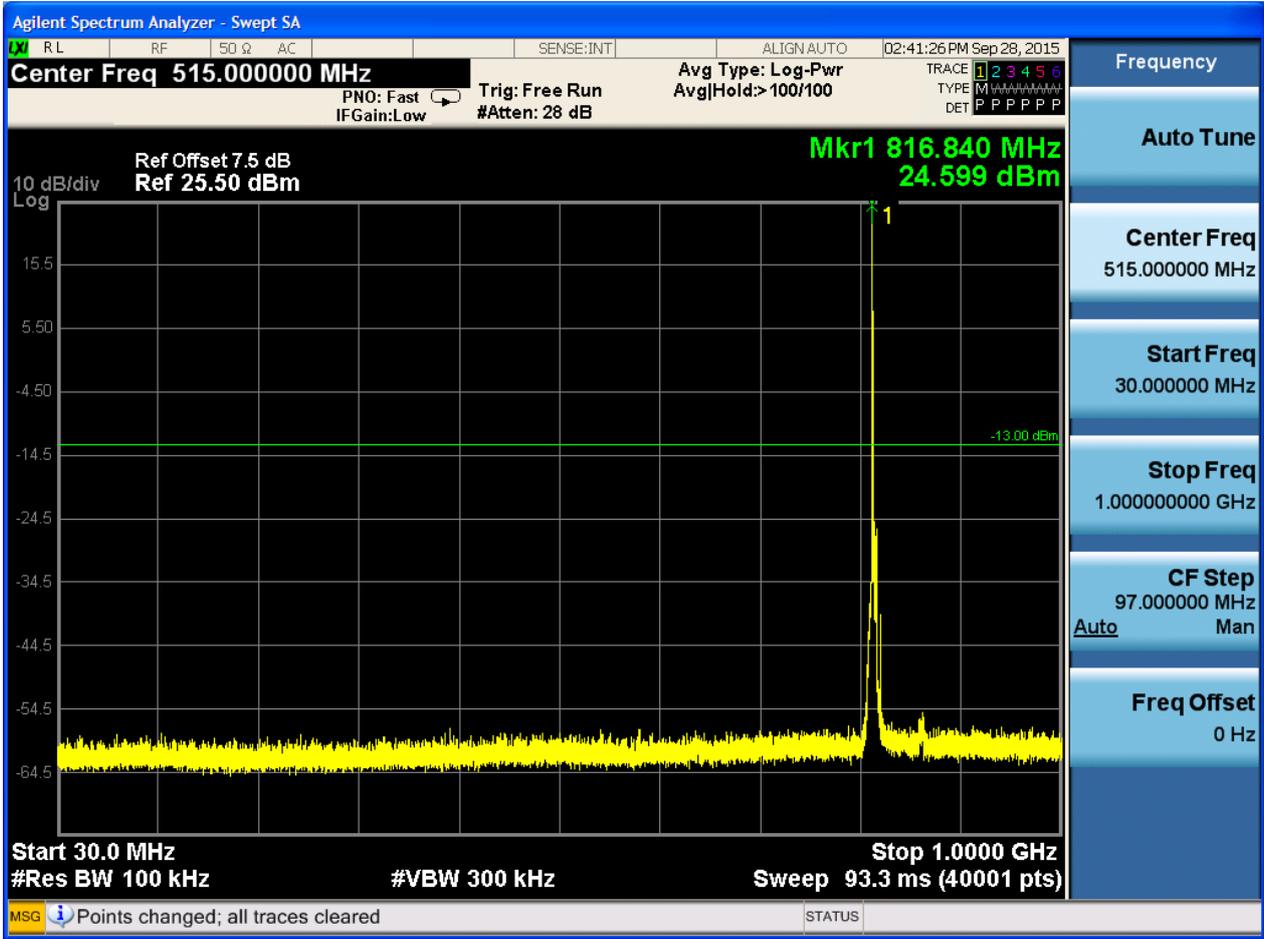


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



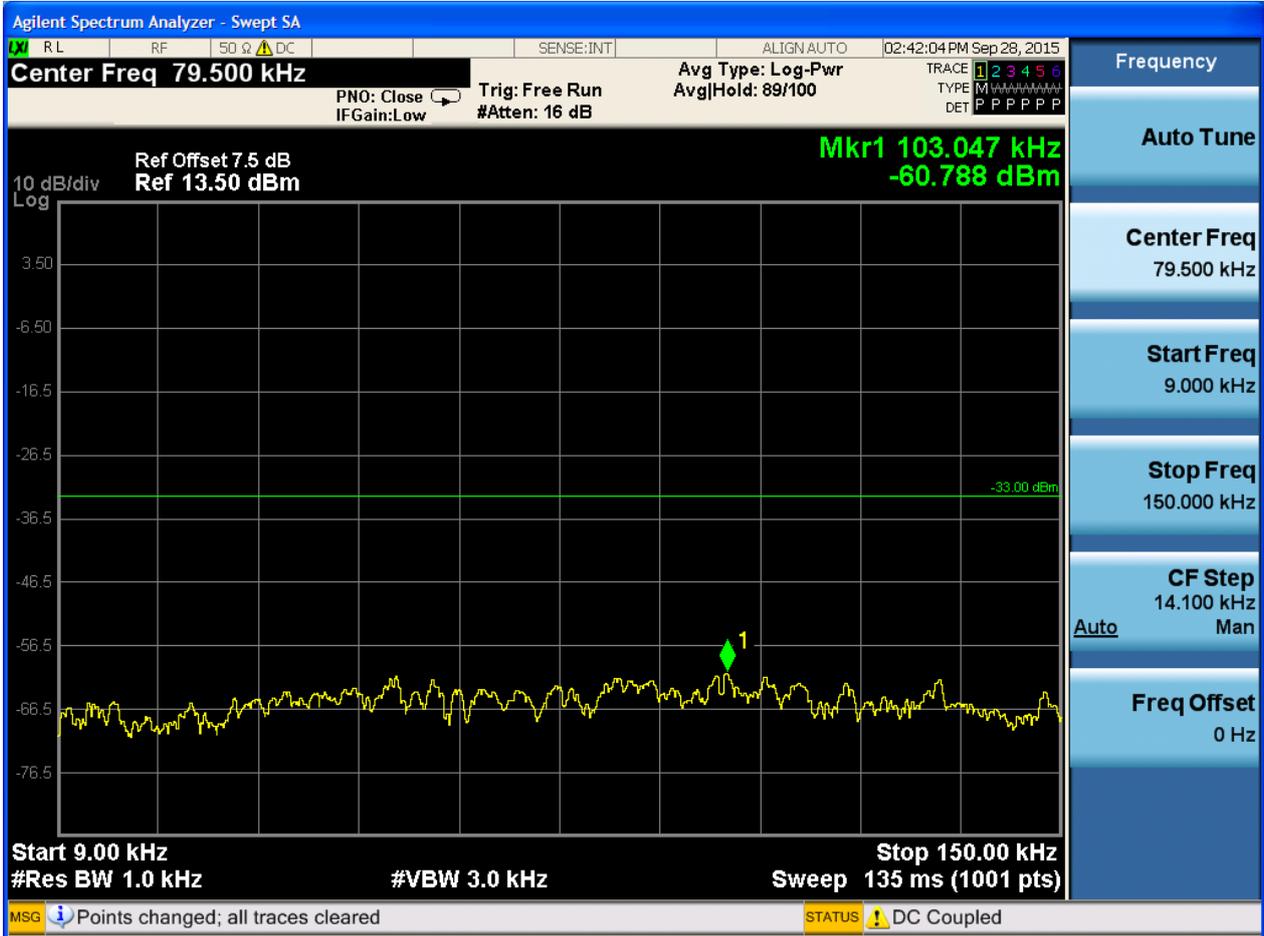




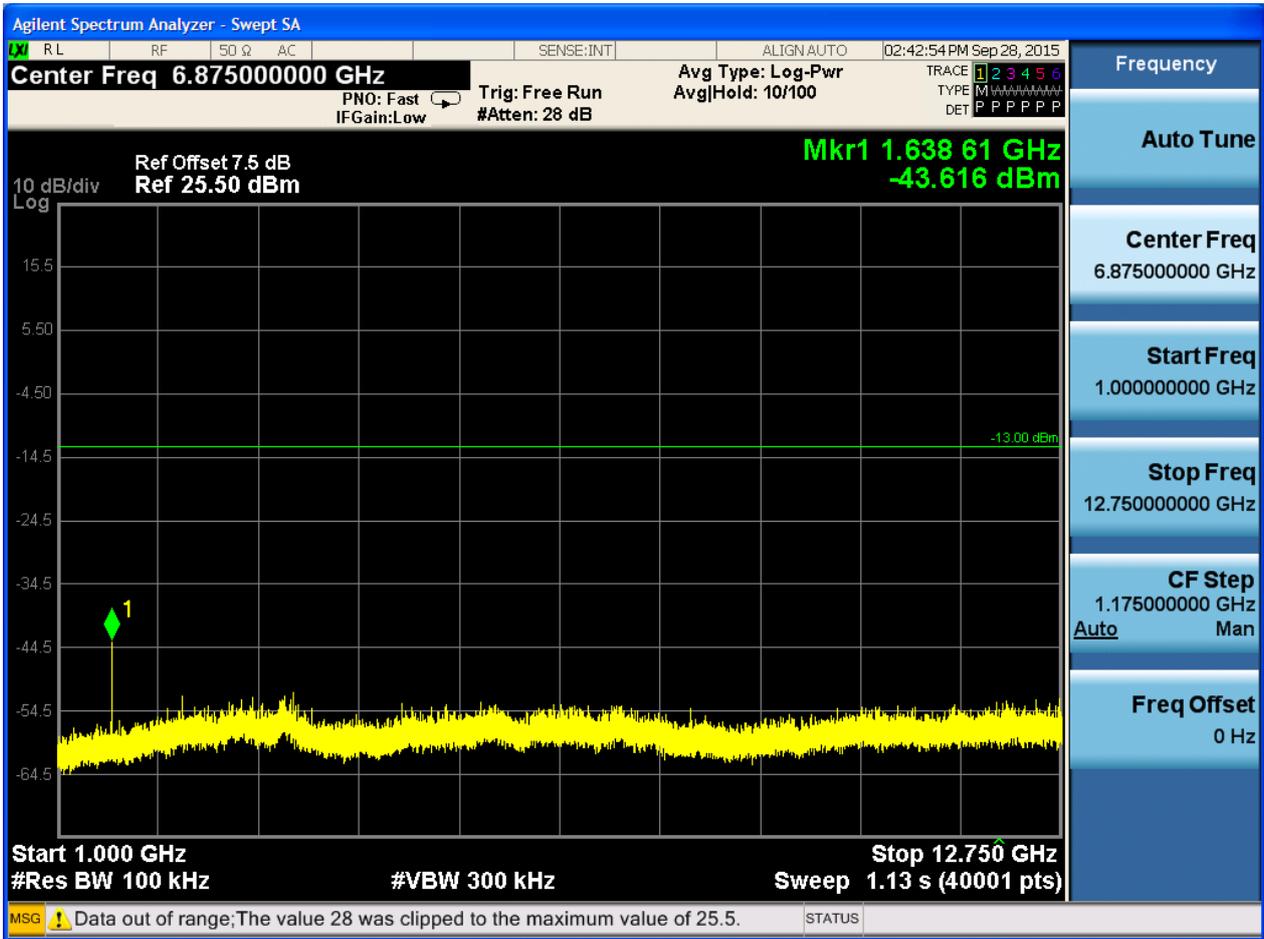


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





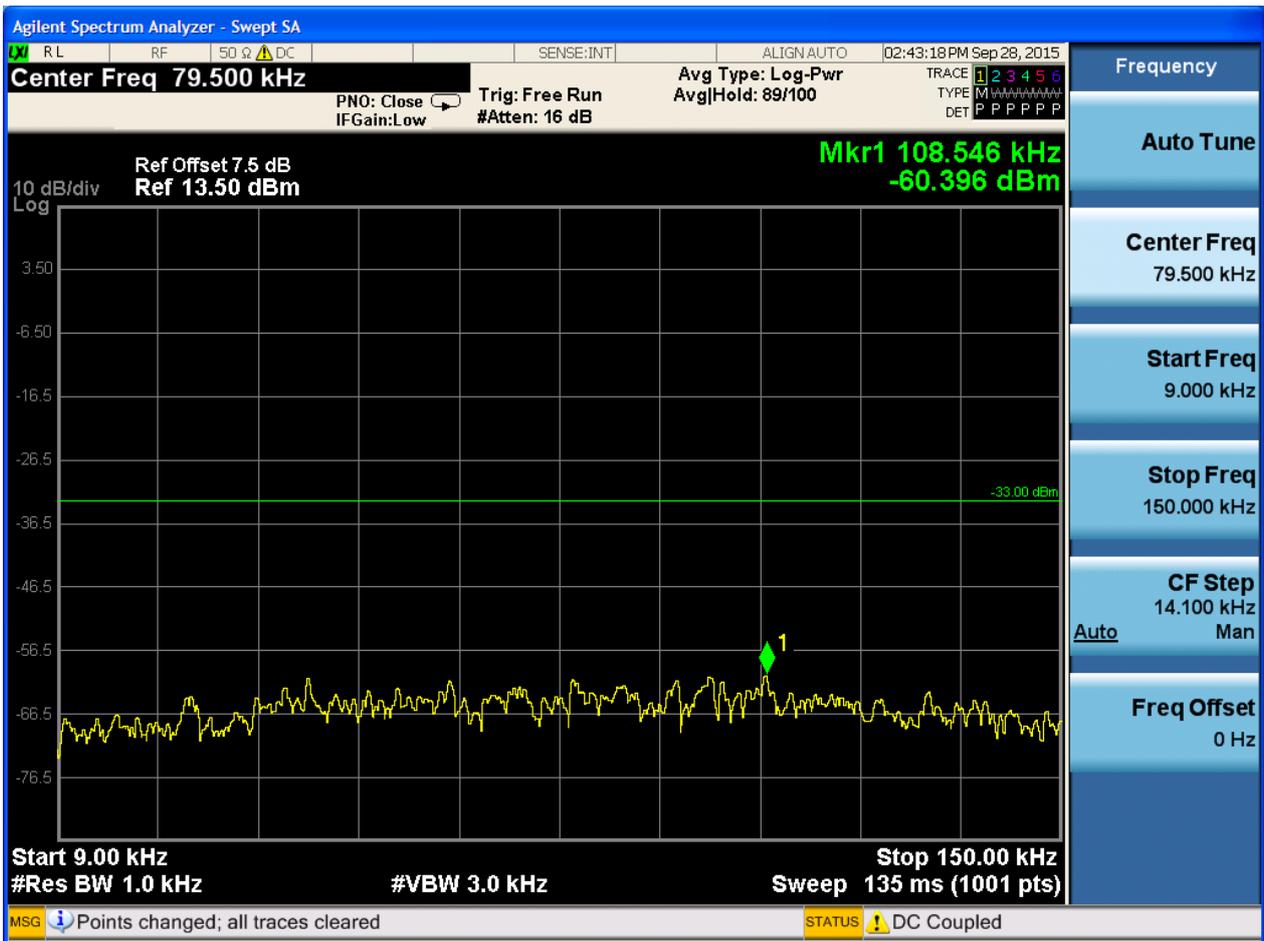




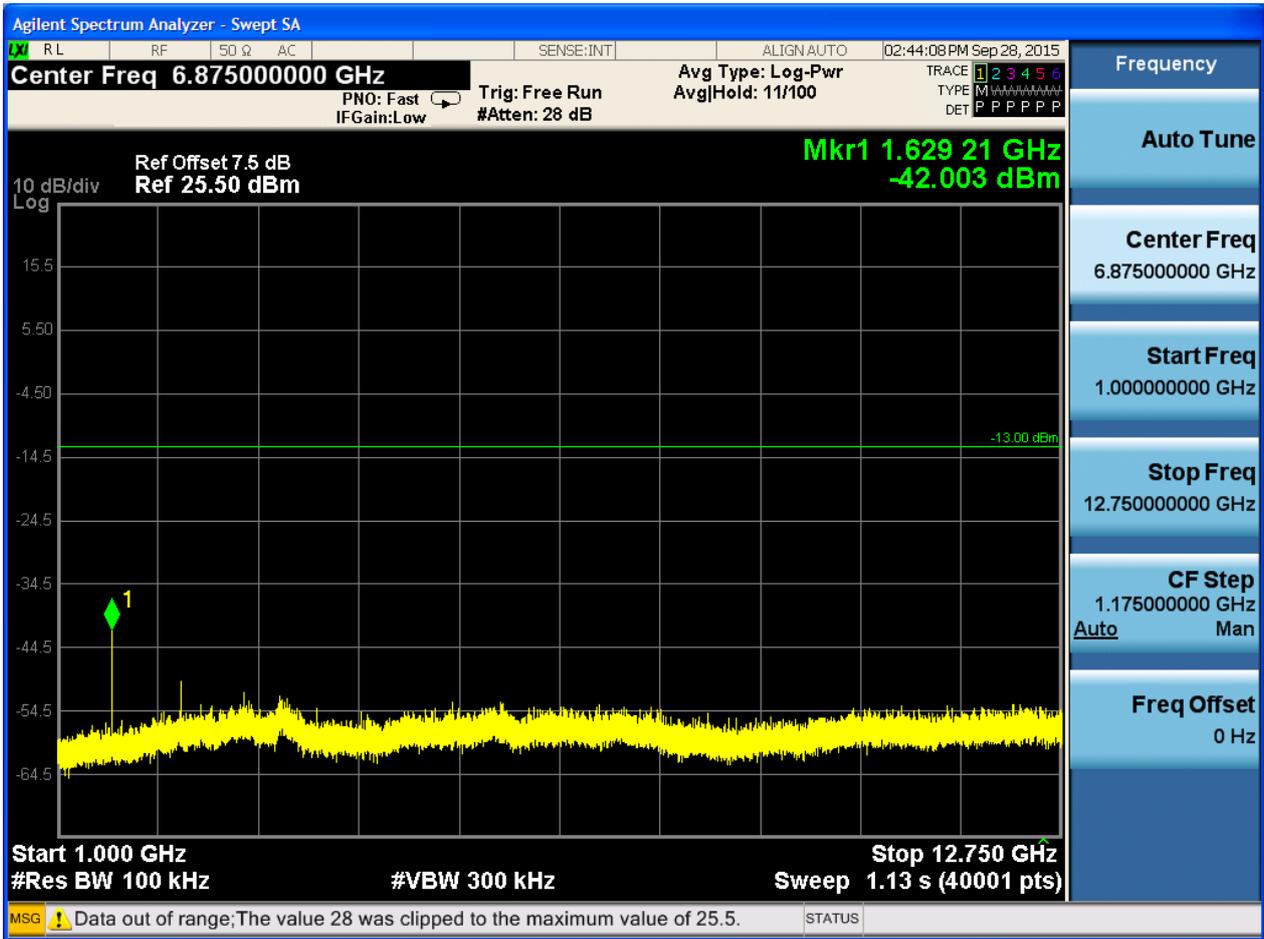
6.1.1.1.4 Test Bandwidth = 10

6.1.1.1.4.1 Test Channel = LCH/MCH/HCH

6.1.1.1.4.1.1 Test RB = RB1#0







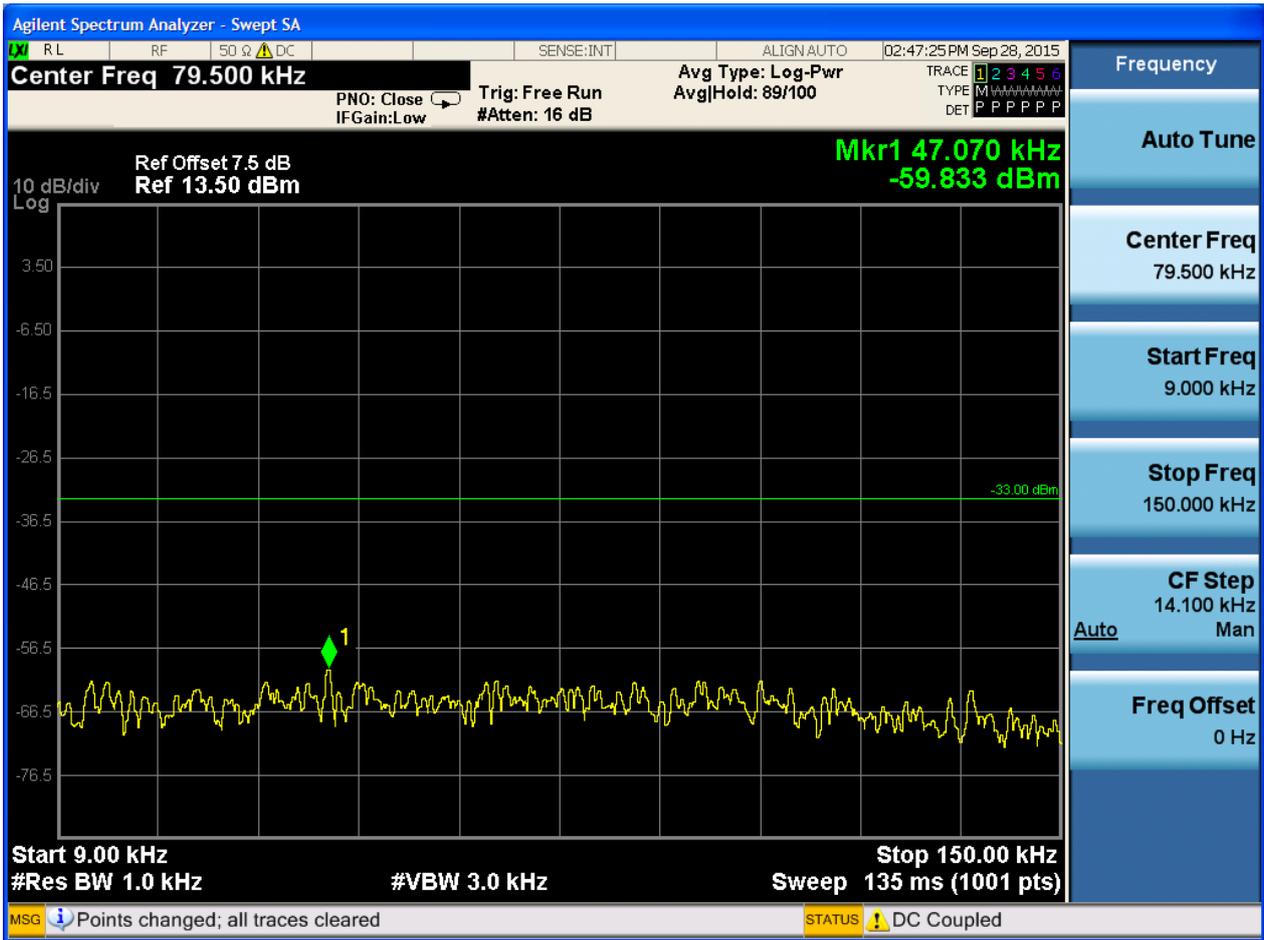


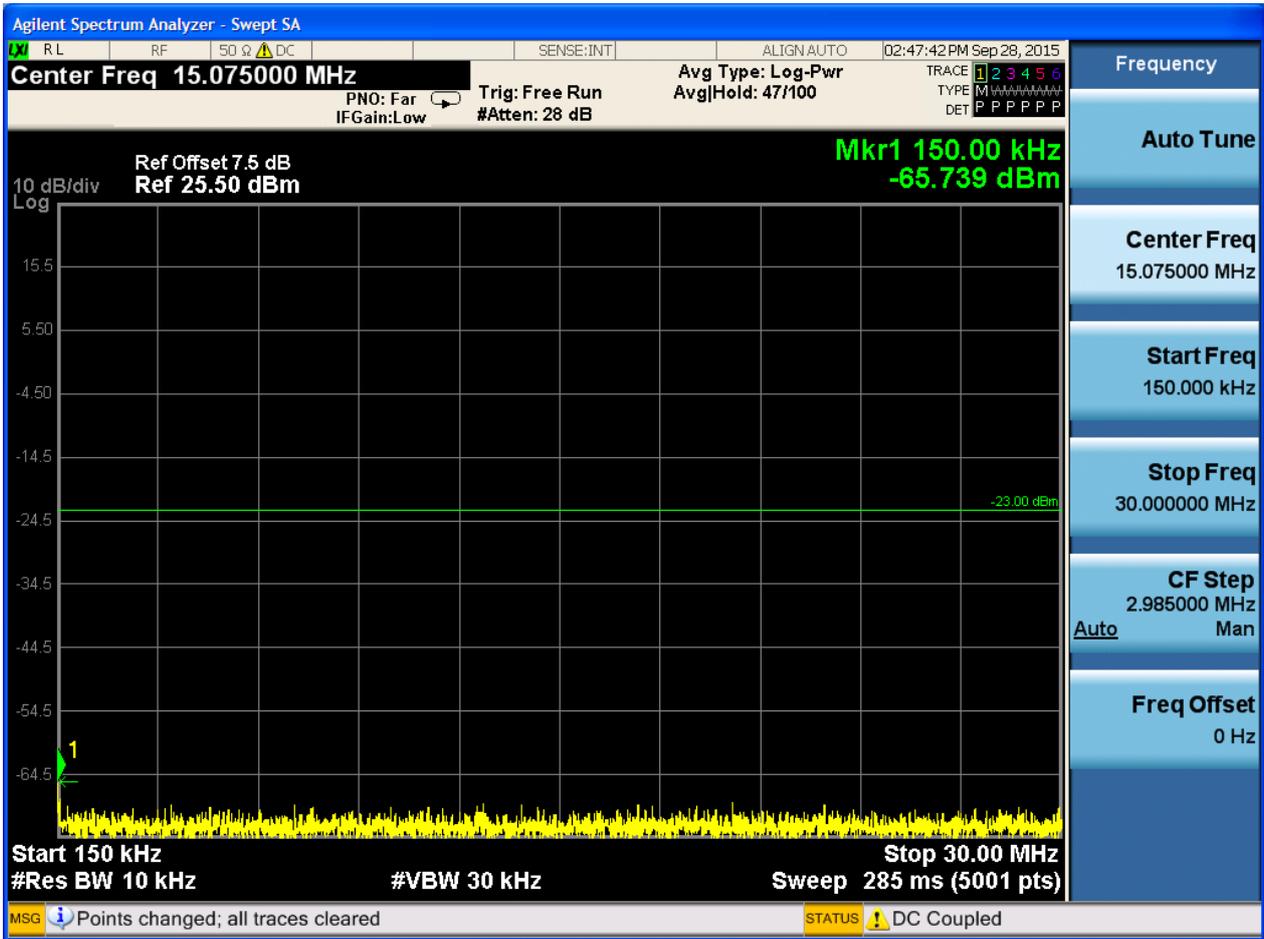
6.1.1.2 Test Mode = LTE/TM2

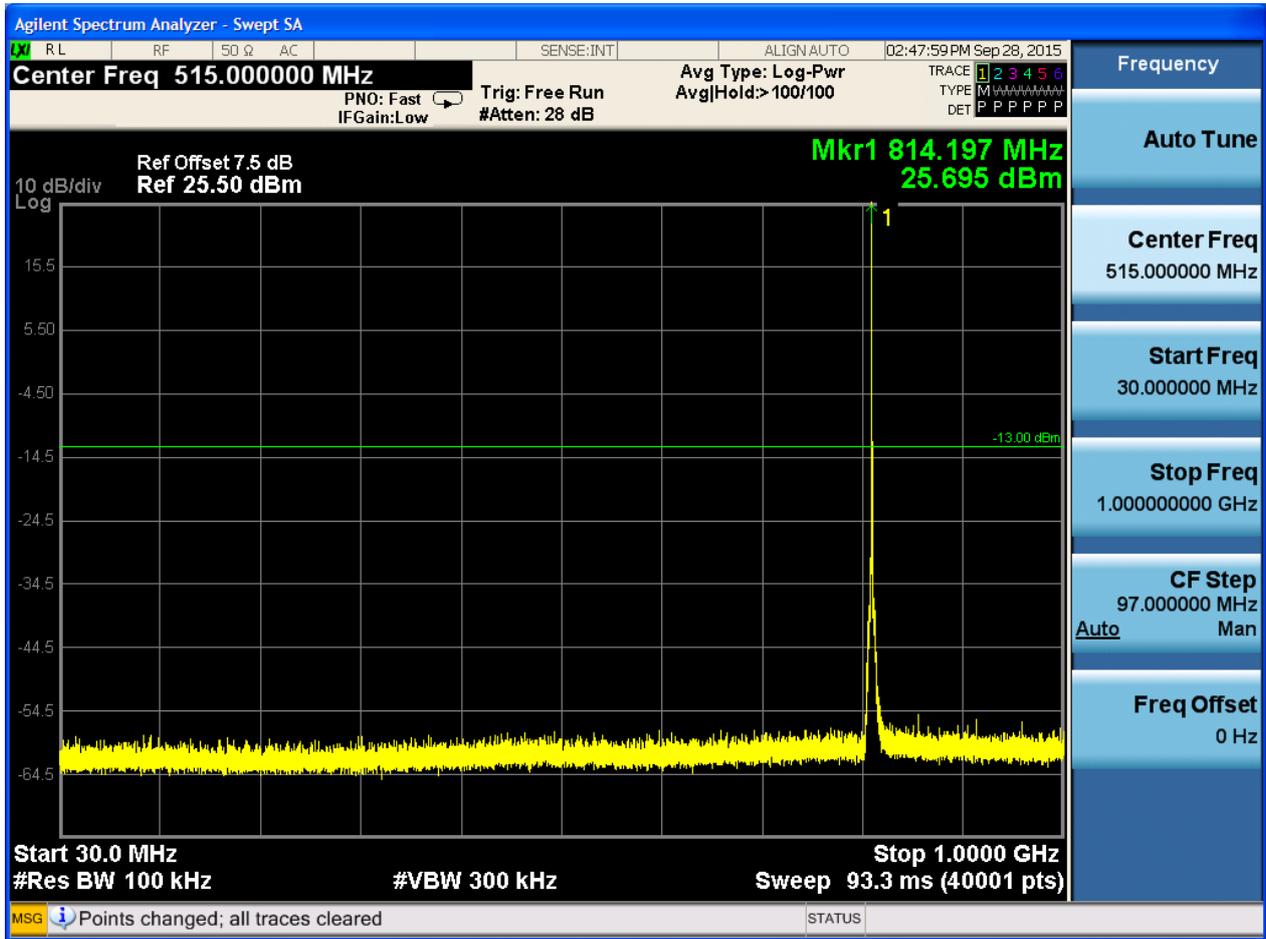
6.1.1.2.1 Test Bandwidth = 1.4

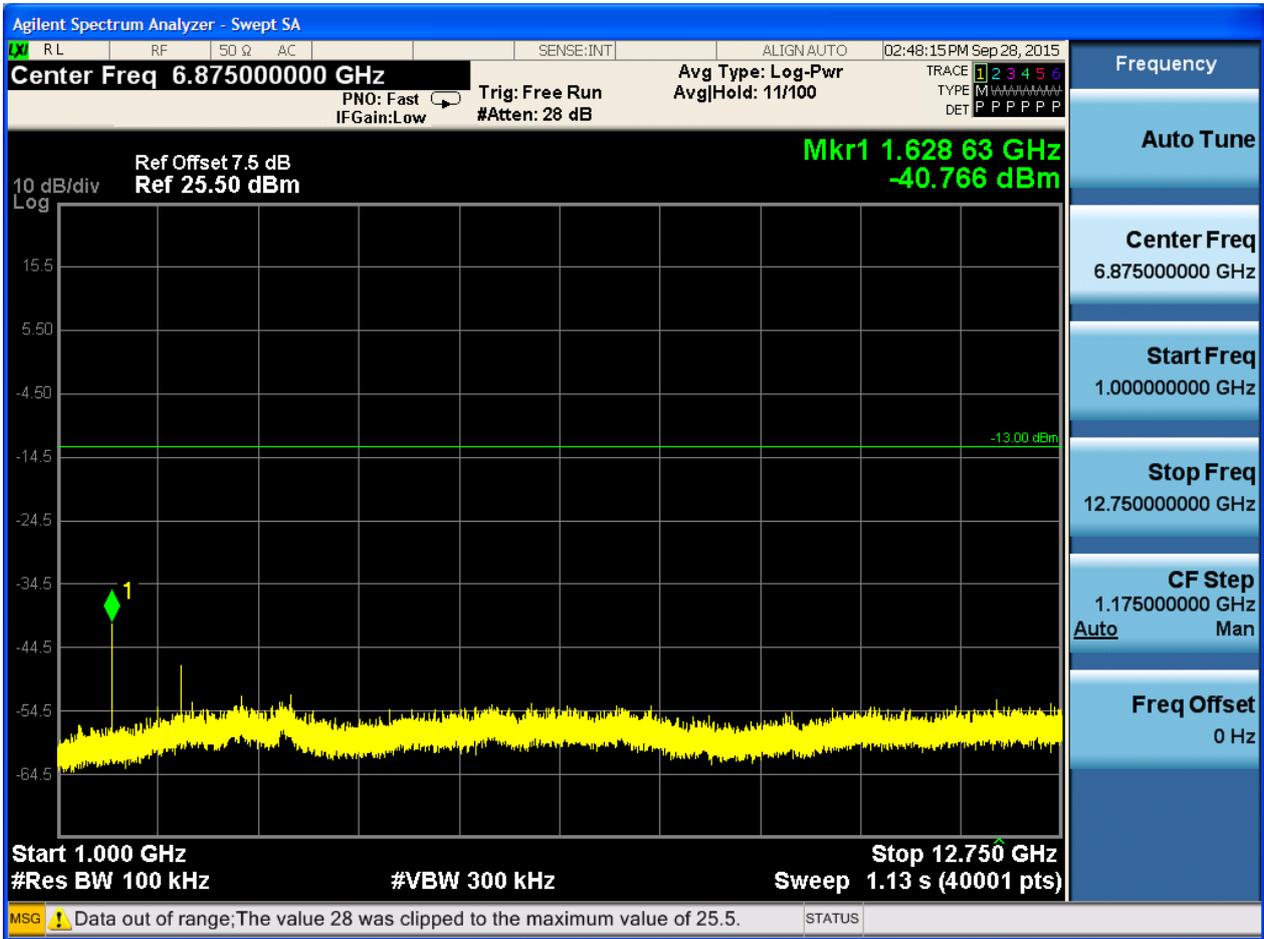
6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0

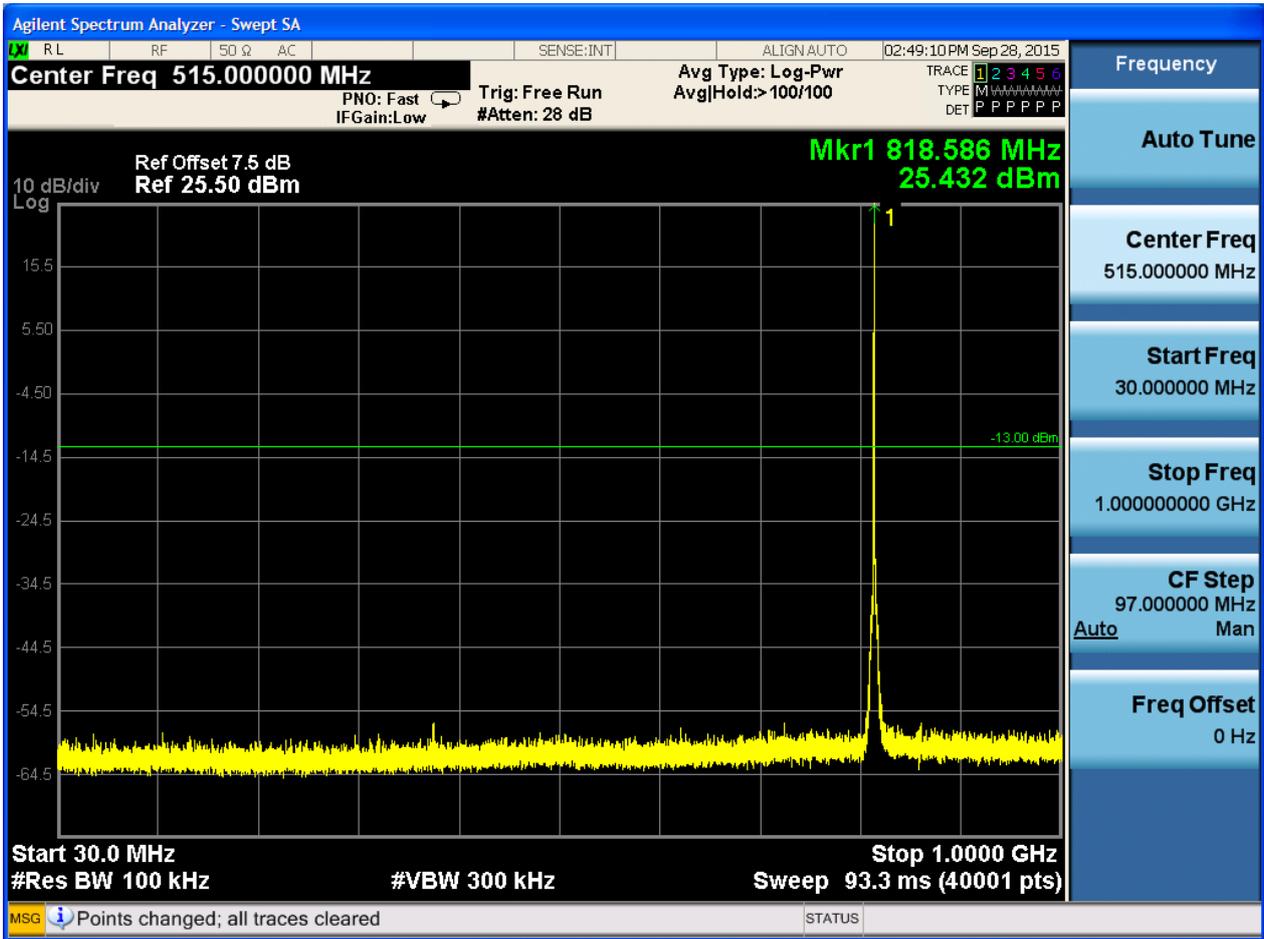


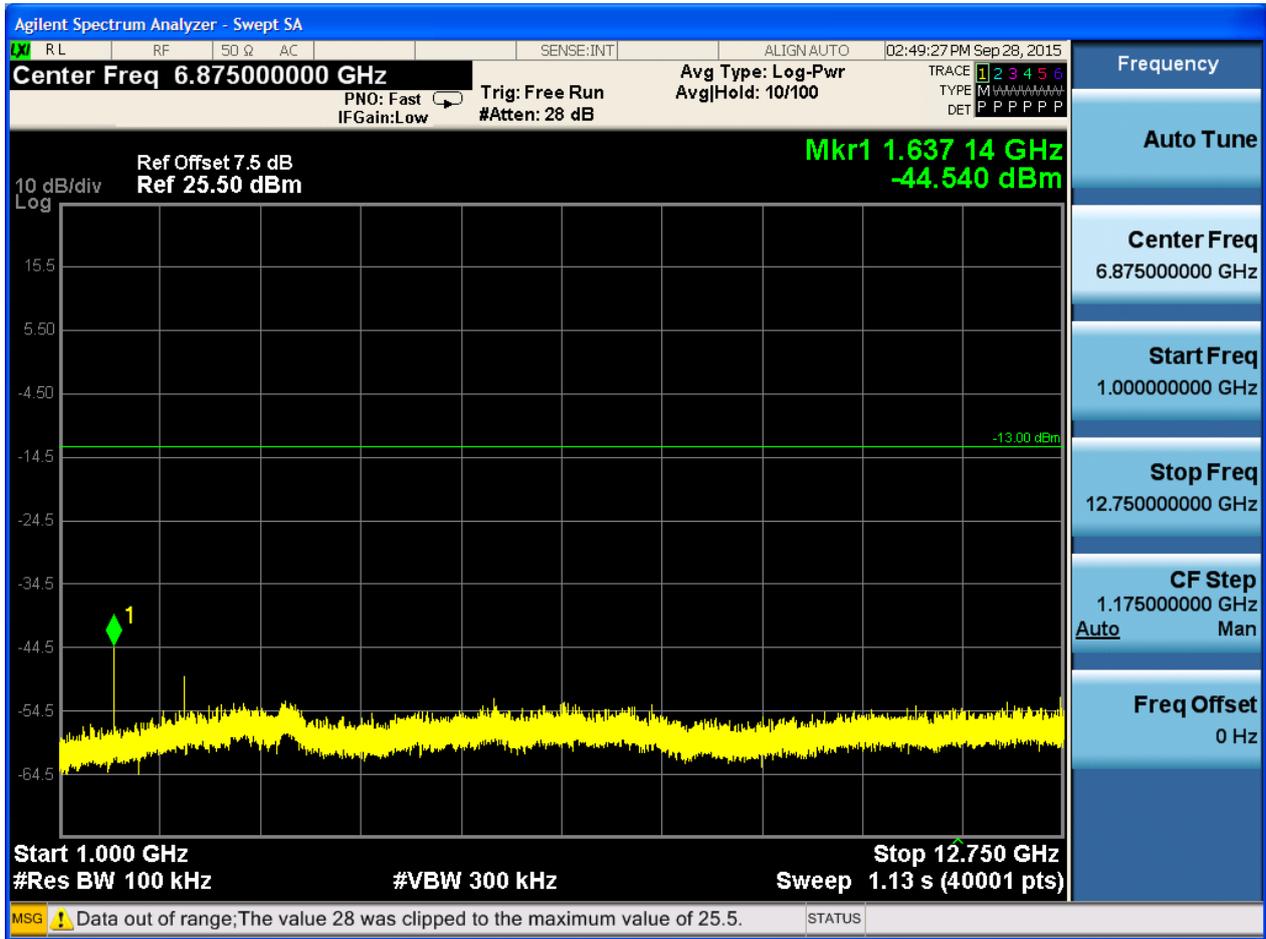








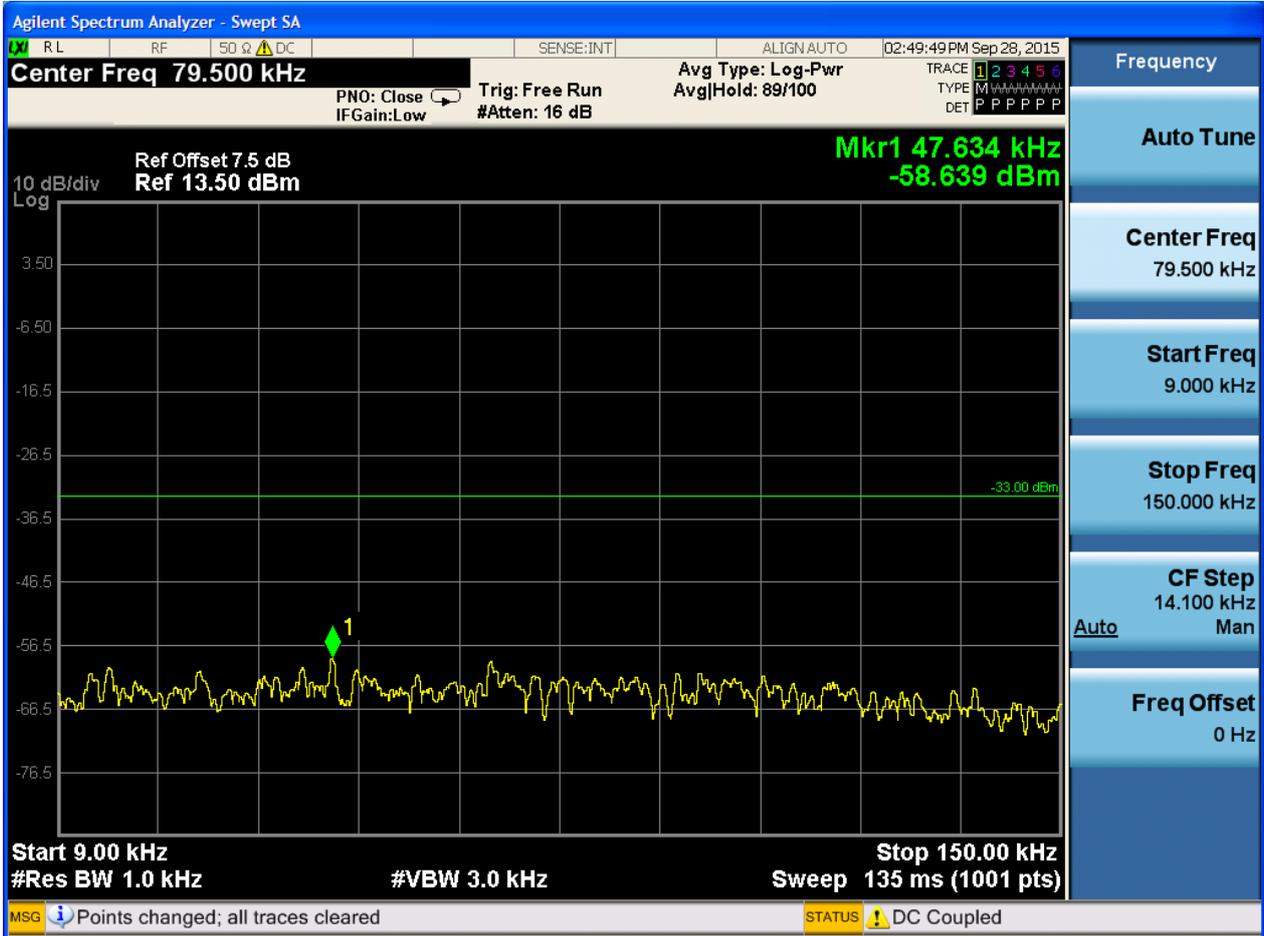


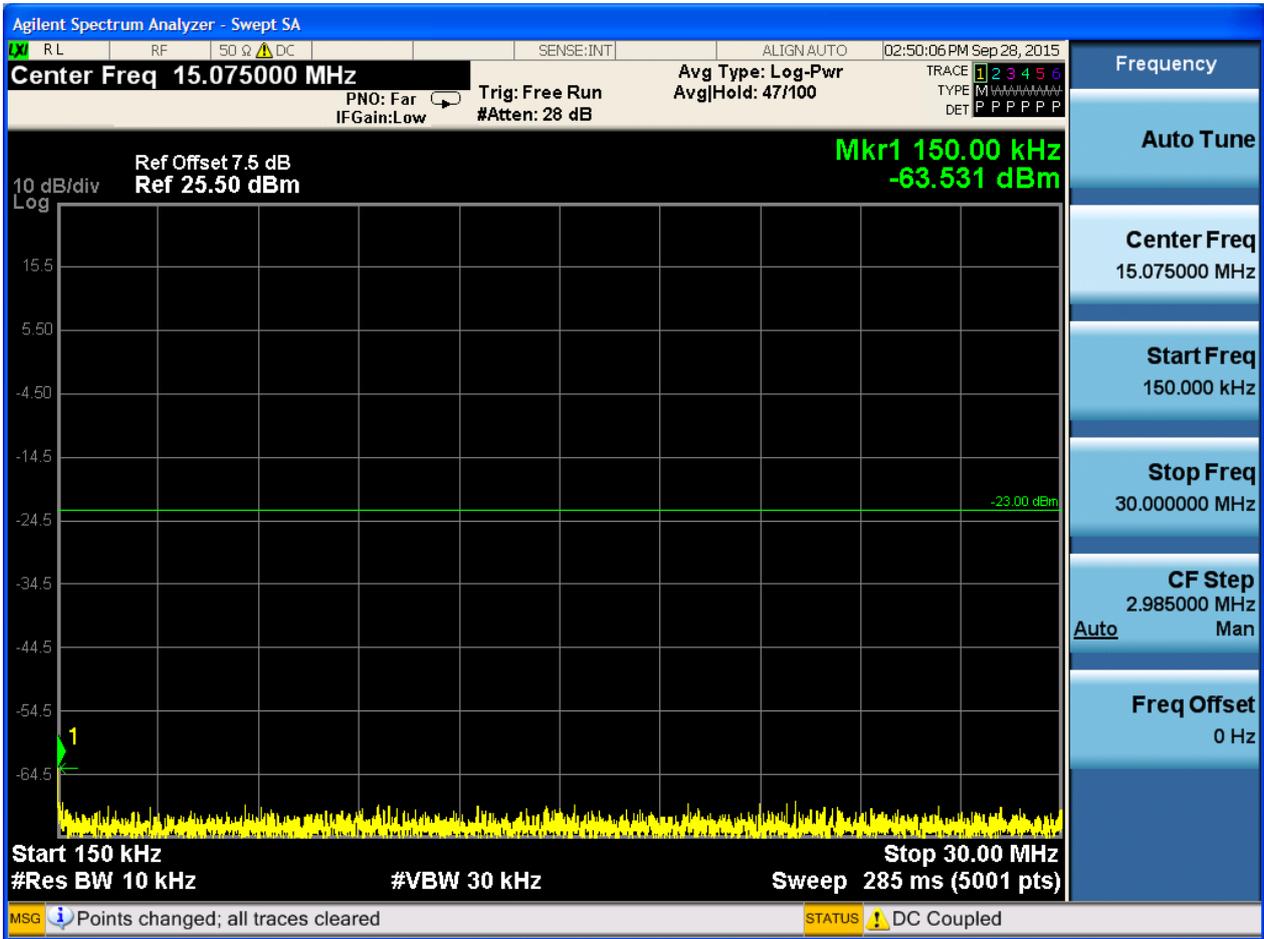


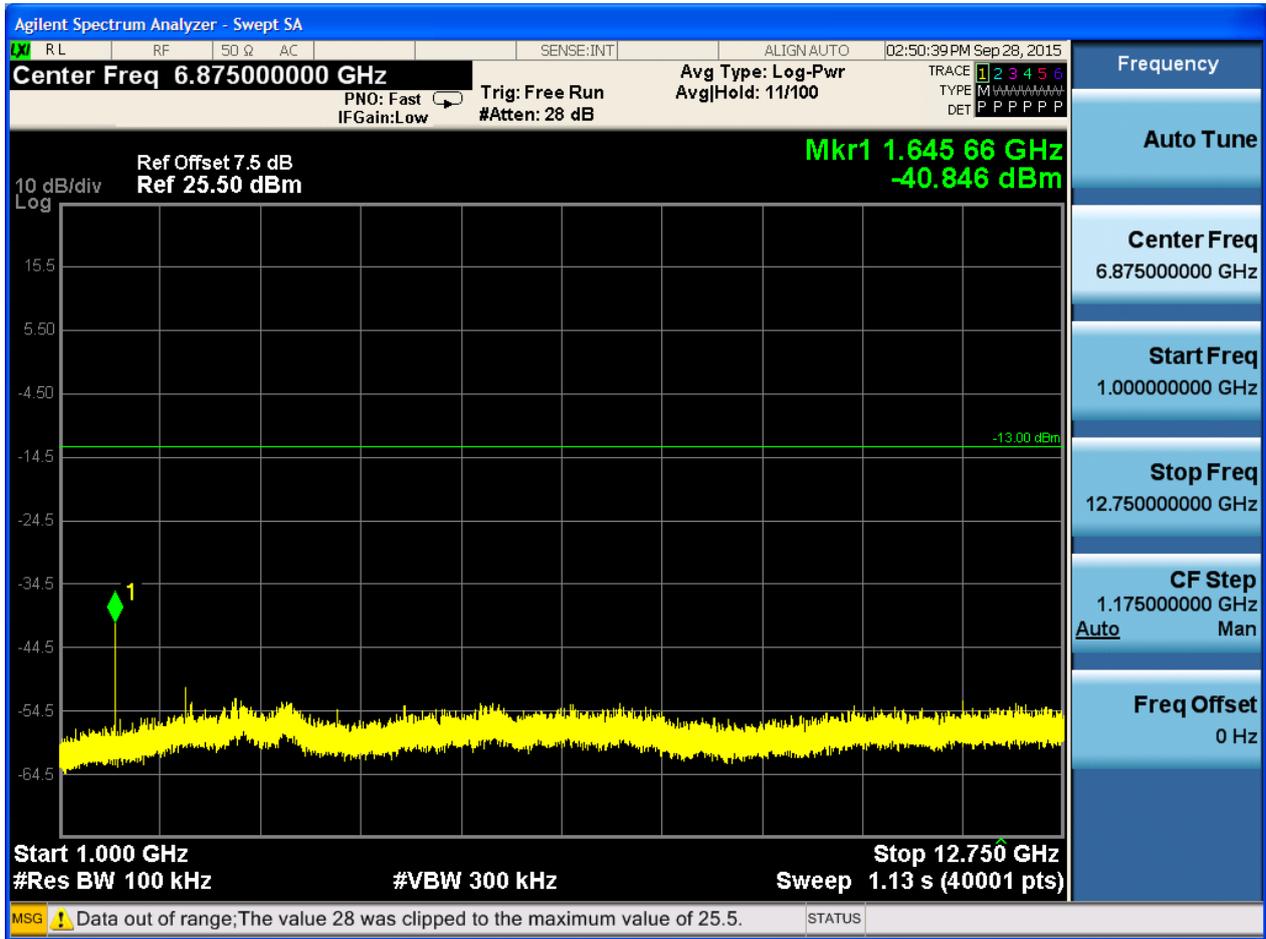


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





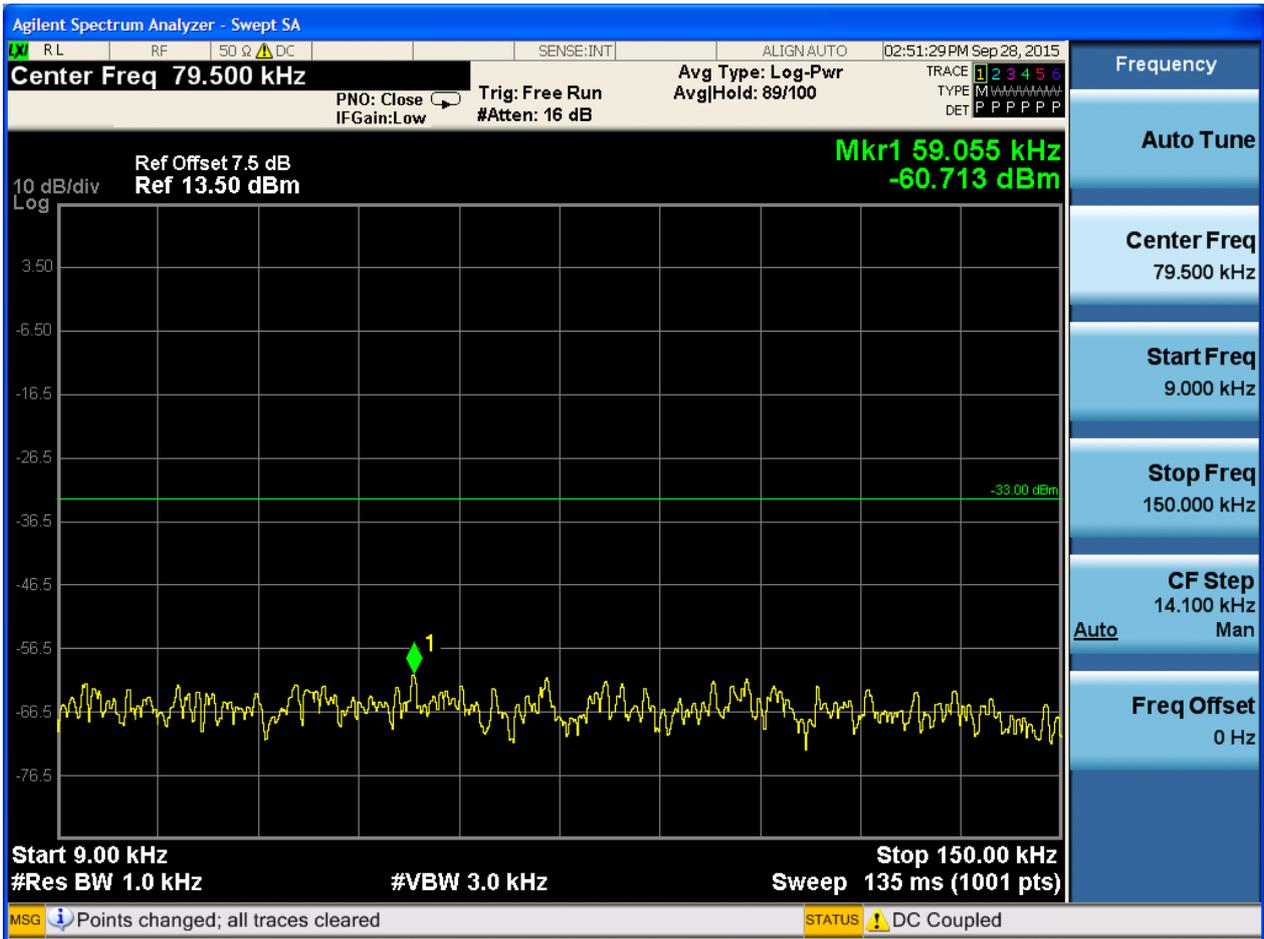


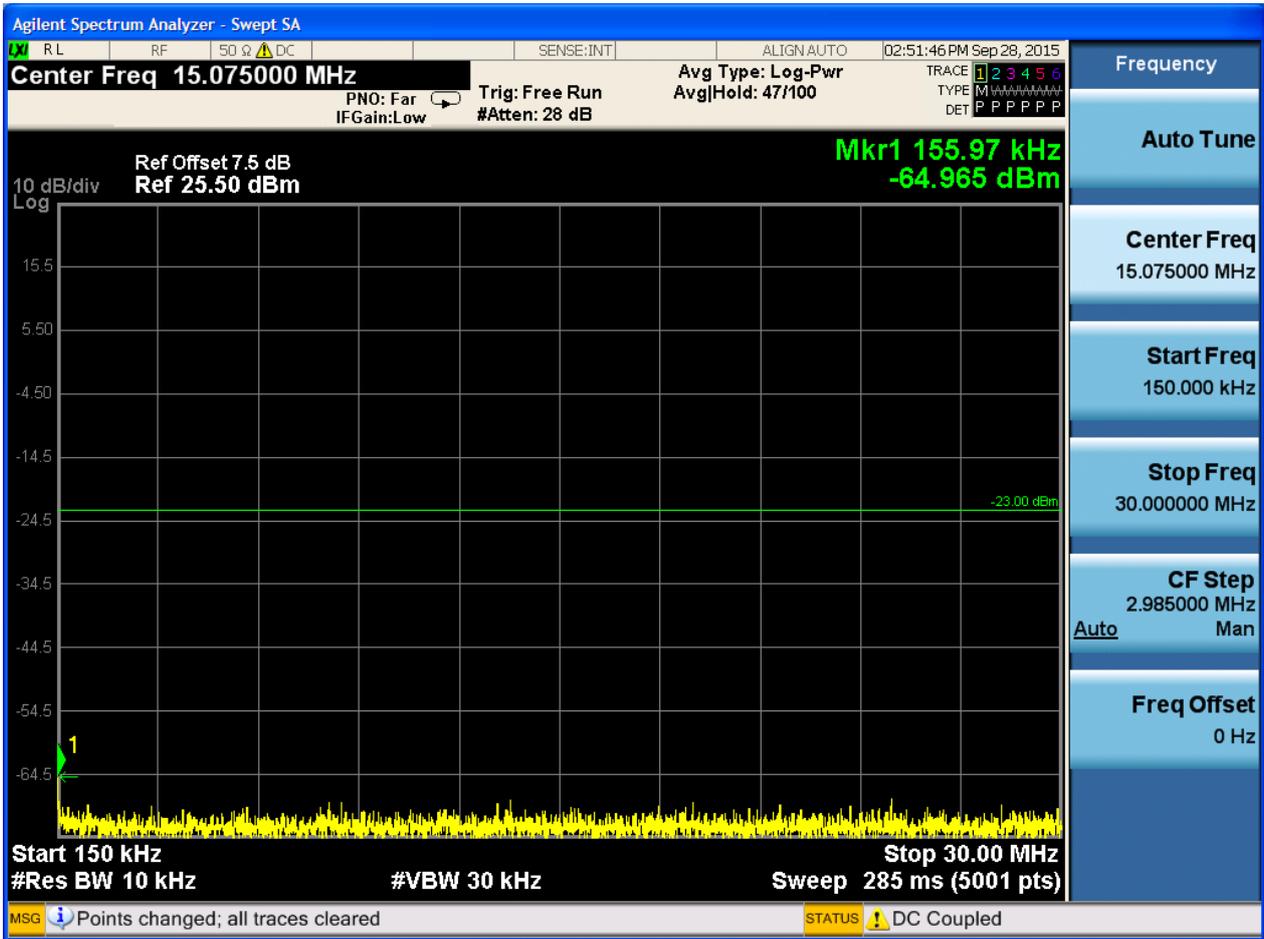


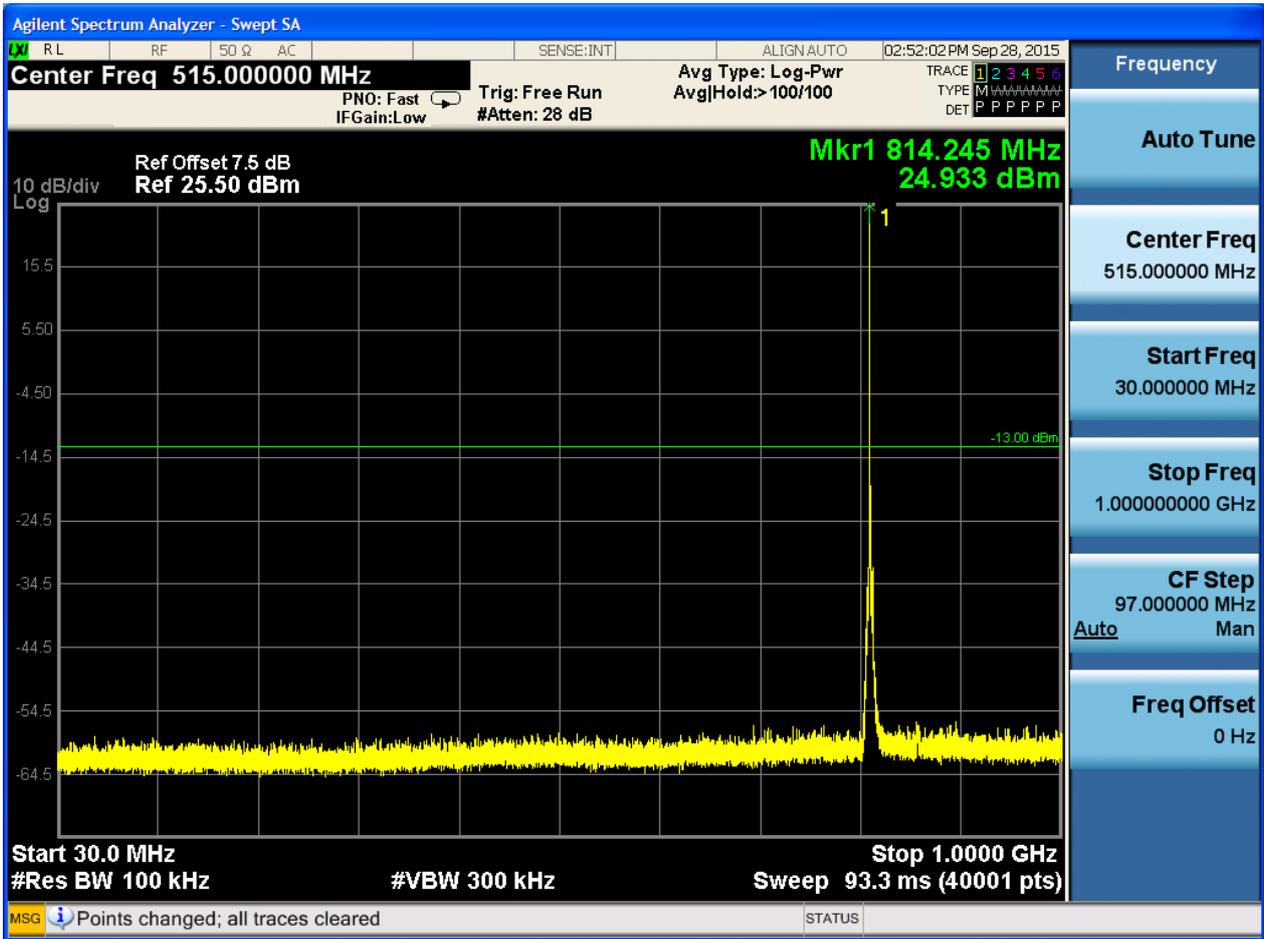
6.1.1.2.2 Test Bandwidth = 3

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



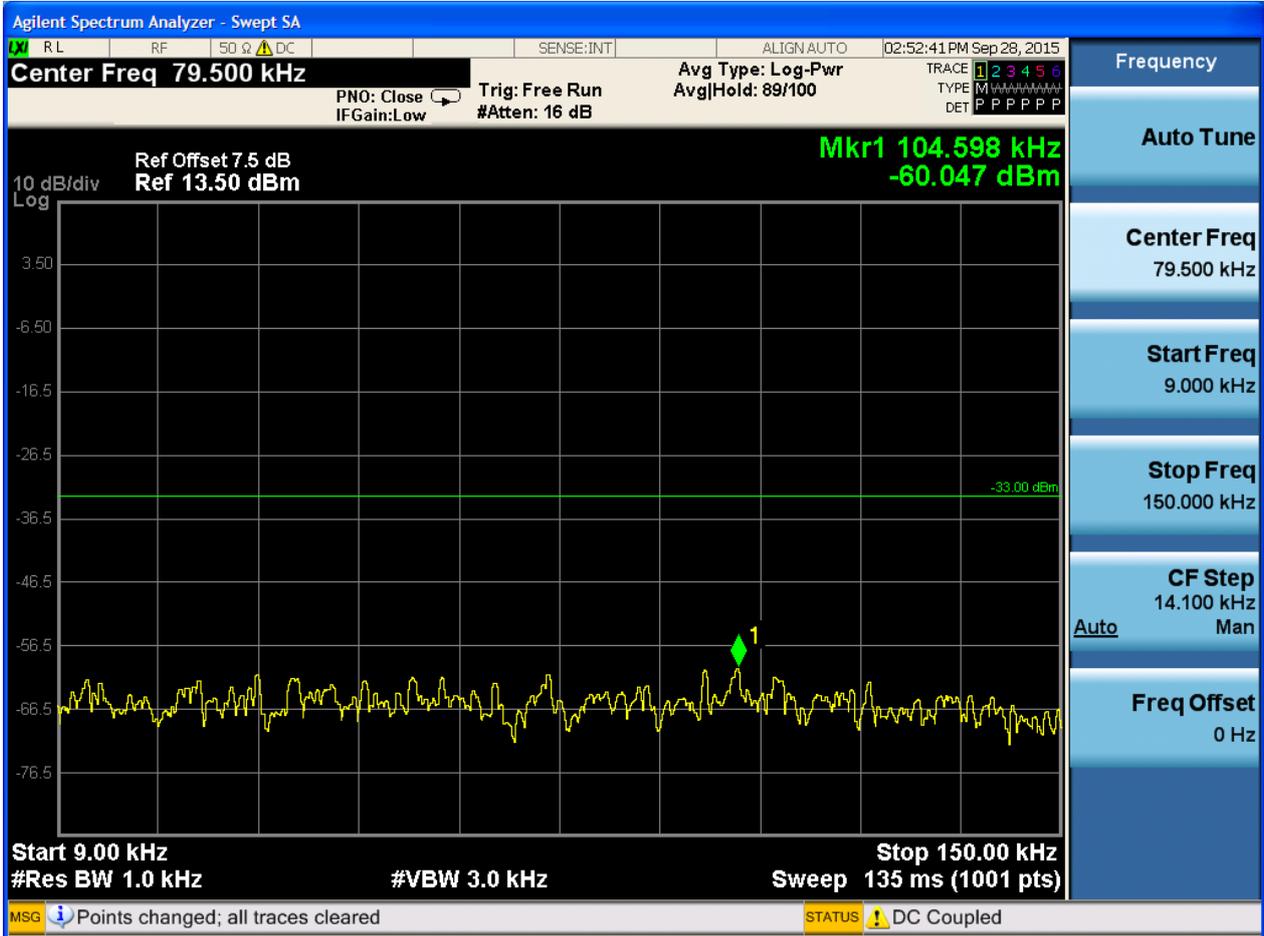


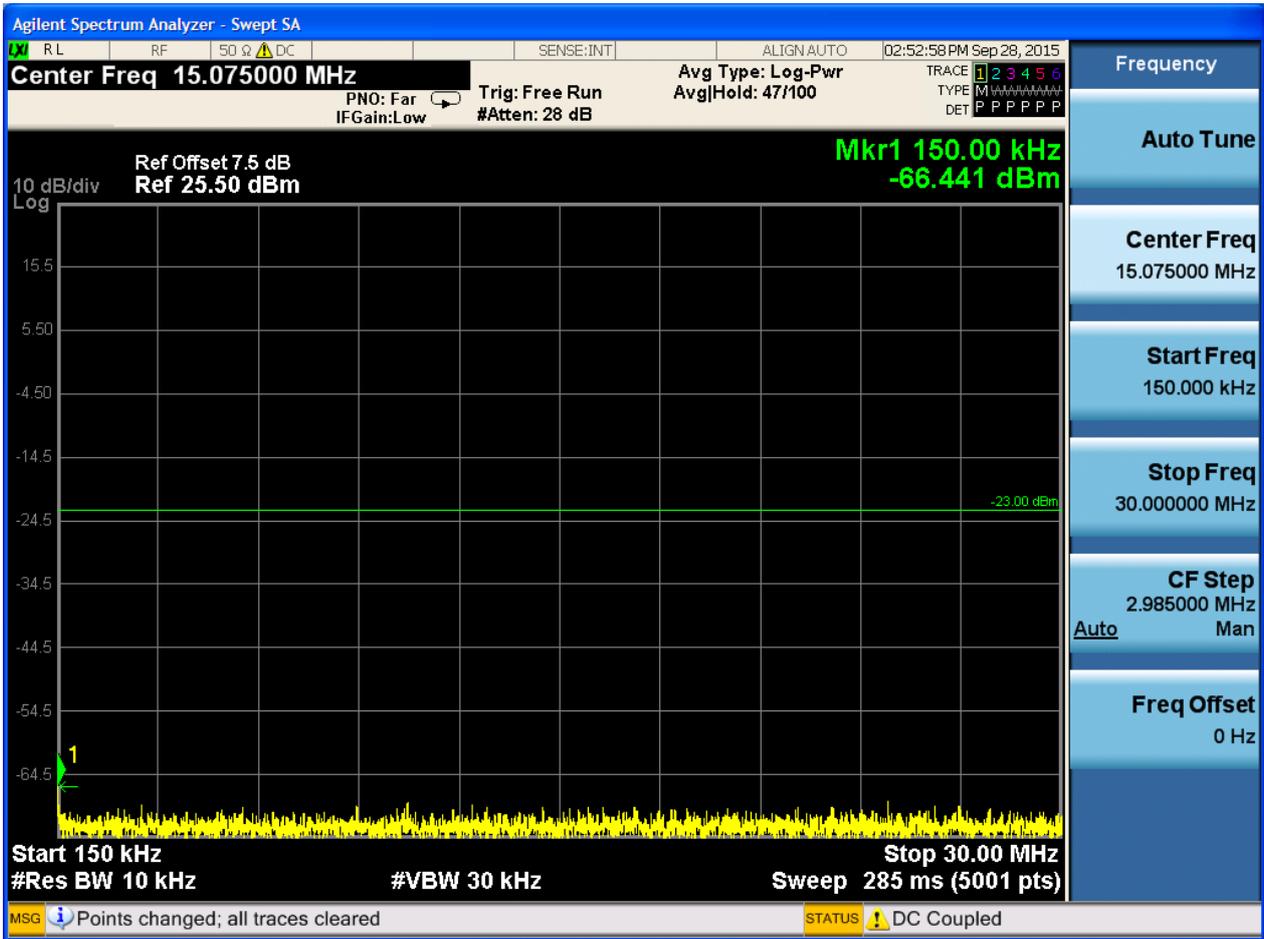


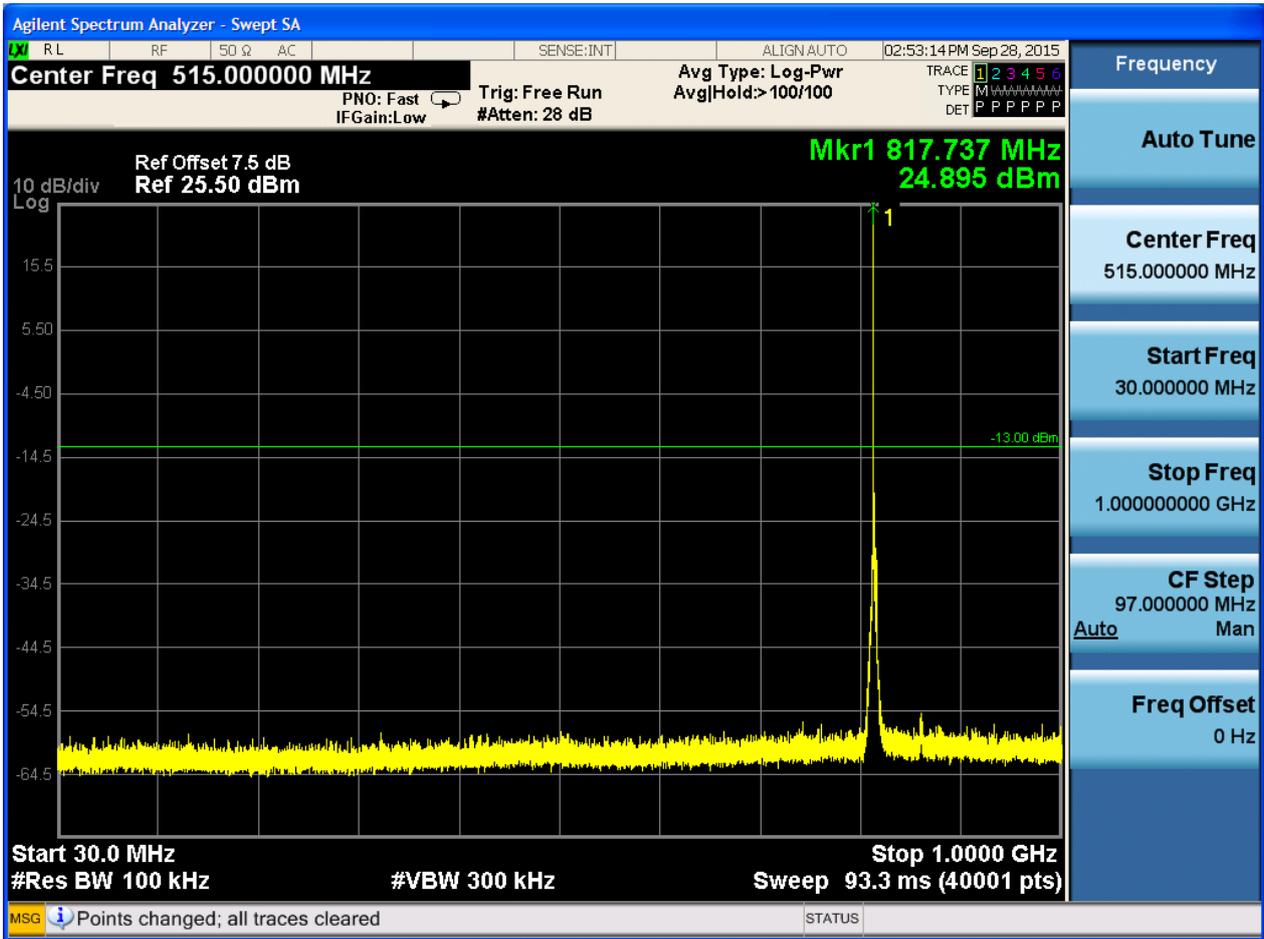


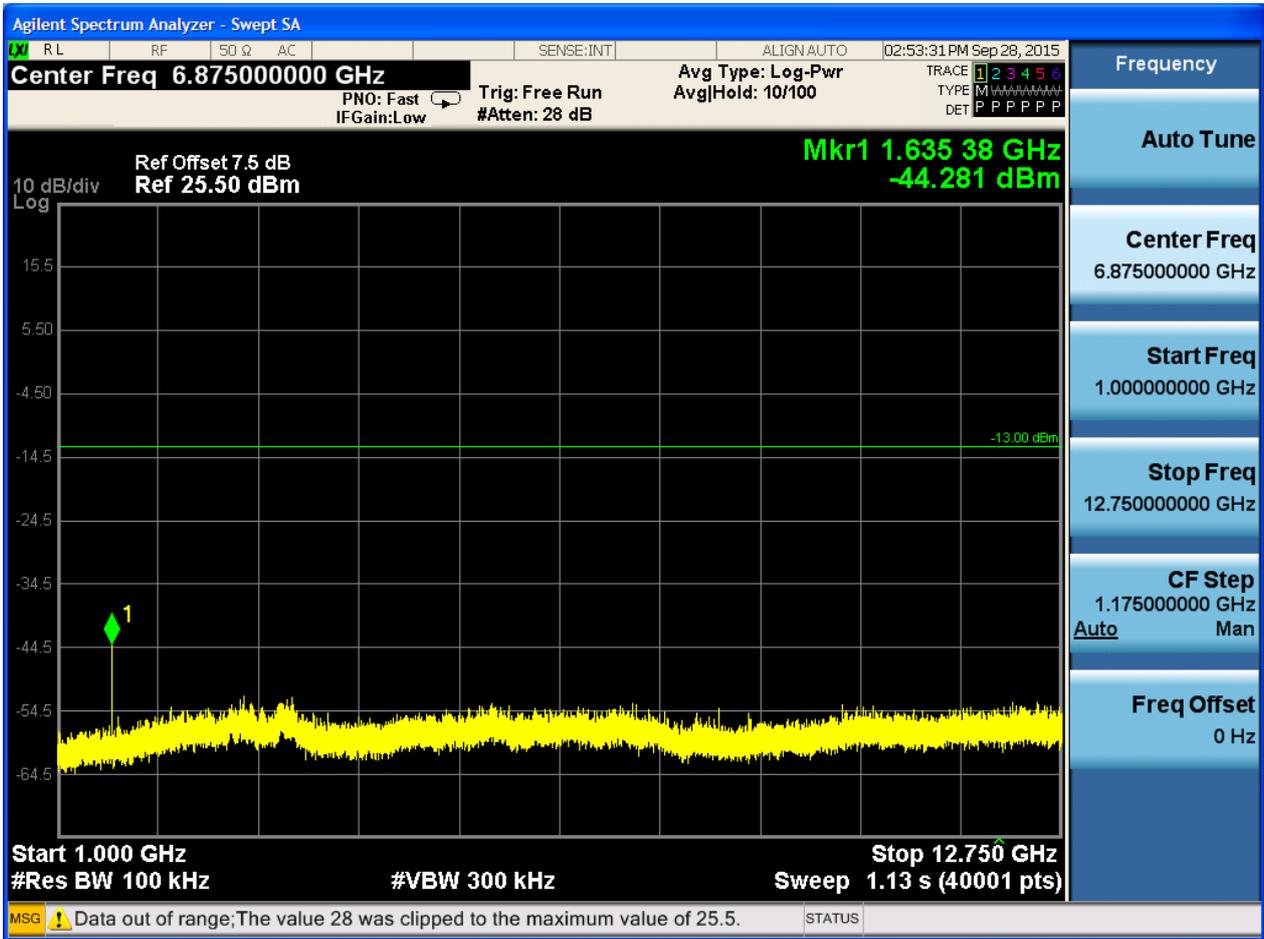
6.1.1.2.2.2 Test Channel = MCH

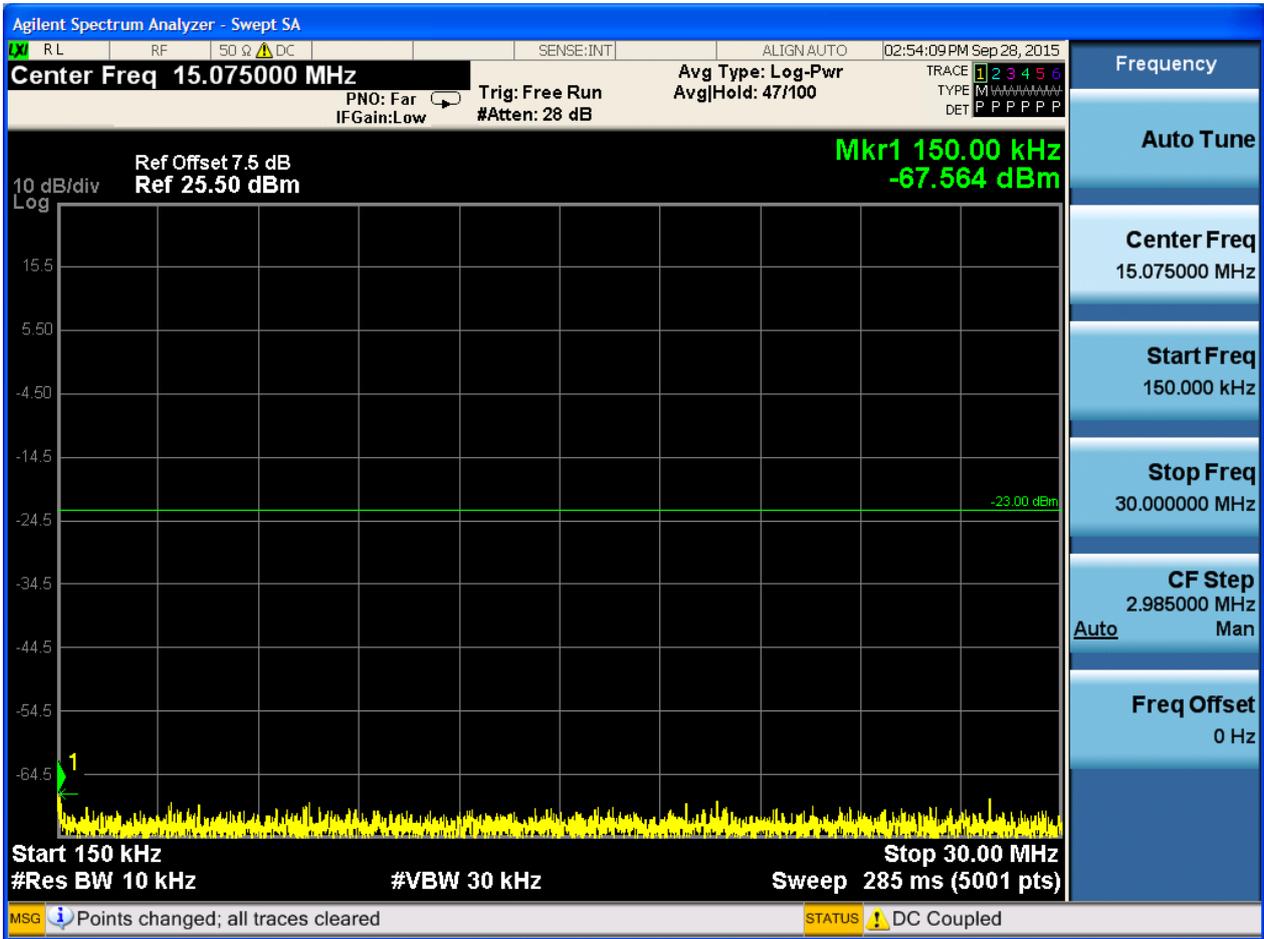
6.1.1.2.2.2.1 Test RB = RB1#0

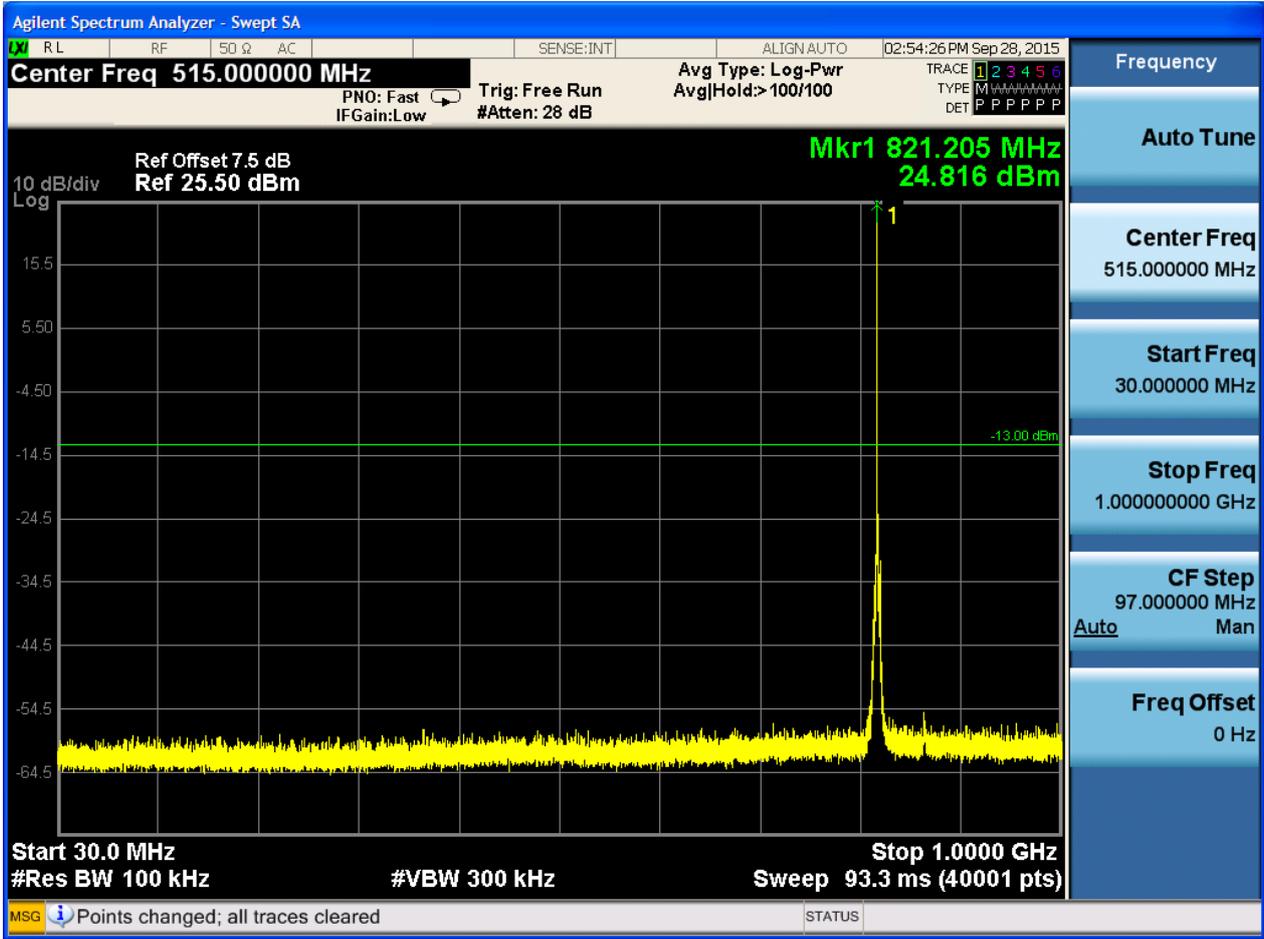


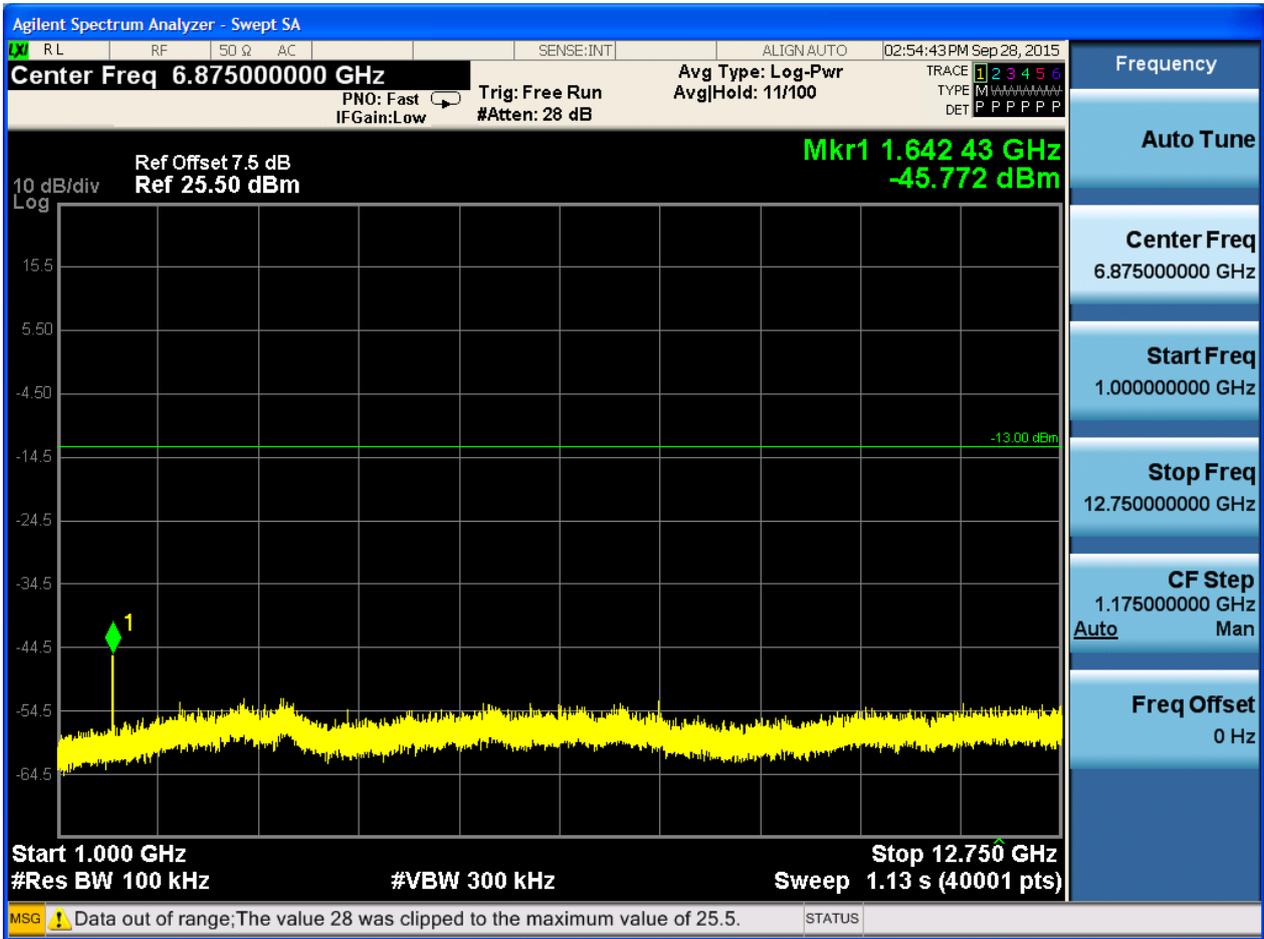














6.1.1.2.3 Test Bandwidth = 5

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0

