



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
BAND5	LTE/TM1	1.4	LCH	RB1#0	22.37	18.42	38.5	PASS
				RB1#3	22.58	18.63	38.5	PASS
				RB1#5	22.45	18.5	38.5	PASS
				RB3#0	22.45	18.5	38.5	PASS
				RB3#2	22.54	18.59	38.5	PASS
				RB3#3	22.5	18.55	38.5	PASS
				RB6#0	21.52	17.57	38.5	PASS
			MCH	RB1#0	22.38	18.43	38.5	PASS
				RB1#3	22.67	18.72	38.5	PASS
				RB1#5	22.59	18.64	38.5	PASS
				RB3#0	22.47	18.52	38.5	PASS
				RB3#2	22.6	18.65	38.5	PASS
				RB3#3	22.6	18.65	38.5	PASS
				RB6#0	21.57	17.62	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	22.79	18.84	38.5	PASS
				RB1#3	23.02	19.07	38.5	PASS
				RB1#5	22.9	18.95	38.5	PASS
				RB3#0	22.87	18.92	38.5	PASS
				RB3#2	22.95	19	38.5	PASS
				RB3#3	22.88	18.93	38.5	PASS
				RB6#0	21.59	17.64	38.5	PASS
		3	LCH	RB1#0	22.18	18.23	38.5	PASS
				RB1#7	22.55	18.6	38.5	PASS
				RB1#14	22.36	18.41	38.5	PASS
				RB8#0	21.41	17.46	38.5	PASS
				RB8#4	21.62	17.67	38.5	PASS
				RB8#7	21.56	17.61	38.5	PASS
				RB15#0	21.54	17.59	38.5	PASS
			MCH	RB1#0	22.29	18.34	38.5	PASS
				RB1#7	22.63	18.68	38.5	PASS
				RB1#14	22.29	18.34	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#0	21.48	17.53	38.5	PASS
				RB8#4	21.59	17.64	38.5	PASS
				RB8#7	21.61	17.66	38.5	PASS
				RB15#0	21.53	17.58	38.5	PASS
			HCH	RB1#0	22.2	18.25	38.5	PASS
				RB1#7	22.97	19.02	38.5	PASS
				RB1#14	22.85	18.9	38.5	PASS
				RB8#0	21.41	17.46	38.5	PASS
				RB8#4	21.56	17.61	38.5	PASS
				RB8#7	21.64	17.69	38.5	PASS
				RB15#0	21.51	17.56	38.5	PASS
		5	LCH	RB1#0	21.96	18.01	38.5	PASS
				RB1#13	22.56	18.61	38.5	PASS
				RB1#24	23.45	19.5	38.5	PASS
				RB12#0	21.42	17.47	38.5	PASS
				RB12#6	21.67	17.72	38.5	PASS
				RB12#13	21.39	17.44	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.34	17.39	38.5	PASS
			MCH	RB1#0	22.24	18.29	38.5	PASS
				RB1#13	22.64	18.69	38.5	PASS
				RB1#24	23.35	19.4	38.5	PASS
				RB12#0	21.43	17.48	38.5	PASS
				RB12#6	21.6	17.65	38.5	PASS
				RB12#13	21.39	17.44	38.5	PASS
				RB25#0	21.4	17.45	38.5	PASS
			HCH	RB1#0	22	18.05	38.5	PASS
				RB1#13	22.55	18.6	38.5	PASS
				RB1#24	23.32	19.37	38.5	PASS
				RB12#0	21.4	17.45	38.5	PASS
				RB12#6	21.6	17.65	38.5	PASS
				RB12#13	21.4	17.45	38.5	PASS
				RB25#0	21.41	17.46	38.5	PASS
		10	LCH	RB1#0	22.21	18.26	38.5	PASS
				RB1#25	22.85	18.9	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	21.93	17.98	38.5	PASS
				RB25#0	21.36	17.41	38.5	PASS
				RB25#13	21.49	17.54	38.5	PASS
				RB25#25	21.48	17.53	38.5	PASS
				RB50#0	21.41	17.46	38.5	PASS
			MCH	RB1#0	22.52	18.57	38.5	PASS
				RB1#25	22.69	18.74	38.5	PASS
				RB1#49	21.87	17.92	38.5	PASS
				RB25#0	21.35	17.4	38.5	PASS
				RB25#13	21.43	17.48	38.5	PASS
				RB25#25	21.25	17.3	38.5	PASS
				RB50#0	21.35	17.4	38.5	PASS
			HCH	RB1#0	22.32	18.37	38.5	PASS
				RB1#25	22.65	18.7	38.5	PASS
				RB1#49	21.81	17.86	38.5	PASS
				RB25#0	21.3	17.35	38.5	PASS
				RB25#13	21.56	17.61	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.33	17.38	38.5	PASS
				RB50#0	21.38	17.43	38.5	PASS
	LTE/TM2	1.4	LCH	RB1#0	21.38	17.43	38.5	PASS
				RB1#3	21.74	17.79	38.5	PASS
				RB1#5	21.62	17.67	38.5	PASS
				RB3#0	21.43	17.48	38.5	PASS
				RB3#2	21.53	17.58	38.5	PASS
				RB3#3	21.58	17.63	38.5	PASS
				RB6#0	20.56	16.61	38.5	PASS
			MCH	RB1#0	21.58	17.63	38.5	PASS
				RB1#3	21.86	17.91	38.5	PASS
				RB1#5	21.72	17.77	38.5	PASS
				RB3#0	21.56	17.61	38.5	PASS
				RB3#2	21.59	17.64	38.5	PASS
				RB3#3	21.69	17.74	38.5	PASS
				RB6#0	20.68	16.73	38.5	PASS
			HCH	RB1#0	21.51	17.56	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#3	21.76	17.81	38.5	PASS
				RB1#5	21.71	17.76	38.5	PASS
				RB3#0	21.65	17.7	38.5	PASS
				RB3#2	21.59	17.64	38.5	PASS
				RB3#3	21.55	17.6	38.5	PASS
				RB6#0	20.72	16.77	38.5	PASS
		3	LCH	RB1#0	21.27	17.32	38.5	PASS
				RB1#7	21.81	17.86	38.5	PASS
				RB1#14	21.62	17.67	38.5	PASS
				RB8#0	20.39	16.44	38.5	PASS
				RB8#4	20.52	16.57	38.5	PASS
				RB8#7	20.54	16.59	38.5	PASS
				RB15#0	20.48	16.53	38.5	PASS
			MCH	RB1#0	21.71	17.76	38.5	PASS
				RB1#7	22	18.05	38.5	PASS
				RB1#14	21.58	17.63	38.5	PASS
				RB8#0	20.44	16.49	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#4	20.59	16.64	38.5	PASS
				RB8#7	20.56	16.61	38.5	PASS
				RB15#0	20.49	16.54	38.5	PASS
			HCH	RB1#0	21.65	17.7	38.5	PASS
				RB1#7	21.6	17.65	38.5	PASS
				RB1#14	21.82	17.87	38.5	PASS
				RB8#0	20.47	16.52	38.5	PASS
				RB8#4	20.63	16.68	38.5	PASS
				RB8#7	20.71	16.76	38.5	PASS
				RB15#0	20.55	16.6	38.5	PASS
		5	LCH	RB1#0	21.07	17.12	38.5	PASS
				RB1#13	21.62	17.67	38.5	PASS
				RB1#24	22.14	18.19	38.5	PASS
				RB12#0	20.45	16.5	38.5	PASS
				RB12#6	20.7	16.75	38.5	PASS
				RB12#13	20.41	16.46	38.5	PASS
				RB25#0	20.29	16.34	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			MCH	RB1#0	21.55	17.6	38.5	PASS
				RB1#13	21.97	18.02	38.5	PASS
				RB1#24	22.2	18.25	38.5	PASS
				RB12#0	20.48	16.53	38.5	PASS
				RB12#6	20.66	16.71	38.5	PASS
				RB12#13	20.45	16.5	38.5	PASS
				RB25#0	20.38	16.43	38.5	PASS
			HCH	RB1#0	21.24	17.29	38.5	PASS
				RB1#13	21.73	17.78	38.5	PASS
				RB1#24	22.55	18.6	38.5	PASS
				RB12#0	20.46	16.51	38.5	PASS
				RB12#6	20.66	16.71	38.5	PASS
				RB12#13	20.48	16.53	38.5	PASS
				RB25#0	20.38	16.43	38.5	PASS
		10	LCH	RB1#0	21.42	17.47	38.5	PASS
				RB1#25	21.99	18.04	38.5	PASS
				RB1#49	21.25	17.3	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.37	16.42	38.5	PASS
				RB25#13	20.48	16.53	38.5	PASS
				RB25#25	20.48	16.53	38.5	PASS
				RB50#0	20.39	16.44	38.5	PASS
			MCH	RB1#0	21.79	17.84	38.5	PASS
				RB1#25	21.93	17.98	38.5	PASS
				RB1#49	21.12	17.17	38.5	PASS
				RB25#0	20.33	16.38	38.5	PASS
				RB25#13	20.39	16.44	38.5	PASS
				RB25#25	20.23	16.28	38.5	PASS
				RB50#0	20.32	16.37	38.5	PASS
			HCH	RB1#0	21.48	17.53	38.5	PASS
				RB1#25	21.8	17.85	38.5	PASS
				RB1#49	20.99	17.04	38.5	PASS
				RB25#0	20.24	16.29	38.5	PASS
				RB25#13	20.5	16.55	38.5	PASS
				RB25#25	20.28	16.33	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB50#0	20.33	16.38	38.5	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:

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

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

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

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
BAND5	LTE/TM1	1.4	LCH	RB1#0	4.45	13	PASS
				RB1#3	4.22	13	PASS
				RB1#5	4.38	13	PASS
				RB3#0	4.8	13	PASS
				RB3#2	4.59	13	PASS
				RB3#3	4.7	13	PASS
				RB6#0	5.69	13	PASS
			MCH	RB1#0	4.49	13	PASS
				RB1#3	4.31	13	PASS
				RB1#5	4.51	13	PASS
				RB3#0	5.06	13	PASS
				RB3#2	4.91	13	PASS
				RB3#3	4.8	13	PASS
				RB6#0	5.85	13	PASS
			HCH	RB1#0	3.74	13	PASS
				RB1#3	3.6	13	PASS
				RB1#5	3.73	13	PASS
				RB3#0	4.18	13	PASS
				RB3#2	4.02	13	PASS
				RB3#3	4.23	13	PASS
				RB6#0	5.48	13	PASS
		3	LCH	RB1#0	4.56	13	PASS
				RB1#7	4.33	13	PASS
				RB1#14	4.4	13	PASS
				RB8#0	5.4	13	PASS
				RB8#4	5.26	13	PASS
				RB8#7	5.32	13	PASS
				RB15#0	5.74	13	PASS
			MCH	RB1#0	4.83	13	PASS
				RB1#7	4.2	13	PASS
				RB1#14	4.58	13	PASS
				RB8#0	5.57	13	PASS
				RB8#4	5.45	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#7	5.42	13	PASS
				RB15#0	5.79	13	PASS
			HCH	RB1#0	4.06	13	PASS
				RB1#7	3.75	13	PASS
				RB1#14	3.85	13	PASS
				RB8#0	5.27	13	PASS
				RB8#4	5.01	13	PASS
				RB8#7	5.09	13	PASS
				RB15#0	5.48	13	PASS
		5	LCH	RB1#0	4.79	13	PASS
				RB1#13	4.33	13	PASS
				RB1#24	3.85	13	PASS
				RB12#0	5.59	13	PASS
				RB12#6	5.31	13	PASS
				RB12#13	5.56	13	PASS
				RB25#0	6	13	PASS
			MCH	RB1#0	4.74	13	PASS
				RB1#13	4.48	13	PASS
				RB1#24	4.08	13	PASS
				RB12#0	5.79	13	PASS
				RB12#6	5.62	13	PASS
				RB12#13	5.73	13	PASS
				RB25#0	5.98	13	PASS
			HCH	RB1#0	4.56	13	PASS
				RB1#13	4.04	13	PASS
				RB1#24	3.65	13	PASS
				RB12#0	5.46	13	PASS
				RB12#6	5.17	13	PASS
				RB12#13	5.31	13	PASS
				RB25#0	5.72	13	PASS
		10	LCH	RB1#0	4.42	13	PASS
				RB1#25	4.03	13	PASS
				RB1#49	4.56	13	PASS
				RB25#0	5.85	13	PASS
				RB25#13	5.68	13	PASS
				RB25#25	5.91	13	PASS
				RB50#0	6.2	13	PASS
			MCH	RB1#0	4.22	13	PASS
				RB1#25	4.15	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#49	4.48	13	PASS
				RB25#0	6.01	13	PASS
				RB25#13	5.81	13	PASS
				RB25#25	6.1	13	PASS
				RB50#0	6.28	13	PASS
			HCH	RB1#0	4.39	13	PASS
				RB1#25	4.05	13	PASS
				RB1#49	4.19	13	PASS
				RB25#0	6.01	13	PASS
				RB25#13	5.52	13	PASS
				RB25#25	5.62	13	PASS
				RB50#0	6.03	13	PASS
	LTE/TM2	1.4	LCH	RB1#0	5.47	13	PASS
				RB1#3	5.27	13	PASS
				RB1#5	5.4	13	PASS
				RB3#0	5.55	13	PASS
				RB3#2	5.44	13	PASS
				RB3#3	5.55	13	PASS
				RB6#0	6.41	13	PASS
			MCH	RB1#0	5.49	13	PASS
				RB1#3	5.17	13	PASS
				RB1#5	5.51	13	PASS
				RB3#0	5.52	13	PASS
				RB3#2	5.52	13	PASS
				RB3#3	5.61	13	PASS
				RB6#0	6.78	13	PASS
			HCH	RB1#0	4.74	13	PASS
				RB1#3	4.79	13	PASS
				RB1#5	4.7	13	PASS
				RB3#0	5.12	13	PASS
				RB3#2	5.01	13	PASS
				RB3#3	5.15	13	PASS
				RB6#0	6.29	13	PASS
		3	LCH	RB1#0	5.79	13	PASS
				RB1#7	5.46	13	PASS
				RB1#14	5.17	13	PASS
				RB8#0	6.19	13	PASS
				RB8#4	6.1	13	PASS
				RB8#7	6.27	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB15#0	6.54	13	PASS
				RB1#0	5.33	13	PASS
			MCH	RB1#7	5.11	13	PASS
				RB1#14	5.37	13	PASS
				RB8#0	6.28	13	PASS
				RB8#4	6.18	13	PASS
				RB8#7	6.2	13	PASS
				RB15#0	6.75	13	PASS
			HCH	RB1#0	5.07	13	PASS
				RB1#7	4.96	13	PASS
				RB1#14	5.07	13	PASS
				RB8#0	5.97	13	PASS
				RB8#4	5.93	13	PASS
				RB8#7	5.97	13	PASS
				RB15#0	6.53	13	PASS
		5	LCH	RB1#0	5.55	13	PASS
				RB1#13	5.2	13	PASS
				RB1#24	4.87	13	PASS
				RB12#0	6.42	13	PASS
				RB12#6	6.21	13	PASS
				RB12#13	6.44	13	PASS
				RB25#0	6.73	13	PASS
			MCH	RB1#0	5.66	13	PASS
				RB1#13	5.44	13	PASS
				RB1#24	5.18	13	PASS
				RB12#0	6.65	13	PASS
				RB12#6	6.54	13	PASS
				RB12#13	6.6	13	PASS
				RB25#0	6.98	13	PASS
			HCH	RB1#0	5.59	13	PASS
				RB1#13	5.01	13	PASS
				RB1#24	4.36	13	PASS
				RB12#0	6.31	13	PASS
				RB12#6	5.97	13	PASS
				RB12#13	6.13	13	PASS
				RB25#0	6.64	13	PASS
		10	LCH	RB1#0	5.38	13	PASS
				RB1#25	4.93	13	PASS
				RB1#49	5.54	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	6.8	13	PASS
				RB25#13	6.62	13	PASS
				RB25#25	6.84	13	PASS
				RB50#0	6.96	13	PASS
			MCH	RB1#0	5.32	13	PASS
				RB1#25	5.29	13	PASS
				RB1#49	5.77	13	PASS
				RB25#0	6.87	13	PASS
				RB25#13	6.7	13	PASS
				RB25#25	6.93	13	PASS
				RB50#0	7.12	13	PASS
			HCH	RB1#0	5.42	13	PASS
				RB1#25	4.95	13	PASS
				RB1#49	5.15	13	PASS
				RB25#0	6.99	13	PASS
				RB25#13	6.5	13	PASS
				RB25#25	6.58	13	PASS
				RB50#0	6.88	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

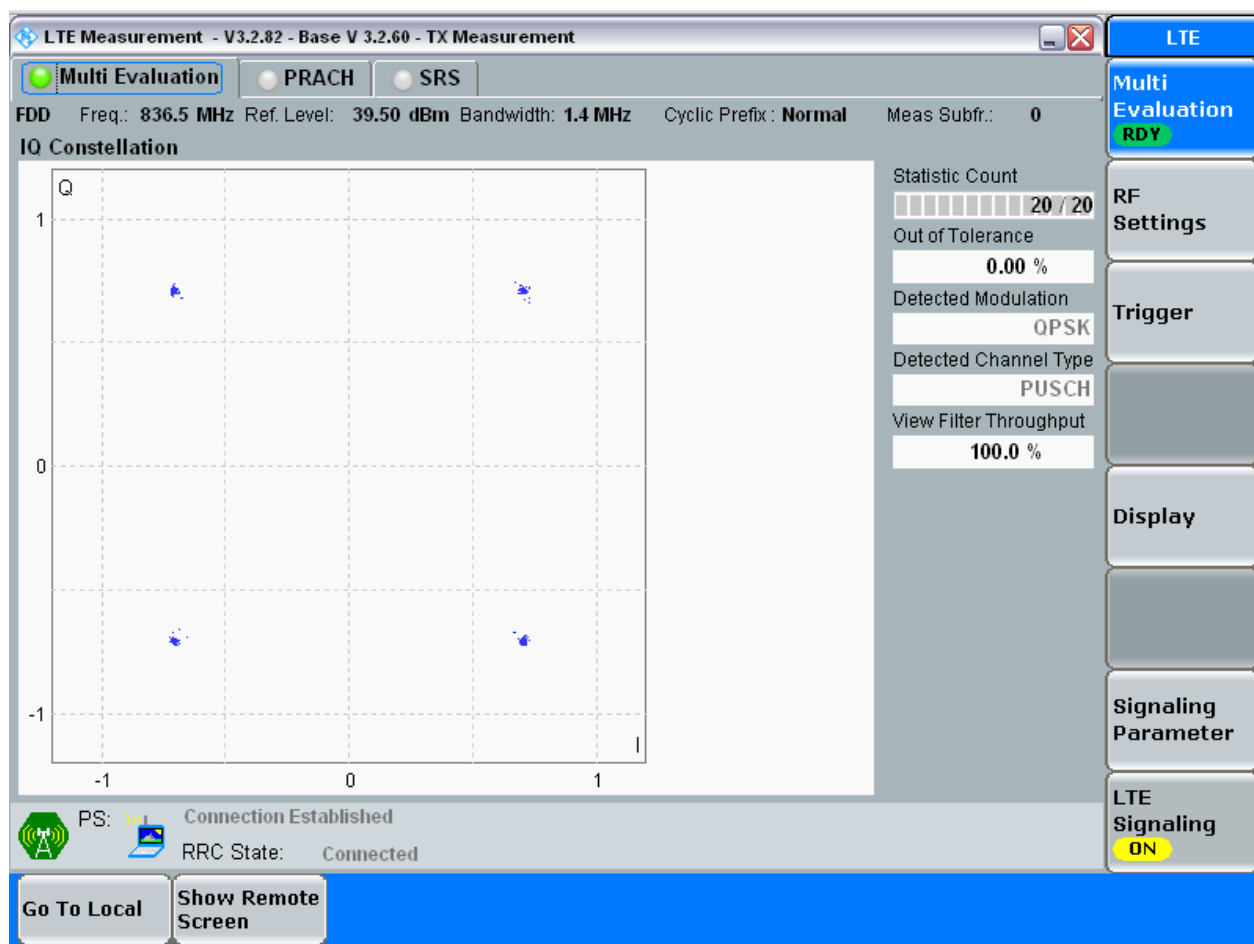
3.1.1 Test Band = BAND5

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

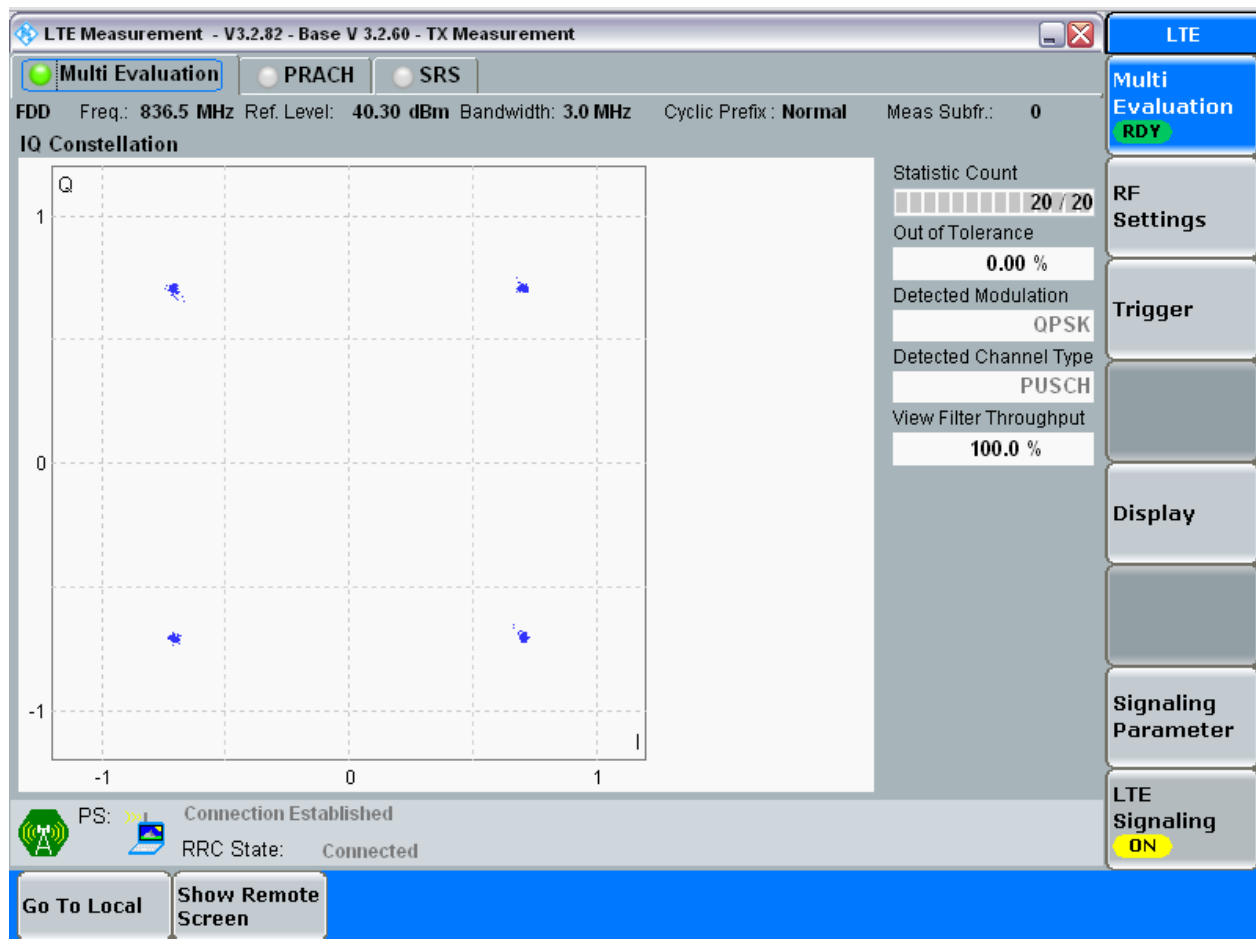
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

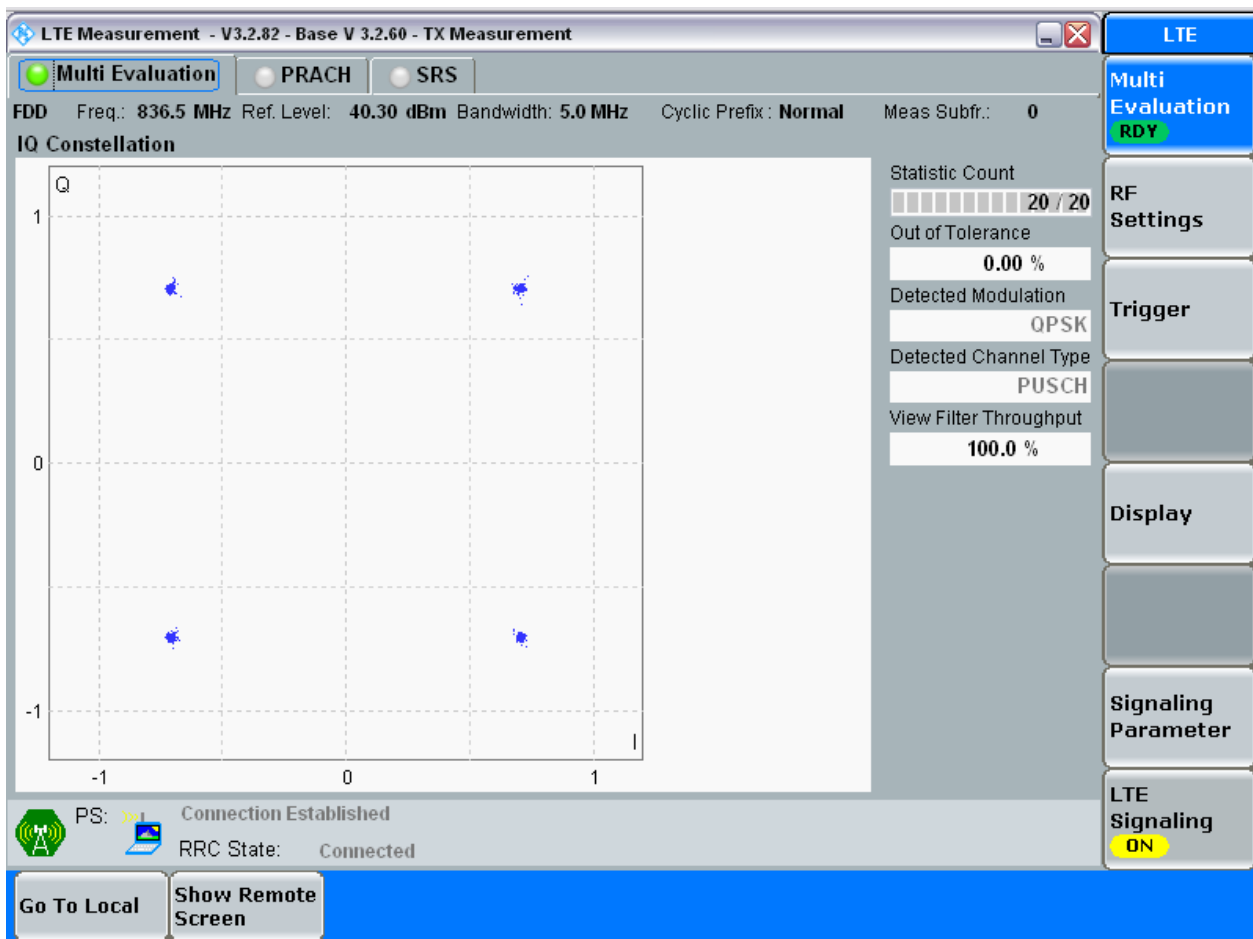
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

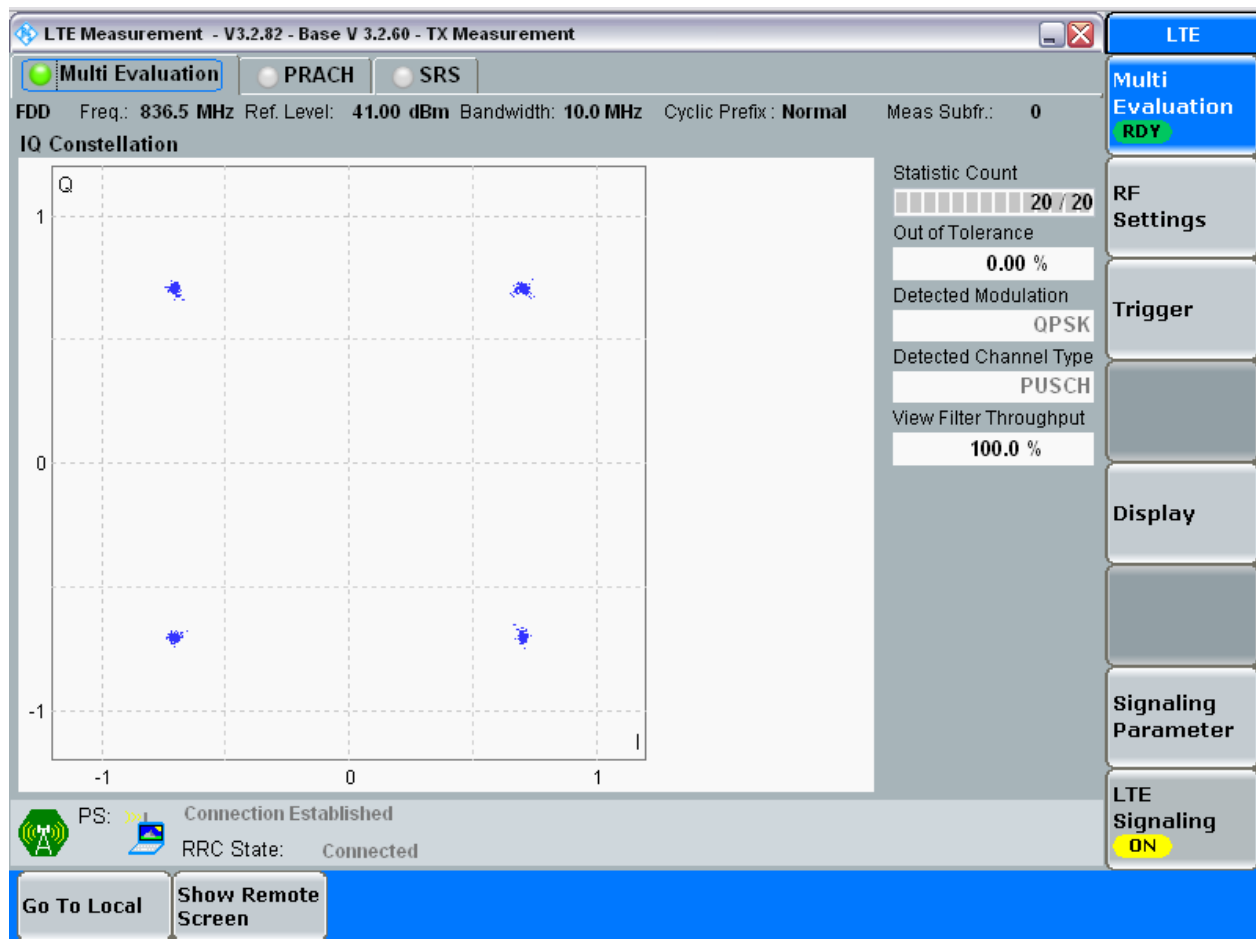
3.1.1.1.3.1.1 Test RB = RB25#0



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

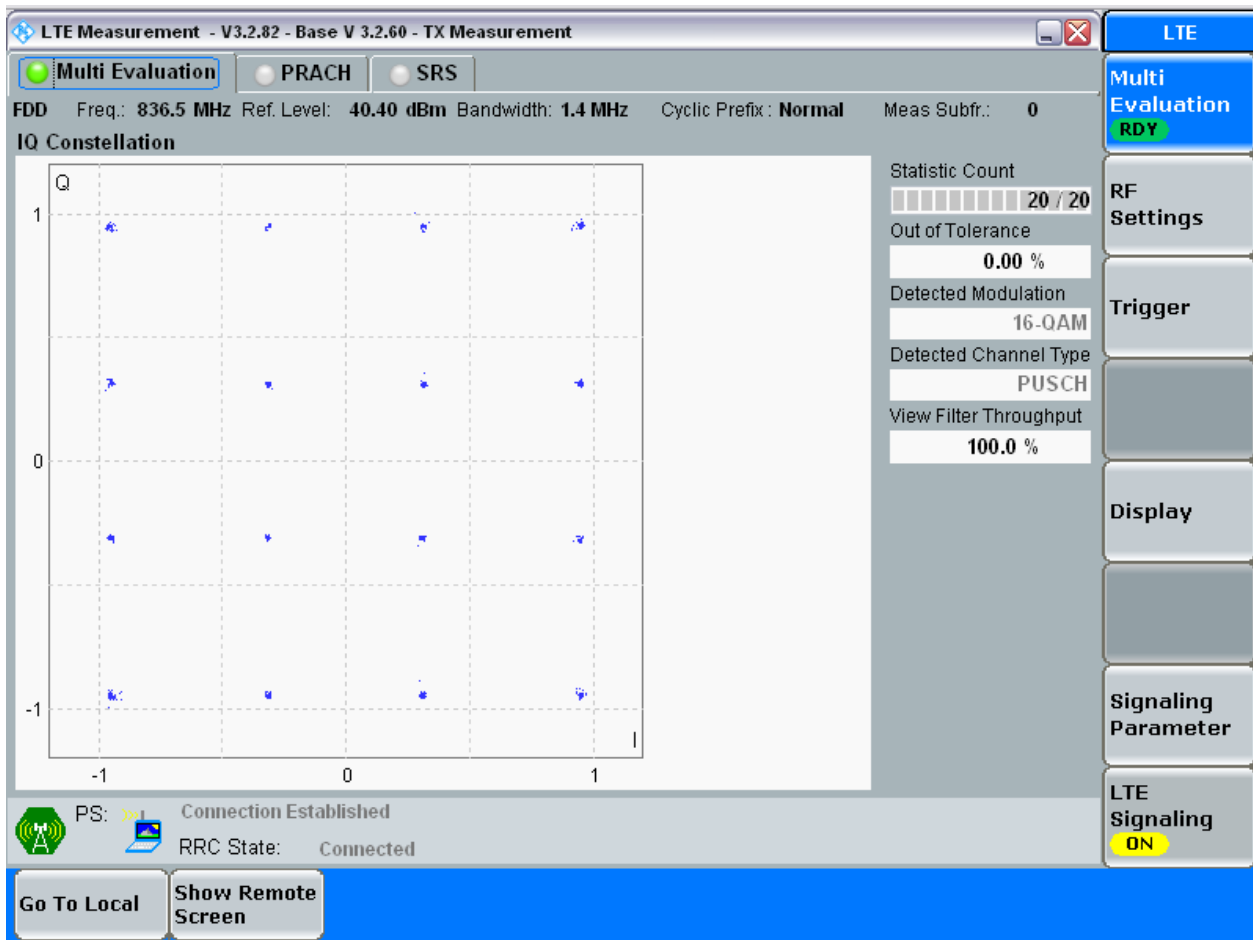


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

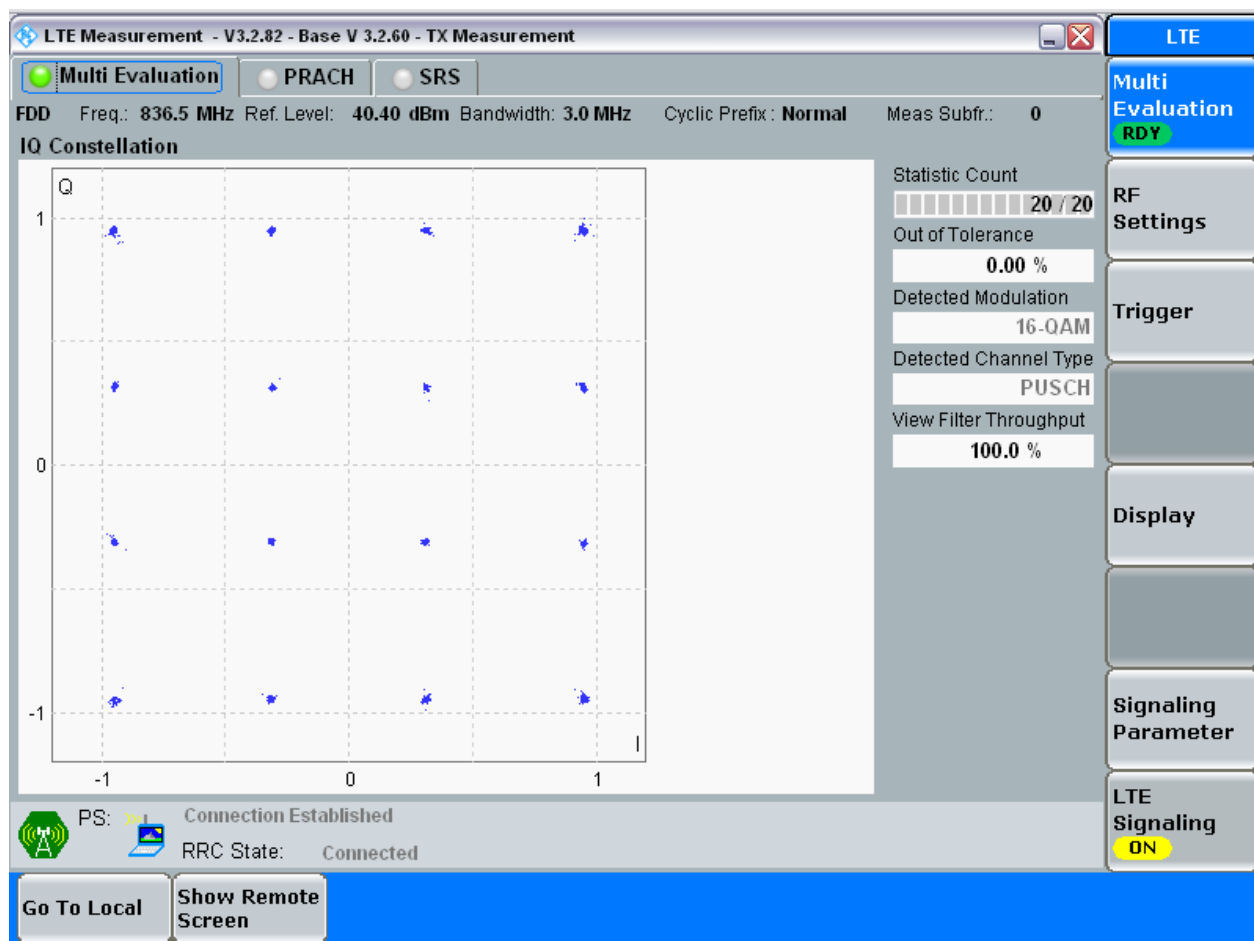
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

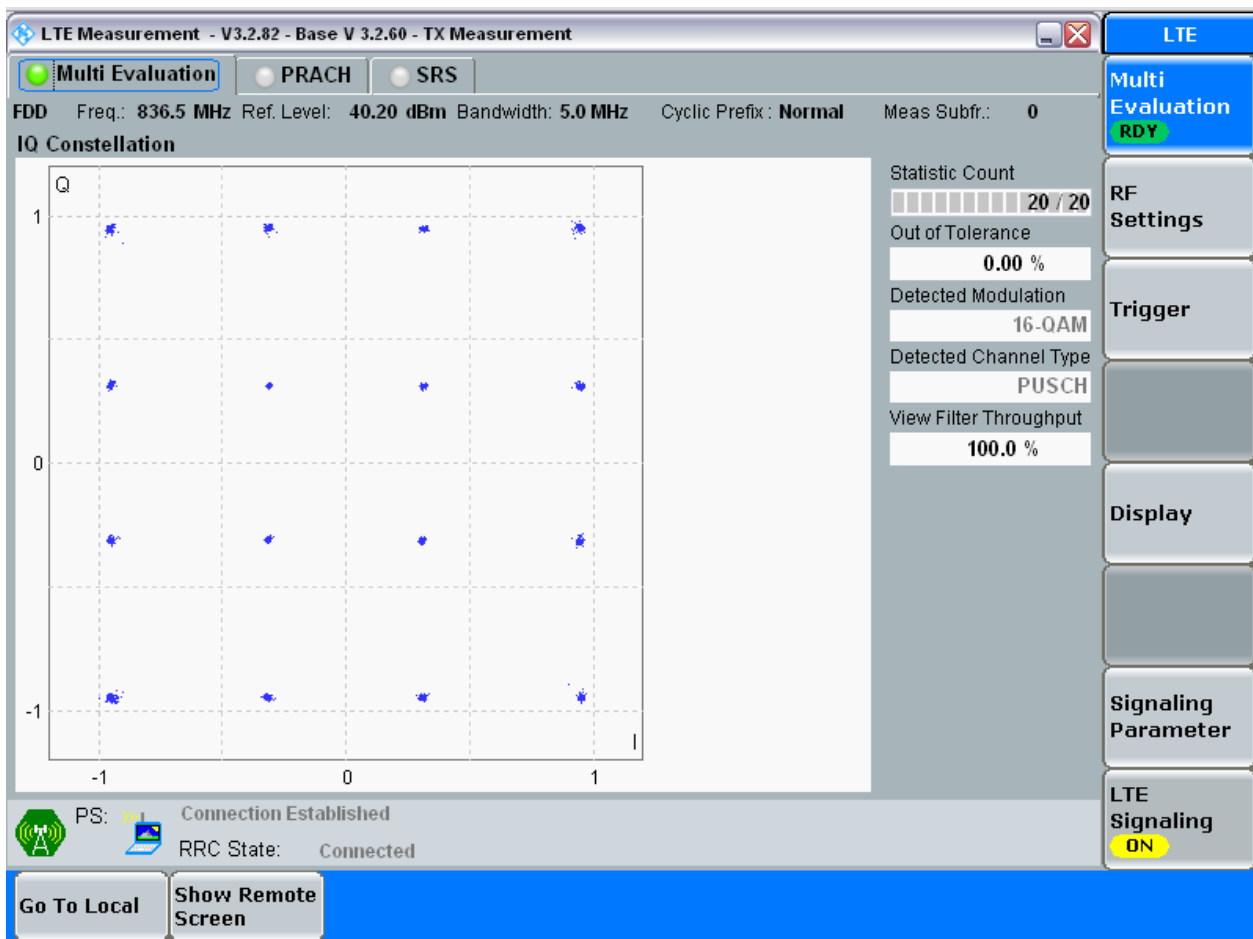
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

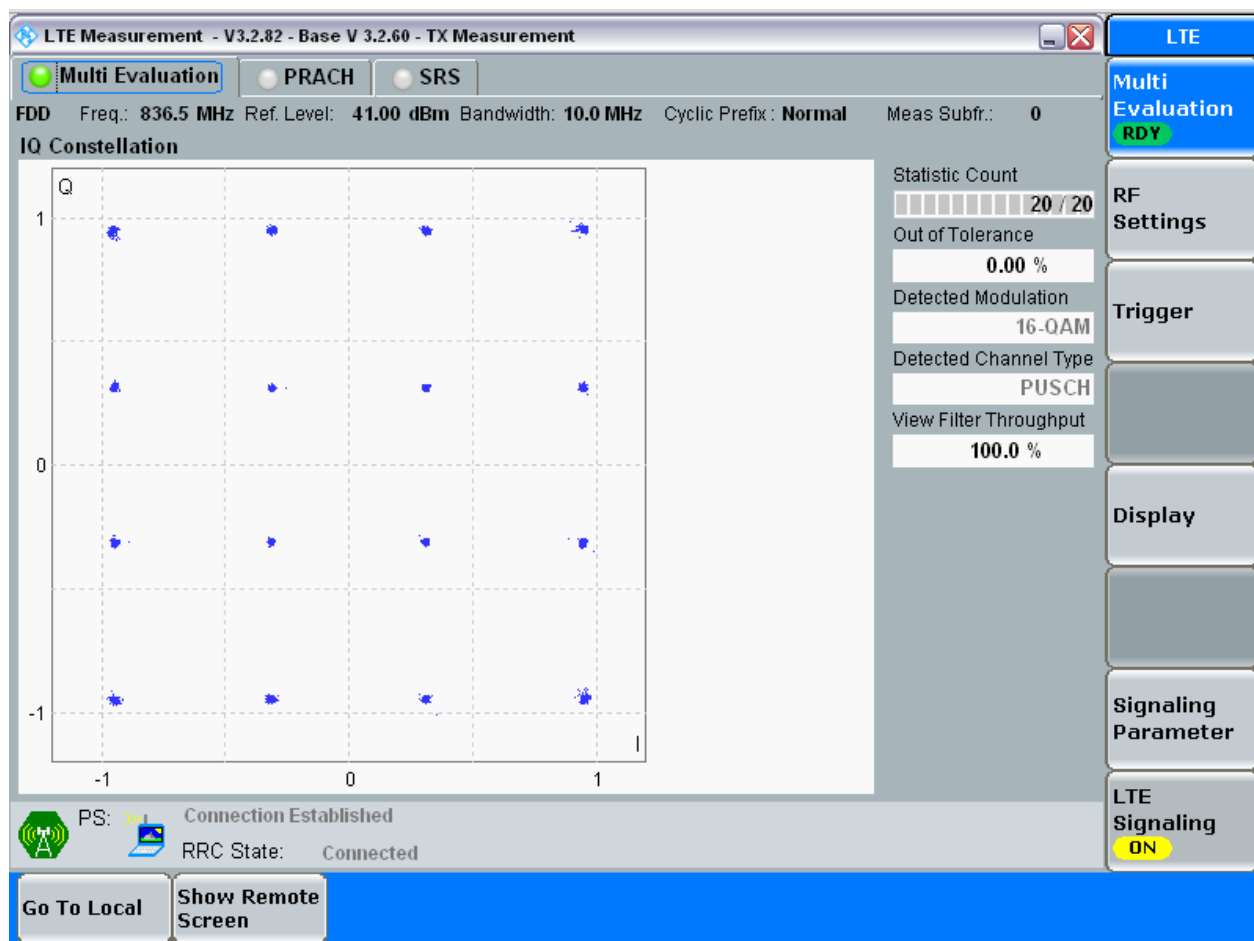
3.1.1.2.3.1.1 Test RB = RB25#0



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
BAND5	LTE/TM1	1.4	LCH	RB6#0	1.11	1.69	Pass
			MCH	RB6#0	1.10	1.27	Pass
			HCH	RB6#0	1.09	1.24	Pass
		3	LCH	RB15#0	2.71	2.99	Pass
			MCH	RB15#0	2.71	3.05	Pass
			HCH	RB15#0	2.72	3.15	Pass
		5	LCH	RB25#0	4.52	5.04	Pass
			MCH	RB25#0	4.53	4.94	Pass
			HCH	RB25#0	4.54	6.43	Pass
		10	LCH	RB50#0	9.06	11.11	Pass
			MCH	RB50#0	9.09	12.96	Pass
			HCH	RB50#0	9.02	9.97	Pass
	LTE/TM2	1.4	LCH	RB6#0	1.11	1.45	Pass
			MCH	RB6#0	1.12	1.65	Pass
			HCH	RB6#0	1.13	1.80	Pass
		3	LCH	RB15#0	2.73	3.90	Pass
			MCH	RB15#0	2.75	4.25	Pass
			HCH	RB15#0	2.77	4.16	Pass
		5	LCH	RB25#0	4.54	5.90	Pass
			MCH	RB25#0	4.55	6.20	Pass
			HCH	RB25#0	4.56	6.83	Pass
		10	LCH	RB50#0	9.14	13.43	Pass
			MCH	RB50#0	9.20	13.61	Pass
			HCH	RB50#0	9.11	13.38	Pass



Part II - Test Plots

4.1 For LTE

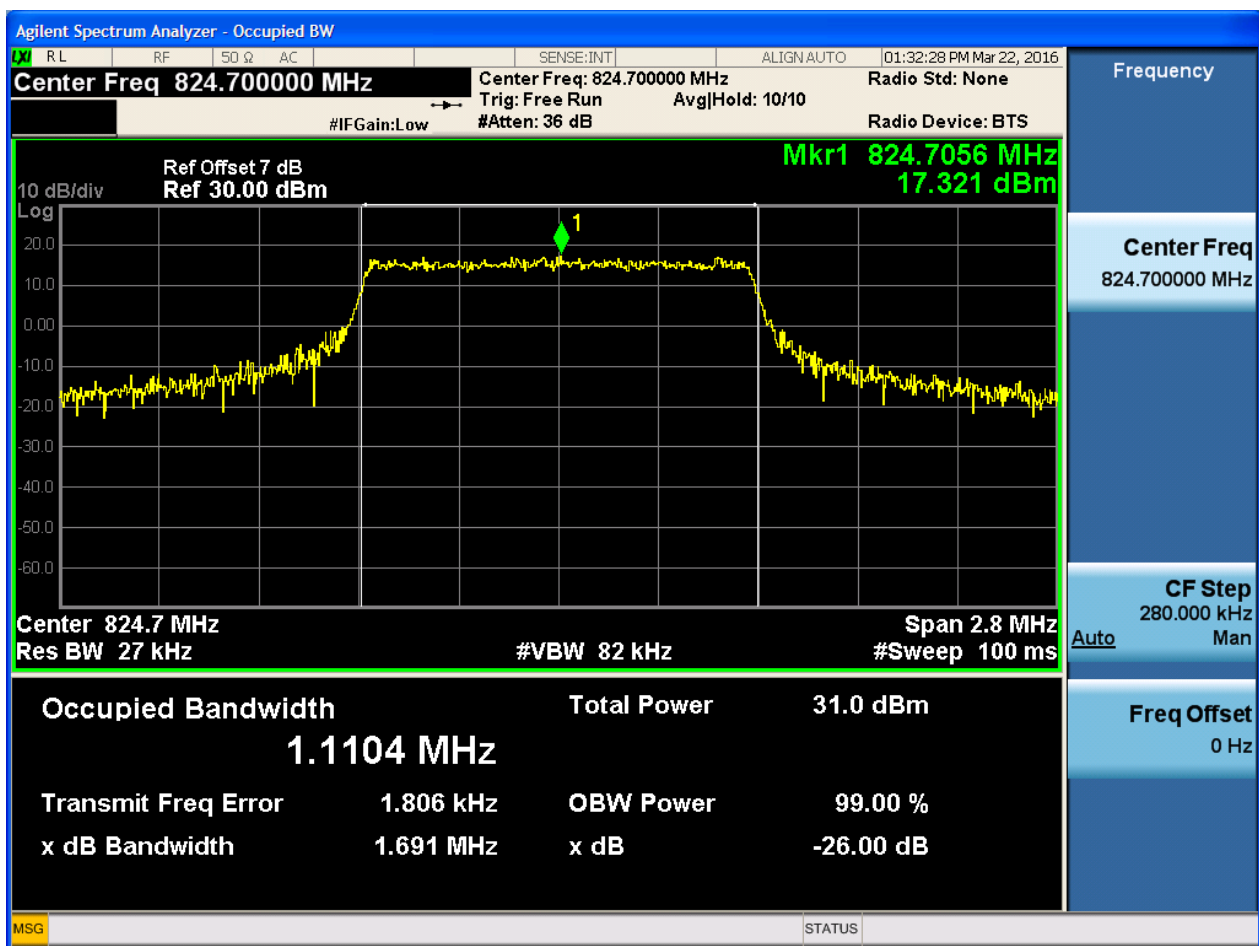
4.1.1 Test Band = BAND5

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

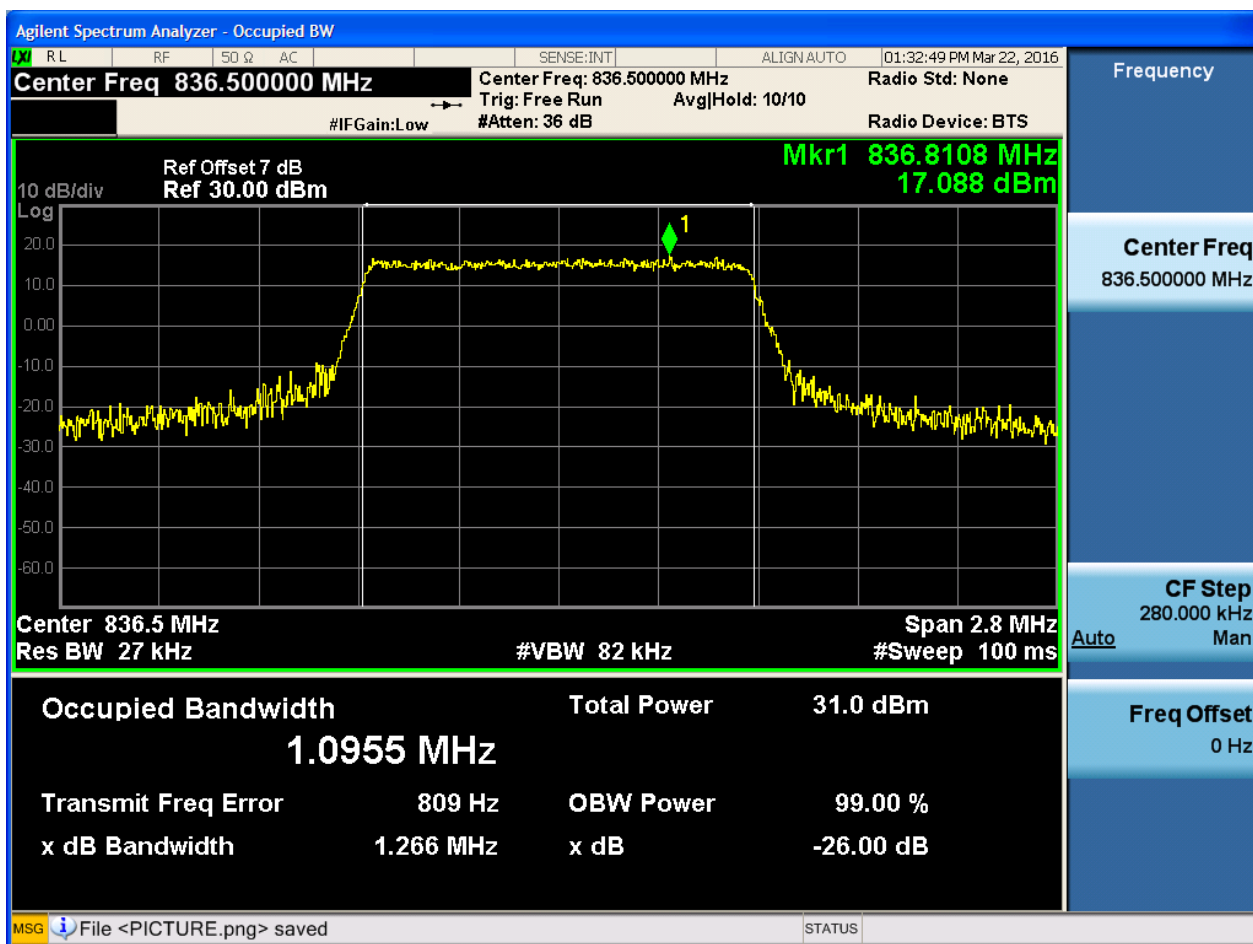
4.1.1.1.1.1.1 Test RB = RB6#0





4.1.1.1.1.2 Test Channel = MCH

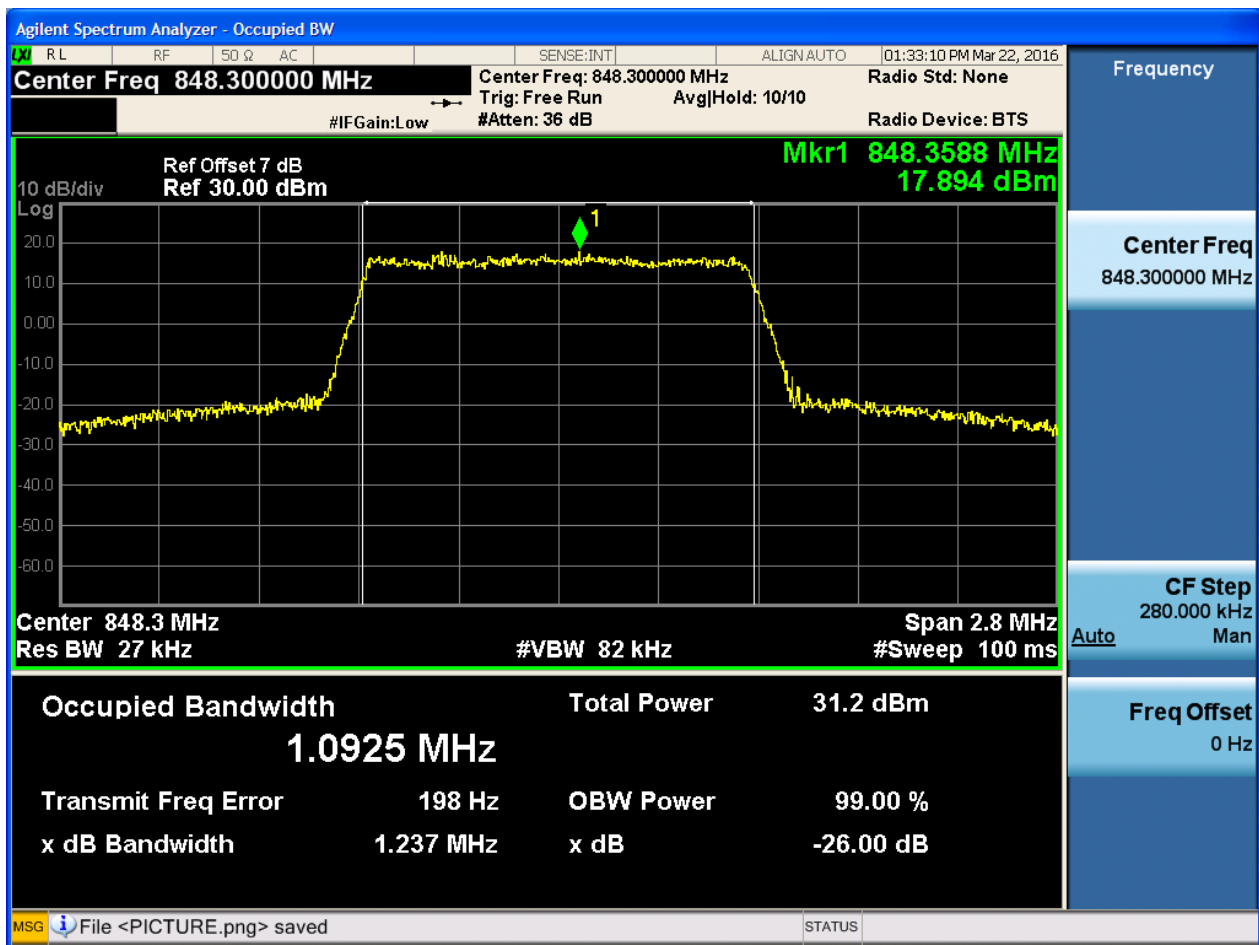
4.1.1.1.1.2.1 Test RB = RB6#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB6#0

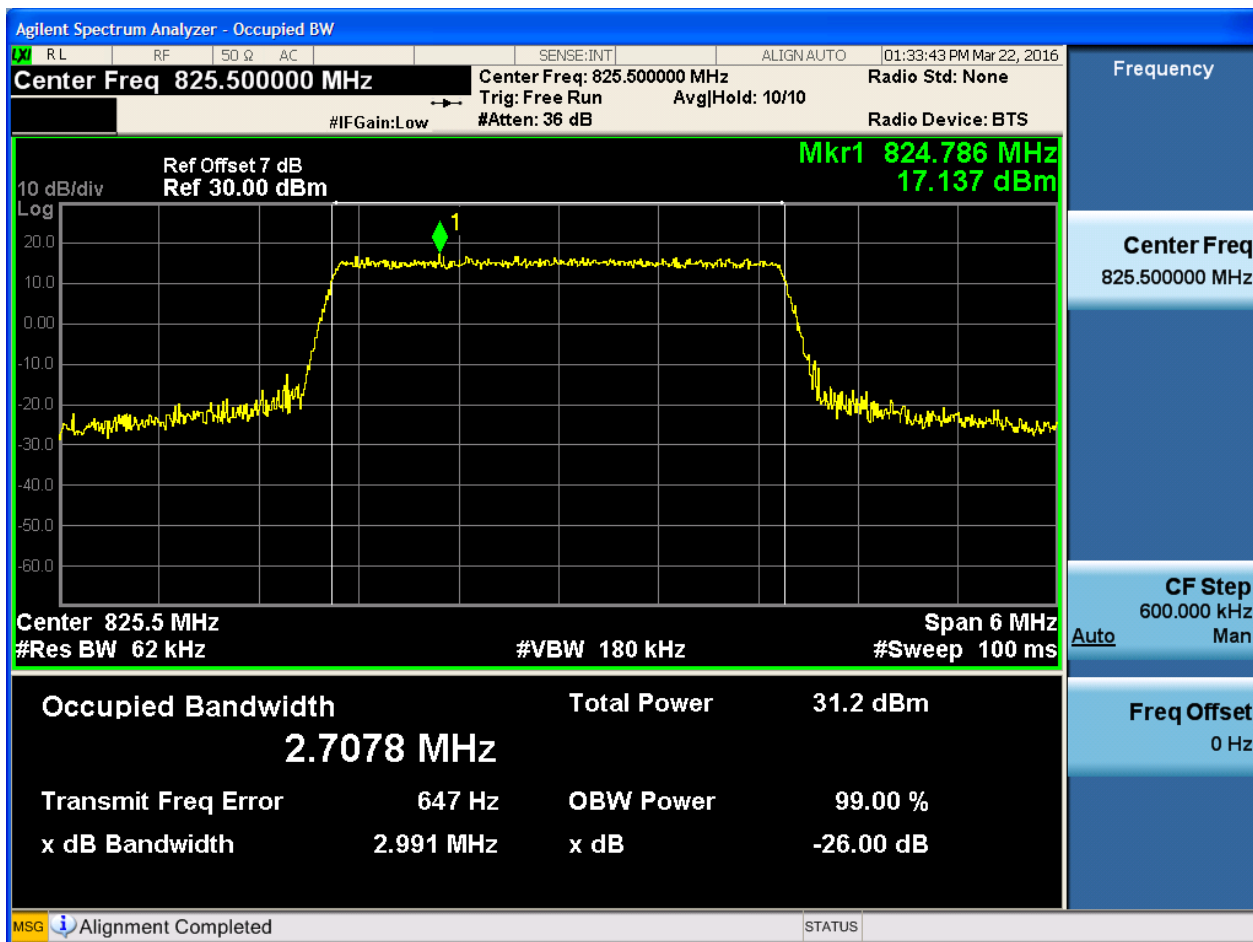




4.1.1.1.2 Test Bandwidth = 3

4.1.1.1.2.1 Test Channel = LCH

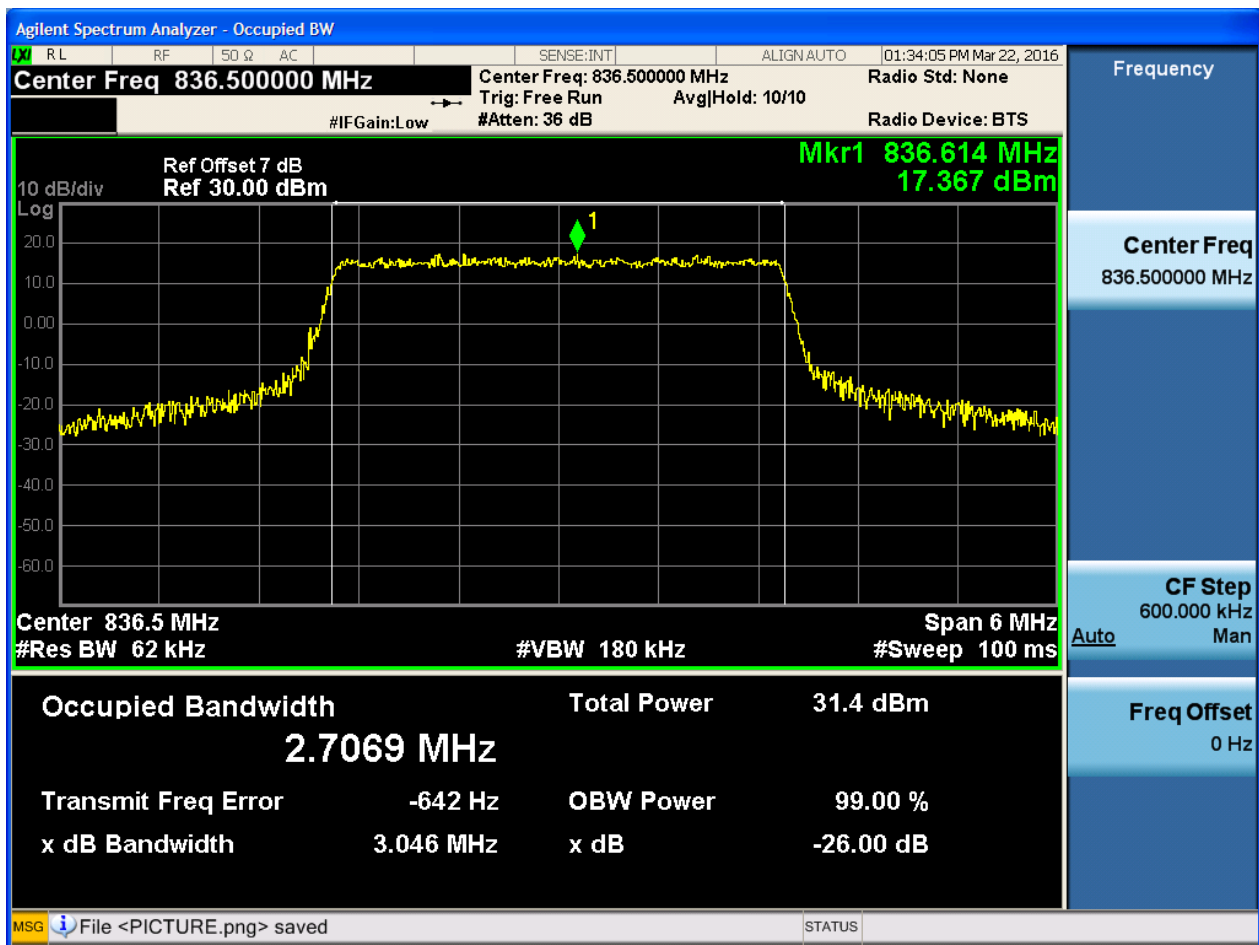
4.1.1.1.2.1.1 Test RB = RB15#0





4.1.1.1.2.2 Test Channel = MCH

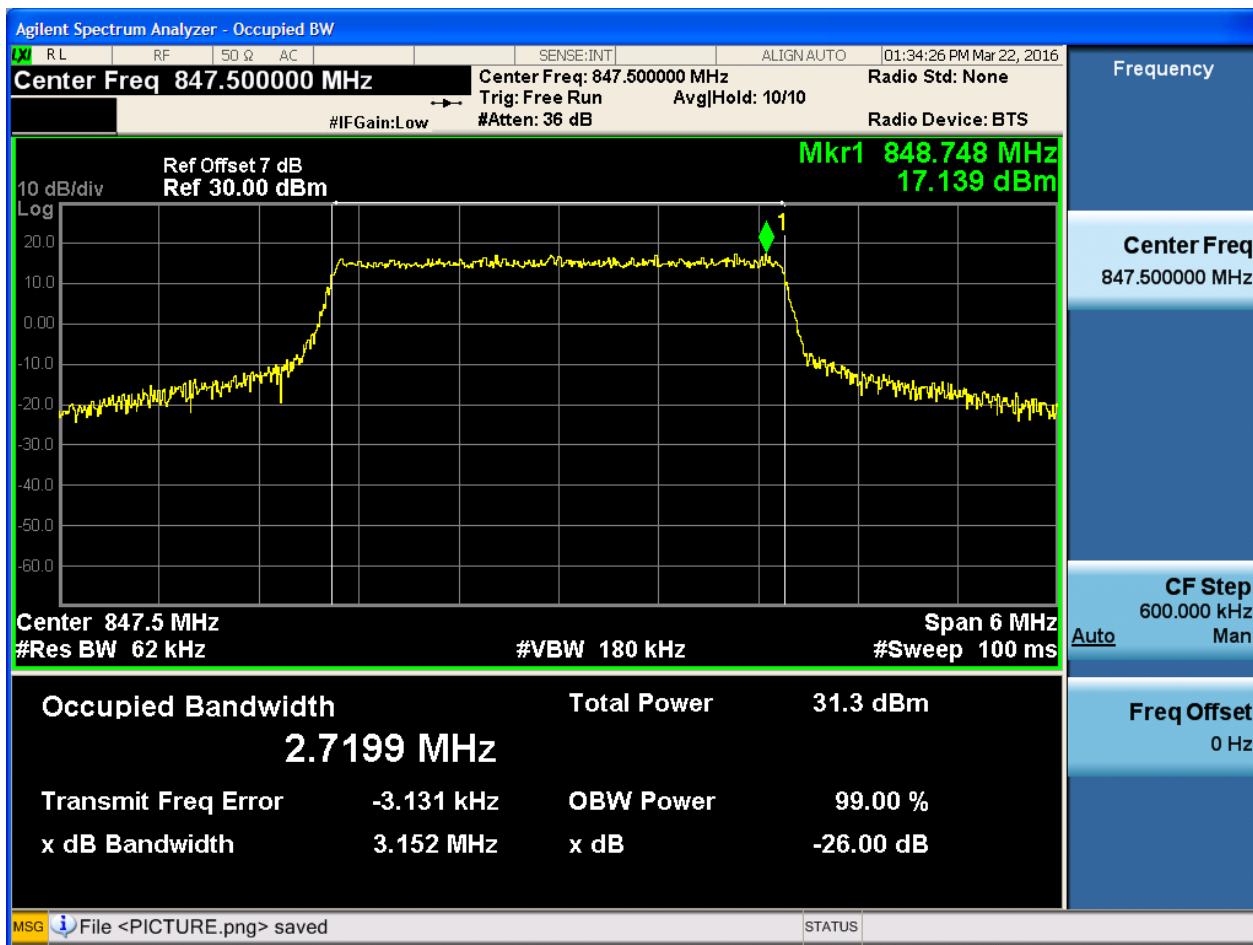
4.1.1.1.2.2.1 Test RB = RB15#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB15#0

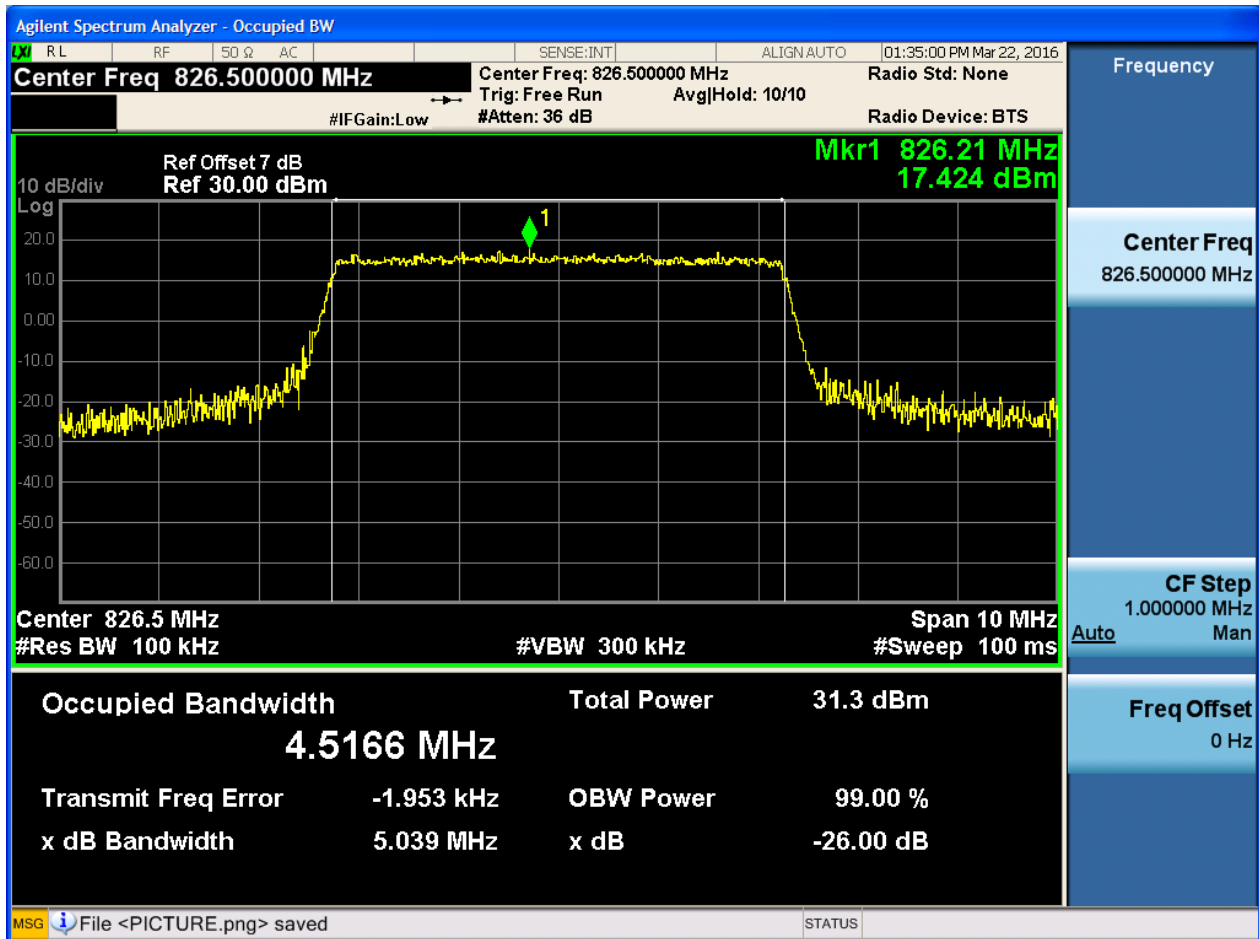




4.1.1.1.3 Test Bandwidth = 5

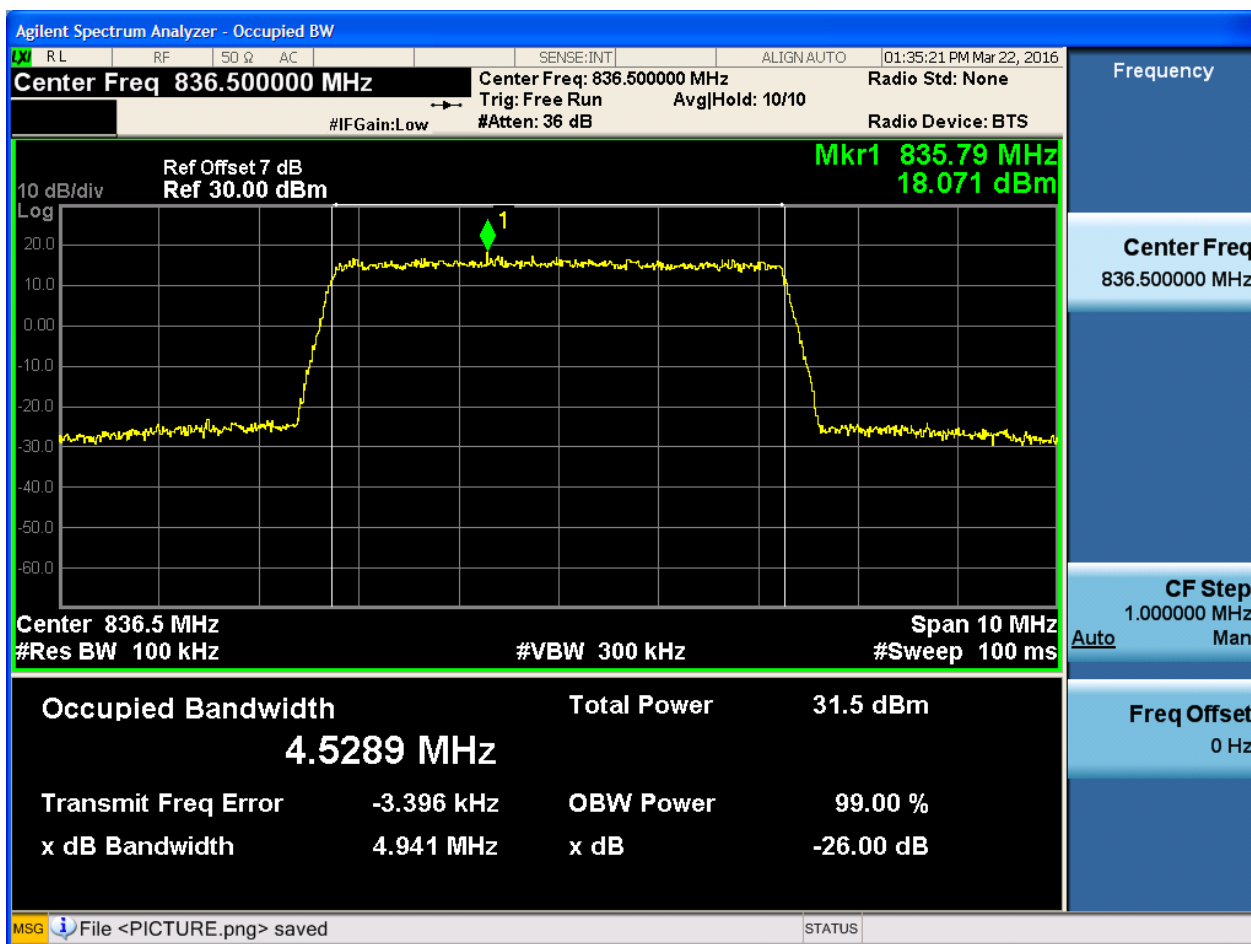
4.1.1.1.3.1 Test Channel = LCH

4.1.1.1.3.1.1 Test RB = RB25#0



4.1.1.1.3.2 Test Channel = MCH

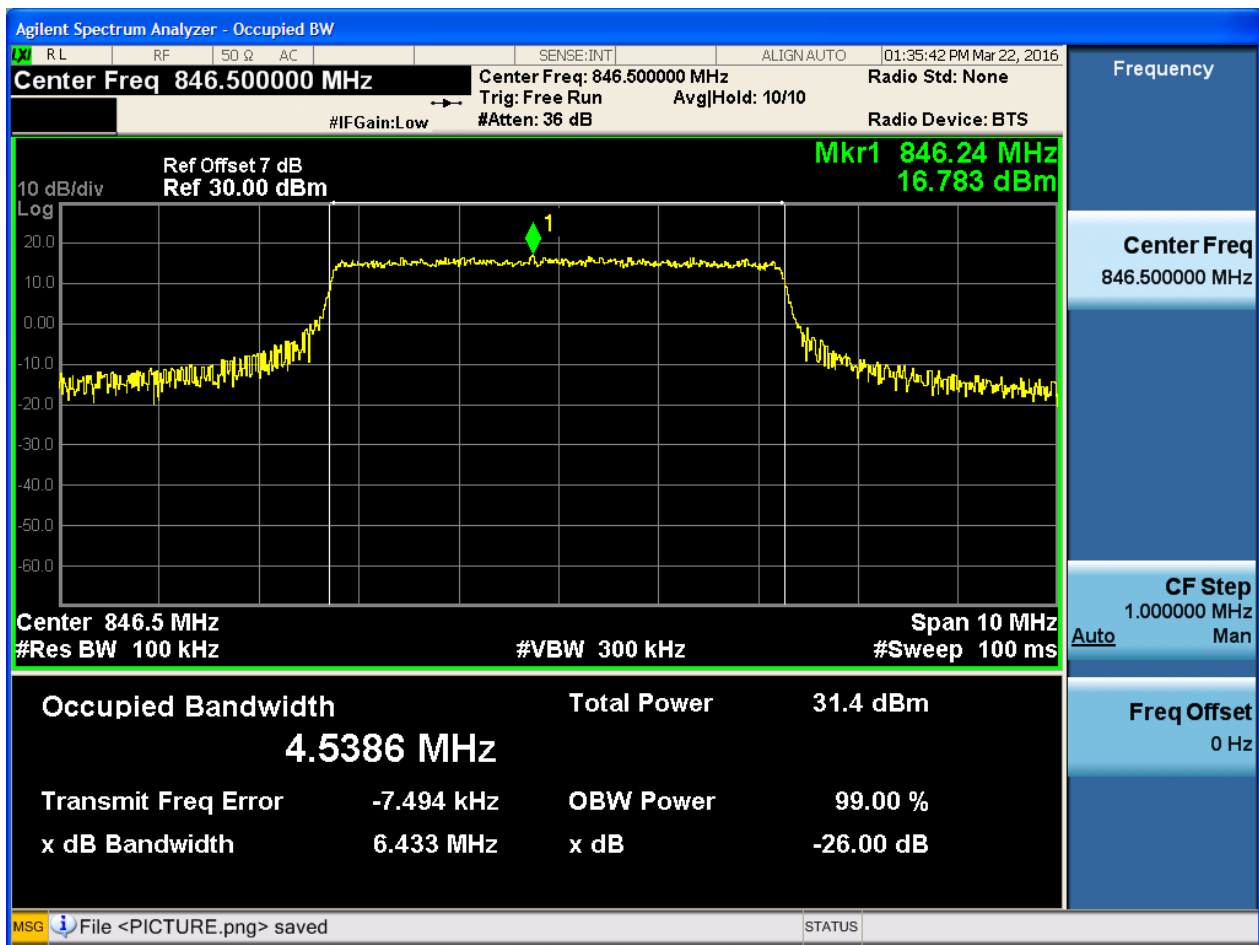
4.1.1.1.3.2.1 Test RB = RB25#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB25#0

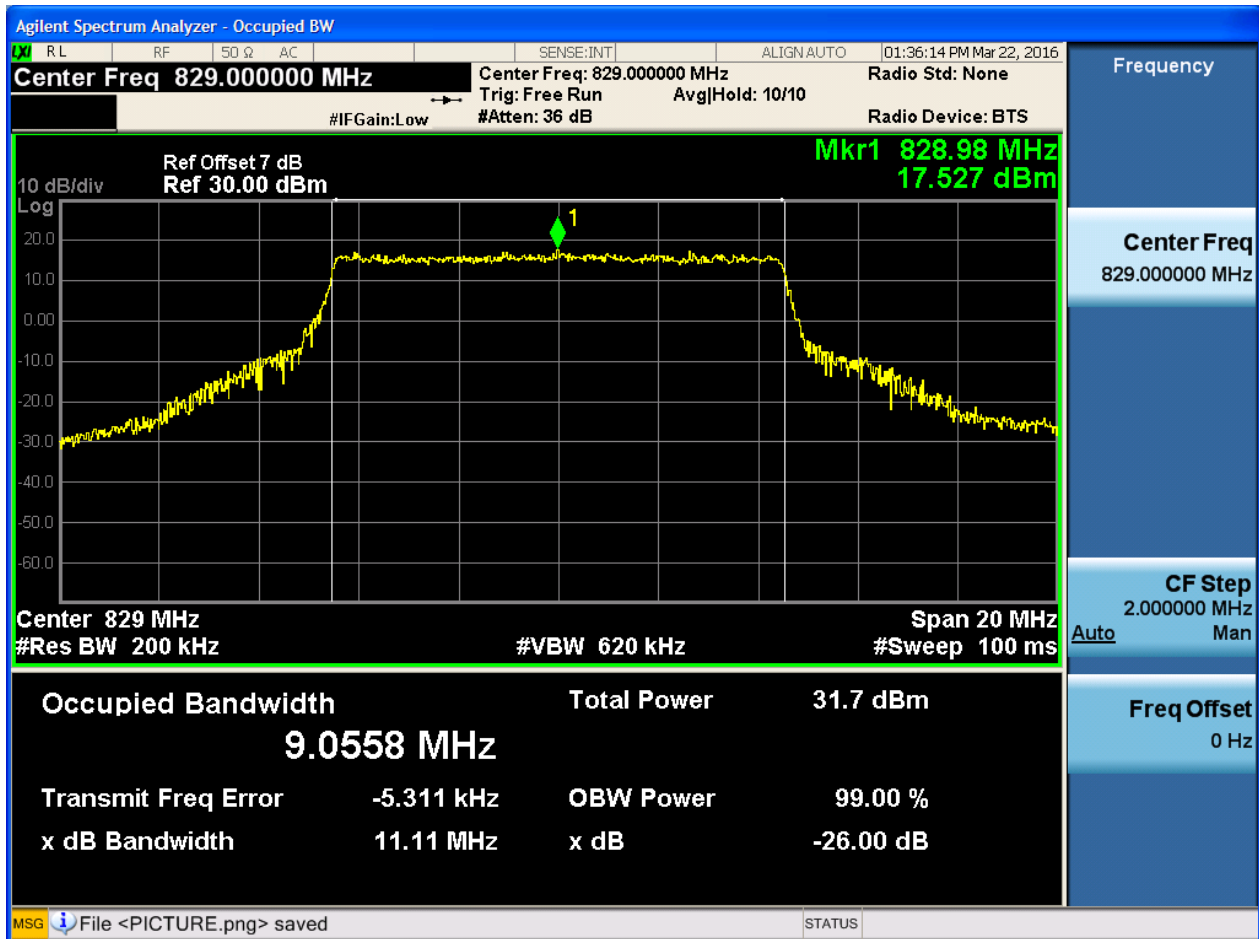




4.1.1.1.4 Test Bandwidth = 10

4.1.1.1.4.1 Test Channel = LCH

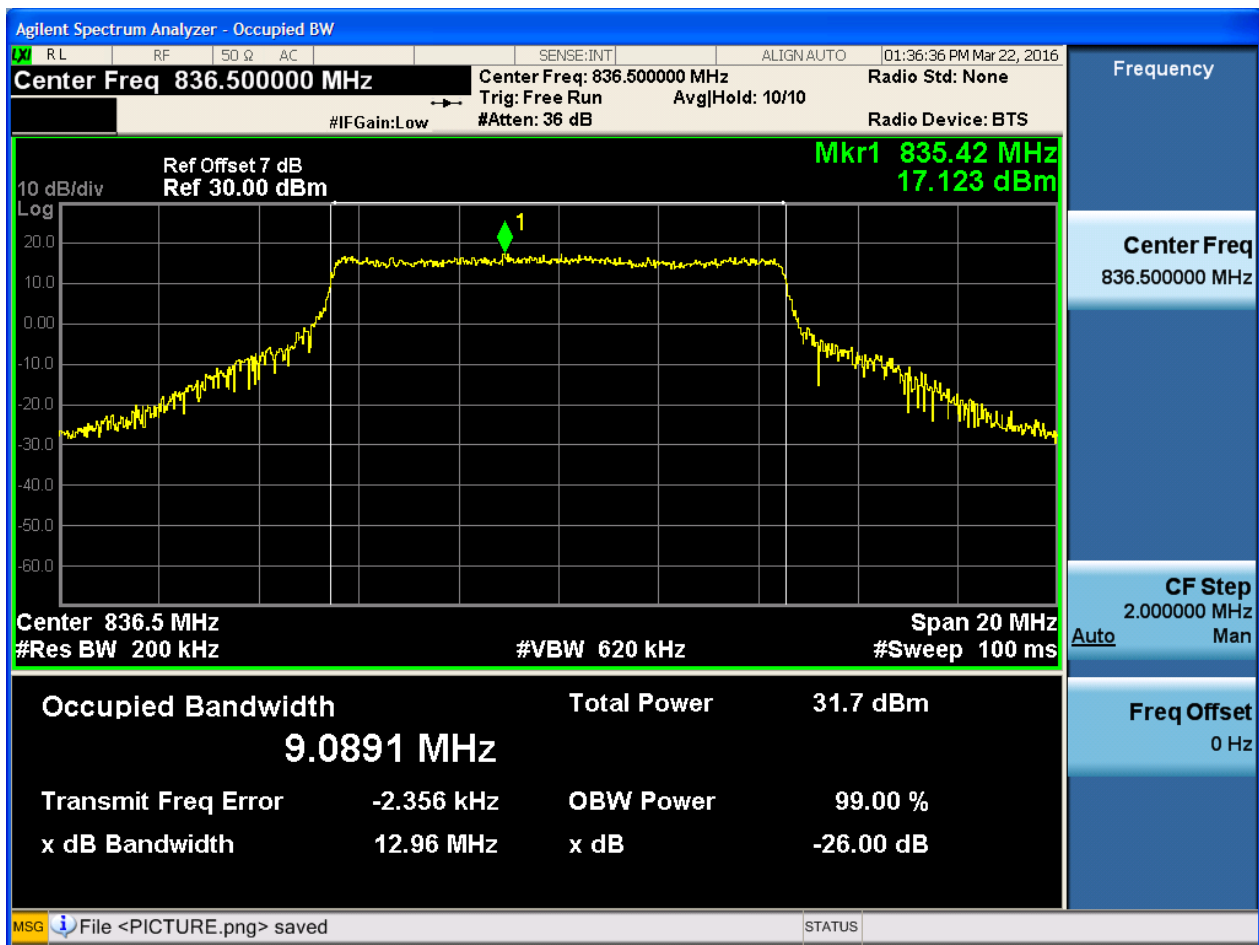
4.1.1.1.4.1.1 Test RB = RB50#0





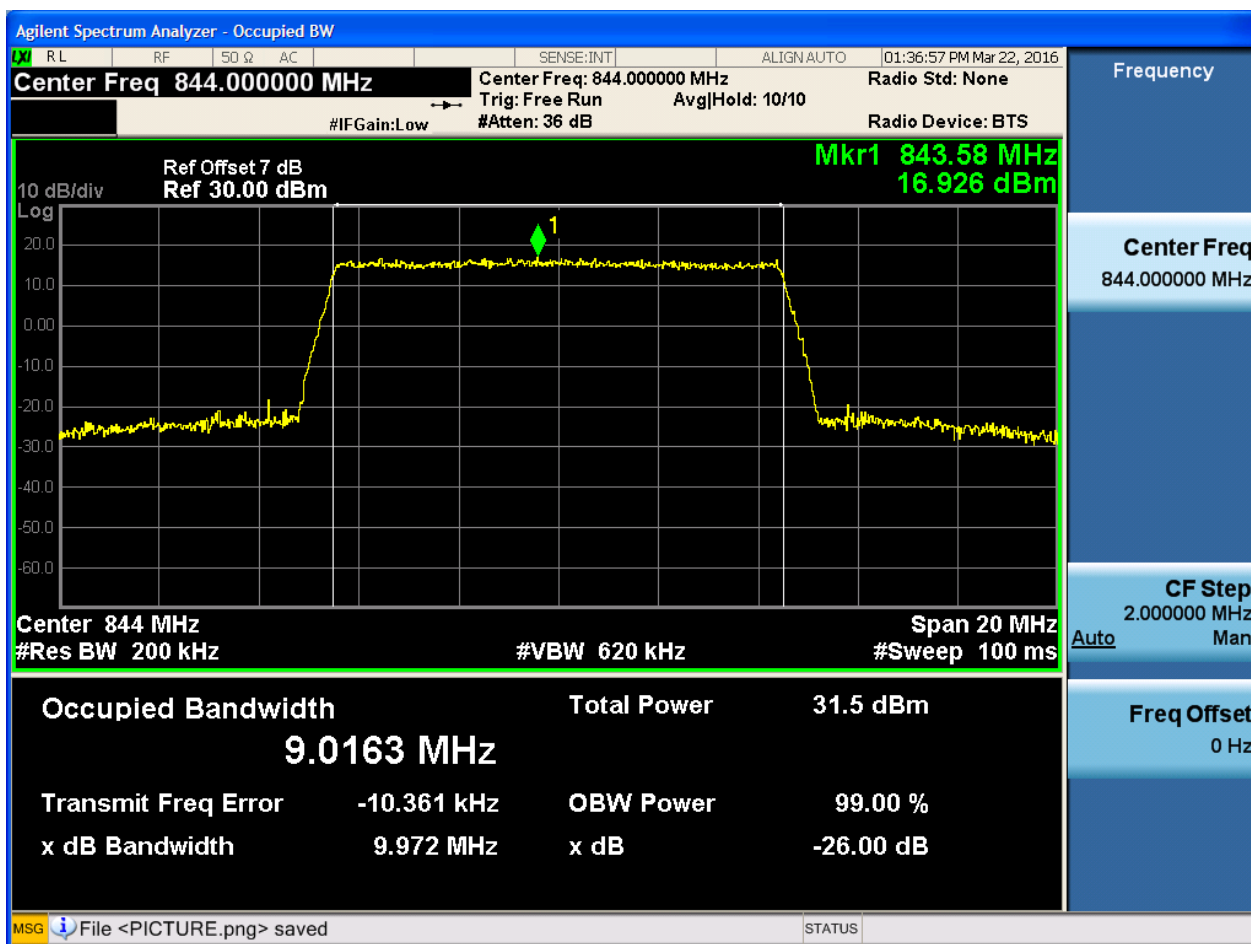
4.1.1.1.4.2 Test Channel = MCH

4.1.1.1.4.2.1 Test RB = RB50#0



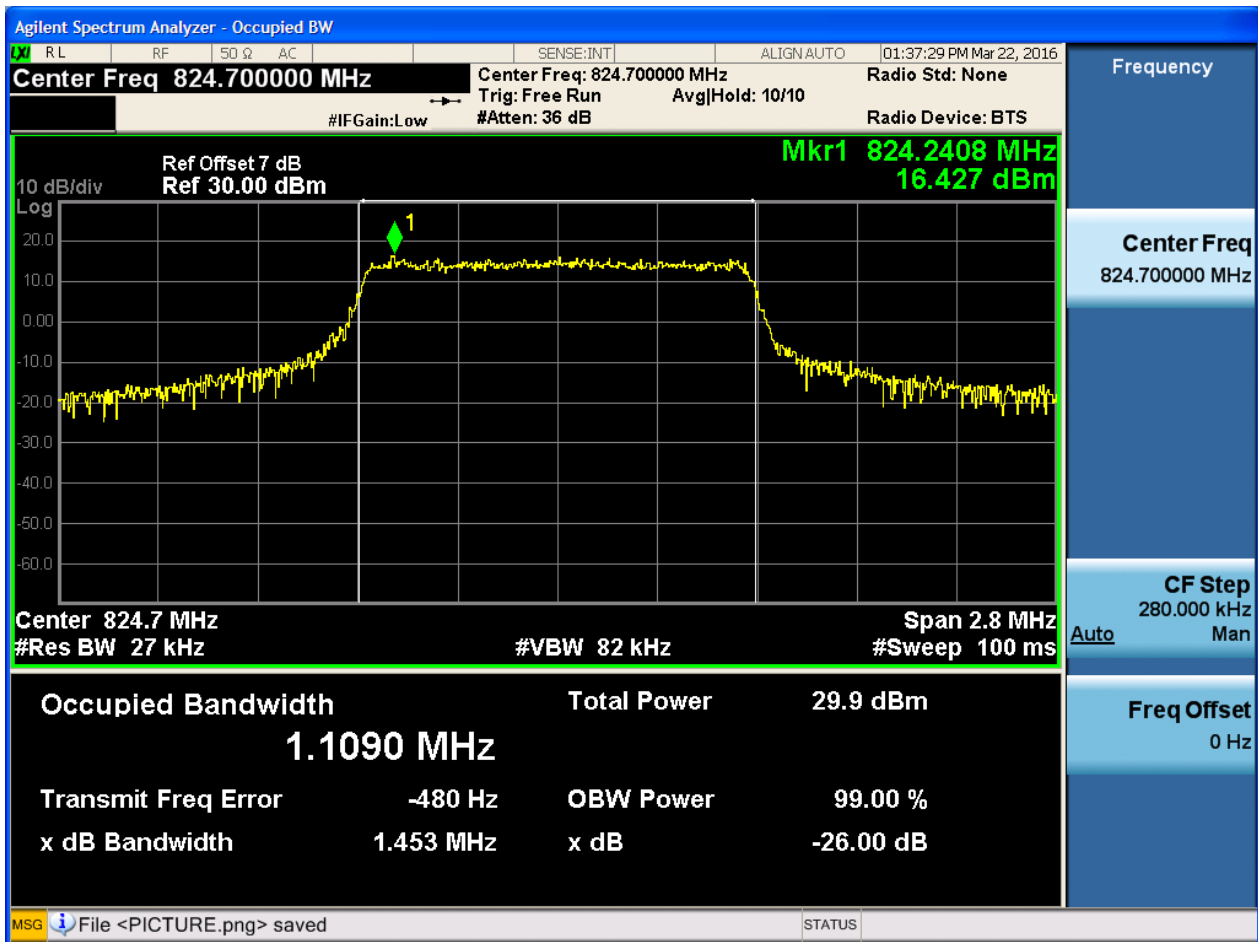
4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB50#0





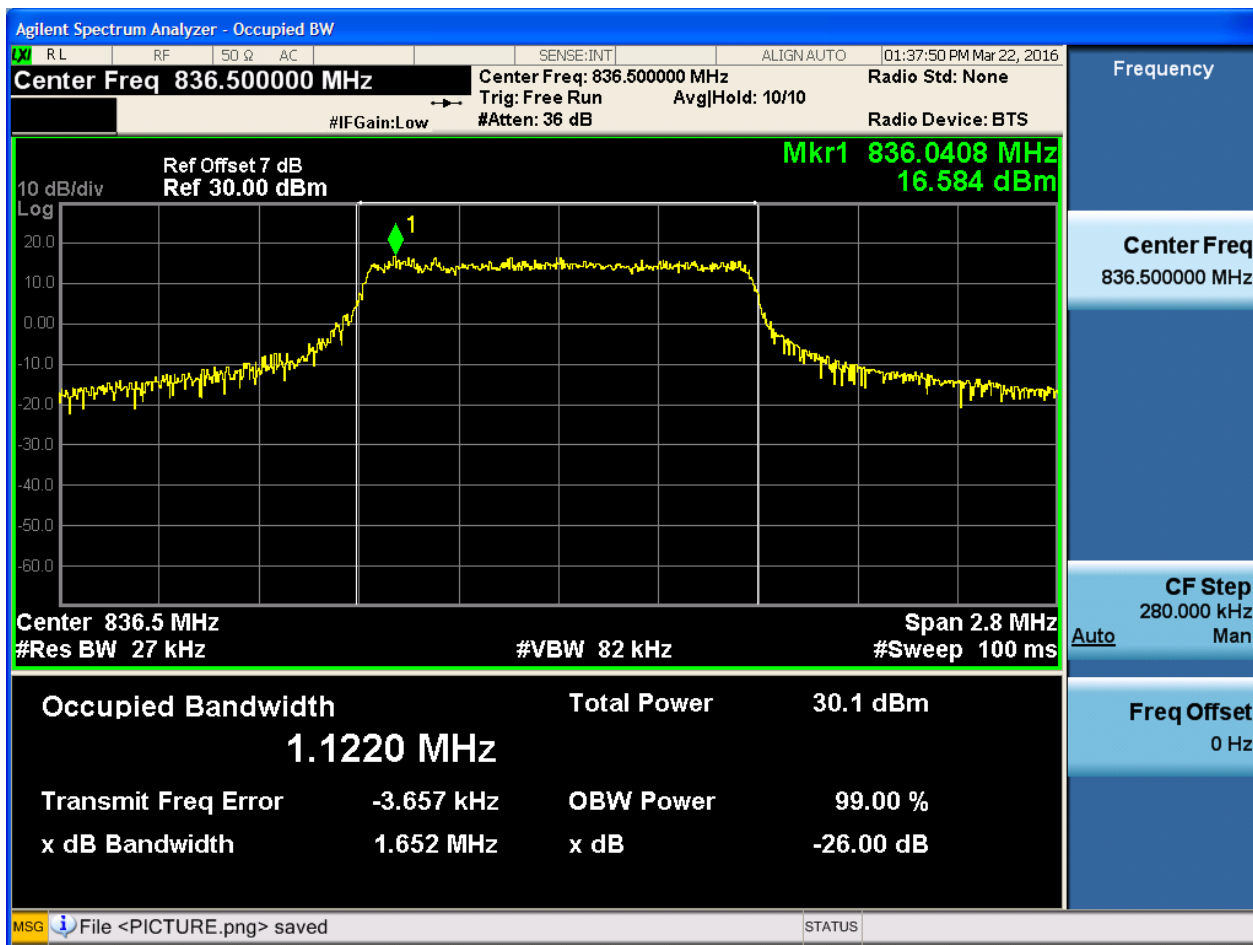
4.1.1.2.1.1.1 Test RB = RB6#0





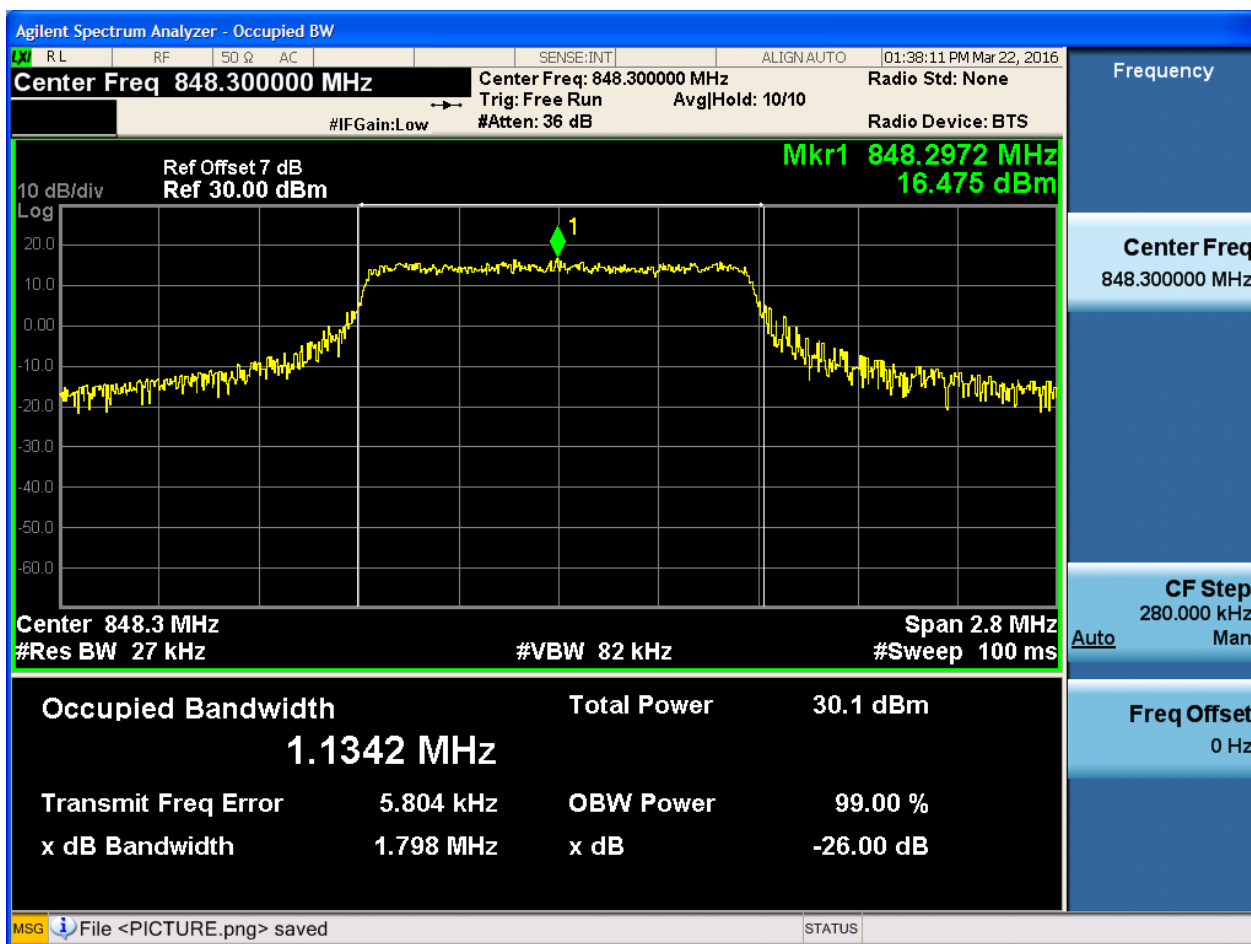
4.1.1.2.1.2 Test Channel = MCH

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

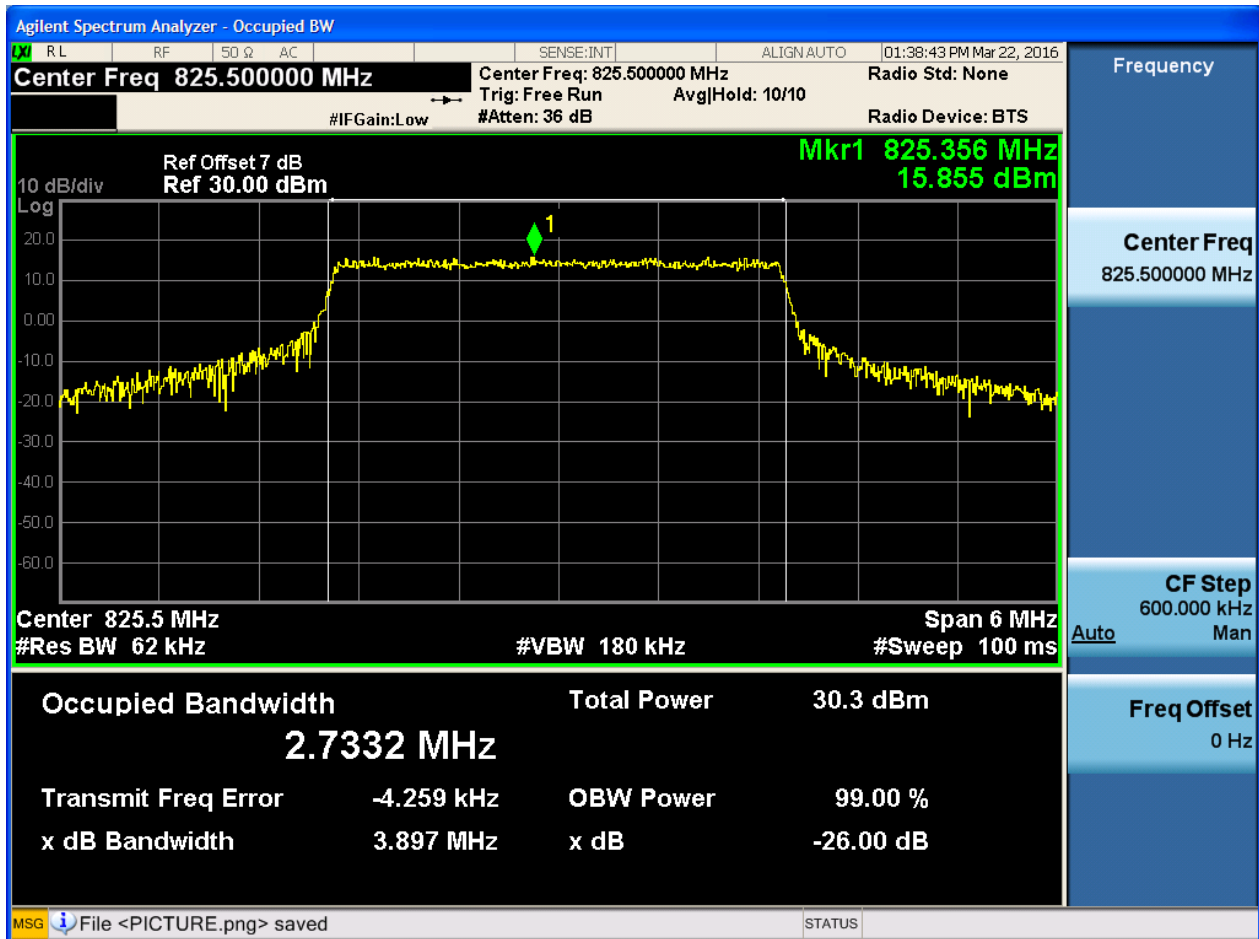




4.1.1.2.2 Test Bandwidth = 3

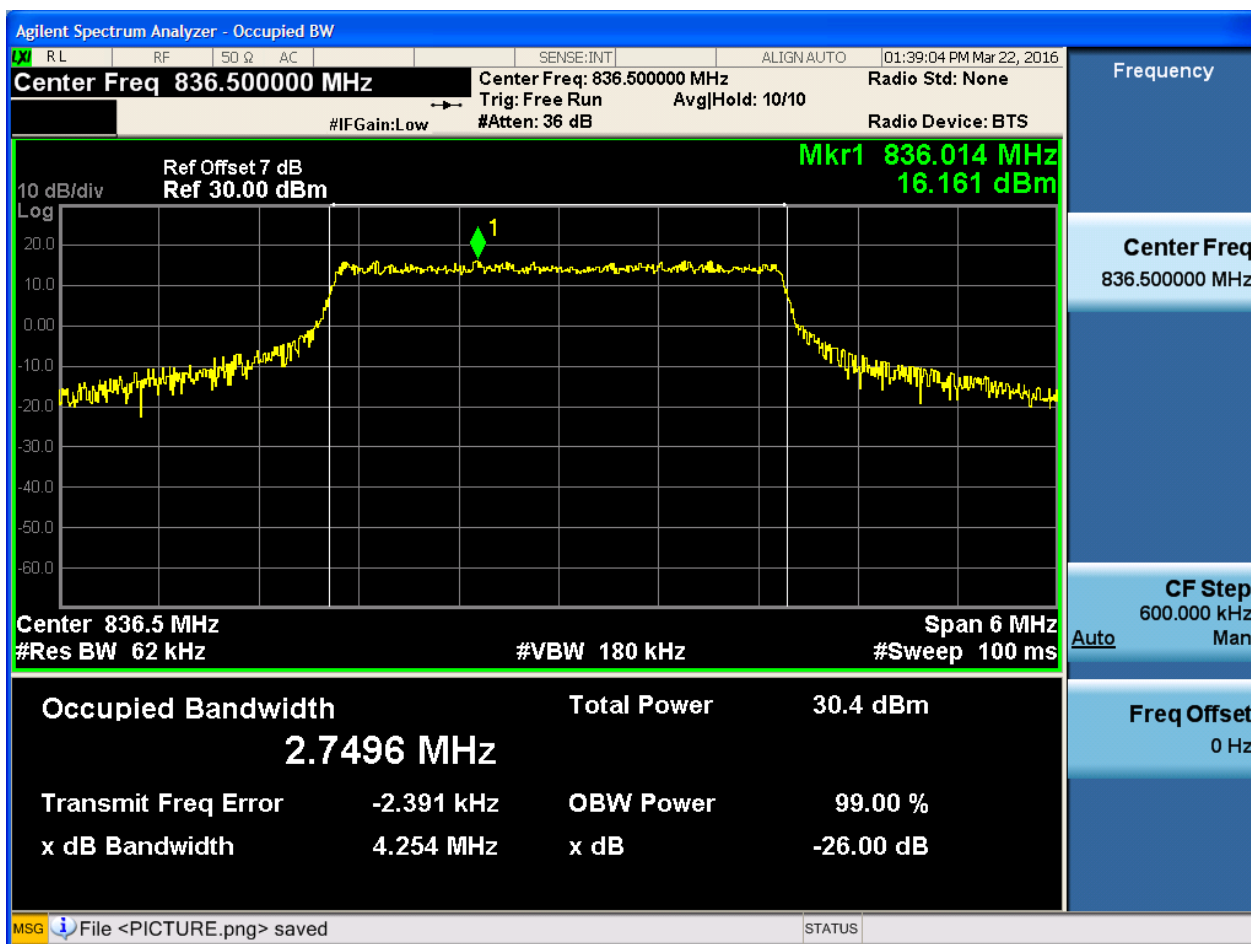
4.1.1.2.2.1 Test Channel = LCH

4.1.1.2.2.1.1 Test RB = RB15#0



4.1.1.2.2.2 Test Channel = MCH

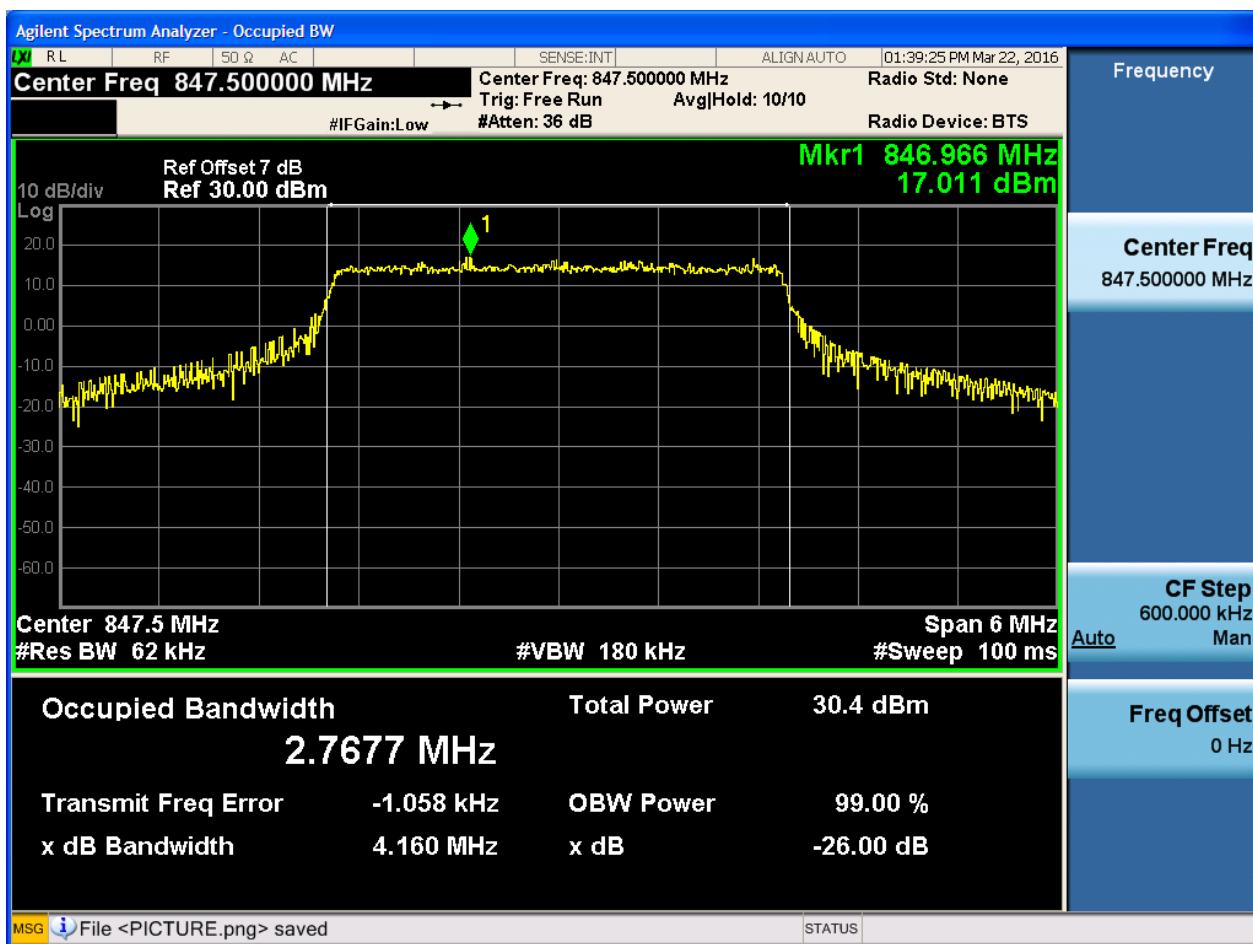
4.1.1.2.2.2.1 Test RB = RB15#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB15#0

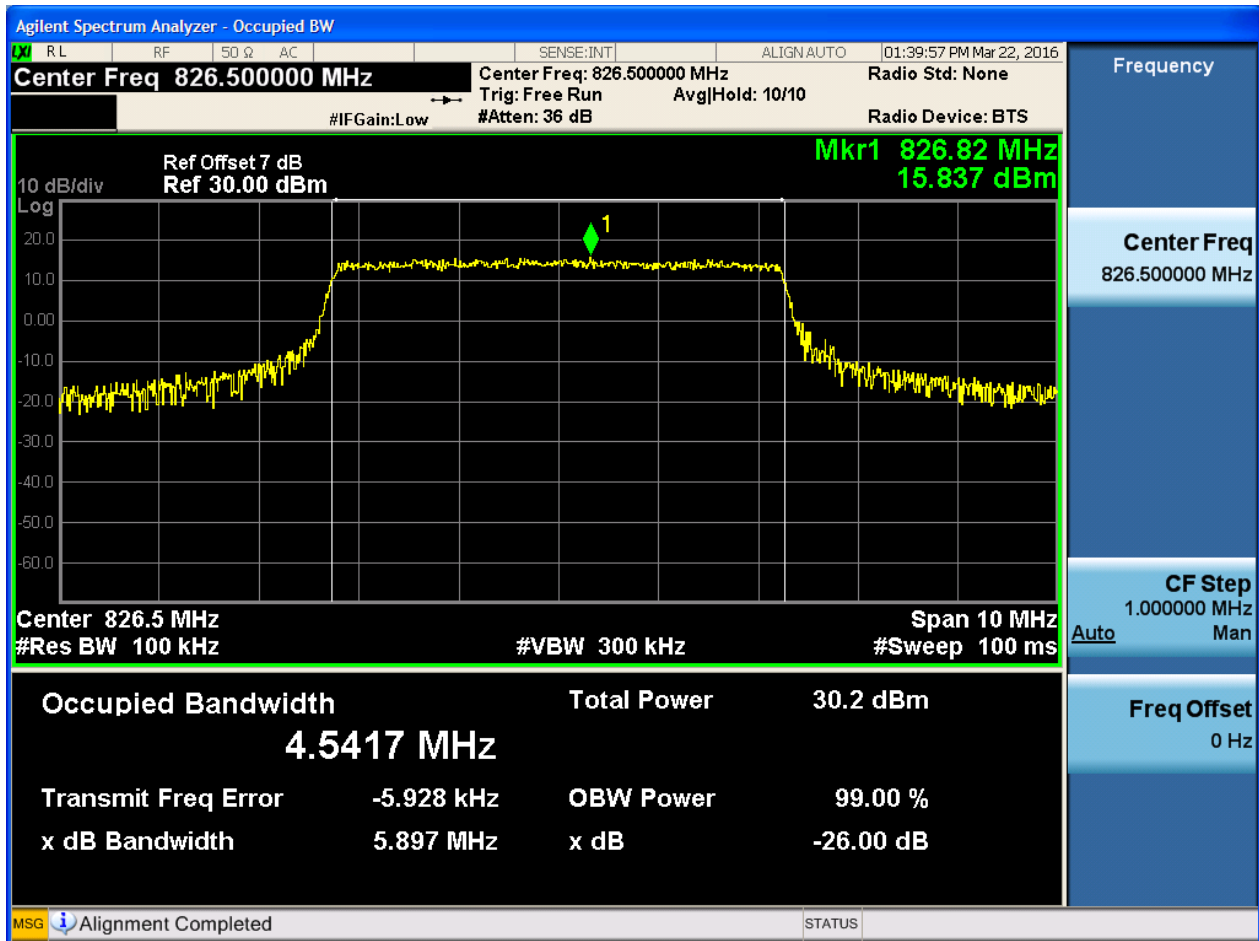




4.1.1.2.3 Test Bandwidth = 5

4.1.1.2.3.1 Test Channel = LCH

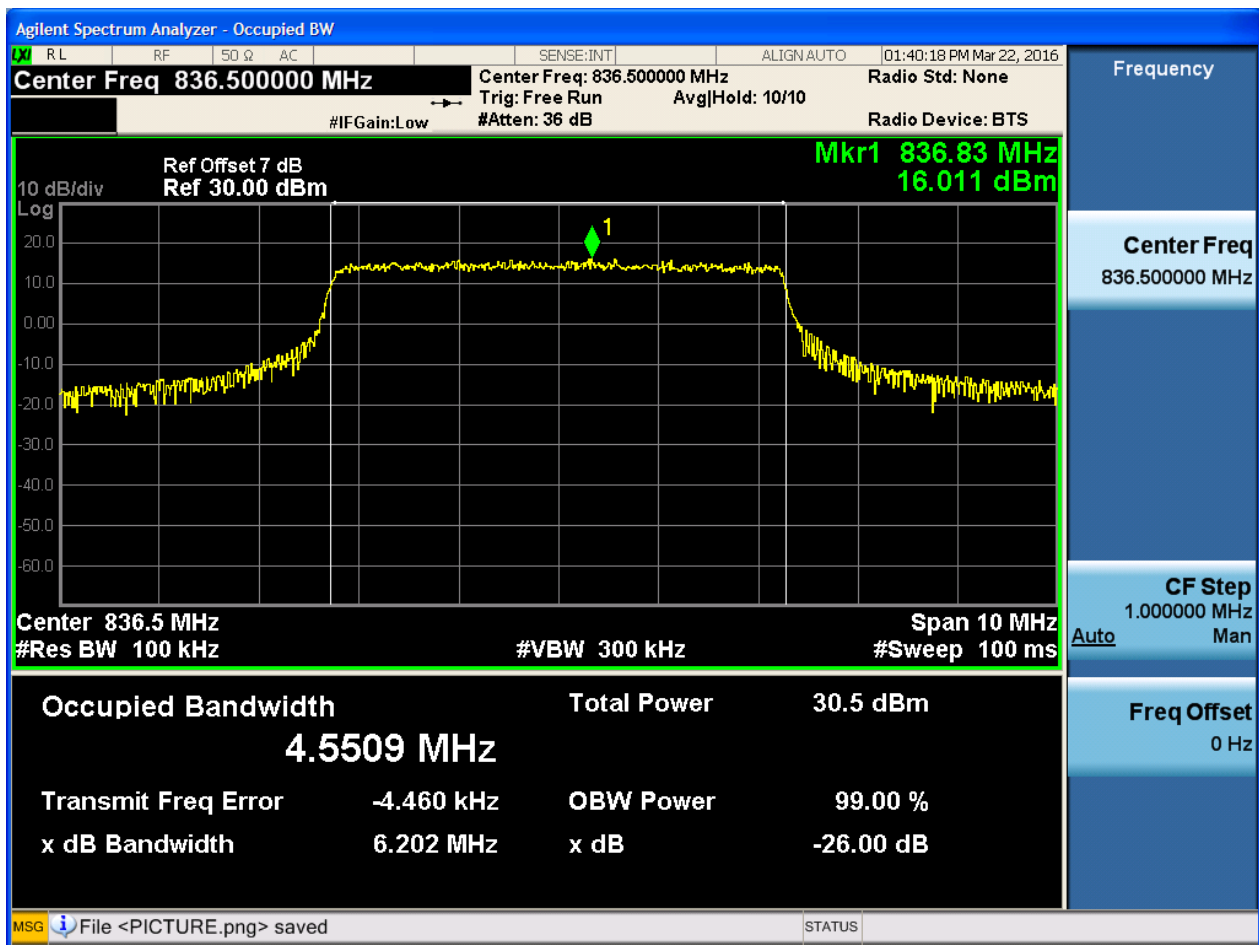
4.1.1.2.3.1.1 Test RB = RB25#0





4.1.1.2.3.2 Test Channel = MCH

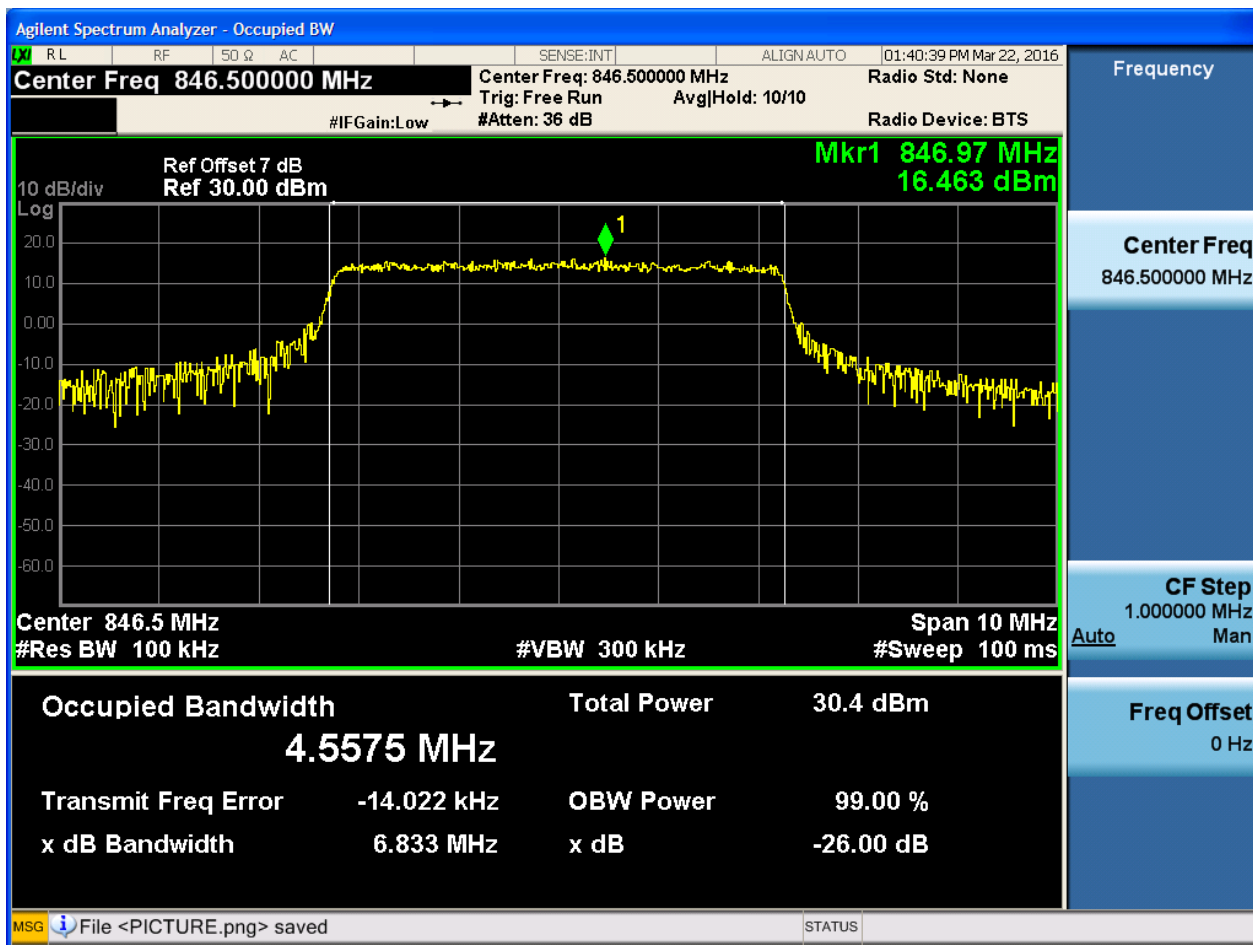
4.1.1.2.3.2.1 Test RB = RB25#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB25#0

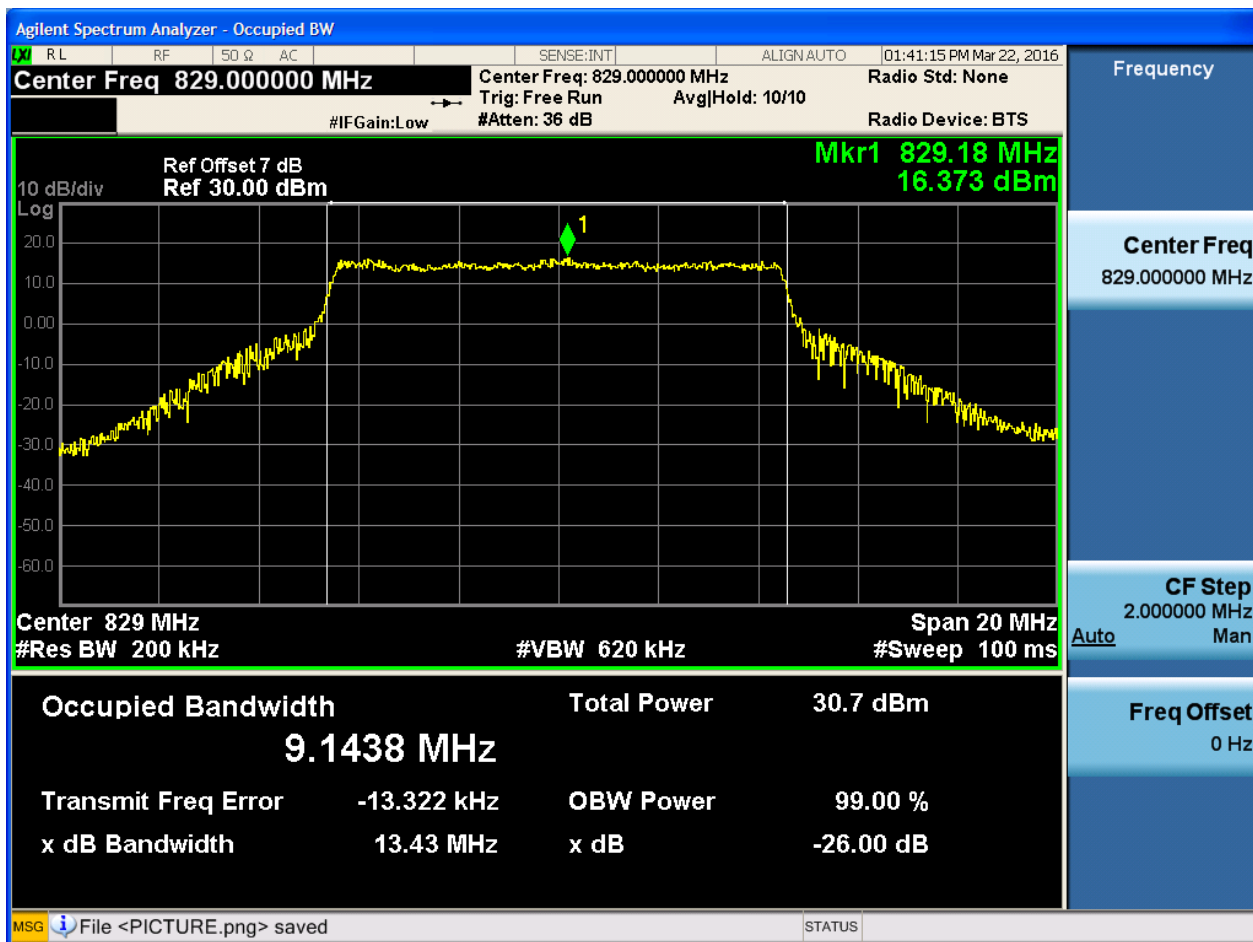




4.1.1.2.4 Test Bandwidth = 10

4.1.1.2.4.1 Test Channel = LCH

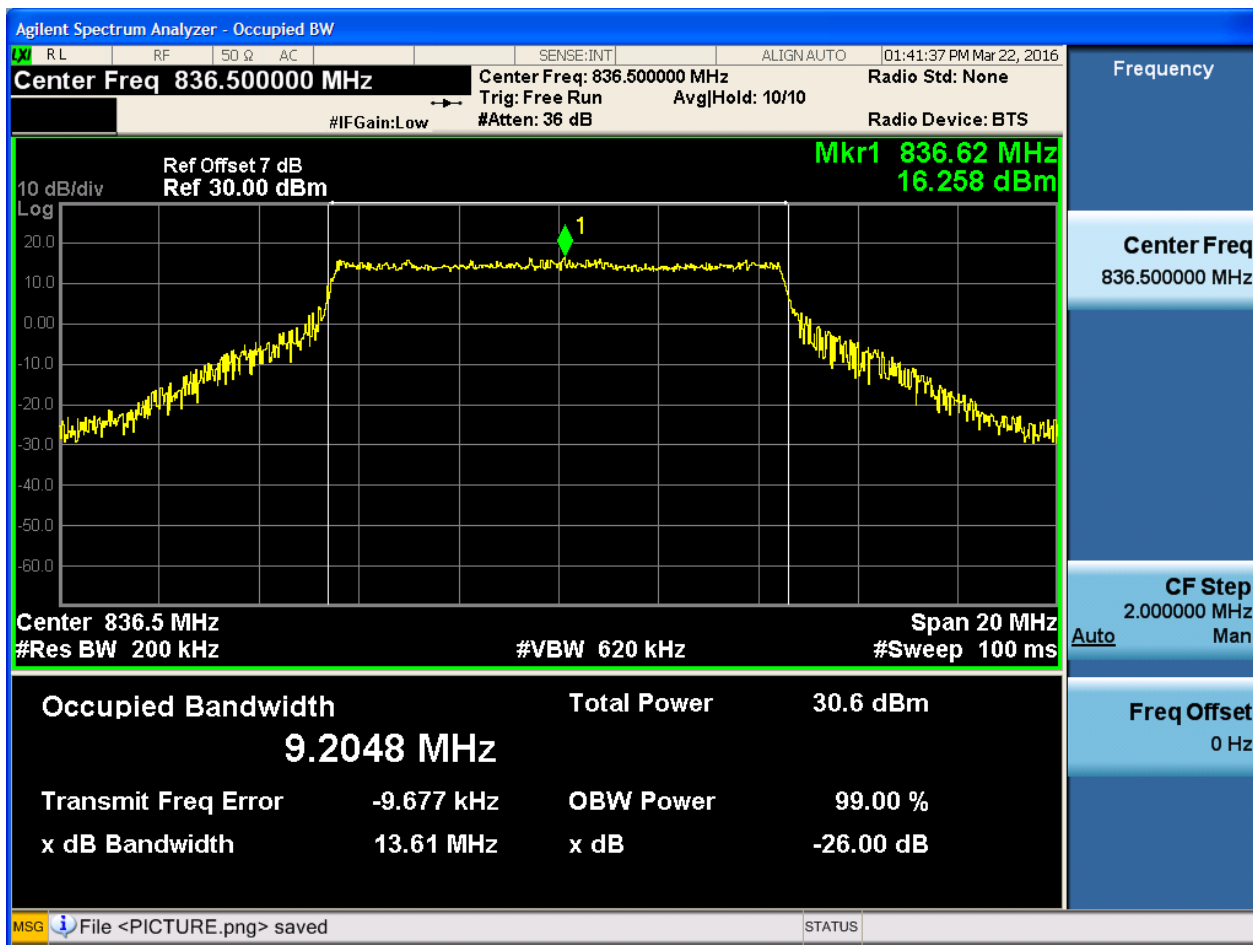
4.1.1.2.4.1.1 Test RB = RB50#0





4.1.1.2.4.2 Test Channel = MCH

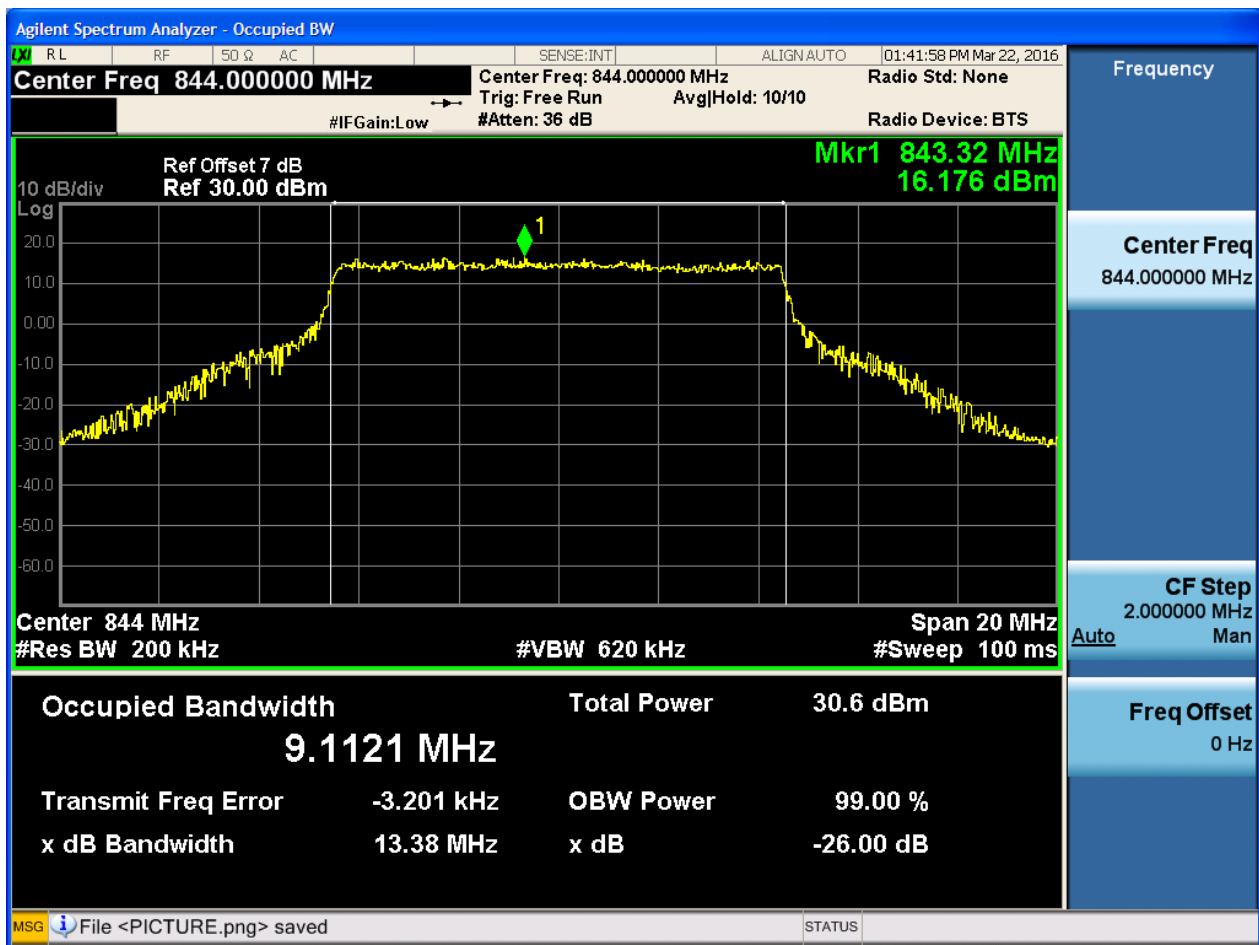
4.1.1.2.4.2.1 Test RB = RB50#0





4.1.1.2.4.3 Test Channel = HCH

4.1.1.2.4.3.1 Test RB = RB50#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

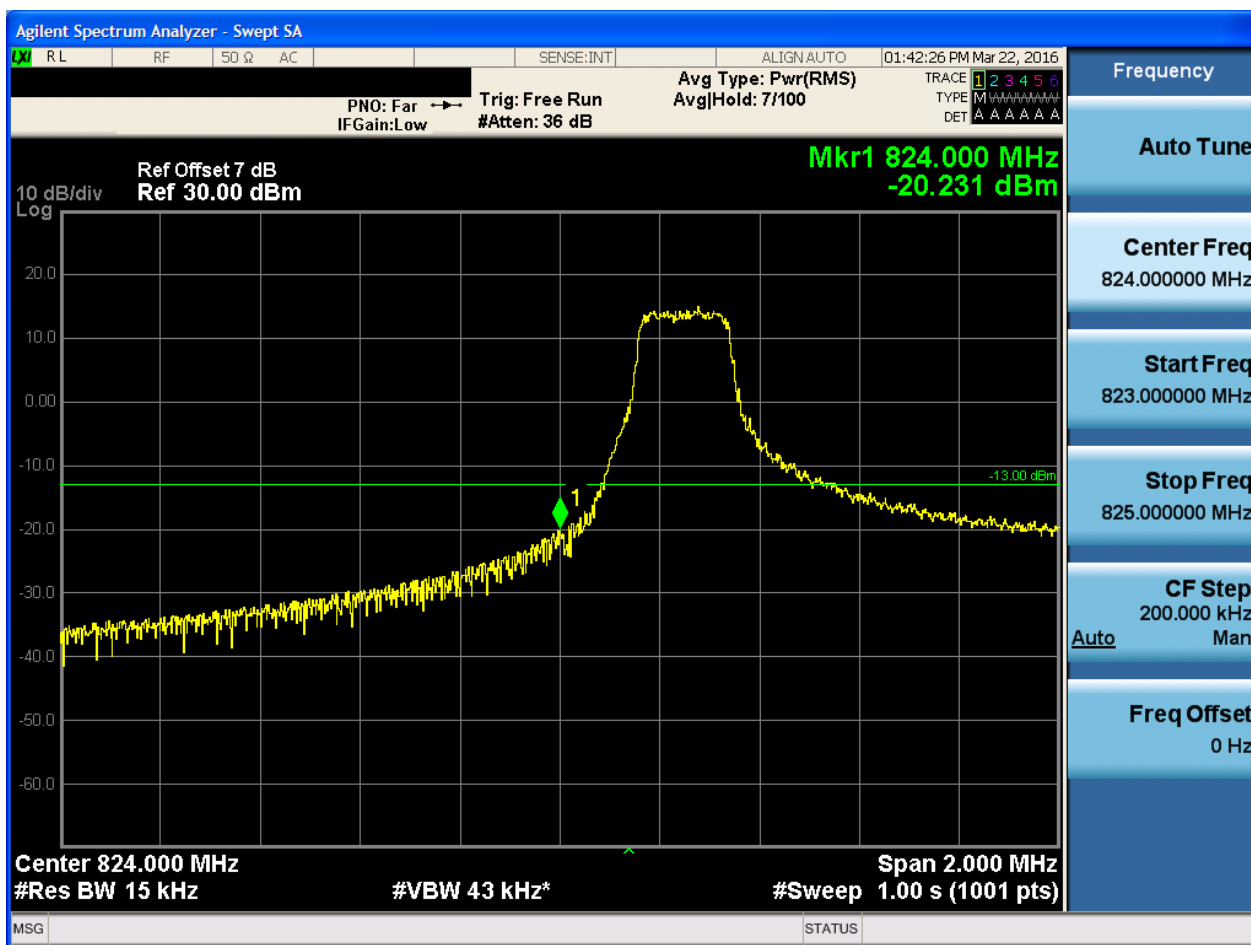
5.1.1 Test Band = BAND5

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 = RB1#0



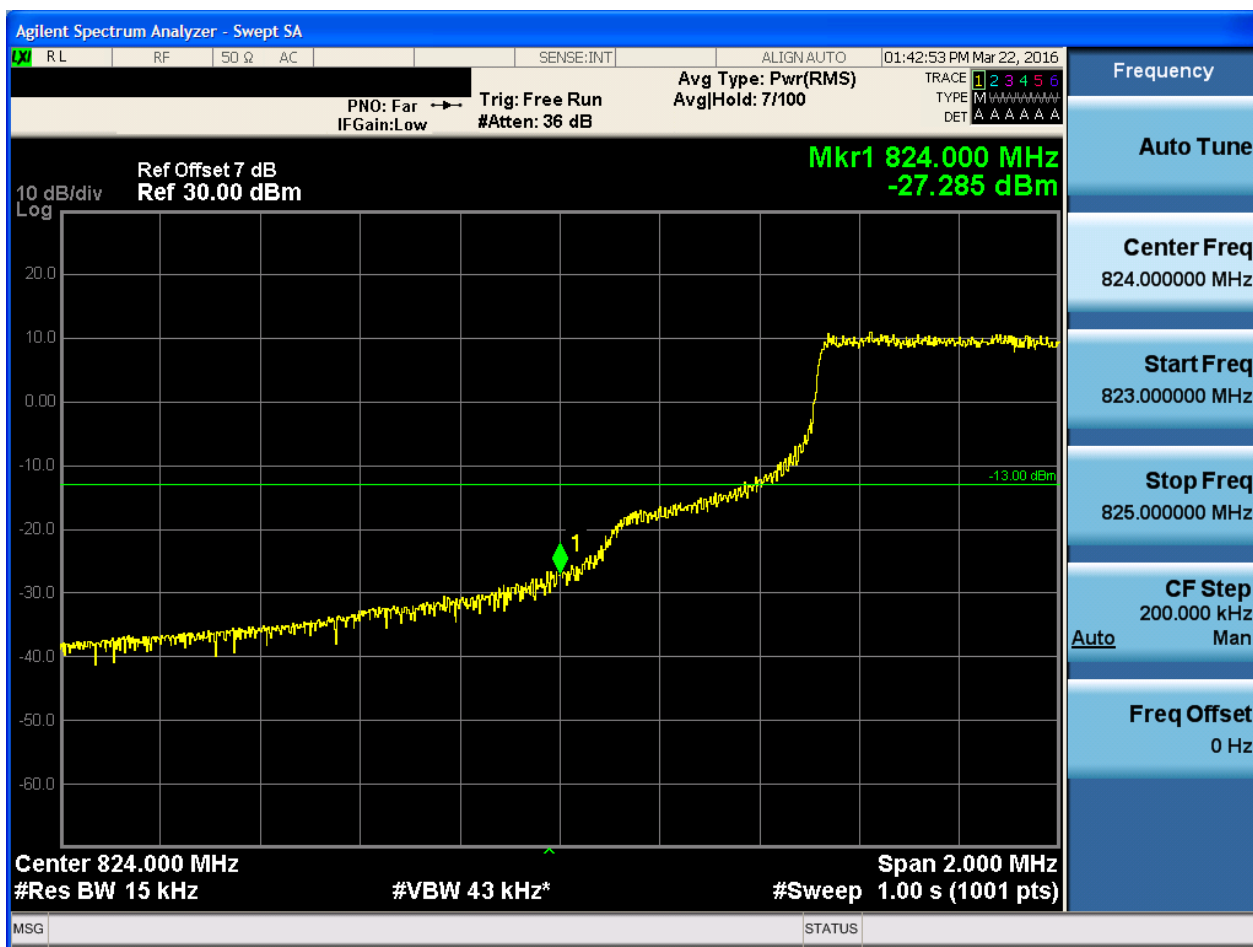


5.1.1.1.1.2 Test RB = RB1#5



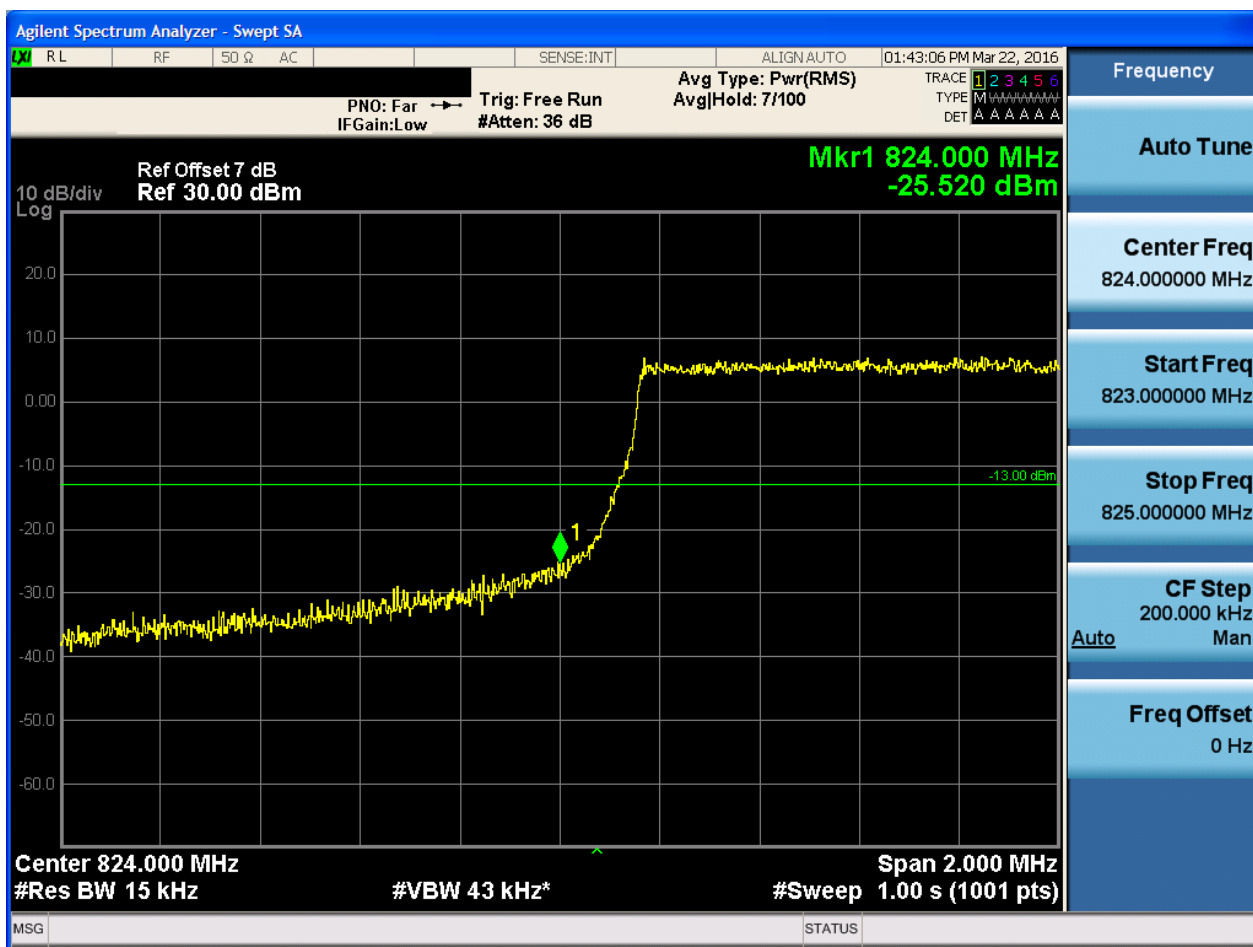


5.1.1.1.1.3 Test RB = RB3#2





5.1.1.1.1.4 Test RB = RB6#0





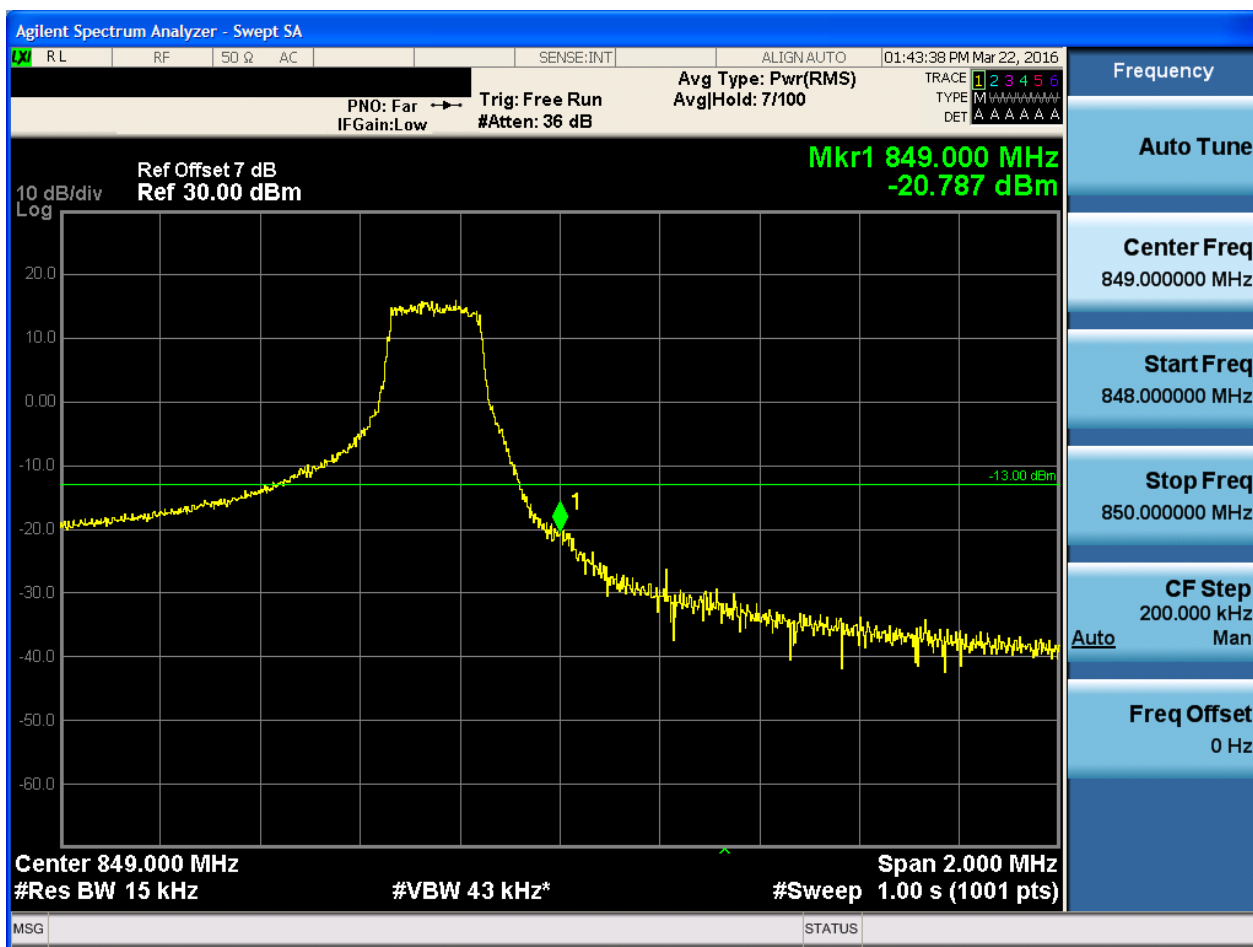
5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





5.1.1.1.1.2.2 Test RB = RB1#5



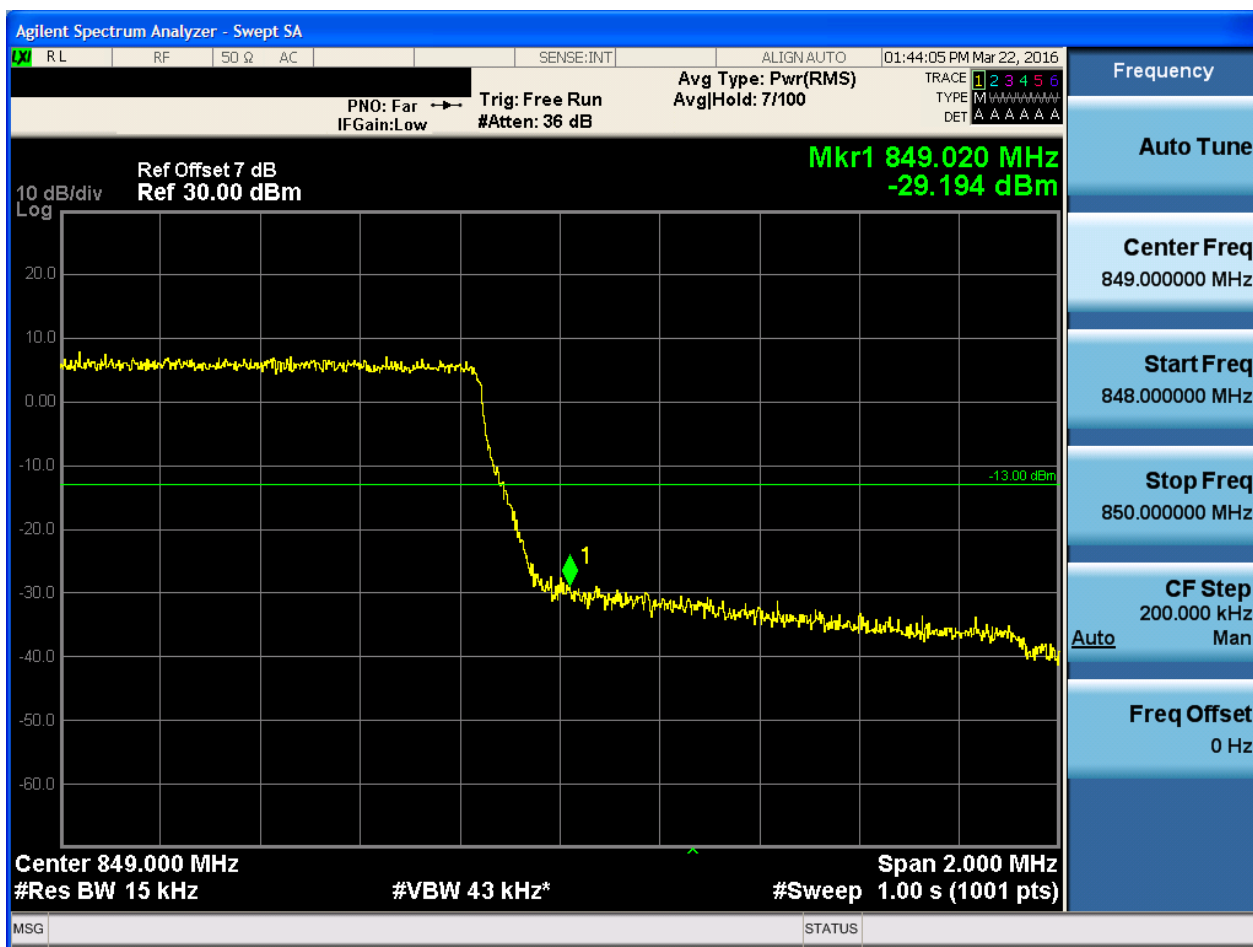


5.1.1.1.2.3 Test RB = RB3#2





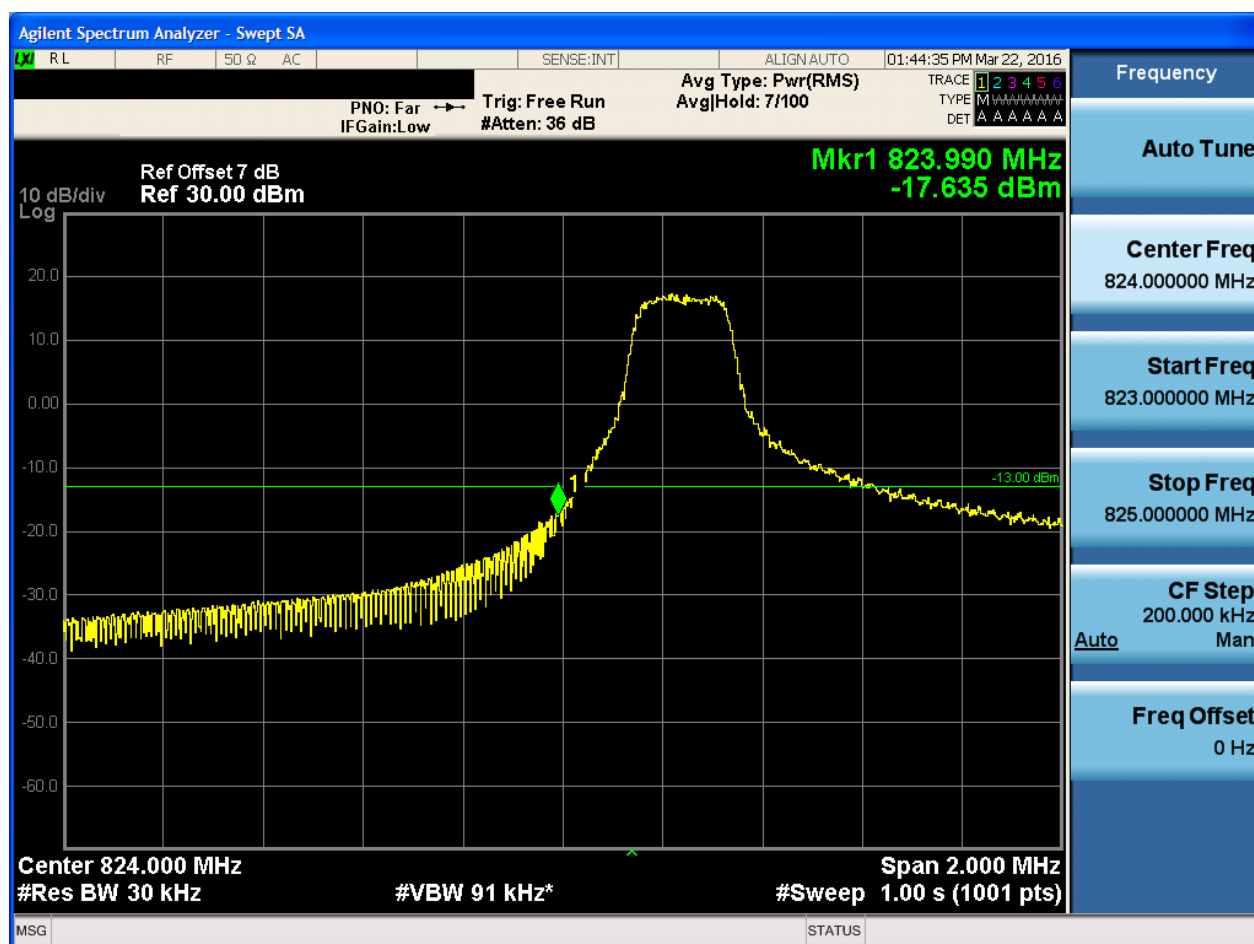
5.1.1.1.2.4 Test RB = RB6#0



5.1.1.1.2 Test Bandwidth = 3

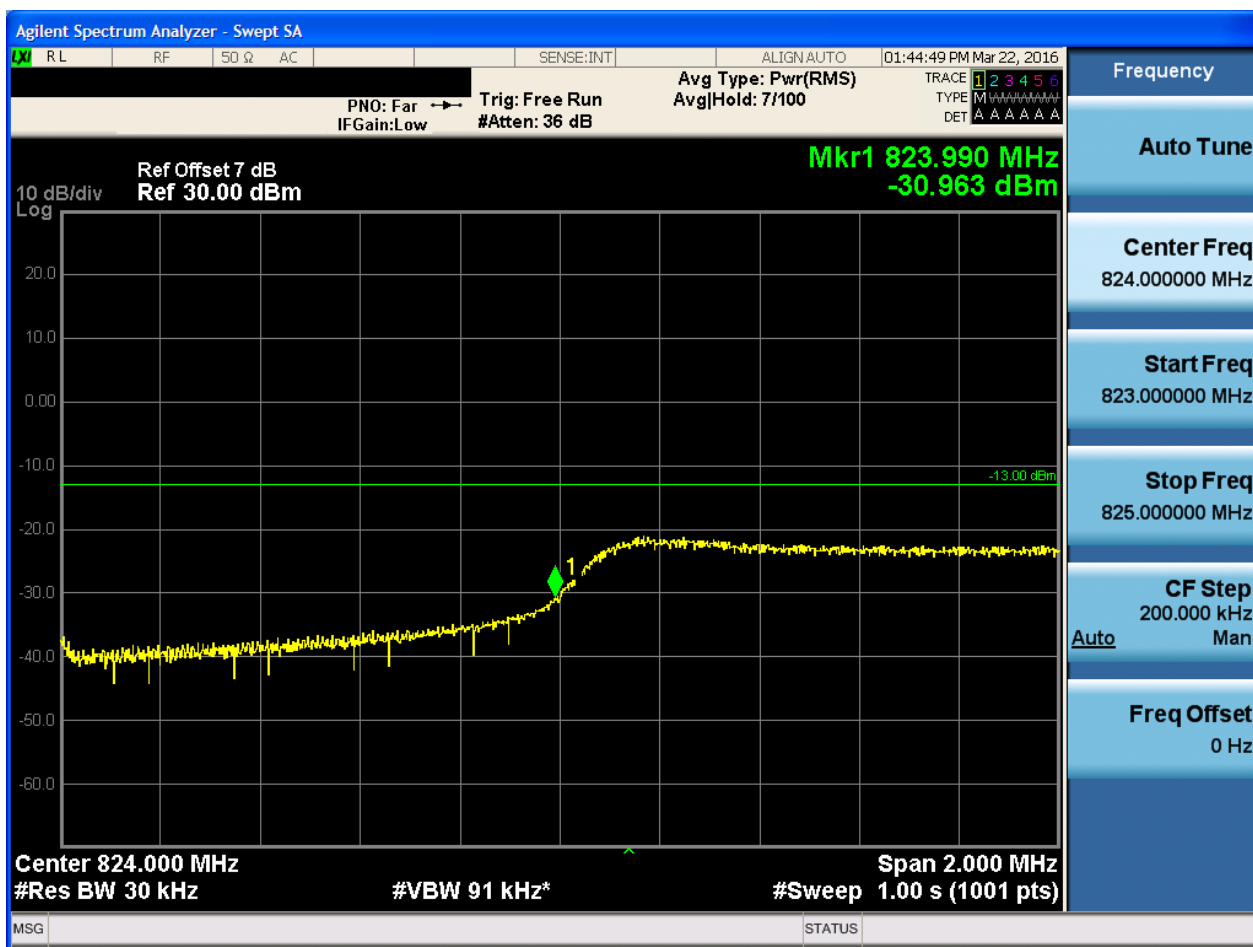
5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0



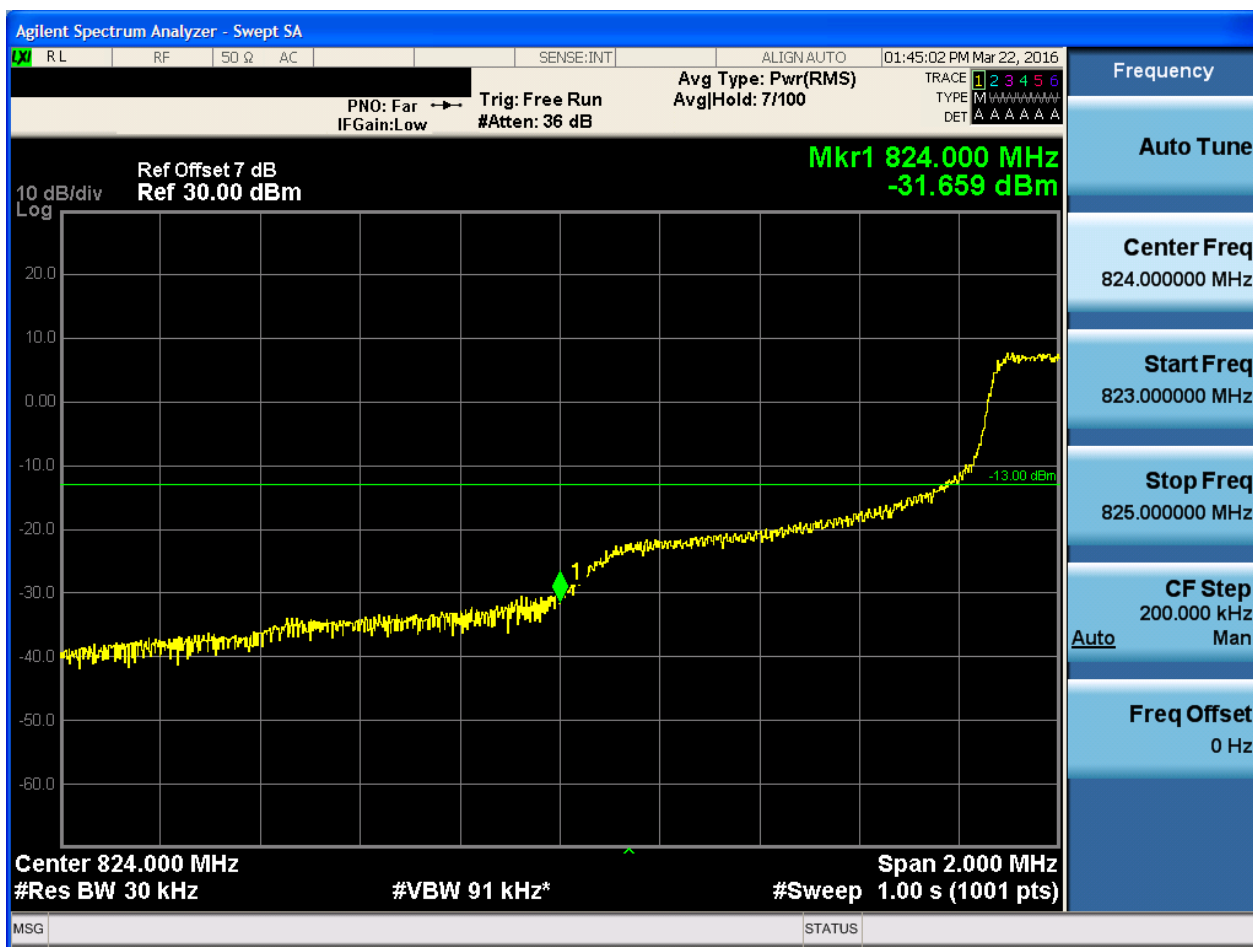


5.1.1.1.2.1.2 Test RB = RB1#14



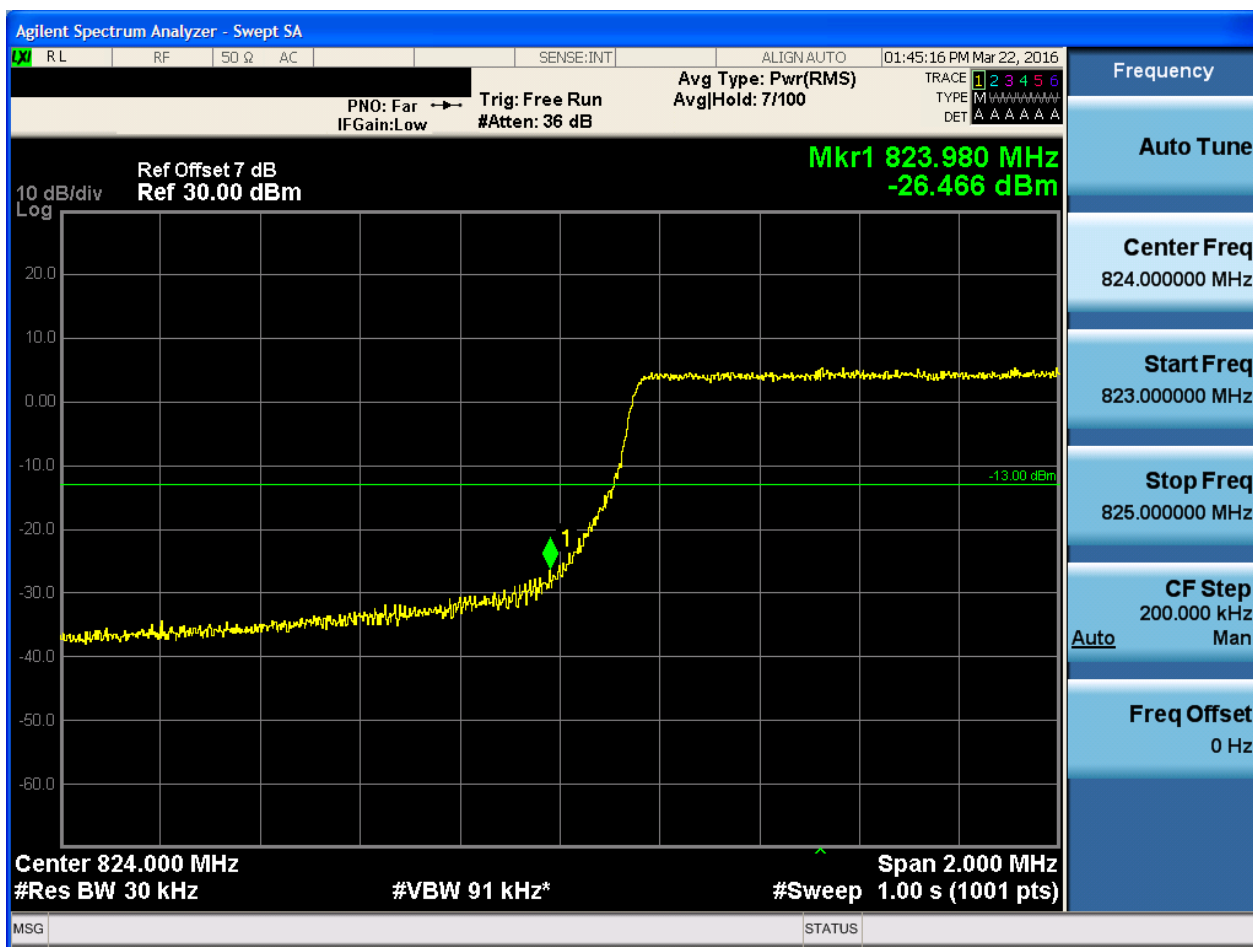


5.1.1.1.2.1.3 Test RB = RB8#4





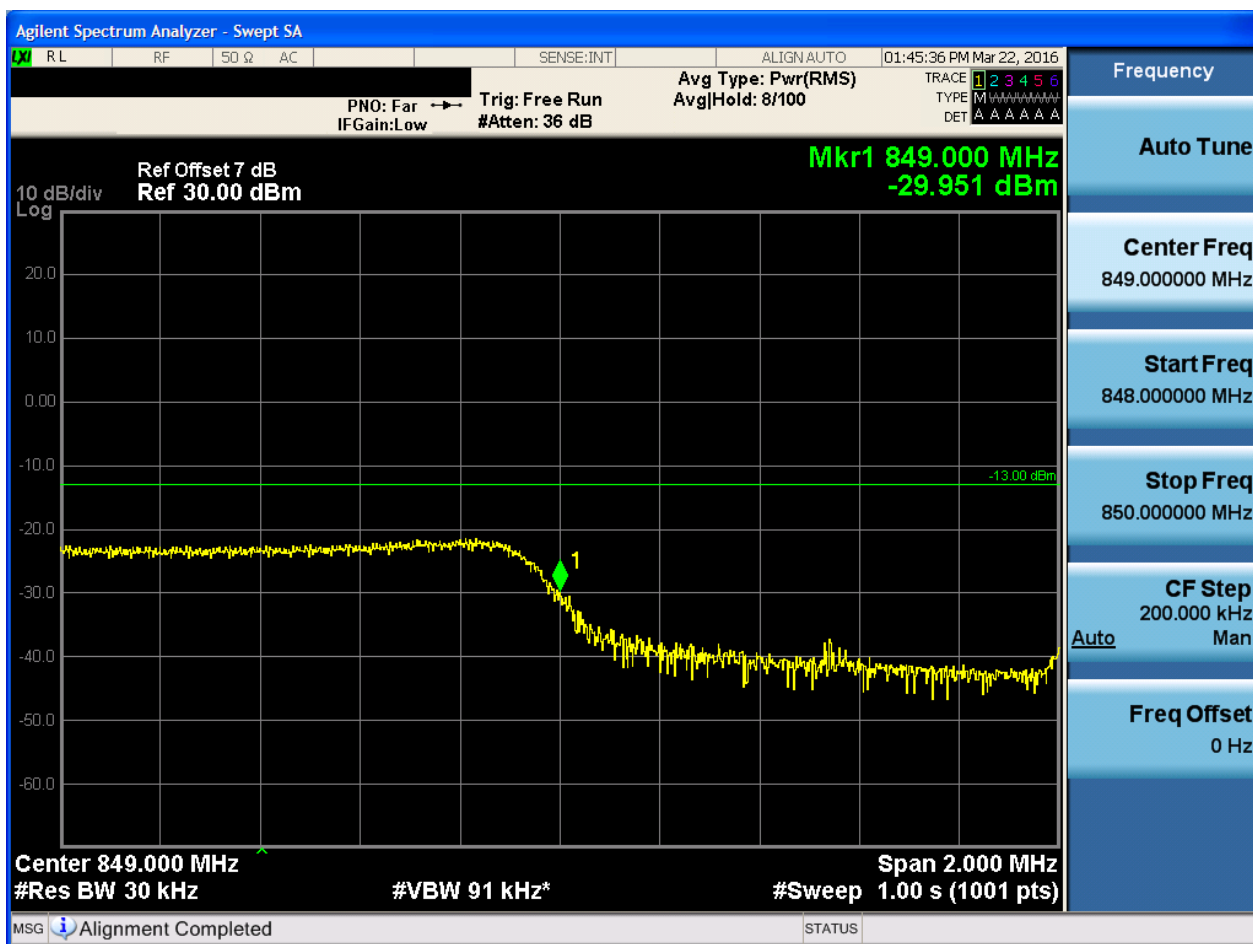
5.1.1.1.2.1.4 Test RB = RB15#0





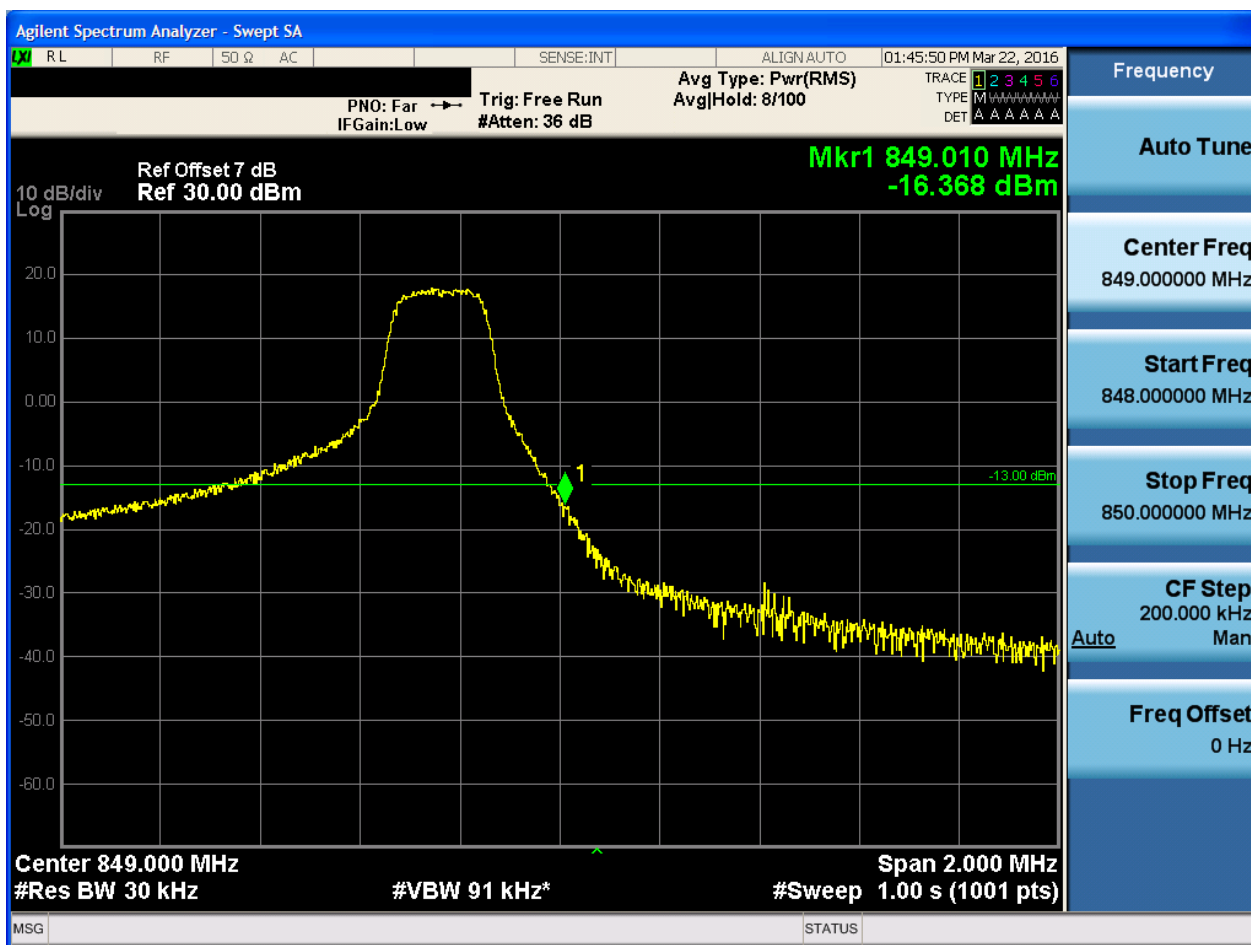
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0





5.1.1.1.2.2.2 Test RB = RB1#14



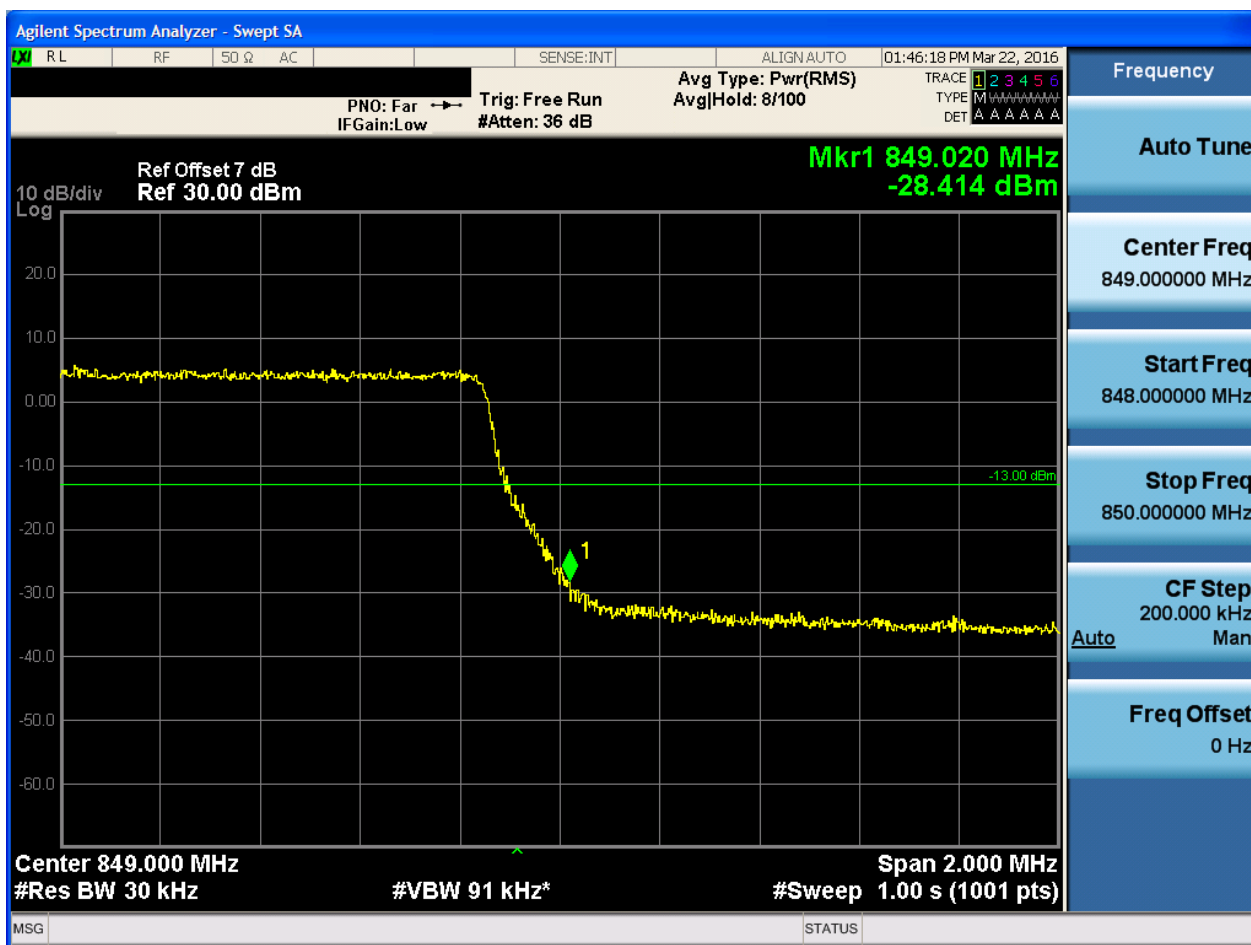


5.1.1.1.2.2.3 Test RB = RB8#4





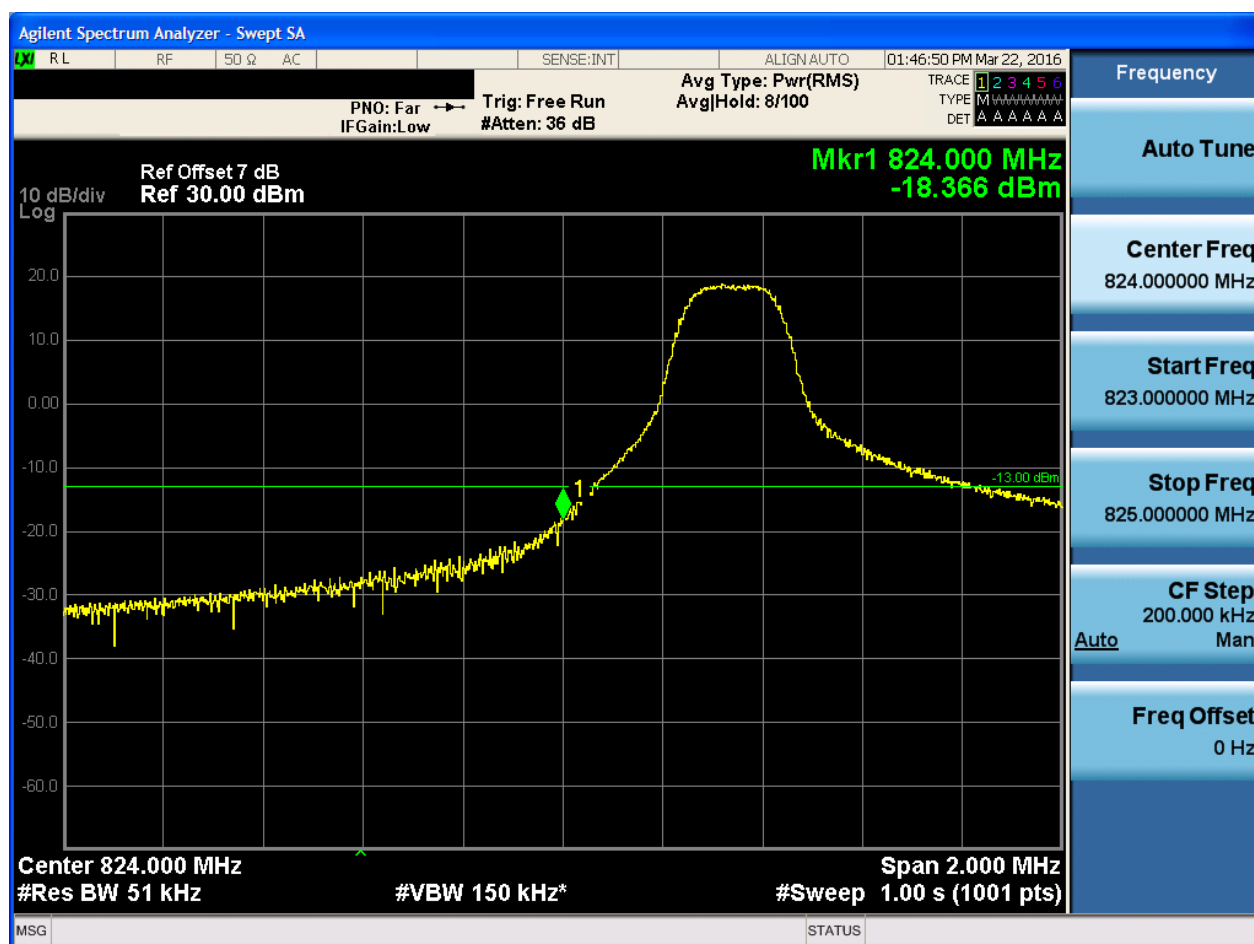
5.1.1.1.2.2.4 Test RB = RB15#0



5.1.1.1.3 Test Bandwidth = 5

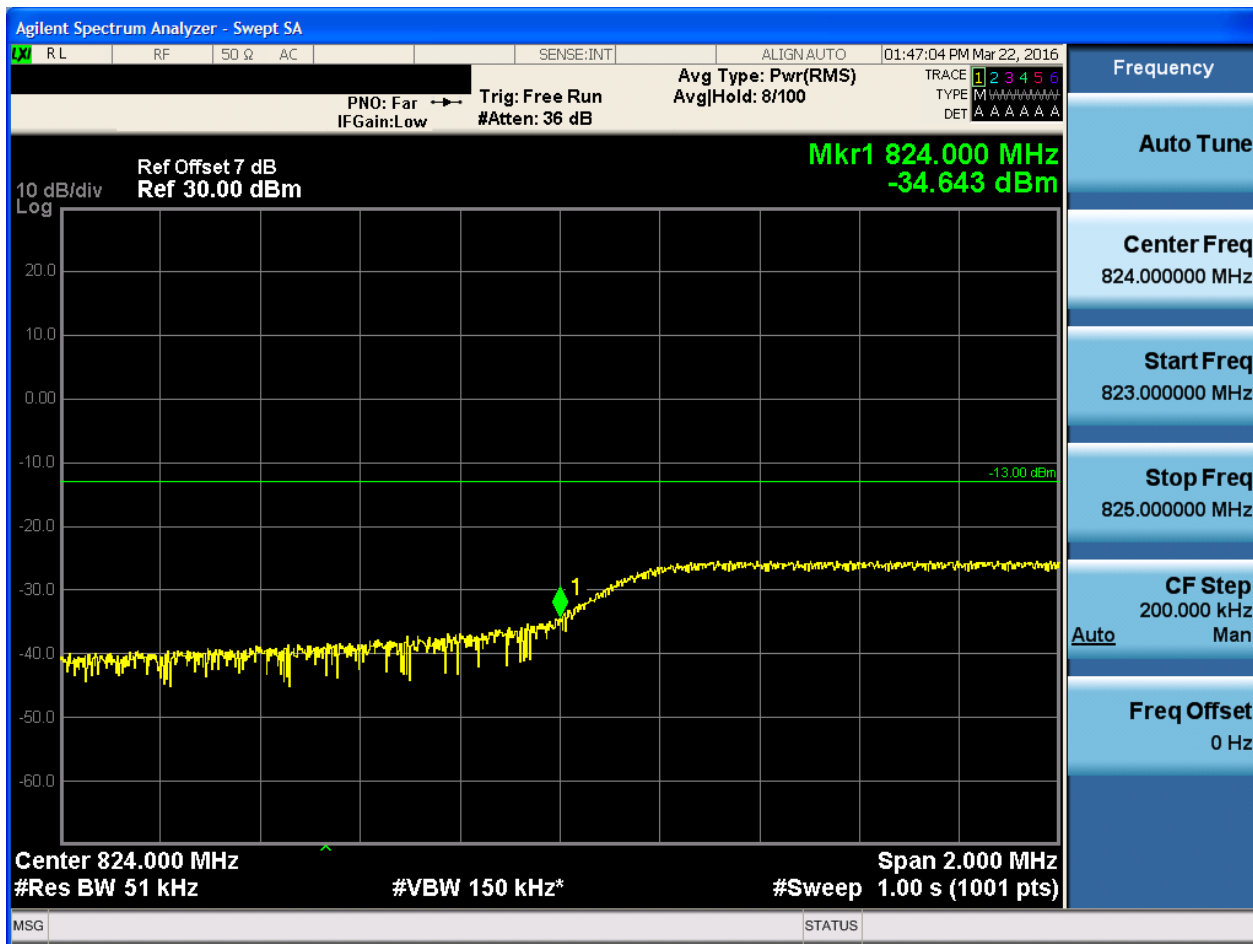
5.1.1.1.3.1 Test Channel = LCH

5.1.1.1.3.1.1 Test RB = RB1#0



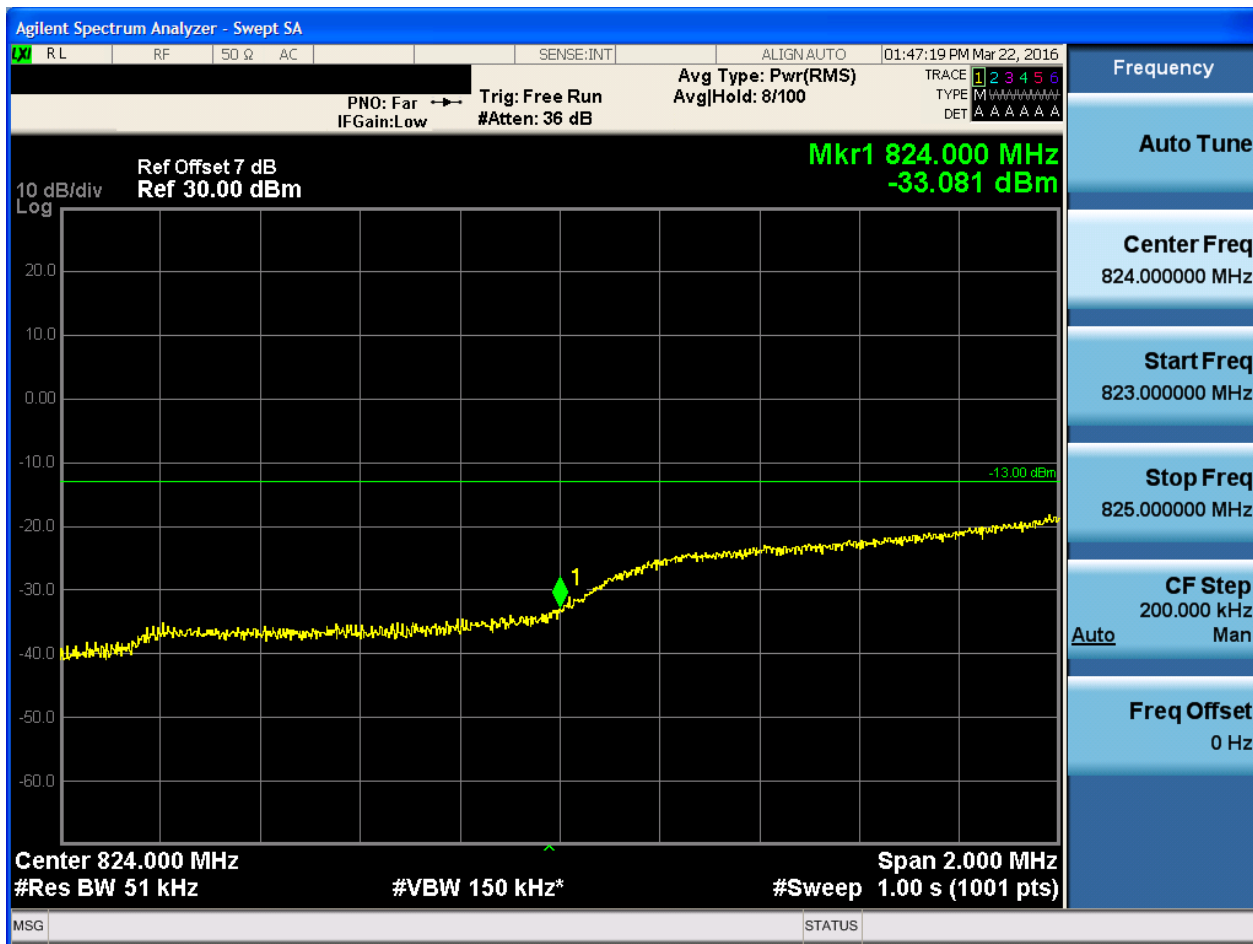


5.1.1.1.3.1.2 Test RB = RB1#24



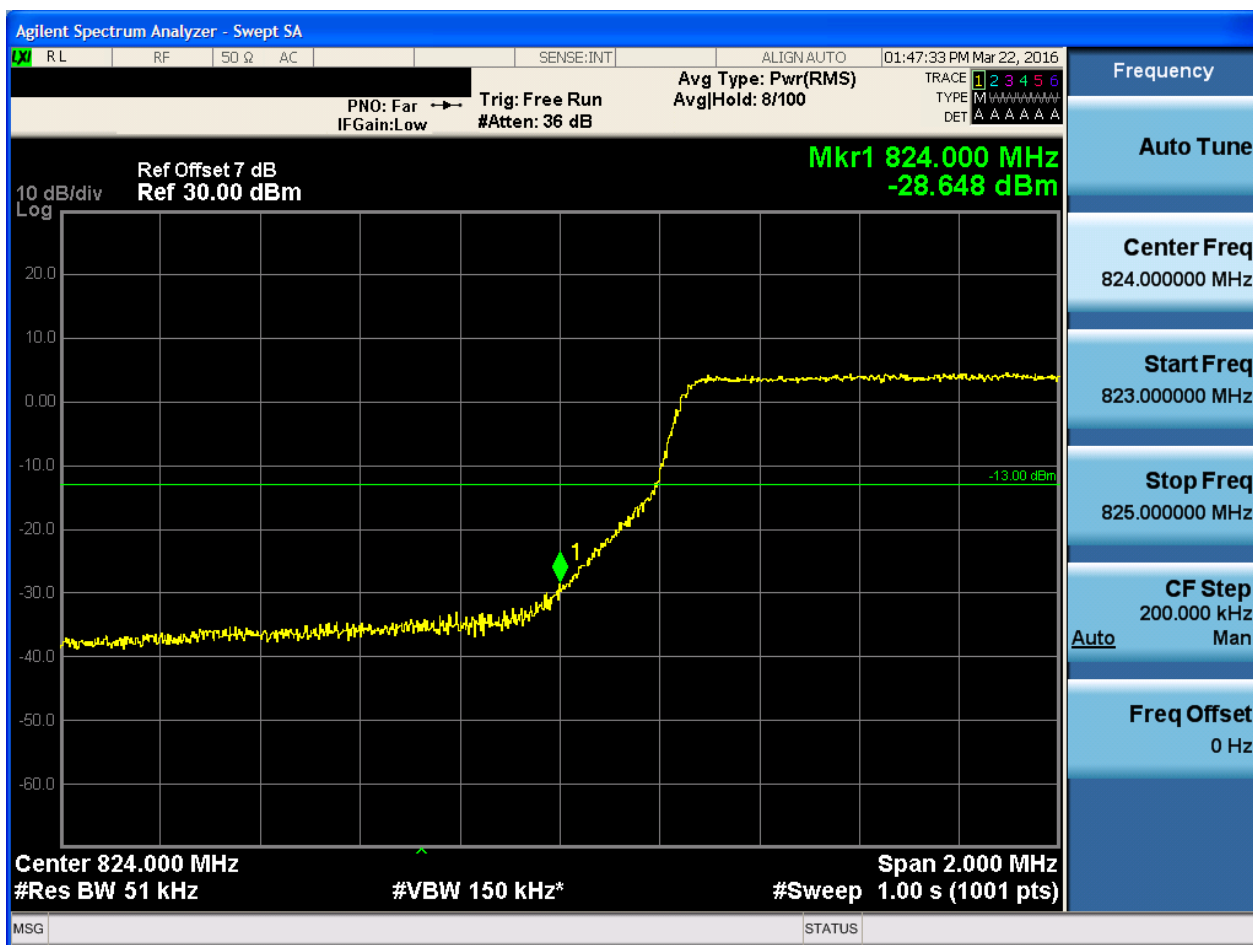


5.1.1.1.3.1.3 Test RB = RB12#6





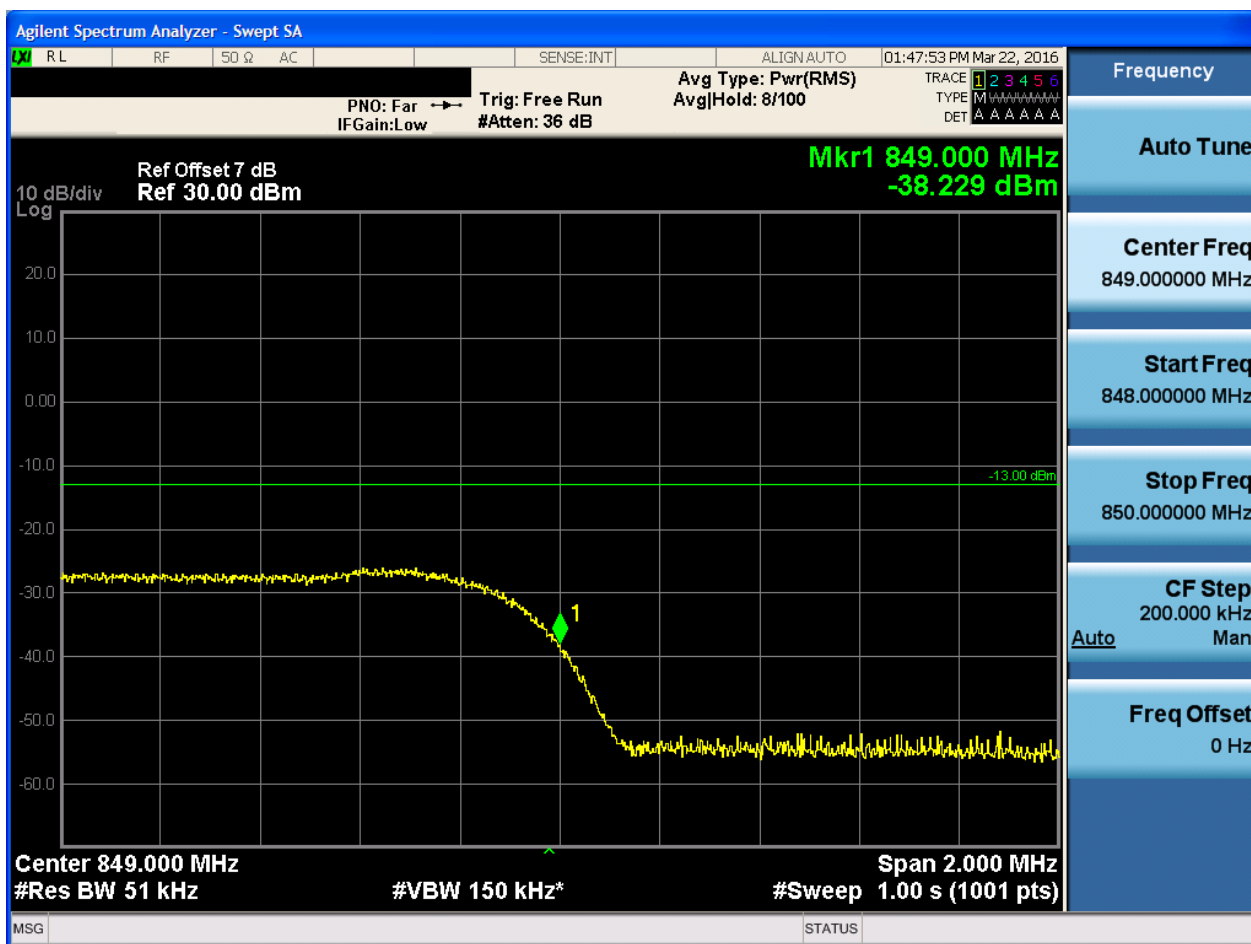
5.1.1.1.3.1.4 Test RB = RB25#0





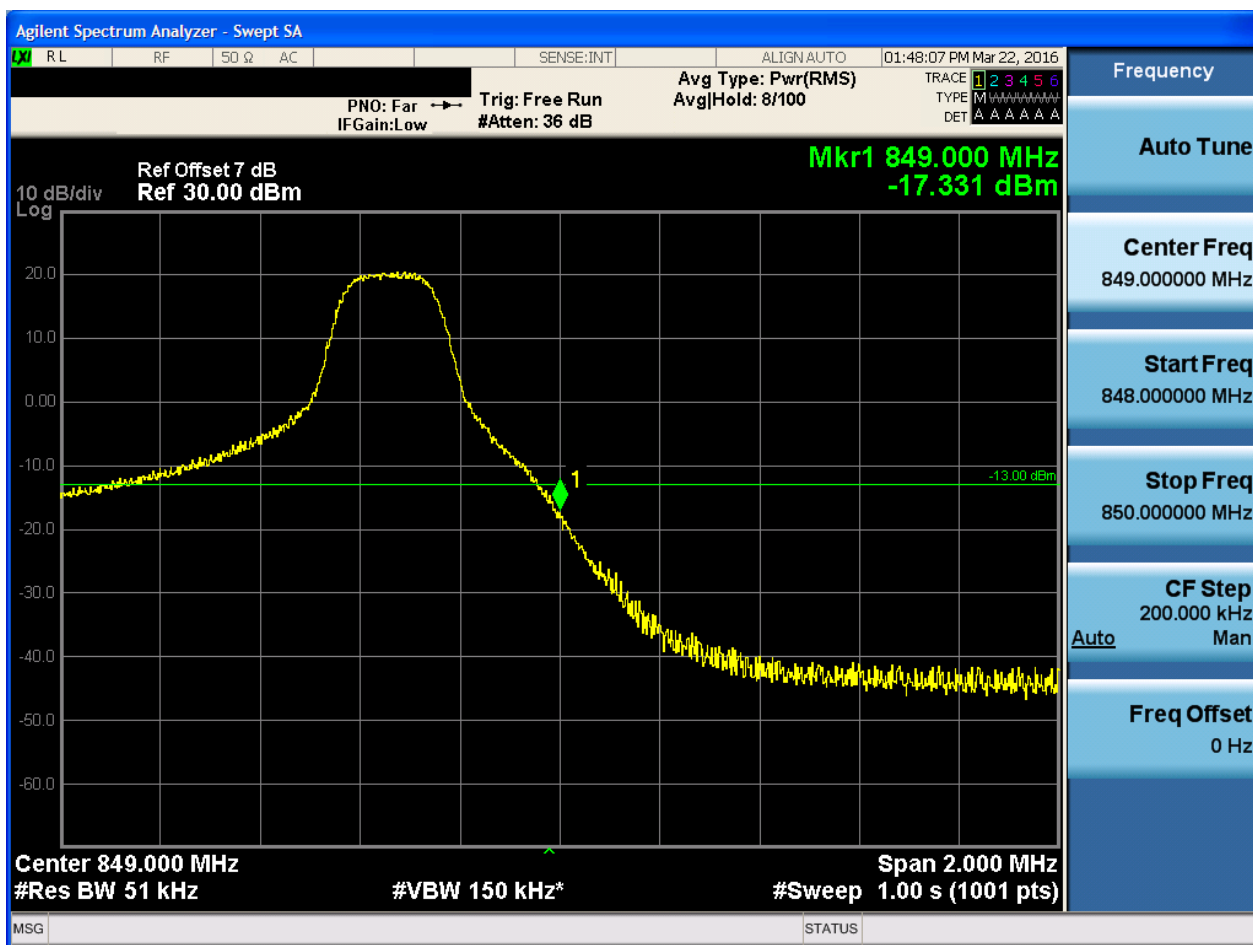
5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#24





5.1.1.1.3.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:48:37 PM Mar 22, 2016

Avg Type: Pwr(RMS) Avg|Hold: 8/100

Trig: Free Run #Atten: 36 dB

PNO: Far IFGain: Low

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W
DET A A A A A A

Ref Offset 7 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-31.106 dBm

10 dB/div
Log

-13.00 dBm

Center 849.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*
Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Auto

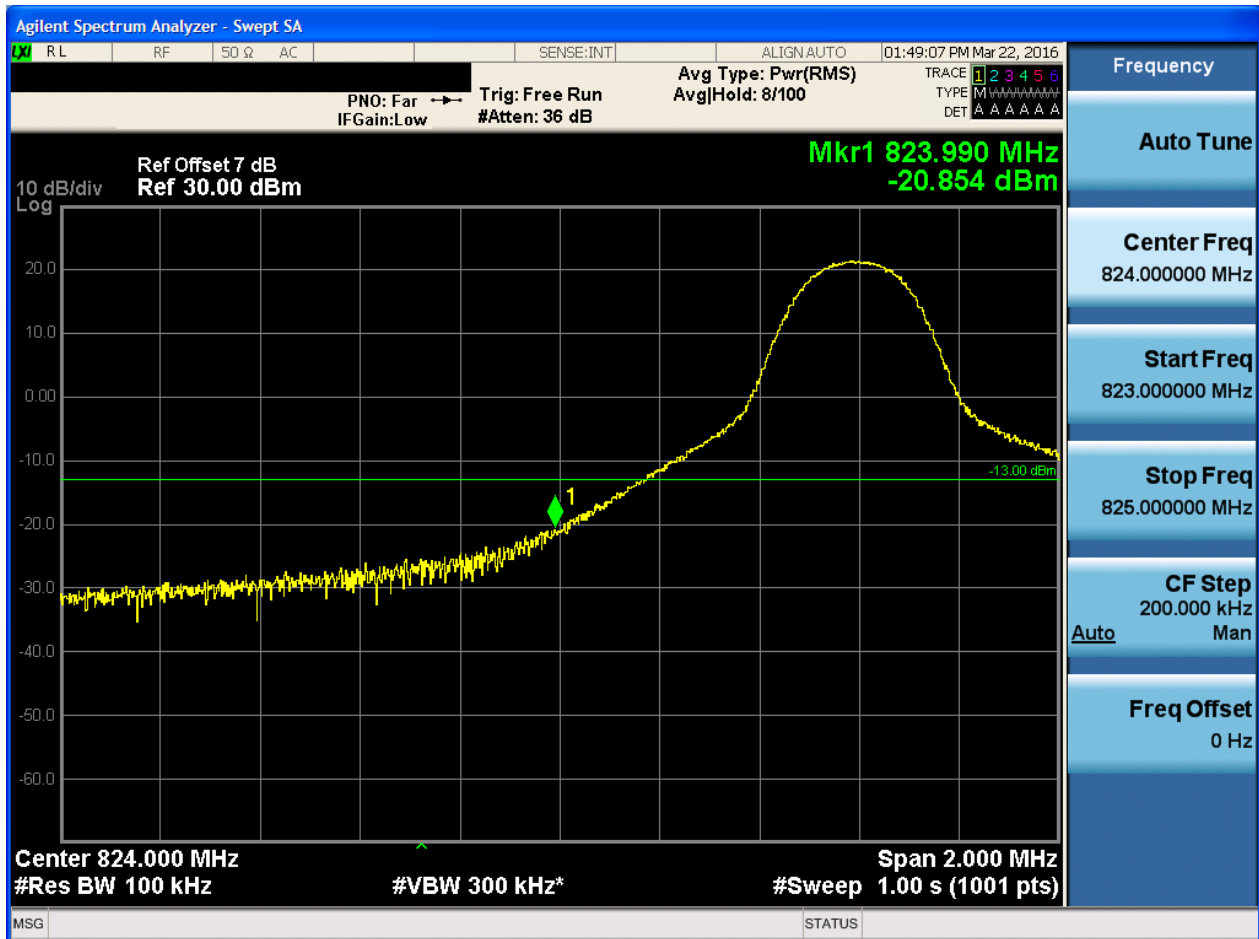
Freq Offset
0 Hz

MSG STATUS

5.1.1.1.4 Test Bandwidth = 10

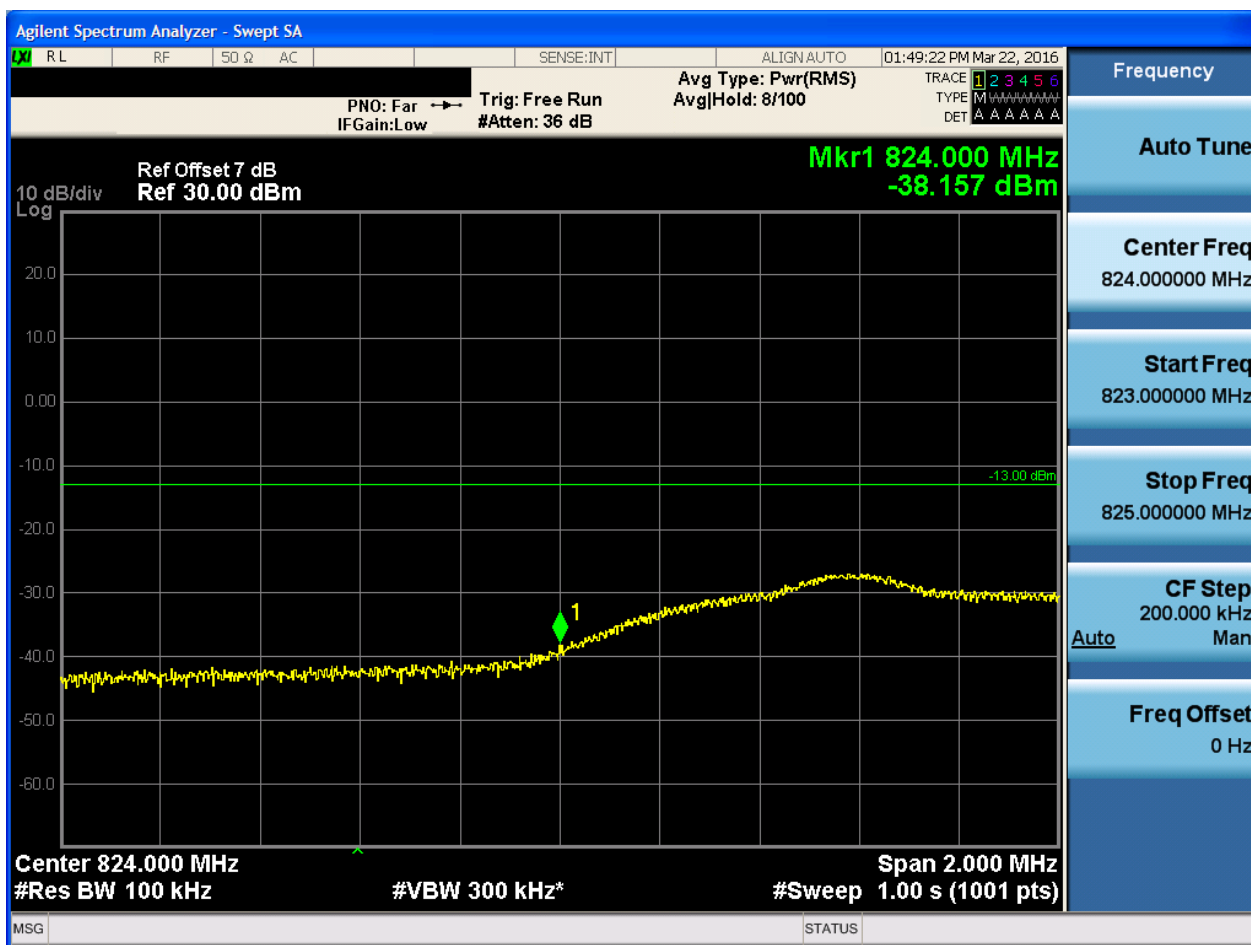
5.1.1.1.4.1 Test Channel = LCH

5.1.1.1.4.1.1 Test RB = RB1#0





5.1.1.1.4.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:49:36 PM Mar 22, 2016

Avg Type: Pwr(RMS) Avg|Hold: 8/100

Trig: Free Run #Atten: 36 dB

PNO: Far IFGain:Low

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W
DET A A A A A A

Ref Offset 7 dB
Ref 30.00 dBm

Mkr1 823.990 MHz
-35.061 dBm

10 dB/div
Log

20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0

-13.00 dBm

Center 824.000 MHz
#Res BW 100 kHz

#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

MSG STATUS



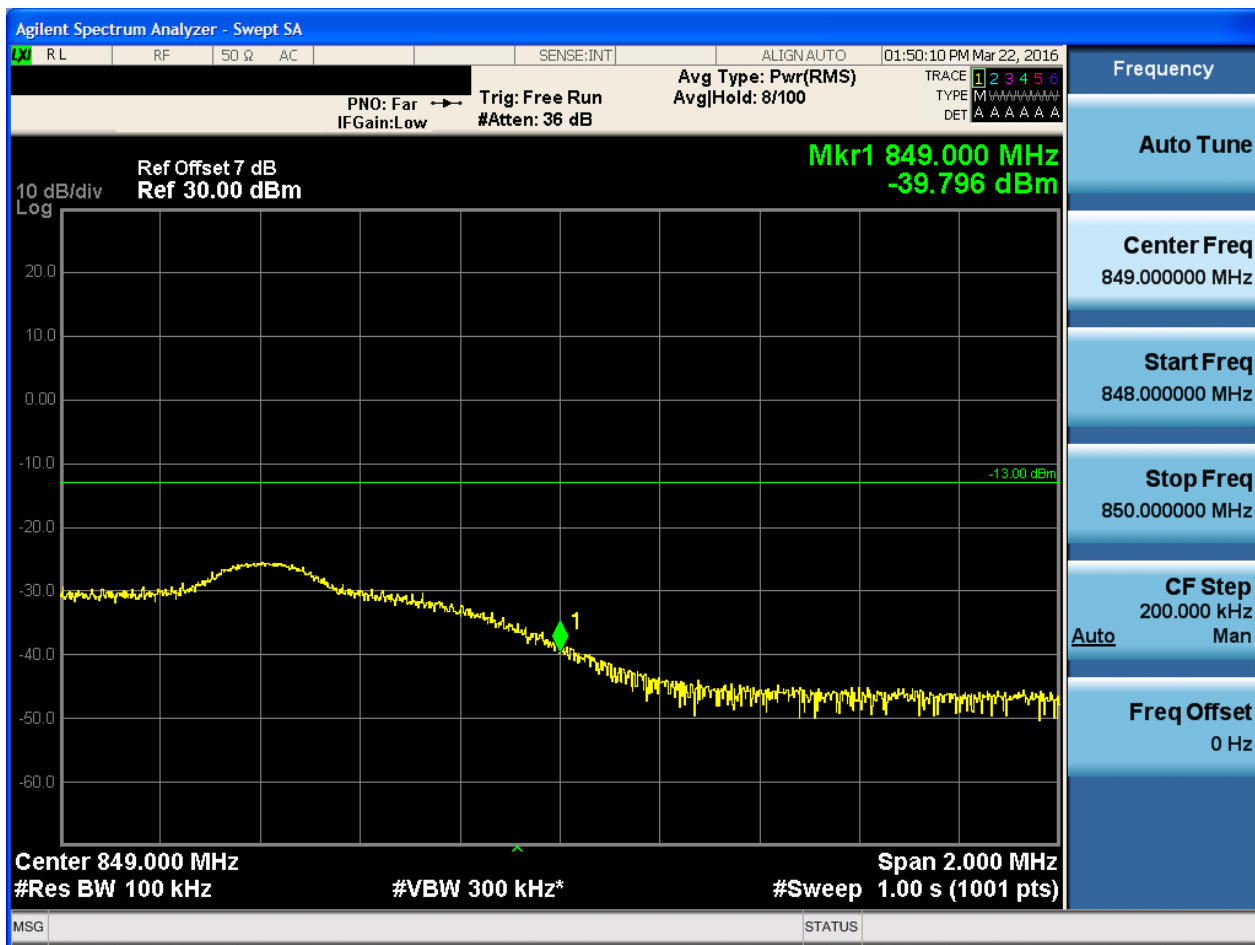
5.1.1.1.4.1.4 Test RB = RB50#0





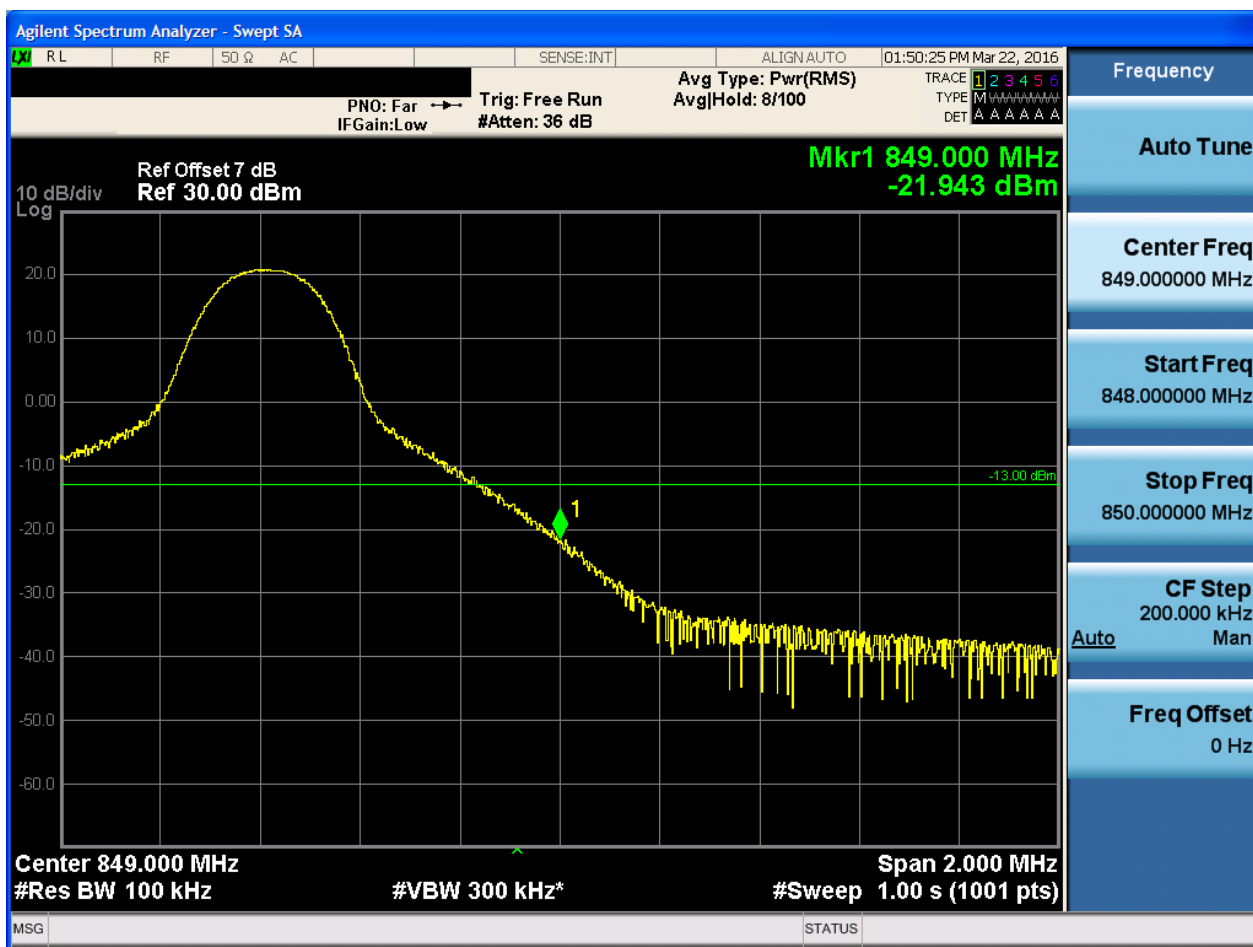
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0





5.1.1.1.4.2.2 Test RB = RB1#49





5.1.1.1.4.2.3 Test RB = RB25#13





5.1.1.1.4.2.4 Test RB = RB50#0



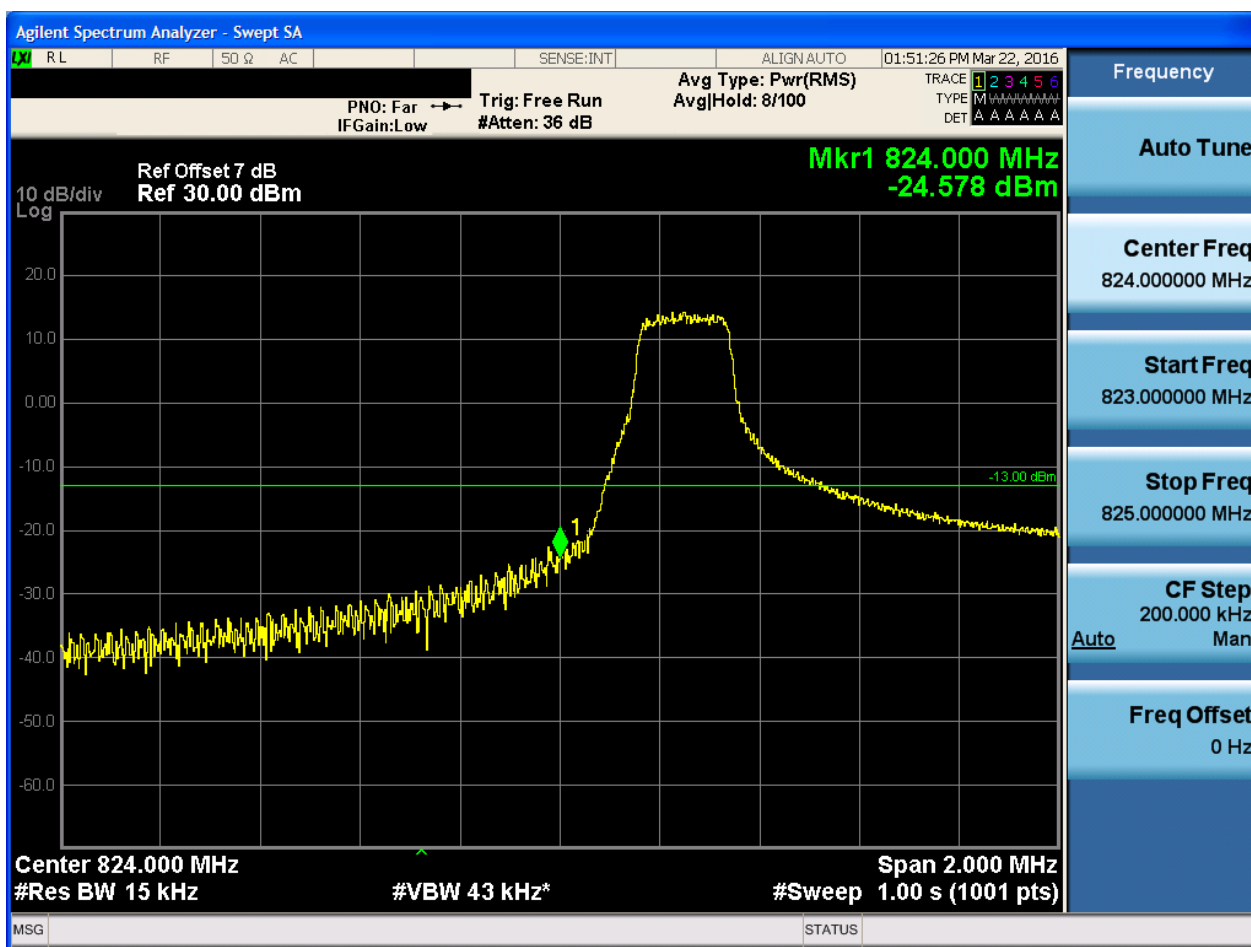


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 1.4

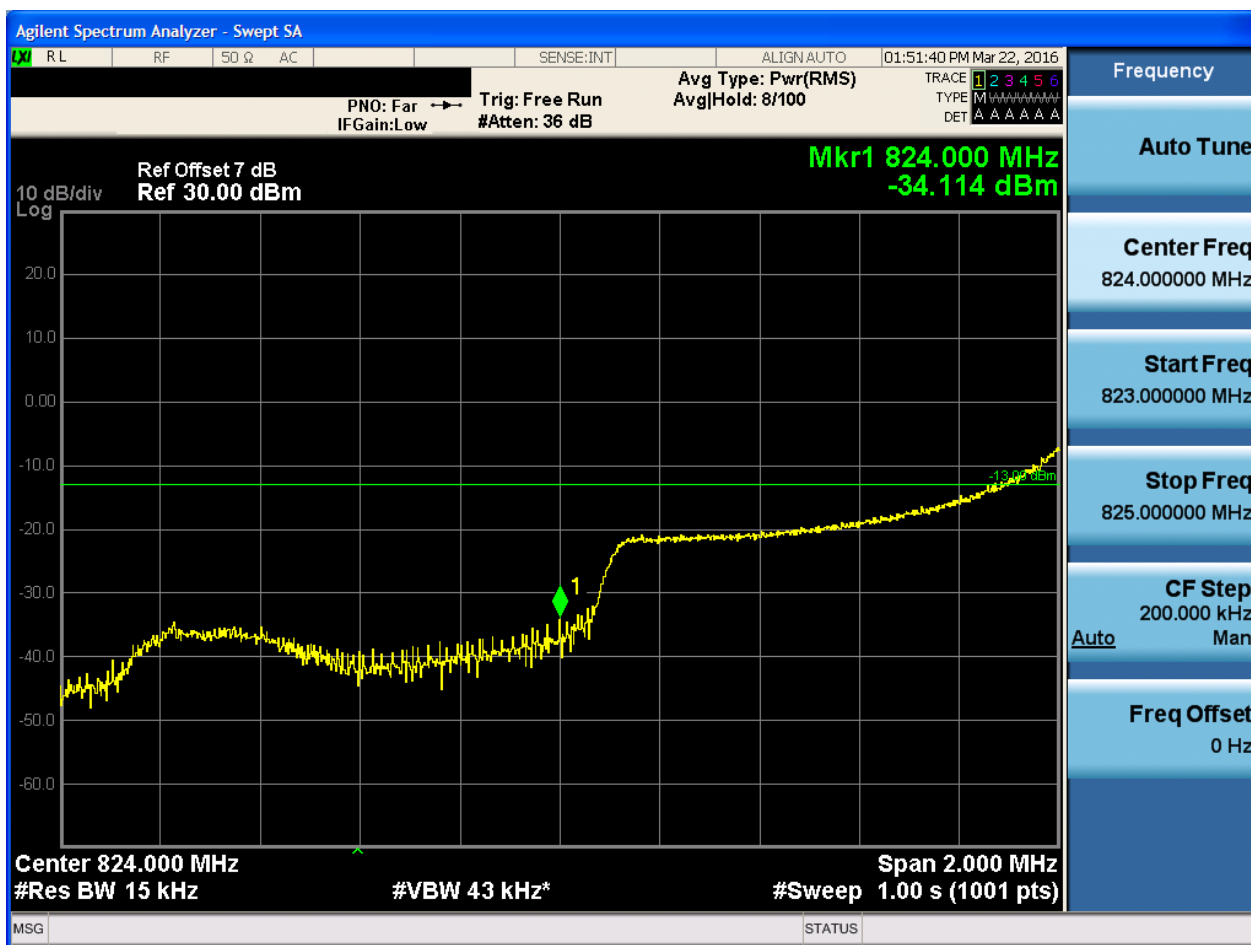
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0



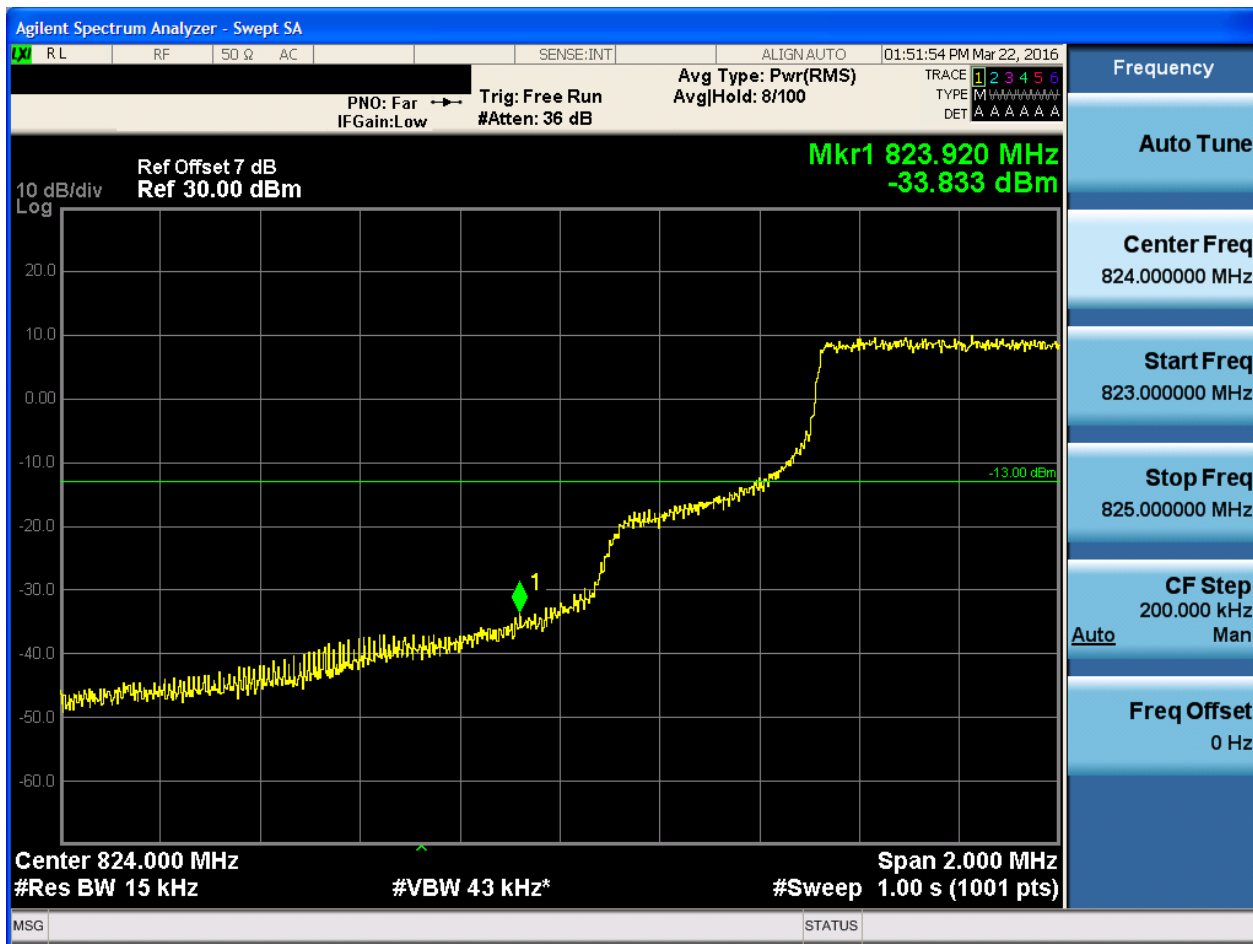


5.1.1.2.1.1.2 Test RB = RB1#5



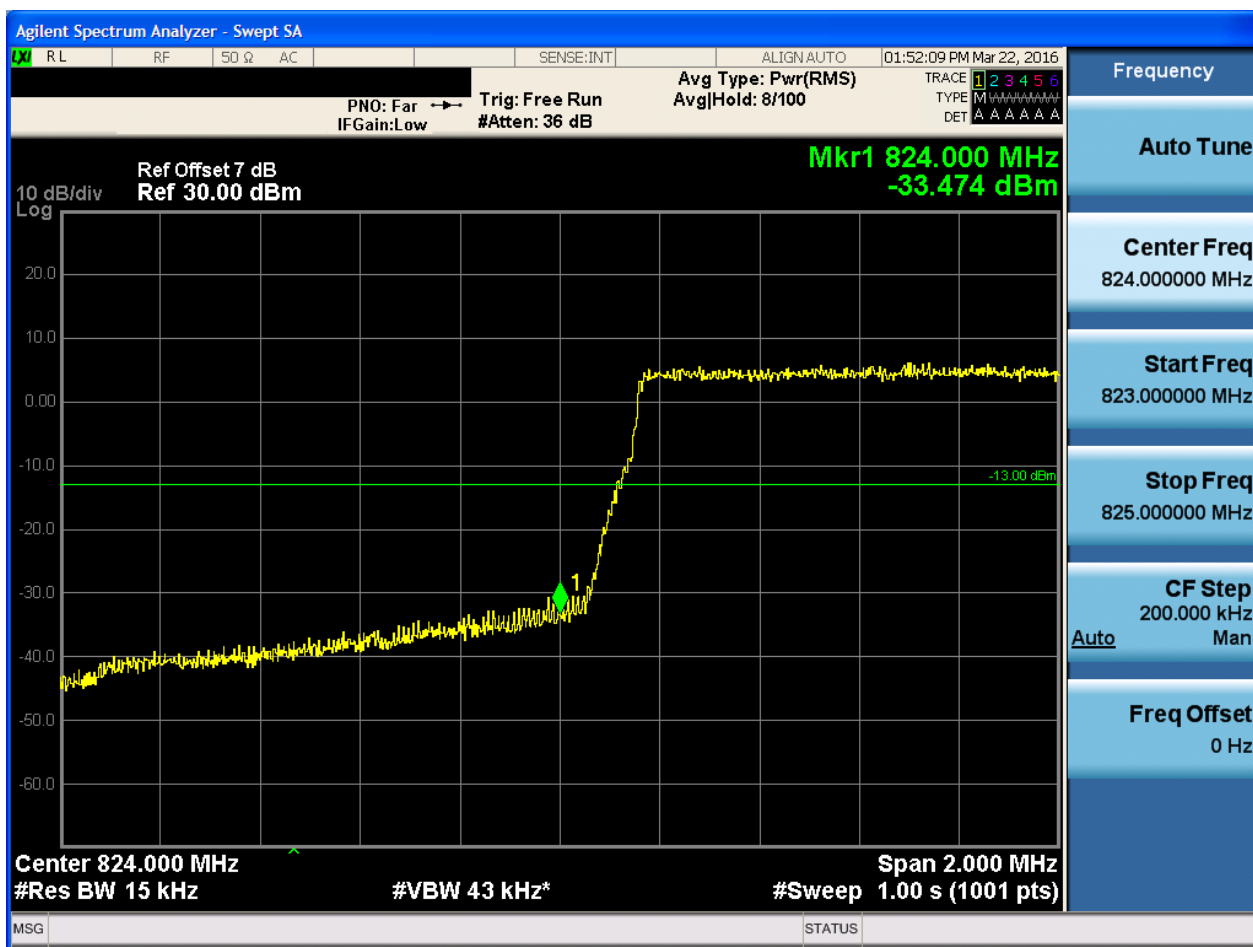


5.1.1.2.1.1.3 Test RB = RB3#2





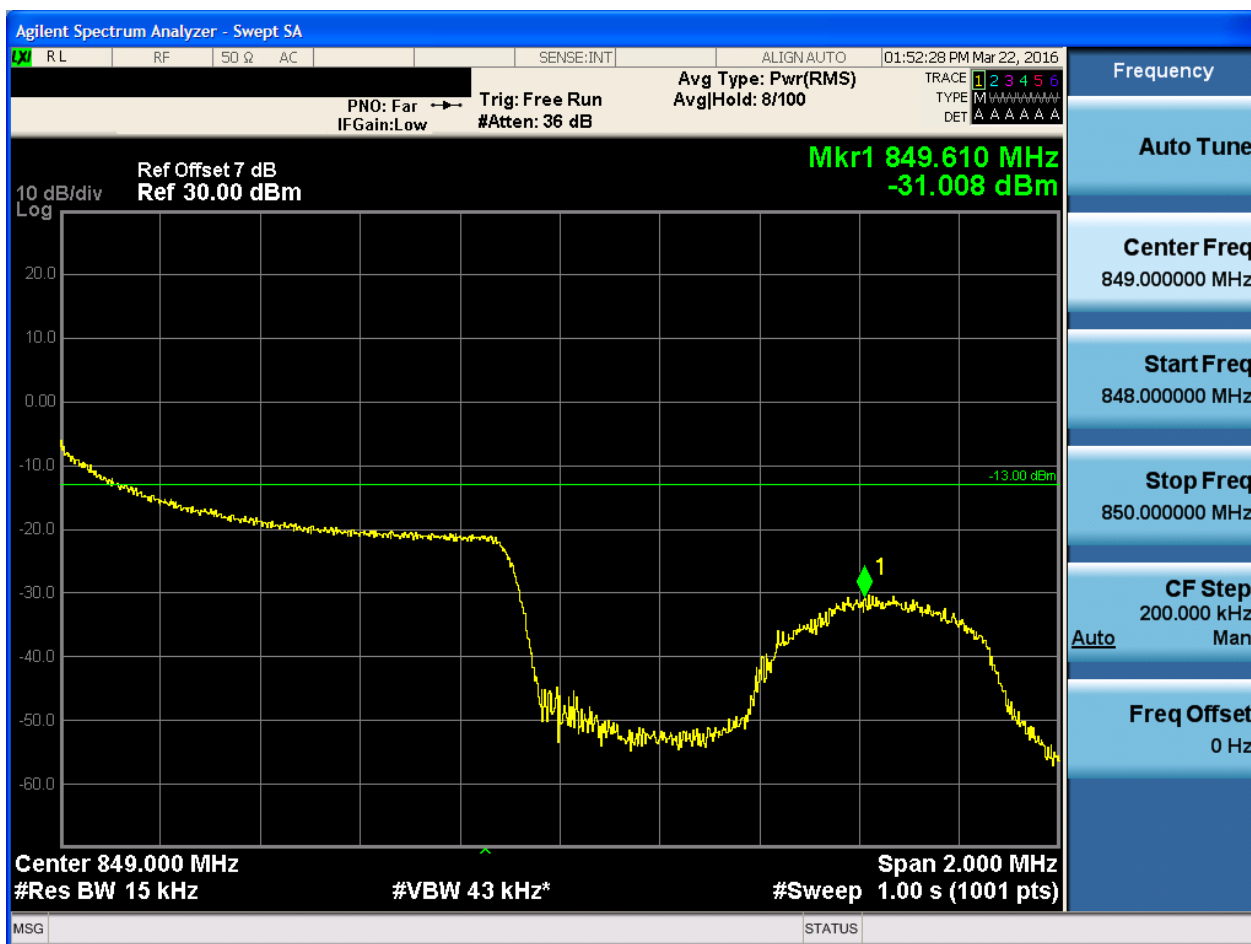
5.1.1.2.1.1.4 Test RB = RB6#0





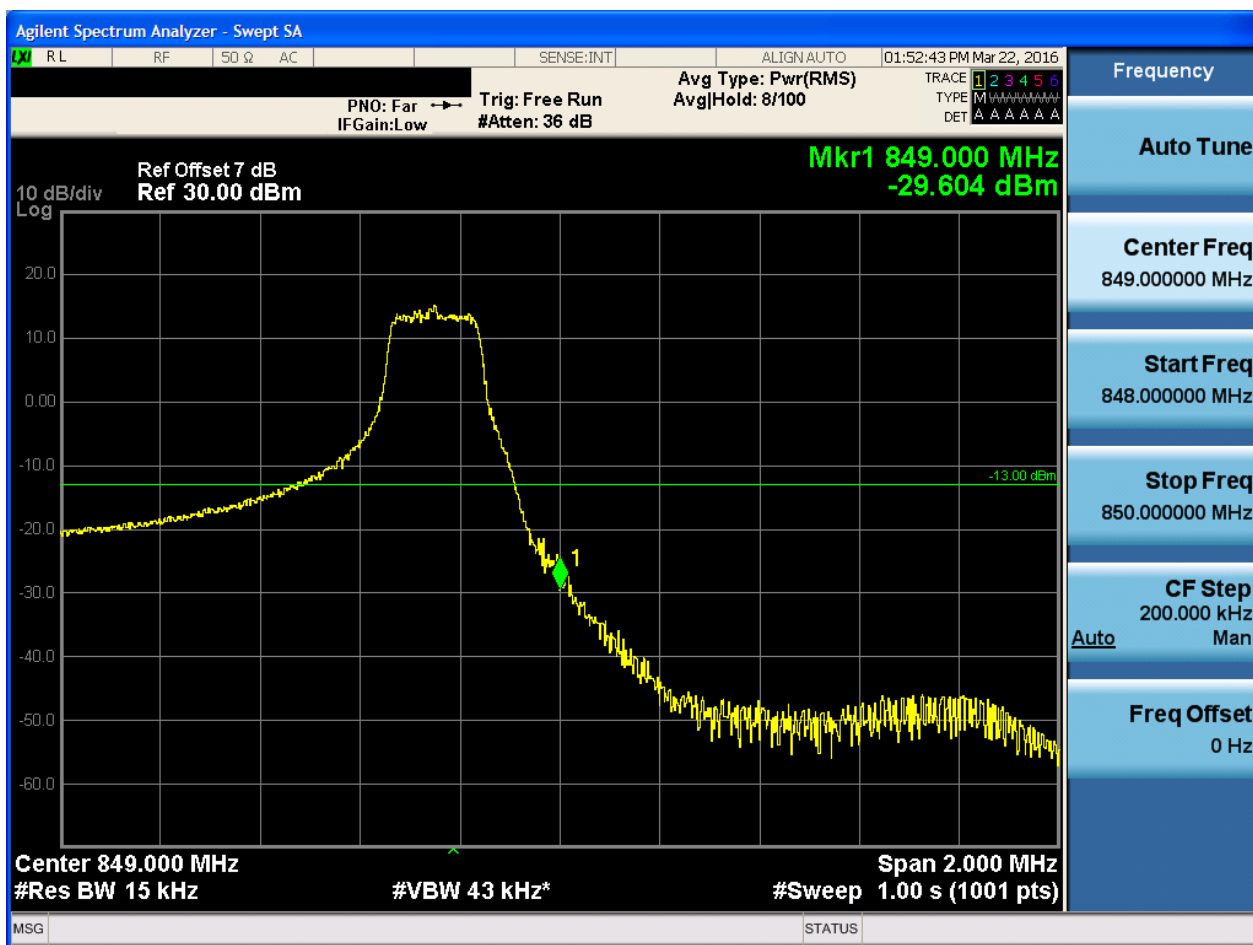
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





5.1.1.2.1.2.2 Test RB = RB1#5





5.1.1.2.1.2.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

UXI R.L RF 50 Ω AC SENSE:INT ALIGN:AUTO 01:53:11 PM Mar 22, 2016

PNO: Far Trg: Free Run Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
IFGain:Low #Atten: 36 dB Avg|Hold: 8/100 TYPE M TYPE M TYPE M TYPE M TYPE M
DET A A A A A A

Ref Offset 7 dB Mkr1 849.010 MHz
Ref 30.00 dBm -32.055 dBm

10 dB/div Log

Center 849.000 MHz Span 2.000 MHz
#Res BW 15 kHz #VBW 43 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq 849.000000 MHz

Start Freq 848.000000 MHz

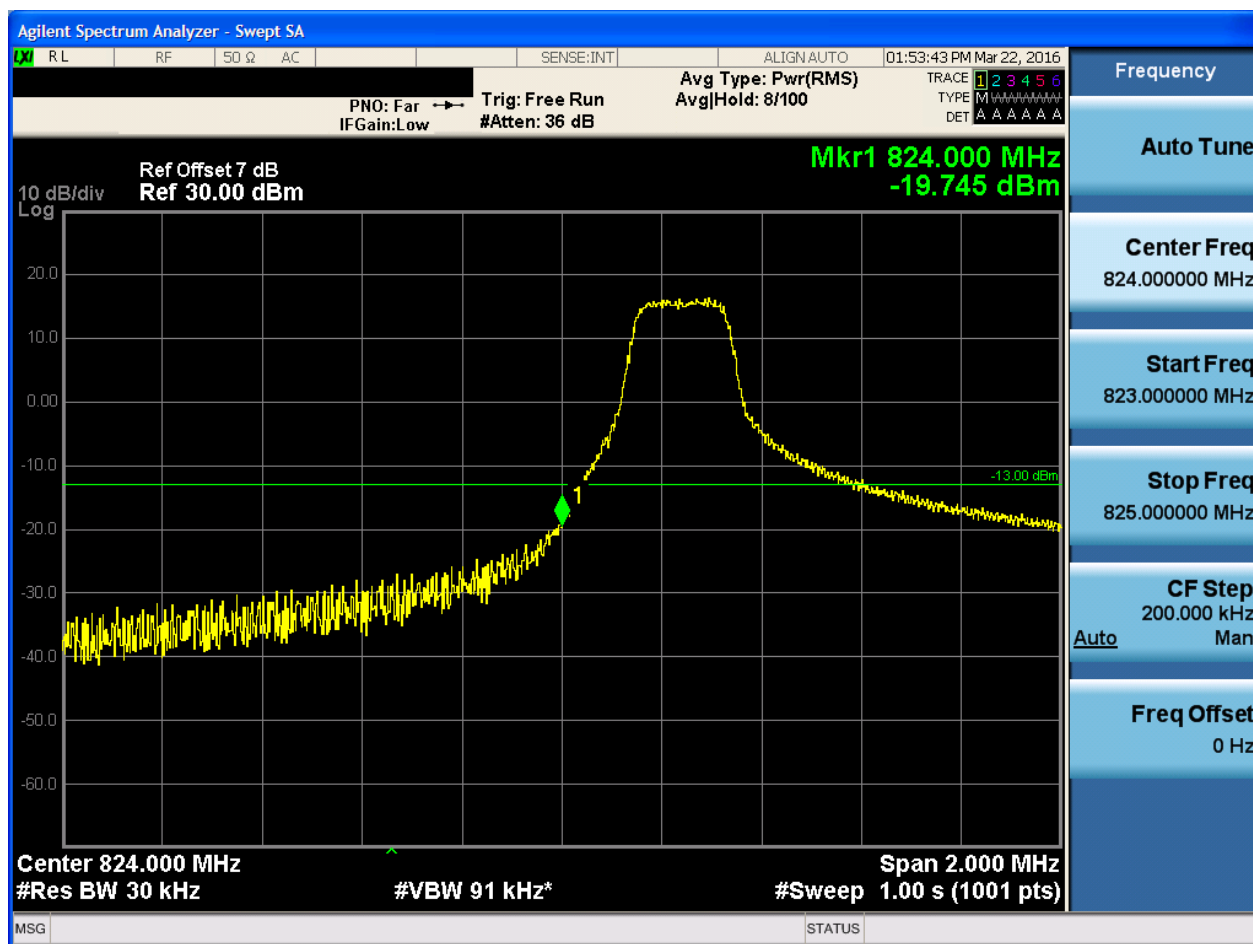
Stop Freq 850.000000 MHz

CF Step 200.000 kHz
Auto Man

Freq Offset 0 Hz

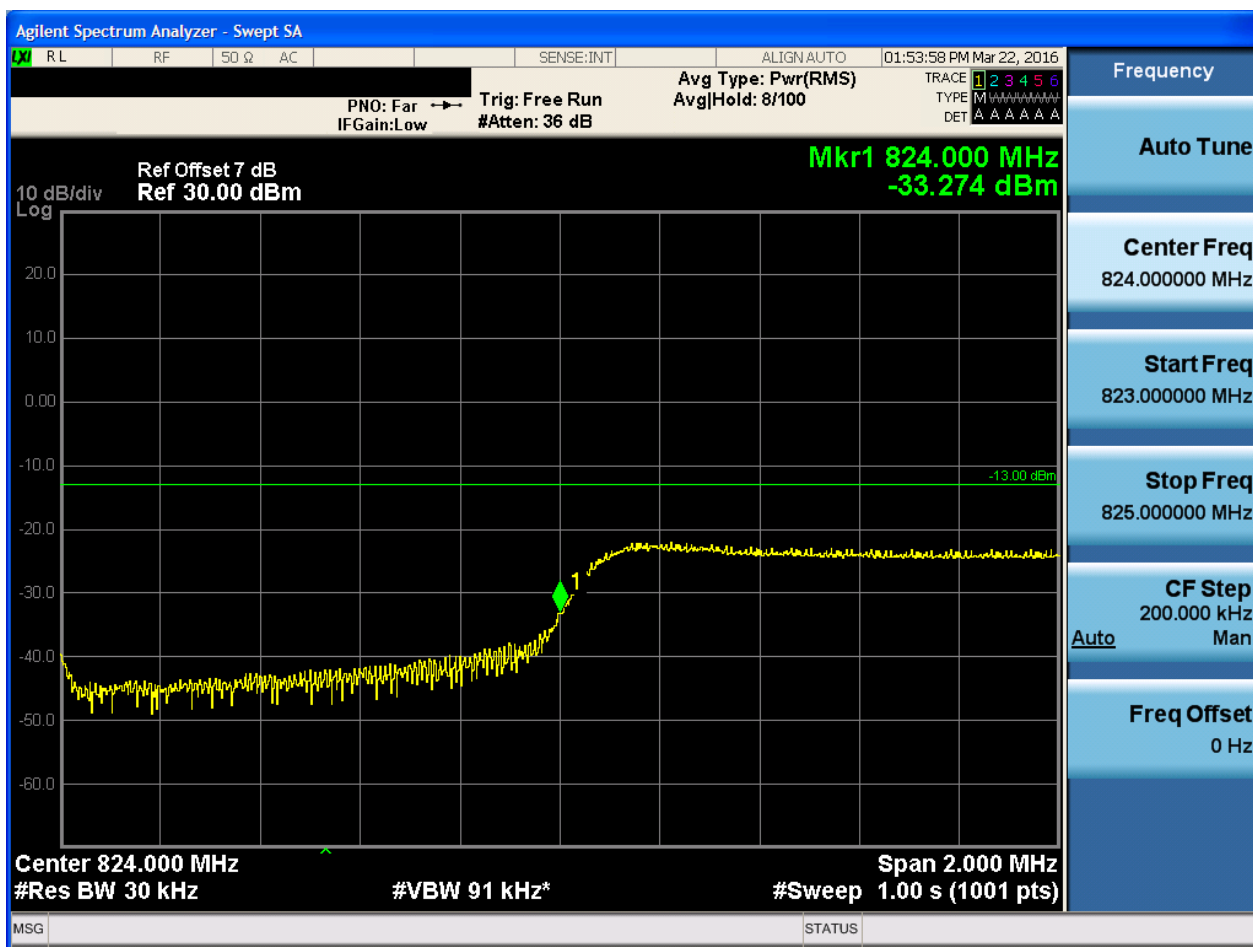


5.1.1.2.2.1.1 Test RB = RB1#0





5.1.1.2.2.1.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:54:12 PM Mar 22, 2016

Avg Type: Pwr(RMS) Avg|Hold: 8/100

Trig: Free Run #Atten: 36 dB

PNO: Far IFGain: Low

TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET A A A A A A

Ref Offset 7 dB Ref 30.00 dBm

Mkr1 824.000 MHz -33.384 dBm

10 dB/div Log

Center 824.000 MHz #Res BW 30 kHz #VBW 91 kHz* Span 2.000 MHz #Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq 824.000000 MHz

Start Freq 823.000000 MHz

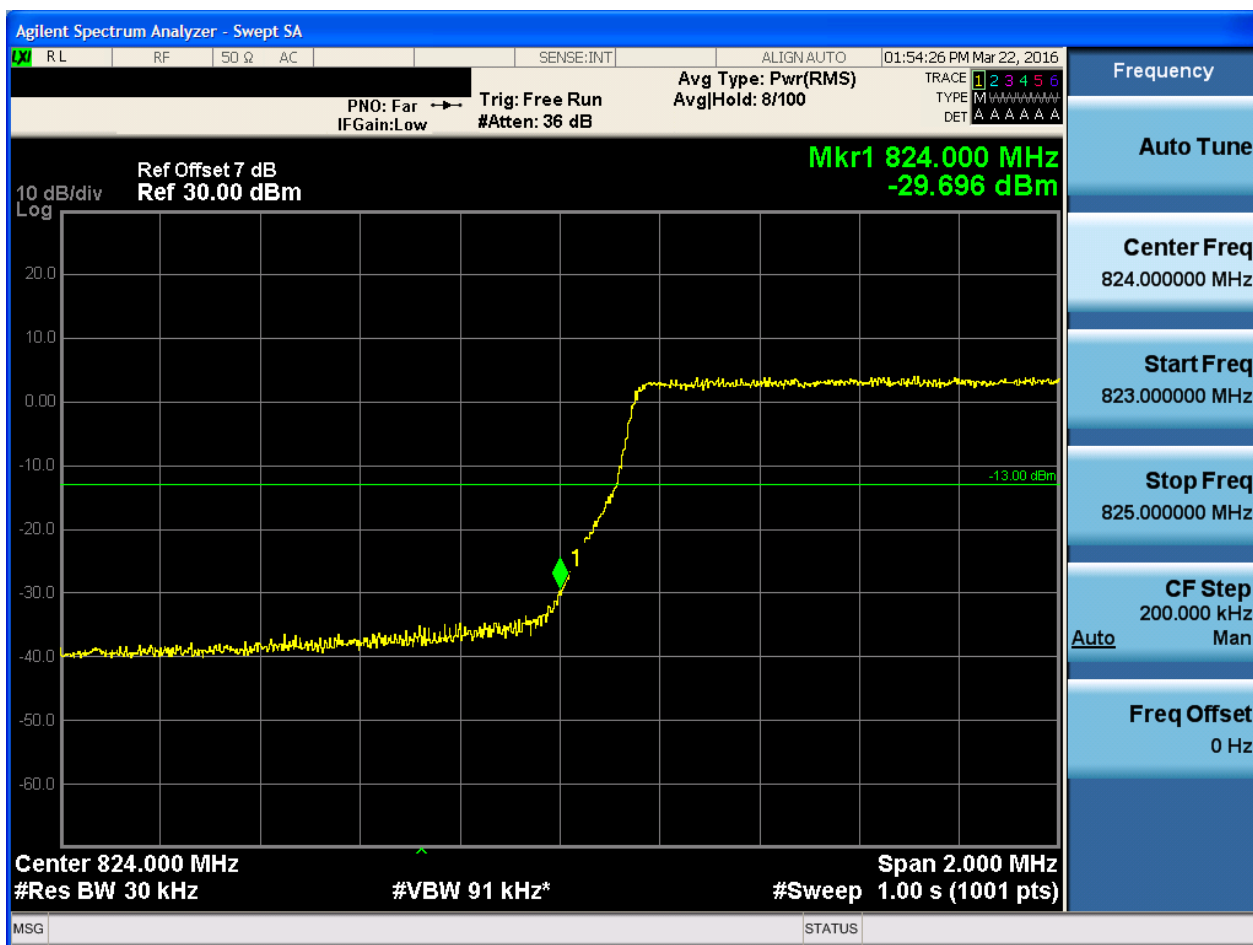
Stop Freq 825.000000 MHz

CF Step 200.000 kHz Man

Freq Offset 0 Hz



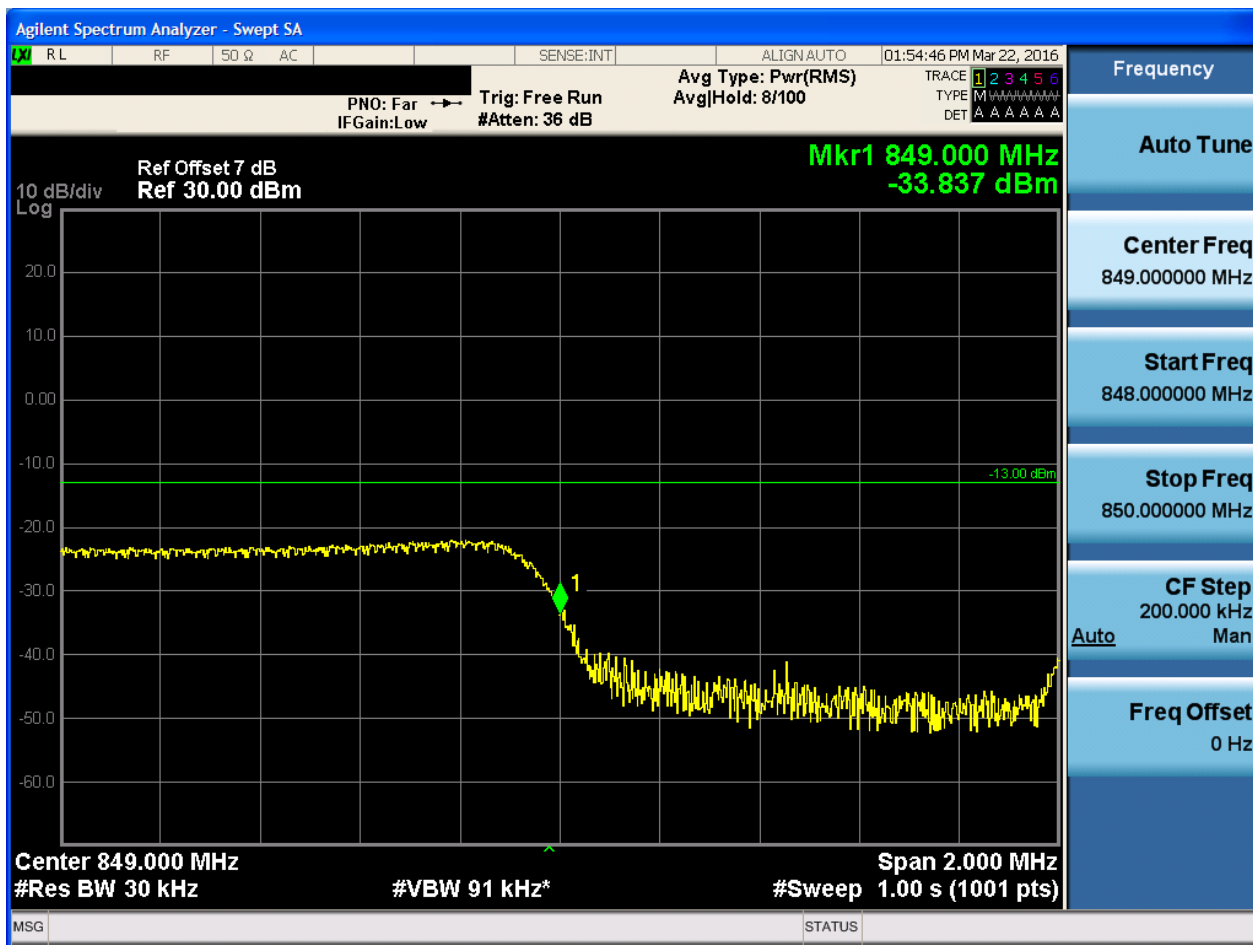
5.1.1.2.2.1.4 Test RB = RB15#0





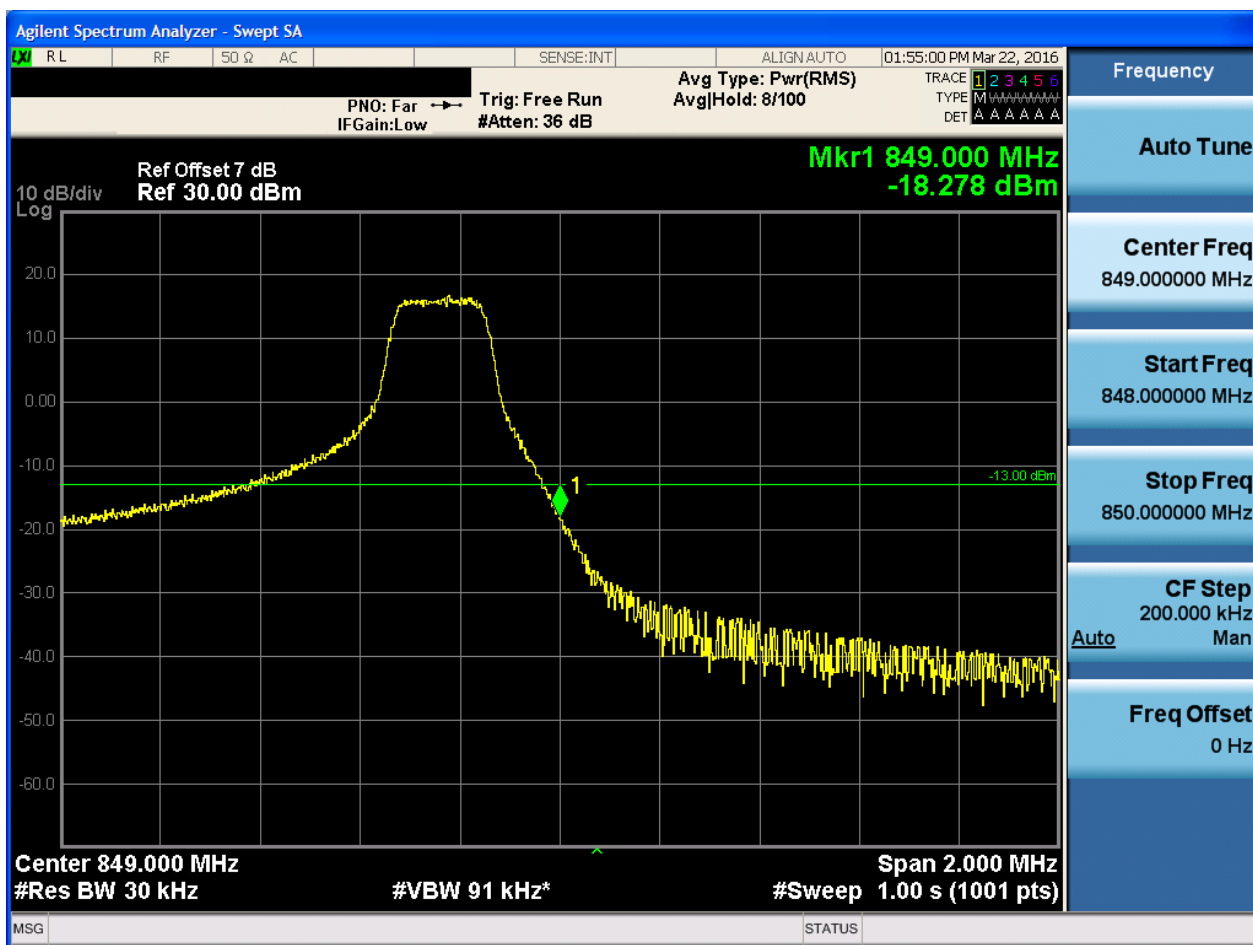
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14



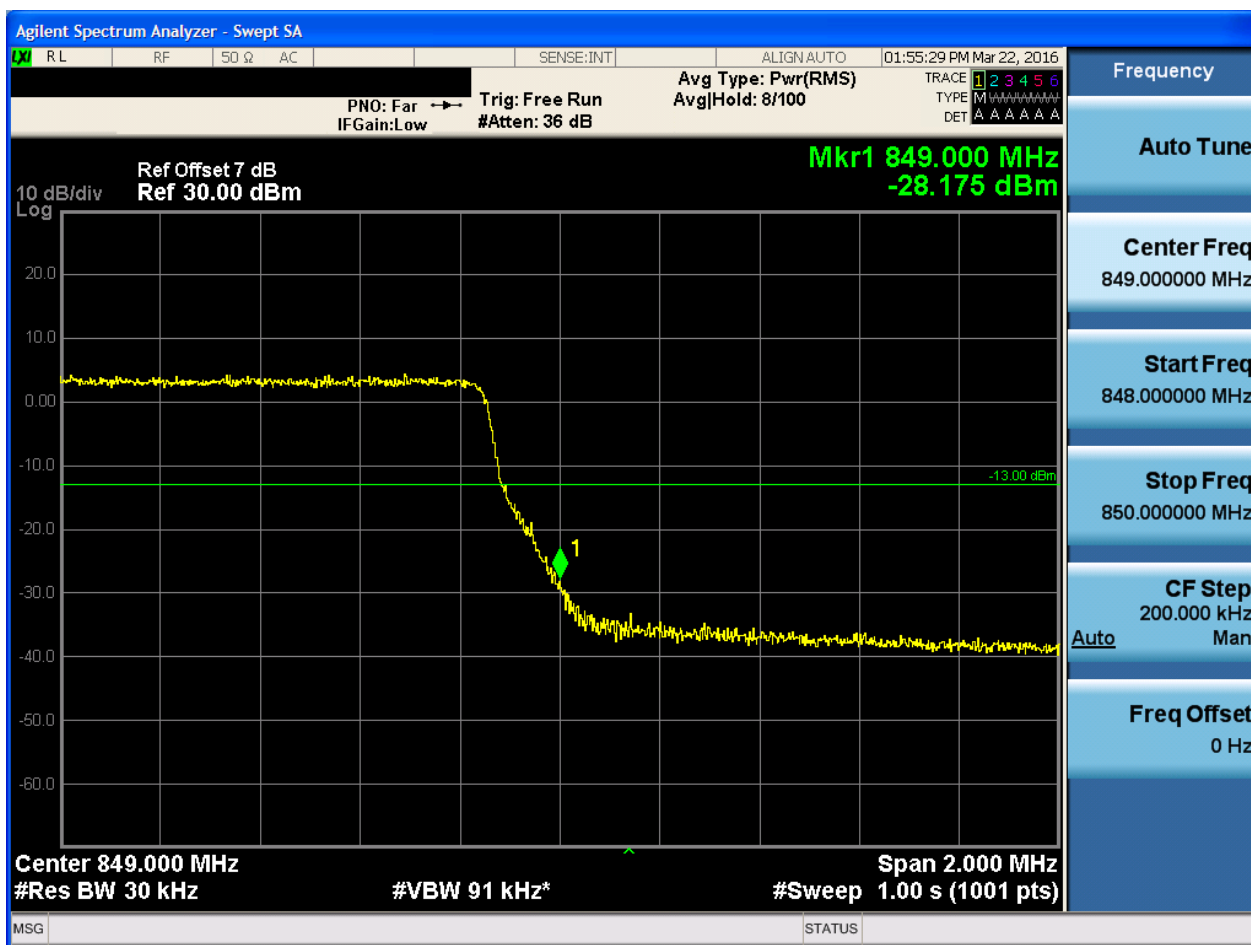


5.1.1.2.2.3 Test RB = RB8#4



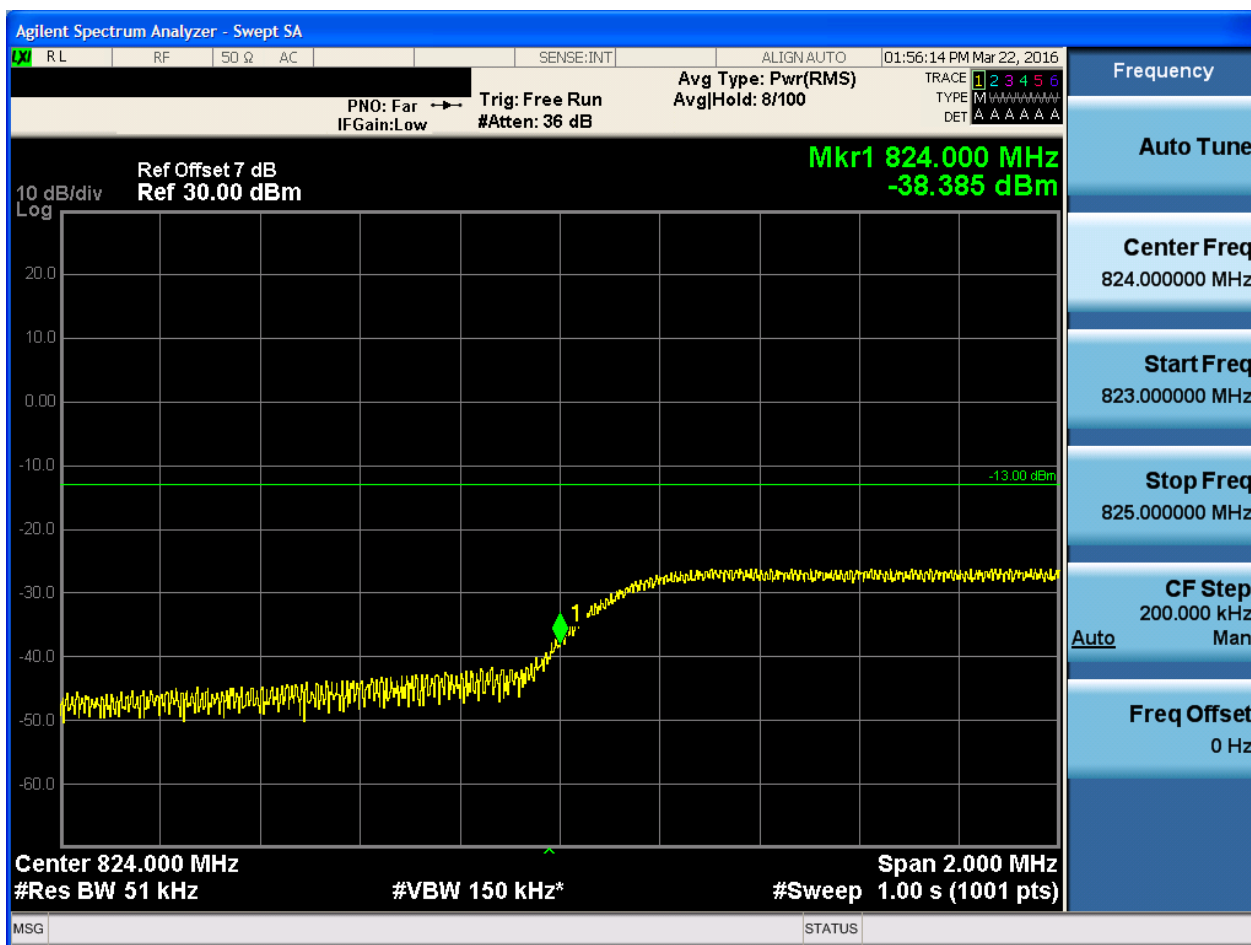


5.1.1.2.2.4 Test RB = RB15#0





5.1.1.2.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

Xi R L RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:56:29 PM Mar 22, 2016

Avg Type: Pwr(RMS) Avg|Hold: 8/100

Trig: Free Run #Atten: 36 dB

PNO: Far IFGain: Low

TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET A A A A A A

Ref Offset 7 dB Ref 30.00 dBm

Mkr1 824.000 MHz -34.630 dBm

10 dB/div Log

-13.00 dBm

Center 824.000 MHz #Res BW 51 kHz #VBW 150 kHz* Span 2.000 MHz #Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq 824.000000 MHz

Start Freq 823.000000 MHz

Stop Freq 825.000000 MHz

CF Step 200.000 kHz Man

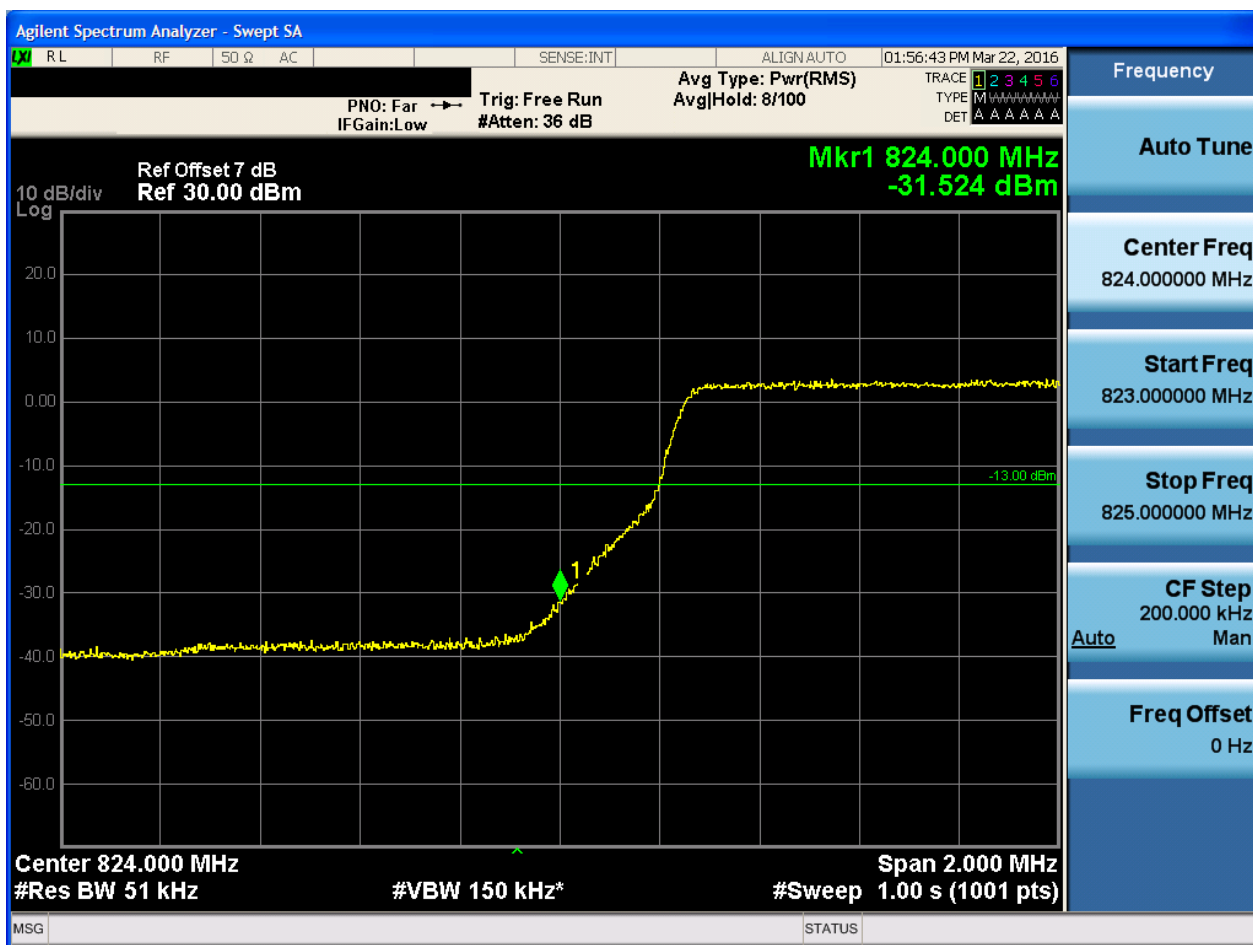
Auto

Freq Offset 0 Hz

MSG STATUS



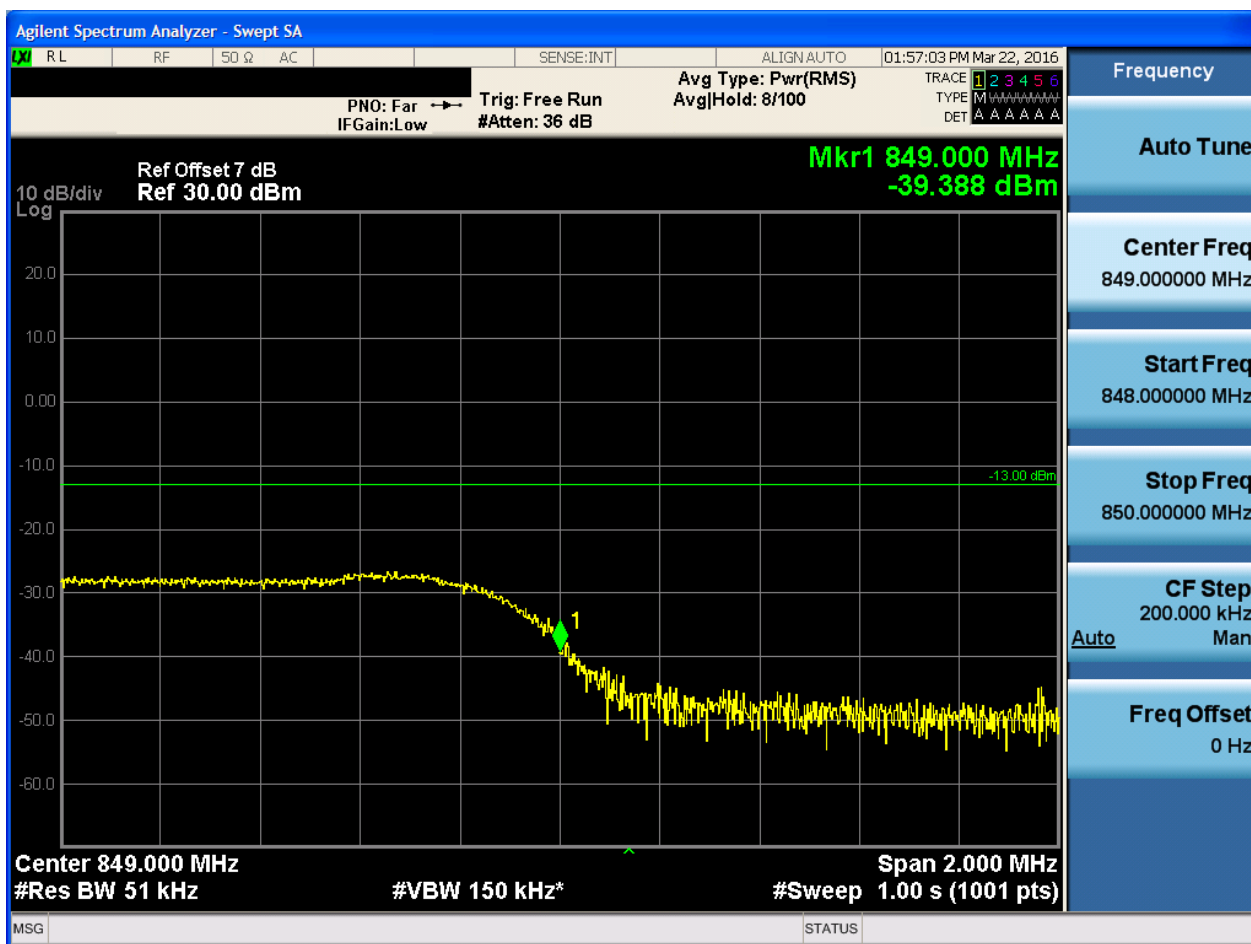
5.1.1.2.3.1.4 Test RB = RB25#0





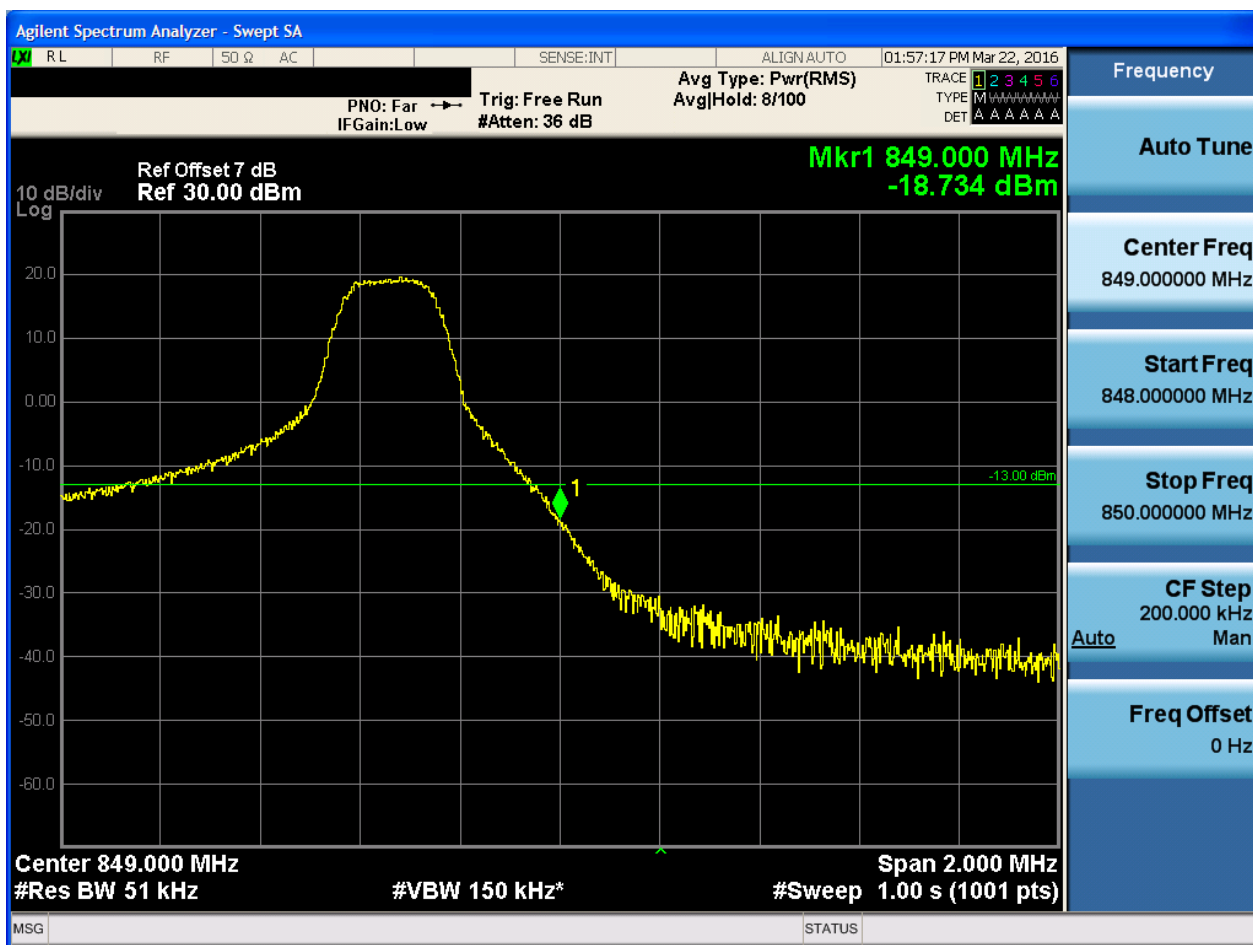
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#24

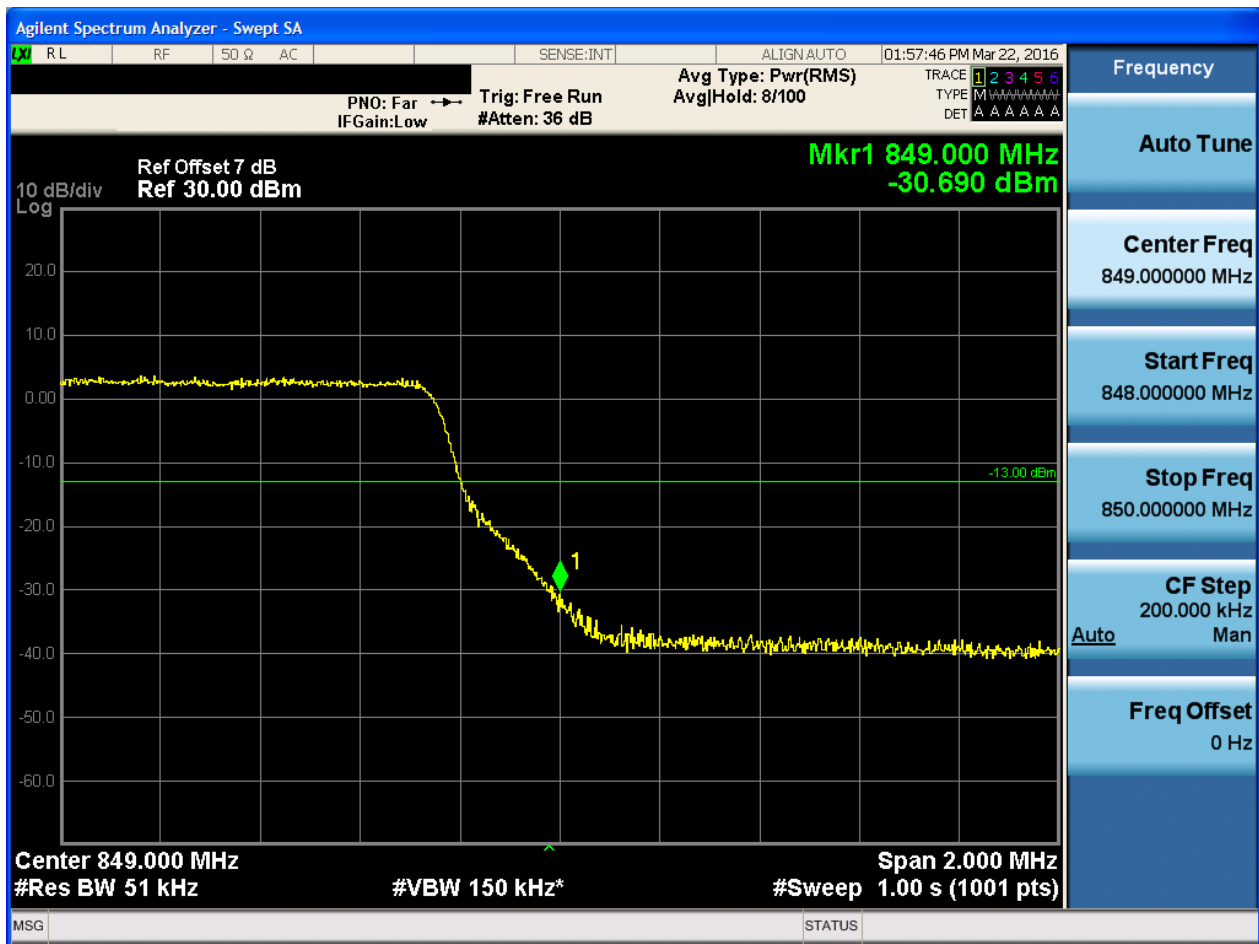




5.1.1.2.3.2.3 Test RB = RB12#6



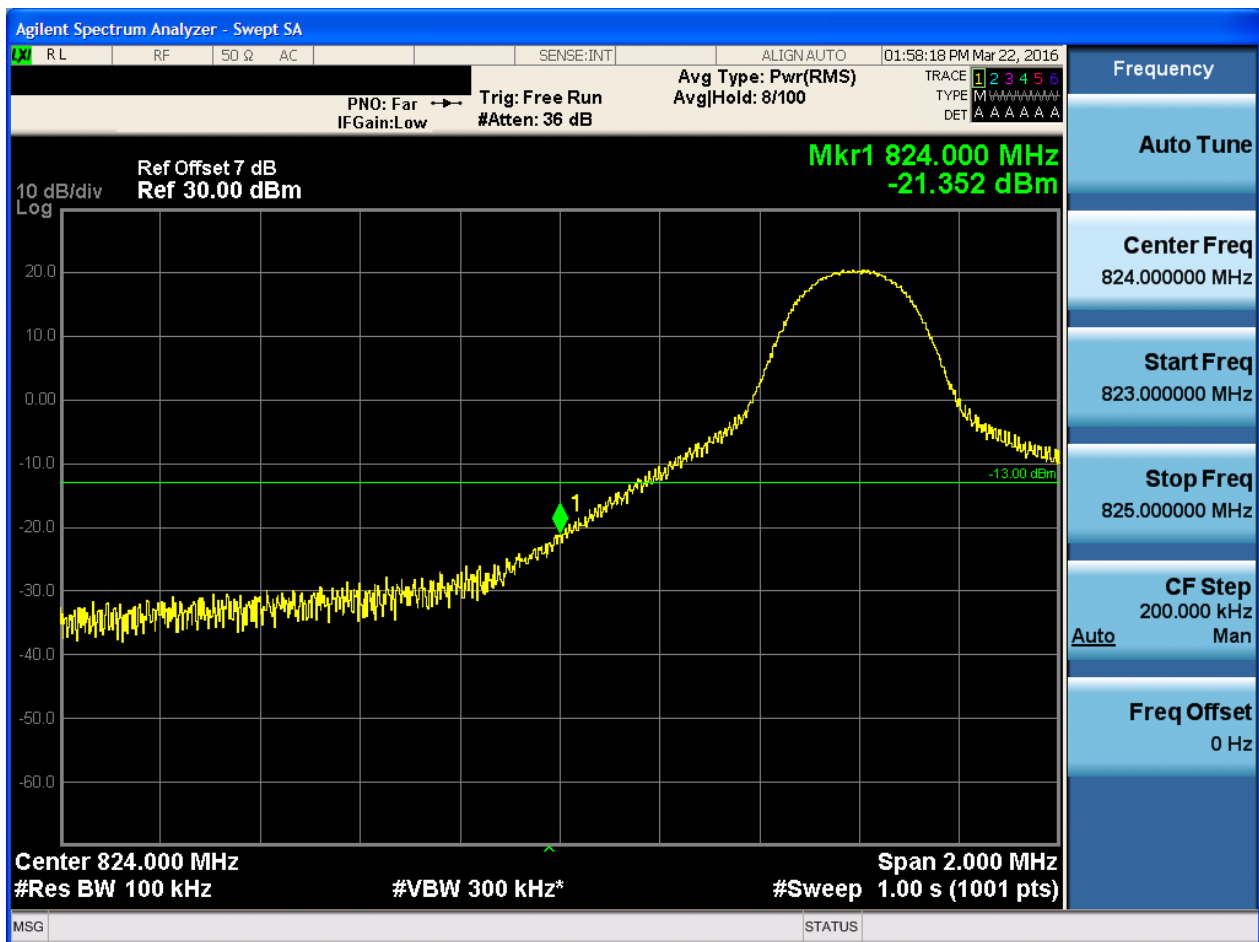
5.1.1.2.3.2.4 Test RB = RB25#0



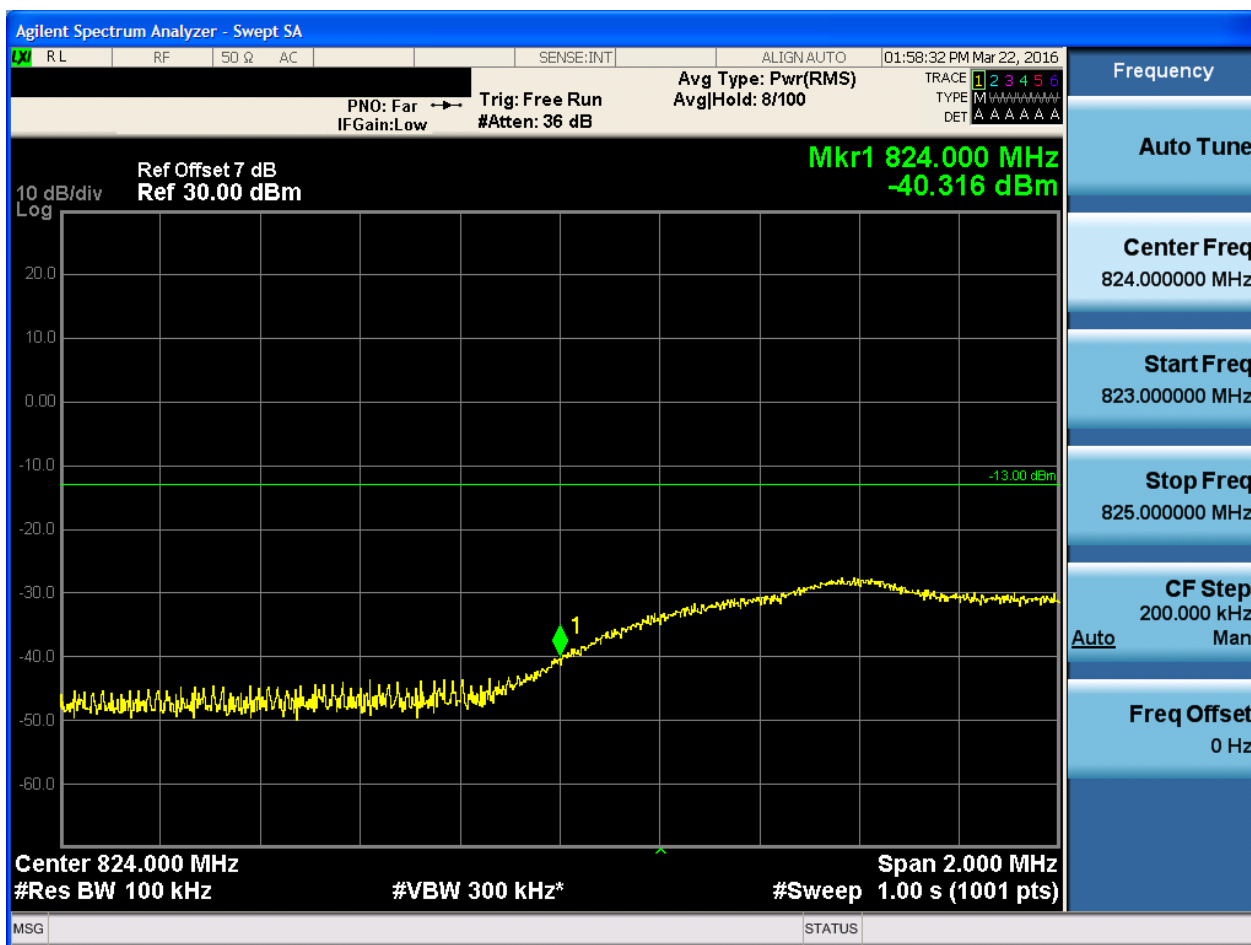
5.1.1.2.4 Test Bandwidth = 10

5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



5.1.1.2.4.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 01:58:47 PM Mar 22, 2016

PNO: Far Trg: Free Run Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
IFGain:Low #Atten: 36 dB Avg|Hold: 8/100 TYPE M M M M M M M M
DET A A A A A A A

Ref Offset 7 dB Mkr1 823.970 MHz
Ref 30.00 dBm -36.359 dBm

10 dB/div Log

-13.00 dBm

Center 824.000 MHz Span 2.000 MHz
#Res BW 100 kHz #VBW 300 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

The image shows a screenshot of an Agilent Spectrum Analyzer in Swept SA mode. The main display is a log-scale frequency spectrum plot. The horizontal axis represents frequency, with a center frequency of 824.000 MHz and a span of 2.000 MHz. The vertical axis represents power in dBm, ranging from -60.0 to 20.0 dBm. A yellow trace shows the spectrum, which is relatively flat at approximately -40 dBm until about 823.5 MHz, where it begins to rise, reaching about -30 dBm at 825 MHz. A green marker labeled '1' is placed on the rising part of the trace at 823.970 MHz, with a corresponding power reading of -36.359 dBm. A horizontal green line is drawn across the plot at -13.00 dBm. The top of the screen displays various instrument settings: PNO: Far, IFGain:Low, Trg: Free Run, #Atten: 36 dB, Avg Type: Pwr(RMS), Avg|Hold: 8/100, TRACE 1, TYPE M, and DET A. The bottom of the screen shows the center frequency (824.000 MHz), resolution bandwidth (#Res BW 100 kHz), video bandwidth (#VBW 300 kHz*), and sweep time (#Sweep 1.00 s (1001 pts)). The right side of the screen features a control panel with buttons for Frequency, Auto Tune, Center Freq (824.000000 MHz), Start Freq (823.000000 MHz), Stop Freq (825.000000 MHz), CF Step (200.000 kHz), and Freq Offset (0 Hz).



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:59:01 PM Mar 22, 2016

Avg Type: Pwr(RMS) Avg|Hold: 8/100

Trig: Free Run #Atten: 36 dB

PNO: Far IFGain: Low

TRACE 1 2 3 4 5 6 TYPE MAAAAAA DET A A A A A A

Ref Offset 7 dB Ref 30.00 dBm

Mkr1 823.990 MHz -33.403 dBm

10 dB/div Log

Center 824.000 MHz #Res BW 100 kHz #VBW 300 kHz* Span 2.000 MHz #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq 824.000000 MHz

Start Freq 823.000000 MHz

Stop Freq 825.000000 MHz

CF Step 200.000 kHz Man

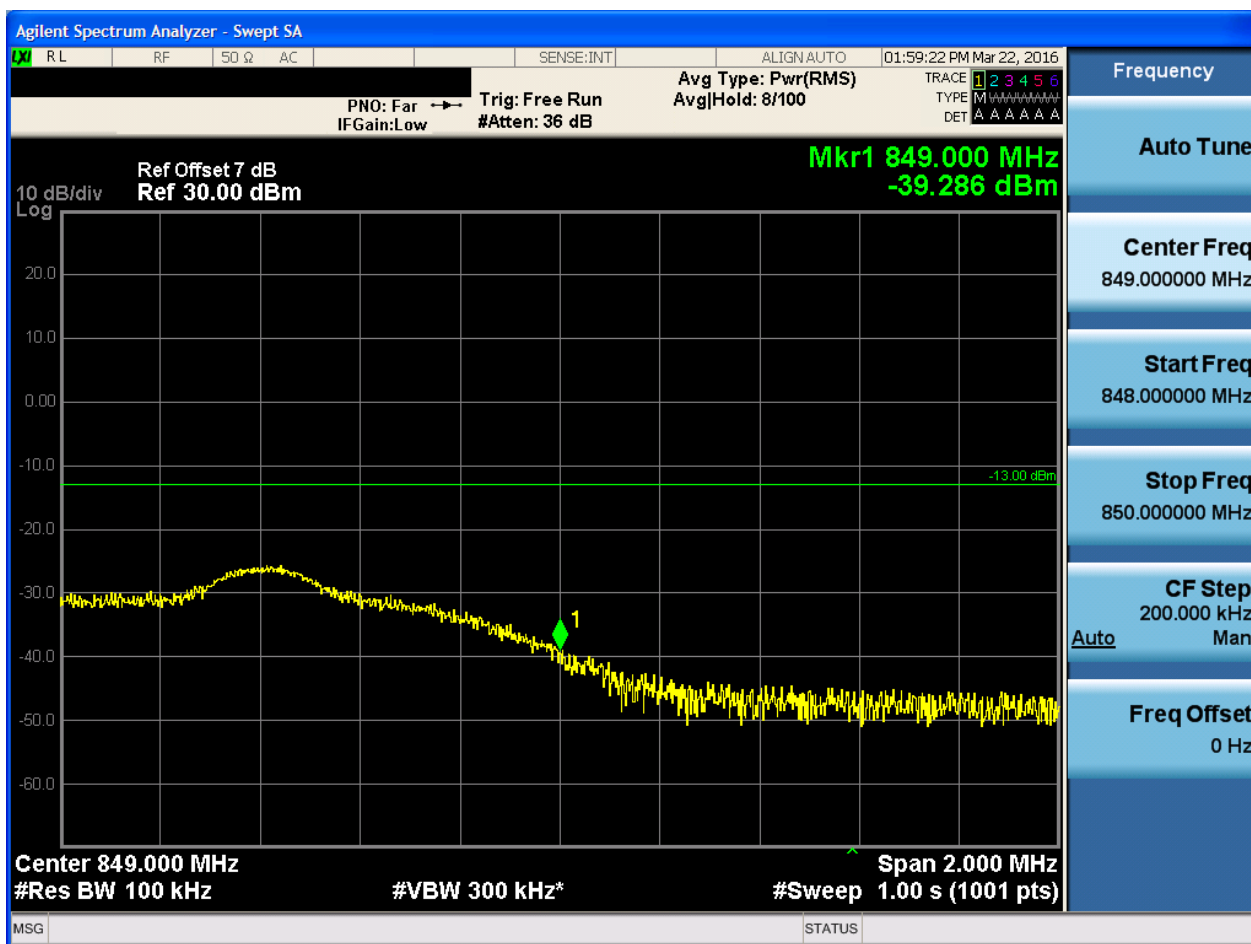
Auto

Freq Offset 0 Hz



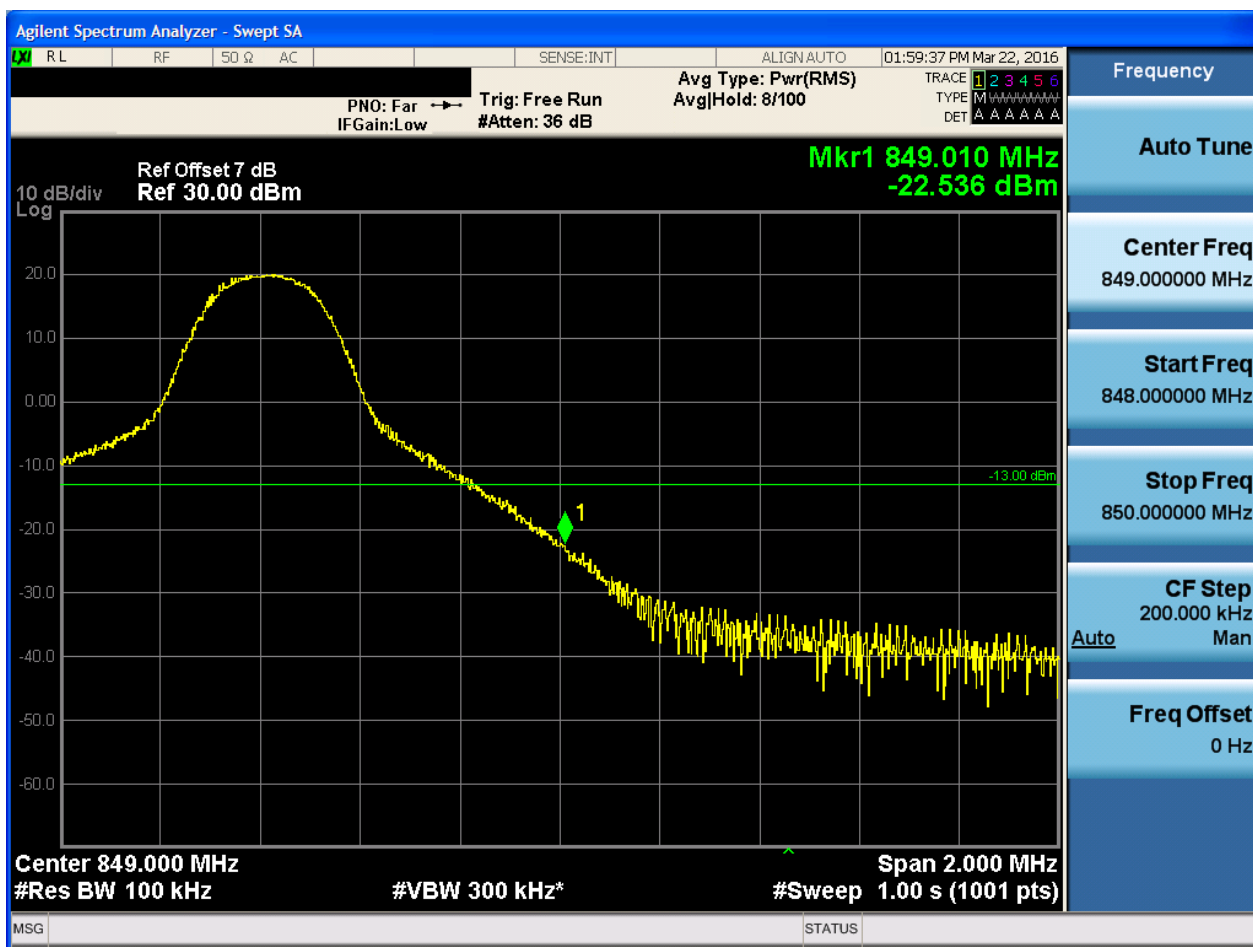
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0



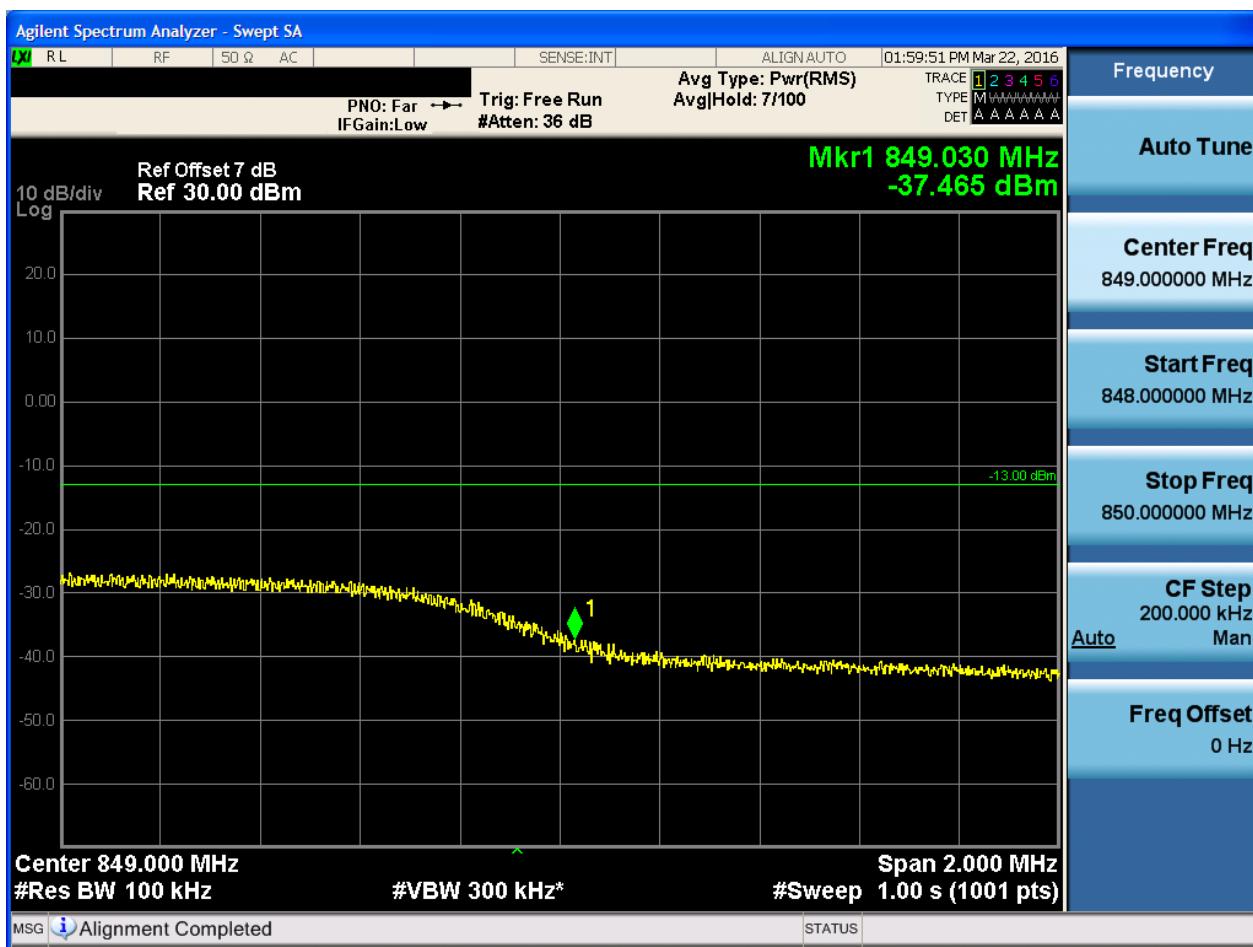


5.1.1.2.4.2.2 Test RB = RB1#49





5.1.1.2.4.2.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:00:06 PM Mar 22, 2016

Avg Type: Pwr(RMS) AvgHold: 8/100

Trig: Free Run #Atten: 36 dB

PNO: Far IFGain: Low

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W
DET A A A A A A

Ref Offset 7 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-33.677 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

MSG STATUS

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

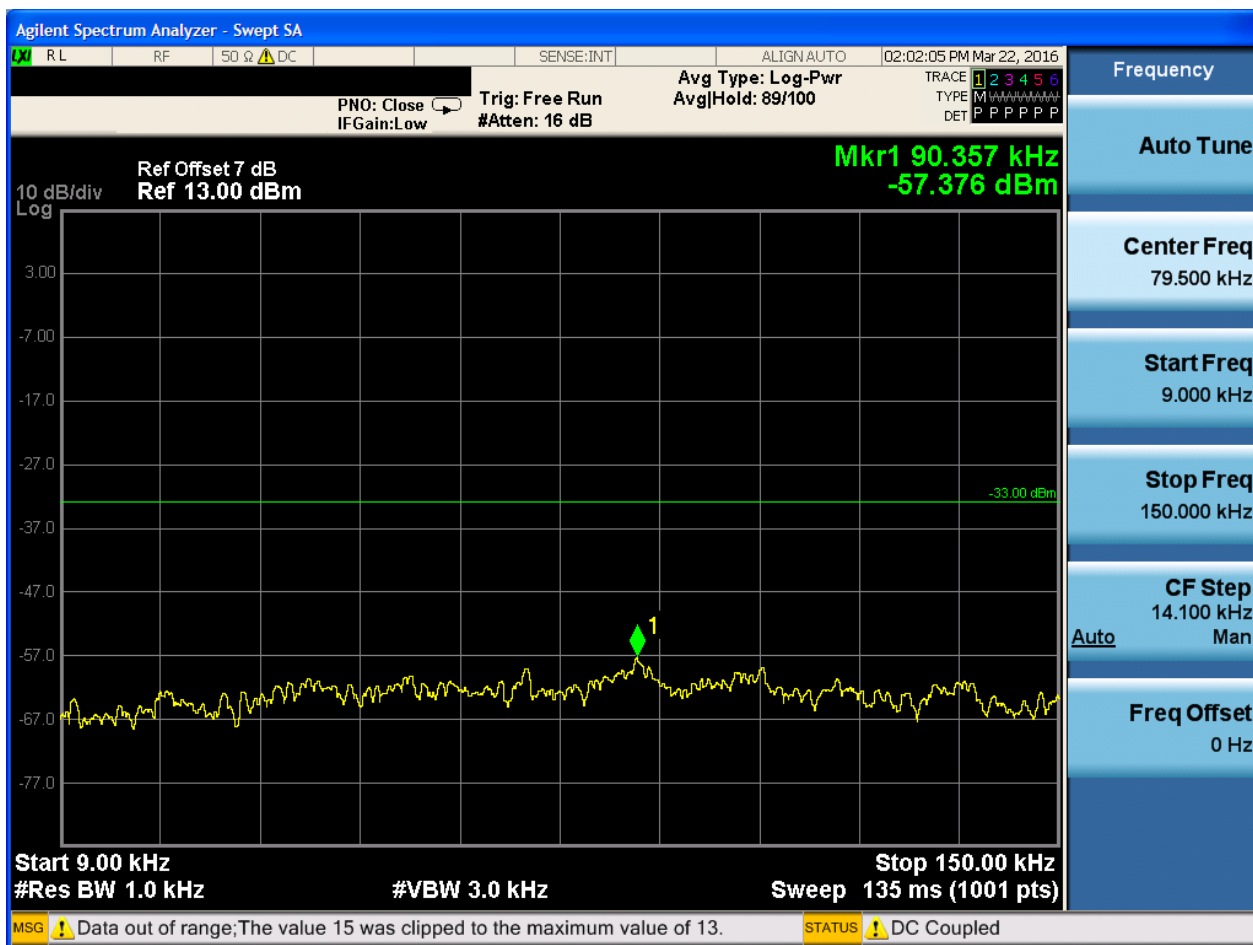
6.1.1 Test Band = BAND5

6.1.1.1 Test Mode = LTE/TM1

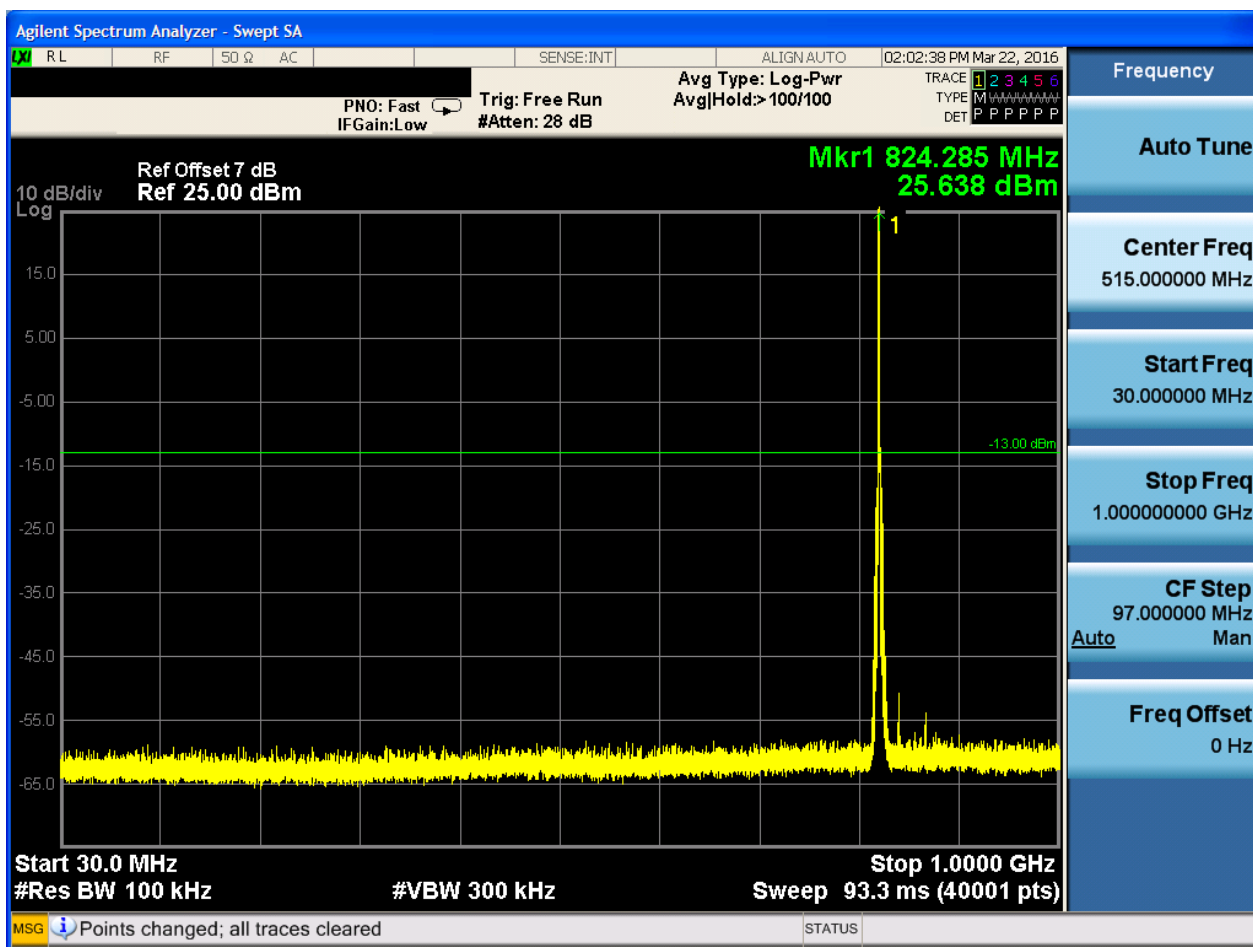
6.1.1.1.1 Test Bandwidth = 1.4

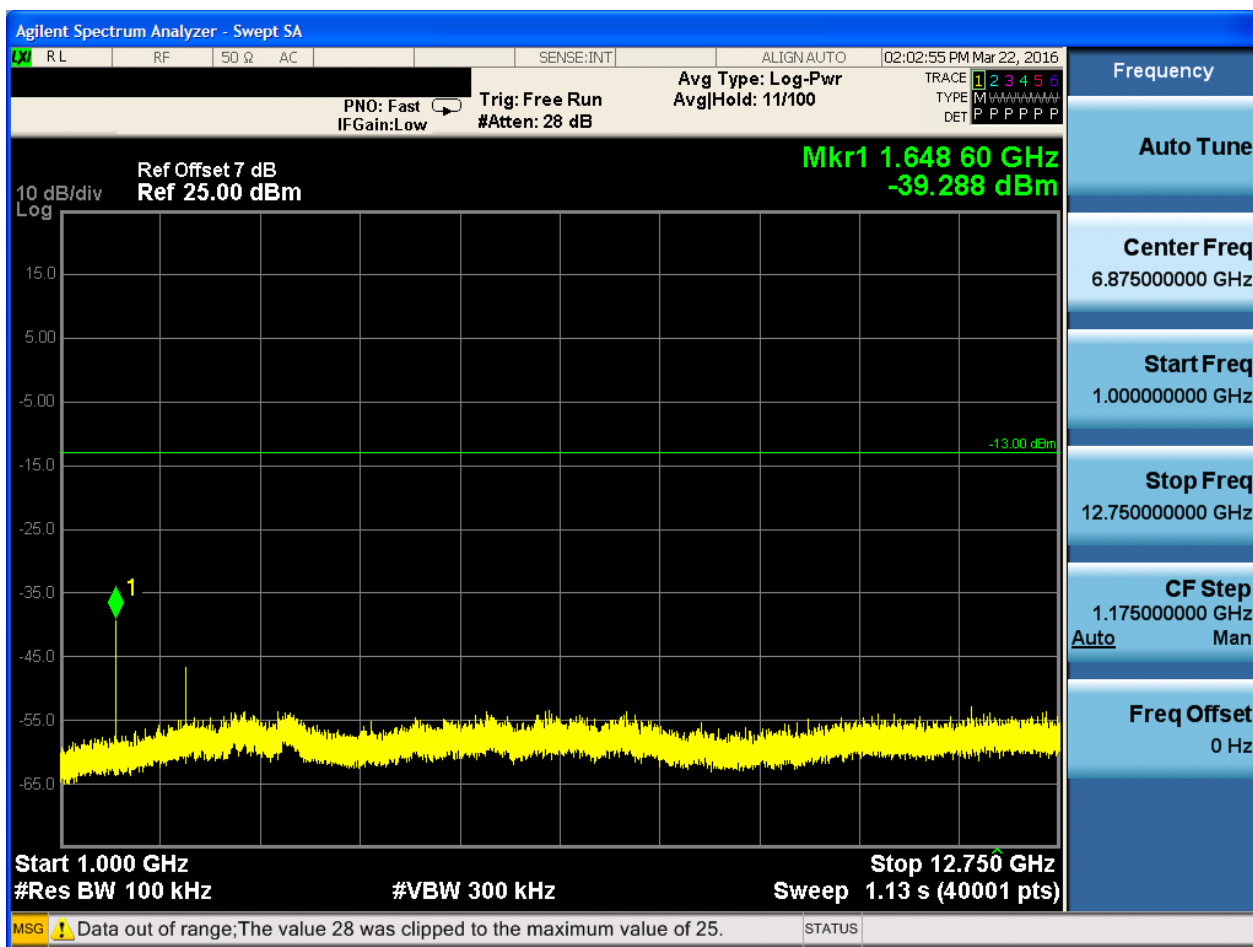
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0









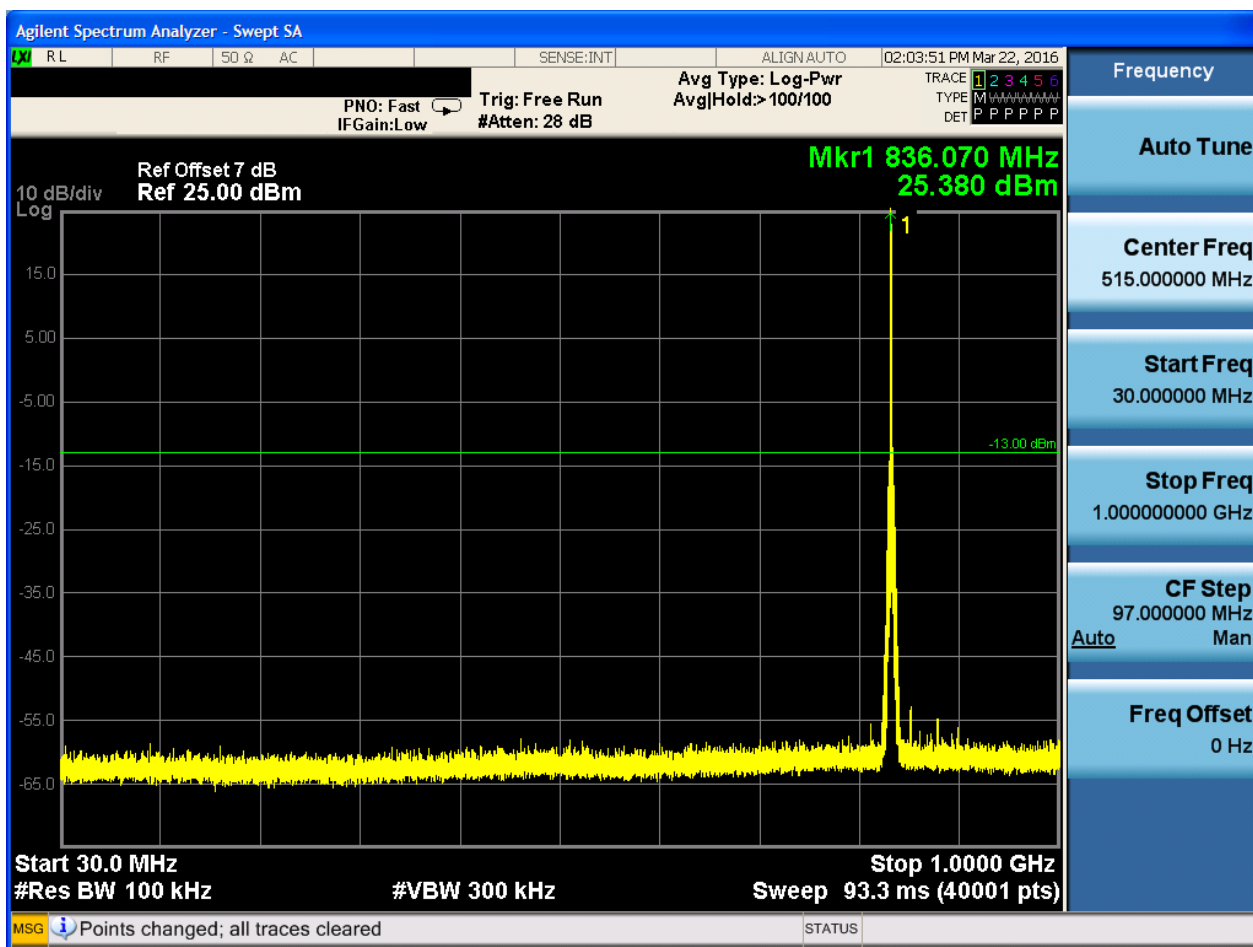


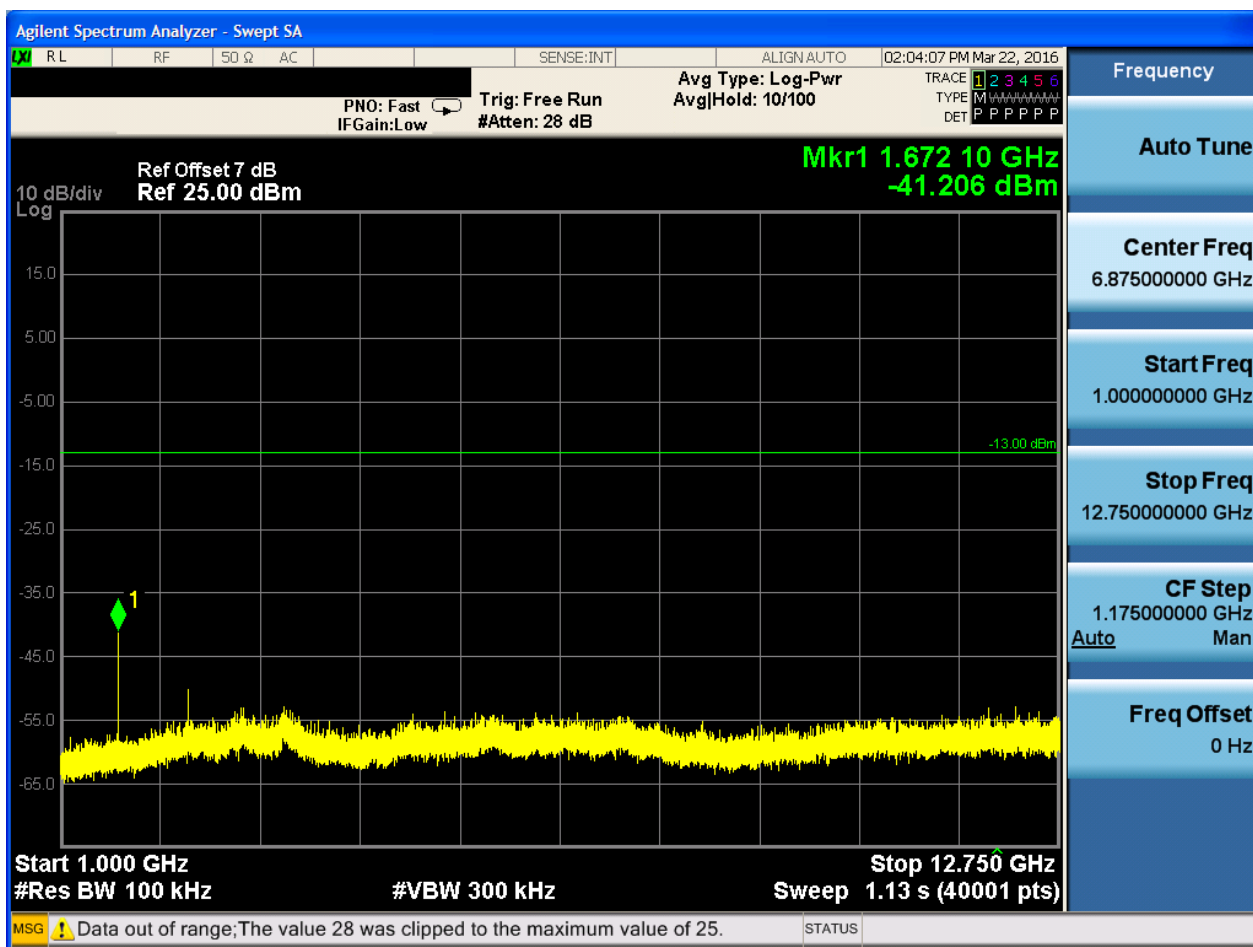
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0





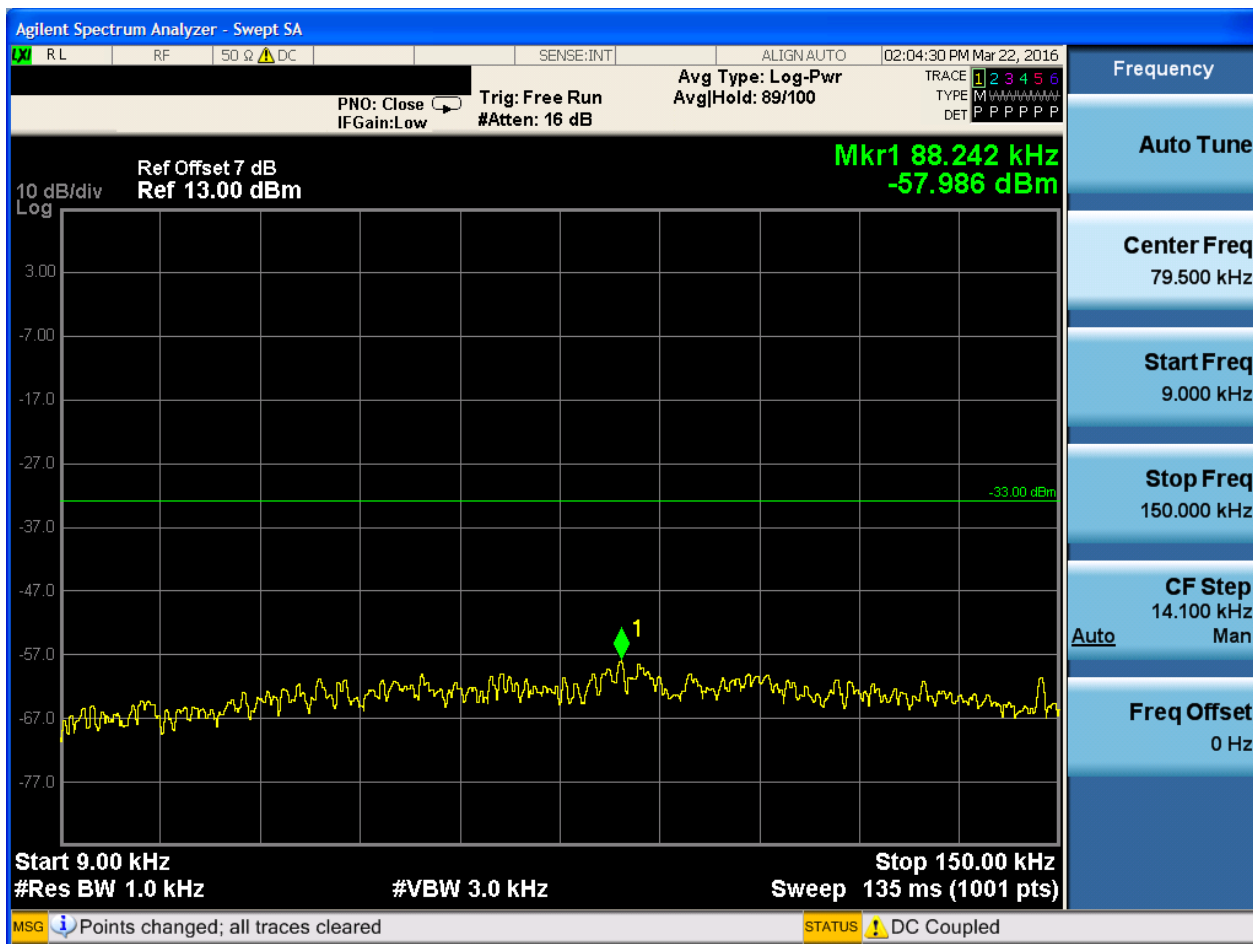




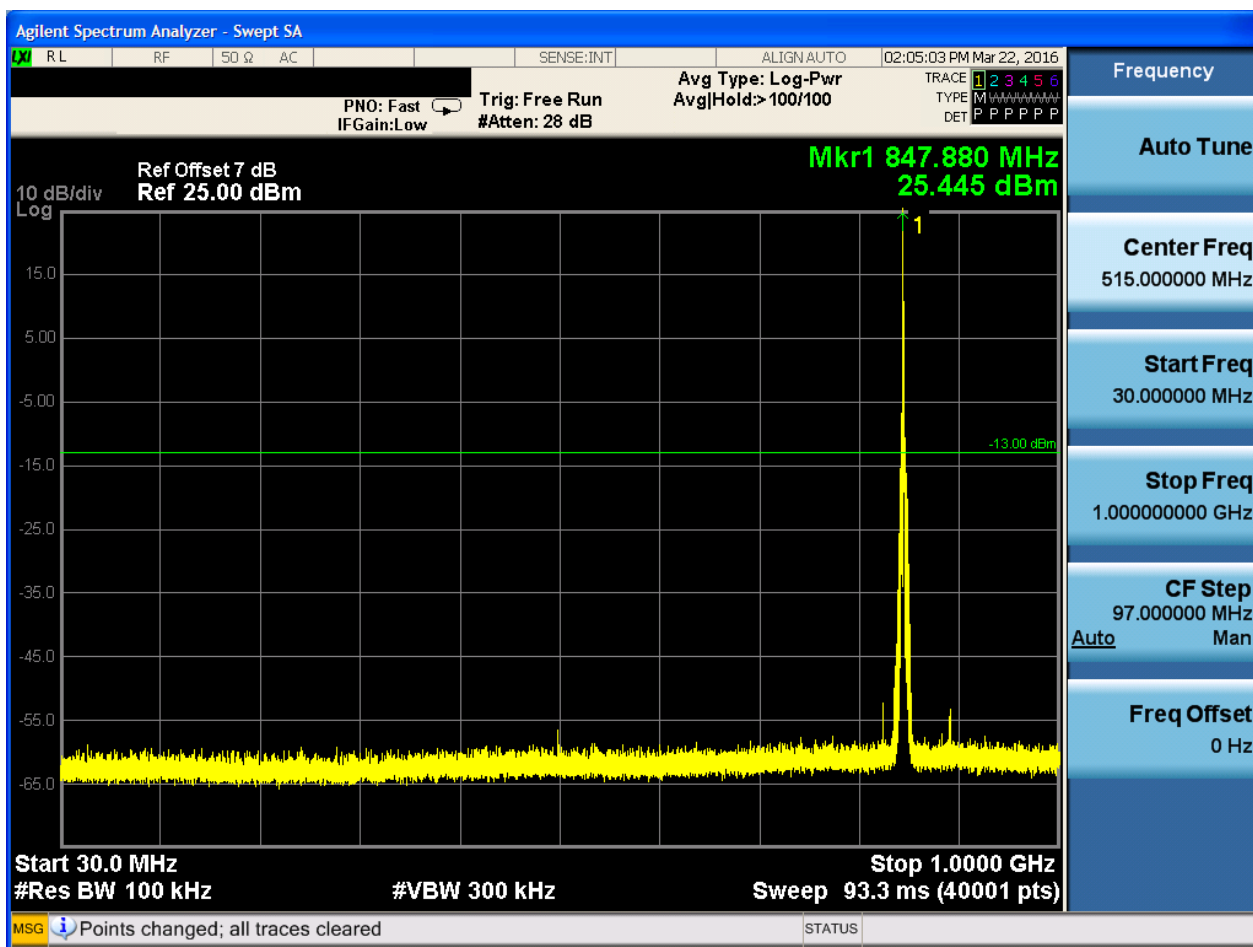


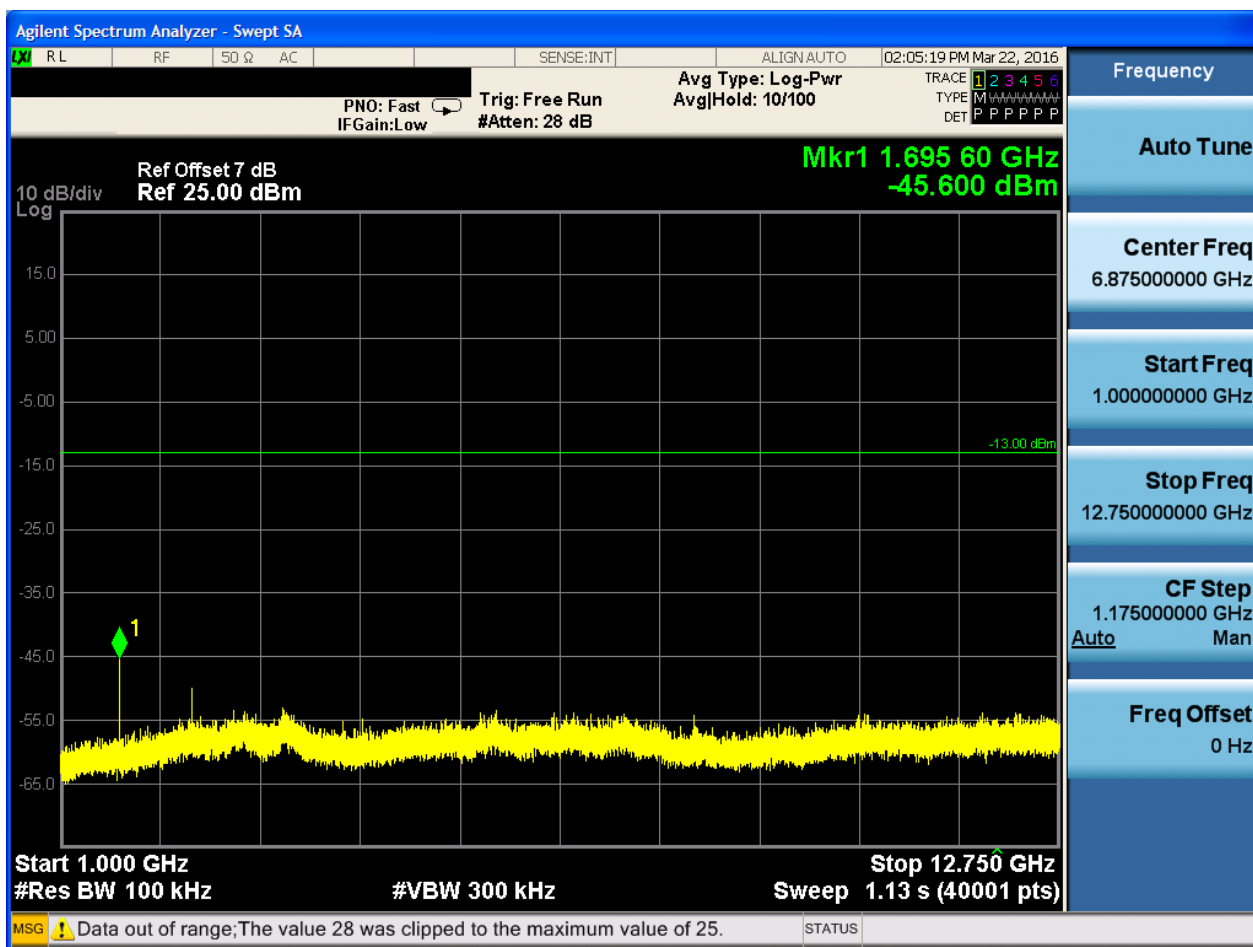
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0











6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

