



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	22.52	18.23	38.5	PASS
				RB1#3	22.69	18.52	38.5	PASS
				RB1#5	22.57	18.24	38.5	PASS
				RB3#0	22.59	18.16	38.5	PASS
				RB3#2	22.66	18.41	38.5	PASS
				RB3#3	22.68	18.61	38.5	PASS
				RB6#0	21.69	17.28	38.5	PASS
			MCH	RB1#0	22.86	18.42	38.5	PASS
				RB1#3	23	18.59	38.5	PASS
				RB1#5	22.87	18.68	38.5	PASS
				RB3#0	22.87	18.76	38.5	PASS
				RB3#2	22.89	18.74	38.5	PASS
				RB3#3	22.84	18.62	38.5	PASS
				RB6#0	21.86	17.53	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	22.89	18.60	38.5	PASS
				RB1#3	22.99	18.70	38.5	PASS
				RB1#5	22.83	18.66	38.5	PASS
				RB3#0	22.87	18.71	38.5	PASS
				RB3#2	22.87	18.46	38.5	PASS
				RB3#3	22.83	18.65	38.5	PASS
				RB6#0	21.94	17.69	38.5	PASS
		3	LCH	RB1#0	22.39	18.28	38.5	PASS
				RB1#7	22.86	18.70	38.5	PASS
				RB1#14	22.49	18.39	38.5	PASS
				RB8#0	21.64	17.55	38.5	PASS
				RB8#4	21.77	17.46	38.5	PASS
				RB8#7	21.77	17.55	38.5	PASS
				RB15#0	21.73	17.36	38.5	PASS
			MCH	RB1#0	22.63	18.23	38.5	PASS
				RB1#7	22.95	18.73	38.5	PASS
				RB1#14	22.6	18.53	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#0	21.77	17.38	38.5	PASS
				RB8#4	21.85	17.73	38.5	PASS
				RB8#7	21.77	17.41	38.5	PASS
				RB15#0	21.77	17.60	38.5	PASS
			HCH	RB1#0	22.77	18.70	38.5	PASS
				RB1#7	23.09	18.91	38.5	PASS
				RB1#14	22.64	18.40	38.5	PASS
				RB8#0	21.99	17.92	38.5	PASS
				RB8#4	22.04	17.84	38.5	PASS
				RB8#7	21.88	17.58	38.5	PASS
				RB15#0	21.97	17.67	38.5	PASS
		5	LCH	RB1#0	22.24	18.00	38.5	PASS
				RB1#13	22.81	18.71	38.5	PASS
				RB1#24	22.3	18.14	38.5	PASS
				RB12#0	21.63	17.52	38.5	PASS
				RB12#6	21.84	17.68	38.5	PASS
				RB12#13	21.63	17.33	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.64	17.31	38.5	PASS
			MCH	RB1#0	22.54	18.23	38.5	PASS
				RB1#13	22.92	18.78	38.5	PASS
				RB1#24	22.44	18.17	38.5	PASS
				RB12#0	21.7	17.51	38.5	PASS
				RB12#6	21.82	17.54	38.5	PASS
				RB12#13	21.68	17.24	38.5	PASS
				RB25#0	21.68	17.51	38.5	PASS
			HCH	RB1#0	22.66	18.30	38.5	PASS
				RB1#13	22.98	18.82	38.5	PASS
				RB1#24	22.42	18.19	38.5	PASS
				RB12#0	21.92	17.68	38.5	PASS
				RB12#6	22.04	17.66	38.5	PASS
				RB12#13	21.79	17.53	38.5	PASS
				RB25#0	21.85	17.71	38.5	PASS
		10	LCH	RB1#0	22.09	17.89	38.5	PASS
				RB1#25	22.87	18.54	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	22.16	17.84	38.5	PASS
				RB25#0	21.61	17.28	38.5	PASS
				RB25#13	21.67	17.39	38.5	PASS
				RB25#25	21.43	17.36	38.5	PASS
				RB50#0	21.47	17.41	38.5	PASS
			MCH	RB1#0	22.29	18.01	38.5	PASS
				RB1#25	22.94	18.77	38.5	PASS
				RB1#49	22.33	18.03	38.5	PASS
				RB25#0	21.55	17.12	38.5	PASS
				RB25#13	21.68	17.28	38.5	PASS
				RB25#25	21.59	17.20	38.5	PASS
				RB50#0	21.5	17.21	38.5	PASS
			HCH	RB1#0	22.37	17.97	38.5	PASS
				RB1#25	23.01	18.69	38.5	PASS
				RB1#49	22.13	17.85	38.5	PASS
				RB25#0	21.75	17.69	38.5	PASS
				RB25#13	21.9	17.63	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.68	17.37	38.5	PASS
				RB50#0	21.78	17.53	38.5	PASS
	LTE/TM2	1.4	LCH	RB1#0	21.65	17.50	38.5	PASS
				RB1#3	22	17.65	38.5	PASS
				RB1#5	21.75	17.66	38.5	PASS
				RB3#0	21.77	17.44	38.5	PASS
				RB3#2	21.86	17.69	38.5	PASS
				RB3#3	21.82	17.42	38.5	PASS
				RB6#0	20.83	16.75	38.5	PASS
			MCH	RB1#0	21.97	17.58	38.5	PASS
				RB1#3	22.28	17.98	38.5	PASS
				RB1#5	21.94	17.80	38.5	PASS
				RB3#0	22.12	18.06	38.5	PASS
				RB3#2	22.15	17.87	38.5	PASS
				RB3#3	21.98	17.81	38.5	PASS
				RB6#0	21.07	16.86	38.5	PASS
			HCH	RB1#0	22.19	17.89	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#3	22.2	18.11	38.5	PASS
				RB1#5	22.13	18.02	38.5	PASS
				RB3#0	22.06	17.63	38.5	PASS
				RB3#2	22.04	17.71	38.5	PASS
				RB3#3	22.03	17.73	38.5	PASS
				RB6#0	20.98	16.83	38.5	PASS
		3	LCH	RB1#0	21.59	17.34	38.5	PASS
				RB1#7	22.16	18.02	38.5	PASS
				RB1#14	21.71	17.63	38.5	PASS
				RB8#0	20.69	16.60	38.5	PASS
				RB8#4	20.83	16.67	38.5	PASS
				RB8#7	20.8	16.53	38.5	PASS
				RB15#0	20.71	16.37	38.5	PASS
			MCH	RB1#0	21.84	17.47	38.5	PASS
				RB1#7	22.18	17.91	38.5	PASS
				RB1#14	21.81	17.61	38.5	PASS
				RB8#0	20.87	16.70	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#4	20.92	16.84	38.5	PASS
				RB8#7	20.84	16.64	38.5	PASS
				RB15#0	20.8	16.72	38.5	PASS
			HCH	RB1#0	21.93	17.67	38.5	PASS
				RB1#7	22.28	17.90	38.5	PASS
				RB1#14	21.83	17.43	38.5	PASS
				RB8#0	21.09	16.74	38.5	PASS
				RB8#4	21.08	16.64	38.5	PASS
				RB8#7	21	16.68	38.5	PASS
				RB15#0	20.98	16.70	38.5	PASS
		5	LCH	RB1#0	21.42	17.20	38.5	PASS
				RB1#13	21.94	17.51	38.5	PASS
				RB1#24	21.44	17.38	38.5	PASS
				RB12#0	20.69	16.49	38.5	PASS
				RB12#6	20.84	16.48	38.5	PASS
				RB12#13	20.64	16.36	38.5	PASS
				RB25#0	20.75	16.65	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
			MCH	RB1#0	21.65	17.31	38.5	PASS
				RB1#13	22	17.95	38.5	PASS
				RB1#24	21.54	17.35	38.5	PASS
				RB12#0	20.79	16.53	38.5	PASS
				RB12#6	20.92	16.49	38.5	PASS
				RB12#13	20.78	16.42	38.5	PASS
				RB25#0	20.86	16.61	38.5	PASS
			HCH	RB1#0	22.01	17.67	38.5	PASS
				RB1#13	22.29	18.12	38.5	PASS
				RB1#24	21.81	17.76	38.5	PASS
				RB12#0	20.91	16.72	38.5	PASS
				RB12#6	20.96	16.86	38.5	PASS
				RB12#13	20.72	16.46	38.5	PASS
				RB25#0	20.86	16.73	38.5	PASS
		10	LCH	RB1#0	21.15	16.75	38.5	PASS
				RB1#25	21.91	17.52	38.5	PASS
				RB1#49	21.09	16.71	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.65	16.35	38.5	PASS
				RB25#13	20.7	16.49	38.5	PASS
				RB25#25	20.46	16.19	38.5	PASS
				RB50#0	20.51	16.27	38.5	PASS
			MCH	RB1#0	21.51	17.31	38.5	PASS
				RB1#25	22.01	17.87	38.5	PASS
				RB1#49	21.52	17.13	38.5	PASS
				RB25#0	20.65	16.33	38.5	PASS
				RB25#13	20.79	16.55	38.5	PASS
				RB25#25	20.64	16.50	38.5	PASS
				RB50#0	20.55	16.48	38.5	PASS
			HCH	RB1#0	21.64	17.41	38.5	PASS
				RB1#25	22.28	18.13	38.5	PASS
				RB1#49	21.42	17.37	38.5	PASS
				RB25#0	20.88	16.59	38.5	PASS
				RB25#13	20.93	16.64	38.5	PASS
				RB25#25	20.71	16.29	38.5	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB50#0	20.75	16.52	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:

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

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

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

$$\text{SET Sweep time} = \text{auto-couple.}$$

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	5.64	13	PASS
				RB1#3	5.51	13	PASS
				RB1#5	5.49	13	PASS
				RB3#0	5.47	13	PASS
				RB3#2	5.72	13	PASS
				RB3#3	5.72	13	PASS
				RB6#0	6.08	13	PASS
			MCH	RB1#0	5.46	13	PASS
				RB1#3	5.26	13	PASS
				RB1#5	5.26	13	PASS
				RB3#0	5.59	13	PASS
				RB3#2	5.39	13	PASS
				RB3#3	5.3	13	PASS
				RB6#0	6.19	13	PASS
			HCH	RB1#0	4.79	13	PASS
				RB1#3	4.58	13	PASS
				RB1#5	4.69	13	PASS
				RB3#0	5.14	13	PASS
				RB3#2	5.06	13	PASS
				RB3#3	5.12	13	PASS
				RB6#0	6.09	13	PASS
		3	LCH	RB1#0	5.36	13	PASS
				RB1#7	5.01	13	PASS
				RB1#14	5.18	13	PASS
				RB8#0	6.18	13	PASS
				RB8#4	6.15	13	PASS
				RB8#7	6.11	13	PASS
				RB15#0	6.15	13	PASS
			MCH	RB1#0	5.47	13	PASS
				RB1#7	4.91	13	PASS
				RB1#14	5.06	13	PASS
				RB8#0	6.34	13	PASS
				RB8#4	6.07	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#7	5.95	13	PASS
				RB15#0	6.29	13	PASS
			HCH	RB1#0	5.1	13	PASS
				RB1#7	4.31	13	PASS
				RB1#14	4.56	13	PASS
				RB8#0	5.89	13	PASS
				RB8#4	5.99	13	PASS
				RB8#7	6.04	13	PASS
				RB15#0	6.08	13	PASS
		5	LCH	RB1#0	5.26	13	PASS
				RB1#13	4.75	13	PASS
				RB1#24	4.99	13	PASS
				RB12#0	6.21	13	PASS
				RB12#6	6.13	13	PASS
				RB12#13	6.22	13	PASS
				RB25#0	6.37	13	PASS
			MCH	RB1#0	5.31	13	PASS
				RB1#13	4.84	13	PASS
				RB1#24	4.84	13	PASS
				RB12#0	6.37	13	PASS
				RB12#6	6.26	13	PASS
				RB12#13	6.12	13	PASS
				RB25#0	6.42	13	PASS
			HCH	RB1#0	4.75	13	PASS
				RB1#13	4.82	13	PASS
				RB1#24	5	13	PASS
				RB12#0	6.01	13	PASS
				RB12#6	6.01	13	PASS
				RB12#13	6.12	13	PASS
				RB25#0	6.01	13	PASS
		10	LCH	RB1#0	5.55	13	PASS
				RB1#25	5.35	13	PASS
				RB1#49	5.85	13	PASS
				RB25#0	6.53	13	PASS
				RB25#13	6.57	13	PASS
				RB25#25	6.71	13	PASS
				RB50#0	6.51	13	PASS
			MCH	RB1#0	5.68	13	PASS
				RB1#25	5.2	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#49	5.02	13	PASS
				RB25#0	6.59	13	PASS
				RB25#13	6.36	13	PASS
				RB25#25	6.24	13	PASS
				RB50#0	6.59	13	PASS
			HCH	RB1#0	5.16	13	PASS
				RB1#25	4.66	13	PASS
				RB1#49	5.31	13	PASS
				RB25#0	6	13	PASS
				RB25#13	6.12	13	PASS
				RB25#25	6.34	13	PASS
				RB50#0	6.42	13	PASS
	LTE/TM2	1.4	LCH	RB1#0	6.5	13	PASS
				RB1#3	6.5	13	PASS
				RB1#5	6.35	13	PASS
				RB3#0	6.39	13	PASS
				RB3#2	6.29	13	PASS
				RB3#3	6.28	13	PASS
				RB6#0	6.95	13	PASS
			MCH	RB1#0	6.29	13	PASS
				RB1#3	5.97	13	PASS
				RB1#5	5.92	13	PASS
				RB3#0	6.26	13	PASS
				RB3#2	6.18	13	PASS
				RB3#3	5.96	13	PASS
				RB6#0	6.9	13	PASS
			HCH	RB1#0	5.68	13	PASS
				RB1#3	5.55	13	PASS
				RB1#5	5.64	13	PASS
				RB3#0	5.99	13	PASS
				RB3#2	5.9	13	PASS
				RB3#3	5.87	13	PASS
				RB6#0	6.91	13	PASS
		3	LCH	RB1#0	6.48	13	PASS
				RB1#7	5.87	13	PASS
				RB1#14	6.26	13	PASS
				RB8#0	6.66	13	PASS
				RB8#4	6.58	13	PASS
				RB8#7	6.68	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB15#0	6.69	13	PASS
				RB1#0	6.64	13	PASS
			MCH	RB1#7	6.22	13	PASS
				RB1#14	6.27	13	PASS
				RB8#0	6.95	13	PASS
				RB8#4	6.9	13	PASS
				RB8#7	6.75	13	PASS
				RB15#0	6.81	13	PASS
			HCH	RB1#0	6.22	13	PASS
				RB1#7	5.64	13	PASS
				RB1#14	5.95	13	PASS
				RB8#0	6.69	13	PASS
				RB8#4	6.86	13	PASS
				RB8#7	6.71	13	PASS
				RB15#0	6.68	13	PASS
		5	LCH	RB1#0	6.34	13	PASS
				RB1#13	6.03	13	PASS
				RB1#24	6.33	13	PASS
				RB12#0	6.81	13	PASS
				RB12#6	6.75	13	PASS
				RB12#13	6.88	13	PASS
				RB25#0	7.21	13	PASS
			MCH	RB1#0	6.44	13	PASS
				RB1#13	5.97	13	PASS
				RB1#24	5.93	13	PASS
				RB12#0	6.99	13	PASS
				RB12#6	6.86	13	PASS
				RB12#13	6.76	13	PASS
				RB25#0	7.27	13	PASS
			HCH	RB1#0	5.76	13	PASS
				RB1#13	5.76	13	PASS
				RB1#24	6.02	13	PASS
				RB12#0	6.99	13	PASS
				RB12#6	6.99	13	PASS
				RB12#13	6.97	13	PASS
				RB25#0	7.22	13	PASS
		10	LCH	RB1#0	6.42	13	PASS
				RB1#25	6.28	13	PASS
				RB1#49	6.47	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	7.13	13	PASS
				RB25#13	7.28	13	PASS
				RB25#25	7.37	13	PASS
				RB50#0	7.13	13	PASS
			MCH	RB1#0	6.41	13	PASS
				RB1#25	6.01	13	PASS
				RB1#49	5.79	13	PASS
				RB25#0	7.46	13	PASS
				RB25#13	7.19	13	PASS
				RB25#25	6.99	13	PASS
				RB50#0	7.36	13	PASS
			HCH	RB1#0	5.9	13	PASS
				RB1#25	5.54	13	PASS
				RB1#49	6.2	13	PASS
				RB25#0	6.65	13	PASS
				RB25#13	7.05	13	PASS
				RB25#25	7.18	13	PASS
				RB50#0	7.35	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

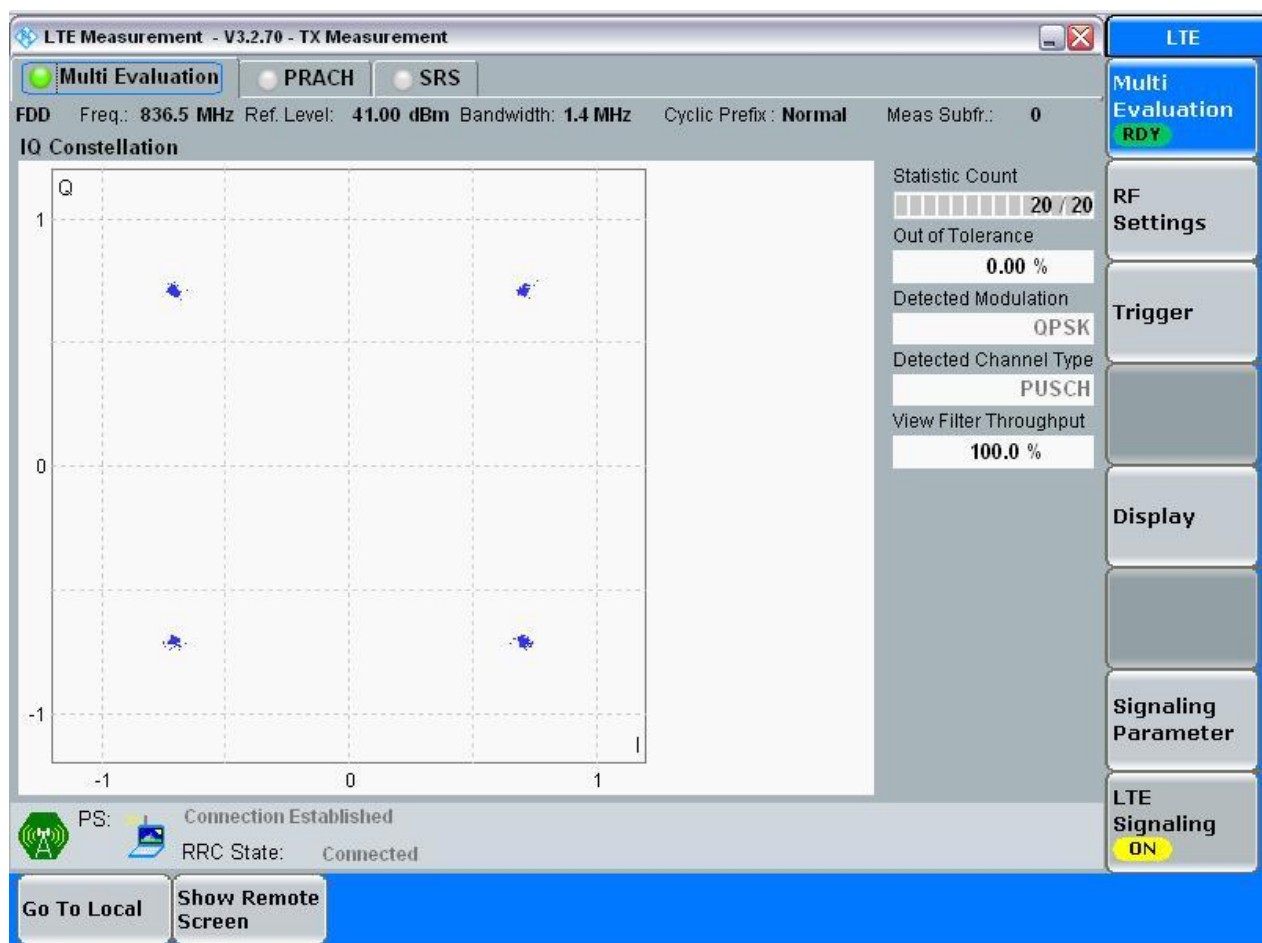
3.1.1 Test Band = BAND5

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

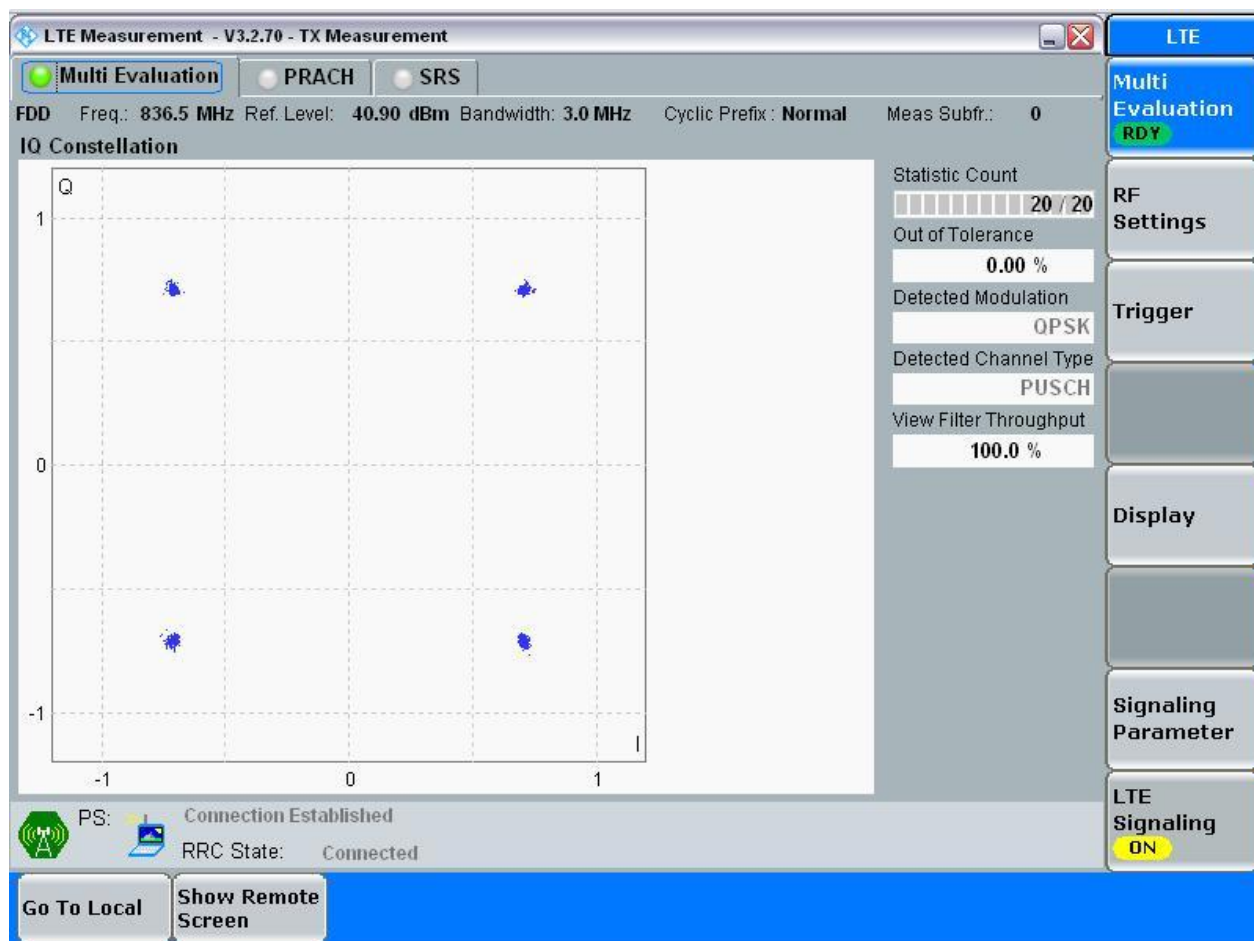
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

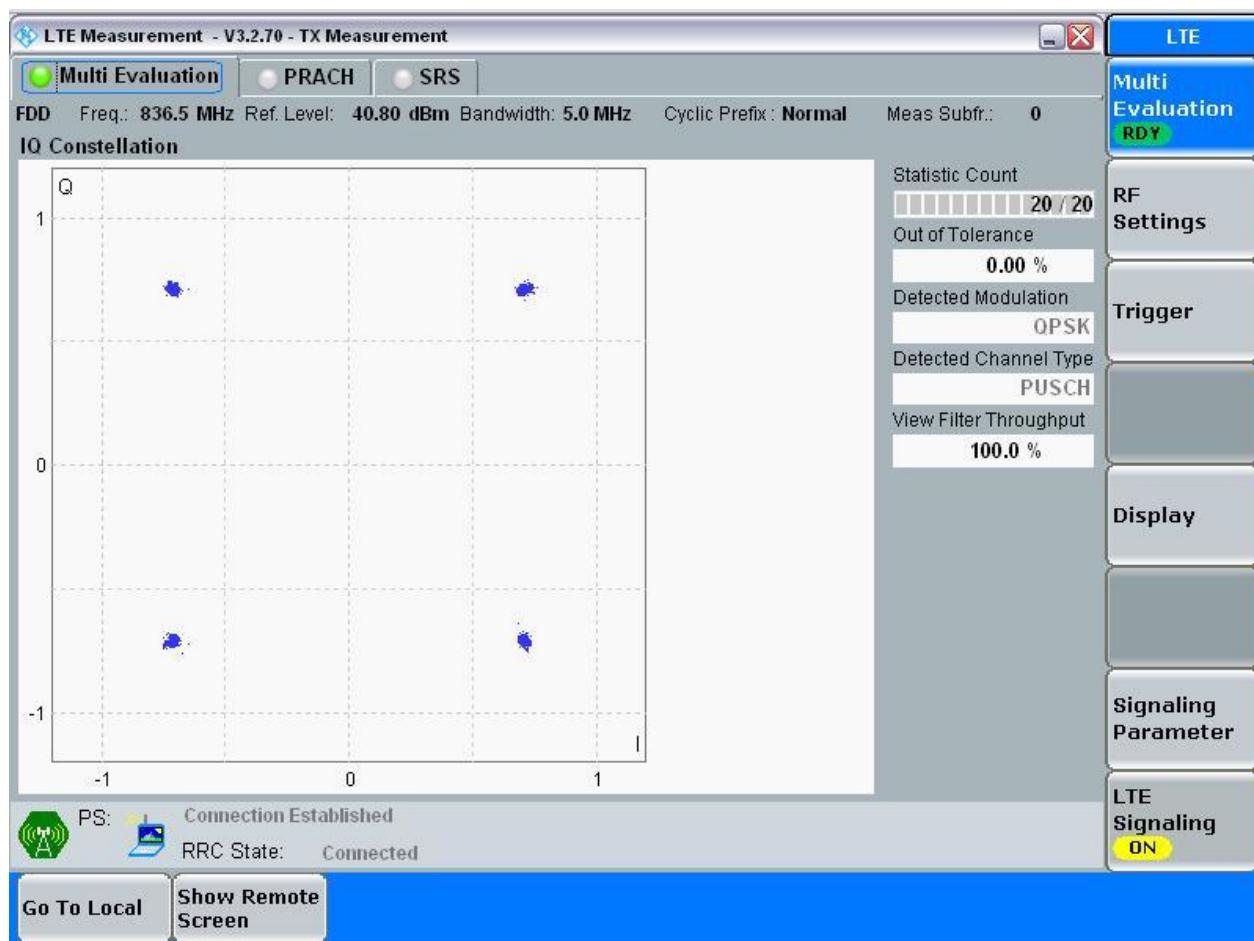
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

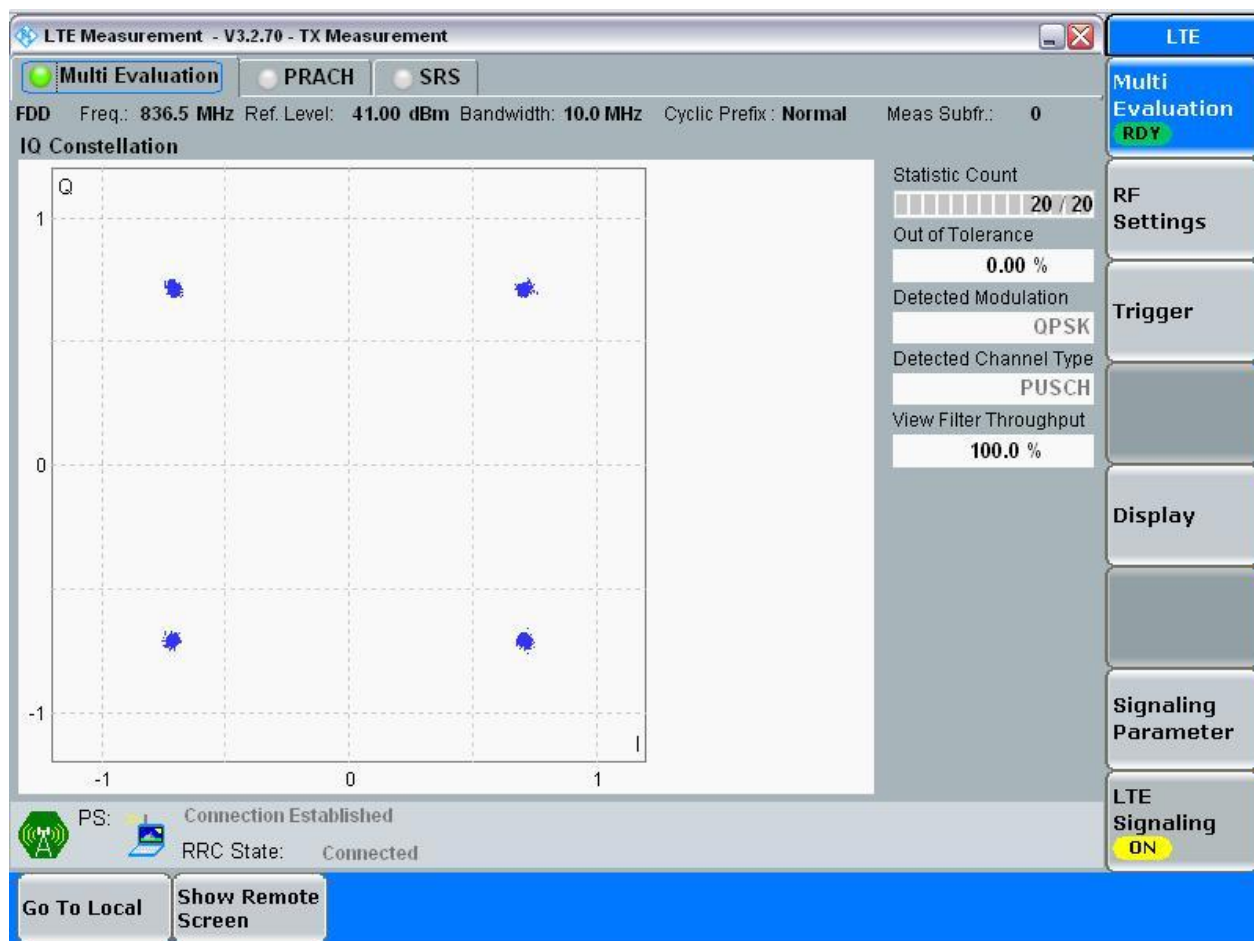
3.1.1.1.3.1.1 Test RB = RB25#0



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

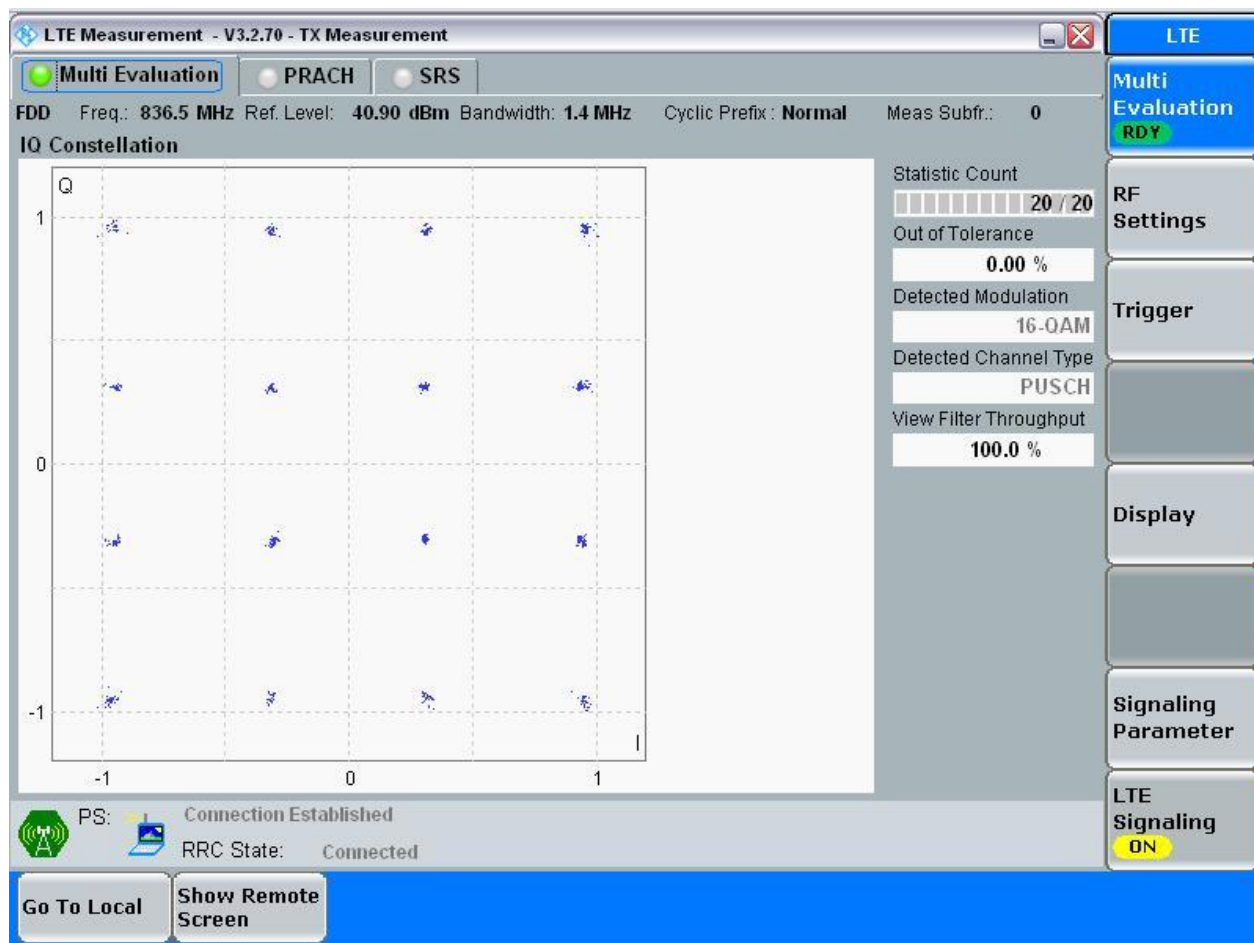


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

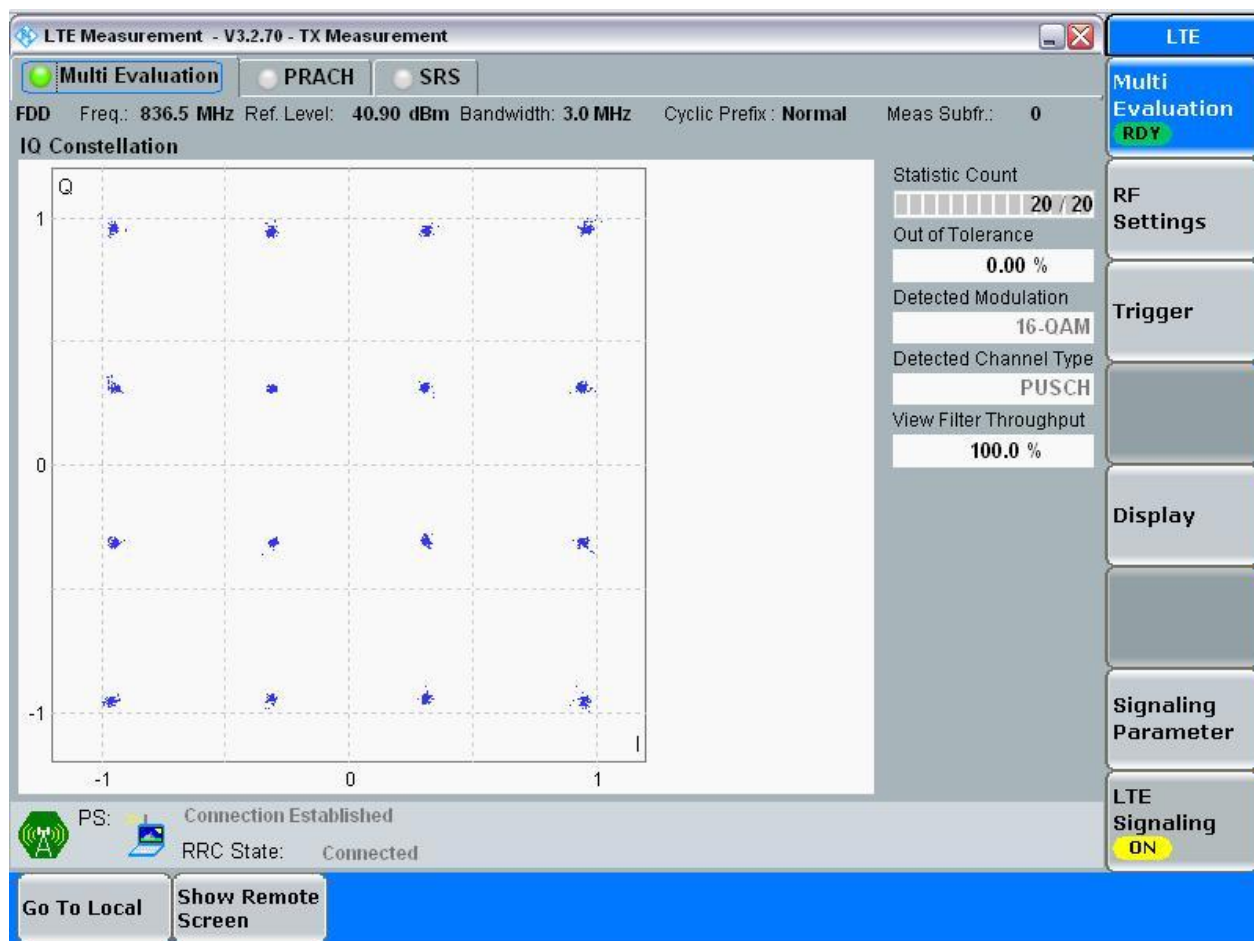
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

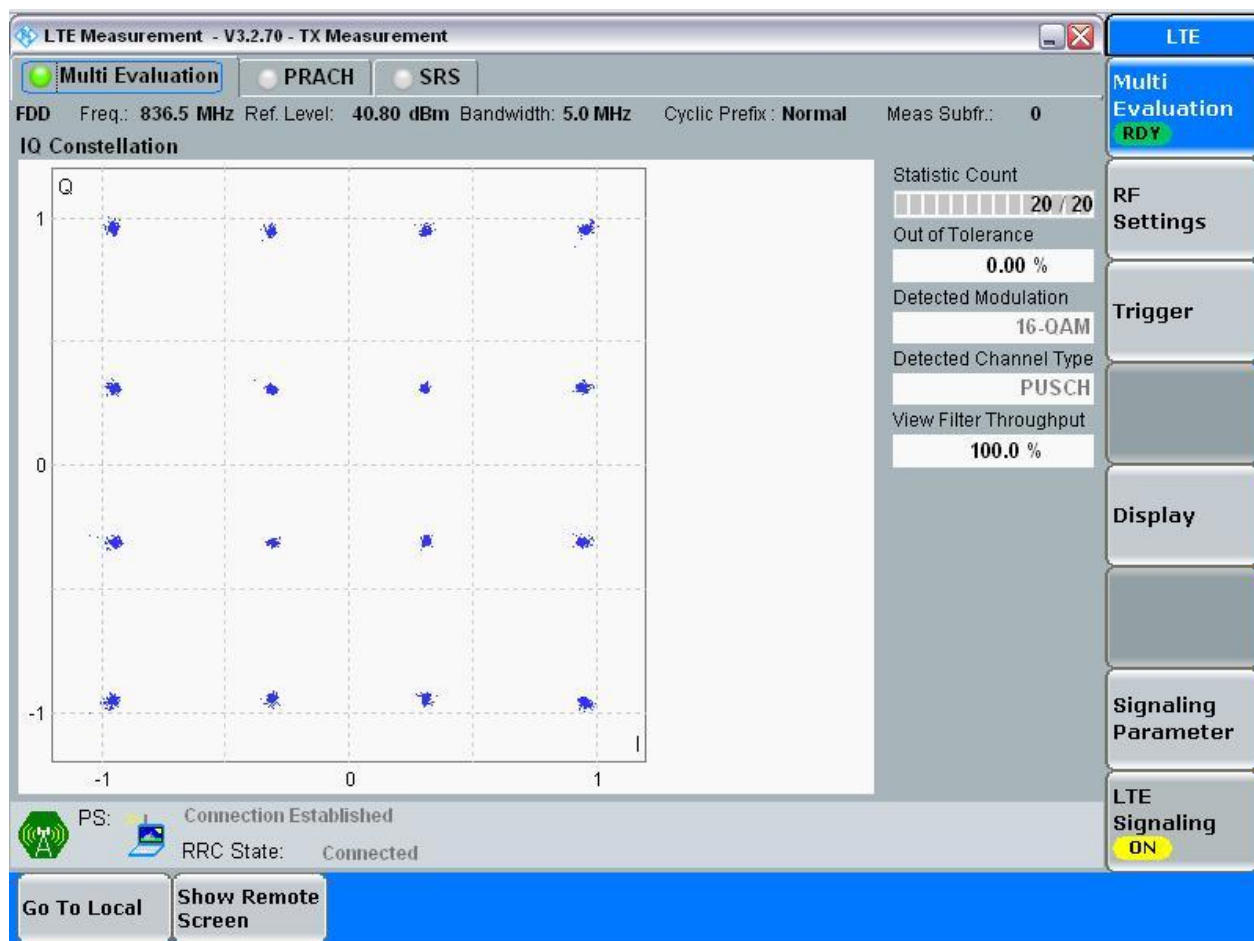
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

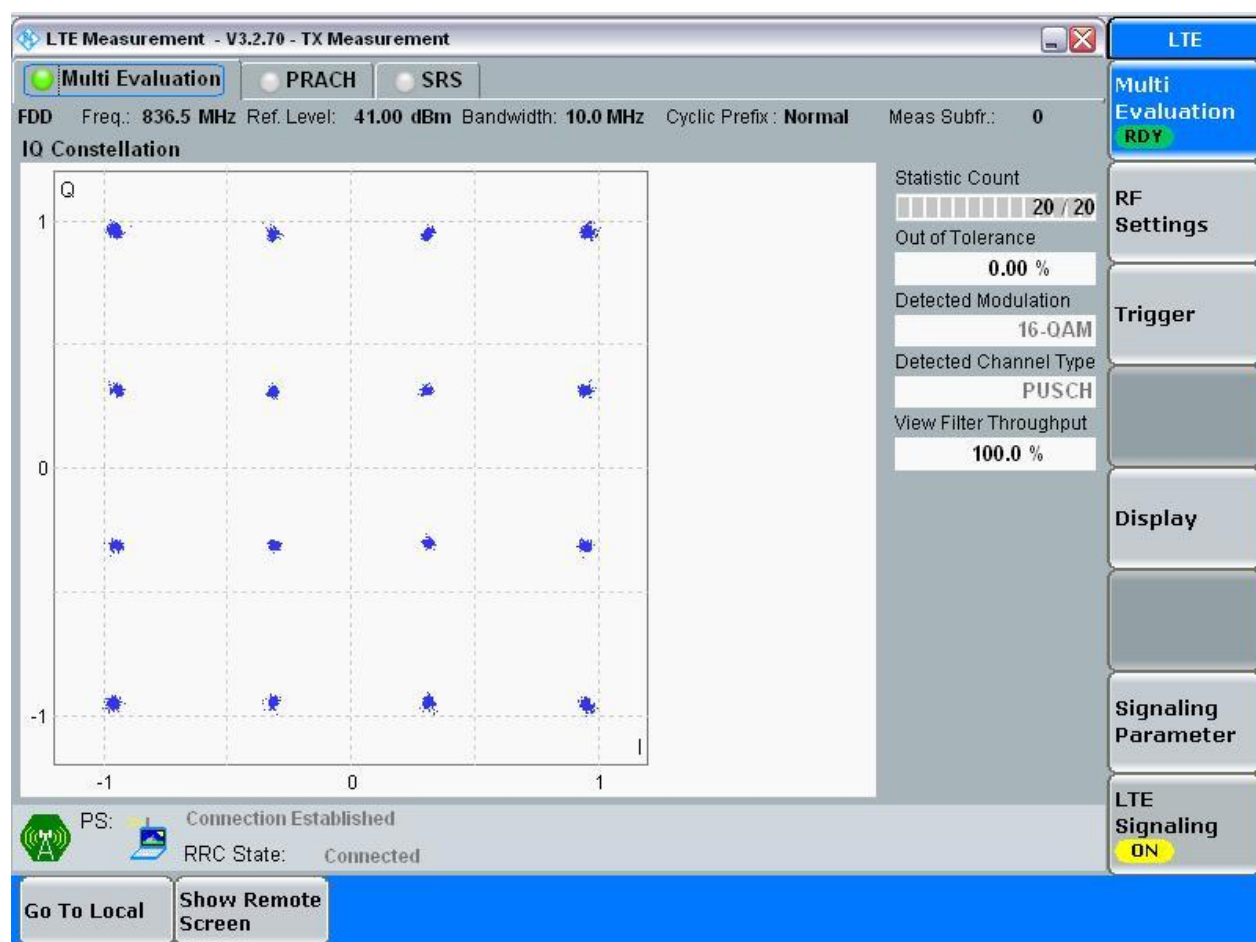
3.1.1.2.3.1.1 Test RB = RB25#0



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	1.09	1.24	Pass
			MCH	RB6#0	1.09	1.24	Pass
			HCH	RB6#0	1.09	1.24	Pass
		3	LCH	RB15#0	2.70	2.98	Pass
			MCH	RB15#0	2.71	2.98	Pass
			HCH	RB15#0	2.71	2.98	Pass
		5	LCH	RB25#0	4.51	4.96	Pass
			MCH	RB25#0	4.53	4.95	Pass
			HCH	RB25#0	4.51	4.96	Pass
		10	LCH	RB50#0	9.00	9.91	Pass
			MCH	RB50#0	9.01	9.89	Pass
			HCH	RB50#0	8.97	9.88	Pass
	LTE/TM2	1.4	LCH	RB6#0	1.10	1.24	Pass
			MCH	RB6#0	1.09	1.24	Pass
			HCH	RB6#0	1.10	1.24	Pass
		3	LCH	RB15#0	2.71	2.98	Pass
			MCH	RB15#0	2.71	2.98	Pass
			HCH	RB15#0	2.70	2.99	Pass
		5	LCH	RB25#0	4.52	4.96	Pass
			MCH	RB25#0	4.52	4.94	Pass
			HCH	RB25#0	4.52	4.99	Pass
		10	LCH	RB50#0	8.98	9.92	Pass
			MCH	RB50#0	8.99	9.96	Pass
			HCH	RB50#0	8.98	9.87	Pass



Part II - Test Plots

4.1 For LTE

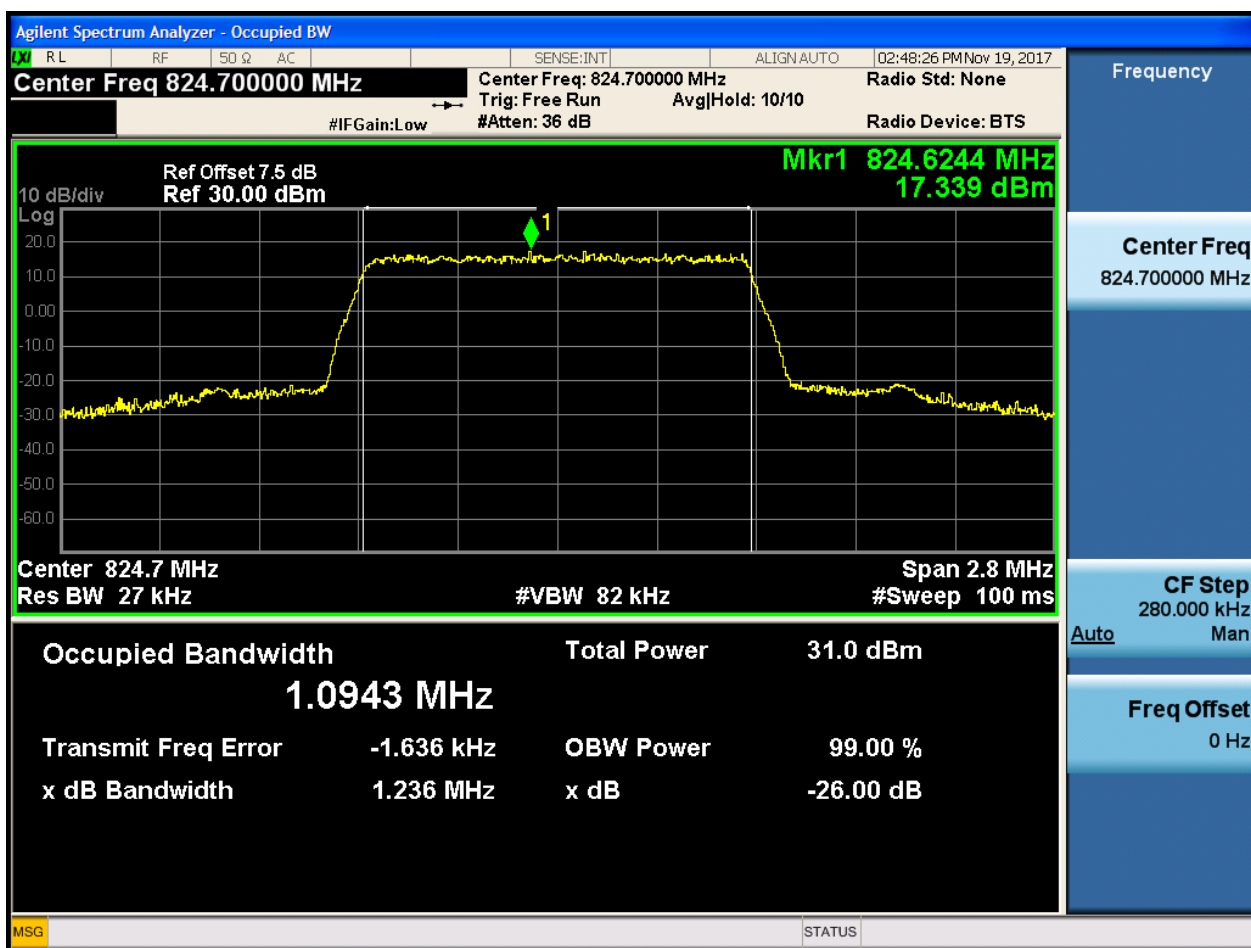
4.1.1 Test Band = BAND5

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 1.4

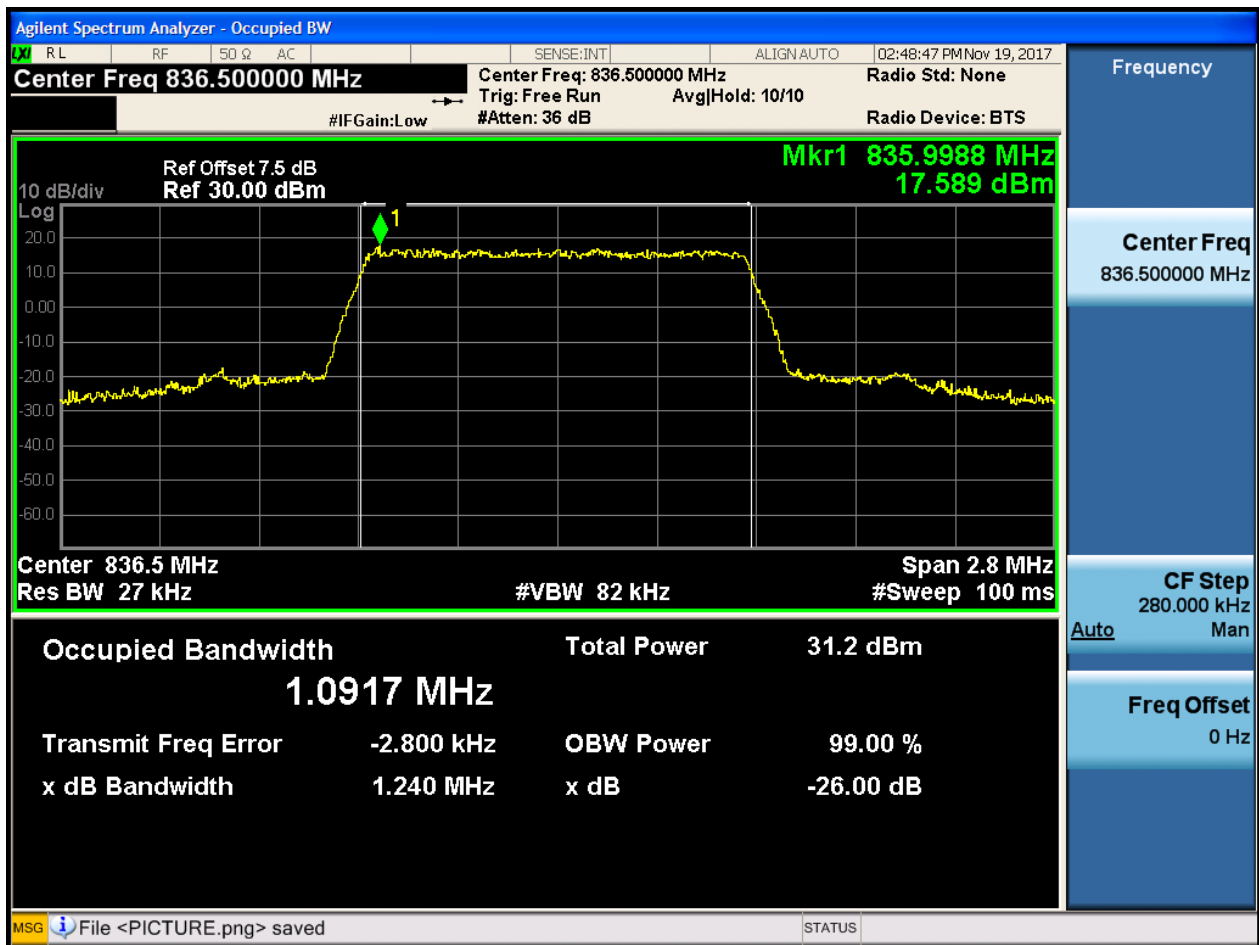
4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 Test RB = RB6#0



4.1.1.1.1.2 Test Channel = MCH

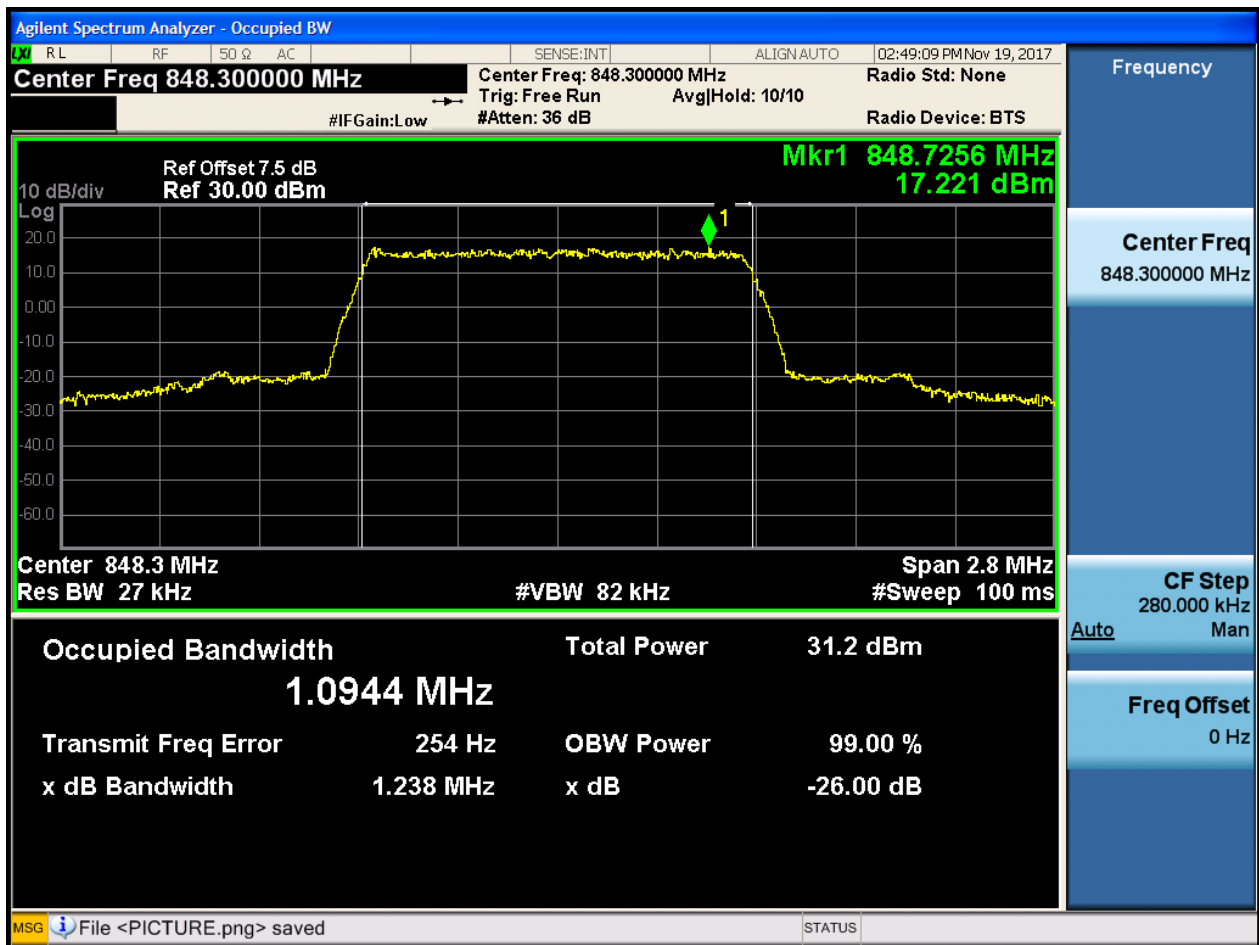
4.1.1.1.1.2.1 Test RB = RB6#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB6#0

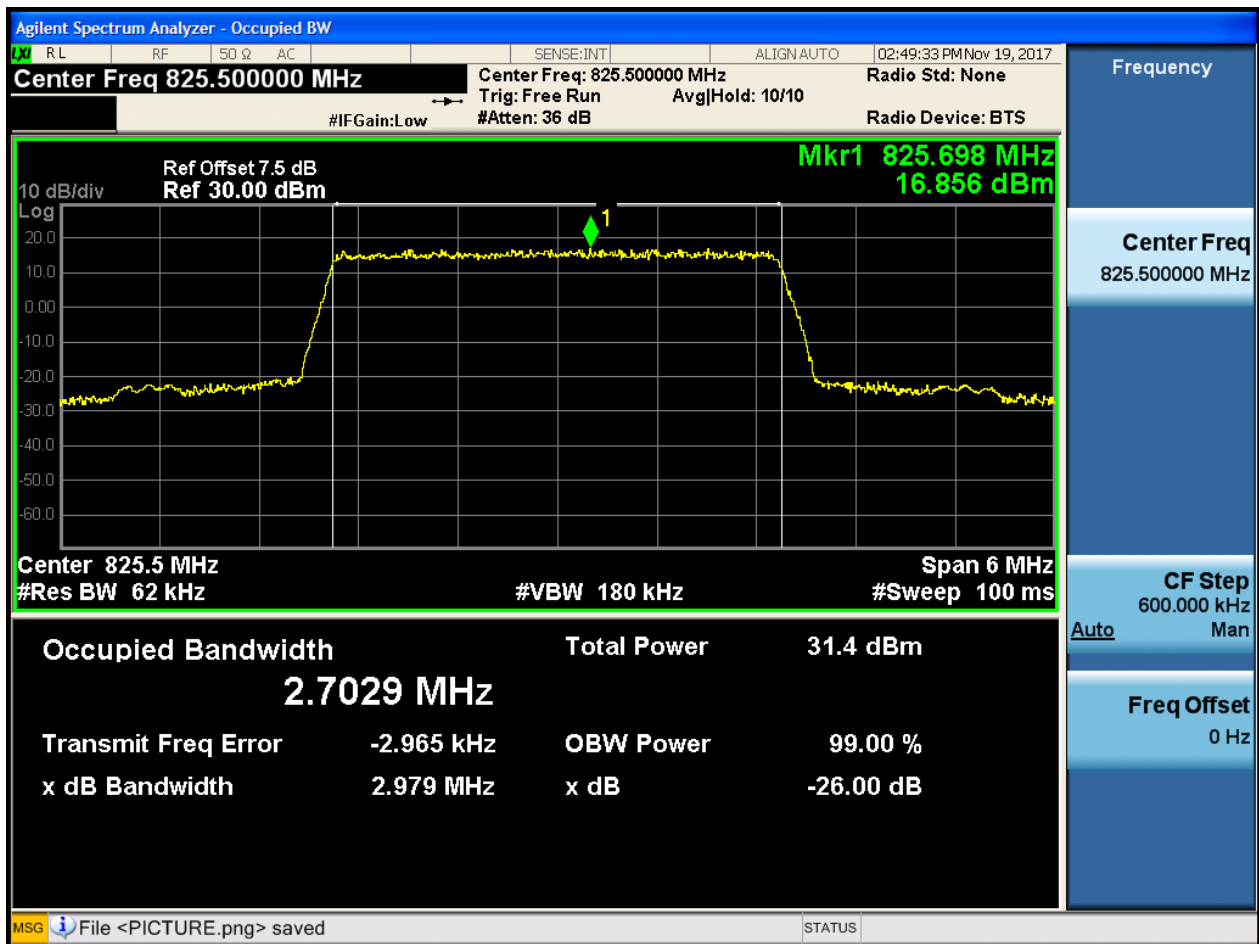




4.1.1.1.2 Test Bandwidth = 3

4.1.1.1.2.1 Test Channel = LCH

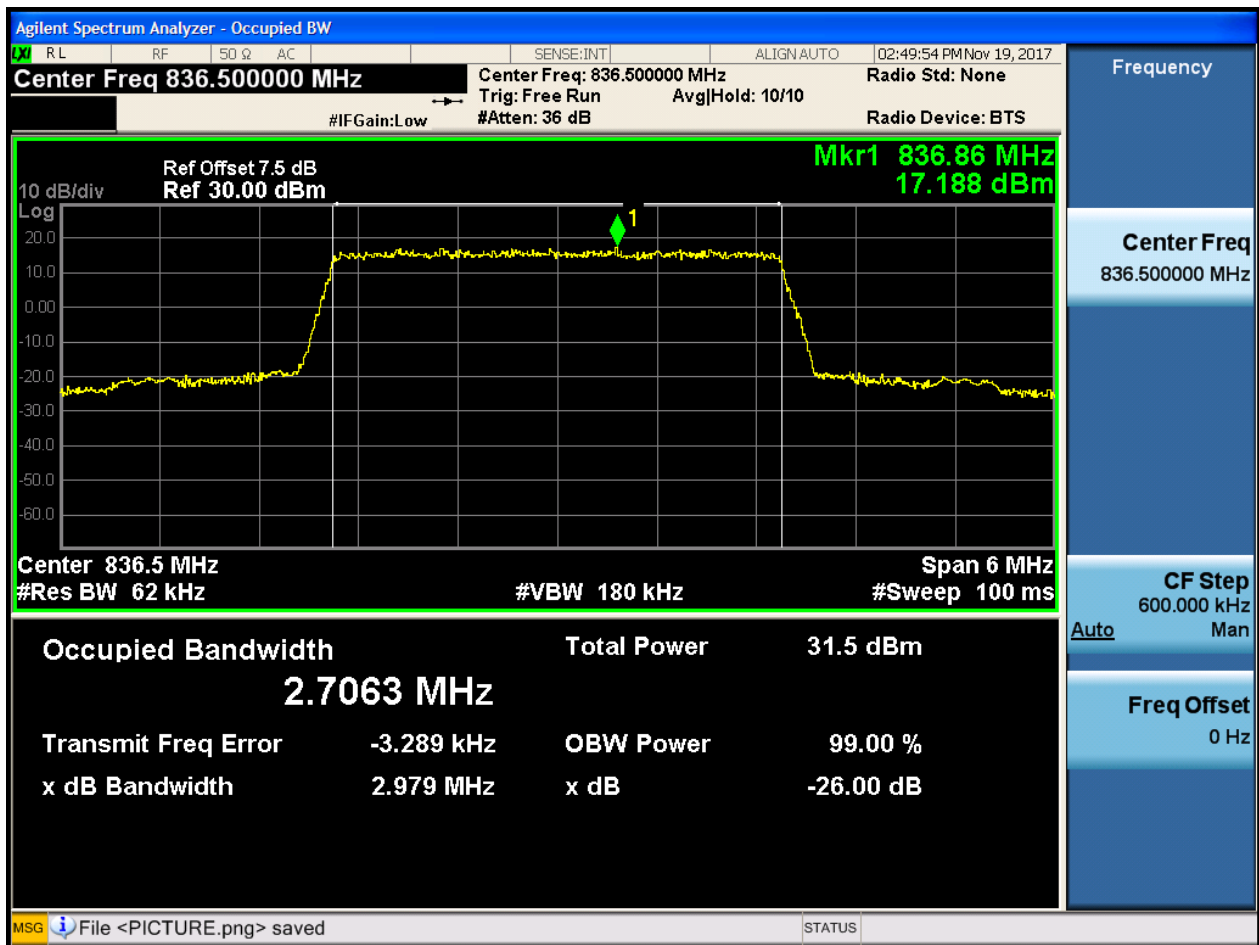
4.1.1.1.2.1.1 Test RB = RB15#0





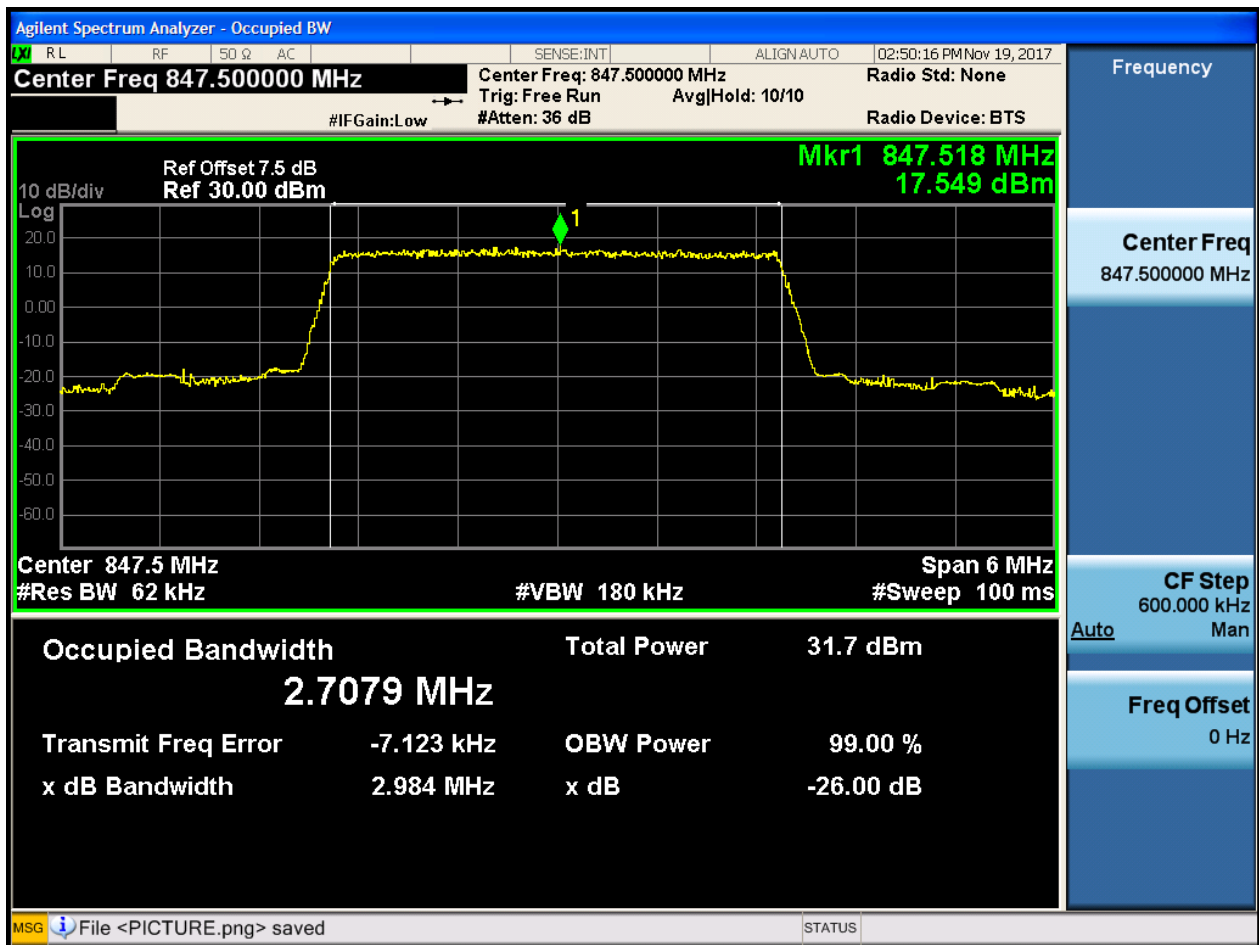
4.1.1.1.2.2 Test Channel = MCH

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

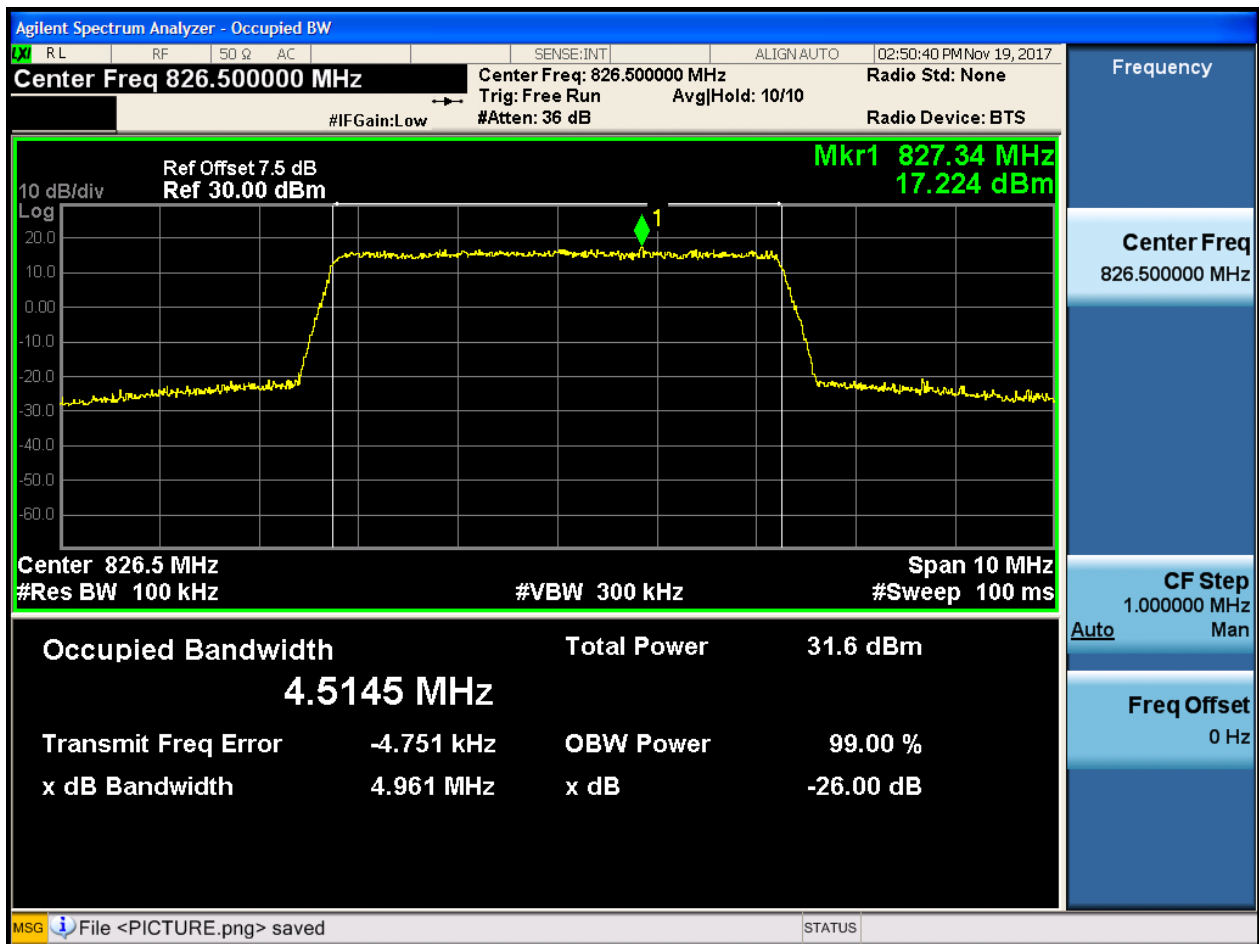




4.1.1.1.3 Test Bandwidth = 5

4.1.1.1.3.1 Test Channel = LCH

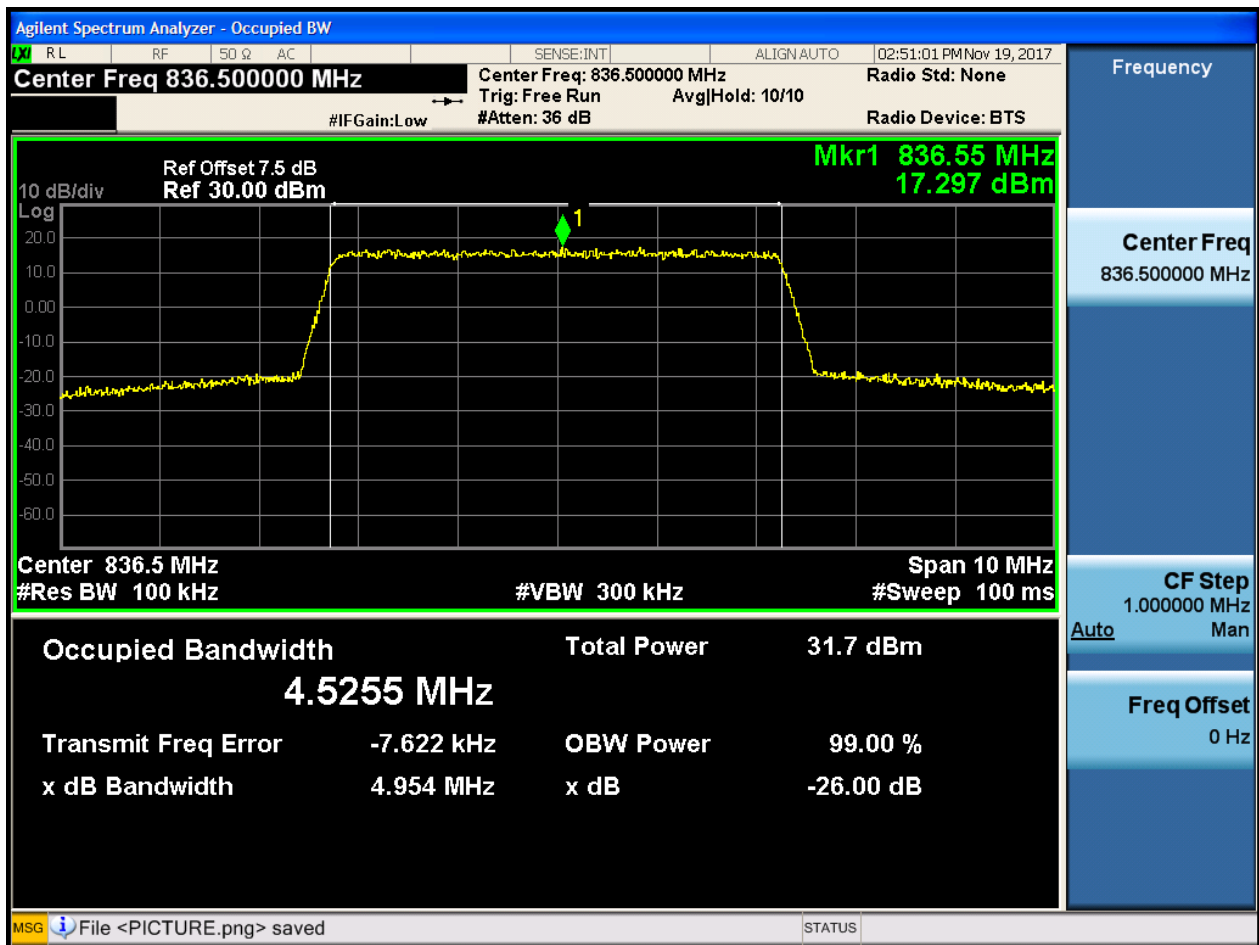
4.1.1.1.3.1.1 Test RB = RB25#0





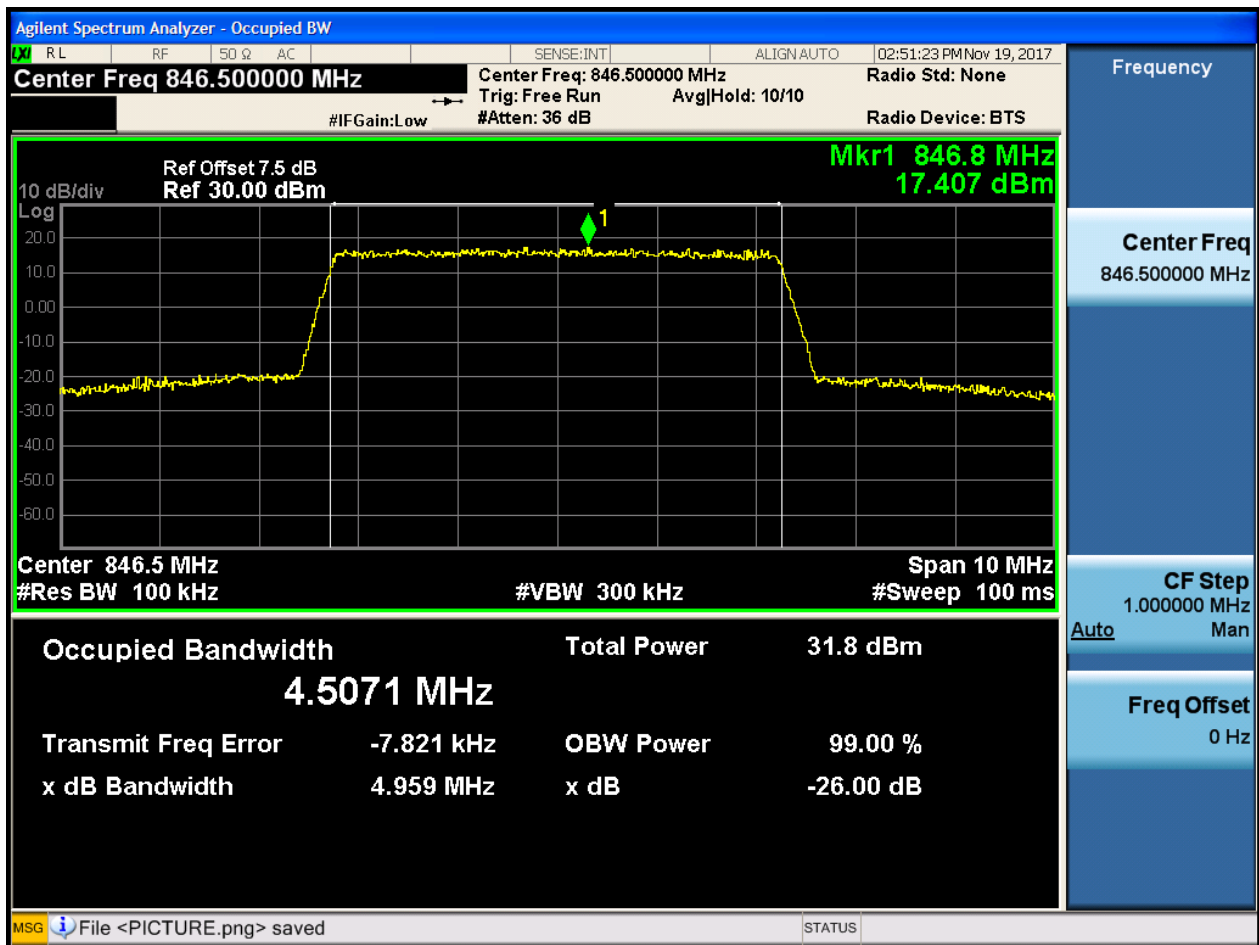
4.1.1.1.3.2 Test Channel = MCH

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

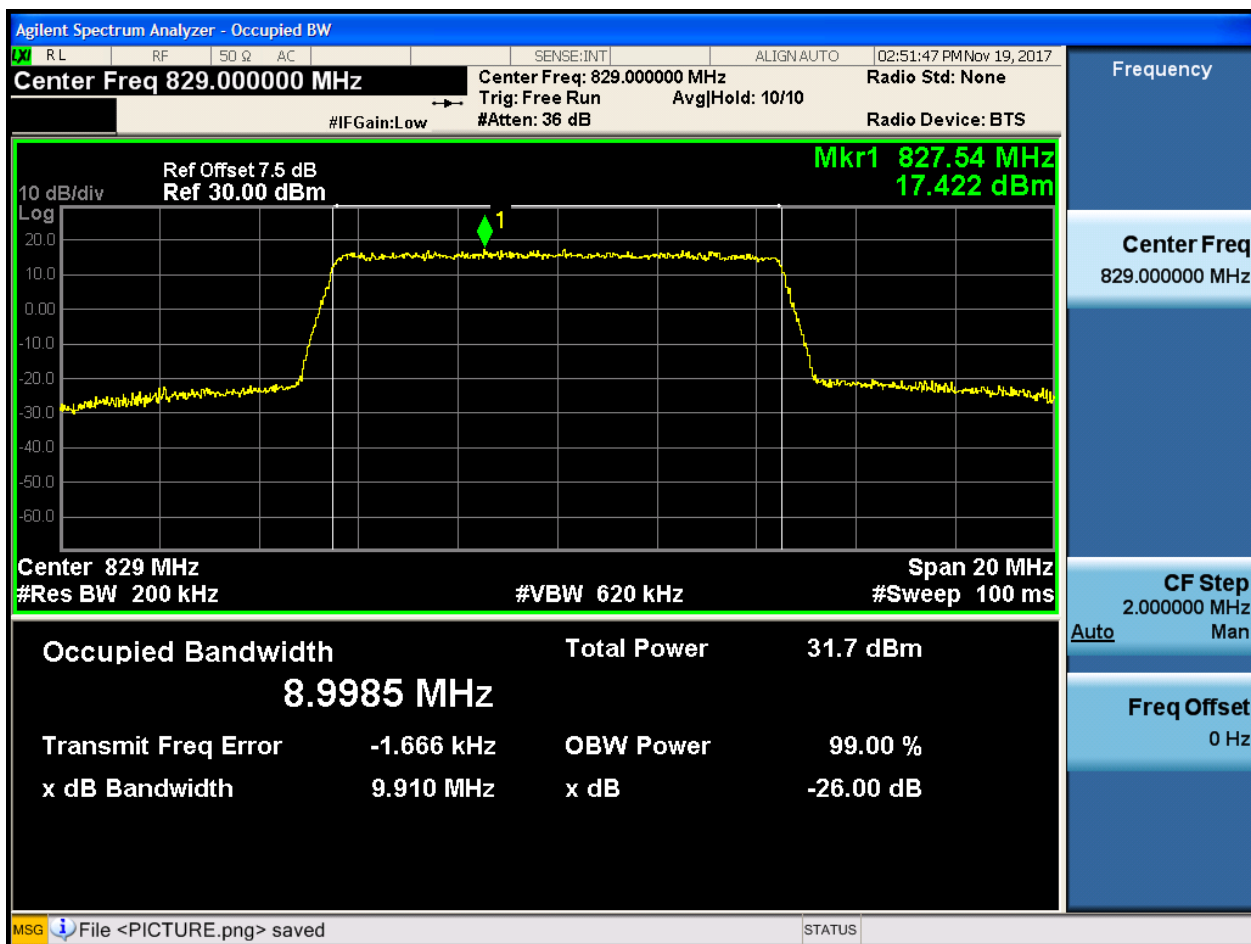




4.1.1.1.4 Test Bandwidth = 10

4.1.1.1.4.1 Test Channel = LCH

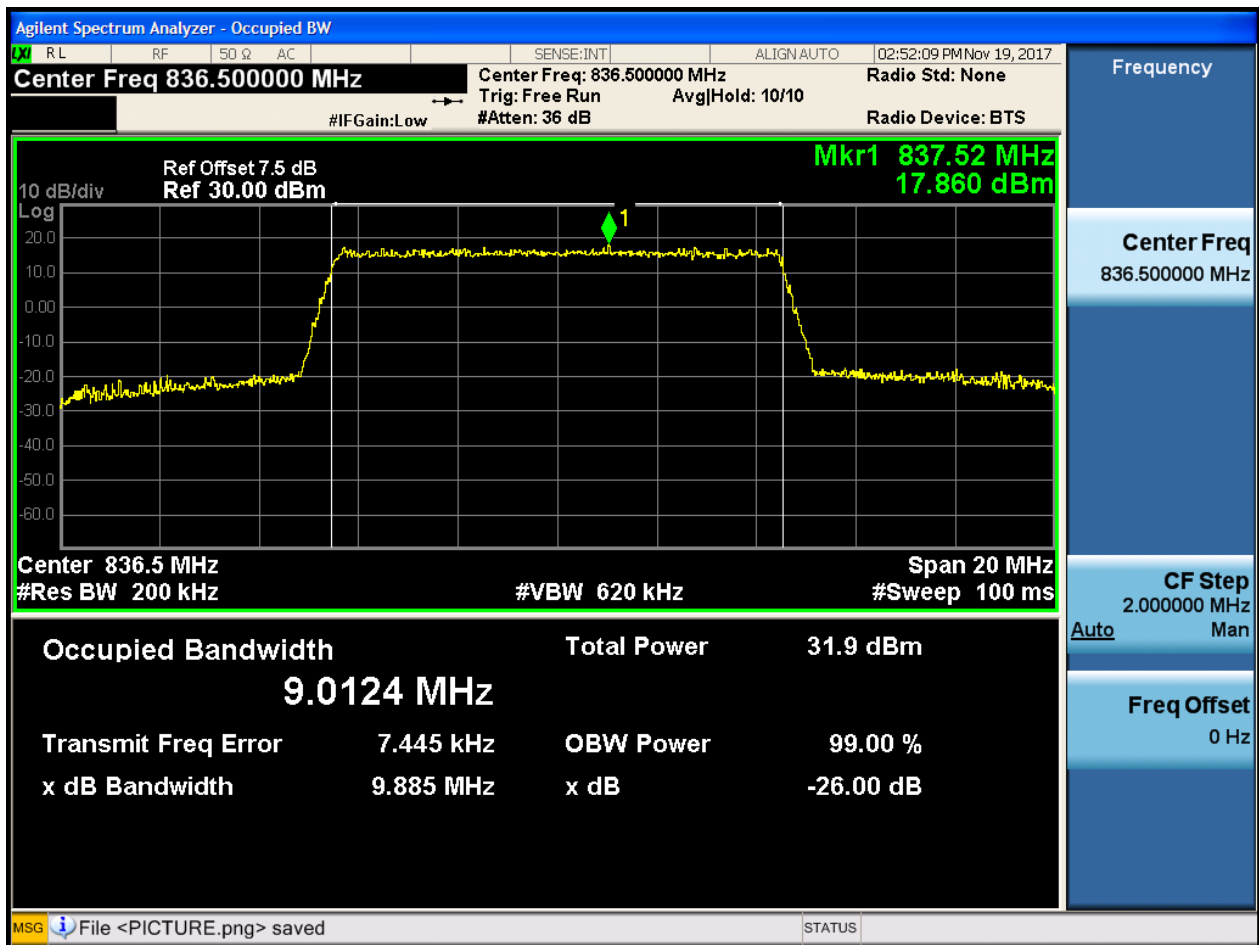
4.1.1.1.4.1.1 Test RB = RB50#0





4.1.1.1.4.2 Test Channel = MCH

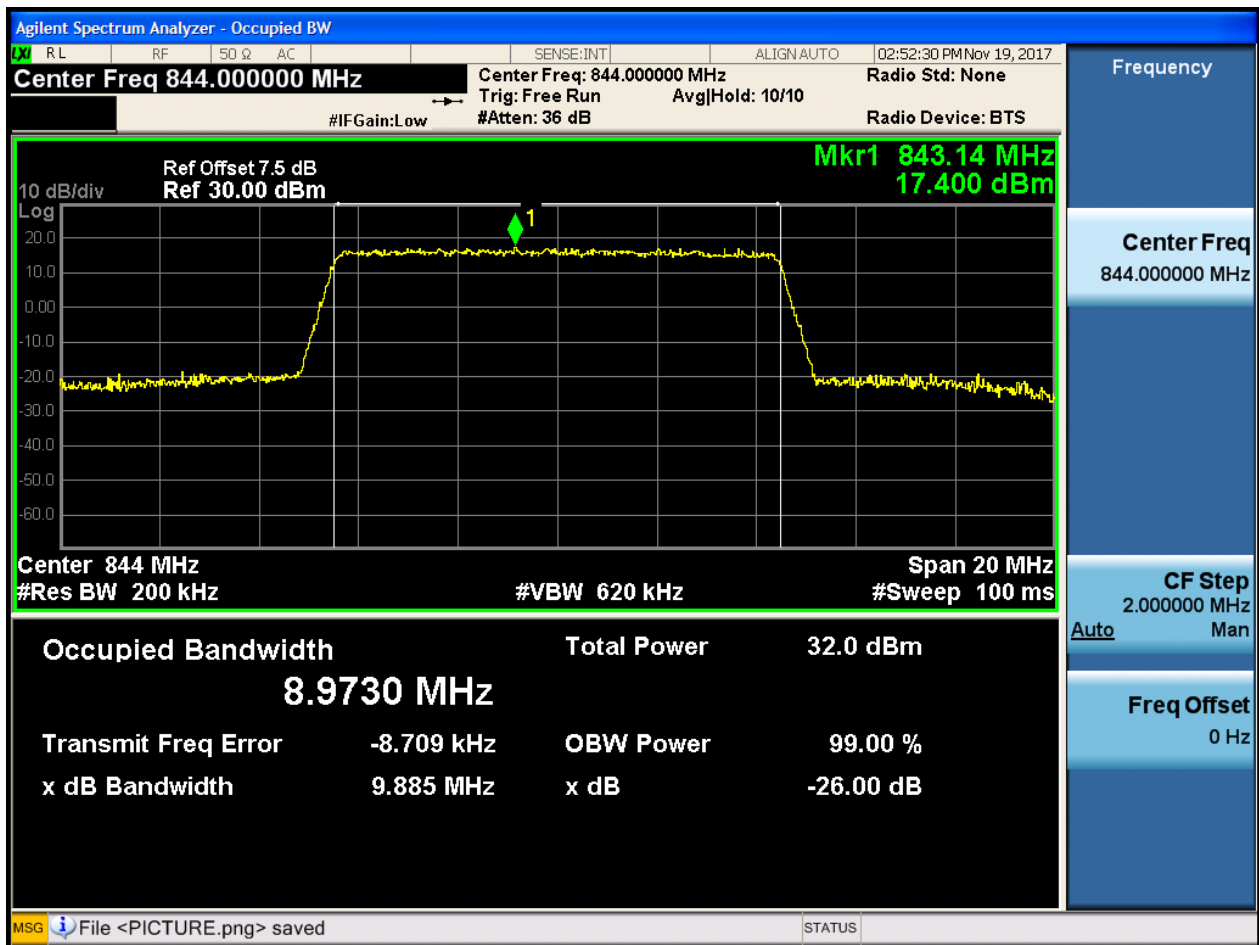
4.1.1.1.4.2.1 Test RB = RB50#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB50#0

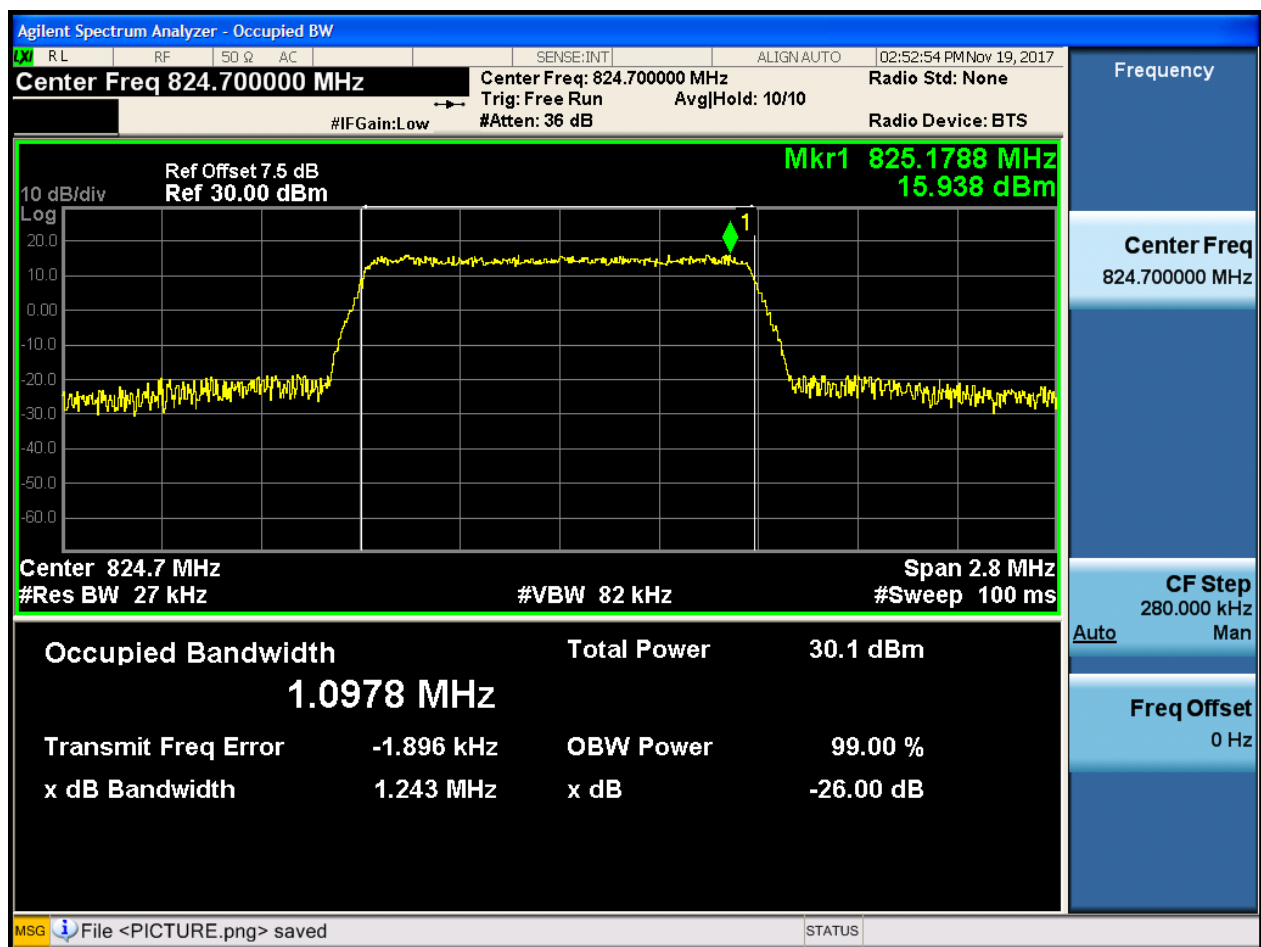


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 1.4

4.1.1.2.1.1 Test Channel = LCH

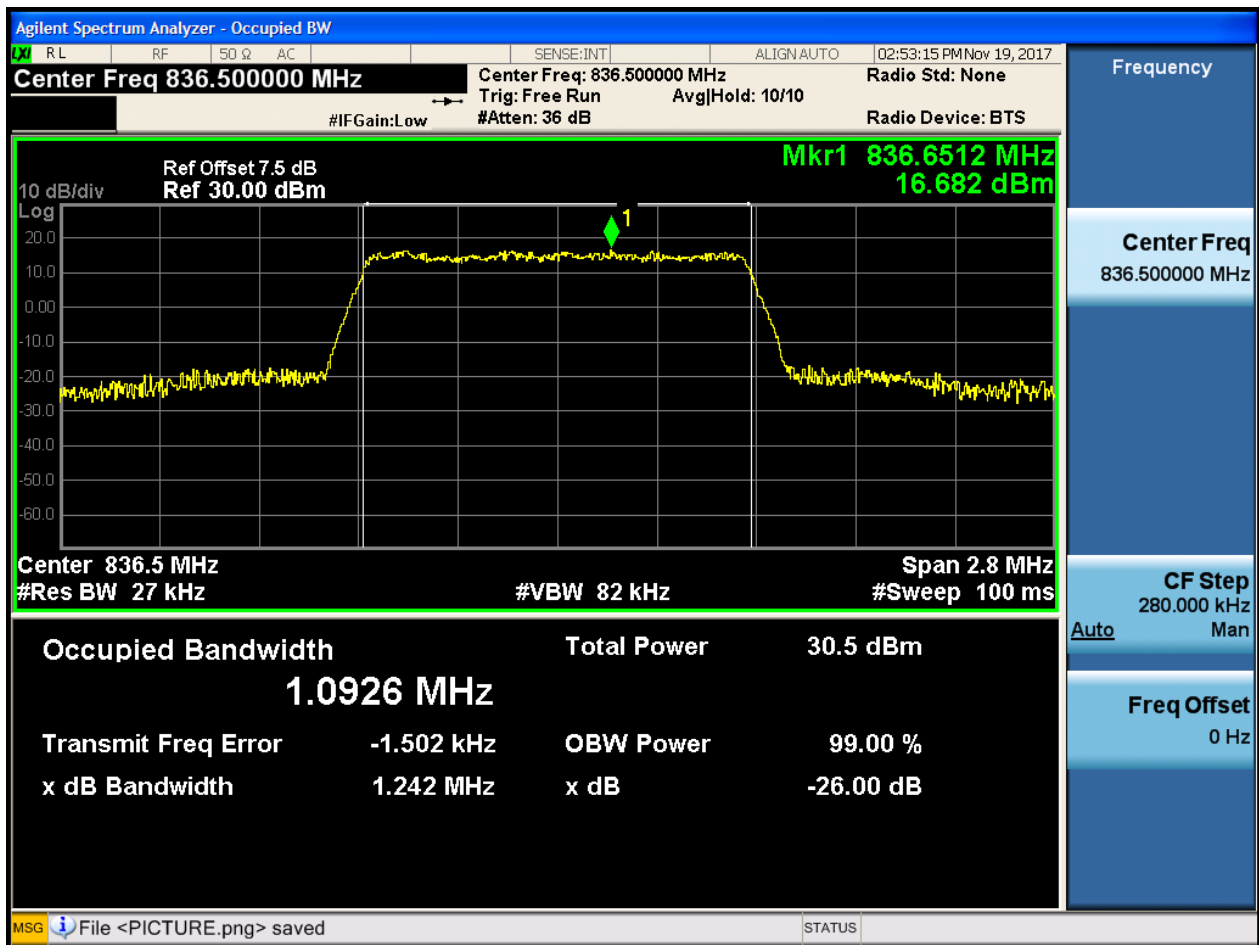
4.1.1.2.1.1.1 Test RB = RB6#0





4.1.1.2.1.2 Test Channel = MCH

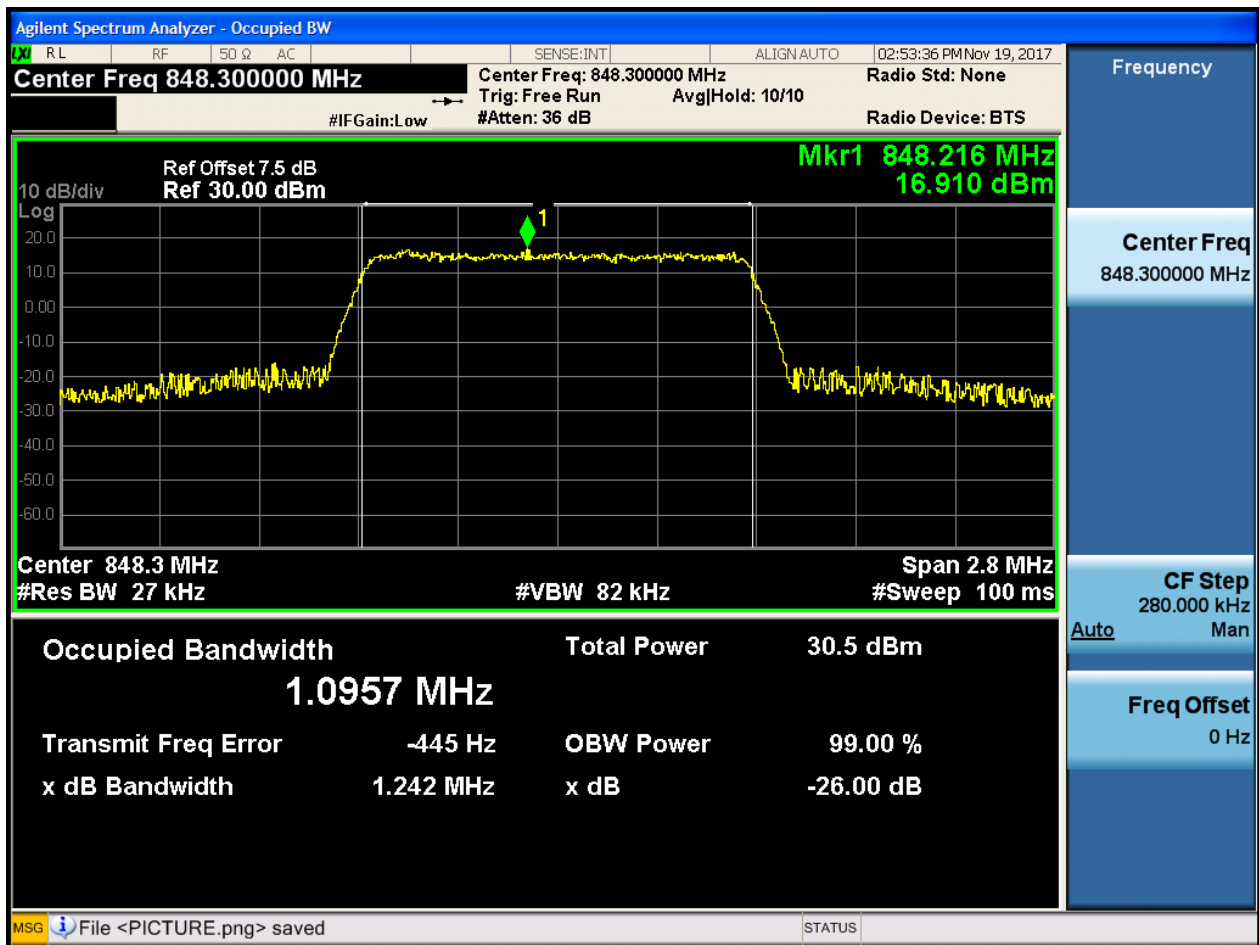
4.1.1.2.1.2.1 Test RB = RB6#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB6#0

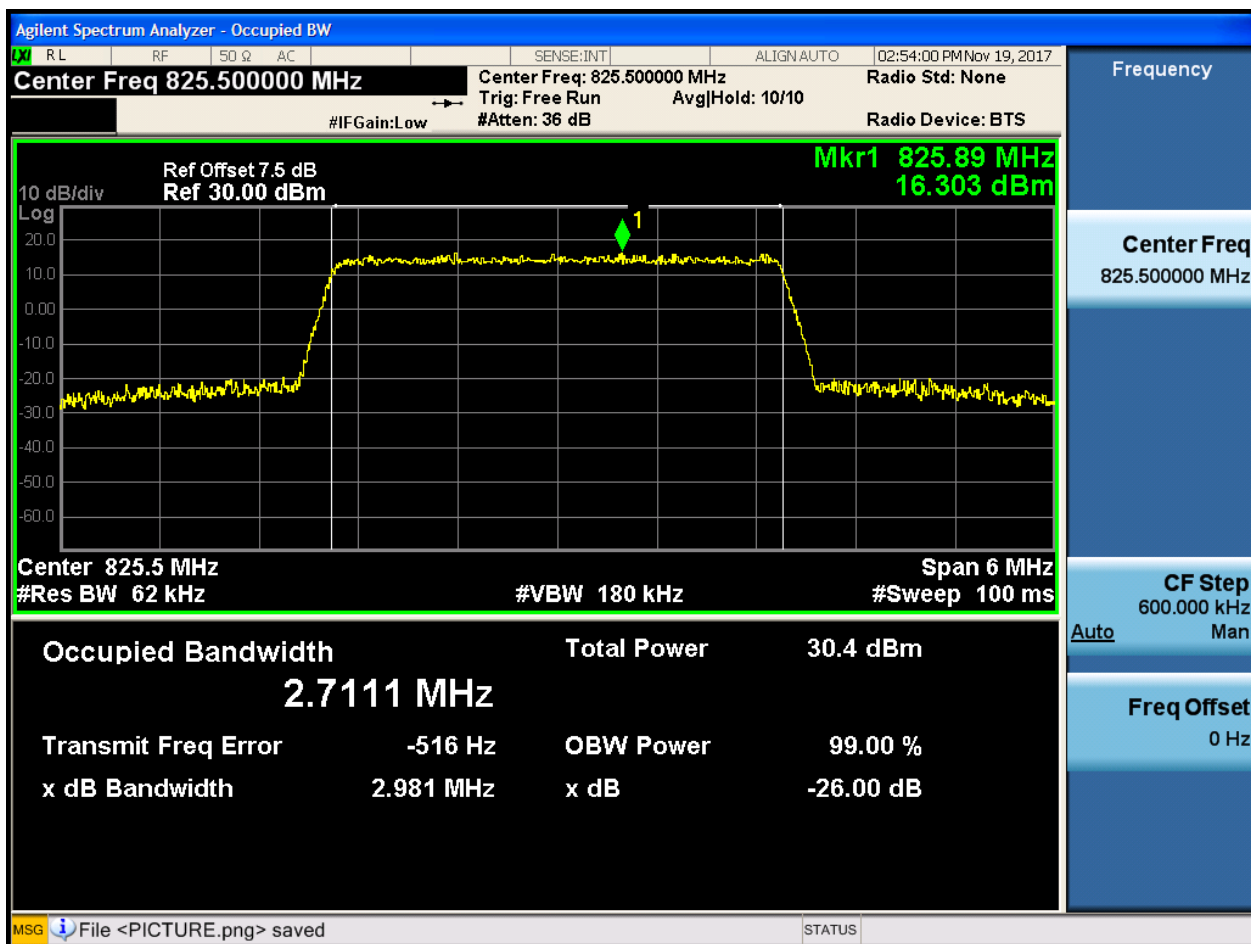




4.1.1.2.2 Test Bandwidth = 3

4.1.1.2.2.1 Test Channel = LCH

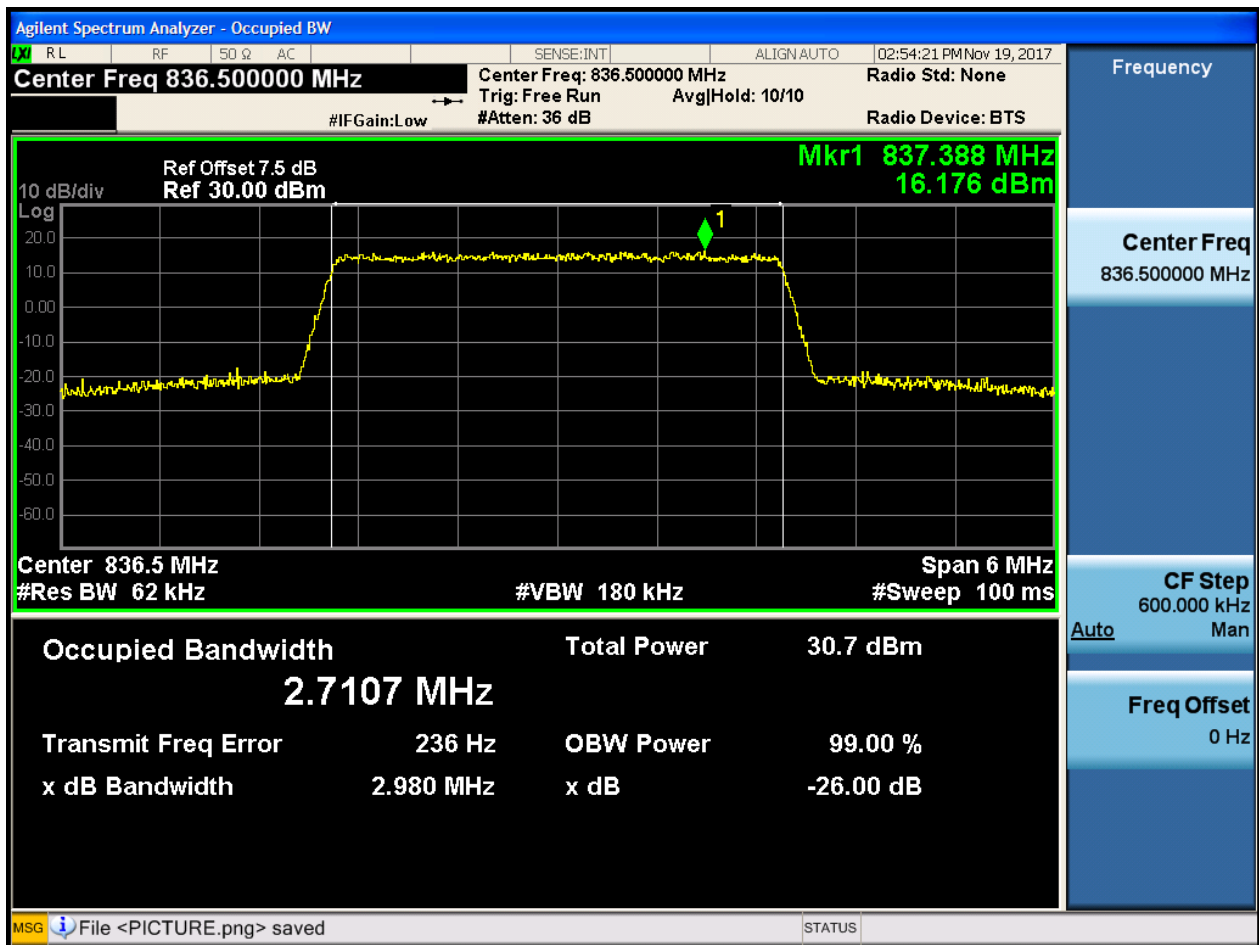
4.1.1.2.2.1.1 Test RB = RB15#0





4.1.1.2.2 Test Channel = MCH

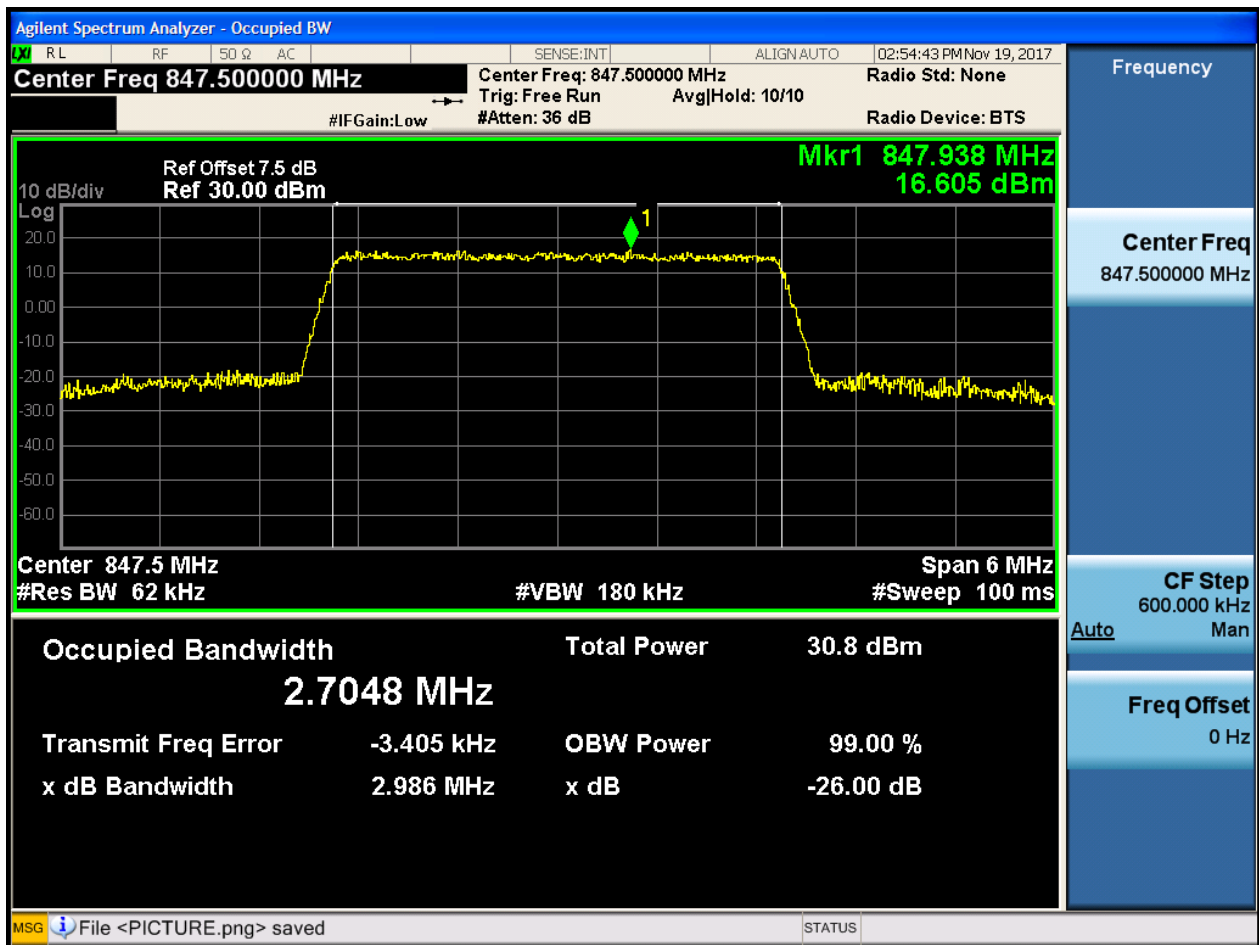
4.1.1.2.2.1 Test RB = RB15#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB15#0

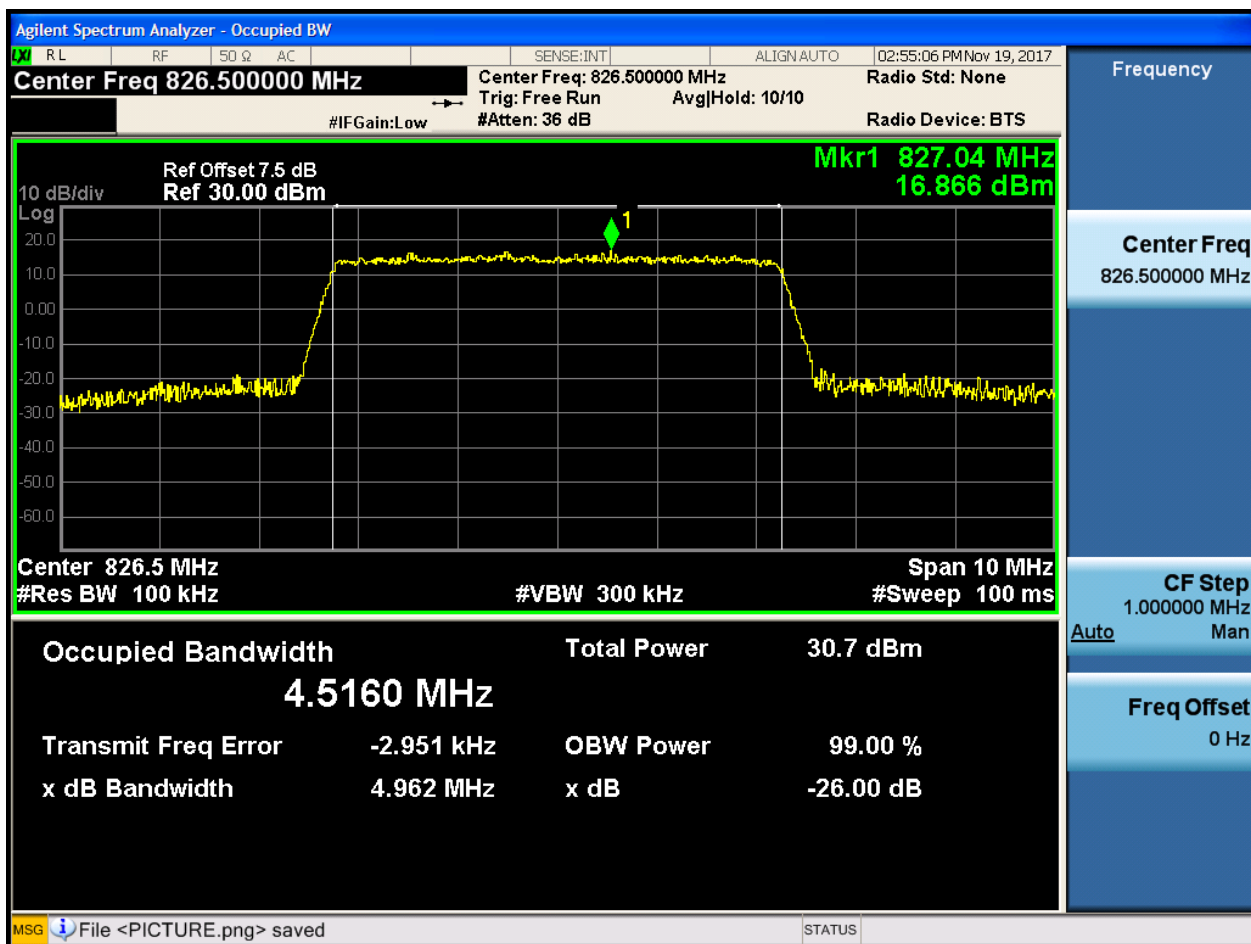




4.1.1.2.3 Test Bandwidth = 5

4.1.1.2.3.1 Test Channel = LCH

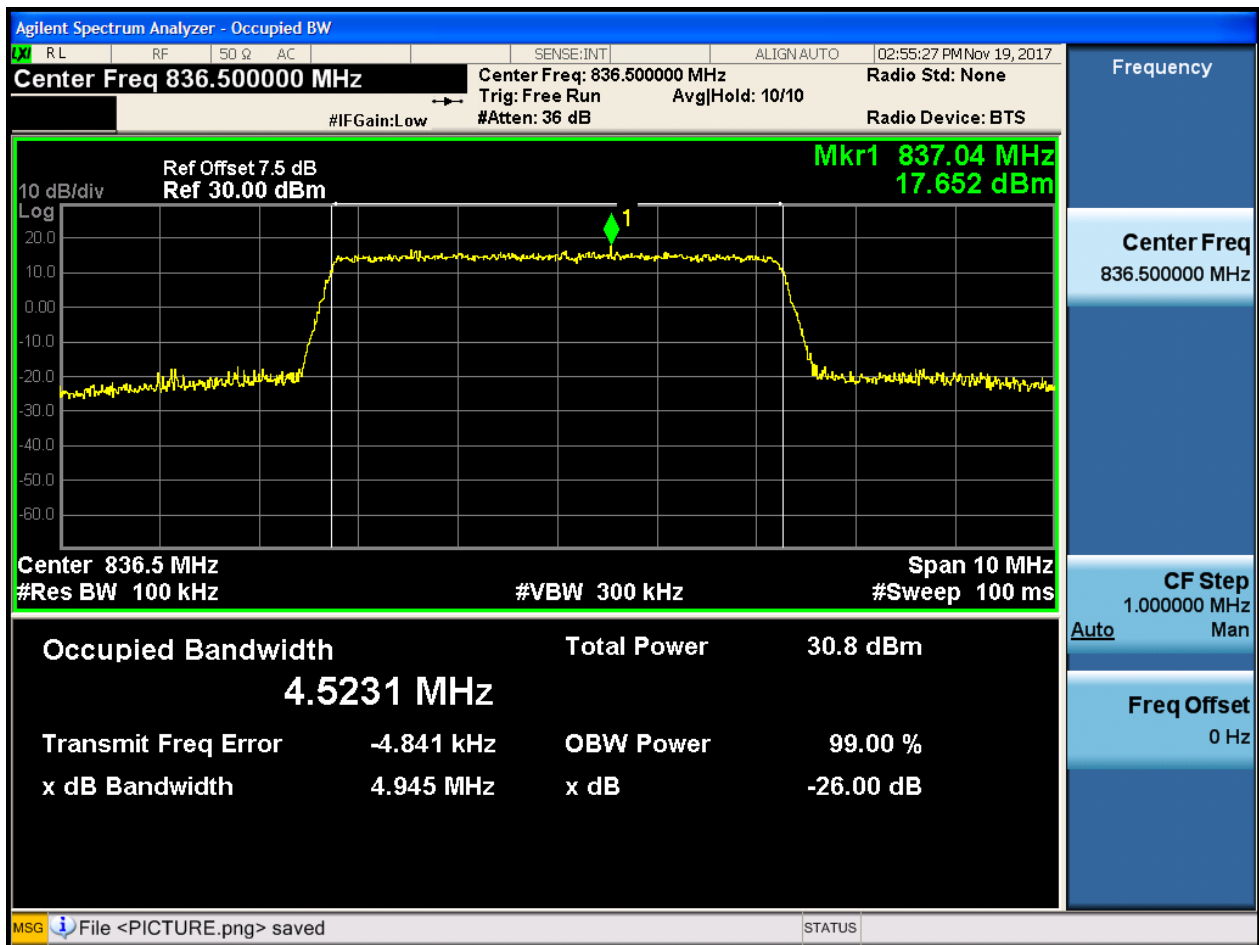
4.1.1.2.3.1.1 Test RB = RB25#0





4.1.1.2.3.2 Test Channel = MCH

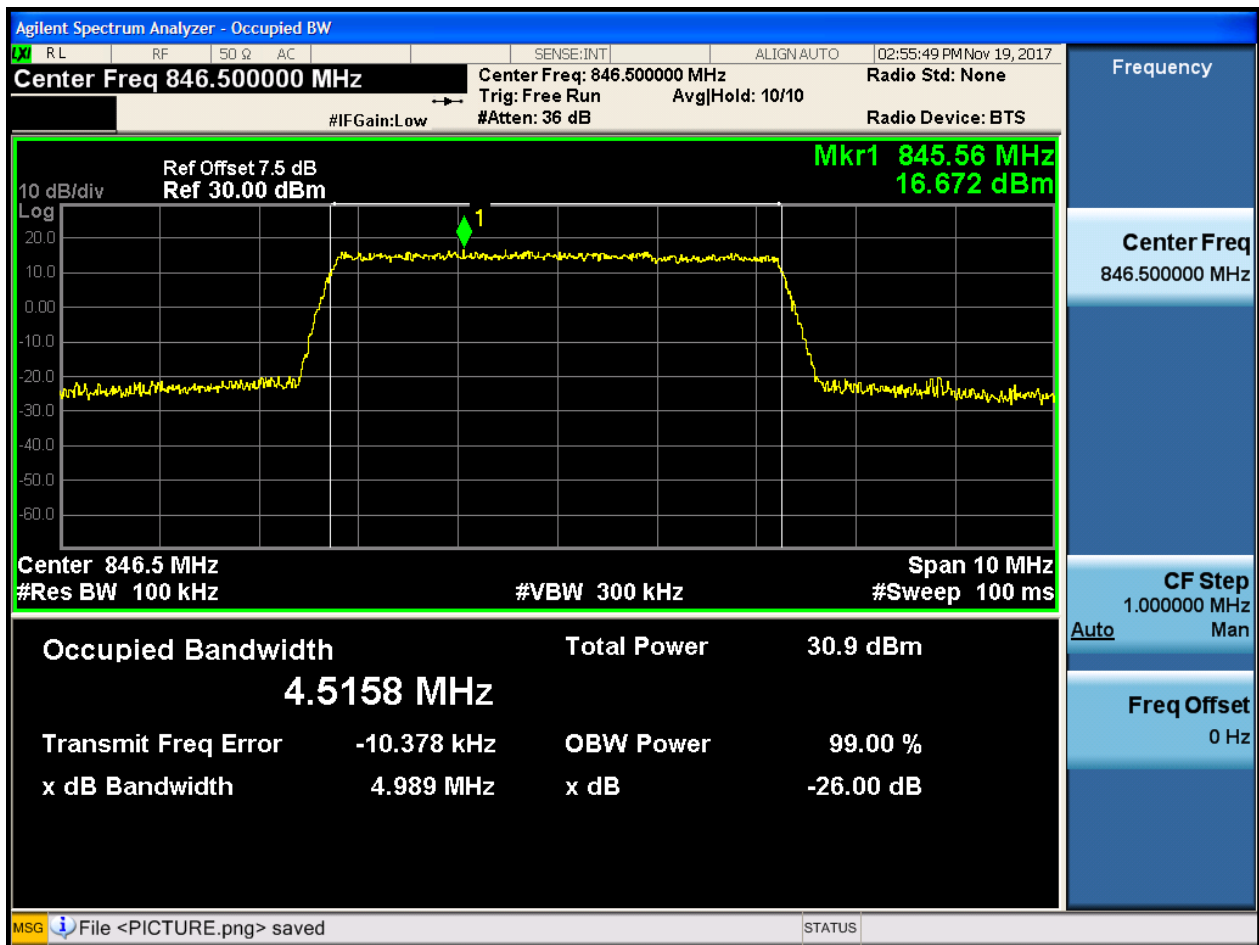
4.1.1.2.3.2.1 Test RB = RB25#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB25#0

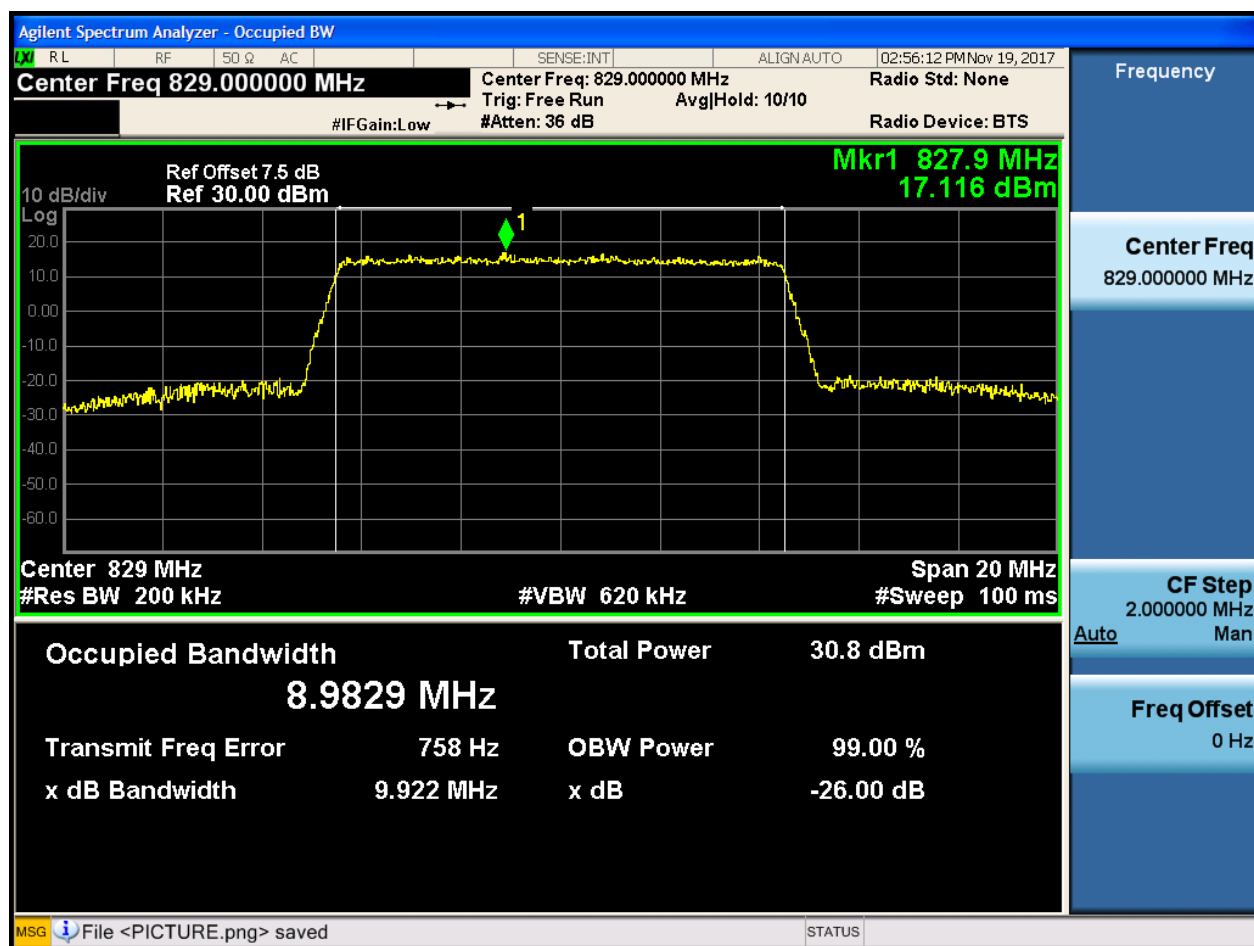




4.1.1.2.4 Test Bandwidth = 10

4.1.1.2.4.1 Test Channel = LCH

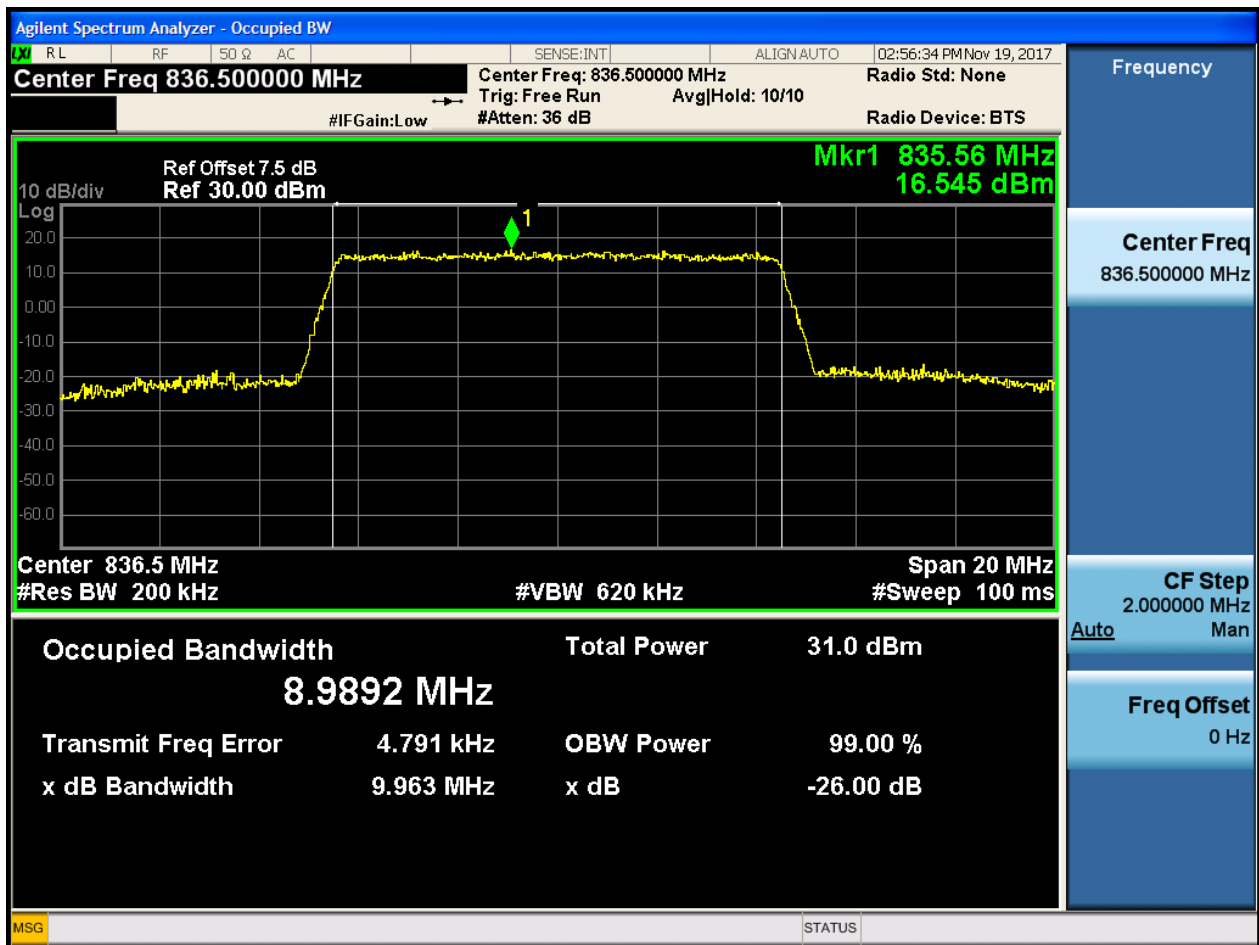
4.1.1.2.4.1.1 Test RB = RB50#0





4.1.1.2.4.2 Test Channel = MCH

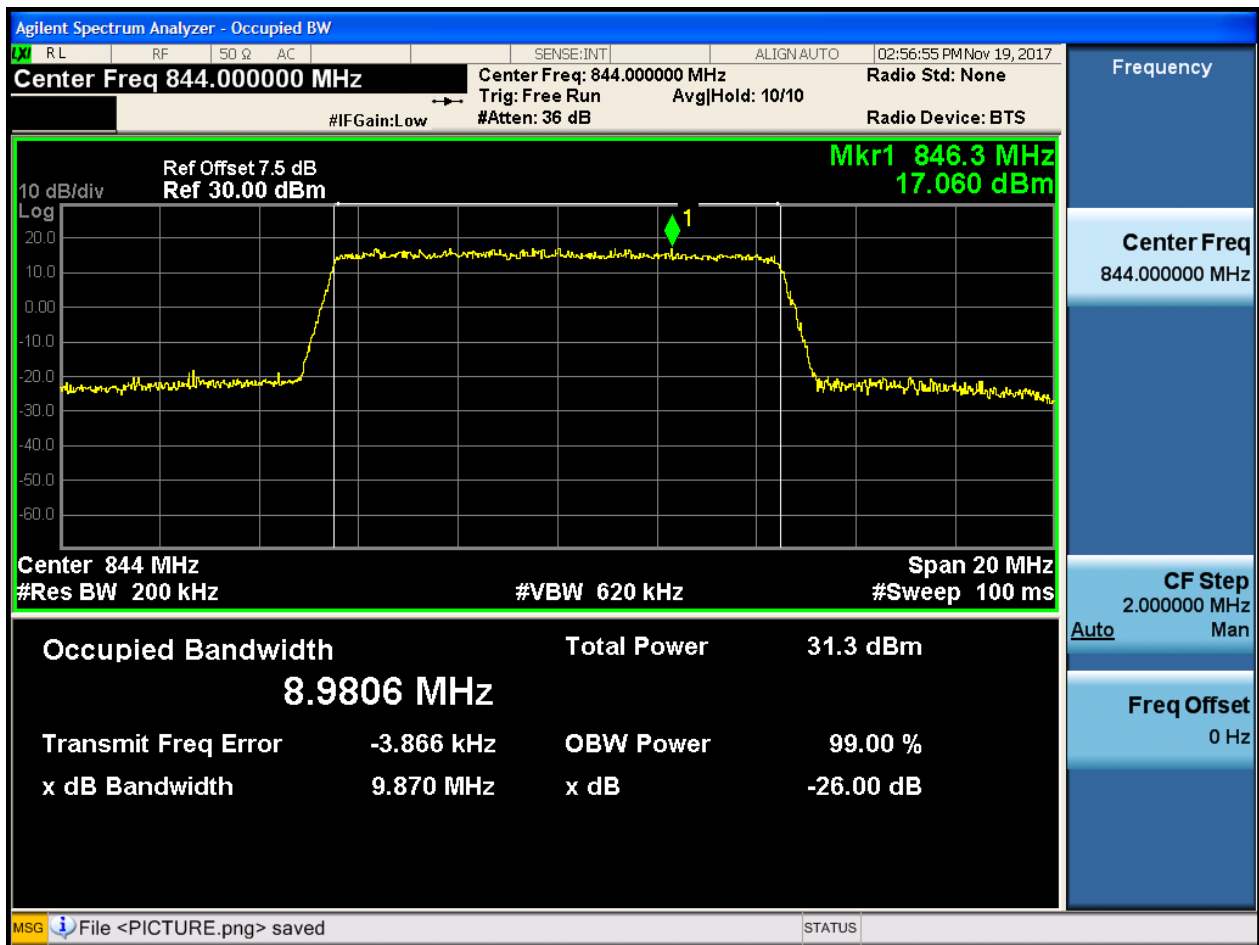
4.1.1.2.4.2.1 Test RB = RB50#0





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

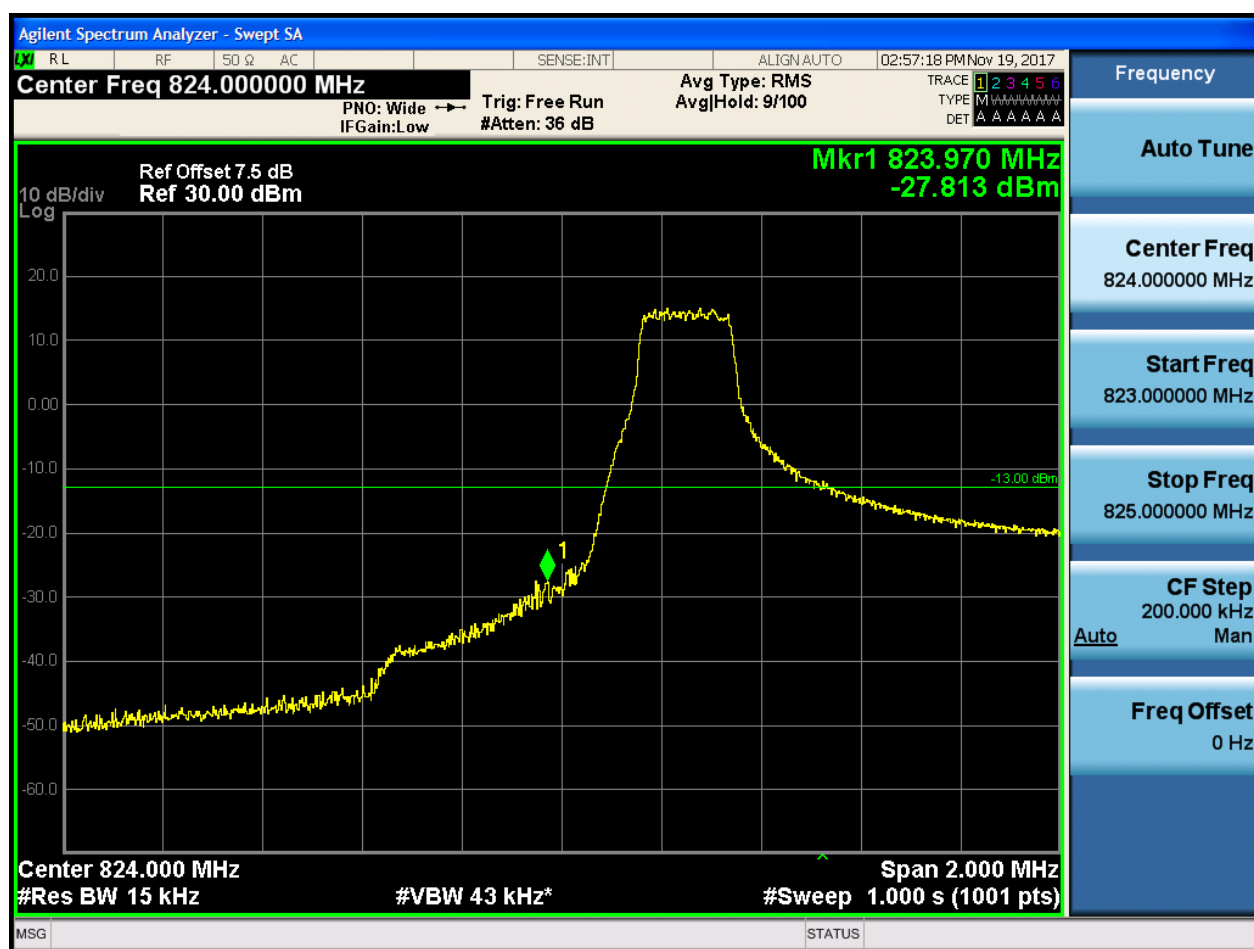
5.1.1 Test Band = BAND5

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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:57:50 PM Nov 19, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100
#Atten: 36 dB

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 7.5 dB
Ref 30.00 dBm

Mkr1 823.960 MHz
-32.923 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 15 kHz

#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.000 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



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





5.1.1.1.2.2 Test RB = RB1#5





5.1.1.1.1.2.3 Test RB = RB3#2





5.1.1.1.2.4 Test RB = RB6#0

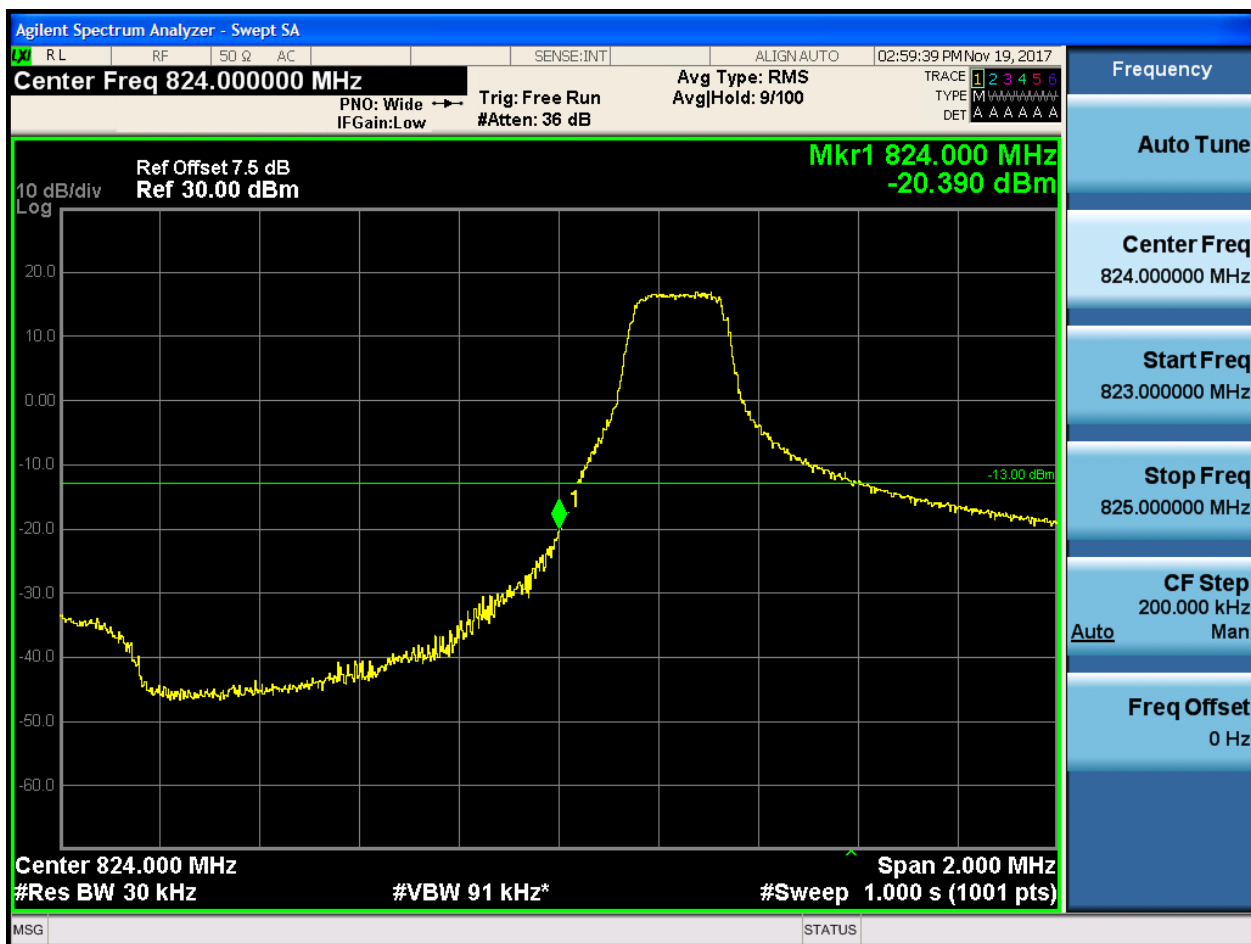




5.1.1.1.2 Test Bandwidth = 3

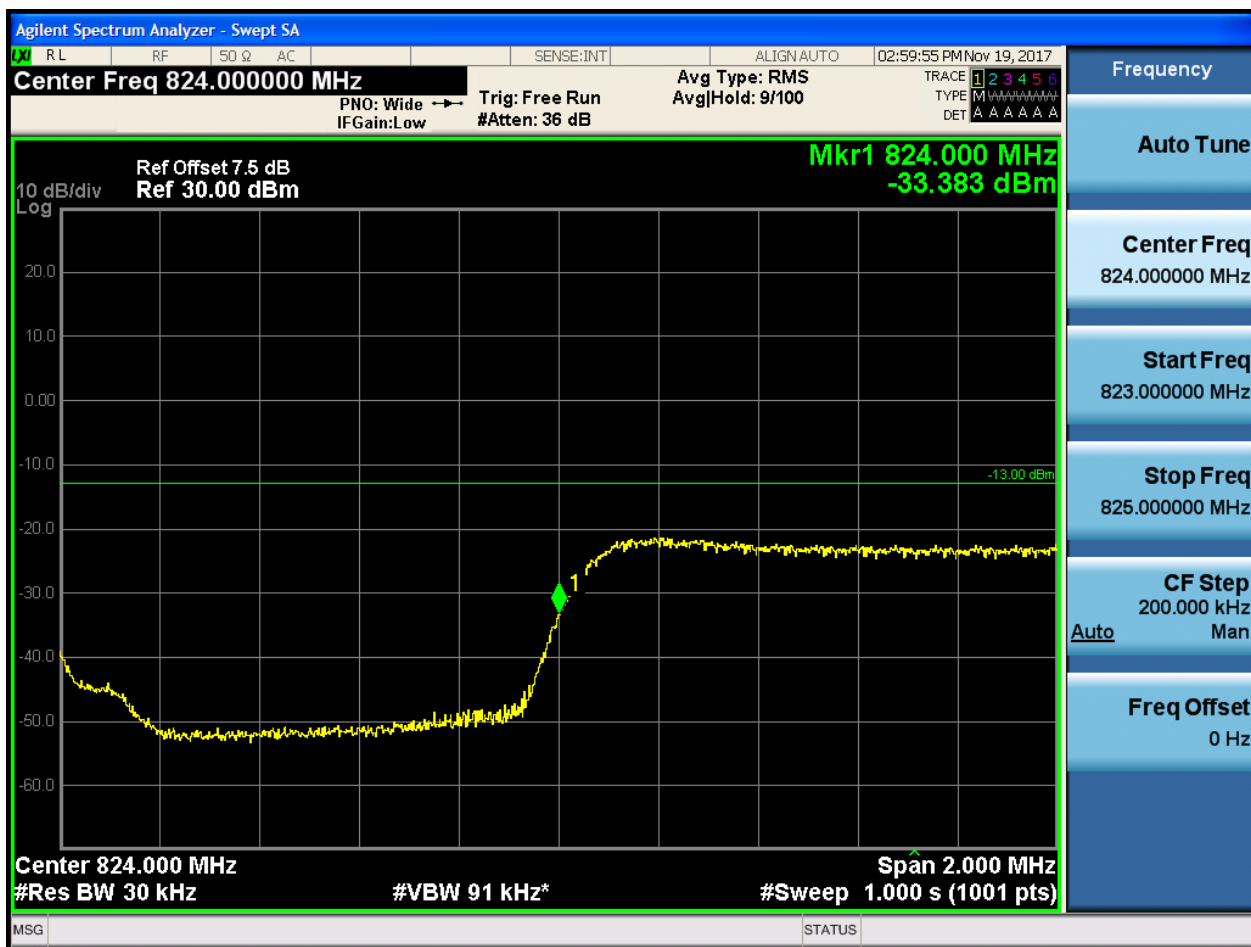
5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0





5.1.1.1.2.1.2 Test RB = RB1#14



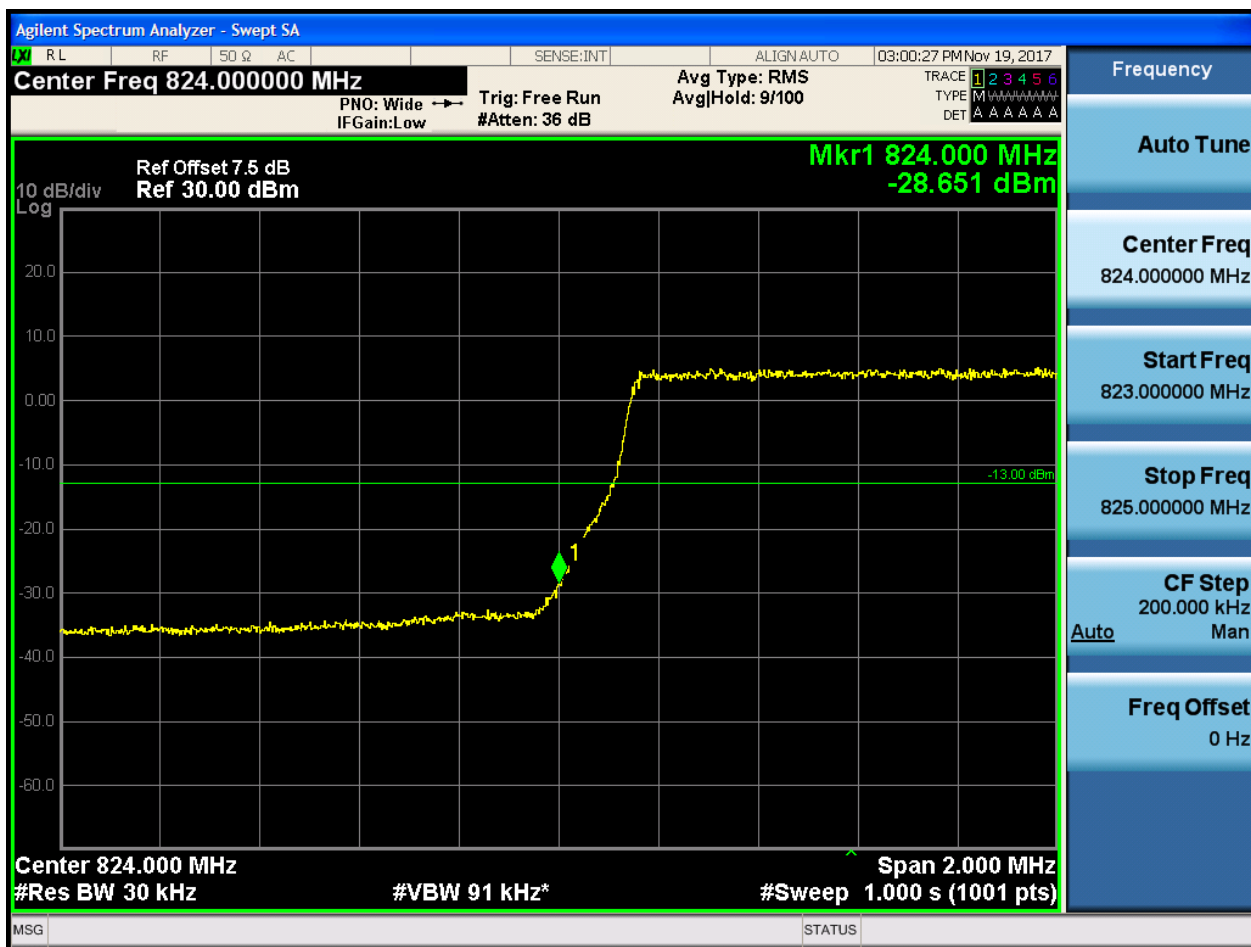


5.1.1.1.2.1.3 Test RB = RB8#4





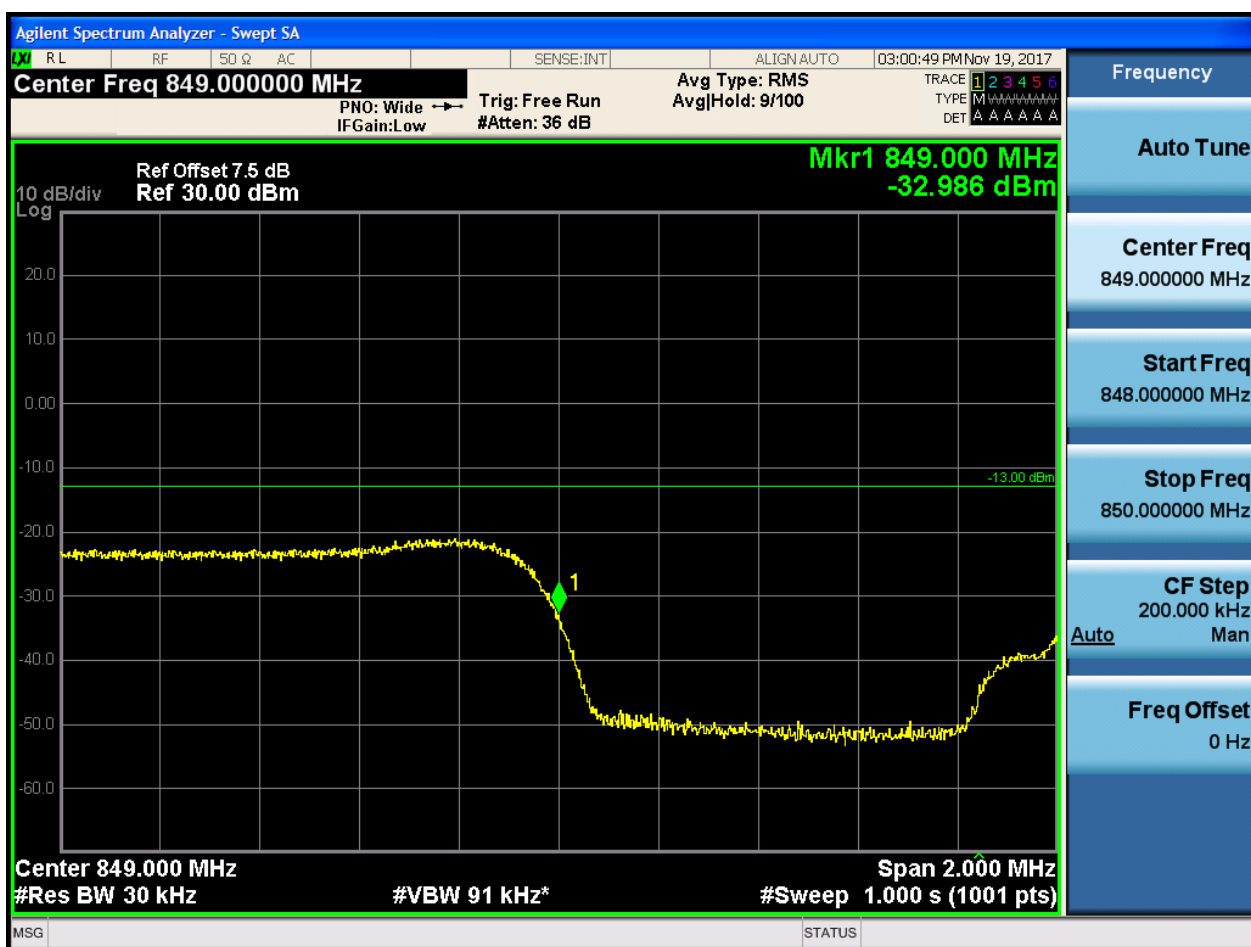
5.1.1.1.2.1.4 Test RB = RB15#0





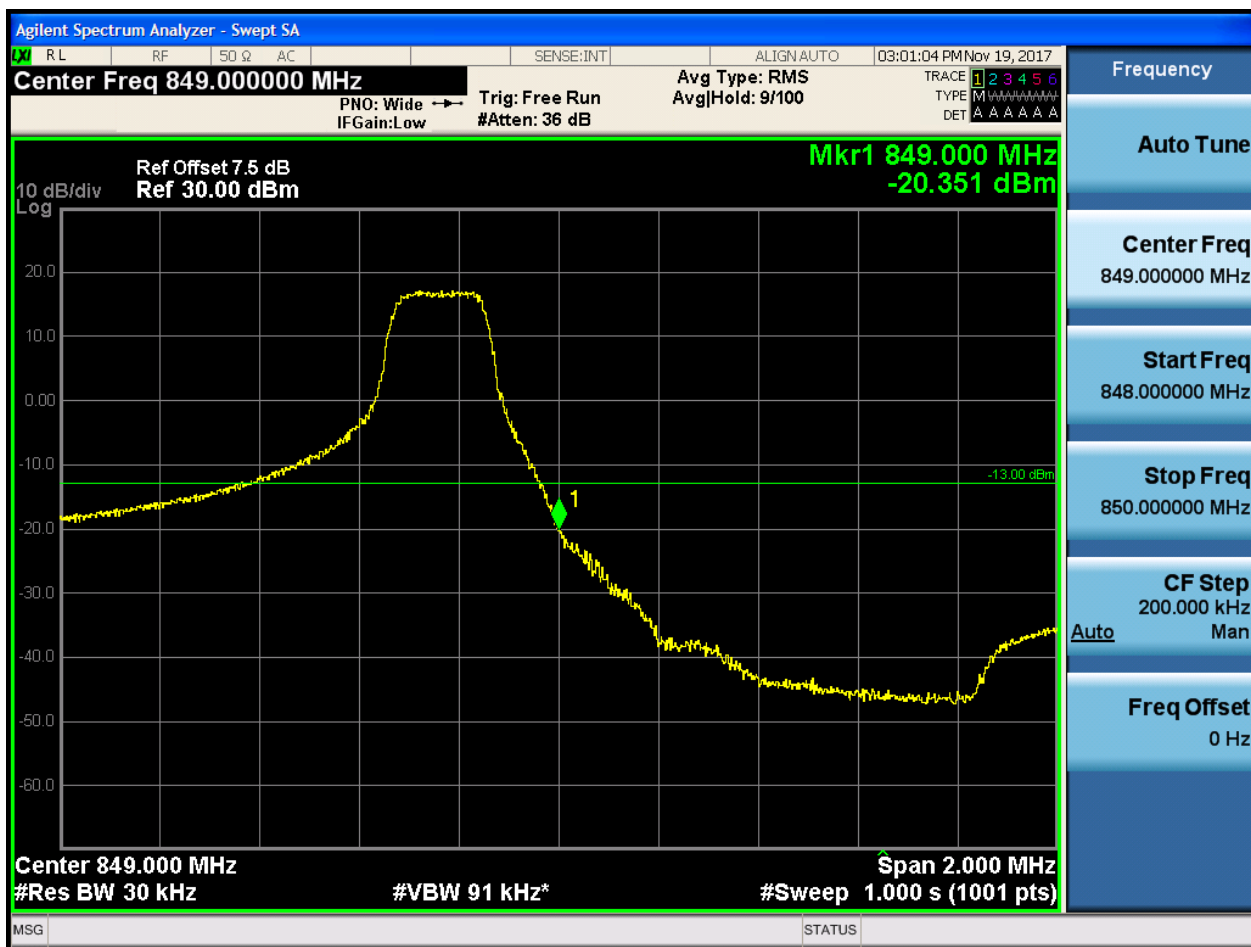
5.1.1.1.2.2 Test Channel = HCH

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





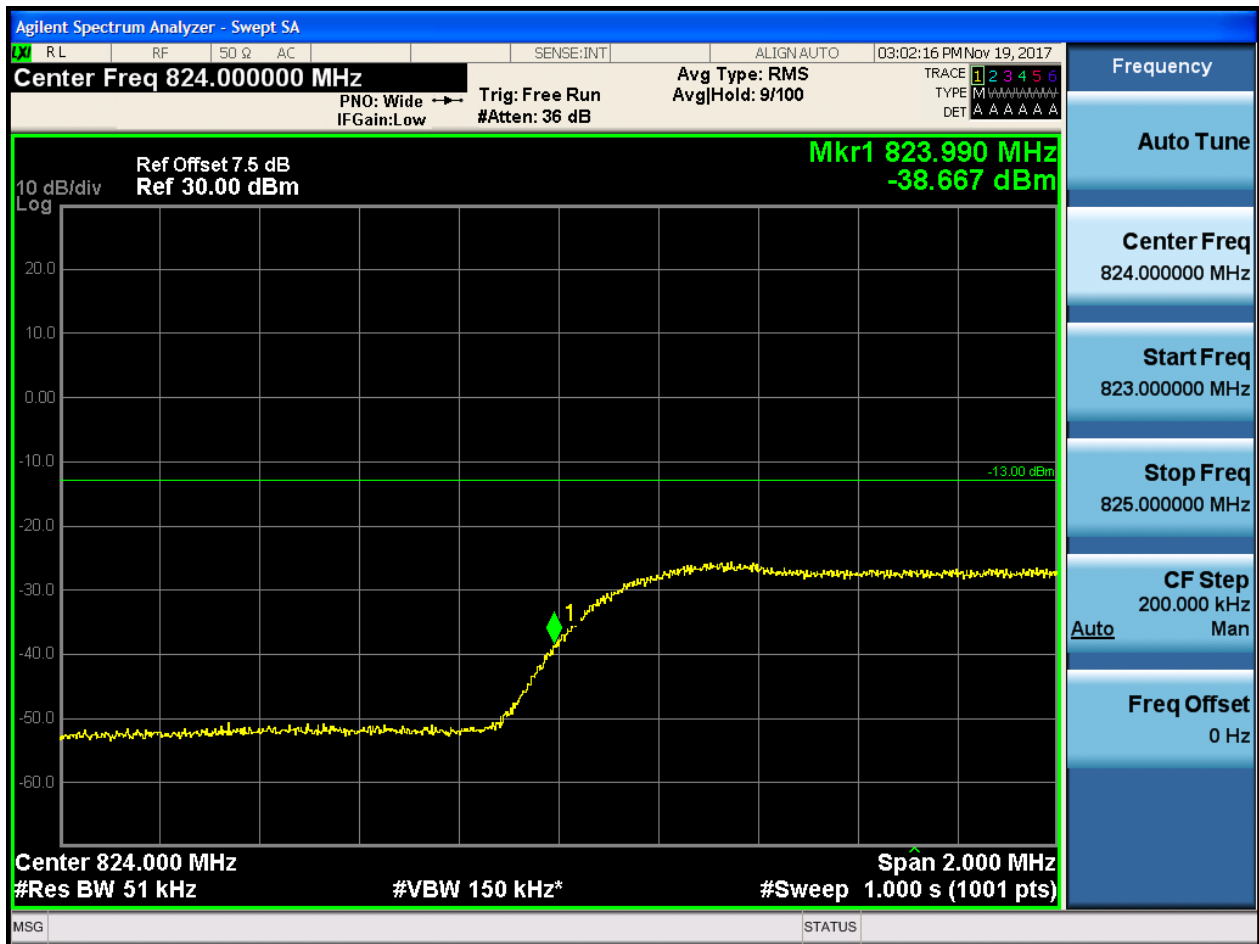
5.1.1.1.2.2.4 Test RB = RB15#0







5.1.1.1.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:02:32 PM Nov 19, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100
#Atten: 36 dB

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 7.5 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-34.574 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 51 kHz #VBW 150 kHz* Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

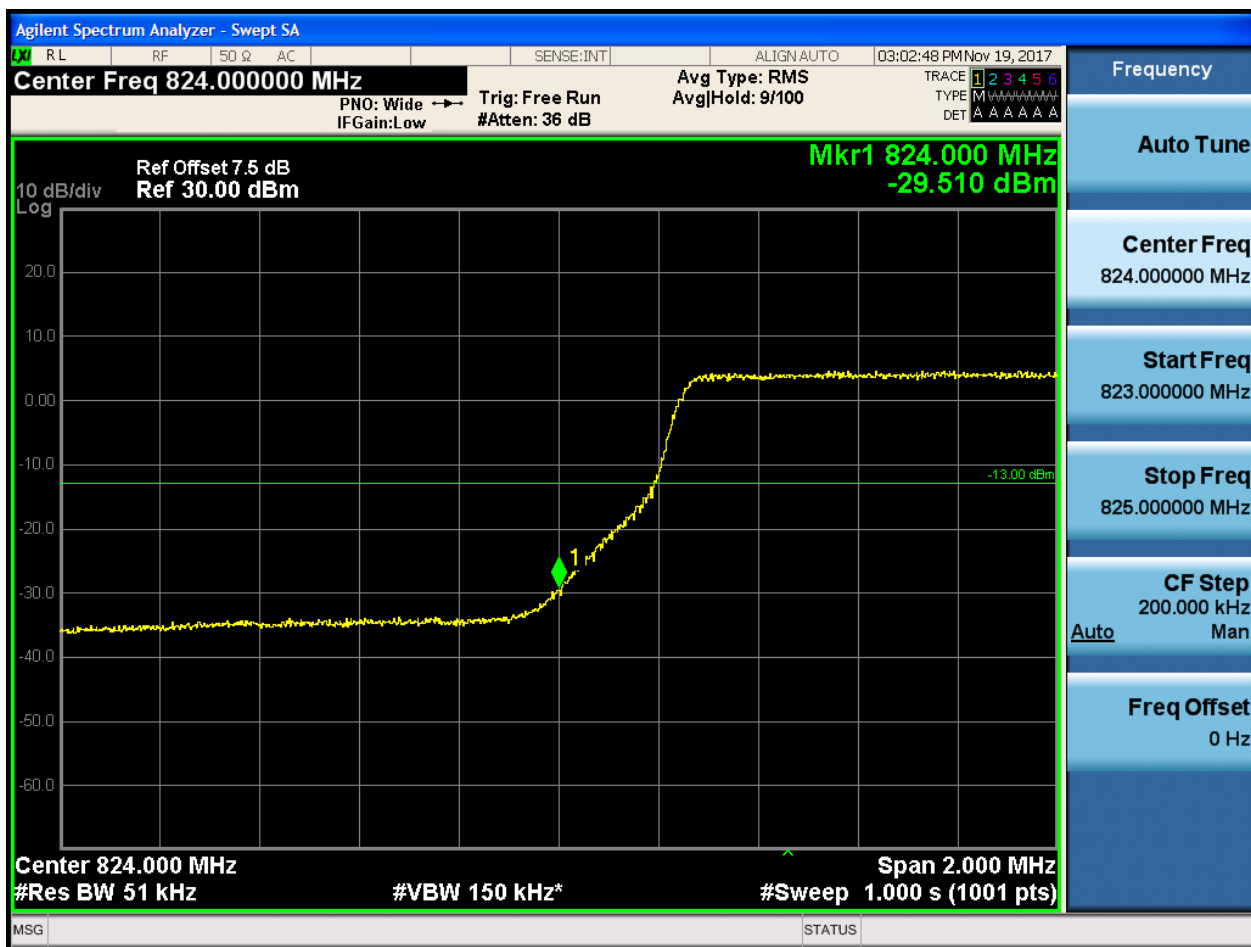
Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



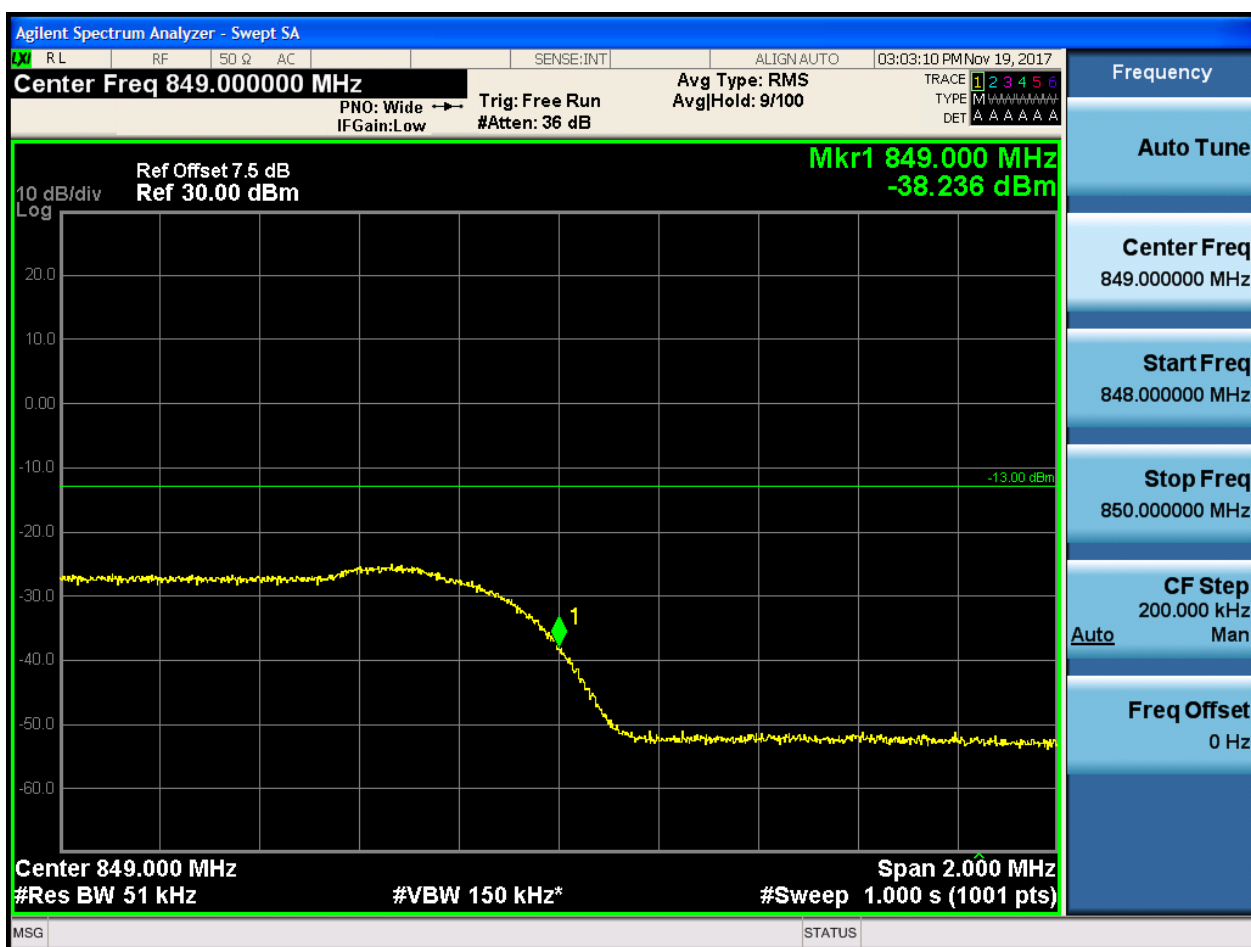
5.1.1.1.3.1.4 Test RB = RB25#0





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





5.1.1.1.3.2.4 Test RB = RB25#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 03:04:54 PM Nov 19, 2017

Center Freq 824.000000 MHz Avg Type: RMS
 PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100
 #Atten: 36 dB

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 7.5 dB
 Ref 30.00 dBm

Mkr1 823.990 MHz
 -34.479 dBm

10 dB/div
 Log

-13.00 dBm

Center 824.000 MHz Span 2.000 MHz
 #Res BW 100 kHz #VBW 300 kHz* #Sweep 1.000 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



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





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-23.380 dBm

Center 849.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 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
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:06:04 PM Nov 19, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100
#Atten: 36 dB

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 7.5 dB
Ref 30.00 dBm

Mkr1 849.030 MHz
-34.386 dBm

10 dB/div
Log

-13.00 dBm

Center 849.000 MHz
#Res BW 100 kHz

#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 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

5.1.1.1.4.2.4 Test RB = RB50#0





5.1.1.2.1.1.1 Test RB = RB1#0





5.1.1.2.1.1.2 Test RB = RB1#5





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:07:16 PM Nov 19, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide Trig: Free Run
IFGain: Low #Atten: 36 dB

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 7.5 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-33.606 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*
Span 2.000 MHz
#Sweep 1.000 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
Auto Man

Freq Offset
0 Hz

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 823.980 MHz
-34.341 dBm

Center 824.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*
Span 2.000 MHz
#Sweep 1.000 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
Auto

Freq Offset
0 Hz

Frequency

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

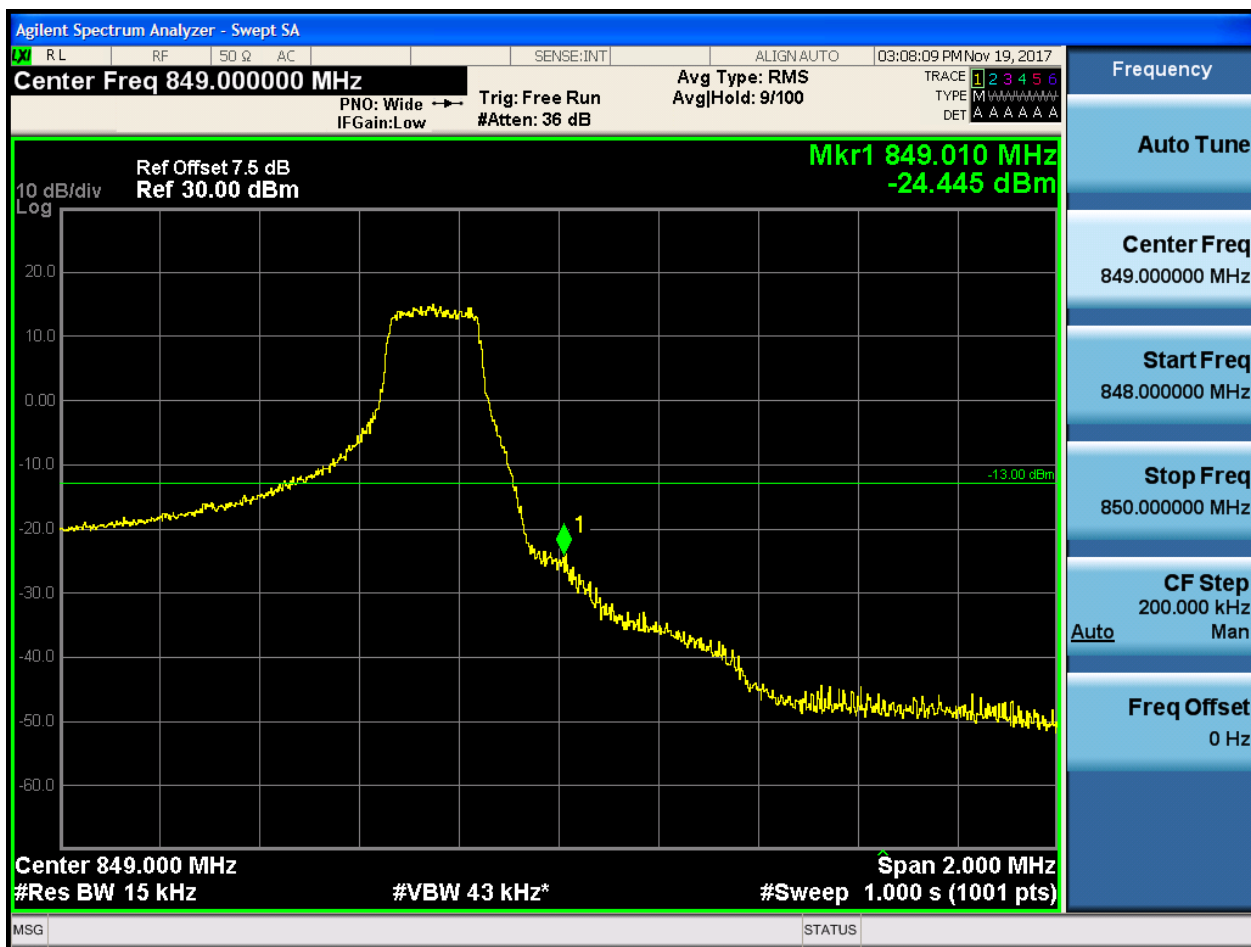
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





5.1.1.2.1.2.2 Test RB = RB1#5





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide Trig: Free Run
IFGain: Low #Atten: 36 dB

Ref Offset 7.5 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-28.881 dBm

The figure shows a spectrum analyzer trace on a grid. The vertical axis is labeled 'Log' and ranges from -60.0 to 20.0 dB/div. The horizontal axis represents frequency. A yellow trace shows a signal that starts around -10 dBm, rises sharply to about 10 dBm, remains flat until approximately 848.5 MHz, then drops sharply to about -30 dBm, where it has a small peak labeled '1'. The signal continues to decrease towards -50 dBm at 850 MHz. A green horizontal line is drawn across the plot at -13.00 dBm.

Center 849.000 MHz Span 2.000 MHz
#Res BW 15 kHz #VBW 43 kHz*
#Sweep 1.000 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 <u>Auto</u> Man
Freq Offset 0 Hz



5.1.1.2.1.2.4 Test RB = RB6#0

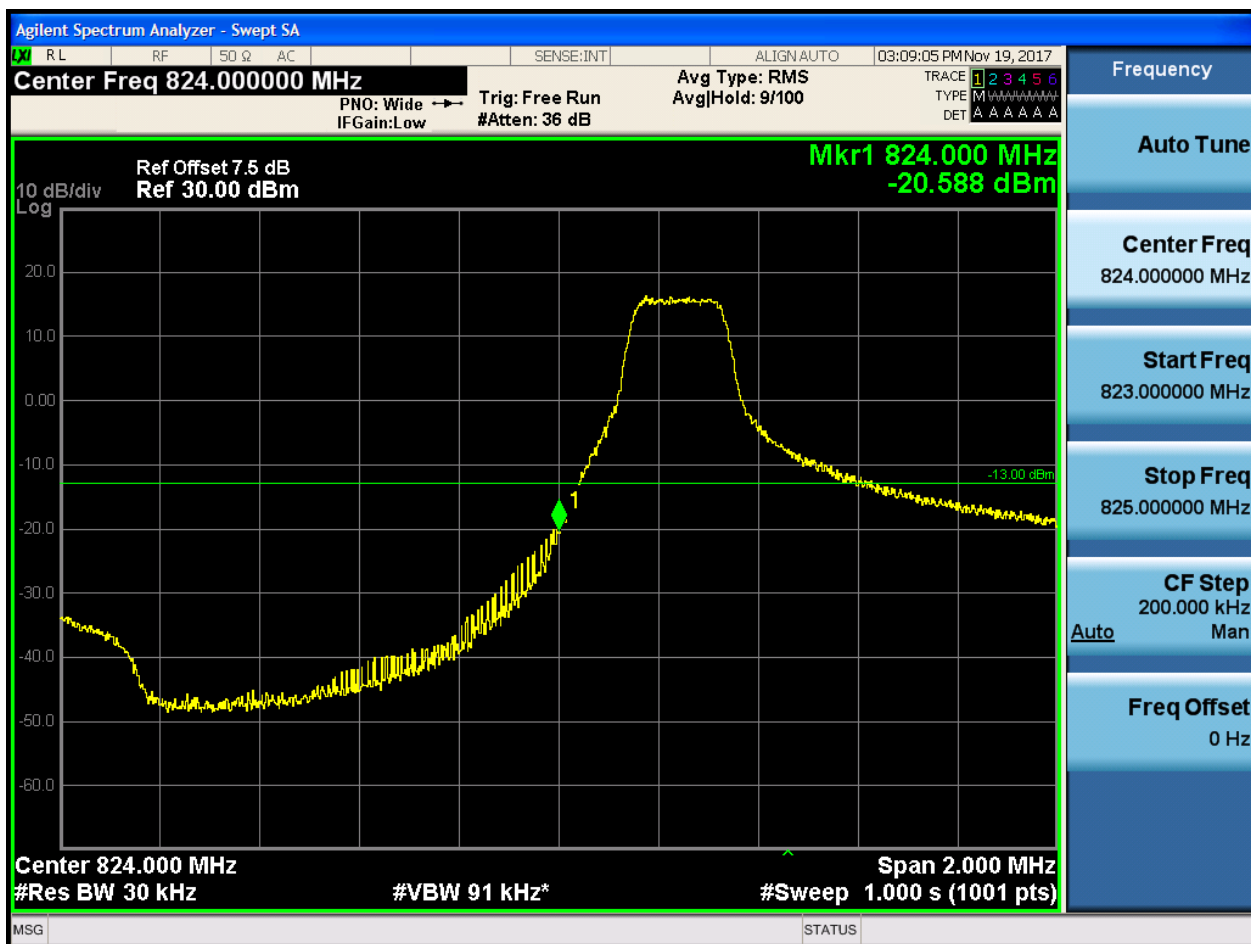




5.1.1.2.2 Test Bandwidth = 3

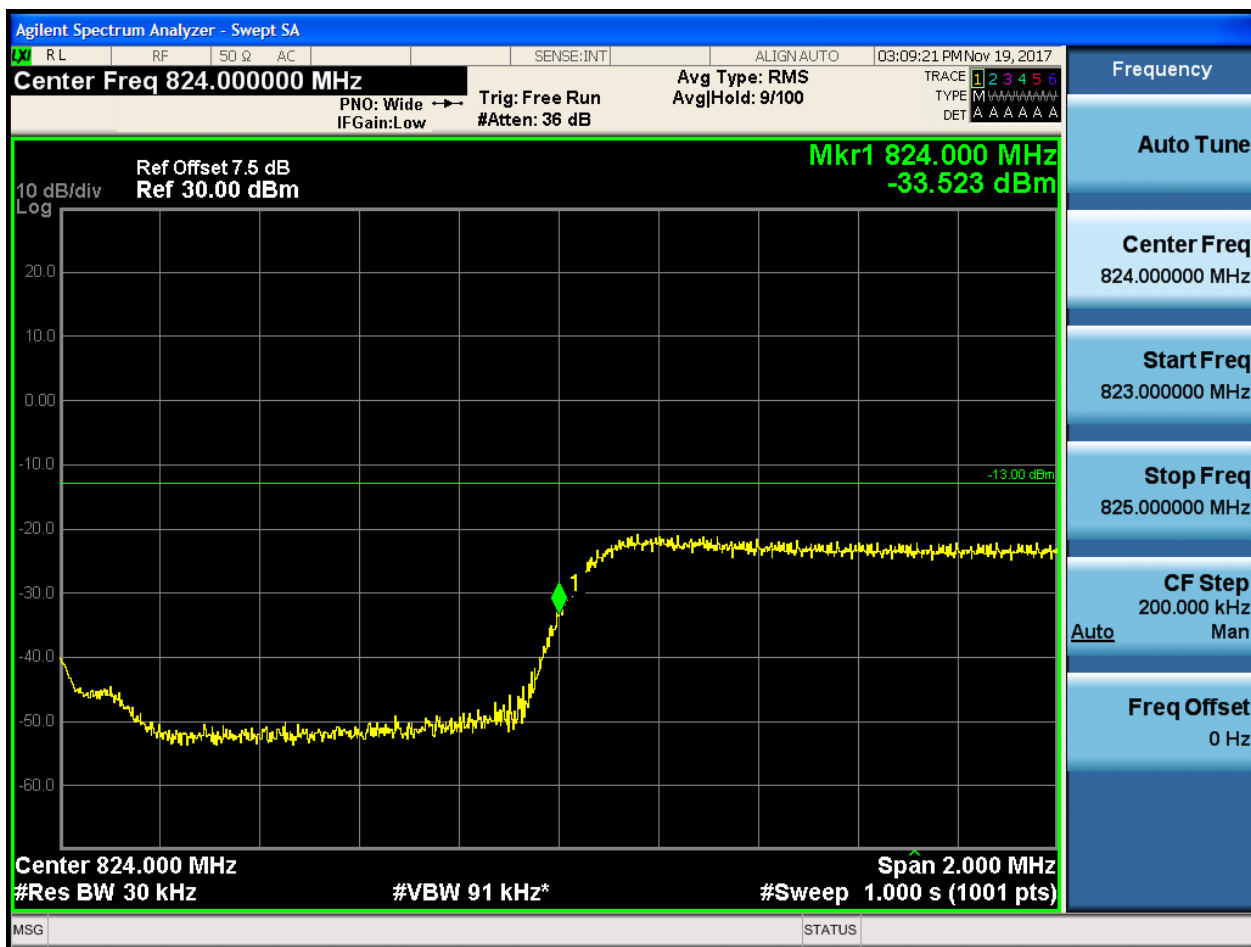
5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





5.1.1.2.2.1.2 Test RB = RB1#14



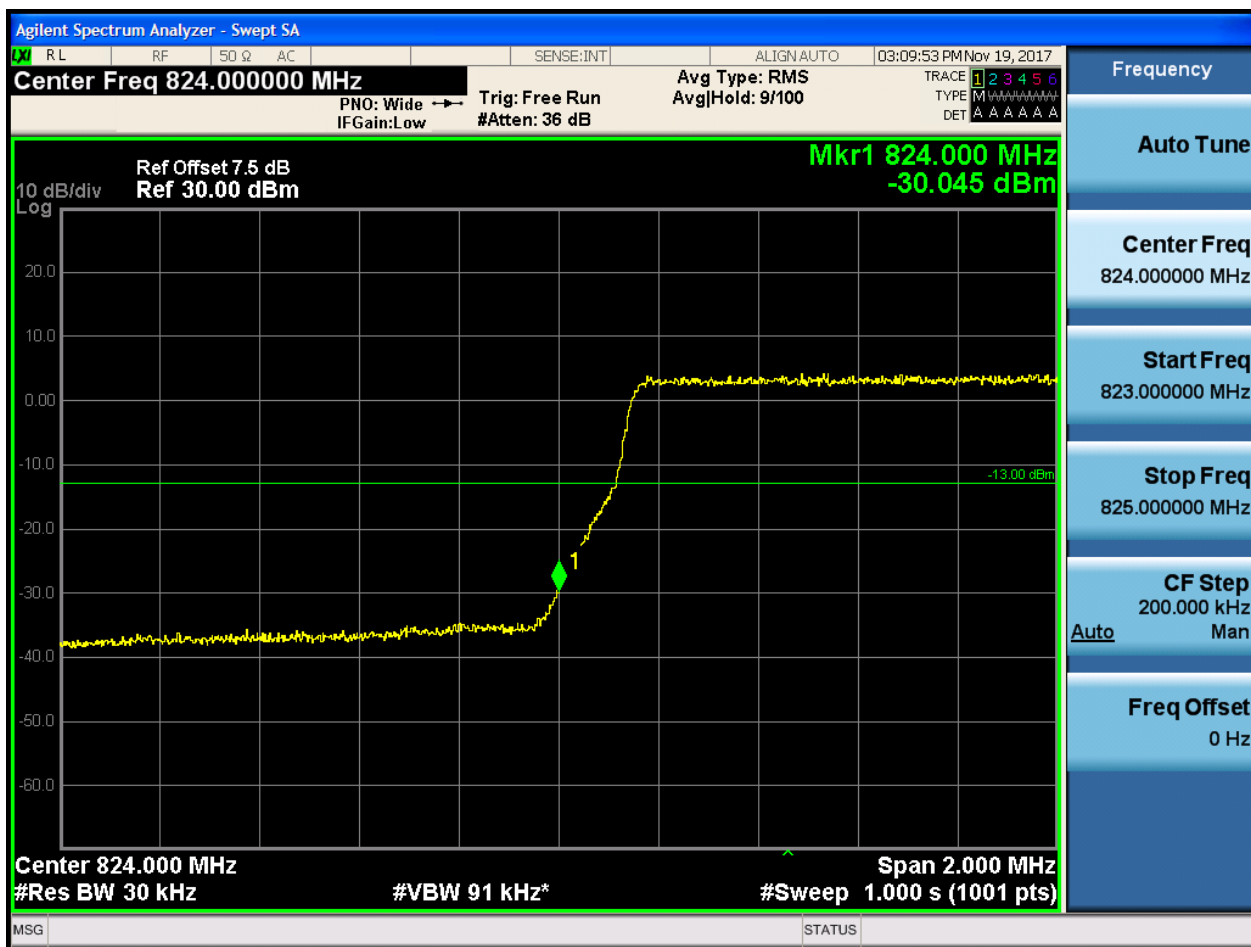


5.1.1.2.2.1.3 Test RB = RB8#4





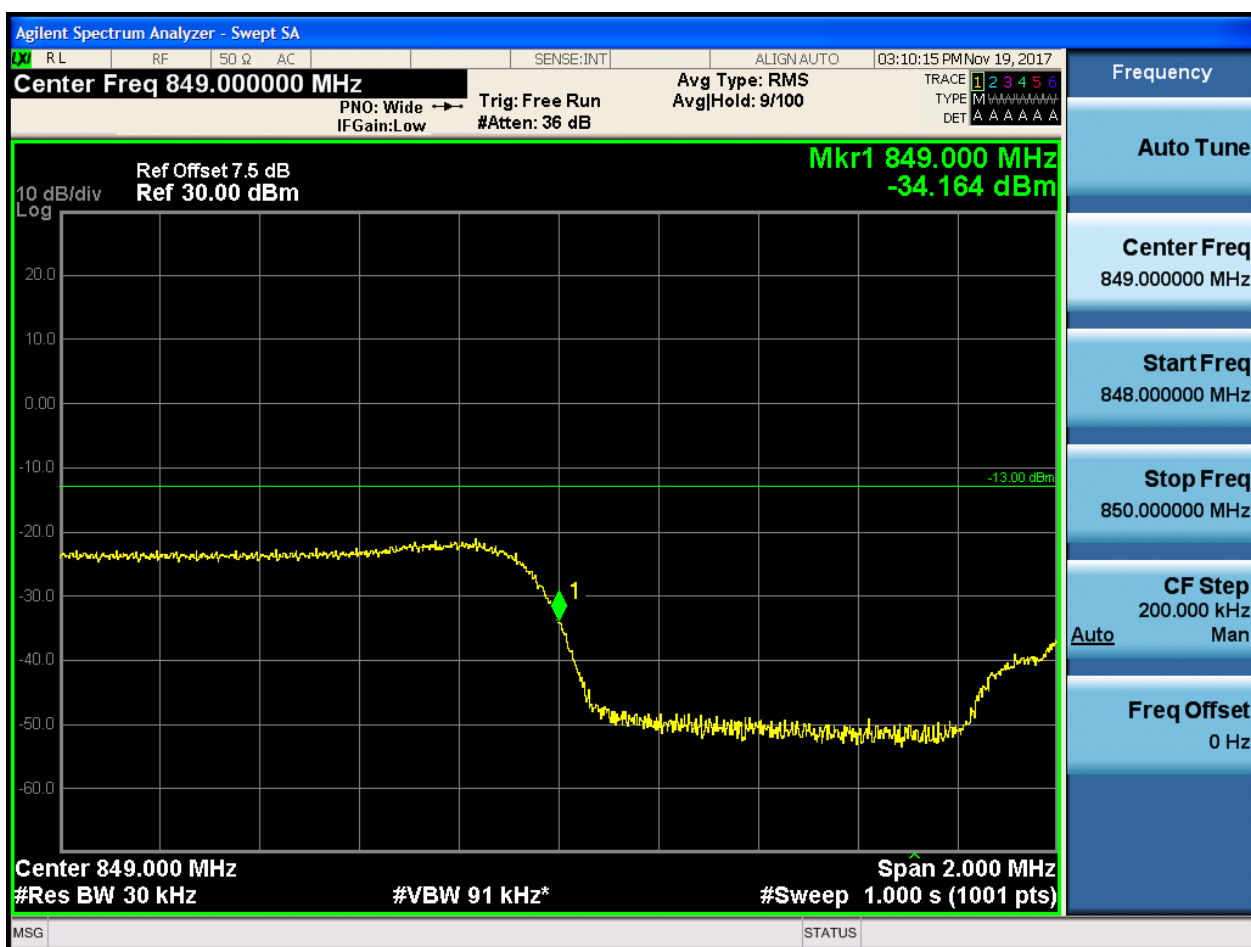
5.1.1.2.2.1.4 Test RB = RB15#0





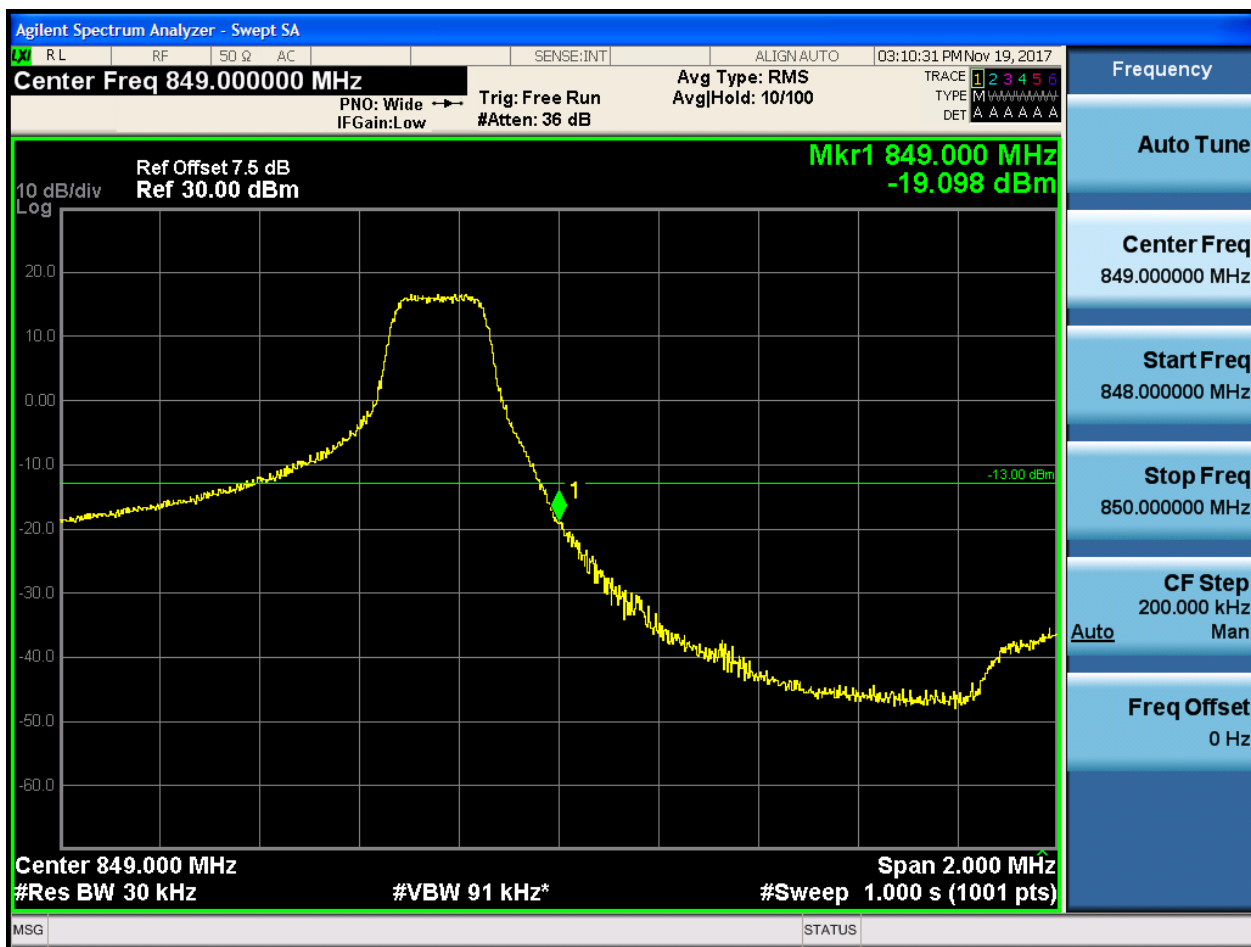
5.1.1.2.2.2 Test Channel = HCH

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

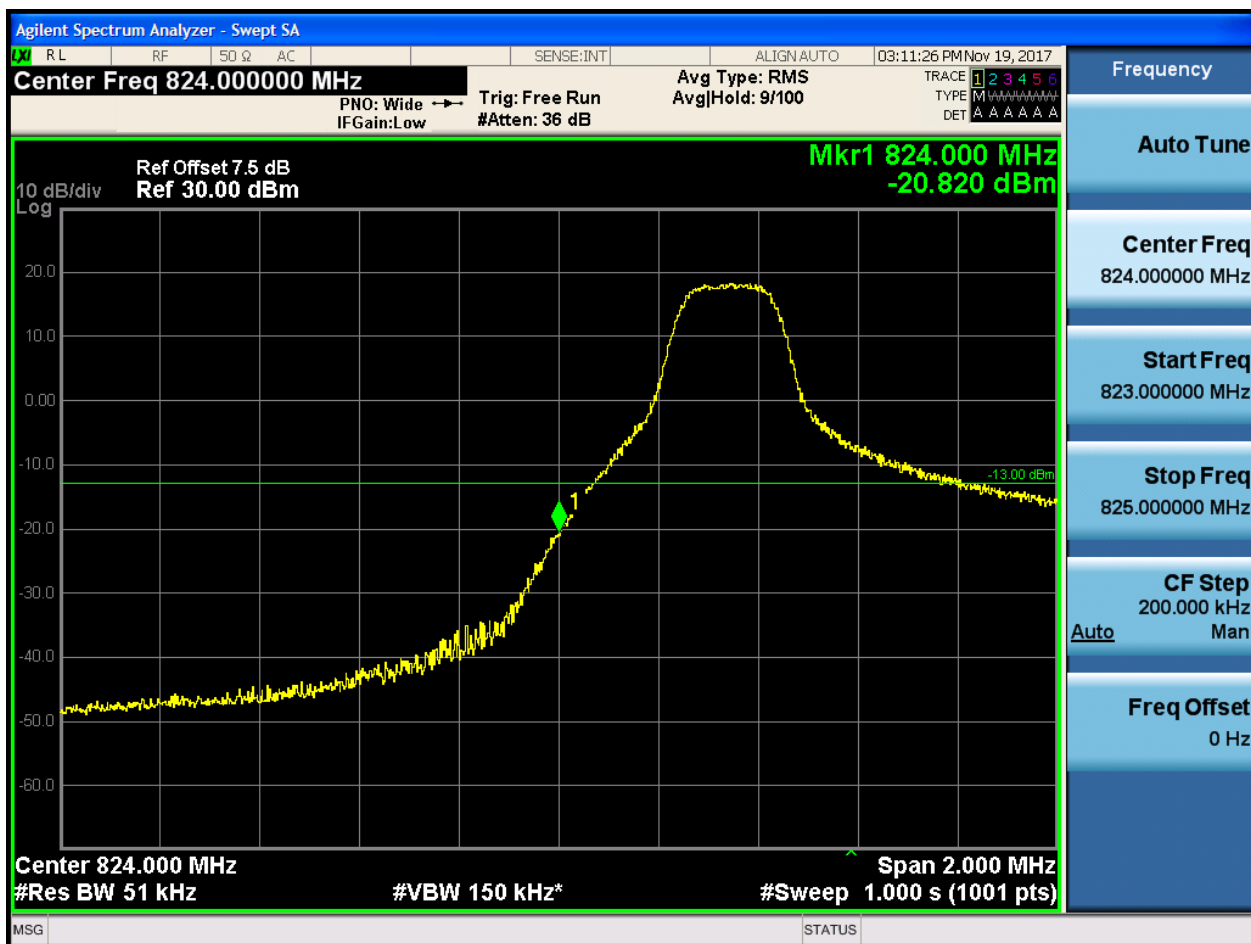




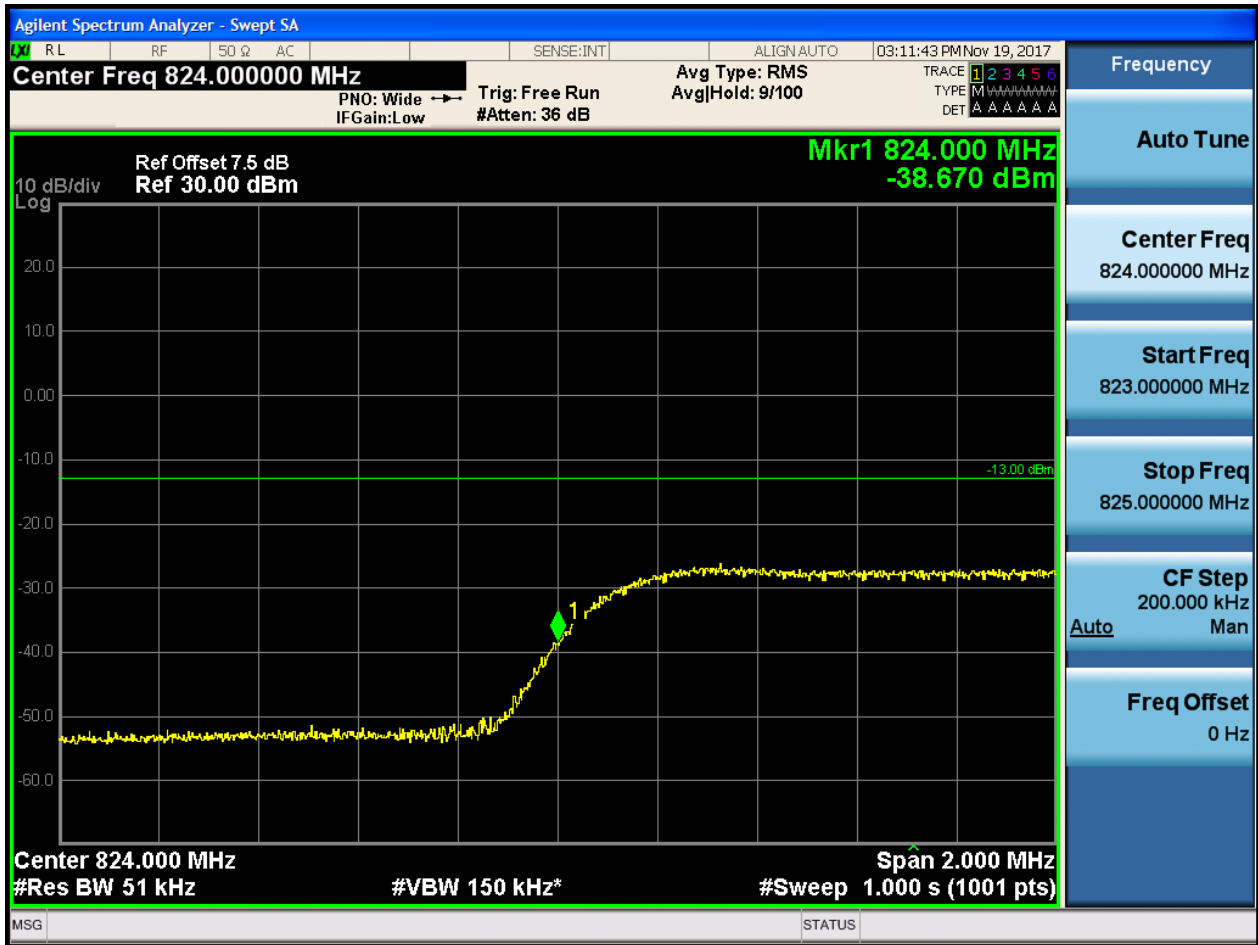
5.1.1.2.3 Test Bandwidth = 5

5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0



5.1.1.2.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:11:59 PM Nov 19, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain: Low Trig: Free Run AvgHold: 9/100
#Atten: 36 dB

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 7.5 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-35.094 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 51 kHz #VBW 150 kHz* Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
824.000000 MHz

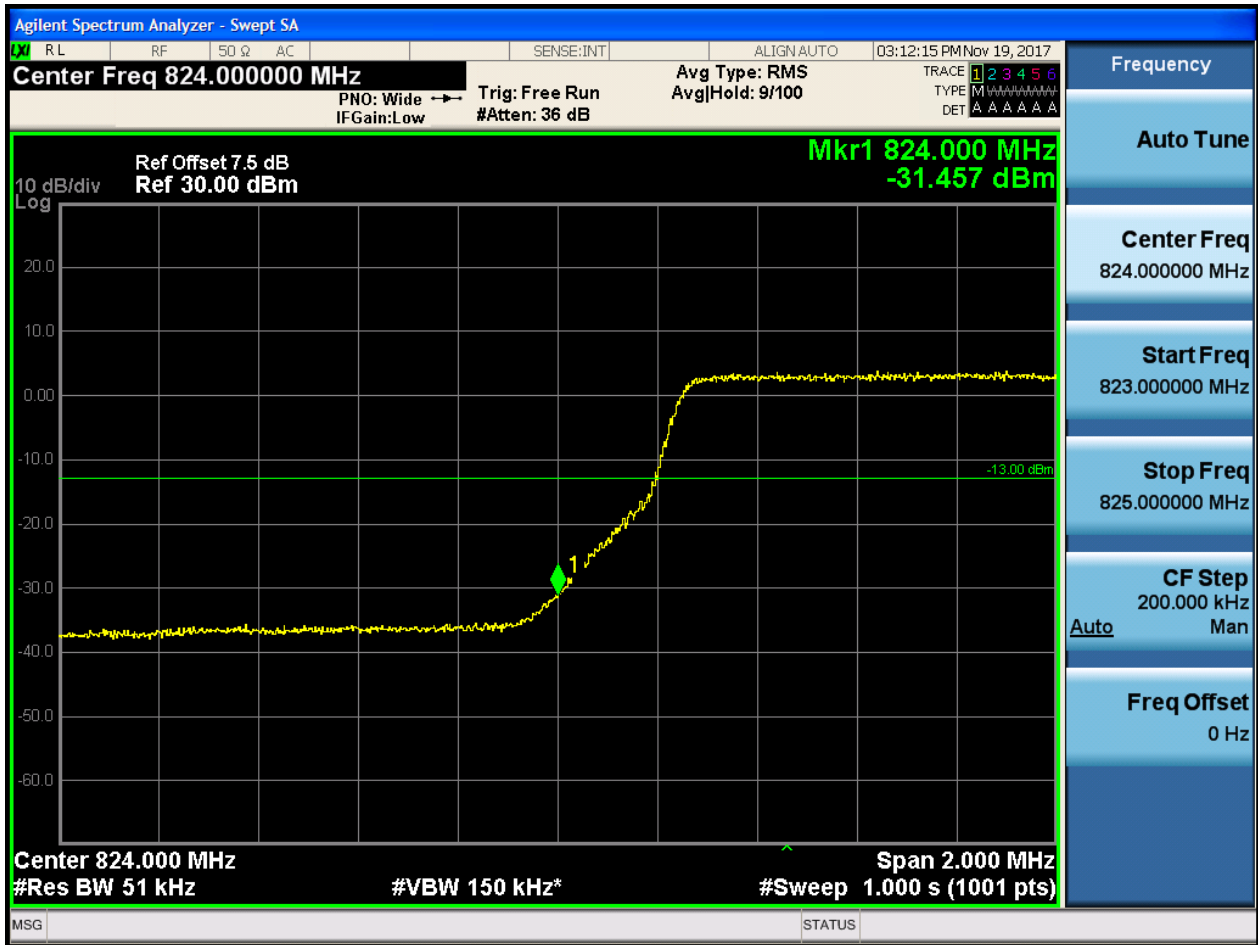
Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.1.1.2.3.1.4 Test RB = RB25#0





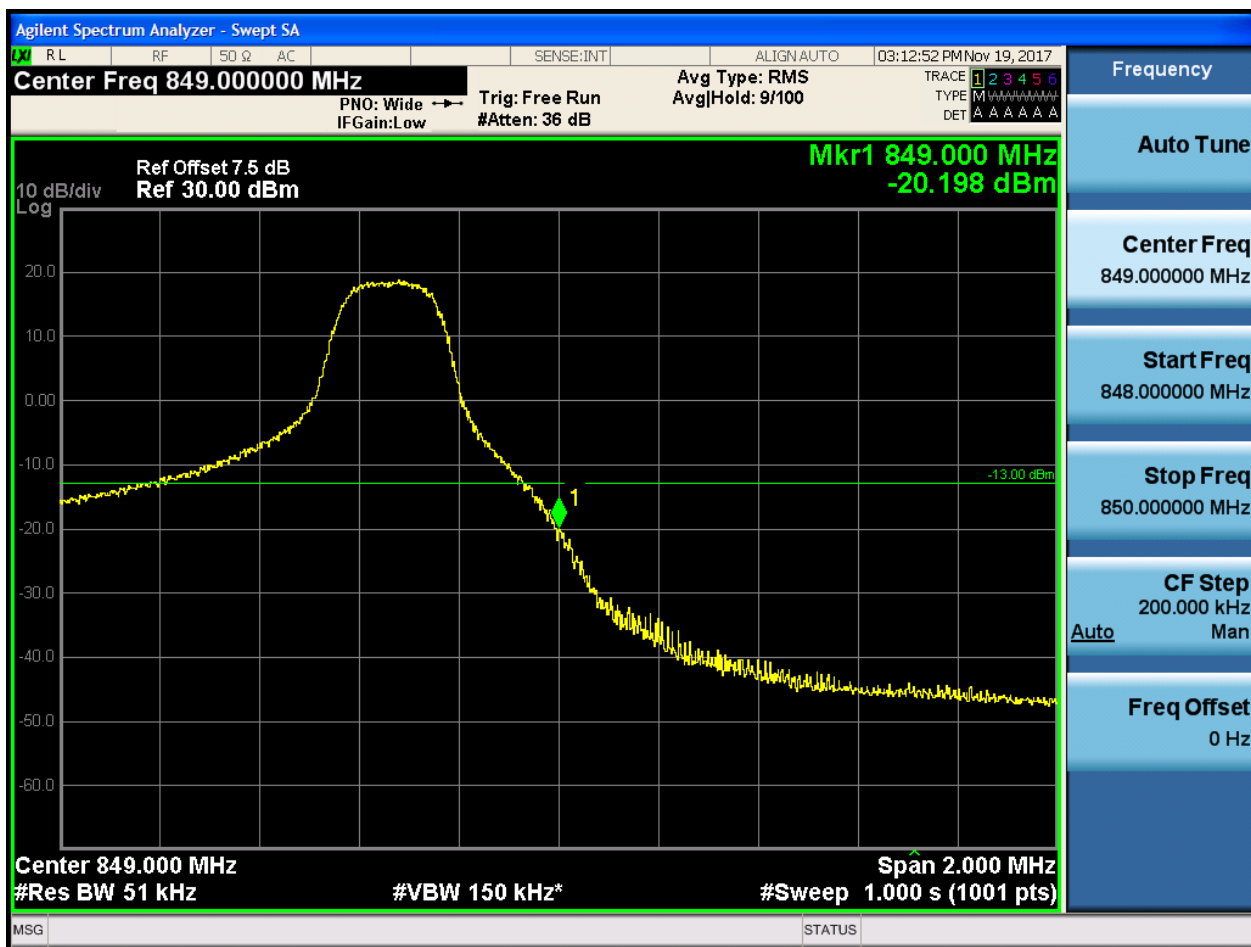
5.1.1.2.3.2 Test Channel = HCH

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





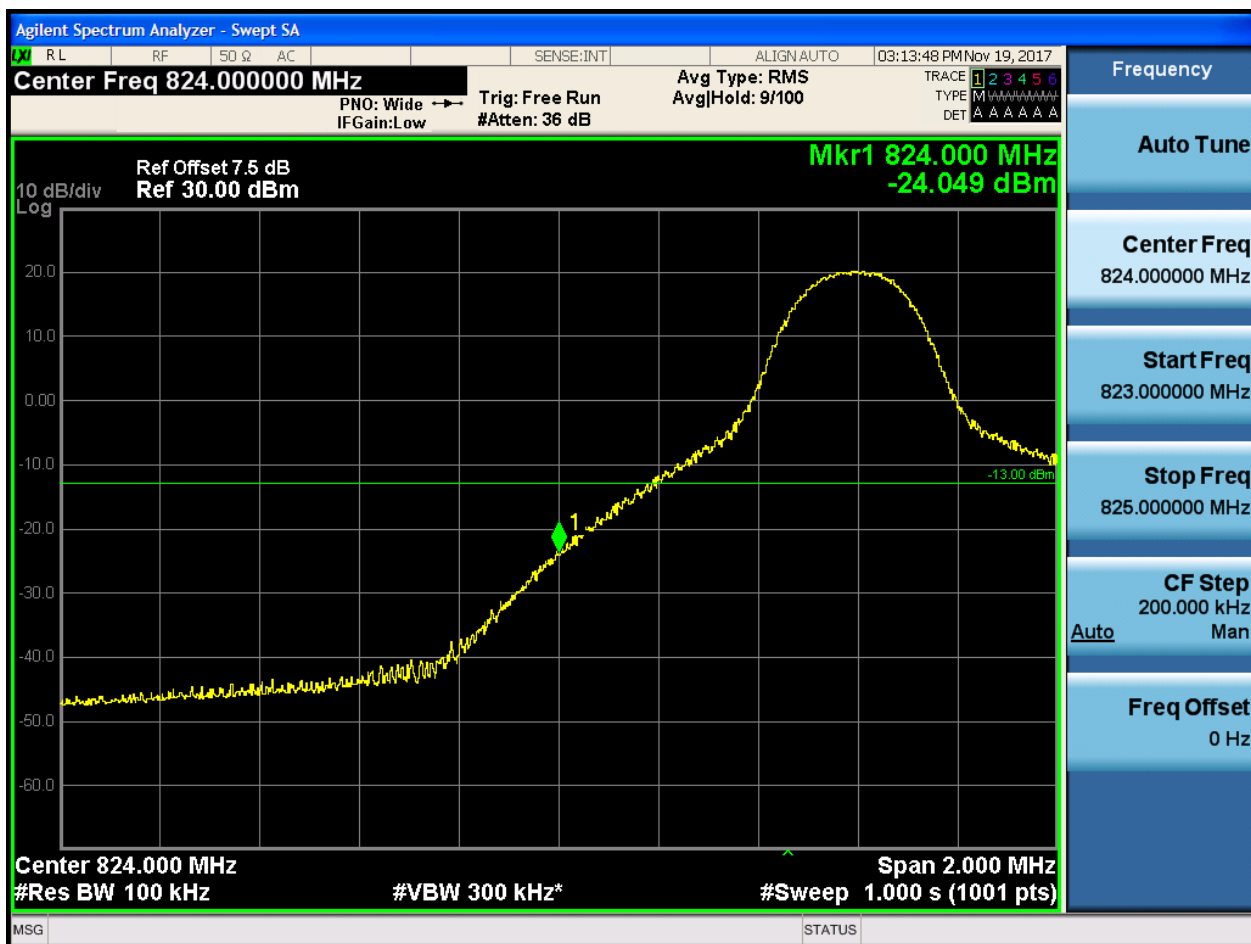
5.1.1.2.3.2.4 Test RB = RB25#0



5.1.1.2.4 Test Bandwidth = 10

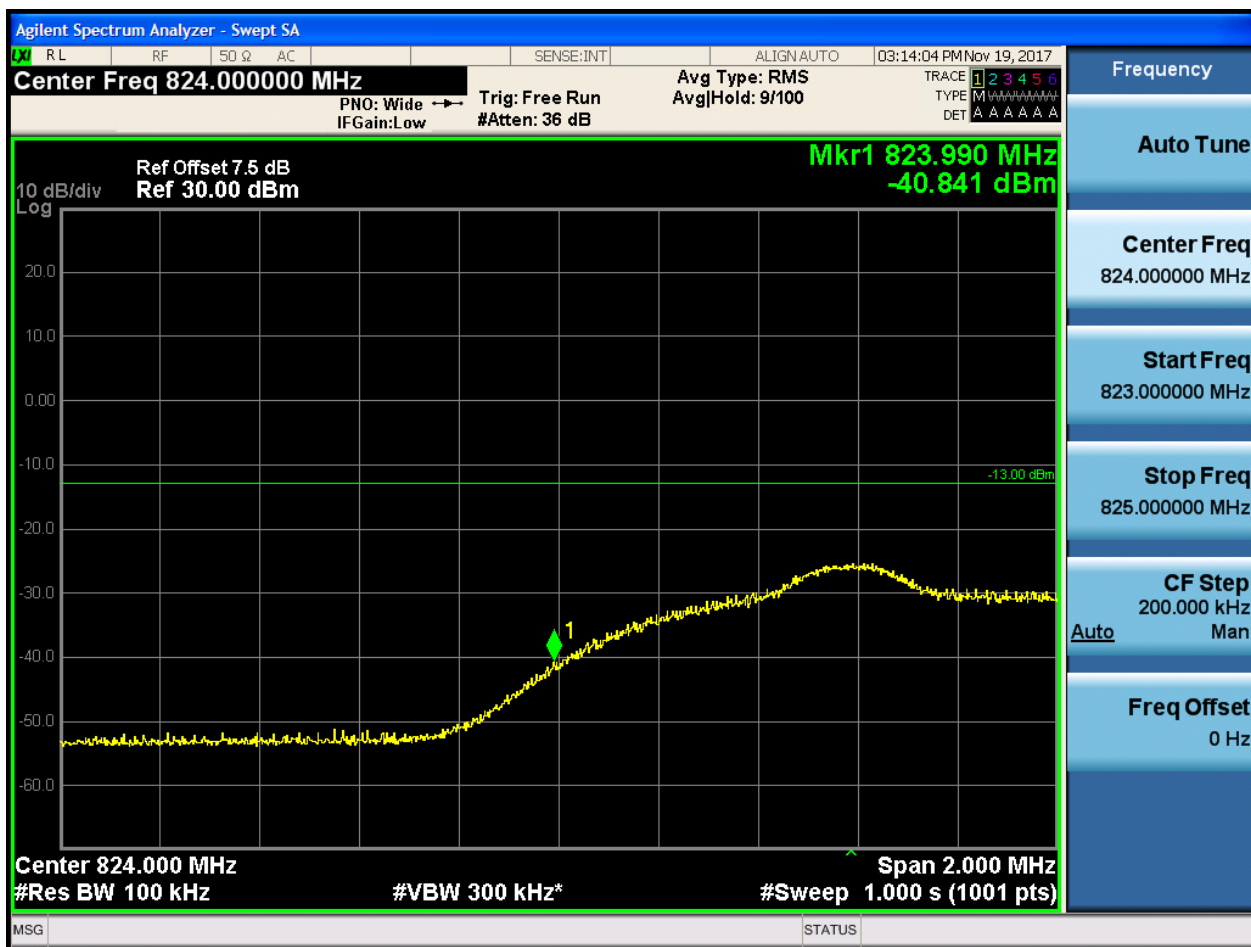
5.1.1.2.4.1 Test Channel = LCH

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 03:14:20 PM Nov 19, 2017

Center Freq 824.000000 MHz Avg Type: RMS
 PNO: Wide Trig: Free Run
 IFGain:Low #Atten: 36 dB

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 7.5 dB
 Ref 30.00 dBm

Mkr1 824.000 MHz
 -35.252 dBm

10 dB/div
 Log

Center 824.000 MHz
 #Res BW 100 kHz
 #VBW 300 kHz*
 Span 2.000 MHz
 #Sweep 1.000 s (1001 pts)

MSG STATUS



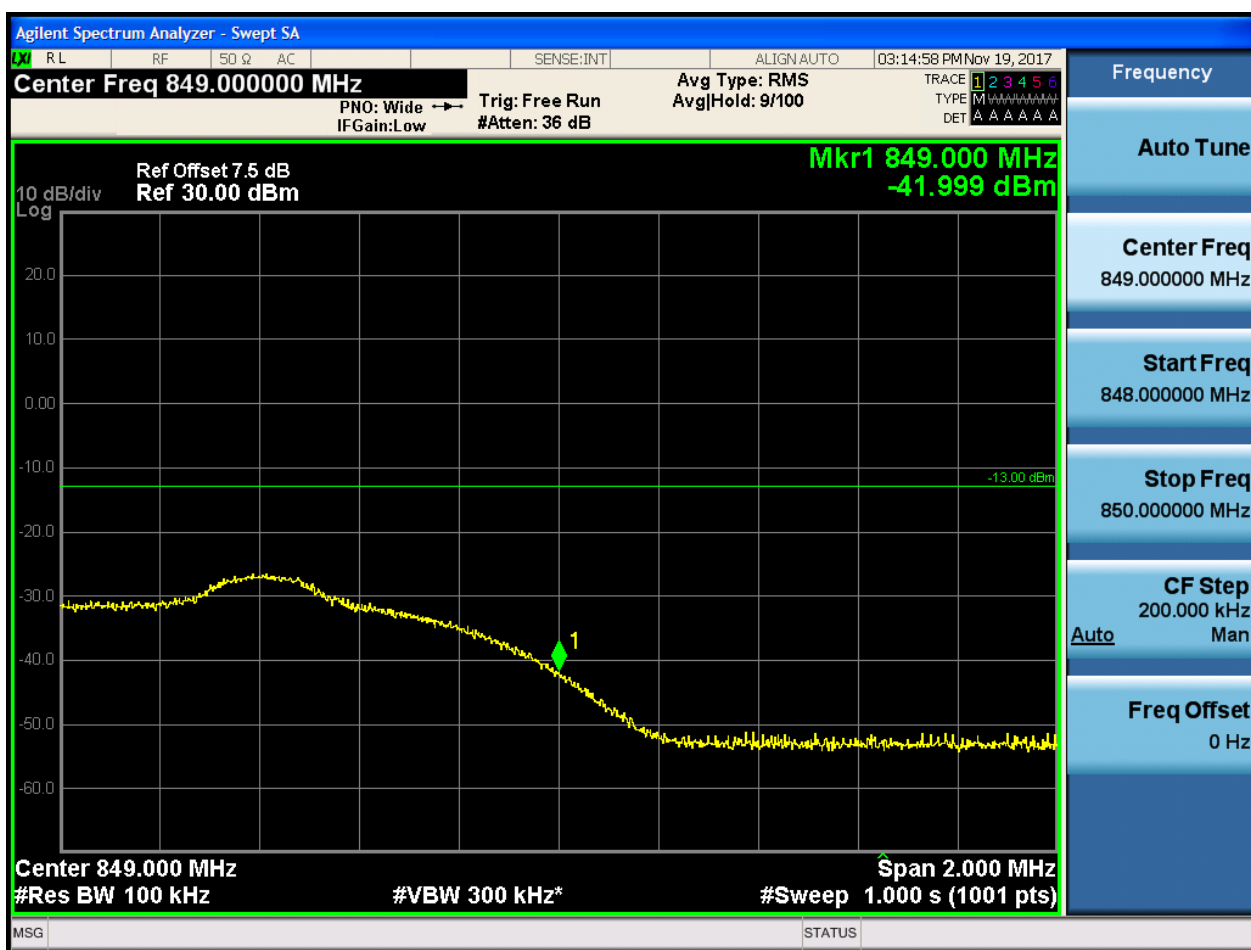
5.1.1.2.4.1.4 Test RB = RB50#0





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

