



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	23.41	20.06	38.5	PASS
				RB1#3	23.42	19.91	38.5	PASS
				RB1#5	23.36	20.04	38.5	PASS
				RB3#0	23.45	20.19	38.5	PASS
				RB3#2	23.42	19.80	38.5	PASS
				RB3#3	23.38	19.82	38.5	PASS
				RB6#0	22.1	18.61	38.5	PASS
			MCH	RB1#0	22.68	19.09	38.5	PASS
				RB1#3	22.74	19.25	38.5	PASS
				RB1#5	22.66	19.05	38.5	PASS
				RB3#0	22.69	19.23	38.5	PASS
				RB3#2	22.71	19.15	38.5	PASS
				RB3#3	22.68	19.10	38.5	PASS
				RB6#0	21.73	18.37	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	22.71	19.28	38.5	PASS
				RB1#3	22.68	19.14	38.5	PASS
				RB1#5	22.67	19.10	38.5	PASS
				RB3#0	22.77	19.21	38.5	PASS
				RB3#2	22.75	19.48	38.5	PASS
				RB3#3	22.71	19.13	38.5	PASS
				RB6#0	21.57	17.99	38.5	PASS
		3	LCH	RB1#0	23.45	20.04	38.5	PASS
				RB1#7	23.5	19.91	38.5	PASS
				RB1#14	23.28	19.87	38.5	PASS
				RB8#0	22.12	18.64	38.5	PASS
				RB8#4	22.09	18.84	38.5	PASS
				RB8#7	22.03	18.70	38.5	PASS
				RB15#0	22.18	18.84	38.5	PASS
			MCH	RB1#0	22.64	19.19	38.5	PASS
				RB1#7	22.89	19.47	38.5	PASS
				RB1#14	22.77	19.31	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#0	21.66	18.38	38.5	PASS
				RB8#4	21.69	18.39	38.5	PASS
				RB8#7	21.58	18.00	38.5	PASS
				RB15#0	21.67	18.40	38.5	PASS
			HCH	RB1#0	22.9	19.65	38.5	PASS
				RB1#7	22.96	19.64	38.5	PASS
				RB1#14	22.67	19.11	38.5	PASS
				RB8#0	21.54	18.28	38.5	PASS
				RB8#4	21.61	18.08	38.5	PASS
				RB8#7	21.6	18.21	38.5	PASS
				RB15#0	21.73	18.08	38.5	PASS
		5	LCH	RB1#0	23.71	20.32	38.5	PASS
				RB1#13	23.61	20.01	38.5	PASS
				RB1#24	23.43	20.04	38.5	PASS
				RB12#0	22.35	19.02	38.5	PASS
				RB12#6	22.3	18.88	38.5	PASS
				RB12#13	22.24	18.98	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	22.28	18.65	38.5	PASS
			MCH	RB1#0	23.06	19.81	38.5	PASS
				RB1#13	22.8	19.35	38.5	PASS
				RB1#24	22.6	19.33	38.5	PASS
				RB12#0	21.67	18.15	38.5	PASS
				RB12#6	21.72	18.19	38.5	PASS
				RB12#13	21.64	18.04	38.5	PASS
				RB25#0	21.59	18.21	38.5	PASS
			HCH	RB1#0	22.93	19.45	38.5	PASS
				RB1#13	22.92	19.53	38.5	PASS
				RB1#24	22.6	19.33	38.5	PASS
				RB12#0	21.82	18.25	38.5	PASS
				RB12#6	21.74	18.13	38.5	PASS
				RB12#13	21.63	18.26	38.5	PASS
				RB25#0	21.72	18.36	38.5	PASS
		10	LCH	RB1#0	23.63	20.12	38.5	PASS
				RB1#25	23.68	20.28	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	23.22	19.65	38.5	PASS
				RB25#0	22.07	18.79	38.5	PASS
				RB25#13	21.81	18.26	38.5	PASS
				RB25#25	21.58	17.97	38.5	PASS
				RB50#0	21.89	18.36	38.5	PASS
			MCH	RB1#0	23.22	19.71	38.5	PASS
				RB1#25	23.64	20.33	38.5	PASS
				RB1#49	23.45	19.85	38.5	PASS
				RB25#0	21.73	18.46	38.5	PASS
				RB25#13	21.57	18.21	38.5	PASS
				RB25#25	21.63	18.10	38.5	PASS
				RB50#0	21.56	18.20	38.5	PASS
			HCH	RB1#0	23.11	19.68	38.5	PASS
				RB1#25	23.64	20.34	38.5	PASS
				RB1#49	23.04	19.40	38.5	PASS
				RB25#0	21.94	18.49	38.5	PASS
				RB25#13	21.89	18.48	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.65	18.24	38.5	PASS
				RB50#0	21.88	18.50	38.5	PASS
	LTE/TM2	1.4	LCH	RB1#0	22.34	18.80	38.5	PASS
				RB1#3	22.32	19.00	38.5	PASS
				RB1#5	22.3	18.92	38.5	PASS
				RB3#0	22.29	19.02	38.5	PASS
				RB3#2	22.29	18.99	38.5	PASS
				RB3#3	22.27	18.82	38.5	PASS
				RB6#0	21.27	17.97	38.5	PASS
			MCH	RB1#0	21.71	18.44	38.5	PASS
				RB1#3	21.81	18.37	38.5	PASS
				RB1#5	21.77	18.14	38.5	PASS
				RB3#0	21.76	18.42	38.5	PASS
				RB3#2	21.77	18.27	38.5	PASS
				RB3#3	21.73	18.45	38.5	PASS
				RB6#0	20.76	17.23	38.5	PASS
			HCH	RB1#0	21.93	18.40	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#3	21.89	18.29	38.5	PASS
				RB1#5	21.81	18.27	38.5	PASS
				RB3#0	21.6	18.03	38.5	PASS
				RB3#2	21.57	17.95	38.5	PASS
				RB3#3	21.55	17.94	38.5	PASS
				RB6#0	20.65	17.27	38.5	PASS
		3	LCH	RB1#0	22.3	18.91	38.5	PASS
				RB1#7	22.4	18.82	38.5	PASS
				RB1#14	22.17	18.63	38.5	PASS
				RB8#0	21.46	18.20	38.5	PASS
				RB8#4	21.45	18.11	38.5	PASS
				RB8#7	21.4	17.77	38.5	PASS
				RB15#0	21.36	18.06	38.5	PASS
			MCH	RB1#0	21.65	18.31	38.5	PASS
				RB1#7	21.95	18.55	38.5	PASS
				RB1#14	21.78	18.40	38.5	PASS
				RB8#0	20.7	17.10	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#4	20.76	17.44	38.5	PASS
				RB8#7	20.66	17.38	38.5	PASS
				RB15#0	20.59	16.98	38.5	PASS
			HCH	RB1#0	21.86	18.23	38.5	PASS
				RB1#7	21.87	18.45	38.5	PASS
				RB1#14	21.65	18.31	38.5	PASS
				RB8#0	20.64	17.00	38.5	PASS
				RB8#4	20.72	17.35	38.5	PASS
				RB8#7	20.61	17.19	38.5	PASS
				RB15#0	20.73	17.48	38.5	PASS
		5	LCH	RB1#0	22.54	19.18	38.5	PASS
				RB1#13	22.46	18.82	38.5	PASS
				RB1#24	22.25	18.73	38.5	PASS
				RB12#0	21.35	17.72	38.5	PASS
				RB12#6	21.3	17.74	38.5	PASS
				RB12#13	21.26	17.72	38.5	PASS
				RB25#0	21.32	17.80	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
			MCH	RB1#0	21.8	18.54	38.5	PASS
				RB1#13	21.79	18.42	38.5	PASS
				RB1#24	21.71	18.24	38.5	PASS
				RB12#0	20.65	17.07	38.5	PASS
				RB12#6	20.71	17.32	38.5	PASS
				RB12#13	20.63	17.25	38.5	PASS
				RB25#0	20.47	16.97	38.5	PASS
			HCH	RB1#0	22.08	18.71	38.5	PASS
				RB1#13	21.83	18.30	38.5	PASS
				RB1#24	21.75	18.29	38.5	PASS
				RB12#0	20.85	17.48	38.5	PASS
				RB12#6	20.78	17.49	38.5	PASS
				RB12#13	20.68	17.30	38.5	PASS
				RB25#0	20.72	17.29	38.5	PASS
		10	LCH	RB1#0	22.46	19.16	38.5	PASS
				RB1#25	22.44	18.82	38.5	PASS
				RB1#49	22.18	18.66	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.12	17.51	38.5	PASS
				RB25#13	20.85	17.54	38.5	PASS
				RB25#25	20.63	16.99	38.5	PASS
				RB50#0	20.92	17.54	38.5	PASS
			MCH	RB1#0	21.98	18.66	38.5	PASS
				RB1#25	22.39	18.84	38.5	PASS
				RB1#49	22.2	18.63	38.5	PASS
				RB25#0	20.75	17.33	38.5	PASS
				RB25#13	20.58	17.01	38.5	PASS
				RB25#25	20.65	17.35	38.5	PASS
				RB50#0	20.46	17.17	38.5	PASS
			HCH	RB1#0	22.21	18.82	38.5	PASS
				RB1#25	22.6	19.19	38.5	PASS
				RB1#49	22.42	19.07	38.5	PASS
				RB25#0	20.96	17.69	38.5	PASS
				RB25#13	20.9	17.47	38.5	PASS
				RB25#25	20.66	17.21	38.5	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB50#0	20.79	17.19	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:

SET Span=1.5*OBW

SET RBW=1%of the OBW,not to wxceed 1MHz

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector:RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
BAND5	LTE/TM1	1.4	LCH	RB1#0	4.42	13	PASS
				RB1#3	4.37	13	PASS
				RB1#5	4.43	13	PASS
				RB3#0	4.9	13	PASS
				RB3#2	4.93	13	PASS
				RB3#3	4.99	13	PASS
				RB6#0	5.4	13	PASS
			MCH	RB1#0	4.64	13	PASS
				RB1#3	4.63	13	PASS
				RB1#5	4.59	13	PASS
				RB3#0	5.1	13	PASS
				RB3#2	5	13	PASS
				RB3#3	5.1	13	PASS
				RB6#0	5.77	13	PASS
			HCH	RB1#0	4.33	13	PASS
				RB1#3	4.25	13	PASS
				RB1#5	4.25	13	PASS
				RB3#0	4.71	13	PASS
				RB3#2	4.58	13	PASS
				RB3#3	4.69	13	PASS
				RB6#0	5.54	13	PASS
		3	LCH	RB1#0	4.04	13	PASS
				RB1#7	3.97	13	PASS
				RB1#14	4.12	13	PASS
				RB8#0	5.4	13	PASS
				RB8#4	5.32	13	PASS
				RB8#7	5.4	13	PASS
				RB15#0	5.74	13	PASS
			MCH	RB1#0	4.6	13	PASS
				RB1#7	4.44	13	PASS
				RB1#14	4.63	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#0	5.53	13	PASS
				RB8#4	5.45	13	PASS
				RB8#7	5.56	13	PASS
				RB15#0	5.69	13	PASS
			HCH	RB1#0	4.26	13	PASS
				RB1#7	4.22	13	PASS
				RB1#14	4.21	13	PASS
				RB8#0	5.42	13	PASS
				RB8#4	5.34	13	PASS
				RB8#7	5.38	13	PASS
				RB15#0	5.64	13	PASS
		5	LCH	RB1#0	4.44	13	PASS
				RB1#13	4.55	13	PASS
				RB1#24	4.63	13	PASS
				RB12#0	5.6	13	PASS
				RB12#6	5.46	13	PASS
				RB12#13	5.64	13	PASS
				RB25#0	5.92	13	PASS
			MCH	RB1#0	4.74	13	PASS
				RB1#13	4.66	13	PASS
				RB1#24	4.59	13	PASS
				RB12#0	5.75	13	PASS
				RB12#6	5.65	13	PASS
				RB12#13	5.74	13	PASS
				RB25#0	5.95	13	PASS
			HCH	RB1#0	4.29	13	PASS
				RB1#13	4.3	13	PASS
				RB1#24	4.31	13	PASS
				RB12#0	5.3	13	PASS
				RB12#6	5.29	13	PASS
				RB12#13	5.43	13	PASS
				RB25#0	5.82	13	PASS
		10	LCH	RB1#0	4.26	13	PASS
				RB1#25	4.37	13	PASS
				RB1#49	4.71	13	PASS
				RB25#0	5.75	13	PASS
				RB25#13	5.68	13	PASS
				RB25#25	5.91	13	PASS
				RB50#0	5.94	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
			MCH	RB1#0	4.42	13	PASS
				RB1#25	4.25	13	PASS
				RB1#49	3.95	13	PASS
				RB25#0	5.95	13	PASS
				RB25#13	5.91	13	PASS
				RB25#25	5.86	13	PASS
				RB50#0	6.01	13	PASS
			HCH	RB1#0	4.29	13	PASS
				RB1#25	3.73	13	PASS
				RB1#49	4.15	13	PASS
				RB25#0	5.37	13	PASS
				RB25#13	5.27	13	PASS
				RB25#25	5.55	13	PASS
				RB50#0	5.77	13	PASS
	LTE/TM2	1.4	LCH	RB1#0	5.48	13	PASS
				RB1#3	5.53	13	PASS
				RB1#5	5.44	13	PASS
				RB3#0	5.57	13	PASS
				RB3#2	5.58	13	PASS
				RB3#3	5.56	13	PASS
				RB6#0	6.6	13	PASS
			MCH	RB1#0	5.65	13	PASS
				RB1#3	5.61	13	PASS
				RB1#5	5.61	13	PASS
				RB3#0	6.13	13	PASS
				RB3#2	6.01	13	PASS
				RB3#3	6.14	13	PASS
				RB6#0	6.56	13	PASS
			HCH	RB1#0	5.17	13	PASS
				RB1#3	5.12	13	PASS
				RB1#5	5.01	13	PASS
				RB3#0	5.62	13	PASS
				RB3#2	5.48	13	PASS
				RB3#3	5.48	13	PASS
				RB6#0	6.59	13	PASS
		3	LCH	RB1#0	5.33	13	PASS
				RB1#7	5.26	13	PASS
				RB1#14	5.4	13	PASS
				RB8#0	6.12	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#4	6.06	13	PASS
				RB8#7	6.14	13	PASS
				RB15#0	6.45	13	PASS
			MCH	RB1#0	5.65	13	PASS
				RB1#7	5.52	13	PASS
				RB1#14	5.55	13	PASS
				RB8#0	6.27	13	PASS
				RB8#4	6.26	13	PASS
				RB8#7	6.36	13	PASS
				RB15#0	6.63	13	PASS
			HCH	RB1#0	5.04	13	PASS
				RB1#7	4.93	13	PASS
				RB1#14	5.07	13	PASS
				RB8#0	6.05	13	PASS
				RB8#4	6.08	13	PASS
				RB8#7	6.21	13	PASS
				RB15#0	6.41	13	PASS
		5	LCH	RB1#0	5.35	13	PASS
				RB1#13	5.49	13	PASS
				RB1#24	5.48	13	PASS
				RB12#0	6.09	13	PASS
				RB12#6	6.09	13	PASS
				RB12#13	6.22	13	PASS
				RB25#0	6.47	13	PASS
			MCH	RB1#0	5.61	13	PASS
				RB1#13	5.55	13	PASS
				RB1#24	5.46	13	PASS
				RB12#0	6.55	13	PASS
				RB12#6	6.52	13	PASS
				RB12#13	6.52	13	PASS
				RB25#0	6.69	13	PASS
			HCH	RB1#0	4.65	13	PASS
				RB1#13	4.89	13	PASS
				RB1#24	4.95	13	PASS
				RB12#0	6.02	13	PASS
				RB12#6	5.99	13	PASS
				RB12#13	6.35	13	PASS
				RB25#0	6.42	13	PASS
		10	LCH	RB1#0	5.27	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#25	5.33	13	PASS
				RB1#49	5.49	13	PASS
				RB25#0	6.38	13	PASS
				RB25#13	6.48	13	PASS
				RB25#25	6.66	13	PASS
				RB50#0	6.62	13	PASS
			MCH	RB1#0	5.47	13	PASS
				RB1#25	5.19	13	PASS
				RB1#49	4.78	13	PASS
				RB25#0	6.68	13	PASS
				RB25#13	6.68	13	PASS
				RB25#25	6.5	13	PASS
				RB50#0	6.98	13	PASS
			HCH	RB1#0	4.75	13	PASS
				RB1#25	4.42	13	PASS
				RB1#49	4.74	13	PASS
				RB25#0	5.98	13	PASS
				RB25#13	5.87	13	PASS
				RB25#25	6.17	13	PASS
				RB50#0	6.54	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

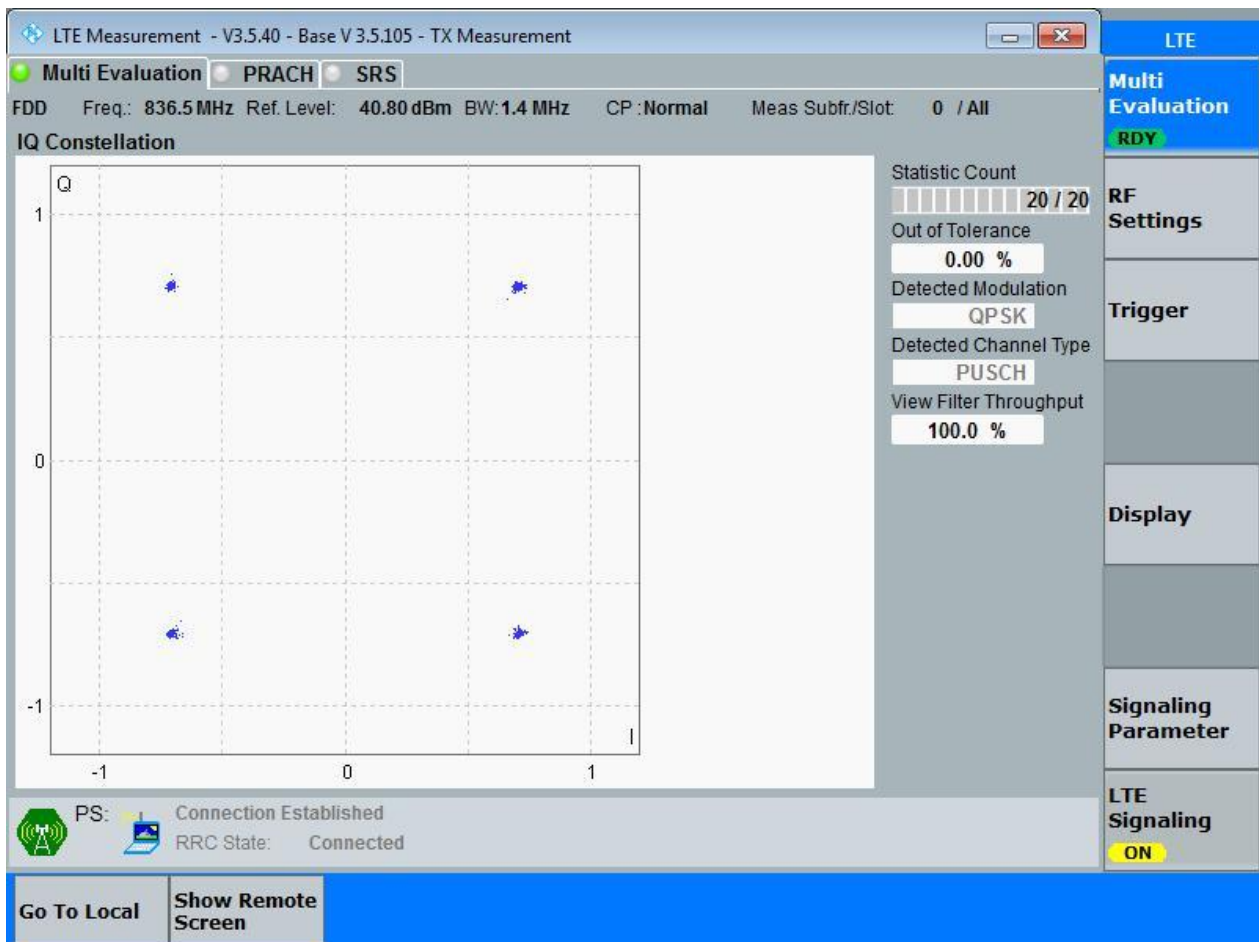
3.1.1 Test Band = BAND5

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

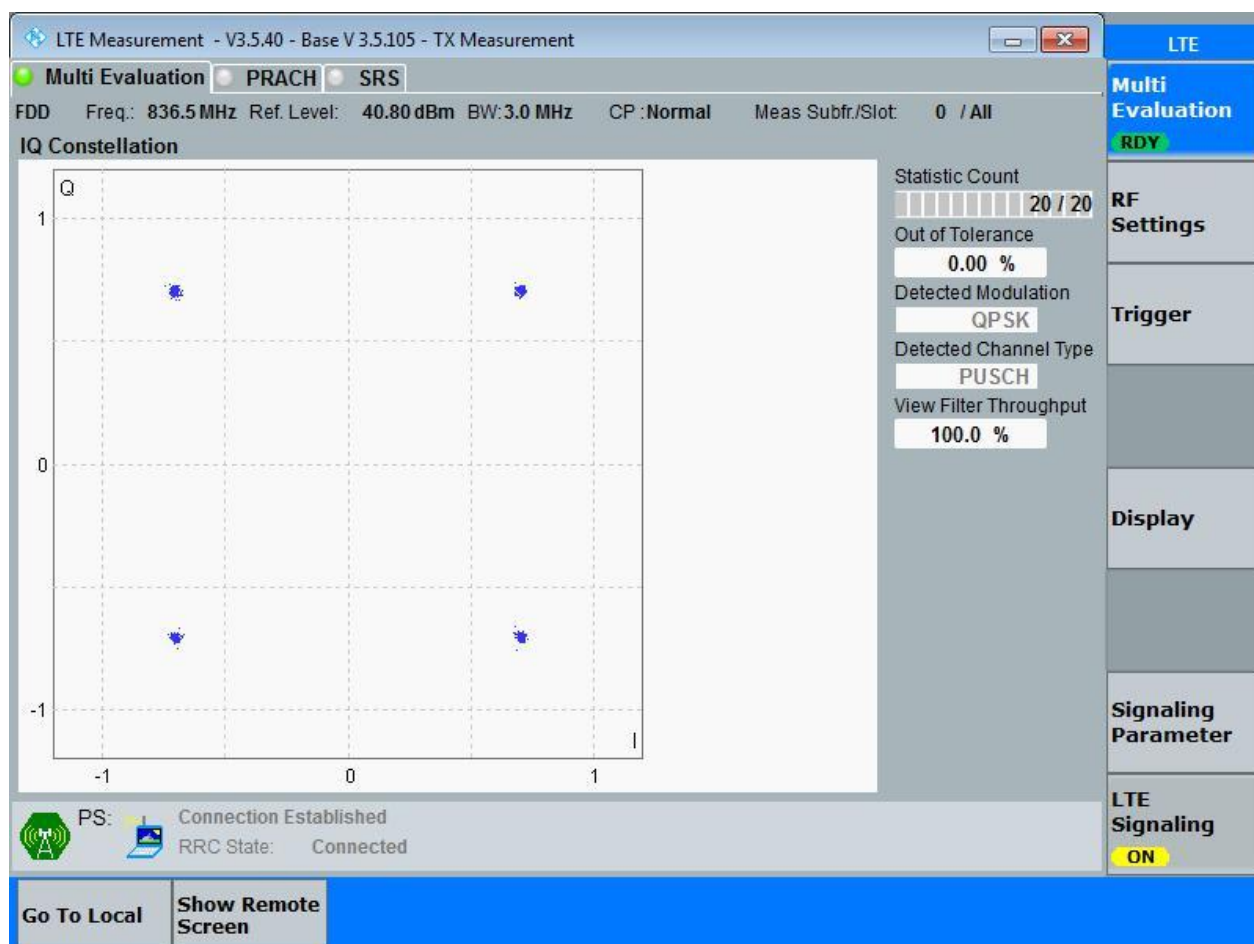
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

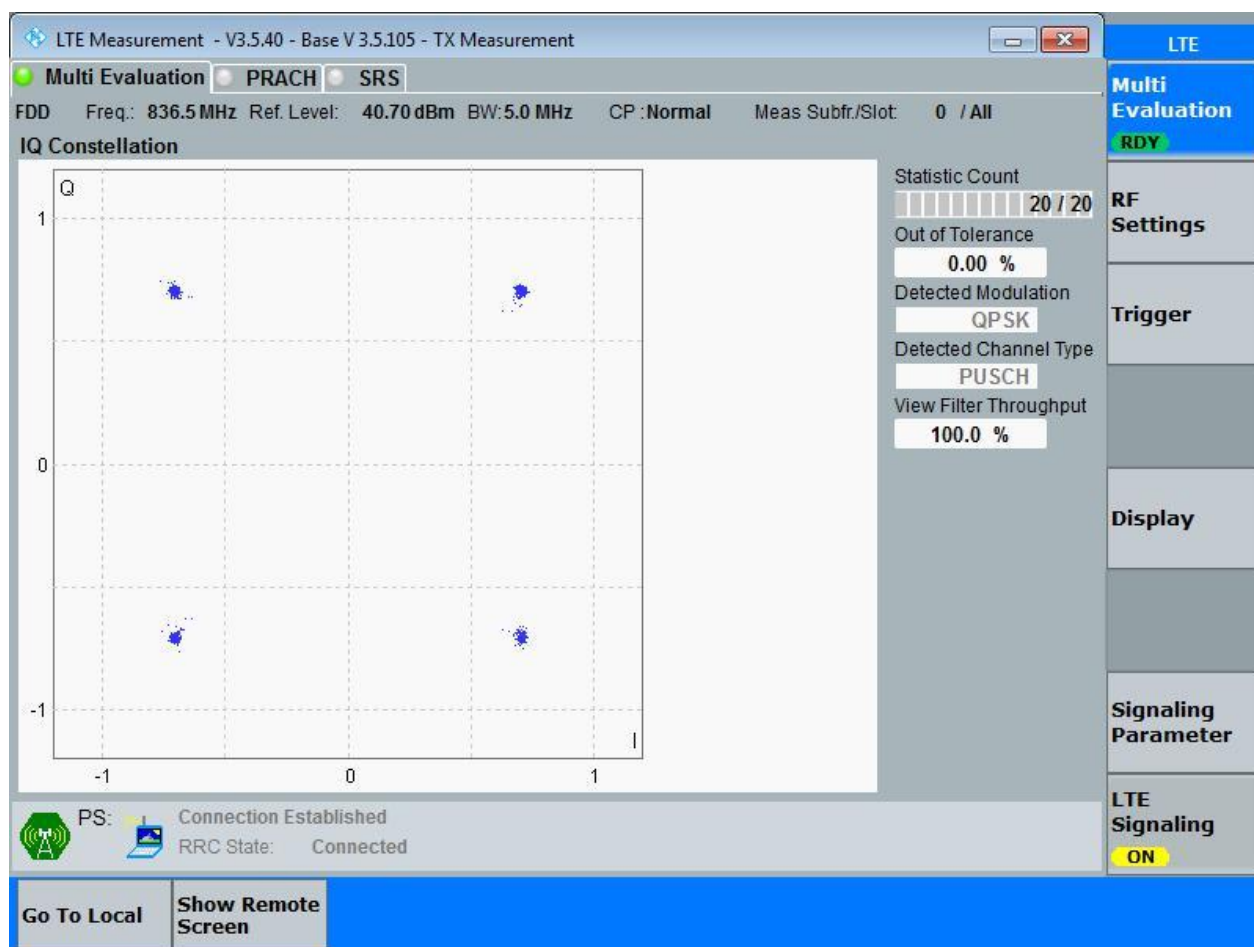
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

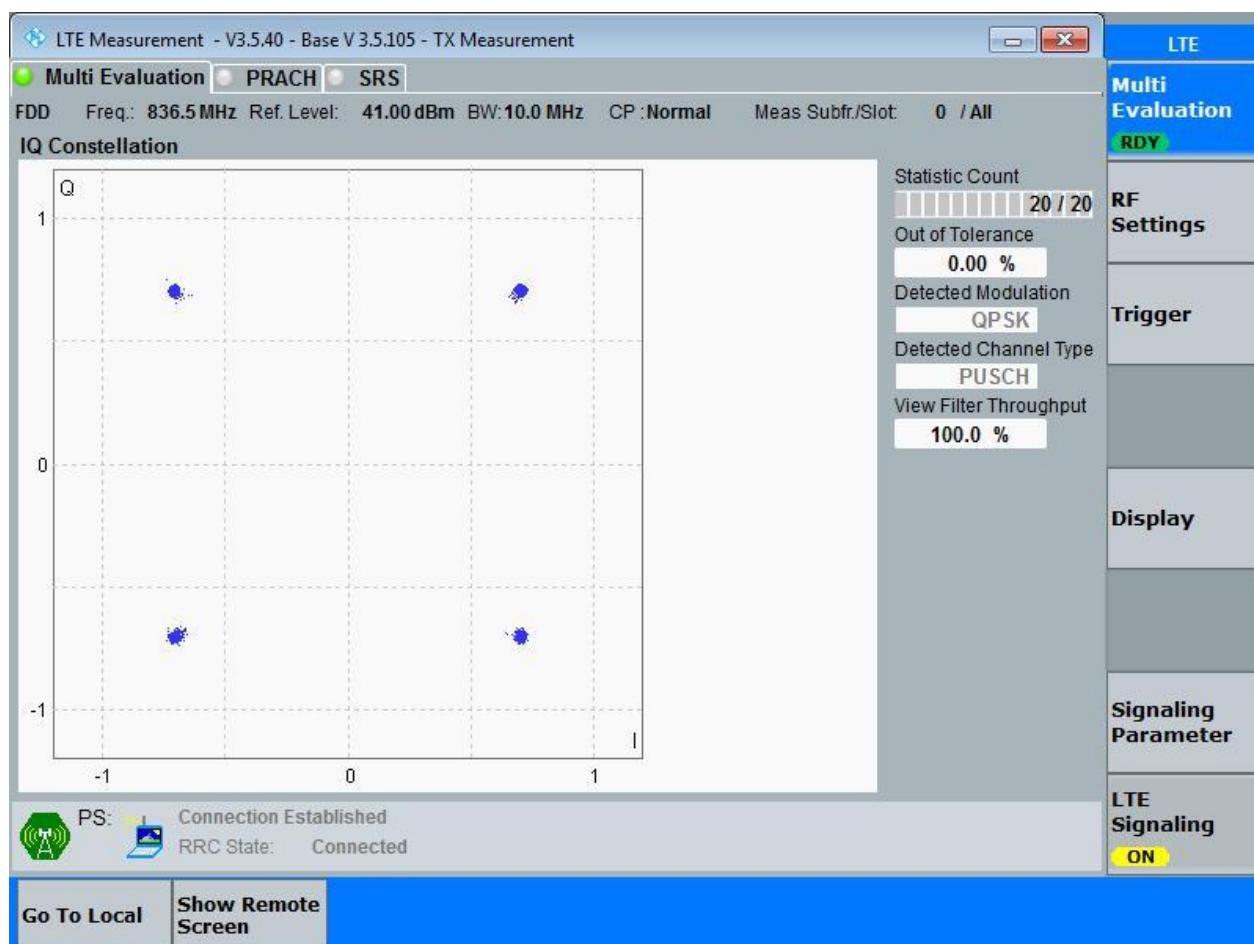
3.1.1.1.3.1.1 Test RB = RB25#0



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

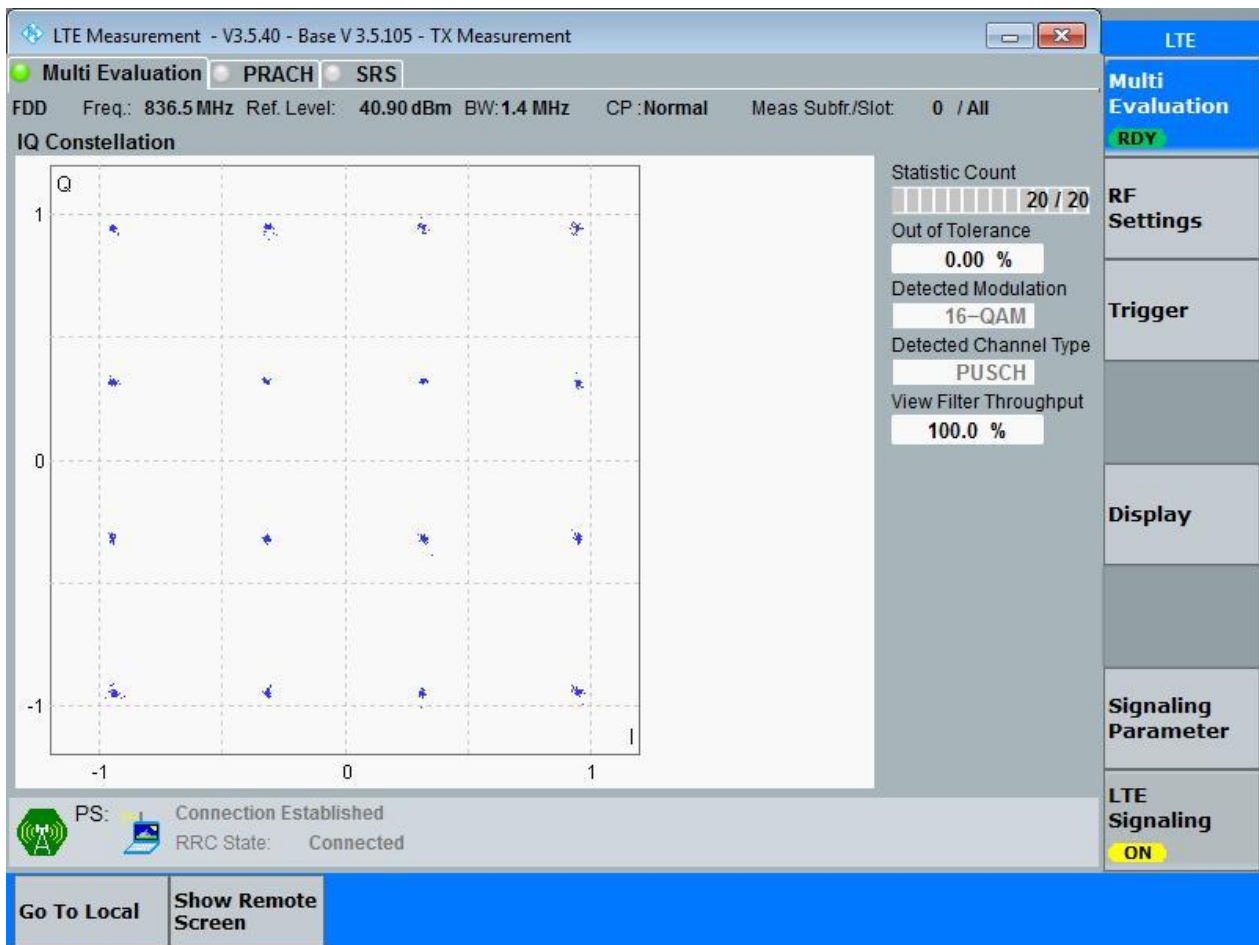


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

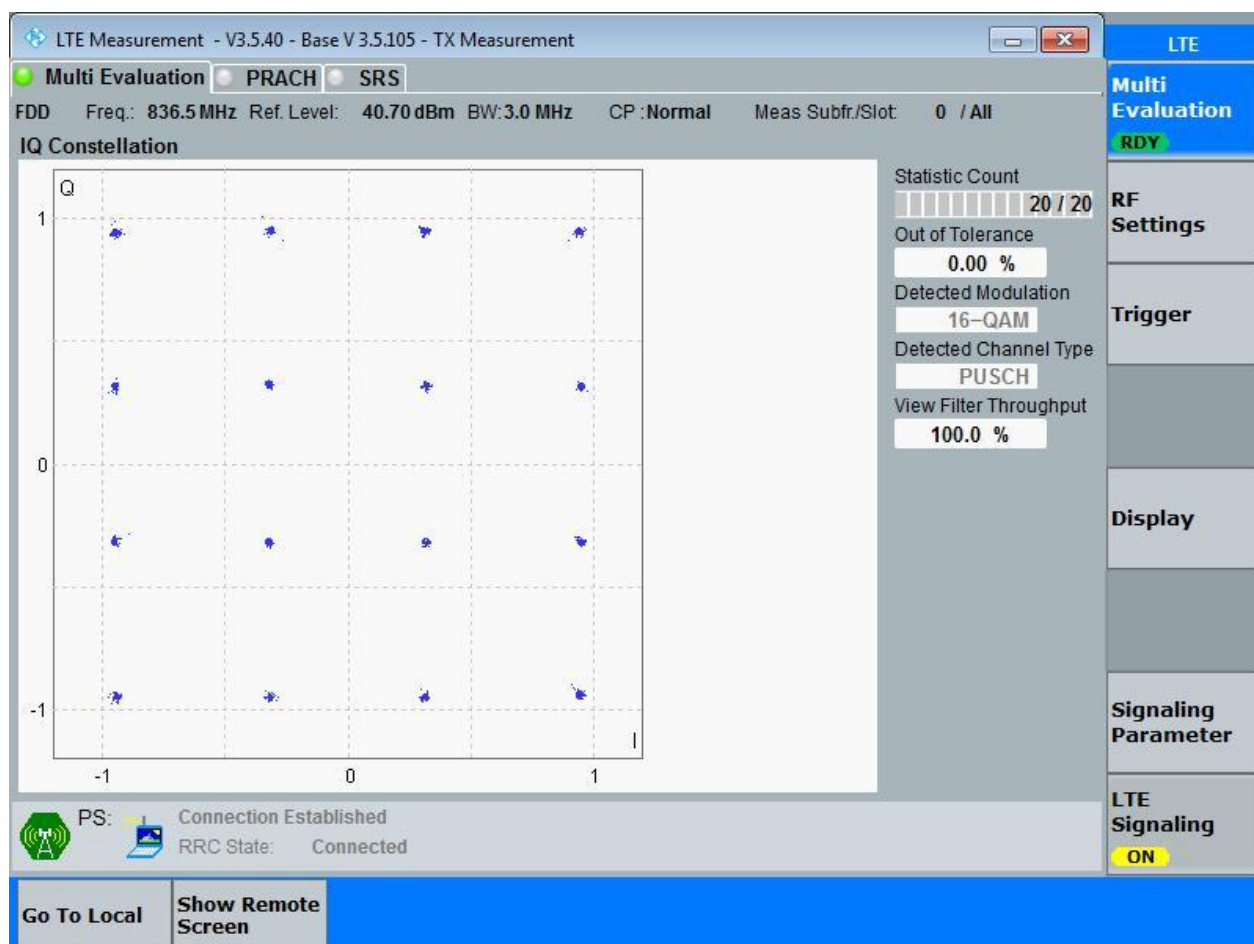
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

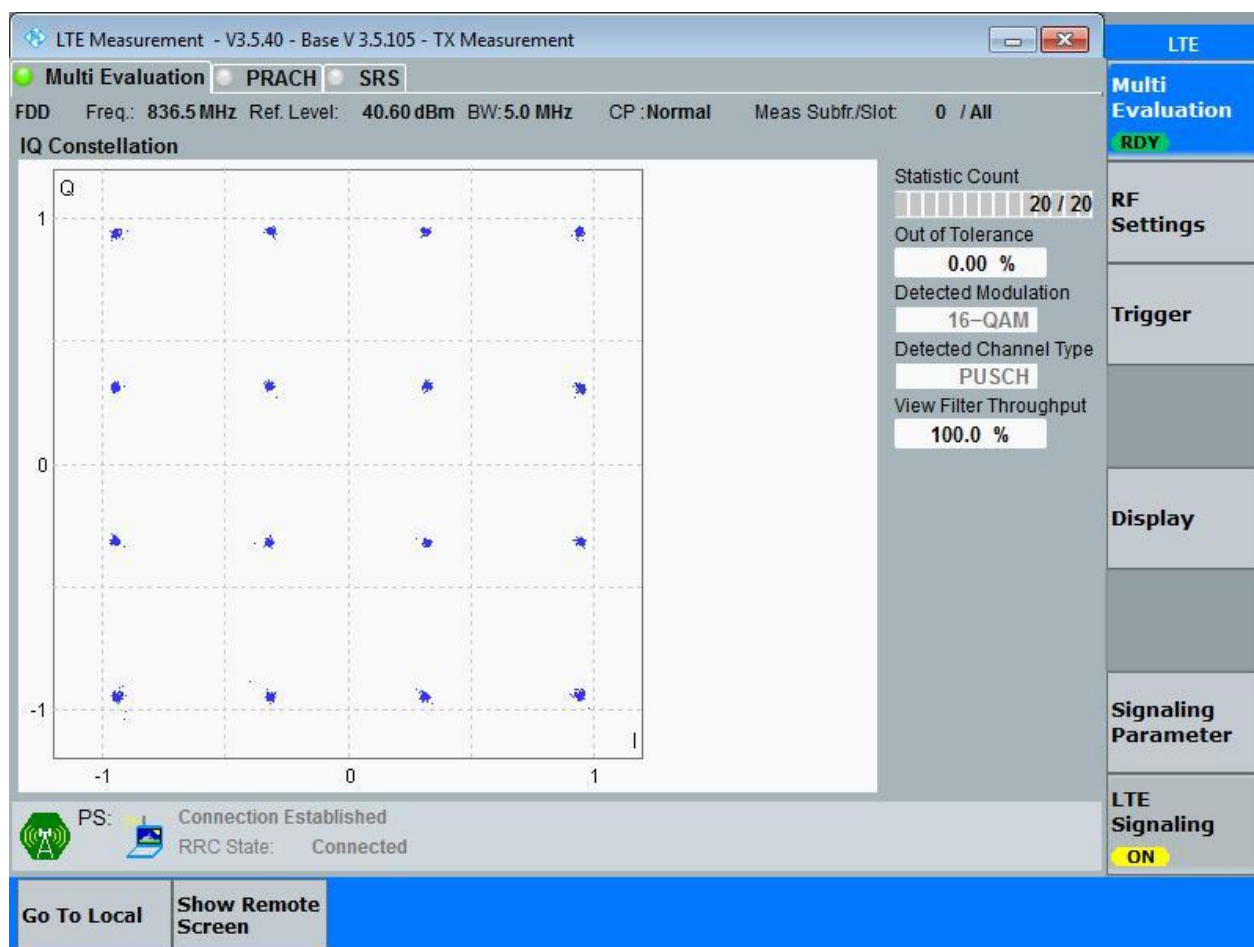
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

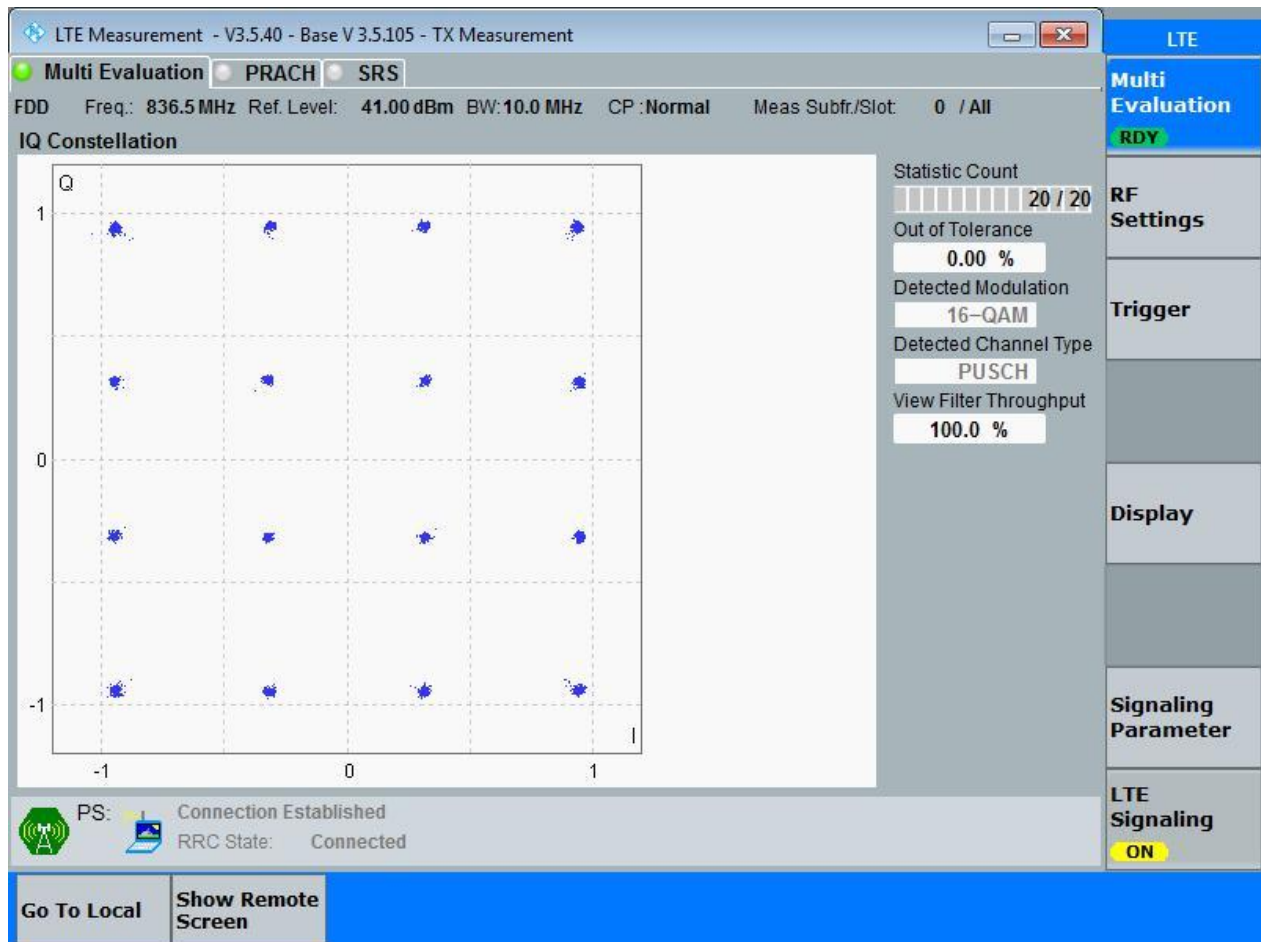
3.1.1.2.3.1.1 Test RB = RB25#0



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	1.20	Pass
			MCH	RB6#0	1.10	1.23	Pass
			HCH	RB6#0	1.10	1.24	Pass
		3	LCH	RB15#0	2.71	3.00	Pass
			MCH	RB15#0	2.70	2.97	Pass
			HCH	RB15#0	2.71	2.98	Pass
		5	LCH	RB25#0	4.51	4.87	Pass
			MCH	RB25#0	4.51	4.81	Pass
			HCH	RB25#0	4.51	4.98	Pass
		10	LCH	RB50#0	9.02	9.92	Pass
			MCH	RB50#0	9.01	9.97	Pass
			HCH	RB50#0	9.01	9.92	Pass
	LTE/TM2	1.4	LCH	RB6#0	1.08	1.21	Pass
			MCH	RB6#0	1.09	1.24	Pass
			HCH	RB6#0	1.09	1.25	Pass
		3	LCH	RB15#0	2.71	2.88	Pass
			MCH	RB15#0	2.72	2.99	Pass
			HCH	RB15#0	2.71	3.00	Pass
		5	LCH	RB25#0	4.52	4.96	Pass
			MCH	RB25#0	4.52	4.93	Pass
			HCH	RB25#0	4.52	4.99	Pass
		10	LCH	RB50#0	9.03	9.92	Pass
			MCH	RB50#0	9.00	9.97	Pass
			HCH	RB50#0	9.00	9.90	Pass



Part II - Test Plots

4.1 For LTE

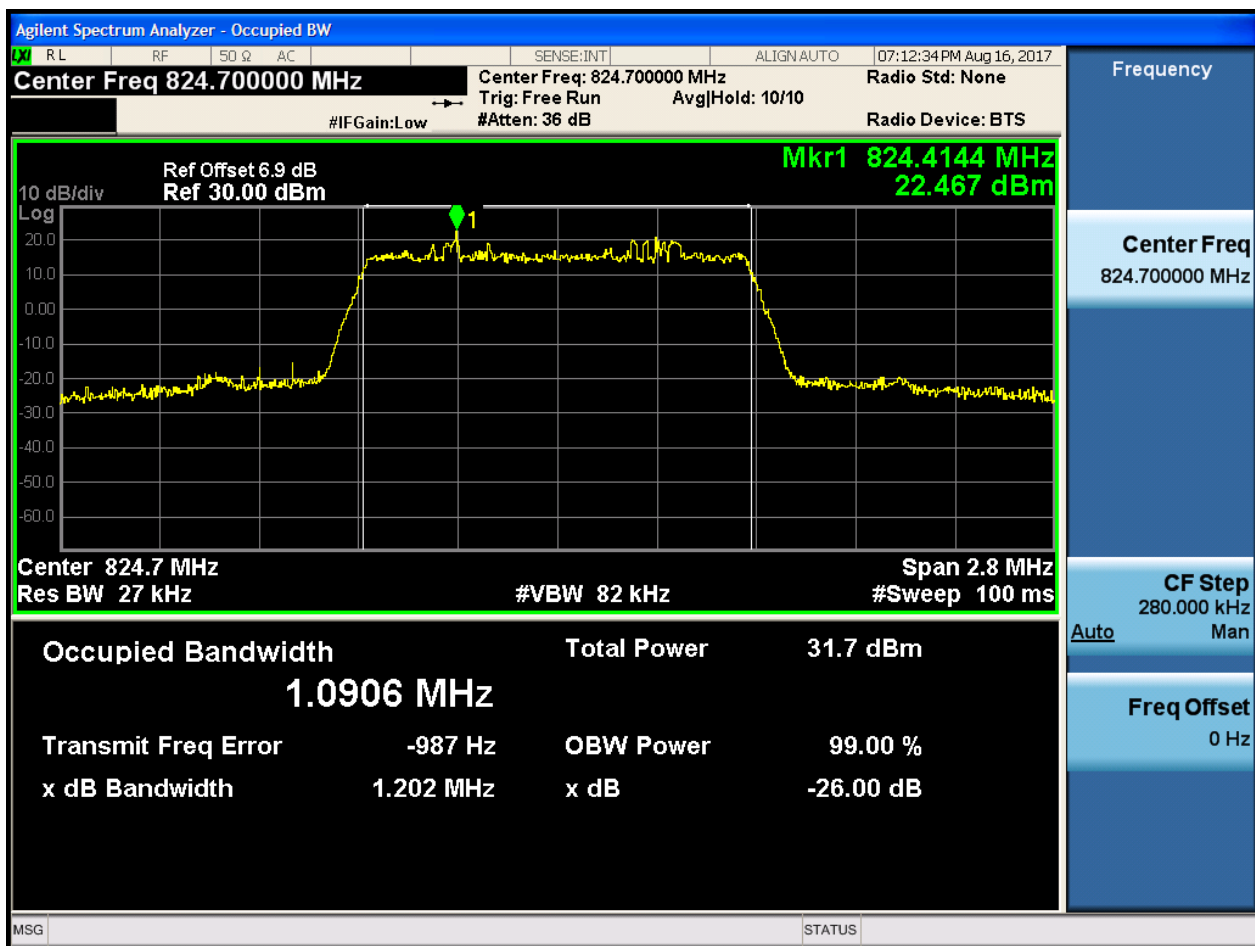
4.1.1 Test Band = BAND5

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 1.4

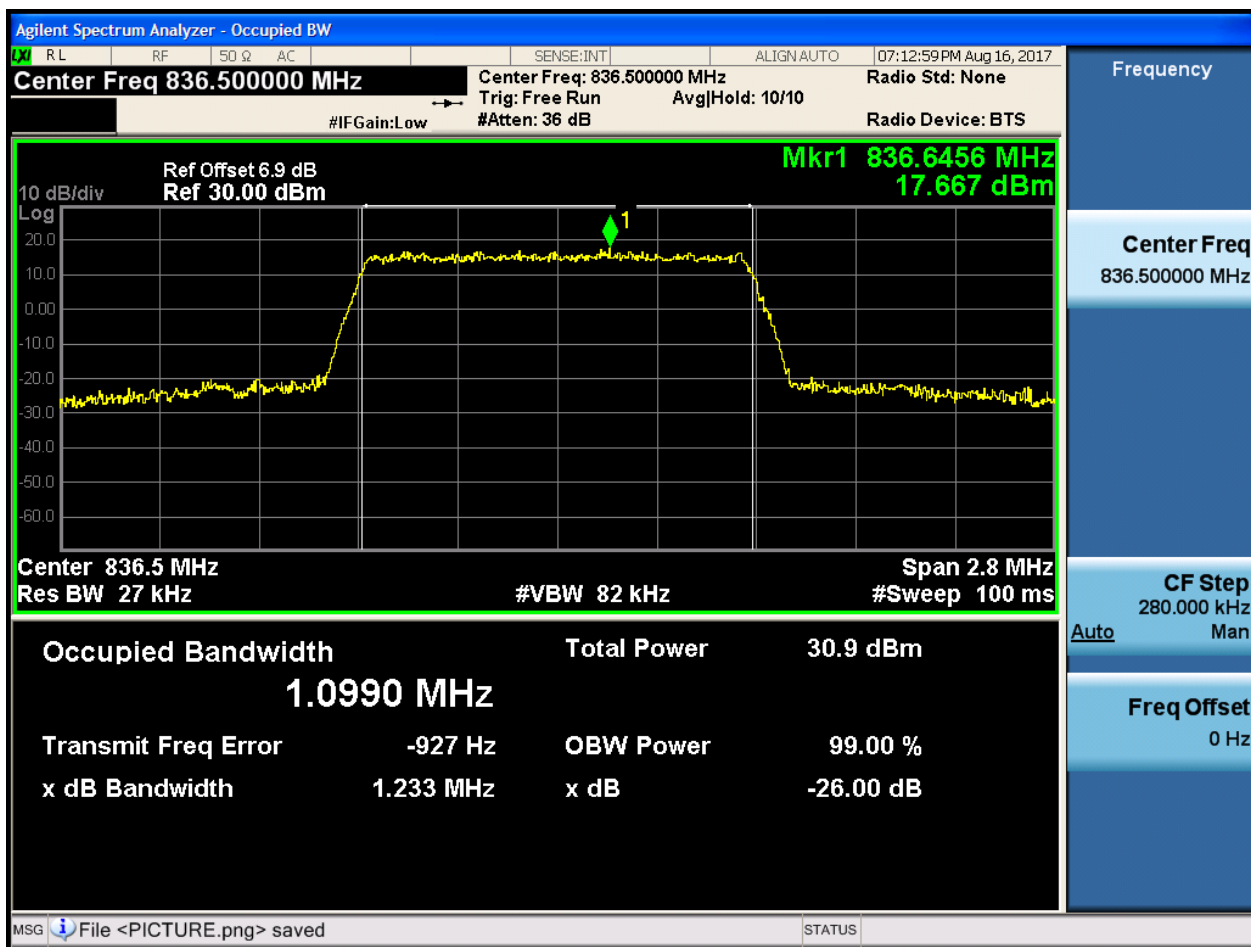
4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 Test RB = RB6#0



4.1.1.1.1.2 Test Channel = MCH

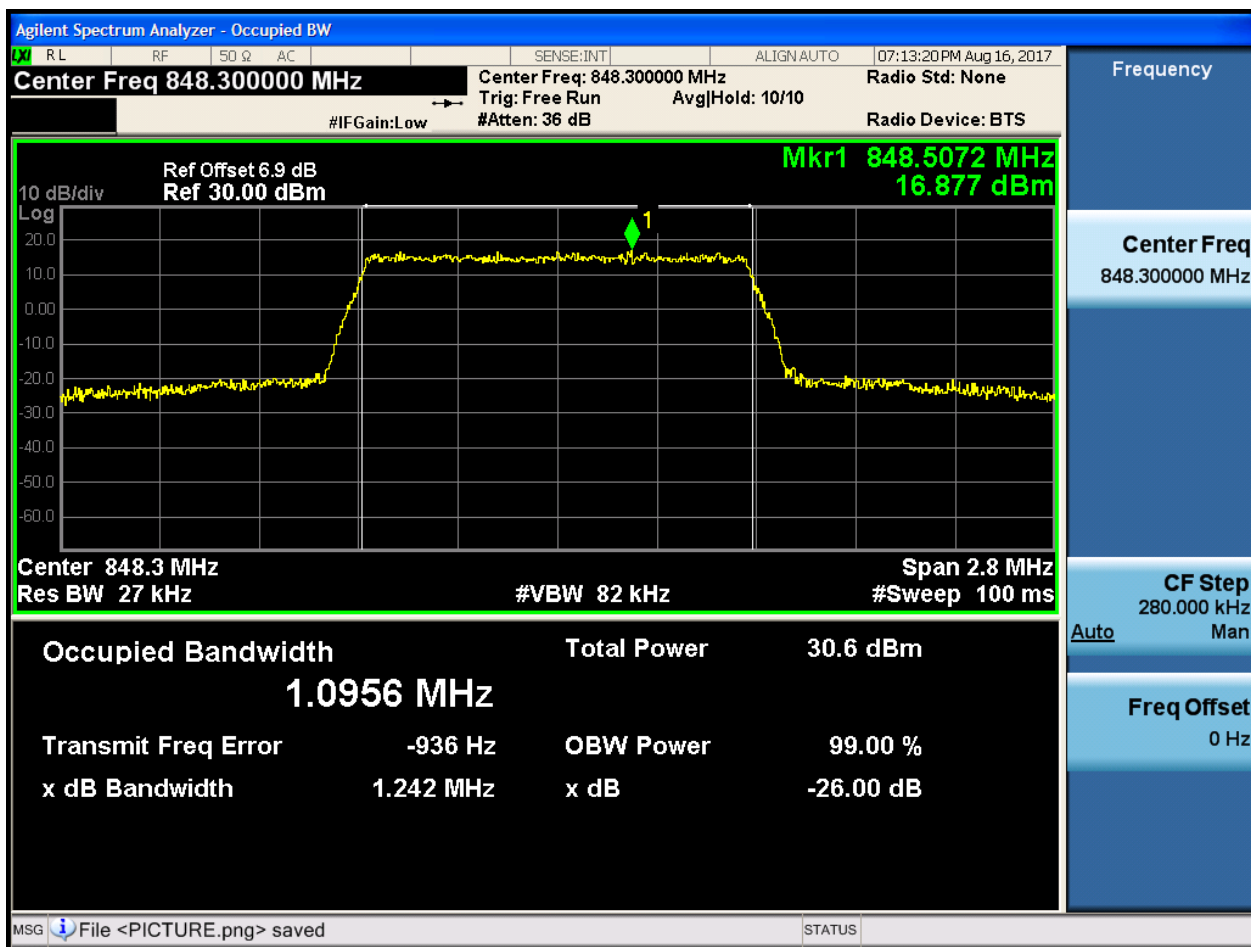
4.1.1.1.1.2.1 Test RB = RB6#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB6#0

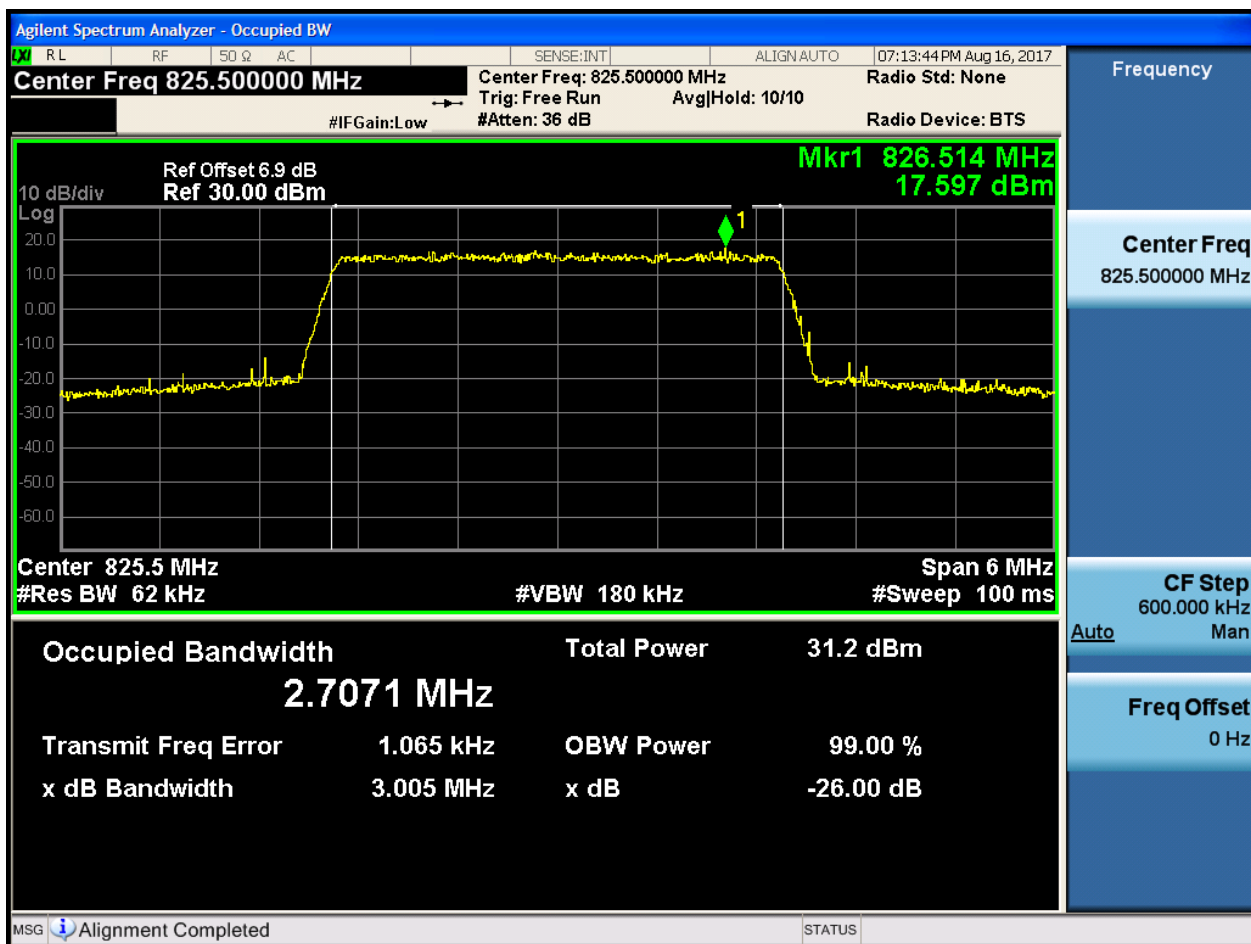




4.1.1.1.2 Test Bandwidth = 3

4.1.1.1.2.1 Test Channel = LCH

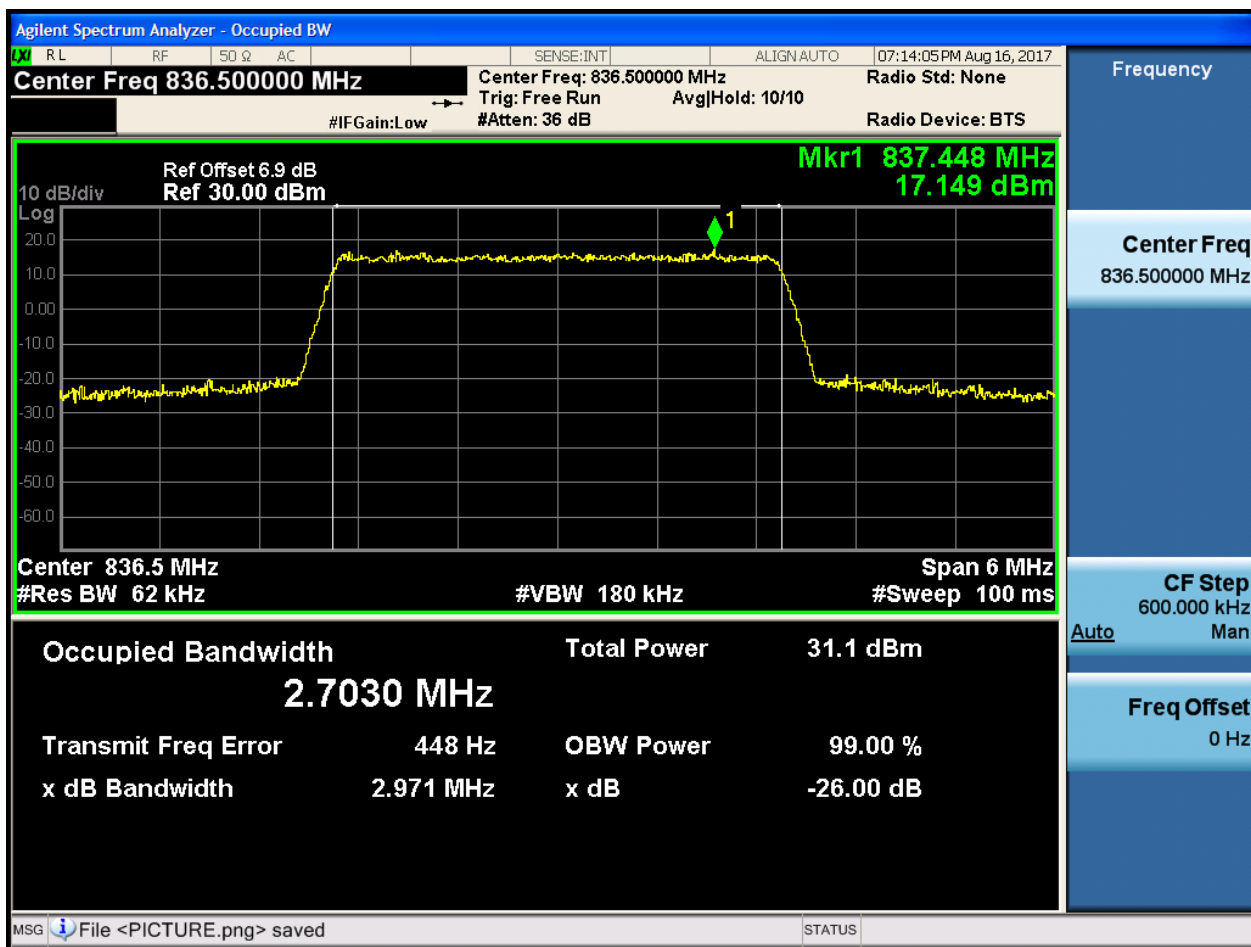
4.1.1.1.2.1.1 Test RB = RB15#0





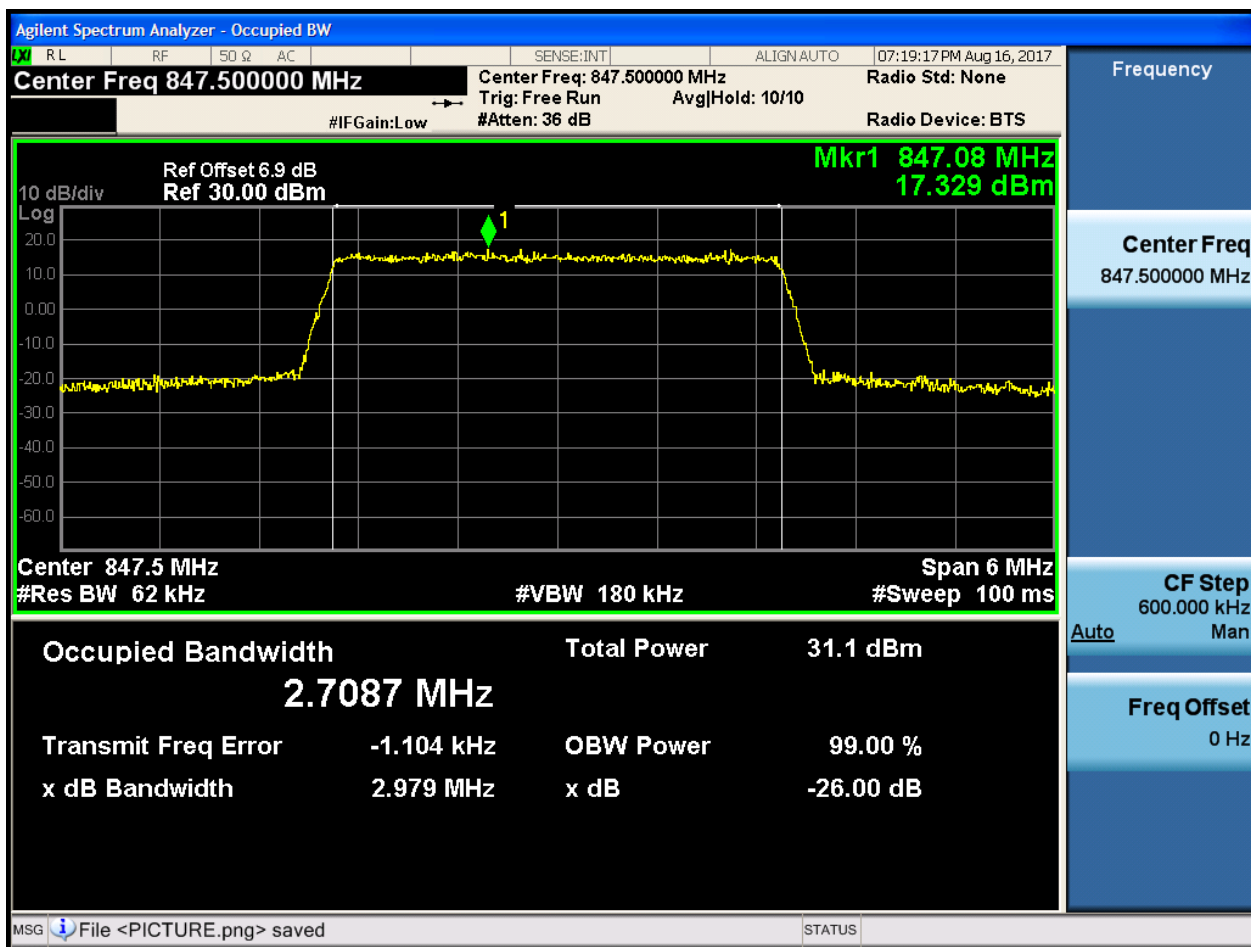
4.1.1.1.2.2 Test Channel = MCH

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

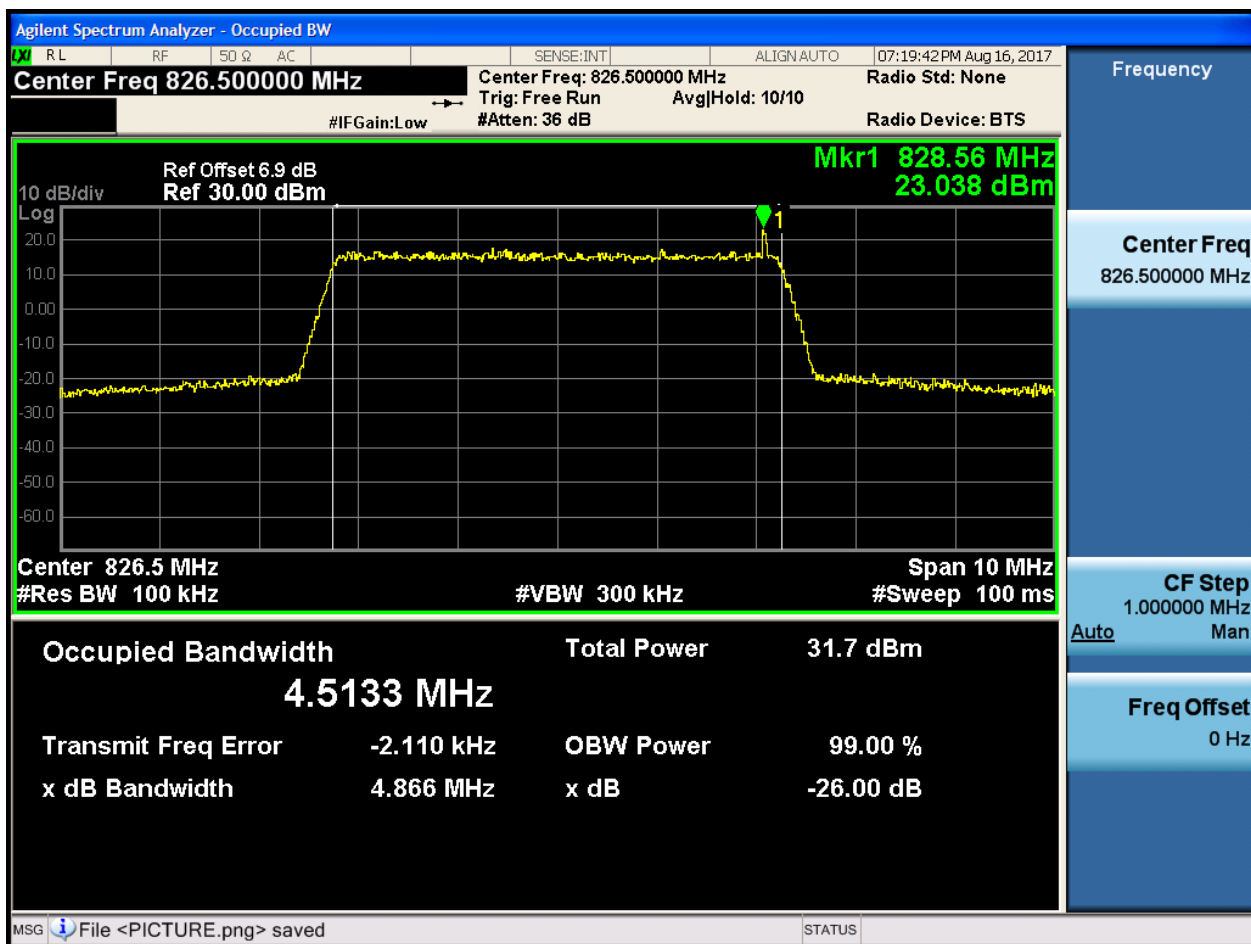




4.1.1.1.3 Test Bandwidth = 5

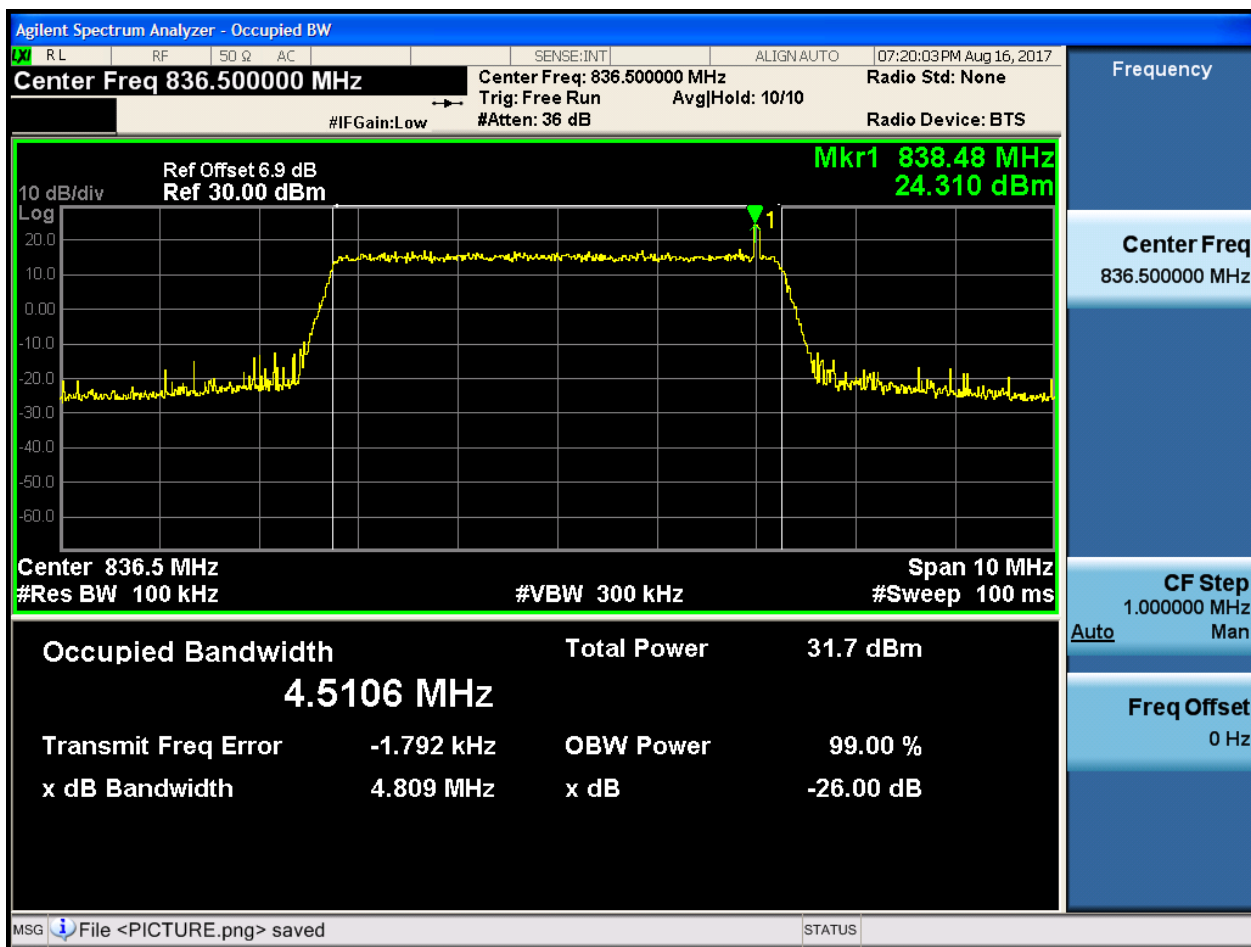
4.1.1.1.3.1 Test Channel = LCH

4.1.1.1.3.1.1 Test RB = RB25#0



4.1.1.1.3.2 Test Channel = MCH

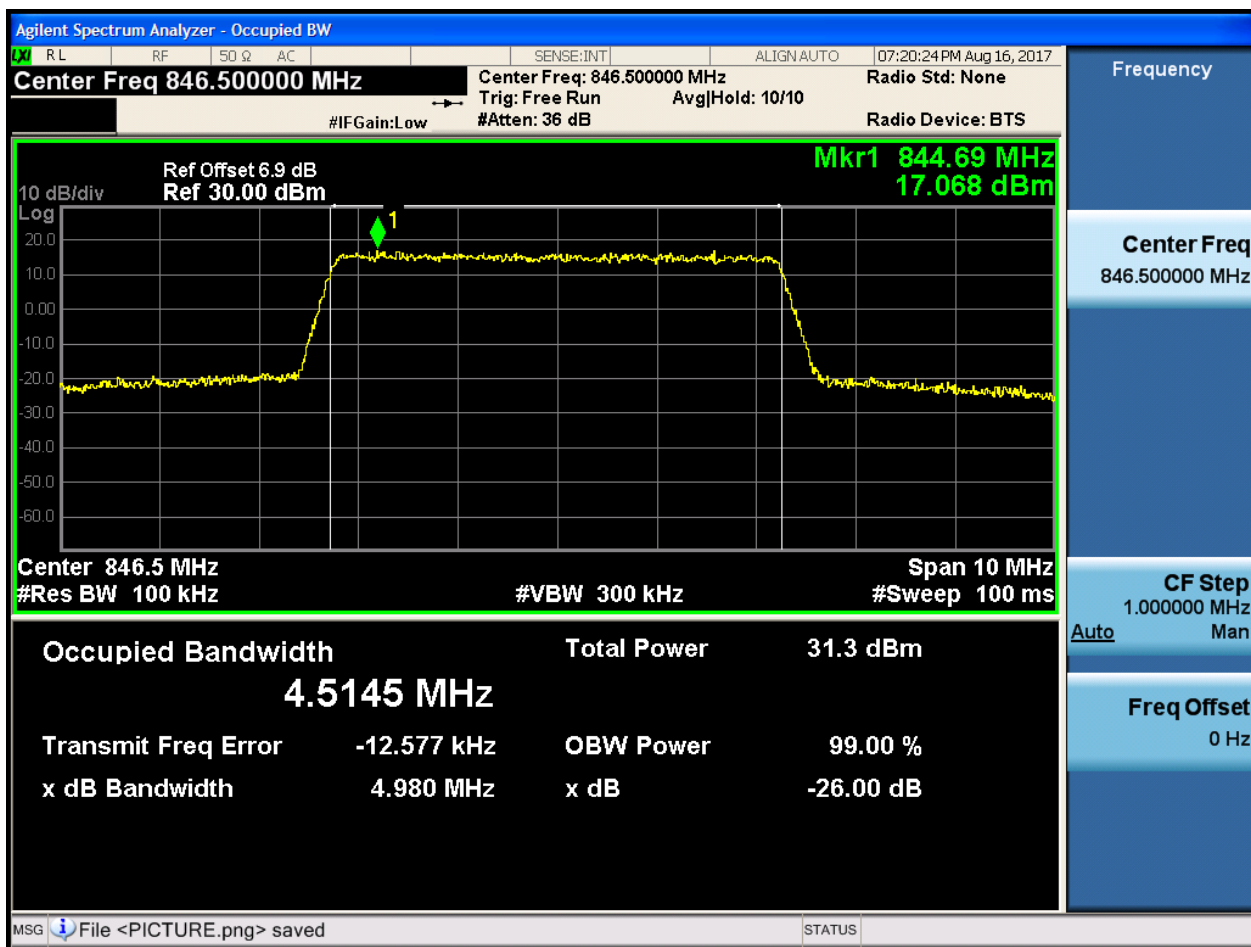
4.1.1.1.3.2.1 Test RB = RB25#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB25#0

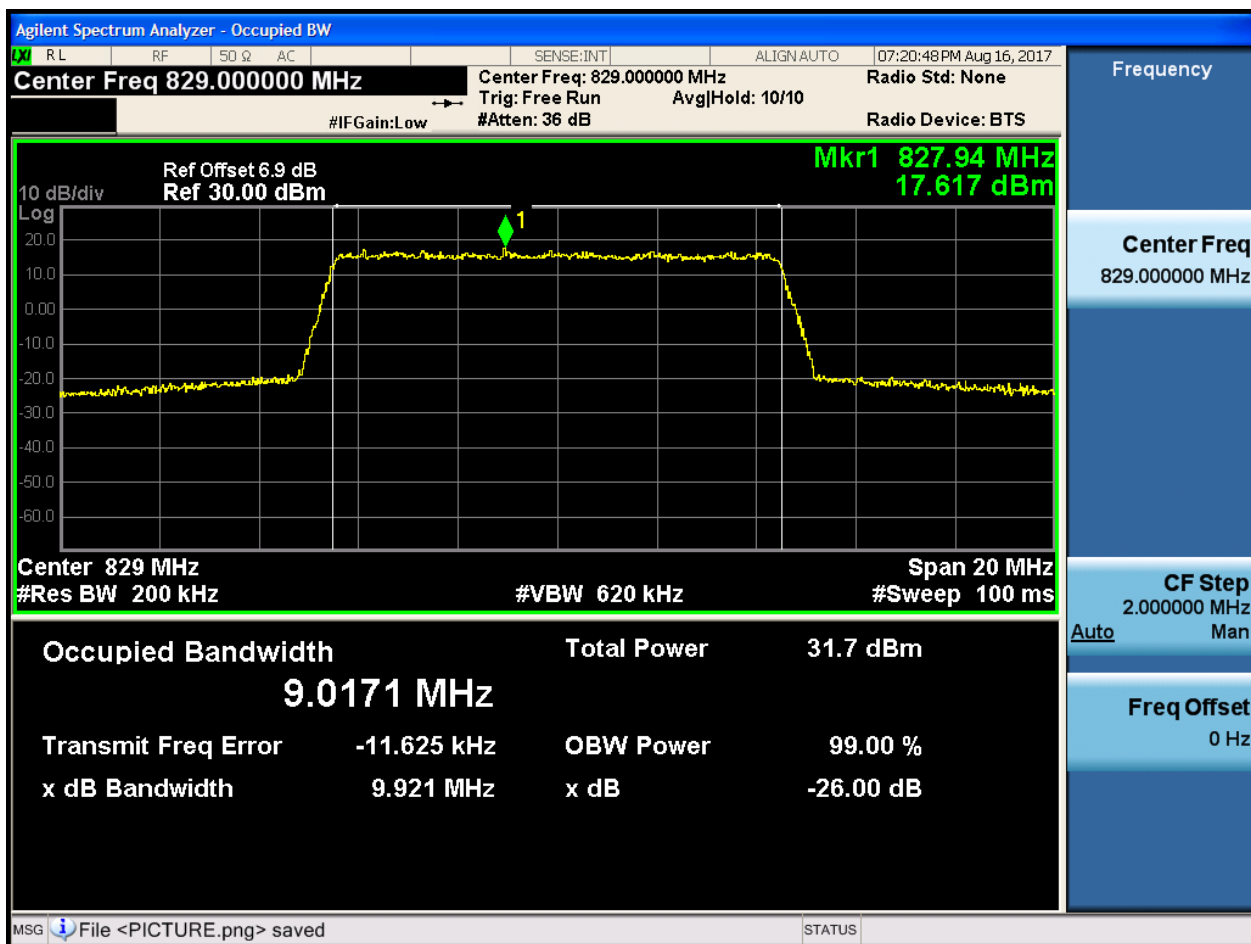




4.1.1.1.4 Test Bandwidth = 10

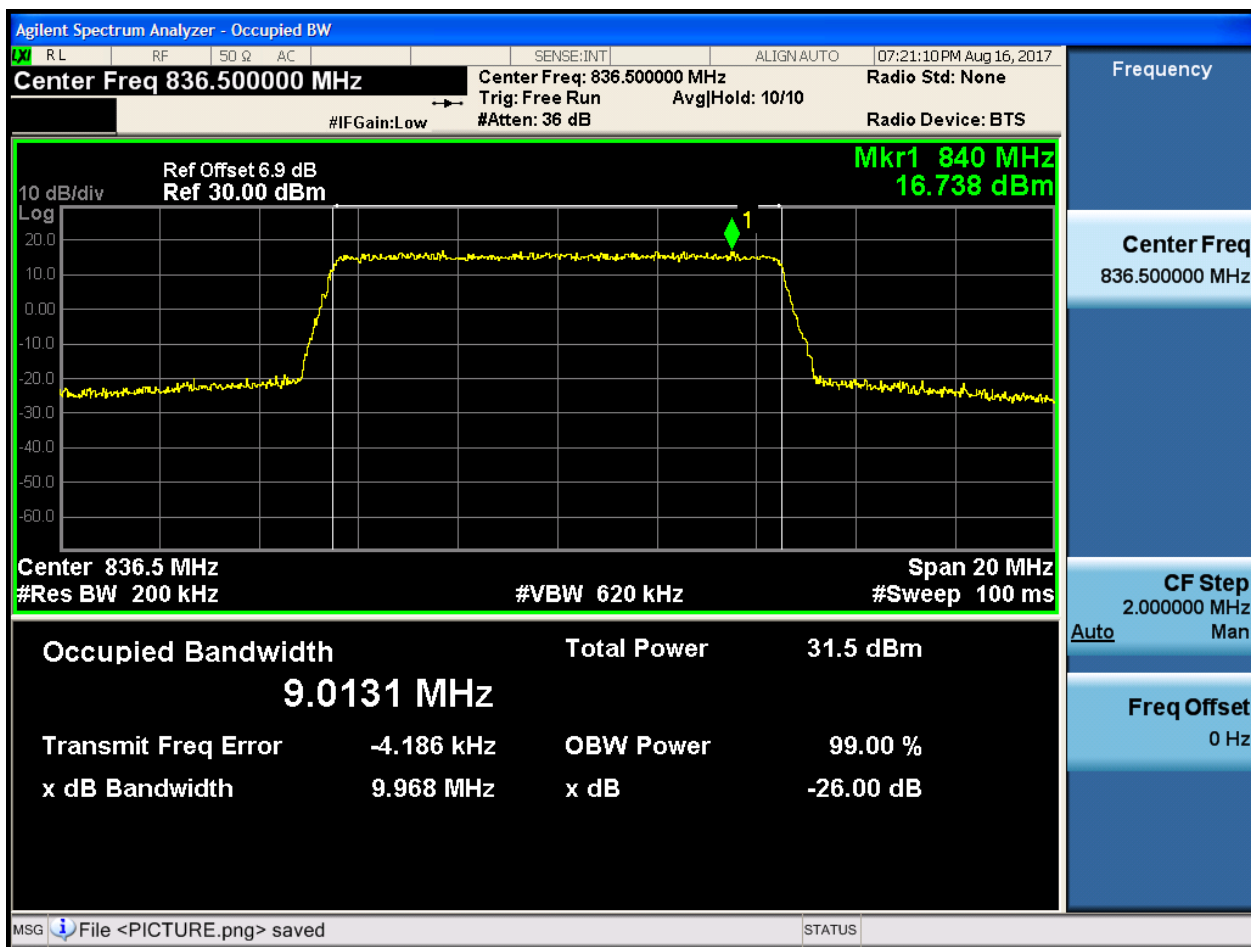
4.1.1.1.4.1 Test Channel = LCH

4.1.1.1.4.1.1 Test RB = RB50#0



4.1.1.1.4.2 Test Channel = MCH

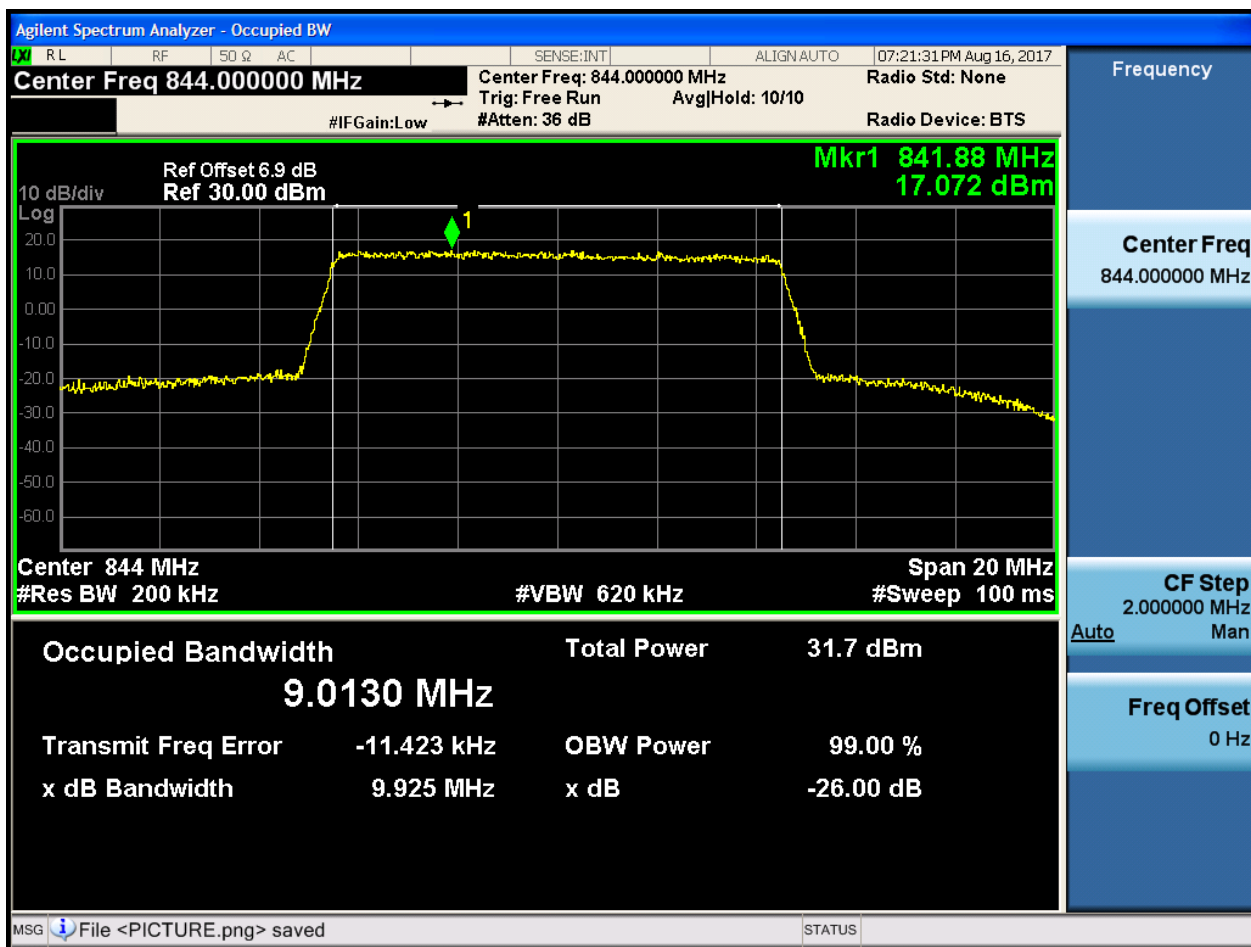
4.1.1.1.4.2.1 Test RB = RB50#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB50#0

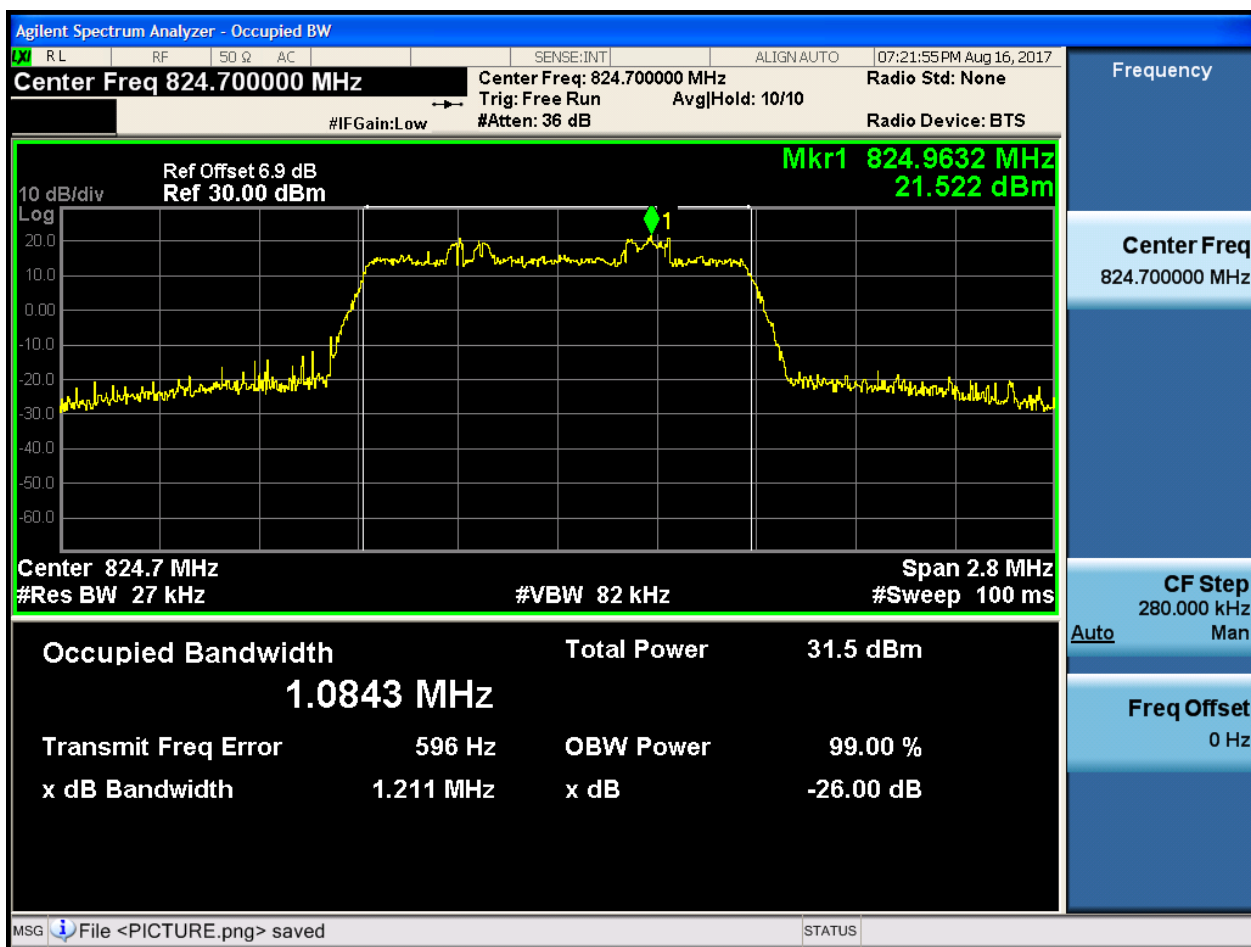


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 1.4

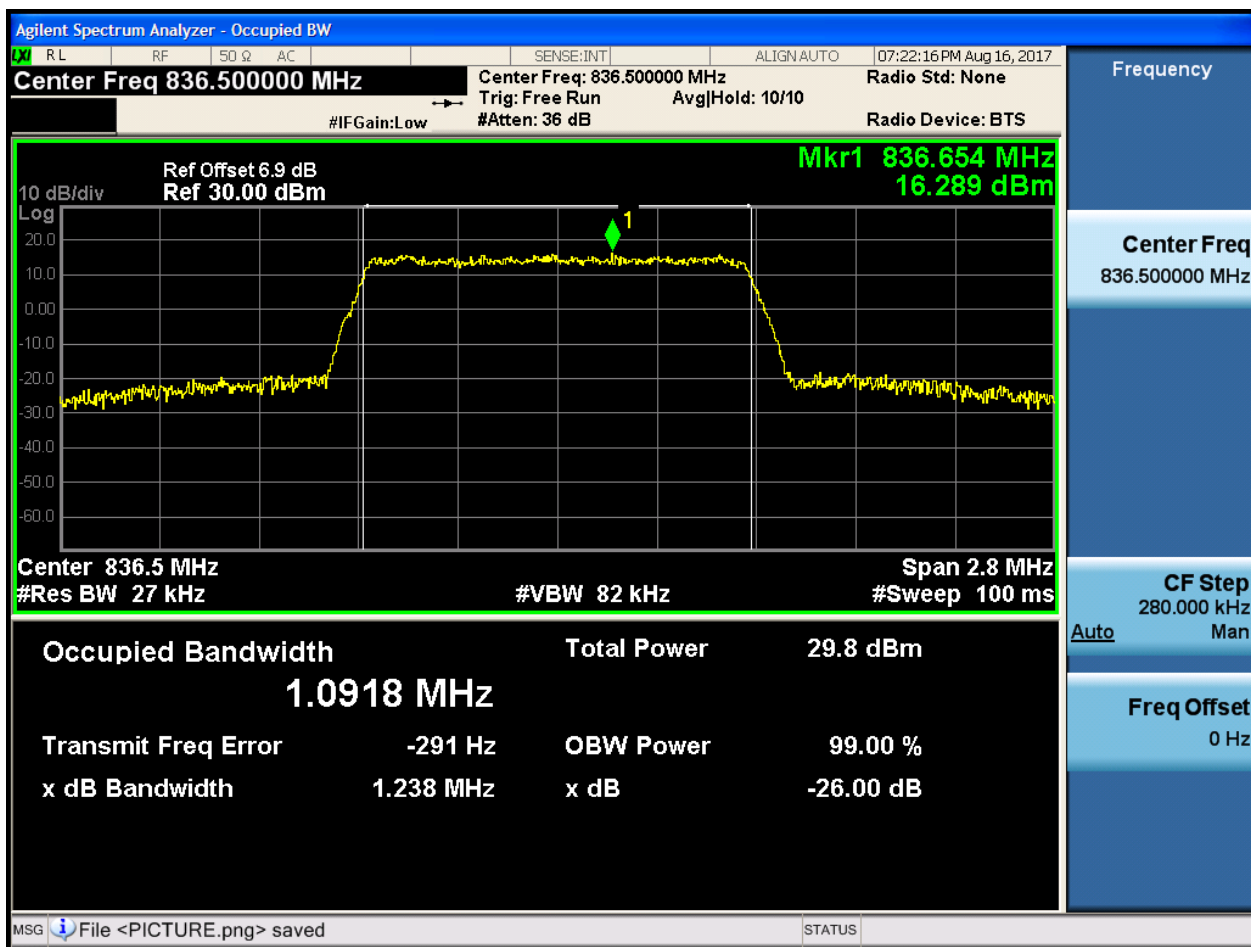
4.1.1.2.1.1 Test Channel = LCH

4.1.1.2.1.1.1 Test RB = RB6#0



4.1.1.2.1.2 Test Channel = MCH

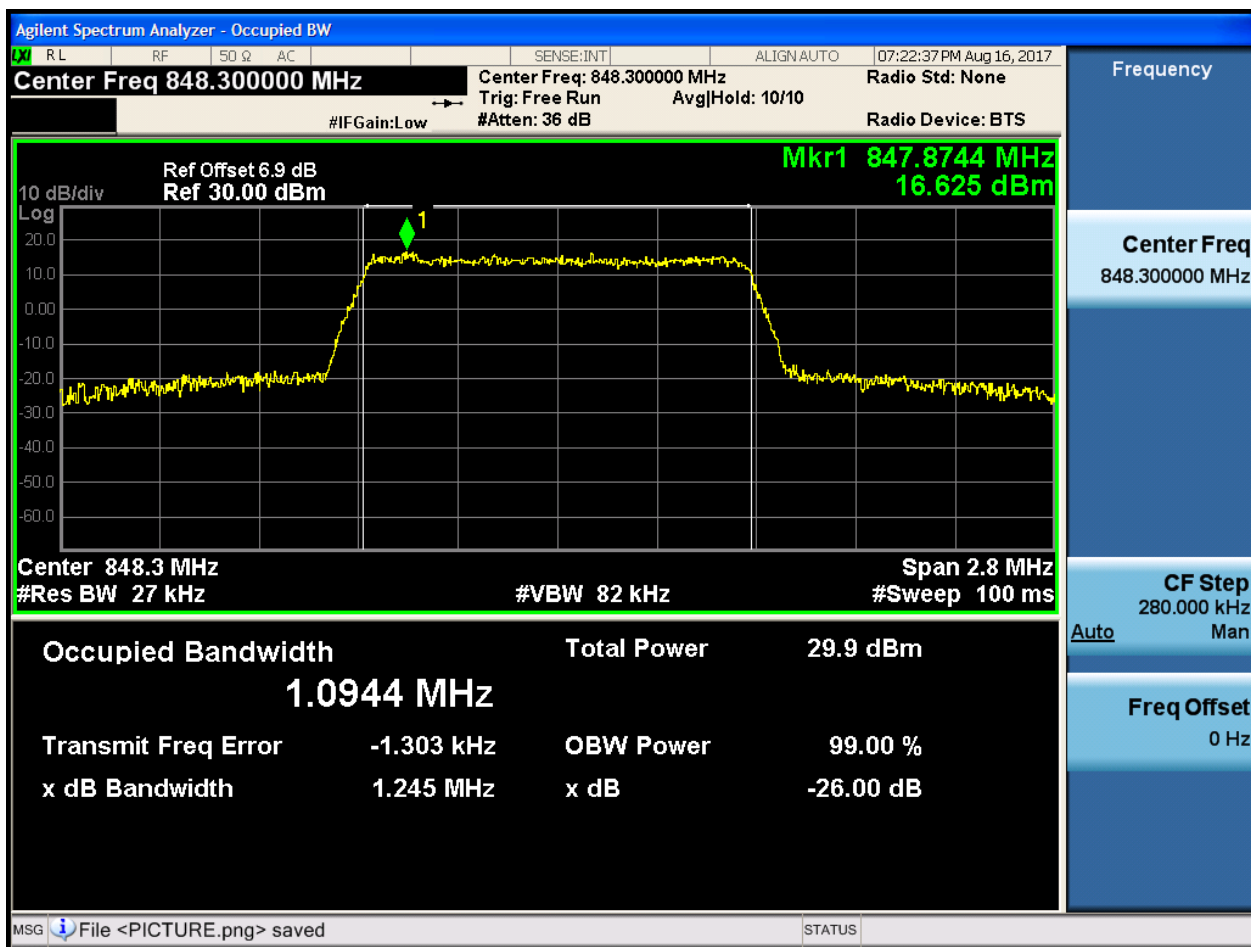
4.1.1.2.1.2.1 Test RB = RB6#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB6#0

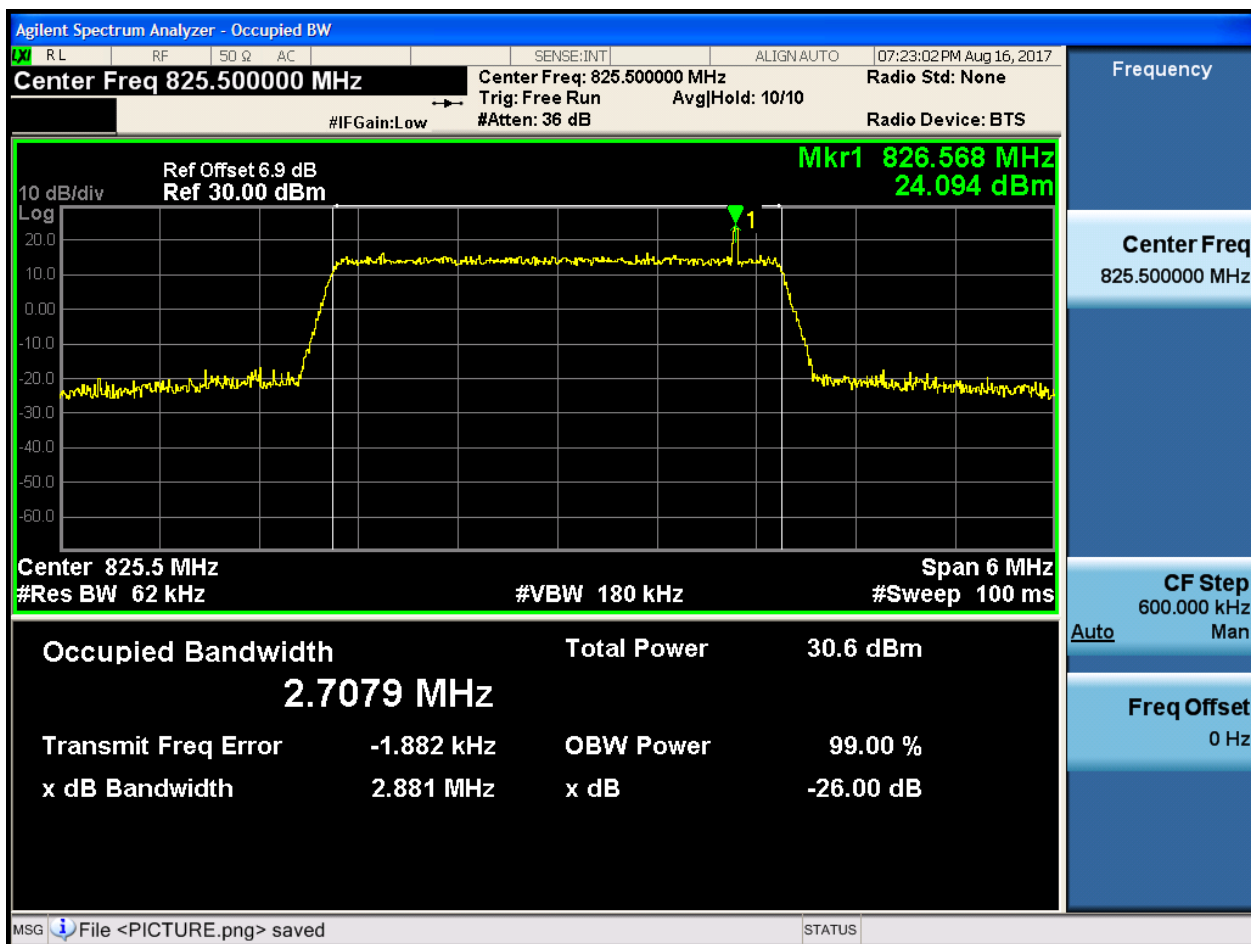




4.1.1.2.2 Test Bandwidth = 3

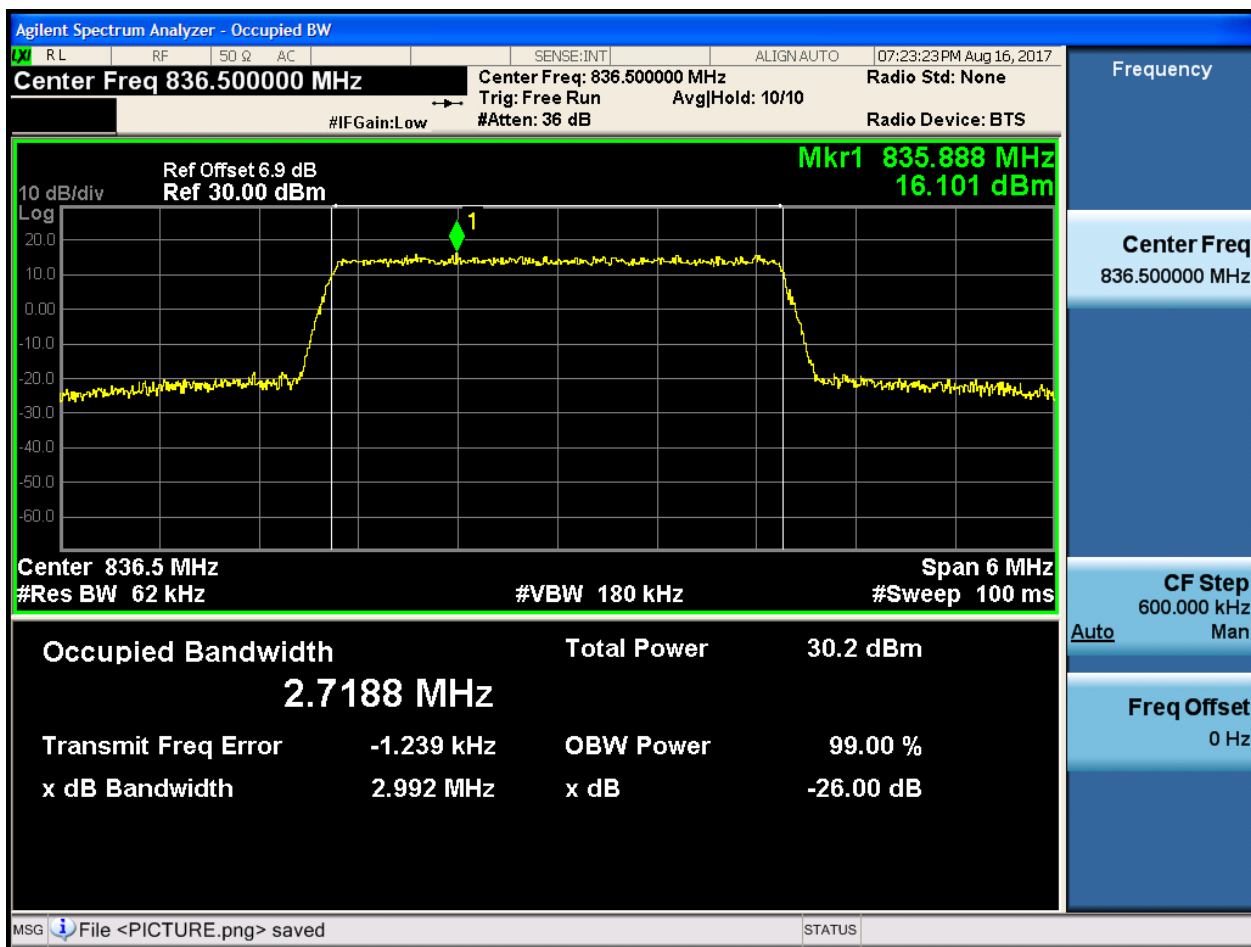
4.1.1.2.2.1 Test Channel = LCH

4.1.1.2.2.1.1 Test RB = RB15#0



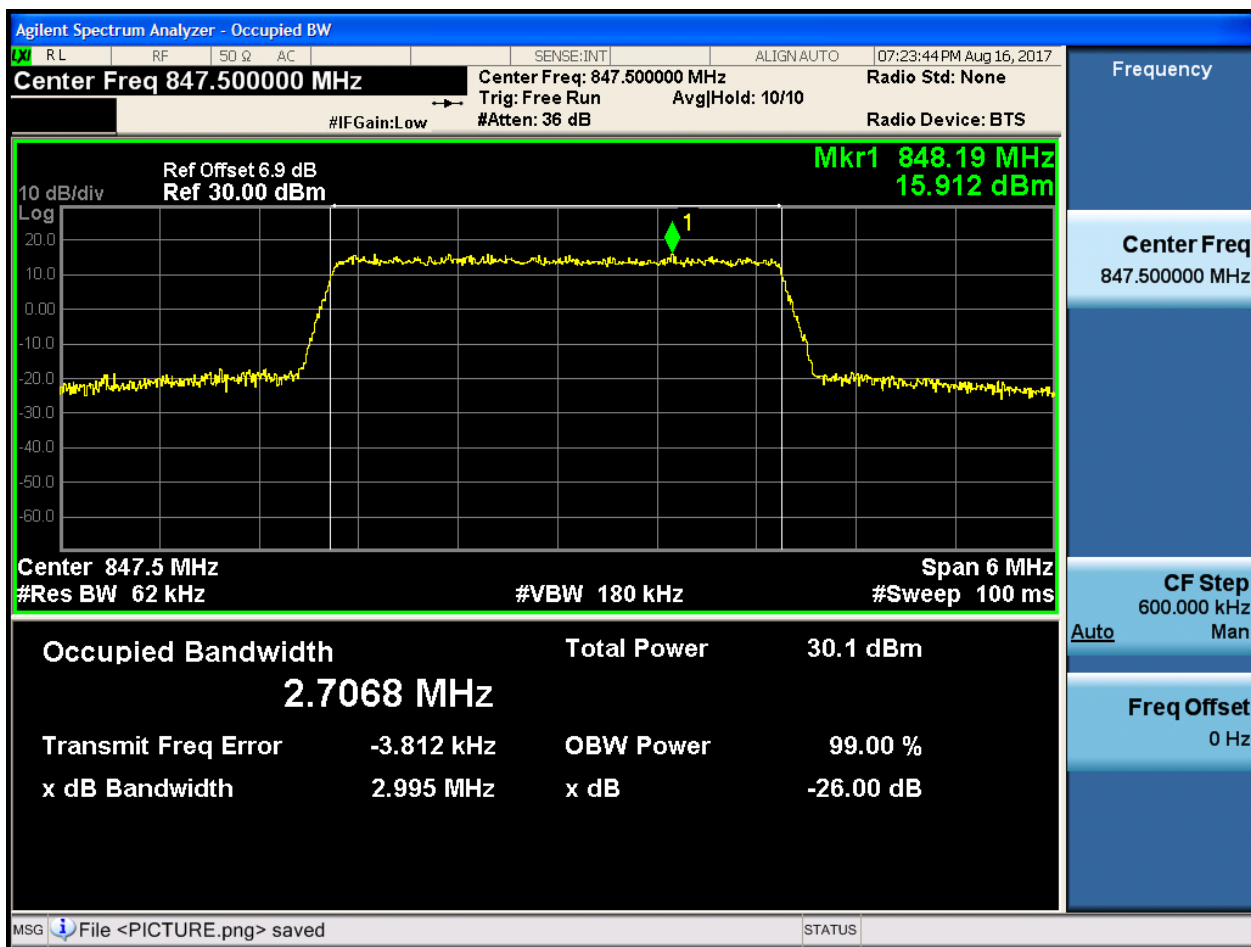
4.1.1.2.2.2 Test Channel = MCH

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

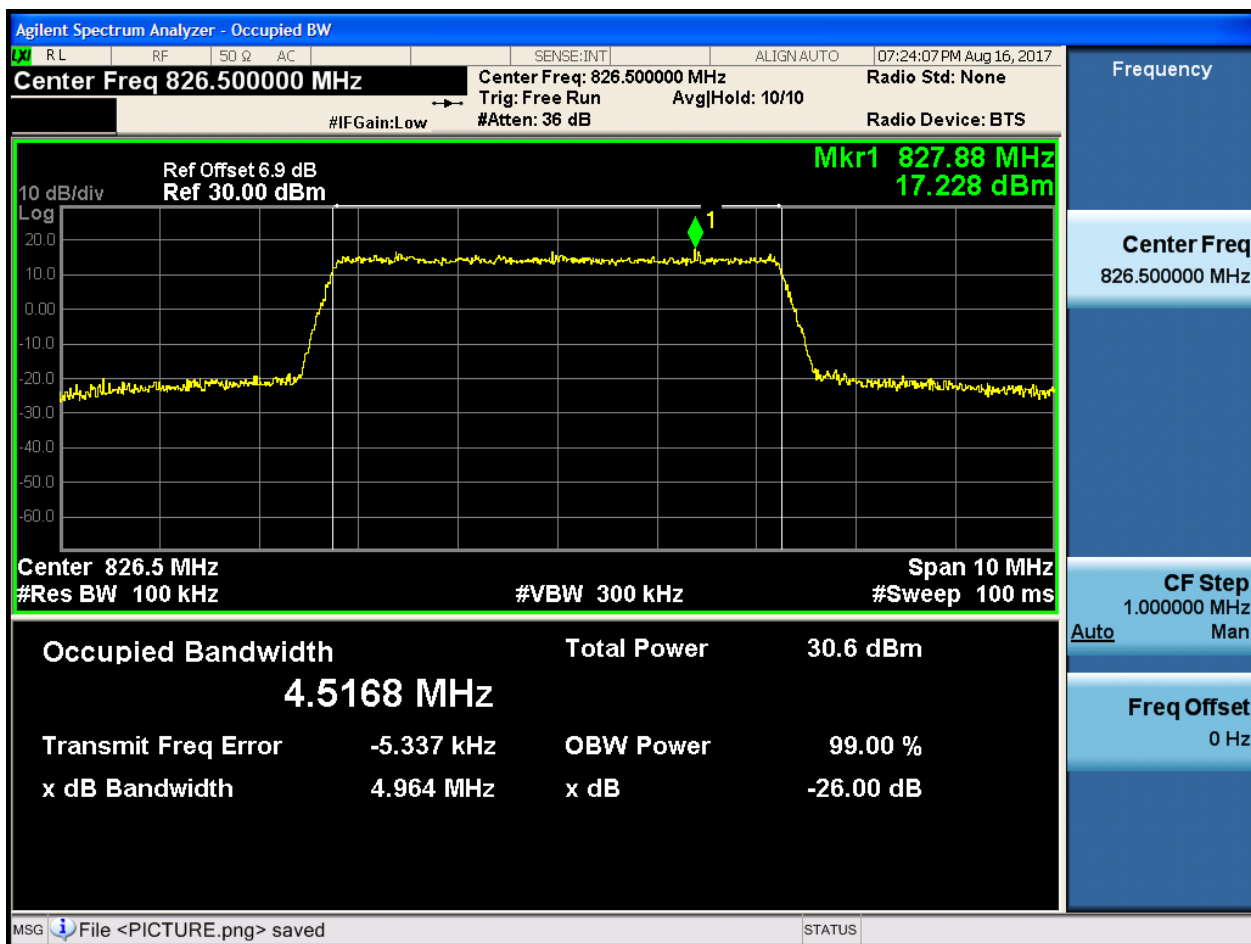




4.1.1.2.3 Test Bandwidth = 5

4.1.1.2.3.1 Test Channel = LCH

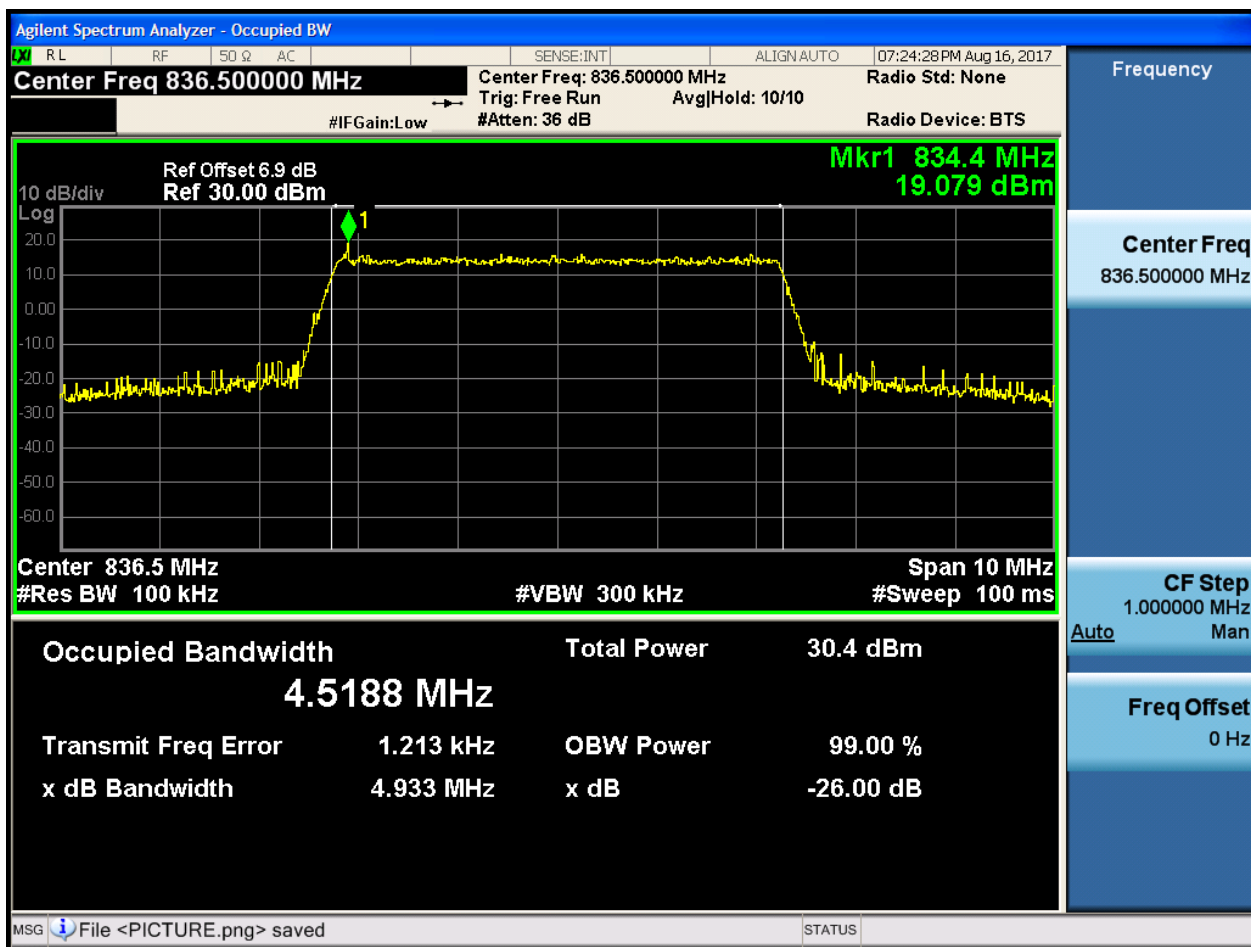
4.1.1.2.3.1.1 Test RB = RB25#0





4.1.1.2.3.2 Test Channel = MCH

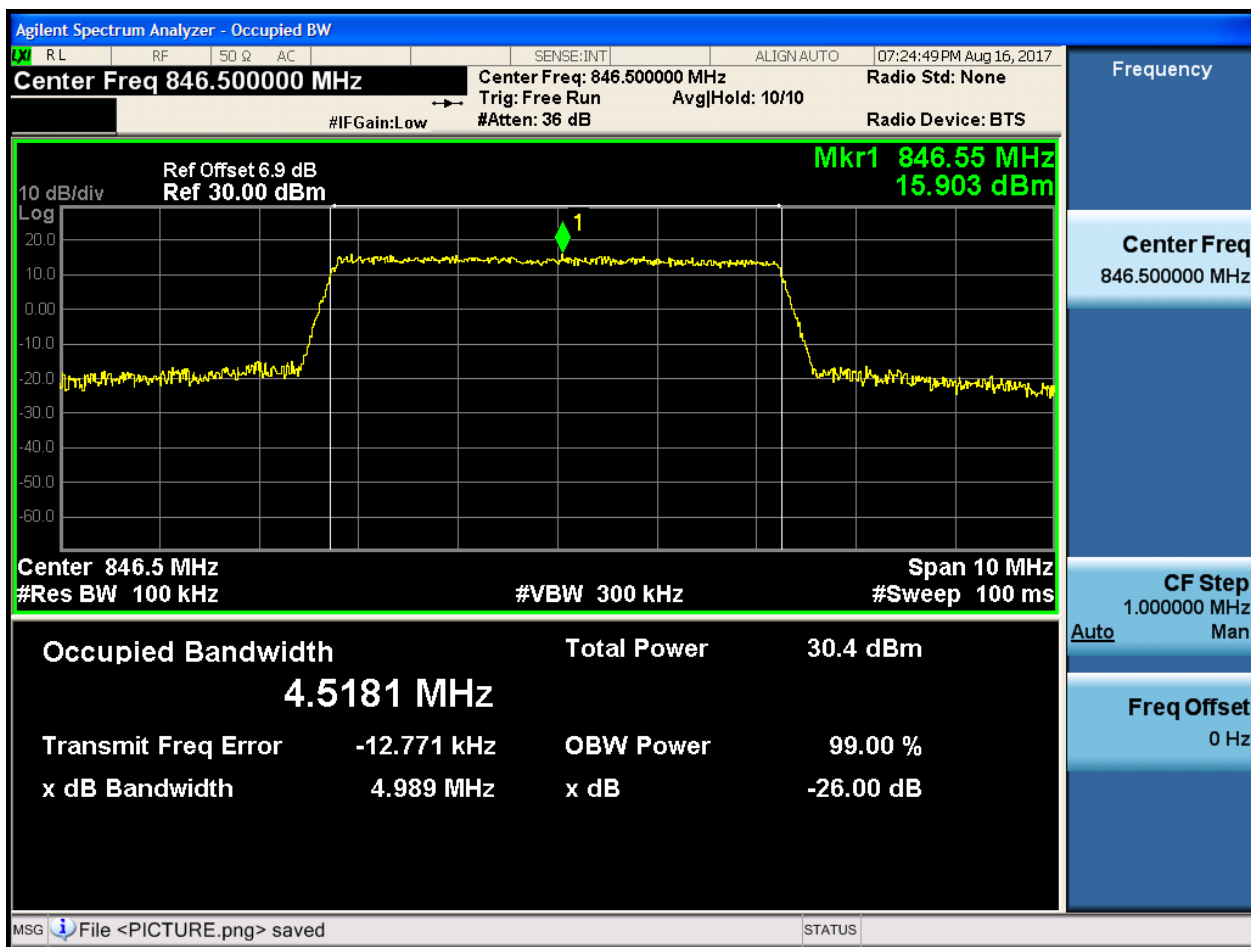
4.1.1.2.3.2.1 Test RB = RB25#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB25#0

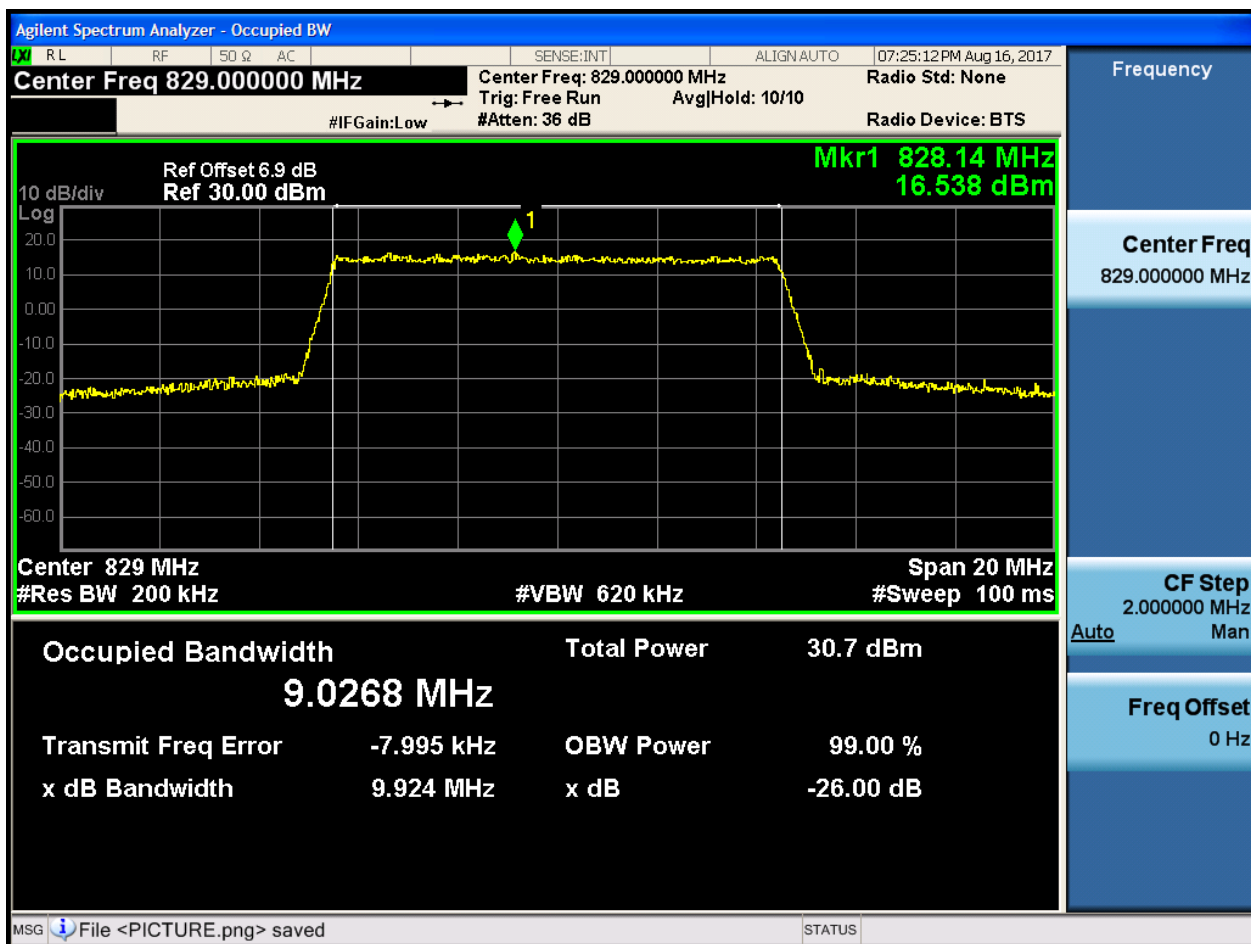




4.1.1.2.4 Test Bandwidth = 10

4.1.1.2.4.1 Test Channel = LCH

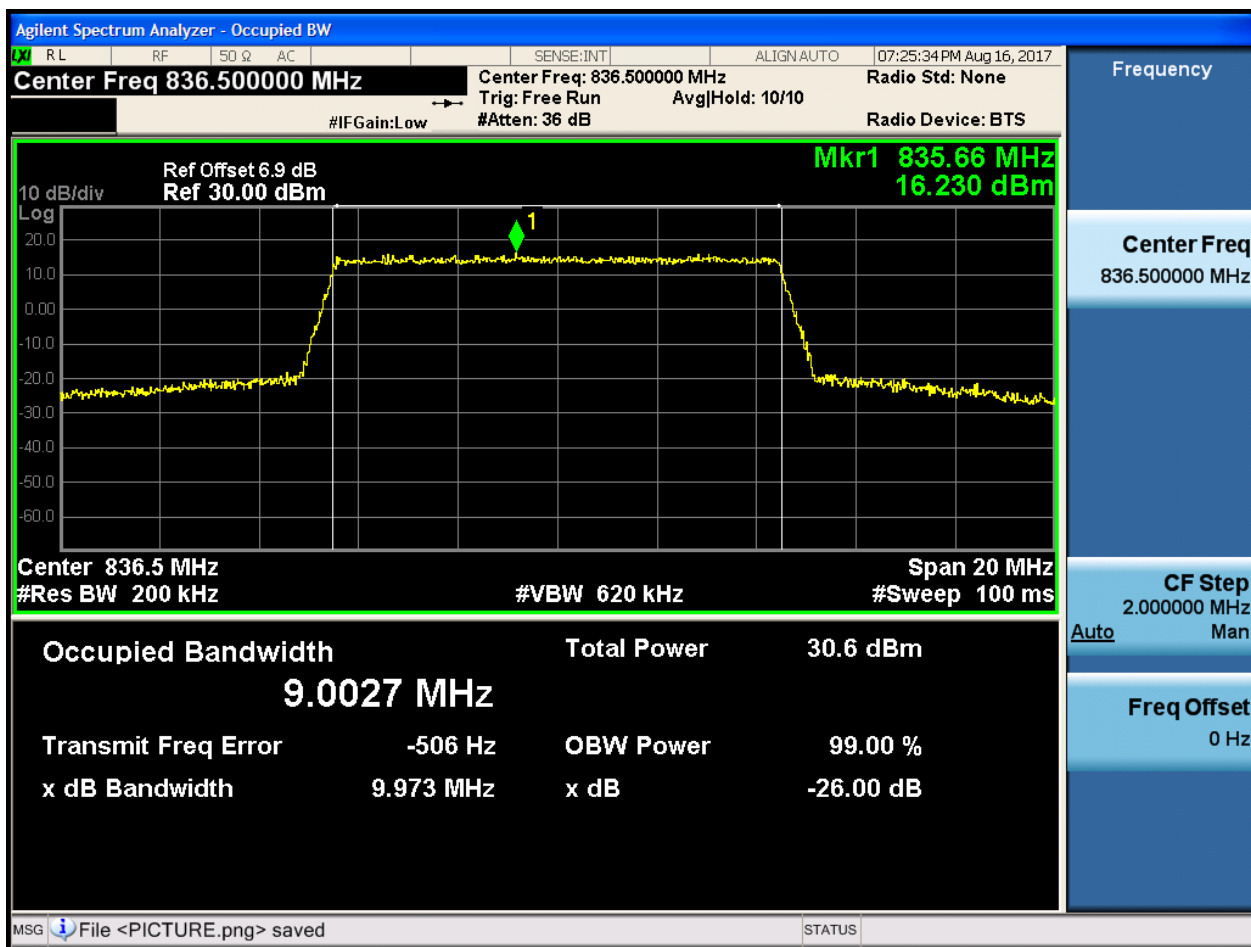
4.1.1.2.4.1.1 Test RB = RB50#0





4.1.1.2.4.2 Test Channel = MCH

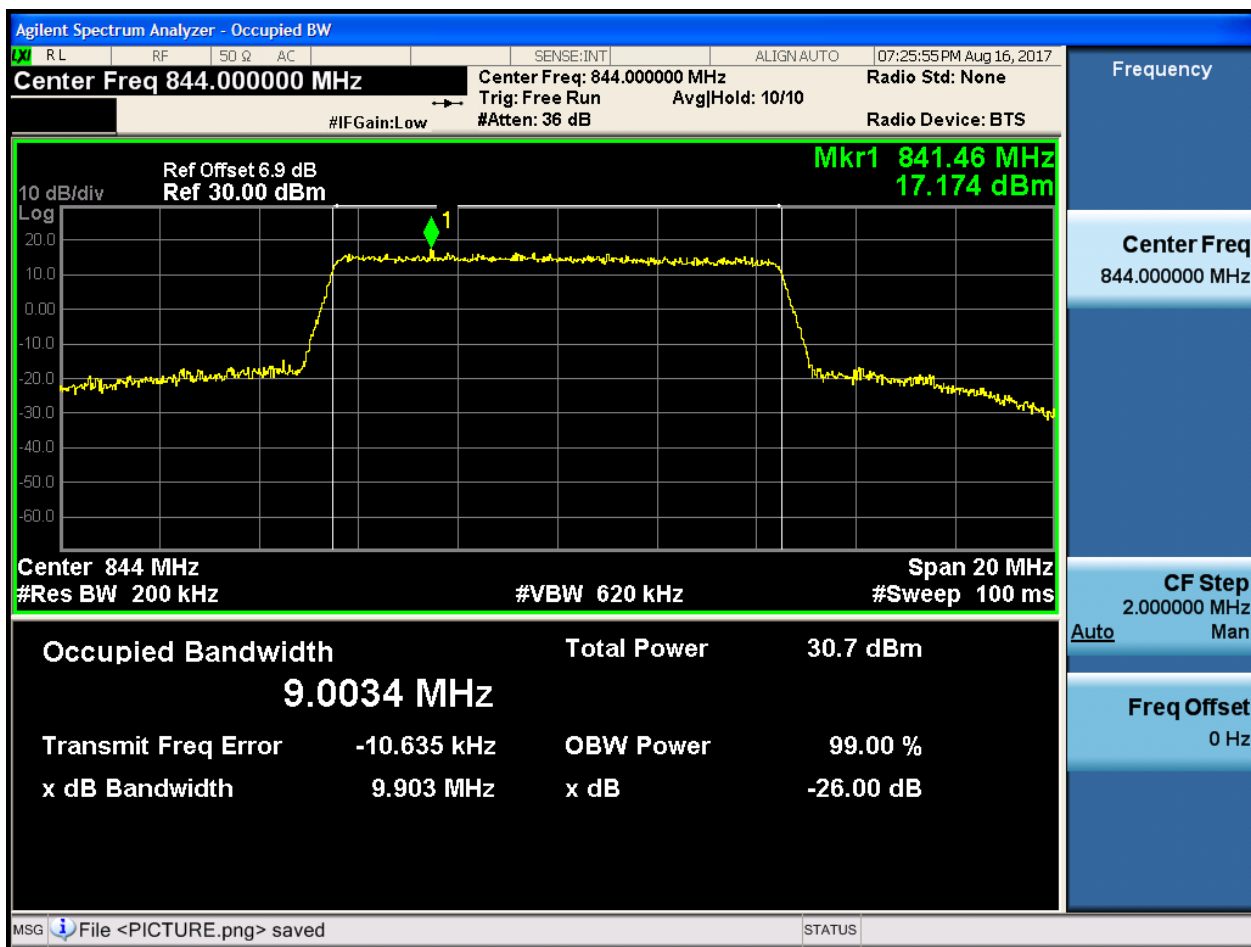
4.1.1.2.4.2.1 Test RB = RB50#0





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

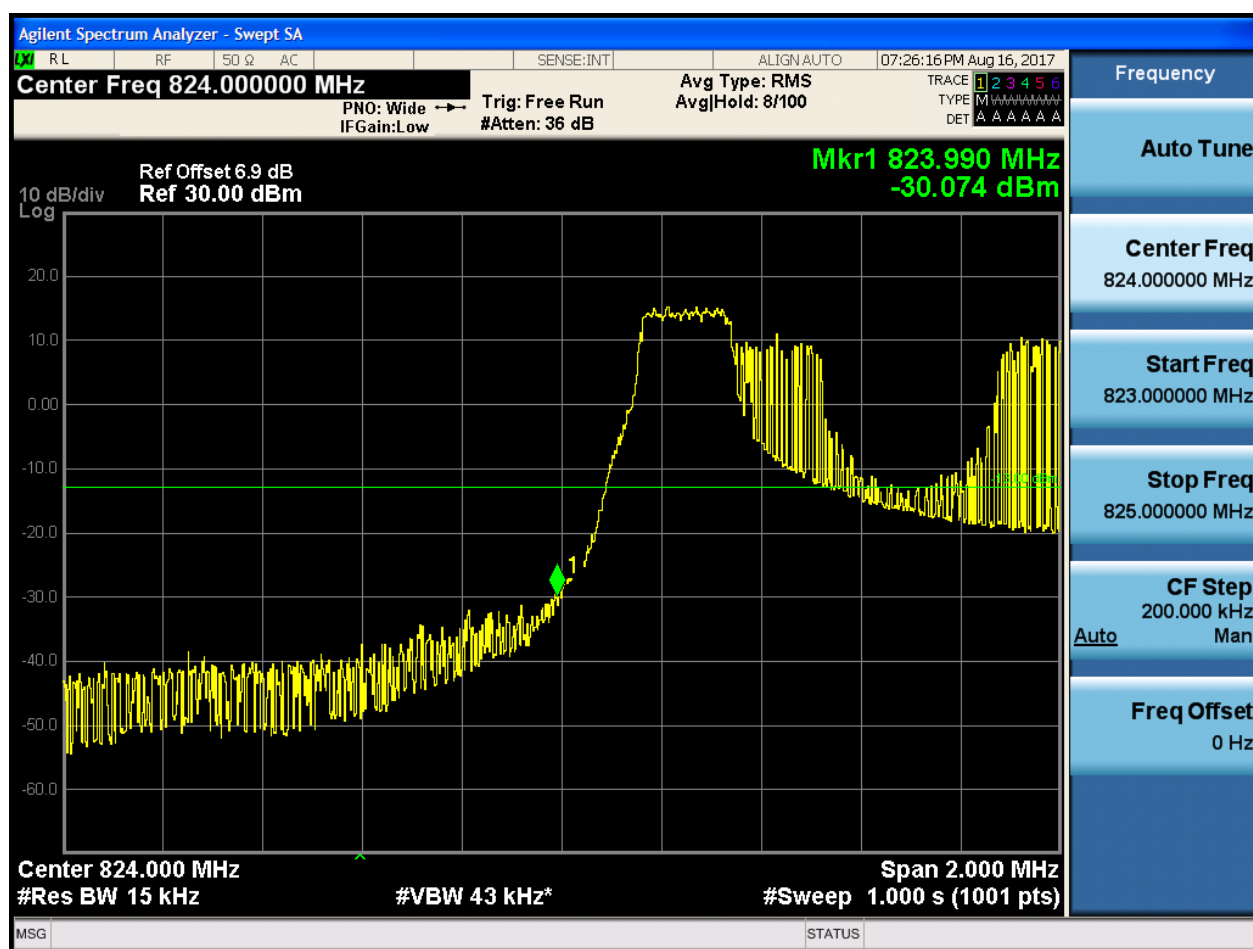
5.1.1 Test Band = BAND5

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





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 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)

Trig: Free Run
#Atten: 36 dB

Avg Type: RMS
Avg/Hold: 8/100

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

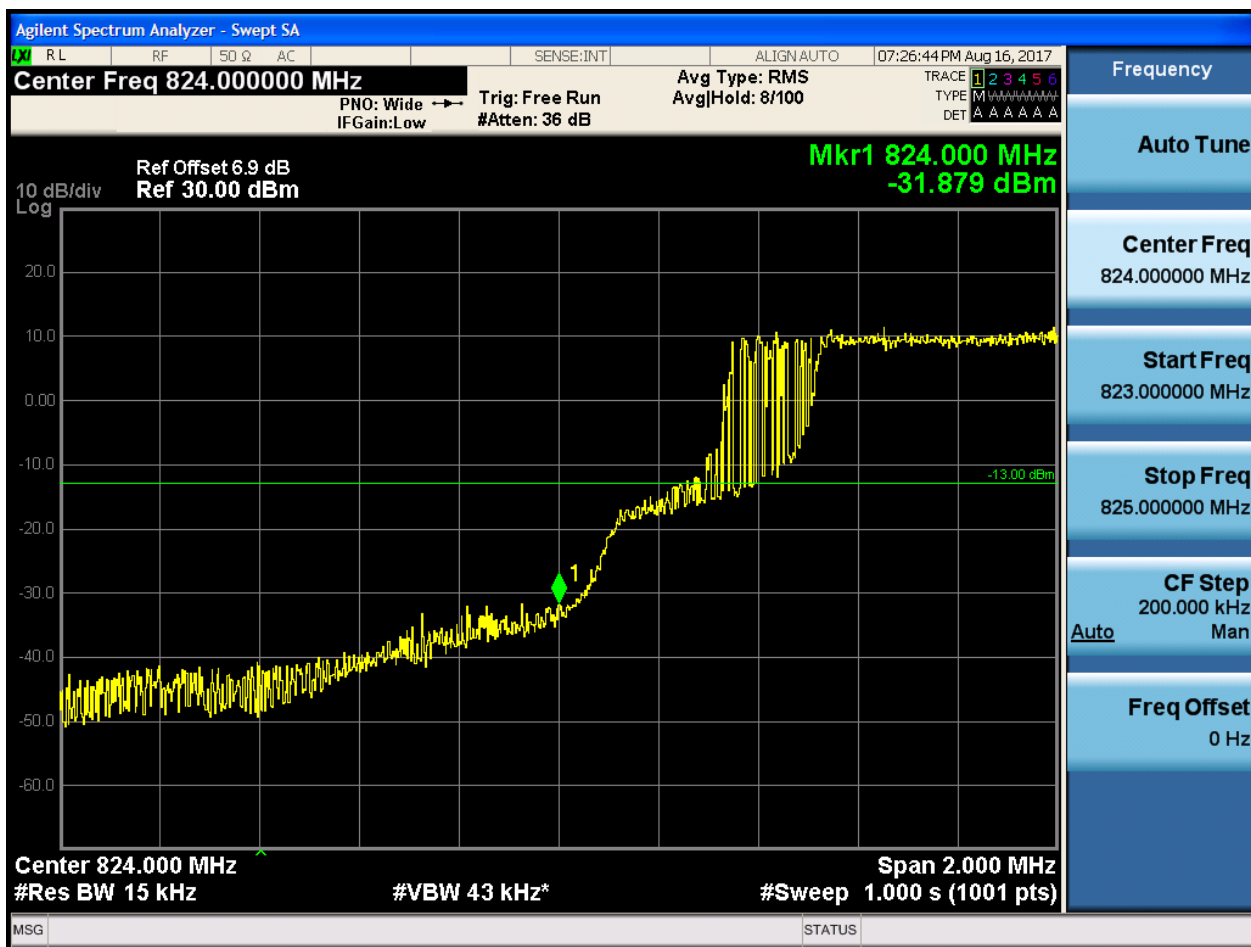
Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

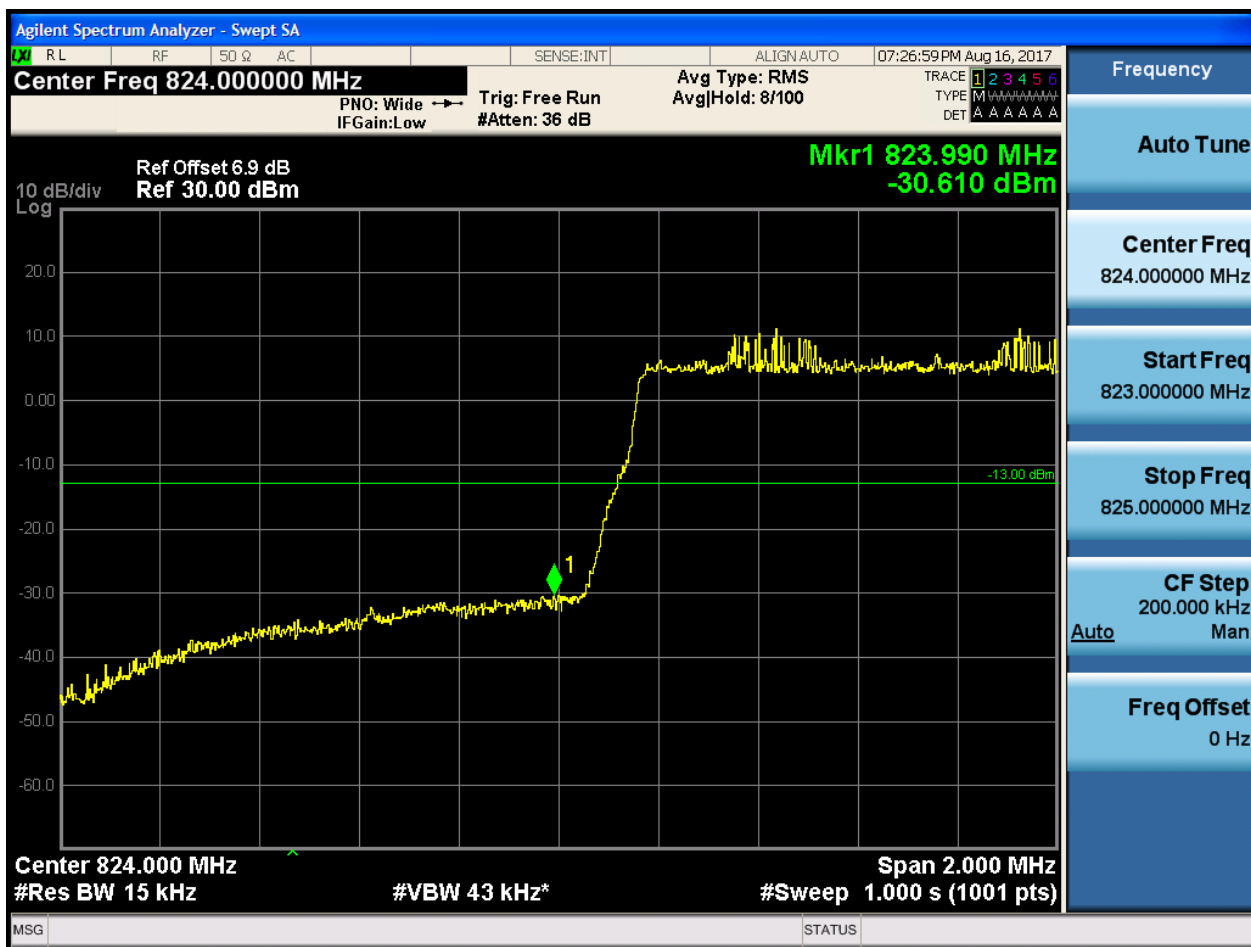


5.1.1.1.1.3 Test RB = RB3#2





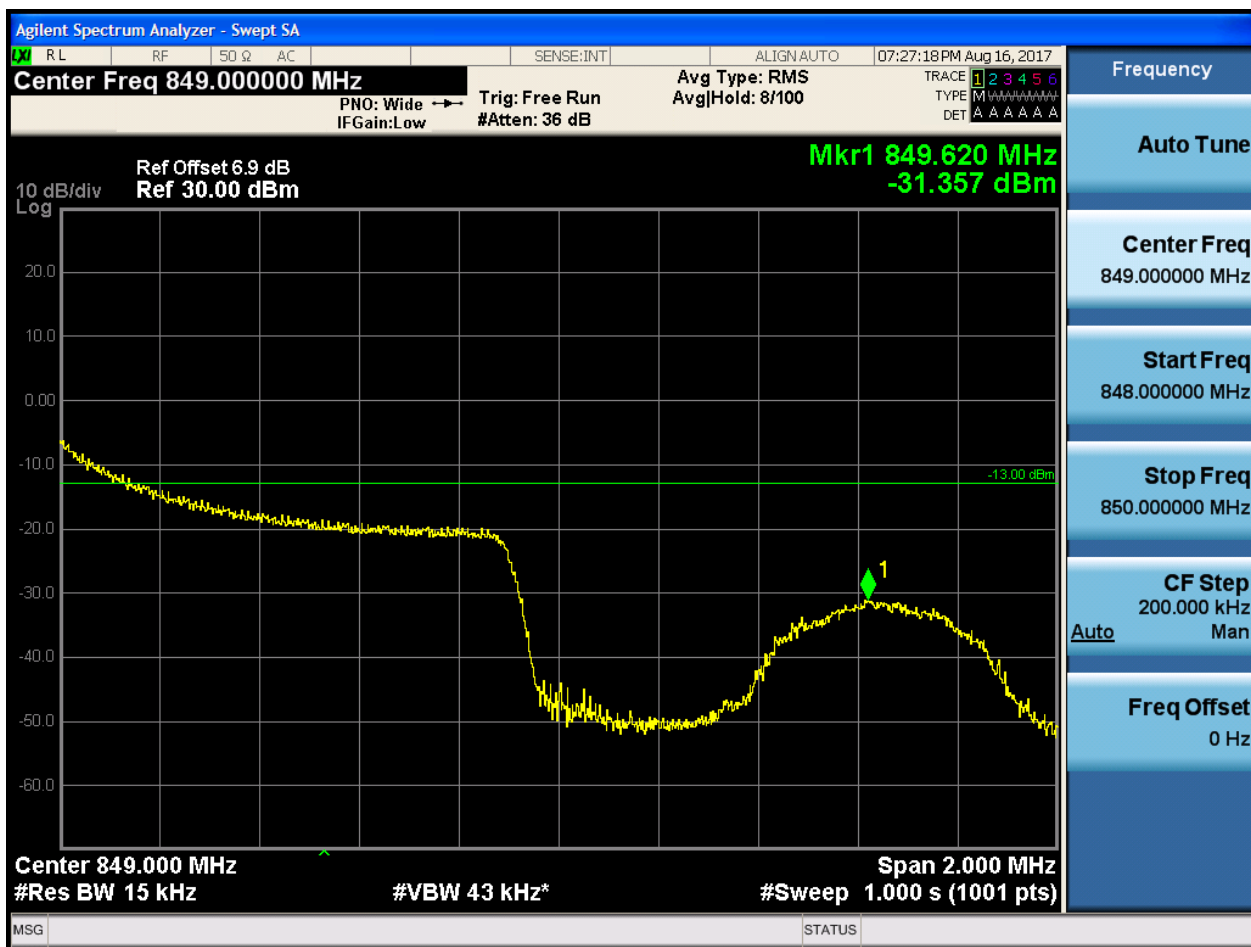
5.1.1.1.1.4 Test RB = RB6#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:27:33 PM Aug 16, 2017

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

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

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-26.266 dBm

10 dB/div
Log

Center 849.000 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
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

Center Freq 849.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Trig: Free Run
#Atten: 36 dB

Avg Type: RMS
Avg|Hold: 8/100

Mkr1 849.060 MHz
-25.649 dBm

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 07:28:01PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide → Trig: Free Run AvgHold: 8/100
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 6.9 dB
Ref 30.00 dBm

Mkr1 849.160 MHz
-30.874 dBm

10 dB/div
Log

Center 849.000 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
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Auto Man

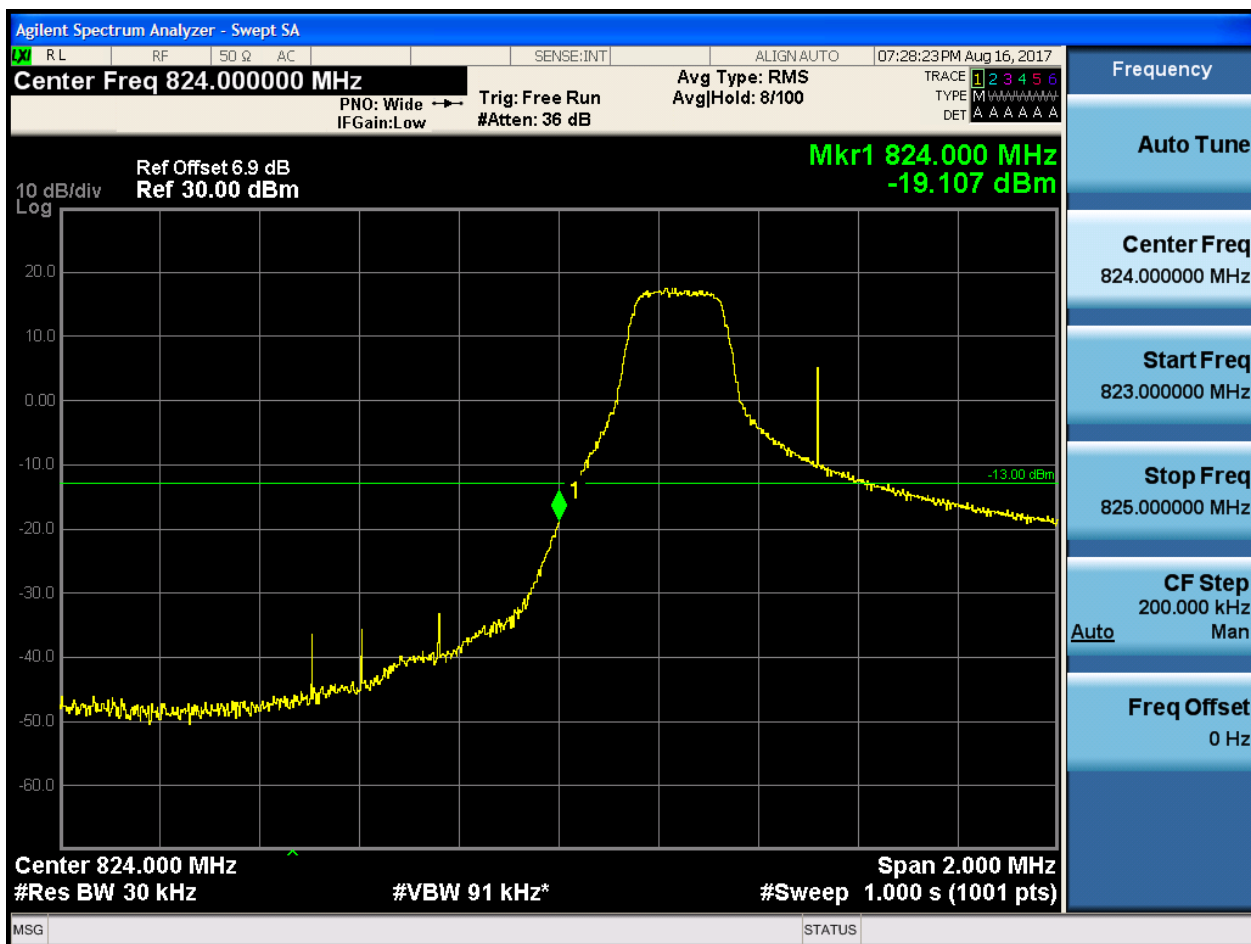
Freq Offset
0 Hz



5.1.1.1.2 Test Bandwidth = 3

5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:28:37 PM Aug 16, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

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

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-33.359 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 30 kHz
#VBW 91 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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:28:51PM Aug 16, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-30.651 dBm

10 dB/div
Log

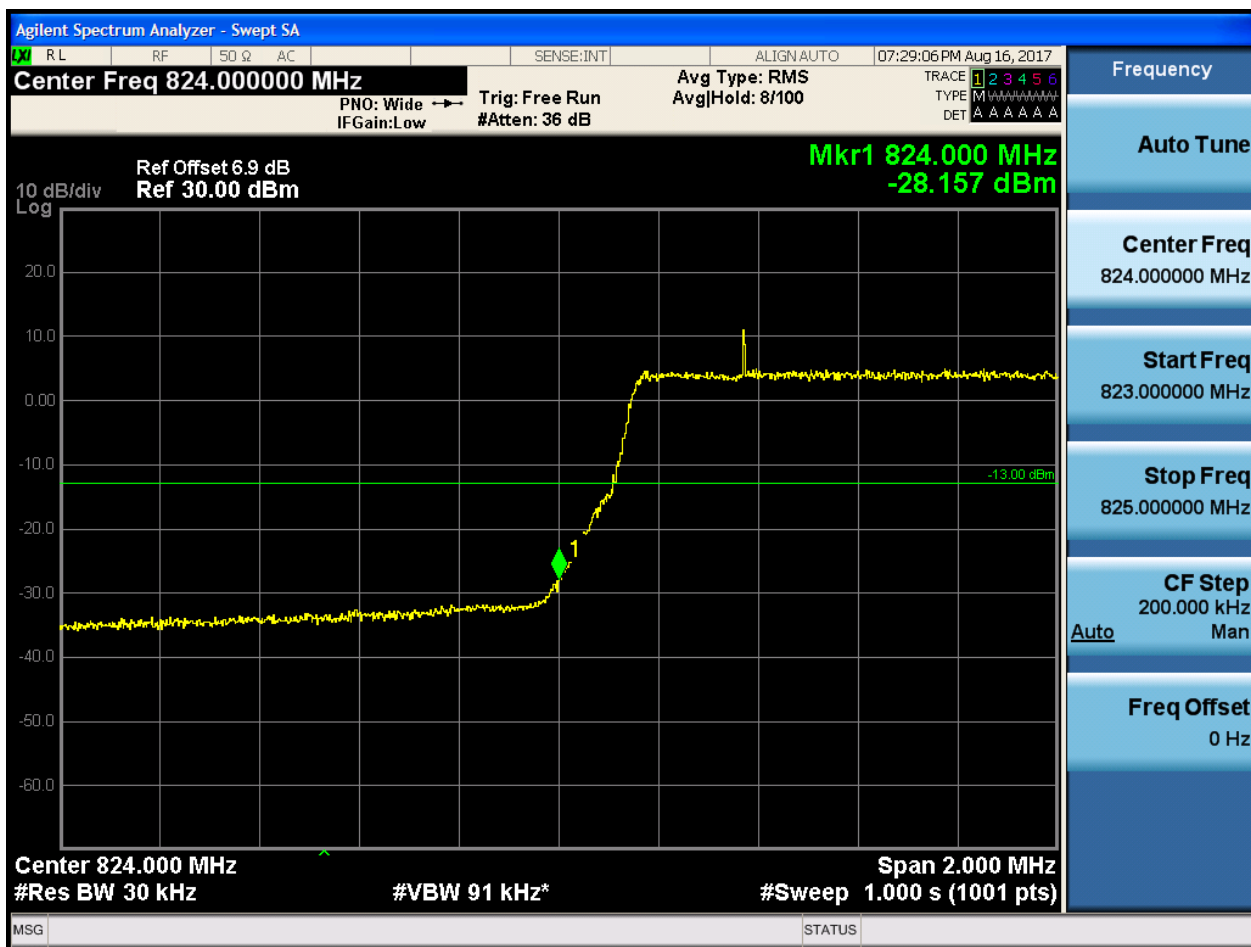
Center 824.000 MHz
#Res BW 30 kHz
#VBW 91 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

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



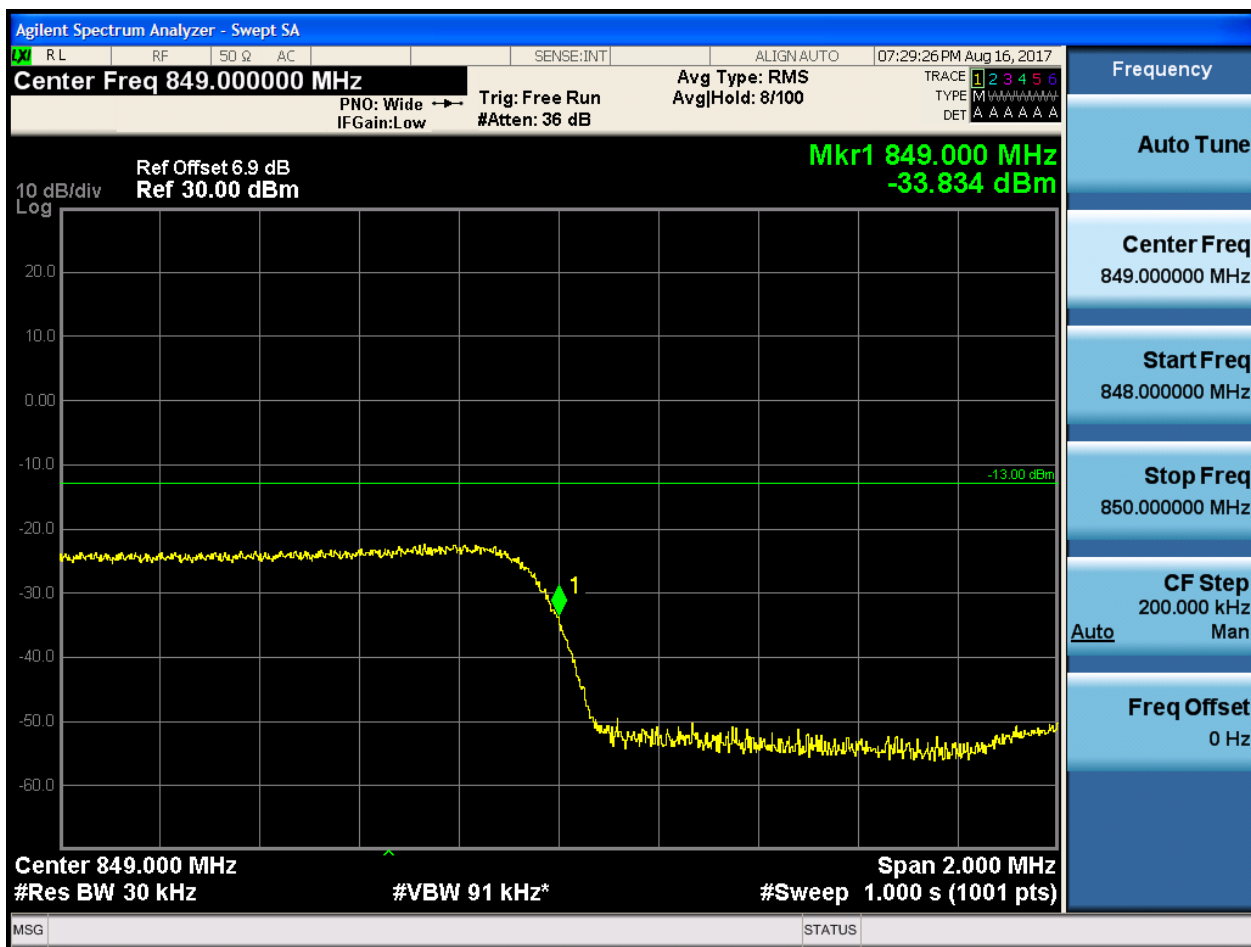
5.1.1.1.2.1.4 Test RB = RB15#0





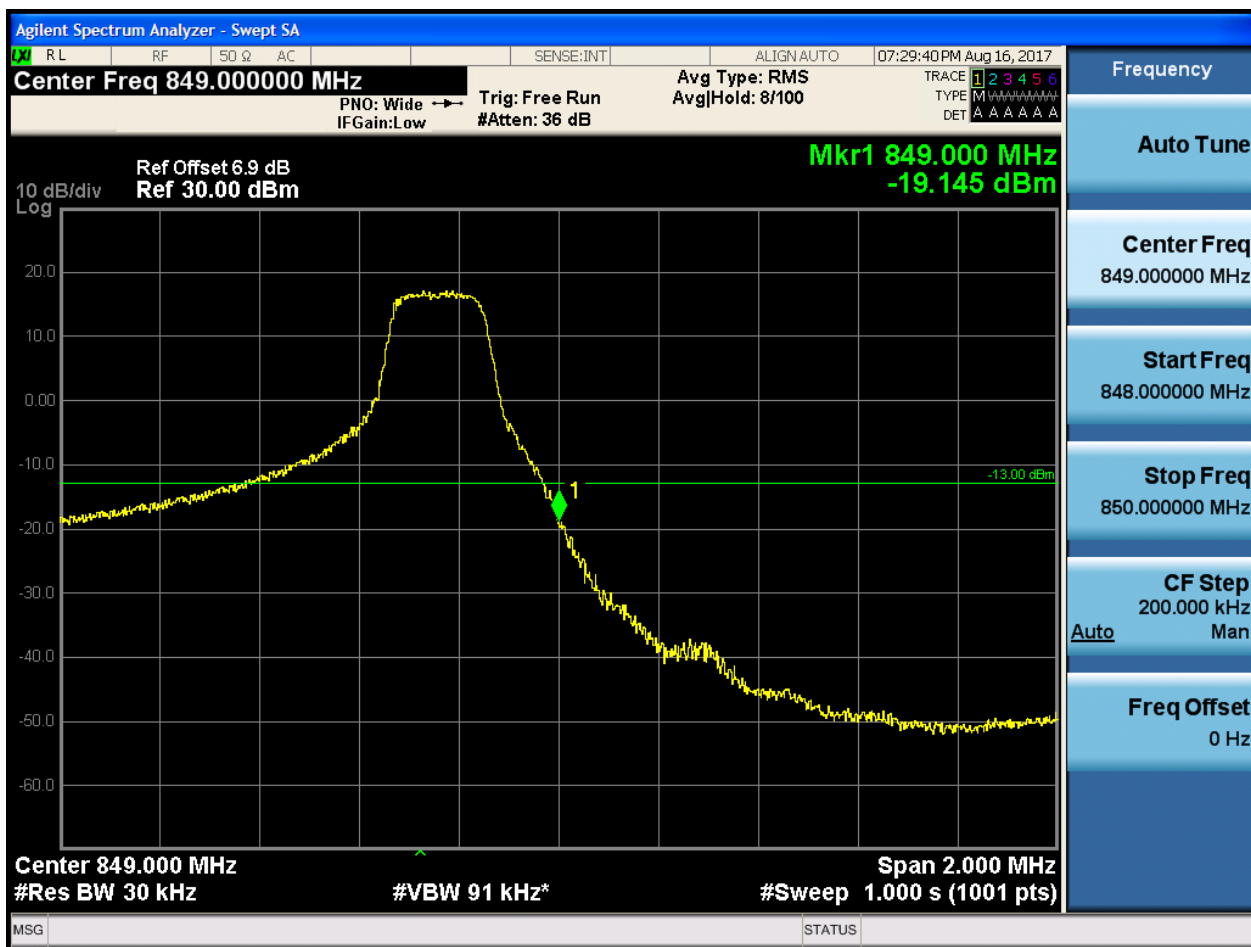
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0





5.1.1.1.2.2.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:29:54PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

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

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-31.098 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

1

Center 849.000 MHz
#Res BW 30 kHz

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

#VBW 91 kHz*

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

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:30:08 PM Aug 16, 2017

Center Freq 849.000000 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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-28.787 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 30 kHz
#VBW 91 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

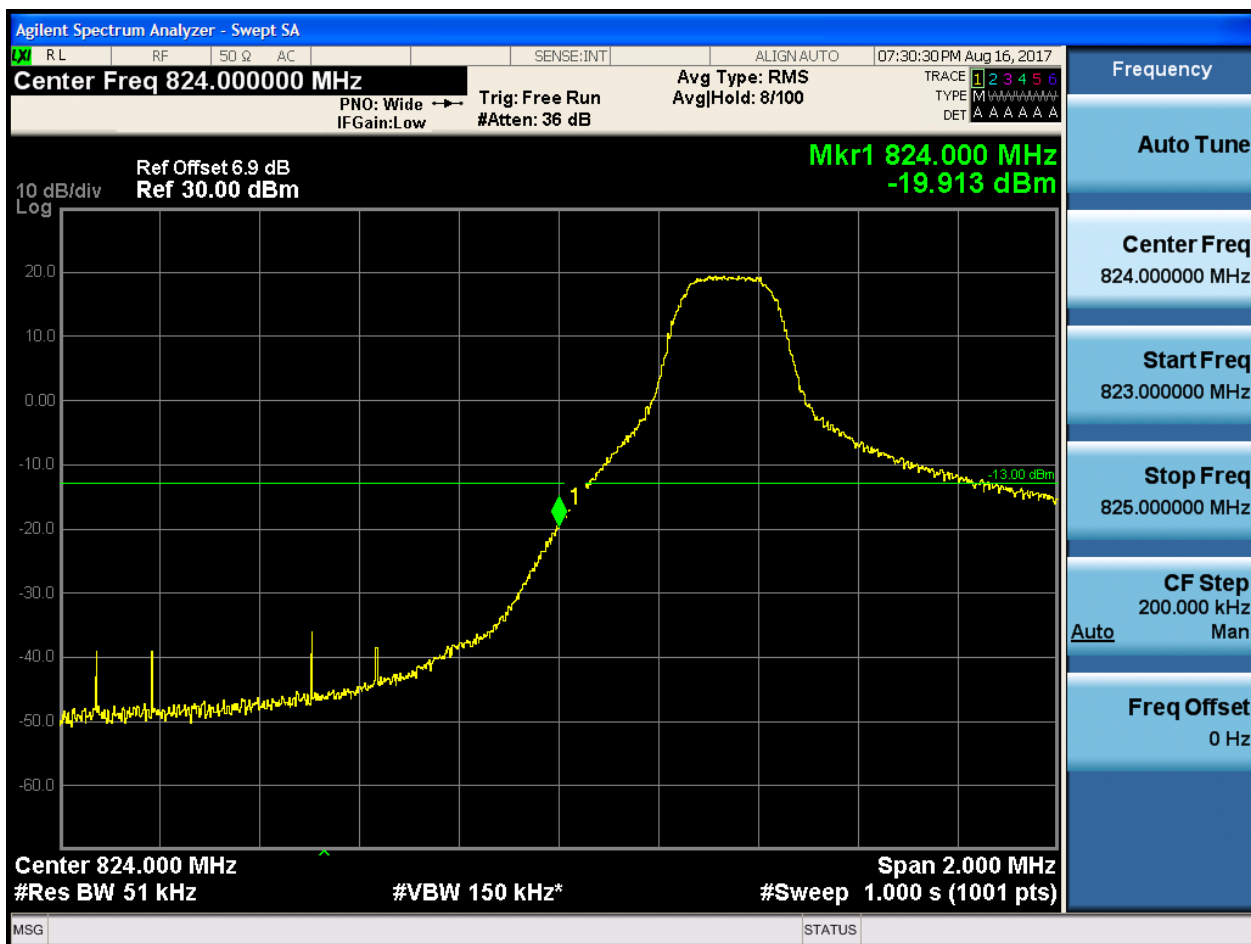
MSG STATUS



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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:30:45 PM Aug 16, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-38.260 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)

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

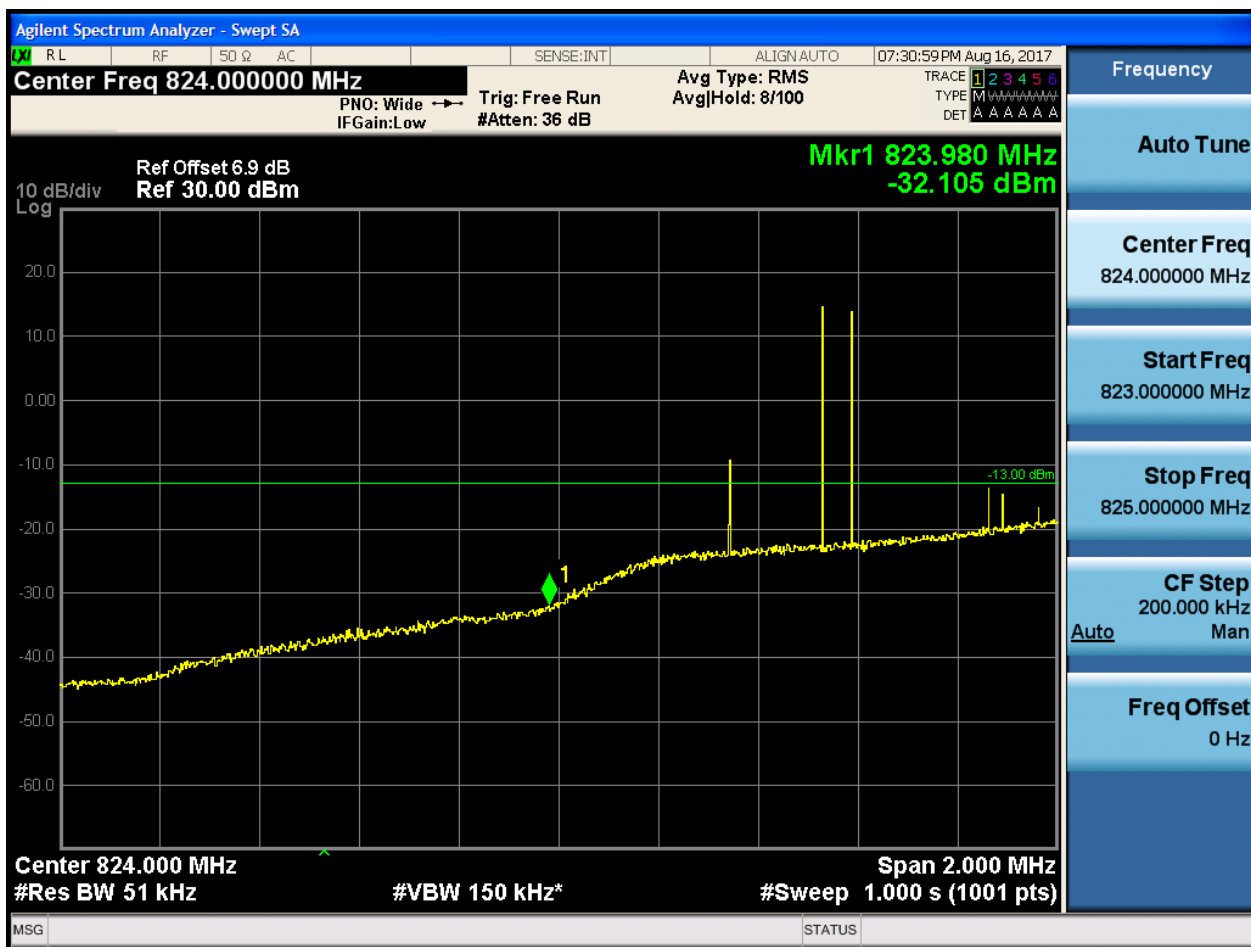
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS



5.1.1.1.3.1.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:31:13PM Aug 16, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-28.937 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

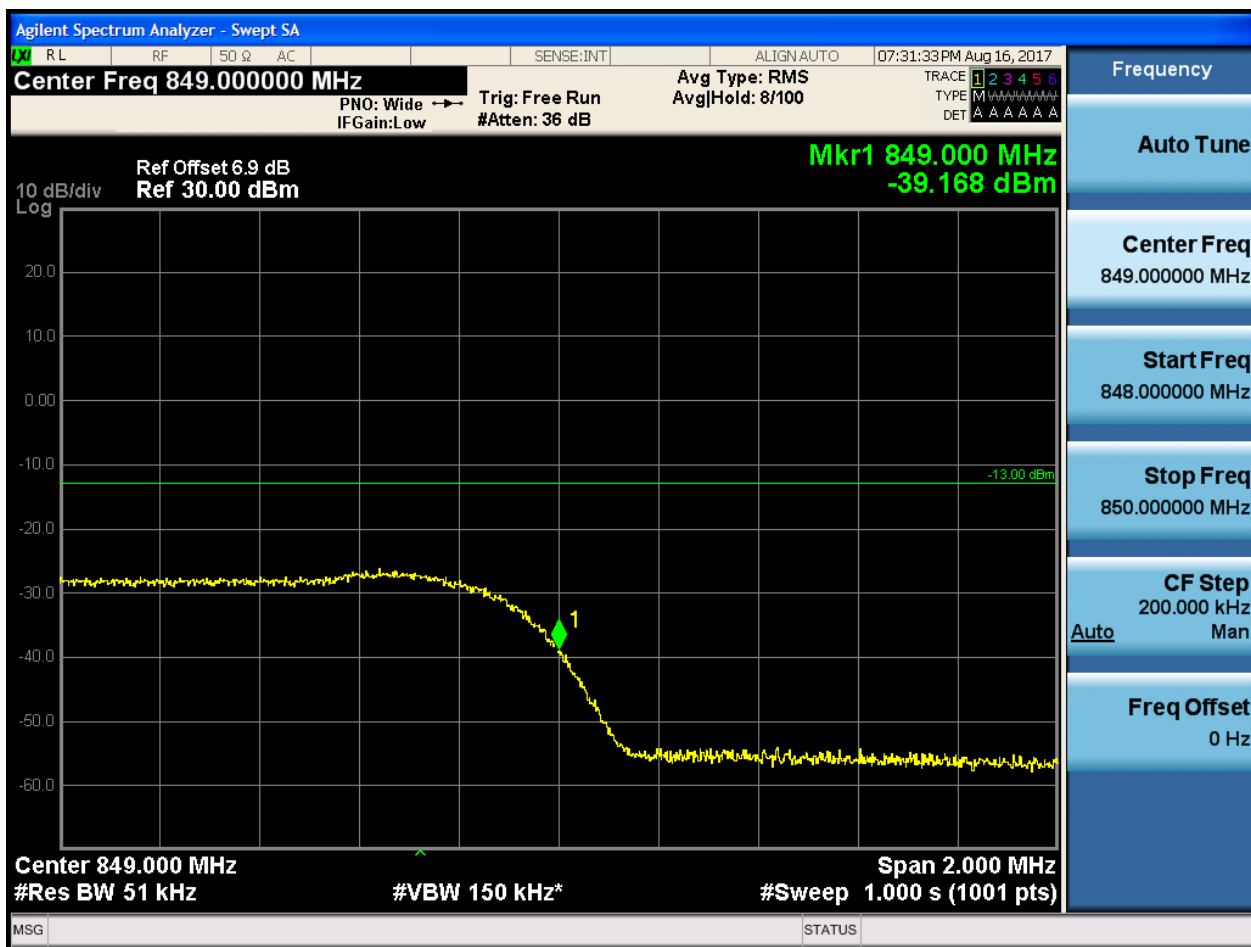
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



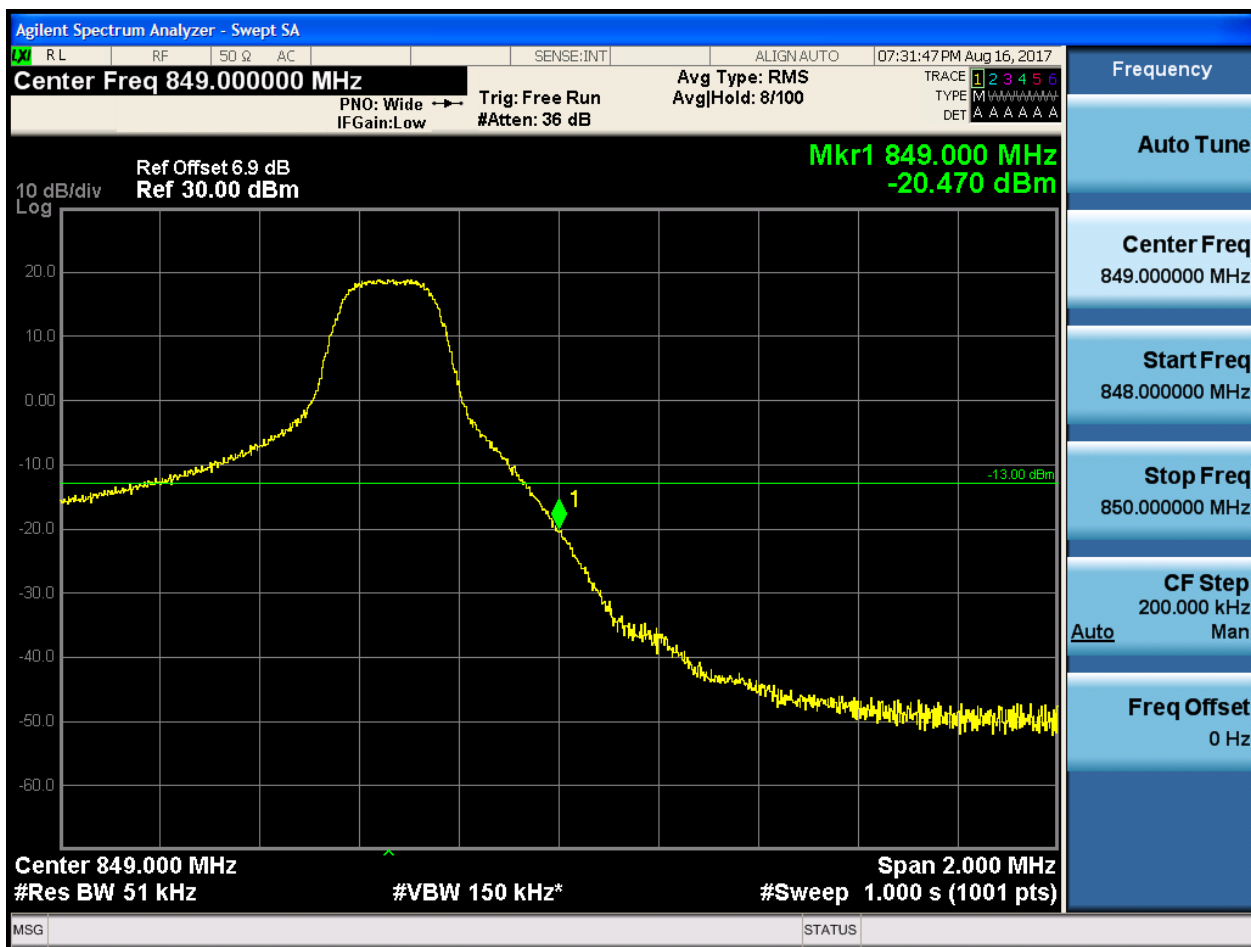
5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:32:02 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-32.788 dBm

10 dB/div
Log

Center 849.000 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
849.000000 MHz
Start Freq
848.000000 MHz
Stop Freq
850.000000 MHz
CF Step
200.000 kHz
Auto Man
Freq Offset
0 Hz



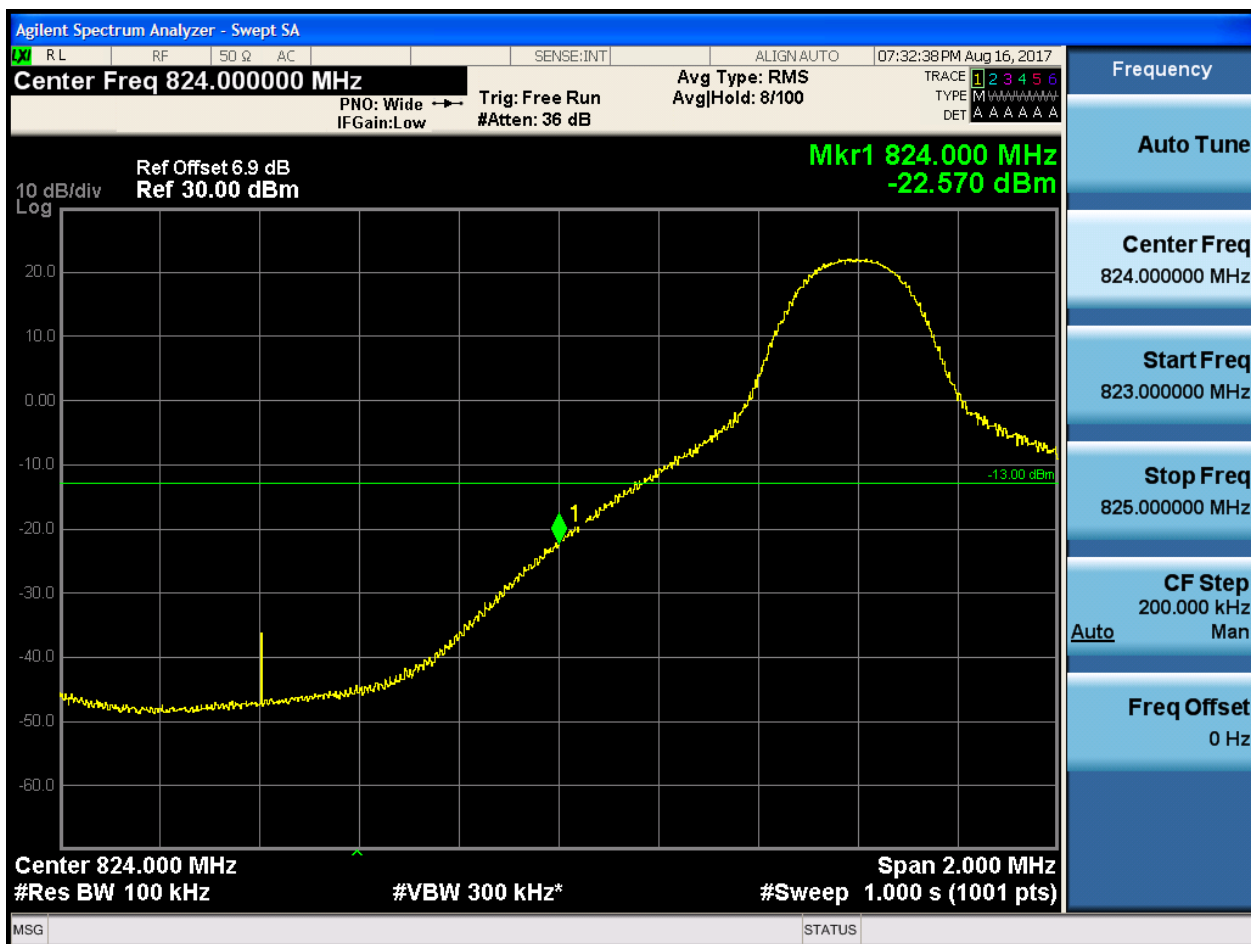
5.1.1.1.3.2.4 Test RB = RB25#0



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





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz Avg Type: RMS Trace 1 2 3 4 5 6
 PNO: Wide → Trig: Free Run AvgHold: 8/100
 IFGain: Low #Atten: 36 dB TYPE M W W W W W W W W W
 DET A A A A A A

Ref Offset 6.9 dB Mkr1 824.000 MHz
 Ref 30.00 dBm -40.706 dBm

10 dB/div Log

Center 824.000 MHz Span 2.000 MHz
 #Res BW 100 kHz #VBW 300 kHz* #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 <u>Auto</u> Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:33:06 PM Aug 16, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-33.214 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

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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:33:21PM Aug 16, 2017

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-30.324 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

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



5.1.1.1.4.2 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 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-21.346 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 07:34:09 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-33.744 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:34:24 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain: Low Trig: Free Run
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-31.541 dBm

10 dB/div
Log

20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0

-13.00 dBm

1

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

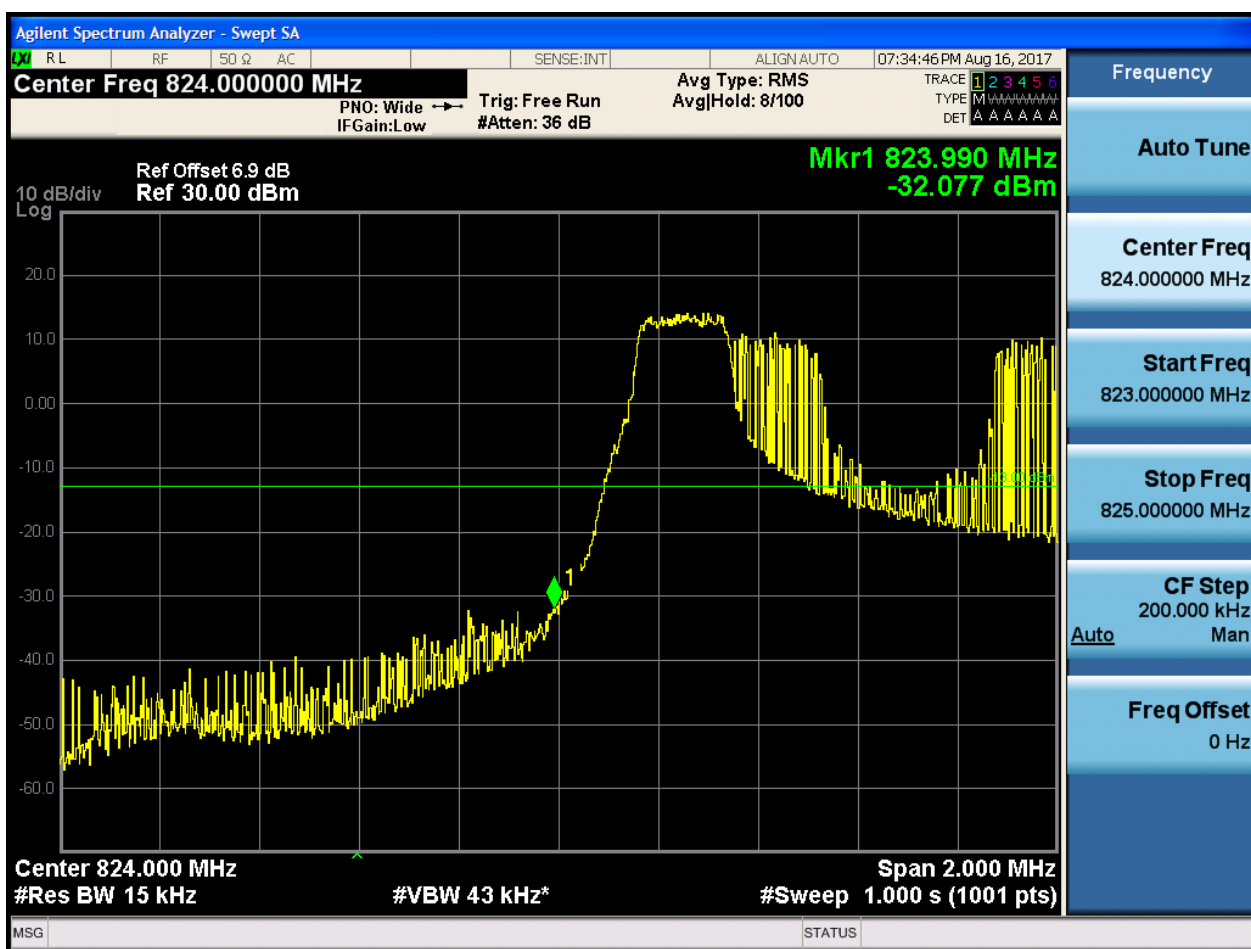
MSG STATUS

5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 1.4

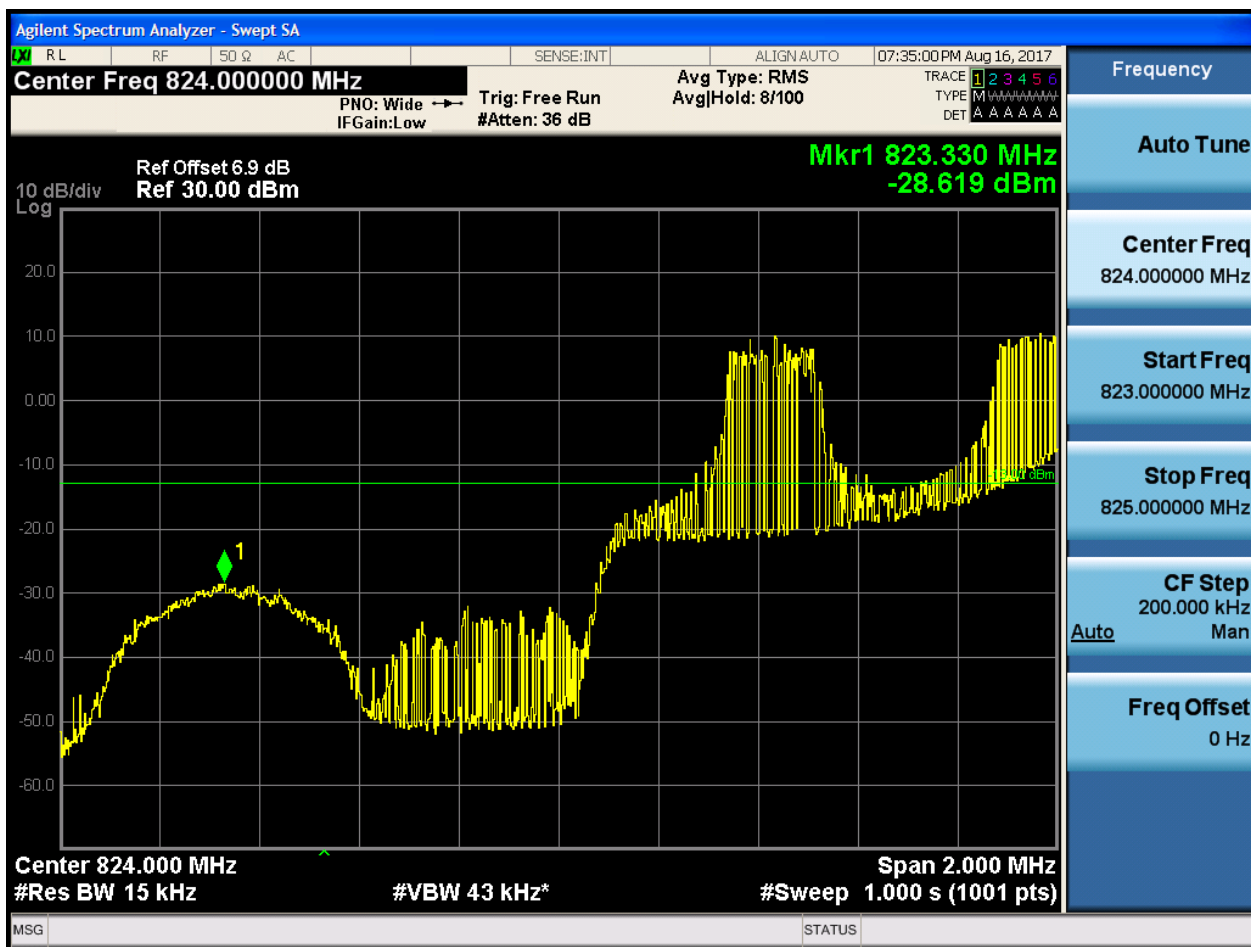
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0

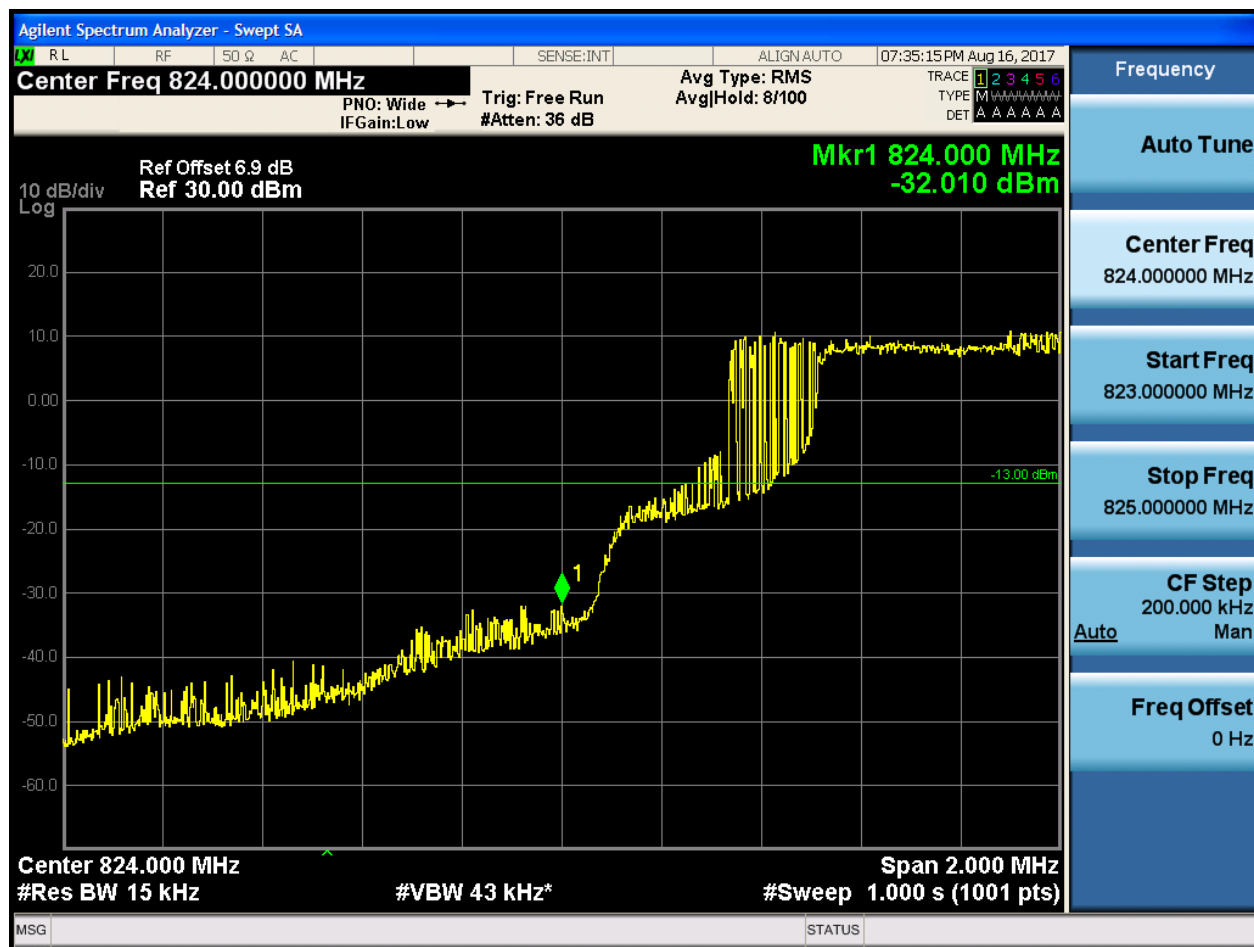




5.1.1.2.1.1.2 Test RB = RB1#5

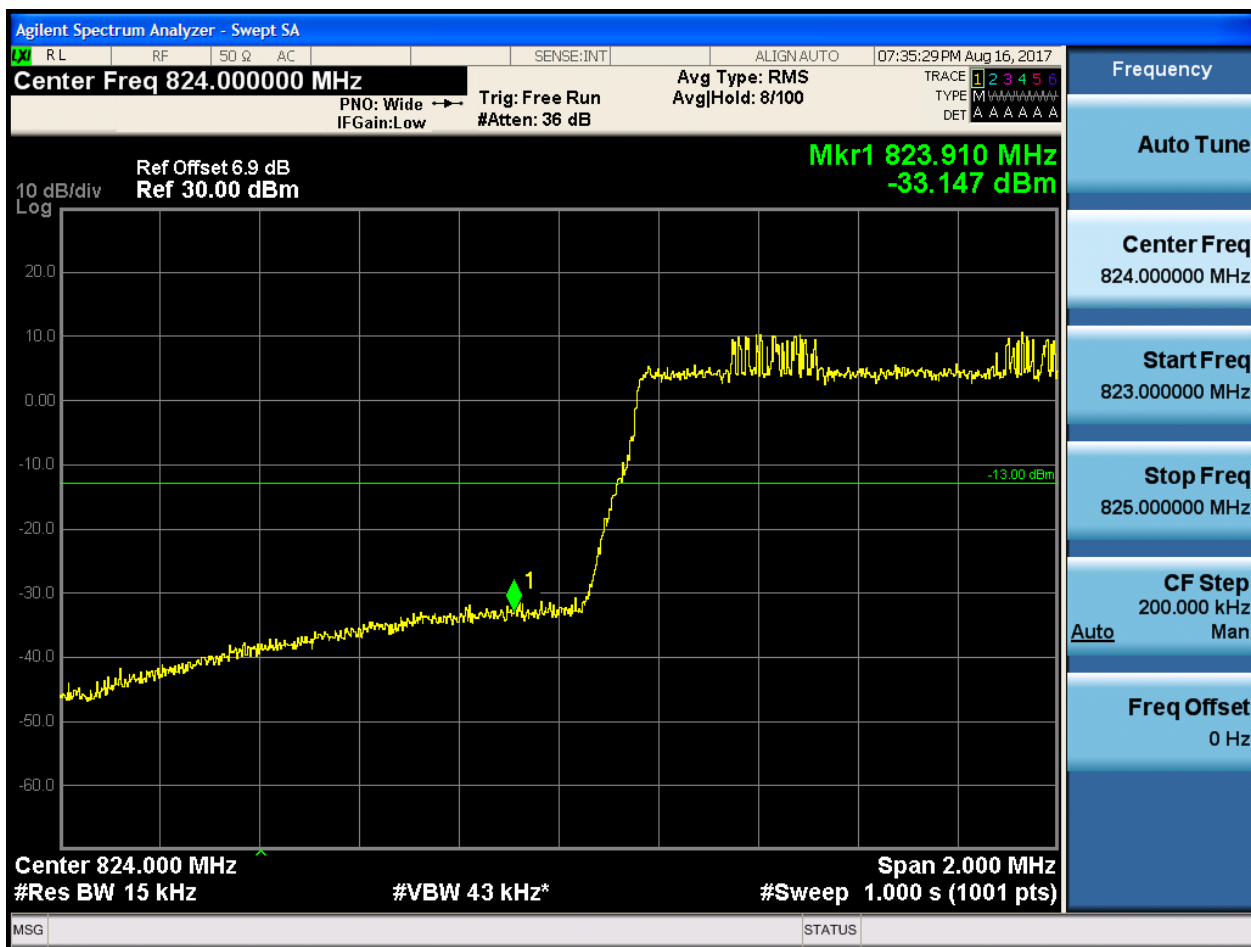


5.1.1.2.1.1.3 Test RB = RB3#2



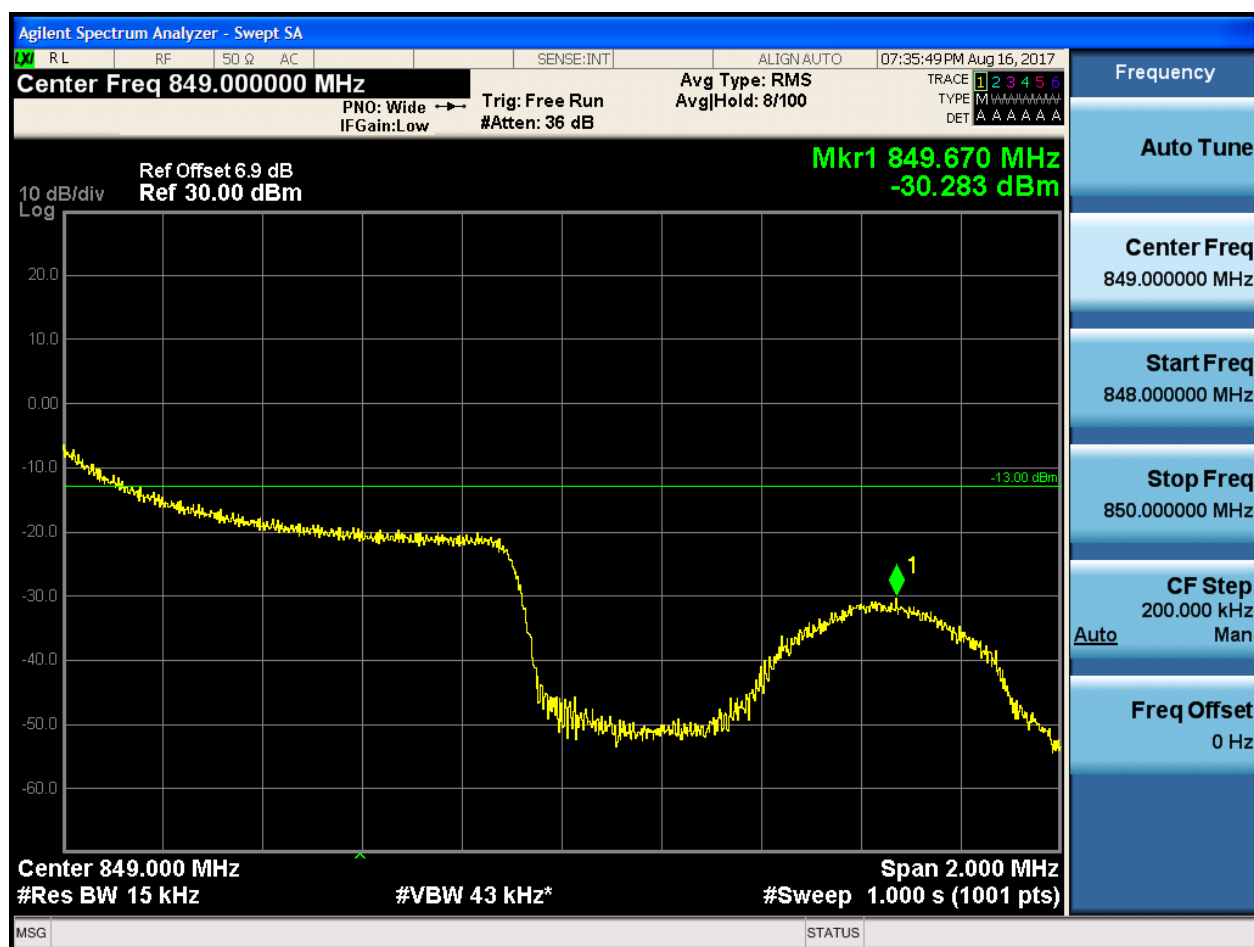


5.1.1.2.1.1.4 Test RB = RB6#0



5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:36:03 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-25.518 dBm

10 dB/div
Log

Center 849.000 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
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

[illegible]



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:36:32 PM Aug 16, 2017

Center Freq 849.000000 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 6.9 dB
Ref 30.00 dBm

Mkr1 849.030 MHz
-32.408 dBm

10 dB/div
Log

Center 849.000 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
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

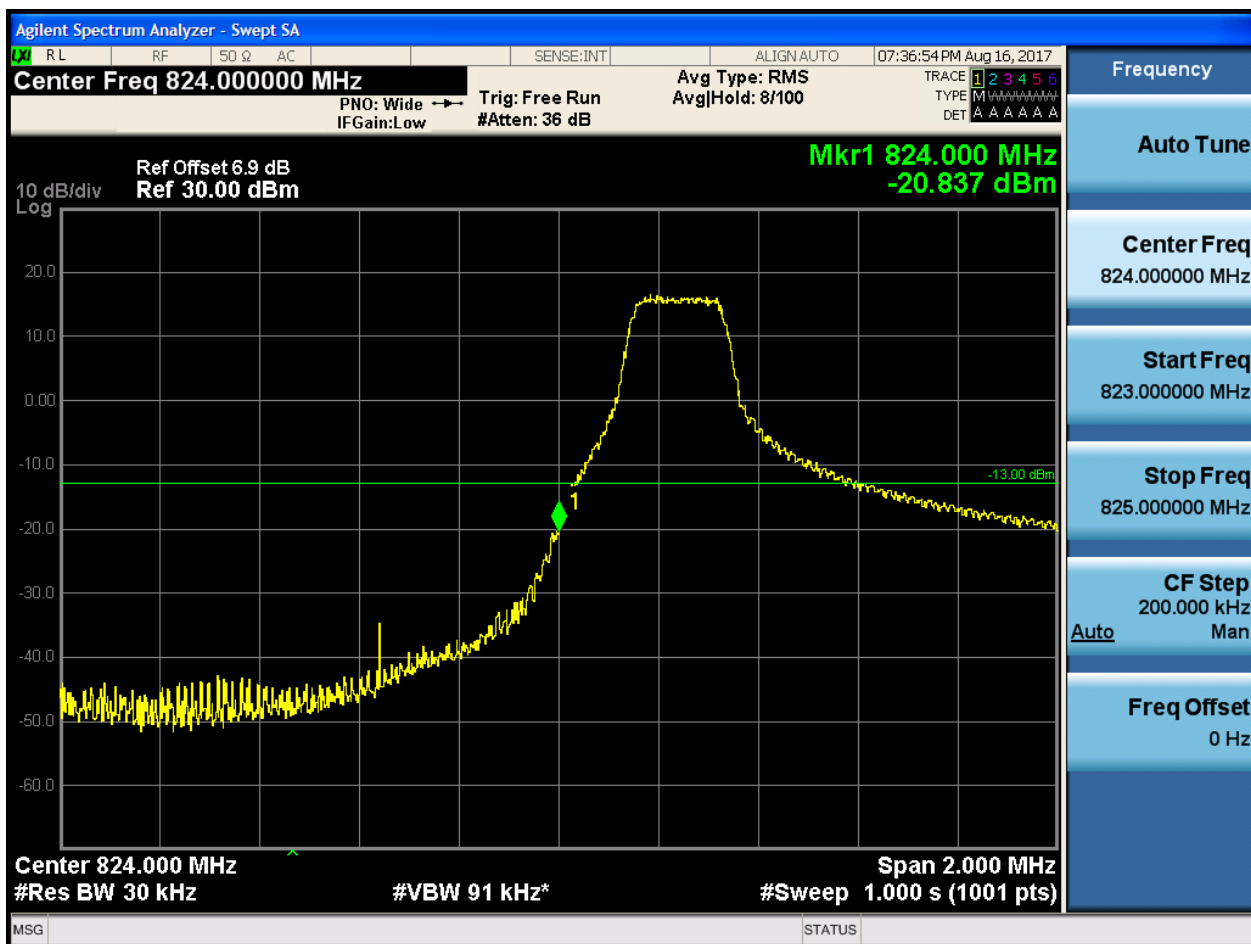
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.1.1.2.2 Test Bandwidth = 3

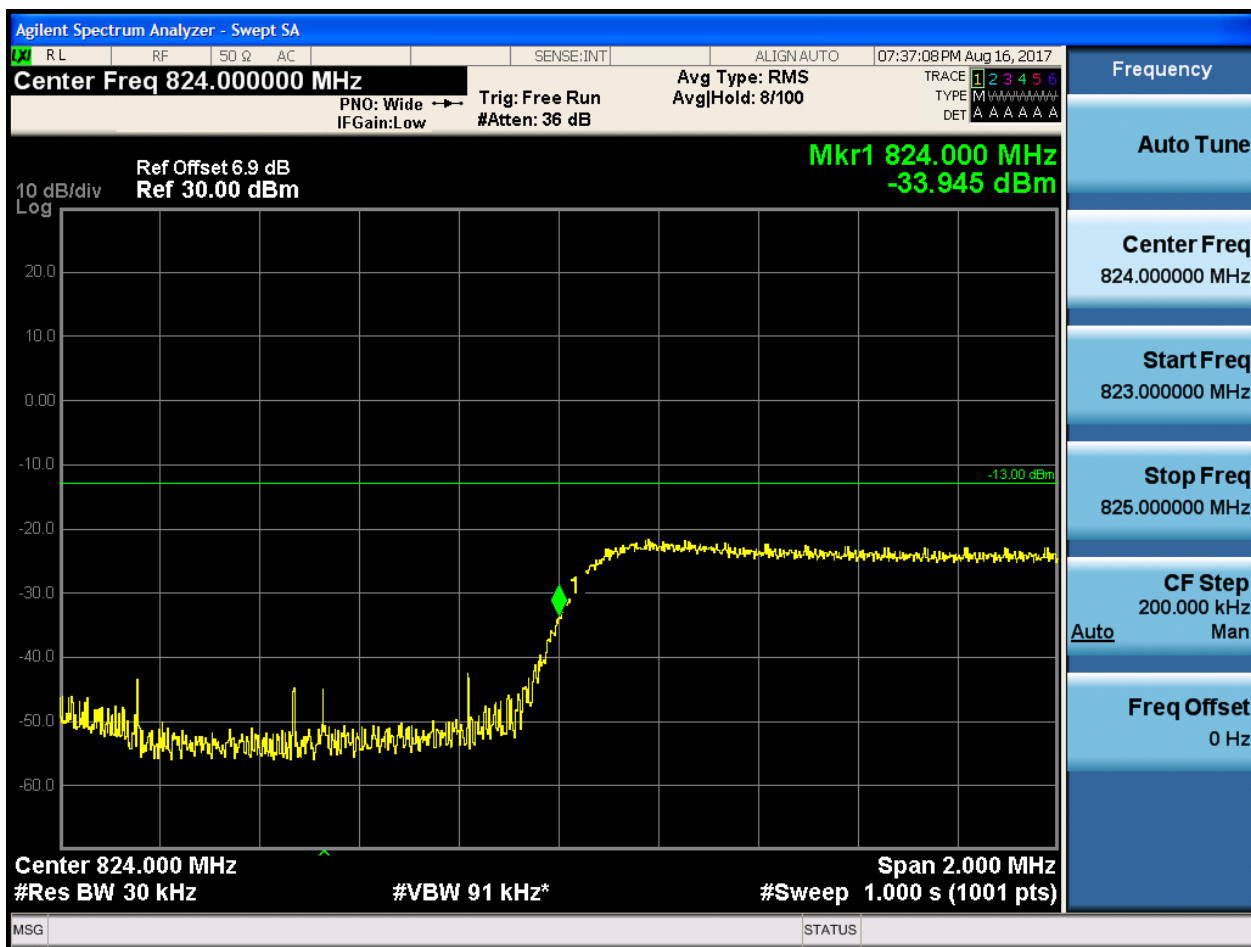
5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





5.1.1.2.2.1.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 824.000 MHz
-32.202 dBm

Center 824.000 MHz
#Res BW 30 kHz
#VBW 91 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

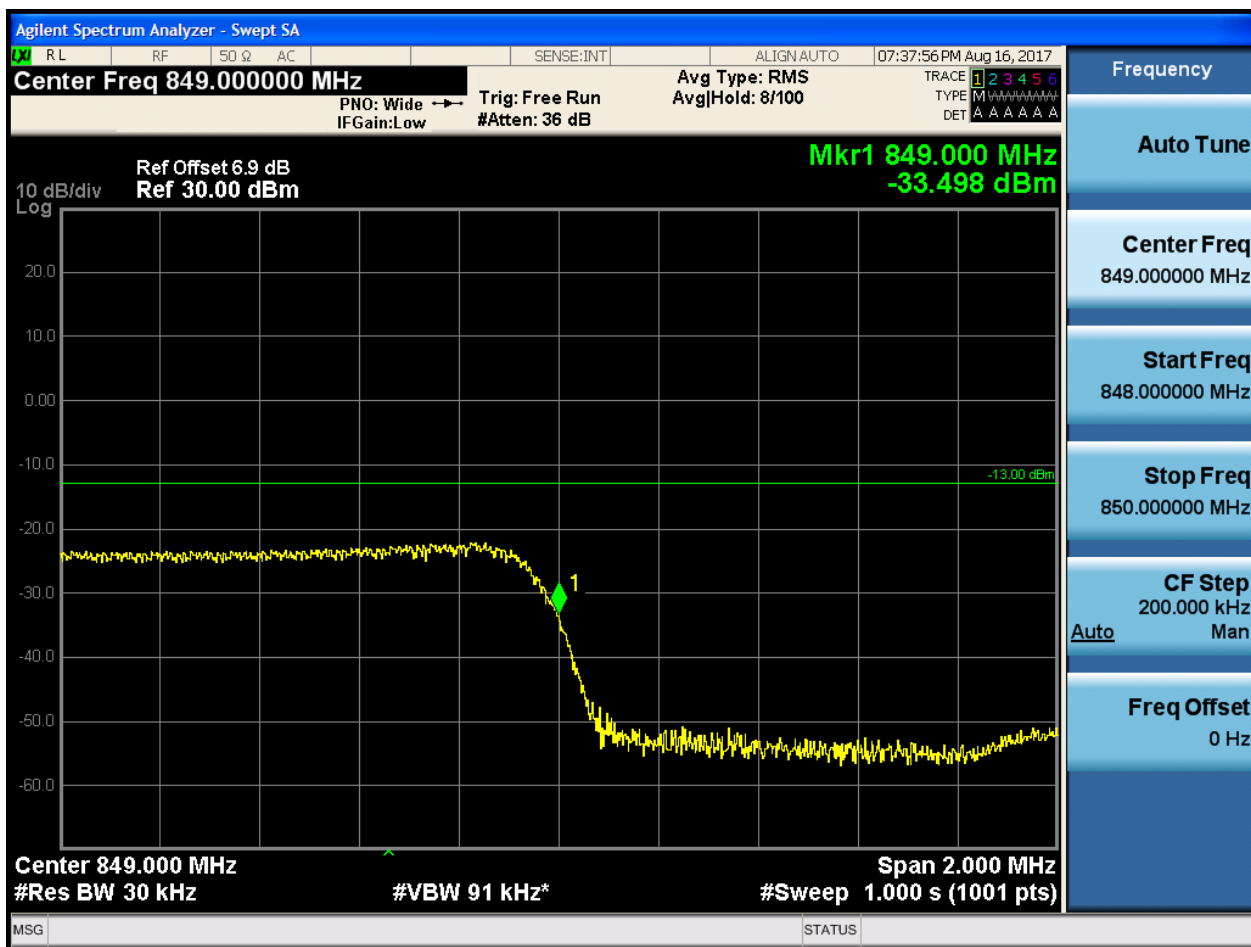
The image shows the front panel of an Agilent Spectrum Analyzer in 'Swept SA' mode. The main display is a log-linear plot of power spectral density. The vertical axis is labeled '10 dB/div Log' and ranges from -60.0 to 20.0 dBm. The horizontal axis represents frequency, with a center frequency of 824.000000 MHz and a span of 2.000 MHz. A yellow trace shows the swept spectrum, which is relatively flat around -45 dBm until approximately 823.5 MHz, where it begins to rise. A green marker is positioned at the center frequency (824.000 MHz) with a reading of -32.202 dBm. A horizontal green line is drawn at -13.00 dBm. The right side of the screen features a vertical menu with options: 'Frequency', 'Auto Tune', 'Center Freq' (824.000000 MHz), 'Start Freq' (823.000000 MHz), 'Stop Freq' (825.000000 MHz), 'CF Step' (200.000 kHz, with 'Auto' and 'Man' sub-options), and 'Freq Offset' (0 Hz). The top status bar displays various parameters: 'Center Freq 824.000000 MHz', 'Avg Type: RMS', 'Avg|Hold: 8/100', 'PNO: Wide', 'Trig: Free Run', 'IFGain: Low', '#Atten: 36 dB', 'TRACE 1', 'TYPE M', and 'DET A A A A A A'. The bottom status bar shows 'MSG' and 'STATUS'.

[illegible]



5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:38:11PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

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

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-19.974 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 30 kHz
#VBW 91 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



Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

PNO: Wide → Trig: Free Run
IFGain: Low #Atten: 36 dB

Avg Type: RMS
Avg/Hold: 8/100

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 6.9 dB
Ref 30.00 dBm

Mkr1 849.020 MHz
-31.633 dBm

The figure shows a spectrum analyzer display with a yellow trace representing the signal. The y-axis is labeled 'Log' and ranges from -60.0 to 20.0 dB/div. The x-axis represents frequency. A green horizontal line indicates the noise floor at -13.00 dBm. A green diamond marker labeled '1' points to the signal peak at 849.020 MHz.

Parameter	Value
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

Center 849.000 MHz
#Res BW 30 kHz

#VBW 91 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-30.250 dBm

Center 849.000 MHz
#Res BW 30 kHz
#VBW 91 kHz*

Span 2.000 MHz
#Sweep 1.000 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
Auto

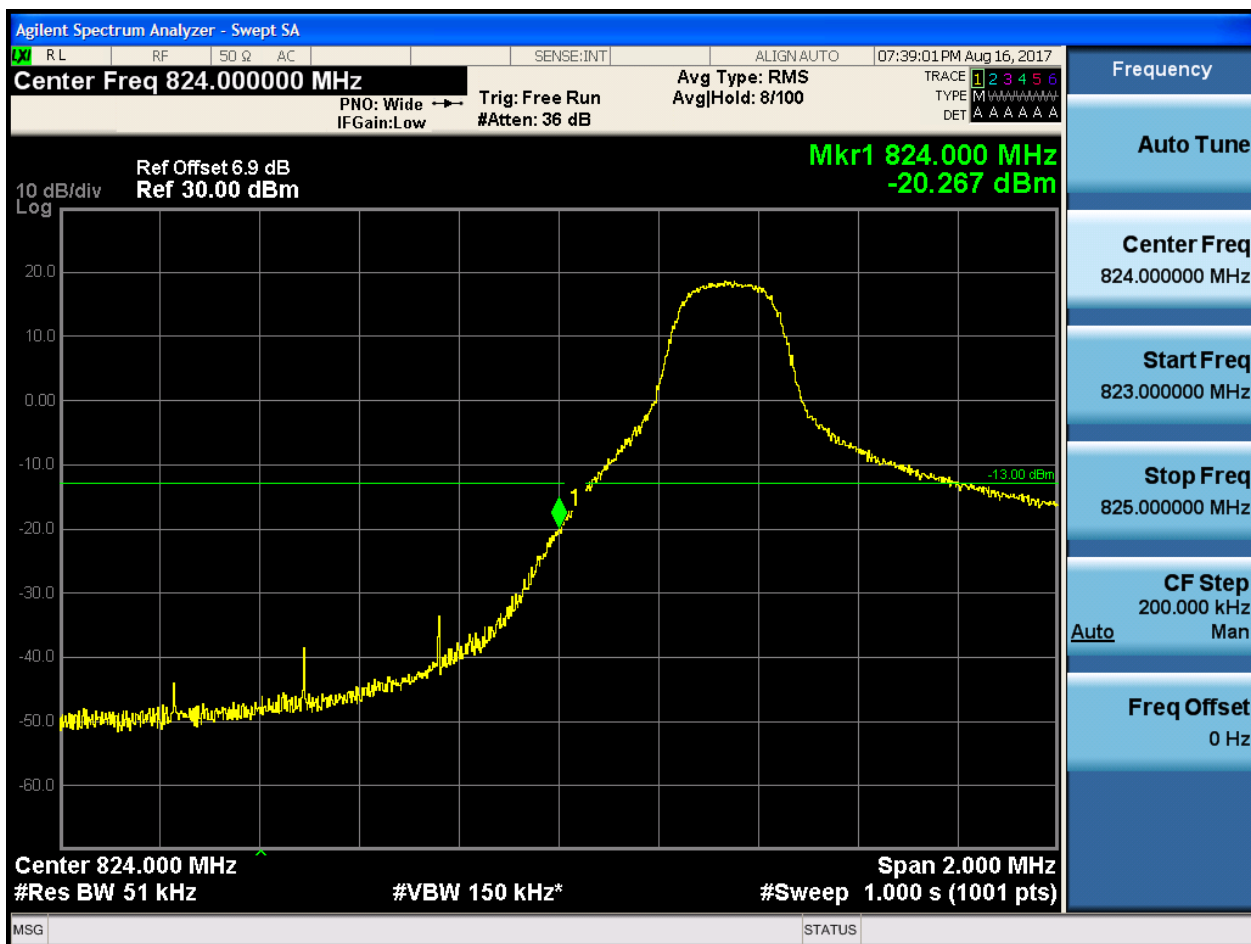
Freq Offset
0 Hz

The screenshot displays a swept spectrum on a grid. The vertical axis represents power in dBm, ranging from -60.0 to 20.0. The horizontal axis represents frequency in MHz, with a center frequency of 849.000 MHz and a span of 2.000 MHz. A yellow trace shows the signal spectrum, which is relatively flat around 0 dBm until approximately 848.5 MHz, where it drops sharply to about -30 dBm. A green horizontal line is drawn at -13.00 dBm. A green marker labeled '1' is placed on the trace at the center frequency. The right side of the screen contains a control panel with various settings: Frequency (849.000000 MHz), Auto Tune, Center Freq (849.000000 MHz), Start Freq (848.000000 MHz), Stop Freq (850.000000 MHz), CF Step (200.000 kHz, Auto), and Freq Offset (0 Hz). The bottom status bar shows the message 'MSG' and the status 'STATUS'.

5.1.1.2.3 Test Bandwidth = 5

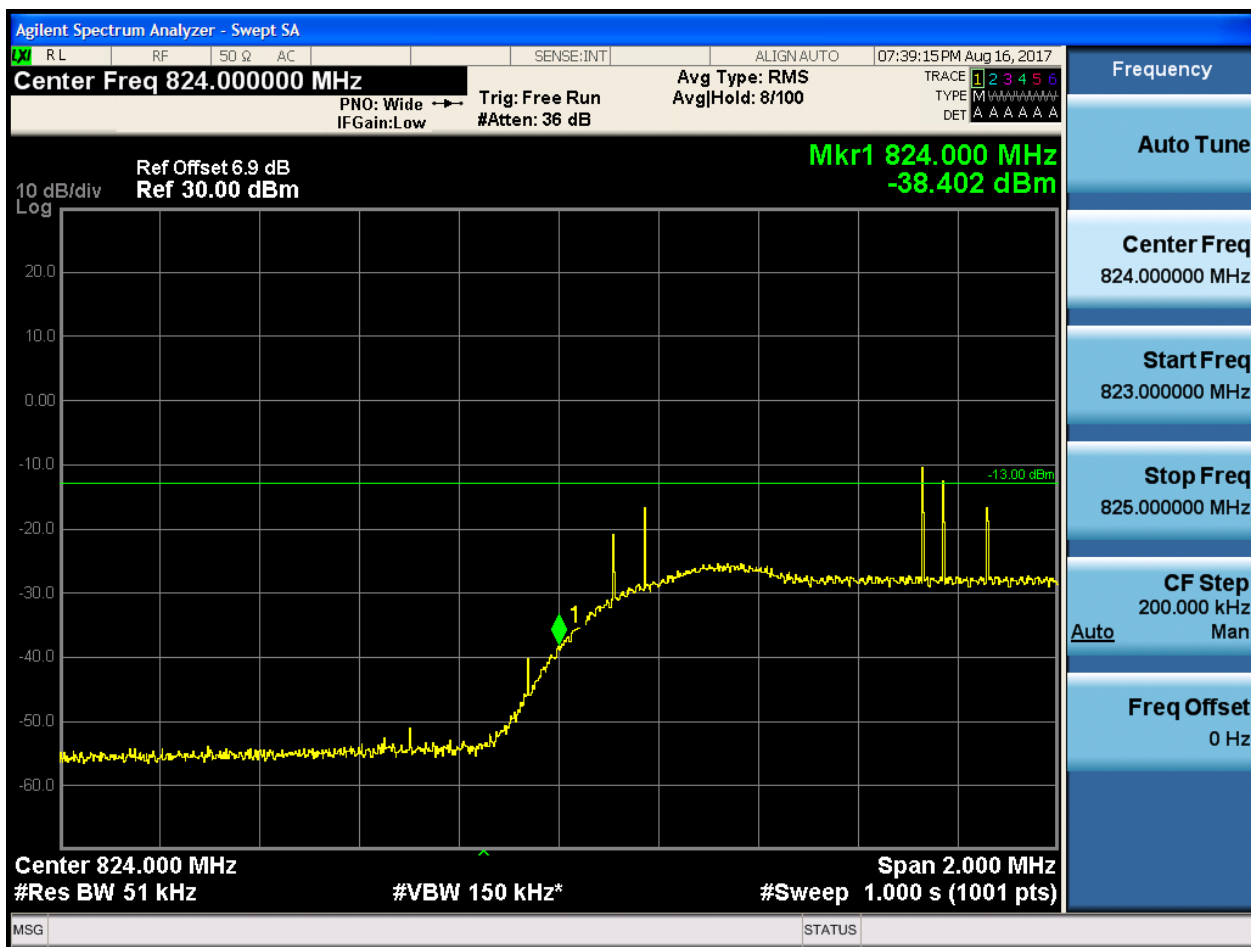
5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0



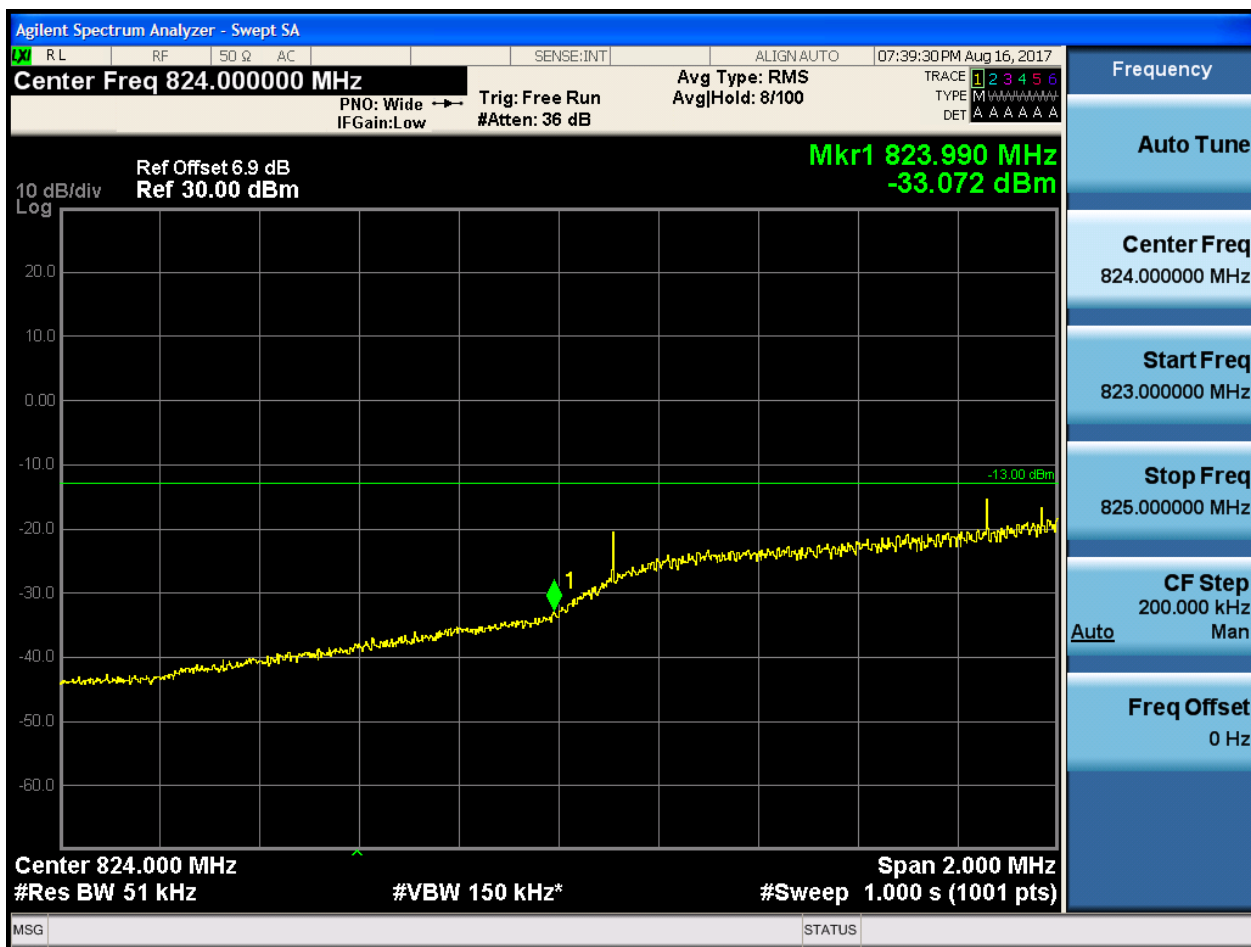


5.1.1.2.3.1.2 Test RB = RB1#24





5.1.1.2.3.1.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

[X] RL	RF	50 Ω AC	SENSE:INT	ALIGN AUTO	07:39:44 PM Aug 16, 2017
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Center Freq 824.000000 MHz

PNO: Wide → Trig: Free Run
IFGain: Low #Atten: 36 dB

Avg Type: RMS
Avg/Hold: 8/100

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

**Mkr1 823.990 MHz
-29.982 dBm**

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div Log

Center 824.000 MHz
#Res BW 51 kHz

#VBW 150 kHz*

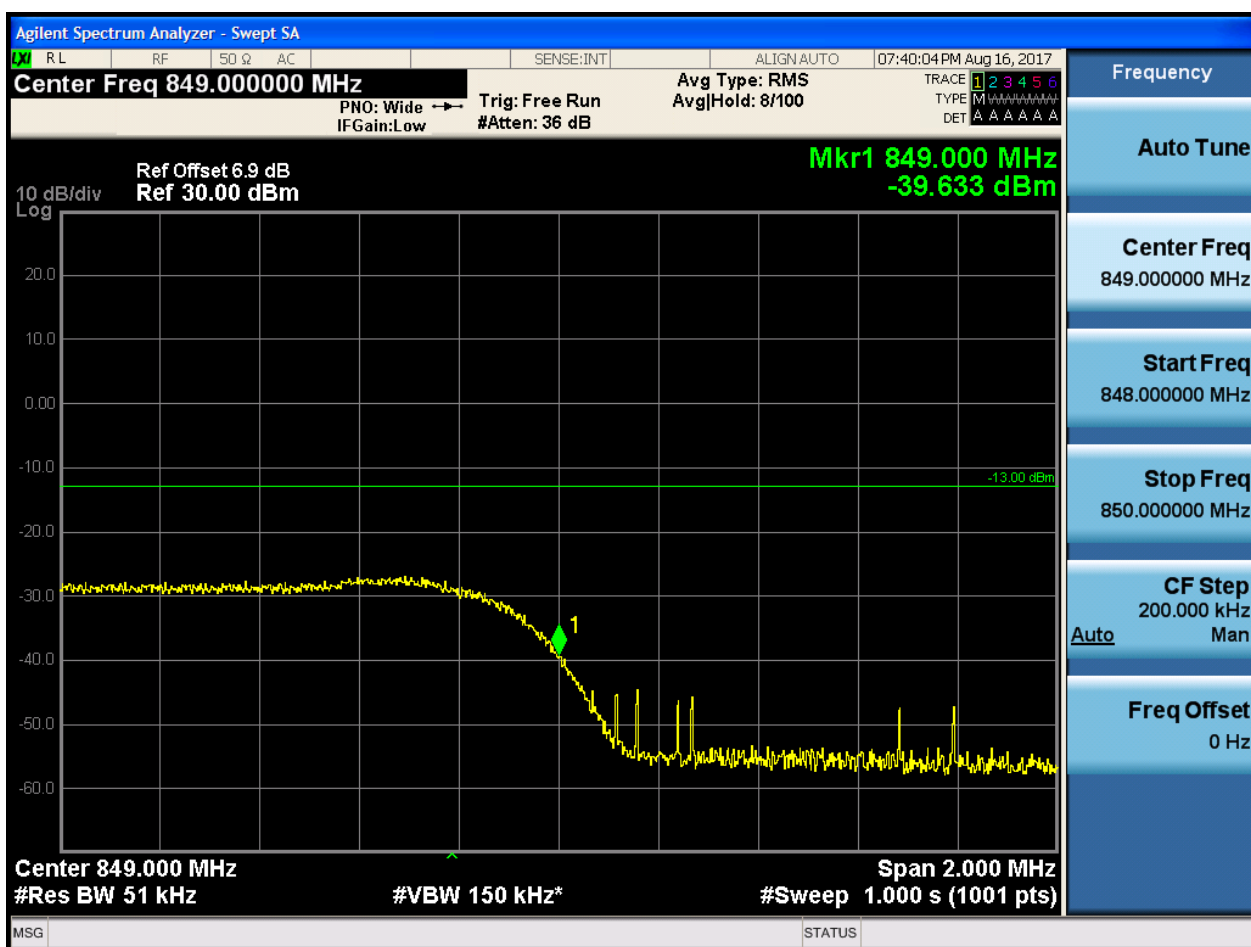
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:40:18 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

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

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-20.680 dBm

10 dB/div
Log

Center 849.000 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
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 07:40:33 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-33.735 dBm

10 dB/div
Log

Center 849.000 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 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 07:40:47 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-30.899 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*
#Sweep 1.000 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
Auto Man

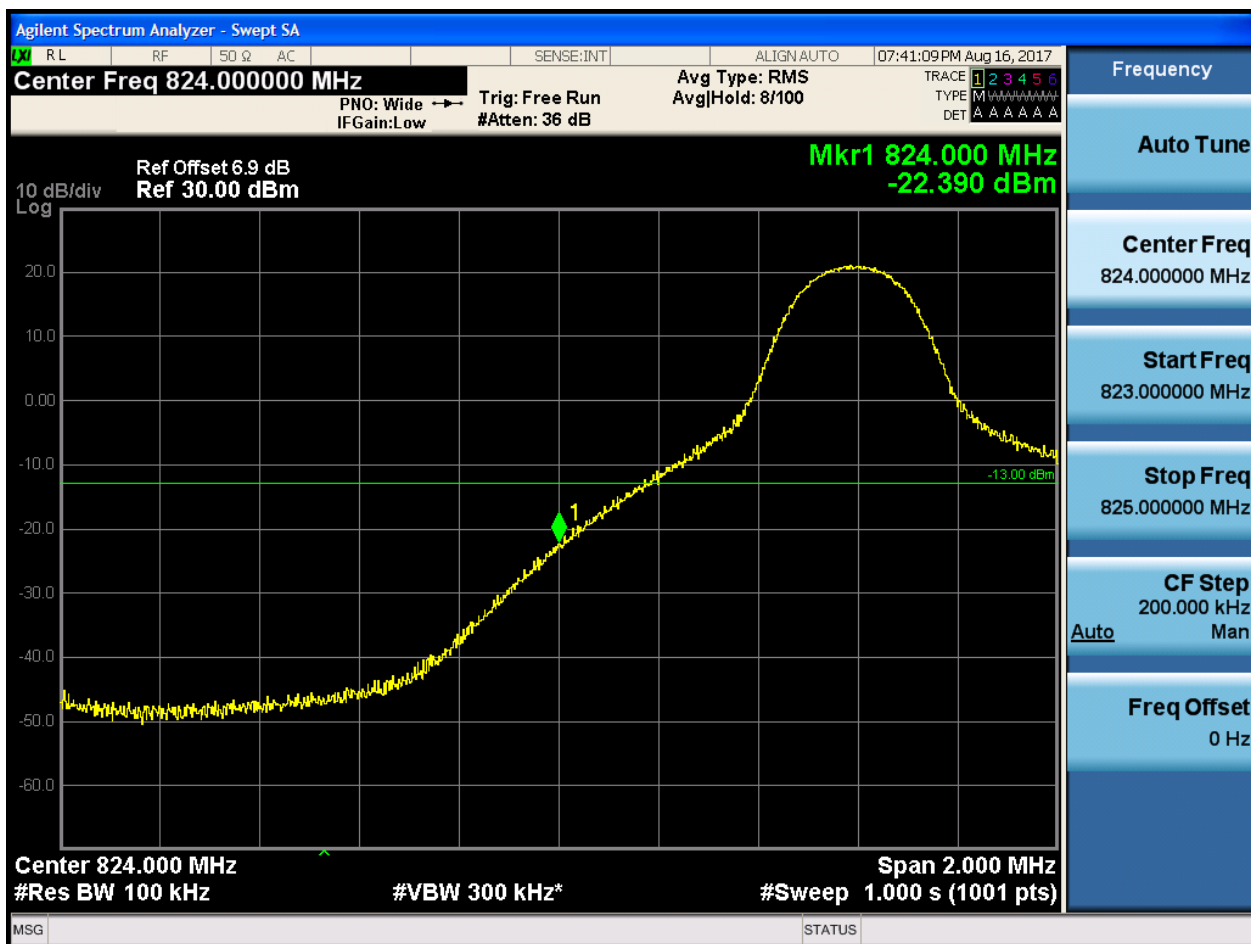
Freq Offset
0 Hz

MSG STATUS

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





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 824.000 MHz
-41.262 dBm

Center 824.000 MHz
#Res BW 100 kHz
#VBW 300 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



Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 823.970 MHz
-34.857 dBm

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

MSG STATUS

The image shows a screenshot of an Agilent Spectrum Analyzer in Swept SA mode. The main display is a log-frequency plot with a yellow trace representing the signal spectrum. A green marker labeled '1' is positioned at 823.970 MHz with a level of -34.857 dBm. The background is a grid. The y-axis is labeled '10 dB/div Log' and ranges from -60.0 to 20.0 dBm. The x-axis represents frequency, with a center frequency of 824.000 MHz and a span of 2.000 MHz. The resolution bandwidth (Res BW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time is 1.000 s, resulting in 1001 points. The reference level is 30.00 dBm, and the reference offset is 6.9 dB. The noise floor is indicated as -13.00 dBm. The top status bar shows the center frequency, average type (RMS), and average hold (8/100). The right sidebar contains various settings and parameters, including frequency, auto tune, center frequency, start frequency, stop frequency, CF step, and frequency offset.

Parameter	Value
Center Freq	824.000000 MHz
Start Freq	823.000000 MHz
Stop Freq	825.000000 MHz
CF Step	200.000 kHz
Freq Offset	0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 823.980 MHz
-31.847 dBm

Center 824.000 MHz
#Res BW 100 kHz
#VBW 300 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

Freq Offset
0 Hz



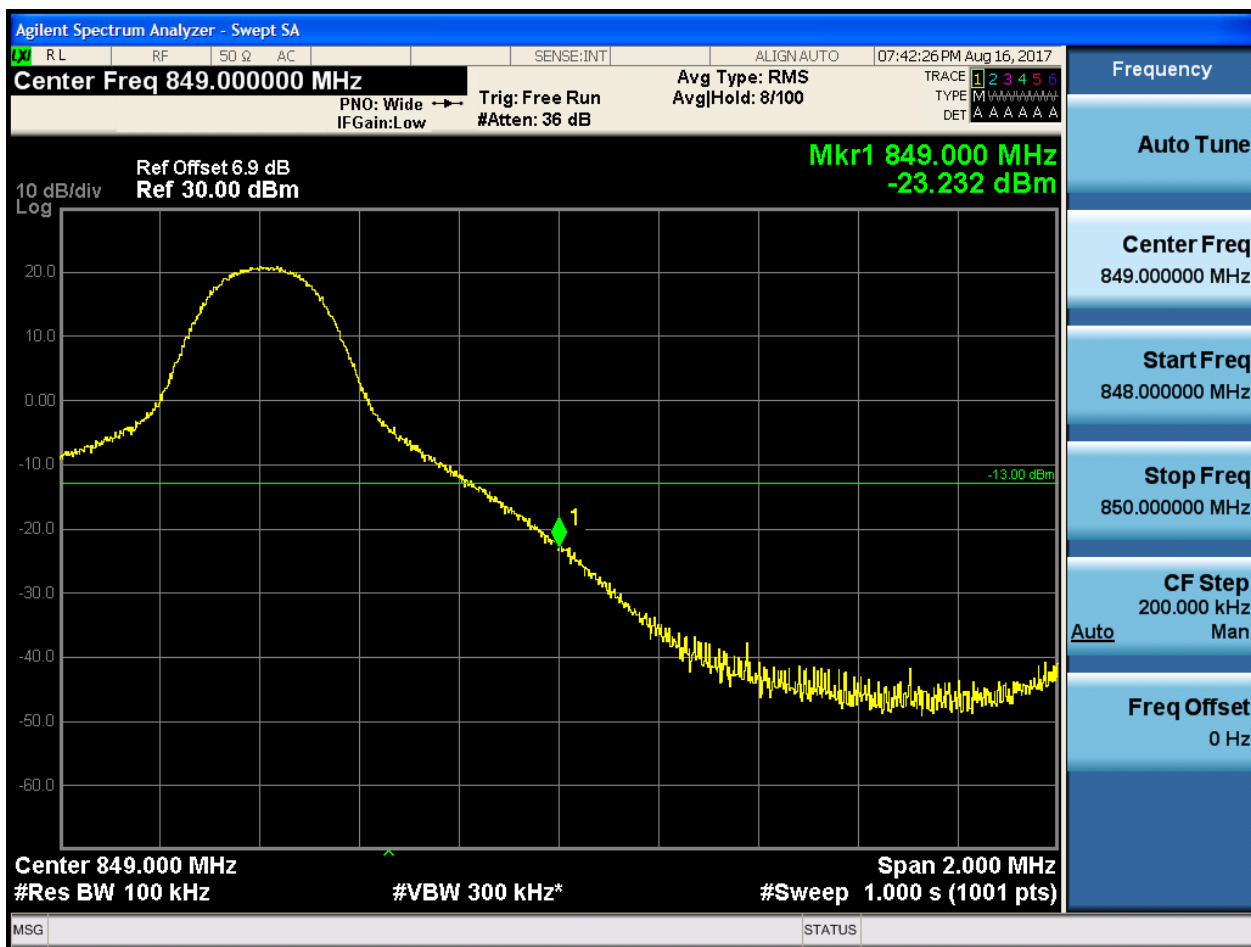
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0





5.1.1.2.4.2.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:42:41 PM Aug 16, 2017

Center Freq 849.000000 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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-35.191 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:42:55 PM Aug 16, 2017

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 6.9 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-32.837 dBm

10 dB/div
Log

20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0

848.000000 MHz
849.000000 MHz
850.000000 MHz

-13.00 dBm

1

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

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

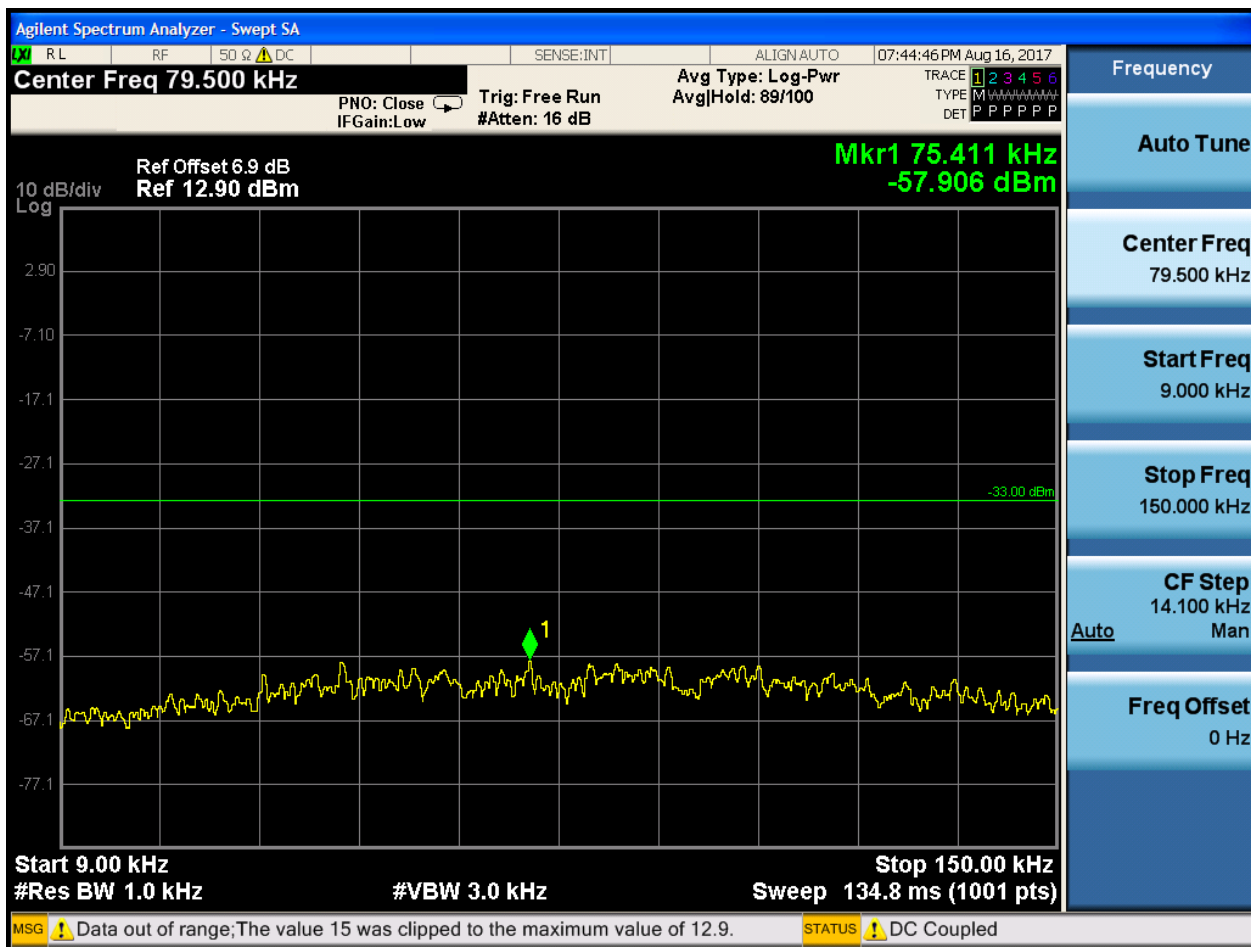
6.1.1 Test Band = BAND5

6.1.1.1 Test Mode = LTE/TM1

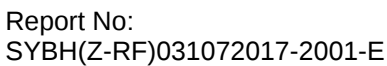
6.1.1.1.1 Test Bandwidth = 1.4

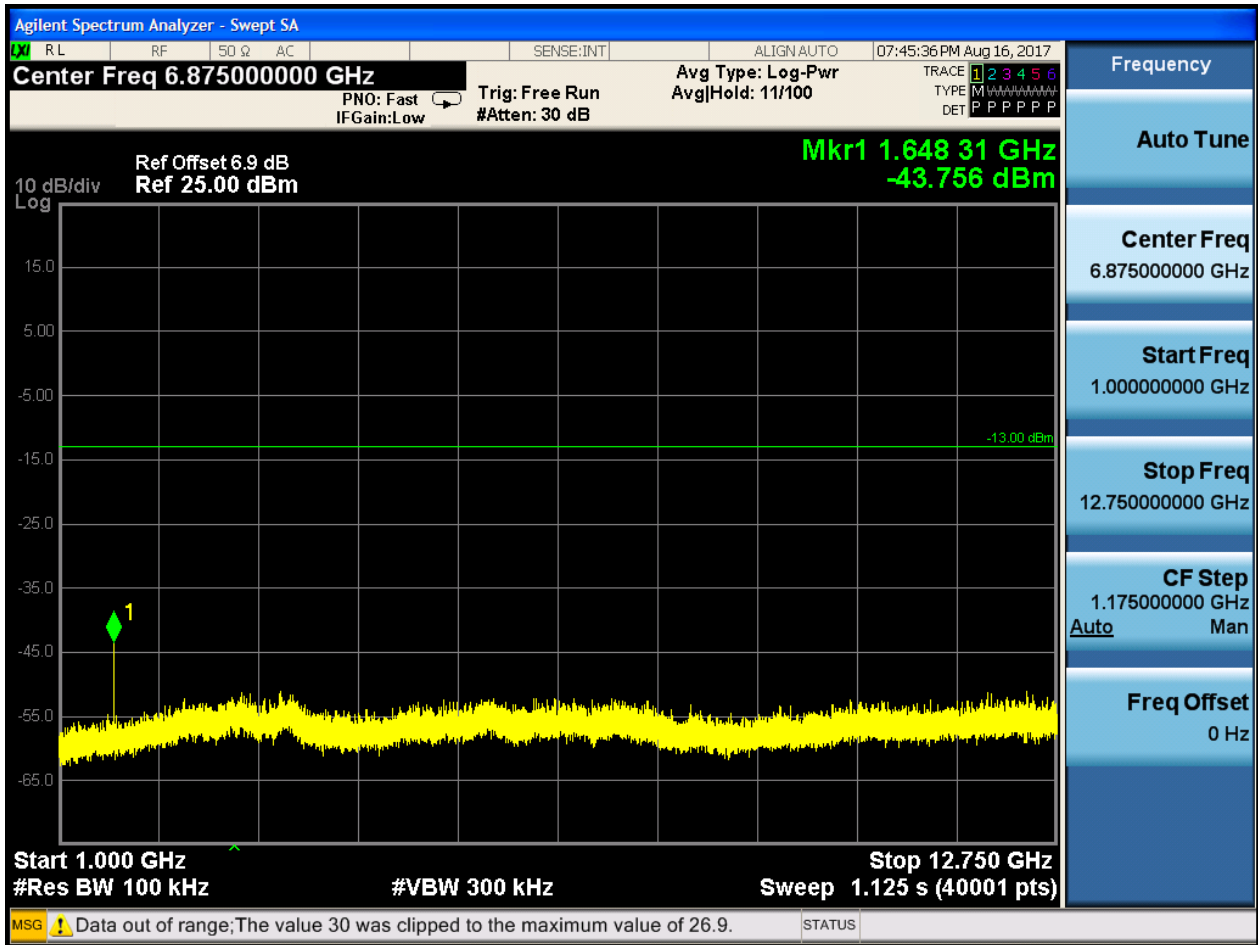
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



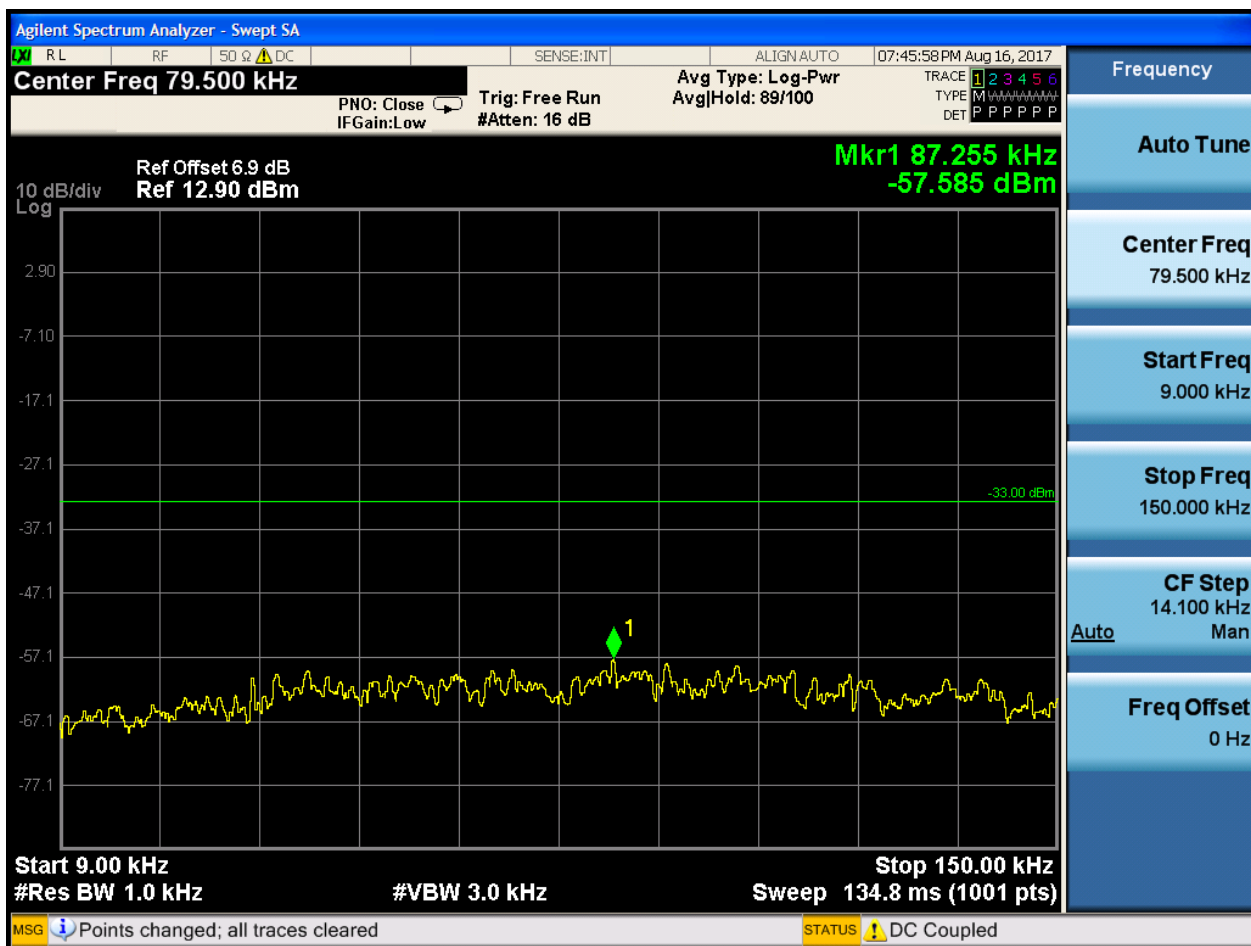




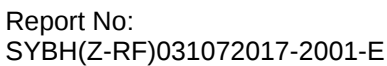


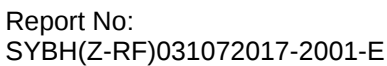
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



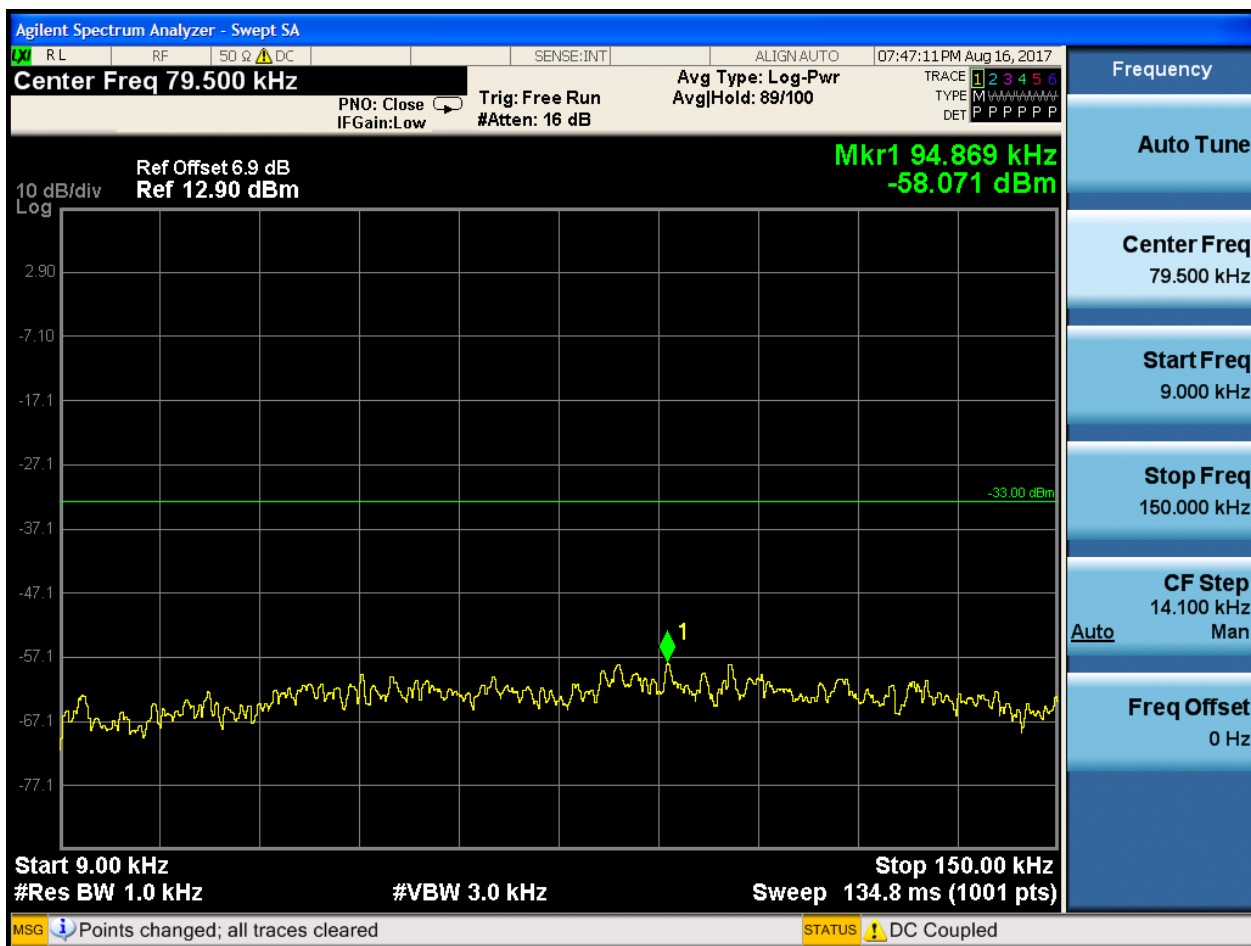


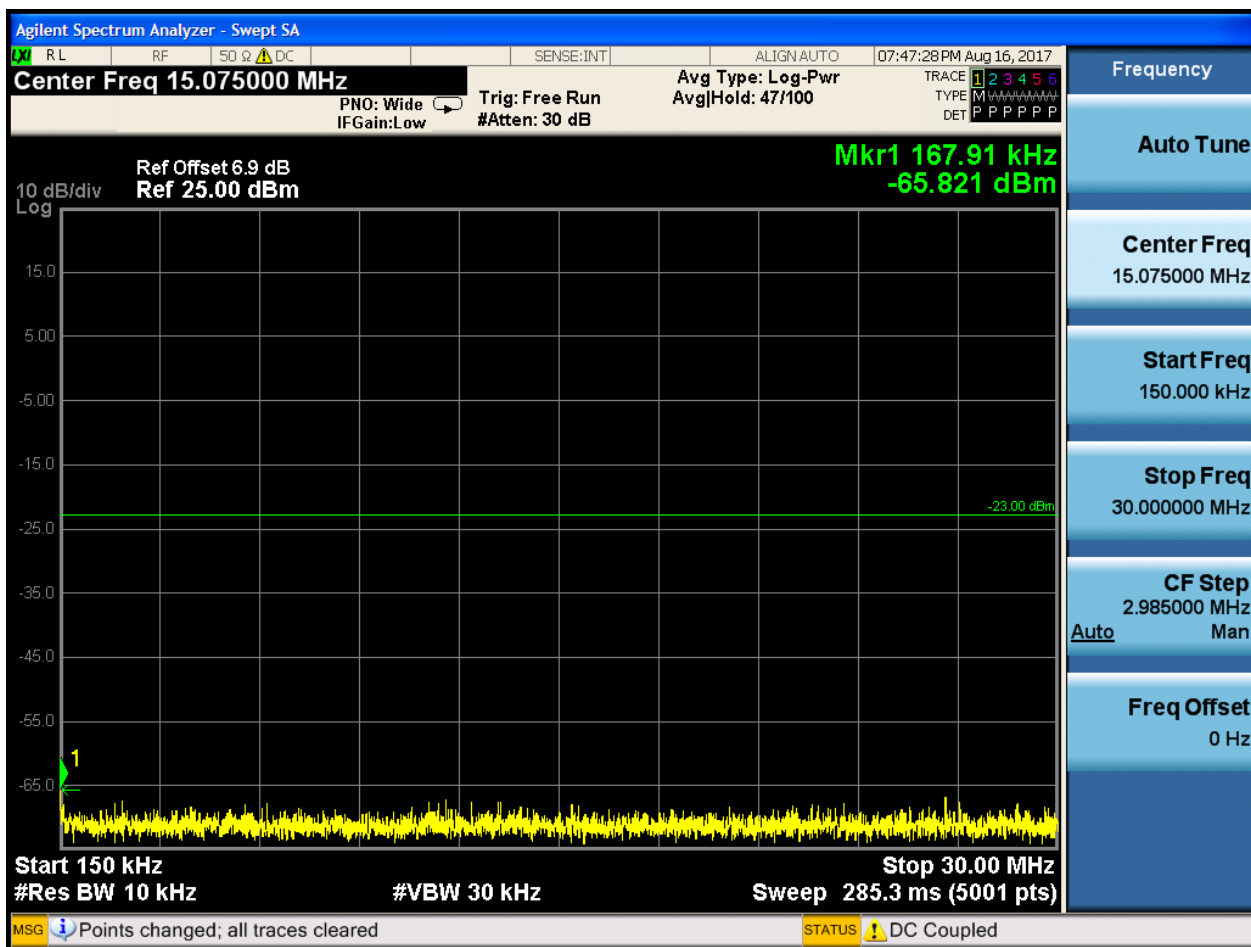


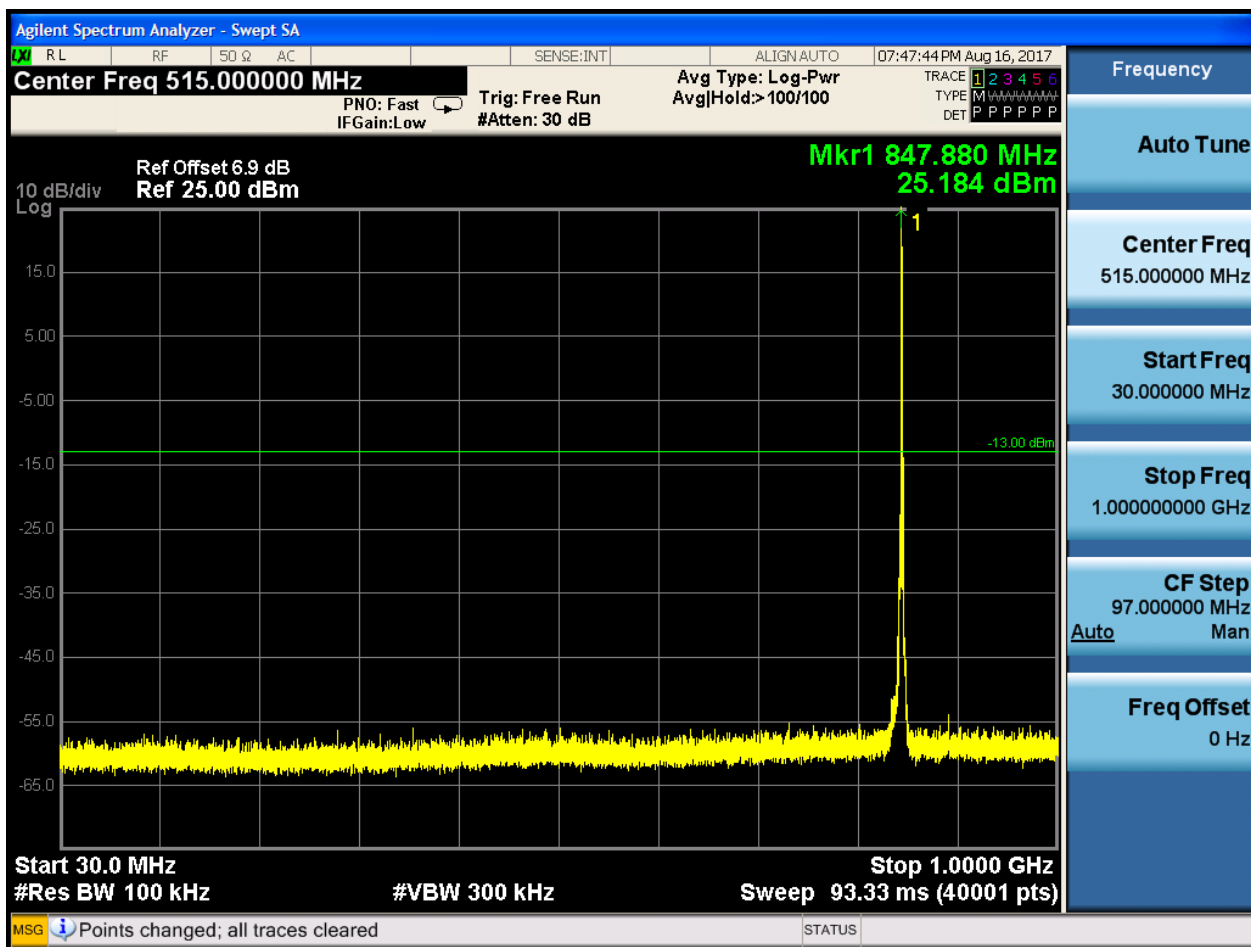


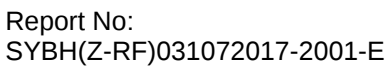
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0







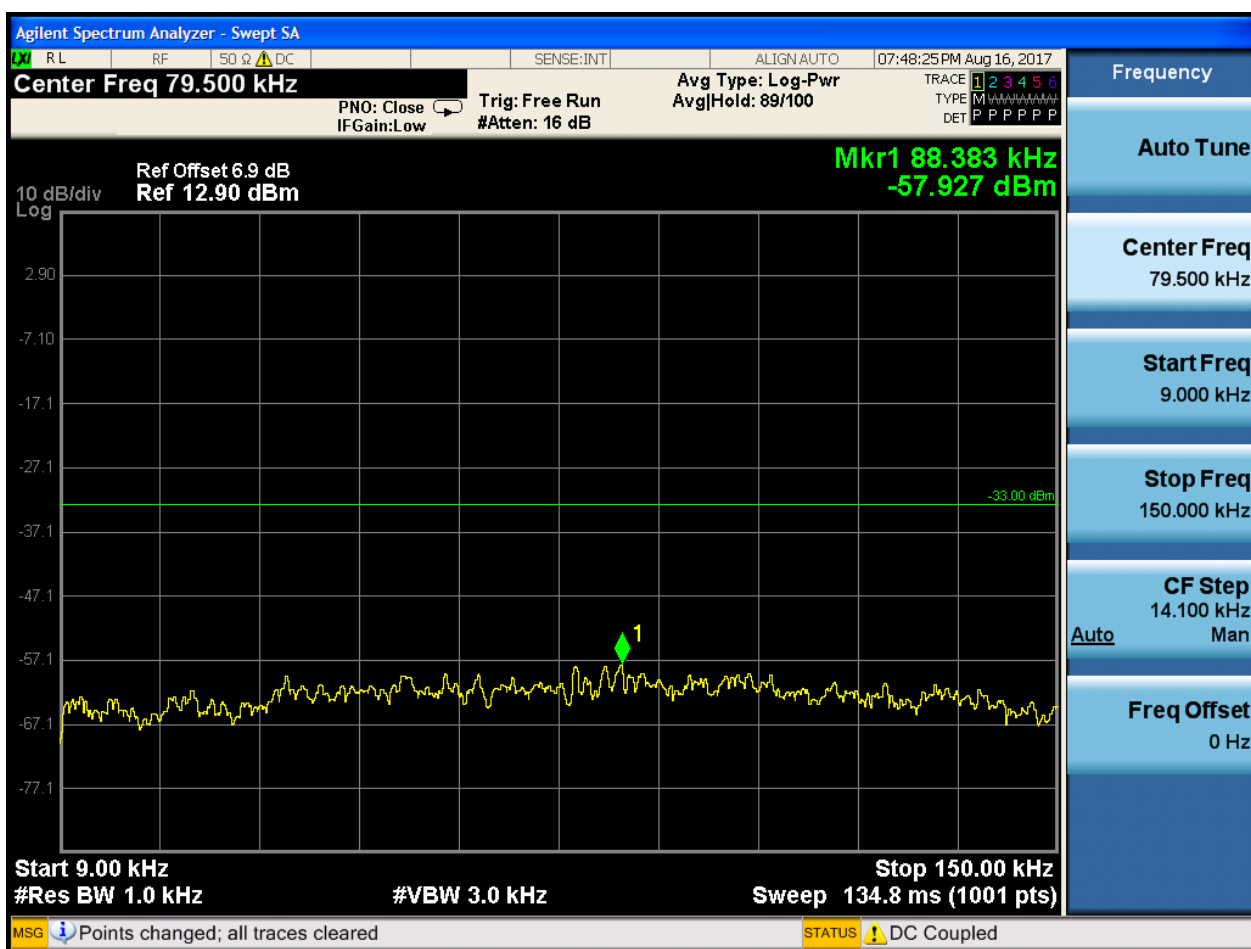


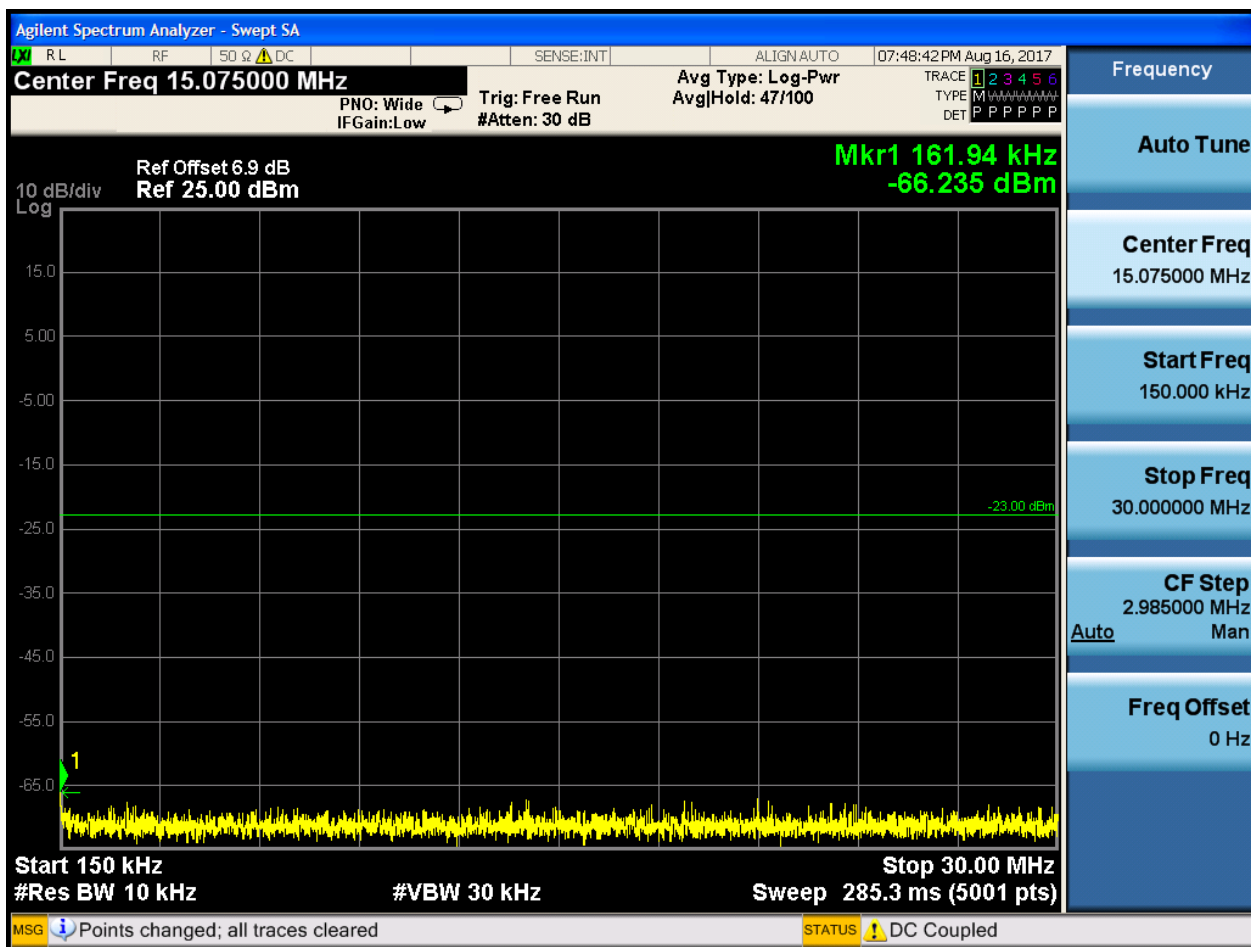


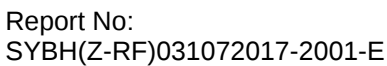
6.1.1.1.2 Test Bandwidth = 3

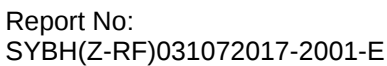
6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0









6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0

