



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	23.39	19.79	38.5	PASS
				RB1#3	23.43	19.83	38.5	PASS
				RB1#5	23.4	19.8	38.5	PASS
				RB3#0	23.35	19.75	38.5	PASS
				RB3#2	23.49	19.89	38.5	PASS
				RB3#3	23.48	19.88	38.5	PASS
			MCH	RB6#0	22.41	18.81	38.5	PASS
				RB1#0	23.06	19.46	38.5	PASS
				RB1#3	23.37	19.77	38.5	PASS
				RB1#5	23.45	19.85	38.5	PASS
				RB3#0	23.34	19.74	38.5	PASS
				RB3#2	23.43	19.83	38.5	PASS
				RB3#3	23.32	19.72	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB6#0	22.27	18.67	38.5	PASS
			HCH	RB1#0	23.24	19.64	38.5	PASS
				RB1#3	23.24	19.64	38.5	PASS
				RB1#5	23.07	19.47	38.5	PASS
				RB3#0	23.33	19.73	38.5	PASS
				RB3#2	23.3	19.7	38.5	PASS
				RB3#3	23.2	19.6	38.5	PASS
				RB6#0	22.25	18.65	38.5	PASS
		3	LCH	RB1#0	23.42	19.82	38.5	PASS
				RB1#7	23.58	19.98	38.5	PASS
				RB1#14	23.47	19.87	38.5	PASS
				RB8#0	22.39	18.79	38.5	PASS
				RB8#4	22.43	18.83	38.5	PASS
				RB8#7	22.42	18.82	38.5	PASS
				RB15#0	22.38	18.78	38.5	PASS
			MCH	RB1#0	23.42	19.82	38.5	PASS
				RB1#7	23.5	19.9	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#14	23.38	19.78	38.5	PASS
				RB8#0	22.43	18.83	38.5	PASS
				RB8#4	22.37	18.77	38.5	PASS
				RB8#7	22.4	18.8	38.5	PASS
				RB15#0	22.42	18.82	38.5	PASS
			HCH	RB1#0	23.37	19.77	38.5	PASS
				RB1#7	23.32	19.72	38.5	PASS
				RB1#14	23.42	19.82	38.5	PASS
				RB8#0	22.31	18.71	38.5	PASS
				RB8#4	22.27	18.67	38.5	PASS
				RB8#7	22.47	18.87	38.5	PASS
				RB15#0	22.38	18.78	38.5	PASS
		5	LCH	RB1#0	23.3	19.7	38.5	PASS
				RB1#13	23.38	19.78	38.5	PASS
				RB1#24	23.33	19.73	38.5	PASS
				RB12#0	22.36	18.76	38.5	PASS
				RB12#6	22.46	18.86	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB12#13	22.42	18.82	38.5	PASS
				RB25#0	22.37	18.77	38.5	PASS
			MCH	RB1#0	23.25	19.65	38.5	PASS
				RB1#13	23.21	19.61	38.5	PASS
				RB1#24	23.3	19.7	38.5	PASS
				RB12#0	22.42	18.82	38.5	PASS
				RB12#6	22.45	18.85	38.5	PASS
				RB12#13	22.41	18.81	38.5	PASS
				RB25#0	22.37	18.77	38.5	PASS
			HCH	RB1#0	23.02	19.42	38.5	PASS
				RB1#13	23.13	19.53	38.5	PASS
				RB1#24	22.93	19.33	38.5	PASS
				RB12#0	22.35	18.75	38.5	PASS
				RB12#6	22.44	18.84	38.5	PASS
				RB12#13	22.29	18.69	38.5	PASS
				RB25#0	22.32	18.72	38.5	PASS
		10	LCH	RB1#0	23.41	19.81	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#25	23.88	20.28	38.5	PASS
				RB1#49	23.54	19.94	38.5	PASS
				RB25#0	22.47	18.87	38.5	PASS
				RB25#13	22.5	18.9	38.5	PASS
				RB25#25	22.39	18.79	38.5	PASS
				RB50#0	22.44	18.84	38.5	PASS
			MCH	RB1#0	23.32	19.72	38.5	PASS
				RB1#25	23.62	20.02	38.5	PASS
				RB1#49	23.49	19.89	38.5	PASS
				RB25#0	22.46	18.86	38.5	PASS
				RB25#13	22.48	18.88	38.5	PASS
				RB25#25	22.35	18.75	38.5	PASS
				RB50#0	22.37	18.77	38.5	PASS
			HCH	RB1#0	23.21	19.61	38.5	PASS
				RB1#25	23.65	20.05	38.5	PASS
				RB1#49	23.25	19.65	38.5	PASS
				RB25#0	22.43	18.83	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#13	22.45	18.85	38.5	PASS
				RB25#25	22.29	18.69	38.5	PASS
				RB50#0	22.31	18.71	38.5	PASS
	LTE/TM2	1.4	LCH	RB1#0	22.19	18.59	38.5	PASS
				RB1#3	22.29	18.69	38.5	PASS
				RB1#5	22.27	18.67	38.5	PASS
				RB3#0	22.45	18.85	38.5	PASS
				RB3#2	22.57	18.97	38.5	PASS
				RB3#3	22.55	18.95	38.5	PASS
				RB6#0	21.61	18.01	38.5	PASS
			MCH	RB1#0	22.61	19.01	38.5	PASS
				RB1#3	22.69	19.09	38.5	PASS
				RB1#5	22.63	19.03	38.5	PASS
				RB3#0	22.21	18.61	38.5	PASS
				RB3#2	22.42	18.82	38.5	PASS
				RB3#3	22.23	18.63	38.5	PASS
				RB6#0	21.23	17.63	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	21.43	17.83	38.5	PASS
				RB1#3	21.73	18.13	38.5	PASS
				RB1#5	22.13	18.53	38.5	PASS
				RB3#0	22.63	19.03	38.5	PASS
				RB3#2	22.46	18.86	38.5	PASS
				RB3#3	22.24	18.64	38.5	PASS
				RB6#0	21.07	17.47	38.5	PASS
		3	LCH	RB1#0	22.56	18.96	38.5	PASS
				RB1#7	22.48	18.88	38.5	PASS
				RB1#14	22.43	18.83	38.5	PASS
				RB8#0	21.26	17.66	38.5	PASS
				RB8#4	21.2	17.6	38.5	PASS
				RB8#7	21.21	17.61	38.5	PASS
				RB15#0	21.18	17.58	38.5	PASS
			MCH	RB1#0	22.29	18.69	38.5	PASS
				RB1#7	22.42	18.82	38.5	PASS
				RB1#14	22.52	18.92	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB8#0	21.42	17.82	38.5	PASS
				RB8#4	21.34	17.74	38.5	PASS
				RB8#7	21.28	17.68	38.5	PASS
				RB15#0	21.19	17.59	38.5	PASS
			HCH	RB1#0	22.22	18.62	38.5	PASS
				RB1#7	22.08	18.48	38.5	PASS
				RB1#14	22.22	18.62	38.5	PASS
				RB8#0	21.33	17.73	38.5	PASS
				RB8#4	21.22	17.62	38.5	PASS
				RB8#7	20.99	17.39	38.5	PASS
				RB15#0	20.97	17.37	38.5	PASS
		5	LCH	RB1#0	22.2	18.6	38.5	PASS
				RB1#13	21.92	18.32	38.5	PASS
				RB1#24	21.77	18.17	38.5	PASS
				RB12#0	21.18	17.58	38.5	PASS
				RB12#6	21.13	17.53	38.5	PASS
				RB12#13	21.33	17.73	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.41	17.81	38.5	PASS
			MCH	RB1#0	21.86	18.26	38.5	PASS
				RB1#13	21.87	18.27	38.5	PASS
				RB1#24	21.6	18	38.5	PASS
				RB12#0	21.29	17.69	38.5	PASS
				RB12#6	21.13	17.53	38.5	PASS
				RB12#13	21.08	17.48	38.5	PASS
				RB25#0	21.39	17.79	38.5	PASS
			HCH	RB1#0	22.29	18.69	38.5	PASS
				RB1#13	22.28	18.68	38.5	PASS
				RB1#24	22.17	18.57	38.5	PASS
				RB12#0	21.26	17.66	38.5	PASS
				RB12#6	21.27	17.67	38.5	PASS
				RB12#13	21.1	17.5	38.5	PASS
				RB25#0	21.12	17.52	38.5	PASS
		10	LCH	RB1#0	22.51	18.91	38.5	PASS
				RB1#25	22.41	18.81	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#49	21.64	18.04	38.5	PASS
				RB25#0	21.25	17.65	38.5	PASS
				RB25#13	21.57	17.97	38.5	PASS
				RB25#25	21.29	17.69	38.5	PASS
				RB50#0	21.34	17.74	38.5	PASS
			MCH	RB1#0	22.61	19.01	38.5	PASS
				RB1#25	22.76	19.16	38.5	PASS
				RB1#49	22.3	18.7	38.5	PASS
				RB25#0	21.57	17.97	38.5	PASS
				RB25#13	21.58	17.98	38.5	PASS
				RB25#25	21.45	17.85	38.5	PASS
				RB50#0	21.4	17.8	38.5	PASS
			HCH	RB1#0	21.99	18.39	38.5	PASS
				RB1#25	22.23	18.63	38.5	PASS
				RB1#49	22.16	18.56	38.5	PASS
				RB25#0	21.52	17.92	38.5	PASS
				RB25#13	21.52	17.92	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.26	17.66	38.5	PASS
				RB50#0	21.29	17.69	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:

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

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

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

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

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	3.76	13	PASS
				RB1#3	3.71	13	PASS
				RB1#5	3.78	13	PASS
				RB3#0	4.18	13	PASS
				RB3#2	4.13	13	PASS
				RB3#3	4.14	13	PASS
				RB6#0	5.23	13	PASS
			MCH	RB1#0	3.79	13	PASS
				RB1#3	3.7	13	PASS
				RB1#5	3.75	13	PASS
				RB3#0	4.08	13	PASS
				RB3#2	3.95	13	PASS
				RB3#3	4.01	13	PASS
				RB6#0	5.07	13	PASS
			HCH	RB1#0	3.75	13	PASS
				RB1#3	3.72	13	PASS
				RB1#5	3.77	13	PASS
				RB3#0	3.99	13	PASS
				RB3#2	3.8	13	PASS
				RB3#3	3.91	13	PASS
				RB6#0	4.98	13	PASS
		3	LCH	RB1#0	3.86	13	PASS
				RB1#7	3.8	13	PASS
				RB1#14	3.95	13	PASS
				RB8#0	4.81	13	PASS
				RB8#4	4.75	13	PASS
				RB8#7	4.88	13	PASS
				RB15#0	5.14	13	PASS
			MCH	RB1#0	3.89	13	PASS
				RB1#7	3.76	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#14	3.78	13	PASS
				RB8#0	4.65	13	PASS
				RB8#4	4.52	13	PASS
				RB8#7	4.63	13	PASS
				RB15#0	5.19	13	PASS
			HCH	RB1#0	3.89	13	PASS
				RB1#7	3.61	13	PASS
				RB1#14	3.53	13	PASS
				RB8#0	4.69	13	PASS
				RB8#4	4.58	13	PASS
				RB8#7	4.59	13	PASS
				RB15#0	5.06	13	PASS
		5	LCH	RB1#0	3.88	13	PASS
				RB1#13	3.94	13	PASS
				RB1#24	3.91	13	PASS
				RB12#0	4.67	13	PASS
				RB12#6	4.66	13	PASS
				RB12#13	4.75	13	PASS
				RB25#0	5.08	13	PASS
			MCH	RB1#0	3.92	13	PASS
				RB1#13	3.78	13	PASS
				RB1#24	3.78	13	PASS
				RB12#0	4.67	13	PASS
				RB12#6	4.49	13	PASS
				RB12#13	4.56	13	PASS
				RB25#0	5.18	13	PASS
			HCH	RB1#0	4.02	13	PASS
				RB1#13	3.9	13	PASS
				RB1#24	3.77	13	PASS
				RB12#0	4.71	13	PASS
				RB12#6	4.54	13	PASS
				RB12#13	4.57	13	PASS
				RB25#0	5.08	13	PASS
		10	LCH	RB1#0	3.84	13	PASS
				RB1#25	3.8	13	PASS
				RB1#49	3.92	13	PASS
				RB25#0	4.74	13	PASS
				RB25#13	4.75	13	PASS
				RB25#25	4.78	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB50#0	5.28	13	PASS
			MCH	RB1#0	4.07	13	PASS
				RB1#25	3.7	13	PASS
				RB1#49	3.82	13	PASS
				RB25#0	4.72	13	PASS
				RB25#13	4.59	13	PASS
				RB25#25	4.61	13	PASS
				RB50#0	5.11	13	PASS
			HCH	RB1#0	3.89	13	PASS
				RB1#25	3.73	13	PASS
				RB1#49	3.84	13	PASS
				RB25#0	4.7	13	PASS
				RB25#13	4.67	13	PASS
				RB25#25	4.68	13	PASS
				RB50#0	4.85	13	PASS
	LTE/TM2	1.4	LCH	RB1#0	4.82	13	PASS
				RB1#3	4.82	13	PASS
				RB1#5	4.77	13	PASS
				RB3#0	5.2	13	PASS
				RB3#2	5.13	13	PASS
				RB3#3	5.28	13	PASS
				RB6#0	5.71	13	PASS
			MCH	RB1#0	4.78	13	PASS
				RB1#3	4.71	13	PASS
				RB1#5	4.72	13	PASS
				RB3#0	4.82	13	PASS
				RB3#2	4.59	13	PASS
				RB3#3	4.79	13	PASS
				RB6#0	5.71	13	PASS
			HCH	RB1#0	4.33	13	PASS
				RB1#3	4.5	13	PASS
				RB1#5	4.22	13	PASS
				RB3#0	4.79	13	PASS
				RB3#2	4.64	13	PASS
				RB3#3	4.77	13	PASS
				RB6#0	5.97	13	PASS
		3	LCH	RB1#0	4.63	13	PASS
				RB1#7	4.62	13	PASS
				RB1#14	4.84	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#0	5.66	13	PASS
				RB8#4	5.61	13	PASS
				RB8#7	5.64	13	PASS
				RB15#0	6.24	13	PASS
			MCH	RB1#0	4.84	13	PASS
				RB1#7	4.71	13	PASS
				RB1#14	4.8	13	PASS
				RB8#0	5.5	13	PASS
				RB8#4	5.52	13	PASS
				RB8#7	5.49	13	PASS
				RB15#0	5.98	13	PASS
			HCH	RB1#0	4.87	13	PASS
				RB1#7	4.5	13	PASS
				RB1#14	4.63	13	PASS
				RB8#0	5.61	13	PASS
				RB8#4	5.49	13	PASS
				RB8#7	5.52	13	PASS
				RB15#0	5.89	13	PASS
		5	LCH	RB1#0	5.06	13	PASS
				RB1#13	5.05	13	PASS
				RB1#24	5.21	13	PASS
				RB12#0	5.63	13	PASS
				RB12#6	5.61	13	PASS
				RB12#13	5.79	13	PASS
				RB25#0	6.11	13	PASS
			MCH	RB1#0	5	13	PASS
				RB1#13	4.83	13	PASS
				RB1#24	4.87	13	PASS
				RB12#0	5.61	13	PASS
				RB12#6	5.48	13	PASS
				RB12#13	5.53	13	PASS
				RB25#0	6.19	13	PASS
			HCH	RB1#0	4.76	13	PASS
				RB1#13	4.67	13	PASS
				RB1#24	4.61	13	PASS
				RB12#0	5.55	13	PASS
				RB12#6	5.43	13	PASS
				RB12#13	5.46	13	PASS
				RB25#0	6.11	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
		10	LCH	RB1#0	4.87	13	PASS
				RB1#25	4.85	13	PASS
				RB1#49	4.97	13	PASS
				RB25#0	5.84	13	PASS
				RB25#13	5.71	13	PASS
				RB25#25	5.84	13	PASS
				RB50#0	6.7	13	PASS
			MCH	RB1#0	5.05	13	PASS
				RB1#25	4.79	13	PASS
				RB1#49	4.91	13	PASS
				RB25#0	5.61	13	PASS
				RB25#13	5.41	13	PASS
				RB25#25	5.48	13	PASS
				RB50#0	6.28	13	PASS
			HCH	RB1#0	4.4	13	PASS
				RB1#25	4.46	13	PASS
				RB1#49	4.35	13	PASS
				RB25#0	5.5	13	PASS
				RB25#13	5.52	13	PASS
				RB25#25	5.65	13	PASS
				RB50#0	6.16	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

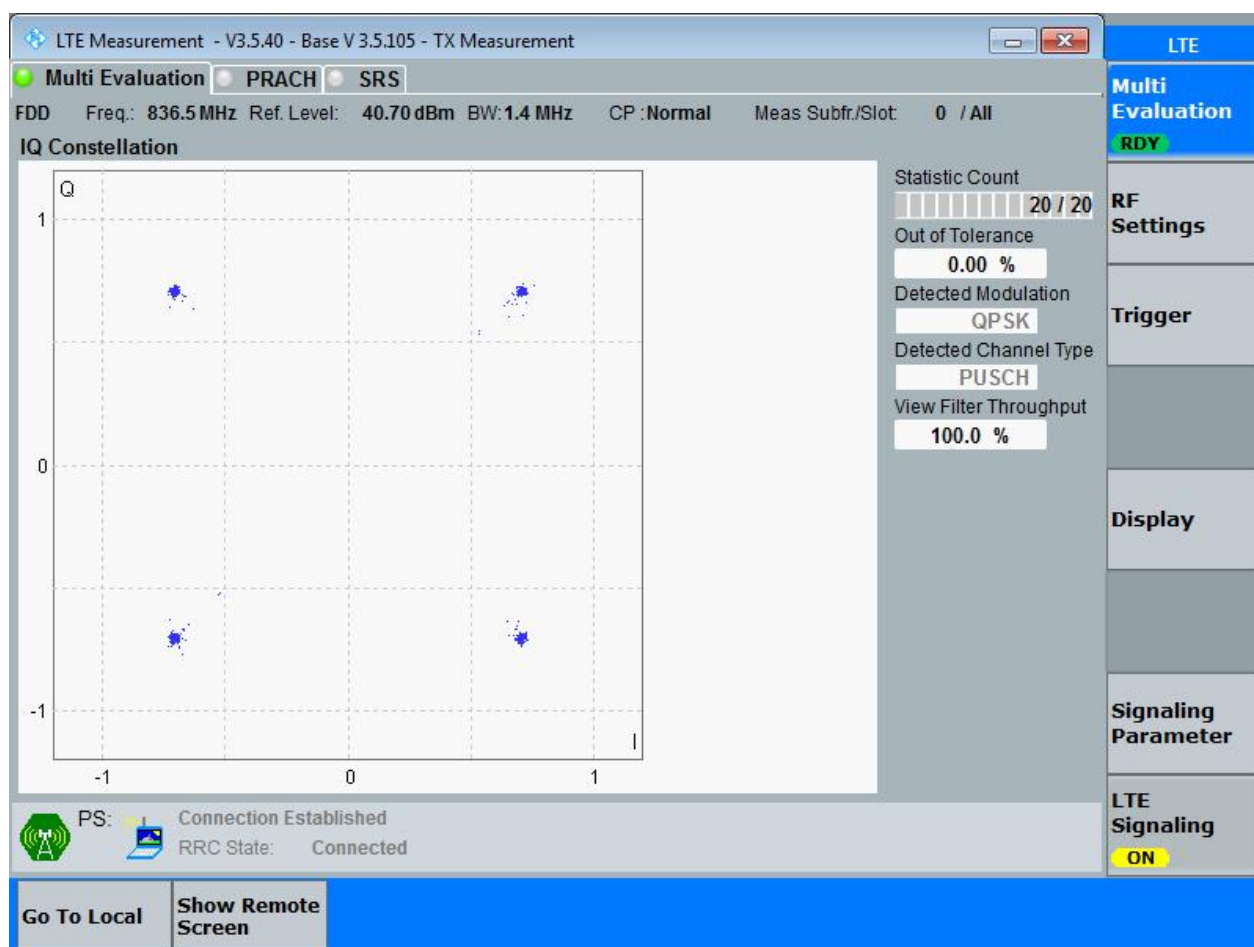
3.1.1 Test Band = BAND5

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

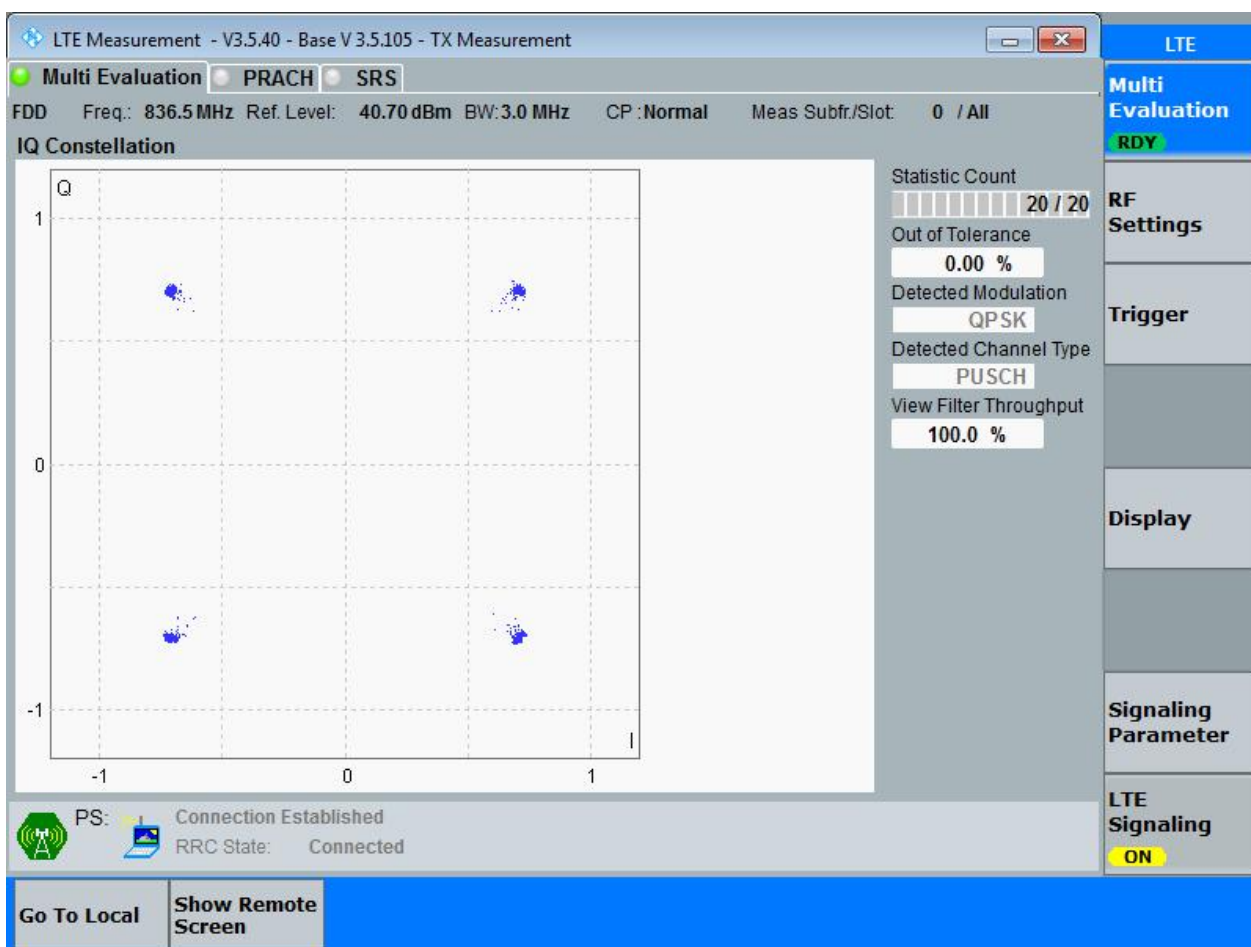
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

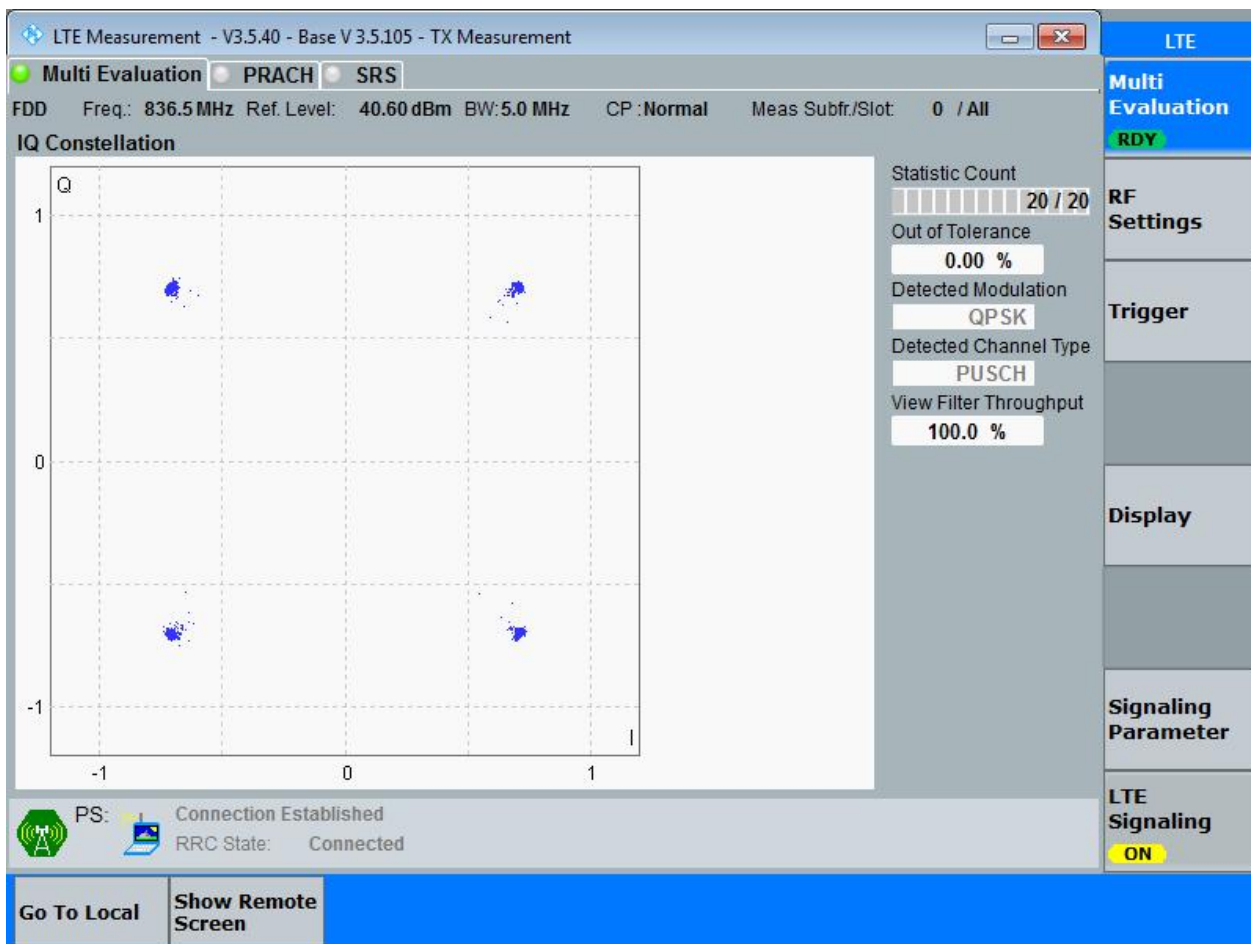
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

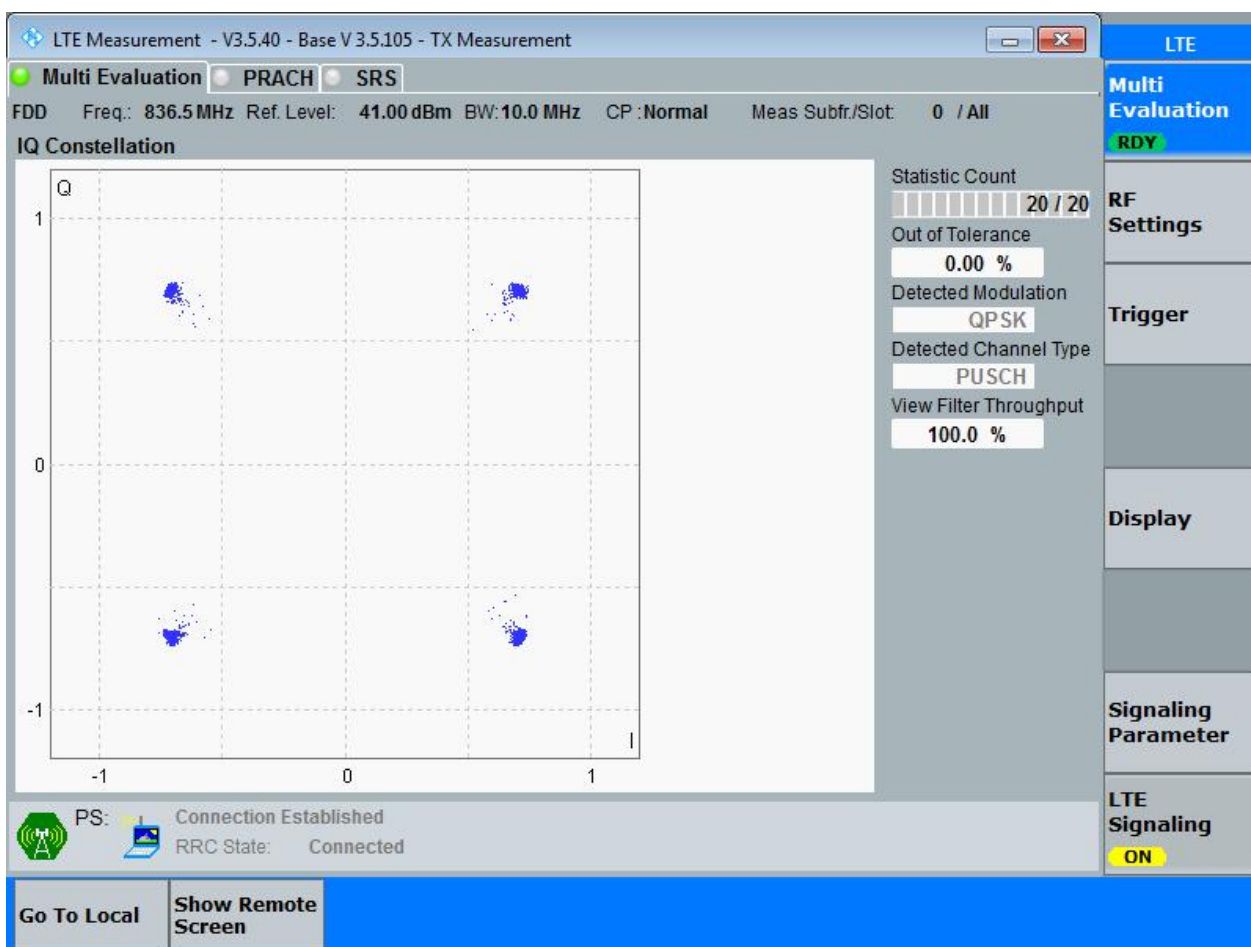
3.1.1.1.3.1.1 Test RB = RB25#0



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

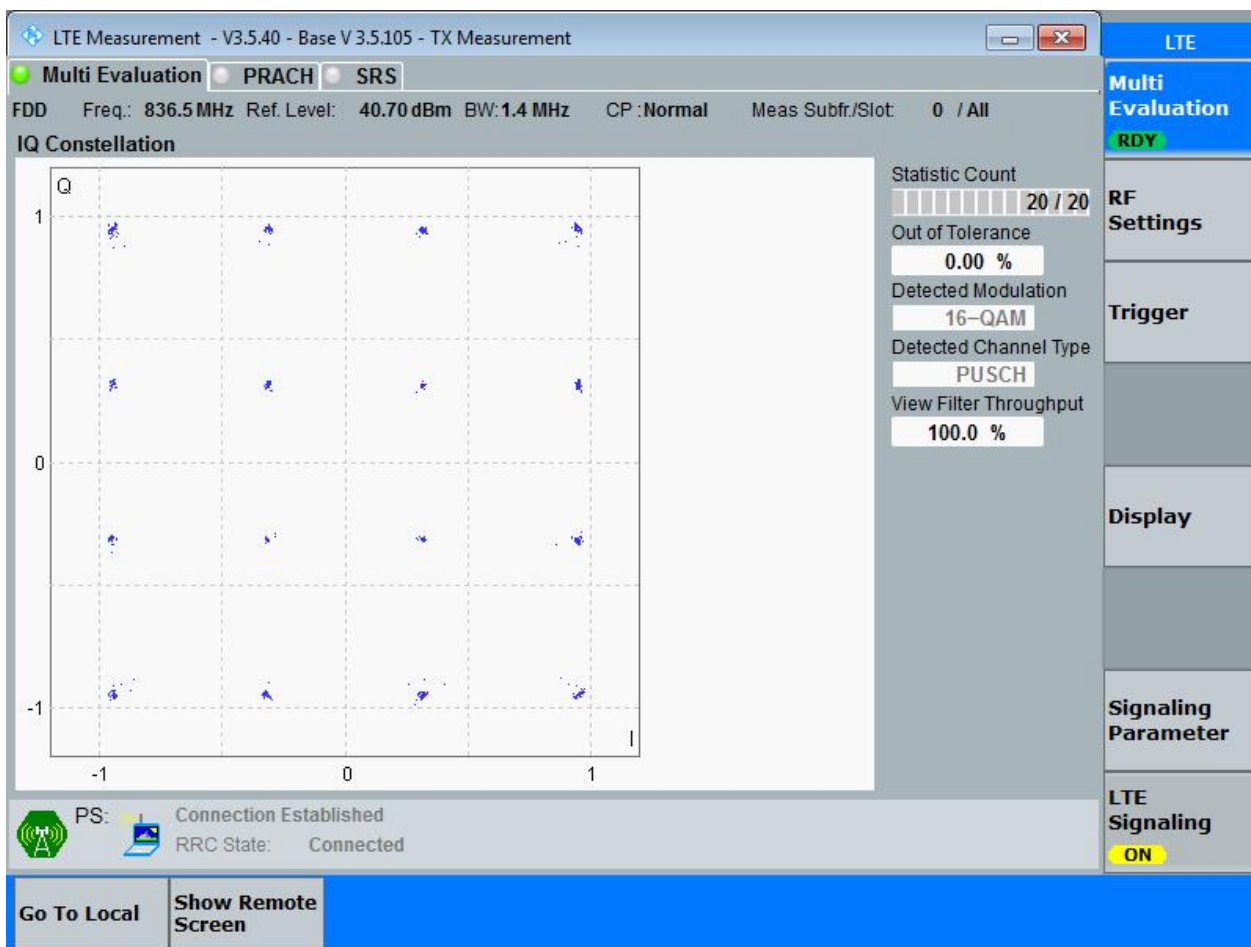


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

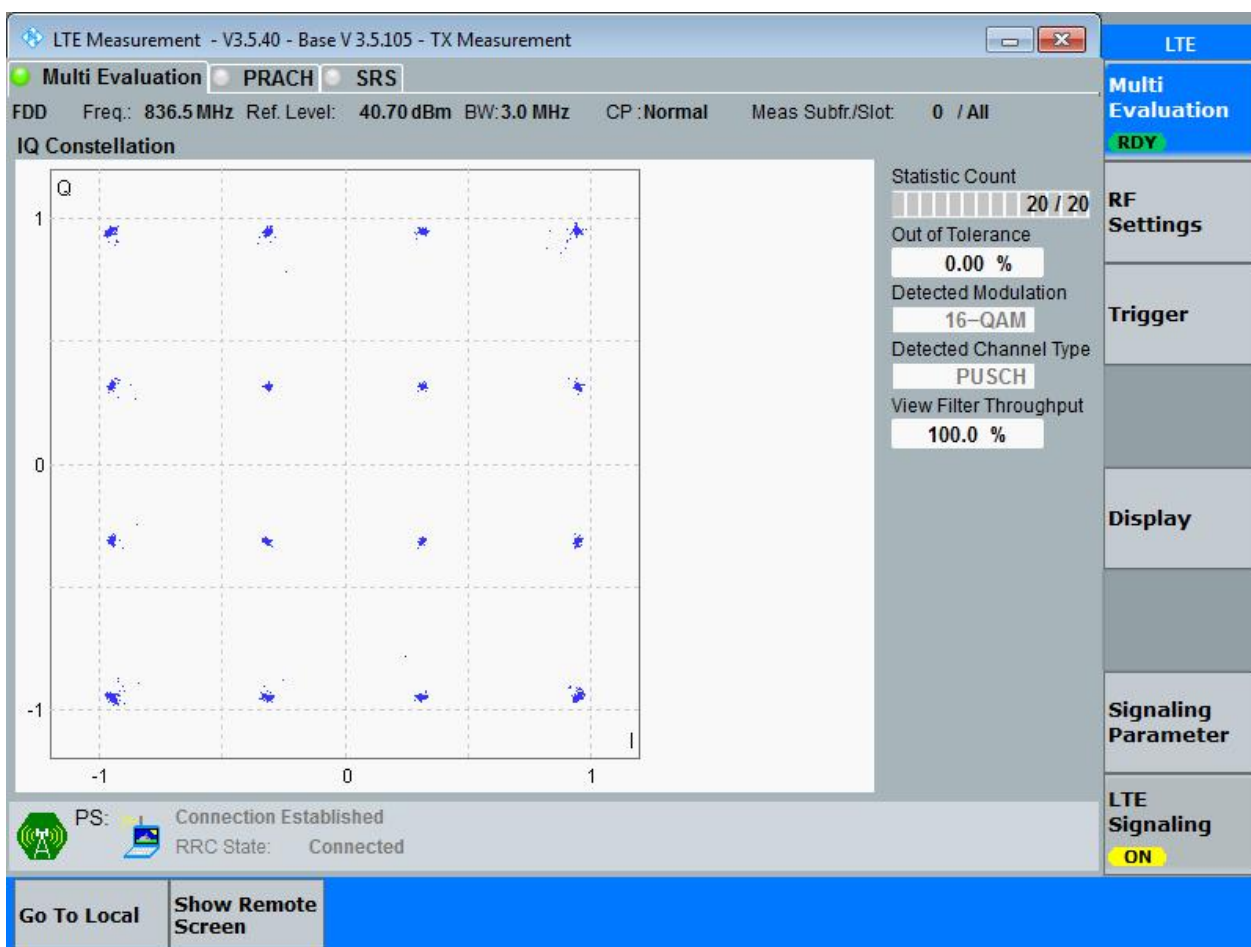
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

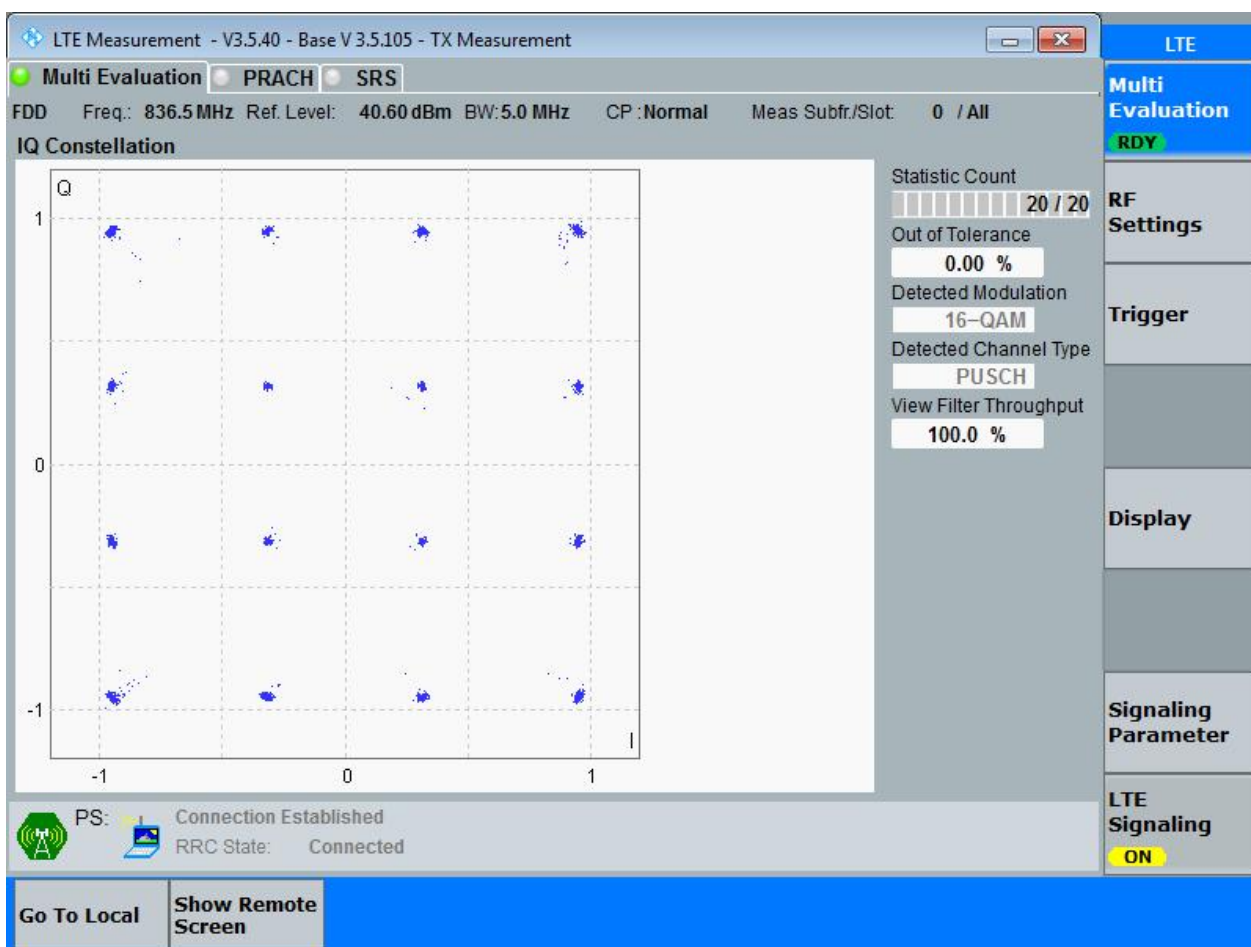
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

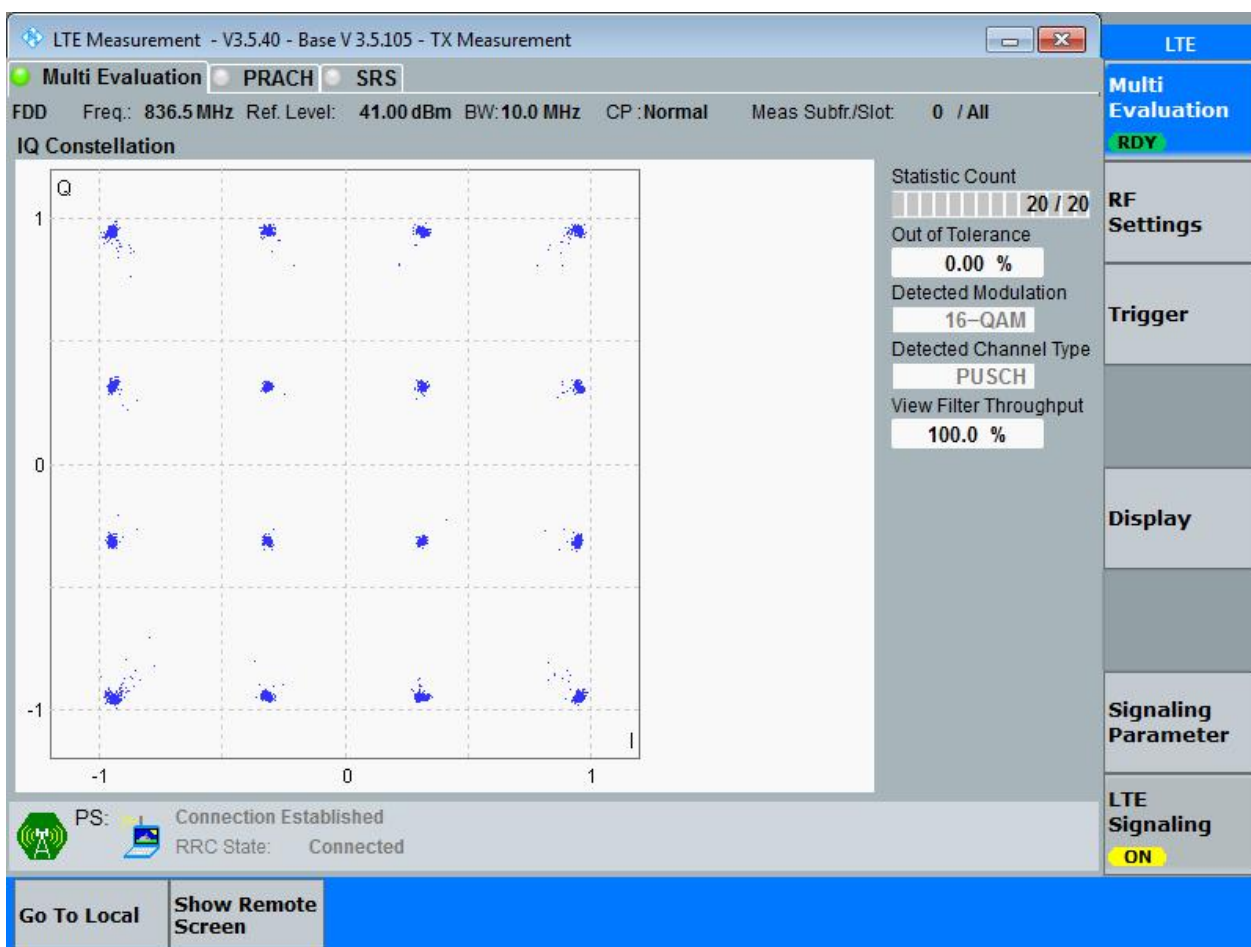
3.1.1.2.3.1.1 Test RB = RB25#0



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	1.30	Pass
			MCH	RB6#0	1.09	1.30	Pass
			HCH	RB6#0	1.09	1.30	Pass
		3	LCH	RB15#0	2.70	3.00	Pass
			MCH	RB15#0	2.71	3.00	Pass
			HCH	RB15#0	2.70	2.98	Pass
		5	LCH	RB25#0	4.52	5.02	Pass
			MCH	RB25#0	4.50	4.99	Pass
			HCH	RB25#0	4.50	5.02	Pass
		10	LCH	RB50#0	8.97	9.90	Pass
			MCH	RB50#0	8.96	9.89	Pass
			HCH	RB50#0	8.97	9.87	Pass
	LTE/TM2	1.4	LCH	RB6#0	1.10	1.31	Pass
			MCH	RB6#0	1.09	1.29	Pass
			HCH	RB6#0	1.09	1.30	Pass
		3	LCH	RB15#0	2.71	2.99	Pass
			MCH	RB15#0	2.70	3.00	Pass
			HCH	RB15#0	2.70	2.99	Pass
		5	LCH	RB25#0	4.51	5.04	Pass
			MCH	RB25#0	4.49	4.99	Pass
			HCH	RB25#0	4.50	5.01	Pass
		10	LCH	RB50#0	8.97	9.96	Pass
			MCH	RB50#0	8.98	9.86	Pass
			HCH	RB50#0	8.96	9.94	Pass



Part II - Test Plots

4.1 For LTE

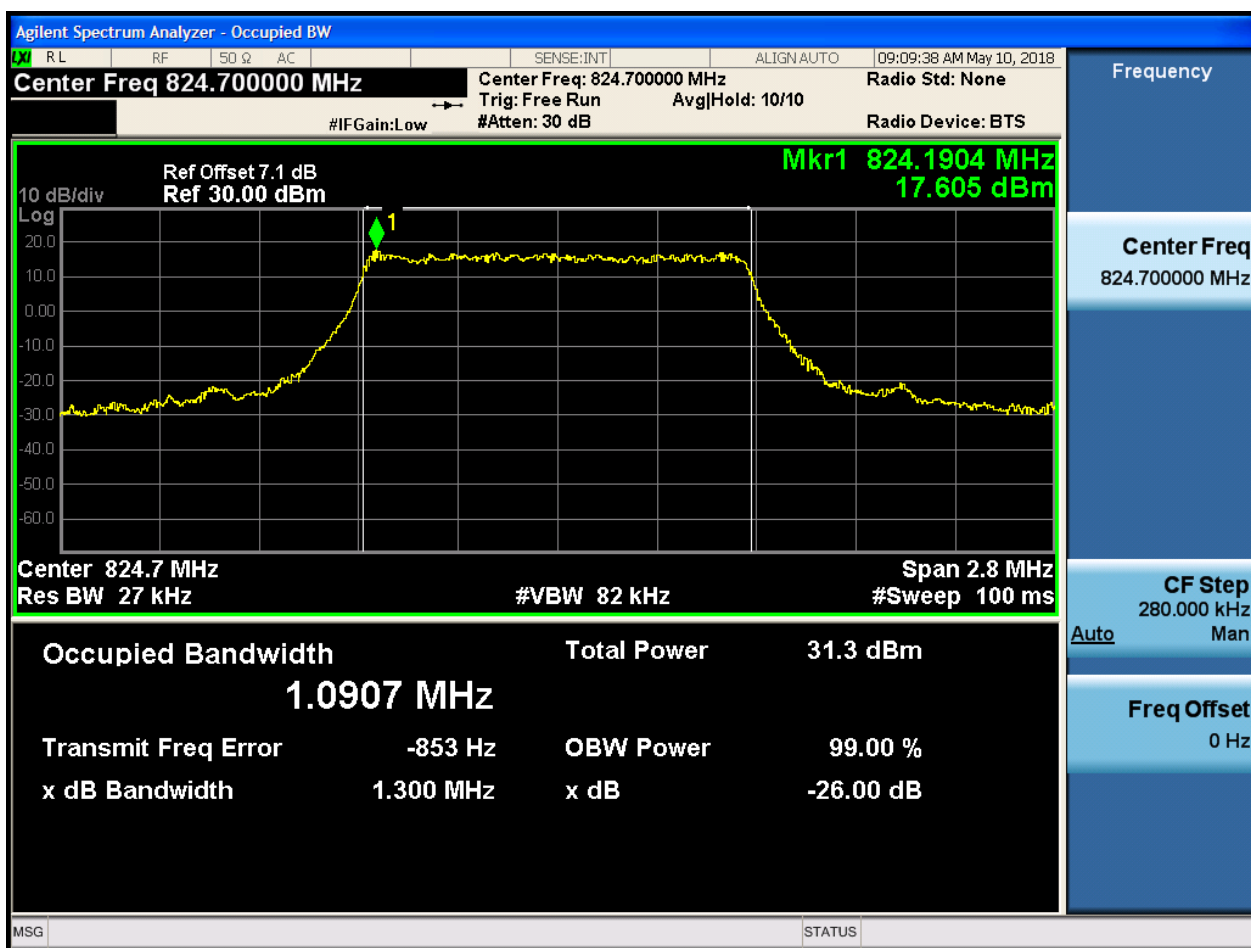
4.1.1 Test Band = BAND5

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

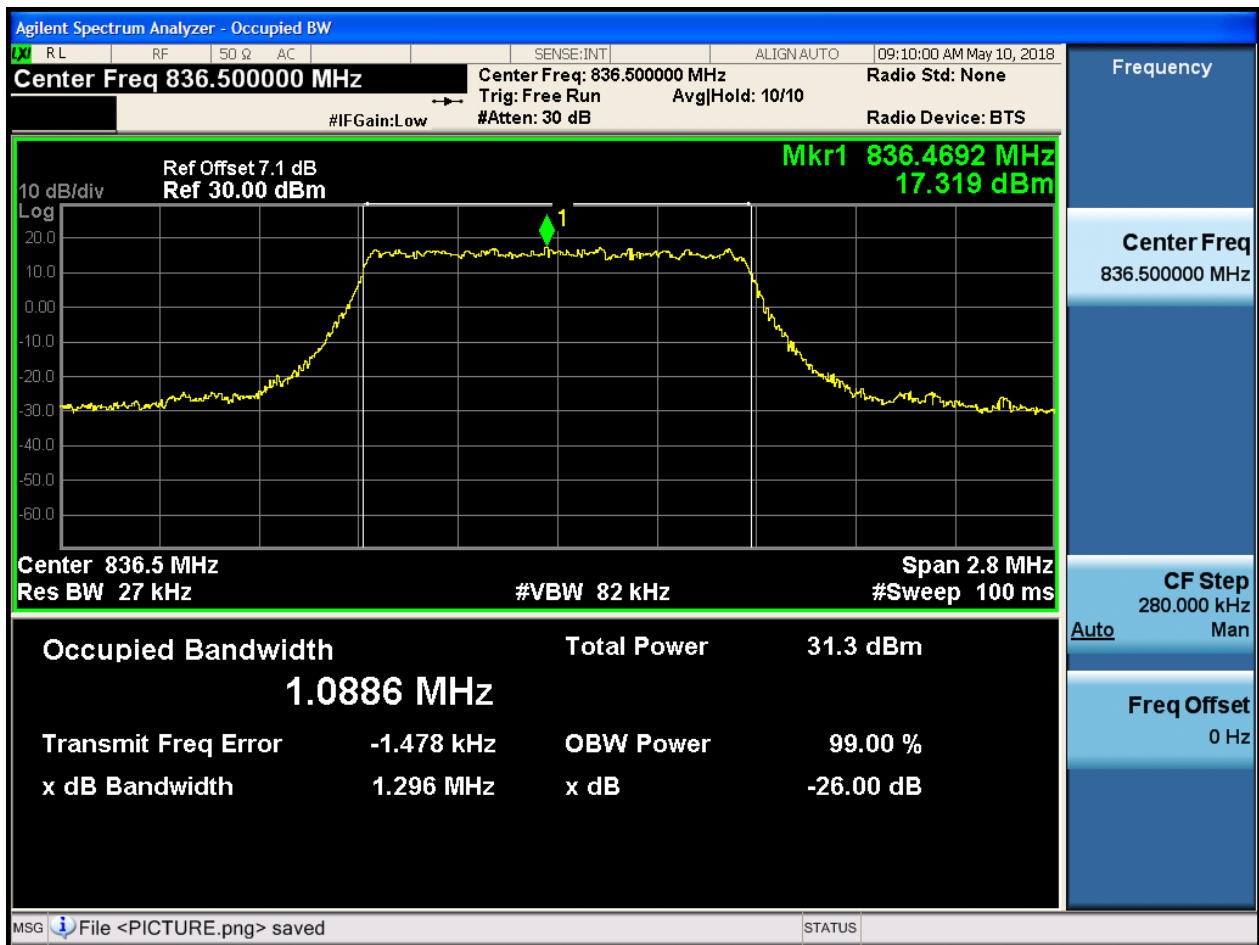
4.1.1.1.1.1.1 Test RB = RB6#0





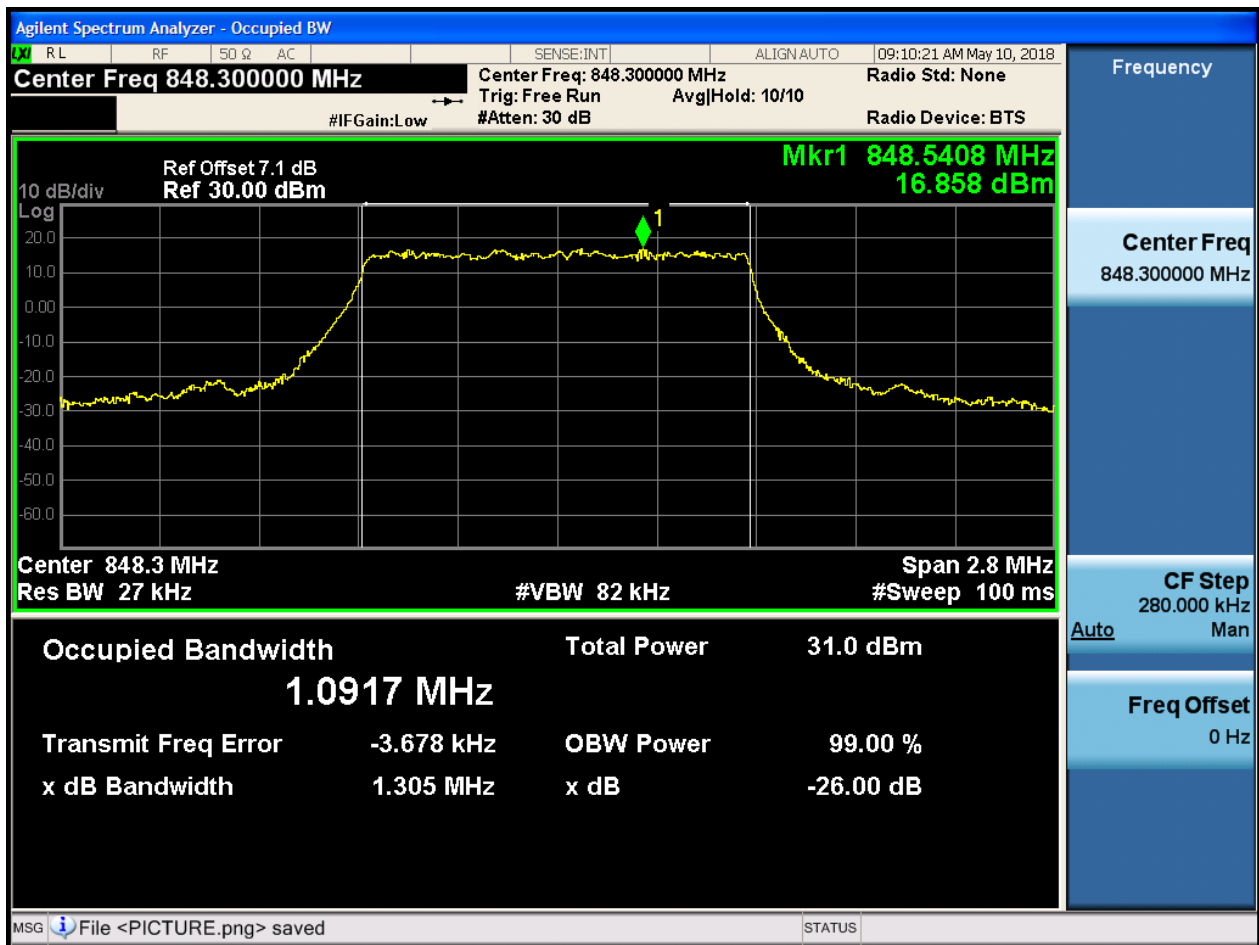
4.1.1.1.1.2 Test Channel = MCH

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

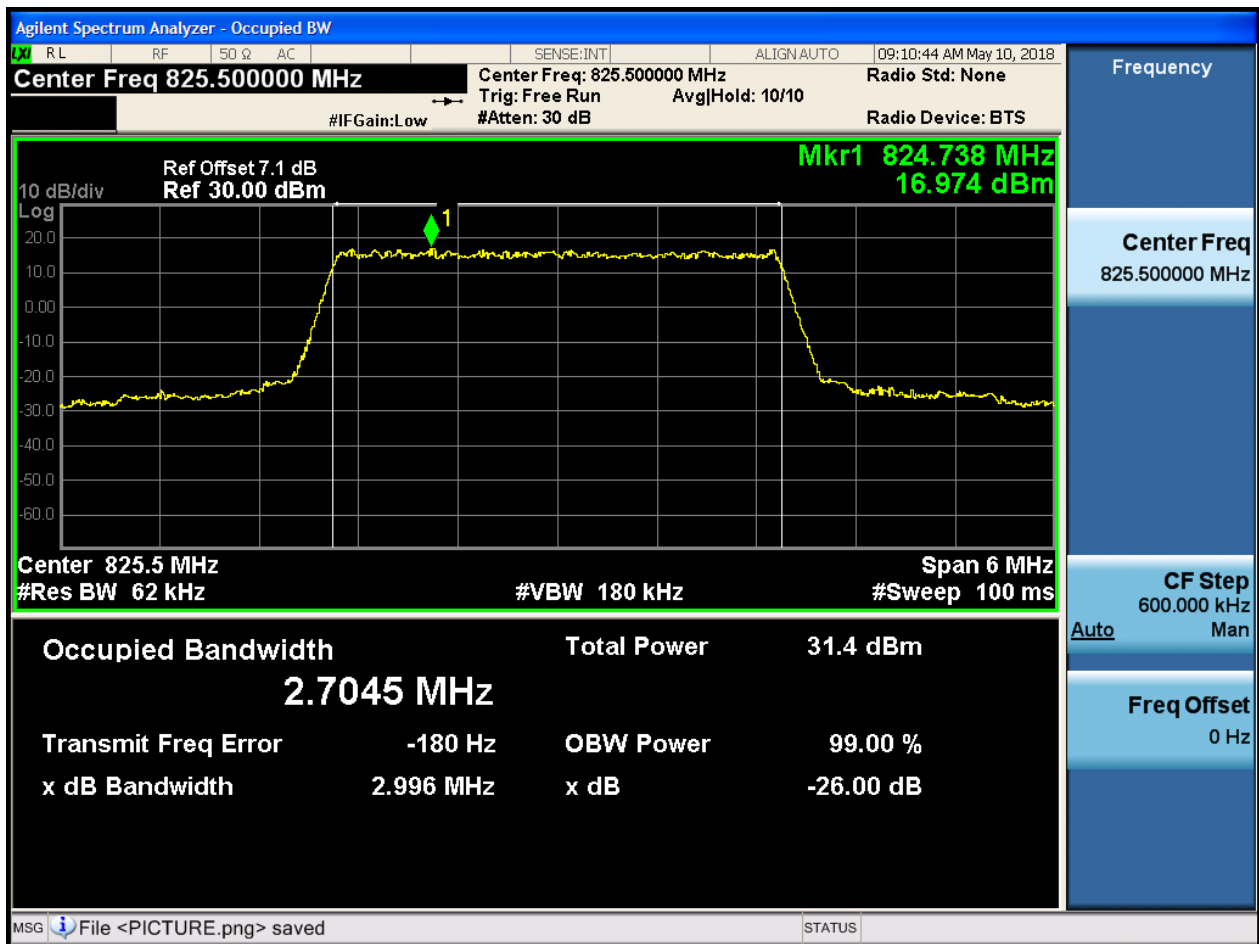




4.1.1.1.2 Test Bandwidth = 3

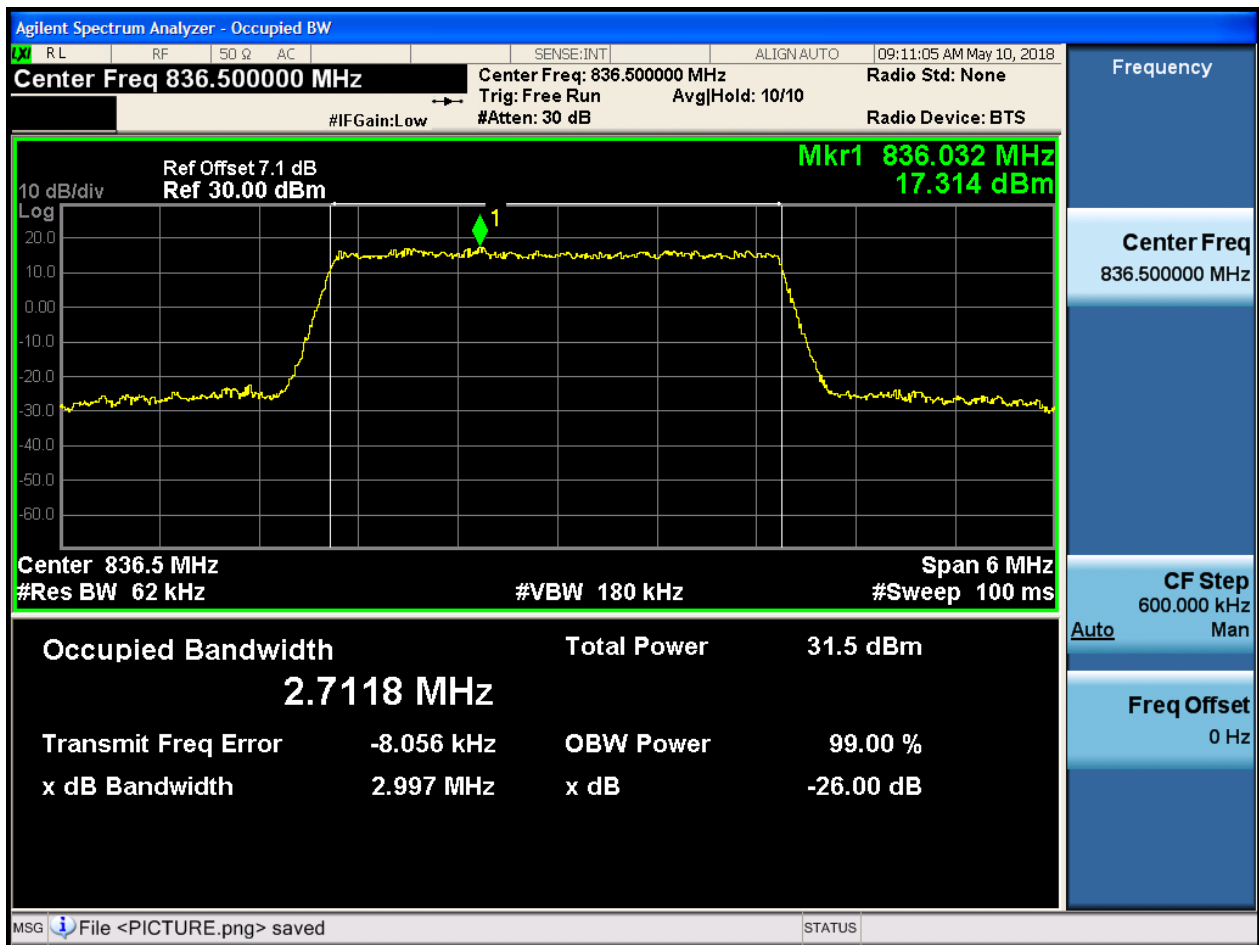
4.1.1.1.2.1 Test Channel = LCH

4.1.1.1.2.1.1 Test RB = RB15#0



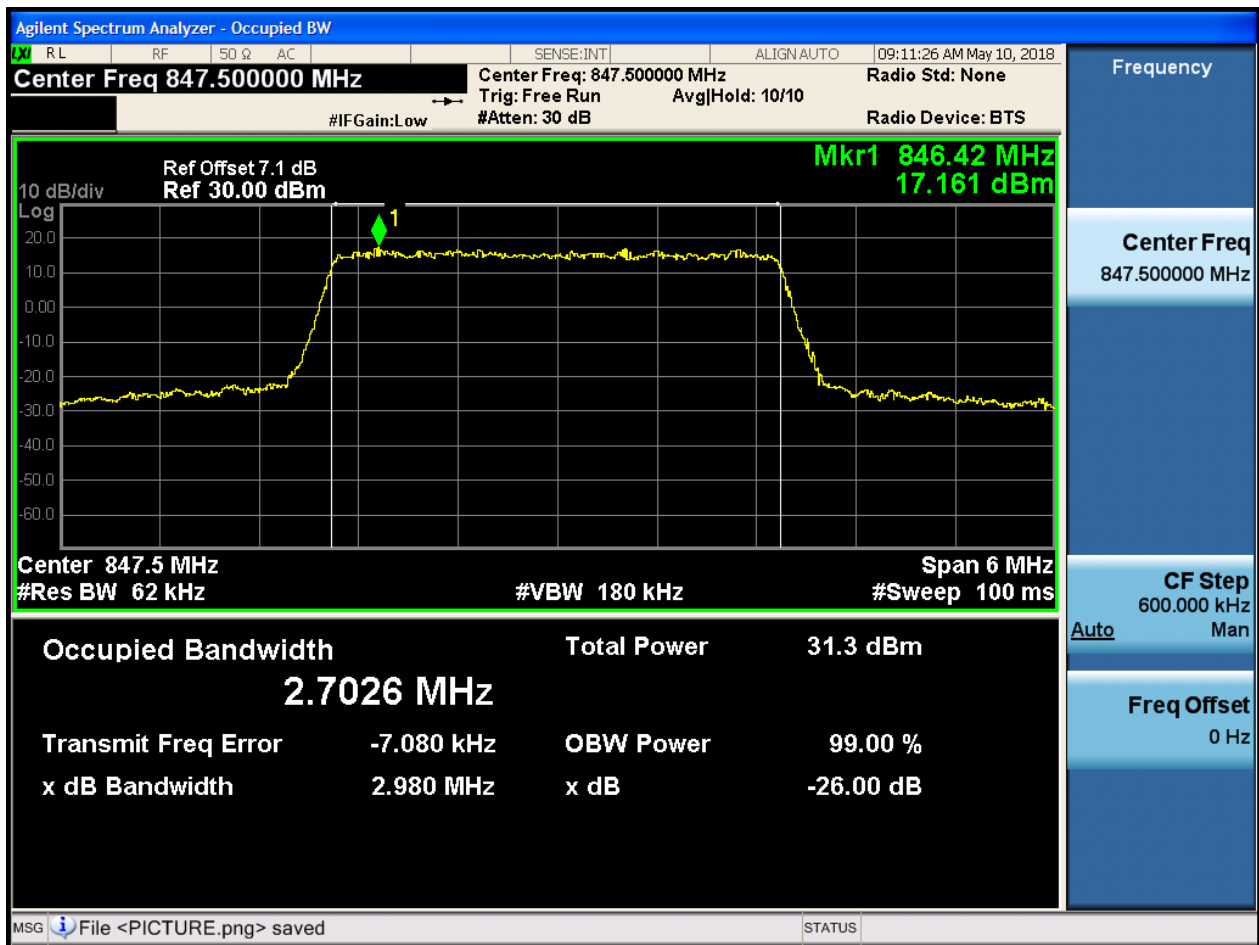
4.1.1.1.2.2 Test Channel = MCH

4.1.1.1.2.2.1 Test RB = RB15#0



4.1.1.1.2.3 Test Channel = HCH

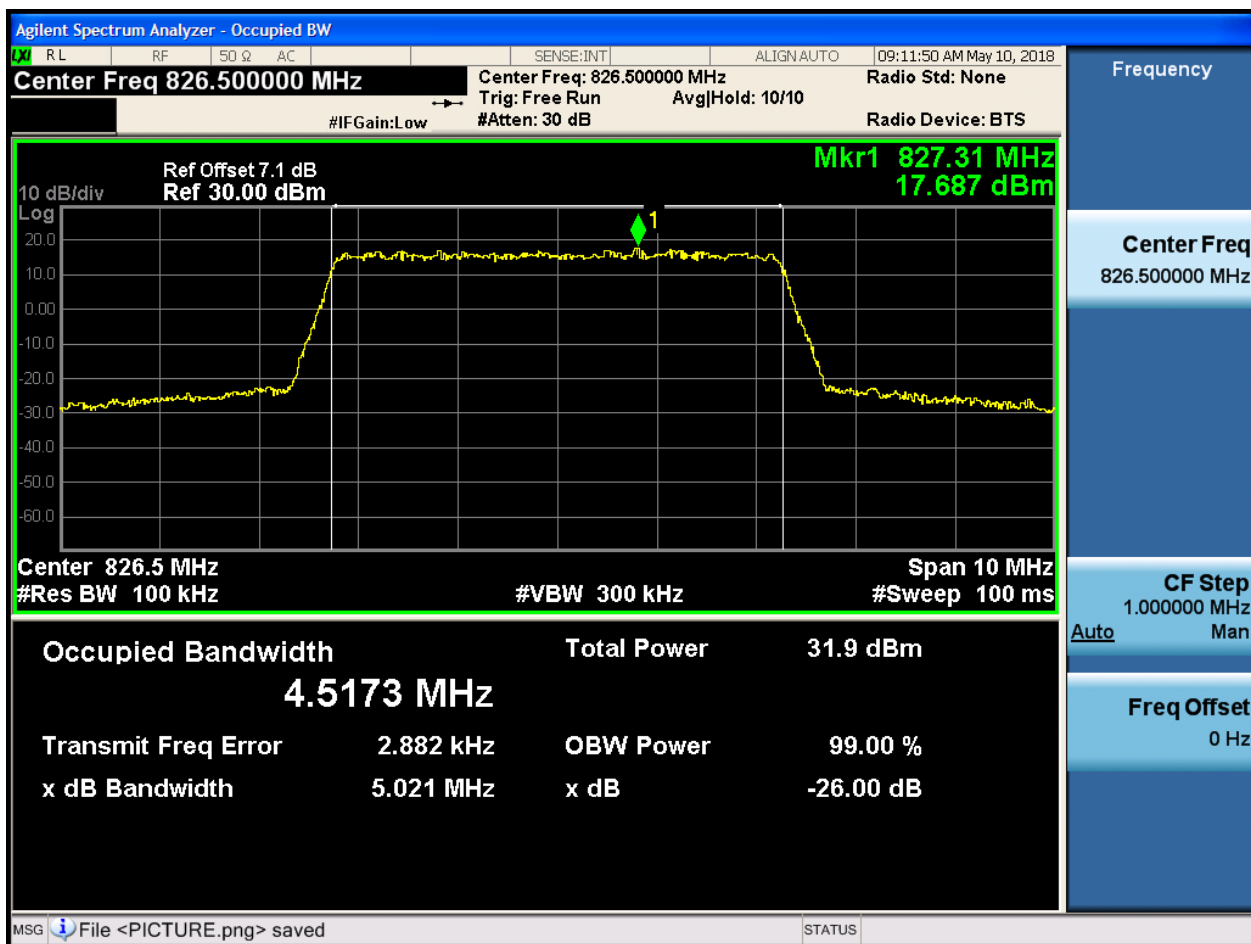
4.1.1.1.2.3.1 Test RB = RB15#0



4.1.1.1.3 Test Bandwidth = 5

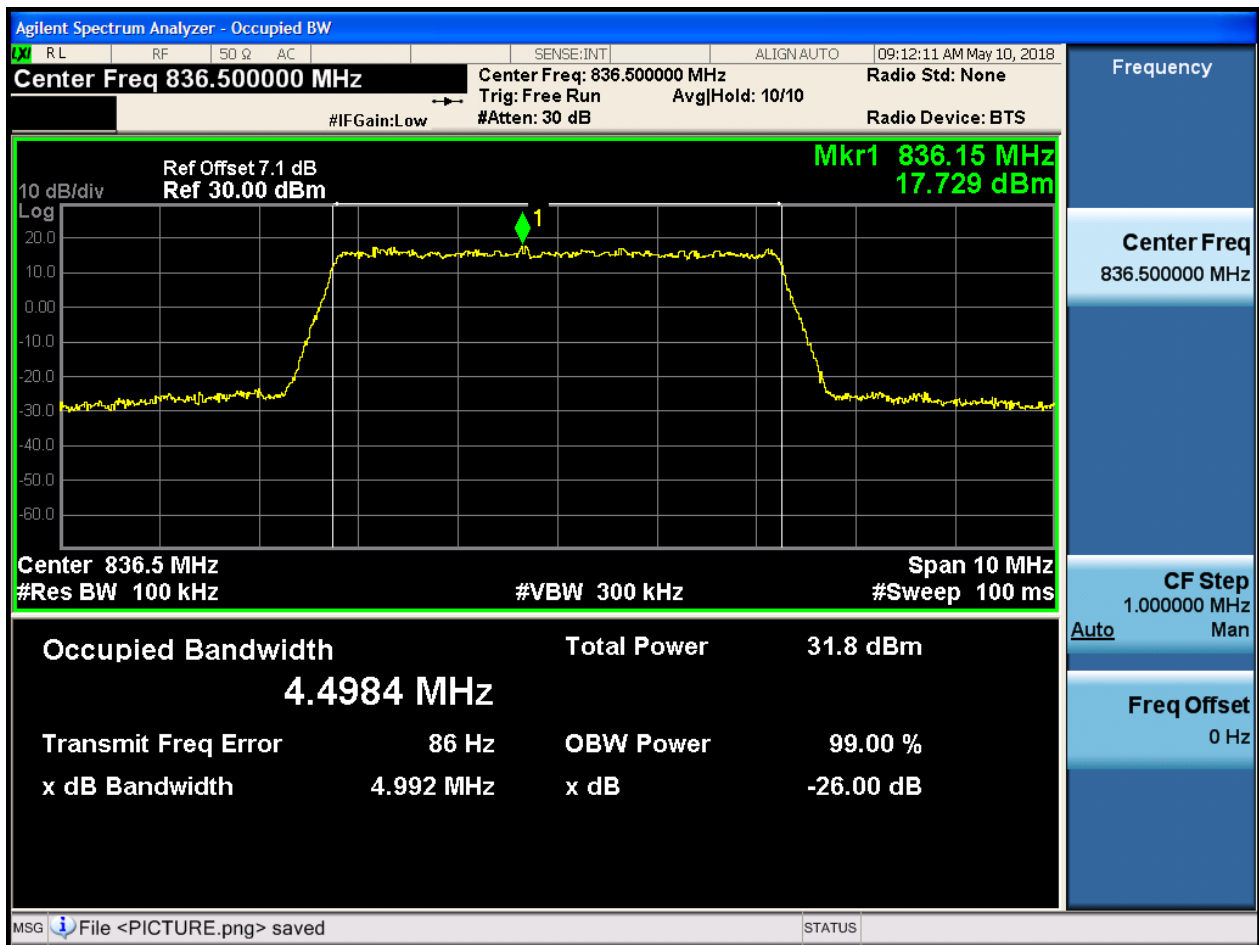
4.1.1.1.3.1 Test Channel = LCH

4.1.1.1.3.1.1 Test RB = RB25#0



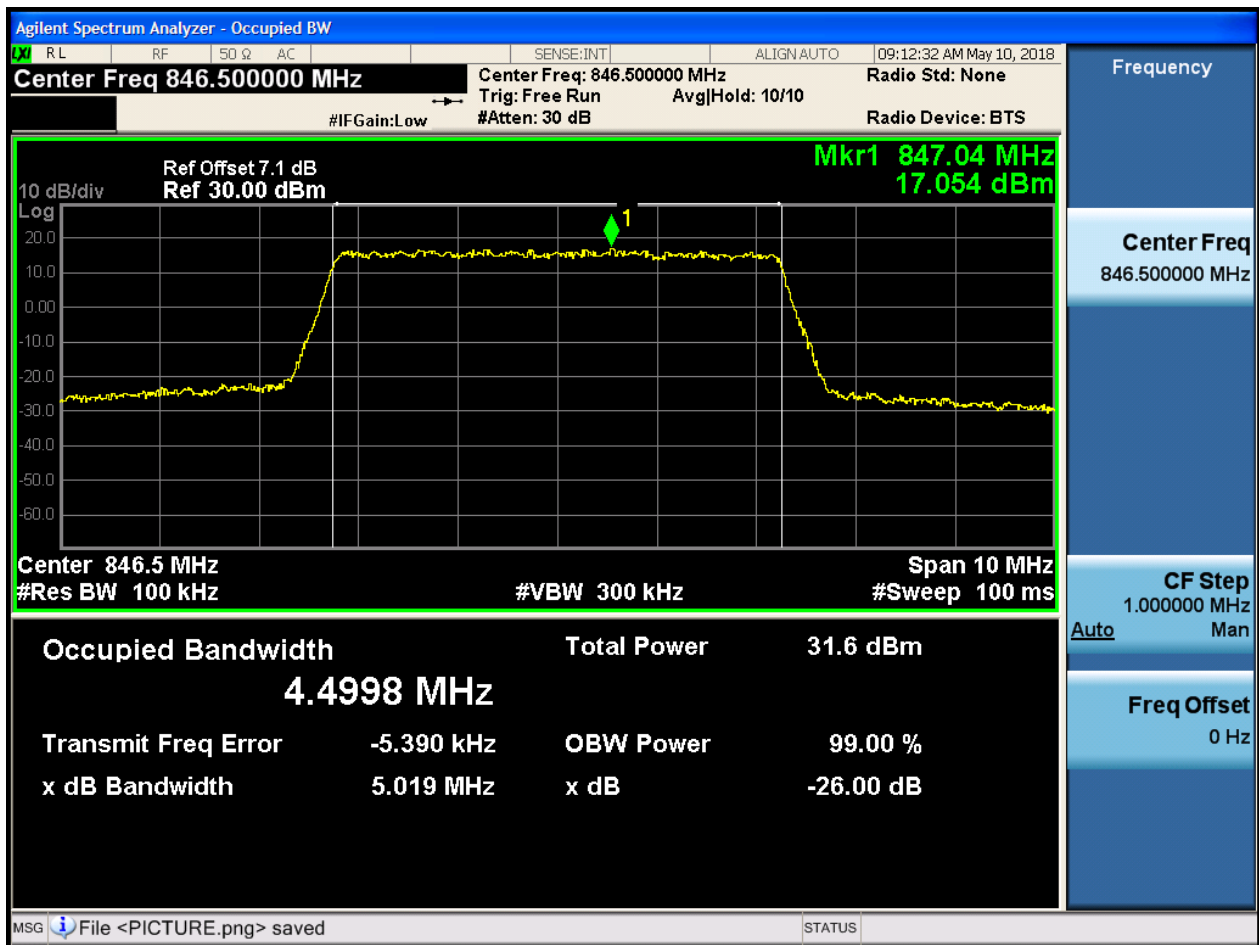
4.1.1.1.3.2 Test Channel = MCH

4.1.1.1.3.2.1 Test RB = RB25#0



4.1.1.1.3.3 Test Channel = HCH

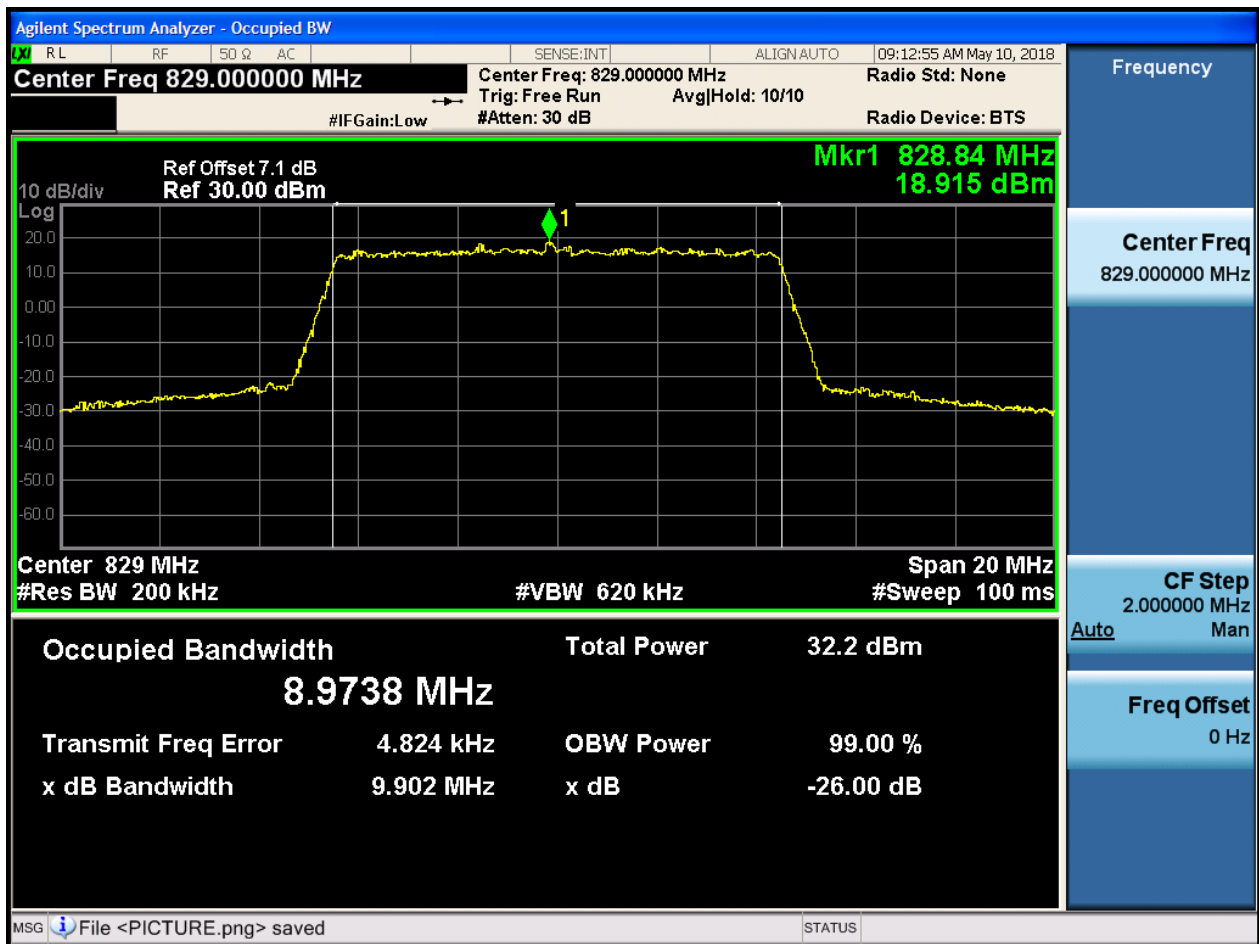
4.1.1.1.3.3.1 Test RB = RB25#0



4.1.1.1.4 Test Bandwidth = 10

4.1.1.1.4.1 Test Channel = LCH

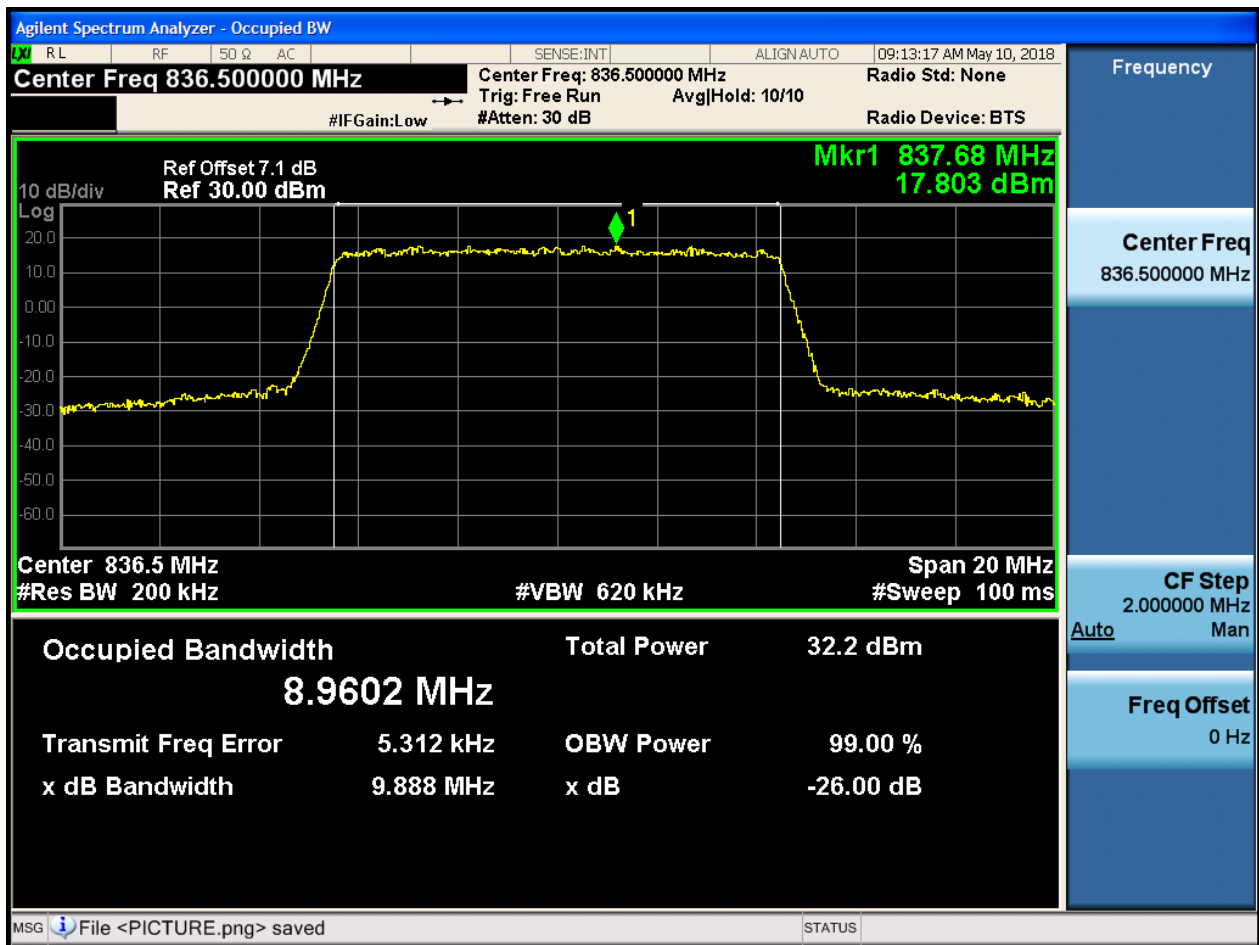
4.1.1.1.4.1.1 Test RB = RB50#0





4.1.1.1.4.2 Test Channel = MCH

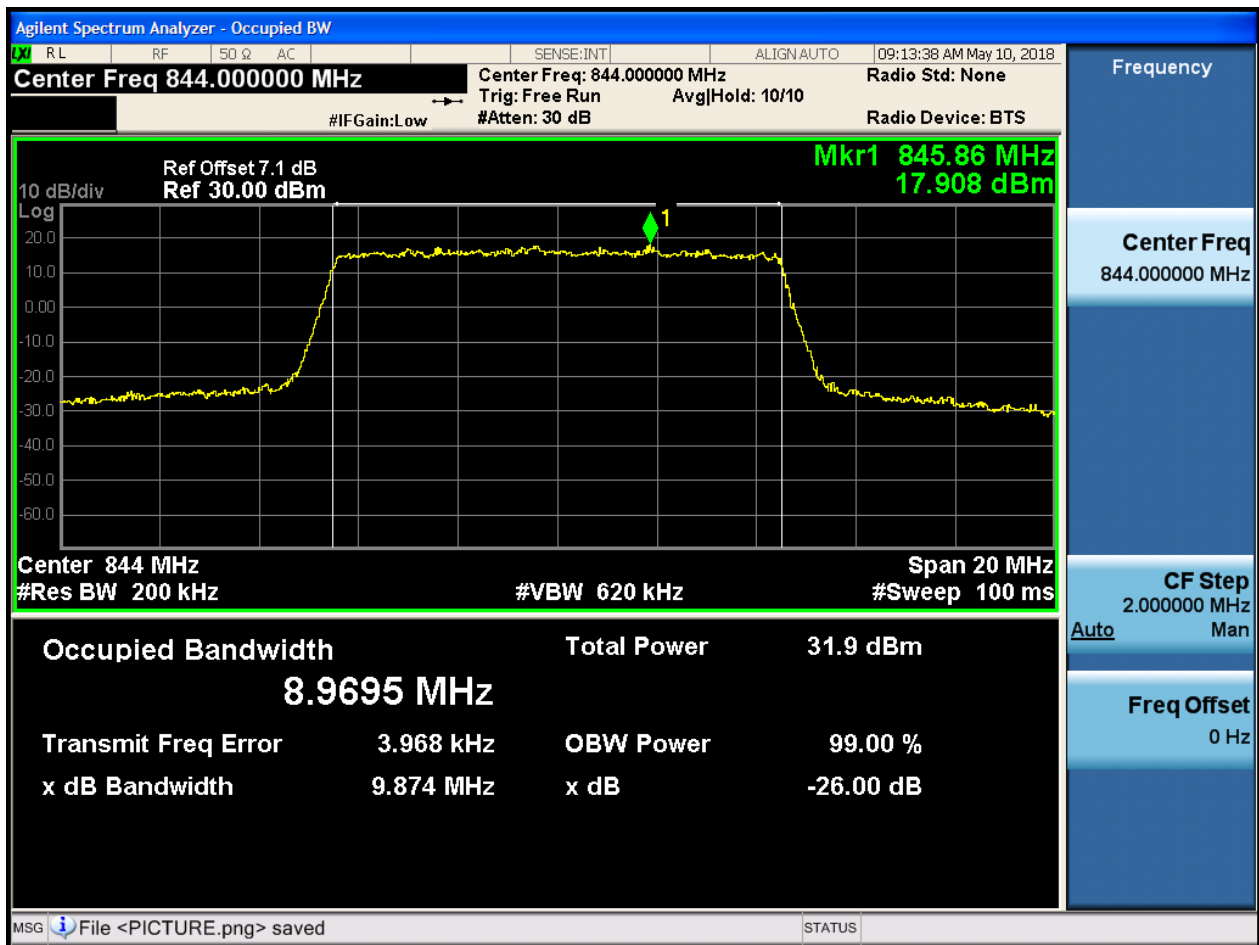
4.1.1.1.4.2.1 Test RB = RB50#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB50#0

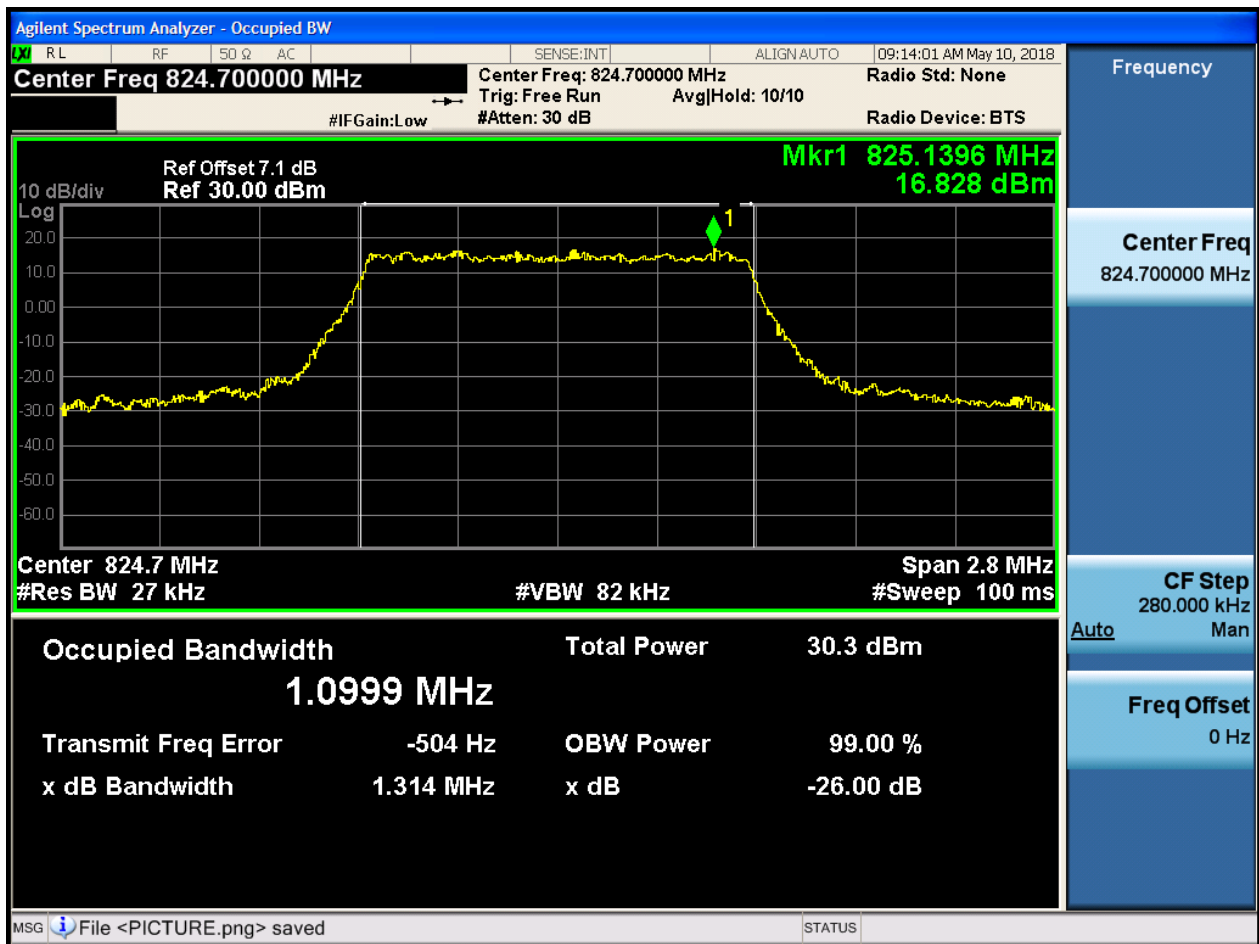


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 1.4

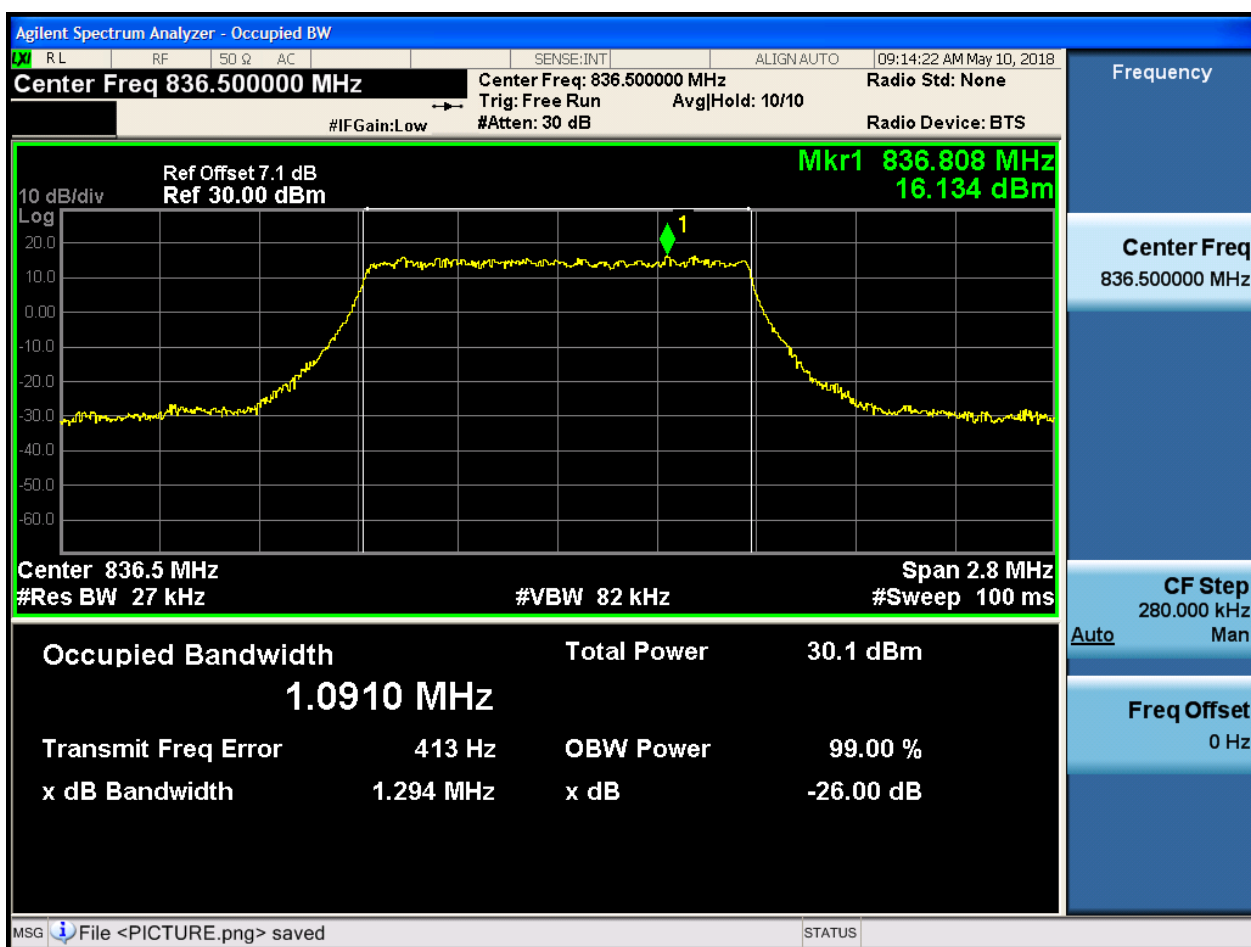
4.1.1.2.1.1 Test Channel = LCH

4.1.1.2.1.1.1 Test RB = RB6#0



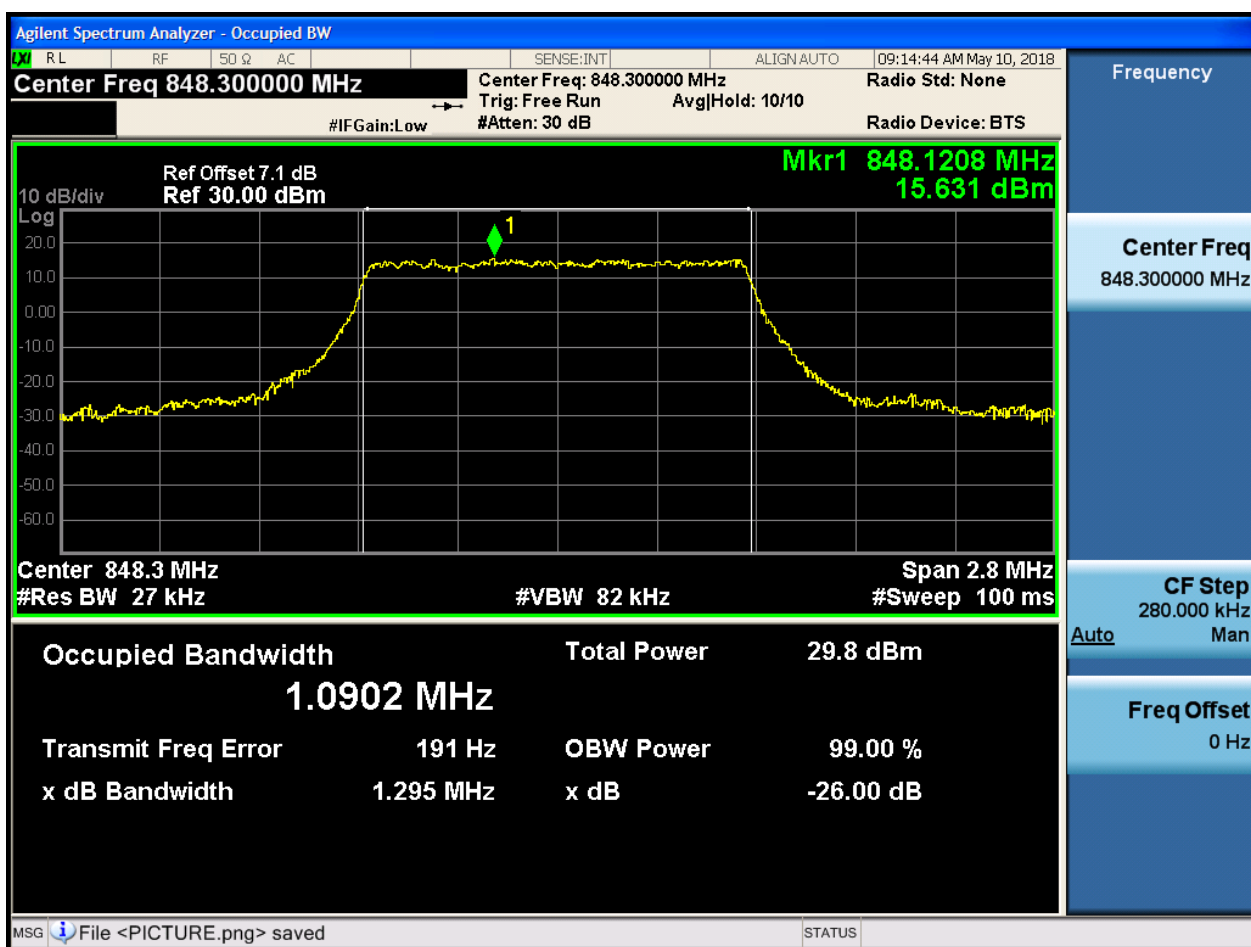
4.1.1.2.1.2 Test Channel = MCH

4.1.1.2.1.2.1 Test RB = RB6#0



4.1.1.2.1.3 Test Channel = HCH

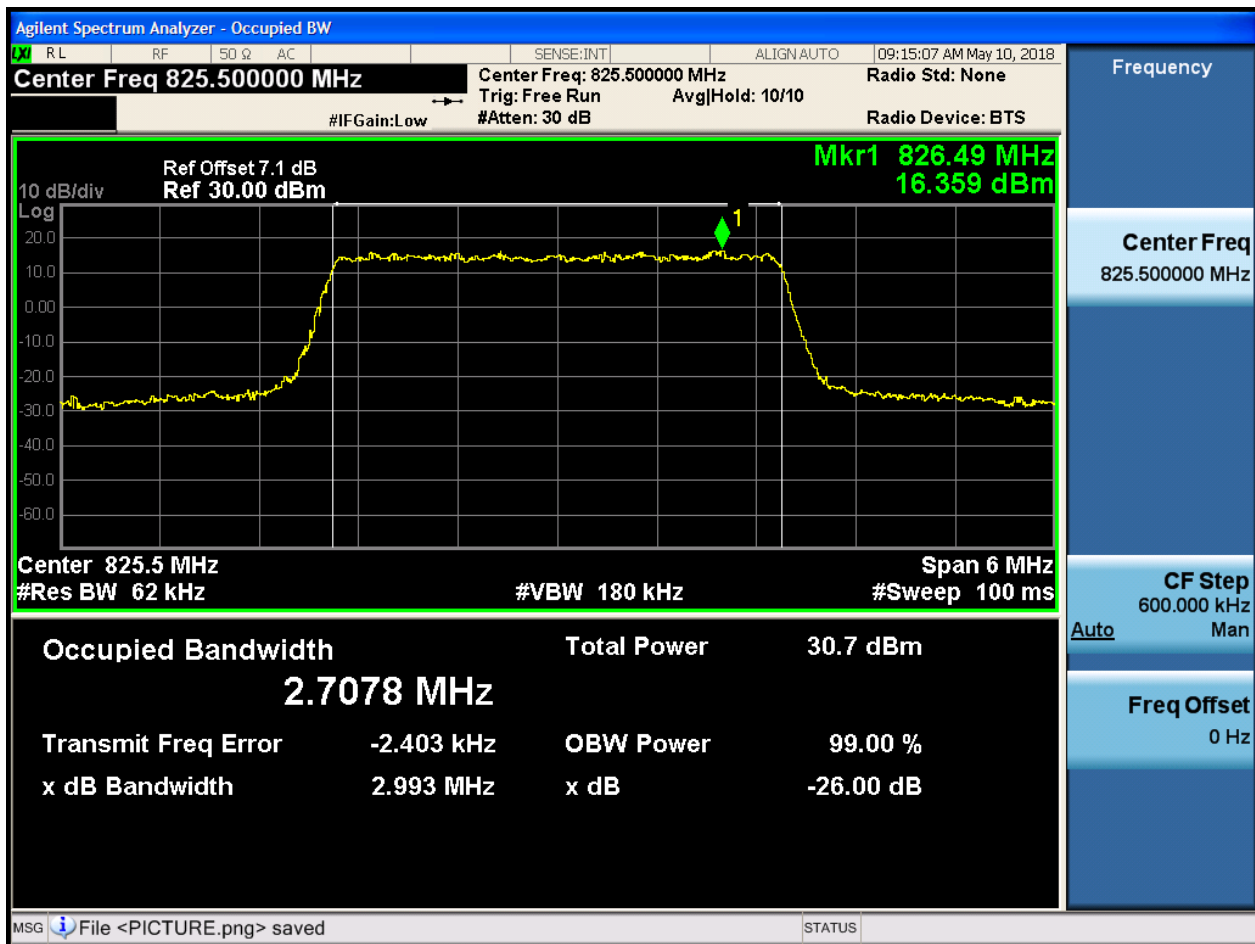
4.1.1.2.1.3.1 Test RB = RB6#0



4.1.1.2.2 Test Bandwidth = 3

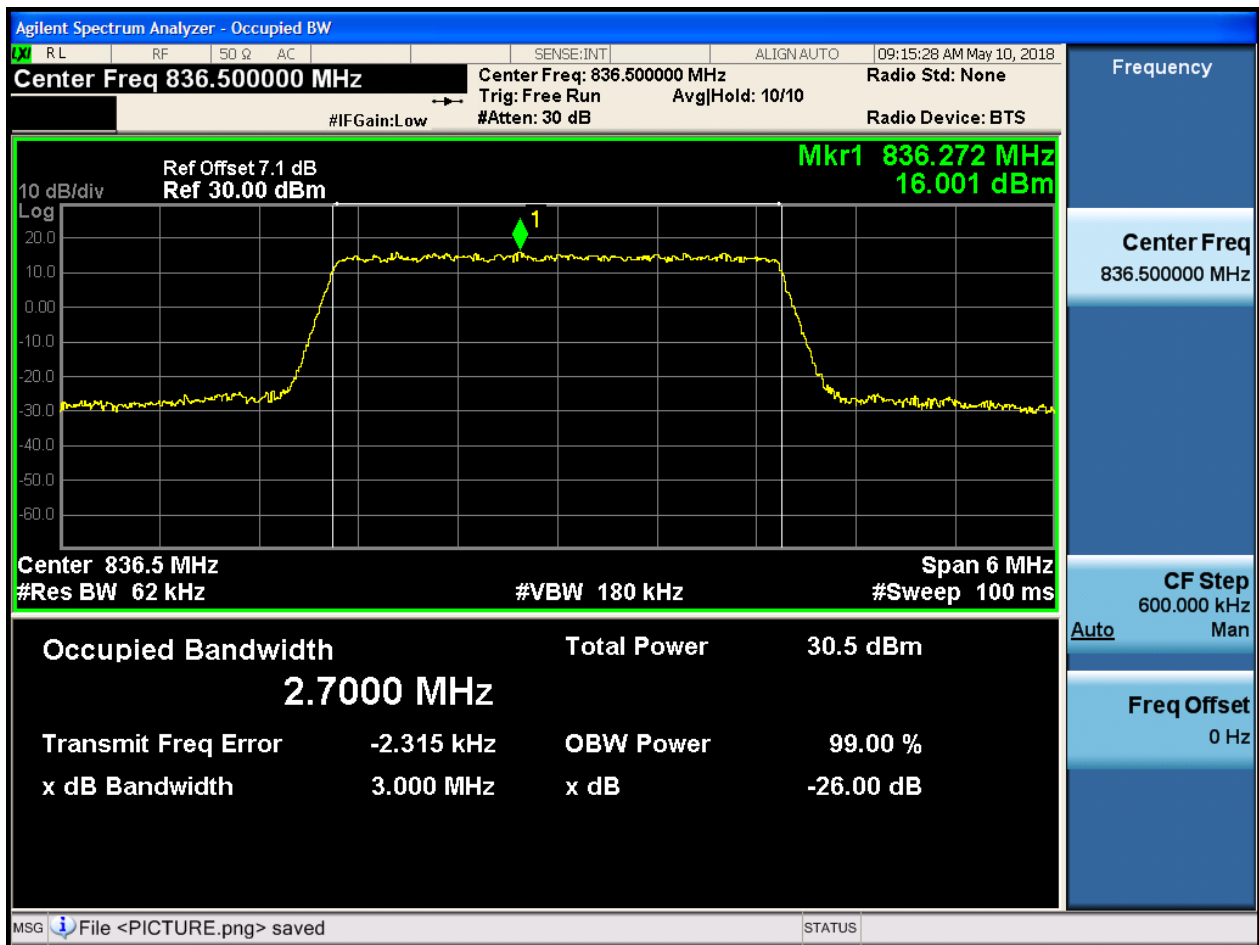
4.1.1.2.2.1 Test Channel = LCH

4.1.1.2.2.1.1 Test RB = RB15#0



4.1.1.2.2.2 Test Channel = MCH

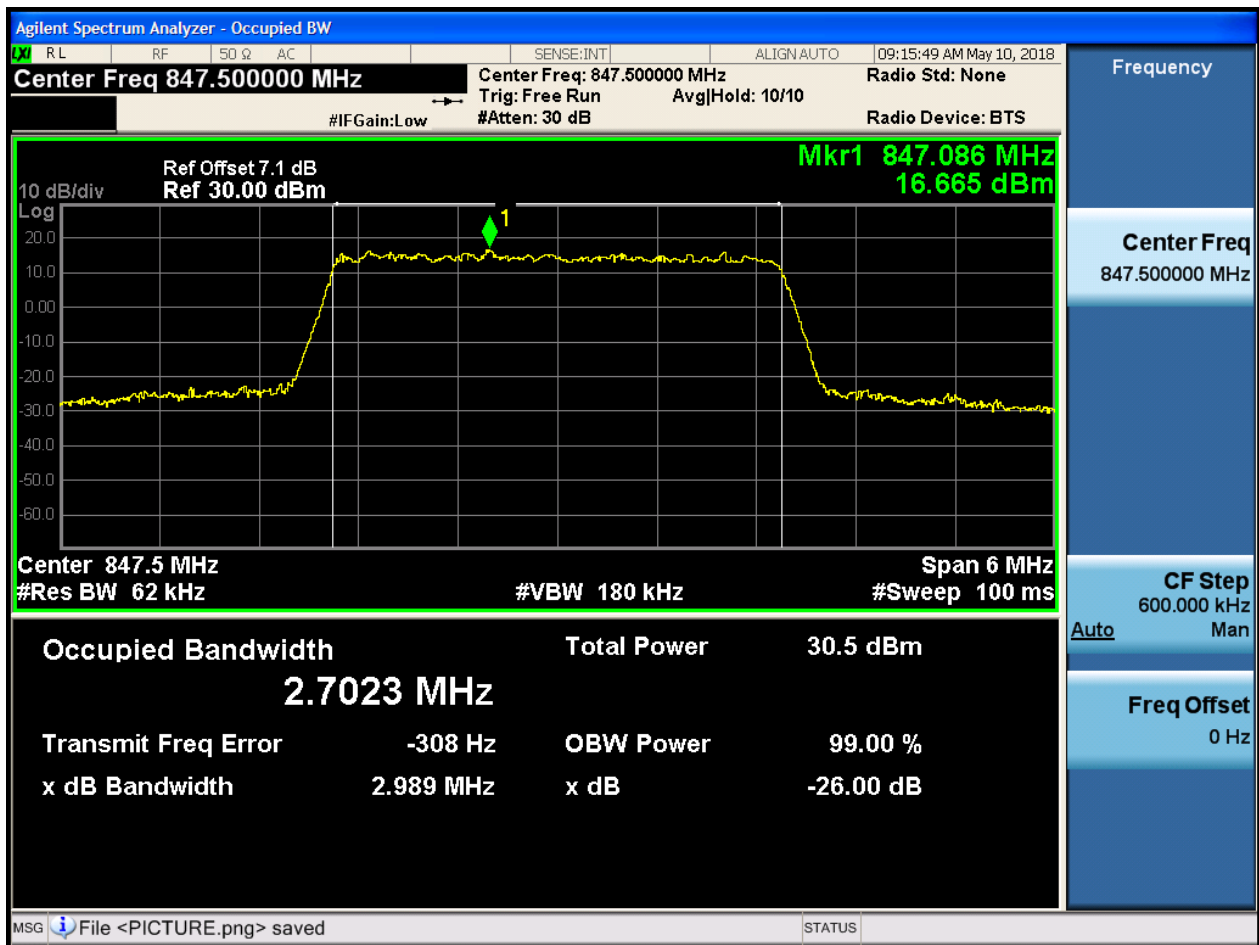
4.1.1.2.2.2.1 Test RB = RB15#0





4.1.1.2.2.3 Test Channel = HCH

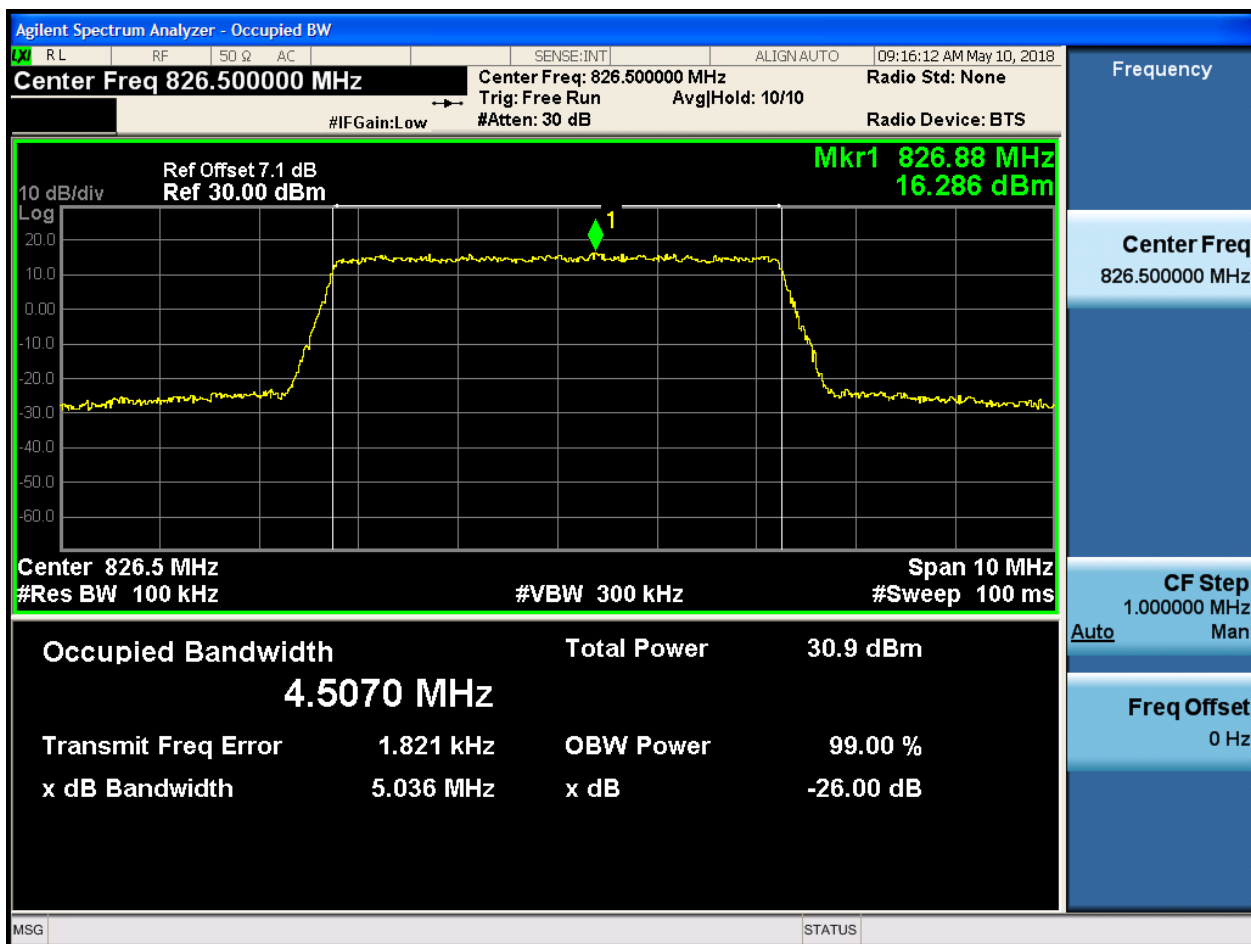
4.1.1.2.2.3.1 Test RB = RB15#0



4.1.1.2.3 Test Bandwidth = 5

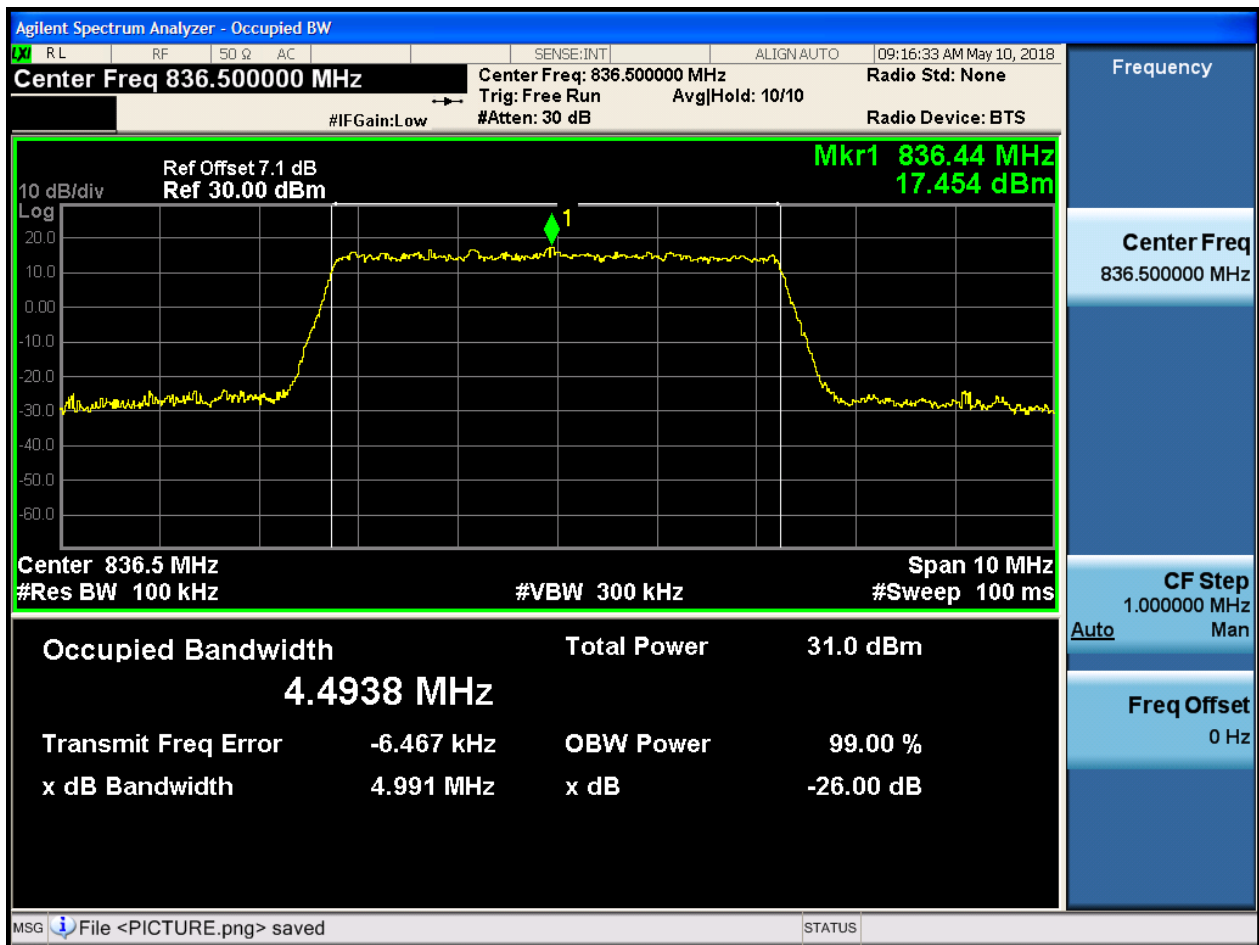
4.1.1.2.3.1 Test Channel = LCH

4.1.1.2.3.1.1 Test RB = RB25#0



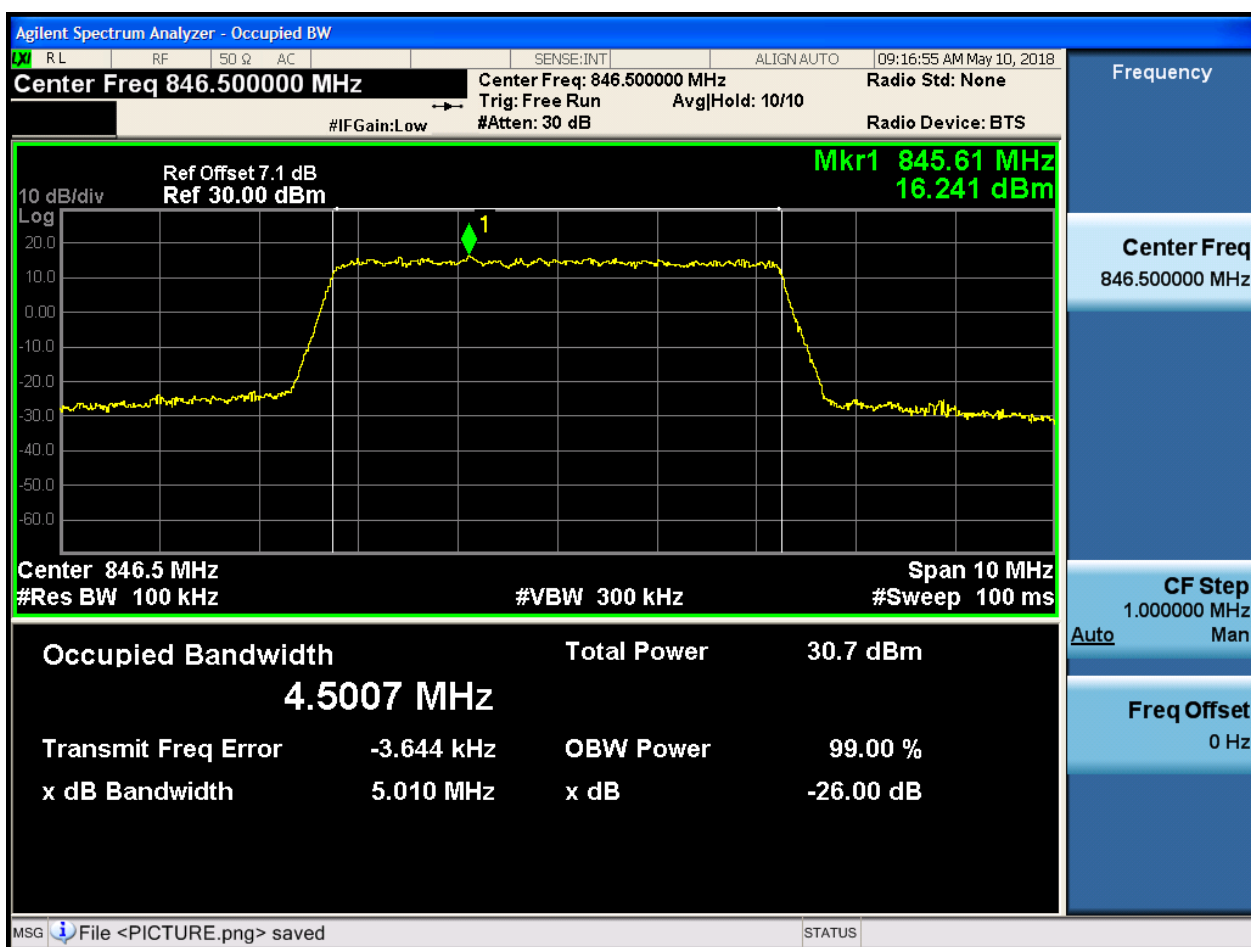
4.1.1.2.3.2 Test Channel = MCH

4.1.1.2.3.2.1 Test RB = RB25#0



4.1.1.2.3.3 Test Channel = HCH

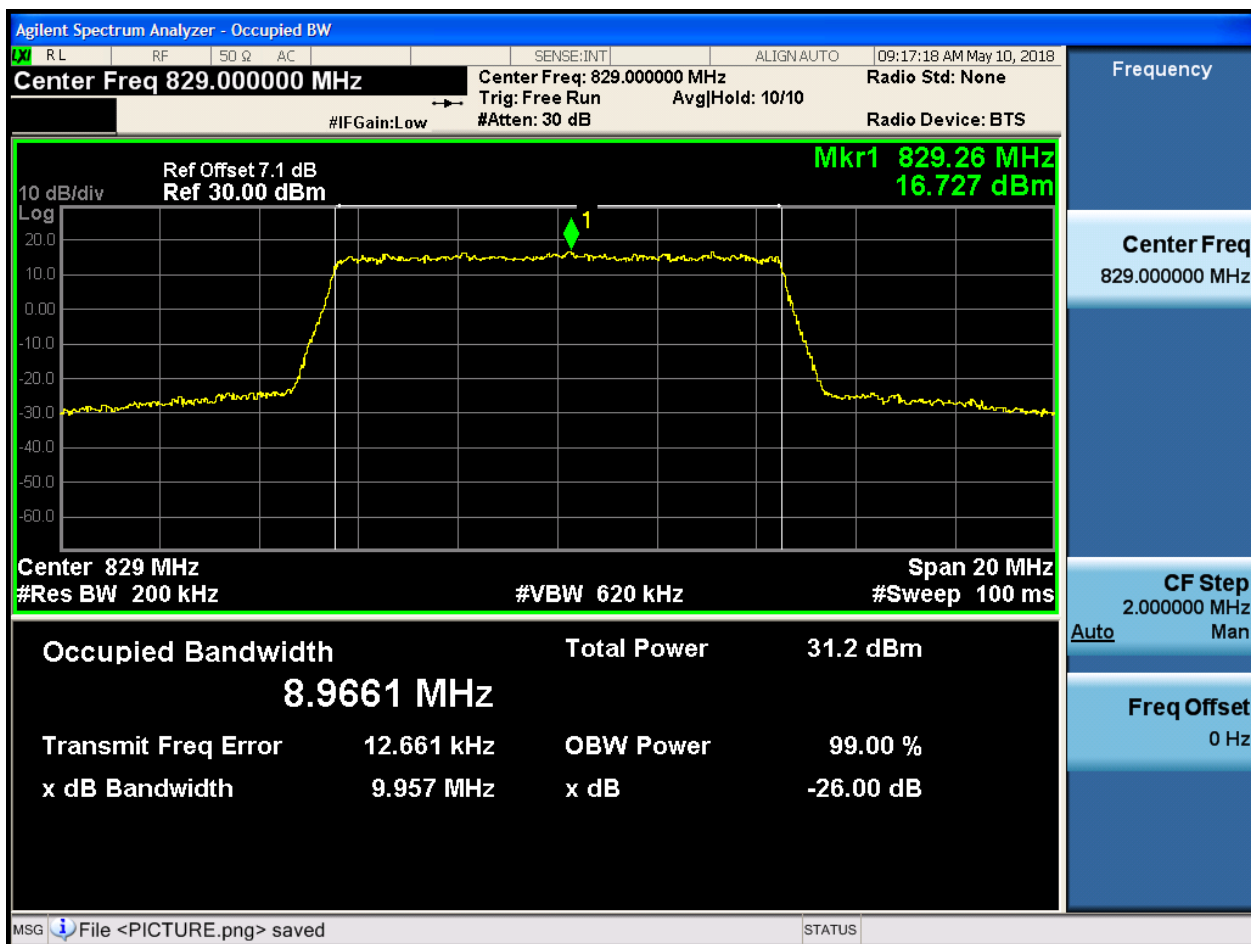
4.1.1.2.3.3.1 Test RB = RB25#0



4.1.1.2.4 Test Bandwidth = 10

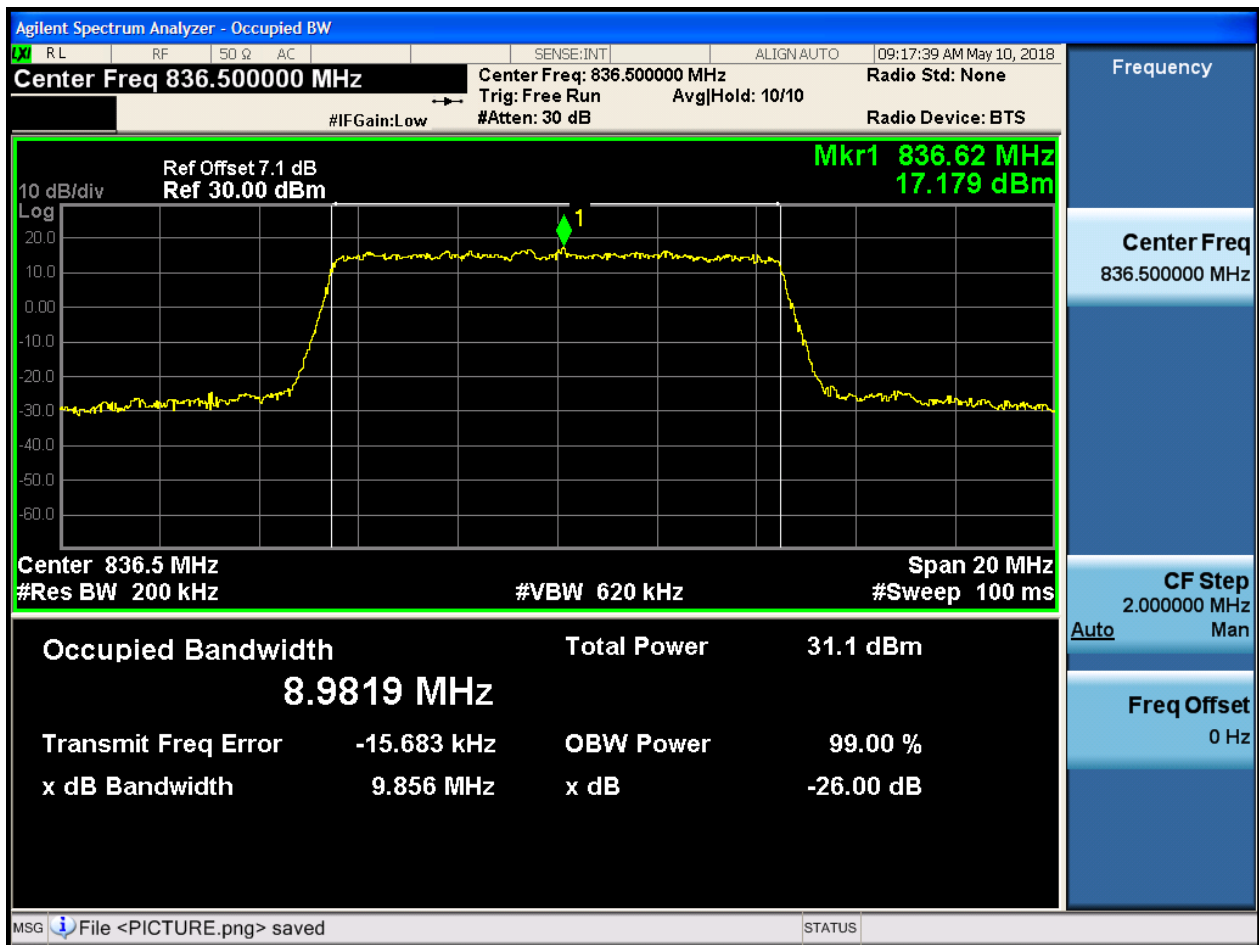
4.1.1.2.4.1 Test Channel = LCH

4.1.1.2.4.1.1 Test RB = RB50#0



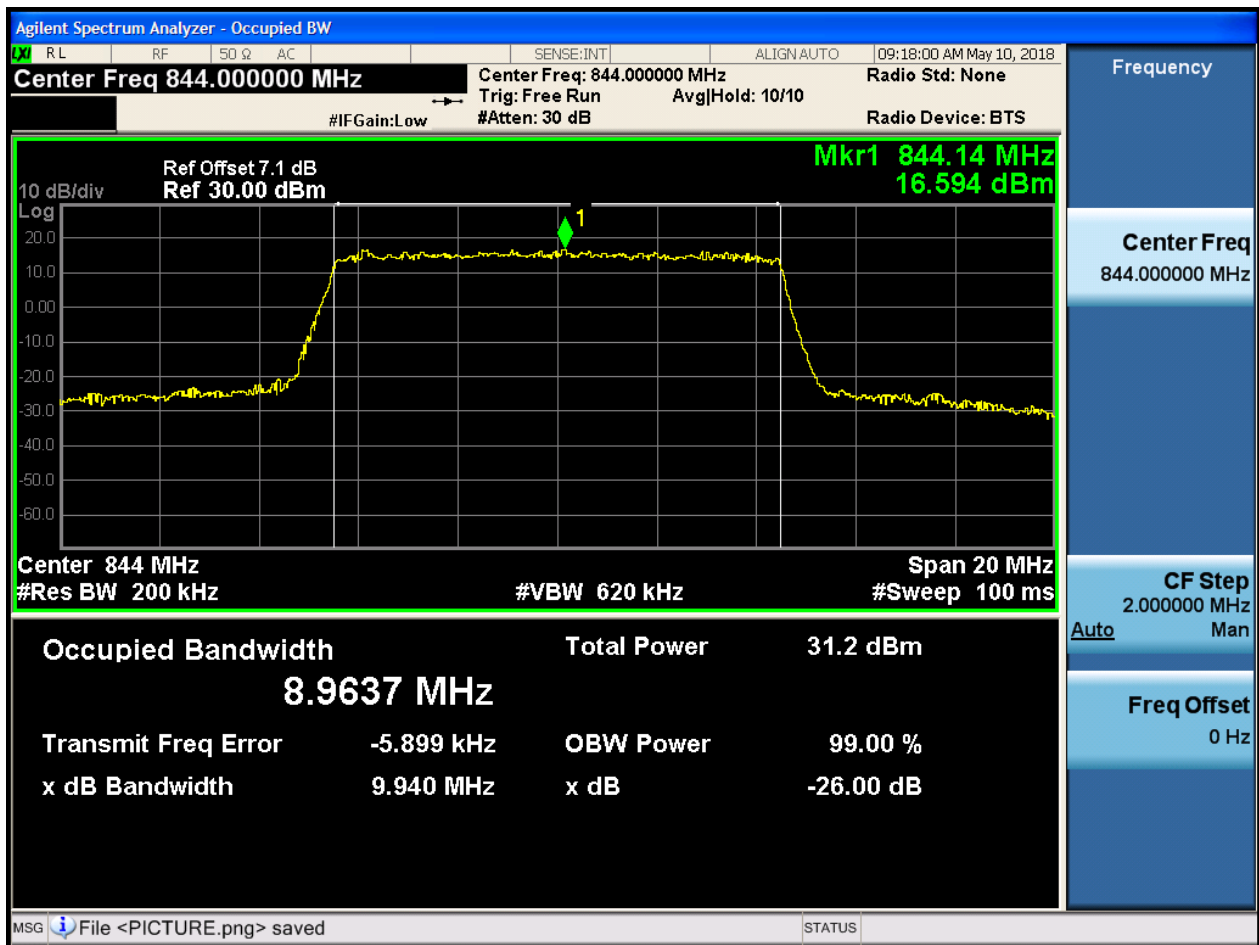
4.1.1.2.4.2 Test Channel = MCH

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

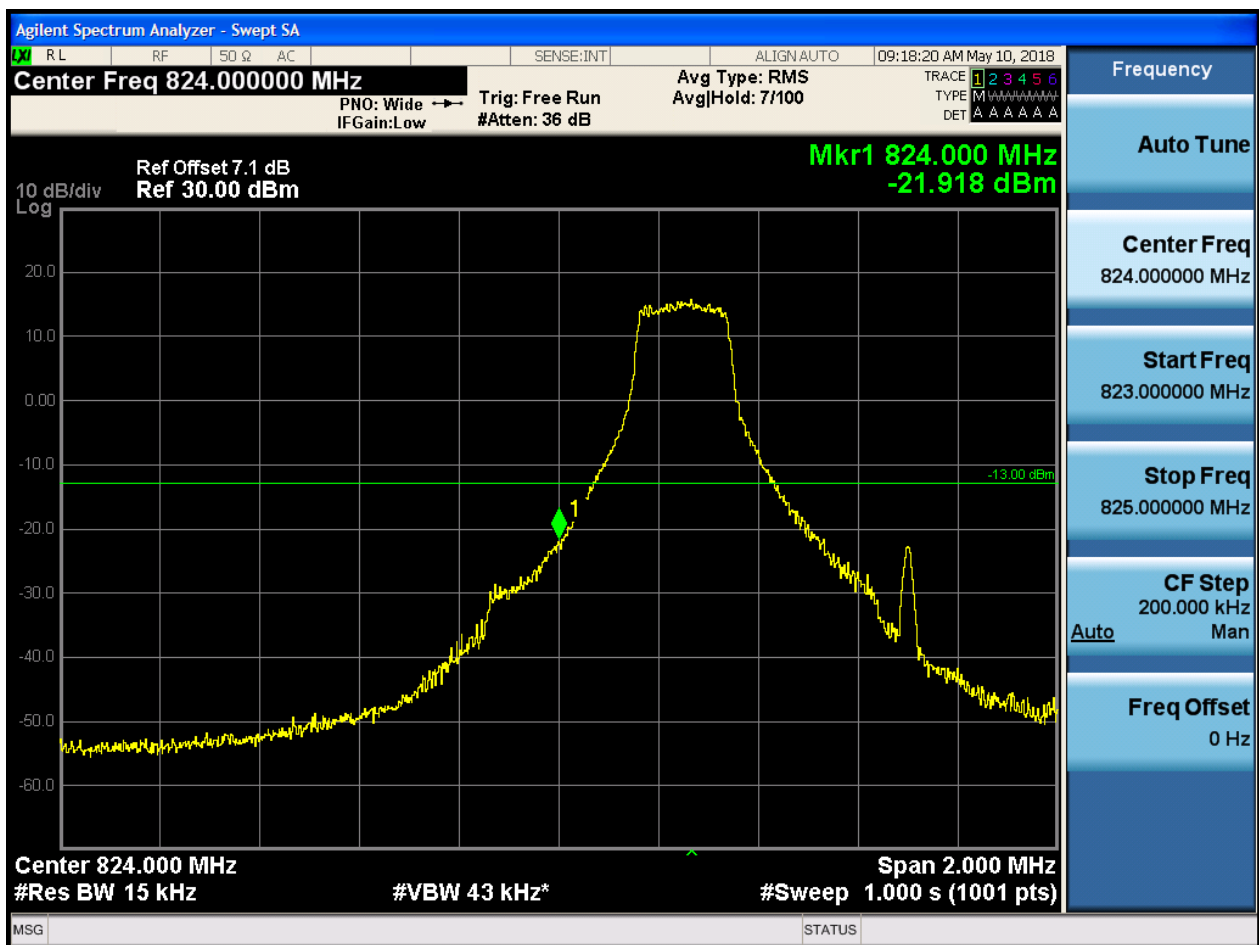
5.1.1 Test Band = BAND5

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

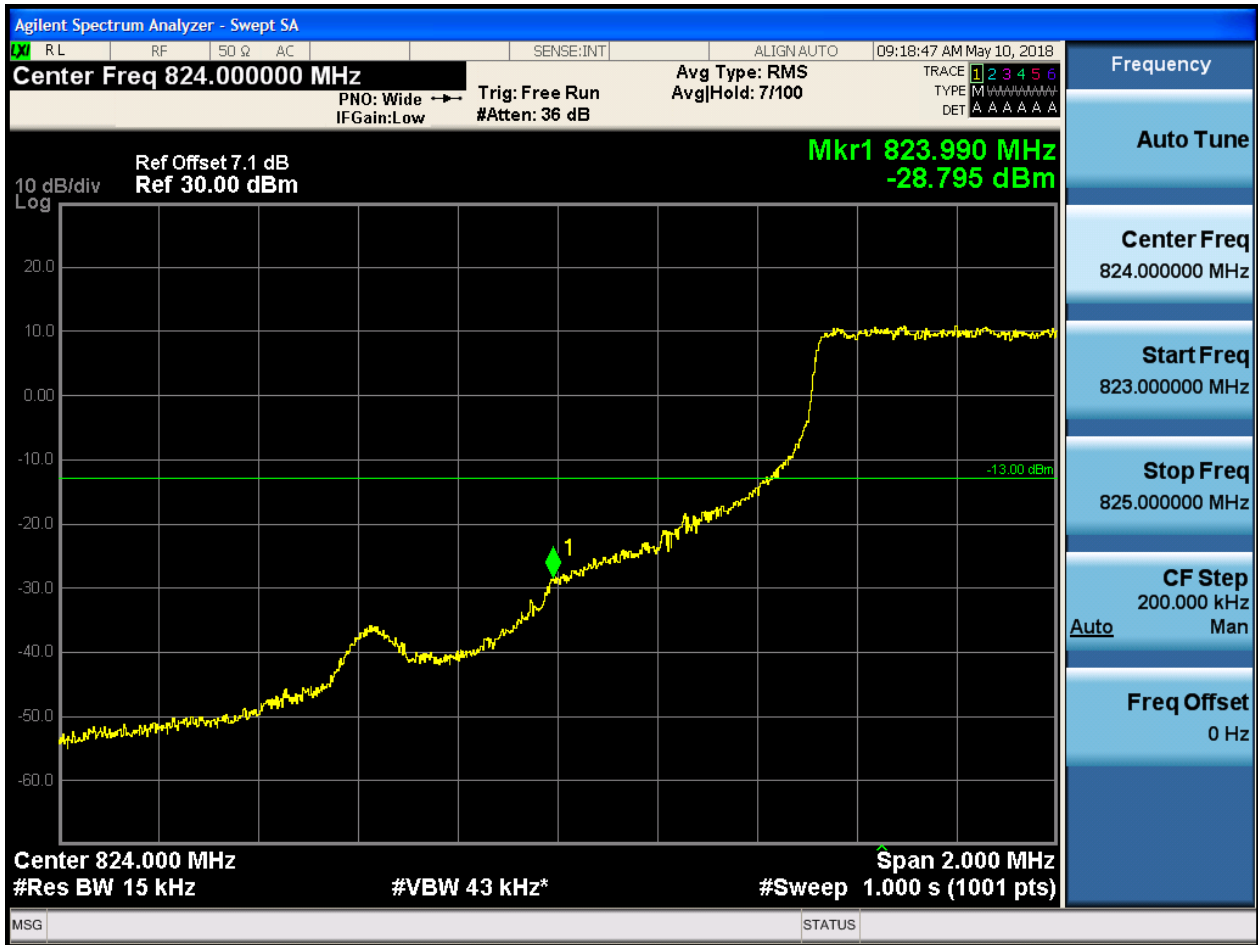


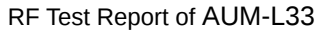


5.1.1.1.1.2 Test RB = RB1#5



5.1.1.1.1.1.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:19:01 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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

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

10 dB/div Log
Ref Offset 7.1 dB
Ref 30.00 dBm
Mkr1 824.000 MHz
-27.569 dBm

Center 824.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

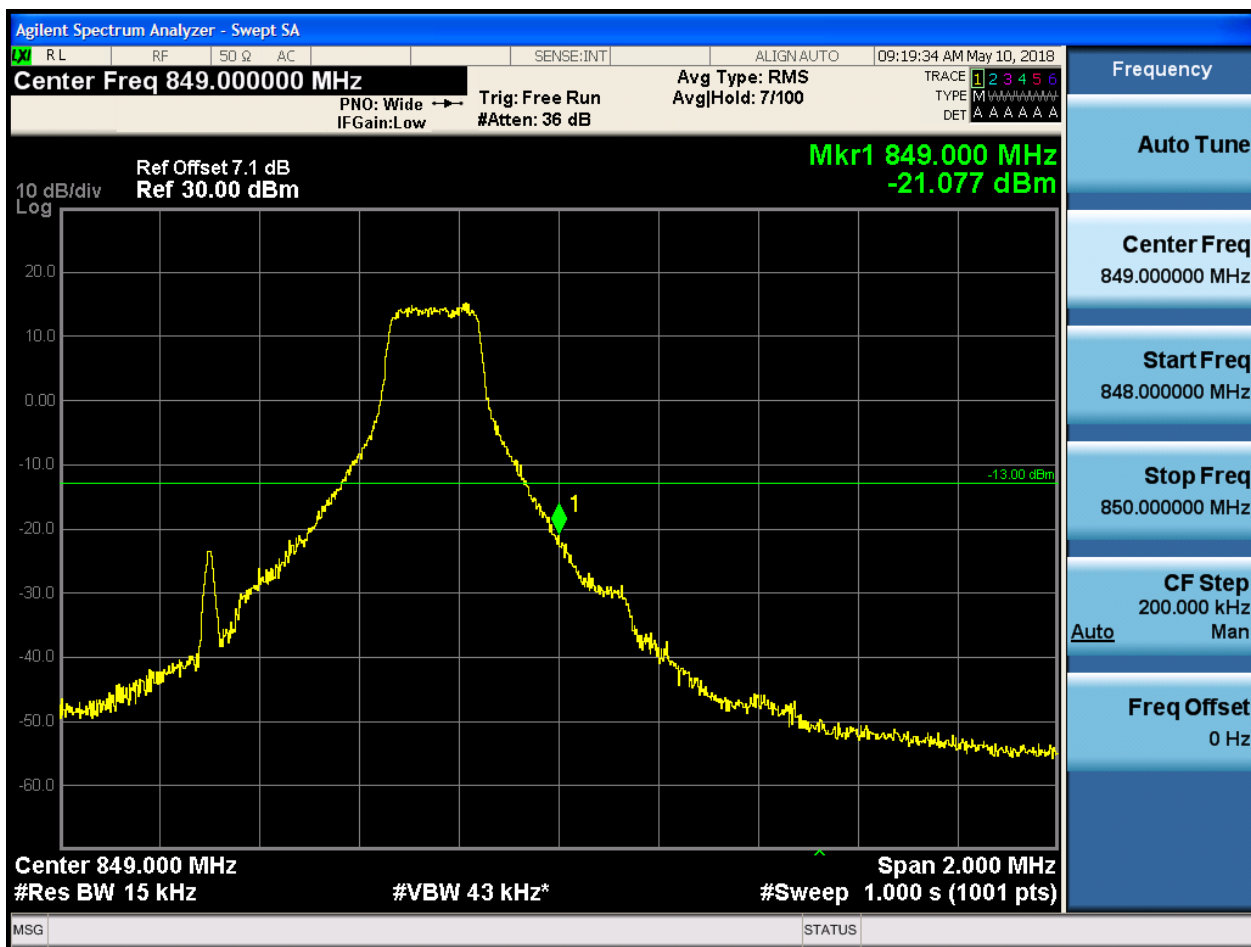
5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





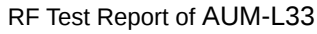
5.1.1.1.2.2 Test RB = RB1#5





5.1.1.1.1.2.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-27.490 dBm

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

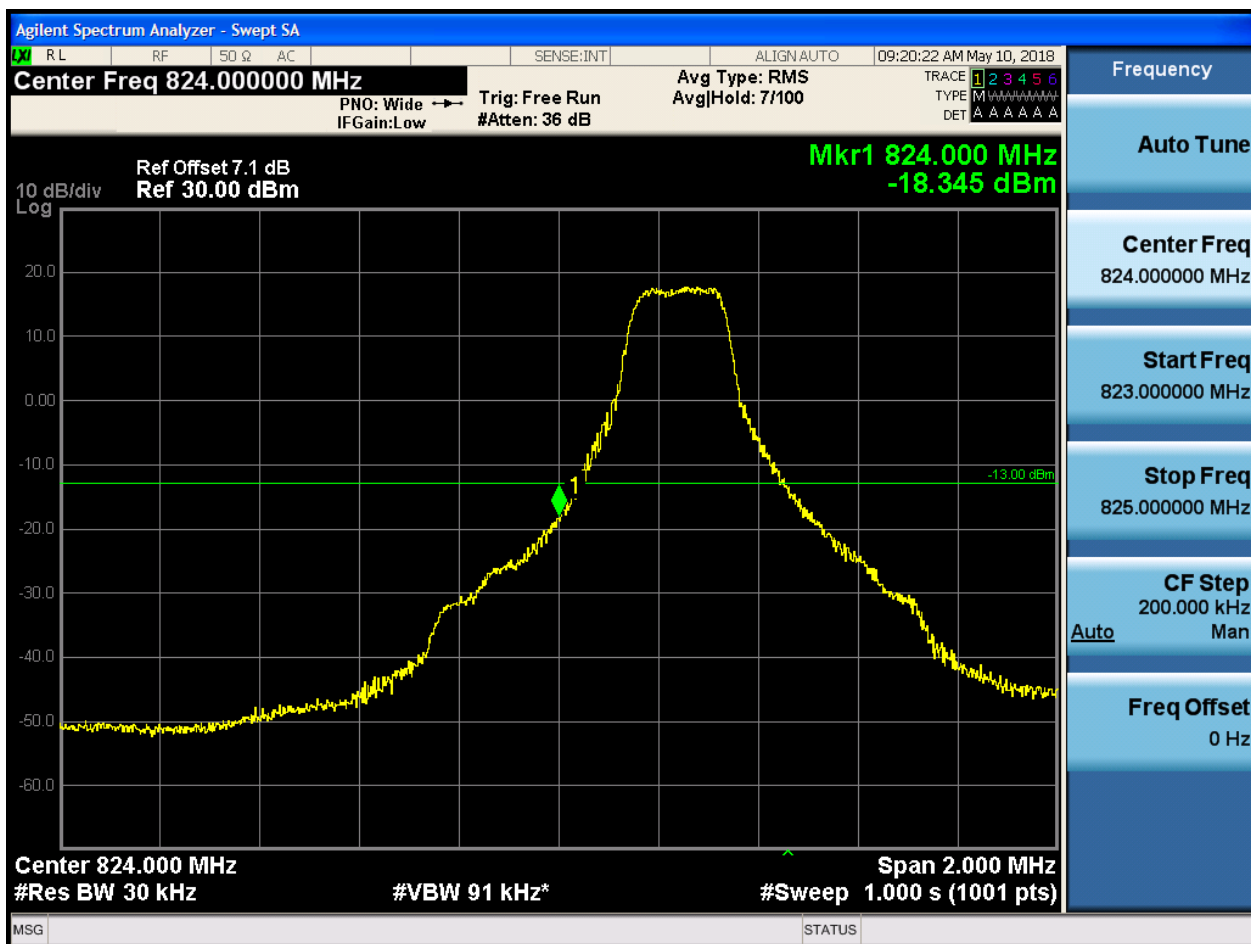
Freq Offset
0 Hz

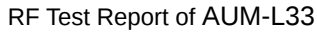


5.1.1.1.2 Test Bandwidth = 3

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 09:20:36 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 71/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 823.010 MHz
-44.795 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)

Frequency

Auto Tune

Center Freq
824.000000 MHz

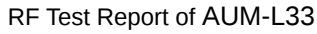
Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:20:50 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 71/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-32.175 dBm

10 dB/div
Log

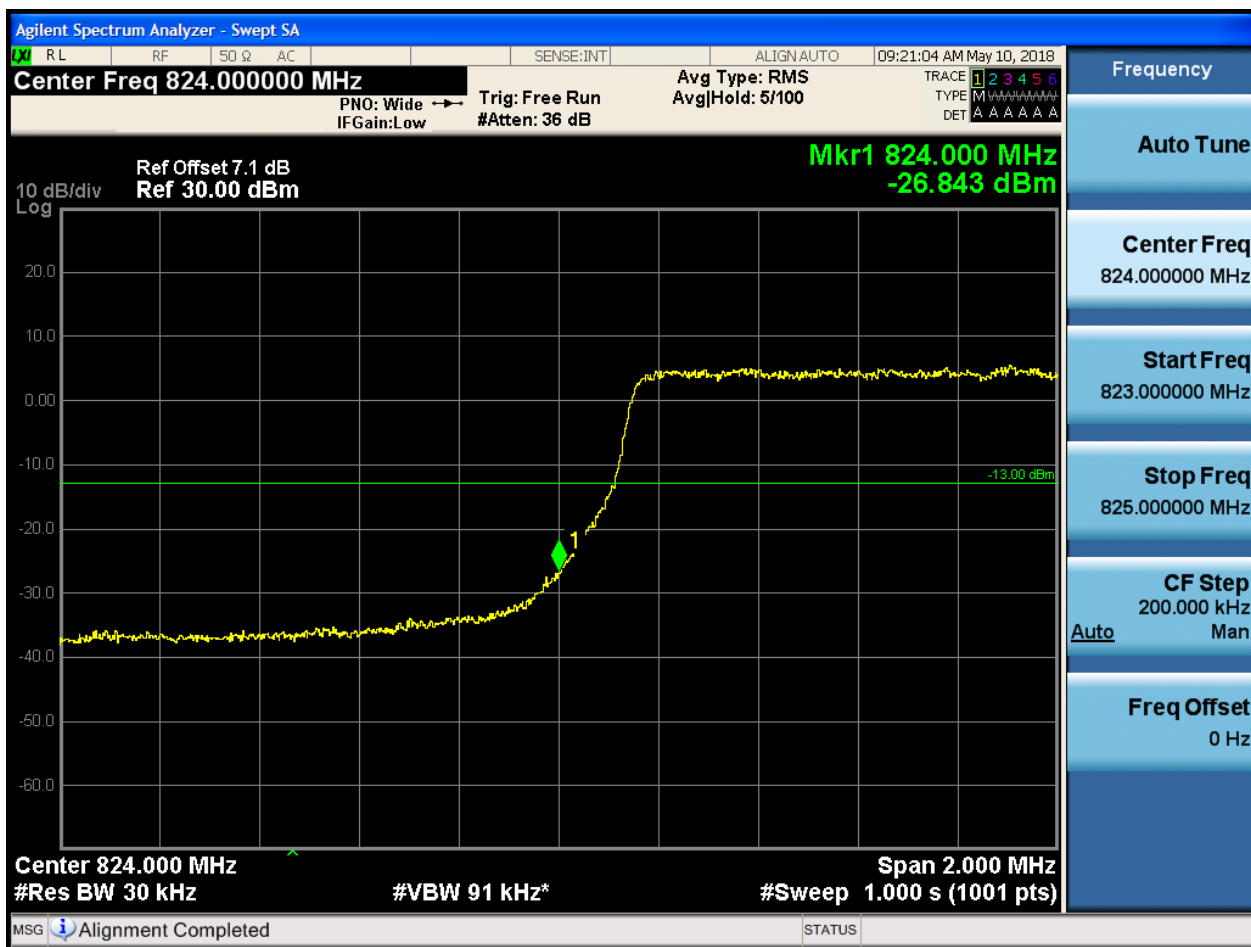
Center 824.000 MHz
#Res BW 30 kHz
#VBW 91 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

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

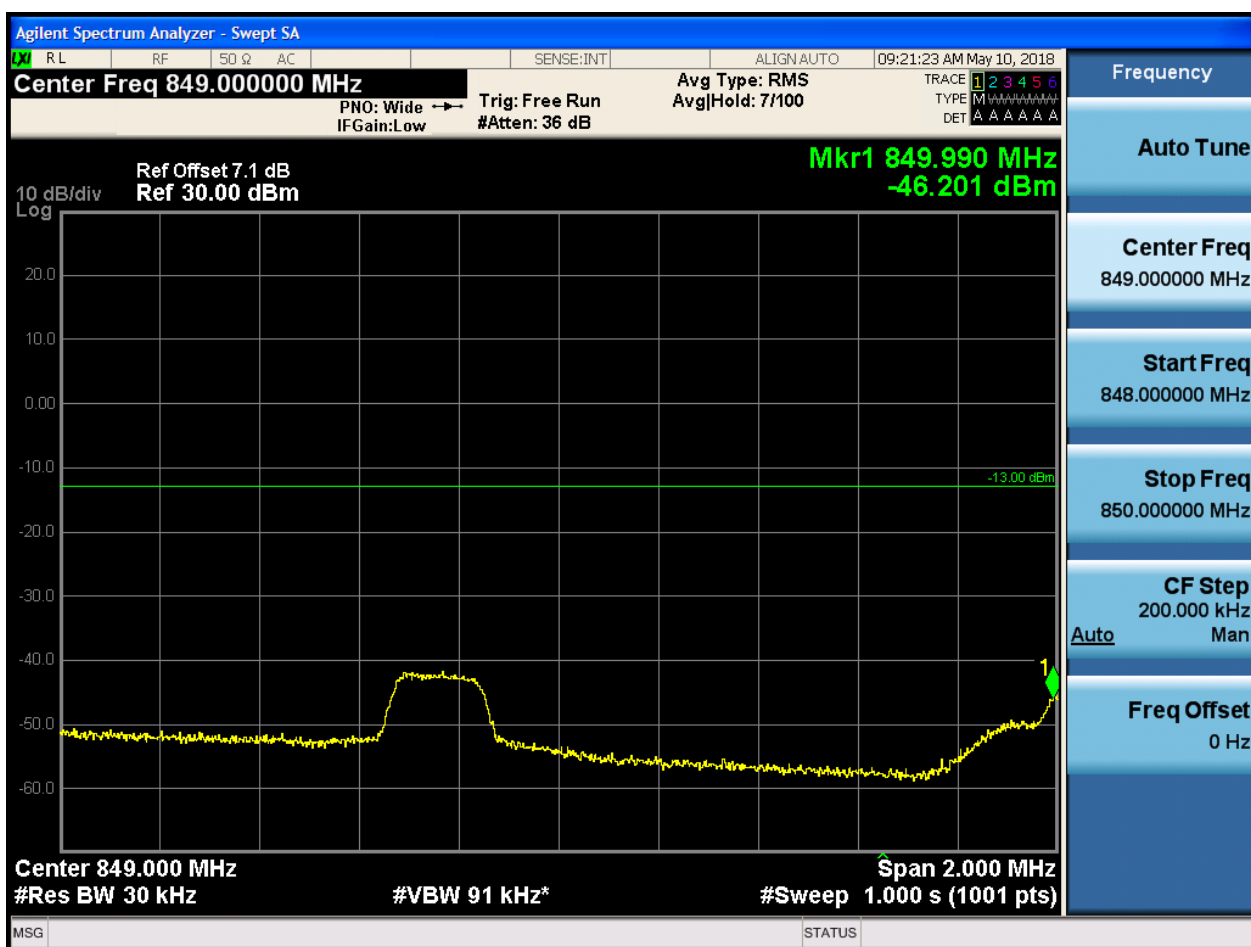


5.1.1.1.2.1.4 Test RB = RB15#0



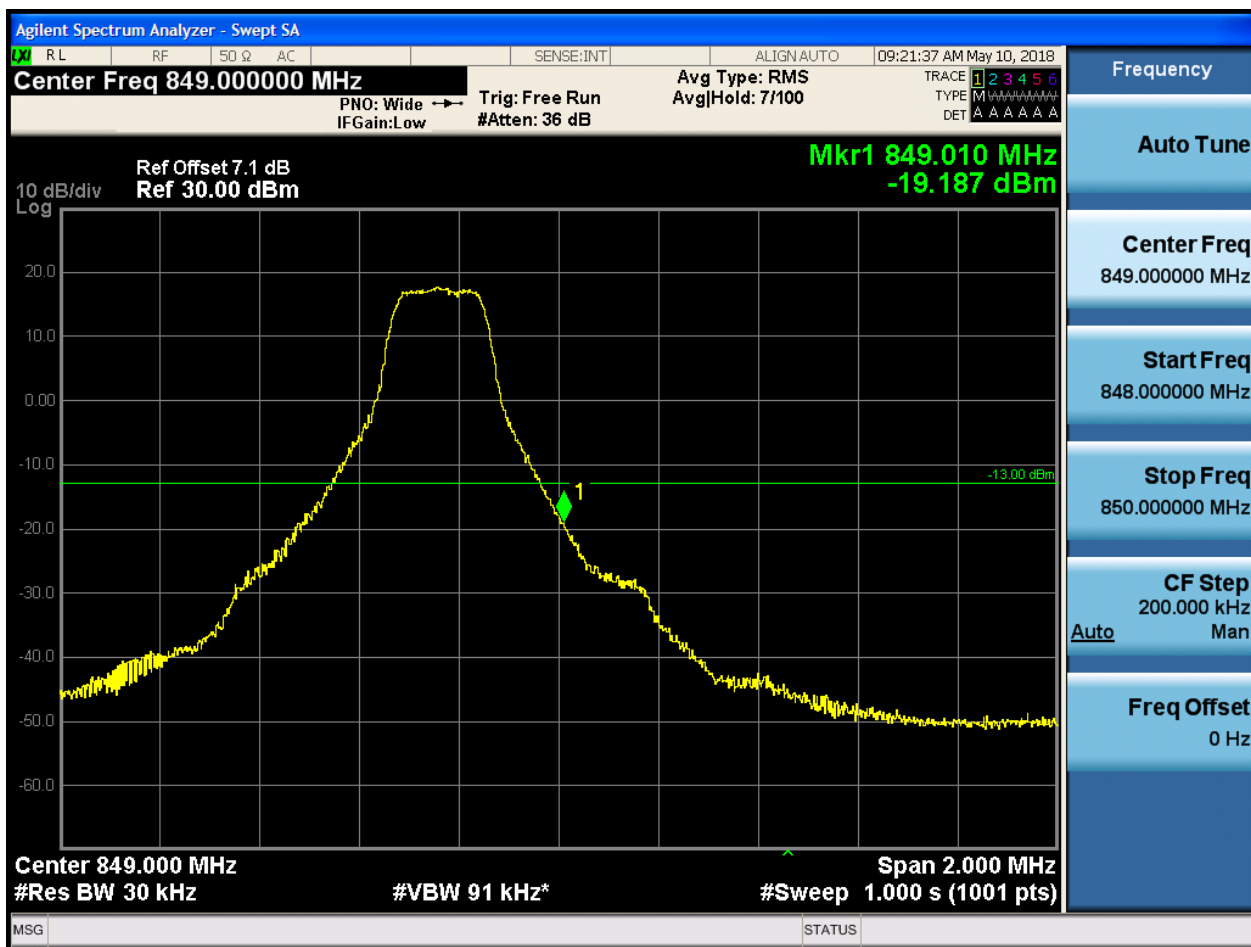
5.1.1.1.2.2 Test Channel = HCH

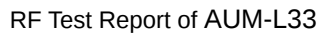
5.1.1.1.2.2.1 Test RB = RB1#0





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 09:21:50 AM May 10, 2018

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-31.689 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

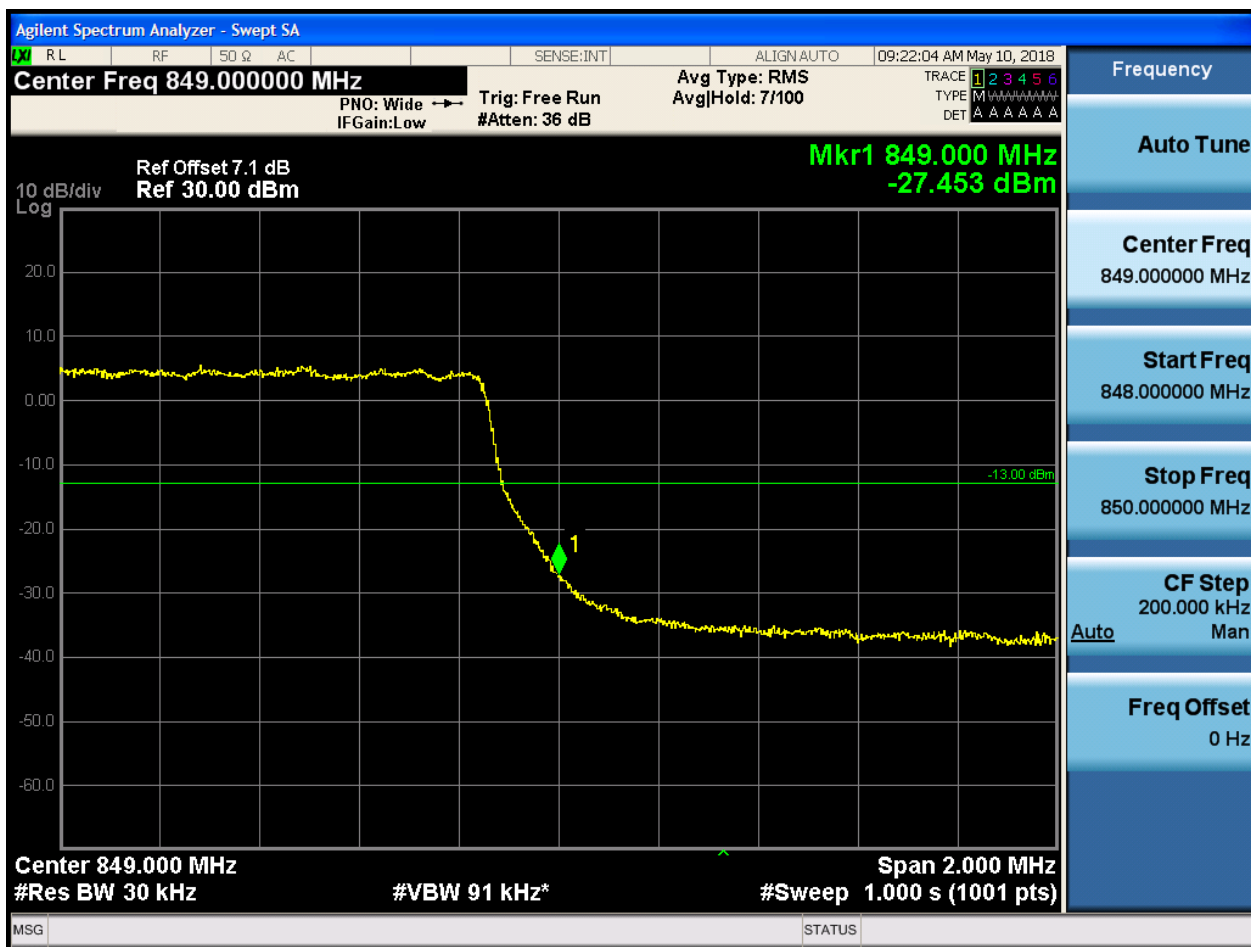
Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

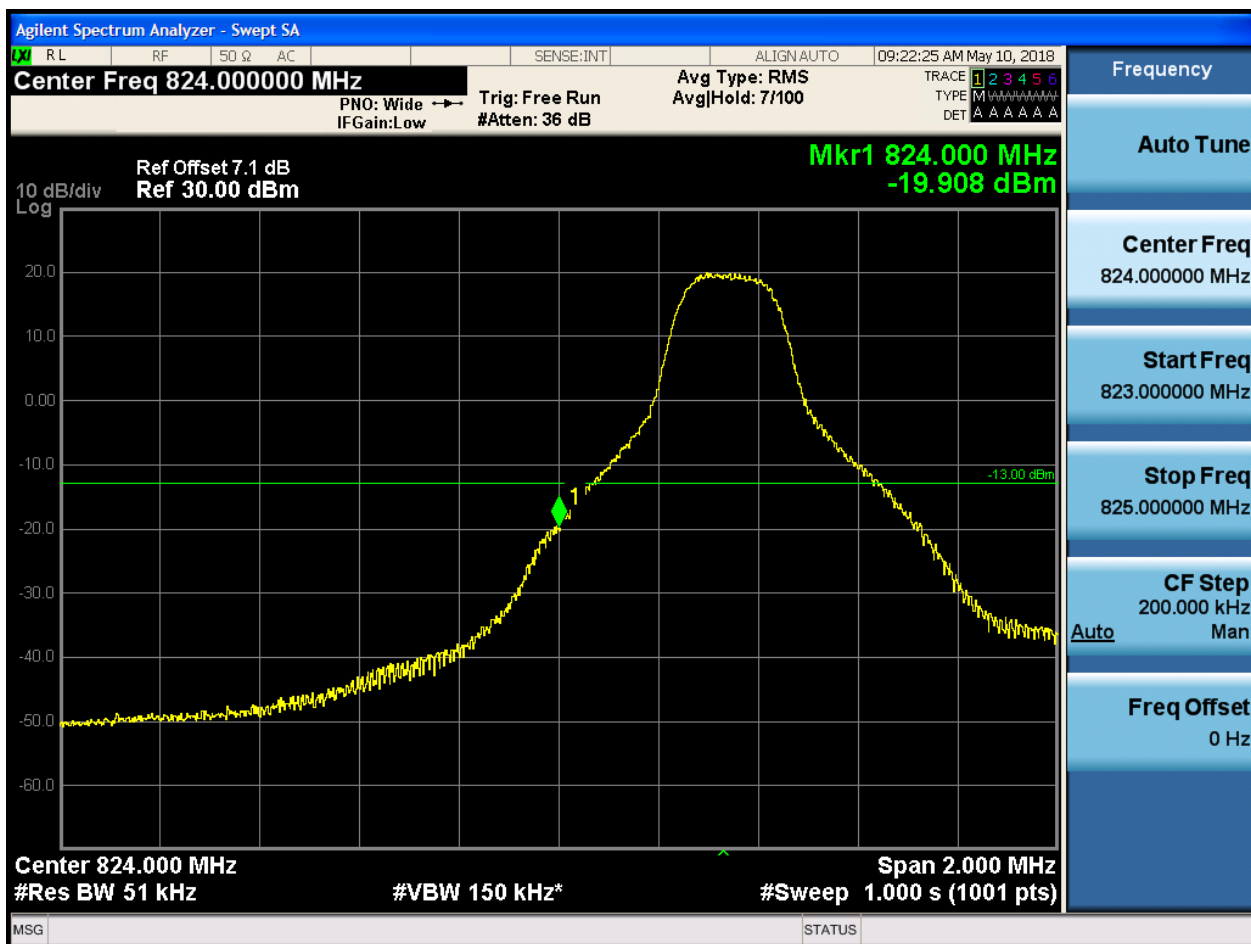
5.1.1.1.2.2.4 Test RB = RB15#0



5.1.1.1.3 Test Bandwidth = 5

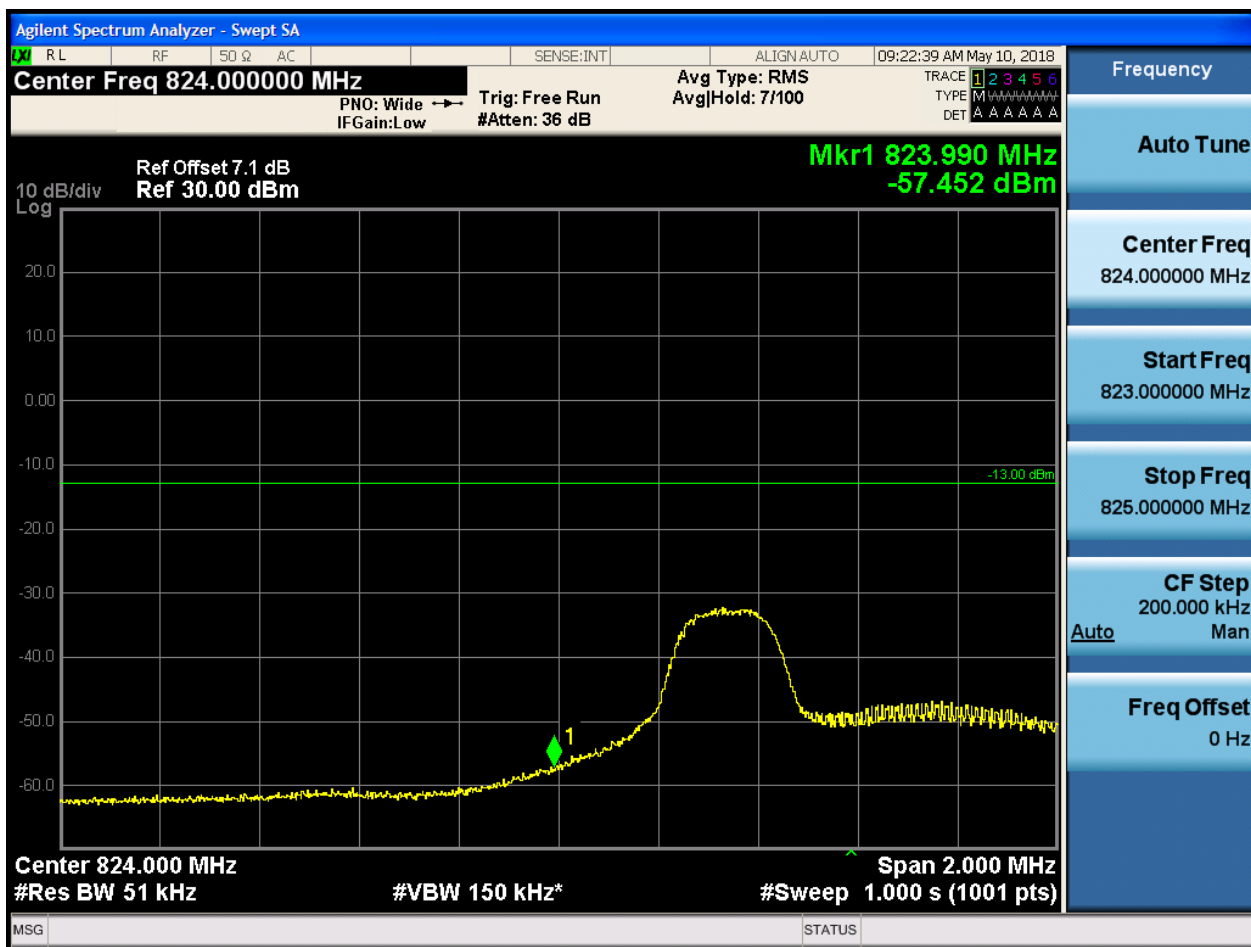
5.1.1.1.3.1 Test Channel = LCH

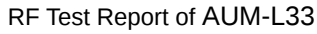
5.1.1.1.3.1.1 Test RB = RB1#0





5.1.1.1.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:22:53 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 823.990 MHz
-33.047 dBm

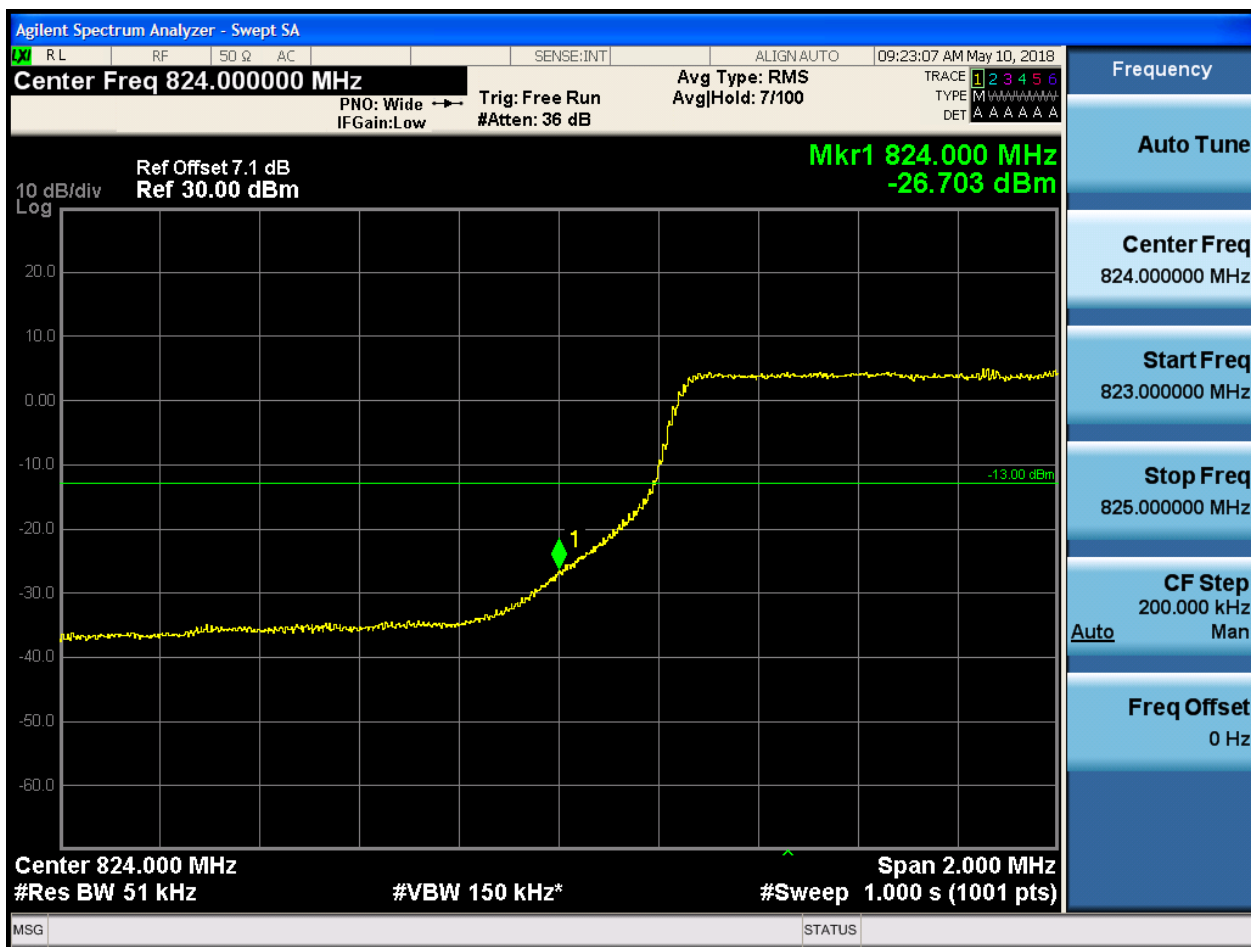
10 dB/div
Log

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

MSG STATUS

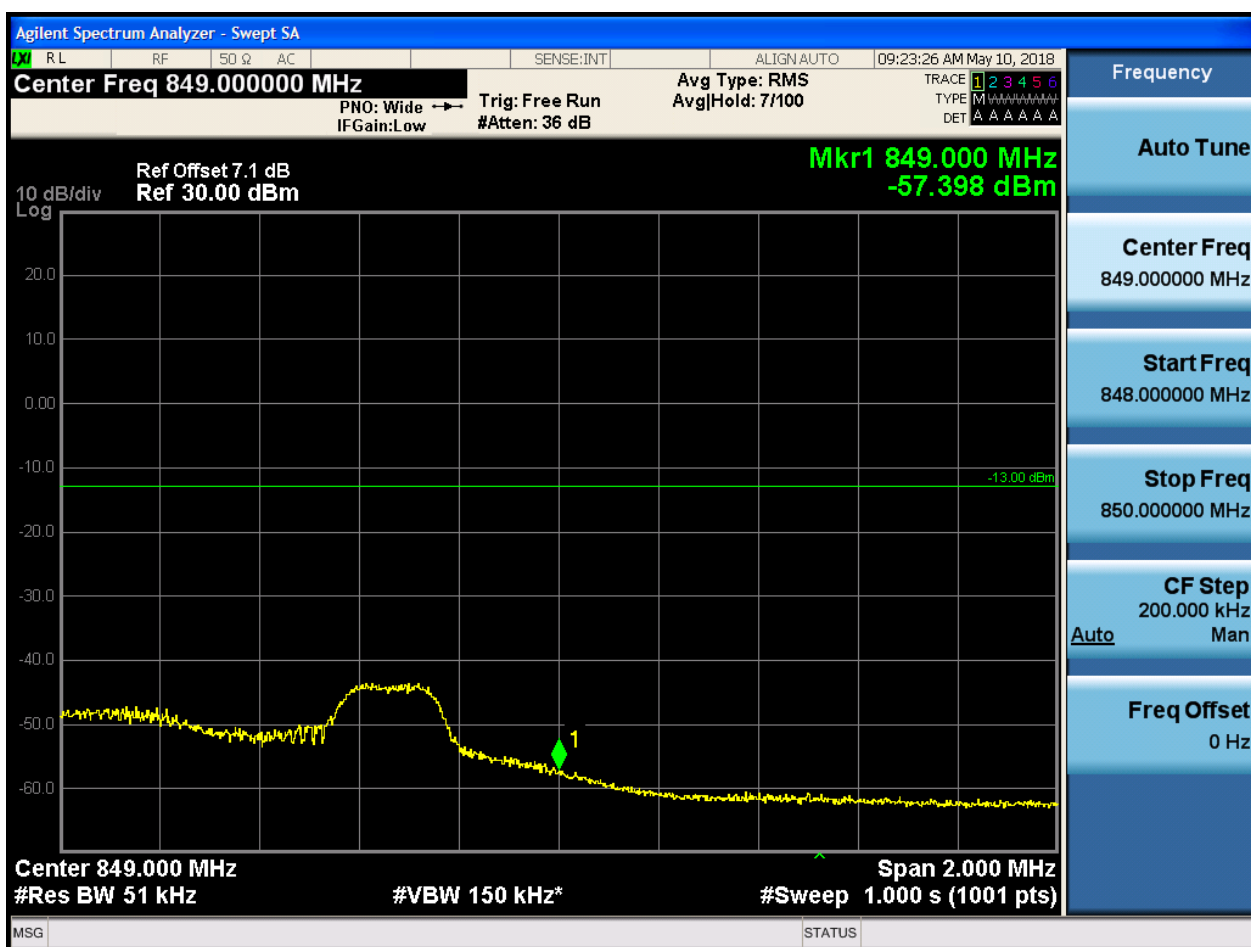


5.1.1.1.3.1.4 Test RB = RB25#0



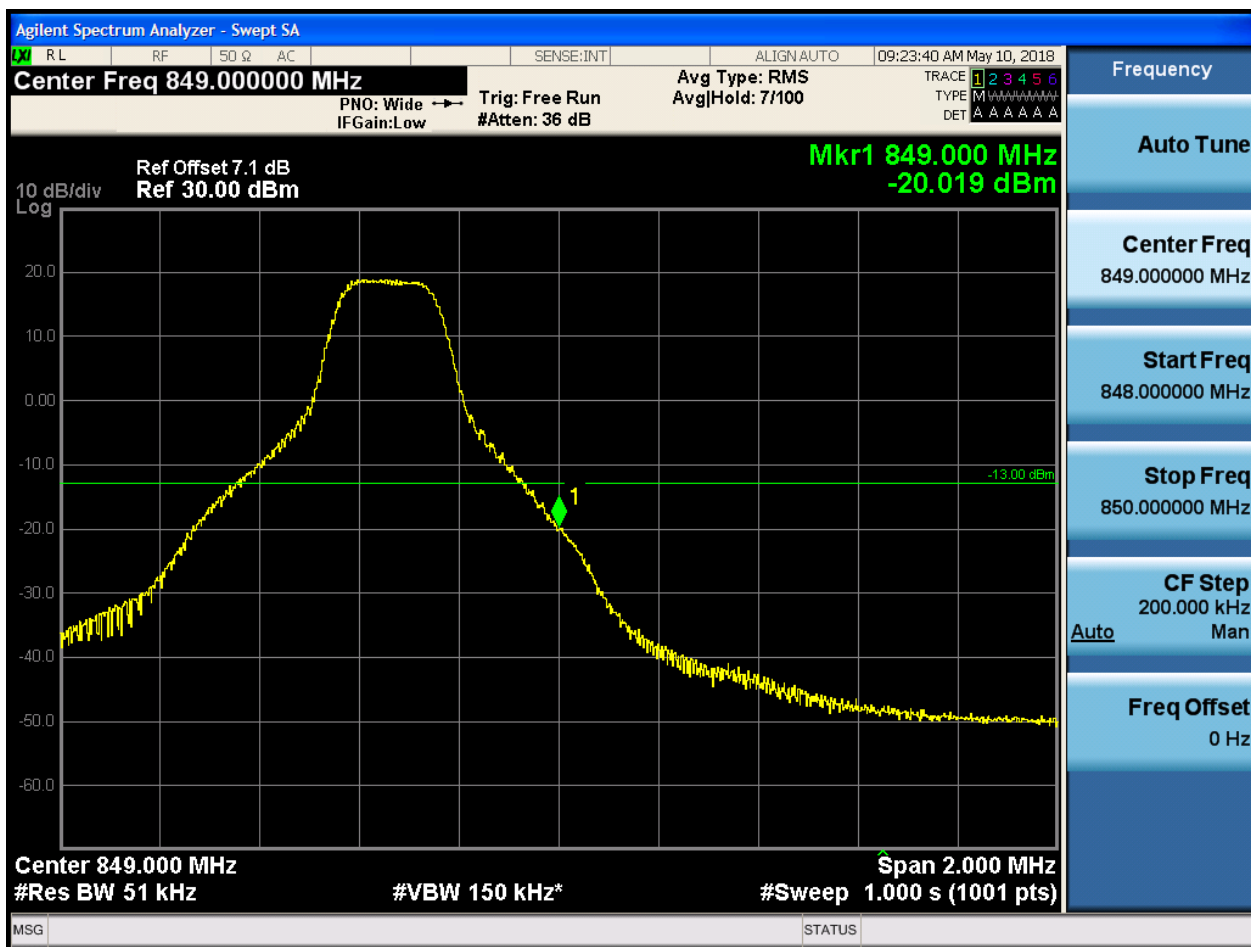
5.1.1.1.3.2 Test Channel = HCH

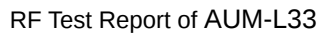
5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:23:53 AM May 10, 2018

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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

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

10 dB/div
Log

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-34.134 dBm

-13.00 dBm

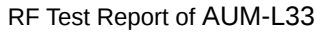
Center 849.000 MHz
#Res BW 51 kHz

#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Detailed description: The image shows a screenshot of an Agilent Spectrum Analyzer. The main display is a swept spectrum plot with a logarithmic scale. 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 849.000 MHz and a span of 2.000 MHz. A yellow trace shows the signal level, which decreases as frequency increases. A green horizontal line is at -13.00 dBm. A marker '1' is placed on the trace at 849.010 MHz, indicating a level of -34.134 dBm. The right-hand side of the screen features a vertical menu with options: 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), and Freq Offset (0 Hz). The bottom of the screen shows various control parameters: Center 849.000 MHz, #Res BW 51 kHz, #VBW 150 kHz*, Span 2.000 MHz, and #Sweep 1.000 s (1001 pts). The top of the screen displays the instrument name 'Agilent Spectrum Analyzer - Swept SA', various settings (RL, RF, 50 Ω , AC, SENSE:INT, ALIGN AUTO), and the time '09:23:53 AM May 10, 2018'. The bottom left corner has 'MSG' and 'STATUS' indicators.



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:24:07 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-27.422 dBm

10 dB/div
Log

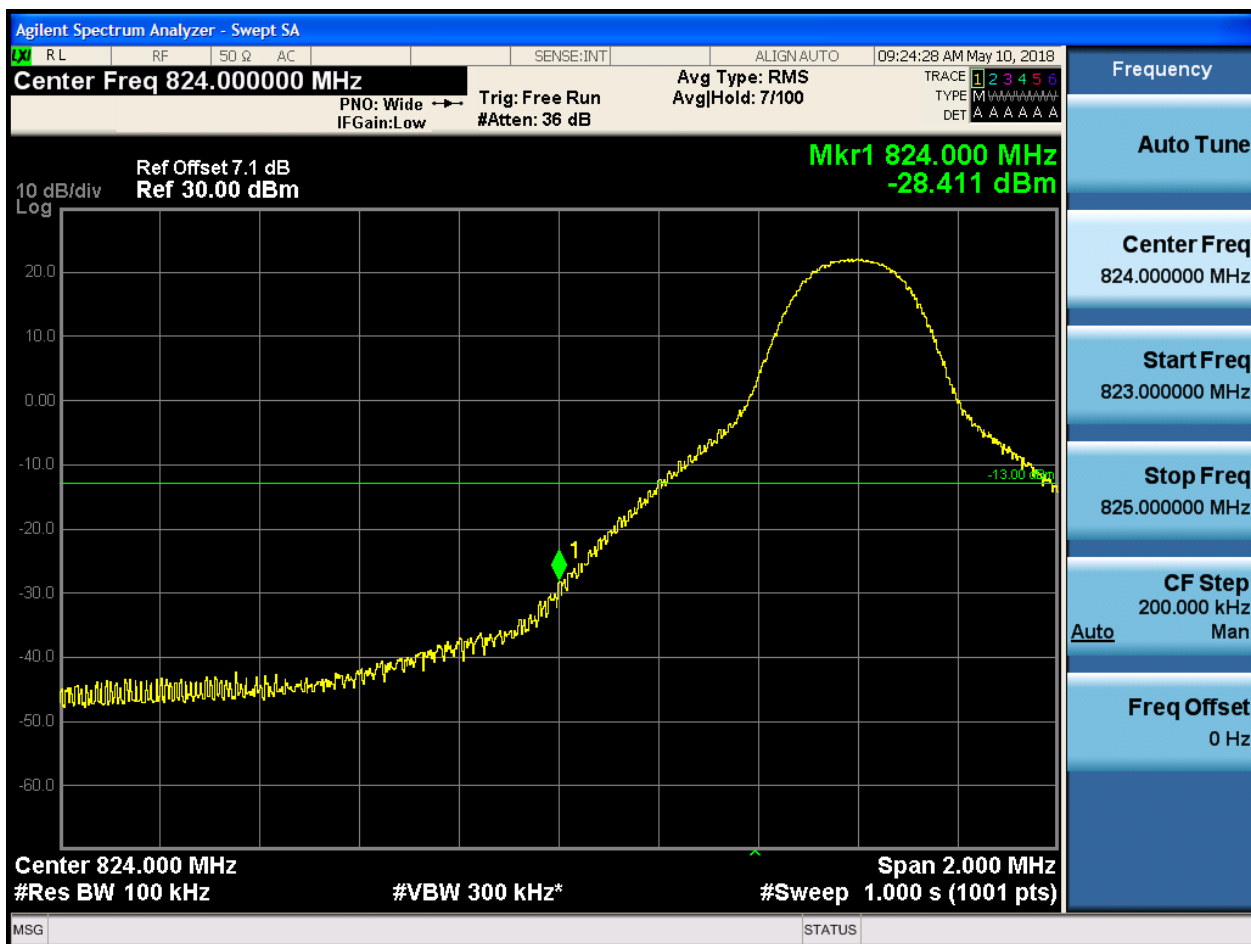
Center 849.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

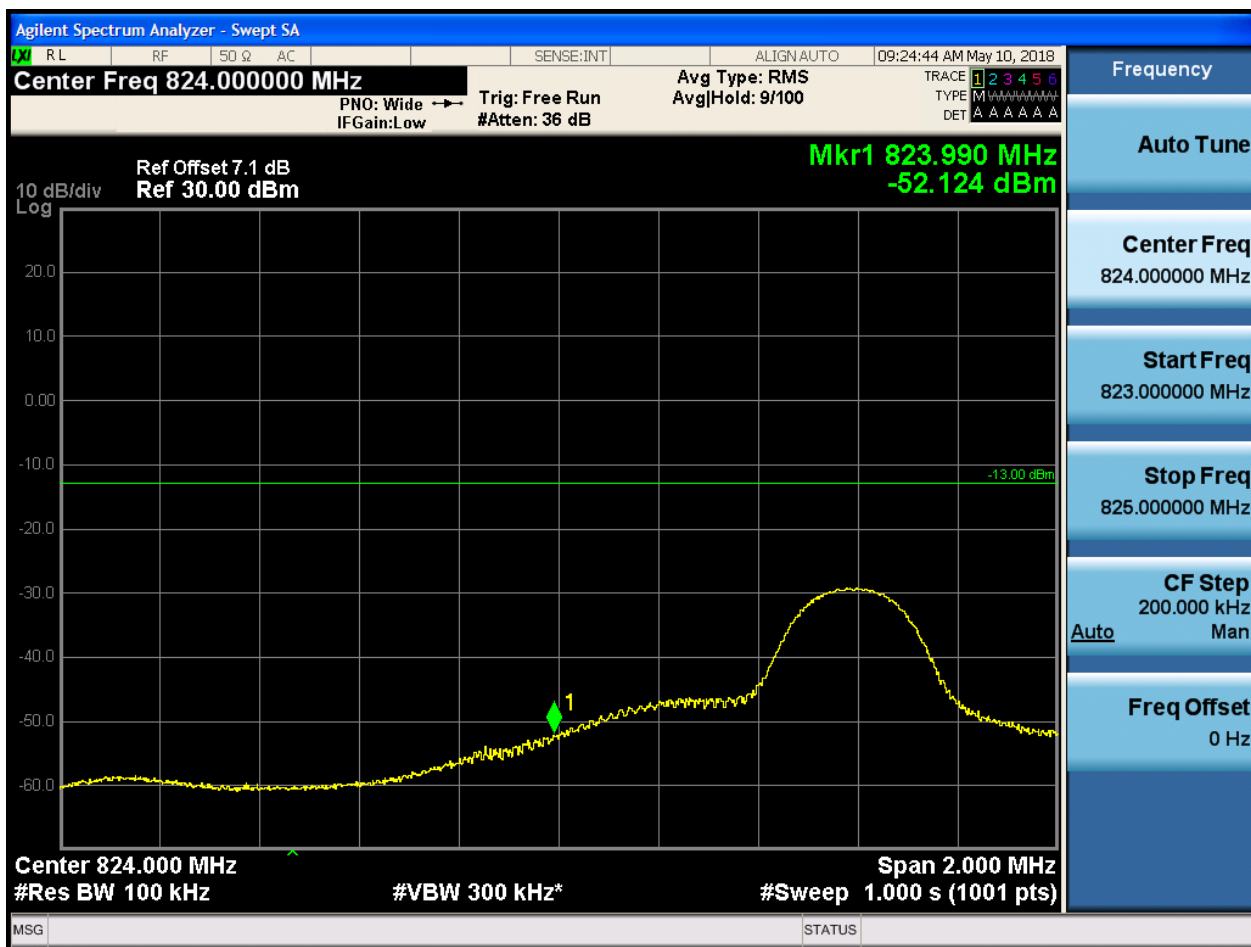
5.1.1.1.4 Test Bandwidth = 10

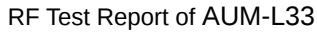
5.1.1.1.4.1 Test Channel = LCH

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 09:24:58 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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

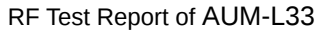
Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 823.990 MHz
-33.953 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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:25:11 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-30.474 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 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

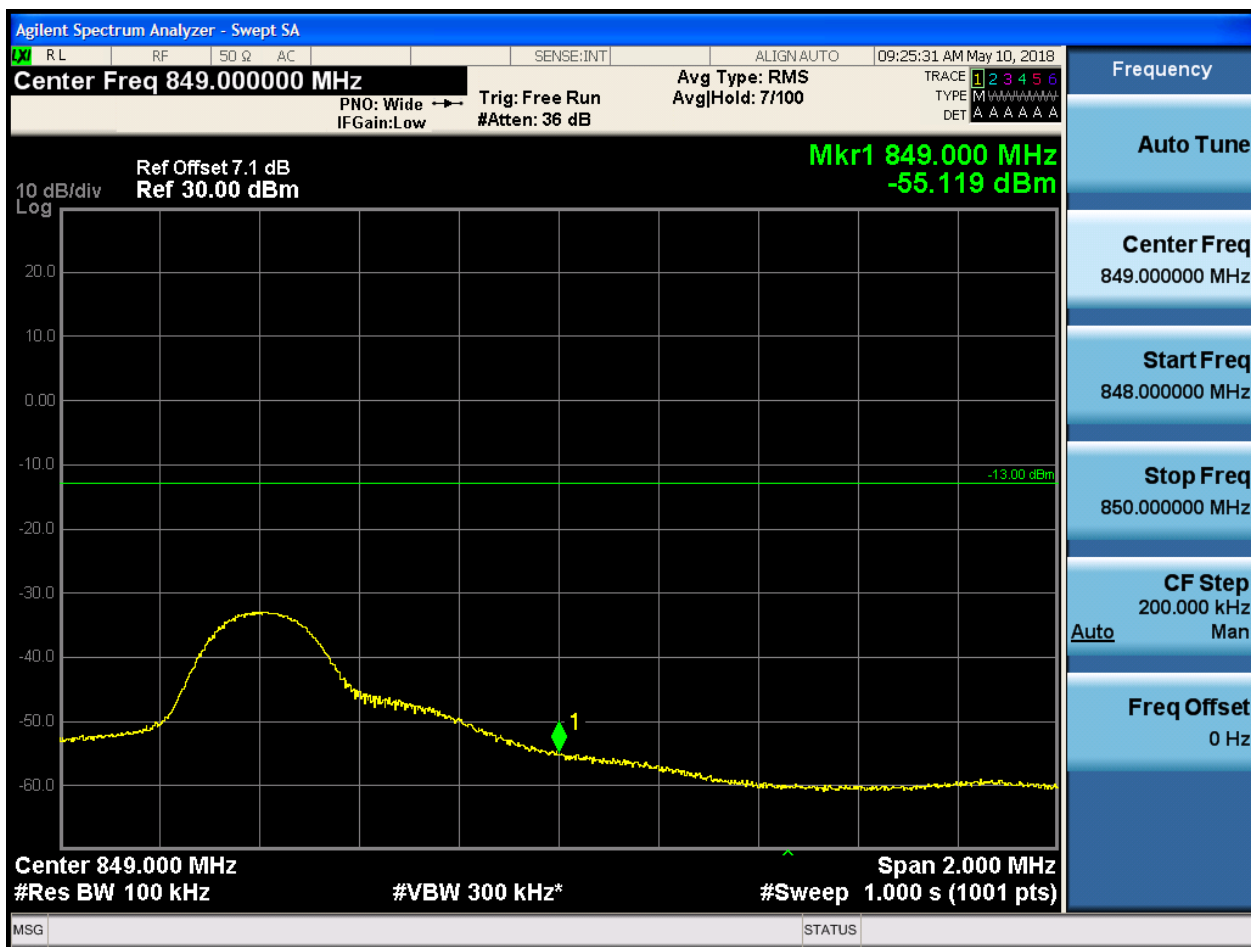
Stop Freq
825.000000 MHz

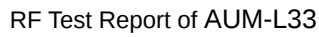
CF Step
200.000 kHz
Auto Man

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

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:25:44 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

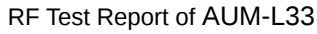
Mkr1 849.000 MHz
-30.125 dBm

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

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 09:25:58 AM May 10, 2018

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-34.573 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

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

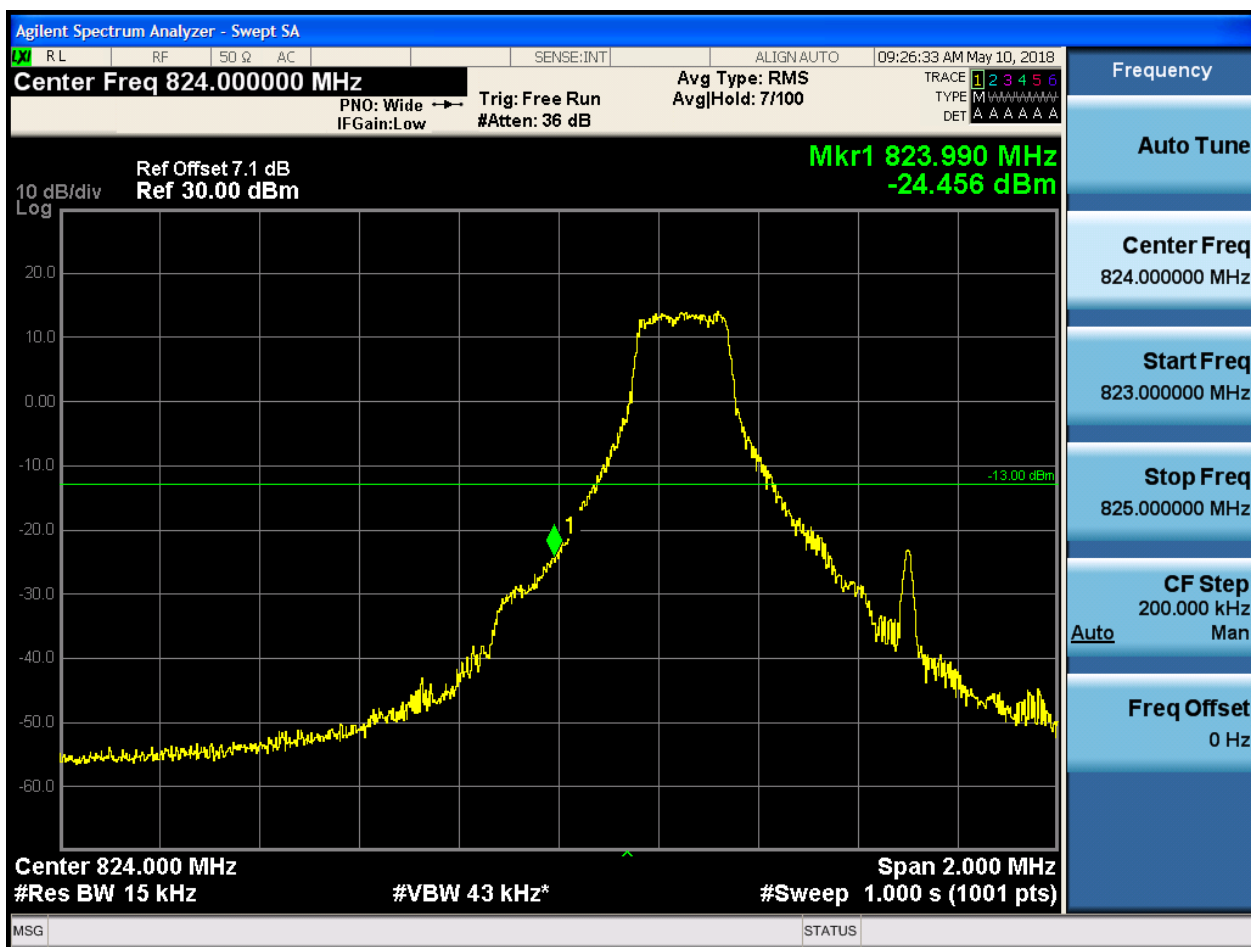


5.1.1.2 Test Mode = LTE/TM2

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



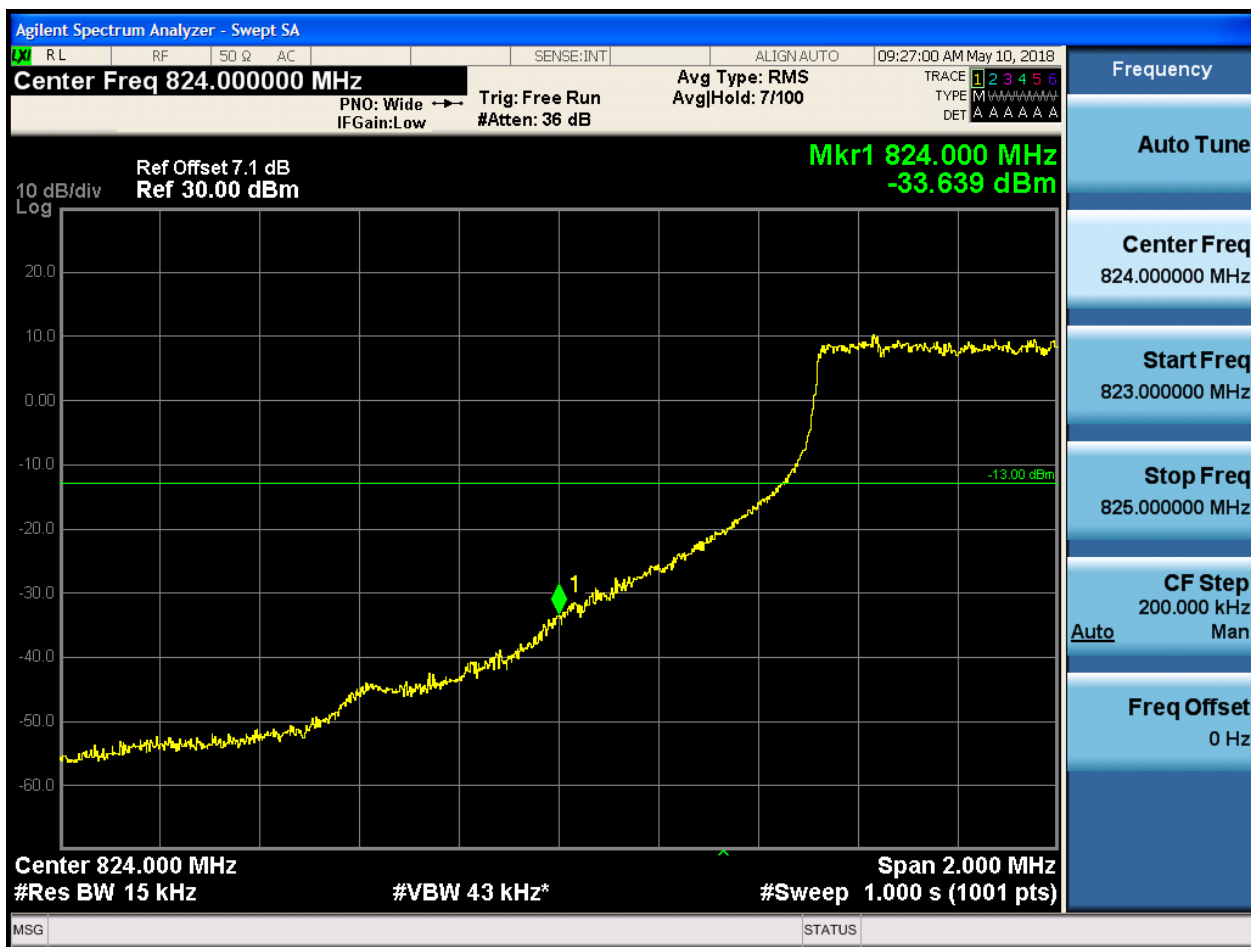


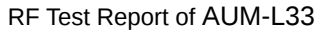
5.1.1.2.1.1.2 Test RB = RB1#5





5.1.1.2.1.1.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:27:14 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide Trig: Free Run AvgHold: 7/100
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 7.1 dB
Ref 30.00 dBm

Mkr1 823.990 MHz
-29.721 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

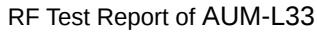
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.1.1.2.1.2 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 09:27:47 AM May 10, 2018

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#Atten: 36 dB

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 849.000 MHz
-24.018 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

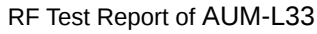
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



5.1.1.2.1.2.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:28:14 AM May 10, 2018

Center Freq 849.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#Atten: 36 dB DET A A A A A

Ref Offset 7.1 dB Mkr1 849.000 MHz
Ref 30.00 dBm -28.571 dBm

10 dB/div Log

Center 849.000 MHz Span 2.000 MHz
#Res BW 15 kHz #VBW 43 kHz* #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

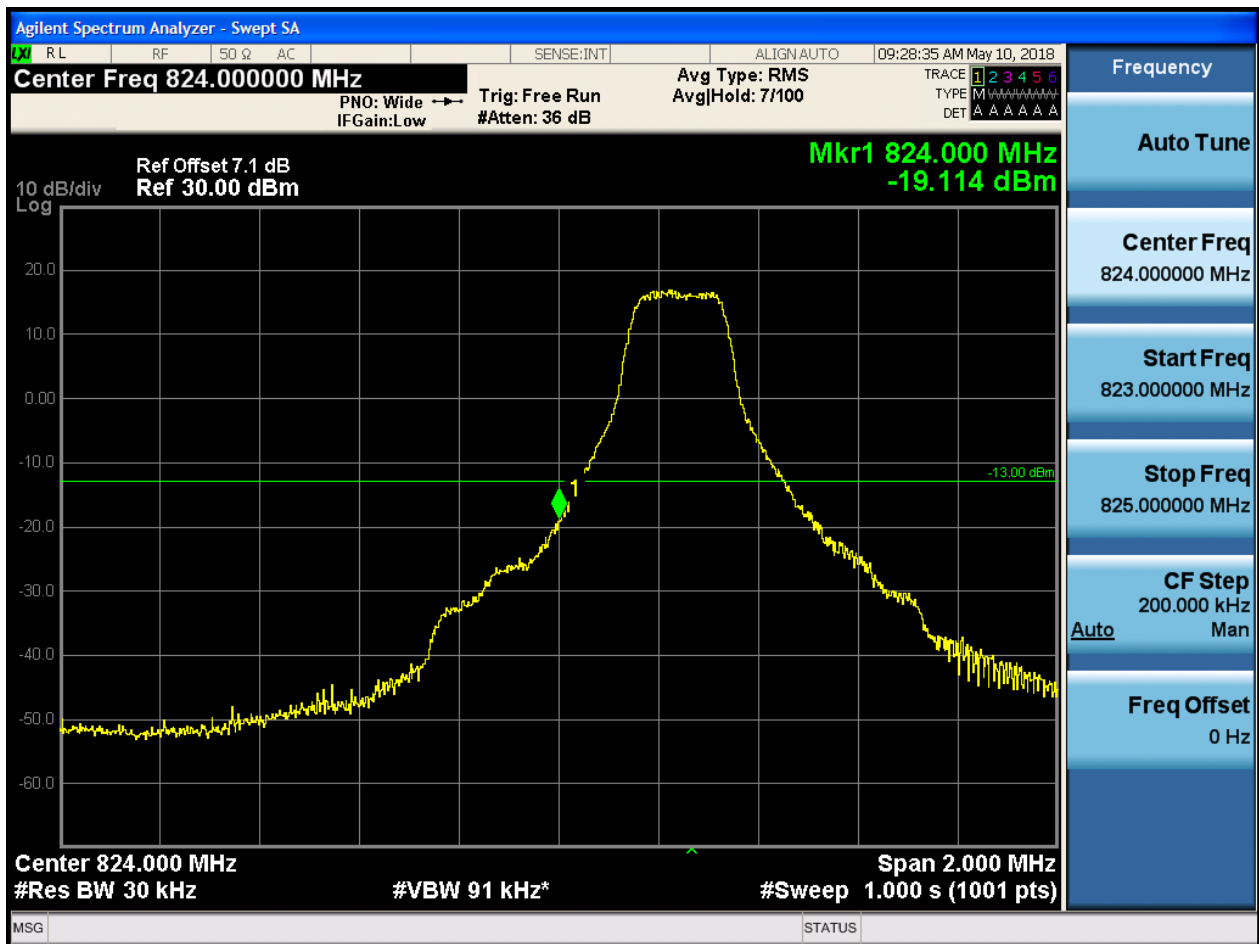
Freq Offset
0 Hz

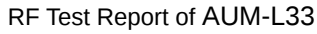


5.1.1.2.2 Test Bandwidth = 3

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:28:49 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 71/100
#Atten: 36 dB

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 823.010 MHz
-45.122 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

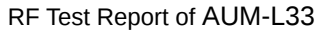
Center Freq
824.000000 MHz

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 09:29:03 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-34.209 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

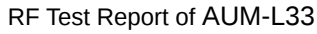
Center Freq
824.000000 MHz

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 09:29:16 AM May 10, 2018

Center Freq 824.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 7/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-26.353 dBm

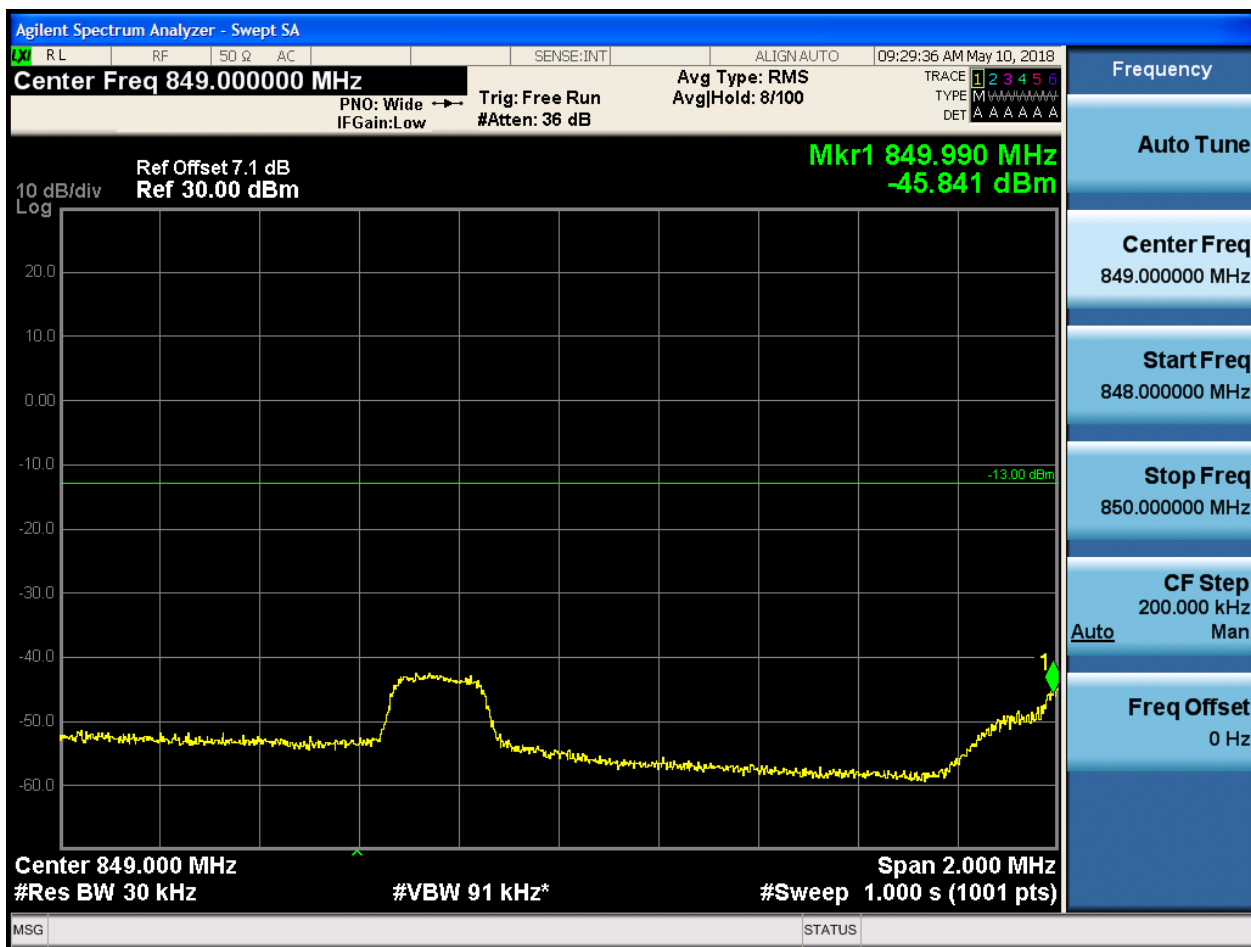
10 dB/div
Log

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

MSG STATUS

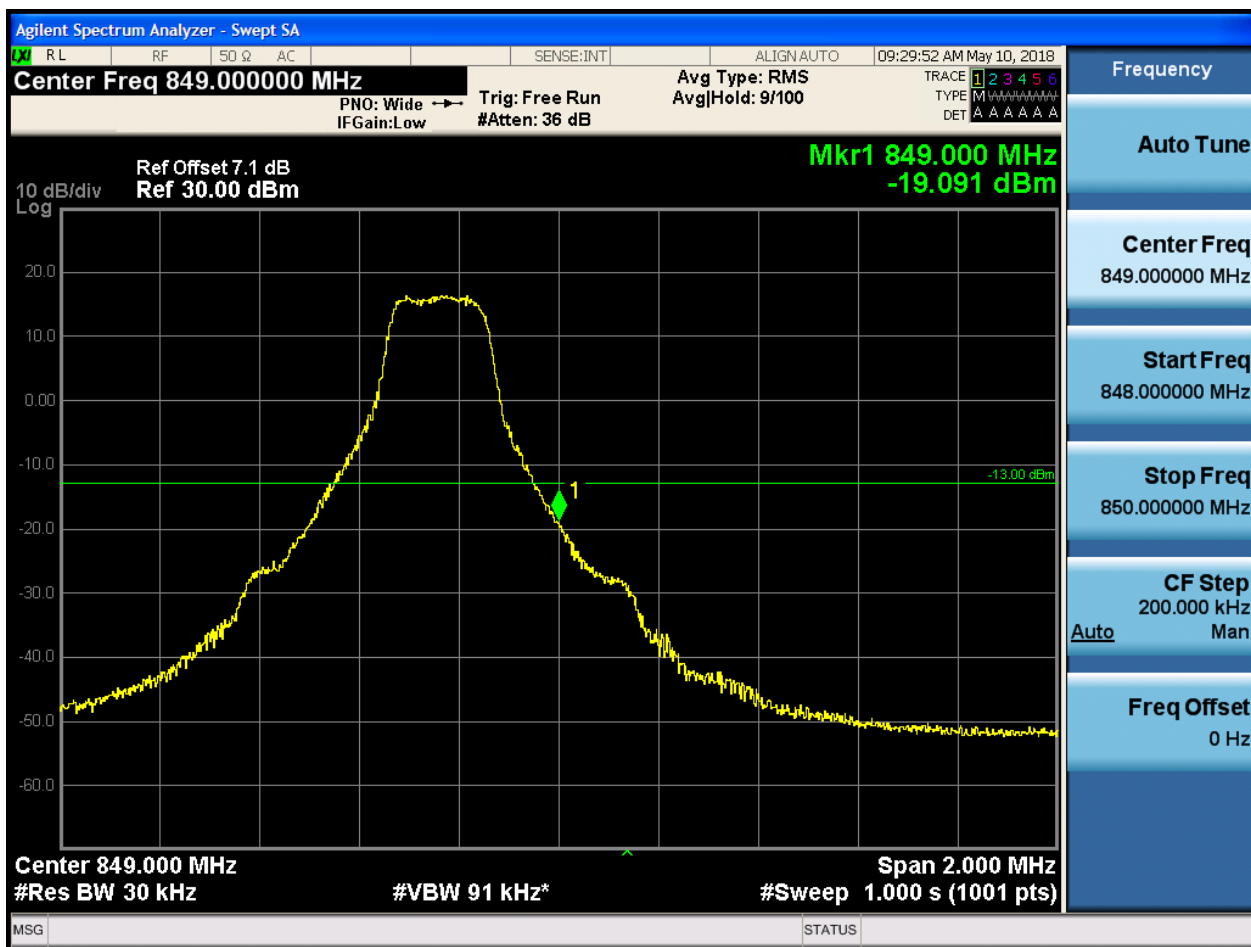
5.1.1.2.2.2 Test Channel = HCH

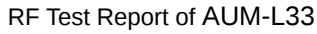
5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14





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: 9/100

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 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-33.377 dBm

10 dB/div
Log

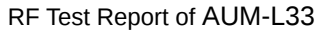
-13.00 dBm

Center 849.000 MHz
#Res BW 30 kHz

#VBW 91 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 <u>Auto</u> Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-27.373 dBm

Center 849.000 MHz
#Res BW 30 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

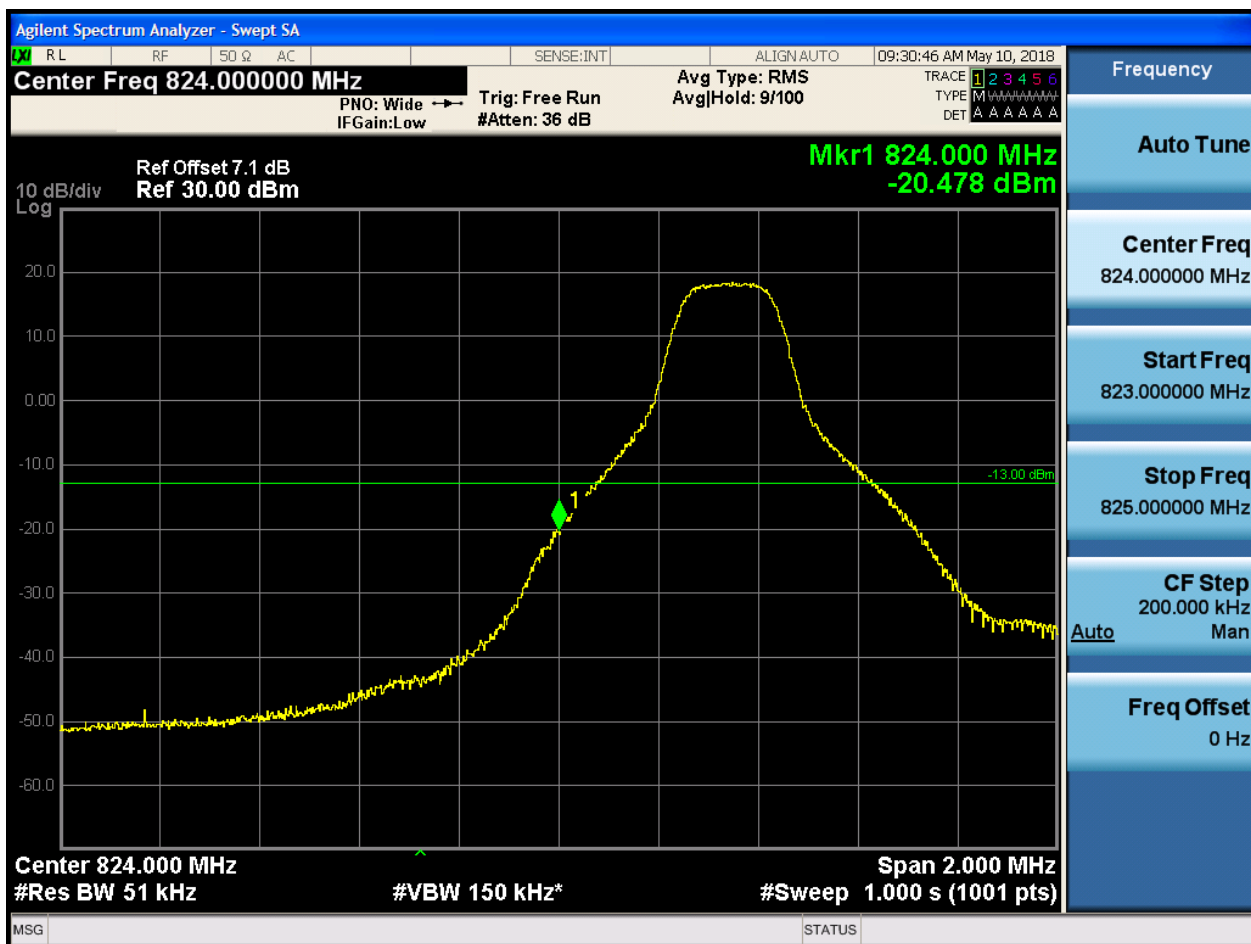
The image shows a screenshot of an Agilent Spectrum Analyzer in Swept SA mode. The main display is a log-scale plot of power spectral density versus frequency. The center frequency is set to 849.000000 MHz. The reference level is 30.00 dBm, and the reference offset is 7.1 dB. The span is 2.000 MHz, and the resolution bandwidth is 30 kHz. A marker Mkr1 is placed at the center frequency, showing a power level of -27.373 dBm. The plot shows a signal that is relatively flat around 0 dBm from 848 MHz to 849 MHz, then drops sharply to about -40 dBm by 850 MHz. The right side of the screen displays various settings and parameters, including Auto Tune, Center Freq, Start Freq, Stop Freq, CF Step, and Freq Offset.

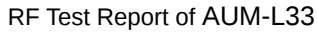
Parameter	Value
Center Freq	849.000000 MHz
Start Freq	848.000000 MHz
Stop Freq	850.000000 MHz
CF Step	200.000 kHz
Freq Offset	0 Hz

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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:31:02 AM May 10, 2018

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 A A A A A A
DET A A A A A A

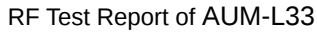
Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 823.990 MHz
-57.572 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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:31:17 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-35.413 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

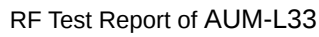
Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:31:33 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-28.241 dBm

10 dB/div
Log

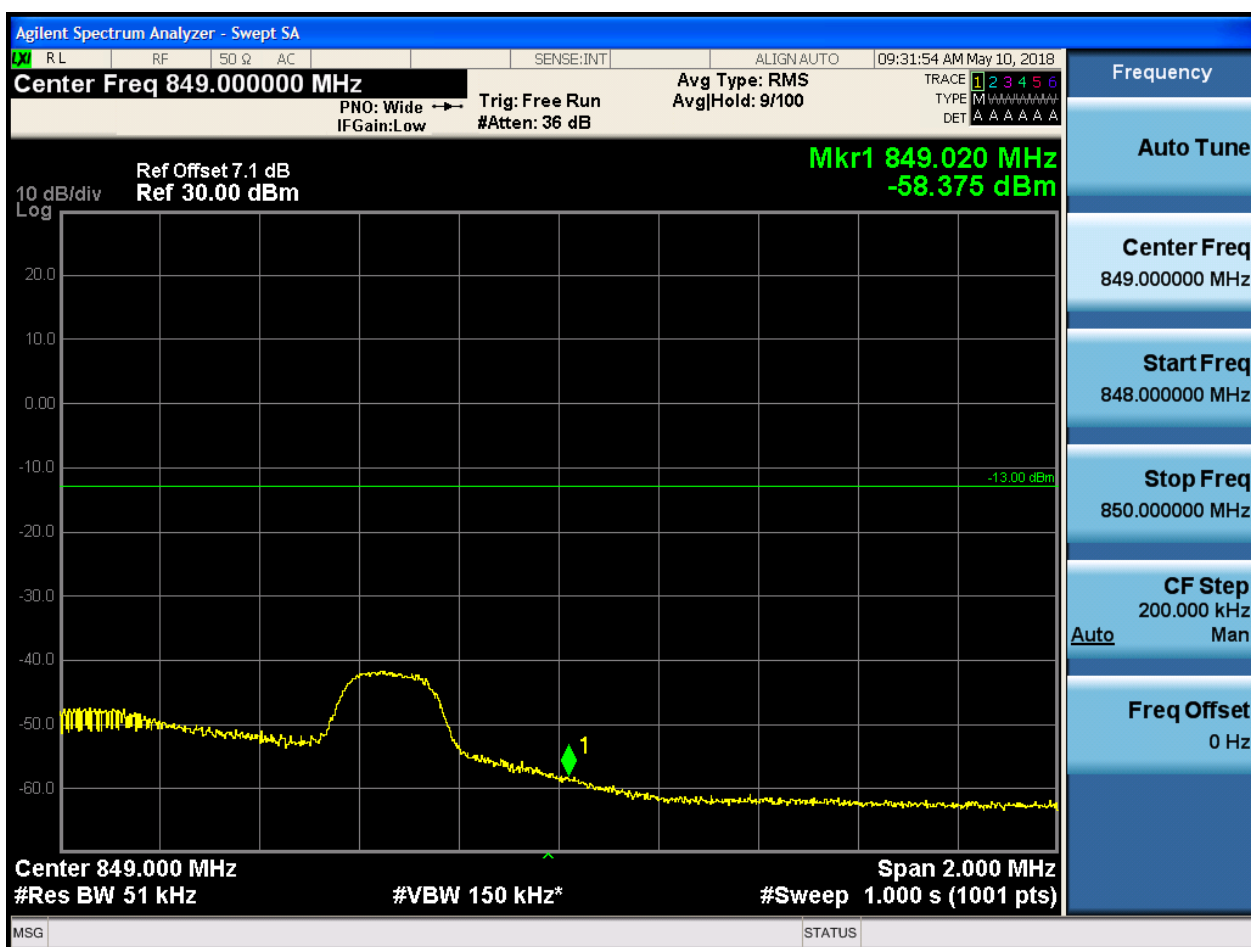
Center Freq 824.000000 MHz
Start Freq 823.000000 MHz
Stop Freq 825.000000 MHz
CF Step 200.000 kHz
Auto Man
Freq Offset 0 Hz

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

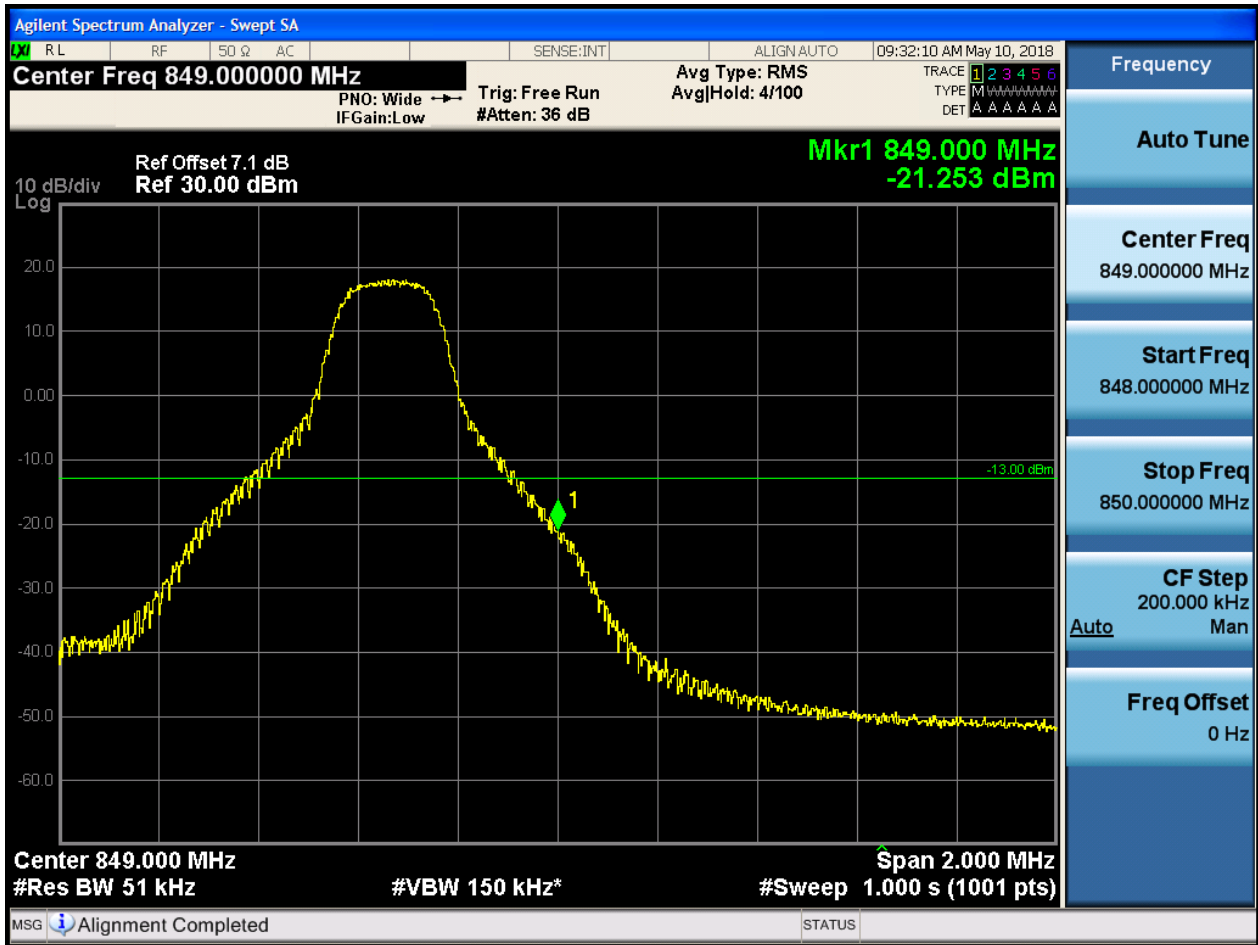
MSG STATUS

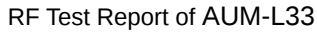
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0



5.1.1.2.3.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:32:25 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-36.663 dBm

10 dB/div
Log

Center 849.000 MHz
#Res BW 51 kHz

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

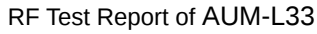
Center Freq
849.000000 MHz

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 09:32:41 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-29.576 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

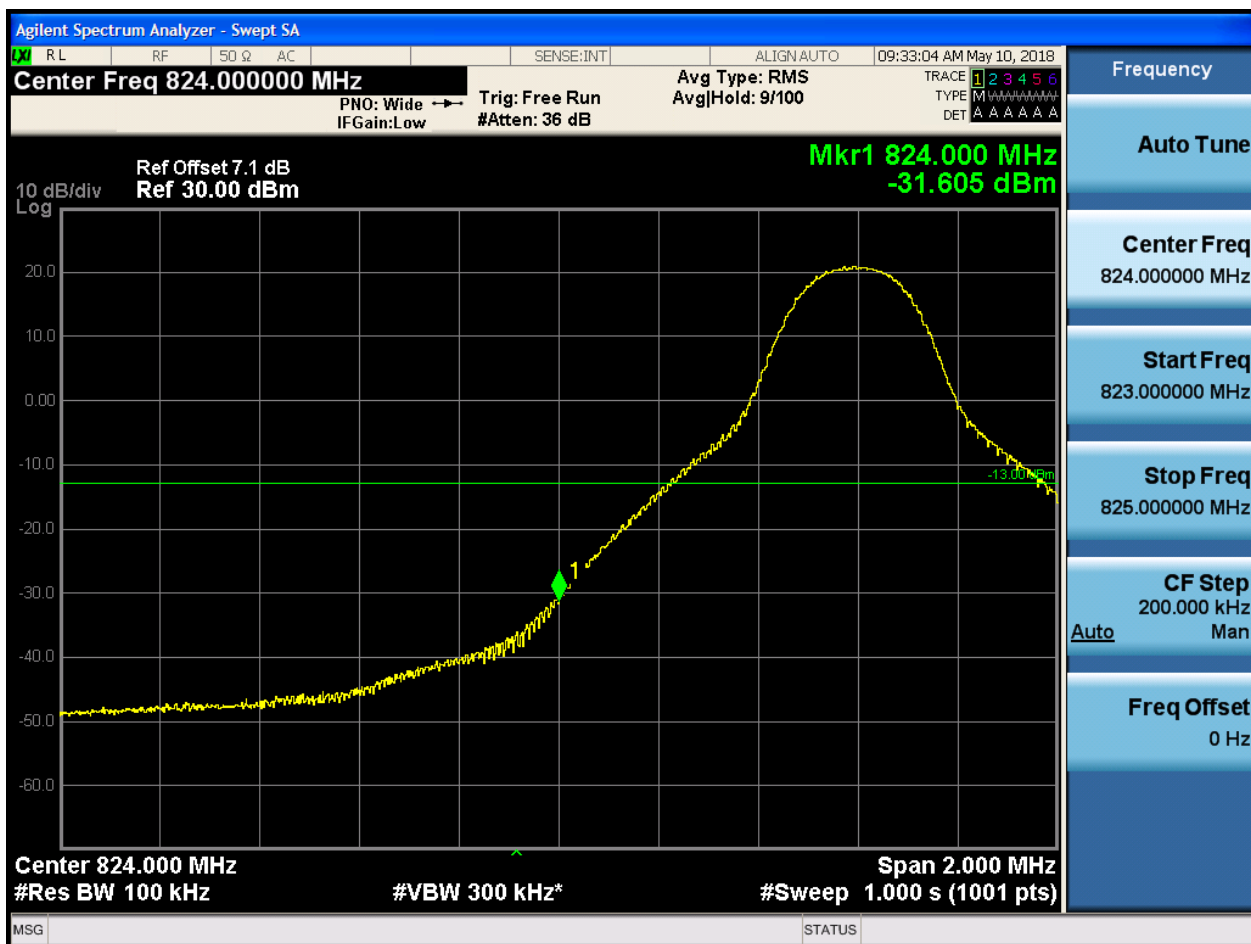
CF Step
200.000 kHz
Auto Man

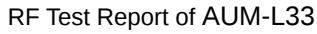
Freq Offset
0 Hz

5.1.1.2.4 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

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:33:19 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-50.868 dBm

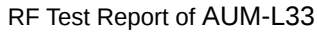
10 dB/div
Log

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

MSG STATUS

5.1.1.2.4.1.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 824.000 MHz
-32.578 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

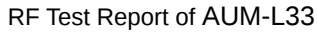
CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:34:28 AM May 10, 2018

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

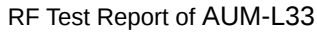
Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-32.443 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 09:34:43 AM May 10, 2018

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 W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

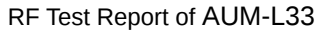
Mkr1 849.000 MHz
-36.063 dBm

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

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 09:34:59 AM May 10, 2018

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 7.1 dB
Ref 30.00 dBm

Mkr1 849.010 MHz
-32.261 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

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

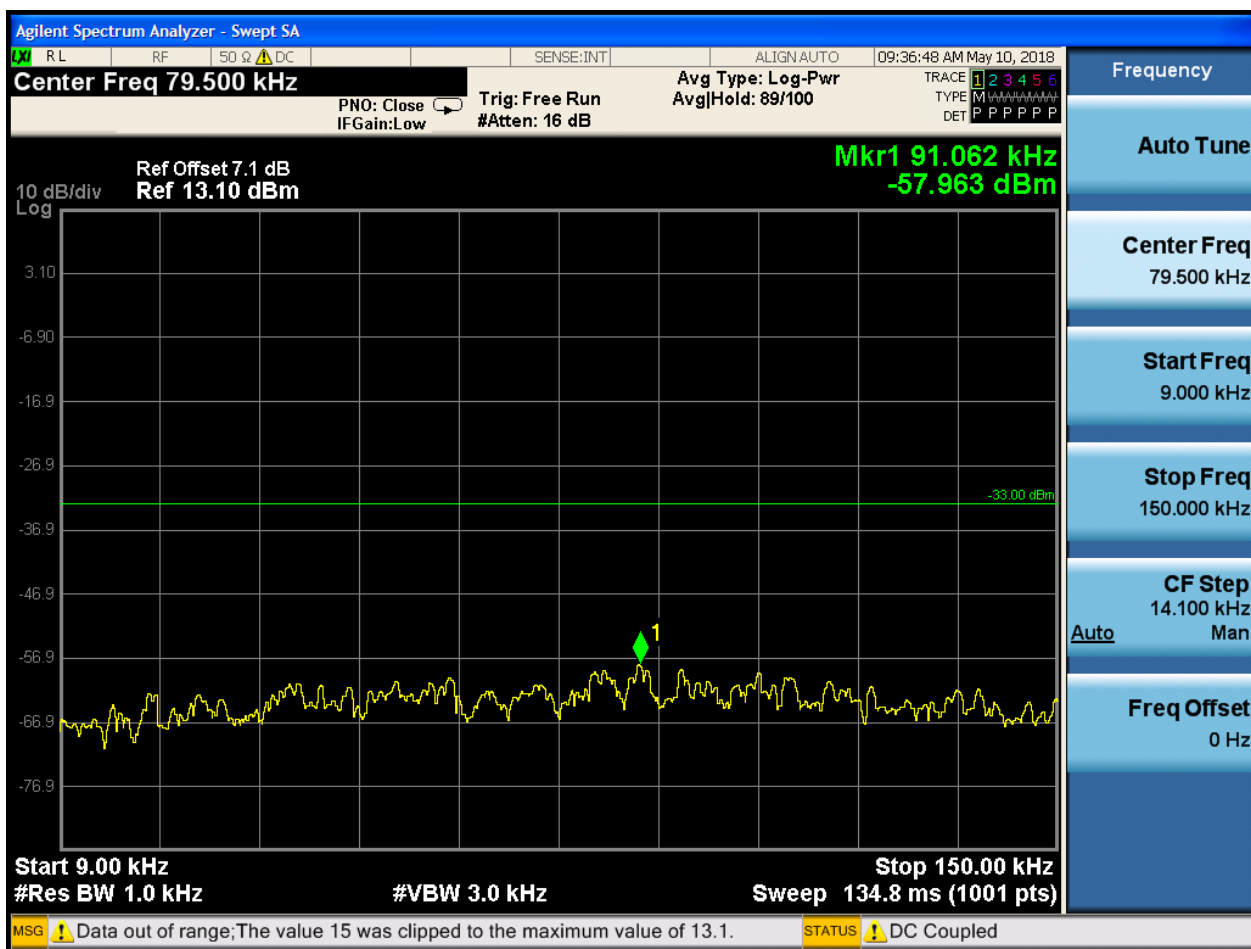
6.1.1 Test Band = BAND5

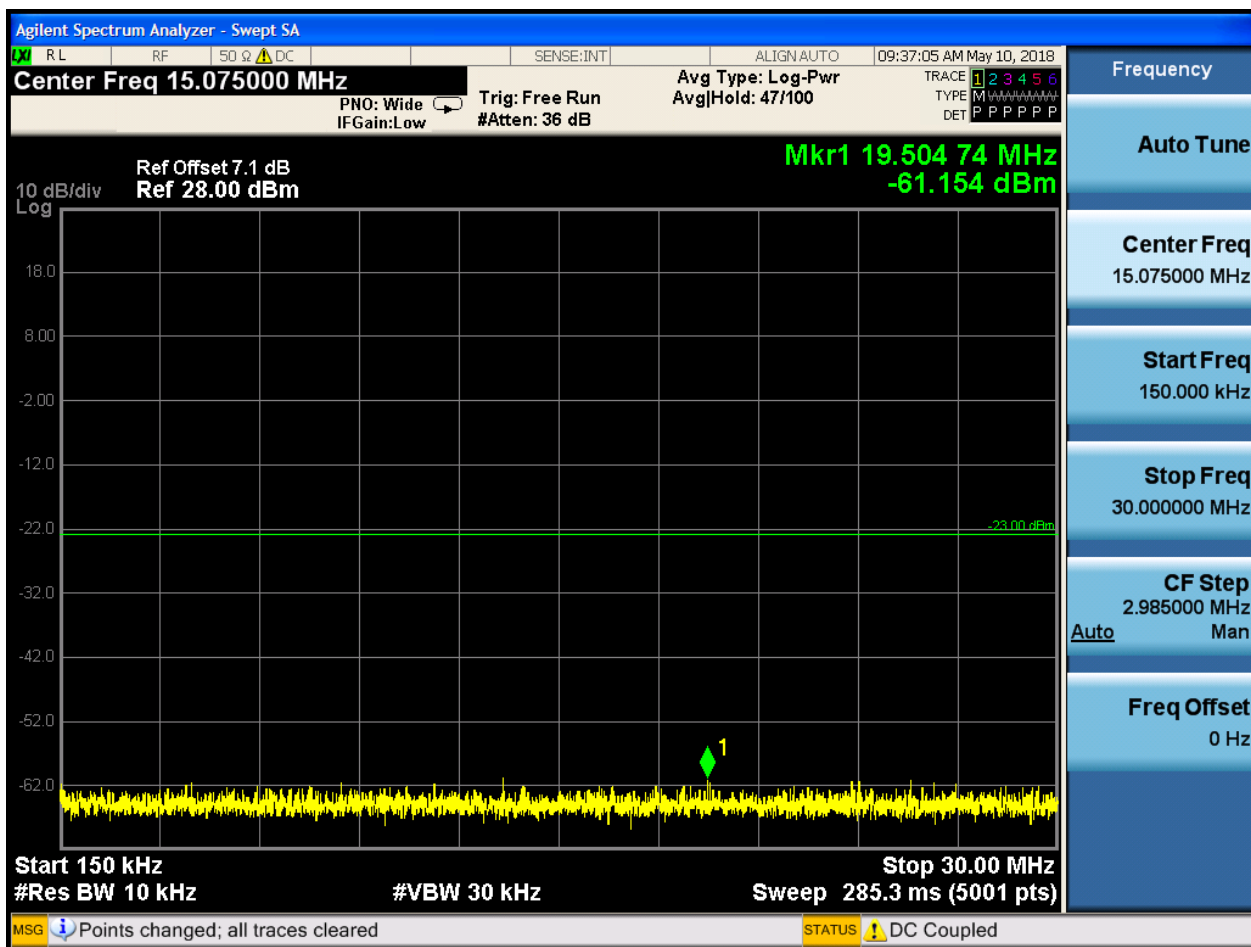
6.1.1.1 Test Mode = LTE/TM1

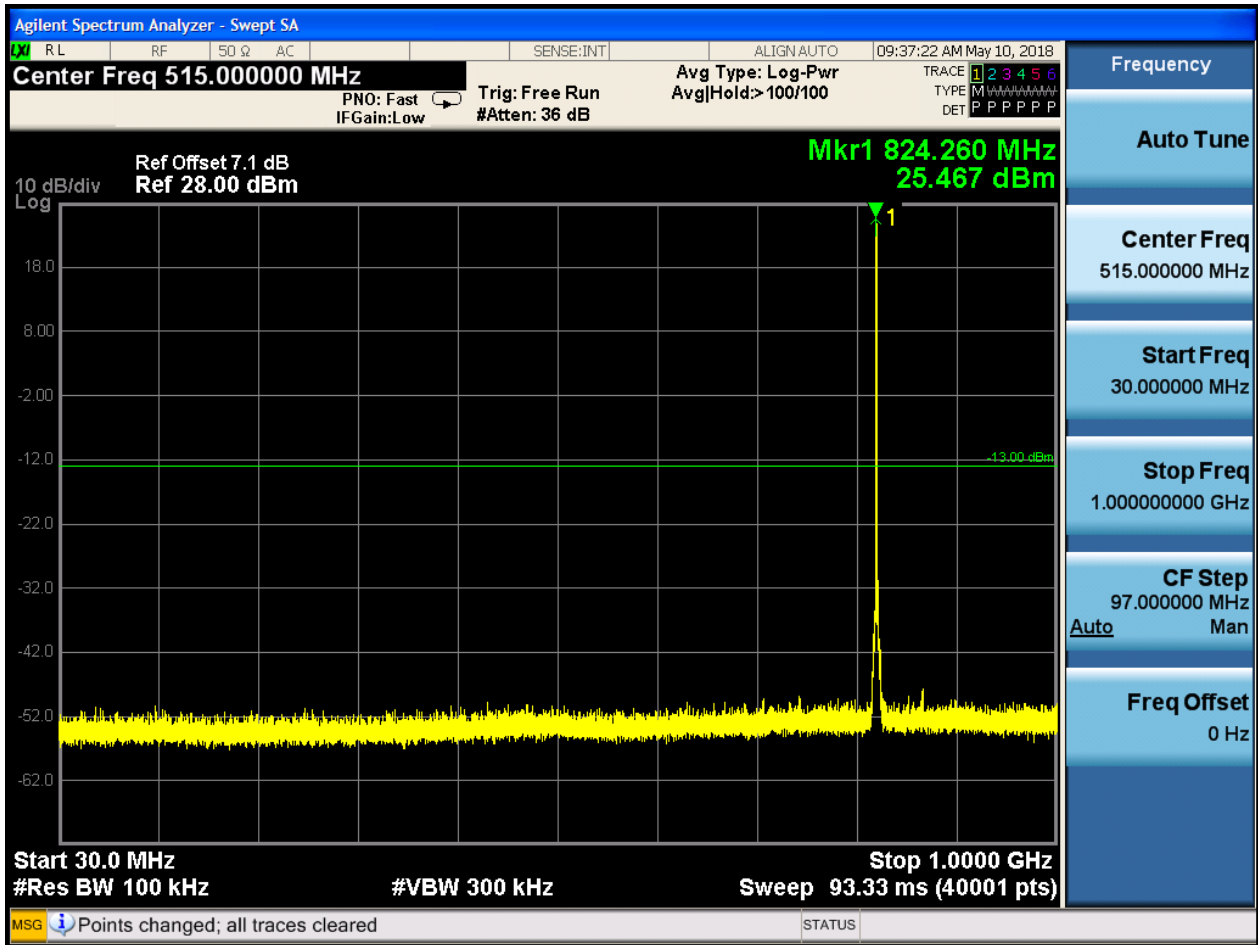
6.1.1.1.1 Test Bandwidth = 1.4

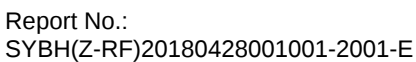
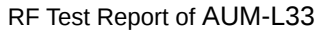
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



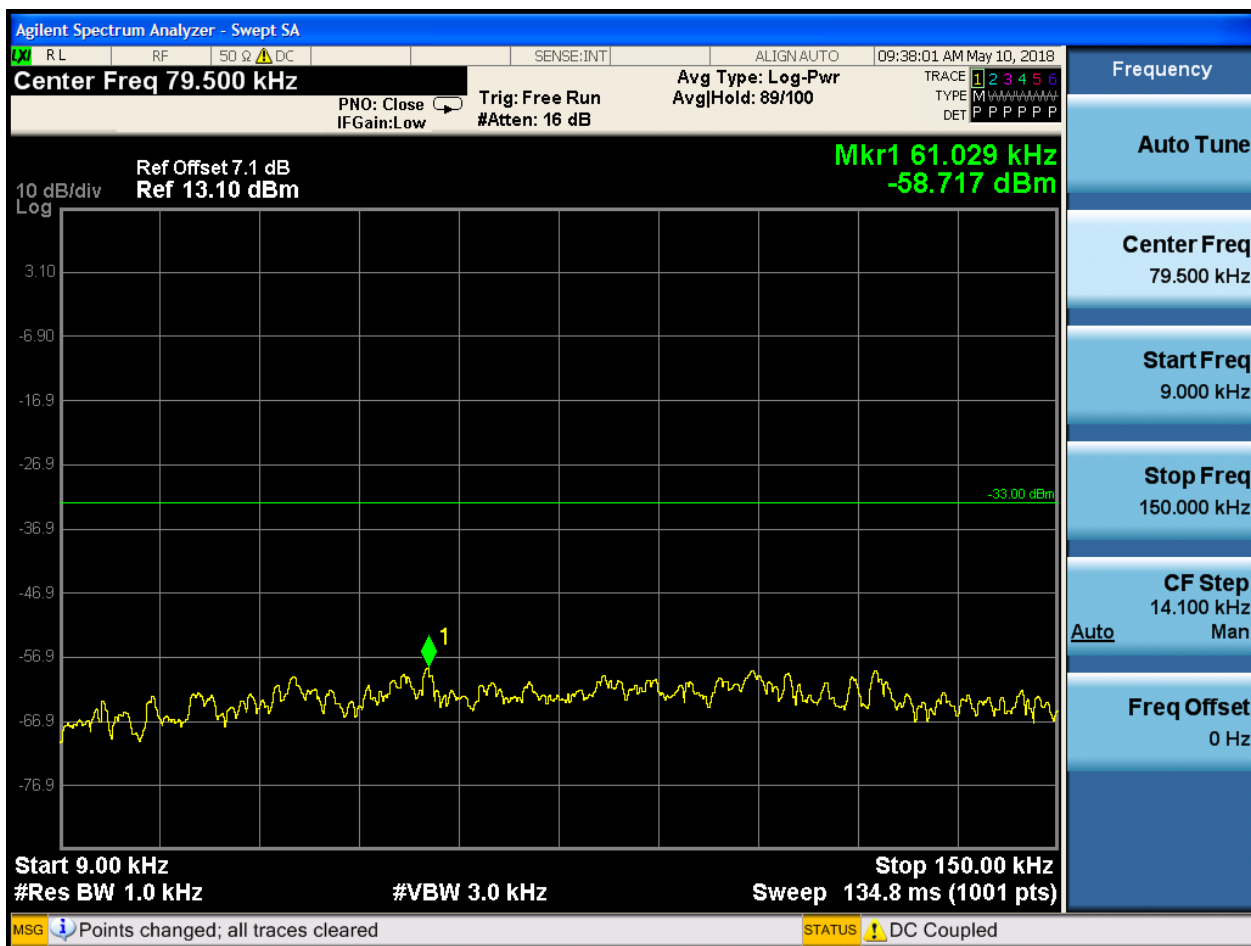


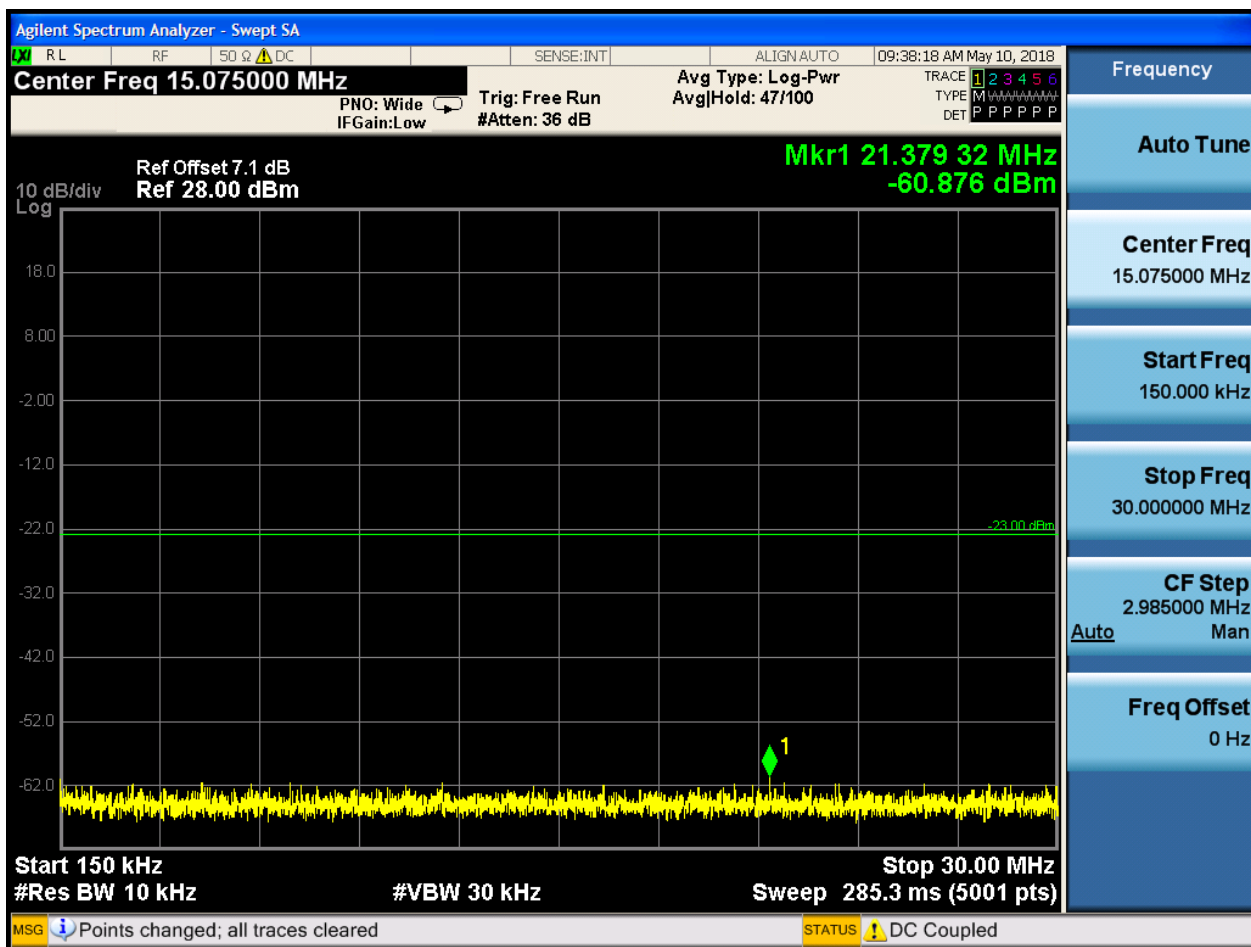


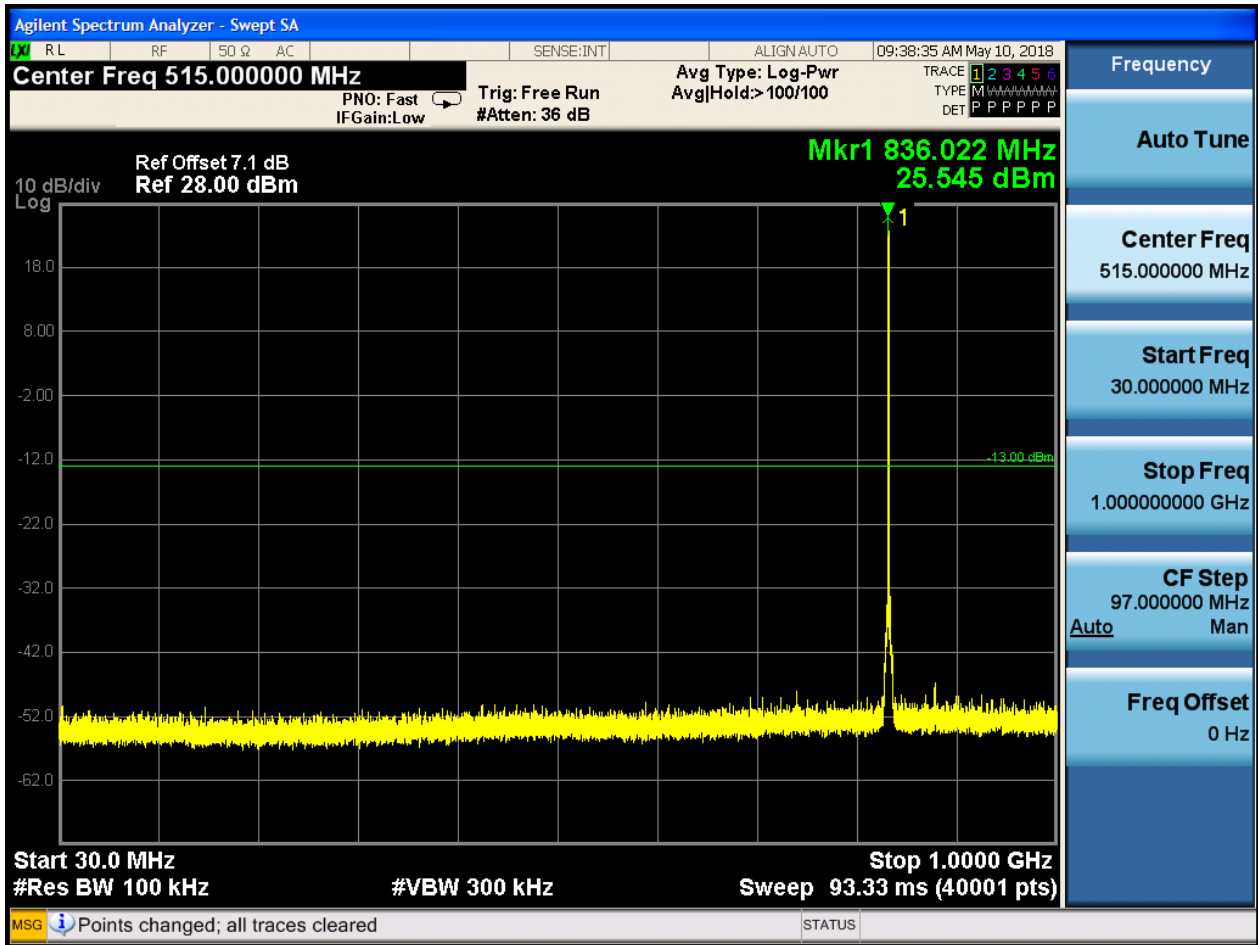


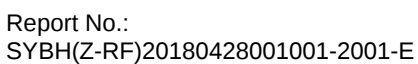
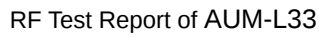
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



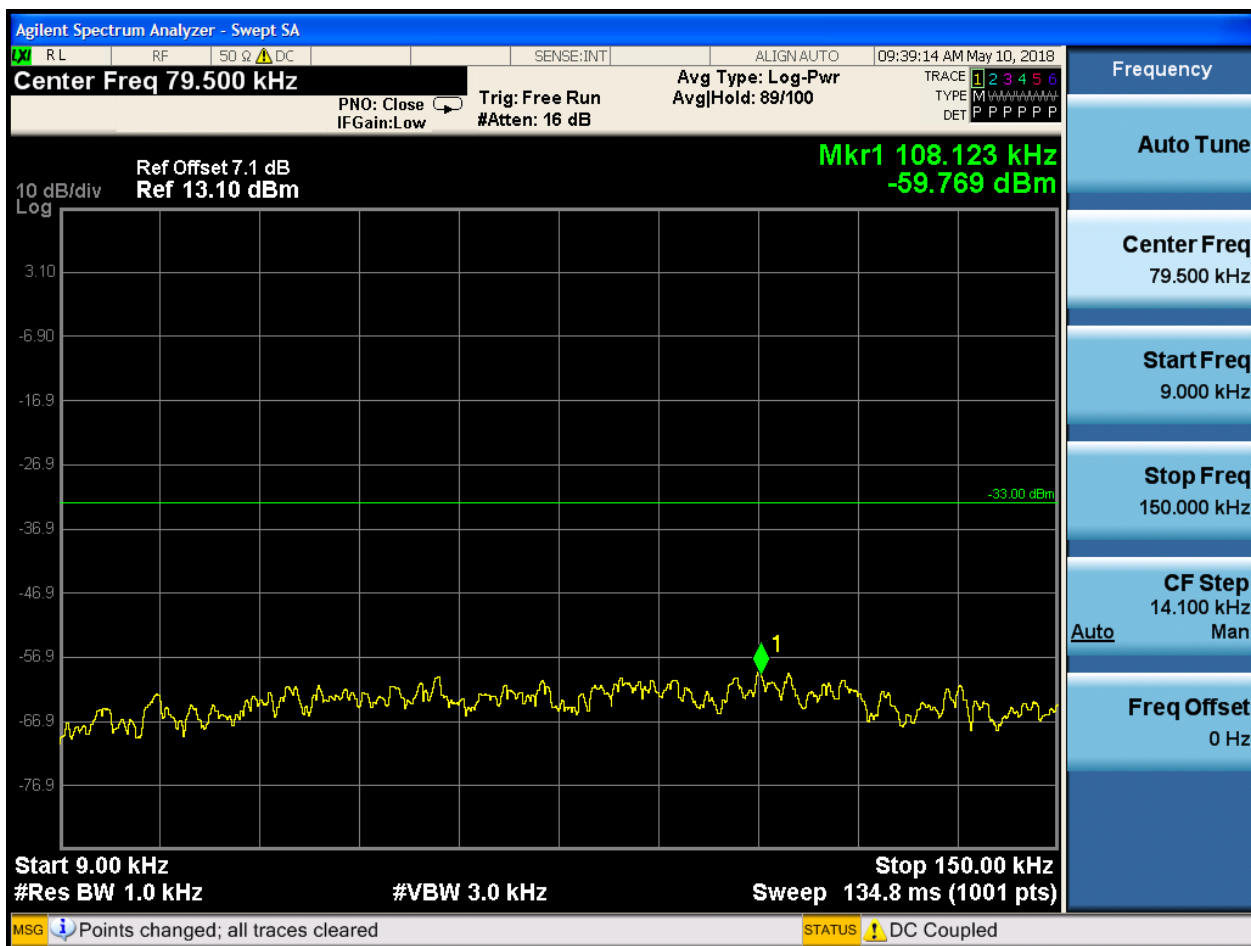


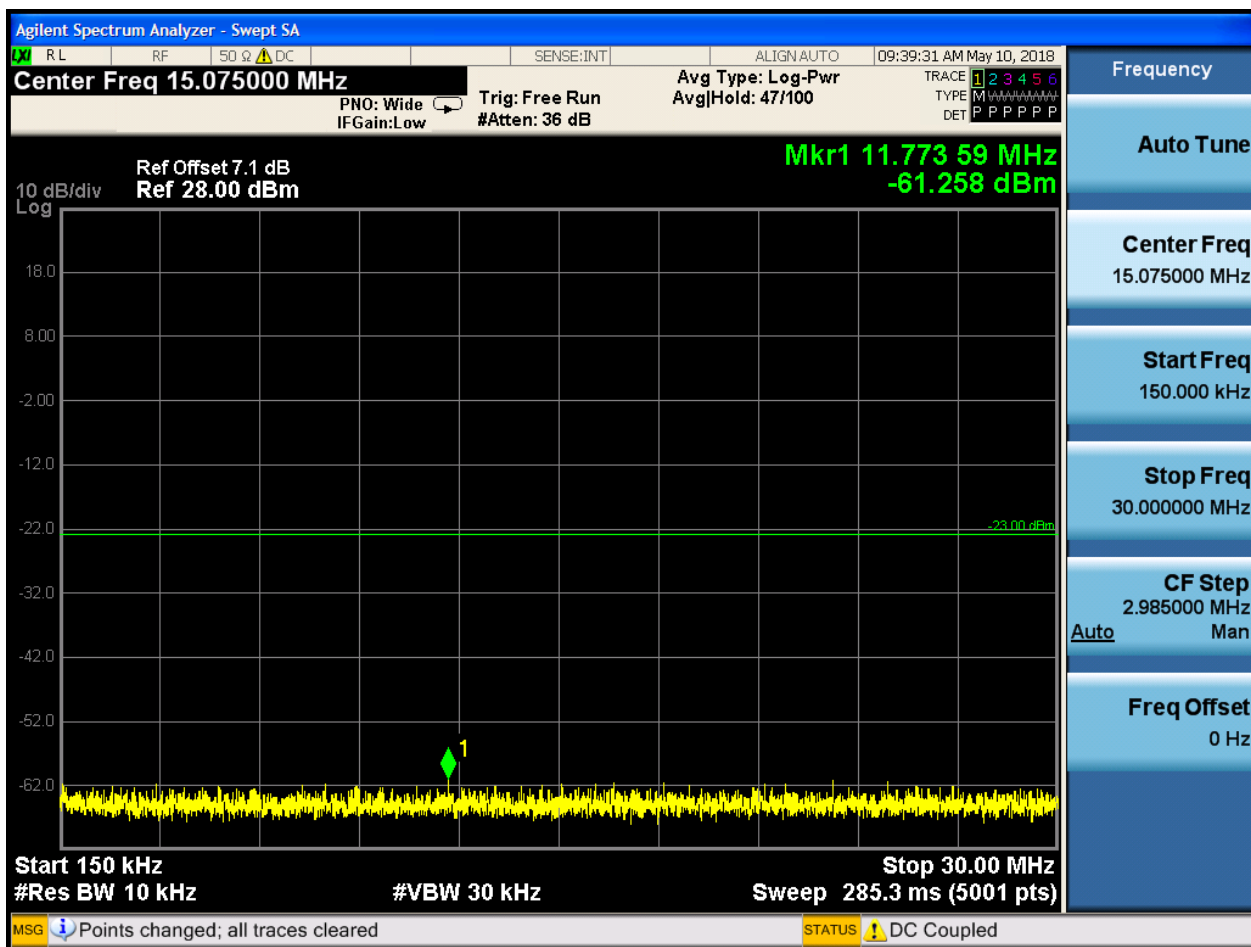


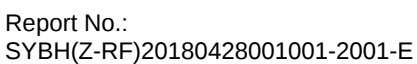
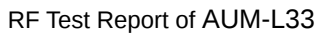


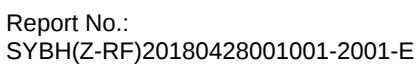
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0





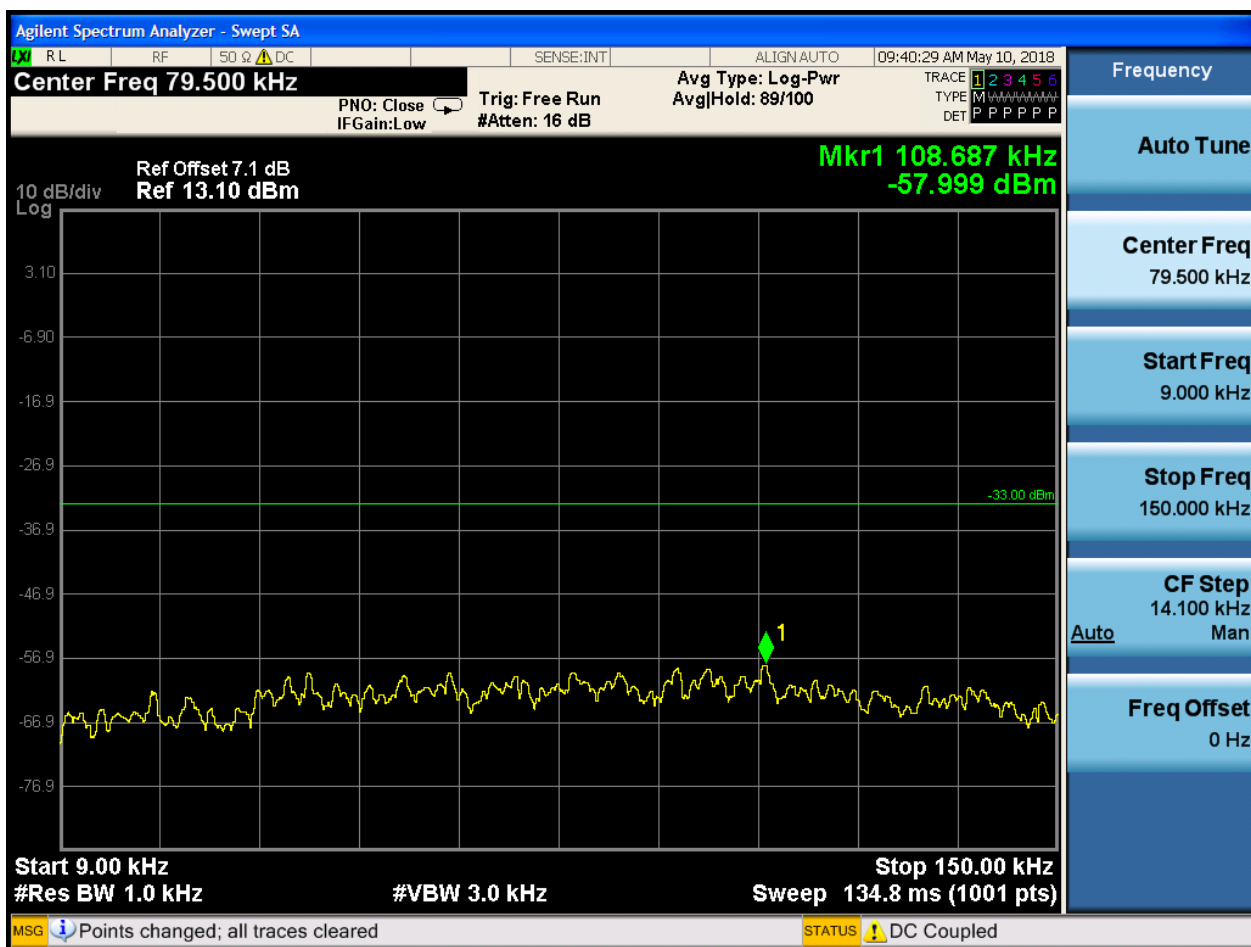


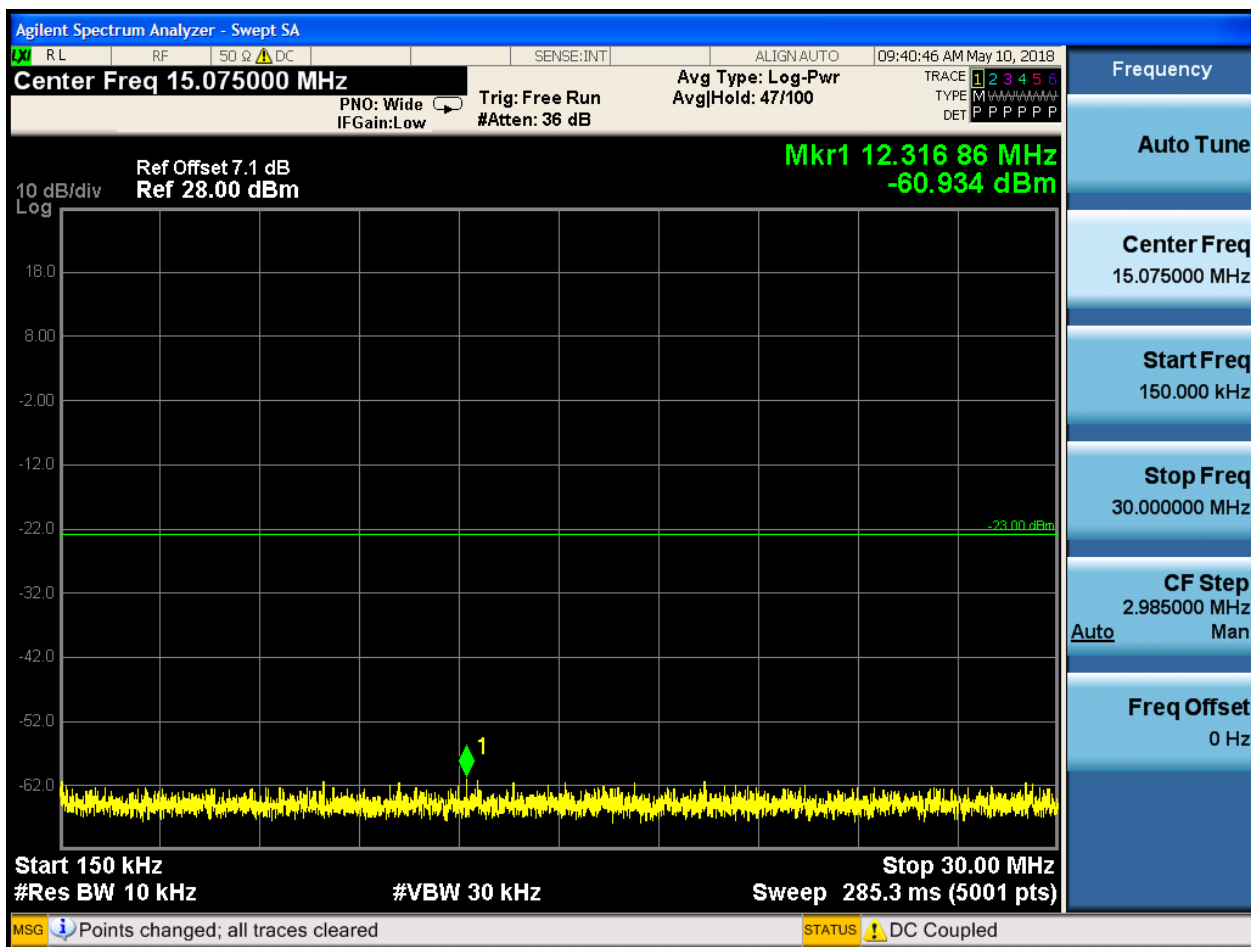


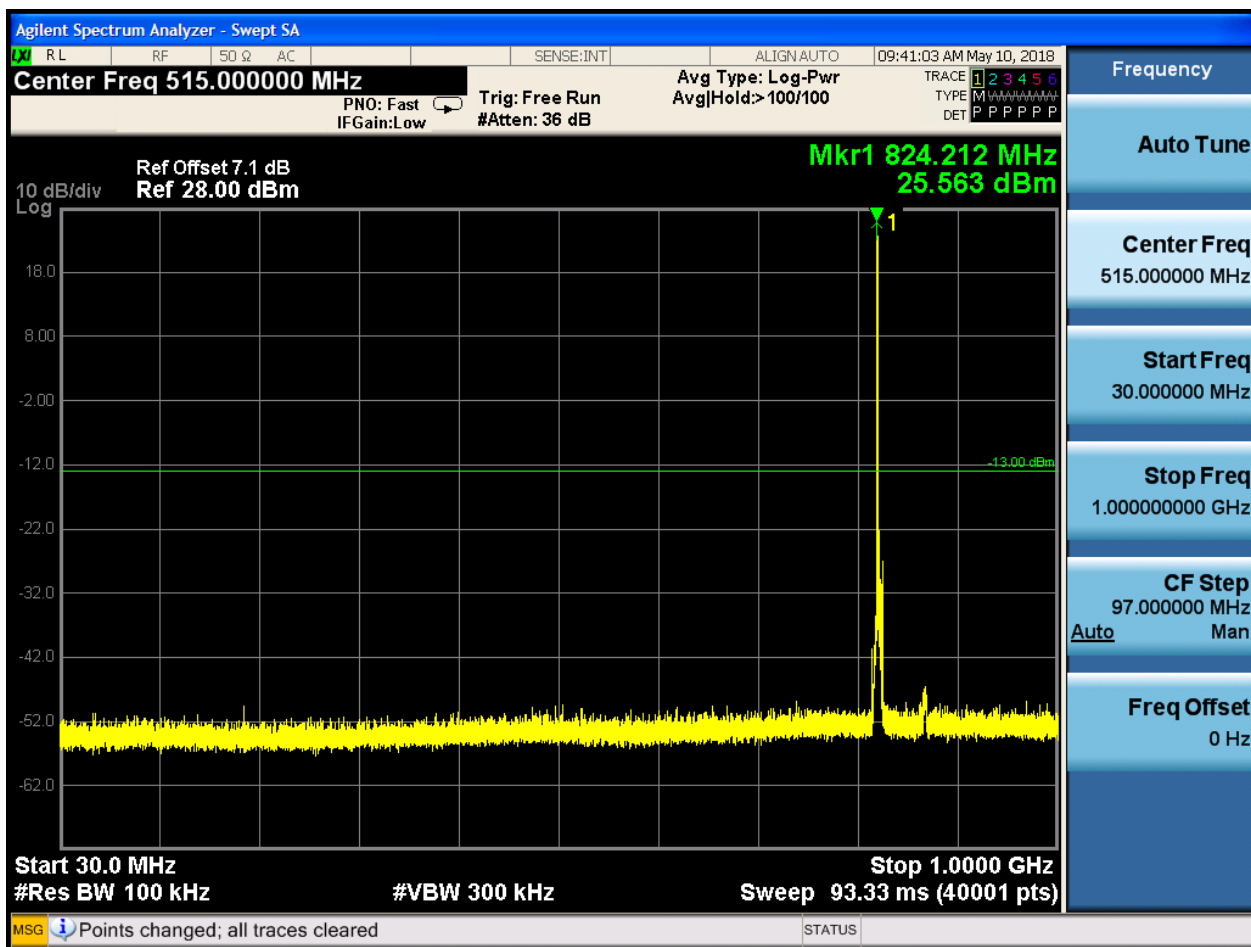
6.1.1.1.2 Test Bandwidth = 3

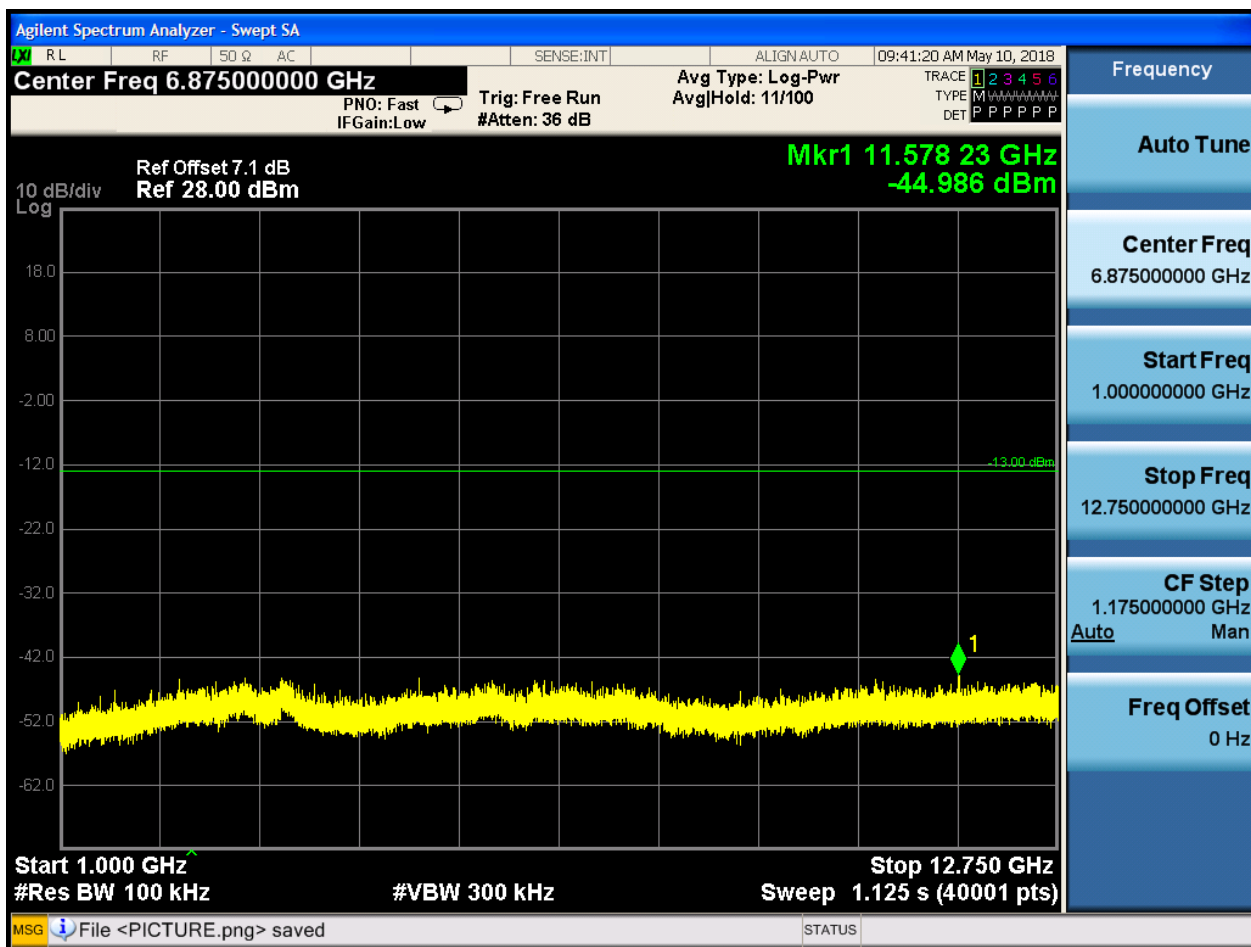
6.1.1.1.2.1 Test Channel = LCH

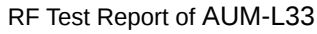
6.1.1.1.2.1.1 Test RB = RB1#0











6.1.1.1.2.2.1 Test RB = RB1#0

