



Appendix for test report



1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
BAND5	LTE/TM1	1.4	LCH	RB1#0	22.55	17.8	38.5	PASS
				RB1#3	22.82	18.07	38.5	PASS
				RB1#5	22.71	17.96	38.5	PASS
				RB3#0	22.65	17.9	38.5	PASS
				RB3#2	22.8	18.05	38.5	PASS
				RB3#3	22.82	18.07	38.5	PASS
				RB6#0	21.79	17.04	38.5	PASS
			MCH	RB1#0	22.22	17.47	38.5	PASS
				RB1#3	22.31	17.56	38.5	PASS
				RB1#5	22.28	17.53	38.5	PASS
				RB3#0	22.17	17.42	38.5	PASS
				RB3#2	22.21	17.46	38.5	PASS
				RB3#3	22.19	17.44	38.5	PASS
				RB6#0	21.2	16.45	38.5	PASS
			HCH	RB1#0	22.23	17.48	38.5	PASS
				RB1#3	22.31	17.56	38.5	PASS
				RB1#5	22.17	17.42	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB3#0	22.29	17.54	38.5	PASS
				RB3#2	22.3	17.55	38.5	PASS
				RB3#3	22.24	17.49	38.5	PASS
				RB6#0	21.43	16.68	38.5	PASS
		3	LCH	RB1#0	22.41	17.66	38.5	PASS
				RB1#7	22.85	18.1	38.5	PASS
				RB1#14	22.45	17.7	38.5	PASS
				RB8#0	21.72	16.97	38.5	PASS
				RB8#4	21.78	17.03	38.5	PASS
				RB8#7	21.67	16.92	38.5	PASS
				RB15#0	21.71	16.96	38.5	PASS
			MCH	RB1#0	22.03	17.28	38.5	PASS
				RB1#7	22.24	17.49	38.5	PASS
				RB1#14	22.01	17.26	38.5	PASS
				RB8#0	21.22	16.47	38.5	PASS
				RB8#4	21.22	16.47	38.5	PASS
				RB8#7	21.18	16.43	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB15#0	21.16	16.41	38.5	PASS
				RB1#0	22.39	17.64	38.5	PASS
				RB1#7	22.47	17.72	38.5	PASS
				RB1#14	22.1	17.35	38.5	PASS
				RB8#0	21.51	16.76	38.5	PASS
				RB8#4	21.39	16.64	38.5	PASS
				RB8#7	21.34	16.59	38.5	PASS
				RB15#0	21.52	16.77	38.5	PASS
		5	LCH	RB1#0	22.34	17.59	38.5	PASS
				RB1#13	22.76	18.01	38.5	PASS
				RB1#24	22.2	17.45	38.5	PASS
				RB12#0	21.71	16.96	38.5	PASS
				RB12#6	21.82	17.07	38.5	PASS
				RB12#13	21.56	16.81	38.5	PASS
				RB25#0	21.62	16.87	38.5	PASS
			MCH	RB1#0	21.92	17.17	38.5	PASS
				RB1#13	22.25	17.5	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#24	22.04	17.29	38.5	PASS
				RB12#0	21.24	16.49	38.5	PASS
				RB12#6	21.31	16.56	38.5	PASS
				RB12#13	21.14	16.39	38.5	PASS
				RB25#0	21.08	16.33	38.5	PASS
			HCH	RB1#0	22.67	17.92	38.5	PASS
				RB1#13	22.41	17.66	38.5	PASS
				RB1#24	21.89	17.14	38.5	PASS
				RB12#0	21.75	17	38.5	PASS
				RB12#6	21.72	16.97	38.5	PASS
				RB12#13	21.24	16.49	38.5	PASS
				RB25#0	21.65	16.9	38.5	PASS
		10	LCH	RB1#0	22.89	18.14	38.5	PASS
				RB1#25	22.96	18.21	38.5	PASS
				RB1#49	22.14	17.39	38.5	PASS
				RB25#0	22.1	17.35	38.5	PASS
				RB25#13	21.97	17.22	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	21.52	16.77	38.5	PASS
				RB50#0	21.83	17.08	38.5	PASS
			MCH	RB1#0	22.28	17.53	38.5	PASS
				RB1#25	22.67	17.92	38.5	PASS
				RB1#49	22.71	17.96	38.5	PASS
				RB25#0	21.52	16.77	38.5	PASS
				RB25#13	21.63	16.88	38.5	PASS
				RB25#25	21.66	16.91	38.5	PASS
				RB50#0	21.51	16.76	38.5	PASS
			HCH	RB1#0	22.54	17.79	38.5	PASS
				RB1#25	23.23	18.48	38.5	PASS
				RB1#49	22.29	17.54	38.5	PASS
				RB25#0	22.09	17.34	38.5	PASS
				RB25#13	22.37	17.62	38.5	PASS
				RB25#25	22.1	17.35	38.5	PASS
				RB50#0	22.24	17.49	38.5	PASS
	LTE/TM2	1.4	LCH	RB1#0	21.18	16.43	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#3	21.44	16.69	38.5	PASS
				RB1#5	21.37	16.62	38.5	PASS
				RB3#0	21.32	16.57	38.5	PASS
				RB3#2	21.45	16.7	38.5	PASS
				RB3#3	21.41	16.66	38.5	PASS
				RB6#0	21.26	16.51	38.5	PASS
			MCH	RB1#0	20.71	15.96	38.5	PASS
				RB1#3	20.82	16.07	38.5	PASS
				RB1#5	20.73	15.98	38.5	PASS
				RB3#0	20.77	16.02	38.5	PASS
				RB3#2	20.77	16.02	38.5	PASS
				RB3#3	20.79	16.04	38.5	PASS
				RB6#0	20.6	15.85	38.5	PASS
			HCH	RB1#0	20.98	16.23	38.5	PASS
				RB1#3	21.06	16.31	38.5	PASS
				RB1#5	20.9	16.15	38.5	PASS
				RB3#0	21.06	16.31	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB3#2	21.03	16.28	38.5	PASS
				RB3#3	20.99	16.24	38.5	PASS
				RB6#0	20.96	16.21	38.5	PASS
		3	LCH	RB1#0	21.09	16.34	38.5	PASS
				RB1#7	21.53	16.78	38.5	PASS
				RB1#14	21.09	16.34	38.5	PASS
				RB8#0	21.25	16.5	38.5	PASS
				RB8#4	21.29	16.54	38.5	PASS
				RB8#7	21.19	16.44	38.5	PASS
				RB15#0	21.19	16.44	38.5	PASS
			MCH	RB1#0	20.56	15.81	38.5	PASS
				RB1#7	20.87	16.12	38.5	PASS
				RB1#14	20.55	15.8	38.5	PASS
				RB8#0	20.72	15.97	38.5	PASS
				RB8#4	20.72	15.97	38.5	PASS
				RB8#7	20.67	15.92	38.5	PASS
				RB15#0	20.66	15.91	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	21.18	16.43	38.5	PASS
				RB1#7	21.24	16.49	38.5	PASS
				RB1#14	20.9	16.15	38.5	PASS
				RB8#0	21.12	16.37	38.5	PASS
				RB8#4	21.04	16.29	38.5	PASS
				RB8#7	20.92	16.17	38.5	PASS
				RB15#0	21.05	16.3	38.5	PASS
		5	LCH	RB1#0	21.05	16.3	38.5	PASS
				RB1#13	21.58	16.83	38.5	PASS
				RB1#24	20.96	16.21	38.5	PASS
				RB12#0	21.16	16.41	38.5	PASS
				RB12#6	21.28	16.53	38.5	PASS
				RB12#13	20.97	16.22	38.5	PASS
				RB25#0	21.03	16.28	38.5	PASS
			MCH	RB1#0	20.41	15.66	38.5	PASS
				RB1#13	21.11	16.36	38.5	PASS
				RB1#24	20.71	15.96	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB12#0	20.67	15.92	38.5	PASS
				RB12#6	20.74	15.99	38.5	PASS
				RB12#13	20.64	15.89	38.5	PASS
				RB25#0	20.49	15.74	38.5	PASS
			HCH	RB1#0	21.55	16.8	38.5	PASS
				RB1#13	21.33	16.58	38.5	PASS
				RB1#24	20.84	16.09	38.5	PASS
				RB12#0	21.2	16.45	38.5	PASS
				RB12#6	21.13	16.38	38.5	PASS
				RB12#13	20.57	15.82	38.5	PASS
				RB25#0	21.06	16.31	38.5	PASS
		10	LCH	RB1#0	21.27	16.52	38.5	PASS
				RB1#25	21.38	16.63	38.5	PASS
				RB1#49	20.54	15.79	38.5	PASS
				RB25#0	21.56	16.81	38.5	PASS
				RB25#13	21.35	16.6	38.5	PASS
				RB25#25	20.94	16.19	38.5	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB50#0	21.25	16.5	38.5	PASS
				RB1#0	20.89	16.14	38.5	PASS
			MCH	RB1#25	21.29	16.54	38.5	PASS
				RB1#49	21.31	16.56	38.5	PASS
				RB25#0	20.99	16.24	38.5	PASS
				RB25#13	21.04	16.29	38.5	PASS
				RB25#25	21.03	16.28	38.5	PASS
				RB50#0	20.89	16.14	38.5	PASS
			HCH	RB1#0	21.32	16.57	38.5	PASS
				RB1#25	21.95	17.2	38.5	PASS
				RB1#49	21.05	16.3	38.5	PASS
				RB25#0	21.49	16.74	38.5	PASS
				RB25#13	21.73	16.98	38.5	PASS
				RB25#25	21.46	16.71	38.5	PASS
				RB50#0	21.68	16.93	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,

$ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]$

$EIRP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBi]$

b, SGP=Signal Generator Level

Note2:

SET Span=1.5*OBW

SET RBW=1%of the OBW,not to exceed 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	0	13	PASS
				RB1#3	4.41	13	PASS
				RB1#5	4.41	13	PASS
				RB3#0	5.03	13	PASS
				RB3#2	4.67	13	PASS
				RB3#3	4.85	13	PASS
				RB6#0	5.67	13	PASS
			MCH	RB1#0	4.68	13	PASS
				RB1#3	4.74	13	PASS
				RB1#5	4.72	13	PASS
				RB3#0	5.2	13	PASS
				RB3#2	5.26	13	PASS
				RB3#3	5.1	13	PASS
				RB6#0	5.54	13	PASS
			HCH	RB1#0	4.52	13	PASS
				RB1#3	4.54	13	PASS
				RB1#5	4.44	13	PASS
				RB3#0	4.91	13	PASS
				RB3#2	4.82	13	PASS
				RB3#3	4.84	13	PASS
				RB6#0	5.41	13	PASS
		3	LCH	RB1#0	4.64	13	PASS
				RB1#7	4.17	13	PASS
				RB1#14	4.42	13	PASS
				RB8#0	5.28	13	PASS
				RB8#4	5.24	13	PASS
				RB8#7	5.25	13	PASS
				RB15#0	5.58	13	PASS
			MCH	RB1#0	4.85	13	PASS
				RB1#7	4.72	13	PASS
				RB1#14	4.87	13	PASS
				RB8#0	5.4	13	PASS
				RB8#4	5.2	13	PASS
				RB8#7	5.26	13	PASS
				RB15#0	5.59	13	PASS
			HCH	RB1#0	4.37	13	PASS
				RB1#7	4.71	13	PASS
				RB1#14	4.53	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
		5		RB8#0	5.38	13	PASS
				RB8#4	5.42	13	PASS
				RB8#7	5.42	13	PASS
				RB15#0	5.53	13	PASS
			LCH	RB1#0	0	13	PASS
				RB1#13	4.25	13	PASS
				RB1#24	4.56	13	PASS
				RB12#0	5.34	13	PASS
				RB12#6	5.19	13	PASS
				RB12#13	5.37	13	PASS
				RB25#0	5.77	13	PASS
			MCH	RB1#0	4.99	13	PASS
				RB1#13	4.92	13	PASS
				RB1#24	5.01	13	PASS
				RB12#0	5.5	13	PASS
				RB12#6	5.37	13	PASS
				RB12#13	5.55	13	PASS
				RB25#0	5.71	13	PASS
			HCH	RB1#0	3.78	13	PASS
				RB1#13	4.53	13	PASS
				RB1#24	4.76	13	PASS
				RB12#0	5.02	13	PASS
				RB12#6	5.11	13	PASS
				RB12#13	5.41	13	PASS
				RB25#0	5.54	13	PASS
		10	LCH	RB1#0	0	13	PASS
				RB1#25	4.35	13	PASS
				RB1#49	4.94	13	PASS
				RB25#0	5.43	13	PASS
				RB25#13	5.41	13	PASS
				RB25#25	5.82	13	PASS
				RB50#0	5.64	13	PASS
			MCH	RB1#0	4.64	13	PASS
				RB1#25	4.92	13	PASS
				RB1#49	4.54	13	PASS
				RB25#0	5.82	13	PASS
				RB25#13	5.68	13	PASS
				RB25#25	5.74	13	PASS
				RB50#0	6.21	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
	LTE/TM2		HCH	RB1#0	4.54	13	PASS
				RB1#25	3.3	13	PASS
				RB1#49	4.22	13	PASS
				RB25#0	5.12	13	PASS
				RB25#13	4.57	13	PASS
				RB25#25	5.03	13	PASS
				RB50#0	5.43	13	PASS
		1.4	LCH	RB1#0	0	13	PASS
				RB1#3	5.36	13	PASS
				RB1#5	5.29	13	PASS
				RB3#0	6.12	13	PASS
				RB3#2	6.18	13	PASS
				RB3#3	6.11	13	PASS
				RB6#0	6.16	13	PASS
			MCH	RB1#0	5.62	13	PASS
				RB1#3	5.5	13	PASS
				RB1#5	5.54	13	PASS
				RB3#0	6.16	13	PASS
				RB3#2	6.23	13	PASS
				RB3#3	6.11	13	PASS
				RB6#0	6.64	13	PASS
			HCH	RB1#0	5.62	13	PASS
				RB1#3	5.64	13	PASS
				RB1#5	5.67	13	PASS
				RB3#0	5.87	13	PASS
				RB3#2	5.77	13	PASS
				RB3#3	5.91	13	PASS
				RB6#0	6.35	13	PASS
		3	LCH	RB1#0	5.71	13	PASS
				RB1#7	5.3	13	PASS
				RB1#14	5.51	13	PASS
				RB8#0	6.05	13	PASS
				RB8#4	5.89	13	PASS
				RB8#7	6	13	PASS
				RB15#0	6.23	13	PASS
			MCH	RB1#0	5.8	13	PASS
				RB1#7	5.74	13	PASS
				RB1#14	5.94	13	PASS
				RB8#0	5.97	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#4	5.94	13	PASS
				RB8#7	5.95	13	PASS
				RB15#0	6.21	13	PASS
			HCH	RB1#0	5.23	13	PASS
				RB1#7	5.23	13	PASS
				RB1#14	5.33	13	PASS
				RB8#0	5.93	13	PASS
				RB8#4	5.85	13	PASS
				RB8#7	5.88	13	PASS
				RB15#0	6.04	13	PASS
		5	LCH	RB1#0	5.84	13	PASS
				RB1#13	5.52	13	PASS
				RB1#24	5.72	13	PASS
				RB12#0	6.24	13	PASS
				RB12#6	5.98	13	PASS
				RB12#13	6.24	13	PASS
				RB25#0	6.44	13	PASS
			MCH	RB1#0	5.59	13	PASS
				RB1#13	5.65	13	PASS
				RB1#24	5.55	13	PASS
				RB12#0	6.12	13	PASS
				RB12#6	6.05	13	PASS
				RB12#13	6.26	13	PASS
				RB25#0	6.5	13	PASS
			HCH	RB1#0	4.71	13	PASS
				RB1#13	5.14	13	PASS
				RB1#24	5.18	13	PASS
				RB12#0	5.49	13	PASS
				RB12#6	5.59	13	PASS
				RB12#13	5.99	13	PASS
				RB25#0	6.21	13	PASS
		10	LCH	RB1#0	0	13	PASS
				RB1#25	5.88	13	PASS
				RB1#49	6.1	13	PASS
				RB25#0	5.98	13	PASS
				RB25#13	6.1	13	PASS
				RB25#25	6.35	13	PASS
				RB50#0	6.46	13	PASS
			MCH	RB1#0	5.8	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#25	5.62	13	PASS
				RB1#49	5.46	13	PASS
				RB25#0	6.25	13	PASS
				RB25#13	6.17	13	PASS
				RB25#25	6.51	13	PASS
				RB50#0	6.68	13	PASS
			HCH	RB1#0	5.58	13	PASS
				RB1#25	4.41	13	PASS
				RB1#49	5.68	13	PASS
				RB25#0	5.73	13	PASS
				RB25#13	5.15	13	PASS
				RB25#25	5.75	13	PASS
				RB50#0	5.97	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

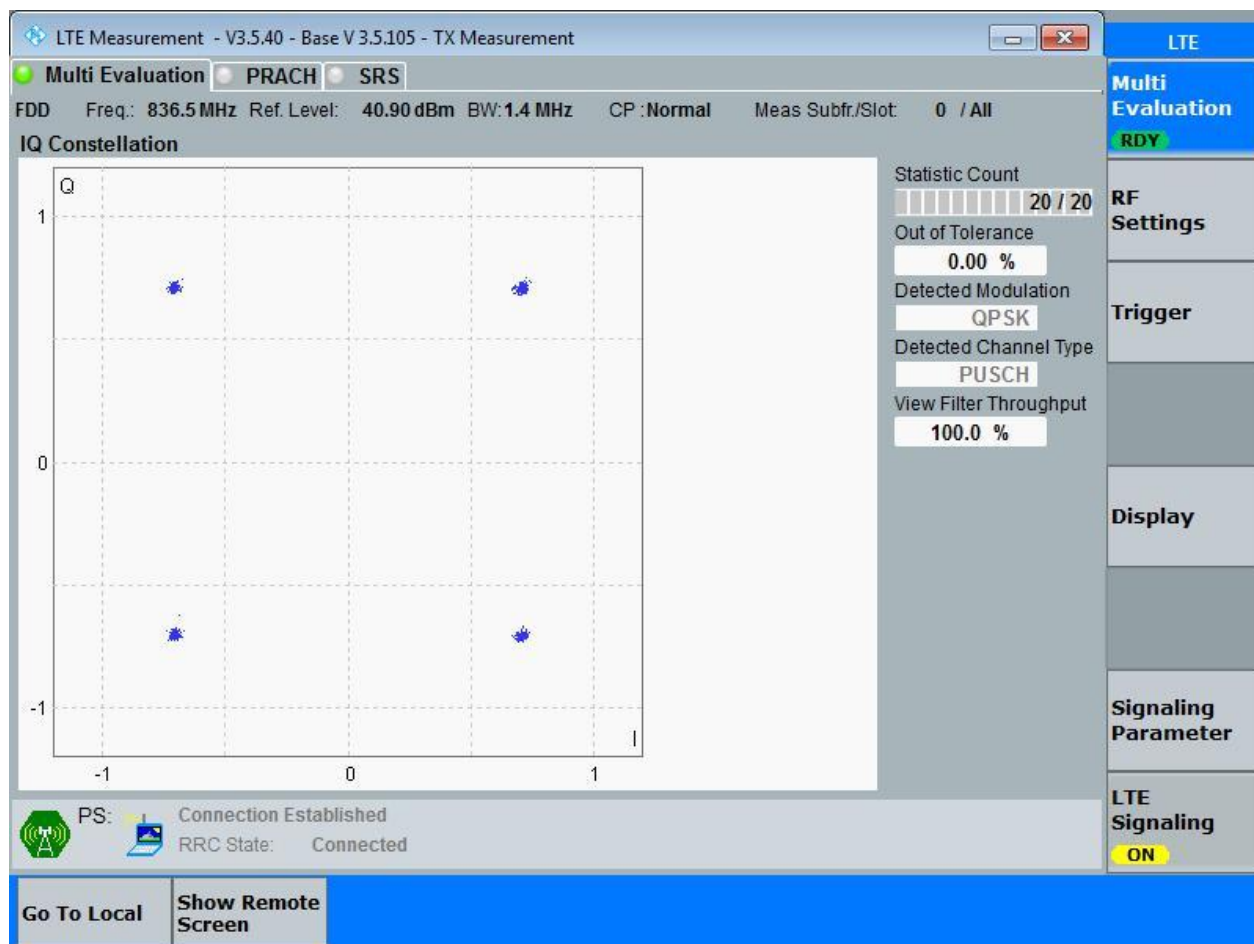
3.1.1 Test Band = BAND5

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

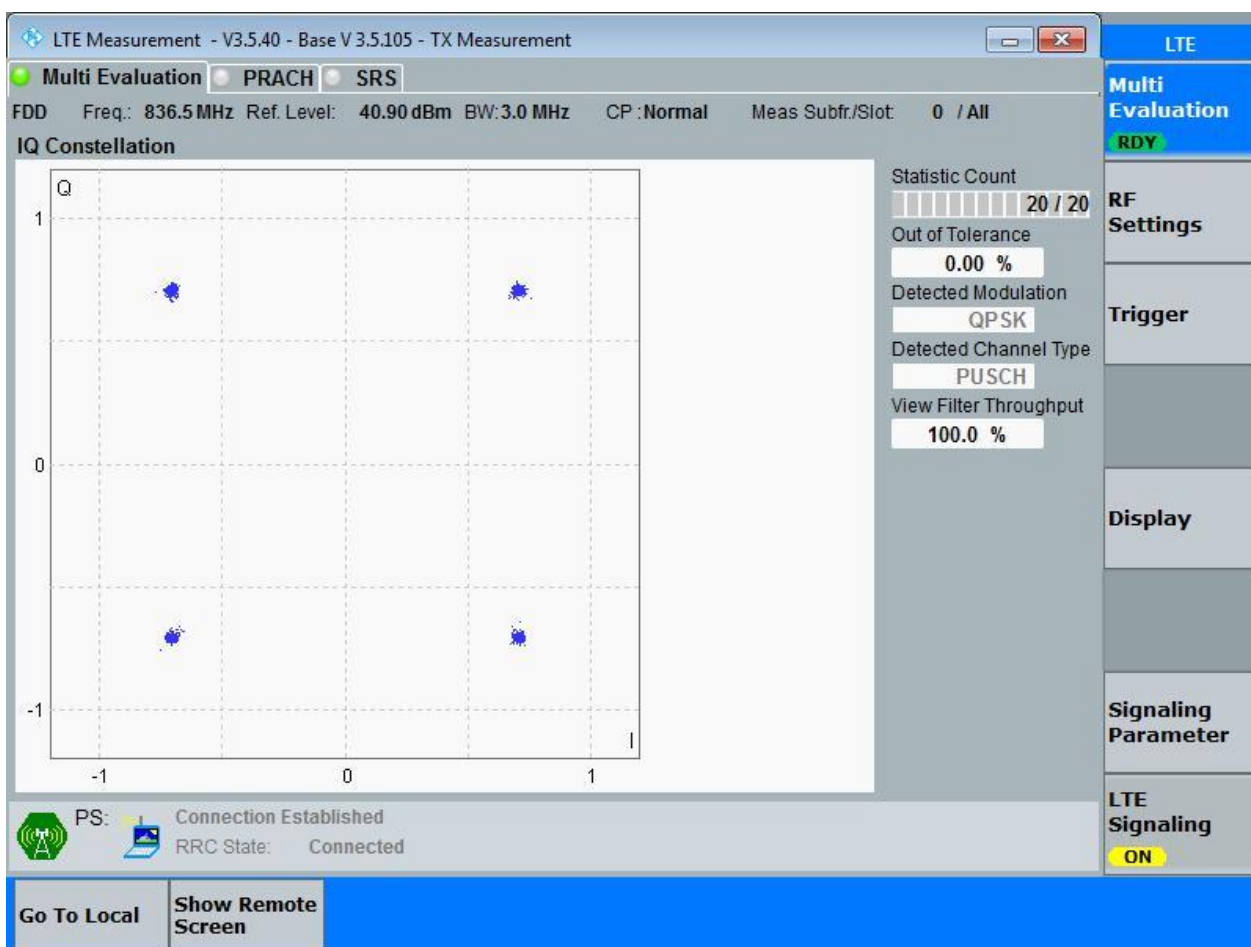
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

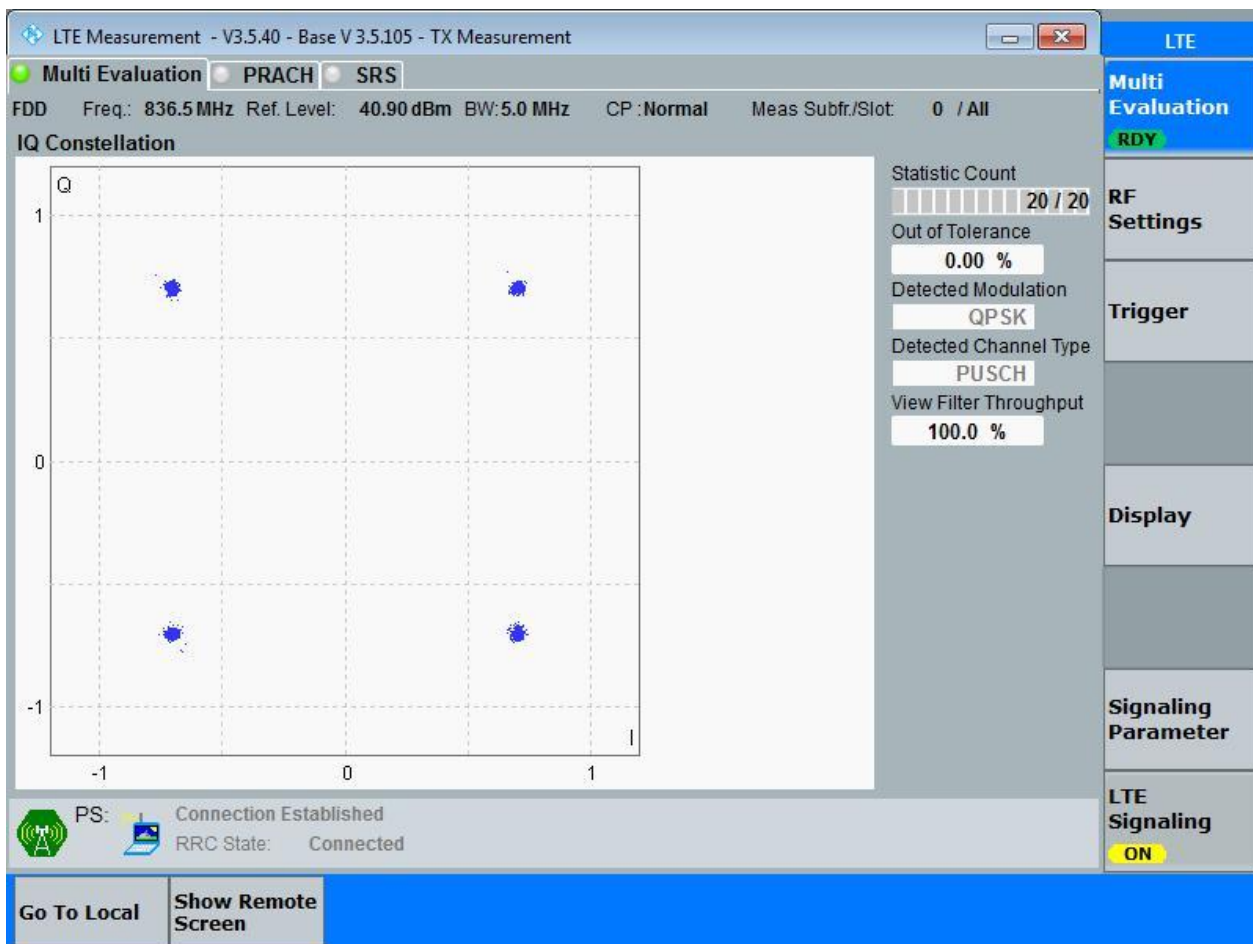
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

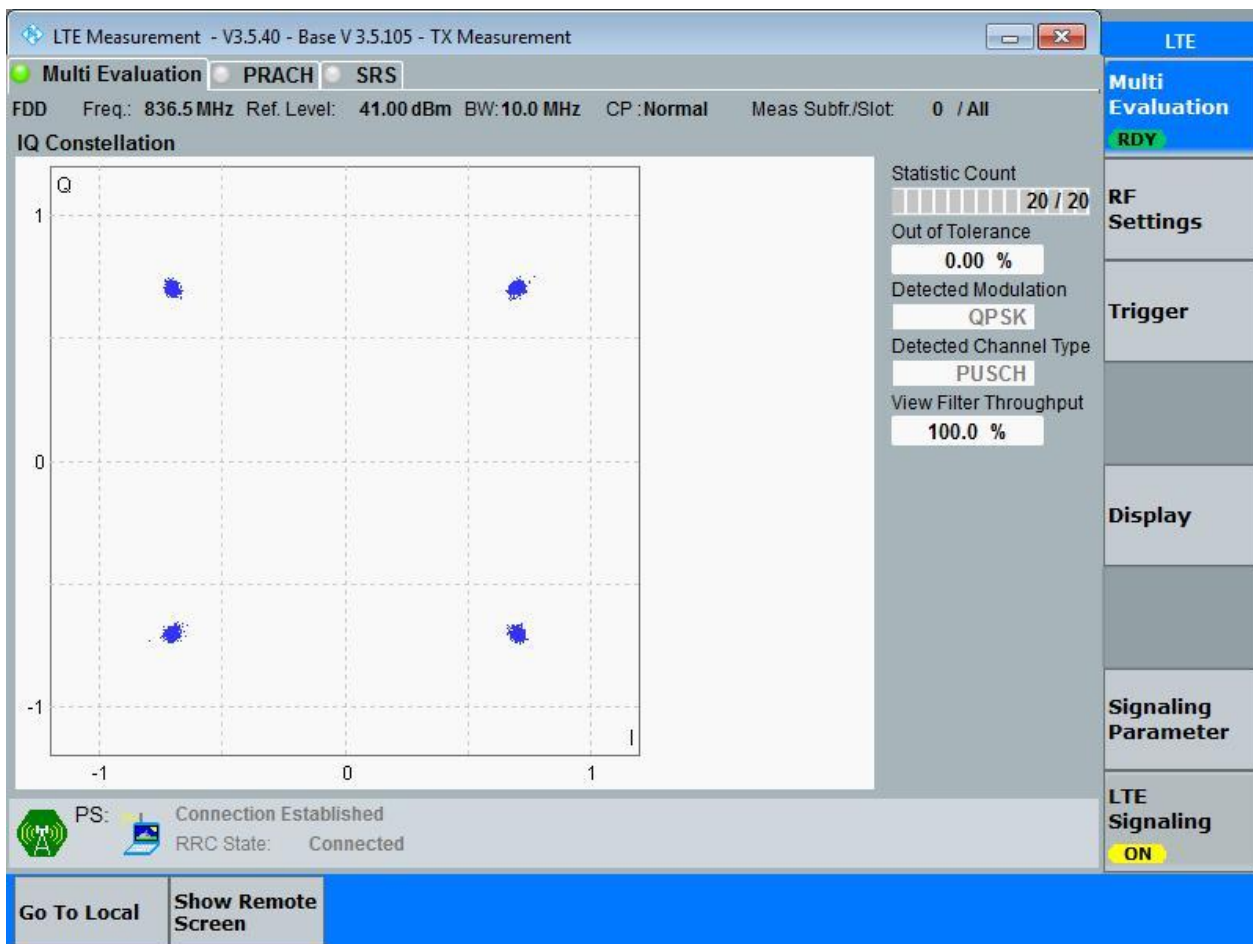
3.1.1.1.3.1.1 Test RB = RB25#0



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

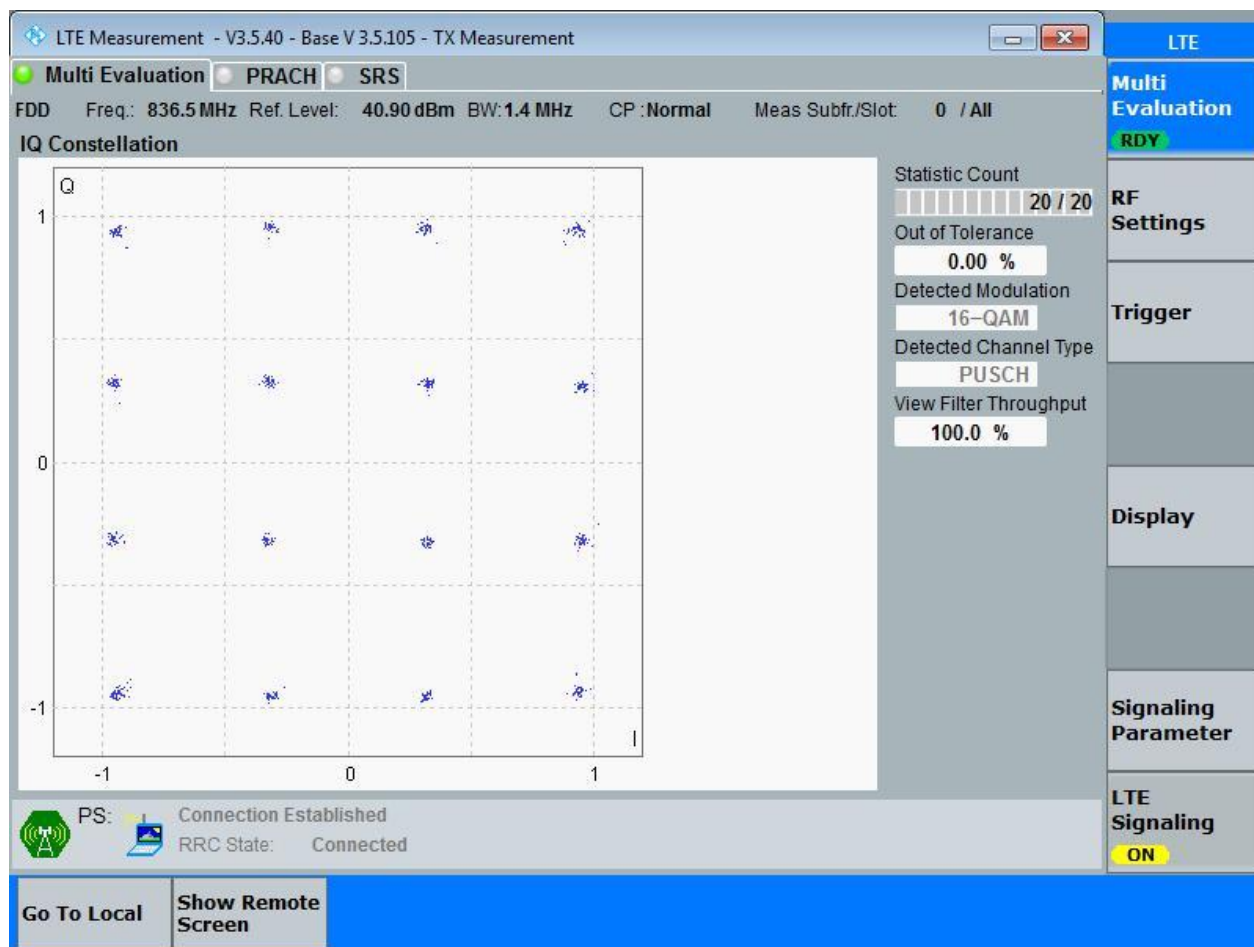


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

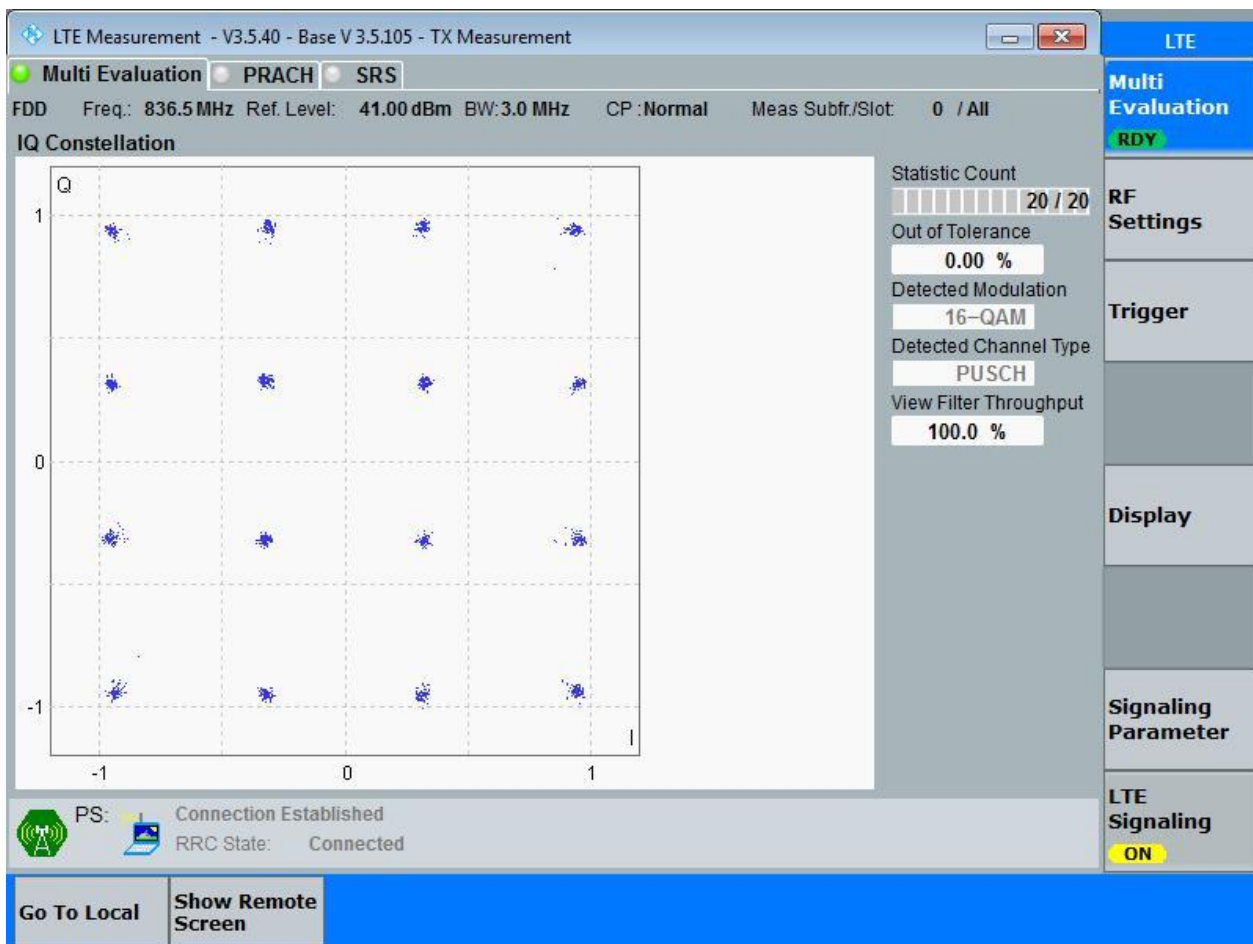
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

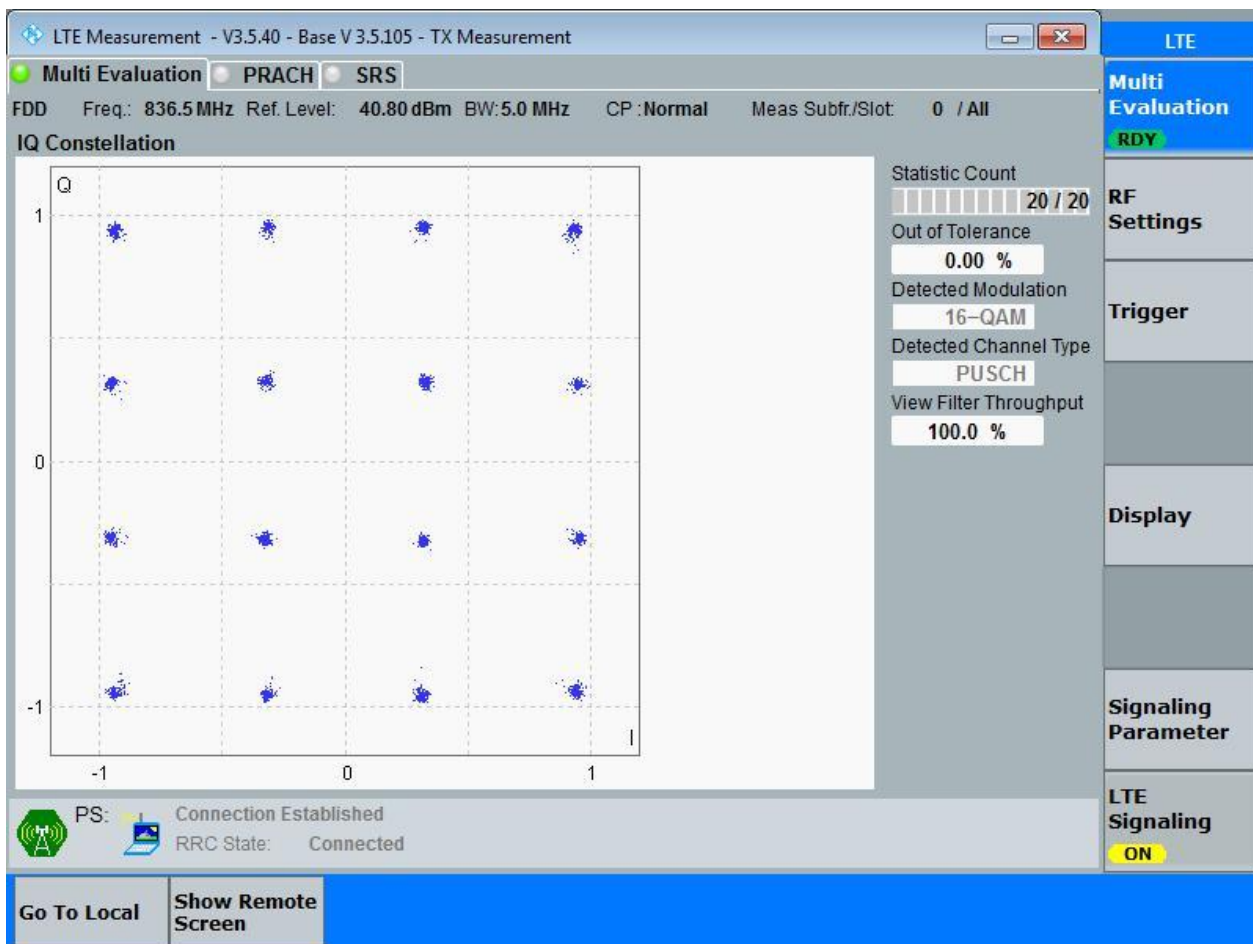
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

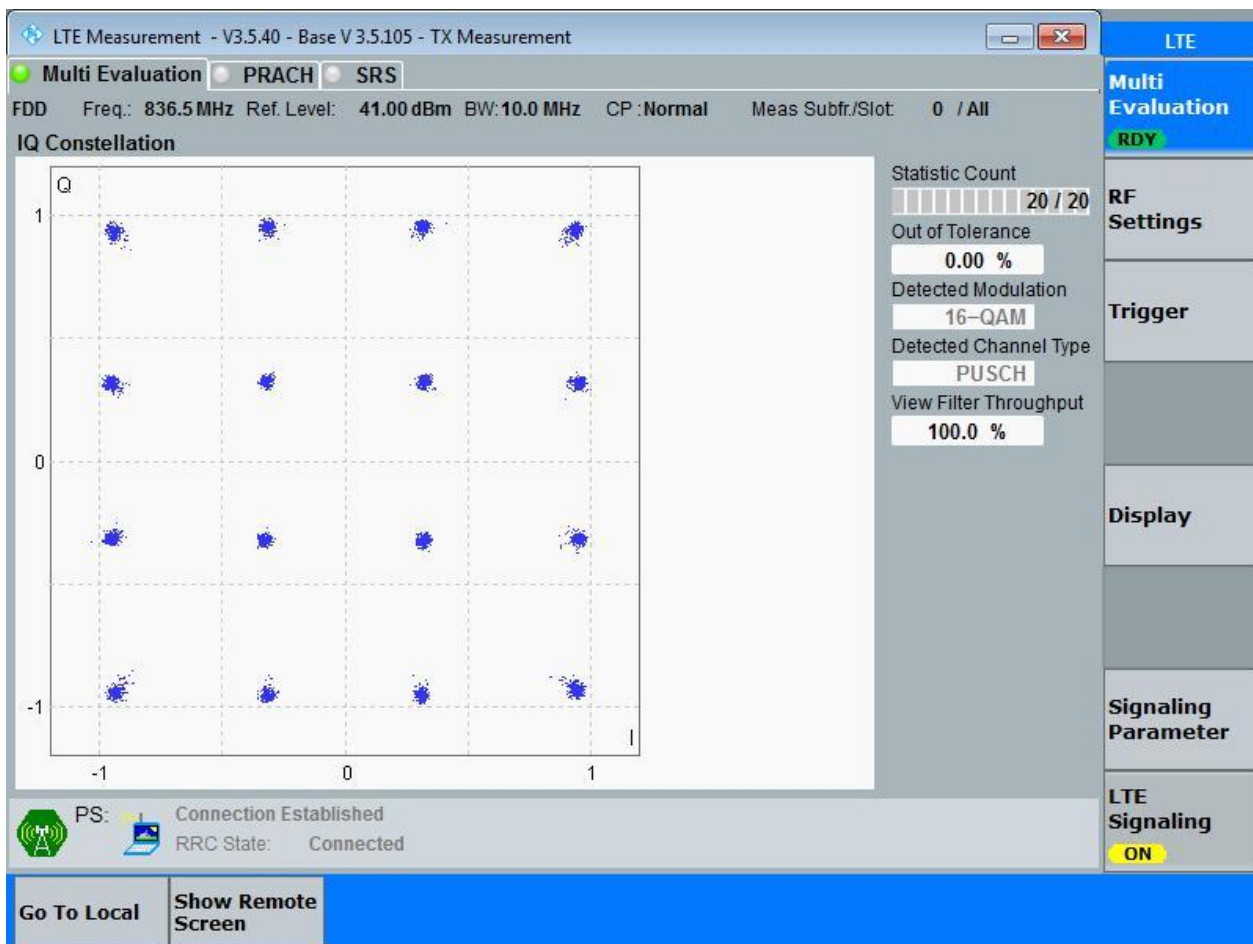
3.1.1.2.3.1.1 Test RB = RB25#0



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	1.23	Pass
			MCH	RB6#0	1.09	1.23	Pass
			HCH	RB6#0	1.09	1.23	Pass
		3	LCH	RB15#0	2.70	2.94	Pass
			MCH	RB15#0	2.70	2.94	Pass
			HCH	RB15#0	2.70	2.93	Pass
		5	LCH	RB25#0	4.50	4.98	Pass
			MCH	RB25#0	4.52	4.99	Pass
			HCH	RB25#0	4.50	4.86	Pass
		10	LCH	RB50#0	8.99	9.62	Pass
			MCH	RB50#0	9.00	9.63	Pass
			HCH	RB50#0	8.92	9.51	Pass
	LTE/TM2	1.4	LCH	RB6#0	1.09	1.22	Pass
			MCH	RB6#0	1.09	1.23	Pass
			HCH	RB6#0	1.09	1.23	Pass
		3	LCH	RB15#0	2.70	2.94	Pass
			MCH	RB15#0	2.70	2.95	Pass
			HCH	RB15#0	2.71	2.94	Pass
		5	LCH	RB25#0	4.50	4.87	Pass
			MCH	RB25#0	4.50	4.87	Pass
			HCH	RB25#0	4.49	4.85	Pass
		10	LCH	RB50#0	8.98	9.64	Pass
			MCH	RB50#0	9.02	9.74	Pass
			HCH	RB50#0	8.94	9.54	Pass



Part II - Test Plots

4.1 For LTE

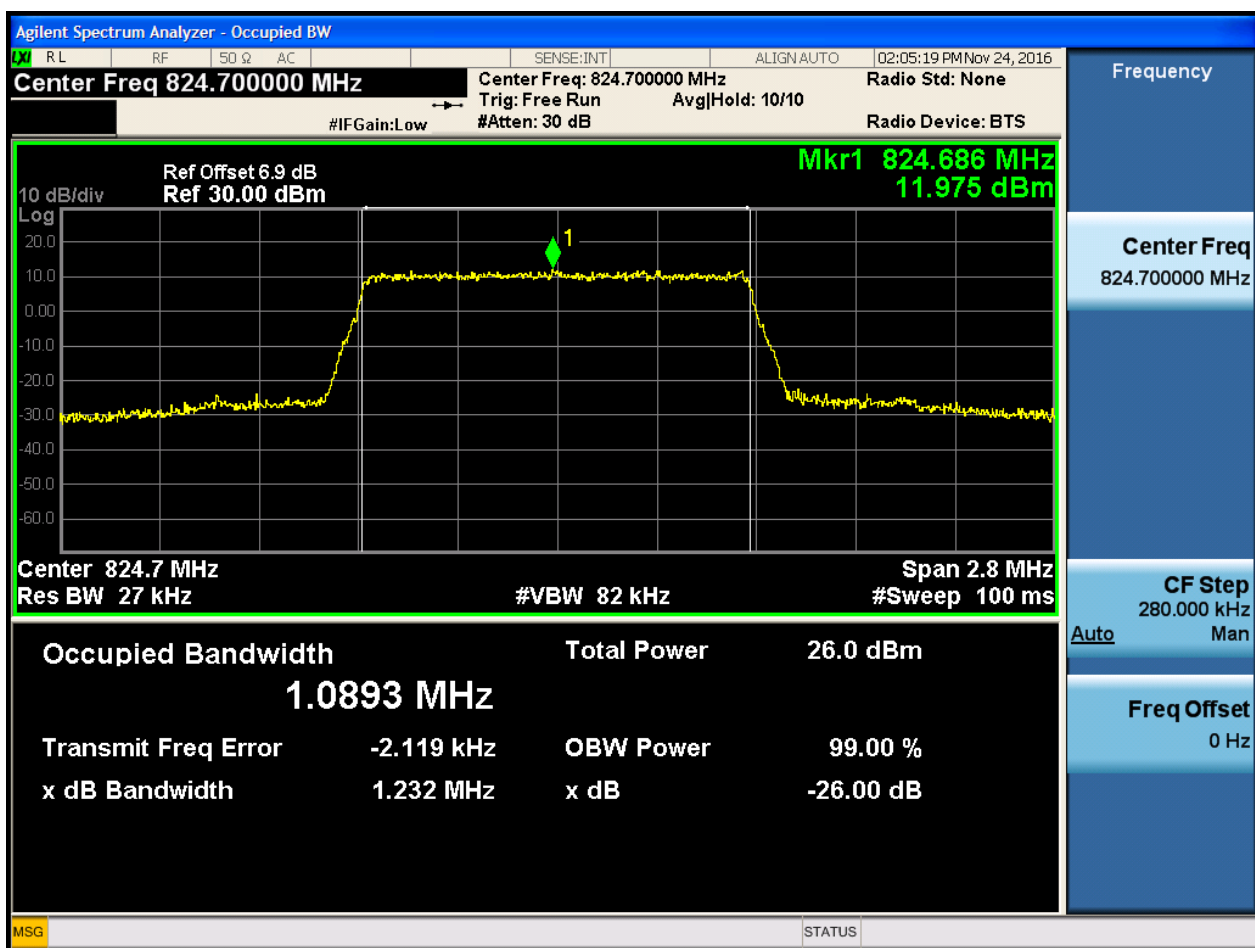
4.1.1 Test Band = BAND5

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 1.4

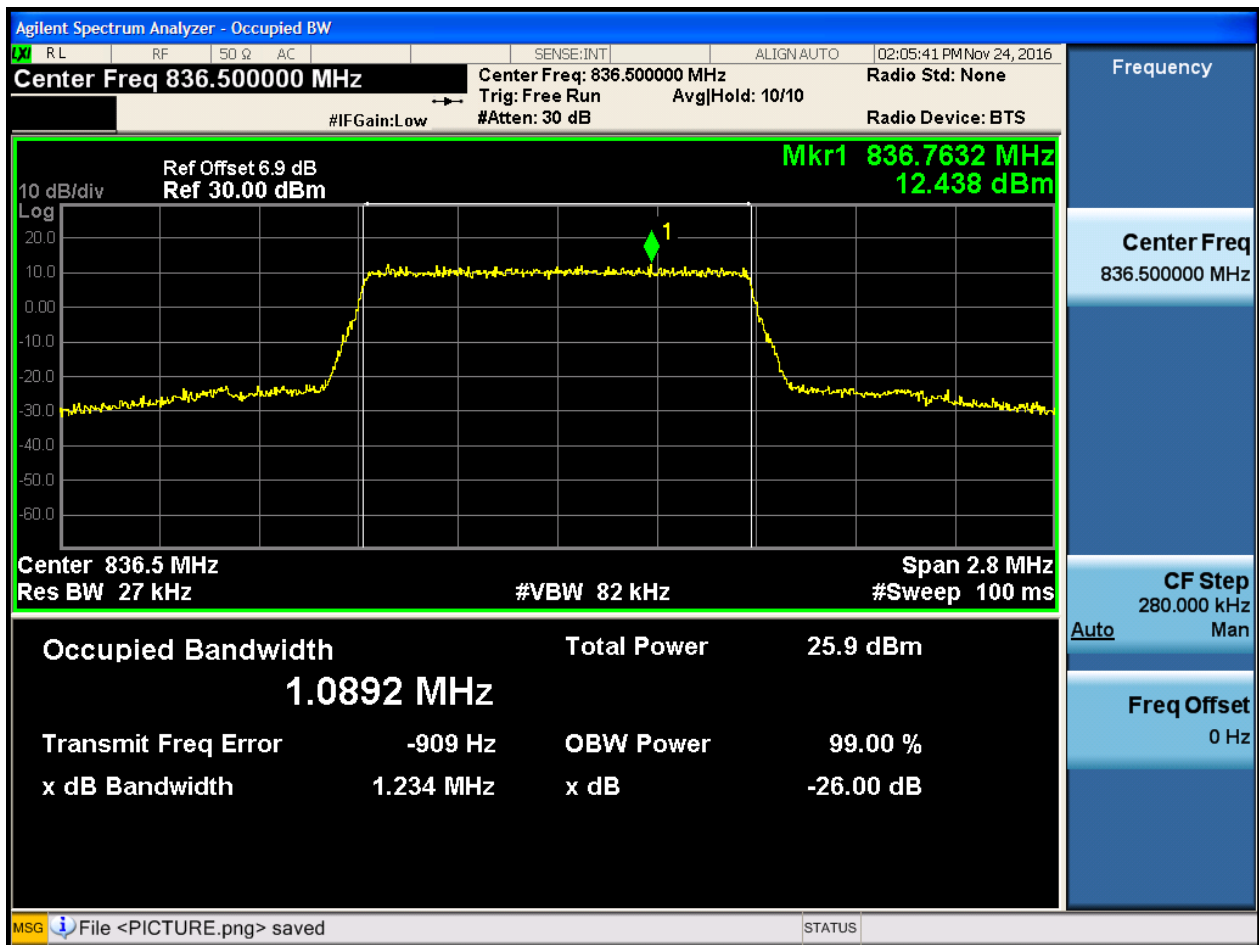
4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 Test RB = RB6#0



4.1.1.1.1.2 Test Channel = MCH

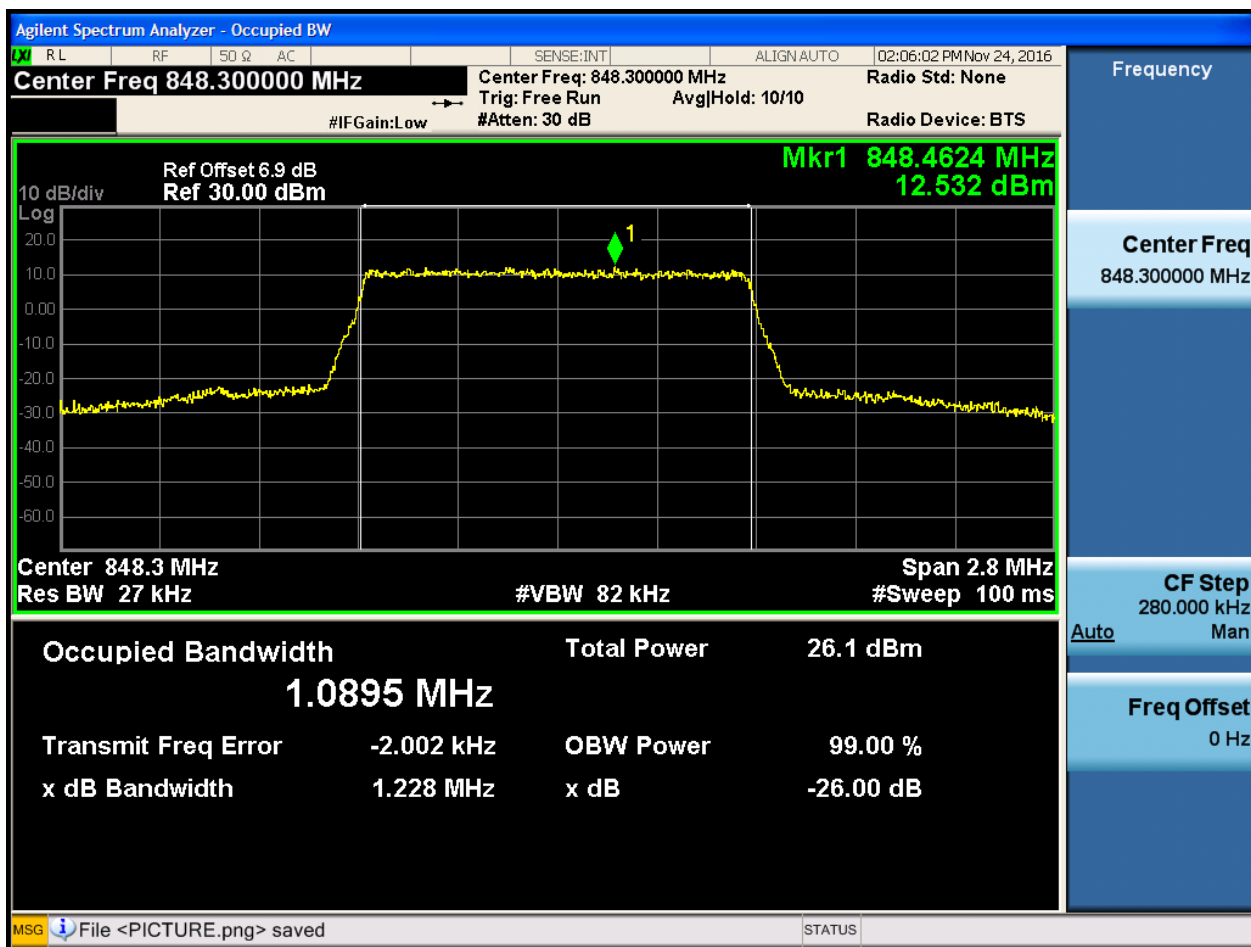
4.1.1.1.1.2.1 Test RB = RB6#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB6#0

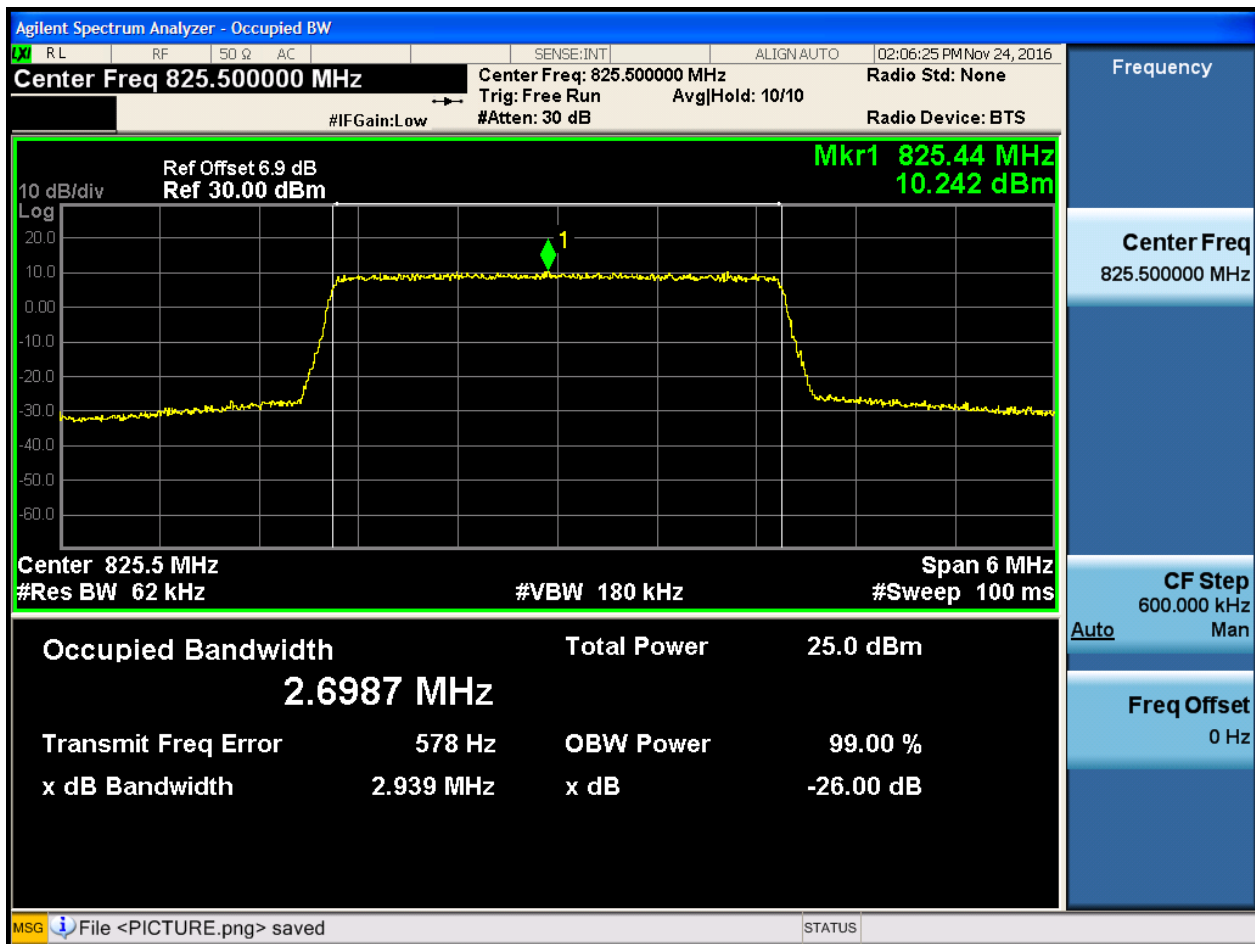




4.1.1.1.2 Test Bandwidth = 3

4.1.1.1.2.1 Test Channel = LCH

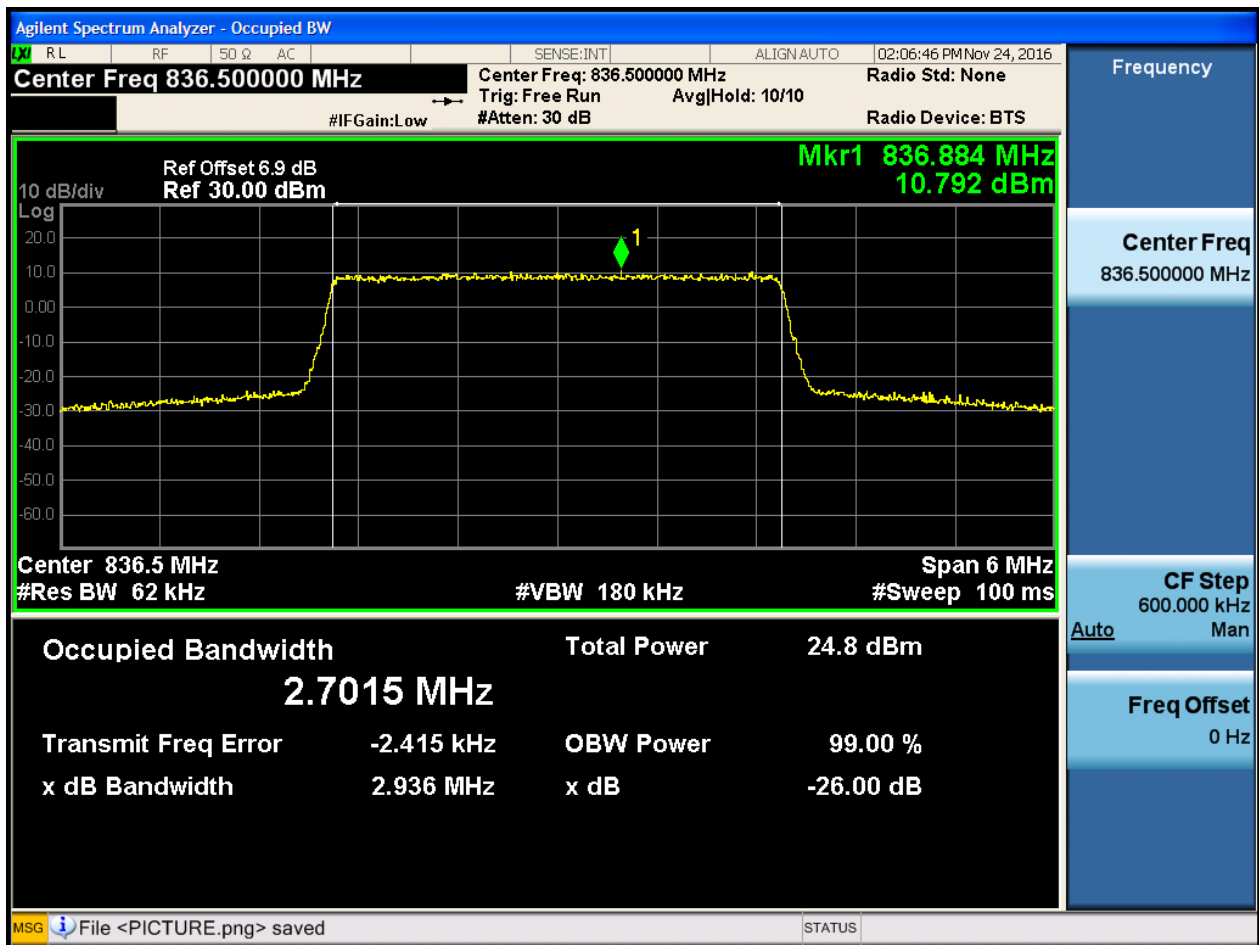
4.1.1.1.2.1.1 Test RB = RB15#0





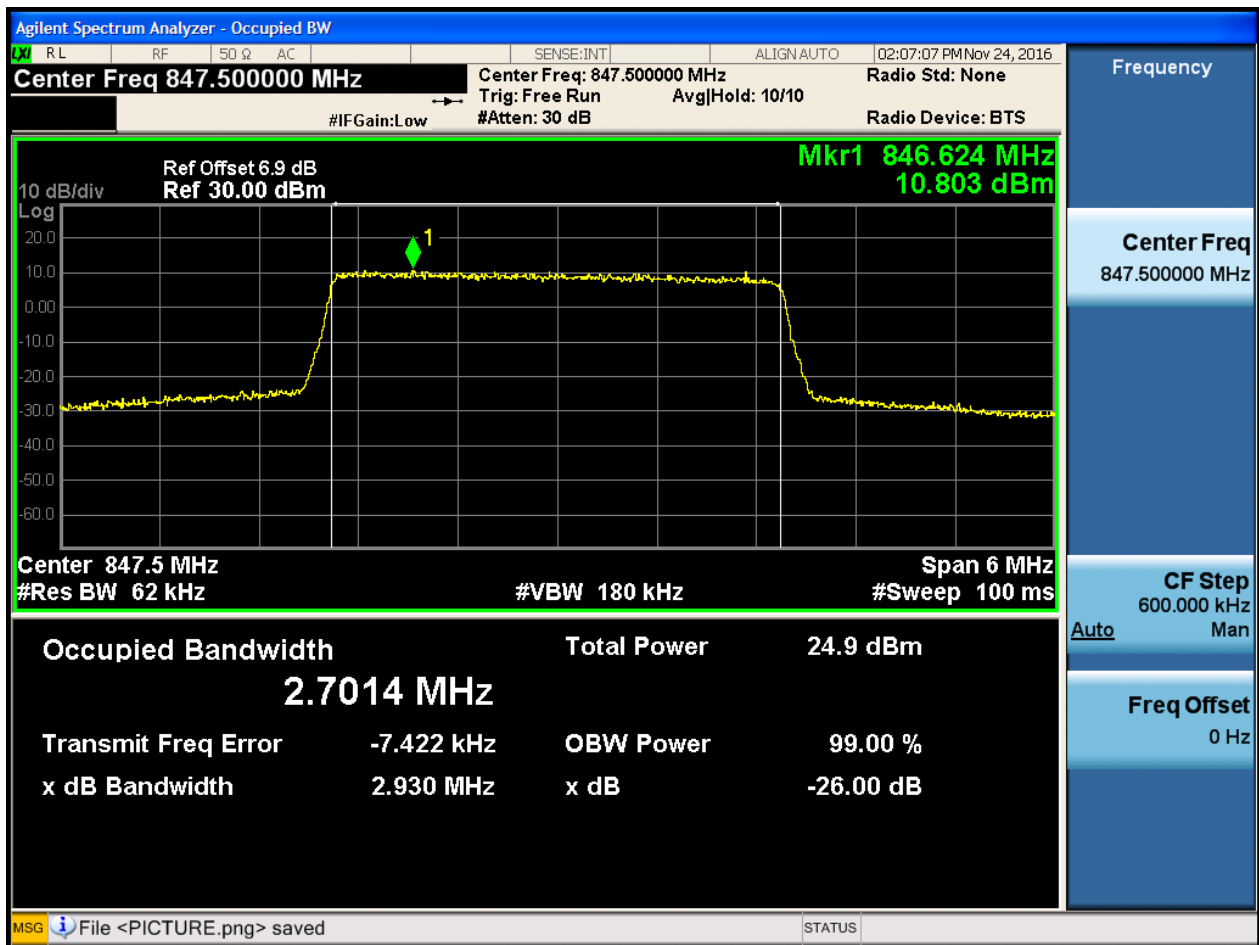
4.1.1.1.2.2 Test Channel = MCH

4.1.1.1.2.2.1 Test RB = RB15#0



4.1.1.1.2.3 Test Channel = HCH

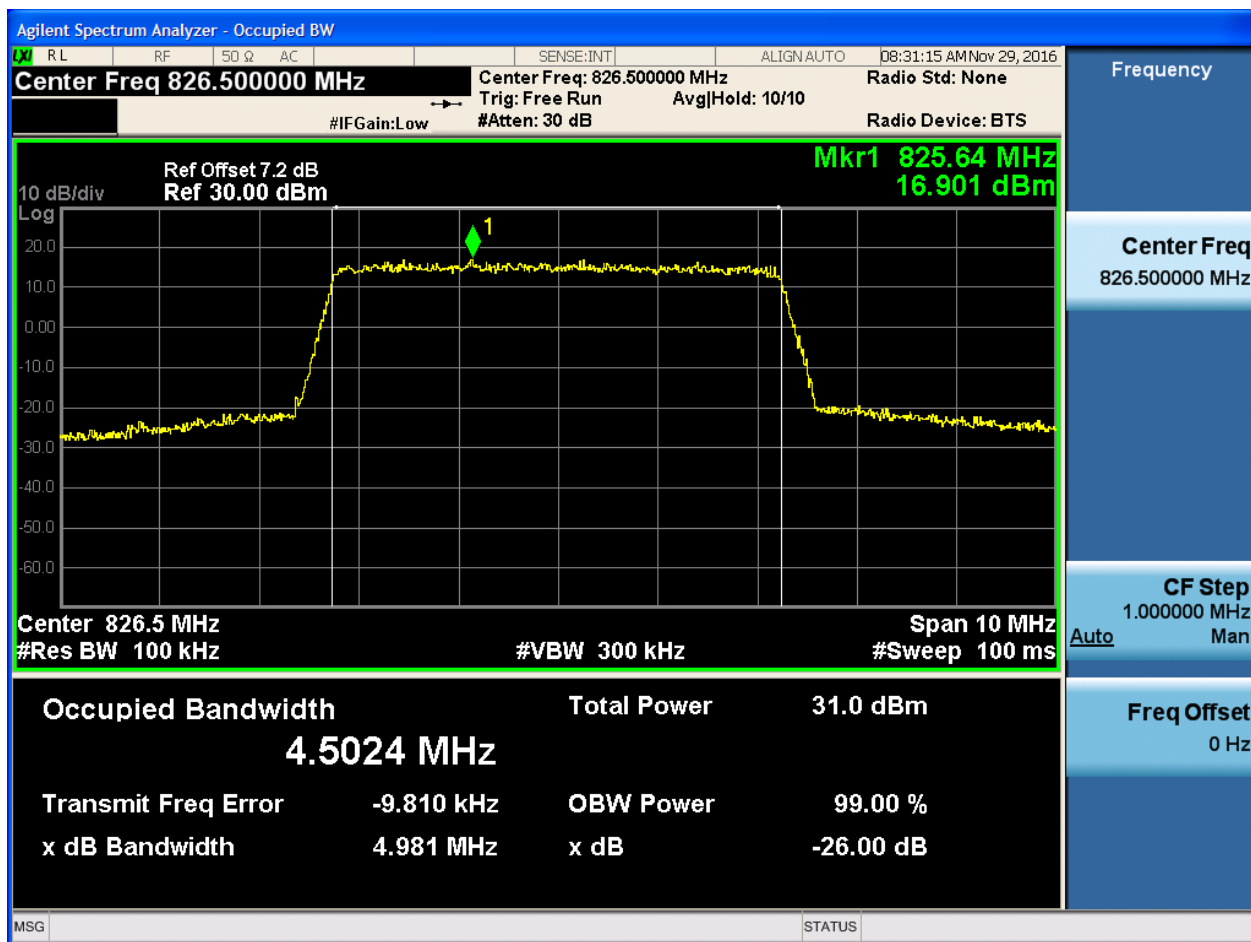
4.1.1.1.2.3.1 Test RB = RB15#0



4.1.1.1.3 Test Bandwidth = 5

4.1.1.1.3.1 Test Channel = LCH

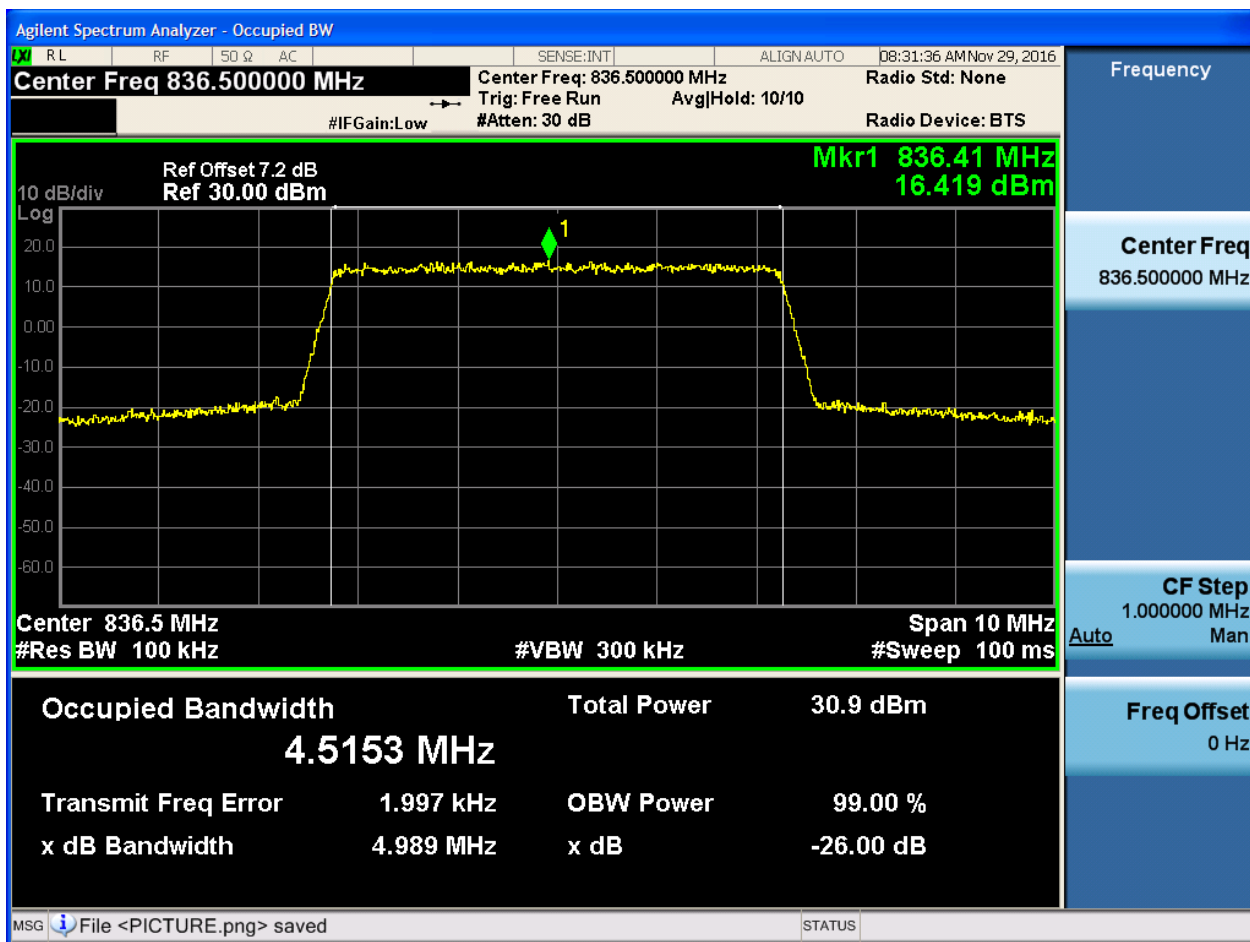
4.1.1.1.3.1.1 Test RB = RB25#0





4.1.1.1.3.2 Test Channel = MCH

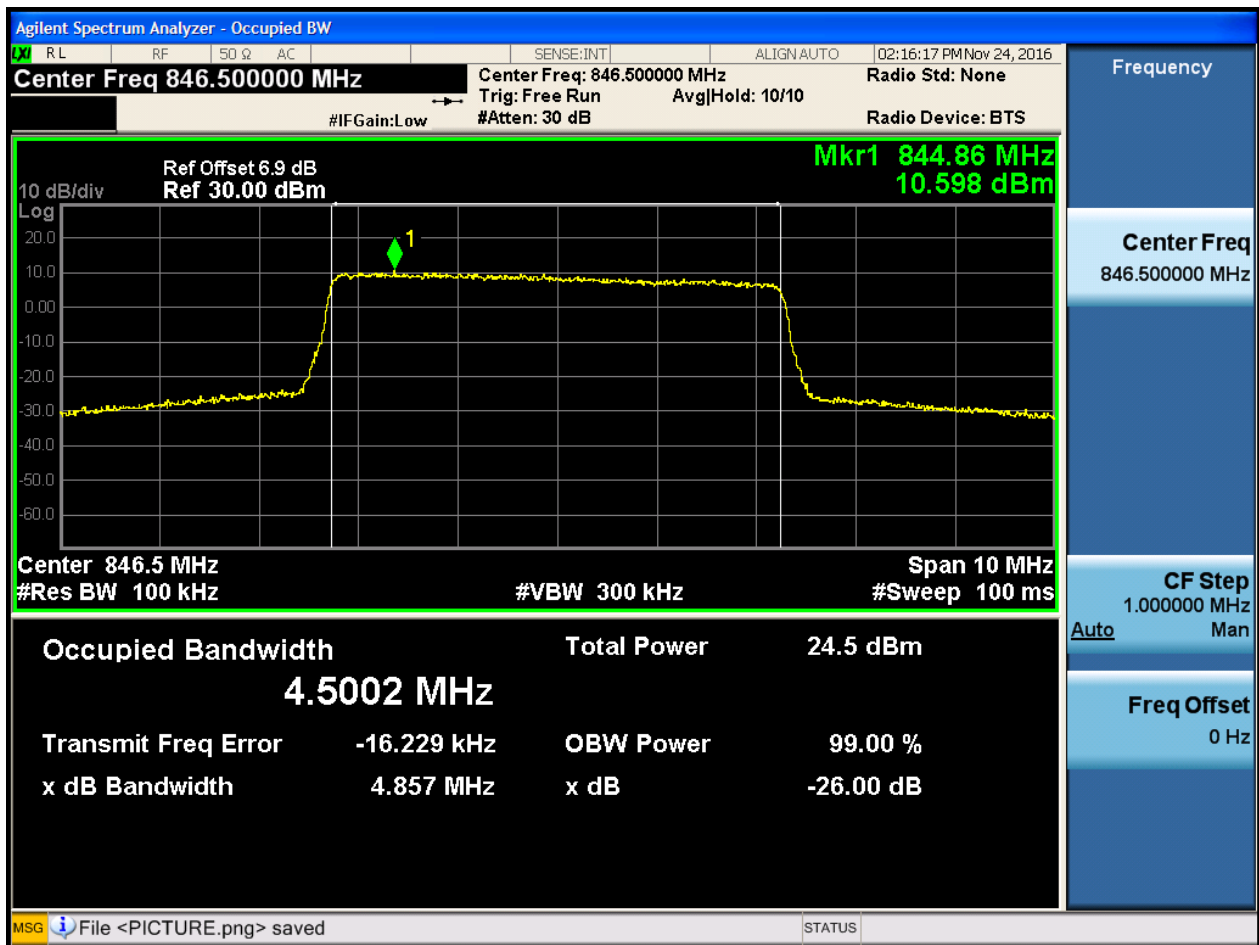
4.1.1.1.3.2.1 Test RB = RB25#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB25#0

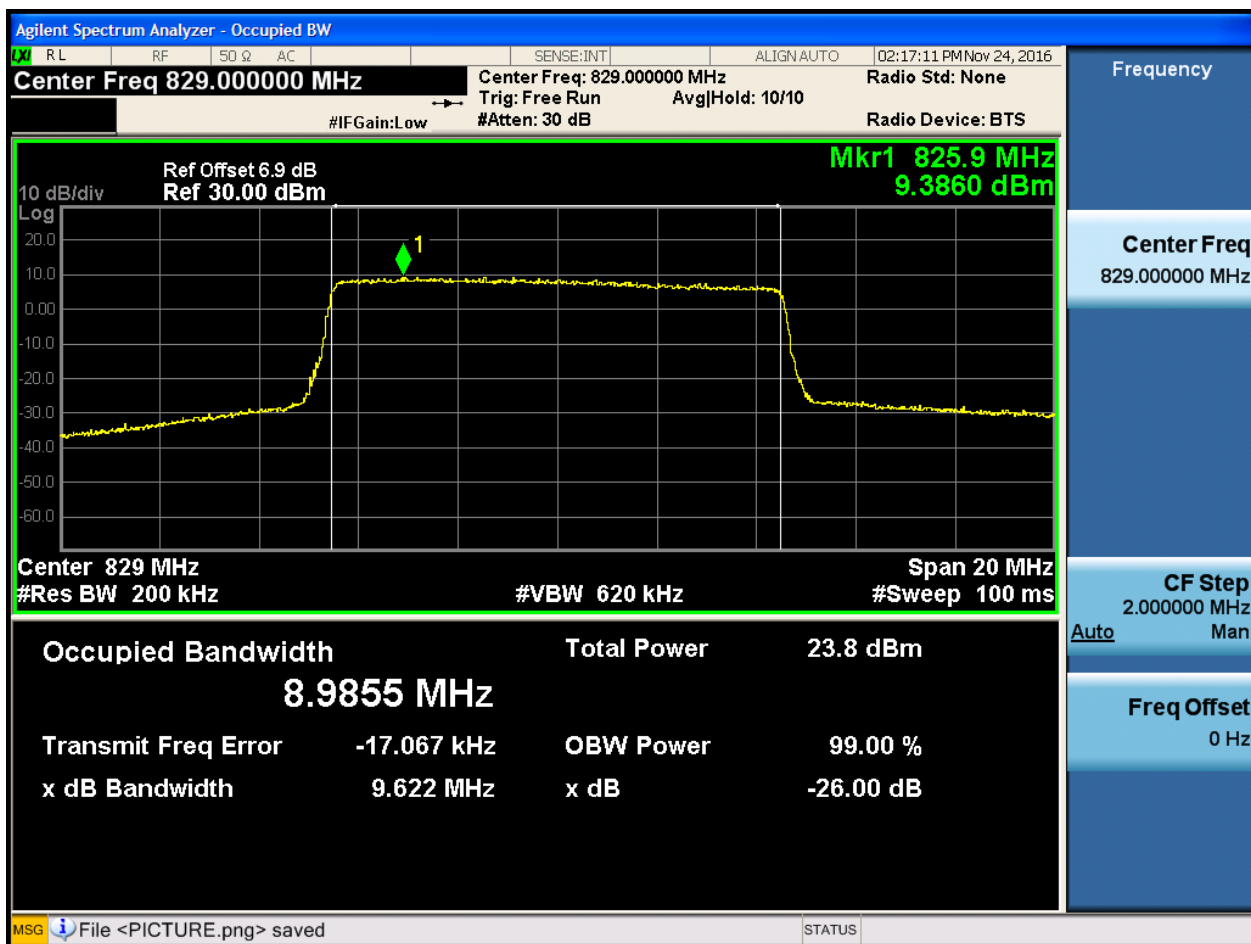




4.1.1.1.4 Test Bandwidth = 10

4.1.1.1.4.1 Test Channel = LCH

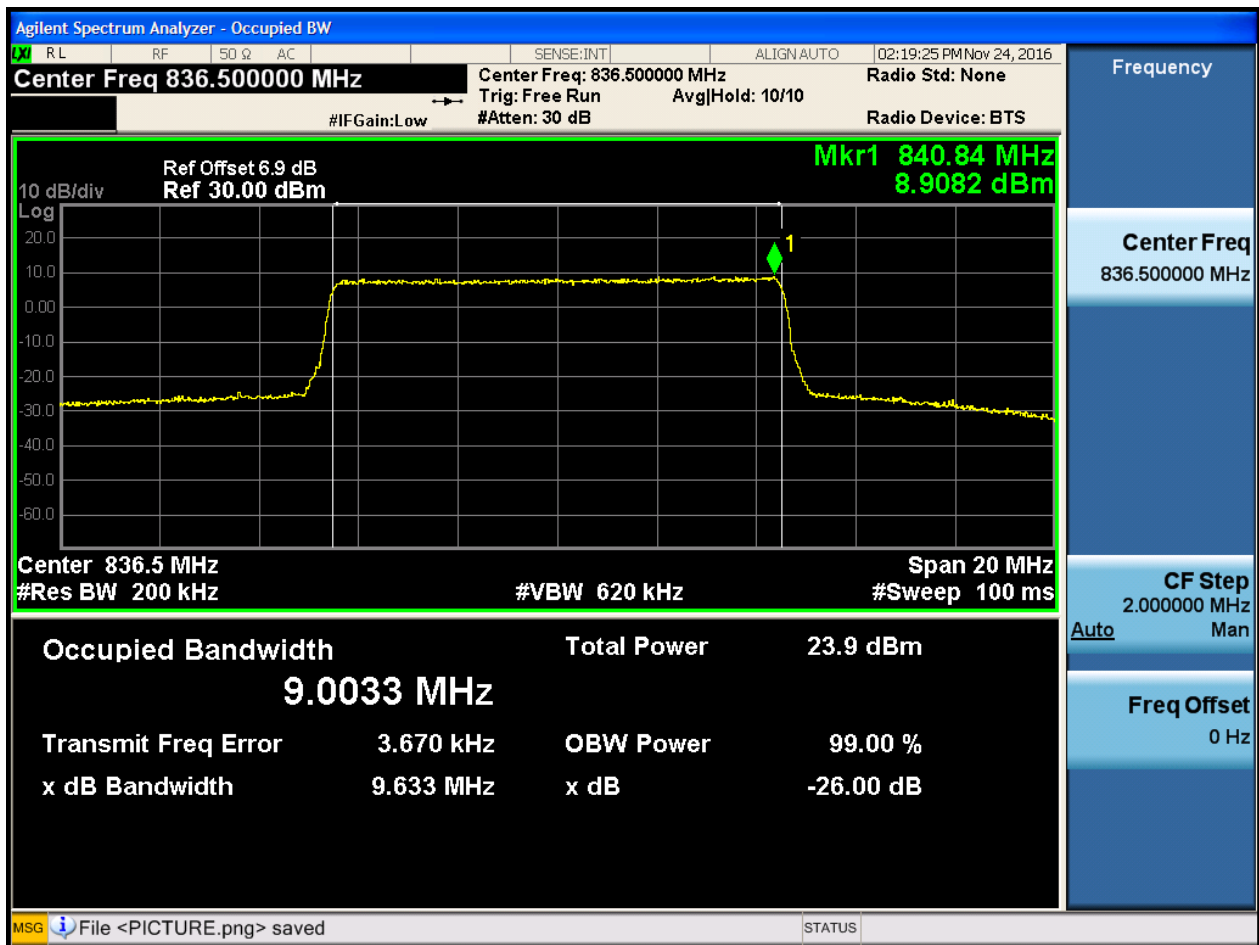
4.1.1.1.4.1.1 Test RB = RB50#0





4.1.1.1.4.2 Test Channel = MCH

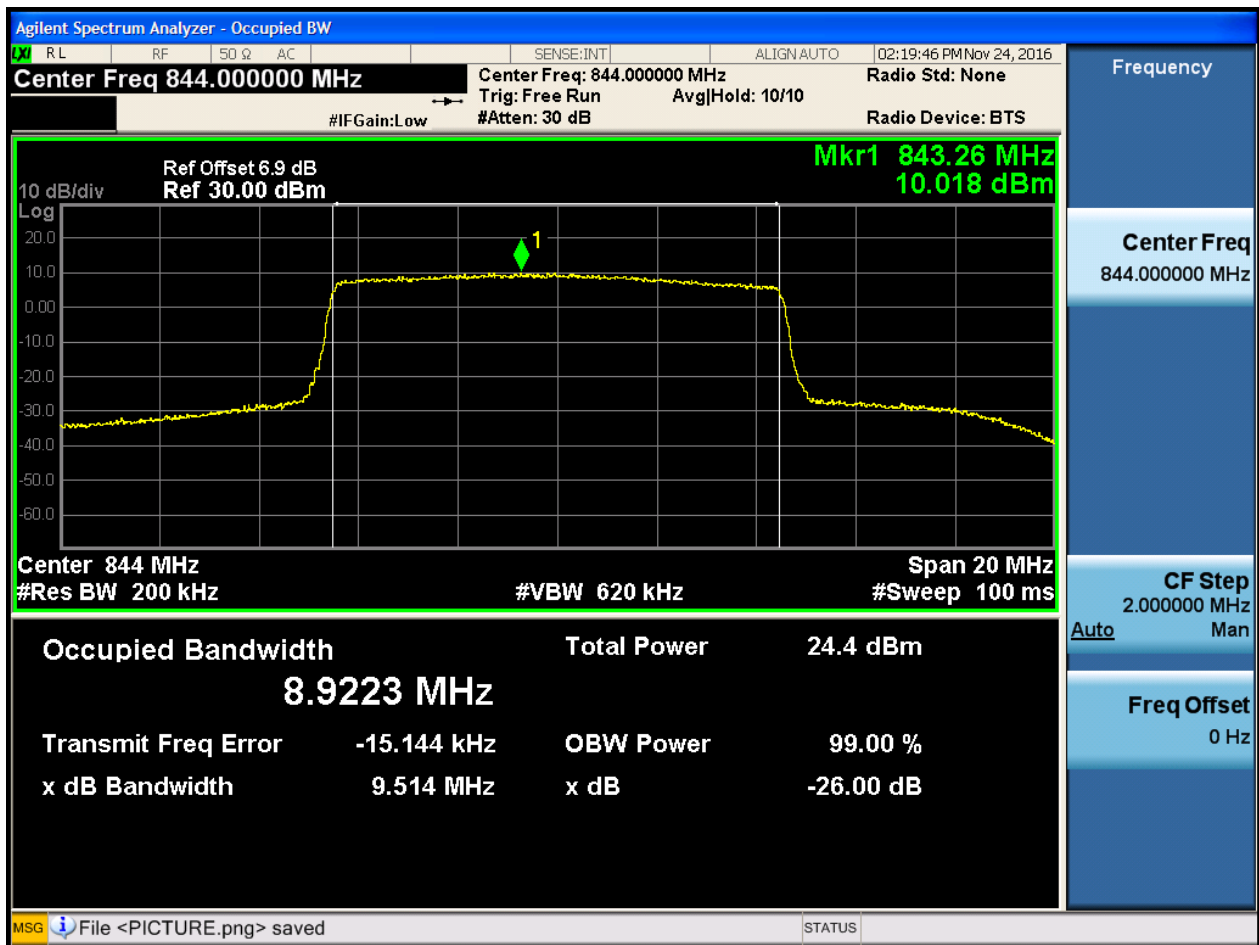
4.1.1.1.4.2.1 Test RB = RB50#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB50#0



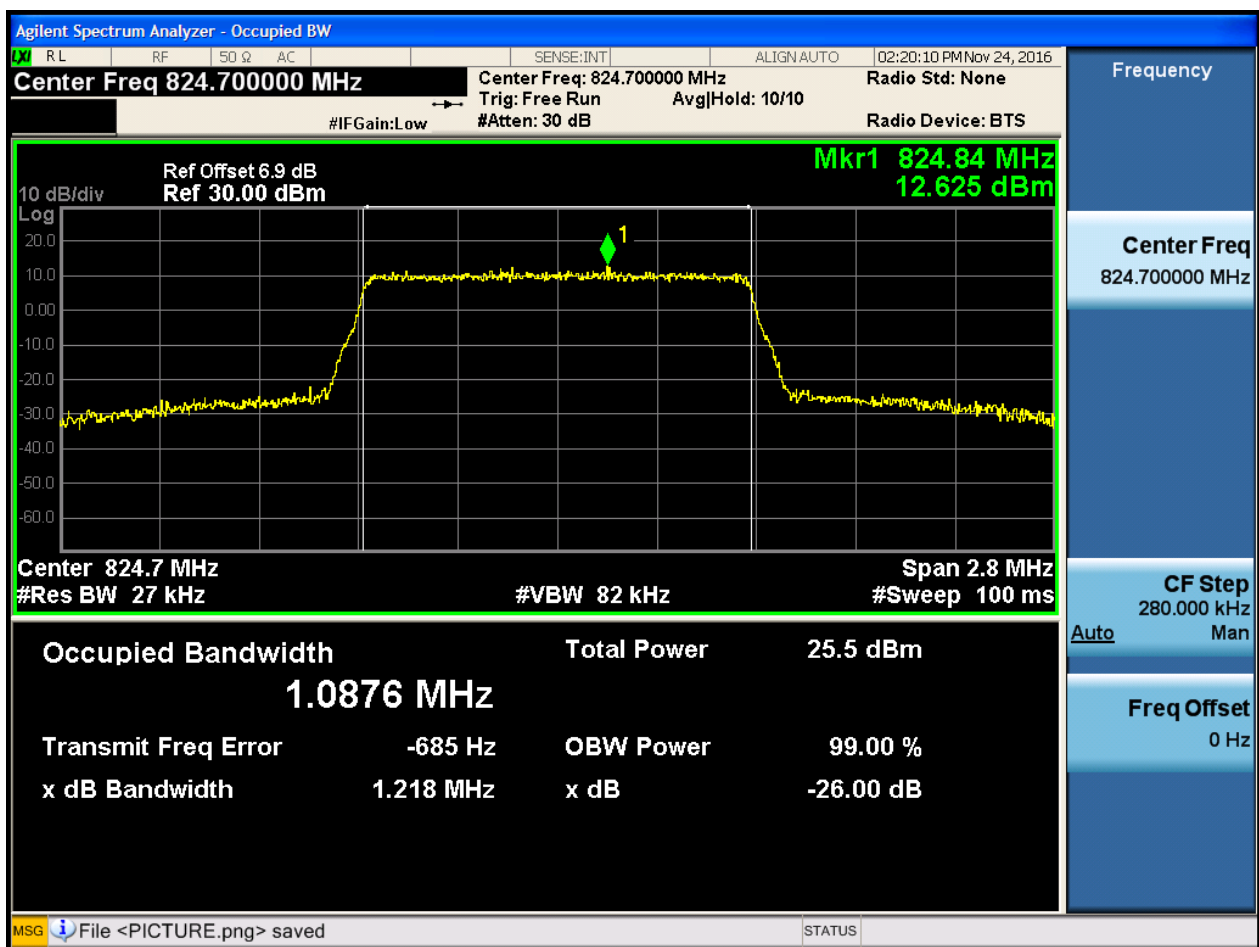


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 1.4

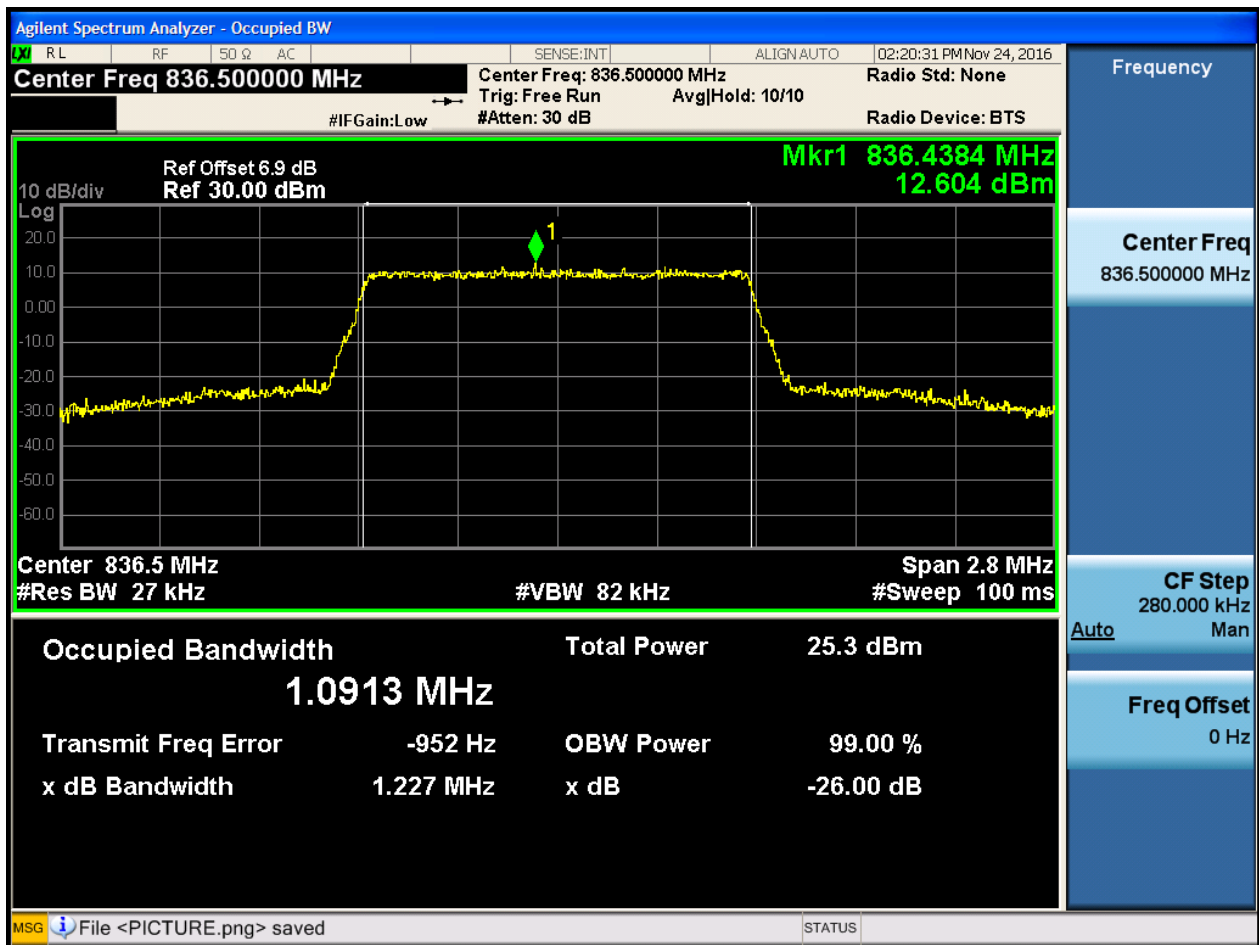
4.1.1.2.1.1 Test Channel = LCH

4.1.1.2.1.1.1 Test RB = RB6#0



4.1.1.2.1.2 Test Channel = MCH

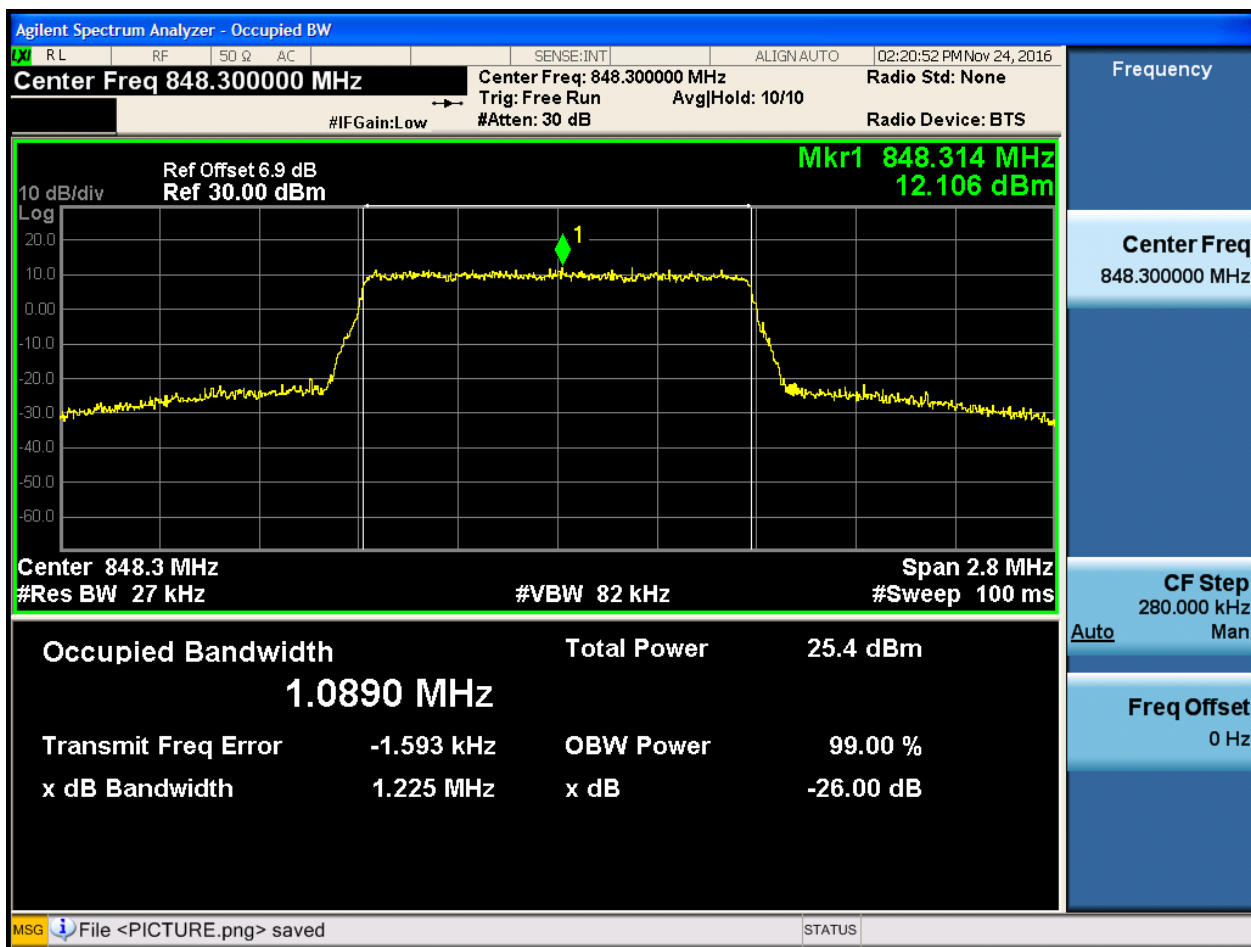
4.1.1.2.1.2.1 Test RB = RB6#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB6#0

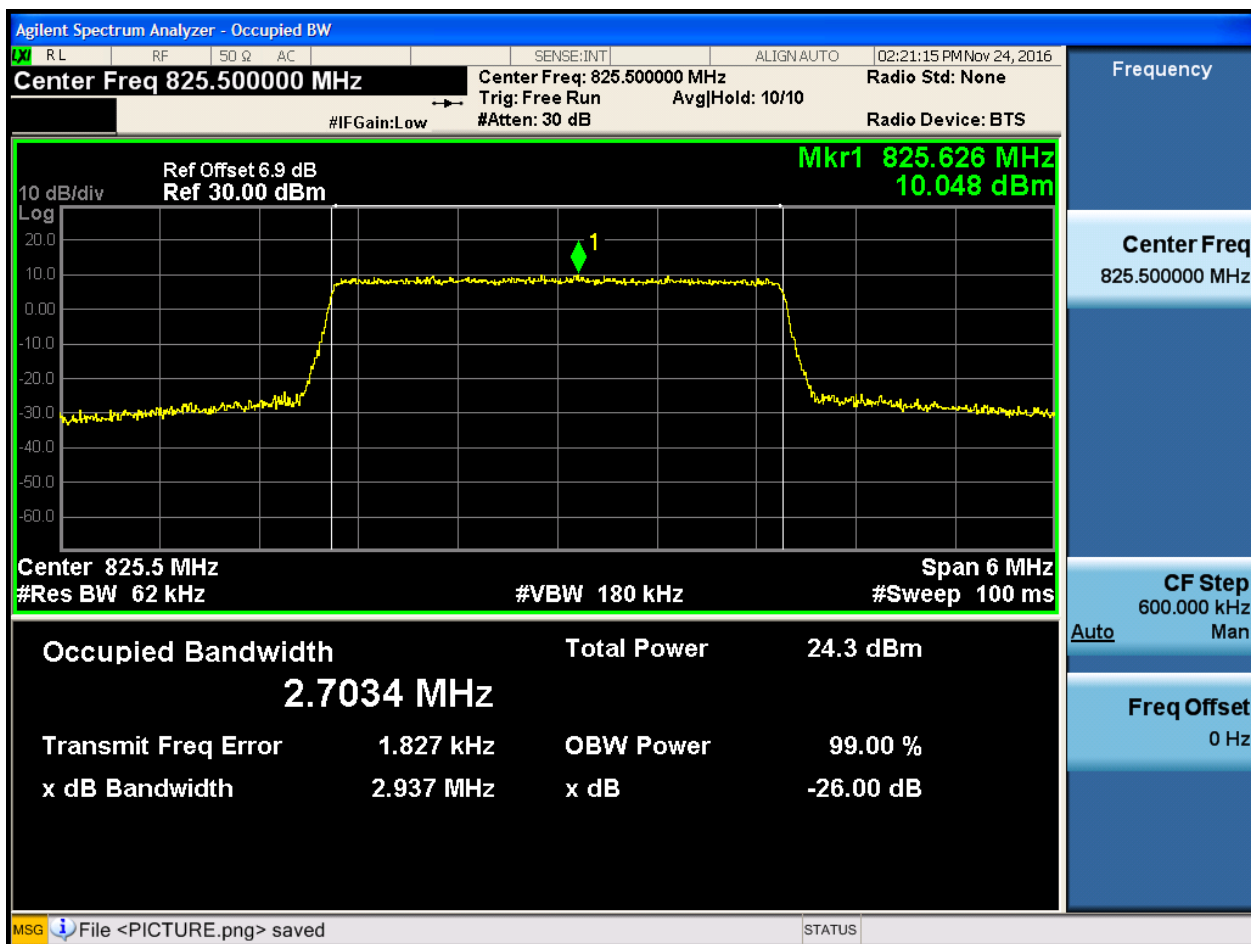




4.1.1.2.2 Test Bandwidth = 3

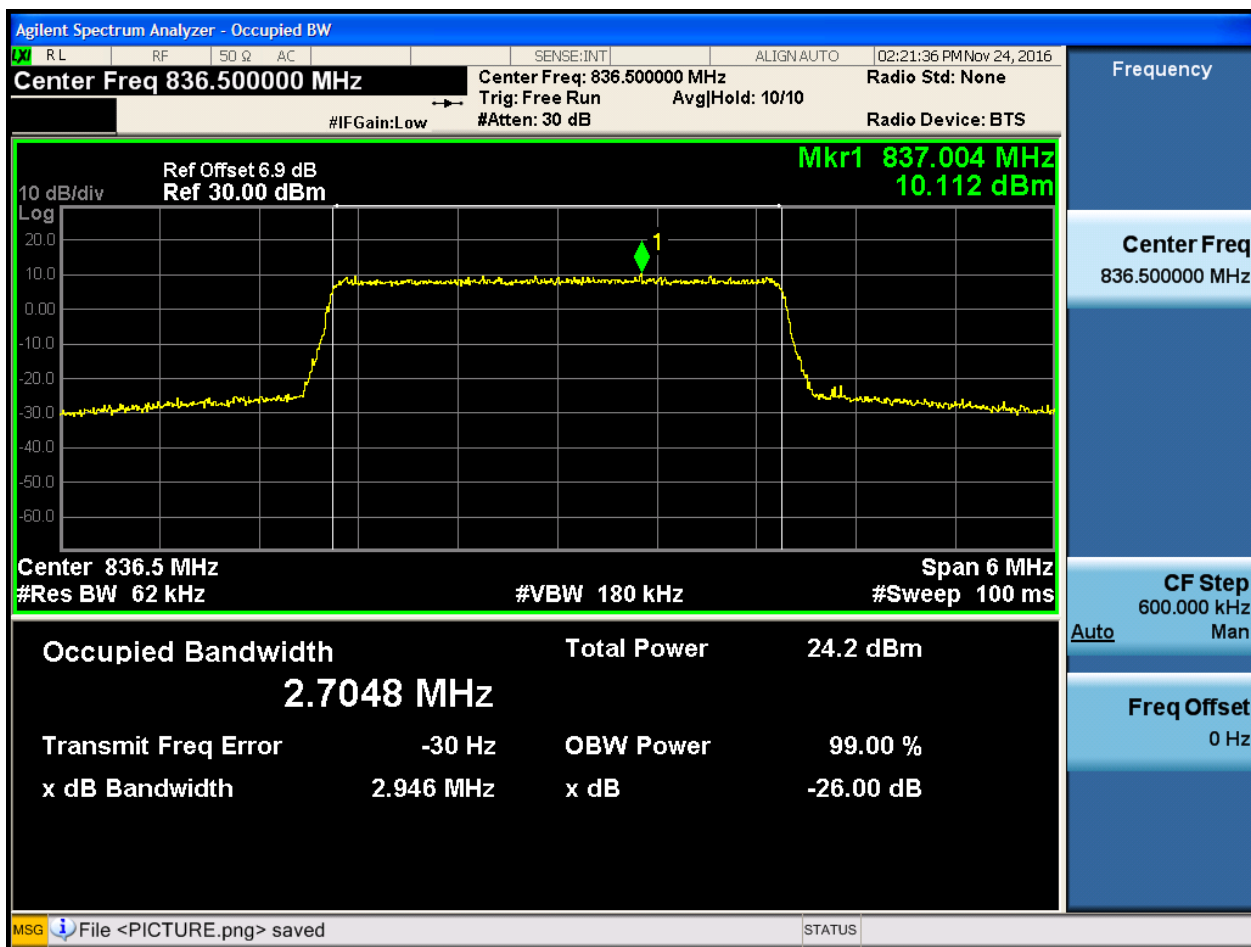
4.1.1.2.2.1 Test Channel = LCH

4.1.1.2.2.1.1 Test RB = RB15#0



4.1.1.2.2.2 Test Channel = MCH

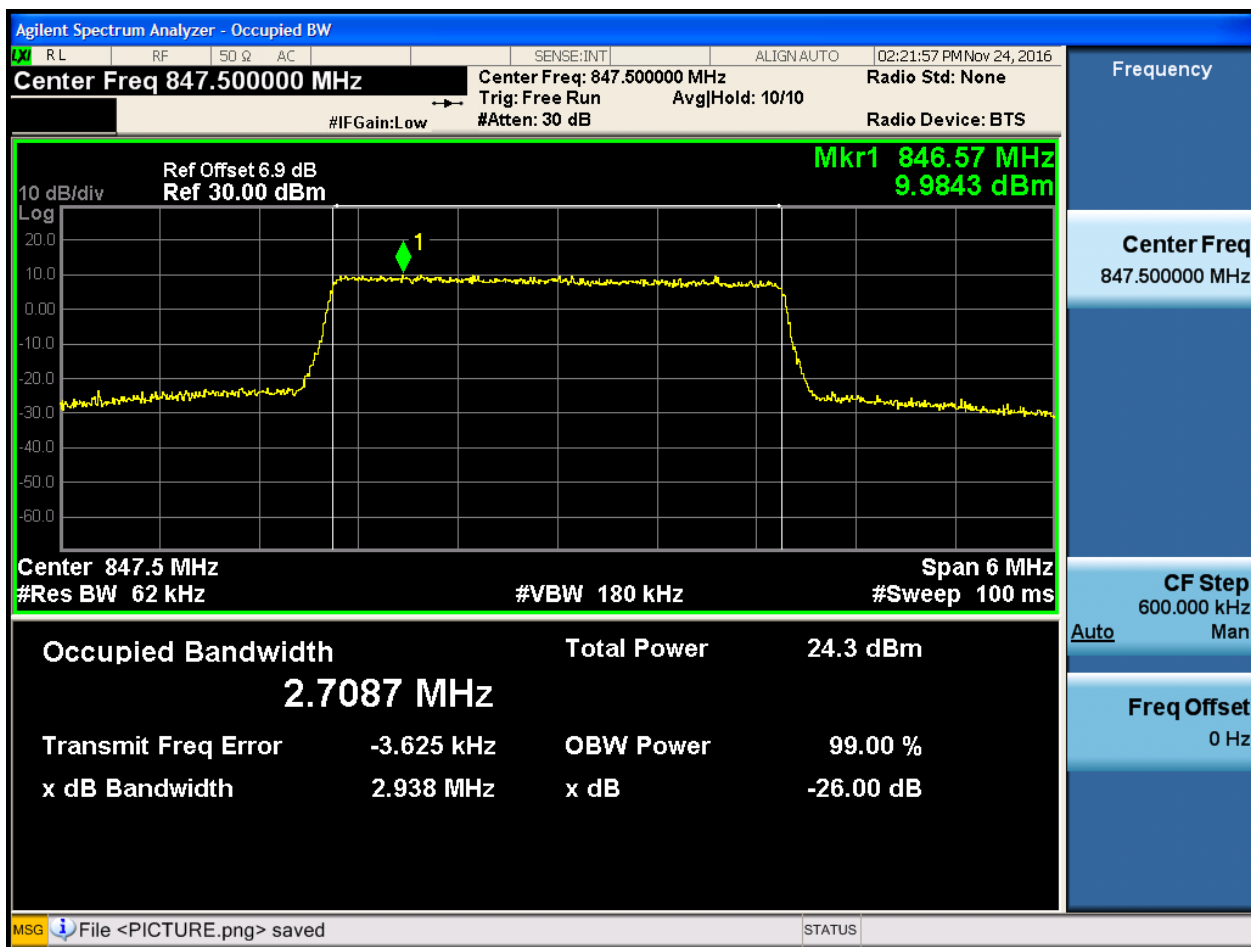
4.1.1.2.2.2.1 Test RB = RB15#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB15#0

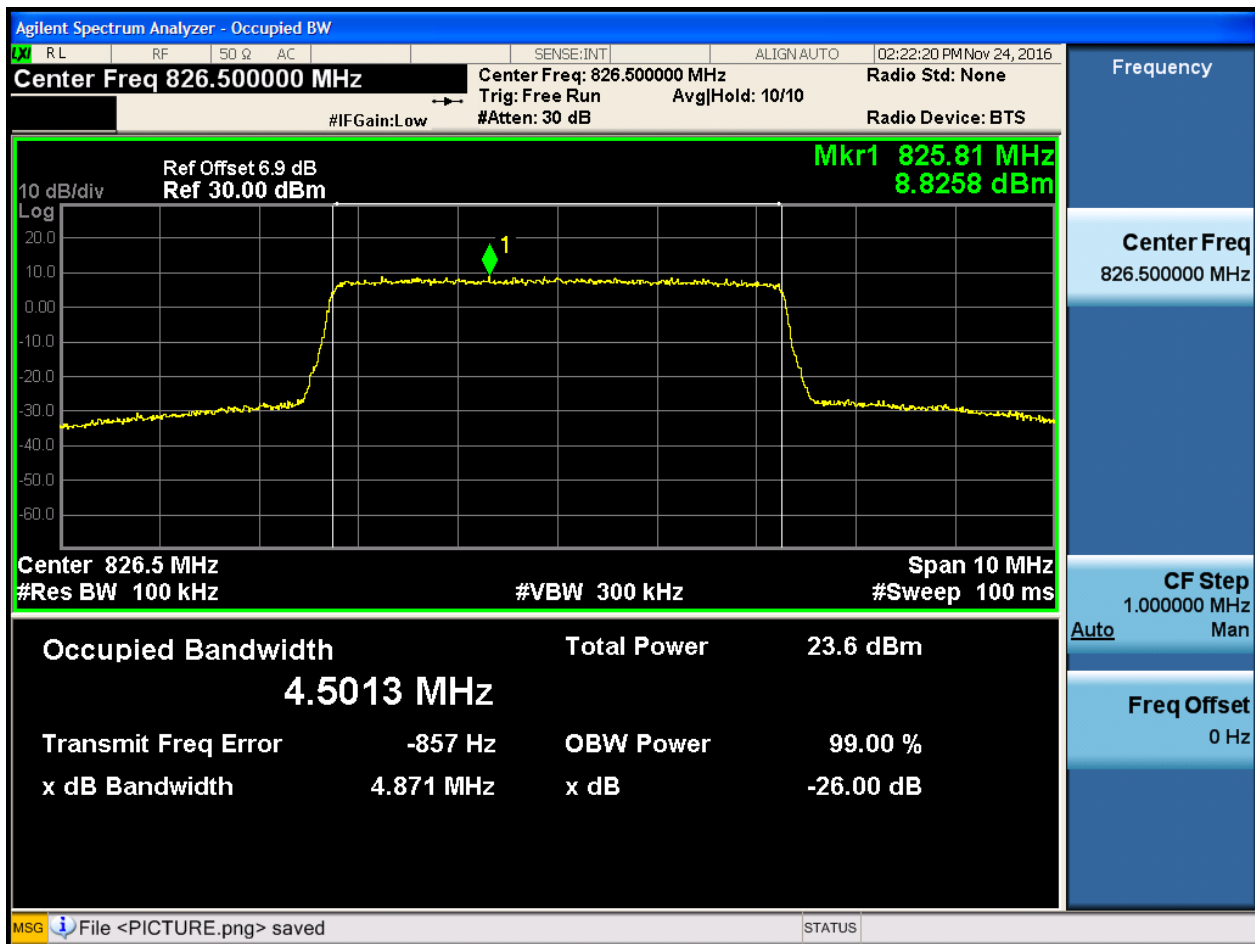




4.1.1.2.3 Test Bandwidth = 5

4.1.1.2.3.1 Test Channel = LCH

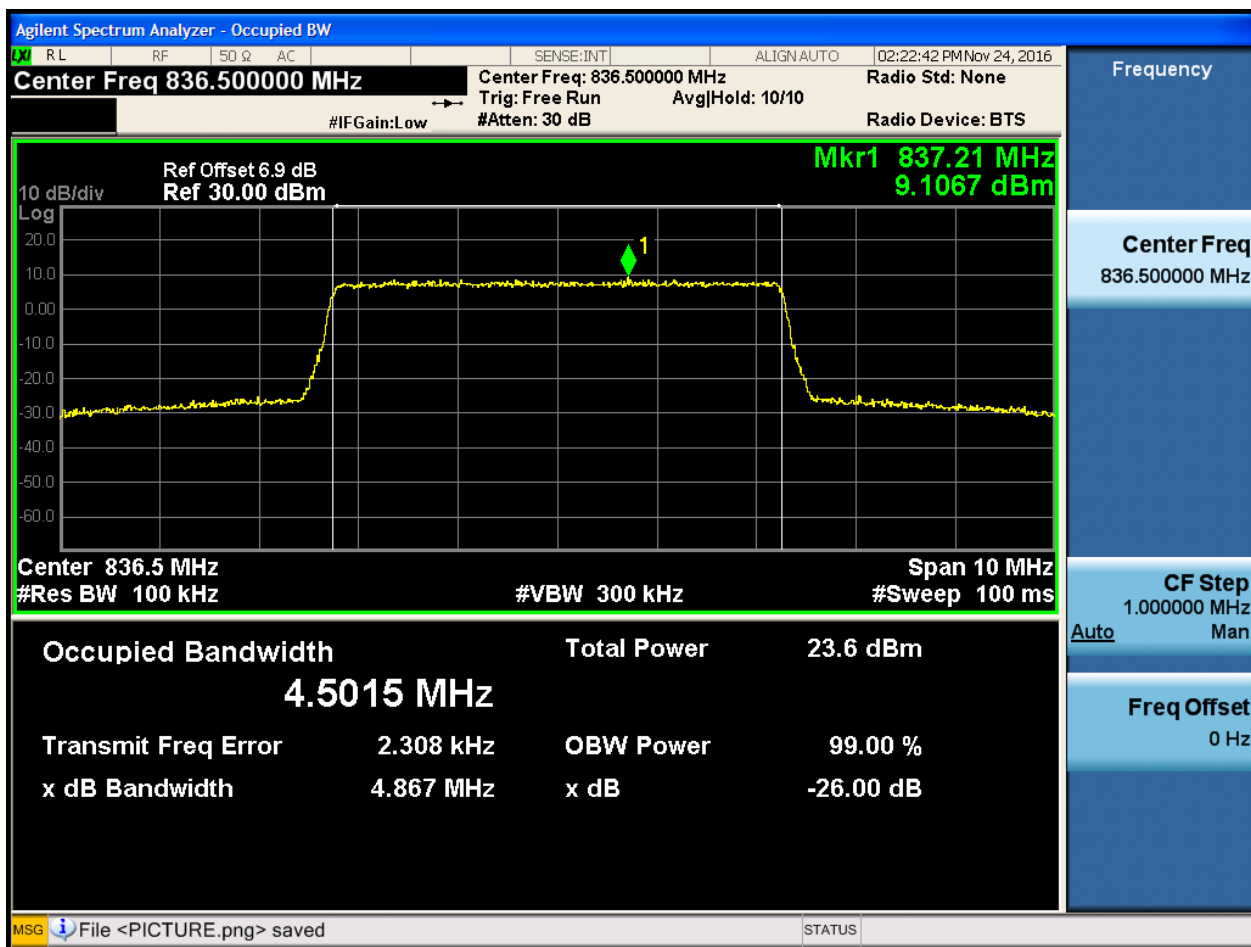
4.1.1.2.3.1.1 Test RB = RB25#0





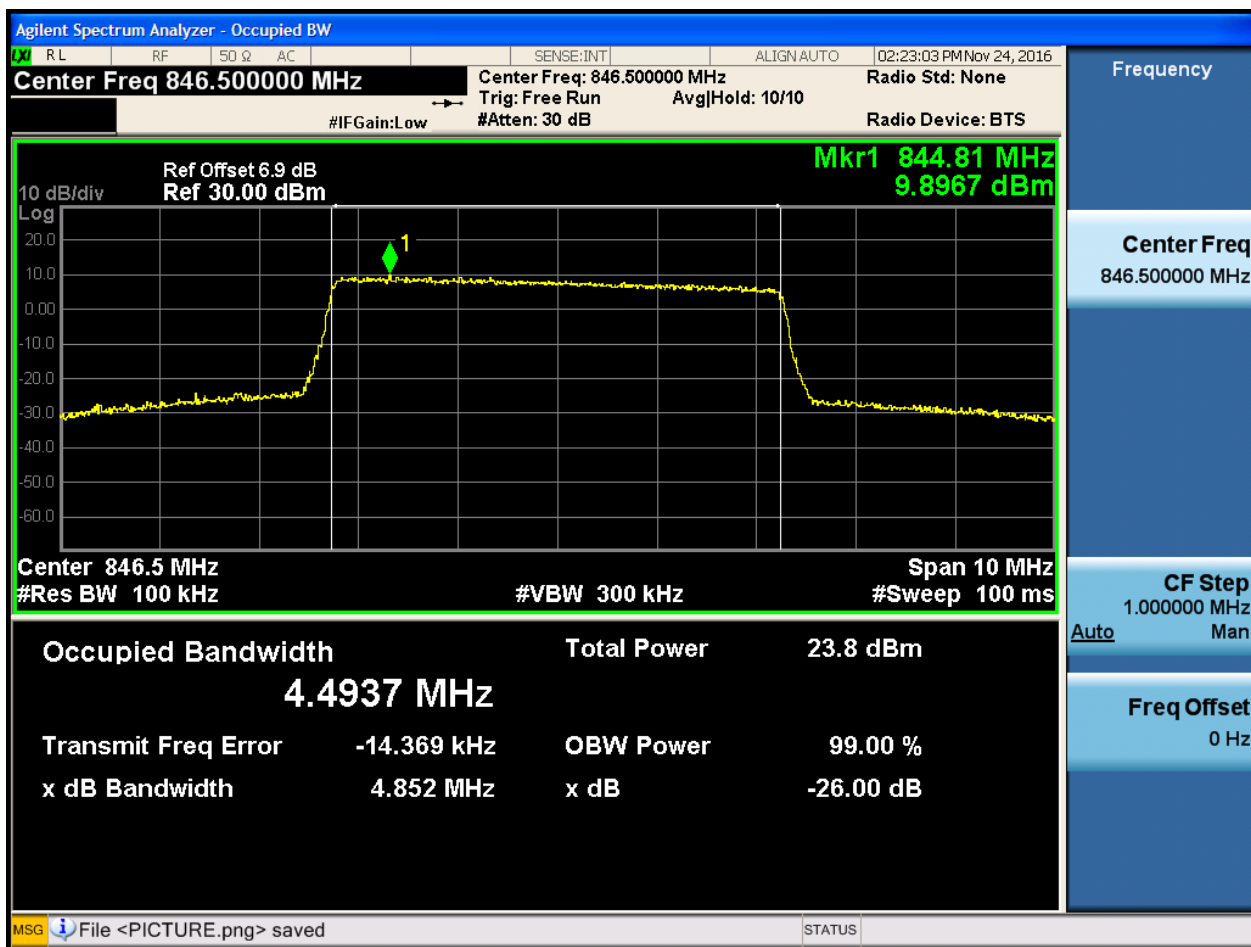
4.1.1.2.3.2 Test Channel = MCH

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

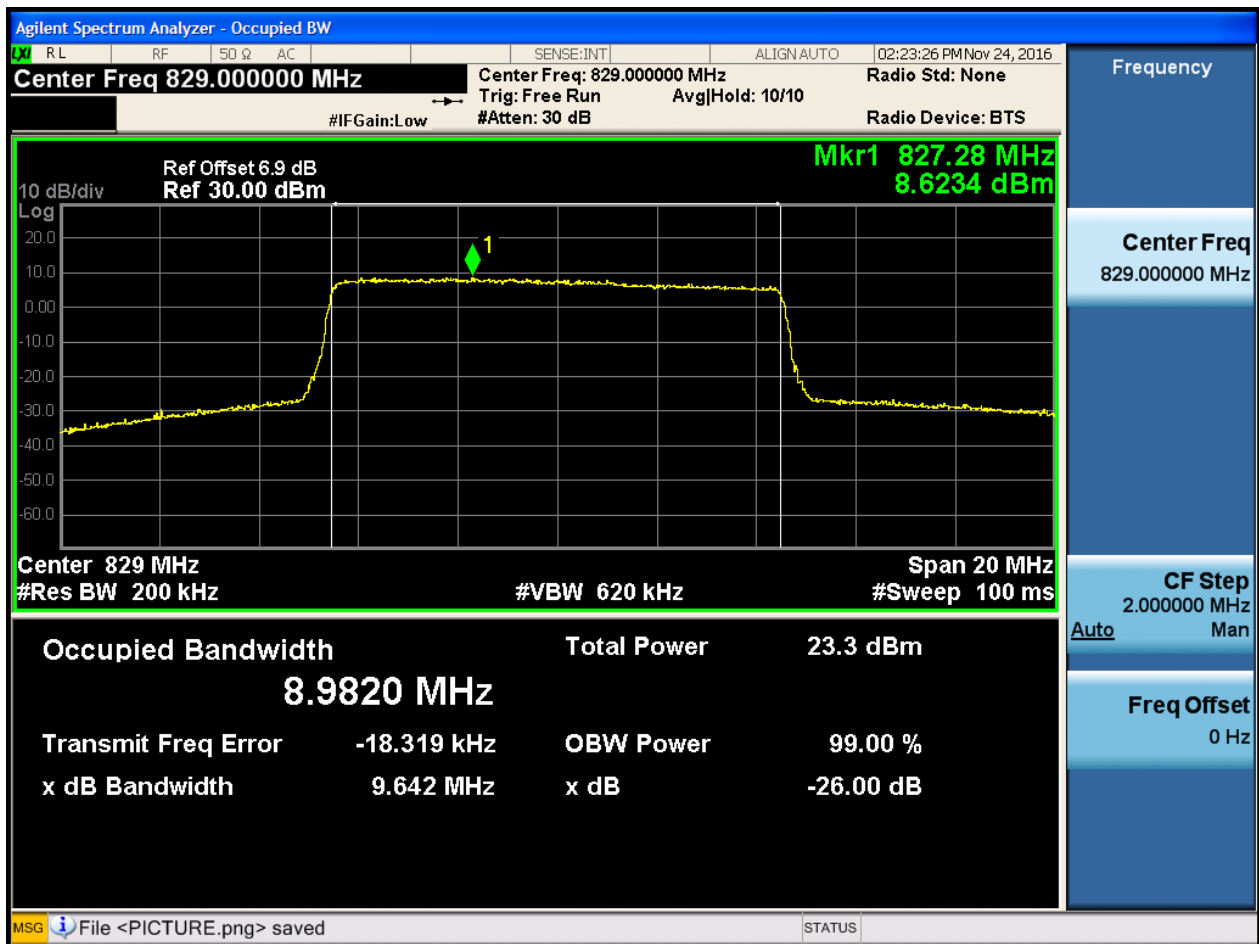




4.1.1.2.4 Test Bandwidth = 10

4.1.1.2.4.1 Test Channel = LCH

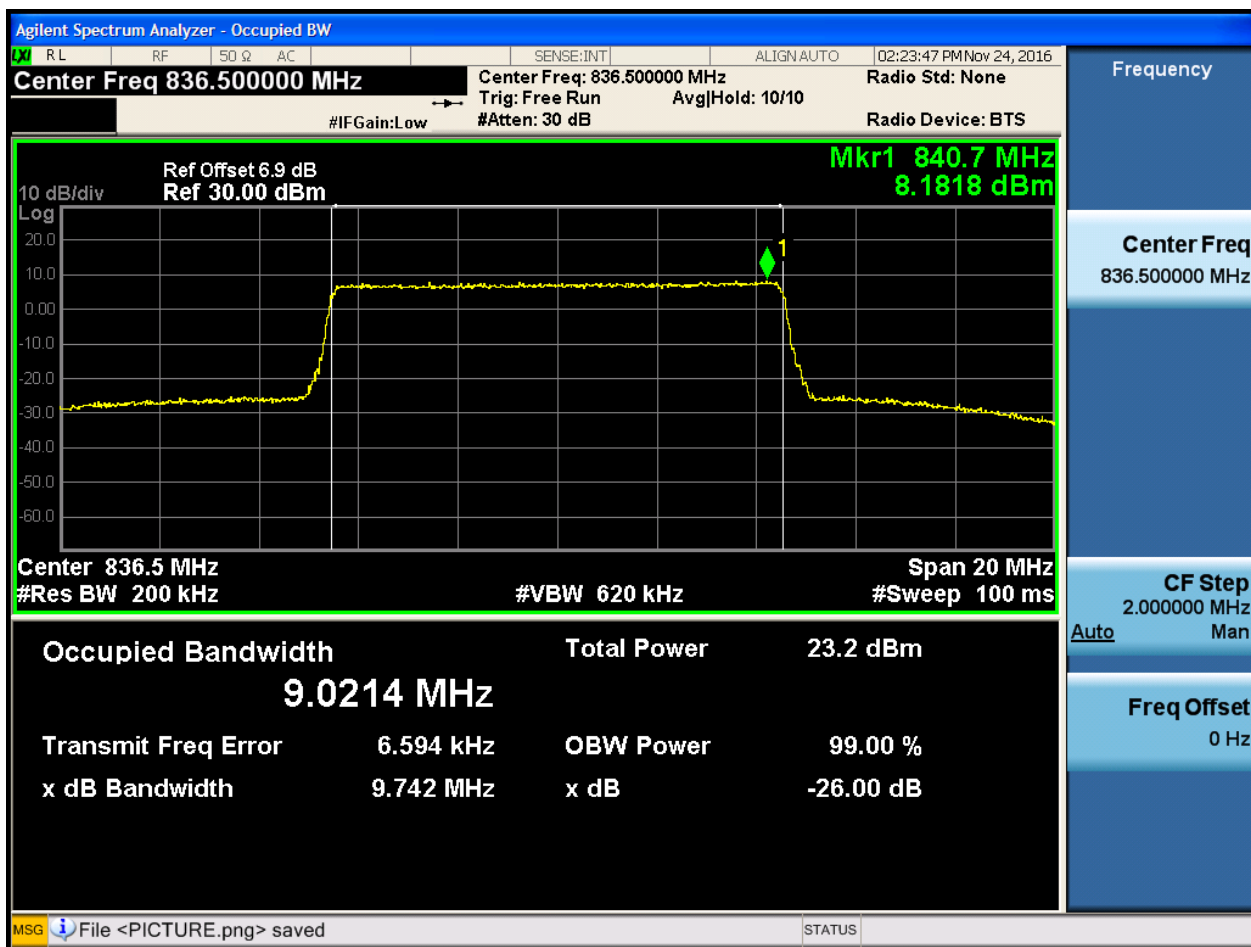
4.1.1.2.4.1.1 Test RB = RB50#0





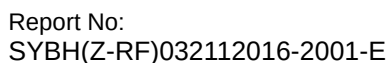
4.1.1.2.4.2 Test Channel = MCH

4.1.1.2.4.2.1 Test RB = RB50#0





4.1.1.2.4.3.1 Test RB = RB50#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

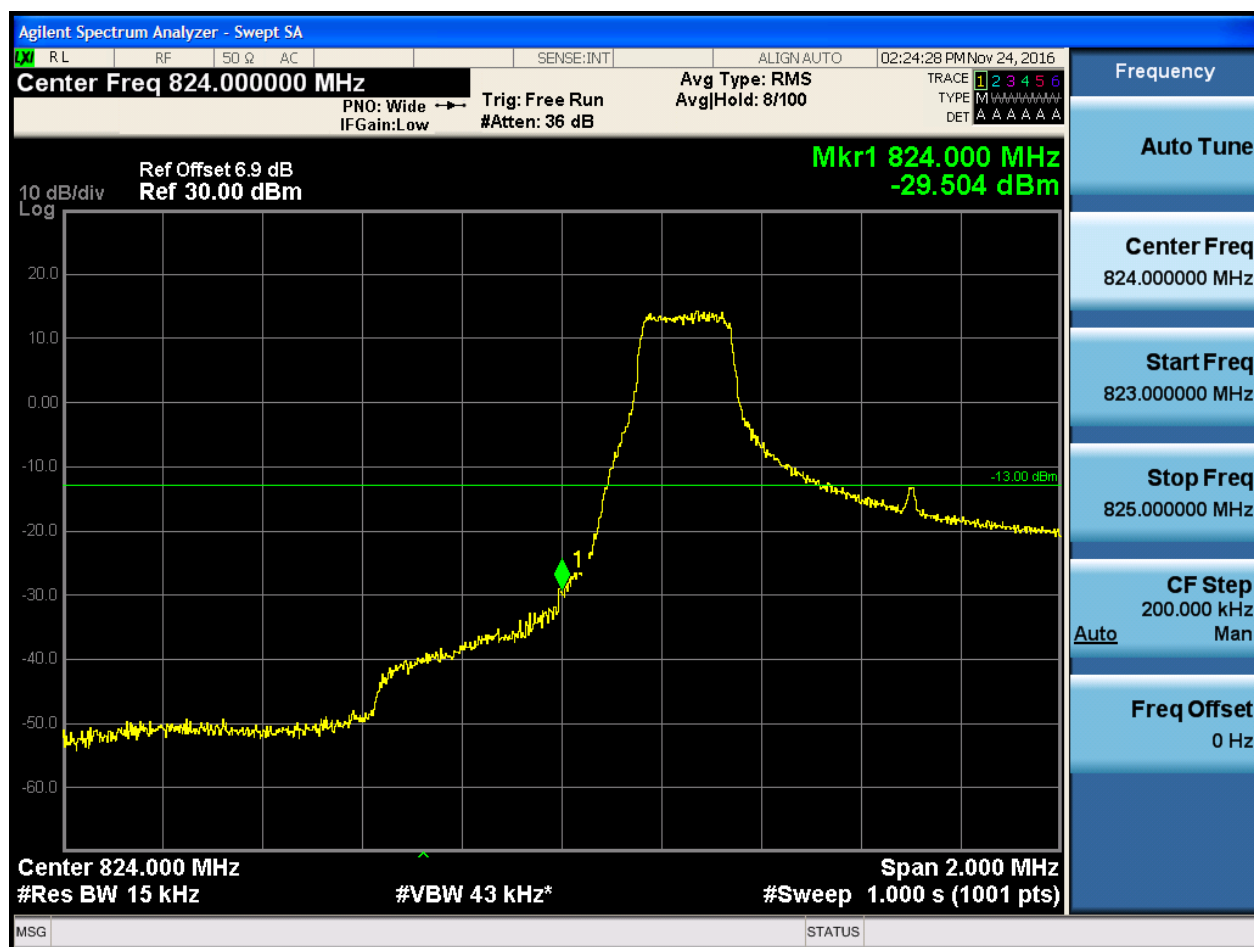
5.1.1 Test Band = BAND5

5.1.1.1 Test Mode = LTE/TM1

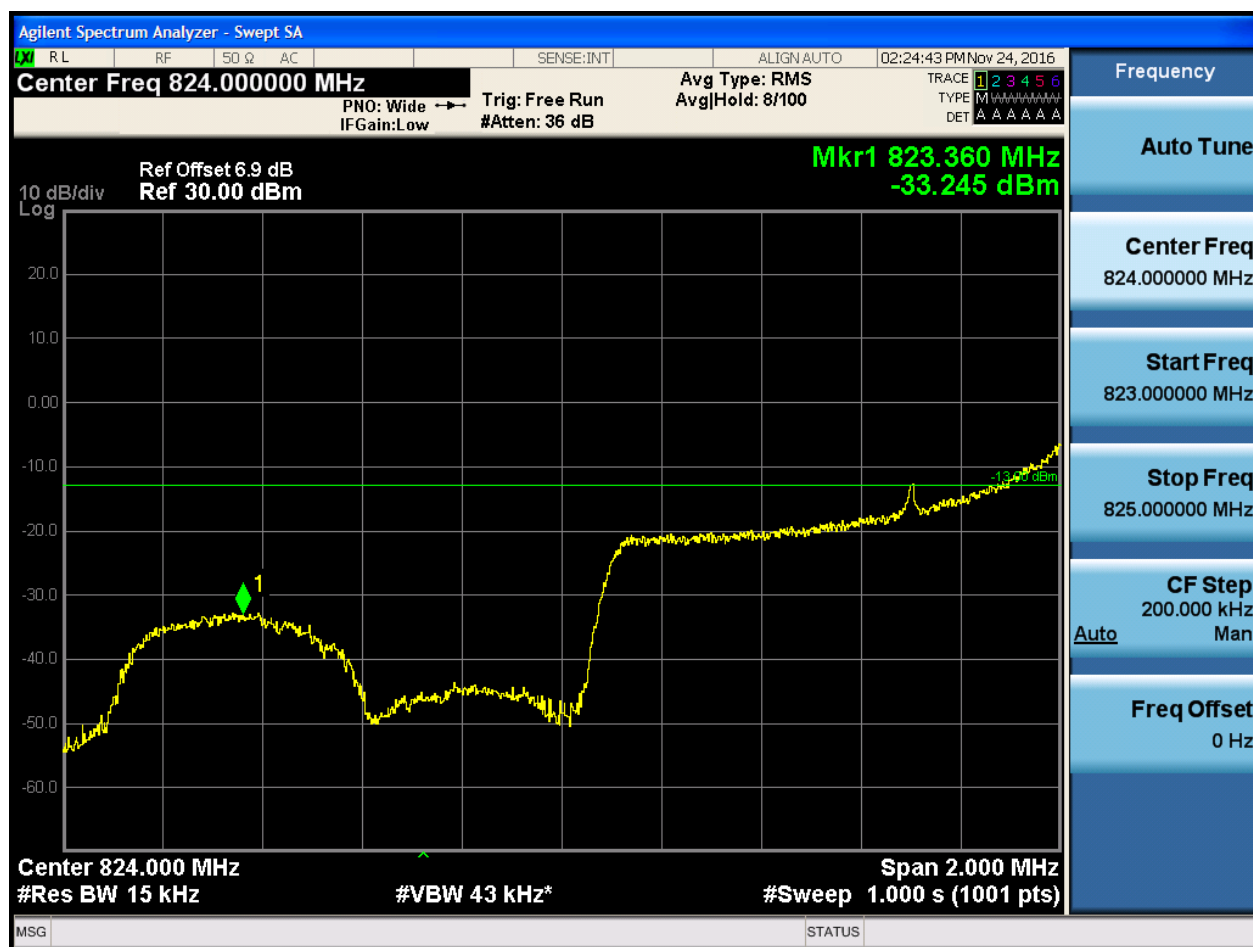
5.1.1.1.1 Test Bandwidth = 1.4

5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0

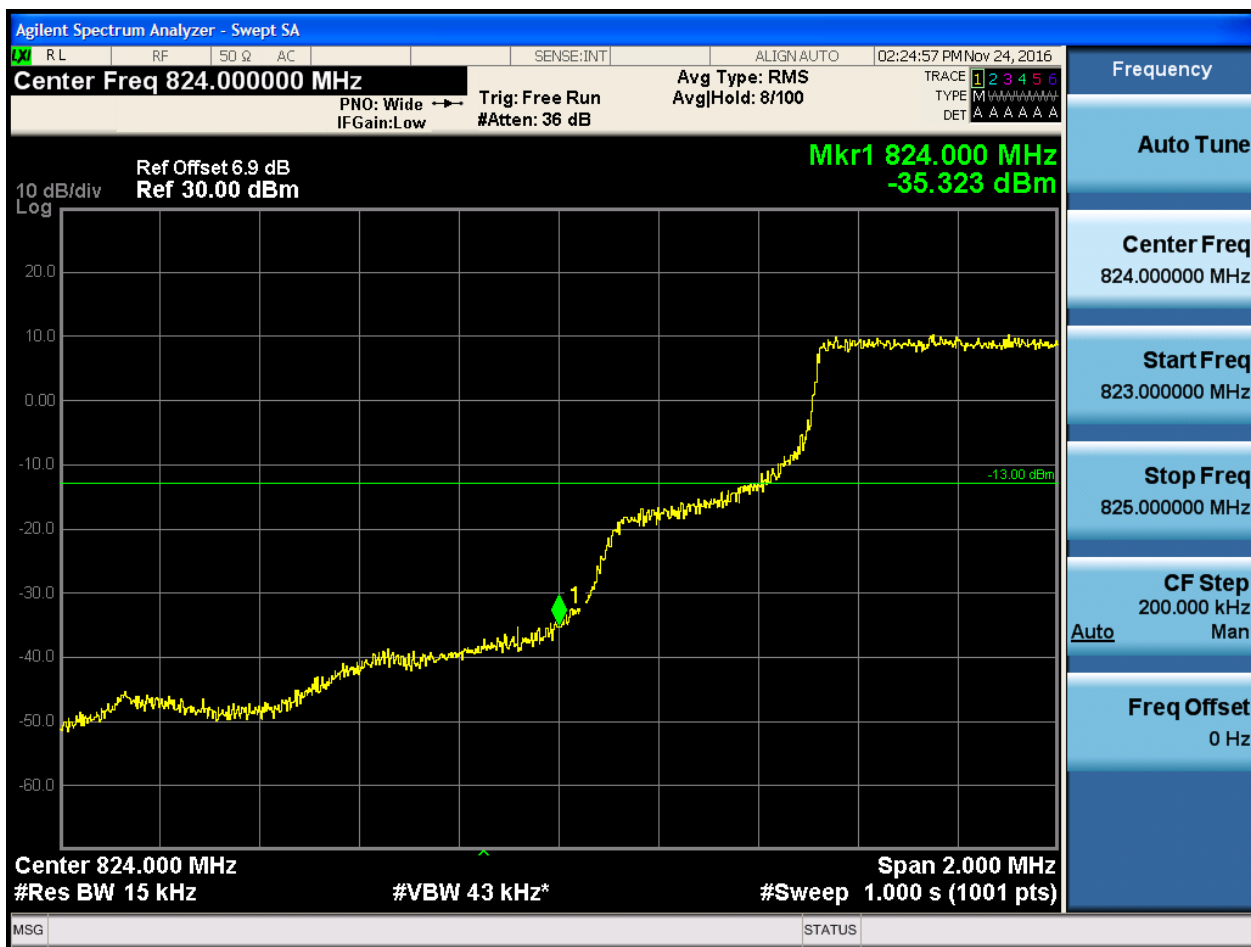


5.1.1.1.1.1.2 Test RB = RB1#5



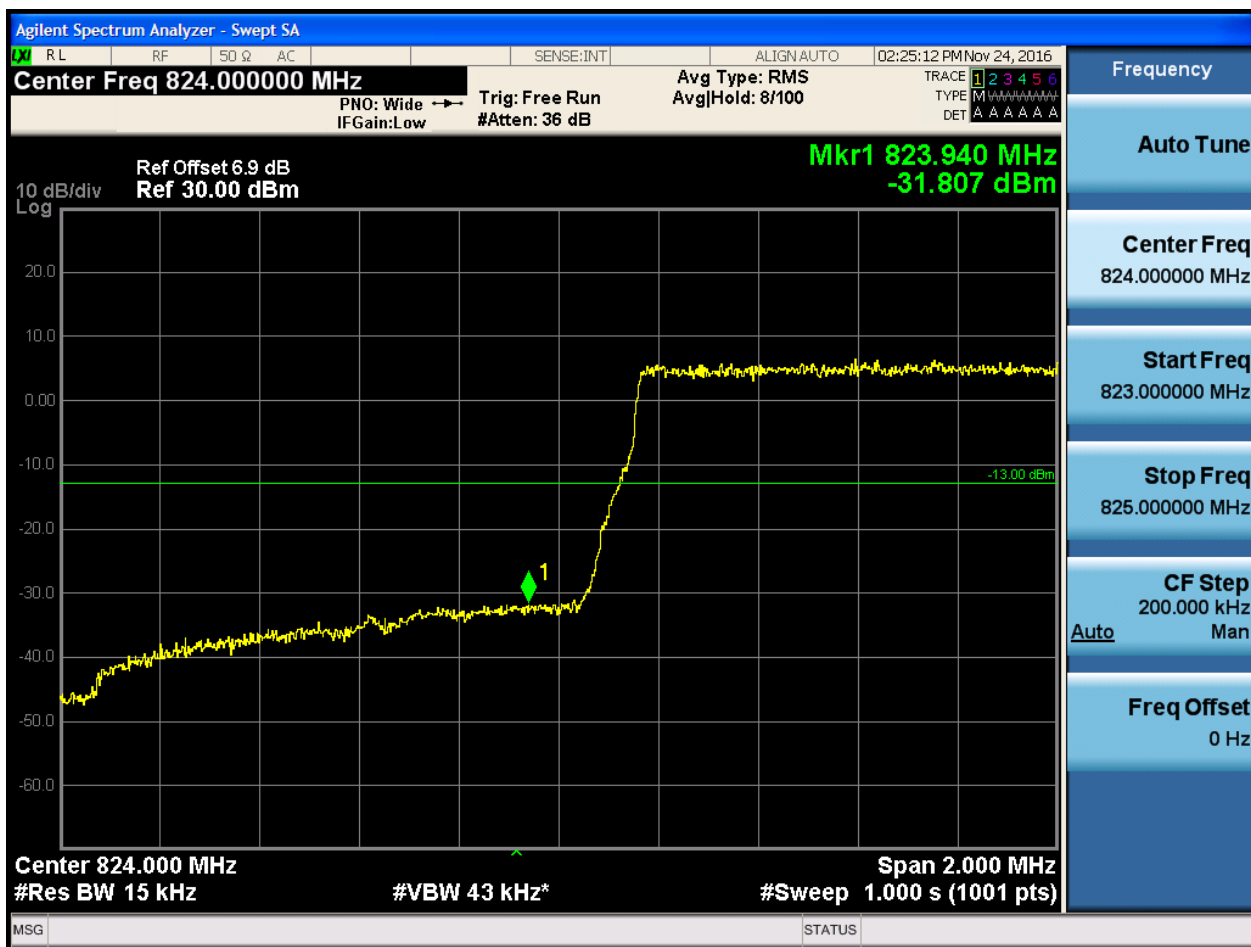


5.1.1.1.1.3 Test RB = RB3#2





5.1.1.1.1.4 Test RB = RB6#0





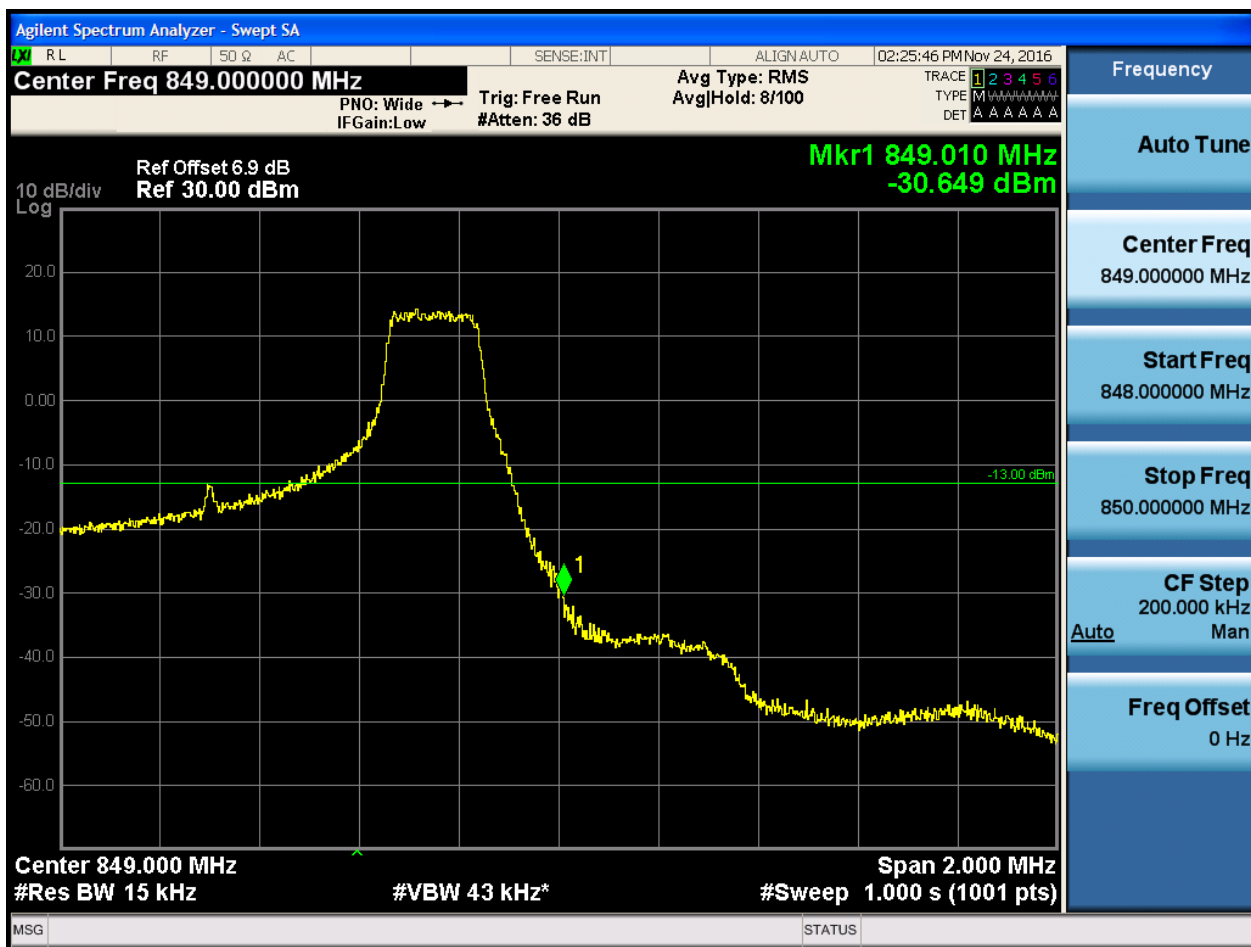
5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





5.1.1.1.2.2 Test RB = RB1#5





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:26:01 PM Nov 24, 2016

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 849.080 MHz
-27.757 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

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

Avg Type: RMS
Avg/Hold: 8/100

02:26:15 PM Nov 24, 2016

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 849.090 MHz
-29.559 dBm

10 dB/div
Log

-13.00 dBm

Center 849.000 MHz
#Res BW 15 kHz

#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

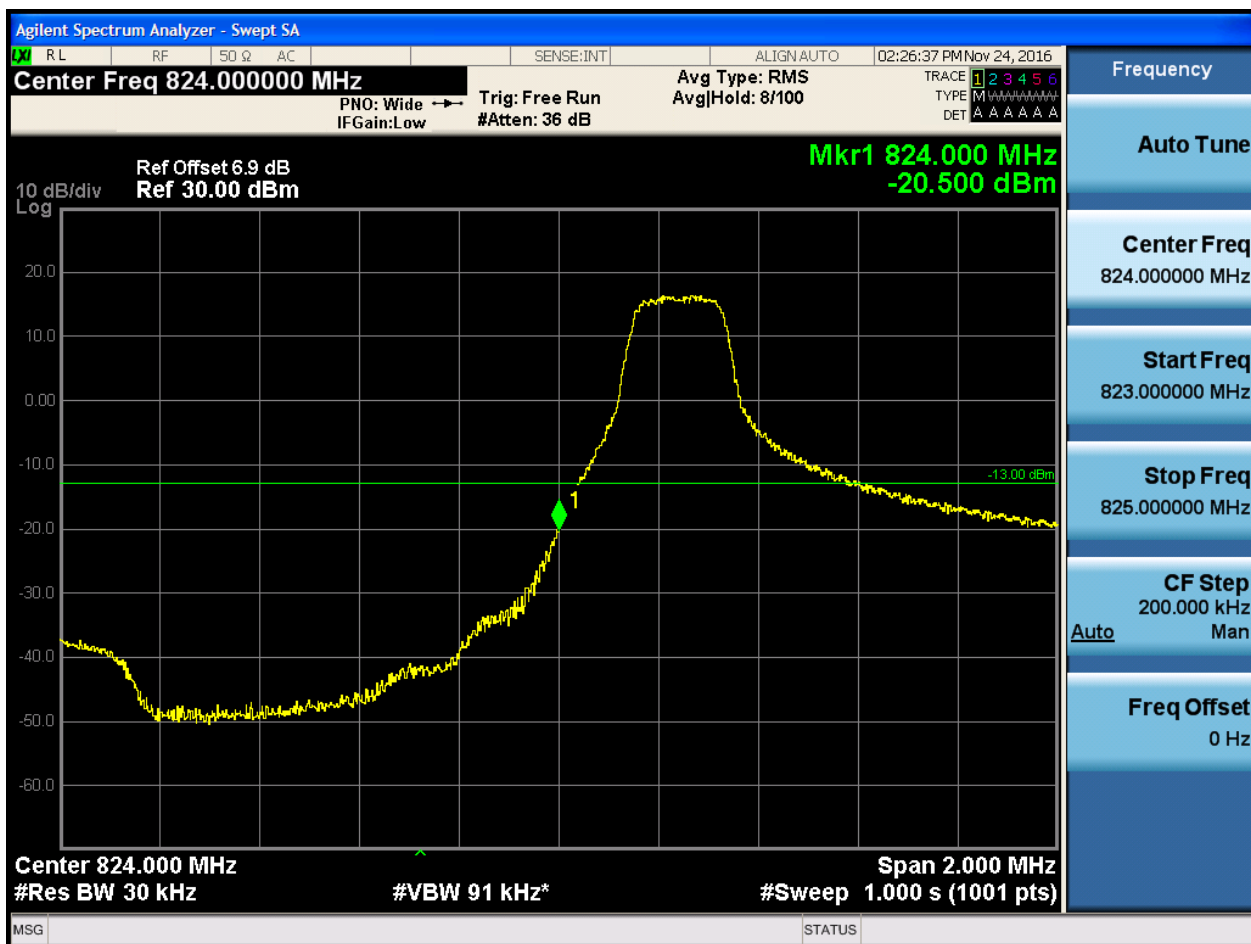
Frequency	
Auto Tune	
Center Freq	849.000000 MHz
Start Freq	848.000000 MHz
Stop Freq	850.000000 MHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz



5.1.1.1.2 Test Bandwidth = 3

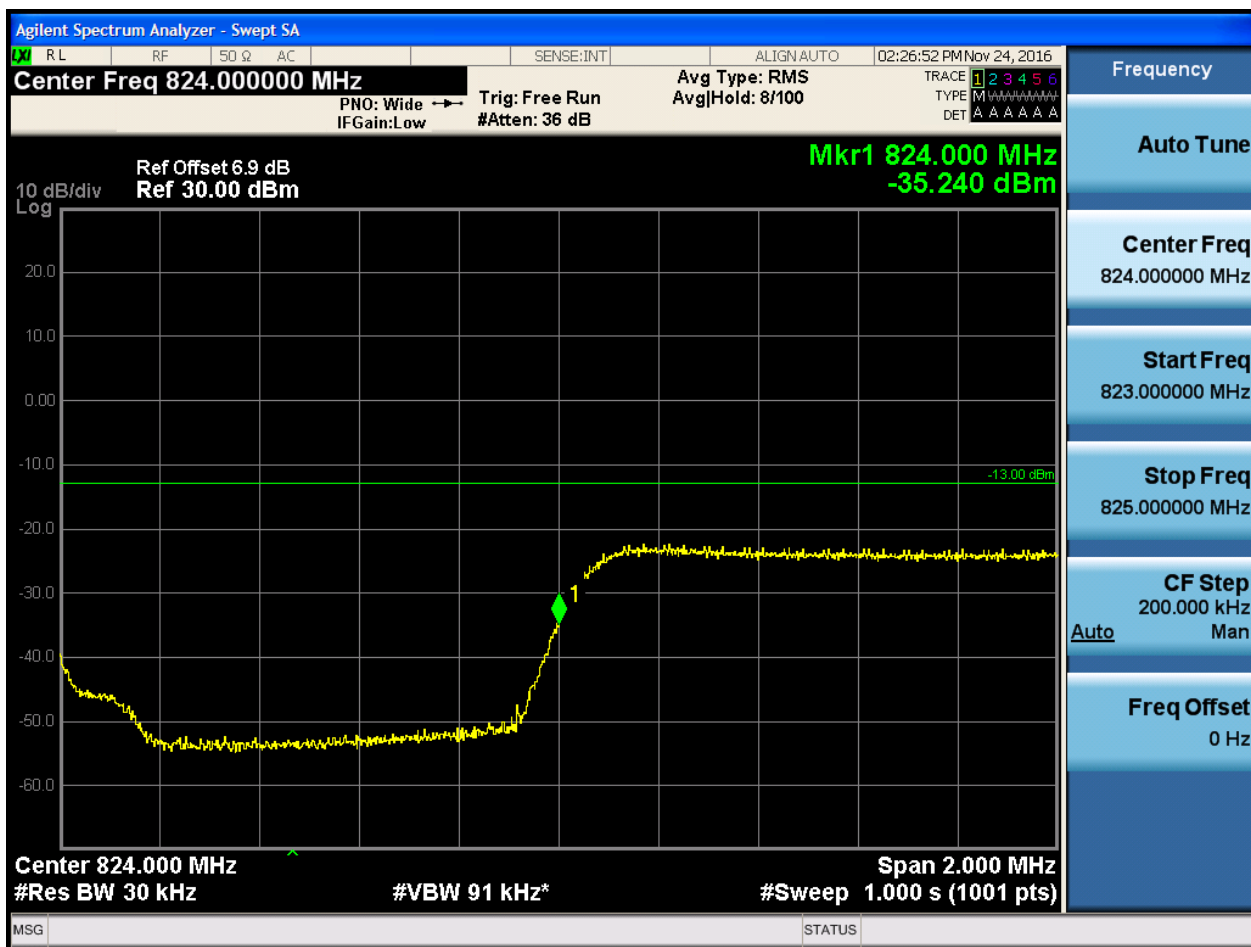
5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0





5.1.1.1.2.1.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:27:06 PM Nov 24, 2016

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 6.9 dB
Ref 30.00 dBm

Mkr1 823.990 MHz
-30.936 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



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
-28.985 dBm

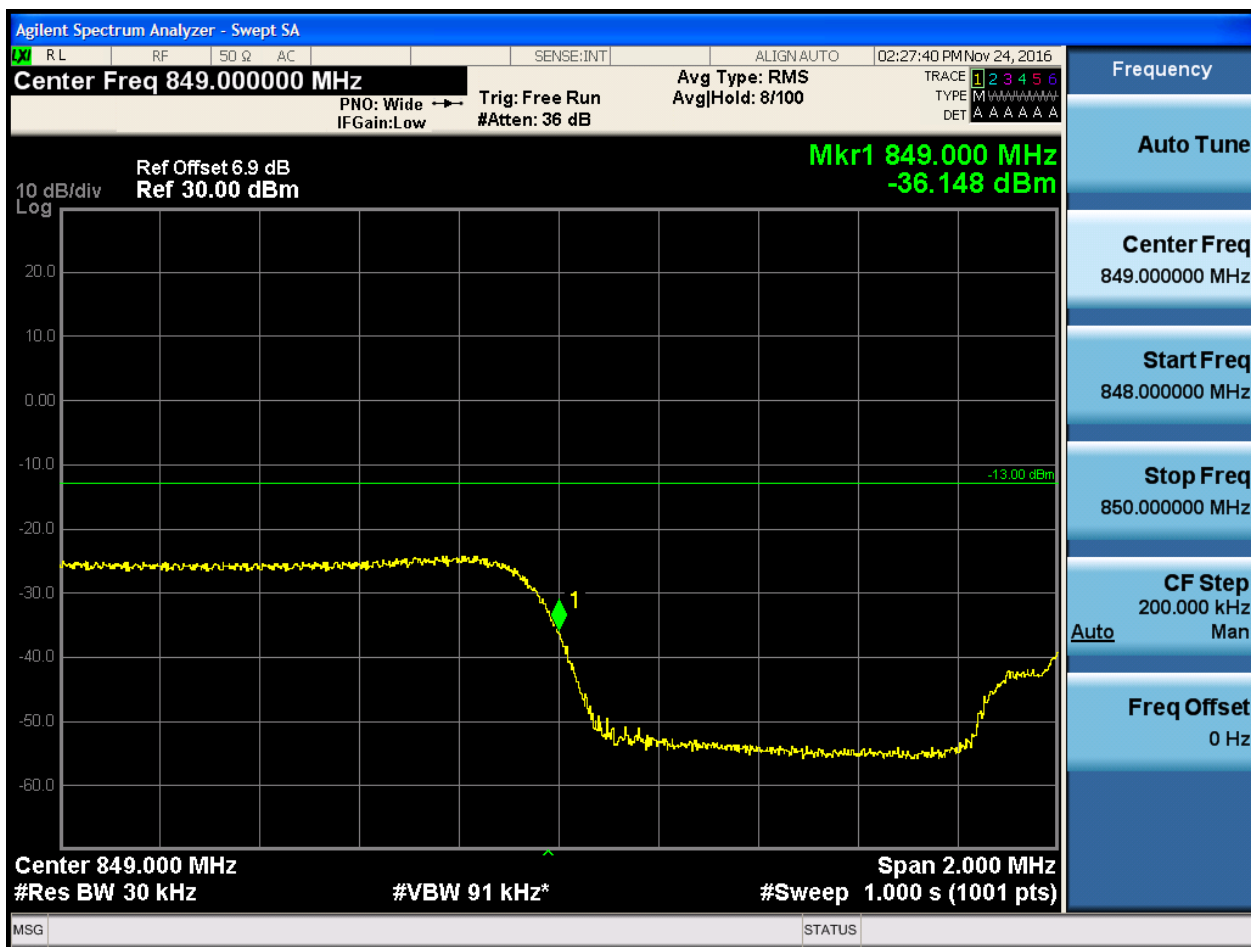
Center 824.000 MHz
#Res BW 30 kHz
#VBW 91 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)



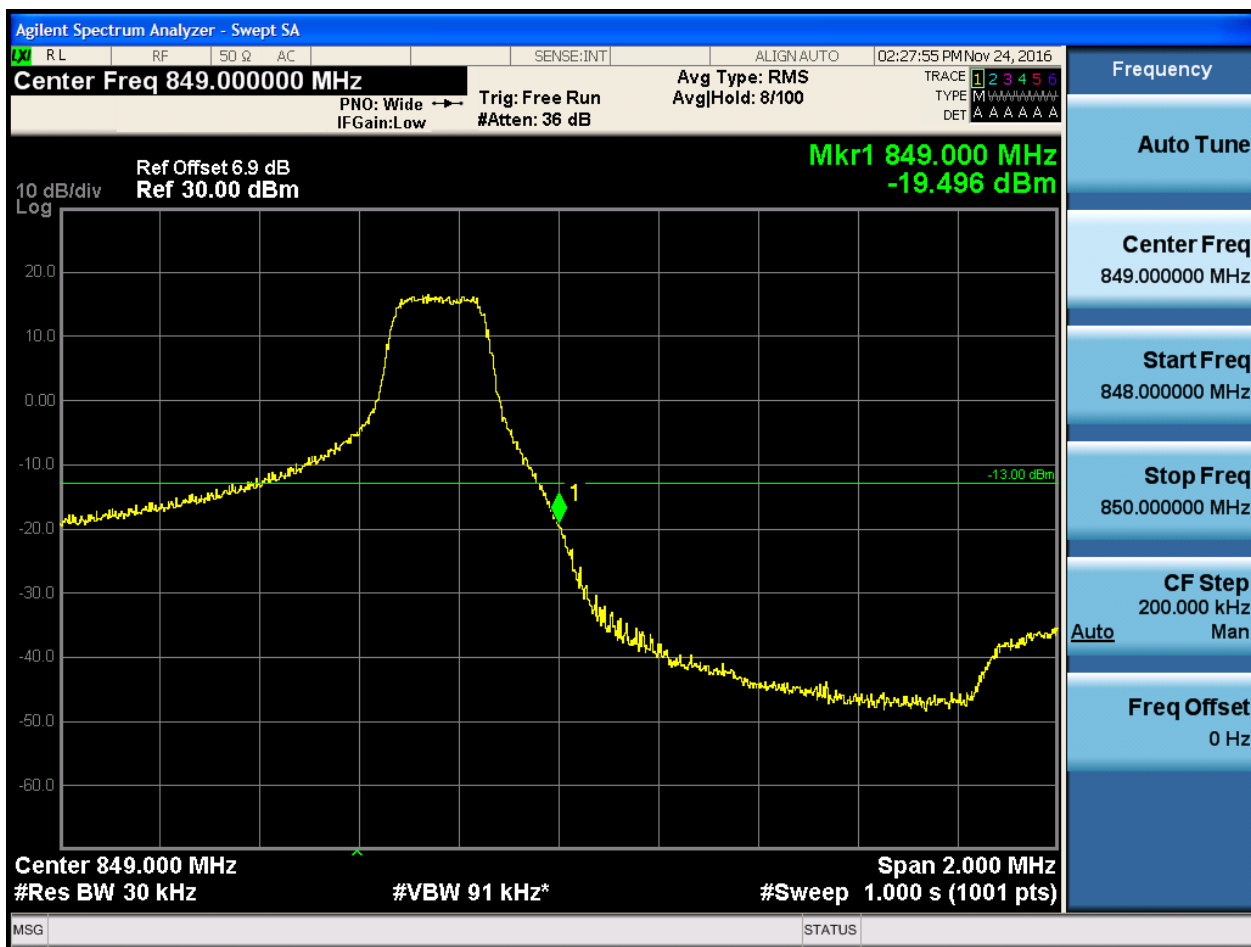
5.1.1.1.2.2 Test Channel = HCH

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 02:28:09 PM Nov 24, 2016

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

10 dB/div
Log

Mkr1 849.000 MHz
-31.440 dBm

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

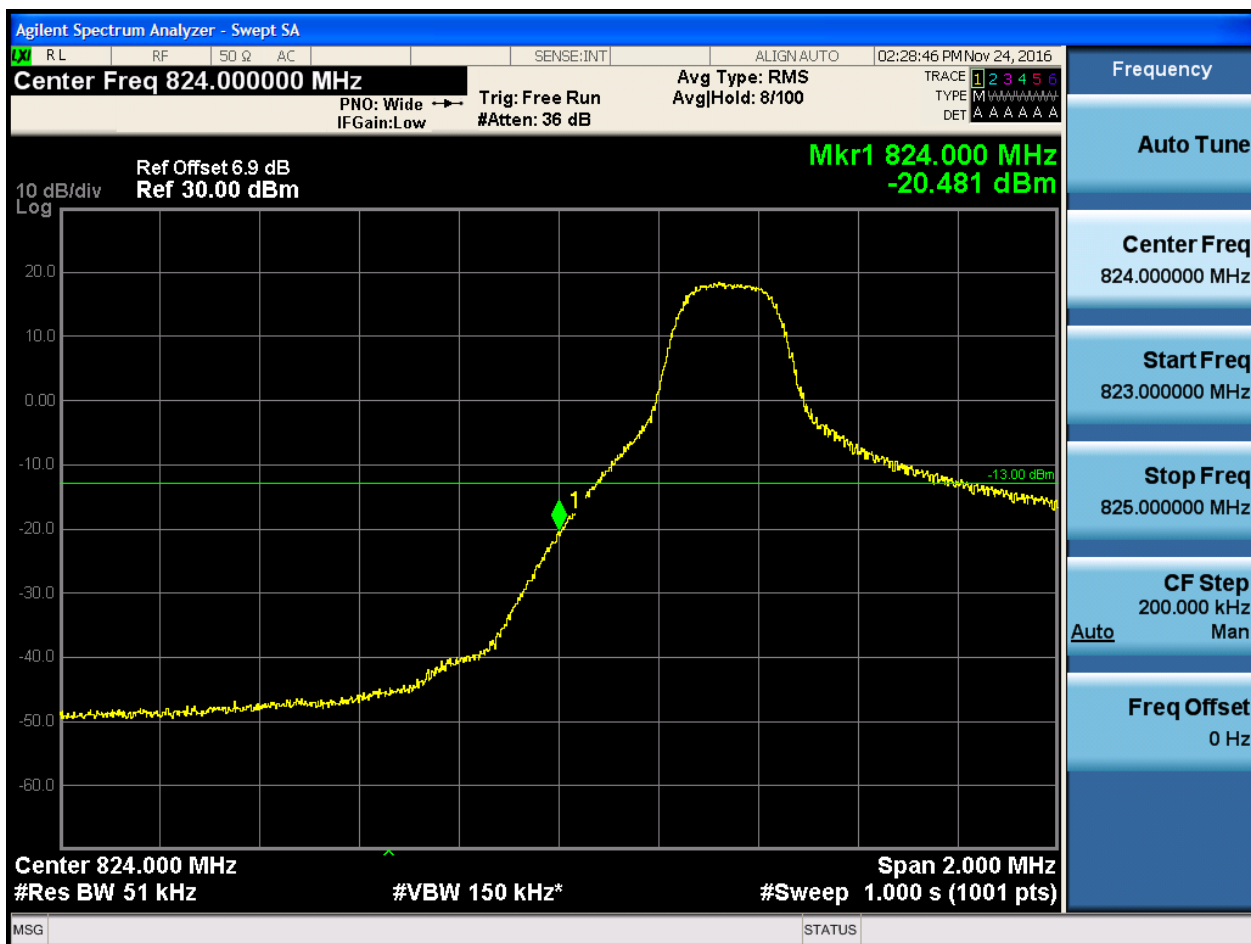




5.1.1.1.3 Test Bandwidth = 5

5.1.1.1.3.1 Test Channel = LCH

5.1.1.1.3.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:29:00 PM Nov 24, 2016

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 A

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 824.000 MHz
-39.063 dBm

-13.00 dBm

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 02:29:29 PM Nov 24, 2016

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 W W
DET A A A A A A A

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-29.949 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)

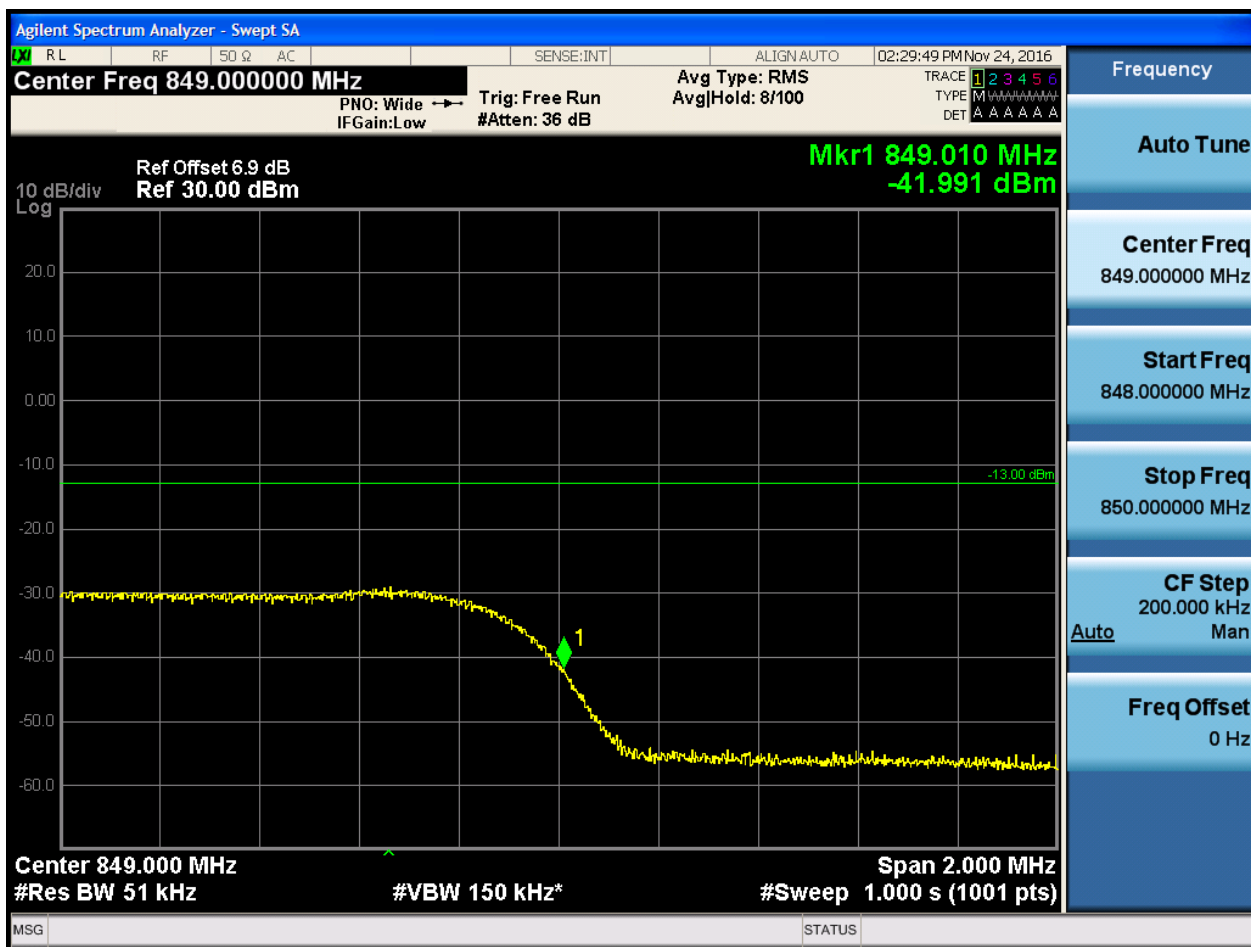
MSG STATUS

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



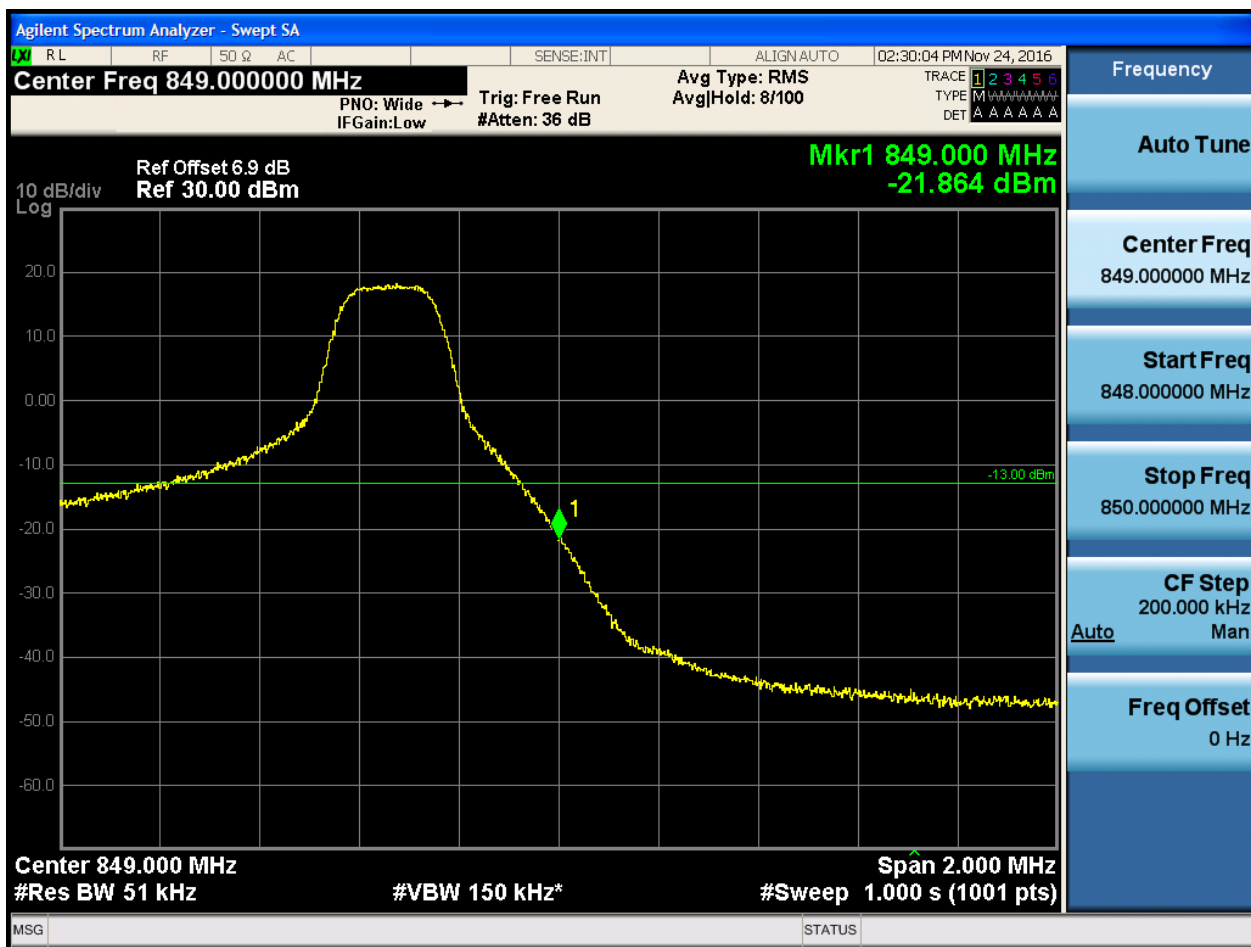
5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#24



5.1.1.1.3.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:30:34 PM Nov 24, 2016

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

Ref Offset 6.9 dB Ref 30.00 dBm

Mkr1 849.010 MHz -30.475 dBm

10 dB/div Log

Center 849.000 MHz Span 2.000 MHz
 #Res BW 51 kHz #VBW 150 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

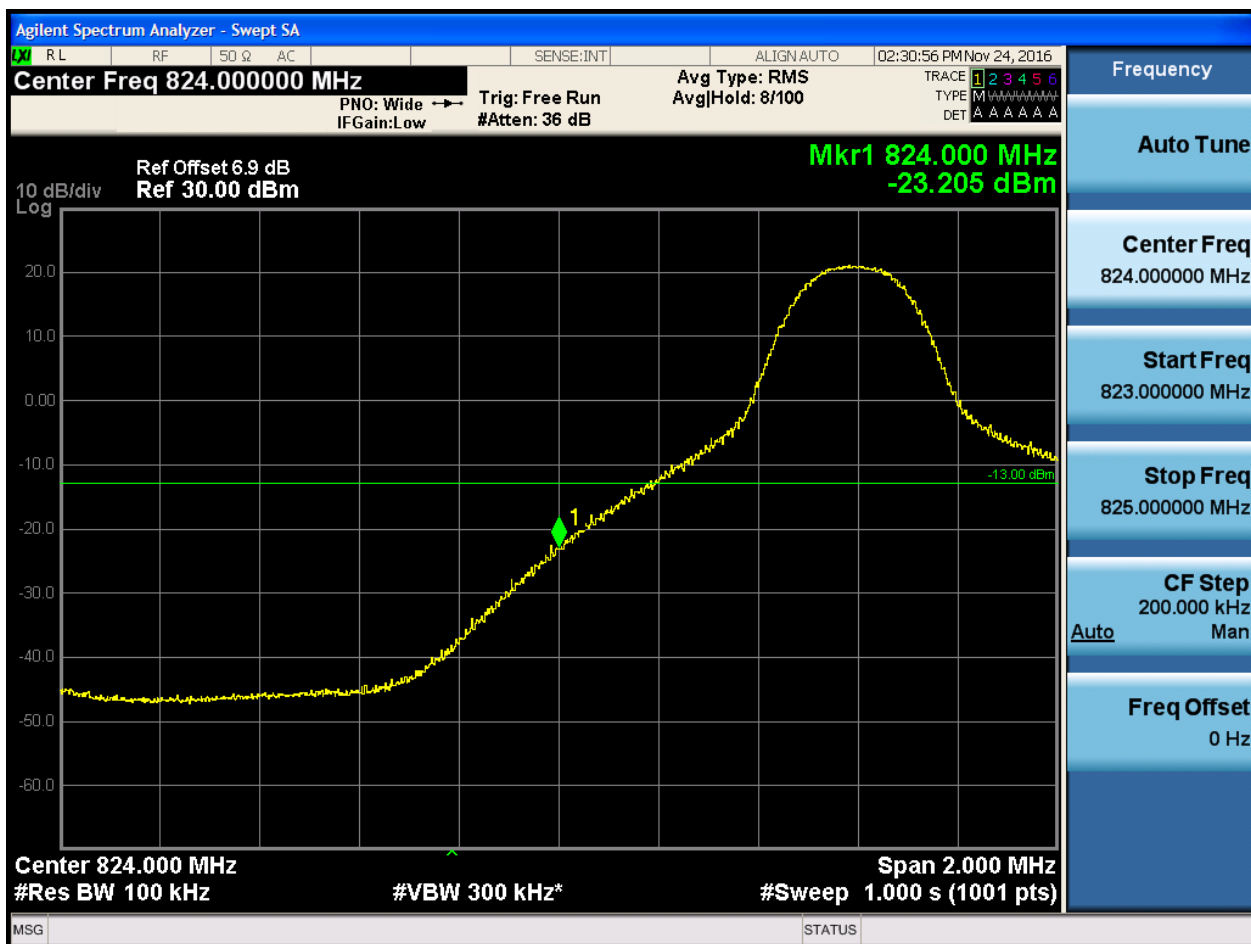
Freq Offset
0 Hz



5.1.1.1.4 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

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:31:10 PM Nov 24, 2016

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
DET A A A A A A

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-39.970 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 02:31:25 PM Nov 24, 2016

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

10 dB/div
Log

Mkr1 823.940 MHz
-32.165 dBm

-13.00 dBm

1

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

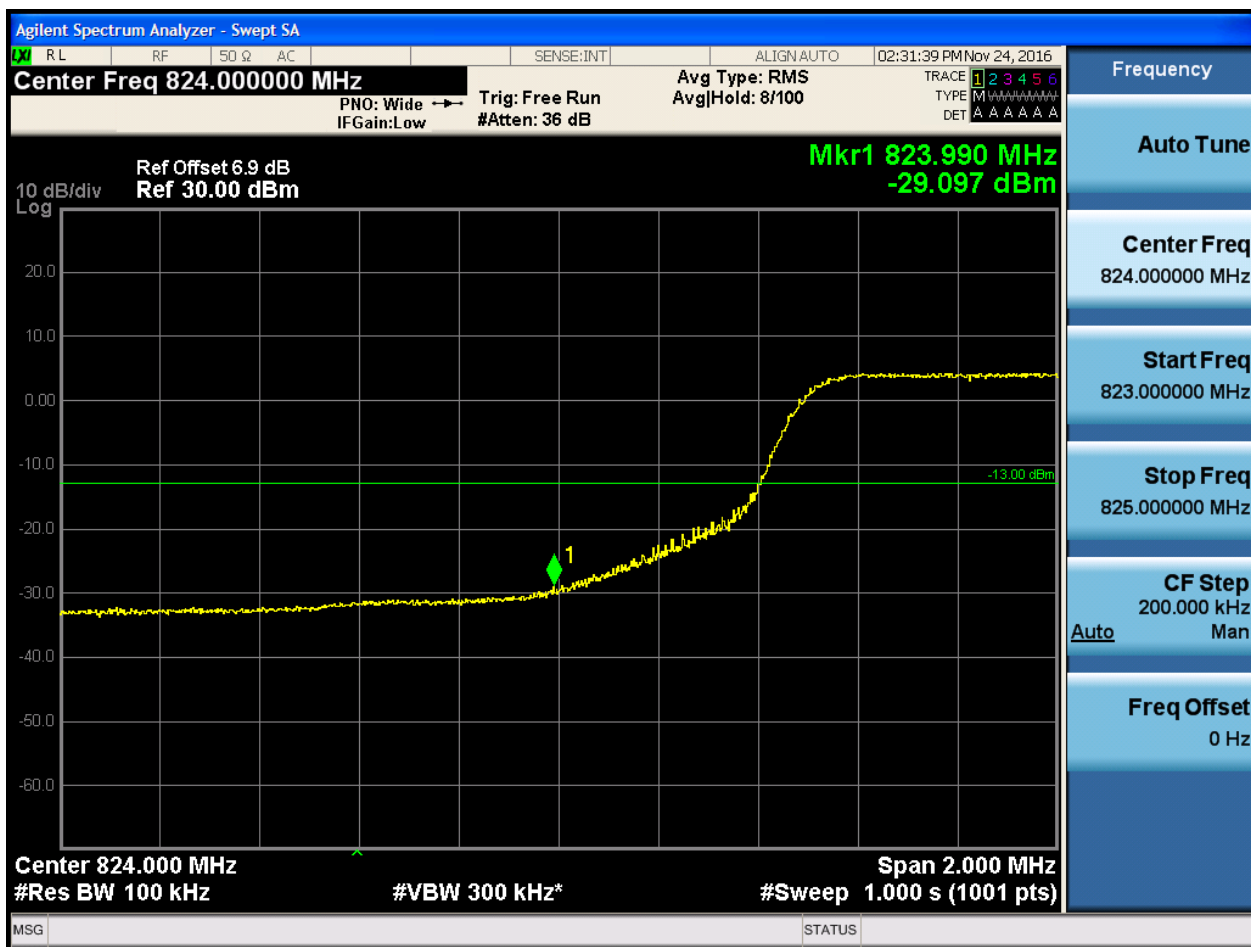
Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



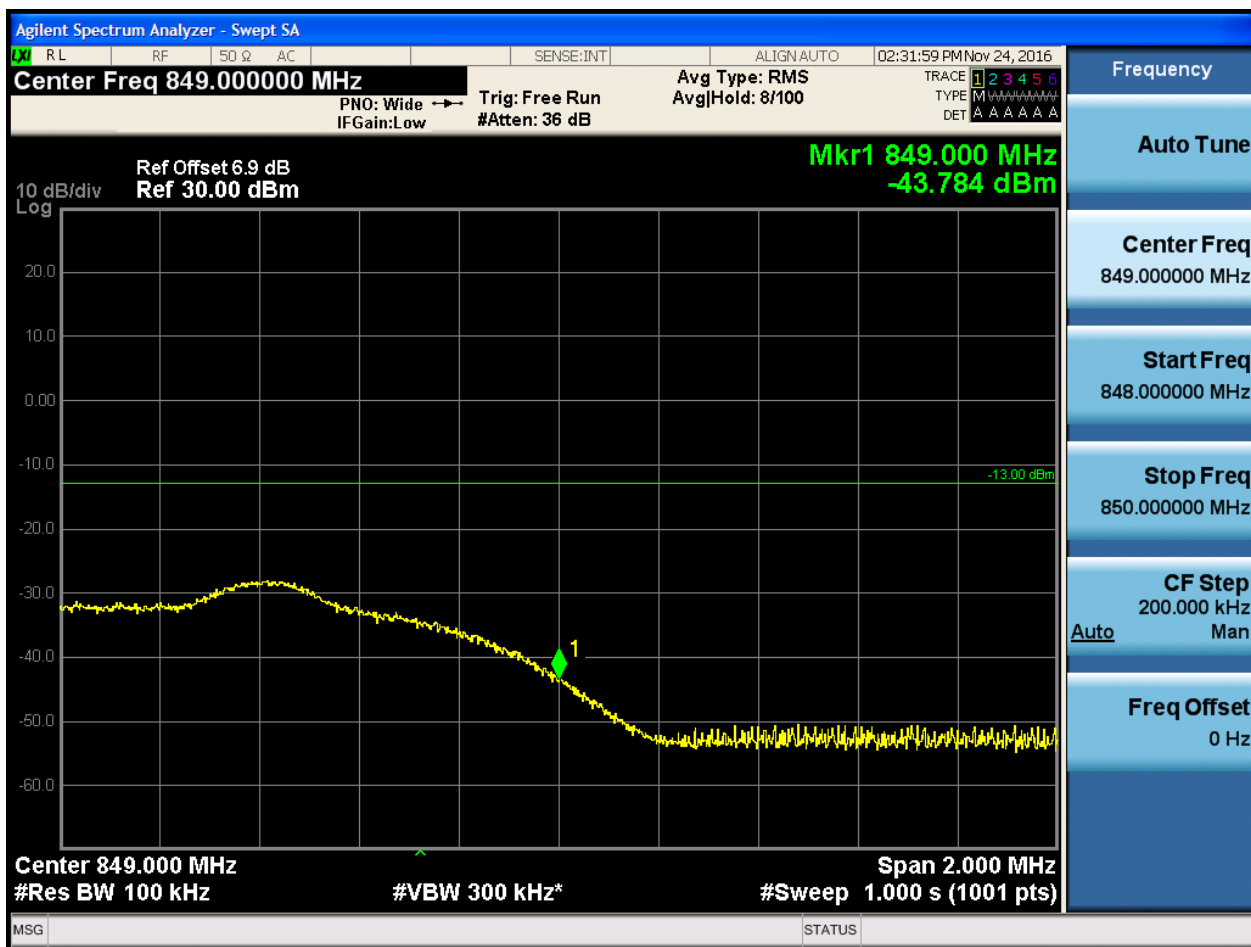
5.1.1.1.4.1.4 Test RB = RB50#0





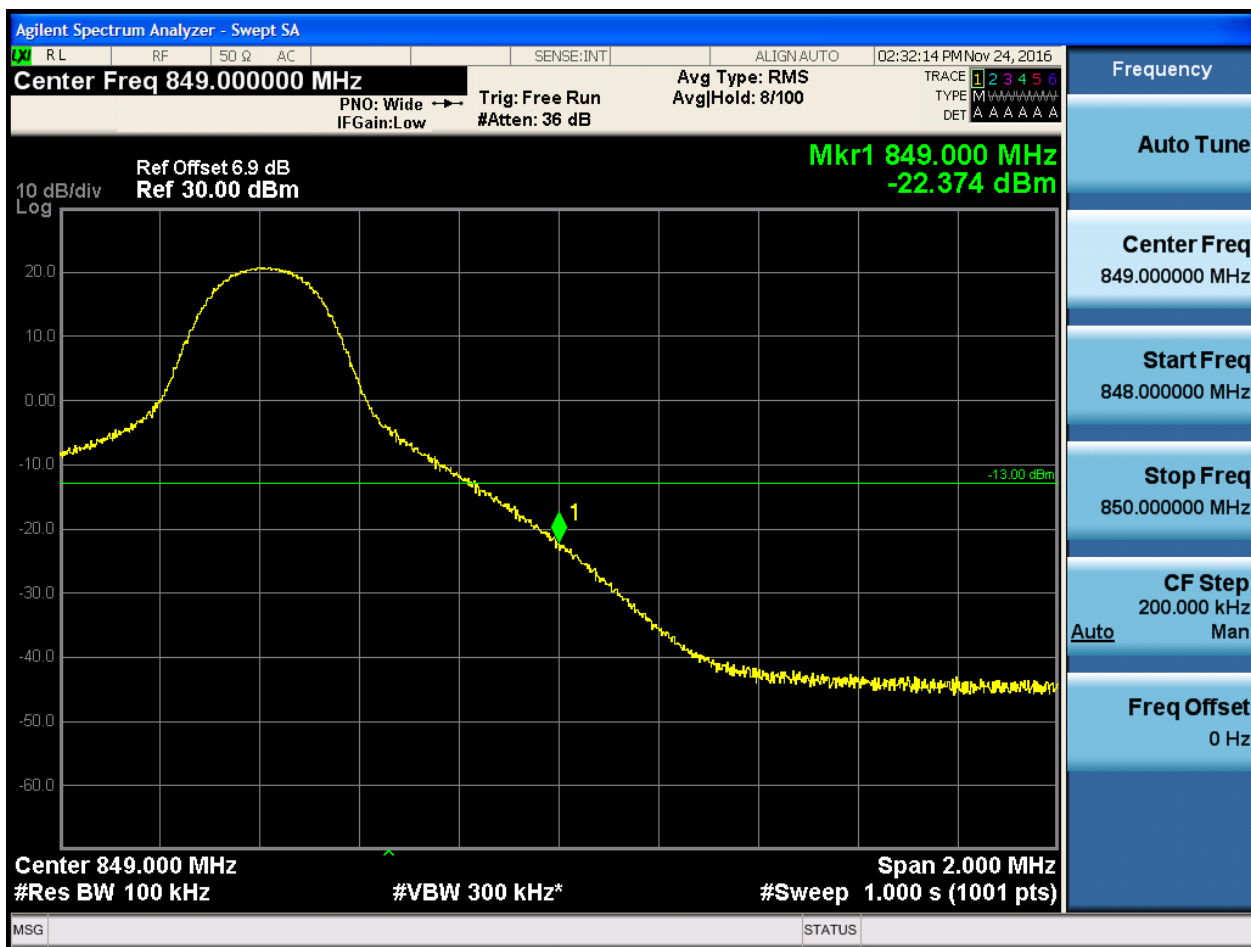
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0

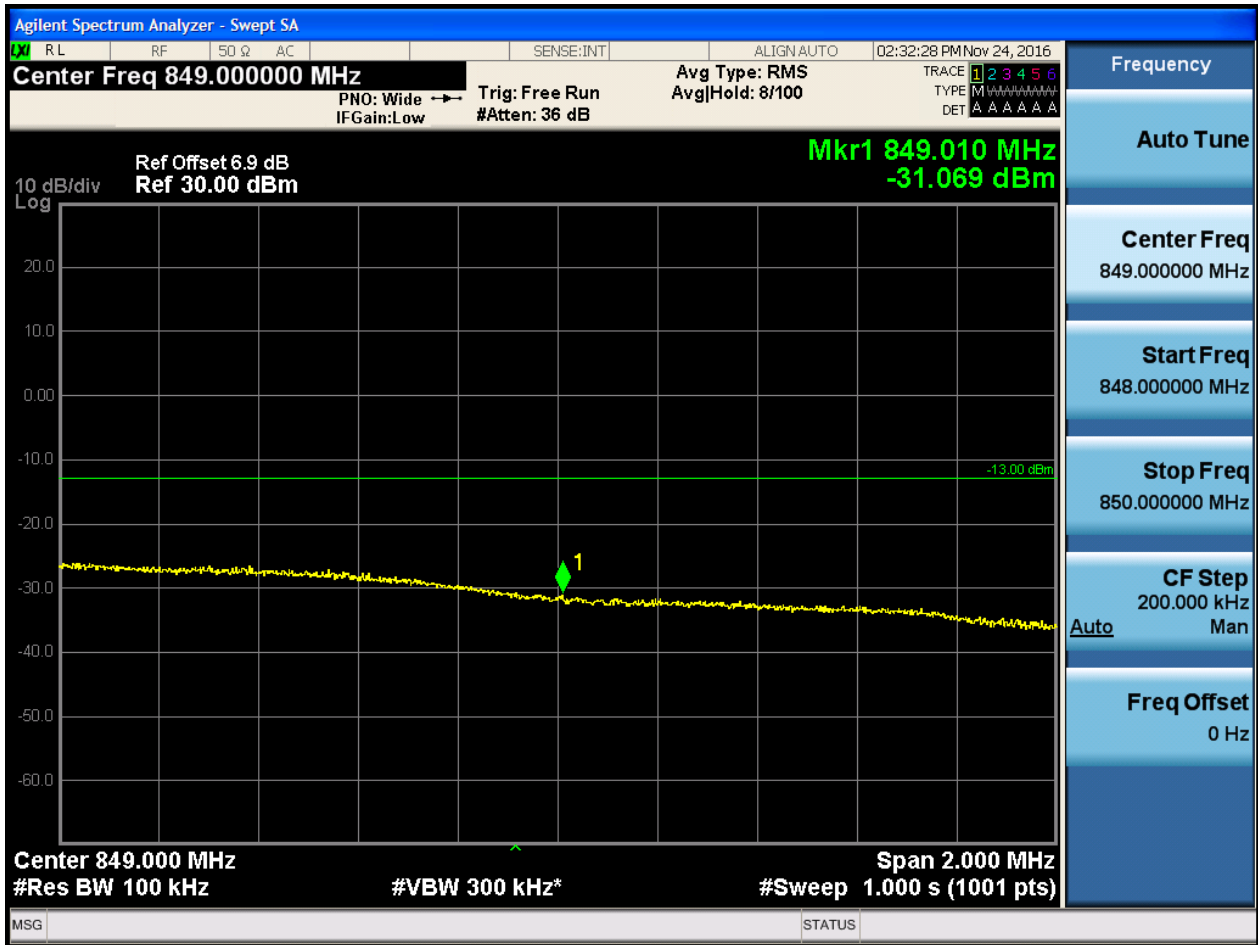




5.1.1.1.4.2.2 Test RB = RB1#49



5.1.1.1.4.2.3 Test RB = RB25#13





5.1.1.1.4.2.4 Test RB = RB50#0



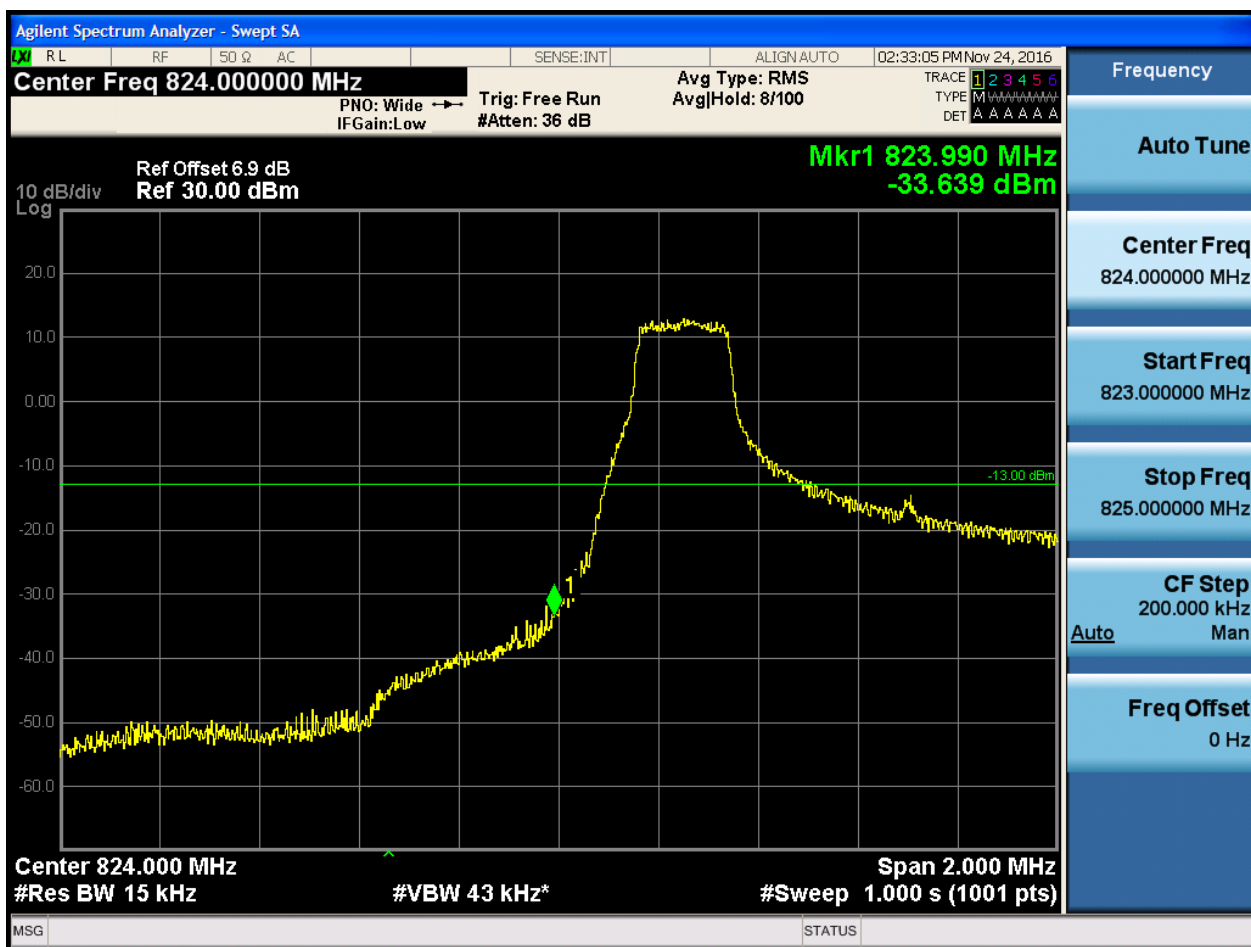


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 1.4

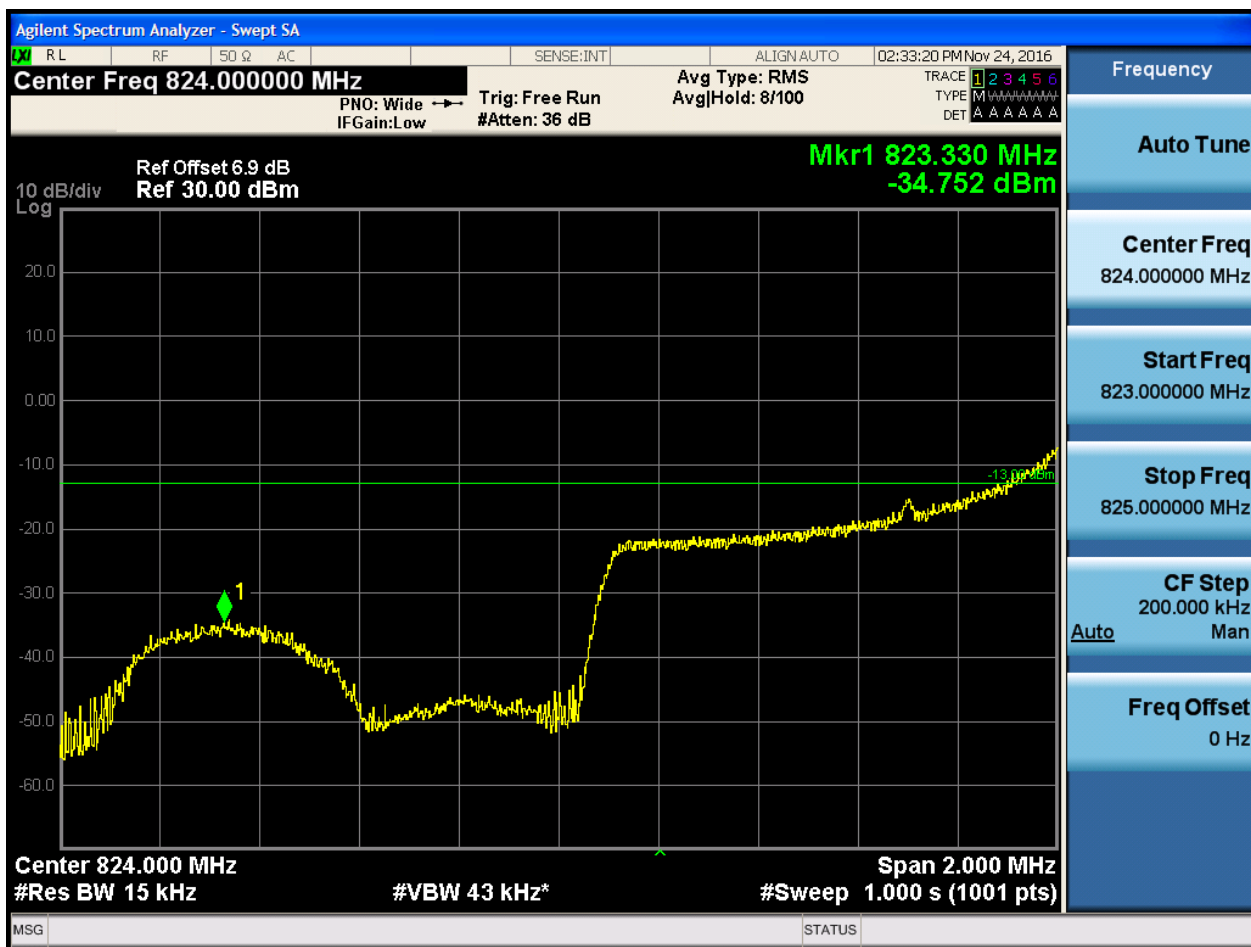
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0

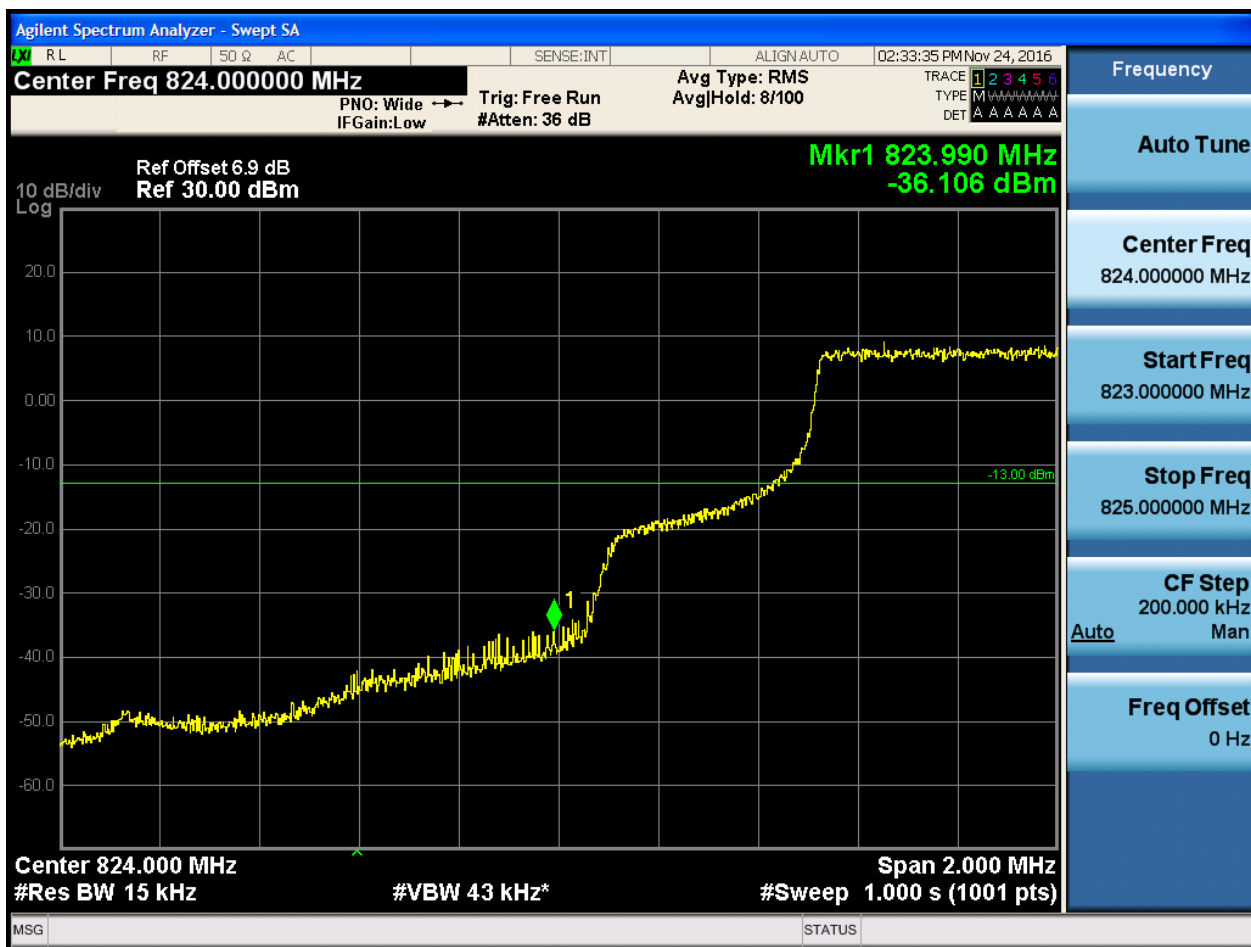




5.1.1.2.1.1.2 Test RB = RB1#5

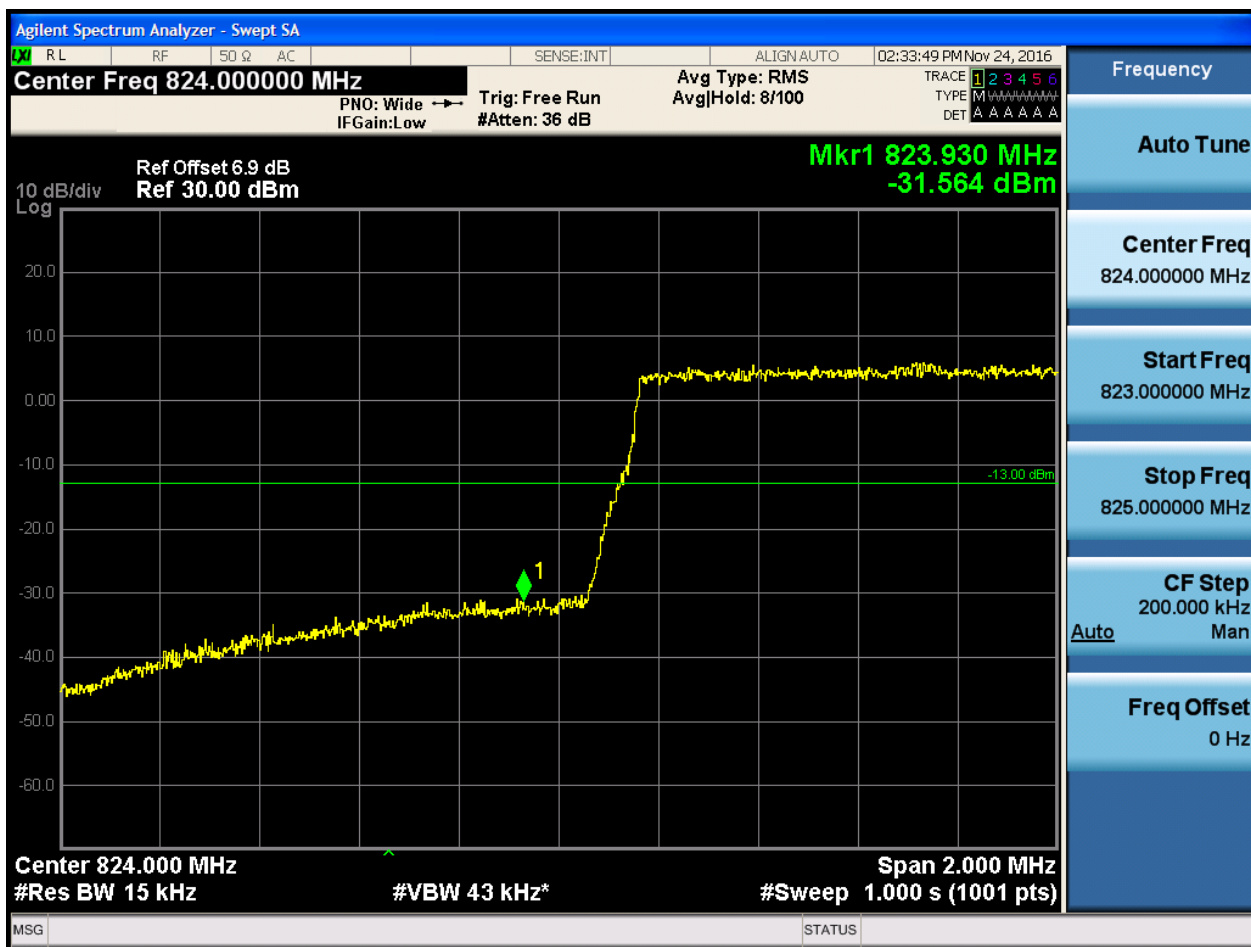


5.1.1.2.1.1.3 Test RB = RB3#2





5.1.1.2.1.1.4 Test RB = RB6#0



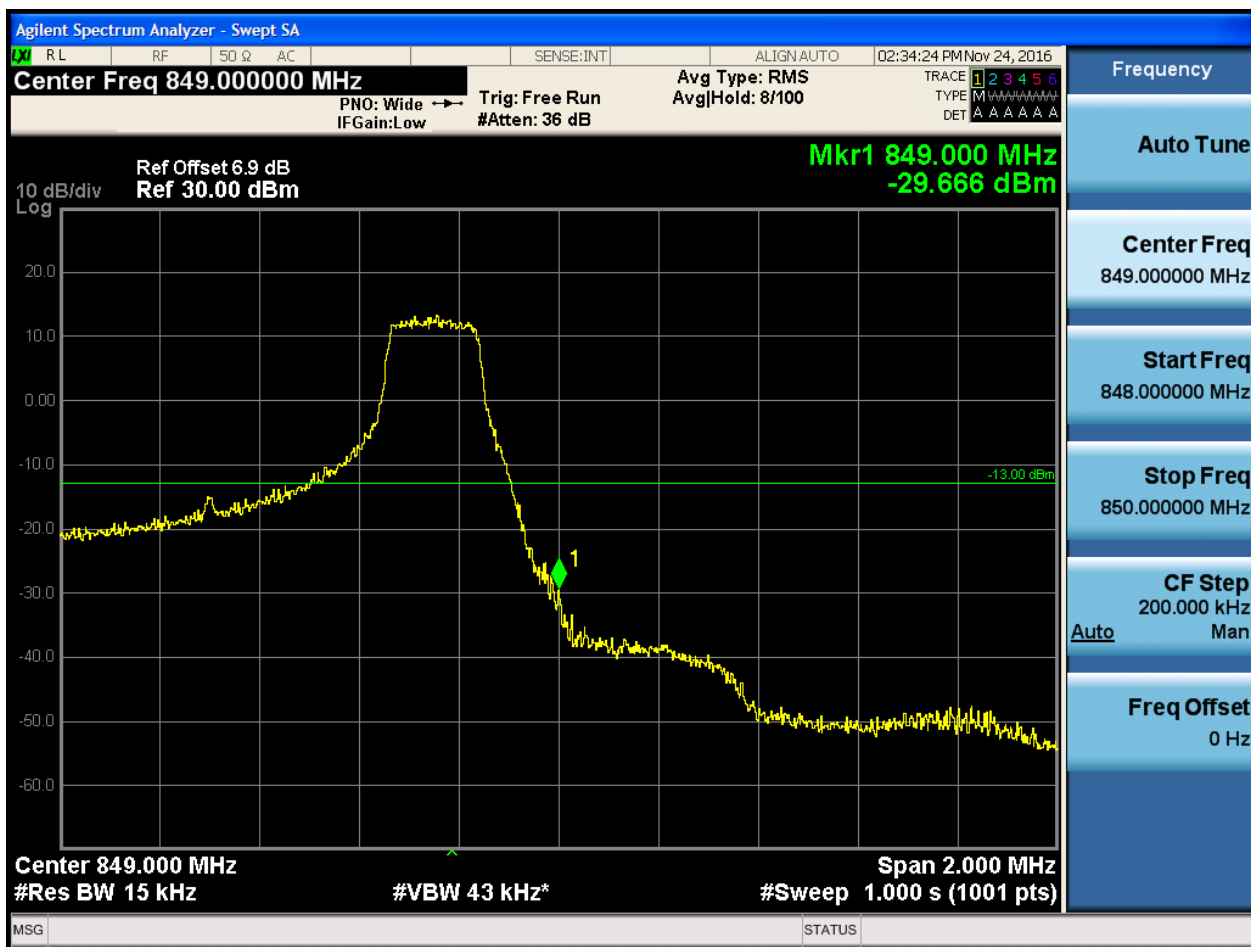
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





5.1.1.2.1.2.2 Test RB = RB1#5





5.1.1.2.1.2.3 Test RB = RB3#2





5.1.1.2.1.2.4 Test RB = RB6#0

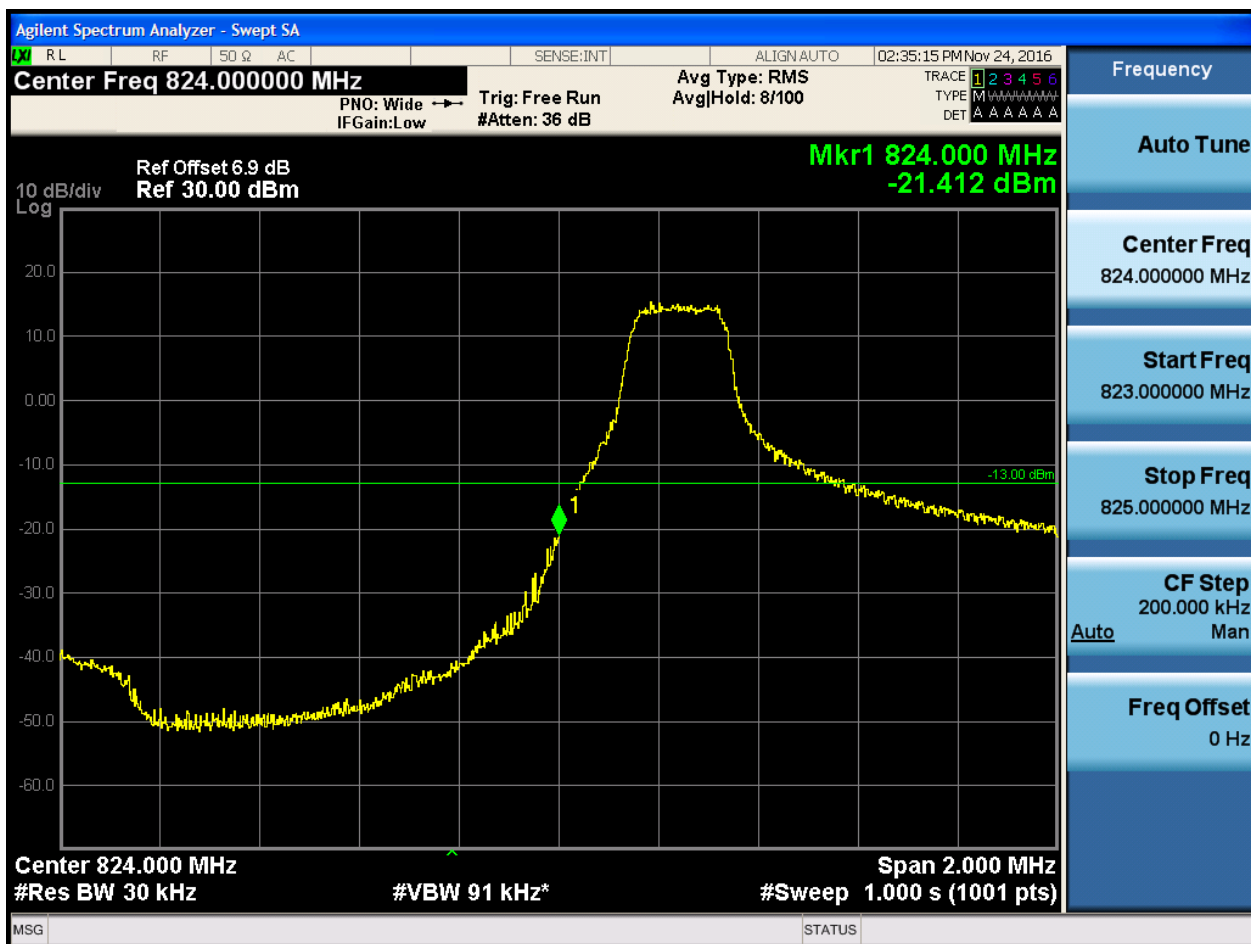




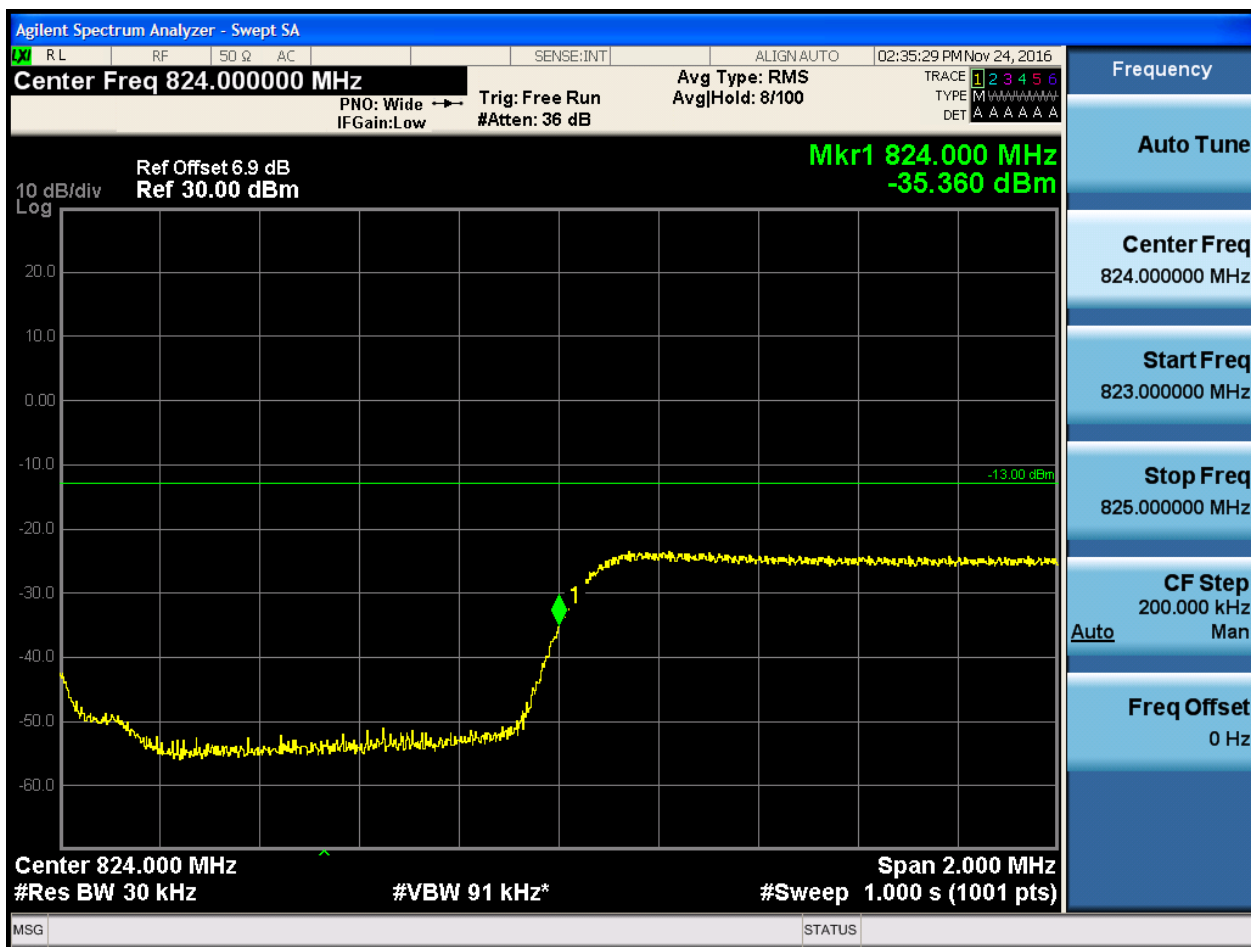
5.1.1.2.2 Test Bandwidth = 3

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0



5.1.1.2.2.1.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:35:44 PM Nov 24, 2016

Center Freq 824.000000 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 824.000 MHz
-32.253 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 02:35:58 PM Nov 24, 2016

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
-28.748 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

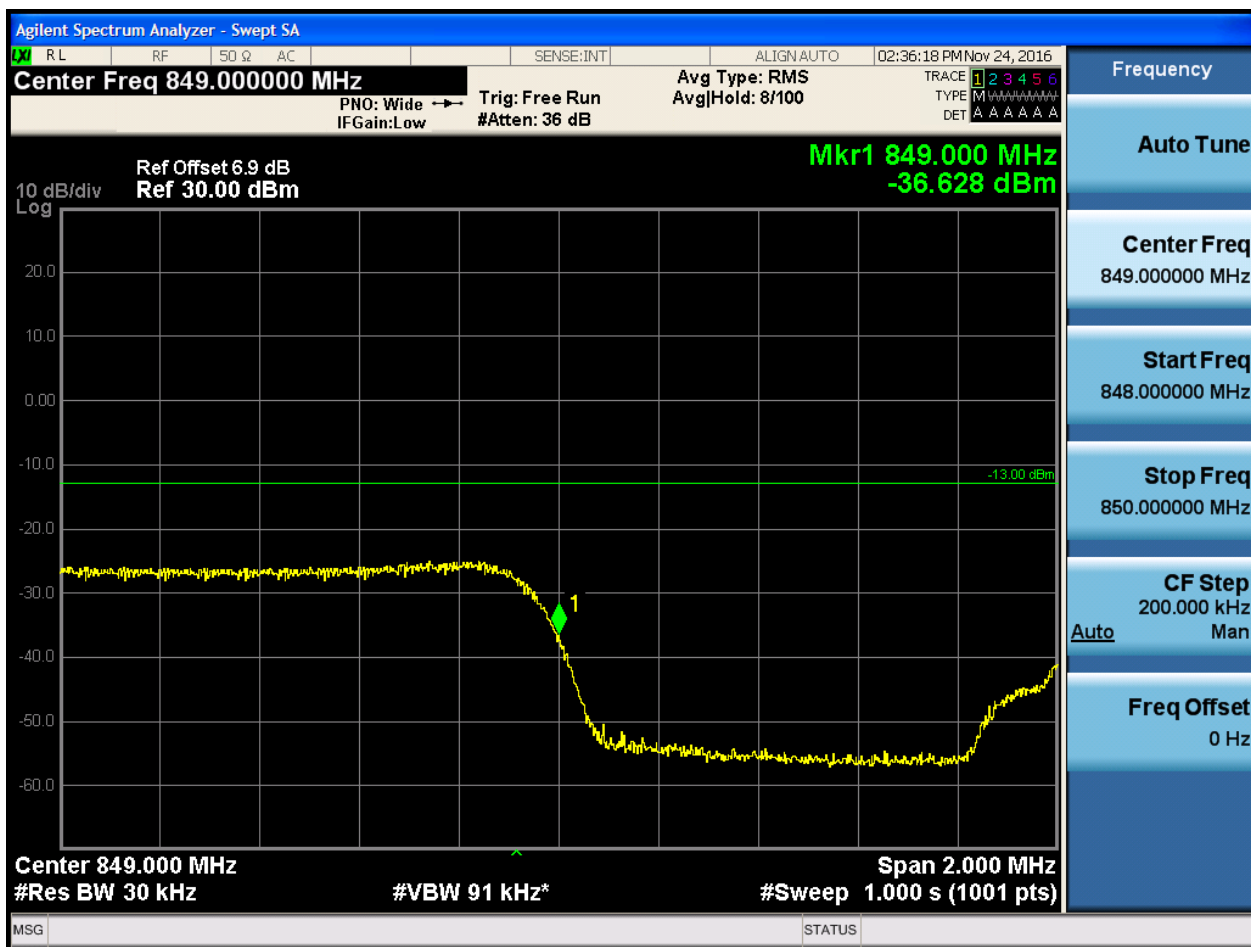
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



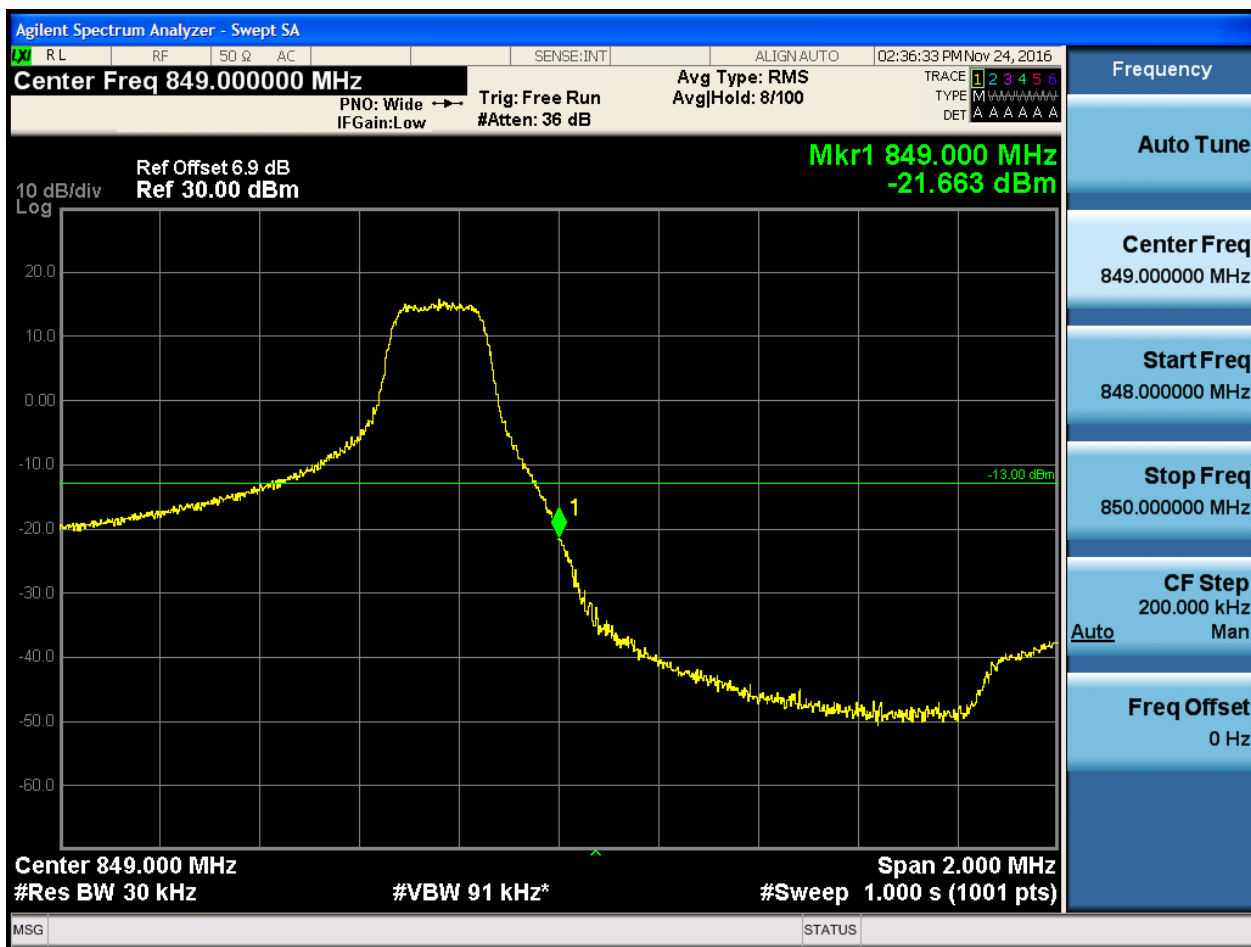
5.1.1.2.2.2 Test Channel = HCH

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

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:36:47 PM Nov 24, 2016

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 849.010 MHz
-30.447 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

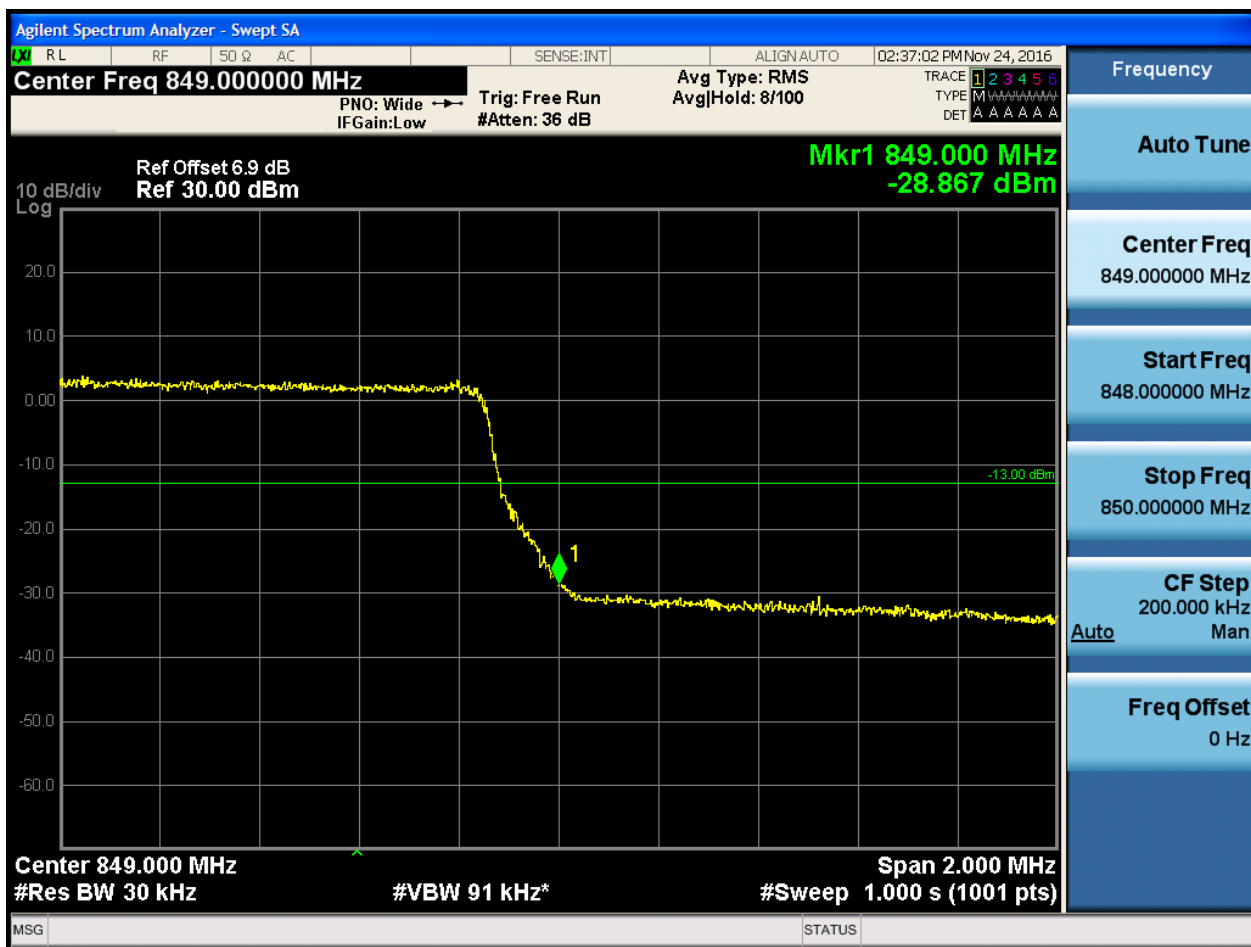
Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



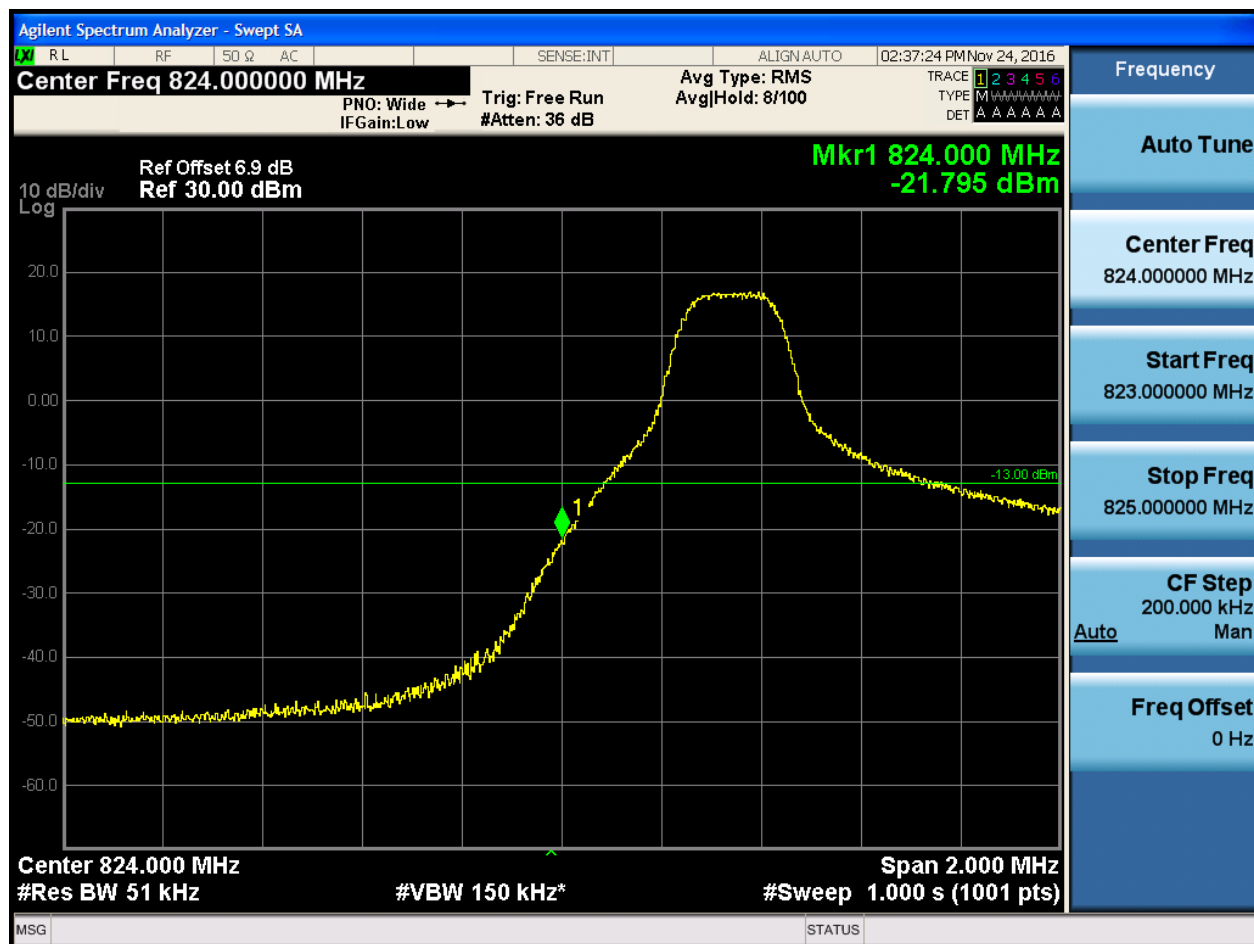
5.1.1.2.2.4 Test RB = RB15#0



5.1.1.2.3 Test Bandwidth = 5

5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:37:38 PM Nov 24, 2016

Center Freq 824.000000 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
DET A A A A A A

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-39.386 dBm

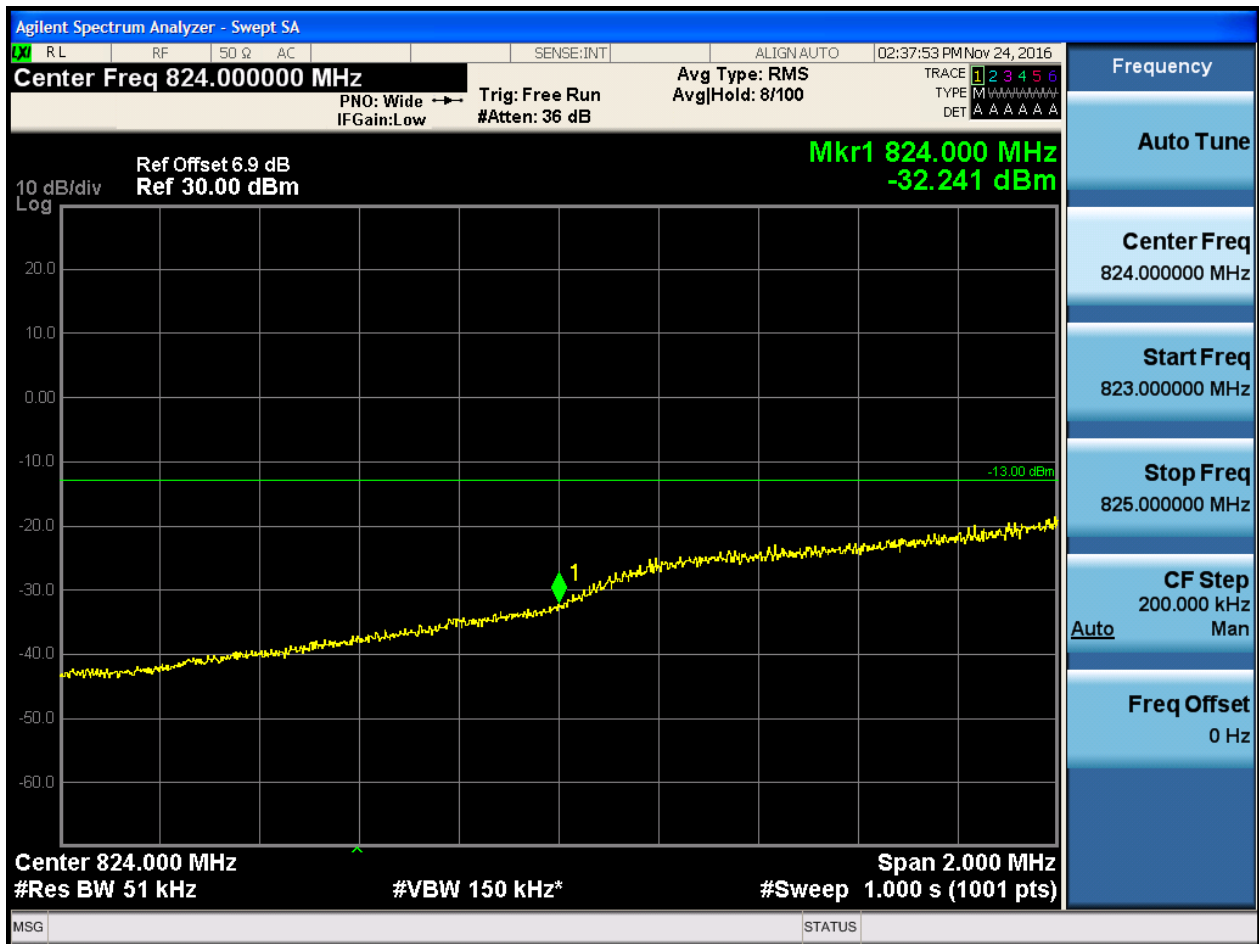
10 dB/div
Log

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

MSG STATUS

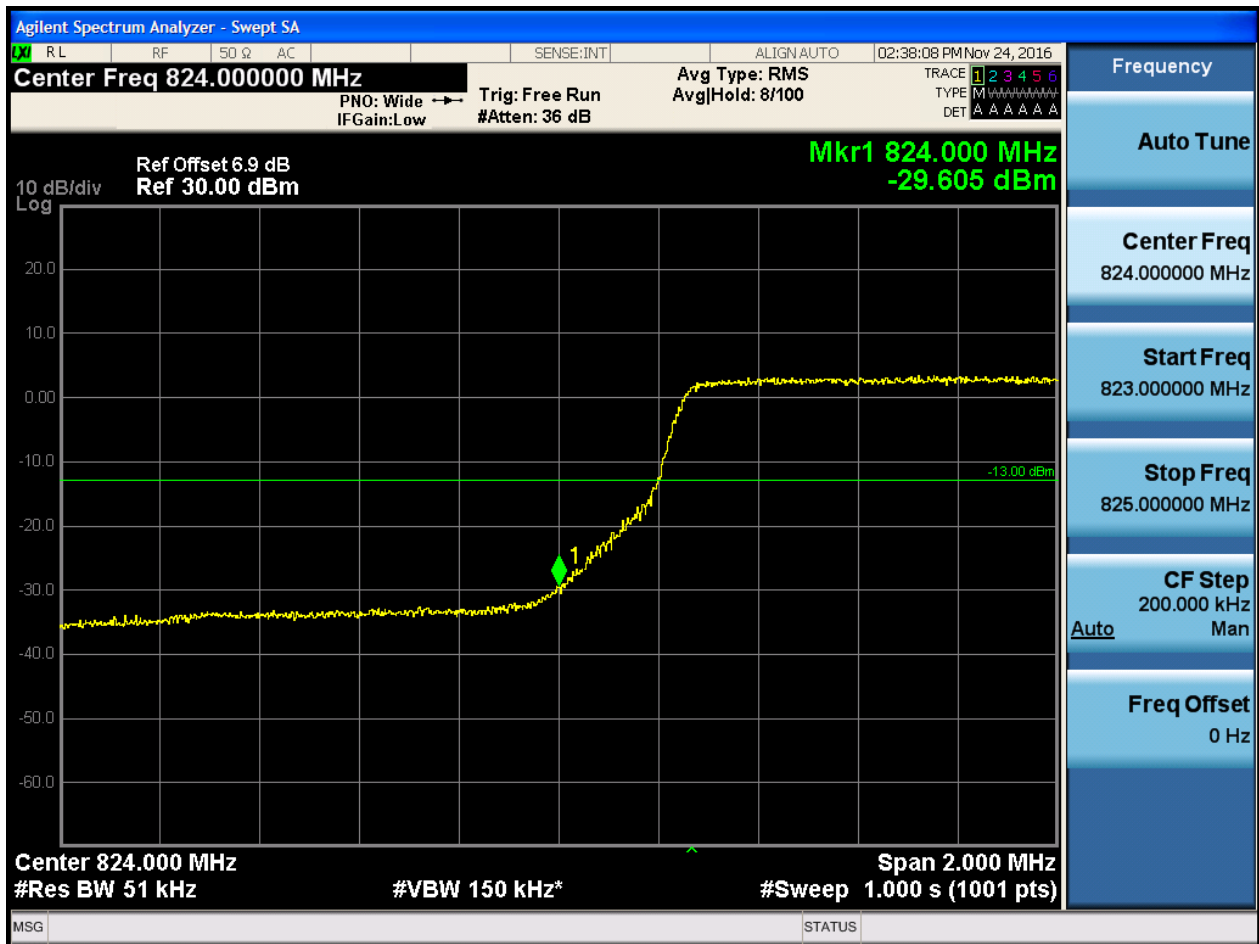


5.1.1.2.3.1.3 Test RB = RB12#6





5.1.1.2.3.1.4 Test RB = RB25#0





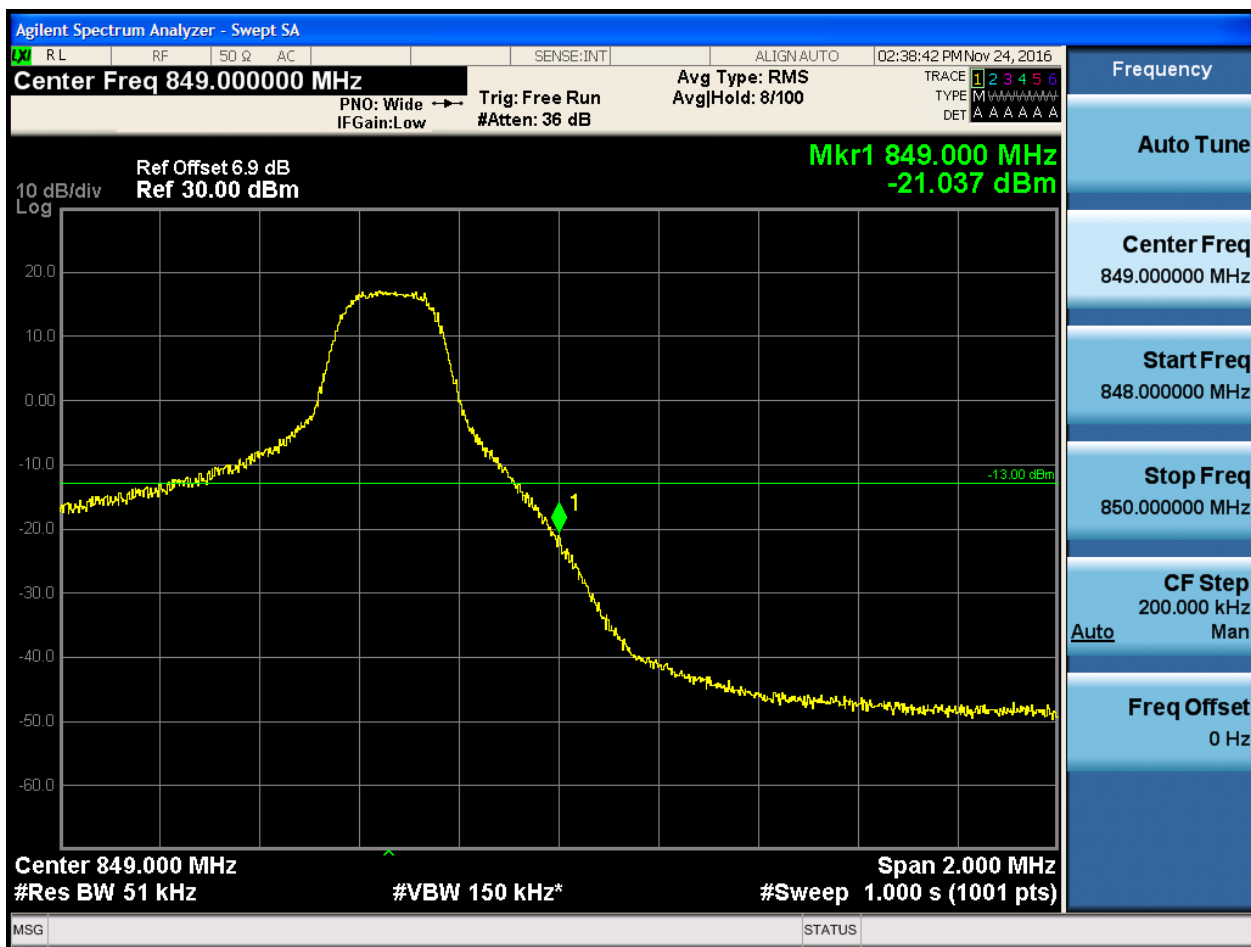
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#24

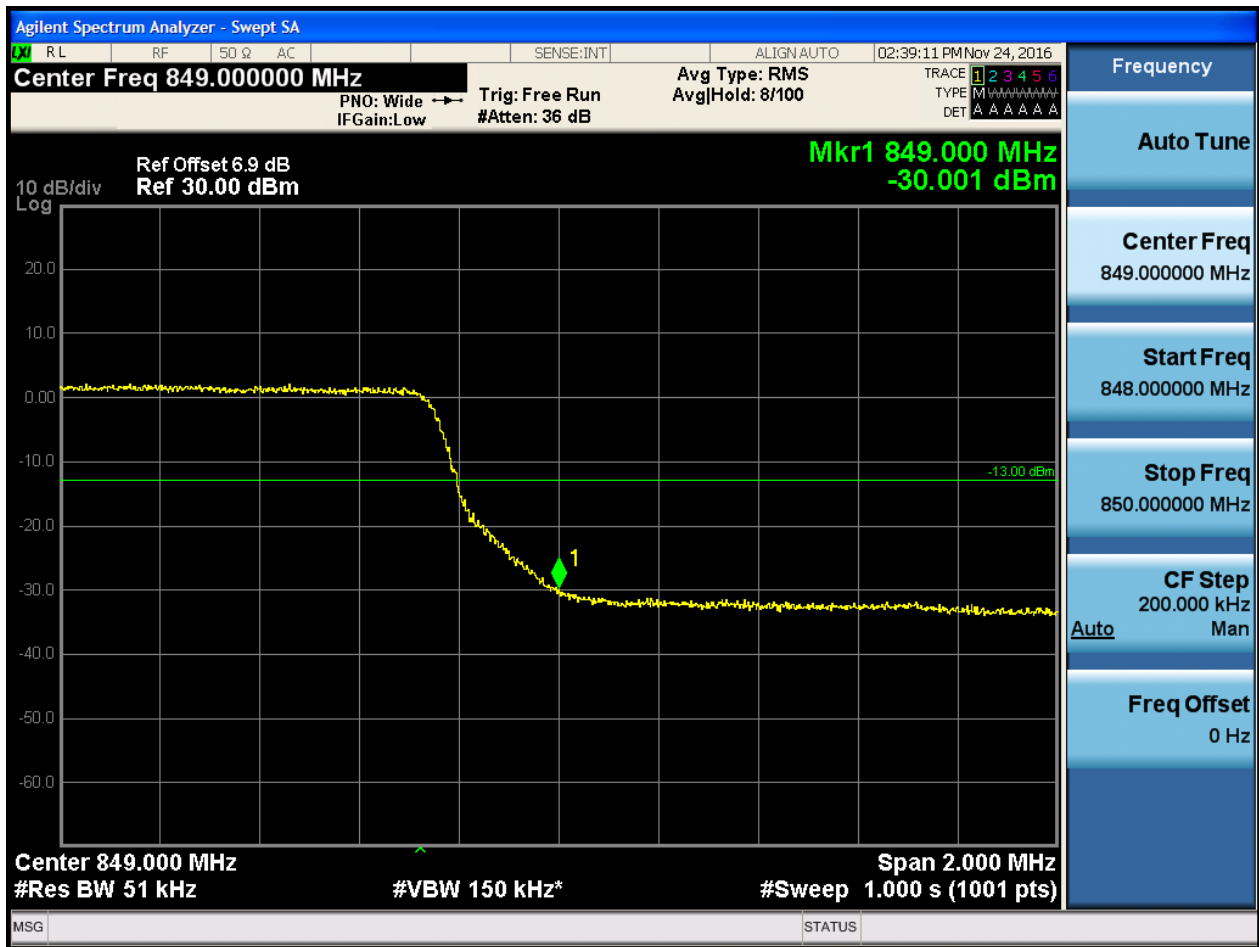


5.1.1.2.3.2.3 Test RB = RB12#6





5.1.1.2.3.2.4 Test RB = RB25#0

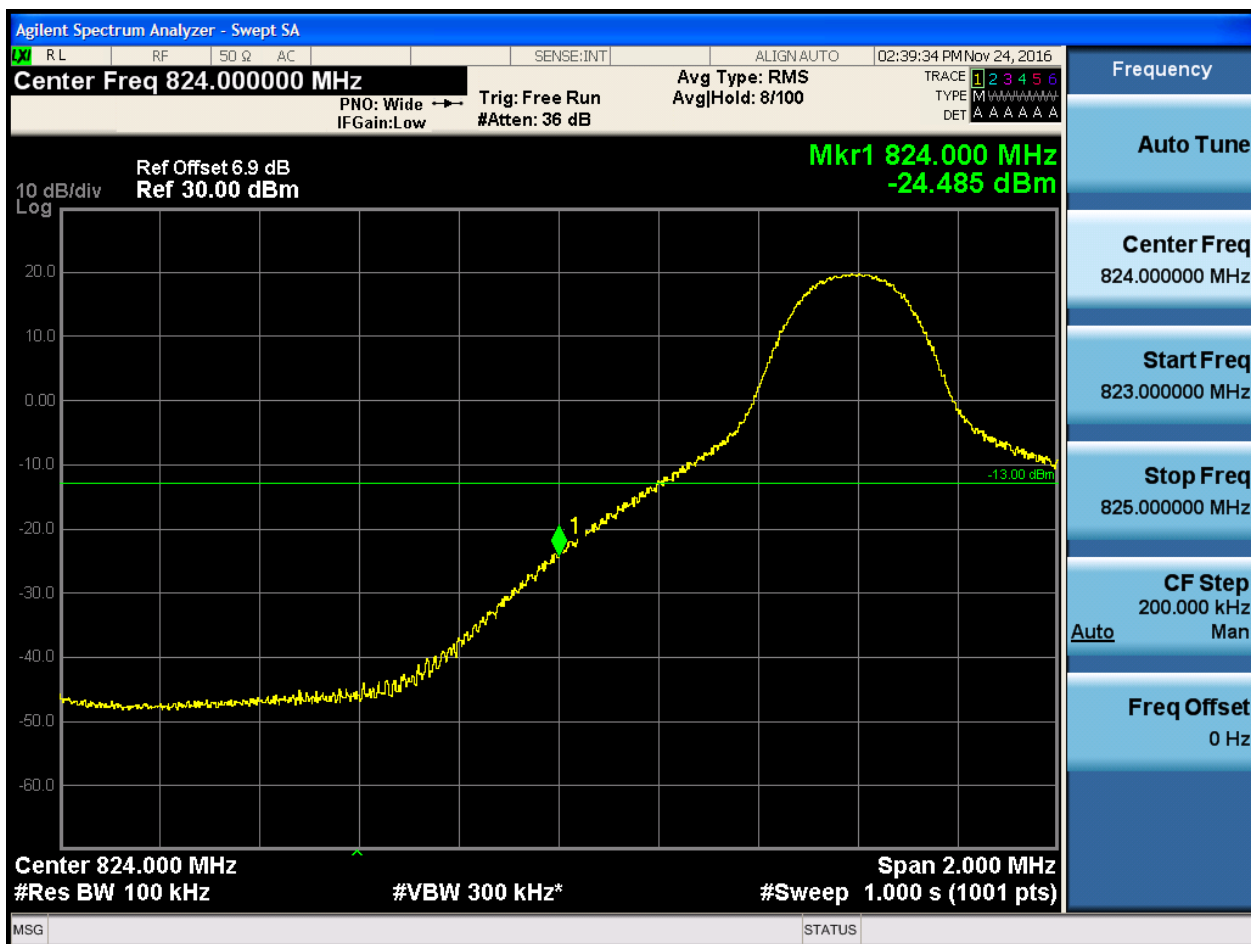




5.1.1.2.4 Test Bandwidth = 10

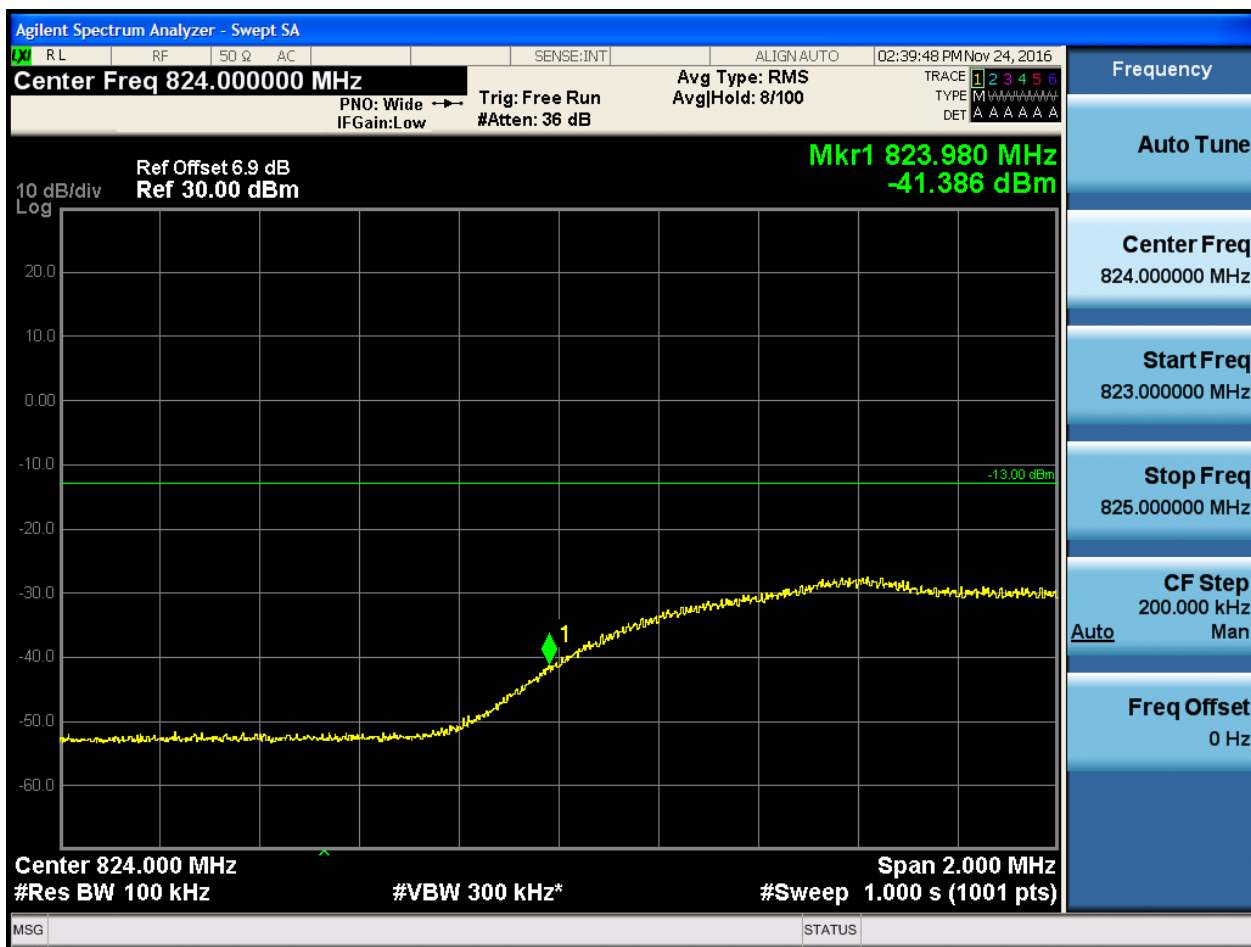
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



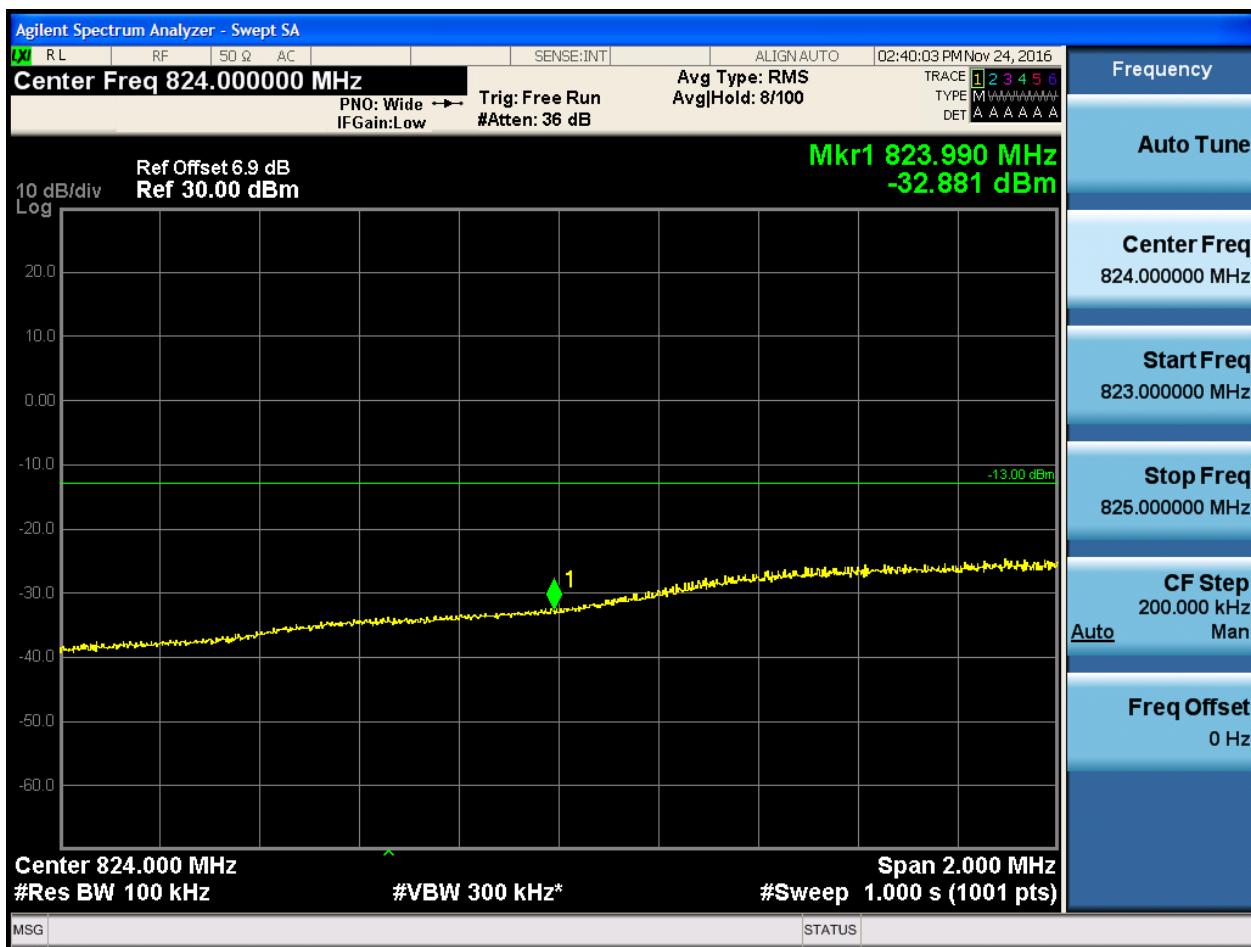


5.1.1.2.4.1.2 Test RB = RB1#49





5.1.1.2.4.1.3 Test RB = RB25#13





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
-30.036 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

Center 824.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG Alignment Completed

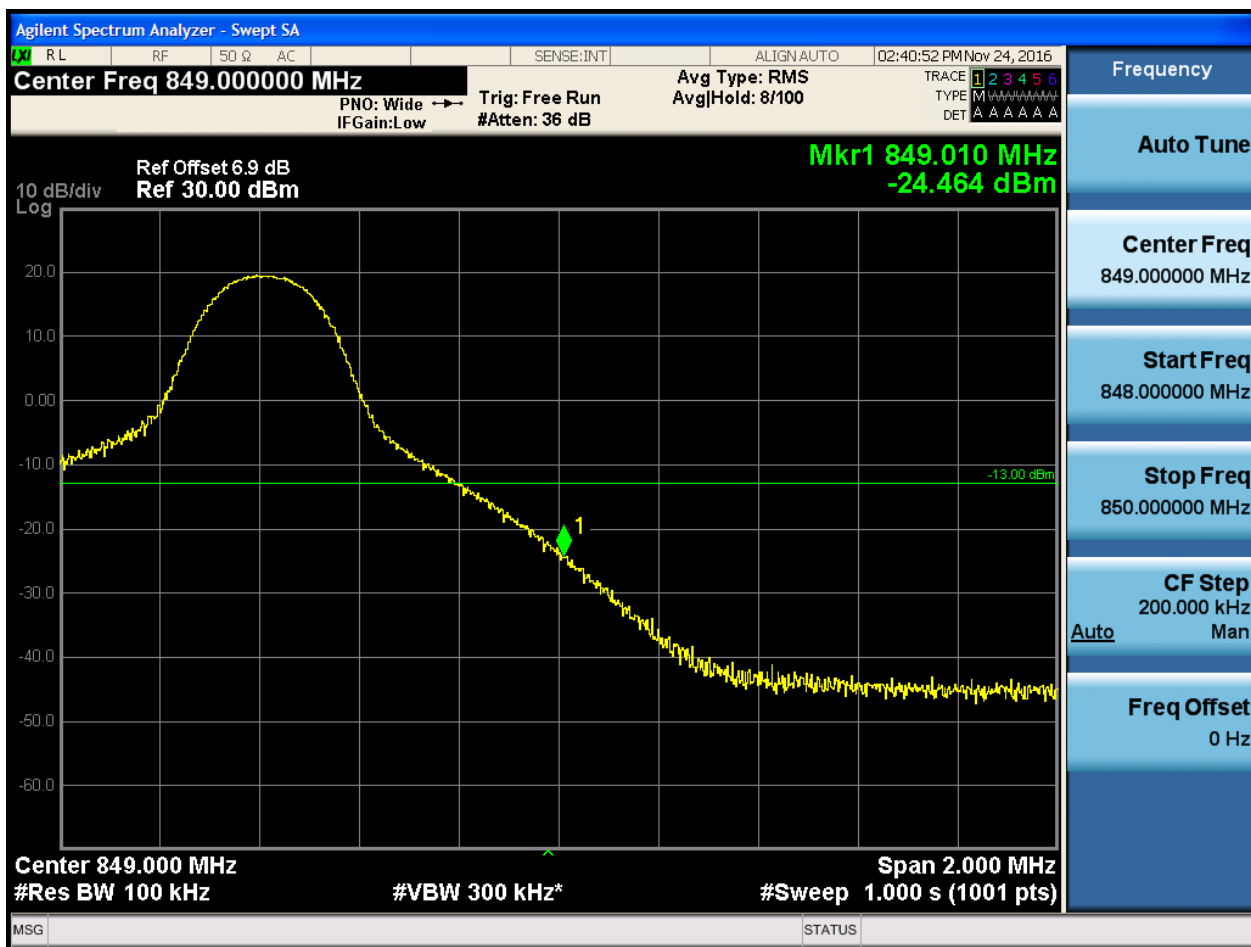
STATUS



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 02:41:07 PM Nov 24, 2016

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 849.020 MHz
-32.052 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



5.1.1.2.4.2.4 Test RB = RB50#0



6Appendix_F: Spurious Emission at Antenna Terminal

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

Part I - Test Plots

6.1 For LTE

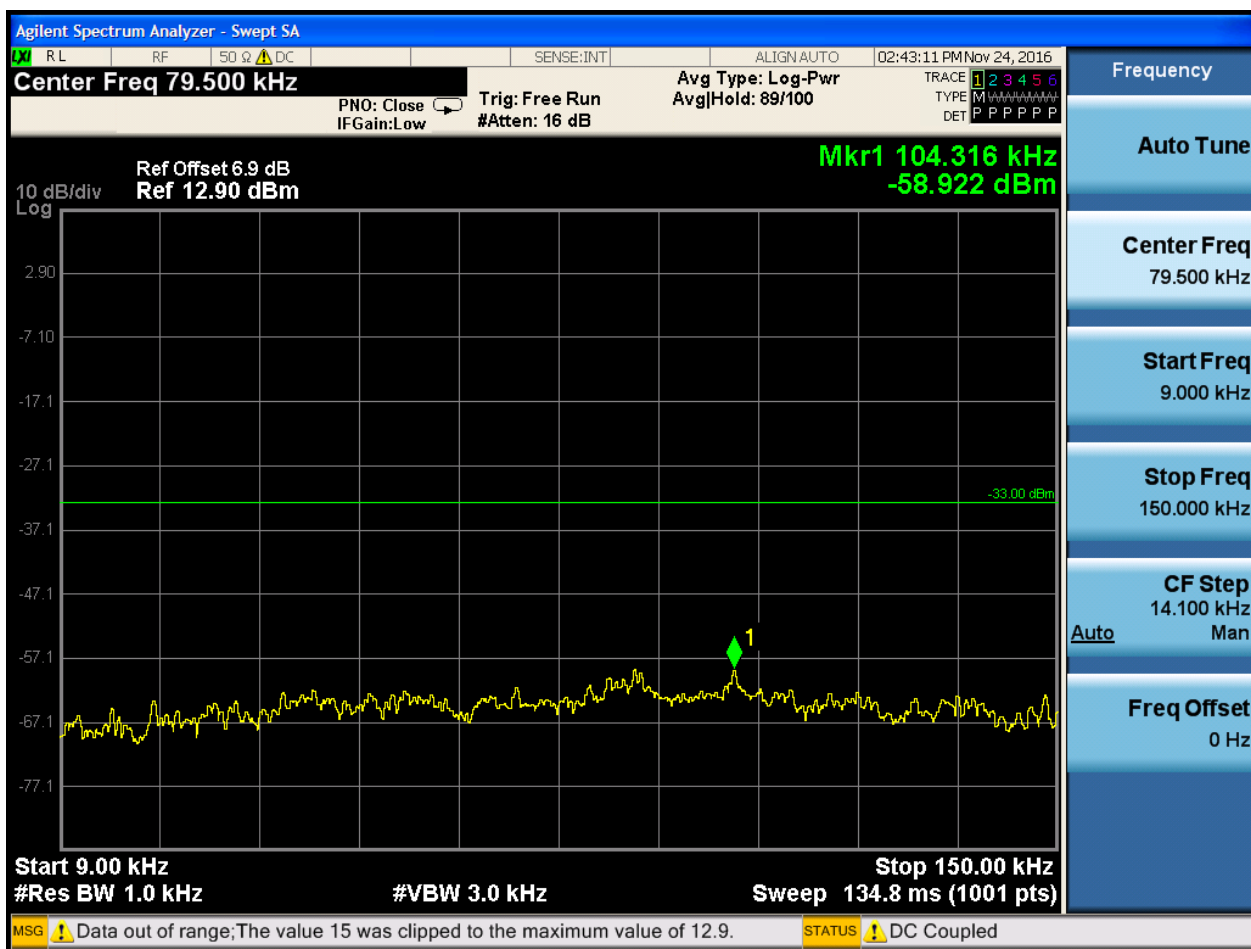
6.1.1 Test Band = BAND5

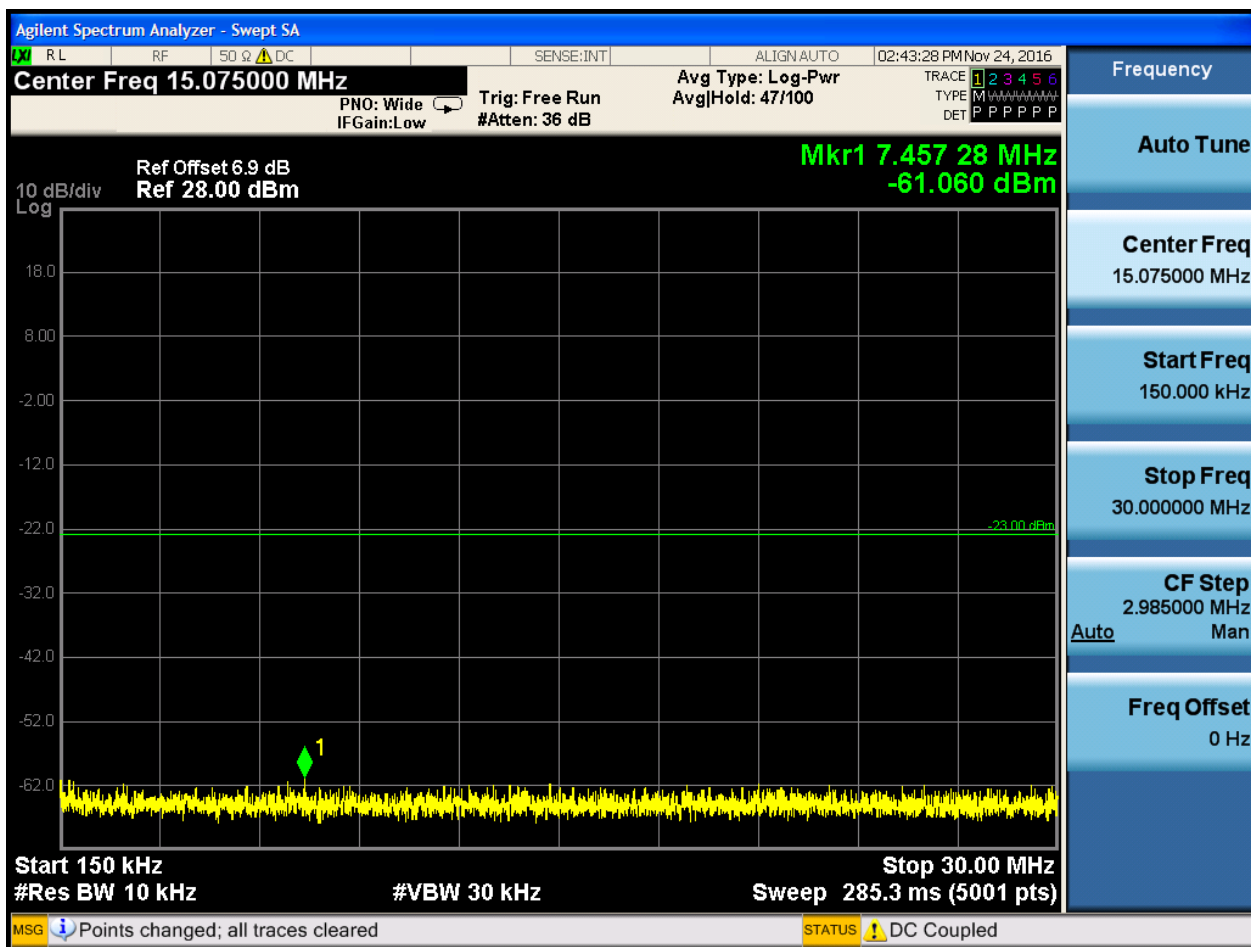
6.1.1.1 Test Mode = LTE/TM1

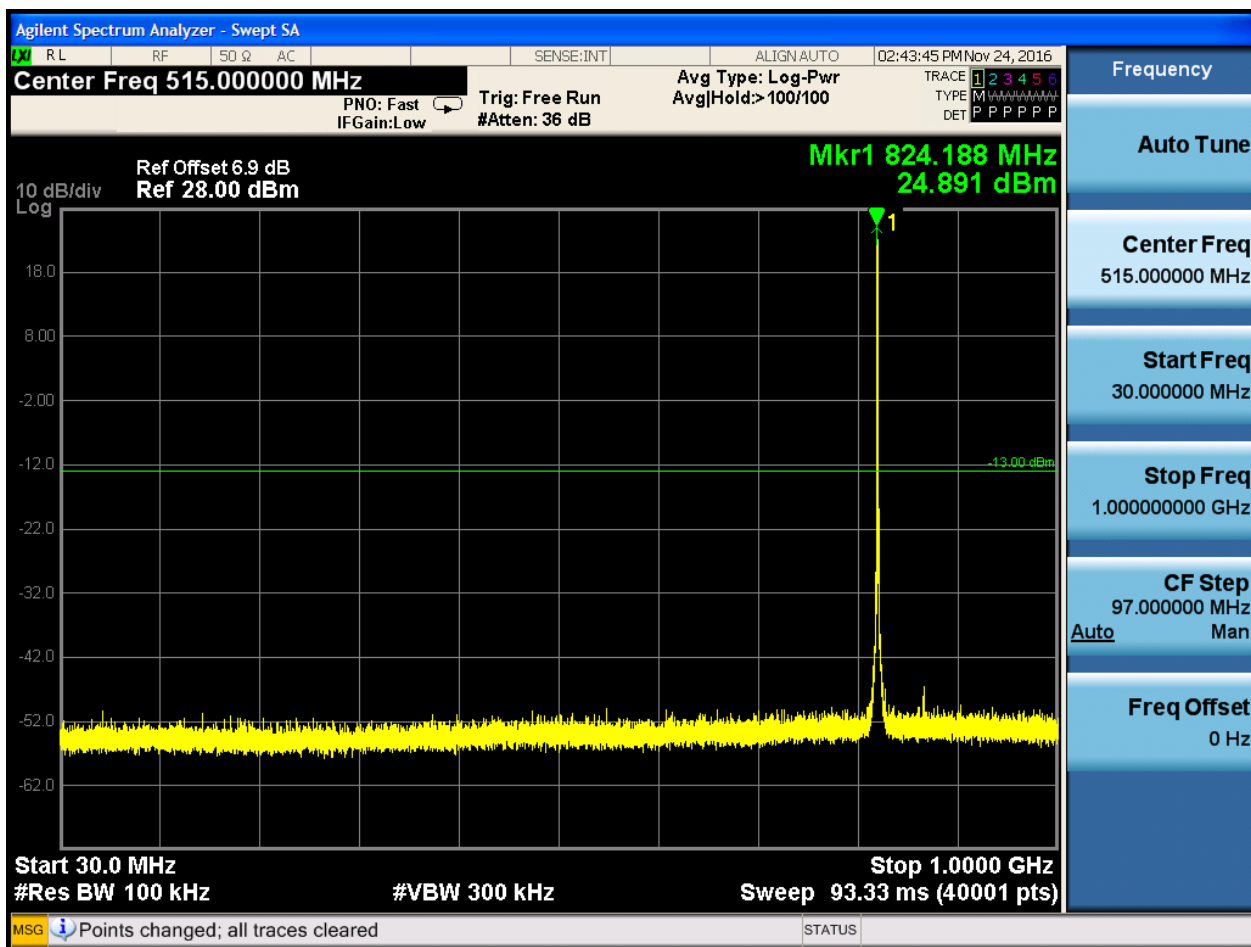
6.1.1.1.1 Test Bandwidth = 1.4

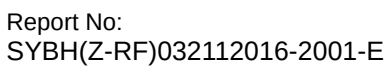
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0





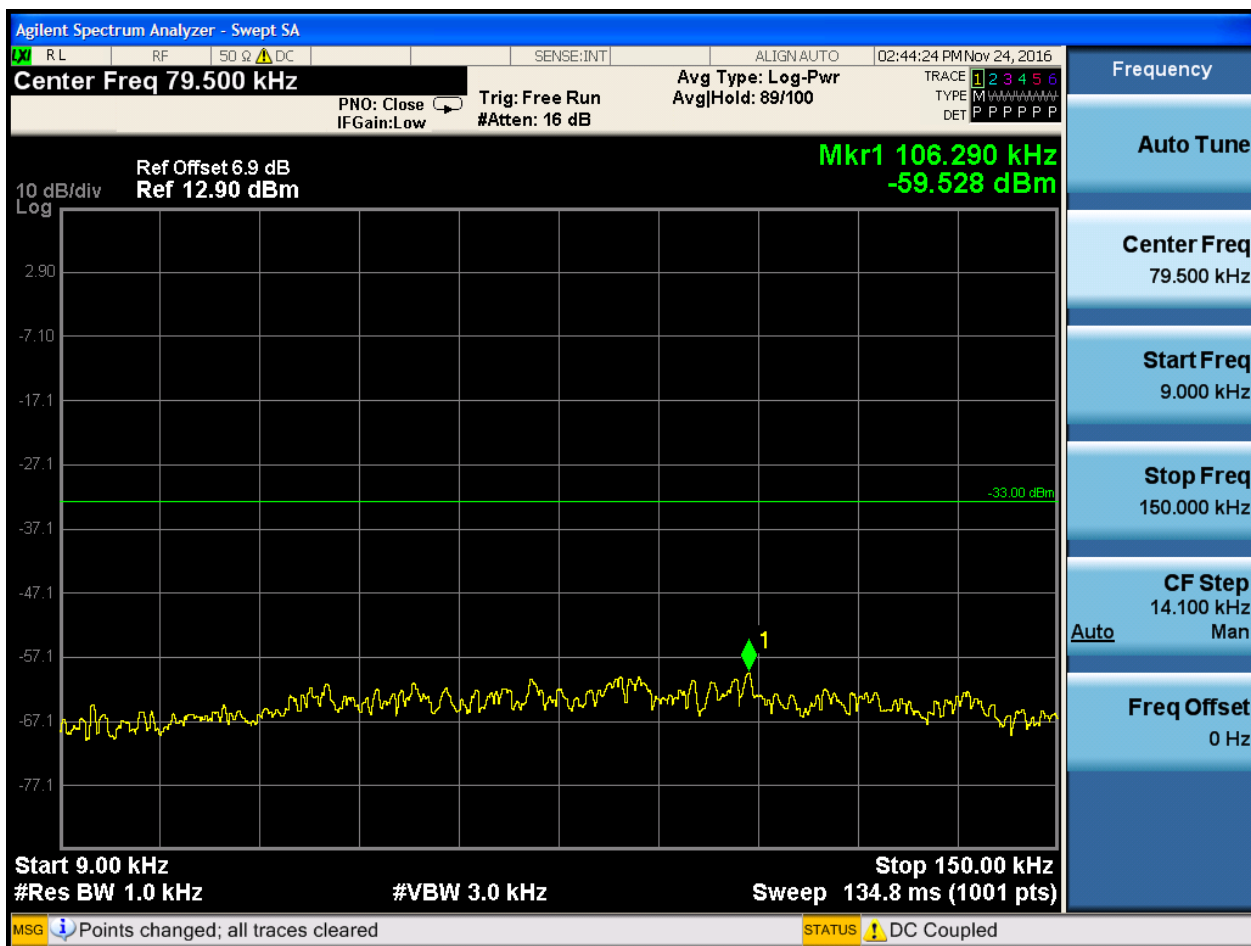


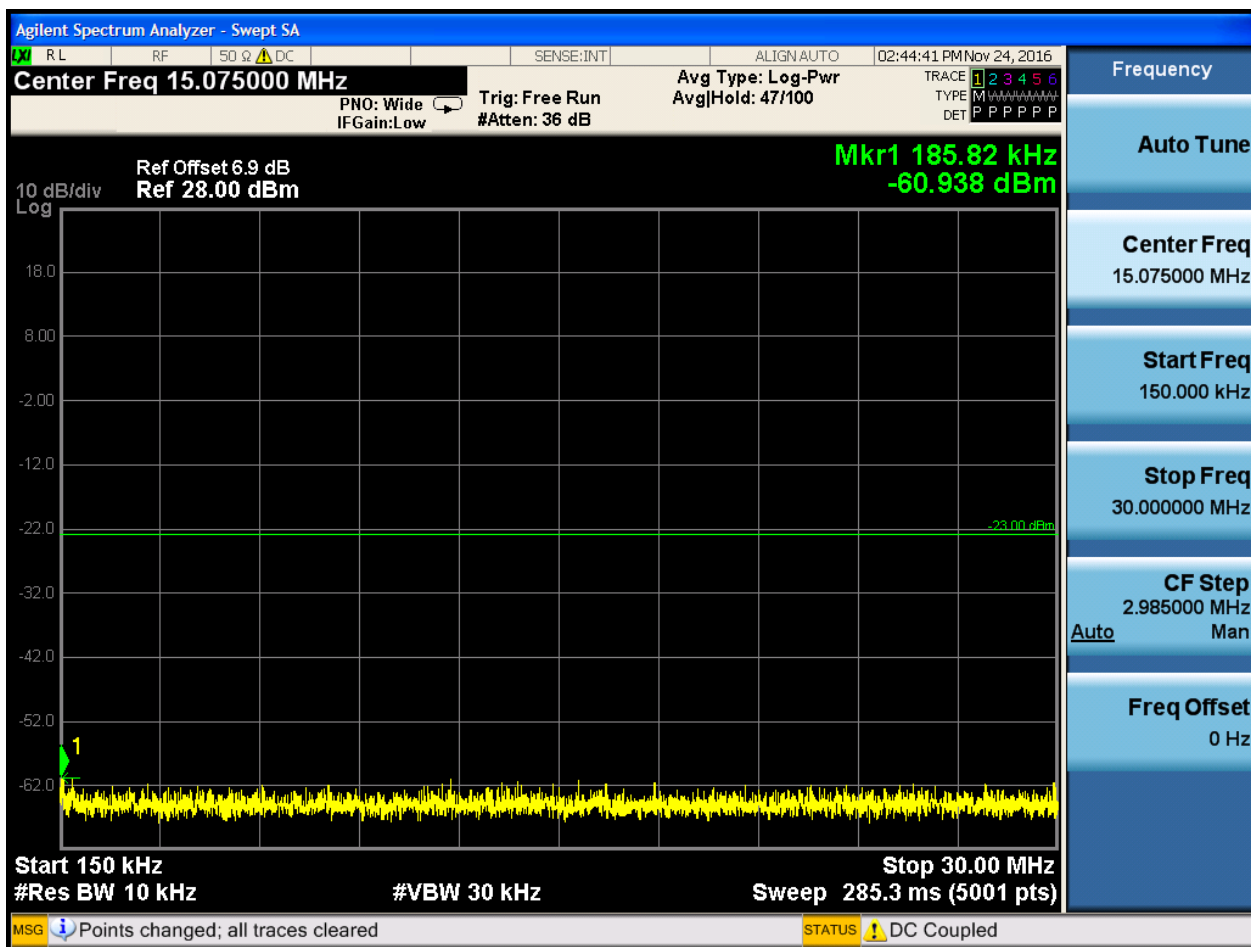


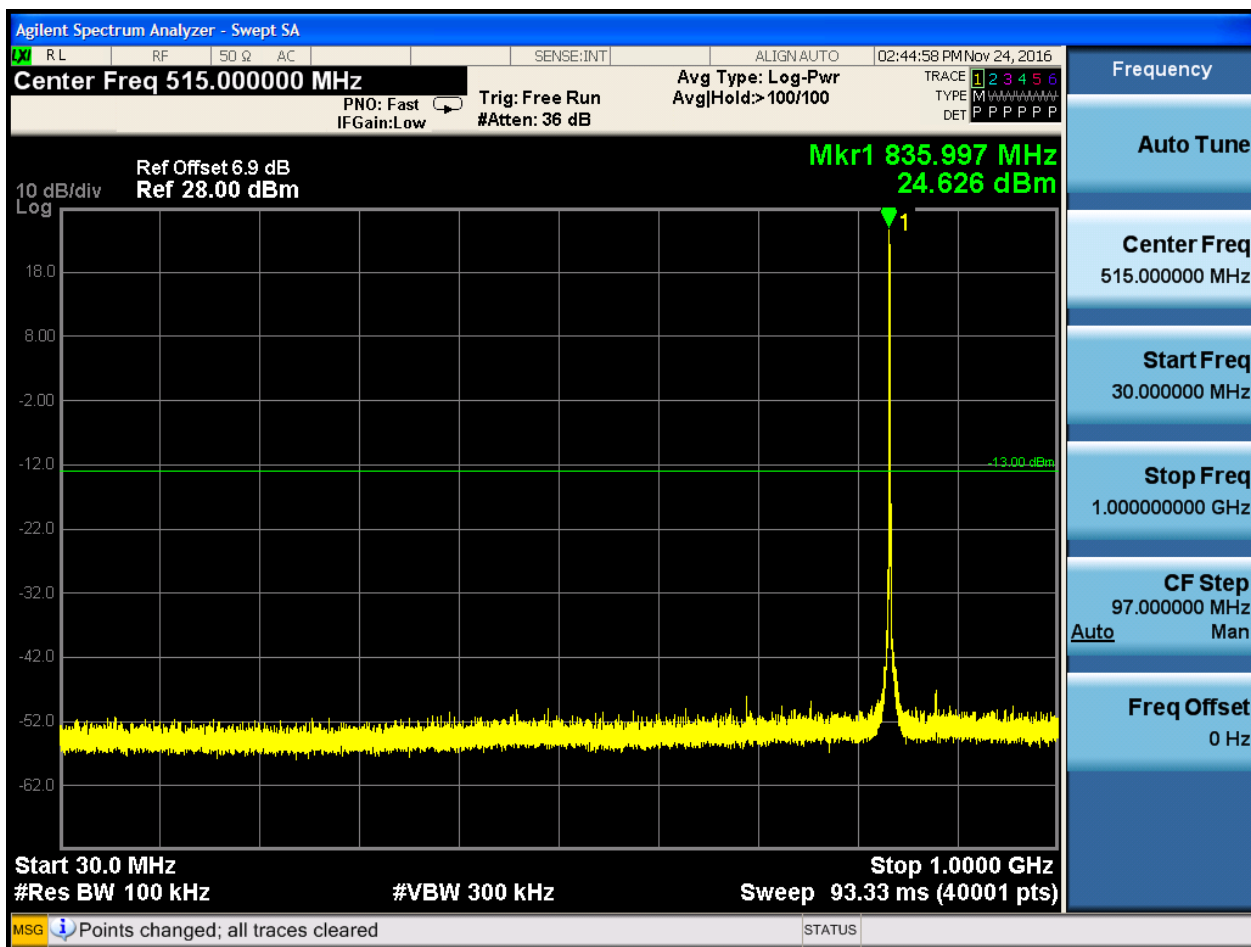


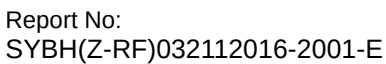
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0





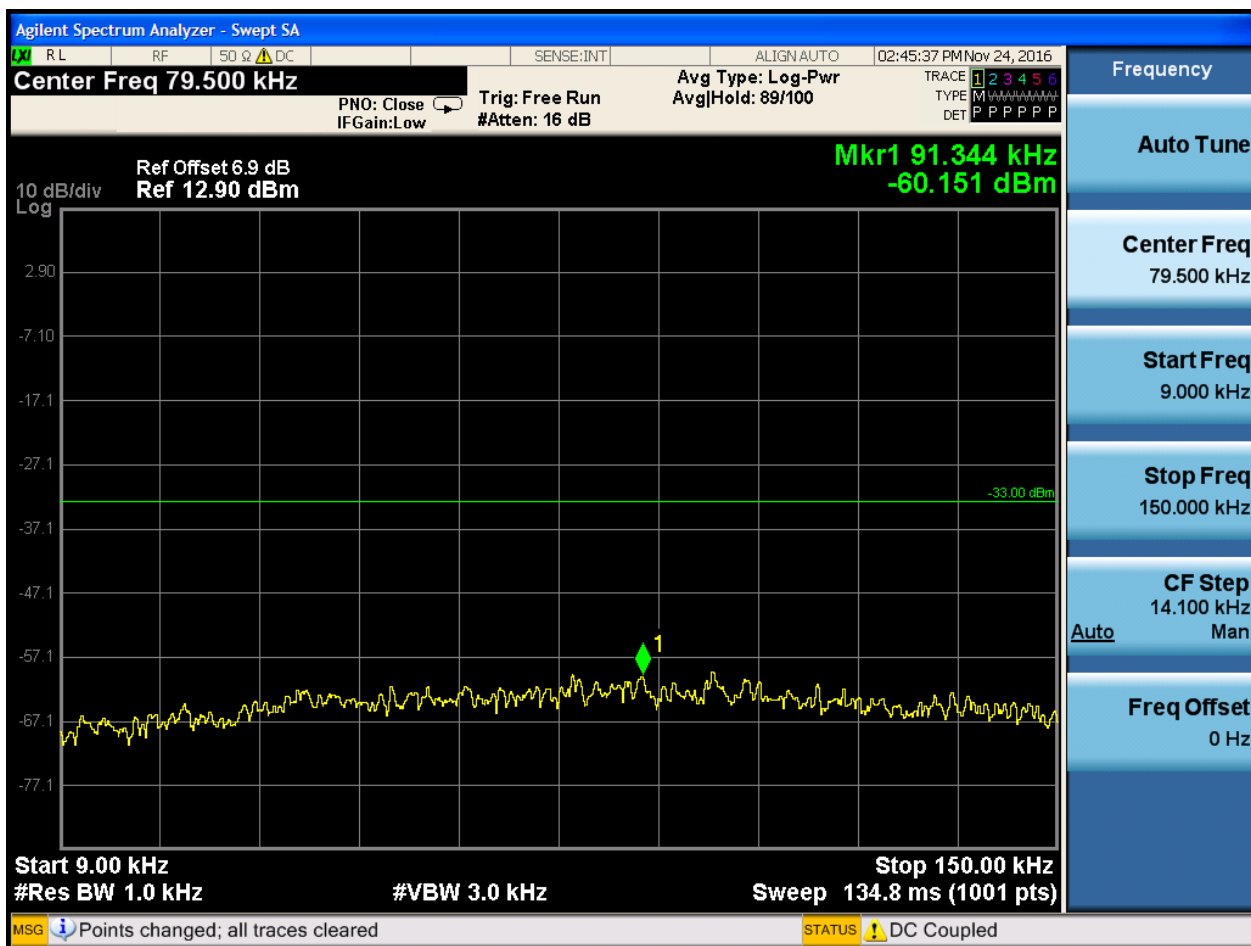


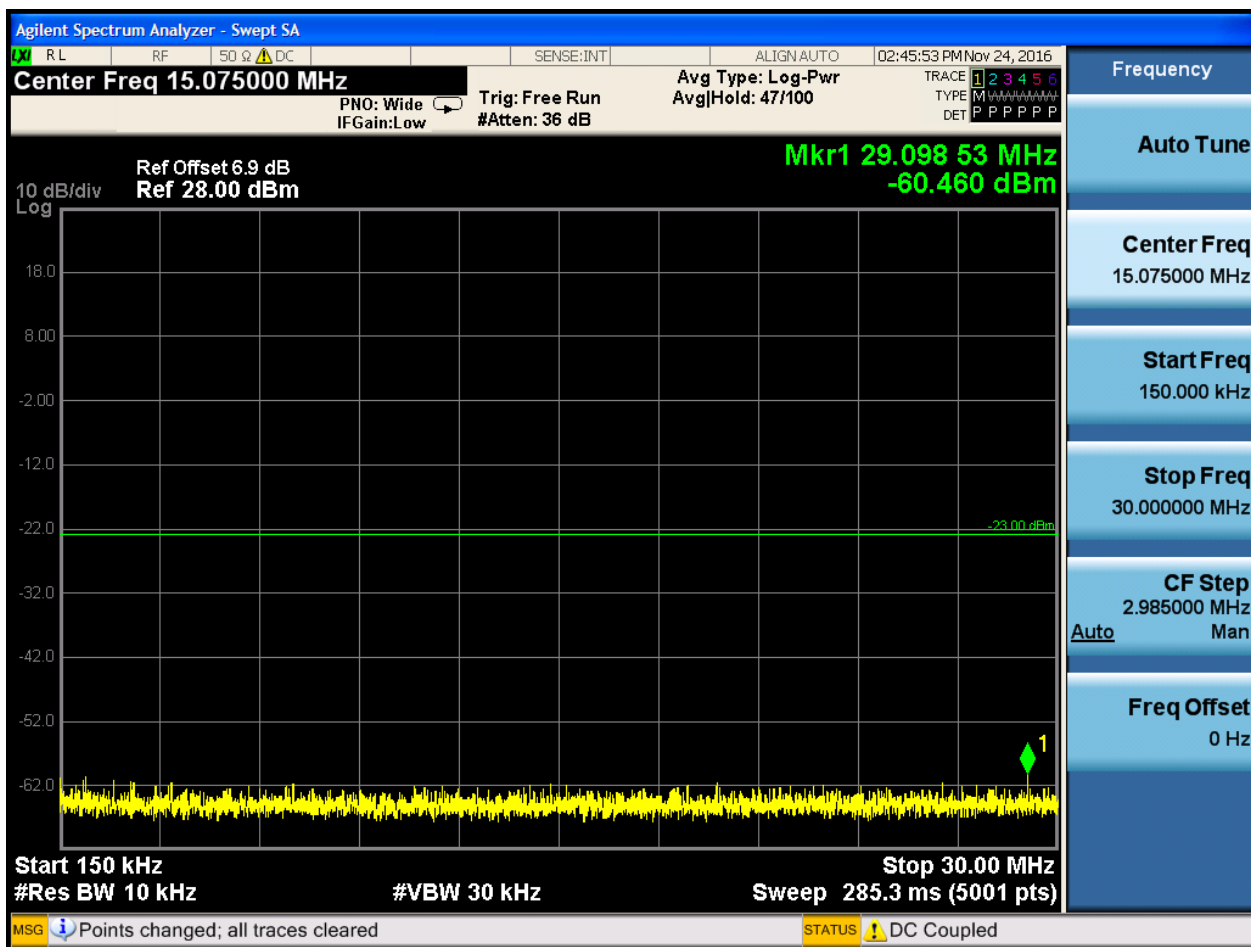


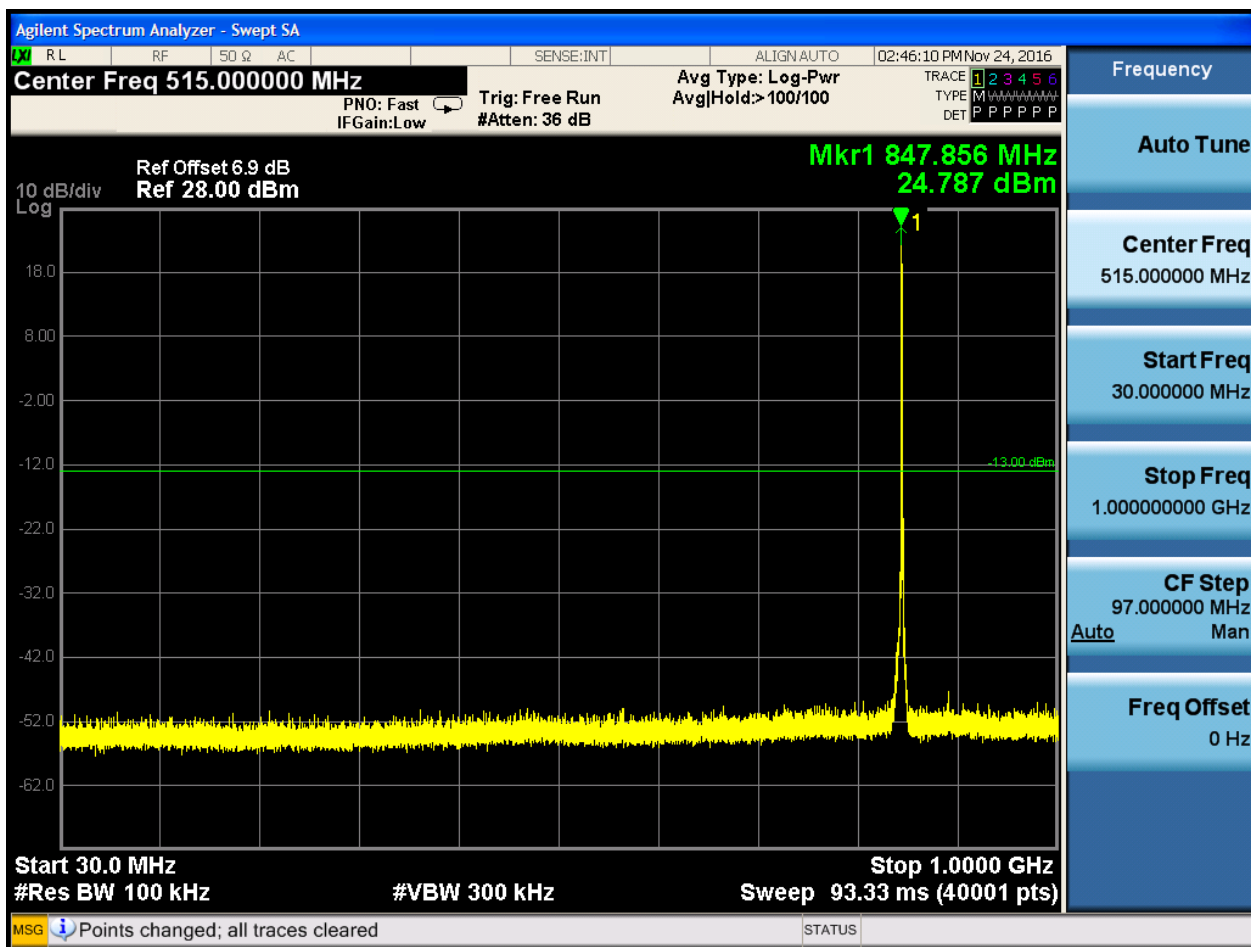


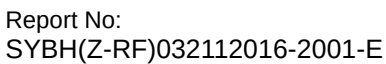
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0





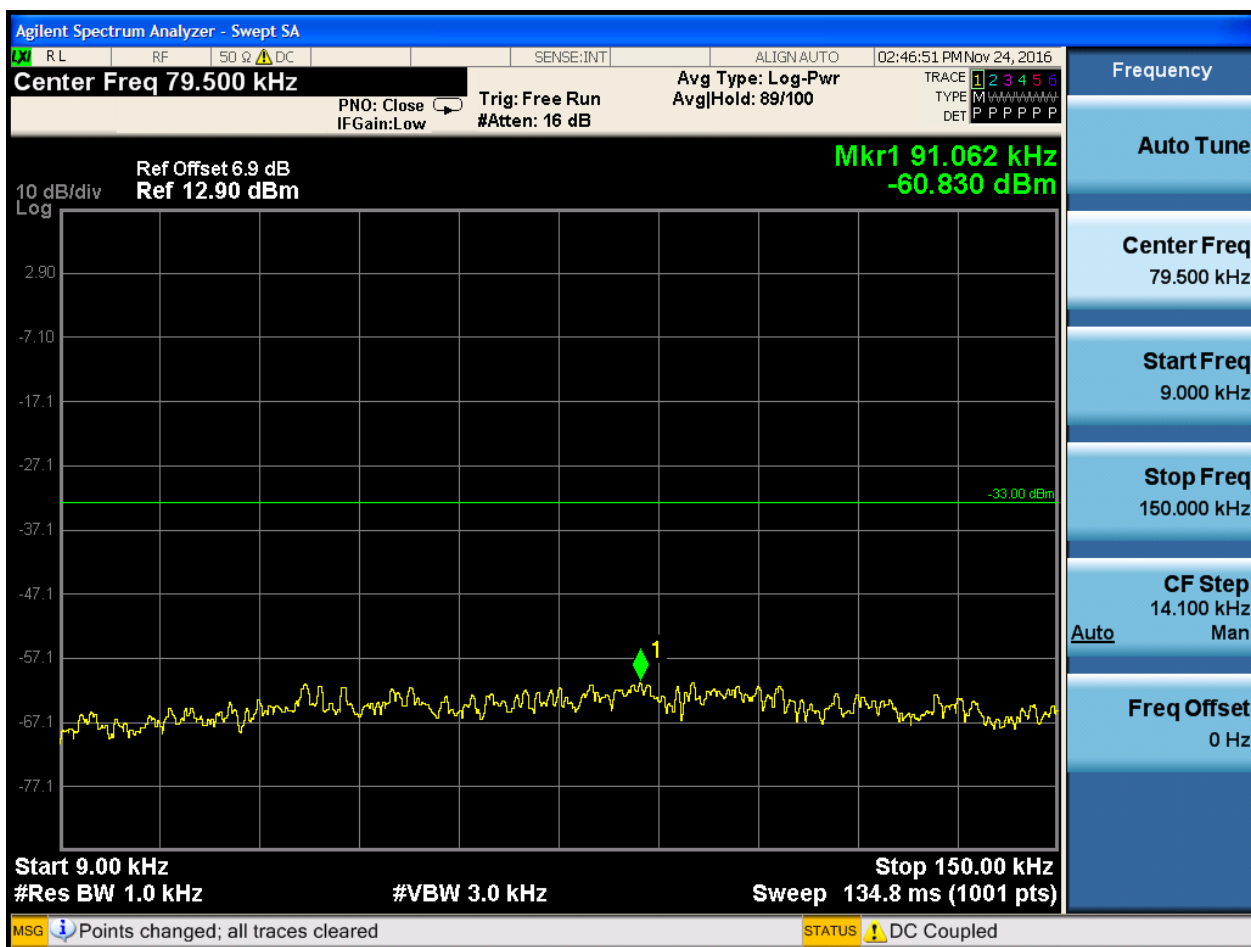


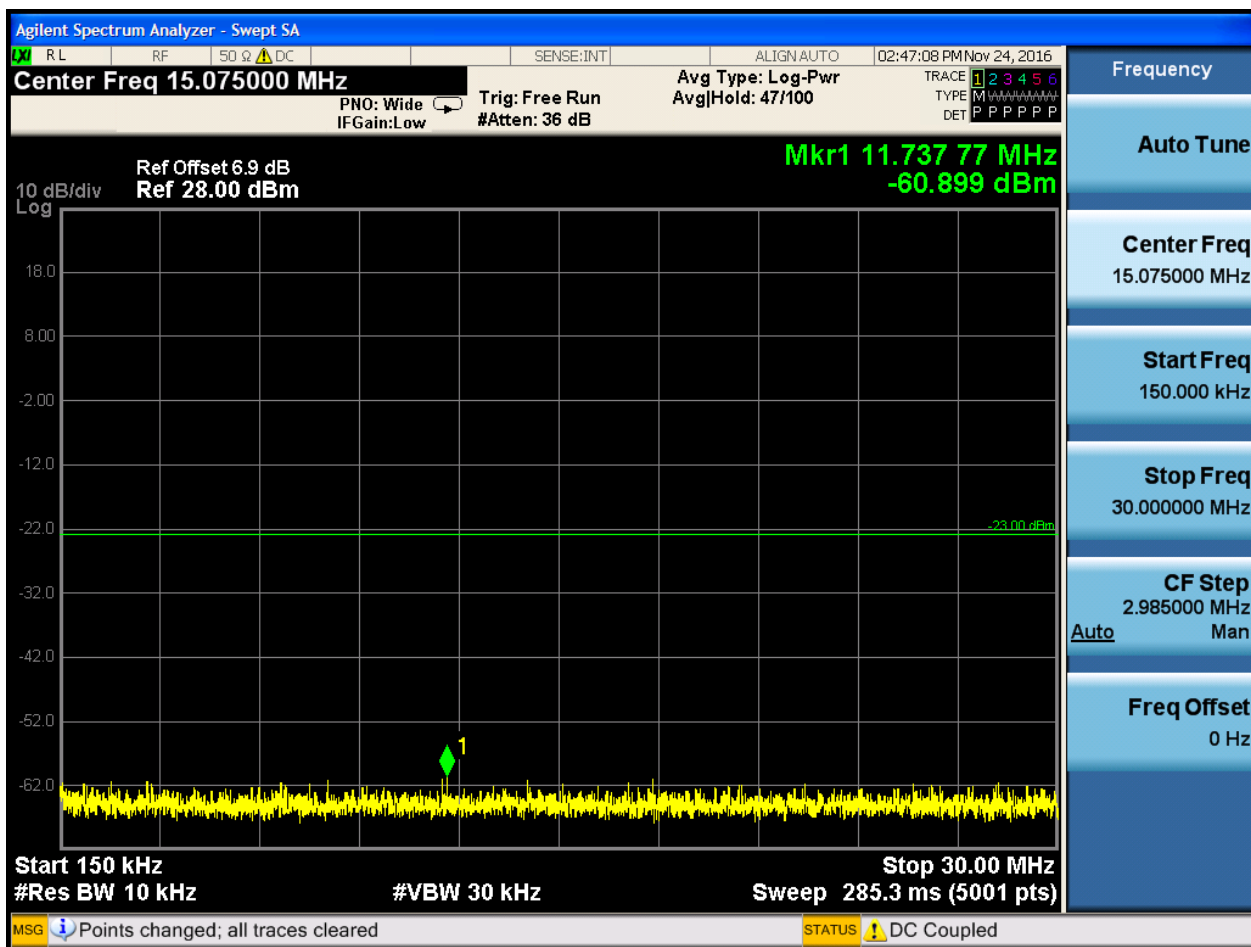


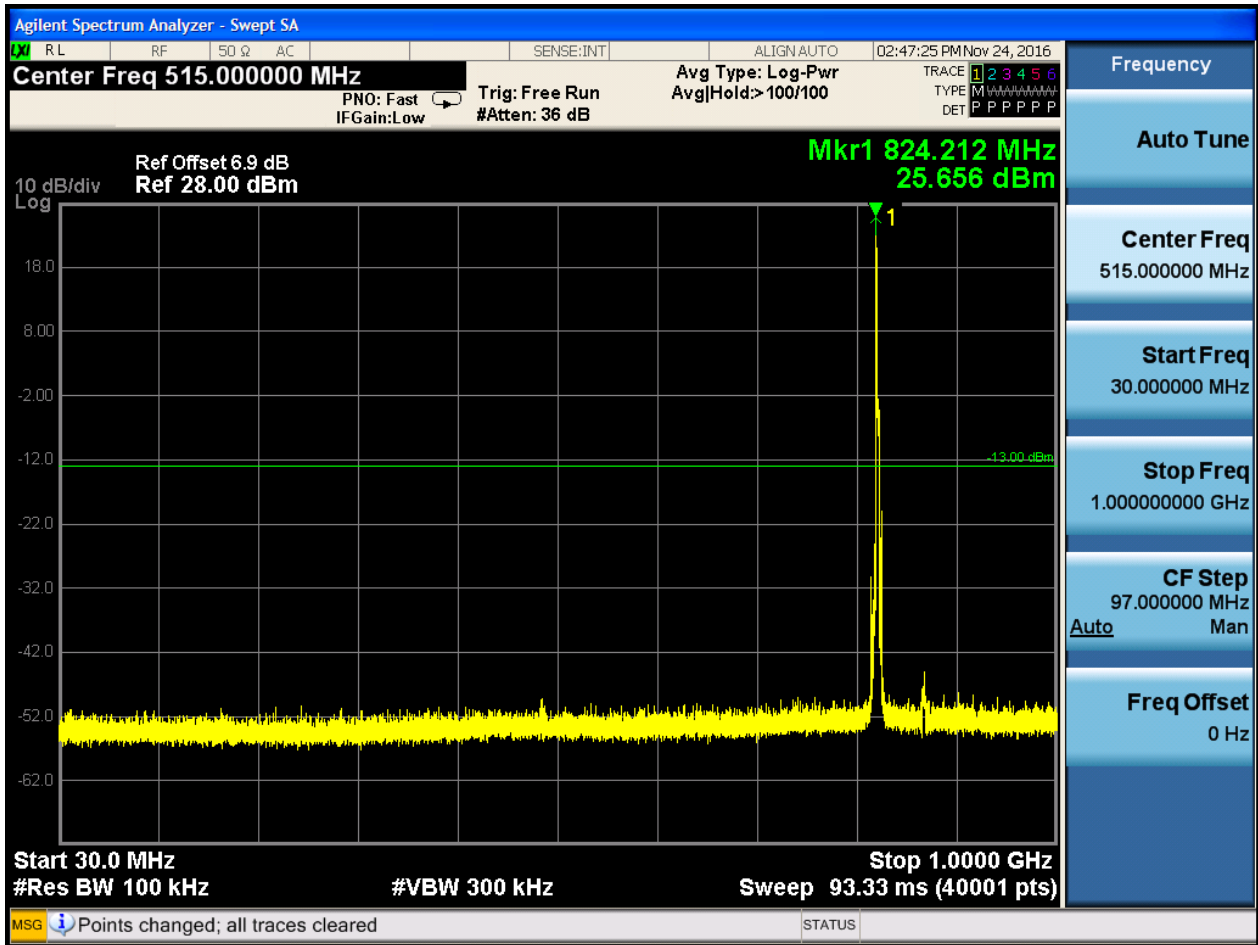
6.1.1.1.2 Test Bandwidth = 3

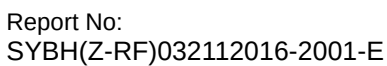
6.1.1.1.2.1 Test Channel = LCH

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

