



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
BAND12	LTE/TM1	1.4	LCH	RB1#0	21.97	17.82	34.7	PASS
				RB1#3	22.13	17.98	34.7	PASS
				RB1#5	22.17	18.02	34.7	PASS
				RB3#0	22.1	17.95	34.7	PASS
				RB3#2	22.14	17.99	34.7	PASS
				RB3#3	22.19	18.04	34.7	PASS
				RB6#0	20.78	16.63	34.7	PASS
			MCH	RB1#0	21.94	17.79	34.7	PASS
				RB1#3	22.03	17.88	34.7	PASS
				RB1#5	21.86	17.71	34.7	PASS
				RB3#0	21.89	17.74	34.7	PASS
				RB3#2	21.87	17.72	34.7	PASS
				RB3#3	21.8	17.65	34.7	PASS
				RB6#0	20.54	16.39	34.7	PASS
			HCH	RB1#0	22.24	18.09	34.7	PASS
				RB1#3	22.23	18.08	34.7	PASS
				RB1#5	21.88	17.73	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB3#0	22.15	18	34.7	PASS
				RB3#2	22.14	17.99	34.7	PASS
				RB3#3	21.98	17.83	34.7	PASS
				RB6#0	20.68	16.53	34.7	PASS
		3	LCH	RB1#0	21.92	17.77	34.7	PASS
				RB1#7	22.34	18.19	34.7	PASS
				RB1#14	22.18	18.03	34.7	PASS
				RB8#0	20.76	16.61	34.7	PASS
				RB8#4	20.9	16.75	34.7	PASS
				RB8#7	20.64	16.49	34.7	PASS
				RB15#0	20.54	16.39	34.7	PASS
			MCH	RB1#0	21.73	17.58	34.7	PASS
				RB1#7	21.97	17.82	34.7	PASS
				RB1#14	21.77	17.62	34.7	PASS
				RB8#0	20.58	16.43	34.7	PASS
				RB8#4	20.6	16.45	34.7	PASS
				RB8#7	20.54	16.39	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB15#0	20.58	16.43	34.7	PASS
			HCH	RB1#0	22.47	18.32	34.7	PASS
				RB1#7	22.41	18.26	34.7	PASS
				RB1#14	21.77	17.62	34.7	PASS
				RB8#0	21.08	16.93	34.7	PASS
				RB8#4	20.96	16.81	34.7	PASS
				RB8#7	20.59	16.44	34.7	PASS
				RB15#0	20.88	16.73	34.7	PASS
		5	LCH	RB1#0	21.8	17.65	34.7	PASS
				RB1#13	22.39	18.24	34.7	PASS
				RB1#24	22.5	18.35	34.7	PASS
				RB12#0	20.62	16.47	34.7	PASS
				RB12#6	20.8	16.65	34.7	PASS
				RB12#13	20.53	16.38	34.7	PASS
				RB25#0	20.55	16.4	34.7	PASS
			MCH	RB1#0	21.78	17.63	34.7	PASS
				RB1#13	21.85	17.7	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#24	22.82	18.67	34.7	PASS
				RB12#0	20.53	16.38	34.7	PASS
				RB12#6	20.57	16.42	34.7	PASS
				RB12#13	20.53	16.38	34.7	PASS
				RB25#0	20.65	16.5	34.7	PASS
			HCH	RB1#0	22	17.85	34.7	PASS
				RB1#13	22.51	18.36	34.7	PASS
				RB1#24	22.39	18.24	34.7	PASS
				RB12#0	21.18	17.03	34.7	PASS
				RB12#6	21.28	17.13	34.7	PASS
				RB12#13	20.74	16.59	34.7	PASS
				RB25#0	20.91	16.76	34.7	PASS
		10	LCH	RB1#0	22.28	18.13	34.7	PASS
				RB1#25	22.53	18.38	34.7	PASS
				RB1#49	21.84	17.69	34.7	PASS
				RB25#0	21.08	16.93	34.7	PASS
				RB25#13	20.84	16.69	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB25#25	20.85	16.7	34.7	PASS
				RB50#0	20.92	16.77	34.7	PASS
			MCH	RB1#0	22.27	18.12	34.7	PASS
				RB1#25	22.42	18.27	34.7	PASS
				RB1#49	22.34	18.19	34.7	PASS
				RB25#0	20.93	16.78	34.7	PASS
				RB25#13	21.12	16.97	34.7	PASS
				RB25#25	21.01	16.86	34.7	PASS
				RB50#0	20.9	16.75	34.7	PASS
			HCH	RB1#0	22.05	17.9	34.7	PASS
				RB1#25	22.8	18.65	34.7	PASS
				RB1#49	22.07	17.92	34.7	PASS
				RB25#0	21.01	16.86	34.7	PASS
				RB25#13	21.43	17.28	34.7	PASS
				RB25#25	21.05	16.9	34.7	PASS
				RB50#0	21.08	16.93	34.7	PASS
	LTE/TM2	1.4	LCH	RB1#0	21.97	17.82	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB1#3	22.04	17.89	34.7	PASS
				RB1#5	22.13	17.98	34.7	PASS
				RB3#0	21.94	17.79	34.7	PASS
				RB3#2	22.02	17.87	34.7	PASS
				RB3#3	22.04	17.89	34.7	PASS
				RB6#0	20.6	16.45	34.7	PASS
			MCH	RB1#0	21.61	17.46	34.7	PASS
				RB1#3	21.67	17.52	34.7	PASS
				RB1#5	21.47	17.32	34.7	PASS
				RB3#0	21.69	17.54	34.7	PASS
				RB3#2	21.67	17.52	34.7	PASS
				RB3#3	21.6	17.45	34.7	PASS
				RB6#0	20.25	16.1	34.7	PASS
			HCH	RB1#0	22.2	18.05	34.7	PASS
				RB1#3	22.08	17.93	34.7	PASS
				RB1#5	21.78	17.63	34.7	PASS
				RB3#0	22.1	17.95	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB3#2	22.07	17.92	34.7	PASS
				RB3#3	21.91	17.76	34.7	PASS
				RB6#0	20.73	16.58	34.7	PASS
		3	LCH	RB1#0	21.81	17.66	34.7	PASS
				RB1#7	22.31	18.16	34.7	PASS
				RB1#14	22.35	18.2	34.7	PASS
				RB8#0	20.51	16.36	34.7	PASS
				RB8#4	20.75	16.6	34.7	PASS
				RB8#7	20.63	16.48	34.7	PASS
				RB15#0	20.4	16.25	34.7	PASS
			MCH	RB1#0	21.65	17.5	34.7	PASS
				RB1#7	21.64	17.49	34.7	PASS
				RB1#14	21.36	17.21	34.7	PASS
				RB8#0	20.28	16.13	34.7	PASS
				RB8#4	20.2	16.05	34.7	PASS
				RB8#7	20.13	15.98	34.7	PASS
				RB15#0	20.1	15.95	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	22.63	18.48	34.7	PASS
				RB1#7	22.66	18.51	34.7	PASS
				RB1#14	21.89	17.74	34.7	PASS
				RB8#0	21.07	16.92	34.7	PASS
				RB8#4	21	16.85	34.7	PASS
				RB8#7	20.62	16.47	34.7	PASS
				RB15#0	20.84	16.69	34.7	PASS
		5	LCH	RB1#0	21.66	17.51	34.7	PASS
				RB1#13	22.51	18.36	34.7	PASS
				RB1#24	22.75	18.6	34.7	PASS
				RB12#0	20.47	16.32	34.7	PASS
				RB12#6	20.85	16.7	34.7	PASS
				RB12#13	20.59	16.44	34.7	PASS
				RB25#0	20.55	16.4	34.7	PASS
			MCH	RB1#0	21.84	17.69	34.7	PASS
				RB1#13	21.72	17.57	34.7	PASS
				RB1#24	22.62	18.47	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB12#0	20.07	15.92	34.7	PASS
				RB12#6	20.07	15.92	34.7	PASS
				RB12#13	20.05	15.9	34.7	PASS
				RB25#0	20.26	16.11	34.7	PASS
			HCH	RB1#0	22.37	18.22	34.7	PASS
				RB1#13	22.89	18.74	34.7	PASS
				RB1#24	22.86	18.71	34.7	PASS
				RB12#0	21.02	16.87	34.7	PASS
				RB12#6	21.29	17.14	34.7	PASS
				RB12#13	20.68	16.53	34.7	PASS
				RB25#0	20.84	16.69	34.7	PASS
		10	LCH	RB1#0	21.96	17.81	34.7	PASS
				RB1#25	22.48	18.33	34.7	PASS
				RB1#49	21.34	17.19	34.7	PASS
				RB25#0	20.98	16.83	34.7	PASS
				RB25#13	20.81	16.66	34.7	PASS
				RB25#25	20.6	16.45	34.7	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	ERP [dBm]	Limit [dBm]	Verdict
				RB50#0	20.76	16.61	34.7	PASS
				RB1#0	22.34	18.19	34.7	PASS
			MCH	RB1#25	22.02	17.87	34.7	PASS
				RB1#49	21.98	17.83	34.7	PASS
				RB25#0	20.71	16.56	34.7	PASS
				RB25#13	20.77	16.62	34.7	PASS
				RB25#25	20.65	16.5	34.7	PASS
				RB50#0	20.56	16.41	34.7	PASS
			HCH	RB1#0	22.06	17.91	34.7	PASS
				RB1#25	22.81	18.66	34.7	PASS
				RB1#49	22.25	18.1	34.7	PASS
				RB25#0	20.52	16.37	34.7	PASS
				RB25#13	21.15	17	34.7	PASS
				RB25#25	20.99	16.84	34.7	PASS
				RB50#0	20.82	16.67	34.7	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,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

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

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
BAND12	LTE/TM1	1.4	LCH	RB1#0	4.1	13	PASS
				RB1#3	3.96	13	PASS
				RB1#5	3.97	13	PASS
				RB3#0	4.36	13	PASS
				RB3#2	4.24	13	PASS
				RB3#3	4.39	13	PASS
				RB6#0	5.55	13	PASS
			MCH	RB1#0	4.38	13	PASS
				RB1#3	4.32	13	PASS
				RB1#5	4.41	13	PASS
				RB3#0	4.82	13	PASS
				RB3#2	4.67	13	PASS
				RB3#3	4.79	13	PASS
				RB6#0	5.43	13	PASS
			HCH	RB1#0	4.1	13	PASS
				RB1#3	4.25	13	PASS
				RB1#5	4.4	13	PASS
				RB3#0	4.6	13	PASS
				RB3#2	4.68	13	PASS
				RB3#3	4.79	13	PASS
				RB6#0	5.37	13	PASS
		3	LCH	RB1#0	4.15	13	PASS
				RB1#7	3.69	13	PASS
				RB1#14	3.95	13	PASS
				RB8#0	5.51	13	PASS
				RB8#4	5.34	13	PASS
				RB8#7	5.71	13	PASS
				RB15#0	5.45	13	PASS
			MCH	RB1#0	4.58	13	PASS
				RB1#7	4.21	13	PASS
				RB1#14	4.37	13	PASS
				RB8#0	5.29	13	PASS
				RB8#4	5.23	13	PASS
				RB8#7	5.33	13	PASS
				RB15#0	5.58	13	PASS
			HCH	RB1#0	3.64	13	PASS
				RB1#7	3.96	13	PASS
				RB1#14	4.59	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
		5		RB8#0	5.14	13	PASS
				RB8#4	5.15	13	PASS
				RB8#7	5.39	13	PASS
				RB15#0	5.36	13	PASS
			LCH	RB1#0	4.51	13	PASS
				RB1#13	3.88	13	PASS
				RB1#24	4.34	13	PASS
				RB12#0	5.28	13	PASS
				RB12#6	5.17	13	PASS
				RB12#13	5.49	13	PASS
				RB25#0	5.52	13	PASS
			MCH	RB1#0	4.72	13	PASS
				RB1#13	4.52	13	PASS
				RB1#24	4.18	13	PASS
				RB12#0	5.47	13	PASS
				RB12#6	5.21	13	PASS
				RB12#13	5.52	13	PASS
				RB25#0	5.72	13	PASS
			HCH	RB1#0	4.57	13	PASS
				RB1#13	3.67	13	PASS
				RB1#24	4.46	13	PASS
				RB12#0	4.98	13	PASS
				RB12#6	4.88	13	PASS
				RB12#13	5.46	13	PASS
				RB25#0	5.59	13	PASS
		10	LCH	RB1#0	3.93	13	PASS
				RB1#25	4.01	13	PASS
				RB1#49	4.38	13	PASS
				RB25#0	5.32	13	PASS
				RB25#13	5.54	13	PASS
				RB25#25	5.82	13	PASS
				RB50#0	5.52	13	PASS
			MCH	RB1#0	4.17	13	PASS
				RB1#25	4.36	13	PASS
				RB1#49	4.03	13	PASS
				RB25#0	5.53	13	PASS
				RB25#13	5.3	13	PASS
				RB25#25	5.59	13	PASS
				RB50#0	6.13	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	4.45	13	PASS
				RB1#25	3.78	13	PASS
				RB1#49	4.58	13	PASS
				RB25#0	5.59	13	PASS
				RB25#13	5.16	13	PASS
				RB25#25	5.42	13	PASS
				RB50#0	5.91	13	PASS
		1.4	LCH	RB1#0	4.55	13	PASS
				RB1#3	4.42	13	PASS
				RB1#5	4.49	13	PASS
				RB3#0	4.91	13	PASS
				RB3#2	4.68	13	PASS
				RB3#3	4.9	13	PASS
				RB6#0	5.92	13	PASS
			MCH	RB1#0	5.18	13	PASS
				RB1#3	5.13	13	PASS
				RB1#5	5.14	13	PASS
				RB3#0	5.46	13	PASS
				RB3#2	5.41	13	PASS
				RB3#3	5.49	13	PASS
				RB6#0	6.17	13	PASS
			HCH	RB1#0	4.65	13	PASS
				RB1#3	4.93	13	PASS
				RB1#5	5	13	PASS
				RB3#0	5.38	13	PASS
				RB3#2	5.33	13	PASS
				RB3#3	5.42	13	PASS
				RB6#0	6.53	13	PASS
		3	LCH	RB1#0	4.5	13	PASS
				RB1#7	4.26	13	PASS
				RB1#14	4.47	13	PASS
				RB8#0	5.88	13	PASS
				RB8#4	5.86	13	PASS
				RB8#7	6.09	13	PASS
				RB15#0	6.24	13	PASS
			MCH	RB1#0	5.1	13	PASS
				RB1#7	4.91	13	PASS
				RB1#14	5.12	13	PASS
				RB8#0	6.08	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB8#4	5.95	13	PASS
				RB8#7	5.94	13	PASS
				RB15#0	6.21	13	PASS
			HCH	RB1#0	4.1	13	PASS
				RB1#7	4.48	13	PASS
				RB1#14	5.06	13	PASS
				RB8#0	5.72	13	PASS
				RB8#4	5.73	13	PASS
				RB8#7	5.92	13	PASS
				RB15#0	6.13	13	PASS
		5	LCH	RB1#0	4.64	13	PASS
				RB1#13	4.42	13	PASS
				RB1#24	4.75	13	PASS
				RB12#0	5.94	13	PASS
				RB12#6	5.8	13	PASS
				RB12#13	5.99	13	PASS
				RB25#0	6.28	13	PASS
			MCH	RB1#0	4.87	13	PASS
				RB1#13	4.66	13	PASS
				RB1#24	4.39	13	PASS
				RB12#0	6.08	13	PASS
				RB12#6	5.9	13	PASS
				RB12#13	5.99	13	PASS
				RB25#0	6.41	13	PASS
			HCH	RB1#0	4.34	13	PASS
				RB1#13	3.98	13	PASS
				RB1#24	4.55	13	PASS
				RB12#0	5.57	13	PASS
				RB12#6	5.42	13	PASS
				RB12#13	6.14	13	PASS
				RB25#0	6.24	13	PASS
		10	LCH	RB1#0	4.73	13	PASS
				RB1#25	5.05	13	PASS
				RB1#49	4.75	13	PASS
				RB25#0	5.9	13	PASS
				RB25#13	6.04	13	PASS
				RB25#25	6.09	13	PASS
				RB50#0	6.21	13	PASS
			MCH	RB1#0	4.81	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#25	5.11	13	PASS
				RB1#49	4.67	13	PASS
				RB25#0	6.21	13	PASS
				RB25#13	5.89	13	PASS
				RB25#25	5.98	13	PASS
				RB50#0	6.55	13	PASS
			HCH	RB1#0	4.82	13	PASS
				RB1#25	4.21	13	PASS
				RB1#49	4.98	13	PASS
				RB25#0	6.11	13	PASS
				RB25#13	5.74	13	PASS
				RB25#25	6.05	13	PASS
				RB50#0	6.6	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

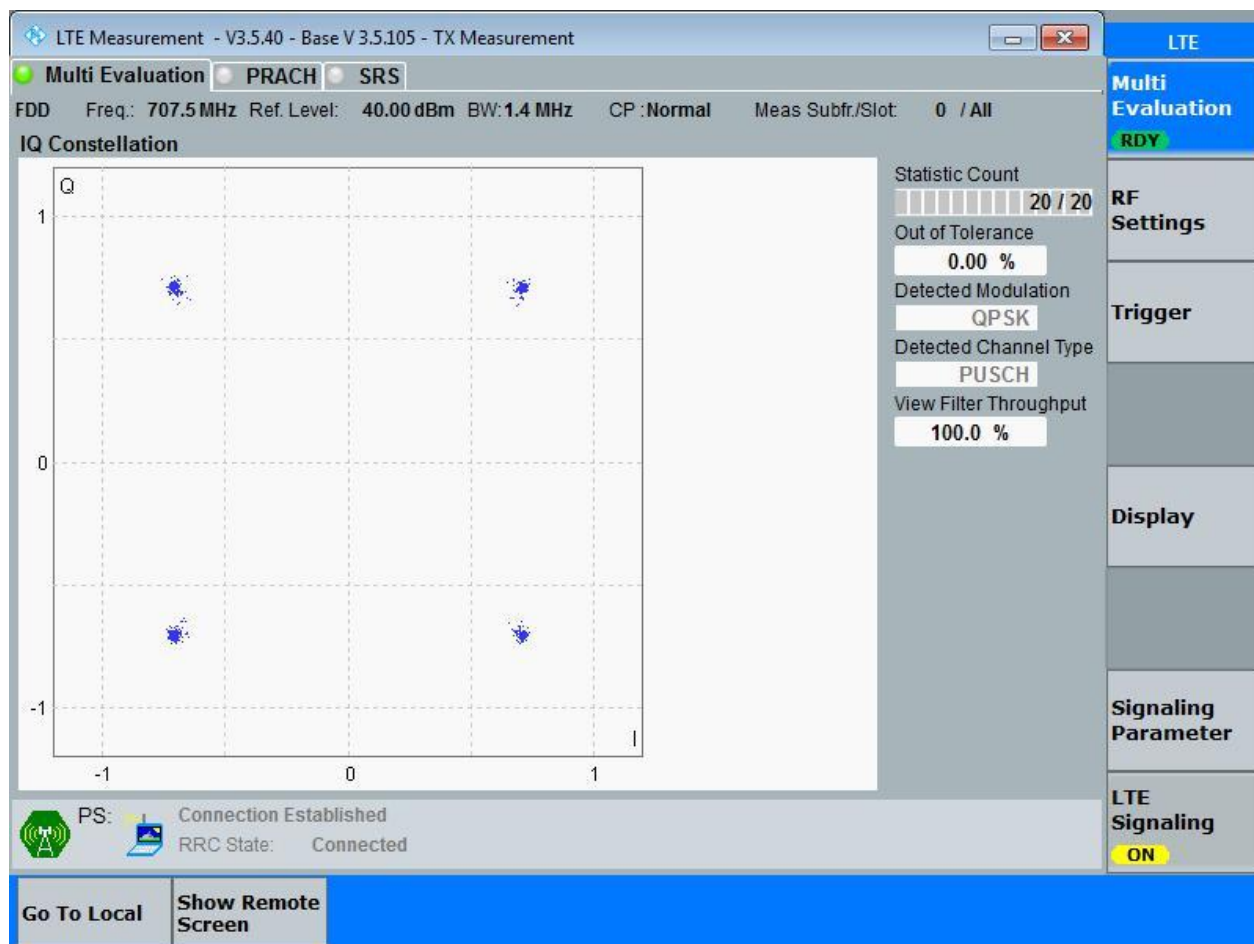
3.1.1 Test Band = BAND12

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

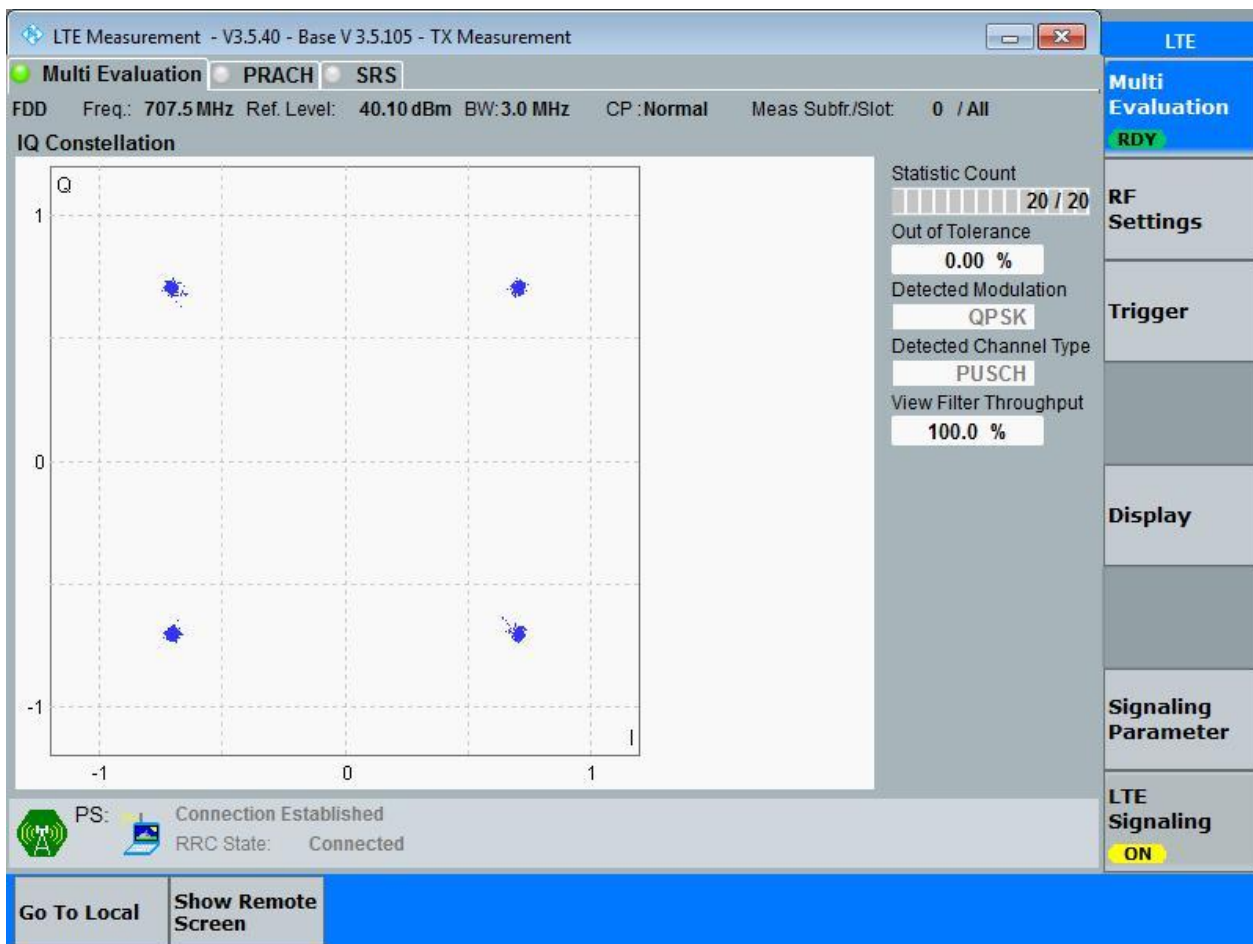
3.1.1.1.1.1.1 Test RB = RB6#0



3.1.1.1.2 Test Bandwidth = 3

3.1.1.1.2.1 Test Channel = MCH

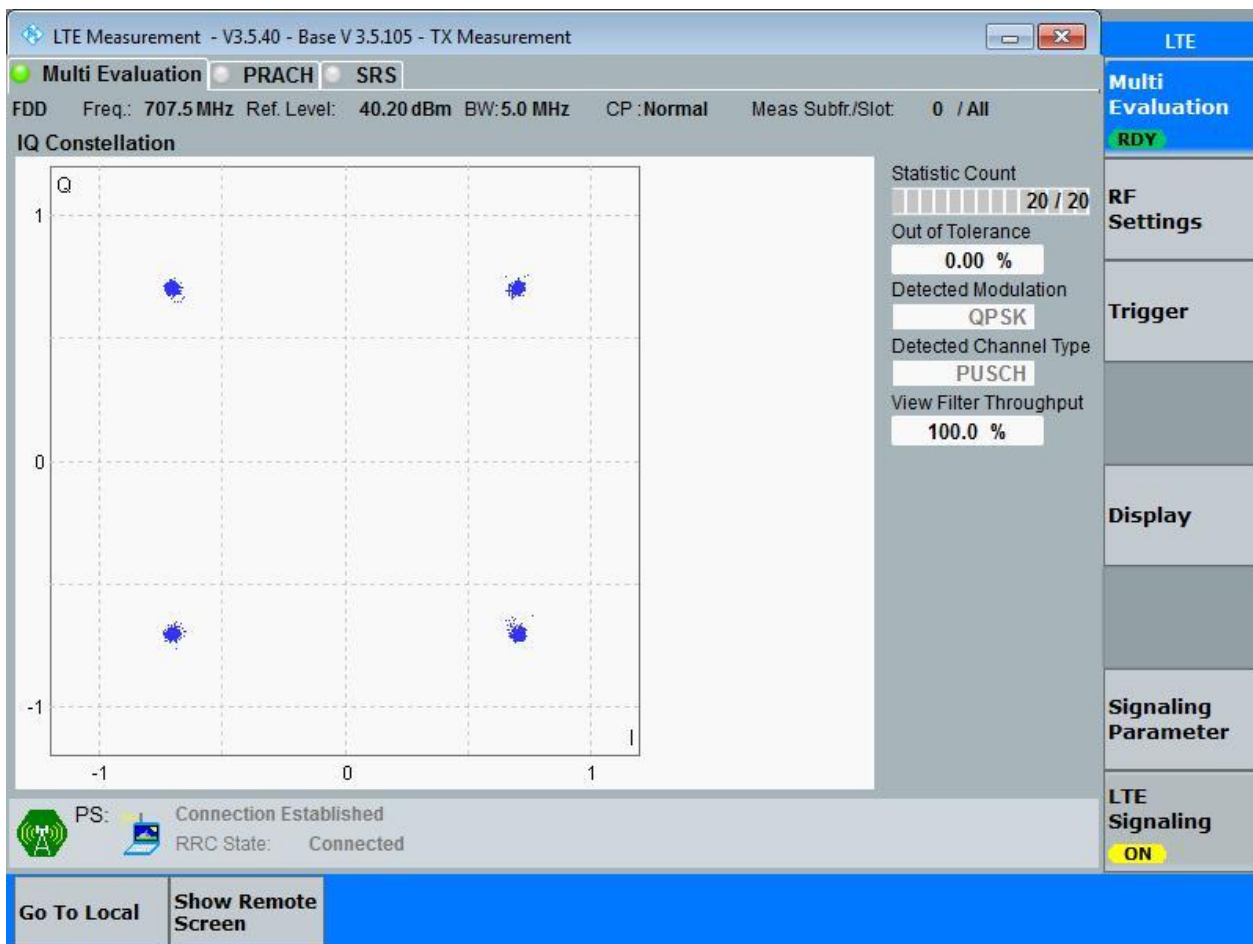
3.1.1.1.2.1.1 Test RB = RB15#0



3.1.1.1.3 Test Bandwidth = 5

3.1.1.1.3.1 Test Channel = MCH

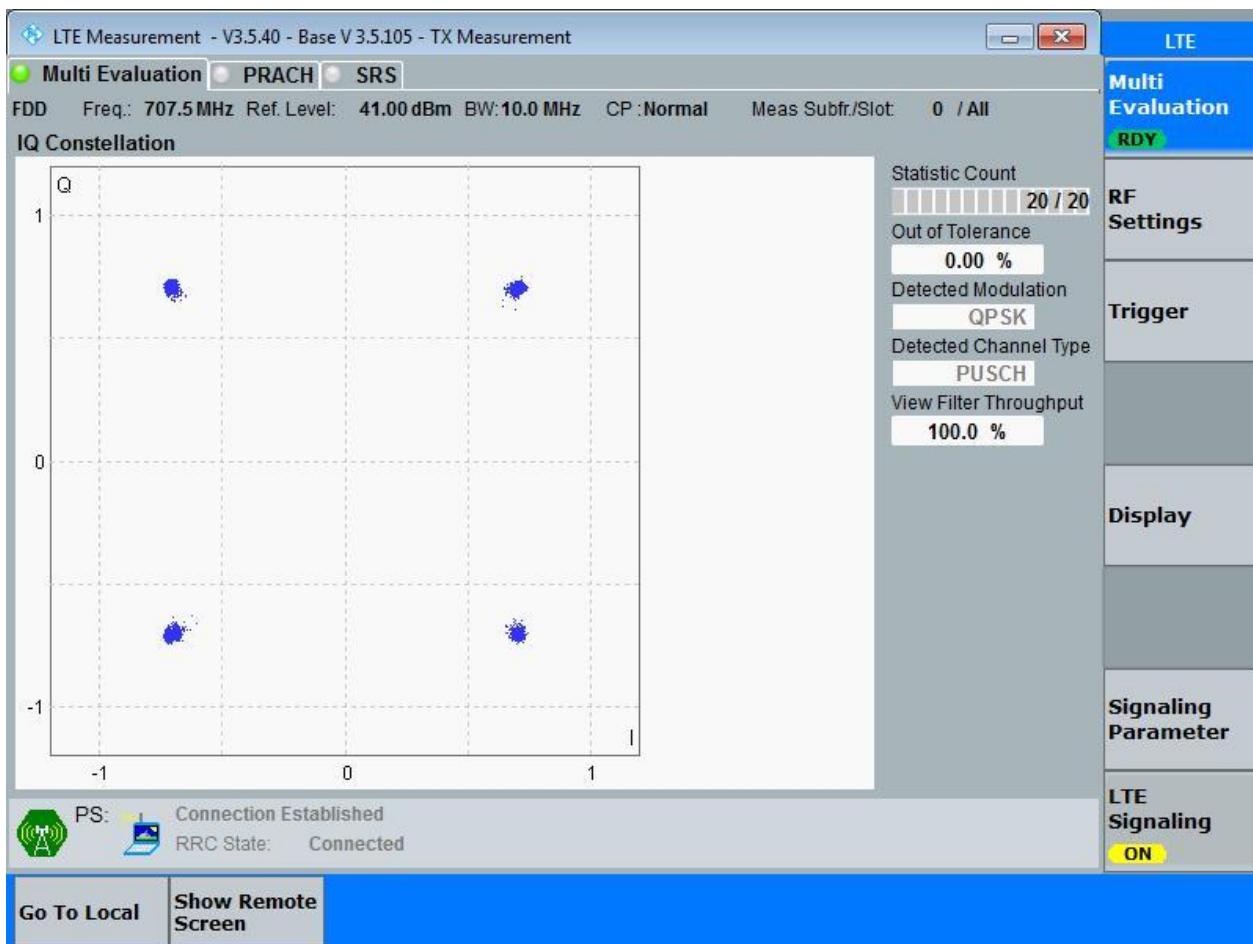
3.1.1.1.3.1.1 Test RB = RB25#0



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

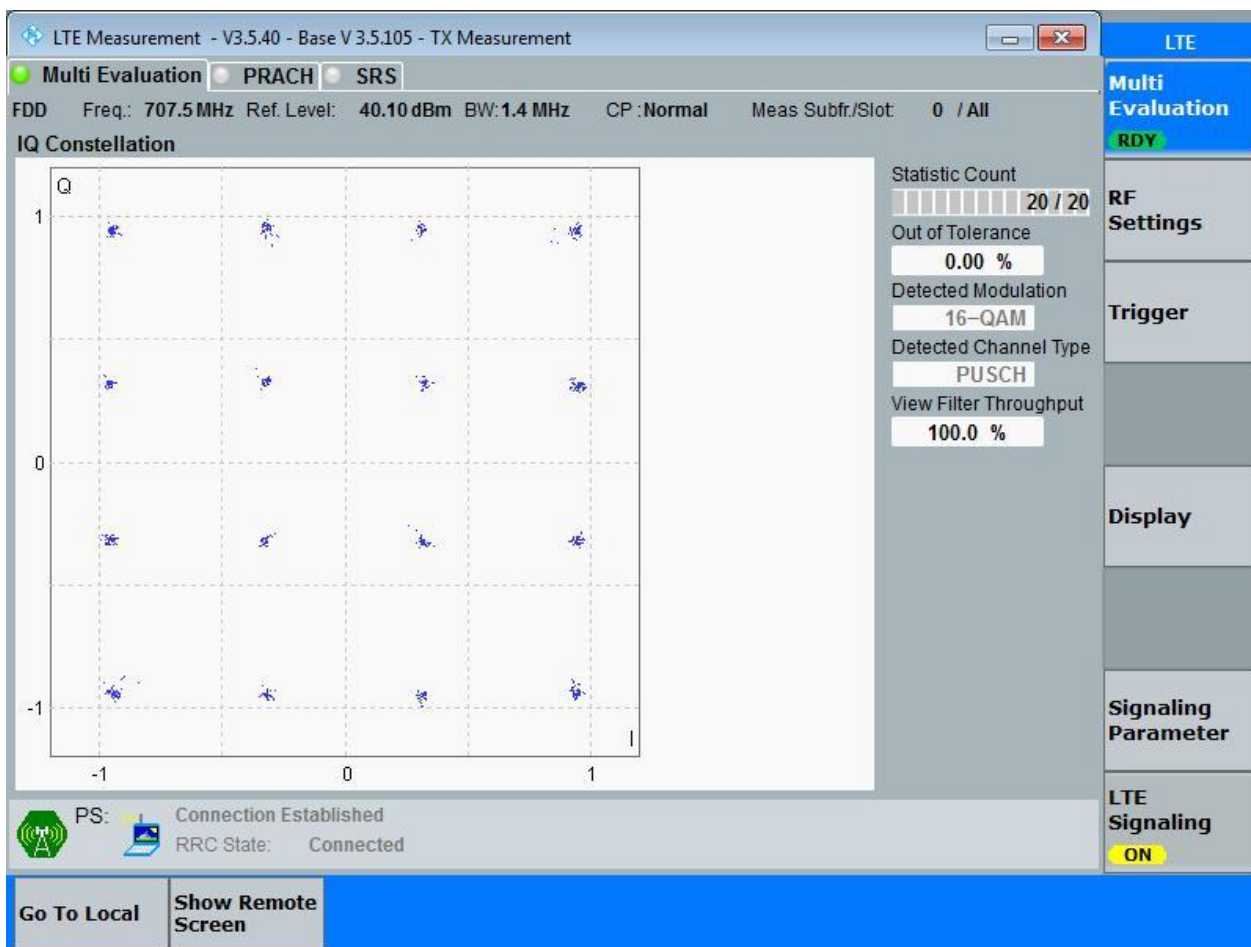


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 1.4

3.1.1.2.1.1 Test Channel = MCH

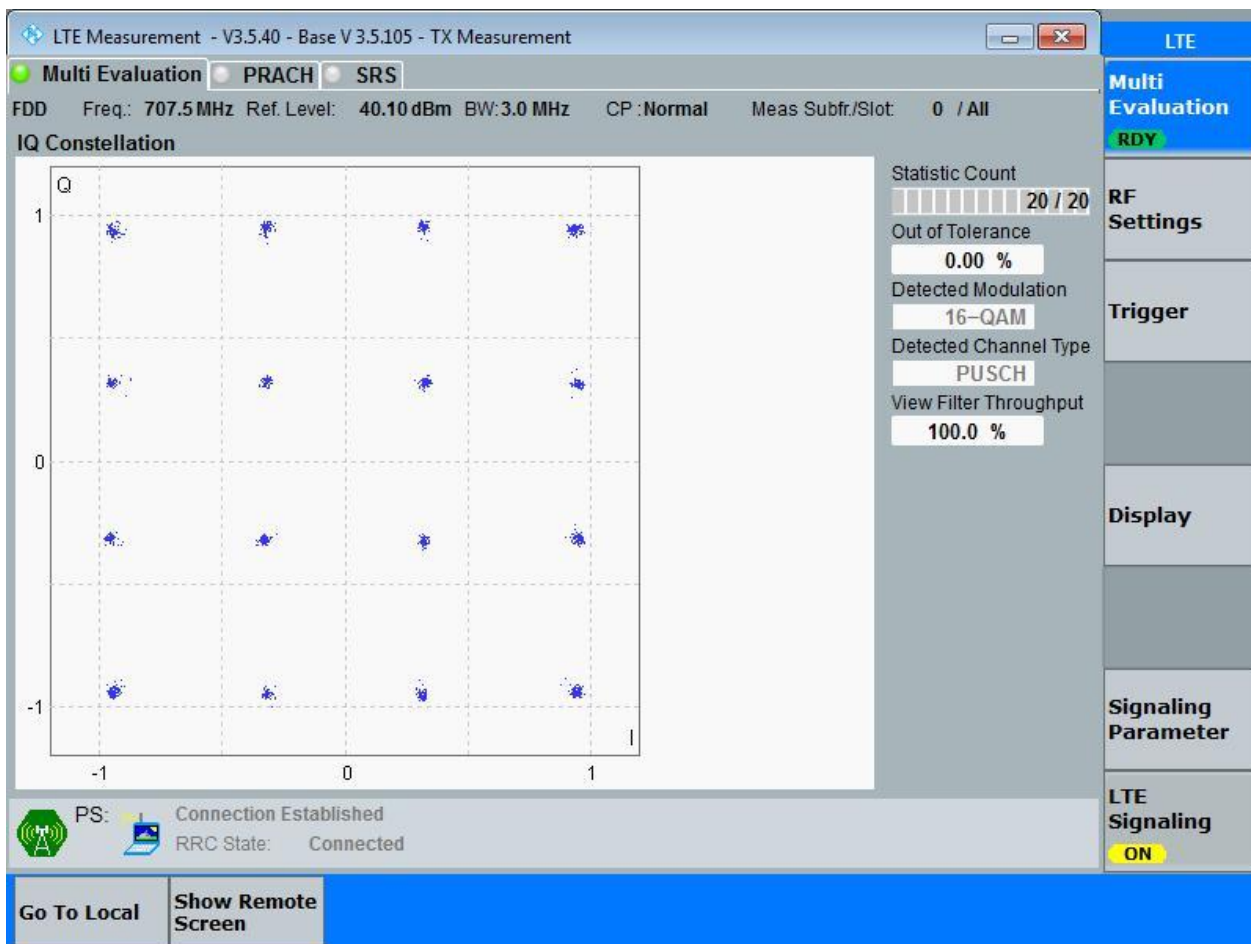
3.1.1.2.1.1.1 Test RB = RB6#0



3.1.1.2.2 Test Bandwidth = 3

3.1.1.2.2.1 Test Channel = MCH

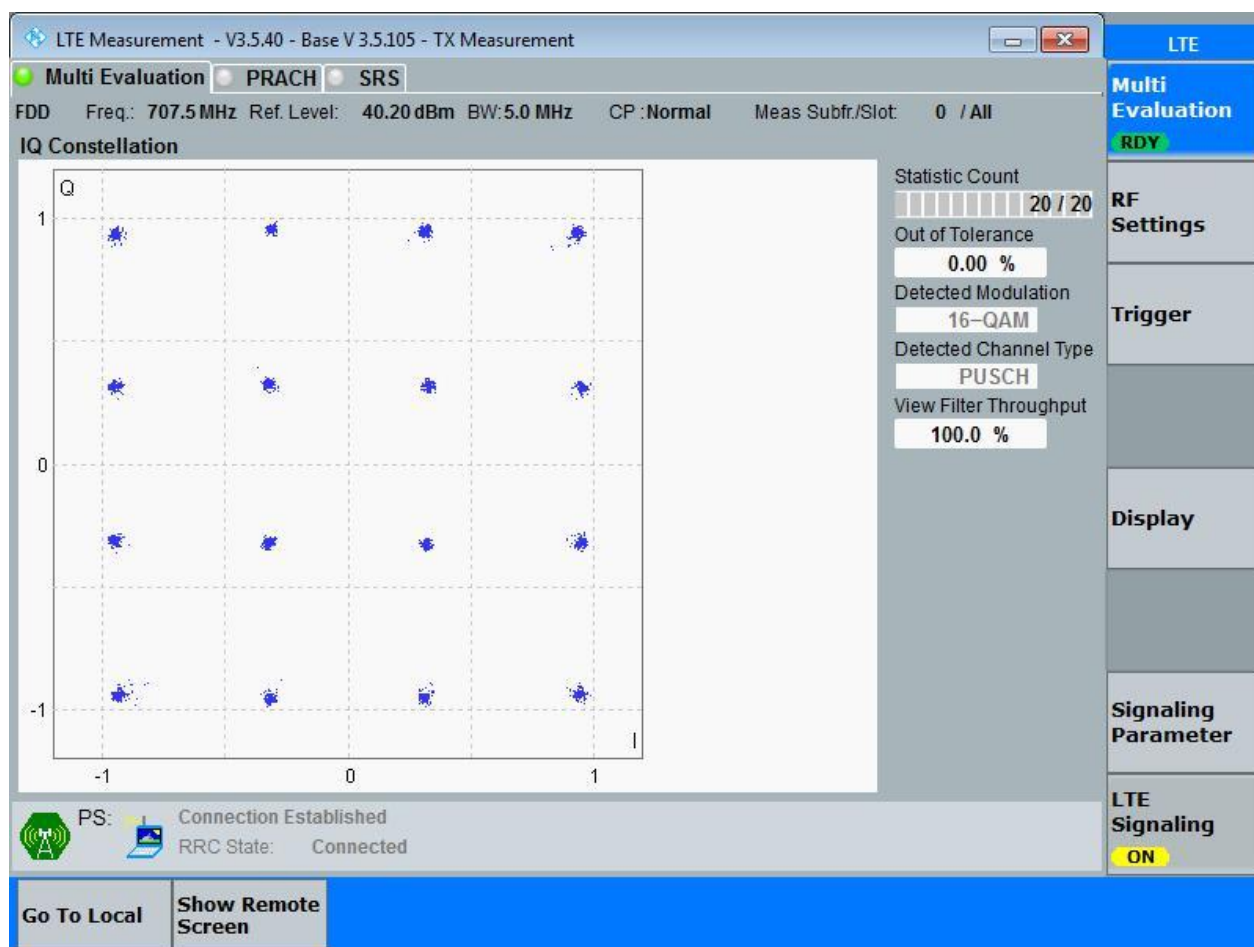
3.1.1.2.2.1.1 Test RB = RB15#0



3.1.1.2.3 Test Bandwidth = 5

3.1.1.2.3.1 Test Channel = MCH

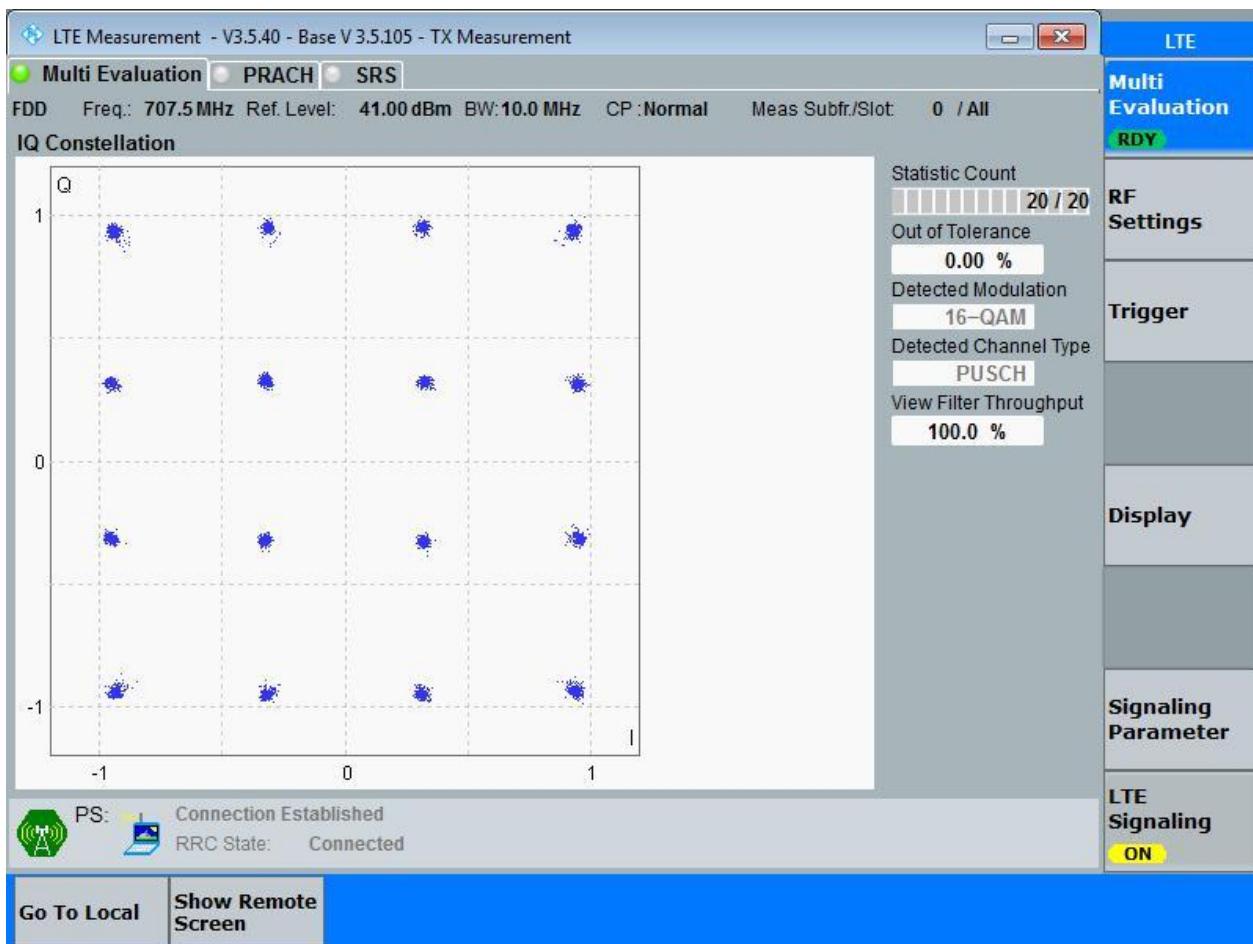
3.1.1.2.3.1.1 Test RB = RB25#0



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
BAND12	LTE/TM1	1.4	LCH	RB6#0	1.09	1.24	Pass
			MCH	RB6#0	1.09	1.23	Pass
			HCH	RB6#0	1.09	1.22	Pass
		3	LCH	RB15#0	2.70	2.92	Pass
			MCH	RB15#0	2.71	2.94	Pass
			HCH	RB15#0	2.70	2.93	Pass
		5	LCH	RB25#0	4.49	4.85	Pass
			MCH	RB25#0	4.50	4.91	Pass
			HCH	RB25#0	4.48	4.83	Pass
		10	LCH	RB50#0	8.94	9.57	Pass
			MCH	RB50#0	9.01	9.66	Pass
			HCH	RB50#0	9.00	9.62	Pass
	LTE/TM2	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	2.93	Pass
			MCH	RB15#0	2.71	2.94	Pass
			HCH	RB15#0	2.70	2.93	Pass
		5	LCH	RB25#0	4.49	4.87	Pass
			MCH	RB25#0	4.50	4.87	Pass
			HCH	RB25#0	4.48	4.84	Pass
		10	LCH	RB50#0	8.95	9.58	Pass
			MCH	RB50#0	9.01	9.64	Pass
			HCH	RB50#0	8.99	9.63	Pass



Part II - Test Plots

4.3 For LTE

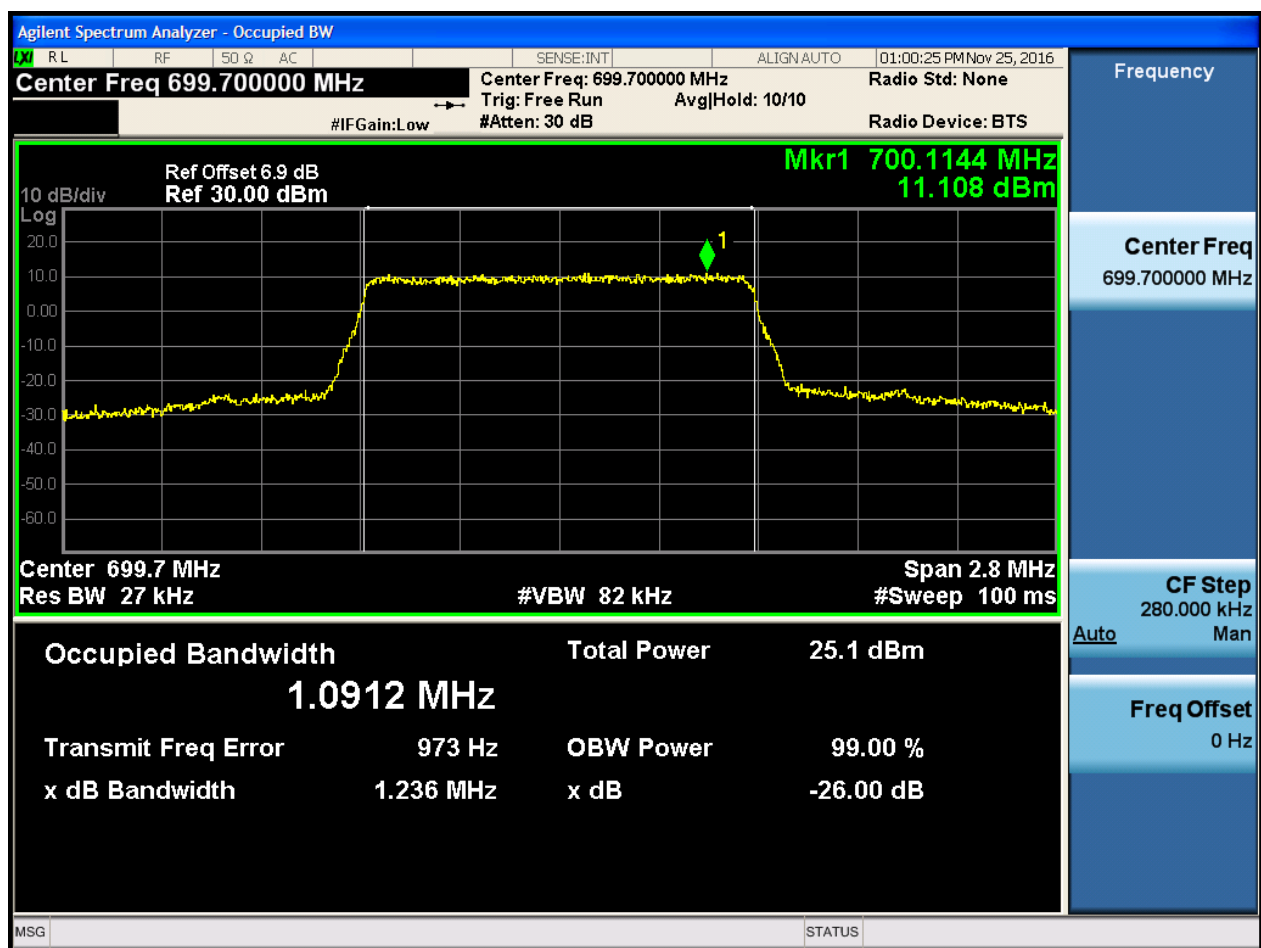
4.3.1 Test Band = BAND12

4.3.1.1 Test Mode = LTE/TM1

4.3.1.1.1 Test Bandwidth = 1.4

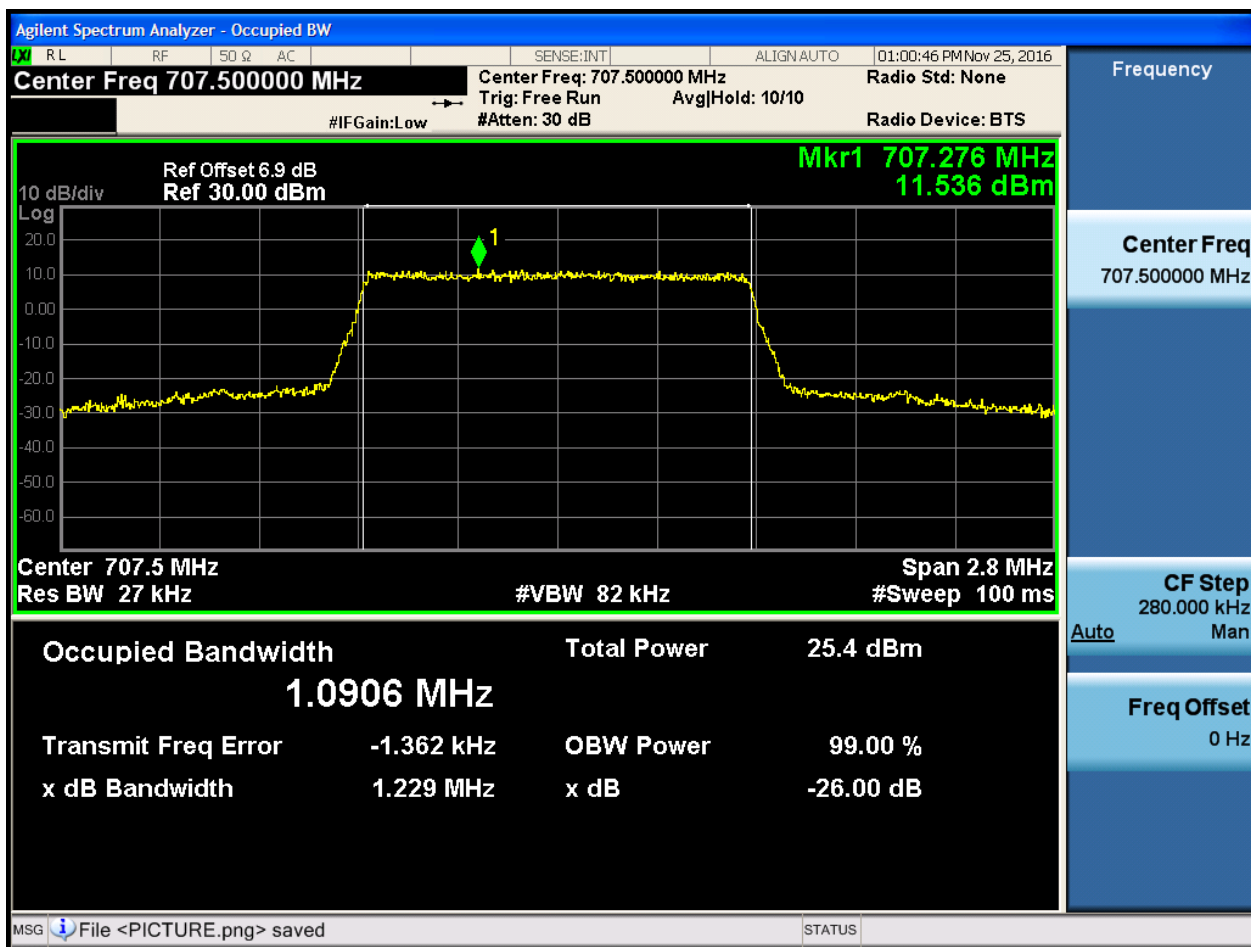
4.3.1.1.1.1 Test Channel = LCH

4.3.1.1.1.1.1 Test RB = RB6#0



4.3.1.1.1.2 Test Channel = MCH

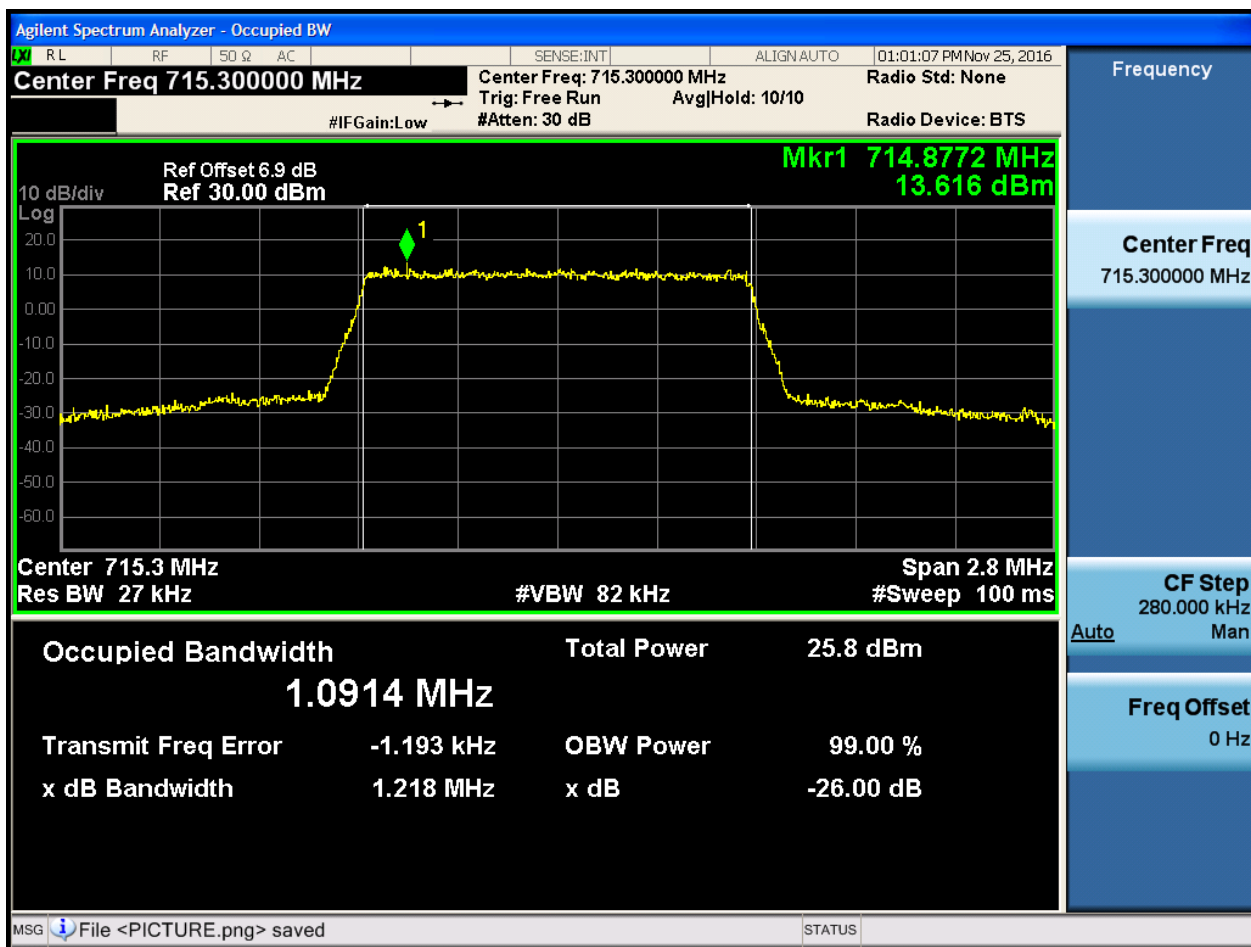
4.3.1.1.1.2.1 Test RB = RB6#0





4.3.1.1.1.3 Test Channel = HCH

4.3.1.1.1.3.1 Test RB = RB6#0

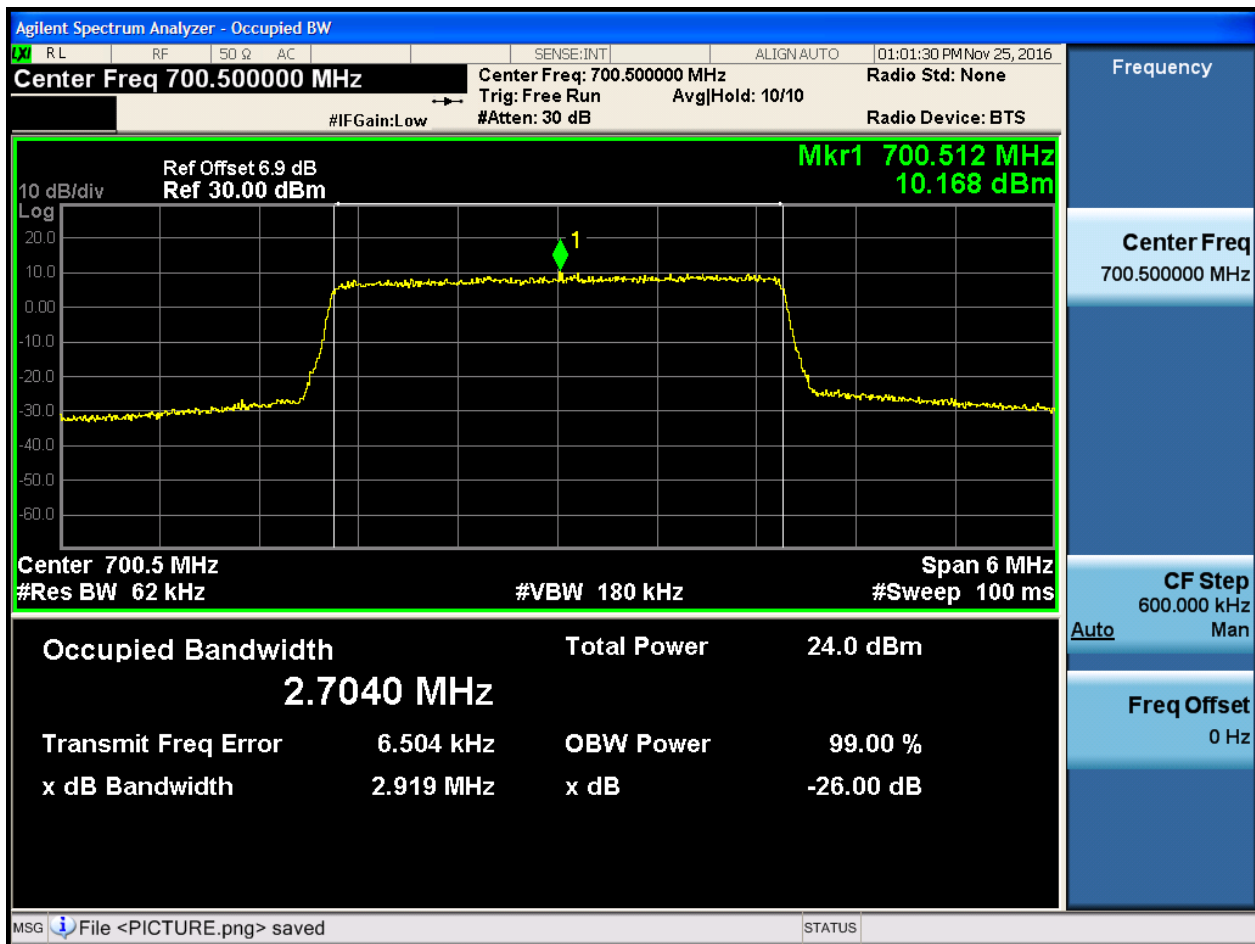




4.3.1.1.2 Test Bandwidth = 3

4.3.1.1.2.1 Test Channel = LCH

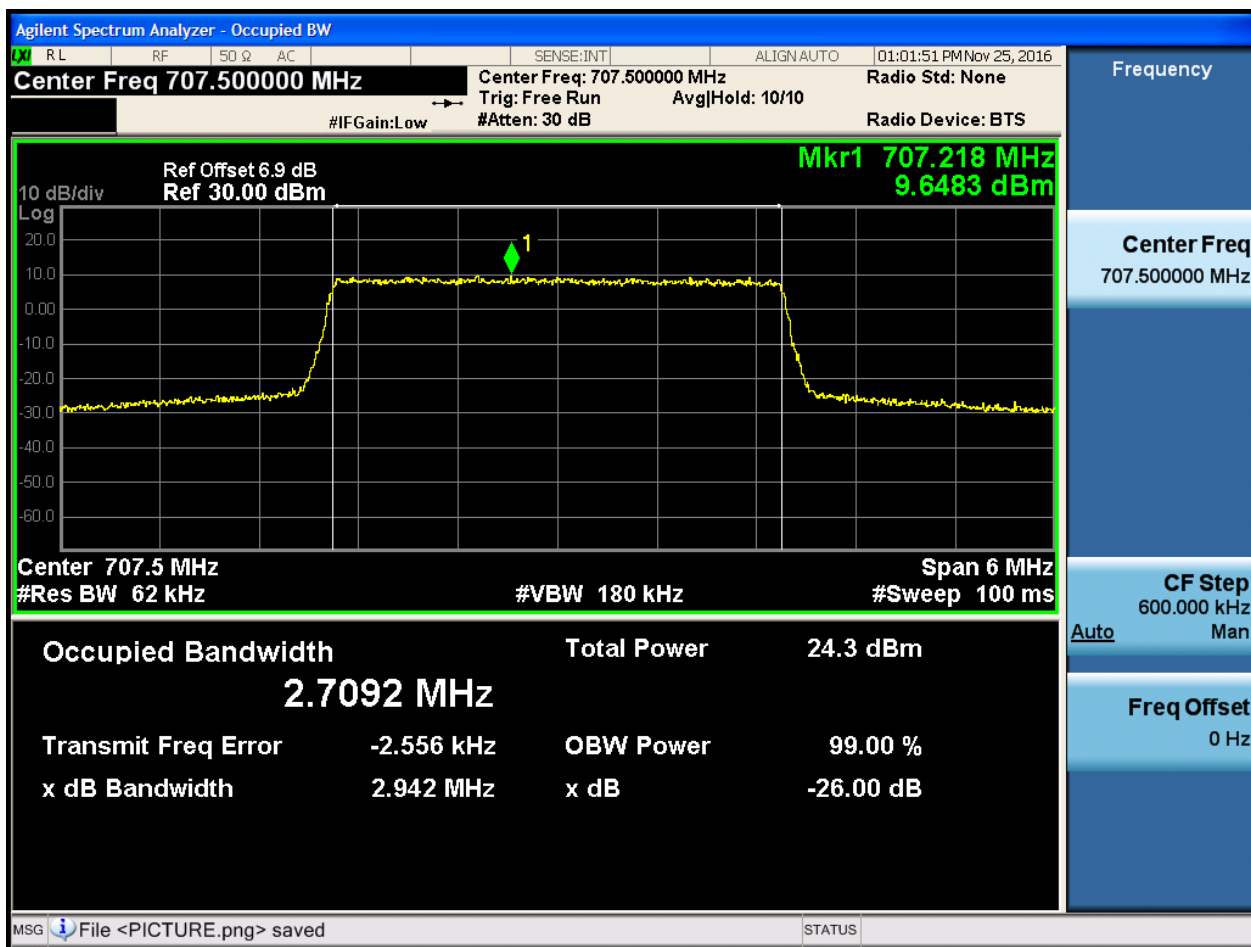
4.3.1.1.2.1.1 Test RB = RB15#0





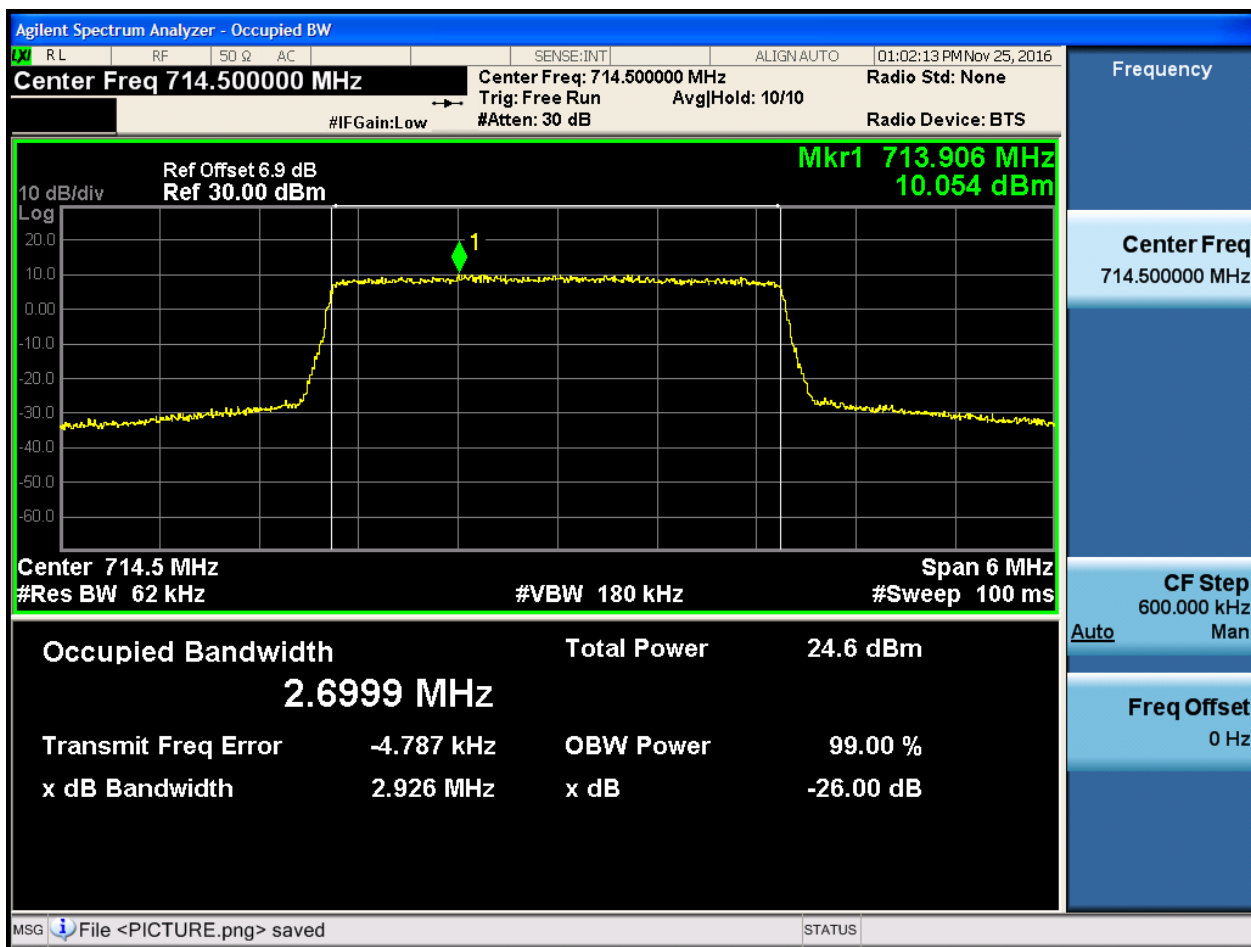
4.3.1.1.2.2 Test Channel = MCH

4.3.1.1.2.2.1 Test RB = RB15#0



4.3.1.1.2.3 Test Channel = HCH

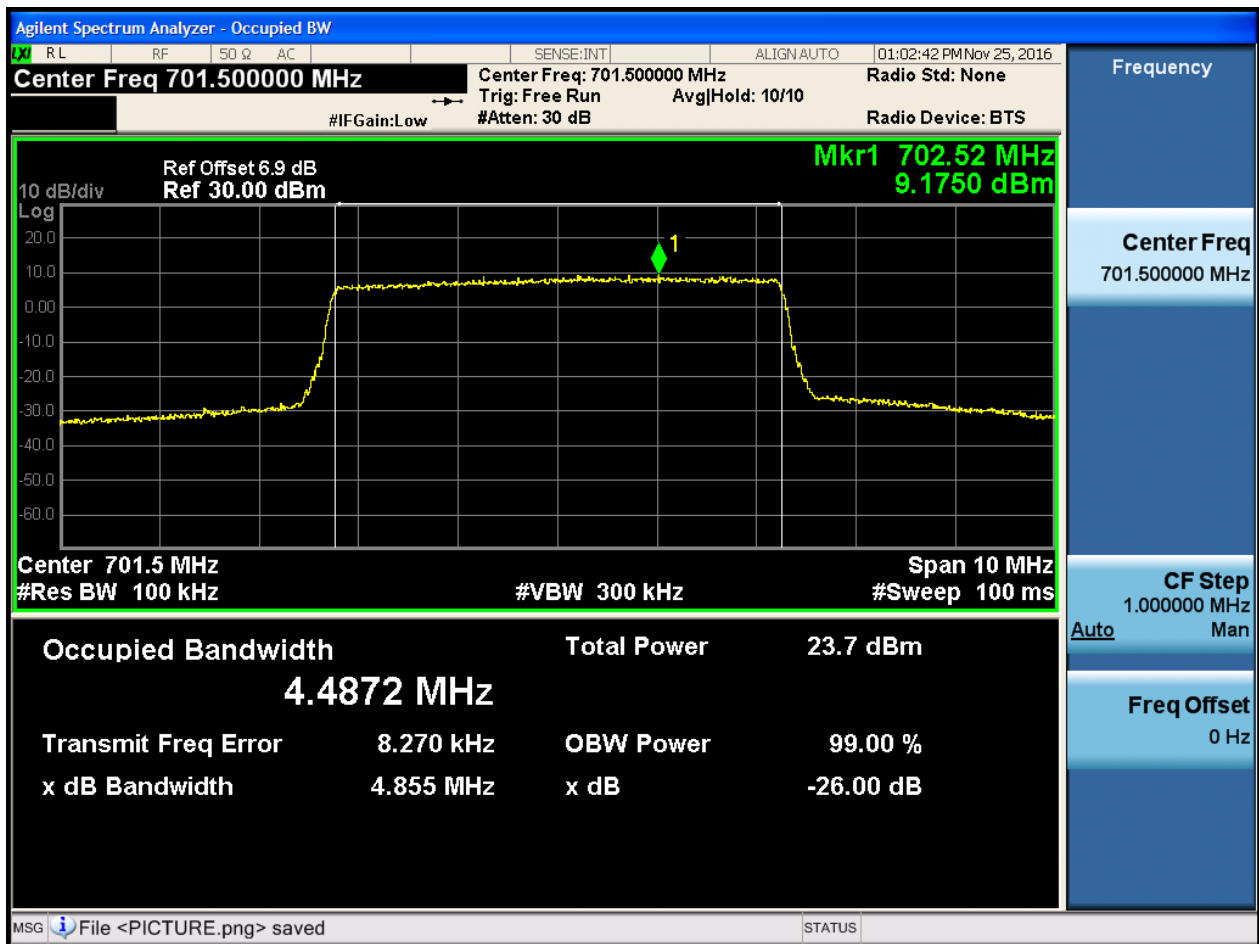
4.3.1.1.2.3.1 Test RB = RB15#0



4.3.1.1.3 Test Bandwidth = 5

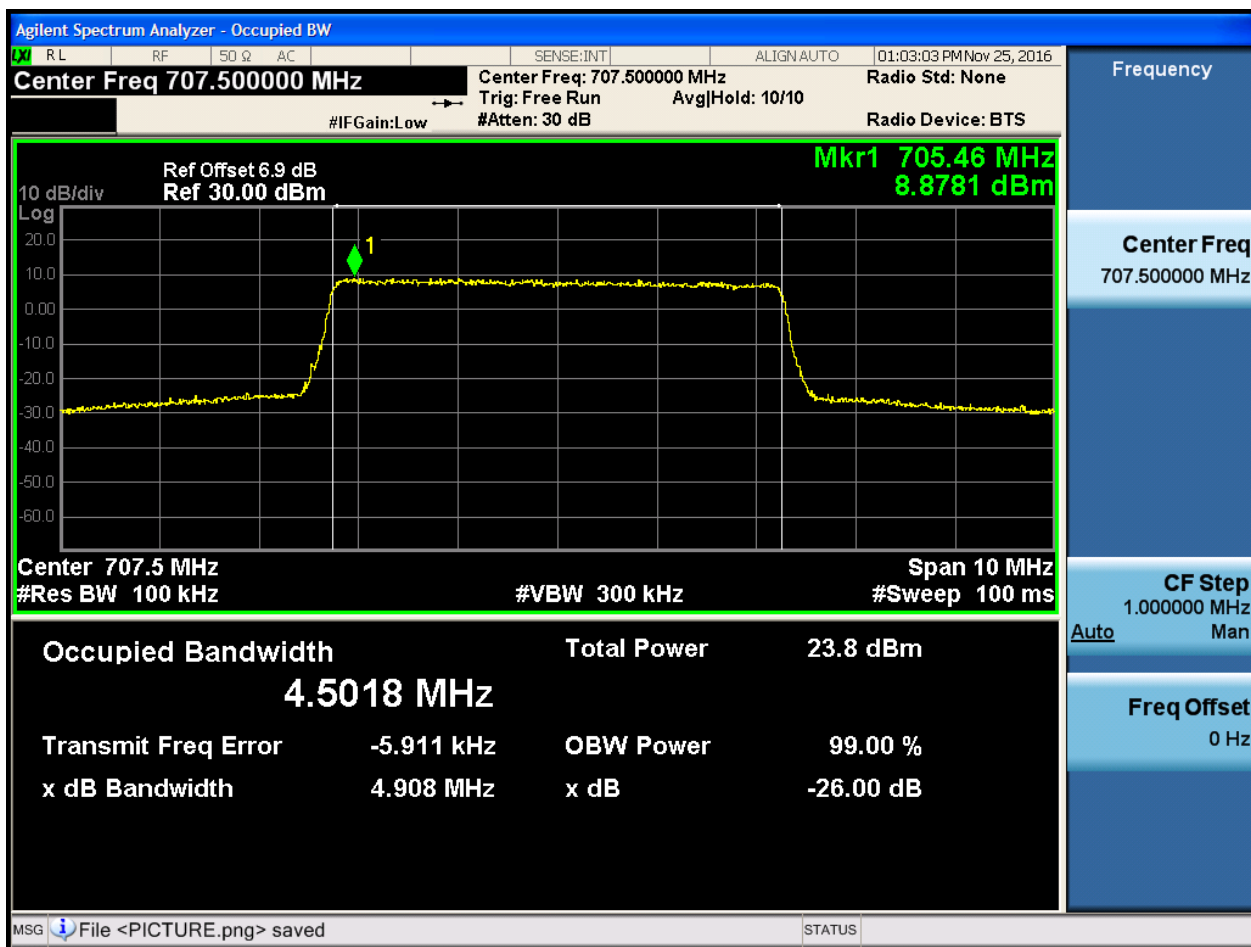
4.3.1.1.3.1 Test Channel = LCH

4.3.1.1.3.1.1 Test RB = RB25#0



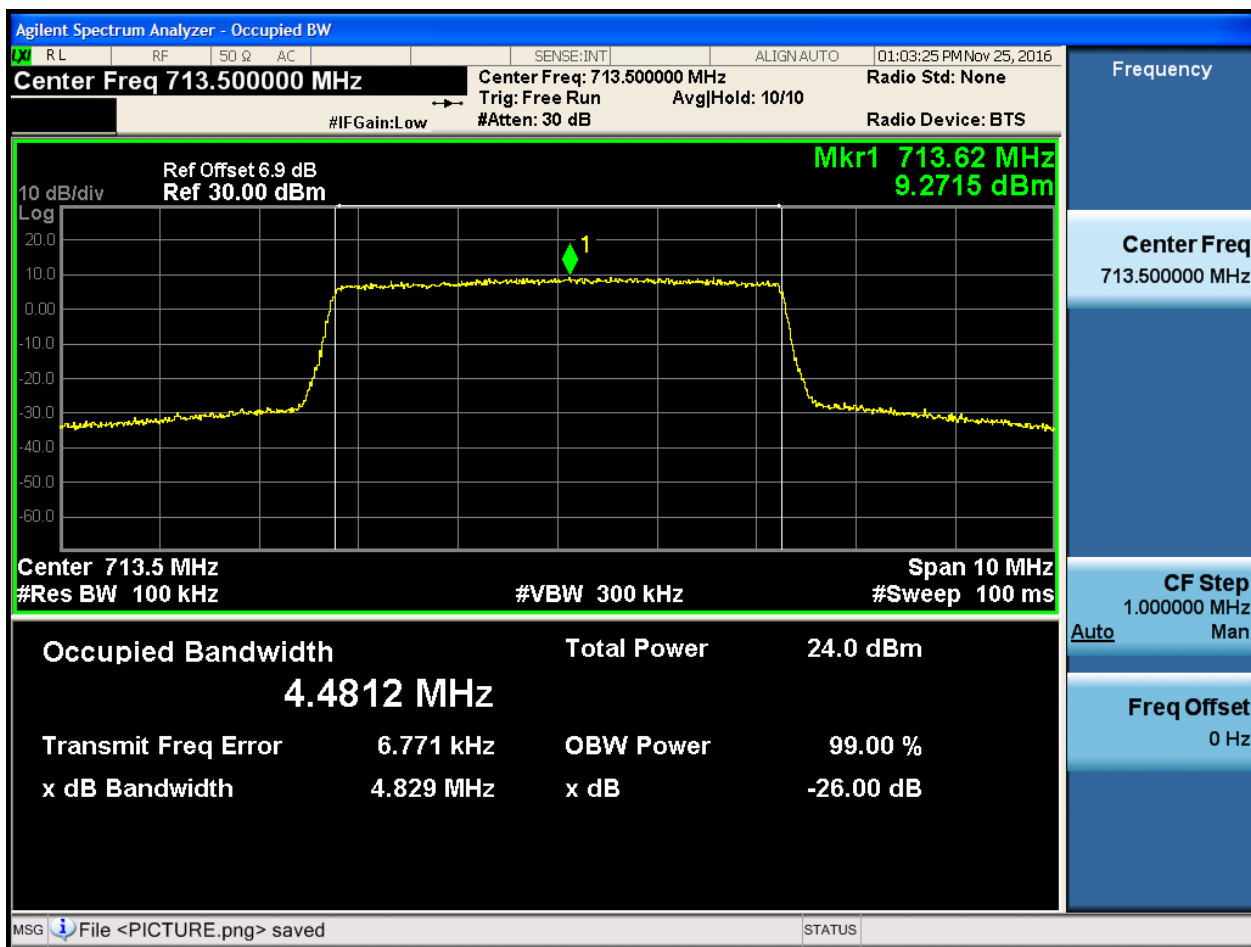
4.3.1.1.3.2 Test Channel = MCH

4.3.1.1.3.2.1 Test RB = RB25#0



4.3.1.1.3.3 Test Channel = HCH

4.3.1.1.3.3.1 Test RB = RB25#0

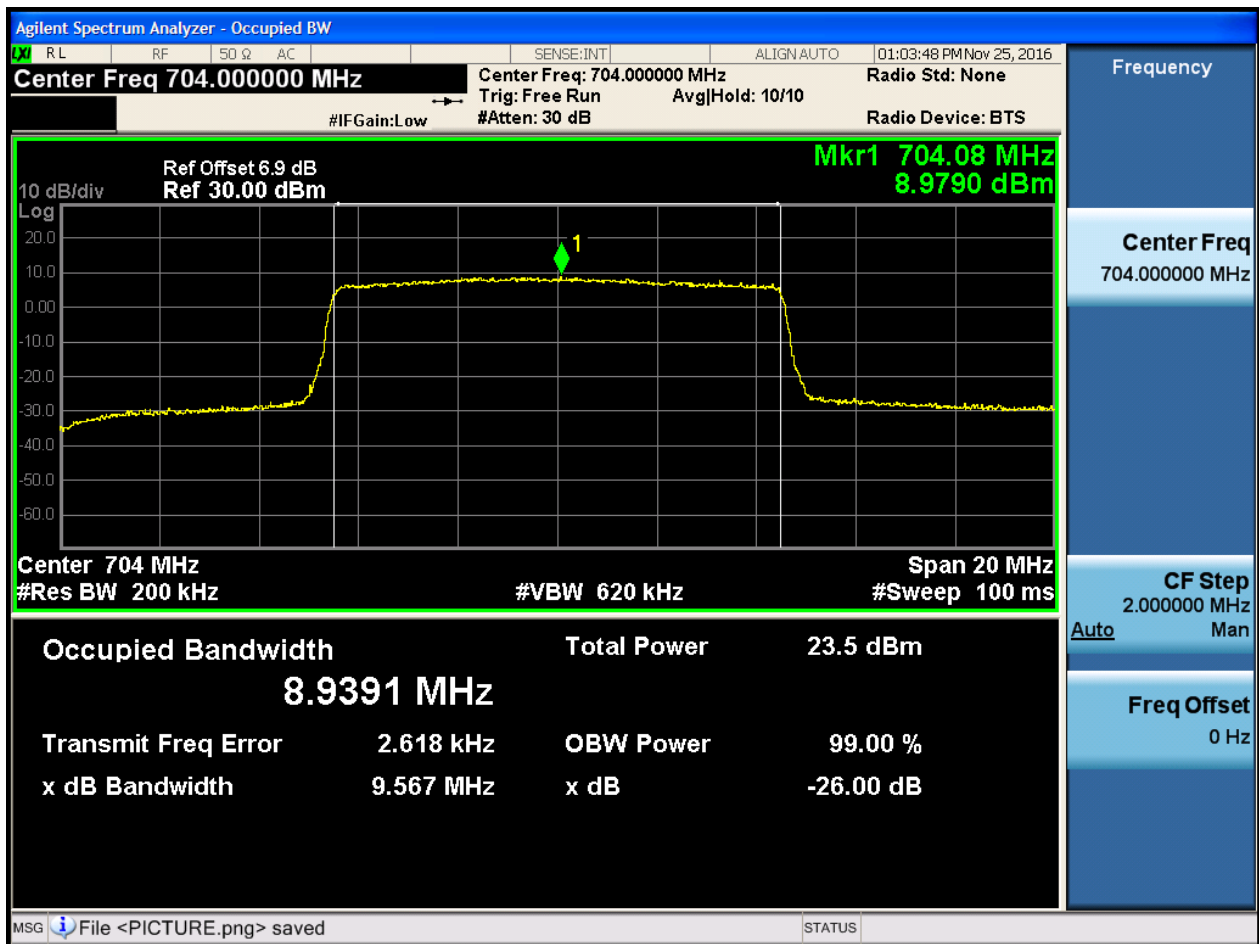




4.3.1.1.4 Test Bandwidth = 10

4.3.1.1.4.1 Test Channel = LCH

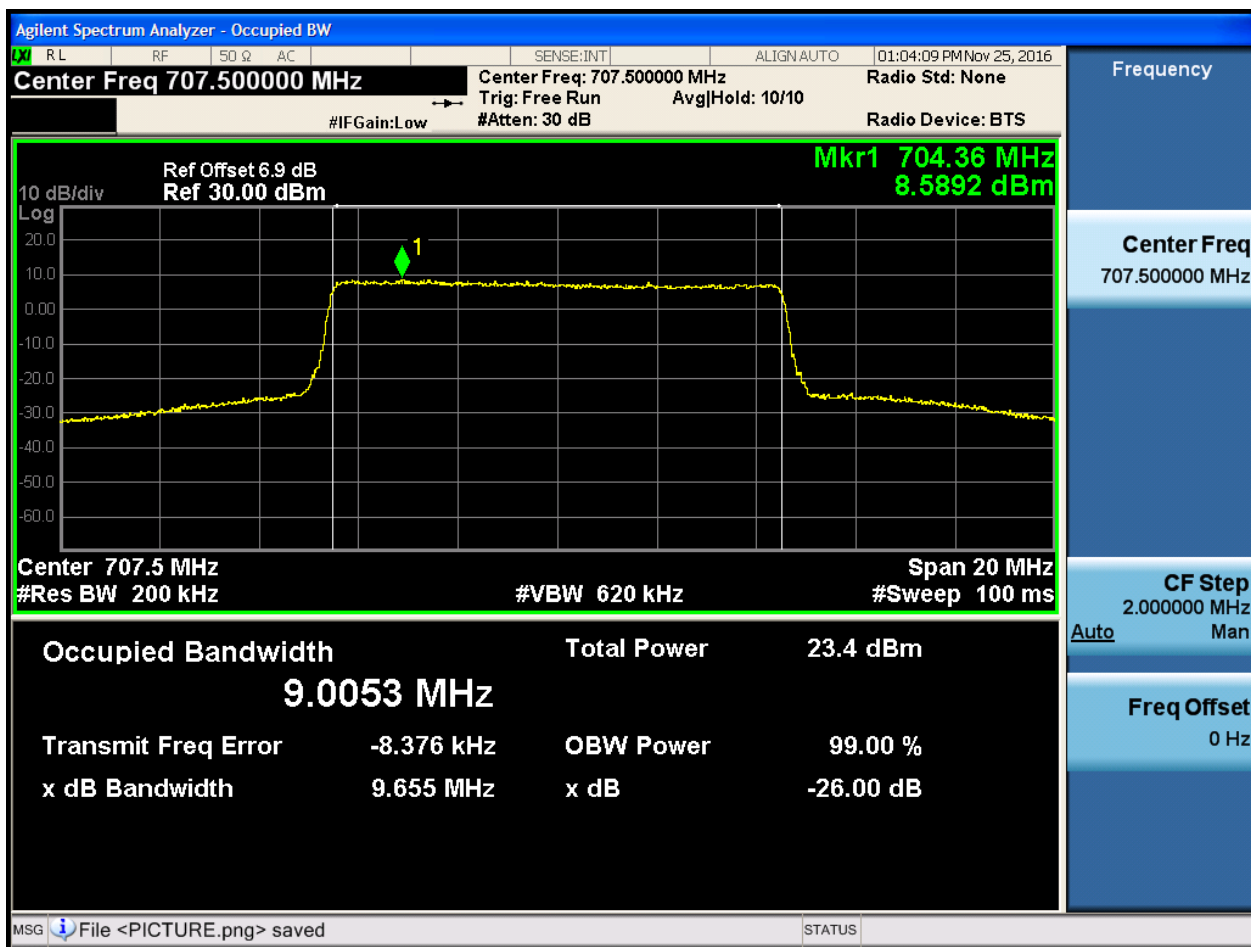
4.3.1.1.4.1.1 Test RB = RB50#0





4.3.1.1.4.2 Test Channel = MCH

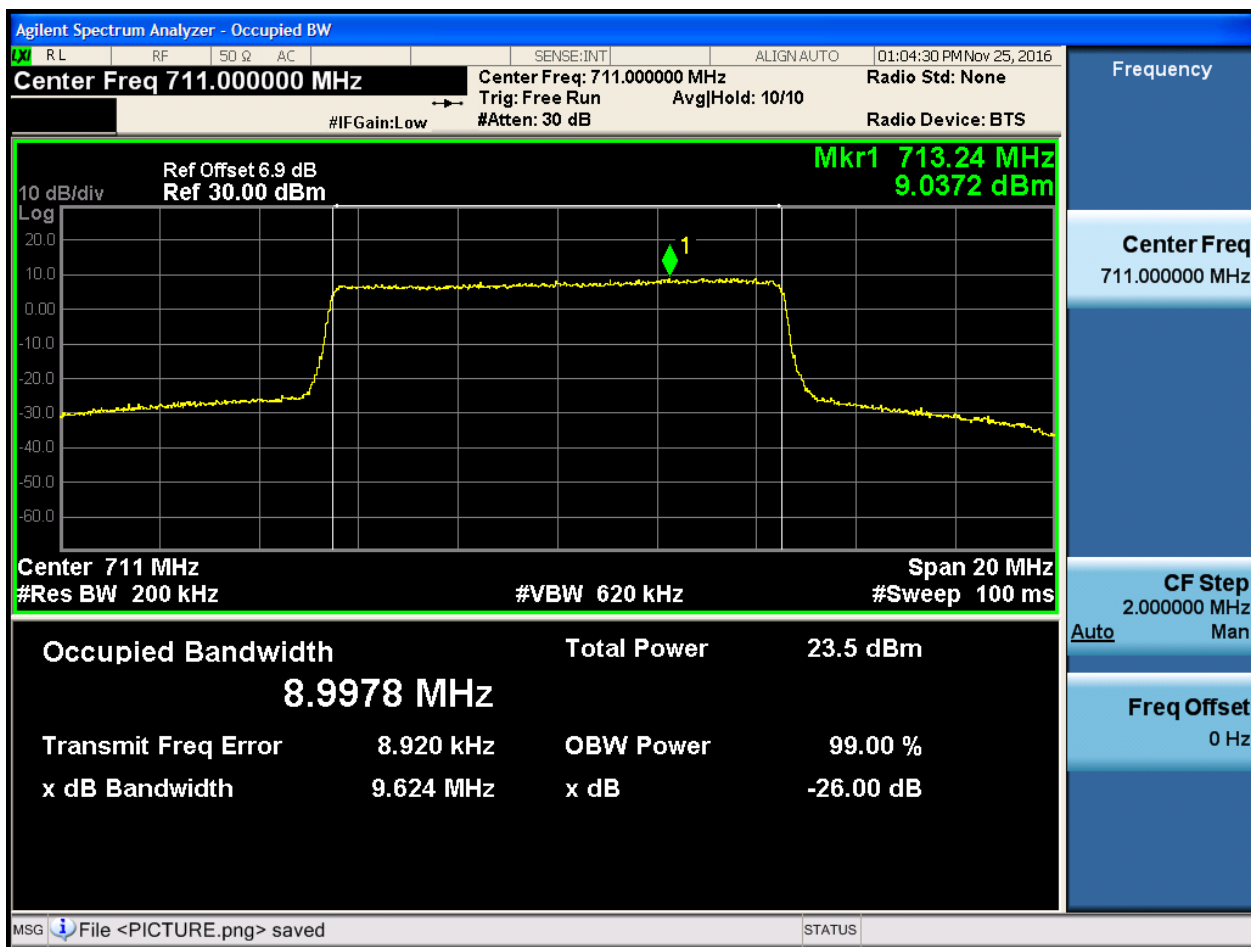
4.3.1.1.4.2.1 Test RB = RB50#0





4.3.1.1.4.3 Test Channel = HCH

4.3.1.1.4.3.1 Test RB = RB50#0



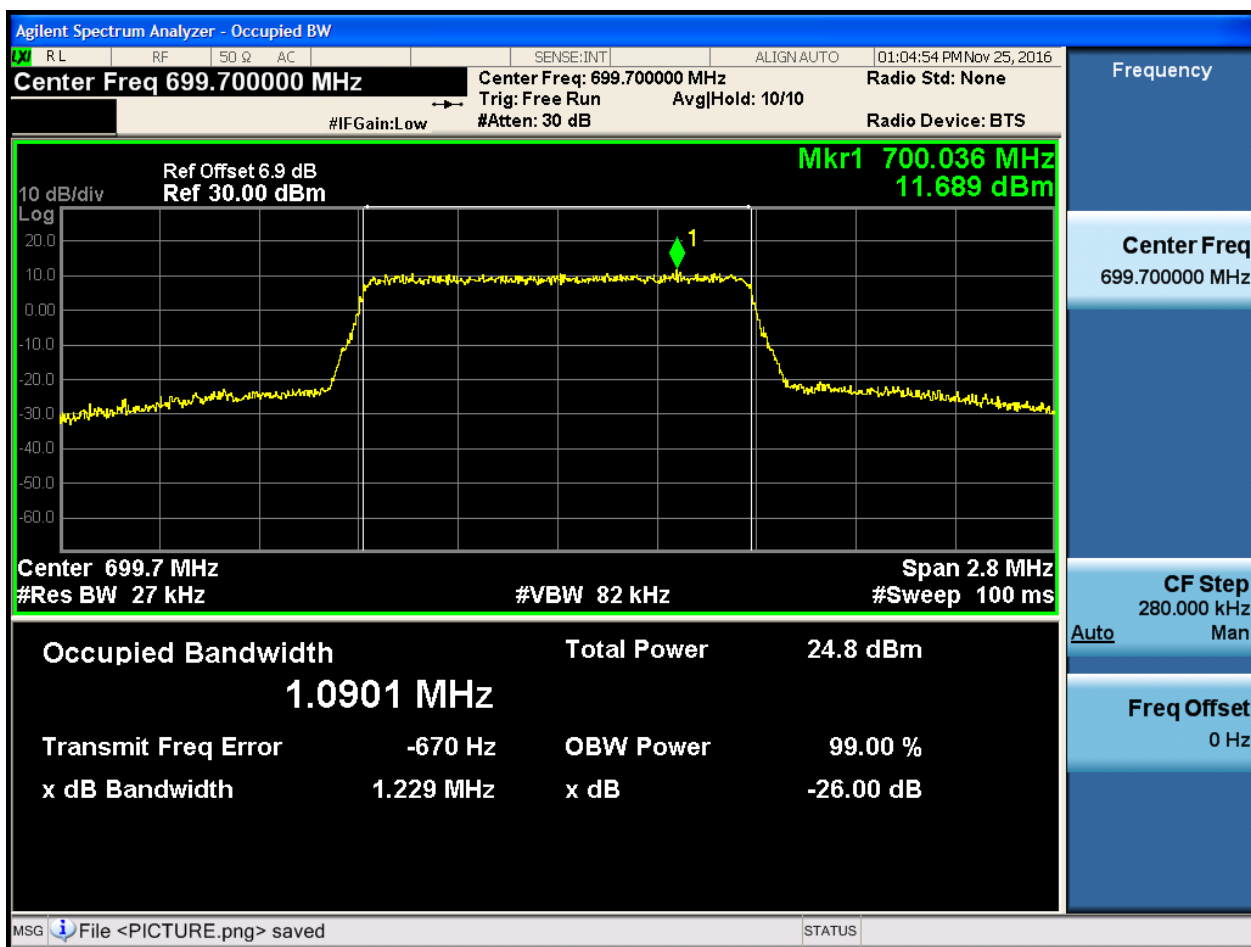


4.3.1.2 Test Mode = LTE/TM2

4.3.1.2.1 Test Bandwidth = 1.4

4.3.1.2.1.1 Test Channel = LCH

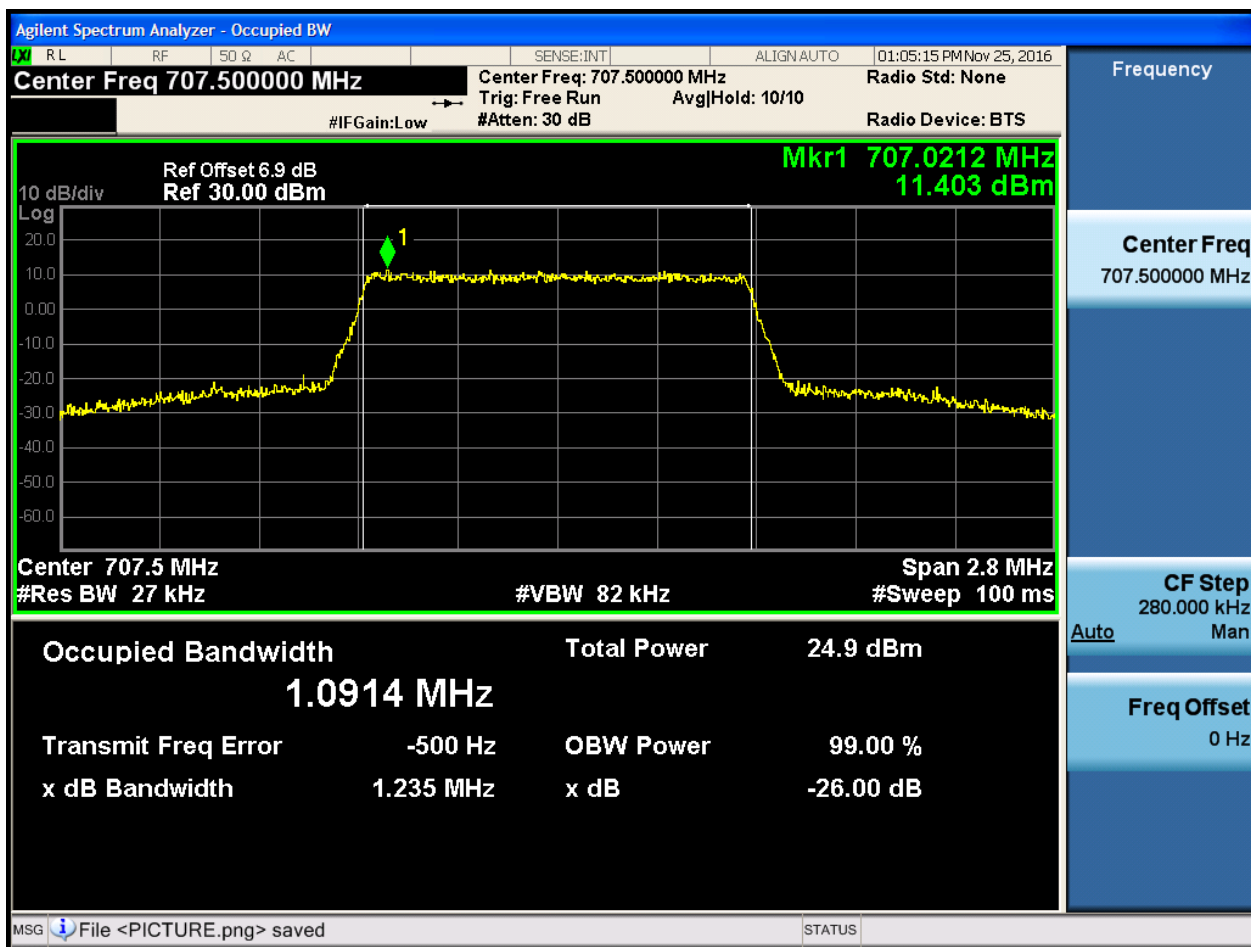
4.3.1.2.1.1.1 Test RB = RB6#0





4.3.1.2.1.2 Test Channel = MCH

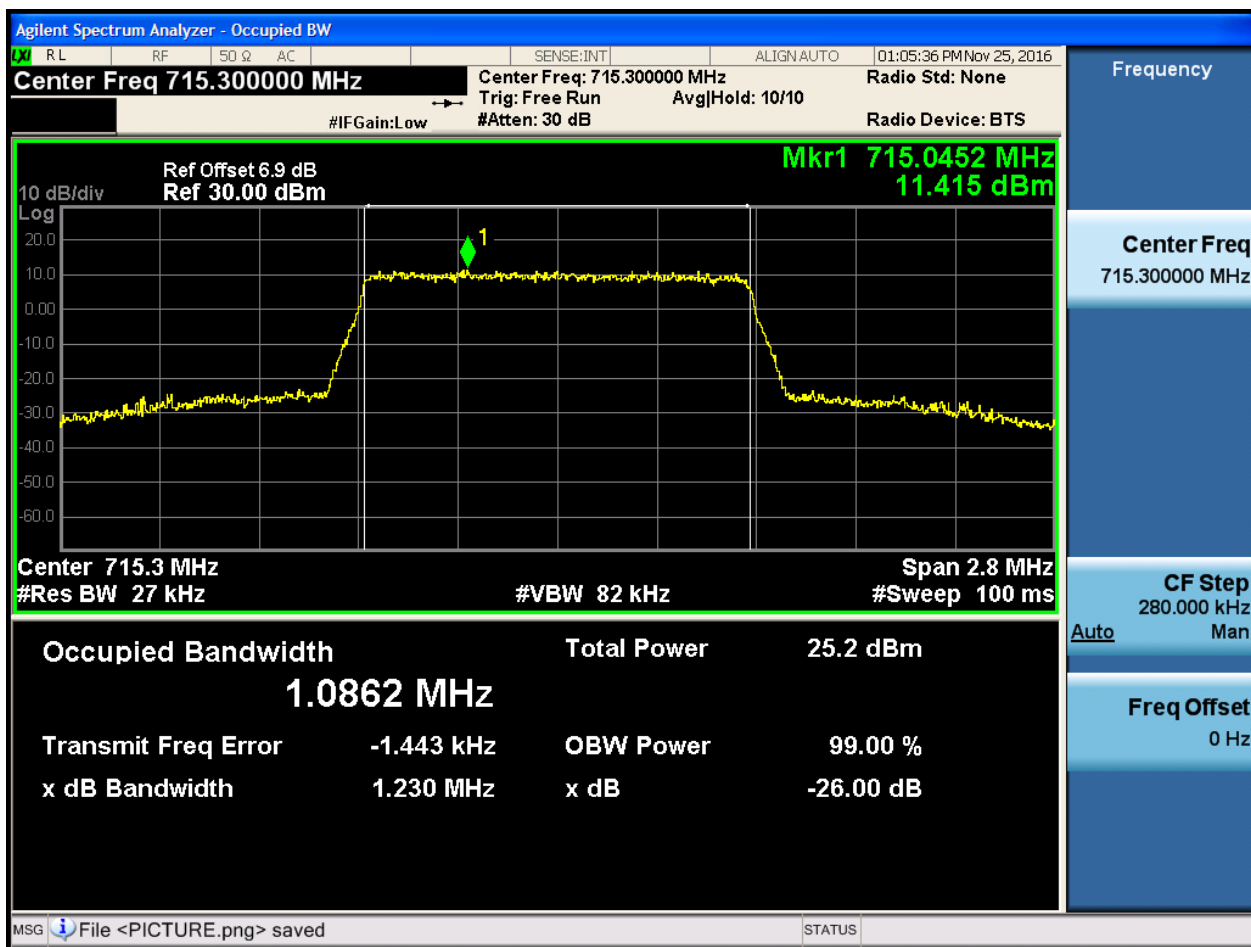
4.3.1.2.1.2.1 Test RB = RB6#0





4.3.1.2.1.3 Test Channel = HCH

4.3.1.2.1.3.1 Test RB = RB6#0

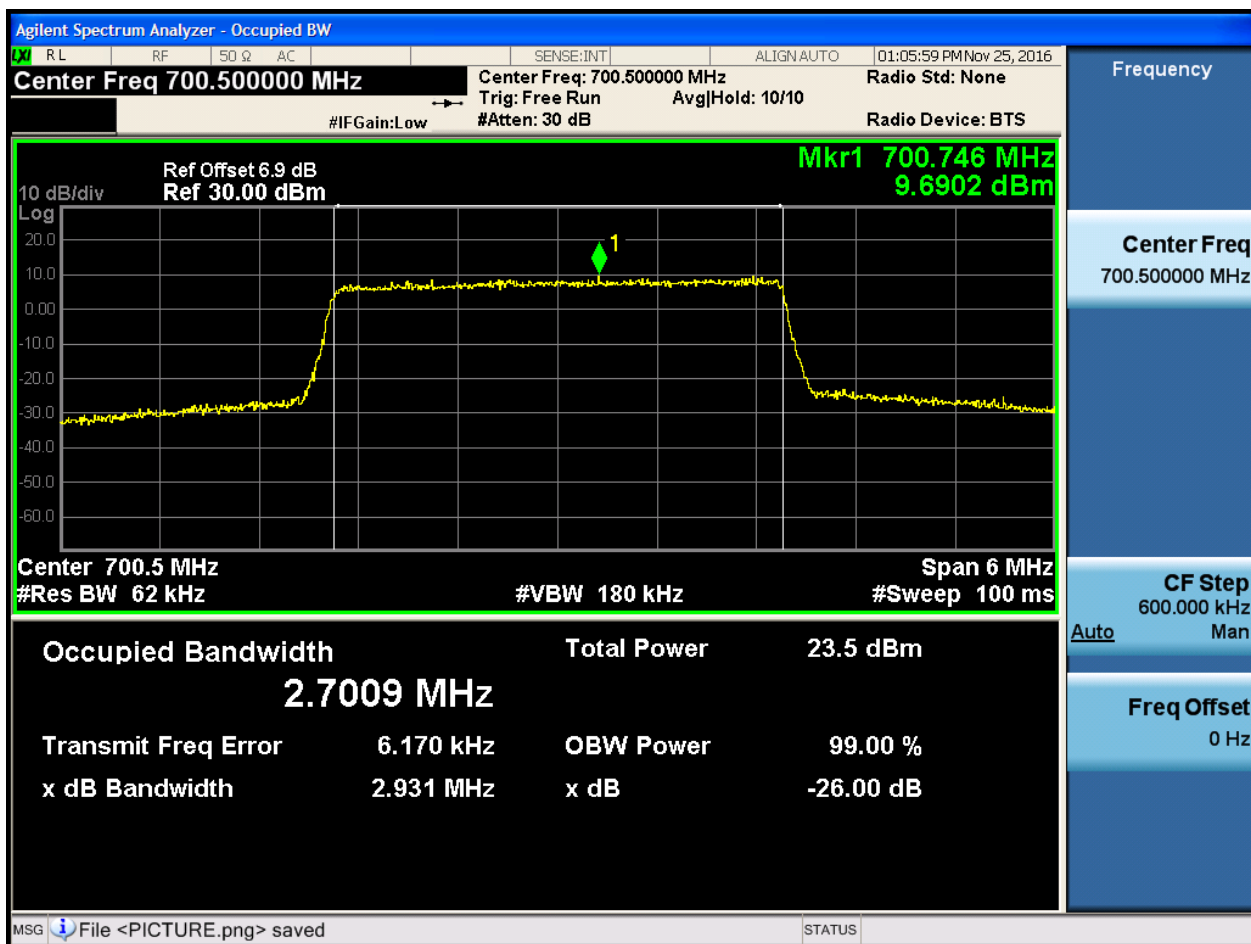




4.3.1.2.2 Test Bandwidth = 3

4.3.1.2.2.1 Test Channel = LCH

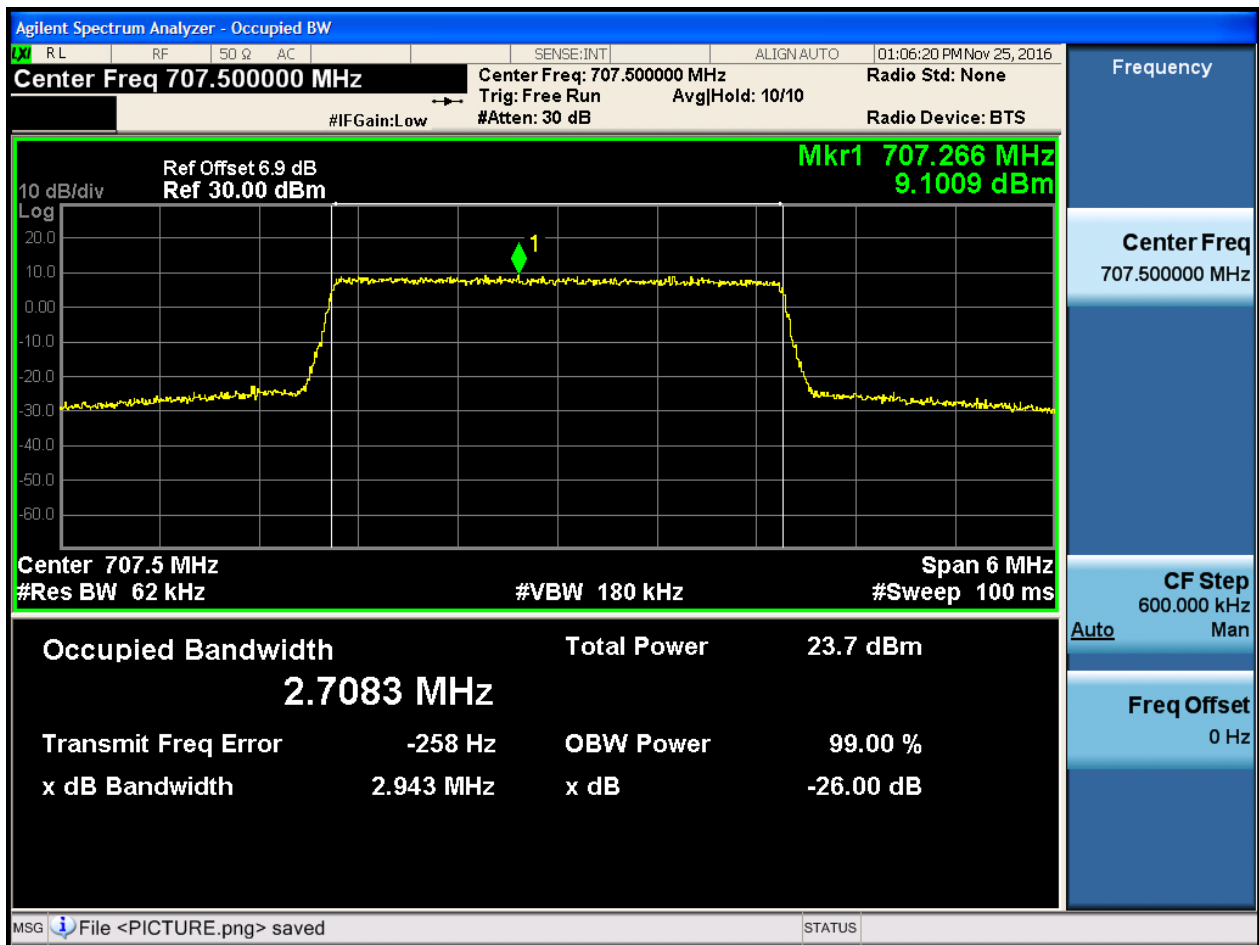
4.3.1.2.2.1.1 Test RB = RB15#0





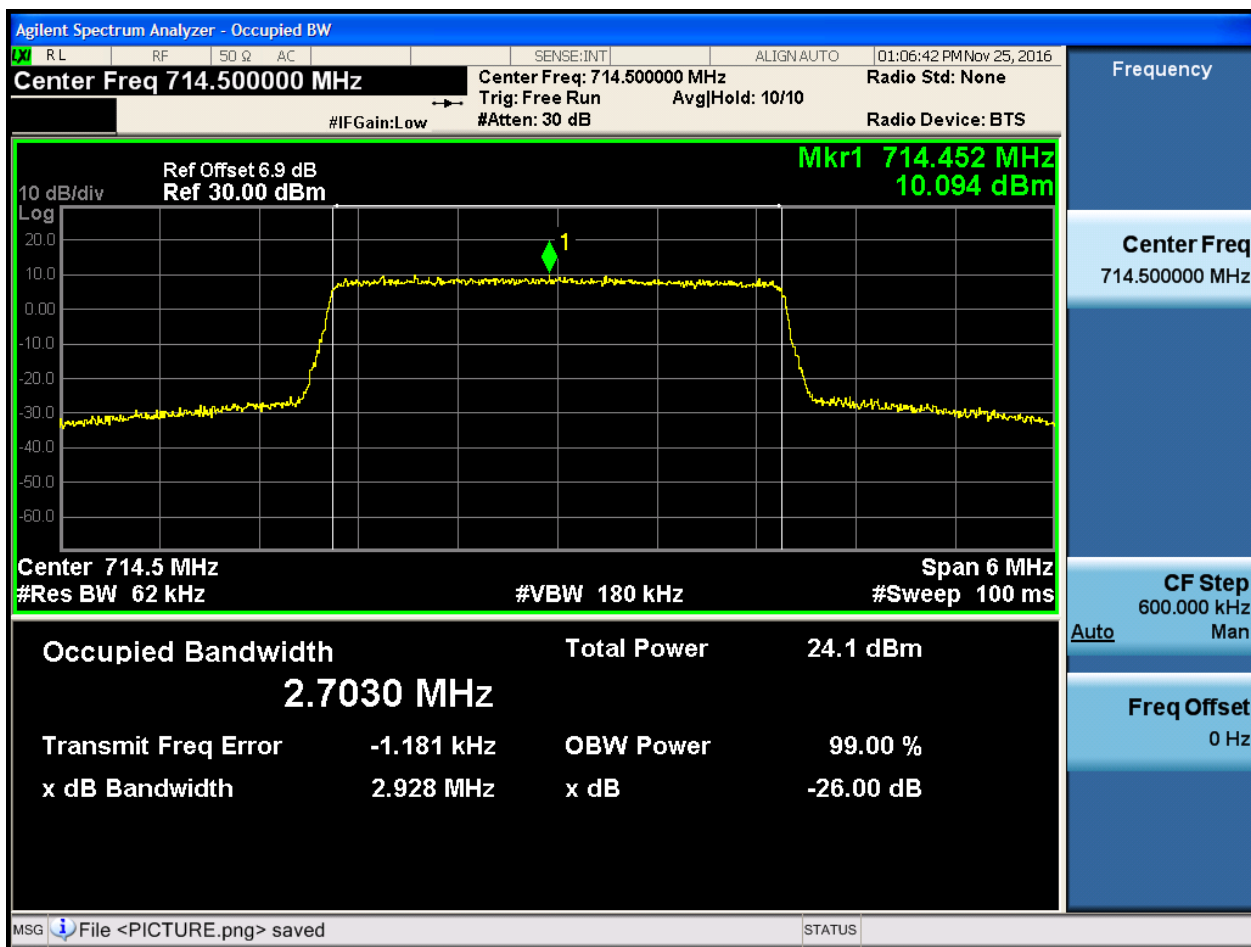
4.3.1.2.2.2 Test Channel = MCH

4.3.1.2.2.2.1 Test RB = RB15#0



4.3.1.2.2.3 Test Channel = HCH

4.3.1.2.2.3.1 Test RB = RB15#0

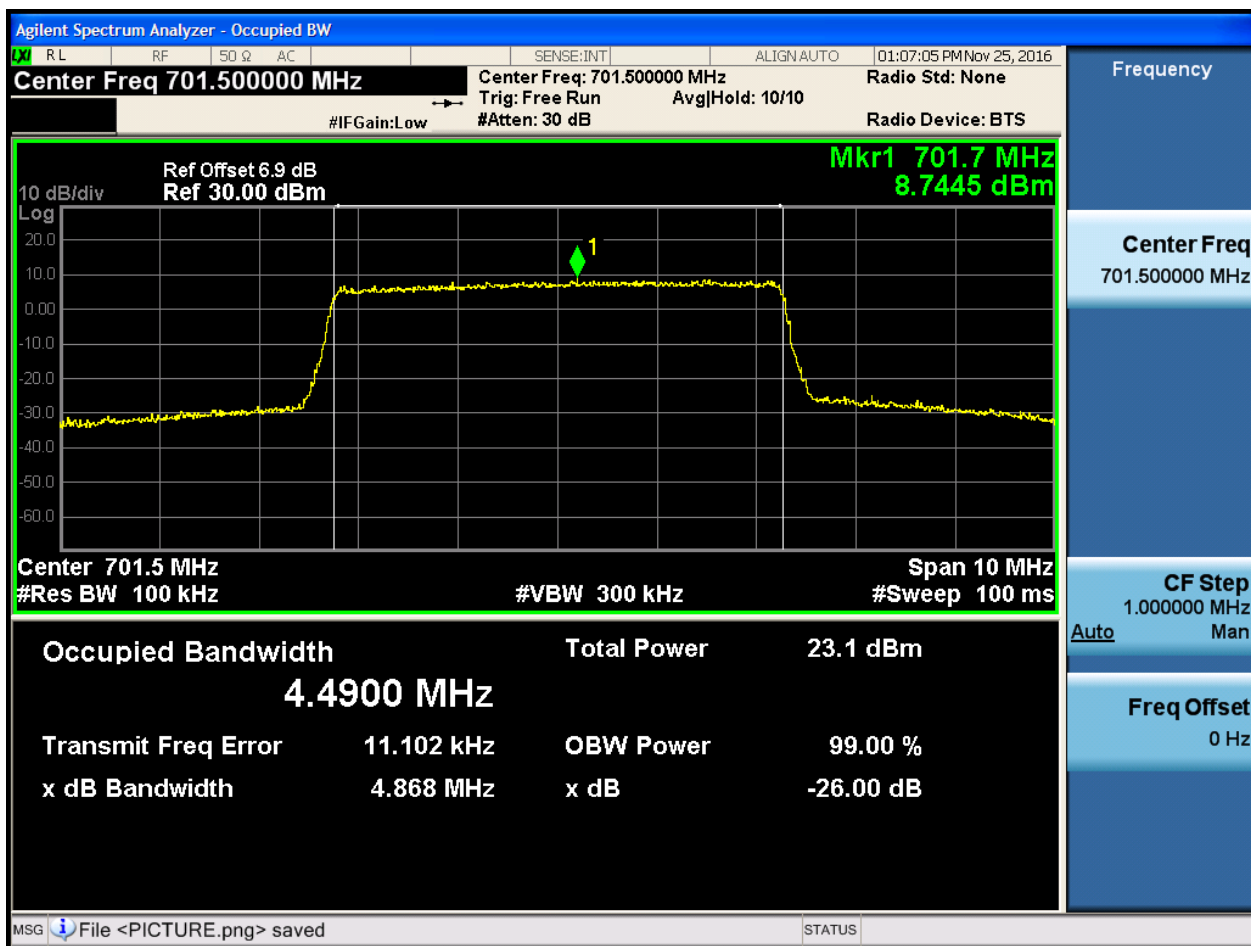




4.3.1.2.3 Test Bandwidth = 5

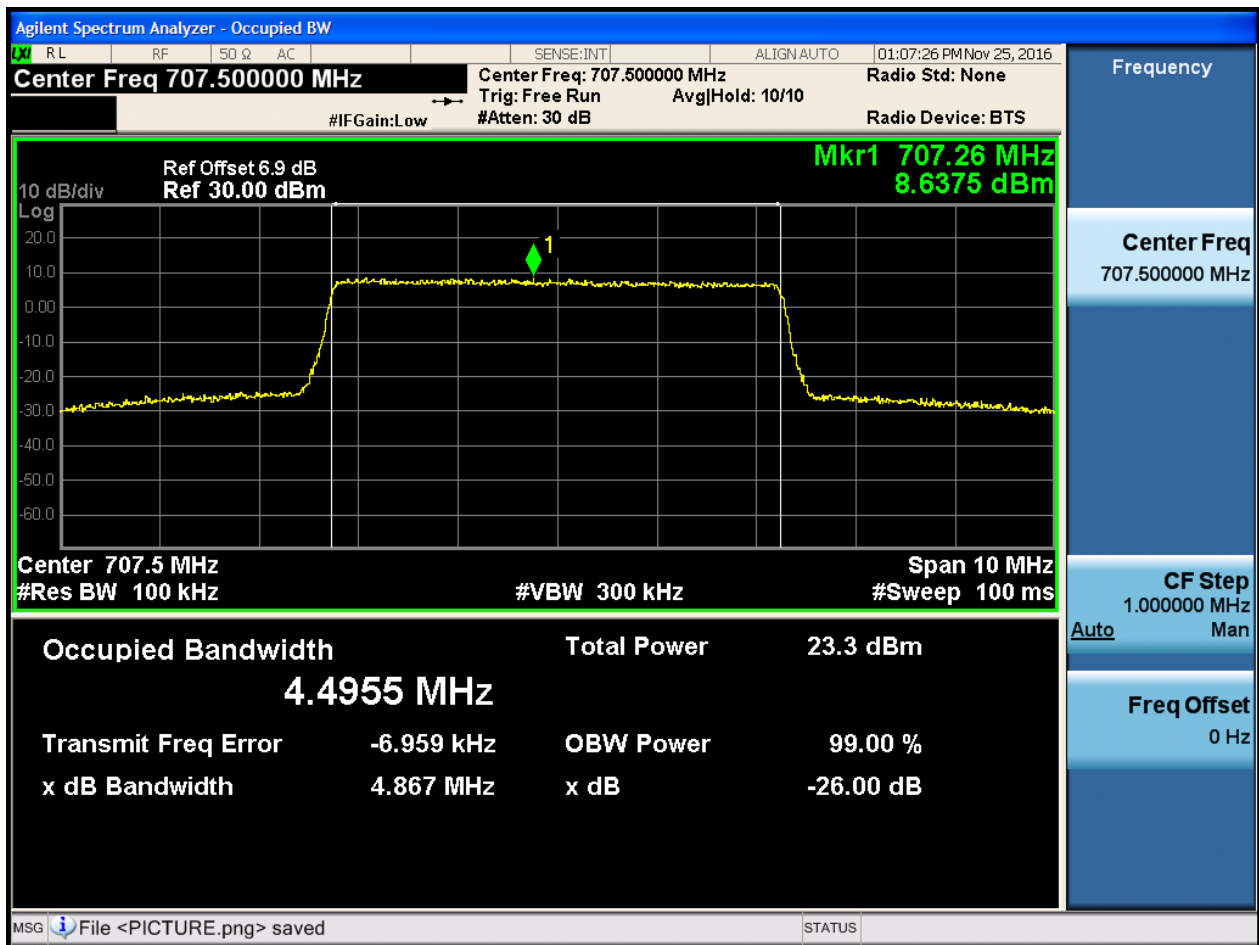
4.3.1.2.3.1 Test Channel = LCH

4.3.1.2.3.1.1 Test RB = RB25#0



4.3.1.2.3.2 Test Channel = MCH

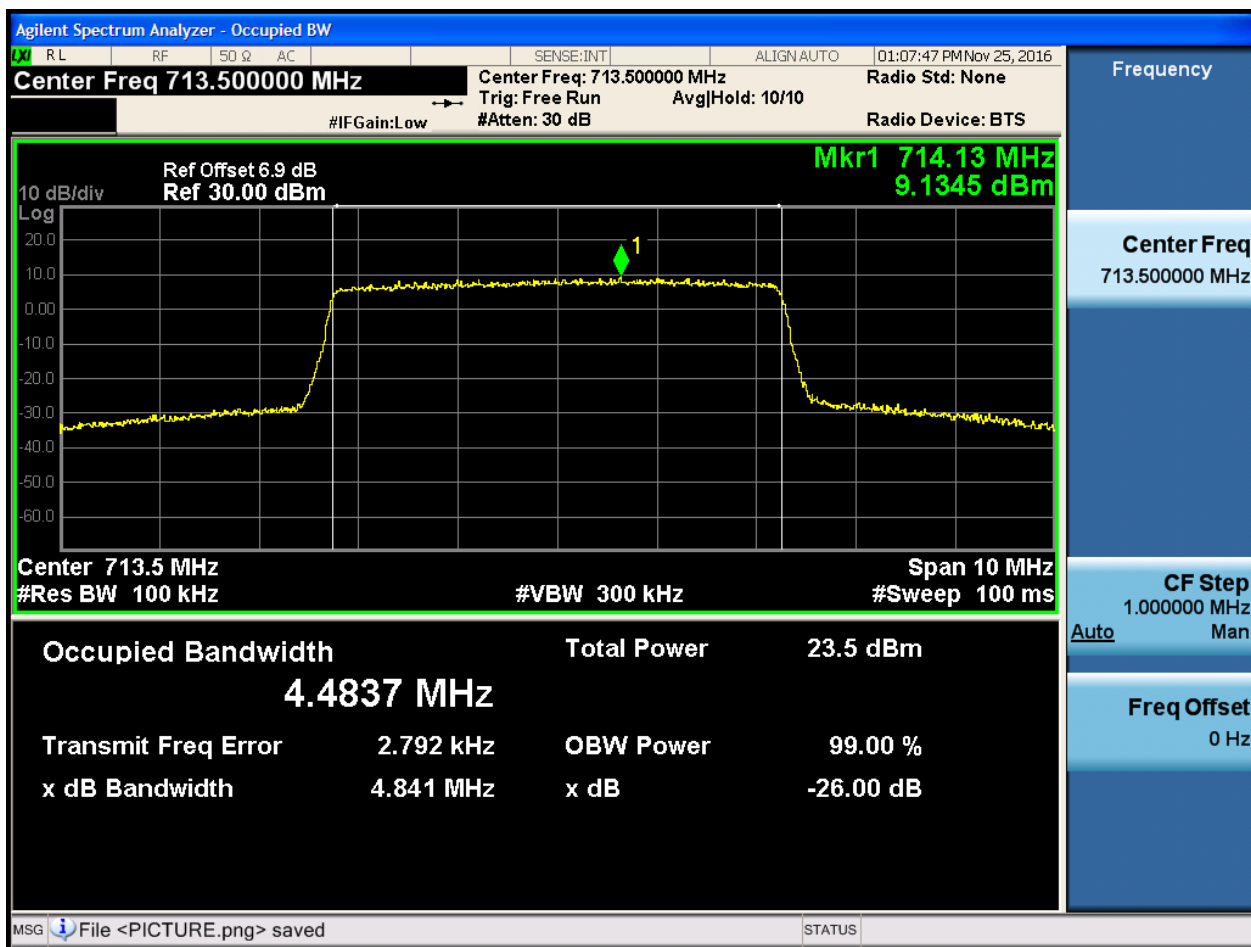
4.3.1.2.3.2.1 Test RB = RB25#0





4.3.1.2.3.3 Test Channel = HCH

4.3.1.2.3.3.1 Test RB = RB25#0

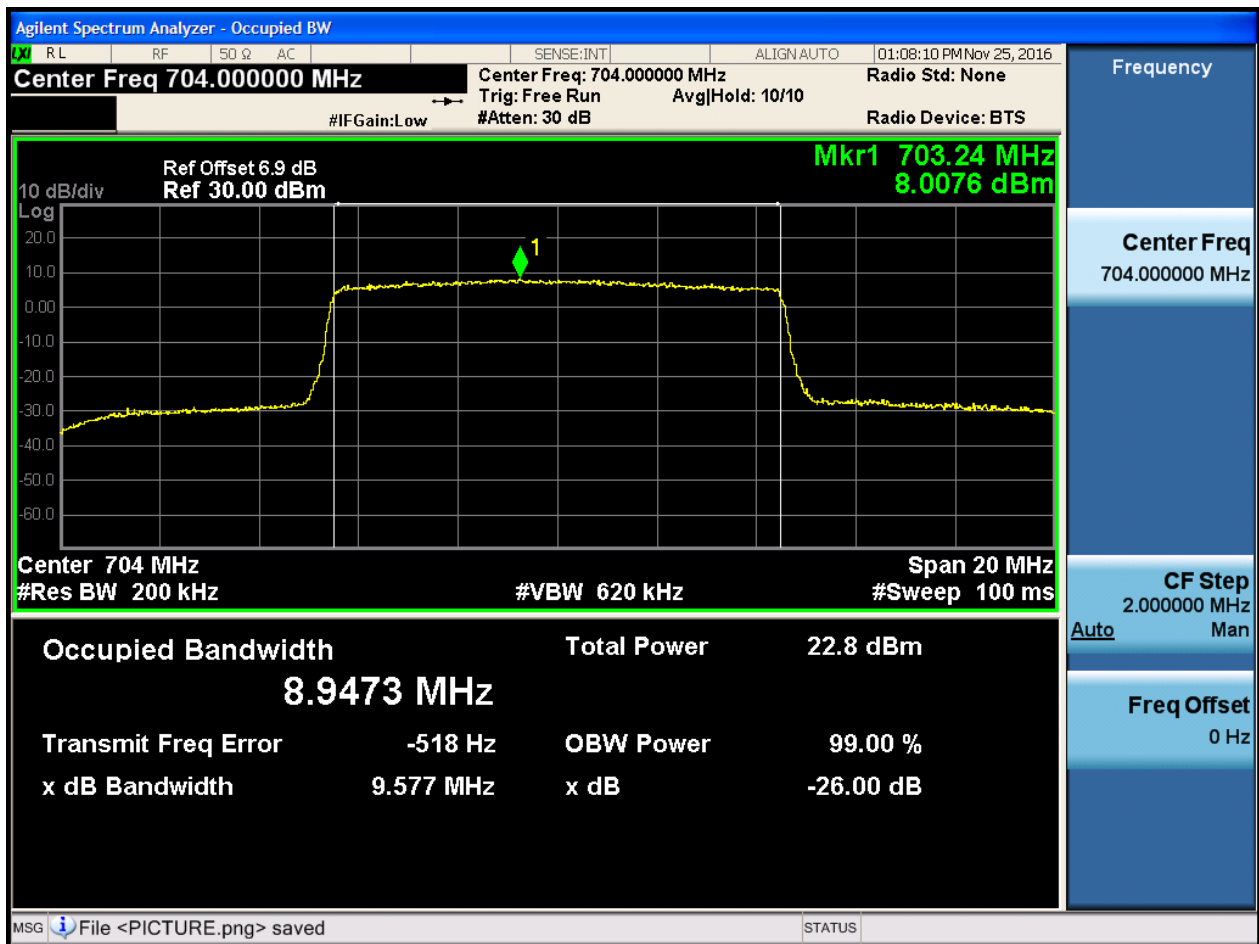




4.3.1.2.4 Test Bandwidth = 10

4.3.1.2.4.1 Test Channel = LCH

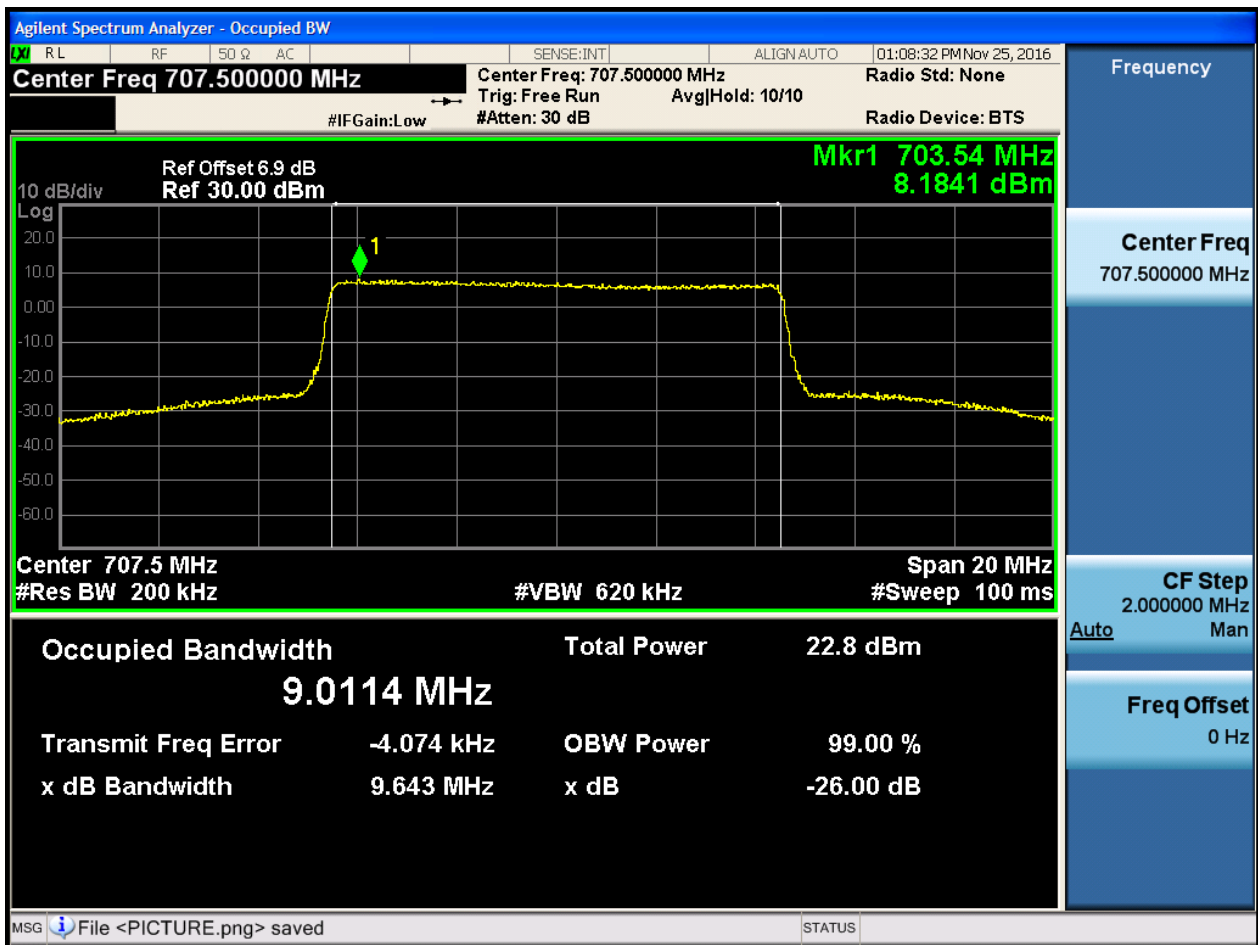
4.3.1.2.4.1.1 Test RB = RB50#0





4.3.1.2.4.2 Test Channel = MCH

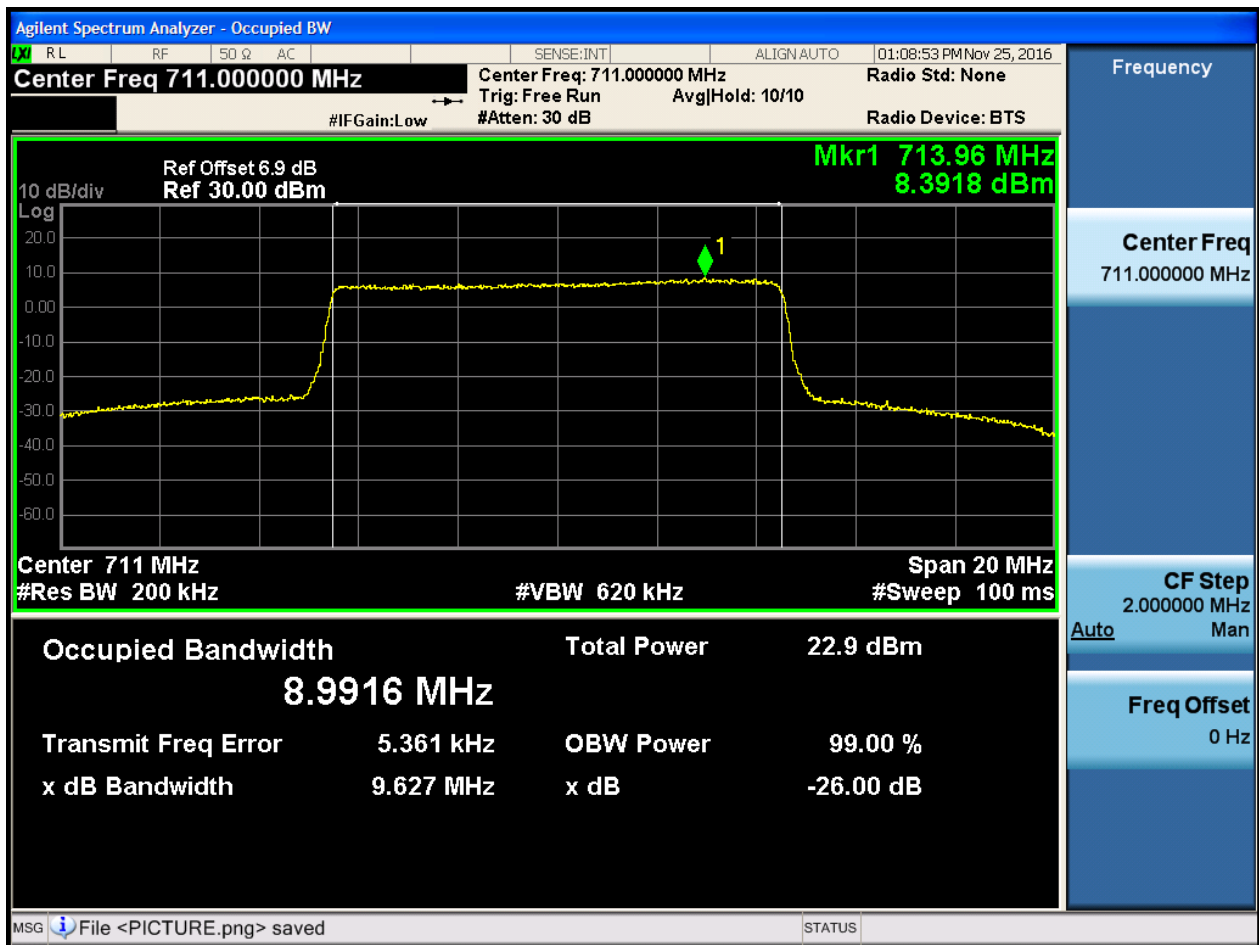
4.3.1.2.4.2.1 Test RB = RB50#0





4.3.1.2.4.3 Test Channel = HCH

4.3.1.2.4.3.1 Test RB = RB50#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.3 For LTE

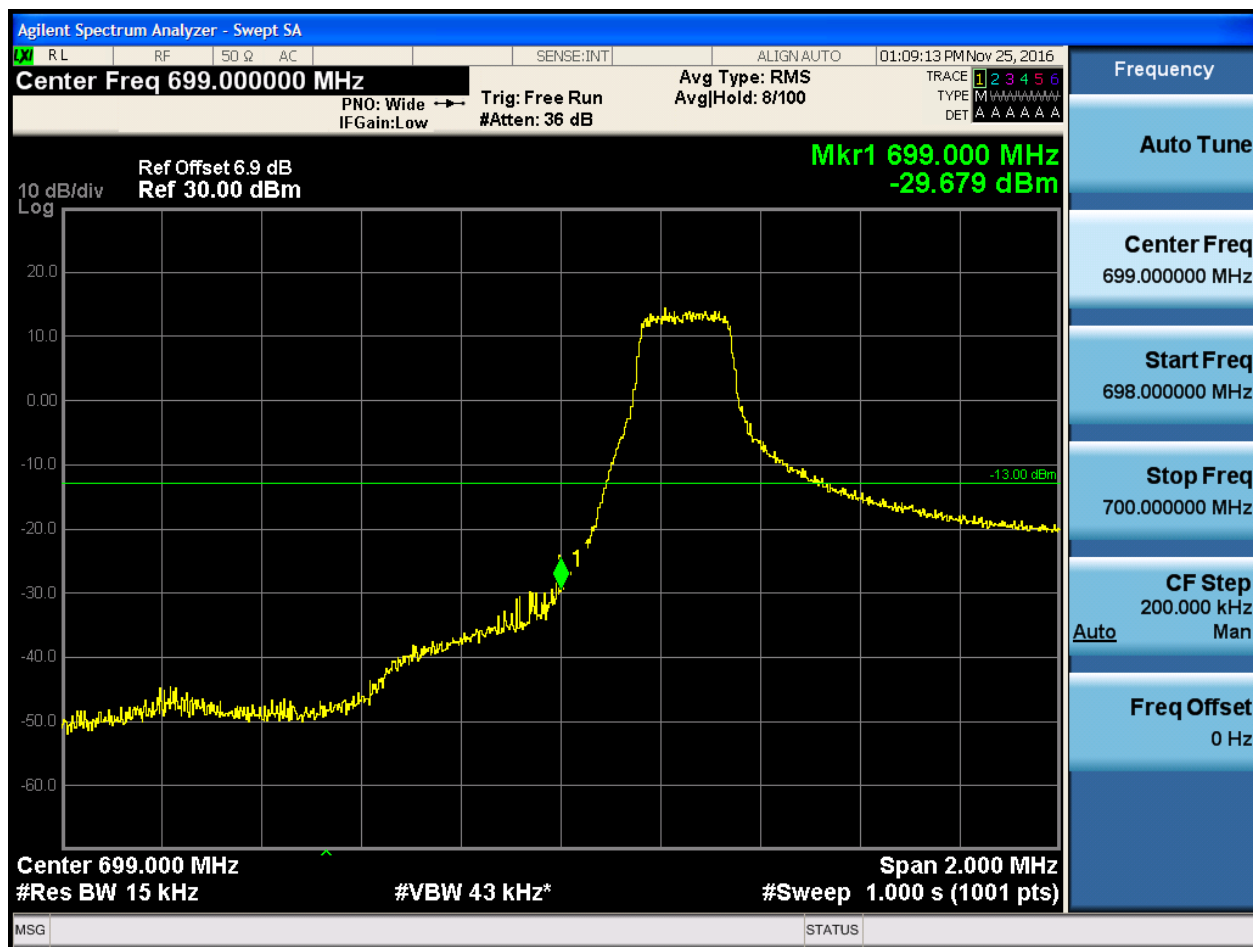
5.3.1 Test Band = BAND12

5.3.1.1 Test Mode = LTE/TM1

5.3.1.1.1 Test Bandwidth = 1.4

5.3.1.1.1.1 Test Channel = LCH

5.3.1.1.1.1.1 Test RB = RB1#0



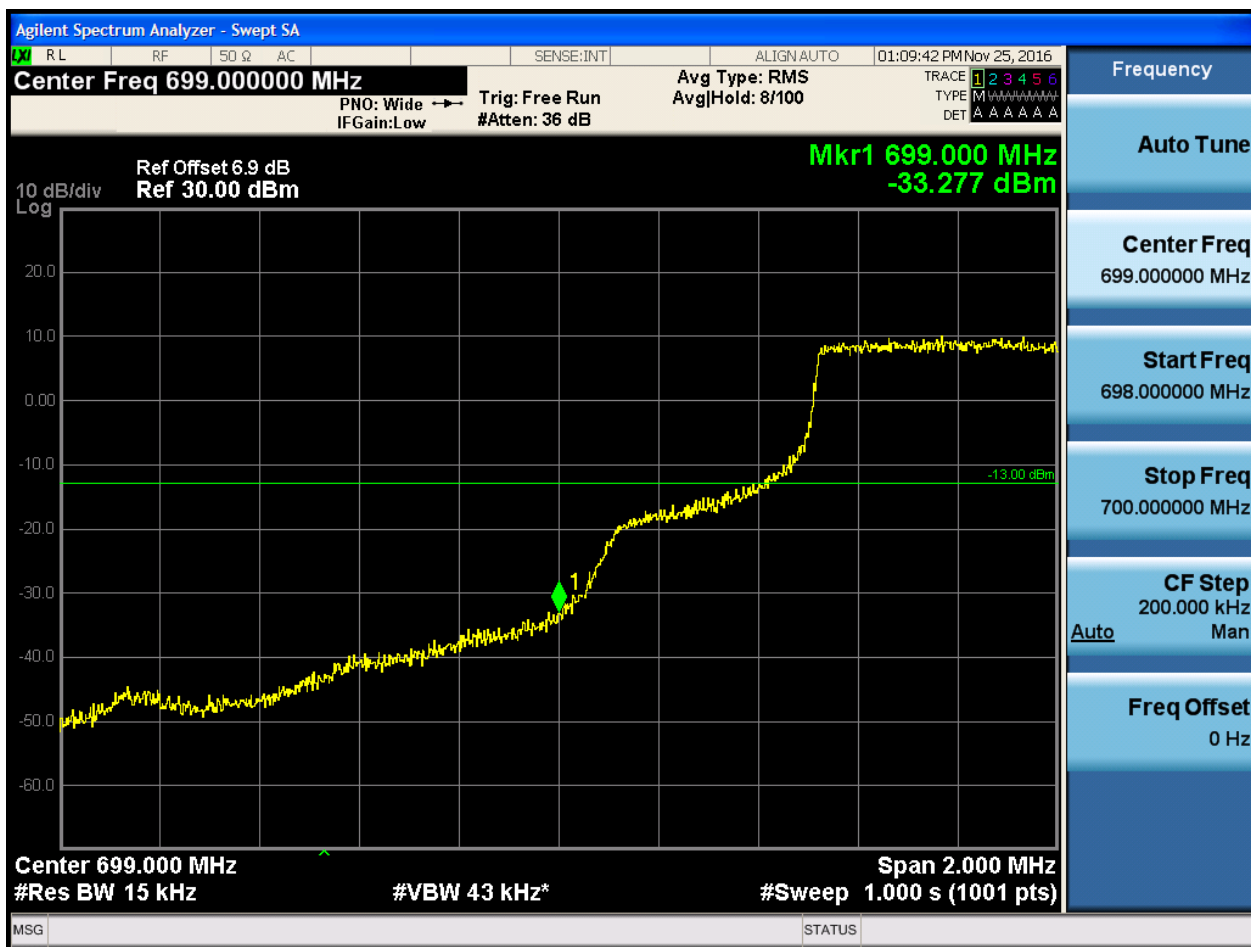


5.3.1.1.1.2 Test RB = RB1#5





5.3.1.1.1.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:09:56 PM Nov 25, 2016

Center Freq 699.000000 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

Ref Offset 6.9 dB
Ref 30.00 dBm

Mkr1 698.970 MHz
-29.403 dBm

10 dB/div
Log

Center 699.000 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
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

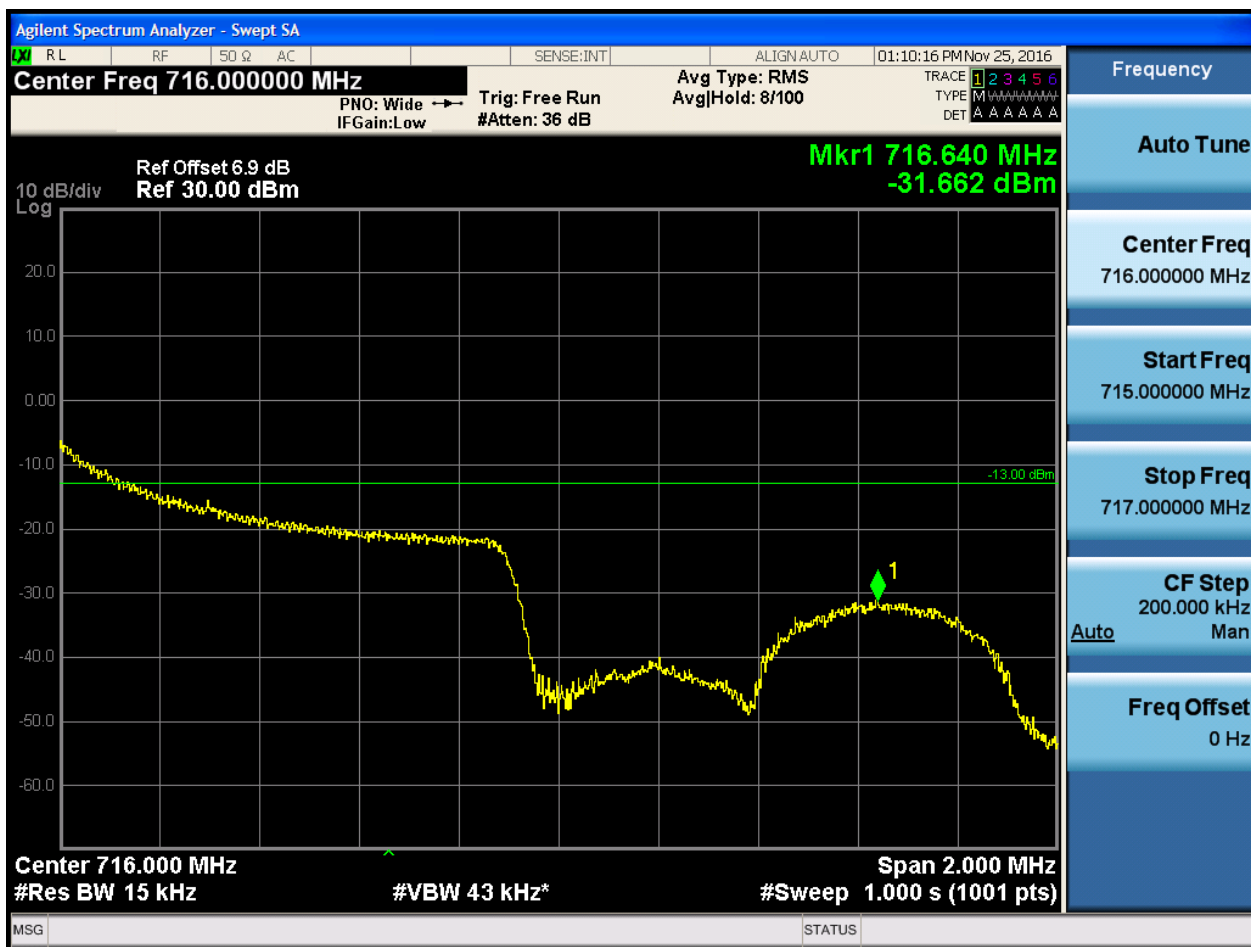
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



5.3.1.1.1.2 Test Channel = HCH

5.3.1.1.1.2.1 Test RB = RB1#0





5.3.1.1.1.2.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:10:59 PM Nov 25, 2016

Center Freq 716.000000 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 716.030 MHz
-31.318 dBm

10 dB/div
Log

Center 716.000 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
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto Man

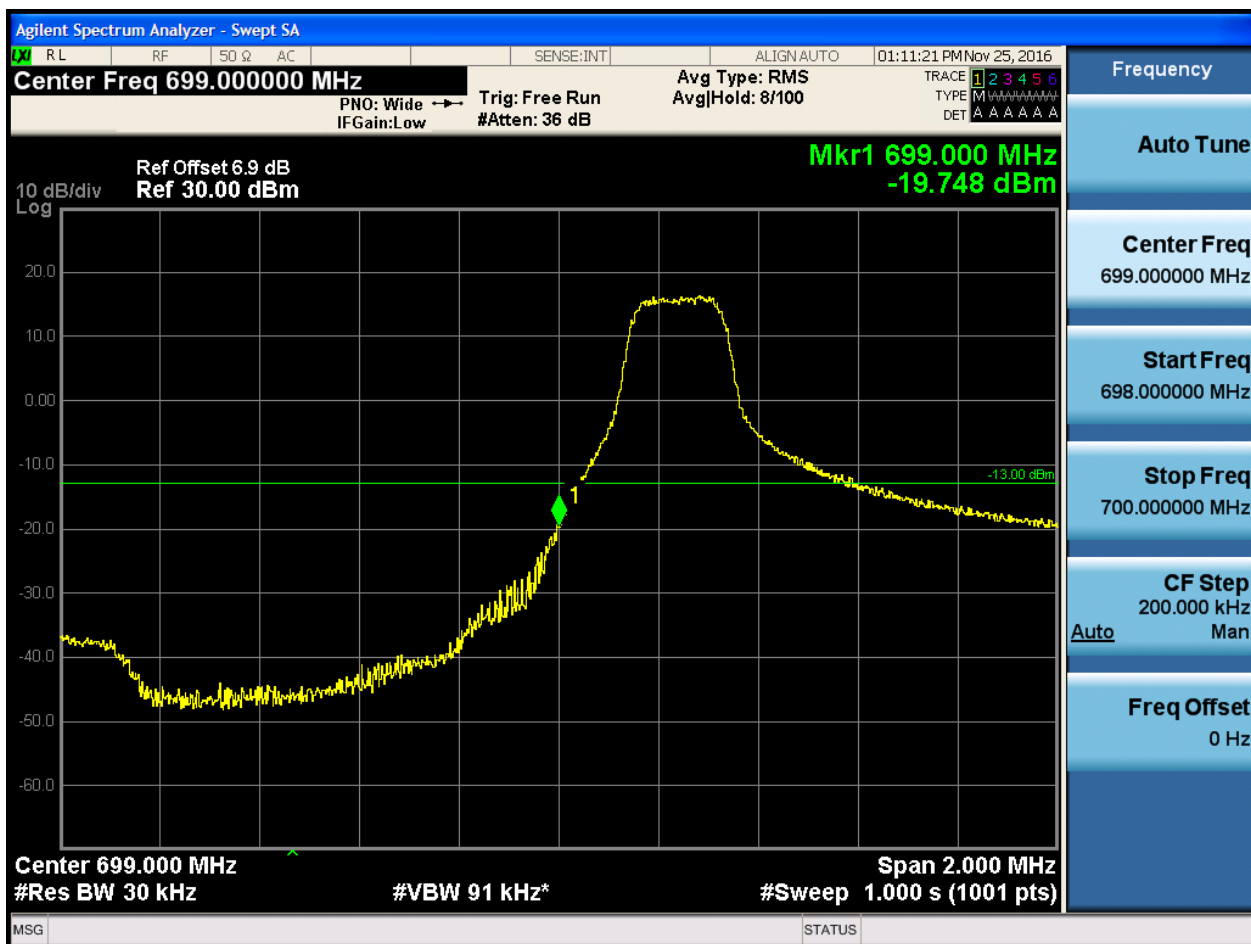
Freq Offset
0 Hz



5.3.1.1.2 Test Bandwidth = 3

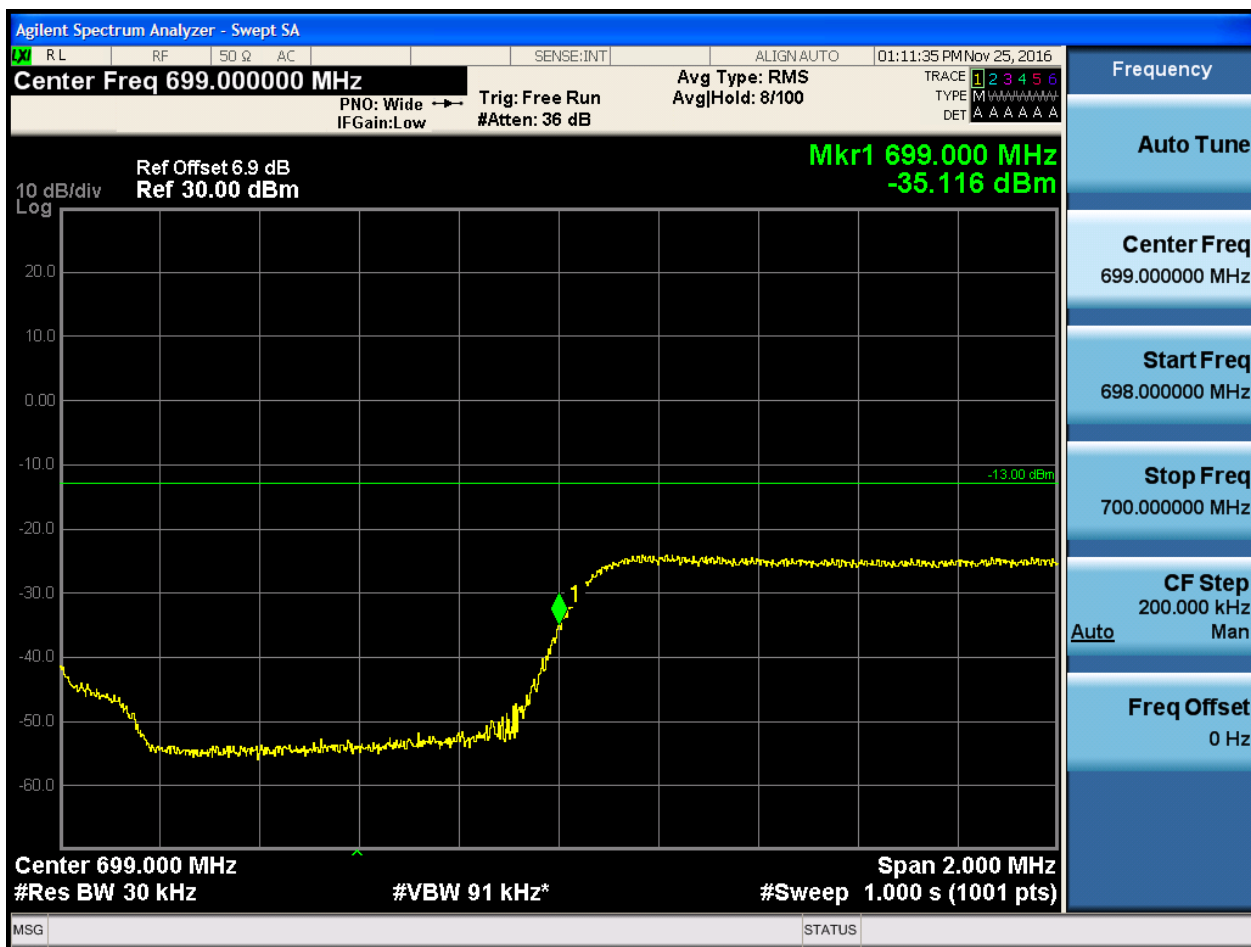
5.3.1.1.2.1 Test Channel = LCH

5.3.1.1.2.1.1 Test RB = RB1#0



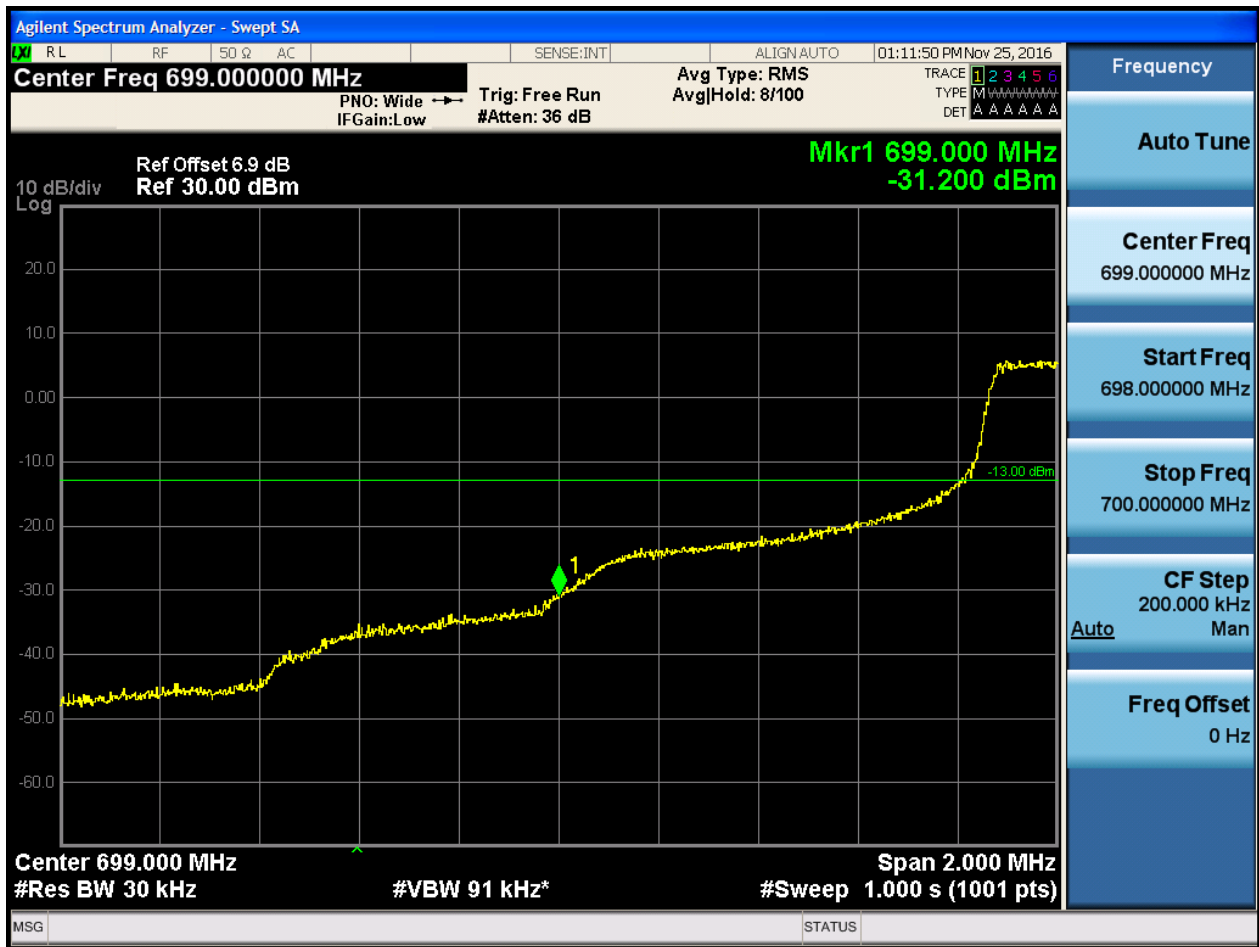


5.3.1.1.2.1.2 Test RB = RB1#14



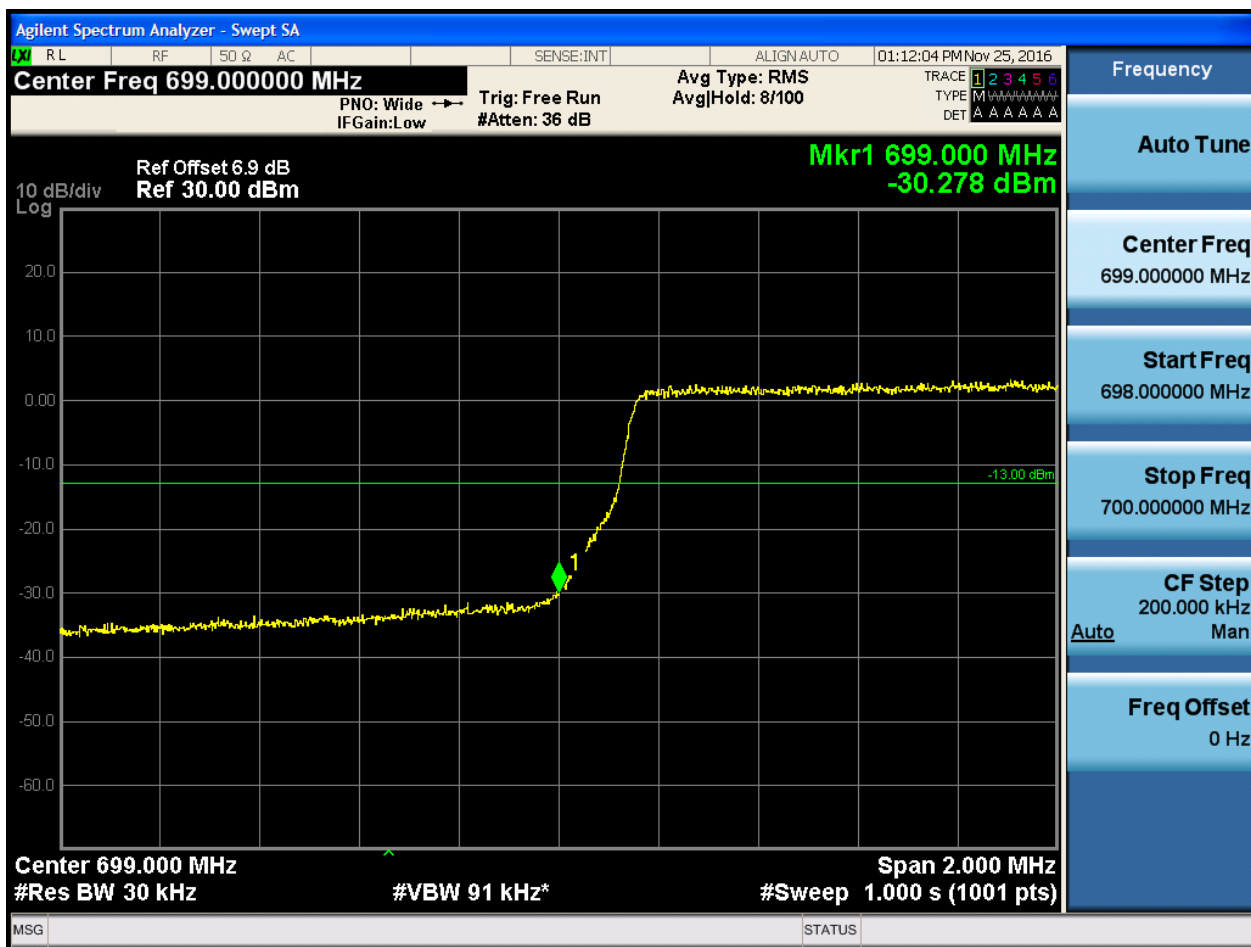


5.3.1.1.2.1.3 Test RB = RB8#4





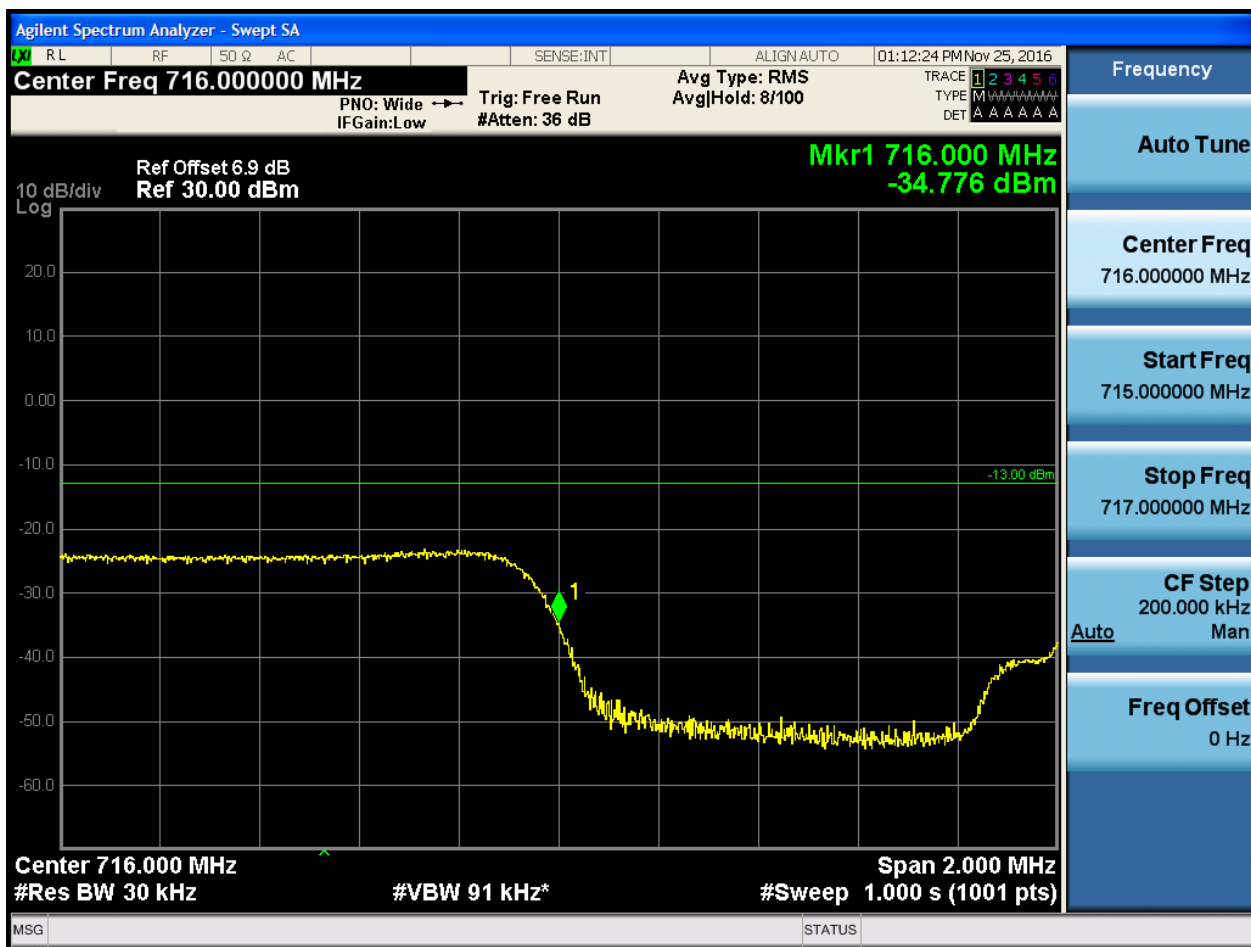
5.3.1.1.2.1.4 Test RB = RB15#0





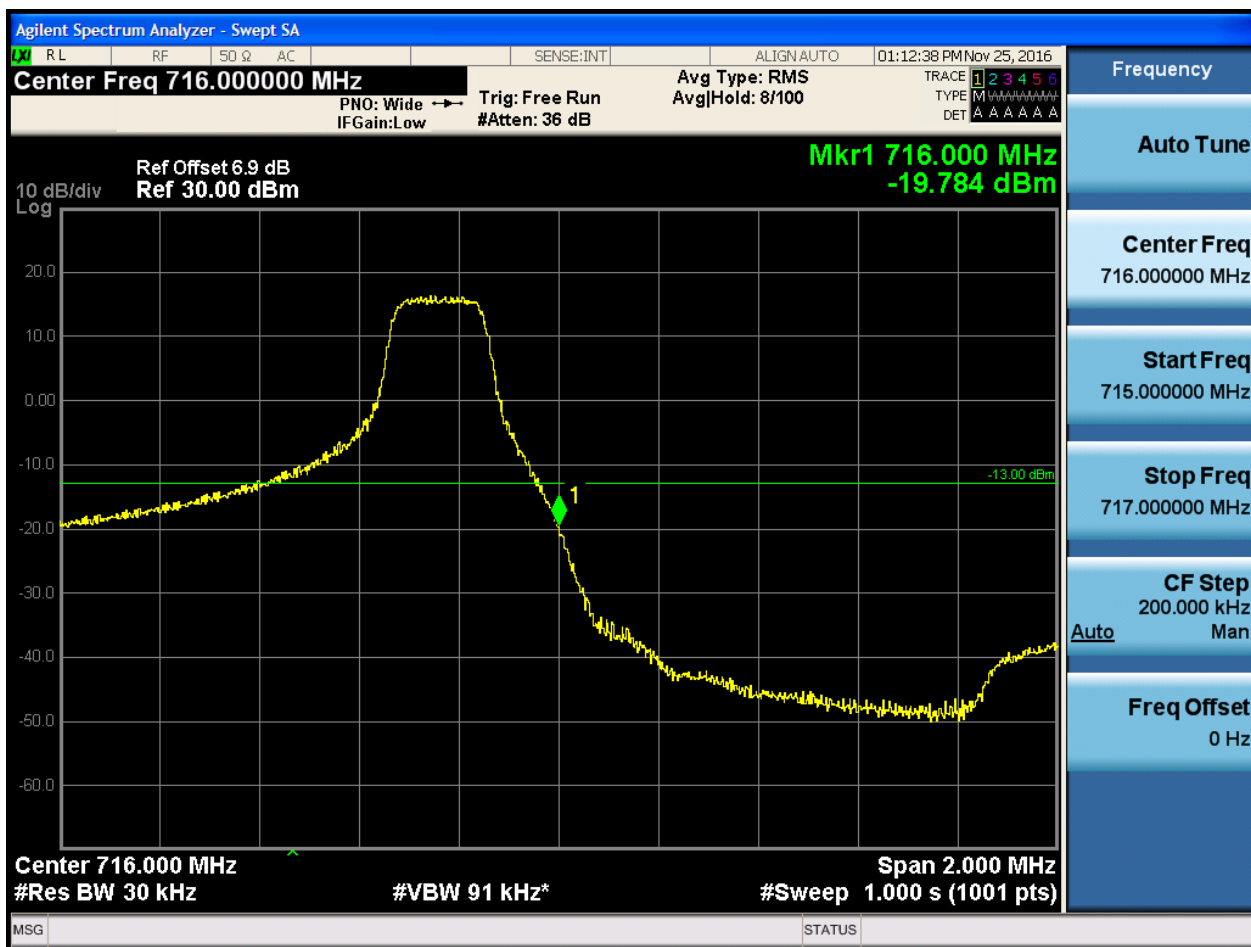
5.3.1.1.2.2 Test Channel = HCH

5.3.1.1.2.2.1 Test RB = RB1#0





5.3.1.1.2.2.2 Test RB = RB1#14





5.3.1.1.2.2.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:13:07 PM Nov 25, 2016

Center Freq 716.000000 MHz Avg Type: RMS
PNO: Wide IF Gain: 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

Mkr1 716.000 MHz
-29.411 dBm

10 dB/div
Log

Center 716.000 MHz
#Res BW 30 kHz #VBW 91 kHz* Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

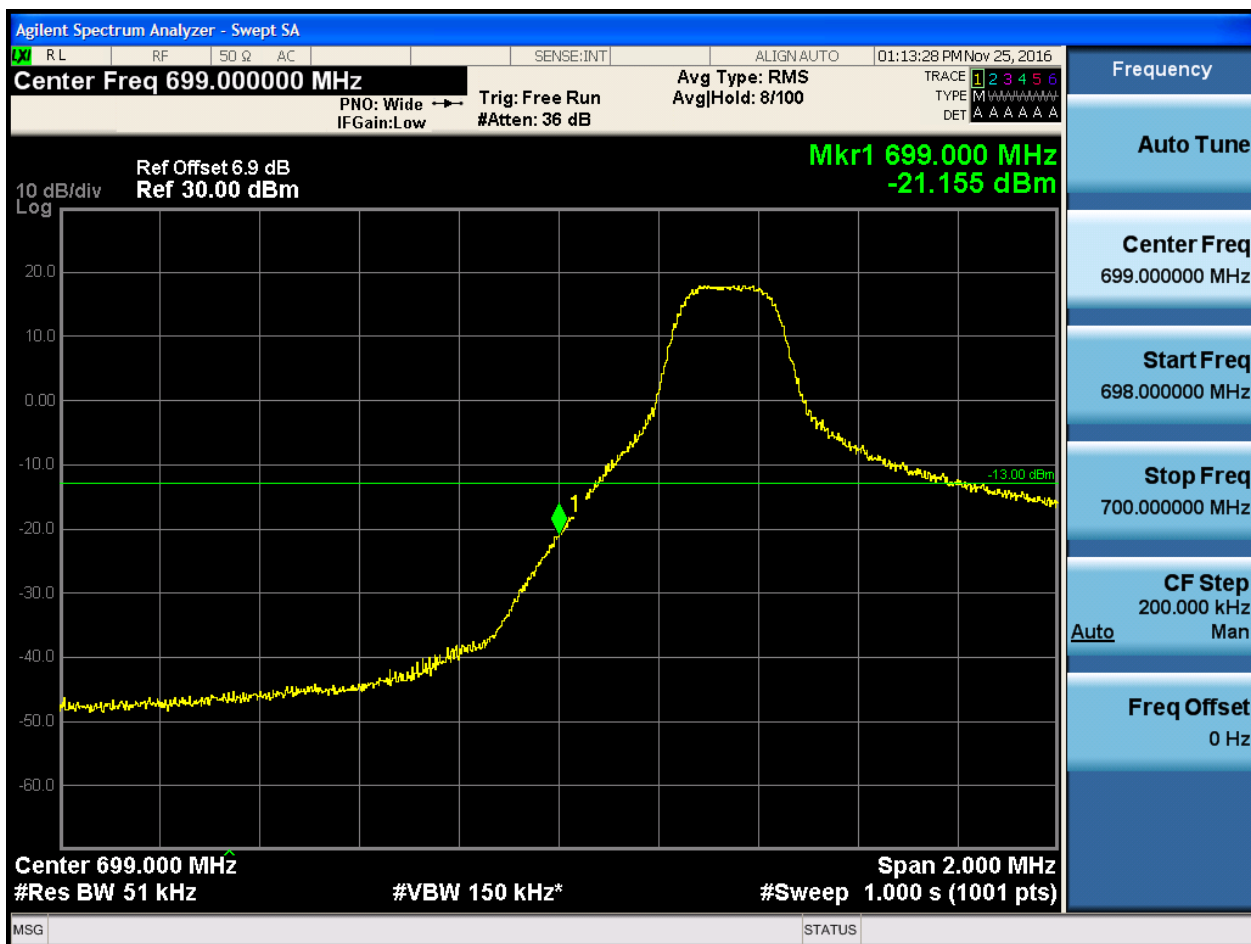
MSG STATUS



5.3.1.1.3 Test Bandwidth = 5

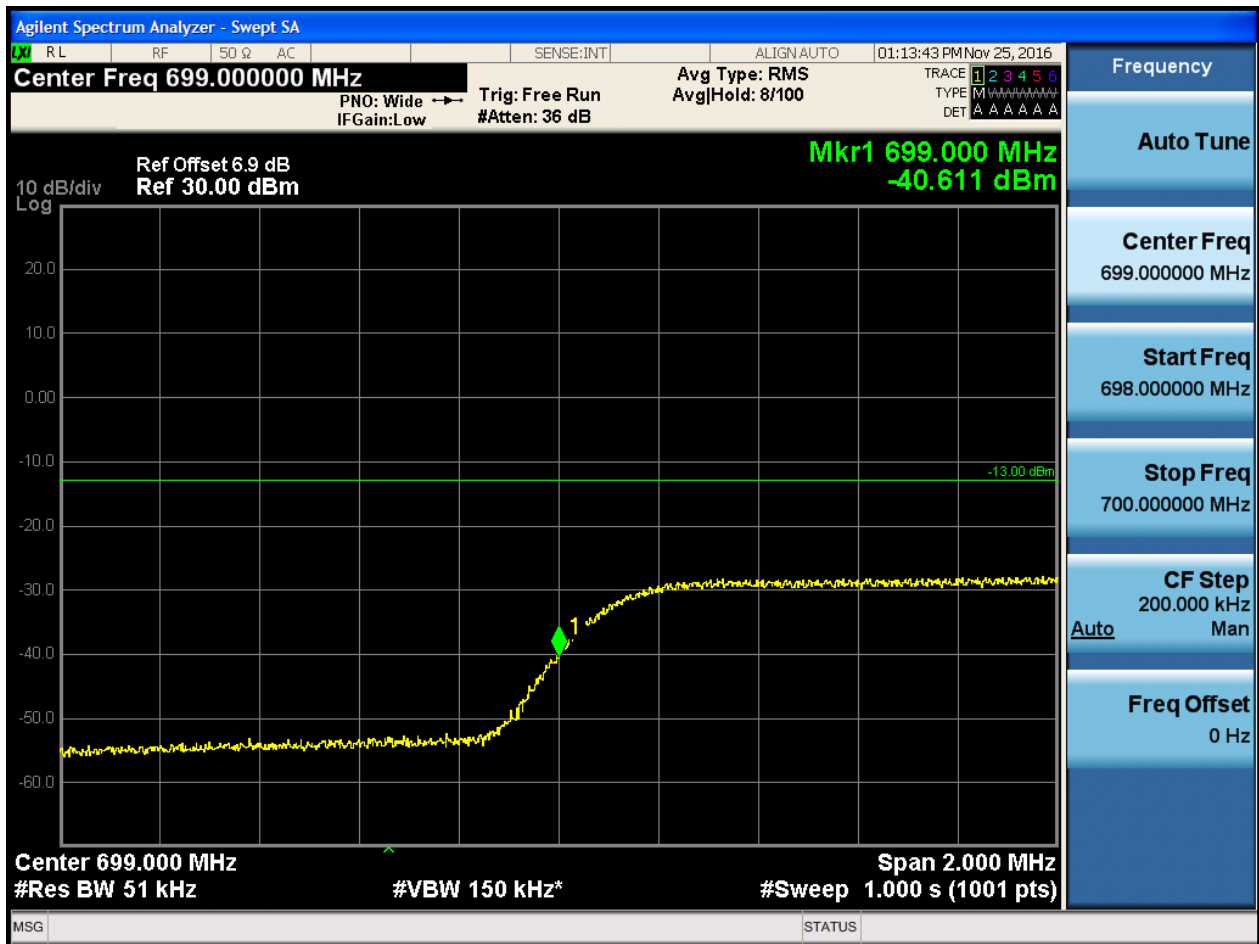
5.3.1.1.3.1 Test Channel = LCH

5.3.1.1.3.1.1 Test RB = RB1#0



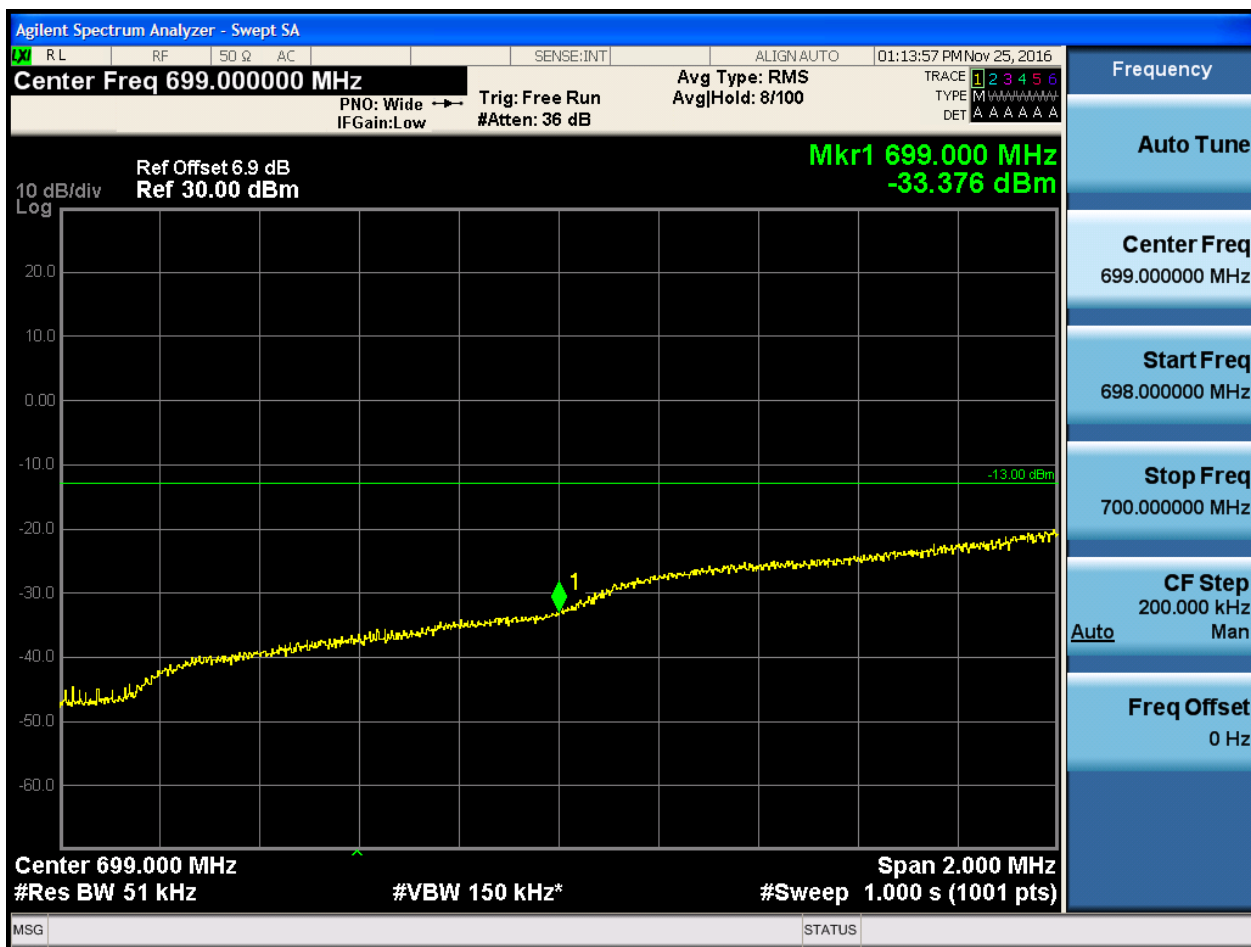


5.3.1.1.3.1.2 Test RB = RB1#24





5.3.1.1.3.1.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:14:12 PM Nov 25, 2016

Center Freq 699.000000 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 699.000 MHz
-30.590 dBm

10 dB/div
Log

Center 699.000 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
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

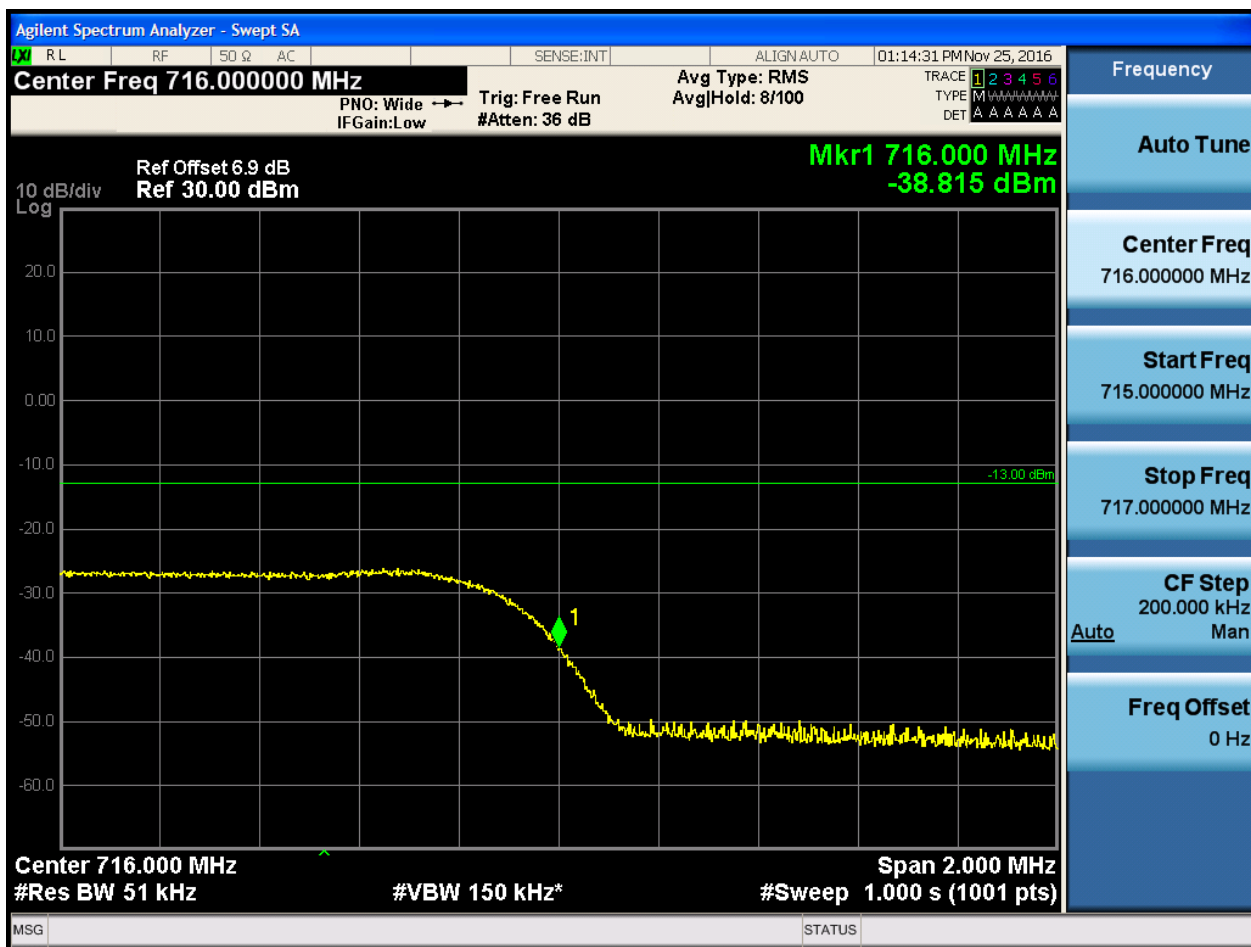
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



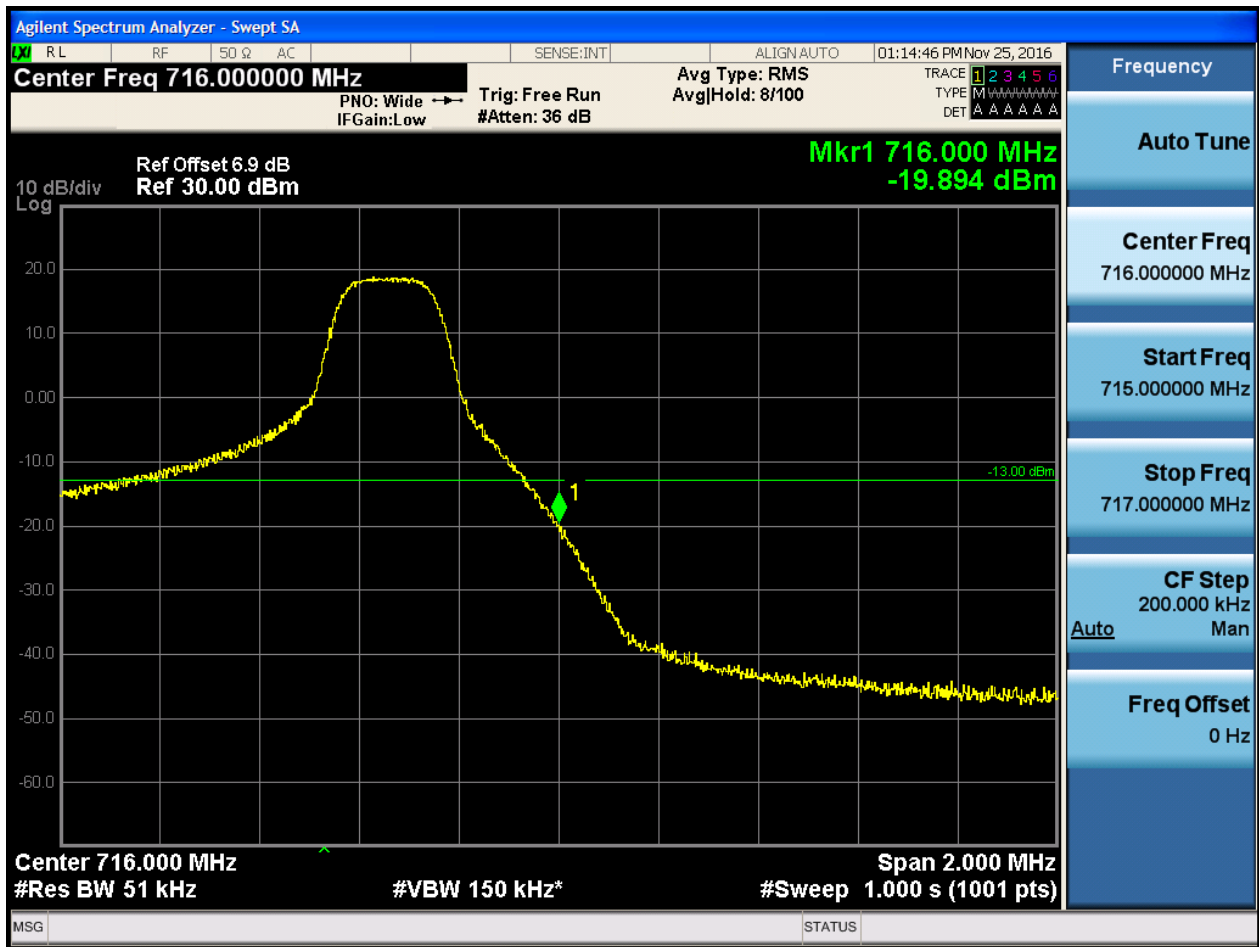
5.3.1.1.3.2 Test Channel = HCH

5.3.1.1.3.2.1 Test RB = RB1#0





5.3.1.1.3.2.2 Test RB = RB1#24



5.3.1.1.3.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:15:14 PM Nov 25, 2016

Center Freq 716.000000 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 716.000 MHz
-29.528 dBm

10 dB/div
Log

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*
#Sweep 1.000 s (1001 pts)

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

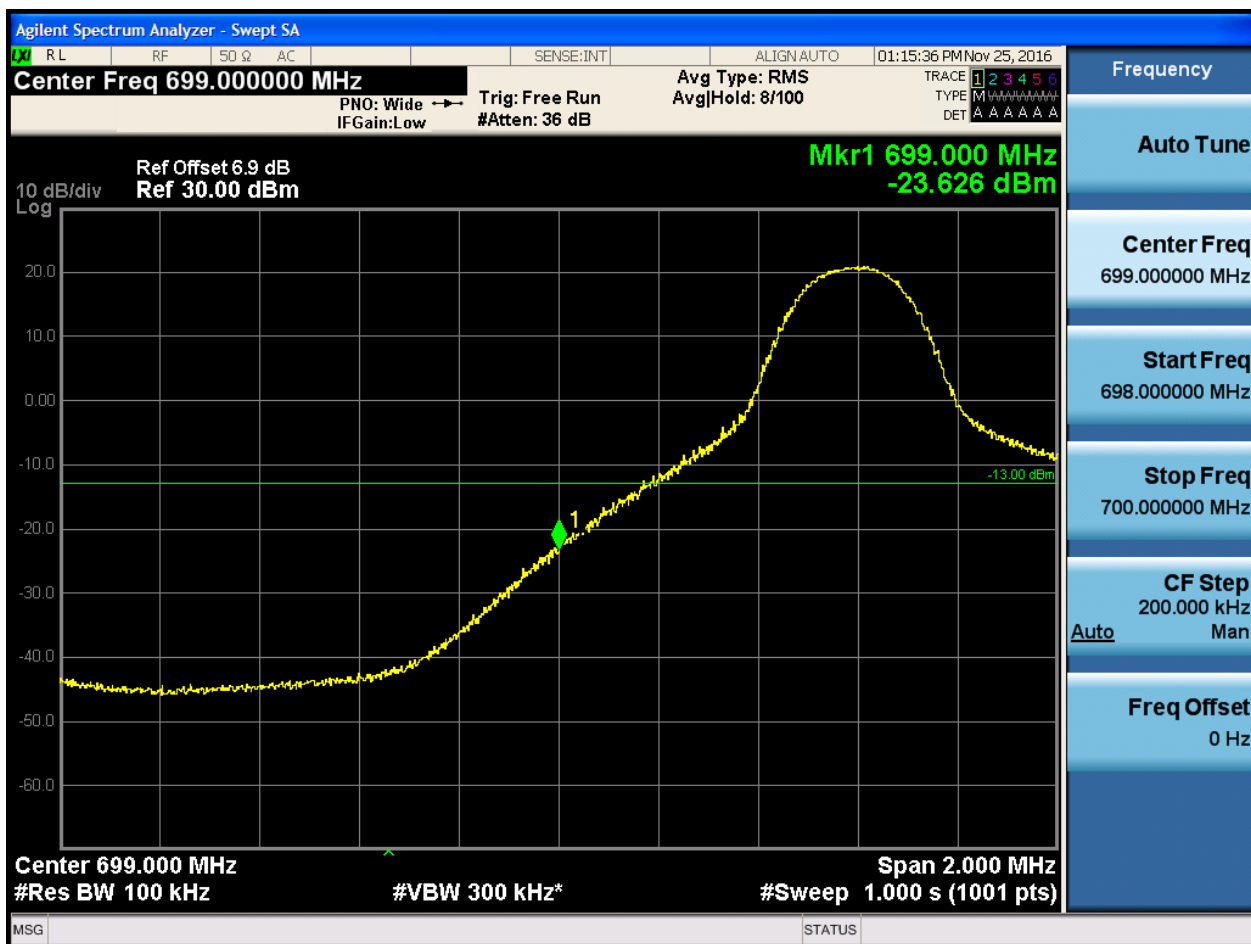
MSG STATUS



5.3.1.1.4 Test Bandwidth = 10

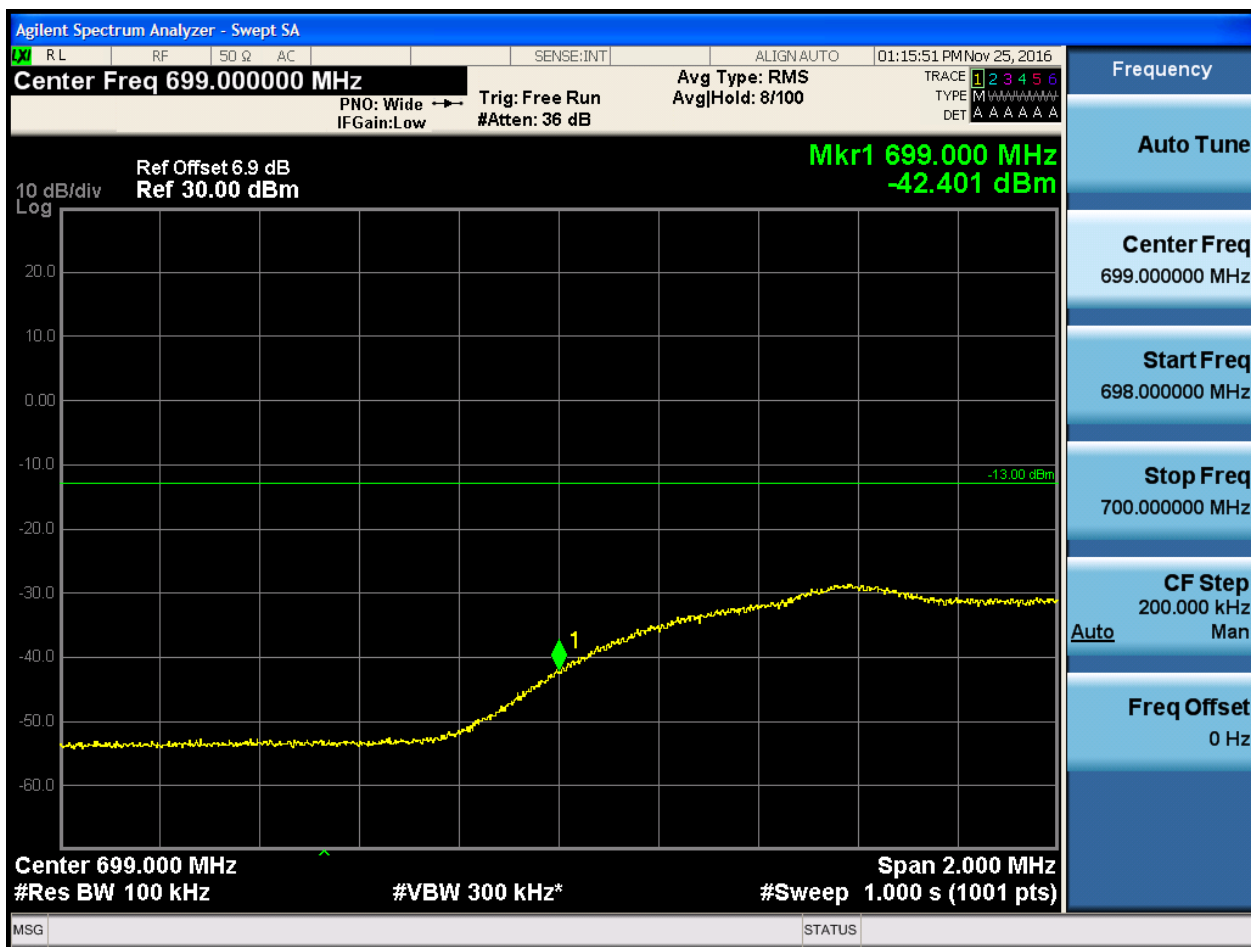
5.3.1.1.4.1 Test Channel = LCH

5.3.1.1.4.1.1 Test RB = RB1#0





5.3.1.1.4.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

Center Freq 699.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 698.980 MHz
-34.030 dBm

Center 699.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:16:19 PM Nov 25, 2016

Center Freq 699.000000 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 699.000 MHz
-30.326 dBm

10 dB/div
Log

Center 699.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

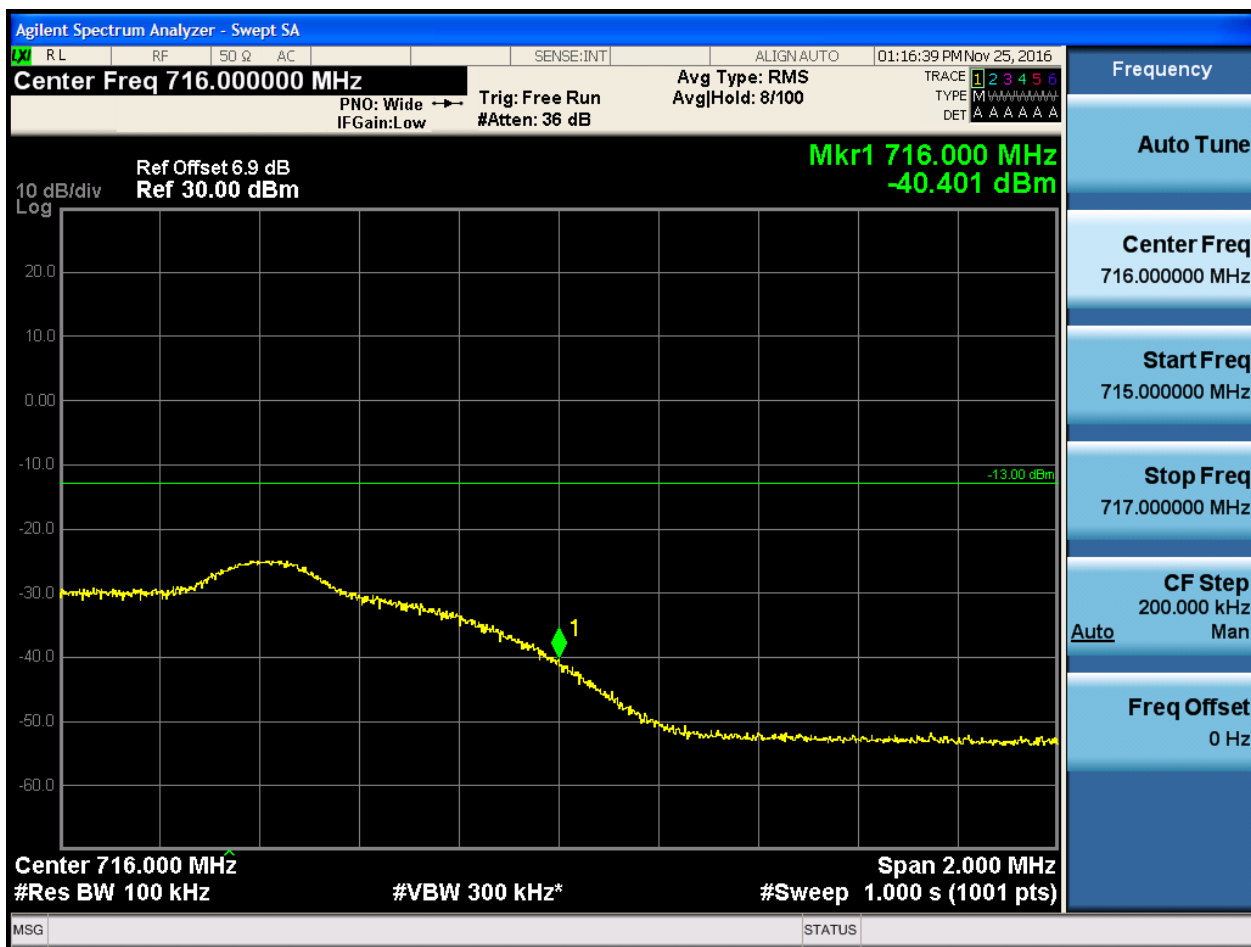
MSG STATUS

Frequency
Auto Tune
Center Freq
699.000000 MHz
Start Freq
698.000000 MHz
Stop Freq
700.000000 MHz
CF Step
200.000 kHz
Auto Man
Freq Offset
0 Hz



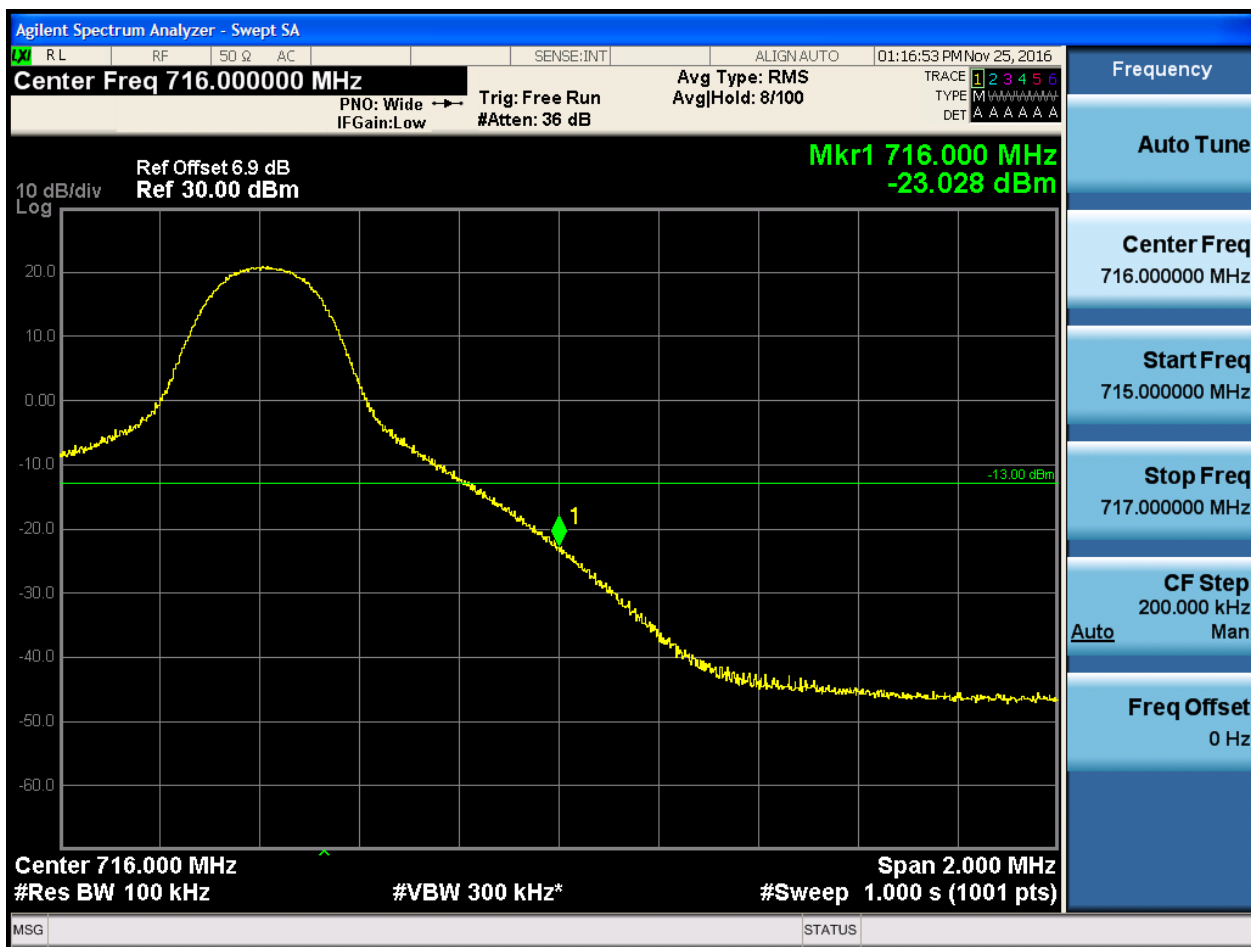
5.3.1.1.4.2 Test Channel = HCH

5.3.1.1.4.2.1 Test RB = RB1#0





5.3.1.1.4.2.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:17:08 PM Nov 25, 2016

Center Freq 716.000000 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 716.030 MHz
-31.520 dBm

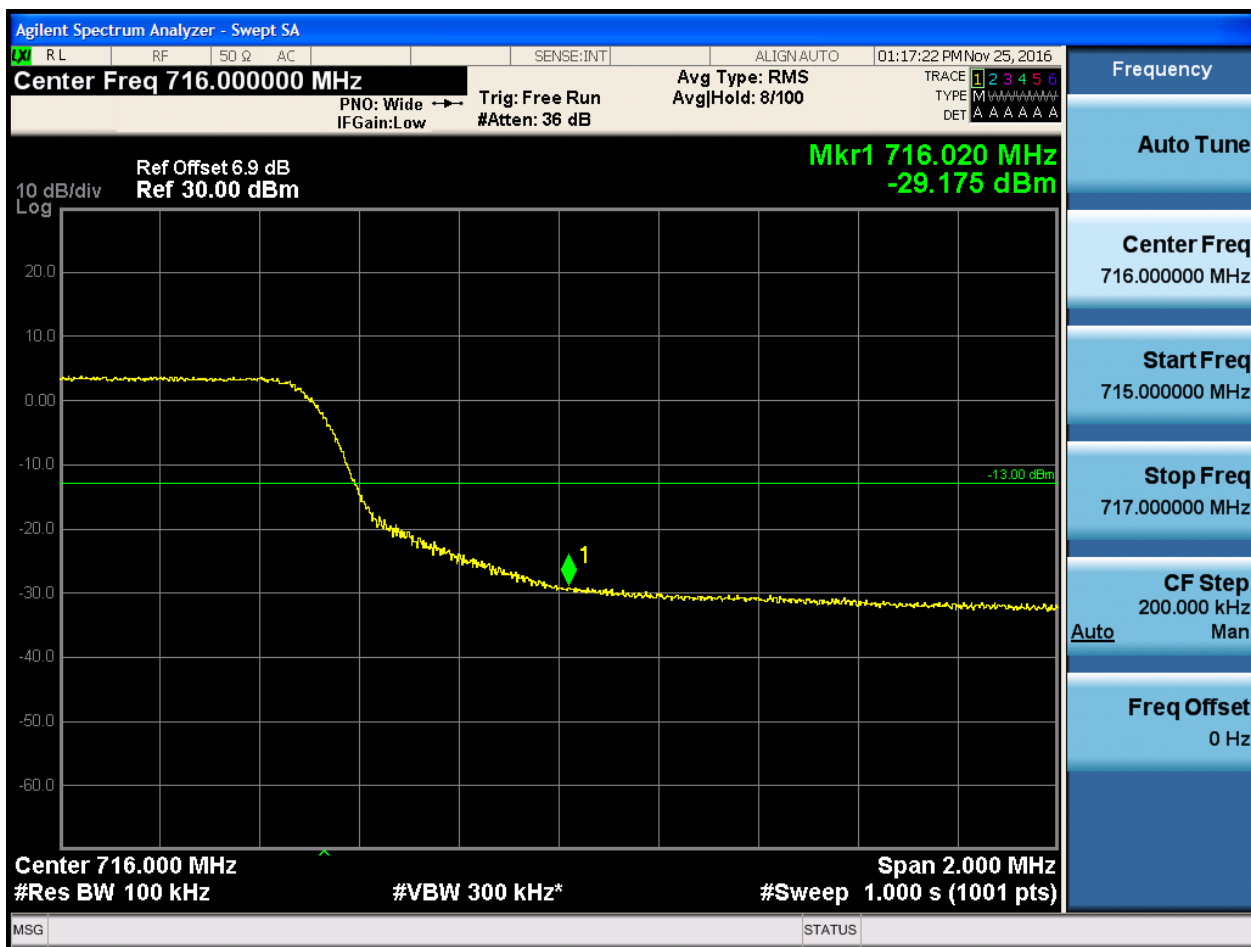
10 dB/div
Log

Center 716.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



5.3.1.1.4.2.4 Test RB = RB50#0



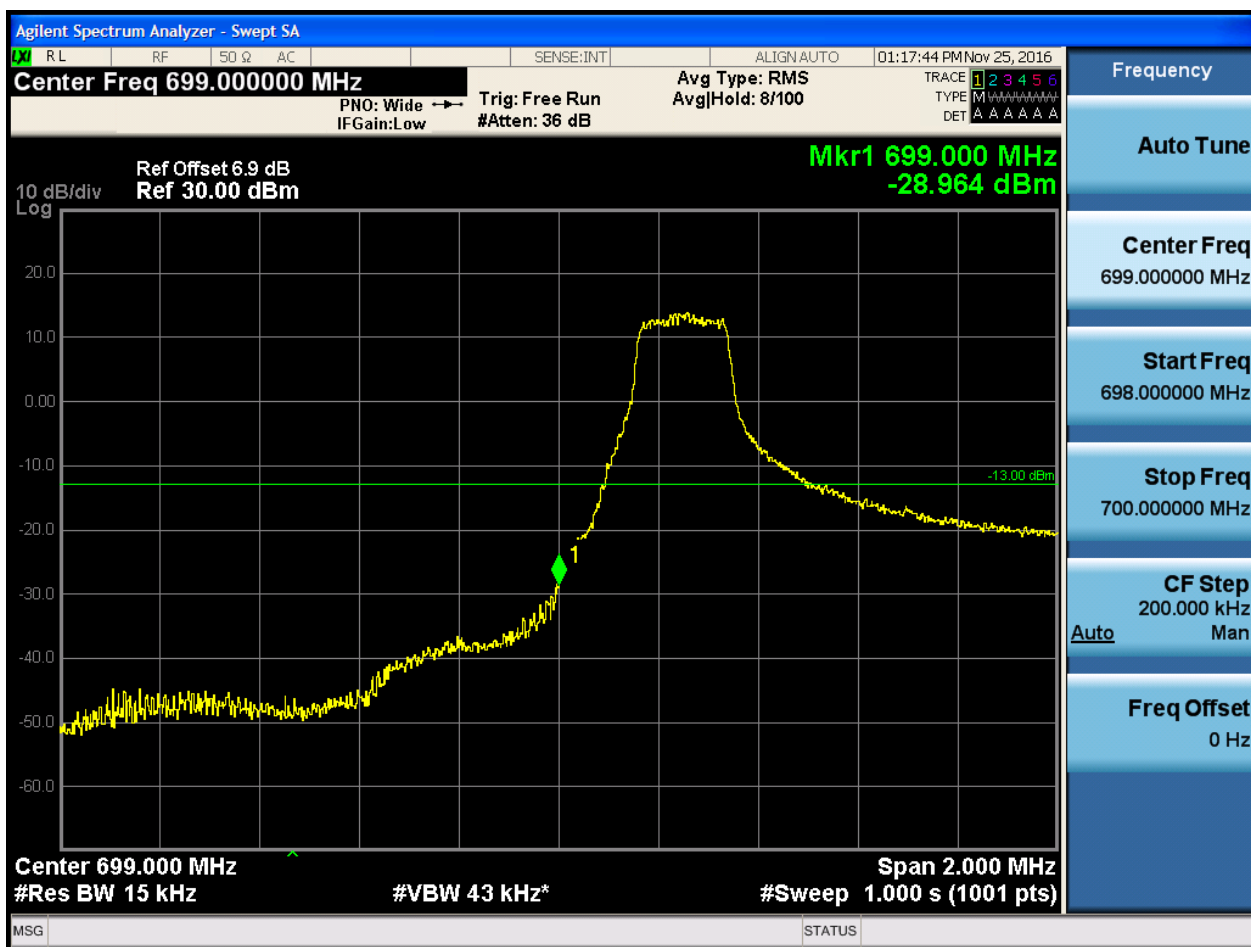


5.3.1.2 Test Mode = LTE/TM2

5.3.1.2.1 Test Bandwidth = 1.4

5.3.1.2.1.1 Test Channel = LCH

5.3.1.2.1.1.1 Test RB = RB1#0



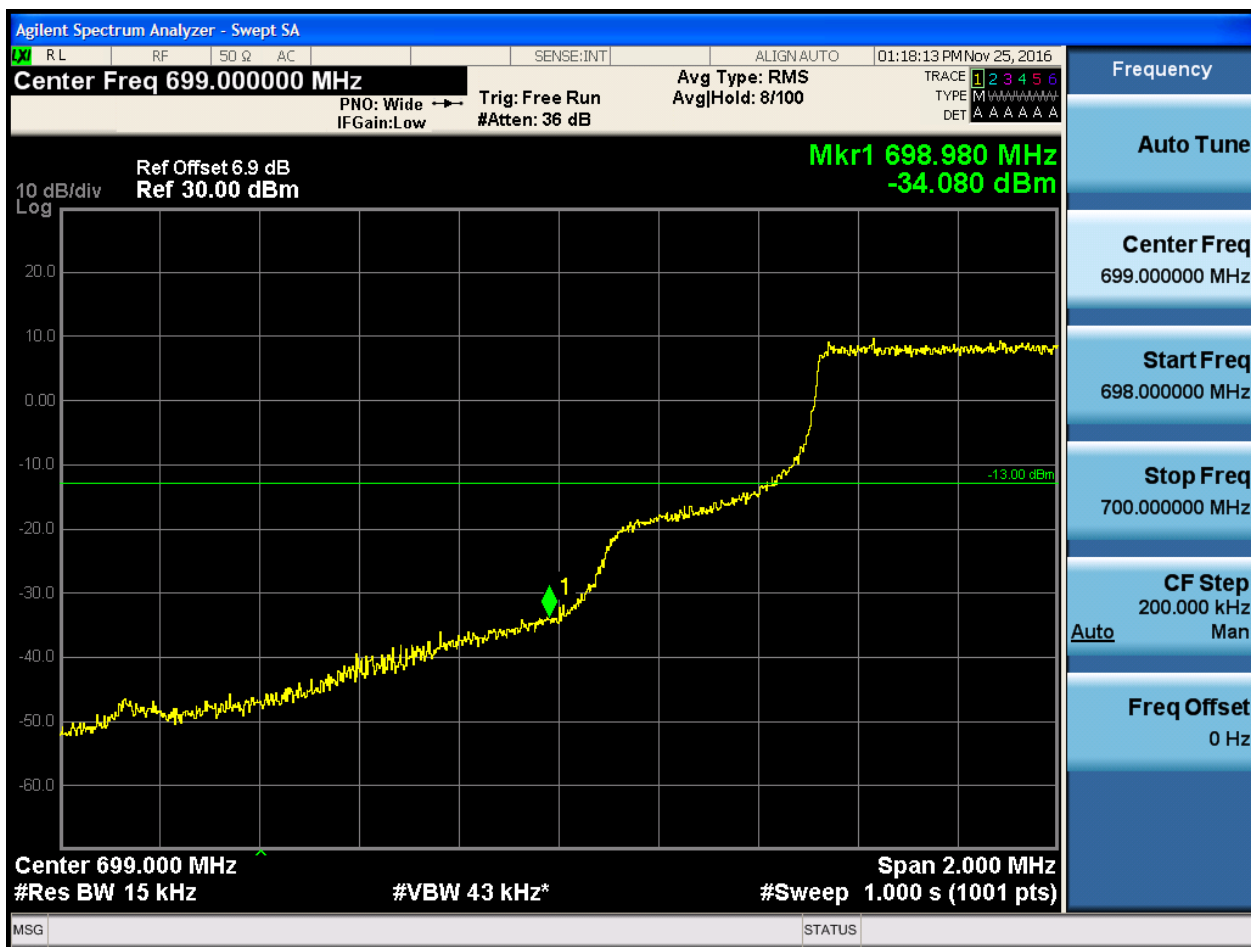


5.3.1.2.1.1.2 Test RB = RB1#5



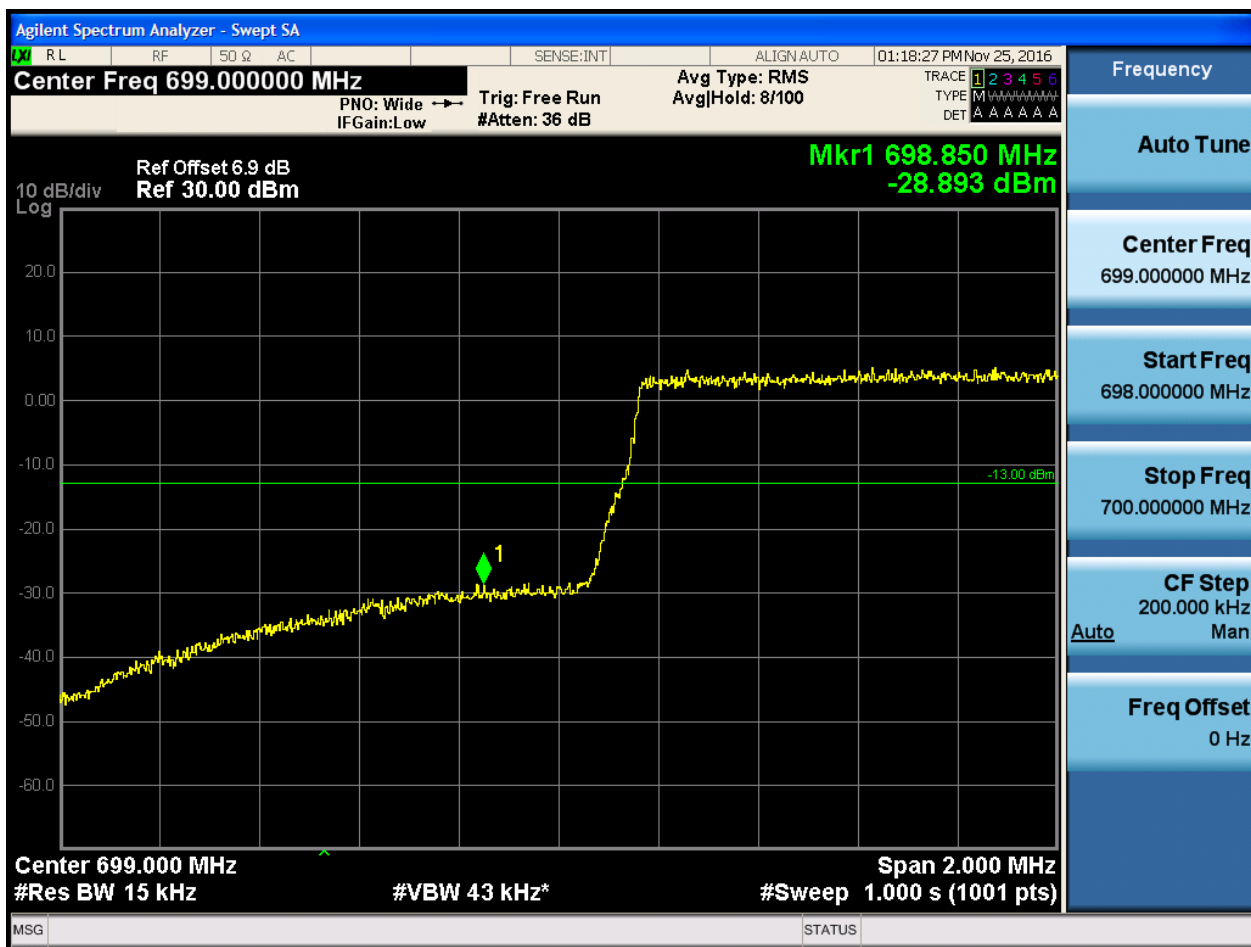


5.3.1.2.1.1.3 Test RB = RB3#2





5.3.1.2.1.1.4 Test RB = RB6#0





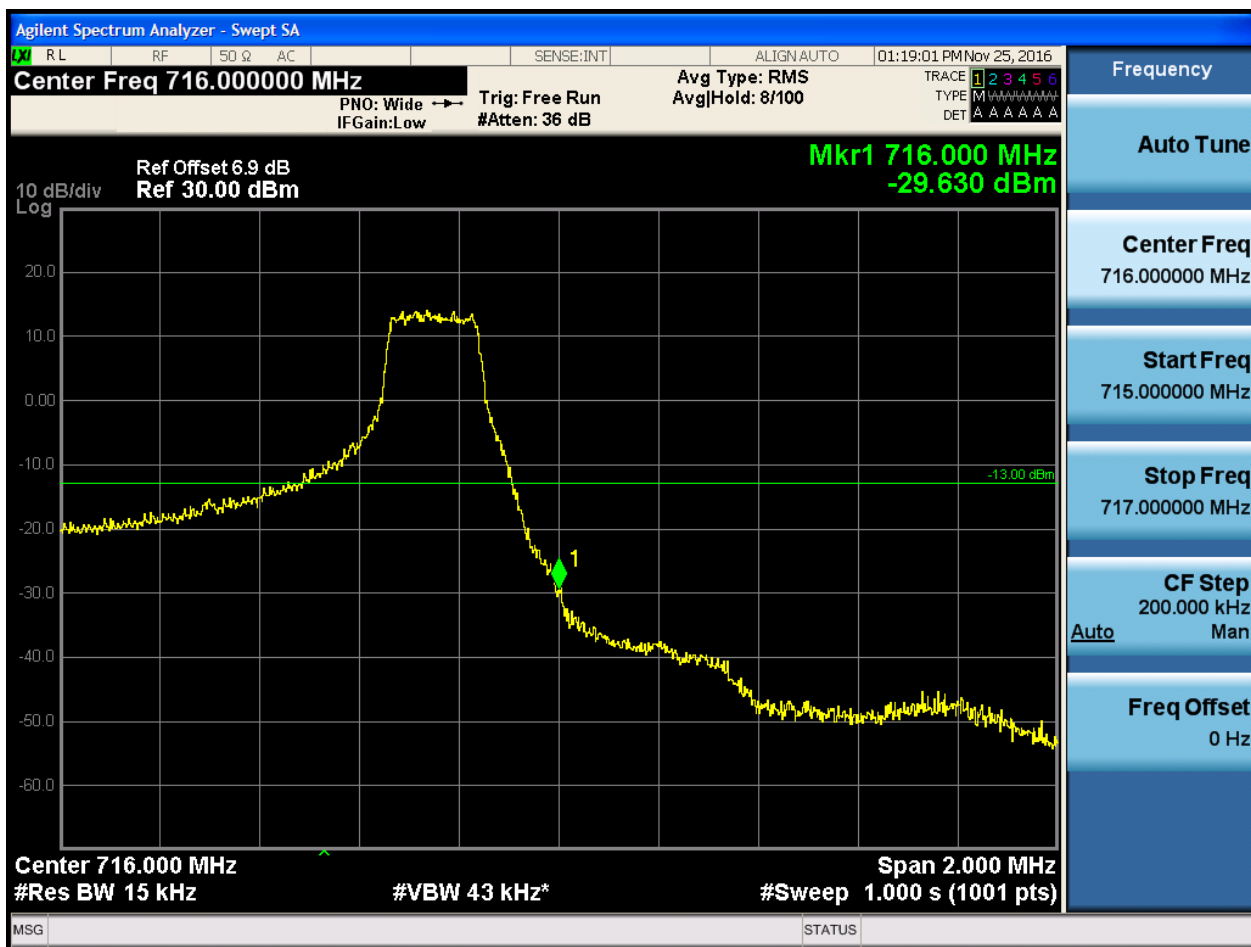
5.3.1.2.1.2 Test Channel = HCH

5.3.1.2.1.2.1 Test RB = RB1#0





5.3.1.2.1.2.2 Test RB = RB1#5





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.040 MHz
-27.707 dBm

Center 716.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

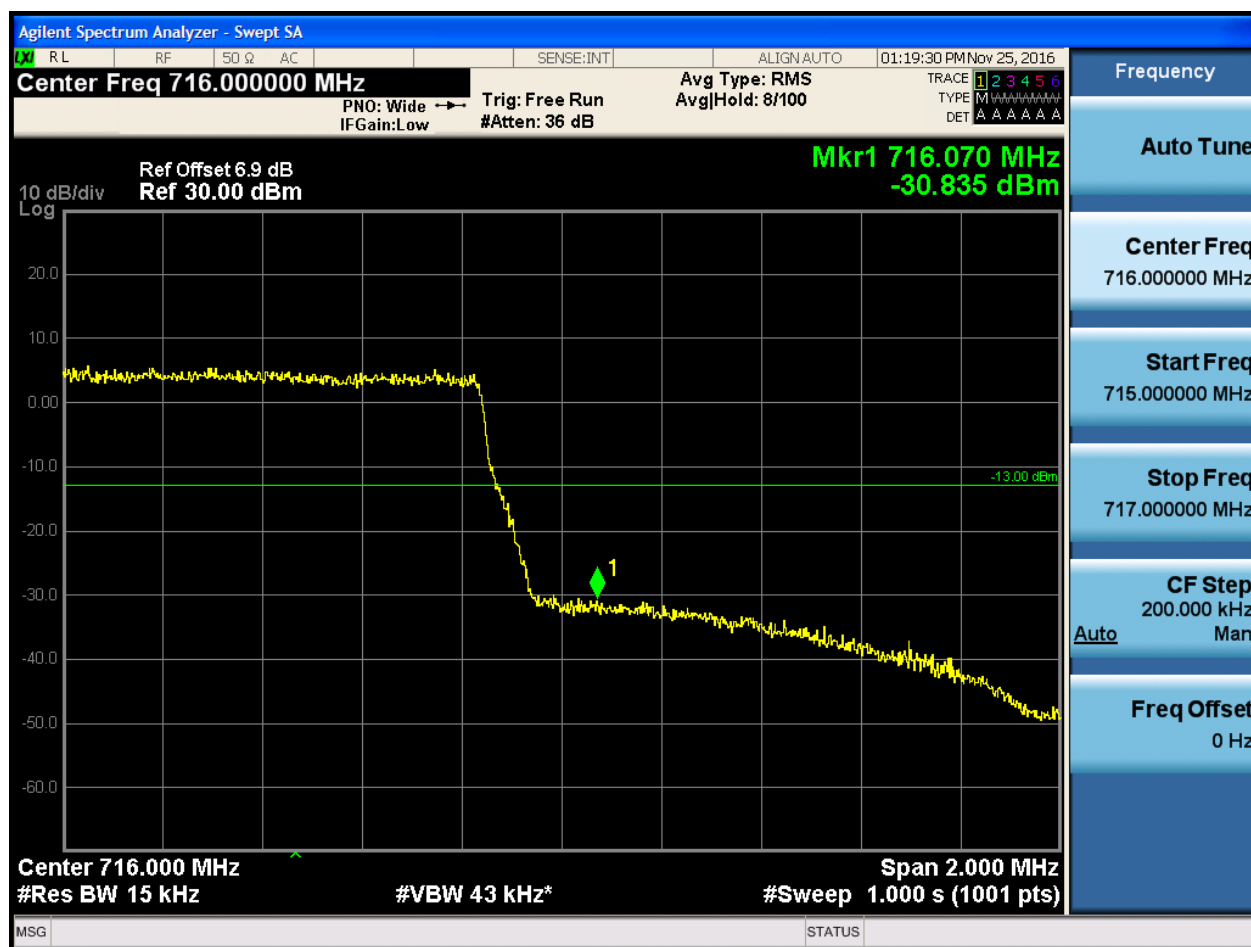
Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.3.1.2.1.2.4 Test RB = RB6#0

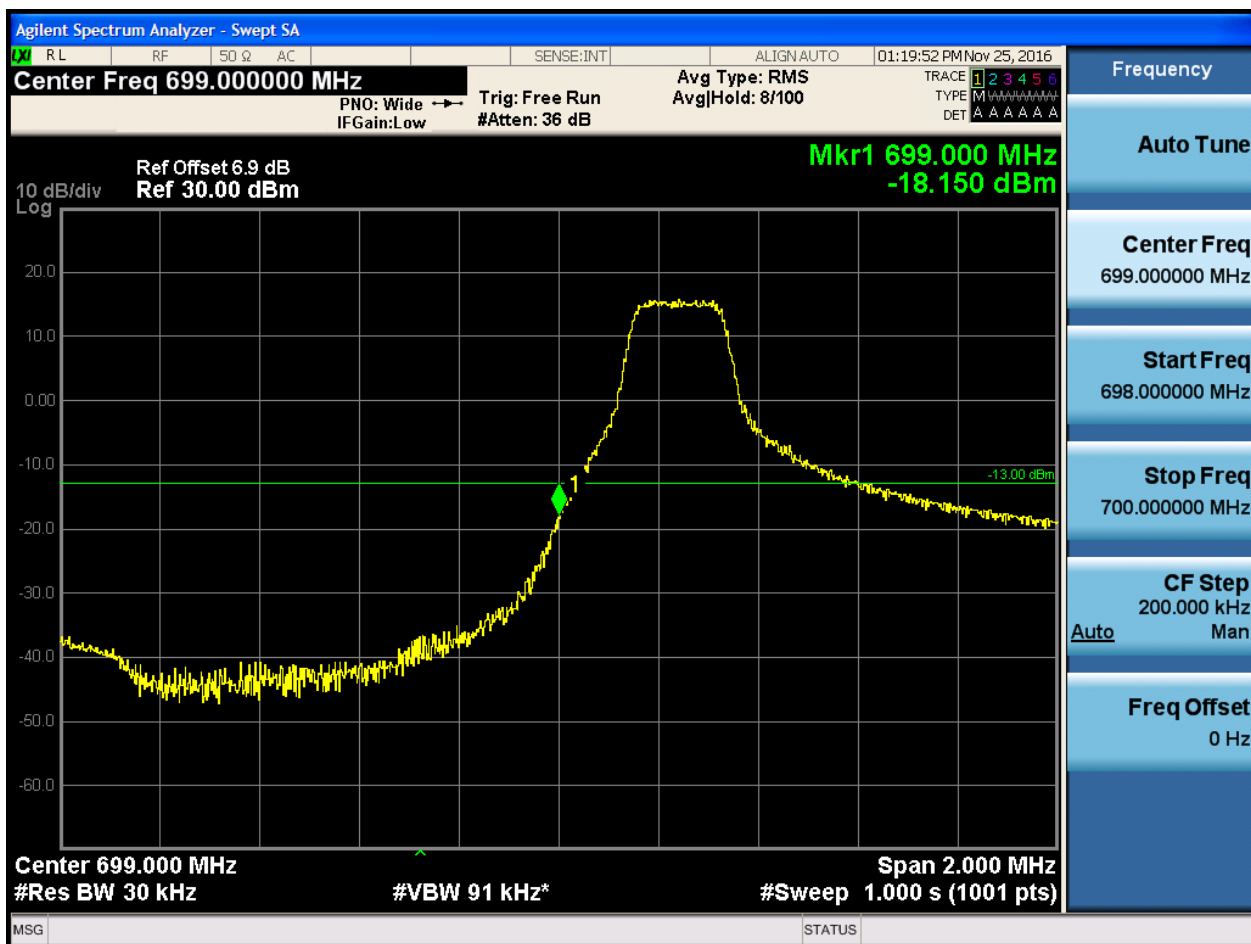




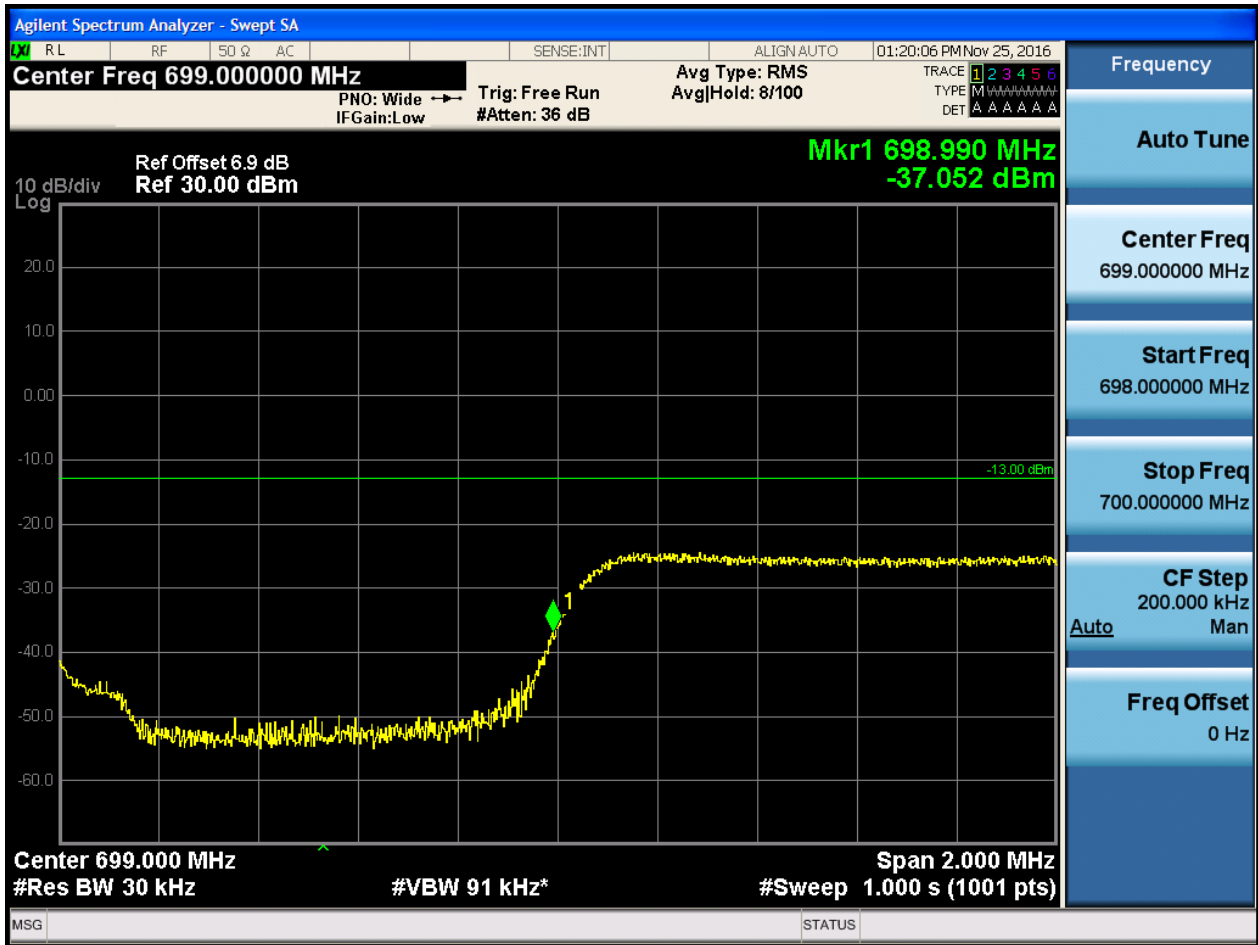
5.3.1.2.2 Test Bandwidth = 3

5.3.1.2.2.1 Test Channel = LCH

5.3.1.2.2.1.1 Test RB = RB1#0

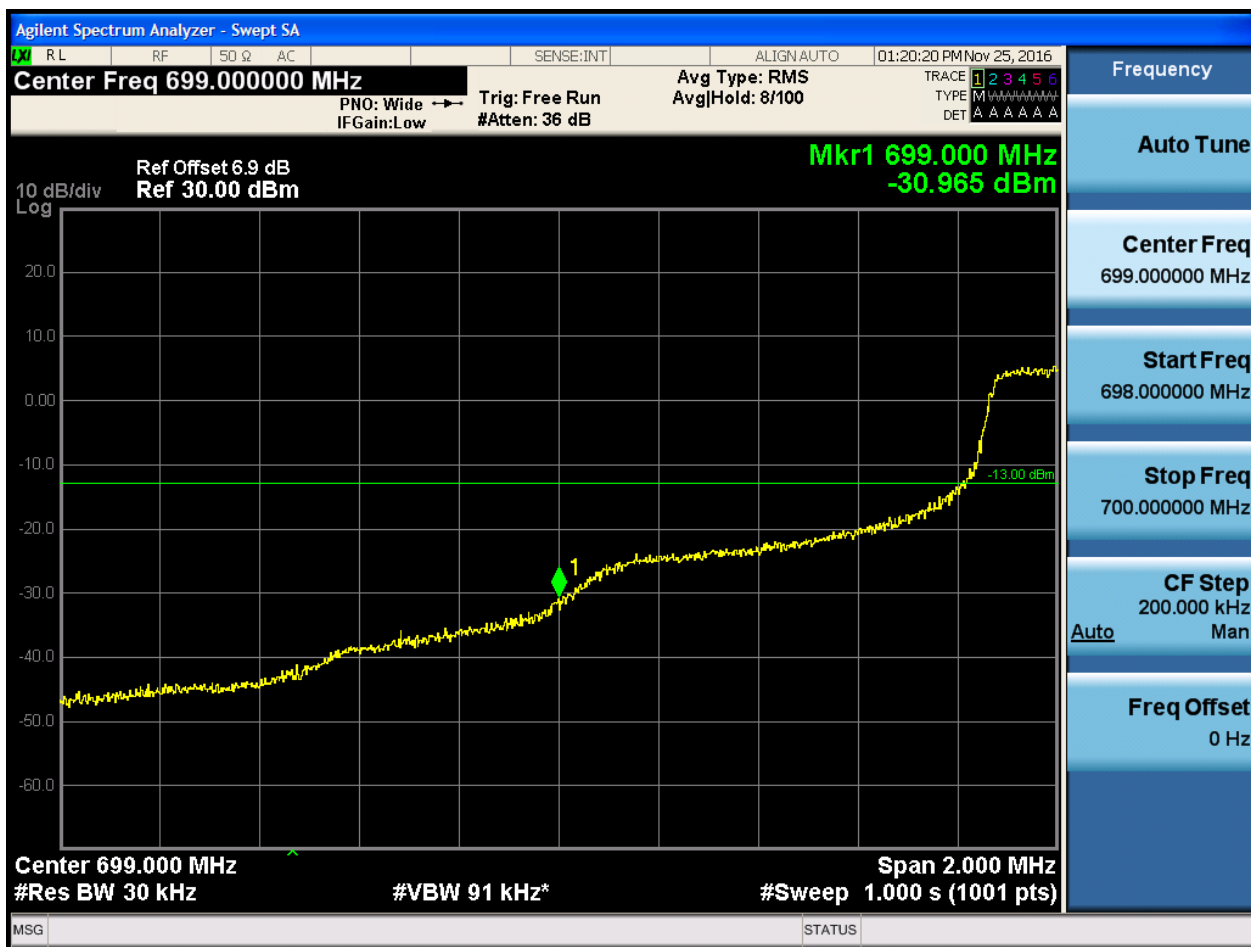


5.3.1.2.2.1.2 Test RB = RB1#14





5.3.1.2.2.1.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:20:35 PM Nov 25, 2016

Center Freq 699.000000 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 699.000 MHz
-29.916 dBm**

10 dB/div
Log

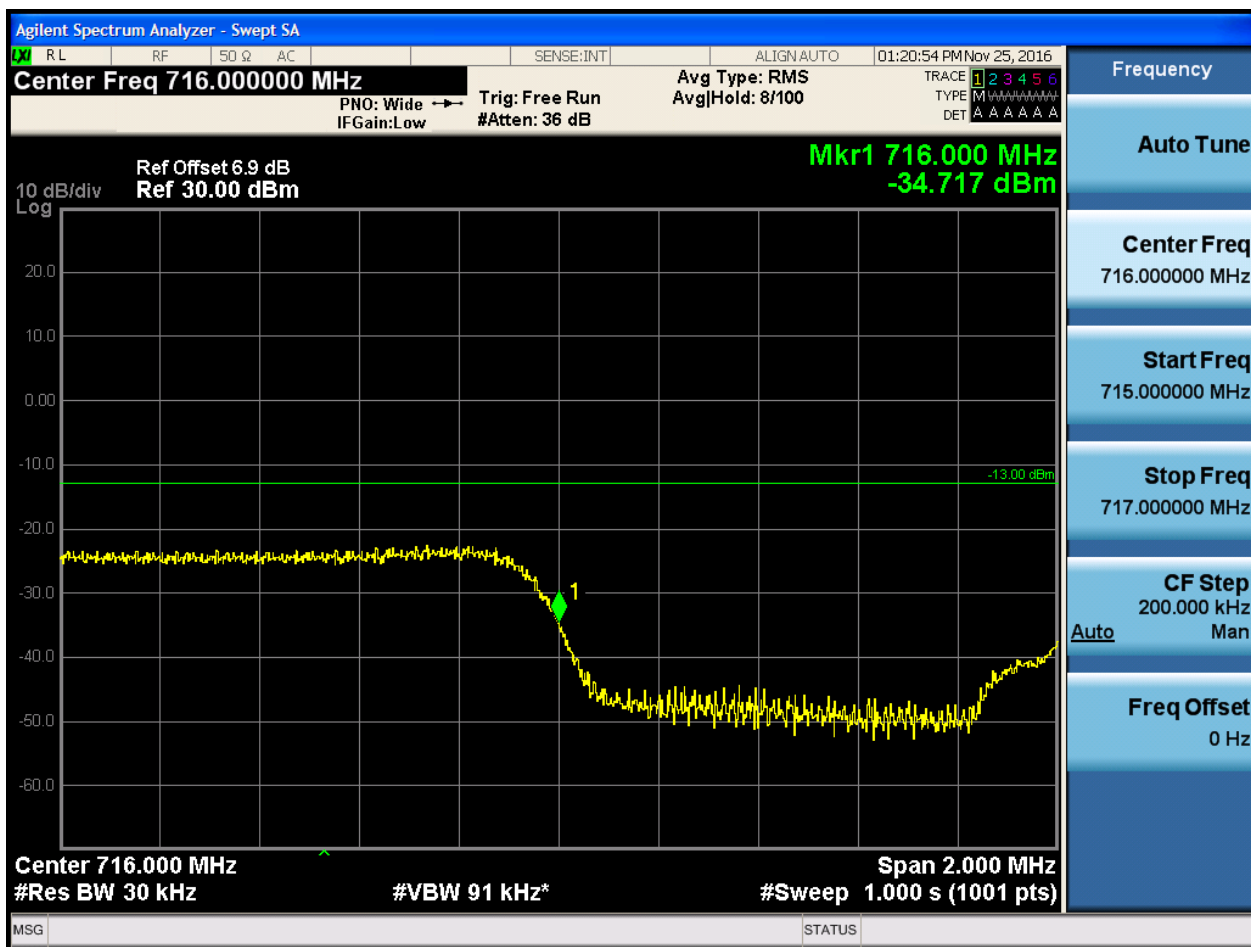
Center 699.000 MHz
#Res BW 30 kHz #VBW 91 kHz* Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



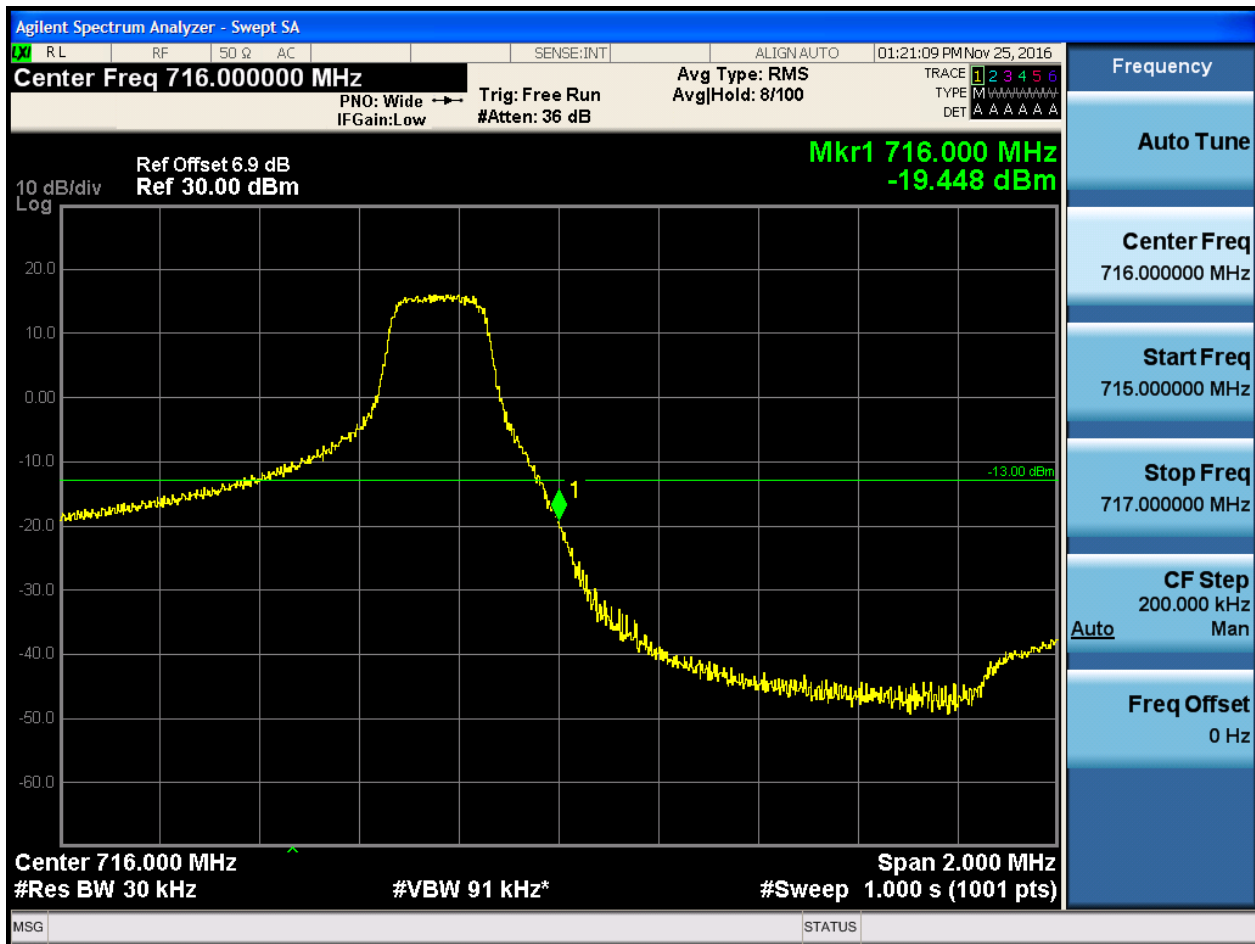
5.3.1.2.2.2 Test Channel = HCH

5.3.1.2.2.2.1 Test RB = RB1#0





5.3.1.2.2.2 Test RB = RB1#14





5.3.1.2.2.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-29.764 dBm

Center Freq 716.000000 MHz

Start Freq 715.000000 MHz

Stop Freq 717.000000 MHz

CF Step 200.000 kHz
Auto

Freq Offset 0 Hz

Center 716.000 MHz
#Res BW 30 kHz

#VBW 91 kHz*

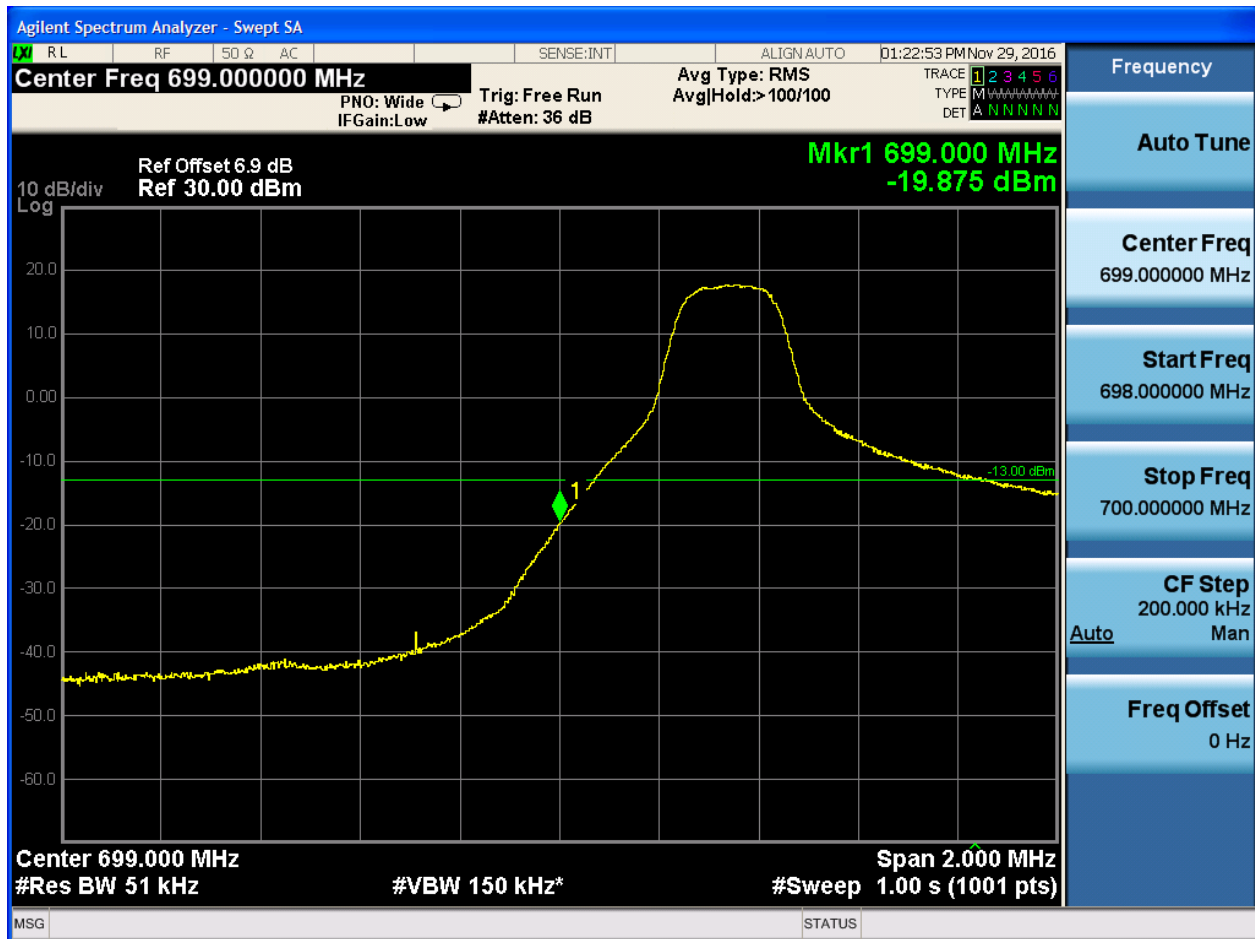
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)



5.3.1.2.3 Test Bandwidth = 5

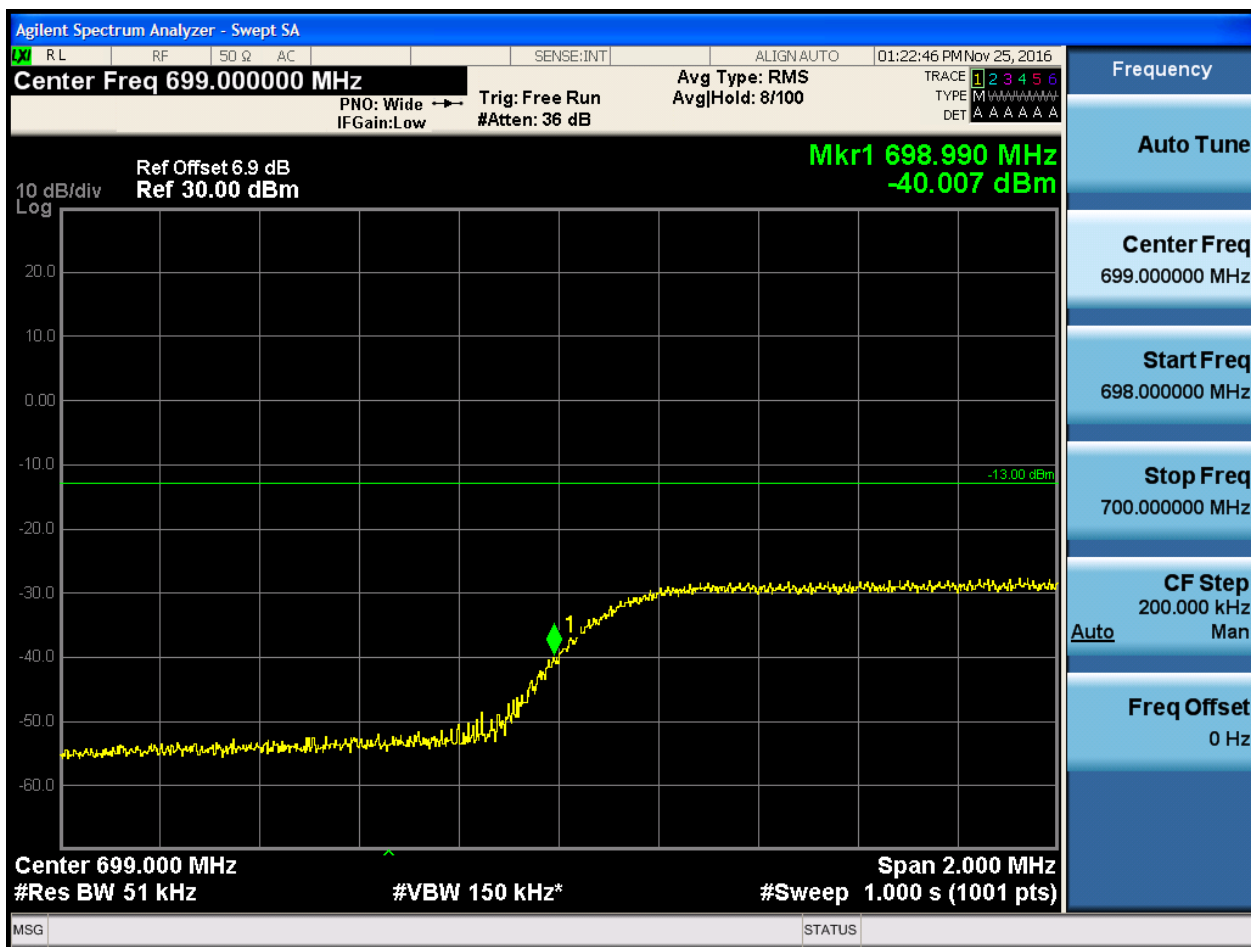
5.3.1.2.3.1 Test Channel = LCH

5.3.1.2.3.1.1 Test RB = RB1#0





5.3.1.2.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:23:00 PM Nov 25, 2016

Center Freq 699.000000 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 699.000 MHz
-33.679 dBm

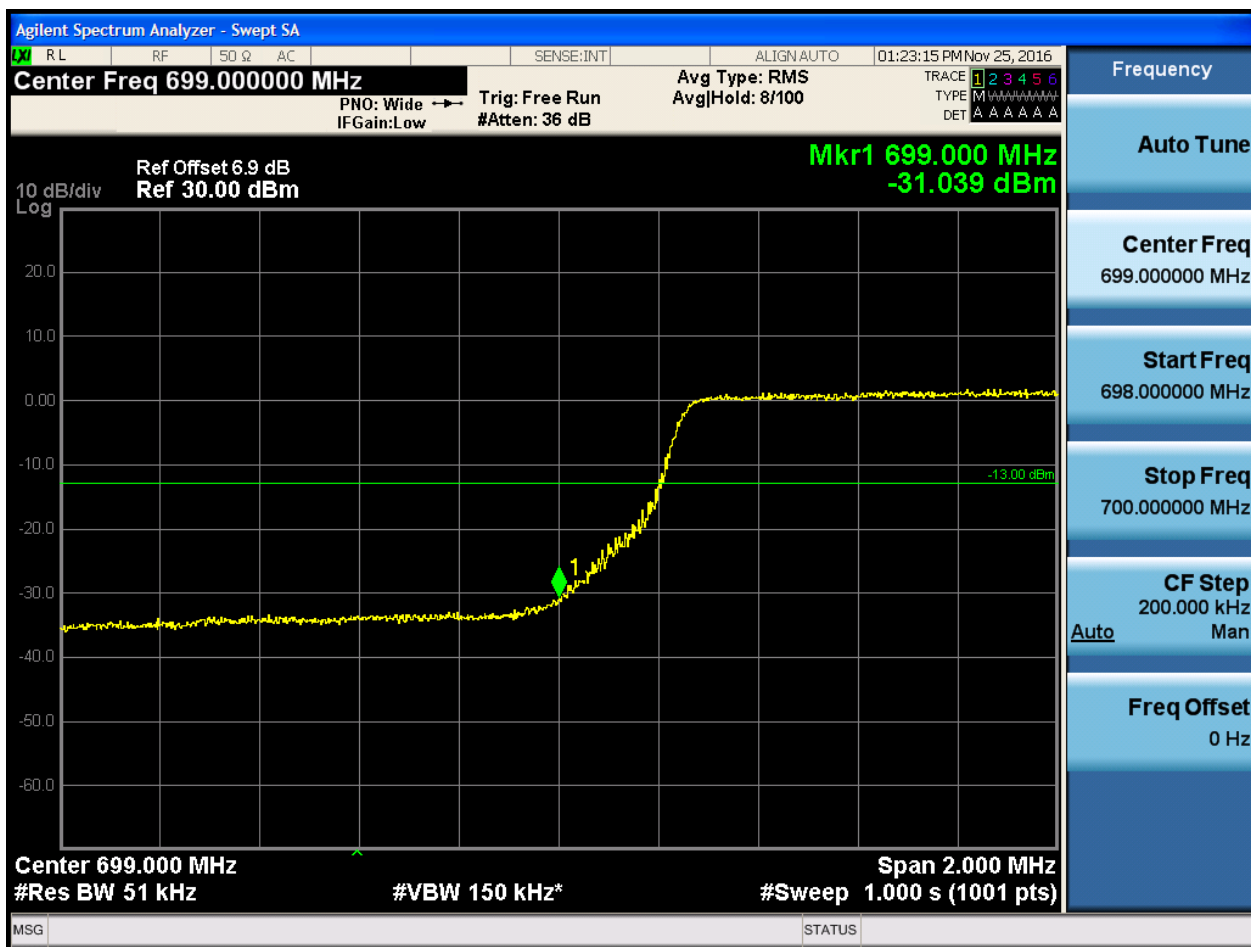
10 dB/div
Log

Center 699.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



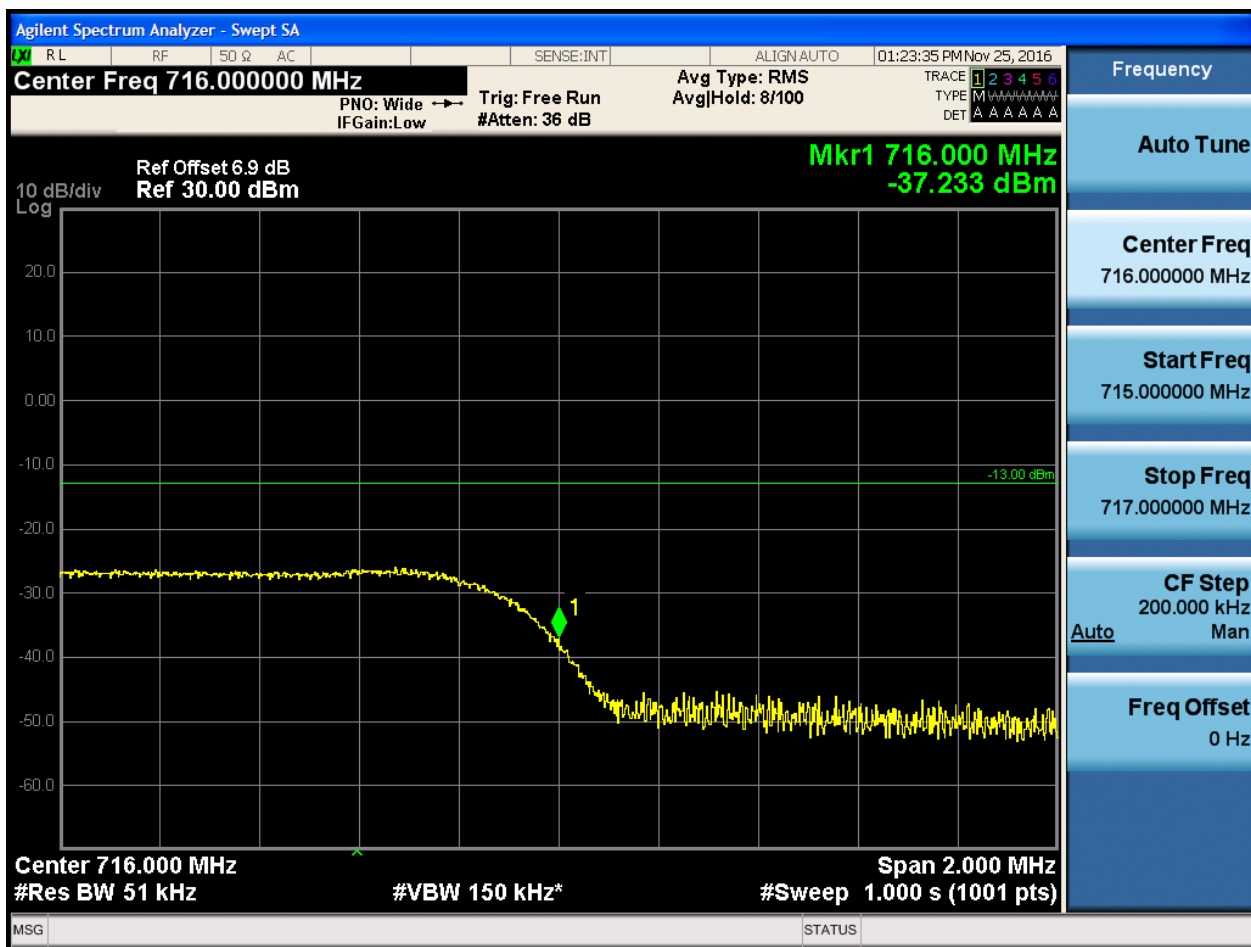
5.3.1.2.3.1.4 Test RB = RB25#0





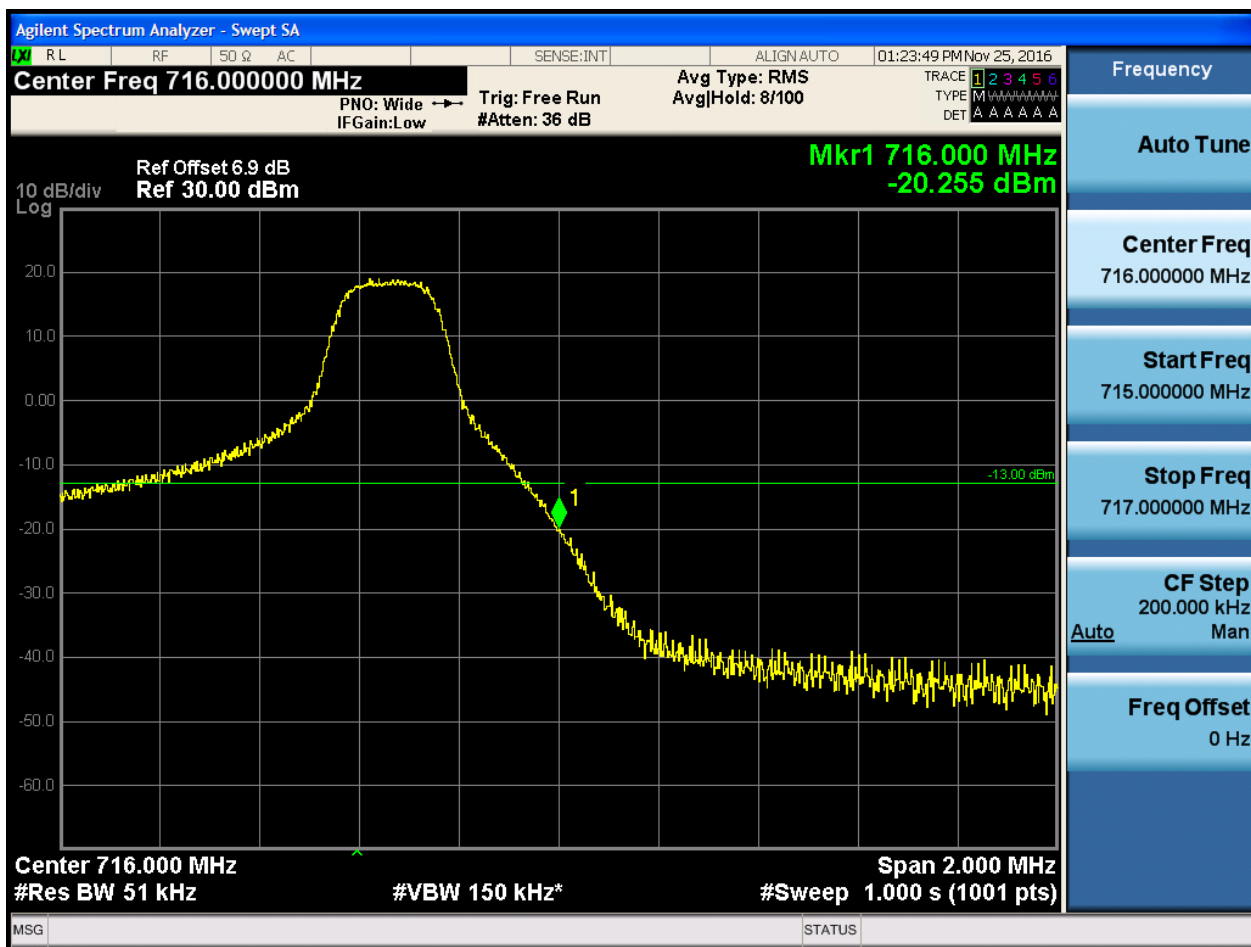
5.3.1.2.3.2 Test Channel = HCH

5.3.1.2.3.2.1 Test RB = RB1#0





5.3.1.2.3.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:24:03 PM Nov 25, 2016

Center Freq 716.000000 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 716.020 MHz
-32.102 dBm

10 dB/div
Log

Center 716.000 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
716.000000 MHz
Start Freq
715.000000 MHz
Stop Freq
717.000000 MHz
CF Step
200.000 kHz
Auto Man
Freq Offset
0 Hz



5.3.1.2.3.2.4 Test RB = RB25#0

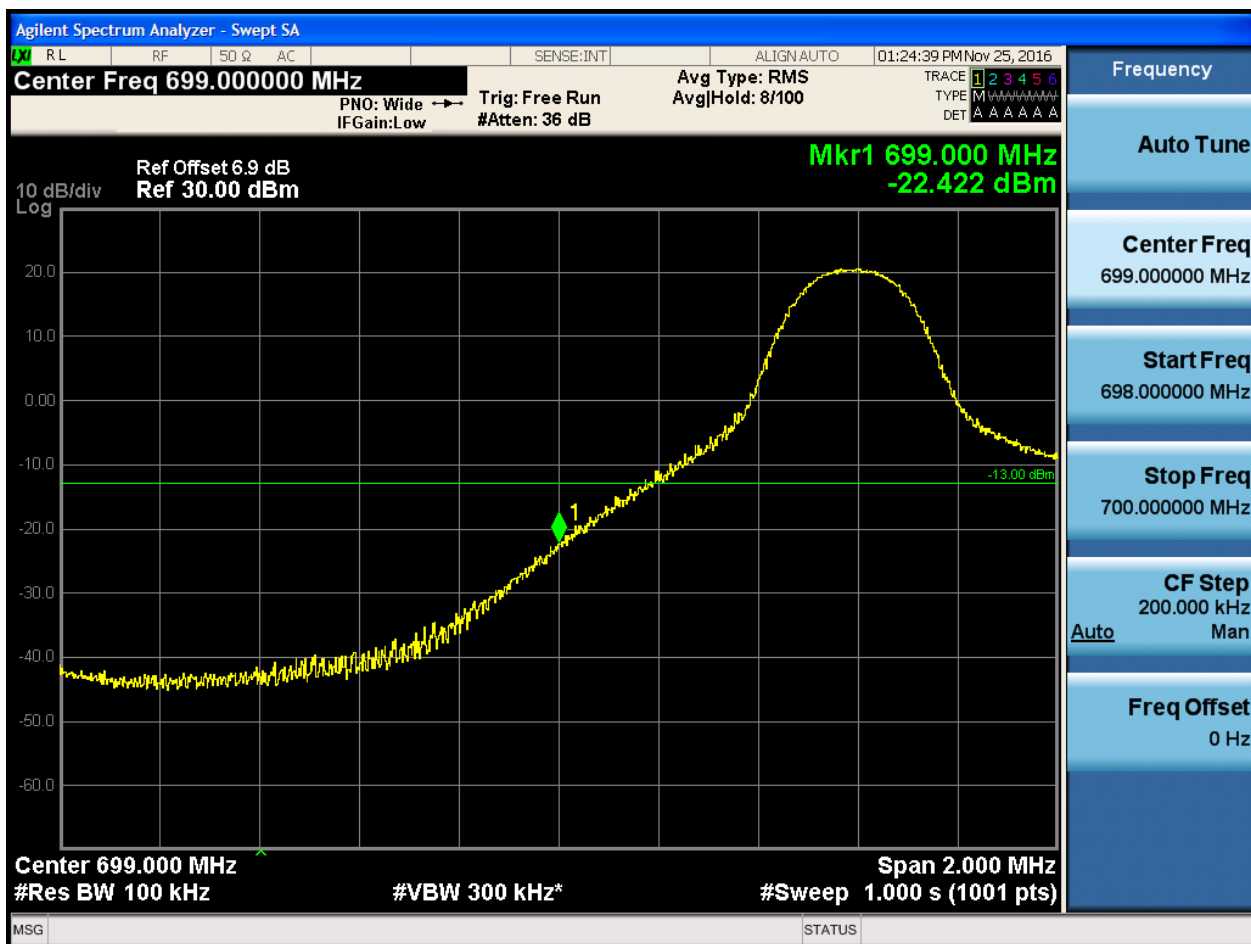




5.3.1.2.4 Test Bandwidth = 10

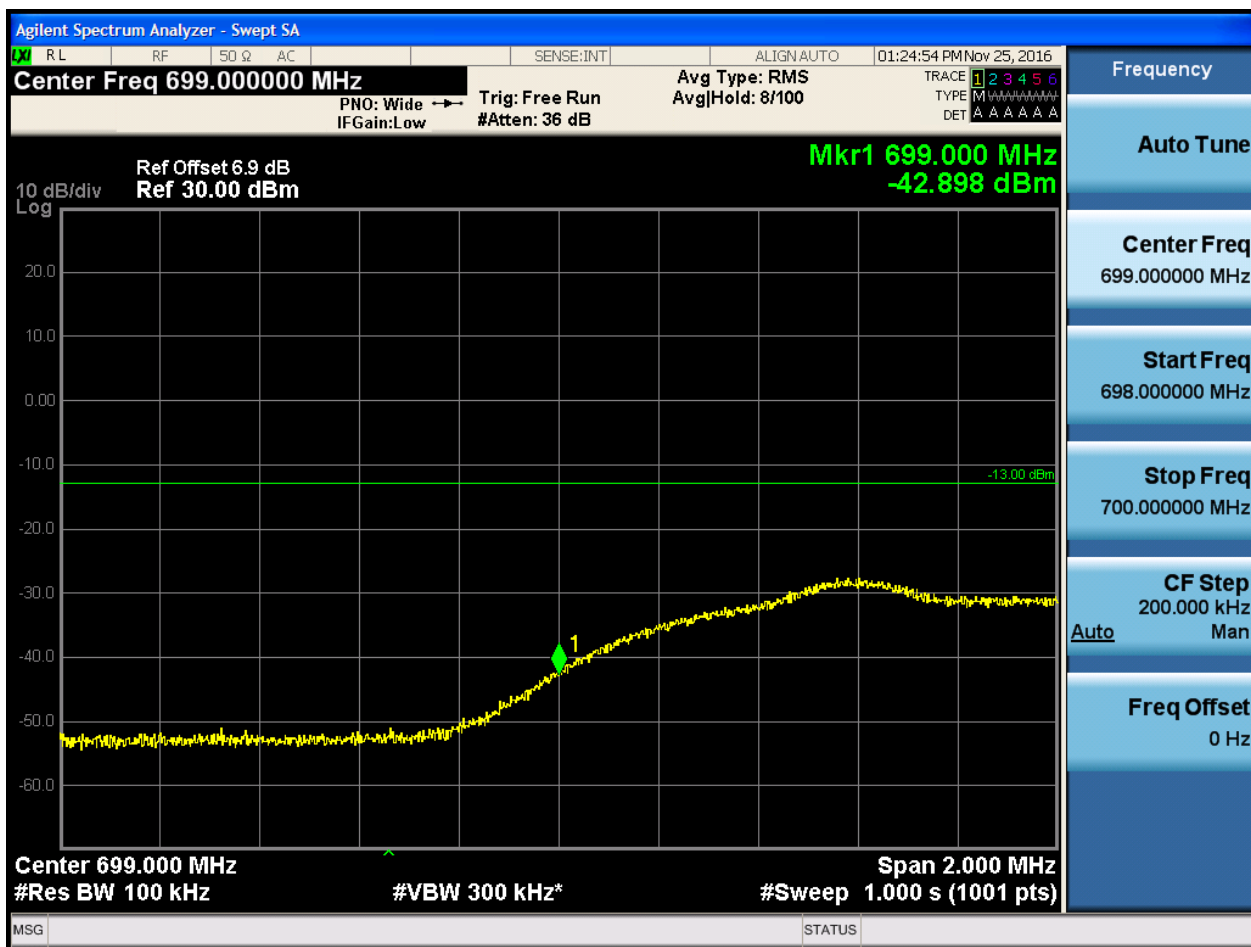
5.3.1.2.4.1 Test Channel = LCH

5.3.1.2.4.1.1 Test RB = RB1#0





5.3.1.2.4.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

Center Freq 699.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Center 699.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Trig: Free Run
#Atten: 36 dB

Avg Type: RMS
Avg/Hold: 8/100

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

Frequency

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

Mkr1 698.990 MHz
-34.839 dBm

-13.00 dBm

1

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:25:23 PM Nov 25, 2016

Center Freq 699.000000 MHz Avg Type: RMS Trg: Free Run
PNO: Wide 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 698.990 MHz
-31.353 dBm

10 dB/div
Log

Center 699.000 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
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

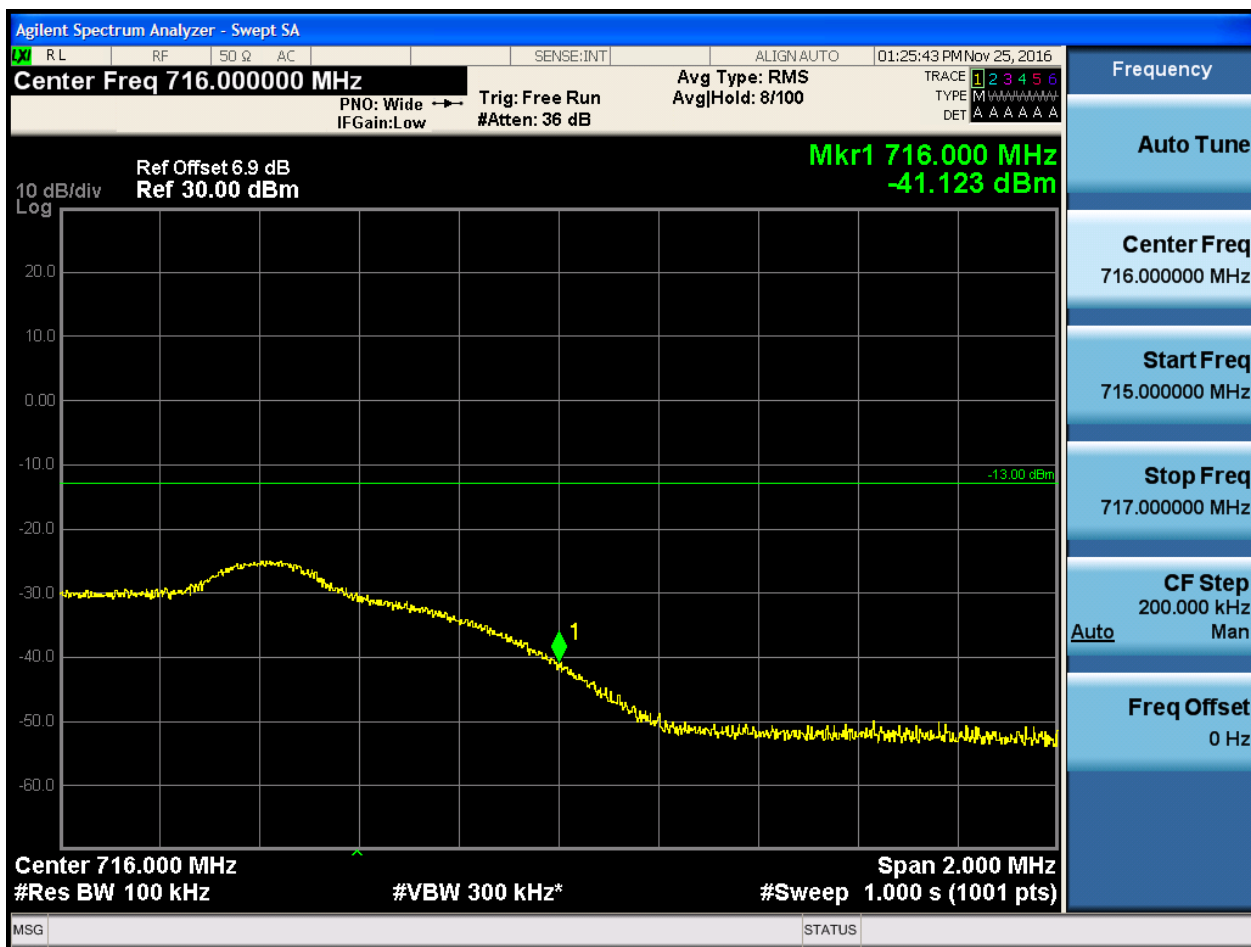
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



5.3.1.2.4.2 Test Channel = HCH

5.3.1.2.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-23.809 dBm

Center 716.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.9 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-30.318 dBm

Center Freq 716.000000 MHz

Start Freq 715.000000 MHz

Stop Freq 717.000000 MHz

CF Step 200.000 kHz
Auto

Freq Offset 0 Hz

Center 716.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:26:25 PM Nov 25, 2016

Center Freq 716.000000 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 716.010 MHz
-29.639 dBm

10 dB/div
Log

Center 716.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS

6Appendix_F: Spurious Emission at Antenna Terminal

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

Part I - Test Plots

6.3 For LTE

6.3.1 Test Band = BAND12

6.3.1.1 Test Mode = LTE/TM1

6.3.1.1.1 Test Bandwidth = 1.4

6.3.1.1.1.1 Test Channel = LCH

6.3.1.1.1.1.1 Test RB = RB1#0