



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]	EIRP [dBm]	Limit [dBm]	Verdict
BAND7	LTE/TM1	5	LCH	RB1#0	21.9	23.9	33	PASS
				RB1#13	21.77	23.77	33	PASS
				RB1#24	22.05	24.05	33	PASS
				RB12#0	20.6	22.6	33	PASS
				RB12#6	20.89	22.89	33	PASS
				RB12#13	20.72	22.72	33	PASS
				RB25#0	20.62	22.62	33	PASS
			MCH	RB1#0	22.04	24.04	33	PASS
				RB1#13	22.14	24.14	33	PASS
				RB1#24	22.16	24.16	33	PASS
				RB12#0	20.86	22.86	33	PASS
				RB12#6	21.12	23.12	33	PASS
				RB12#13	20.9	22.9	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.86	22.86	33	PASS
			HCH	RB1#0	21.71	23.71	33	PASS
				RB1#13	21.52	23.52	33	PASS
				RB1#24	21.59	23.59	33	PASS
				RB12#0	20.49	22.49	33	PASS
				RB12#6	20.62	22.62	33	PASS
				RB12#13	20.4	22.4	33	PASS
				RB25#0	20.49	22.49	33	PASS
		10	LCH	RB1#0	21.46	23.46	33	PASS
				RB1#25	21.84	23.84	33	PASS
				RB1#49	21.61	23.61	33	PASS
				RB25#0	20.35	22.35	33	PASS
				RB25#13	20.72	22.72	33	PASS
				RB25#25	20.55	22.55	33	PASS
				RB50#0	20.42	22.42	33	PASS
			MCH	RB1#0	21.73	23.73	33	PASS
				RB1#25	22.06	24.06	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#49	21.63	23.63	33	PASS
				RB25#0	20.59	22.59	33	PASS
				RB25#13	20.96	22.96	33	PASS
				RB25#25	20.71	22.71	33	PASS
				RB50#0	20.69	22.69	33	PASS
			HCH	RB1#0	21.5	23.5	33	PASS
				RB1#25	21.6	23.6	33	PASS
				RB1#49	21.01	23.01	33	PASS
				RB25#0	20.37	22.37	33	PASS
				RB25#13	20.53	22.53	33	PASS
				RB25#25	20.3	22.3	33	PASS
				RB50#0	20.37	22.37	33	PASS
		15	LCH	RB1#0	20.82	22.82	33	PASS
				RB1#38	21.29	23.29	33	PASS
				RB1#74	20.58	22.58	33	PASS
				RB36#0	19.86	21.86	33	PASS
				RB36#18	20.02	22.02	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB36#39	19.99	21.99	33	PASS
				RB75#0	19.96	21.96	33	PASS
			MCH	RB1#0	21.03	23.03	33	PASS
				RB1#38	21.36	23.36	33	PASS
				RB1#74	20.62	22.62	33	PASS
				RB36#0	20.07	22.07	33	PASS
				RB36#18	20.18	22.18	33	PASS
				RB36#39	20.12	22.12	33	PASS
				RB75#0	20.14	22.14	33	PASS
			HCH	RB1#0	20.91	22.91	33	PASS
				RB1#38	21.98	23.98	33	PASS
				RB1#74	21.03	23.03	33	PASS
				RB36#0	20.96	22.96	33	PASS
				RB36#18	20.88	22.88	33	PASS
				RB36#39	20.6	22.6	33	PASS
				RB75#0	20.79	22.79	33	PASS
		20	LCH	RB1#0	21.66	23.66	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#50	21.88	23.88	33	PASS
				RB1#99	21.93	23.93	33	PASS
				RB50#0	20.8	22.8	33	PASS
				RB50#25	20.86	22.86	33	PASS
				RB50#50	20.86	22.86	33	PASS
				RB100#0	20.81	22.81	33	PASS
			MCH	RB1#0	21.86	23.86	33	PASS
				RB1#50	21.99	23.99	33	PASS
				RB1#99	22	24	33	PASS
				RB50#0	21.03	23.03	33	PASS
				RB50#25	21.01	23.01	33	PASS
				RB50#50	21.04	23.04	33	PASS
				RB100#0	21.02	23.02	33	PASS
			HCH	RB1#0	21.85	23.85	33	PASS
				RB1#50	21.57	23.57	33	PASS
				RB1#99	21.17	23.17	33	PASS
				RB50#0	20.85	22.85	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#25	20.76	22.76	33	PASS
				RB50#50	20.35	22.35	33	PASS
				RB100#0	20.74	22.74	33	PASS
	LTE/TM2	5	LCH	RB1#0	21.85	23.85	33	PASS
				RB1#13	22.11	24.11	33	PASS
				RB1#24	22.07	24.07	33	PASS
				RB12#0	20.61	22.61	33	PASS
				RB12#6	20.91	22.91	33	PASS
				RB12#13	20.77	22.77	33	PASS
				RB25#0	20.68	22.68	33	PASS
			MCH	RB1#0	22.37	24.37	33	PASS
				RB1#13	22.35	24.35	33	PASS
				RB1#24	22.48	24.48	33	PASS
				RB12#0	20.85	22.85	33	PASS
				RB12#6	21.1	23.1	33	PASS
				RB12#13	21.02	23.02	33	PASS
				RB25#0	21	23	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	21.46	23.46	33	PASS
				RB1#13	21.72	23.72	33	PASS
				RB1#24	21.1	23.1	33	PASS
				RB12#0	20.46	22.46	33	PASS
				RB12#6	20.59	22.59	33	PASS
				RB12#13	20.4	22.4	33	PASS
				RB25#0	20.47	22.47	33	PASS
		10	LCH	RB1#0	21.84	23.84	33	PASS
				RB1#25	22.21	24.21	33	PASS
				RB1#49	21.93	23.93	33	PASS
				RB25#0	20.63	22.63	33	PASS
				RB25#13	20.99	22.99	33	PASS
				RB25#25	20.85	22.85	33	PASS
				RB50#0	20.7	22.7	33	PASS
			MCH	RB1#0	22.19	24.19	33	PASS
				RB1#25	22.49	24.49	33	PASS
				RB1#49	22.06	24.06	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.93	22.93	33	PASS
				RB25#13	21.29	23.29	33	PASS
				RB25#25	21.05	23.05	33	PASS
				RB50#0	21.01	23.01	33	PASS
			HCH	RB1#0	21.87	23.87	33	PASS
				RB1#25	21.93	23.93	33	PASS
				RB1#49	20.99	22.99	33	PASS
				RB25#0	20.54	22.54	33	PASS
				RB25#13	20.68	22.68	33	PASS
				RB25#25	20.46	22.46	33	PASS
				RB50#0	20.53	22.53	33	PASS
		15	LCH	RB1#0	21.23	23.23	33	PASS
				RB1#38	21.69	23.69	33	PASS
				RB1#74	21.05	23.05	33	PASS
				RB36#0	20.16	22.16	33	PASS
				RB36#18	20.5	22.5	33	PASS
				RB36#39	20.46	22.46	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB75#0	20.25	22.25	33	PASS
			MCH	RB1#0	21.58	23.58	33	PASS
				RB1#38	21.89	23.89	33	PASS
				RB1#74	21.23	23.23	33	PASS
				RB36#0	20.58	22.58	33	PASS
				RB36#18	20.7	22.7	33	PASS
				RB36#39	20.64	22.64	33	PASS
				RB75#0	20.63	22.63	33	PASS
			HCH	RB1#0	21.2	23.2	33	PASS
				RB1#38	21.28	23.28	33	PASS
				RB1#74	20.36	22.36	33	PASS
				RB36#0	20.25	22.25	33	PASS
				RB36#18	20.19	22.19	33	PASS
				RB36#39	19.92	21.92	33	PASS
				RB75#0	20.09	22.09	33	PASS
		20	LCH	RB1#0	21.42	23.42	33	PASS
				RB1#50	21.65	23.65	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#99	21.66	23.66	33	PASS
				RB50#0	20.22	22.22	33	PASS
				RB50#25	20.28	22.28	33	PASS
				RB50#50	20.29	22.29	33	PASS
				RB100#0	20.25	22.25	33	PASS
			MCH	RB1#0	21.69	23.69	33	PASS
				RB1#50	21.82	23.82	33	PASS
				RB1#99	21.74	23.74	33	PASS
				RB50#0	20.52	22.52	33	PASS
				RB50#25	20.49	22.49	33	PASS
				RB50#50	20.53	22.53	33	PASS
				RB100#0	20.51	22.51	33	PASS
			HCH	RB1#0	21.58	23.58	33	PASS
				RB1#50	21.3	23.3	33	PASS
				RB1#99	20.86	22.86	33	PASS
				RB50#0	20.28	22.28	33	PASS
				RB50#25	20.19	22.19	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#50	19.8	21.8	33	PASS
				RB100#0	20.17	22.17	33	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: RBW > emission bandwidth, VBW > 3 x RBW.

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
BAND7	LTE/TM1	5	LCH	RB1#0	3.89	13	PASS
				RB1#13	3.19	13	PASS
				RB1#24	3.77	13	PASS
				RB12#0	4.63	13	PASS
				RB12#6	4.25	13	PASS
				RB12#13	4.6	13	PASS
				RB25#0	5.11	13	PASS
			MCH	RB1#0	3.55	13	PASS
				RB1#13	3.07	13	PASS
				RB1#24	3.42	13	PASS
				RB12#0	4.69	13	PASS
				RB12#6	4.38	13	PASS
				RB12#13	4.55	13	PASS
				RB25#0	5.11	13	PASS
			HCH	RB1#0	4.06	13	PASS
				RB1#13	3.37	13	PASS
				RB1#24	3.72	13	PASS
				RB12#0	4.72	13	PASS
				RB12#6	4.3	13	PASS
				RB12#13	4.5	13	PASS
				RB25#0	5.03	13	PASS
		10	LCH	RB1#0	3.64	13	PASS
				RB1#25	3.2	13	PASS
				RB1#49	3.53	13	PASS
				RB25#0	4.8	13	PASS
				RB25#13	4.29	13	PASS
				RB25#25	4.64	13	PASS
				RB50#0	5.15	13	PASS
			MCH	RB1#0	3.34	13	PASS
				RB1#25	2.89	13	PASS
				RB1#49	3.16	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	4.72	13	PASS
				RB25#13	4.13	13	PASS
				RB25#25	4.56	13	PASS
				RB50#0	5.06	13	PASS
			HCH	RB1#0	3.71	13	PASS
				RB1#25	3.5	13	PASS
				RB1#49	3.52	13	PASS
				RB25#0	4.9	13	PASS
				RB25#13	4.41	13	PASS
				RB25#25	4.58	13	PASS
				RB50#0	5.26	13	PASS
		15	LCH	RB1#0	3.7	13	PASS
				RB1#38	3.46	13	PASS
				RB1#74	3.81	13	PASS
				RB36#0	5.22	13	PASS
				RB36#18	4.92	13	PASS
				RB36#39	5.19	13	PASS
				RB75#0	5.67	13	PASS
			MCH	RB1#0	3.68	13	PASS
				RB1#38	3.35	13	PASS
				RB1#74	3.47	13	PASS
				RB36#0	5.2	13	PASS
				RB36#18	4.8	13	PASS
				RB36#39	4.97	13	PASS
				RB75#0	5.63	13	PASS
			HCH	RB1#0	3.51	13	PASS
				RB1#38	3.56	13	PASS
				RB1#74	3.38	13	PASS
				RB36#0	5.24	13	PASS
				RB36#18	4.95	13	PASS
				RB36#39	5.08	13	PASS
				RB75#0	5.75	13	PASS
		20	LCH	RB1#0	3.66	13	PASS
				RB1#50	3.63	13	PASS
				RB1#99	3.5	13	PASS
				RB50#0	5.22	13	PASS
				RB50#25	5.09	13	PASS
				RB50#50	5.24	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB100#0	5.71	13	PASS
			MCH	RB1#0	3.66	13	PASS
				RB1#50	3.52	13	PASS
				RB1#99	3.26	13	PASS
				RB50#0	5.16	13	PASS
				RB50#25	4.92	13	PASS
				RB50#50	4.94	13	PASS
				RB100#0	5.61	13	PASS
			HCH	RB1#0	3.36	13	PASS
				RB1#50	3.71	13	PASS
				RB1#99	3.32	13	PASS
				RB50#0	5.11	13	PASS
				RB50#25	5.03	13	PASS
				RB50#50	5.15	13	PASS
				RB100#0	5.78	13	PASS
	LTE/TM2	5	LCH	RB1#0	4.11	13	PASS
				RB1#13	3.41	13	PASS
				RB1#24	3.84	13	PASS
				RB12#0	4.97	13	PASS
				RB12#6	4.55	13	PASS
				RB12#13	4.98	13	PASS
				RB25#0	5.54	13	PASS
			MCH	RB1#0	3.92	13	PASS
				RB1#13	3.3	13	PASS
				RB1#24	3.57	13	PASS
				RB12#0	4.98	13	PASS
				RB12#6	4.56	13	PASS
				RB12#13	4.84	13	PASS
				RB25#0	5.4	13	PASS
			HCH	RB1#0	4.35	13	PASS
				RB1#13	3.56	13	PASS
				RB1#24	3.95	13	PASS
				RB12#0	5.01	13	PASS
				RB12#6	4.52	13	PASS
				RB12#13	4.79	13	PASS
				RB25#0	5.38	13	PASS
		10	LCH	RB1#0	3.84	13	PASS
				RB1#25	3.39	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#49	3.73	13	PASS
				RB25#0	5.05	13	PASS
				RB25#13	4.66	13	PASS
				RB25#25	4.95	13	PASS
				RB50#0	5.72	13	PASS
			MCH	RB1#0	3.57	13	PASS
				RB1#25	3.12	13	PASS
				RB1#49	3.48	13	PASS
				RB25#0	4.99	13	PASS
				RB25#13	4.5	13	PASS
				RB25#25	4.83	13	PASS
				RB50#0	5.52	13	PASS
			HCH	RB1#0	4.02	13	PASS
				RB1#25	3.72	13	PASS
				RB1#49	3.79	13	PASS
				RB25#0	5.25	13	PASS
				RB25#13	4.76	13	PASS
				RB25#25	4.83	13	PASS
				RB50#0	5.62	13	PASS
		15	LCH	RB1#0	4.21	13	PASS
				RB1#38	3.62	13	PASS
				RB1#74	4.05	13	PASS
				RB36#0	5.53	13	PASS
				RB36#18	5.23	13	PASS
				RB36#39	5.47	13	PASS
				RB75#0	6.11	13	PASS
			MCH	RB1#0	4.21	13	PASS
				RB1#38	3.58	13	PASS
				RB1#74	3.97	13	PASS
				RB36#0	5.54	13	PASS
				RB36#18	5.09	13	PASS
				RB36#39	5.25	13	PASS
				RB75#0	5.98	13	PASS
			HCH	RB1#0	4.12	13	PASS
				RB1#38	3.81	13	PASS
				RB1#74	3.93	13	PASS
				RB36#0	5.6	13	PASS
				RB36#18	5.25	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
		20		RB36#39	5.38	13	PASS
				RB75#0	6.04	13	PASS
			LCH	RB1#0	4.09	13	PASS
				RB1#50	3.73	13	PASS
				RB1#99	4.03	13	PASS
				RB50#0	5.63	13	PASS
				RB50#25	5.45	13	PASS
				RB50#50	5.59	13	PASS
				RB100#0	6.11	13	PASS
			MCH	RB1#0	4.01	13	PASS
				RB1#50	3.6	13	PASS
				RB1#99	3.71	13	PASS
				RB50#0	5.51	13	PASS
				RB50#25	5.21	13	PASS
				RB50#50	5.27	13	PASS
				RB100#0	5.94	13	PASS
			HCH	RB1#0	3.74	13	PASS
				RB1#50	3.73	13	PASS
				RB1#99	3.88	13	PASS
				RB50#0	5.42	13	PASS
				RB50#25	5.35	13	PASS
				RB50#50	5.48	13	PASS
				RB100#0	6.2	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

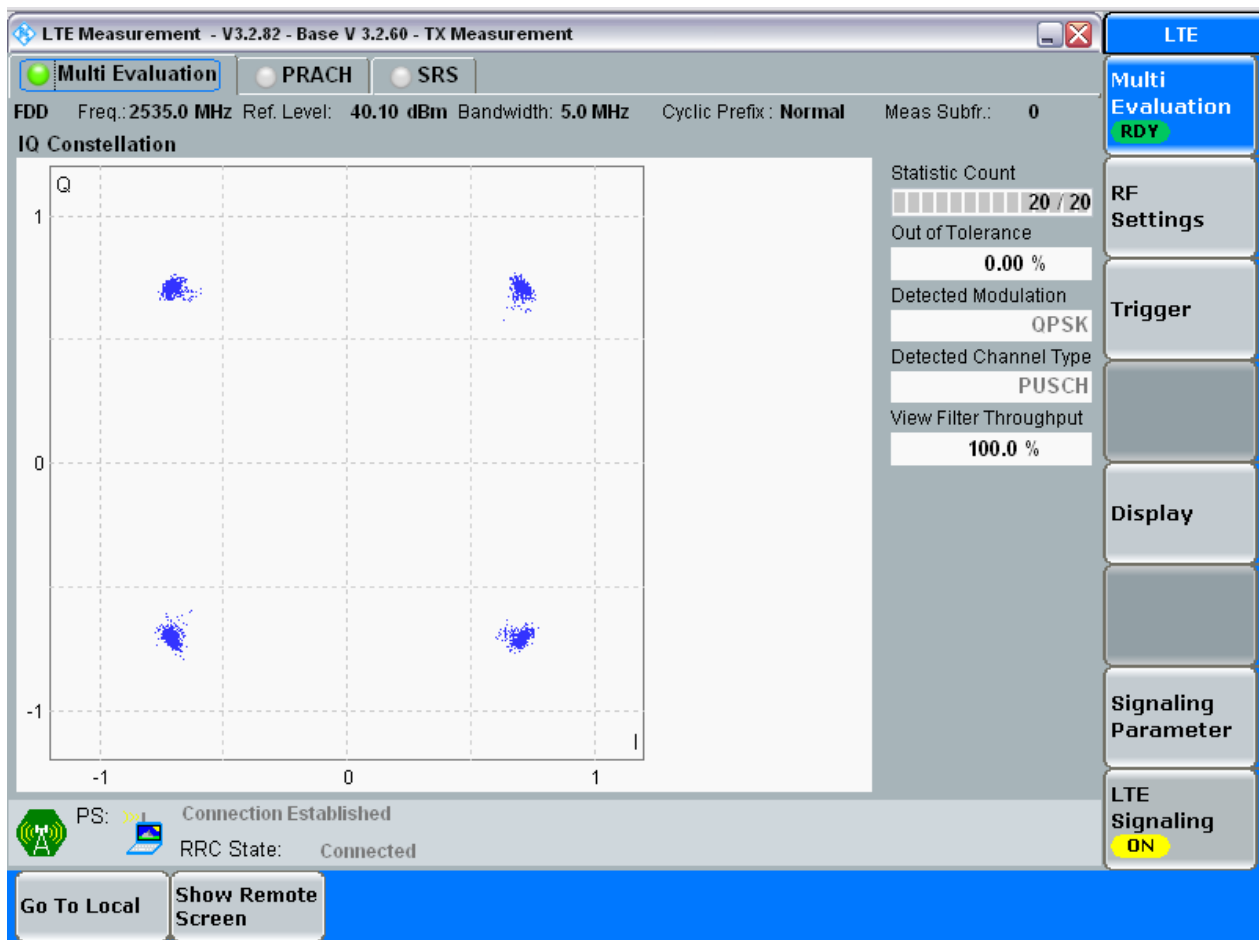
3.1.1 Test Band = BAND7

3.1.1.1 Test Mode = LTE/TM1

3.1.1.1.1 Test Bandwidth = 5

3.1.1.1.1.1 Test Channel = MCH

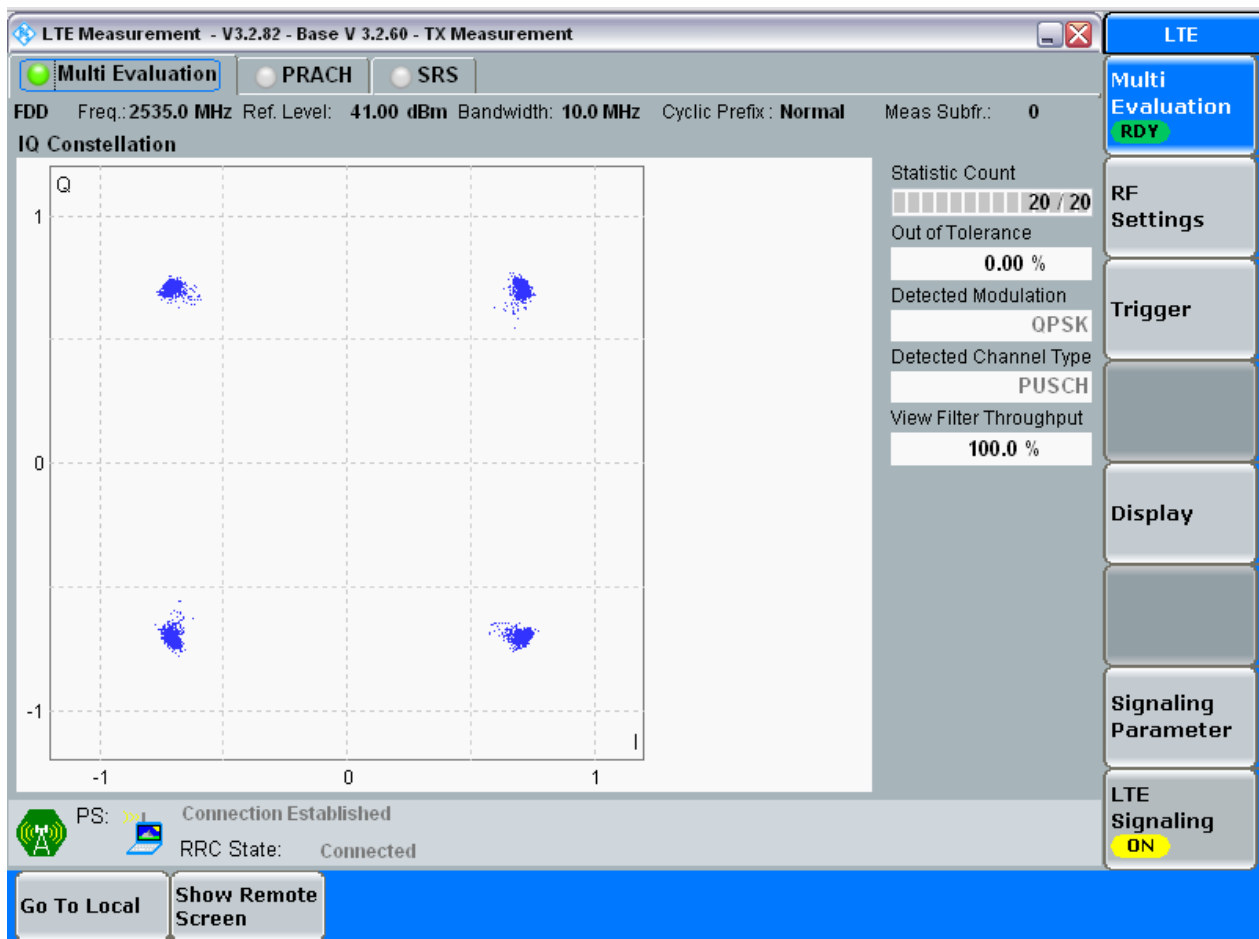
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

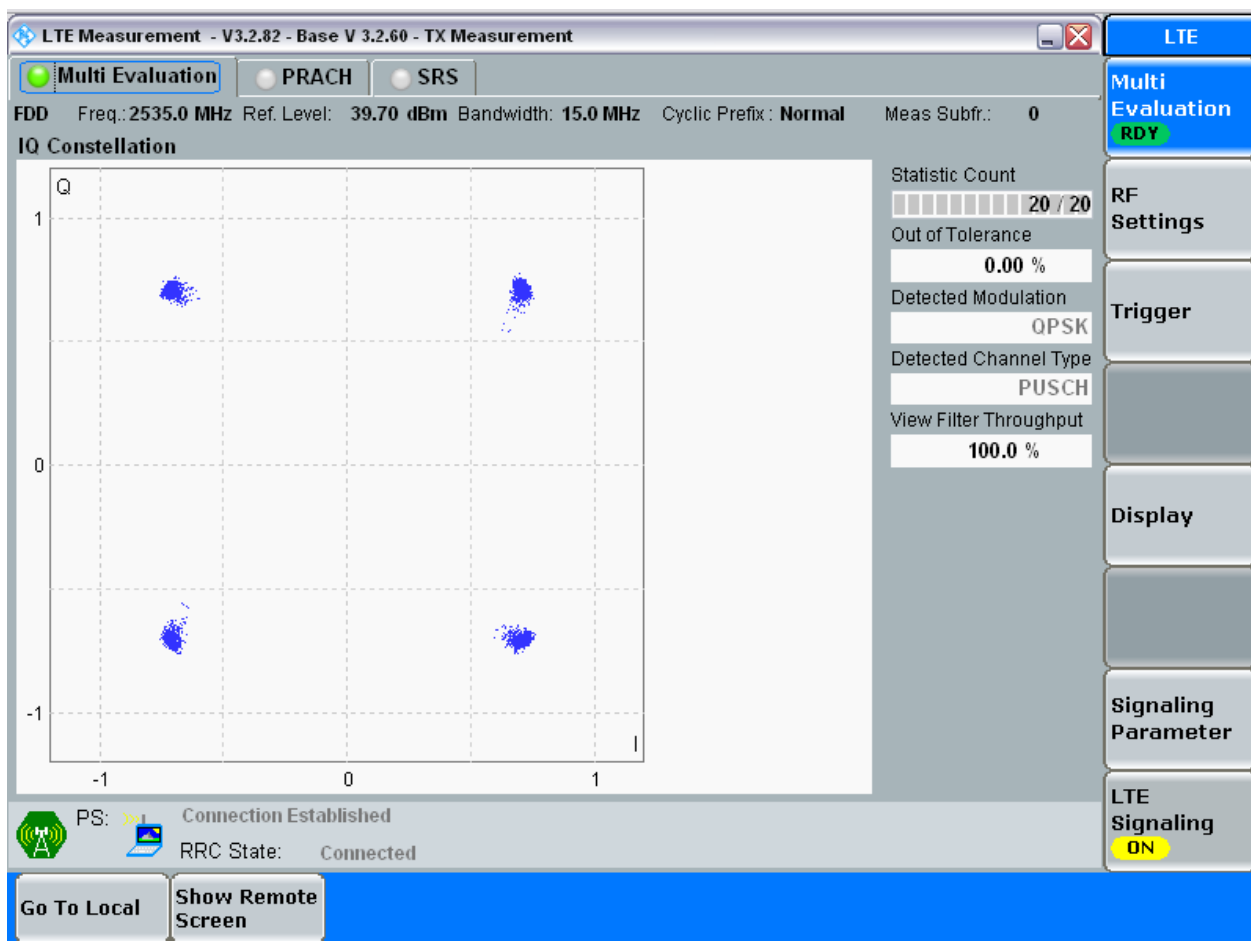
3.1.1.1.2.1.1 Test RB = RB50#0



3.1.1.1.3 Test Bandwidth = 15

3.1.1.1.3.1 Test Channel = MCH

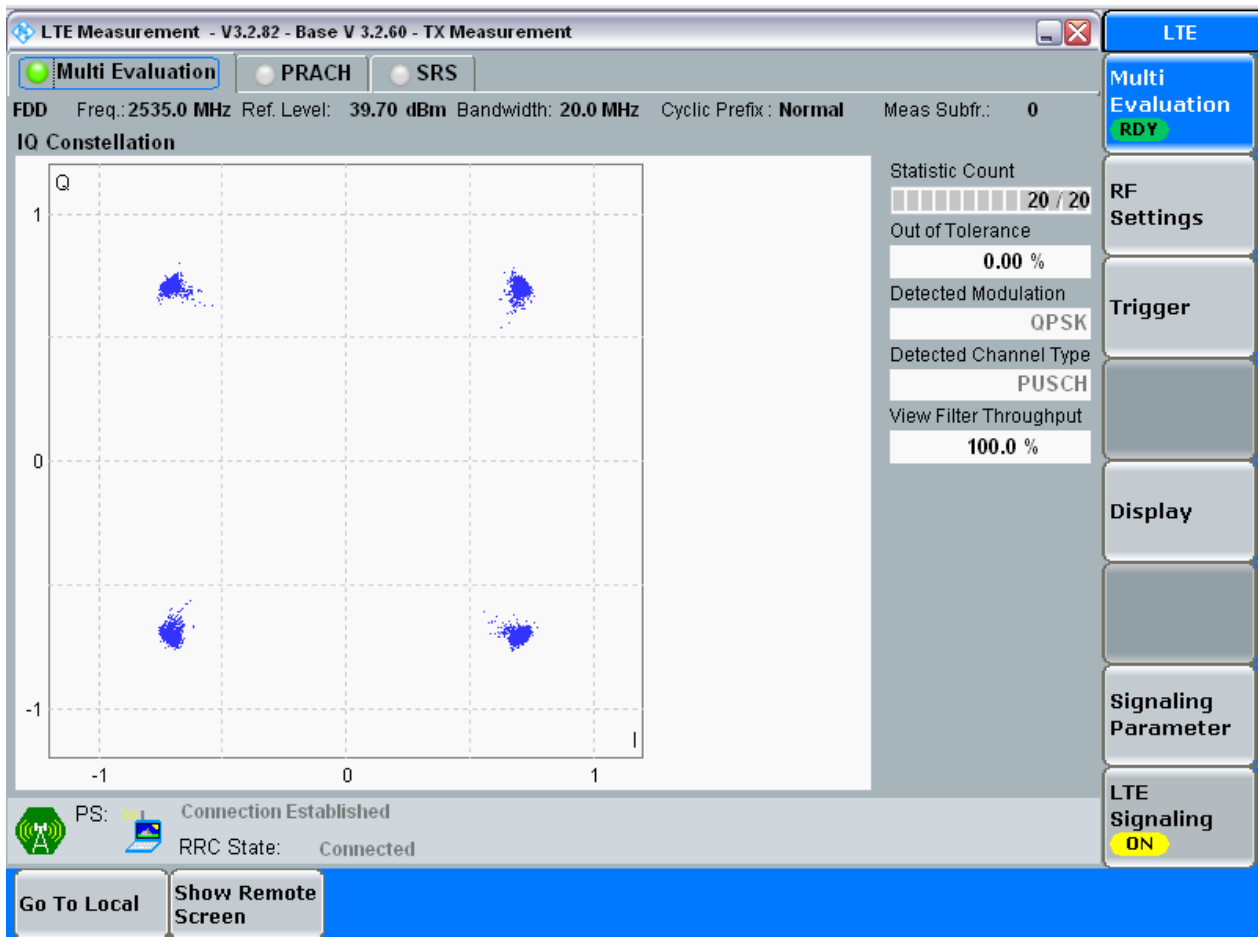
3.1.1.1.3.1.1 Test RB = RB75#0



3.1.1.1.4 Test Bandwidth = 20

3.1.1.1.4.1 Test Channel = MCH

3.1.1.1.4.1.1 Test RB = RB100#0

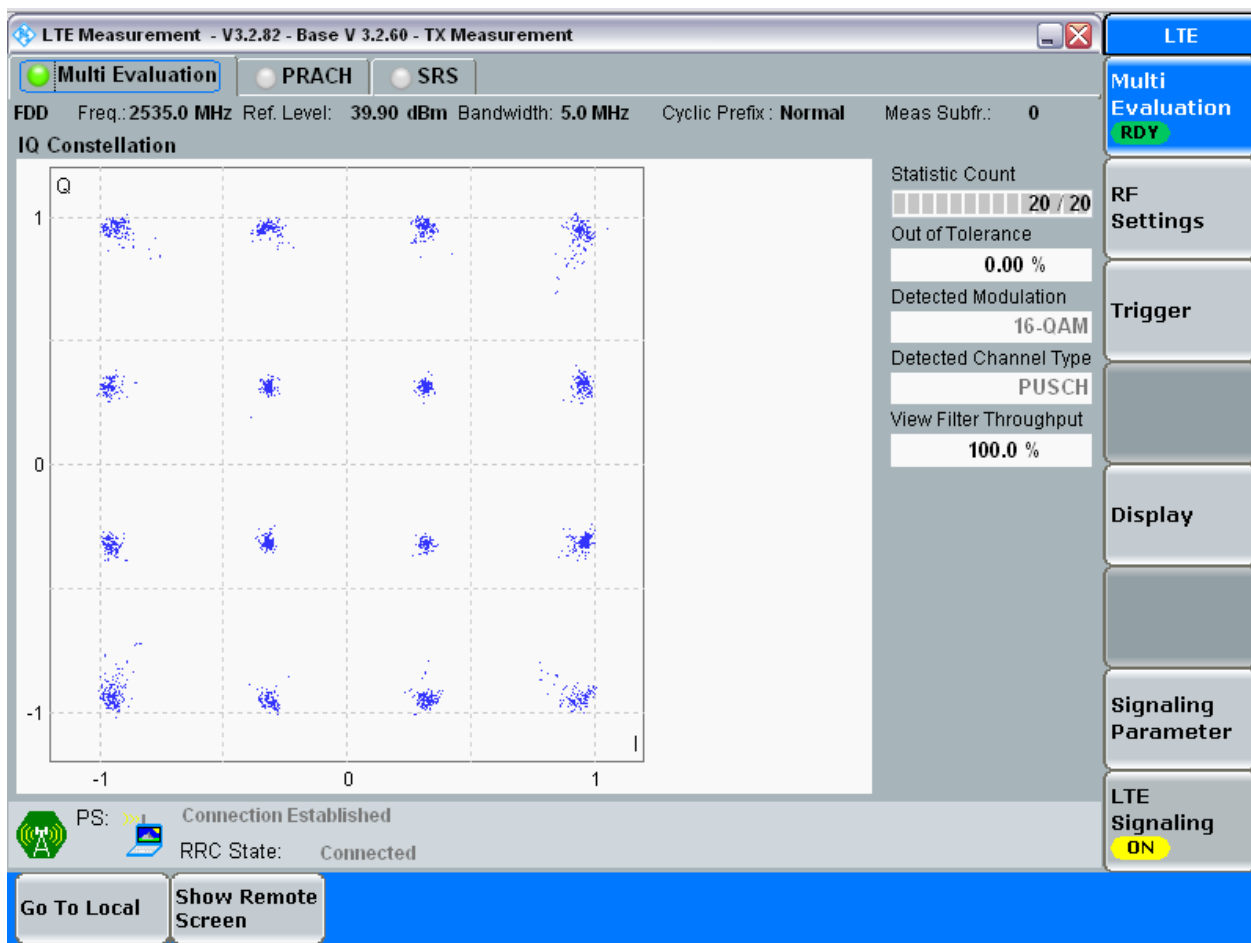


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

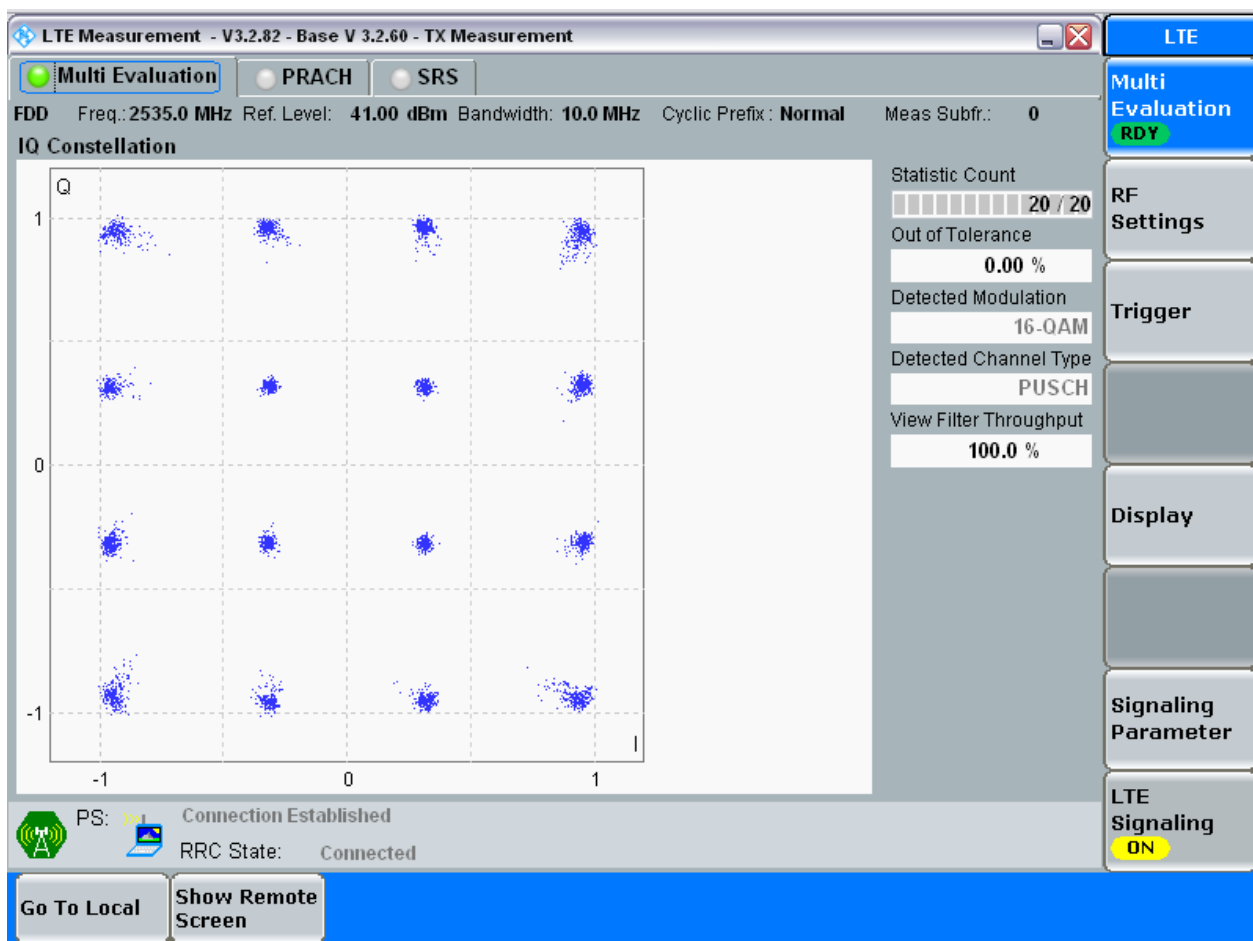
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

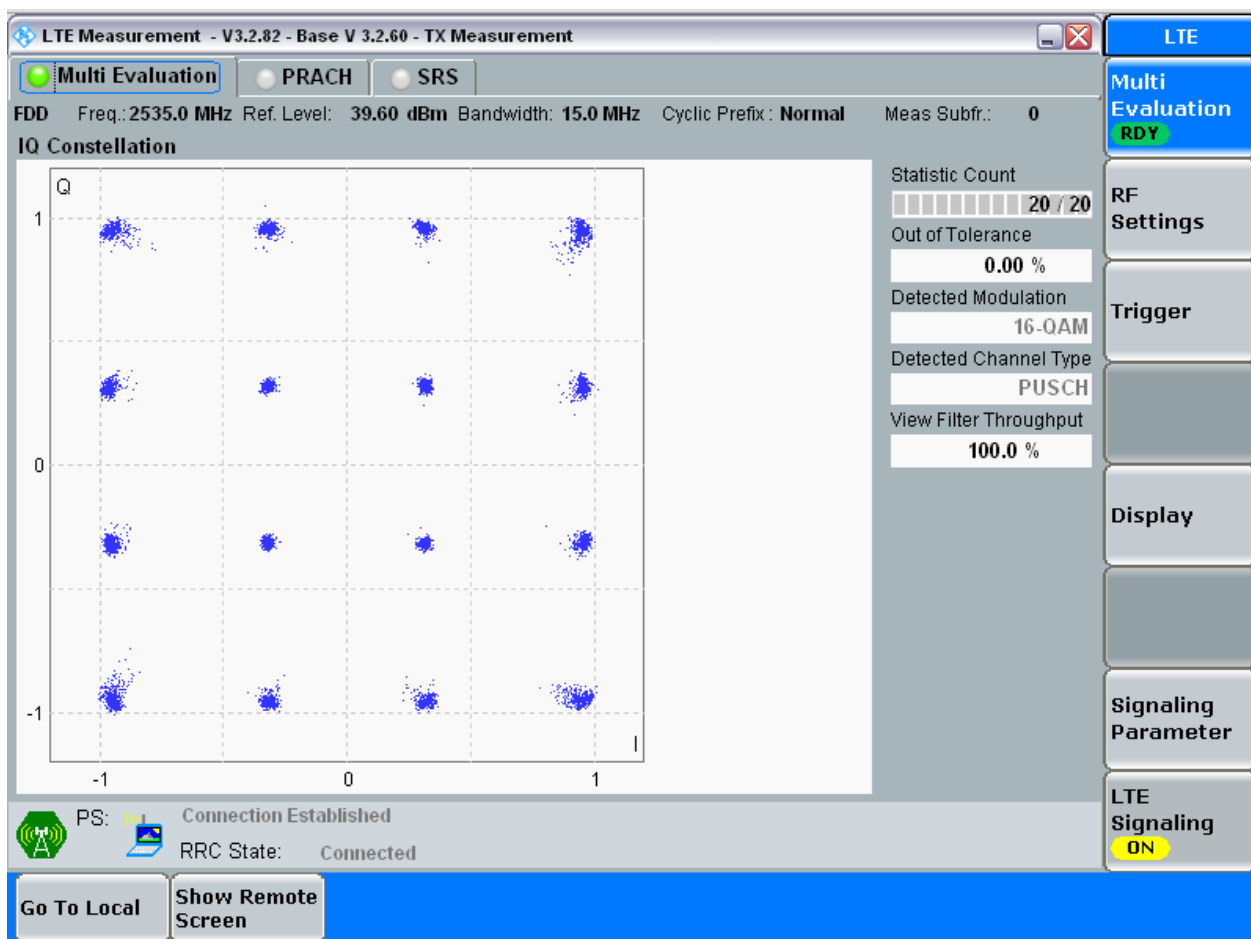
3.1.1.2.2.1.1 Test RB = RB50#0



3.1.1.2.3 Test Bandwidth = 15

3.1.1.2.3.1 Test Channel = MCH

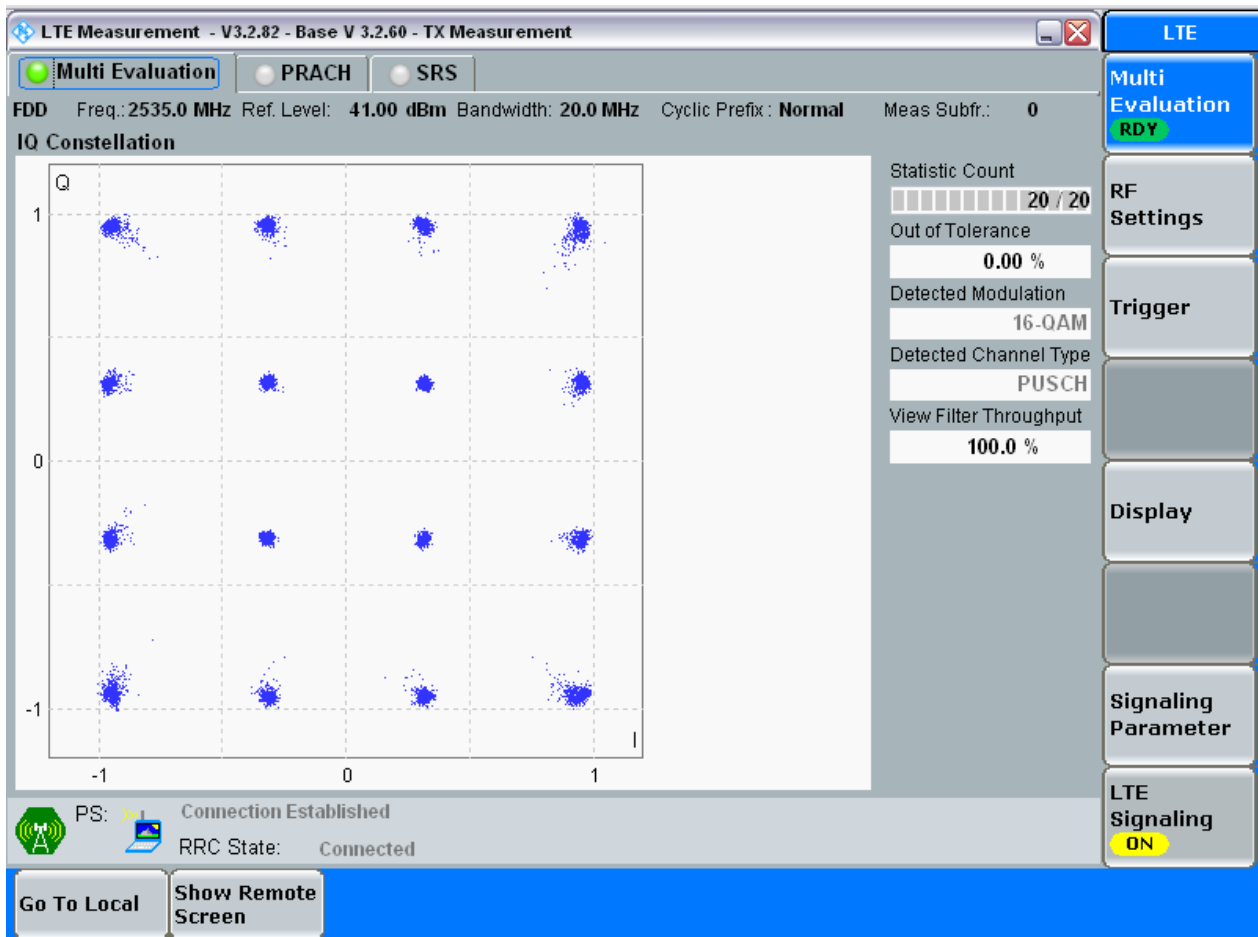
3.1.1.2.3.1.1 Test RB = RB75#0



3.1.1.2.4 Test Bandwidth = 20

3.1.1.2.4.1 Test Channel = MCH

3.1.1.2.4.1.1 Test RB = RB100#0



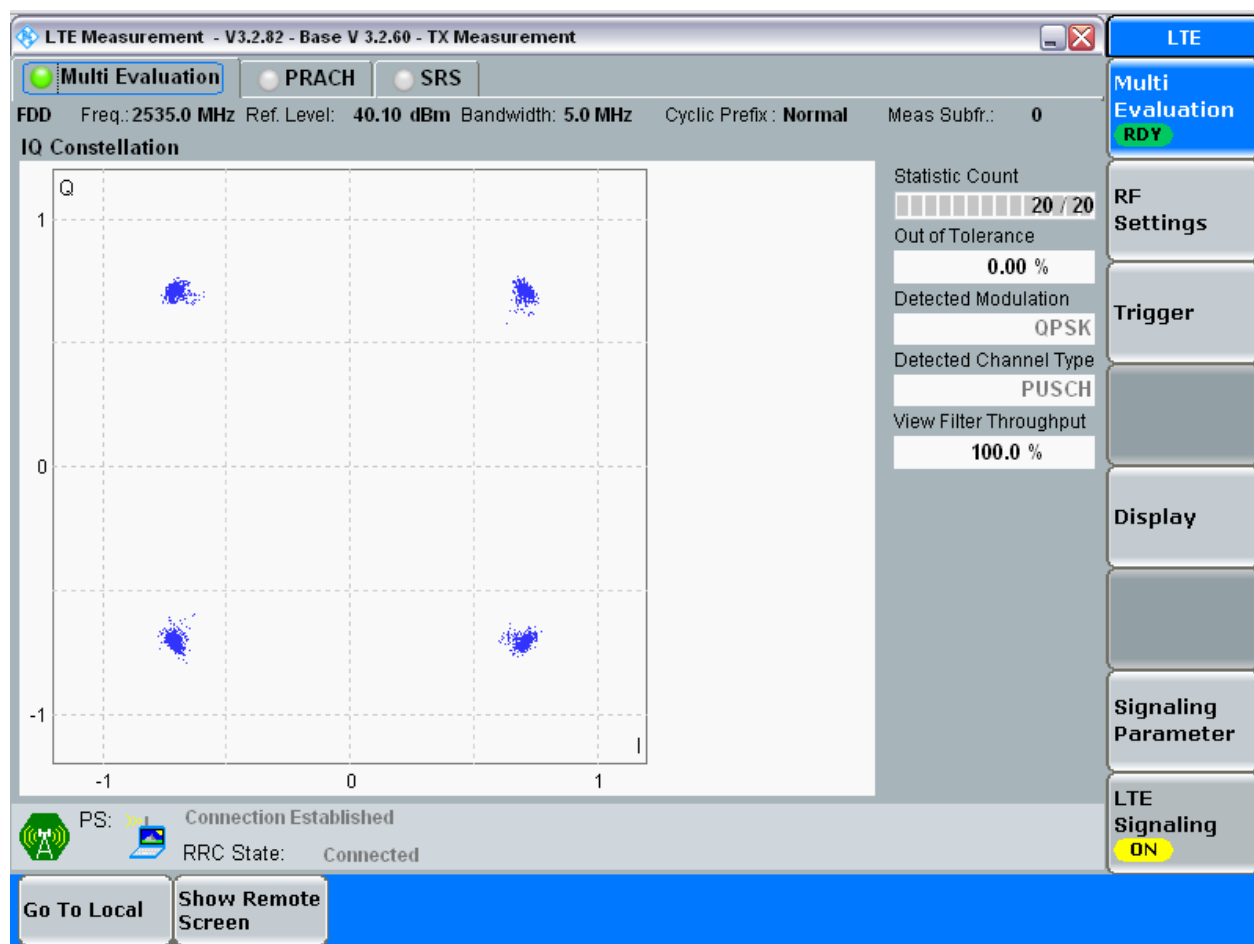
3.1.2 Test Band = BAND7

3.1.2.1 Test Mode = LTE/TM1

3.1.2.1.1 Test Bandwidth = 5

3.1.2.1.1.1 Test Channel = MCH

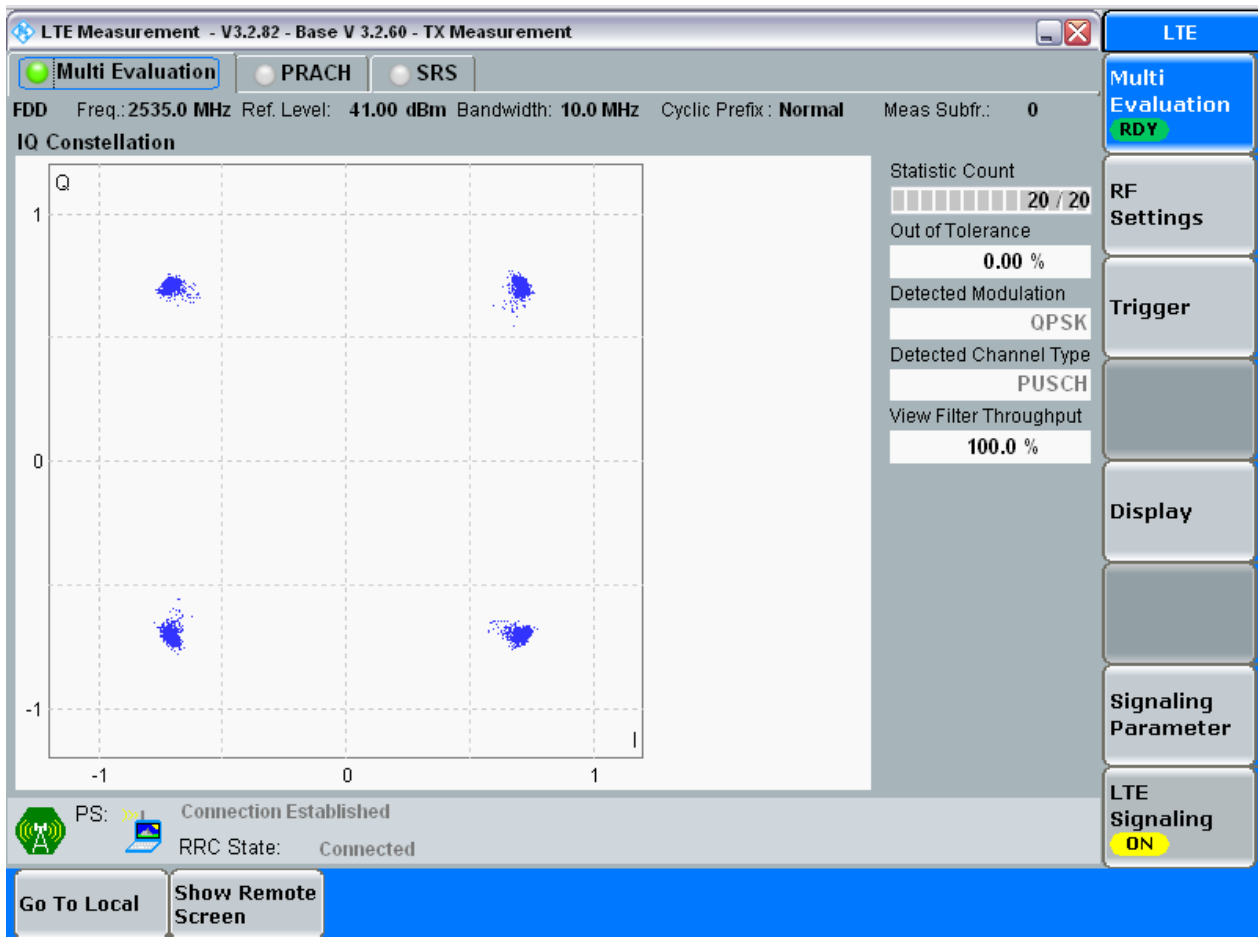
3.1.2.1.1.1.1 Test RB = RB25#0



3.1.2.1.2 Test Bandwidth = 10

3.1.2.1.2.1 Test Channel = MCH

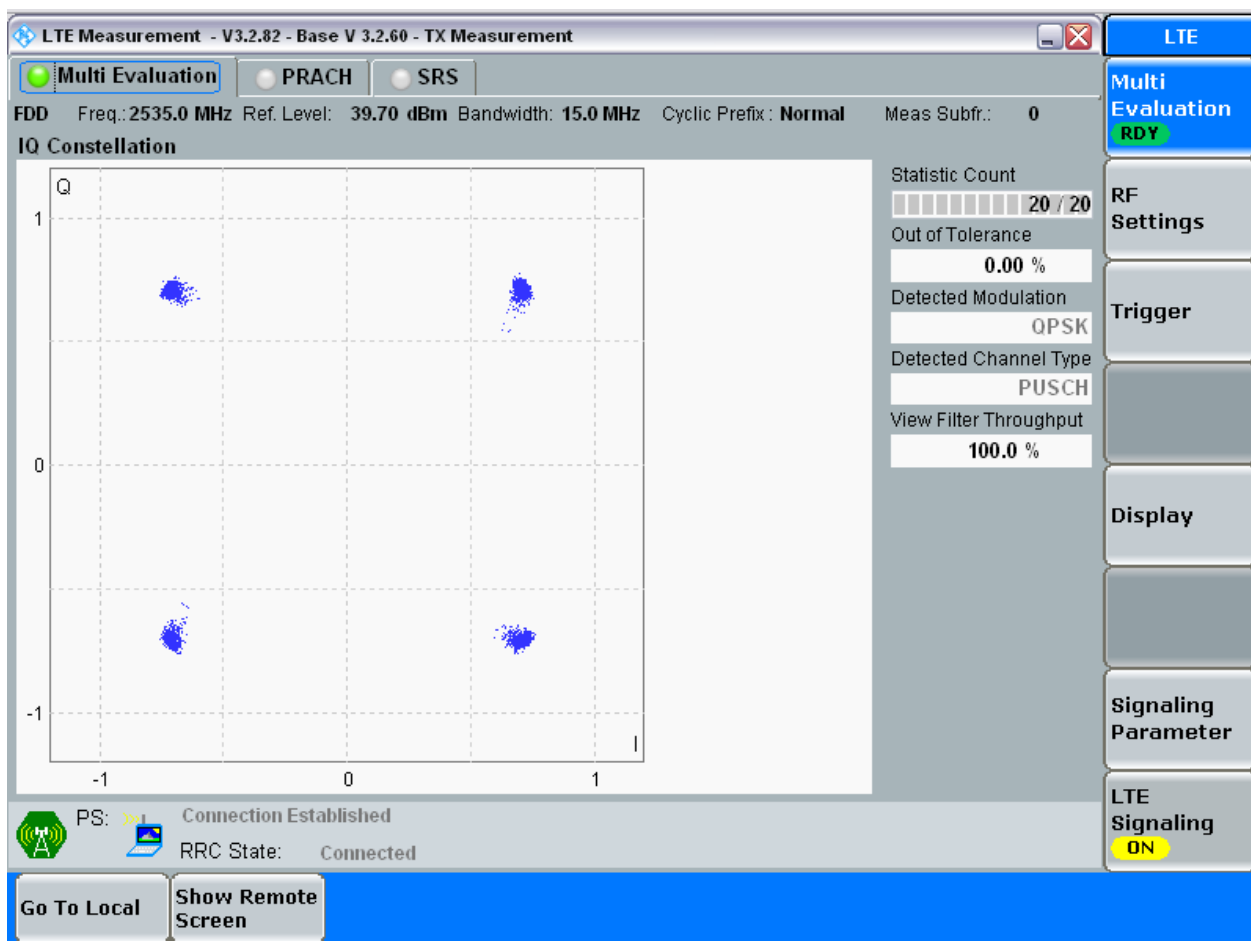
3.1.2.1.2.1.1 Test RB = RB50#0



3.1.2.1.3 Test Bandwidth = 15

3.1.2.1.3.1 Test Channel = MCH

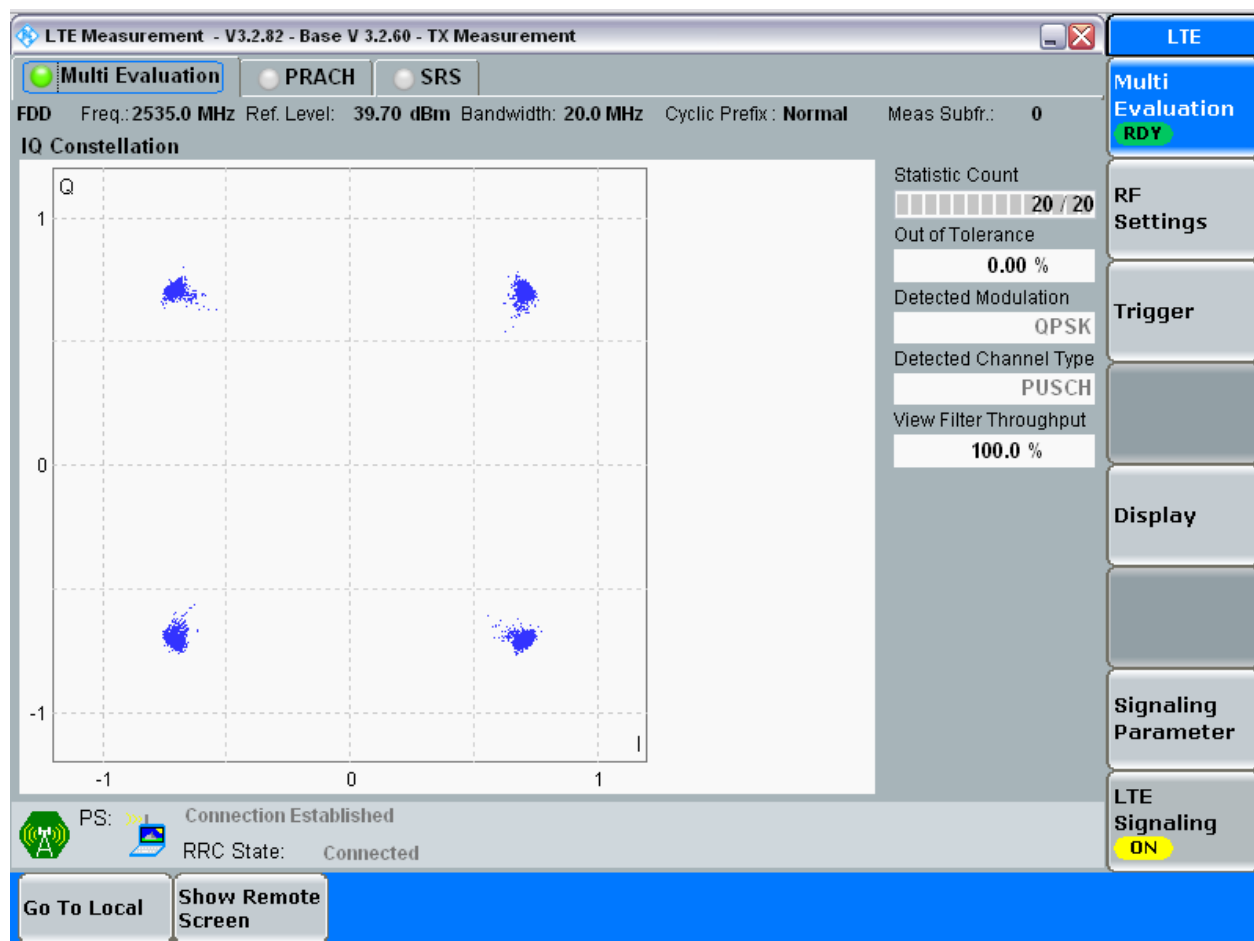
3.1.2.1.3.1.1 Test RB = RB75#0



3.1.2.1.4 Test Bandwidth = 20

3.1.2.1.4.1 Test Channel = MCH

3.1.2.1.4.1.1 Test RB = RB100#0

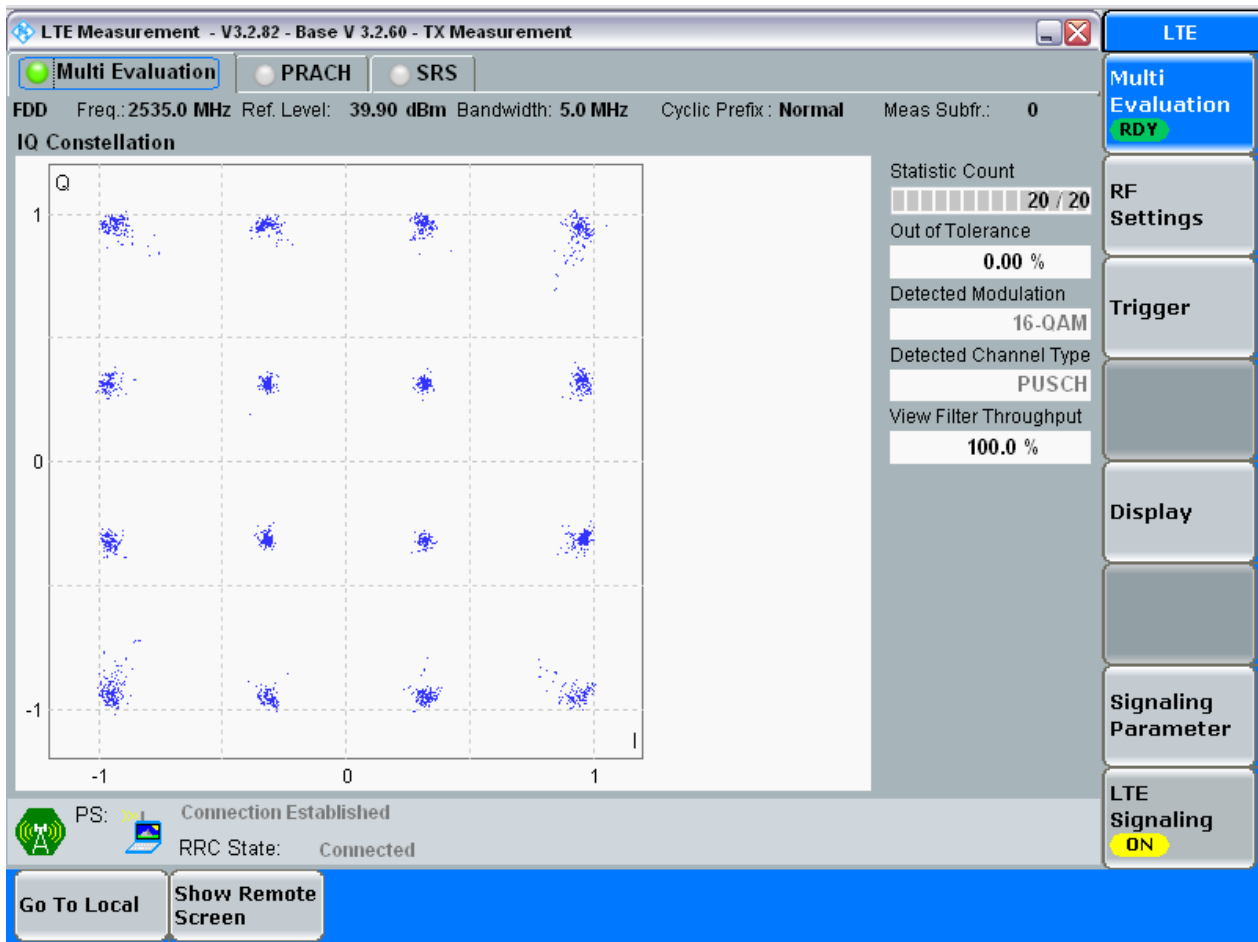


3.1.2.2 Test Mode = LTE/TM2

3.1.2.2.1 Test Bandwidth = 5

3.1.2.2.1.1 Test Channel = MCH

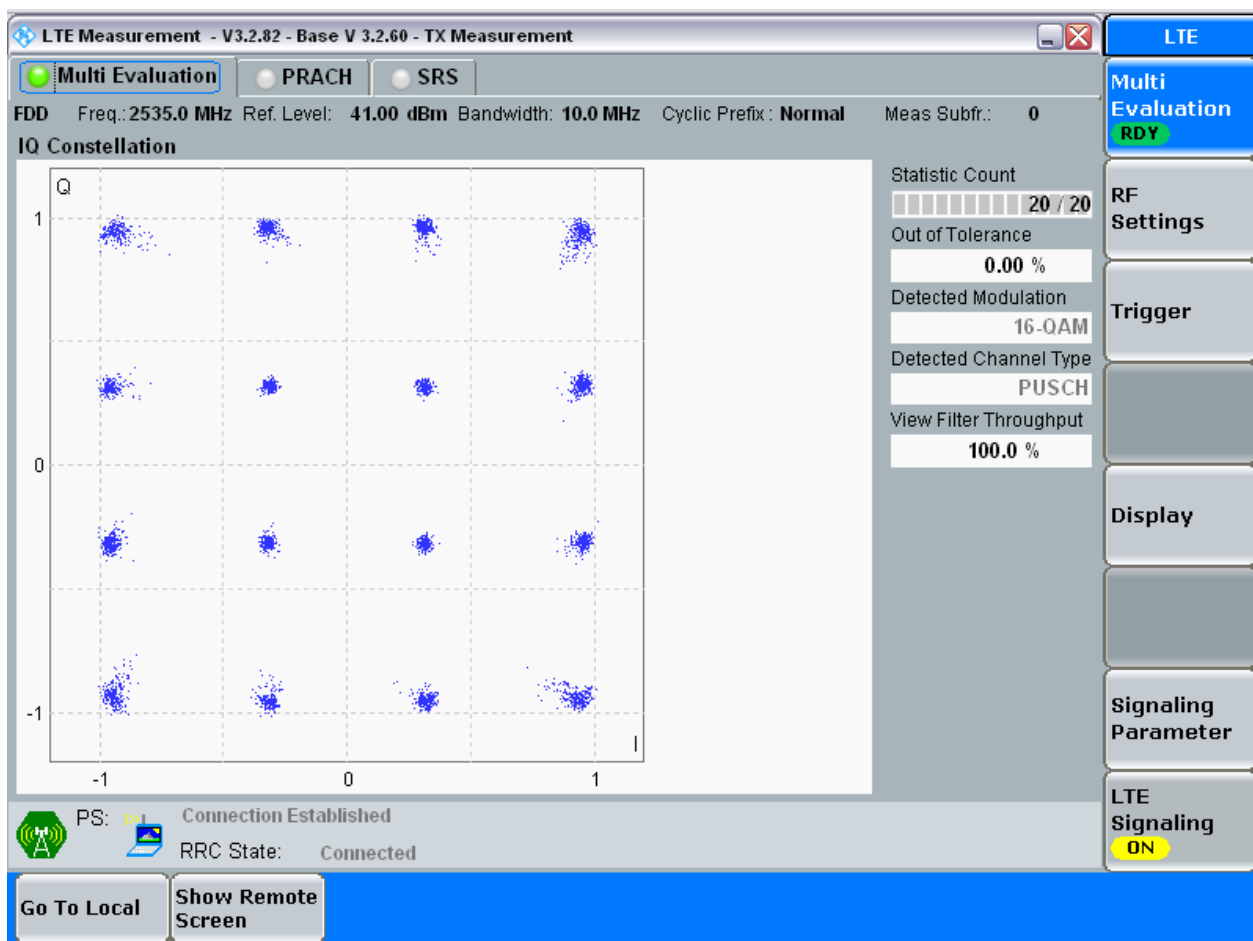
3.1.2.2.1.1.1 Test RB = RB25#0



3.1.2.2.2 Test Bandwidth = 10

3.1.2.2.2.1 Test Channel = MCH

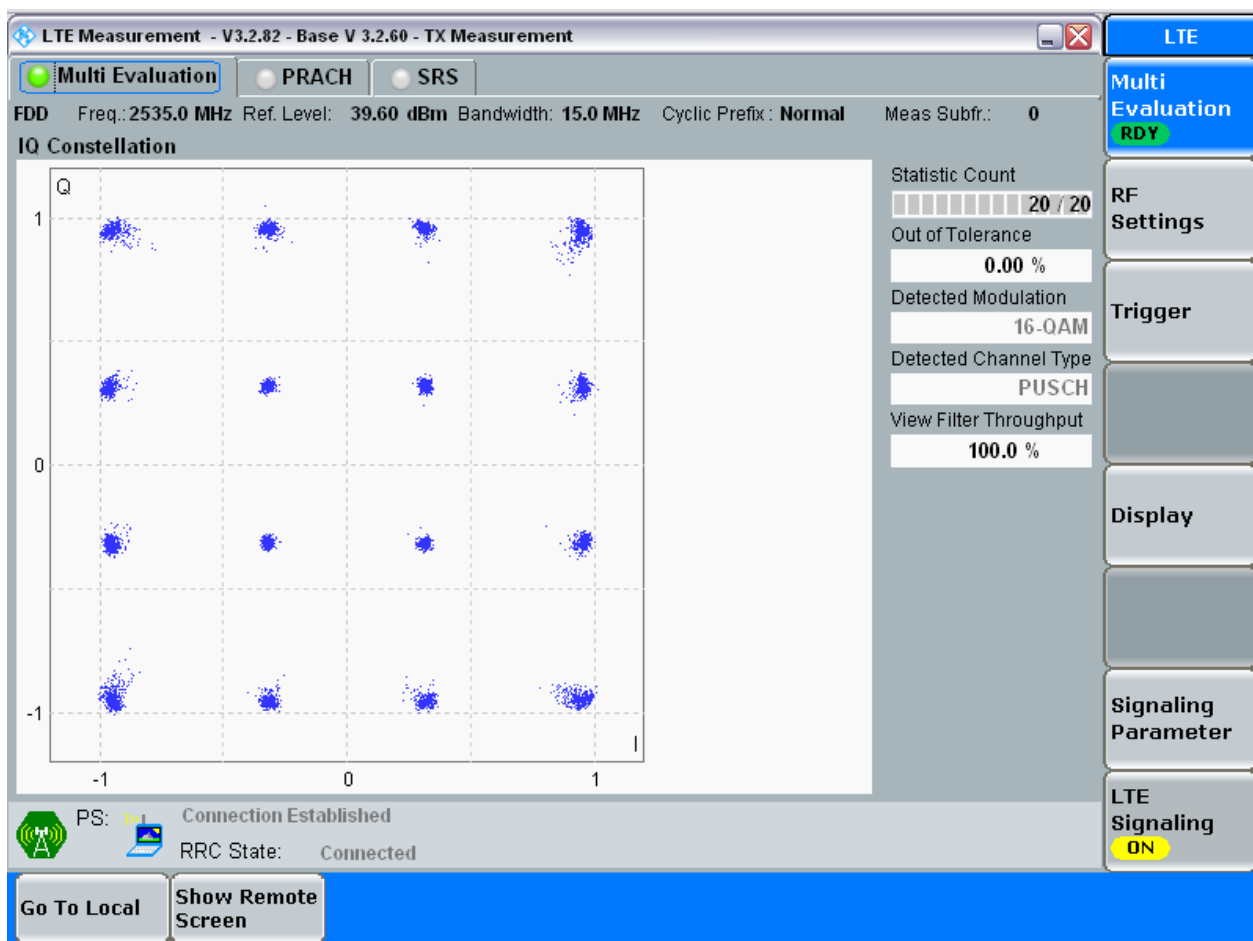
3.1.2.2.2.1.1 Test RB = RB50#0



3.1.2.2.3 Test Bandwidth = 15

3.1.2.2.3.1 Test Channel = MCH

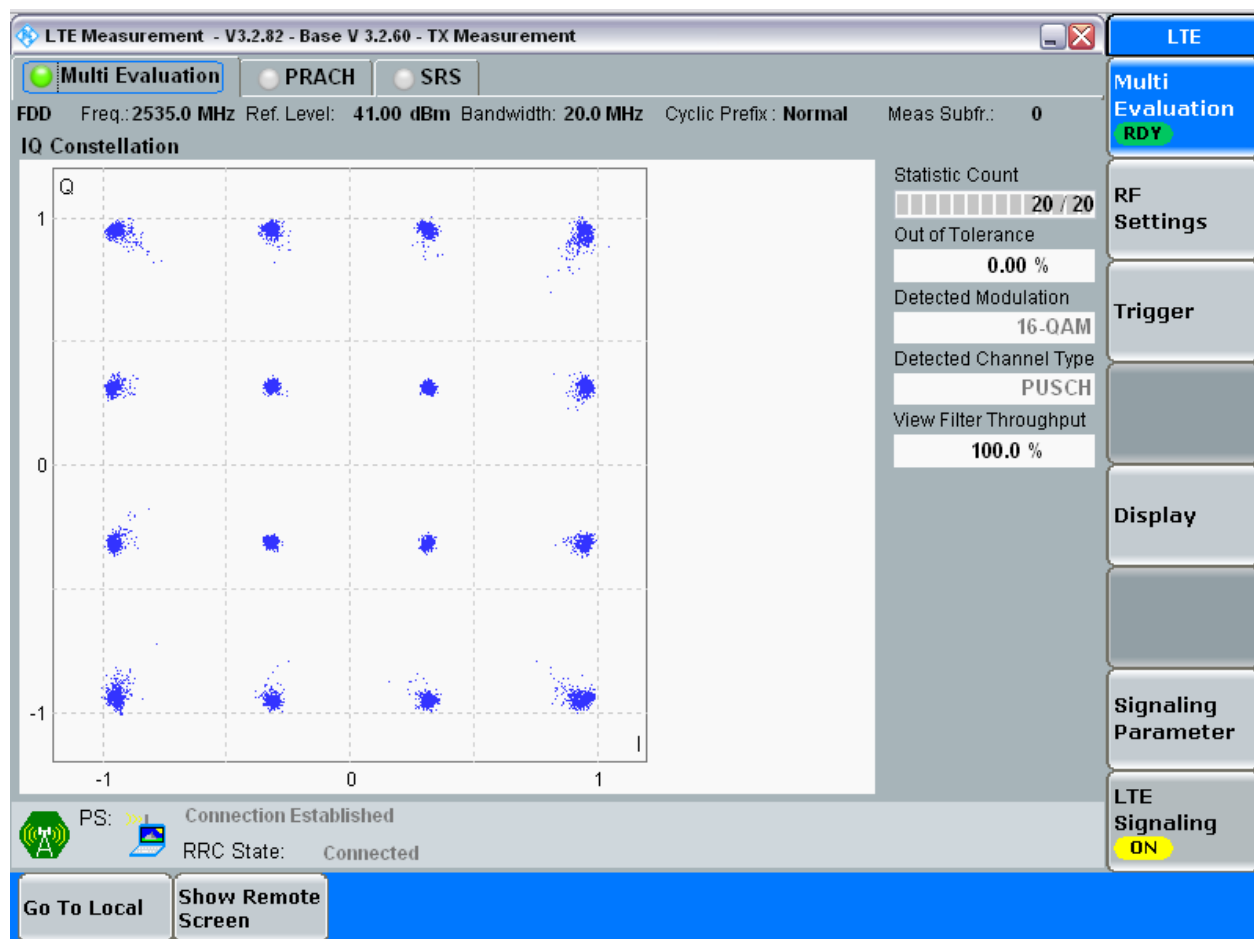
3.1.2.2.3.1.1 Test RB = RB75#0



3.1.2.2.4 Test Bandwidth = 20

3.1.2.2.4.1 Test Channel = MCH

3.1.2.2.4.1.1 Test RB = RB100#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
BAND7	LTE/TM1	5	LCH	RB25#0	4.49	4.86	Pass
			MCH	RB25#0	4.49	4.84	Pass
			HCH	RB25#0	4.50	4.86	Pass
		10	LCH	RB50#0	8.99	9.64	Pass
			MCH	RB50#0	9.00	9.65	Pass
			HCH	RB50#0	8.99	9.64	Pass
		15	LCH	RB75#0	13.50	14.49	Pass
			MCH	RB75#0	13.50	14.54	Pass
			HCH	RB75#0	13.51	14.53	Pass
		20	LCH	RB100#0	17.97	19.06	Pass
			MCH	RB100#0	17.98	19.06	Pass
			HCH	RB100#0	17.98	19.09	Pass
	LTE/TM2	5	LCH	RB25#0	4.50	4.89	Pass
			MCH	RB25#0	4.50	4.89	Pass
			HCH	RB25#0	4.51	4.90	Pass
		10	LCH	RB50#0	9.00	9.68	Pass
			MCH	RB50#0	9.00	9.68	Pass
			HCH	RB50#0	9.02	9.68	Pass
		15	LCH	RB75#0	13.50	14.44	Pass
			MCH	RB75#0	13.50	14.42	Pass
			HCH	RB75#0	13.51	14.37	Pass
		20	LCH	RB100#0	17.98	19.09	Pass
			MCH	RB100#0	17.98	19.11	Pass
			HCH	RB100#0	17.98	19.07	Pass

Part II - Test Plots

4.1 For LTE

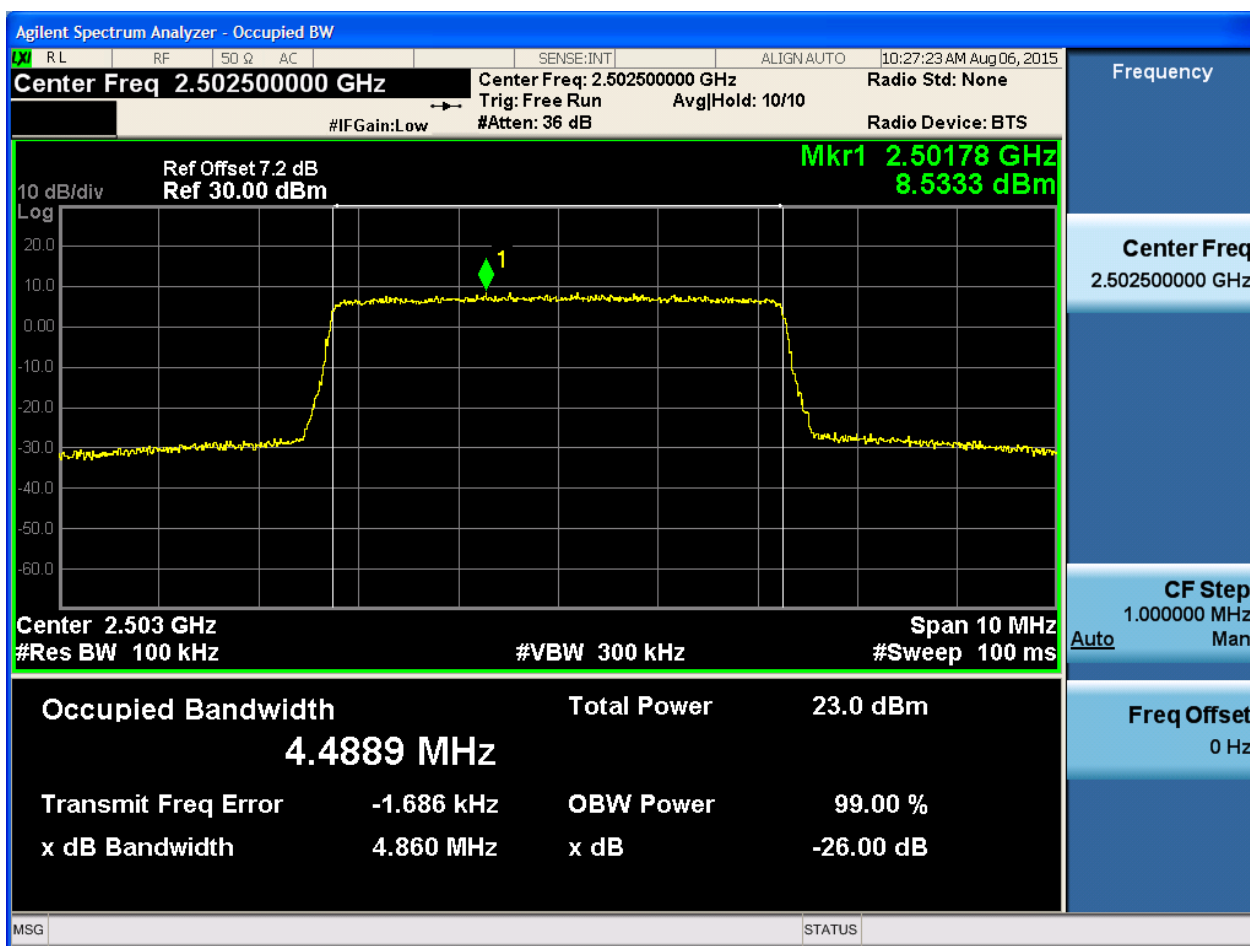
4.1.1 Test Band = BAND7

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 5

4.1.1.1.1.1 Test Channel = LCH

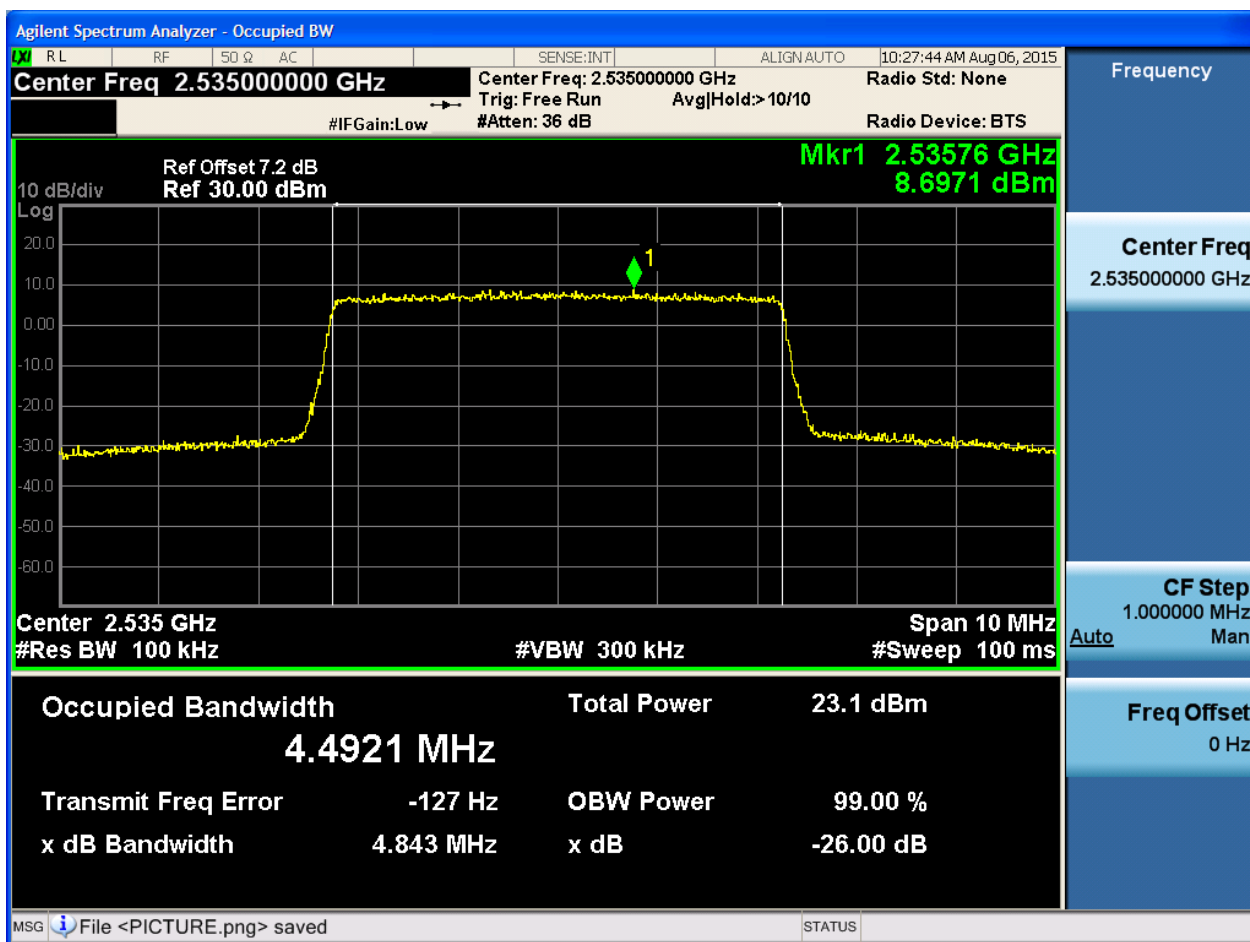
4.1.1.1.1.1.1 Test RB = RB25#0





4.1.1.1.1.2 Test Channel = MCH

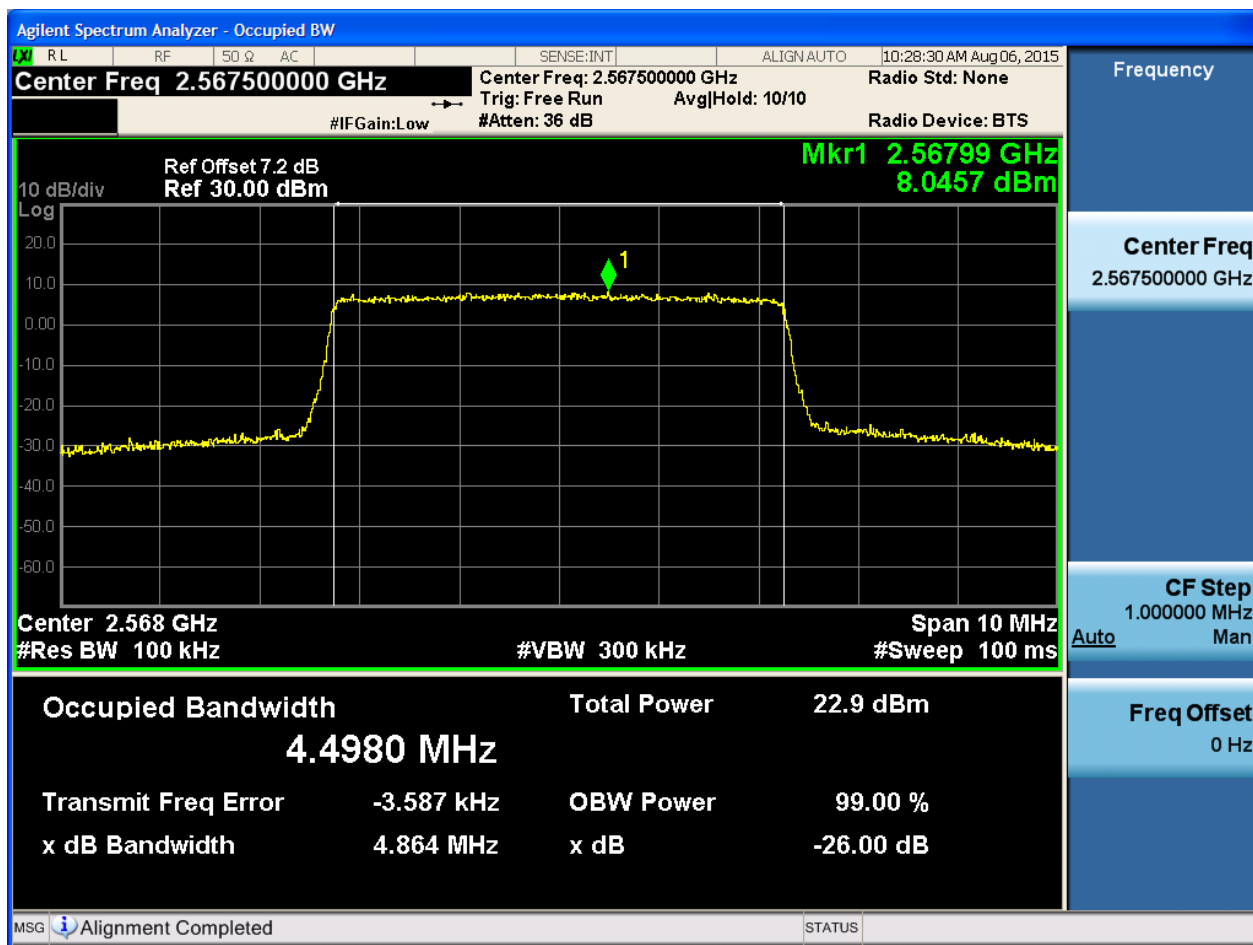
4.1.1.1.1.2.1 Test RB = RB25#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

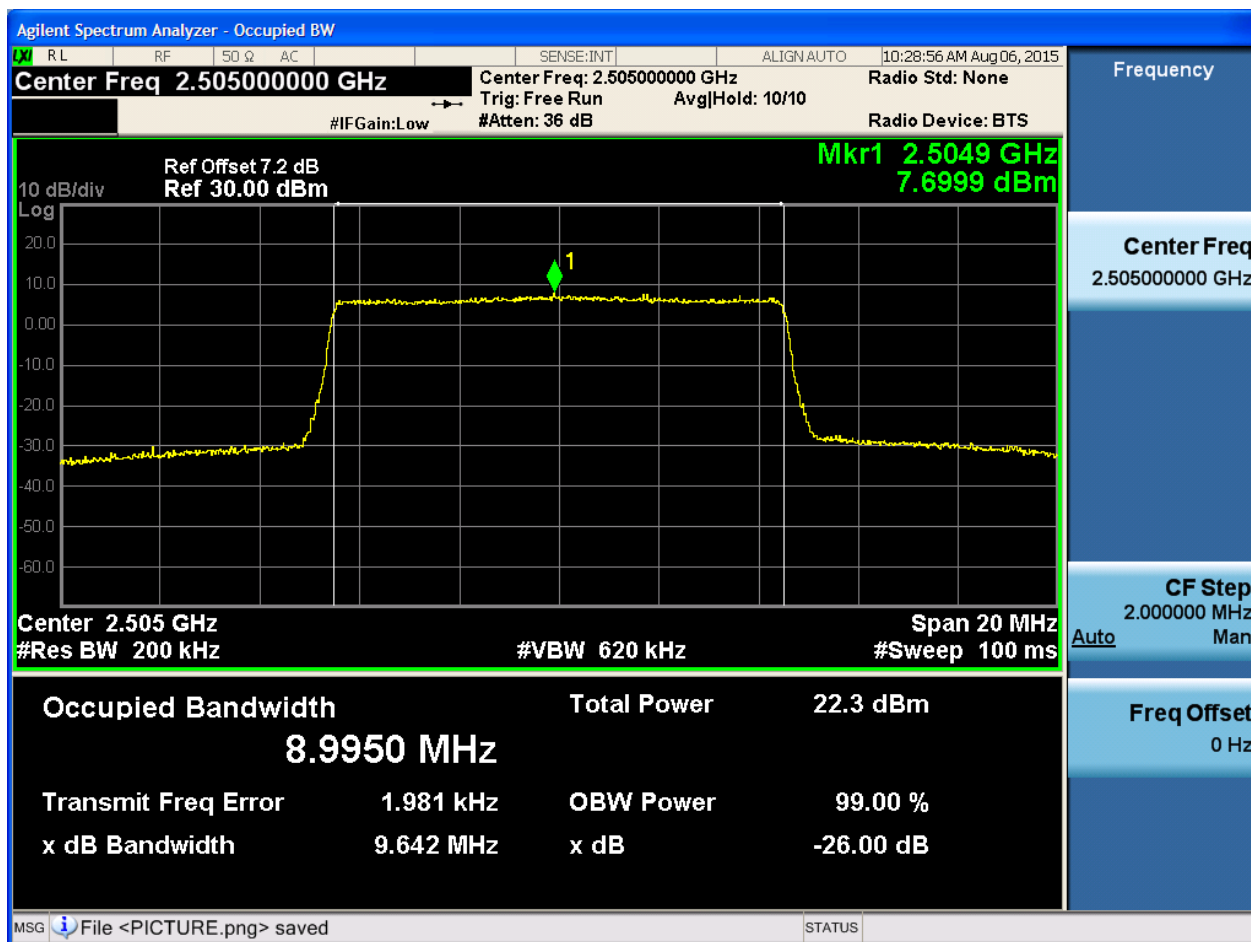




4.1.1.1.2 Test Bandwidth = 10

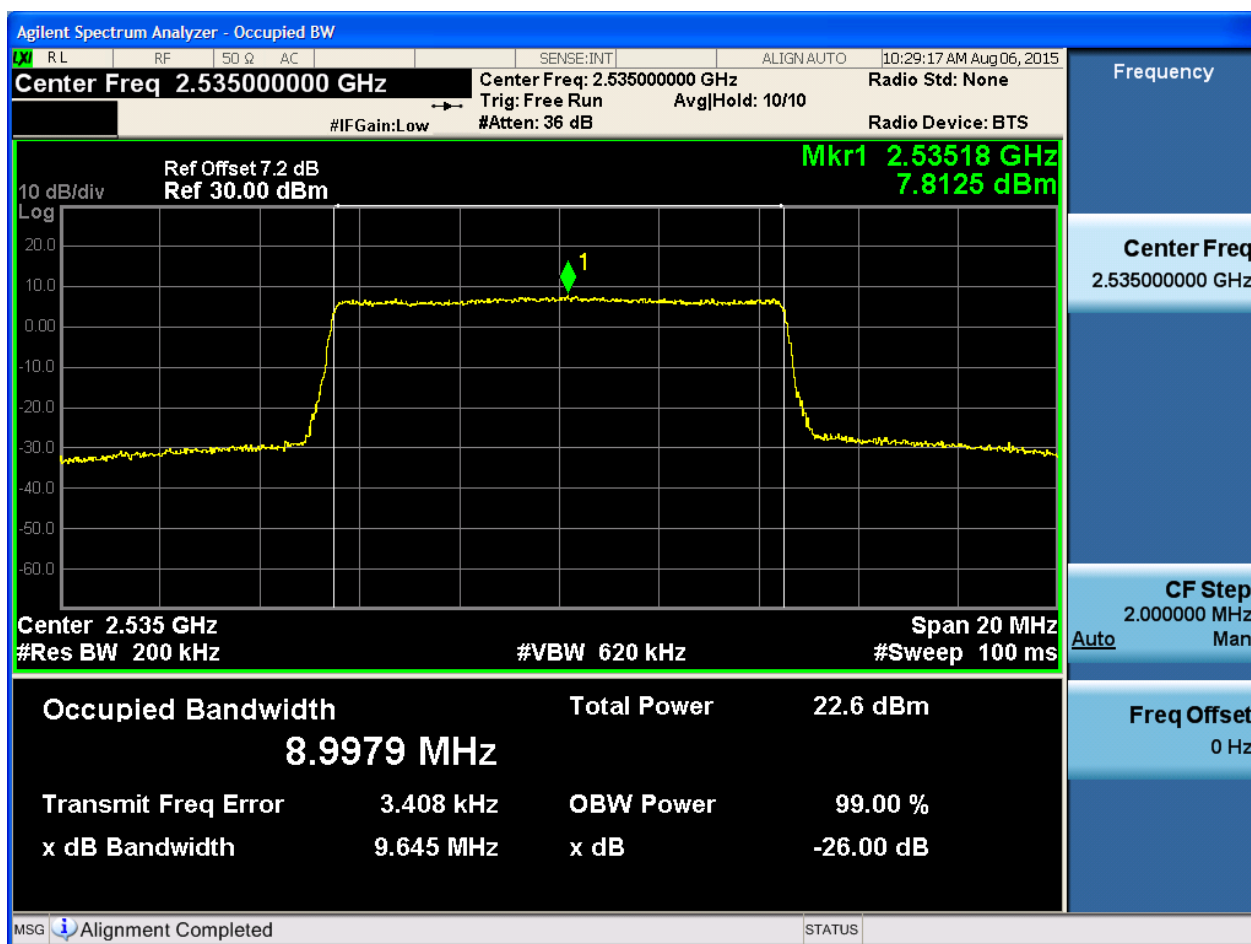
4.1.1.1.2.1 Test Channel = LCH

4.1.1.1.2.1.1 Test RB = RB50#0





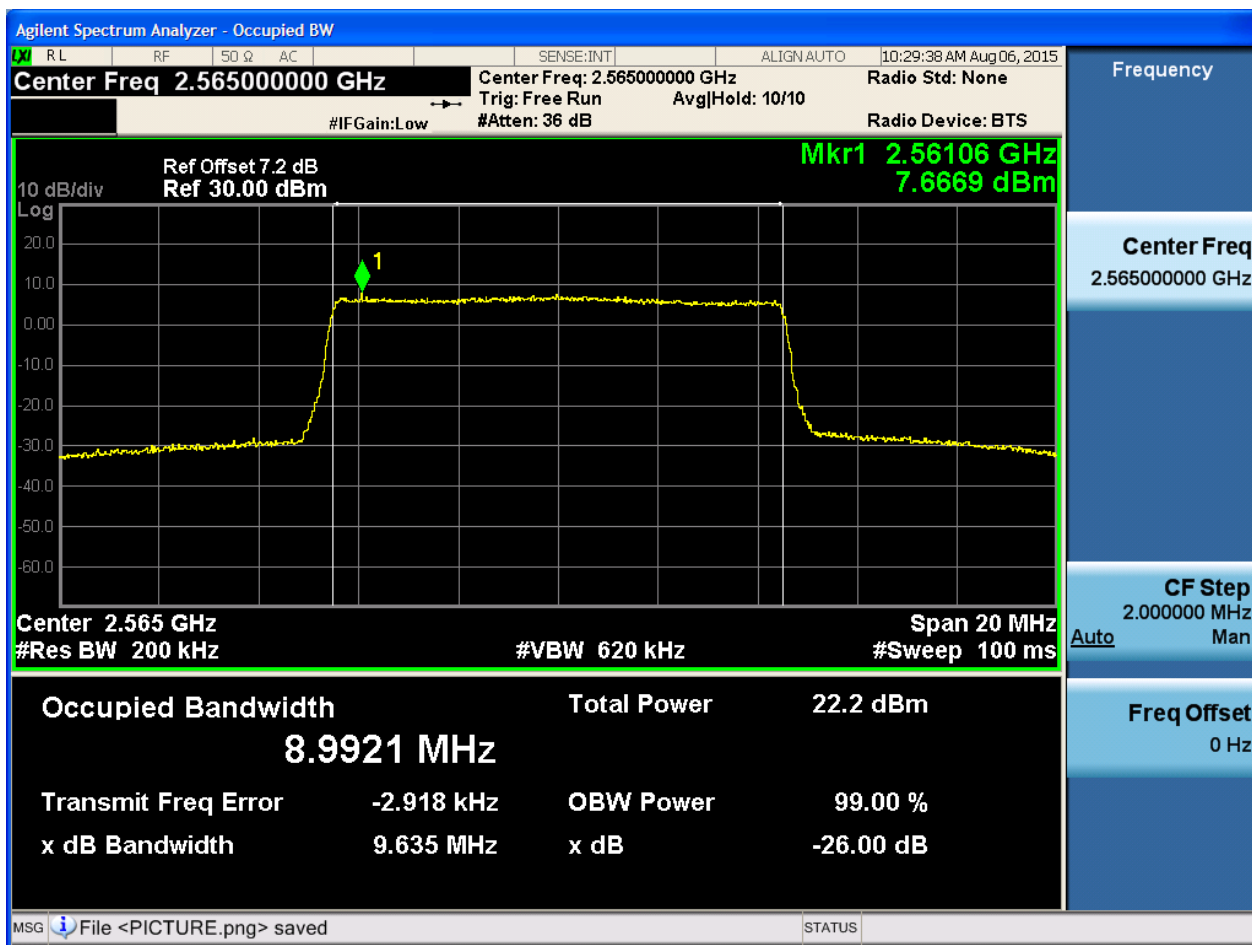
4.1.1.1.2.2.1 Test RB = RB50#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0

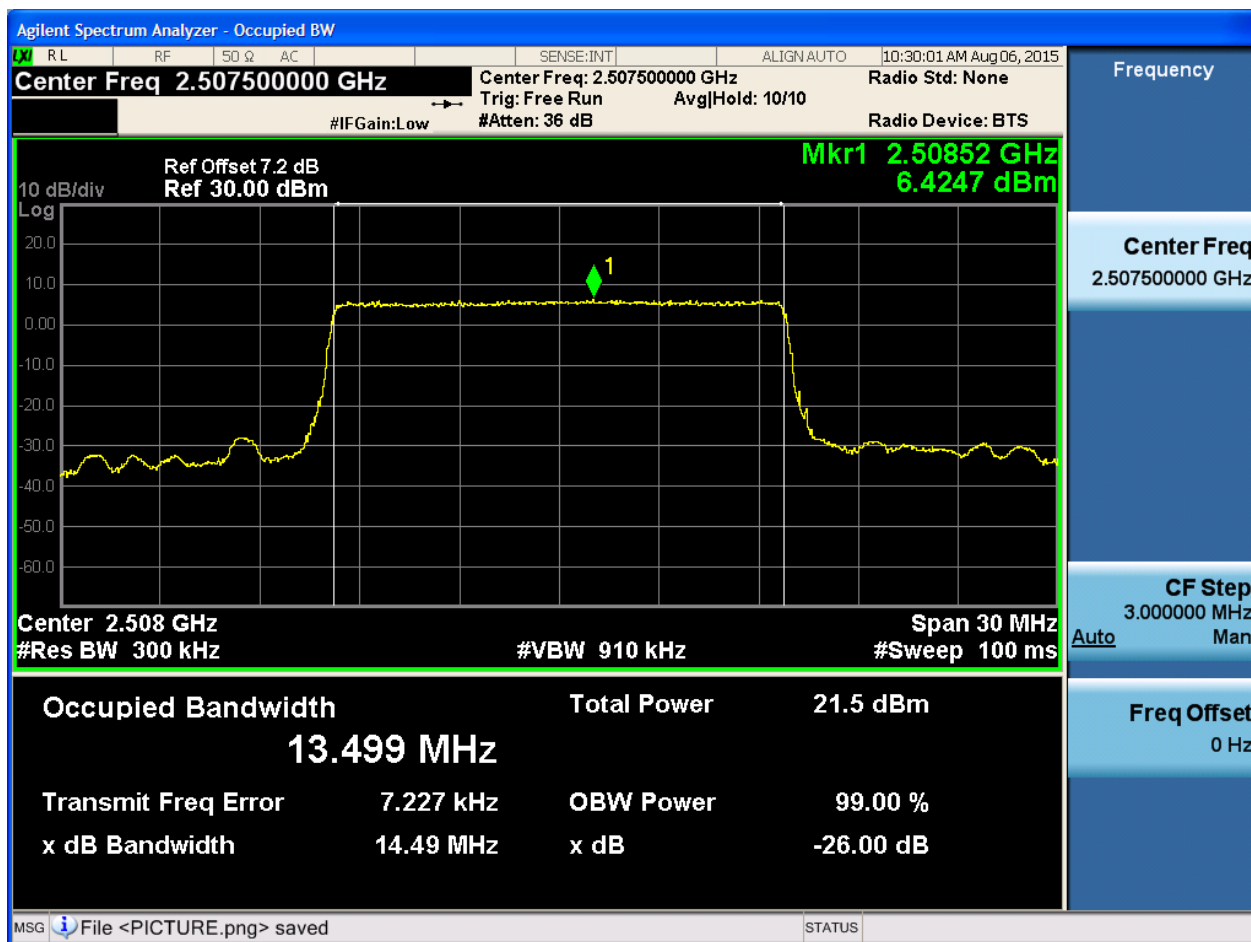




4.1.1.1.3 Test Bandwidth = 15

4.1.1.1.3.1 Test Channel = LCH

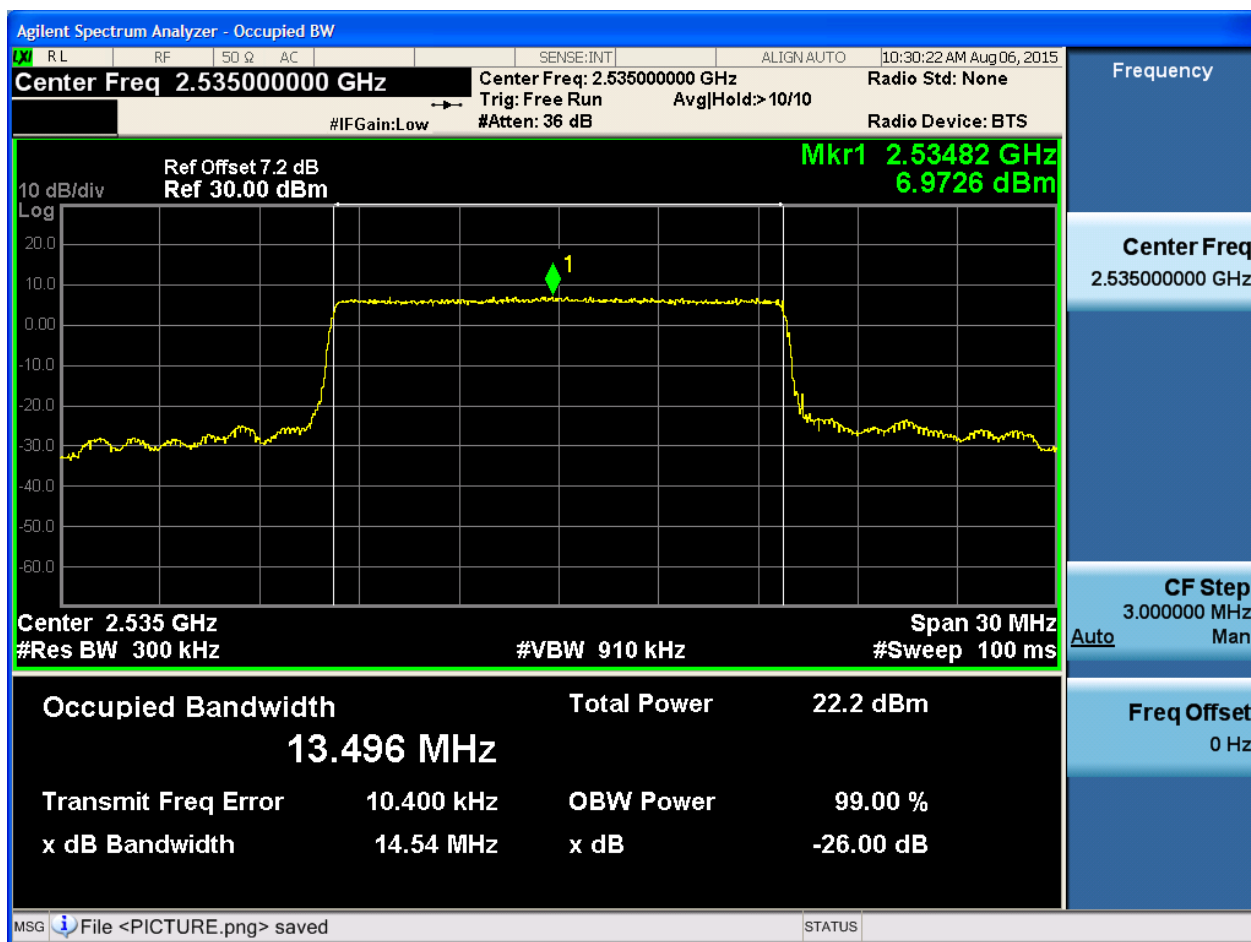
4.1.1.1.3.1.1 Test RB = RB75#0





4.1.1.1.3.2 Test Channel = MCH

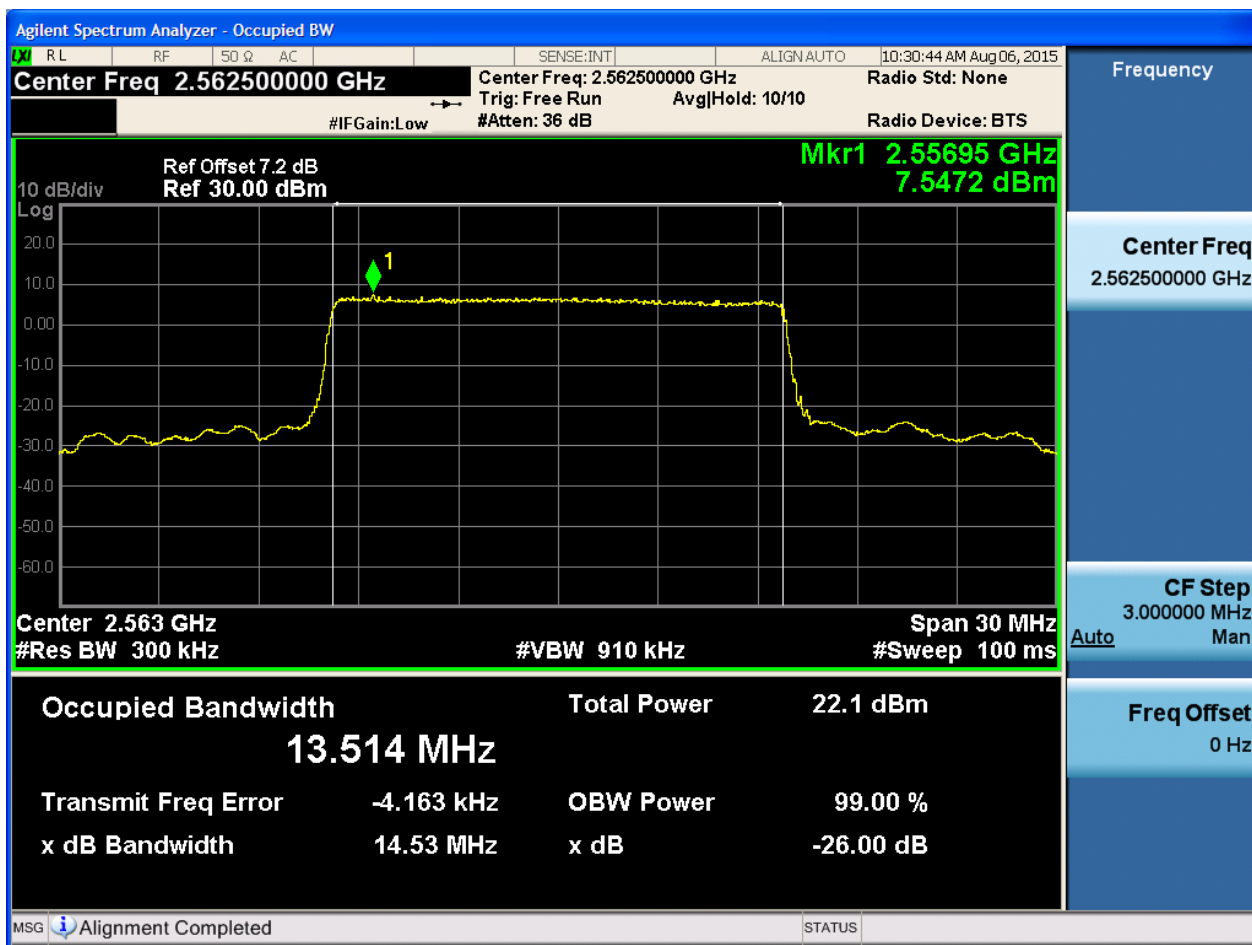
4.1.1.1.3.2.1 Test RB = RB75#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB75#0

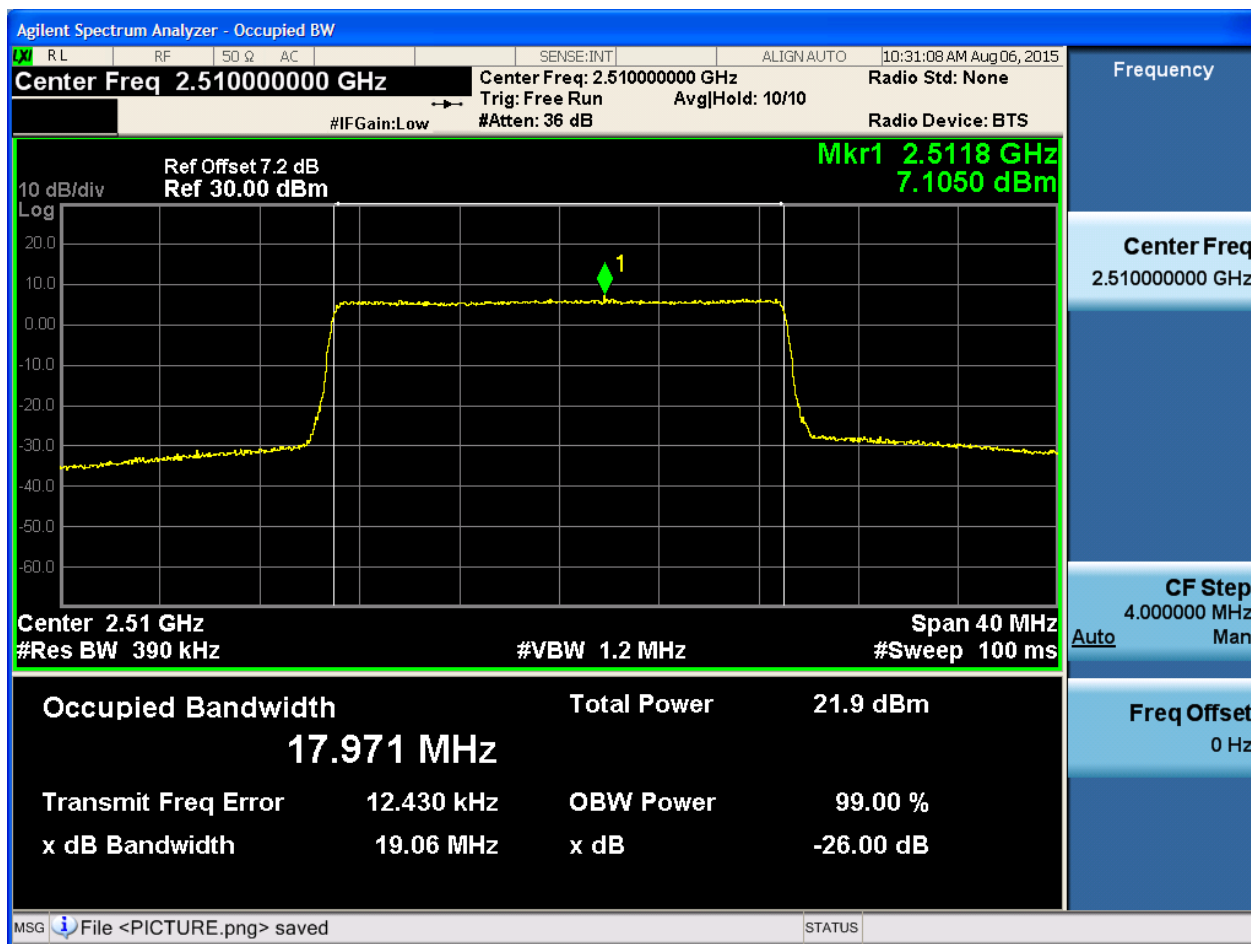




4.1.1.1.4 Test Bandwidth = 20

4.1.1.1.4.1 Test Channel = LCH

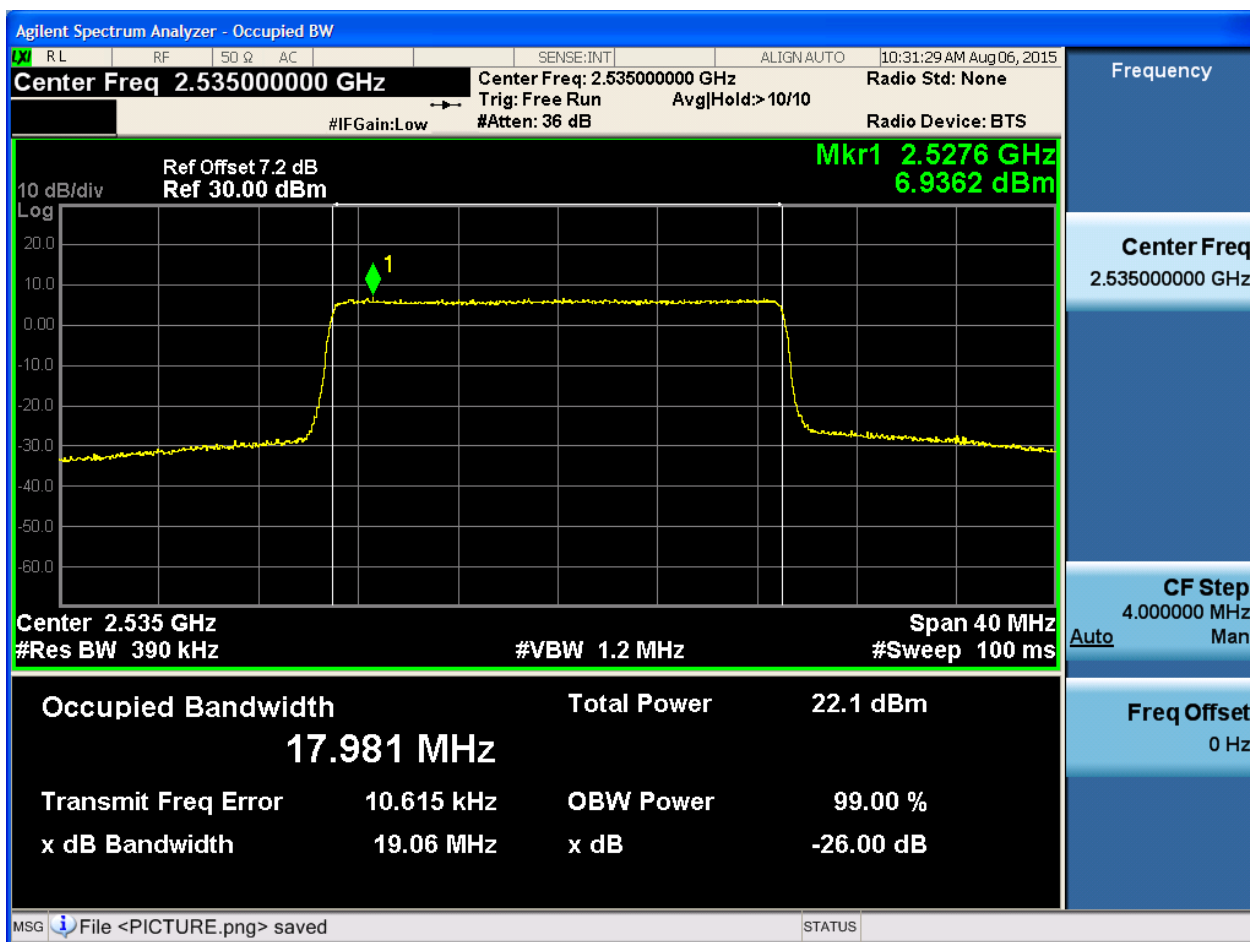
4.1.1.1.4.1.1 Test RB = RB100#0





4.1.1.1.4.2 Test Channel = MCH

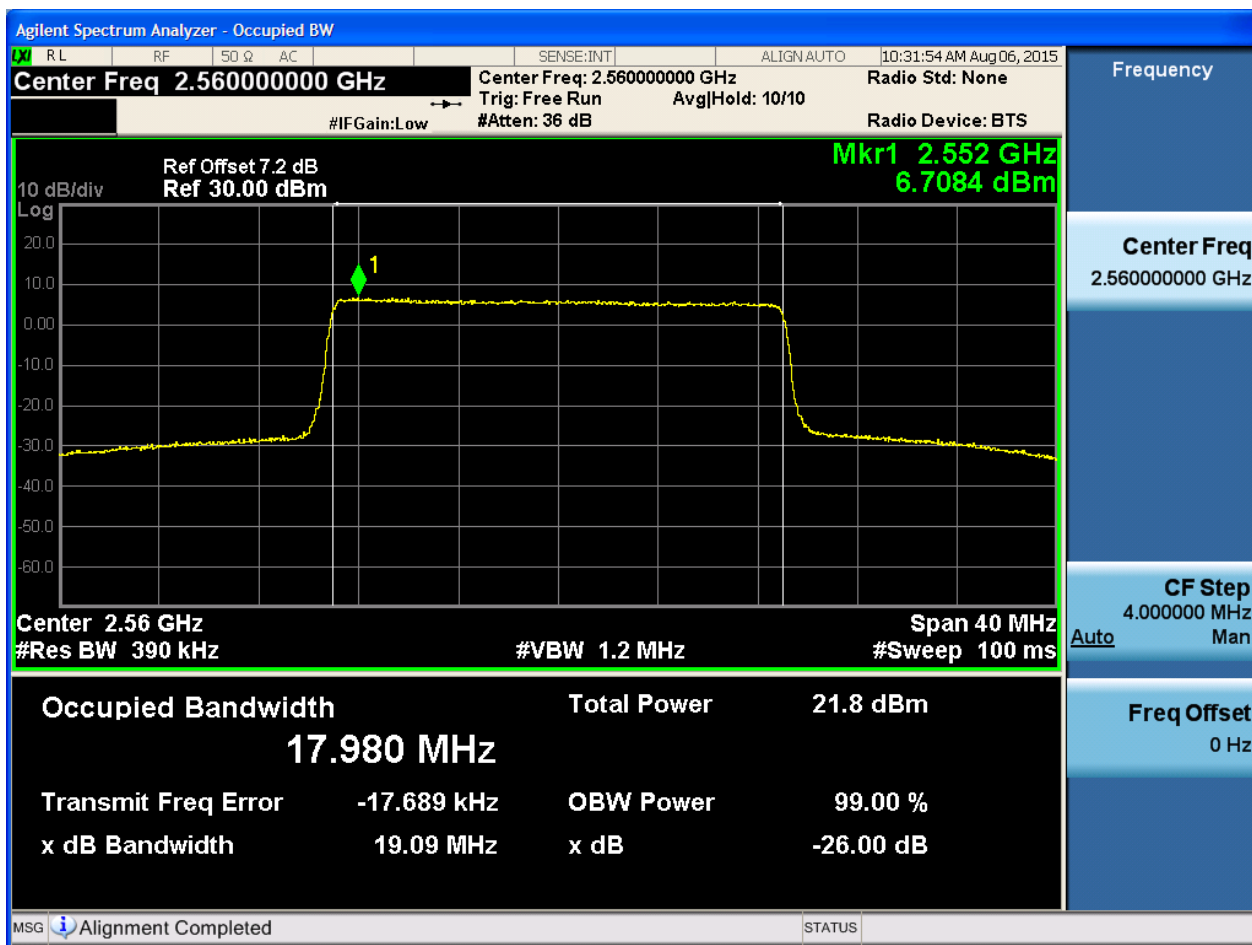
4.1.1.1.4.2.1 Test RB = RB100#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB100#0



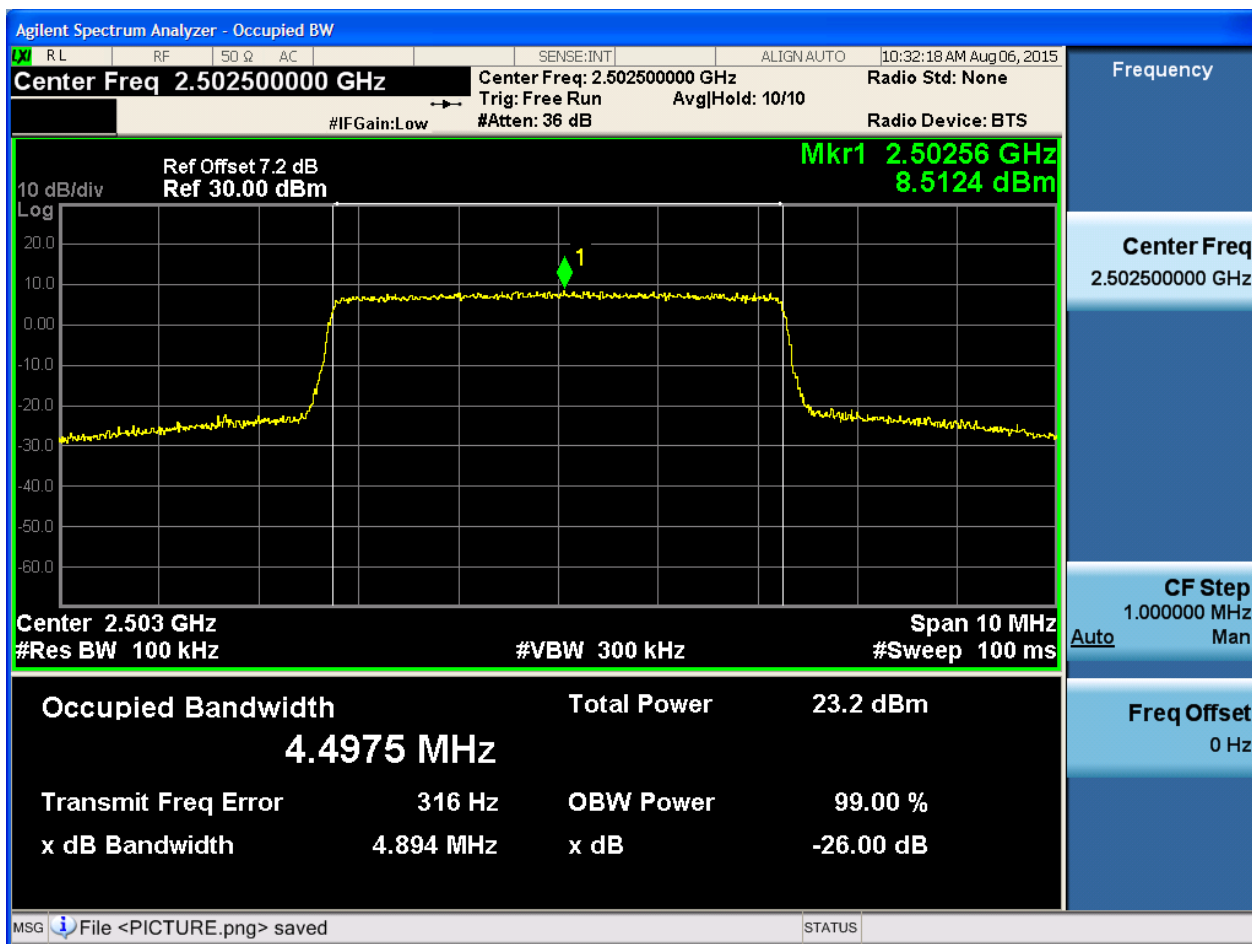


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

4.1.1.2.1.1 Test Channel = LCH

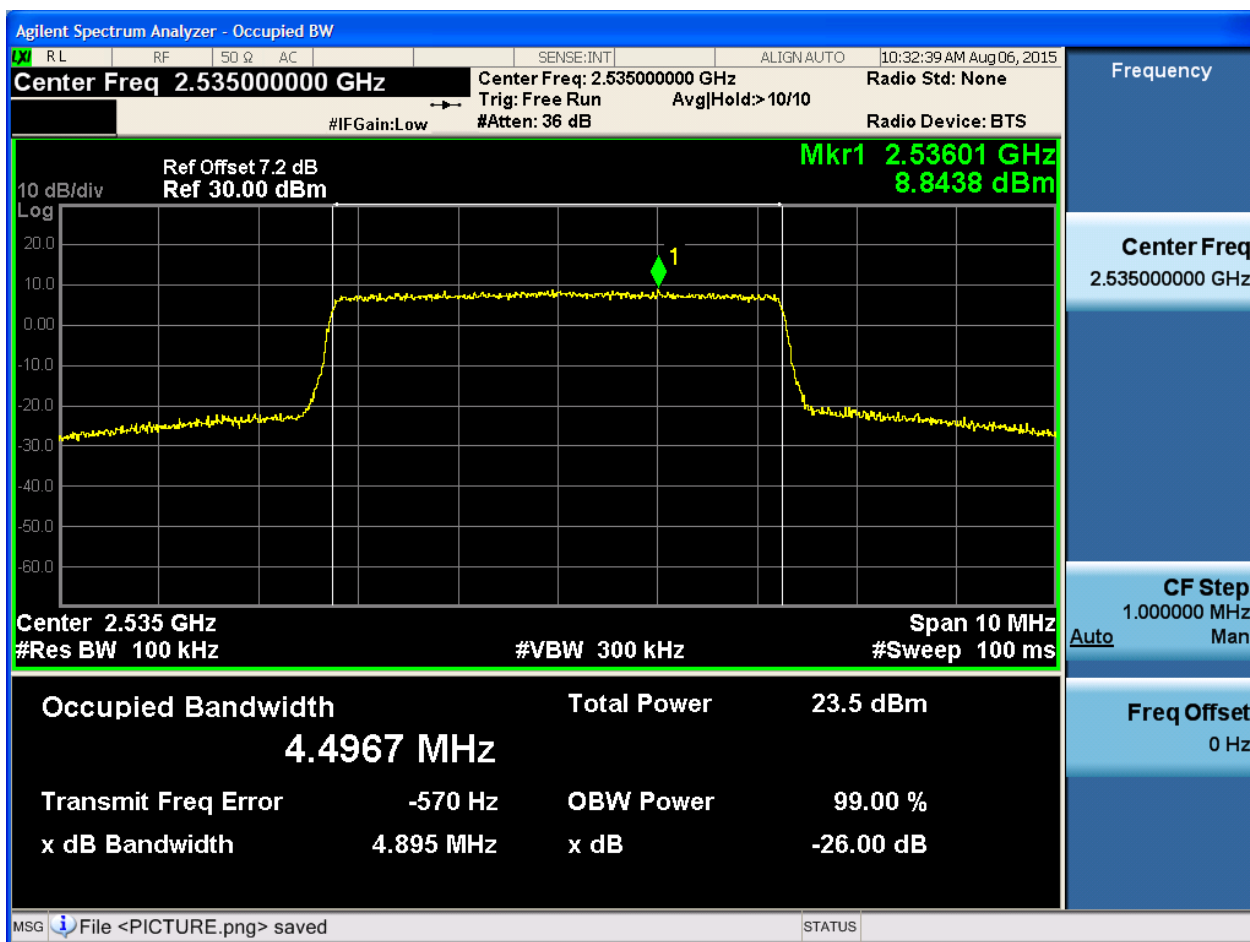
4.1.1.2.1.1.1 Test RB = RB25#0





4.1.1.2.1.2 Test Channel = MCH

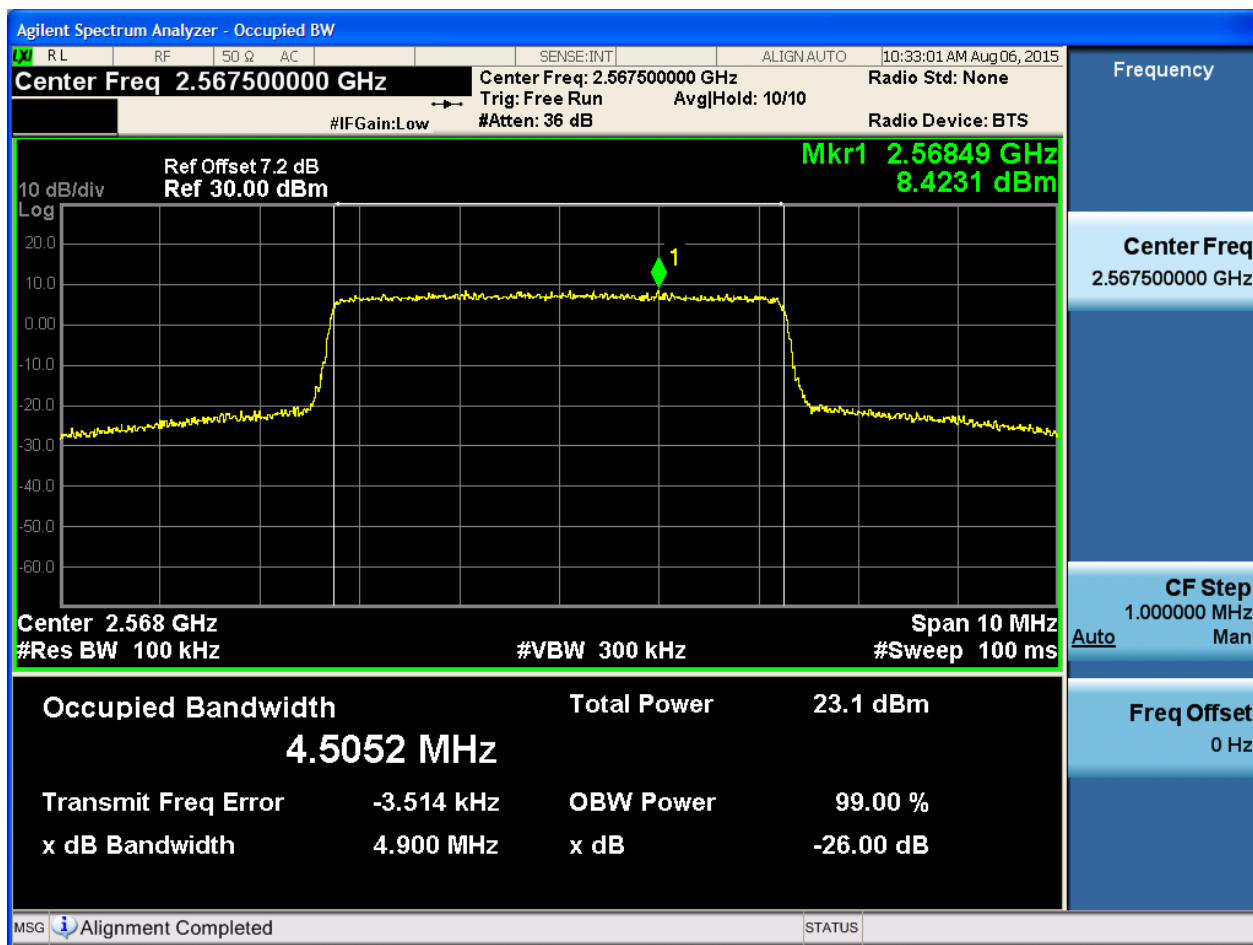
4.1.1.2.1.2.1 Test RB = RB25#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

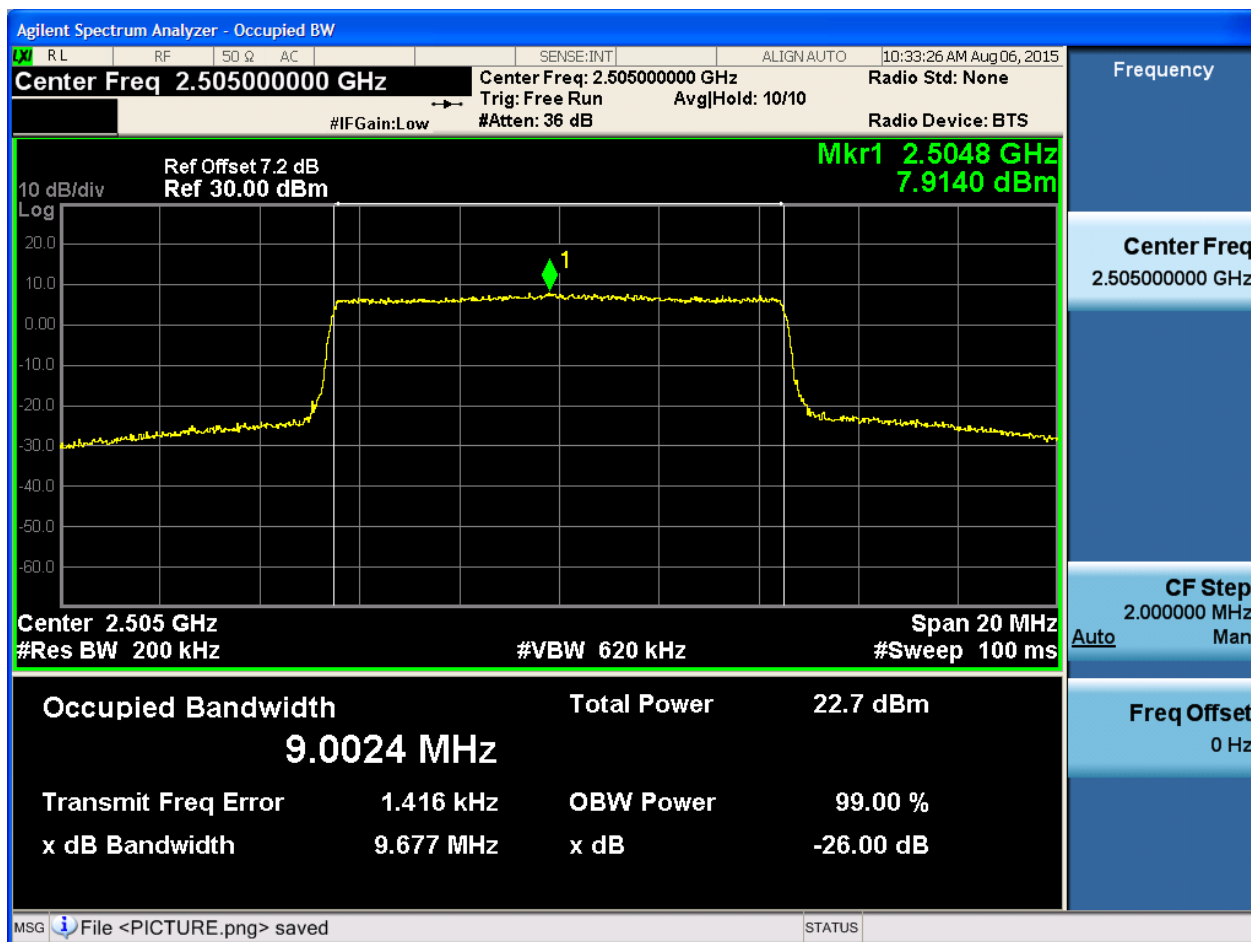




4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

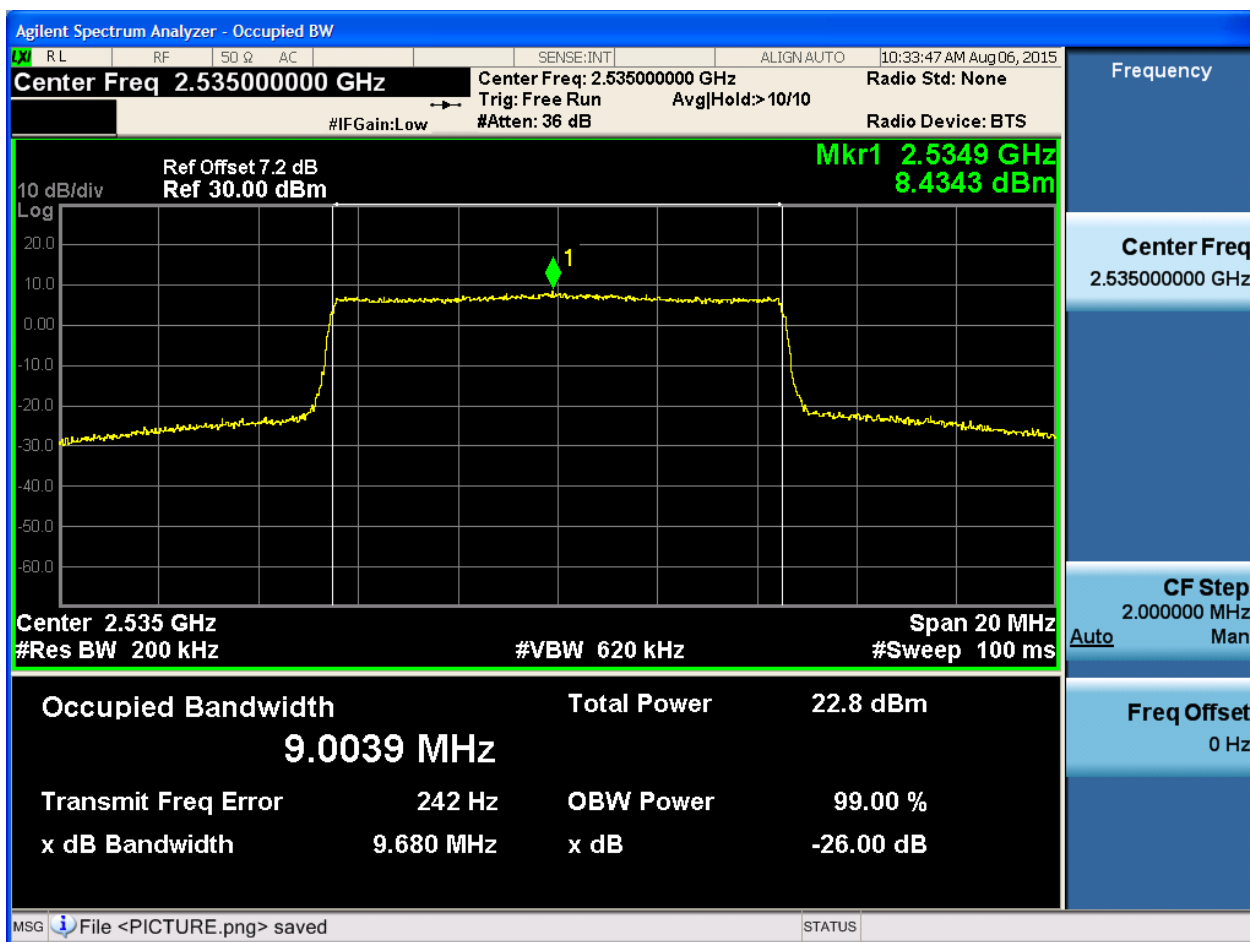
4.1.1.2.2.1.1 Test RB = RB50#0





4.1.1.2.2.2 Test Channel = MCH

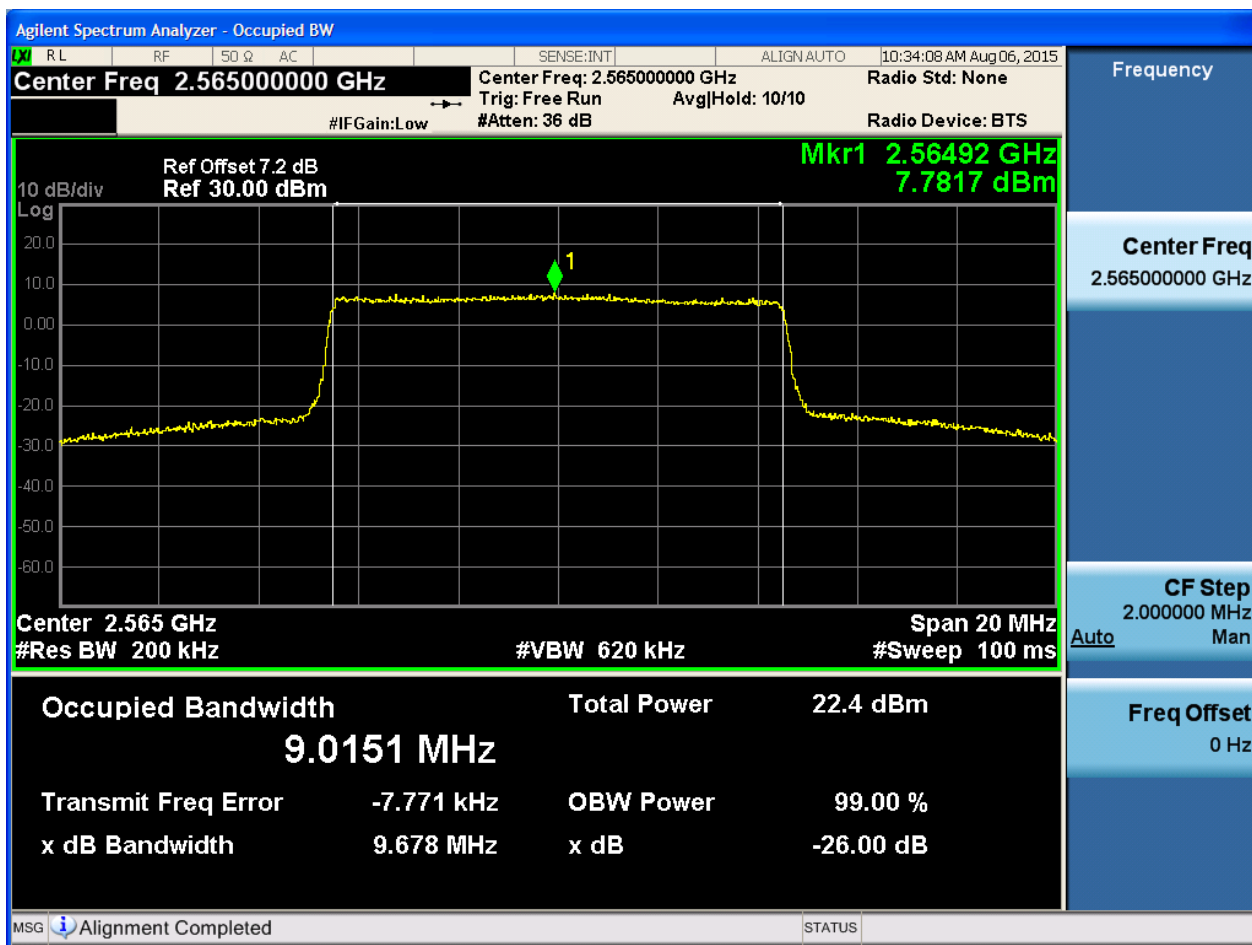
4.1.1.2.2.1 Test RB = RB50#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0

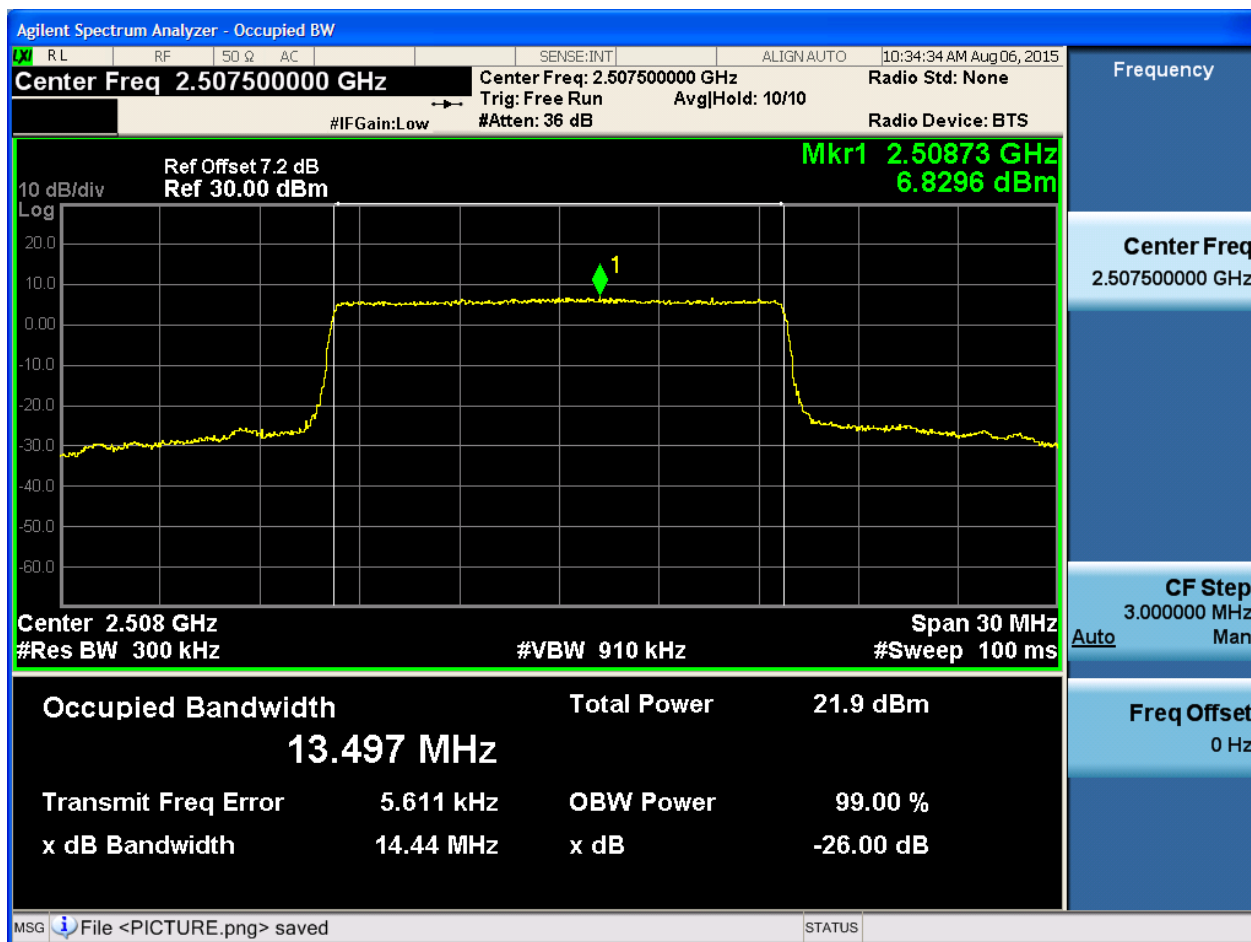




4.1.1.2.3 Test Bandwidth = 15

4.1.1.2.3.1 Test Channel = LCH

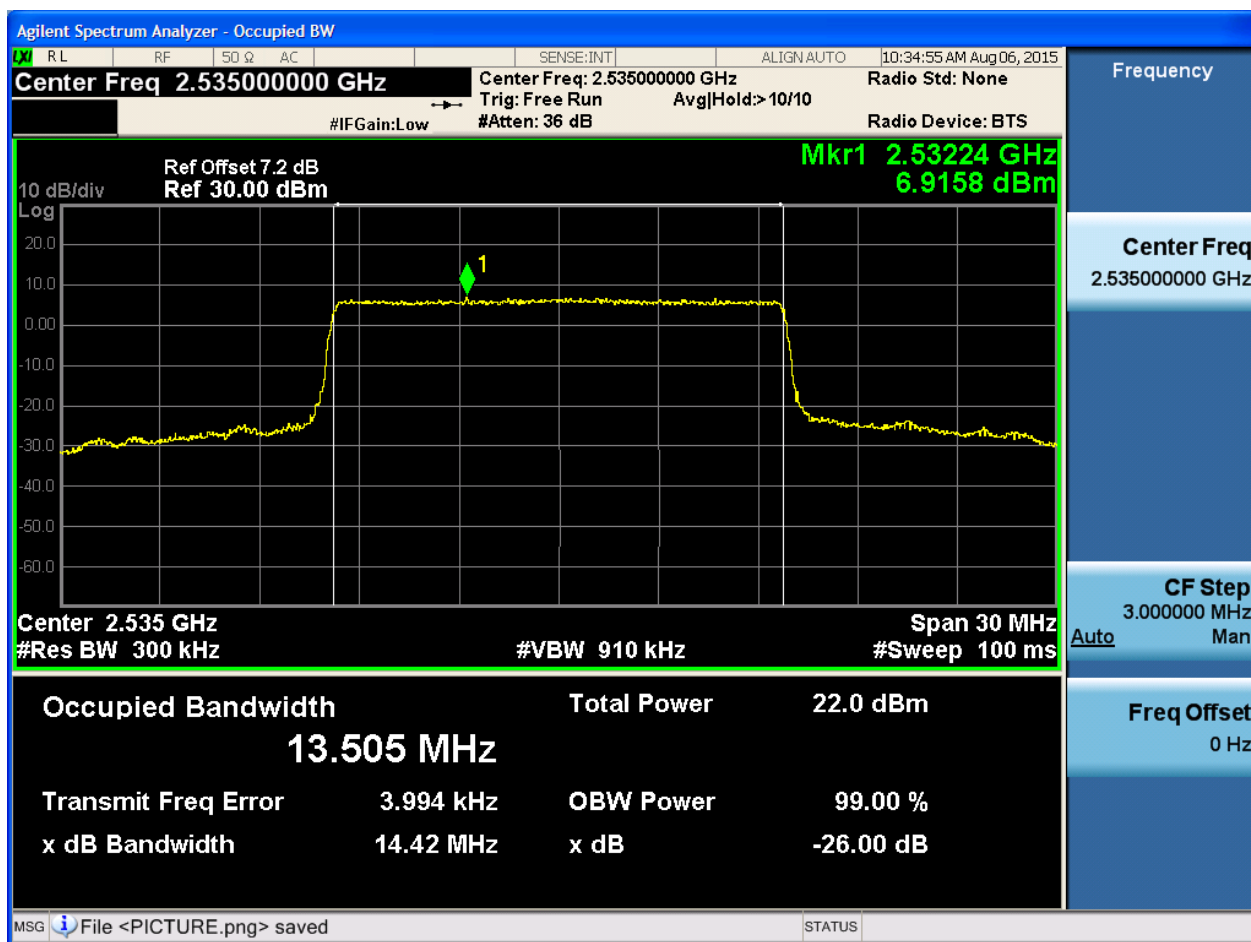
4.1.1.2.3.1.1 Test RB = RB75#0





4.1.1.2.3.2 Test Channel = MCH

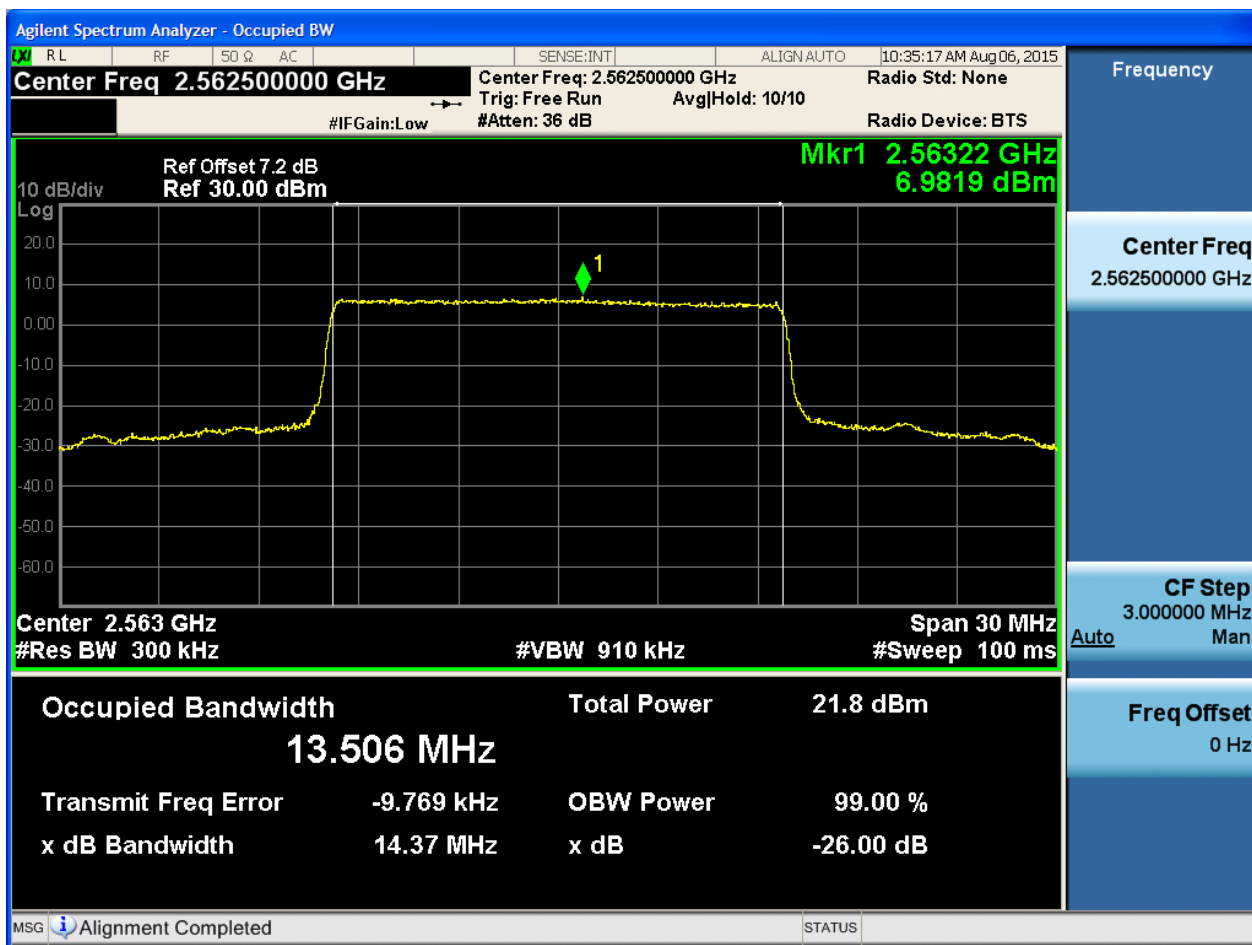
4.1.1.2.3.2.1 Test RB = RB75#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB75#0

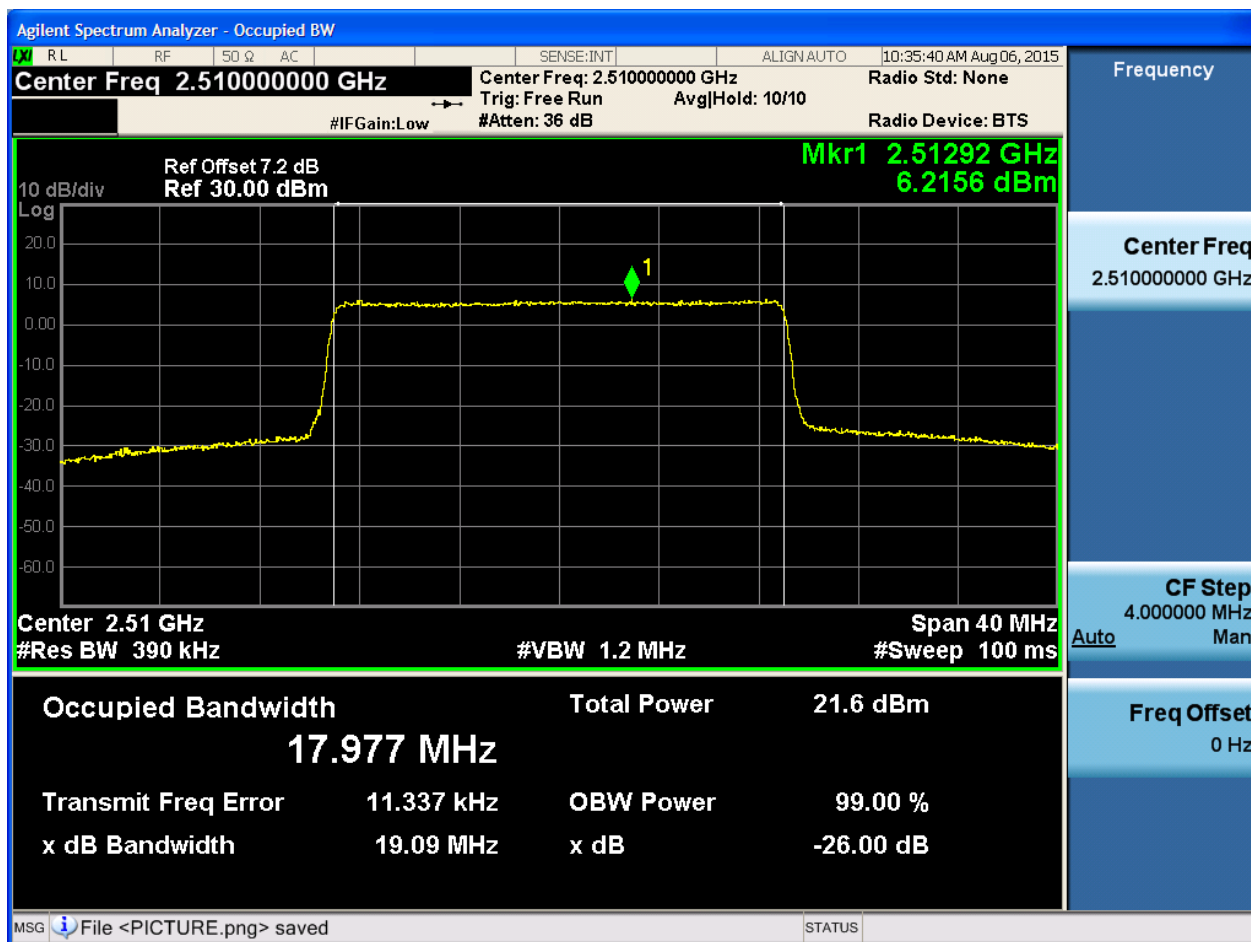




4.1.1.2.4 Test Bandwidth = 20

4.1.1.2.4.1 Test Channel = LCH

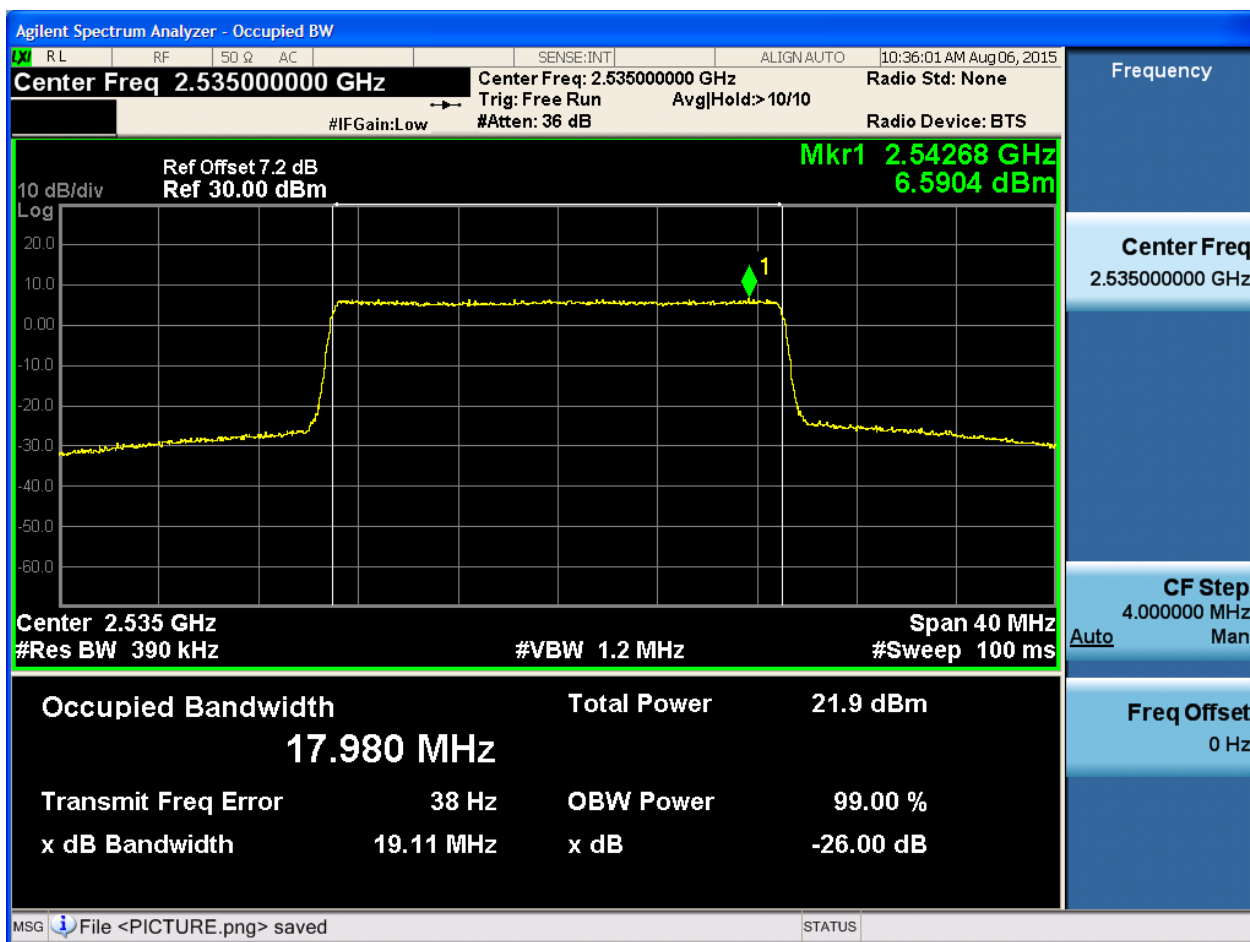
4.1.1.2.4.1.1 Test RB = RB100#0





4.1.1.2.4.2 Test Channel = MCH

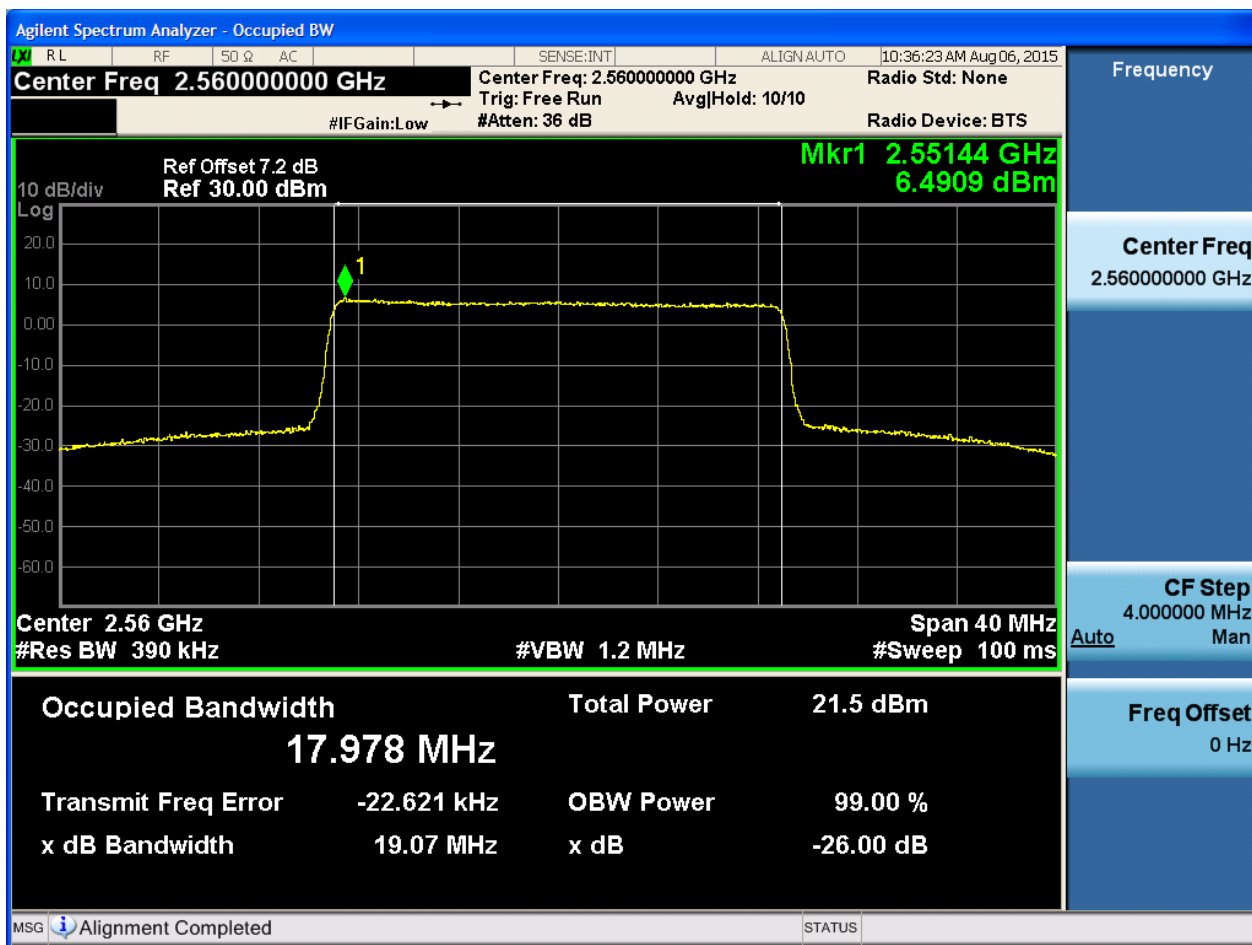
4.1.1.2.4.2.1 Test RB = RB100#0





4.1.1.2.4.3 Test Channel = HCH

4.1.1.2.4.3.1 Test RB = RB100#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

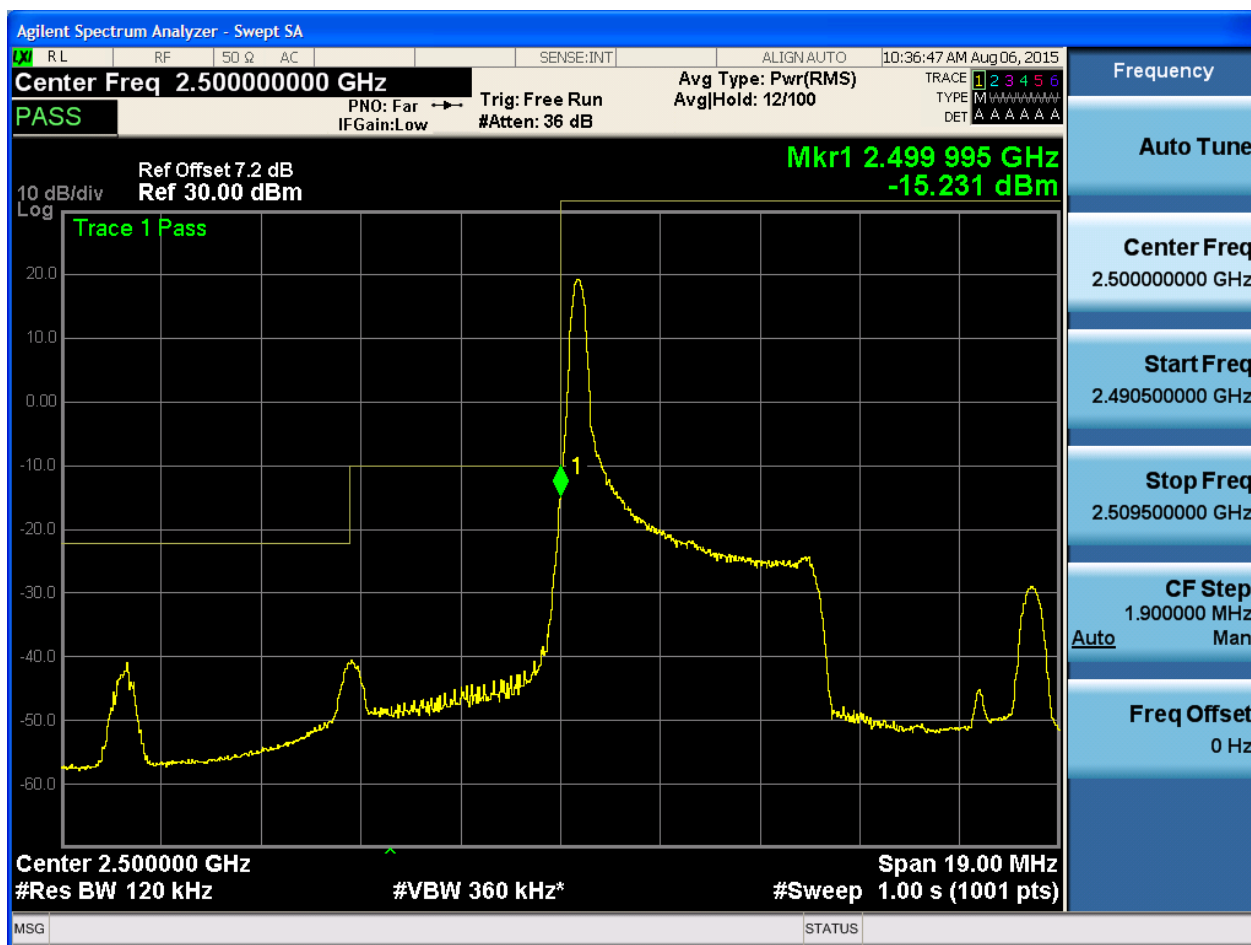
5.1.1 Test Band = BAND7

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 5

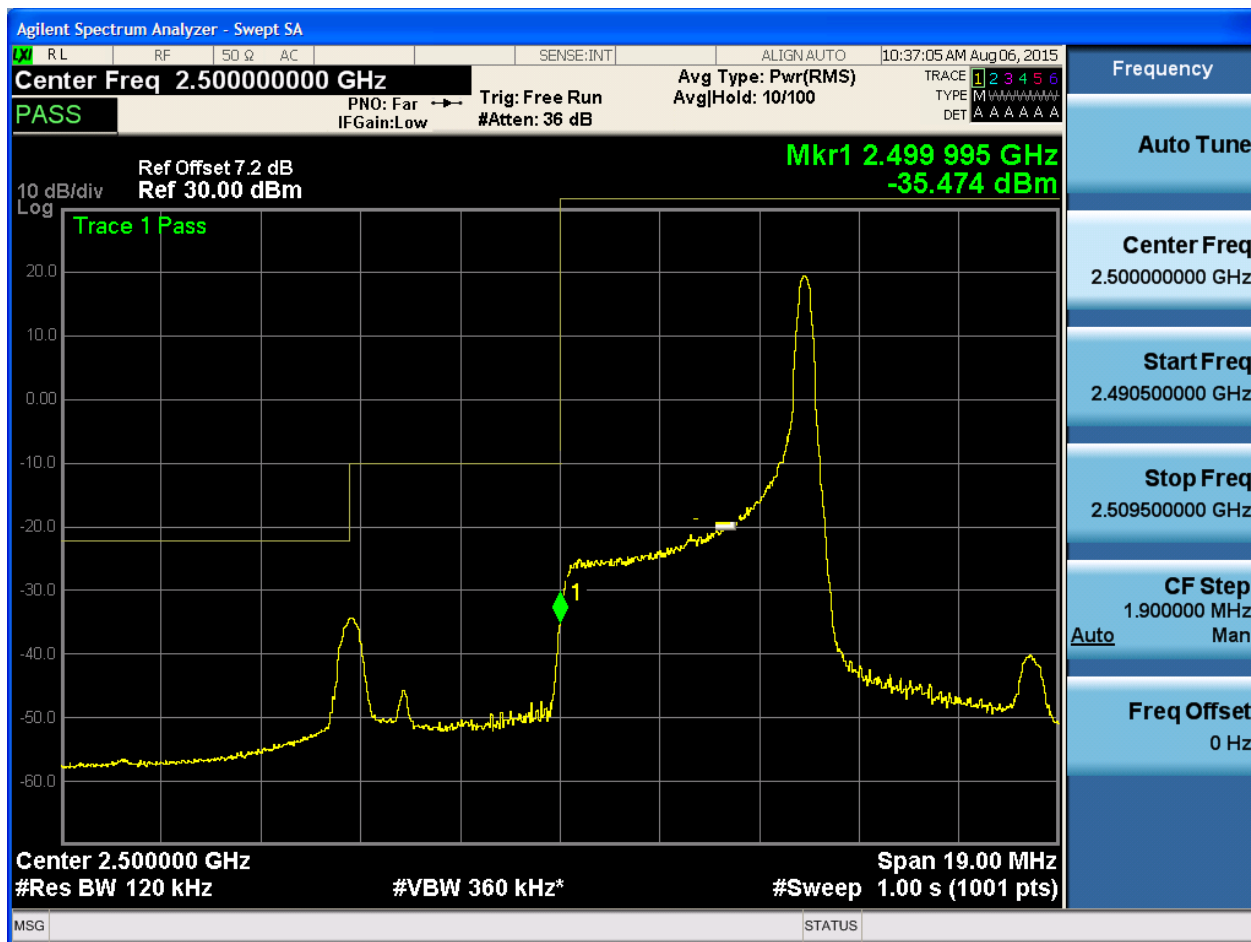
5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0





5.1.1.1.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 10:37:23 AM Aug 06, 2015

Center Freq 2.50000000 GHz Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
PASS PNO: Far Trig: Free Run Avg|Hold: 12/100 TYPE M A A A A A
IFGain:Low #Atten: 36 dB DET

Ref Offset 7.2 dB Mkr1 2.499 995 GHz
Ref 30.00 dBm -27.330 dBm

10 dB/div Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz
#Res BW 120 kHz #VBW 360 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.50000000 GHz

Start Freq
2.49050000 GHz

Stop Freq
2.50950000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



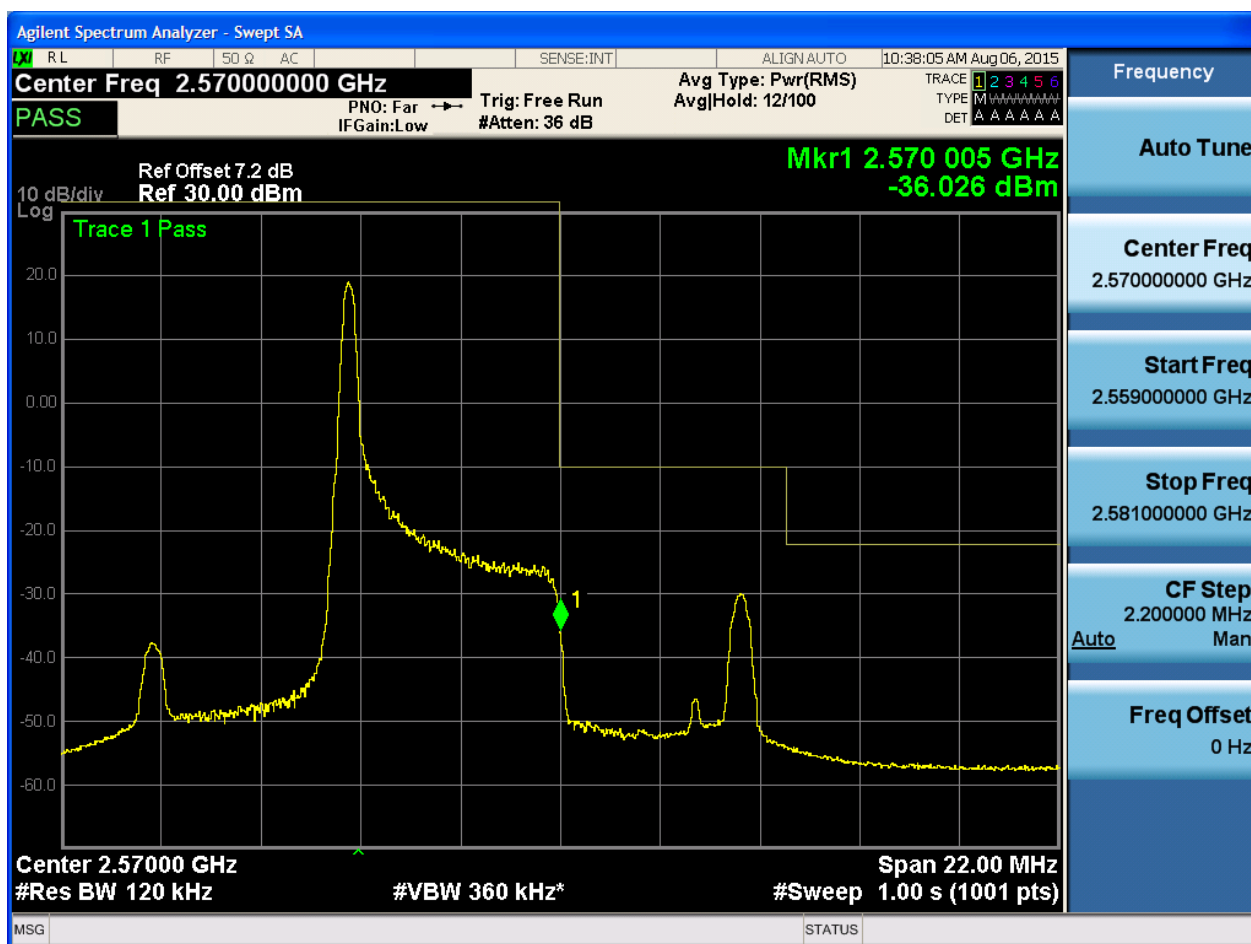
5.1.1.1.1.4 Test RB = RB25#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 10:38:24 AM Aug 06, 2015

Center Freq 2.57000000 GHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5 6
PASS PNO: Far Trig: Free Run AvgHold: 8/100 TYPE M W W W W W W W
IFGain: Low #Atten: 36 dB DET A A A A A A

Ref Offset 7.2 dB Mkr1 2.570 005 GHz
Ref 30.00 dBm -15.149 dBm

10 dB/div Log

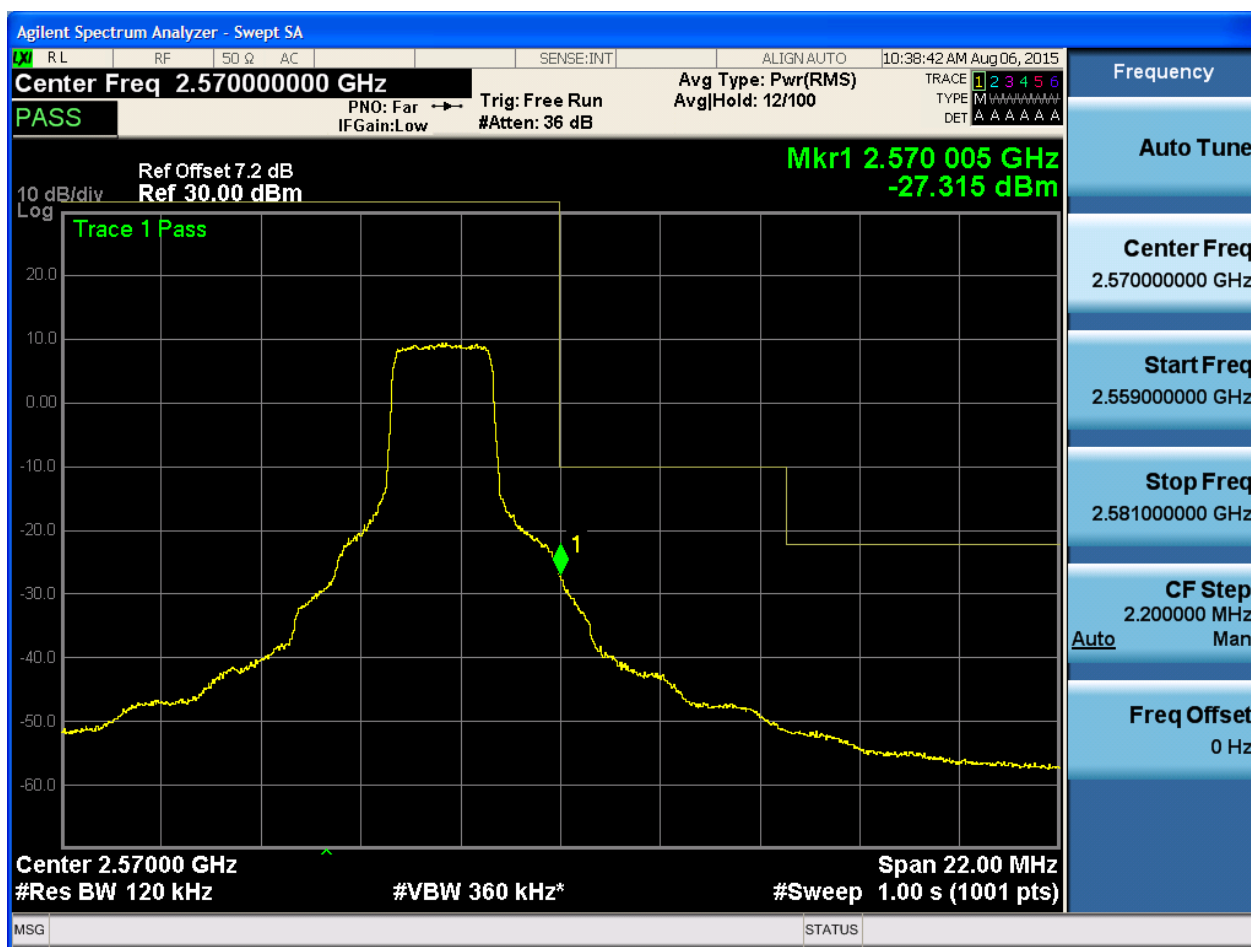
Trace 1 Pass

Center 2.57000 GHz Span 22.00 MHz
#Res BW 120 kHz #VBW 360 kHz* #Sweep 1.00 s (1001 pts)

MSG Alignment Completed STATUS



5.1.1.1.2.3 Test RB = RB12#6



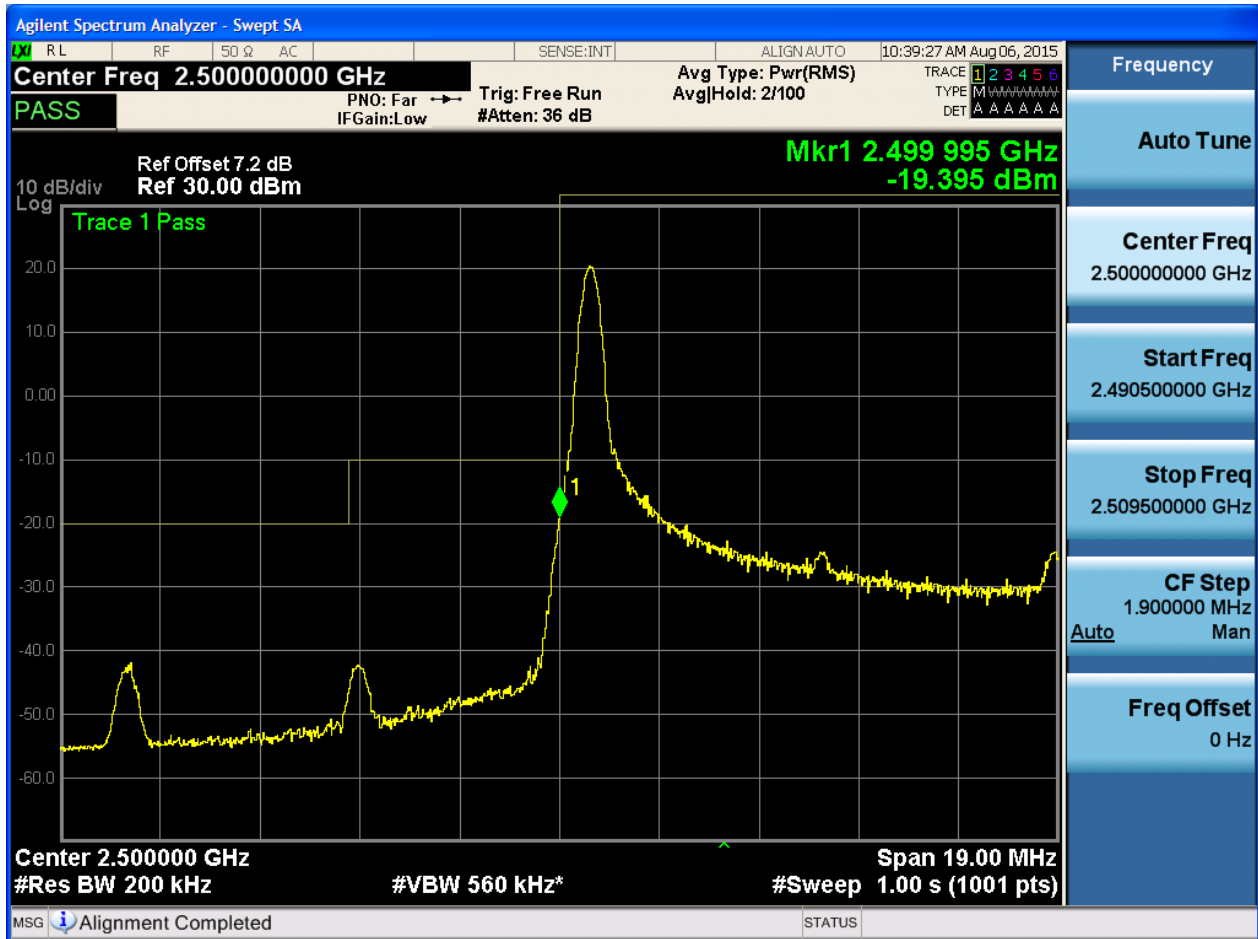


5.1.1.1.2.4 Test RB = RB25#0



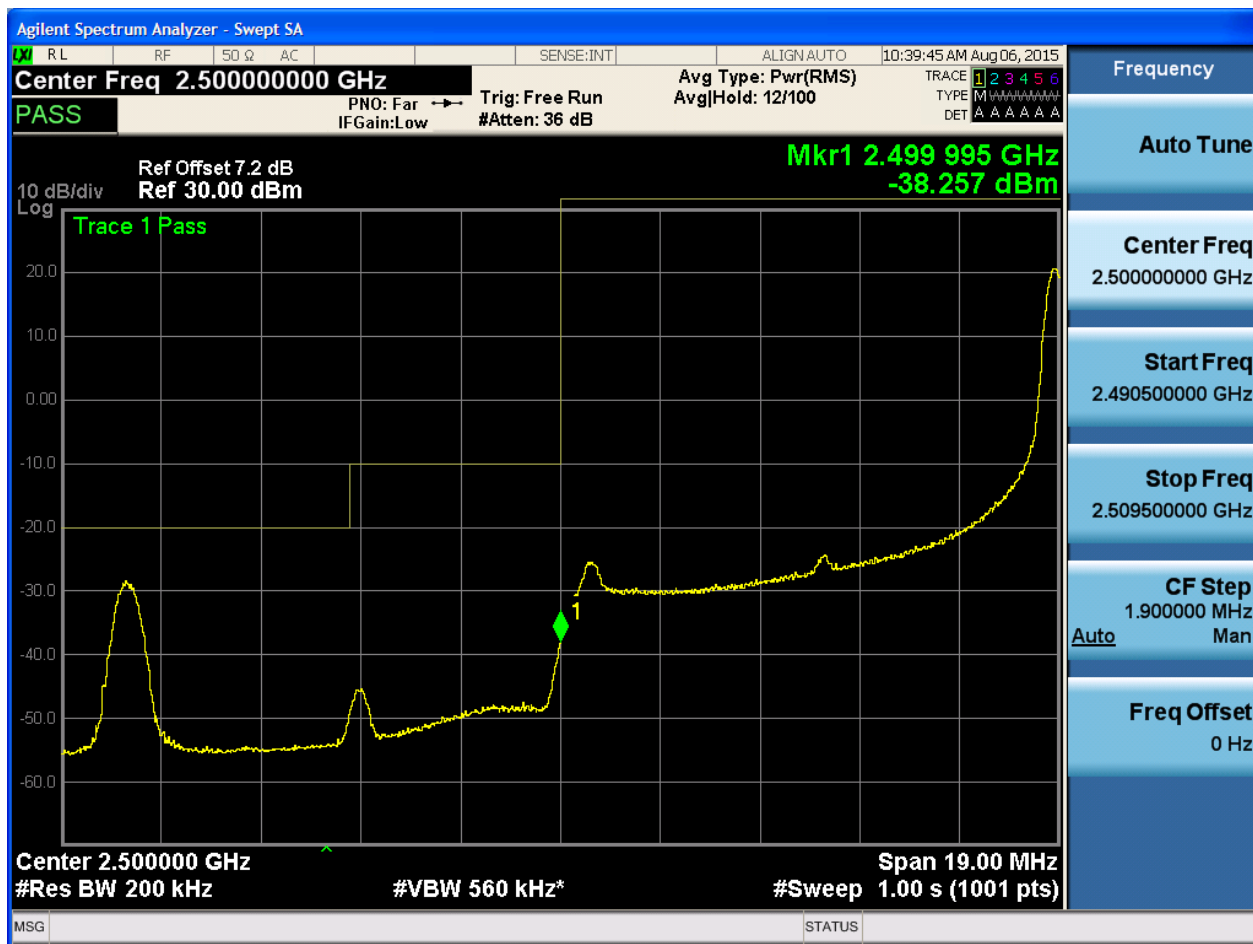


5.1.1.1.2.1.1 Test RB = RB1#0





5.1.1.1.2.1.2 Test RB = RB1#49





5.1.1.1.2.1.3 Test RB = RB25#13





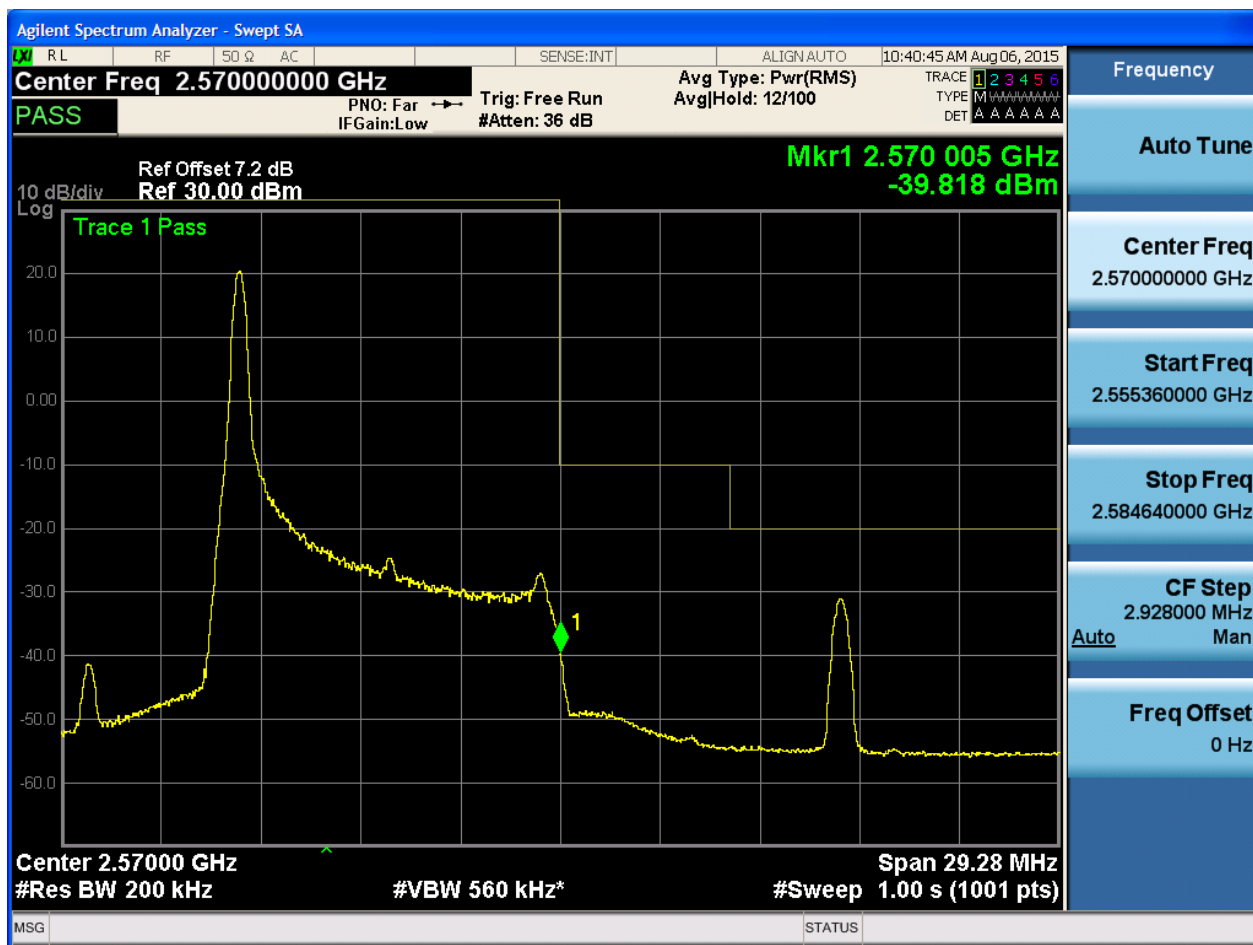
5.1.1.1.2.1.4 Test RB = RB50#0





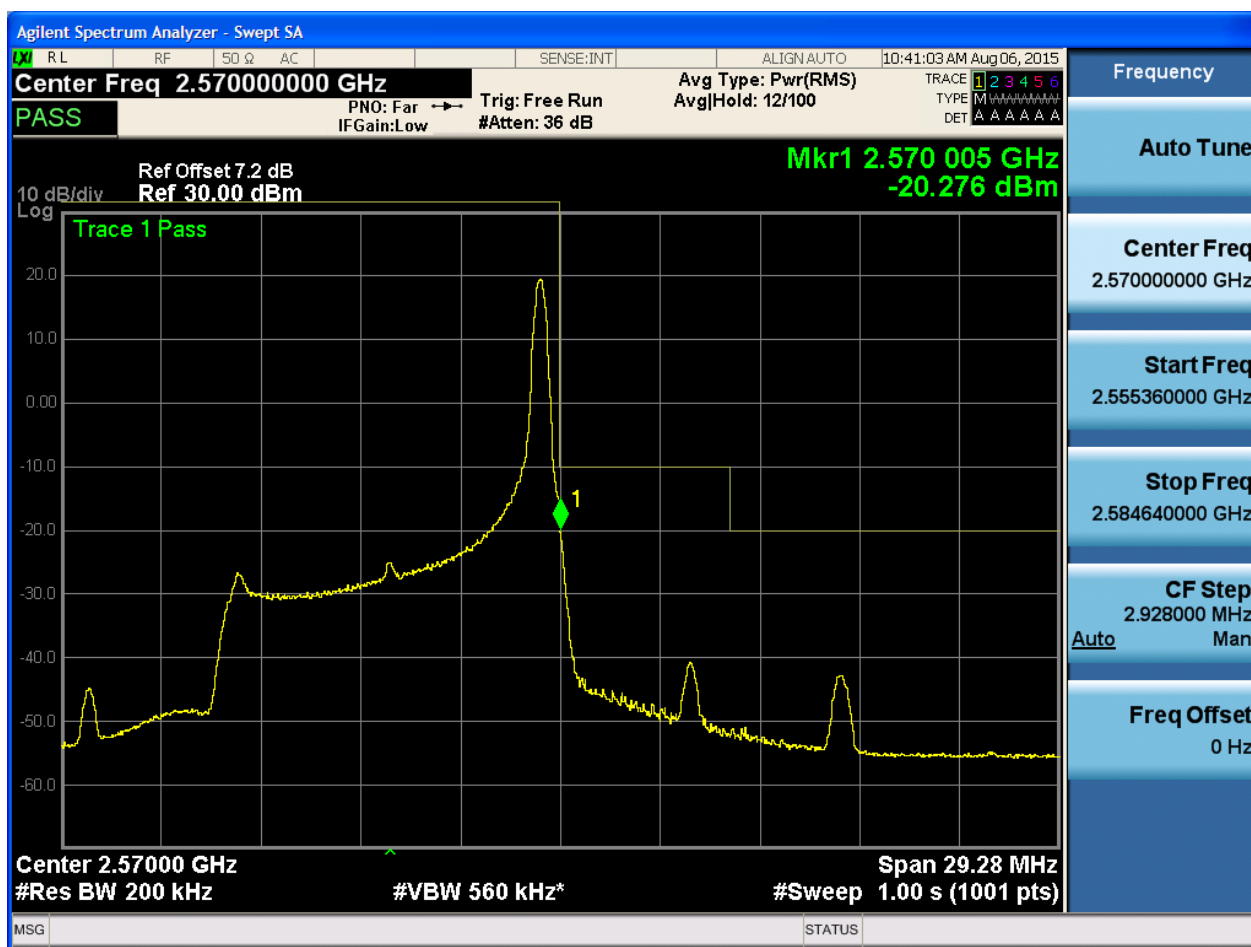
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0





5.1.1.1.2.2.2 Test RB = RB1#49





5.1.1.1.2.2.3 Test RB = RB25#13





5.1.1.1.2.2.4 Test RB = RB50#0

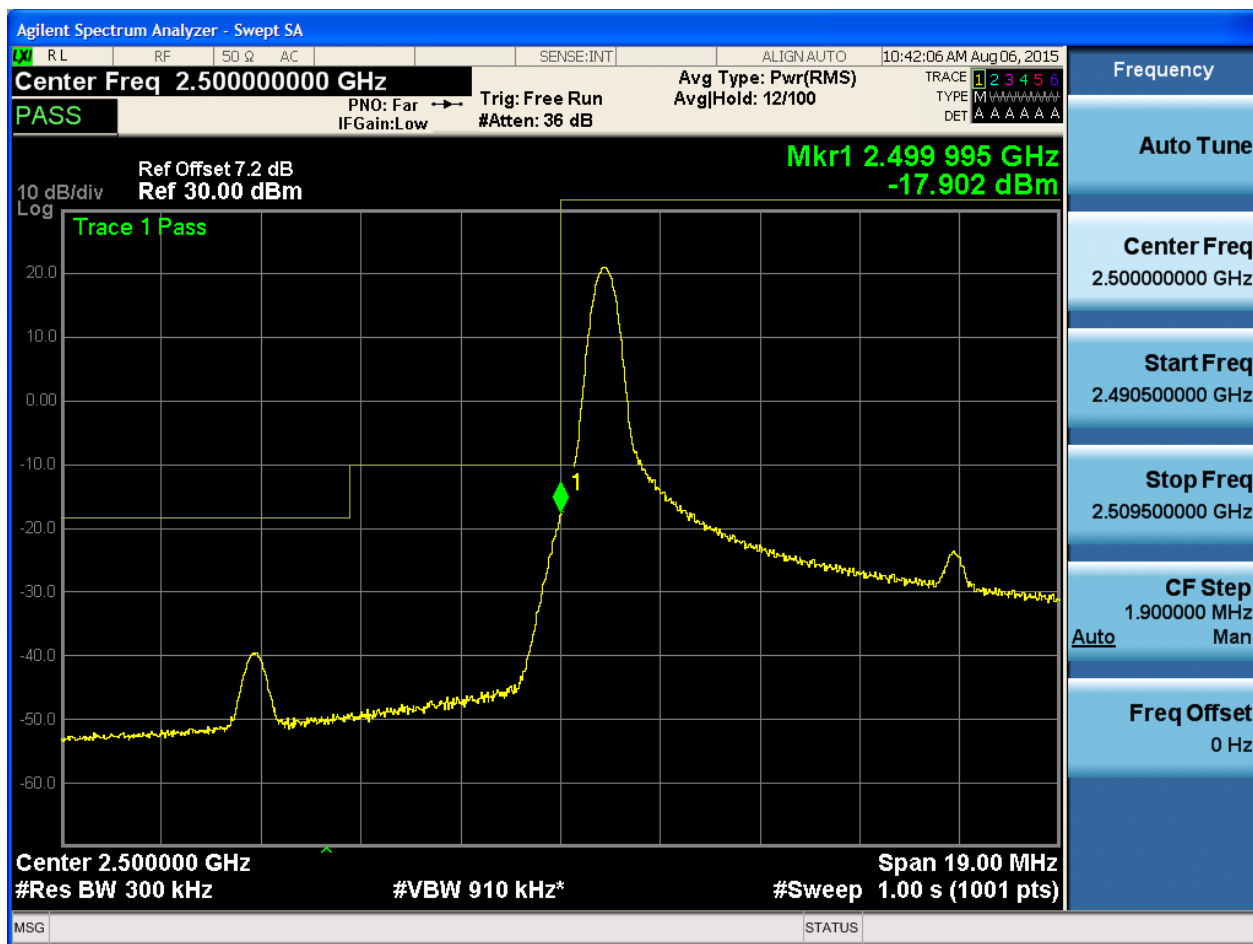




5.1.1.1.3 Test Bandwidth = 15

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 10:42:24 AM Aug 06, 2015

Center Freq 2.50000000 GHz Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
#Attenu: 12/100 TYPE [M] W W W W W W W W
DET A A A A A A

PASS PN0: Far Trig: Free Run IFGain: Low #Atten: 36 dB

Ref Offset 7.2 dB Mkr1 2.499 995 GHz
Ref 30.00 dBm -40.818 dBm

10 dB/div Log Trace 1 Pass

The spectrum analyzer displays a swept frequency range from 2.4905 GHz to 2.5095 GHz. The vertical axis represents power in dBm, ranging from -60 to +20. A yellow trace shows the signal level across this range. There are two distinct peaks: one at approximately 2.495 GHz reaching about -40 dBm, and another at approximately 2.505 GHz reaching about -30 dBm. A green diamond marker labeled '1' is placed on the rising edge of the second peak at approximately 2.499995 GHz, where the power is about -40.8 dBm. The background grid is black with white lines.

Center 2.500000 GHz Span 19.00 MHz
#Res BW 300 kHz #VBW 910 kHz* #Sweep 1.00 s (1001 pts)



5.1.1.1.3.1.3 Test RB = RB36#18





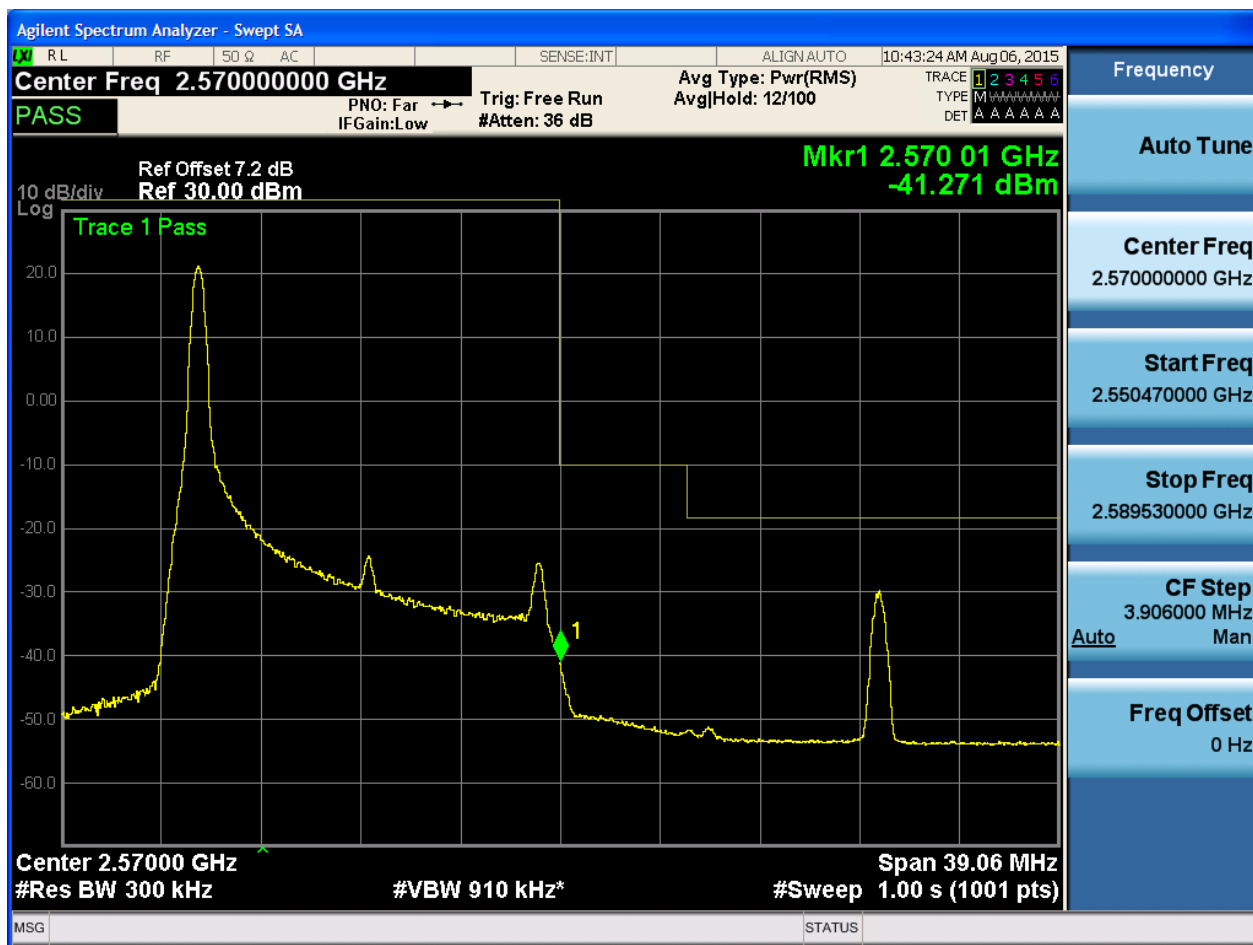
5.1.1.1.3.1.4 Test RB = RB75#0





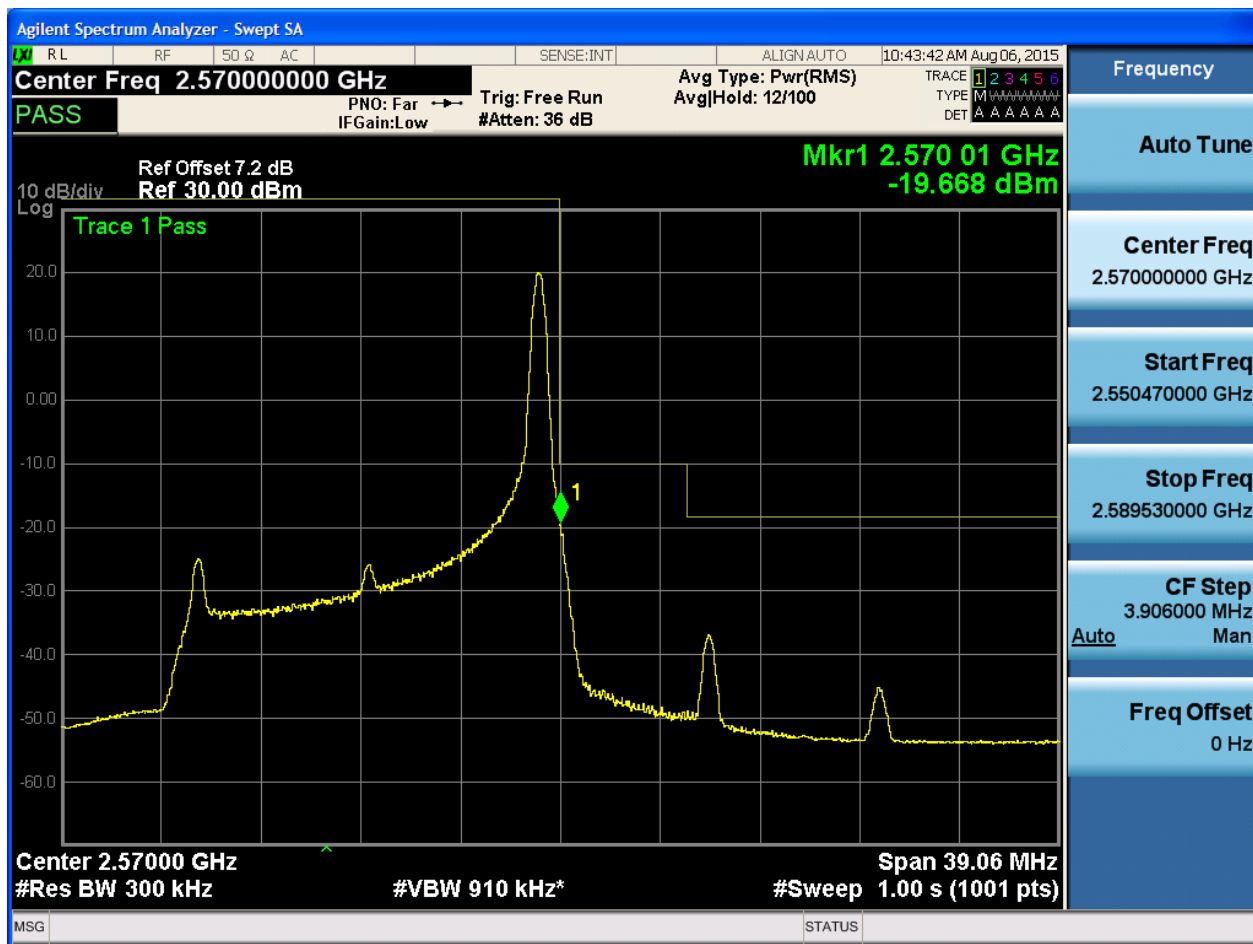
5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#74





5.1.1.1.3.2.3 Test RB = RB36#18





5.1.1.1.3.2.4 Test RB = RB75#0

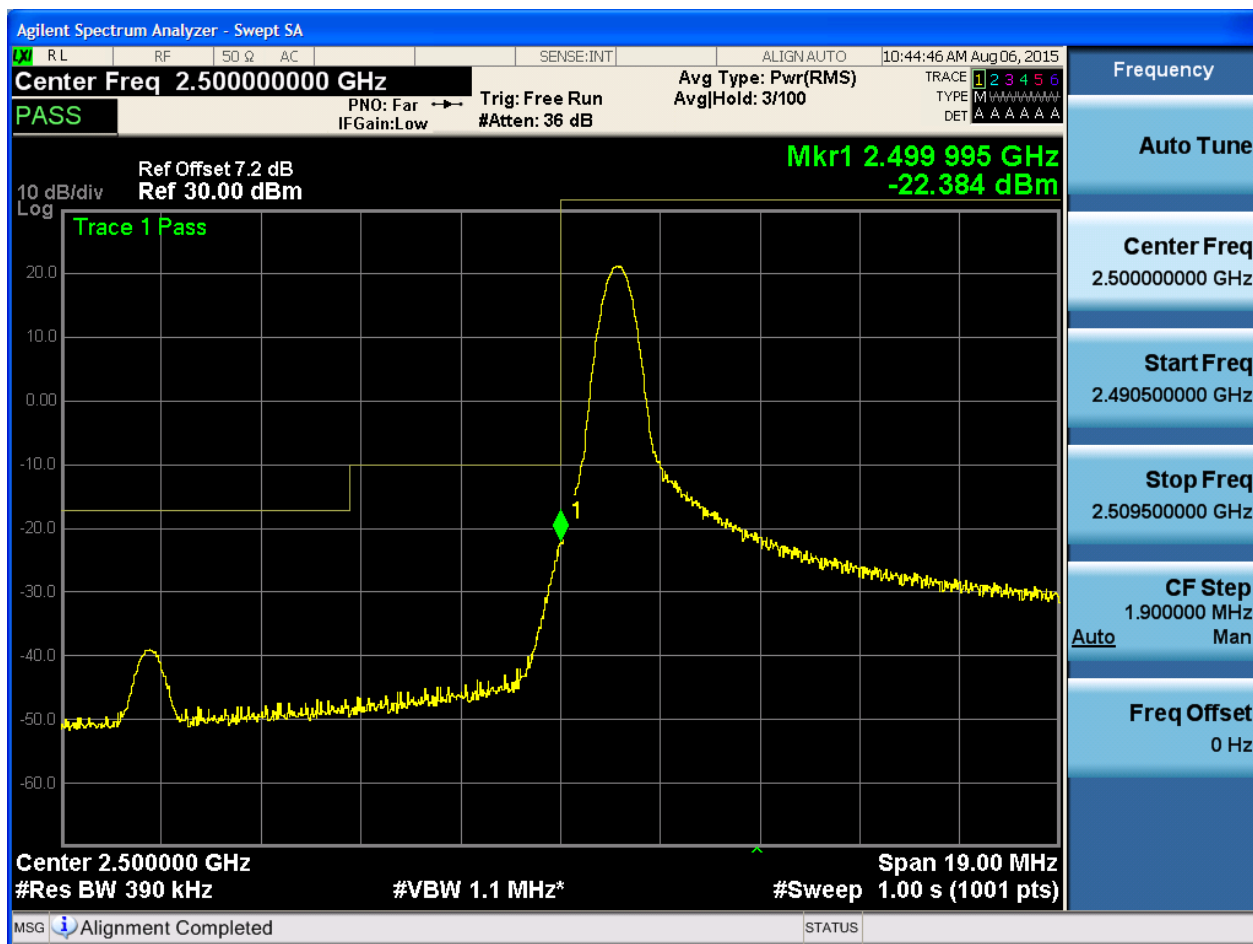




5.1.1.1.4 Test Bandwidth = 20

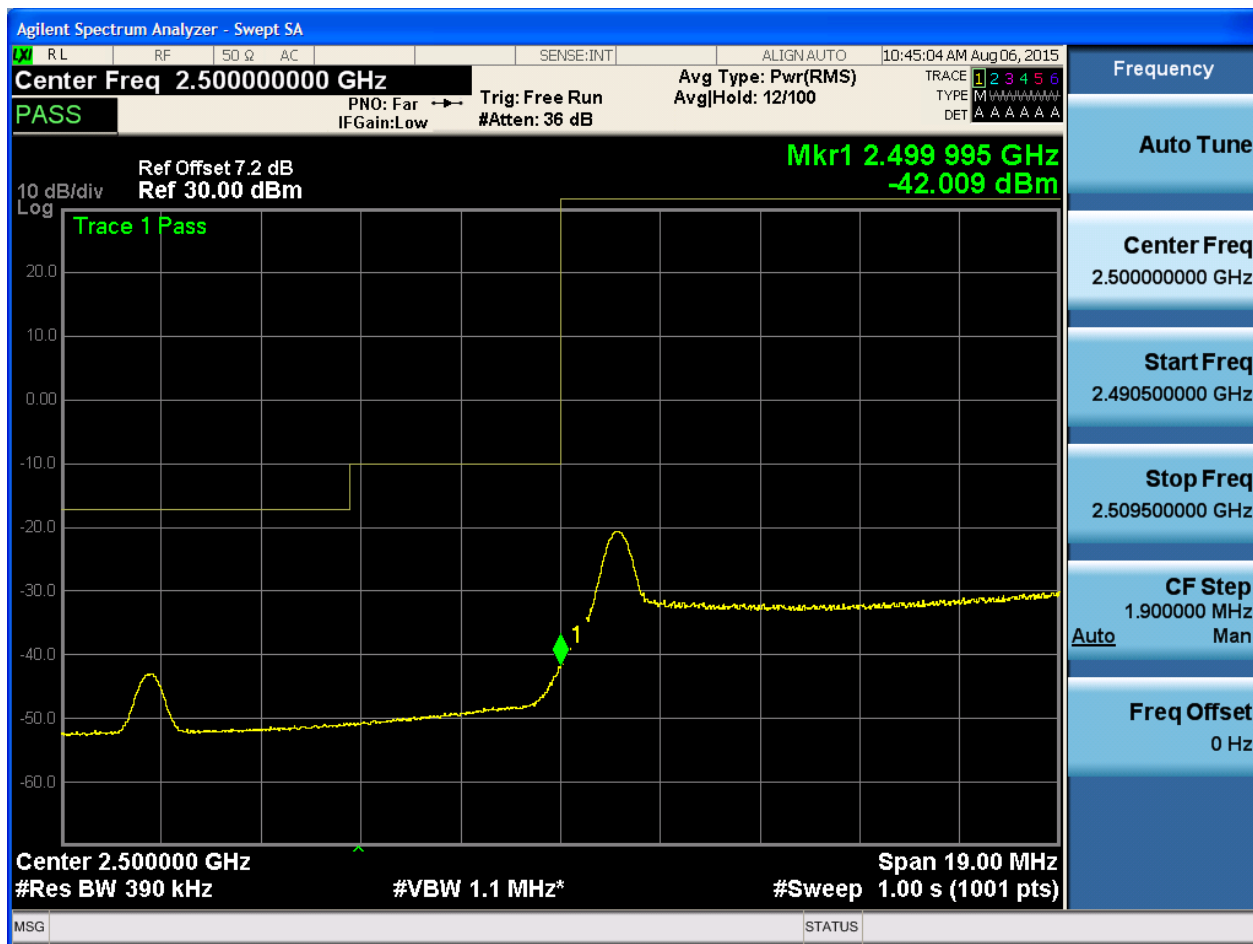
5.1.1.1.4.1 Test Channel = LCH

5.1.1.1.4.1.1 Test RB = RB1#0



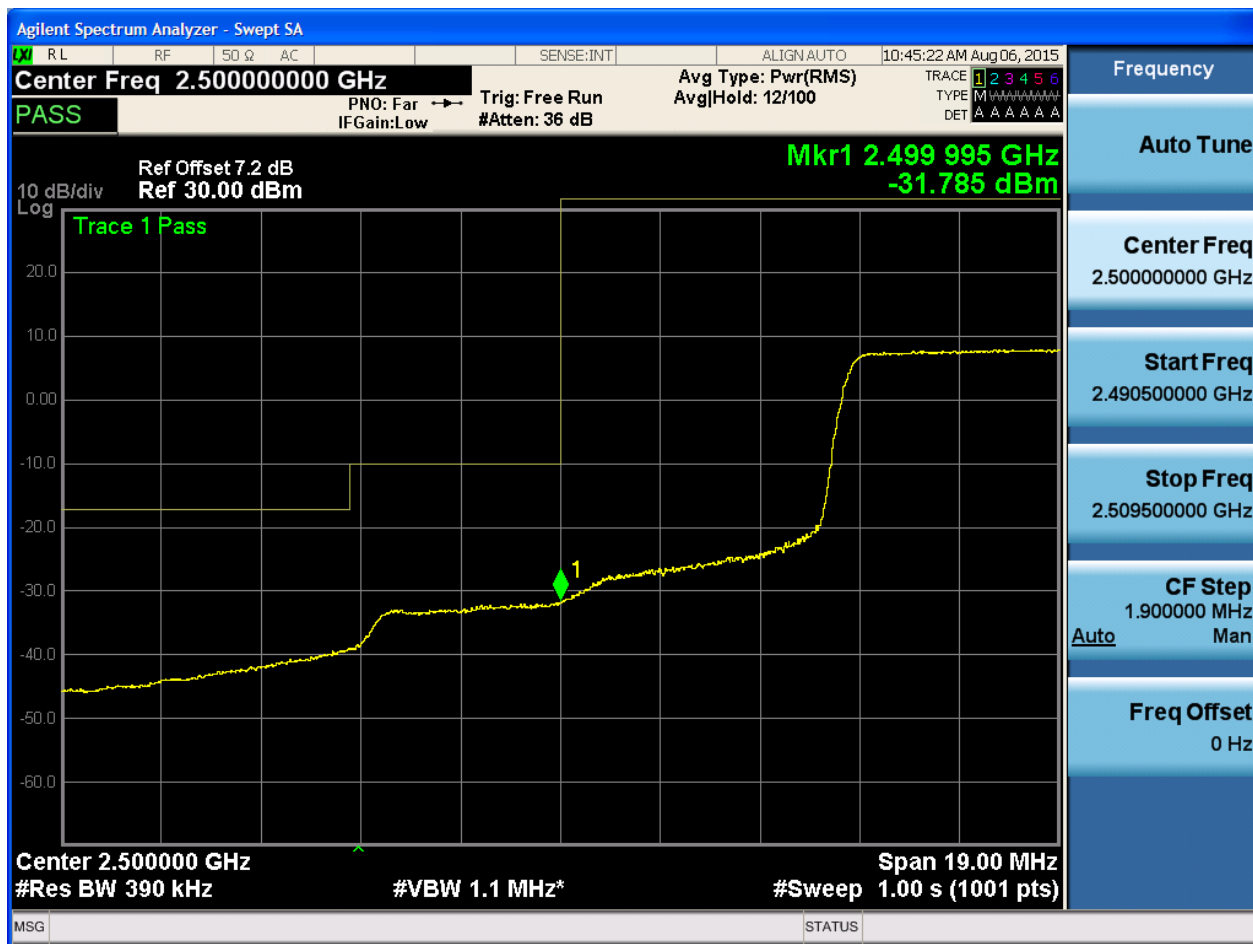


5.1.1.1.4.1.2 Test RB = RB1#99





5.1.1.1.4.1.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.500000000 GHz

Ref Offset 7.2 dB
Ref 30.00 dBm

Trace 1 Pass

Mkr1 2.499 995 GHz
-29.852 dBm

10 dB/div
Log

Center 2.500000 GHz
#Res BW 390 kHz
#VBW 1.1 MHz*
Span 19.00 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

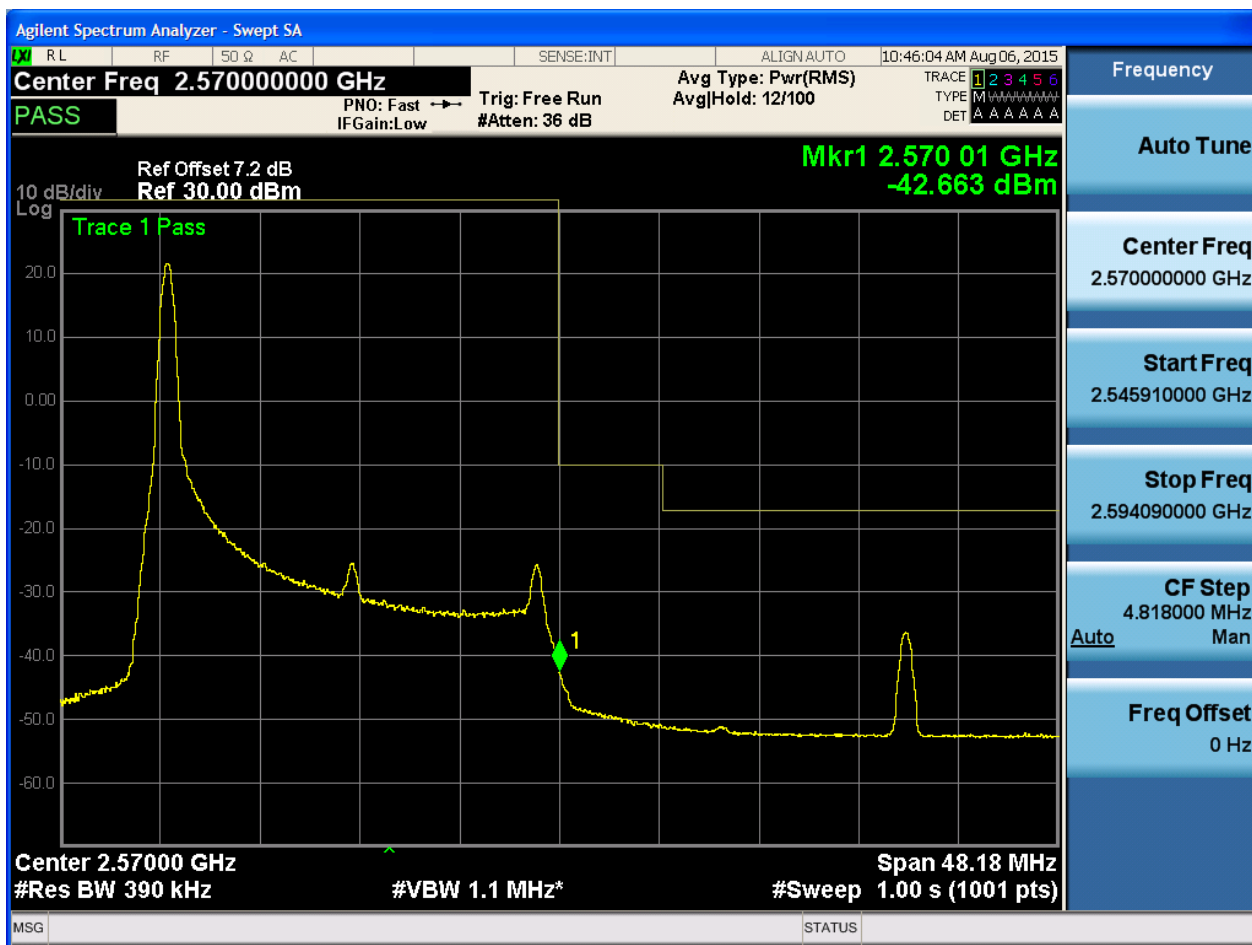
CF Step
1.900000 MHz
Man

Freq Offset
0 Hz



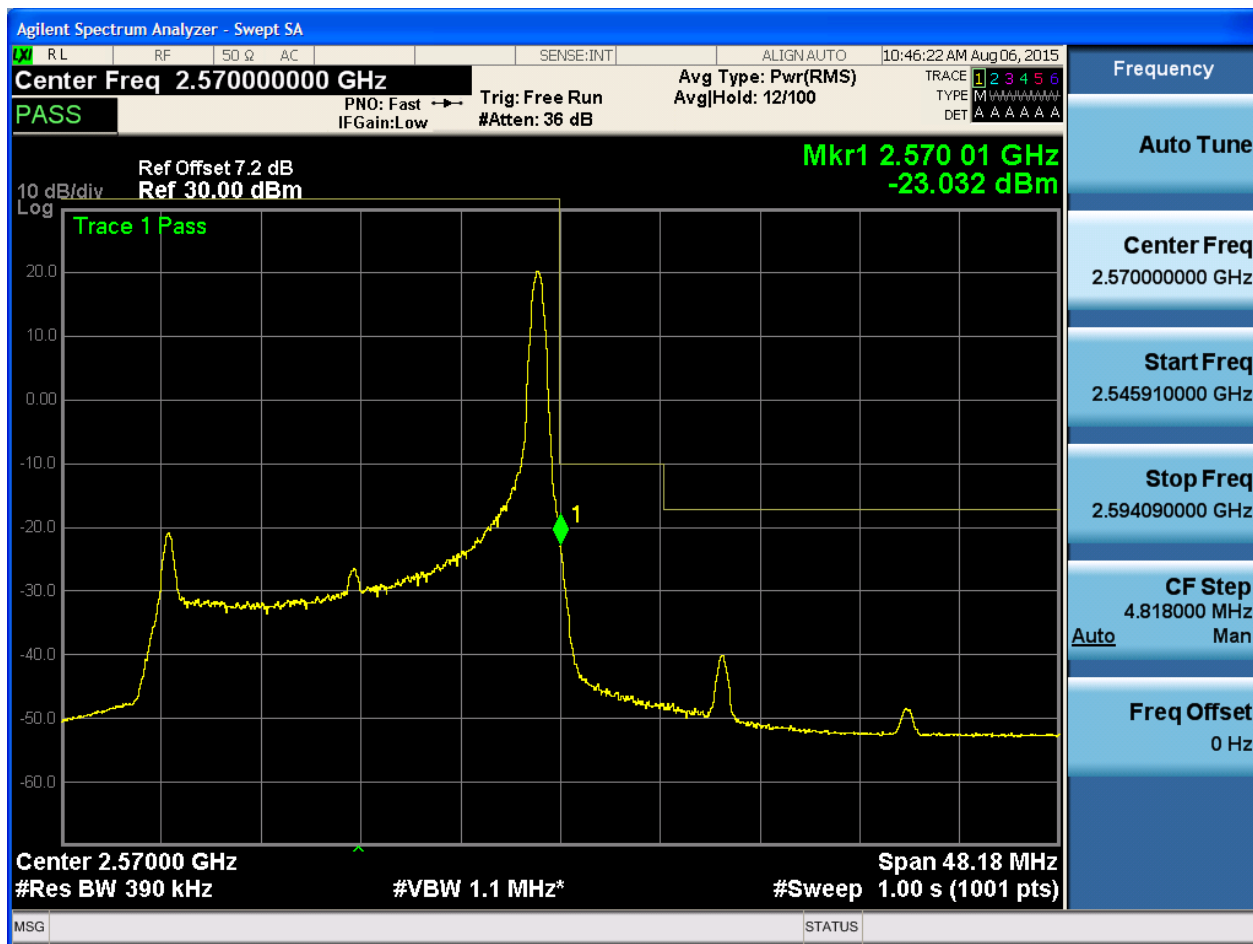
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0



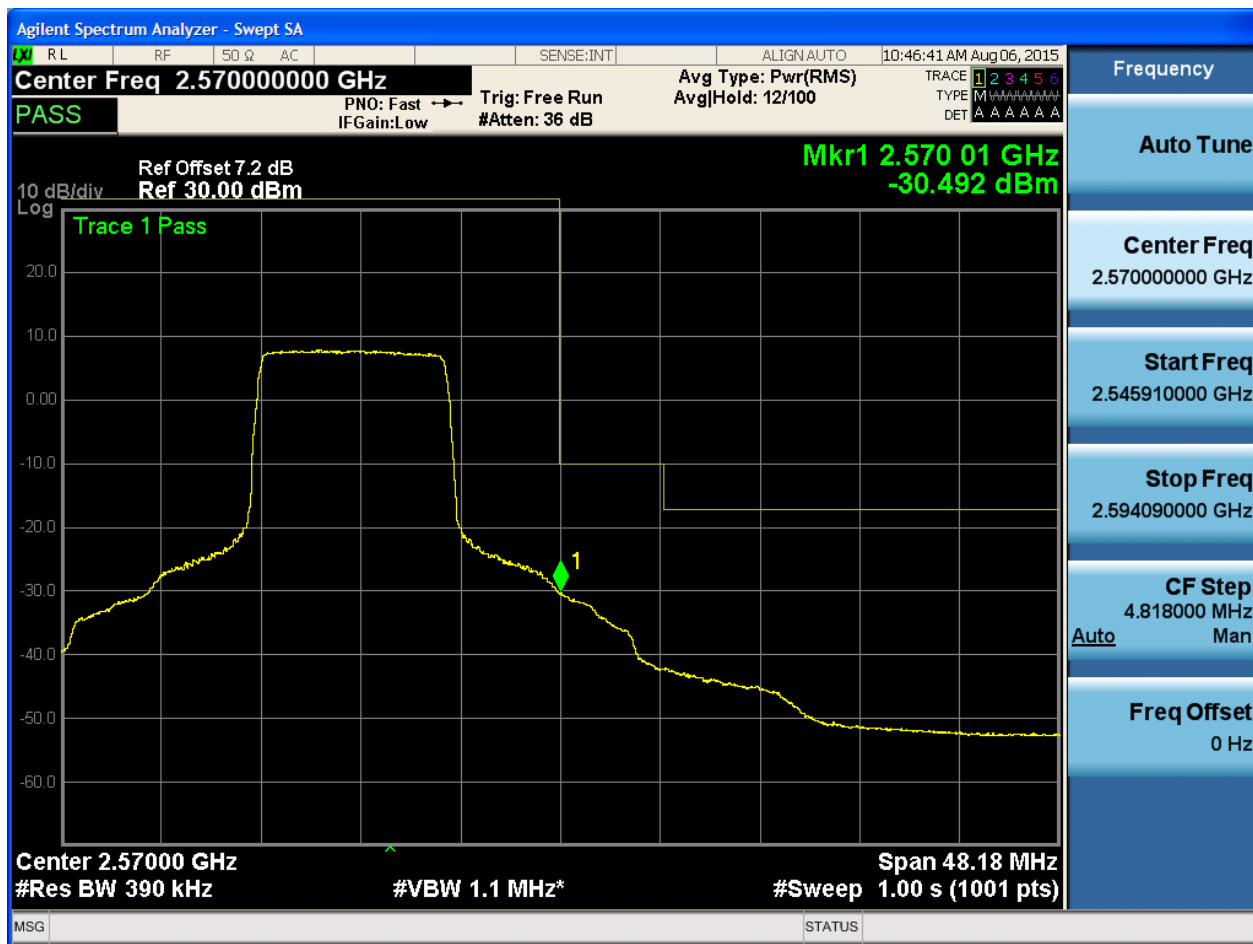


5.1.1.1.4.2.2 Test RB = RB1#99





5.1.1.1.4.2.3 Test RB = RB50#25





5.1.1.1.4.2.4 Test RB = RB100#0



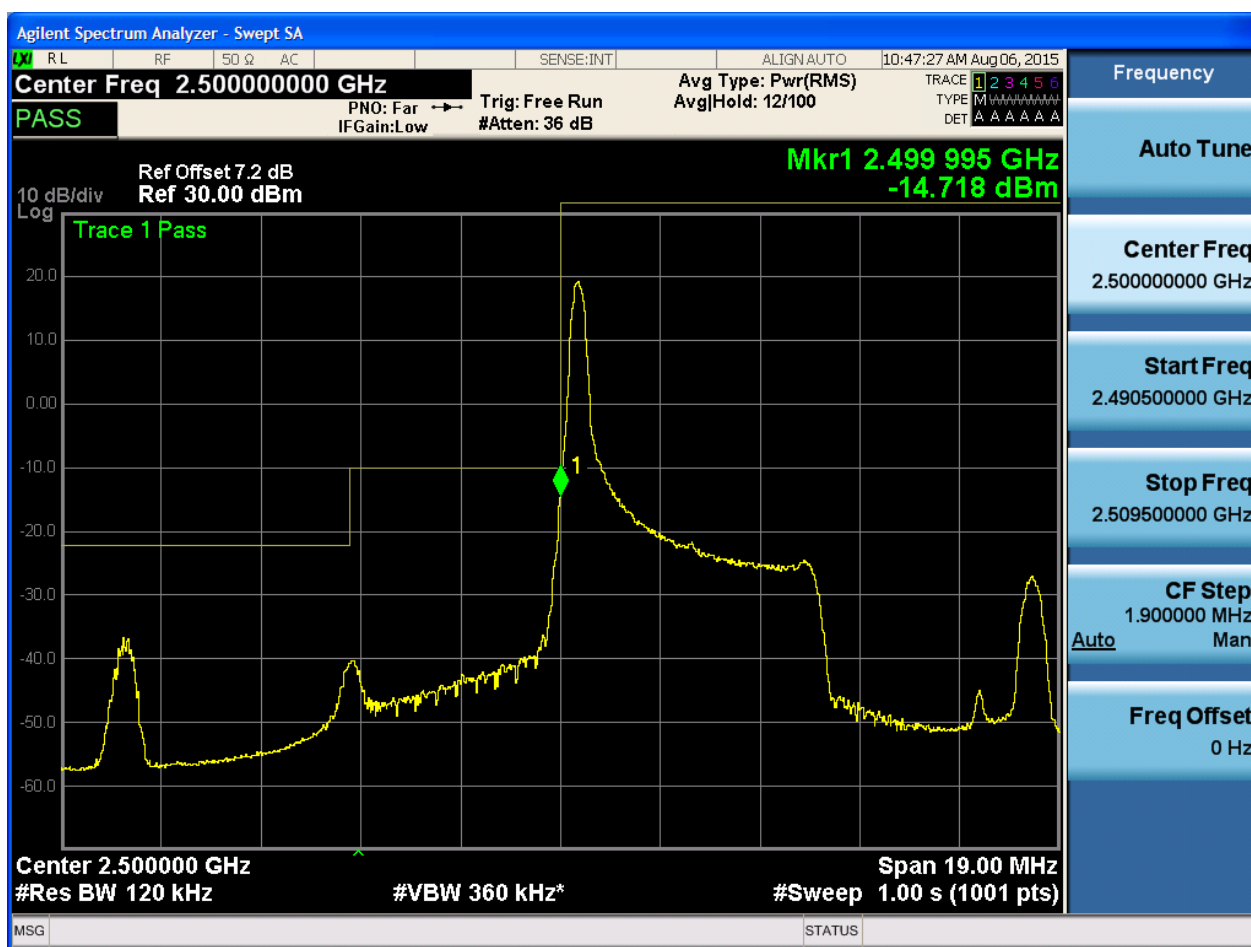


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 5

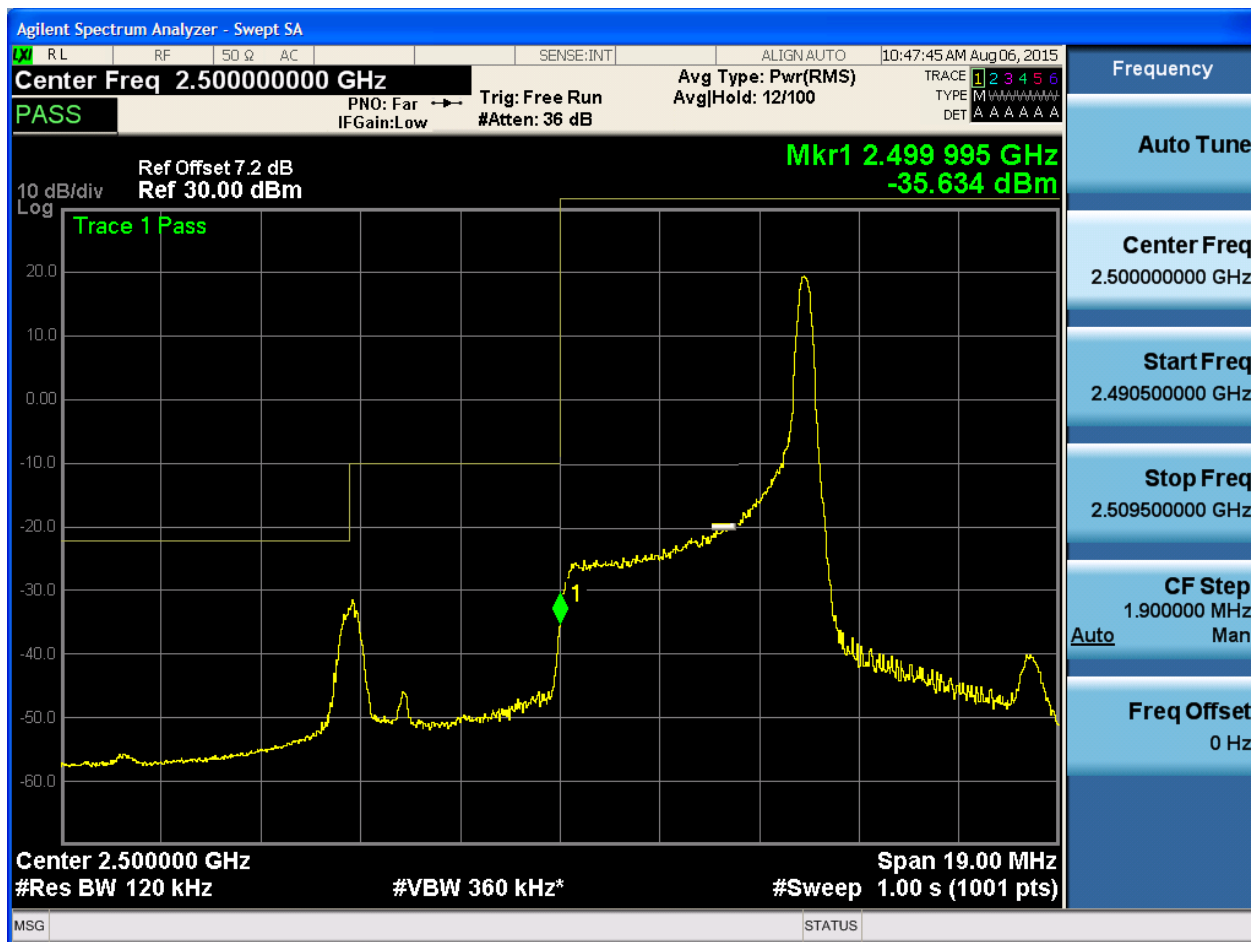
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0



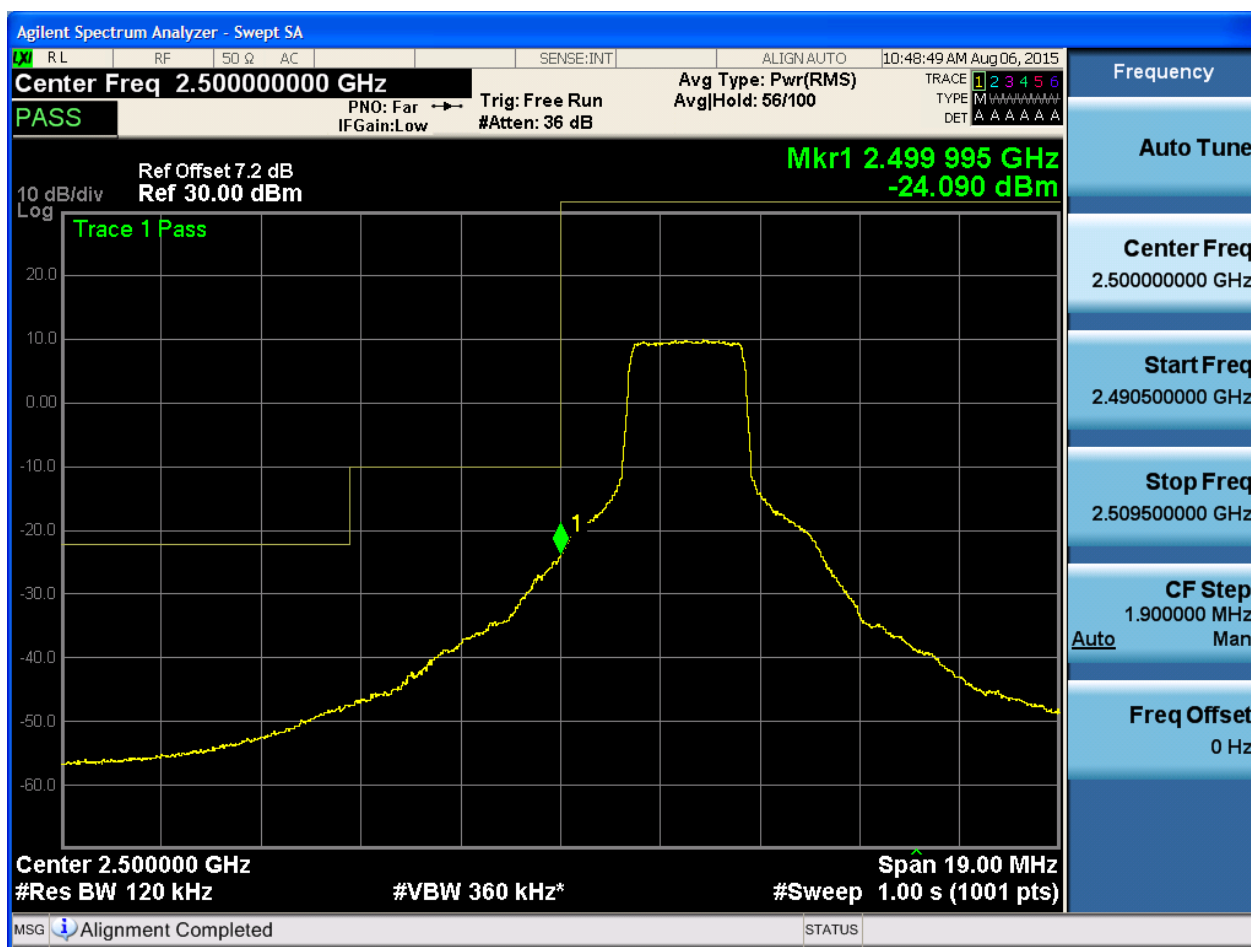


5.1.1.2.1.1.2 Test RB = RB1#24





5.1.1.2.1.1.3 Test RB = RB12#6





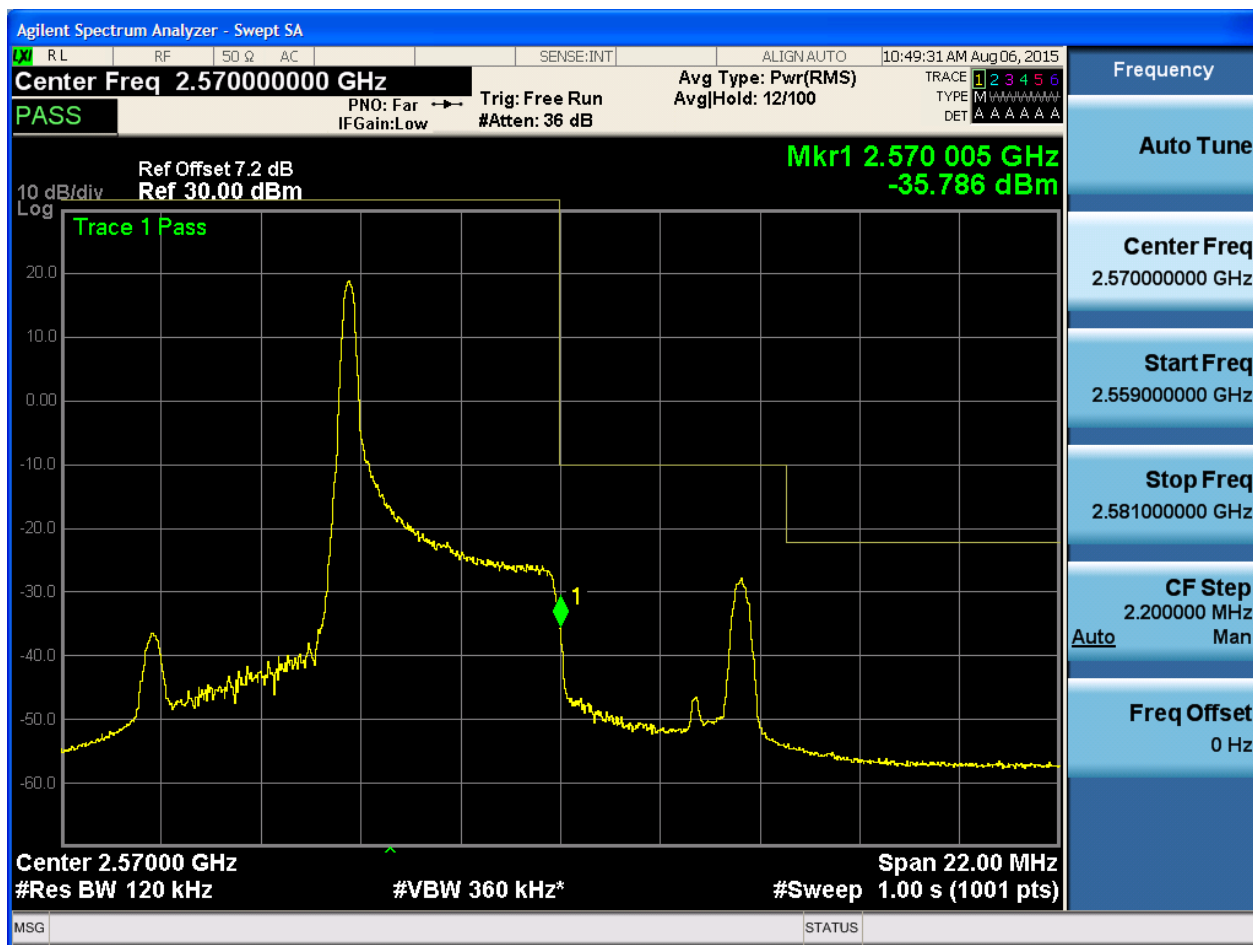
5.1.1.2.1.1.4 Test RB = RB25#0





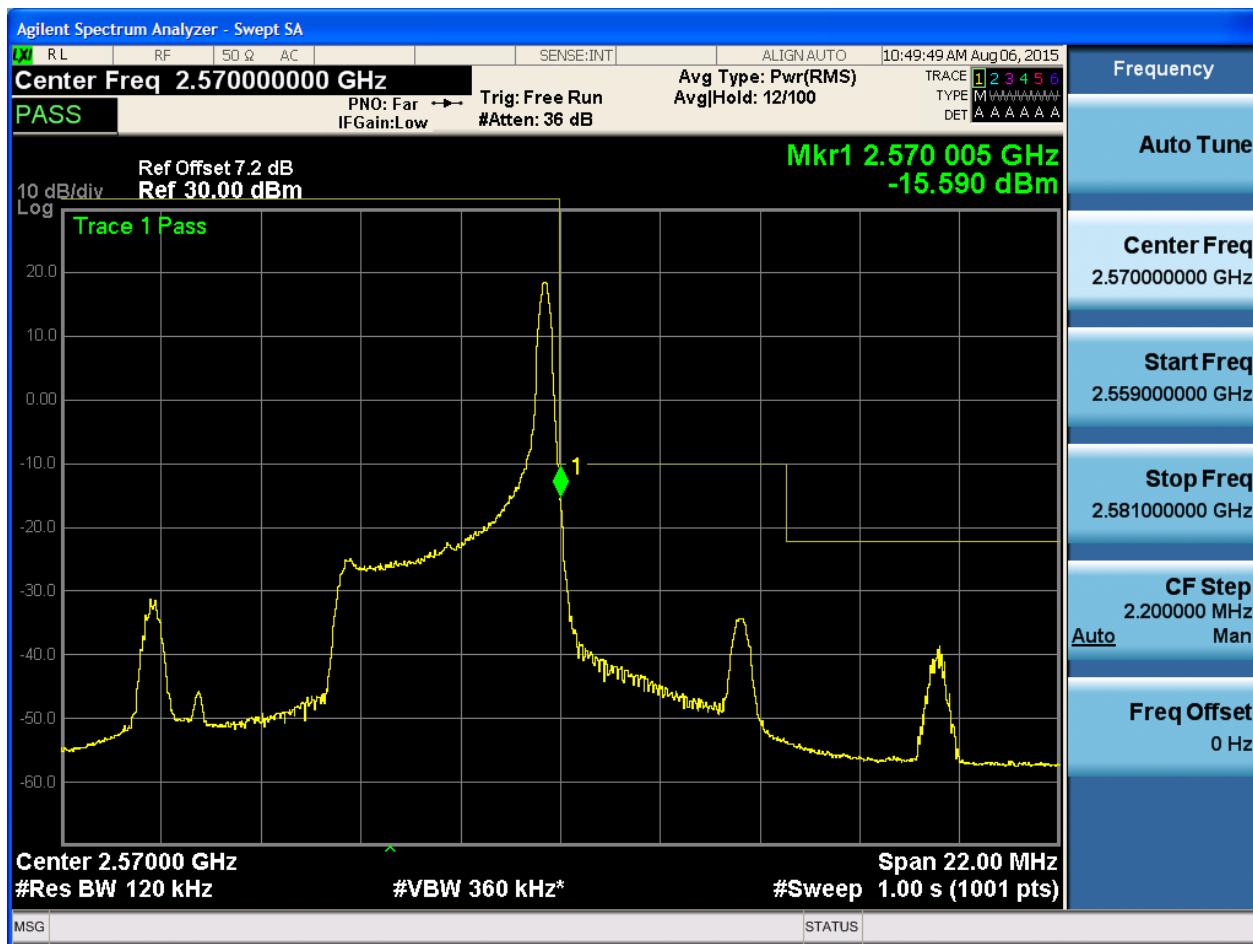
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0



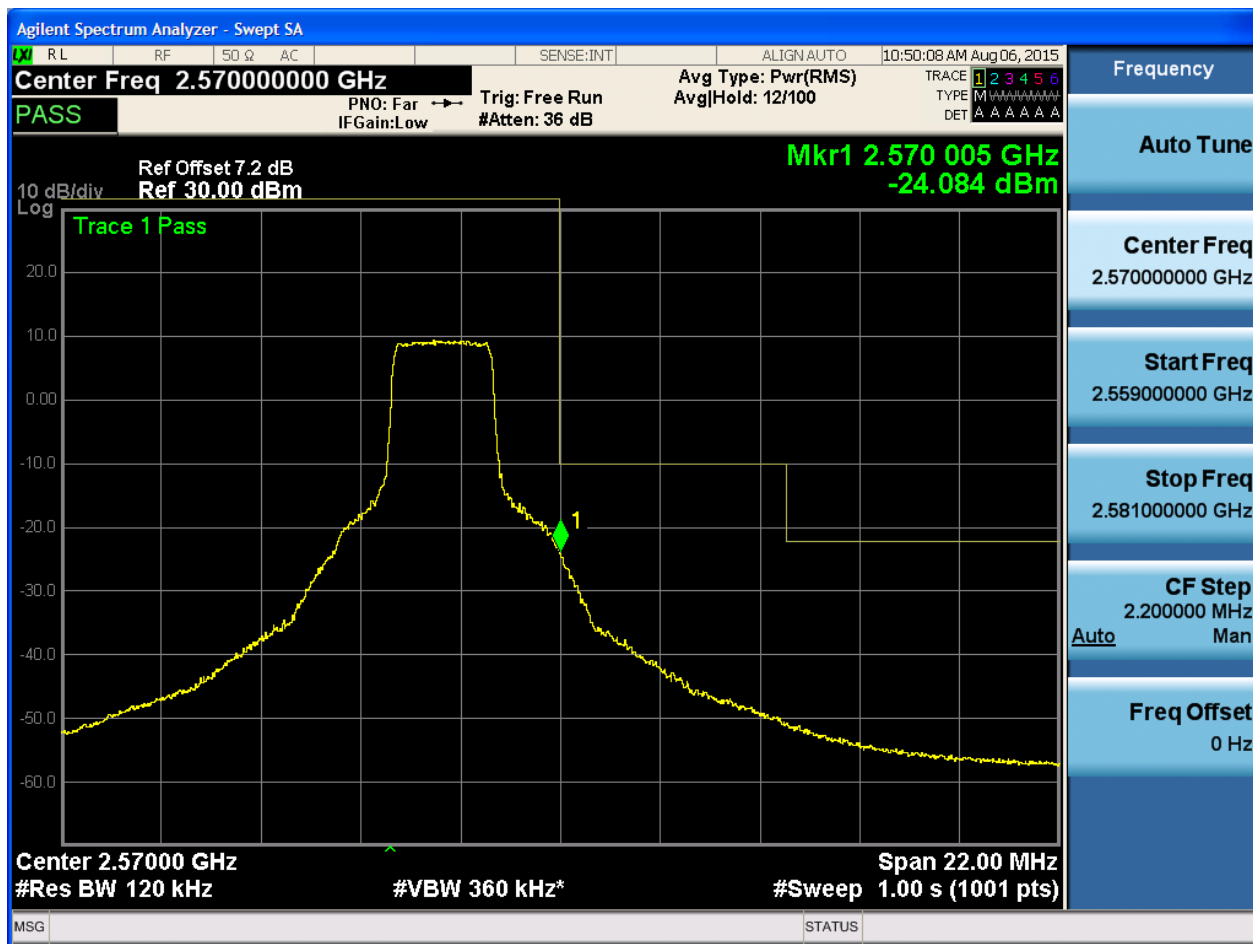


5.1.1.2.1.2.2 Test RB = RB1#24





5.1.1.2.1.2.3 Test RB = RB12#6





5.1.1.2.1.2.4 Test RB = RB25#0

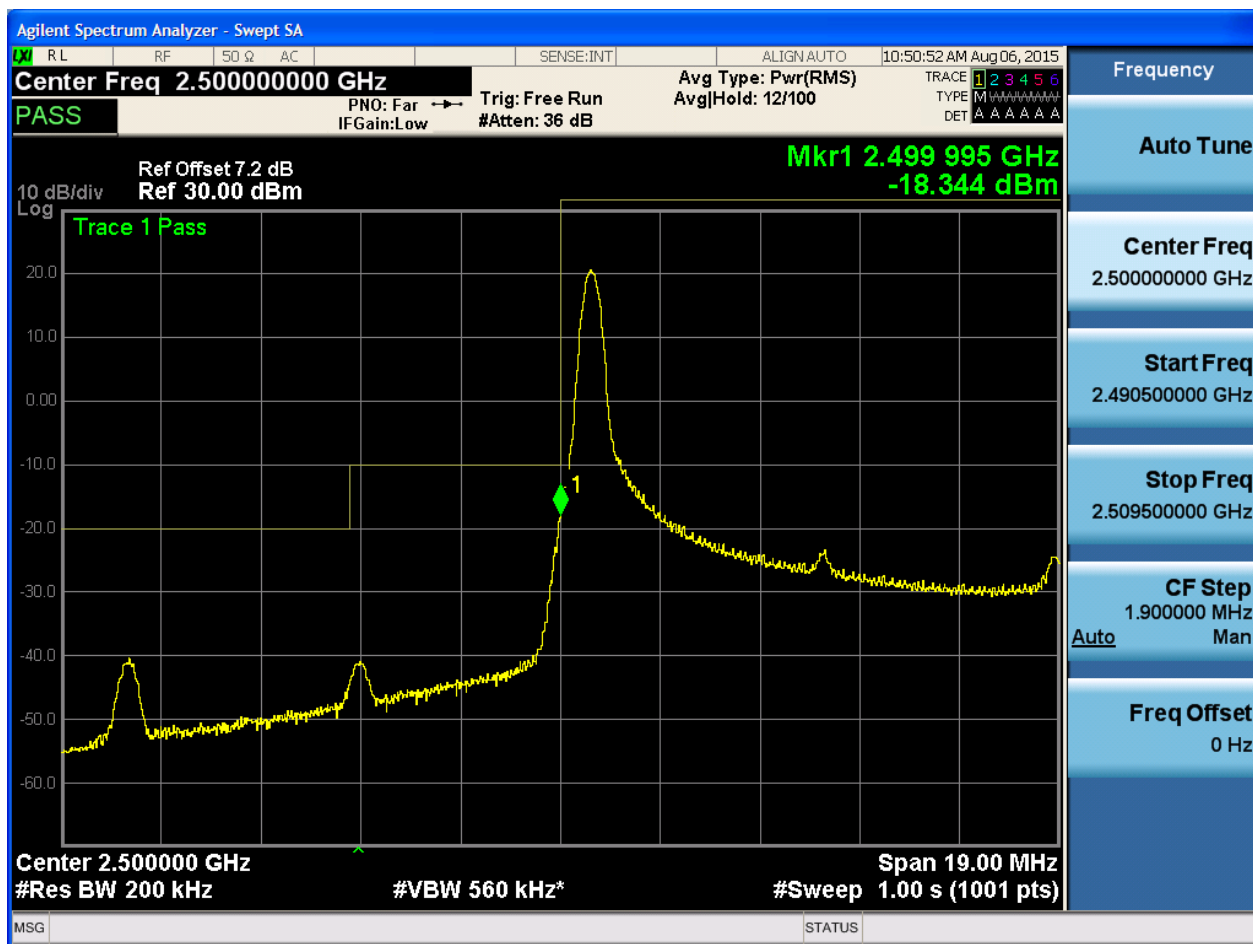




5.1.1.2.2 Test Bandwidth = 10

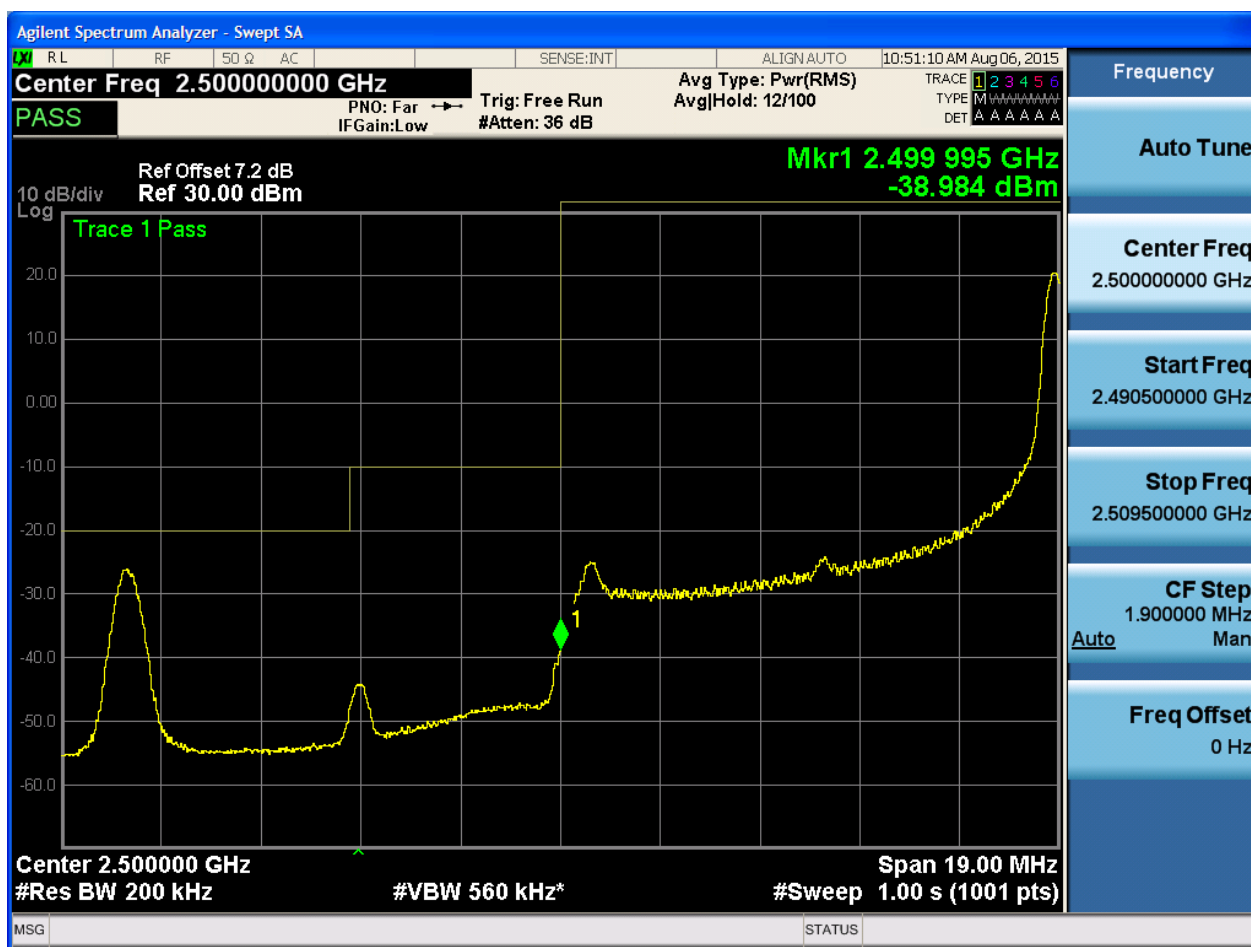
5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





5.1.1.2.2.1.2 Test RB = RB1#49





5.1.1.2.2.1.3 Test RB = RB25#13





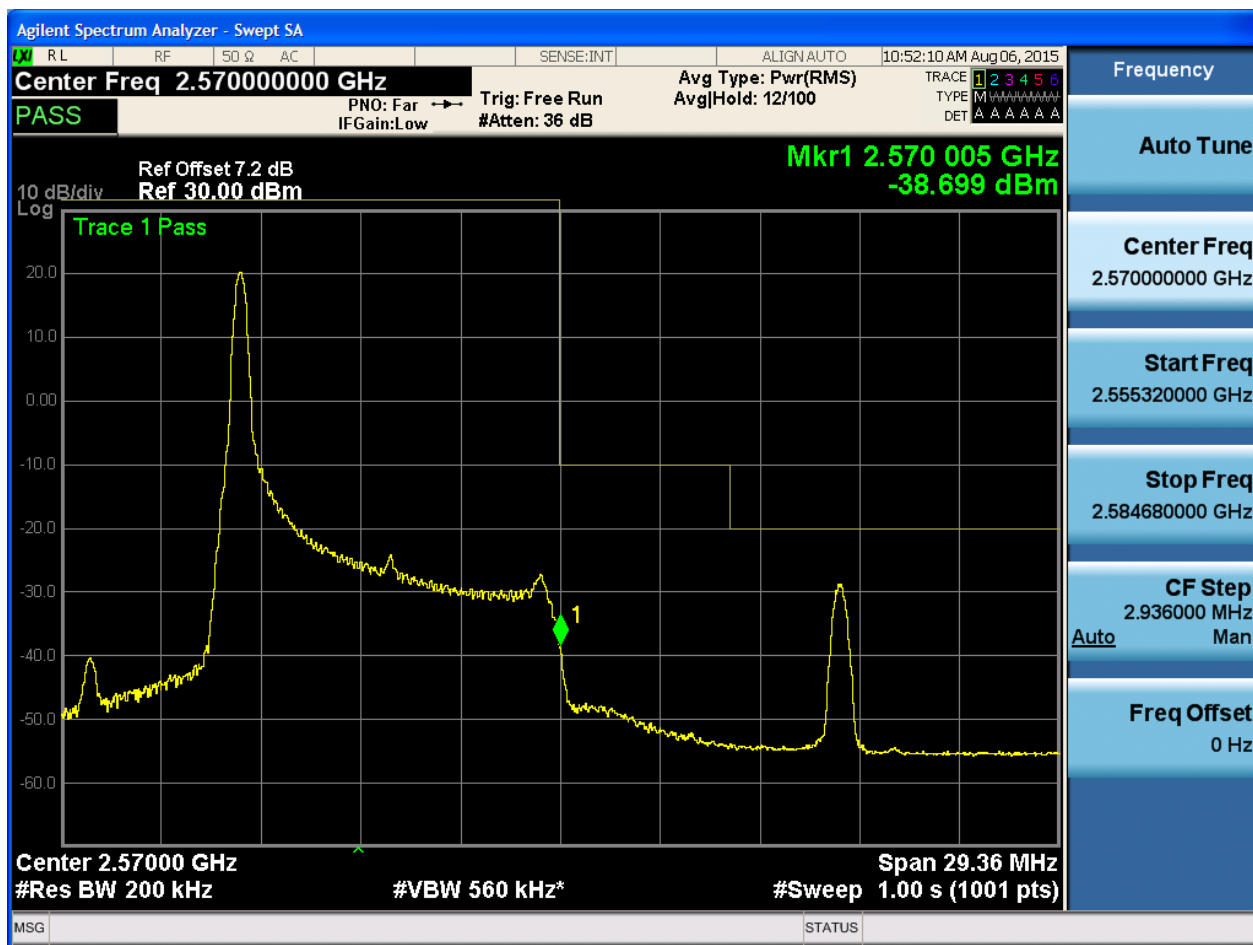
5.1.1.2.2.1.4 Test RB = RB50#0





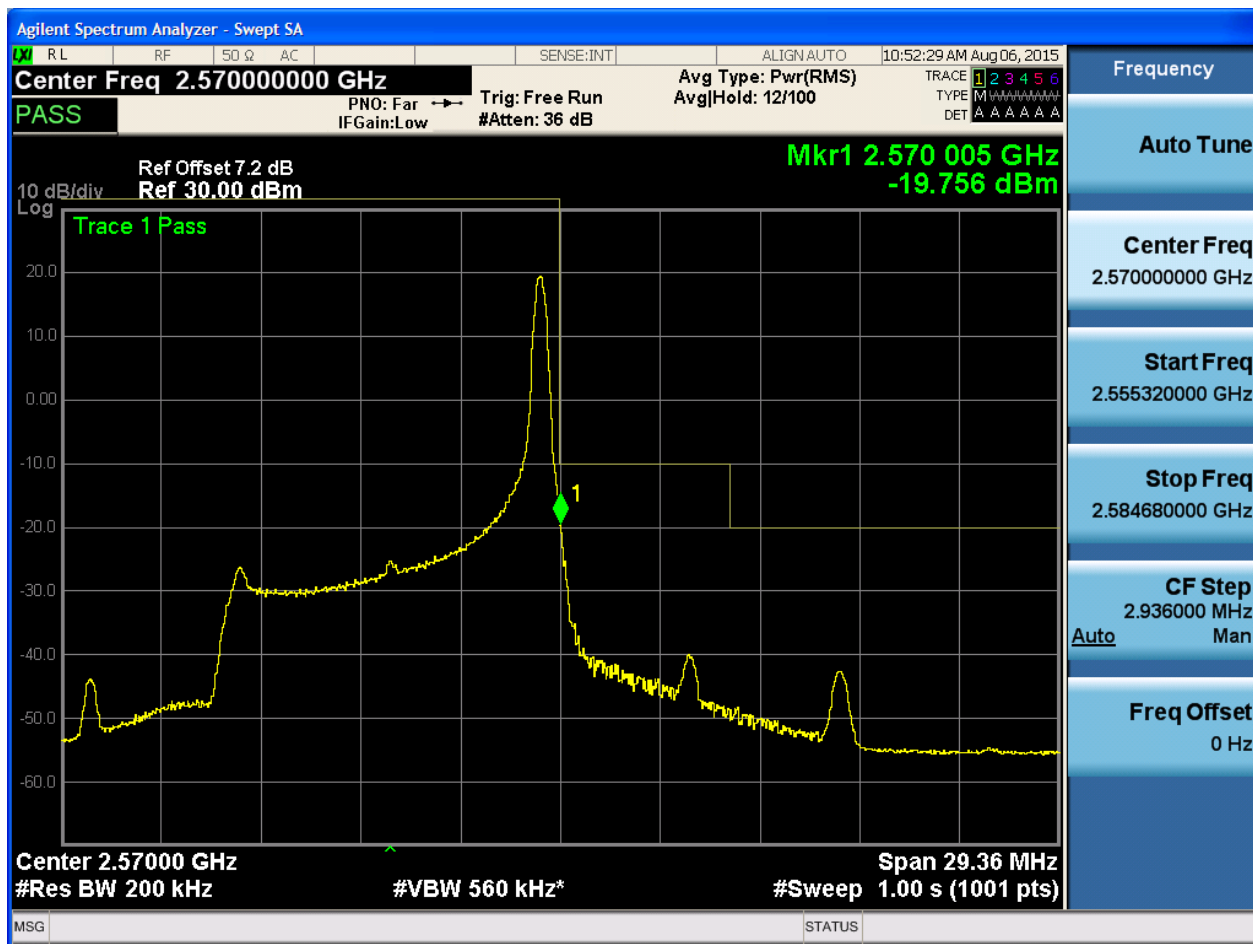
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0



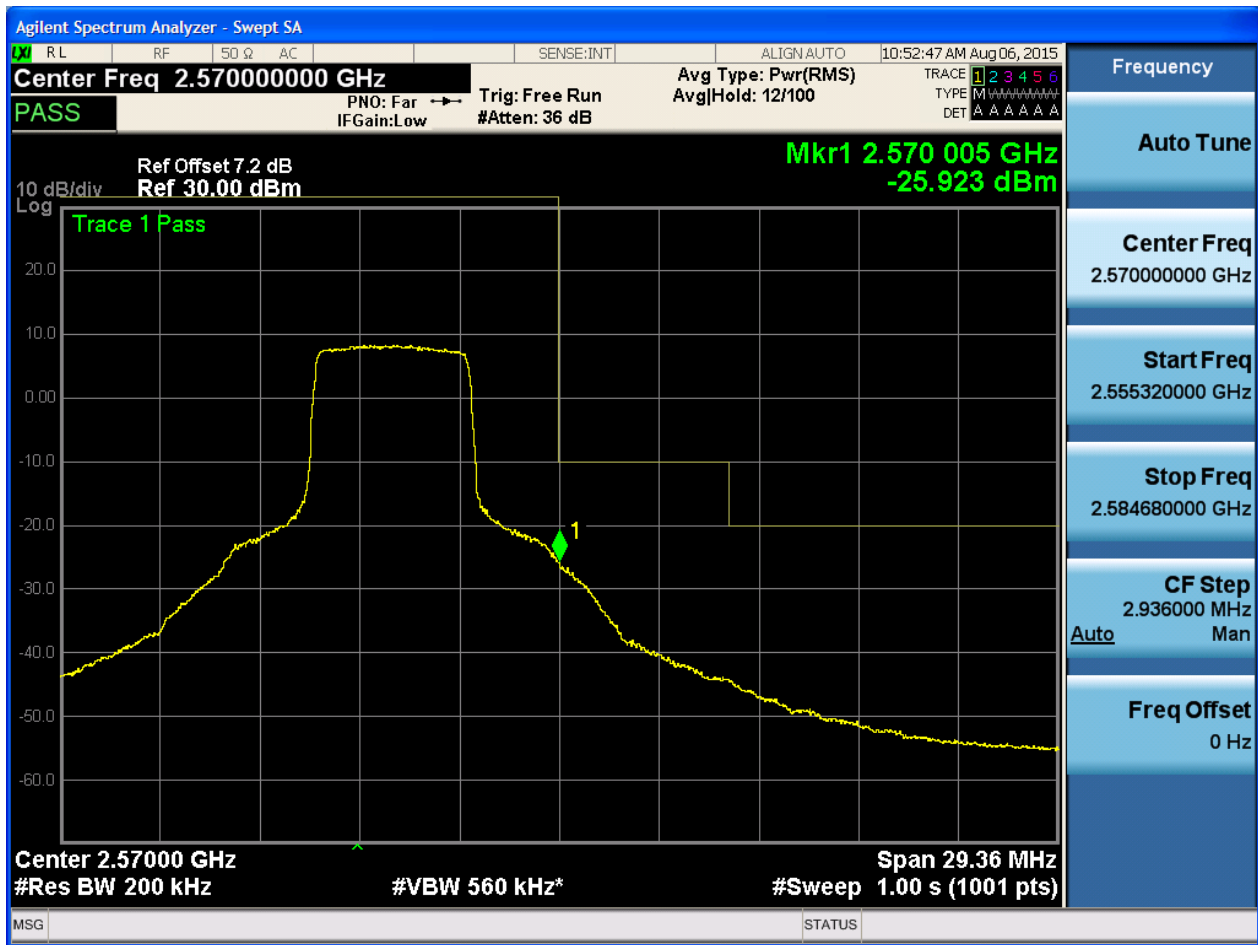


5.1.1.2.2.2 Test RB = RB1#49





5.1.1.2.2.3 Test RB = RB25#13





5.1.1.2.2.4 Test RB = RB50#0

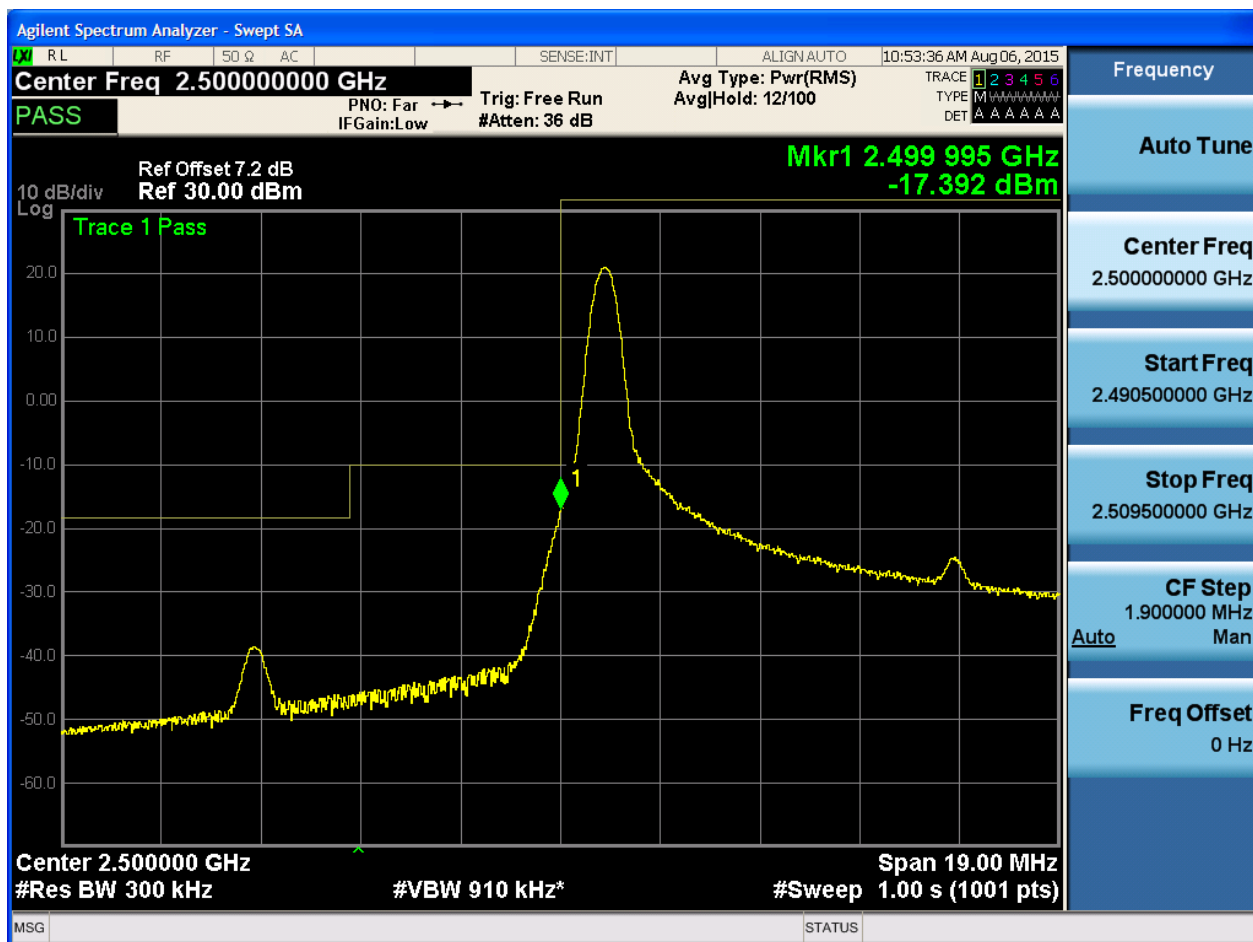




5.1.1.2.3 Test Bandwidth = 15

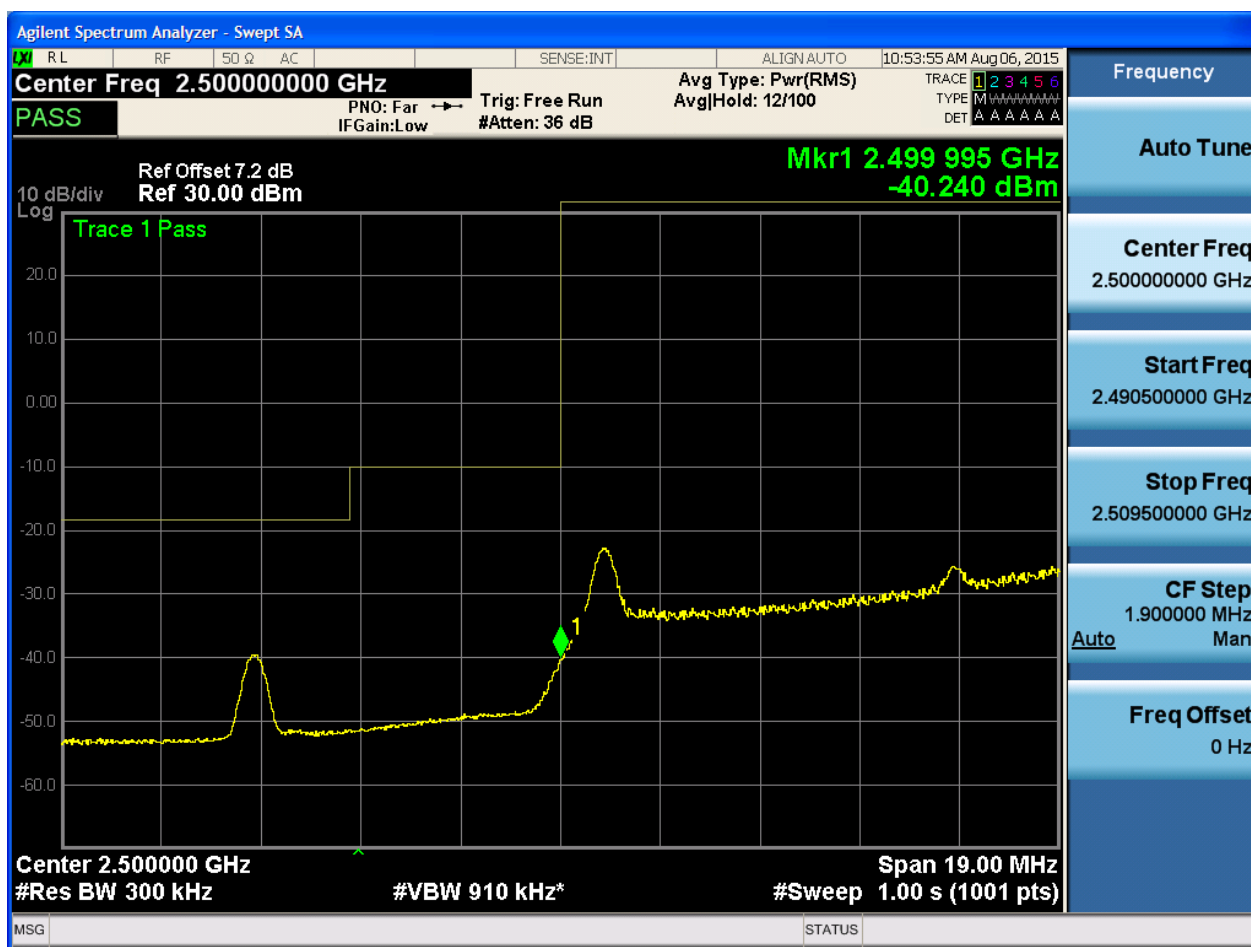
5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





5.1.1.2.3.1.2 Test RB = RB1#74





5.1.1.2.3.1.3 Test RB = RB36#18





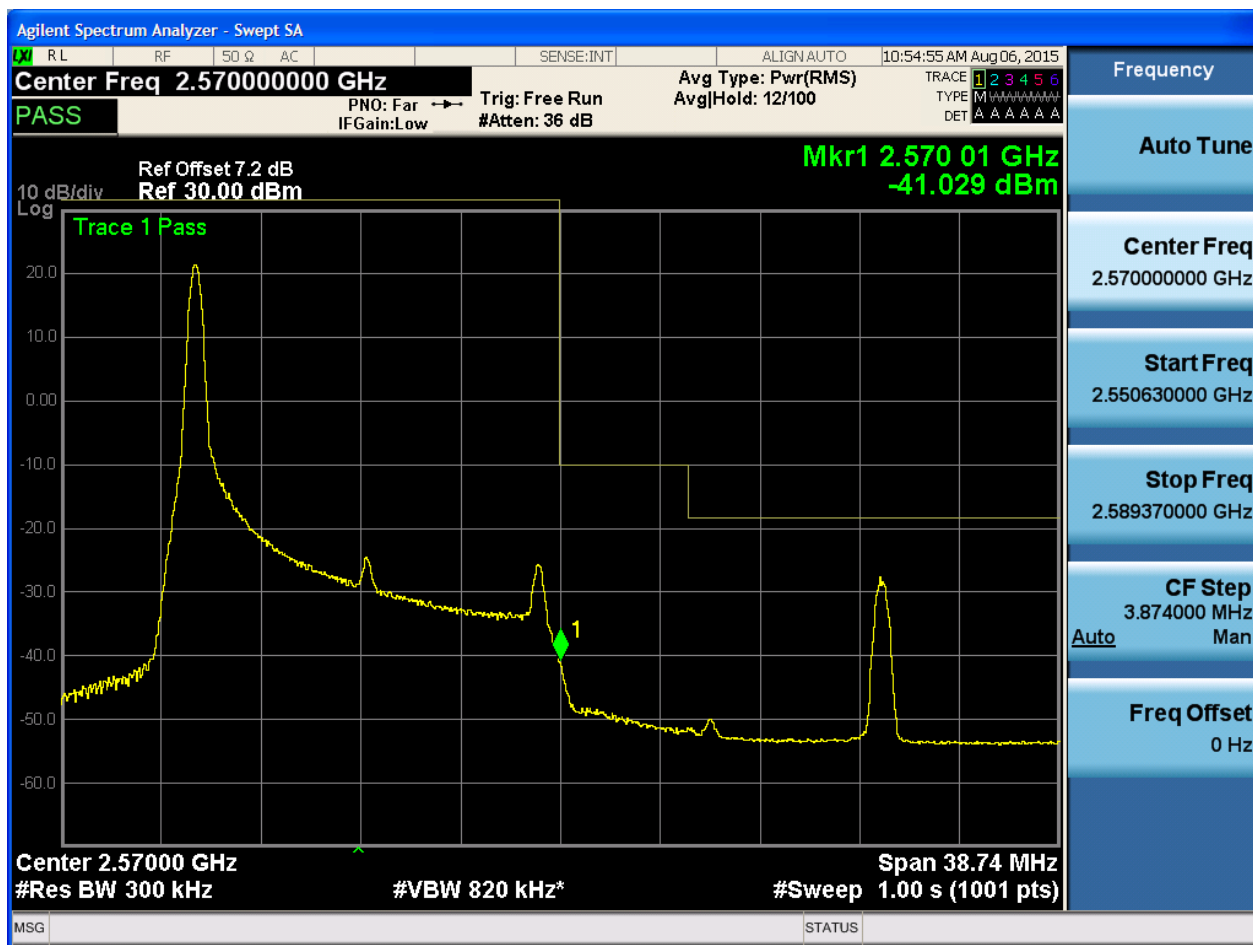
5.1.1.2.3.1.4 Test RB = RB75#0





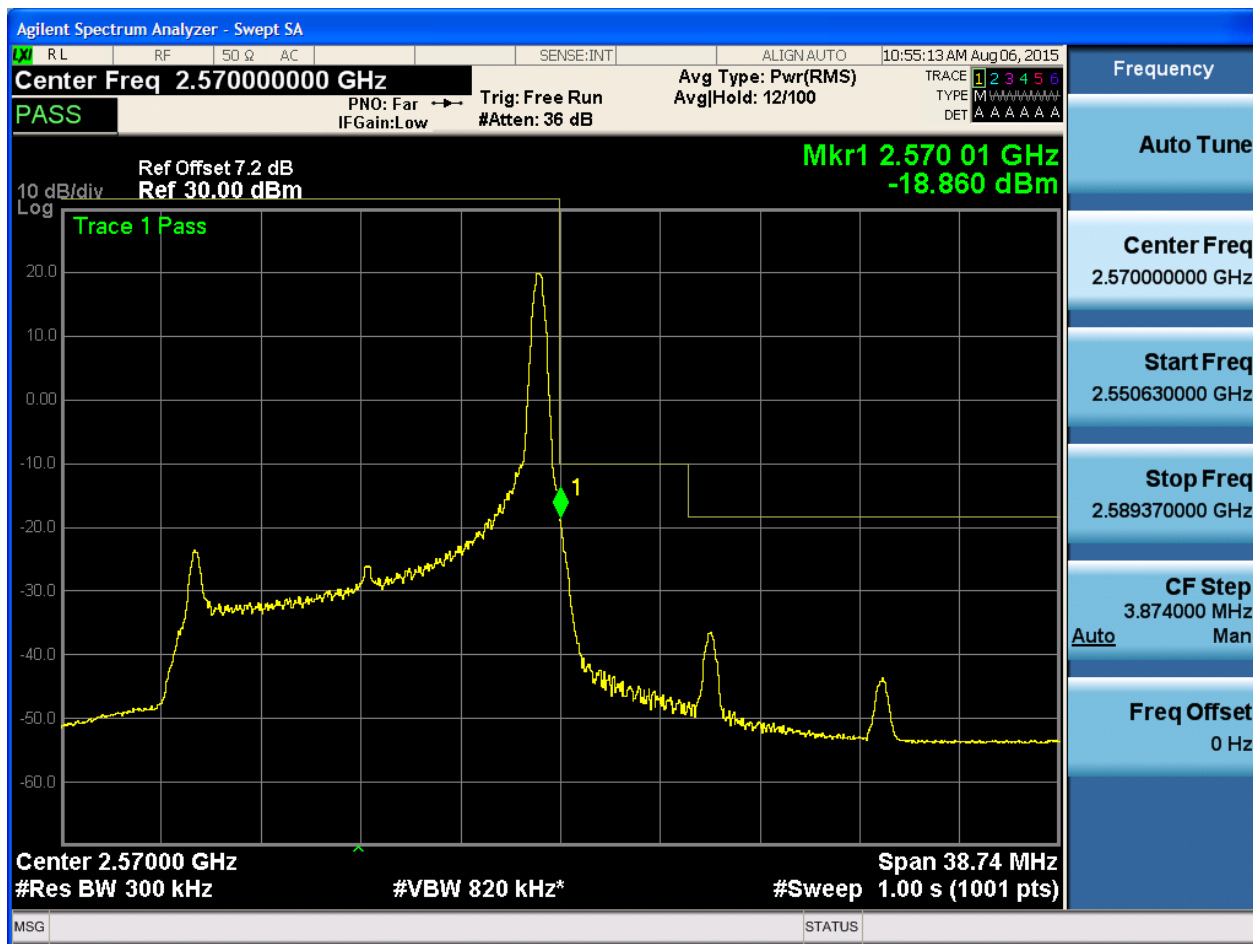
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#74





5.1.1.2.3.2.3 Test RB = RB36#18





5.1.1.2.3.2.4 Test RB = RB75#0

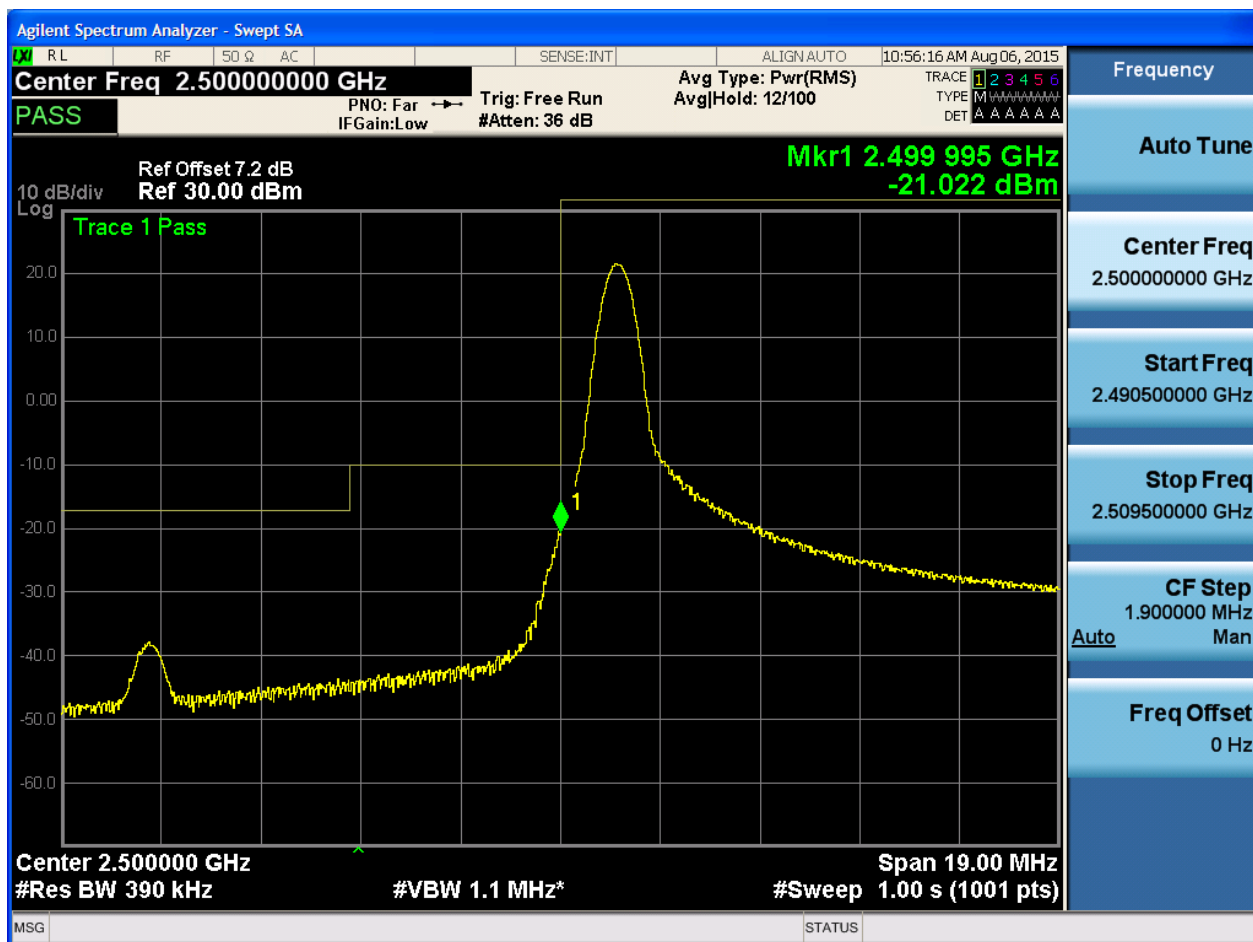




5.1.1.2.4 Test Bandwidth = 20

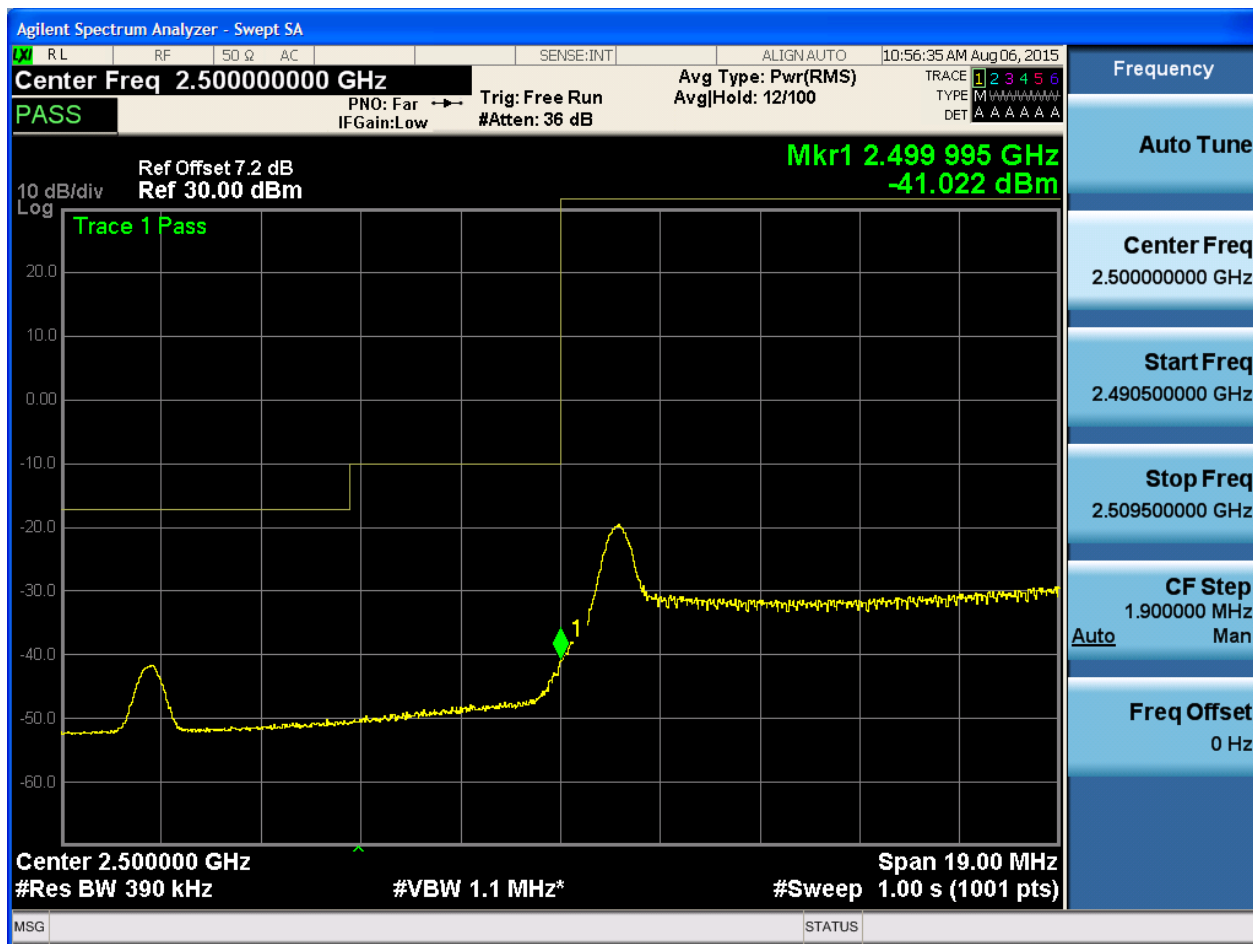
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



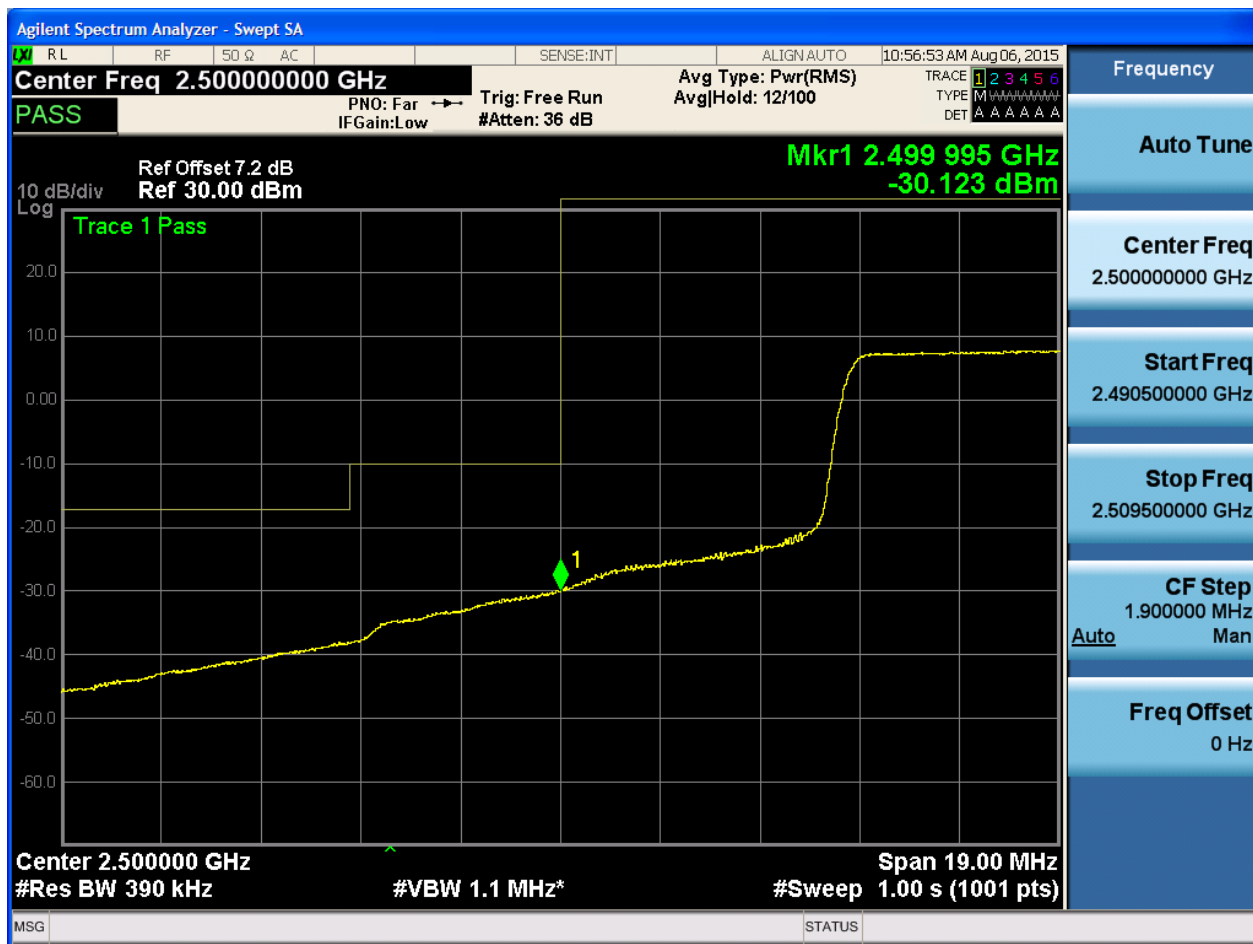


5.1.1.2.4.1.2 Test RB = RB1#99



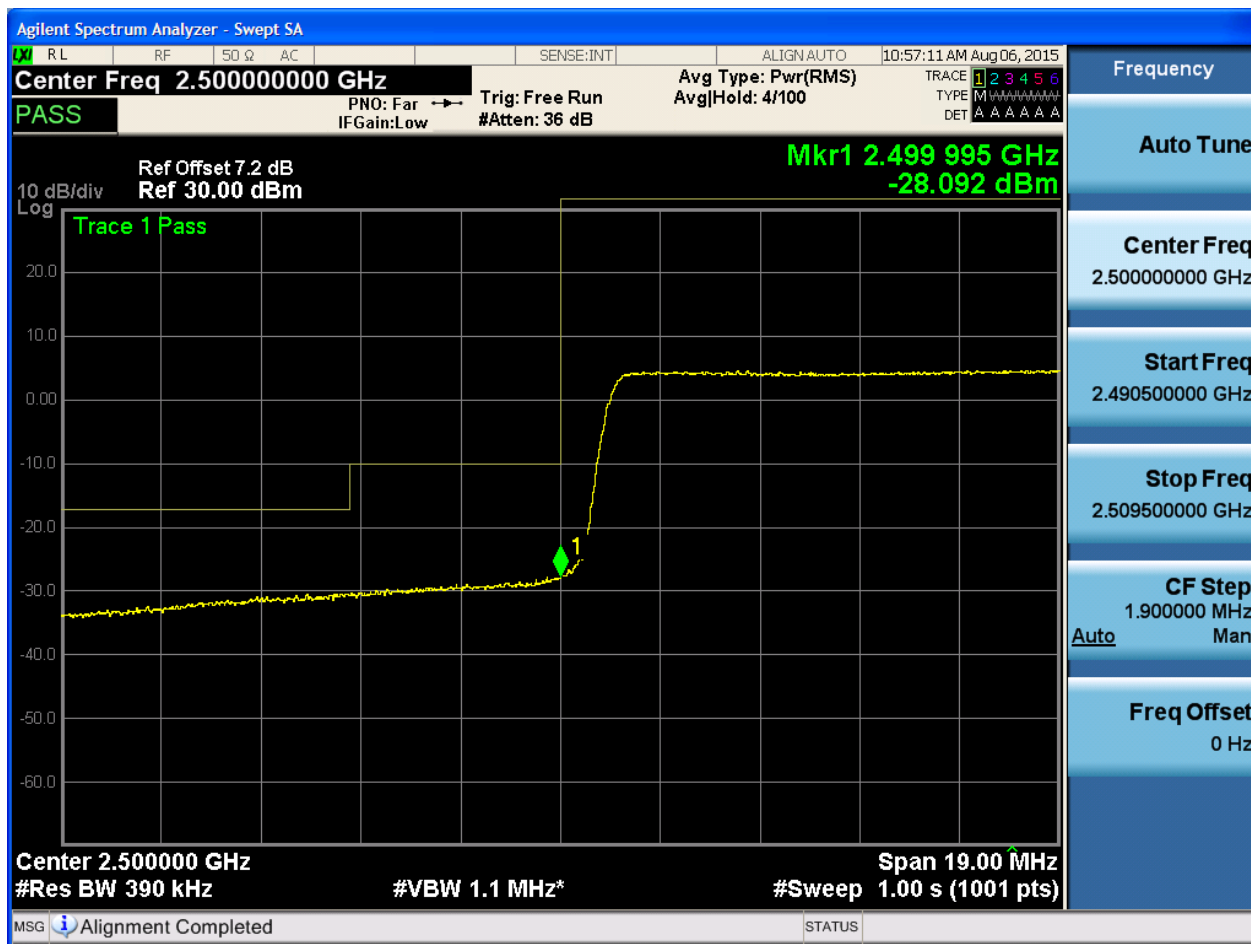


5.1.1.2.4.1.3 Test RB = RB50#25





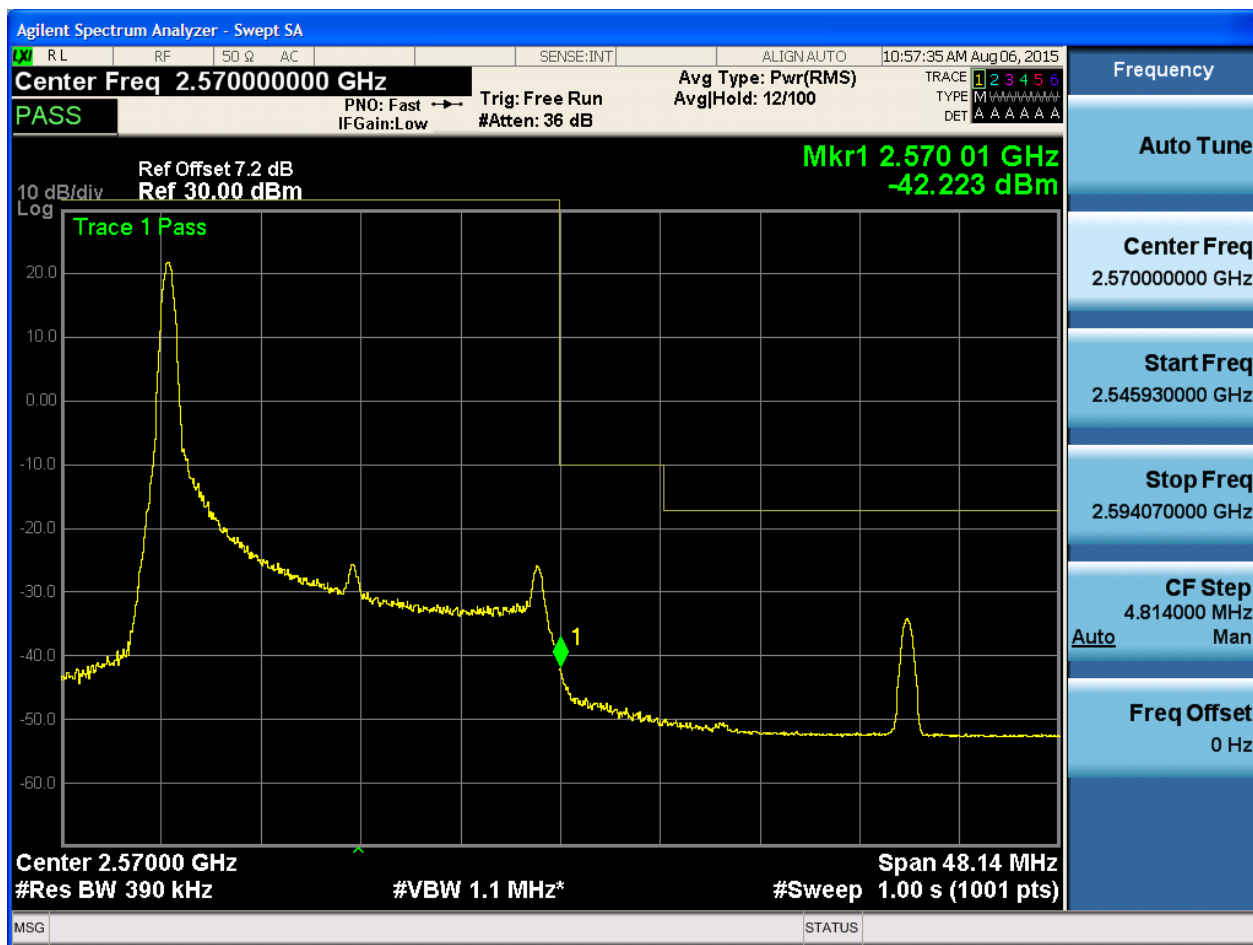
5.1.1.2.4.1.4 Test RB = RB100#0





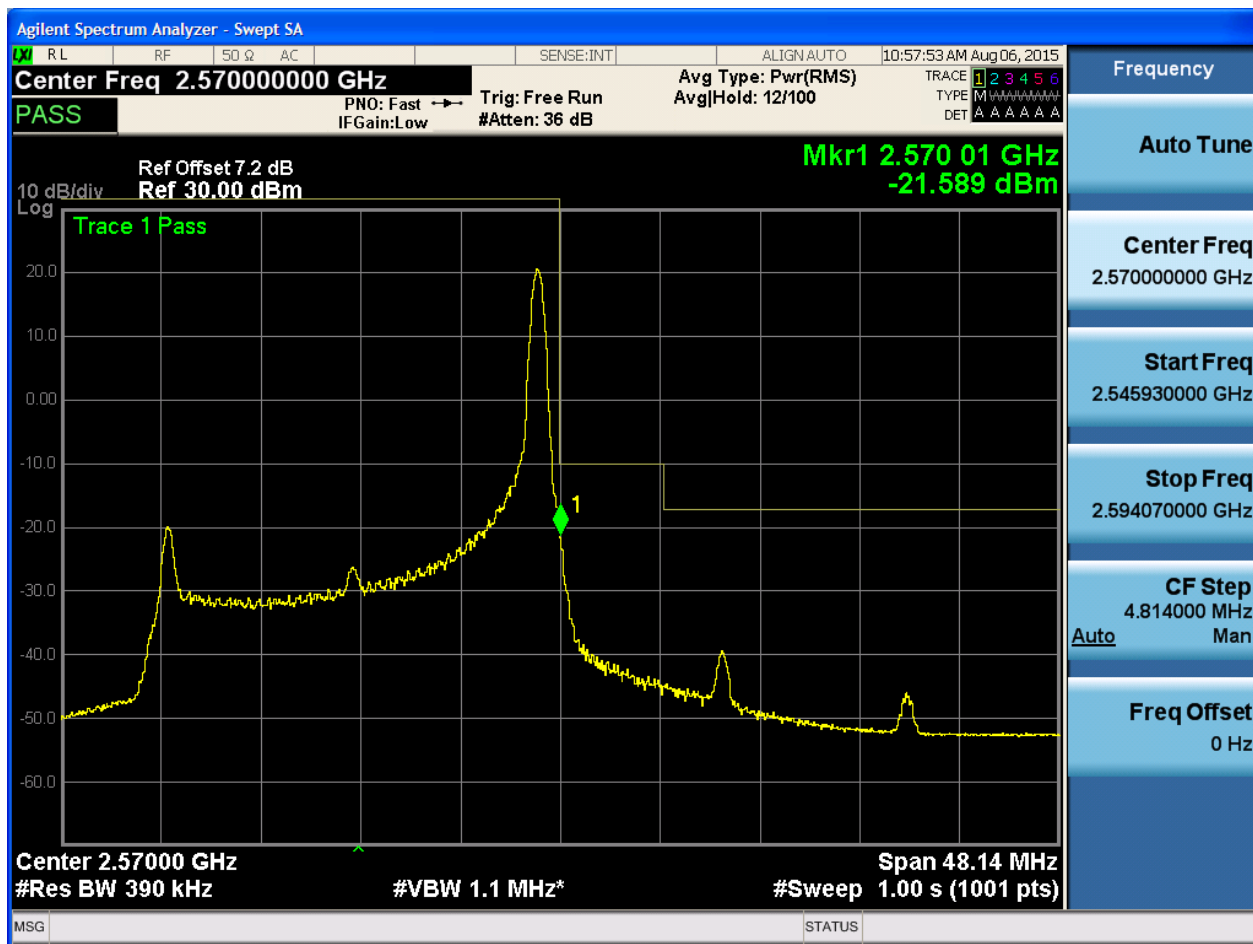
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0





5.1.1.2.4.2.2 Test RB = RB1#99





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 10:58:11 AM Aug 06, 2015

Center Freq 2.570000000 GHz Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
PASS PNO: Fast IFGain: Low Trig: Free Run AvgHold: 12/100 TYPE M DET A A A A A A

Ref Offset 7.2 dB Mkr1 2.570 01 GHz
Ref 30.00 dBm -29.037 dBm

10 dB/div Log

Trace 1 Pass

Center 2.57000 GHz Span 48.14 MHz
#Res BW 390 kHz #VBW 1.1 MHz* #Sweep 1.00 s (1001 pts)

MSG STATUS



5.1.1.2.4.2.4 Test RB = RB100#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 = BAND7

6.1.1.1 Test Mode = LTE/TM1

6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

