



Appendix for LTE B7



1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Conducted power[dBm]	EIRP(dBm)	Limit [dBm]	Verdict
BAND7	LTE/TM1	5	LCH	RB1#0	21.04	21.74	33	PASS
				RB1#13	21.38	22.08	33	PASS
				RB1#24	20.93	21.63	33	PASS
				RB12#0	20.58	21.28	33	PASS
				RB12#6	20.65	21.35	33	PASS
				RB12#13	20.42	21.12	33	PASS
				RB25#0	20.5	21.2	33	PASS
			MCH	RB1#0	21.72	22.42	33	PASS
				RB1#13	21.9	22.6	33	PASS
				RB1#24	21.42	22.12	33	PASS
				RB12#0	21.11	21.81	33	PASS
				RB12#6	21.12	21.82	33	PASS
				RB12#13	20.85	21.55	33	PASS
				RB25#0	20.94	21.64	33	PASS
			HCH	RB1#0	21.76	22.46	33	PASS
				RB1#13	21.94	22.64	33	PASS
				RB1#24	21.45	22.15	33	PASS
				RB12#0	21.05	21.75	33	PASS
				RB12#6	21.05	21.75	33	PASS
				RB12#13	20.84	21.54	33	PASS
				RB25#0	20.92	21.62	33	PASS
		10	LCH	RB1#0	20.93	21.63	33	PASS
				RB1#25	21.19	21.89	33	PASS
				RB1#49	20.78	21.48	33	PASS
				RB25#0	20.42	21.12	33	PASS
				RB25#13	20.39	21.09	33	PASS
				RB25#25	20.24	20.94	33	PASS
				RB50#0	20.34	21.04	33	PASS
			MCH	RB1#0	21.64	22.34	33	PASS
				RB1#25	21.8	22.5	33	PASS
				RB1#49	21.29	21.99	33	PASS
				RB25#0	20.99	21.69	33	PASS
				RB25#13	21	21.7	33	PASS
				RB25#25	20.78	21.48	33	PASS
				RB50#0	20.85	21.55	33	PASS
			HCH	RB1#0	21.68	22.38	33	PASS
				RB1#25	21.98	22.68	33	PASS

				RB1#49	21.42	22.12	33	PASS
				RB25#0	20.91	21.61	33	PASS
				RB25#13	20.92	21.62	33	PASS
				RB25#25	20.76	21.46	33	PASS
				RB50#0	20.84	21.54	33	PASS
		15	LCH	RB1#0	20.75	21.45	33	PASS
				RB1#38	21.11	21.81	33	PASS
				RB1#74	20.7	21.4	33	PASS
				RB36#0	20.21	20.91	33	PASS
				RB36#18	20.28	20.98	33	PASS
				RB36#39	20.2	20.9	33	PASS
				RB75#0	20.14	20.84	33	PASS
			MCH	RB1#0	21.37	22.07	33	PASS
				RB1#38	21.68	22.38	33	PASS
				RB1#74	20.93	21.63	33	PASS
				RB36#0	20.9	21.6	33	PASS
				RB36#18	20.9	21.6	33	PASS
				RB36#39	20.6	21.3	33	PASS
				RB75#0	20.69	21.39	33	PASS
			HCH	RB1#0	21.33	22.03	33	PASS
				RB1#38	21.87	22.57	33	PASS
				RB1#74	21.24	21.94	33	PASS
				RB36#0	20.79	21.49	33	PASS
				RB36#18	20.94	21.64	33	PASS
				RB36#39	20.74	21.44	33	PASS
				RB75#0	20.79	21.49	33	PASS
		20	LCH	RB1#0	21.08	21.78	33	PASS
				RB1#50	21.19	21.89	33	PASS
				RB1#99	21.25	21.95	33	PASS
				RB50#0	20.25	20.95	33	PASS
				RB50#25	20.3	21	33	PASS
				RB50#50	20.25	20.95	33	PASS
				RB100#0	20.19	20.89	33	PASS
			MCH	RB1#0	21.71	22.41	33	PASS
				RB1#50	21.71	22.41	33	PASS
				RB1#99	21.23	21.93	33	PASS
				RB50#0	20.8	21.5	33	PASS
				RB50#25	20.8	21.5	33	PASS
				RB50#50	20.6	21.3	33	PASS
				RB100#0	20.69	21.39	33	PASS
			HCH	RB1#0	21.5	22.2	33	PASS

	LTE/TM2			RB1#50	21.95	22.65	33	PASS
				RB1#99	21.51	22.21	33	PASS
				RB50#0	20.79	21.49	33	PASS
				RB50#25	20.94	21.64	33	PASS
				RB50#50	20.81	21.51	33	PASS
				RB100#0	20.76	21.46	33	PASS
		5	LCH	RB1#0	20.21	20.91	33	PASS
				RB1#13	20.49	21.19	33	PASS
				RB1#24	20.01	20.71	33	PASS
				RB12#0	20.29	20.99	33	PASS
				RB12#6	20.36	21.06	33	PASS
				RB12#13	20.13	20.83	33	PASS
				RB25#0	20.22	20.92	33	PASS
			MCH	RB1#0	20.99	21.69	33	PASS
				RB1#13	21.01	21.71	33	PASS
				RB1#24	20.54	21.24	33	PASS
				RB12#0	20.89	21.59	33	PASS
				RB12#6	20.88	21.58	33	PASS
				RB12#13	20.62	21.32	33	PASS
				RB25#0	20.67	21.37	33	PASS
			HCH	RB1#0	21.06	21.76	33	PASS
				RB1#13	21.27	21.97	33	PASS
				RB1#24	20.8	21.5	33	PASS
				RB12#0	20.97	21.67	33	PASS
				RB12#6	20.94	21.64	33	PASS
				RB12#13	20.76	21.46	33	PASS
				RB25#0	20.78	21.48	33	PASS
		10	LCH	RB1#0	20.16	20.86	33	PASS
				RB1#25	20.24	20.94	33	PASS
				RB1#49	19.81	20.51	33	PASS
				RB25#0	20.23	20.93	33	PASS
				RB25#13	20.15	20.85	33	PASS
				RB25#25	20	20.7	33	PASS
				RB50#0	20.1	20.8	33	PASS
			MCH	RB1#0	20.8	21.5	33	PASS
				RB1#25	20.83	21.53	33	PASS
				RB1#49	20.38	21.08	33	PASS
				RB25#0	20.84	21.54	33	PASS
				RB25#13	20.73	21.43	33	PASS
				RB25#25	20.56	21.26	33	PASS
				RB50#0	20.64	21.34	33	PASS

			HCH	RB1#0	21.04	21.74	33	PASS
				RB1#25	21.28	21.98	33	PASS
				RB1#49	20.69	21.39	33	PASS
				RB25#0	20.87	21.57	33	PASS
				RB25#13	20.88	21.58	33	PASS
				RB25#25	20.72	21.42	33	PASS
				RB50#0	20.82	21.52	33	PASS
		15	LCH	RB1#0	19.85	20.55	33	PASS
				RB1#38	20.24	20.94	33	PASS
				RB1#74	19.84	20.54	33	PASS
				RB36#0	20.1	20.8	33	PASS
				RB36#18	20.16	20.86	33	PASS
				RB36#39	20.14	20.84	33	PASS
				RB75#0	20.04	20.74	33	PASS
			MCH	RB1#0	20.72	21.42	33	PASS
				RB1#38	20.95	21.65	33	PASS
				RB1#74	20.25	20.95	33	PASS
				RB36#0	20.8	21.5	33	PASS
				RB36#18	20.77	21.47	33	PASS
				RB36#39	20.48	21.18	33	PASS
				RB75#0	20.55	21.25	33	PASS
			HCH	RB1#0	20.62	21.32	33	PASS
				RB1#38	21.22	21.92	33	PASS
				RB1#74	20.54	21.24	33	PASS
				RB36#0	20.71	21.41	33	PASS
				RB36#18	20.94	21.64	33	PASS
				RB36#39	20.76	21.46	33	PASS
				RB75#0	20.83	21.53	33	PASS
		20	LCH	RB1#0	20.4	21.1	33	PASS
				RB1#50	20.56	21.26	33	PASS
				RB1#99	20.63	21.33	33	PASS
				RB50#0	20.26	20.96	33	PASS
				RB50#25	20.22	20.92	33	PASS
				RB50#50	20.25	20.95	33	PASS
				RB100#0	20.21	20.91	33	PASS
			MCH	RB1#0	21	21.7	33	PASS
				RB1#50	21.01	21.71	33	PASS
				RB1#99	20.45	21.15	33	PASS
				RB50#0	20.72	21.42	33	PASS
				RB50#25	20.71	21.41	33	PASS
				RB50#50	20.5	21.2	33	PASS

				RB100#0	20.63	21.33	33	PASS
			HCH	RB1#0	20.72	21.42	33	PASS
				RB1#50	21.3	22	33	PASS
				RB1#99	20.82	21.52	33	PASS
				RB50#0	20.81	21.51	33	PASS
				RB50#25	20.9	21.6	33	PASS
				RB50#50	20.77	21.47	33	PASS
				RB100#0	20.77	21.47	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: SET Span=1.5*OBW

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

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector:RMS



2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
BAND7	LTE/TM1	5	LCH	RB1#0	4.62	13	PASS
				RB1#13	4.34	13	PASS
				RB1#24	4.66	13	PASS
				RB12#0	5.42	13	PASS
				RB12#6	5.45	13	PASS
				RB12#13	5.51	13	PASS
				RB25#0	5.67	13	PASS
			MCH	RB1#0	4.61	13	PASS
				RB1#13	4.48	13	PASS
				RB1#24	4.78	13	PASS
				RB12#0	4.89	13	PASS
				RB12#6	4.79	13	PASS
				RB12#13	5.01	13	PASS
				RB25#0	5.58	13	PASS
			HCH	RB1#0	4.5	13	PASS
				RB1#13	4.15	13	PASS
				RB1#24	4.34	13	PASS
				RB12#0	4.79	13	PASS
				RB12#6	4.7	13	PASS
				RB12#13	4.82	13	PASS
				RB25#0	5.19	13	PASS
		10	LCH	RB1#0	4.57	13	PASS
				RB1#25	4.44	13	PASS
				RB1#49	4.75	13	PASS
				RB25#0	5.55	13	PASS
				RB25#13	5.54	13	PASS
				RB25#25	5.72	13	PASS
				RB50#0	6.14	13	PASS
			MCH	RB1#0	4.34	13	PASS
				RB1#25	4.28	13	PASS
				RB1#49	4.58	13	PASS
				RB25#0	5.15	13	PASS
				RB25#13	5.04	13	PASS
				RB25#25	5.17	13	PASS
				RB50#0	5.41	13	PASS
			HCH	RB1#0	4.25	13	PASS
				RB1#25	4.04	13	PASS
				RB1#49	4.26	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	4.96	13	PASS
				RB25#13	4.87	13	PASS
				RB25#25	5.02	13	PASS
				RB50#0	5.72	13	PASS
		15	LCH	RB1#0	4.52	13	PASS
				RB1#38	4.34	13	PASS
				RB1#74	4.81	13	PASS
				RB36#0	5.52	13	PASS
				RB36#18	5.47	13	PASS
				RB36#39	5.7	13	PASS
				RB75#0	6.01	13	PASS
			MCH	RB1#0	4.75	13	PASS
				RB1#38	4.43	13	PASS
				RB1#74	4.84	13	PASS
				RB36#0	5.29	13	PASS
				RB36#18	5.13	13	PASS
				RB36#39	5.25	13	PASS
				RB75#0	5.74	13	PASS
			HCH	RB1#0	4.59	13	PASS
				RB1#38	4.04	13	PASS
				RB1#74	4.4	13	PASS
				RB36#0	5.1	13	PASS
				RB36#18	4.96	13	PASS
				RB36#39	5.1	13	PASS
				RB75#0	5.71	13	PASS
		20	LCH	RB1#0	4.59	13	PASS
				RB1#50	4.4	13	PASS
				RB1#99	4.65	13	PASS
				RB50#0	5.36	13	PASS
				RB50#25	5.4	13	PASS
				RB50#50	5.57	13	PASS
				RB100#0	6	13	PASS
			MCH	RB1#0	4.84	13	PASS
				RB1#50	4.36	13	PASS
				RB1#99	4.8	13	PASS
				RB50#0	5.32	13	PASS
				RB50#25	5.21	13	PASS
				RB50#50	5.25	13	PASS
				RB100#0	5.83	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	4.84	13	PASS
				RB1#50	4.23	13	PASS
				RB1#99	4.61	13	PASS
				RB50#0	5.09	13	PASS
				RB50#25	5.07	13	PASS
				RB50#50	5.22	13	PASS
				RB100#0	5.85	13	PASS
		5	LCH	RB1#0	5.07	13	PASS
				RB1#13	4.91	13	PASS
				RB1#24	5.27	13	PASS
				RB12#0	5.58	13	PASS
				RB12#6	5.57	13	PASS
				RB12#13	5.67	13	PASS
				RB25#0	5.99	13	PASS
			MCH	RB1#0	4.8	13	PASS
				RB1#13	4.61	13	PASS
				RB1#24	4.88	13	PASS
				RB12#0	5.12	13	PASS
				RB12#6	5.01	13	PASS
				RB12#13	5.16	13	PASS
				RB25#0	5.62	13	PASS
			HCH	RB1#0	4.58	13	PASS
				RB1#13	4.37	13	PASS
				RB1#24	4.46	13	PASS
				RB12#0	4.94	13	PASS
				RB12#6	4.83	13	PASS
				RB12#13	4.94	13	PASS
				RB25#0	5.66	13	PASS
		10	LCH	RB1#0	5.07	13	PASS
				RB1#25	5.14	13	PASS
				RB1#49	5.2	13	PASS
				RB25#0	5.67	13	PASS
				RB25#13	5.71	13	PASS
				RB25#25	5.77	13	PASS
				RB50#0	6.17	13	PASS
			MCH	RB1#0	4.95	13	PASS
				RB1#25	4.82	13	PASS
				RB1#49	5.15	13	PASS
				RB25#0	5.37	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#13	5.24	13	PASS
				RB25#25	5.36	13	PASS
				RB50#0	5.93	13	PASS
			HCH	RB1#0	4.63	13	PASS
				RB1#25	4.32	13	PASS
				RB1#49	4.59	13	PASS
				RB25#0	5.06	13	PASS
				RB25#13	4.96	13	PASS
				RB25#25	5.09	13	PASS
				RB50#0	5.68	13	PASS
		15	LCH	RB1#0	5.47	13	PASS
				RB1#38	5.03	13	PASS
				RB1#74	5.41	13	PASS
				RB36#0	5.59	13	PASS
				RB36#18	5.55	13	PASS
				RB36#39	5.76	13	PASS
				RB75#0	6.29	13	PASS
			MCH	RB1#0	5.09	13	PASS
				RB1#38	4.69	13	PASS
				RB1#74	5.17	13	PASS
				RB36#0	5.4	13	PASS
				RB36#18	5.19	13	PASS
				RB36#39	5.36	13	PASS
				RB75#0	5.98	13	PASS
			HCH	RB1#0	5.06	13	PASS
				RB1#38	4.44	13	PASS
				RB1#74	4.91	13	PASS
				RB36#0	5.15	13	PASS
				RB36#18	5.03	13	PASS
				RB36#39	5.16	13	PASS
				RB75#0	5.95	13	PASS
		20	LCH	RB1#0	5.52	13	PASS
				RB1#50	4.76	13	PASS
				RB1#99	5.66	13	PASS
				RB50#0	5.5	13	PASS
				RB50#25	5.52	13	PASS
				RB50#50	5.75	13	PASS
				RB100#0	6.15	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#50	4.45	13	PASS
				RB1#99	4.73	13	PASS
				RB50#0	5.43	13	PASS
				RB50#25	5.24	13	PASS
				RB50#50	5.33	13	PASS
				RB100#0	5.98	13	PASS
			HCH	RB1#0	4.61	13	PASS
				RB1#50	4.48	13	PASS
				RB1#99	4.68	13	PASS
				RB50#0	5.22	13	PASS
				RB50#25	5.17	13	PASS
				RB50#50	5.31	13	PASS
				RB100#0	6.17	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

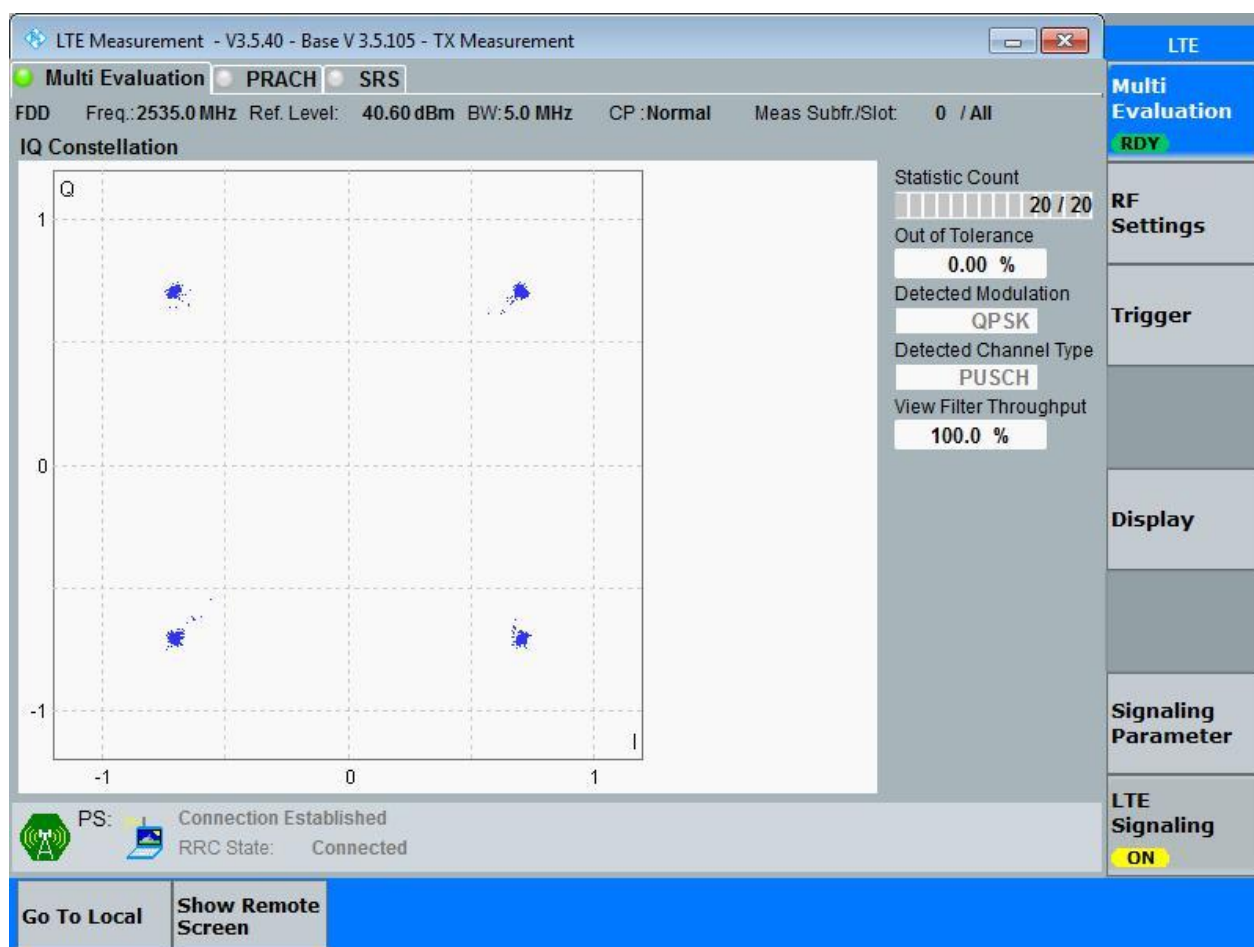
3.1.1 Test Band = BAND7

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

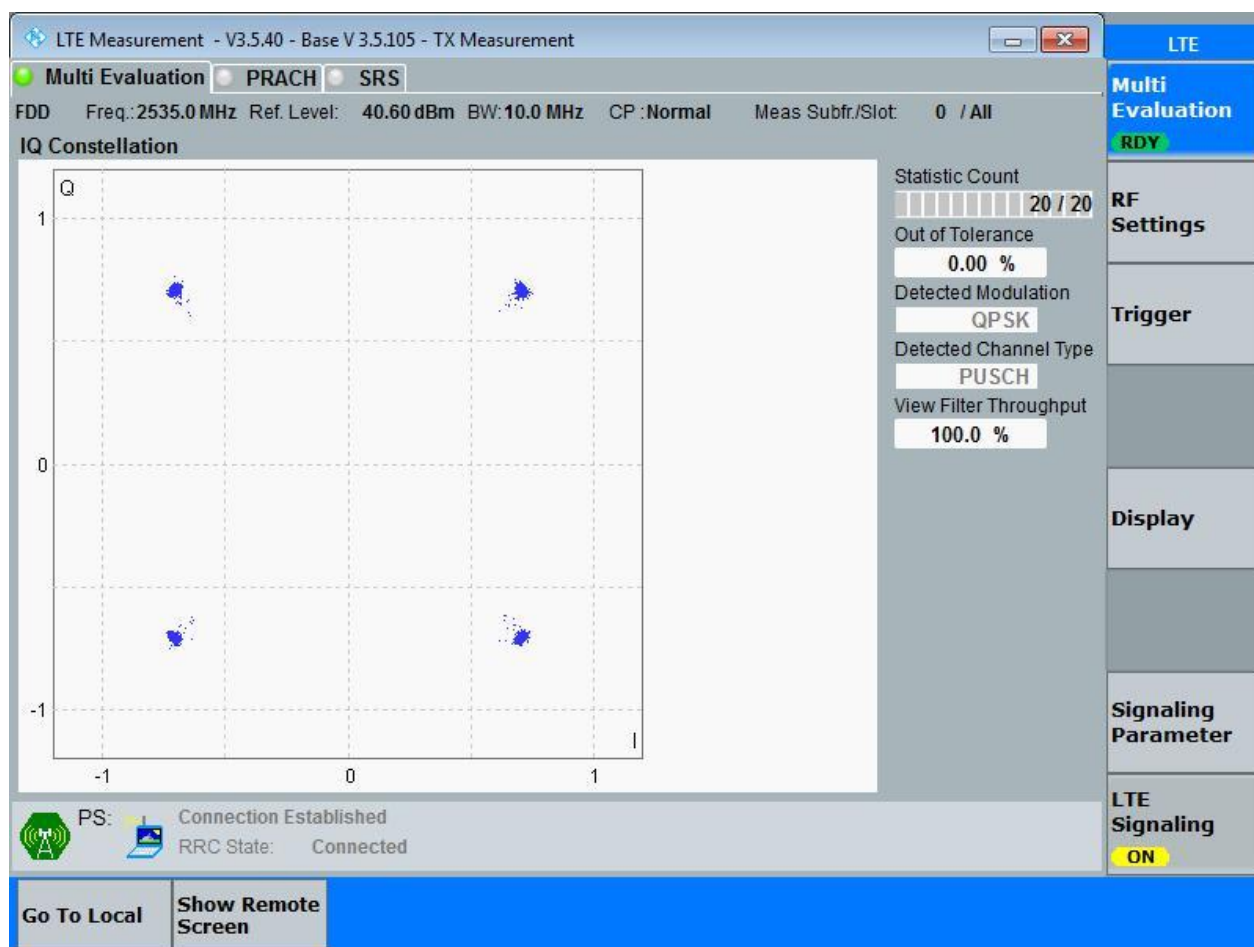
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

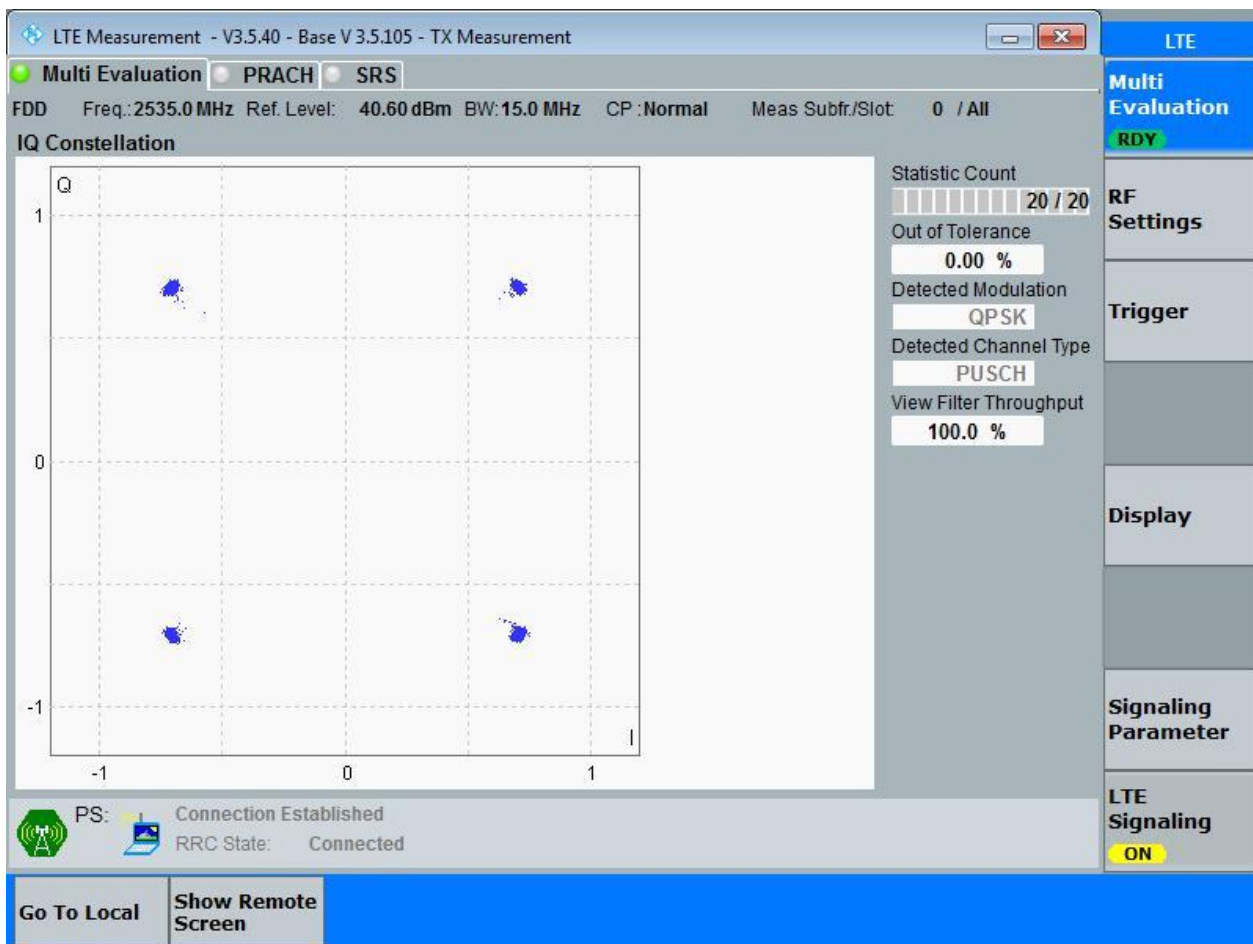
3.1.1.1.2.1.1 Test RB = RB50#0



3.1.1.1.3 Test Bandwidth = 15

3.1.1.1.3.1 Test Channel = MCH

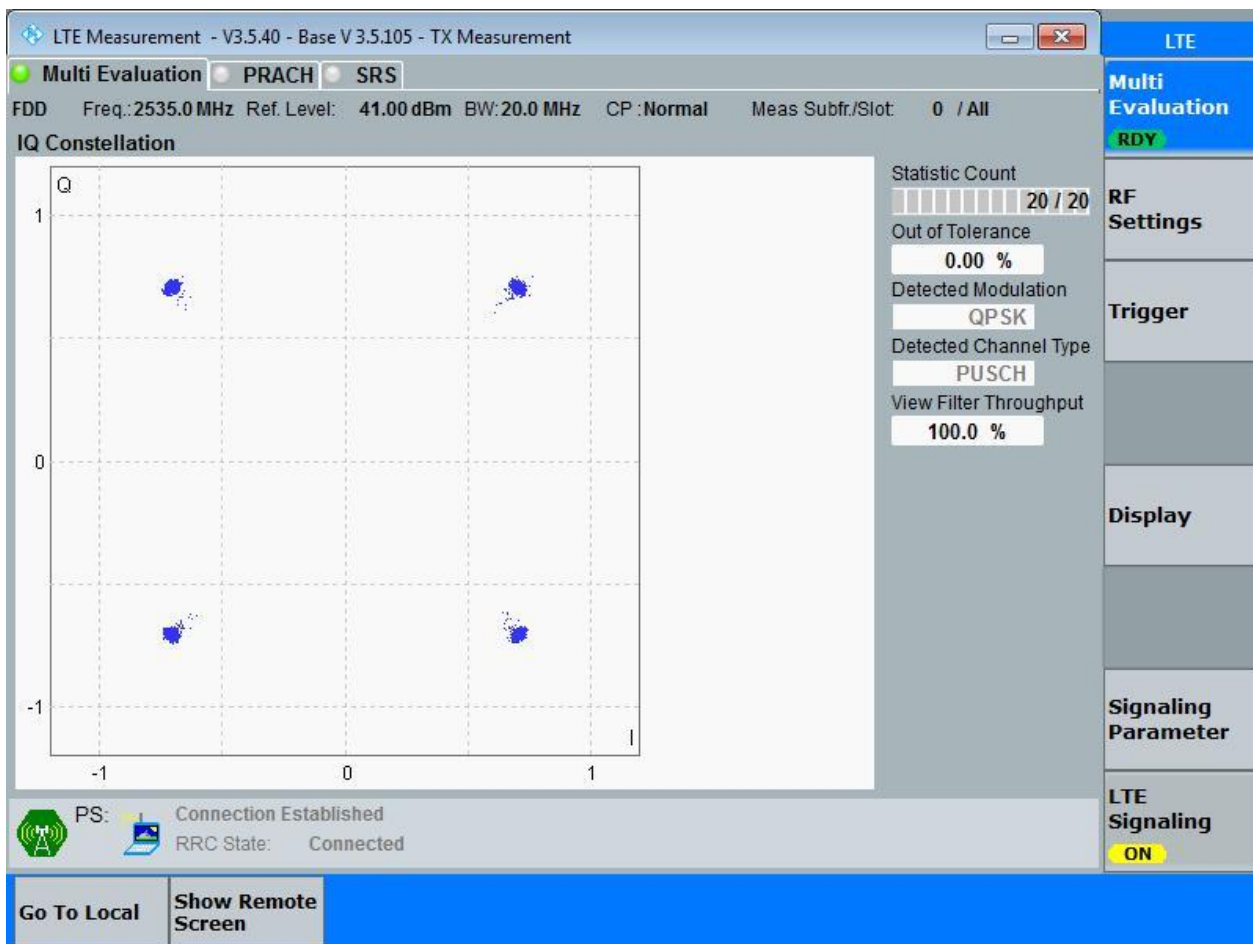
3.1.1.1.3.1.1 Test RB = RB75#0



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

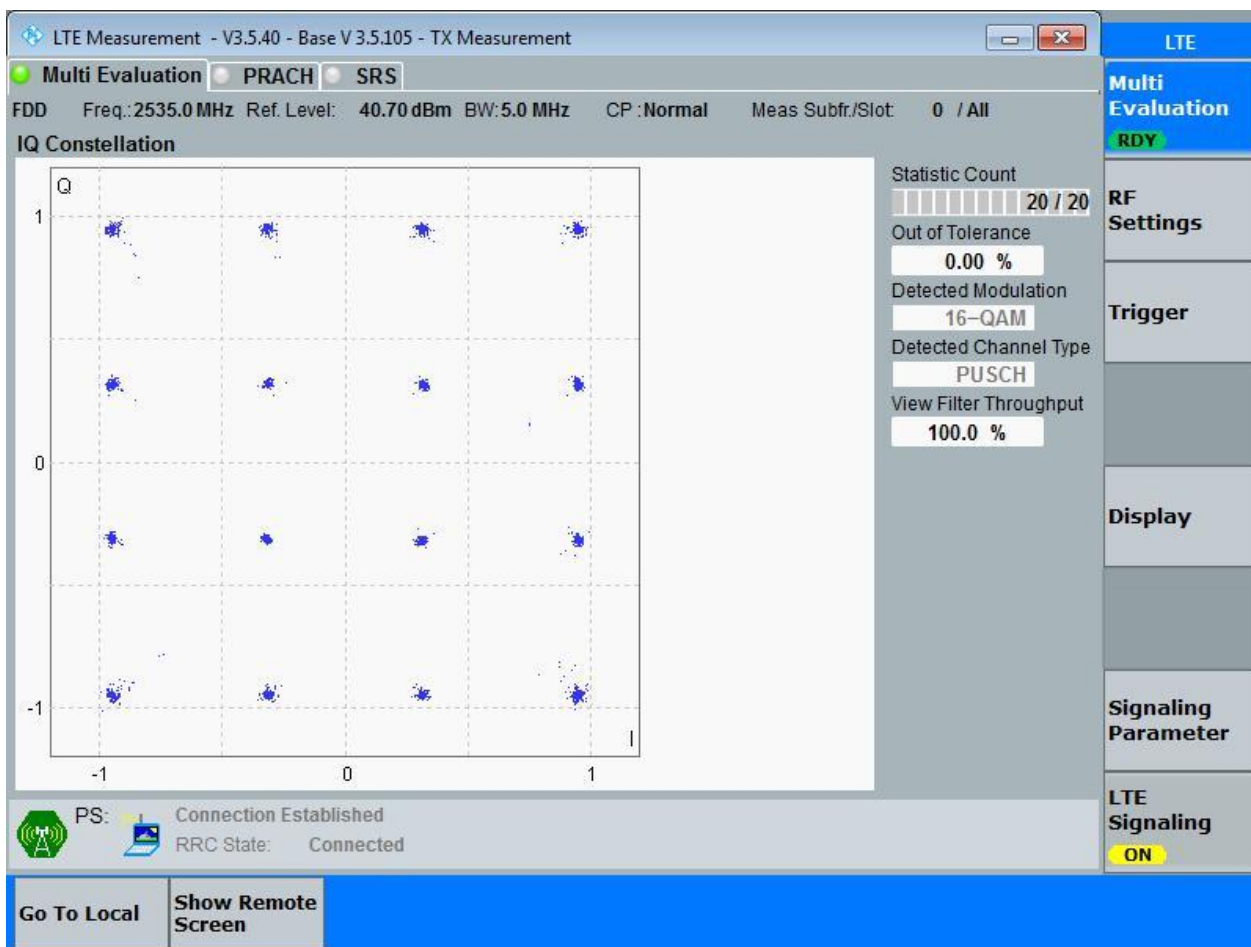


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

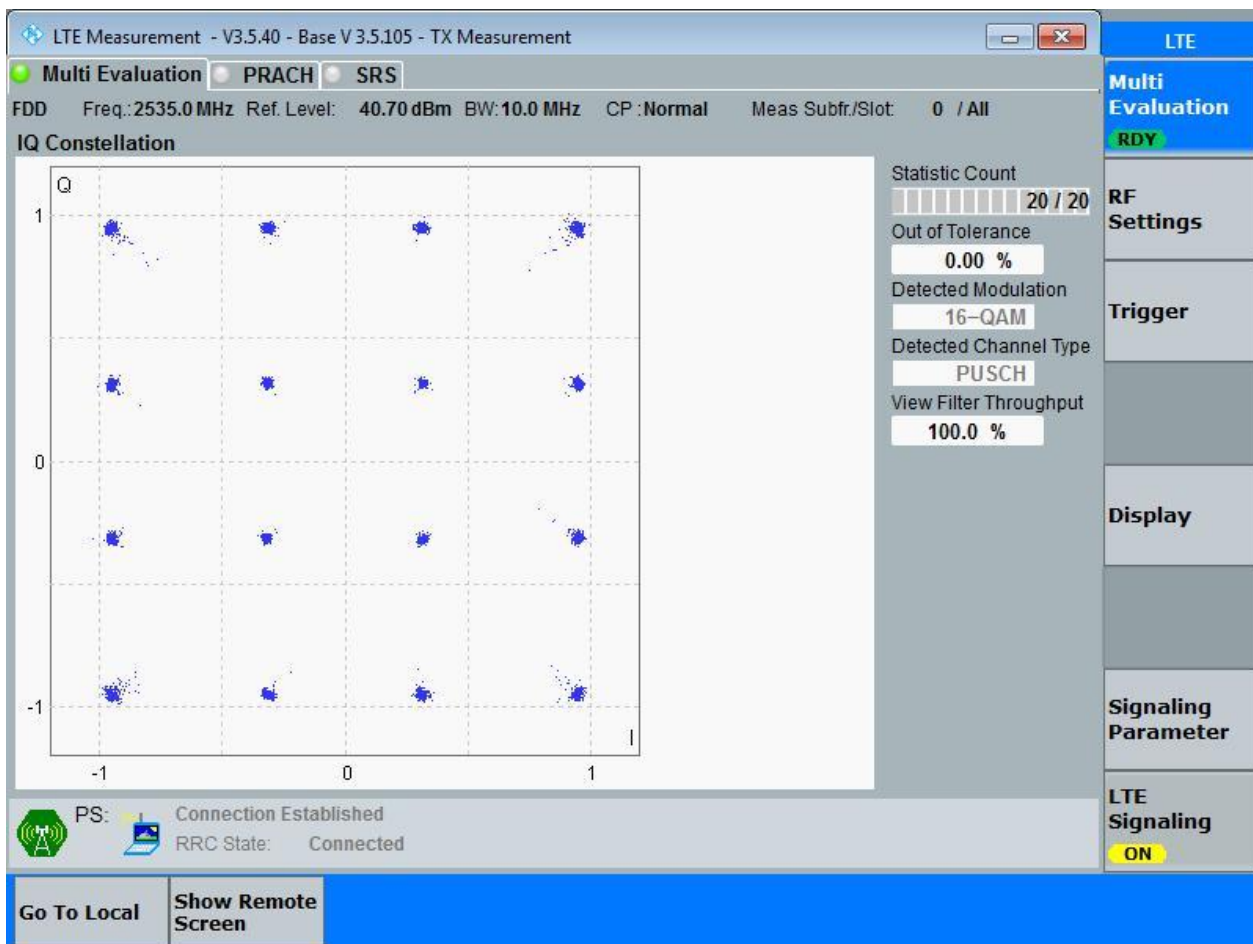
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

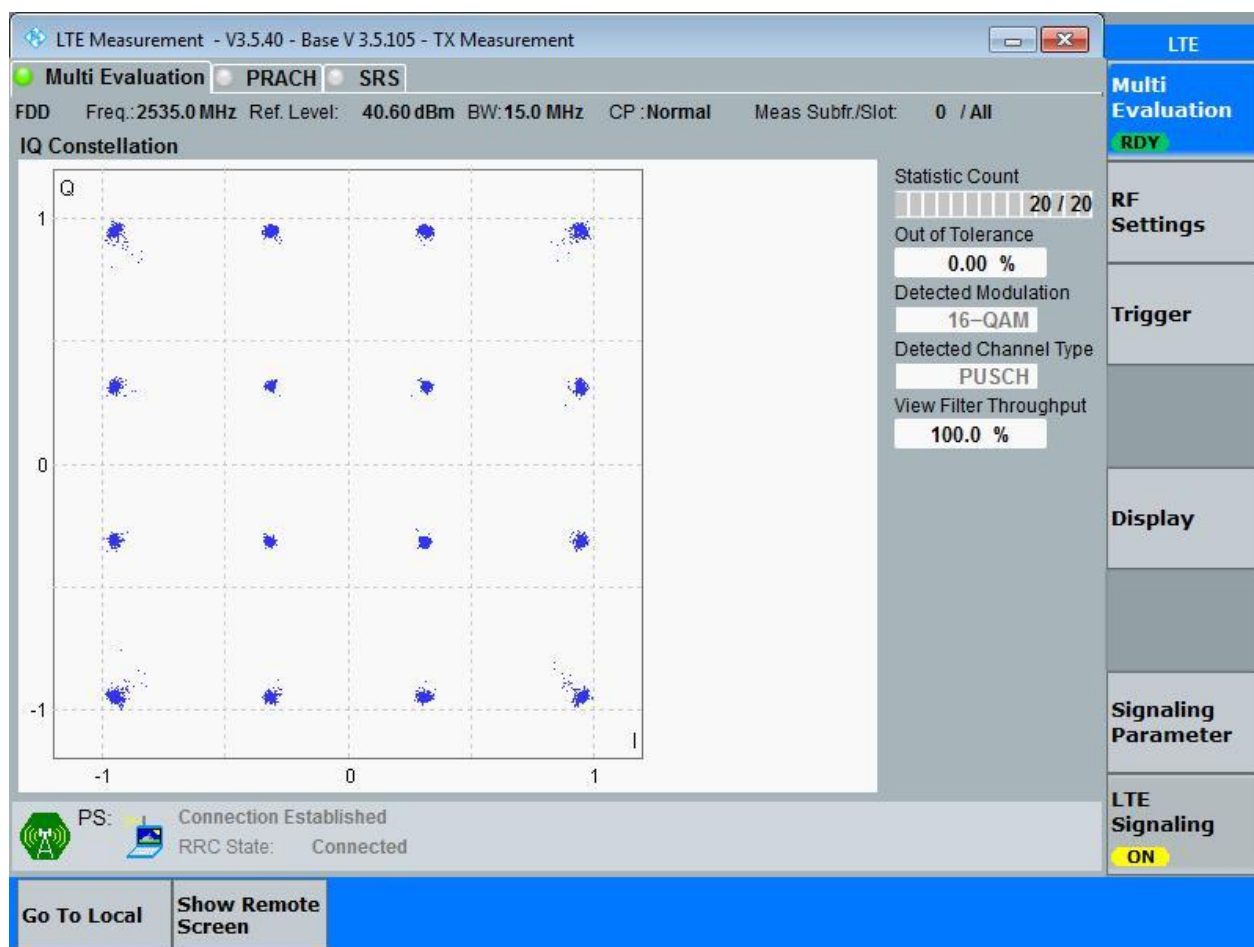
3.1.1.2.2.1.1 Test RB = RB50#0



3.1.1.2.3 Test Bandwidth = 15

3.1.1.2.3.1 Test Channel = MCH

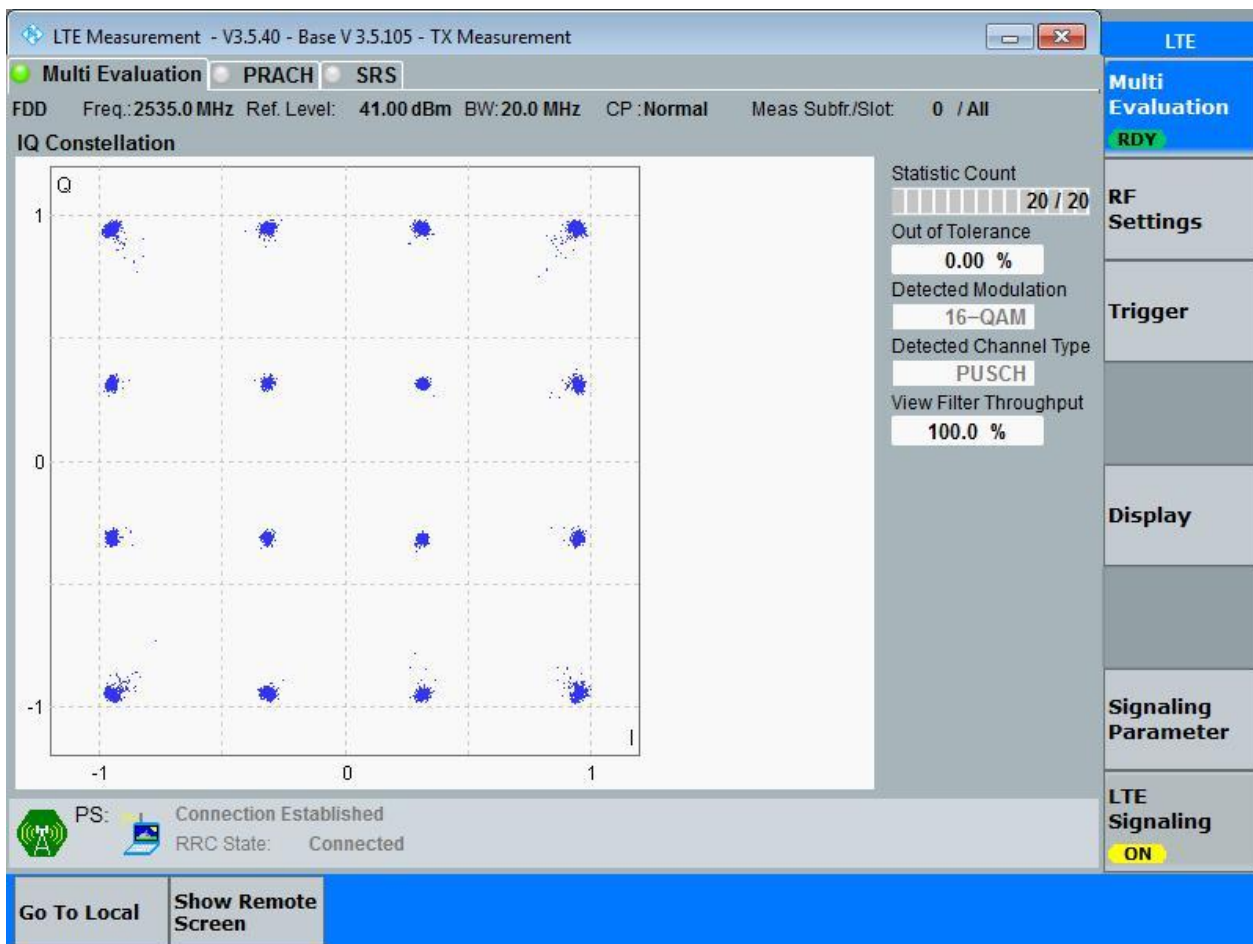
3.1.1.2.3.1.1 Test RB = RB75#0



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





4Appendix_D: Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Bandwidth	Test Channel	Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
	LTE/TM1	5	LCH	RB25#0	4.51	5.16	Pass
			MCH	RB25#0	4.50	4.94	Pass
			HCH	RB25#0	4.50	4.89	Pass
		10	LCH	RB50#0	8.98	9.62	Pass
			MCH	RB50#0	8.98	9.58	Pass
			HCH	RB50#0	8.98	9.60	Pass
		15	LCH	RB75#0	13.47	14.40	Pass
			MCH	RB75#0	13.46	14.42	Pass
			HCH	RB75#0	13.45	14.35	Pass
		20	LCH	RB100#0	17.96	19.10	Pass
			MCH	RB100#0	17.95	19.64	Pass
			HCH	RB100#0	17.96	19.42	Pass
	LTE/TM2	5	LCH	RB25#0	4.50	4.86	Pass
			MCH	RB25#0	4.50	4.92	Pass
			HCH	RB25#0	4.51	5.12	Pass
		10	LCH	RB50#0	9.01	9.83	Pass
			MCH	RB50#0	8.99	10.23	Pass
			HCH	RB50#0	8.99	10.06	Pass
		15	LCH	RB75#0	13.47	14.81	Pass
			MCH	RB75#0	13.47	14.40	Pass
			HCH	RB75#0	13.47	14.53	Pass
		20	LCH	RB100#0	17.97	19.04	Pass
			MCH	RB100#0	17.95	19.11	Pass
			HCH	RB100#0	17.96	19.13	Pass



Part II - Test Plots

4.1 For LTE

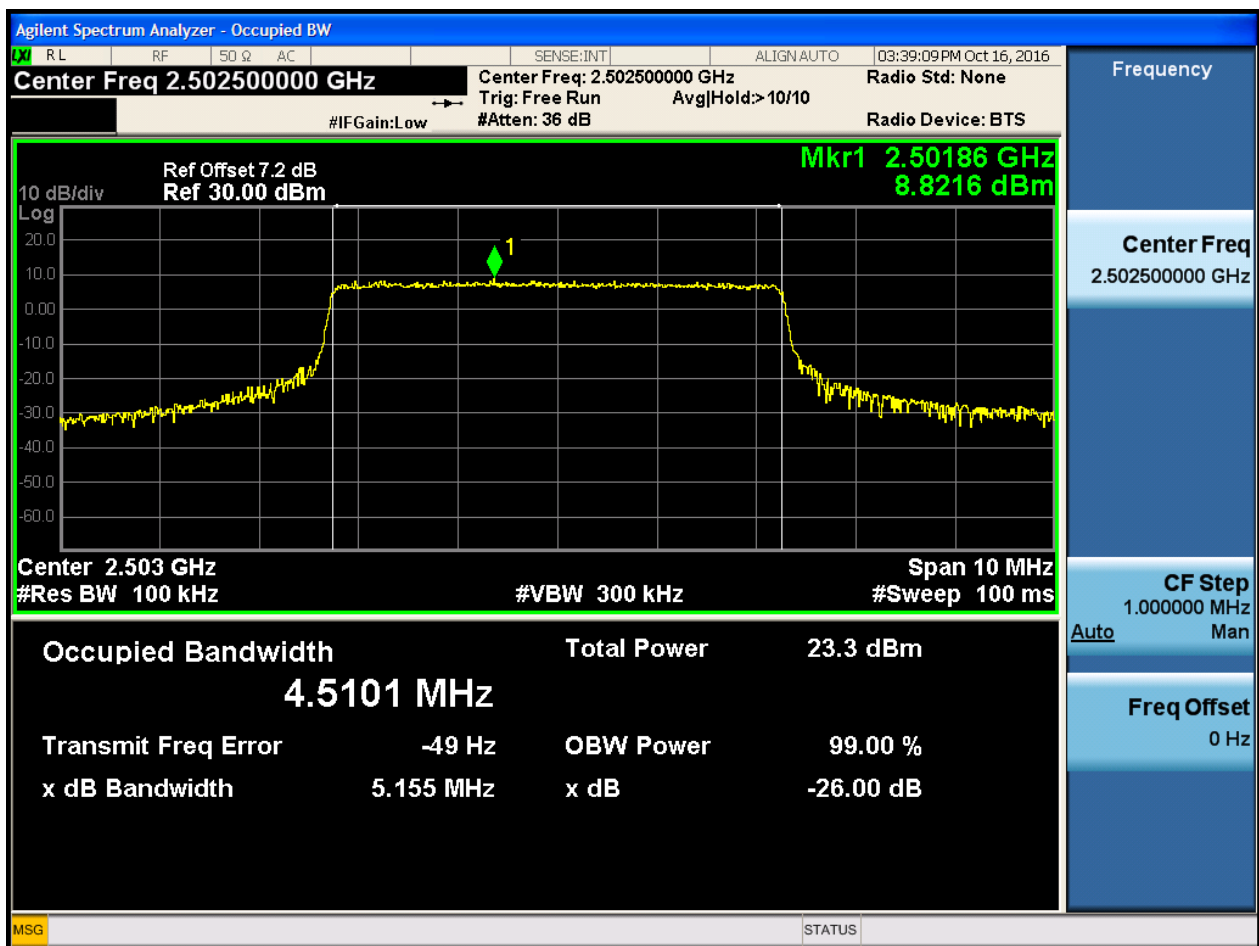
4.1.1 Test Band = BAND7

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

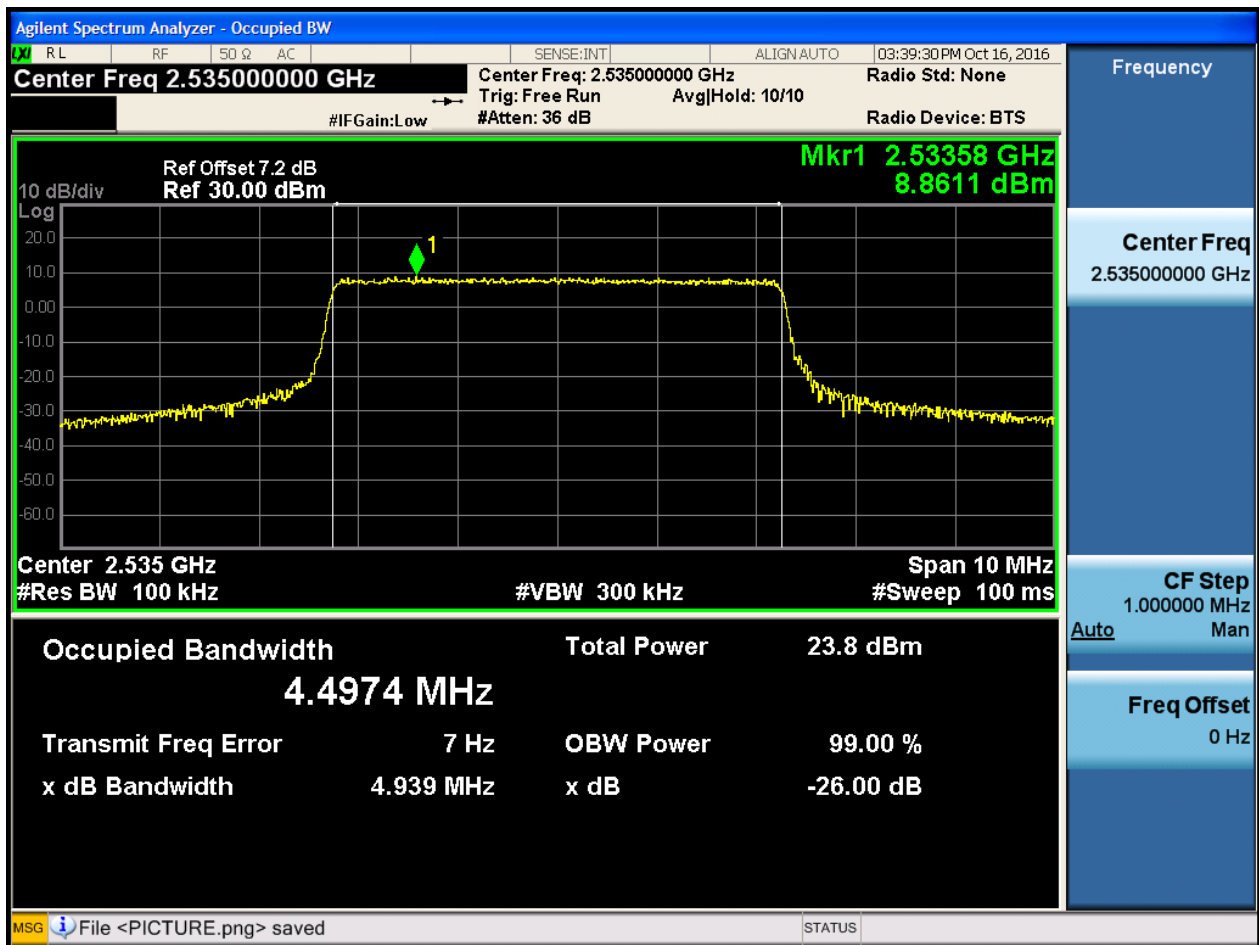
4.1.1.1.1.1.1 Test RB = RB25#0





4.1.1.1.1.2 Test Channel = MCH

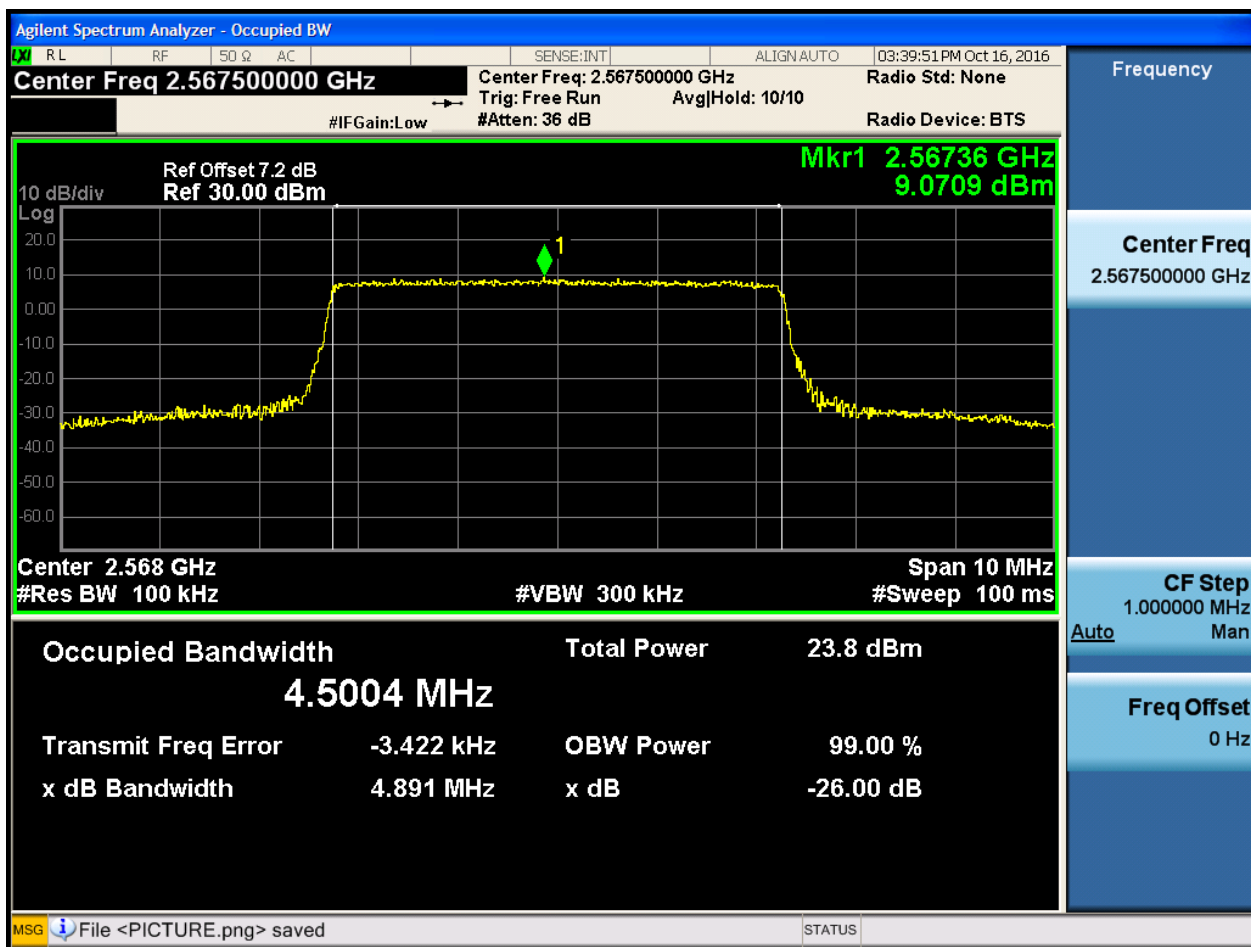
4.1.1.1.1.2.1 Test RB = RB25#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

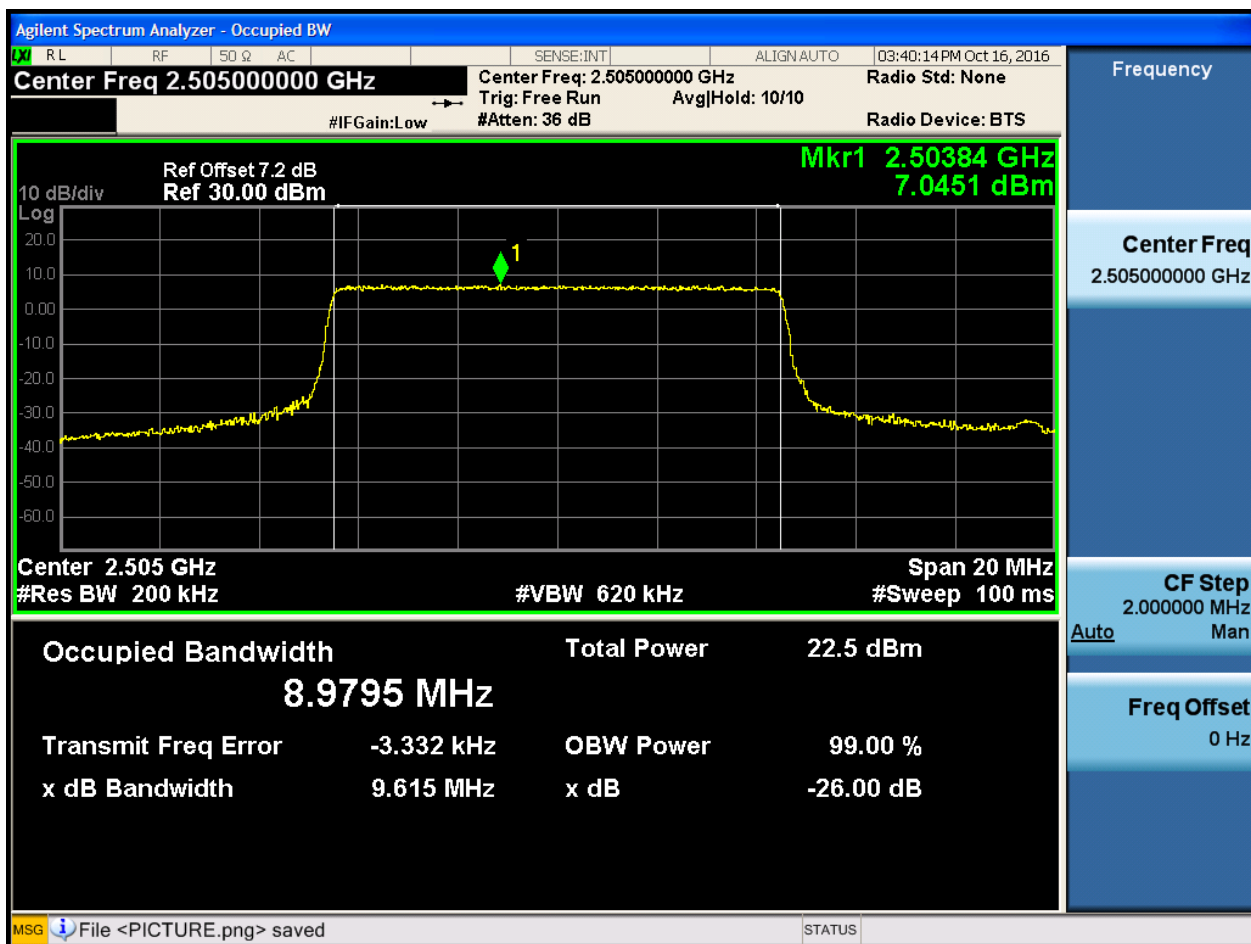




4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH

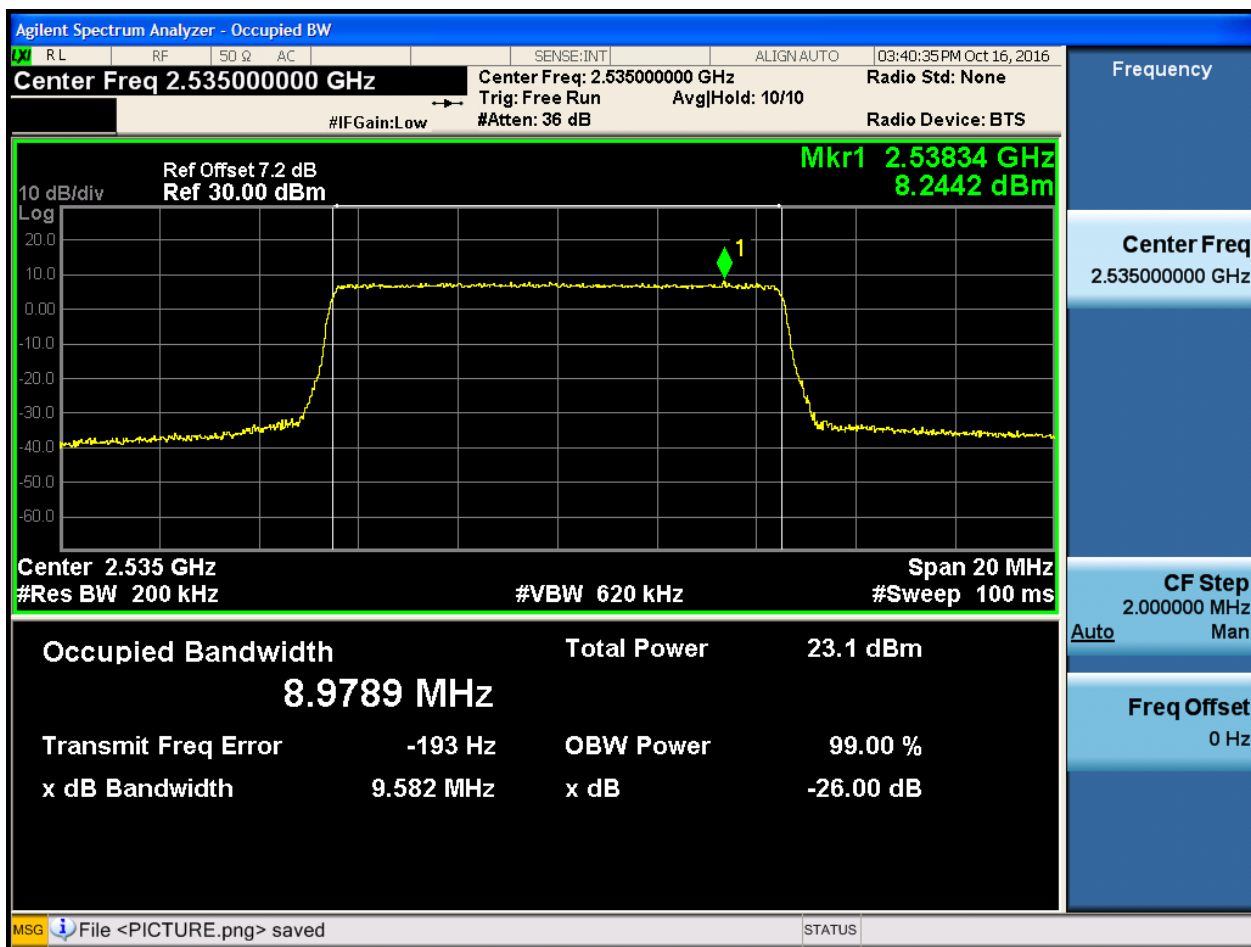
4.1.1.1.2.1.1 Test RB = RB50#0





4.1.1.1.2.2 Test Channel = MCH

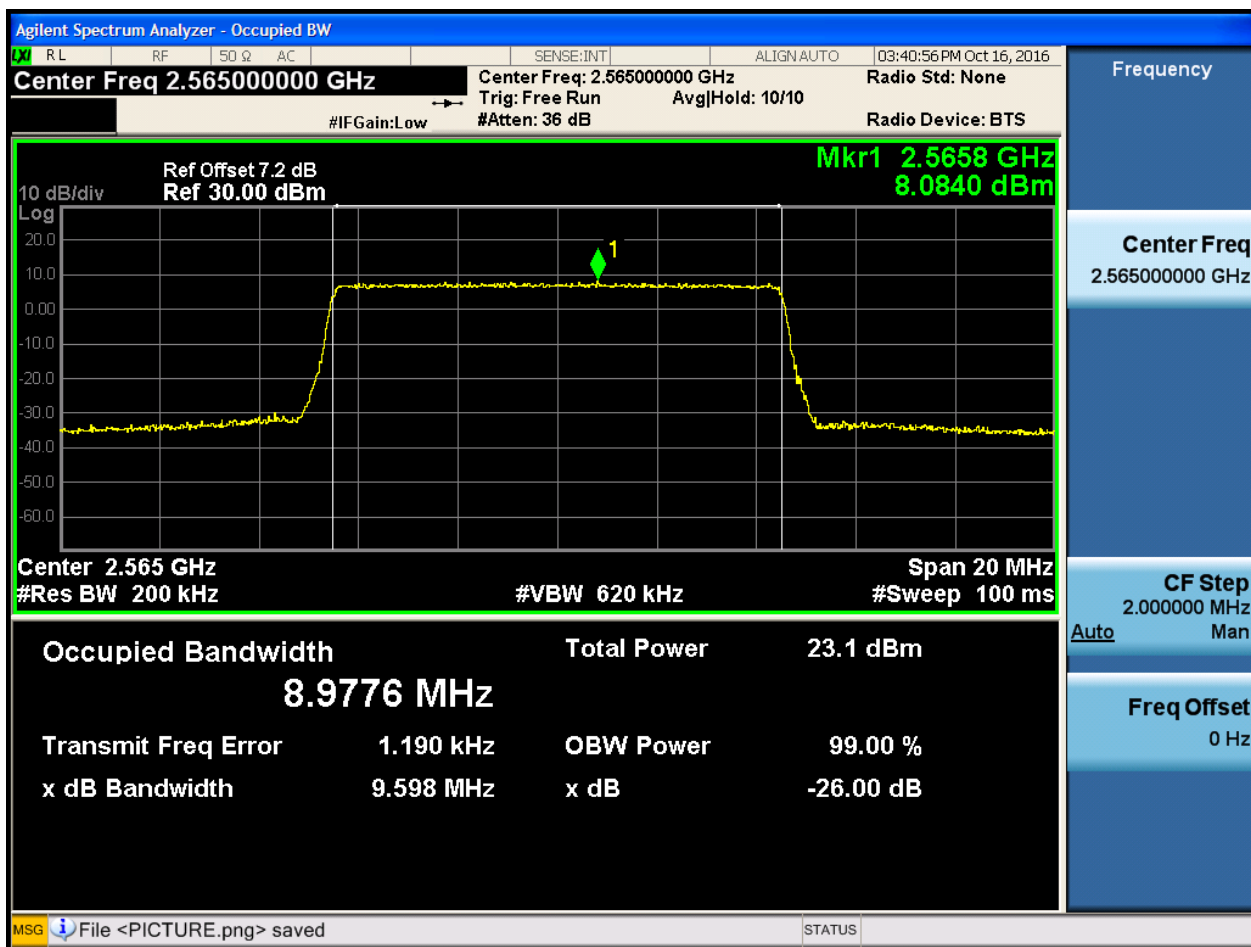
4.1.1.1.2.2.1 Test RB = RB50#0





4.1.1.1.2.3 Test Channel = HCH

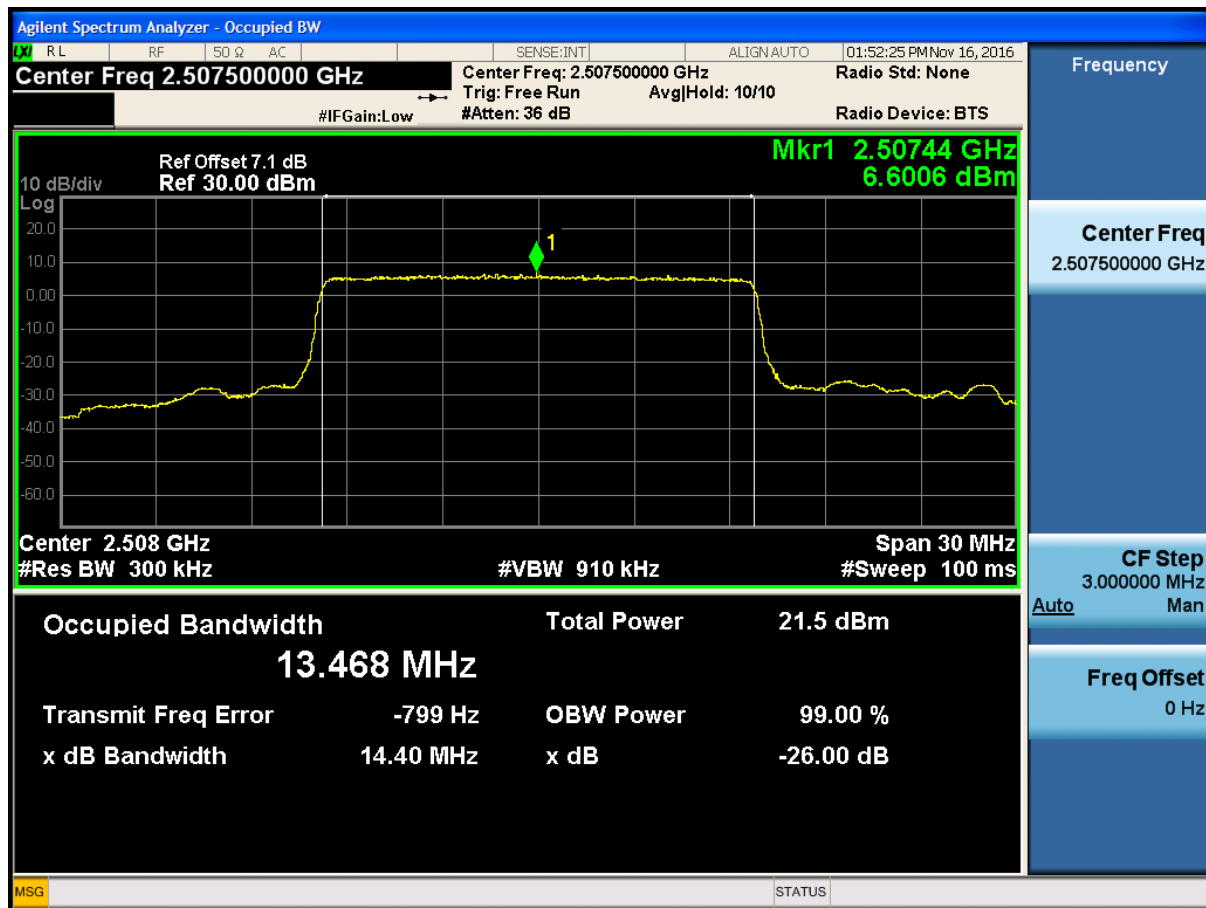
4.1.1.1.2.3.1 Test RB = RB50#0



4.1.1.1.3 Test Bandwidth = 15

4.1.1.1.3.1 Test Channel = LCH

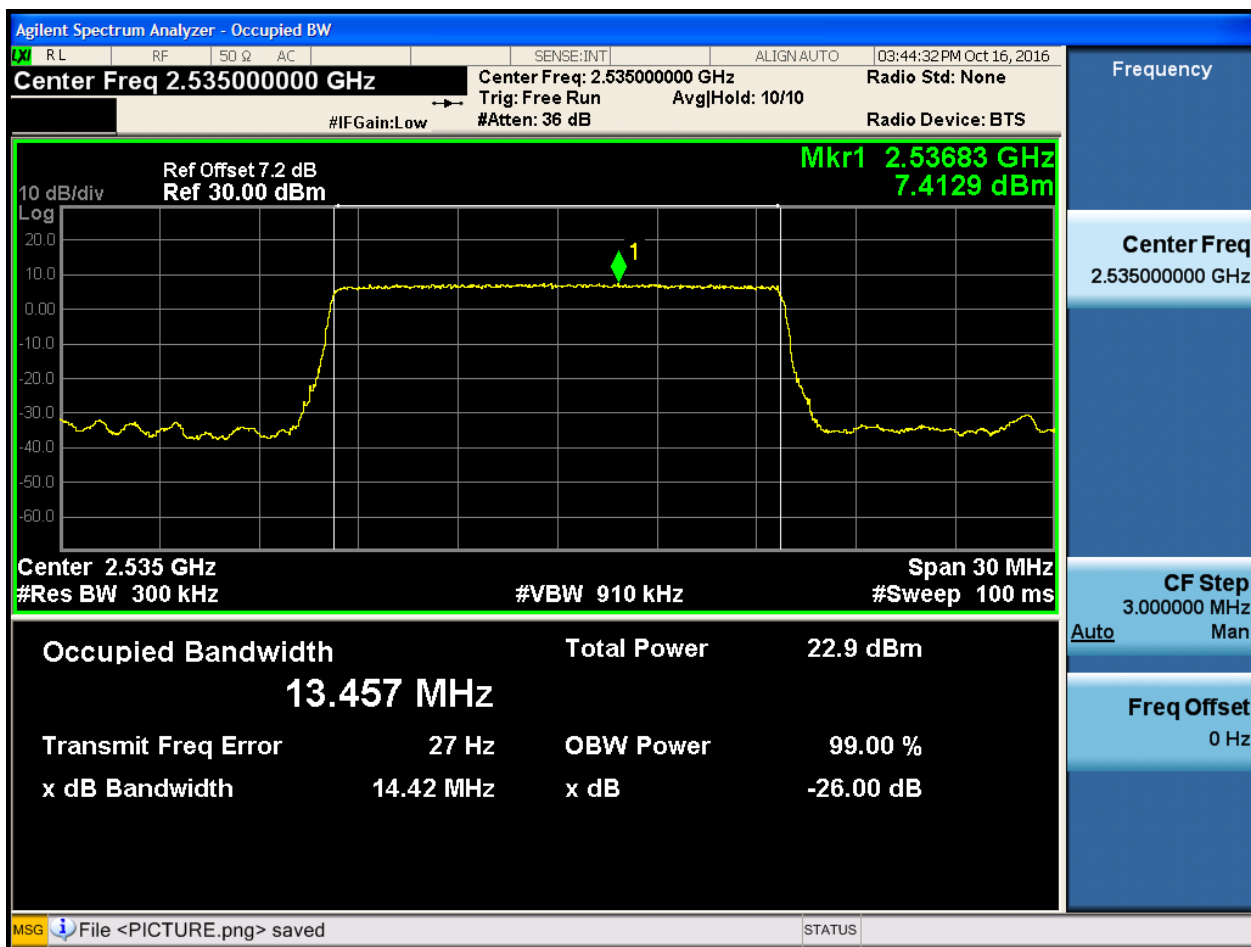
4.1.1.1.3.1.1 Test RB = RB75#0





4.1.1.1.3.2 Test Channel = MCH

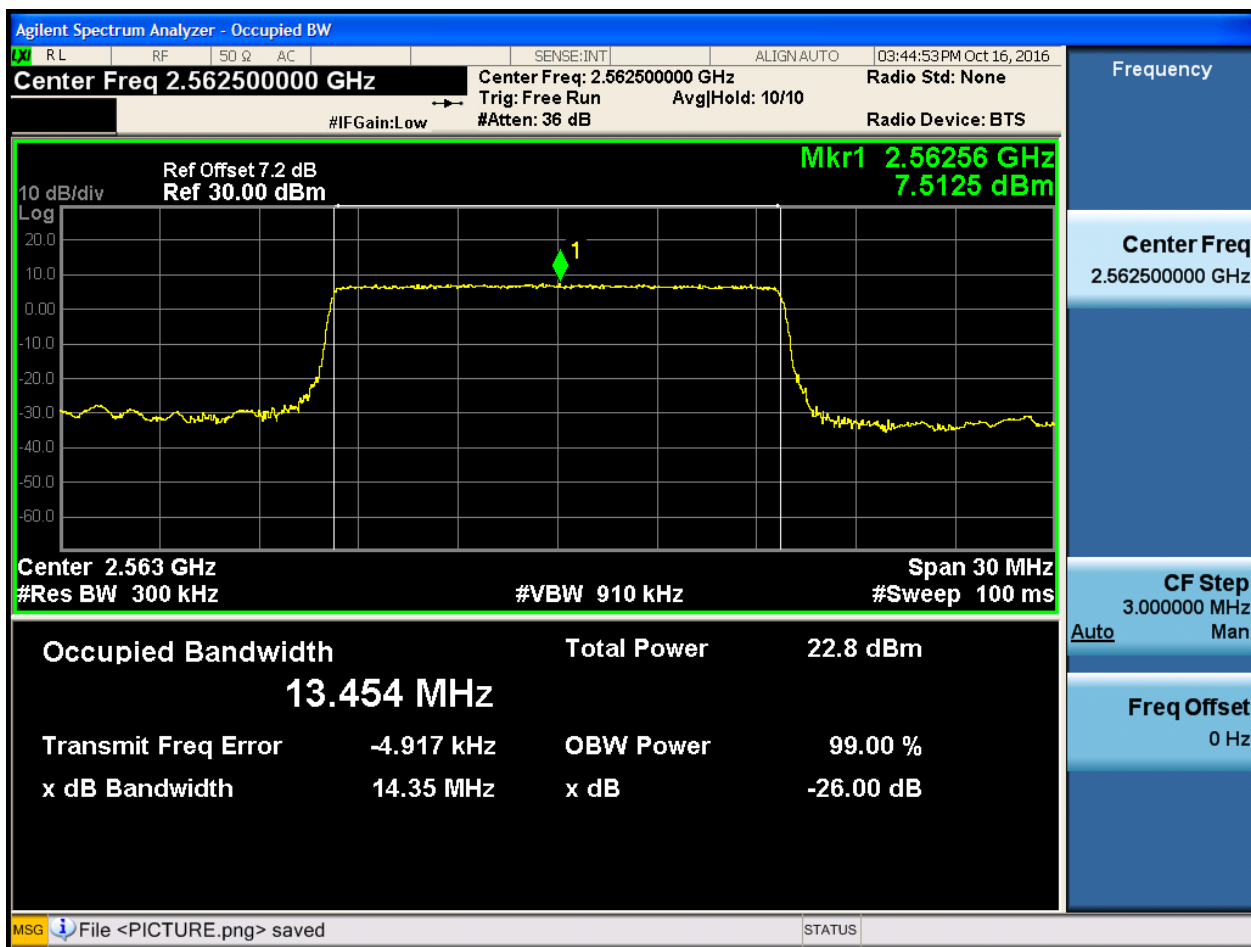
4.1.1.1.3.2.1 Test RB = RB75#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB75#0

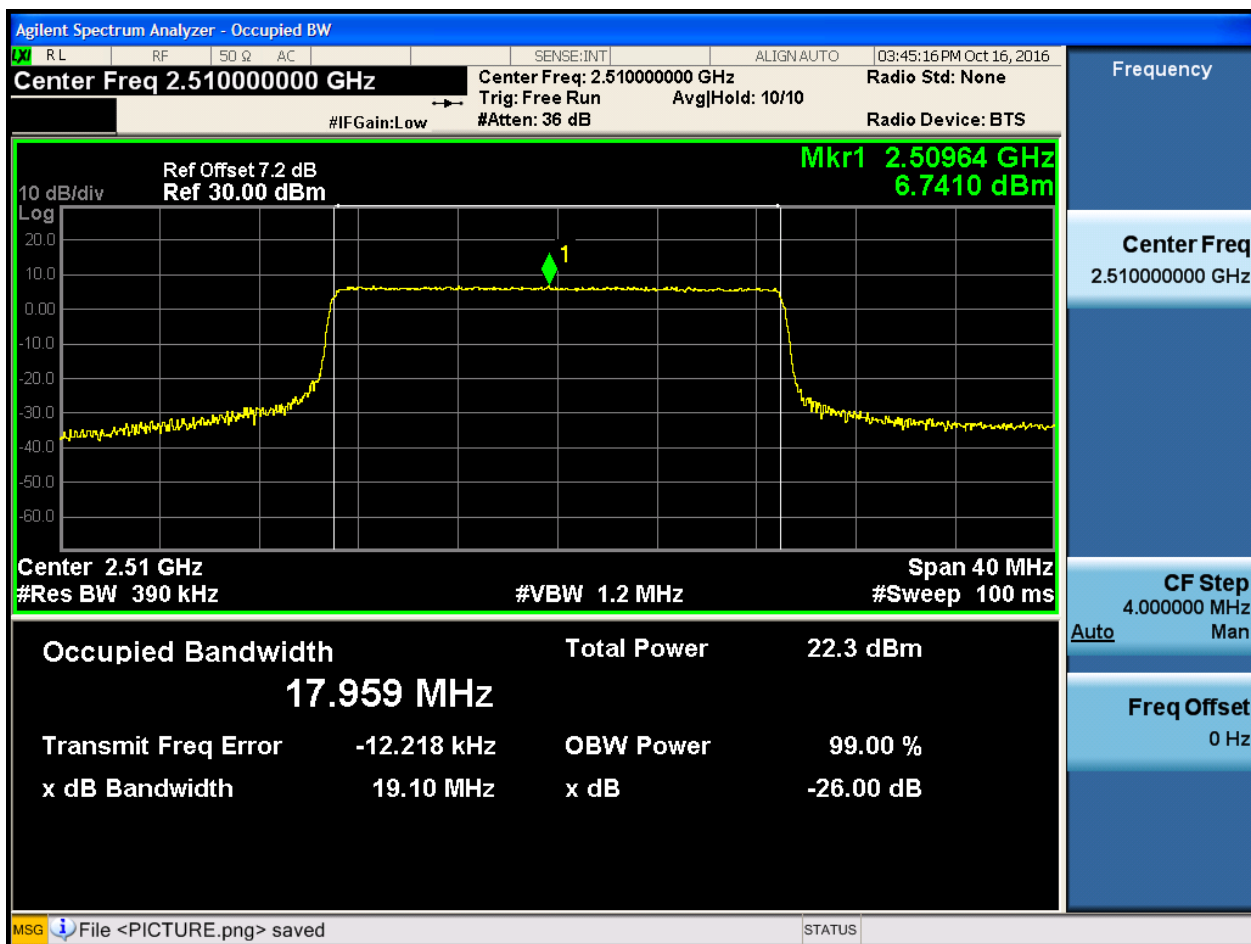




4.1.1.1.4 Test Bandwidth = 20

4.1.1.1.4.1 Test Channel = LCH

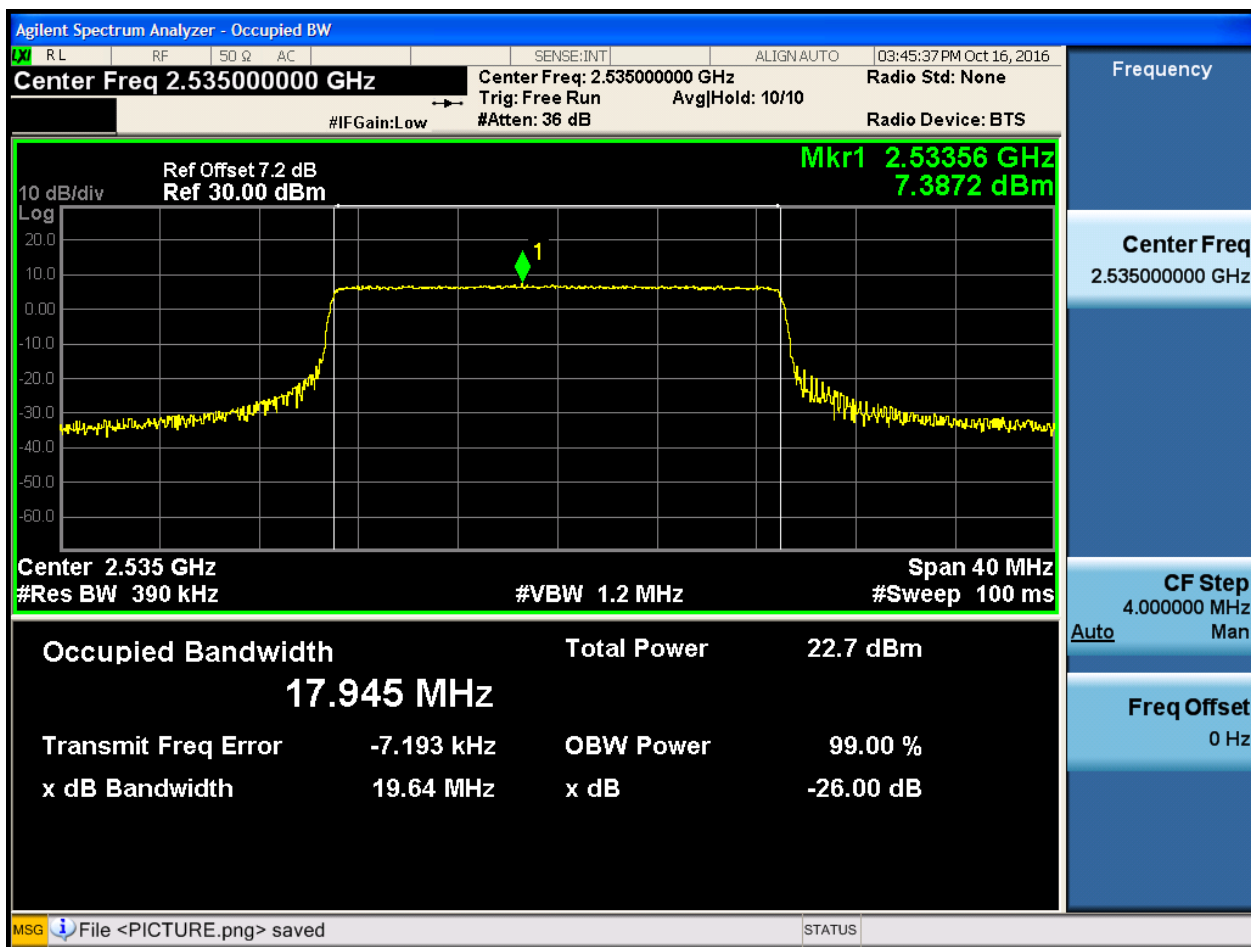
4.1.1.1.4.1.1 Test RB = RB100#0





4.1.1.1.4.2 Test Channel = MCH

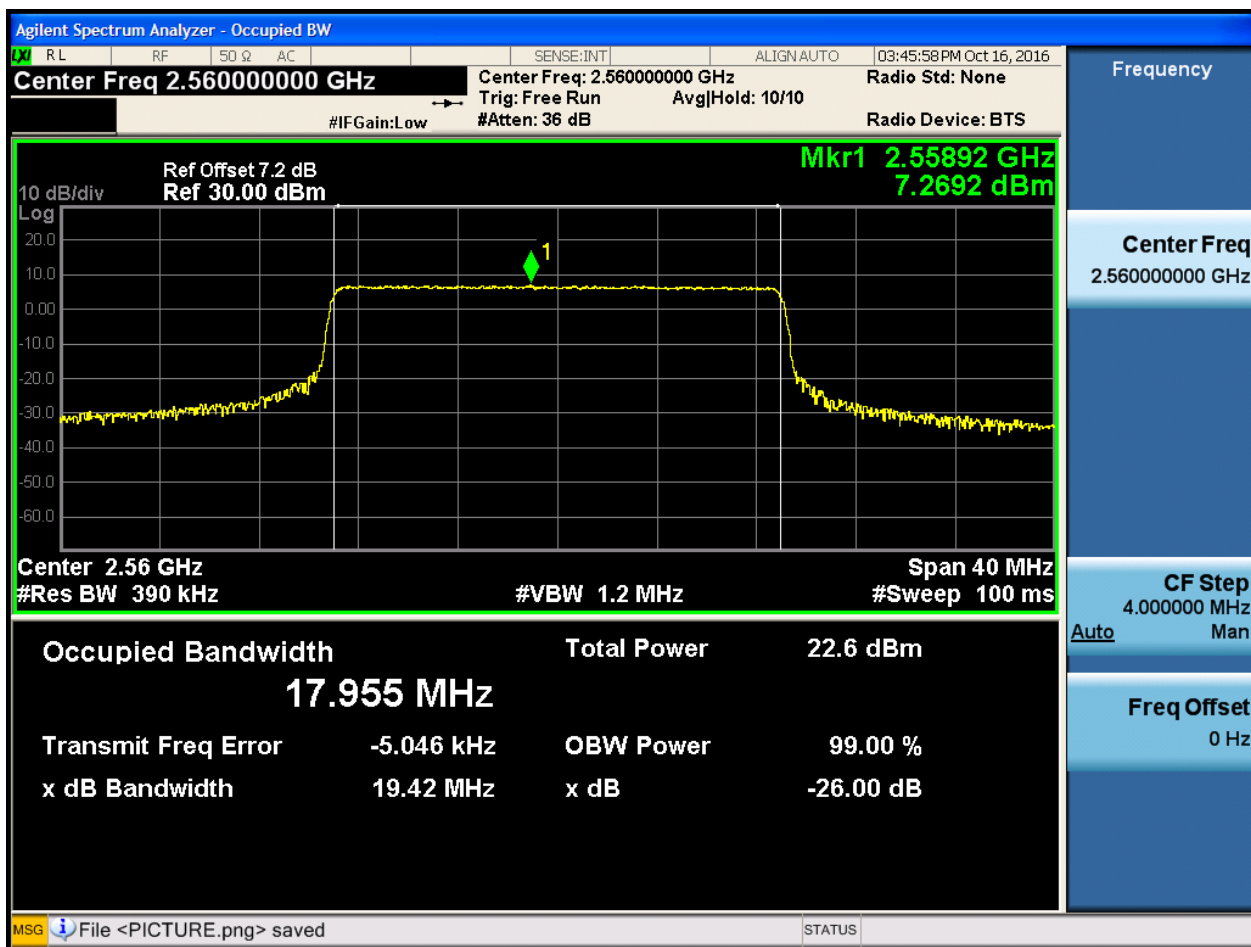
4.1.1.1.4.2.1 Test RB = RB100#0





4.1.1.1..3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB100#0



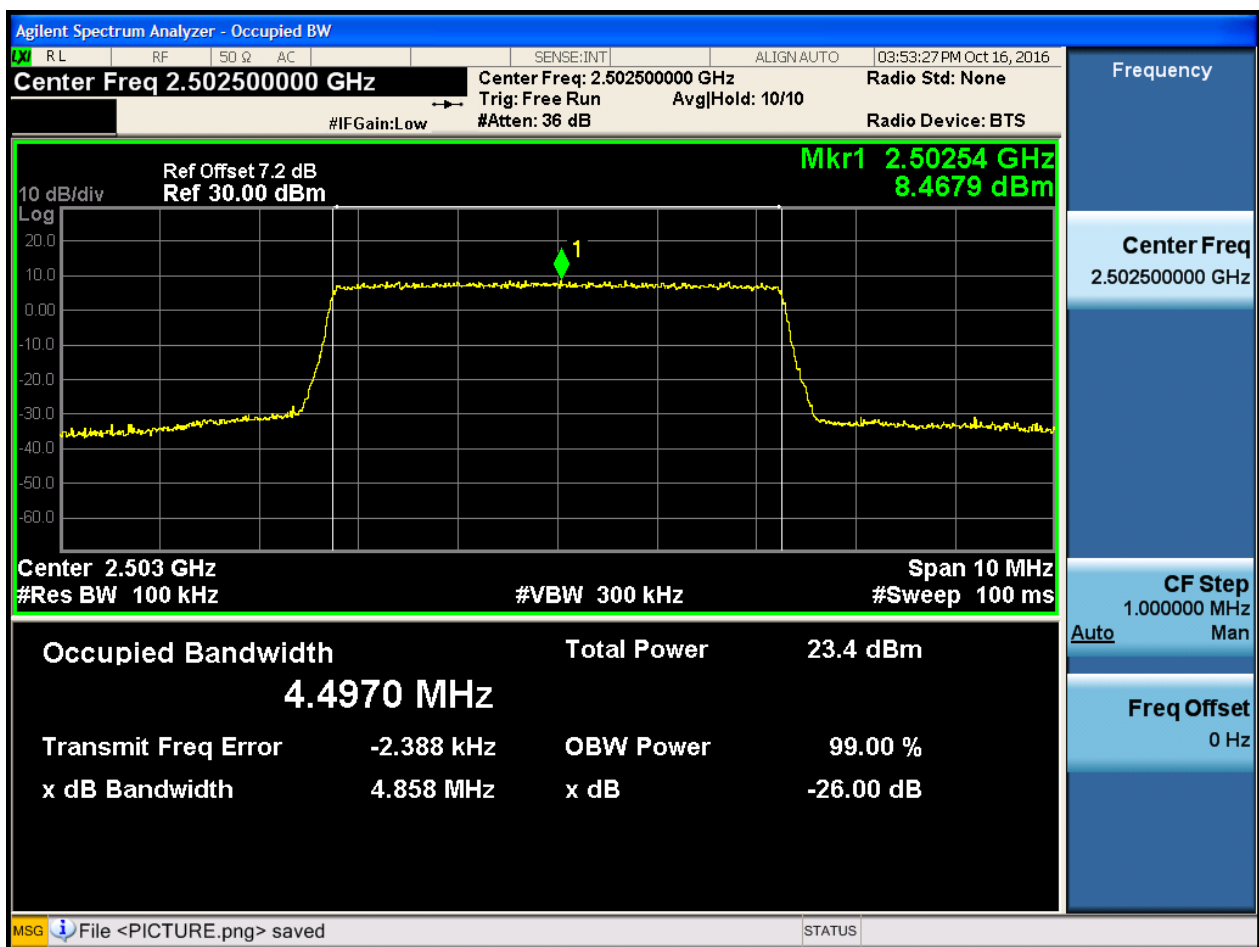


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

4.1.1.2.1.1 Test Channel = LCH

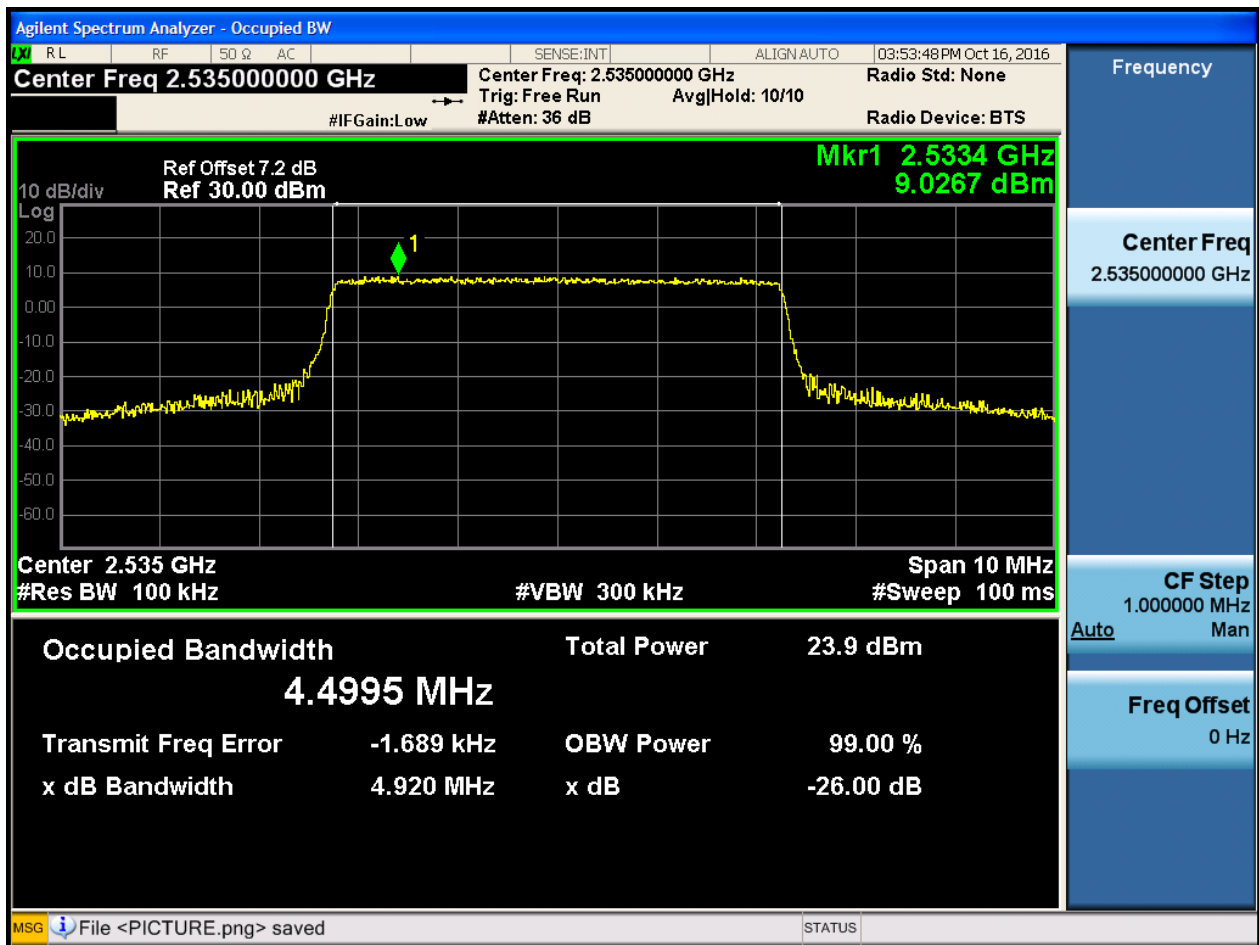
4.1.1.2.1.1.1 Test RB = RB25#0





4.1.1.2.1.2 Test Channel = MCH

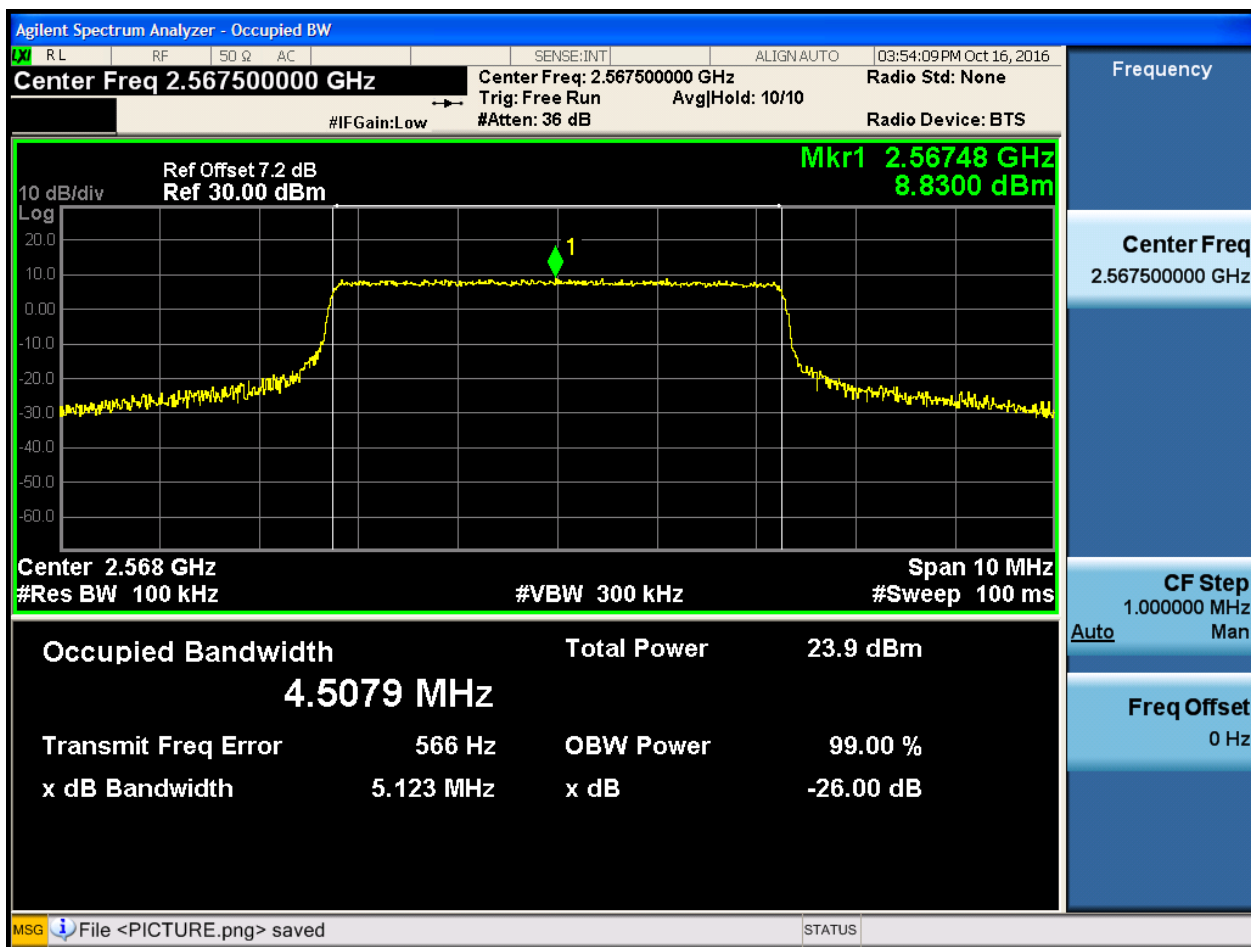
4.1.1.2.1.2.1 Test RB = RB25#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

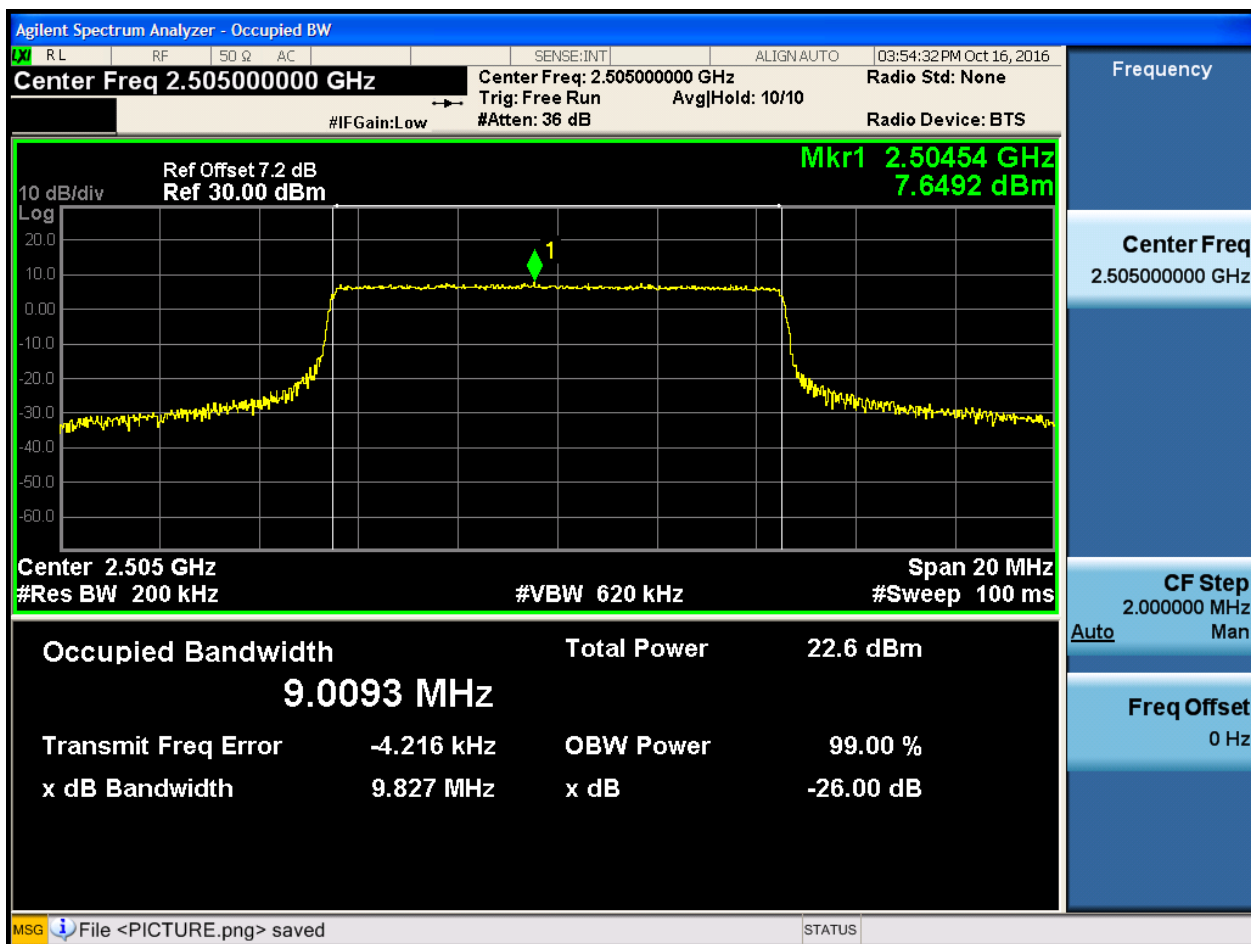




4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

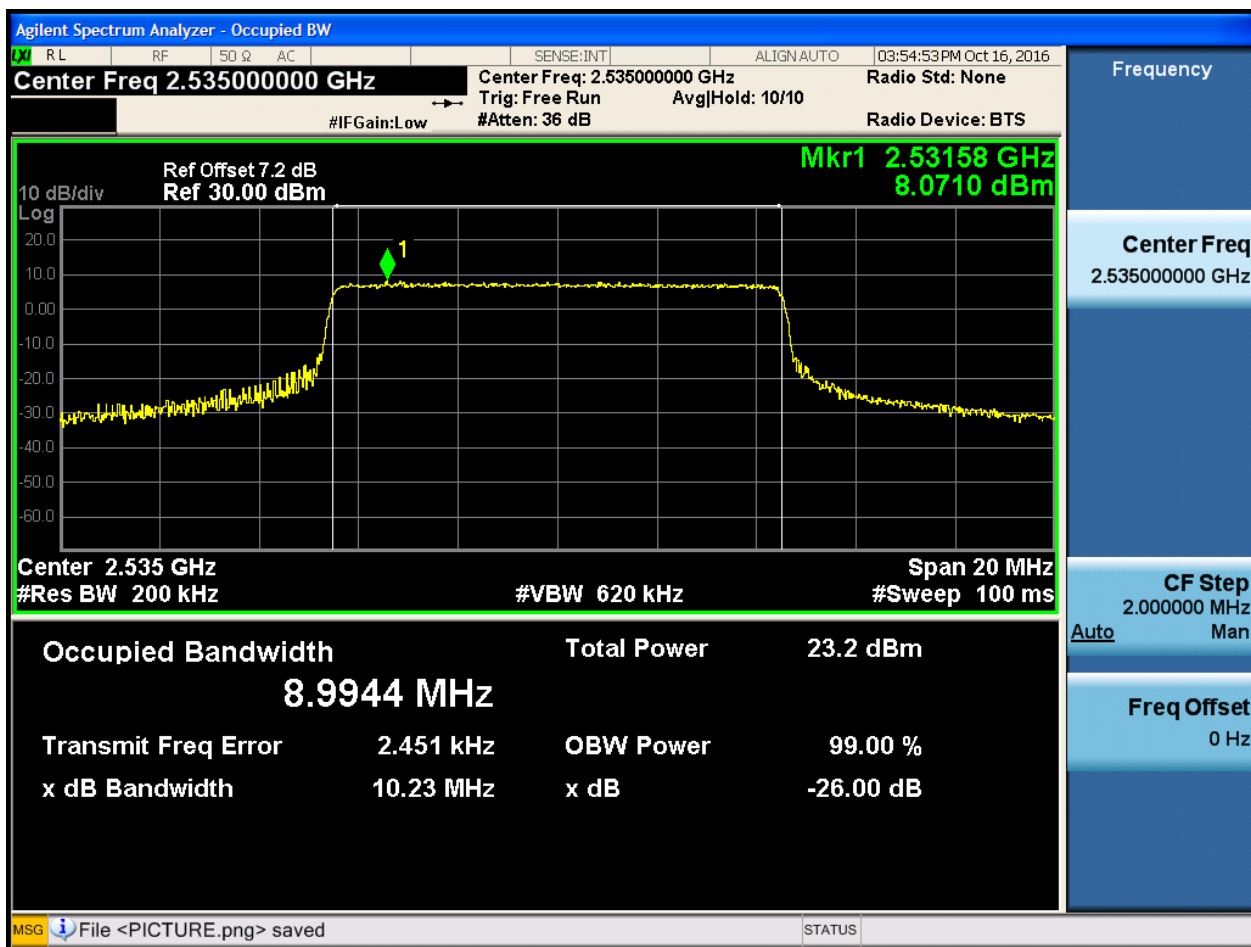
4.1.1.2.2.1.1 Test RB = RB50#0





4.1.1.2.2.2 Test Channel = MCH

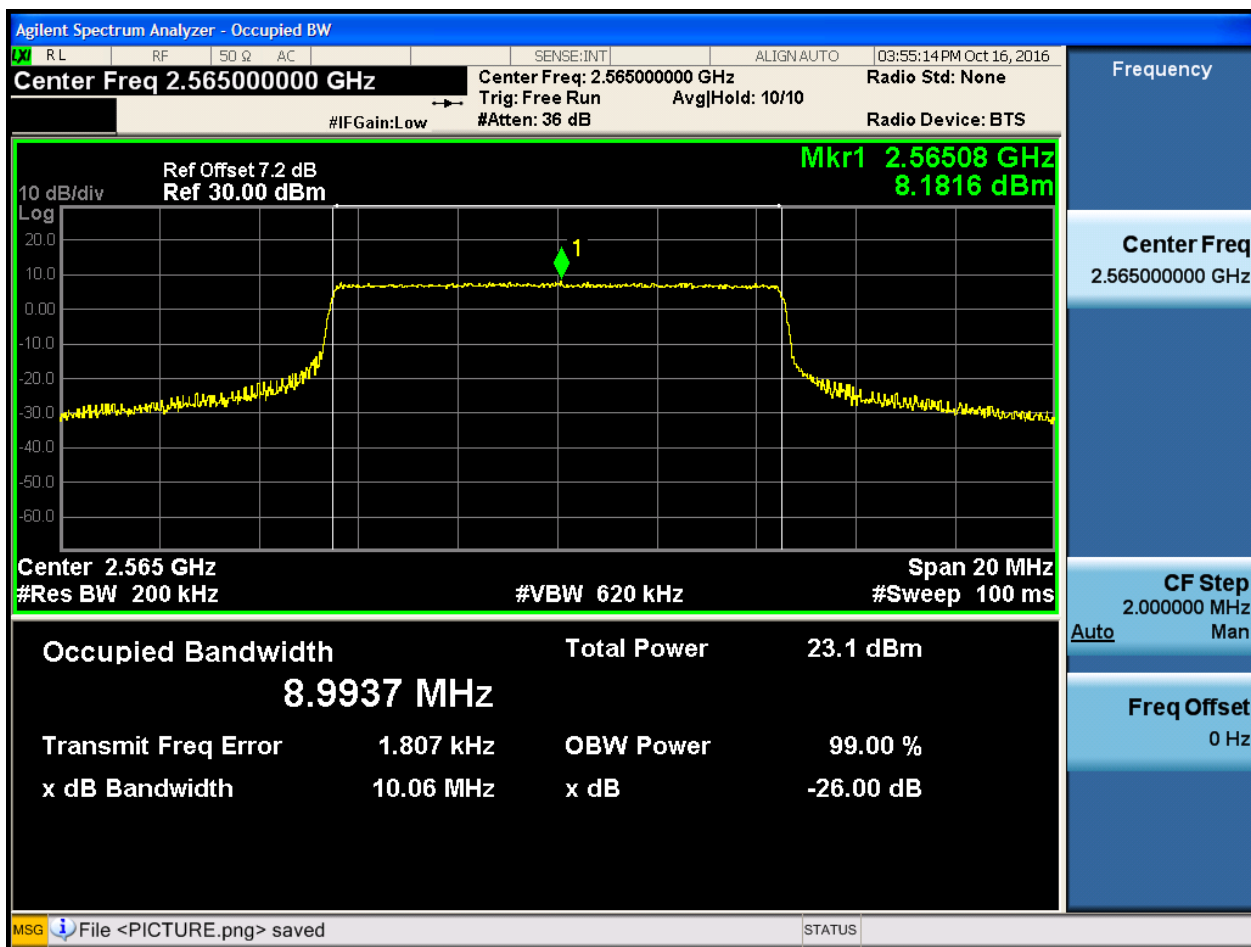
4.1.1.2.2.2.1 Test RB = RB50#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0

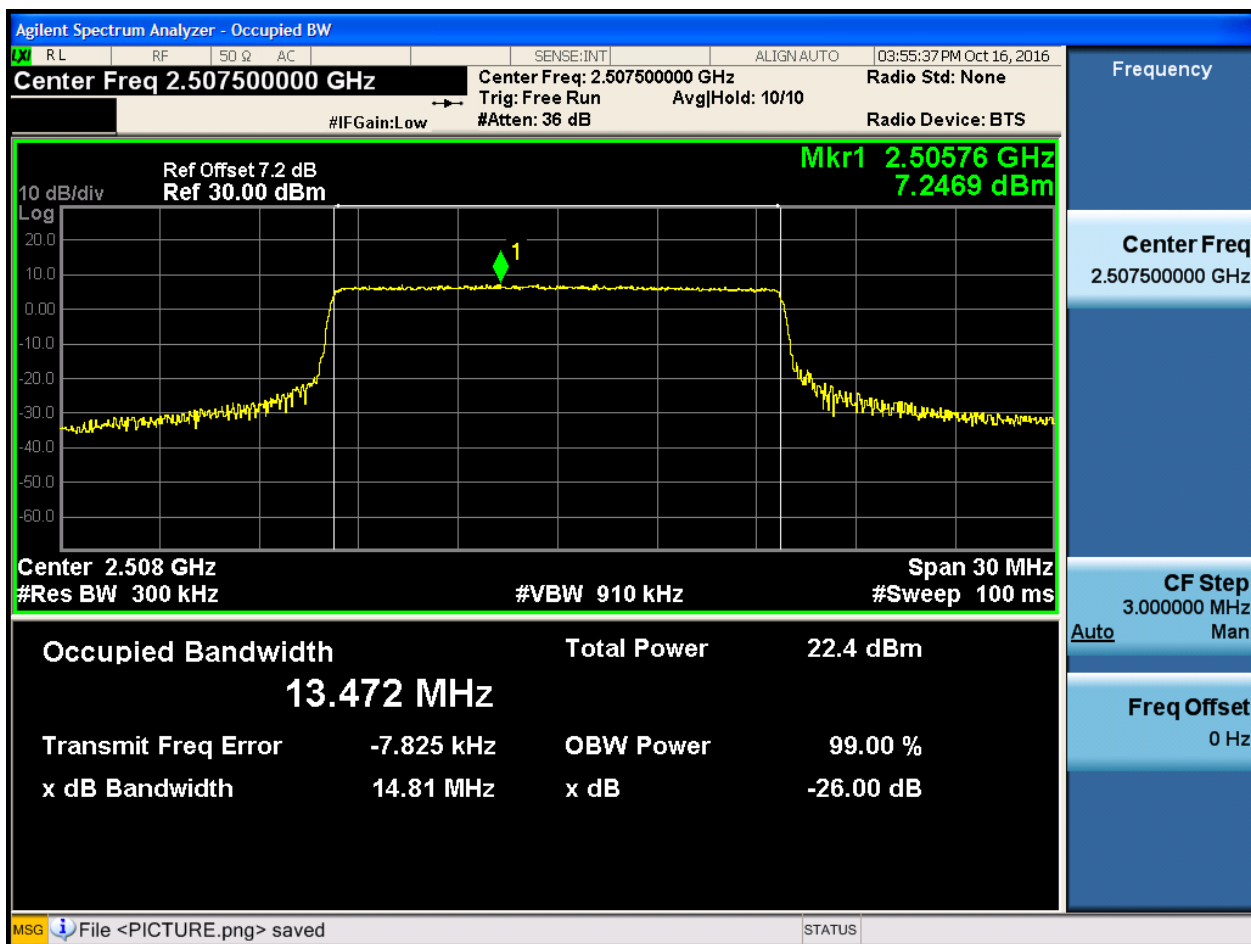




4.1.1.2.3 Test Bandwidth = 15

4.1.1.2.3.1 Test Channel = LCH

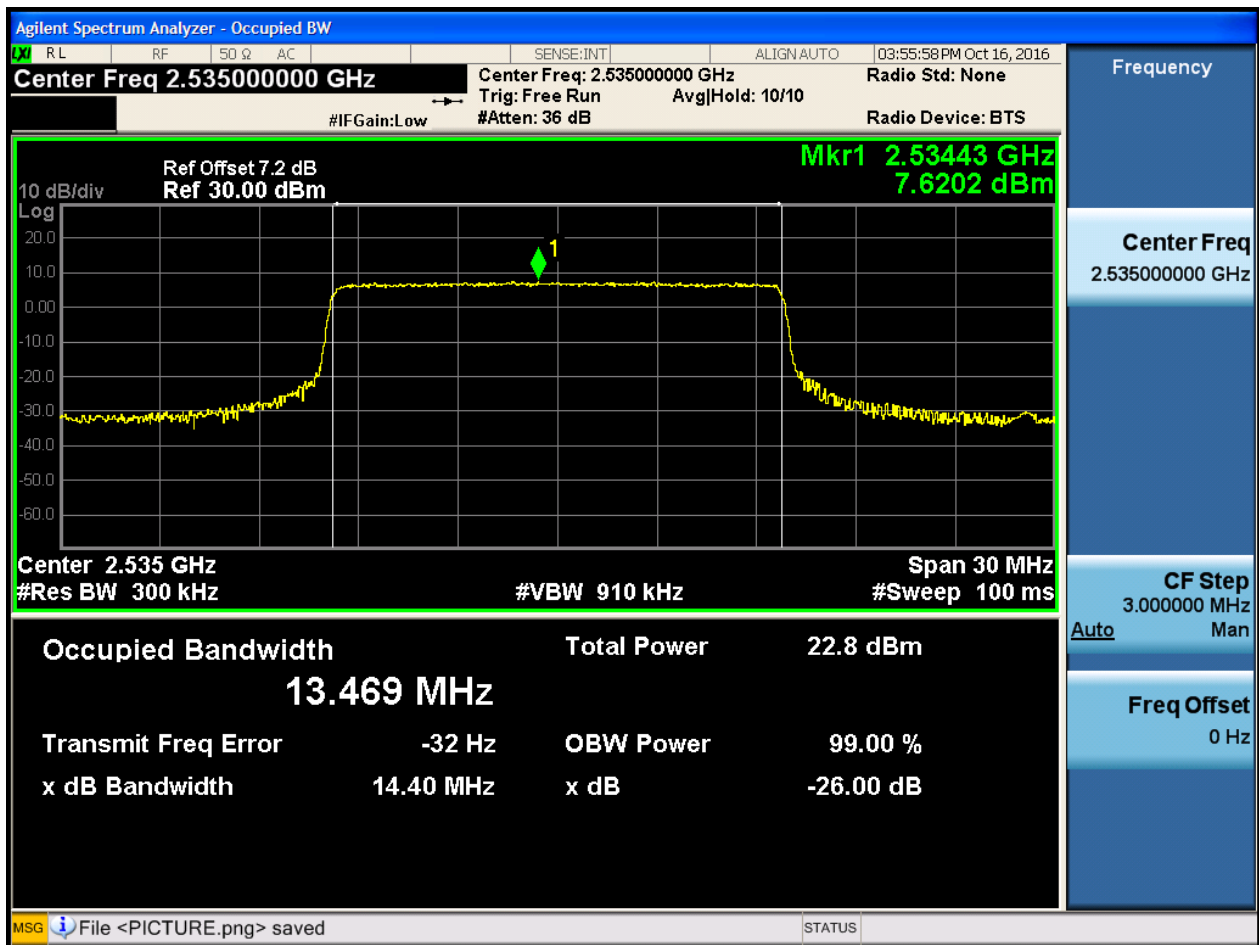
4.1.1.2.3.1.1 Test RB = RB75#0





4.1.1.2.3.2 Test Channel = MCH

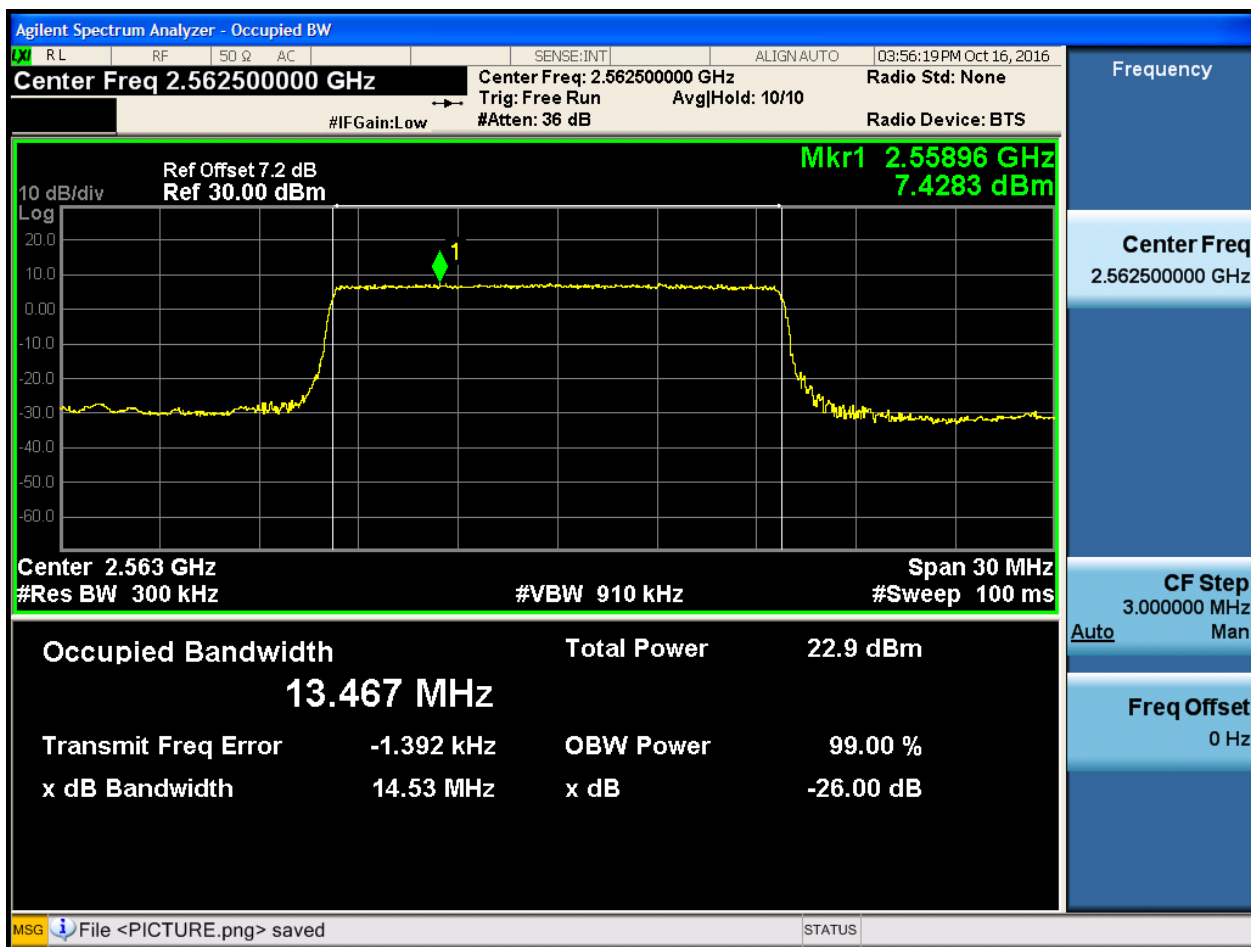
4.1.1.2.3.2.1 Test RB = RB75#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB75#0

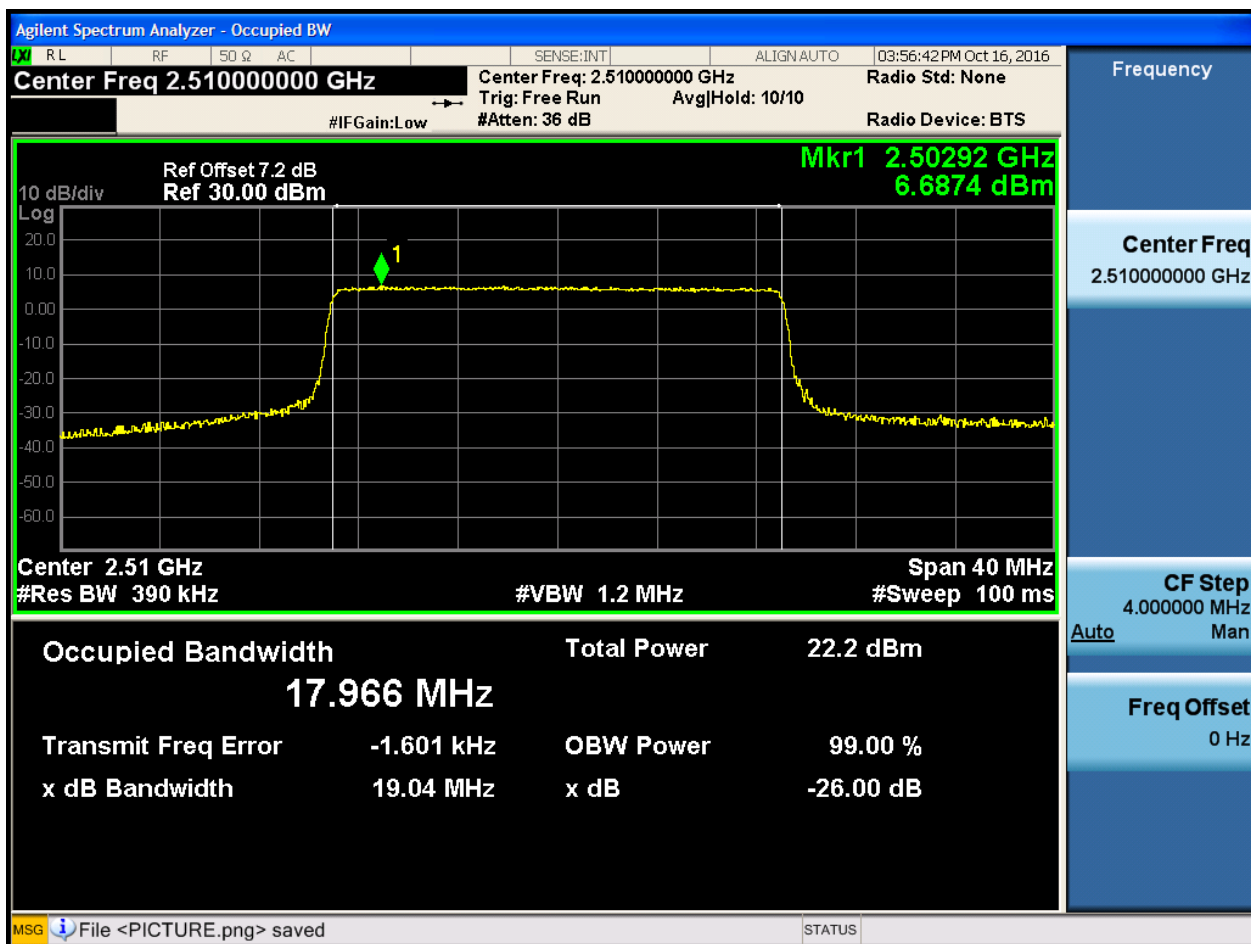




4.1.1.2.4 Test Bandwidth = 20

4.1.1.2.4.1 Test Channel = LCH

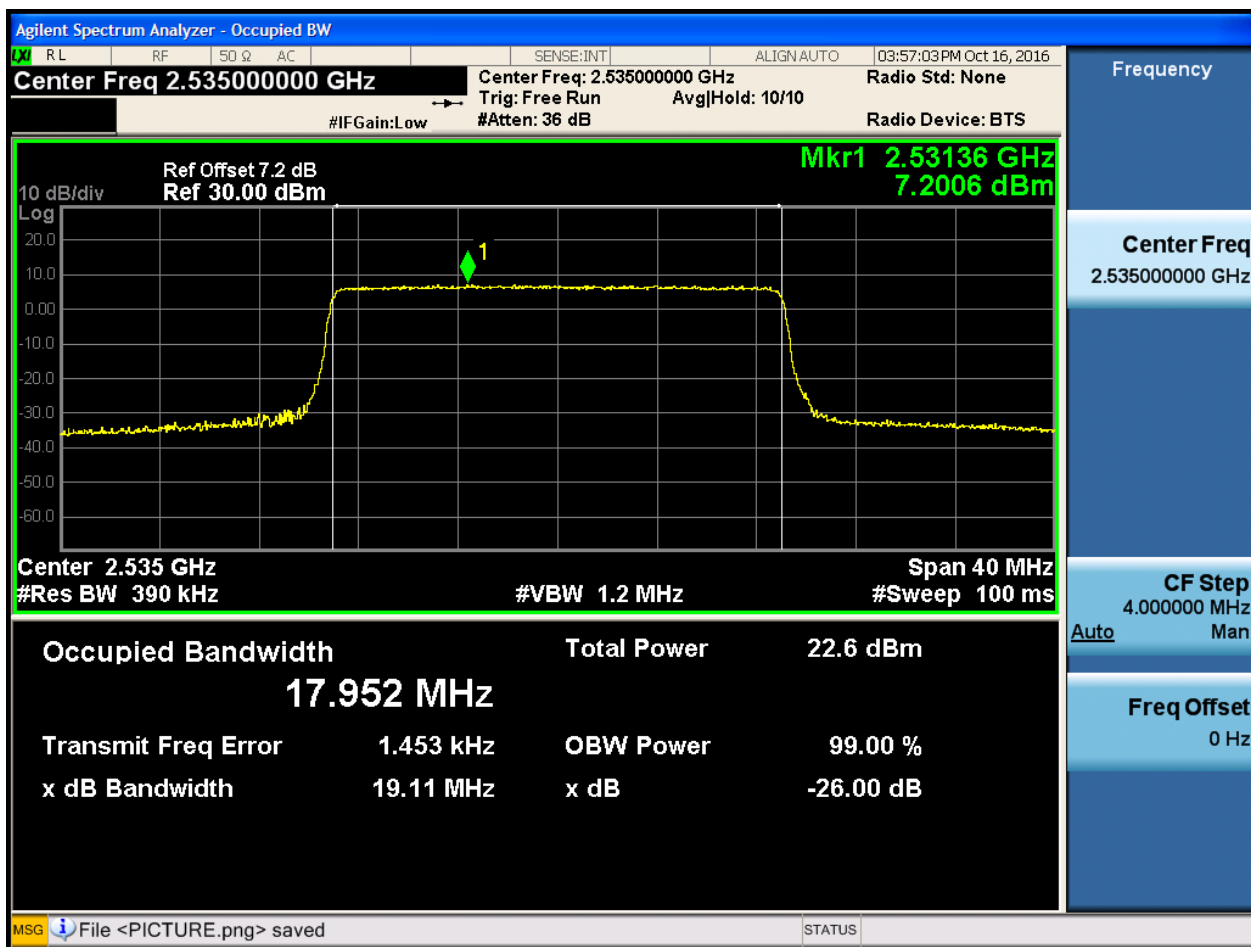
4.1.1.2.4.1.1 Test RB = RB100#0





4.1.1.2.4.2 Test Channel = MCH

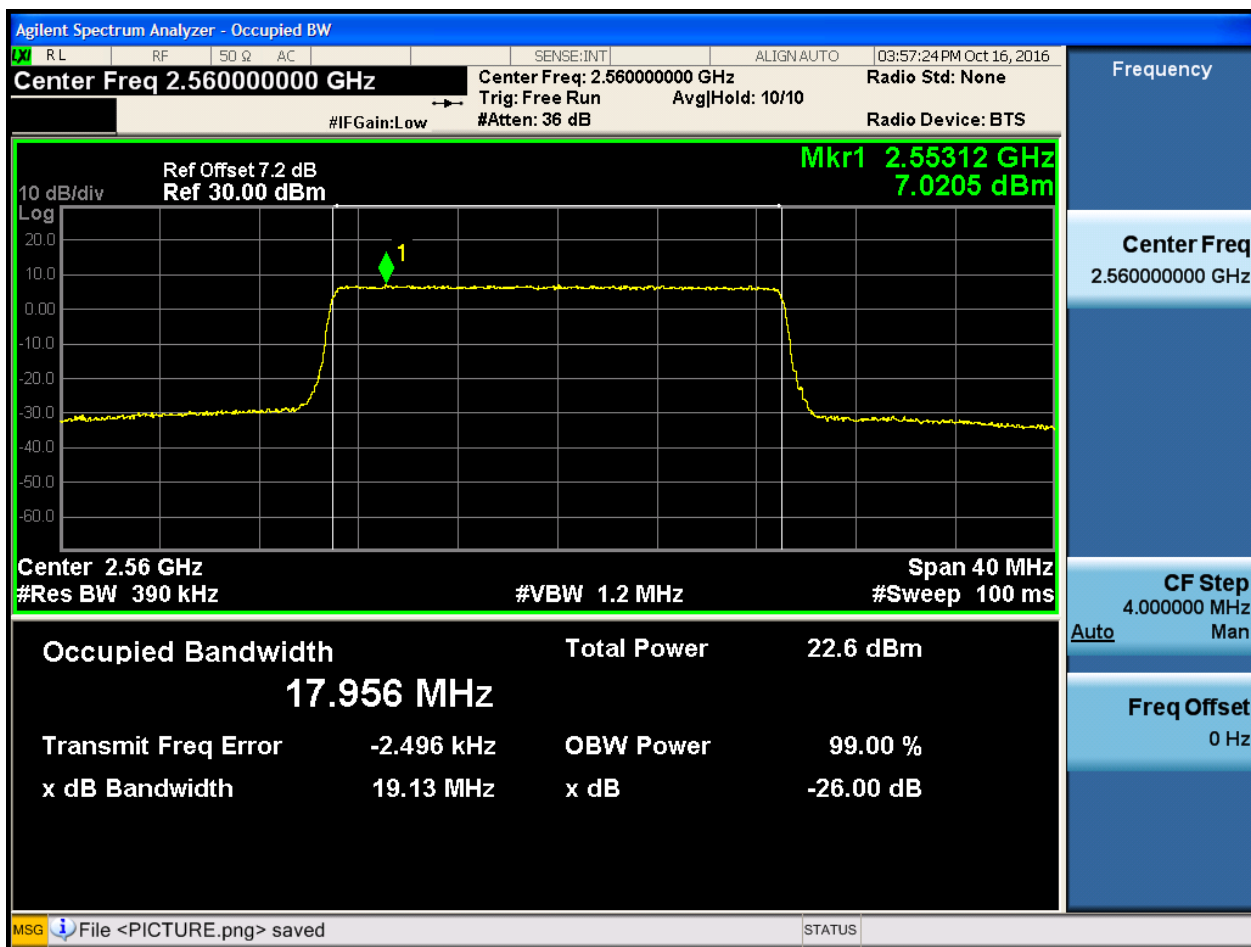
4.1.1.2.4.2.1 Test RB = RB100#0





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

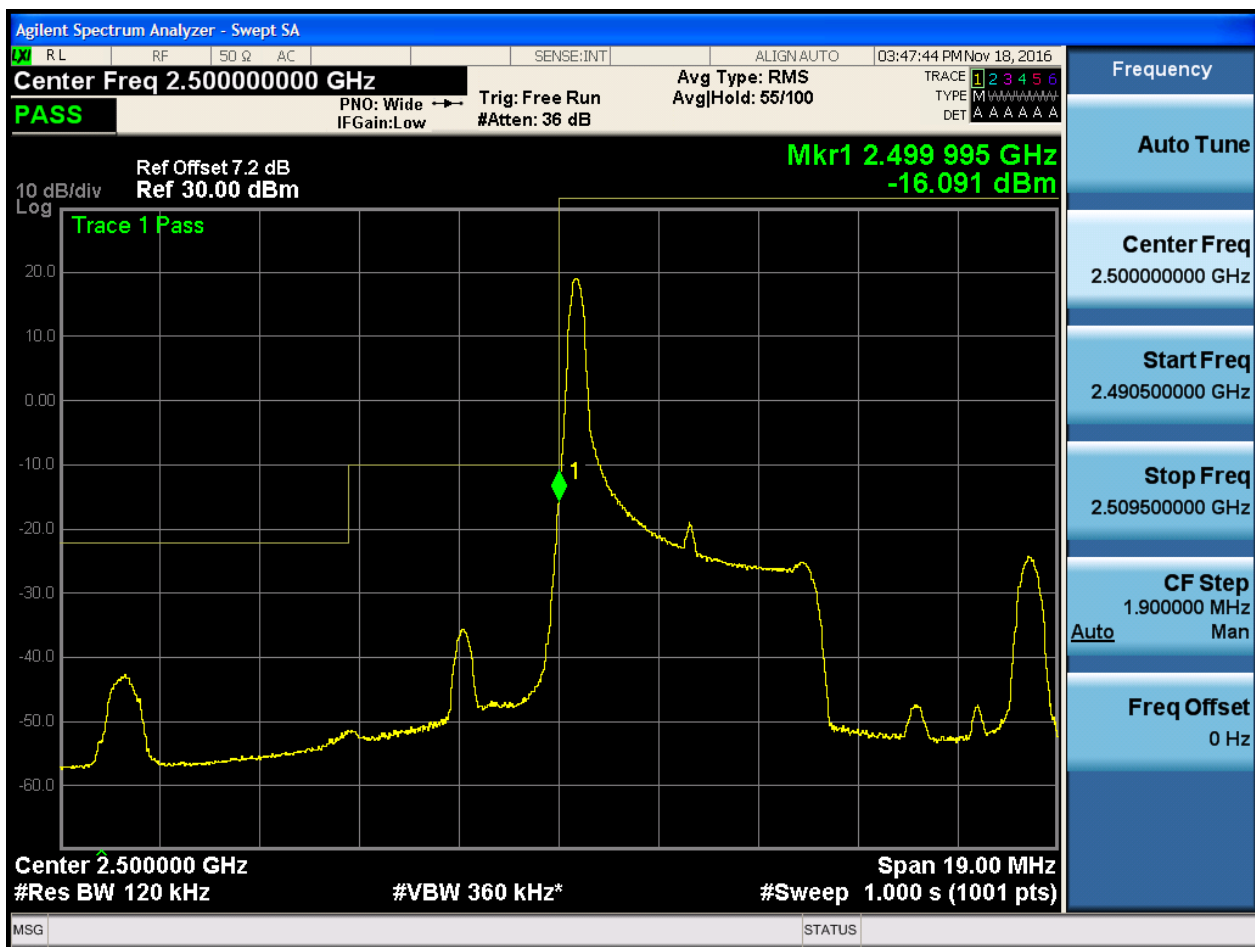
5.1.1 Test Band = BAND7

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 5

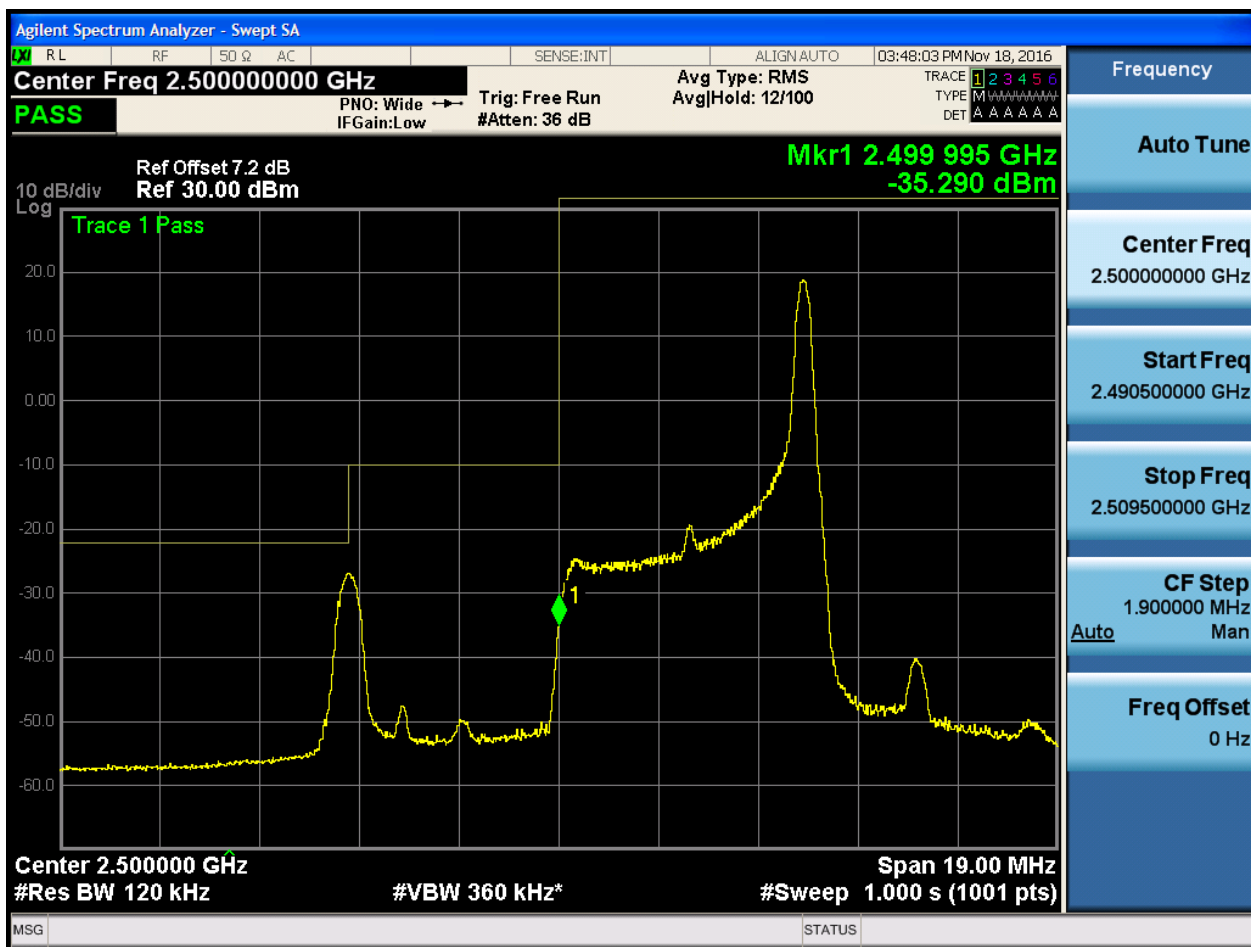
5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0



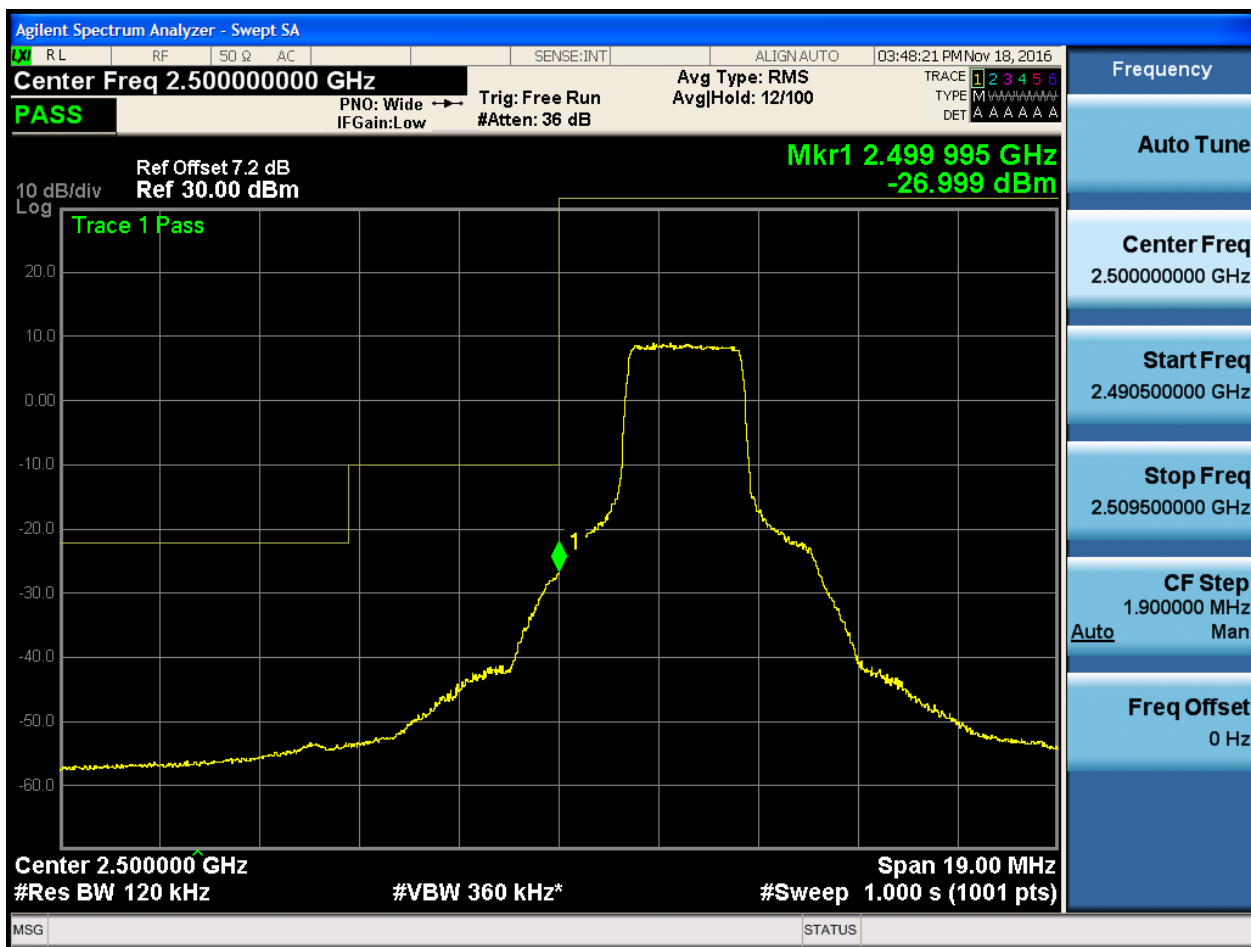


5.1.1.1.1.2 Test RB = RB1#24



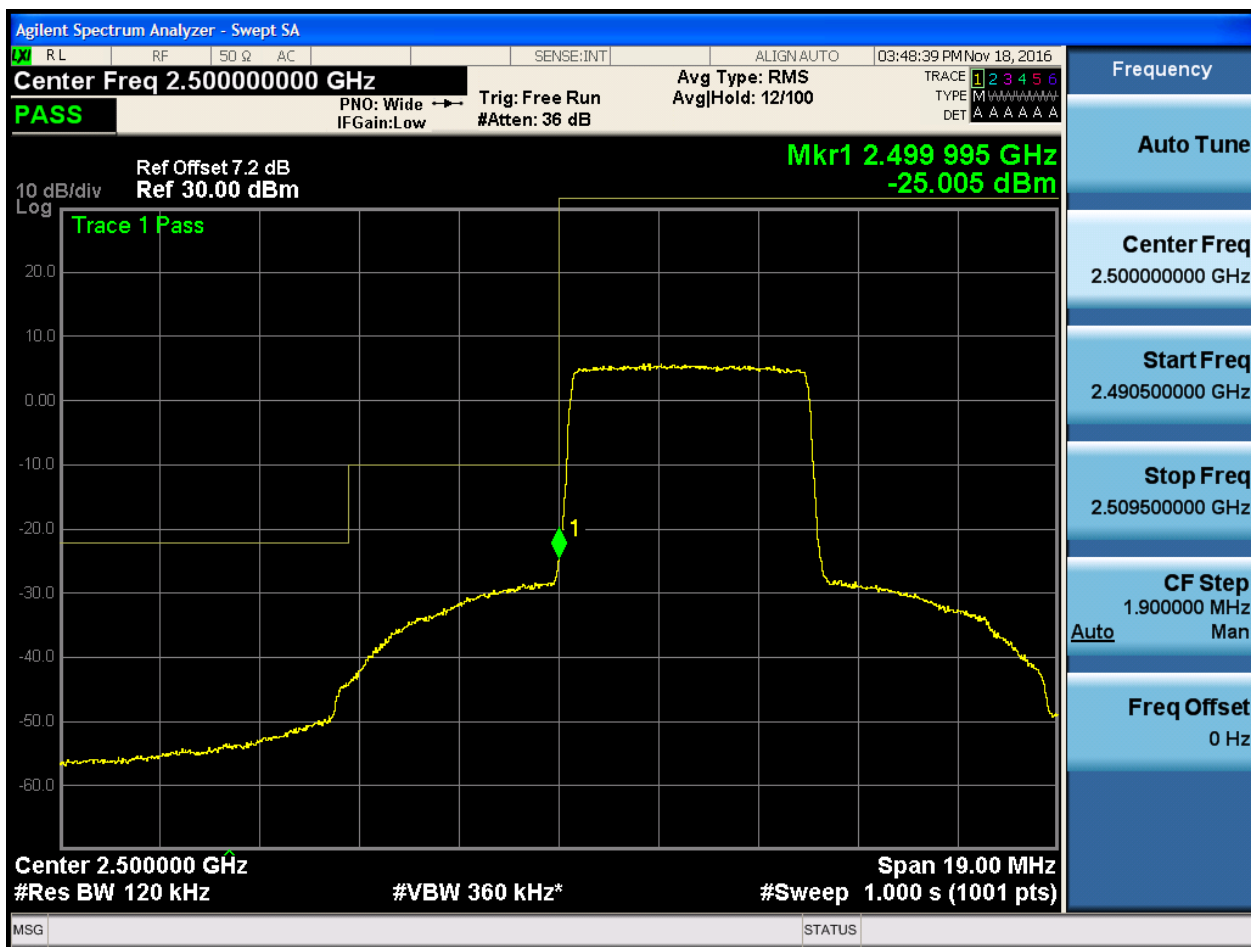


5.1.1.1.1.3 Test RB = RB12#6





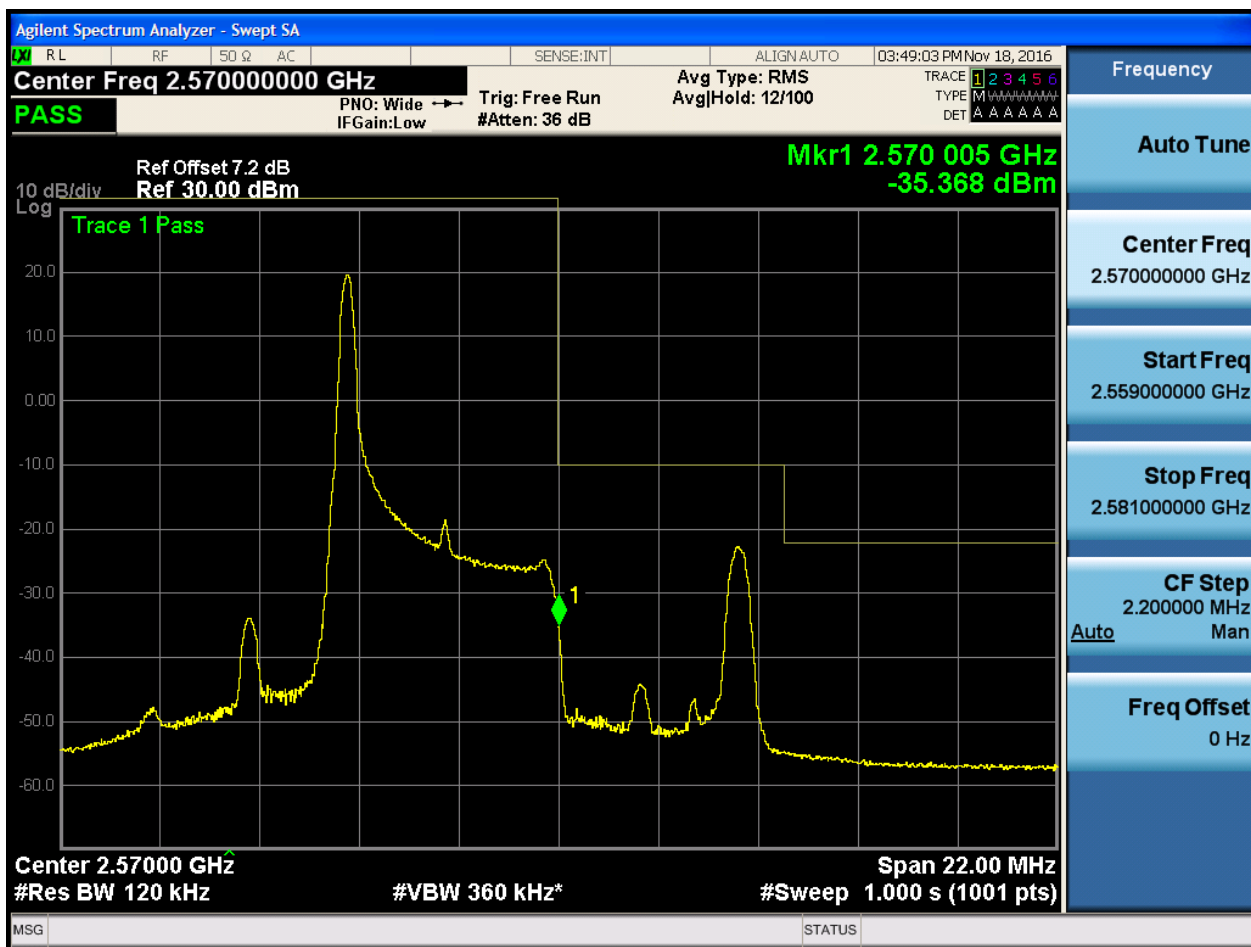
5.1.1.1.1.4 Test RB = RB25#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0



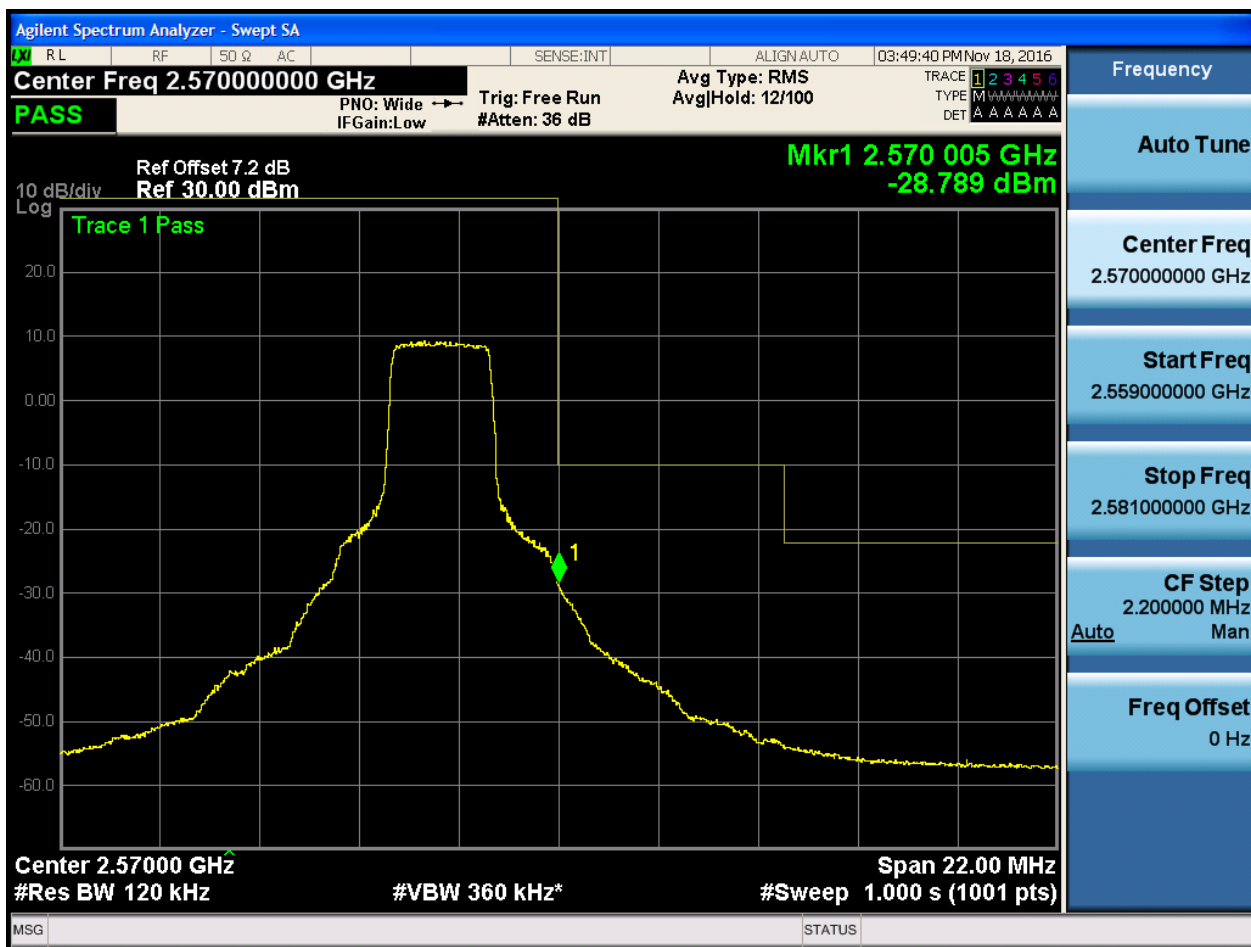


5.1.1.1.2.2 Test RB = RB1#24





5.1.1.1.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:49:58 PM Nov 18, 2016

Center Freq 2.570000000 GHz Avg Type: RMS
PASS PNO: Wide IFGain: Low Trig: Free Run AvgHold: 12/100
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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.570 005 GHz
-25.835 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 120 kHz #VBW 360 kHz* Span 22.00 MHz
#Sweep 1.000 s (1001 pts)

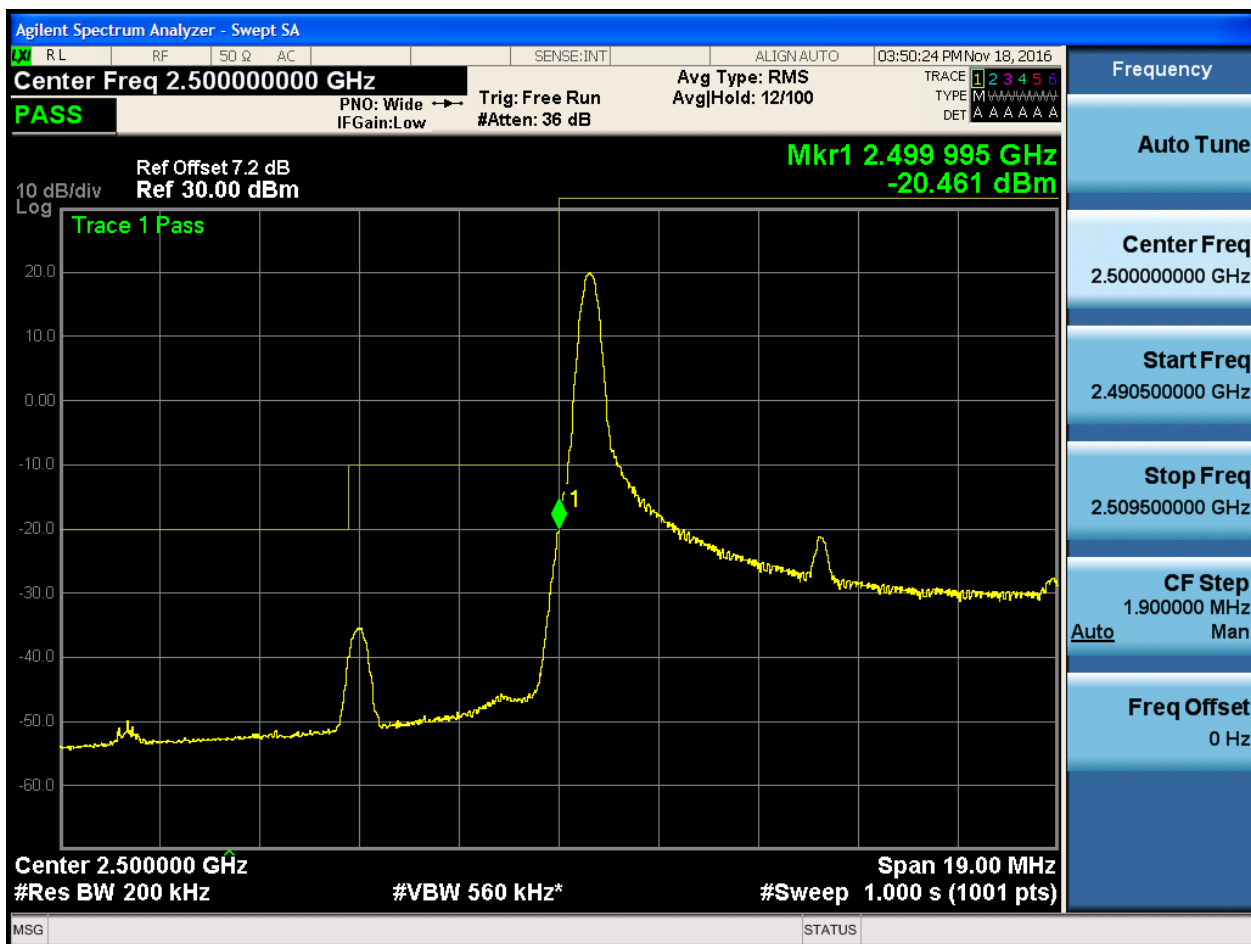
MSG STATUS



5.1.1.1.2 Test Bandwidth = 10

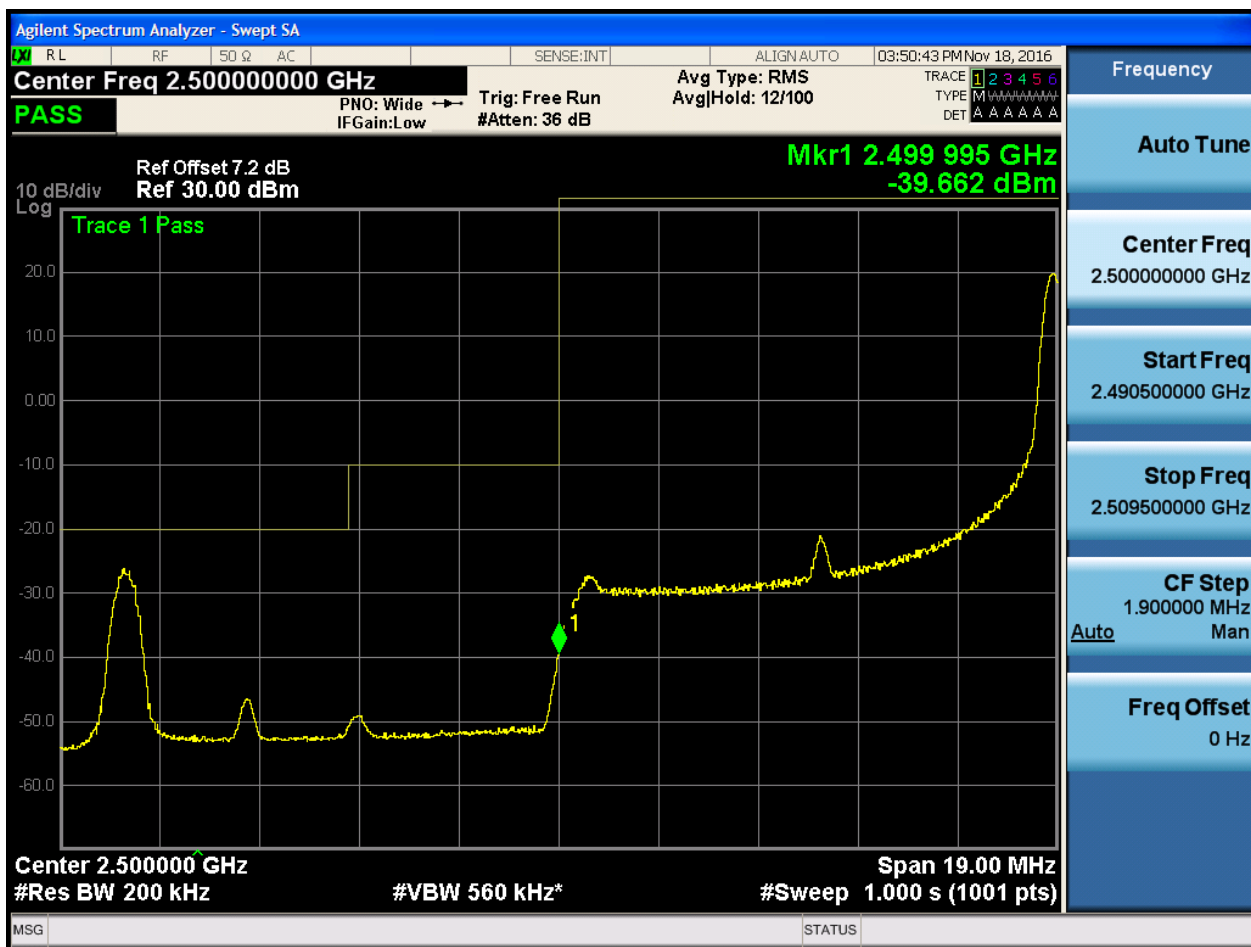
5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0



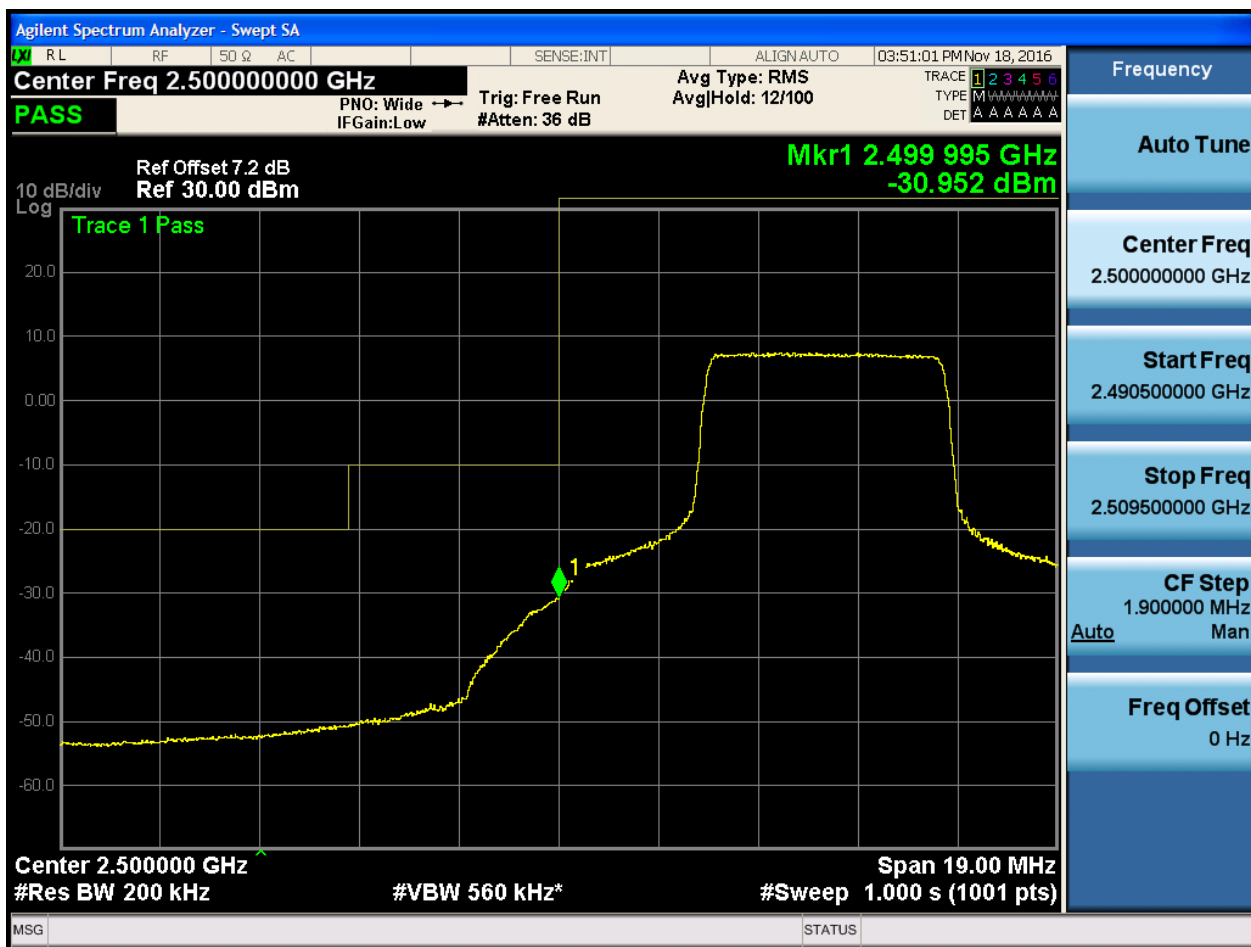


5.1.1.1.2.1.2 Test RB = RB1#49





5.1.1.1.2.1.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:51:19 PM Nov 18, 2016

Center Freq 2.500000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 12/100
PASS #Atten: 36 dB

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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-27.964 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 200 kHz
#VBW 560 kHz*
Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

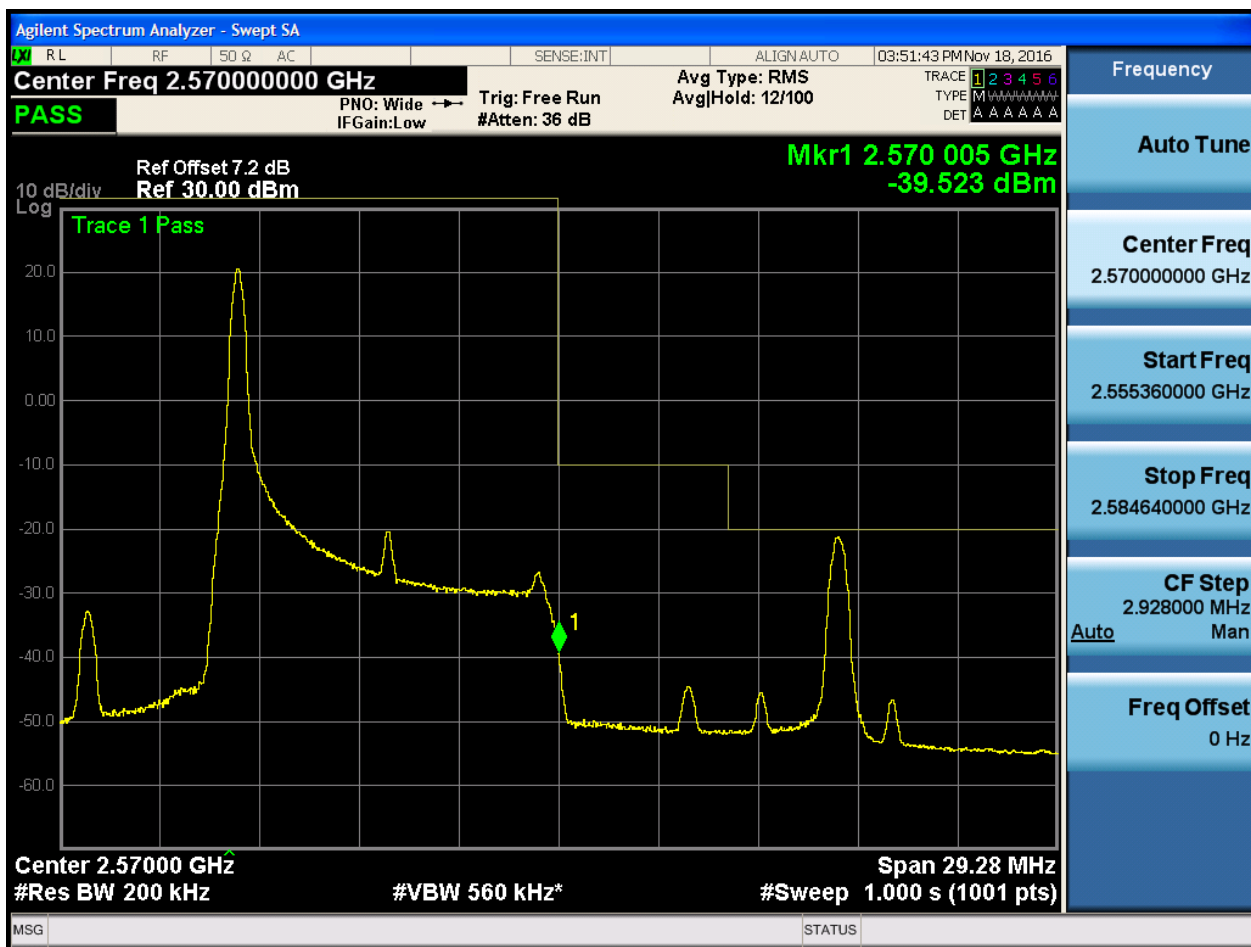
CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:52:02 PM Nov 18, 2016

Center Freq 2.570000000 GHz Avg Type: RMS
#Res BW 200 kHz IF Gain: Low Trig: Free Run #Atten: 36 dB

PASS PNO: Wide Trace 1 2 3 4 5 6
IF Gain: Low #Atten: 36 dB TYPE M W W W W W W W
DET A A A A A A

Ref Offset 7.2 dB Mkr1 2.570 005 GHz
Ref 30.00 dBm -19.818 dBm

10 dB/div Log

Trace 1 Pass

Center 2.57000 GHz Span 29.28 MHz
#Res BW 200 kHz #VBW 560 kHz* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.555360000 GHz

Stop Freq
2.584640000 GHz

CF Step
2.928000 MHz
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:52:20 PM Nov 18, 2016

Center Freq 2.570000000 GHz Avg Type: RMS
PASS PNO: Wide IF Gain: Low Trig: Free Run Avg Hold: 12/100
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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.570 005 GHz
-30.995 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 200 kHz
#VBW 560 kHz*
Span 29.28 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.555360000 GHz

Stop Freq
2.584640000 GHz

CF Step
2.928000 MHz
Auto Man

Freq Offset
0 Hz



5.1.1.1.2.2.4 Test RB = RB50#0

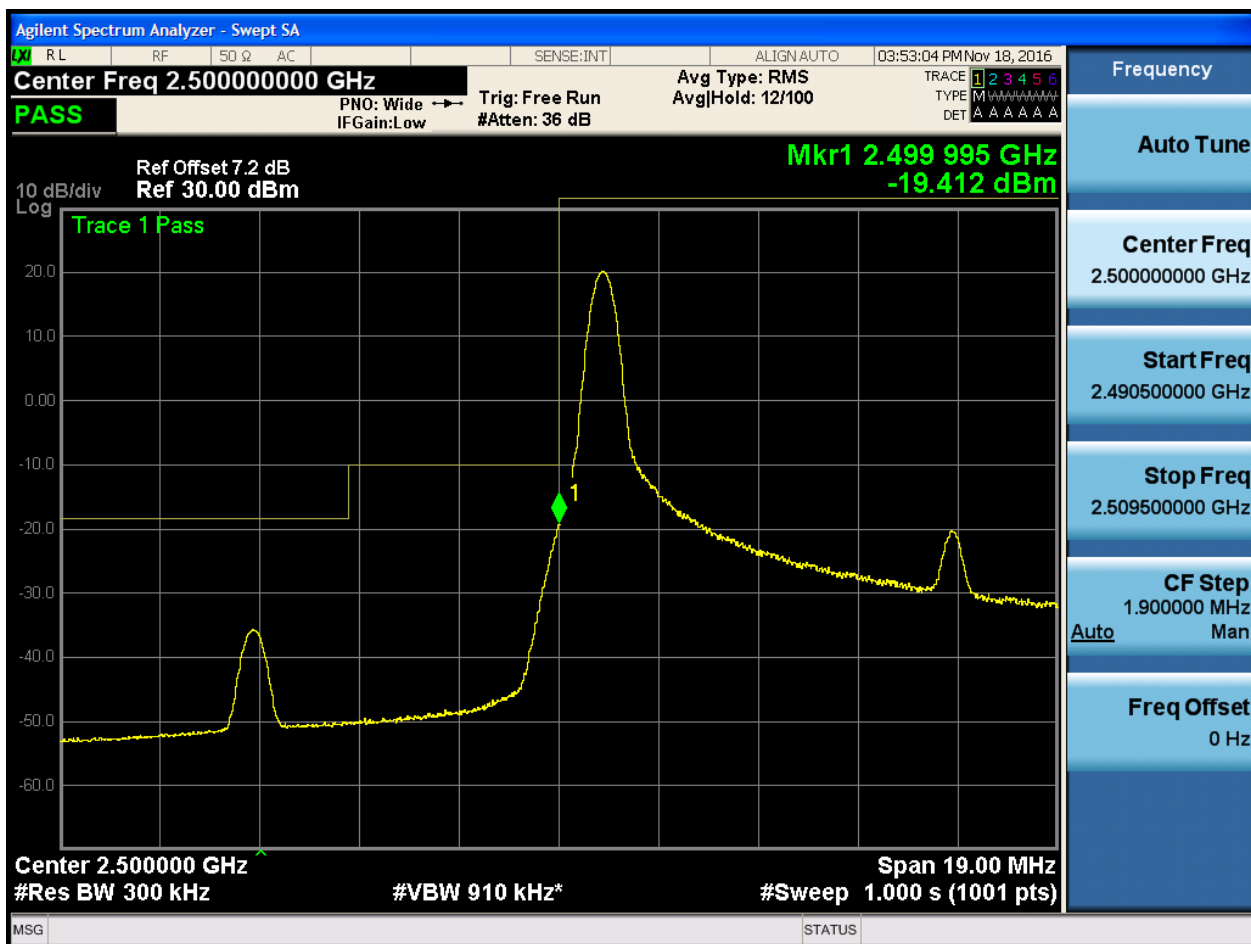




5.1.1.1.3 Test Bandwidth = 15

5.1.1.1.3.1 Test Channel = LCH

5.1.1.1.3.1.1 Test RB = RB1#0





5.1.1.1.3.1.2 Test RB = RB1#74





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:53:41 PM Nov 18, 2016

Center Freq 2.500000000 GHz Avg Type: RMS
#Res BW 300 kHz PNO: Wide Trig: Free Run
IFGain:Low #Atten: 36 dB

PASS

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-31.274 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

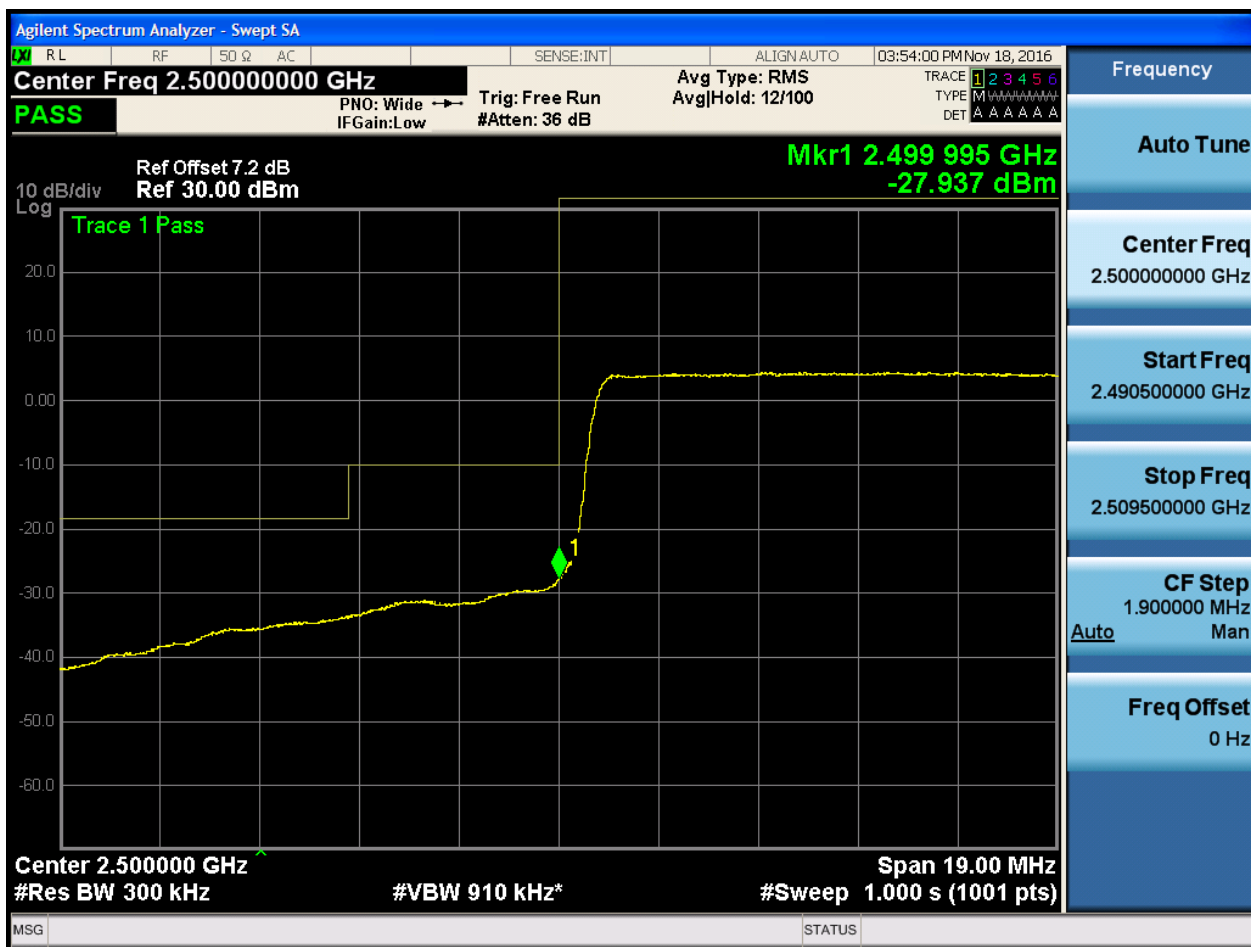
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



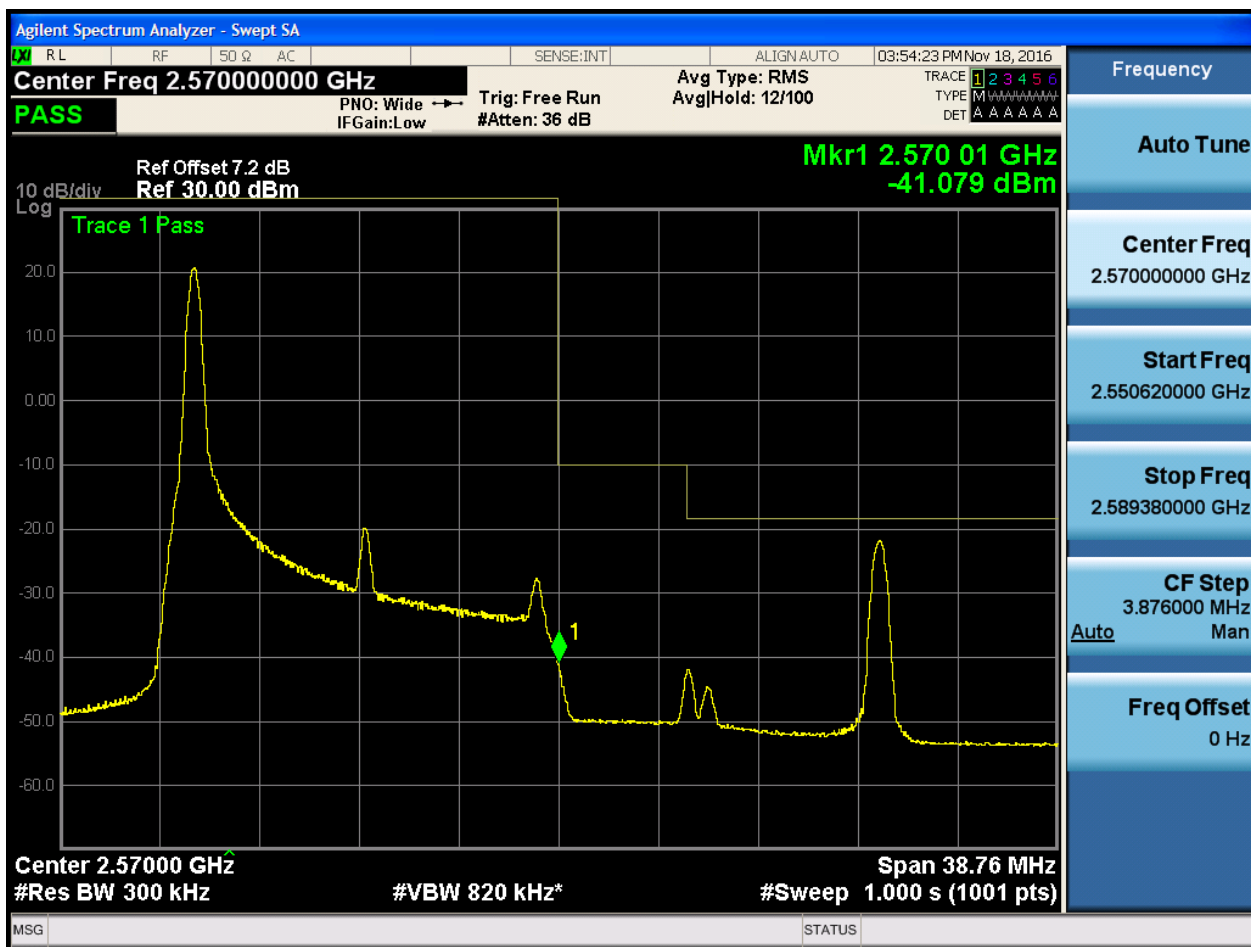
5.1.1.1.3.1.4 Test RB = RB75#0





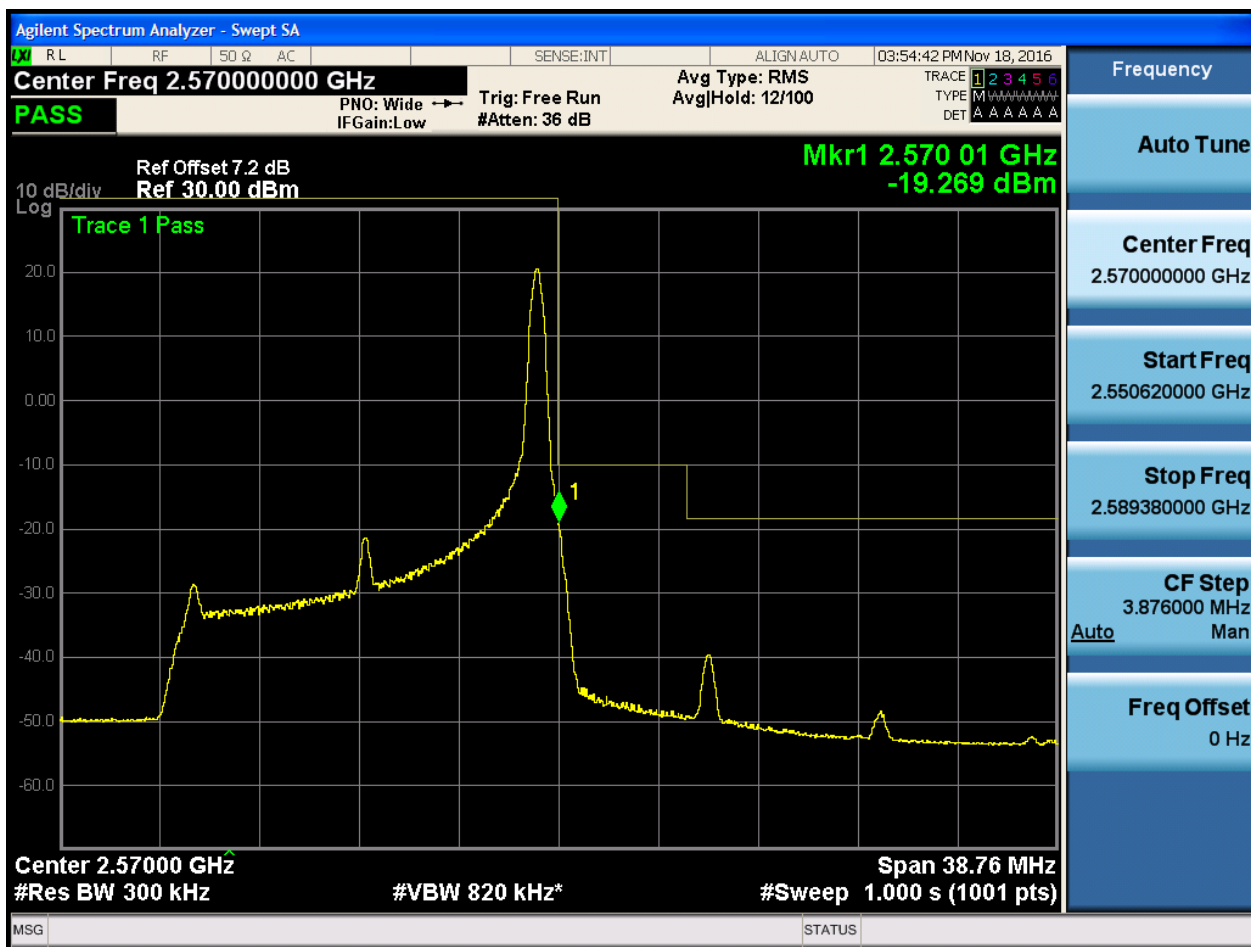
5.1.1.1.3.2 Test Channel = HCH

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

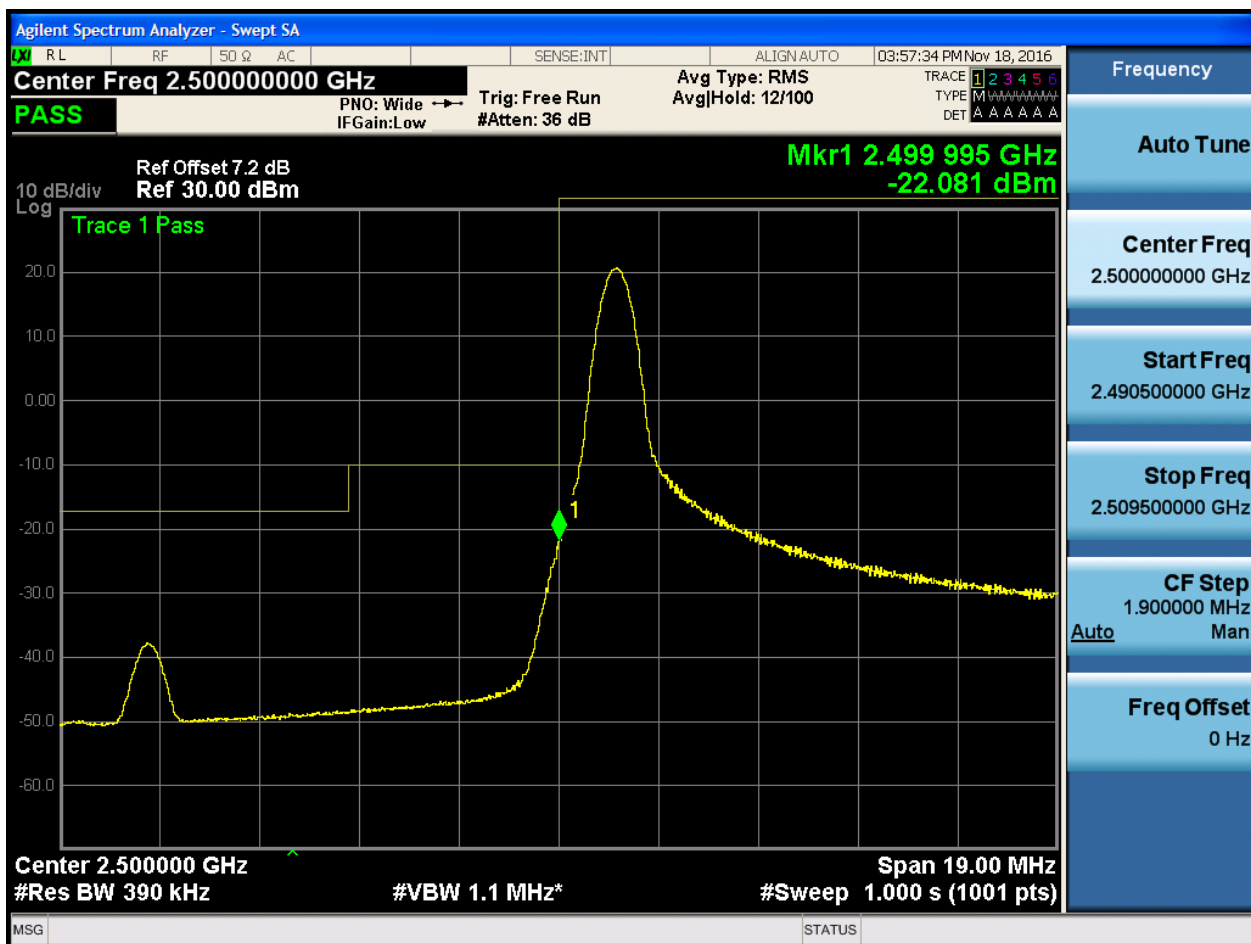




5.1.1.1.4 Test Bandwidth = 20

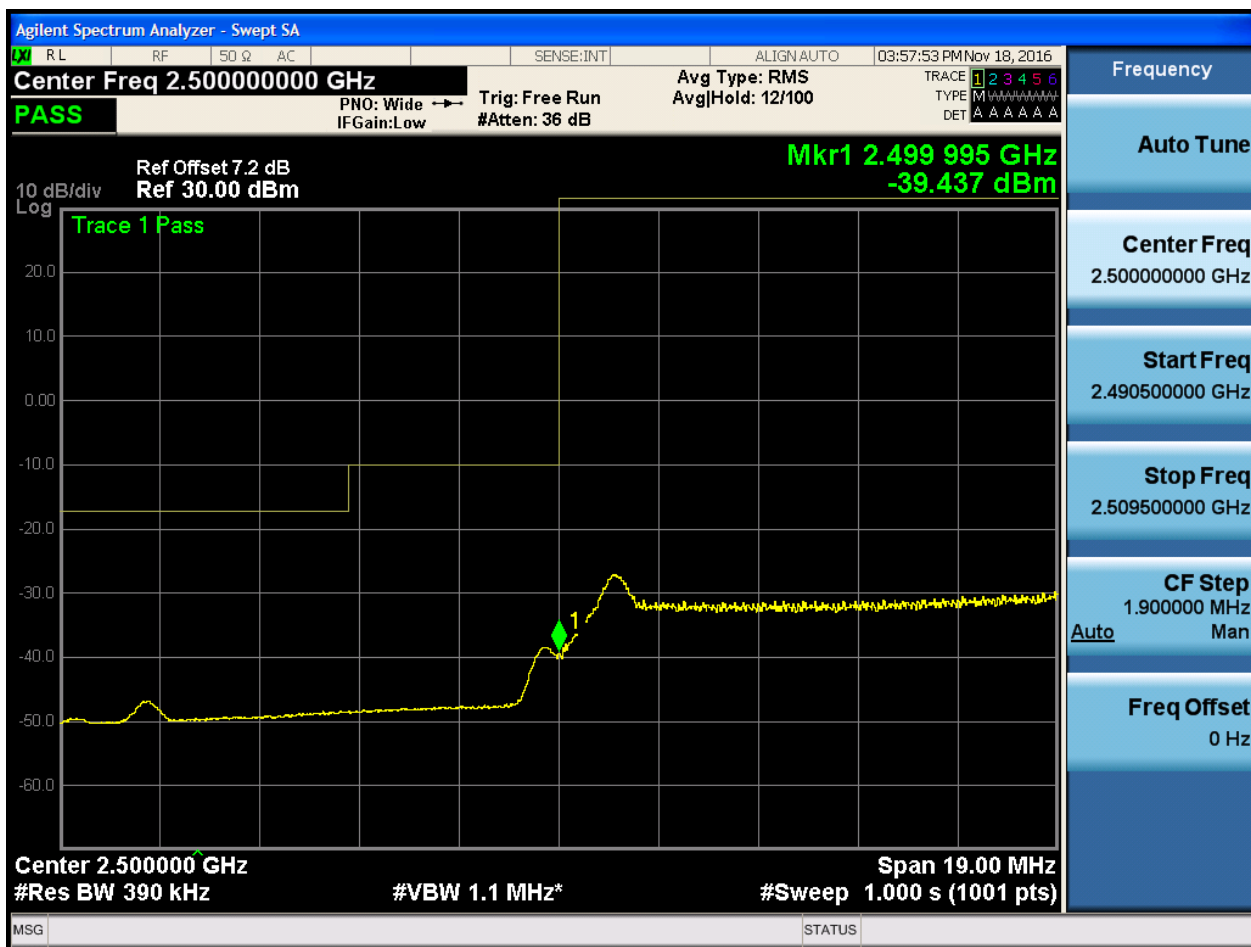
5.1.1.1.4.1 Test Channel = LCH

5.1.1.1.4.1.1 Test RB = RB1#0





5.1.1.1.4.1.2 Test RB = RB1#99



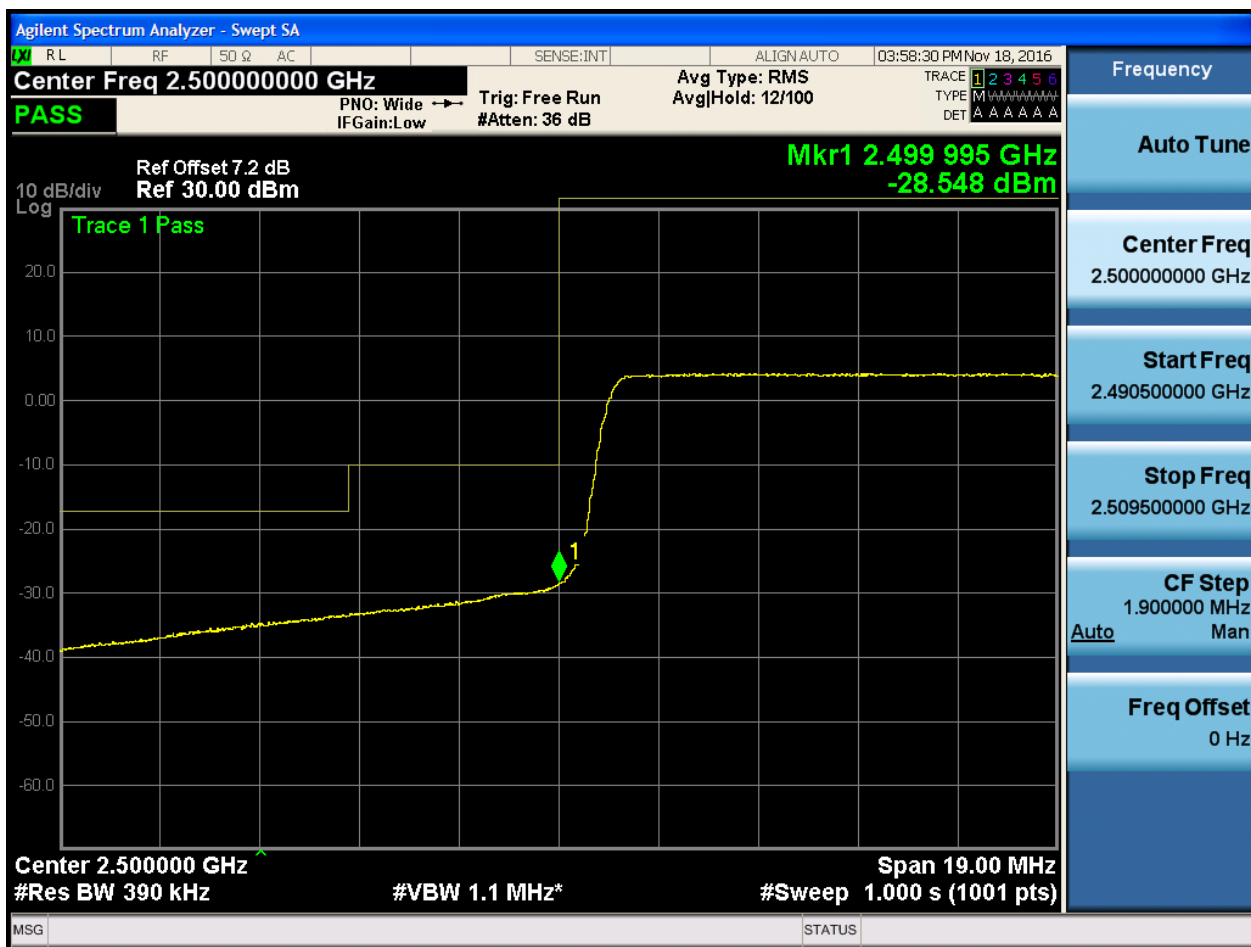


5.1.1.1.4.1.3 Test RB = RB50#25





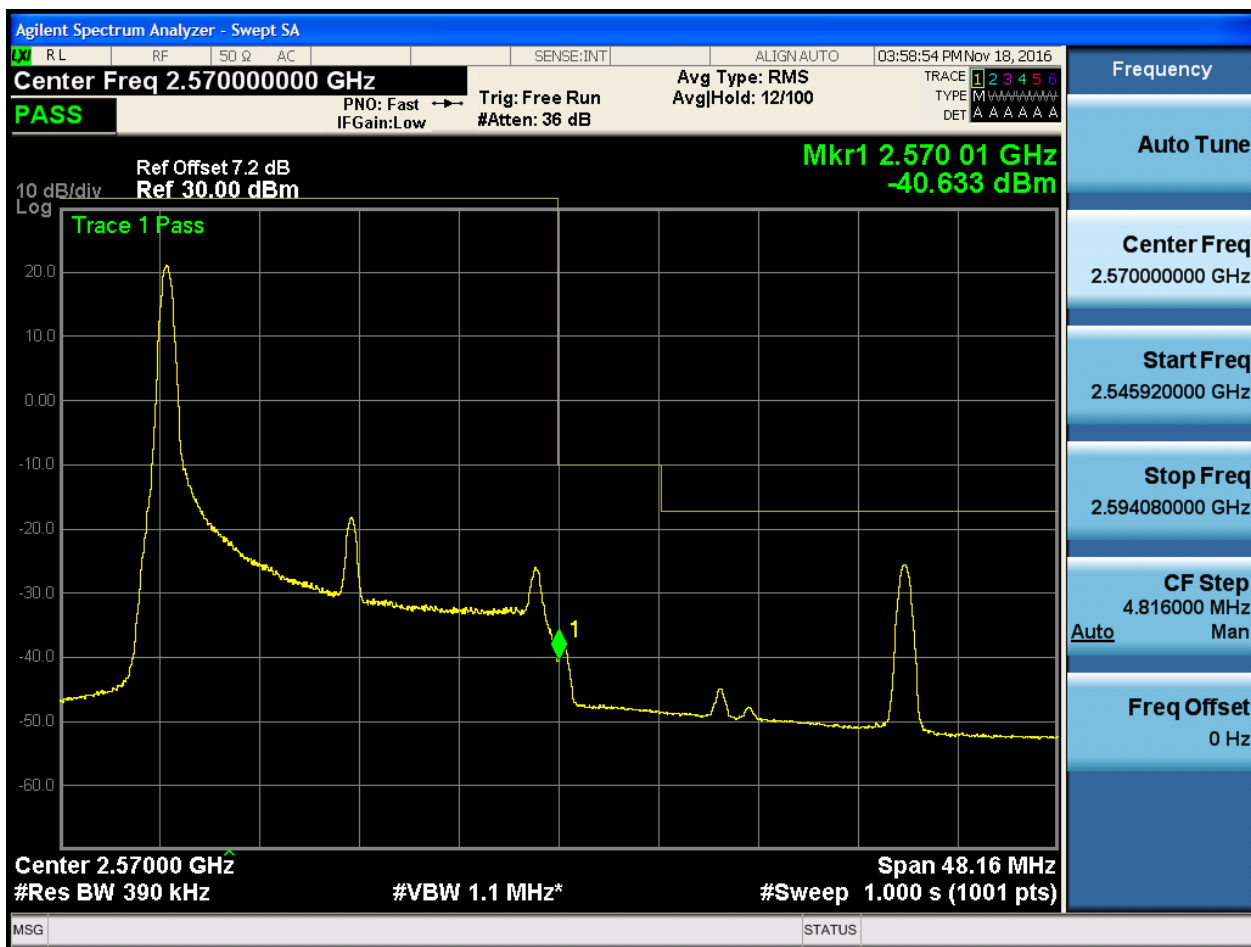
5.1.1.1.4.1.4 Test RB = RB100#0





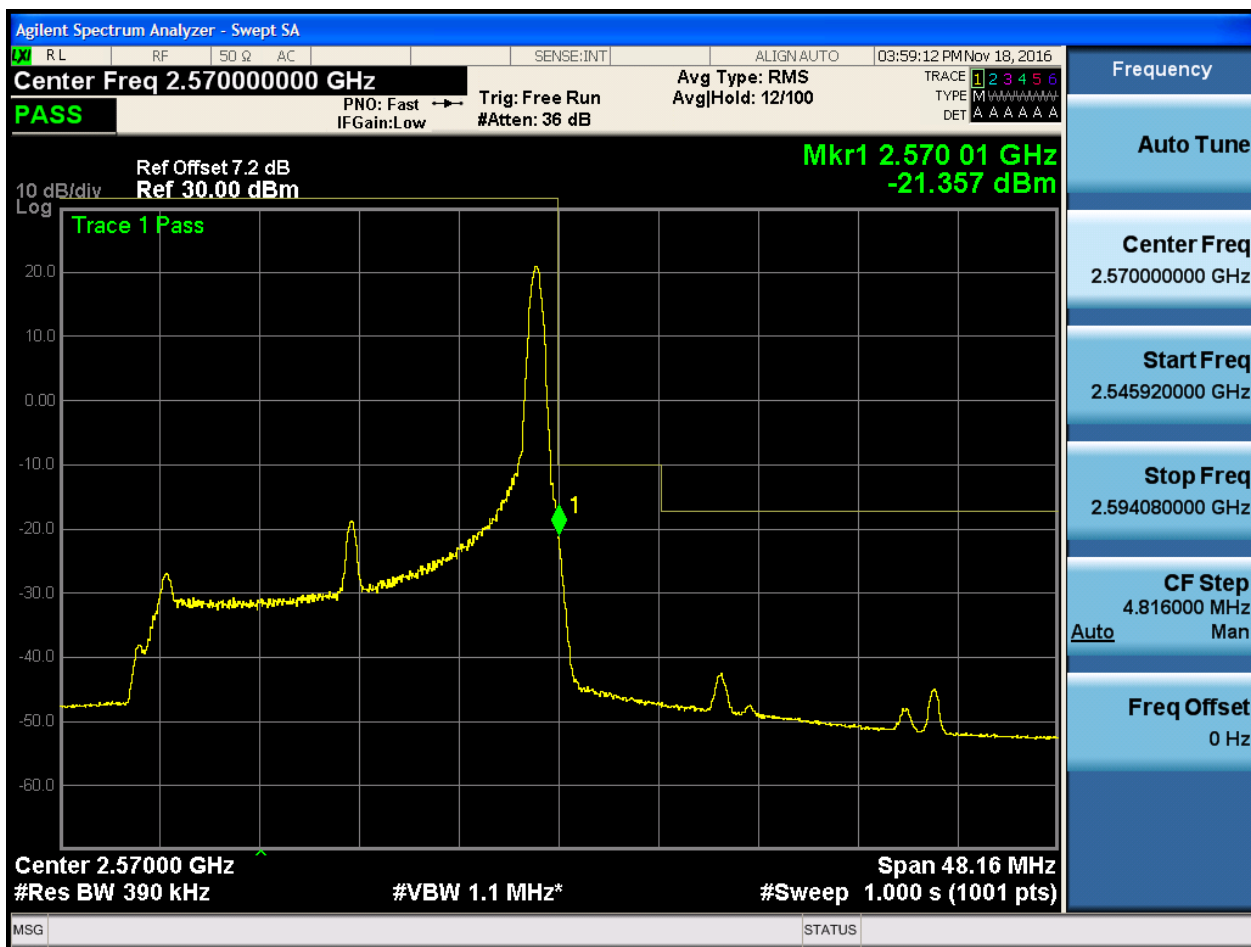
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0





5.1.1.1.4.2.2 Test RB = RB1#99





5.1.1.1.4.2.3 Test RB = RB50#25





5.1.1.1.4.2.4 Test RB = RB100#0



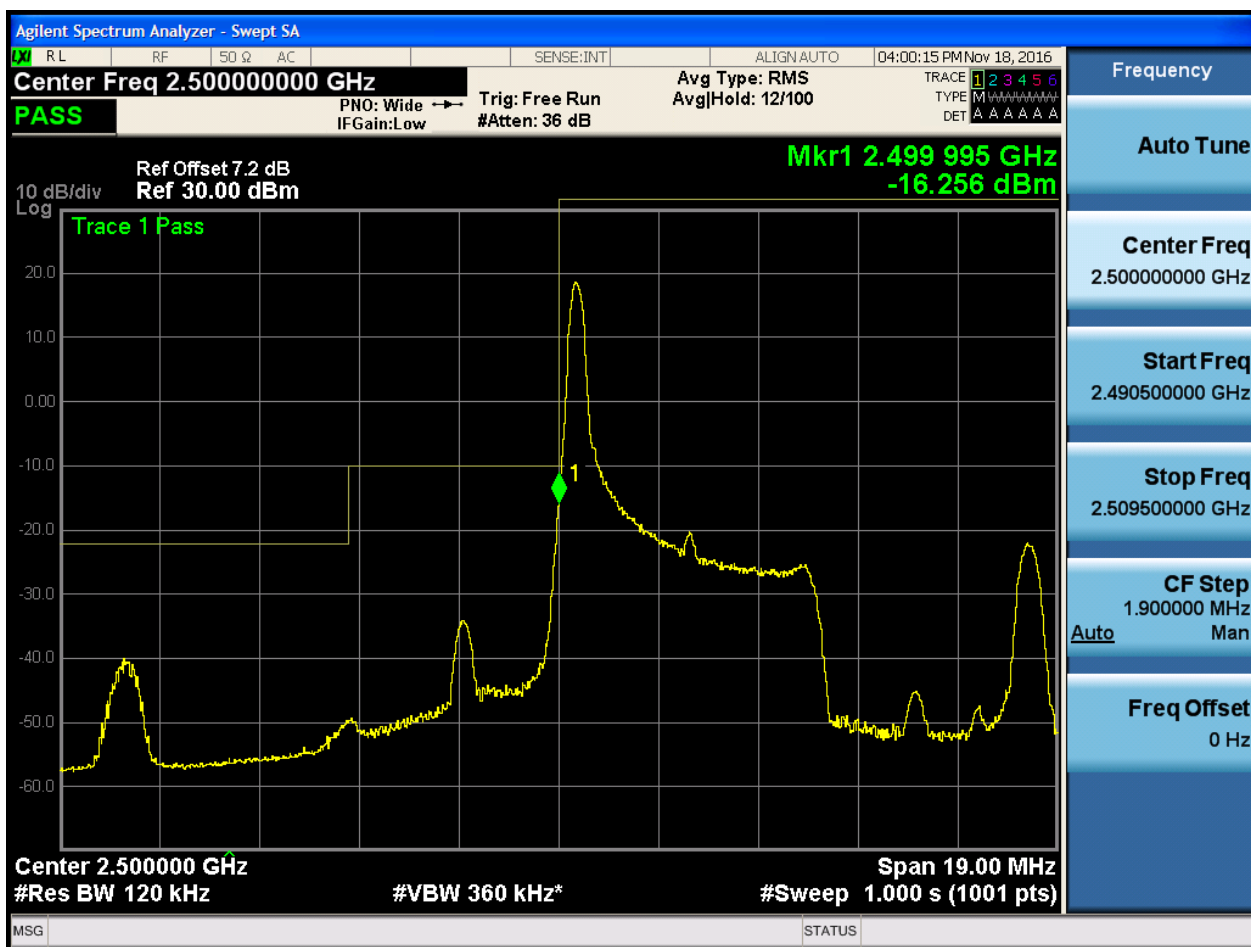


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 5

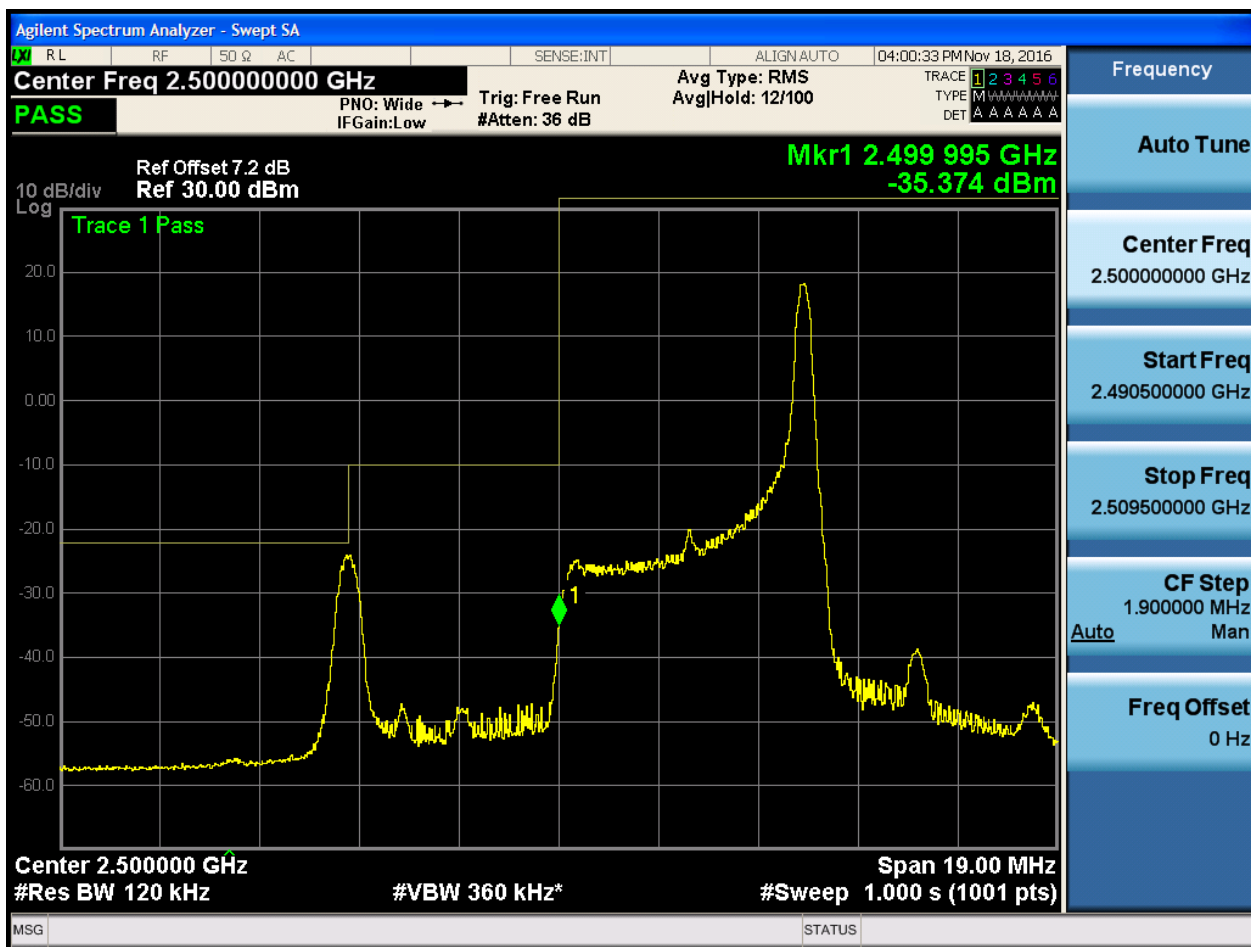
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0



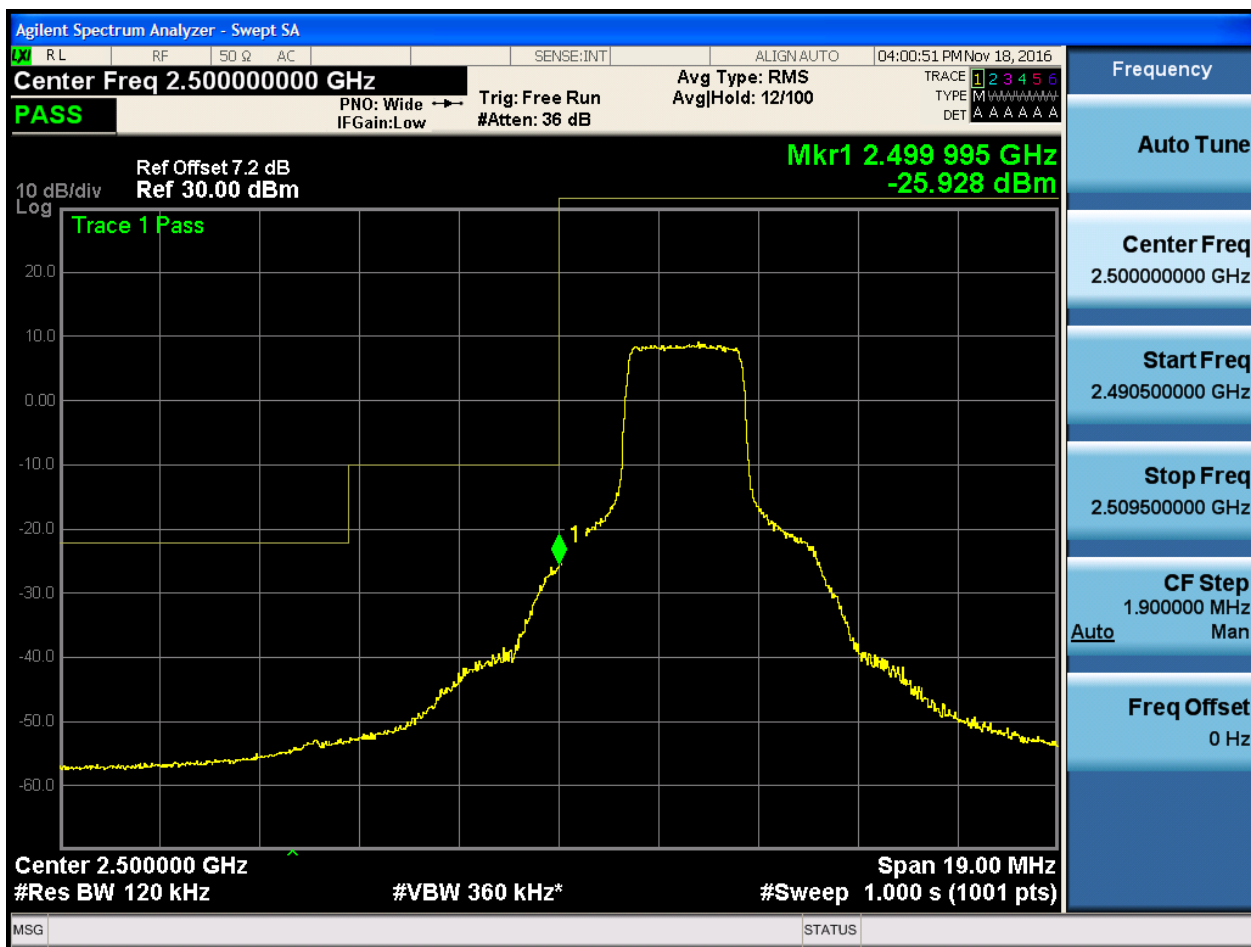


5.1.1.2.1.1.2 Test RB = RB1#24



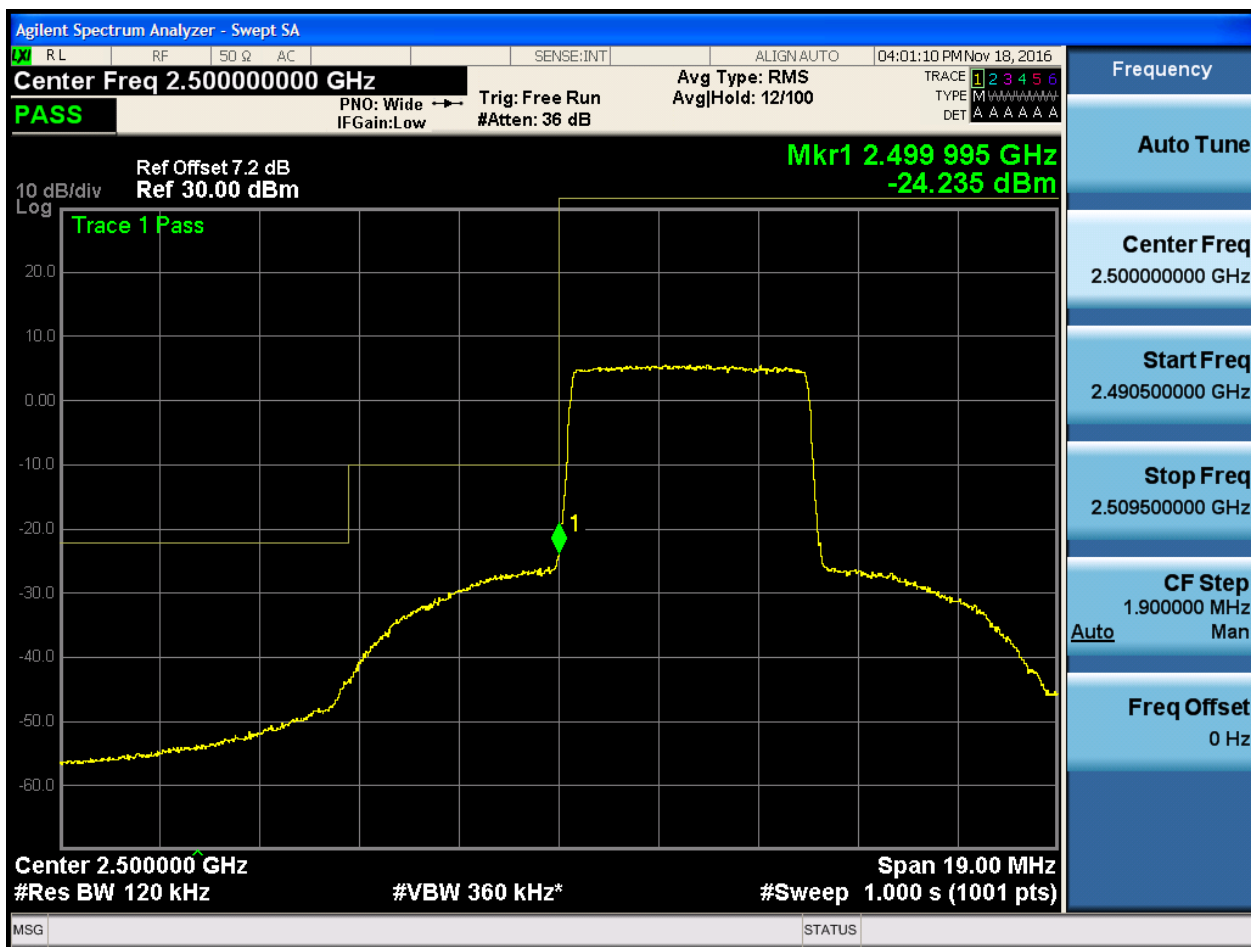


5.1.1.2.1.1.3 Test RB = RB12#6



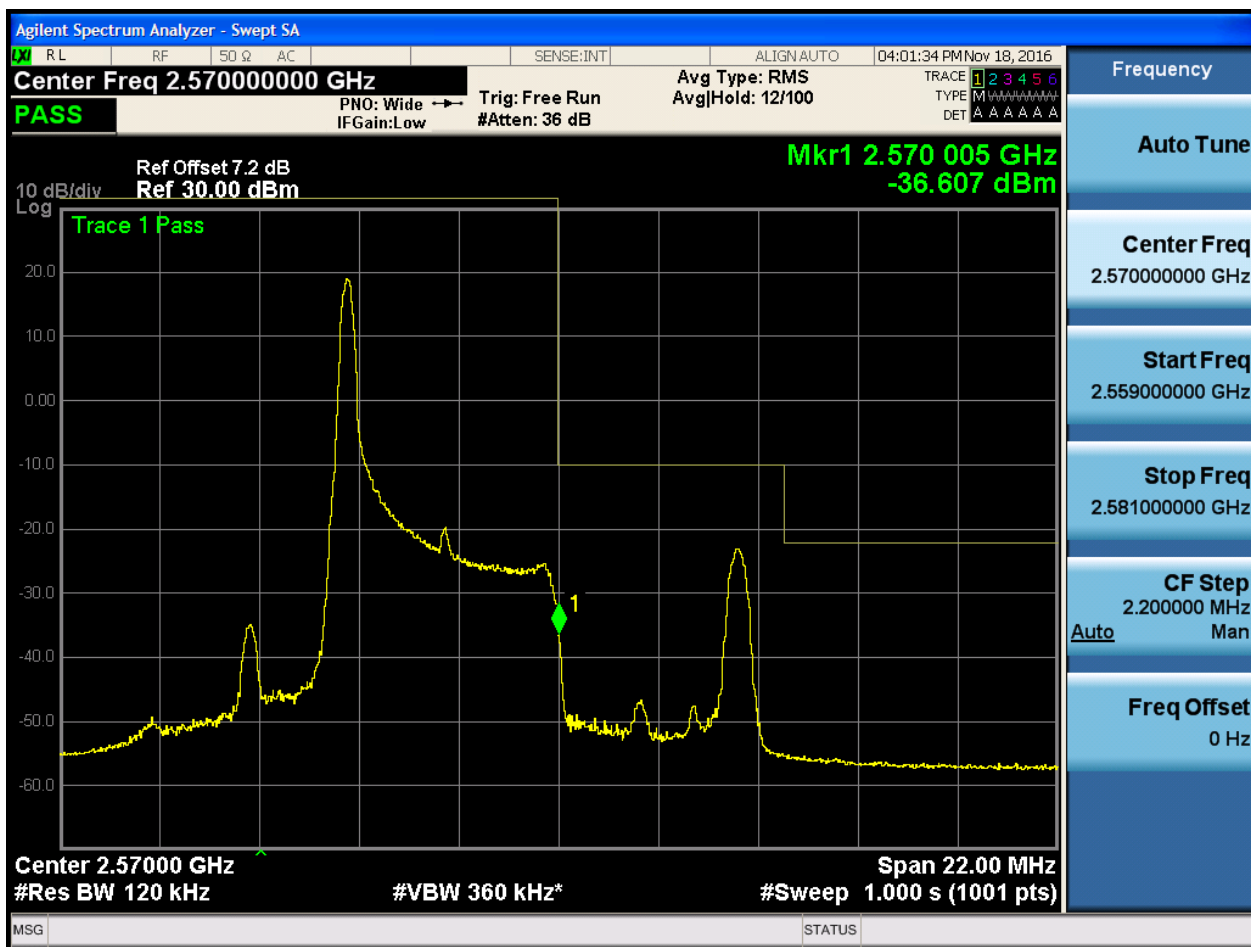


5.1.1.2.1.1.4 Test RB = RB25#0



5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0



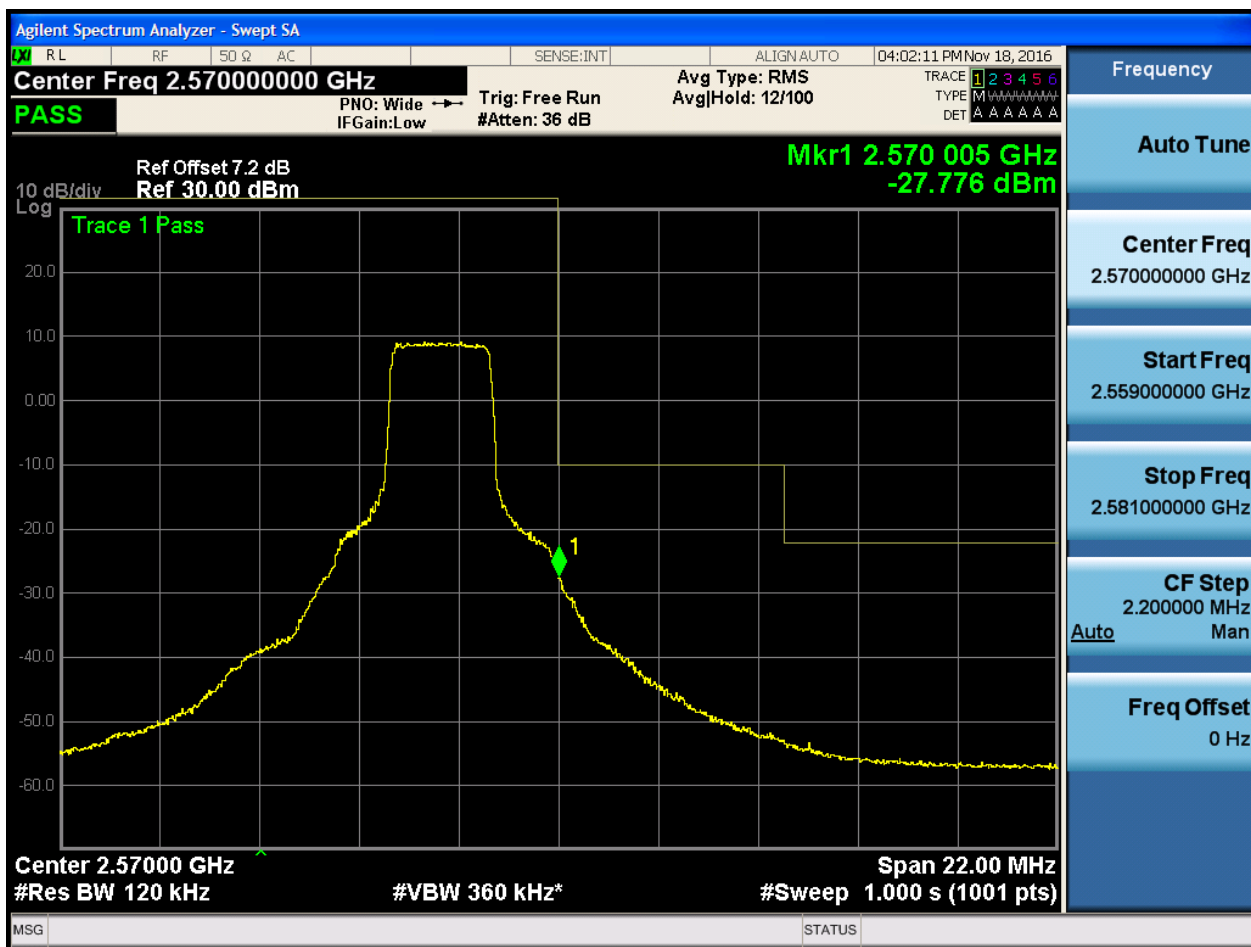


5.1.1.2.1.2.2 Test RB = RB1#24





5.1.1.2.1.2.3 Test RB = RB12#6





5.1.1.2.1.2.4 Test RB = RB25#0

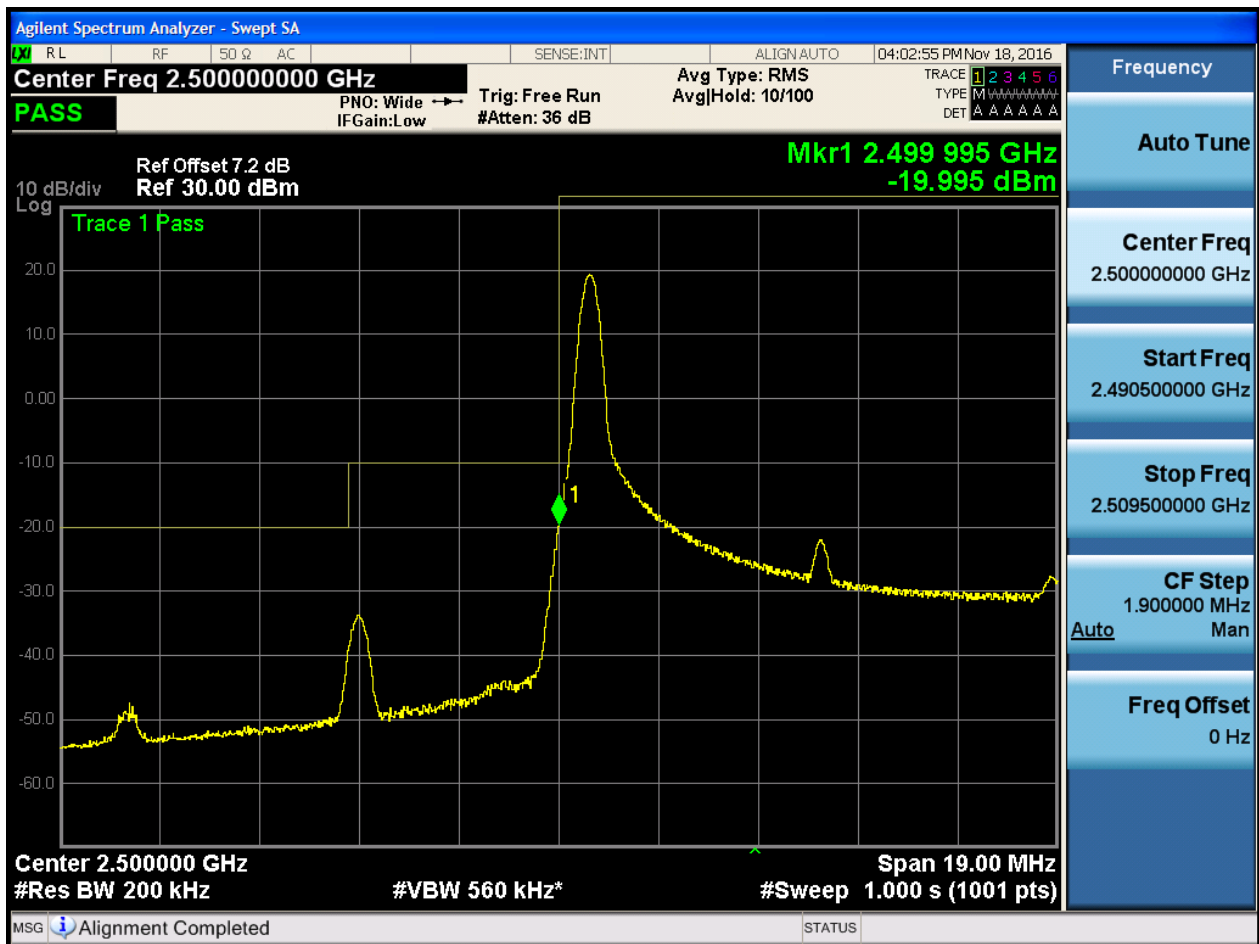




5.1.1.2.2 Test Bandwidth = 10

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:03:32 PM Nov 18, 2016

Center Freq 2.500000000 GHz Avg Type: RMS
PASS PNO: Wide IF Gain: Low Trig: Free Run Avg Hold: 12/100
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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-40.577 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 200 kHz
#VBW 560 kHz*
Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

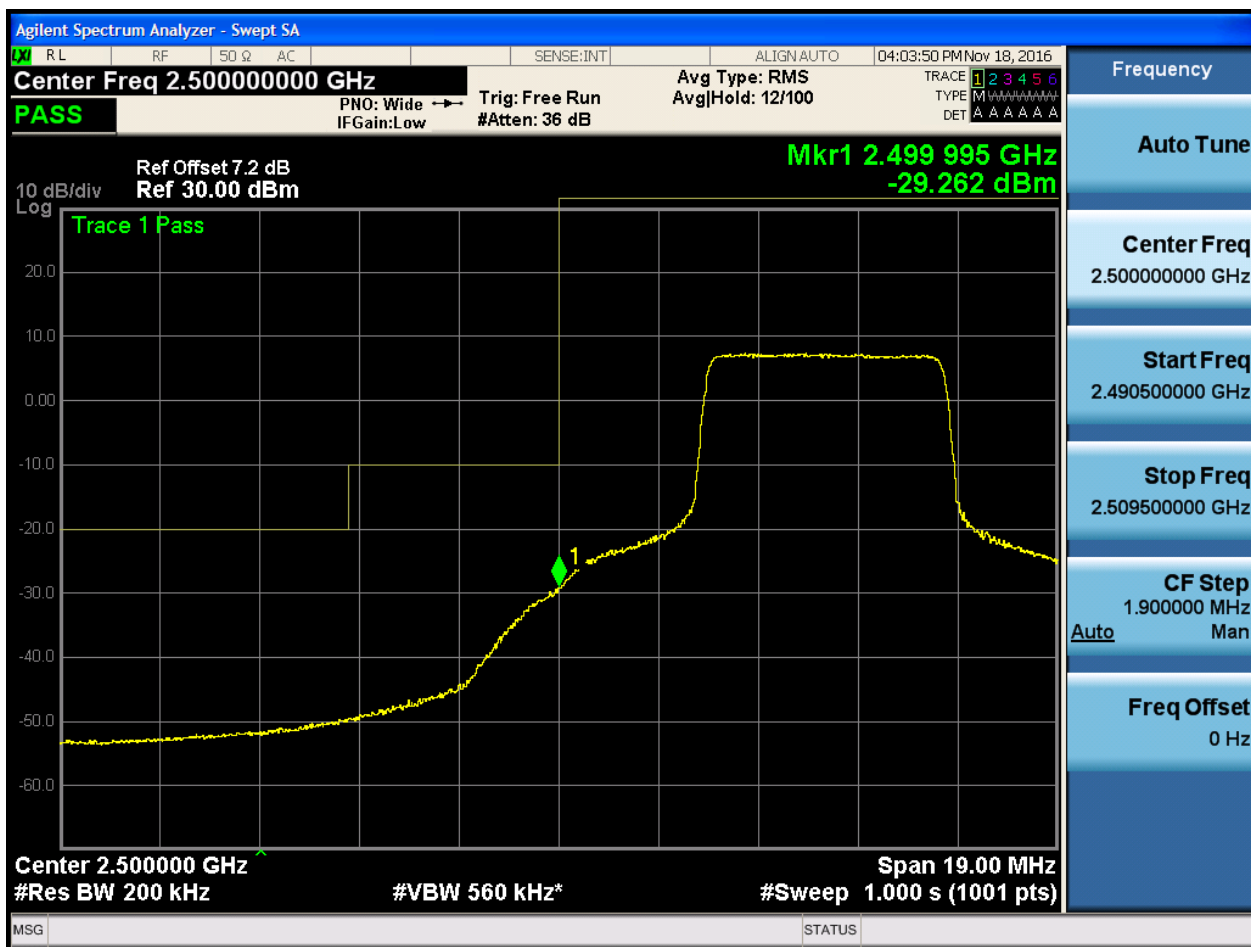
CF Step
1.900000 MHz
Man

Auto

Freq Offset
0 Hz

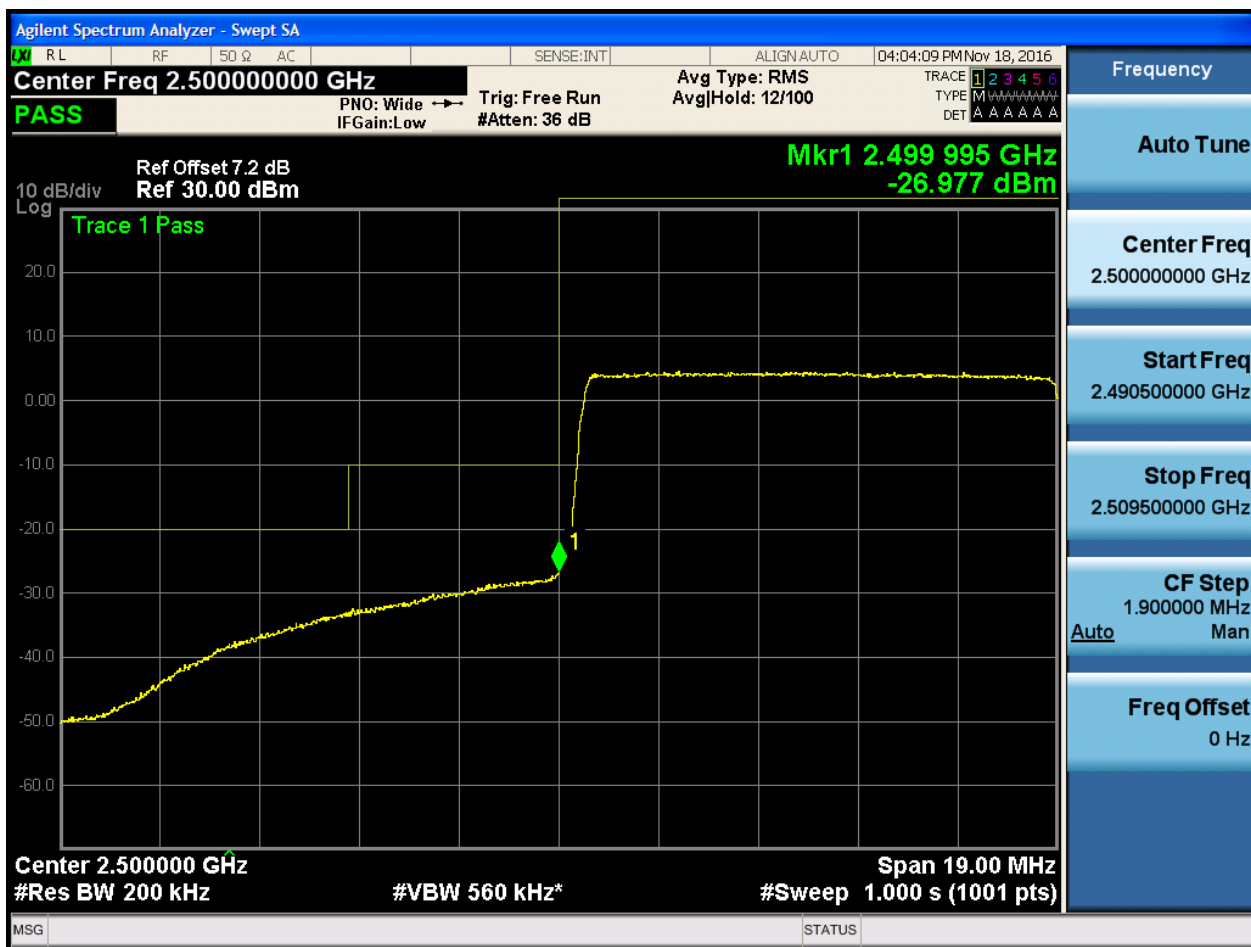


5.1.1.2.2.1.3 Test RB = RB25#13





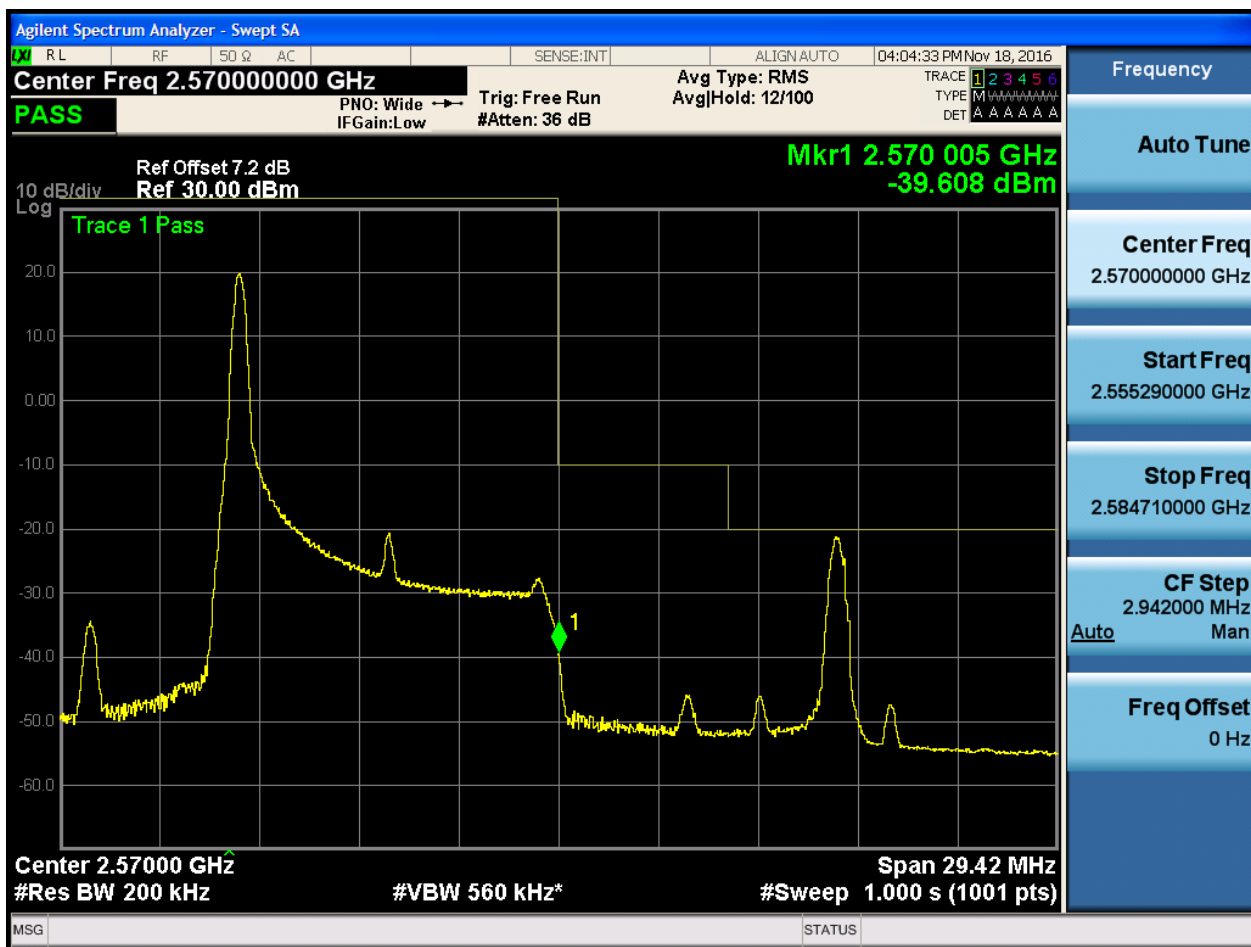
5.1.1.2.2.1.4 Test RB = RB50#0





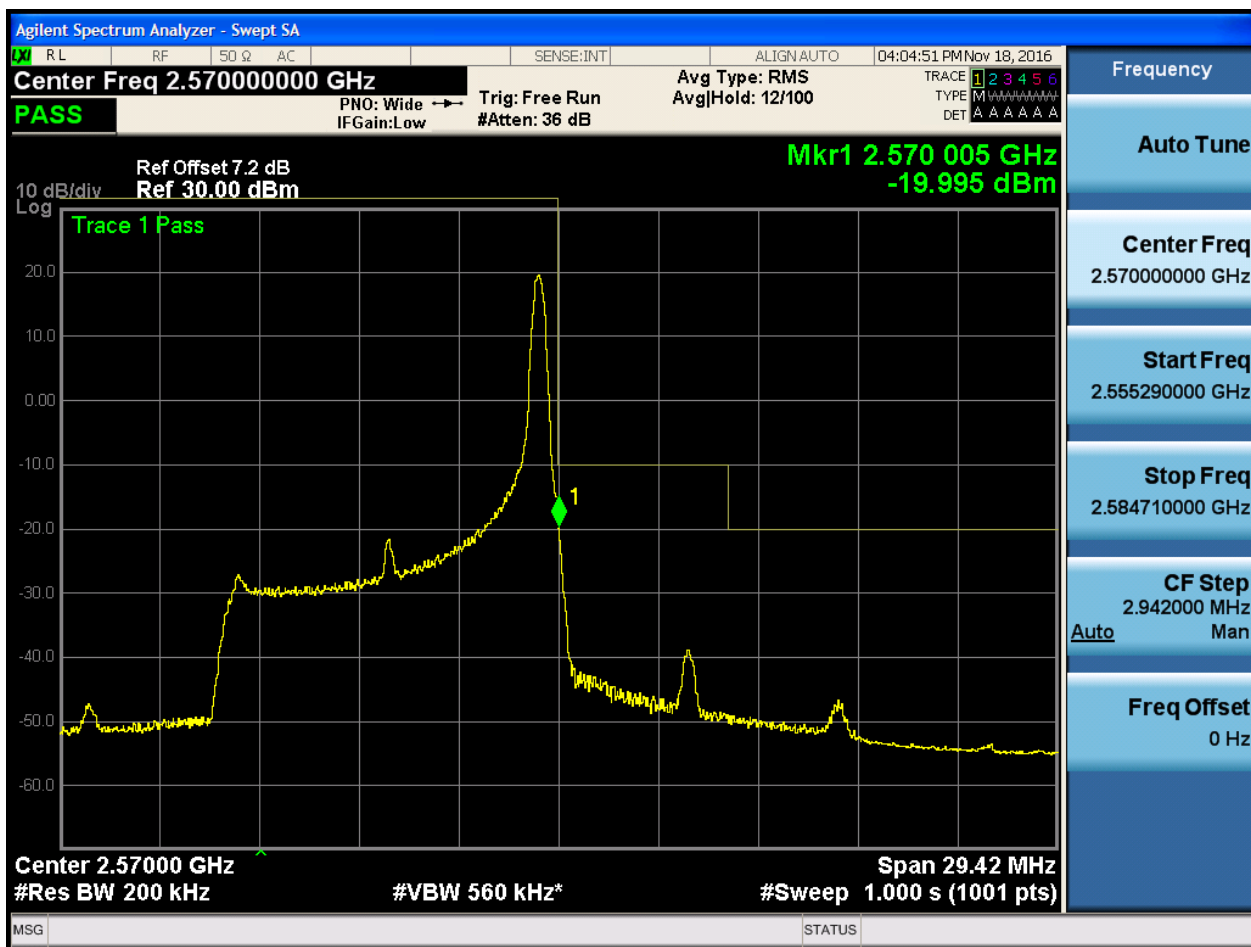
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB = RB1#0



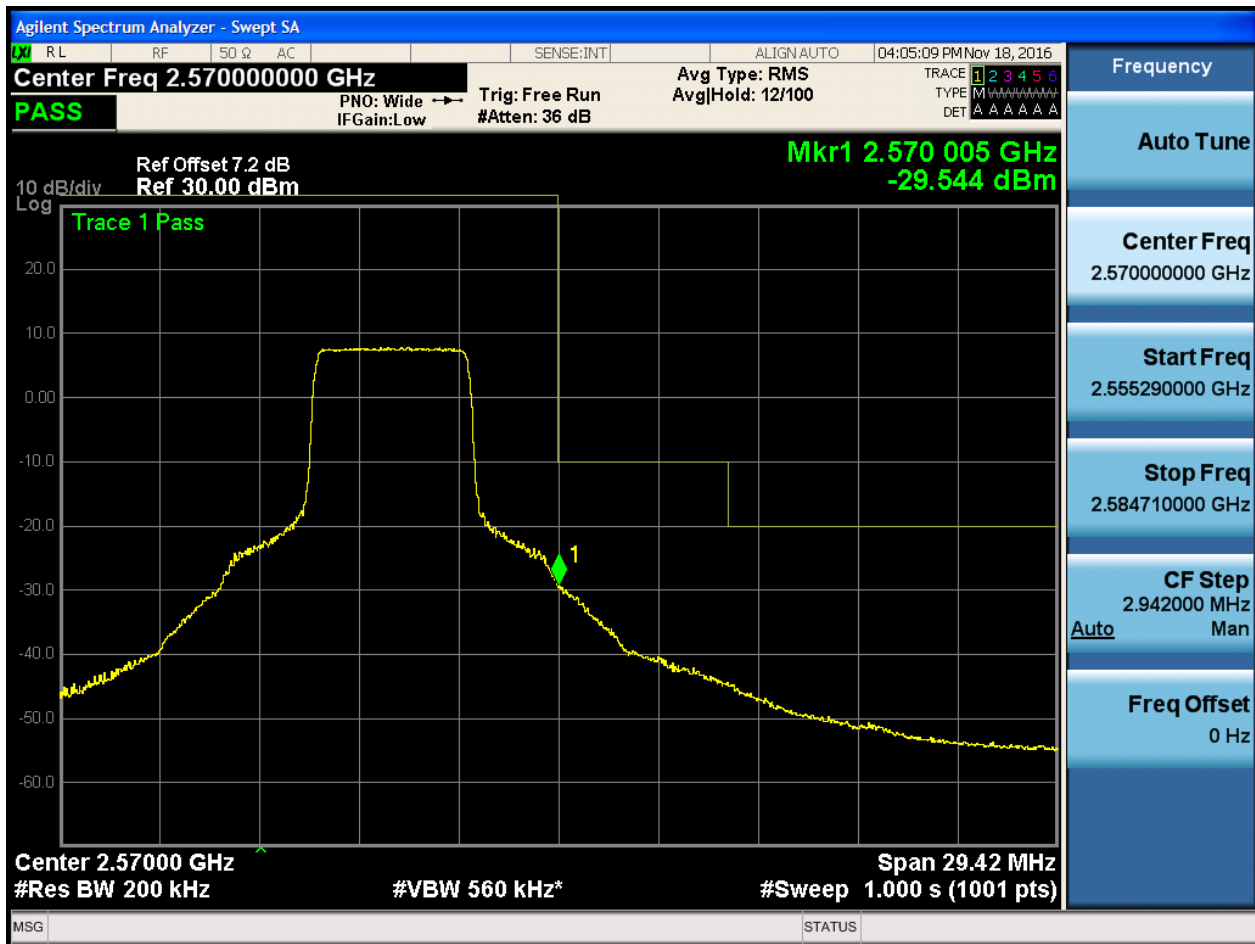


5.1.1.2.2.2 Test RB = RB1#49





5.1.1.2.2.3 Test RB = RB25#13





5.1.1.2.2.4 Test RB = RB50#0

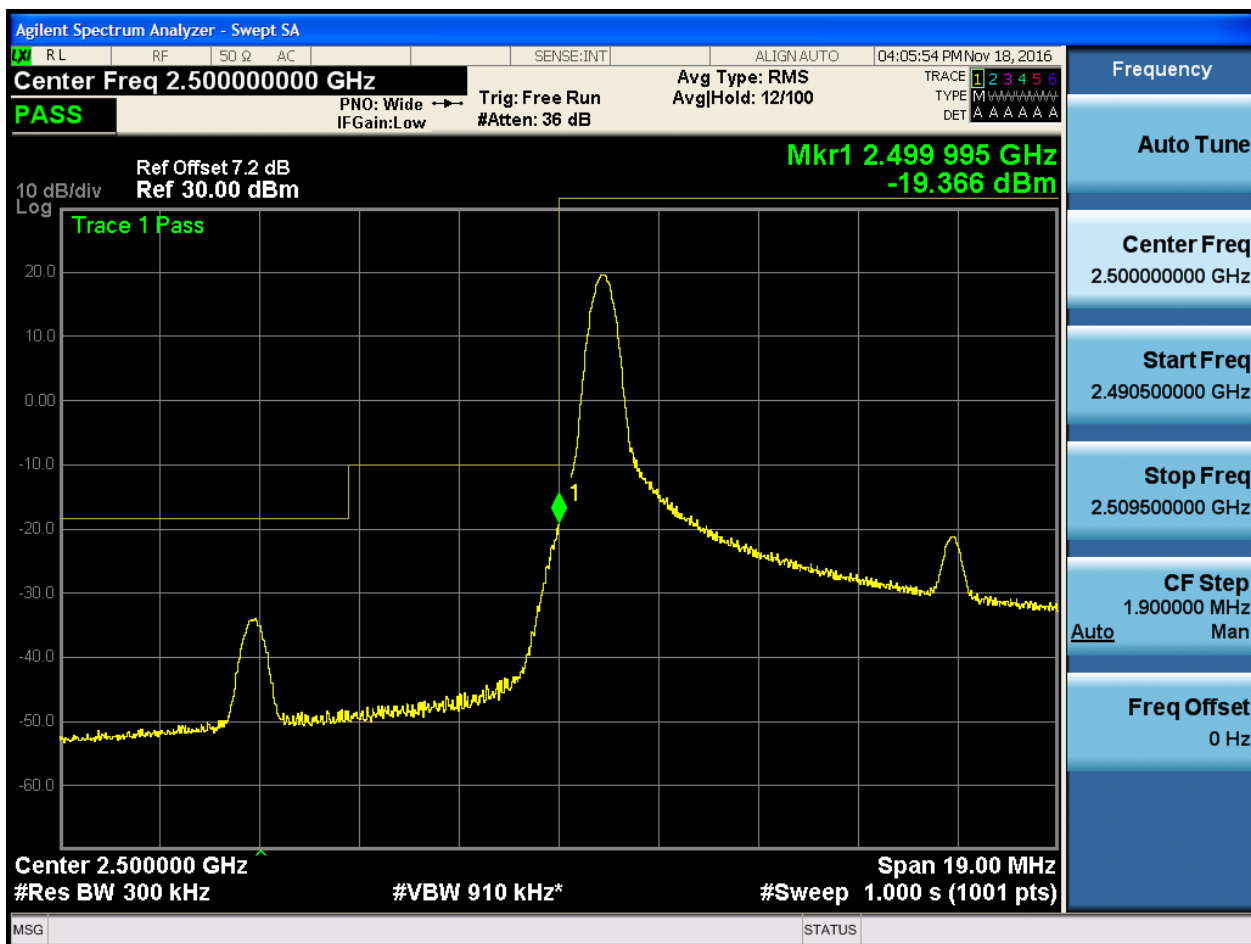




5.1.1.2.3 Test Bandwidth = 15

5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:06:12 PM Nov 18, 2016

Center Freq 2.50000000 GHz Avg Type: RMS
#Res BW 300 kHz IF Gain: Low Trig: Free Run Avg Hold: 12/100
PASS PNO: Wide IF Gain: 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

Frequency

Auto Tune

Center Freq
2.50000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

10 dB/div
Log

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-41.780 dBm

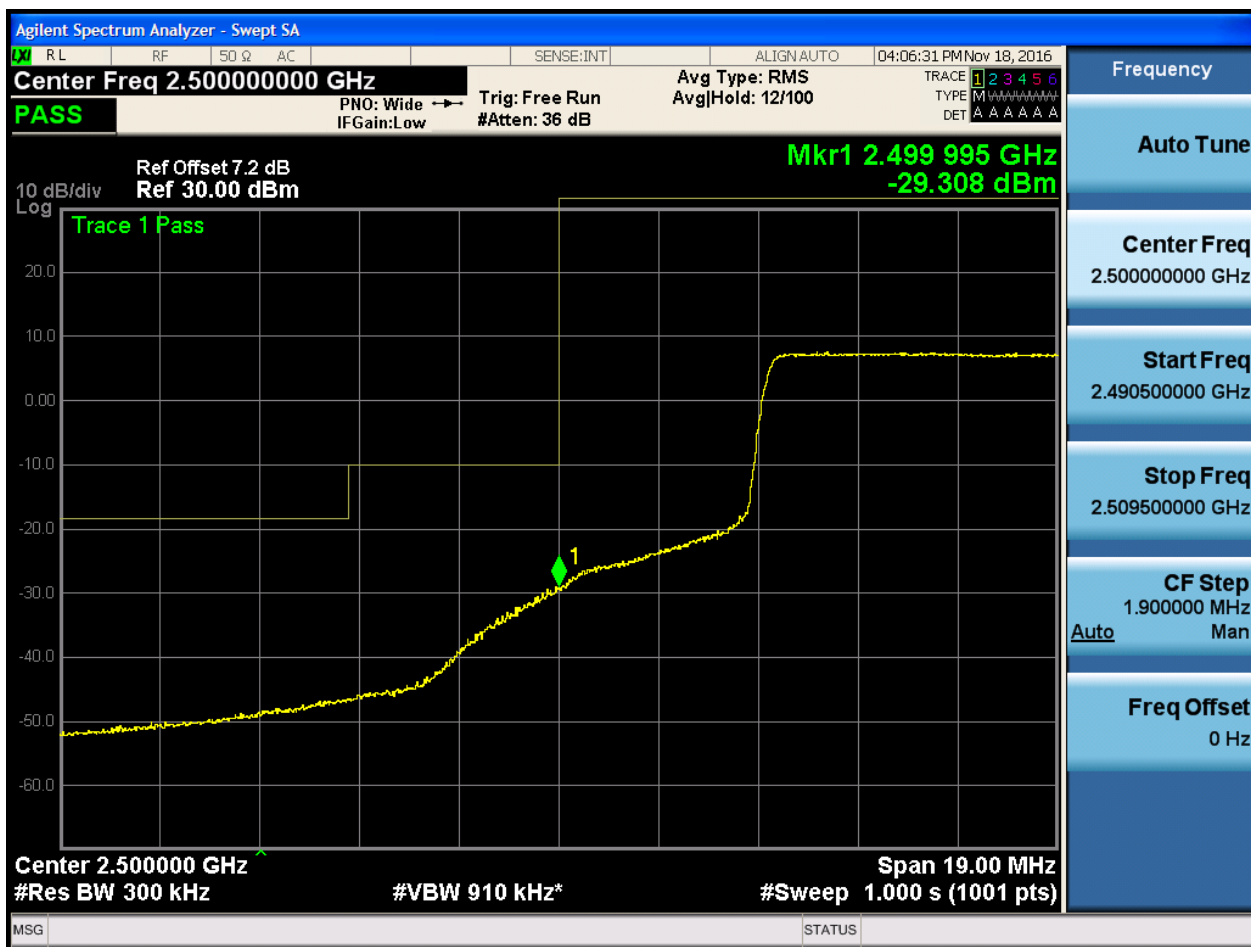
Trace 1 Pass

Center 2.500000 GHz
#Res BW 300 kHz #VBW 910 kHz* Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

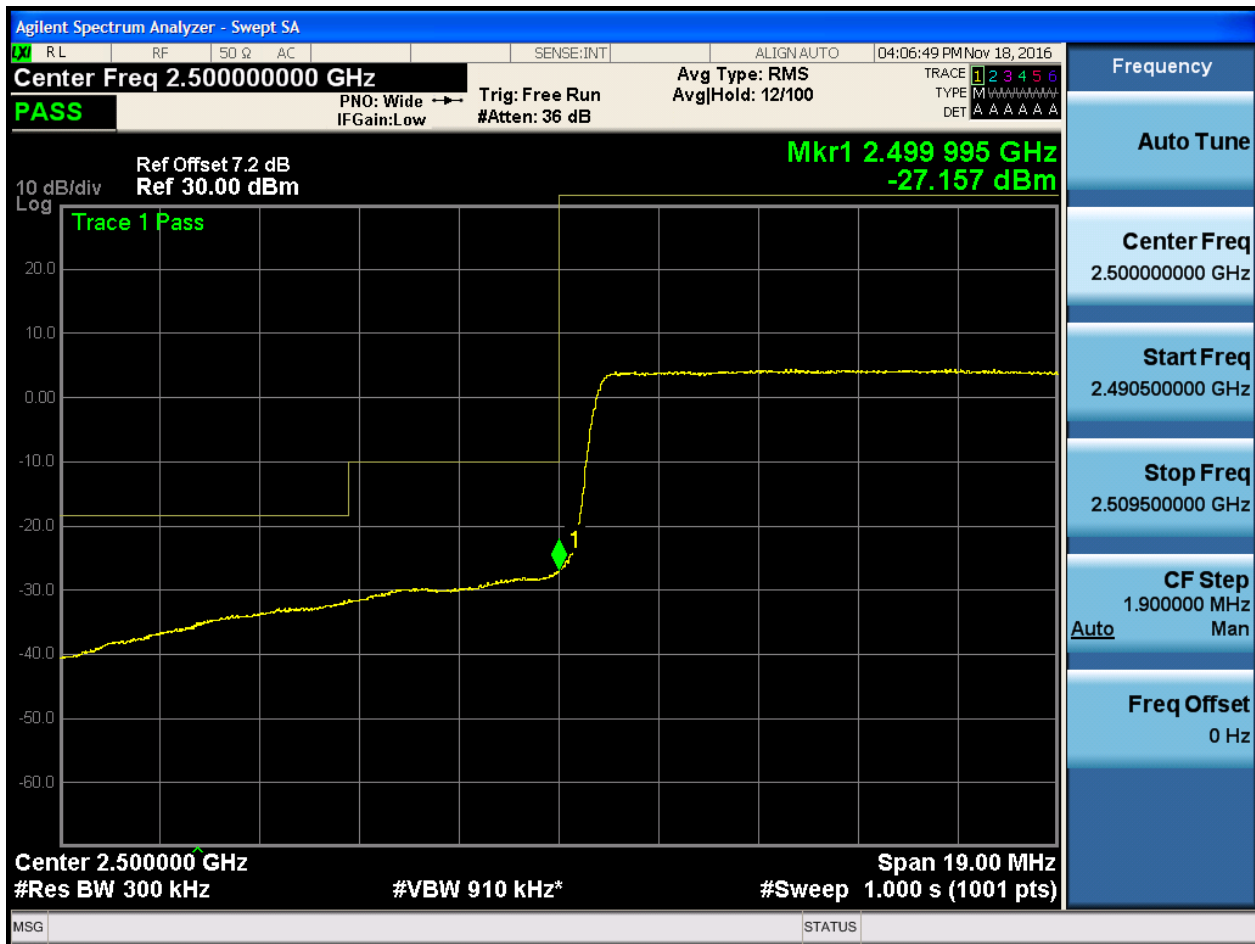


5.1.1.2.3.1.3 Test RB = RB36#18





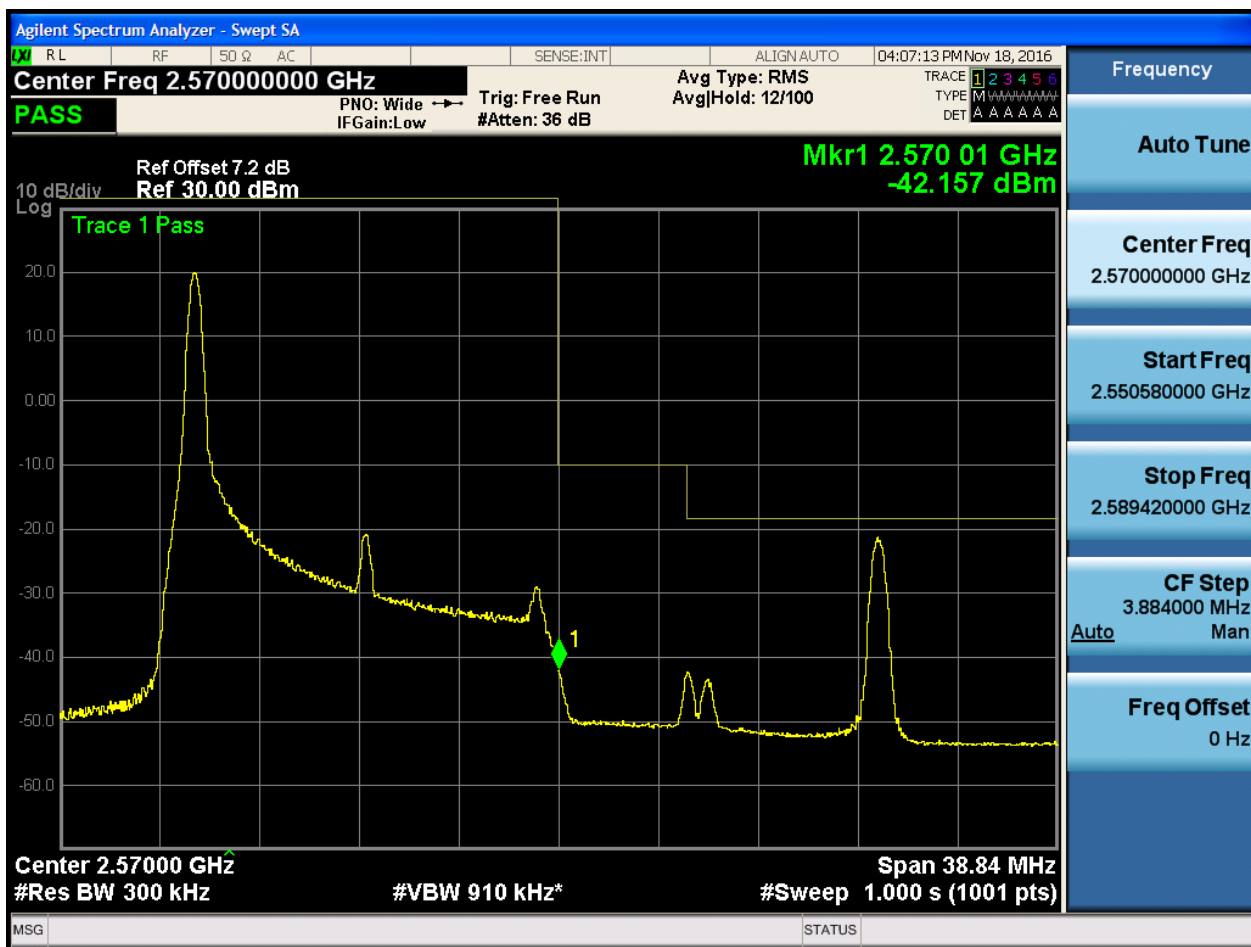
5.1.1.2.3.1.4 Test RB = RB75#0





5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:07:31 PM Nov 18, 2016

Center Freq 2.57000000 GHz Avg Type: RMS
PASS PNO: Wide IF Gain: Low Trig: Free Run AvgHold: 12/100
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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.570 01 GHz
-19.590 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 300 kHz
#VBW 910 kHz*
Span 38.84 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.550580000 GHz

Stop Freq
2.589420000 GHz

CF Step
3.884000 MHz
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:07:50 PM Nov 18, 2016

Center Freq 2.57000000 GHz Avg Type: RMS
PASS PNO: Wide IFGain: Low Trig: Free Run AvgHold: 12/100
#Atten: 36 dB

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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.570 01 GHz
-29.851 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 300 kHz
#VBW 910 kHz*
Span 38.84 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.550580000 GHz

Stop Freq
2.589420000 GHz

CF Step
3.884000 MHz
Auto Man

Freq Offset
0 Hz

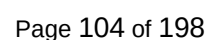


5.1.1.2.3.2.4 Test RB = RB75#0





5.1.1.2.4.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:13:50 PM Nov 18, 2016

Center Freq 2.500000000 GHz Avg Type: RMS
#Res BW 390 kHz #VBW 1.1 MHz* #Sweep 1.000 s (1001 pts)

PASS 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 7.2 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-40.248 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz

MSG STATUS

Frequency
Auto Tune
Center Freq 2.500000000 GHz
Start Freq 2.490500000 GHz
Stop Freq 2.509500000 GHz
CF Step 1.900000 MHz Auto Man
Freq Offset 0 Hz

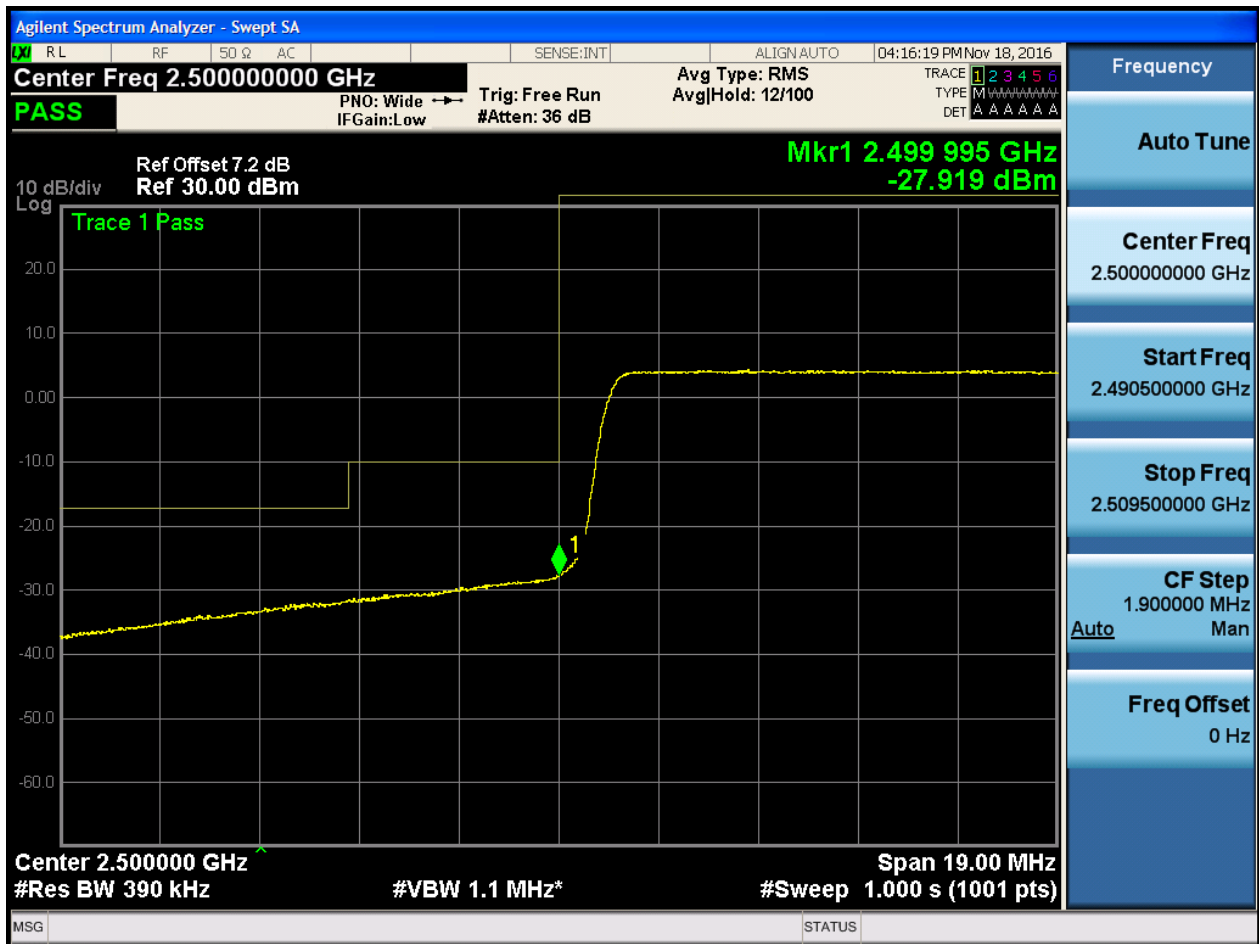


5.1.1.2.4.1.3 Test RB = RB50#25





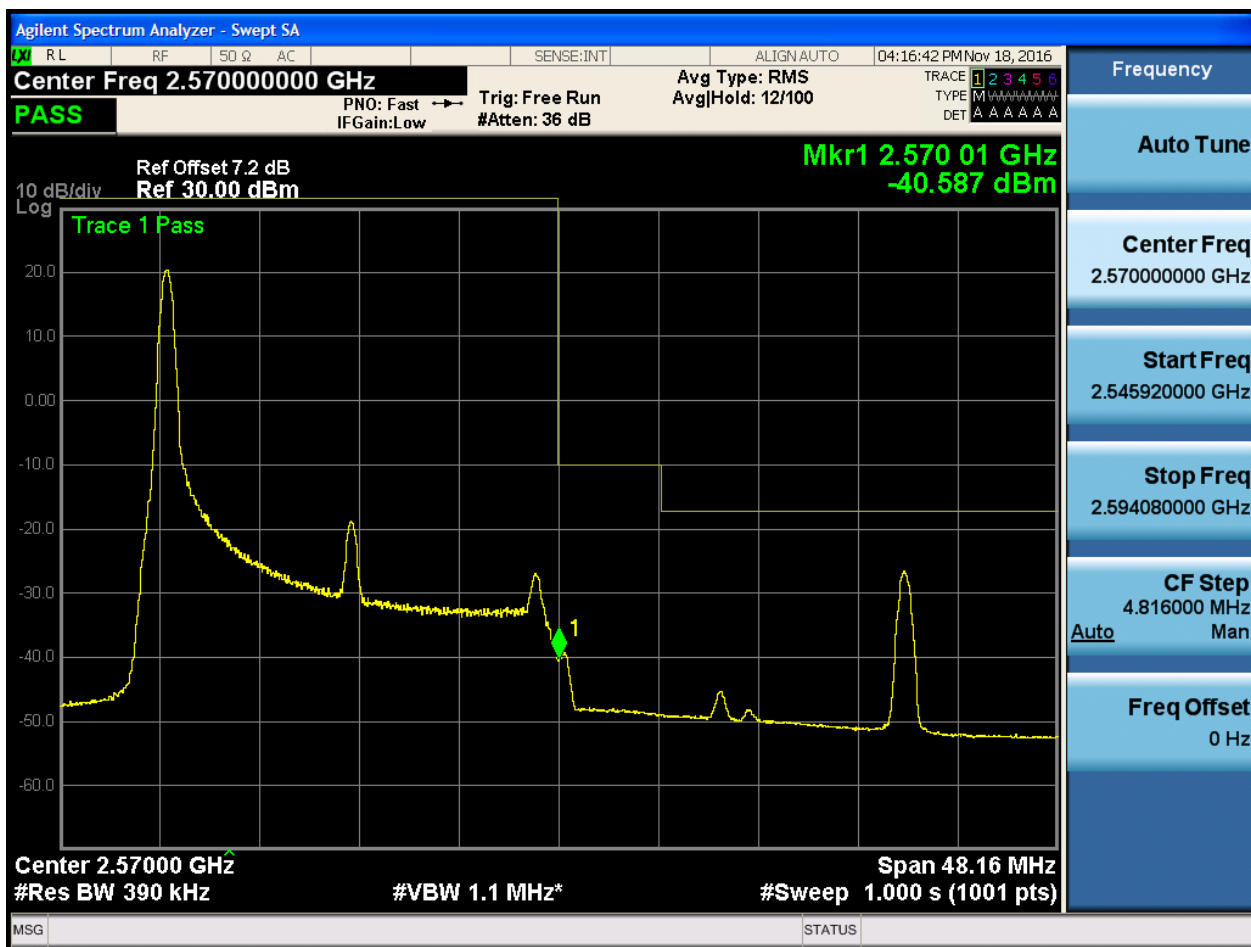
5.1.1.2.4.1.4 Test RB = RB100#0





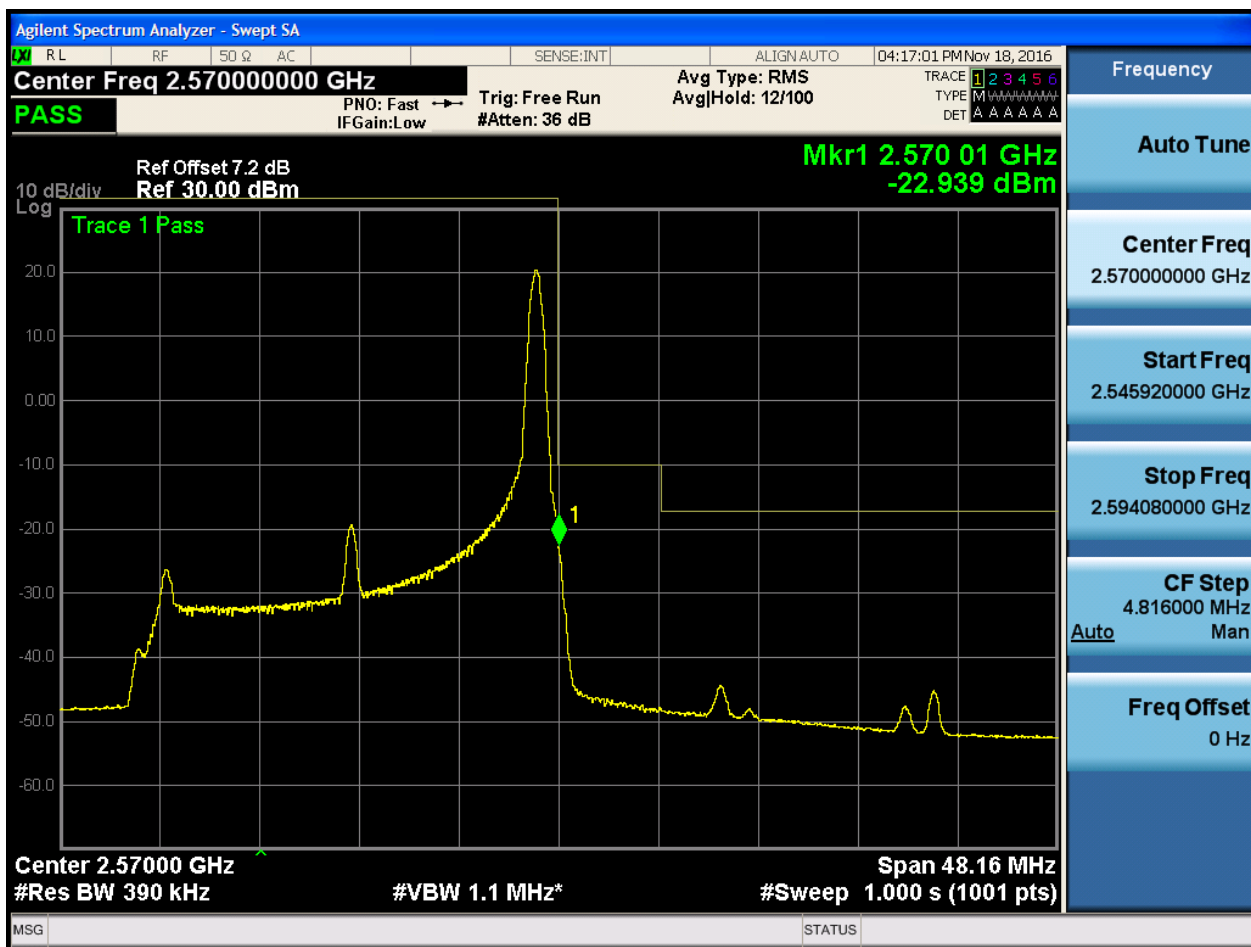
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0



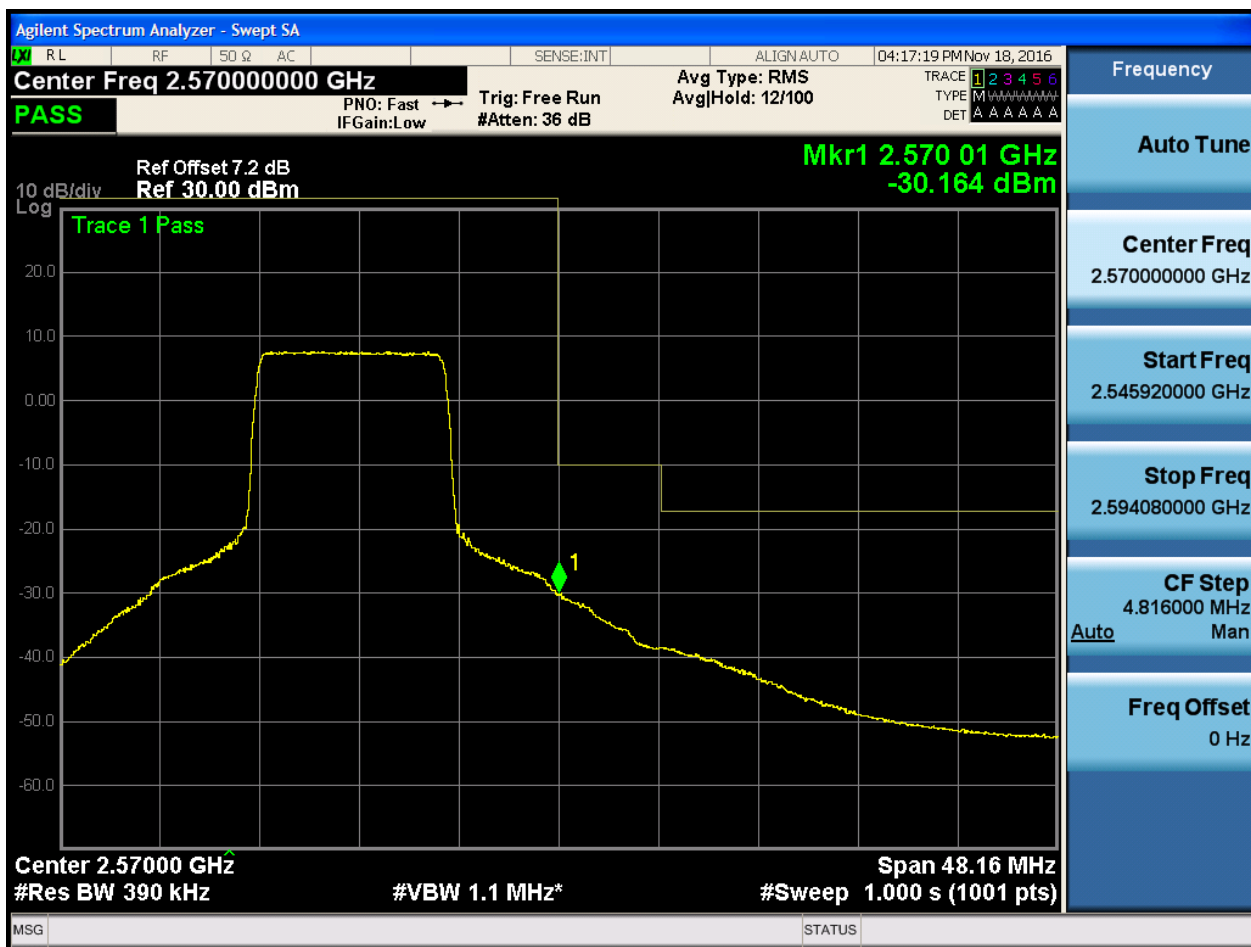


5.1.1.2.4.2.2 Test RB = RB1#99





5.1.1.2.4.2.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:17:38 PM Nov 18, 2016

Center Freq 2.57000000 GHz Avg Type: RMS
PASS PNO: Fast Trig: Free Run AvgHold: 12/100
IFGain: Low #Atten: 36 dB

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

Ref Offset 7.2 dB
Ref 30.00 dBm

Mkr1 2.570 01 GHz
-28.373 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 390 kHz
#VBW 1.1 MHz*
Span 48.16 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.545920000 GHz

Stop Freq
2.594080000 GHz

CF Step
4.816000 MHz
Auto Man

Freq Offset
0 Hz

Appendix_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

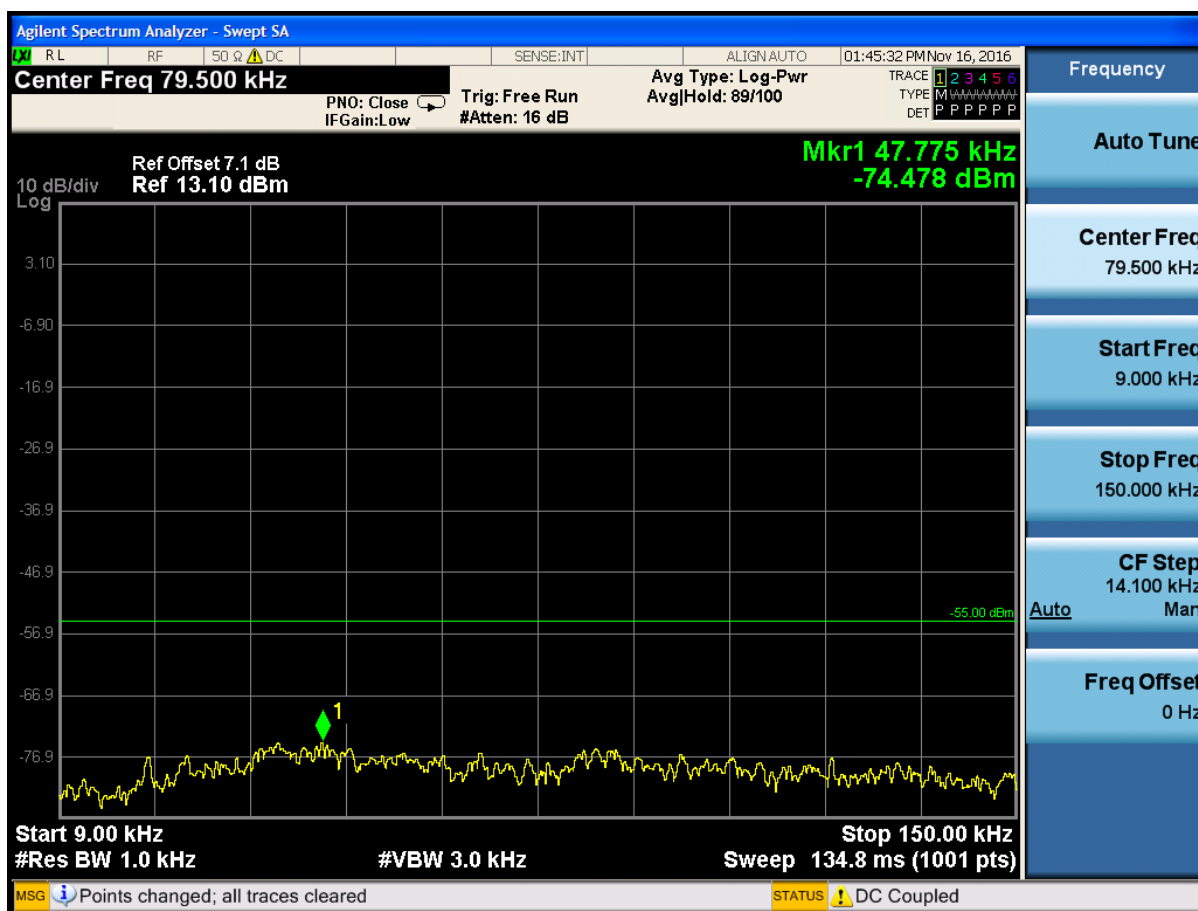
6.1.1 Test Band = BAND7

6.1.1.1 Test Mode = LTE/TM1

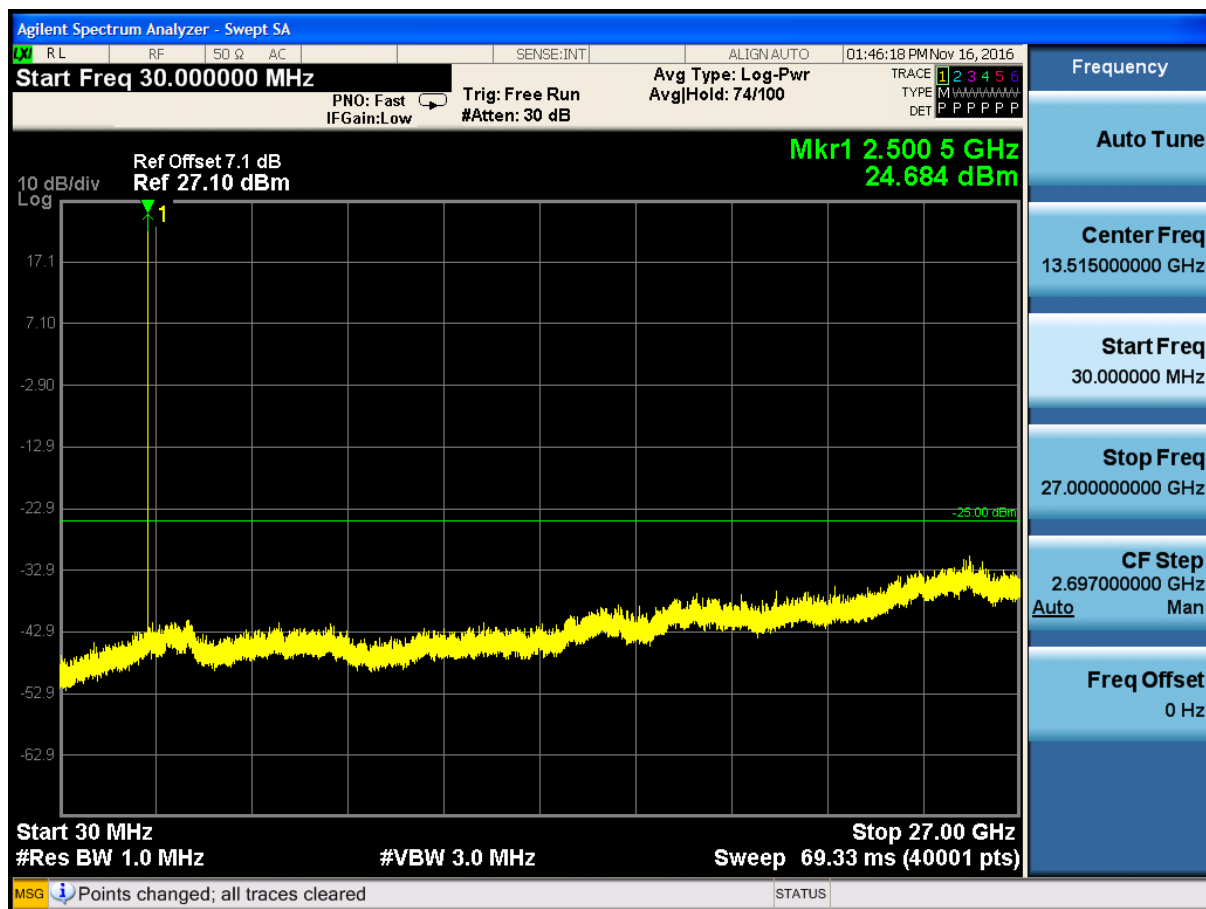
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



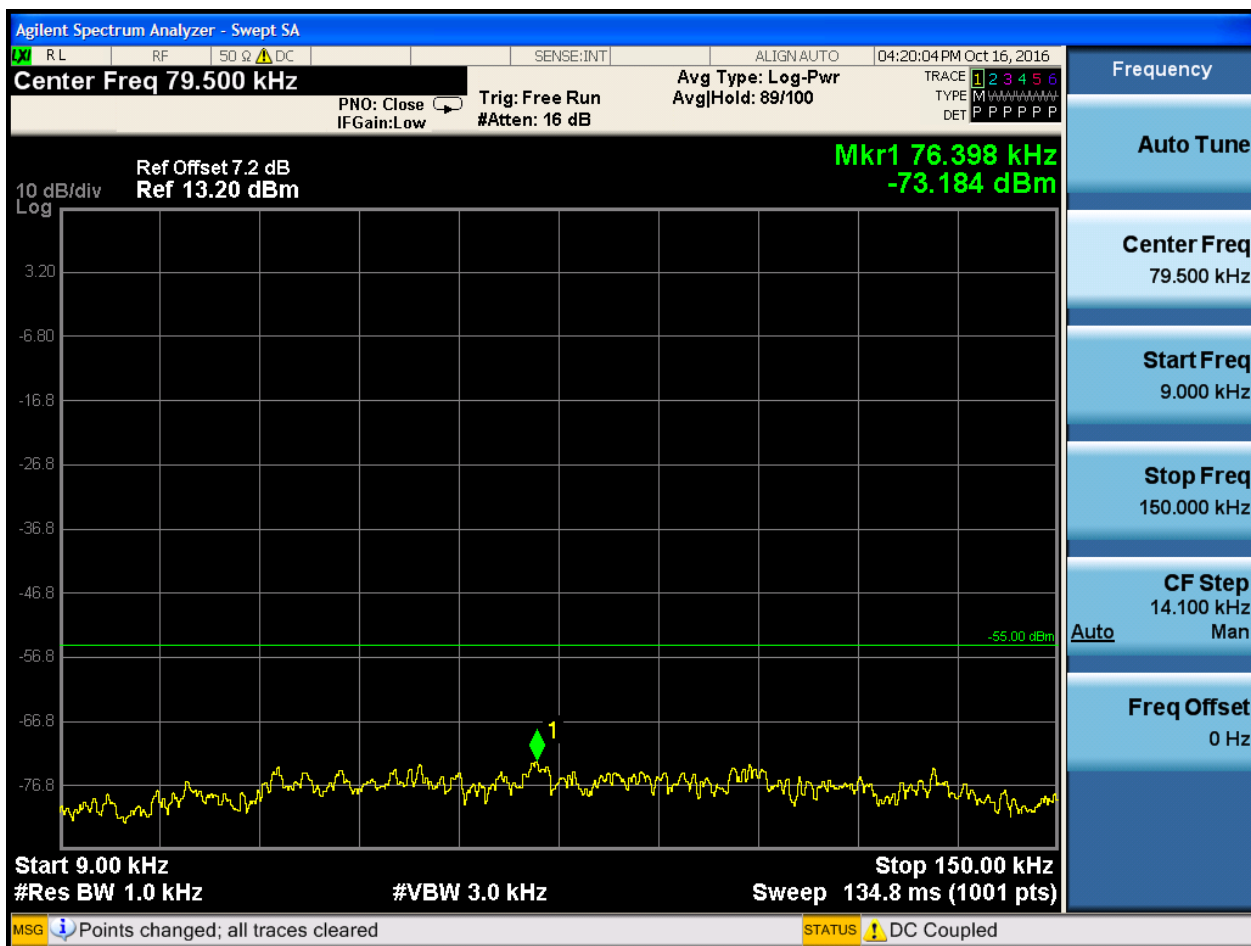


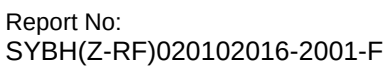


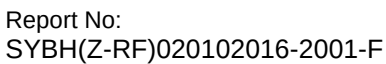


6.1.1.1.1.2 Test Channel = MCH

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

