



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	22.34	21.89	33	PASS
				RB1#13	22.63	22.26	33	PASS
				RB1#24	22.36	22.06	33	PASS
				RB12#0	21.4	20.72	33	PASS
				RB12#6	21.41	20.74	33	PASS
				RB12#13	21.36	20.91	33	PASS
				RB25#0	21.44	20.97	33	PASS
			MCH	RB1#0	22.49	22.10	33	PASS
				RB1#13	22.73	22.03	33	PASS
				RB1#24	22.38	21.69	33	PASS
				RB12#0	21.52	21.11	33	PASS
				RB12#6	21.54	21.20	33	PASS
				RB12#13	21.5	20.99	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
			HCH	RB25#0	21.63	21.08	33	PASS
				RB1#0	22.55	21.93	33	PASS
				RB1#13	22.6	22.02	33	PASS
				RB1#24	22.3	21.73	33	PASS
				RB12#0	21.77	21.19	33	PASS
				RB12#6	21.74	21.40	33	PASS
				RB12#13	21.67	20.97	33	PASS
				RB25#0	21.74	21.13	33	PASS
		10	LCH	RB1#0	22.6	21.94	33	PASS
				RB1#25	22.81	22.13	33	PASS
				RB1#49	22.51	21.88	33	PASS
				RB25#0	21.51	21.08	33	PASS
				RB25#13	21.58	20.95	33	PASS
				RB25#25	21.56	21.22	33	PASS
				RB50#0	21.56	20.94	33	PASS
			MCH	RB1#0	22.88	22.54	33	PASS
				RB1#25	22.65	22.30	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#49	22.54	22.16	33	PASS
				RB25#0	21.66	21.22	33	PASS
				RB25#13	21.58	20.90	33	PASS
				RB25#25	21.58	20.91	33	PASS
				RB50#0	21.59	20.93	33	PASS
			HCH	RB1#0	22.79	22.44	33	PASS
				RB1#25	23.18	22.64	33	PASS
				RB1#49	22.86	22.53	33	PASS
				RB25#0	21.78	21.26	33	PASS
				RB25#13	21.81	21.26	33	PASS
				RB25#25	21.78	21.33	33	PASS
				RB50#0	21.8	21.29	33	PASS
		15	LCH	RB1#0	22.67	22.19	33	PASS
				RB1#38	22.95	22.26	33	PASS
				RB1#74	22.68	22.16	33	PASS
				RB36#0	21.47	20.91	33	PASS
				RB36#18	21.61	21.27	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB36#39	21.59	20.99	33	PASS
				RB75#0	21.54	21.10	33	PASS
			MCH	RB1#0	22.49	21.87	33	PASS
				RB1#38	22.56	22.11	33	PASS
				RB1#74	22.59	22.22	33	PASS
				RB36#0	21.68	21.11	33	PASS
				RB36#18	21.56	21.09	33	PASS
				RB36#39	21.62	20.95	33	PASS
				RB75#0	21.54	21.16	33	PASS
			HCH	RB1#0	22.79	22.40	33	PASS
				RB1#38	22.56	21.92	33	PASS
				RB1#74	22.68	22.32	33	PASS
				RB36#0	21.72	21.17	33	PASS
				RB36#18	21.77	21.37	33	PASS
				RB36#39	21.78	21.42	33	PASS
				RB75#0	21.7	21.37	33	PASS
		20	LCH	RB1#0	22.08	21.71	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#50	22.53	22.10	33	PASS
				RB1#99	22.52	22.17	33	PASS
				RB50#0	21.57	21.22	33	PASS
				RB50#25	21.63	21.26	33	PASS
				RB50#50	21.52	21.18	33	PASS
				RB100#0	21.58	21.27	33	PASS
			MCH	RB1#0	22.23	21.80	33	PASS
				RB1#50	22.71	22.31	33	PASS
				RB1#99	22.55	22.09	33	PASS
				RB50#0	21.66	21.35	33	PASS
				RB50#25	21.62	21.28	33	PASS
				RB50#50	21.58	21.24	33	PASS
				RB100#0	21.6	21.04	33	PASS
			HCH	RB1#0	22.77	22.24	33	PASS
				RB1#50	22.91	22.38	33	PASS
				RB1#99	22.79	22.38	33	PASS
				RB50#0	21.79	21.16	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#25	21.74	21.17	33	PASS
				RB50#50	21.9	21.57	33	PASS
				RB100#0	21.79	21.43	33	PASS
	LTE/TM2	5	LCH	RB1#0	21.19	20.83	33	PASS
				RB1#13	21.23	20.79	33	PASS
				RB1#24	21.11	20.74	33	PASS
				RB12#0	20.31	19.75	33	PASS
				RB12#6	20.47	20.00	33	PASS
				RB12#13	20.29	19.68	33	PASS
				RB25#0	20.44	20.03	33	PASS
			MCH	RB1#0	21.18	20.53	33	PASS
				RB1#13	21.12	20.56	33	PASS
				RB1#24	20.93	20.50	33	PASS
				RB12#0	20.3	19.69	33	PASS
				RB12#6	20.51	19.84	33	PASS
				RB12#13	20.42	19.89	33	PASS
				RB25#0	20.67	20.12	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	21.98	21.35	33	PASS
				RB1#13	21.79	21.18	33	PASS
				RB1#24	21.8	21.15	33	PASS
				RB12#0	20.85	20.42	33	PASS
				RB12#6	20.81	20.32	33	PASS
				RB12#13	20.8	20.20	33	PASS
				RB25#0	20.77	20.41	33	PASS
		10	LCH	RB1#0	21.66	21.17	33	PASS
				RB1#25	21.96	21.40	33	PASS
				RB1#49	21.57	21.10	33	PASS
				RB25#0	20.55	19.88	33	PASS
				RB25#13	20.73	20.29	33	PASS
				RB25#25	20.45	20.00	33	PASS
				RB50#0	20.48	19.84	33	PASS
			MCH	RB1#0	21.6	21.19	33	PASS
				RB1#25	21.9	21.31	33	PASS
				RB1#49	21.53	21.05	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.78	20.38	33	PASS
				RB25#13	20.74	20.32	33	PASS
				RB25#25	20.7	20.17	33	PASS
				RB50#0	20.63	20.11	33	PASS
			HCH	RB1#0	21.76	21.39	33	PASS
				RB1#25	21.42	20.99	33	PASS
				RB1#49	21.44	21.03	33	PASS
				RB25#0	21.07	20.45	33	PASS
				RB25#13	21.13	20.48	33	PASS
				RB25#25	20.88	20.23	33	PASS
				RB50#0	20.89	20.39	33	PASS
		15	LCH	RB1#0	21.42	21.09	33	PASS
				RB1#38	21.72	21.07	33	PASS
				RB1#74	21.63	20.98	33	PASS
				RB36#0	20.75	20.28	33	PASS
				RB36#18	20.68	20.37	33	PASS
				RB36#39	20.6	20.18	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB75#0	20.63	20.23	33	PASS
			MCH	RB1#0	21.45	21.13	33	PASS
				RB1#38	21.77	21.24	33	PASS
				RB1#74	21.35	20.70	33	PASS
				RB36#0	20.63	20.10	33	PASS
				RB36#18	20.62	19.99	33	PASS
				RB36#39	20.55	19.89	33	PASS
				RB75#0	20.61	20.08	33	PASS
			HCH	RB1#0	21.61	21.14	33	PASS
				RB1#38	21.75	21.42	33	PASS
				RB1#74	21.55	21.02	33	PASS
				RB36#0	20.73	20.36	33	PASS
				RB36#18	21.08	20.51	33	PASS
				RB36#39	20.86	20.20	33	PASS
				RB75#0	20.78	20.23	33	PASS
		20	LCH	RB1#0	21.38	20.71	33	PASS
				RB1#50	22.25	21.63	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#99	21.96	21.64	33	PASS
				RB50#0	20.67	20.35	33	PASS
				RB50#25	20.73	20.34	33	PASS
				RB50#50	20.63	20.15	33	PASS
				RB100#0	20.62	20.15	33	PASS
			MCH	RB1#0	21.15	20.78	33	PASS
				RB1#50	22.03	21.72	33	PASS
				RB1#99	21.66	21.17	33	PASS
				RB50#0	20.58	20.27	33	PASS
				RB50#25	20.67	20.15	33	PASS
				RB50#50	20.59	20.18	33	PASS
				RB100#0	20.71	20.24	33	PASS
			HCH	RB1#0	21.58	21.12	33	PASS
				RB1#50	22.26	21.61	33	PASS
				RB1#99	21.82	21.28	33	PASS
				RB50#0	20.96	20.38	33	PASS
				RB50#25	20.84	20.29	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#50	20.9	20.53	33	PASS
				RB100#0	20.82	20.52	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:

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

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

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

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

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	3.09	13	PASS
				RB1#13	2.98	13	PASS
				RB1#24	3.18	13	PASS
				RB12#0	4.1	13	PASS
				RB12#6	3.98	13	PASS
				RB12#13	4.17	13	PASS
				RB25#0	4.66	13	PASS
			MCH	RB1#0	3.19	13	PASS
				RB1#13	3.02	13	PASS
				RB1#24	3.16	13	PASS
				RB12#0	4.07	13	PASS
				RB12#6	3.93	13	PASS
				RB12#13	4.07	13	PASS
				RB25#0	4.63	13	PASS
			HCH	RB1#0	3.07	13	PASS
				RB1#13	2.92	13	PASS
				RB1#24	3.1	13	PASS
				RB12#0	4.04	13	PASS
				RB12#6	3.87	13	PASS
				RB12#13	3.99	13	PASS
				RB25#0	4.64	13	PASS
		10	LCH	RB1#0	3.17	13	PASS
				RB1#25	3.11	13	PASS
				RB1#49	3.23	13	PASS
				RB25#0	4.15	13	PASS
				RB25#13	4.11	13	PASS
				RB25#25	4.27	13	PASS
				RB50#0	4.46	13	PASS
			MCH	RB1#0	3.21	13	PASS
				RB1#25	3.03	13	PASS
				RB1#49	3.31	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	4.11	13	PASS
				RB25#13	4.06	13	PASS
				RB25#25	4.13	13	PASS
				RB50#0	4.47	13	PASS
			HCH	RB1#0	3.22	13	PASS
				RB1#25	2.86	13	PASS
				RB1#49	2.96	13	PASS
				RB25#0	4.13	13	PASS
				RB25#13	3.92	13	PASS
				RB25#25	3.99	13	PASS
				RB50#0	4.64	13	PASS
		15	LCH	RB1#0	3.23	13	PASS
				RB1#38	3.25	13	PASS
				RB1#74	3.32	13	PASS
				RB36#0	4.25	13	PASS
				RB36#18	4.17	13	PASS
				RB36#39	4.3	13	PASS
				RB75#0	5.03	13	PASS
			MCH	RB1#0	3.21	13	PASS
				RB1#38	3.06	13	PASS
				RB1#74	3.21	13	PASS
				RB36#0	4.11	13	PASS
				RB36#18	4.04	13	PASS
				RB36#39	4.2	13	PASS
				RB75#0	4.9	13	PASS
			HCH	RB1#0	3.42	13	PASS
				RB1#38	3.09	13	PASS
				RB1#74	3.06	13	PASS
				RB36#0	4.28	13	PASS
				RB36#18	3.98	13	PASS
				RB36#39	4	13	PASS
				RB75#0	4.84	13	PASS
		20	LCH	RB1#0	3.38	13	PASS
				RB1#50	3.27	13	PASS
				RB1#99	3.36	13	PASS
				RB50#0	4.38	13	PASS
				RB50#25	4.2	13	PASS
				RB50#50	4.34	13	PASS
				RB100#0	4.94	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
			MCH	RB1#0	3.16	13	PASS
				RB1#50	2.95	13	PASS
				RB1#99	3.23	13	PASS
				RB50#0	4.18	13	PASS
				RB50#25	4.07	13	PASS
				RB50#50	4.25	13	PASS
				RB100#0	5.08	13	PASS
			HCH	RB1#0	3.38	13	PASS
				RB1#50	3.14	13	PASS
				RB1#99	3.02	13	PASS
				RB50#0	4.4	13	PASS
				RB50#25	4.17	13	PASS
				RB50#50	4.09	13	PASS
				RB100#0	4.71	13	PASS
	LTE/TM2	5	LCH	RB1#0	4.12	13	PASS
				RB1#13	4.02	13	PASS
				RB1#24	4.25	13	PASS
				RB12#0	5.02	13	PASS
				RB12#6	4.9	13	PASS
				RB12#13	5.13	13	PASS
				RB25#0	5.63	13	PASS
			MCH	RB1#0	4.28	13	PASS
				RB1#13	4.06	13	PASS
				RB1#24	4.33	13	PASS
				RB12#0	5.03	13	PASS
				RB12#6	4.81	13	PASS
				RB12#13	5.06	13	PASS
				RB25#0	5.75	13	PASS
		10	HCH	RB1#0	3.85	13	PASS
				RB1#13	3.8	13	PASS
				RB1#24	3.88	13	PASS
				RB12#0	4.92	13	PASS
				RB12#6	4.79	13	PASS
				RB12#13	4.92	13	PASS
				RB25#0	5.54	13	PASS
			LCH	RB1#0	4.29	13	PASS
				RB1#25	4.25	13	PASS
				RB1#49	4.38	13	PASS
				RB25#0	5.19	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#13	5.11	13	PASS
				RB25#25	5.24	13	PASS
				RB50#0	5.92	13	PASS
			MCH	RB1#0	3.97	13	PASS
				RB1#25	4.03	13	PASS
				RB1#49	4.27	13	PASS
				RB25#0	4.94	13	PASS
				RB25#13	4.84	13	PASS
				RB25#25	4.99	13	PASS
				RB50#0	5.93	13	PASS
			HCH	RB1#0	4	13	PASS
				RB1#25	3.85	13	PASS
				RB1#49	4.07	13	PASS
				RB25#0	5.02	13	PASS
				RB25#13	4.77	13	PASS
				RB25#25	5.01	13	PASS
				RB50#0	5.82	13	PASS
		15	LCH	RB1#0	4.26	13	PASS
				RB1#38	4.22	13	PASS
				RB1#74	4.39	13	PASS
				RB36#0	5.22	13	PASS
				RB36#18	5.15	13	PASS
				RB36#39	5.34	13	PASS
				RB75#0	5.86	13	PASS
			MCH	RB1#0	3.93	13	PASS
				RB1#38	3.82	13	PASS
				RB1#74	4.04	13	PASS
				RB36#0	5.13	13	PASS
				RB36#18	5.01	13	PASS
				RB36#39	5.22	13	PASS
				RB75#0	5.71	13	PASS
			HCH	RB1#0	4.16	13	PASS
				RB1#38	3.88	13	PASS
				RB1#74	3.88	13	PASS
				RB36#0	5.14	13	PASS
				RB36#18	4.98	13	PASS
				RB36#39	4.95	13	PASS
				RB75#0	5.67	13	PASS
		20	LCH	RB1#0	3.82	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#50	3.71	13	PASS
				RB1#99	3.88	13	PASS
				RB50#0	5.25	13	PASS
				RB50#25	5.05	13	PASS
				RB50#50	5.18	13	PASS
				RB100#0	5.49	13	PASS
			MCH	RB1#0	4.13	13	PASS
				RB1#50	4.01	13	PASS
				RB1#99	4.11	13	PASS
				RB50#0	5.07	13	PASS
				RB50#25	4.98	13	PASS
				RB50#50	5.24	13	PASS
				RB100#0	5.75	13	PASS
			HCH	RB1#0	4.06	13	PASS
				RB1#50	3.75	13	PASS
				RB1#99	3.84	13	PASS
				RB50#0	5.35	13	PASS
				RB50#25	5.05	13	PASS
				RB50#50	5.15	13	PASS
				RB100#0	5.8	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

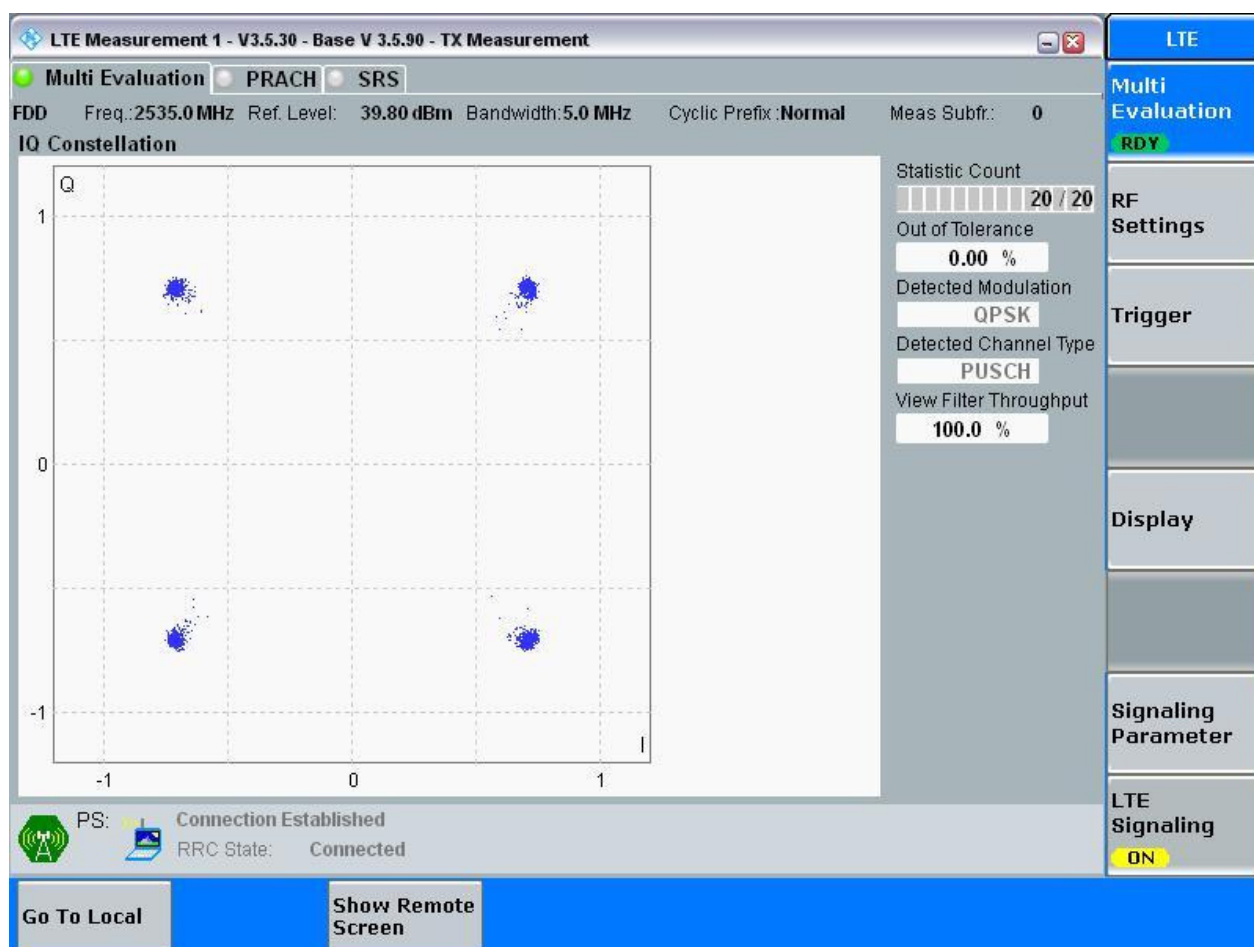
3.1.1 Test Band = BAND7

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

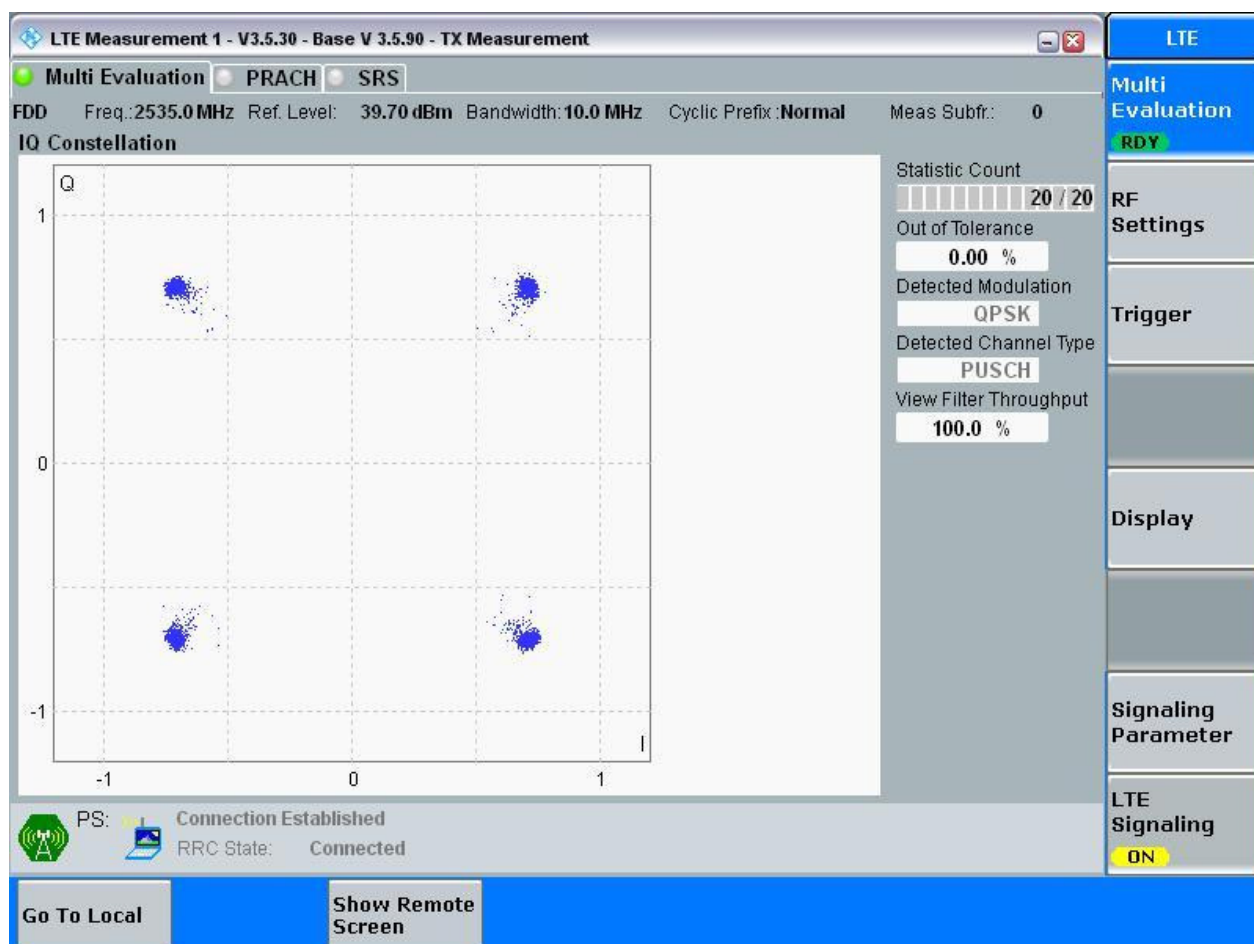
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

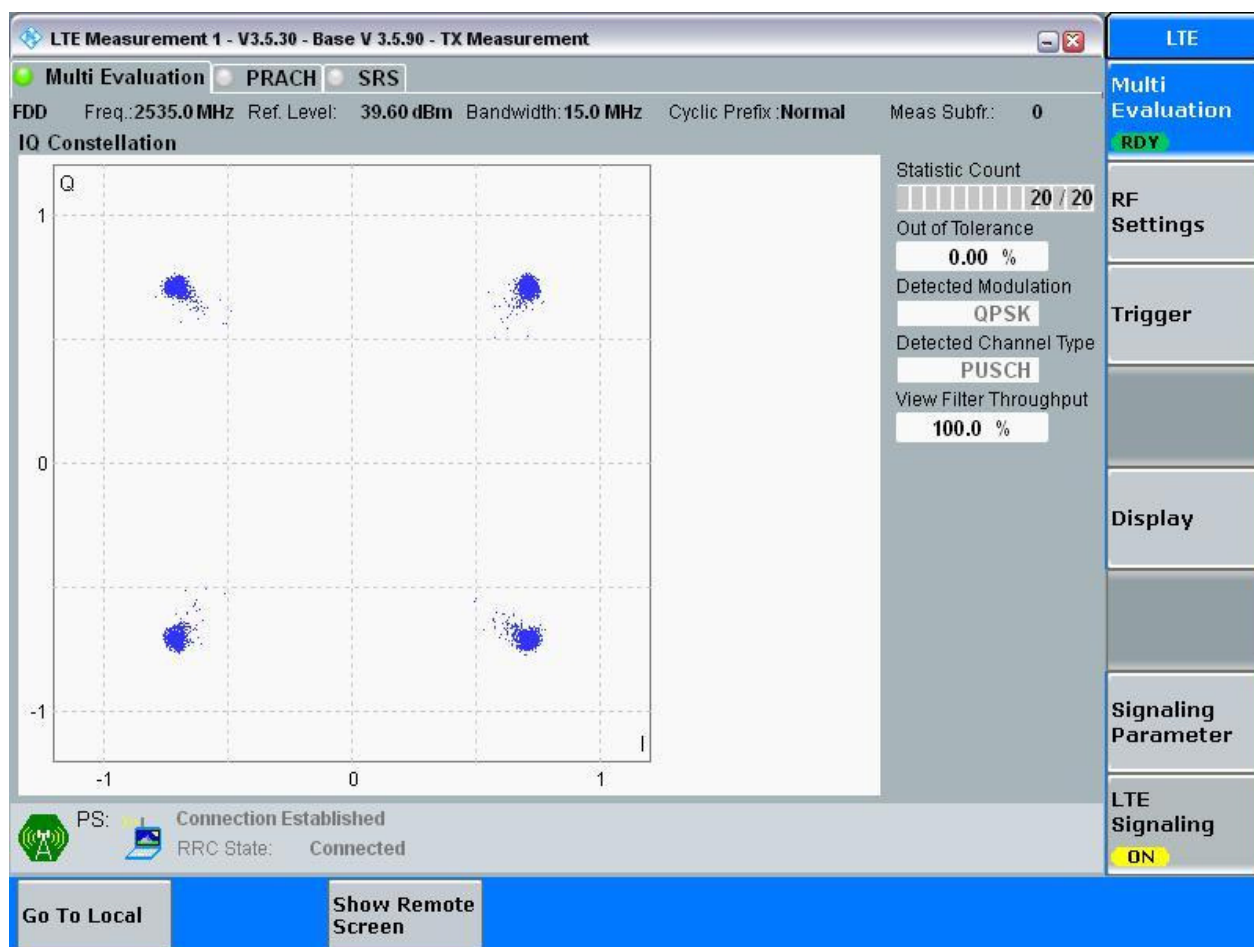
3.1.1.1.2.1.1 Test RB = RB50#0



3.1.1.1.3 Test Bandwidth = 15

3.1.1.1.3.1 Test Channel = MCH

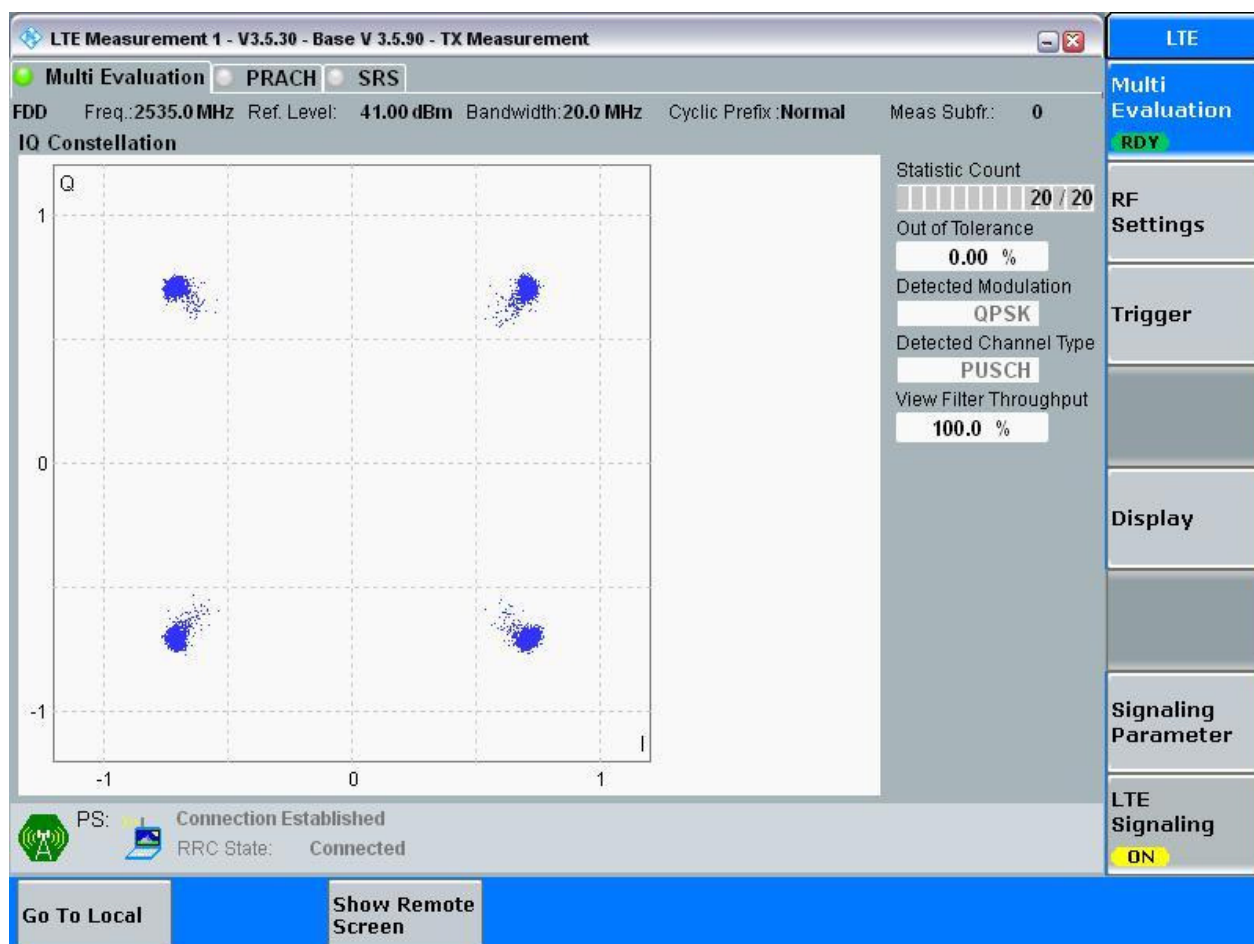
3.1.1.1.3.1.1 Test RB = RB75#0



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

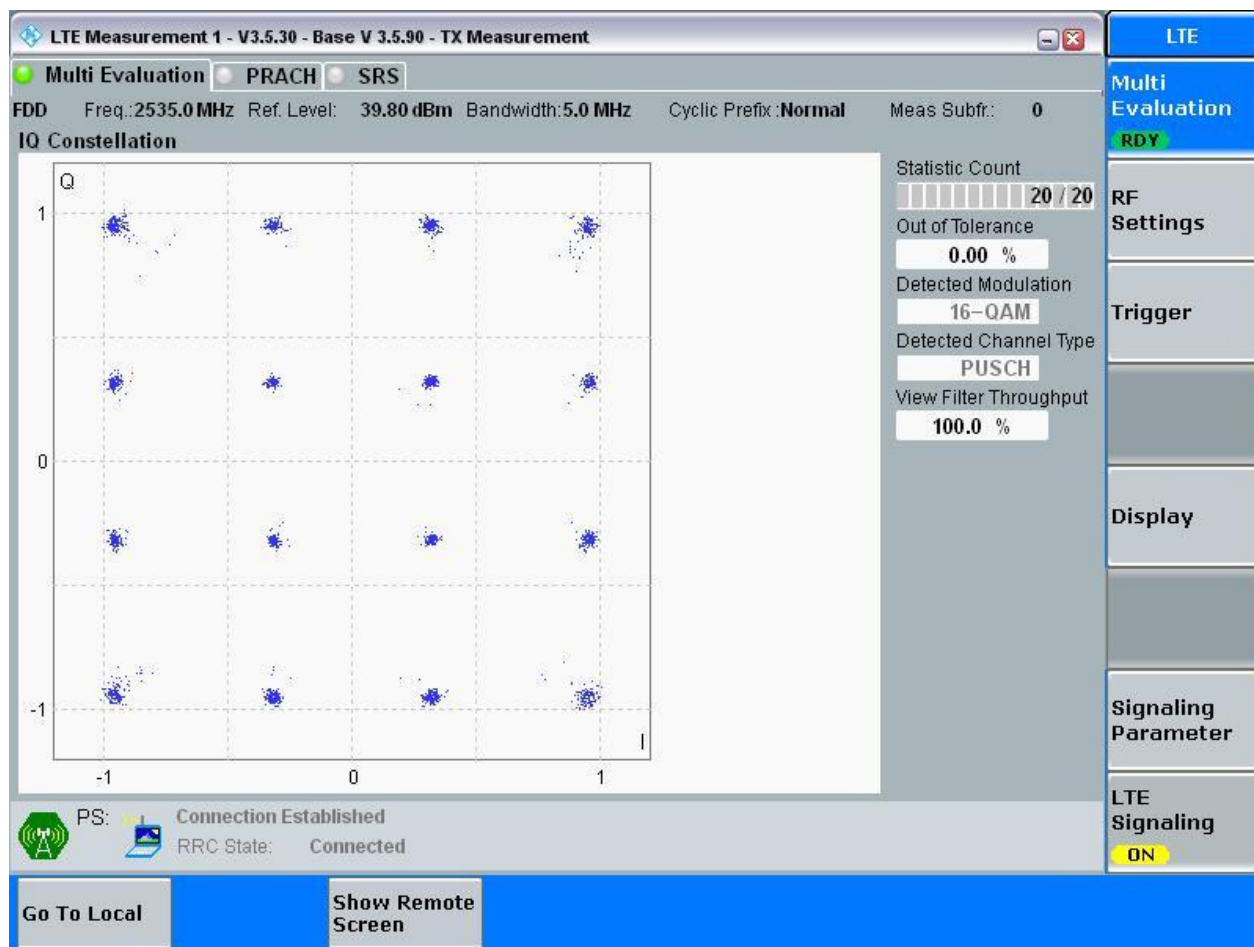


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

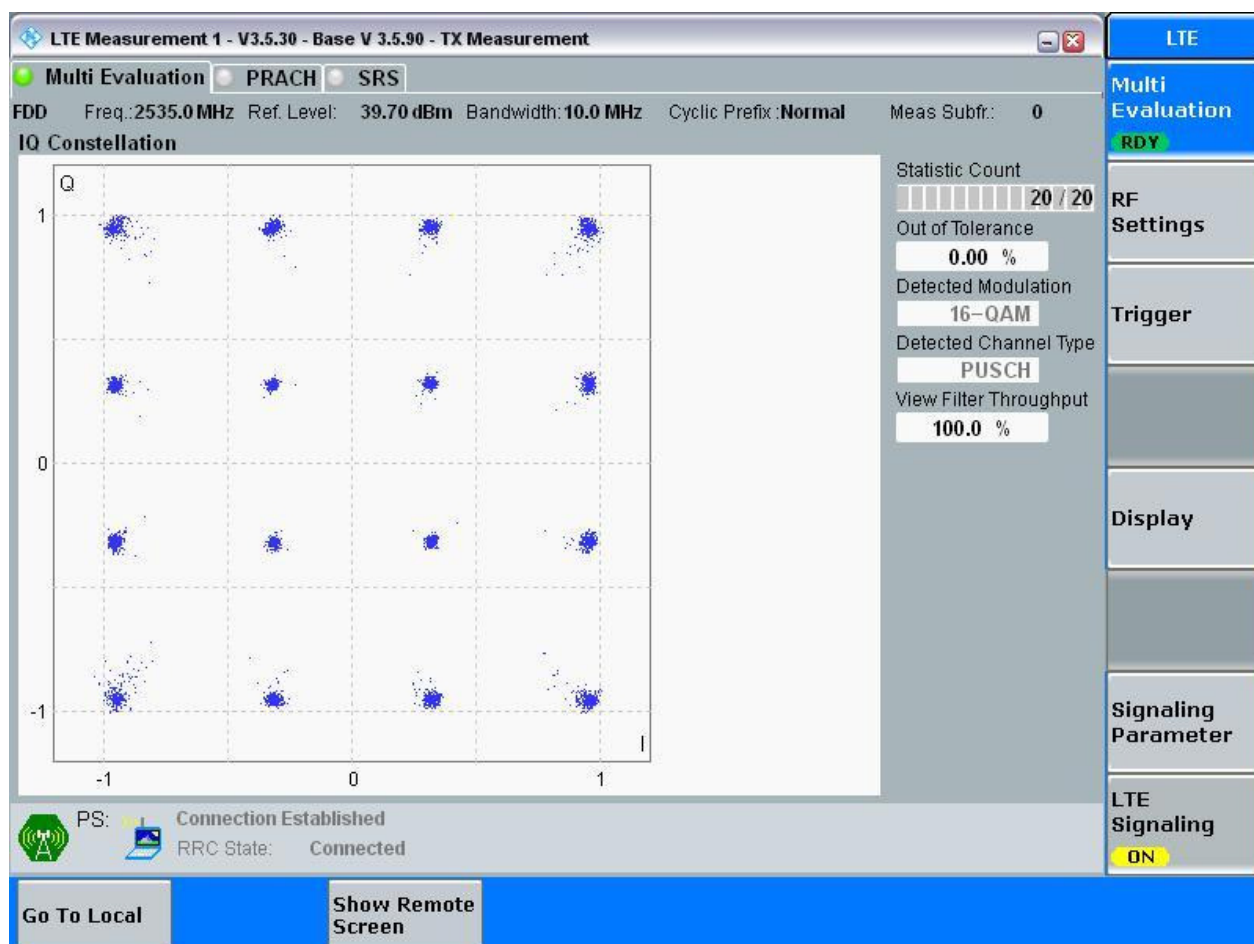
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

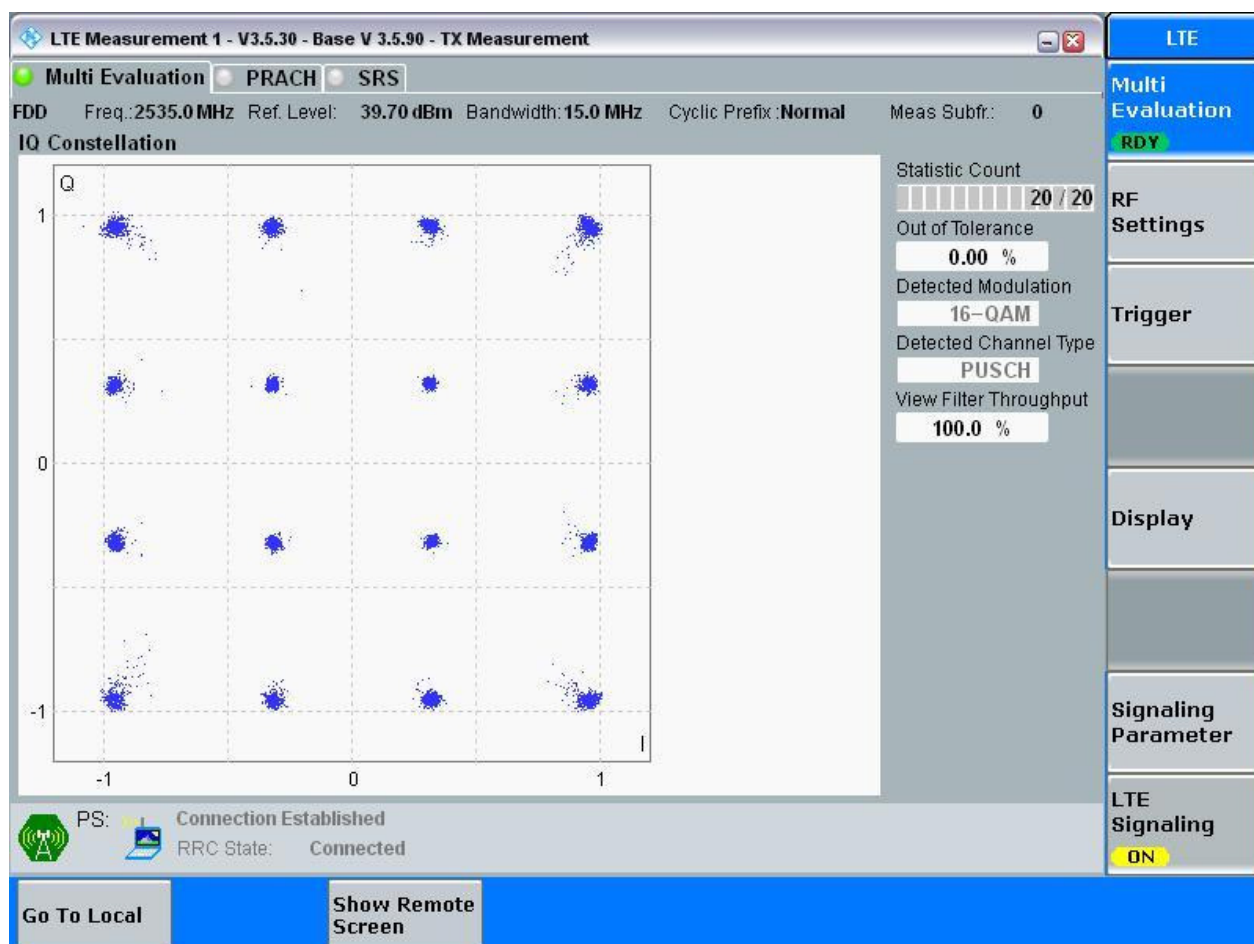
3.1.1.2.2.1.1 Test RB = RB50#0



3.1.1.2.3 Test Bandwidth = 15

3.1.1.2.3.1 Test Channel = MCH

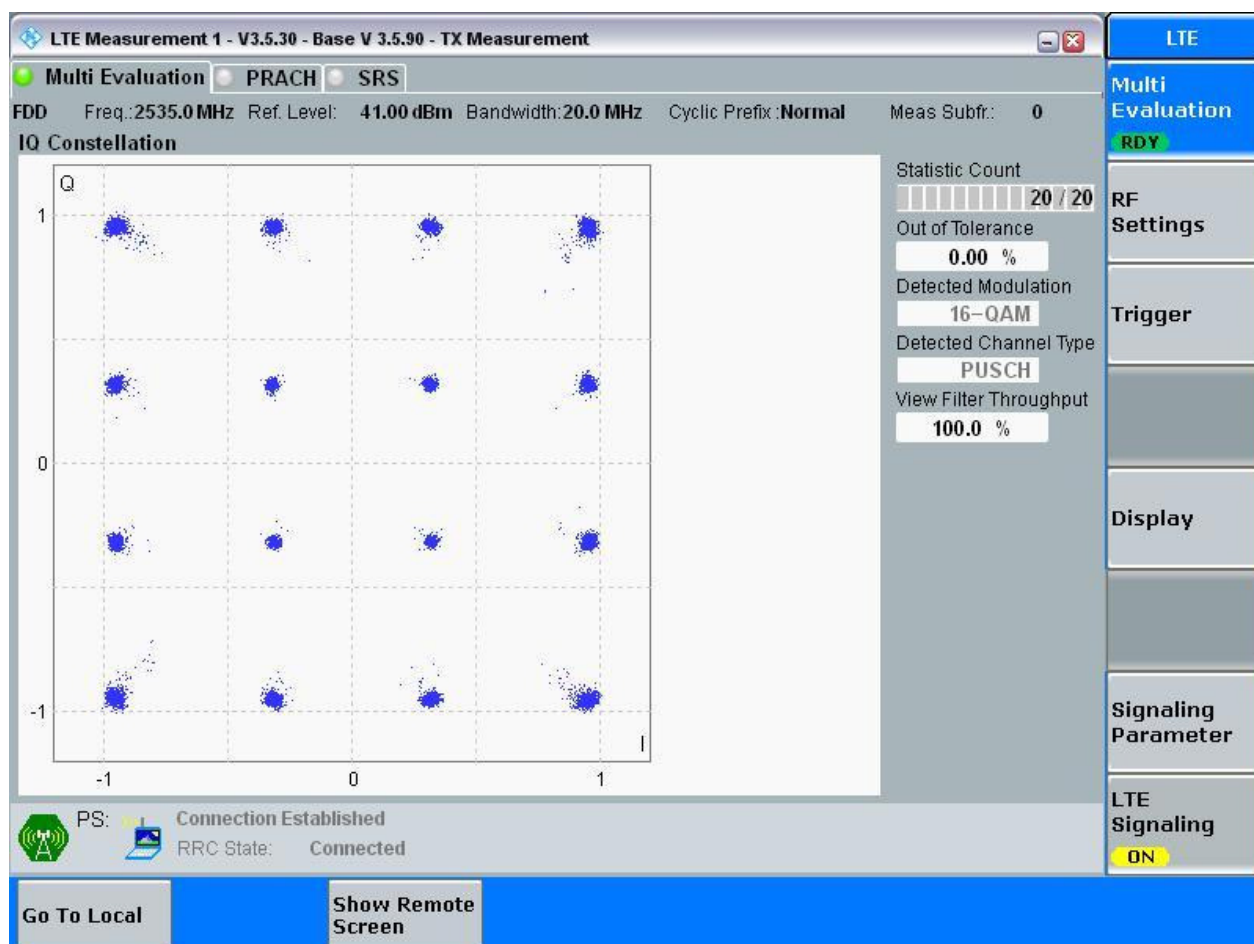
3.1.1.2.3.1.1 Test RB = RB75#0



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
BAND7	LTE/TM1	5	LCH	RB25#0	4.51	4.98	Pass
			MCH	RB25#0	4.49	5.00	Pass
			HCH	RB25#0	4.49	5.01	Pass
		10	LCH	RB50#0	8.97	9.93	Pass
			MCH	RB50#0	8.97	9.90	Pass
			HCH	RB50#0	8.97	9.91	Pass
		15	LCH	RB75#0	13.44	14.86	Pass
			MCH	RB75#0	13.44	14.78	Pass
			HCH	RB75#0	13.42	14.68	Pass
		20	LCH	RB100#0	17.91	19.42	Pass
			MCH	RB100#0	17.91	19.48	Pass
			HCH	RB100#0	17.91	19.41	Pass
	LTE/TM2	5	LCH	RB25#0	4.50	5.01	Pass
			MCH	RB25#0	4.49	4.98	Pass
			HCH	RB25#0	4.49	4.99	Pass
		10	LCH	RB50#0	8.97	9.94	Pass
			MCH	RB50#0	8.99	9.89	Pass
			HCH	RB50#0	8.96	9.94	Pass
		15	LCH	RB75#0	13.44	14.68	Pass
			MCH	RB75#0	13.40	14.73	Pass
			HCH	RB75#0	13.42	14.72	Pass
		20	LCH	RB100#0	17.91	19.49	Pass
			MCH	RB100#0	17.87	19.54	Pass
			HCH	RB100#0	17.87	19.46	Pass



Part II - Test Plots

4.1 For LTE

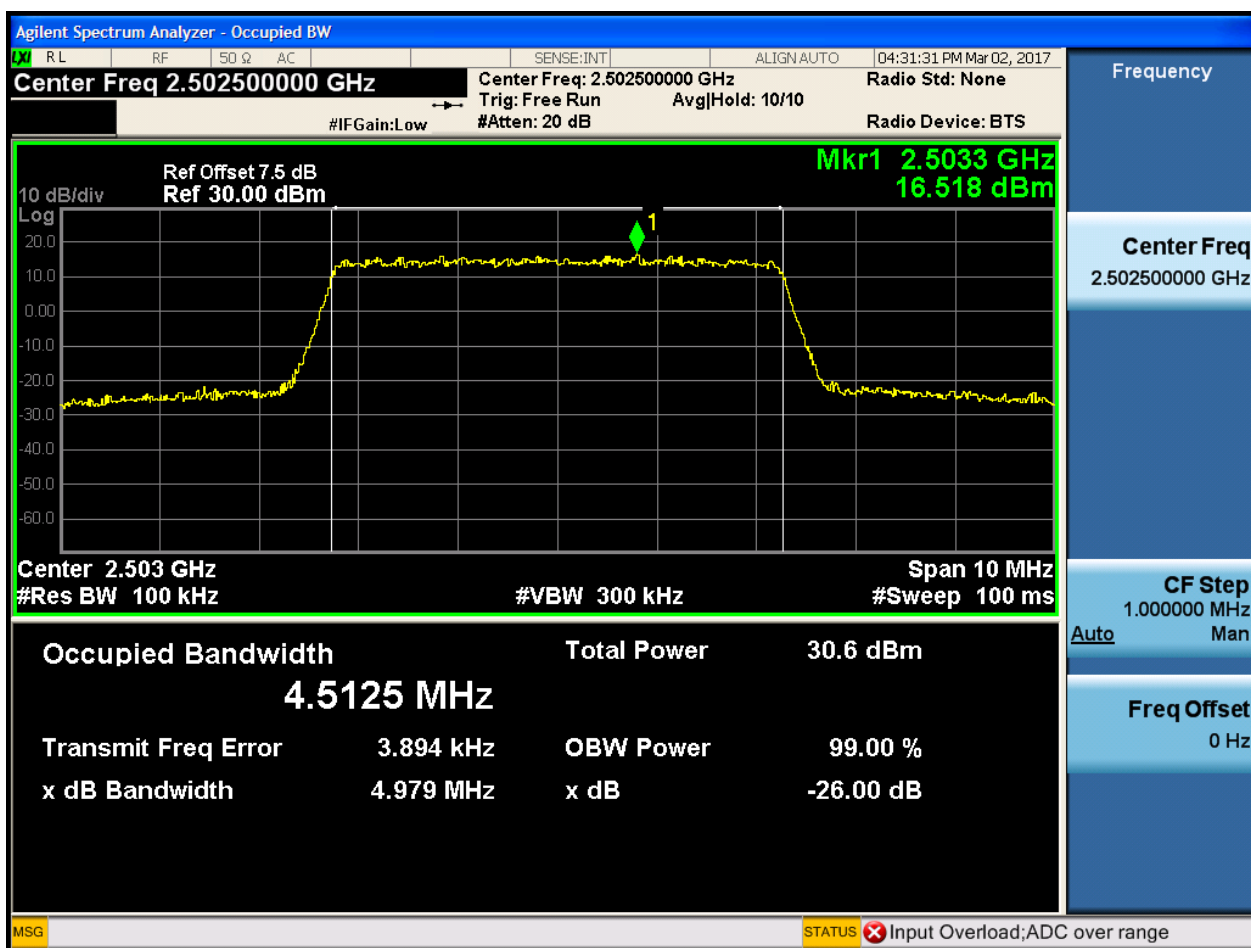
4.1.1 Test Band = BAND7

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 5

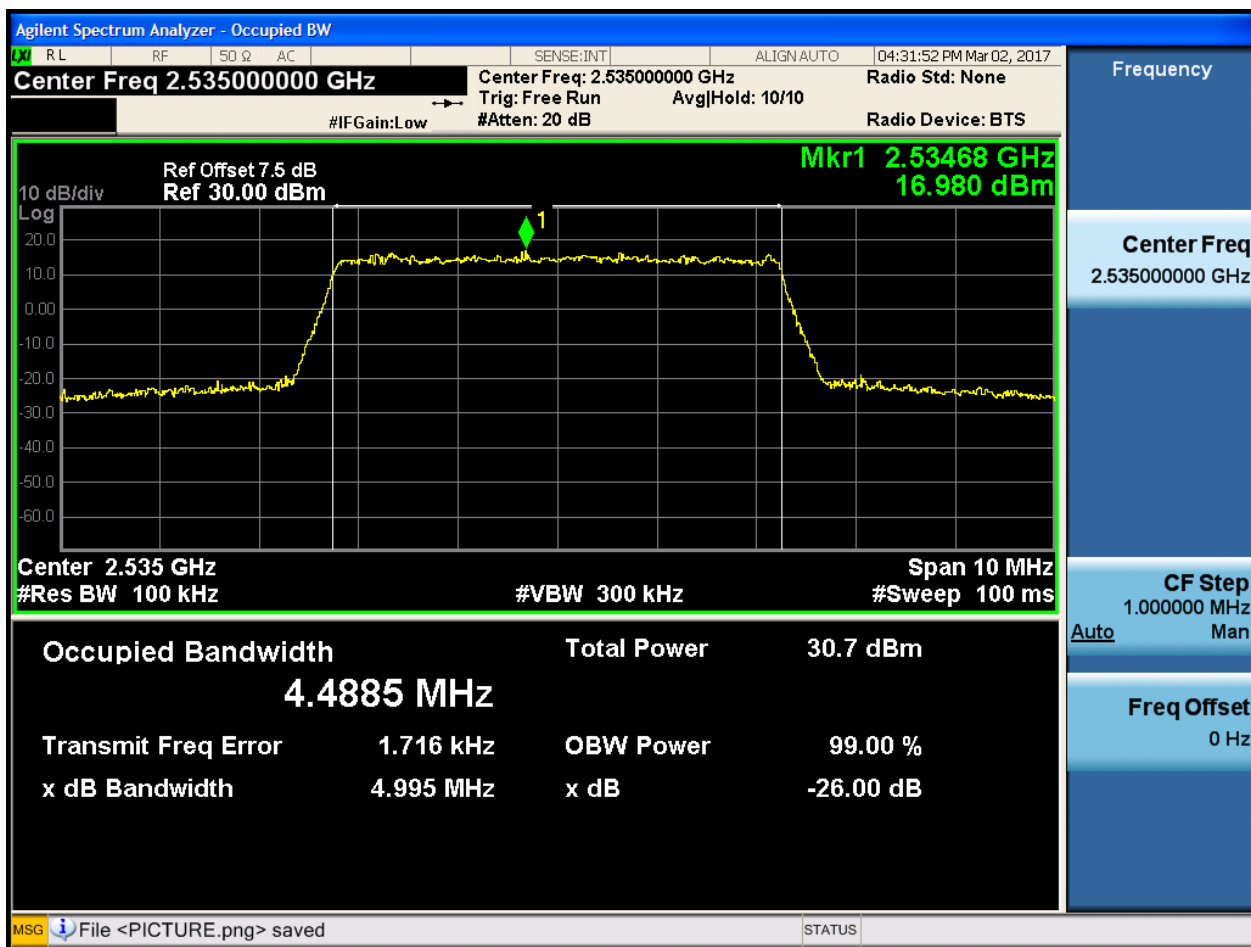
4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 Test RB = RB25#0



4.1.1.1.1.2 Test Channel = MCH

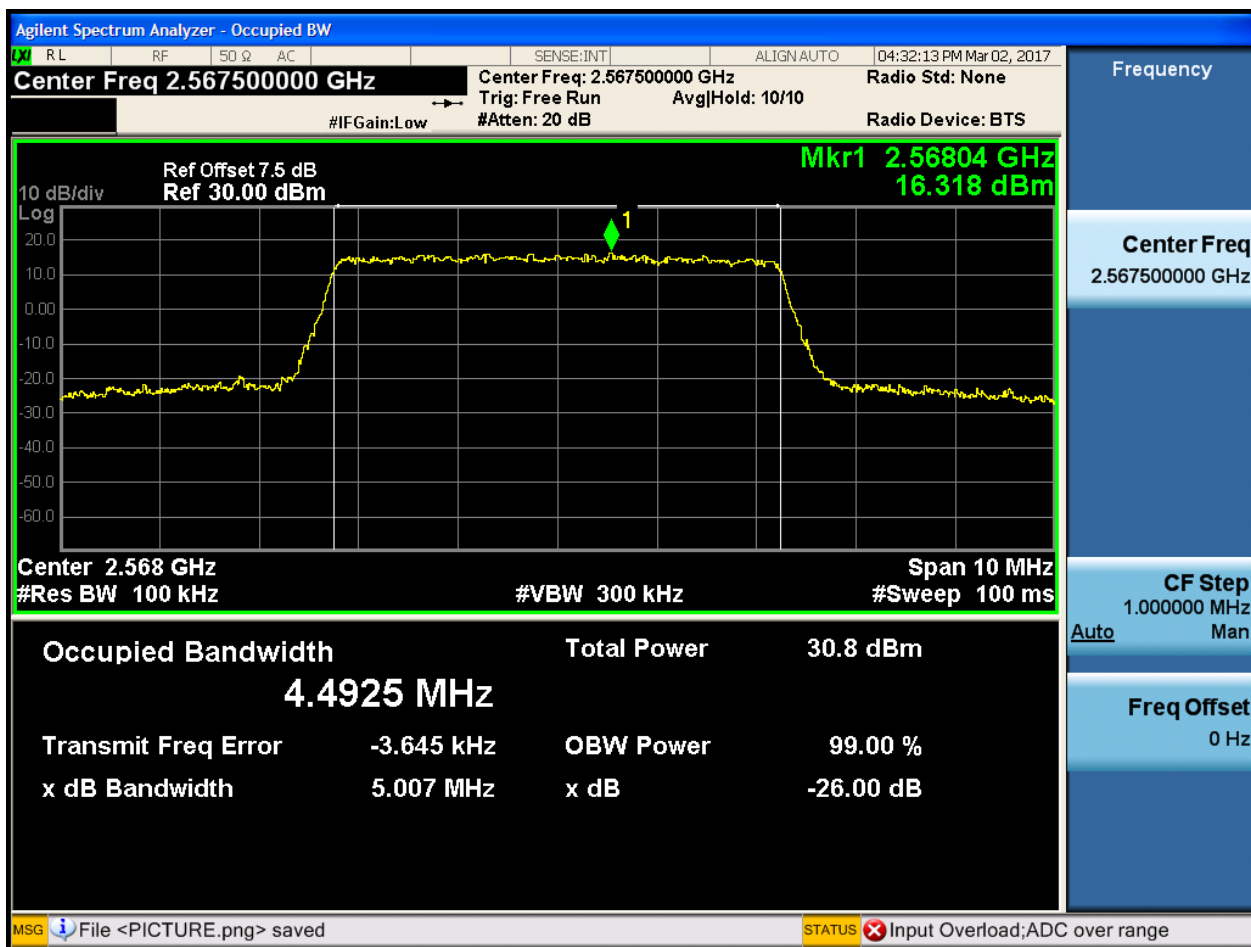
4.1.1.1.1.2.1 Test RB = RB25#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

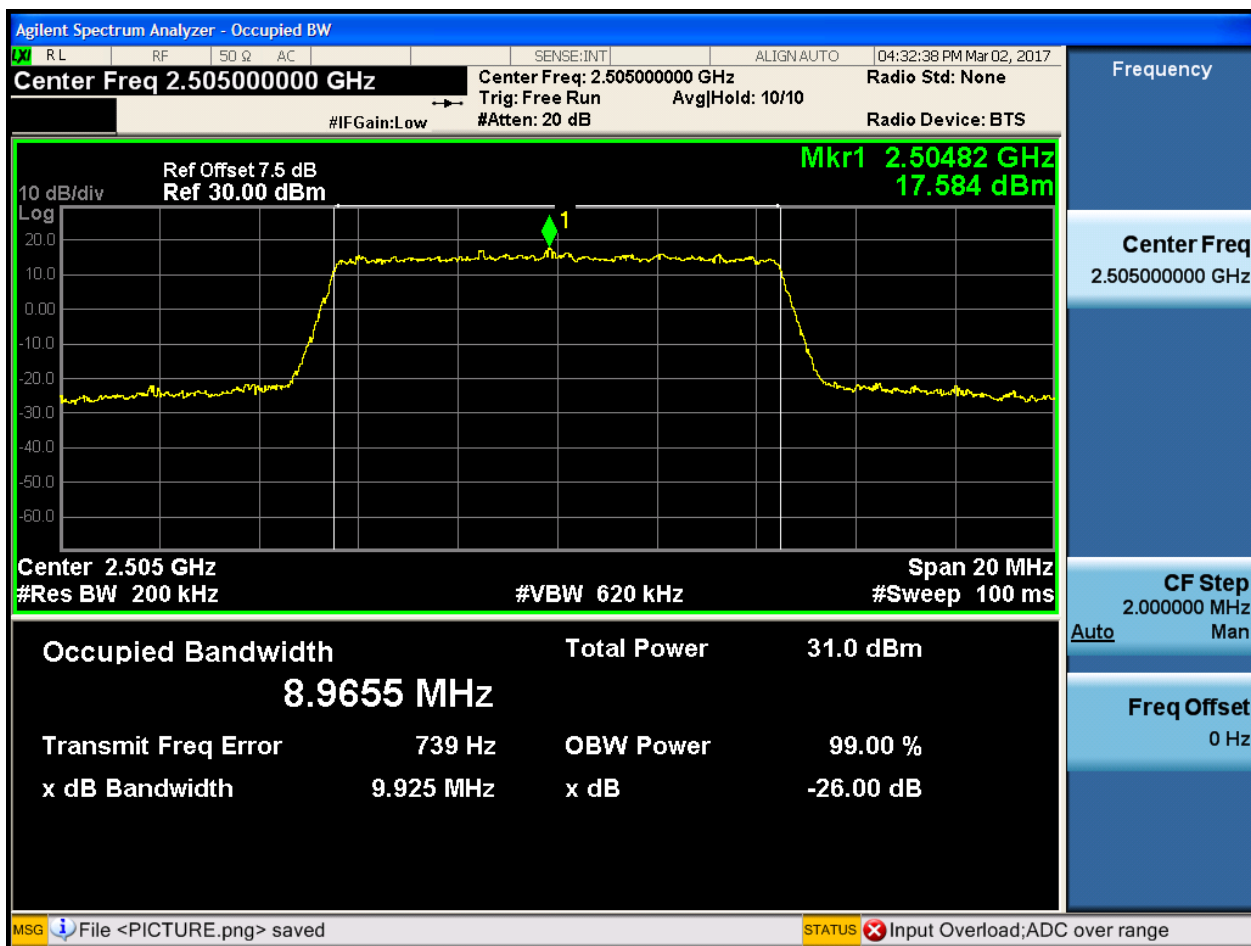




4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH

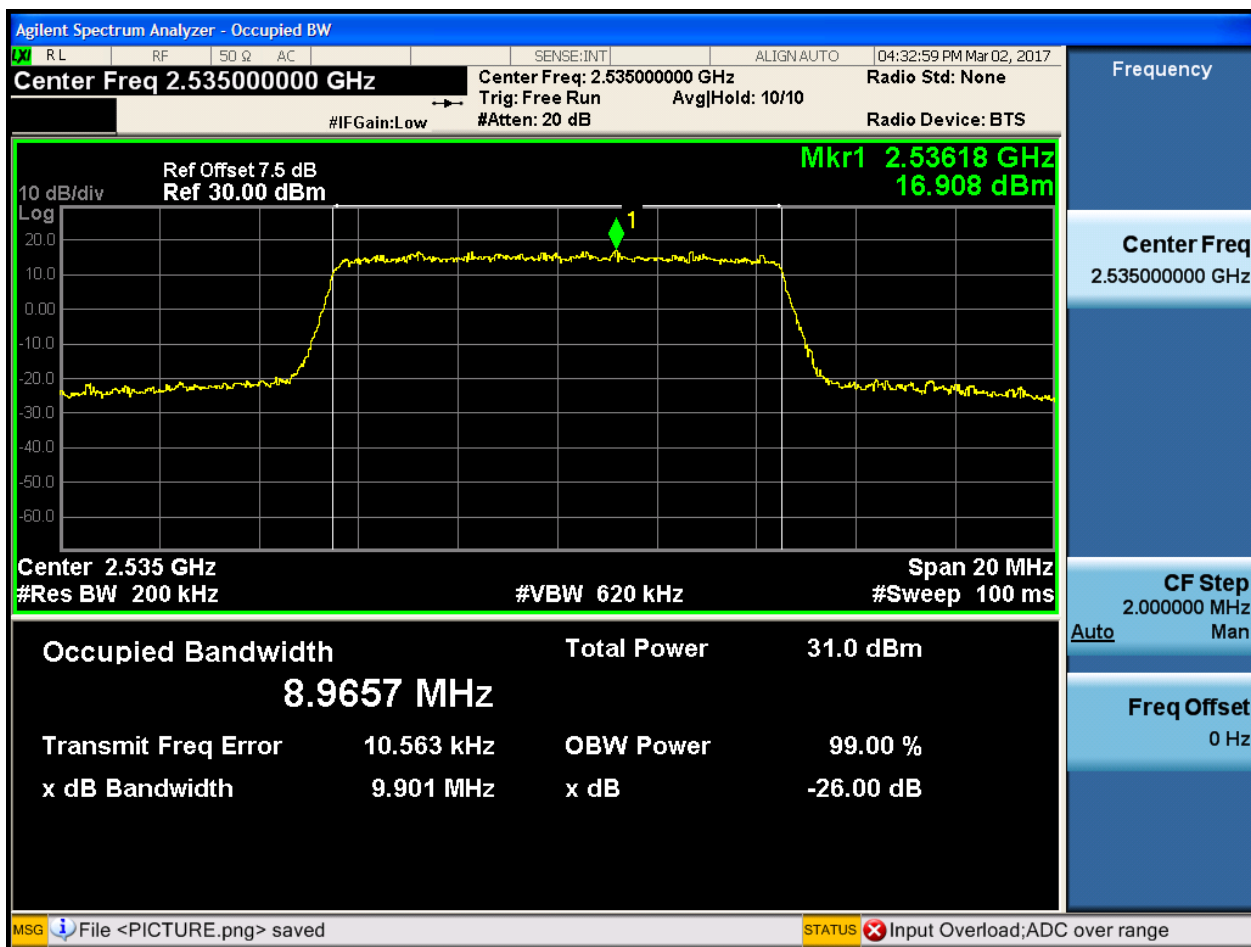
4.1.1.1.2.1.1 Test RB = RB50#0





4.1.1.1.2.2 Test Channel = MCH

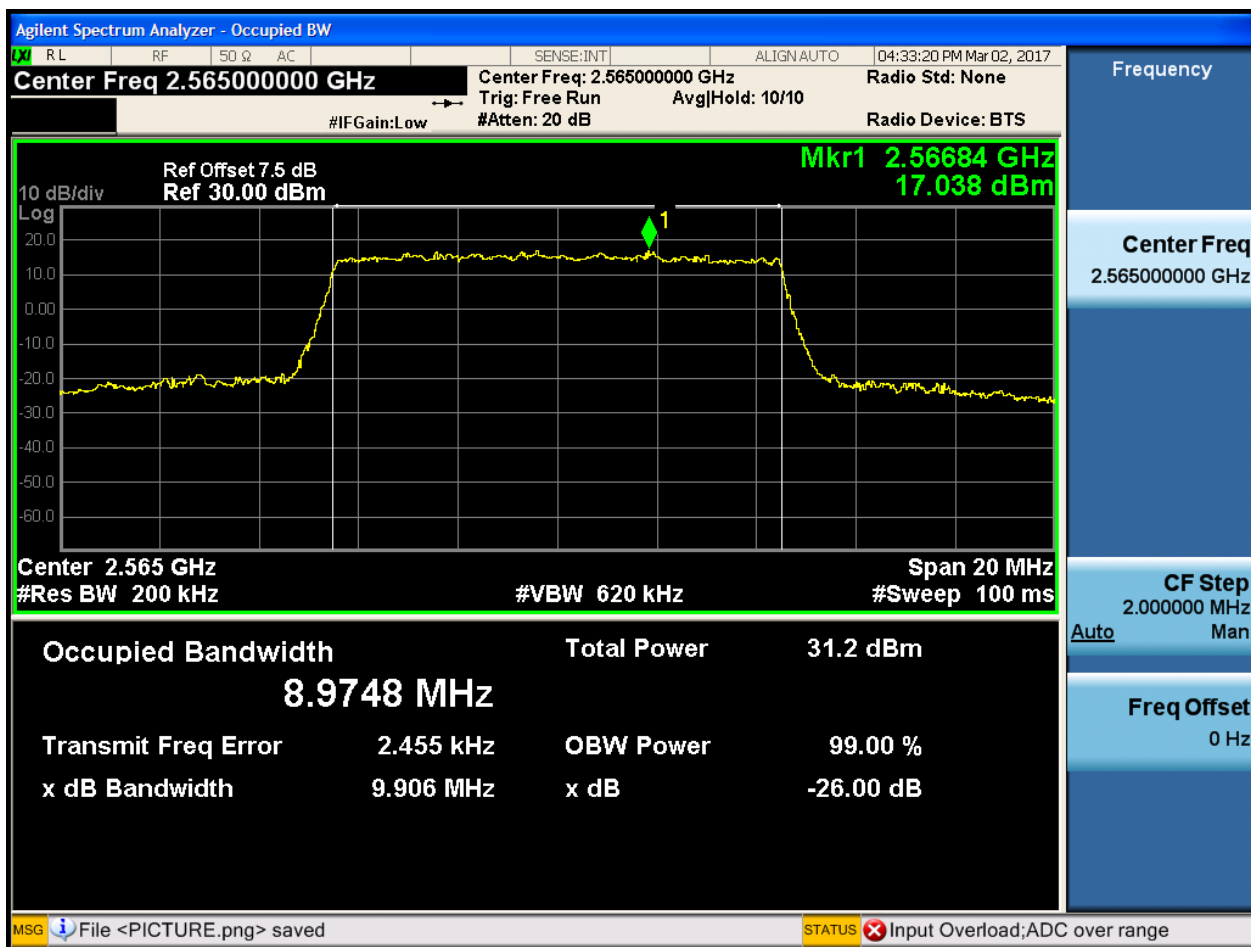
4.1.1.1.2.2.1 Test RB = RB50#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0

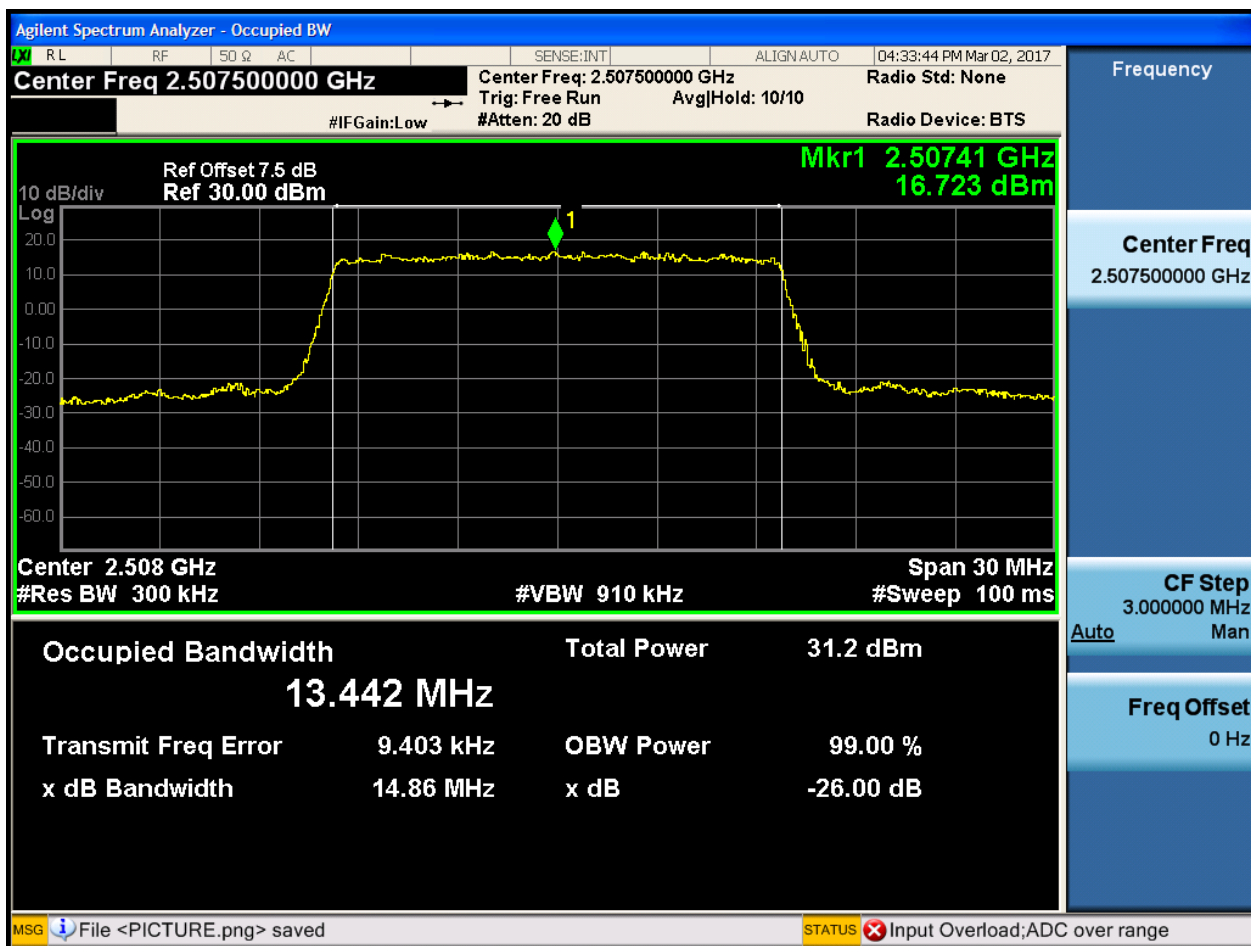




4.1.1.1.3 Test Bandwidth = 15

4.1.1.1.3.1 Test Channel = LCH

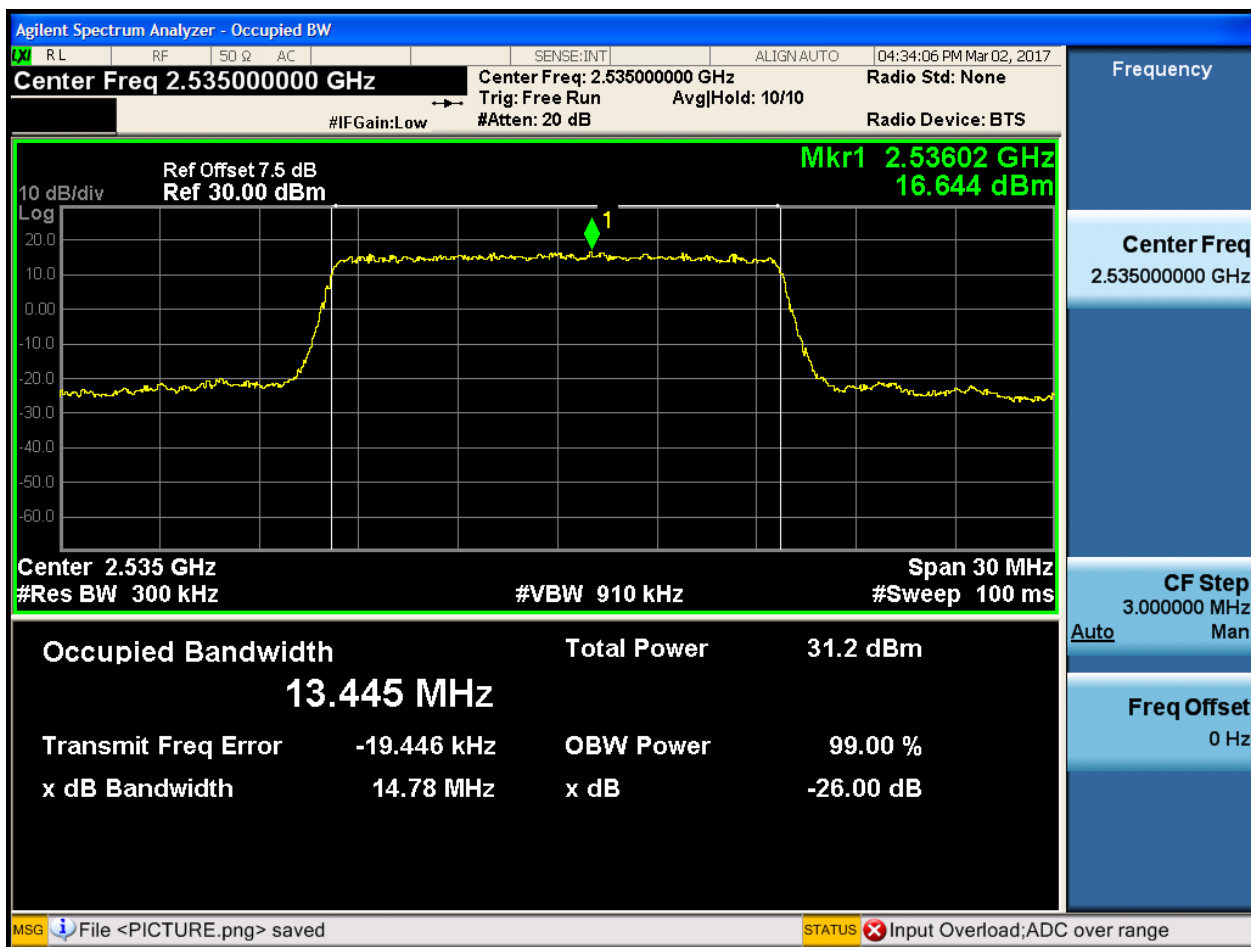
4.1.1.1.3.1.1 Test RB = RB75#0





4.1.1.1.3.2 Test Channel = MCH

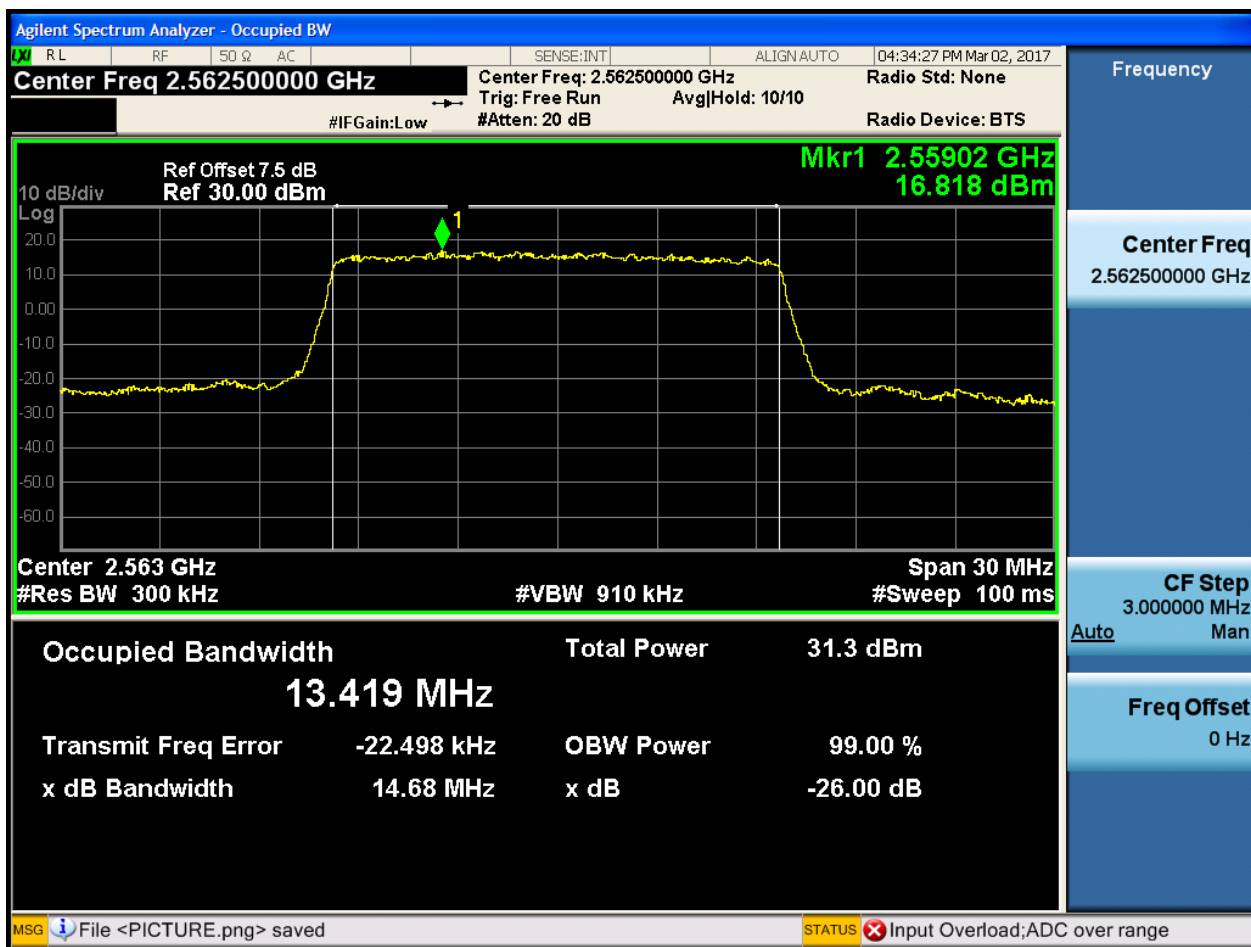
4.1.1.1.3.2.1 Test RB = RB75#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB75#0

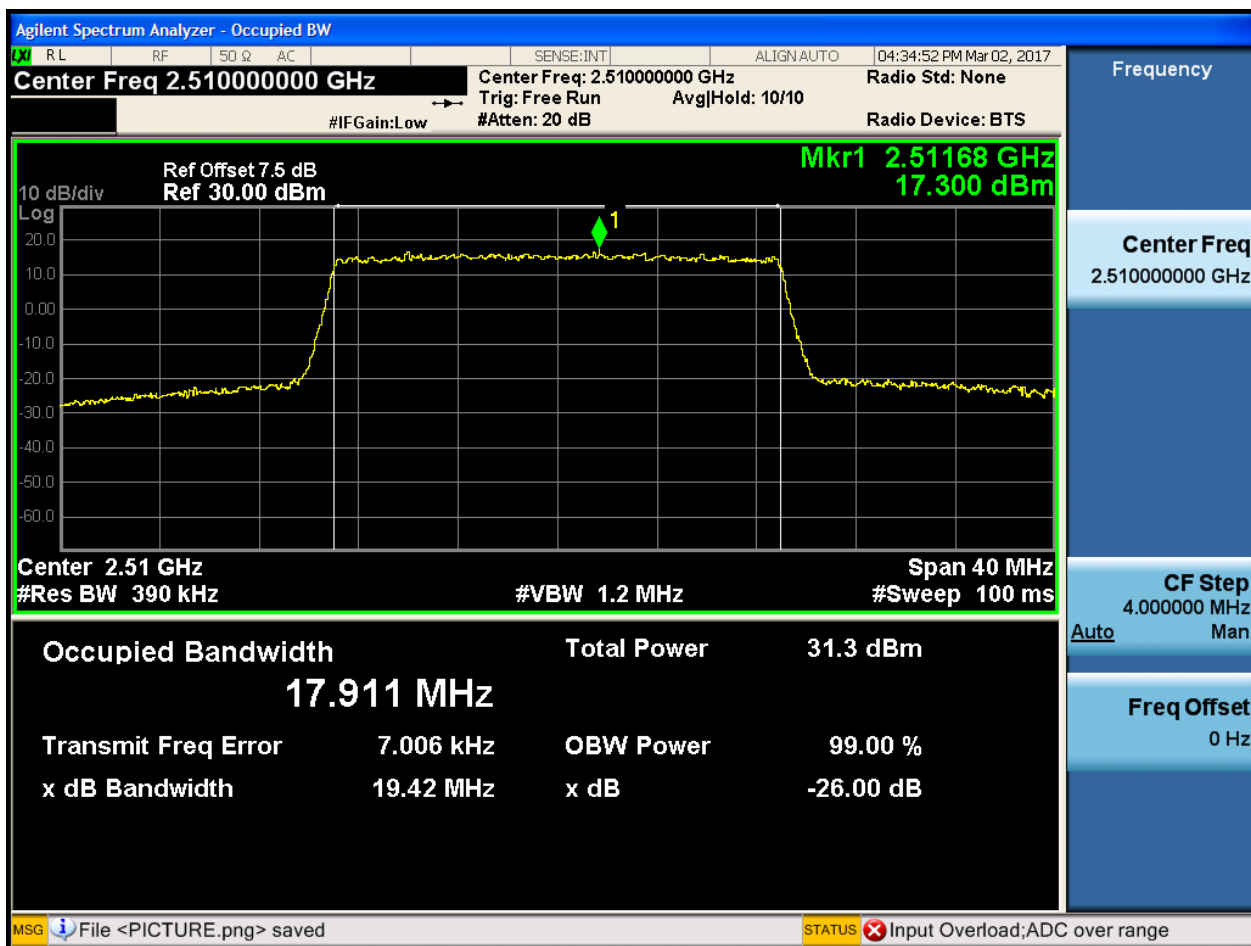




4.1.1.1.4 Test Bandwidth = 20

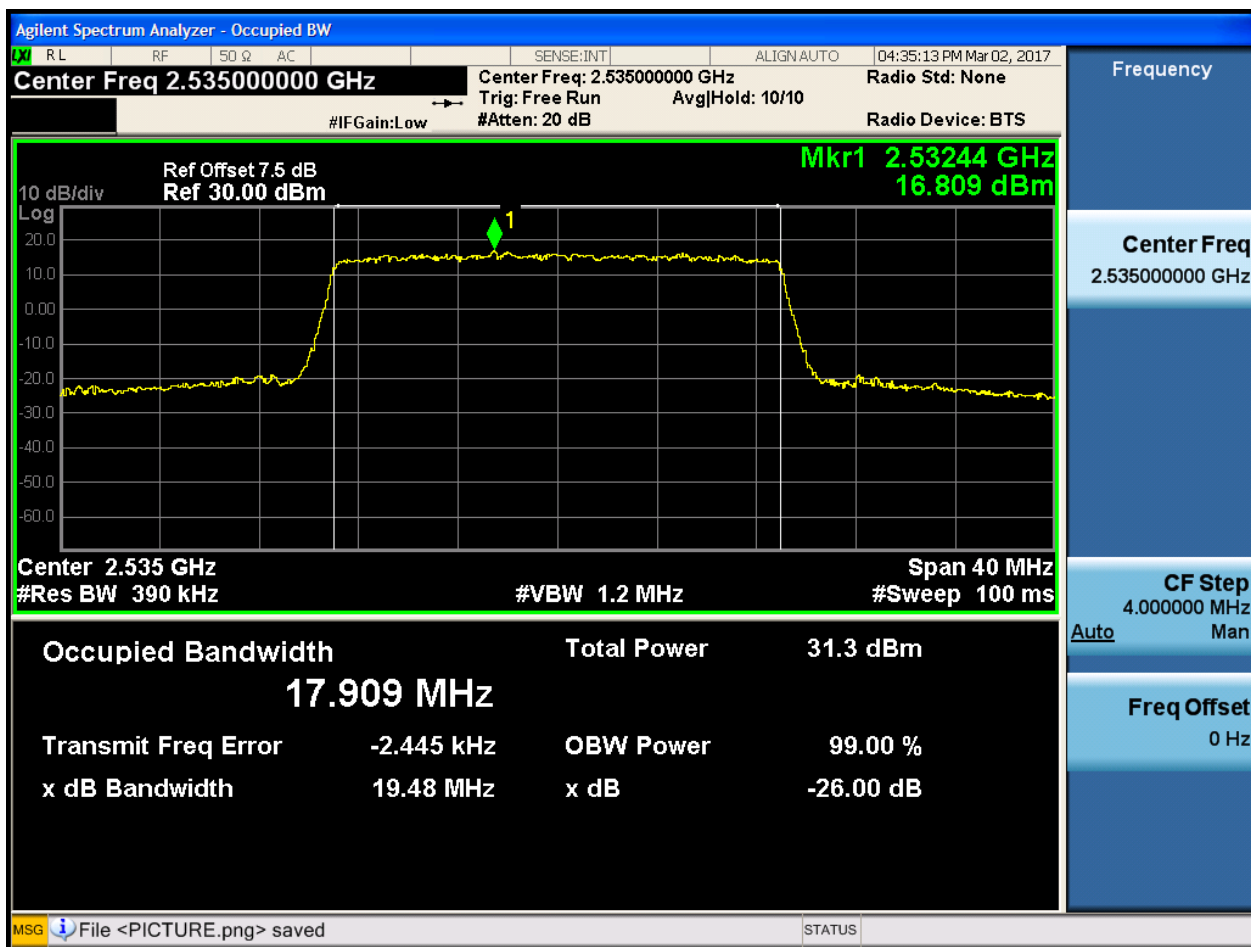
4.1.1.1.4.1 Test Channel = LCH

4.1.1.1.4.1.1 Test RB = RB100#0



4.1.1.1.4.2 Test Channel = MCH

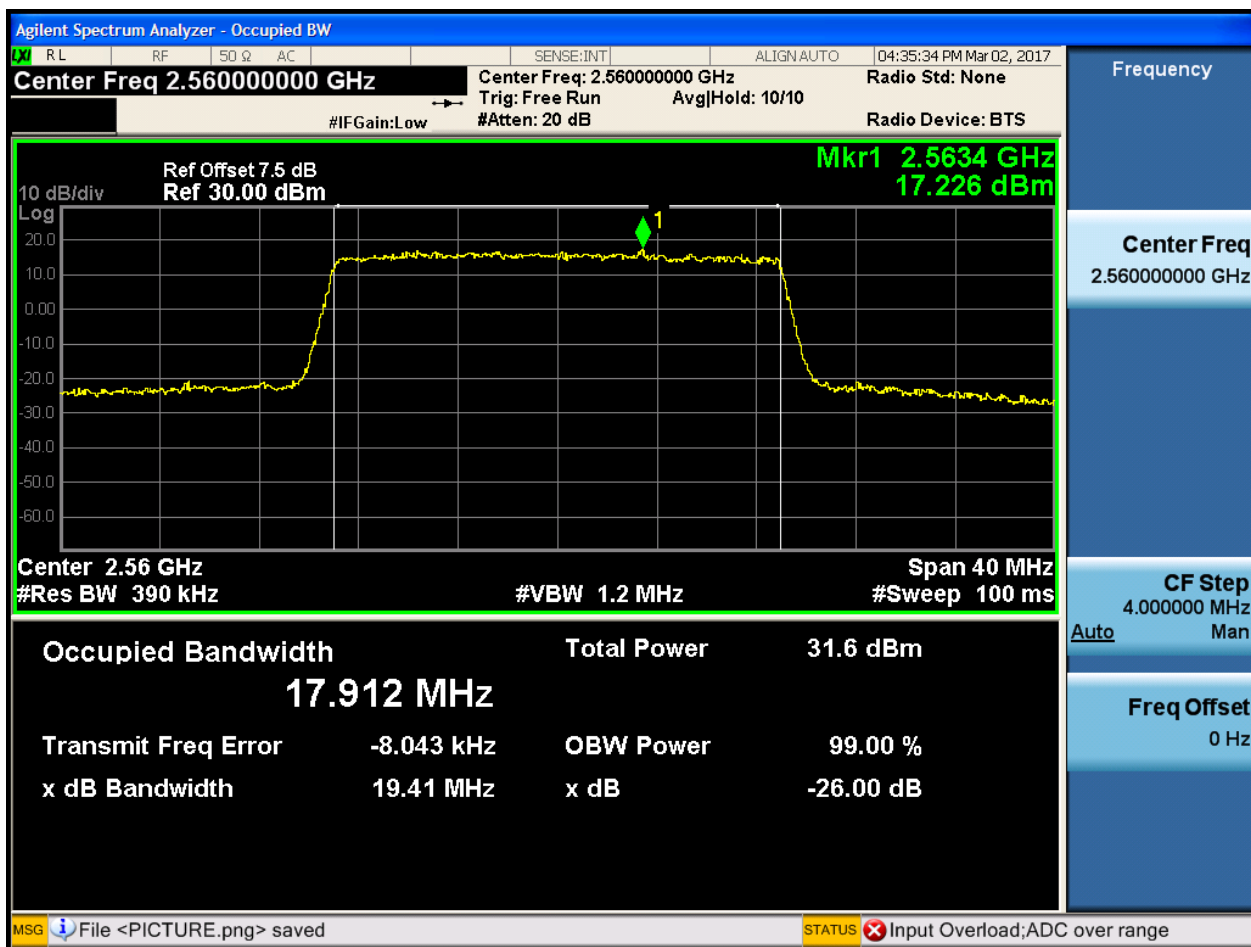
4.1.1.1.4.2.1 Test RB = RB100#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB100#0

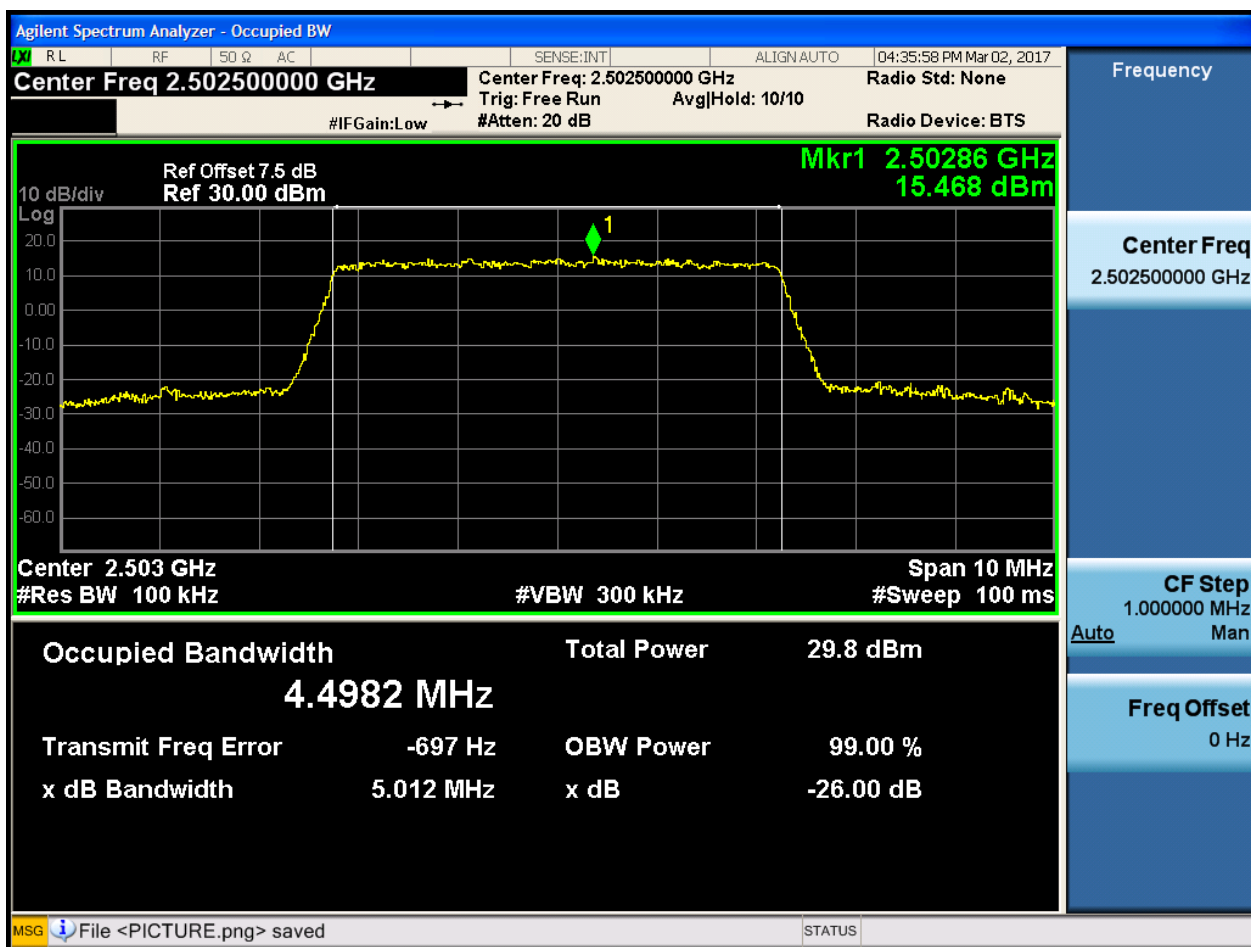


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

4.1.1.2.1.1 Test Channel = LCH

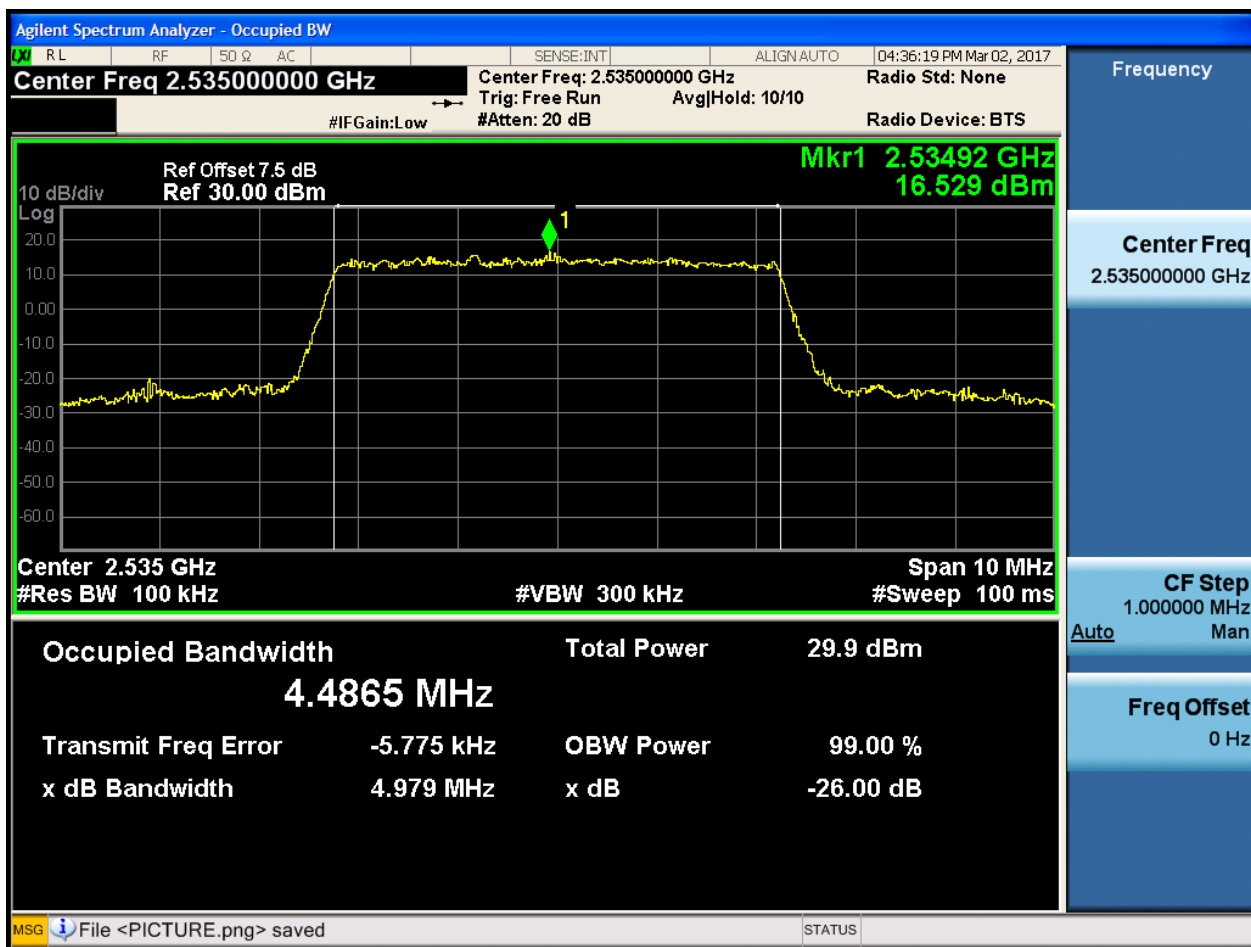
4.1.1.2.1.1.1 Test RB = RB25#0





4.1.1.2.1.2 Test Channel = MCH

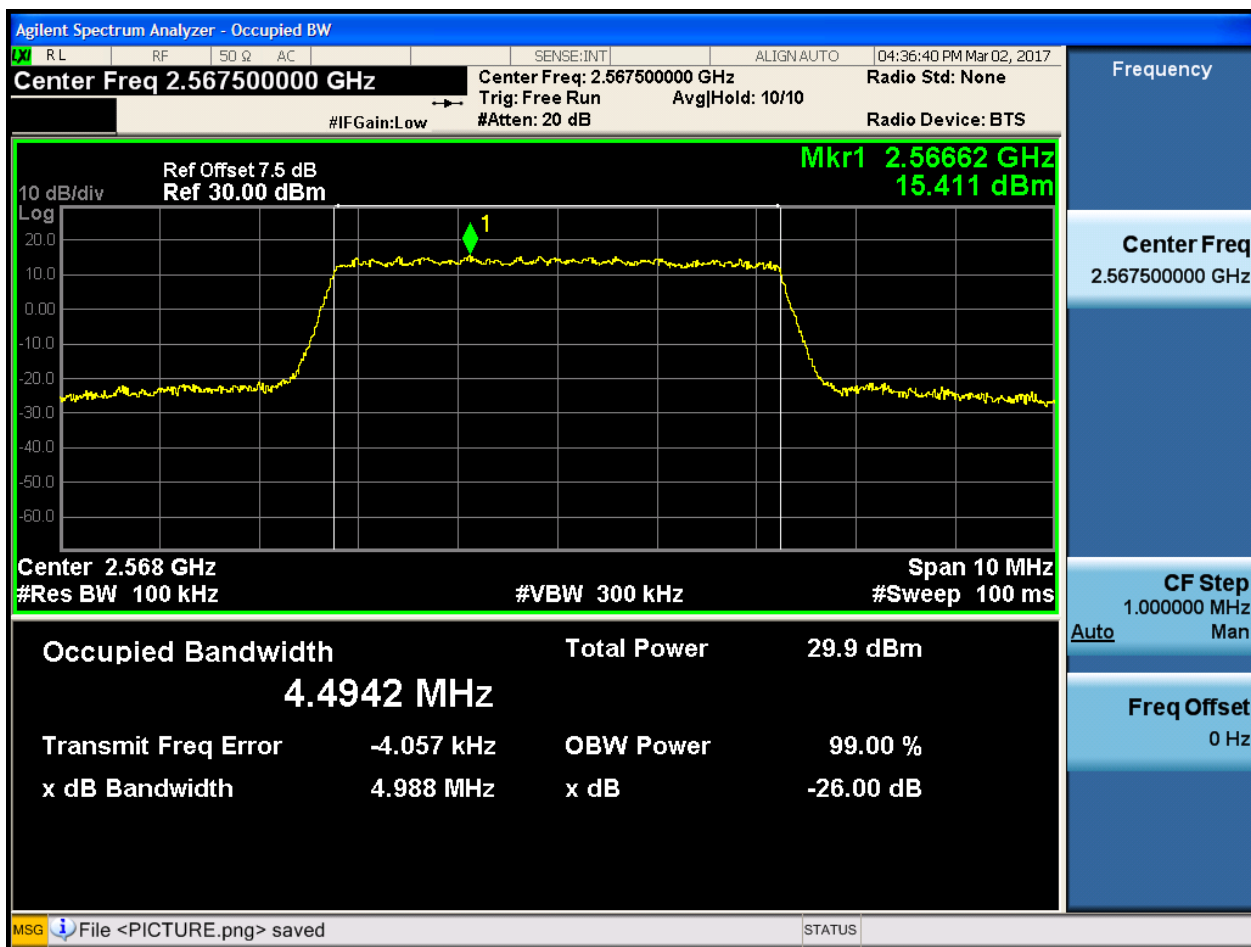
4.1.1.2.1.2.1 Test RB = RB25#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

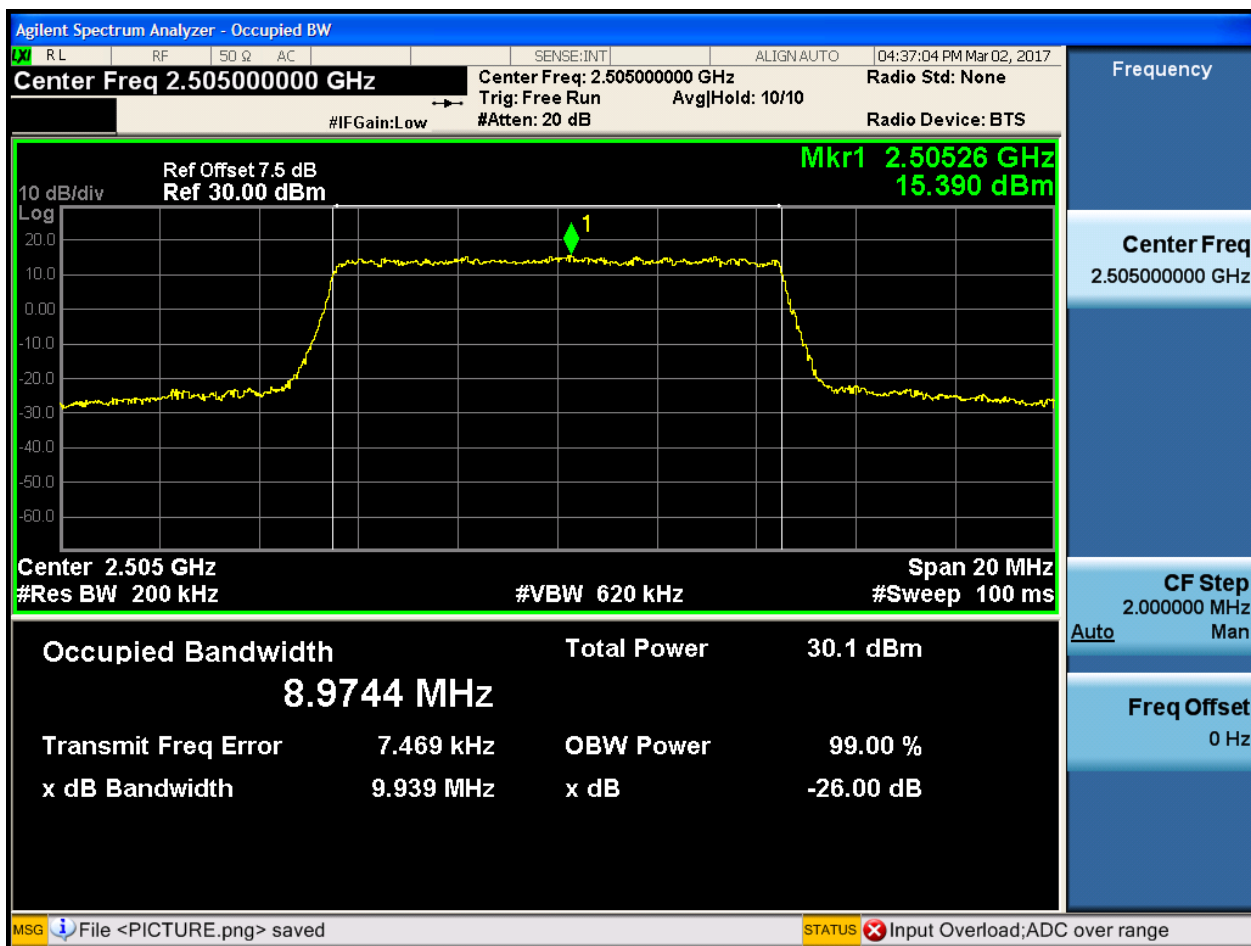




4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

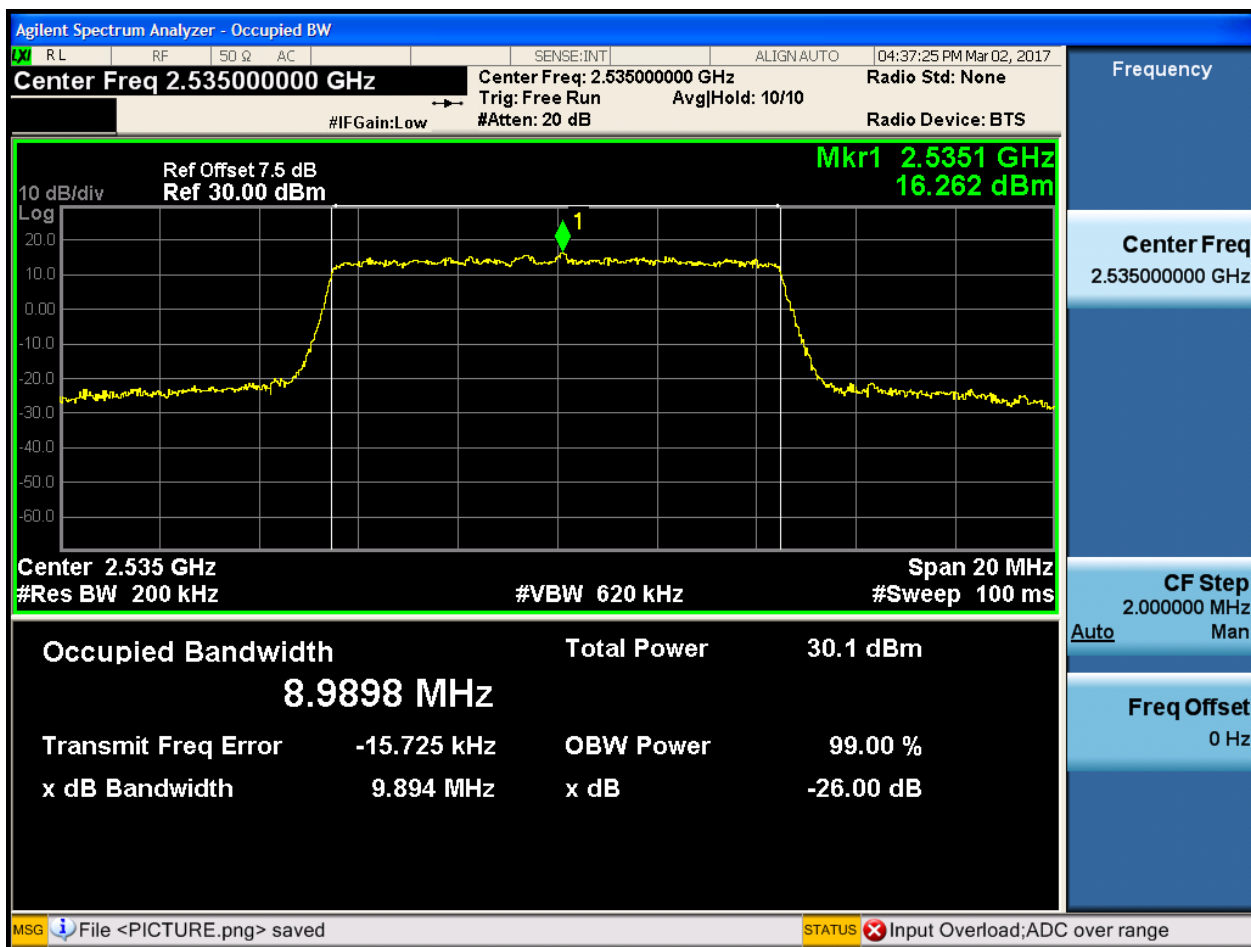
4.1.1.2.2.1.1 Test RB = RB50#0





4.1.1.2.2.2 Test Channel = MCH

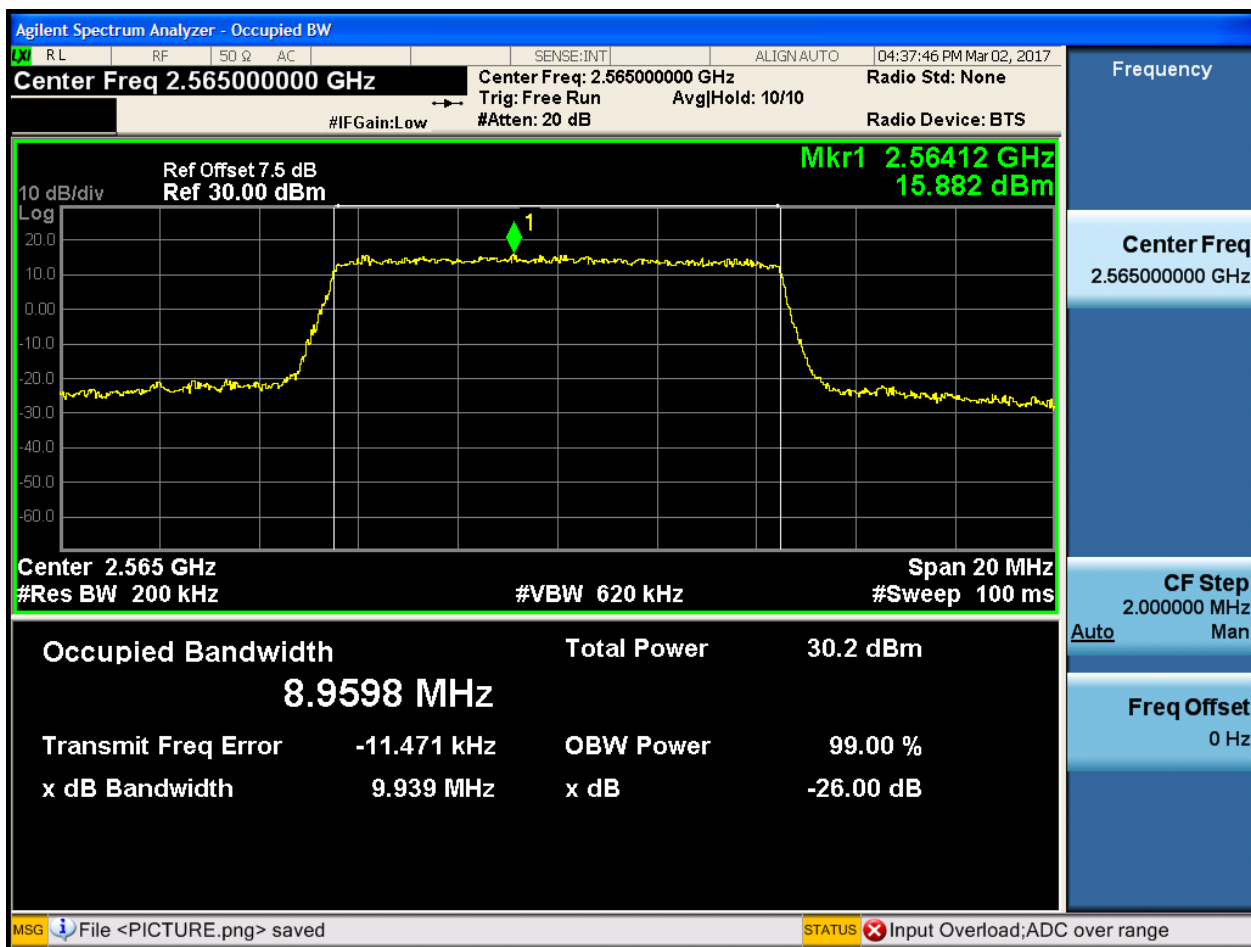
4.1.1.2.2.2.1 Test RB = RB50#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0

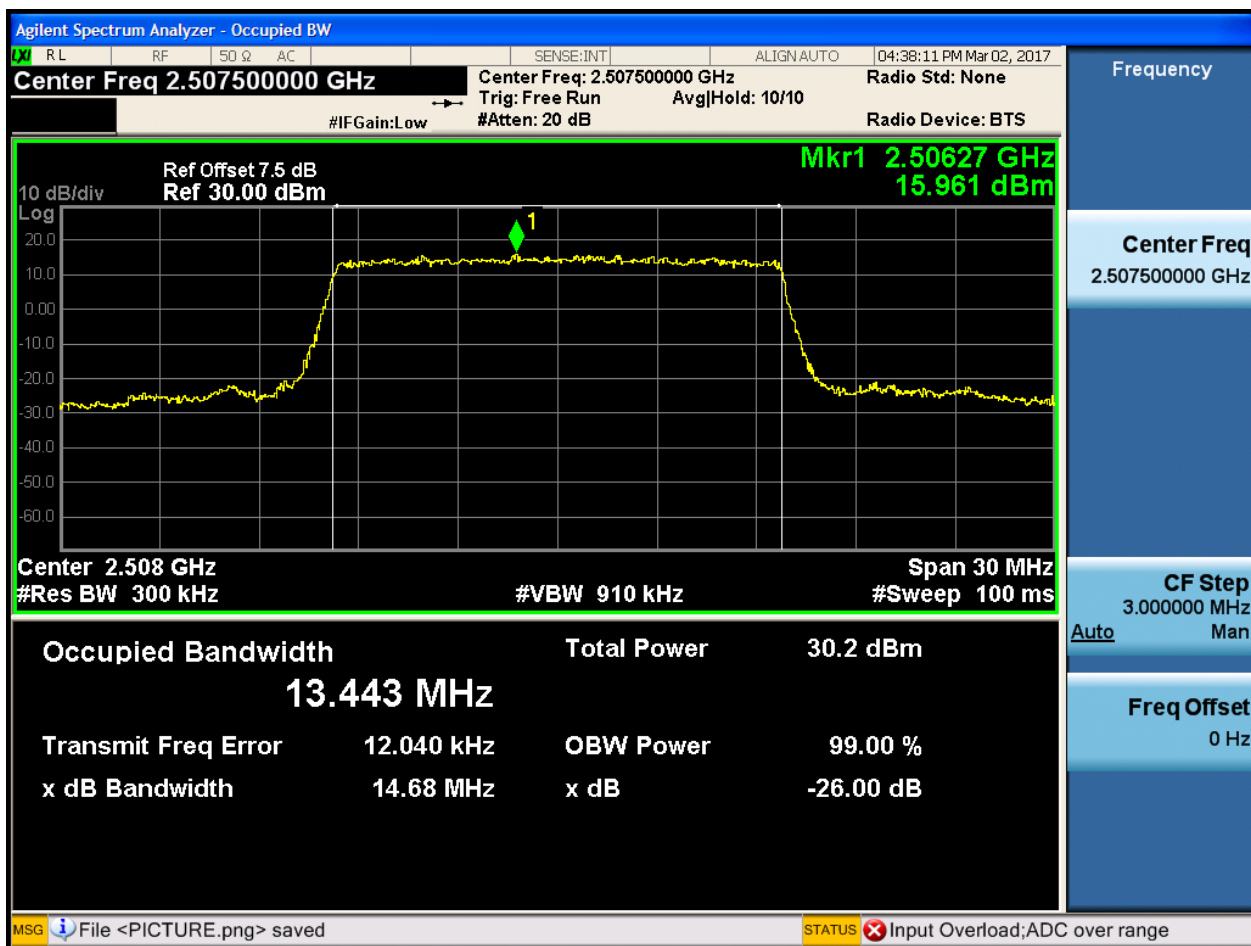




4.1.1.2.3 Test Bandwidth = 15

4.1.1.2.3.1 Test Channel = LCH

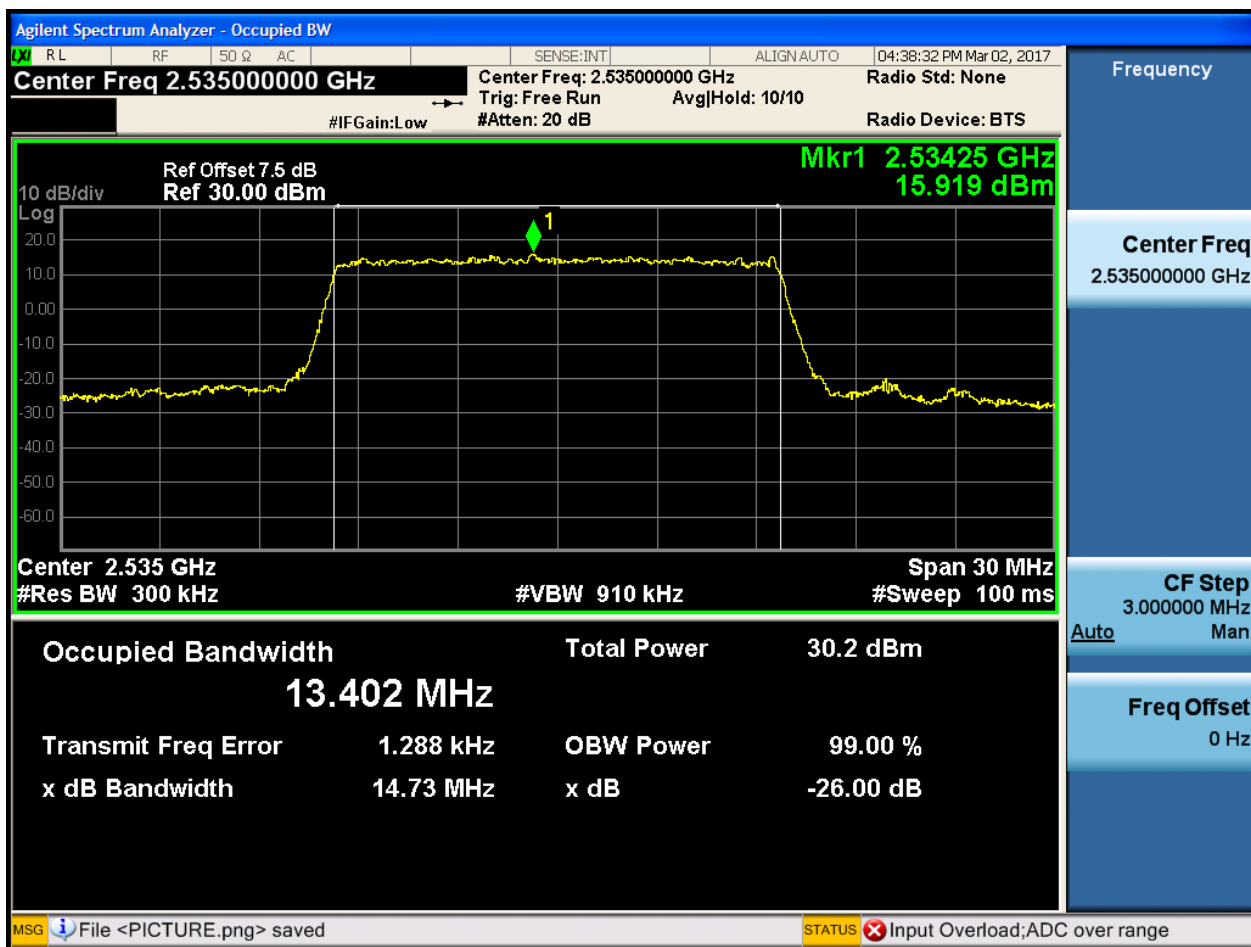
4.1.1.2.3.1.1 Test RB = RB75#0





4.1.1.2.3.2 Test Channel = MCH

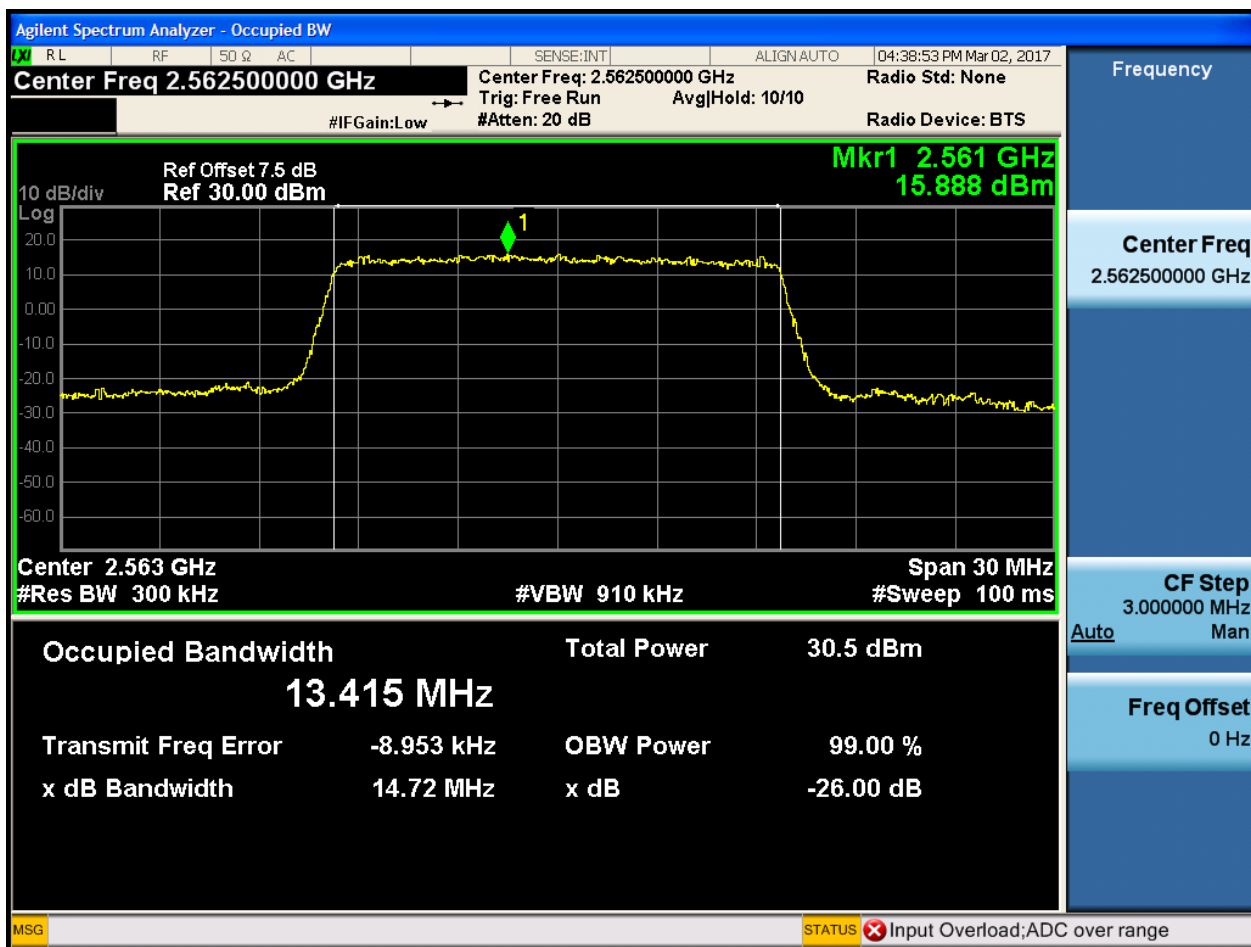
4.1.1.2.3.2.1 Test RB = RB75#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB75#0

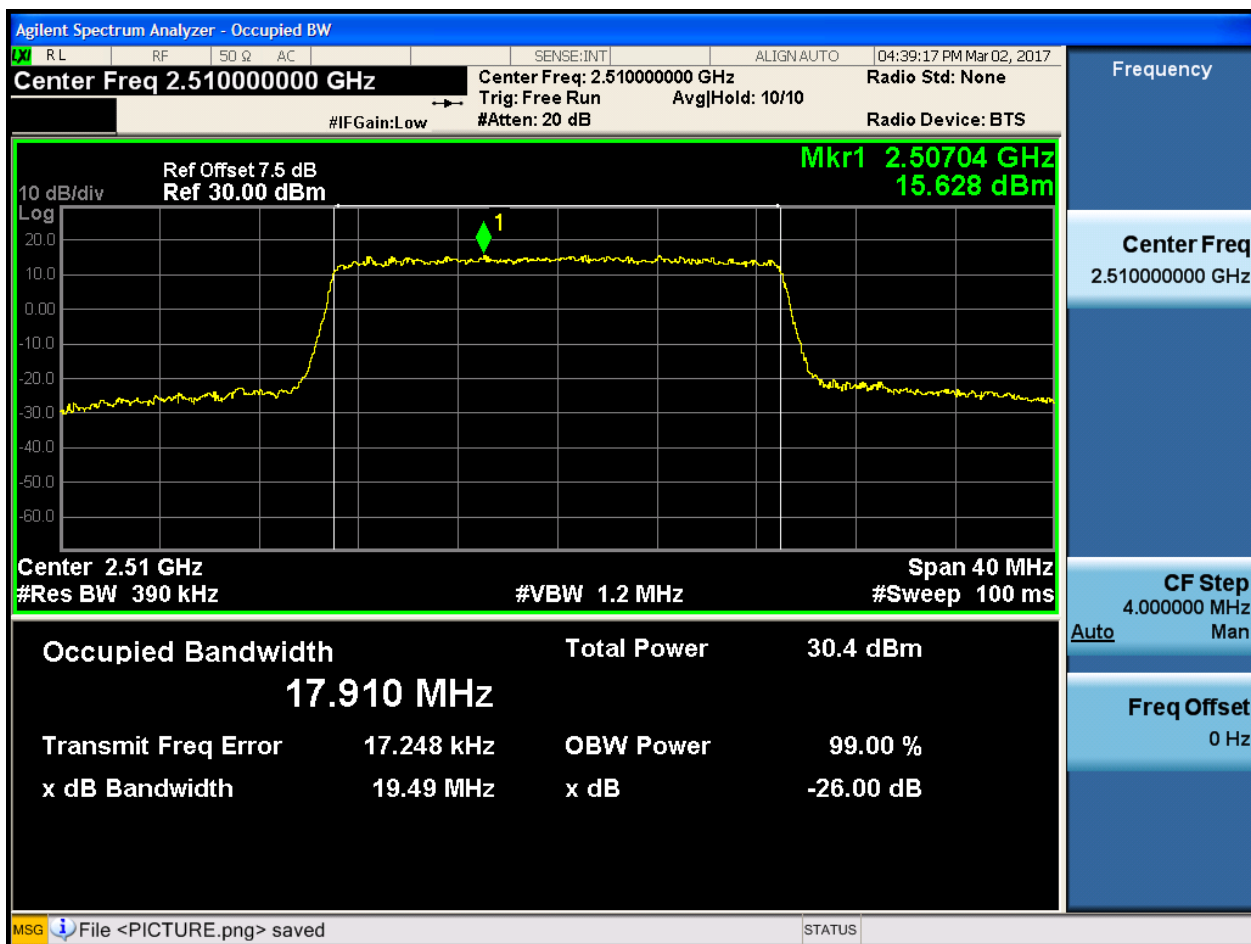




4.1.1.2.4 Test Bandwidth = 20

4.1.1.2.4.1 Test Channel = LCH

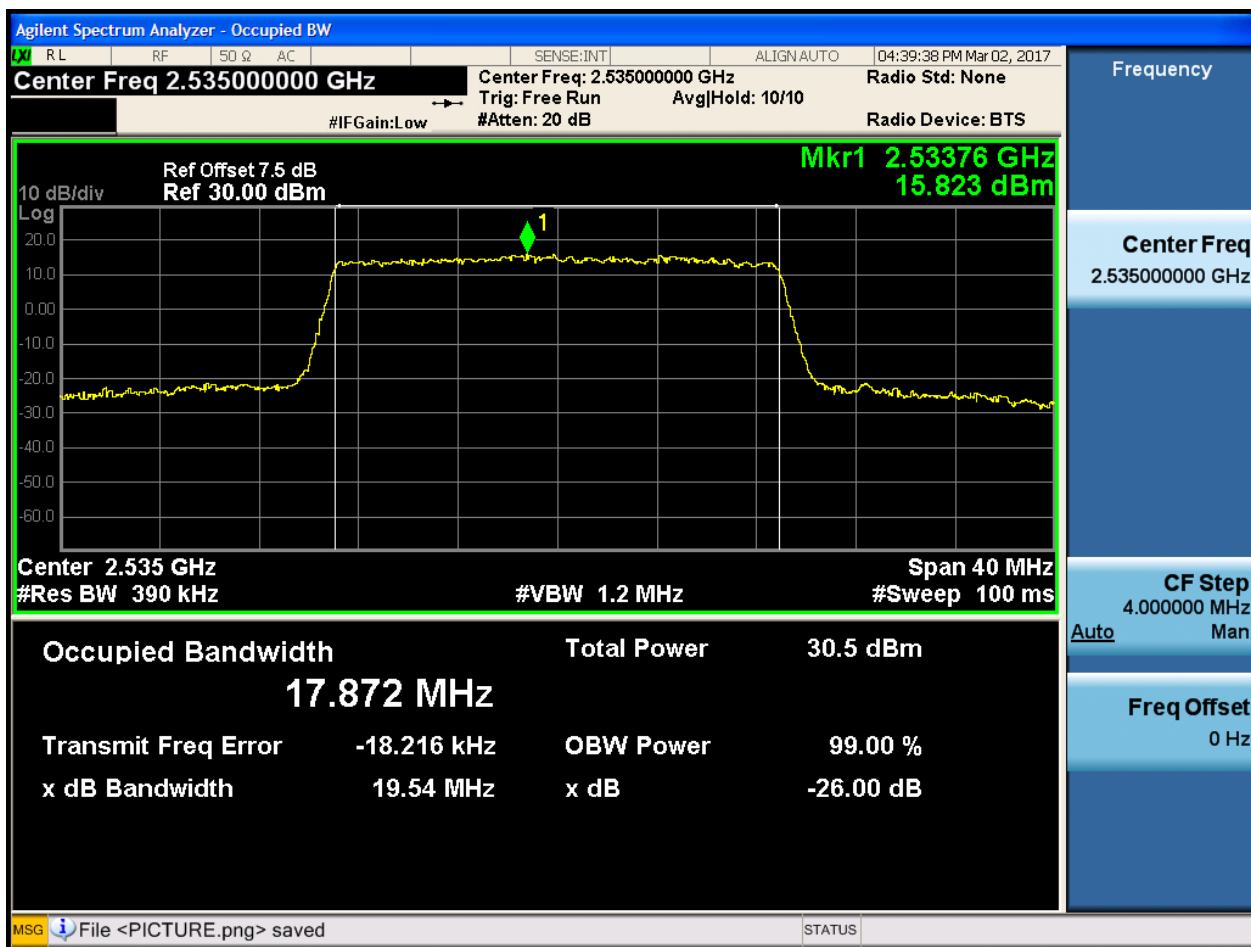
4.1.1.2.4.1.1 Test RB = RB100#0





4.1.1.2.4.2 Test Channel = MCH

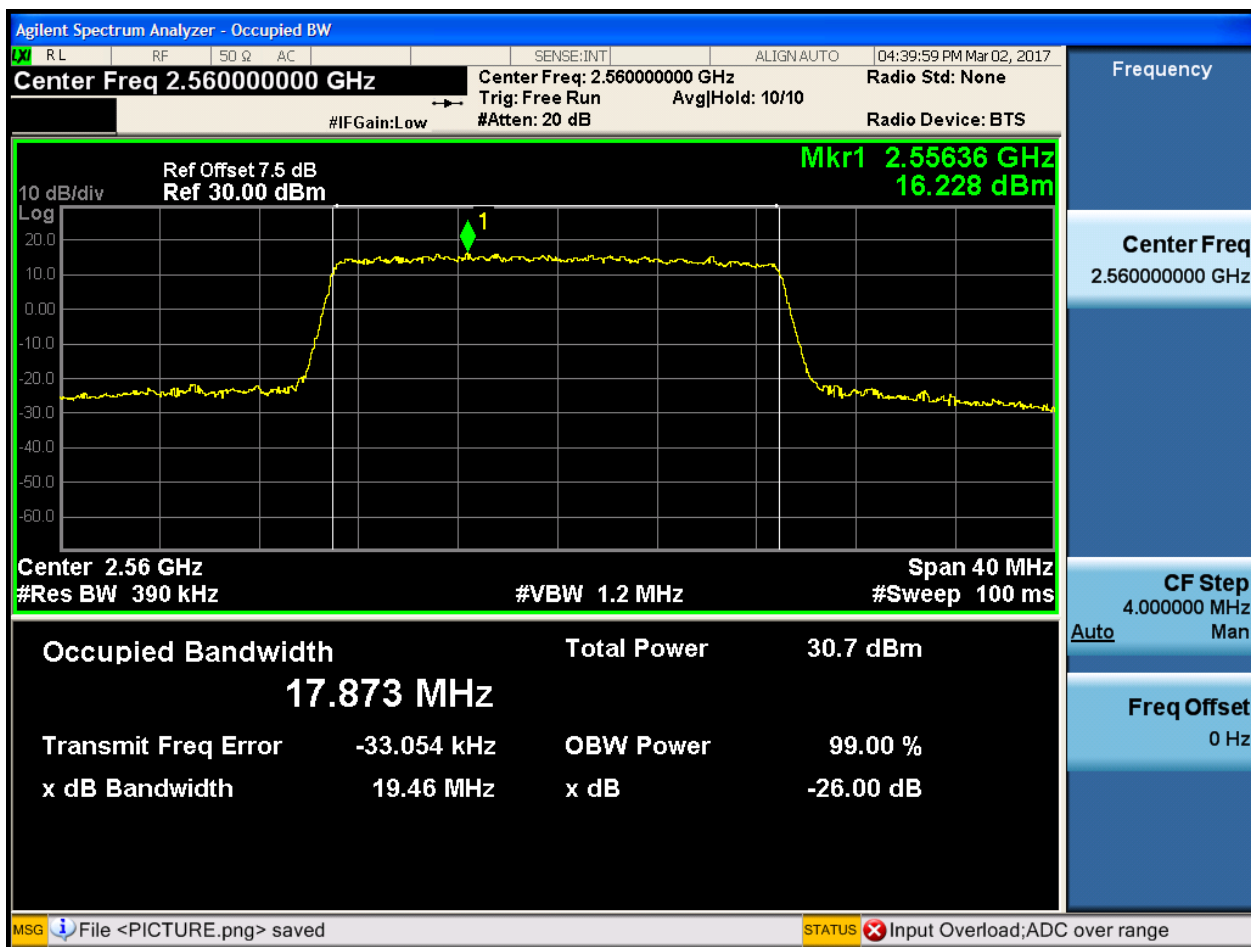
4.1.1.2.4.2.1 Test RB = RB100#0





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

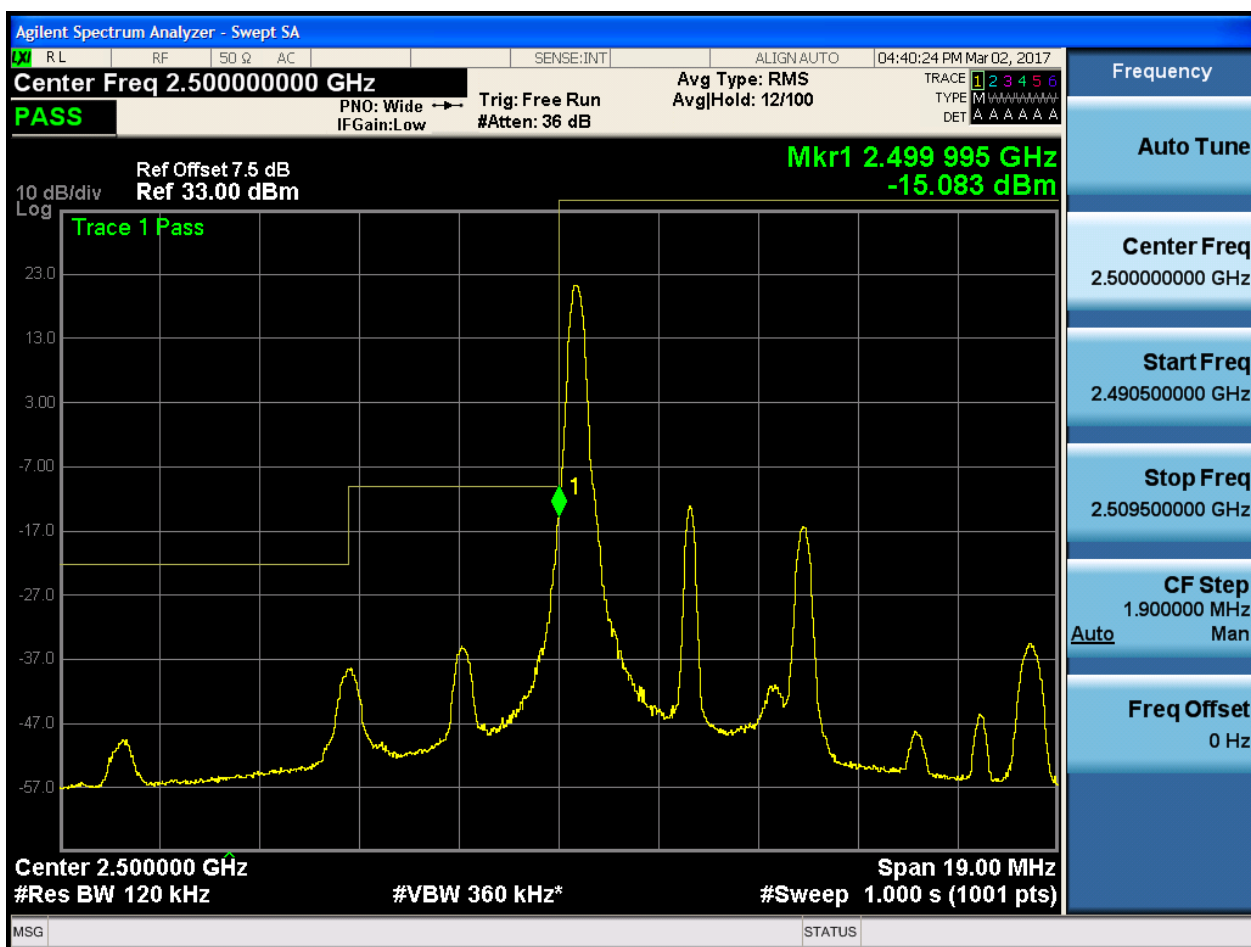
5.1.1 Test Band = BAND7

5.1.1.1 Test Mode = LTE/TM1

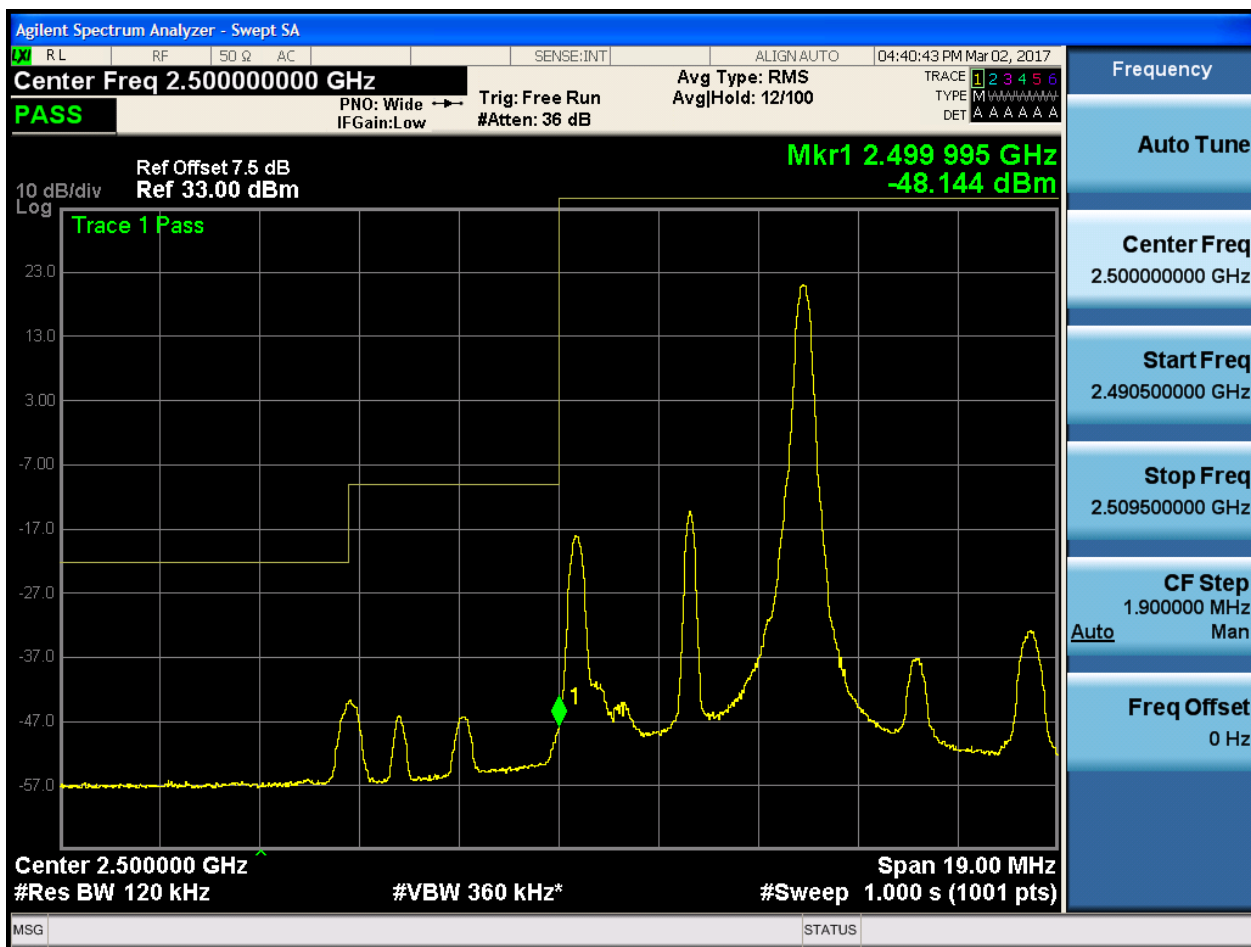
5.1.1.1.1 Test Bandwidth = 5

5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0

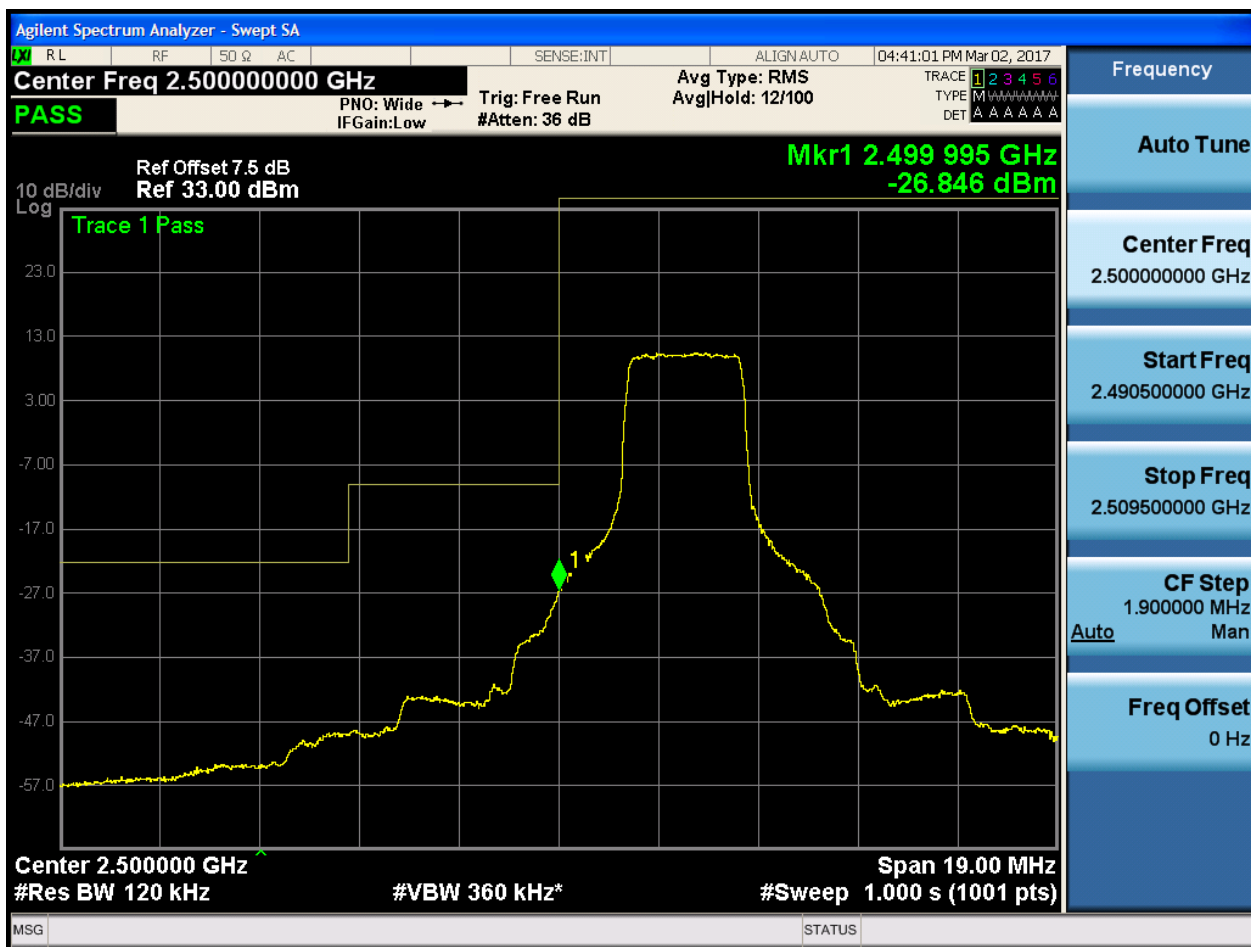


5.1.1.1.1.1.2 Test RB = RB1#24





5.1.1.1.1.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:41:19 PM Mar 02, 2017

Center Freq 2.500000000 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 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-22.473 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 120 kHz #VBW 360 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

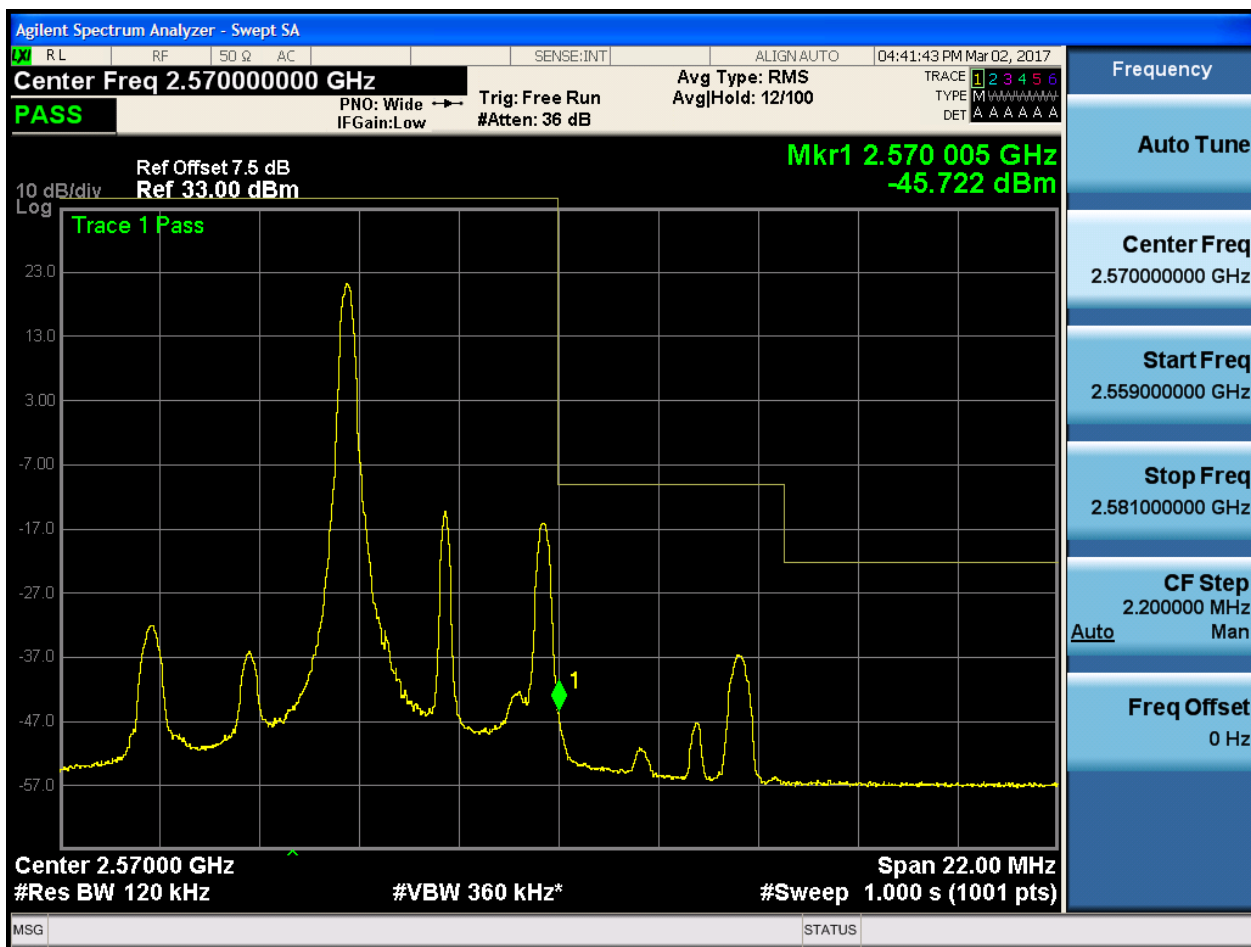
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

5.1.1.1.1.2 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 04:42:01 PM Mar 02, 2017

Center Freq 2.570000000 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 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 005 GHz
-14.453 dBm

10 dB/div
Log

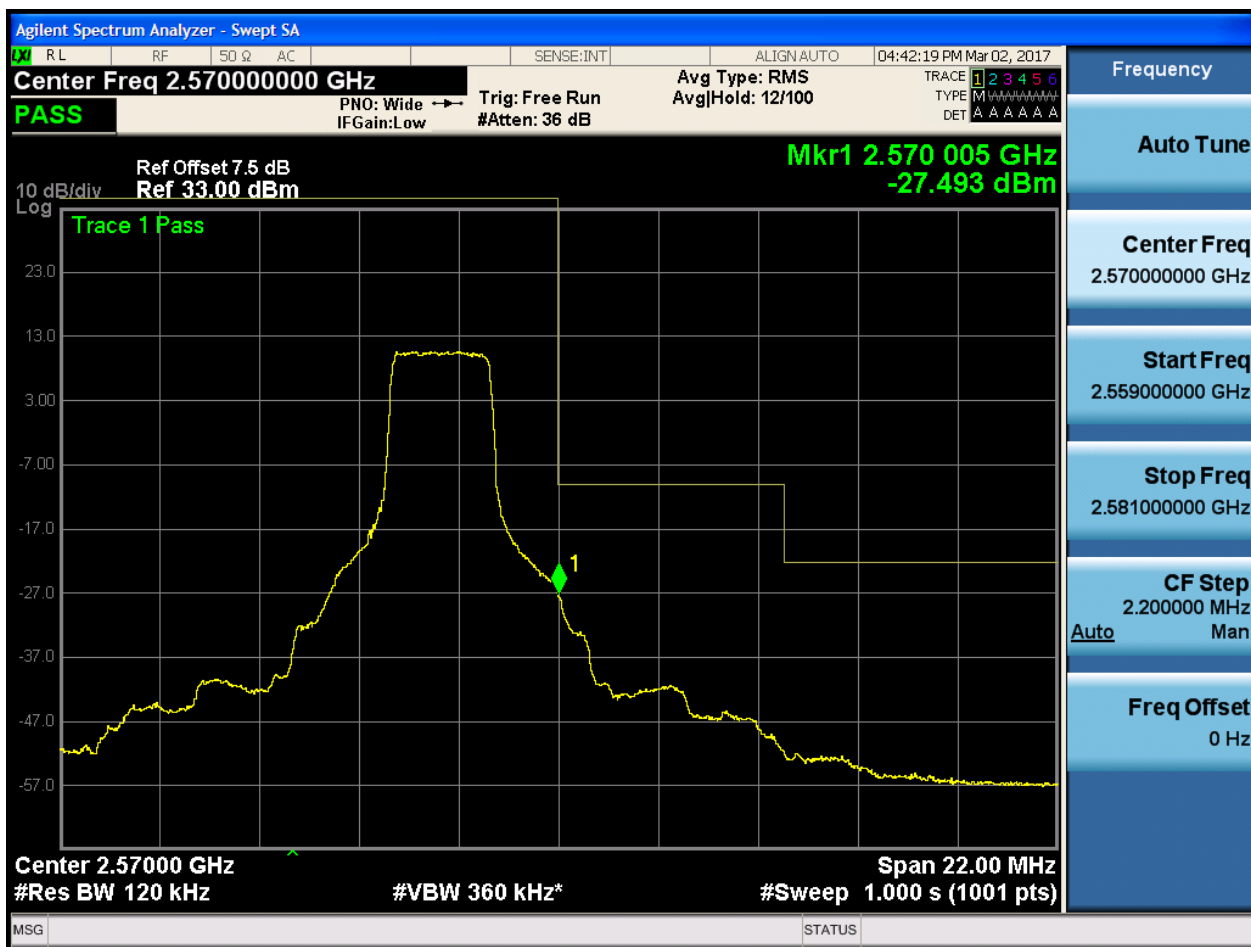
Trace 1 Pass

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

MSG STATUS



5.1.1.1.2.3 Test RB = RB12#6





5.1.1.1.2.4 Test RB = RB25#0

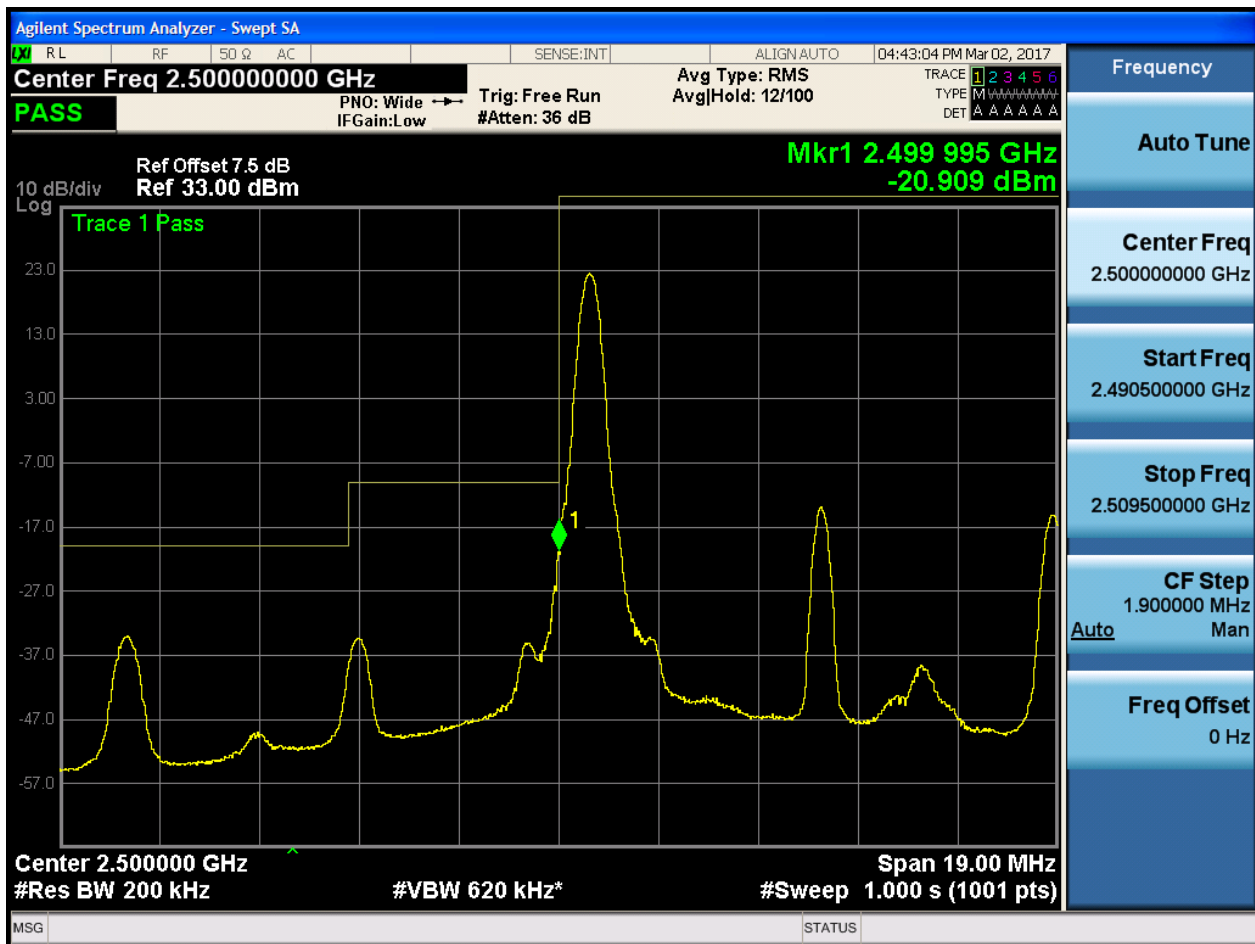




5.1.1.1.2 Test Bandwidth = 10

5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:43:23 PM Mar 02, 2017

Center Freq 2.500000000 GHz Avg Type: RMS
PASS PNO: Wide IFGain:Low Trig: Free Run AvgHold: 12/100
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-45.534 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 200 kHz
#VBW 620 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



Agilent Spectrum Analyzer - Swept SA

Center Freq 2.500000000 GHz

PASS

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-28.895 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 200 kHz
#VBW 620 kHz*

Span 19.00 MHz
#Sweep 1.000 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
Auto Man

Freq Offset
0 Hz



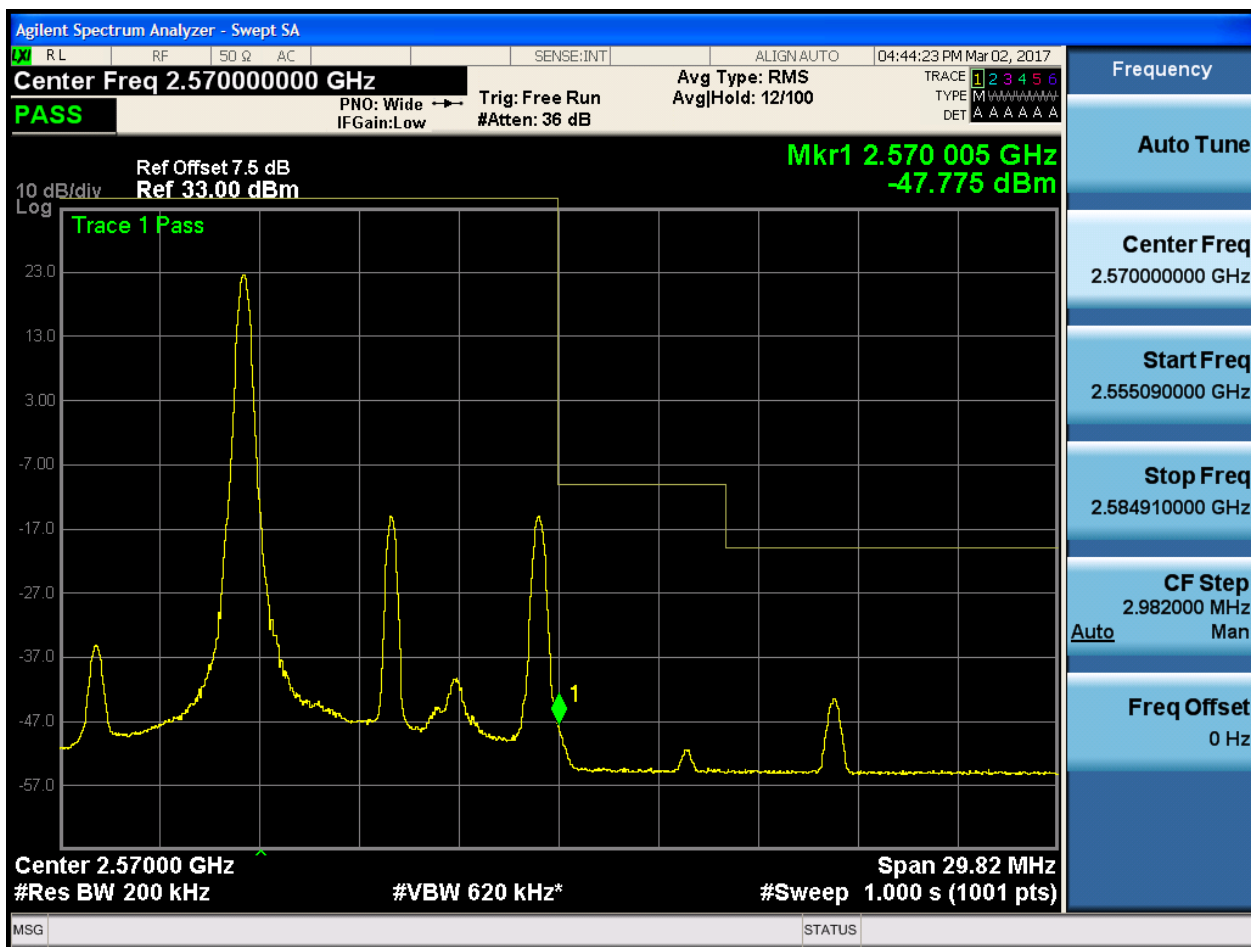
5.1.1.1.2.1.4 Test RB = RB50#0





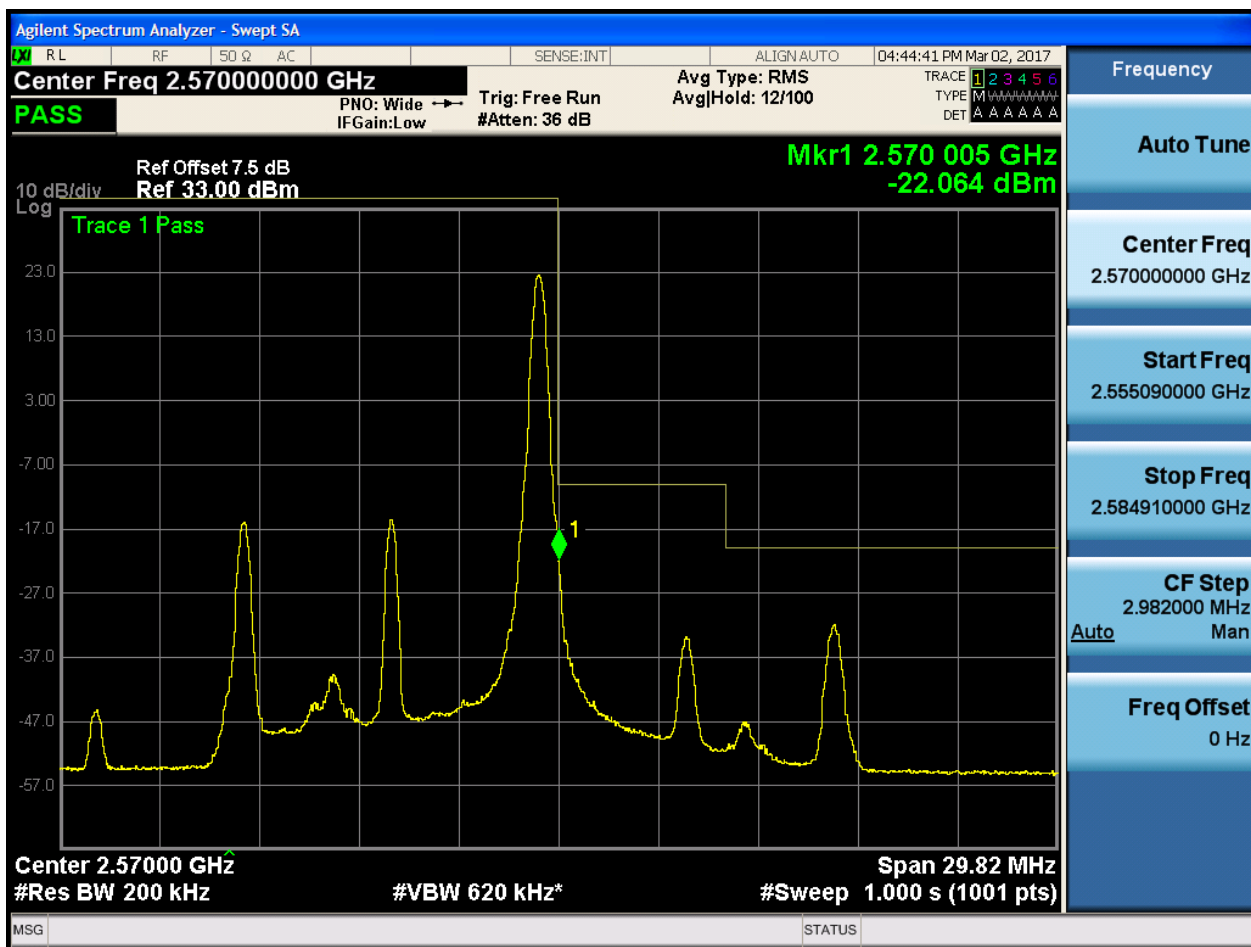
5.1.1.1.2.2 Test Channel = HCH

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

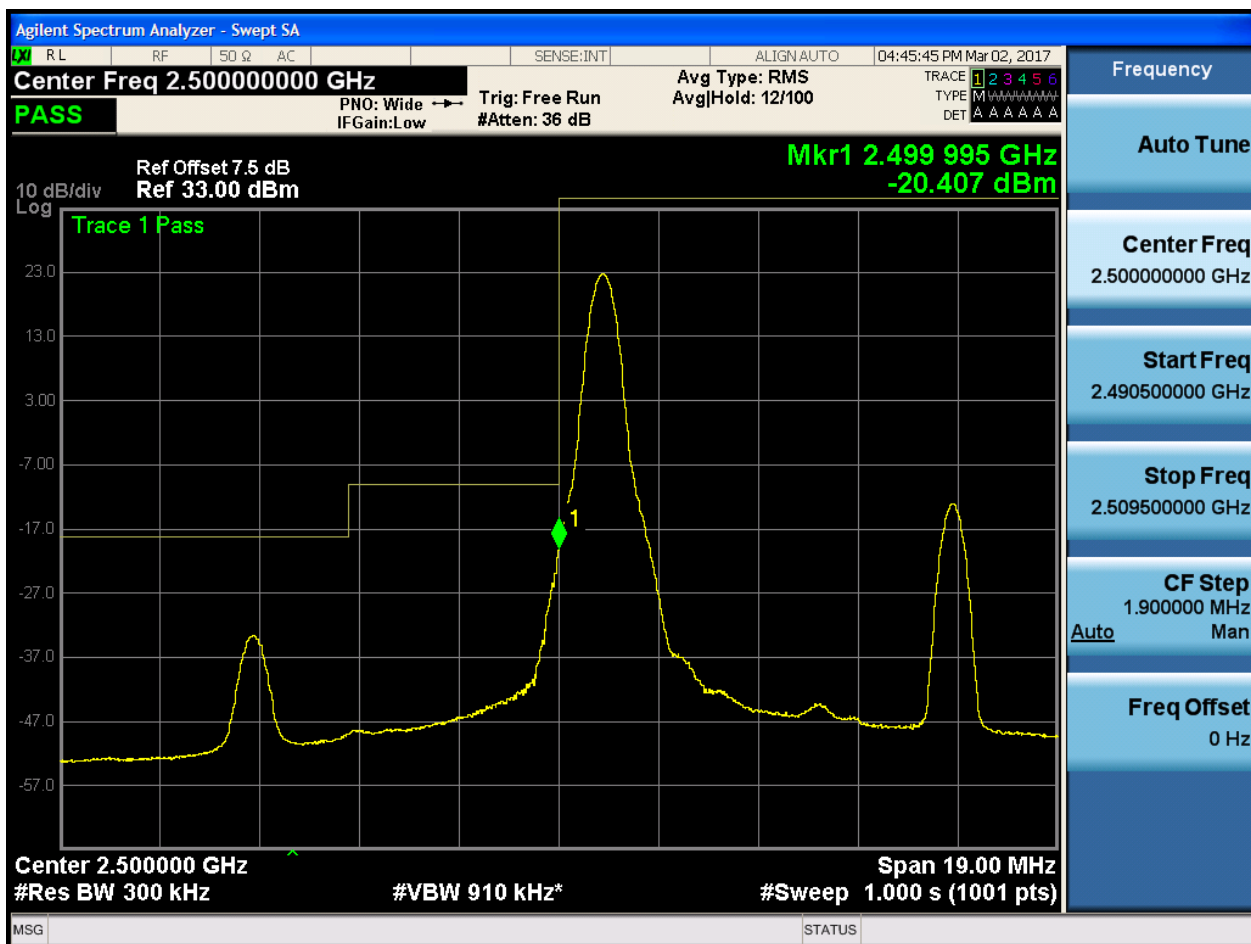




5.1.1.1.3 Test Bandwidth = 15

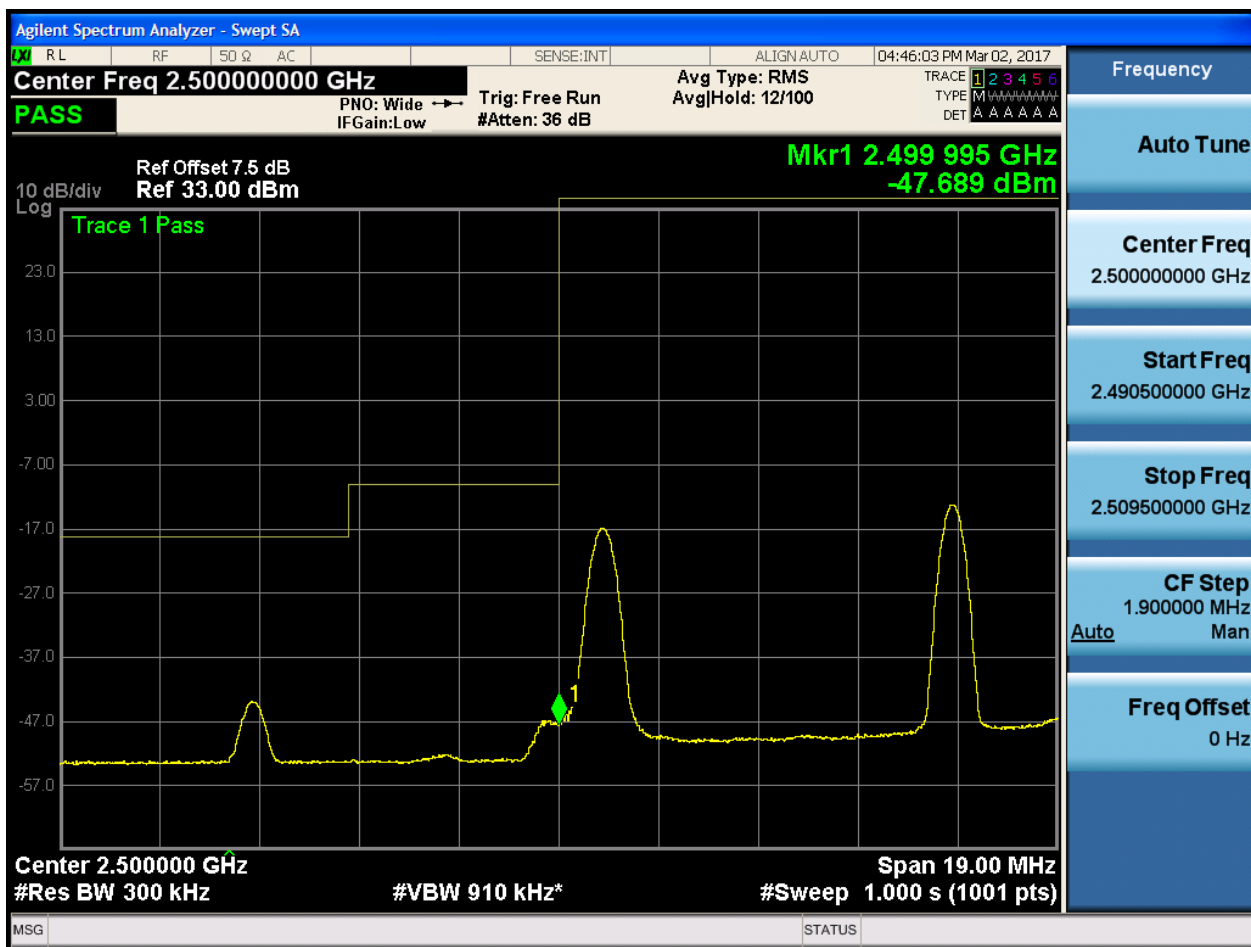
5.1.1.1.3.1 Test Channel = LCH

5.1.1.1.3.1.1 Test RB = RB1#0





5.1.1.1.3.1.2 Test RB = RB1#74





5.1.1.1.3.1.3 Test RB = RB36#18





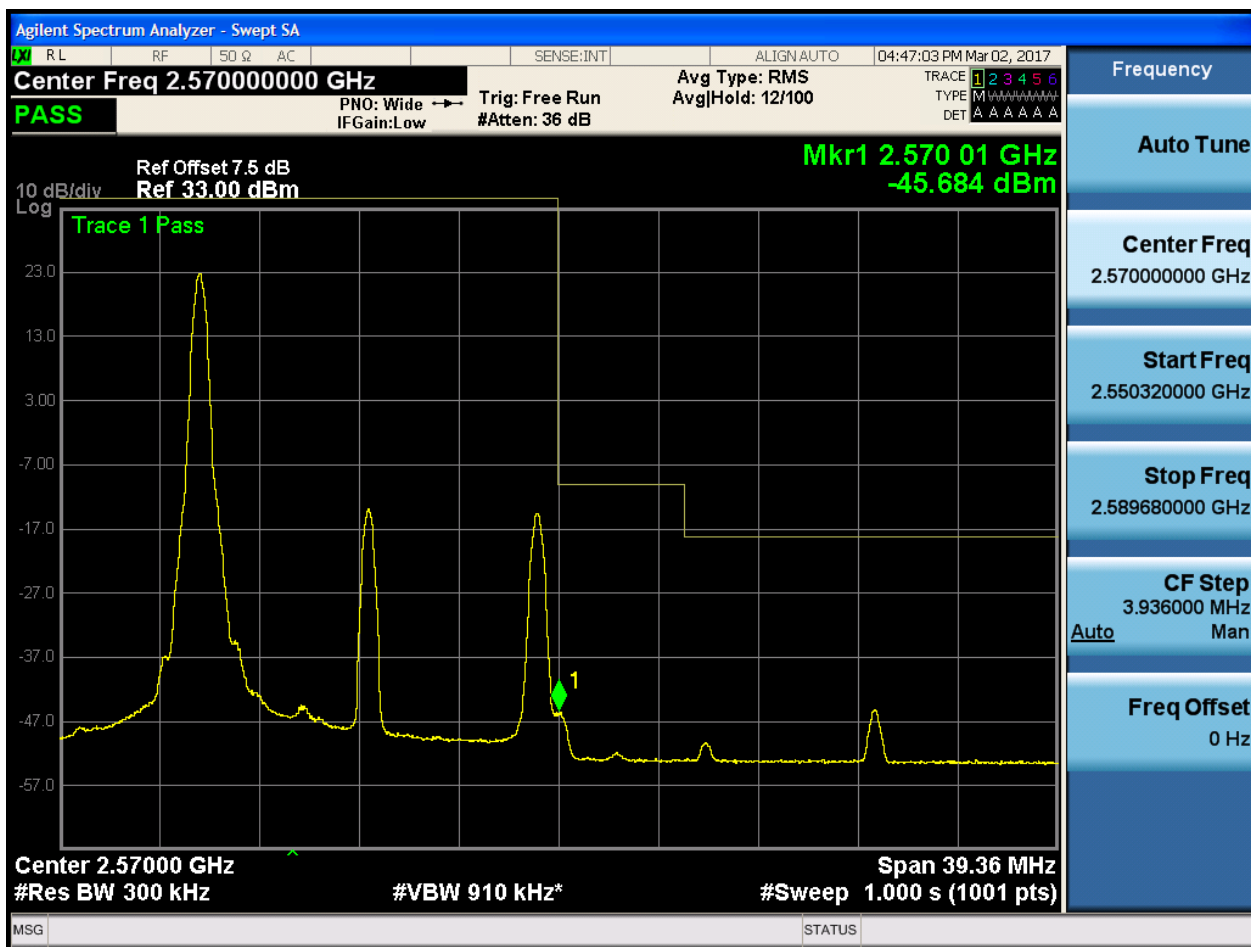
5.1.1.1.3.1.4 Test RB = RB75#0





5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0



[illegible]



5.1.1.1.3.2.3 Test RB = RB36#18





5.1.1.1.3.2.4 Test RB = RB75#0

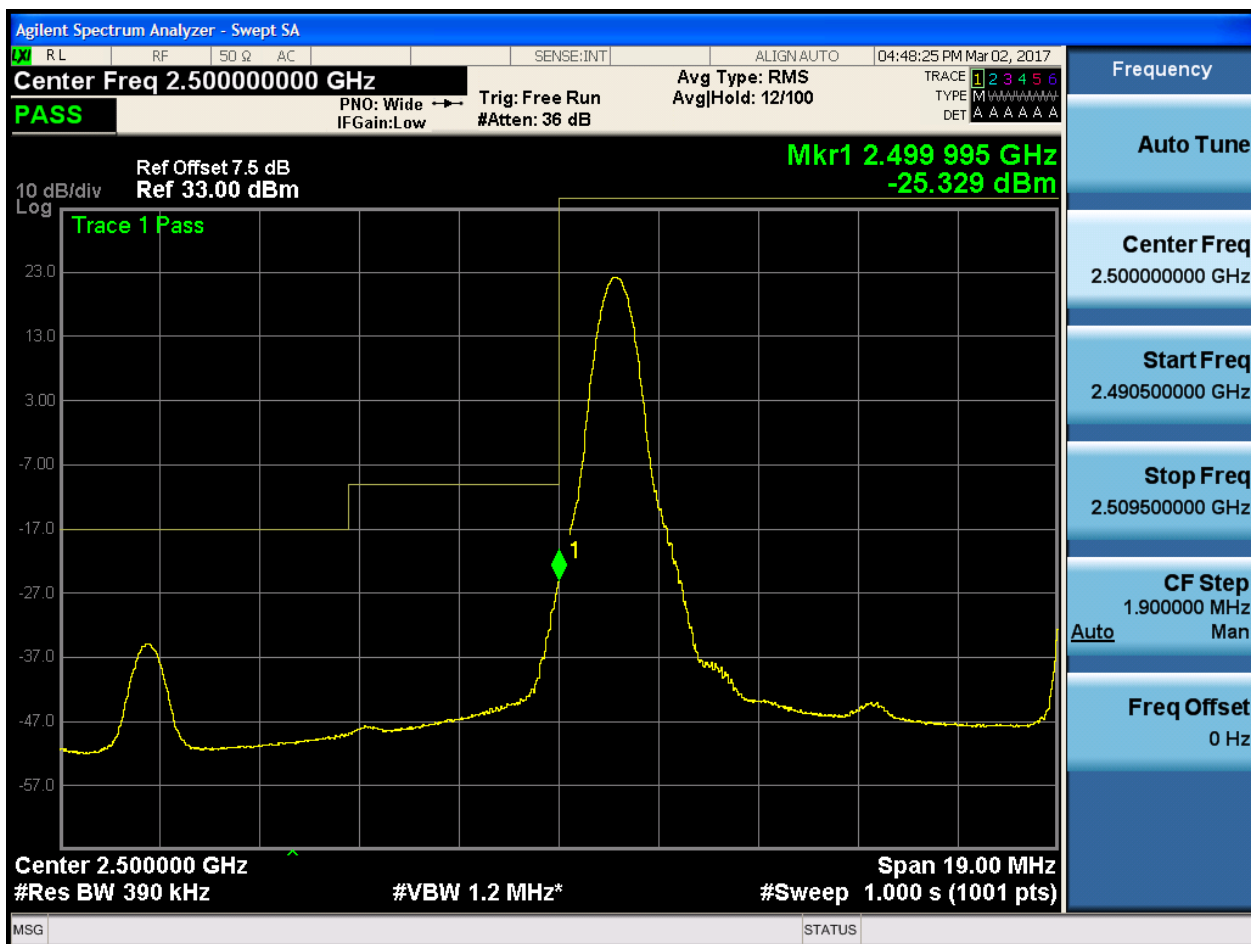




5.1.1.1.4 Test Bandwidth = 20

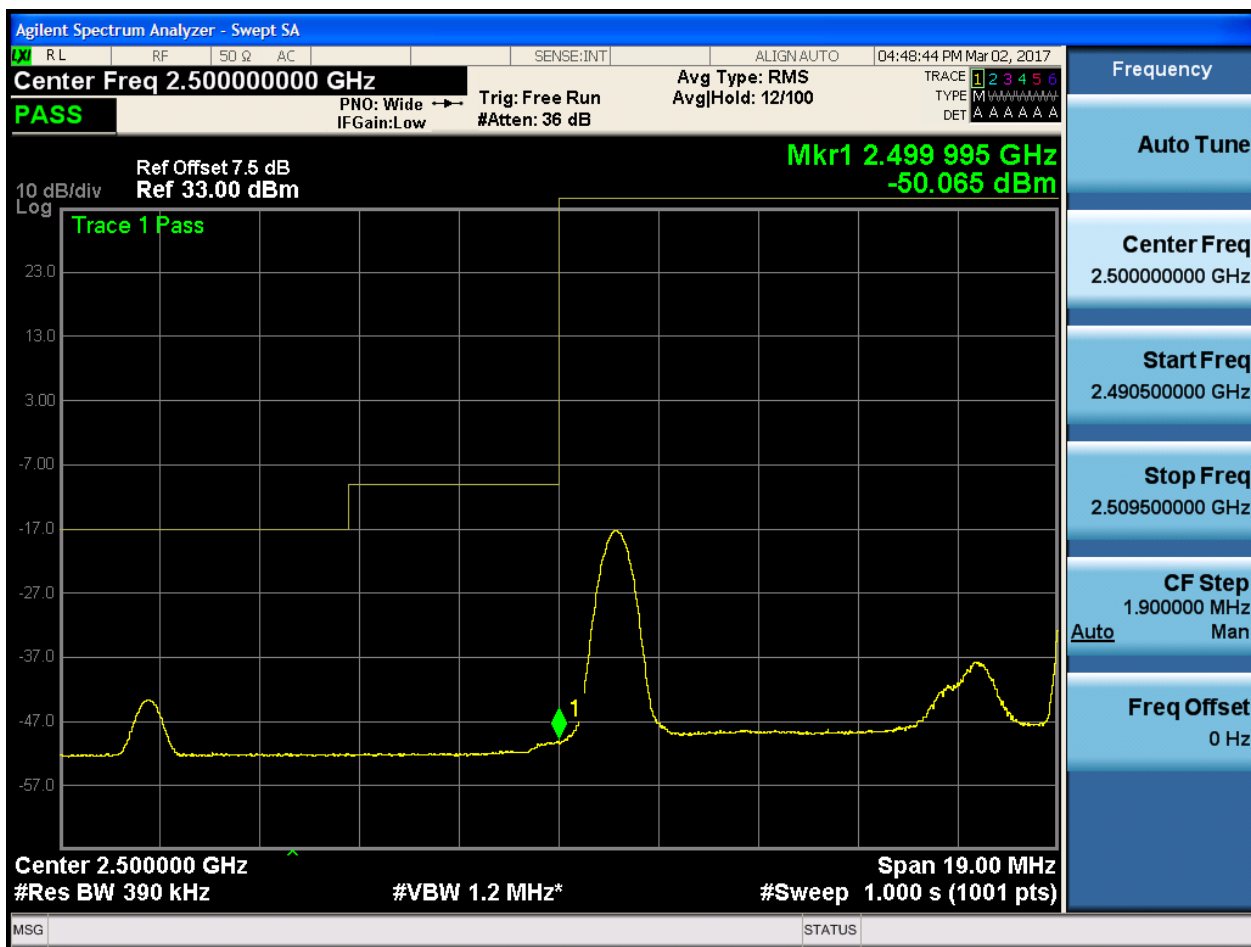
5.1.1.1.4.1 Test Channel = LCH

5.1.1.1.4.1.1 Test RB = RB1#0



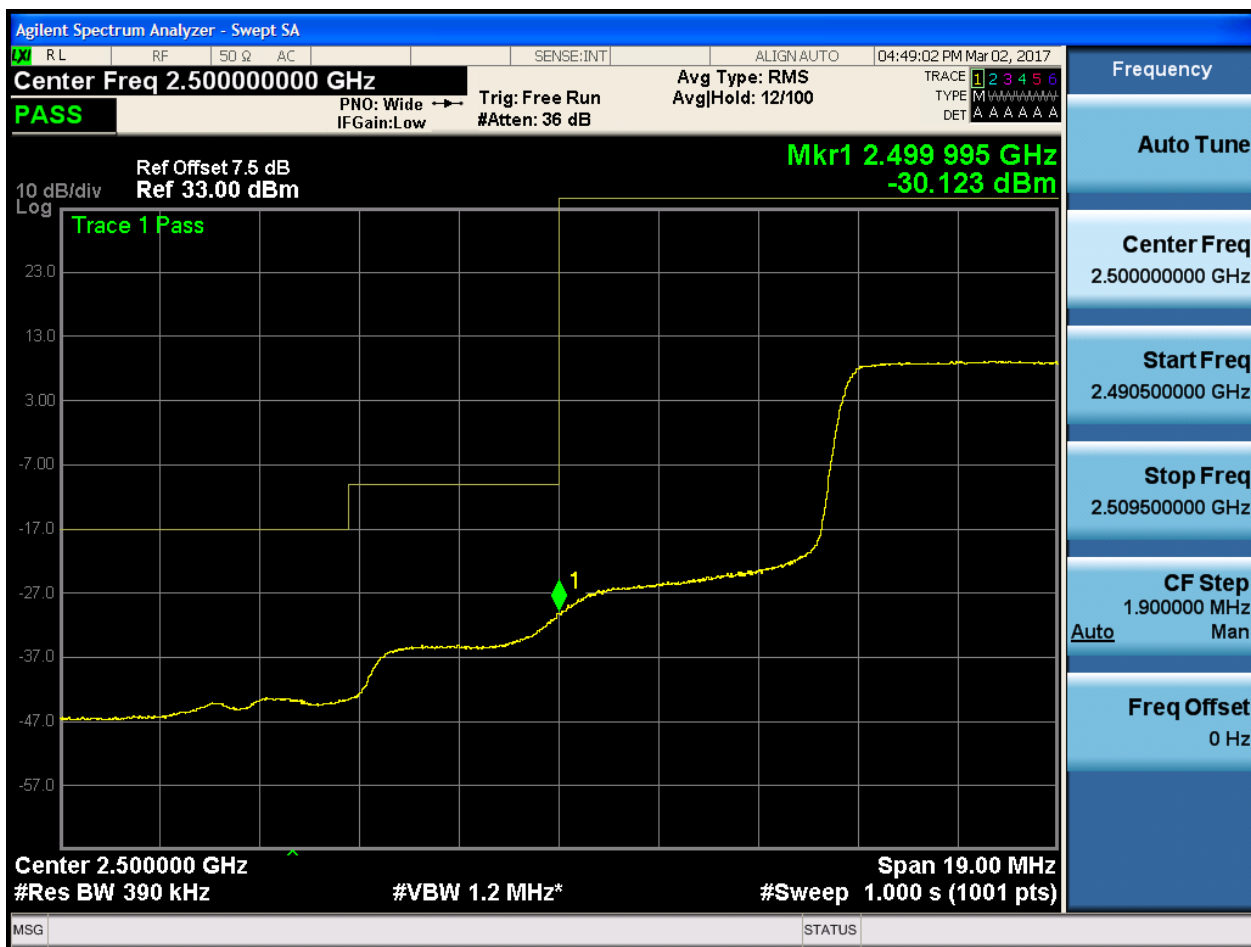


5.1.1.1.4.1.2 Test RB = RB1#99





5.1.1.1.4.1.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:49:20 PM Mar 02, 2017

Center Freq 2.500000000 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 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-27.721 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 390 kHz
#VBW 1.2 MHz*
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

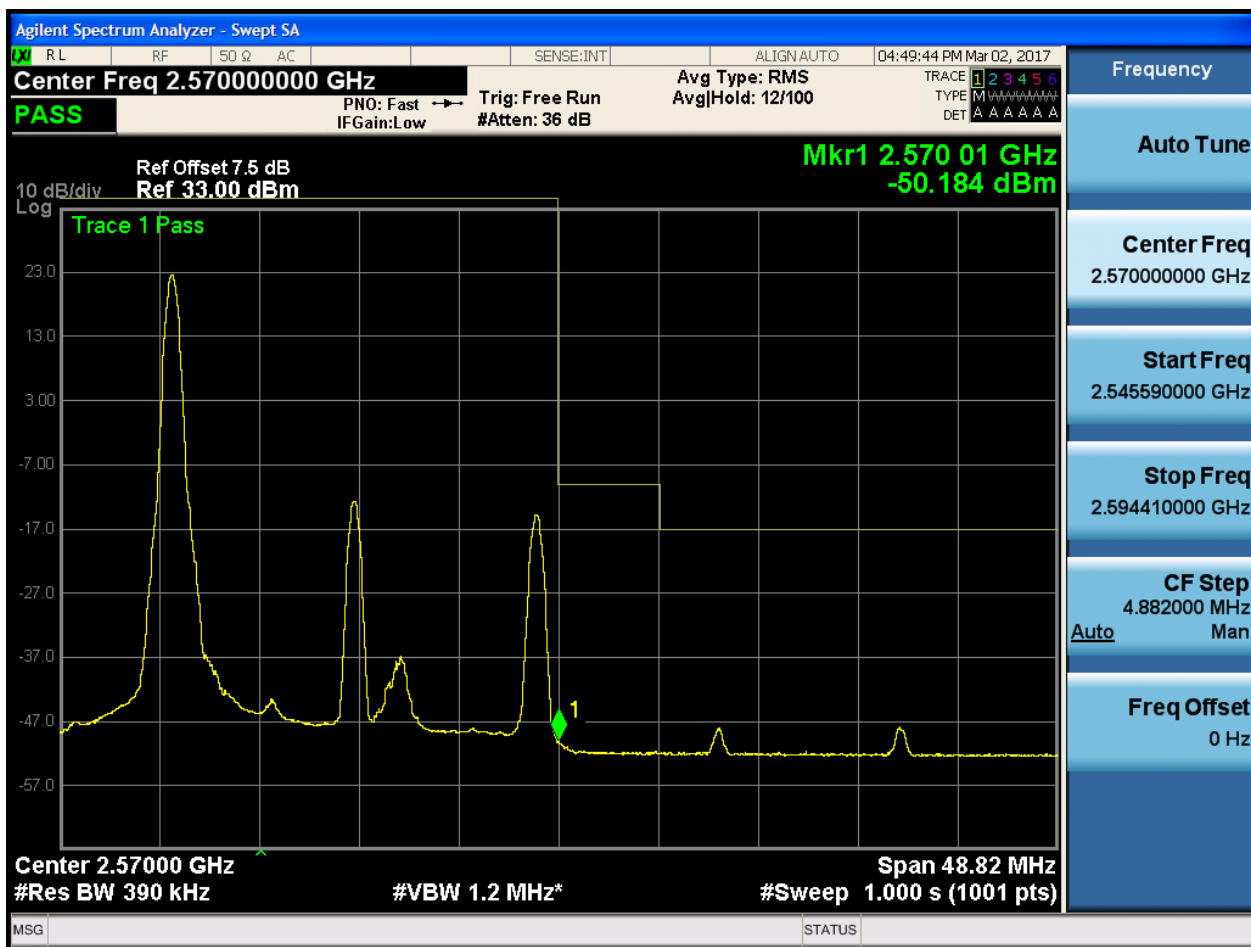
CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



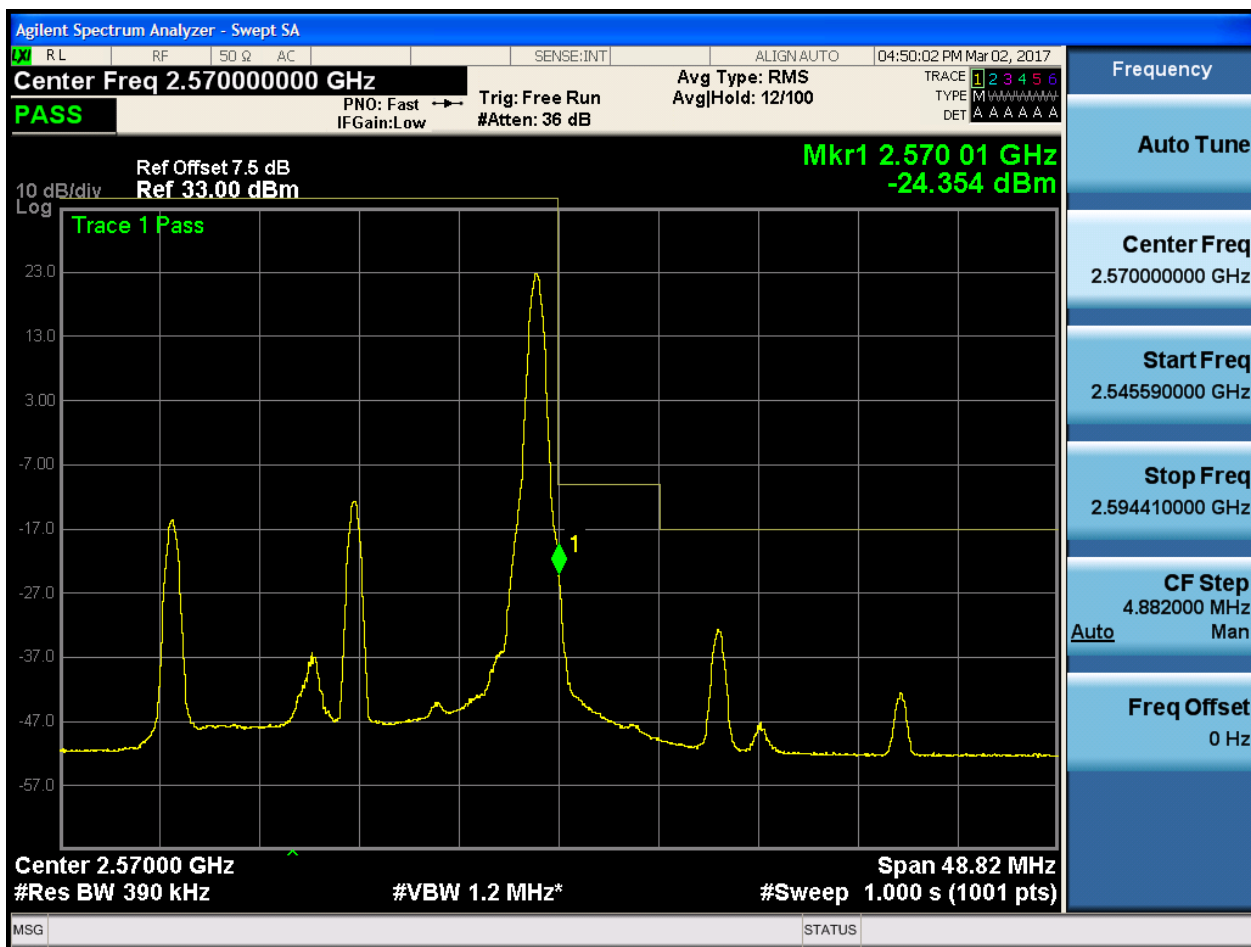
5.1.1.1.4.2 Test Channel = HCH

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



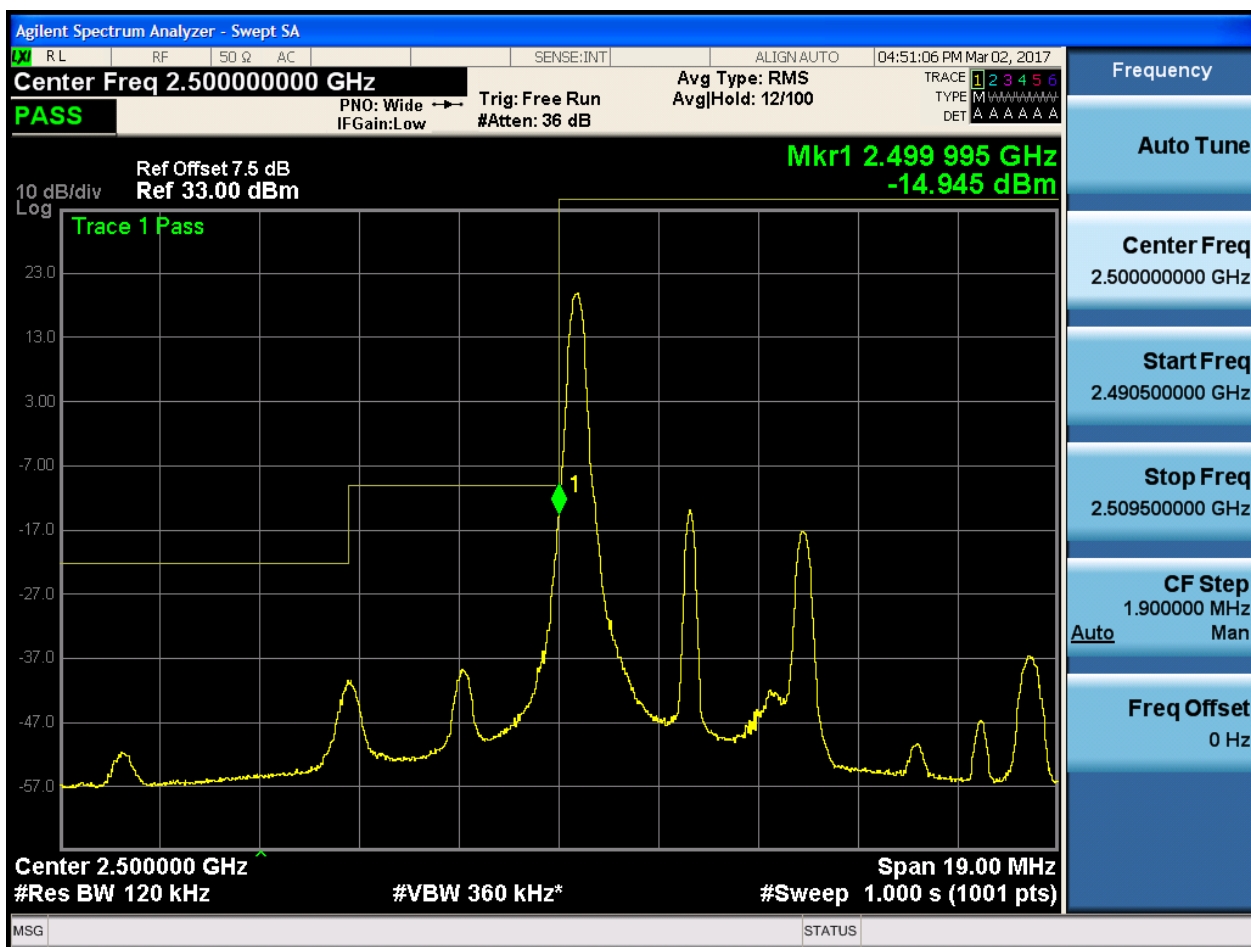


5.1.1.2 Test Mode = LTE/TM2

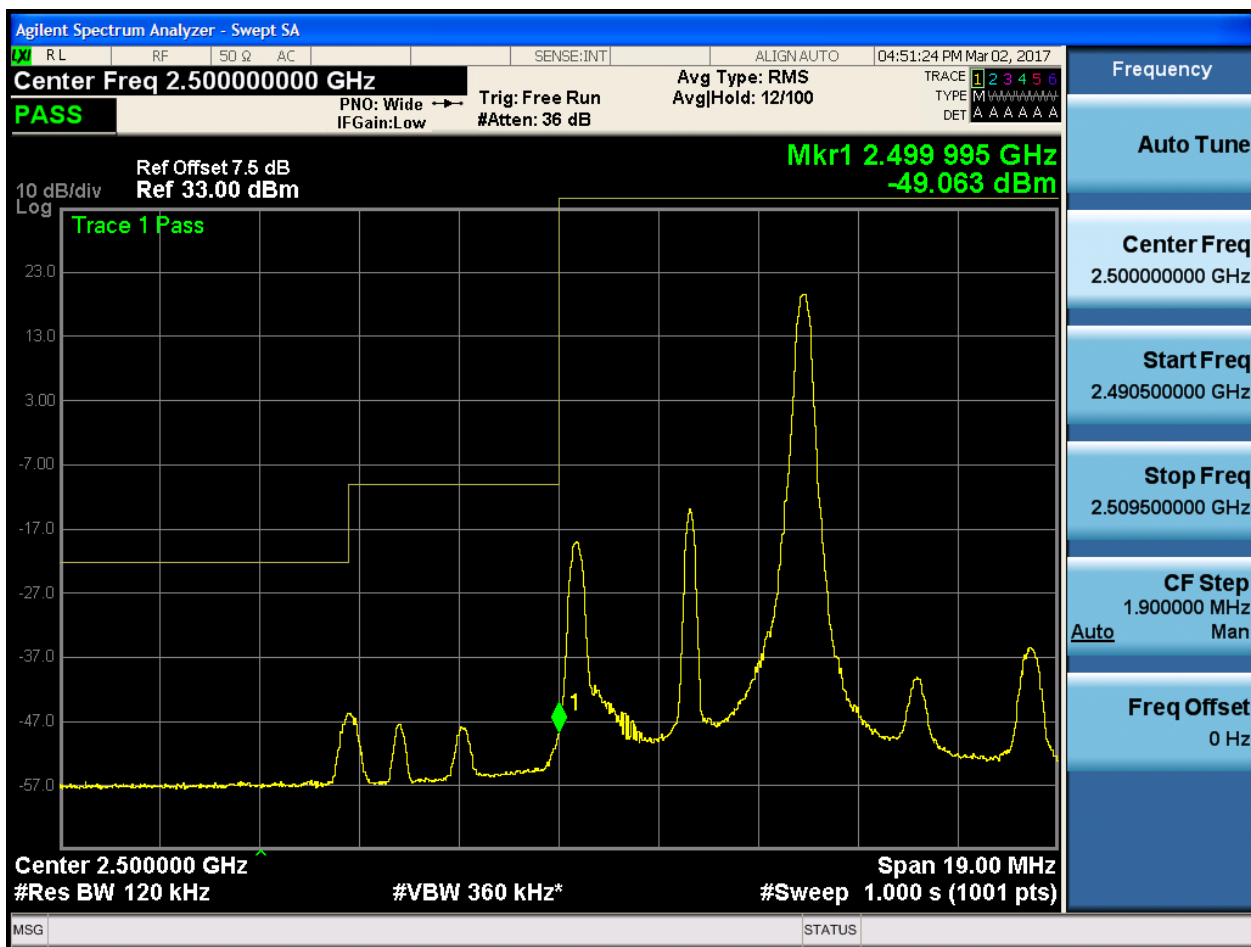
5.1.1.2.1 Test Bandwidth = 5

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





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.500000000 GHz

PASS

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-29.744 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 120 kHz
#VBW 360 kHz*

Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.500000000 GHz

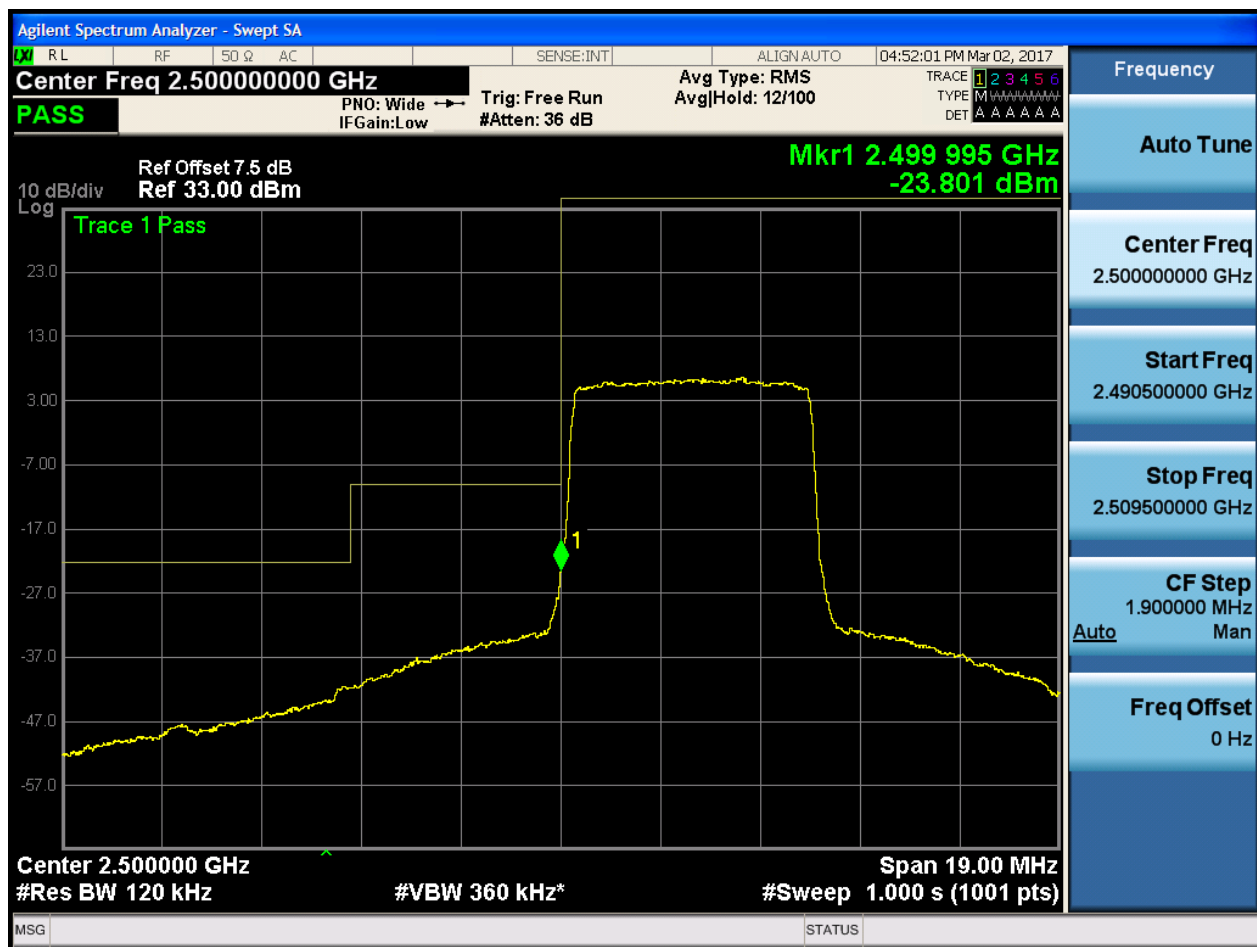
Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

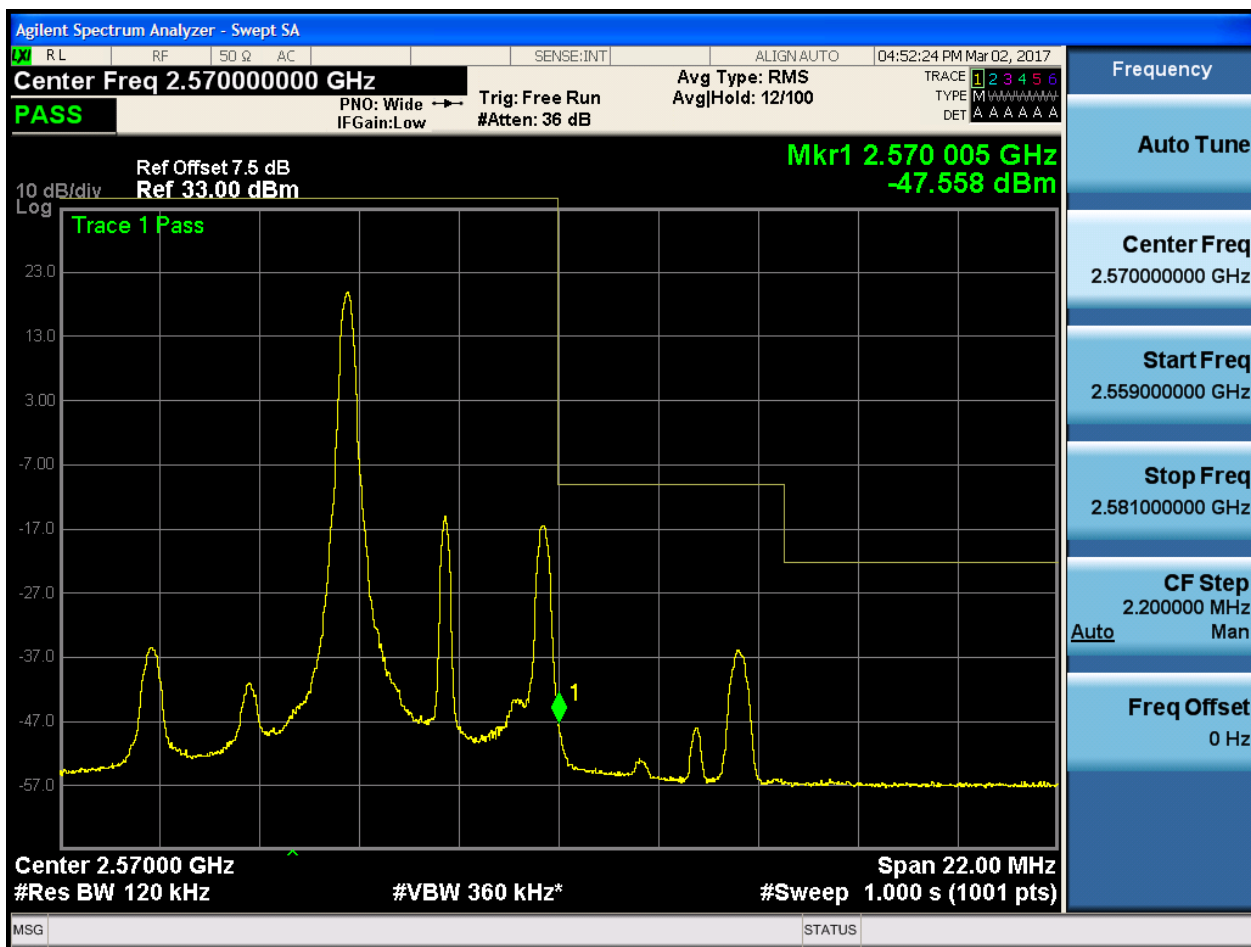
5.1.1.2.1.1.4 Test RB = RB25#0



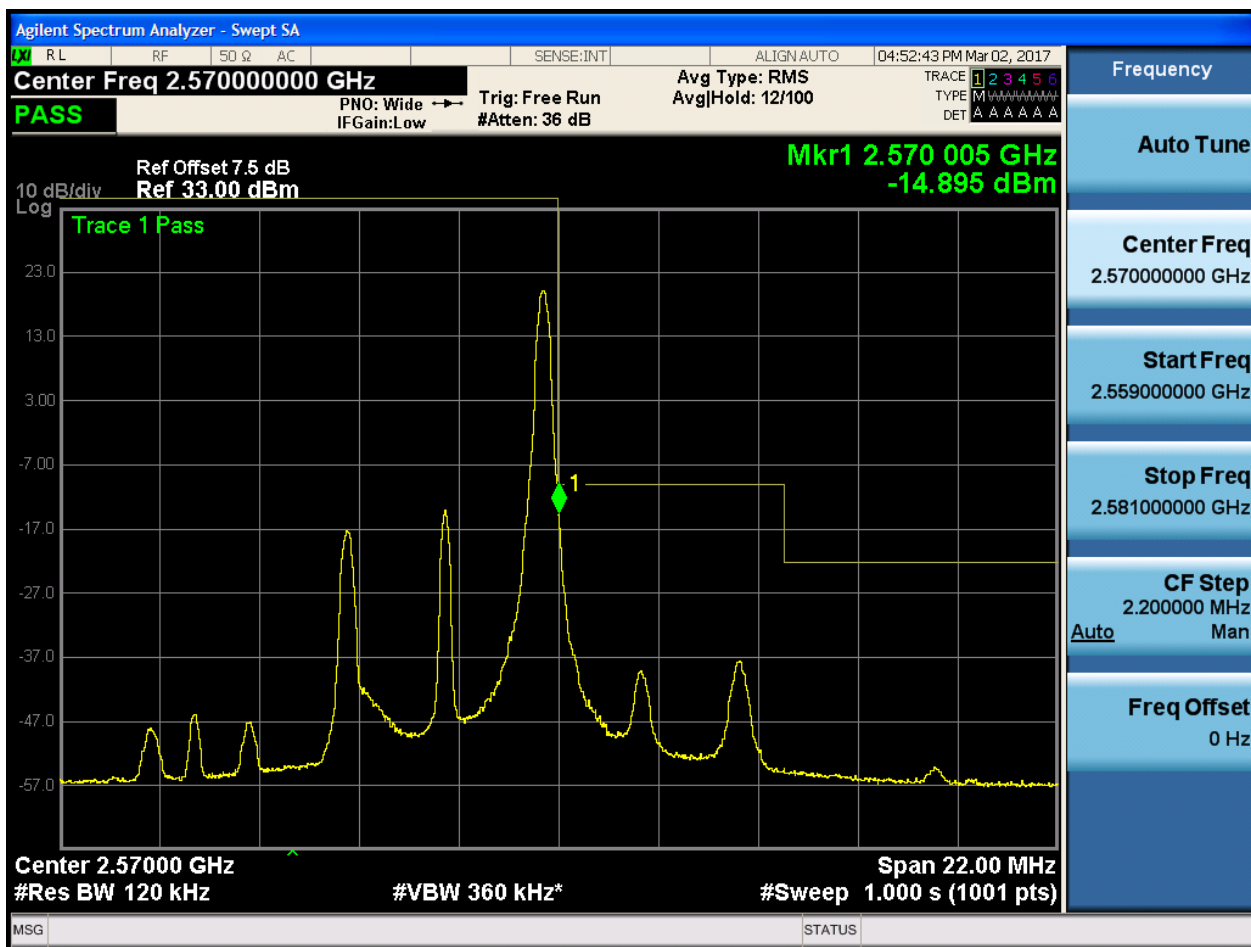


5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0



5.1.1.2.1.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:53:01 PM Mar 02, 2017

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 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 005 GHz
-30.404 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

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.559000000 GHz

Stop Freq
2.581000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz



5.1.1.2.1.2.4 Test RB = RB25#0

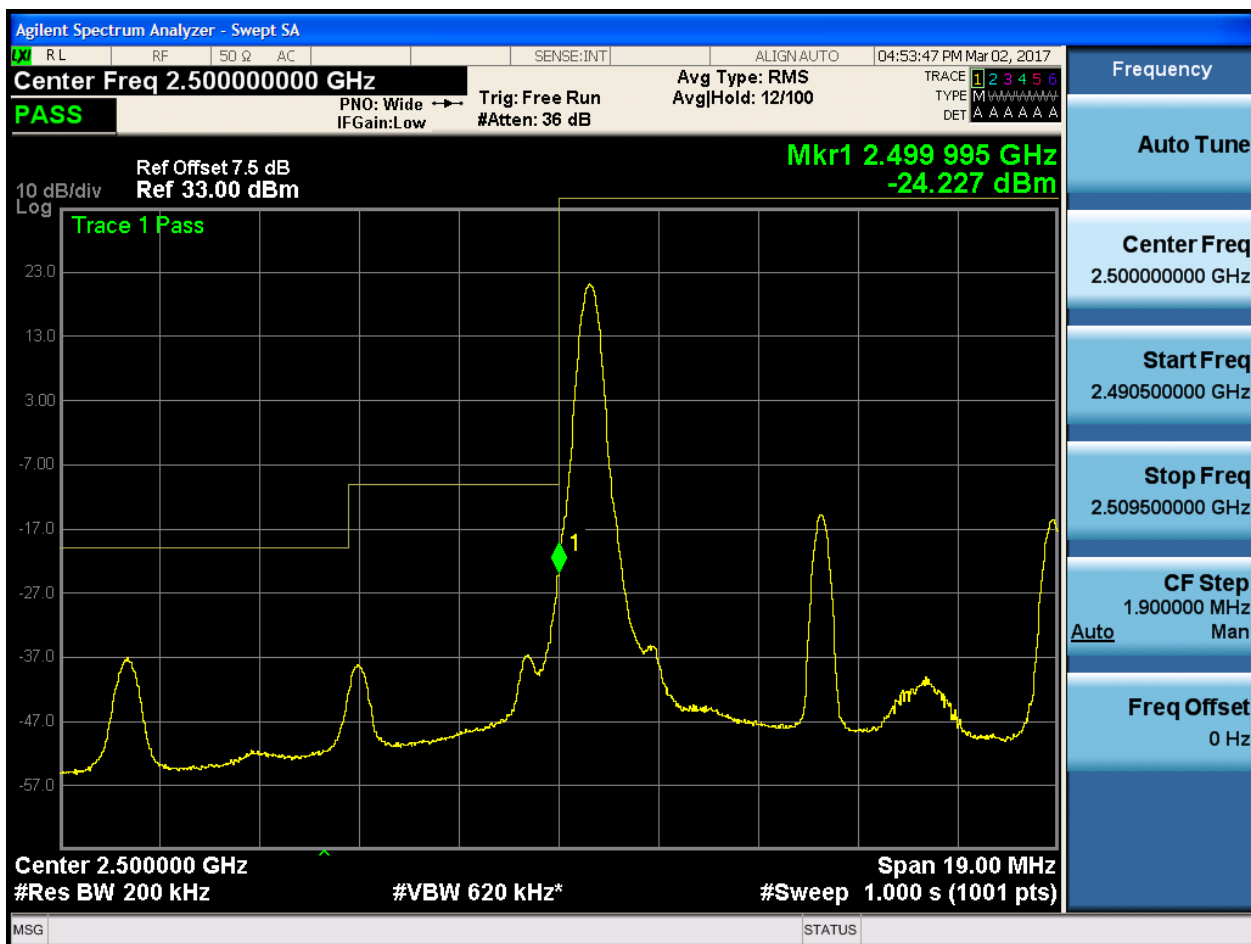




5.1.1.2.2 Test Bandwidth = 10

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

Center Freq 2.50000000 GHz

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

Ref Offset 7.5 dB Ref 33.00 dBm

Mkr1 2.499 995 GHz -45.212 dBm

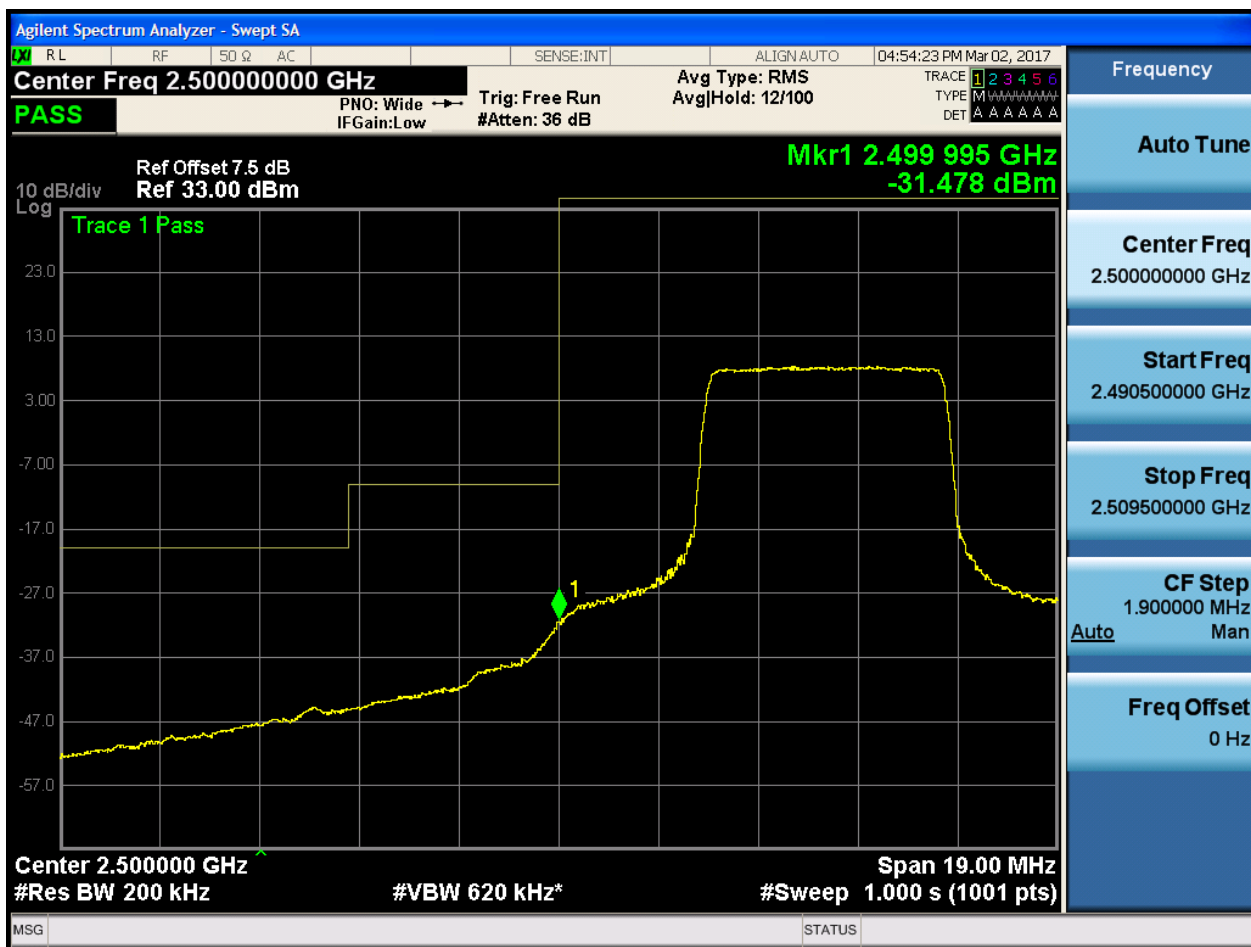
Trace 1 Pass

Center 2.500000 GHz #Res BW 200 kHz #VBW 620 kHz* Span 19.00 MHz #Sweep 1.000 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 <u>Auto</u> Man
Freq Offset 0 Hz

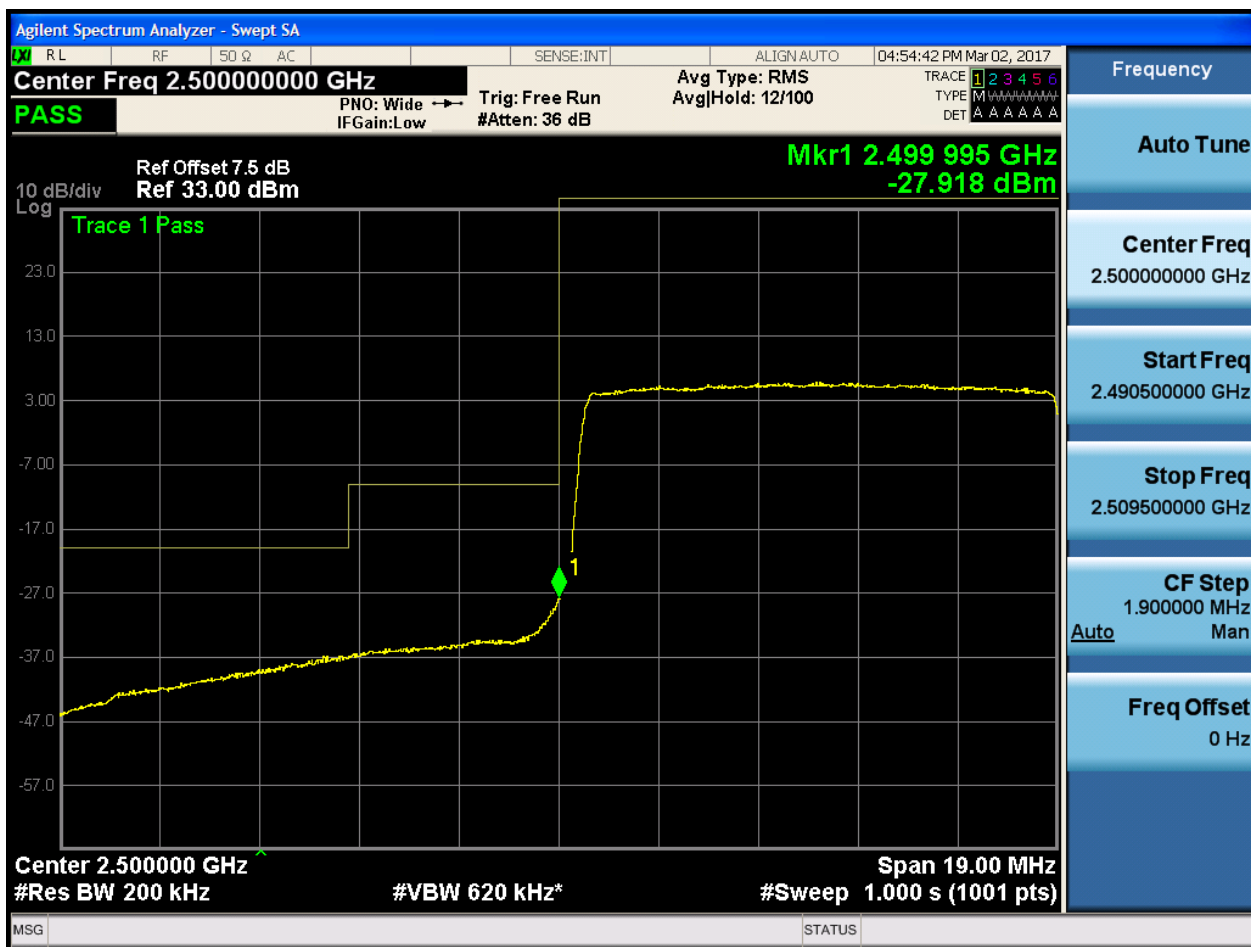


5.1.1.2.2.1.3 Test RB = RB25#13





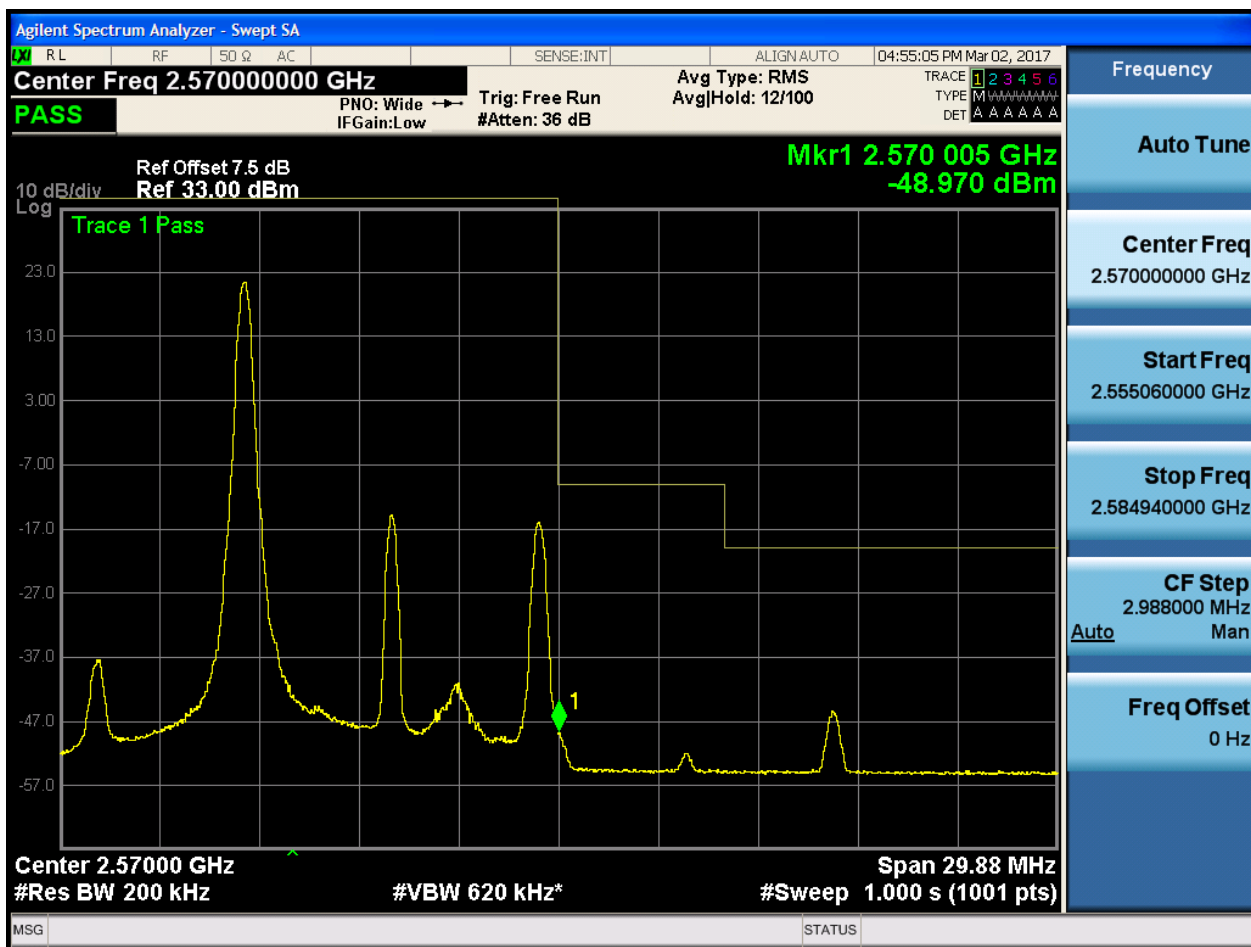
5.1.1.2.2.1.4 Test RB = RB50#0





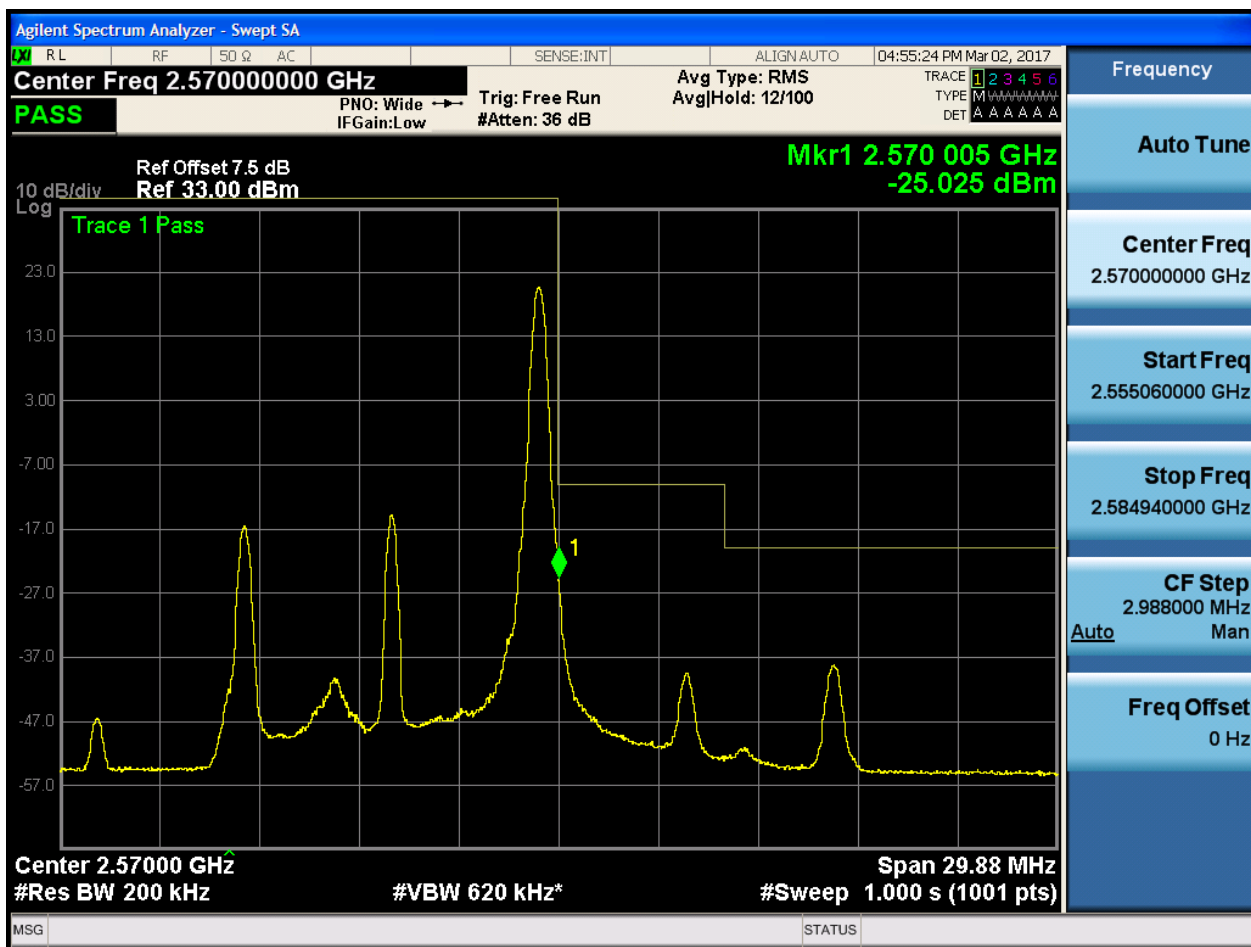
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0



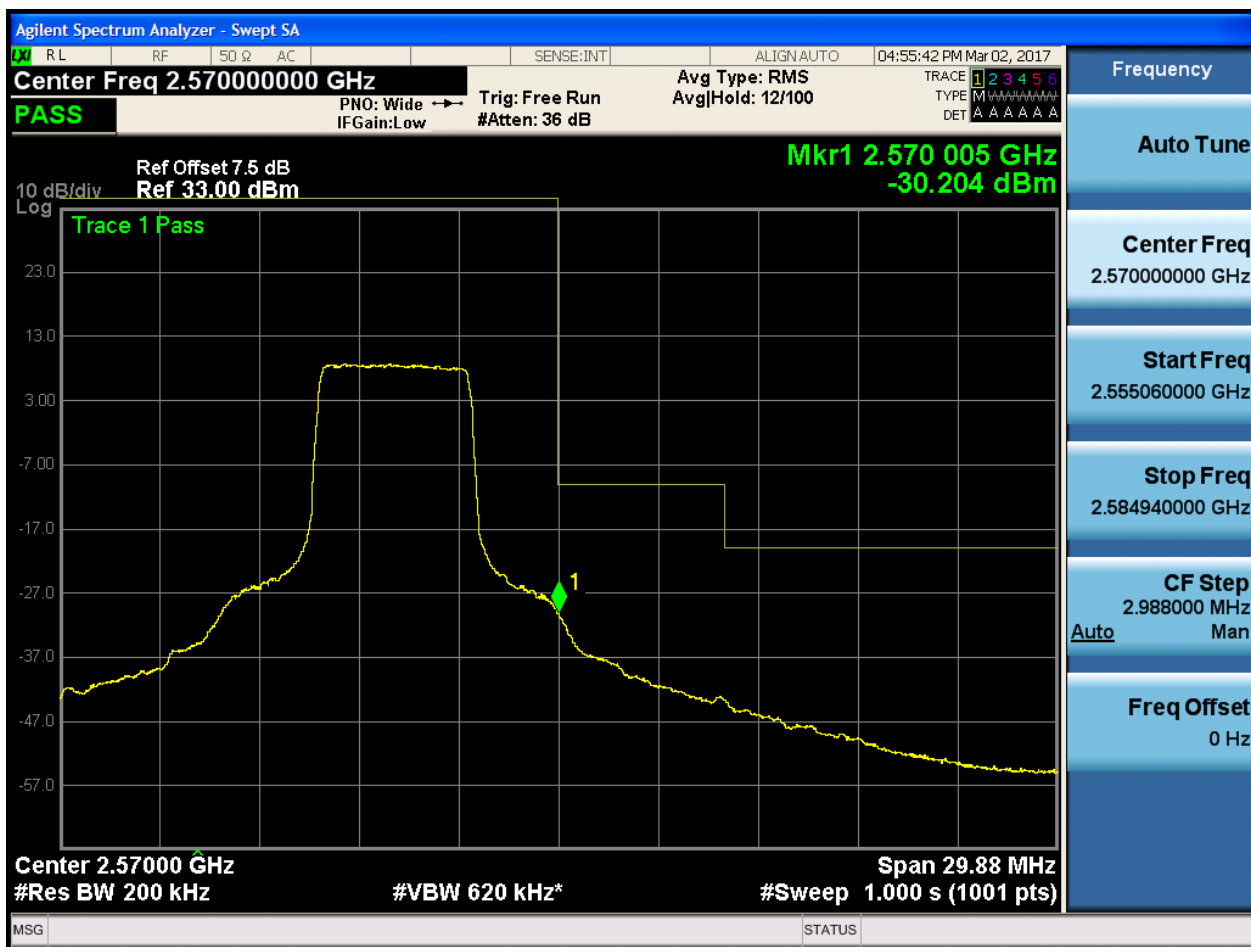


5.1.1.2.2.2 Test RB = RB1#49





5.1.1.2.2.3 Test RB = RB25#13





5.1.1.2.2.4 Test RB = RB50#0

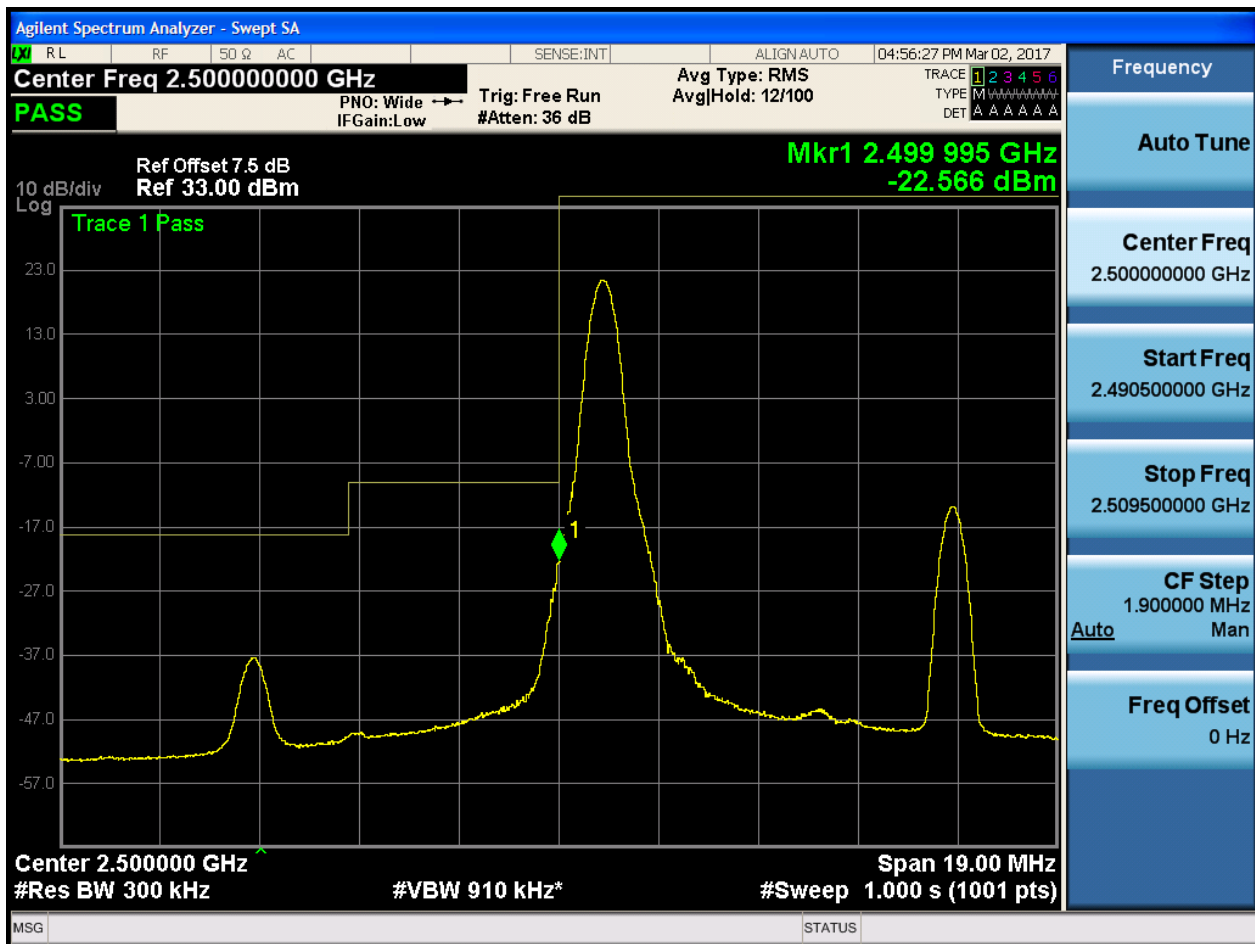




5.1.1.2.3 Test Bandwidth = 15

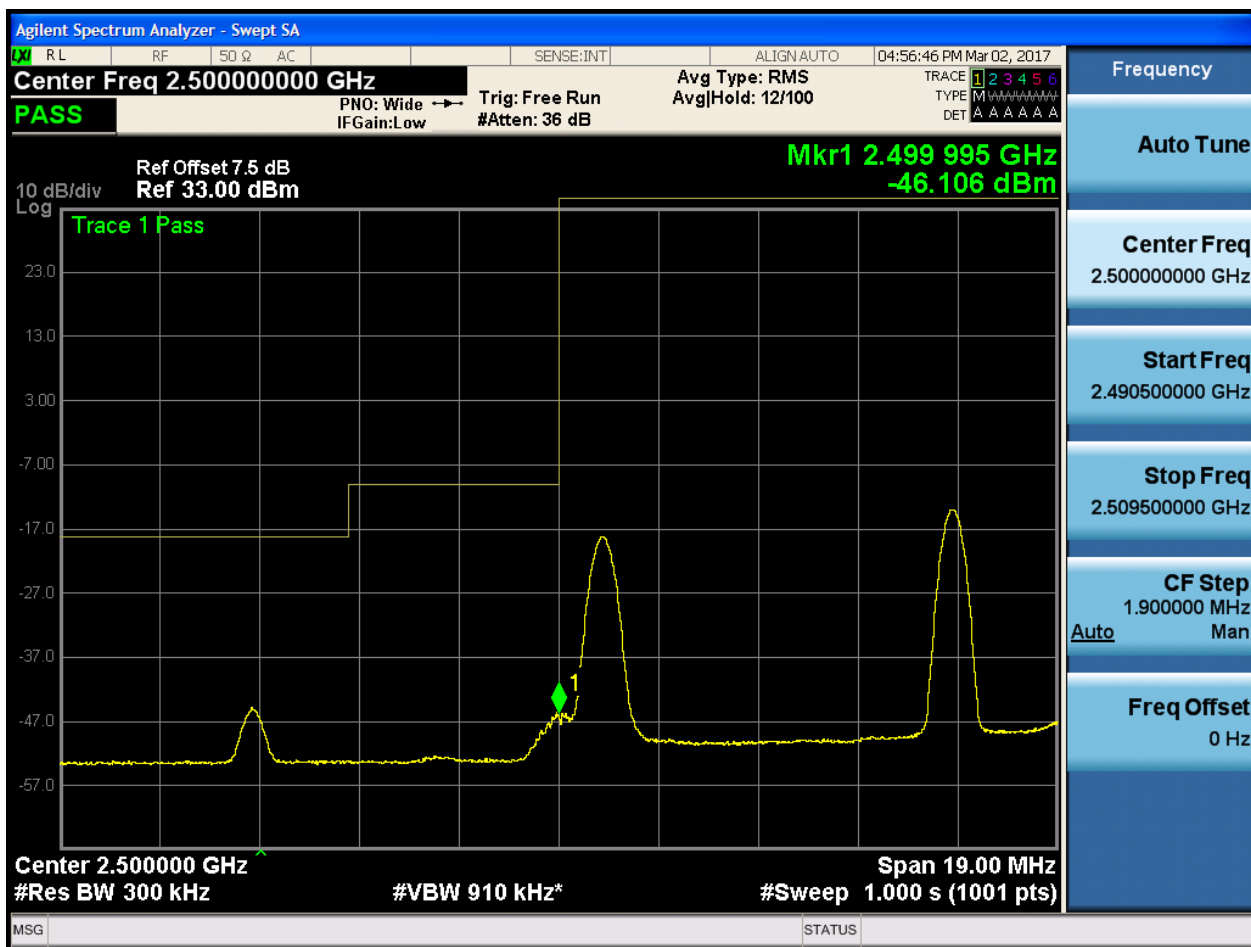
5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





5.1.1.2.3.1.2 Test RB = RB1#74





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:57:04 PM Mar 02, 2017

Center Freq 2.500000000 GHz Avg Type: RMS
#Res BW 300 kHz IFGain:Low Trig: Free Run AvgHold: 12/100
PASS PNO: Wide → #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
2.500000000 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 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-31.780 dBm

Trace 1 Pass

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

MSG STATUS



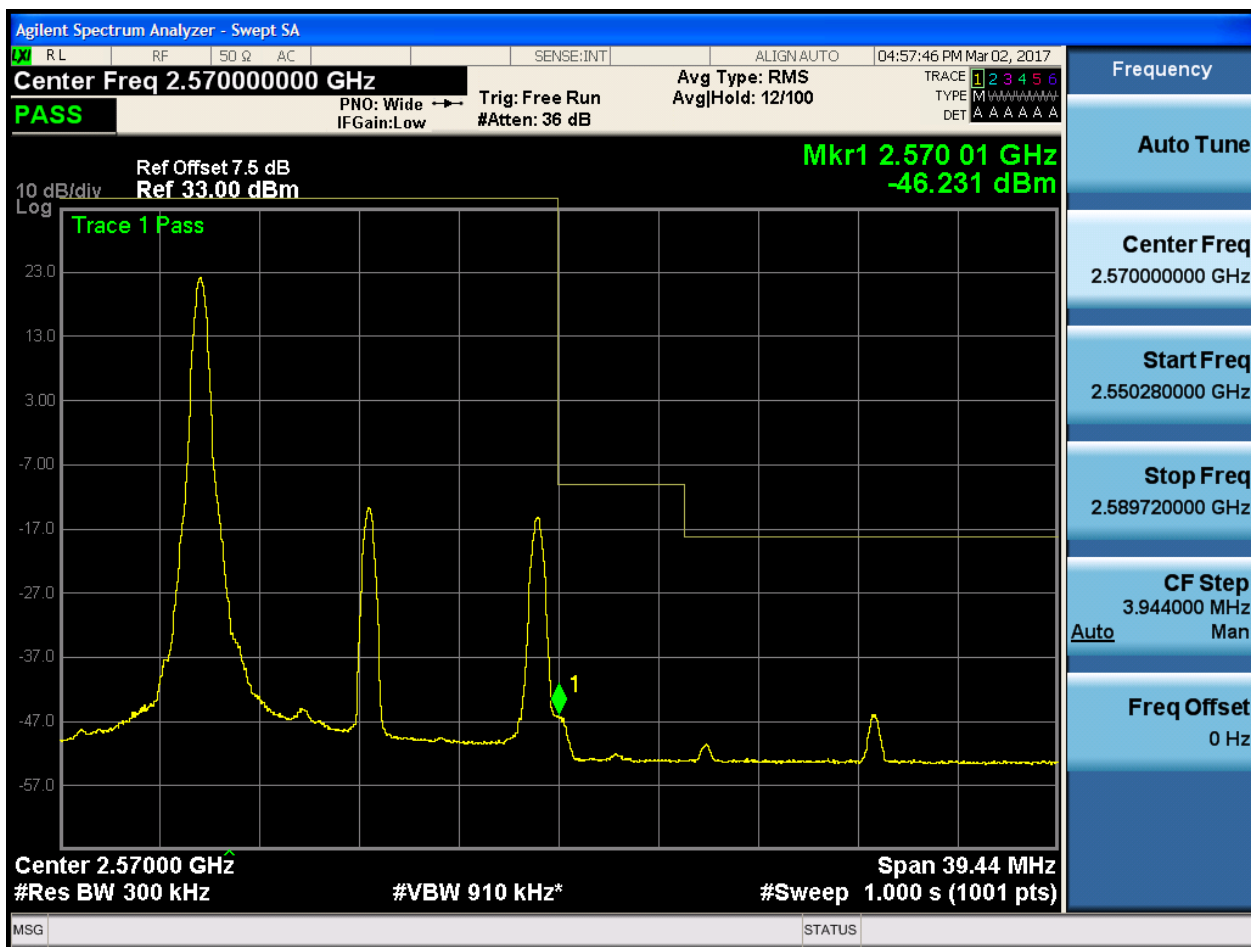
5.1.1.2.3.1.4 Test RB = RB75#0



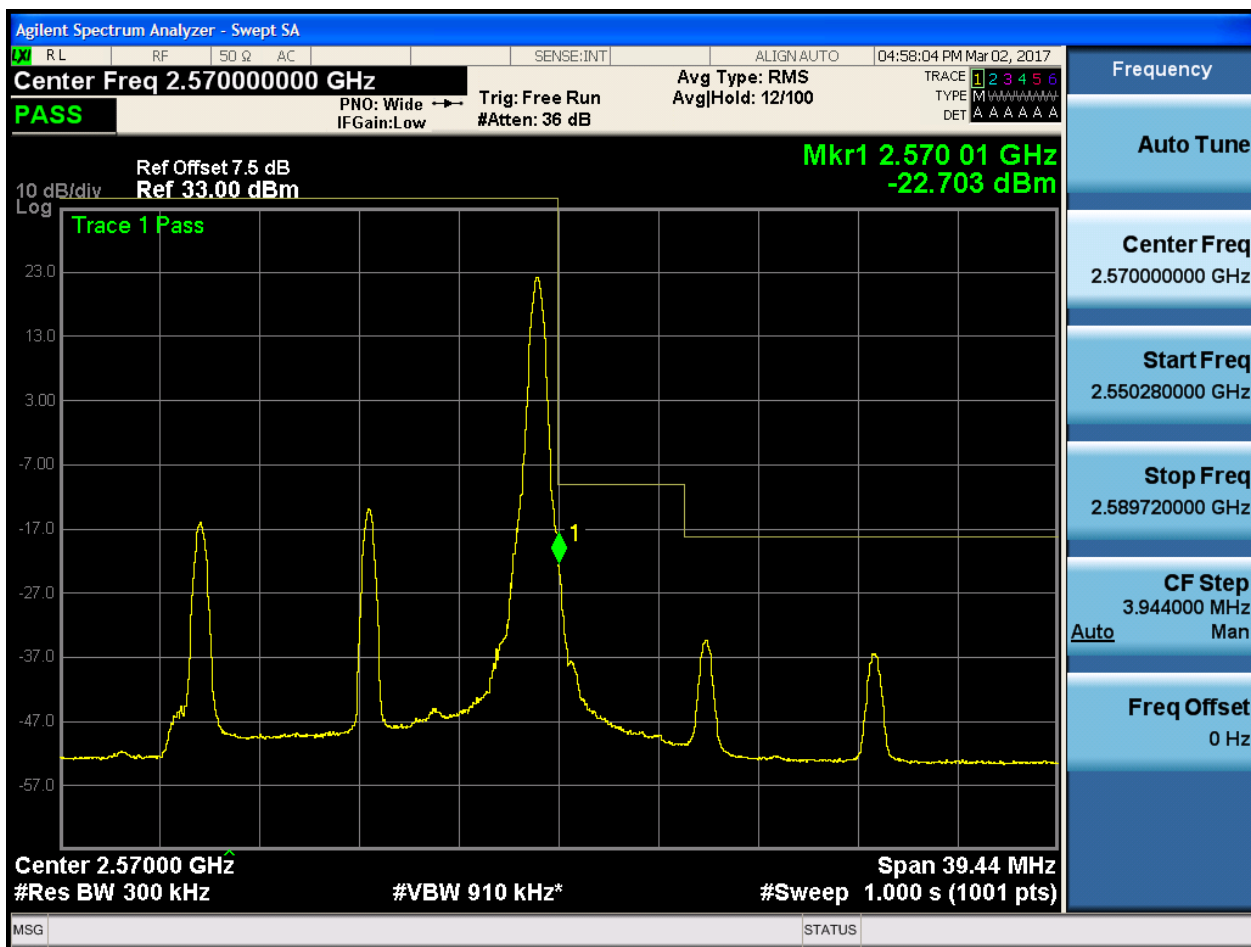


5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0



5.1.1.2.3.2.2 Test RB = RB1#74





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:58:22 PM Mar 02, 2017

Center Freq 2.570000000 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 M M M M M M M
DET A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 01 GHz
-32.008 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 300 kHz

#VBW 910 kHz*

Span 39.44 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:58:41 PM Mar 02, 2017

Center Freq 2.570000000 GHz Avg Type: RMS
PASS PNO: Wide IFGain:Low Trig: Free Run AvgHold: 11/100
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 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 01 GHz
-29.462 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 300 kHz
#VBW 910 kHz*
Span 39.44 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.550280000 GHz

Stop Freq
2.589720000 GHz

CF Step
3.944000 MHz
Auto Man

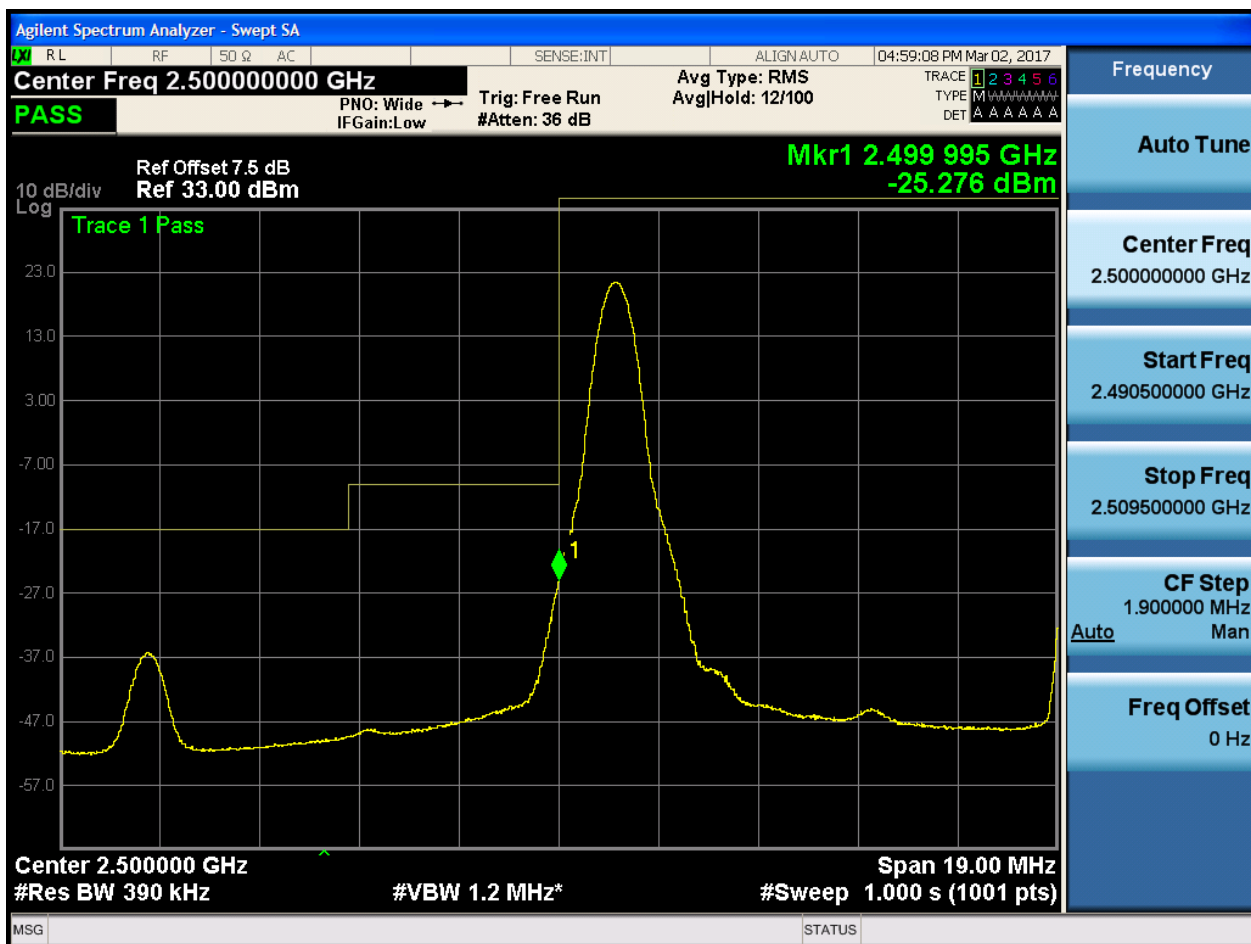
Freq Offset
0 Hz



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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:59:26 PM Mar 02, 2017

Center Freq 2.500000000 GHz Avg Type: RMS
PASS PNO: Wide IFGain:Low Trig: Free Run AvgHold: 12/100
TRACE 1 2 3 4 5 6
TYPE M A A A A A A
DET A A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-50.017 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 390 kHz #VBW 1.2 MHz*
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

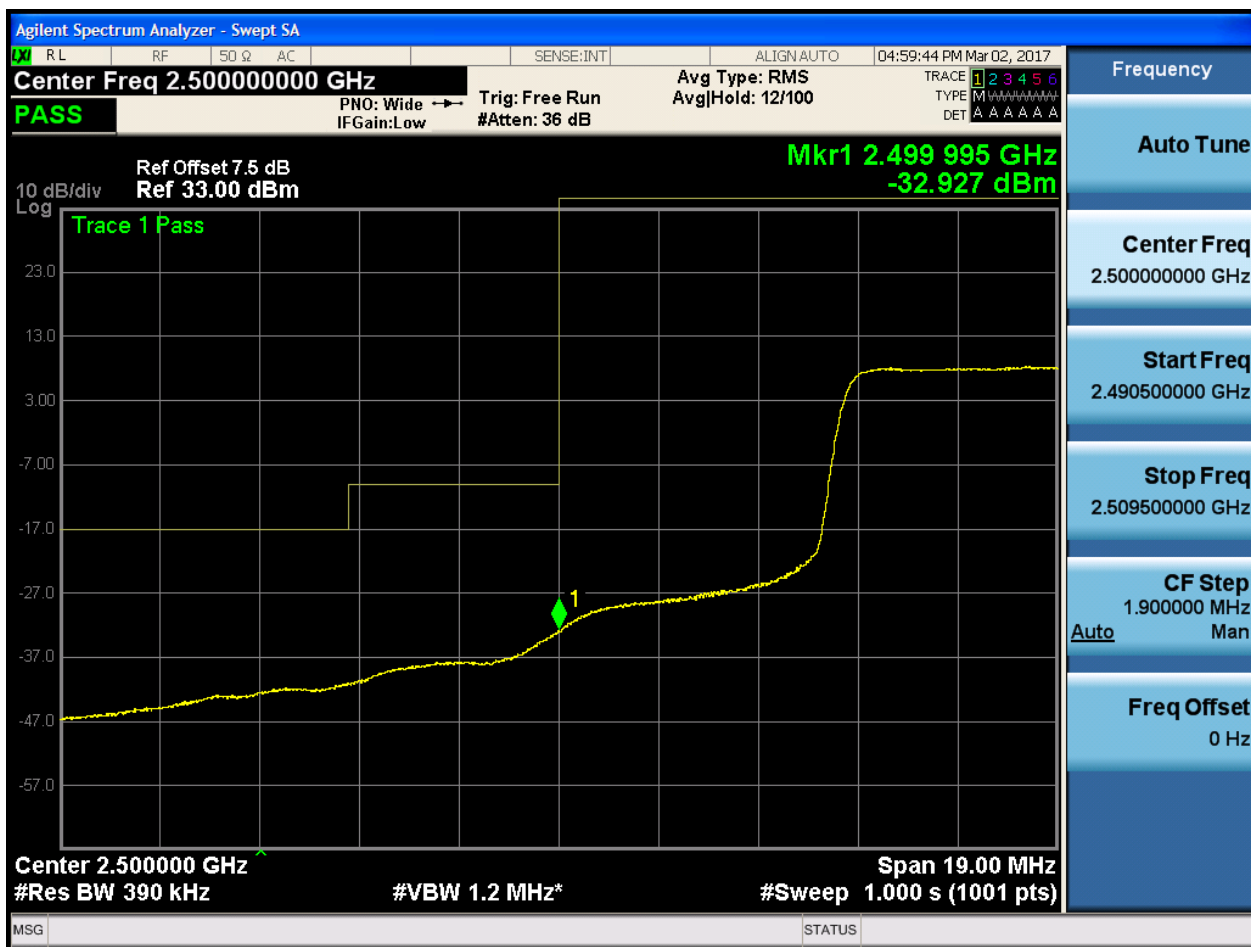
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

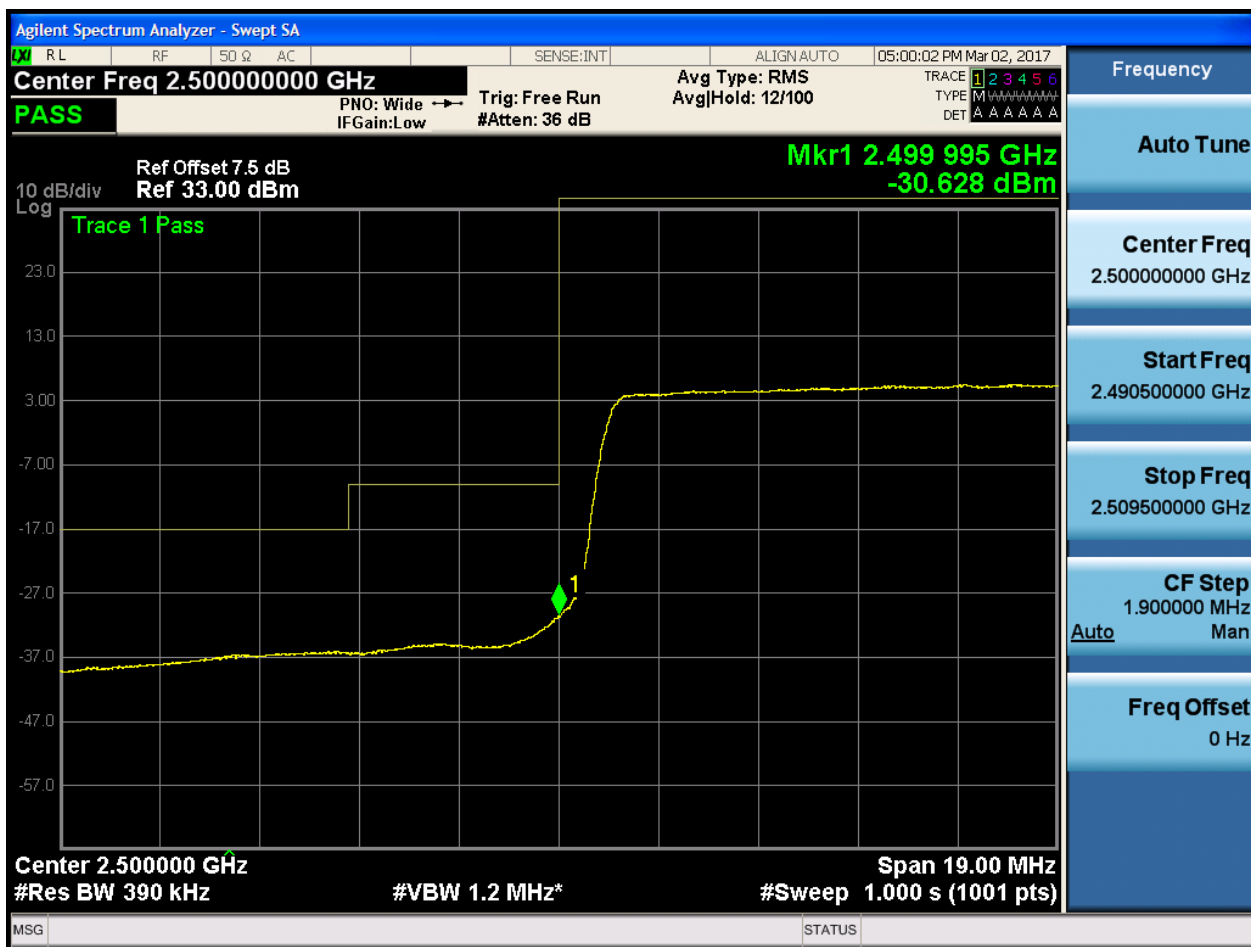


5.1.1.2.4.1.3 Test RB = RB50#25



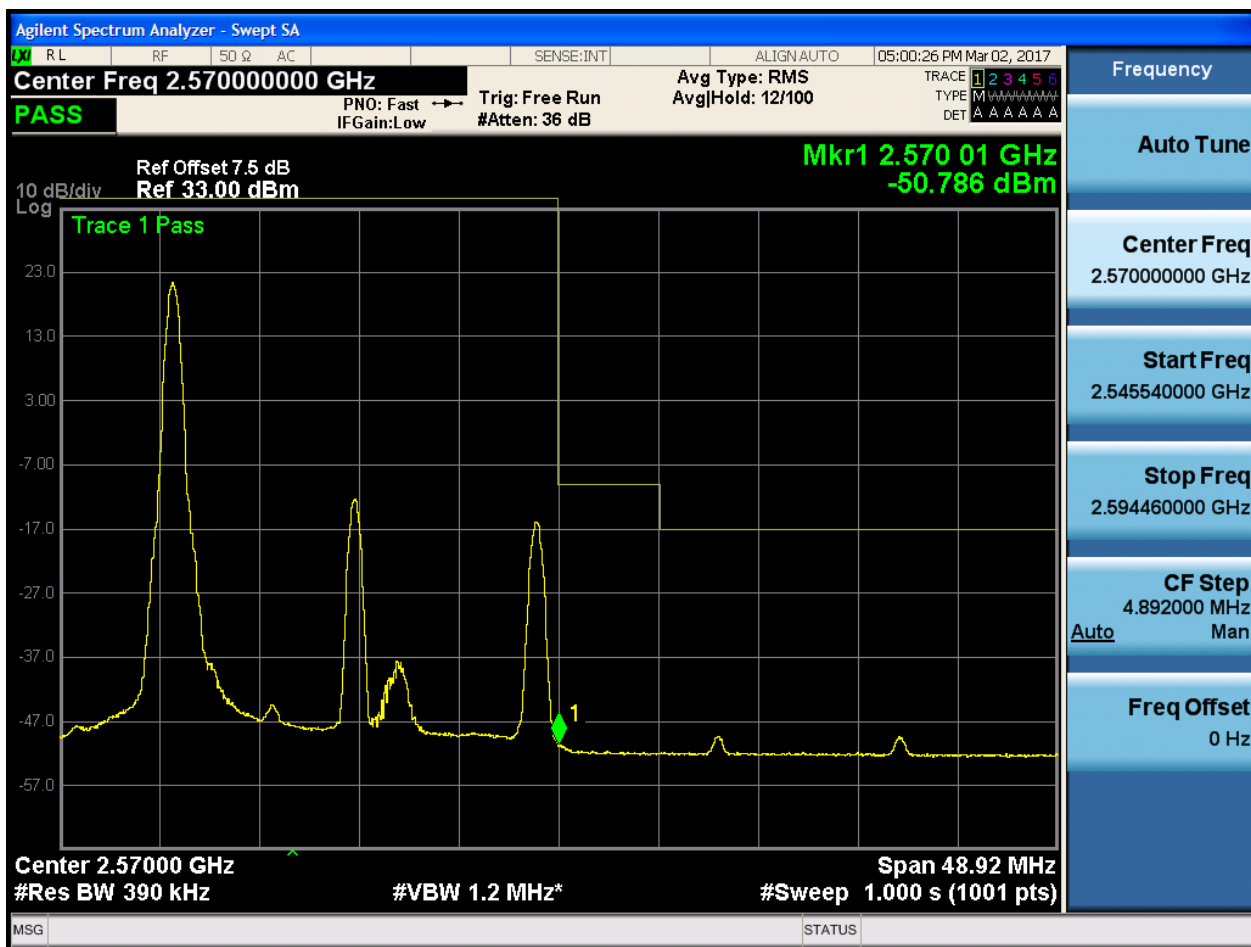


5.1.1.2.4.1.4 Test RB = RB100#0

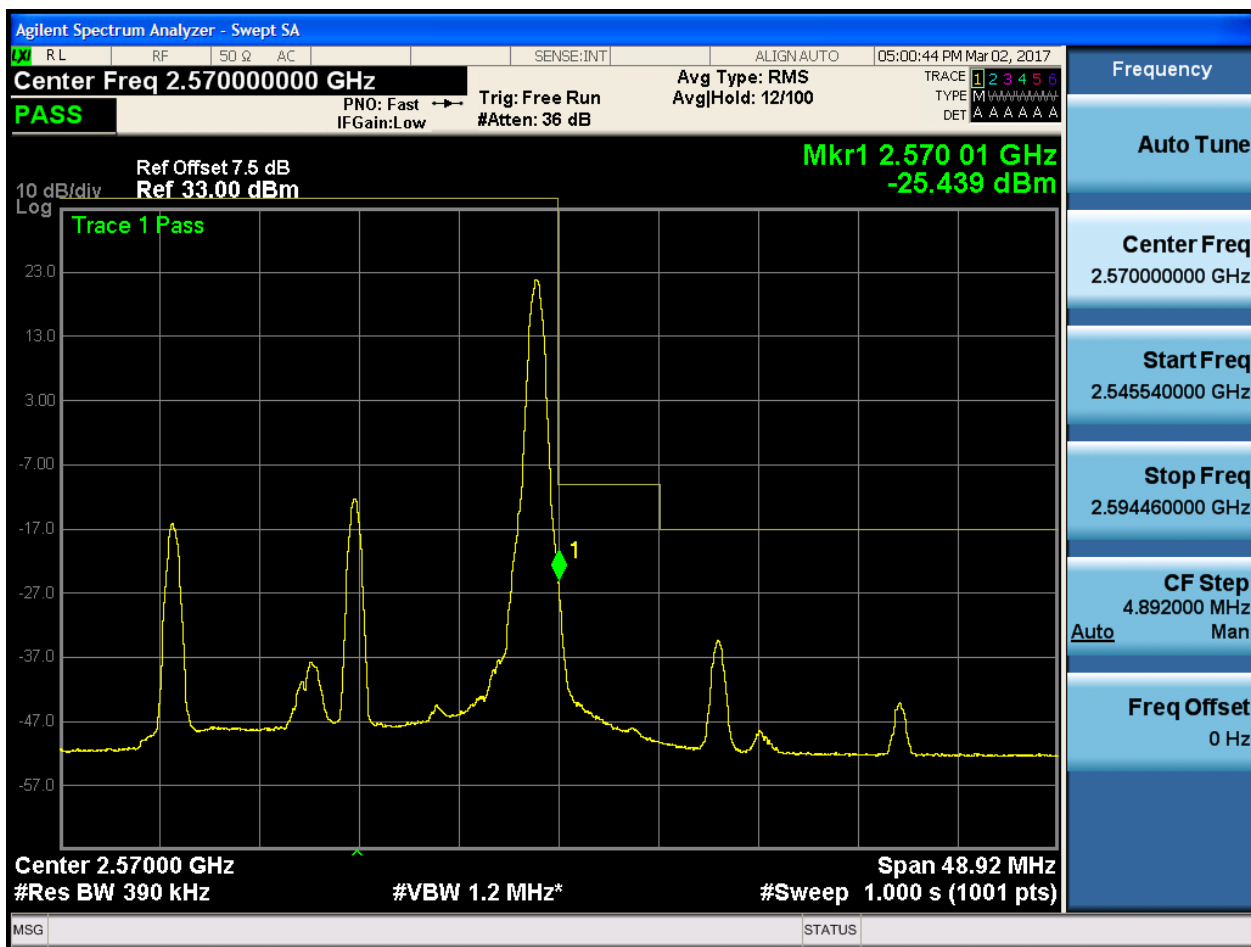


5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0

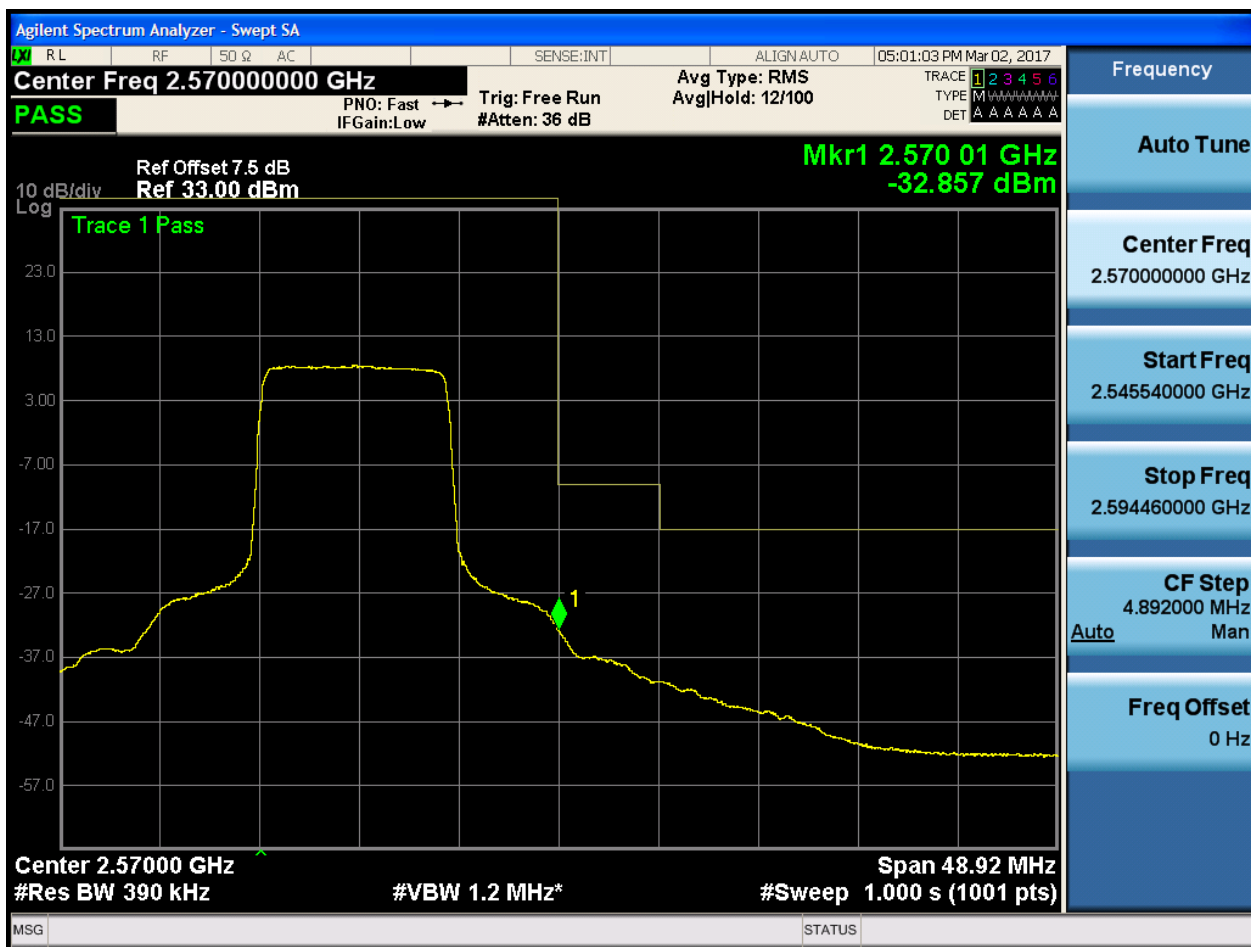


5.1.1.2.4.2.2 Test RB = RB1#99





5.1.1.2.4.2.3 Test RB = RB50#25





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

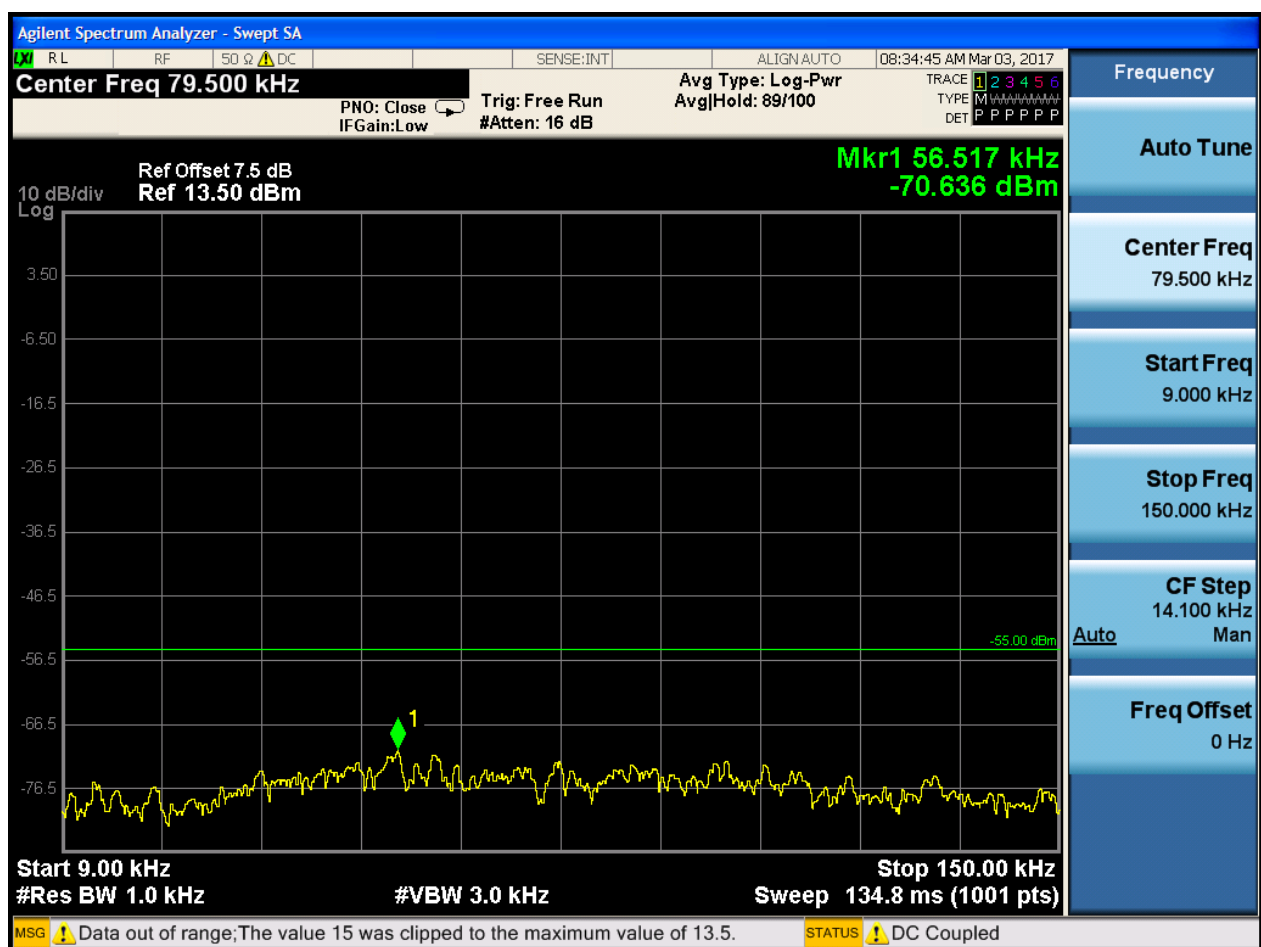
6.1.1 Test Band = BAND7

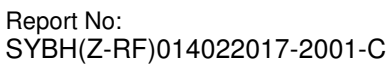
6.1.1.1. Test Mode = LTE/TM1

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





6.1.1.1..1.2 Test Channel = MCH

6.1.1.1..1.2.1 Test RB = RB1#0

