



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	21.79	21.79	33	PASS
				RB1#13	22.33	22.33	33	PASS
				RB1#24	21.48	21.48	33	PASS
				RB12#0	21.28	21.28	33	PASS
				RB12#6	21.4	21.4	33	PASS
				RB12#13	21.32	21.32	33	PASS
				RB25#0	21.27	21.27	33	PASS
			MCH	RB1#0	21.42	21.42	33	PASS
				RB1#13	22.74	22.74	33	PASS
				RB1#24	21.8	21.8	33	PASS
				RB12#0	21.9	21.9	33	PASS
				RB12#6	21.79	21.79	33	PASS
				RB12#13	21.57	21.57	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	21.67	21.67	33	PASS
			HCH	RB1#0	22.08	22.08	33	PASS
				RB1#13	22.75	22.75	33	PASS
				RB1#24	22.23	22.23	33	PASS
				RB12#0	22.04	22.04	33	PASS
				RB12#6	22.04	22.04	33	PASS
				RB12#13	21.87	21.87	33	PASS
				RB25#0	21.94	21.94	33	PASS
		10	LCH	RB1#0	22.25	22.25	33	PASS
				RB1#25	22.26	22.26	33	PASS
				RB1#49	22.03	22.03	33	PASS
				RB25#0	21.32	21.32	33	PASS
				RB25#13	21.38	21.38	33	PASS
				RB25#25	21.6	21.6	33	PASS
				RB50#0	21.54	21.54	33	PASS
			MCH	RB1#0	22.54	22.54	33	PASS
				RB1#25	22.72	22.72	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#49	21.9	21.9	33	PASS
				RB25#0	21.81	21.81	33	PASS
				RB25#13	21.72	21.72	33	PASS
				RB25#25	21.58	21.58	33	PASS
				RB50#0	21.7	21.7	33	PASS
			HCH	RB1#0	22.58	22.58	33	PASS
				RB1#25	22.74	22.74	33	PASS
				RB1#49	22.28	22.28	33	PASS
				RB25#0	21.97	21.97	33	PASS
				RB25#13	21.93	21.93	33	PASS
				RB25#25	21.9	21.9	33	PASS
				RB50#0	22.06	22.06	33	PASS
		15	LCH	RB1#0	21.61	21.61	33	PASS
				RB1#38	22.53	22.53	33	PASS
				RB1#74	22.51	22.51	33	PASS
				RB36#0	21.36	21.36	33	PASS
				RB36#18	21.68	21.68	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB36#39	21.82	21.82	33	PASS
				RB75#0	21.45	21.45	33	PASS
			MCH	RB1#0	22.1	22.1	33	PASS
				RB1#38	22.66	22.66	33	PASS
				RB1#74	22.1	22.1	33	PASS
				RB36#0	21.83	21.83	33	PASS
				RB36#18	21.85	21.85	33	PASS
				RB36#39	21.57	21.57	33	PASS
				RB75#0	21.66	21.66	33	PASS
			HCH	RB1#0	22.15	22.15	33	PASS
				RB1#38	22.8	22.8	33	PASS
				RB1#74	22.42	22.42	33	PASS
				RB36#0	21.86	21.86	33	PASS
				RB36#18	21.95	21.95	33	PASS
				RB36#39	21.91	21.91	33	PASS
				RB75#0	22.3	22.3	33	PASS
		20	LCH	RB1#0	22.01	22.01	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#50	22.75	22.75	33	PASS
				RB1#99	22.61	22.61	33	PASS
				RB50#0	21.56	21.56	33	PASS
				RB50#25	21.72	21.72	33	PASS
				RB50#50	21.72	21.72	33	PASS
				RB100#0	21.63	21.63	33	PASS
			MCH	RB1#0	22.33	22.33	33	PASS
				RB1#50	22.64	22.64	33	PASS
				RB1#99	21.98	21.98	33	PASS
				RB50#0	21.67	21.67	33	PASS
				RB50#25	21.82	21.82	33	PASS
				RB50#50	21.95	21.95	33	PASS
				RB100#0	21.9	21.9	33	PASS
			HCH	RB1#0	22.2	22.2	33	PASS
				RB1#50	22.88	22.88	33	PASS
				RB1#99	22.42	22.42	33	PASS
				RB50#0	22.19	22.19	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#25	22.44	22.44	33	PASS
				RB50#50	21.96	21.96	33	PASS
				RB100#0	22.49	22.49	33	PASS
	LTE/TM2	5	LCH	RB1#0	21.14	21.14	33	PASS
				RB1#13	21.58	21.58	33	PASS
				RB1#24	20.78	20.78	33	PASS
				RB12#0	20.52	20.52	33	PASS
				RB12#6	20.59	20.59	33	PASS
				RB12#13	20.33	20.33	33	PASS
				RB25#0	20.43	20.43	33	PASS
			MCH	RB1#0	21.31	21.31	33	PASS
				RB1#13	21.98	21.98	33	PASS
				RB1#24	21.12	21.12	33	PASS
				RB12#0	20.93	20.93	33	PASS
				RB12#6	20.94	20.94	33	PASS
				RB12#13	20.74	20.74	33	PASS
				RB25#0	20.79	20.79	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	22.43	22.43	33	PASS
				RB1#13	22.38	22.38	33	PASS
				RB1#24	21.82	21.82	33	PASS
				RB12#0	21.31	21.31	33	PASS
				RB12#6	21.26	21.26	33	PASS
				RB12#13	21.15	21.15	33	PASS
				RB25#0	21.21	21.21	33	PASS
		10	LCH	RB1#0	21.23	21.23	33	PASS
				RB1#25	21.57	21.57	33	PASS
				RB1#49	21.28	21.28	33	PASS
				RB25#0	20.41	20.41	33	PASS
				RB25#13	20.33	20.33	33	PASS
				RB25#25	20.79	20.79	33	PASS
				RB50#0	20.66	20.66	33	PASS
			MCH	RB1#0	21.67	21.67	33	PASS
				RB1#25	21.87	21.87	33	PASS
				RB1#49	20.94	20.94	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.93	20.93	33	PASS
				RB25#13	20.87	20.87	33	PASS
				RB25#25	20.79	20.79	33	PASS
				RB50#0	20.85	20.85	33	PASS
			HCH	RB1#0	21.95	21.95	33	PASS
				RB1#25	22.31	22.31	33	PASS
				RB1#49	21.66	21.66	33	PASS
				RB25#0	21.28	21.28	33	PASS
				RB25#13	21.28	21.28	33	PASS
				RB25#25	21.28	21.28	33	PASS
				RB50#0	21.47	21.47	33	PASS
		15	LCH	RB1#0	21.04	21.04	33	PASS
				RB1#38	21.99	21.99	33	PASS
				RB1#74	22.02	22.02	33	PASS
				RB36#0	20.66	20.66	33	PASS
				RB36#18	20.95	20.95	33	PASS
				RB36#39	21.16	21.16	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB75#0	20.75	20.75	33	PASS
			MCH	RB1#0	21.7	21.7	33	PASS
				RB1#38	21.99	21.99	33	PASS
				RB1#74	21.43	21.43	33	PASS
				RB36#0	20.98	20.98	33	PASS
				RB36#18	20.97	20.97	33	PASS
				RB36#39	20.75	20.75	33	PASS
				RB75#0	20.89	20.89	33	PASS
			HCH	RB1#0	21.54	21.54	33	PASS
				RB1#38	22.38	22.38	33	PASS
				RB1#74	21.94	21.94	33	PASS
				RB36#0	21.08	21.08	33	PASS
				RB36#18	21.17	21.17	33	PASS
				RB36#39	21.31	21.31	33	PASS
				RB75#0	21.61	21.61	33	PASS
		20	LCH	RB1#0	21.46	21.46	33	PASS
				RB1#50	22.32	22.32	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#99	22.21	22.21	33	PASS
				RB50#0	20.84	20.84	33	PASS
				RB50#25	20.99	20.99	33	PASS
				RB50#50	21.05	21.05	33	PASS
				RB100#0	20.92	20.92	33	PASS
			MCH	RB1#0	21.7	21.7	33	PASS
				RB1#50	21.8	21.8	33	PASS
				RB1#99	21.23	21.23	33	PASS
				RB50#0	20.89	20.89	33	PASS
				RB50#25	20.98	20.98	33	PASS
				RB50#50	21.16	21.16	33	PASS
				RB100#0	21.04	21.04	33	PASS
			HCH	RB1#0	21.79	21.79	33	PASS
				RB1#50	22.51	22.51	33	PASS
				RB1#99	22.17	22.17	33	PASS
				RB50#0	21.51	21.51	33	PASS
				RB50#25	21.66	21.66	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#50	21.3	21.3	33	PASS
				RB100#0	21.71	21.71	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,

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

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

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	4.59	13	PASS
				RB1#13	4.03	13	PASS
				RB1#24	4.71	13	PASS
				RB12#0	5.44	13	PASS
				RB12#6	5.24	13	PASS
				RB12#13	5.49	13	PASS
				RB25#0	5.54	13	PASS
			MCH	RB1#0	5.19	13	PASS
				RB1#13	4.08	13	PASS
				RB1#24	4.68	13	PASS
				RB12#0	5.56	13	PASS
				RB12#6	5.15	13	PASS
				RB12#13	5.29	13	PASS
				RB25#0	5.67	13	PASS
			HCH	RB1#0	5.36	13	PASS
				RB1#13	4.26	13	PASS
				RB1#24	4.49	13	PASS
				RB12#0	5.45	13	PASS
				RB12#6	5.36	13	PASS
				RB12#13	5.42	13	PASS
				RB25#0	5.68	13	PASS
		10	LCH	RB1#0	4.34	13	PASS
				RB1#25	4.05	13	PASS
				RB1#49	4.5	13	PASS
				RB25#0	5.28	13	PASS
				RB25#13	5.21	13	PASS
				RB25#25	5.17	13	PASS
				RB50#0	5.78	13	PASS
			MCH	RB1#0	4.36	13	PASS
				RB1#25	3.93	13	PASS
				RB1#49	4.21	13	PASS
				RB25#0	5.57	13	PASS
				RB25#13	5.23	13	PASS
				RB25#25	5.32	13	PASS
				RB50#0	5.61	13	PASS
			HCH	RB1#0	4.51	13	PASS
				RB1#25	4.2	13	PASS
				RB1#49	4.32	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	5.42	13	PASS
				RB25#13	5.28	13	PASS
				RB25#25	5.23	13	PASS
				RB50#0	5.72	13	PASS
		15	LCH	RB1#0	4.62	13	PASS
				RB1#38	3.81	13	PASS
				RB1#74	4.32	13	PASS
				RB36#0	5.35	13	PASS
				RB36#18	5.14	13	PASS
				RB36#39	5.43	13	PASS
				RB75#0	5.83	13	PASS
			MCH	RB1#0	5	13	PASS
				RB1#38	4.17	13	PASS
				RB1#74	3.97	13	PASS
				RB36#0	5.83	13	PASS
				RB36#18	5.45	13	PASS
				RB36#39	5.38	13	PASS
				RB75#0	5.88	13	PASS
			HCH	RB1#0	4.34	13	PASS
				RB1#38	4.26	13	PASS
				RB1#74	4.36	13	PASS
				RB36#0	5.75	13	PASS
				RB36#18	5.67	13	PASS
				RB36#39	5.74	13	PASS
				RB75#0	5.94	13	PASS
		20	LCH	RB1#0	4.59	13	PASS
				RB1#50	3.99	13	PASS
				RB1#99	4.86	13	PASS
				RB50#0	5.21	13	PASS
				RB50#25	5.29	13	PASS
				RB50#50	5.7	13	PASS
				RB100#0	5.8	13	PASS
			MCH	RB1#0	5.09	13	PASS
				RB1#50	4.16	13	PASS
				RB1#99	3.97	13	PASS
				RB50#0	5.96	13	PASS
				RB50#25	5.28	13	PASS
				RB50#50	5.08	13	PASS
				RB100#0	5.85	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	4.1	13	PASS
				RB1#50	4.36	13	PASS
				RB1#99	4.72	13	PASS
				RB50#0	4.83	13	PASS
				RB50#25	5.13	13	PASS
				RB50#50	5.37	13	PASS
				RB100#0	5.67	13	PASS
		5	LCH	RB1#0	5.46	13	PASS
				RB1#13	4.82	13	PASS
				RB1#24	5.42	13	PASS
				RB12#0	6.11	13	PASS
				RB12#6	6.06	13	PASS
				RB12#13	6.25	13	PASS
				RB25#0	6.41	13	PASS
			MCH	RB1#0	5.23	13	PASS
				RB1#13	4.45	13	PASS
				RB1#24	4.95	13	PASS
				RB12#0	6.04	13	PASS
				RB12#6	5.93	13	PASS
				RB12#13	5.95	13	PASS
				RB25#0	6.53	13	PASS
			HCH	RB1#0	5.36	13	PASS
				RB1#13	4.7	13	PASS
				RB1#24	5	13	PASS
				RB12#0	6.02	13	PASS
				RB12#6	5.86	13	PASS
				RB12#13	5.96	13	PASS
				RB25#0	6.47	13	PASS
		10	LCH	RB1#0	5.01	13	PASS
				RB1#25	4.62	13	PASS
				RB1#49	4.89	13	PASS
				RB25#0	6.15	13	PASS
				RB25#13	6	13	PASS
				RB25#25	5.98	13	PASS
				RB50#0	6.45	13	PASS
			MCH	RB1#0	5.4	13	PASS
				RB1#25	4.73	13	PASS
				RB1#49	5.1	13	PASS
				RB25#0	6.35	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#13	6.16	13	PASS
				RB25#25	6.22	13	PASS
				RB50#0	6.54	13	PASS
			HCH	RB1#0	5.12	13	PASS
				RB1#25	4.7	13	PASS
				RB1#49	5.2	13	PASS
				RB25#0	6.3	13	PASS
				RB25#13	6.31	13	PASS
				RB25#25	6.16	13	PASS
				RB50#0	6.61	13	PASS
		15	LCH	RB1#0	5.62	13	PASS
				RB1#38	4.69	13	PASS
				RB1#74	5.08	13	PASS
				RB36#0	6.19	13	PASS
				RB36#18	5.86	13	PASS
				RB36#39	6.09	13	PASS
				RB75#0	6.73	13	PASS
			MCH	RB1#0	5.84	13	PASS
				RB1#38	4.8	13	PASS
				RB1#74	4.58	13	PASS
				RB36#0	6.16	13	PASS
				RB36#18	6.12	13	PASS
				RB36#39	6.2	13	PASS
				RB75#0	6.84	13	PASS
			HCH	RB1#0	4.96	13	PASS
				RB1#38	4.74	13	PASS
				RB1#74	5.03	13	PASS
				RB36#0	6.14	13	PASS
				RB36#18	5.97	13	PASS
				RB36#39	6.37	13	PASS
				RB75#0	6.71	13	PASS
		20	LCH	RB1#0	5.09	13	PASS
				RB1#50	4.44	13	PASS
				RB1#99	5.35	13	PASS
				RB50#0	6.02	13	PASS
				RB50#25	6.01	13	PASS
				RB50#50	6.25	13	PASS
				RB100#0	6.59	13	PASS
			MCH	RB1#0	5.56	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#50	4.72	13	PASS
				RB1#99	4.68	13	PASS
				RB50#0	6.18	13	PASS
				RB50#25	6.1	13	PASS
				RB50#50	5.83	13	PASS
				RB100#0	6.77	13	PASS
			HCH	RB1#0	4.69	13	PASS
				RB1#50	5.06	13	PASS
				RB1#99	5.54	13	PASS
				RB50#0	5.64	13	PASS
				RB50#25	5.71	13	PASS
				RB50#50	6.3	13	PASS
				RB100#0	6.26	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

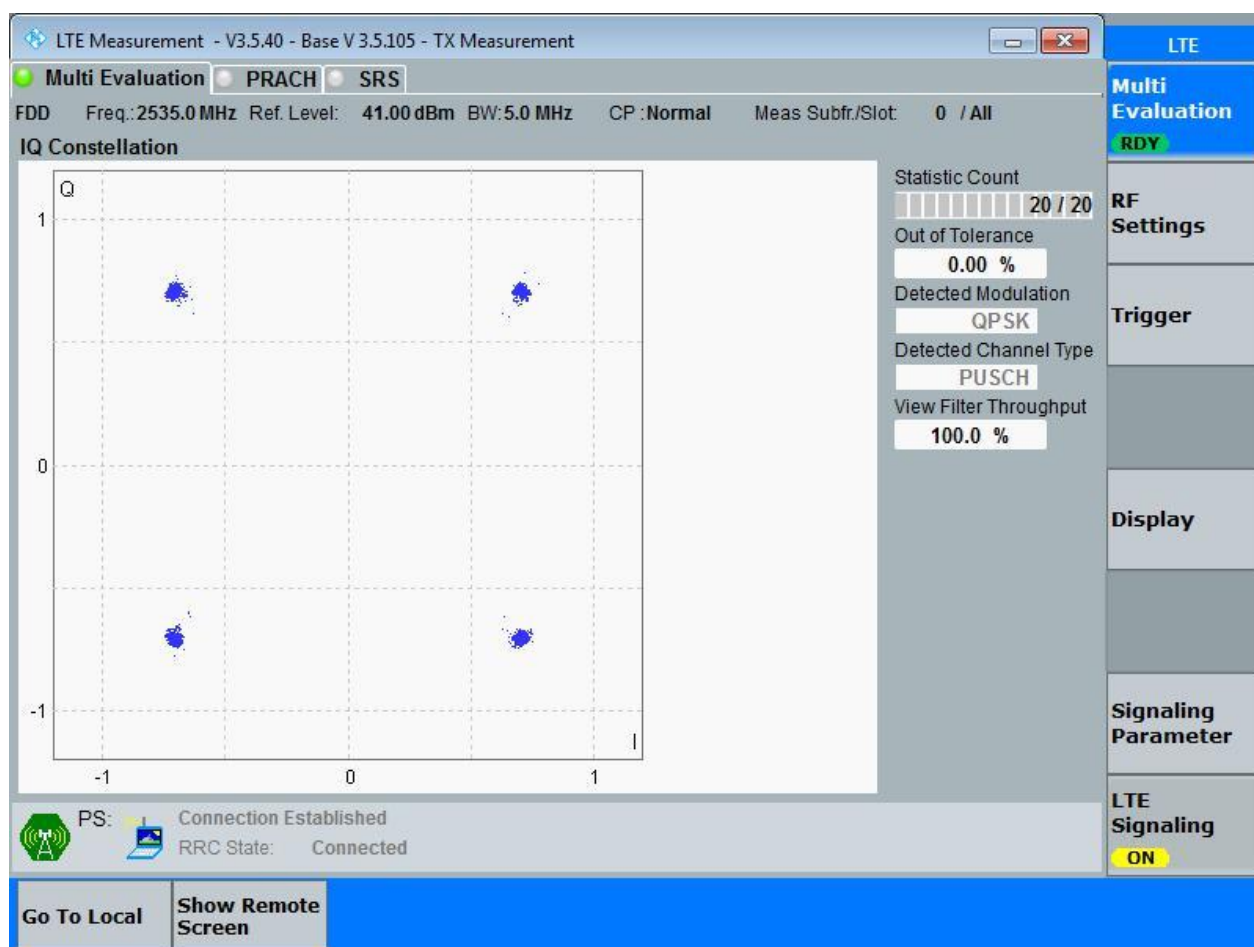
3.1.1 Test Band = BAND7

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

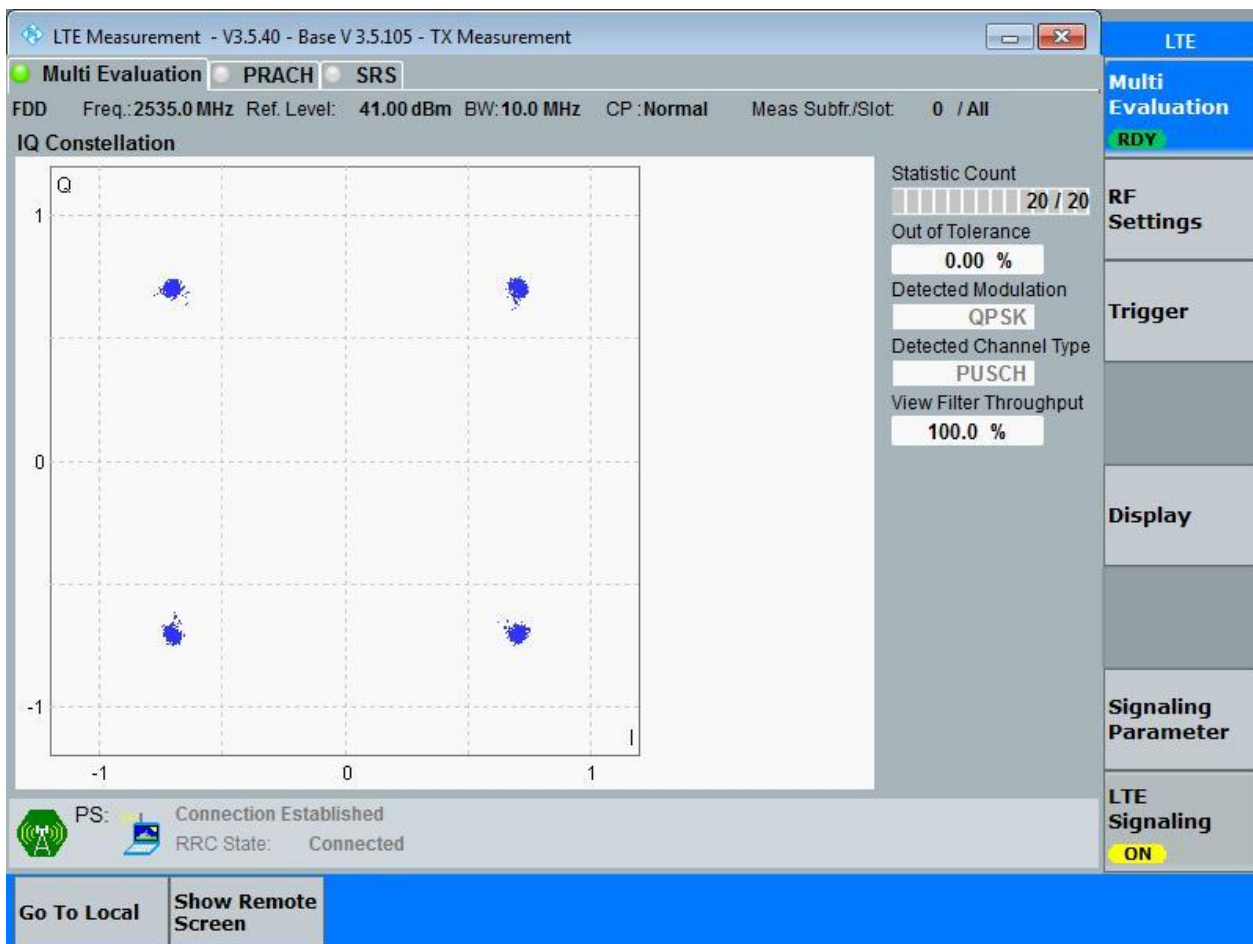
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

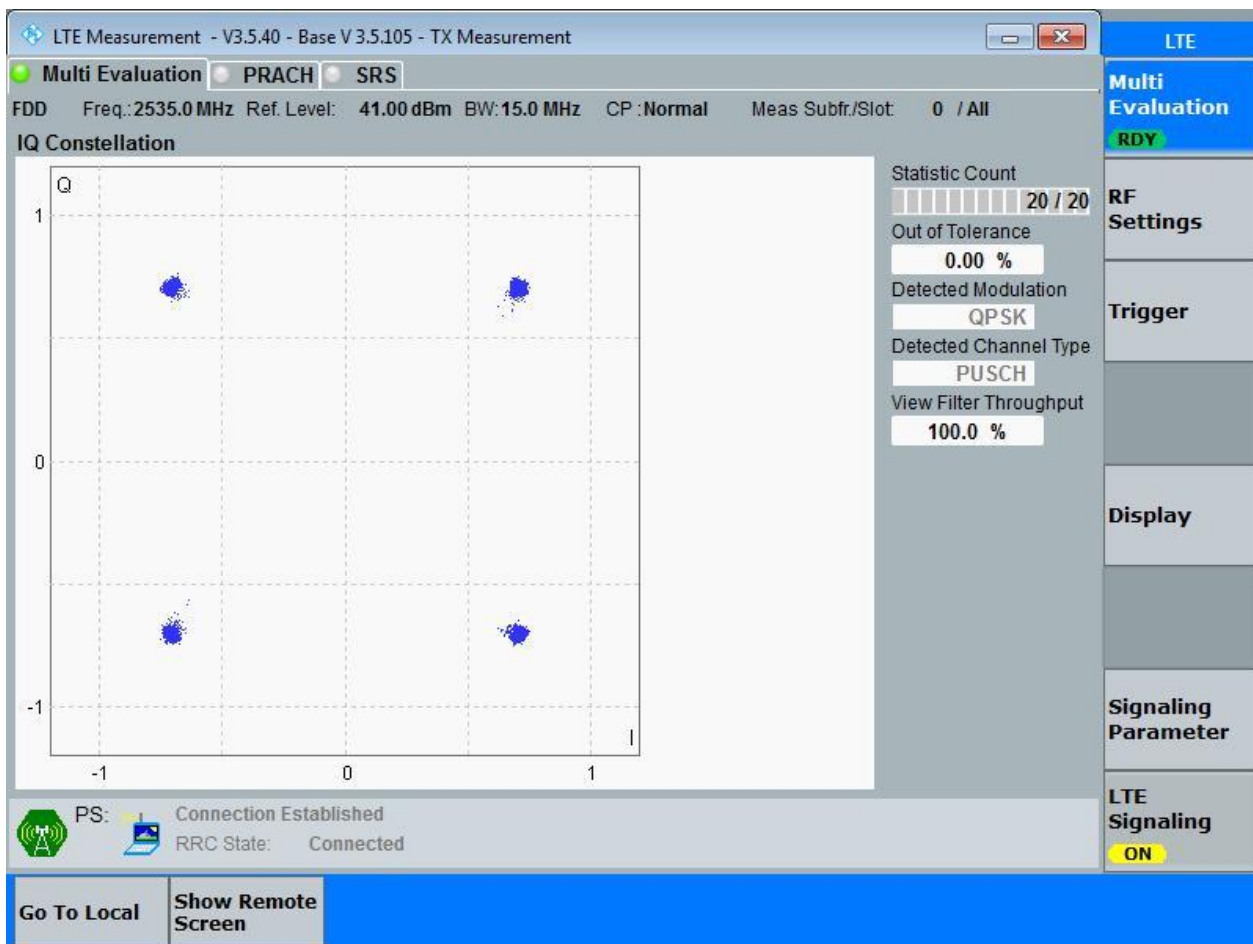
3.1.1.1.2.1.1 Test RB = RB50#0



3.1.1.1.3 Test Bandwidth = 15

3.1.1.1.3.1 Test Channel = MCH

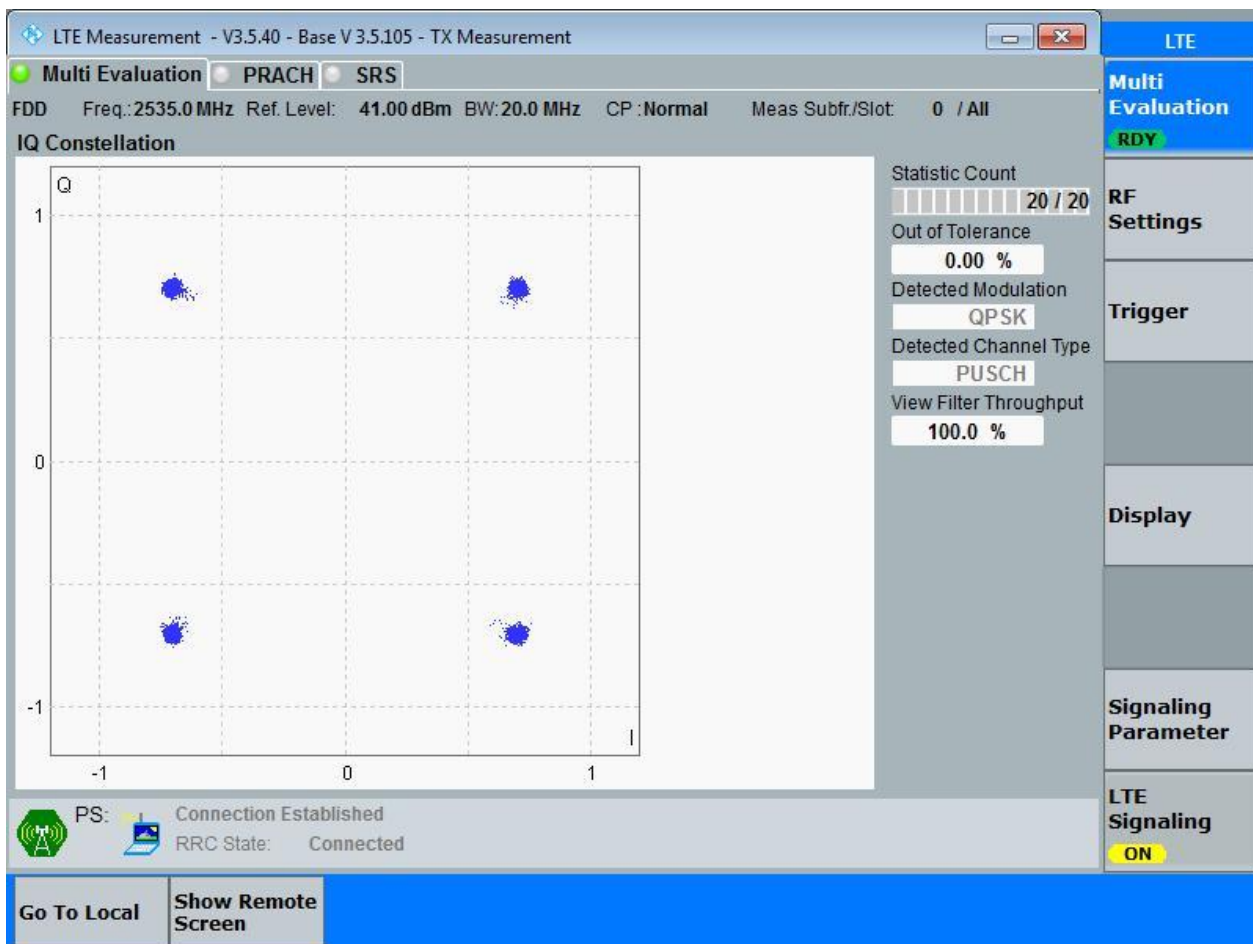
3.1.1.1.3.1.1 Test RB = RB75#0



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

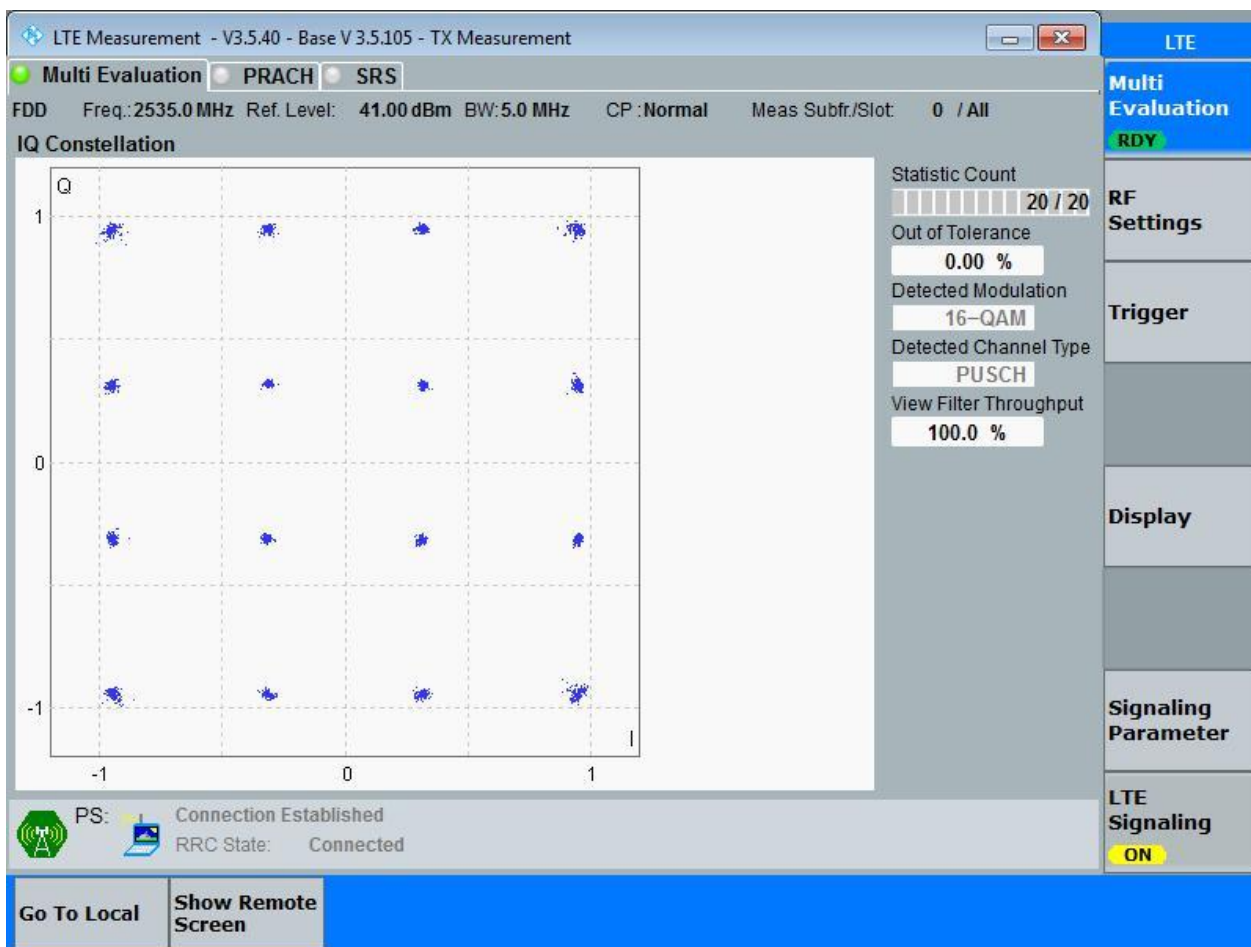


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

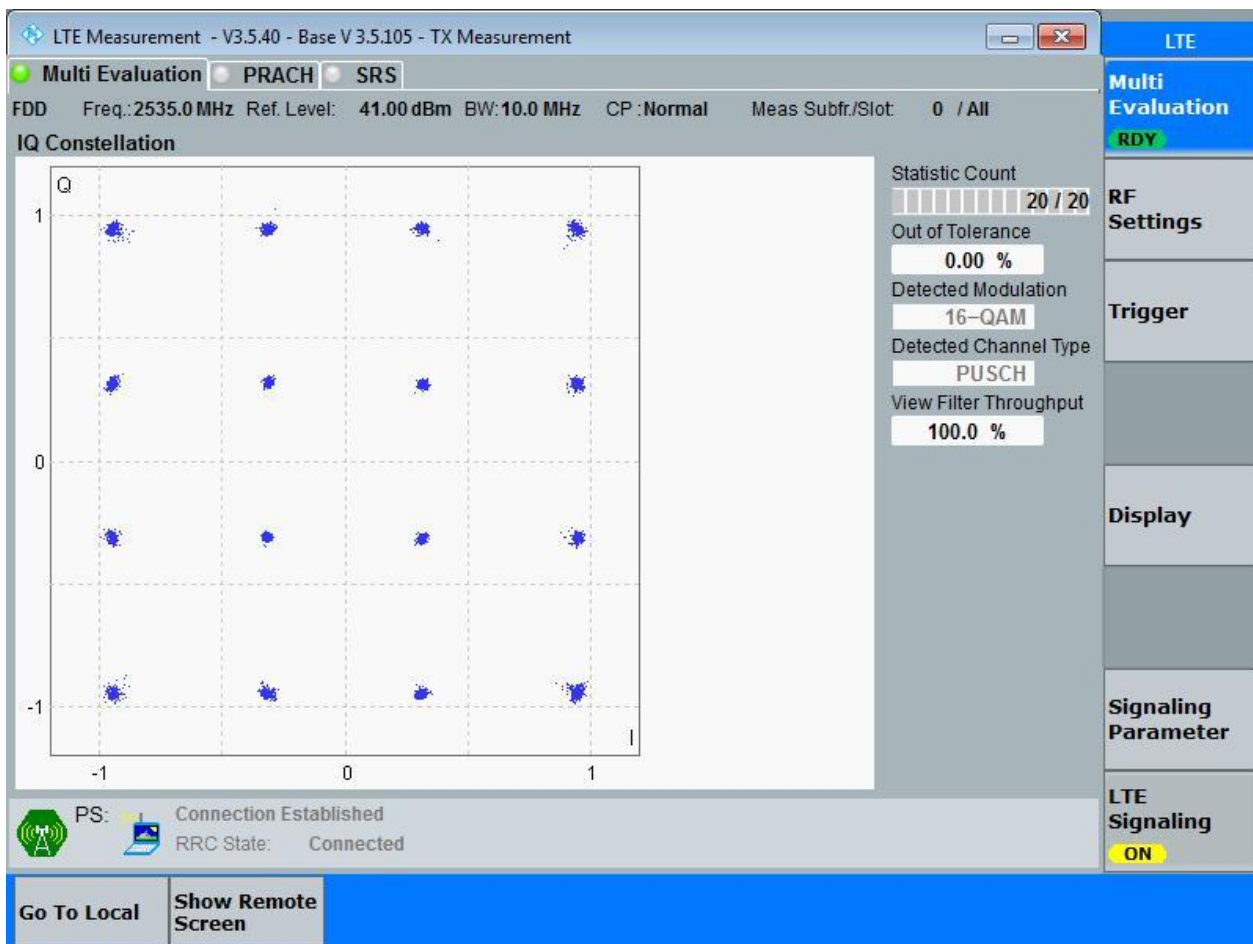
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

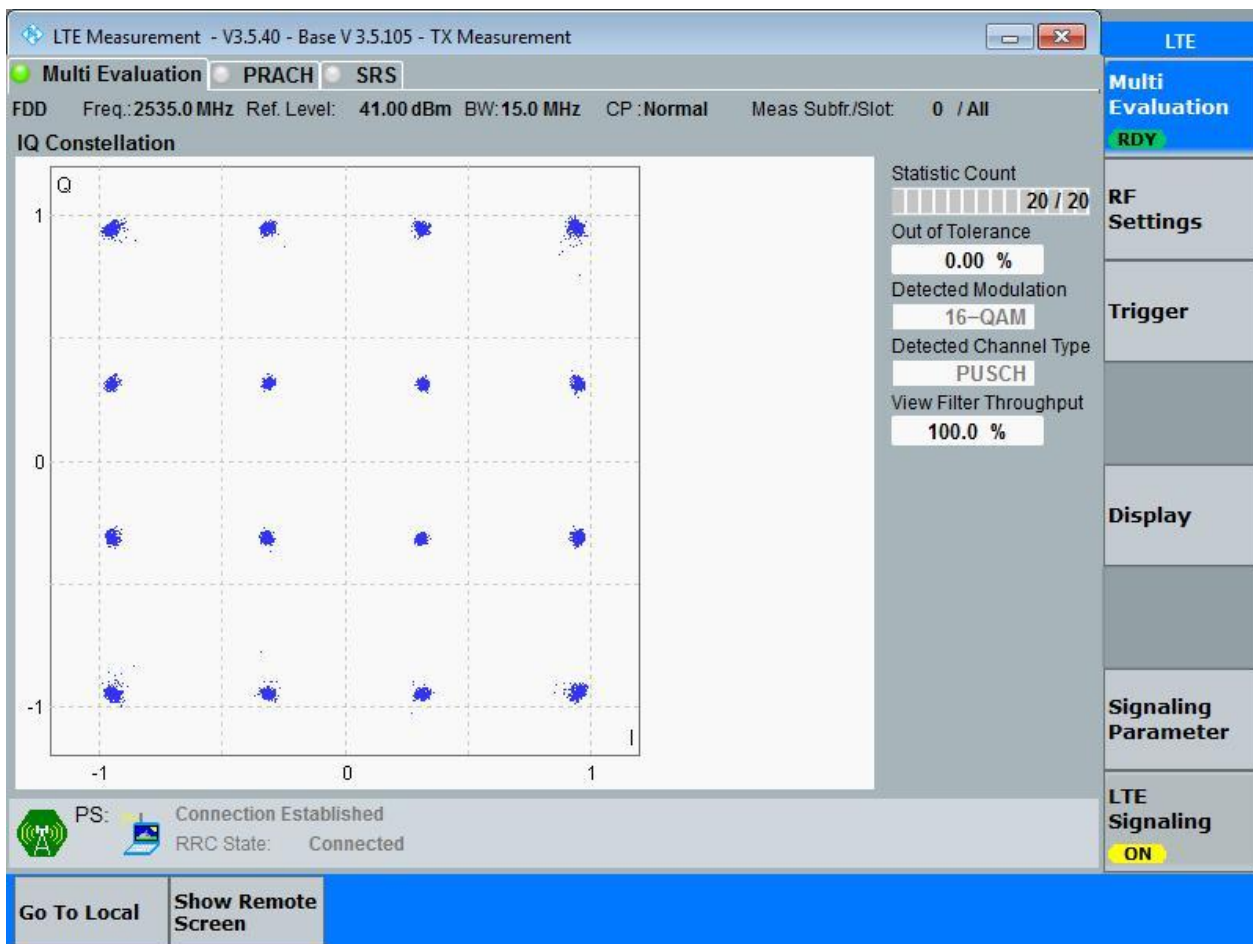
3.1.1.2.2.1.1 Test RB = RB50#0



3.1.1.2.3 Test Bandwidth = 15

3.1.1.2.3.1 Test Channel = MCH

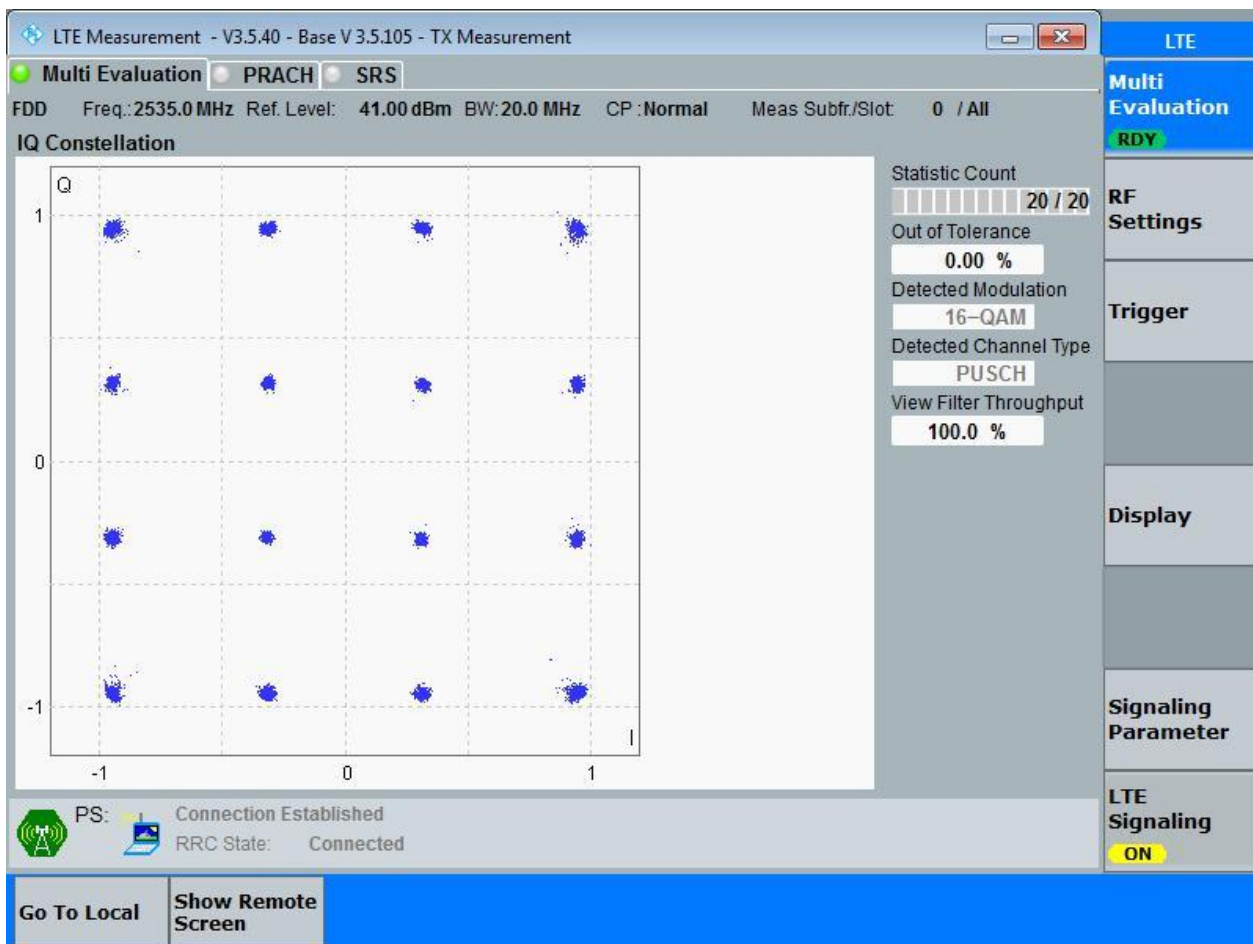
3.1.1.2.3.1.1 Test RB = RB75#0



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	4.50	4.87	Pass
			MCH	RB25#0	4.49	4.89	Pass
			HCH	RB25#0	4.50	4.87	Pass
		10	LCH	RB50#0	8.99	9.64	Pass
			MCH	RB50#0	8.99	9.61	Pass
			HCH	RB50#0	8.99	9.60	Pass
		15	LCH	RB75#0	13.45	14.30	Pass
			MCH	RB75#0	13.47	14.45	Pass
			HCH	RB75#0	13.47	14.35	Pass
		20	LCH	RB100#0	17.91	19.05	Pass
			MCH	RB100#0	17.98	19.10	Pass
			HCH	RB100#0	17.94	19.09	Pass
	LTE/TM2	5	LCH	RB25#0	4.50	4.86	Pass
			MCH	RB25#0	4.50	4.87	Pass
			HCH	RB25#0	4.51	4.87	Pass
		10	LCH	RB50#0	8.98	9.59	Pass
			MCH	RB50#0	8.99	9.62	Pass
			HCH	RB50#0	9.00	9.69	Pass
		15	LCH	RB75#0	13.44	14.41	Pass
			MCH	RB75#0	13.48	14.45	Pass
			HCH	RB75#0	13.47	14.35	Pass
		20	LCH	RB100#0	17.91	19.05	Pass
			MCH	RB100#0	17.98	19.13	Pass
			HCH	RB100#0	17.94	19.04	Pass



Part II - Test Plots

4.1 For LTE

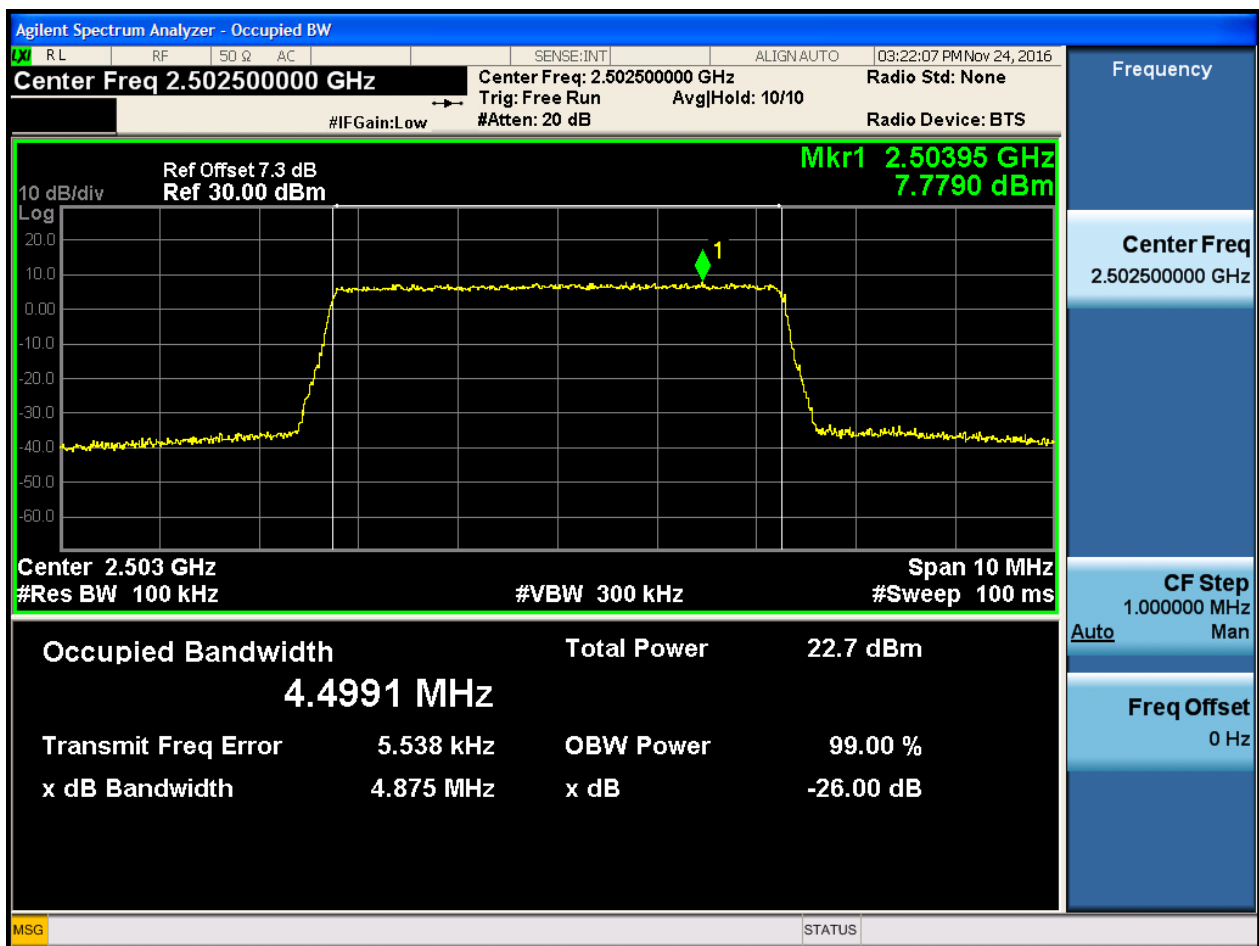
4.1.1 Test Band = BAND7

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

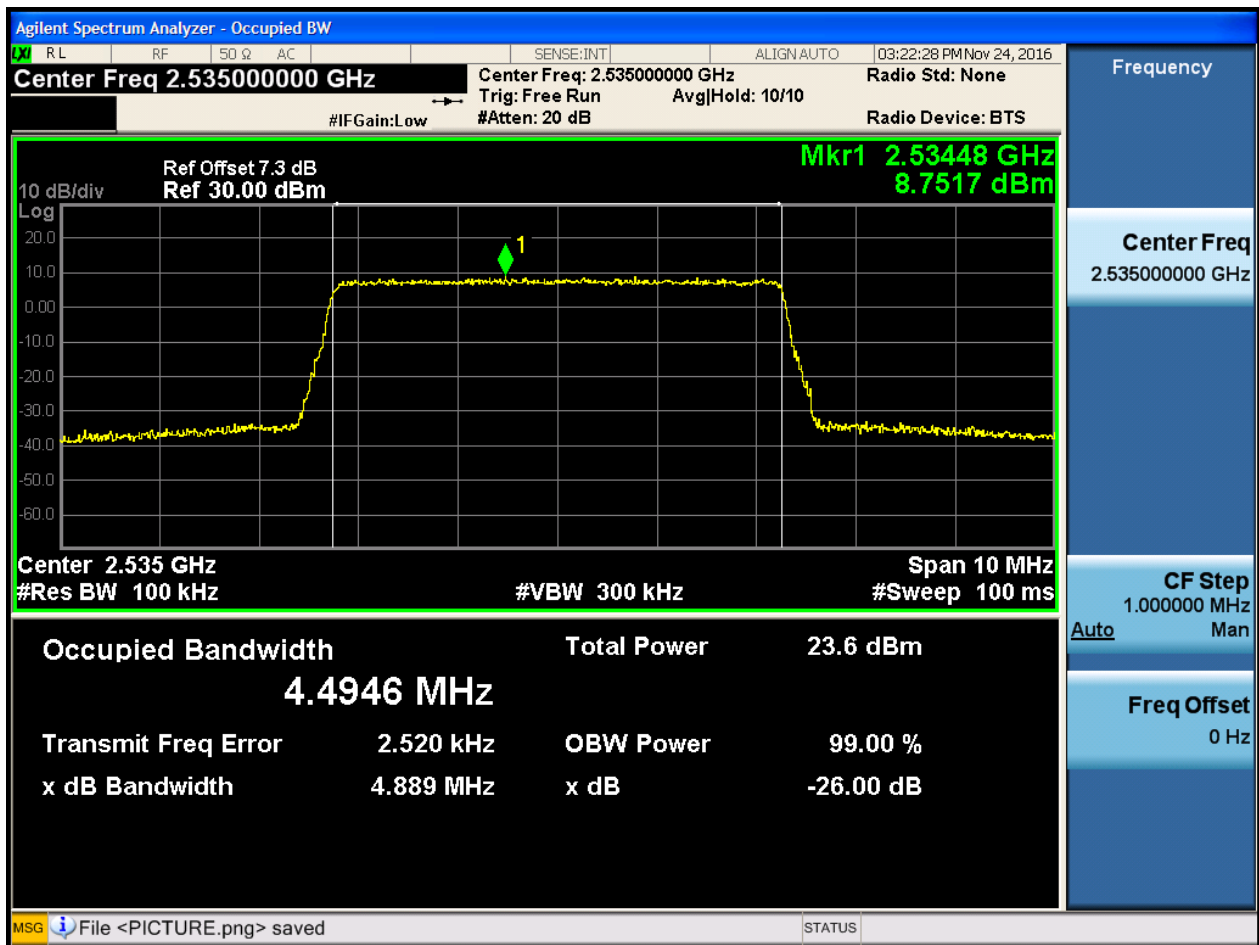
4.1.1.1.1.1.1 Test RB = RB25#0





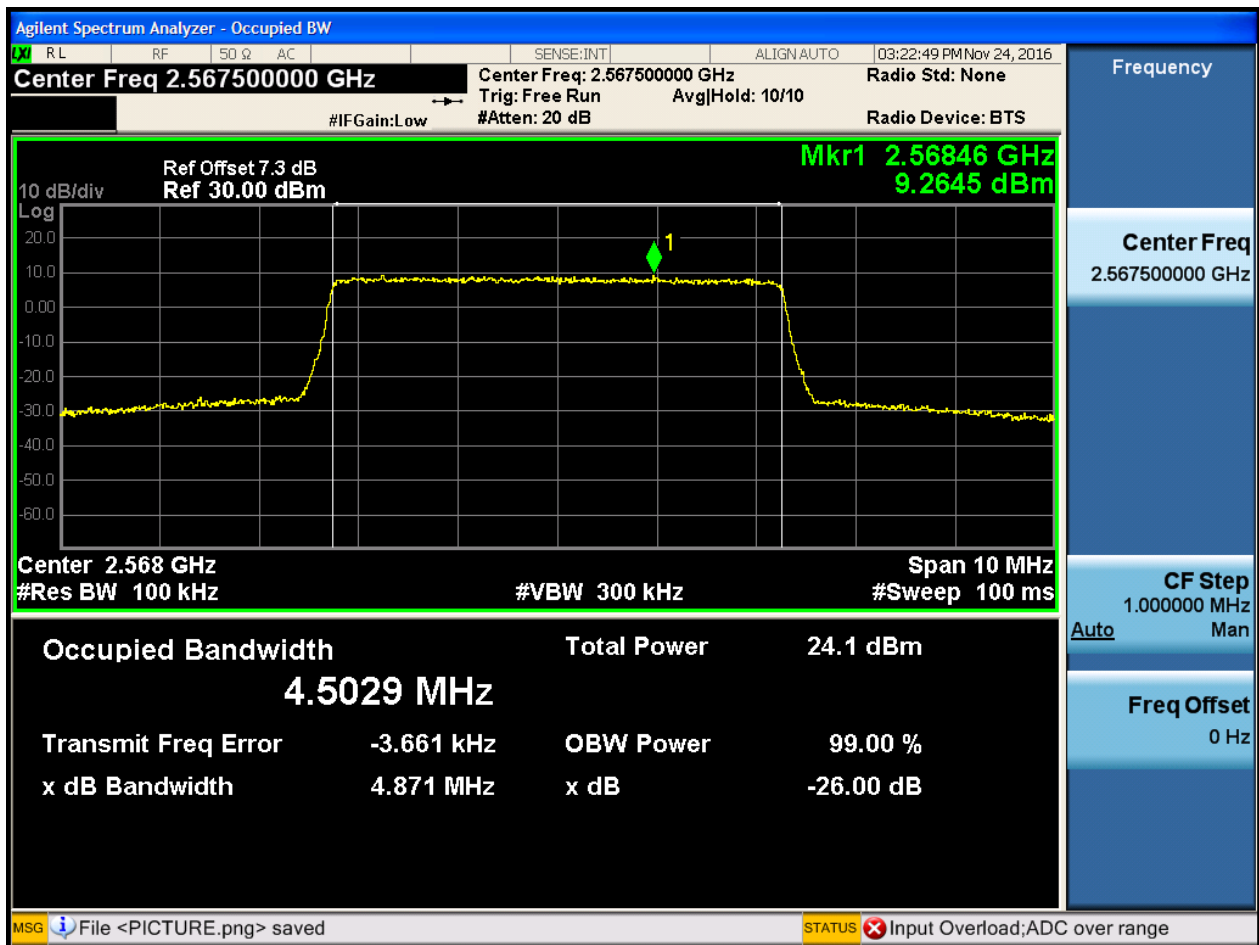
4.1.1.1.1.2 Test Channel = MCH

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

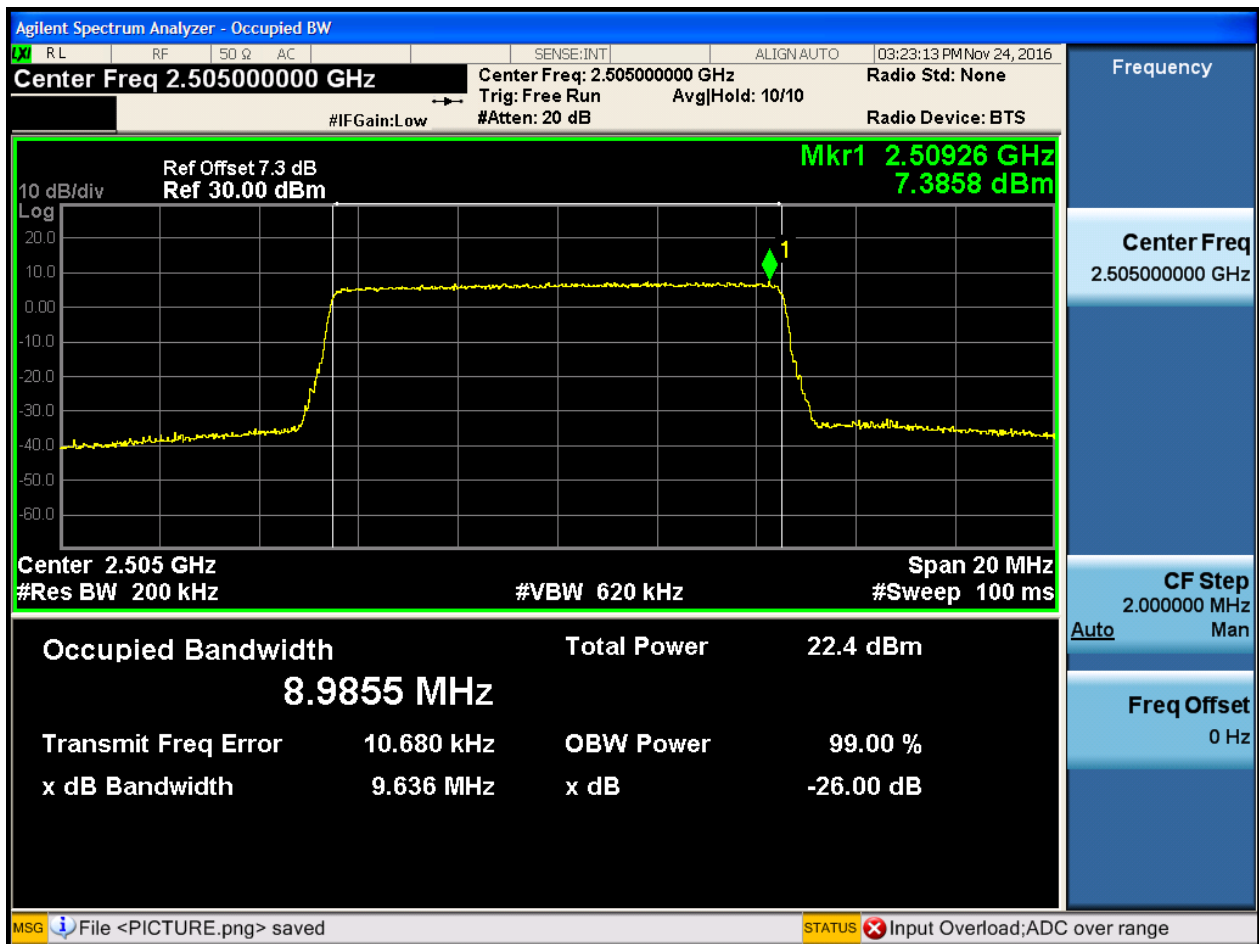




4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH

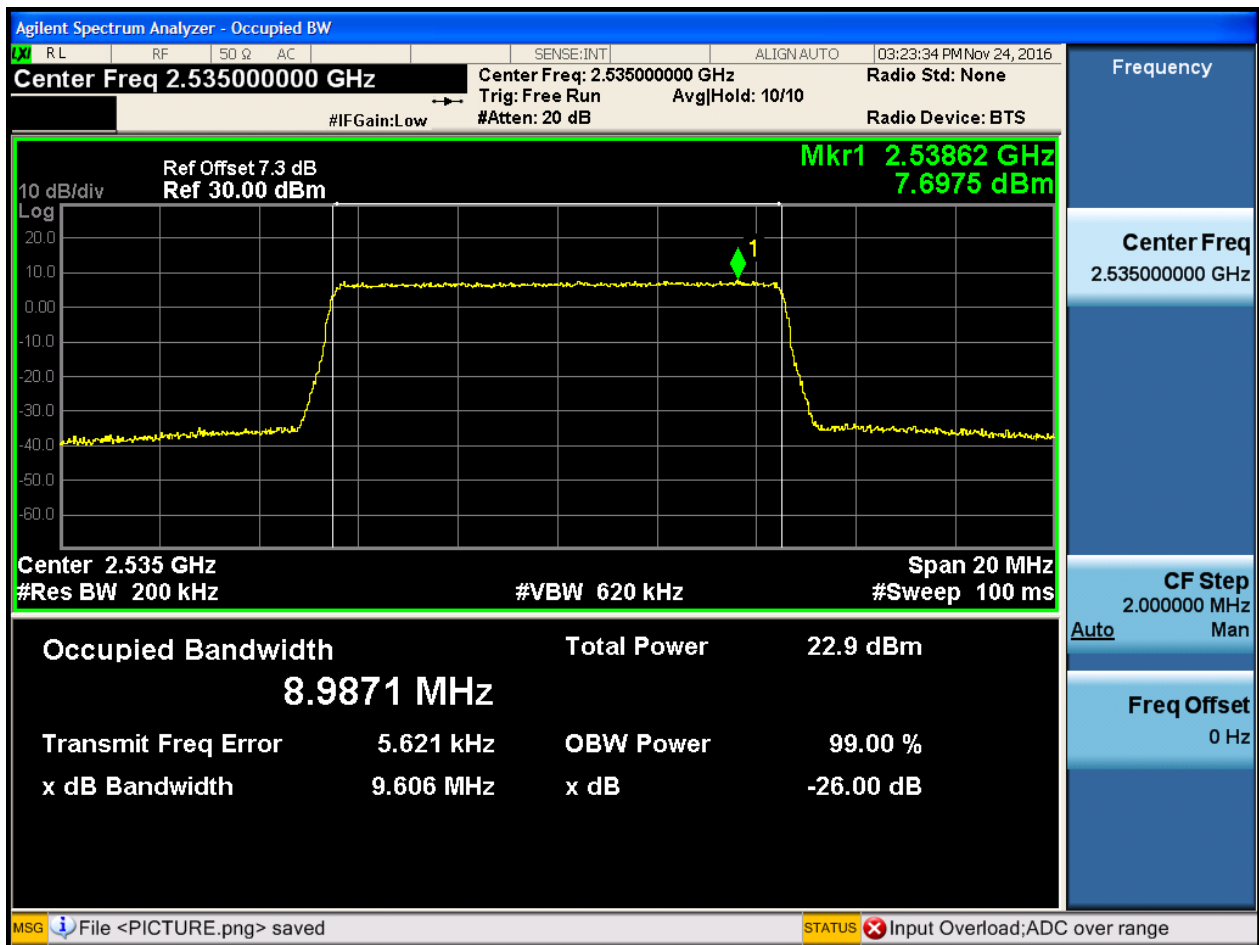
4.1.1.1.2.1.1 Test RB = RB50#0





4.1.1.1.2.2 Test Channel = MCH

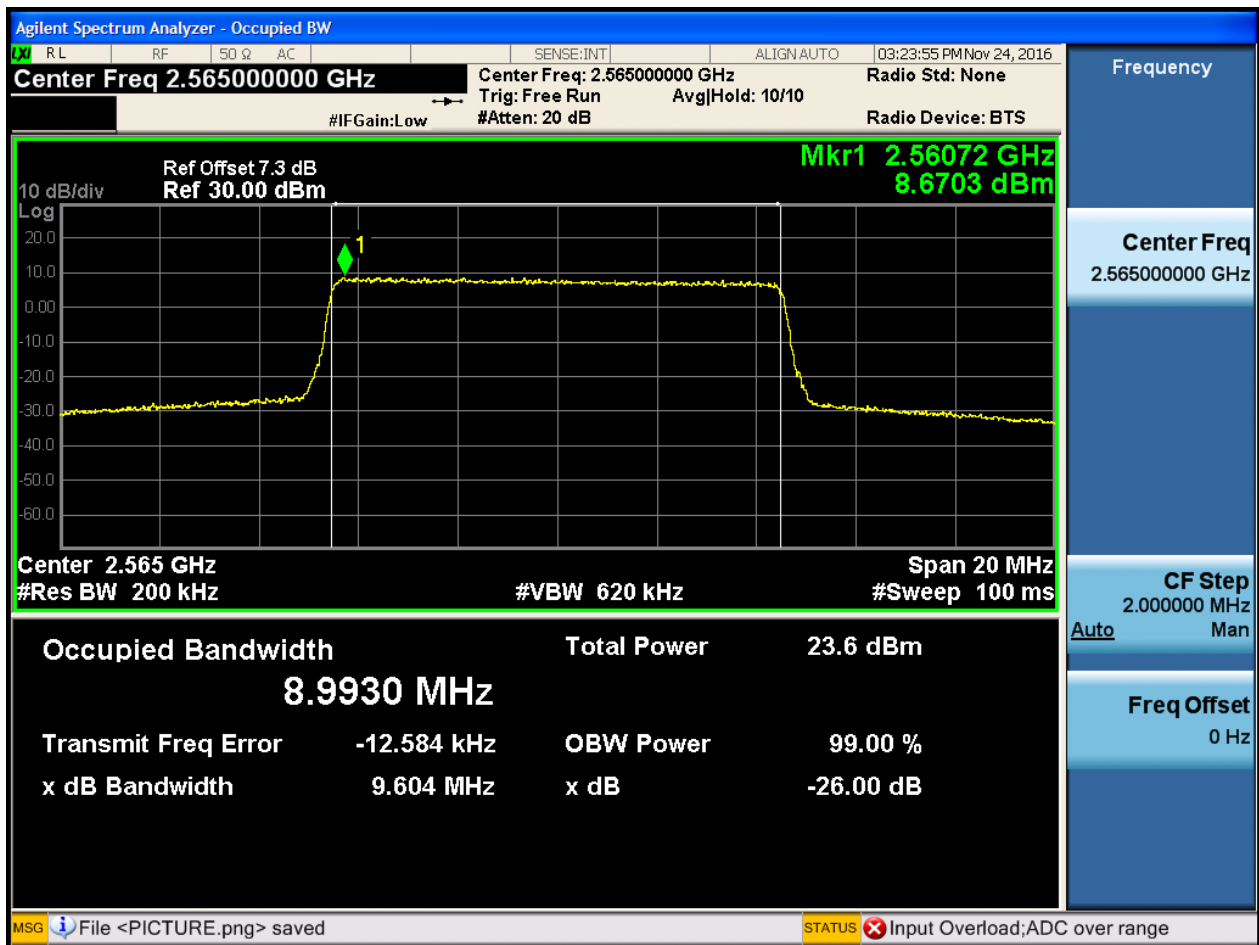
4.1.1.1.2.2.1 Test RB = RB50#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0

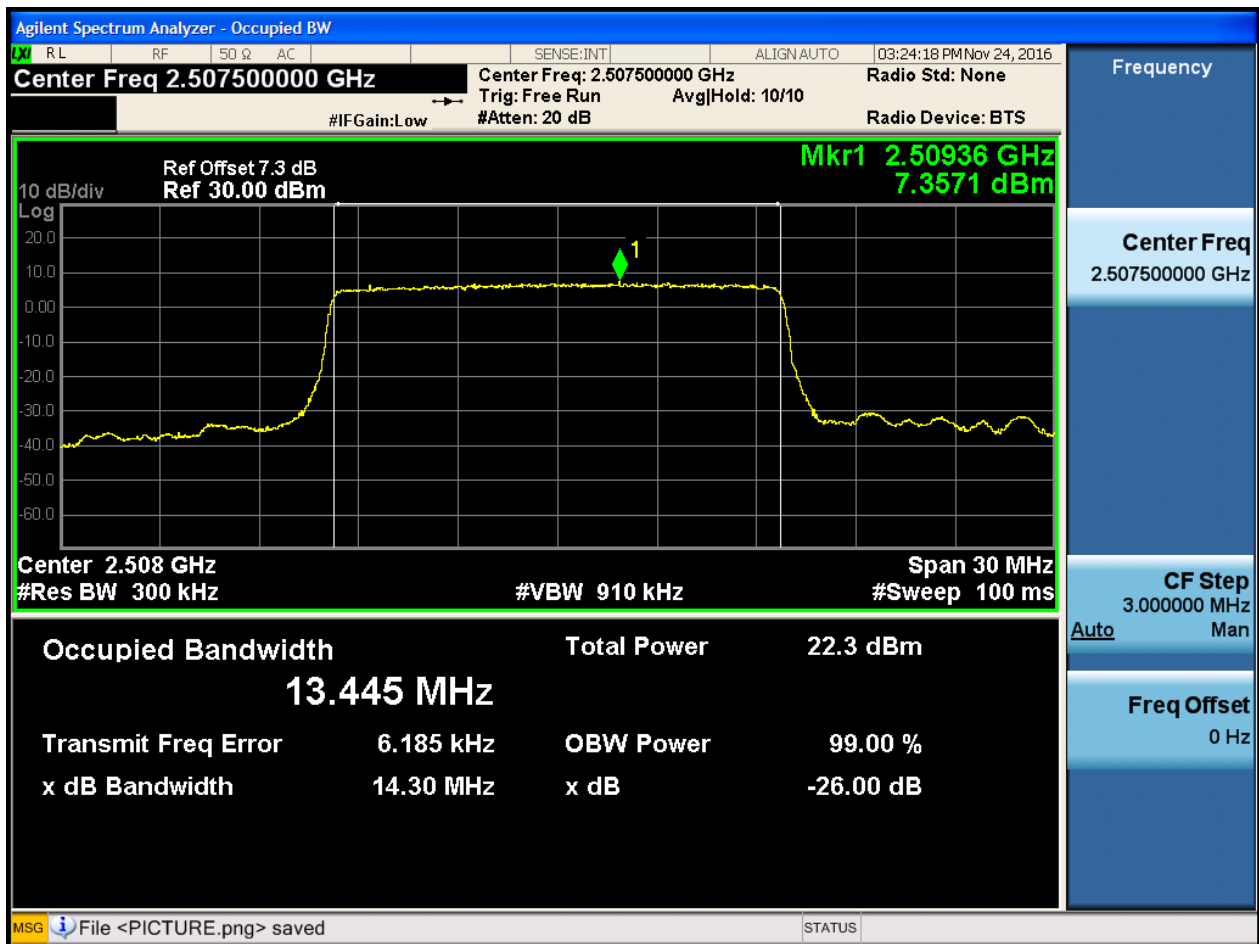




4.1.1.1.3 Test Bandwidth = 15

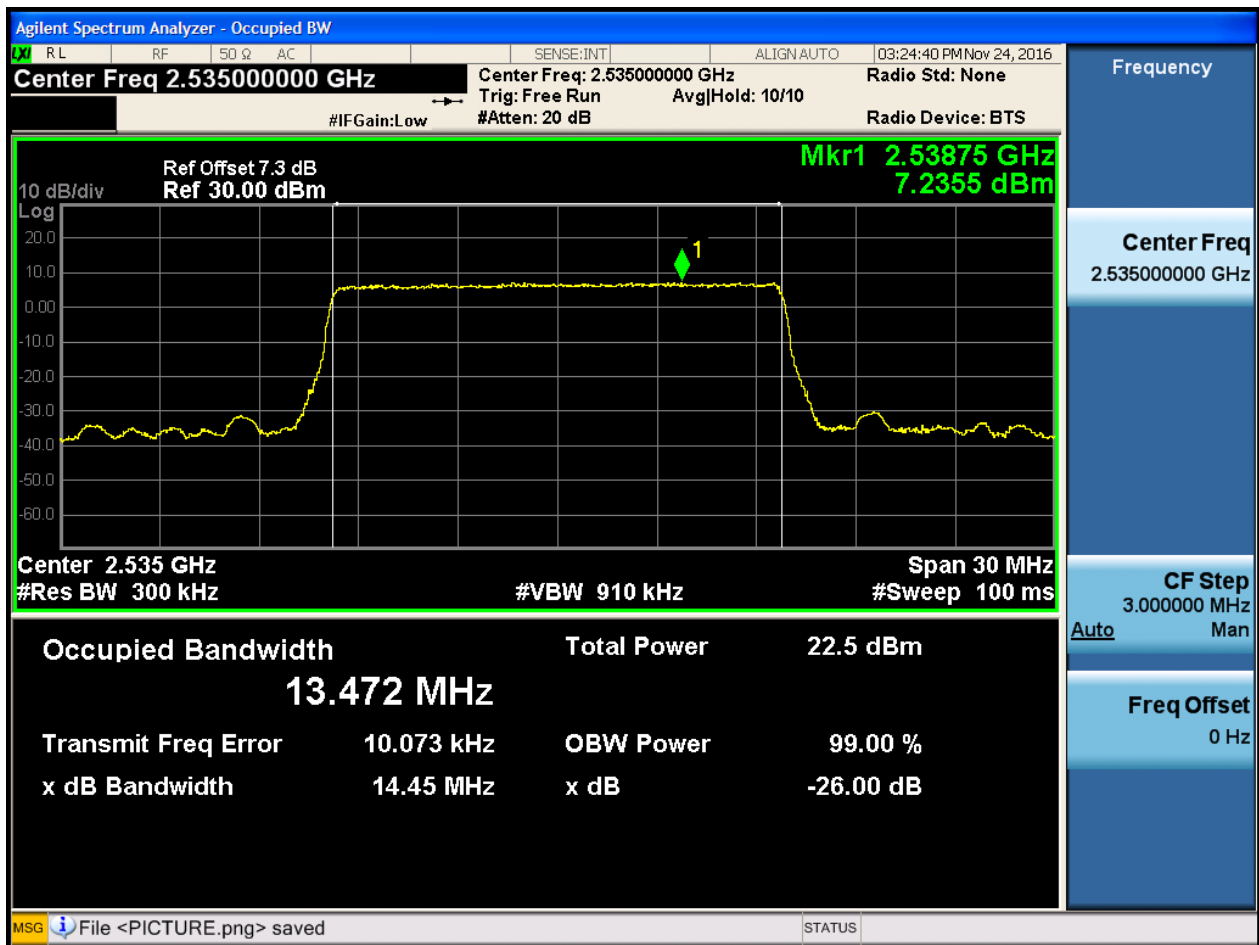
4.1.1.1.3.1 Test Channel = LCH

4.1.1.1.3.1.1 Test RB = RB75#0



4.1.1.1.3.2 Test Channel = MCH

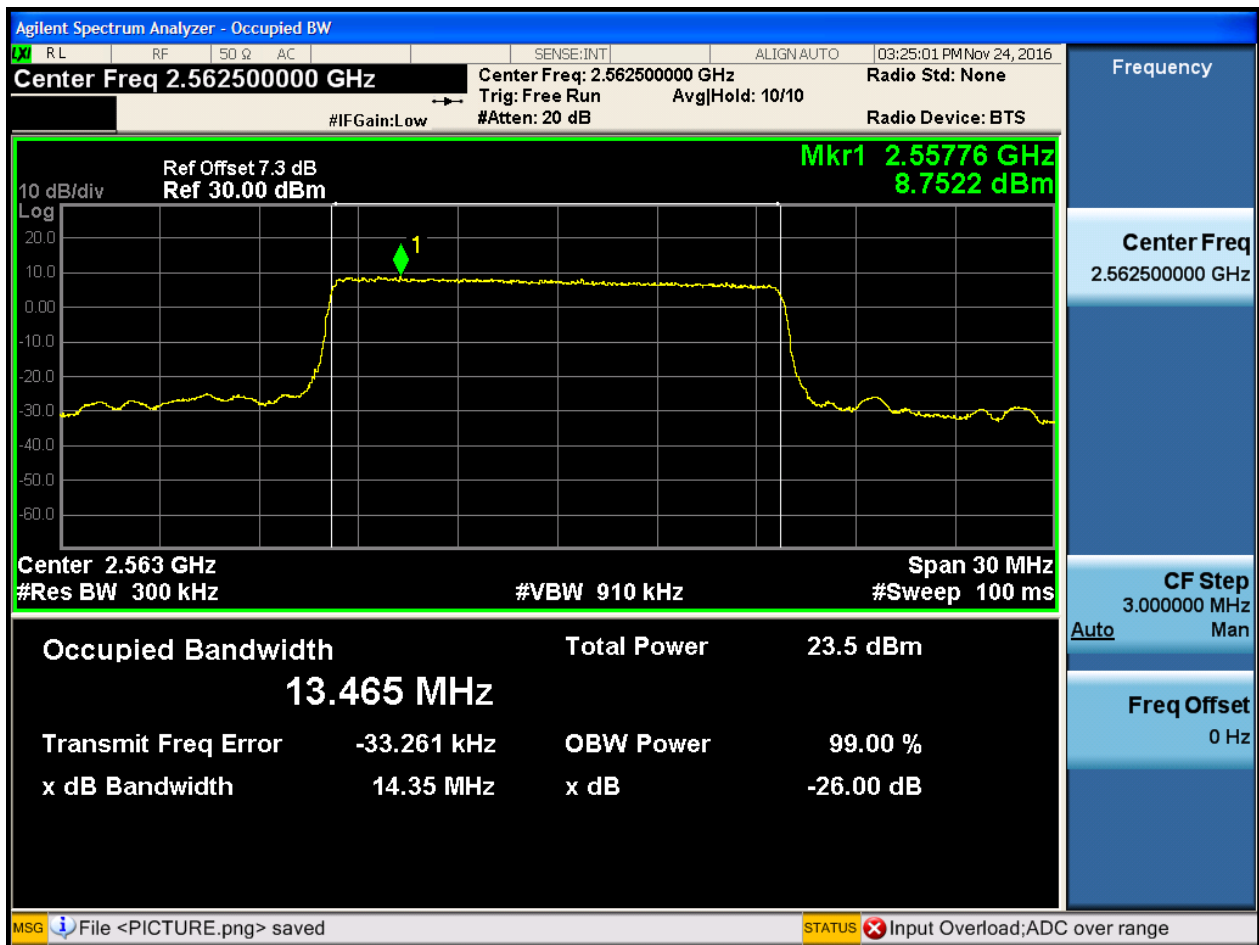
4.1.1.1.3.2.1 Test RB = RB75#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB75#0

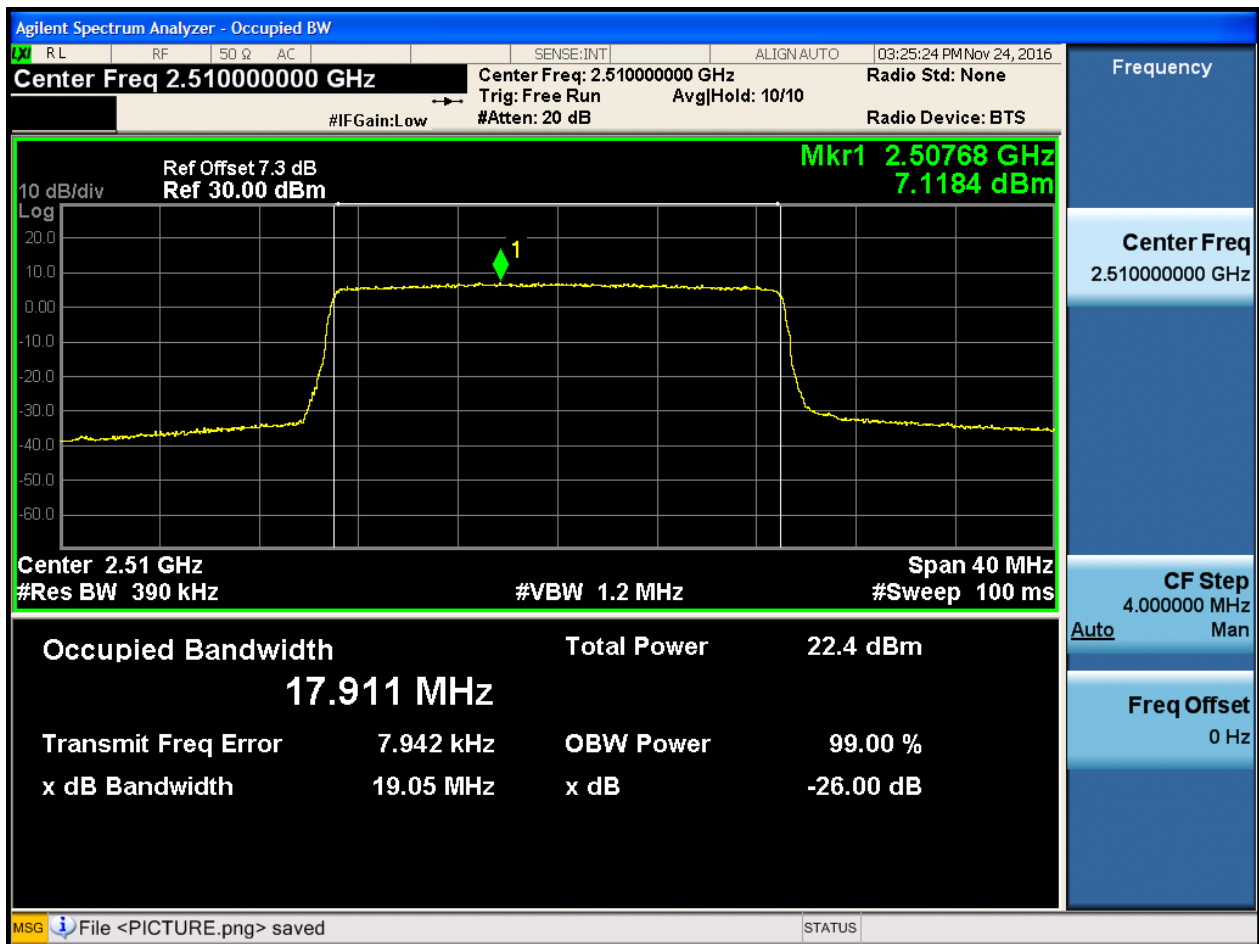




4.1.1.1.4 Test Bandwidth = 20

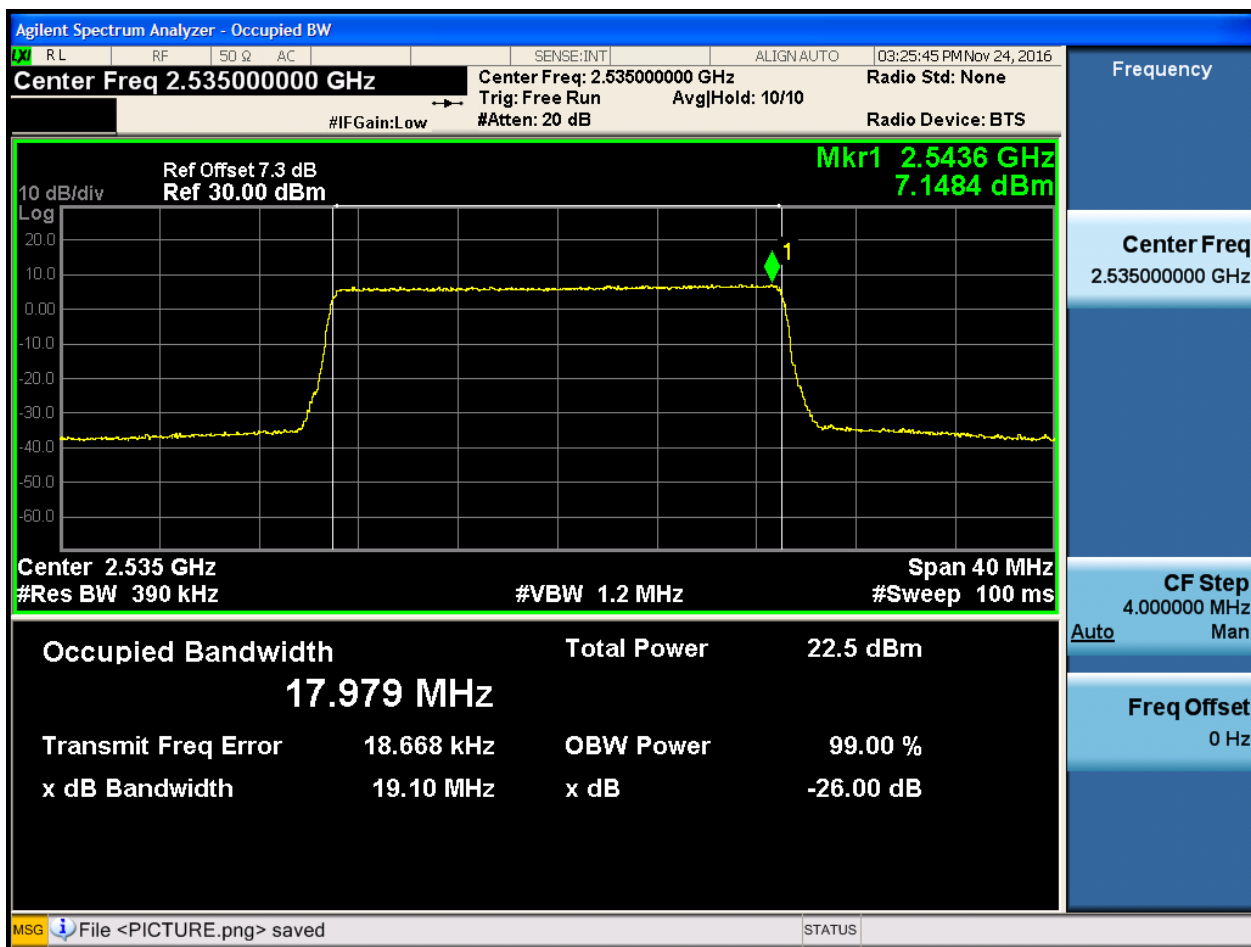
4.1.1.1.4.1 Test Channel = LCH

4.1.1.1.4.1.1 Test RB = RB100#0



4.1.1.1.4.2 Test Channel = MCH

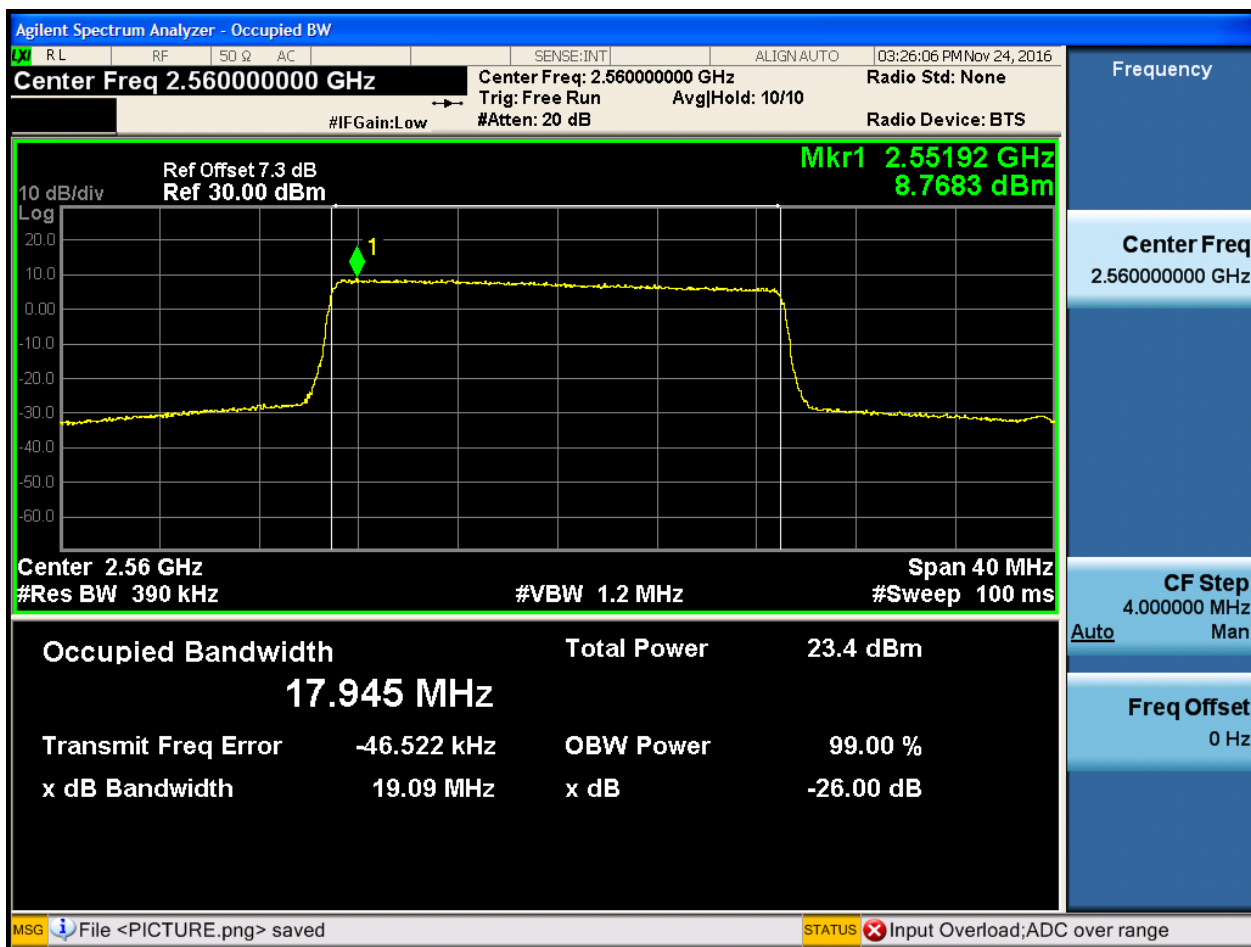
4.1.1.1.4.2.1 Test RB = RB100#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB100#0



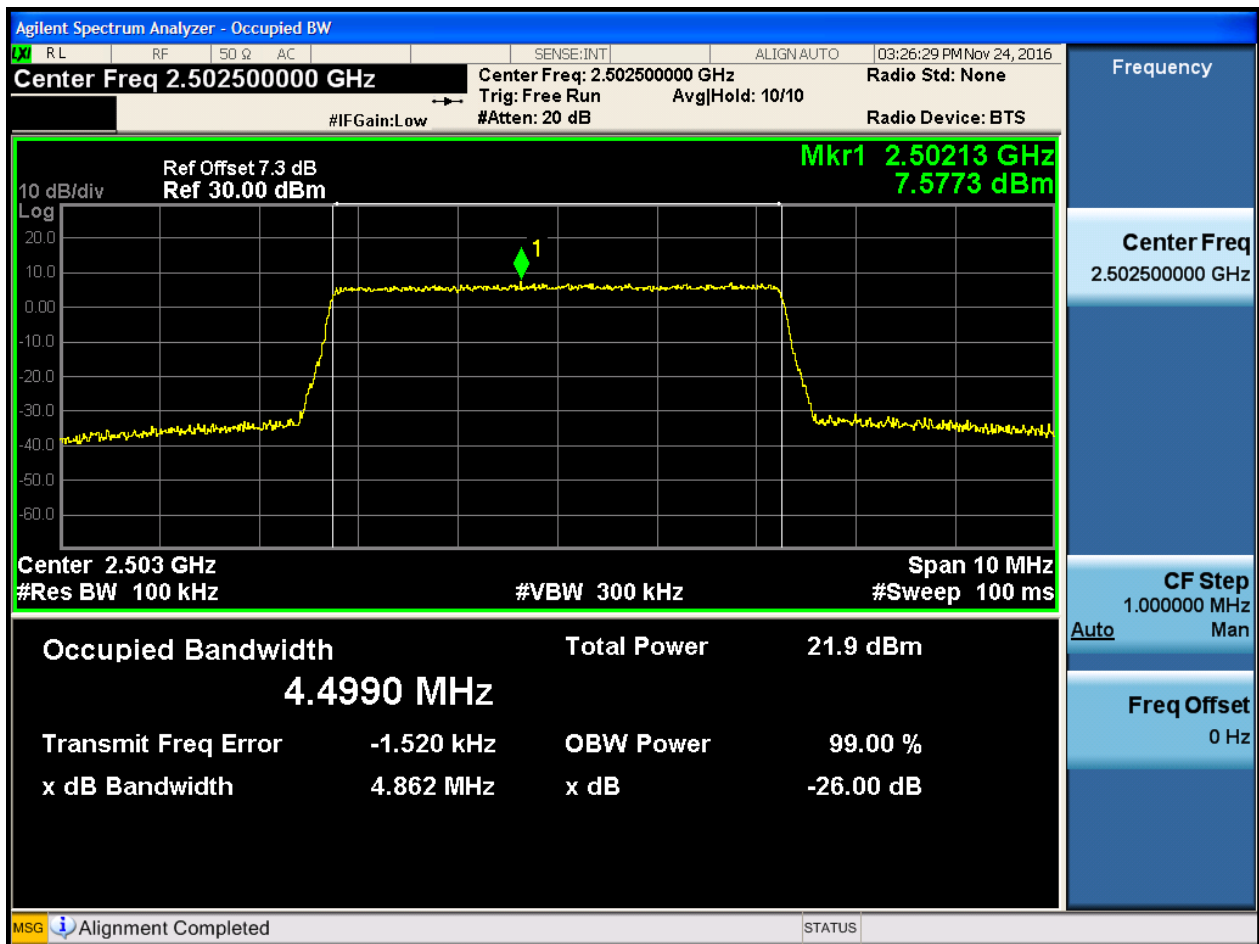


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

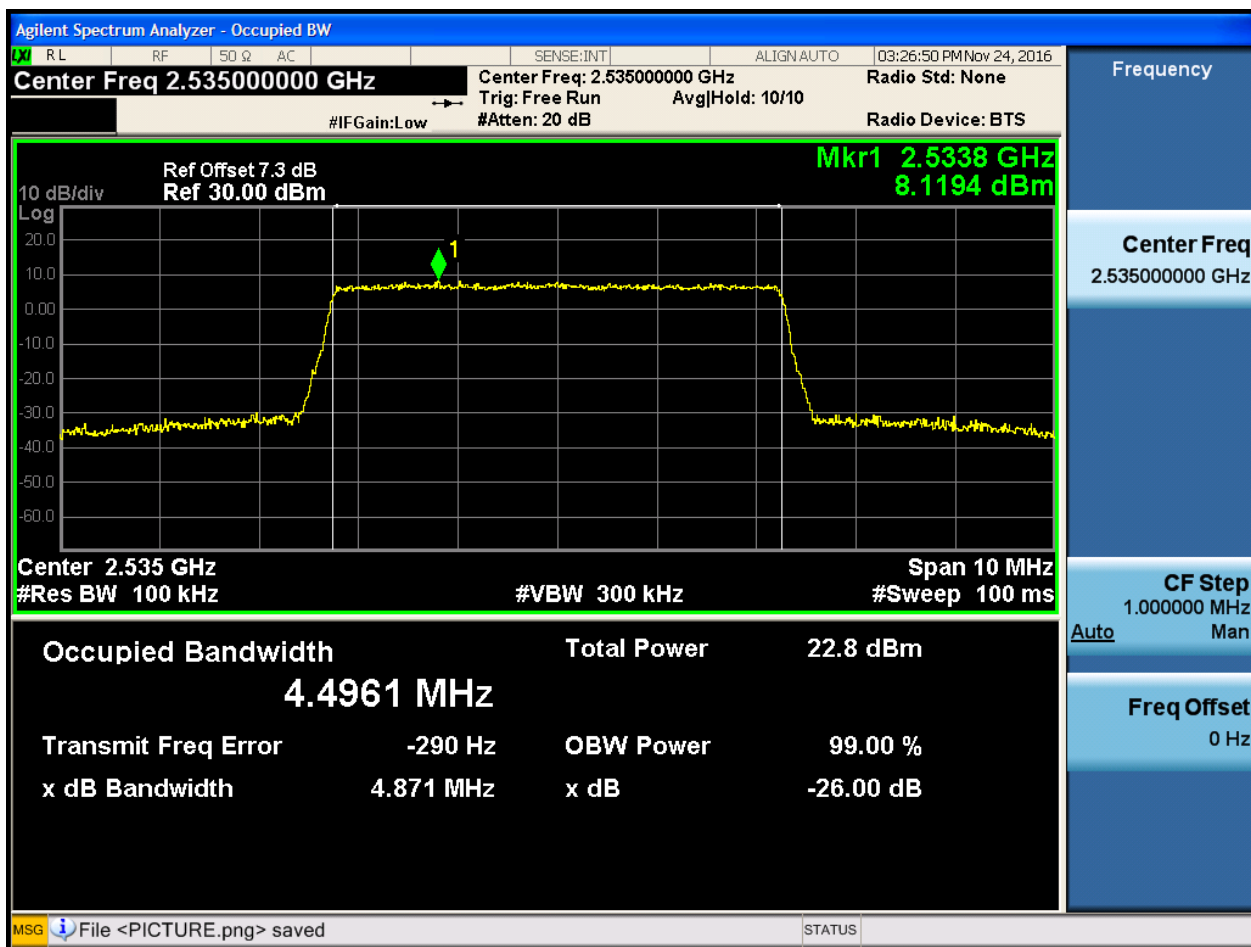
4.1.1.2.1.1 Test Channel = LCH

4.1.1.2.1.1.1 Test RB = RB25#0



4.1.1.2.1.2 Test Channel = MCH

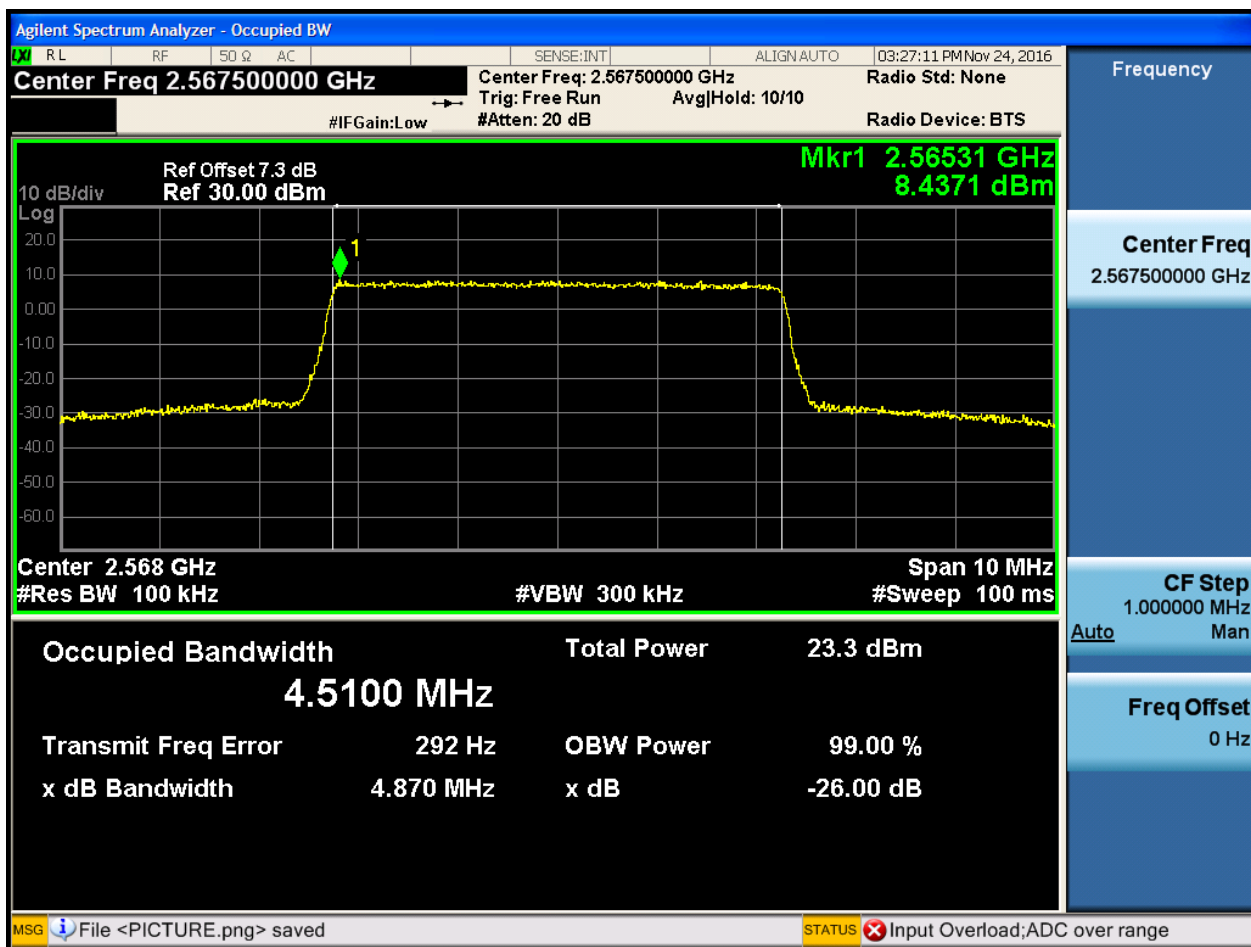
4.1.1.2.1.2.1 Test RB = RB25#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

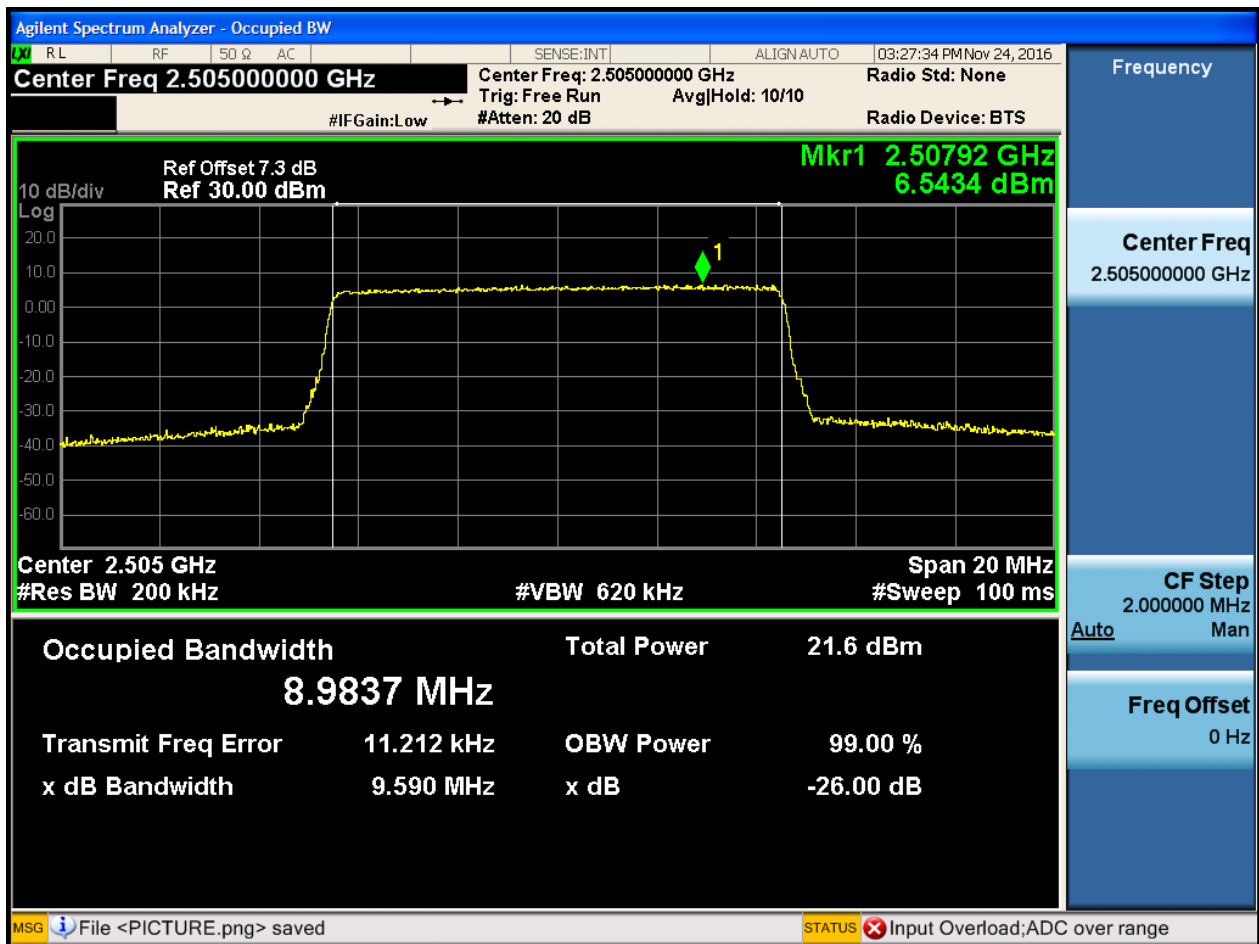




4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

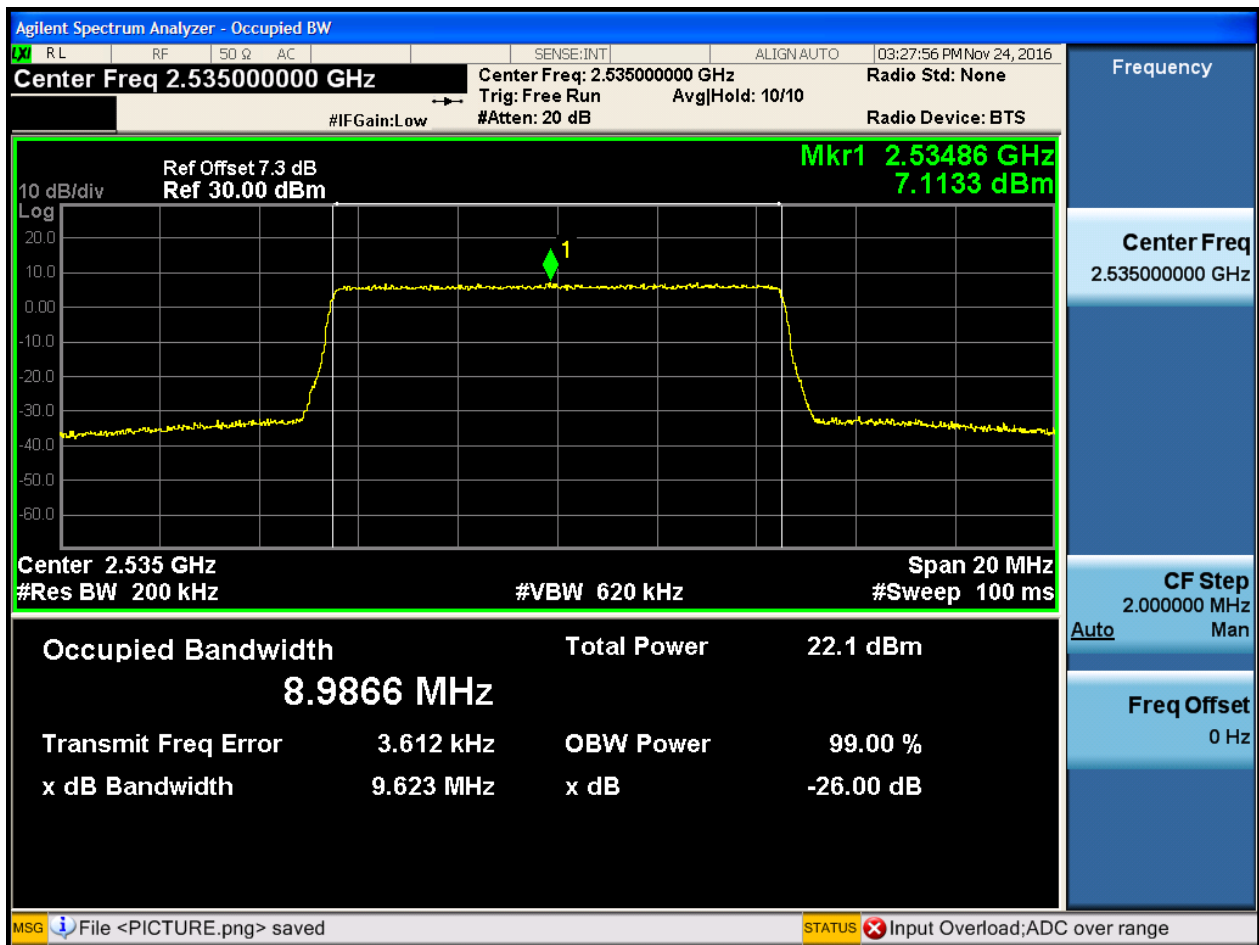
4.1.1.2.2.1.1 Test RB = RB50#0





4.1.1.2.2.2 Test Channel = MCH

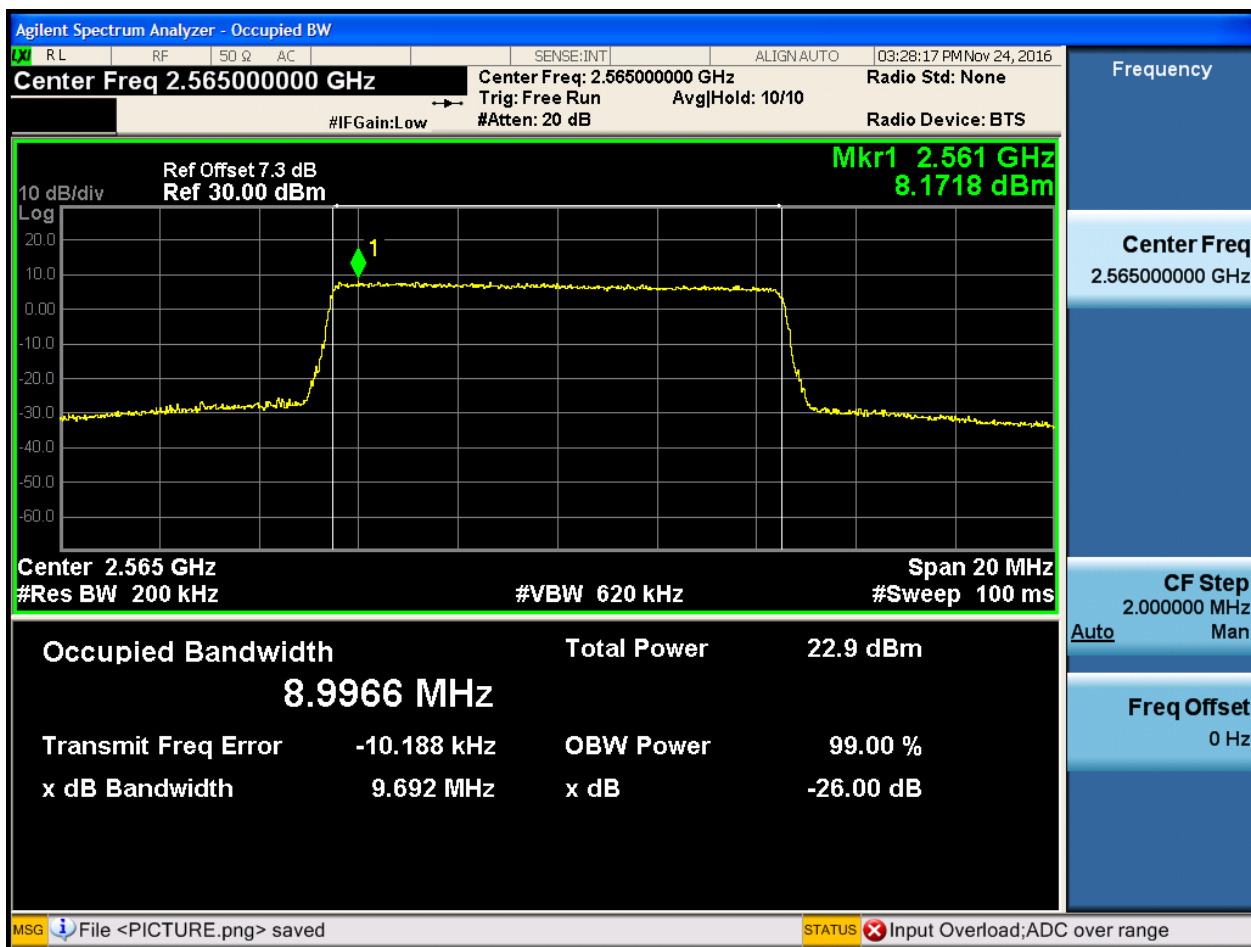
4.1.1.2.2.2.1 Test RB = RB50#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0

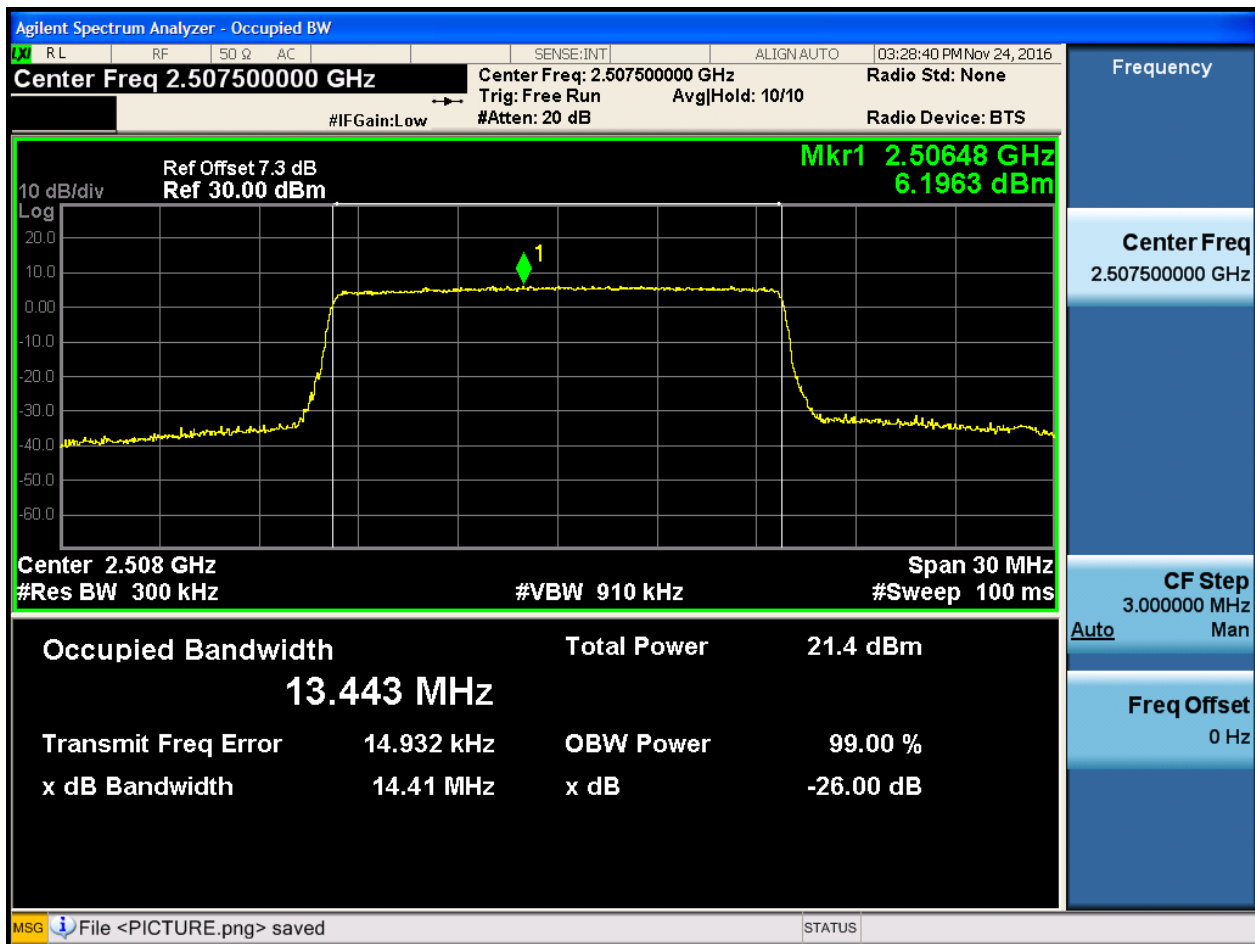




4.1.1.2.3 Test Bandwidth = 15

4.1.1.2.3.1 Test Channel = LCH

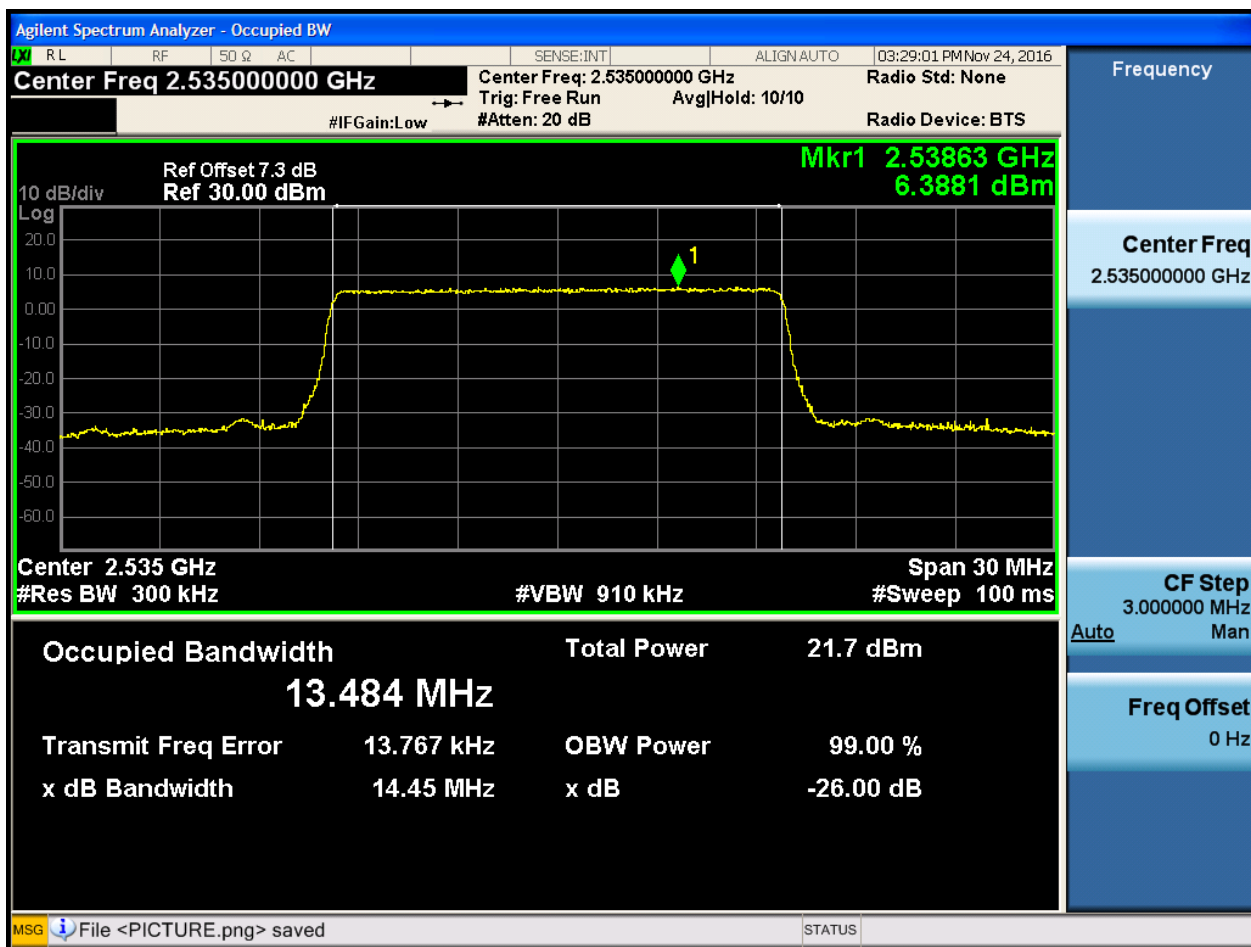
4.1.1.2.3.1.1 Test RB = RB75#0





4.1.1.2.3.2 Test Channel = MCH

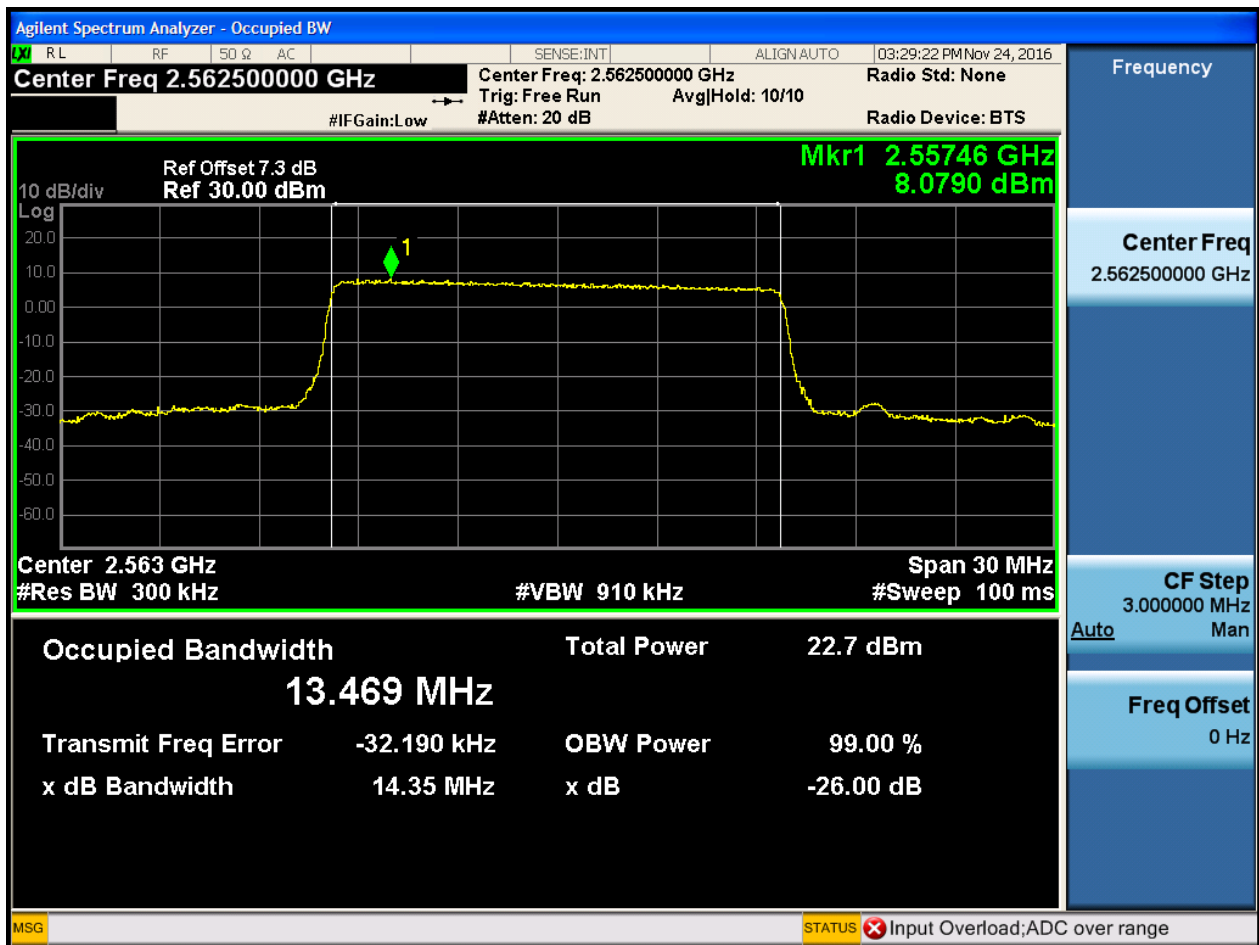
4.1.1.2.3.2.1 Test RB = RB75#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB75#0

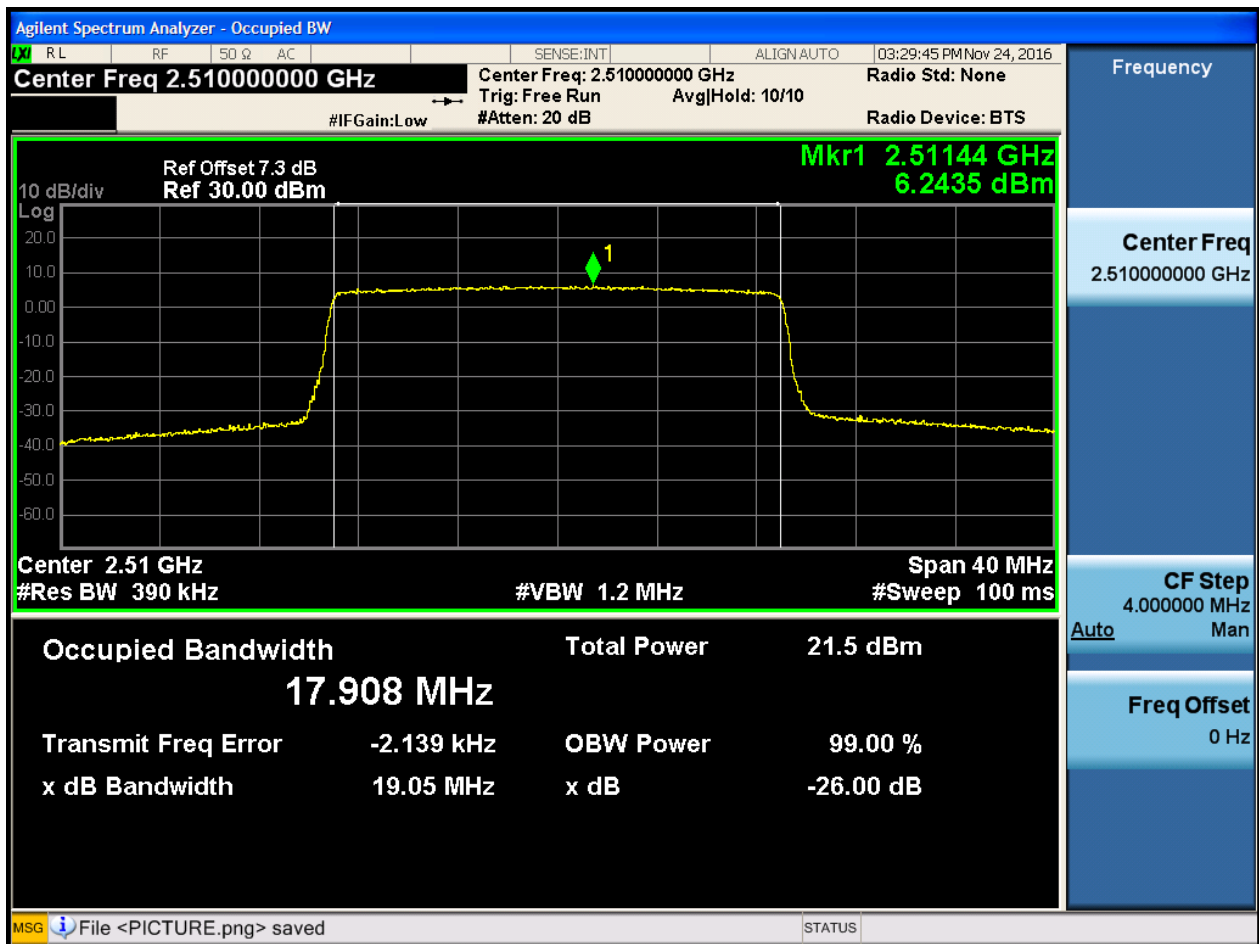




4.1.1.2.4 Test Bandwidth = 20

4.1.1.2.4.1 Test Channel = LCH

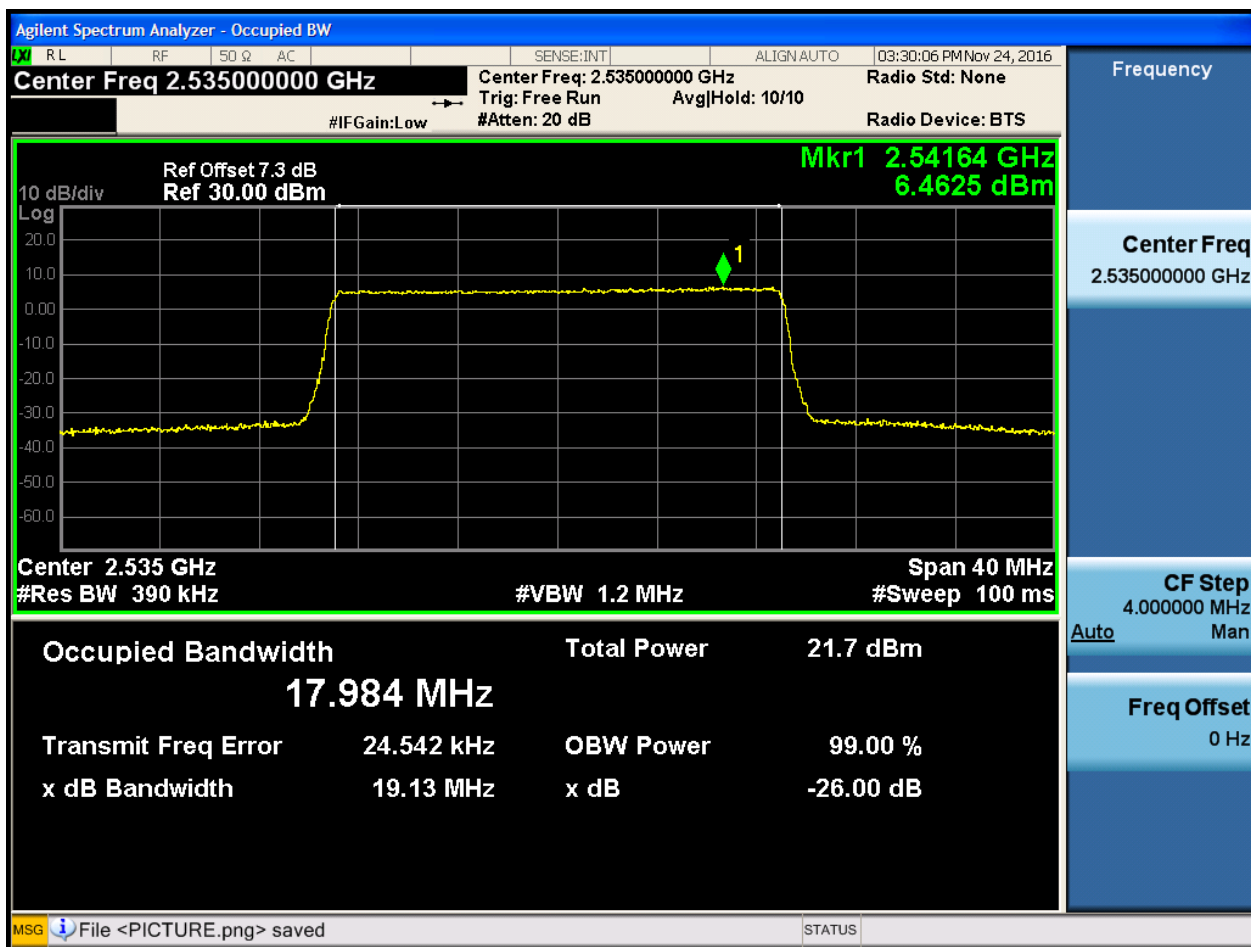
4.1.1.2.4.1.1 Test RB = RB100#0





4.1.1.2.4.2 Test Channel = MCH

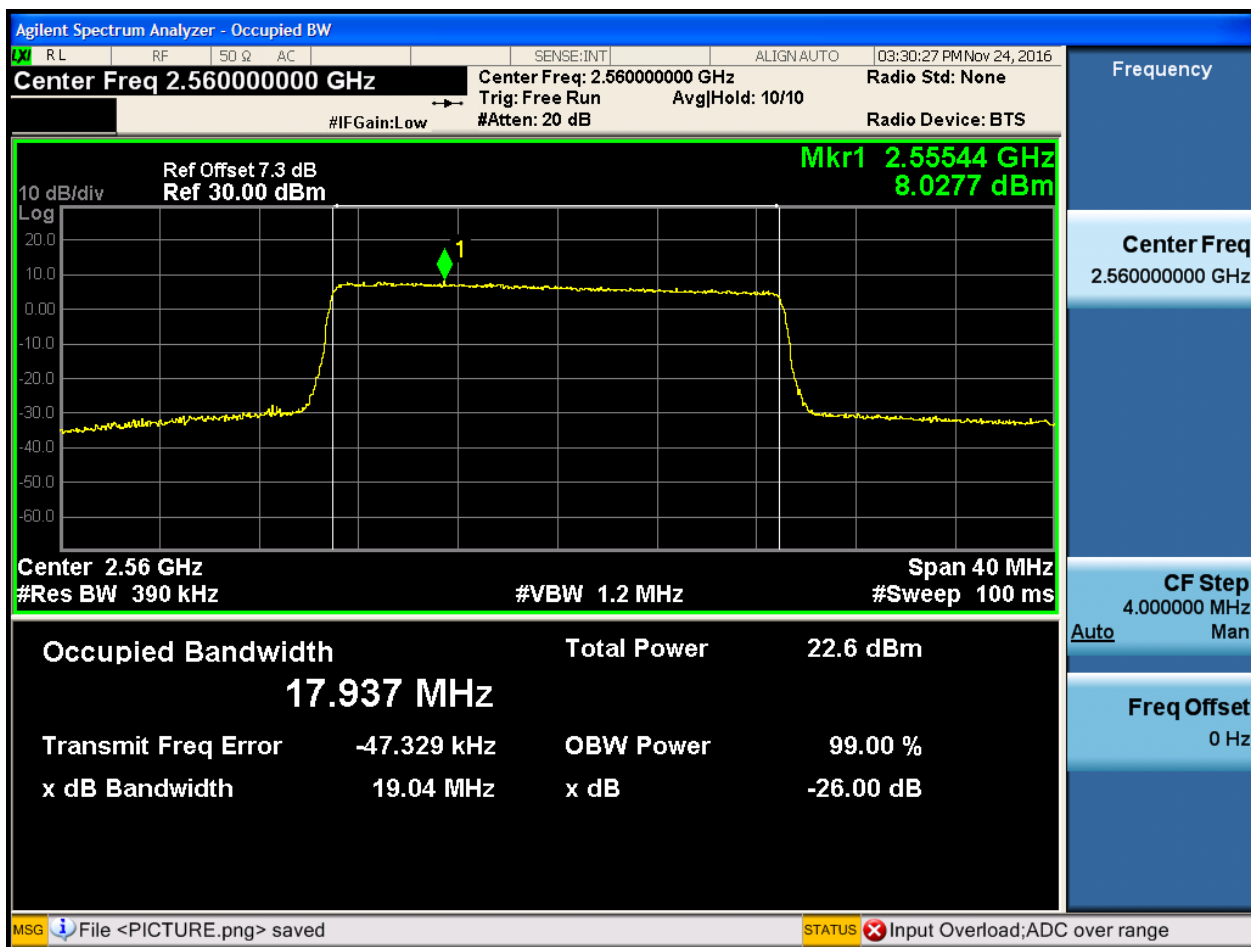
4.1.1.2.4.2.1 Test RB = RB100#0





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

5.2 For LTE

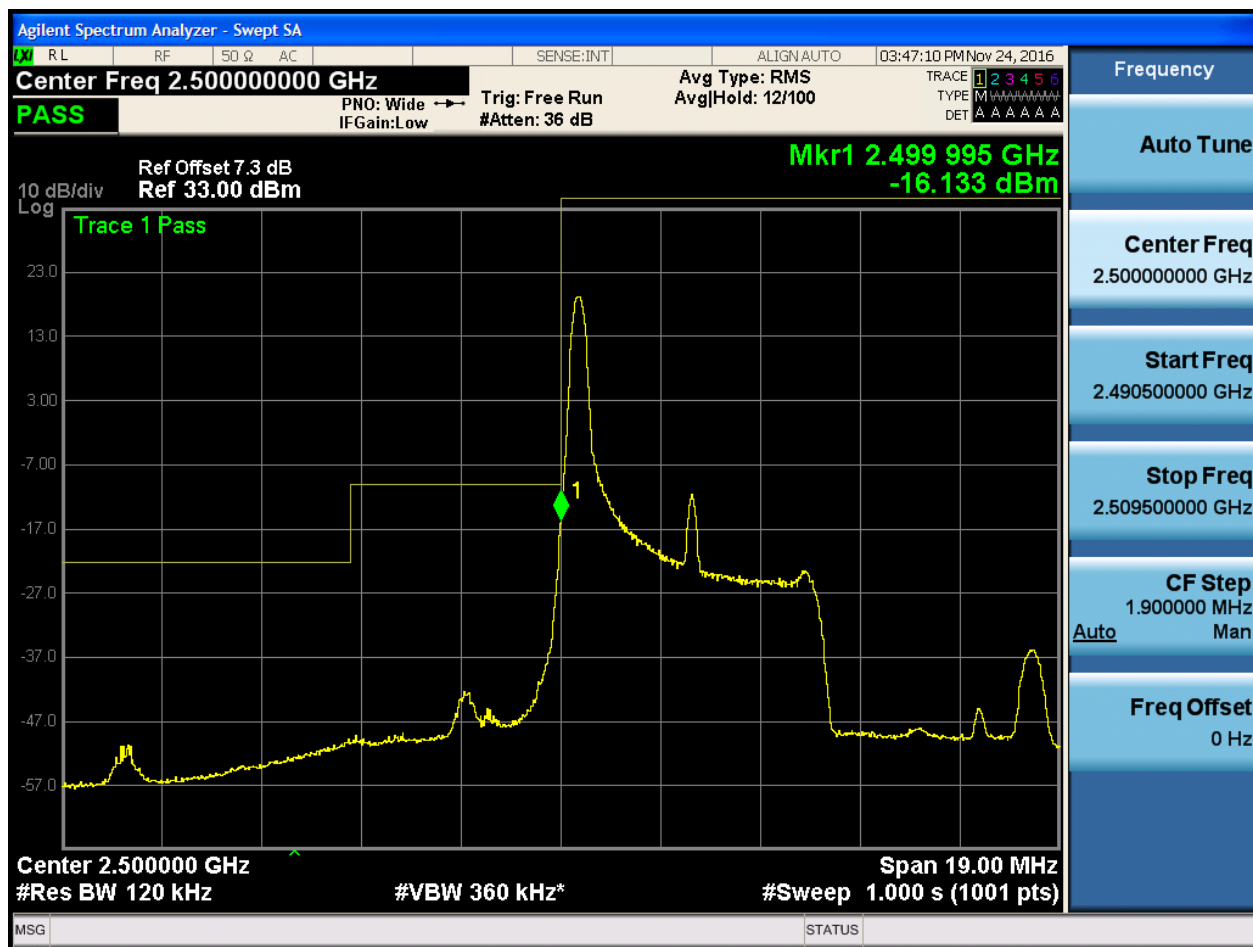
5.2.1 Test Band = BAND7

5.2.1.1 Test Mode = LTE/TM1

5.2.1.1.1 Test Bandwidth = 5

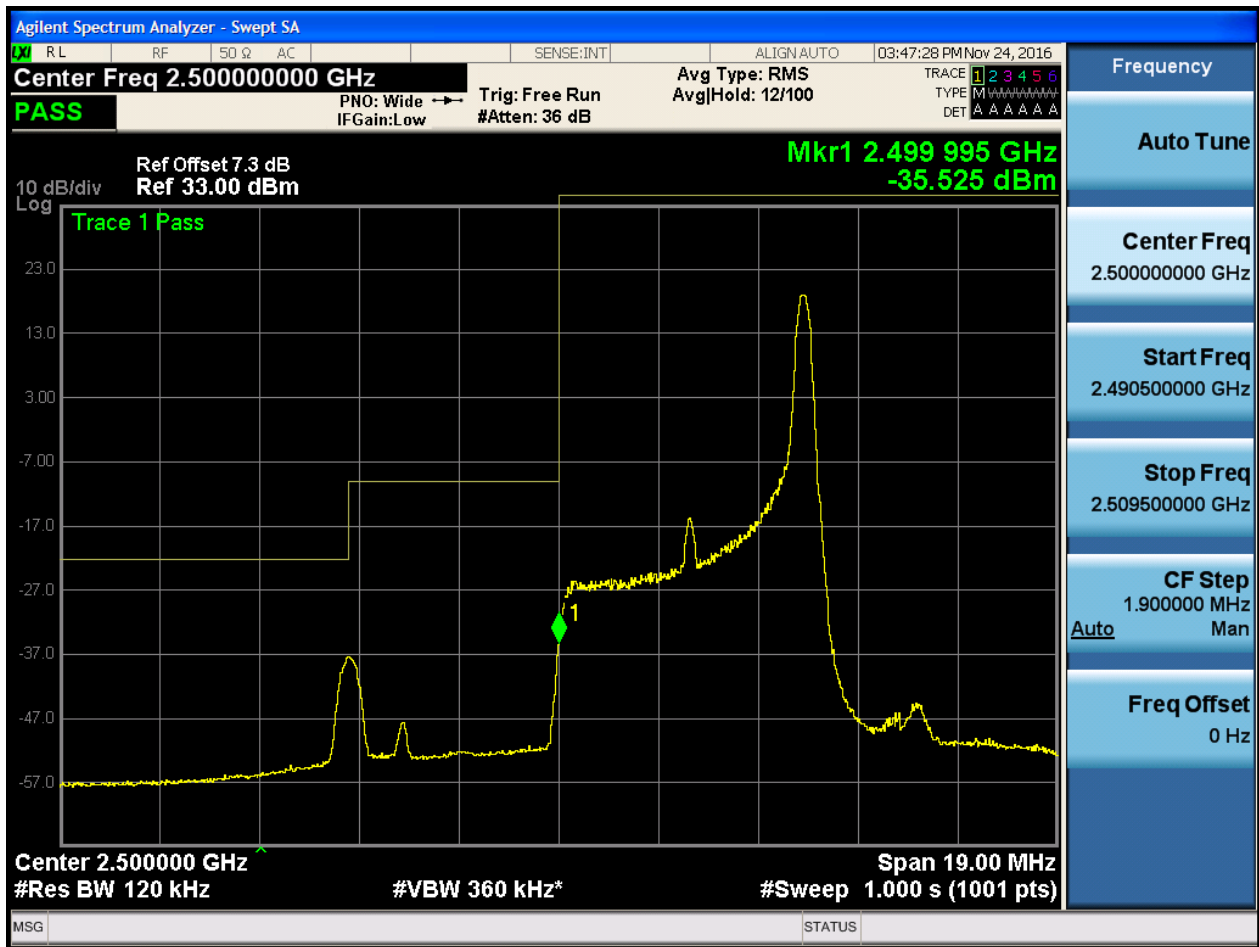
5.2.1.1.1.1 Test Channel = LCH

5.2.1.1.1.1.1 Test RB = RB1#0



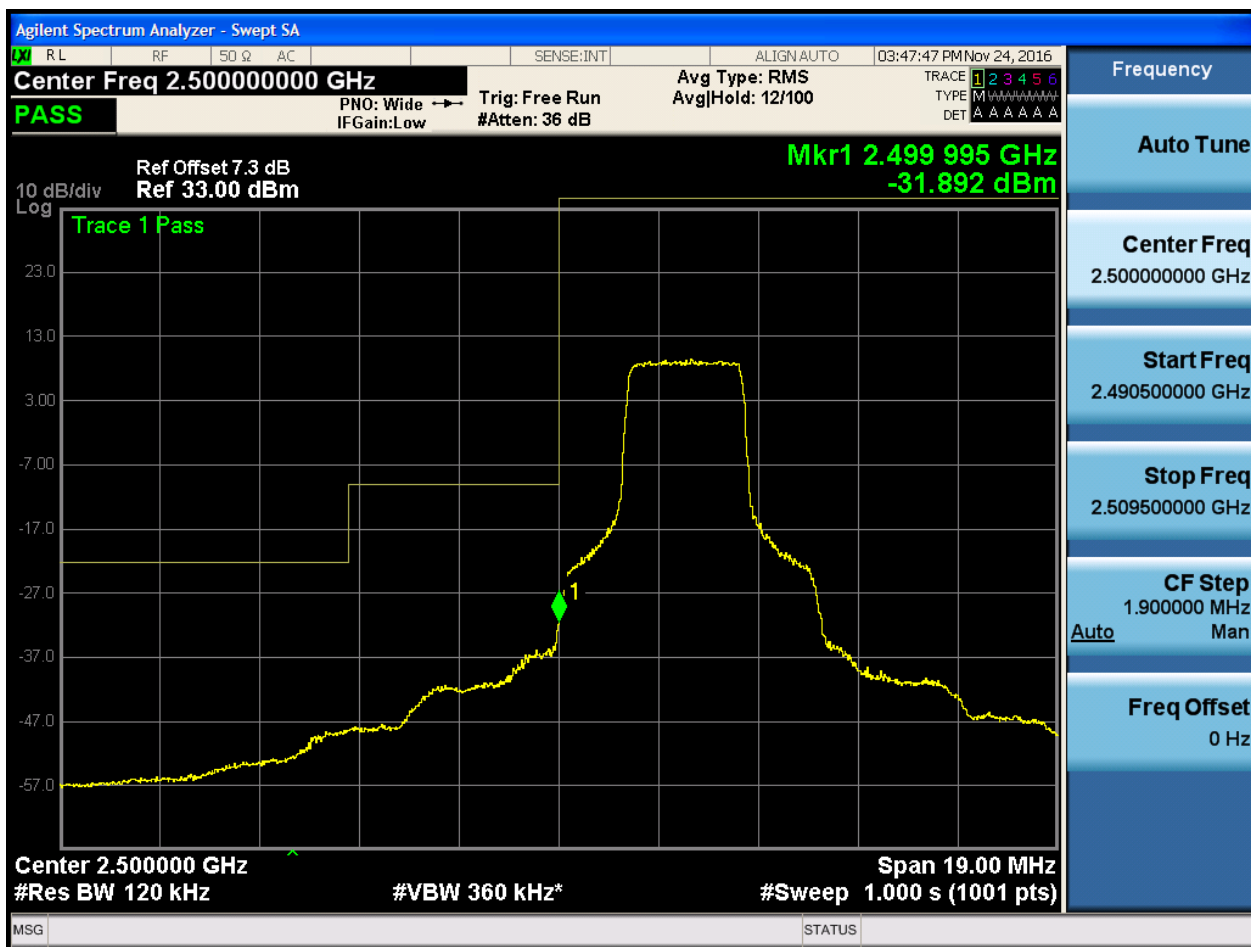


5.2.1.1.1.2 Test RB = RB1#24



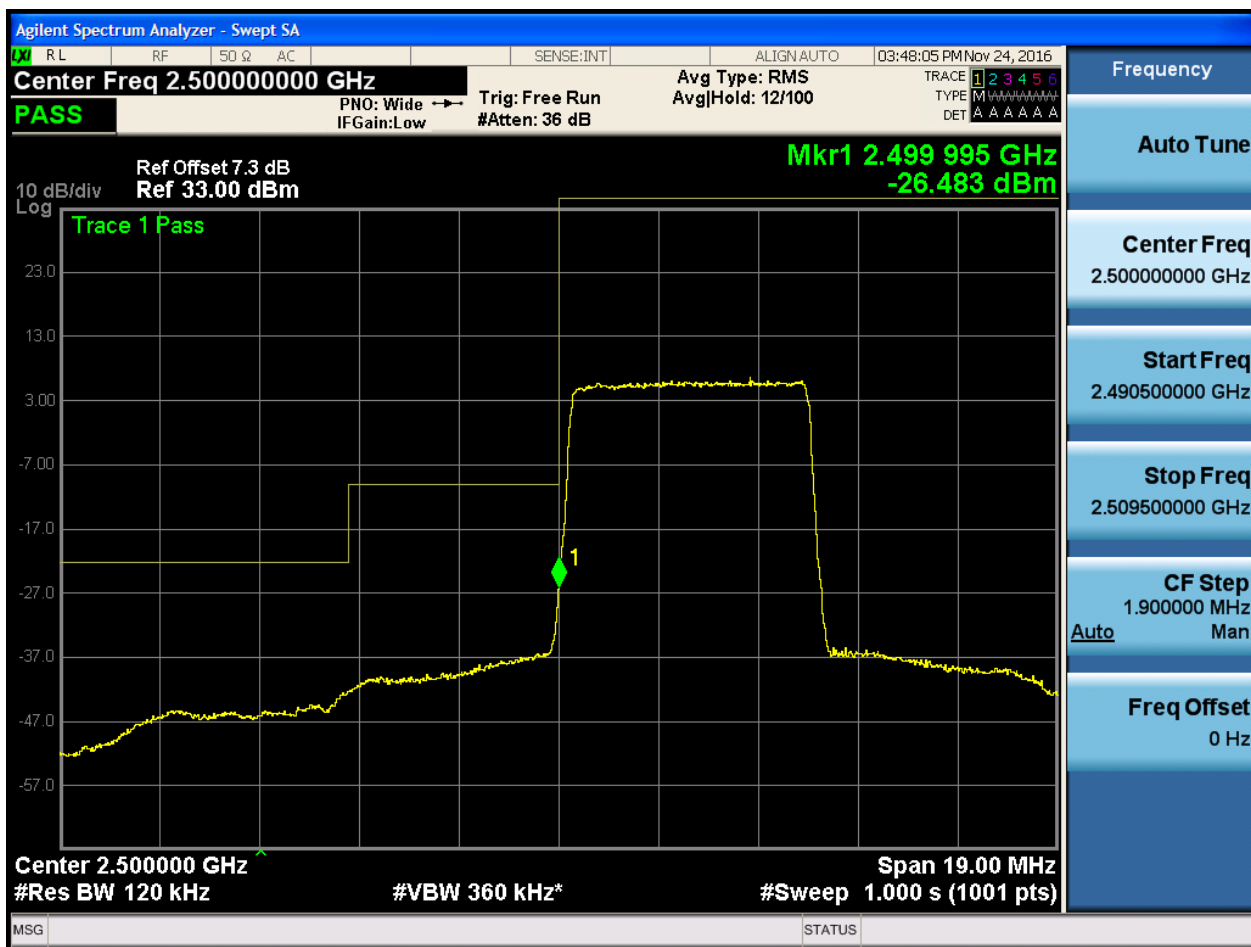


5.2.1.1.1.3 Test RB = RB12#6





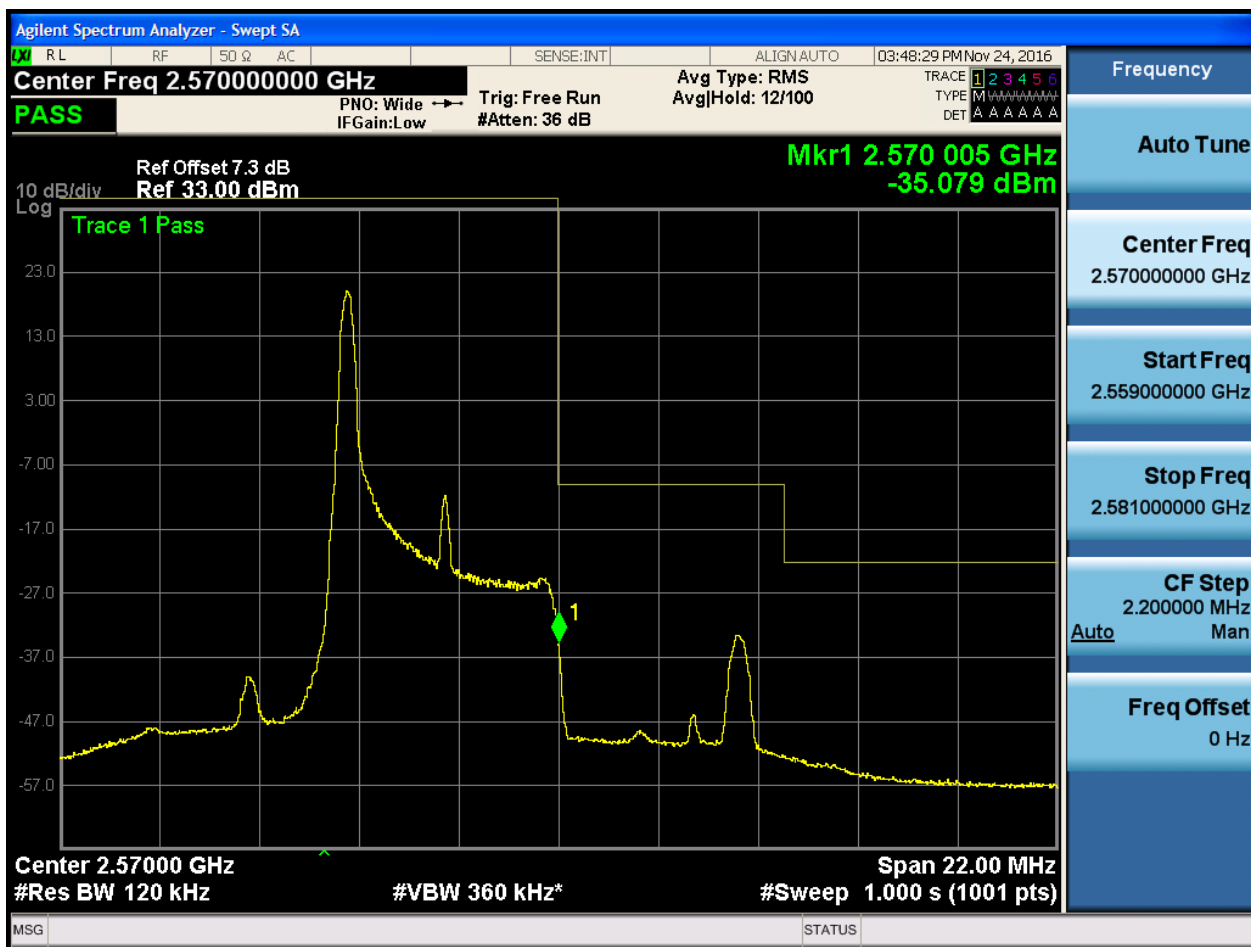
5.2.1.1.1.4 Test RB = RB25#0





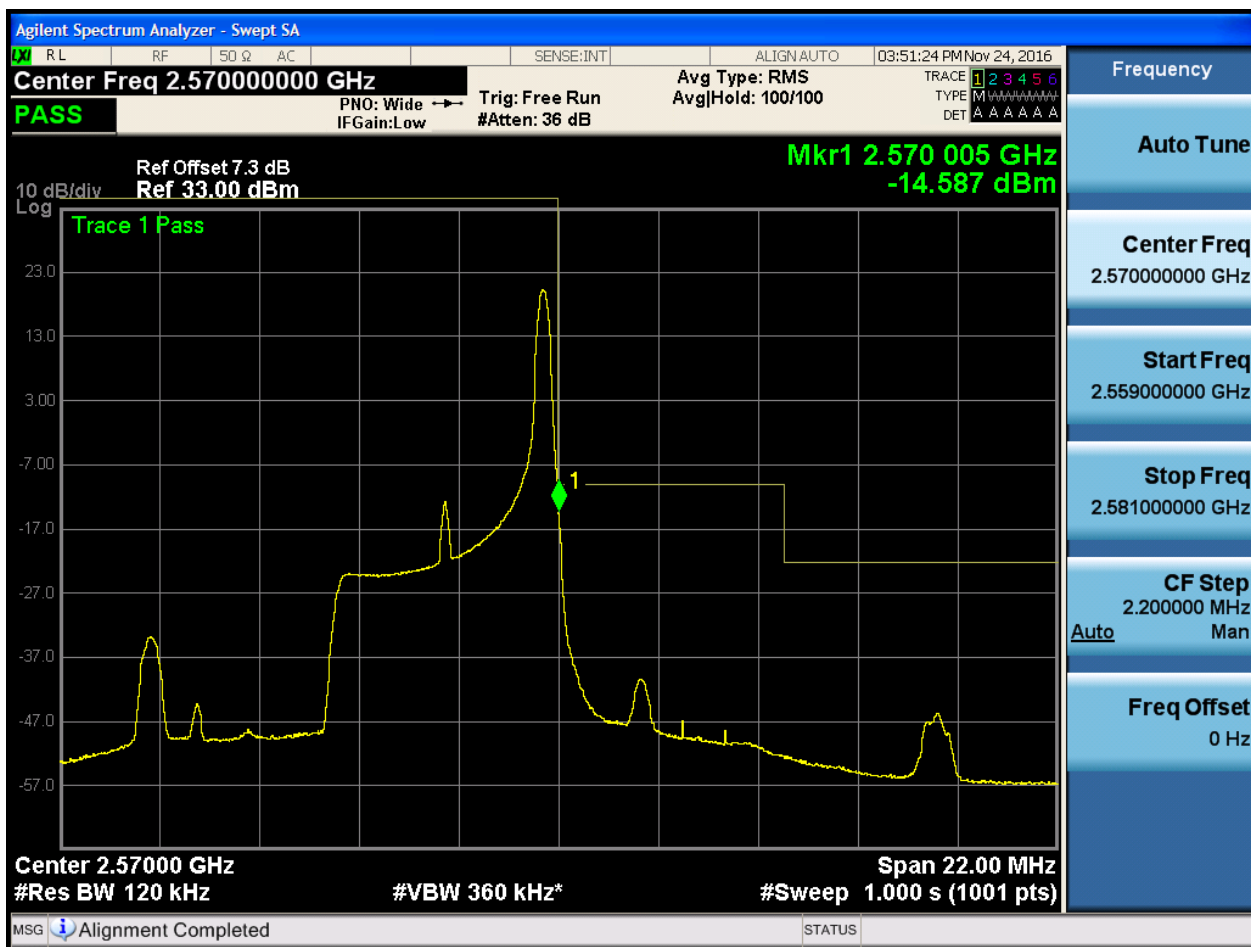
5.2.1.1.1.2 Test Channel = HCH

5.2.1.1.1.2.1 Test RB = RB1#0





5.2.1.1.1.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:51:43 PM Nov 24, 2016

Center Freq 2.57000000 GHz Avg Type: RMS
#Res BW 120 kHz PNO: Wide Trig: Free Run AvgHold: 12/100
IFGain: Low #Atten: 36 dB

PASS

Ref Offset 7.3 dB
Ref 33.00 dBm

Mkr1 2.570 005 GHz
-29.606 dBm

10 dB/div
Log

Trace 1 Pass

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

MSG STATUS

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.559000000 GHz

Stop Freq
2.581000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz



5.2.1.1.1.2.4 Test RB = RB25#0

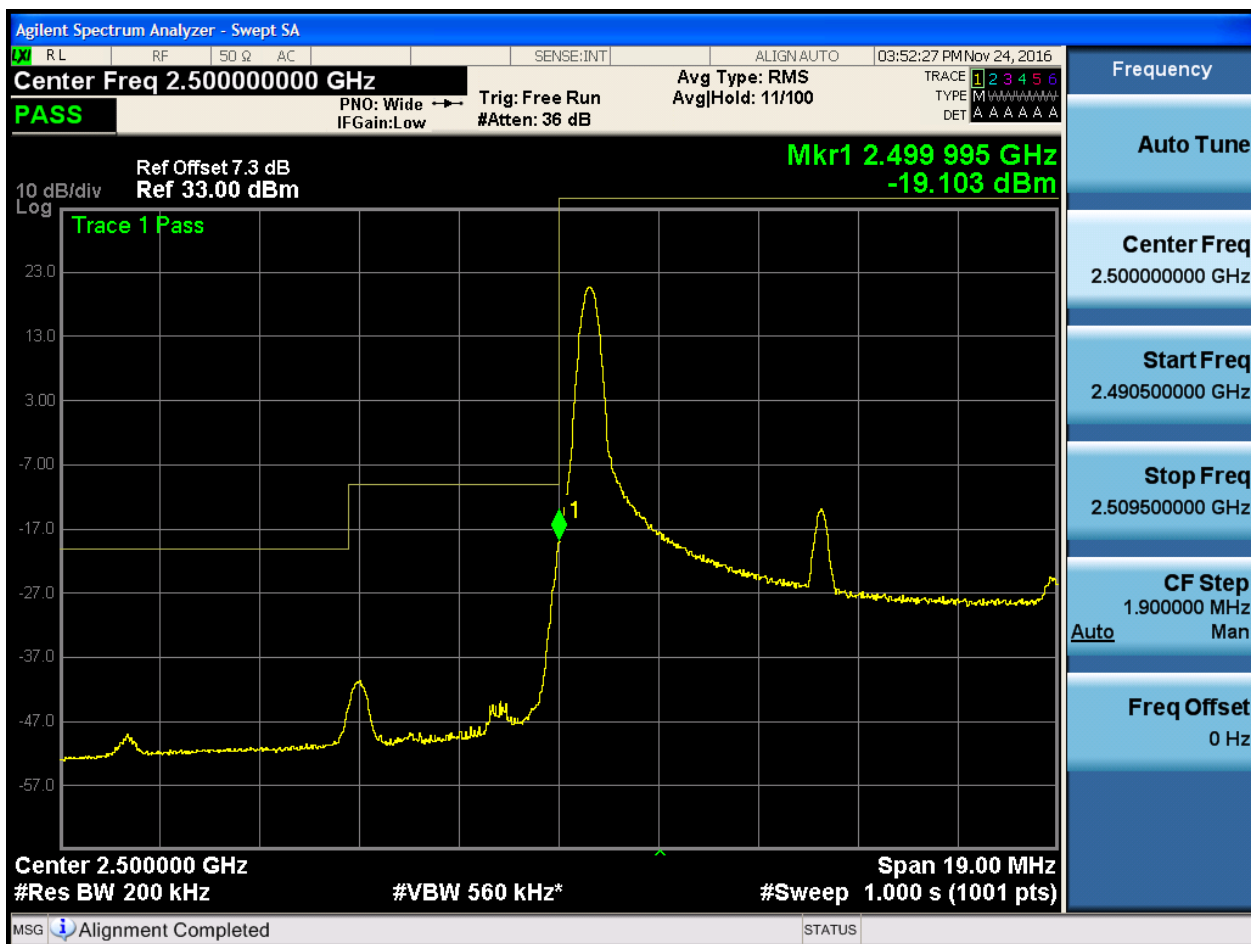




5.2.1.1.2 Test Bandwidth = 10

5.2.1.1.2.1 Test Channel = LCH

5.2.1.1.2.1.1 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

03:52:45 PM Nov 24, 2016

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

Ref Offset 7.3 dB Ref 33.00 dBm

Mkr1 2.499 995 GHz -39.792 dBm

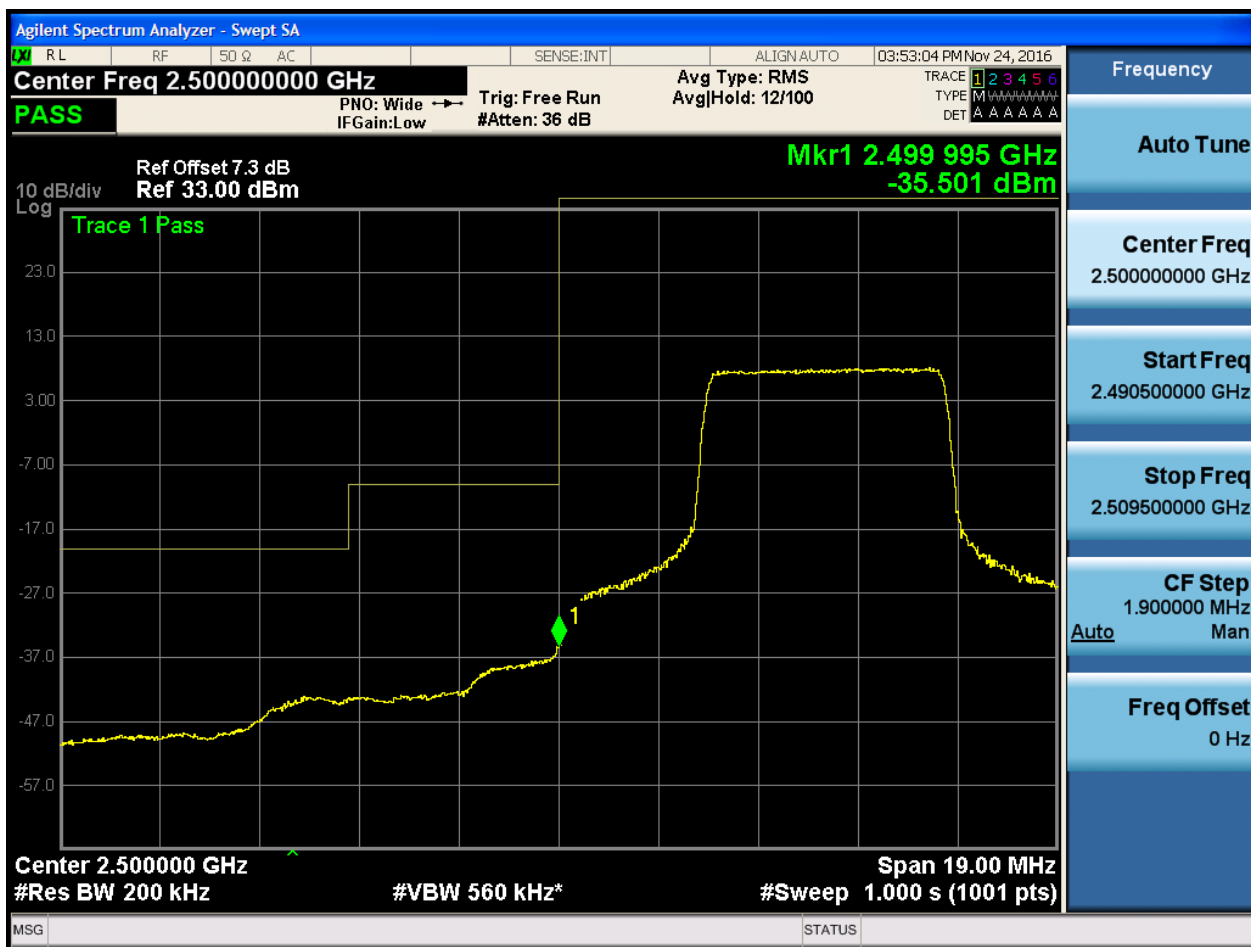
Trace 1 Pass

Center 2.500000 GHz #Res BW 200 kHz #VBW 560 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

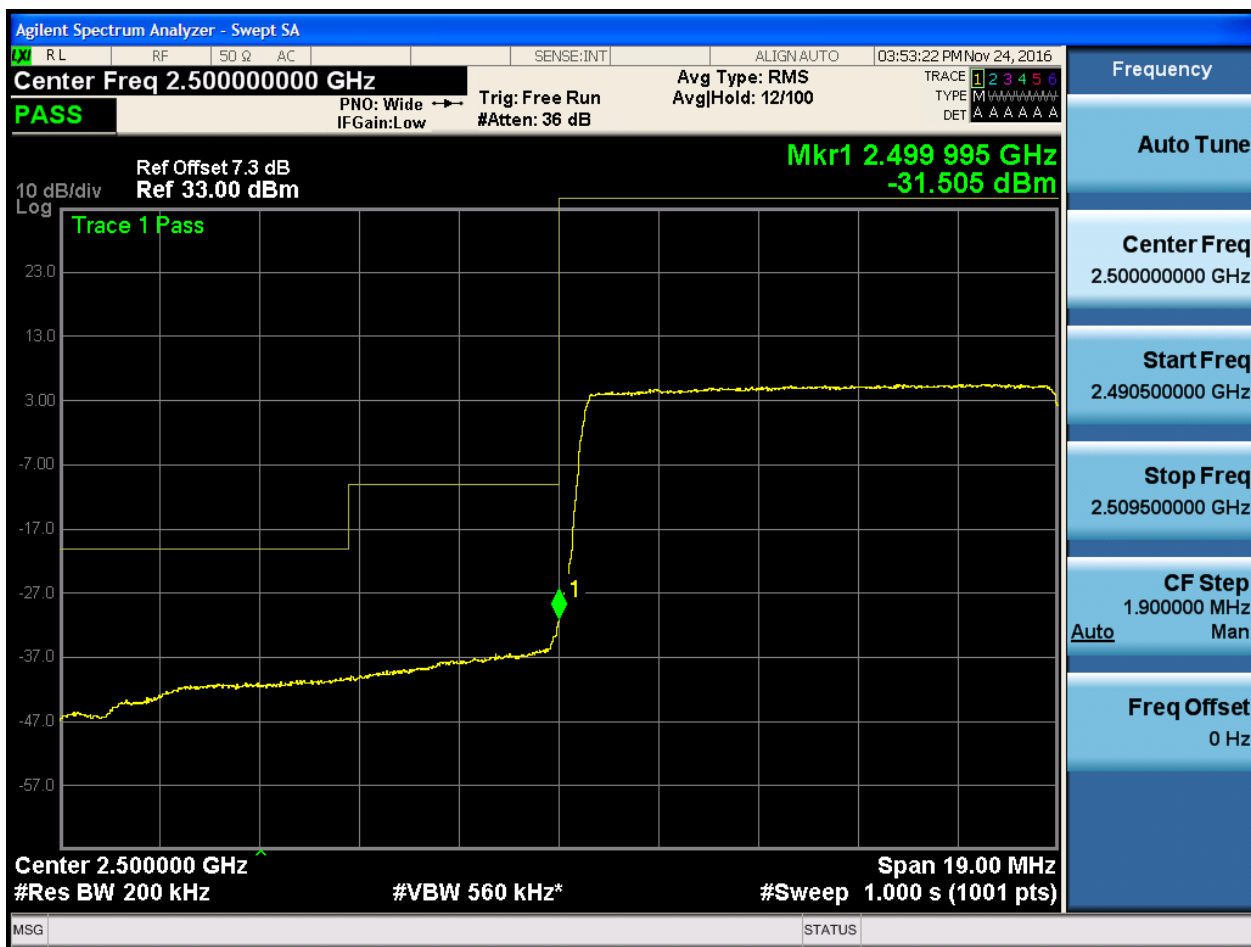


5.2.1.1.2.1.3 Test RB = RB25#13





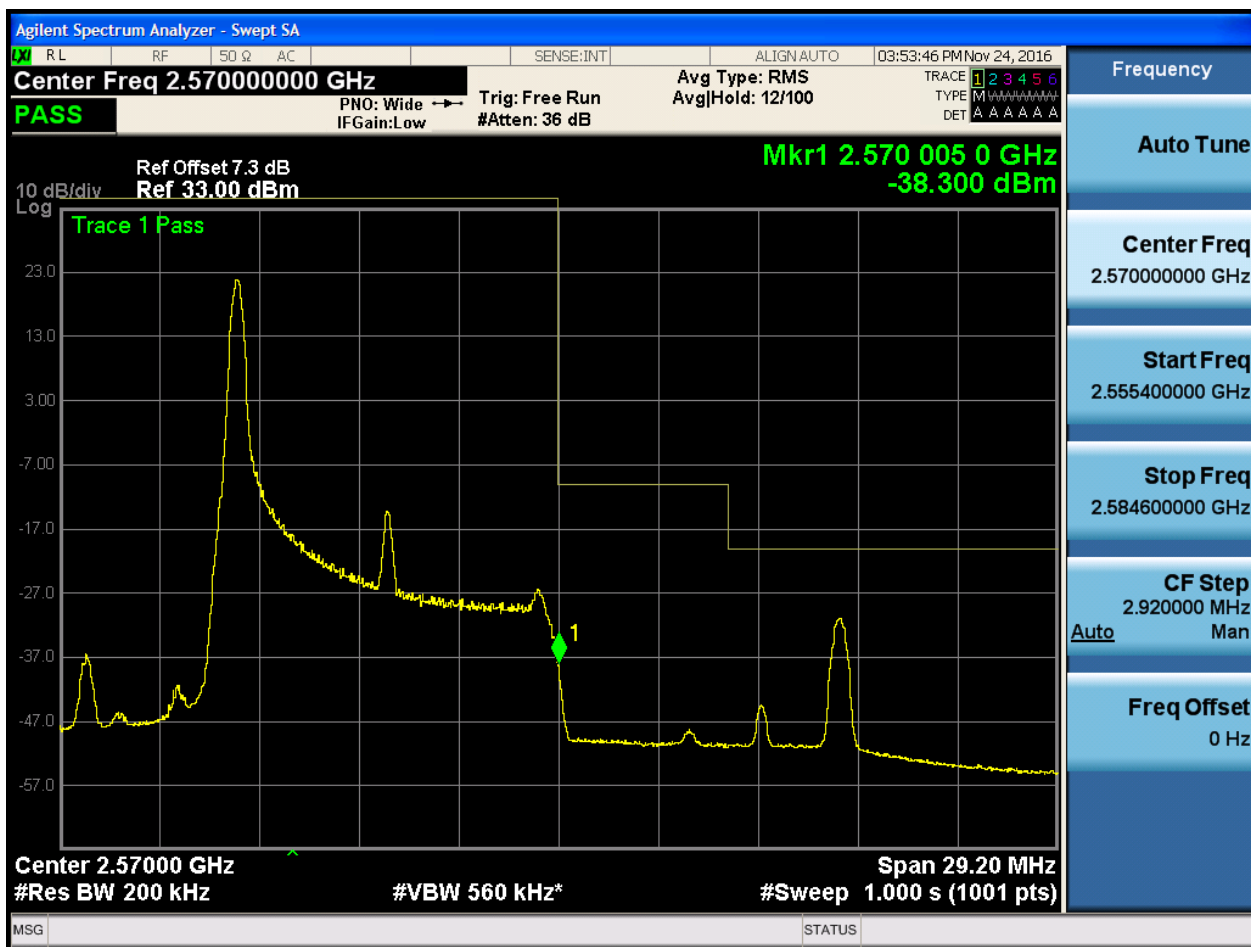
5.2.1.1.2.1.4 Test RB = RB50#0



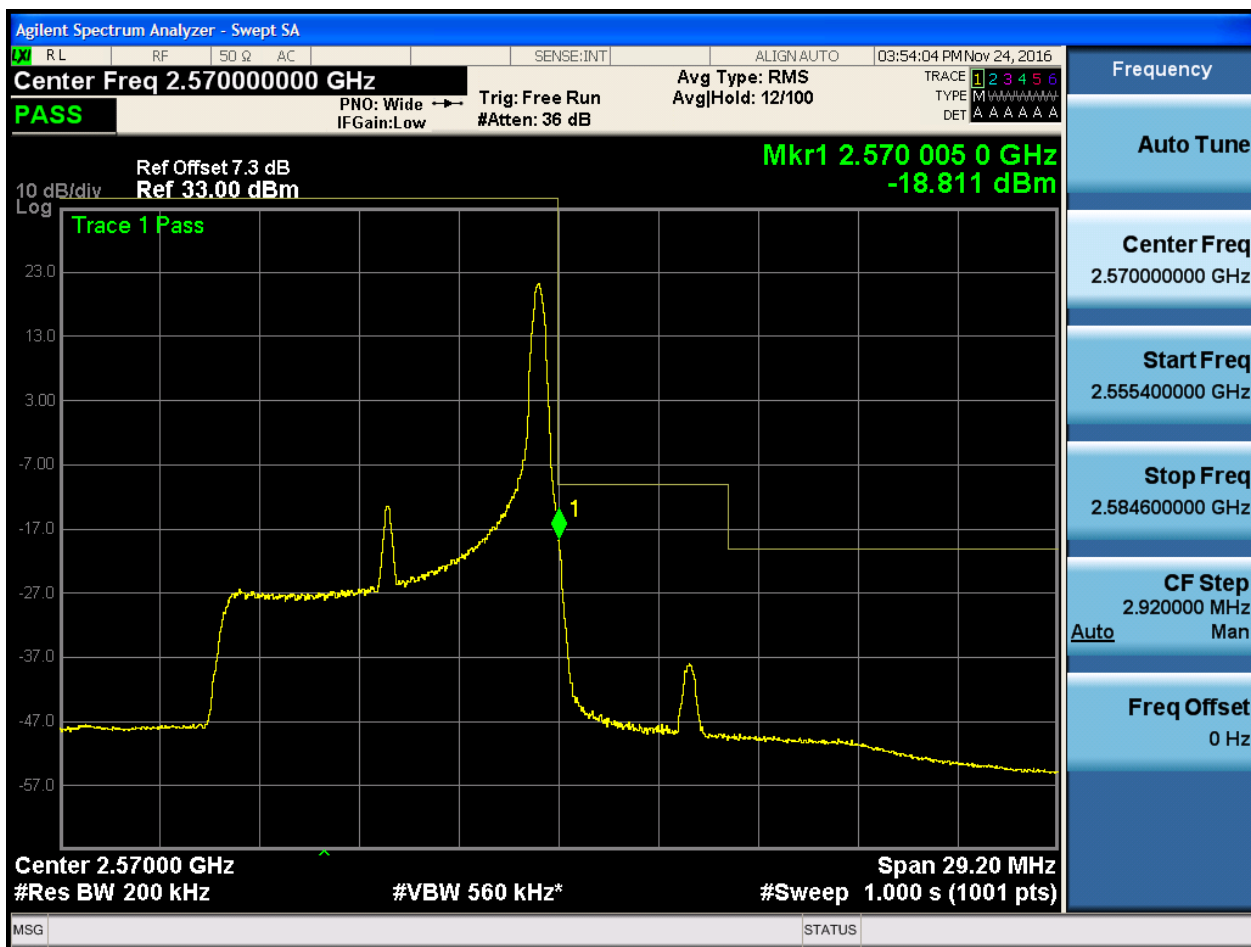


5.2.1.1.2.2 Test Channel = HCH

5.2.1.1.2.2.1 Test RB = RB1#0



5.2.1.1.2.2.2 Test RB = RB1#49





5.2.1.1.2.2.3 Test RB = RB25#13





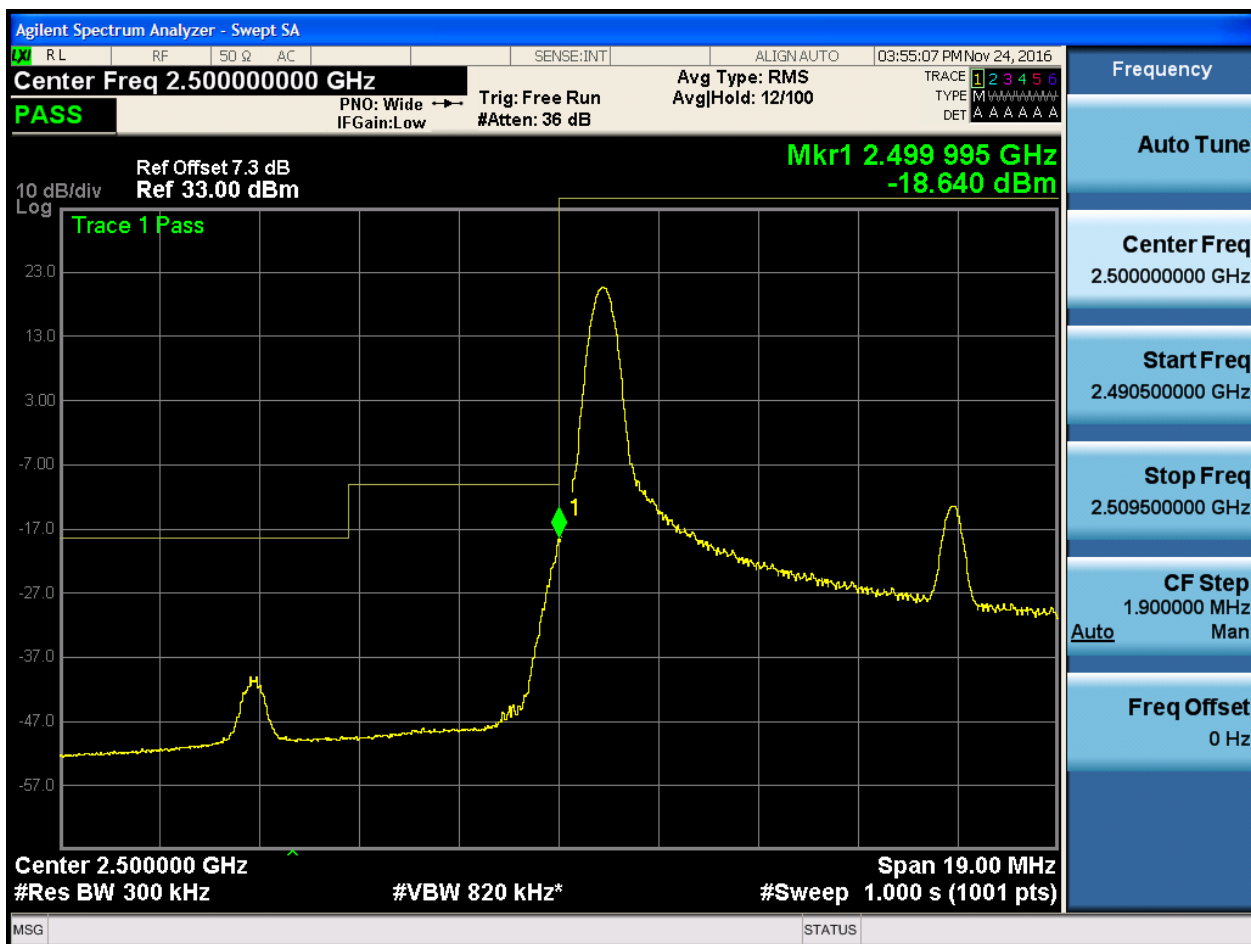
5.2.1.1.2.2.4 Test RB = RB50#0



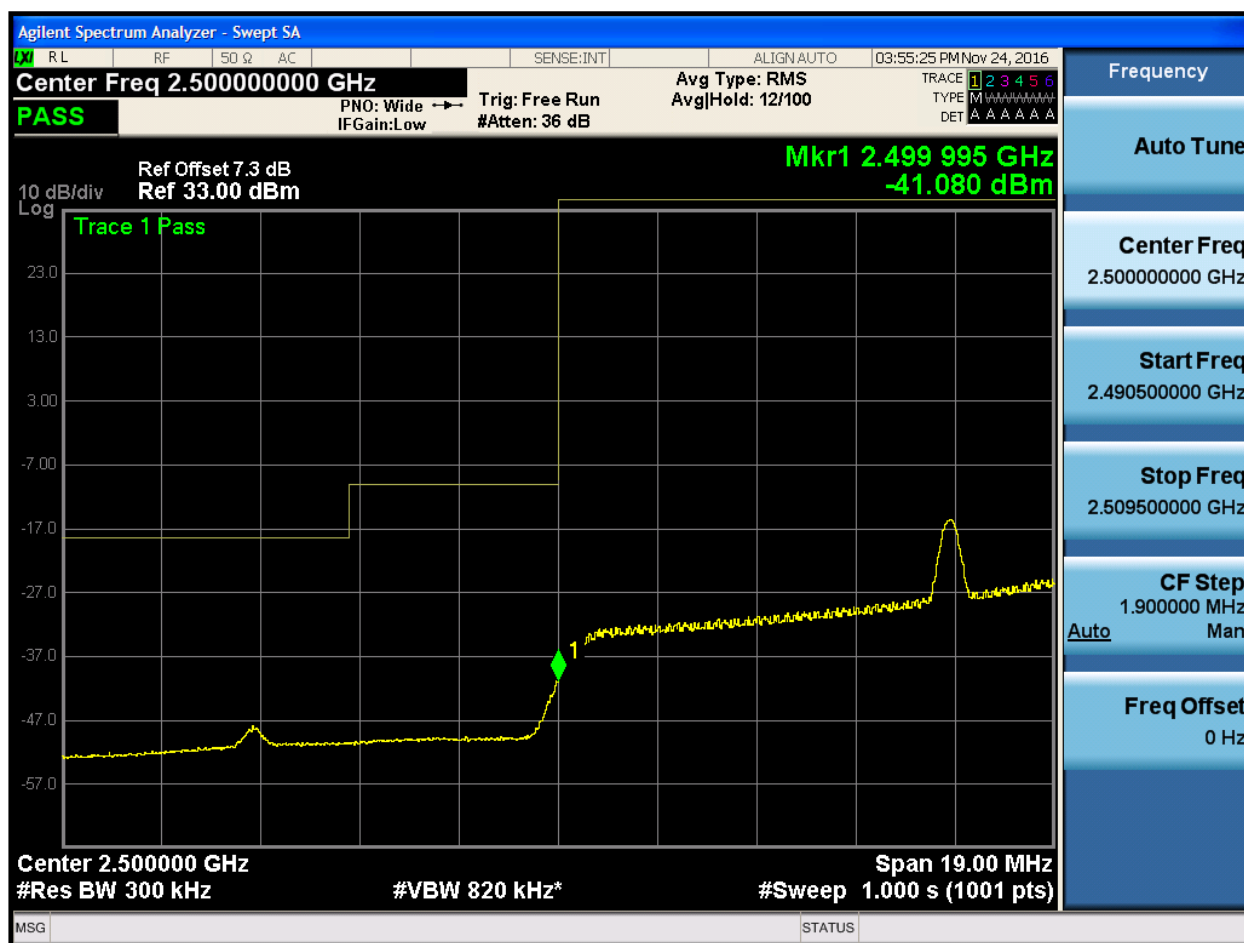
5.2.1.1.3 Test Bandwidth = 15

5.2.1.1.3.1 Test Channel = LCH

5.2.1.1.3.1.1 Test RB = RB1#0

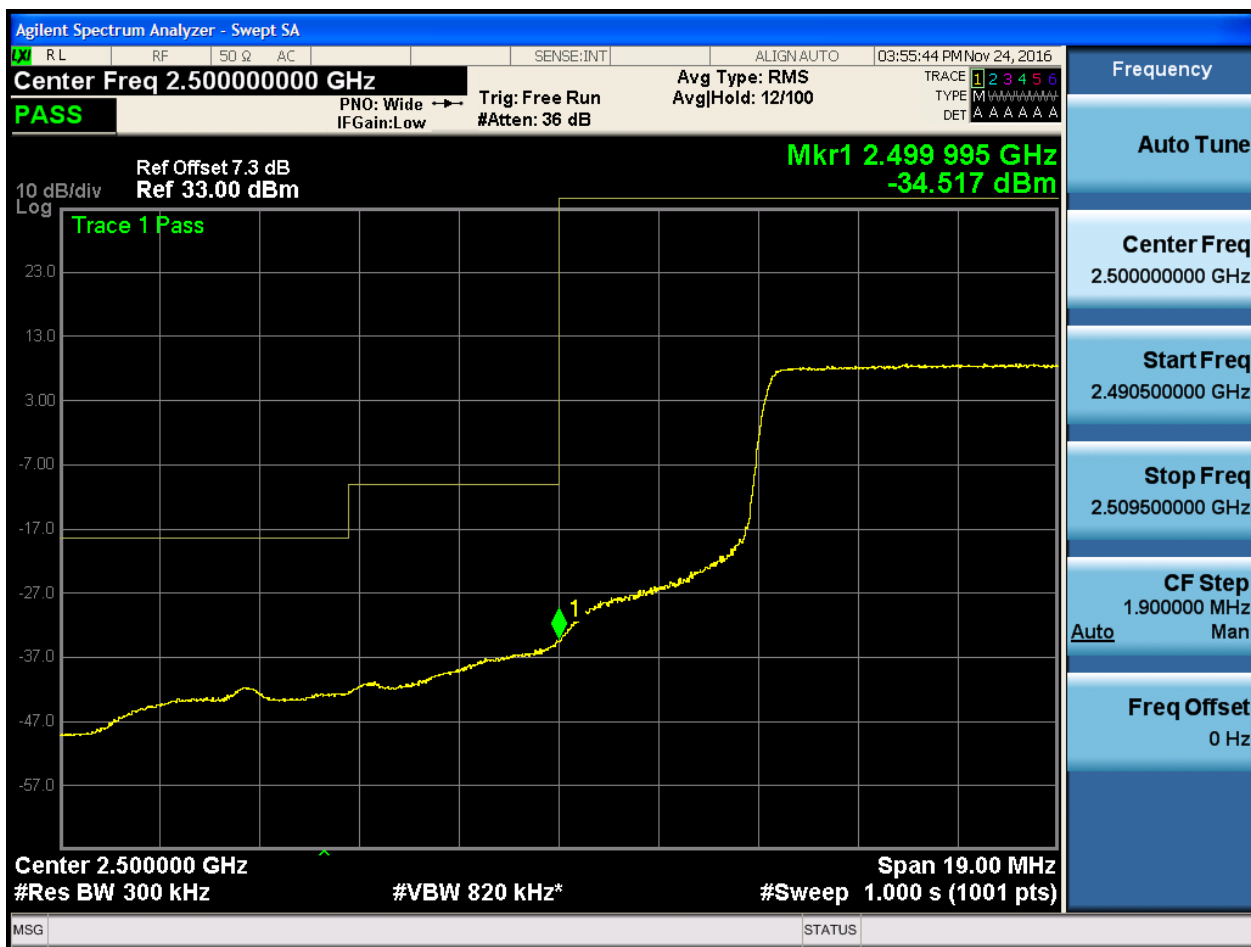


5.2.1.1.3.1.2 Test RB = RB1#74





5.2.1.1.3.1.3 Test RB = RB36#18





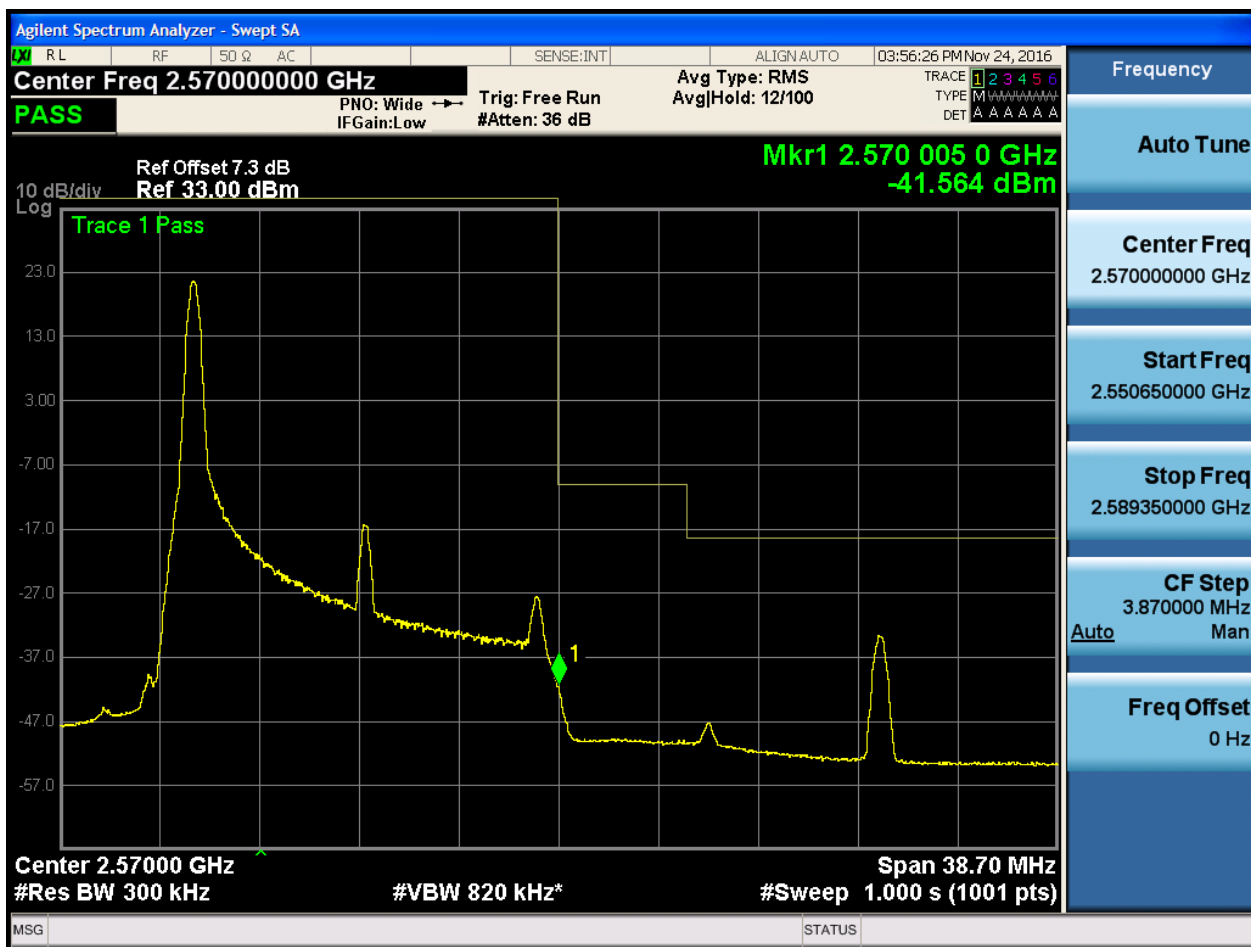
5.2.1.1.3.1.4 Test RB = RB75#0





5.2.1.1.3.2 Test Channel = HCH

5.2.1.1.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:56:44 PM Nov 24, 2016

Center Freq 2.57000000 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
DET A A A A A A

Ref Offset 7.3 dB
Ref 33.00 dBm

Mkr1 2.570 005 0 GHz
-17.564 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz Span 38.70 MHz
#Res BW 300 kHz #VBW 820 kHz* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.550650000 GHz

Stop Freq
2.589350000 GHz

CF Step
3.870000 MHz
Auto Man

Freq Offset
0 Hz



5.2.1.1.3.2.3 Test RB = RB36#18





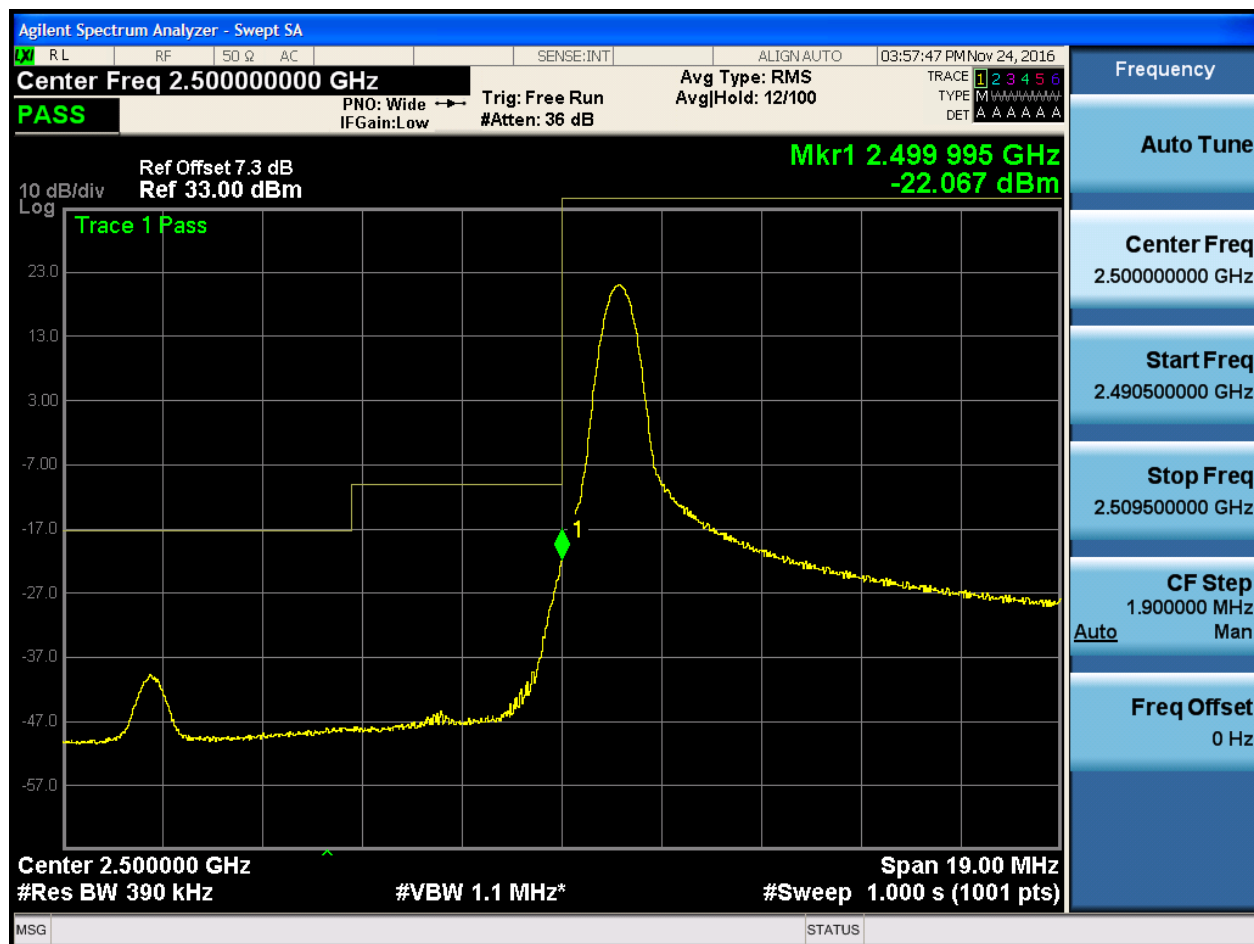
5.2.1.1.3.2.4 Test RB = RB75#0



5.2.1.1.4 Test Bandwidth = 20

5.2.1.1.4.1 Test Channel = LCH

5.2.1.1.4.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.500000000 GHz

PASS

Ref Offset 7.3 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-41.172 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 390 kHz

#VBW 1.1 MHz*

Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

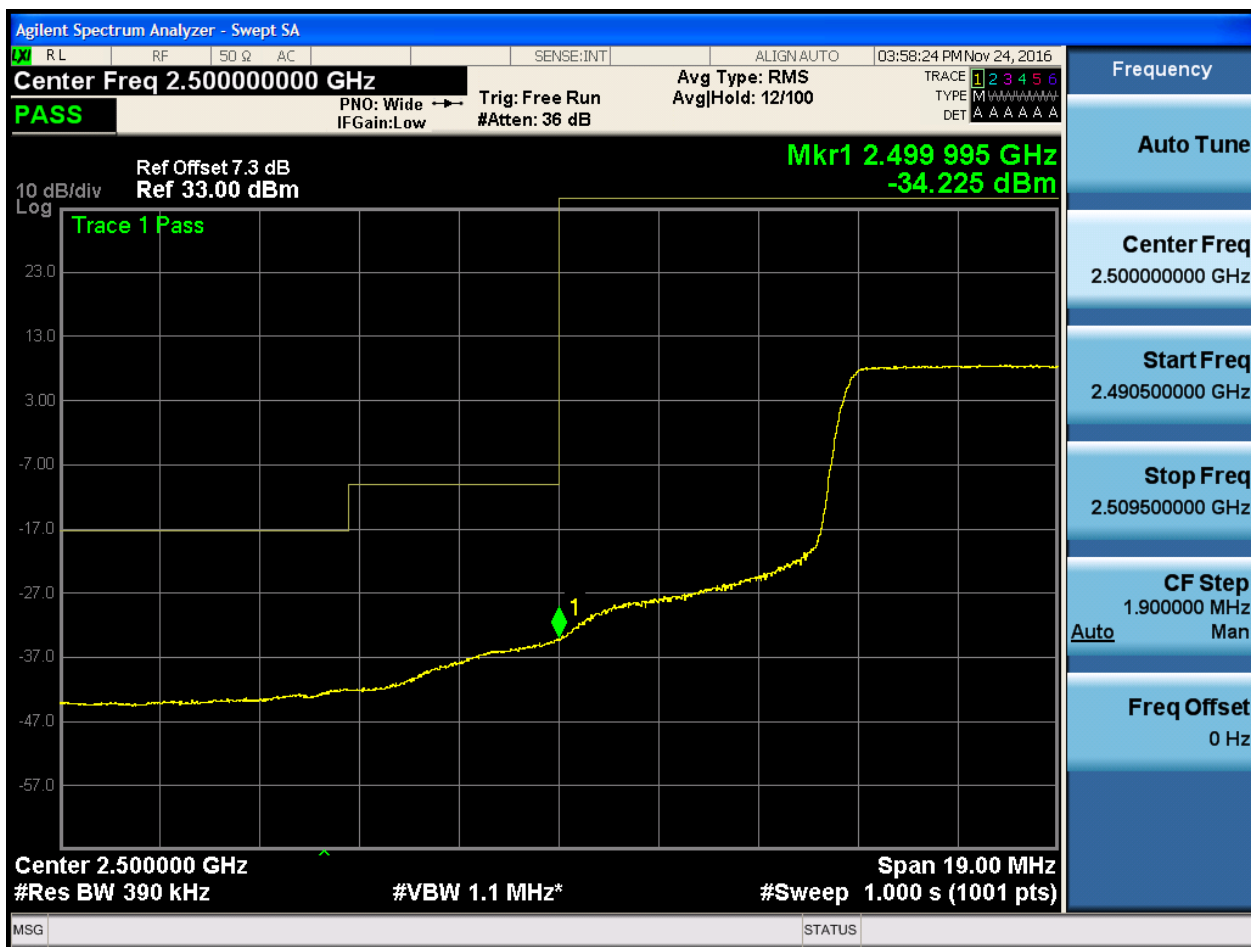
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto

Freq Offset
0 Hz



5.2.1.1.4.1.3 Test RB = RB50#25





5.2.1.1.4.1.4 Test RB = RB100#0





5.2.1.1.4.2 Test Channel = HCH

5.2.1.1.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.57000000 GHz

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

Ref Offset 7.3 dB Ref 33.00 dBm

Mkr1 2.570 01 GHz -21.315 dBm

The figure displays a spectrum analyzer screen with a yellow trace on a black background. The y-axis is labeled 'Log' and ranges from -57.0 to 23.0 dB/div. The x-axis represents frequency. A prominent peak is visible at approximately 2.570 GHz, reaching a level of about 23.0 dBm. Other smaller peaks are present at lower frequencies. The interface includes various control labels like 'PNO: Fast', 'IFGain:Low', 'Trig: Free Run', '#Atten: 36 dB', 'Avg Type: RMS', and 'AvgHold: 12/100'. On the right side, there's a panel with settings for Frequency, Auto Tune, Center Freq (2.57000000 GHz), Start Freq (2.545910000 GHz), Stop Freq (2.594090000 GHz), CF Step (4.818000 MHz), and Freq Offset (0 Hz). At the bottom, it shows 'Center 2.57000 GHz', '#Res BW 390 kHz', '#VBW 1.1 MHz*', 'Span 48.18 MHz', and '#Sweep 1.000 s (1001 pts)'.

Frequency
Auto Tune
Center Freq 2.57000000 GHz
Start Freq 2.545910000 GHz
Stop Freq 2.594090000 GHz
CF Step 4.818000 MHz <u>Auto</u> Man
Freq Offset 0 Hz

Center 2.57000 GHz
#Res BW 390 kHz #VBW 1.1 MHz* Span 48.18 MHz
#Sweep 1.000 s (1001 pts)



5.2.1.1.4.2.3 Test RB = RB50#25





5.2.1.1.4.2.4 Test RB = RB100#0



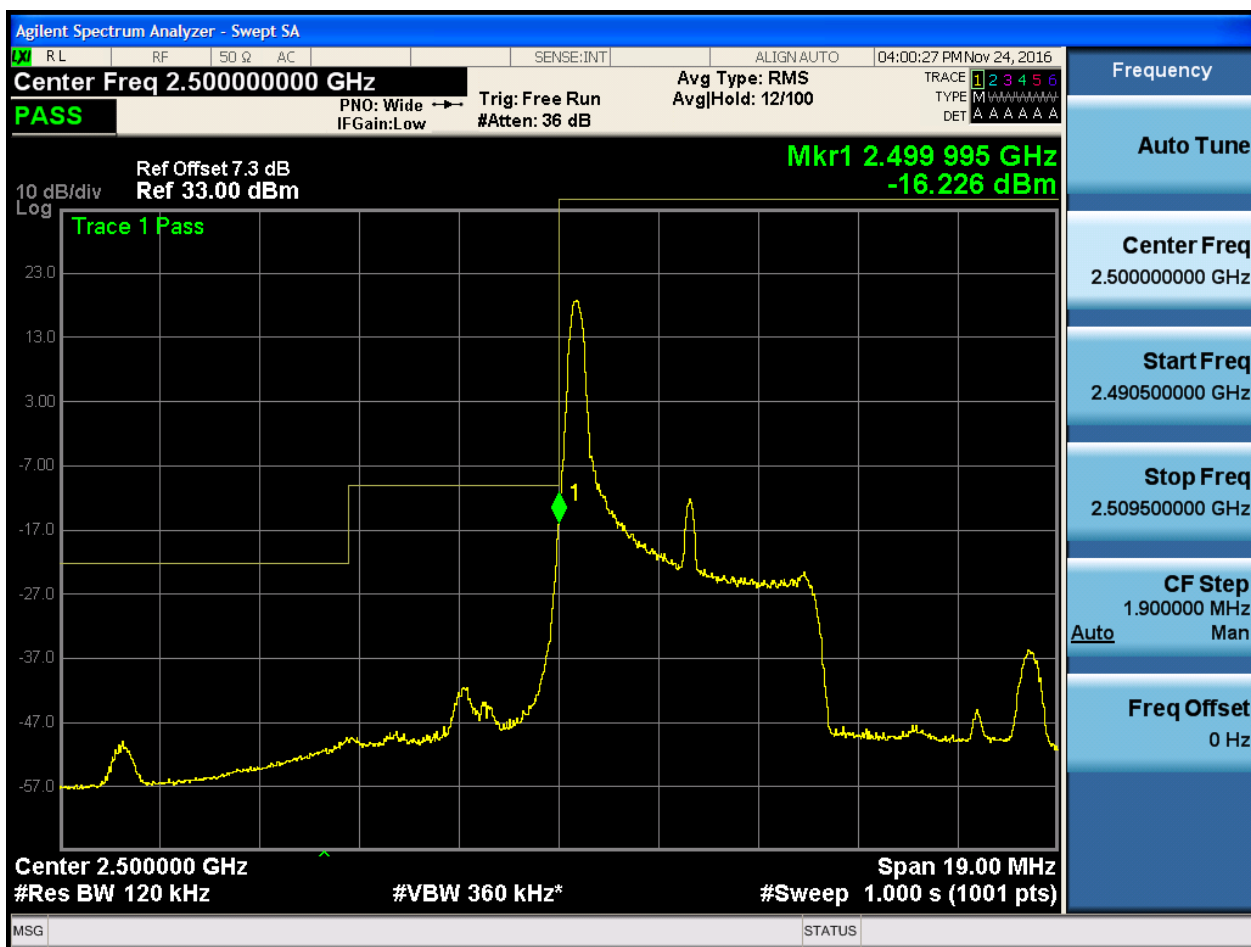


5.2.1.2 Test Mode = LTE/TM2

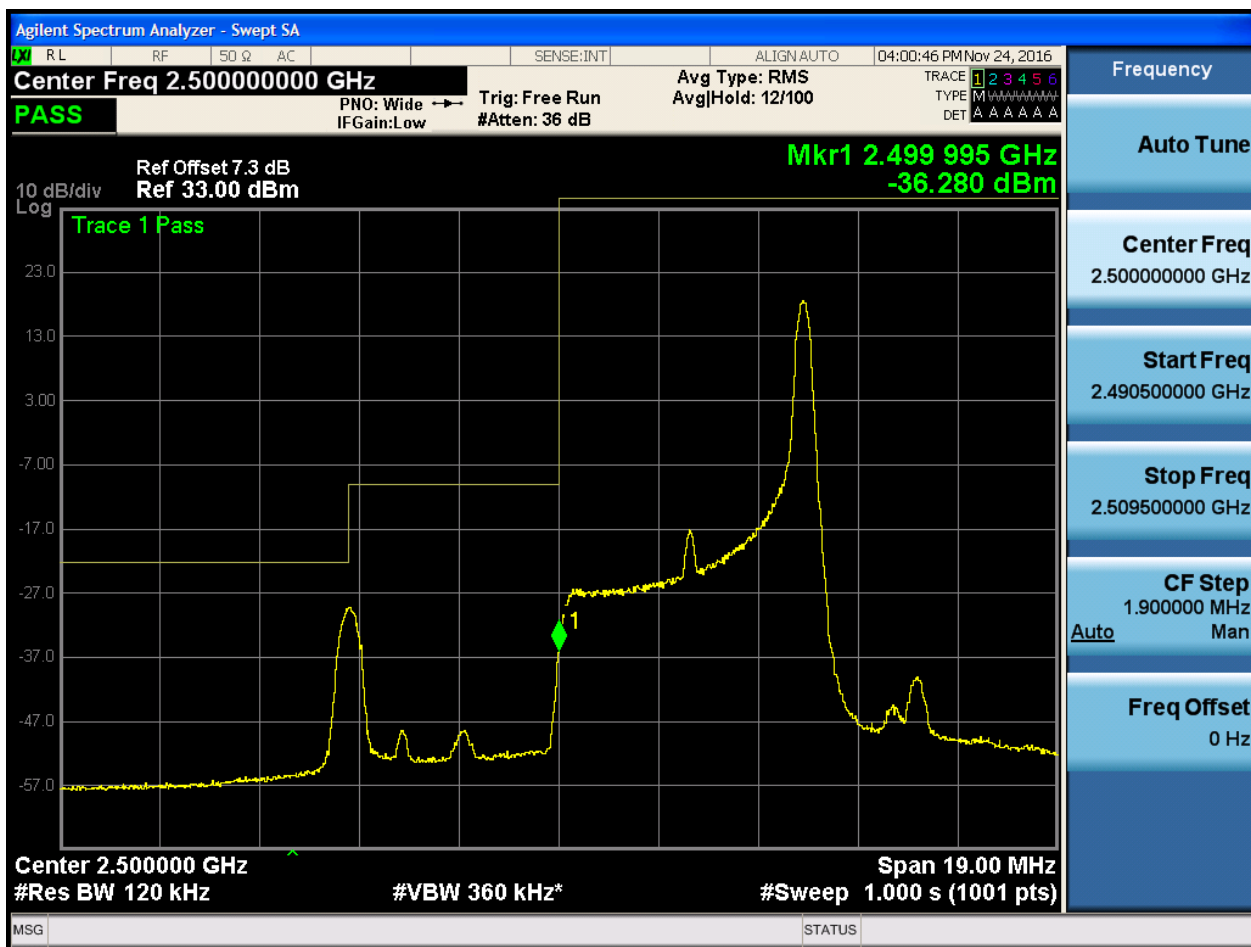
5.2.1.2.1 Test Bandwidth = 5

5.2.1.2.1.1 Test Channel = LCH

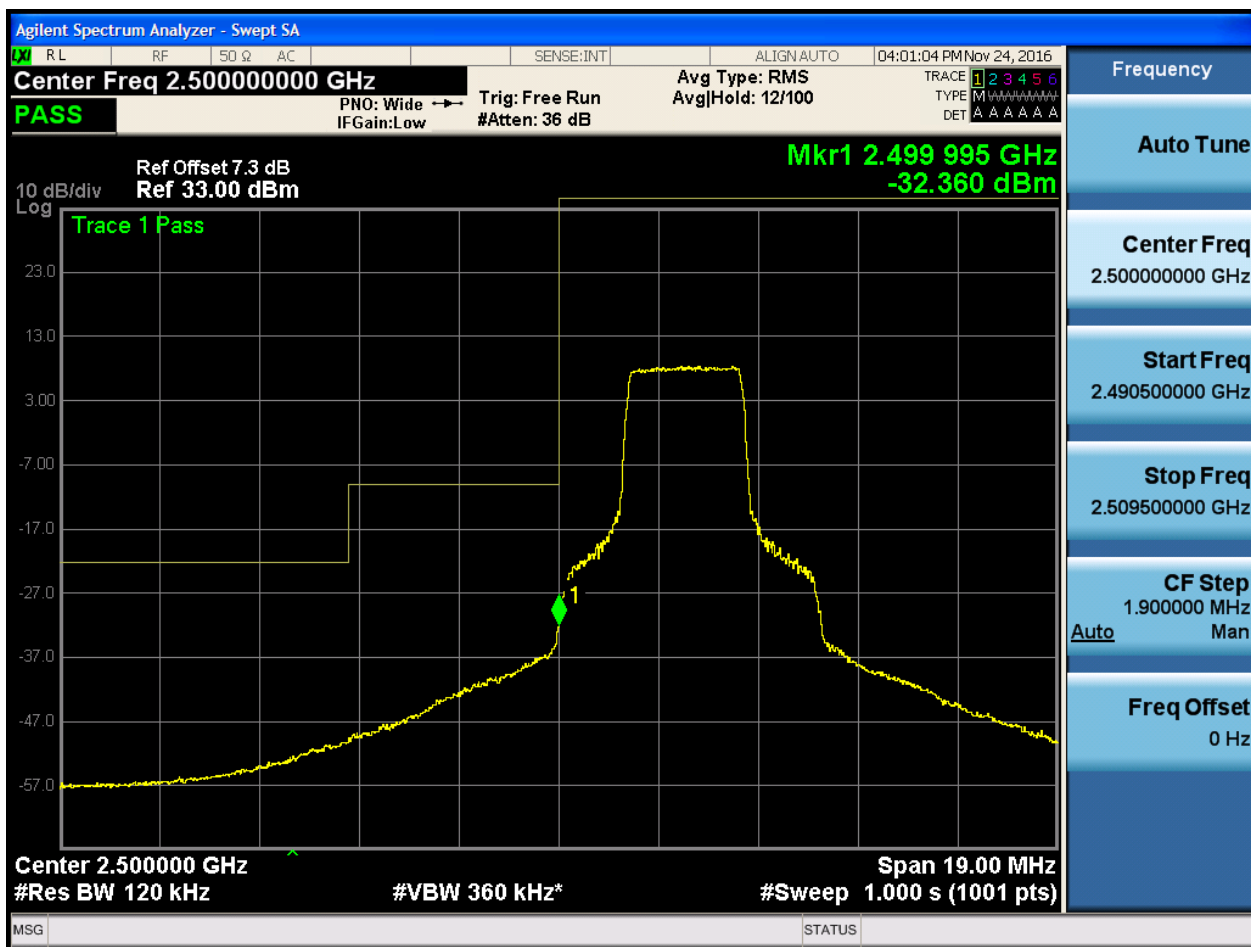
5.2.1.2.1.1.1 Test RB = RB1#0



5.2.1.2.1.1.2 Test RB = RB1#24



5.2.1.2.1.1.3 Test RB = RB12#6

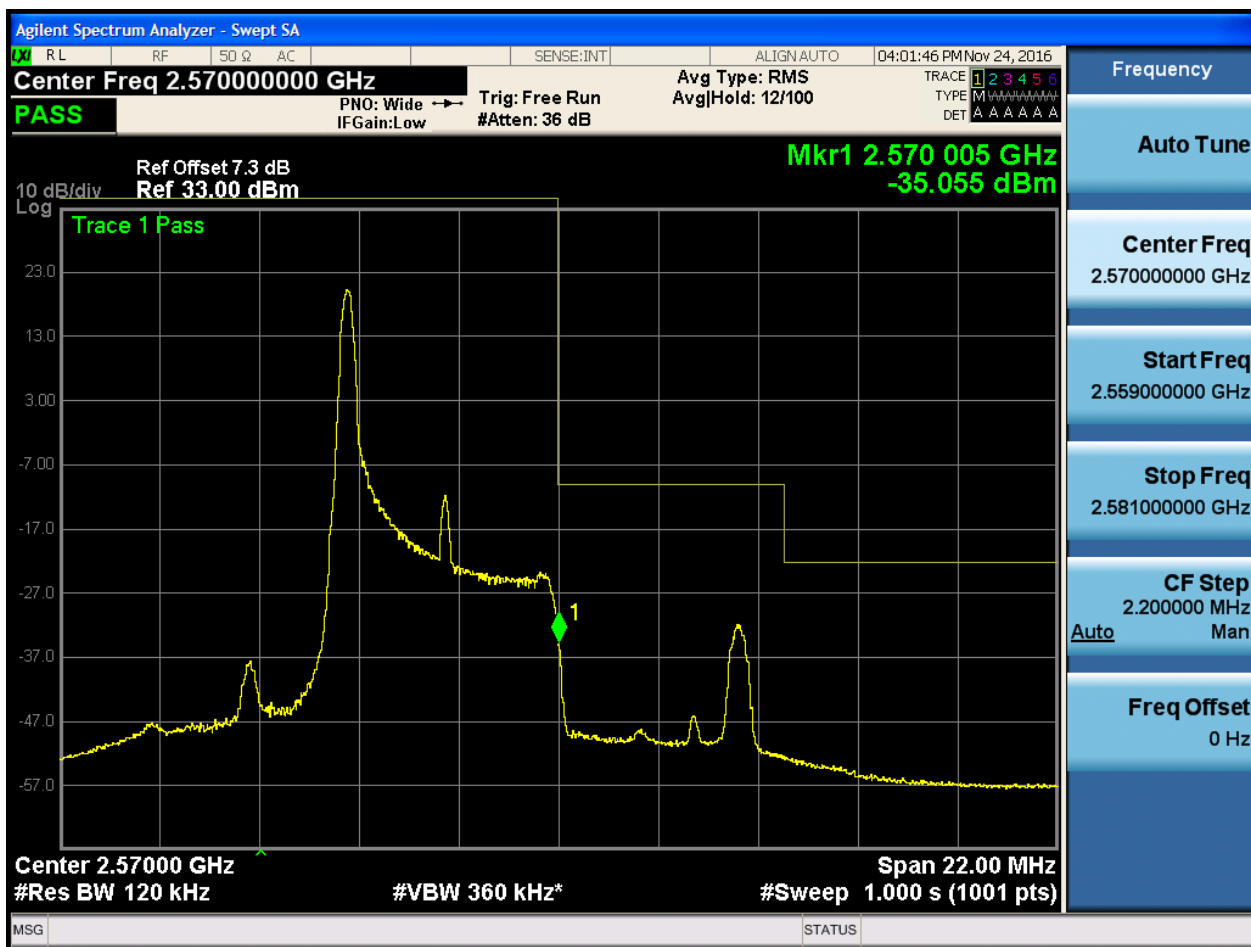


[illegible]

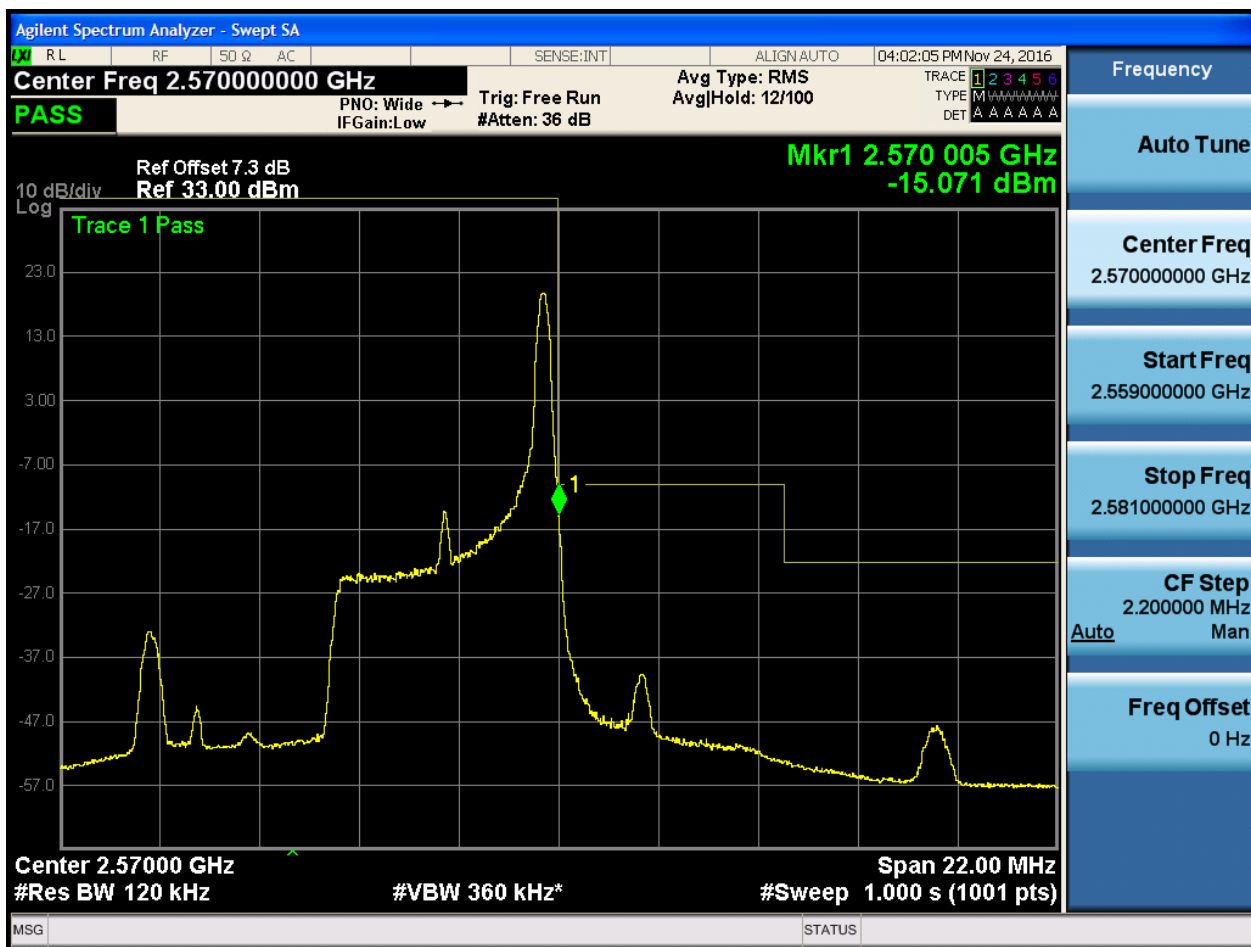


5.2.1.2.1.2 Test Channel = HCH

5.2.1.2.1.2.1 Test RB = RB1#0



5.2.1.2.1.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:02:23 PM Nov 24, 2016

Center Freq 2.570000000 GHz Avg Type: RMS
PASS PNO: Wide 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 7.3 dB
Ref 33.00 dBm

Mkr1 2.570 005 GHz
-30.105 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

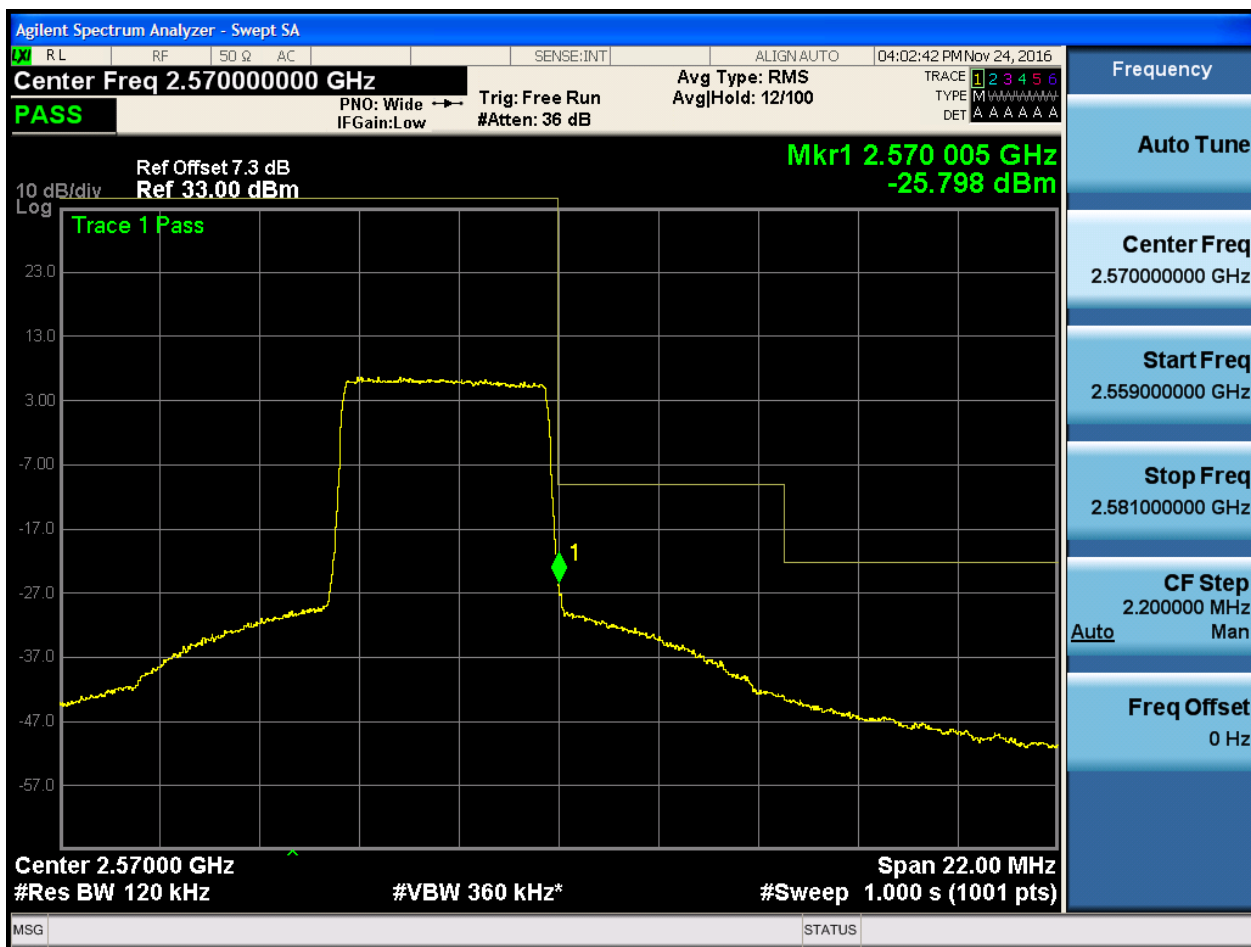
Stop Freq
2.581000000 GHz

CF Step
2.200000 MHz
Auto Man

Freq Offset
0 Hz



5.2.1.2.1.2.4 Test RB = RB25#0

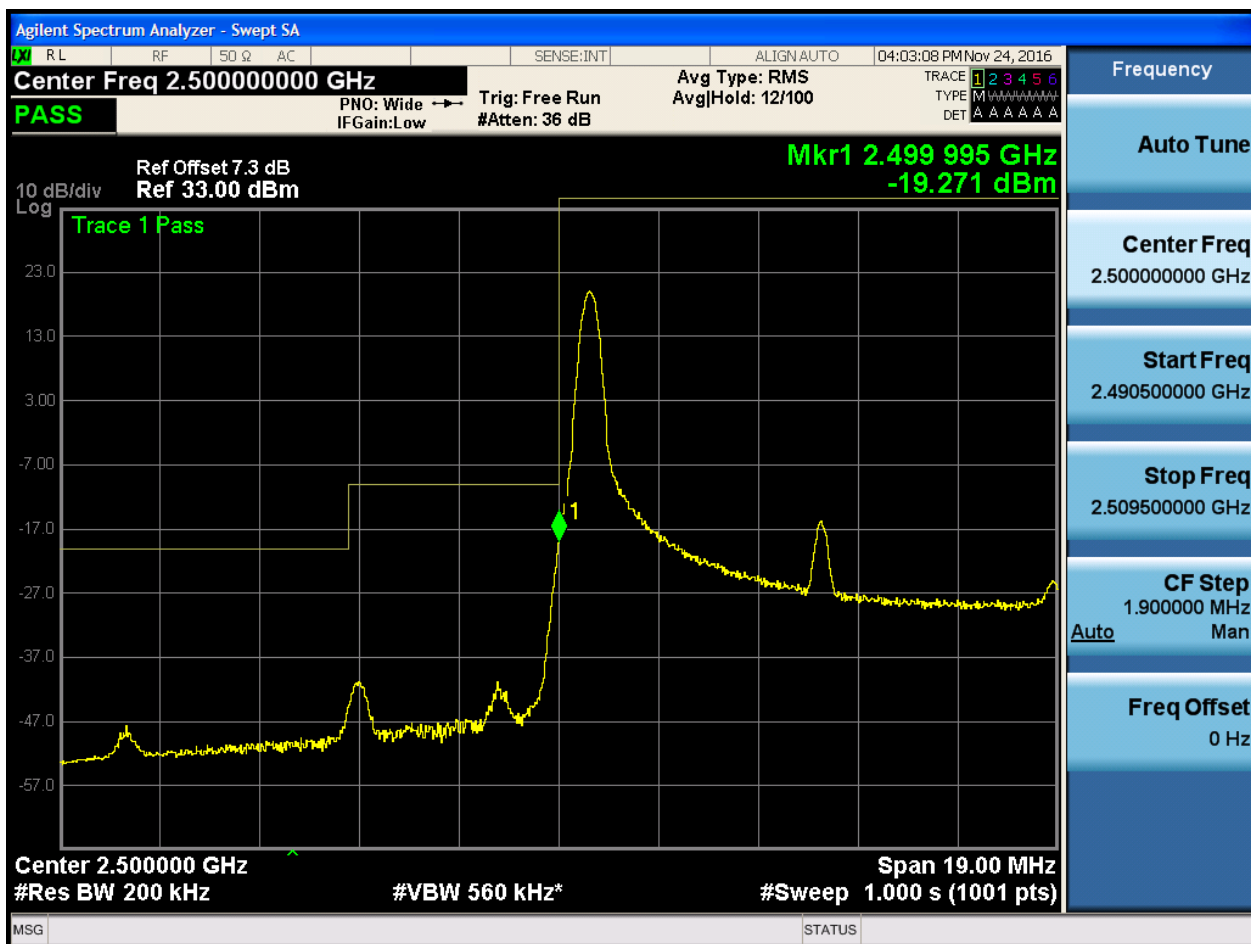




5.2.1.2.2 Test Bandwidth = 10

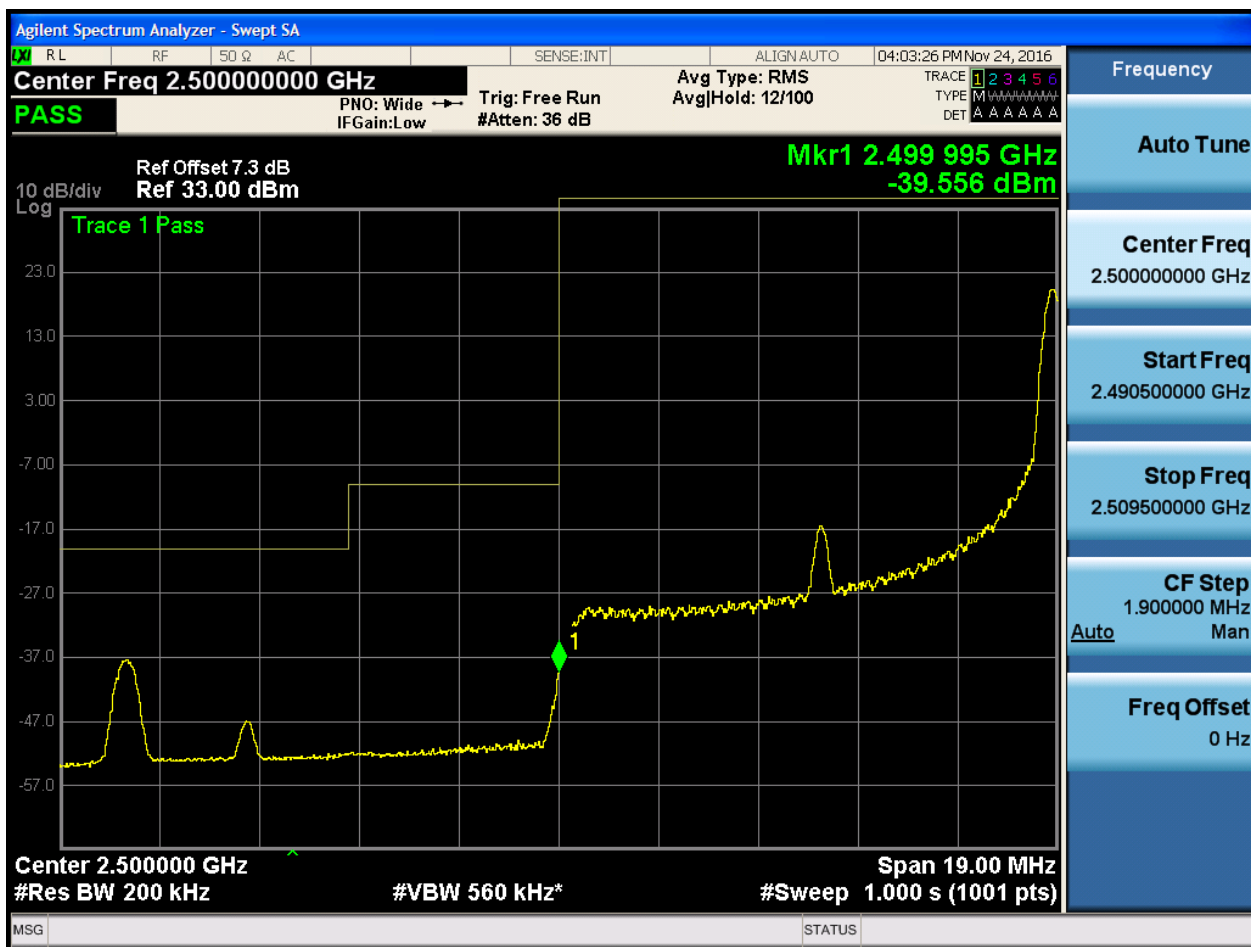
5.2.1.2.2.1 Test Channel = LCH

5.2.1.2.2.1.1 Test RB = RB1#0



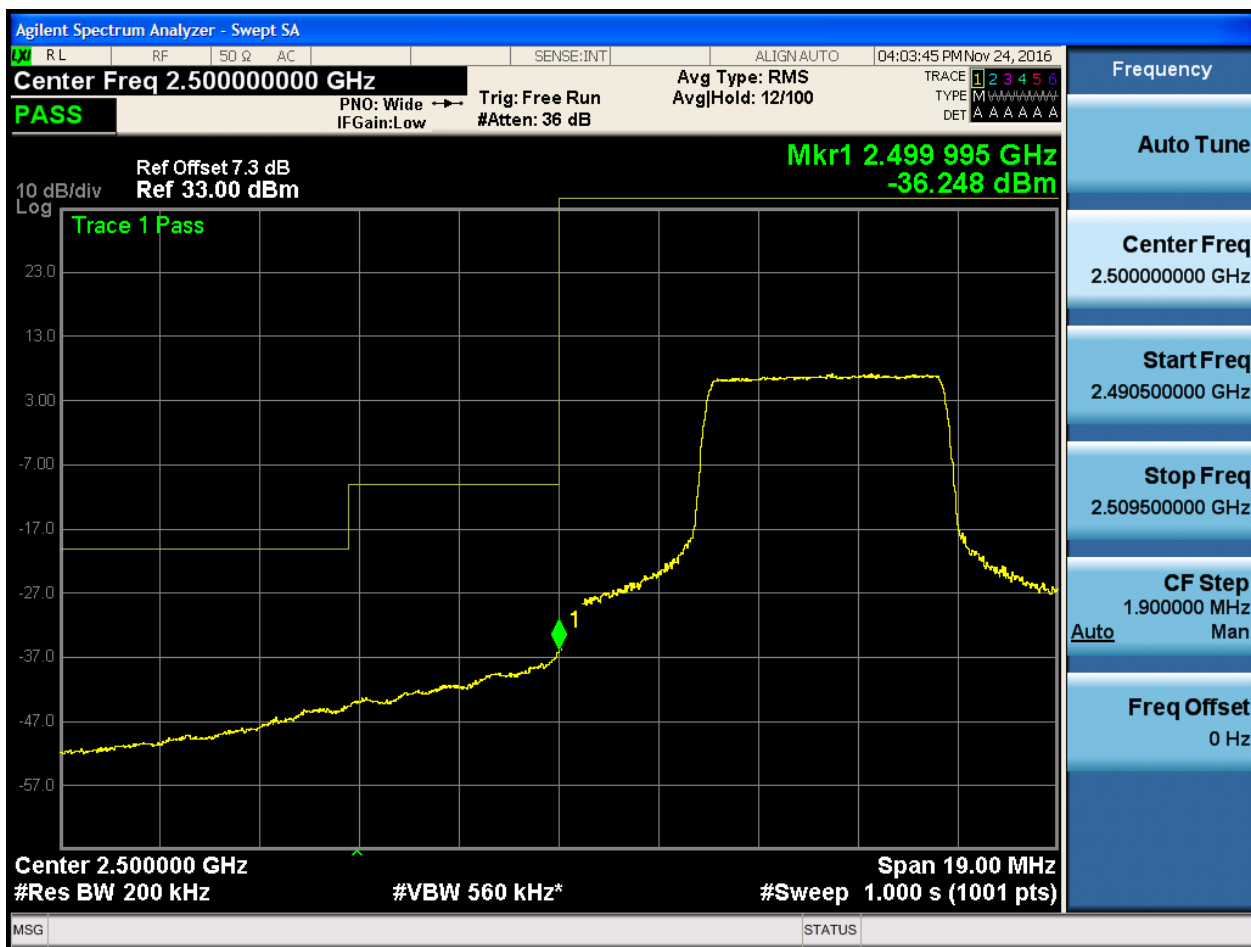


5.2.1.2.2.1.2 Test RB = RB1#49



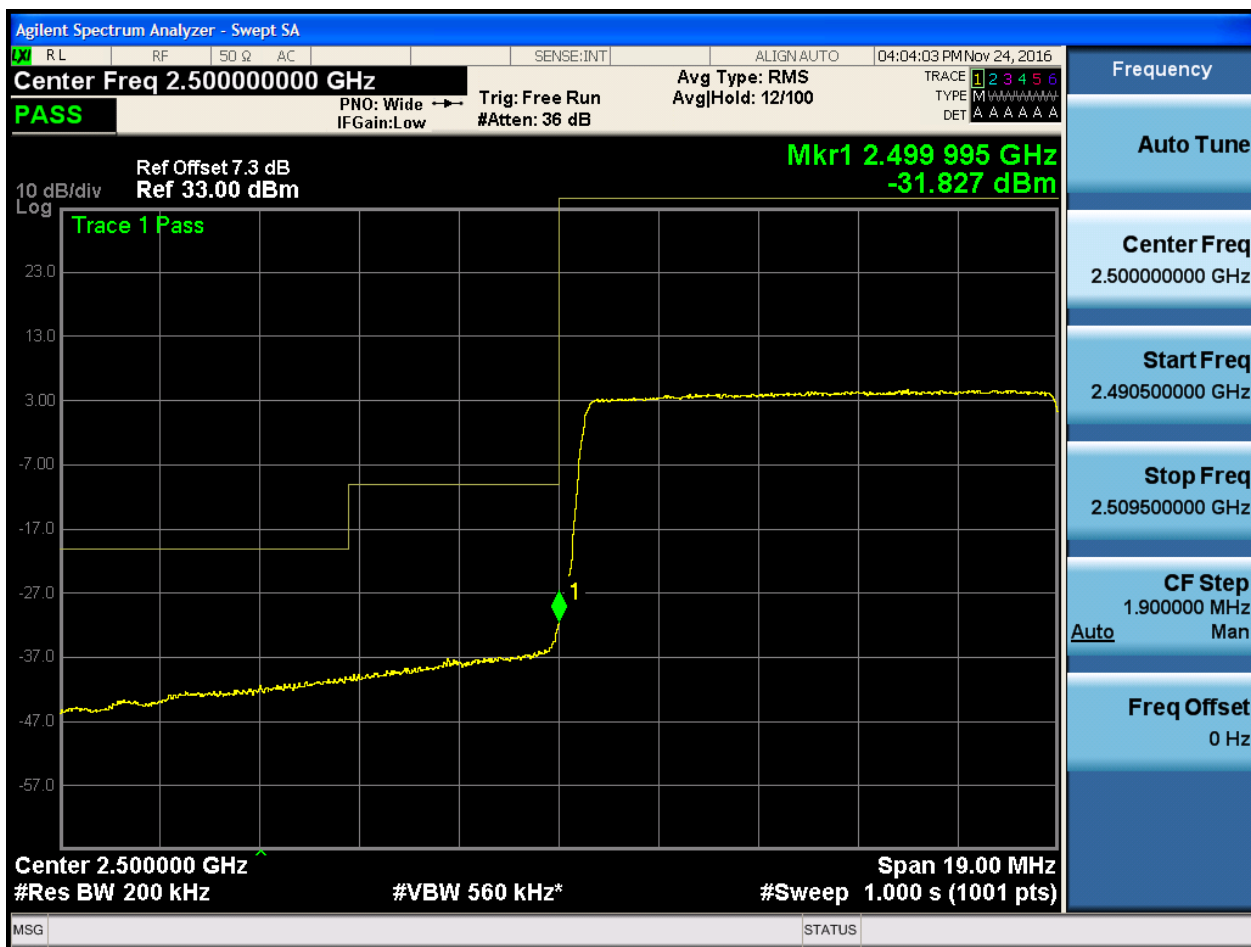


5.2.1.2.2.1.3 Test RB = RB25#13



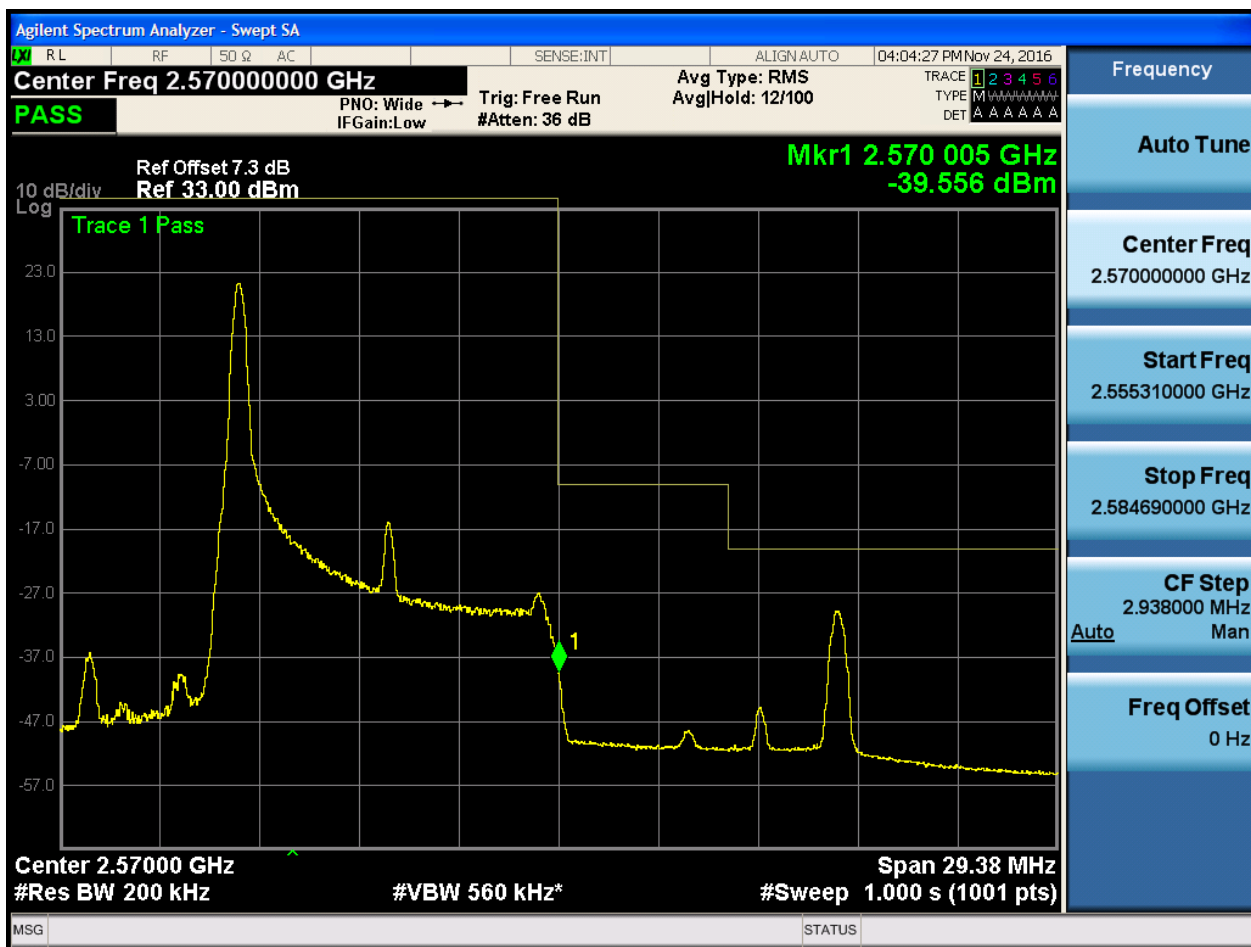


5.2.1.2.2.1.4 Test RB = RB50#0

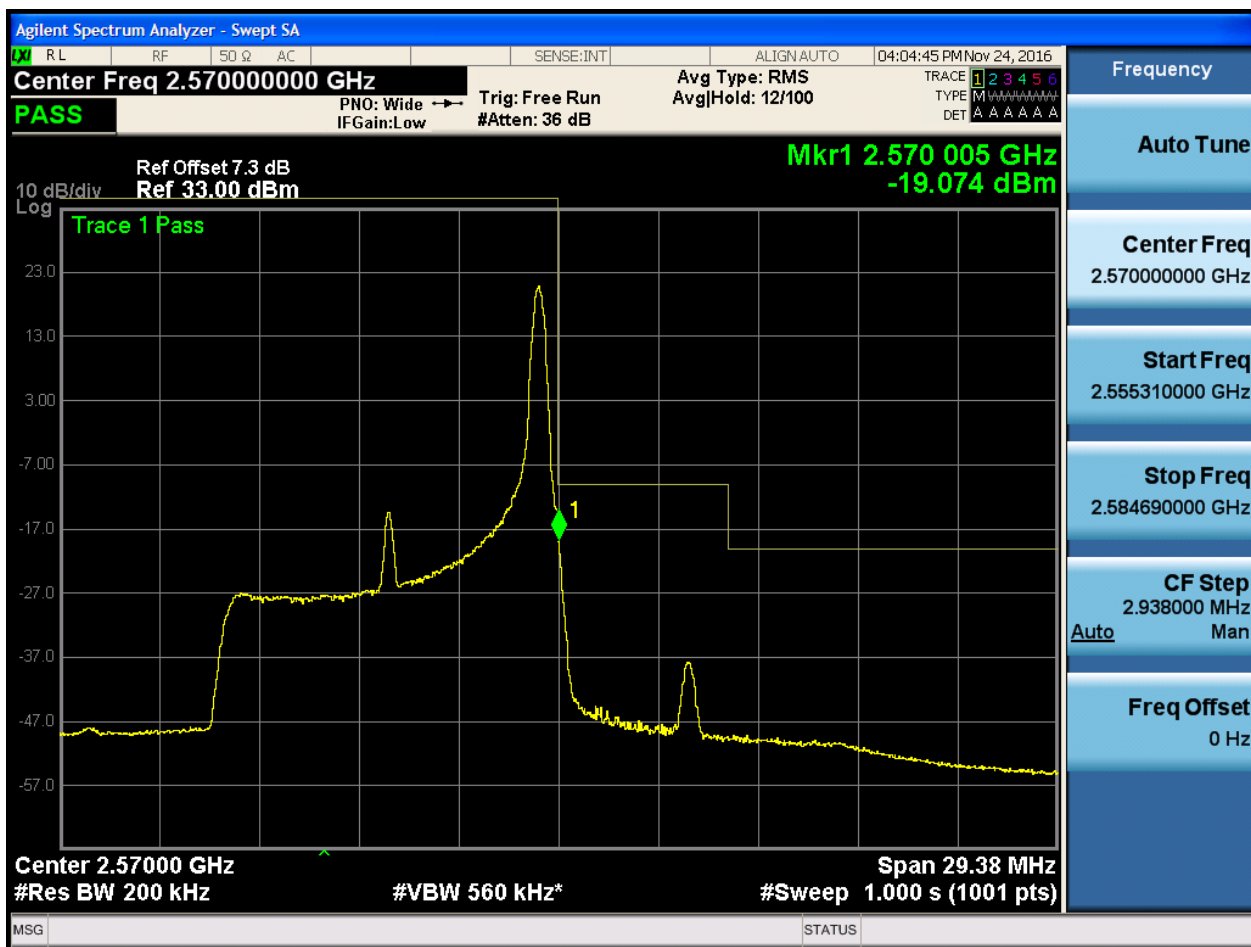


5.2.1.2.2.2 Test Channel = HCH

5.2.1.2.2.2.1 Test RB = RB1#0

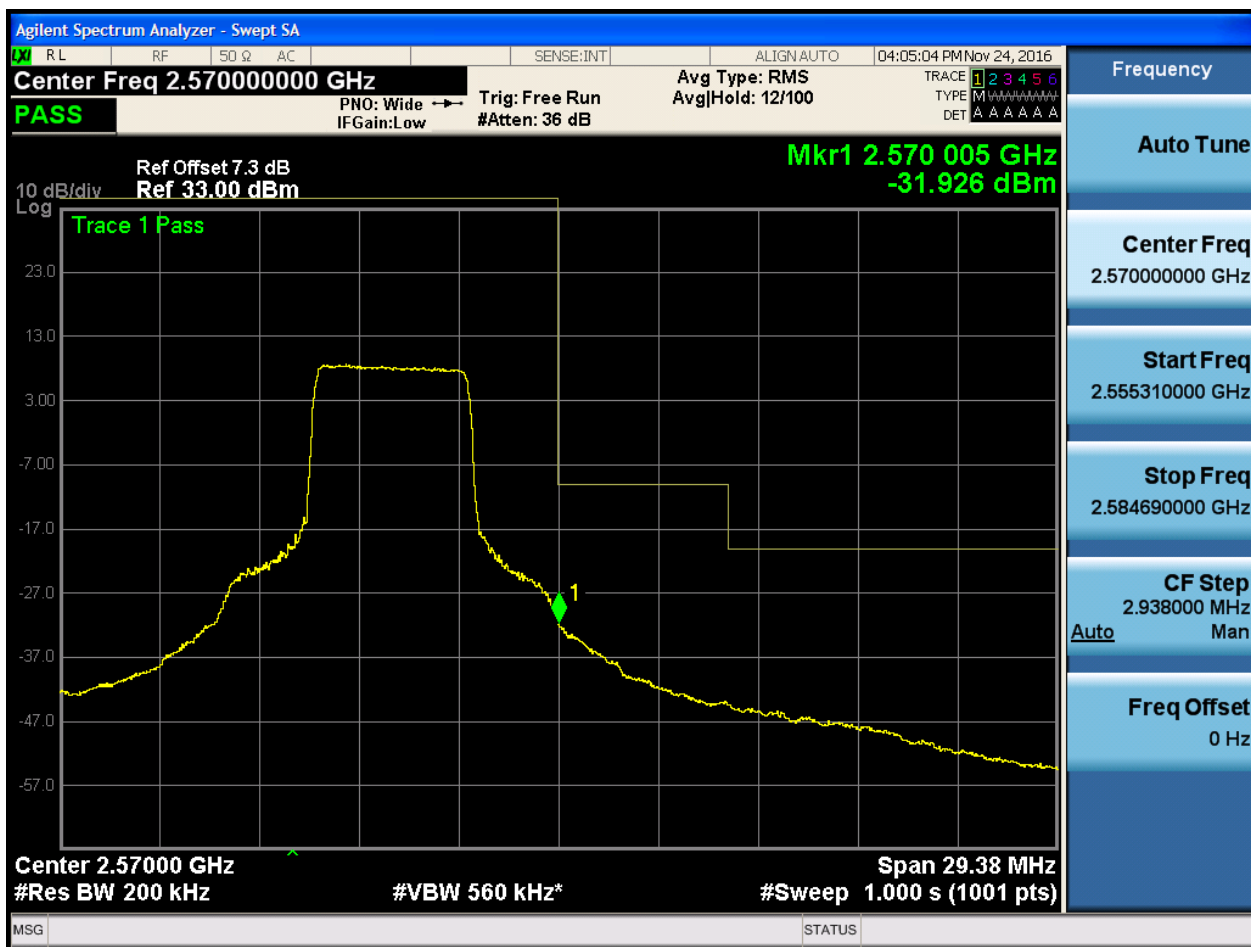


5.2.1.2.2.2.2 Test RB = RB1#49





5.2.1.2.2.3 Test RB = RB25#13





5.2.1.2.2.4 Test RB = RB50#0

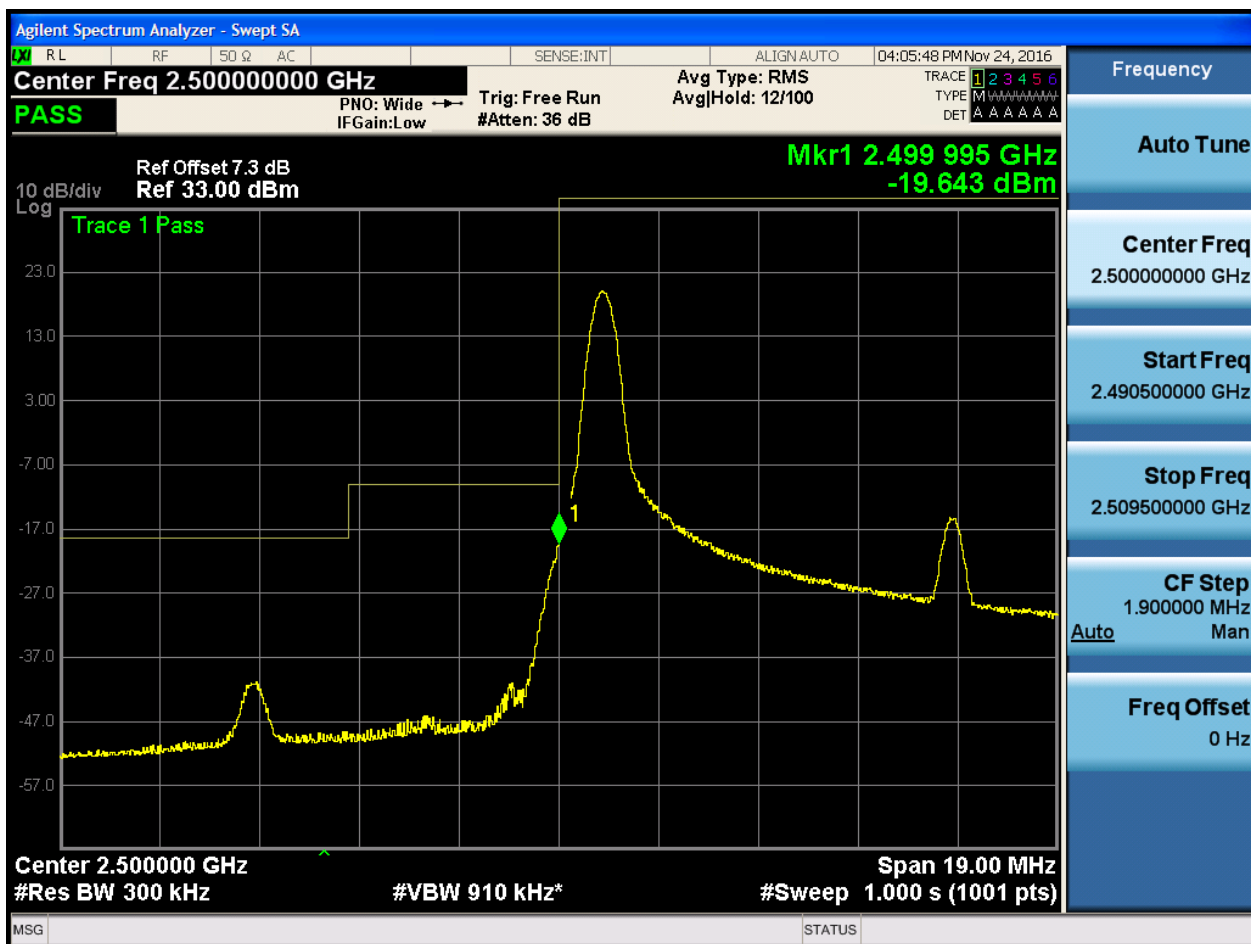




5.2.1.2.3 Test Bandwidth = 15

5.2.1.2.3.1 Test Channel = LCH

5.2.1.2.3.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:06:06 PM Nov 24, 2016

Center Freq 2.500000000 GHz Avg Type: RMS
#Res BW 300 kHz IFGain:Low Trig: Free Run AvgHold: 12/100
PNO: Wide → #Atten: 36 dB

PASS

Ref Offset 7.3 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-39.900 dBm

10 dB/div
Log

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

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

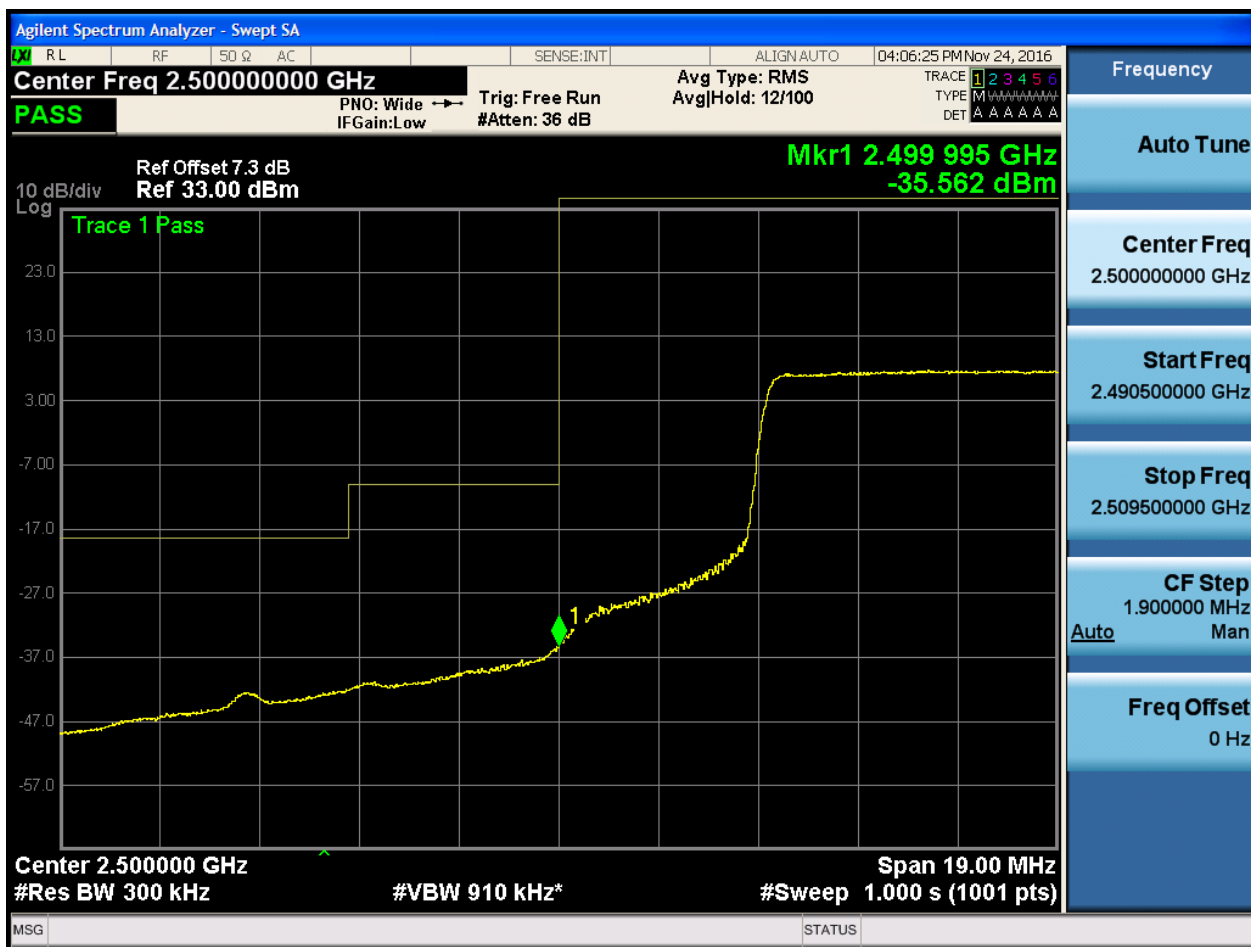
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

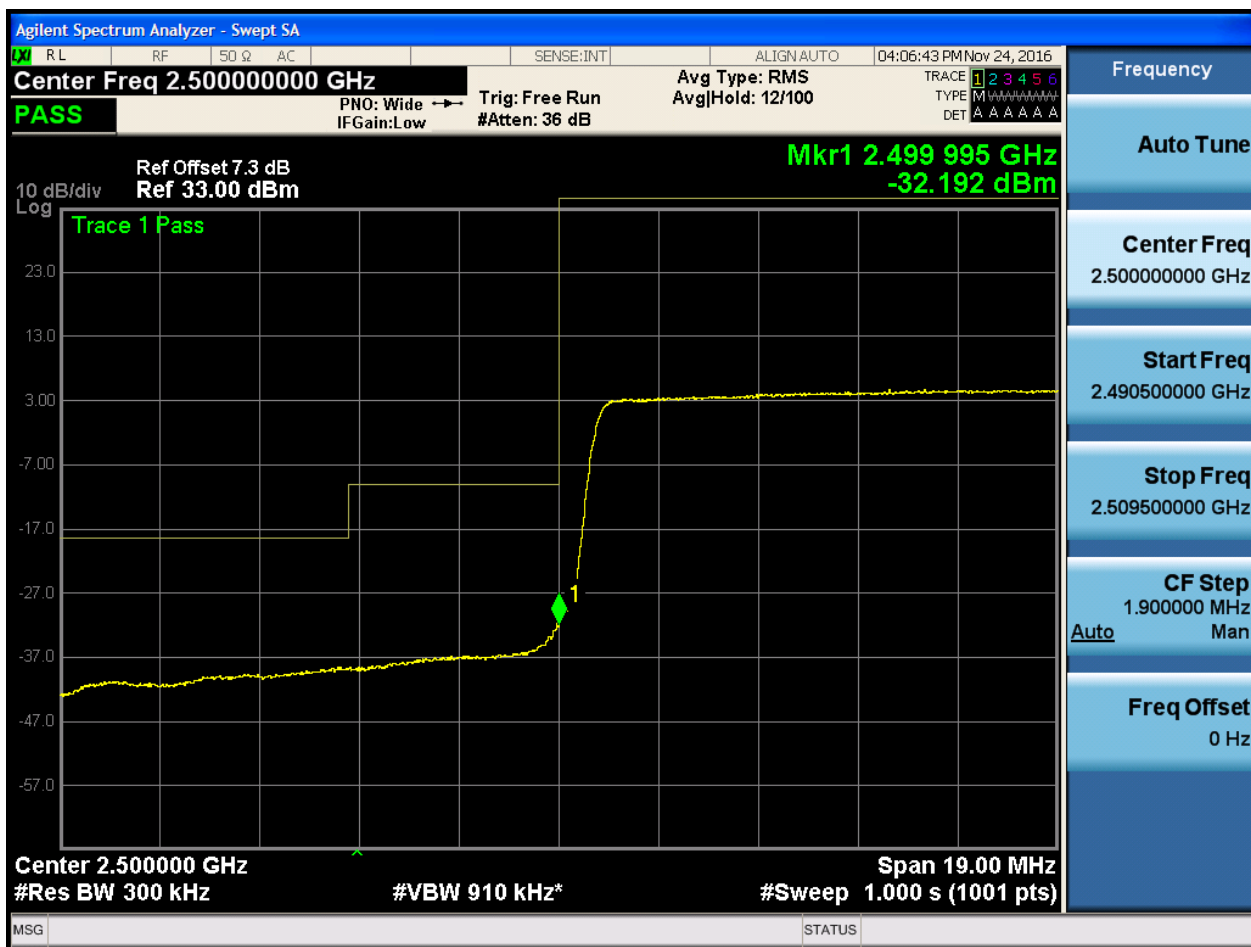


5.2.1.2.3.1.3 Test RB = RB36#18





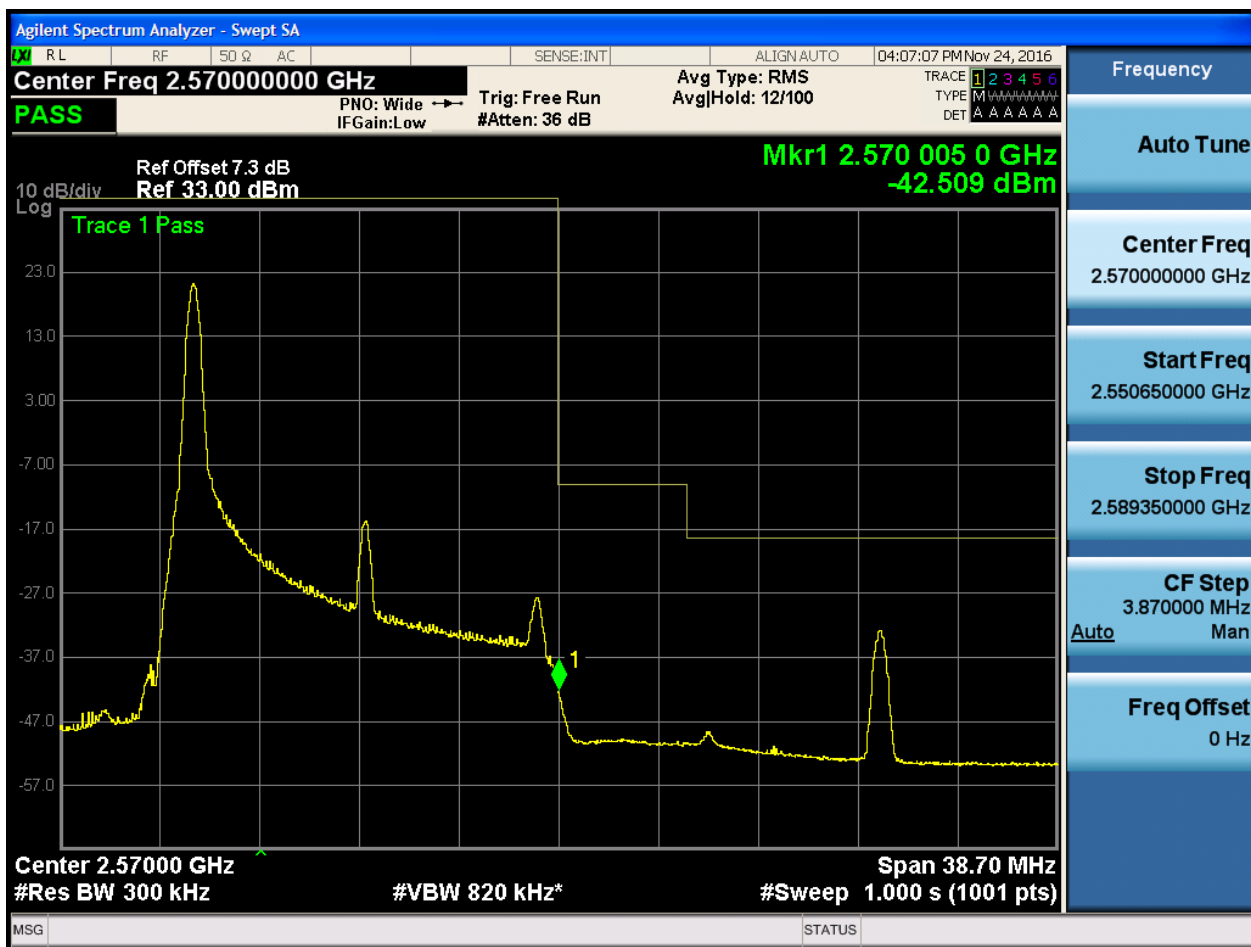
5.2.1.2.3.1.4 Test RB = RB75#0



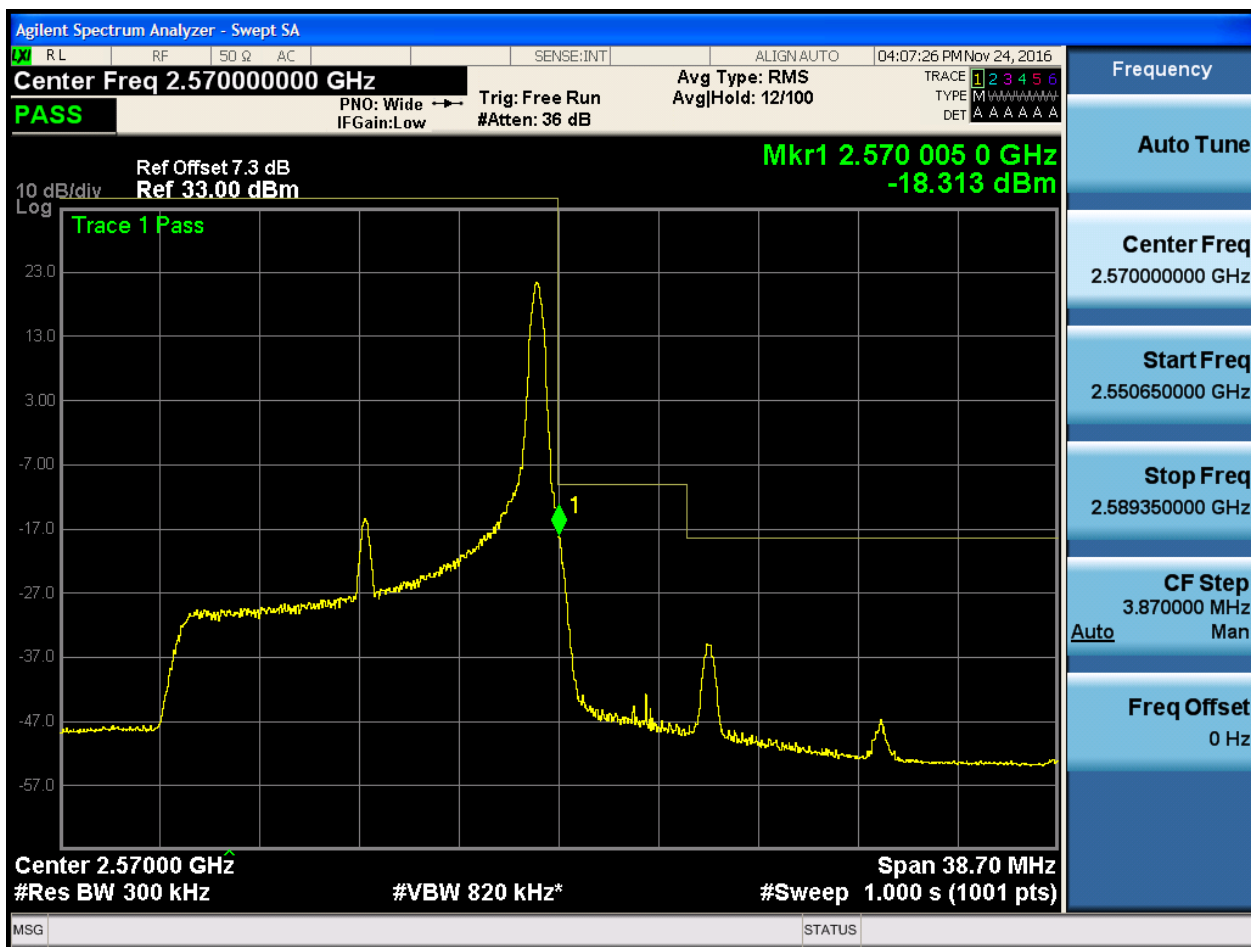


5.2.1.2.3.2 Test Channel = HCH

5.2.1.2.3.2.1 Test RB = RB1#0



5.2.1.2.3.2.2 Test RB = RB1#74





5.2.1.2.3.2.3 Test RB = RB36#18



5.2.1.2.3.2.4 Test RB = RB75#0

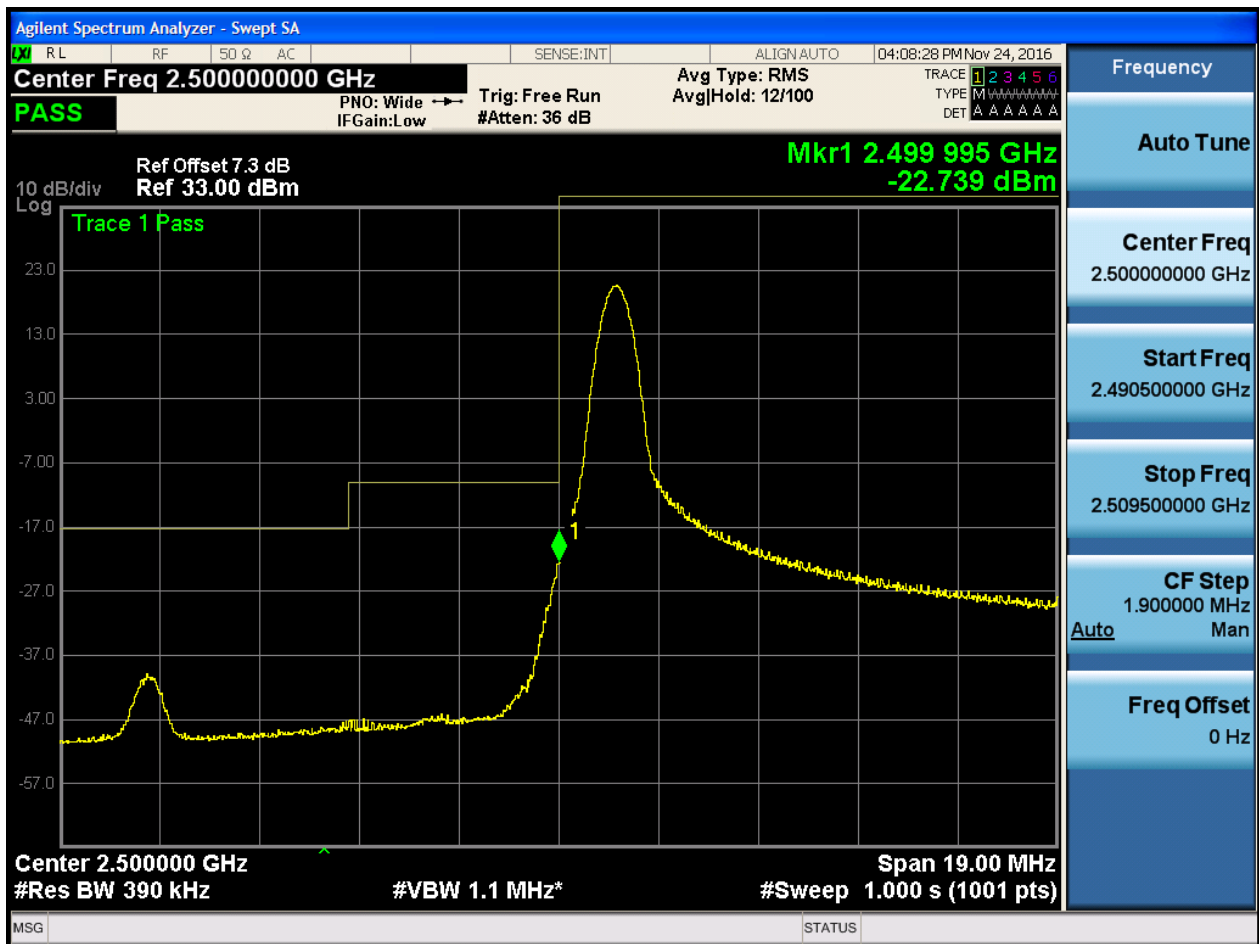




5.2.1.2.4 Test Bandwidth = 20

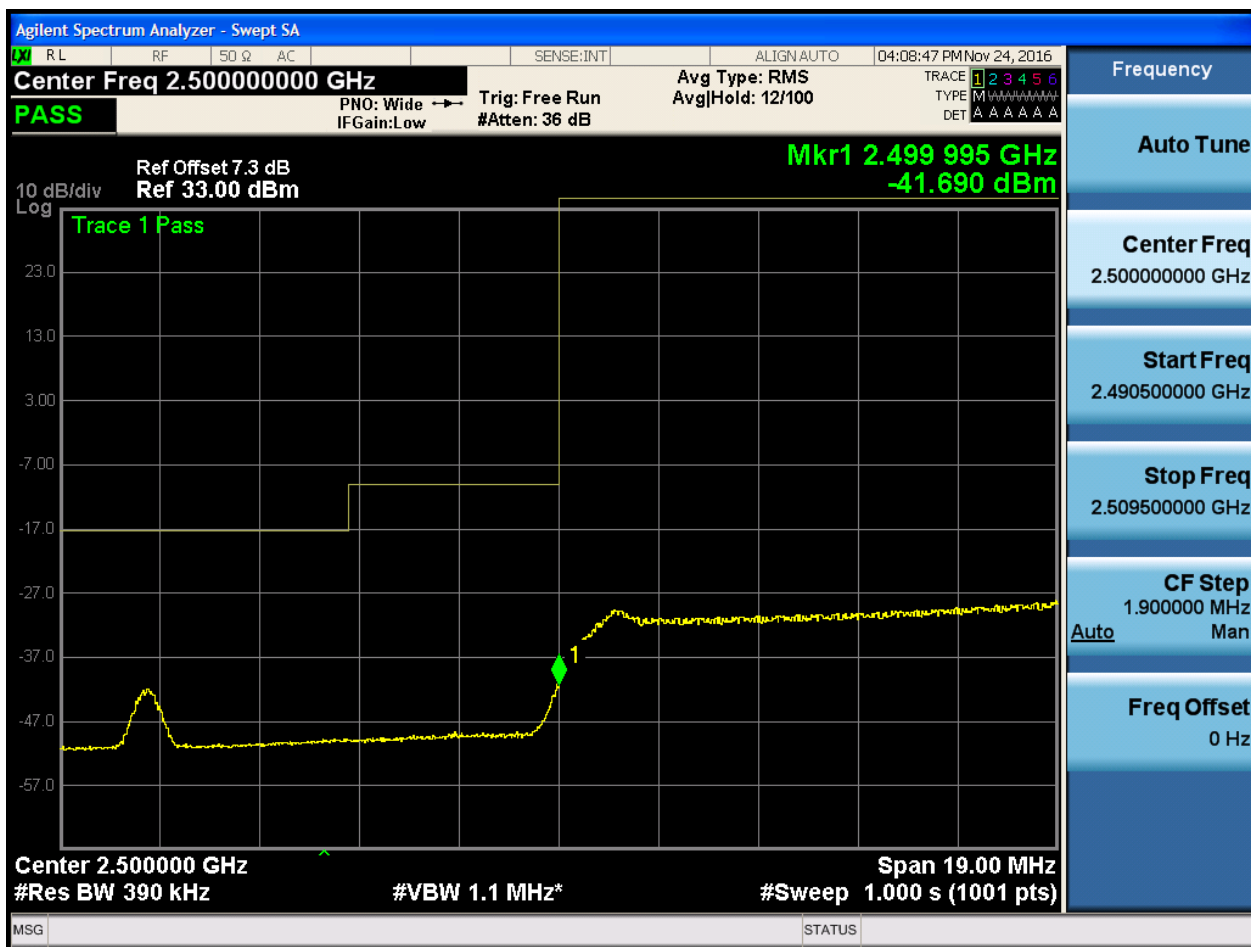
5.2.1.2.4.1 Test Channel = LCH

5.2.1.2.4.1.1 Test RB = RB1#0





5.2.1.2.4.1.2 Test RB = RB1#99





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:09:05 PM Nov 24, 2016

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 A

Ref Offset 7.3 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-35.150 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz
#Res BW 390 kHz #VBW 1.1 MHz* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

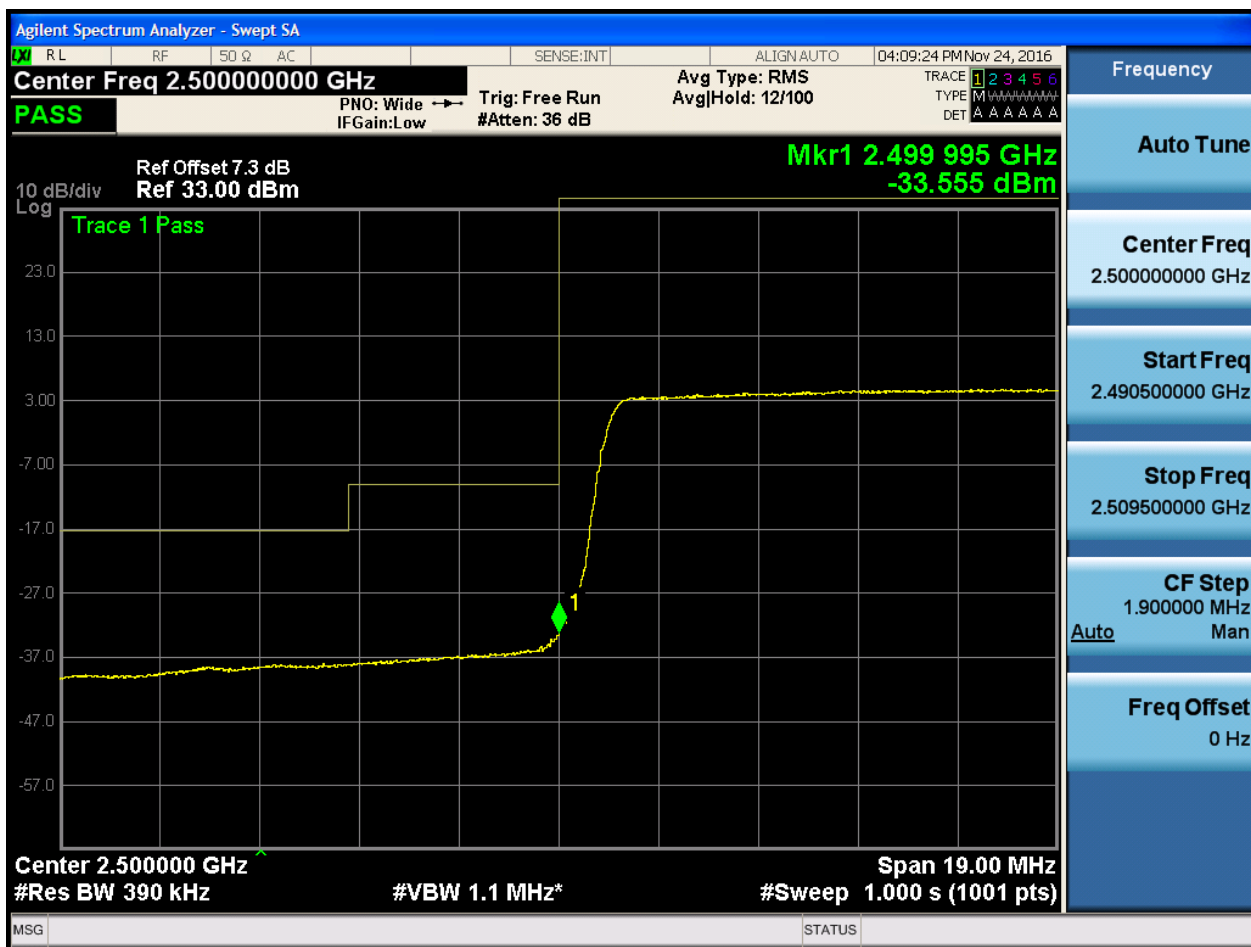
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



5.2.1.2.4.1.4 Test RB = RB100#0





5.2.1.2.4.2 Test Channel = HCH

5.2.1.2.4.2.1 Test RB = RB1#0

