



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	20.89	19.99	33	PASS
				RB1#13	21.1	20.2	33	PASS
				RB1#24	21.16	20.26	33	PASS
				RB12#0	20.33	19.43	33	PASS
				RB12#6	20.35	19.45	33	PASS
				RB12#13	20.26	19.36	33	PASS
			MCH	RB25#0	20.25	19.35	33	PASS
				RB1#0	21.2	20.3	33	PASS
				RB1#13	21.3	20.4	33	PASS
				RB1#24	21.22	20.32	33	PASS
				RB12#0	20.42	19.52	33	PASS
				RB12#6	20.45	19.55	33	PASS
				RB12#13	20.25	19.35	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.4	19.5	33	PASS
			HCH	RB1#0	21.23	20.33	33	PASS
				RB1#13	21.21	20.31	33	PASS
				RB1#24	20.98	20.08	33	PASS
				RB12#0	20.44	19.54	33	PASS
				RB12#6	20.41	19.51	33	PASS
				RB12#13	20.22	19.32	33	PASS
				RB25#0	20.41	19.51	33	PASS
		10	LCH	RB1#0	20.62	19.72	33	PASS
				RB1#25	21.51	20.61	33	PASS
				RB1#49	21.7	20.8	33	PASS
				RB25#0	19.94	19.04	33	PASS
				RB25#13	20.26	19.36	33	PASS
				RB25#25	20.64	19.74	33	PASS
				RB50#0	20.12	19.22	33	PASS
			MCH	RB1#0	20.77	19.87	33	PASS
				RB1#25	21.43	20.53	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#49	21.41	20.51	33	PASS
				RB25#0	20.01	19.11	33	PASS
				RB25#13	20.06	19.16	33	PASS
				RB25#25	20.34	19.44	33	PASS
				RB50#0	20.04	19.14	33	PASS
			HCH	RB1#0	20.99	20.09	33	PASS
				RB1#25	21.53	20.63	33	PASS
				RB1#49	21.29	20.39	33	PASS
				RB25#0	20.18	19.28	33	PASS
				RB25#13	20.17	19.27	33	PASS
				RB25#25	20.51	19.61	33	PASS
				RB50#0	20.23	19.33	33	PASS
		15	LCH	RB1#0	20.76	19.86	33	PASS
				RB1#38	21.43	20.53	33	PASS
				RB1#74	21.52	20.62	33	PASS
				RB36#0	20.24	19.34	33	PASS
				RB36#18	20.53	19.63	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB36#39	20.4	19.5	33	PASS
				RB75#0	20.3	19.4	33	PASS
			MCH	RB1#0	20.99	20.09	33	PASS
				RB1#38	21.21	20.31	33	PASS
				RB1#74	21.13	20.23	33	PASS
				RB36#0	20.18	19.28	33	PASS
				RB36#18	20.32	19.42	33	PASS
				RB36#39	20.16	19.26	33	PASS
				RB75#0	20.27	19.37	33	PASS
			HCH	RB1#0	21.11	20.21	33	PASS
				RB1#38	21.35	20.45	33	PASS
				RB1#74	21.01	20.11	33	PASS
				RB36#0	20.33	19.43	33	PASS
				RB36#18	20.42	19.52	33	PASS
				RB36#39	20.29	19.39	33	PASS
				RB75#0	20.33	19.43	33	PASS
		20	LCH	RB1#0	21.05	20.15	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#50	21.47	20.57	33	PASS
				RB1#99	21.56	20.66	33	PASS
				RB50#0	20.3	19.4	33	PASS
				RB50#25	20.34	19.44	33	PASS
				RB50#50	20.42	19.52	33	PASS
				RB100#0	20.51	19.61	33	PASS
			MCH	RB1#0	21.55	20.65	33	PASS
				RB1#50	21.18	20.28	33	PASS
				RB1#99	21.25	20.35	33	PASS
				RB50#0	20.41	19.51	33	PASS
				RB50#25	20.31	19.41	33	PASS
				RB50#50	20.06	19.16	33	PASS
				RB100#0	20.28	19.38	33	PASS
			HCH	RB1#0	21.59	20.69	33	PASS
				RB1#50	21.43	20.53	33	PASS
				RB1#99	21.27	20.37	33	PASS
				RB50#0	20.35	19.45	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#25	20.37	19.47	33	PASS
				RB50#50	20.28	19.38	33	PASS
				RB100#0	20.21	19.31	33	PASS
	LTE/TM2	5	LCH	RB1#0	19.93	19.03	33	PASS
				RB1#13	20.44	19.54	33	PASS
				RB1#24	20.18	19.28	33	PASS
				RB12#0	20.23	19.33	33	PASS
				RB12#6	20.26	19.36	33	PASS
				RB12#13	20.18	19.28	33	PASS
				RB25#0	20.11	19.21	33	PASS
			MCH	RB1#0	20.47	19.57	33	PASS
				RB1#13	20.66	19.76	33	PASS
				RB1#24	20.49	19.59	33	PASS
				RB12#0	20.35	19.45	33	PASS
				RB12#6	20.37	19.47	33	PASS
				RB12#13	20.2	19.3	33	PASS
				RB25#0	20.27	19.37	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	20.44	19.54	33	PASS
				RB1#13	20.25	19.35	33	PASS
				RB1#24	20.27	19.37	33	PASS
				RB12#0	20.36	19.46	33	PASS
				RB12#6	20.29	19.39	33	PASS
				RB12#13	20.18	19.28	33	PASS
				RB25#0	20.28	19.38	33	PASS
		10	LCH	RB1#0	19.68	18.78	33	PASS
				RB1#25	20.61	19.71	33	PASS
				RB1#49	20.69	19.79	33	PASS
				RB25#0	19.86	18.96	33	PASS
				RB25#13	20.22	19.32	33	PASS
				RB25#25	20.53	19.63	33	PASS
				RB50#0	19.99	19.09	33	PASS
			MCH	RB1#0	19.81	18.91	33	PASS
				RB1#25	20.5	19.6	33	PASS
				RB1#49	20.5	19.6	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	19.94	19.04	33	PASS
				RB25#13	20.05	19.15	33	PASS
				RB25#25	20.34	19.44	33	PASS
				RB50#0	19.98	19.08	33	PASS
			HCH	RB1#0	20	19.1	33	PASS
				RB1#25	20.51	19.61	33	PASS
				RB1#49	20.32	19.42	33	PASS
				RB25#0	20.04	19.14	33	PASS
				RB25#13	20.06	19.16	33	PASS
				RB25#25	20.39	19.49	33	PASS
				RB50#0	20.08	19.18	33	PASS
		15	LCH	RB1#0	19.7	18.8	33	PASS
				RB1#38	20.45	19.55	33	PASS
				RB1#74	20.45	19.55	33	PASS
				RB36#0	20.13	19.23	33	PASS
				RB36#18	20.42	19.52	33	PASS
				RB36#39	20.24	19.34	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB75#0	20.21	19.31	33	PASS
			MCH	RB1#0	20.05	19.15	33	PASS
				RB1#38	20.37	19.47	33	PASS
				RB1#74	20.24	19.34	33	PASS
				RB36#0	20.07	19.17	33	PASS
				RB36#18	20.27	19.37	33	PASS
				RB36#39	20.07	19.17	33	PASS
				RB75#0	20.16	19.26	33	PASS
			HCH	RB1#0	20.3	19.4	33	PASS
				RB1#38	20.56	19.66	33	PASS
				RB1#74	20.23	19.33	33	PASS
				RB36#0	20.2	19.3	33	PASS
				RB36#18	20.27	19.37	33	PASS
				RB36#39	20.17	19.27	33	PASS
				RB75#0	20.18	19.28	33	PASS
		20	LCH	RB1#0	20.49	19.59	33	PASS
				RB1#50	20.91	20.01	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#99	20.92	20.02	33	PASS
				RB50#0	20.18	19.28	33	PASS
				RB50#25	20.2	19.3	33	PASS
				RB50#50	20.33	19.43	33	PASS
				RB100#0	20.32	19.42	33	PASS
			MCH	RB1#0	20.86	19.96	33	PASS
				RB1#50	20.47	19.57	33	PASS
				RB1#99	20.65	19.75	33	PASS
				RB50#0	20.34	19.44	33	PASS
				RB50#25	20.23	19.33	33	PASS
				RB50#50	19.98	19.08	33	PASS
				RB100#0	20.15	19.25	33	PASS
			HCH	RB1#0	20.85	19.95	33	PASS
				RB1#50	20.5	19.6	33	PASS
				RB1#99	20.55	19.65	33	PASS
				RB50#0	20.21	19.31	33	PASS
				RB50#25	20.22	19.32	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured[dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#50	20.13	19.23	33	PASS
				RB100#0	20.12	19.22	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	4.45	13	PASS
				RB1#13	4.01	13	PASS
				RB1#24	4.12	13	PASS
				RB12#0	5.06	13	PASS
				RB12#6	5.05	13	PASS
				RB12#13	5.19	13	PASS
				RB25#0	5.81	13	PASS
			MCH	RB1#0	4.39	13	PASS
				RB1#13	4.46	13	PASS
				RB1#24	4.41	13	PASS
				RB12#0	5.27	13	PASS
				RB12#6	5.22	13	PASS
				RB12#13	5.37	13	PASS
				RB25#0	5.79	13	PASS
			HCH	RB1#0	4.27	13	PASS
				RB1#13	4.26	13	PASS
				RB1#24	4.16	13	PASS
				RB12#0	5.16	13	PASS
				RB12#6	5.16	13	PASS
				RB12#13	5.29	13	PASS
				RB25#0	5.47	13	PASS
		10	LCH	RB1#0	4.37	13	PASS
				RB1#25	3.97	13	PASS
				RB1#49	3.84	13	PASS
				RB25#0	5.38	13	PASS
				RB25#13	5.29	13	PASS
				RB25#25	5.13	13	PASS
				RB50#0	5.83	13	PASS
			MCH	RB1#0	4.54	13	PASS
				RB1#25	4.21	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#49	4.09	13	PASS
				RB25#0	5.63	13	PASS
				RB25#13	5.37	13	PASS
				RB25#25	5.5	13	PASS
				RB50#0	5.95	13	PASS
			HCH	RB1#0	4.39	13	PASS
				RB1#25	3.94	13	PASS
				RB1#49	4.1	13	PASS
				RB25#0	5.51	13	PASS
				RB25#13	5.42	13	PASS
				RB25#25	5.43	13	PASS
				RB50#0	5.52	13	PASS
		15	LCH	RB1#0	4.3	13	PASS
				RB1#38	3.9	13	PASS
				RB1#74	3.91	13	PASS
				RB36#0	5.53	13	PASS
				RB36#18	5.31	13	PASS
				RB36#39	5.41	13	PASS
				RB75#0	5.85	13	PASS
			MCH	RB1#0	4.63	13	PASS
				RB1#38	4.49	13	PASS
				RB1#74	4.37	13	PASS
				RB36#0	5.66	13	PASS
				RB36#18	5.48	13	PASS
				RB36#39	5.76	13	PASS
				RB75#0	6.11	13	PASS
			HCH	RB1#0	4.53	13	PASS
				RB1#38	4.12	13	PASS
				RB1#74	4.4	13	PASS
				RB36#0	5.5	13	PASS
				RB36#18	5.32	13	PASS
				RB36#39	5.4	13	PASS
				RB75#0	5.95	13	PASS
		20	LCH	RB1#0	4.02	13	PASS
				RB1#50	3.92	13	PASS
				RB1#99	3.89	13	PASS
				RB50#0	5.45	13	PASS
				RB50#25	5.32	13	PASS
				RB50#50	5.36	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB100#0	5.9	13	PASS
			MCH	RB1#0	4.34	13	PASS
				RB1#50	4.23	13	PASS
				RB1#99	4.47	13	PASS
				RB50#0	5.59	13	PASS
				RB50#25	5.69	13	PASS
				RB50#50	5.62	13	PASS
				RB100#0	6.19	13	PASS
			HCH	RB1#0	4.36	13	PASS
				RB1#50	4.04	13	PASS
				RB1#99	4.26	13	PASS
				RB50#0	5.43	13	PASS
				RB50#25	5.46	13	PASS
				RB50#50	5.49	13	PASS
				RB100#0	5.81	13	PASS
	LTE/TM2	5	LCH	RB1#0	5.09	13	PASS
				RB1#13	5.21	13	PASS
				RB1#24	4.89	13	PASS
				RB12#0	5.51	13	PASS
				RB12#6	5.55	13	PASS
				RB12#13	5.63	13	PASS
				RB25#0	6.28	13	PASS
			MCH	RB1#0	5.23	13	PASS
				RB1#13	5.4	13	PASS
				RB1#24	5.31	13	PASS
				RB12#0	5.69	13	PASS
				RB12#6	5.7	13	PASS
				RB12#13	5.81	13	PASS
				RB25#0	6.36	13	PASS
			HCH	RB1#0	4.79	13	PASS
				RB1#13	4.99	13	PASS
				RB1#24	5.22	13	PASS
				RB12#0	5.61	13	PASS
				RB12#6	5.67	13	PASS
				RB12#13	5.65	13	PASS
				RB25#0	5.97	13	PASS
		10	LCH	RB1#0	5.52	13	PASS
				RB1#25	5.02	13	PASS
				RB1#49	4.82	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#0	5.66	13	PASS
				RB25#13	5.62	13	PASS
				RB25#25	5.61	13	PASS
				RB50#0	6.24	13	PASS
			MCH	RB1#0	5.67	13	PASS
				RB1#25	5.31	13	PASS
				RB1#49	5.09	13	PASS
				RB25#0	6.06	13	PASS
				RB25#13	6.03	13	PASS
				RB25#25	6.02	13	PASS
				RB50#0	6.41	13	PASS
			HCH	RB1#0	5.3	13	PASS
				RB1#25	4.93	13	PASS
				RB1#49	4.9	13	PASS
				RB25#0	5.91	13	PASS
				RB25#13	5.94	13	PASS
				RB25#25	5.63	13	PASS
				RB50#0	6.3	13	PASS
		15	LCH	RB1#0	5.47	13	PASS
				RB1#38	5.14	13	PASS
				RB1#74	4.8	13	PASS
				RB36#0	5.94	13	PASS
				RB36#18	5.68	13	PASS
				RB36#39	5.58	13	PASS
				RB75#0	6.35	13	PASS
			MCH	RB1#0	5.65	13	PASS
				RB1#38	5.6	13	PASS
				RB1#74	5.22	13	PASS
				RB36#0	6.06	13	PASS
				RB36#18	6.05	13	PASS
				RB36#39	5.99	13	PASS
				RB75#0	6.6	13	PASS
			HCH	RB1#0	5.32	13	PASS
				RB1#38	5.09	13	PASS
				RB1#74	5.12	13	PASS
				RB36#0	5.77	13	PASS
				RB36#18	5.74	13	PASS
				RB36#39	5.66	13	PASS
				RB75#0	6.38	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
		20	LCH	RB1#0	4.84	13	PASS
				RB1#50	4.49	13	PASS
				RB1#99	4.71	13	PASS
				RB50#0	5.78	13	PASS
				RB50#25	5.59	13	PASS
				RB50#50	5.75	13	PASS
				RB100#0	6.44	13	PASS
			MCH	RB1#0	4.88	13	PASS
				RB1#50	5.05	13	PASS
				RB1#99	4.97	13	PASS
				RB50#0	5.88	13	PASS
				RB50#25	6.08	13	PASS
				RB50#50	5.97	13	PASS
				RB100#0	6.62	13	PASS
			HCH	RB1#0	4.8	13	PASS
				RB1#50	4.71	13	PASS
				RB1#99	4.87	13	PASS
				RB50#0	5.81	13	PASS
				RB50#25	5.83	13	PASS
				RB50#50	5.98	13	PASS
				RB100#0	6.33	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

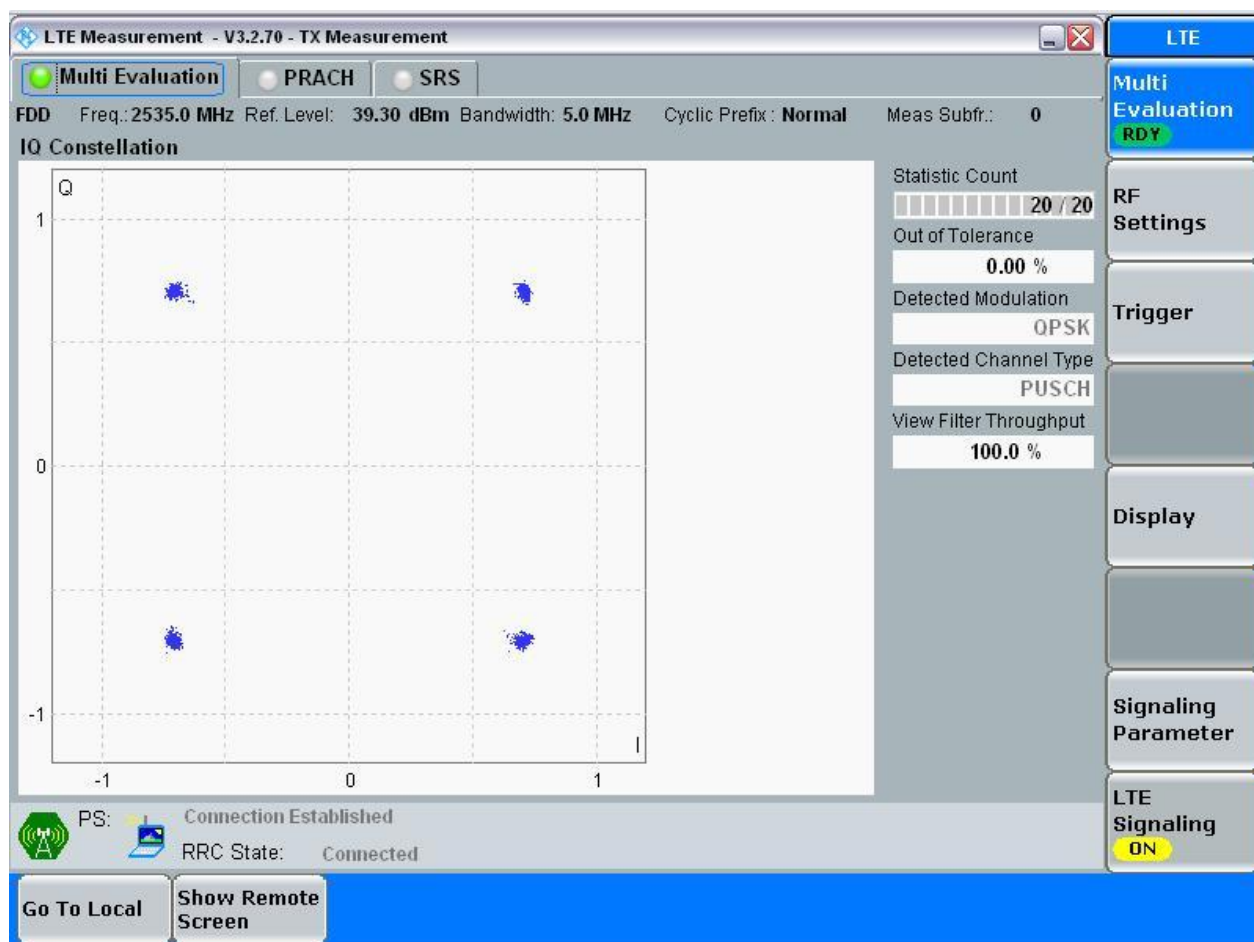
3.1.1 Test Band = BAND7

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

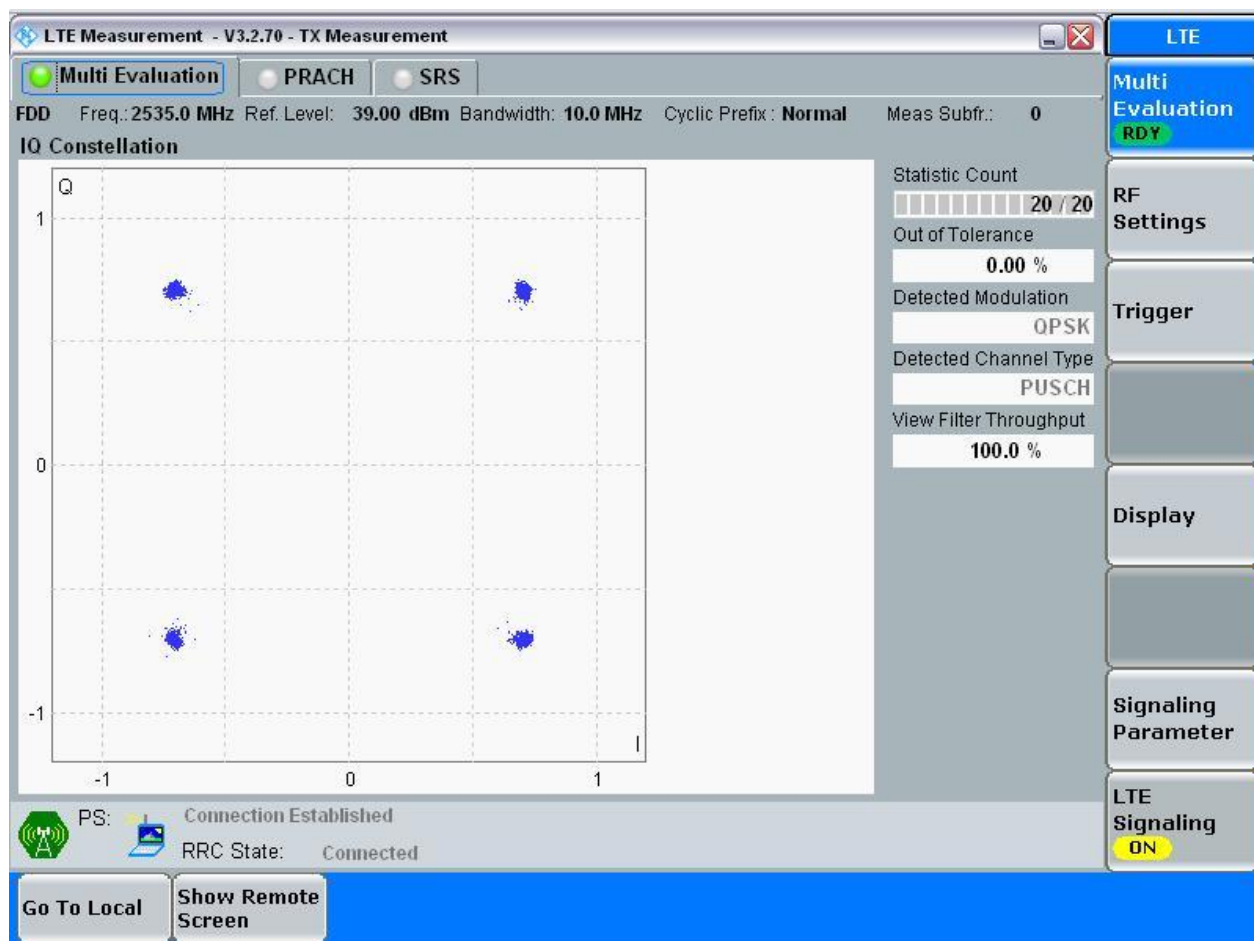
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

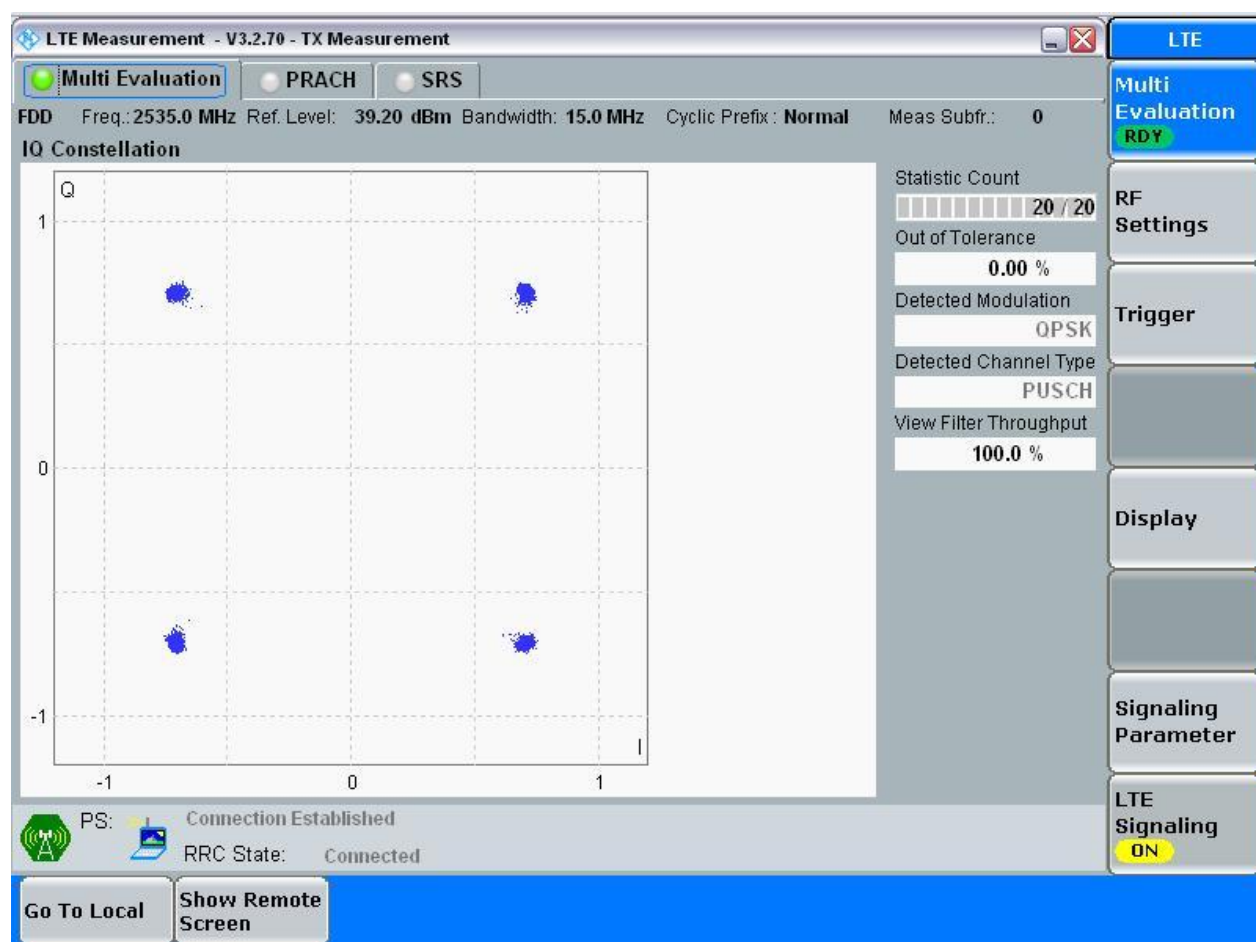
3.1.1.1.2.1.1 Test RB = RB50#0



3.1.1.1.3 Test Bandwidth = 15

3.1.1.1.3.1 Test Channel = MCH

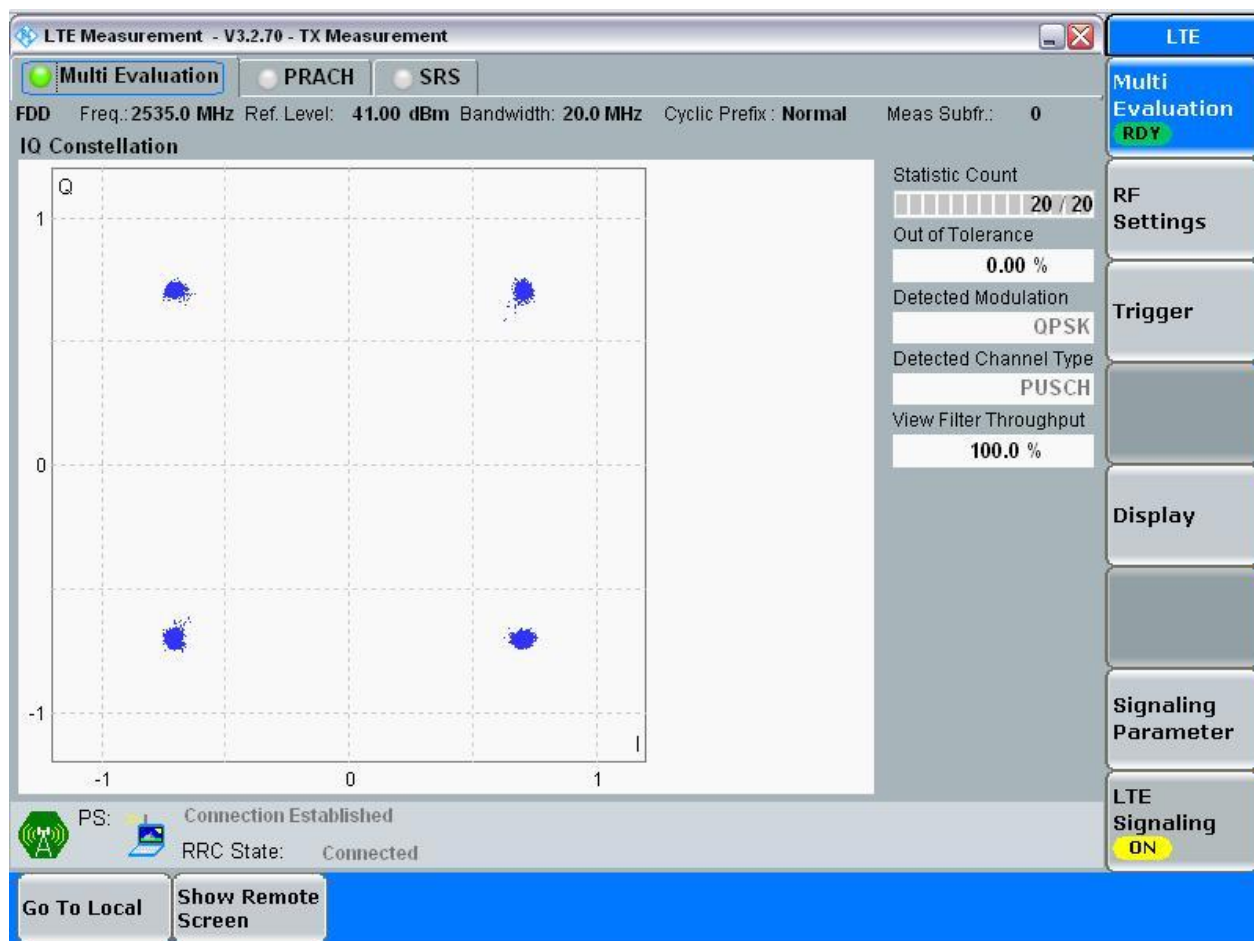
3.1.1.1.3.1.1 Test RB = RB75#0



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

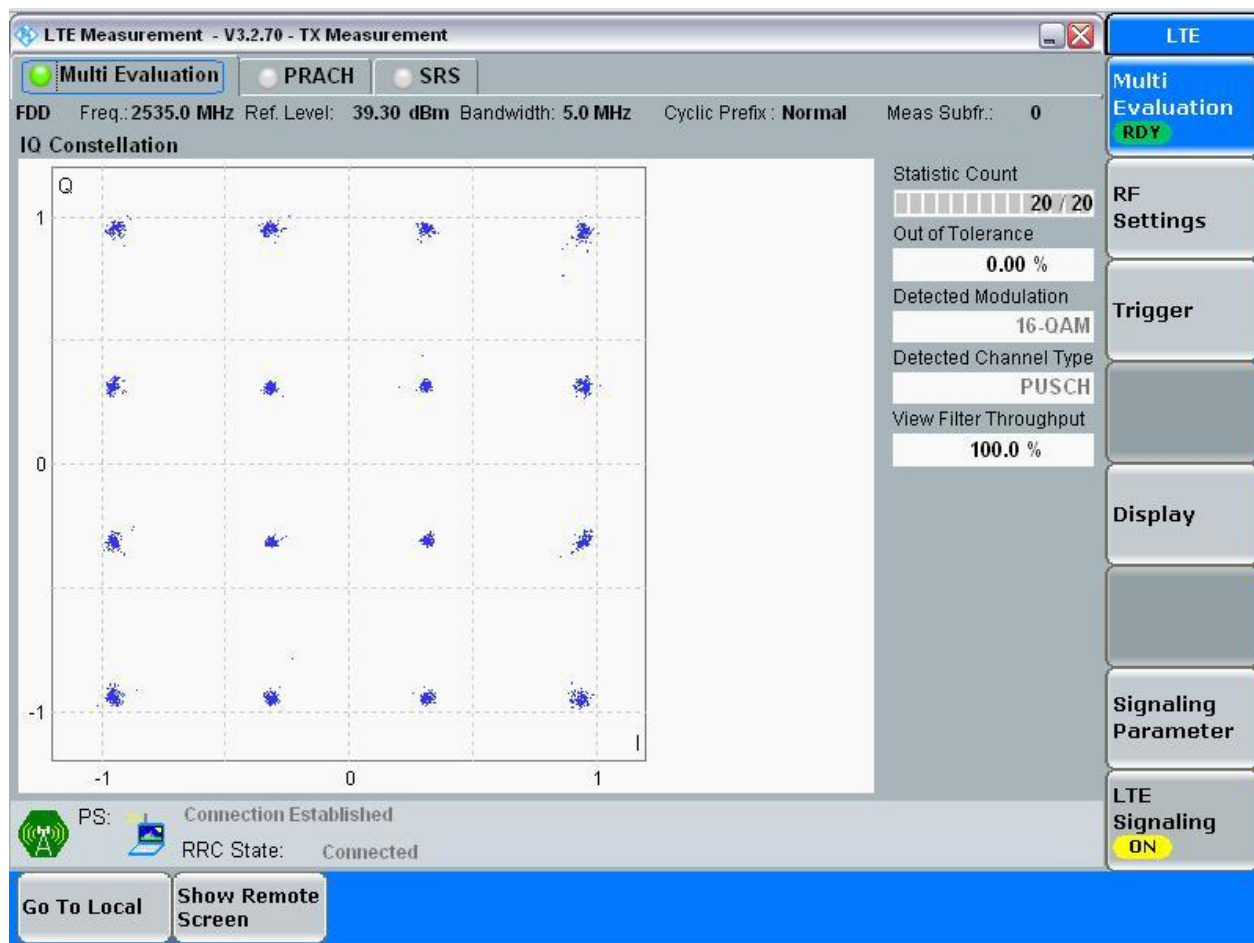


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

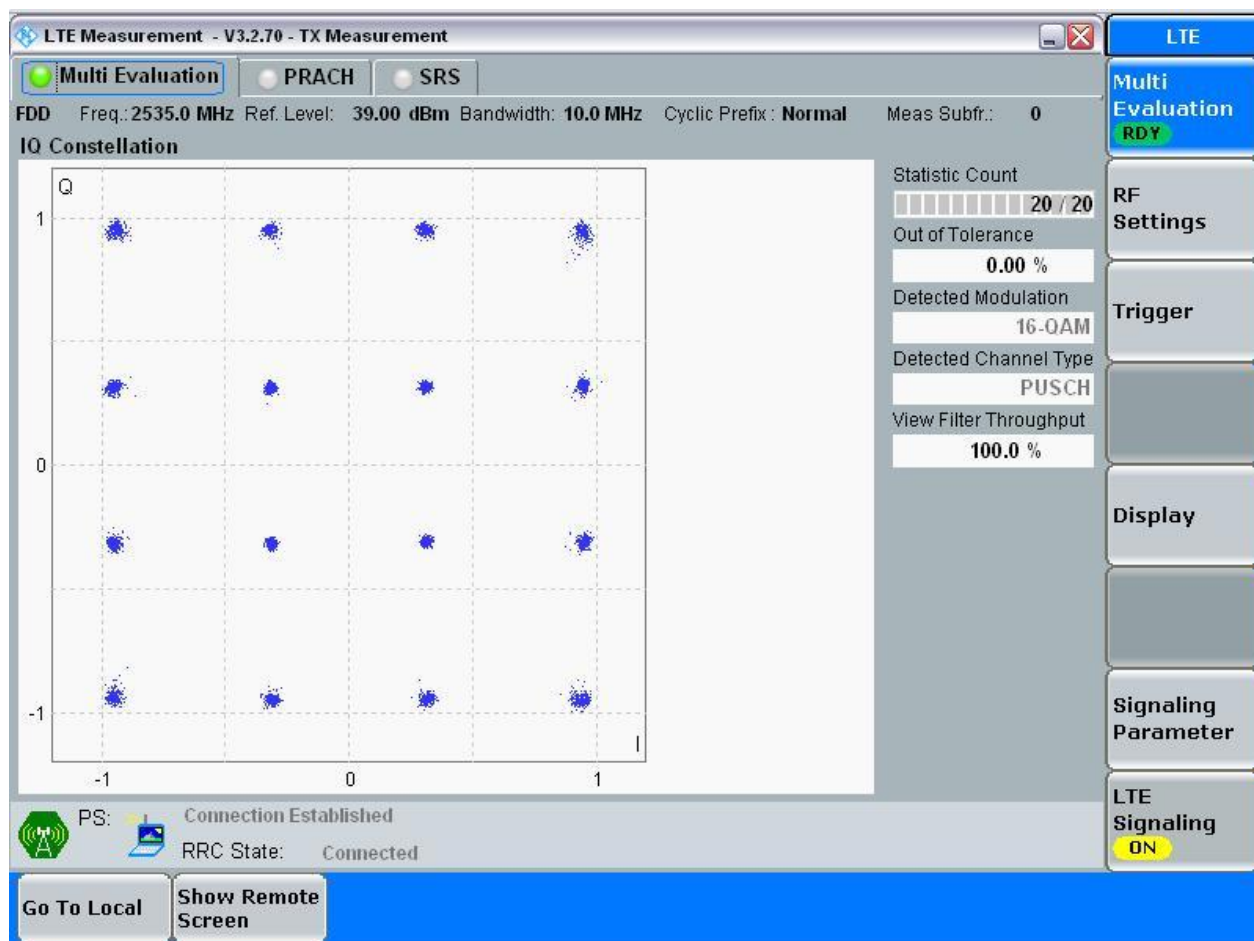
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

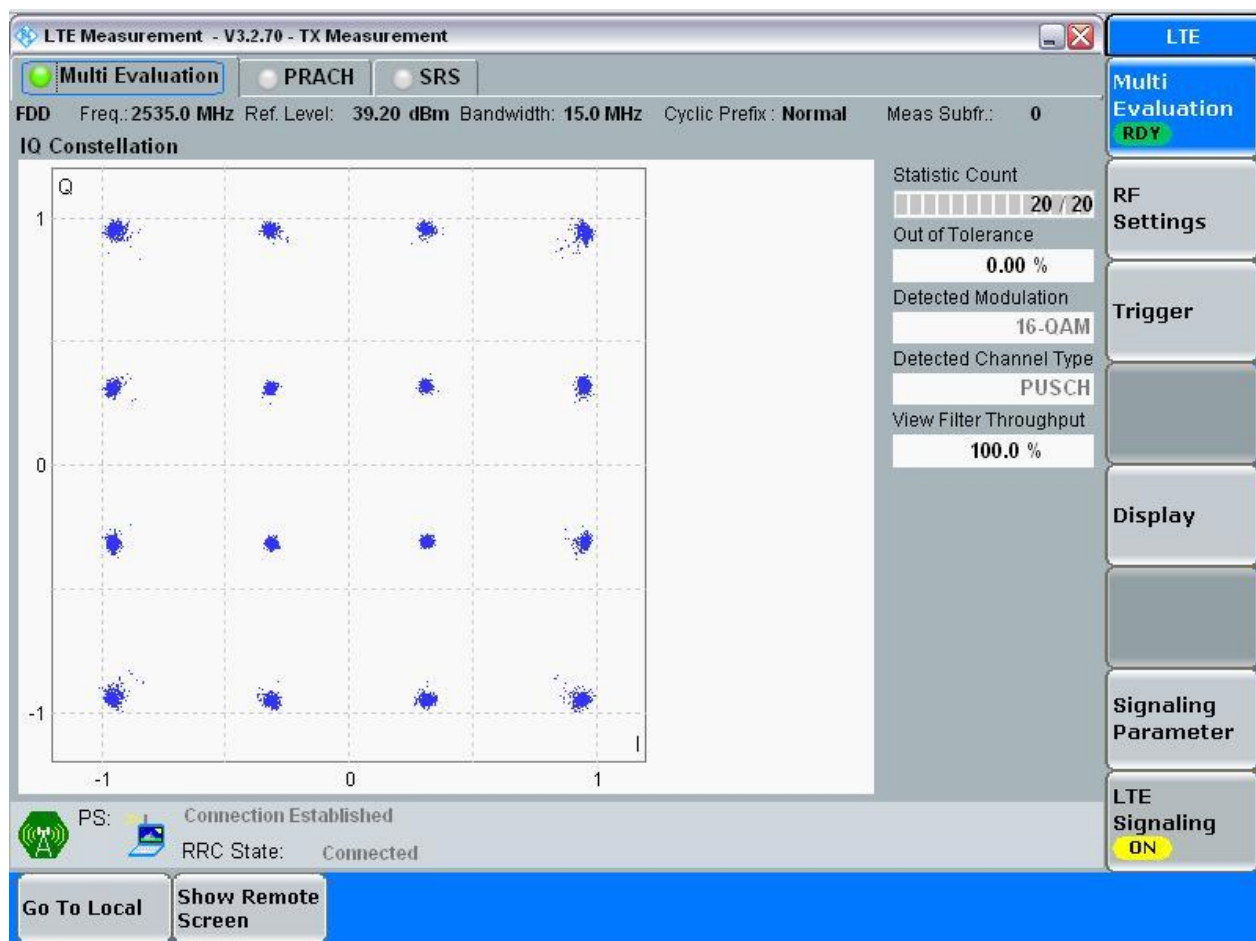
3.1.1.2.2.1.1 Test RB = RB50#0



3.1.1.2.3 Test Bandwidth = 15

3.1.1.2.3.1 Test Channel = MCH

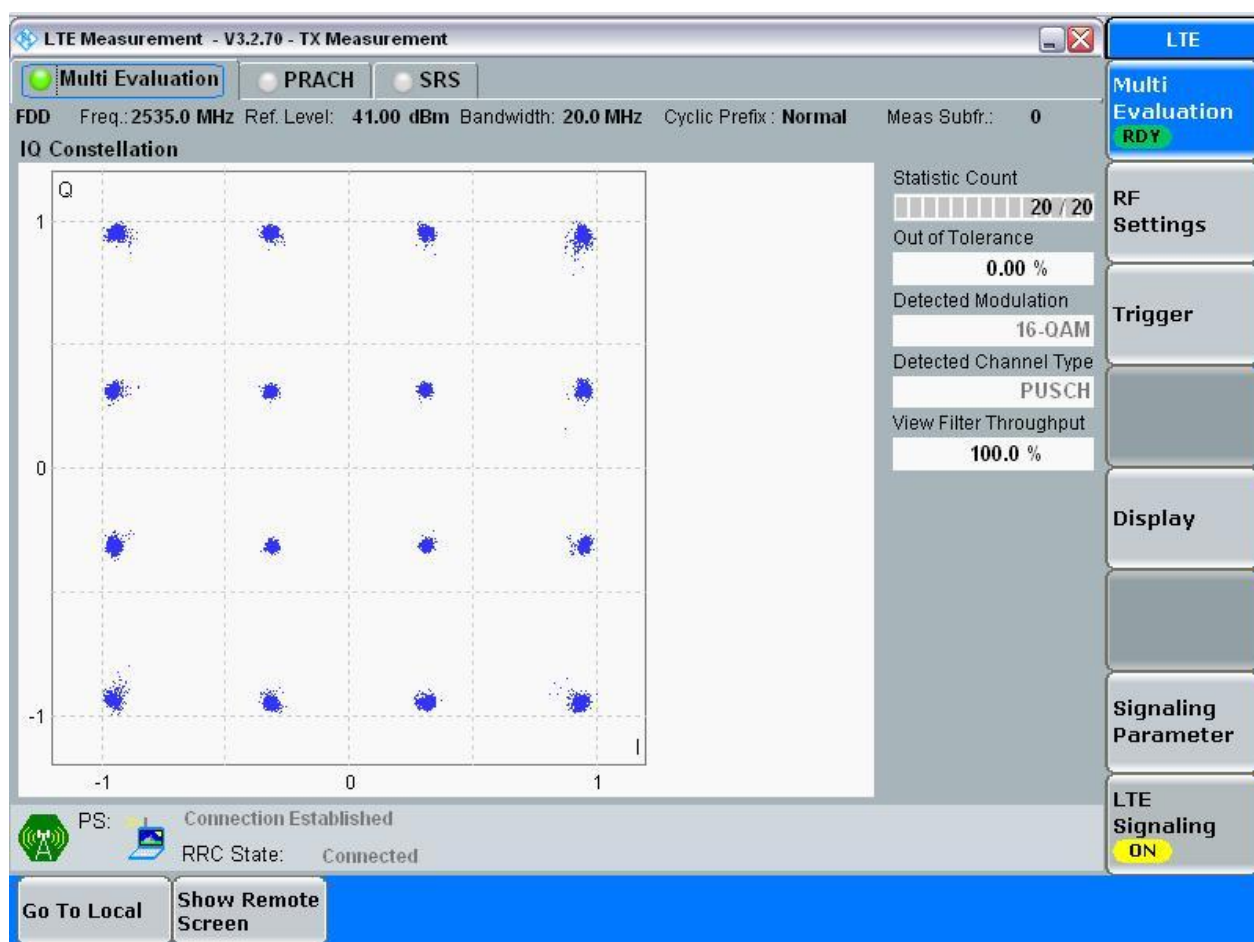
3.1.1.2.3.1.1 Test RB = RB75#0



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/TM2	5	LCH	RB25#0	4.52	5.00	Pass
			MCH	RB25#0	4.52	4.98	Pass
			HCH	RB25#0	4.52	4.98	Pass
		10	LCH	RB50#0	9.03	9.89	Pass
			MCH	RB50#0	9.00	9.91	Pass
			HCH	RB50#0	8.99	9.90	Pass
		15	LCH	RB75#0	13.58	15.08	Pass
			MCH	RB75#0	13.53	15.11	Pass
			HCH	RB75#0	13.52	15.02	Pass
		20	LCH	RB100#0	18.04	19.92	Pass
			MCH	RB100#0	18.02	19.83	Pass
			HCH	RB100#0	17.99	19.73	Pass
	LTE/TM1	5	LCH	RB25#0	4.51	4.97	Pass
			MCH	RB25#0	4.52	4.98	Pass
			HCH	RB25#0	4.51	4.97	Pass
		10	LCH	RB50#0	9.01	9.96	Pass
			MCH	RB50#0	9.00	9.92	Pass
			HCH	RB50#0	8.99	9.95	Pass
		15	LCH	RB75#0	13.50	14.99	Pass
			MCH	RB75#0	13.48	14.98	Pass
			HCH	RB75#0	13.45	14.98	Pass
		20	LCH	RB100#0	18.01	19.76	Pass
			MCH	RB100#0	17.98	19.74	Pass
			HCH	RB100#0	17.95	19.88	Pass



Part II - Test Plots

4.1 For LTE

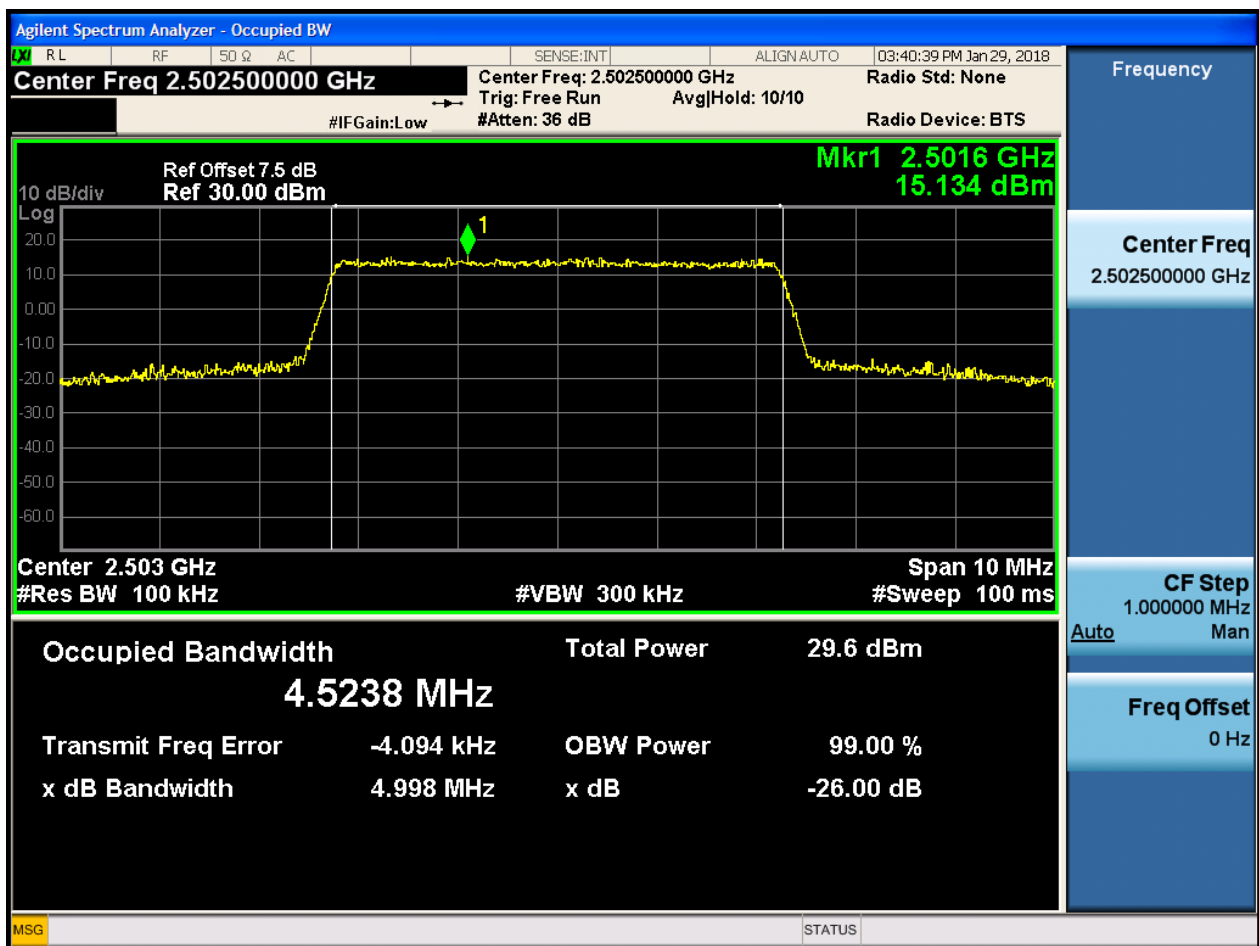
4.1.1 Test Band = BAND7

4.1.1.1 Test Mode = LTE/TM2

4.1.1.1.1 Test Bandwidth = 5

4.1.1.1.1.1 Test Channel = LCH

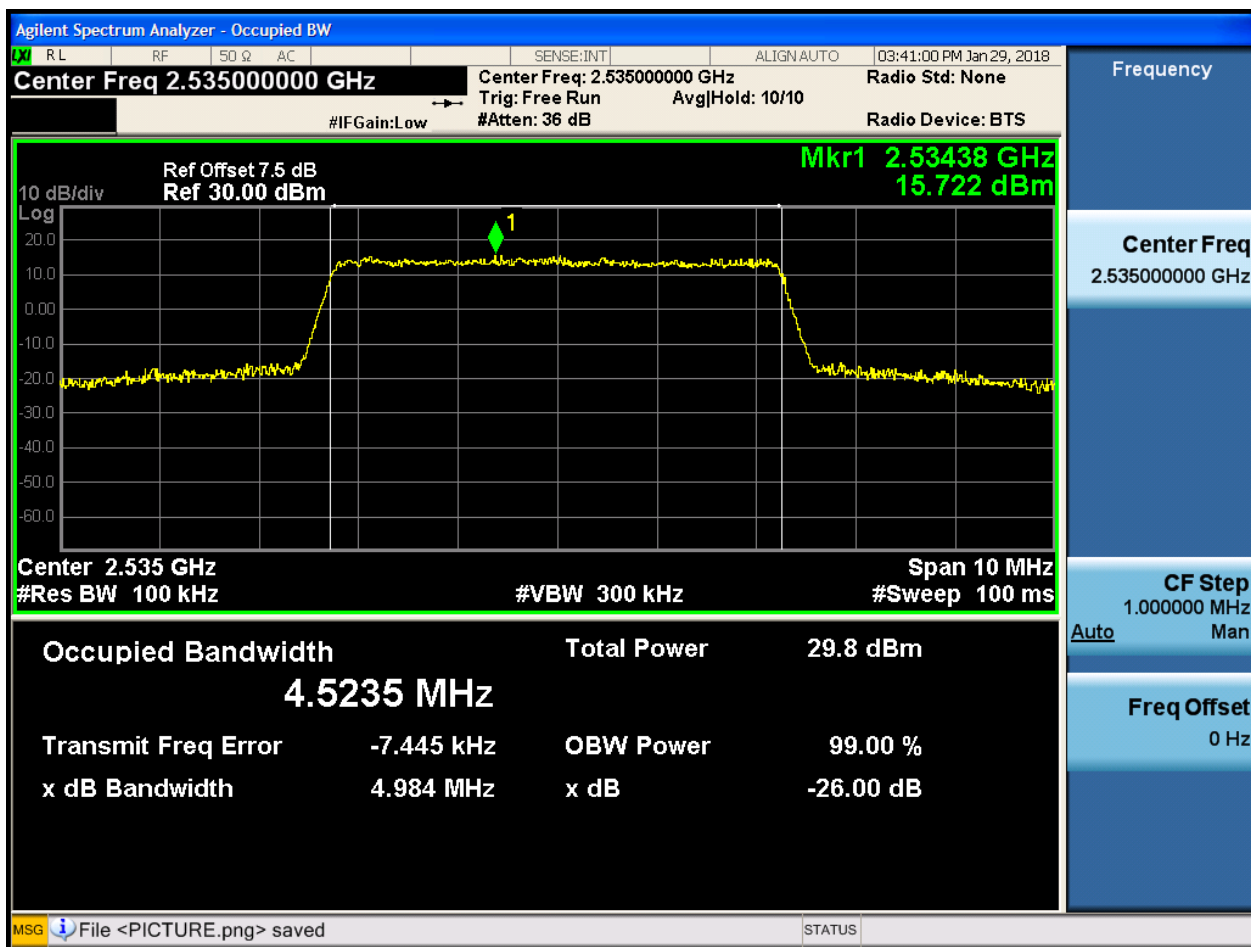
4.1.1.1.1.1.1 Test RB = RB25#0





4.1.1.1.1.2 Test Channel = MCH

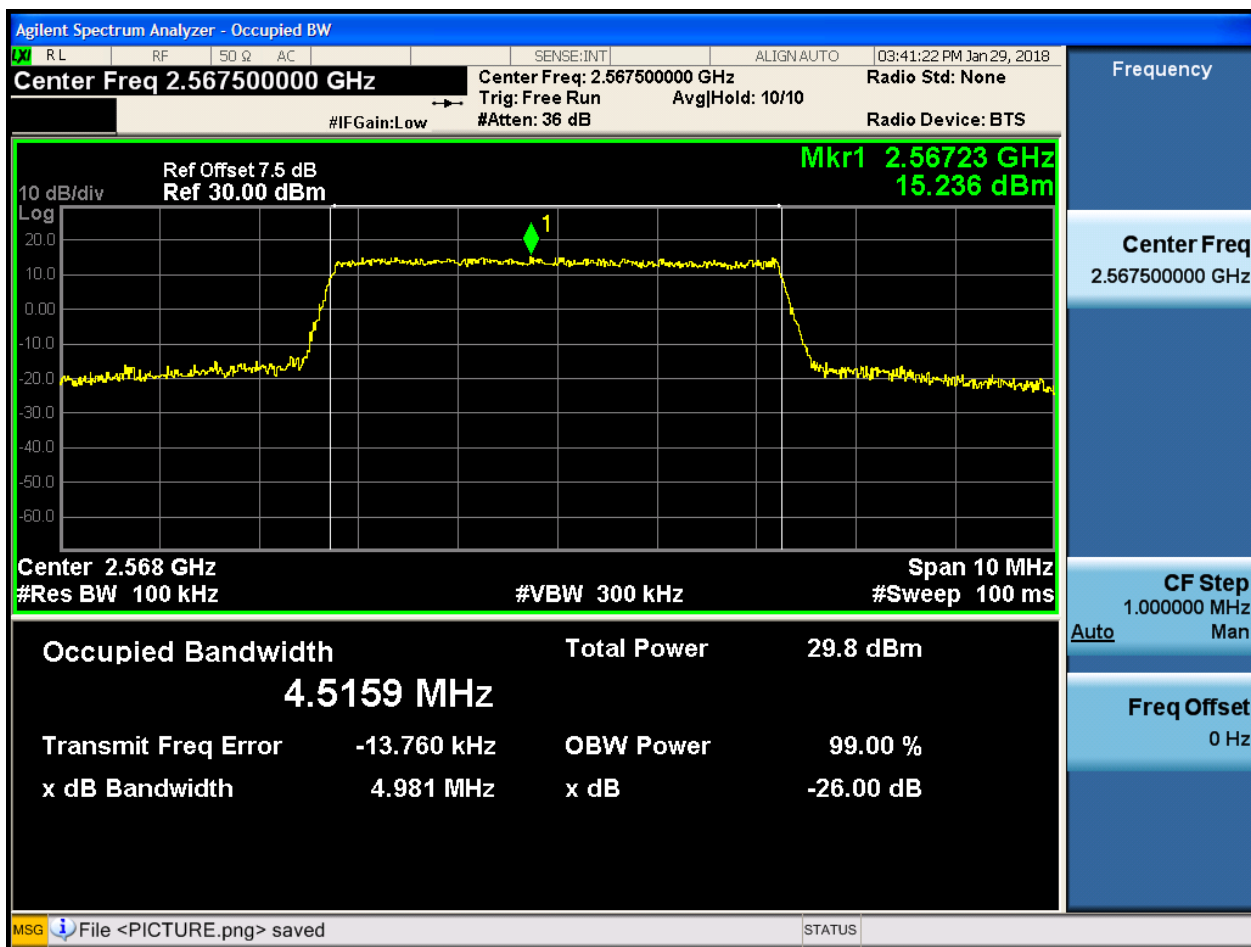
4.1.1.1.1.2.1 Test RB = RB25#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

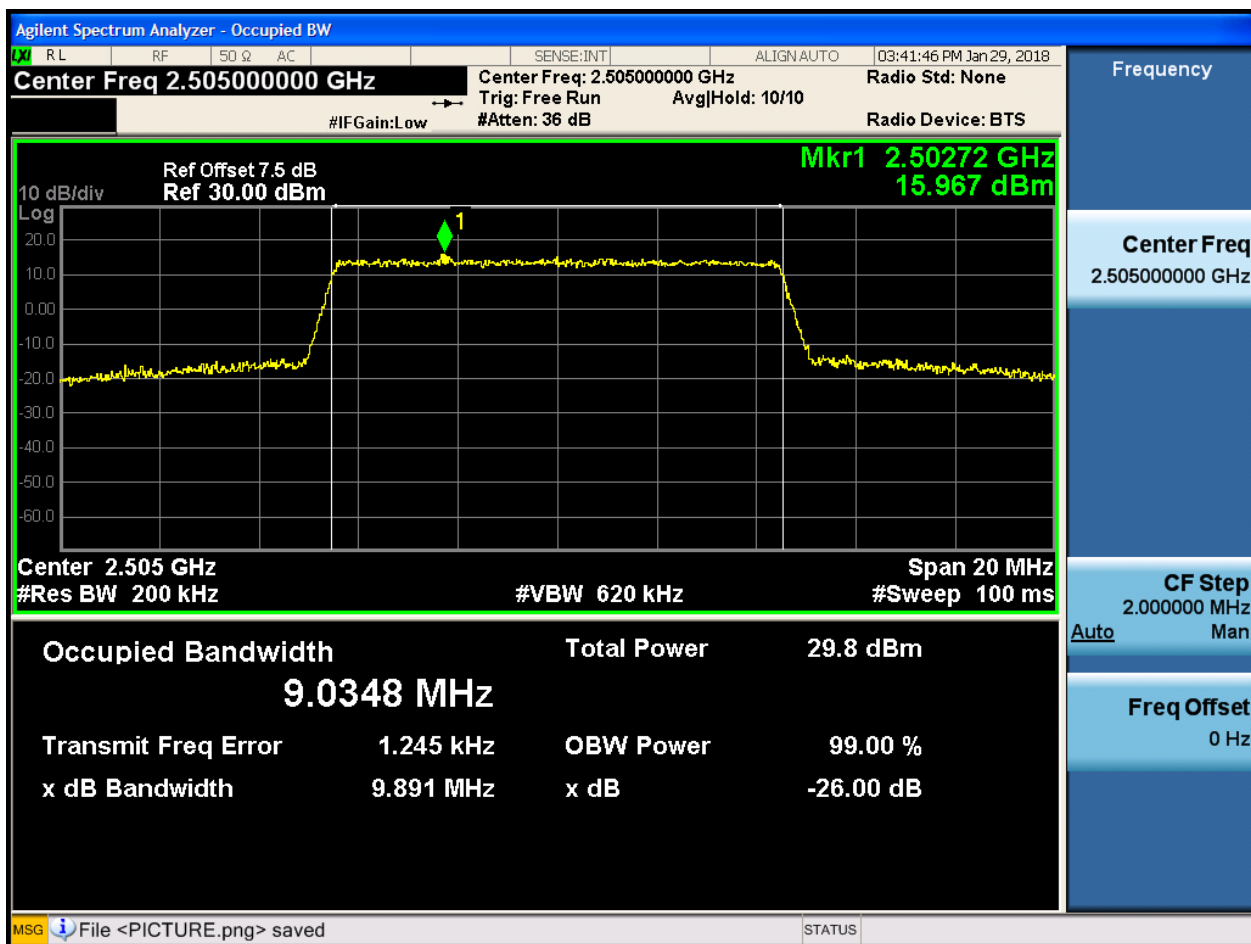




4.1.1.1.2 Test Bandwidth = 10

4.1.1.1.2.1 Test Channel = LCH

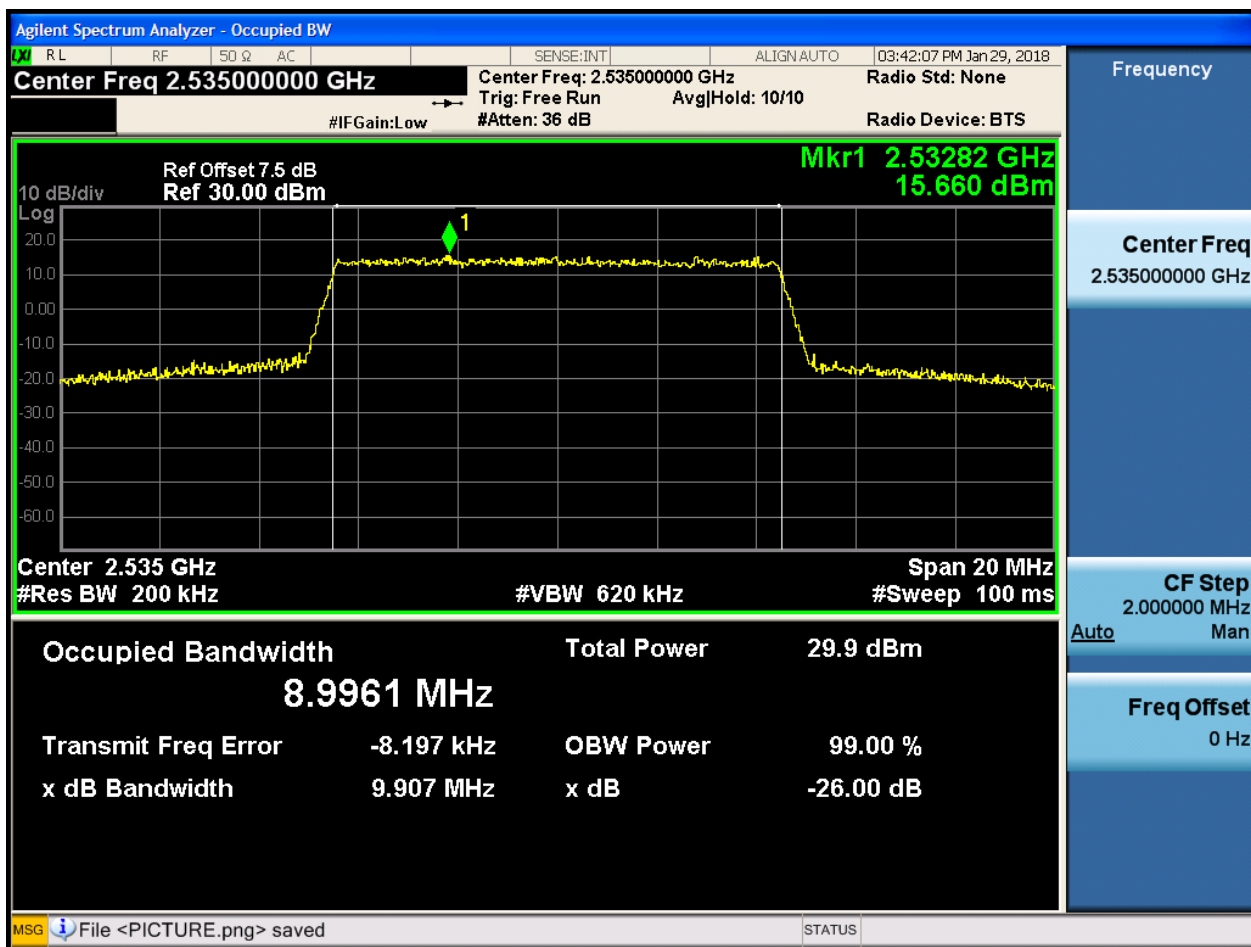
4.1.1.1.2.1.1 Test RB = RB50#0





4.1.1.1.2.2 Test Channel = MCH

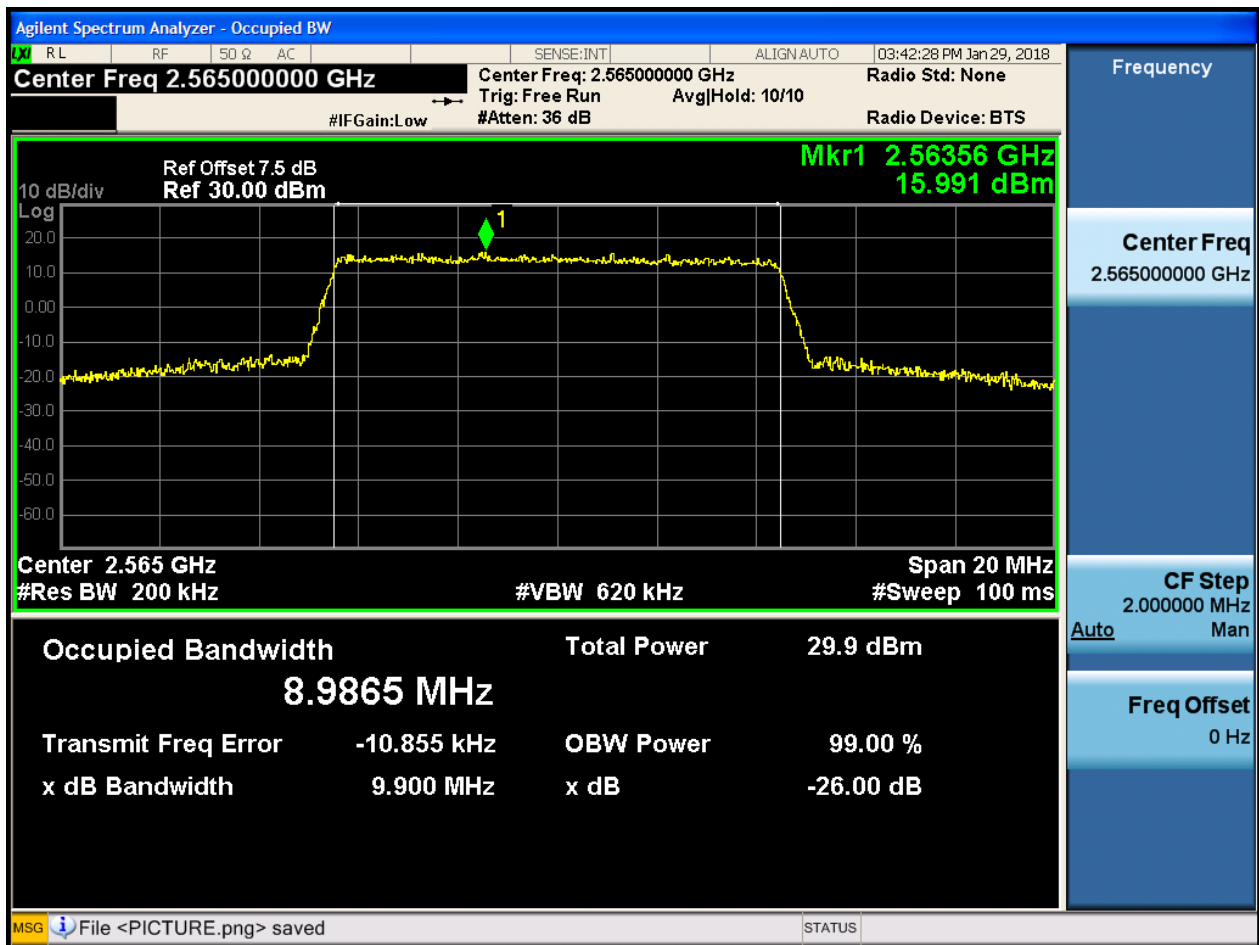
4.1.1.1.2.2.1 Test RB = RB50#0





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 Test RB = RB50#0

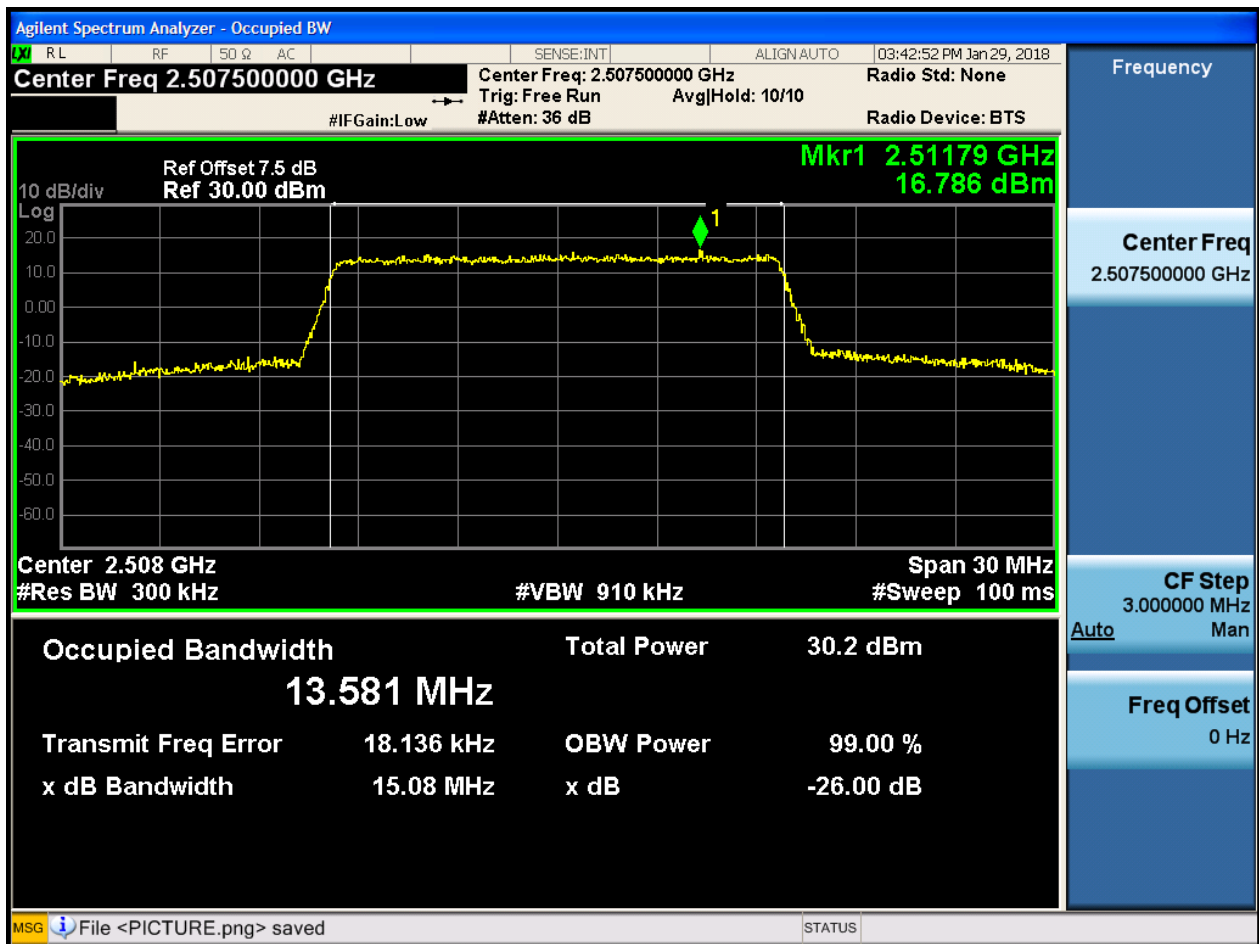




4.1.1.1.3 Test Bandwidth = 15

4.1.1.1.3.1 Test Channel = LCH

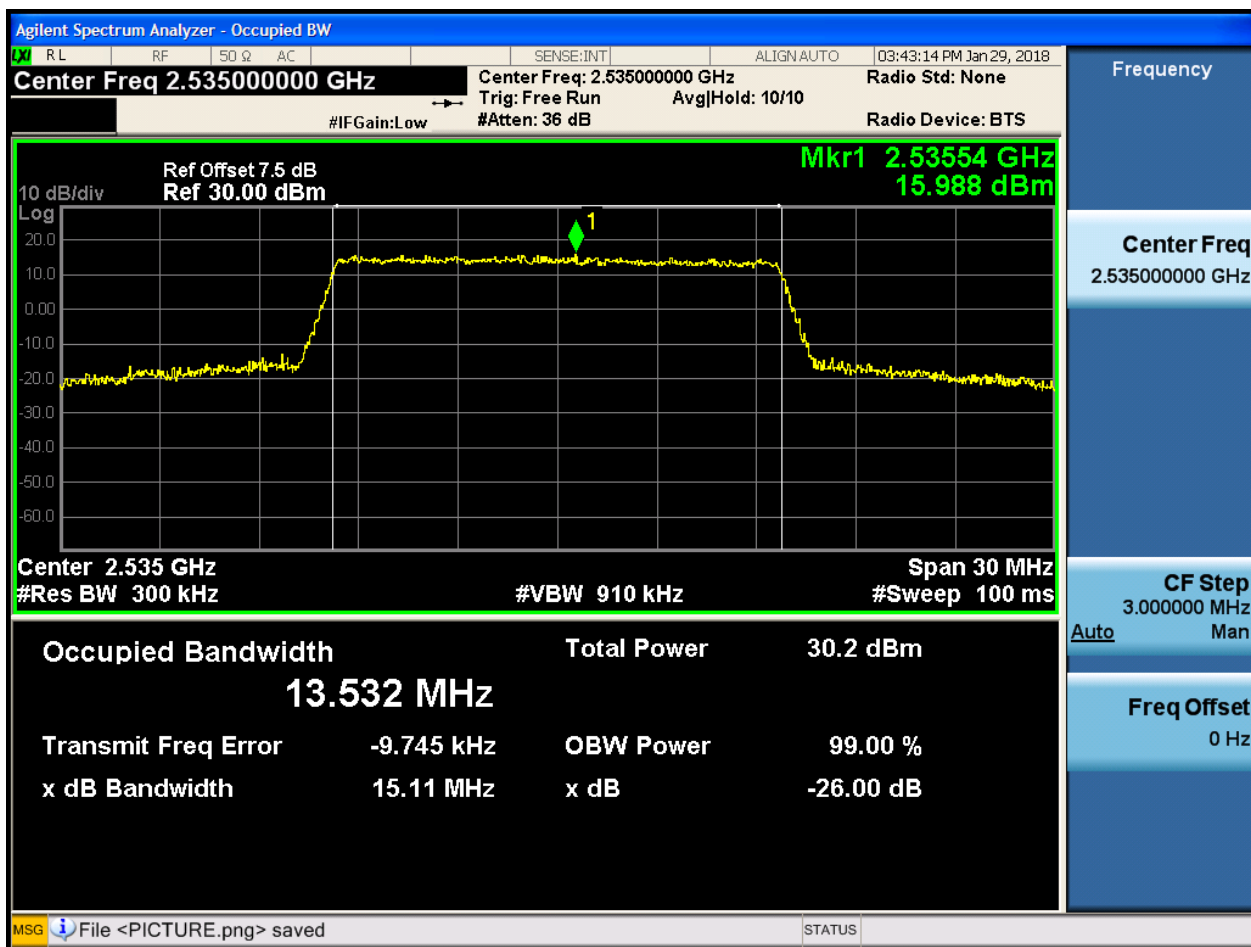
4.1.1.1.3.1.1 Test RB = RB75#0





4.1.1.1.3.2 Test Channel = MCH

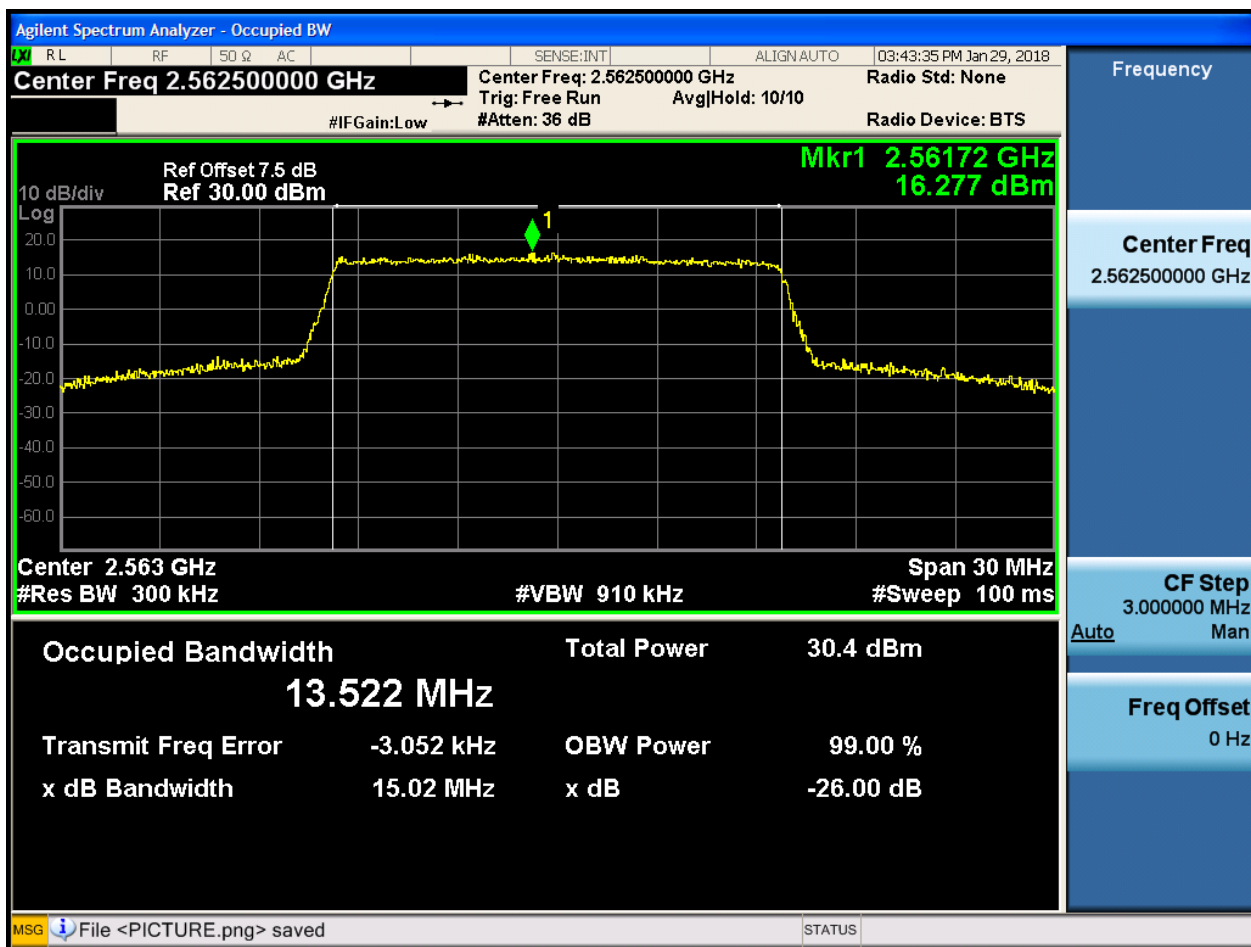
4.1.1.1.3.2.1 Test RB = RB75#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB75#0

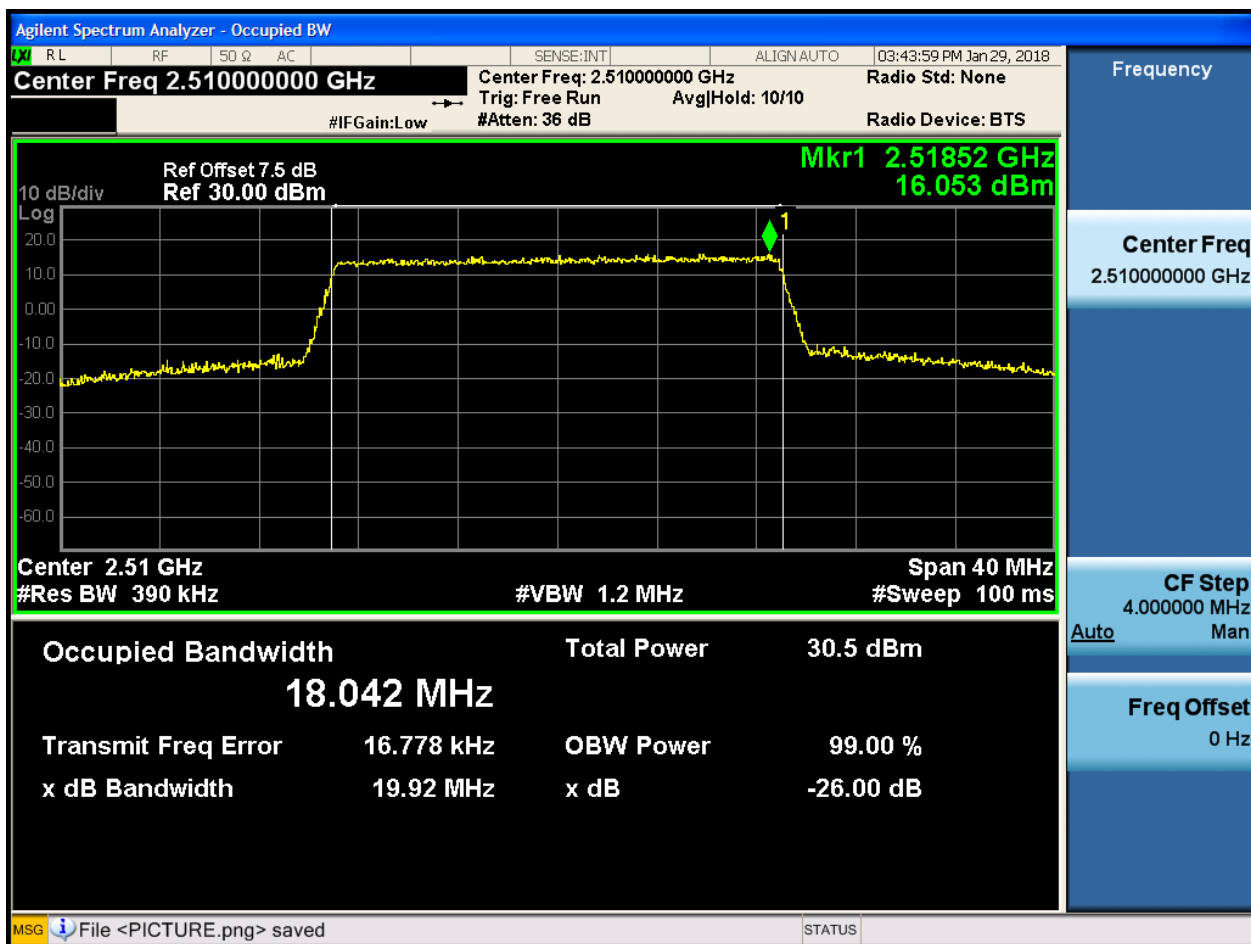




4.1.1.1.4 Test Bandwidth = 20

4.1.1.1.4.1 Test Channel = LCH

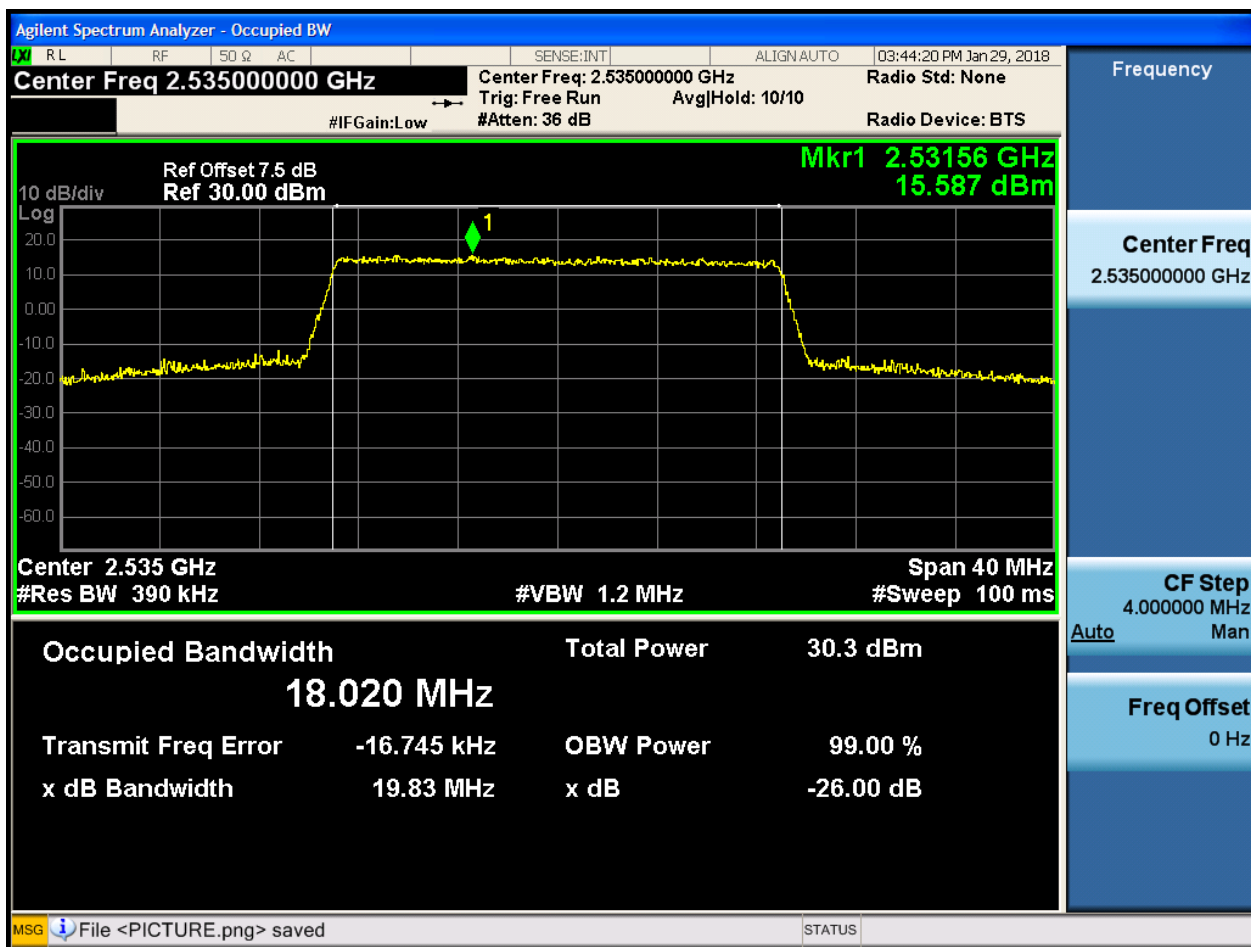
4.1.1.1.4.1.1 Test RB = RB100#0





4.1.1.1.4.2 Test Channel = MCH

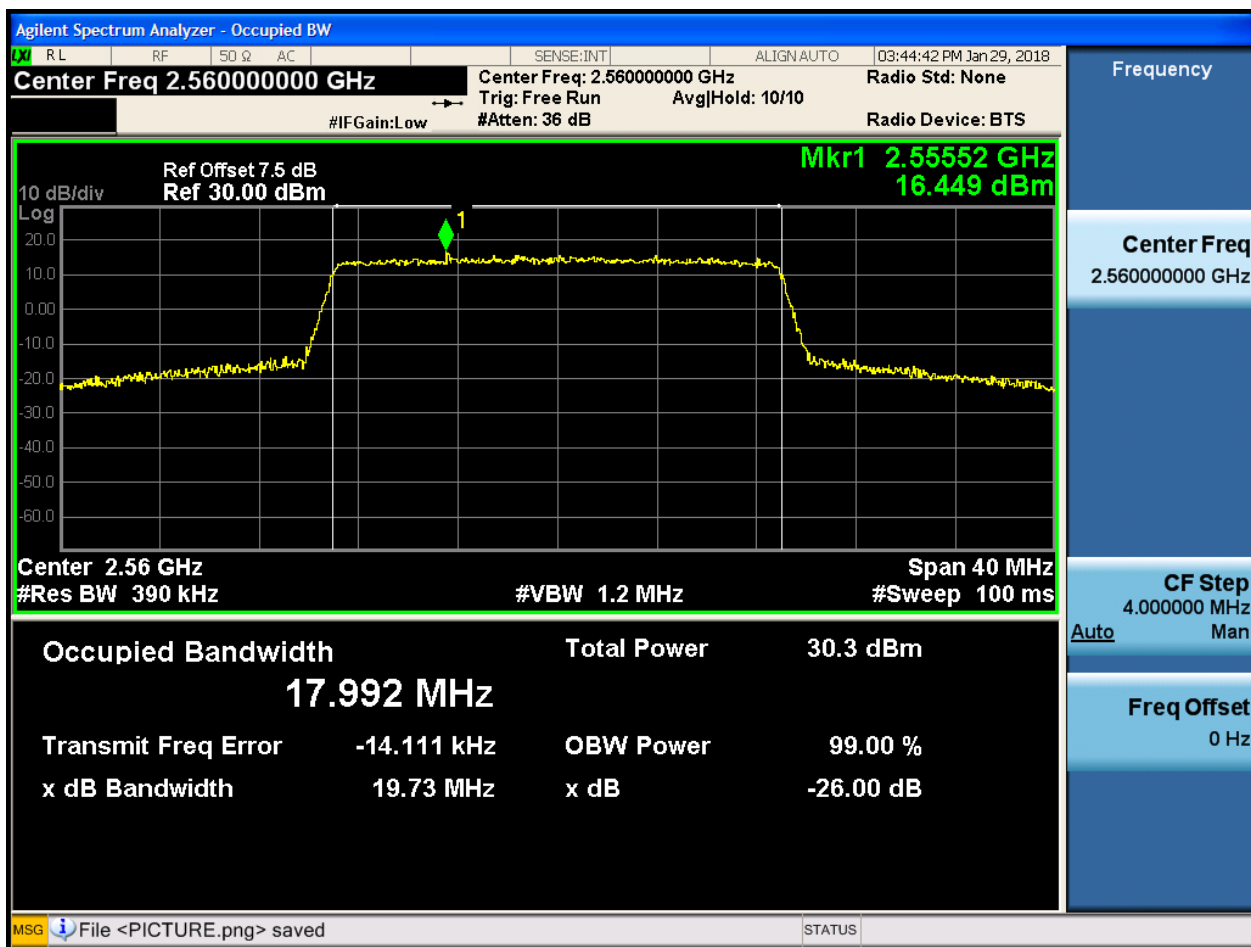
4.1.1.1.4.2.1 Test RB = RB100#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB100#0

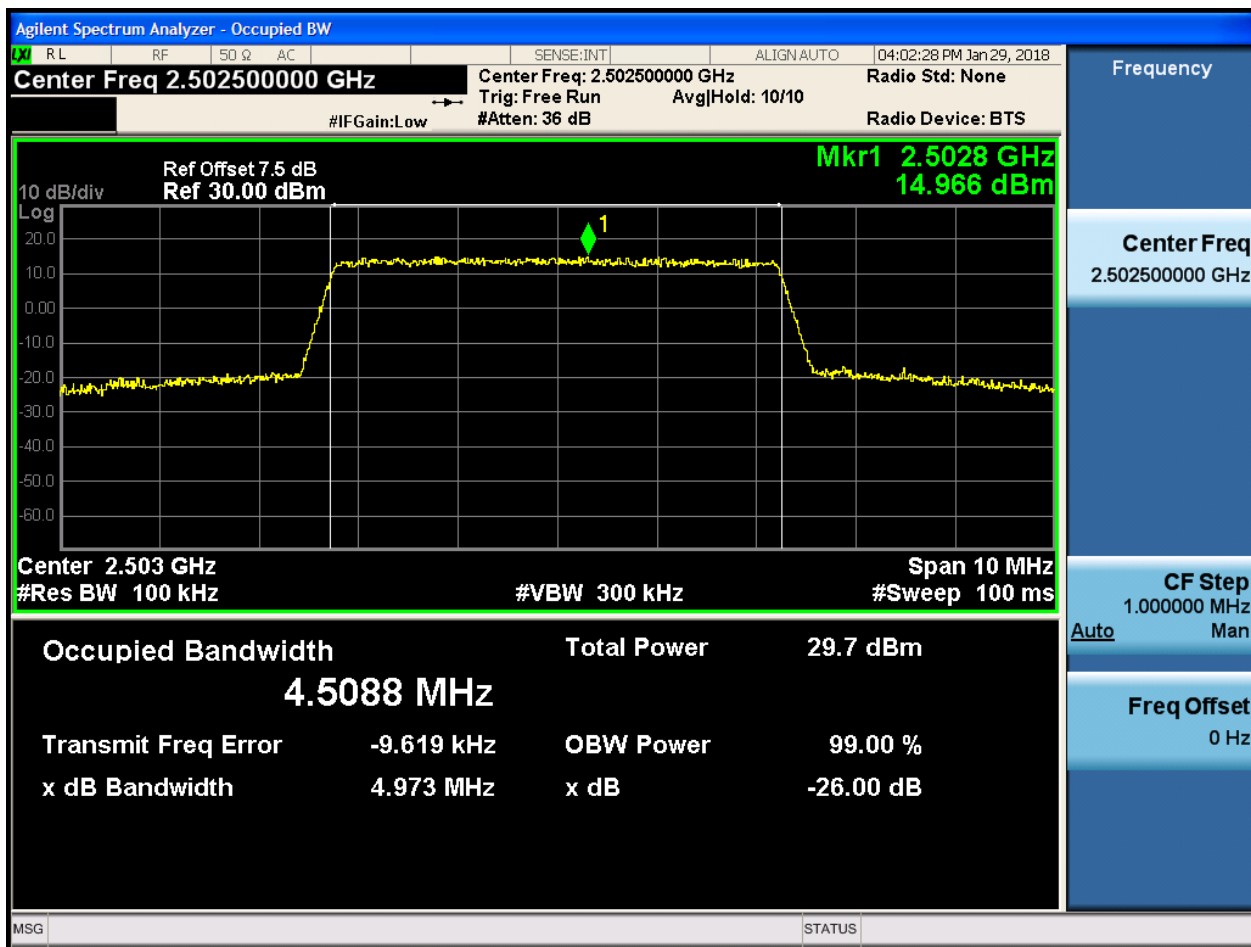


4.2.1.2 Test Mode = LTE/TM1

4.2.1.2.1 Test Bandwidth = 5

4.2.1.1.2.1 Test Channel = LCH

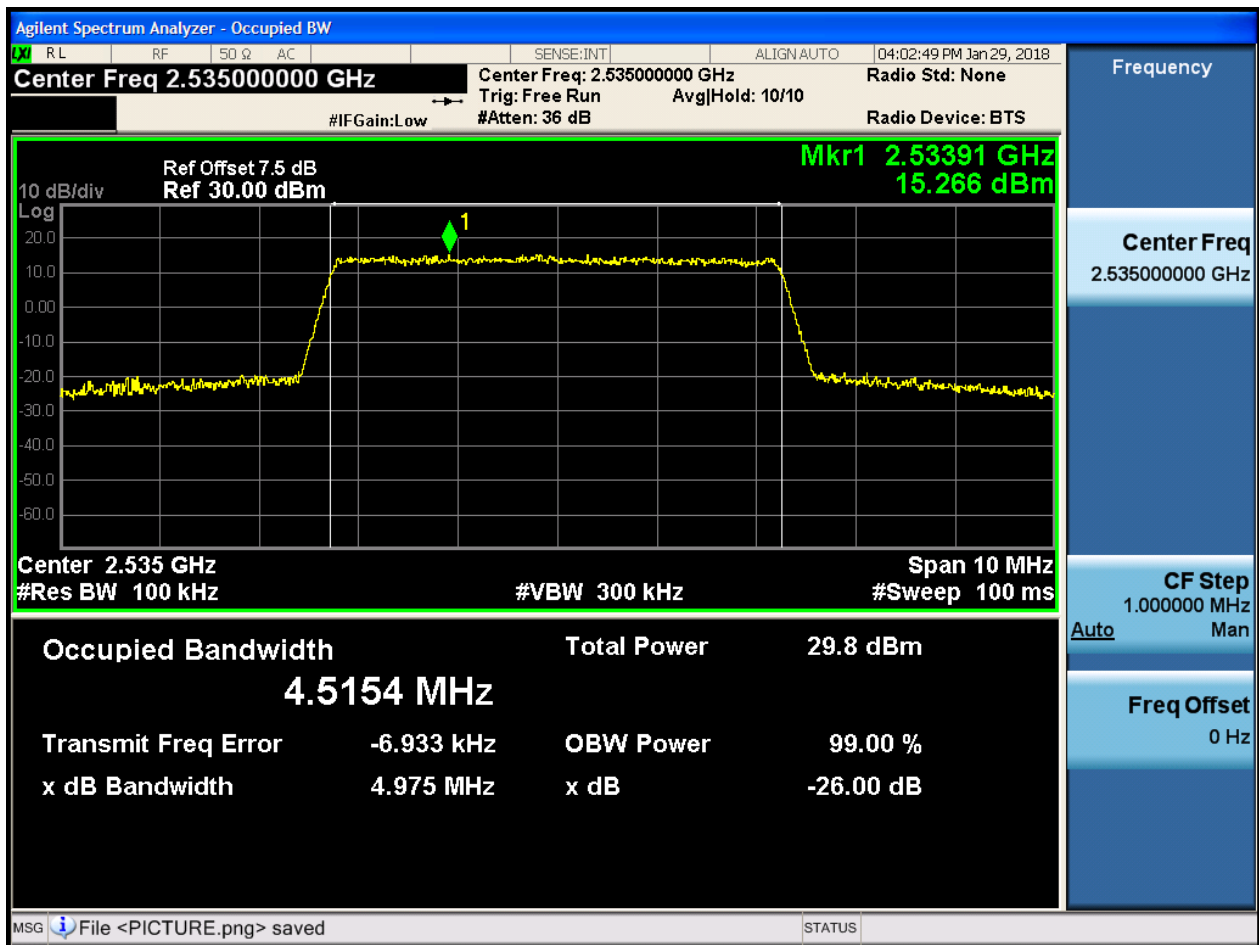
4.2.1.1.1.2.1 Test RB = RB25#0





4.2.1.1.1.3 Test Channel = MCH

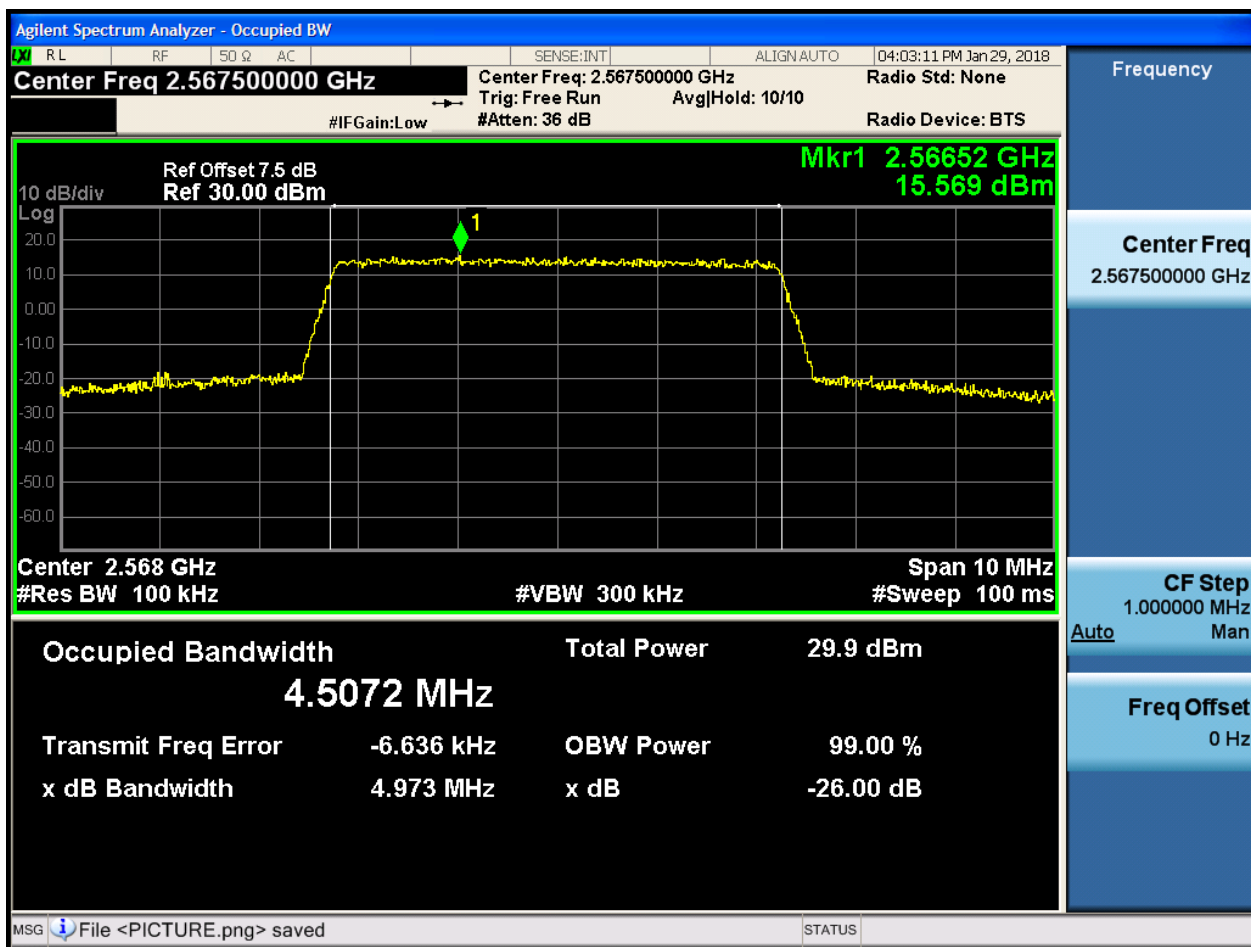
4.2.1.1.1.3.1 Test RB = RB25#0





4.2.1.1.1.4 Test Channel = HCH

4.2.1.1.1.4.1 Test RB = RB25#0

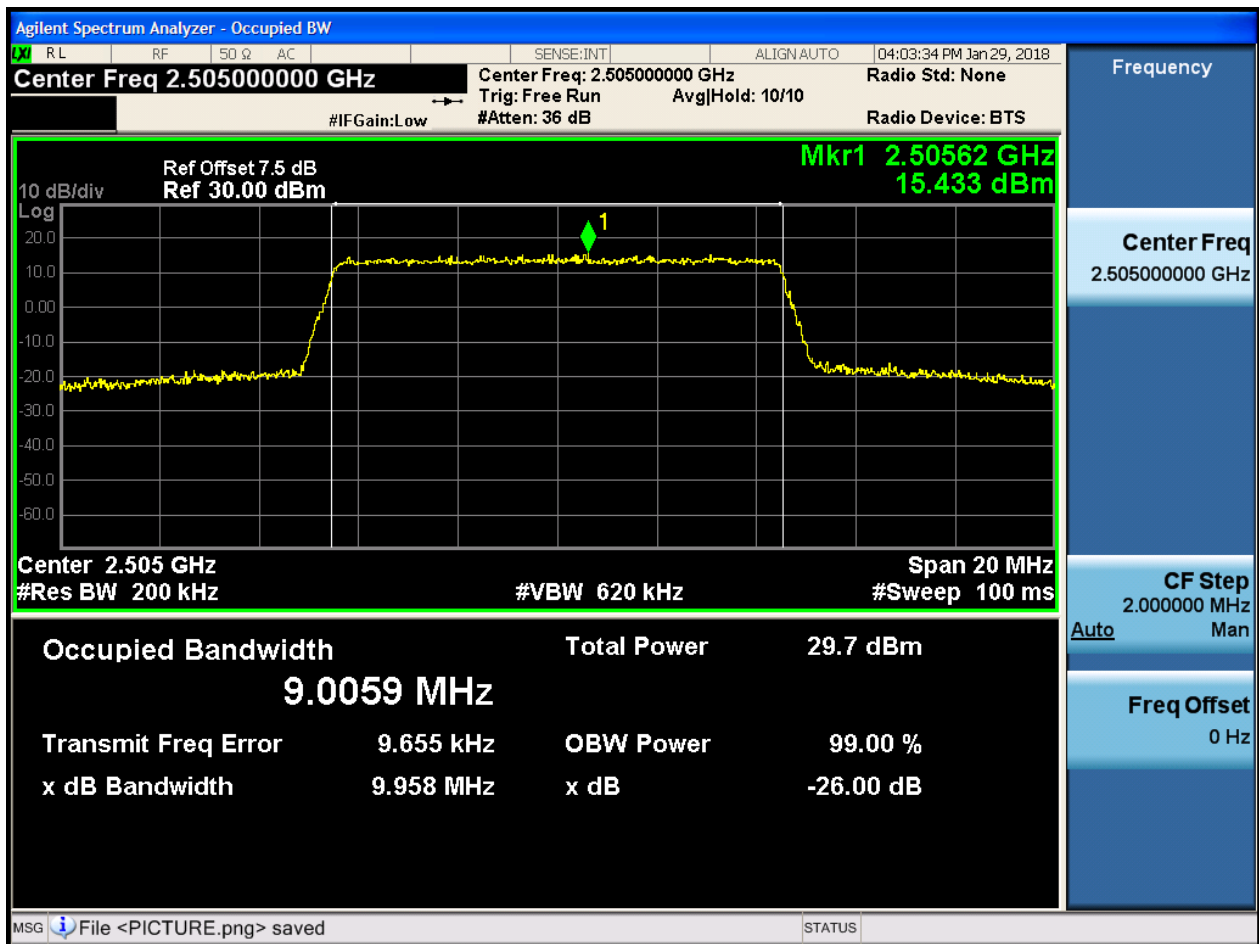




4.2.1.1.2 Test Bandwidth = 10

4.2.1.1.2.1 Test Channel = LCH

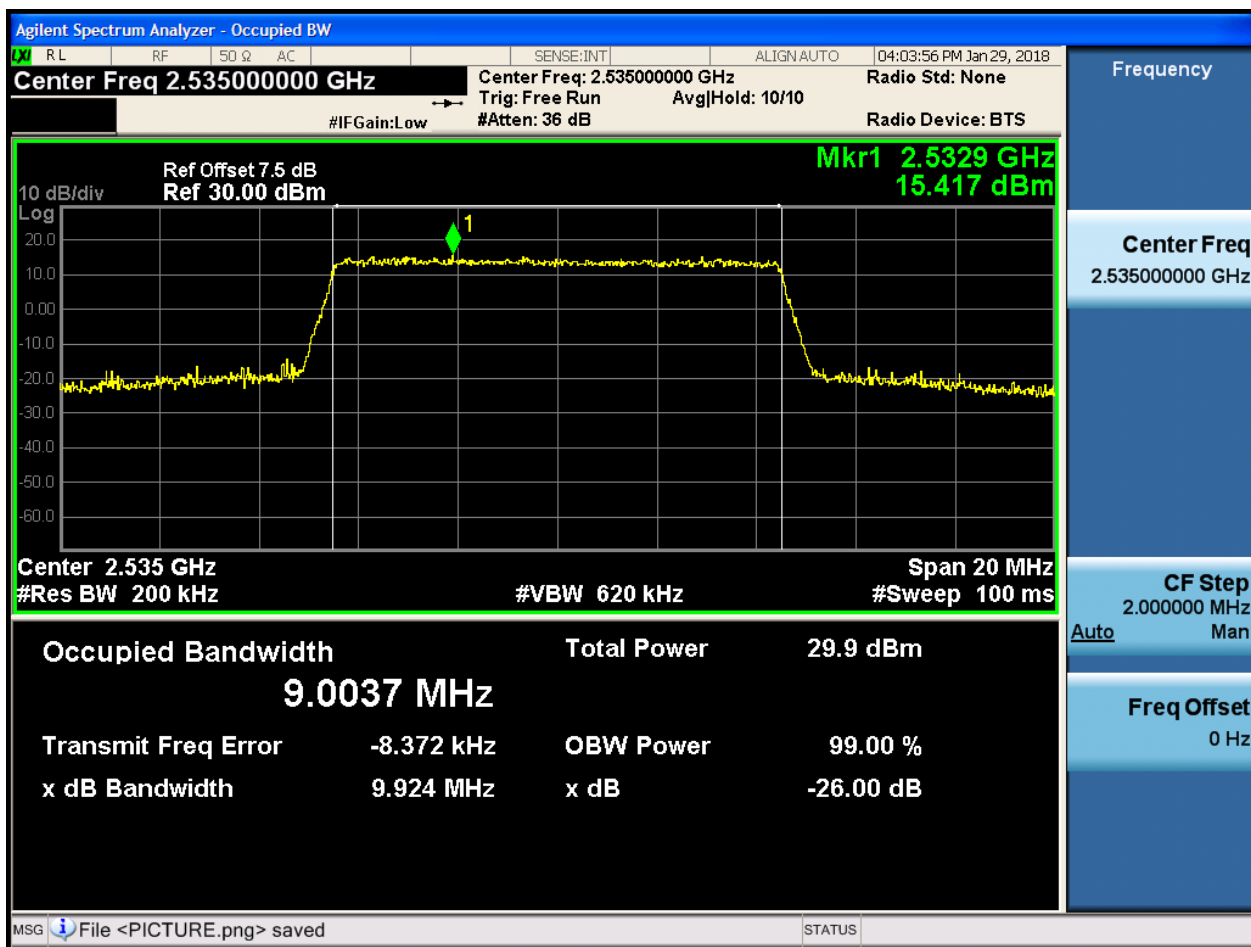
4.2.1.1.2.1.1 Test RB = RB50#0





4.2.1.1.1.2 Test Channel = MCH

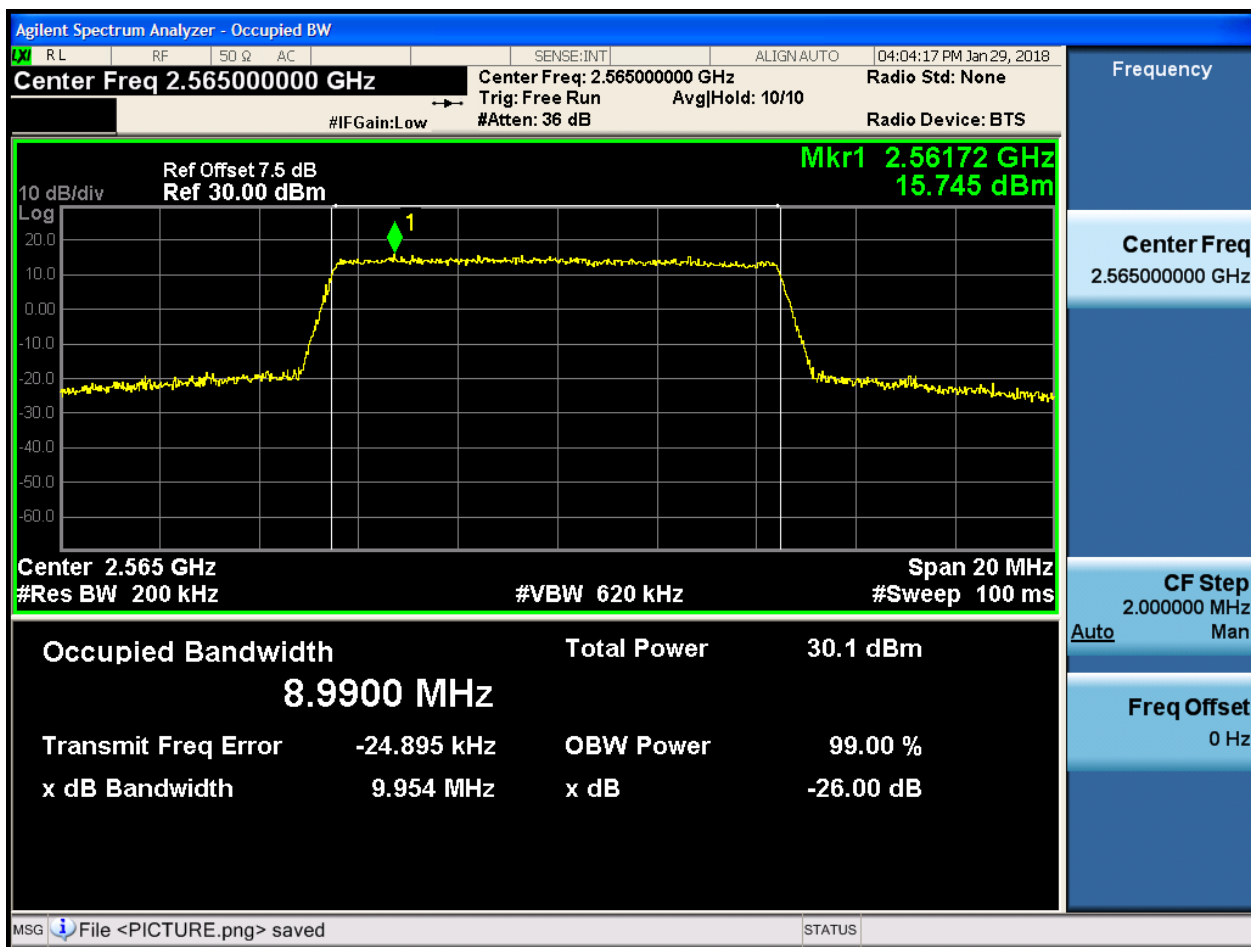
4.2.1.1.2.1 Test RB = RB50#0





4.2.1.1.2.3 Test Channel = HCH

4.2.1.1.2.3.1 Test RB = RB50#0

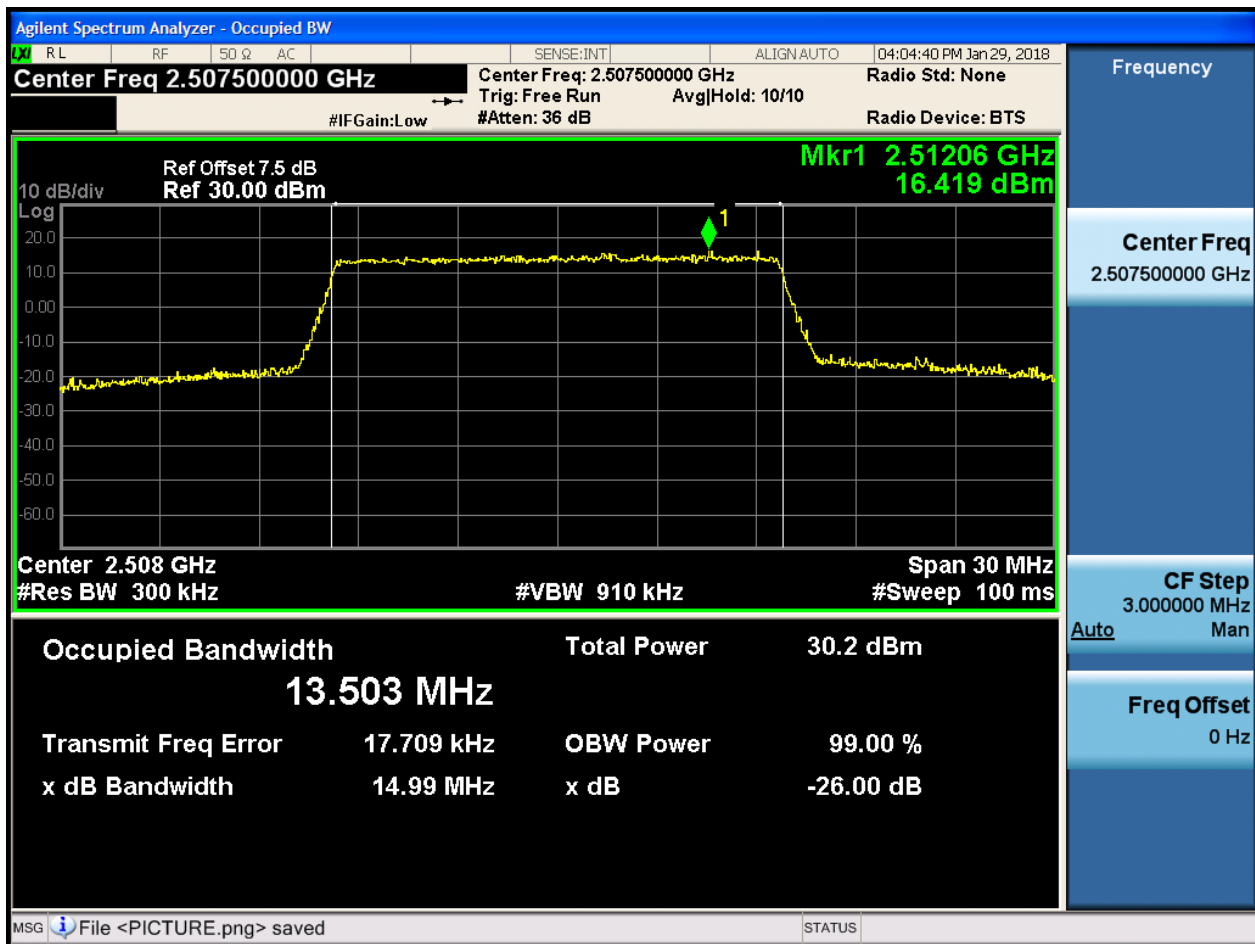




4.2.1.1.3 Test Bandwidth = 15

4.2.1.1.3.1 Test Channel = LCH

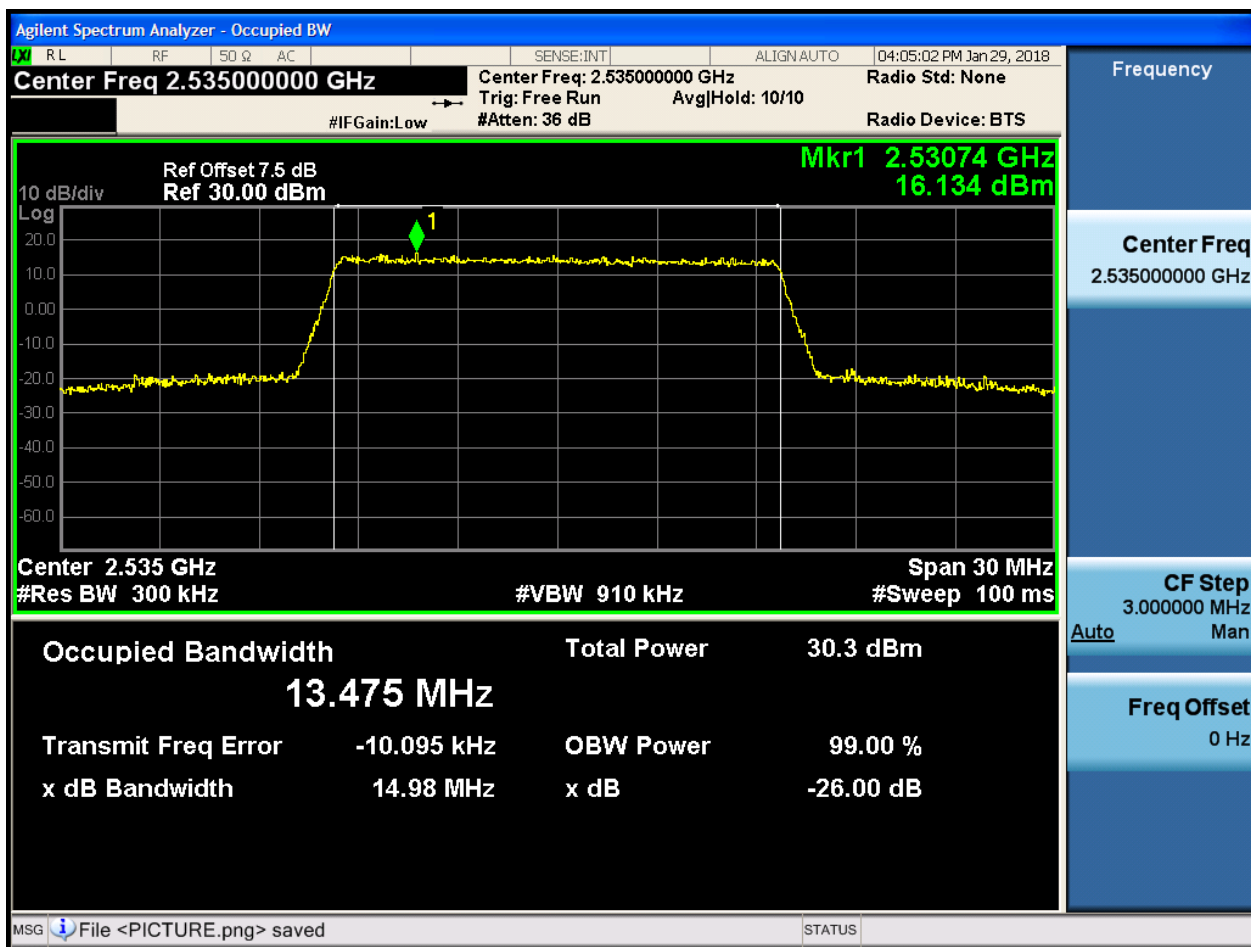
4.2.1.1.3.1.1 Test RB = RB75#0





4.2.1.1.3.2 Test Channel = MCH

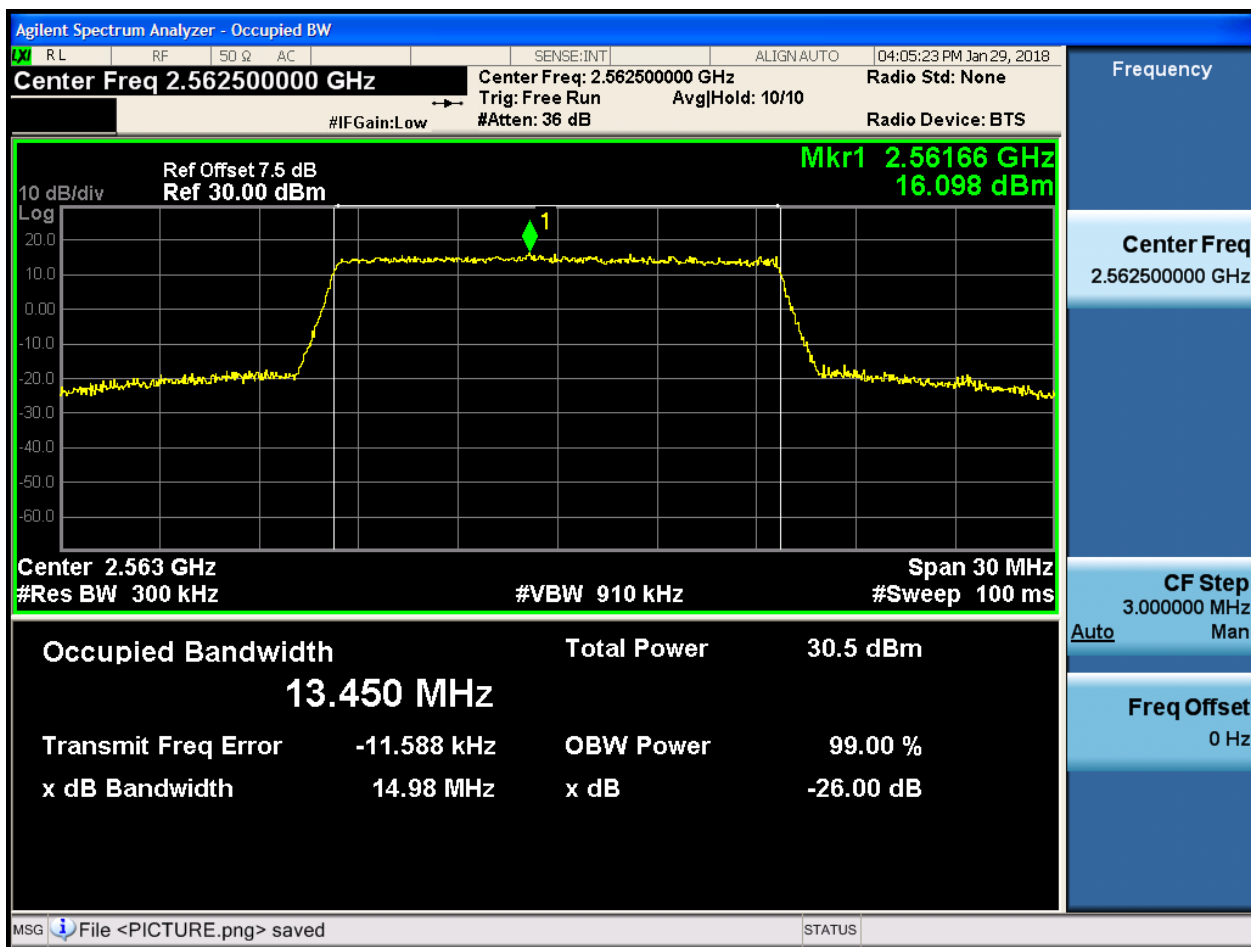
4.2.1.1.3.2.1 Test RB = RB75#0





4.2.1.1.3.3 Test Channel = HCH

4.2.1.1.3.3.1 Test RB = RB75#0

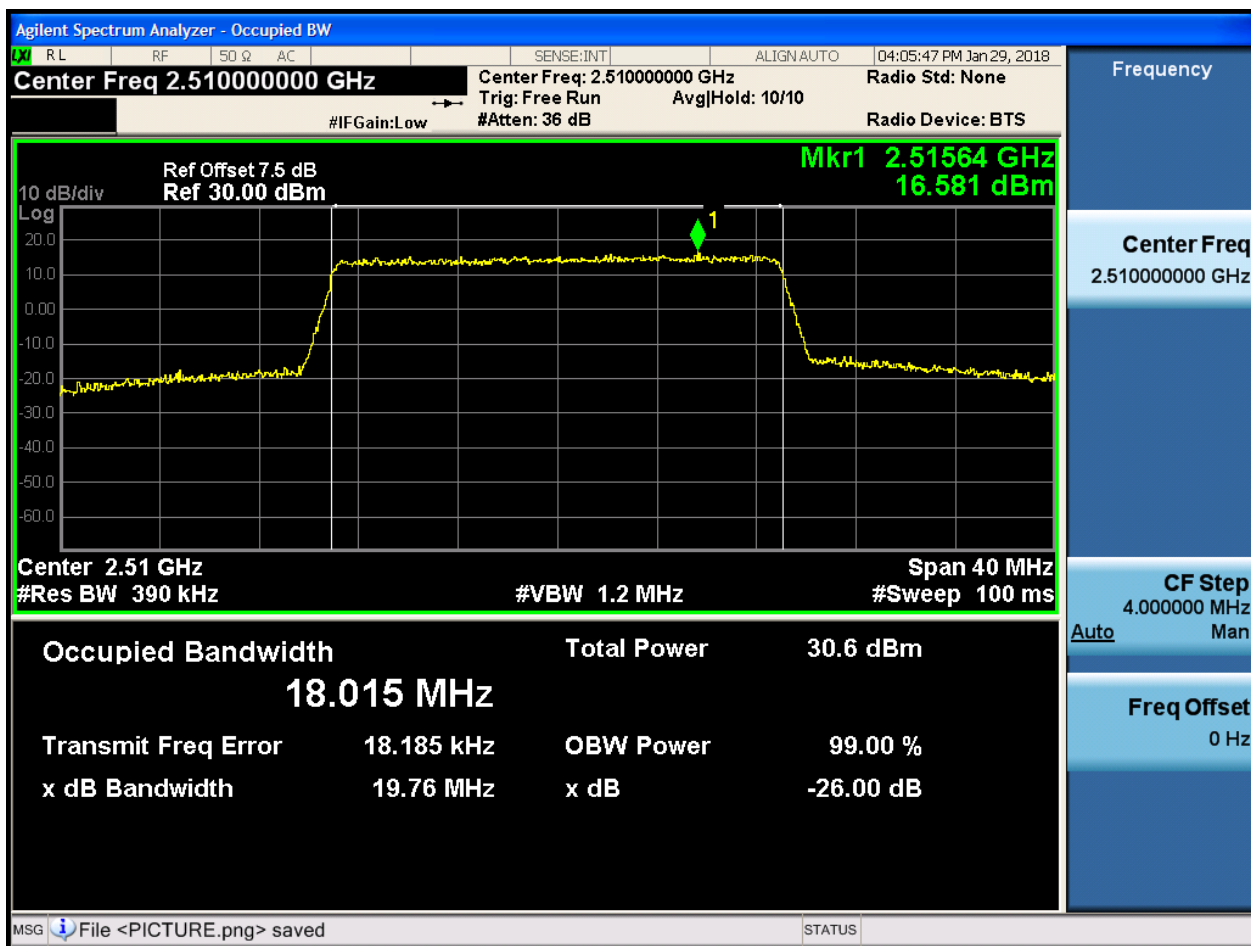




4.2.1.1.4 Test Bandwidth = 20

4.2.1.1.4.1 Test Channel = LCH

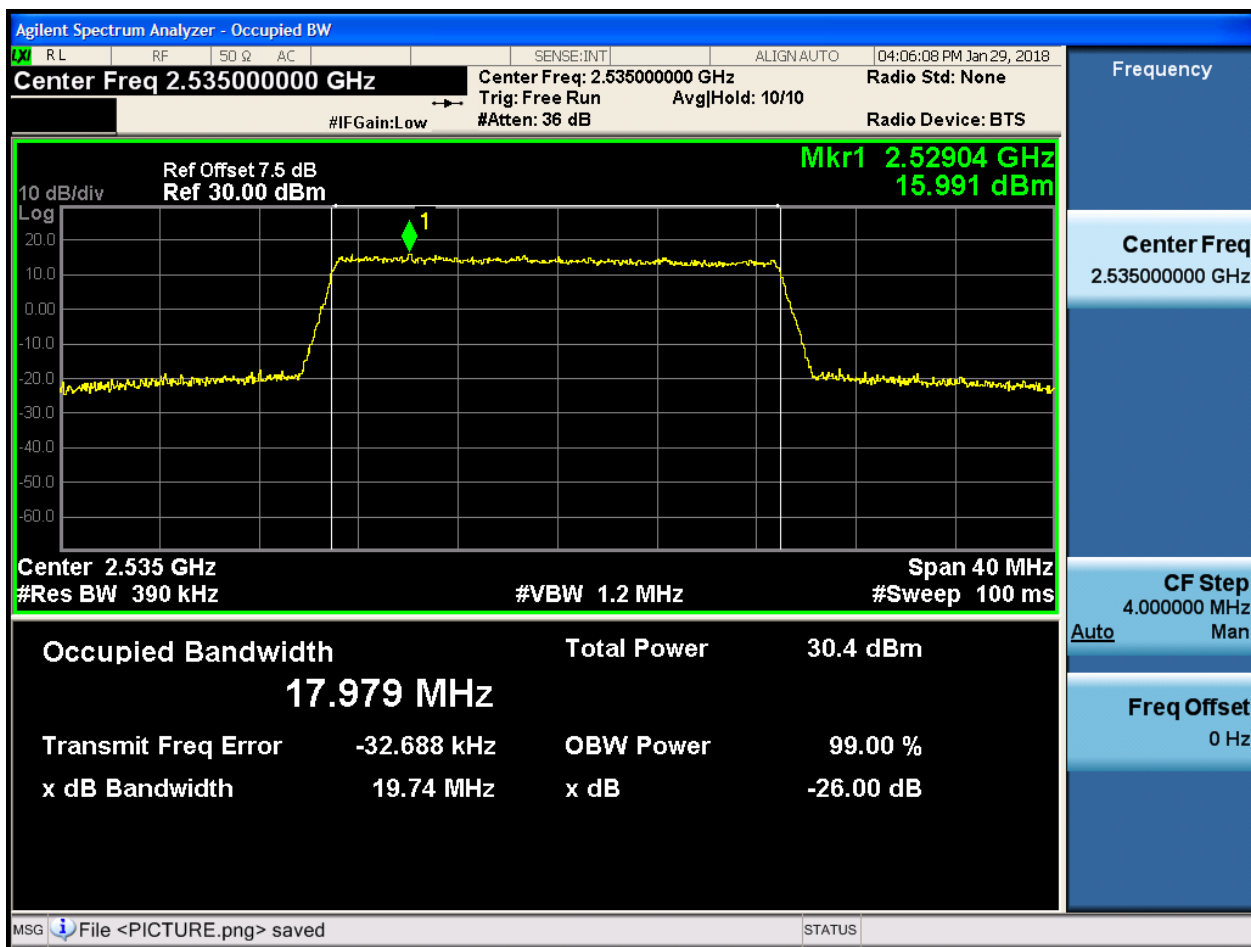
4.2.1.1.4.1.1 Test RB = RB100#0





4.2.1.1.4.2 Test Channel = MCH

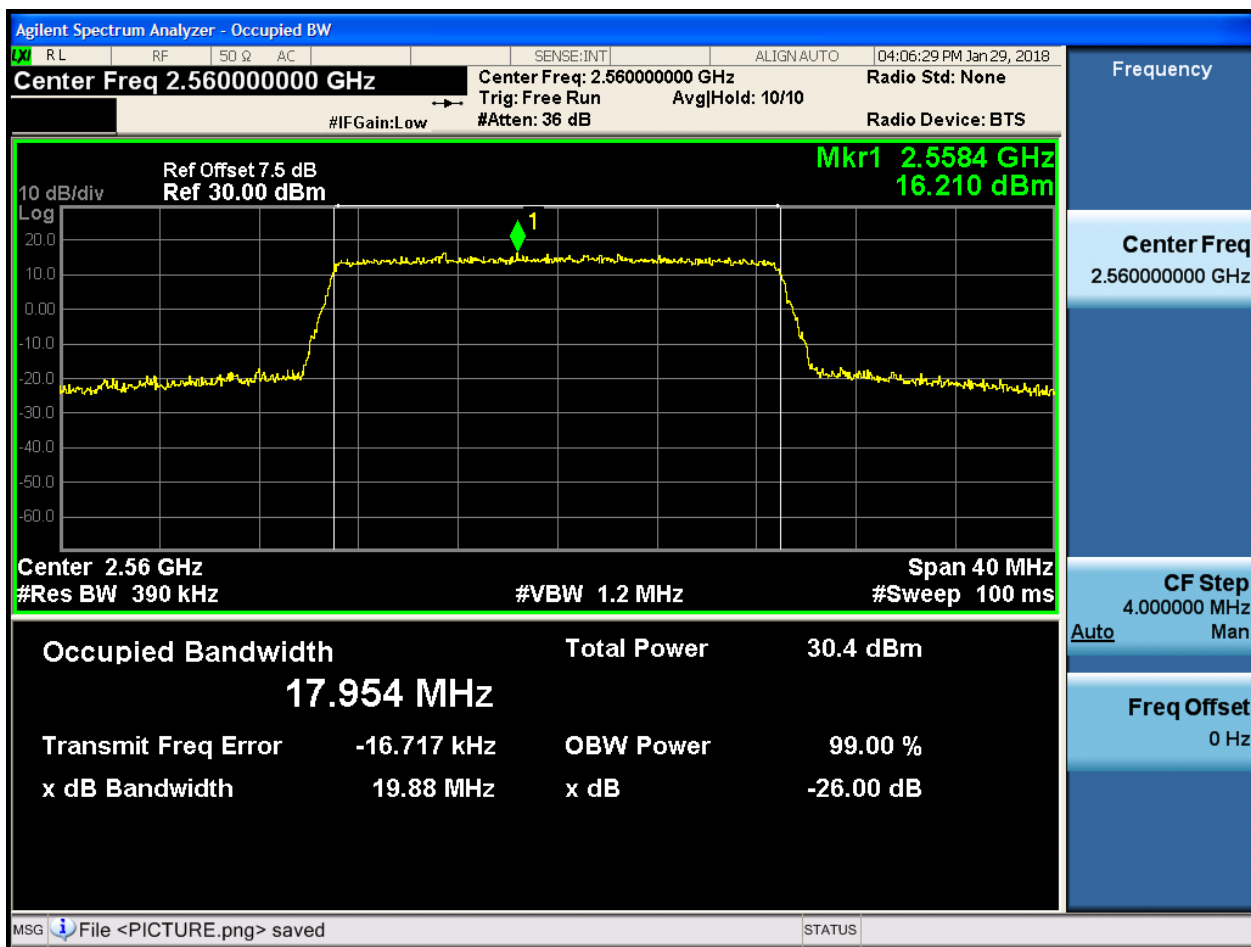
4.2.1.1.4.2.1 Test RB = RB100#0





4.2.1.1.4.3 Test Channel = HCH

4.2.1.1.4.3.1 Test RB = RB100#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

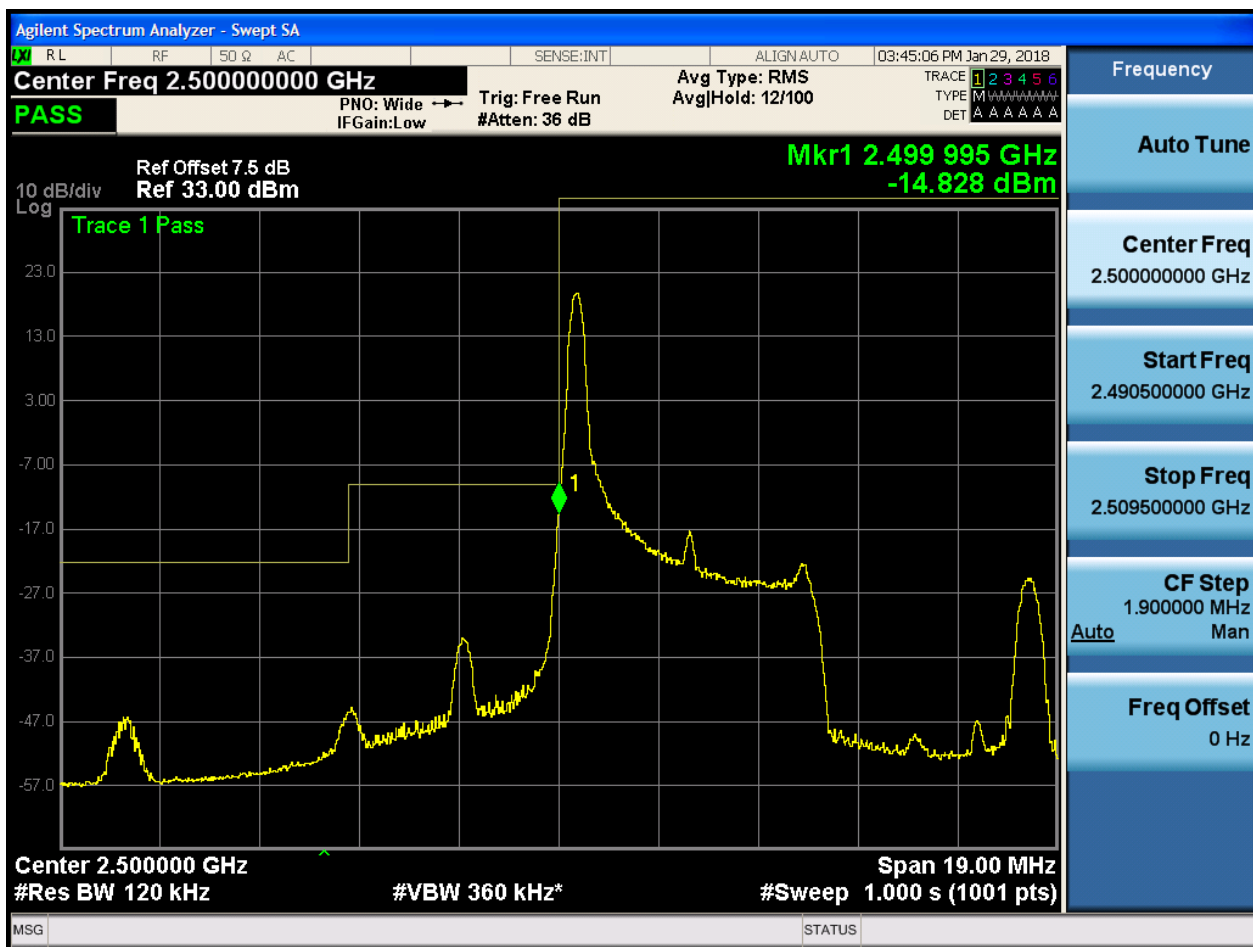
5.1.1 Test Band = BAND7

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





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.500000000 GHz

Ref Offset 7.5 dB
Ref 33.00 dBm

10 dB/div
Log

Trace 1 Pass

Mkr1 2.499 995 GHz
-35.028 dBm

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

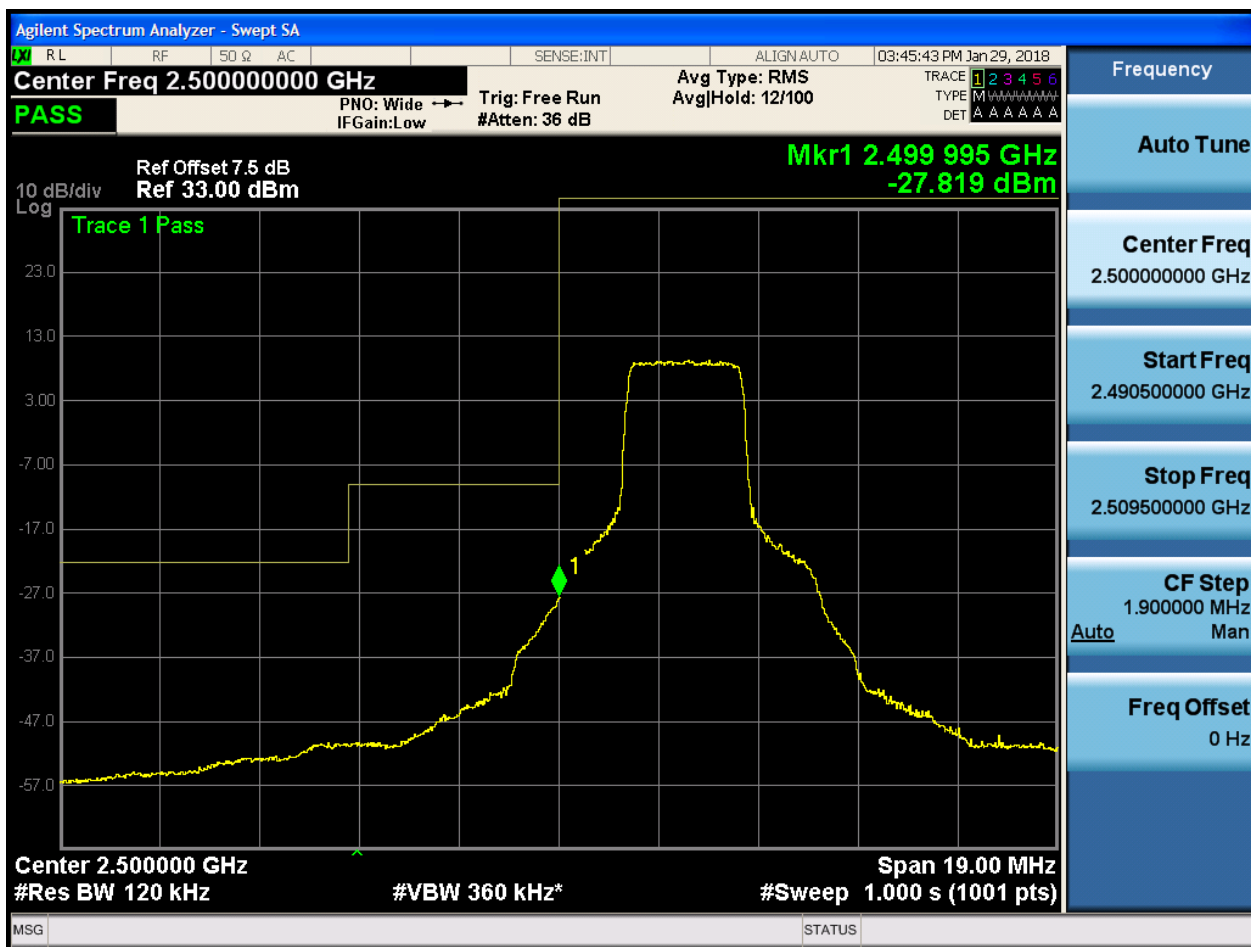
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto

Freq Offset
0 Hz

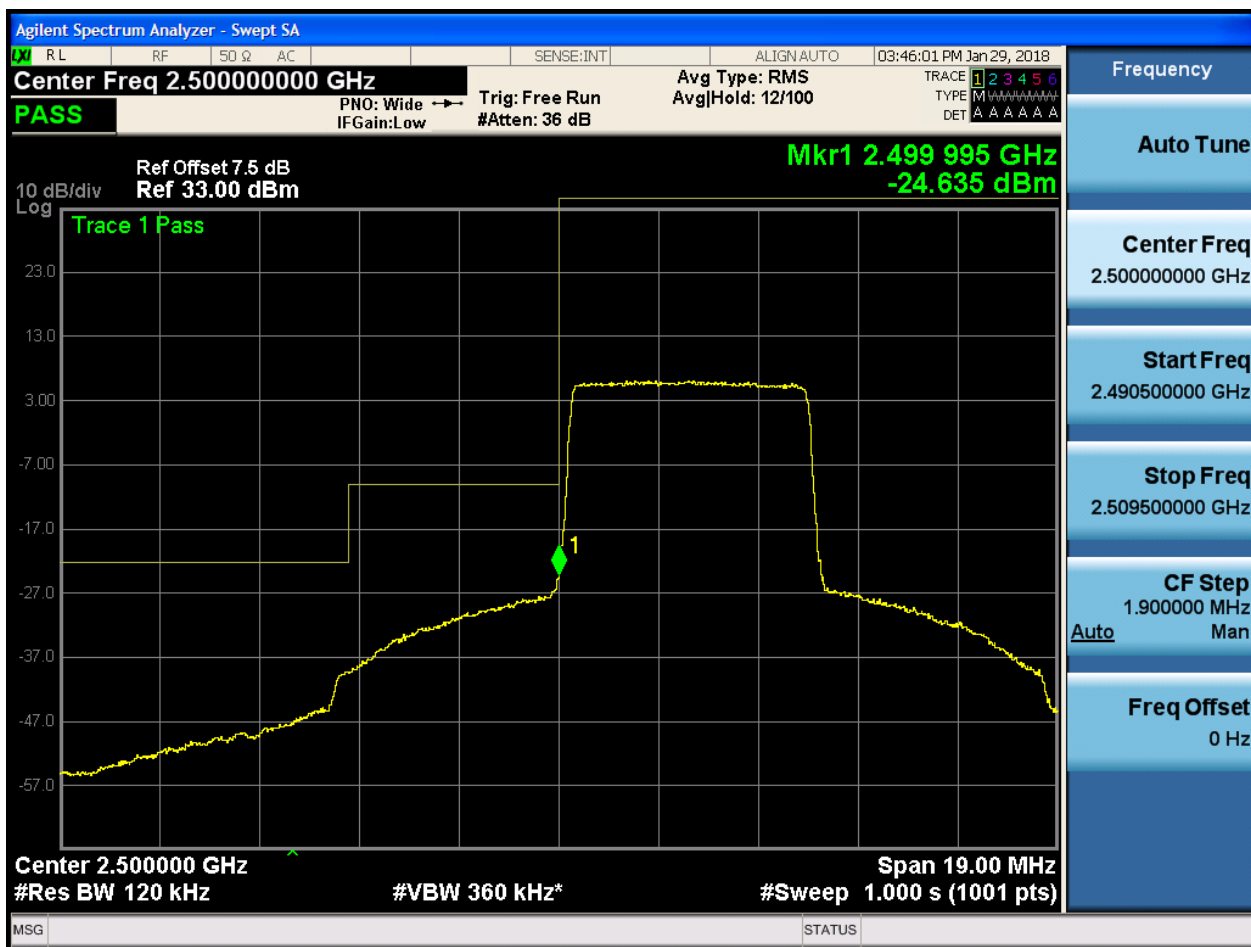


5.1.1.1.1.3 Test RB = RB12#6





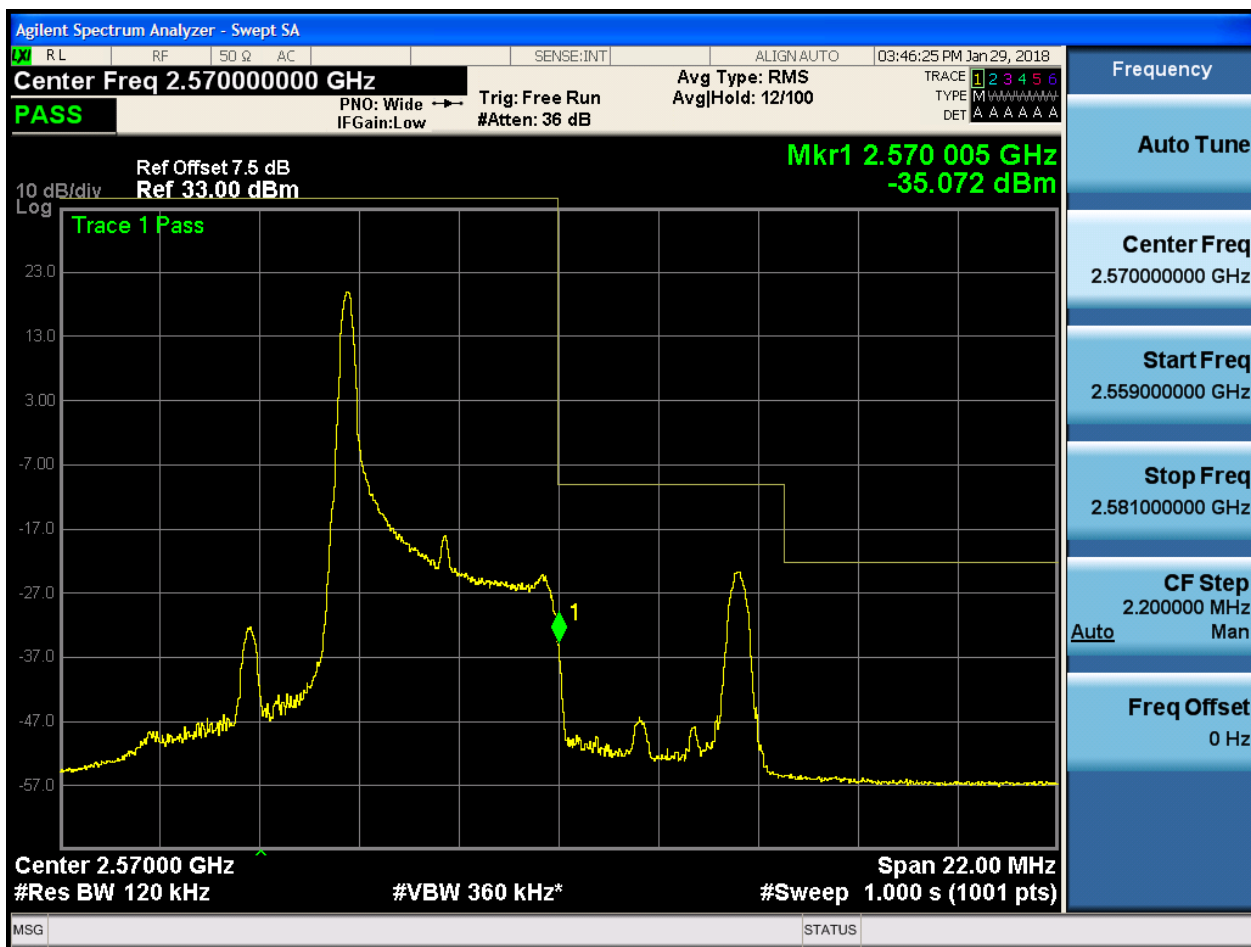
5.1.1.1.1.4 Test RB = RB25#0





5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0

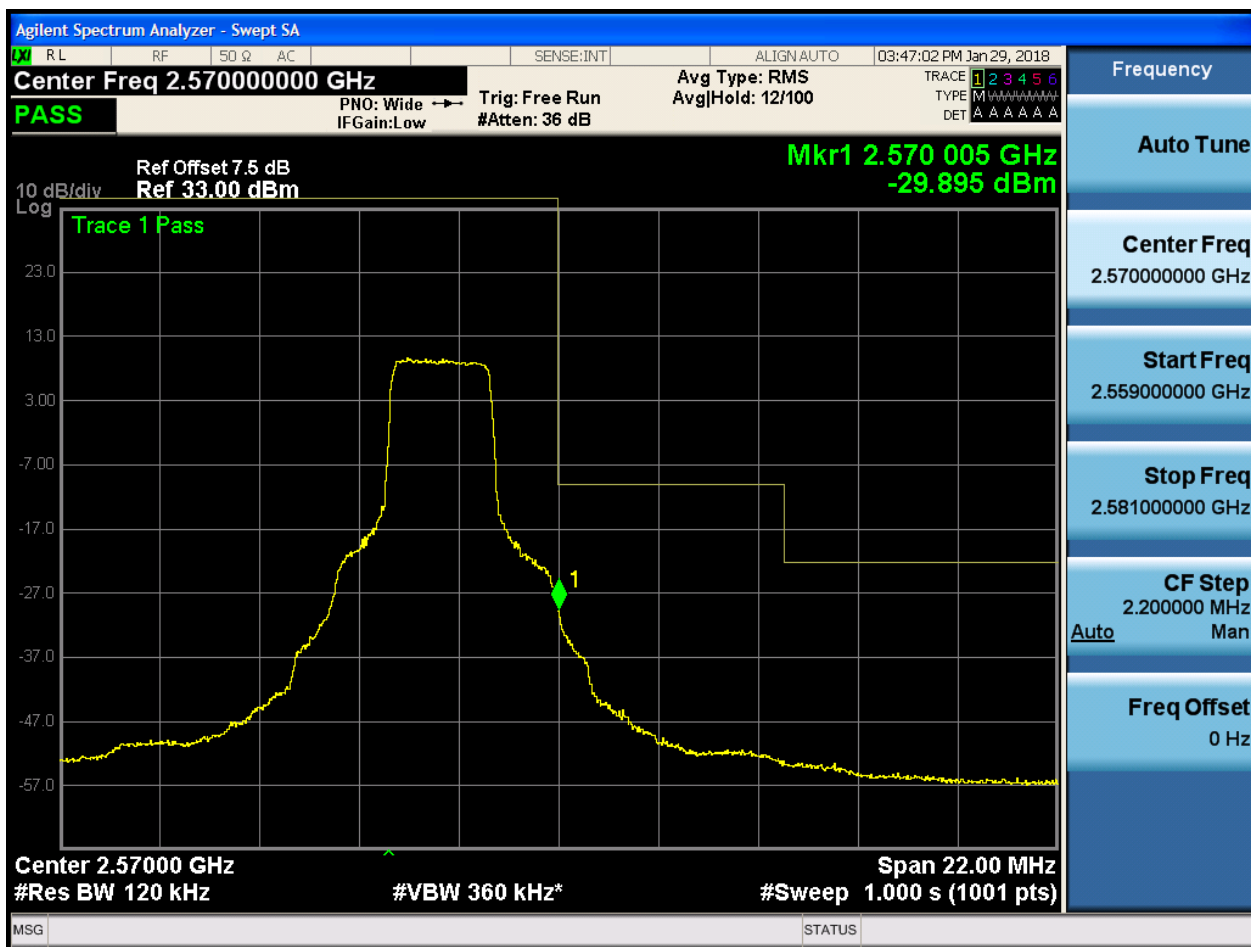


5.1.1.1.1.2.2 Test RB = RB1#24



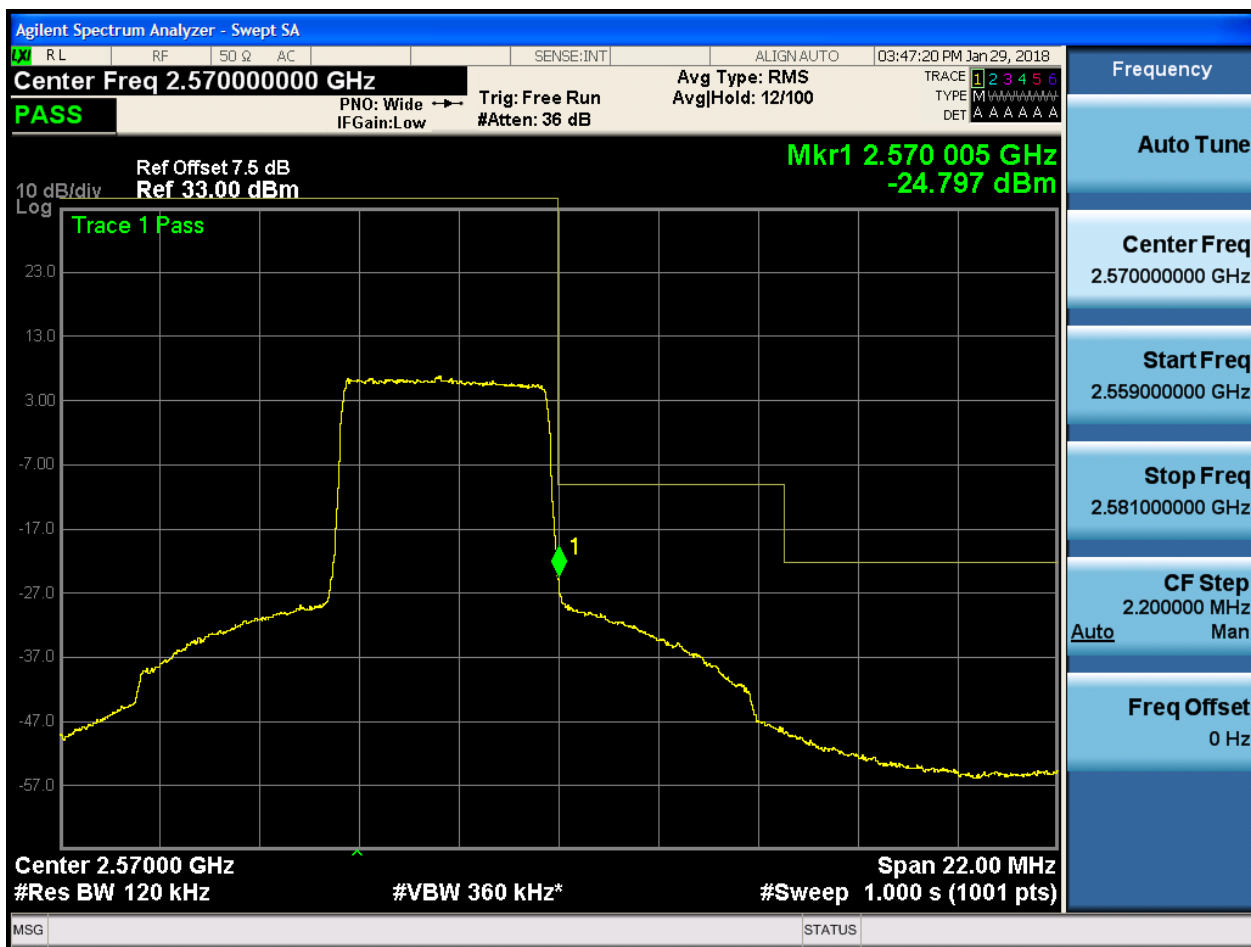


5.1.1.1.2.3 Test RB = RB12#6





5.1.1.1.2.4 Test RB = RB25#0

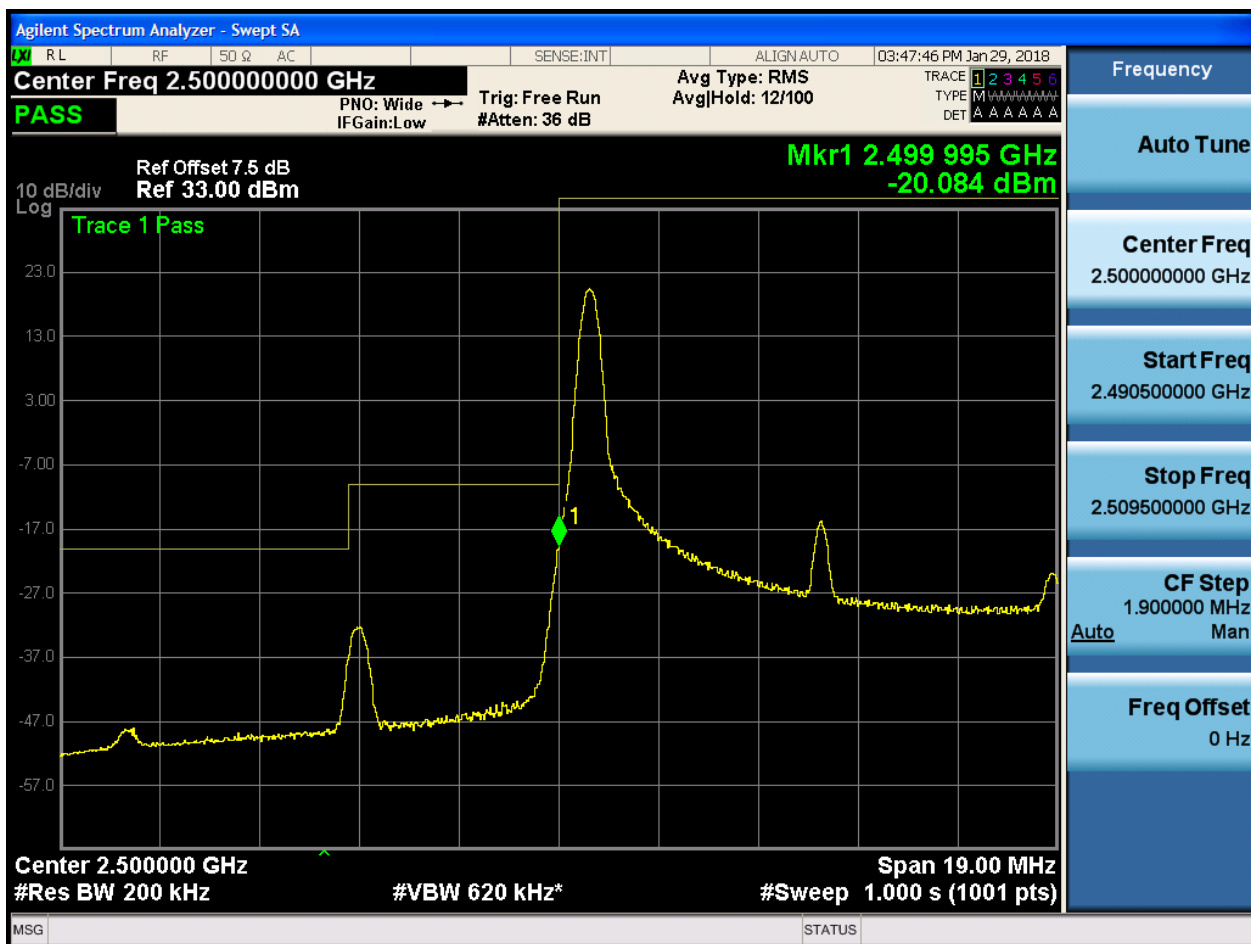




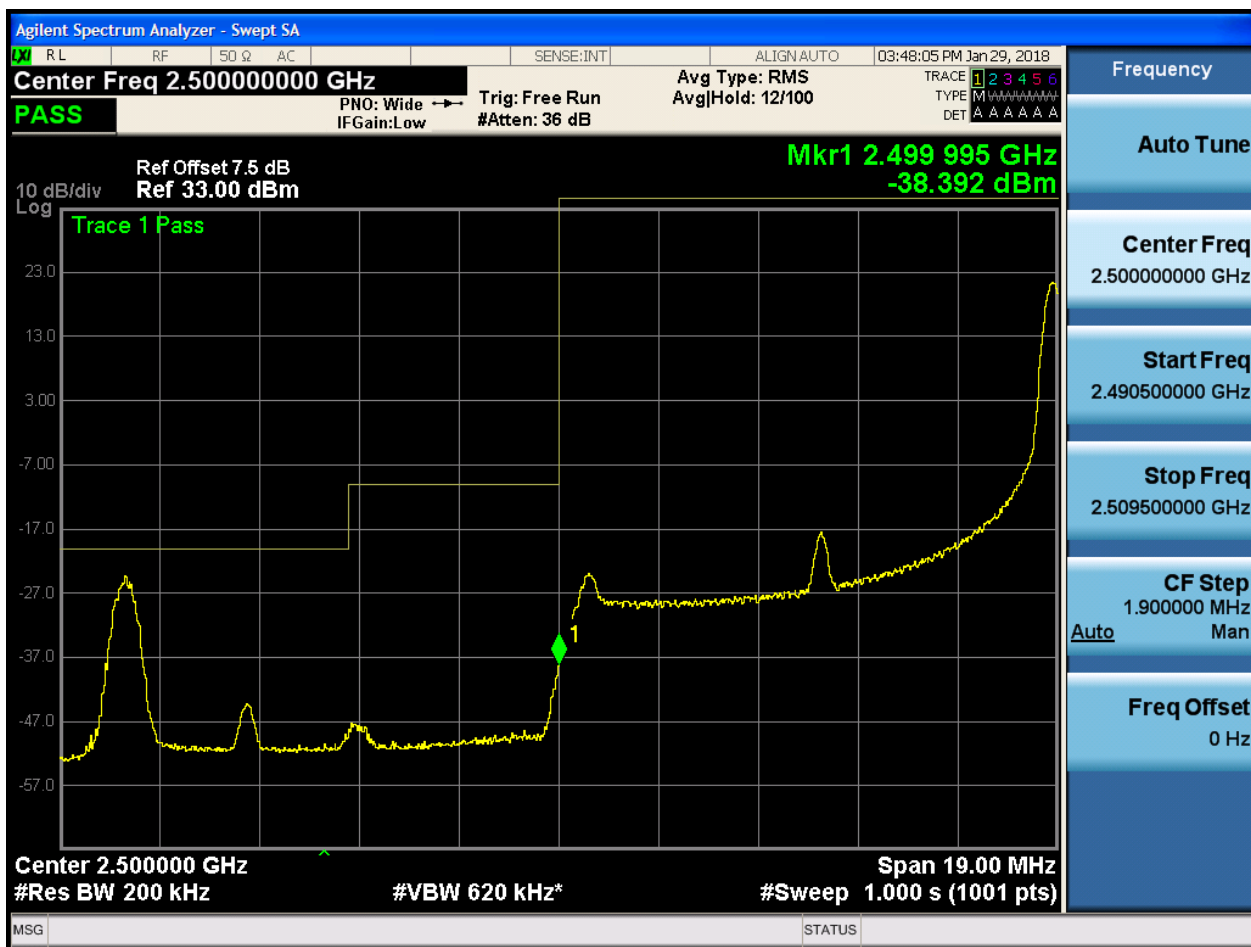
5.1.1.1.2 Test Bandwidth = 10

5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0



5.1.1.1.2.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:48:23 PM Jan 29, 2018

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
-29.745 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

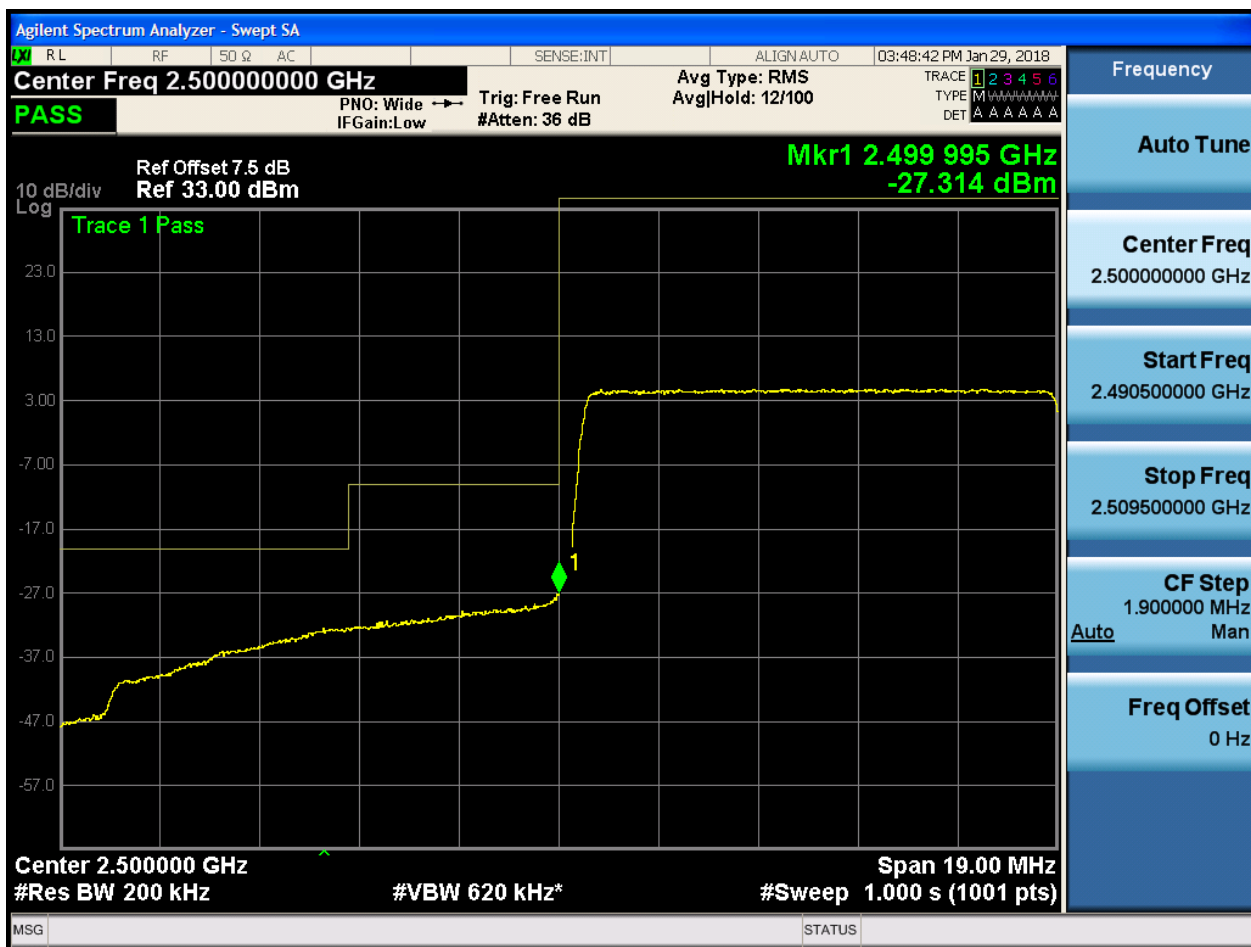
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



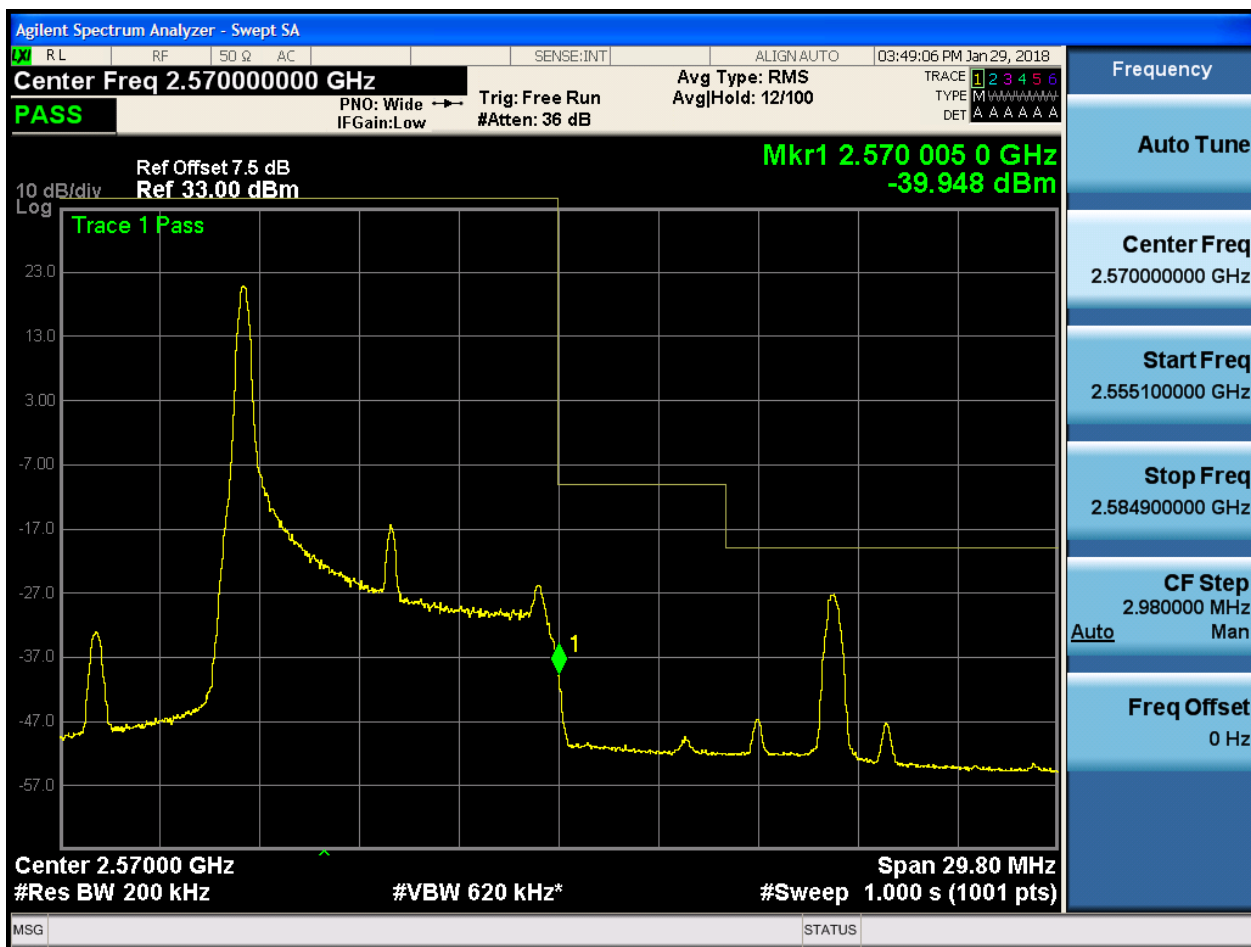
5.1.1.1.2.1.4 Test RB = RB50#0





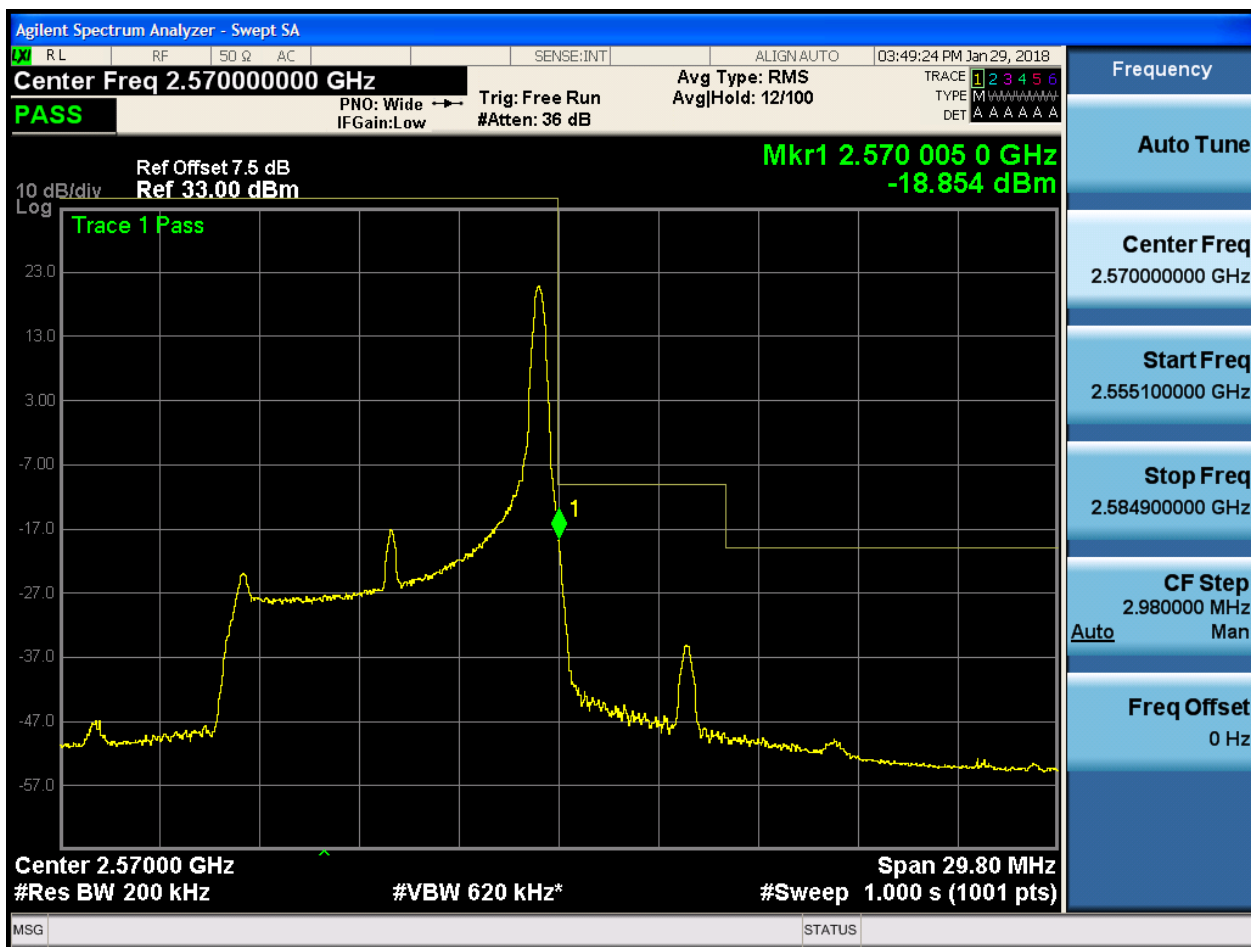
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0



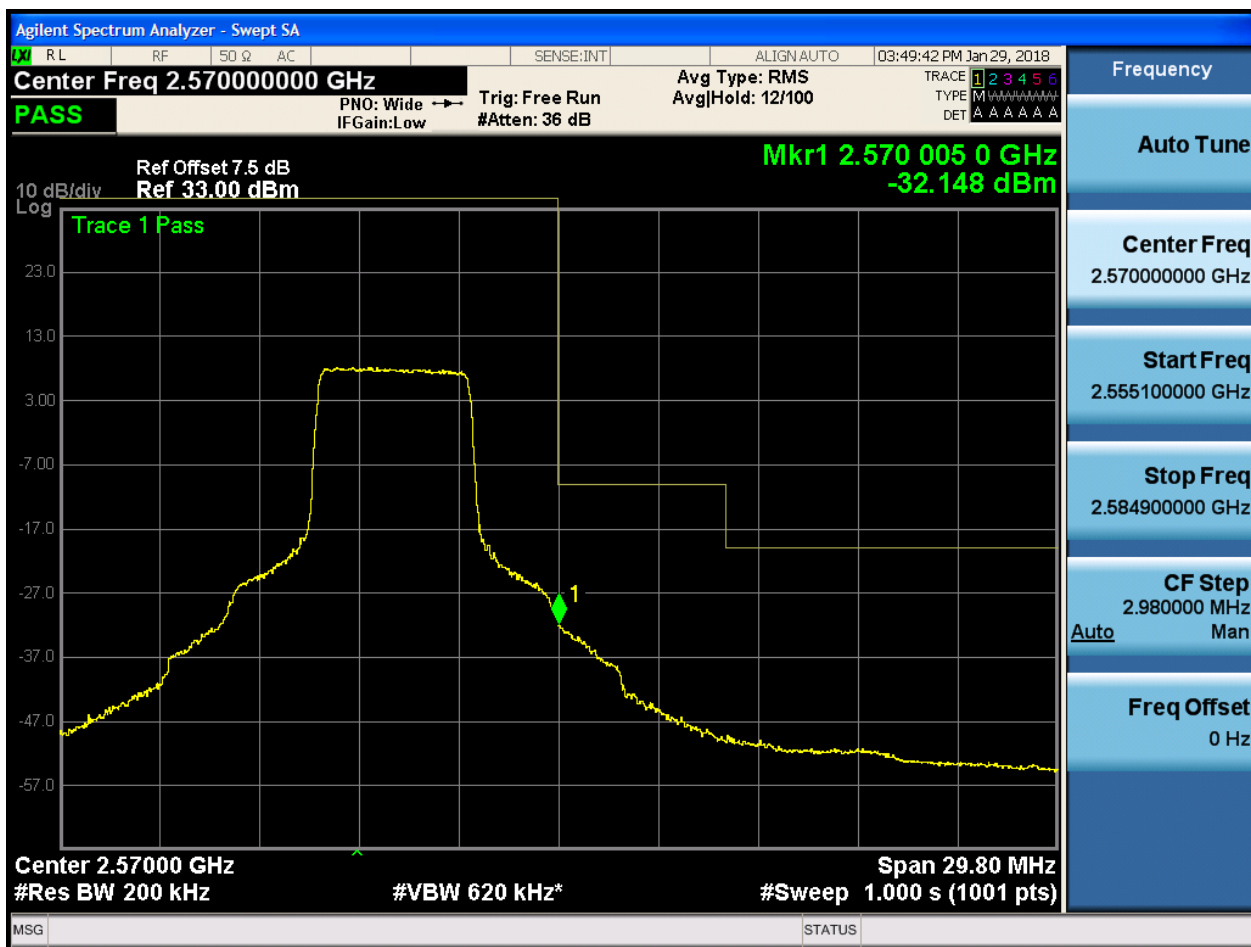


5.1.1.1.2.2.2 Test RB = RB1#49





5.1.1.1.2.2.3 Test RB = RB25#13





5.1.1.1.2.2.4 Test RB = RB50#0

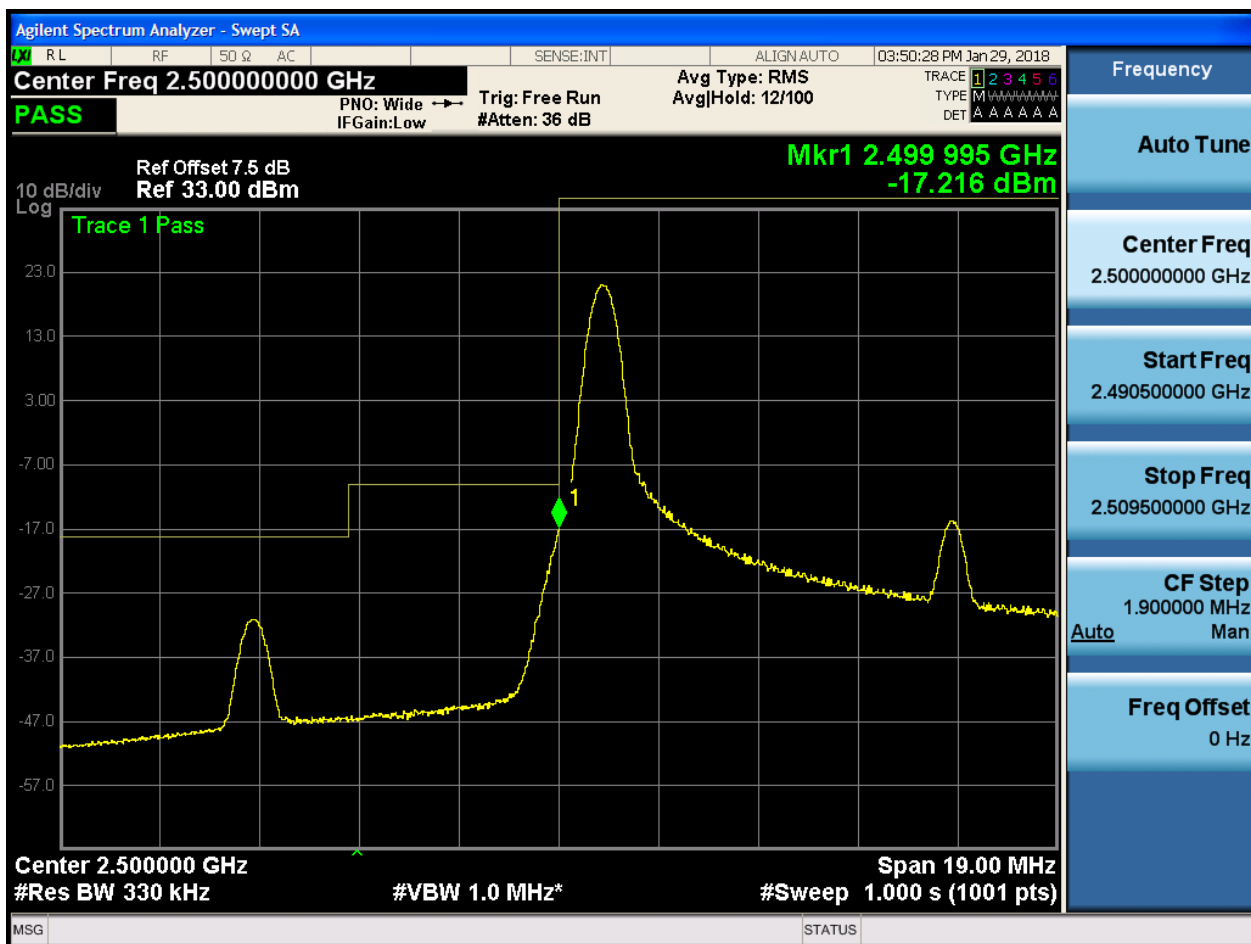




5.1.1.1.3 Test Bandwidth = 15

5.1.1.1.3.1 Test Channel = LCH

5.1.1.1.3.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:50:47 PM Jan 29, 2018

Center Freq 2.500000000 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 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-40.145 dBm

10 dB/div
Log

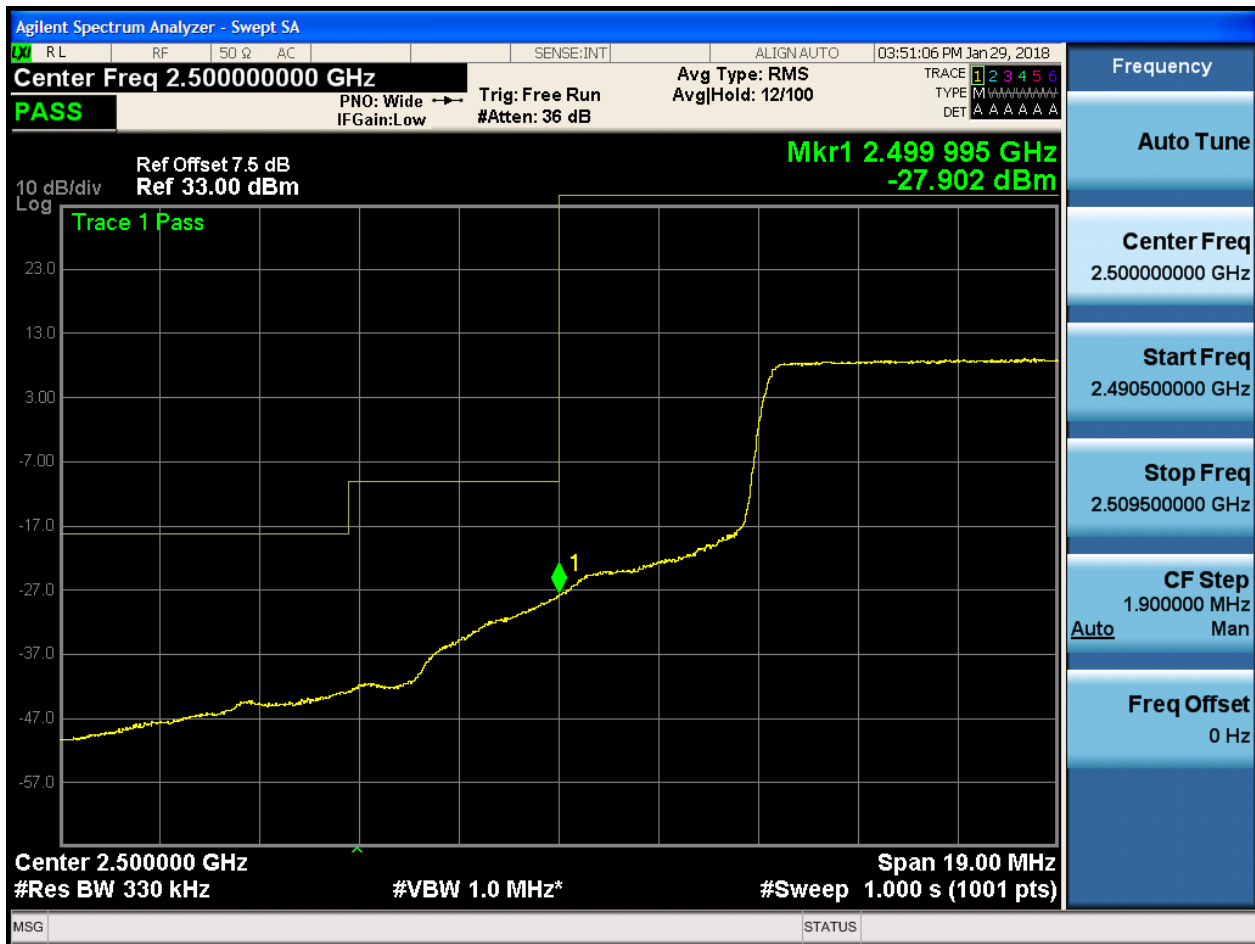
Trace 1 Pass

Center 2.500000 GHz
#Res BW 330 kHz #VBW 1.0 MHz* Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



5.1.1.1.3.1.3 Test RB = RB36#18





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
-25.429 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz
#Res BW 330 kHz
#VBW 1.0 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

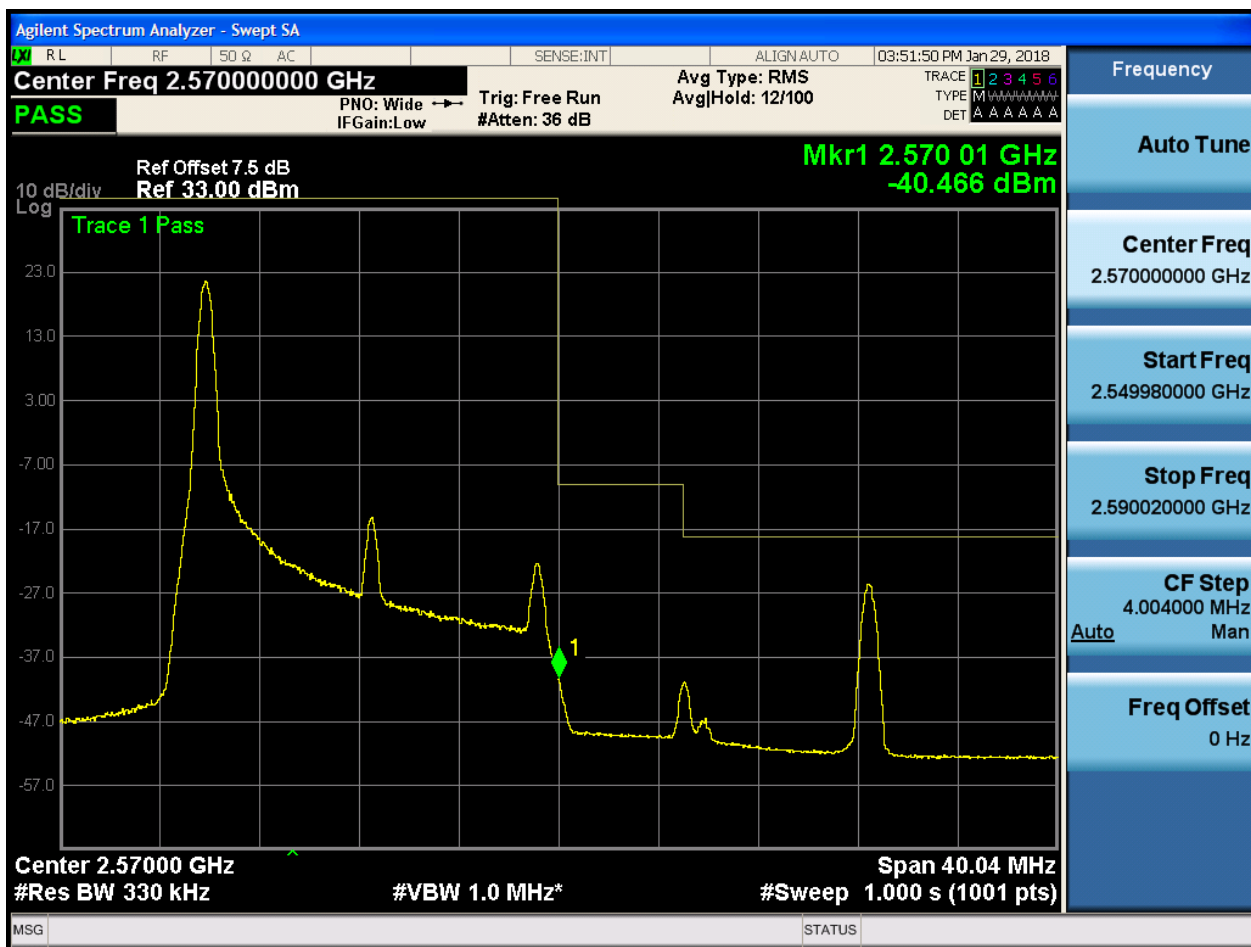
CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:52:09 PM Jan 29, 2018

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 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 01 GHz
-17.399 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 330 kHz
#VBW 1.0 MHz*
Span 40.04 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



5.1.1.1.3.2.3 Test RB = RB36#18





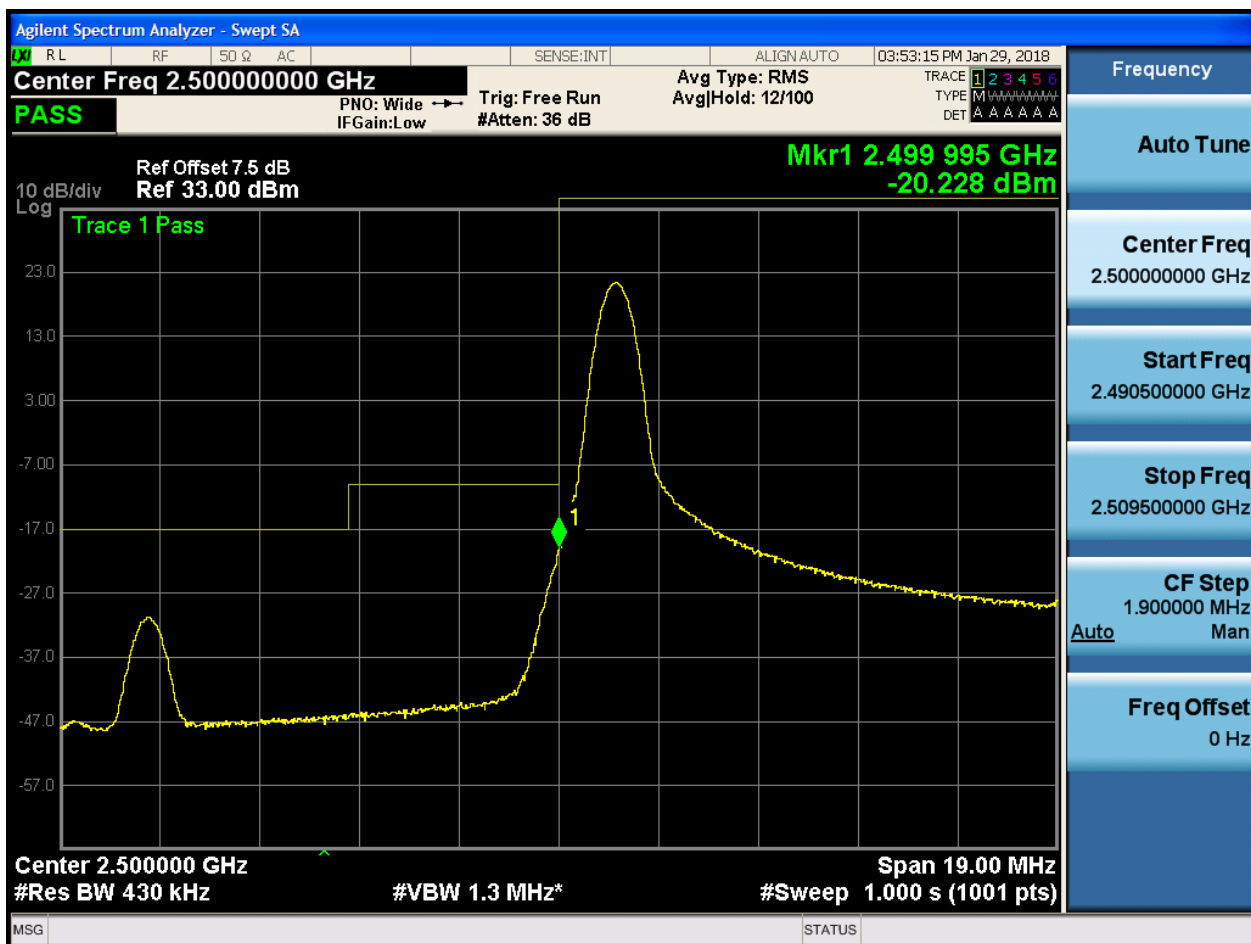
5.1.1.1.3.2.4 Test RB = RB75#0



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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:53:34 PM Jan 29, 2018

Center Freq 2.500000000 GHz Avg Type: RMS
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
DET A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-39.149 dBm

10 dB/div
Log

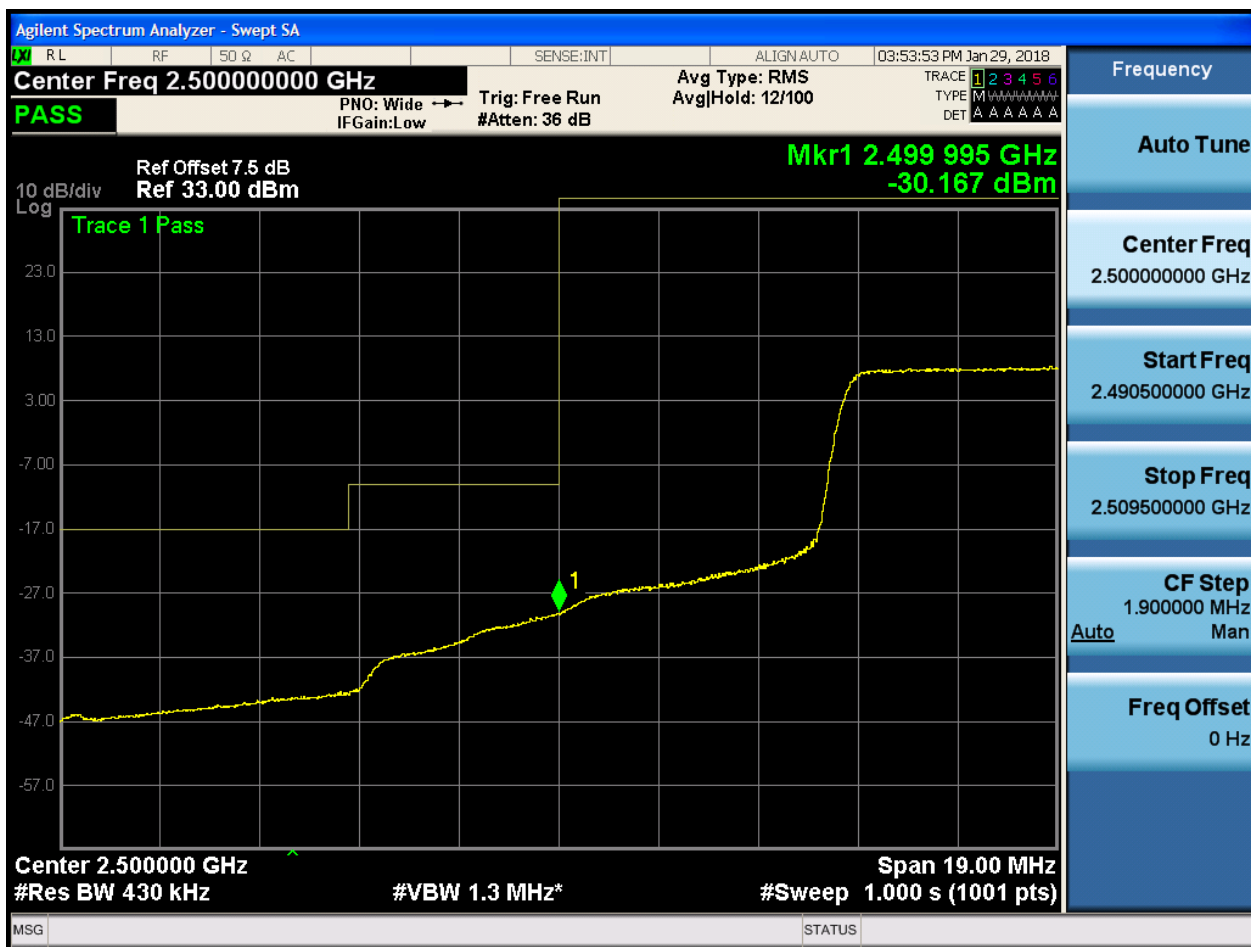
Trace 1 Pass

Center 2.500000 GHz
#Res BW 430 kHz #VBW 1.3 MHz* Span 19.00 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

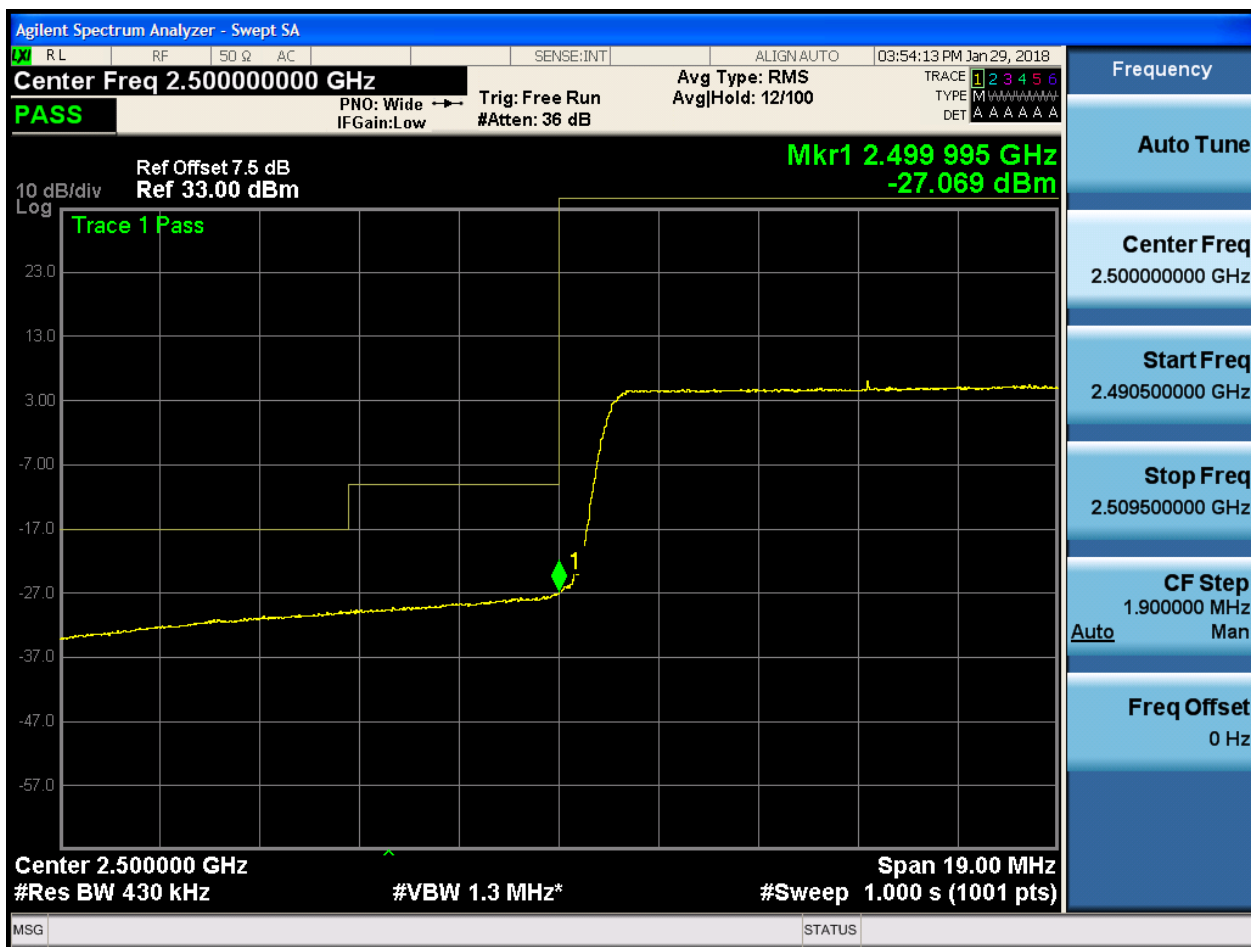


5.1.1.1.4.1.3 Test RB = RB50#25





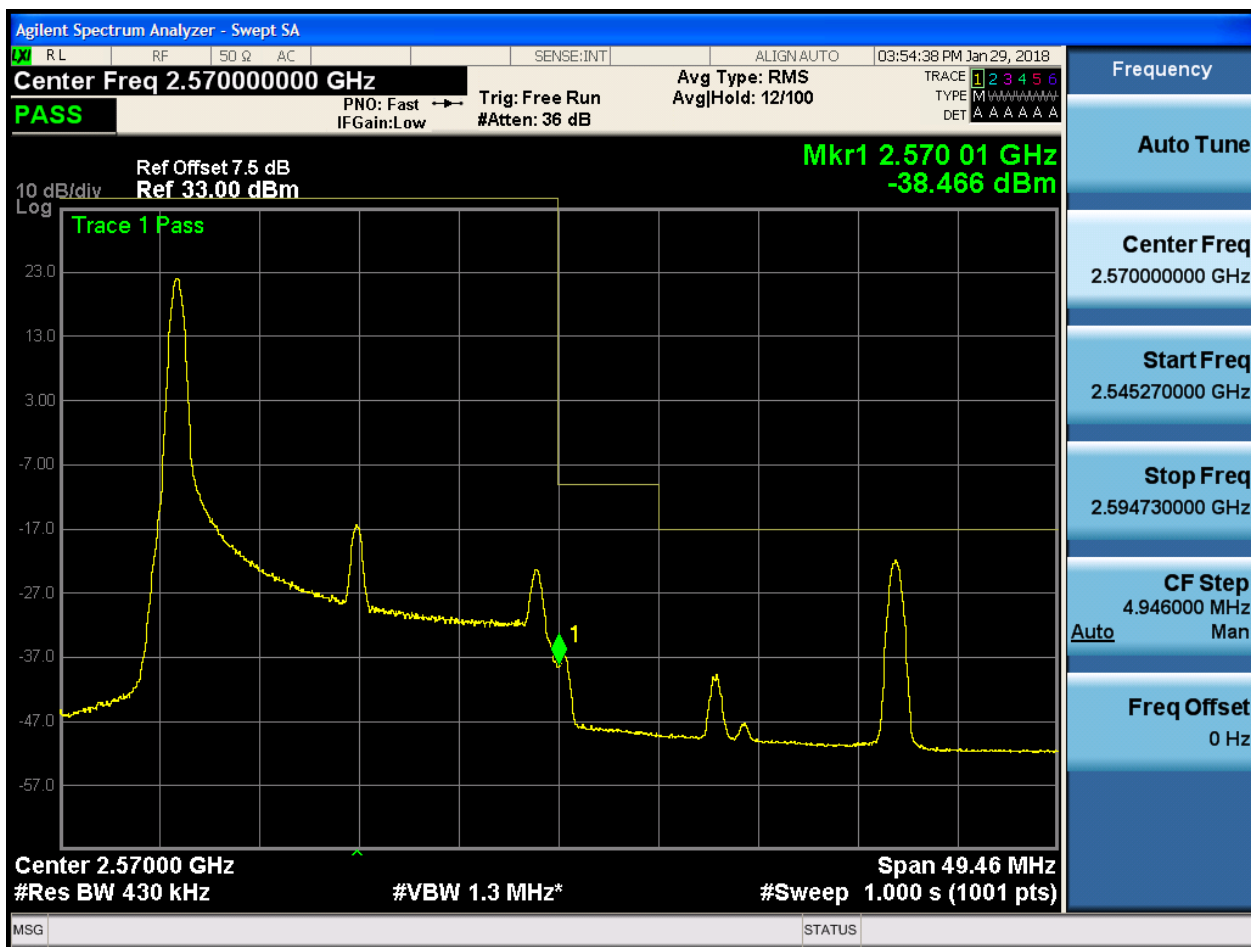
5.1.1.1.4.1.4 Test RB = RB100#0





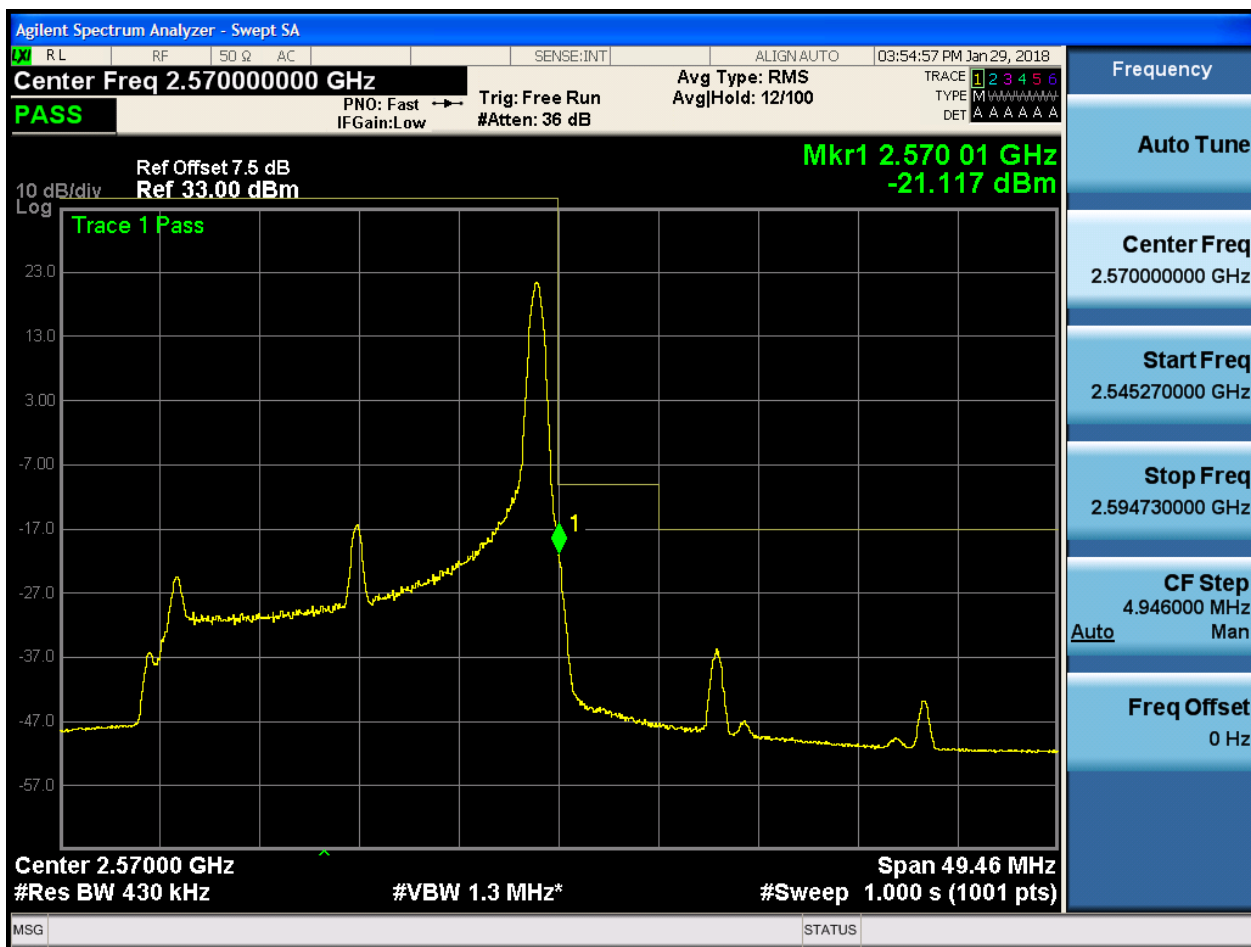
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0



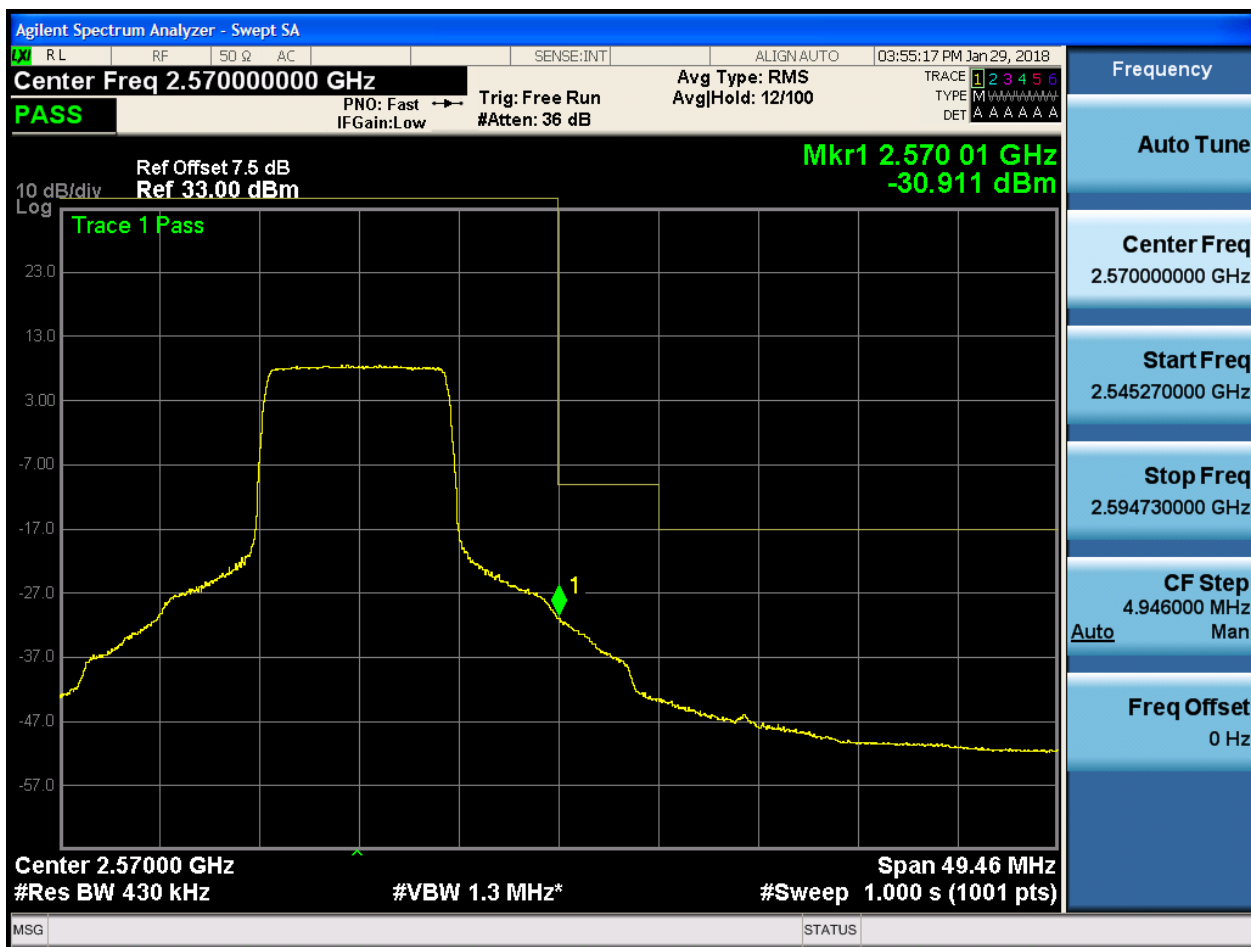


5.1.1.1.4.2.2 Test RB = RB1#99





5.1.1.1.4.2.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:55:37 PM Jan 29, 2018

Center Freq 2.570000000 GHz Avg Type: RMS
 PASS PNO: Fast 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 7.5 dB
 Ref 33.00 dBm

Mkr1 2.570 01 GHz
 -27.927 dBm

10 dB/div
 Log

Trace 1 Pass

Center 2.57000 GHz
 #Res BW 430 kHz
 #VBW 1.3 MHz*
 Span 49.46 MHz
 #Sweep 1.000 s (1001 pts)

MSG Alignment Completed STATUS

Frequency

Auto Tune

Center Freq
 2.570000000 GHz

Start Freq
 2.545270000 GHz

Stop Freq
 2.594730000 GHz

CF Step
 4.946000 MHz
 Auto Man

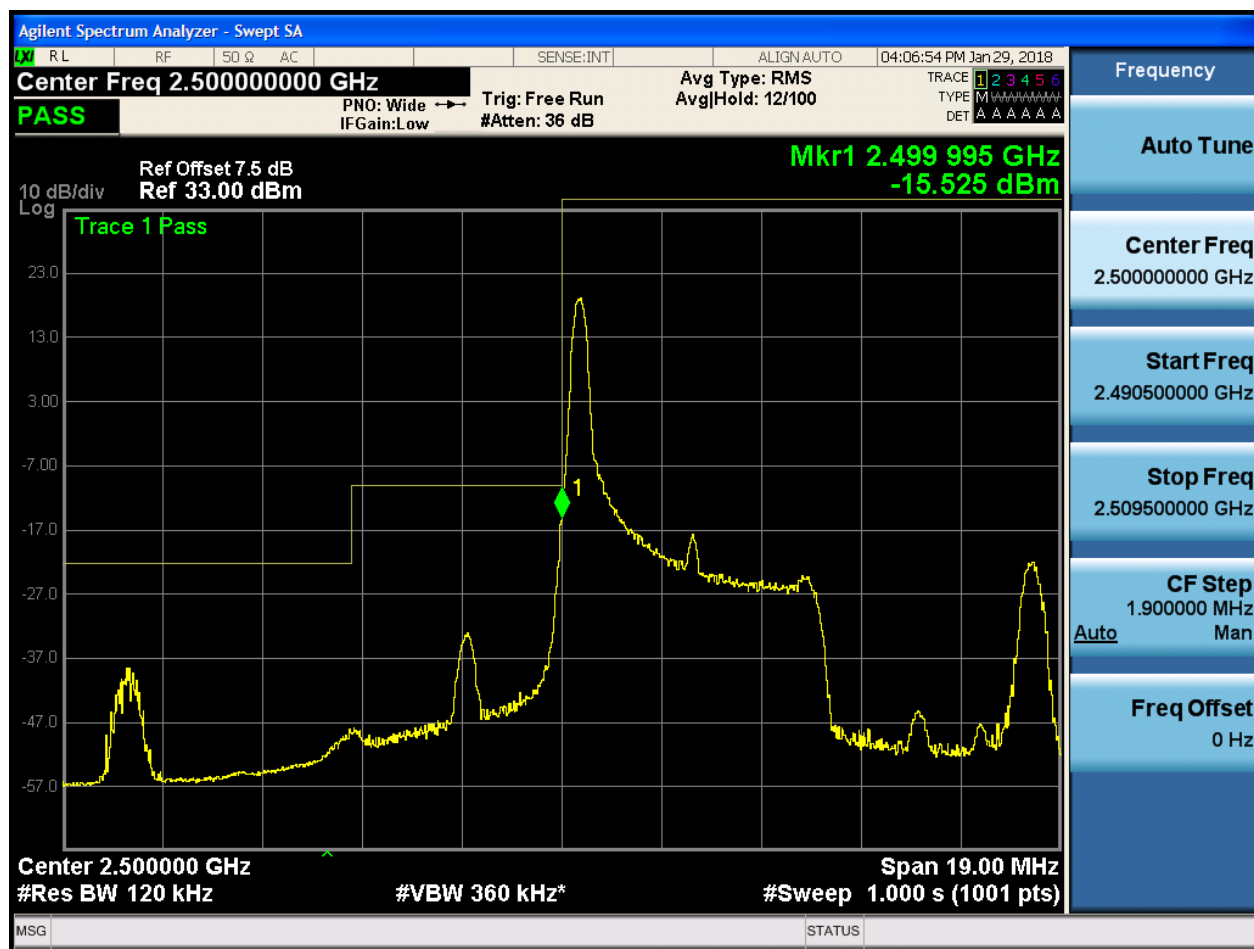
Freq Offset
 0 Hz

5.2.2.1 Test Mode = LTE/TM2

5.2.2.1.1 Test Bandwidth = 5

5.2.2.1.1.1 Test Channel = LCH

5.2.2.1.1.1.1 Test RB = RB1#0





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
-34.219 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

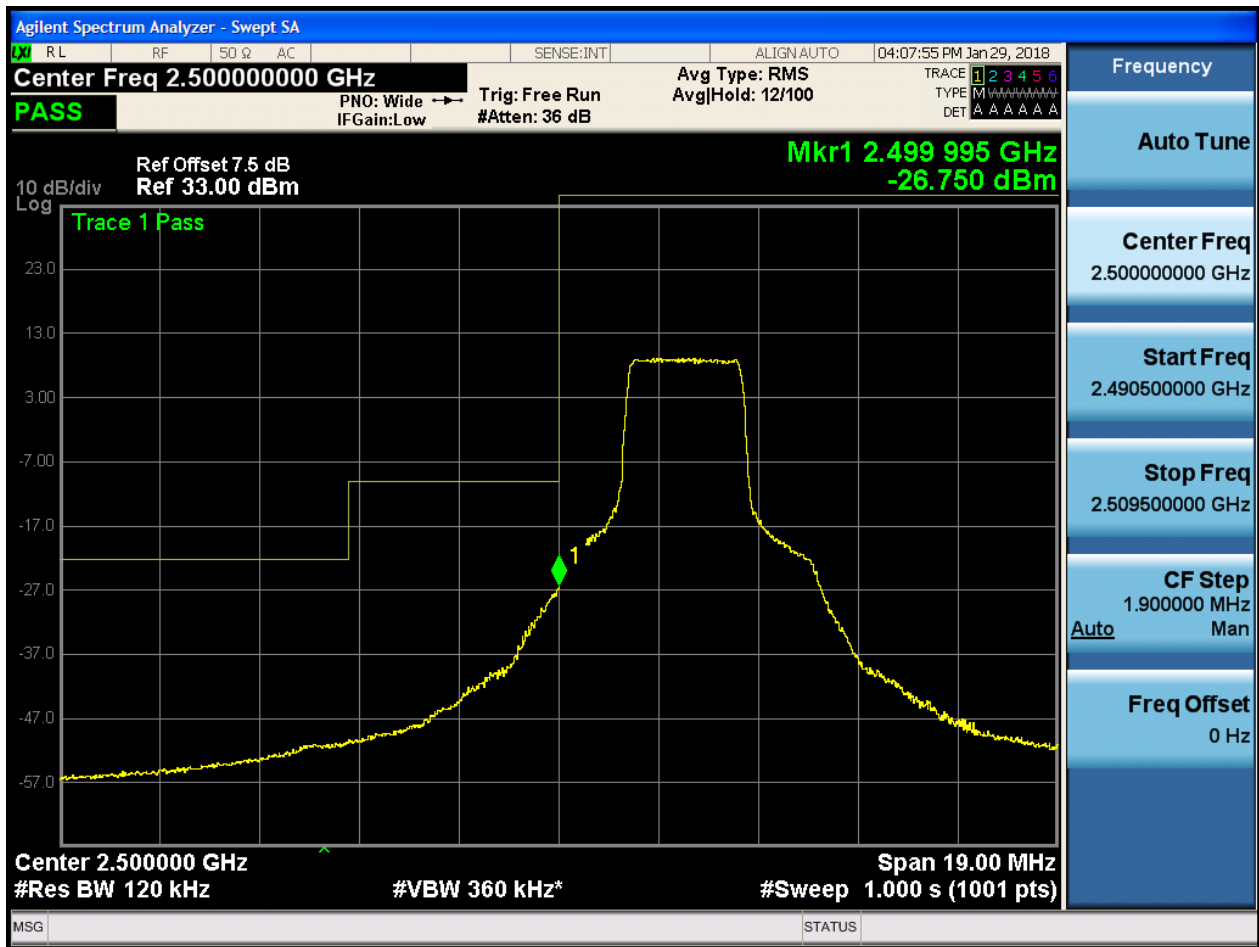
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto

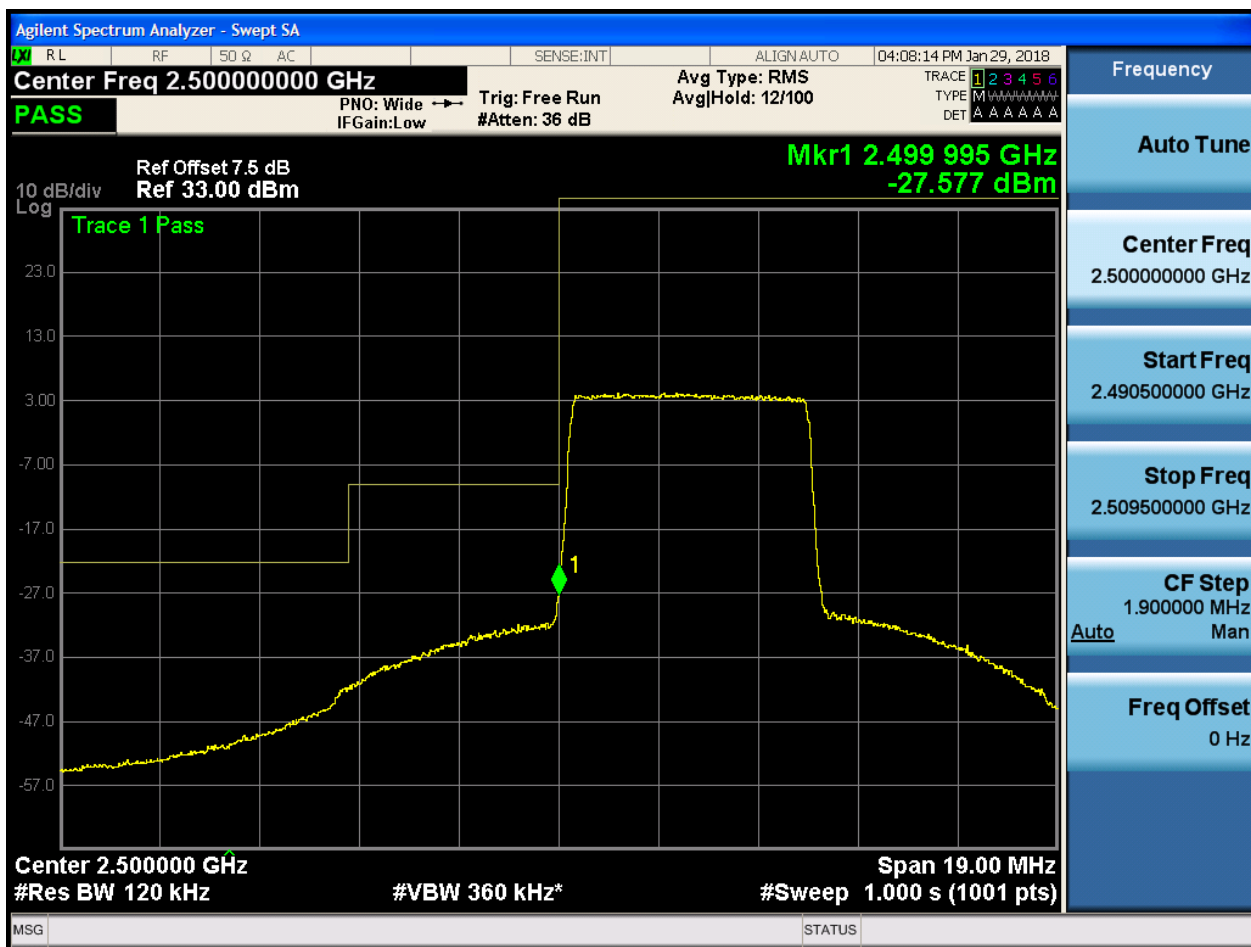
Freq Offset
0 Hz



5.2.2.1.1.1.3 Test RB = RB12#6



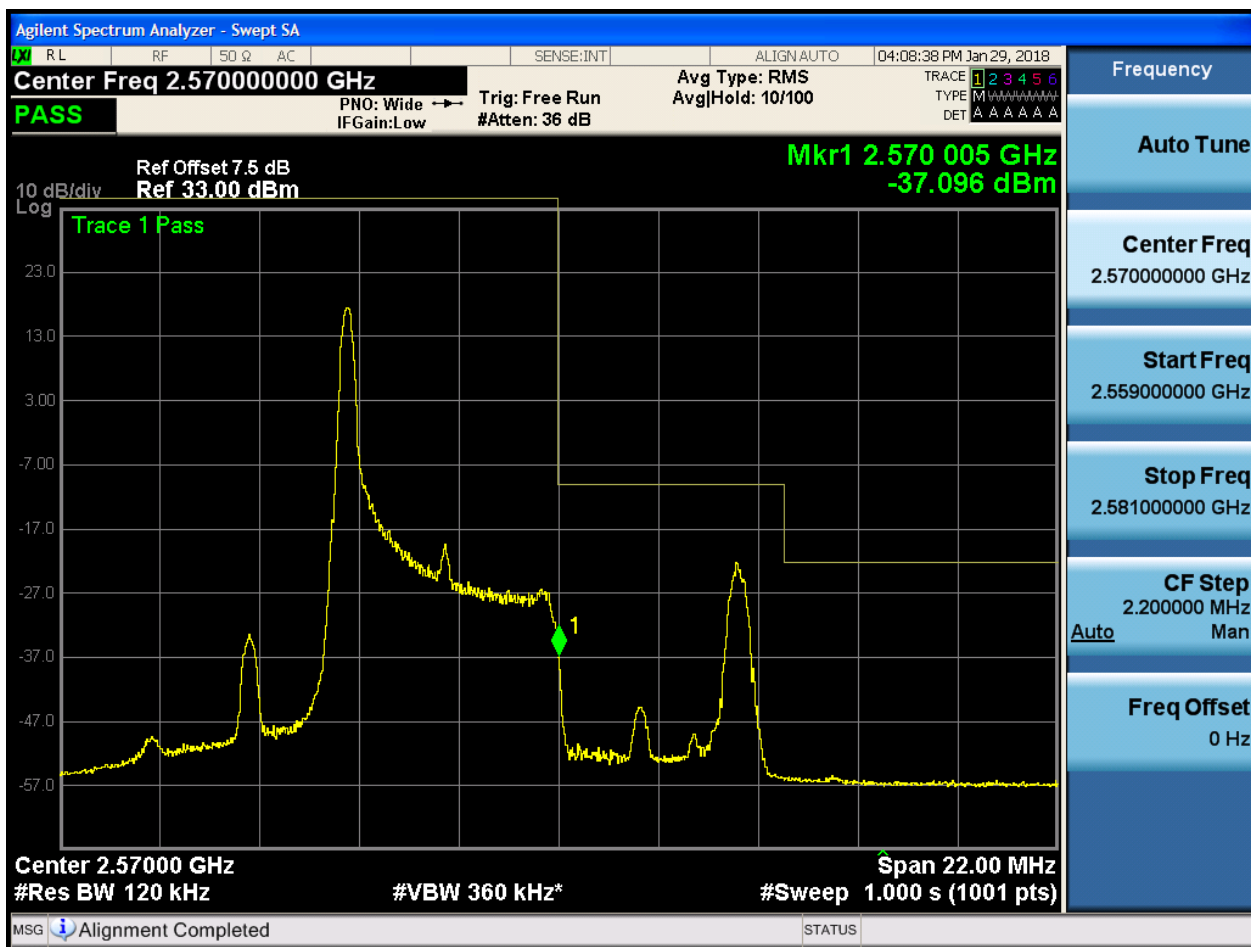
5.2.2.1.1.1.4 Test RB = RB25#0





5.2.2.1.1.2 Test Channel = HCH

5.2.2.1.1.2.1 Test RB = RB1#0



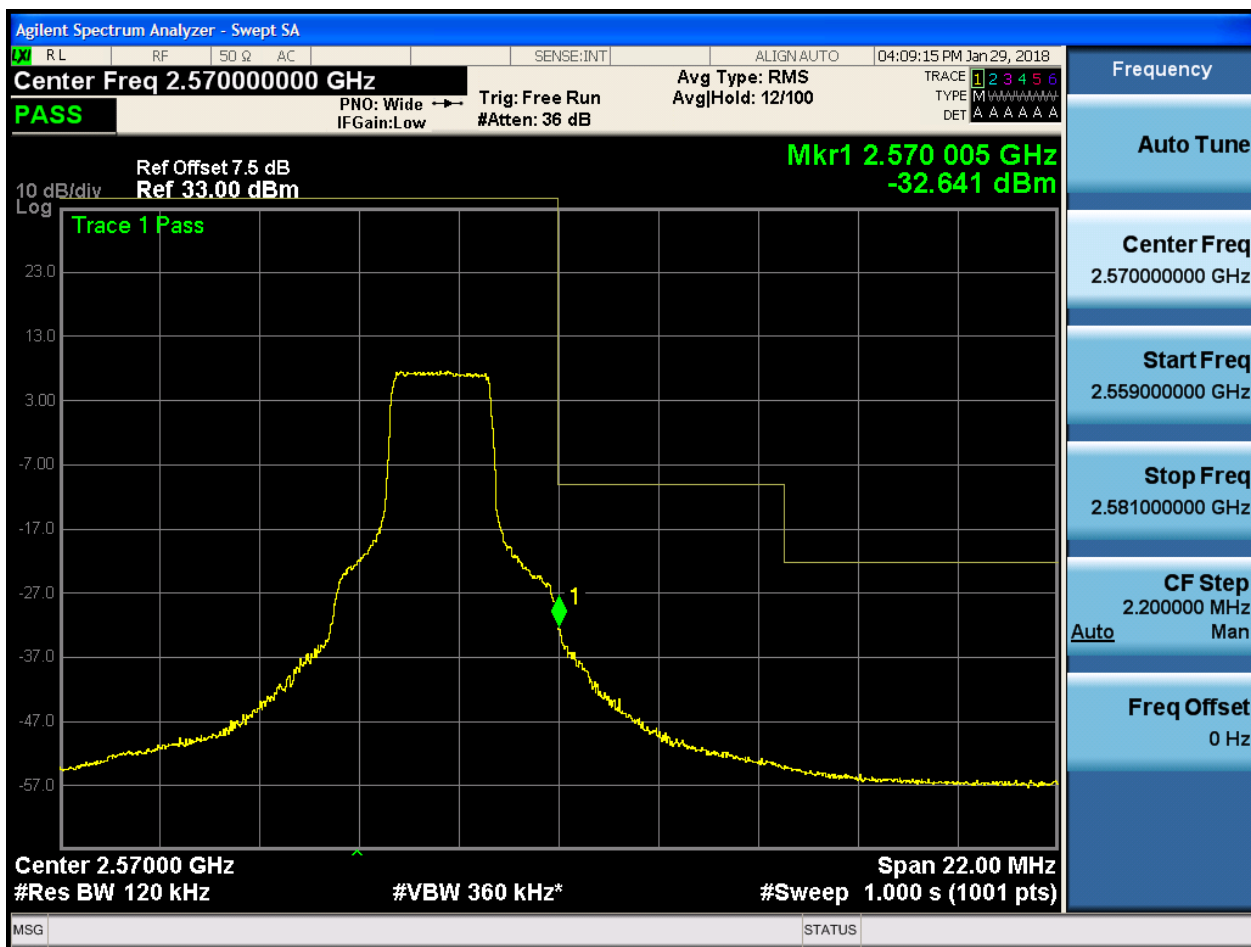


5.2.2.1.1.2.2 Test RB = RB1#24



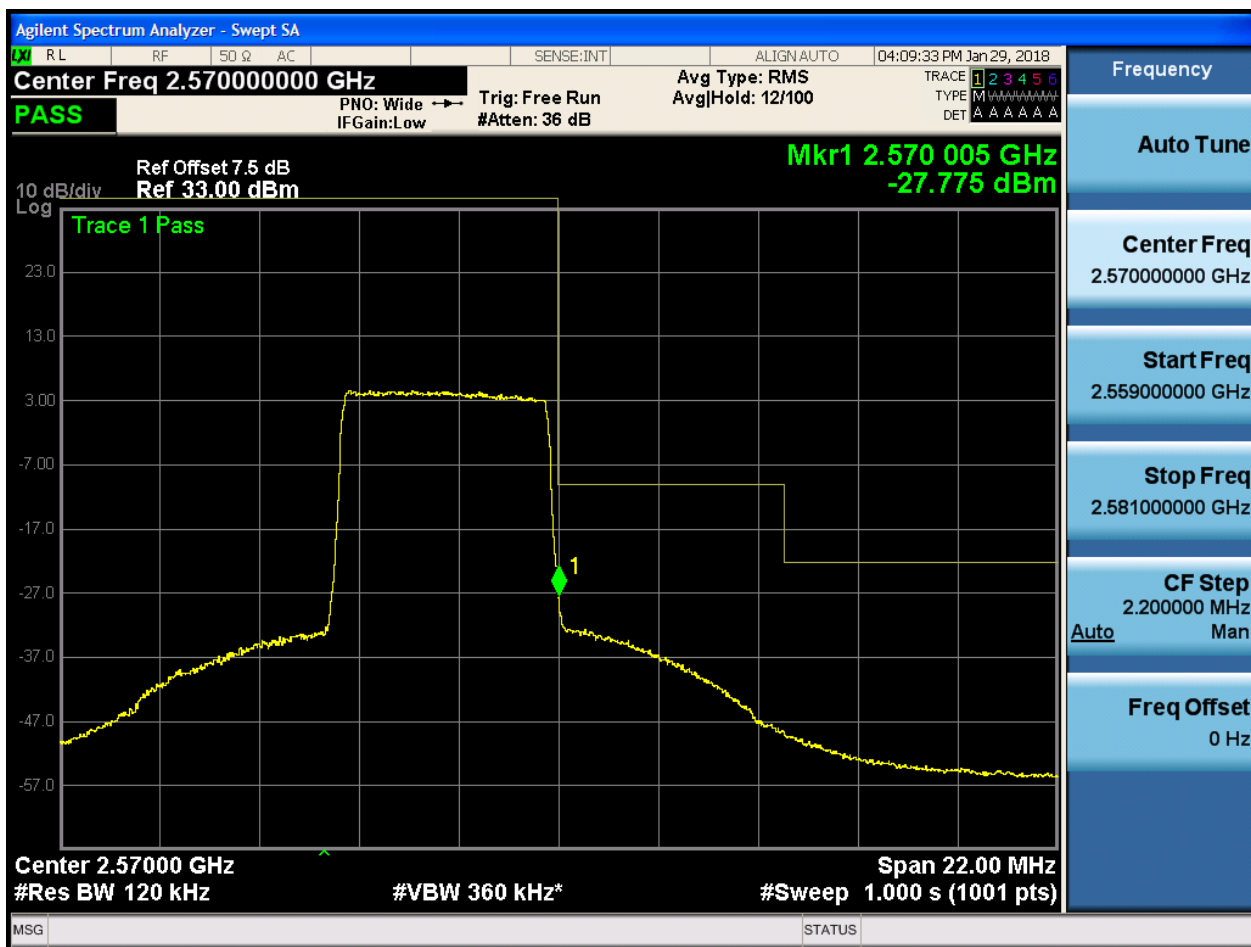


5.2.2.1.1.2.3 Test RB = RB12#6





5.2.2.1.1.2.4 Test RB = RB25#0

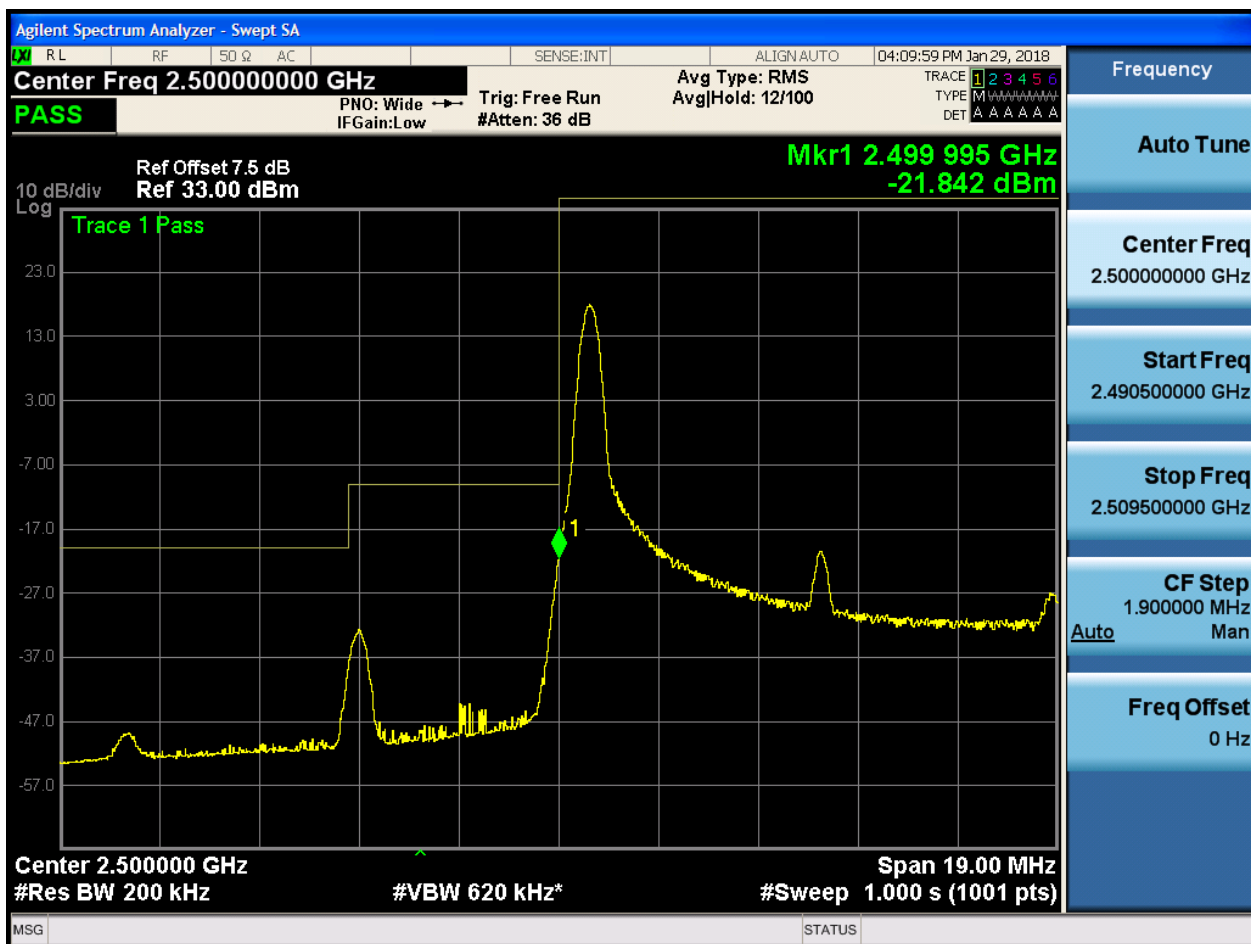




5.2.2.1.2 Test Bandwidth = 10

5.2.2.1.2.1 Test Channel = LCH

5.2.2.1.2.1.1 Test RB = RB1#0





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
-39.273 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
Man

Auto

Freq Offset
0 Hz

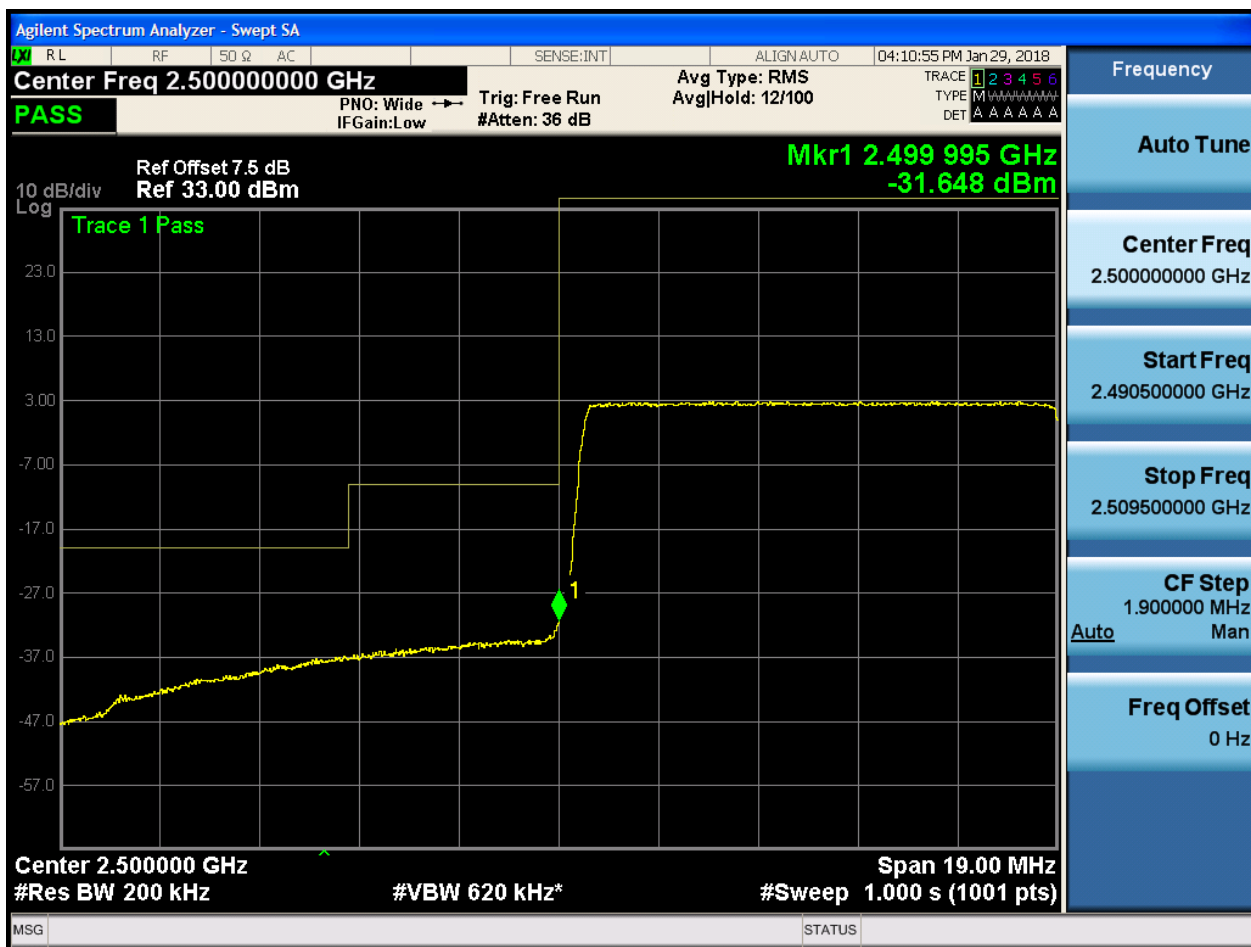


5.2.2.1.2.1.3 Test RB = RB25#13





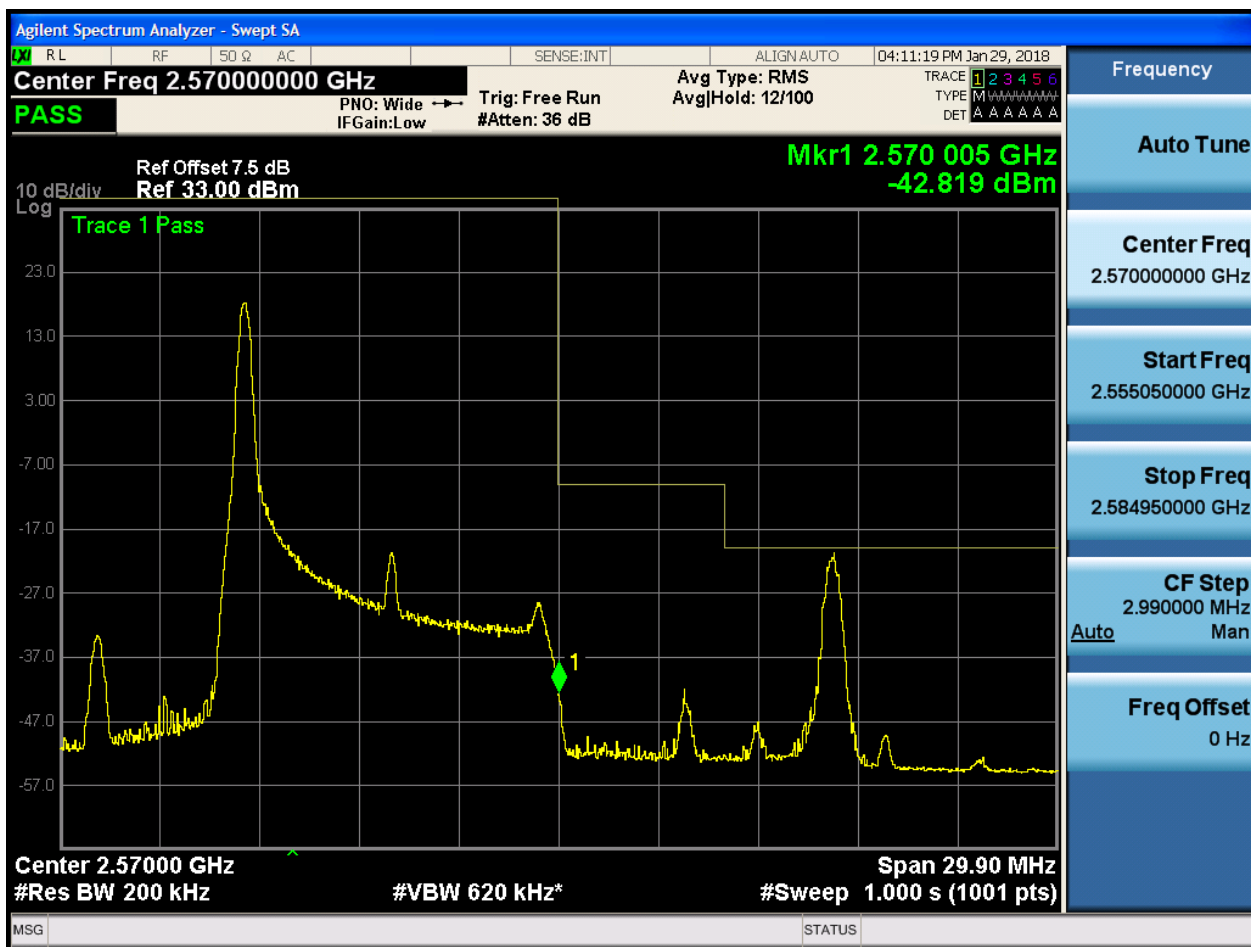
5.2.2.1.2.1.4 Test RB = RB50#0





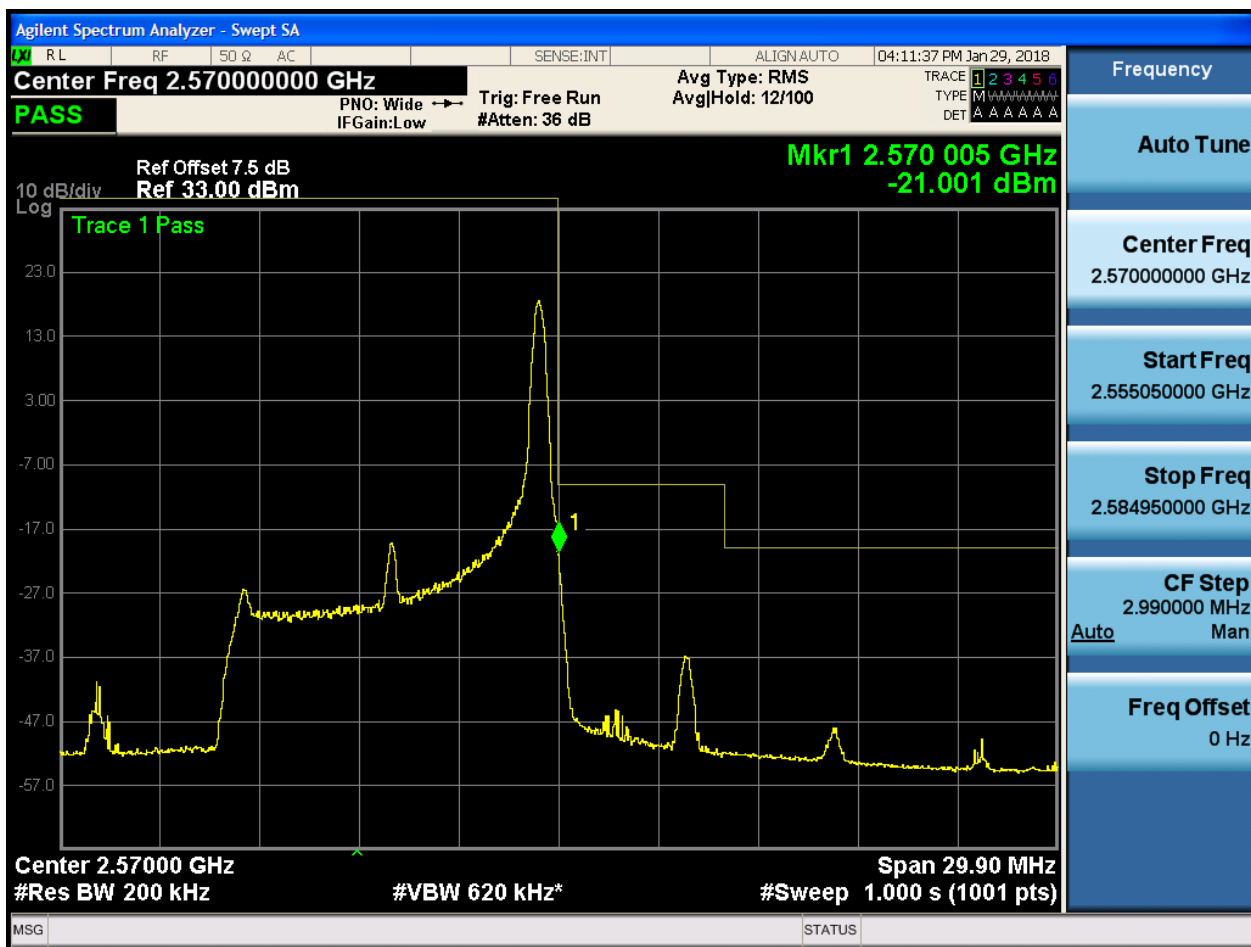
5.2.2.1.2.2 Test Channel = HCH

5.2.2.1.2.2.1 Test RB = RB1#0



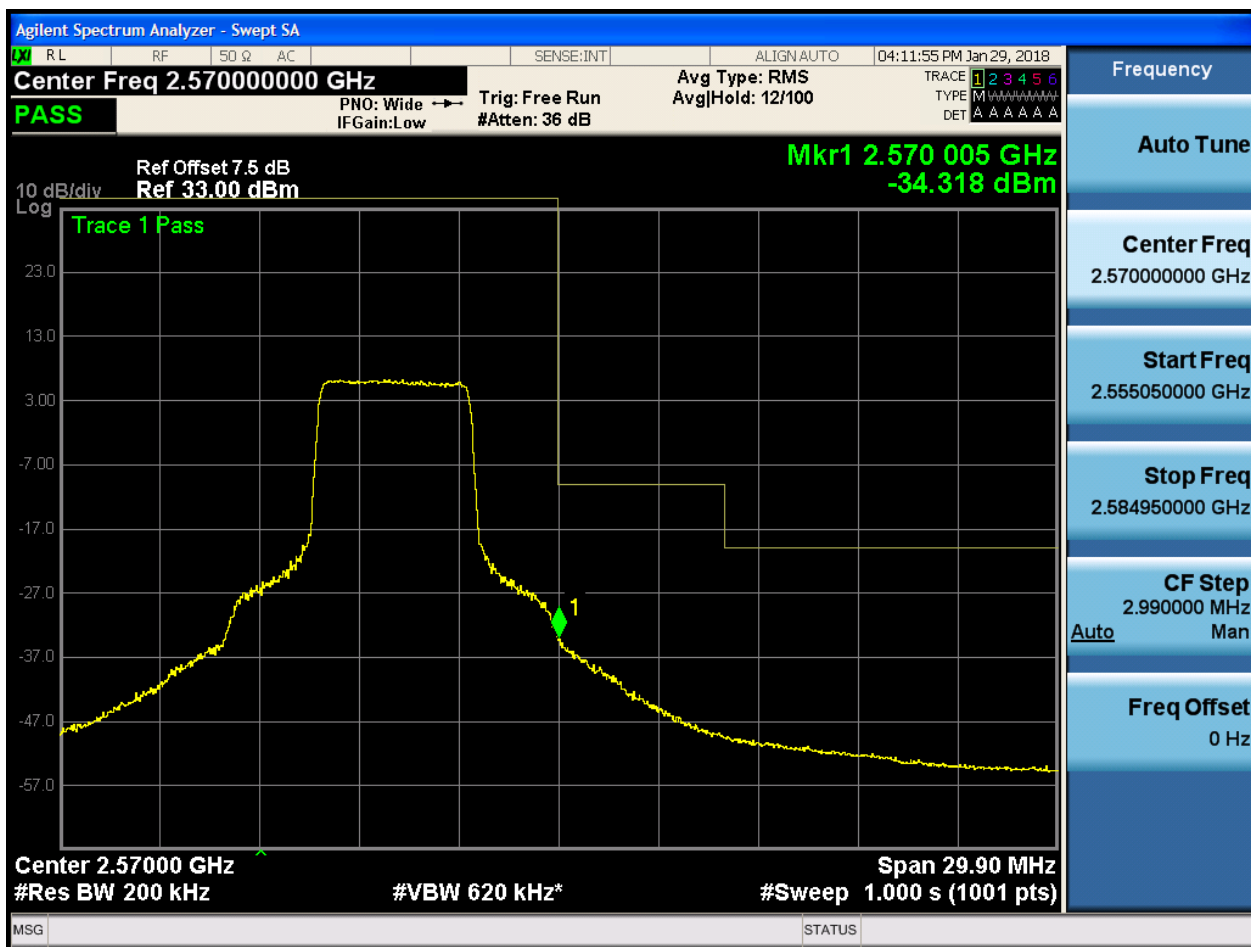


5.2.2.1.2.2.2 Test RB = RB1#49





5.2.2.1.2.2.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:12:14 PM Jan 29, 2018

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 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 005 GHz
-31.053 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz Span 29.90 MHz
#Res BW 200 kHz #VBW 620 kHz #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.555050000 GHz

Stop Freq
2.584950000 GHz

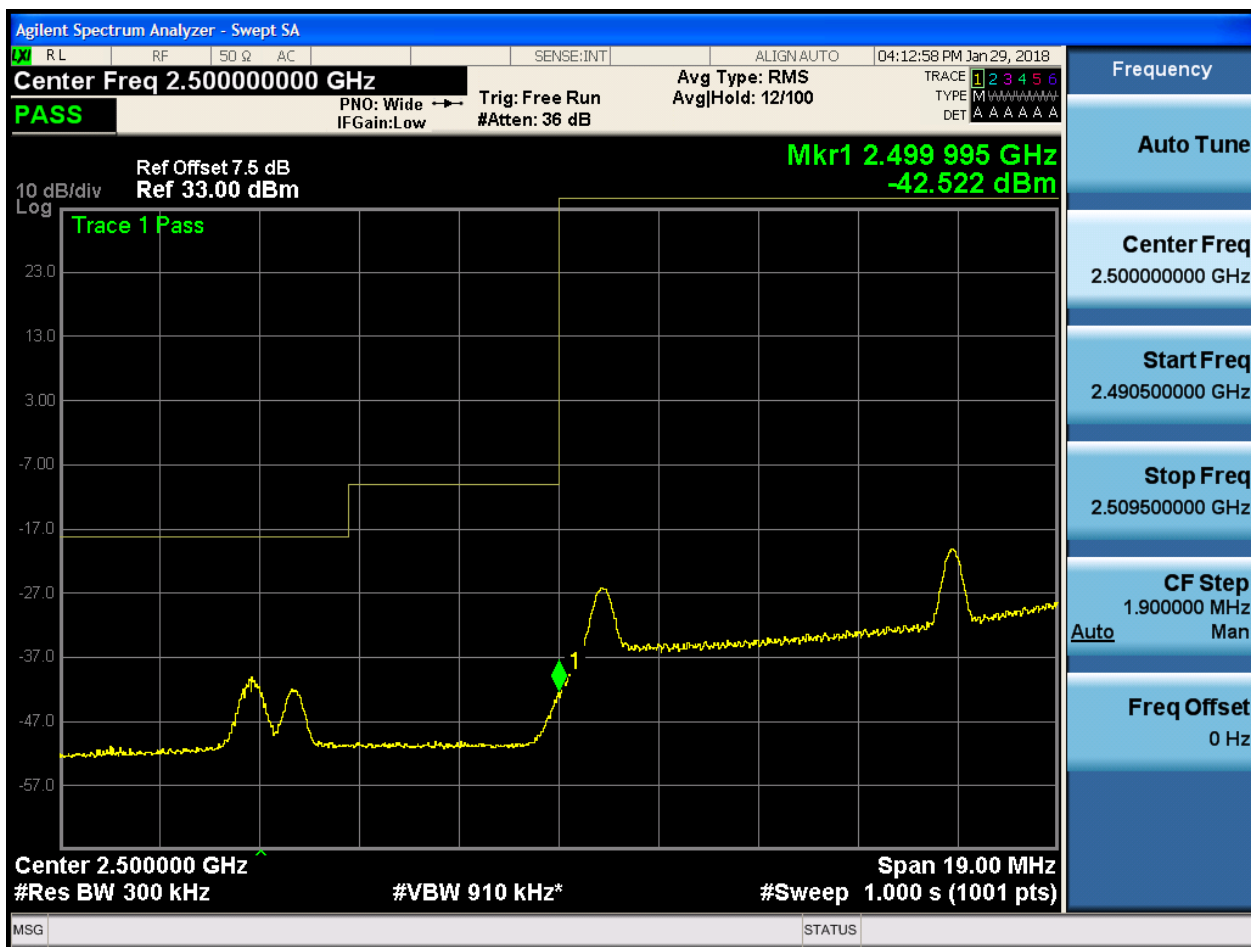
CF Step
2.990000 MHz
Auto Man

Freq Offset
0 Hz



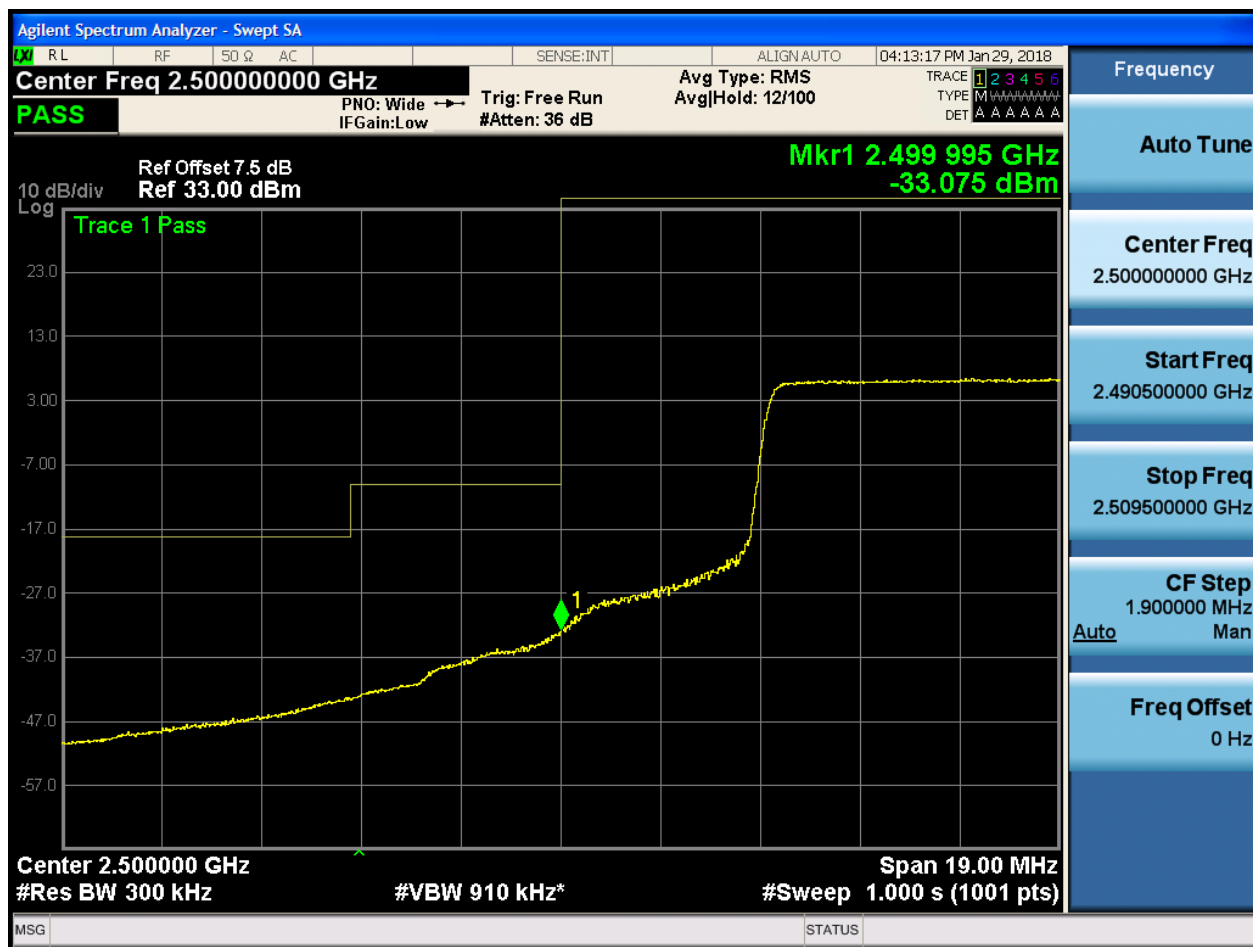


5.2.2.1.3.1.2 Test RB = RB1#74

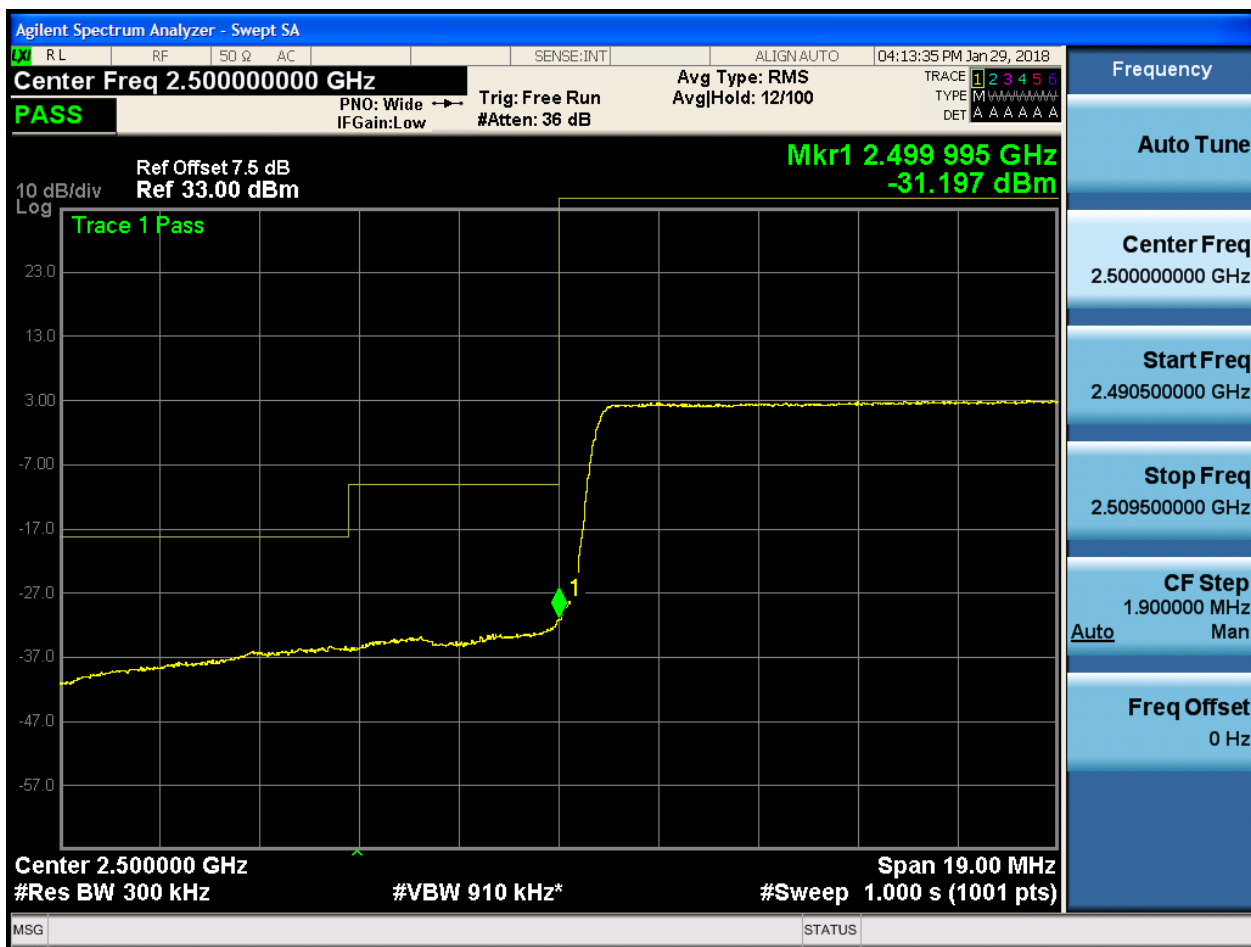




5.2.2.1.3.1.3 Test RB = RB36#18



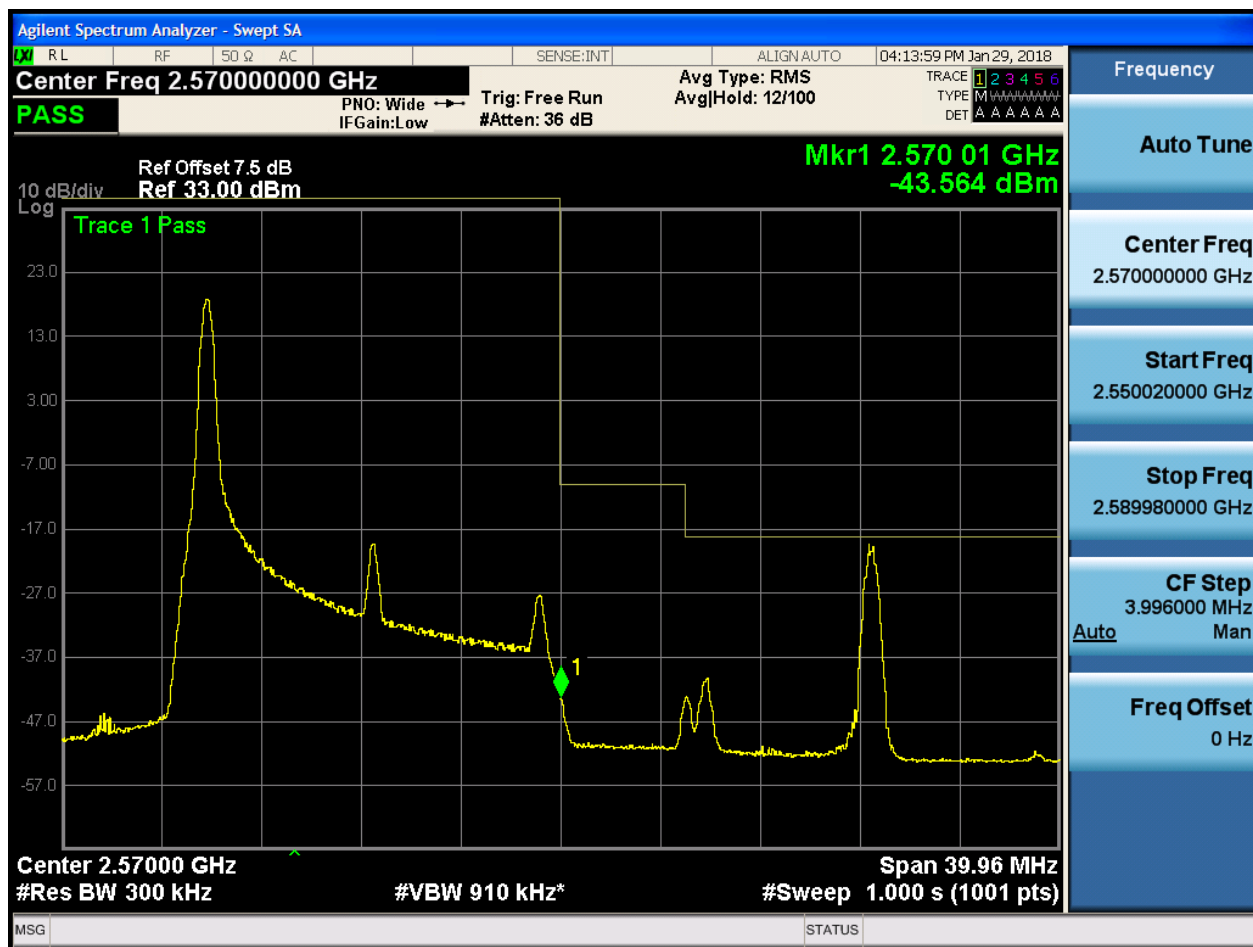
5.2.2.1.3.1.4 Test RB = RB75#0





5.2.2.1.3.2 Test Channel = HCH

5.2.2.1.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:14:18 PM Jan 29, 2018

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 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 01 GHz
-20.936 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz Span 39.96 MHz
#Res BW 300 kHz #VBW 910 kHz* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.570000000 GHz

Start Freq
2.550020000 GHz

Stop Freq
2.589980000 GHz

CF Step
3.996000 MHz
Auto Man

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:14:36 PM Jan 29, 2018

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 W W
DET A A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 01 GHz
-35.218 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.57000 GHz
#Res BW 300 kHz #VBW 910 kHz* Span 39.96 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency
Auto Tune
Center Freq
2.570000000 GHz
Start Freq
2.550020000 GHz
Stop Freq
2.589980000 GHz
CF Step
3.996000 MHz
Auto Man
Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:14:55 PM Jan 29, 2018

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 W W
DET A A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.570 01 GHz
-30.784 dBm

10 dB/div
Log

Trace 1 Pass

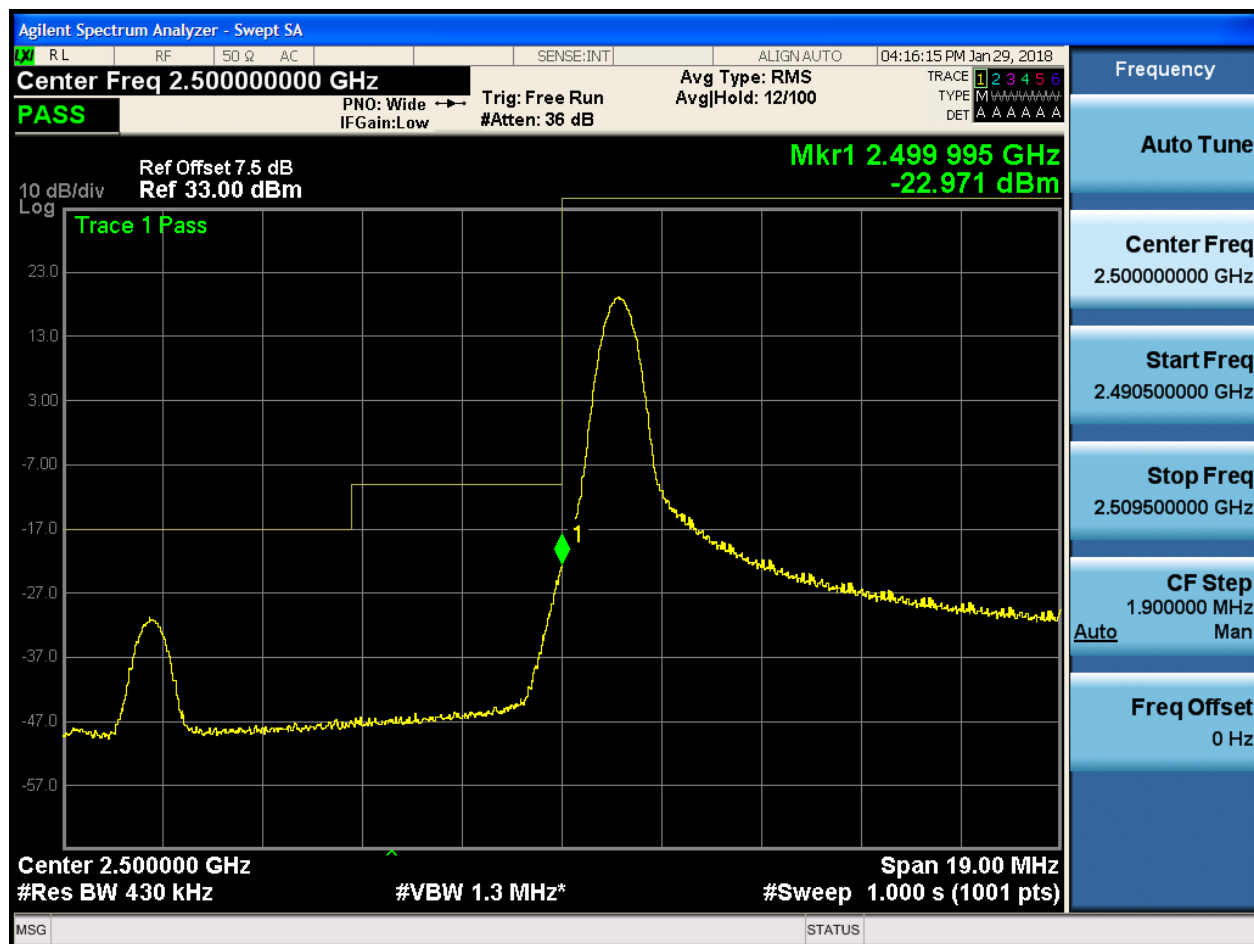
Center 2.57000 GHz
#Res BW 300 kHz #VBW 910 kHz* Span 39.96 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS

5.2.2.1.4 Test Bandwidth = 20

5.2.2.1.4.1 Test Channel = LCH

5.2.2.1.4.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.50000000 GHz

Ref Offset 7.5 dB
Ref 33.00 dBm

10 dB/div
Log

Trace 1 Pass

Mkr1 2.499 995 GHz
-40.985 dBm

Center 2.500000 GHz
#Res BW 430 kHz
#VBW 1.3 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

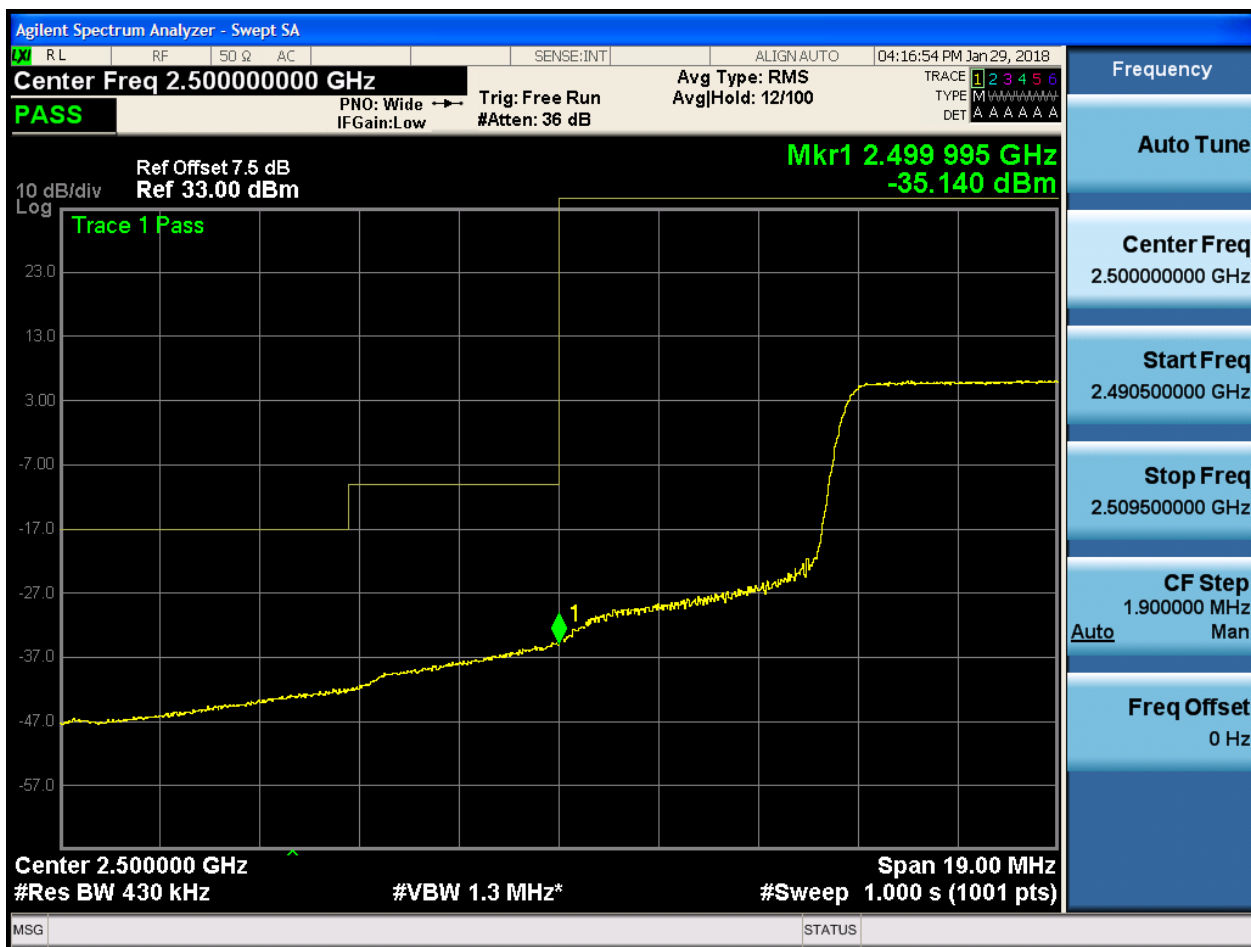
CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz

The image shows a screenshot of an Agilent Spectrum Analyzer in a swept SA mode. The main display area shows a frequency spectrum with a yellow trace. A peak is visible at approximately 2.499995 GHz, marked with a green diamond and labeled 'Mkr1 2.499 995 GHz -40.985 dBm'. The trace is labeled 'Trace 1 Pass'. The y-axis is labeled '10 dB/div Log' and ranges from -57.0 to 23.0. The x-axis is labeled 'Center 2.500000 GHz' and 'Span 19.00 MHz'. The resolution bandwidth is '#Res BW 430 kHz' and the video bandwidth is '#VBW 1.3 MHz*'. The sweep time is '#Sweep 1.000 s (1001 pts)'. The right-hand panel contains several settings: 'Frequency' (2.500000000 GHz), 'Auto Tune', 'Center Freq' (2.500000000 GHz), 'Start Freq' (2.490500000 GHz), 'Stop Freq' (2.509500000 GHz), 'CF Step' (1.900000 MHz, Auto/Man), and 'Freq Offset' (0 Hz). The top status bar shows 'Agilent Spectrum Analyzer - Swept SA', 'Center Freq 2.50000000 GHz', 'Ref Offset 7.5 dB', 'Ref 33.00 dBm', '10 dB/div Log', 'Trace 1 Pass', 'Mkr1 2.499 995 GHz -40.985 dBm', 'Center 2.500000 GHz', '#Res BW 430 kHz', '#VBW 1.3 MHz*', 'Span 19.00 MHz', and '#Sweep 1.000 s (1001 pts)'. The bottom status bar shows 'MSG' and 'STATUS'.



5.2.2.1.4.1.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:17:14 PM Jan 29, 2018

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 W W
DET A A A A A A A

Ref Offset 7.5 dB
Ref 33.00 dBm

Mkr1 2.499 995 GHz
-32.171 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz
#Res BW 430 kHz #VBW 1.3 MHz* #Sweep 1.000 s (1001 pts)

MSG STATUS