



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	21.67	21.4	33	PASS
				RB1#13	21.05	20.78	33	PASS
				RB1#24	21.37	21.1	33	PASS
				RB12#0	20.24	19.97	33	PASS
				RB12#6	19.99	19.72	33	PASS
				RB12#13	20.15	19.88	33	PASS
			MCH	RB25#0	20.23	19.96	33	PASS
				RB1#0	22.16	21.89	33	PASS
				RB1#13	21.92	21.65	33	PASS
				RB1#24	21.99	21.72	33	PASS
				RB12#0	21.01	20.74	33	PASS
				RB12#6	20.9	20.63	33	PASS
				RB12#13	20.97	20.7	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	20.99	20.72	33	PASS
			HCH	RB1#0	22.1	21.83	33	PASS
				RB1#13	21.67	21.4	33	PASS
				RB1#24	21.7	21.43	33	PASS
				RB12#0	20.92	20.65	33	PASS
				RB12#6	20.84	20.57	33	PASS
				RB12#13	20.84	20.57	33	PASS
				RB25#0	20.89	20.62	33	PASS
		10	LCH	RB1#0	21.72	21.45	33	PASS
				RB1#25	20.96	20.69	33	PASS
				RB1#49	21.73	21.46	33	PASS
				RB25#0	20.39	20.12	33	PASS
				RB25#13	20.21	19.94	33	PASS
				RB25#25	20.44	20.17	33	PASS
				RB50#0	20.41	20.14	33	PASS
			MCH	RB1#0	22.26	21.99	33	PASS
				RB1#25	22.12	21.85	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#49	22.3	22.03	33	PASS
				RB25#0	21.12	20.85	33	PASS
				RB25#13	21	20.73	33	PASS
				RB25#25	21.1	20.83	33	PASS
				RB50#0	21.06	20.79	33	PASS
			HCH	RB1#0	22.2	21.93	33	PASS
				RB1#25	21.91	21.64	33	PASS
				RB1#49	22.19	21.92	33	PASS
				RB25#0	21.15	20.88	33	PASS
				RB25#13	20.82	20.55	33	PASS
				RB25#25	20.84	20.57	33	PASS
				RB50#0	20.97	20.7	33	PASS
		15	LCH	RB1#0	21.73	21.46	33	PASS
				RB1#38	21.01	20.74	33	PASS
				RB1#74	21.9	21.63	33	PASS
				RB36#0	20.35	20.08	33	PASS
				RB36#18	20.23	19.96	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB36#39	20.7	20.43	33	PASS
				RB75#0	20.43	20.16	33	PASS
			MCH	RB1#0	22.4	22.13	33	PASS
				RB1#38	22.08	21.81	33	PASS
				RB1#74	22.16	21.89	33	PASS
				RB36#0	21.17	20.9	33	PASS
				RB36#18	21	20.73	33	PASS
				RB36#39	21.16	20.89	33	PASS
				RB75#0	21.19	20.92	33	PASS
			HCH	RB1#0	22.19	21.92	33	PASS
				RB1#38	21.95	21.68	33	PASS
				RB1#74	22.14	21.87	33	PASS
				RB36#0	21.05	20.78	33	PASS
				RB36#18	20.9	20.63	33	PASS
				RB36#39	20.8	20.53	33	PASS
				RB75#0	20.97	20.7	33	PASS
		20	LCH	RB1#0	21.47	21.2	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#50	21.19	20.92	33	PASS
				RB1#99	21.81	21.54	33	PASS
				RB50#0	20.24	19.97	33	PASS
				RB50#25	20.43	20.16	33	PASS
				RB50#50	20.82	20.55	33	PASS
				RB100#0	20.55	20.28	33	PASS
			MCH	RB1#0	22.05	21.78	33	PASS
				RB1#50	21.97	21.7	33	PASS
				RB1#99	21.88	21.61	33	PASS
				RB50#0	21.15	20.88	33	PASS
				RB50#25	21.04	20.77	33	PASS
				RB50#50	21.03	20.76	33	PASS
				RB100#0	21.1	20.83	33	PASS
			HCH	RB1#0	22.09	21.82	33	PASS
				RB1#50	21.9	21.63	33	PASS
				RB1#99	21.8	21.53	33	PASS
				RB50#0	21.02	20.75	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#25	20.92	20.65	33	PASS
				RB50#50	20.86	20.59	33	PASS
				RB100#0	20.93	20.66	33	PASS
	LTE/TM2	5	LCH	RB1#0	20.61	20.34	33	PASS
				RB1#13	20.26	19.99	33	PASS
				RB1#24	20.62	20.35	33	PASS
				RB12#0	19.34	19.07	33	PASS
				RB12#6	19.06	18.79	33	PASS
				RB12#13	19.3	19.03	33	PASS
				RB25#0	19.25	18.98	33	PASS
			MCH	RB1#0	21.23	20.96	33	PASS
				RB1#13	21	20.73	33	PASS
				RB1#24	21.16	20.89	33	PASS
				RB12#0	19.81	19.54	33	PASS
				RB12#6	19.71	19.44	33	PASS
				RB12#13	20.09	19.82	33	PASS
				RB25#0	20.11	19.84	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
			HCH	RB1#0	20.99	20.72	33	PASS
				RB1#13	20.68	20.41	33	PASS
				RB1#24	20.72	20.45	33	PASS
				RB12#0	19.69	19.42	33	PASS
				RB12#6	19.71	19.44	33	PASS
				RB12#13	19.87	19.6	33	PASS
				RB25#0	19.77	19.5	33	PASS
		10	LCH	RB1#0	21	20.73	33	PASS
				RB1#25	20.4	20.13	33	PASS
				RB1#49	21.09	20.82	33	PASS
				RB25#0	19.47	19.2	33	PASS
				RB25#13	19.2	18.93	33	PASS
				RB25#25	19.44	19.17	33	PASS
				RB50#0	19.42	19.15	33	PASS
			MCH	RB1#0	21.44	21.17	33	PASS
				RB1#25	21.2	20.93	33	PASS
				RB1#49	21.4	21.13	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB25#0	19.94	19.67	33	PASS
				RB25#13	19.83	19.56	33	PASS
				RB25#25	20.21	19.94	33	PASS
				RB50#0	20.09	19.82	33	PASS
			HCH	RB1#0	21.43	21.16	33	PASS
				RB1#25	21.06	20.79	33	PASS
				RB1#49	21.11	20.84	33	PASS
				RB25#0	20.23	19.96	33	PASS
				RB25#13	19.97	19.7	33	PASS
				RB25#25	19.89	19.62	33	PASS
				RB50#0	20.12	19.85	33	PASS
		15	LCH	RB1#0	21.1	20.83	33	PASS
				RB1#38	20.4	20.13	33	PASS
				RB1#74	21.11	20.84	33	PASS
				RB36#0	19.47	19.2	33	PASS
				RB36#18	19.38	19.11	33	PASS
				RB36#39	19.8	19.53	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB75#0	19.59	19.32	33	PASS
			MCH	RB1#0	21.42	21.15	33	PASS
				RB1#38	20.9	20.63	33	PASS
				RB1#74	21.33	21.06	33	PASS
				RB36#0	20.23	19.96	33	PASS
				RB36#18	20.05	19.78	33	PASS
				RB36#39	20.2	19.93	33	PASS
				RB75#0	20.15	19.88	33	PASS
			HCH	RB1#0	21.33	21.06	33	PASS
				RB1#38	20.98	20.71	33	PASS
				RB1#74	21.09	20.82	33	PASS
				RB36#0	20.18	19.91	33	PASS
				RB36#18	20.1	19.83	33	PASS
				RB36#39	19.98	19.71	33	PASS
				RB75#0	20.09	19.82	33	PASS
		20	LCH	RB1#0	21.07	20.8	33	PASS
				RB1#50	20.82	20.55	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB1#99	21.48	21.21	33	PASS
				RB50#0	19.29	19.02	33	PASS
				RB50#25	19.51	19.24	33	PASS
				RB50#50	19.94	19.67	33	PASS
				RB100#0	19.65	19.38	33	PASS
			MCH	RB1#0	21.84	21.57	33	PASS
				RB1#50	21.48	21.21	33	PASS
				RB1#99	21.43	21.16	33	PASS
				RB50#0	20.21	19.94	33	PASS
				RB50#25	20.09	19.82	33	PASS
				RB50#50	20.17	19.9	33	PASS
				RB100#0	20.17	19.9	33	PASS
			HCH	RB1#0	21.54	21.27	33	PASS
				RB1#50	21.27	21	33	PASS
				RB1#99	21.14	20.87	33	PASS
				RB50#0	20.13	19.86	33	PASS
				RB50#25	20.03	19.76	33	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RB50#50	19.97	19.7	33	PASS
				RB100#0	20.07	19.8	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.

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	2.85	13	PASS
				RB1#13	3.17	13	PASS
				RB1#24	2.93	13	PASS
				RB12#0	4.38	13	PASS
				RB12#6	4.61	13	PASS
				RB12#13	4.44	13	PASS
				RB25#0	4.89	13	PASS
			MCH	RB1#0	3.28	13	PASS
				RB1#13	3.33	13	PASS
				RB1#24	3.31	13	PASS
				RB12#0	4.57	13	PASS
				RB12#6	4.66	13	PASS
				RB12#13	4.67	13	PASS
				RB25#0	5.11	13	PASS
			HCH	RB1#0	2.78	13	PASS
				RB1#13	3.06	13	PASS
				RB1#24	3.09	13	PASS
				RB12#0	4.22	13	PASS
				RB12#6	4.33	13	PASS
				RB12#13	4.33	13	PASS
				RB25#0	4.78	13	PASS
		10	LCH	RB1#0	2.76	13	PASS
				RB1#25	3.22	13	PASS
				RB1#49	2.51	13	PASS
				RB25#0	4.27	13	PASS
				RB25#13	4.4	13	PASS
				RB25#25	4.23	13	PASS
				RB50#0	4.97	13	PASS
			MCH	RB1#0	3.12	13	PASS
				RB1#25	3.27	13	PASS
				RB1#49	3.14	13	PASS
				RB25#0	4.53	13	PASS
				RB25#13	4.76	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB25#25	4.71	13	PASS
				RB50#0	5.48	13	PASS
			HCH	RB1#0	2.33	13	PASS
				RB1#25	2.89	13	PASS
				RB1#49	2.74	13	PASS
				RB25#0	3.89	13	PASS
				RB25#13	4.16	13	PASS
				RB25#25	4.43	13	PASS
				RB50#0	4.96	13	PASS
		15	LCH	RB1#0	2.77	13	PASS
				RB1#38	3.11	13	PASS
				RB1#74	2.16	13	PASS
				RB36#0	4.28	13	PASS
				RB36#18	4.22	13	PASS
				RB36#39	3.83	13	PASS
				RB75#0	4.9	13	PASS
			MCH	RB1#0	2.79	13	PASS
				RB1#38	3.3	13	PASS
				RB1#74	3.02	13	PASS
				RB36#0	4.47	13	PASS
				RB36#18	4.75	13	PASS
				RB36#39	4.6	13	PASS
				RB75#0	5.25	13	PASS
			HCH	RB1#0	2.25	13	PASS
				RB1#38	2.69	13	PASS
				RB1#74	3.04	13	PASS
				RB36#0	3.7	13	PASS
				RB36#18	3.93	13	PASS
				RB36#39	4.34	13	PASS
				RB75#0	4.93	13	PASS
		20	LCH	RB1#0	2.98	13	PASS
				RB1#50	2.88	13	PASS
				RB1#99	2.5	13	PASS
				RB50#0	4.38	13	PASS
				RB50#25	4.01	13	PASS
				RB50#50	3.78	13	PASS
				RB100#0	4.75	13	PASS
			MCH	RB1#0	2.9	13	PASS
				RB1#50	3.42	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB1#99	3.12	13	PASS
				RB50#0	4.34	13	PASS
				RB50#25	4.61	13	PASS
				RB50#50	4.61	13	PASS
				RB100#0	4.91	13	PASS
			HCH	RB1#0	2.28	13	PASS
				RB1#50	2.56	13	PASS
				RB1#99	3.16	13	PASS
				RB50#0	3.63	13	PASS
				RB50#25	3.83	13	PASS
				RB50#50	4.27	13	PASS
				RB100#0	4.62	13	PASS
	LTE/TM2	5	LCH	RB1#0	4.24	13	PASS
				RB1#13	4.23	13	PASS
				RB1#24	4.03	13	PASS
				RB12#0	5.27	13	PASS
				RB12#6	5.47	13	PASS
				RB12#13	5.33	13	PASS
				RB25#0	5.87	13	PASS
			MCH	RB1#0	4.53	13	PASS
				RB1#13	4.89	13	PASS
				RB1#24	4.53	13	PASS
				RB12#0	5.59	13	PASS
				RB12#6	5.68	13	PASS
				RB12#13	5.69	13	PASS
				RB25#0	6.04	13	PASS
			HCH	RB1#0	3.42	13	PASS
				RB1#13	4.29	13	PASS
				RB1#24	4.21	13	PASS
				RB12#0	5.13	13	PASS
				RB12#6	5.28	13	PASS
				RB12#13	5.33	13	PASS
				RB25#0	5.79	13	PASS
		10	LCH	RB1#0	3.81	13	PASS
				RB1#25	4.31	13	PASS
				RB1#49	3.53	13	PASS
				RB25#0	5.2	13	PASS
				RB25#13	5.34	13	PASS
				RB25#25	5.11	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB50#0	5.81	13	PASS
			MCH	RB1#0	4.14	13	PASS
				RB1#25	4.35	13	PASS
				RB1#49	3.74	13	PASS
				RB25#0	5.34	13	PASS
				RB25#13	5.79	13	PASS
				RB25#25	5.75	13	PASS
				RB50#0	6.4	13	PASS
			HCH	RB1#0	3.18	13	PASS
				RB1#25	3.91	13	PASS
				RB1#49	3.81	13	PASS
				RB25#0	4.79	13	PASS
				RB25#13	5.02	13	PASS
				RB25#25	5.26	13	PASS
				RB50#0	5.55	13	PASS
		15	LCH	RB1#0	3.86	13	PASS
				RB1#38	4.18	13	PASS
				RB1#74	3.11	13	PASS
				RB36#0	5.24	13	PASS
				RB36#18	5.16	13	PASS
				RB36#39	4.77	13	PASS
				RB75#0	5.68	13	PASS
			MCH	RB1#0	3.69	13	PASS
				RB1#38	4.5	13	PASS
				RB1#74	3.86	13	PASS
				RB36#0	5.59	13	PASS
				RB36#18	5.8	13	PASS
				RB36#39	5.67	13	PASS
				RB75#0	6.08	13	PASS
			HCH	RB1#0	3.16	13	PASS
				RB1#38	3.85	13	PASS
				RB1#74	4.15	13	PASS
				RB36#0	4.65	13	PASS
				RB36#18	4.76	13	PASS
				RB36#39	5.24	13	PASS
				RB75#0	5.68	13	PASS
		20	LCH	RB1#0	3.44	13	PASS
				RB1#50	3.33	13	PASS
				RB1#99	2.9	13	PASS

Test Band(For LTE)	Test Mode	Test Bandwidth (MHz)	Test Channel	Test RB	Measured[dB]	Limit [dB]	Verdict
				RB50#0	5.31	13	PASS
				RB50#25	4.89	13	PASS
				RB50#50	4.61	13	PASS
				RB100#0	5.52	13	PASS
			MCH	RB1#0	3.31	13	PASS
				RB1#50	4.54	13	PASS
				RB1#99	3.32	13	PASS
				RB50#0	5.5	13	PASS
				RB50#25	5.8	13	PASS
				RB50#50	5.66	13	PASS
				RB100#0	6.09	13	PASS
			HCH	RB1#0	2.79	13	PASS
				RB1#50	3.04	13	PASS
				RB1#99	3.58	13	PASS
				RB50#0	4.53	13	PASS
				RB50#25	4.65	13	PASS
				RB50#50	5.11	13	PASS
				RB100#0	5.41	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

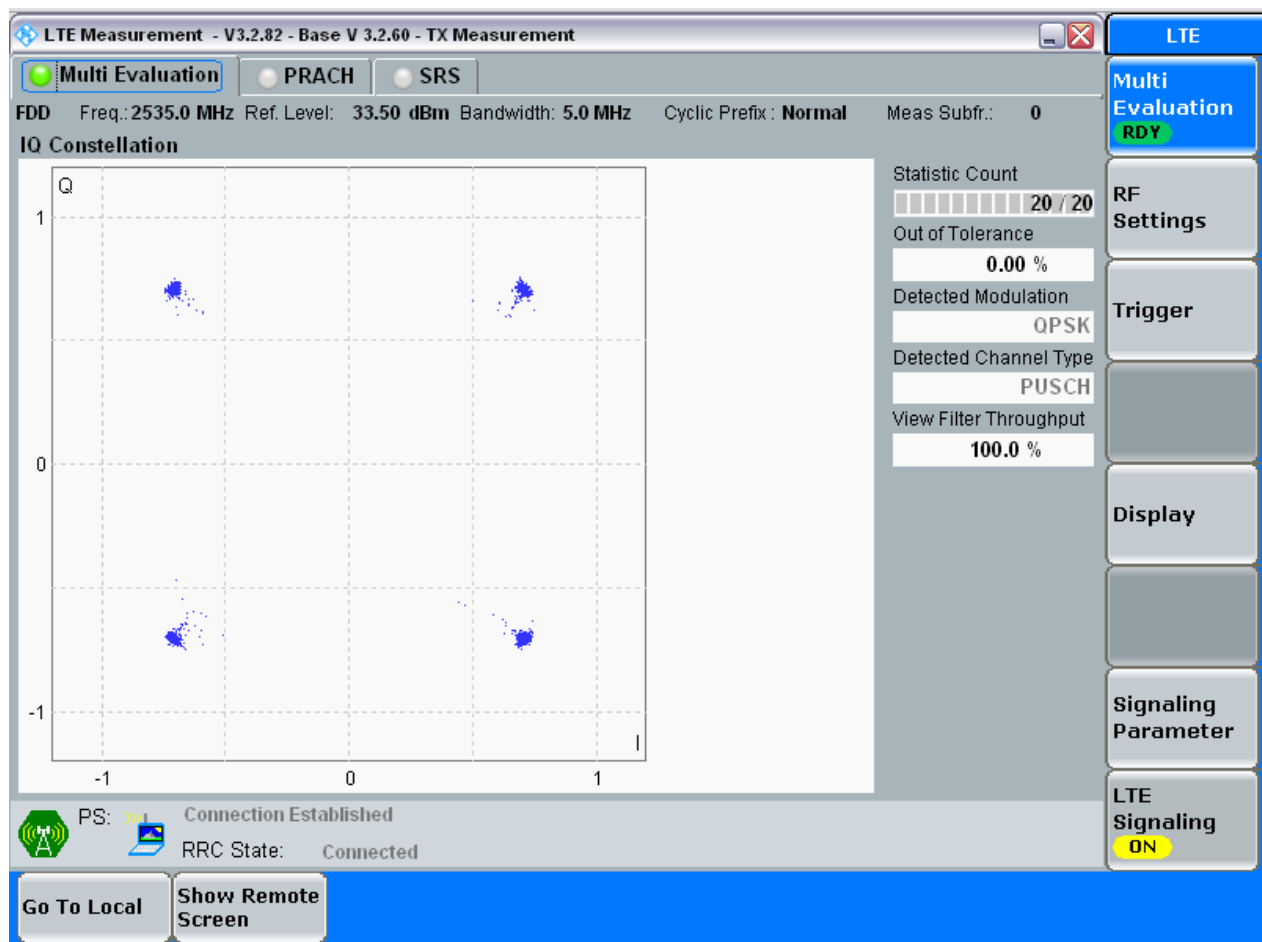
3.1.1 Test Band = BAND7

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

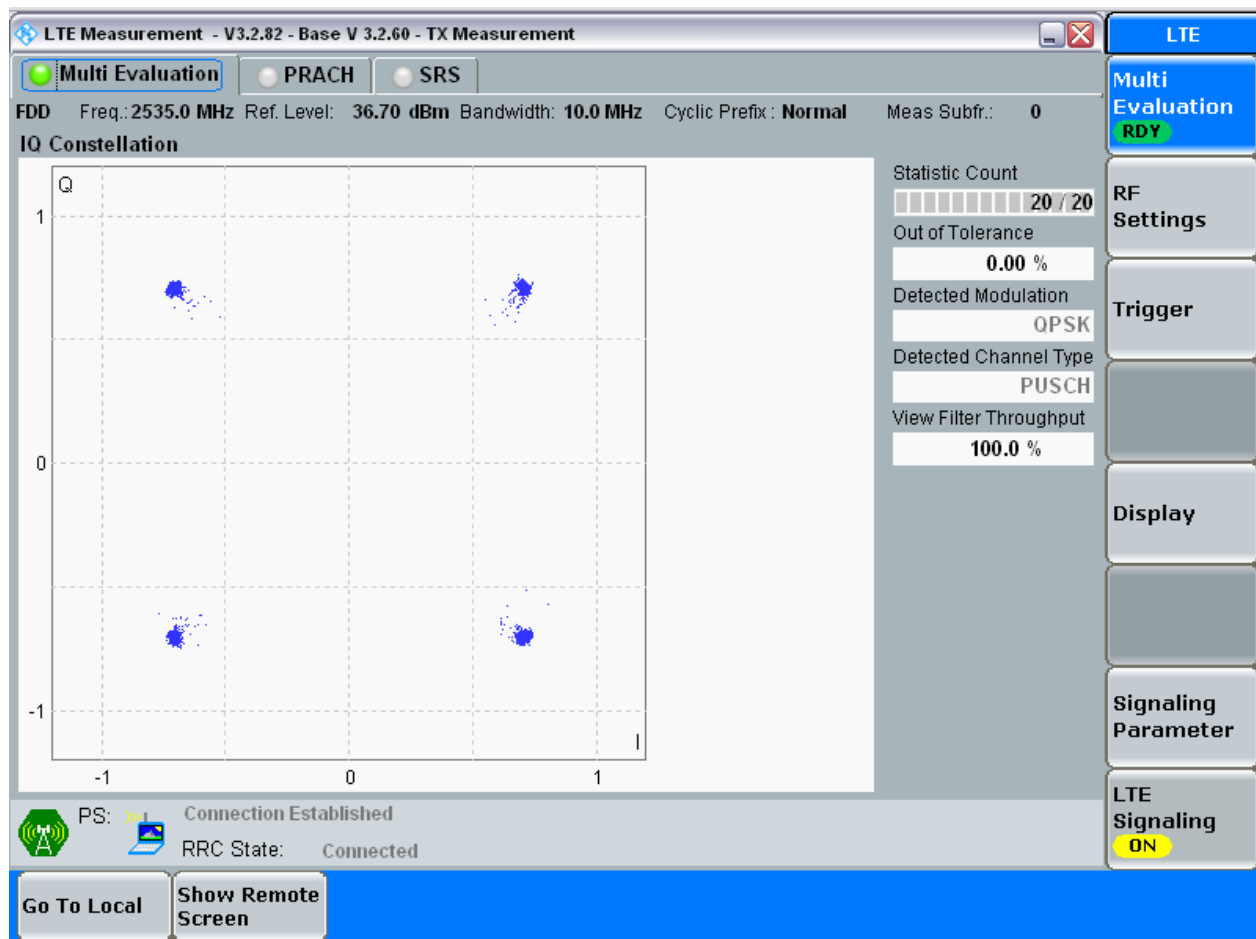
3.1.1.1.1.1.1 Test RB = RB25#0



3.1.1.1.2 Test Bandwidth = 10

3.1.1.1.2.1 Test Channel = MCH

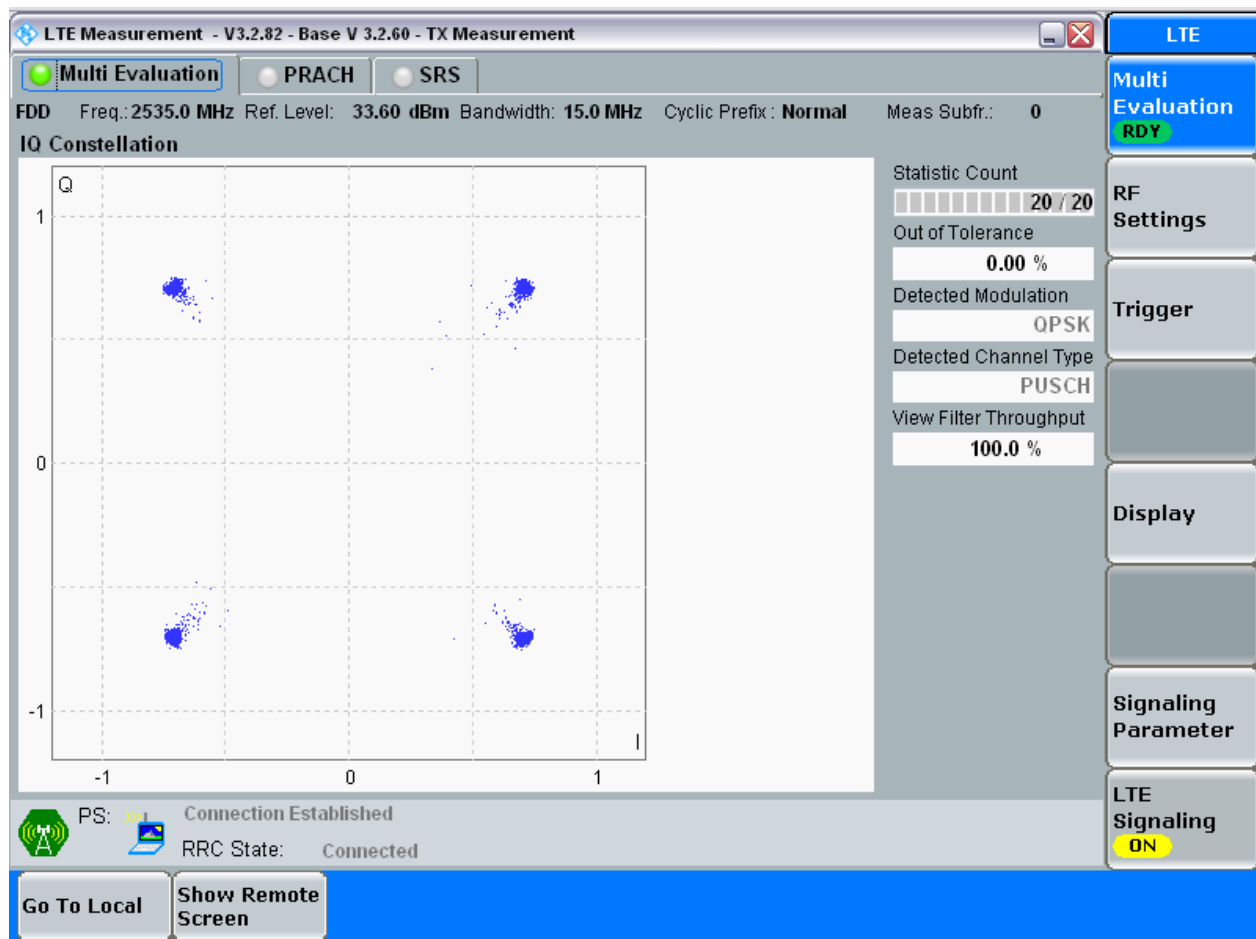
3.1.1.1.2.1.1 Test RB = RB50#0



3.1.1.1.3 Test Bandwidth = 15

3.1.1.1.3.1 Test Channel = MCH

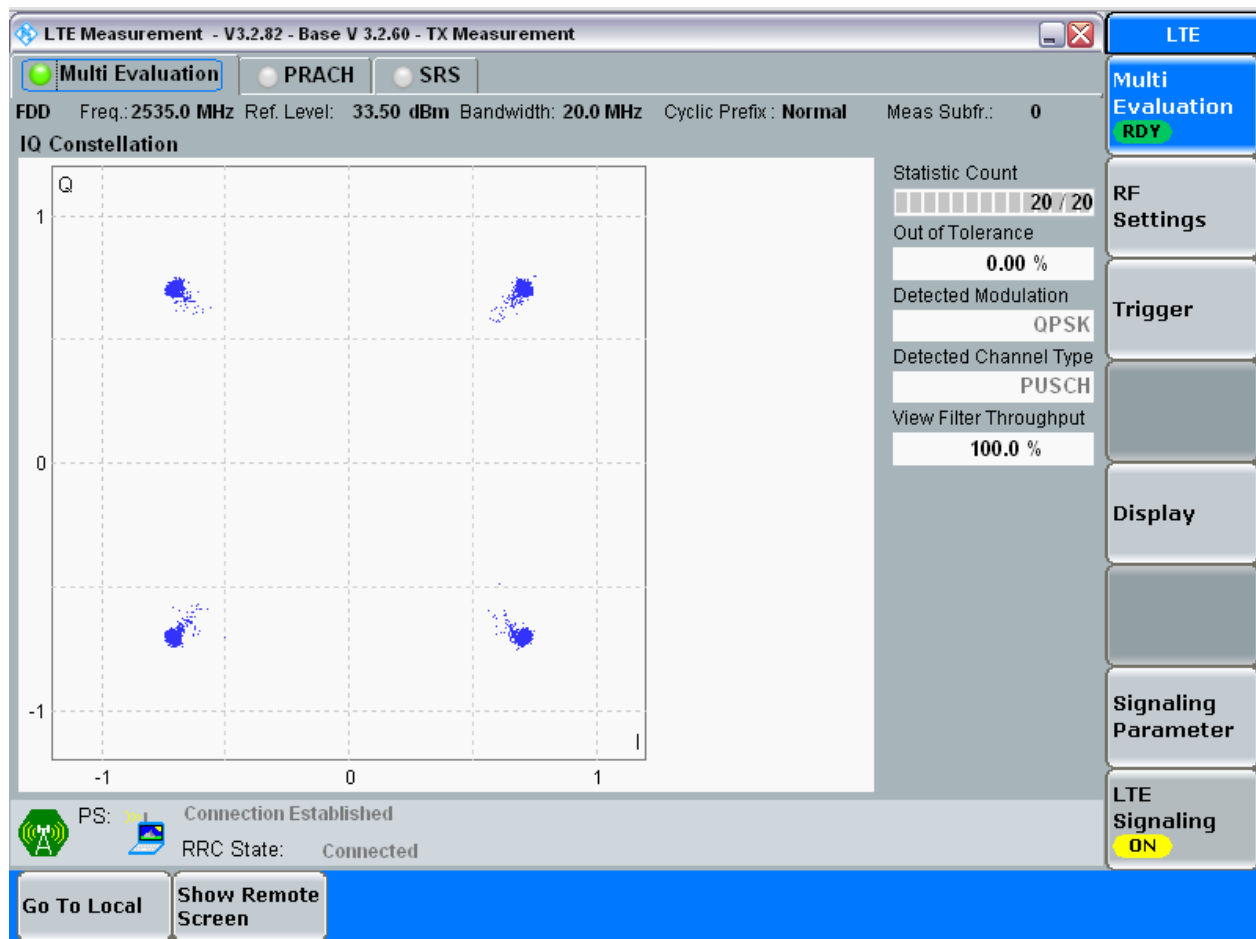
3.1.1.1.3.1.1 Test RB = RB75#0



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

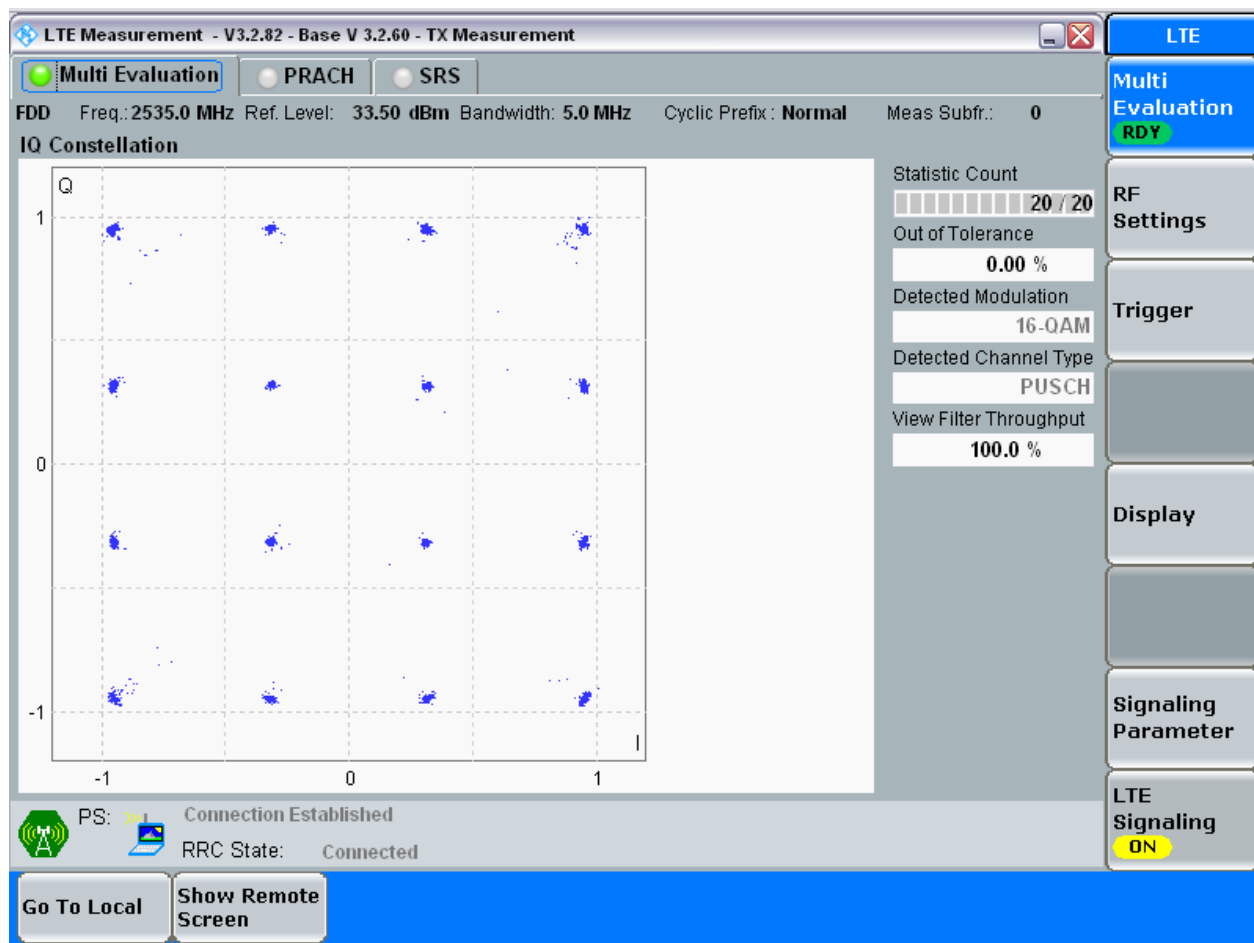


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 5

3.1.1.2.1.1 Test Channel = MCH

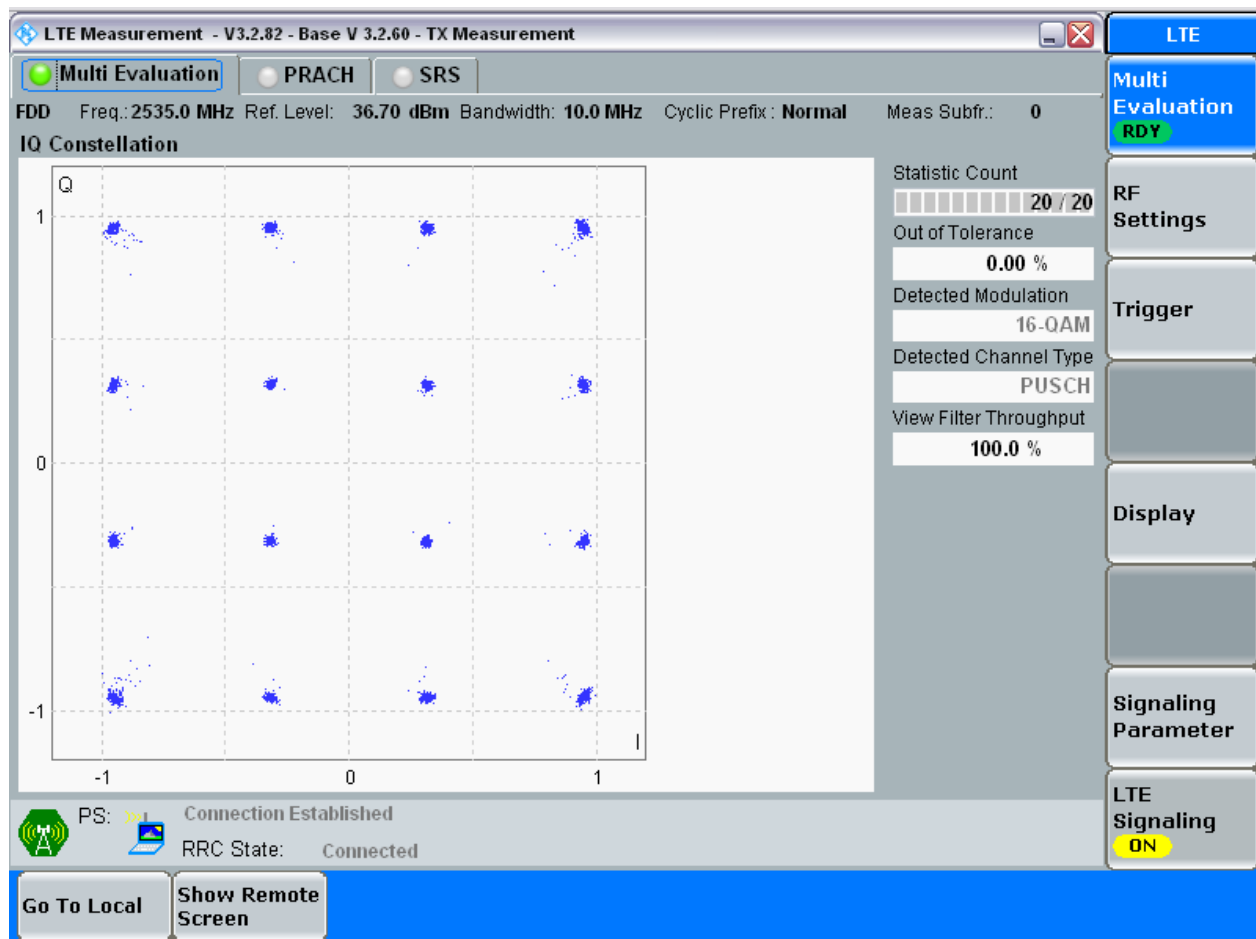
3.1.1.2.1.1.1 Test RB = RB25#0



3.1.1.2.2 Test Bandwidth = 10

3.1.1.2.2.1 Test Channel = MCH

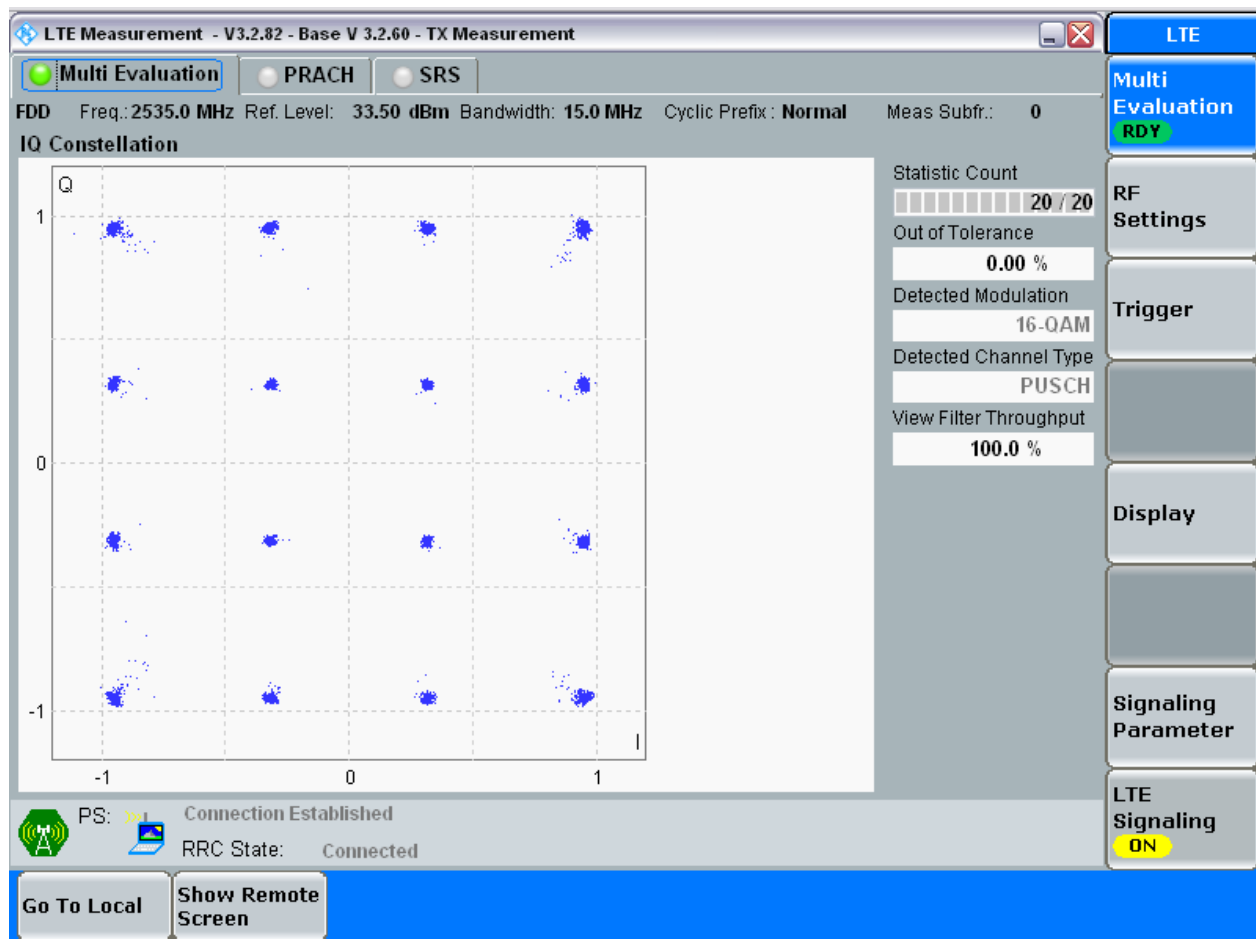
3.1.1.2.2.1.1 Test RB = RB50#0



3.1.1.2.3 Test Bandwidth = 15

3.1.1.2.3.1 Test Channel = MCH

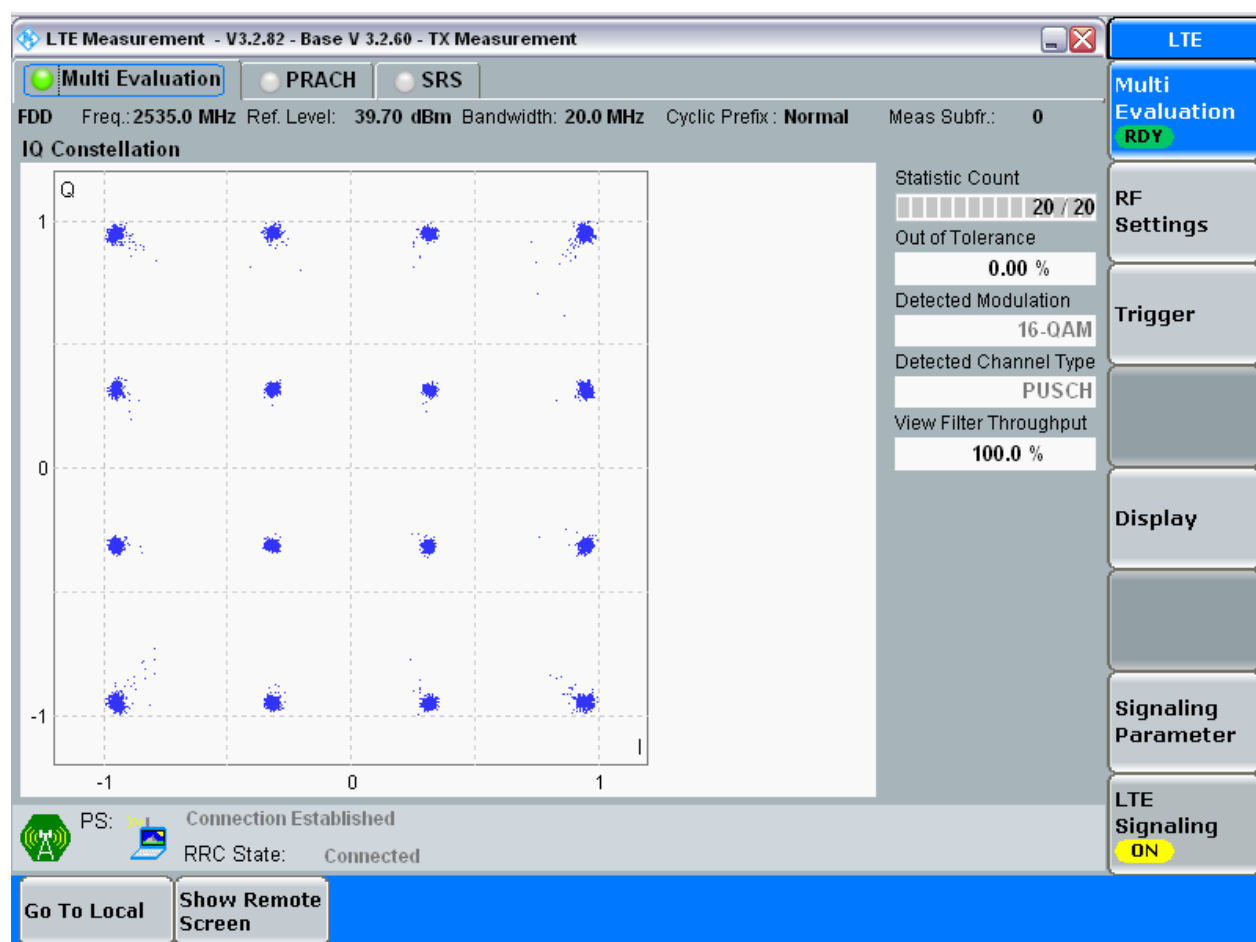
3.1.1.2.3.1.1 Test RB = RB75#0



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	4.94	Pass
			MCH	RB25#0	4.51	4.93	Pass
			HCH	RB25#0	4.50	4.88	Pass
		10	LCH	RB50#0	9.00	9.71	Pass
			MCH	RB50#0	9.00	9.65	Pass
			HCH	RB50#0	9.00	9.66	Pass
		15	LCH	RB75#0	13.50	14.45	Pass
			MCH	RB75#0	13.50	14.42	Pass
			HCH	RB75#0	13.51	14.52	Pass
		20	LCH	RB100#0	17.94	19.02	Pass
			MCH	RB100#0	17.97	19.01	Pass
			HCH	RB100#0	17.95	19.09	Pass
	LTE/TM2	5	LCH	RB25#0	4.51	4.91	Pass
			MCH	RB25#0	4.51	4.87	Pass
			HCH	RB25#0	4.51	4.87	Pass
		10	LCH	RB50#0	9.00	9.65	Pass
			MCH	RB50#0	9.00	9.63	Pass
			HCH	RB50#0	9.00	9.62	Pass
		15	LCH	RB75#0	13.49	14.31	Pass
			MCH	RB75#0	13.49	14.25	Pass
			HCH	RB75#0	13.50	14.31	Pass
		20	LCH	RB100#0	17.95	19.01	Pass
			MCH	RB100#0	17.97	19.01	Pass
			HCH	RB100#0	17.96	19.00	Pass

Part II - Test Plots

4.1 For LTE

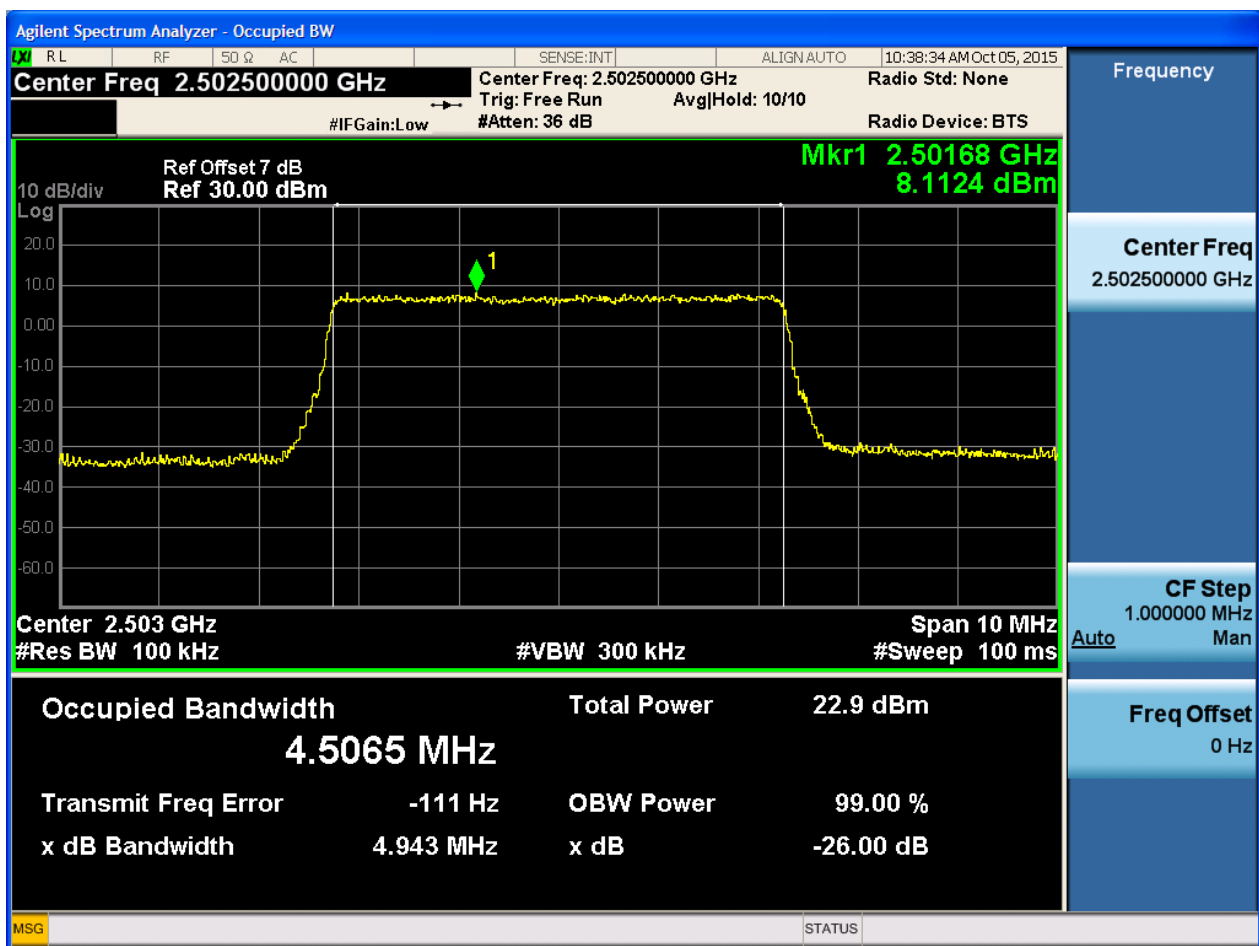
4.1.1 Test Band = BAND7

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

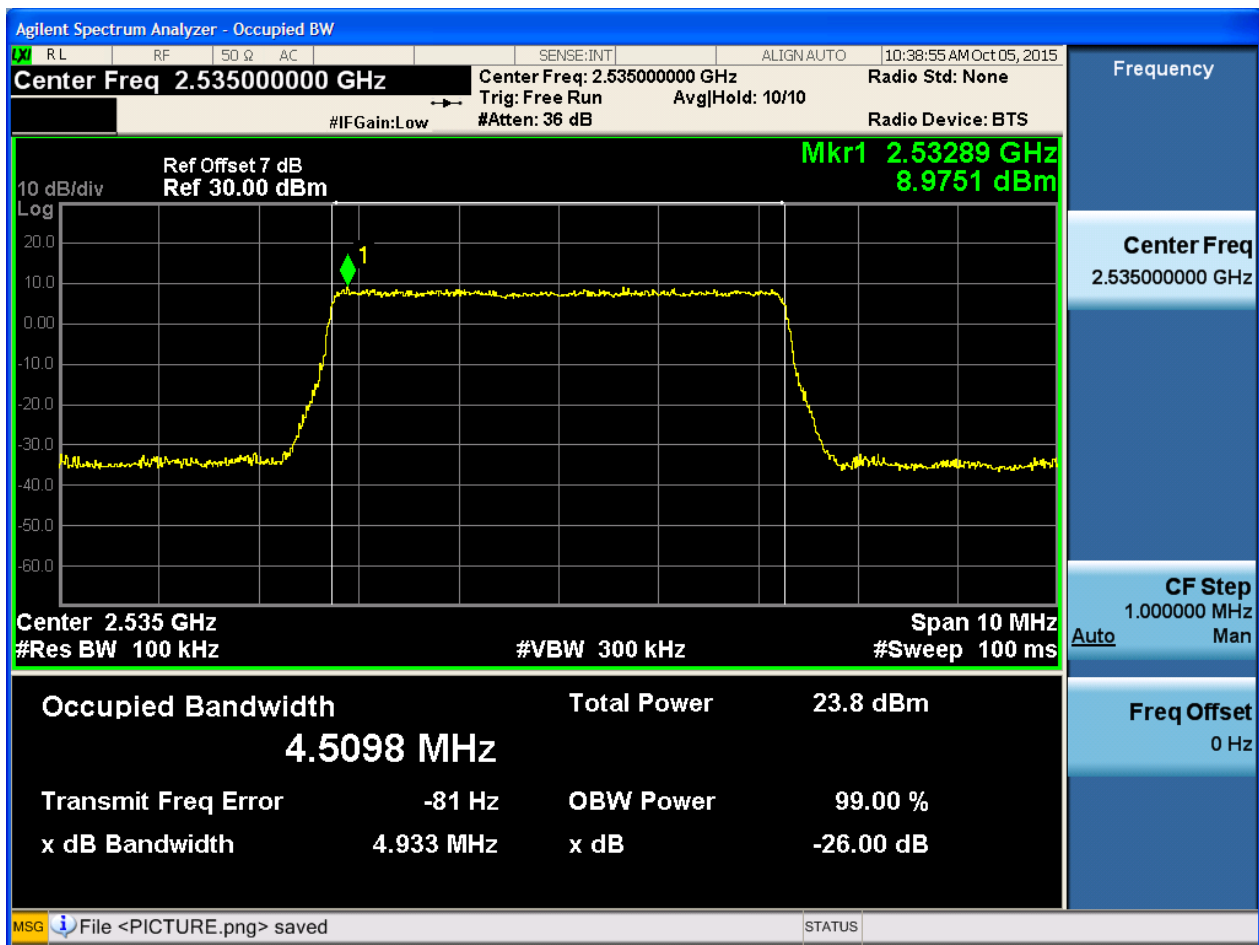
4.1.1.1.1.1.1 Test RB = RB25#0





4.1.1.1.1.2 Test Channel = MCH

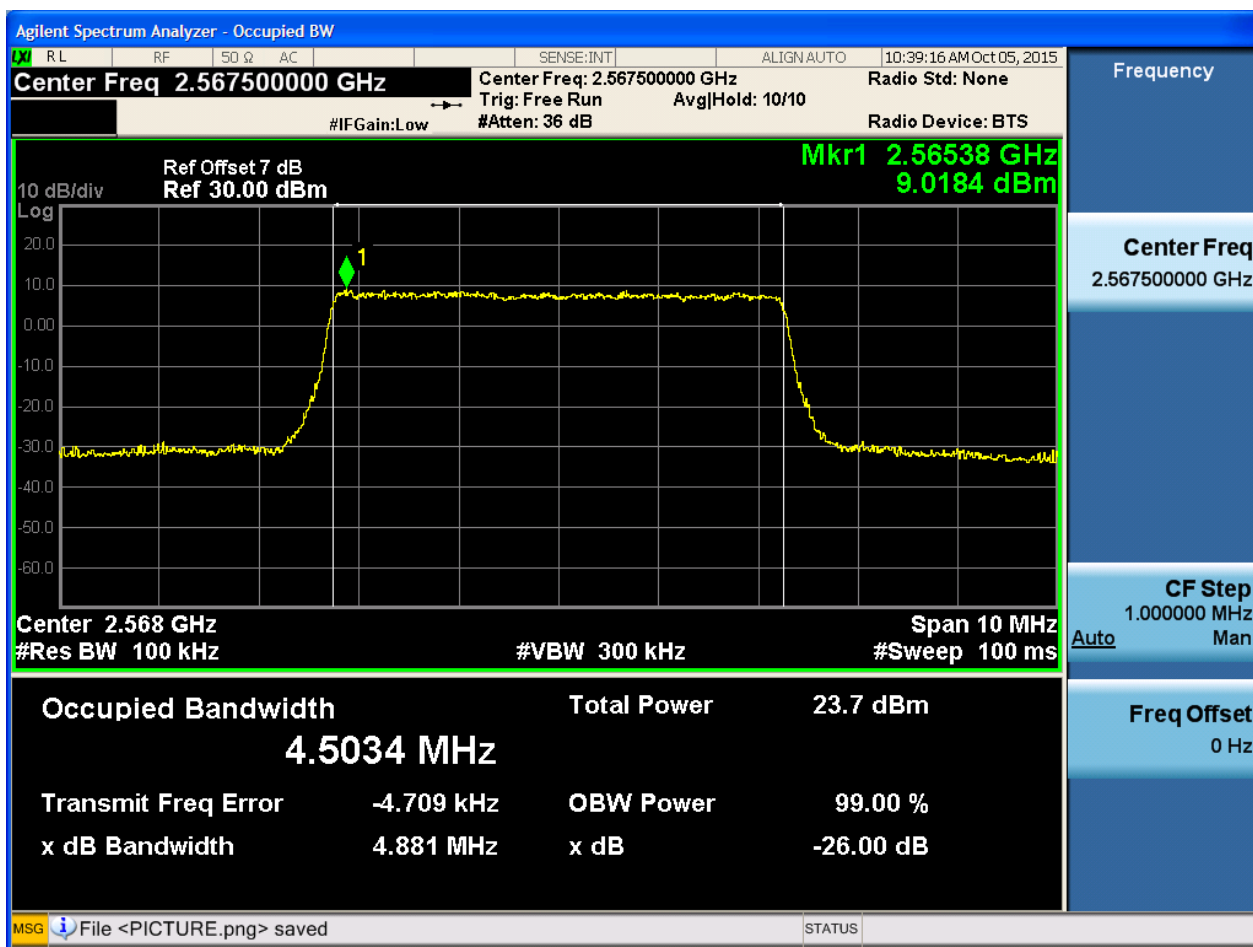
4.1.1.1.1.2.1 Test RB = RB25#0





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 Test RB = RB25#0

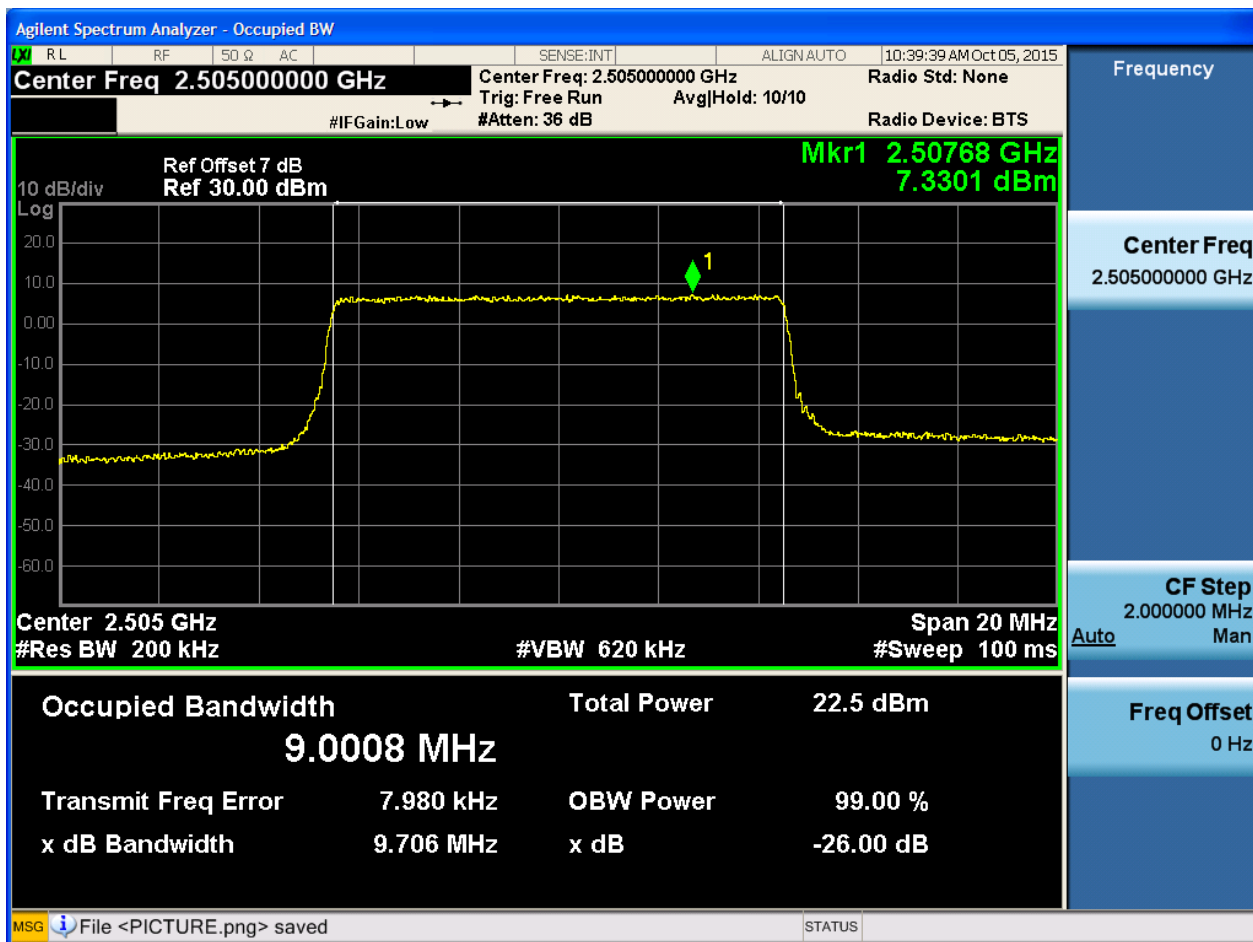




4.1.1.1.2 Test Bandwidth = 10

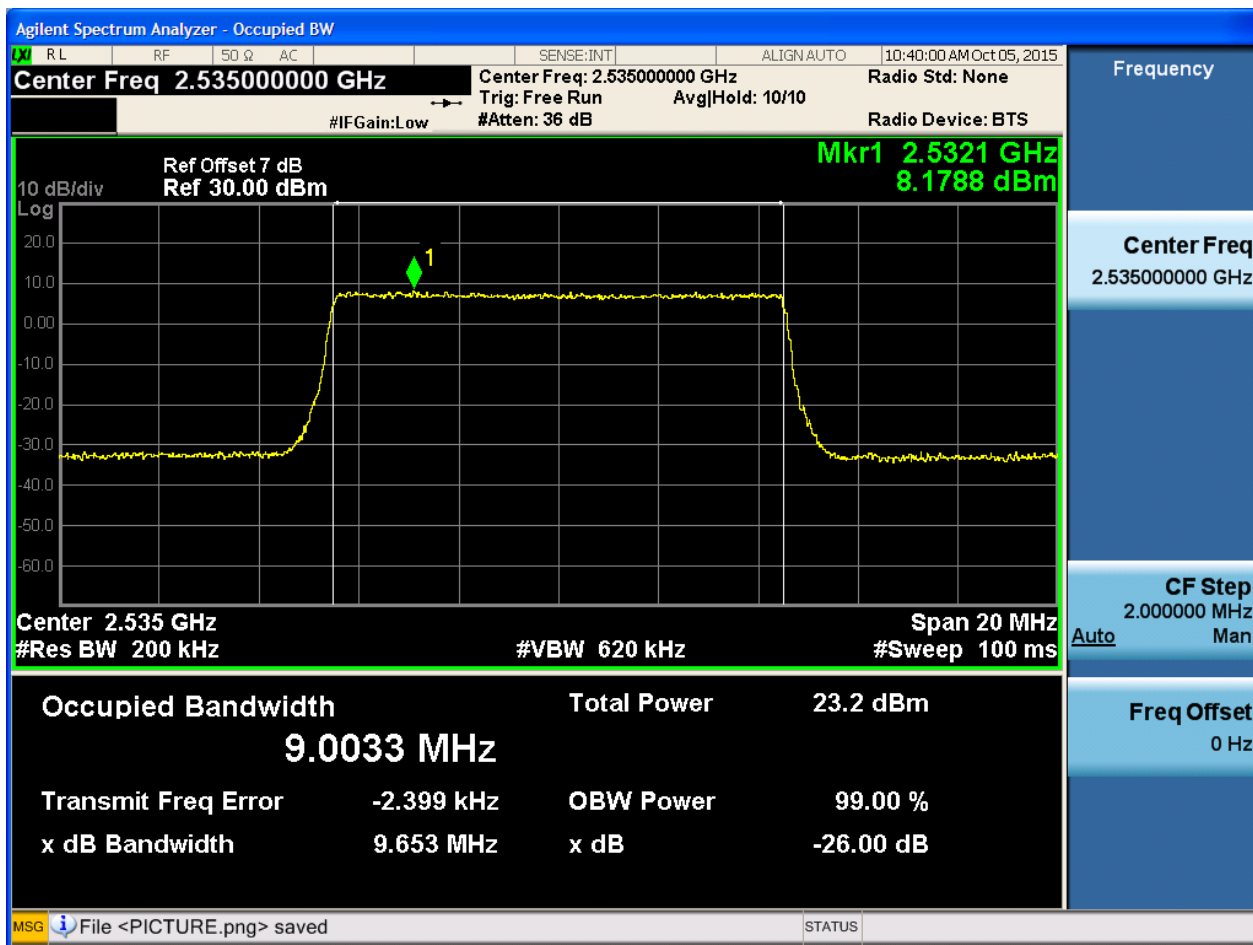
4.1.1.1.2.1 Test Channel = LCH

4.1.1.1.2.1.1 Test RB = RB50#0



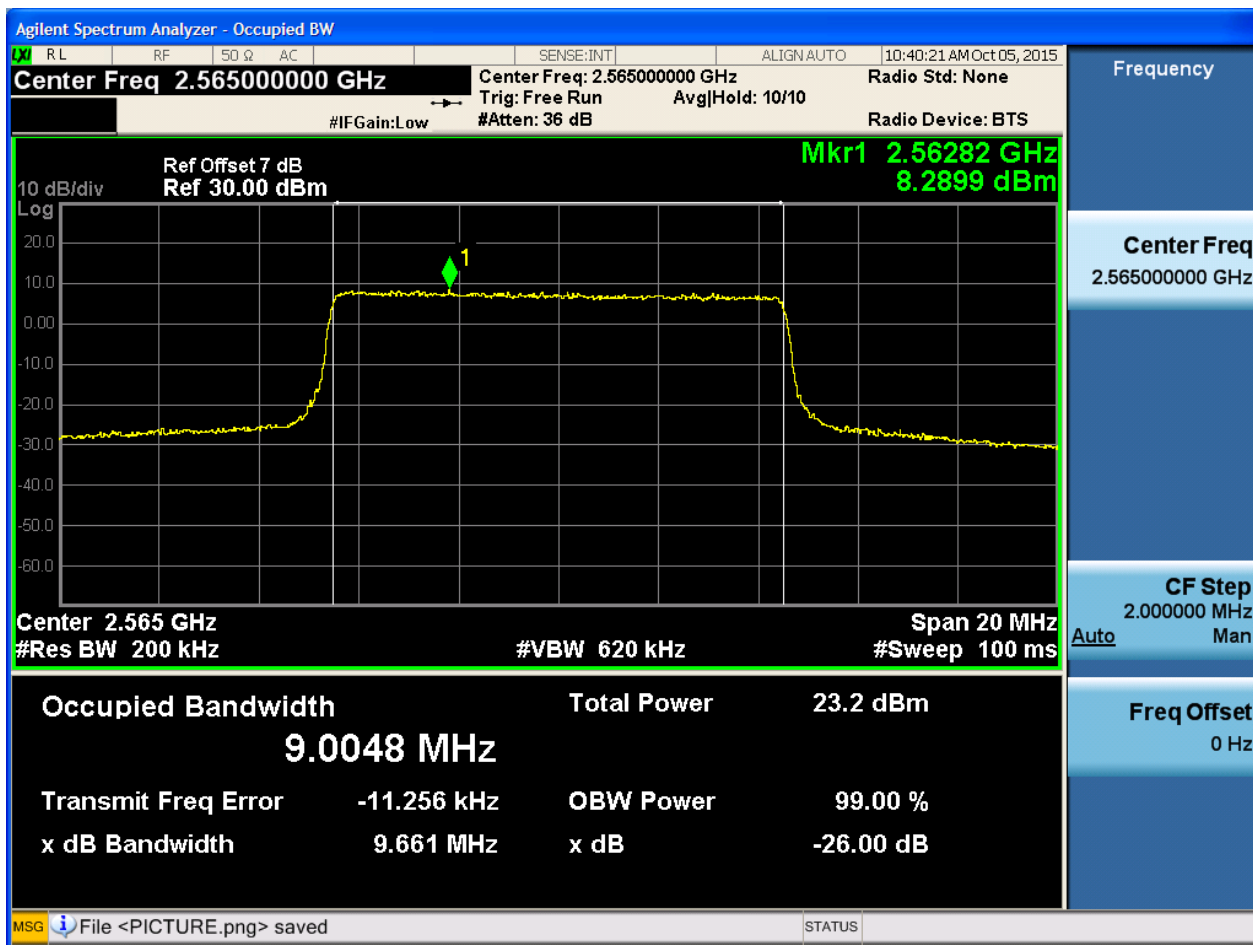
4.1.1.1.2.2 Test Channel = MCH

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

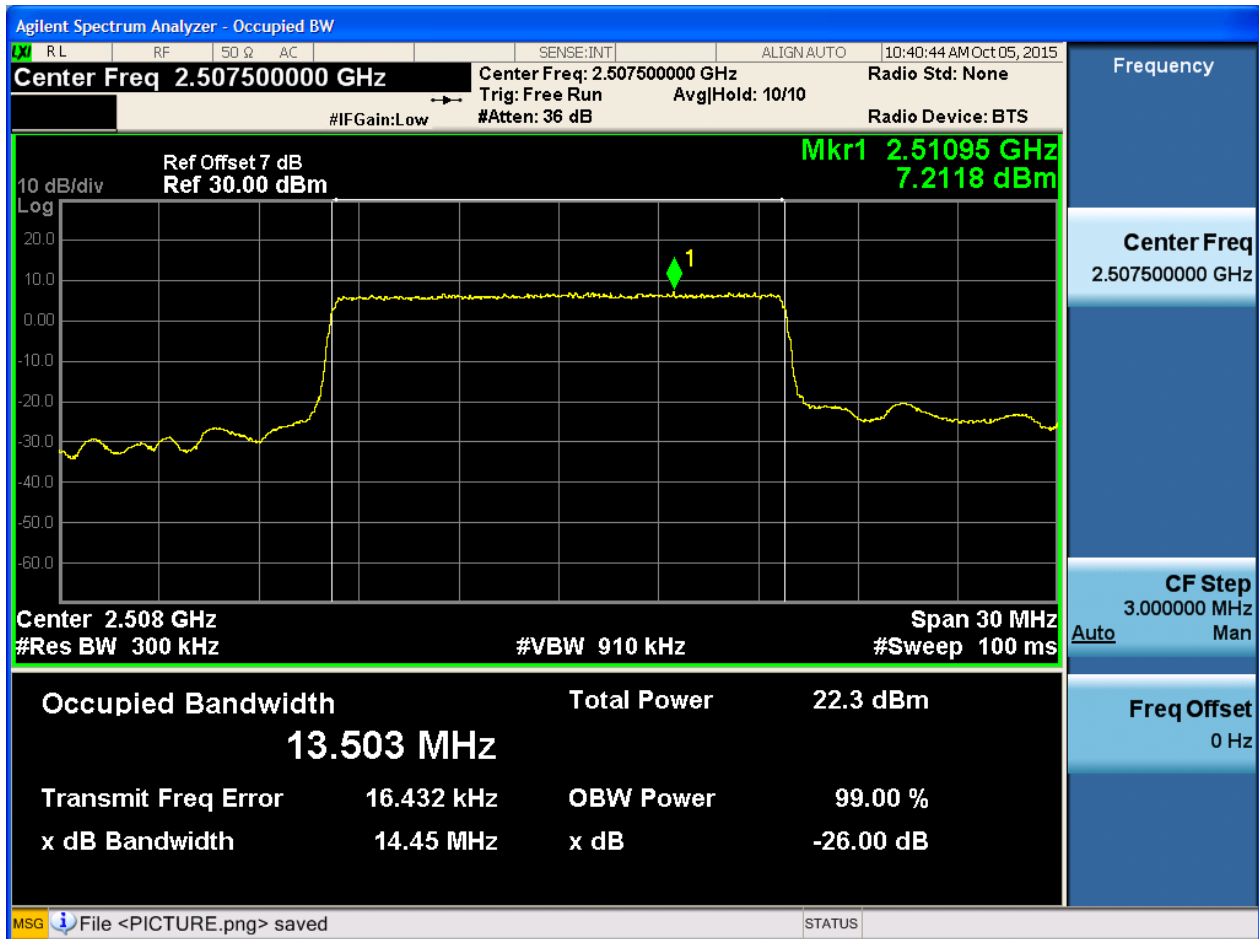




4.1.1.1.3 Test Bandwidth = 15

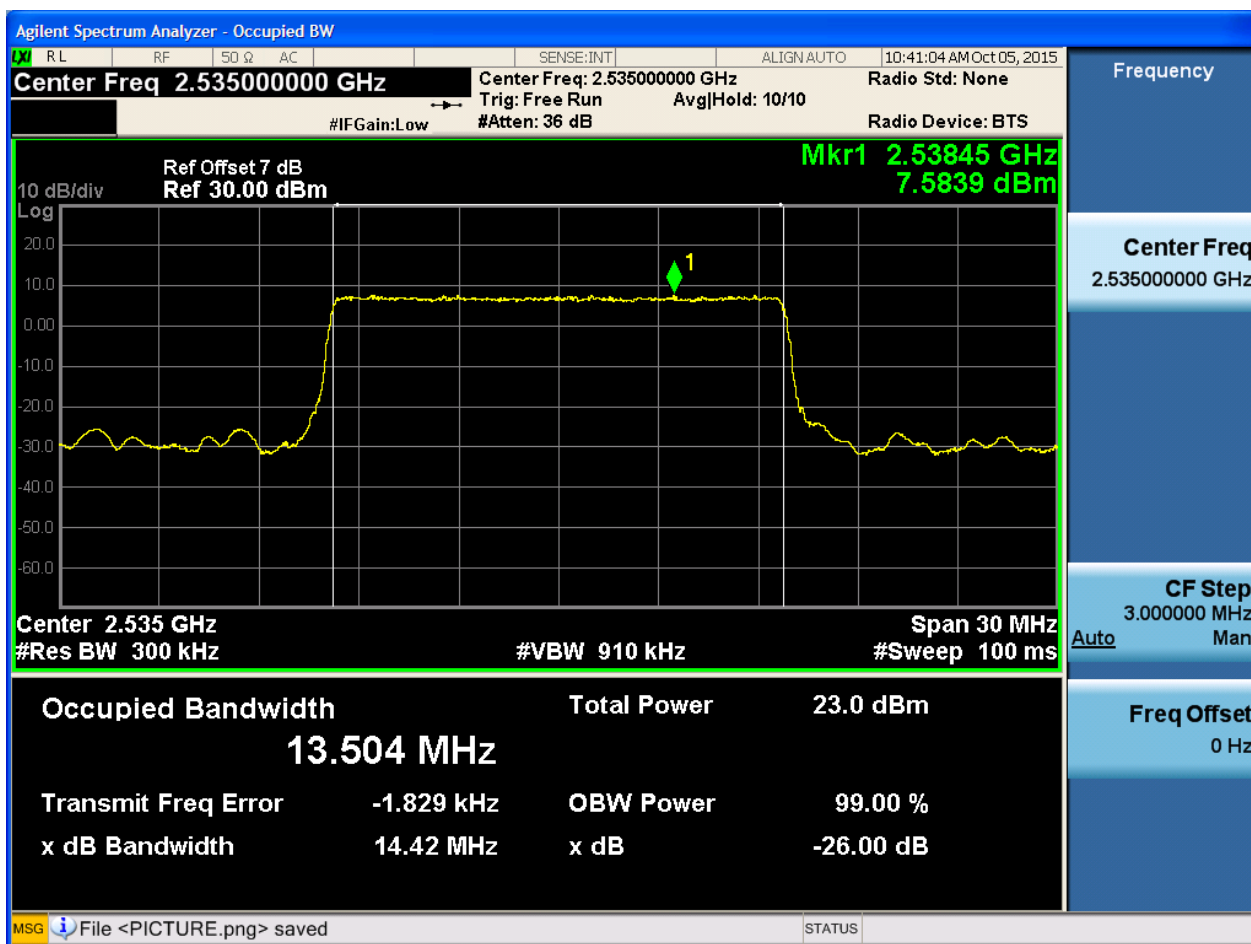
4.1.1.1.3.1 Test Channel = LCH

4.1.1.1.3.1.1 Test RB = RB75#0



4.1.1.1.3.2 Test Channel = MCH

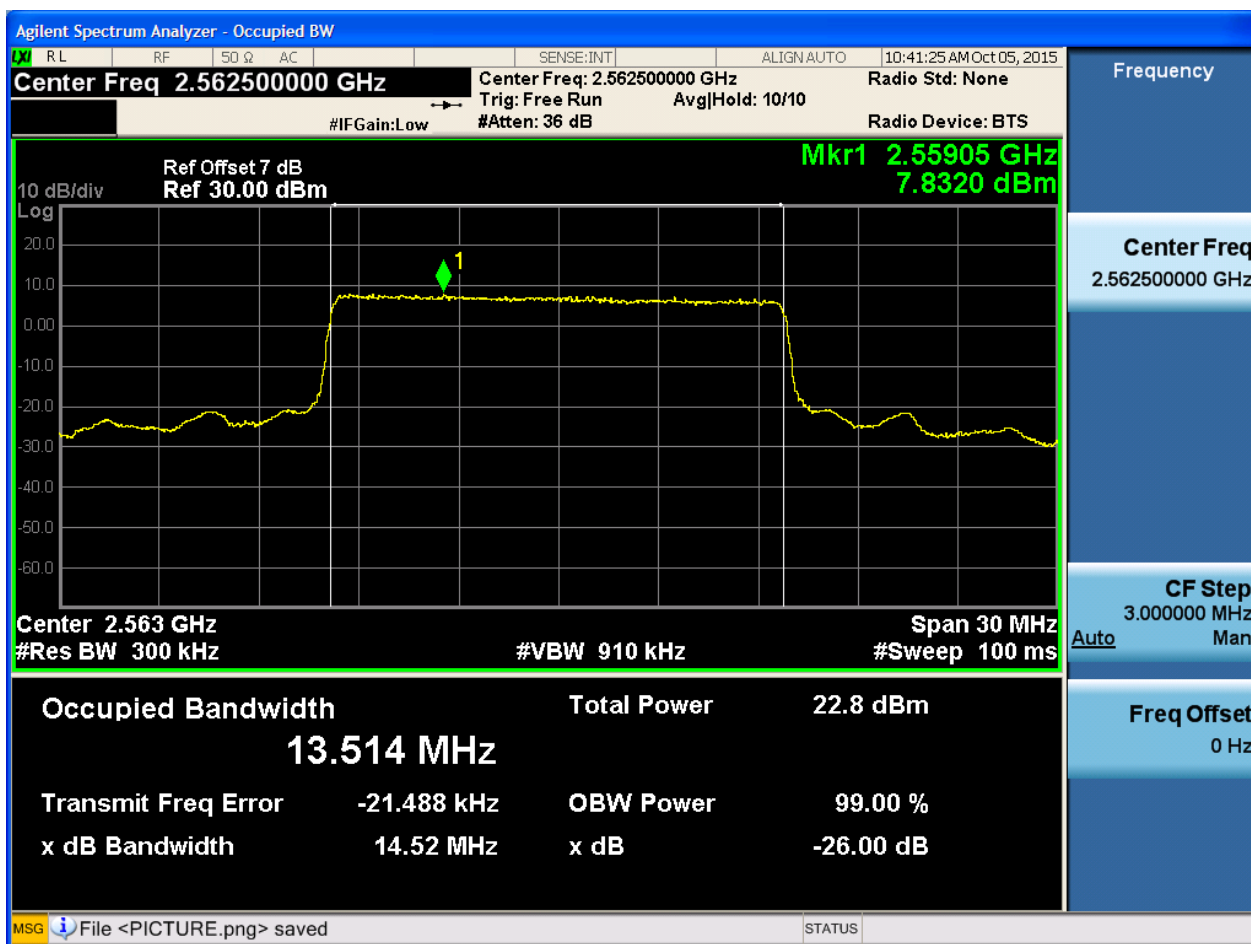
4.1.1.1.3.2.1 Test RB = RB75#0





4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB75#0

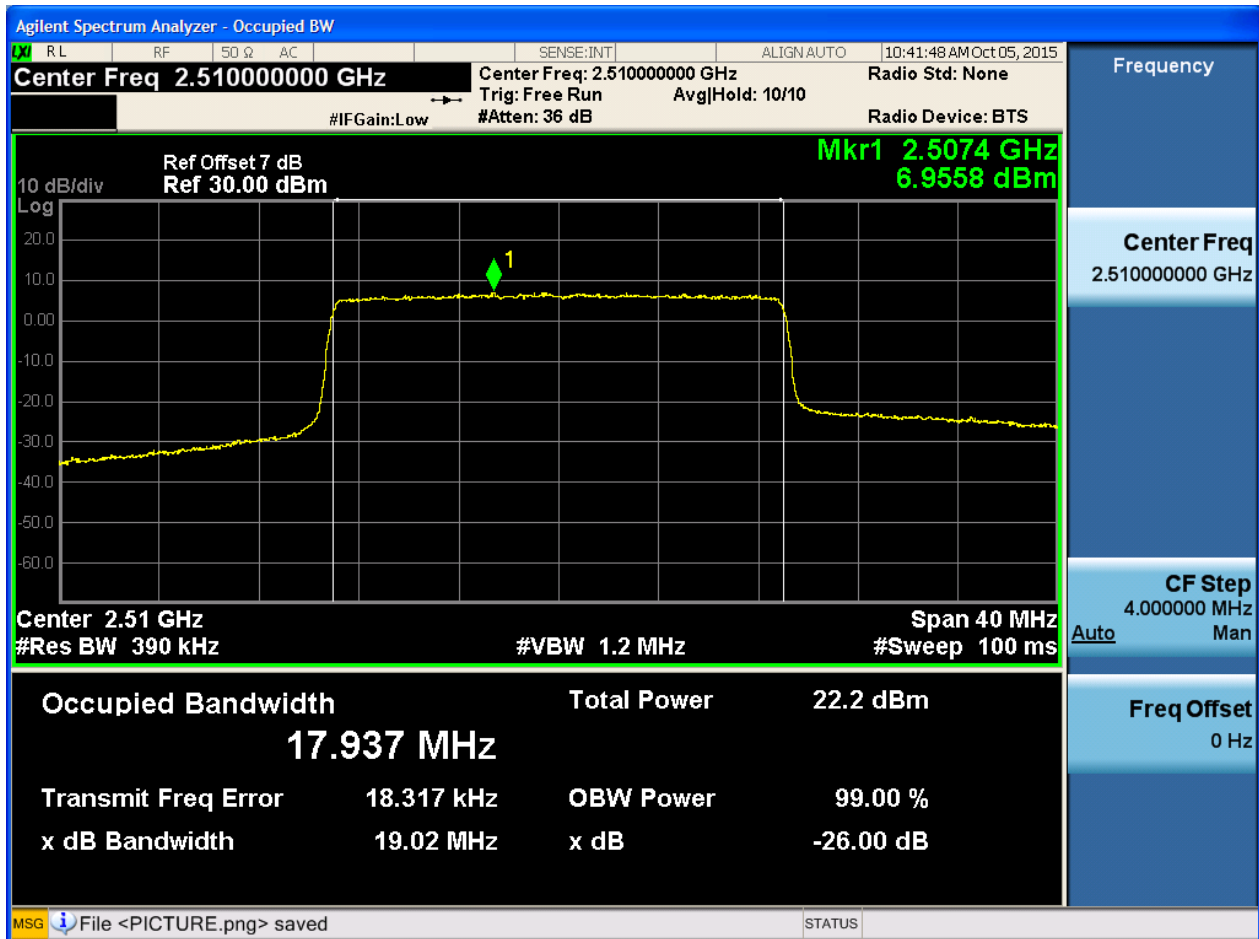




4.1.1.1.4 Test Bandwidth = 20

4.1.1.1.4.1 Test Channel = LCH

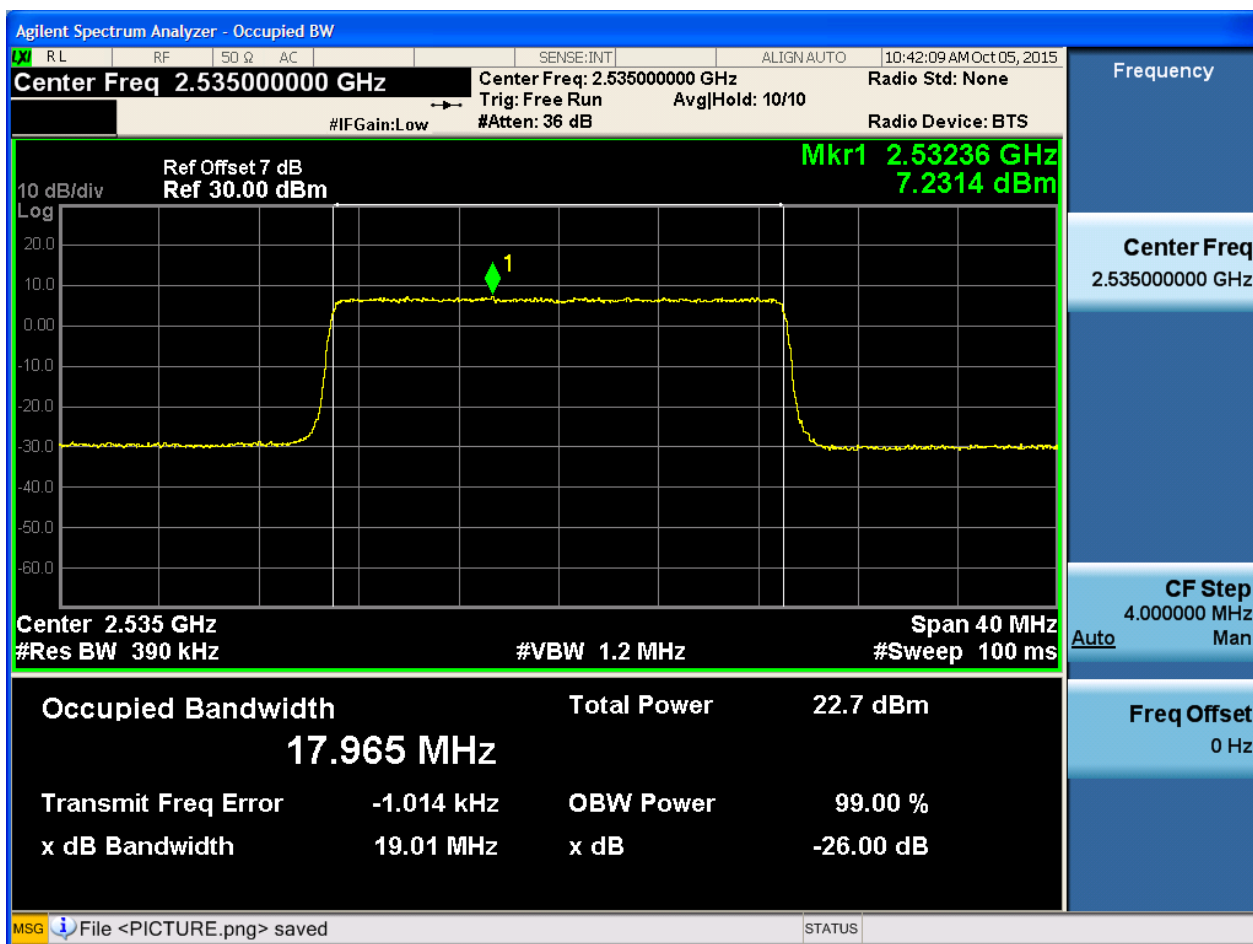
4.1.1.1.4.1.1 Test RB = RB100#0





4.1.1.1.4.2 Test Channel = MCH

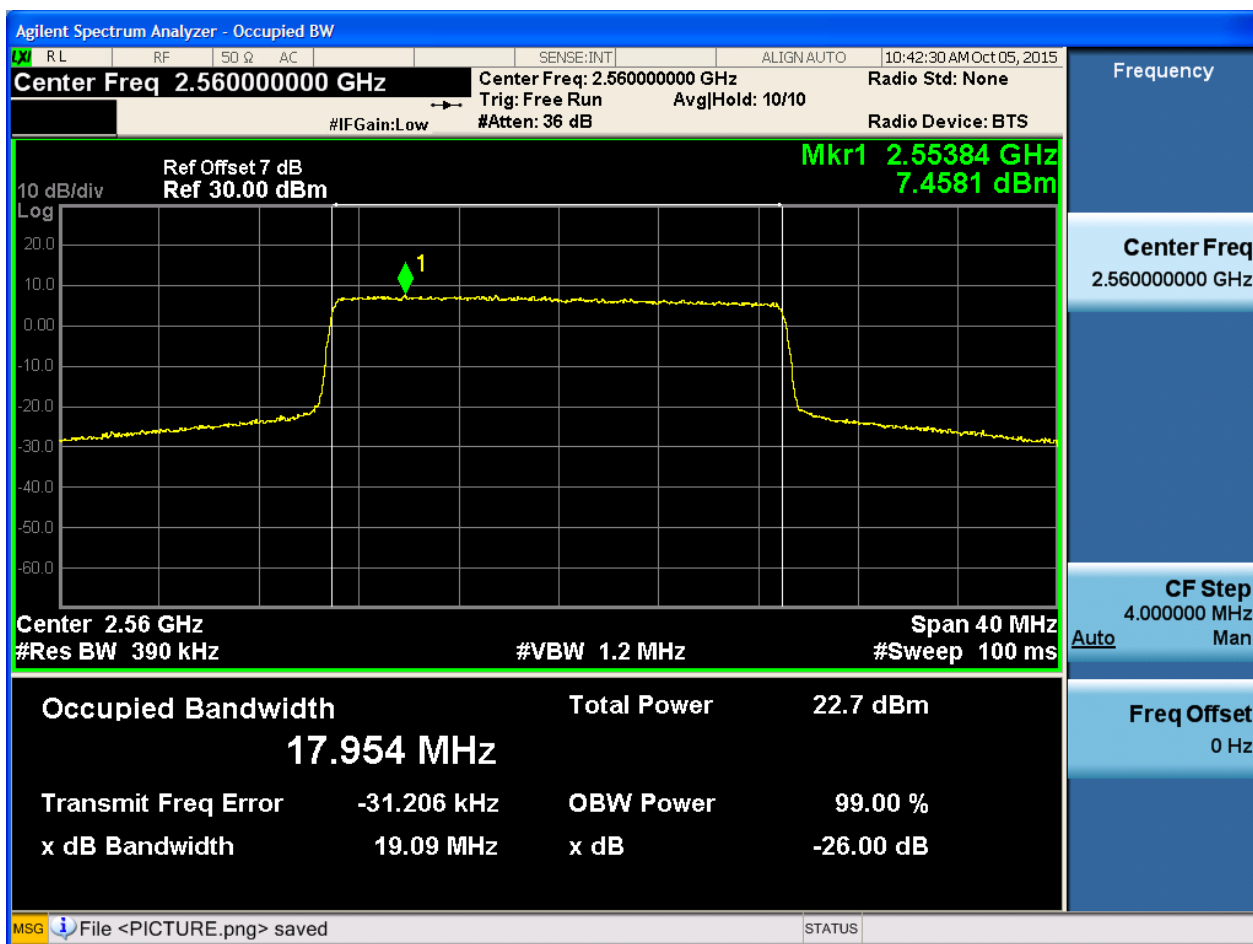
4.1.1.1.4.2.1 Test RB = RB100#0





4.1.1.1.4.3 Test Channel = HCH

4.1.1.1.4.3.1 Test RB = RB100#0



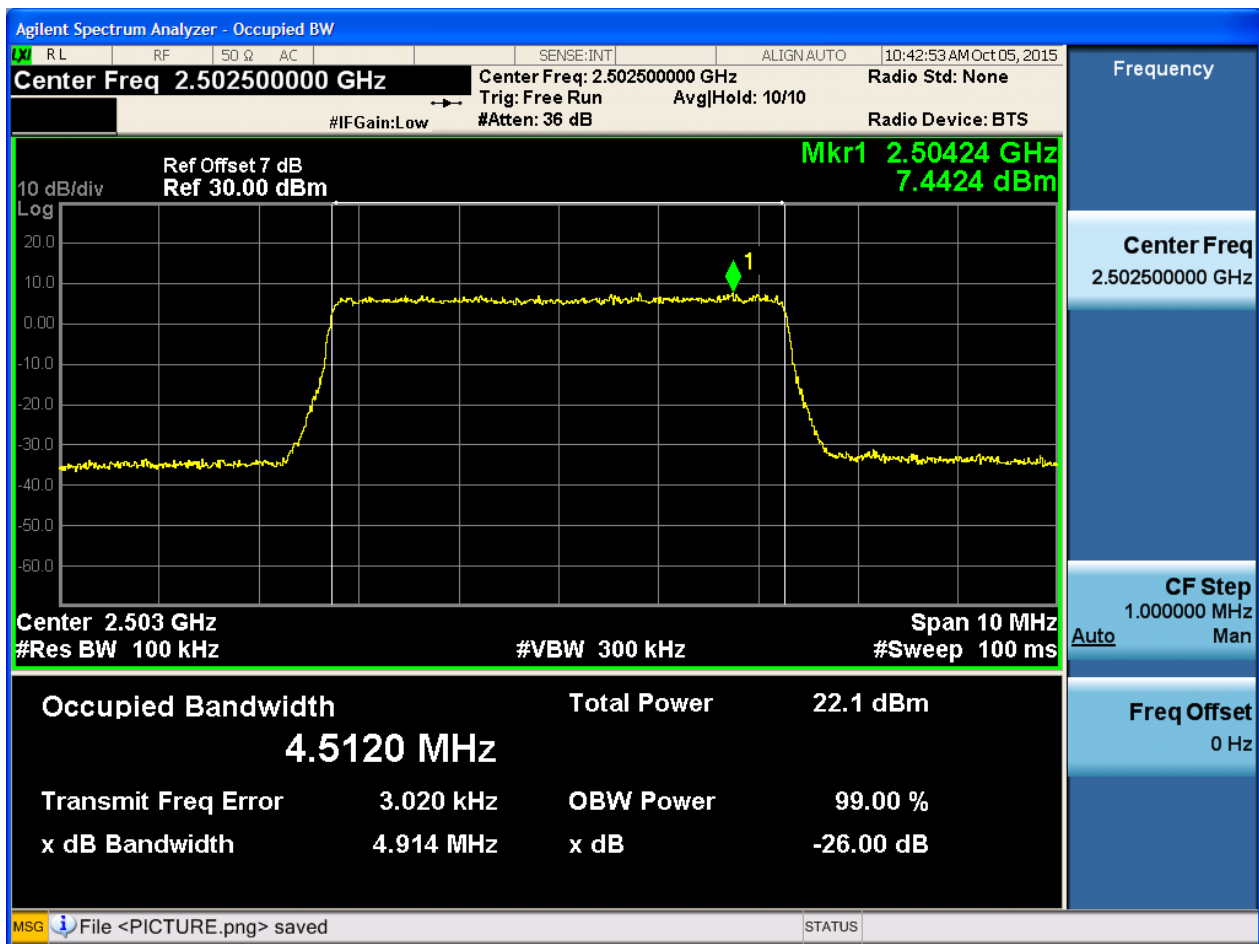


4.1.1.2 Test Mode = LTE/TM2

4.1.1.2.1 Test Bandwidth = 5

4.1.1.2.1.1 Test Channel = LCH

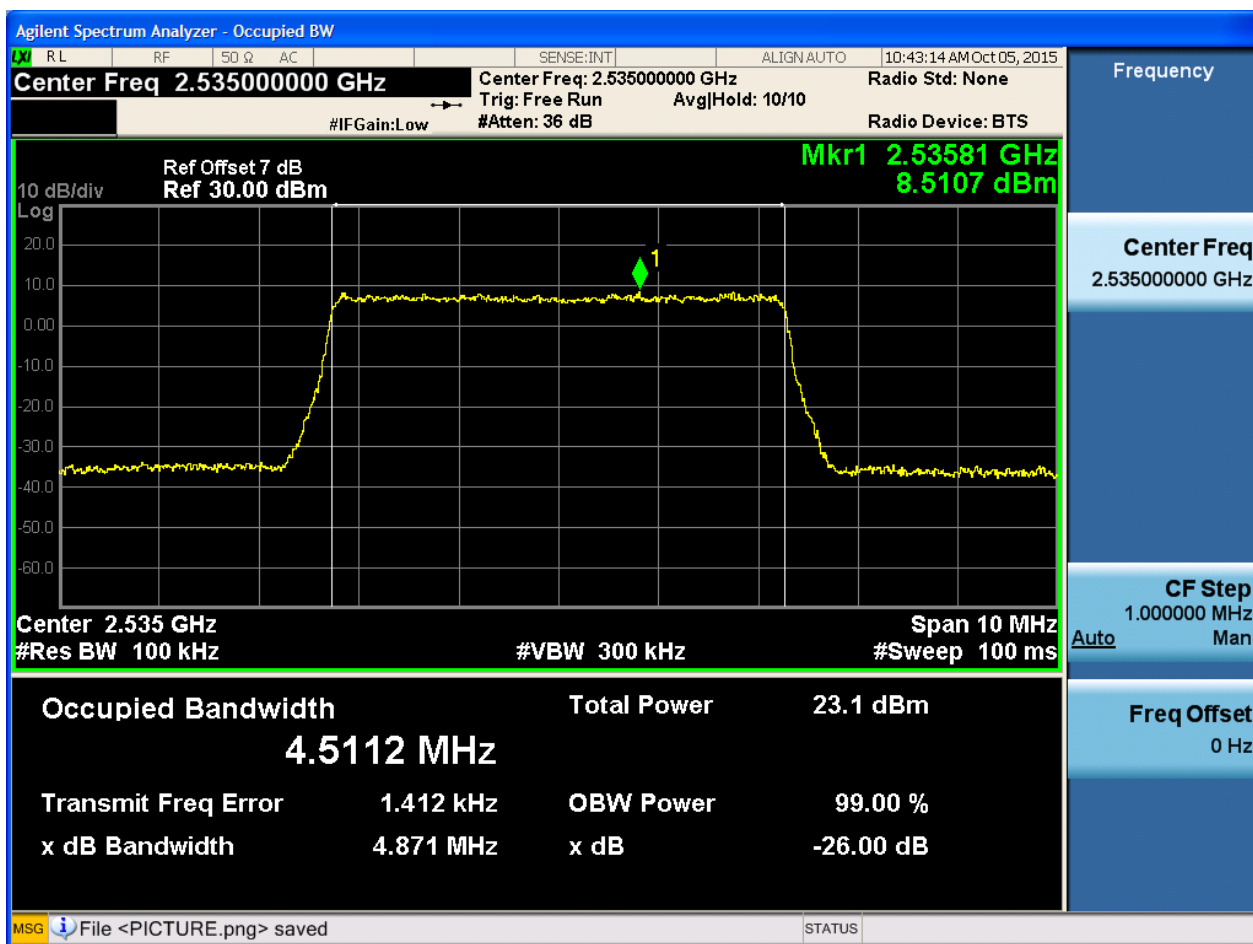
4.1.1.2.1.1.1 Test RB = RB25#0





4.1.1.2.1.2 Test Channel = MCH

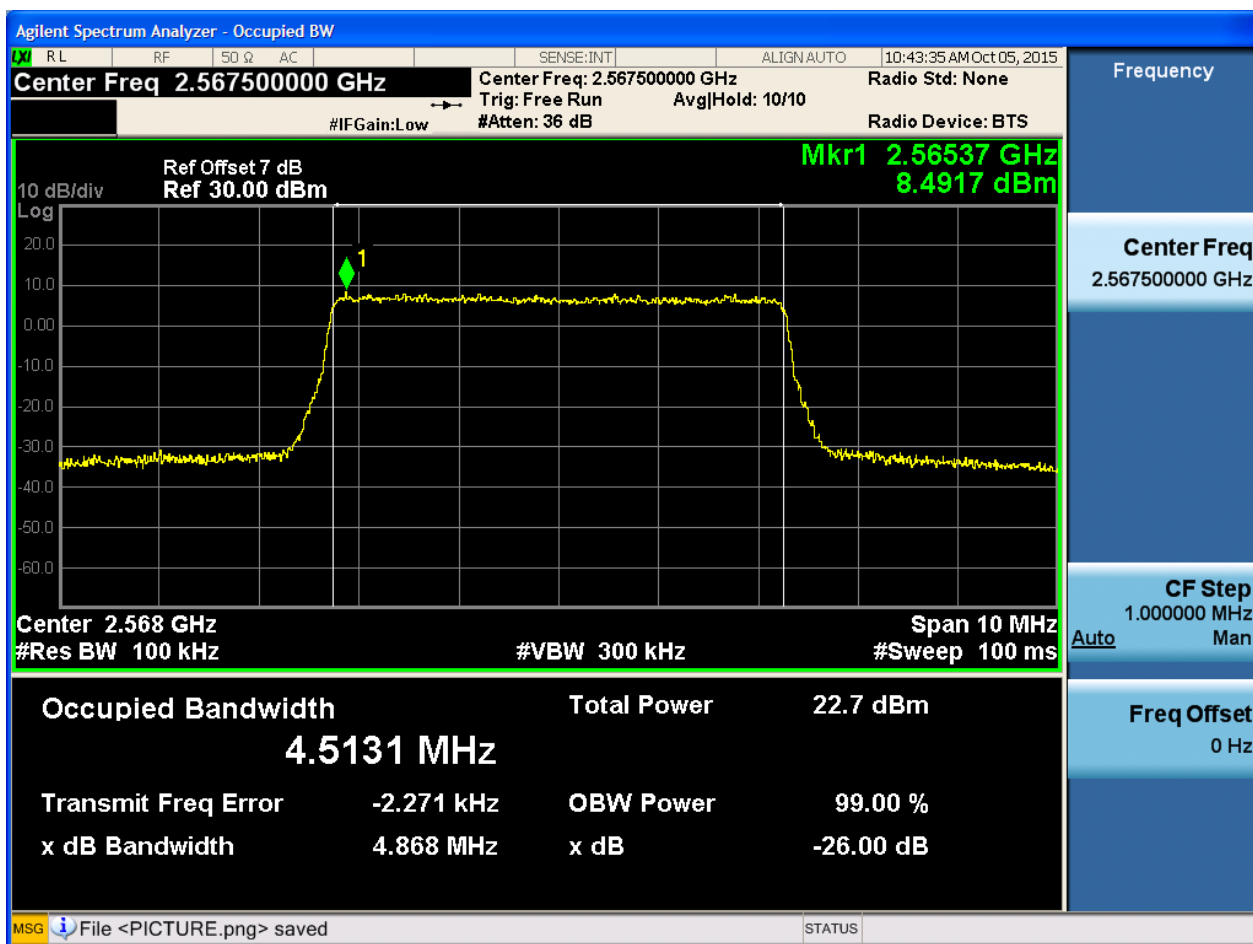
4.1.1.2.1.2.1 Test RB = RB25#0





4.1.1.2.1.3 Test Channel = HCH

4.1.1.2.1.3.1 Test RB = RB25#0

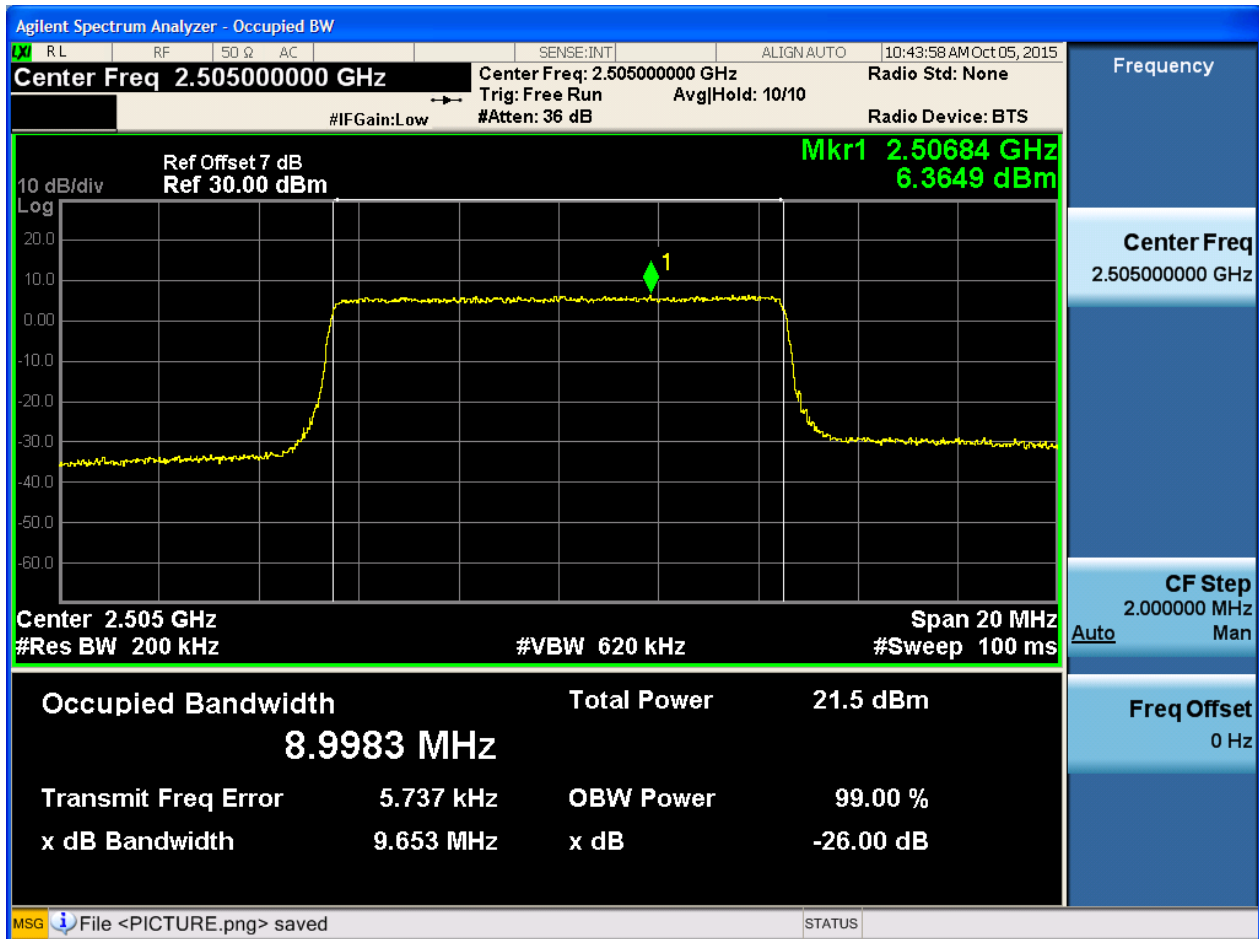




4.1.1.2.2 Test Bandwidth = 10

4.1.1.2.2.1 Test Channel = LCH

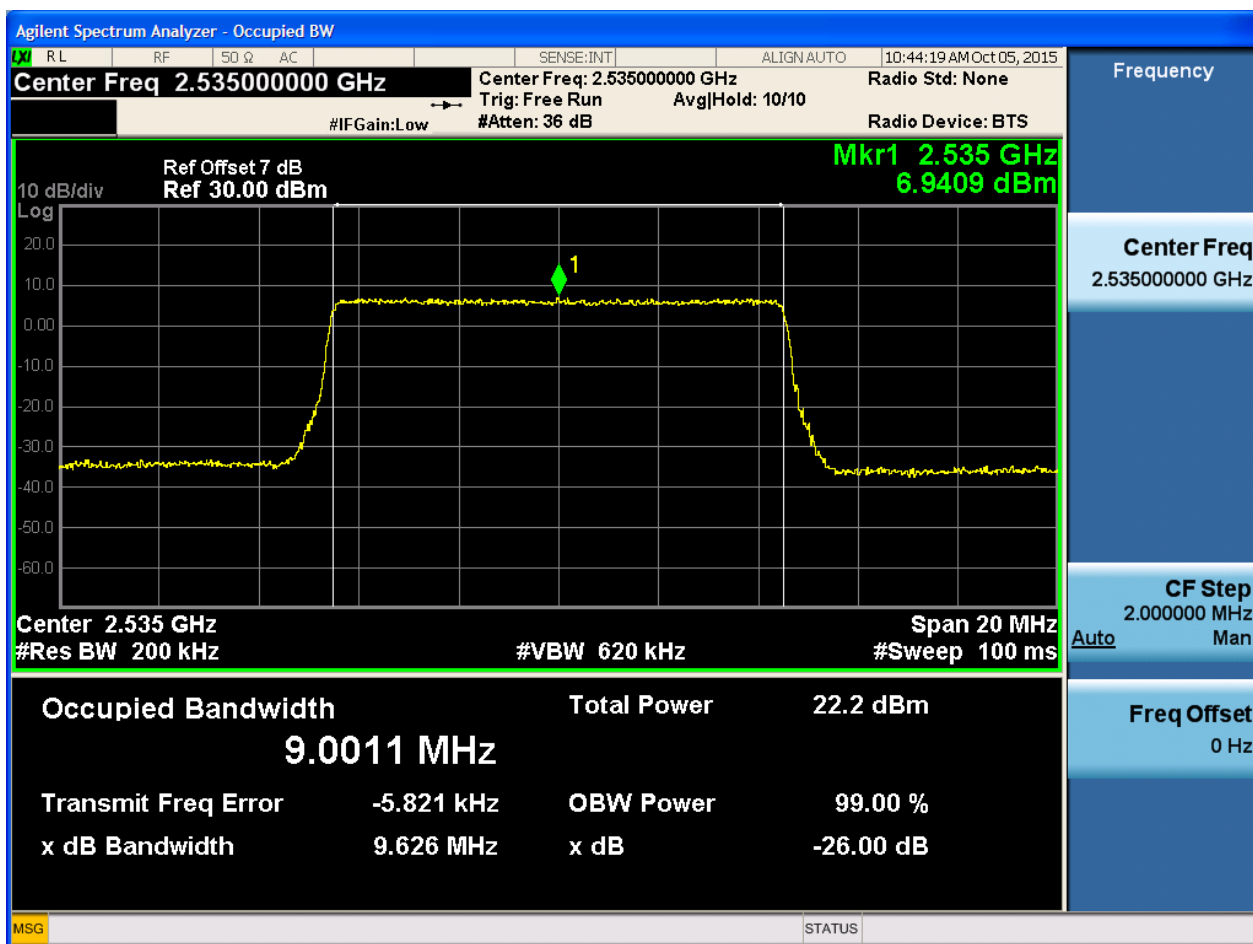
4.1.1.2.2.1.1 Test RB = RB50#0





4.1.1.2.2.2 Test Channel = MCH

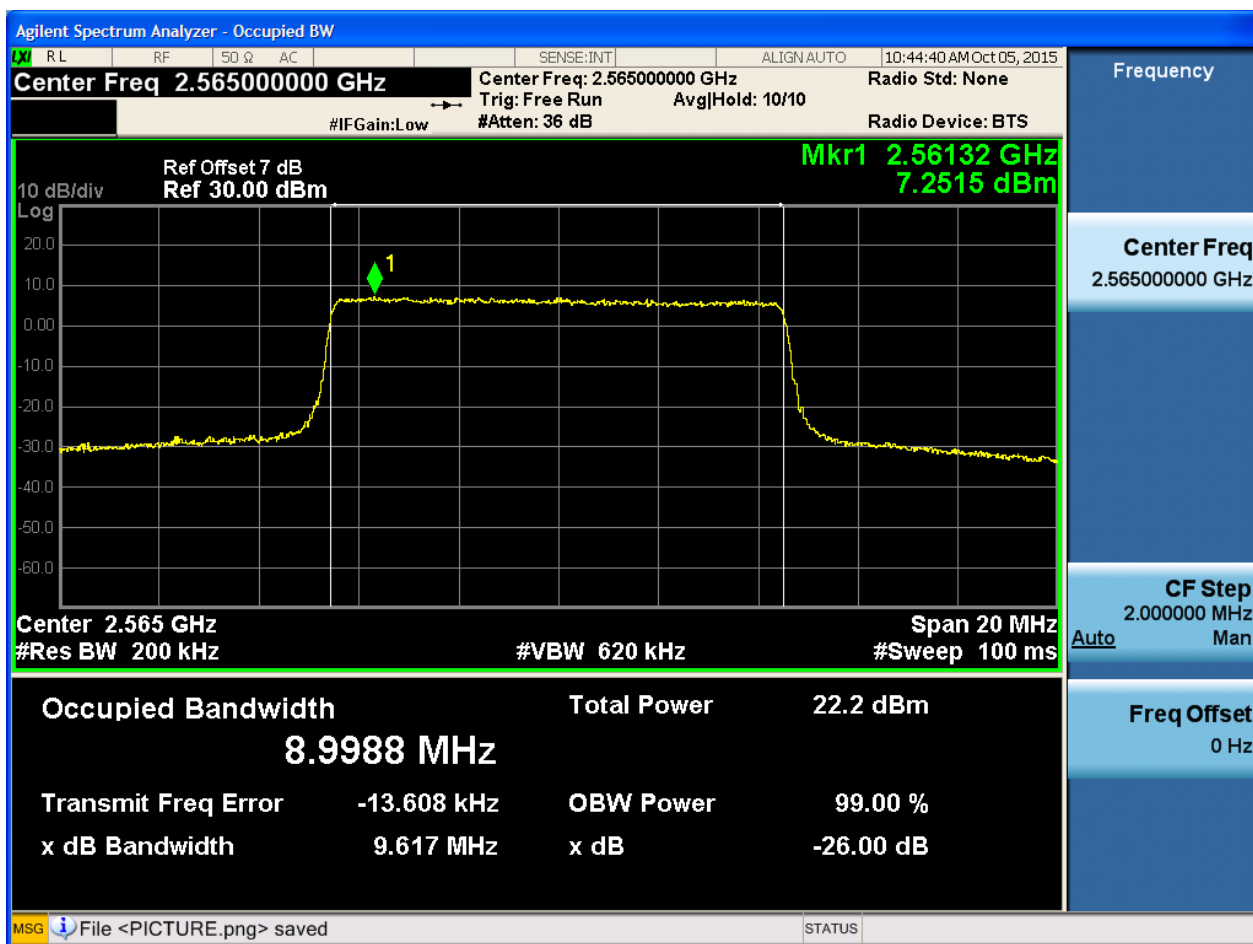
4.1.1.2.2.1 Test RB = RB50#0





4.1.1.2.2.3 Test Channel = HCH

4.1.1.2.2.3.1 Test RB = RB50#0

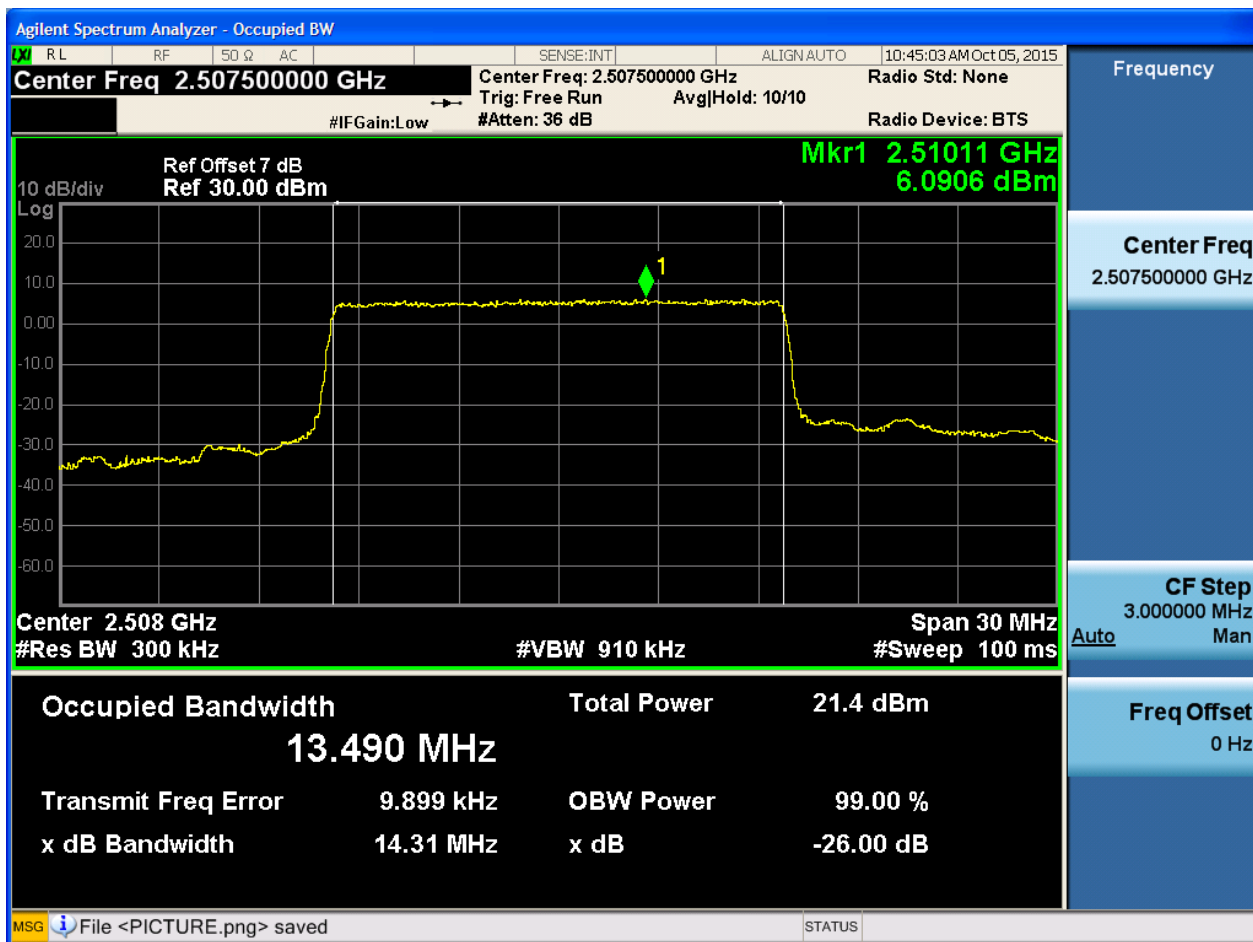




4.1.1.2.3 Test Bandwidth = 15

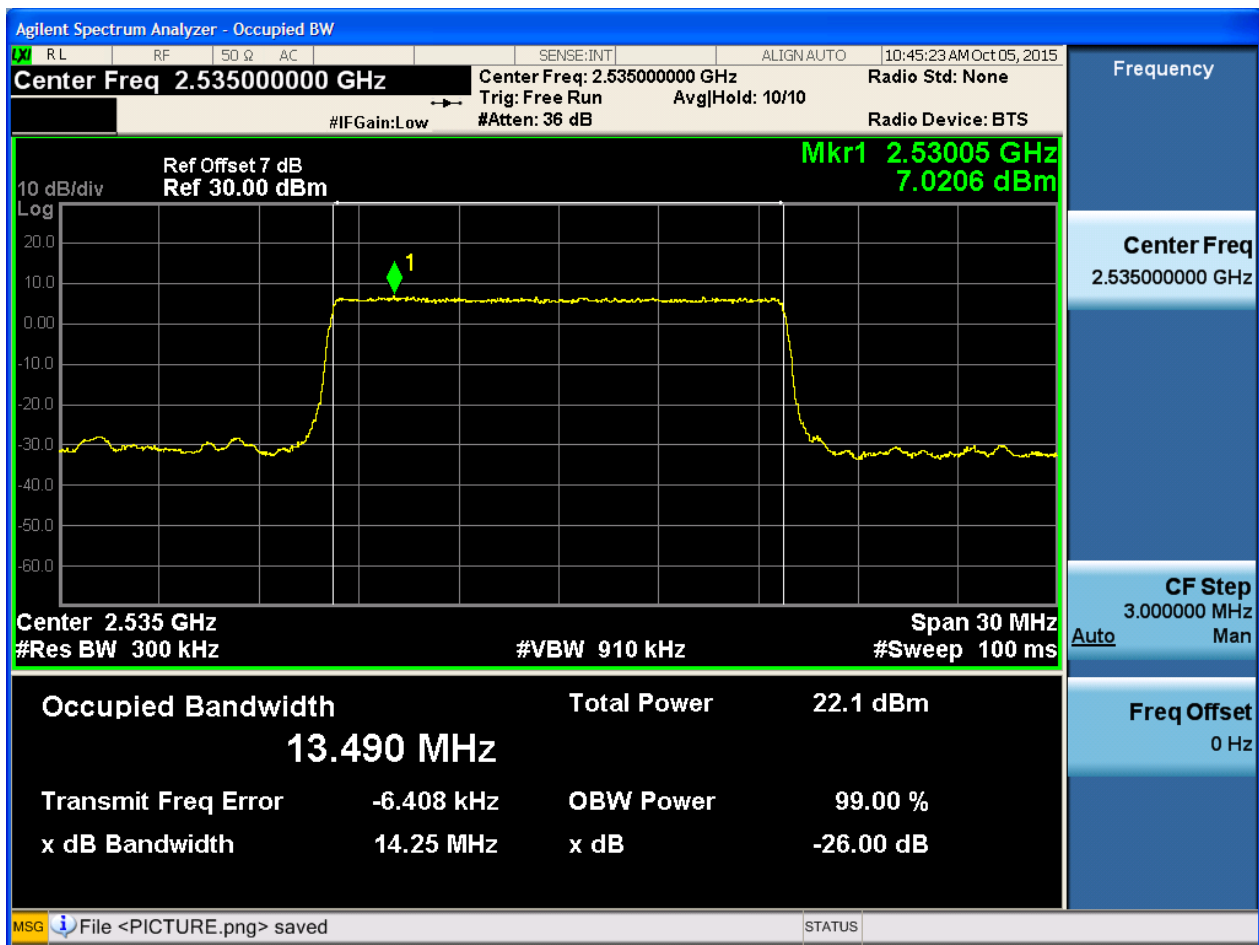
4.1.1.2.3.1 Test Channel = LCH

4.1.1.2.3.1.1 Test RB = RB75#0



4.1.1.2.3.2 Test Channel = MCH

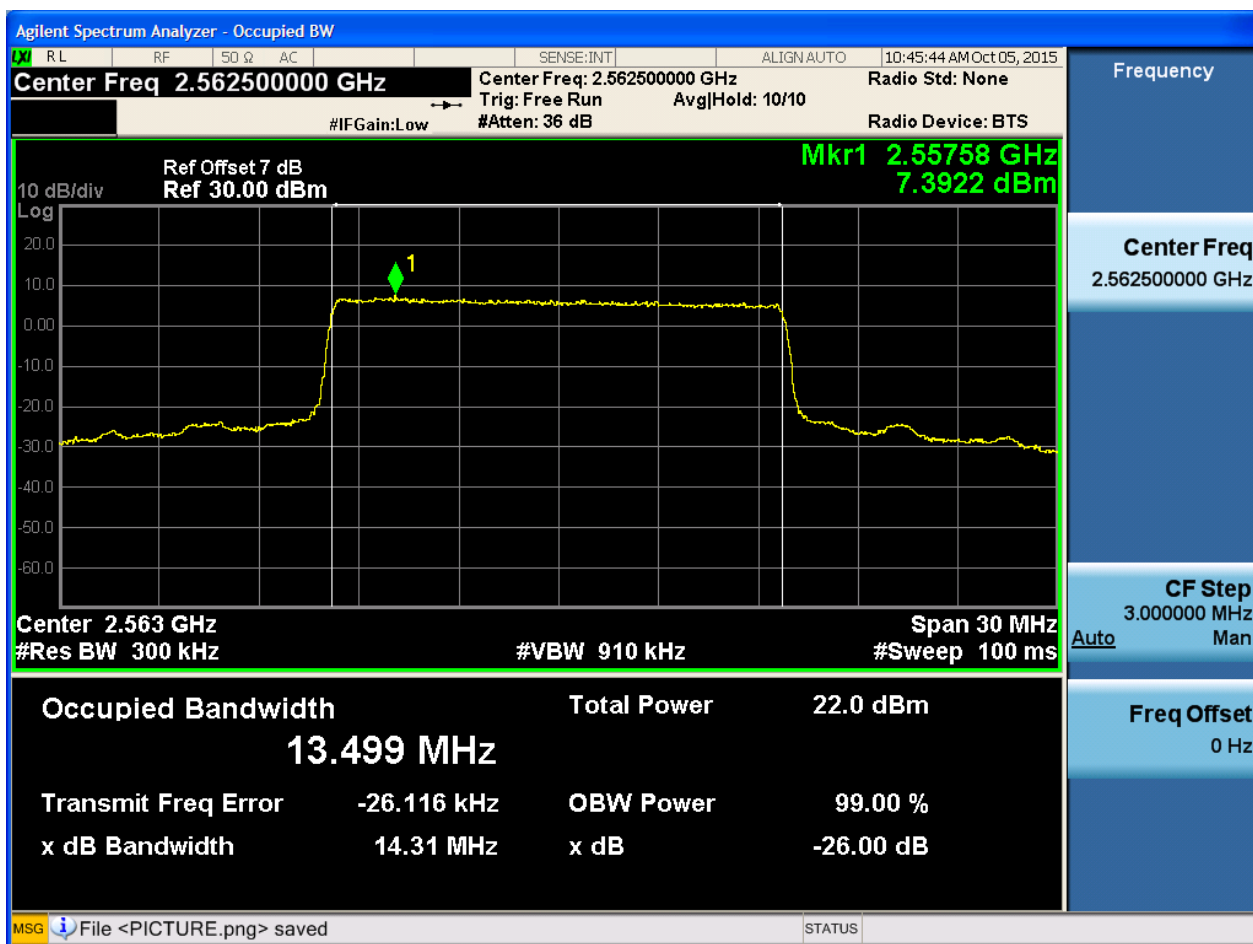
4.1.1.2.3.2.1 Test RB = RB75#0





4.1.1.2.3.3 Test Channel = HCH

4.1.1.2.3.3.1 Test RB = RB75#0

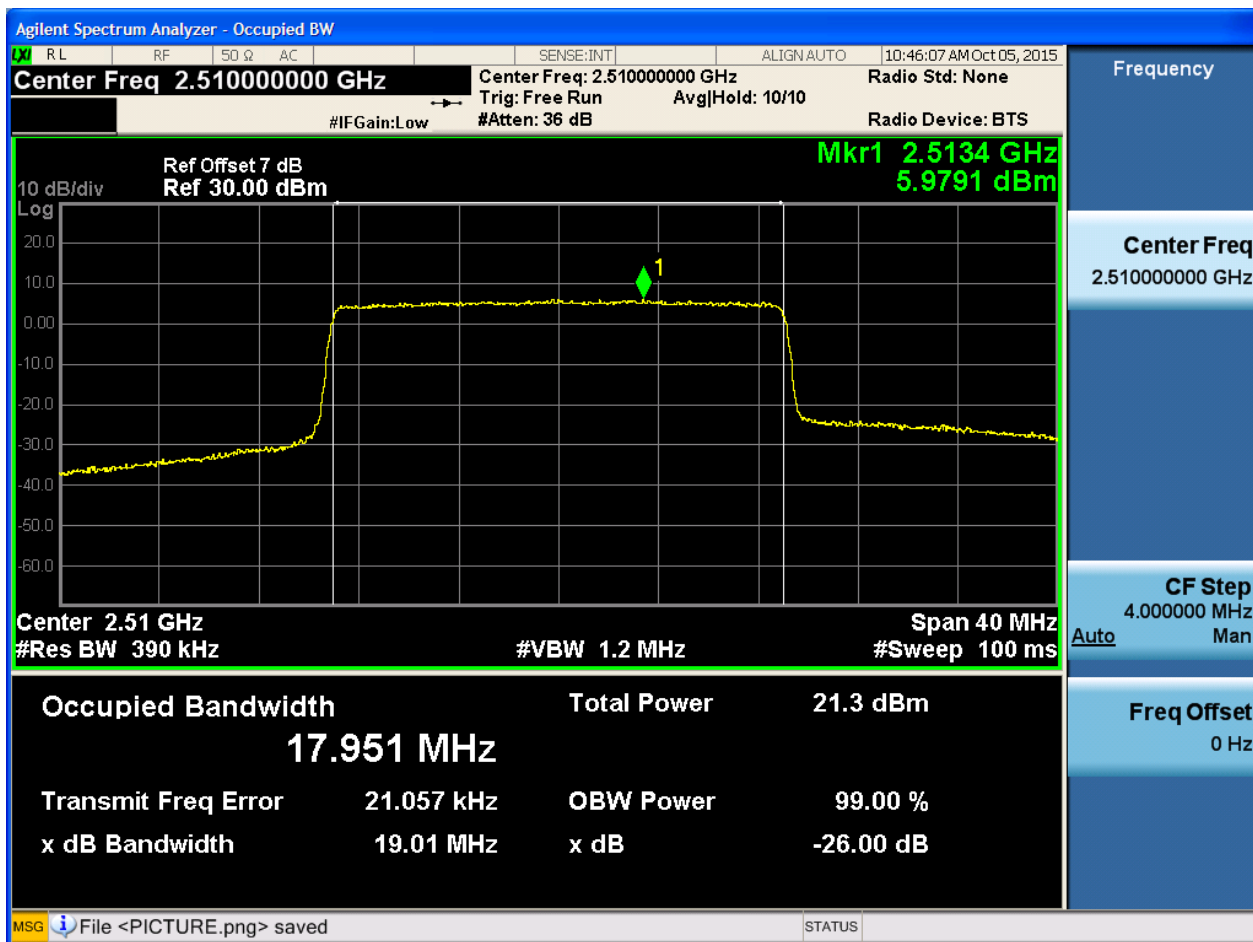




4.1.1.2.4 Test Bandwidth = 20

4.1.1.2.4.1 Test Channel = LCH

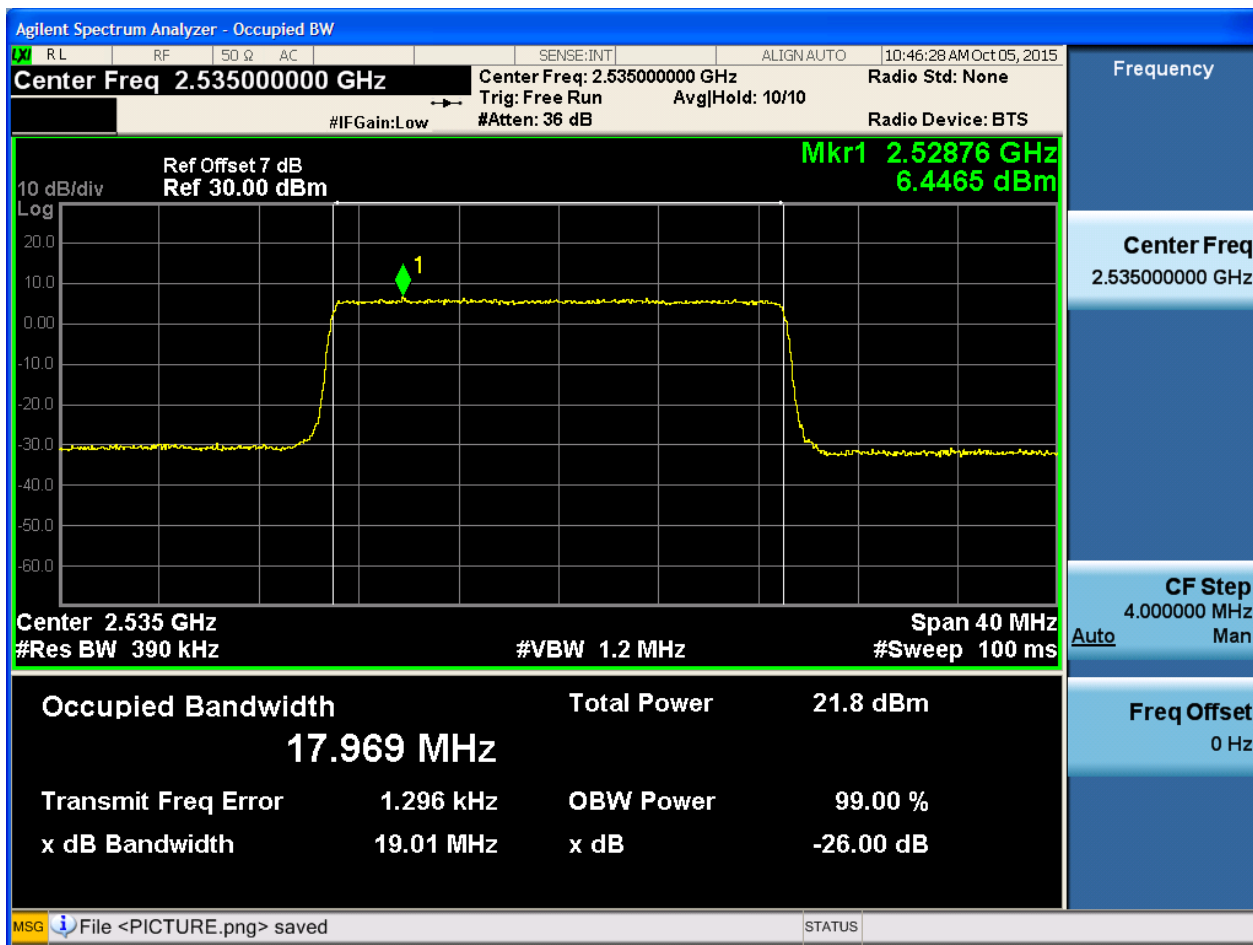
4.1.1.2.4.1.1 Test RB = RB100#0





4.1.1.2.4.2 Test Channel = MCH

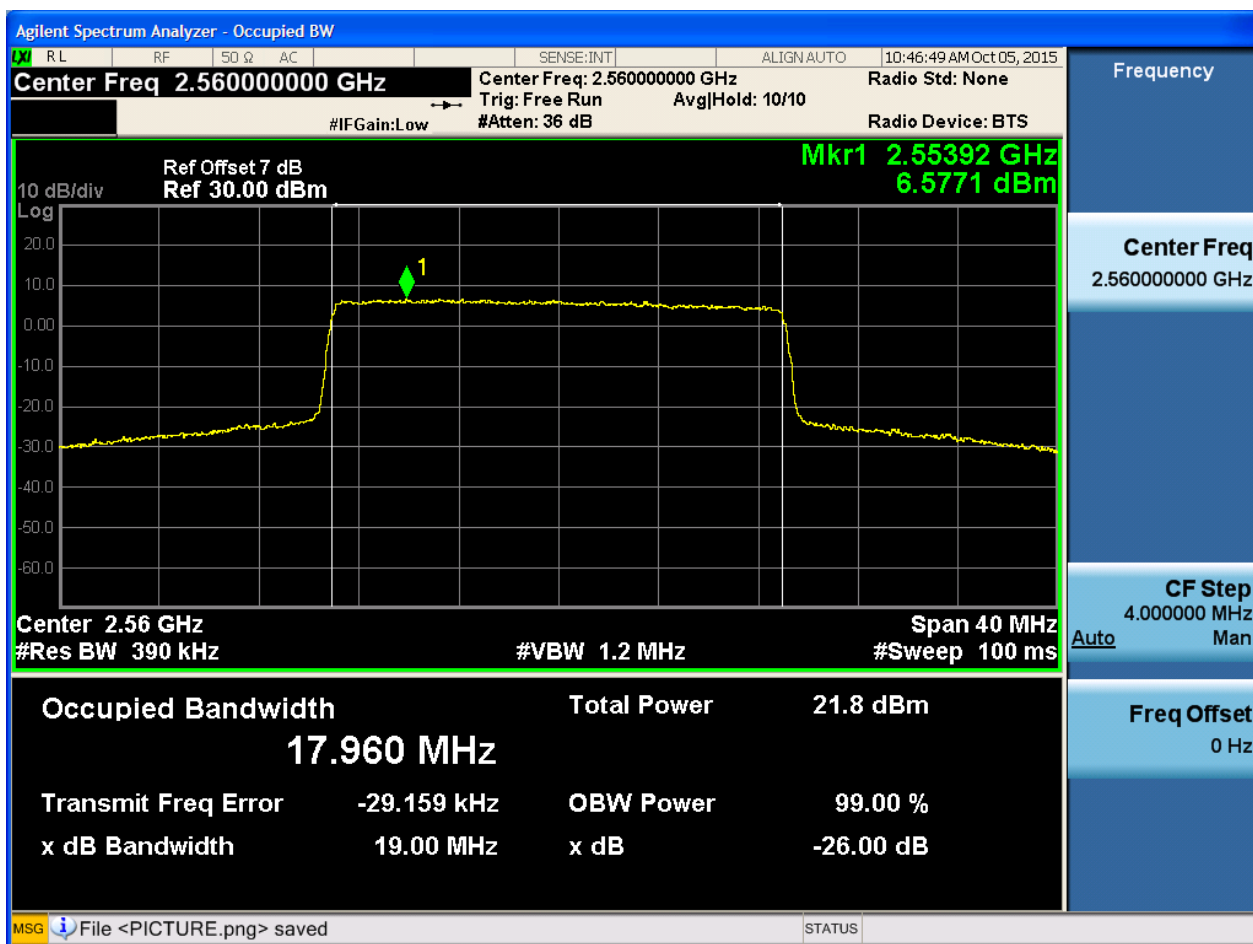
4.1.1.2.4.2.1 Test RB = RB100#0





4.1.1.2.4.3 Test Channel = HCH

4.1.1.2.4.3.1 Test RB = RB100#0



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

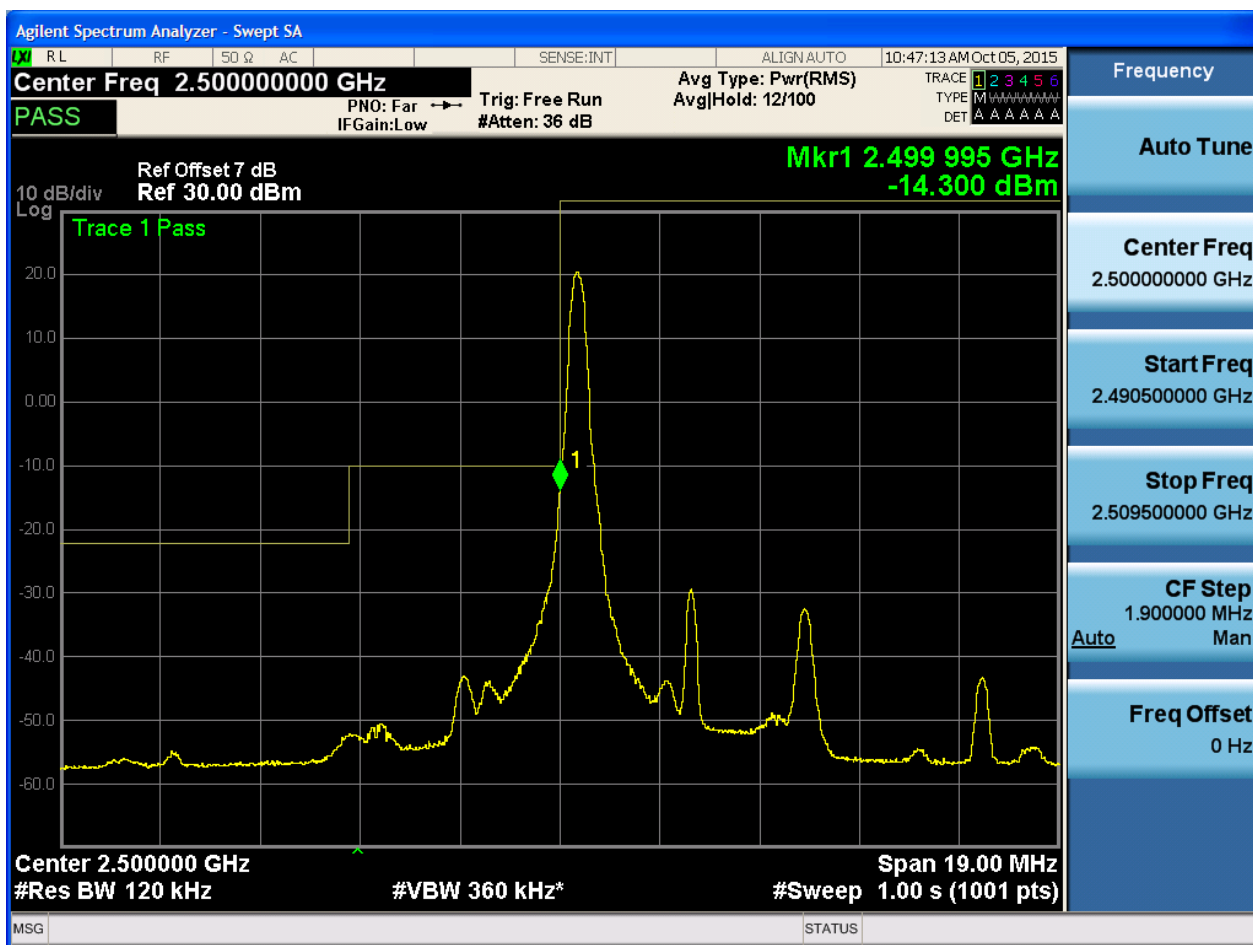
5.1.1 Test Band = BAND7

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 5

5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 Test RB = RB1#0





5.1.1.1.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.50000000 GHz

Ref Offset 7 dB
Ref 30.00 dBm

Trace 1 Pass

Mkr1 2.499 995 GHz
-32.089 dBm

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

Frequency

Auto Tune

Center Freq
2.50000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Man

Freq Offset
0 Hz

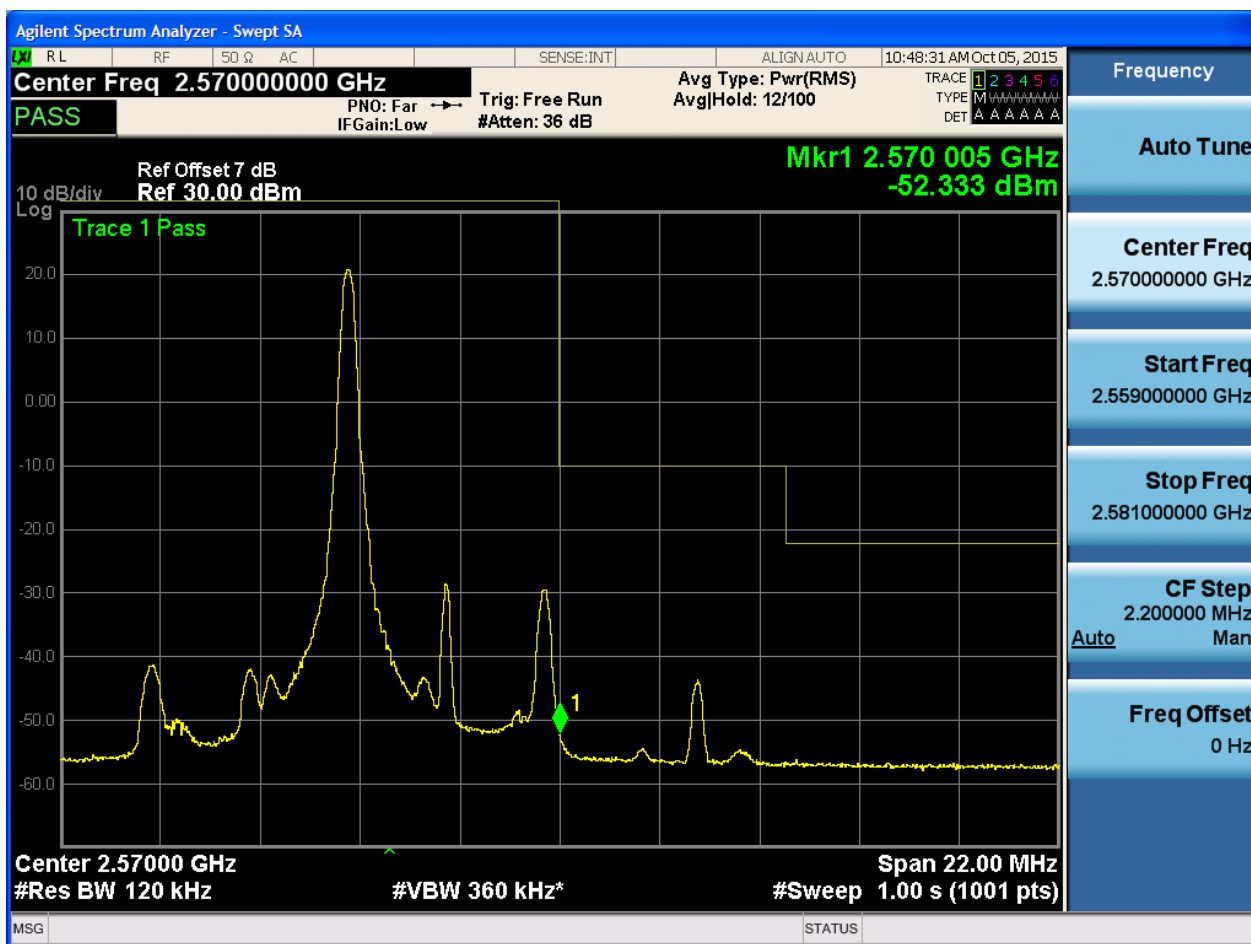


5.1.1.1.1.4 Test RB = RB25#0



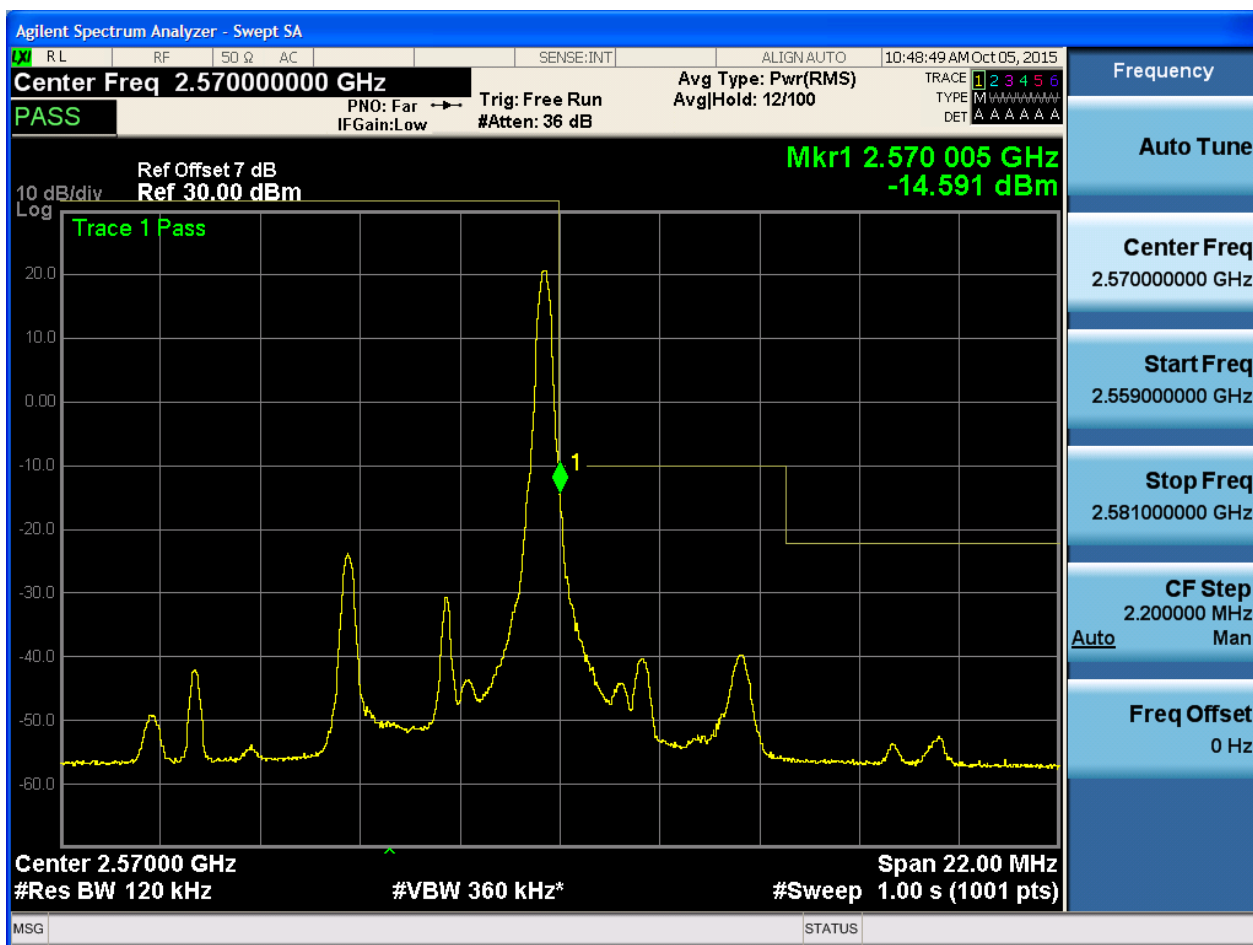
5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 Test RB = RB1#0



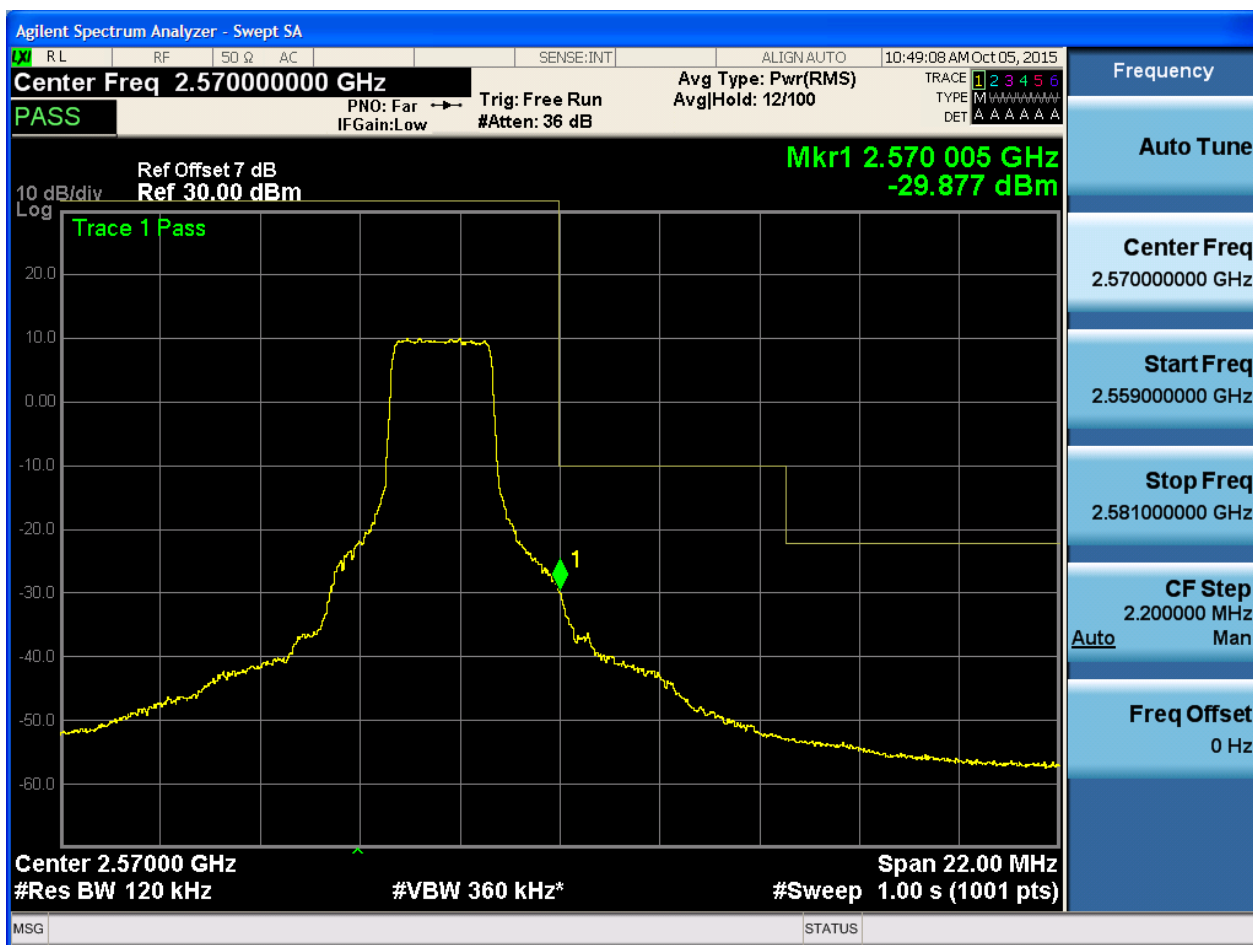


5.1.1.1.2.2 Test RB = RB1#24





5.1.1.1.2.3 Test RB = RB12#6





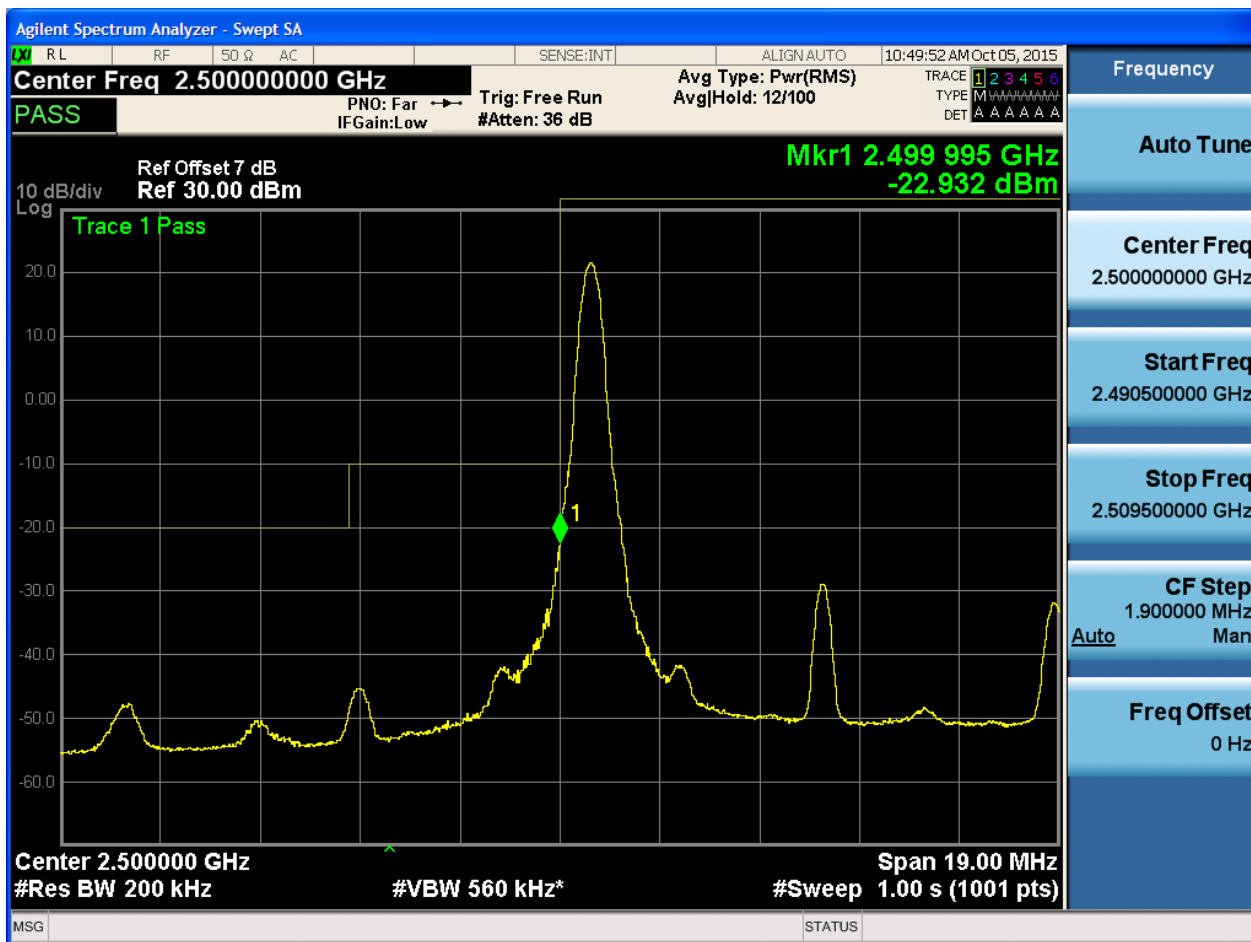
5.1.1.1.2.4 Test RB = RB25#0



5.1.1.1.2 Test Bandwidth = 10

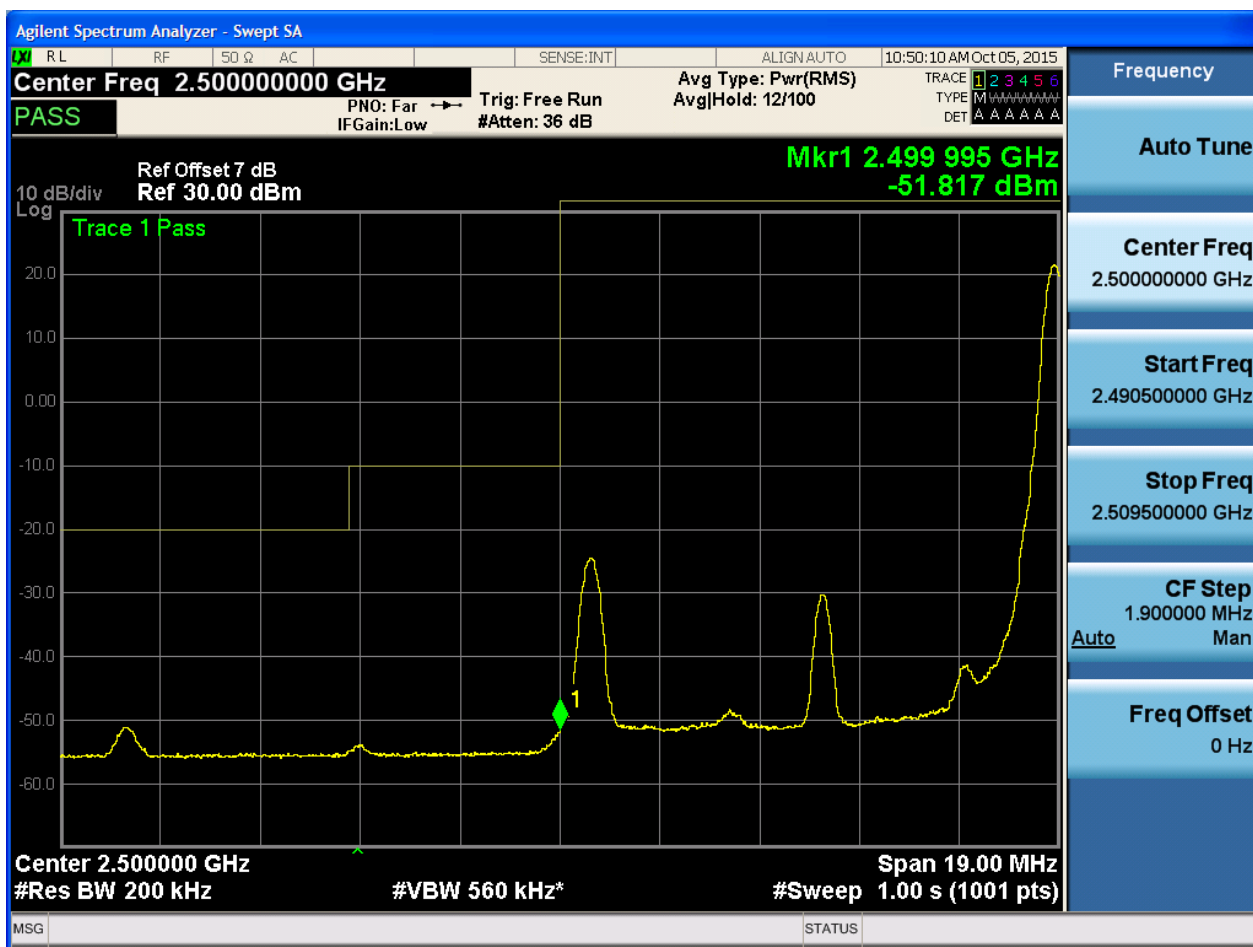
5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 Test RB = RB1#0





5.1.1.1.2.1.2 Test RB = RB1#49



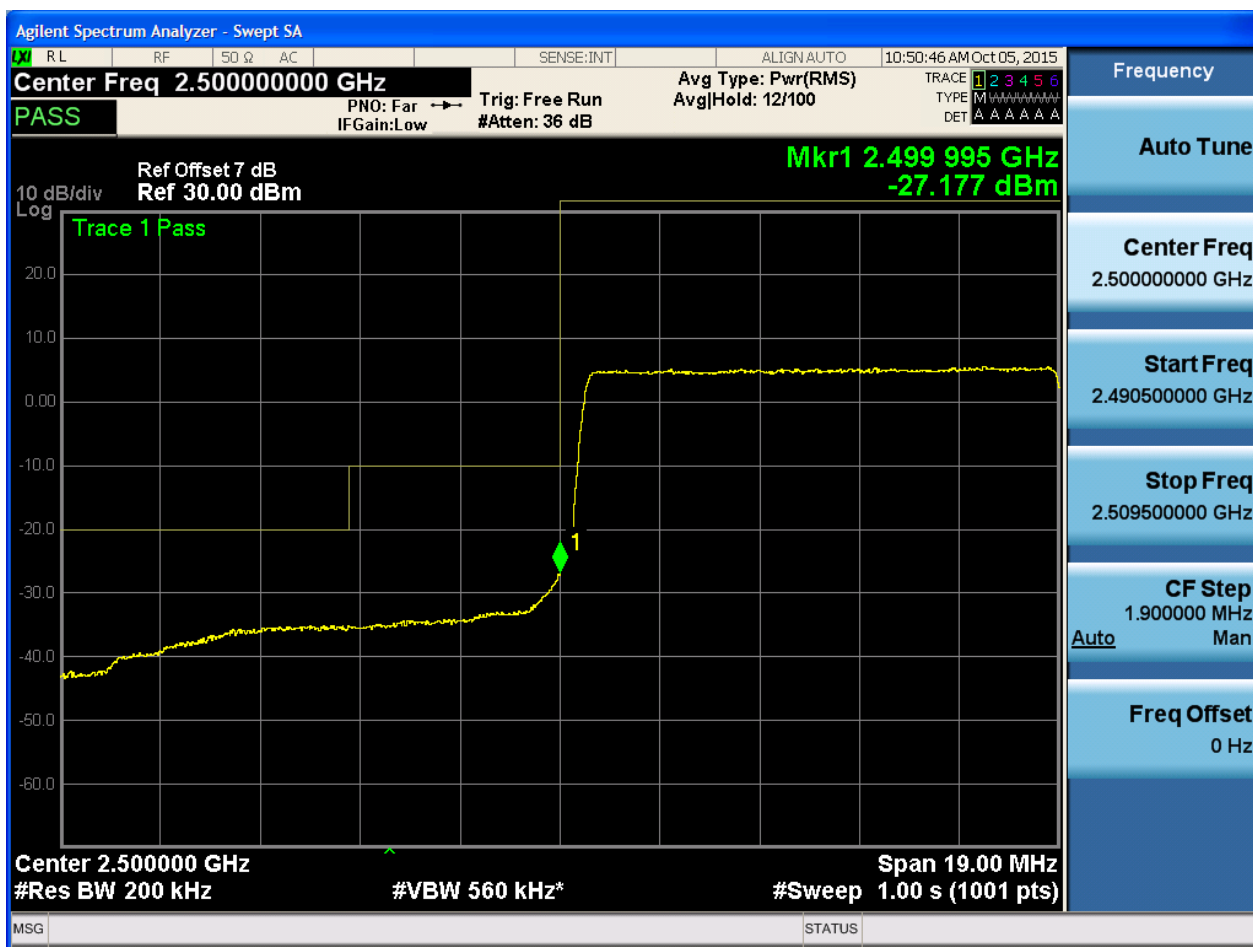


5.1.1.1.2.1.3 Test RB = RB25#13



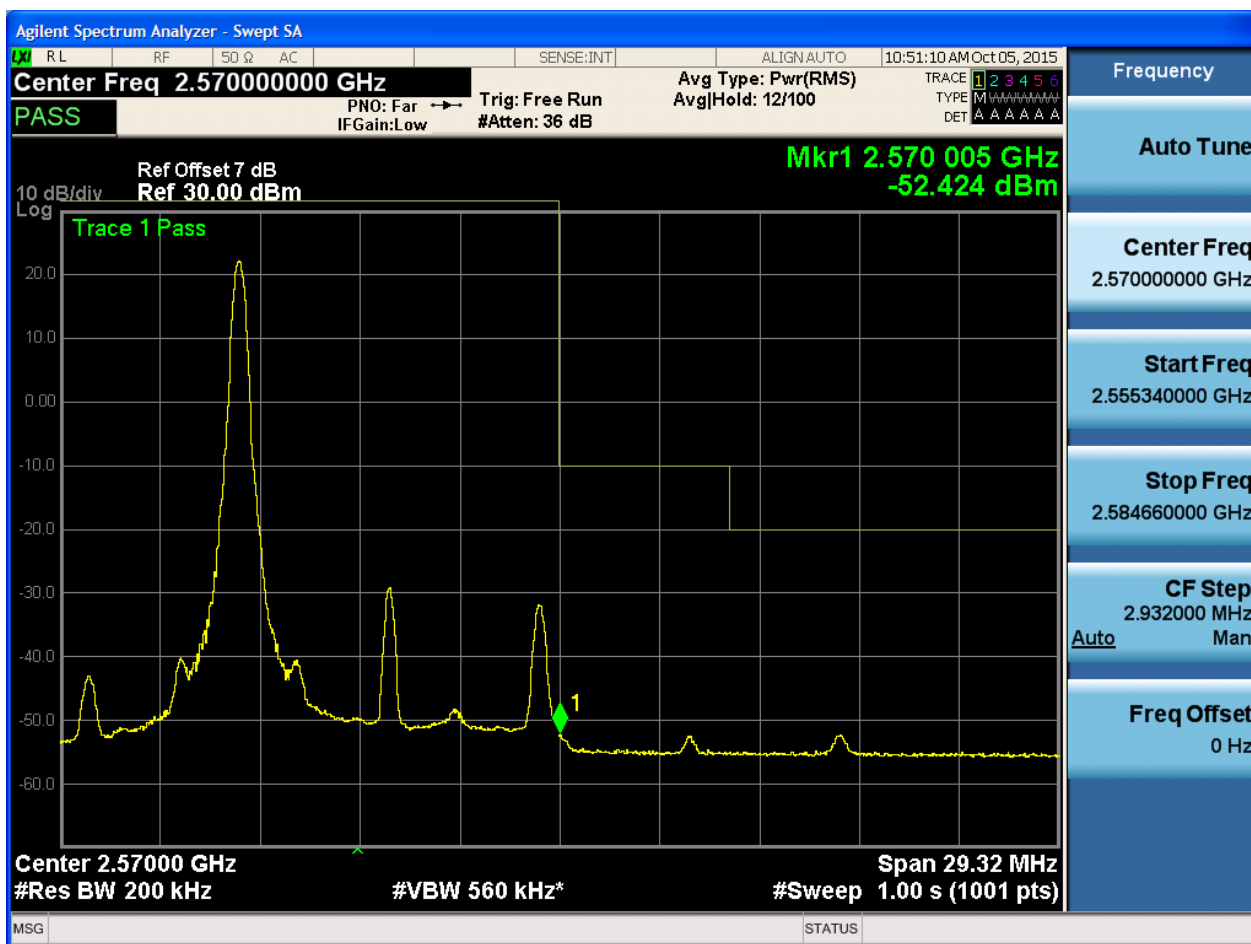


5.1.1.1.2.1.4 Test RB = RB50#0



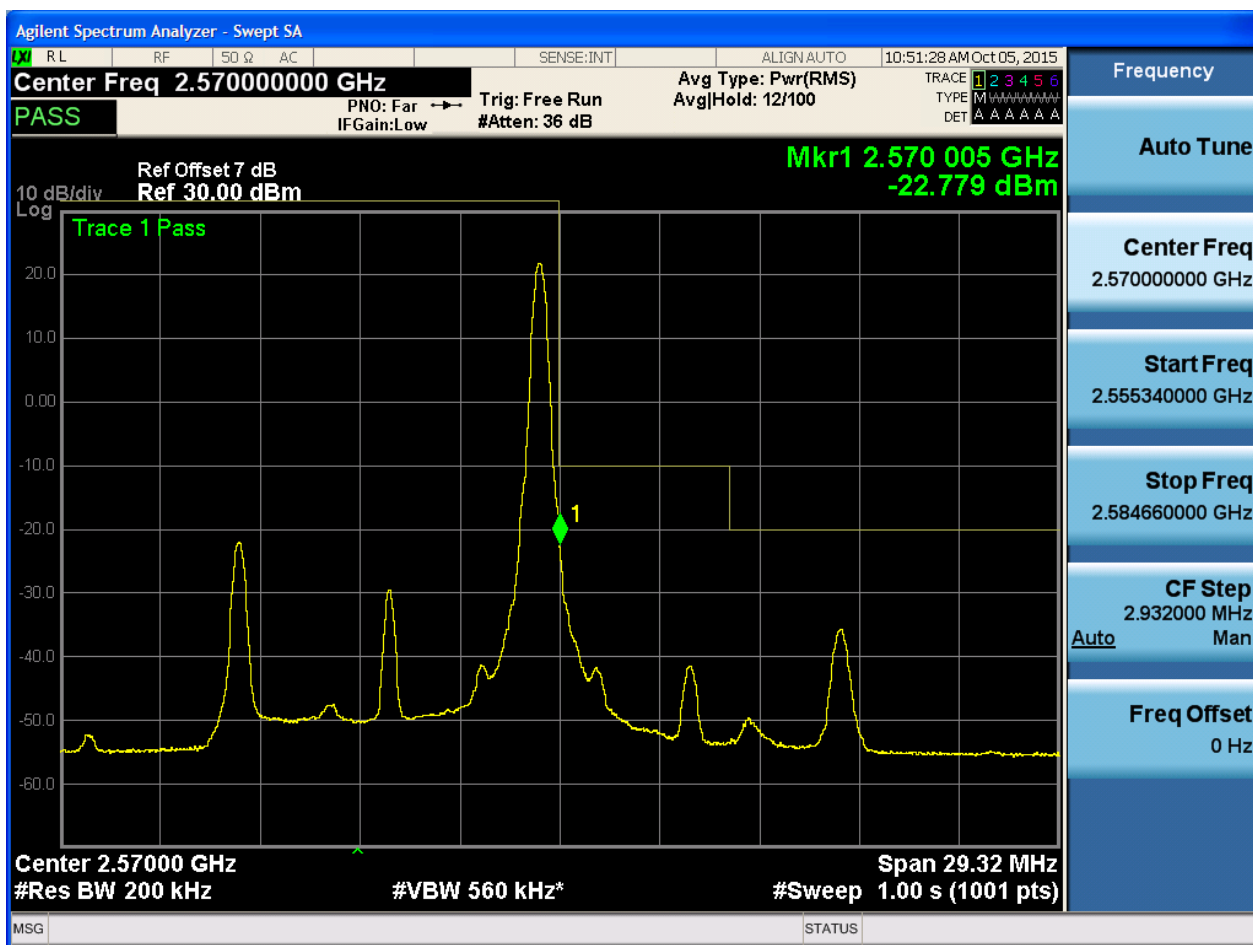
5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 Test RB = RB1#0



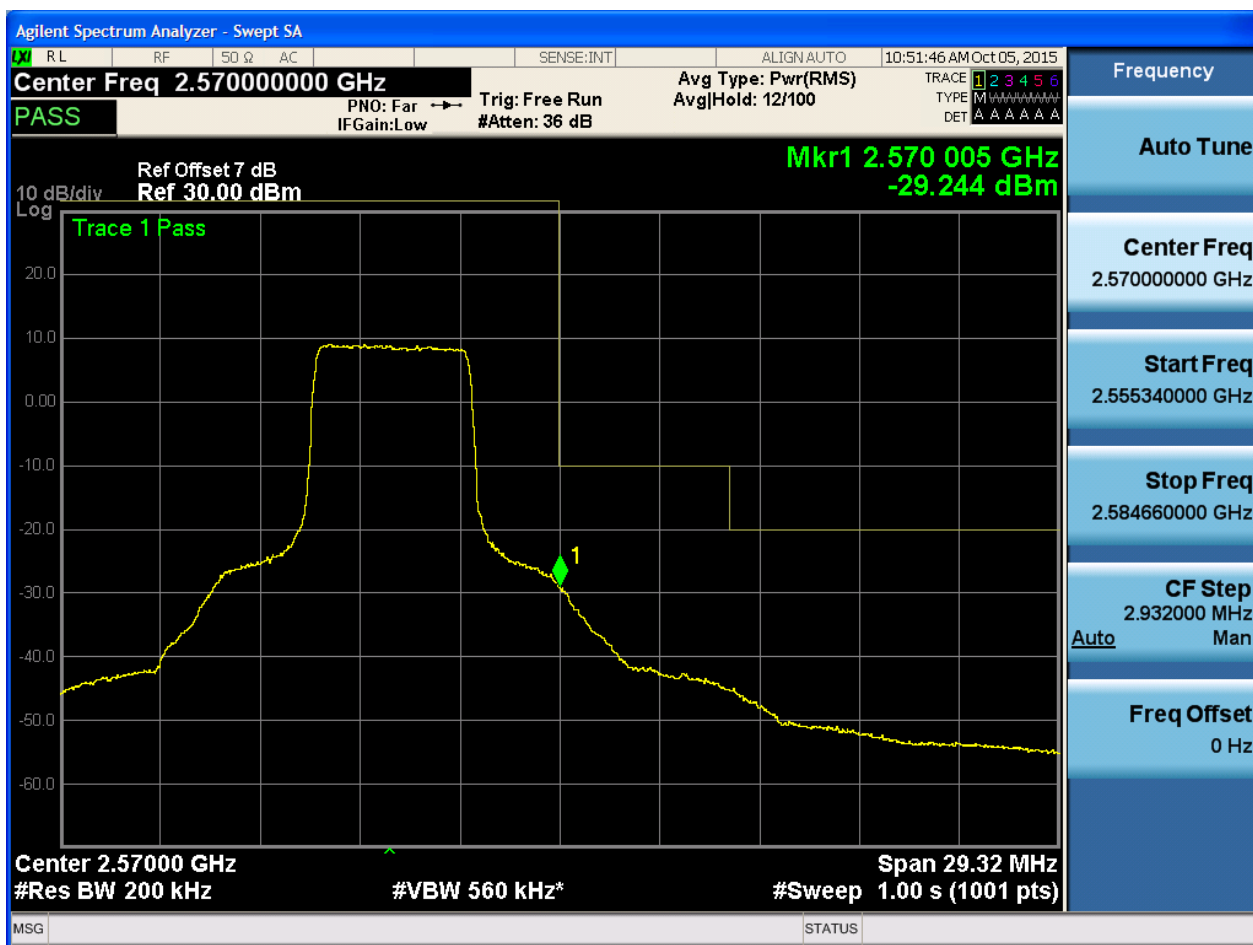


5.1.1.1.2.2.2 Test RB = RB1#49





5.1.1.1.2.2.3 Test RB = RB25#13





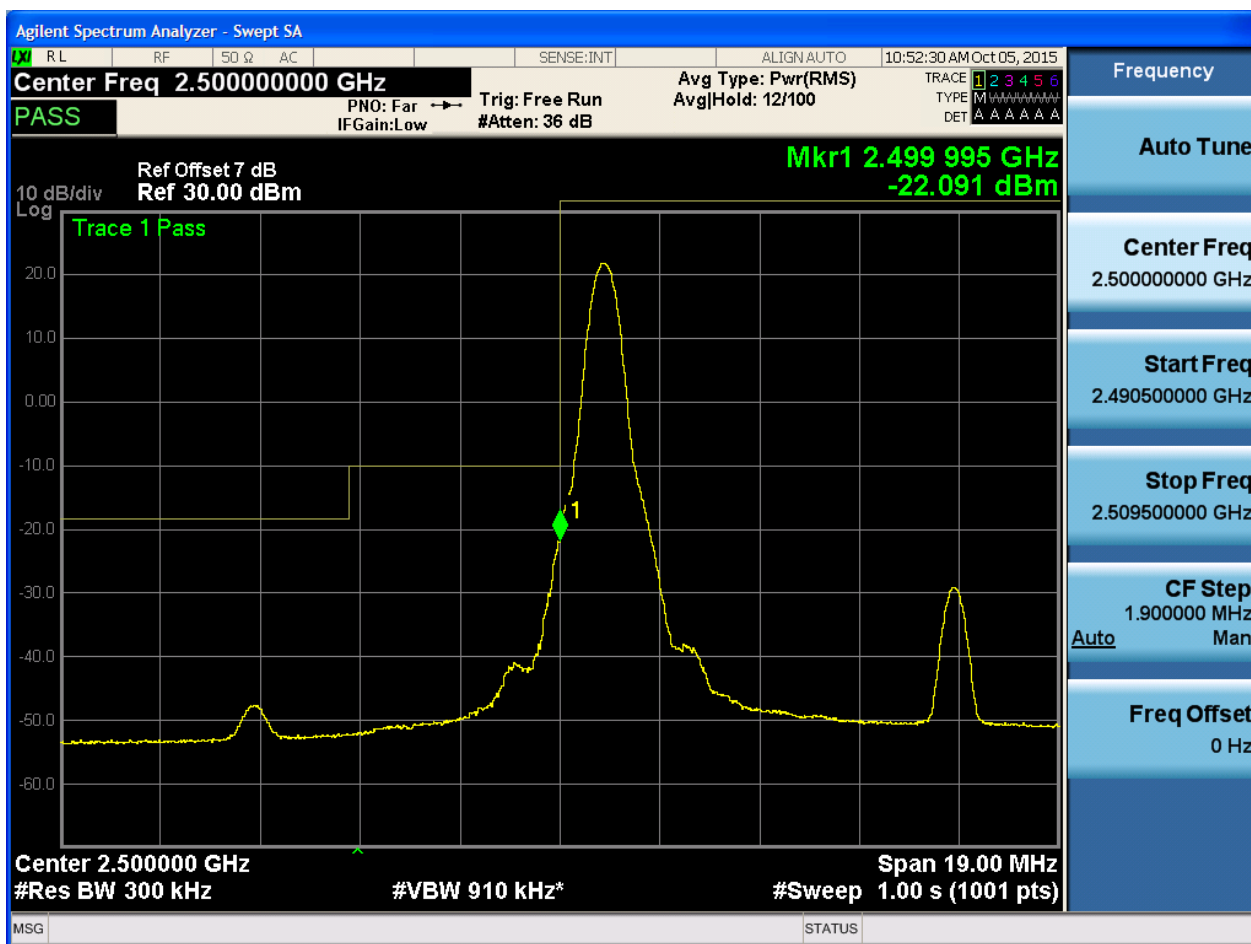
5.1.1.1.2.2.4 Test RB = RB50#0



5.1.1.1.3 Test Bandwidth = 15

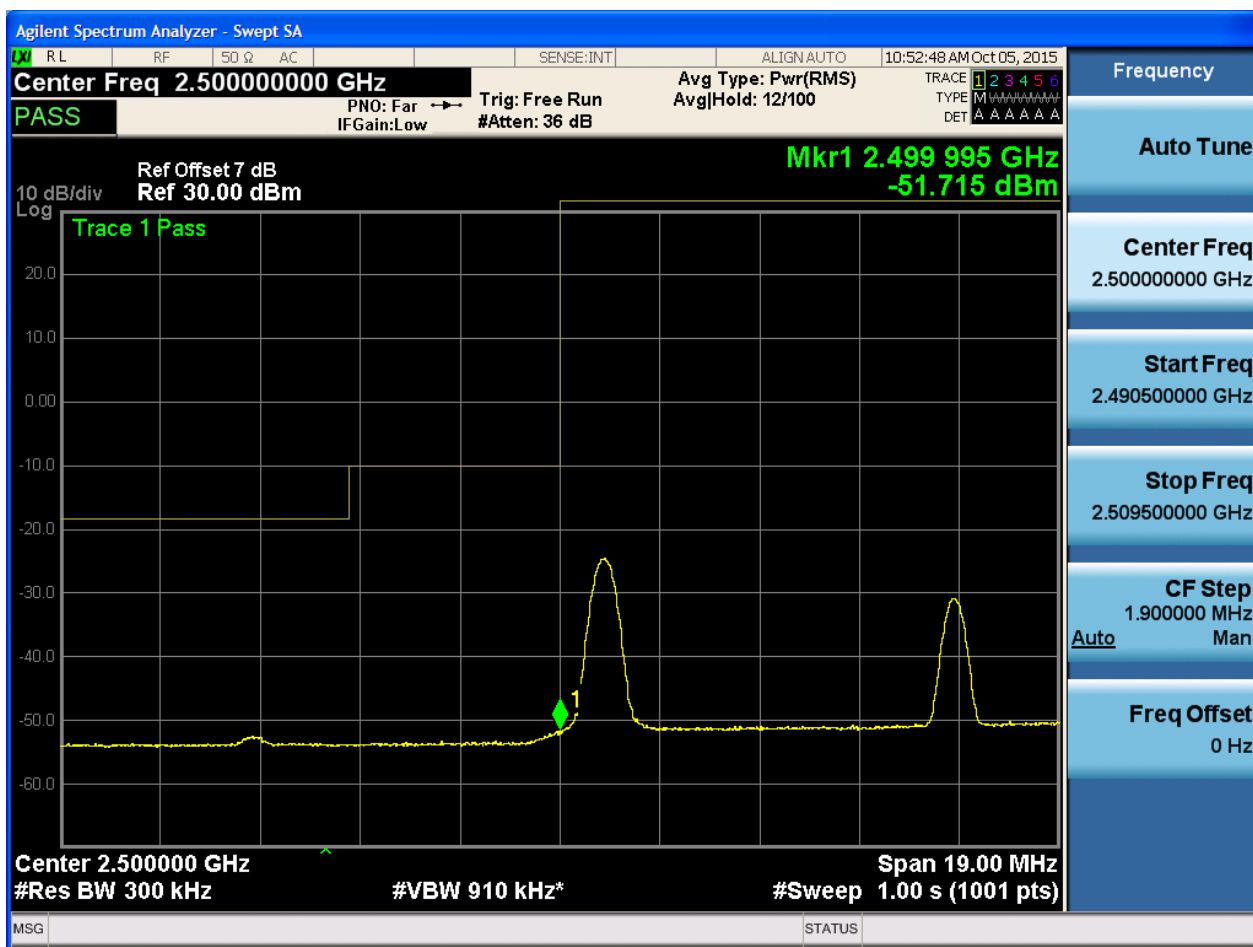
5.1.1.1.3.1 Test Channel = LCH

5.1.1.1.3.1.1 Test RB = RB1#0





5.1.1.1.3.1.2 Test RB = RB1#74





5.1.1.1.3.1.3 Test RB = RB36#18



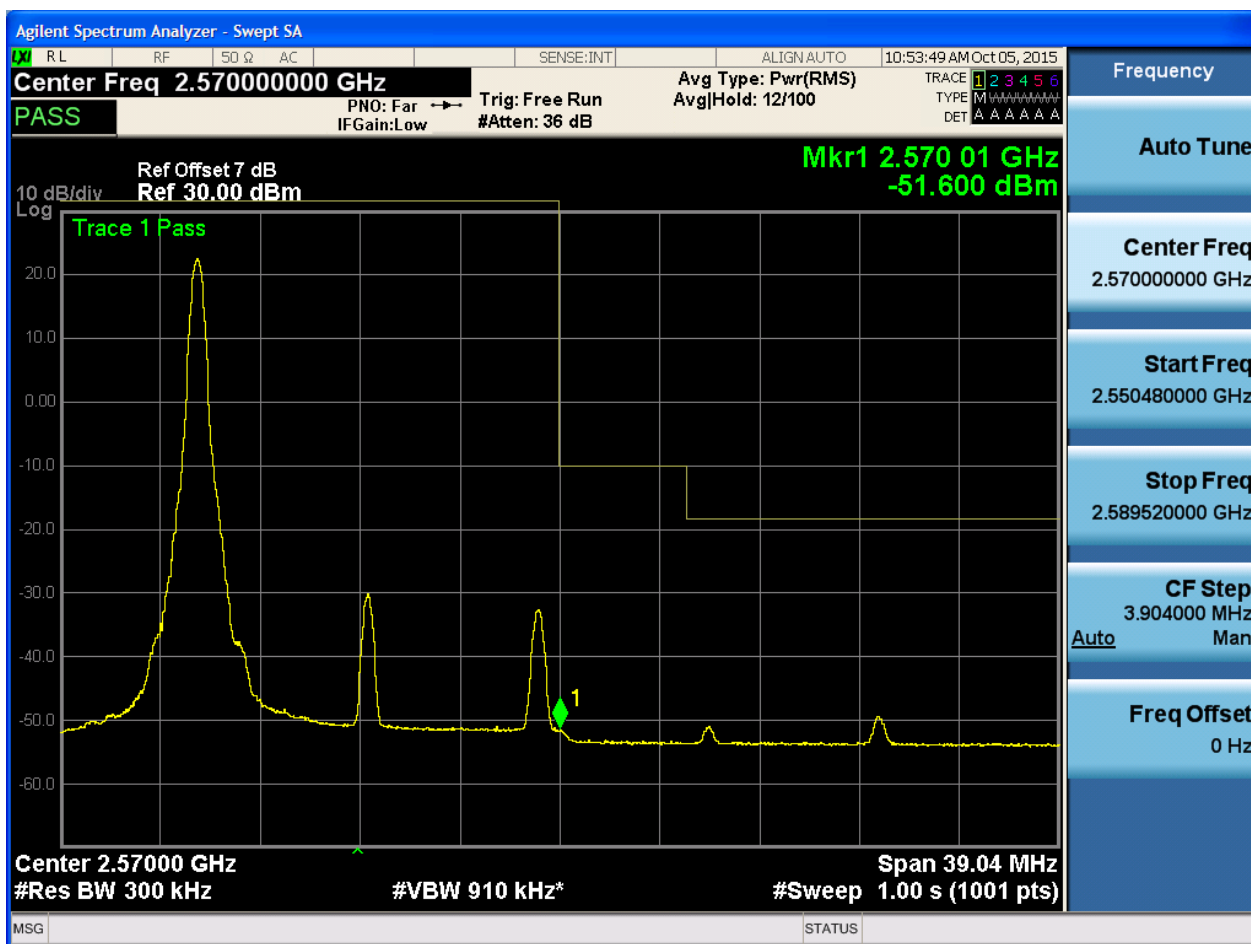


5.1.1.1.3.1.4 Test RB = RB75#0



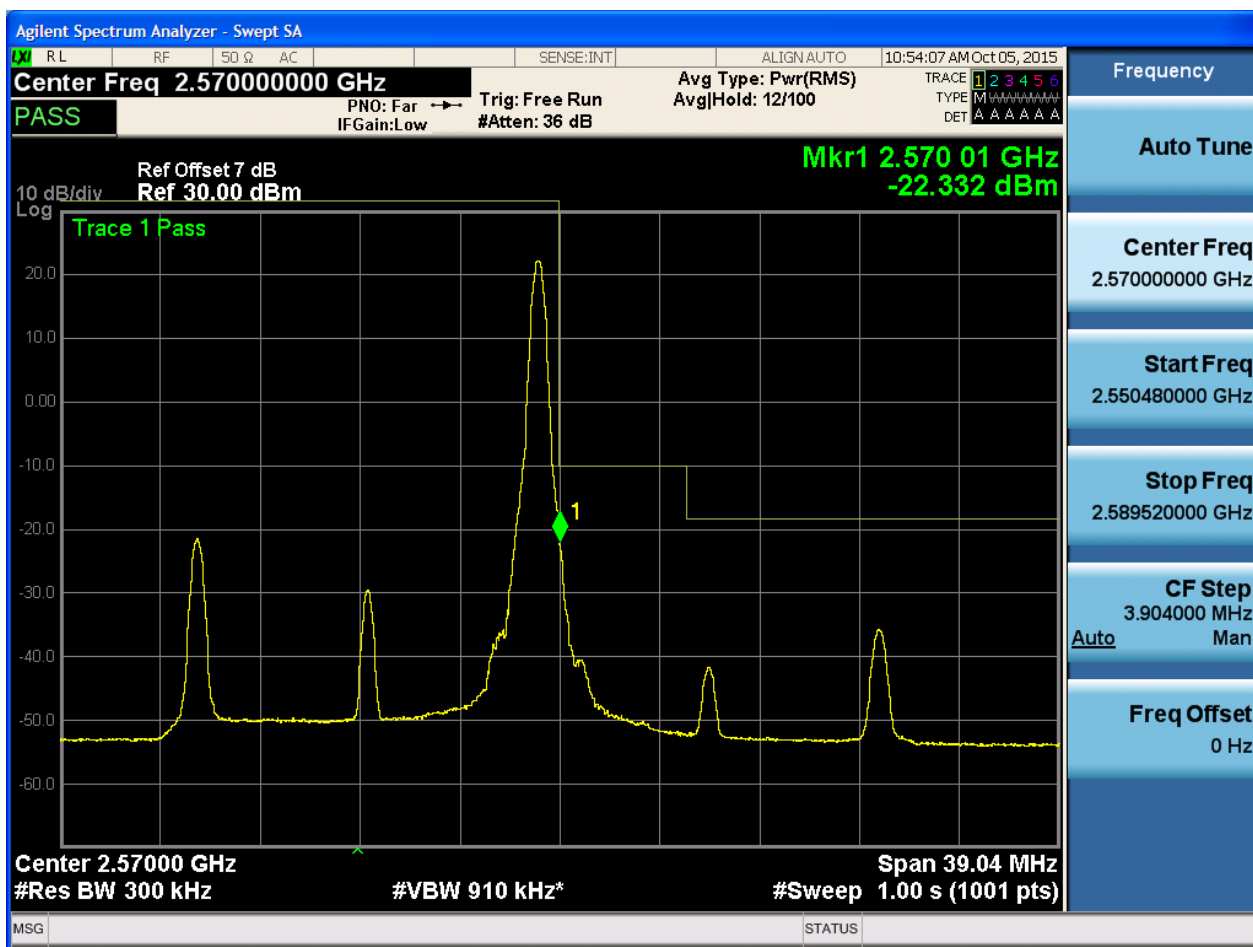
5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#74





5.1.1.1.3.2.3 Test RB = RB36#18





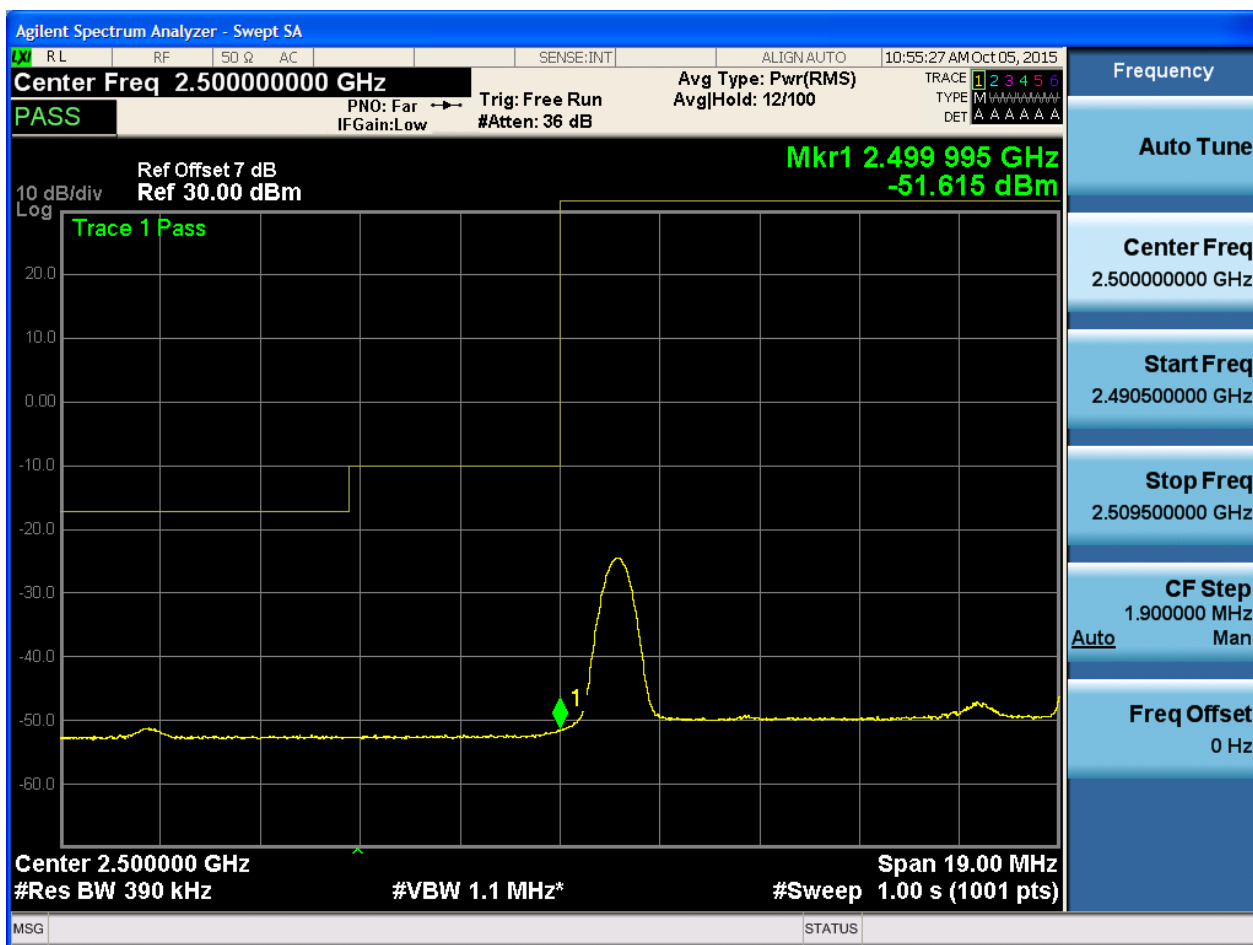
5.1.1.1.3.2.4 Test RB = RB75#0







5.1.1.1.4.1.2 Test RB = RB1#99





5.1.1.1.4.1.3 Test RB = RB50#25



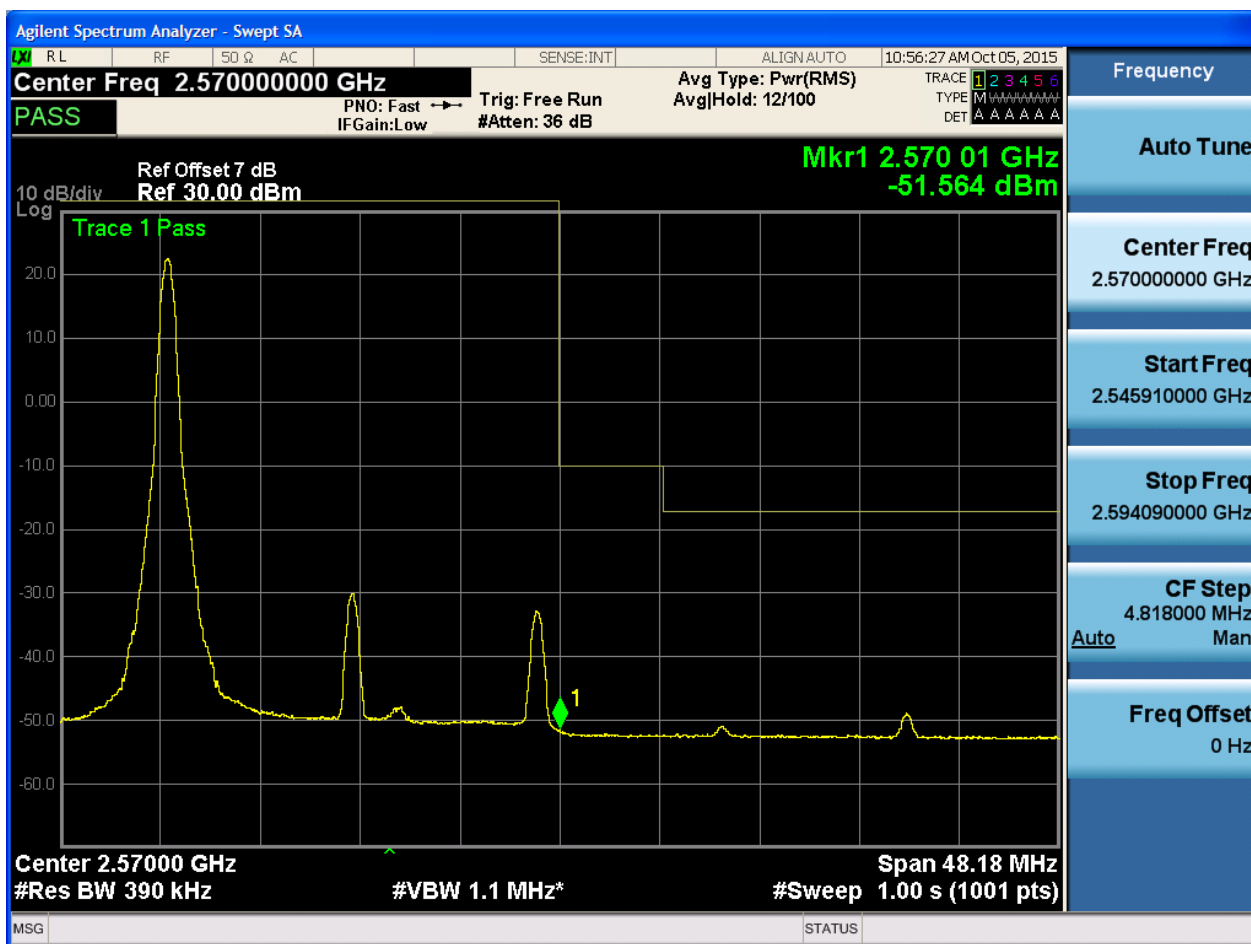


5.1.1.1.4.1.4 Test RB = RB100#0



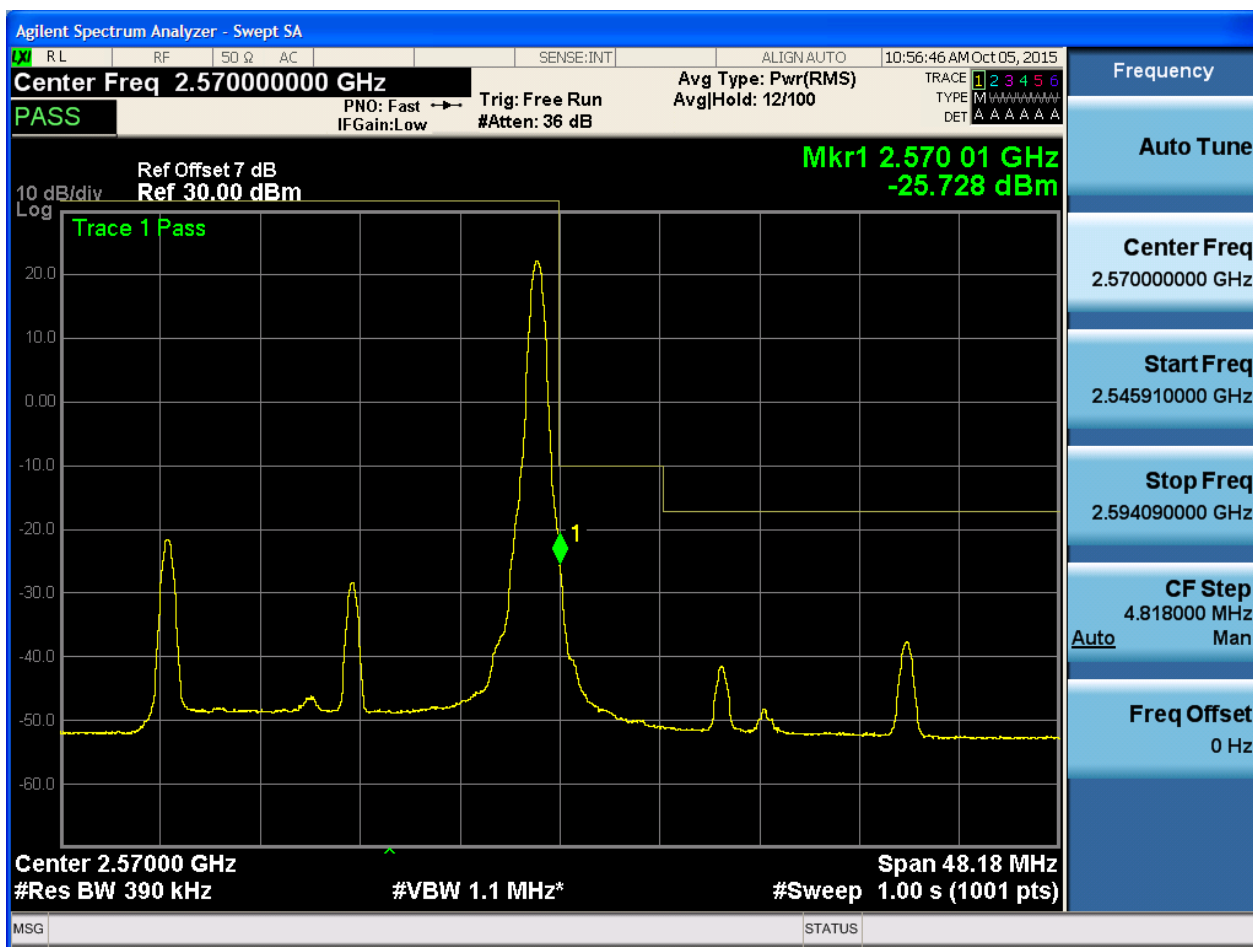
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0





5.1.1.1.4.2.2 Test RB = RB1#99





5.1.1.1.4.2.3 Test RB = RB50#25





5.1.1.1.4.2.4 Test RB = RB100#0



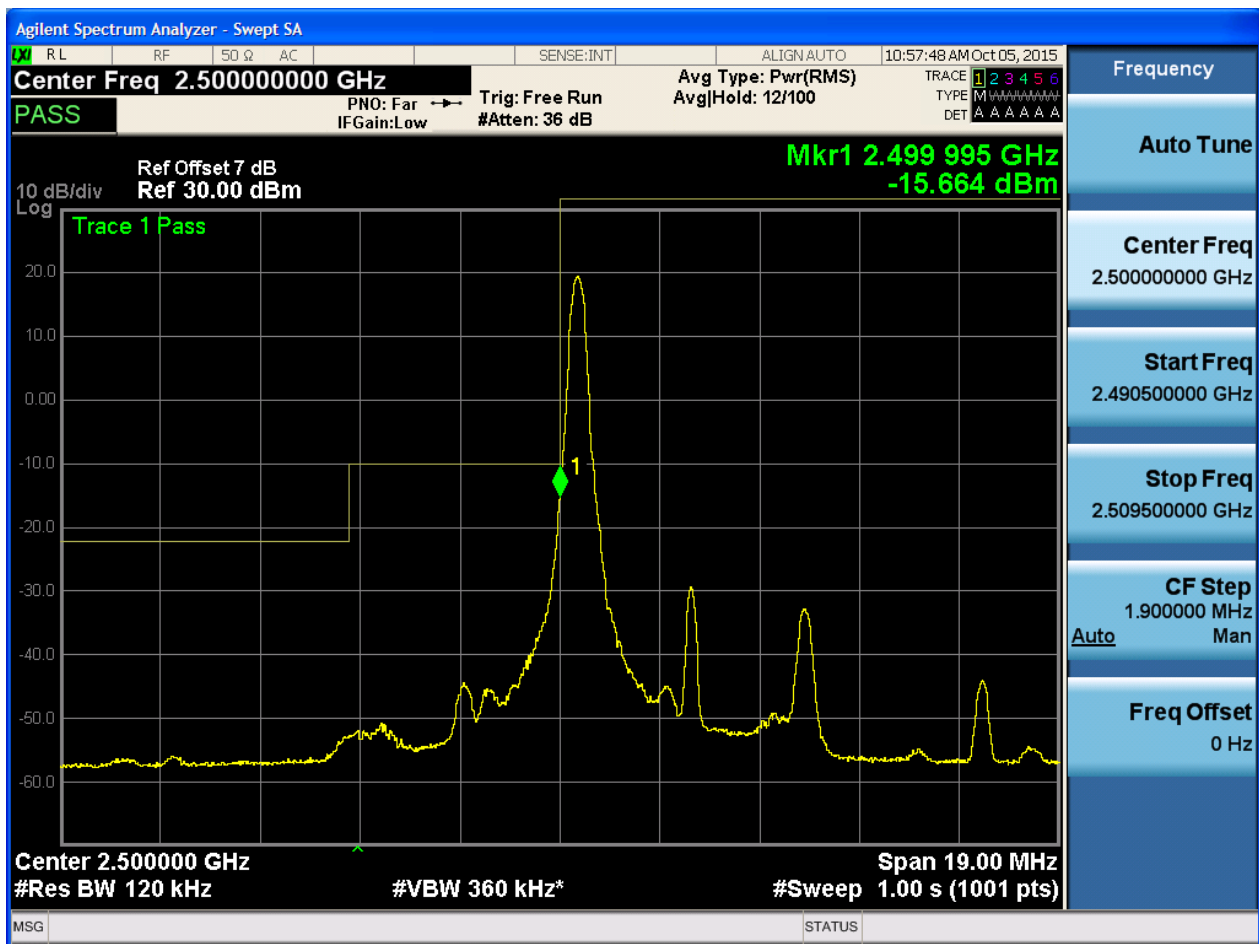


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 5

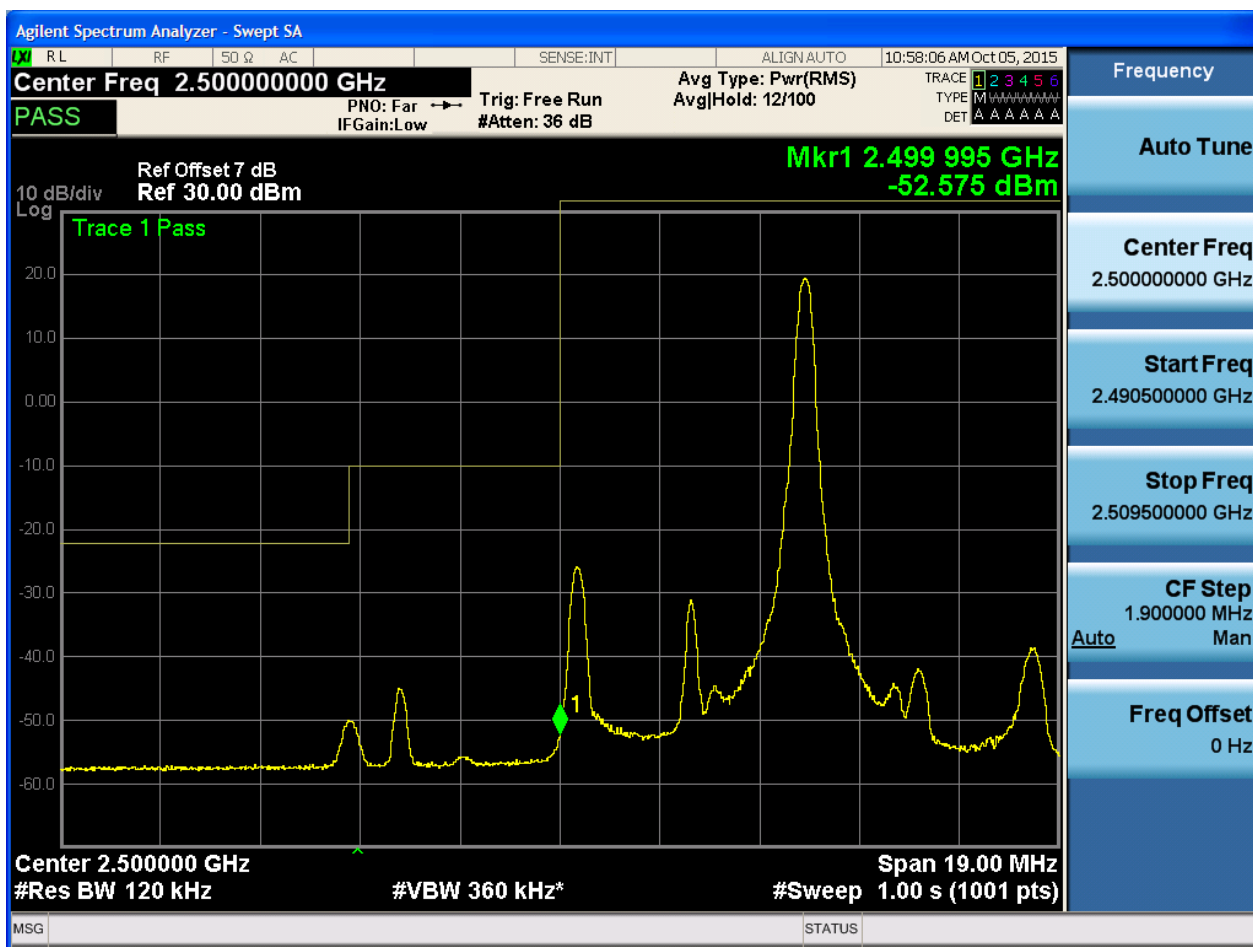
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0



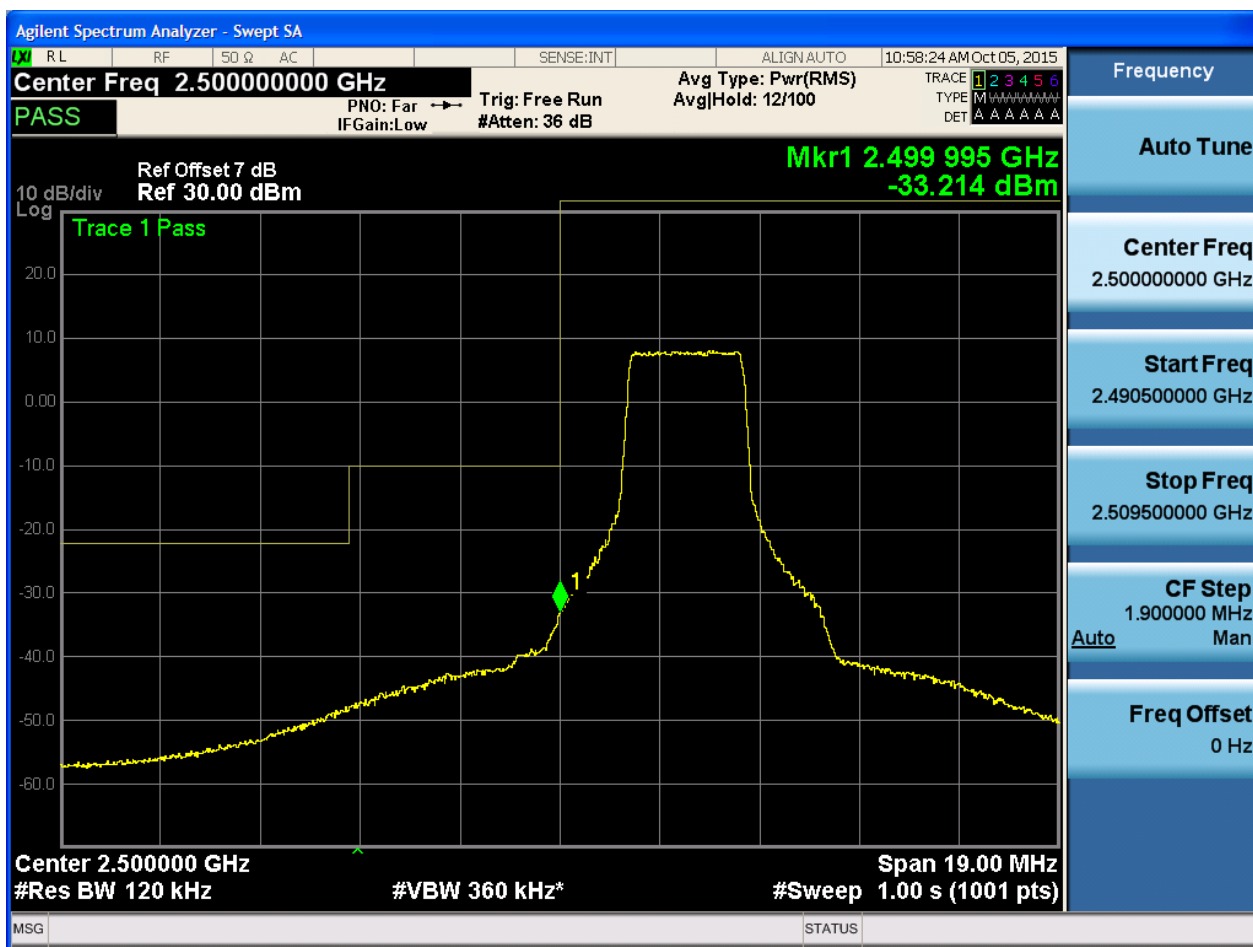


5.1.1.2.1.1.2 Test RB = RB1#24



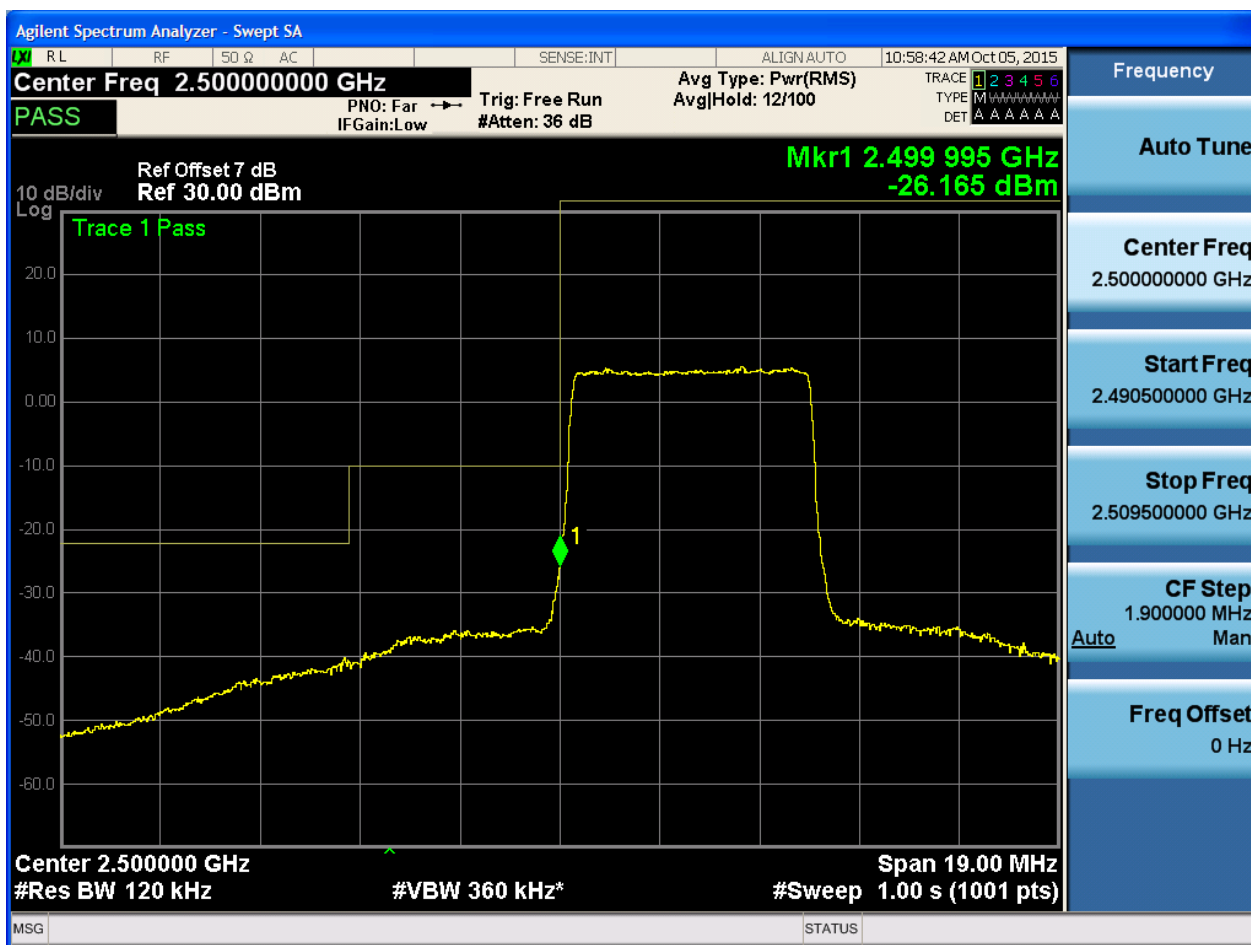


5.1.1.2.1.1.3 Test RB = RB12#6



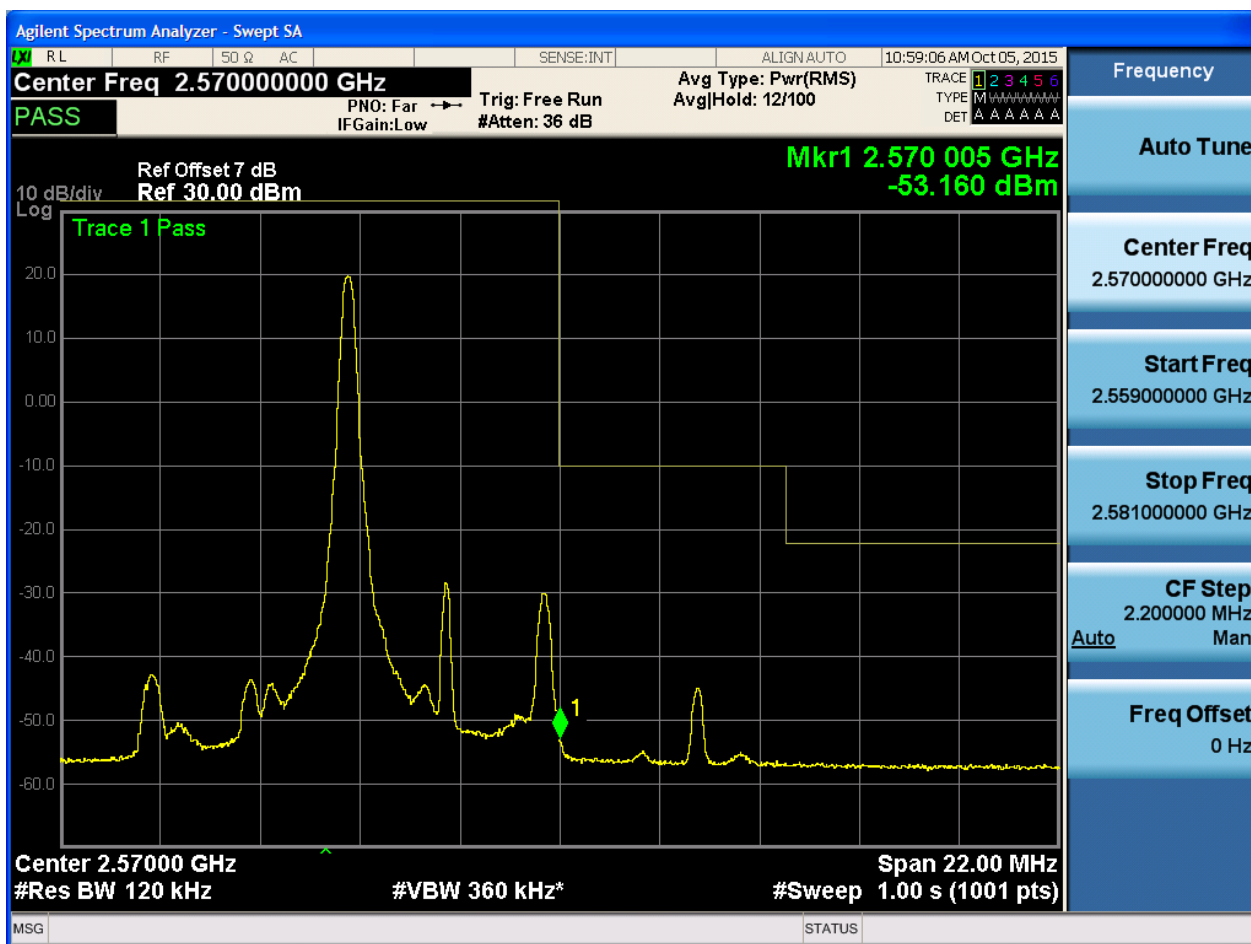


5.1.1.2.1.1.4 Test RB = RB25#0



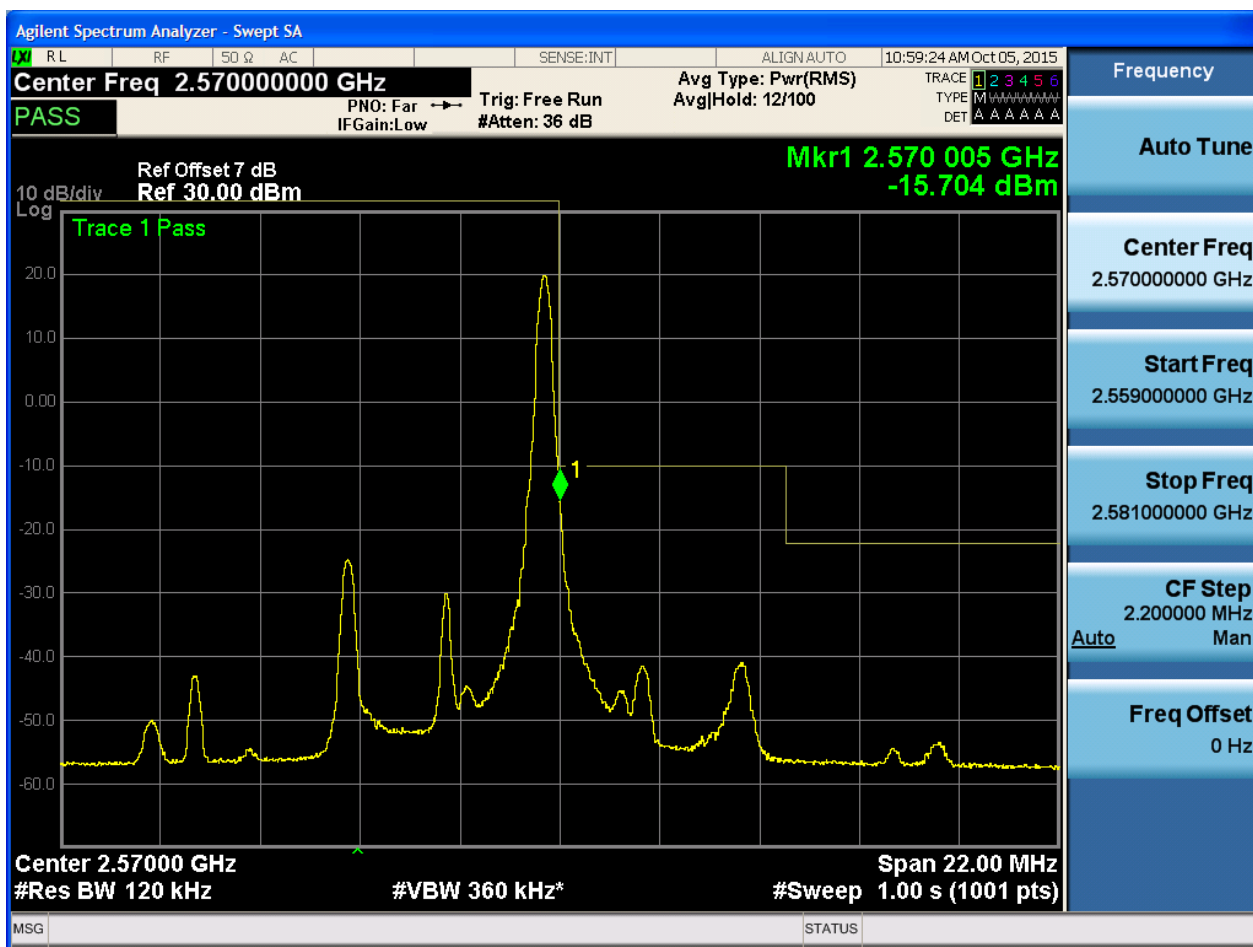
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





5.1.1.2.1.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.57000000 GHz

PASS

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Trace 1 Pass

Mkr1 2.570 005 GHz
-32.888 dBm

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

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.559000000 GHz

Stop Freq
2.581000000 GHz

CF Step
2.200000 MHz
Man

Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 2.57000000 GHz

Ref Offset 7 dB
Ref 30.00 dBm

Trace 1 Pass

Mkr1 2.570 005 GHz
-24.965 dBm

Center 2.57000 GHz
#Res BW 120 kHz
#VBW 360 kHz*

Span 22.00 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.559000000 GHz

Stop Freq
2.581000000 GHz

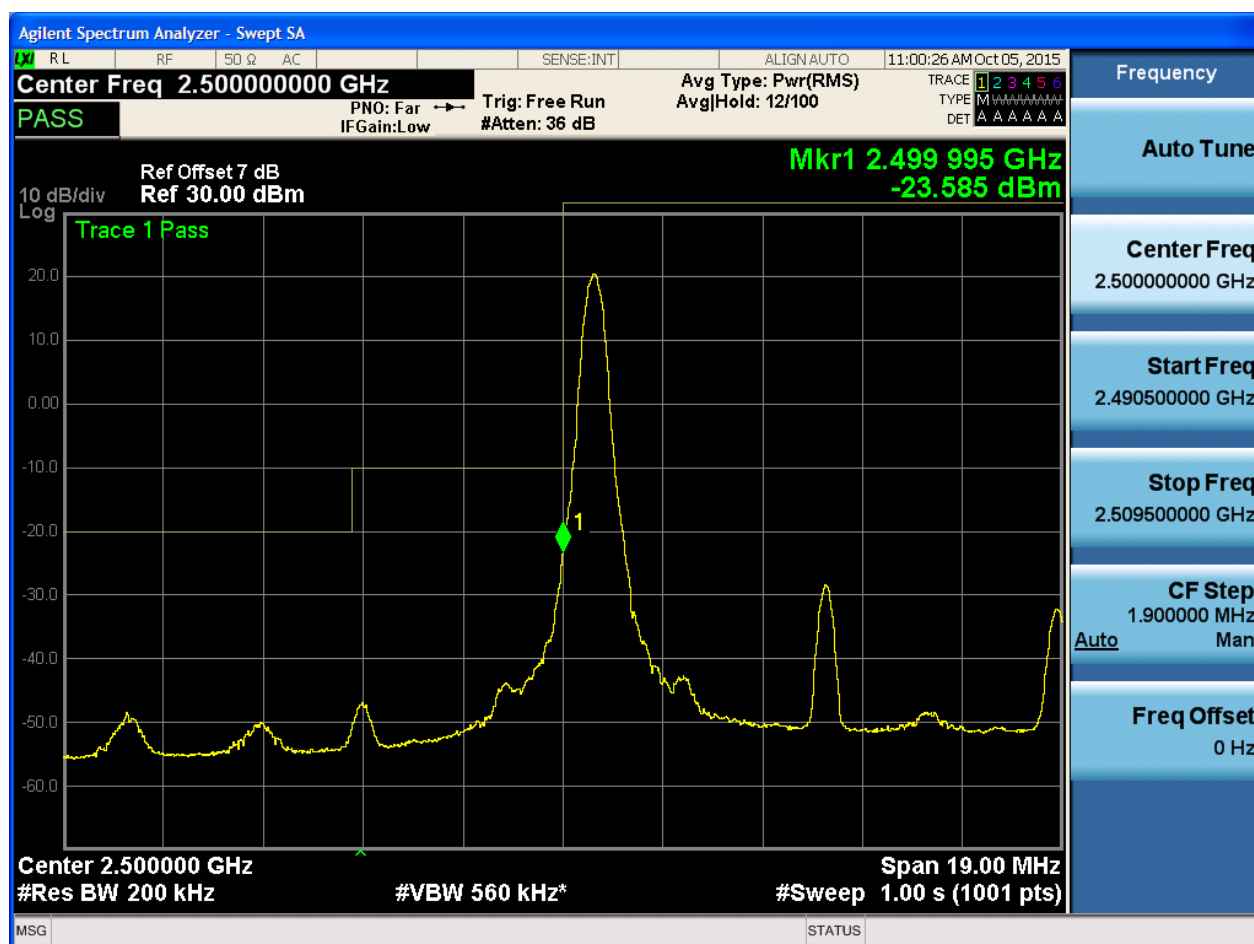
CF Step
2.200000 MHz
Man

Freq Offset
0 Hz

5.1.1.2.2 Test Bandwidth = 10

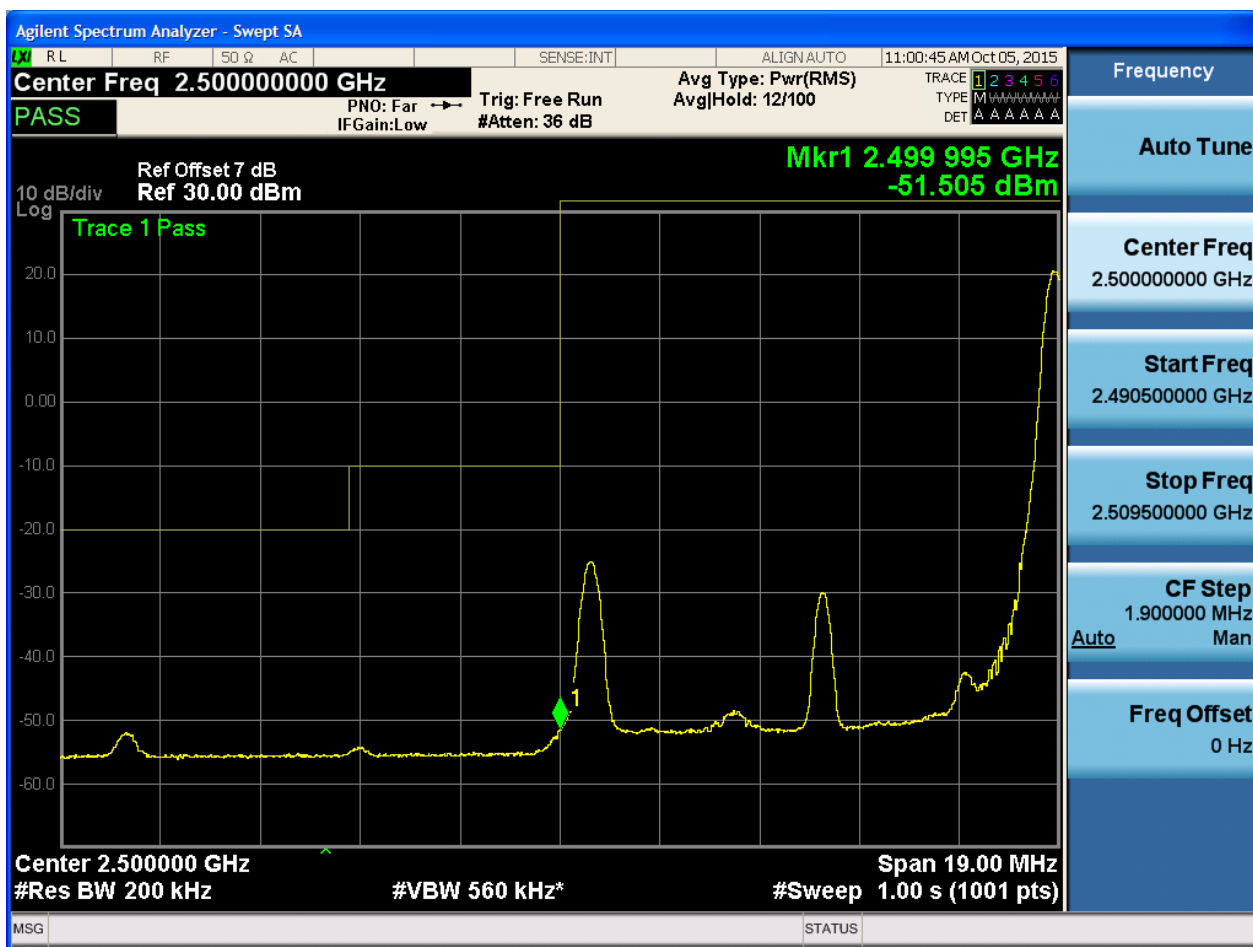
5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0



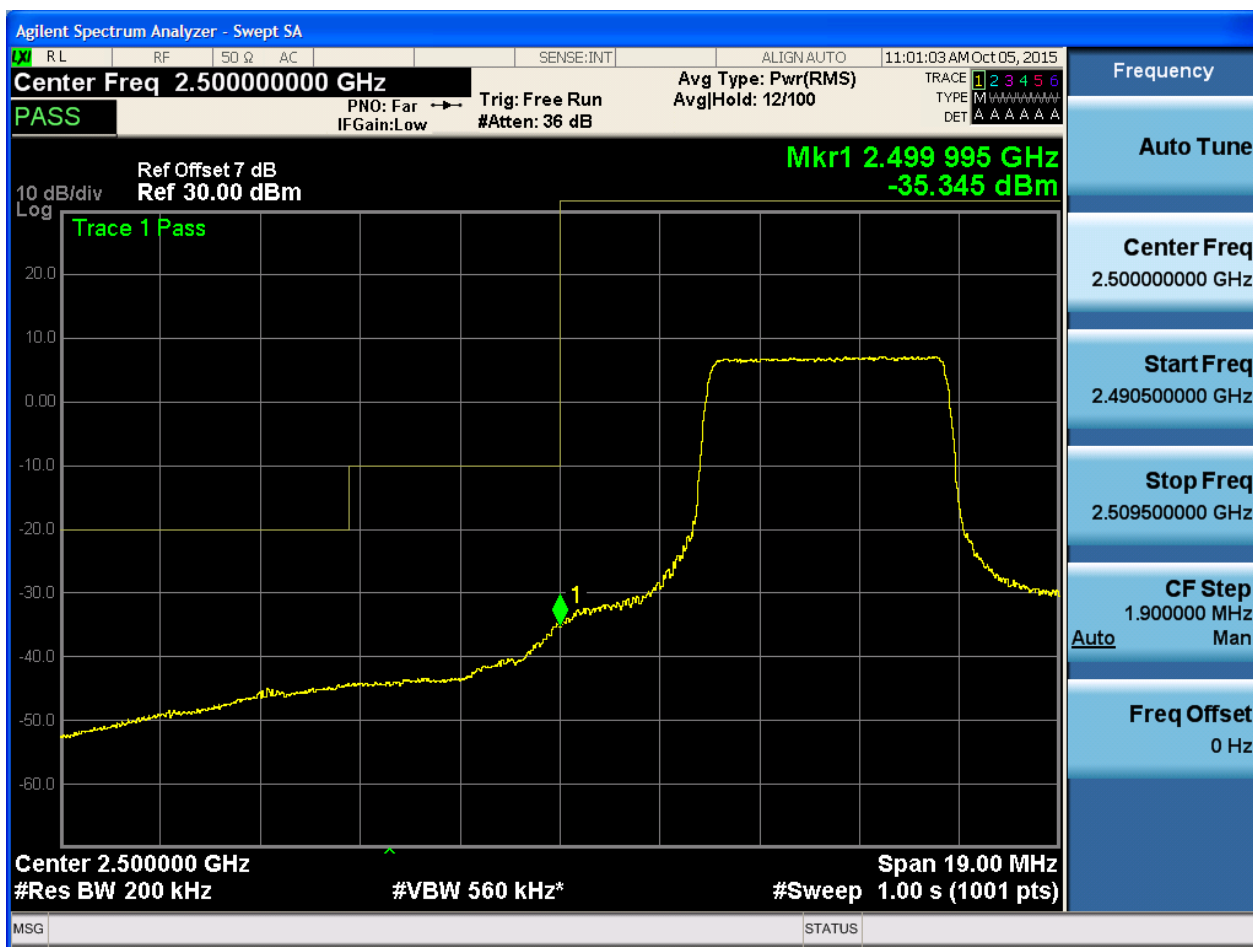


5.1.1.2.2.1.2 Test RB = RB1#49





5.1.1.2.2.1.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 11:01:21 AM Oct 05, 2015

Center Freq 2.50000000 GHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5 6
PASS PNO: Far Trig: Free Run Avg|Hold: 11/100 TYPE M W W W W W W W
IFGain:Low #Atten: 36 dB DET A A A A A A

Ref Offset 7 dB Mkr1 2.499 995 GHz
Ref 30.00 dBm -29.693 dBm

10 dB/div Log

Trace 1 Pass

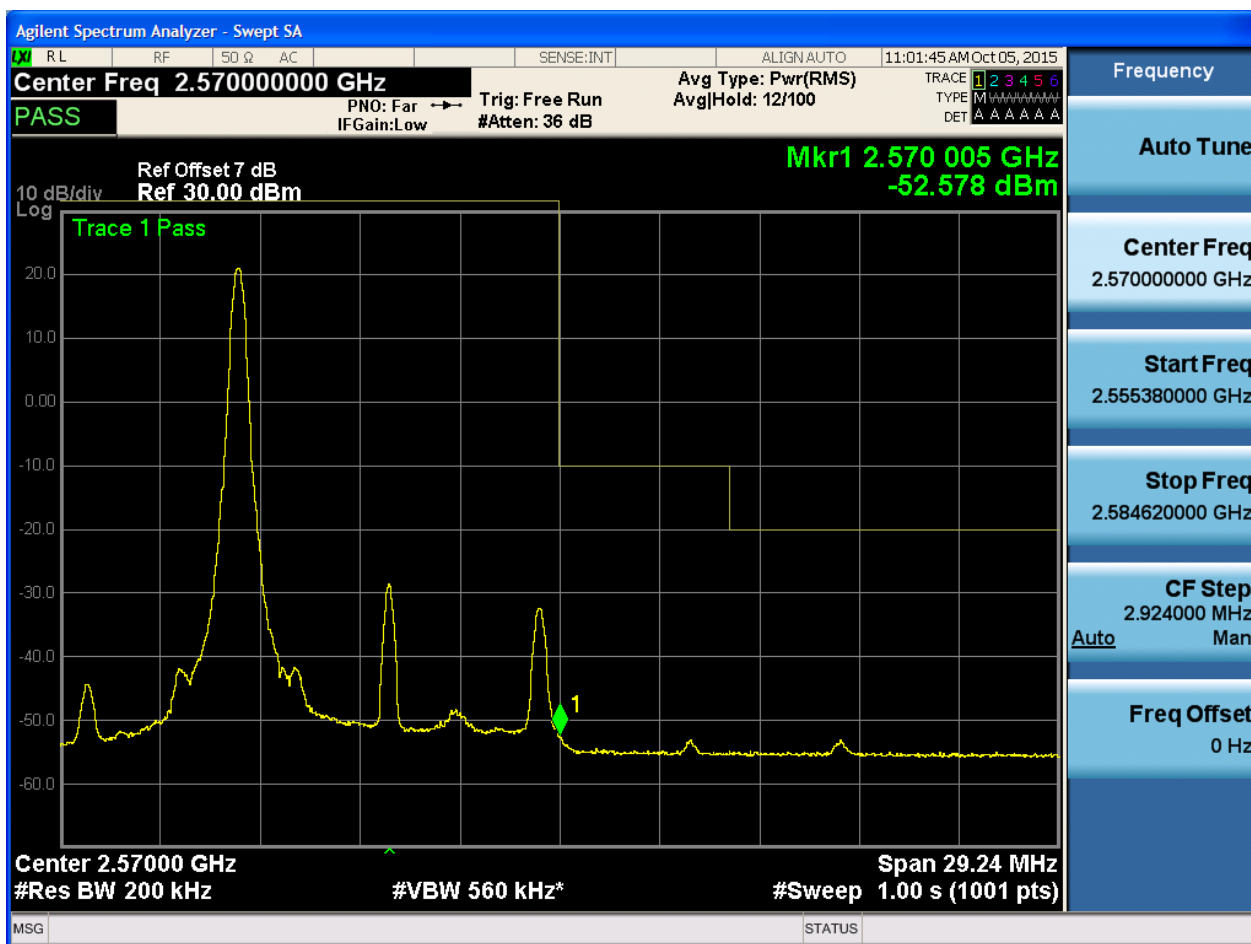
Center 2.500000 GHz Span 19.00 MHz
#Res BW 200 kHz #VBW 560 kHz* #Sweep 1.00 s (1001 pts)

MSG Alignment Completed STATUS



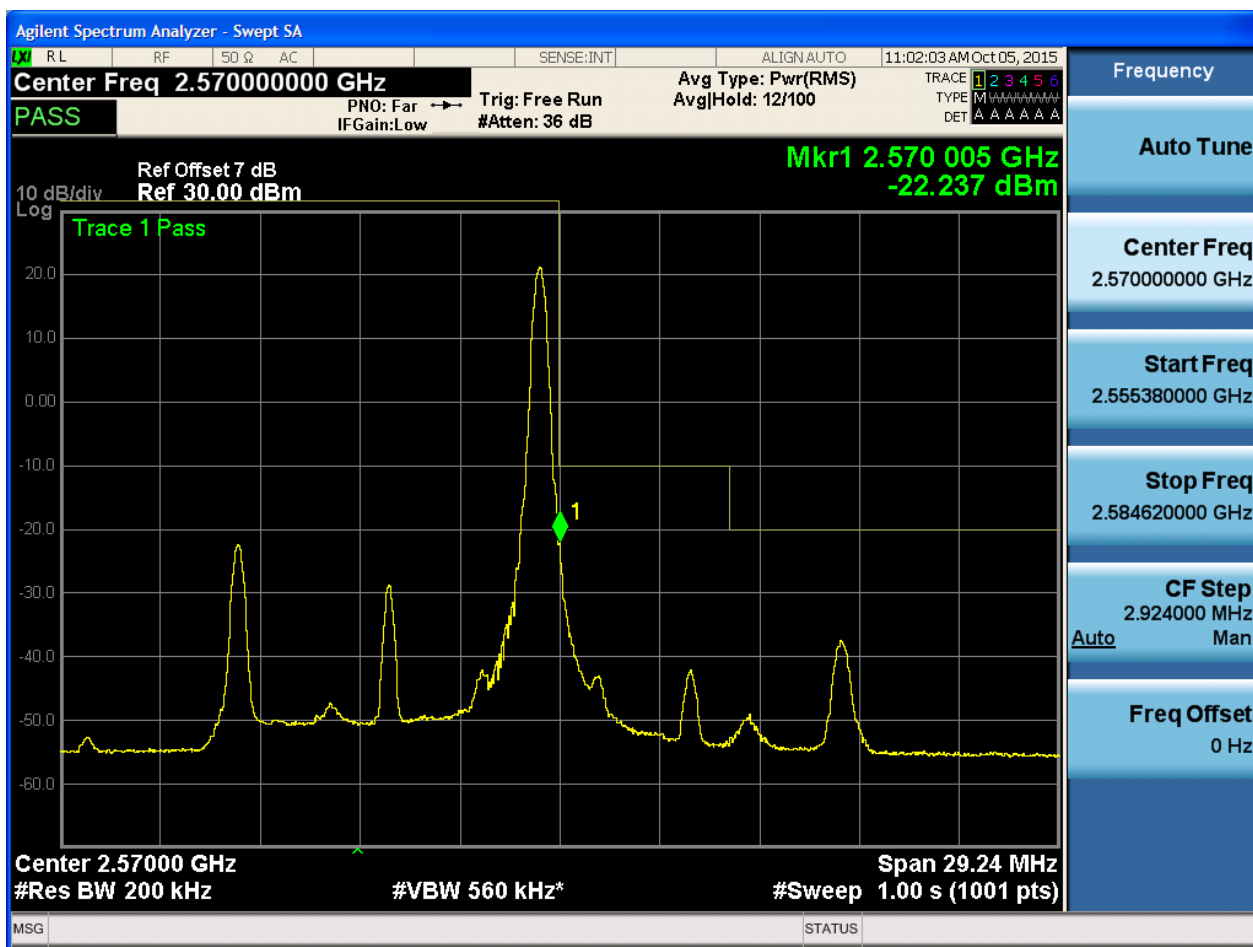
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0



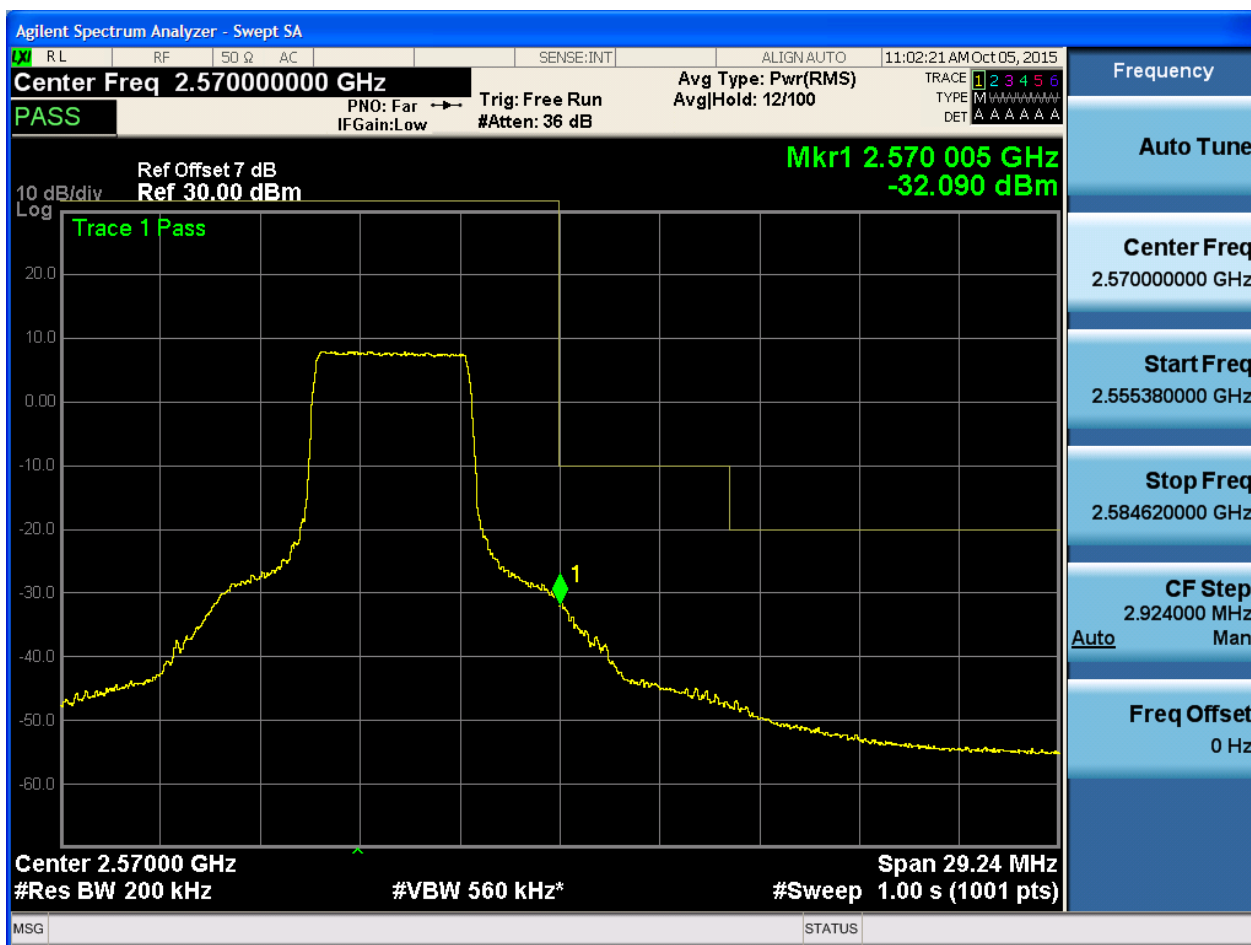


5.1.1.2.2.2 Test RB = RB1#49





5.1.1.2.2.3 Test RB = RB25#13





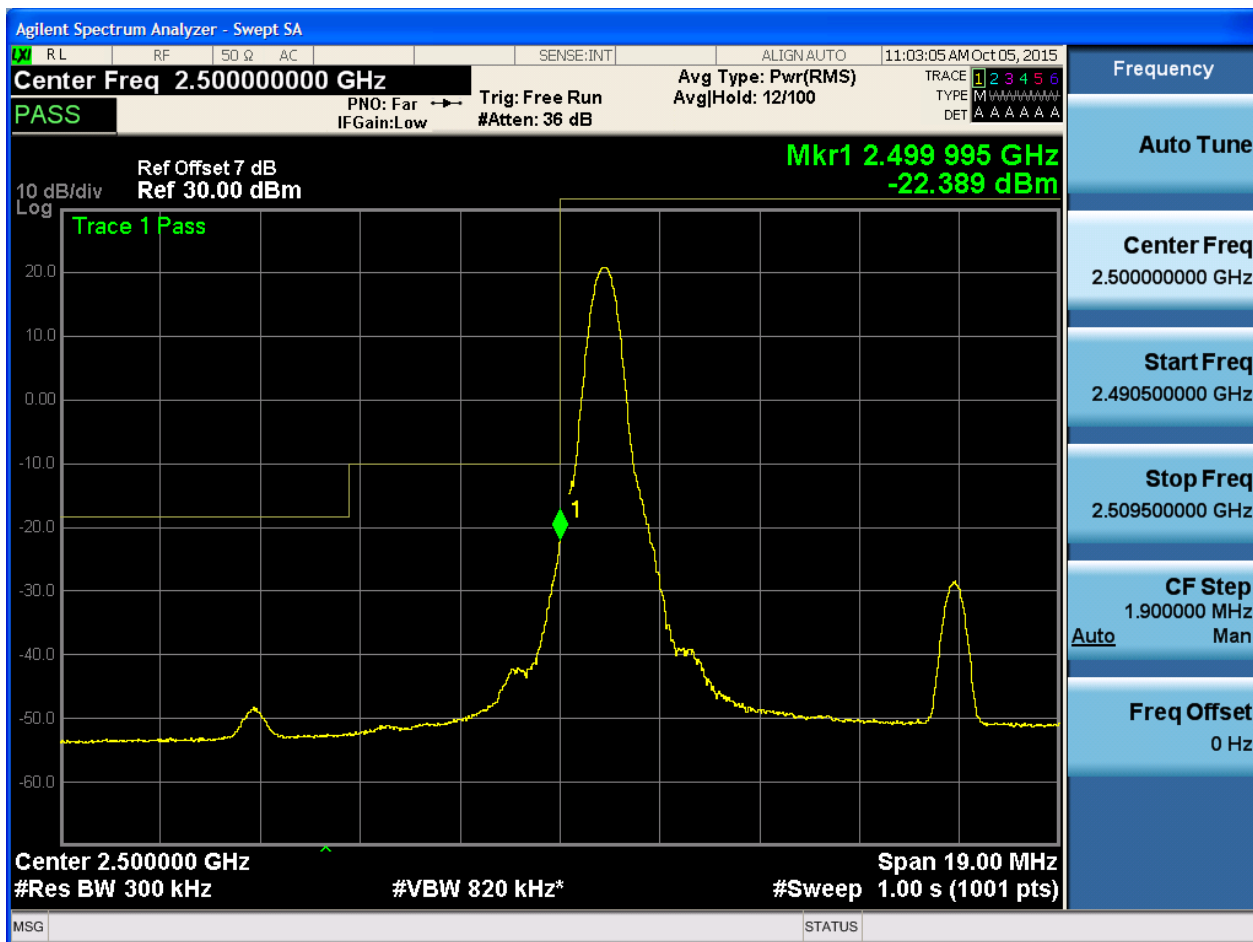
5.1.1.2.2.4 Test RB = RB50#0



5.1.1.2.3 Test Bandwidth = 15

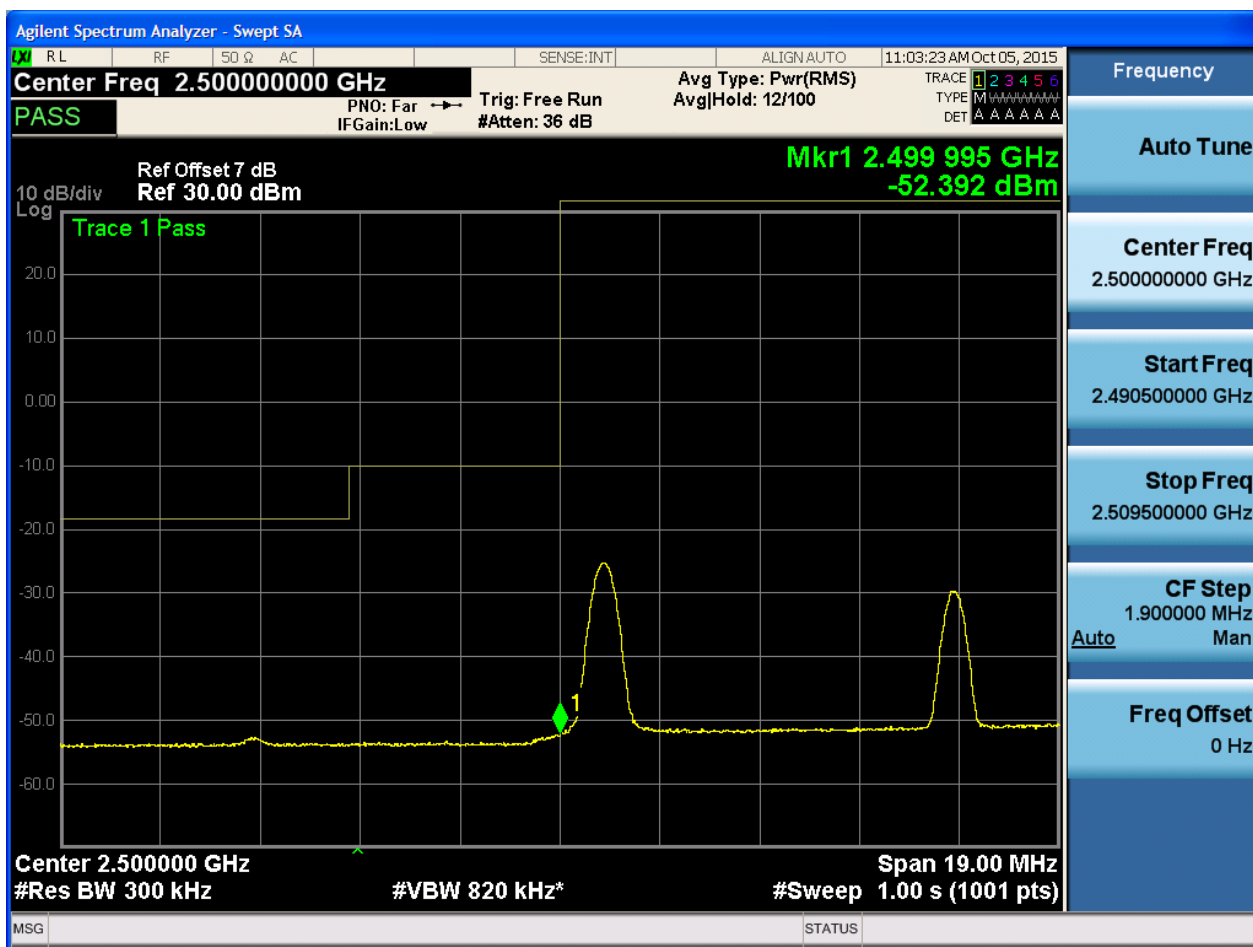
5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





5.1.1.2.3.1.2 Test RB = RB1#74





5.1.1.2.3.1.3 Test RB = RB36#18



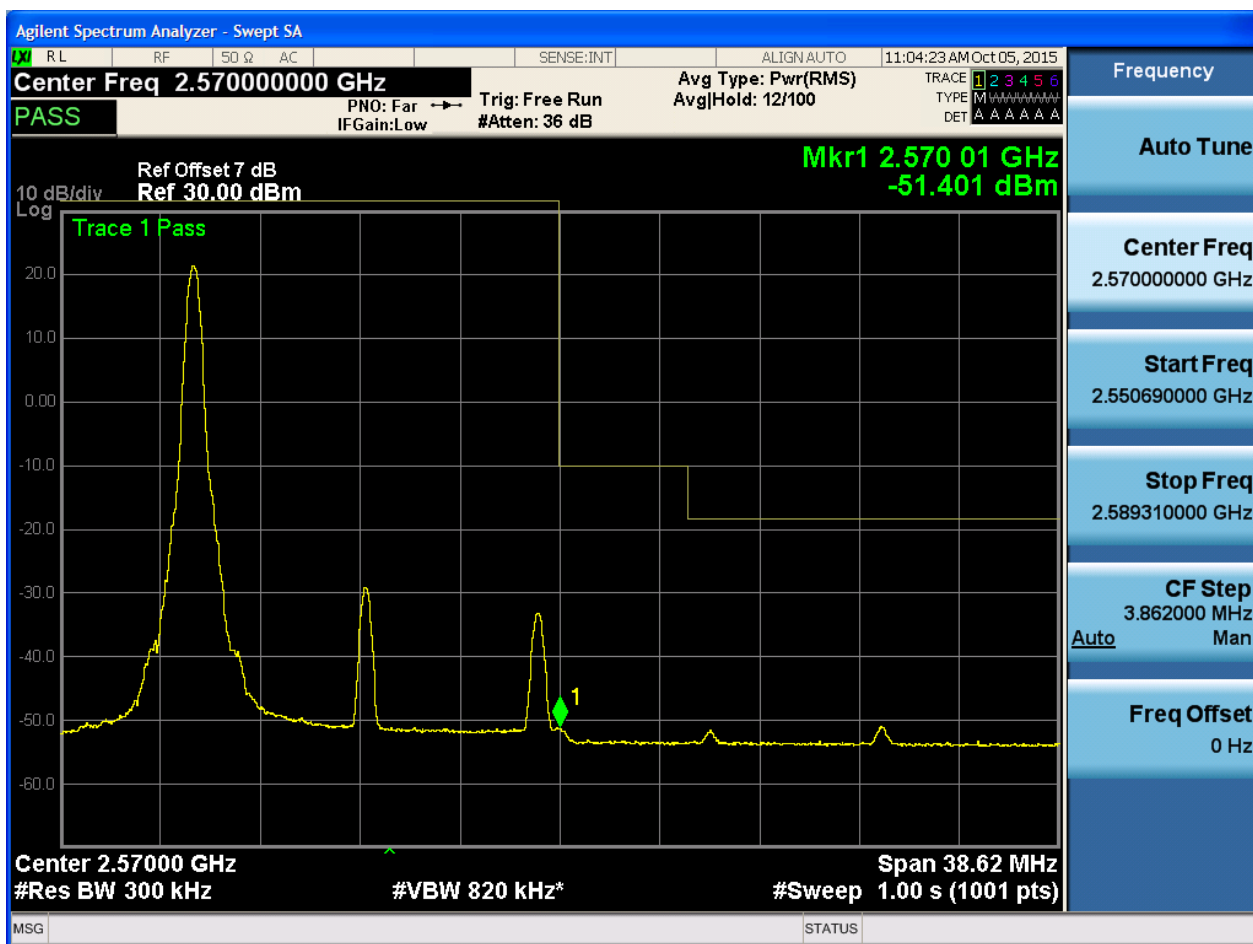


5.1.1.2.3.1.4 Test RB = RB75#0



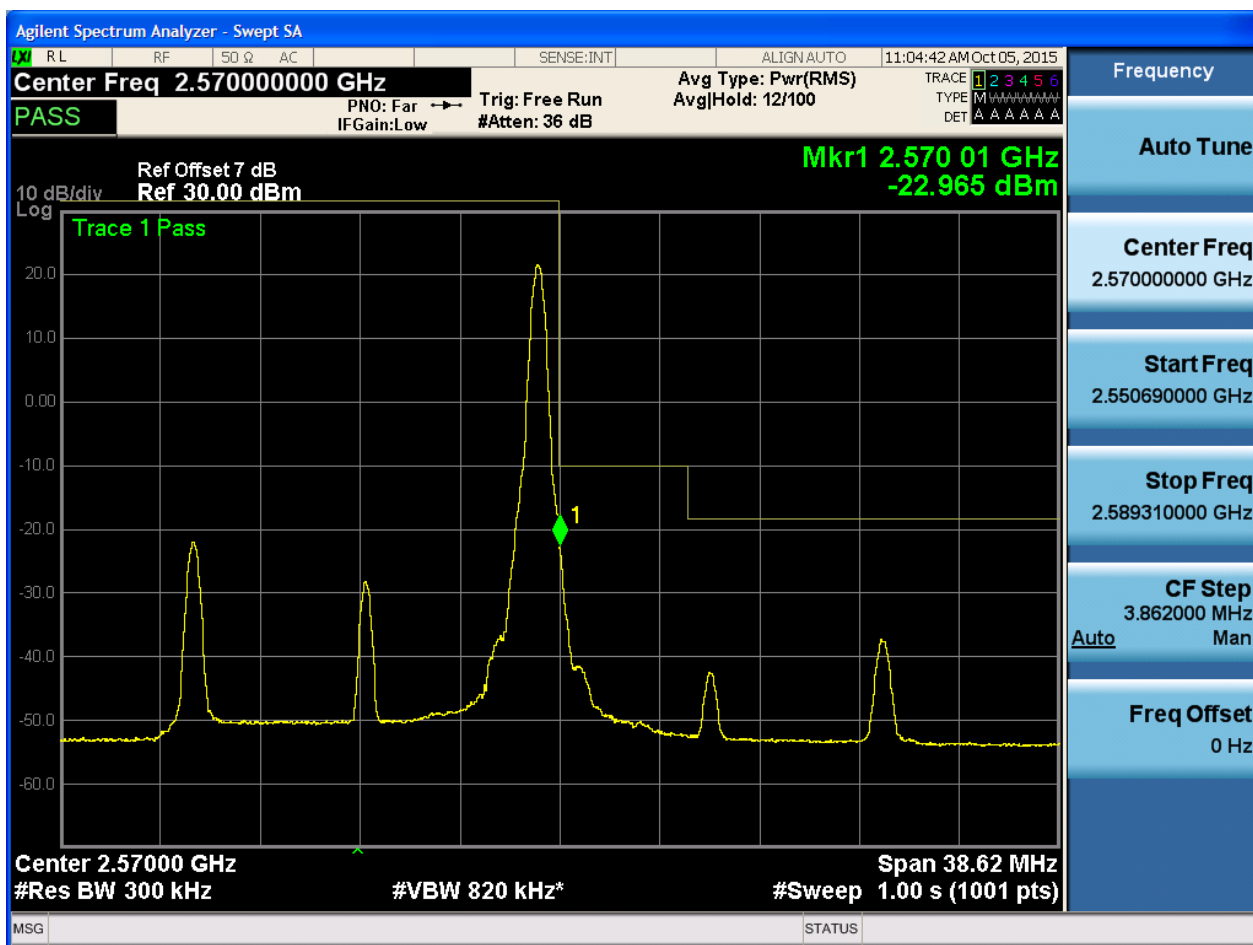
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#74





5.1.1.2.3.2.3 Test RB = RB36#18





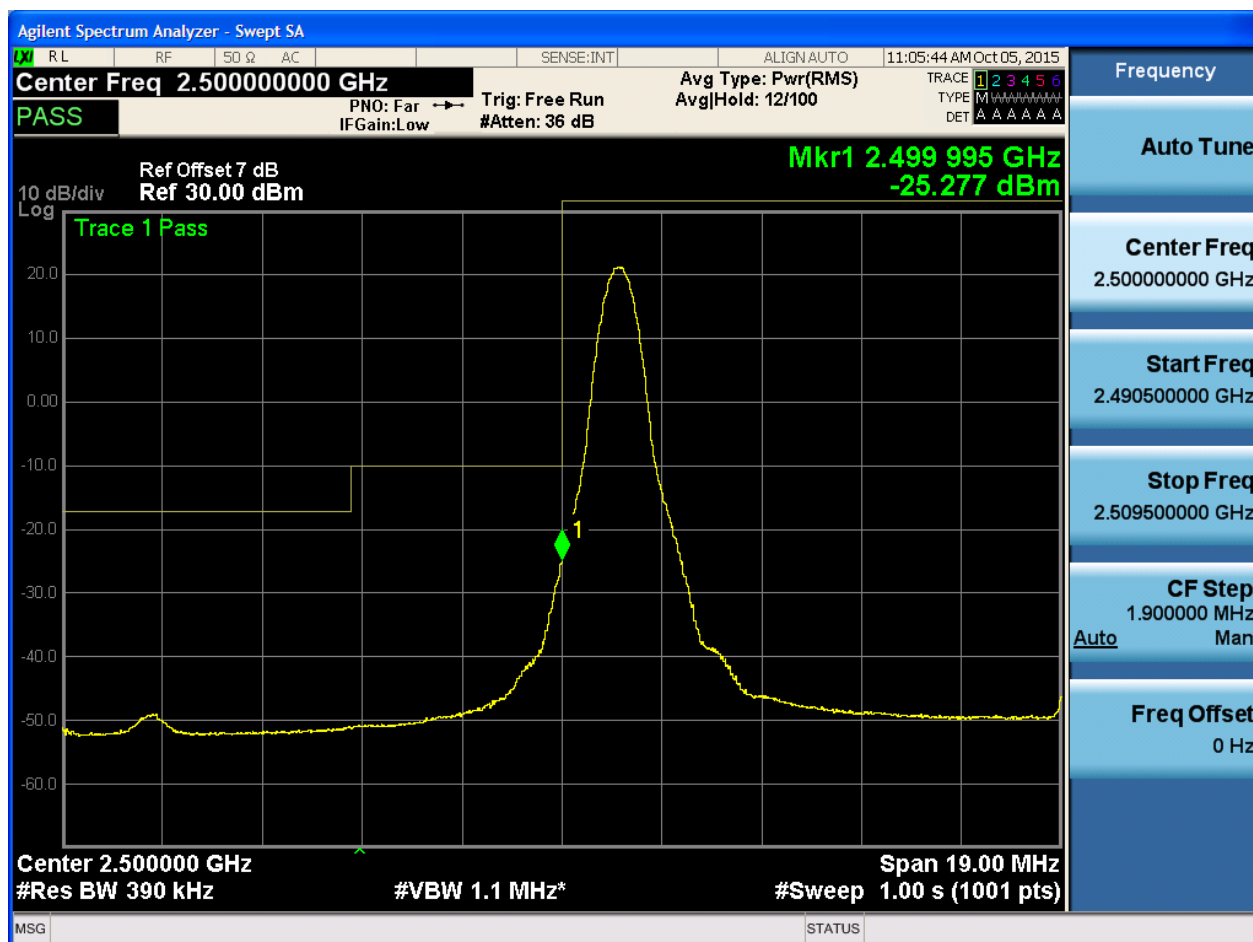
5.1.1.2.3.2.4 Test RB = RB75#0



5.1.1.2.4 Test Bandwidth = 20

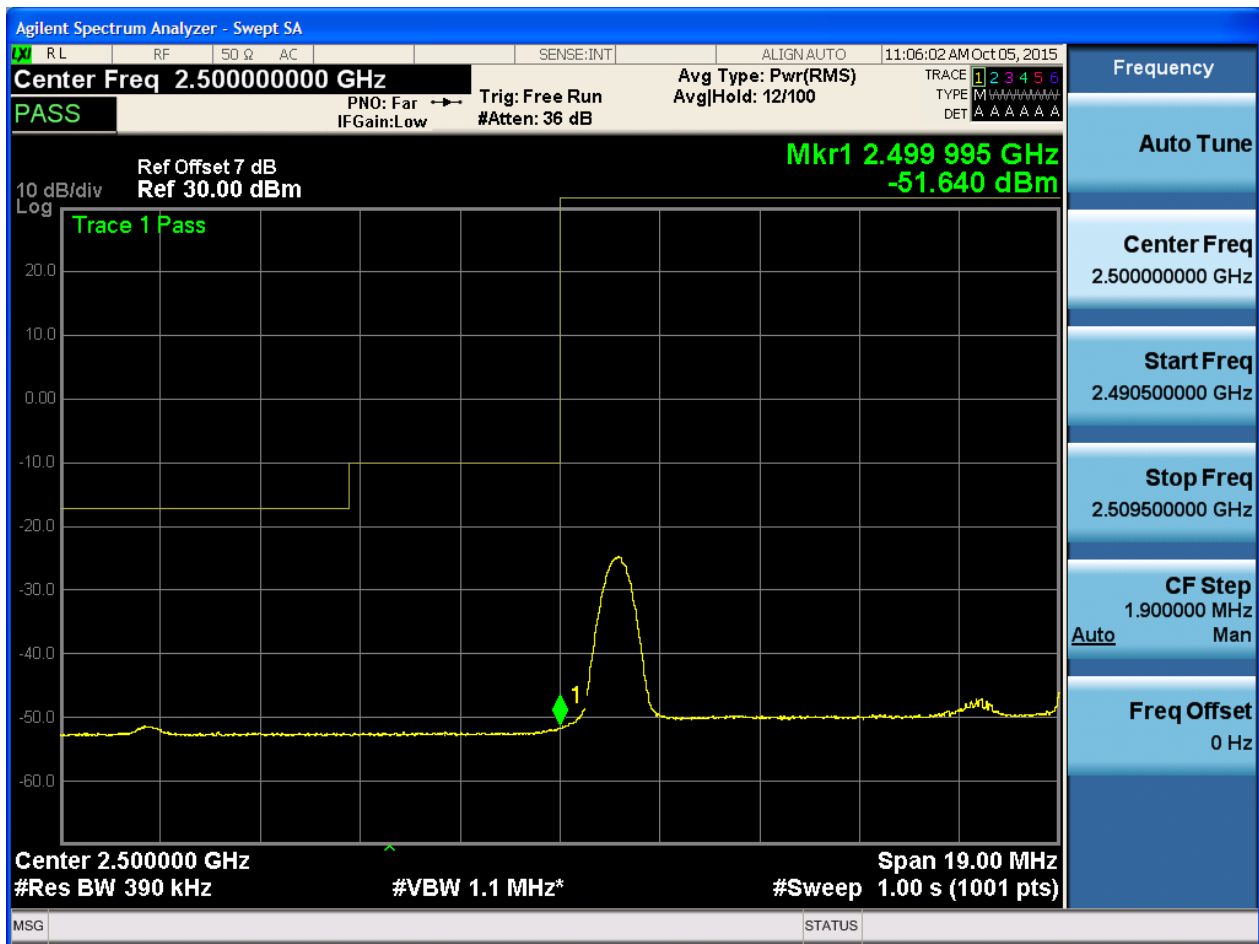
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



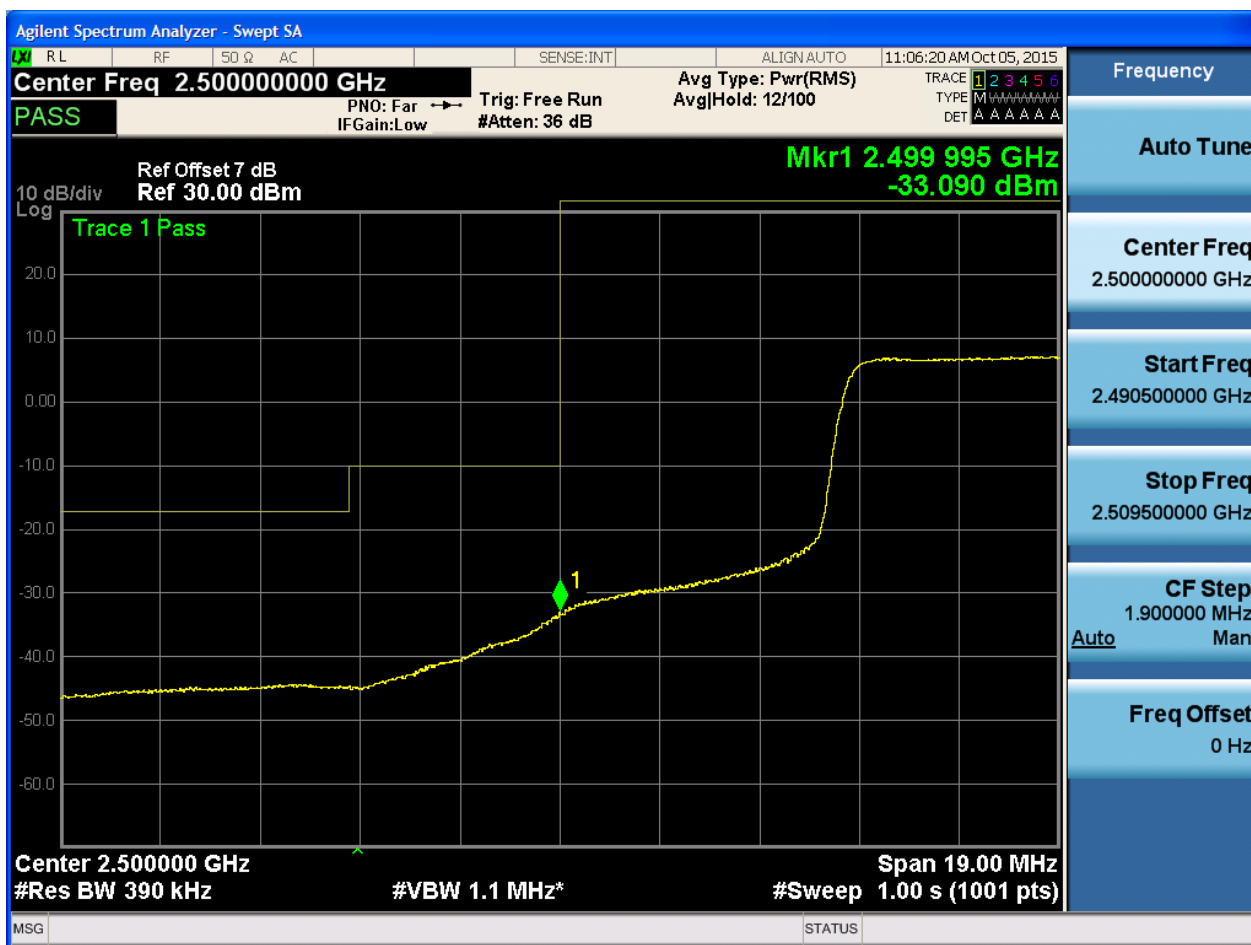


5.1.1.2.4.1.2 Test RB = RB1#99





5.1.1.2.4.1.3 Test RB = RB50#25





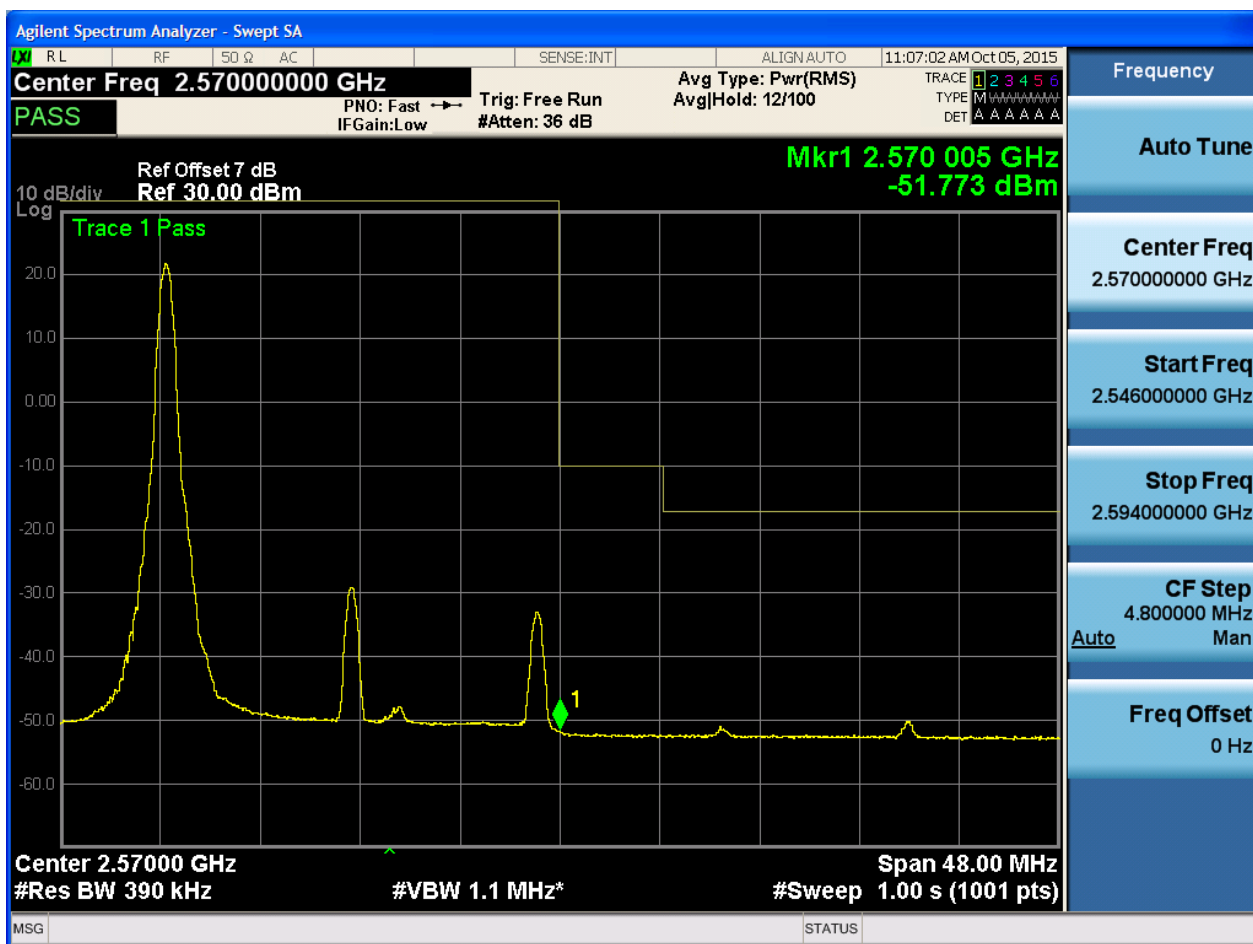
5.1.1.2.4.1.4 Test RB = RB100#0





5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.57000000 GHz

Ref Offset 7 dB
Ref 30.00 dBm

Mkr1 2.570 005 GHz
-25.420 dBm

Trace 1 Pass

Center 2.57000 GHz
#Res BW 390 kHz
#VBW 1.1 MHz*

Span 48.00 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.546000000 GHz

Stop Freq
2.594000000 GHz

CF Step
4.800000 MHz
Man

Freq Offset
0 Hz

MSG Alignment Completed

STATUS

The screenshot displays a spectrum analyzer interface. The main plot shows a swept spectrum with a prominent peak at 2.570005 GHz, marked with a green diamond and labeled '1'. The y-axis is labeled '10 dB/div Log' and ranges from -60.0 to 20.0. The x-axis represents frequency. The top status bar includes various settings: 'Center Freq 2.57000000 GHz', 'Ref Offset 7 dB', 'Ref 30.00 dBm', 'Mkr1 2.570 005 GHz -25.420 dBm', 'Trace 1 Pass', 'Center 2.57000 GHz', '#Res BW 390 kHz', '#VBW 1.1 MHz*', 'Span 48.00 MHz', and '#Sweep 1.00 s (1001 pts)'. The right sidebar contains a 'Frequency' section with 'Auto Tune', 'Center Freq 2.57000000 GHz', 'Start Freq 2.546000000 GHz', 'Stop Freq 2.594000000 GHz', 'CF Step 4.800000 MHz Man', and 'Freq Offset 0 Hz'. The bottom status bar shows 'MSG Alignment Completed' and 'STATUS'.



Agilent Spectrum Analyzer - Swept SA

Center Freq 2.57000000 GHz

Ref Offset 7 dB
Ref 30.00 dBm

Trace 1 Pass

Mkr1 2.570 005 GHz
-28.301 dBm

Center 2.57000 GHz
#Res BW 390 kHz
#VBW 1.1 MHz*

Span 48.00 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.546000000 GHz

Stop Freq
2.594000000 GHz

CF Step
4.800000 MHz
Man

Freq Offset
0 Hz



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

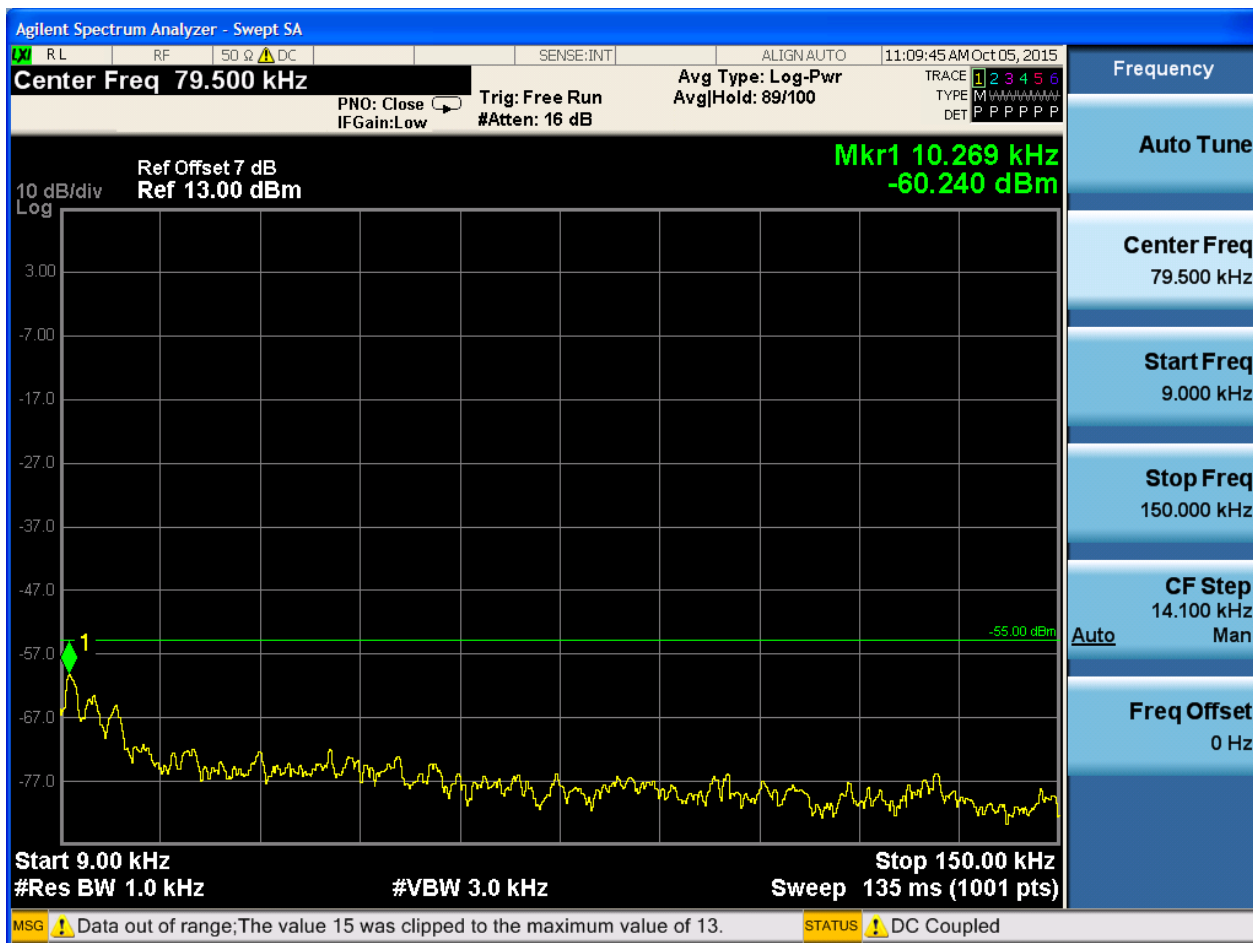
6.1.1 Test Band = BAND7

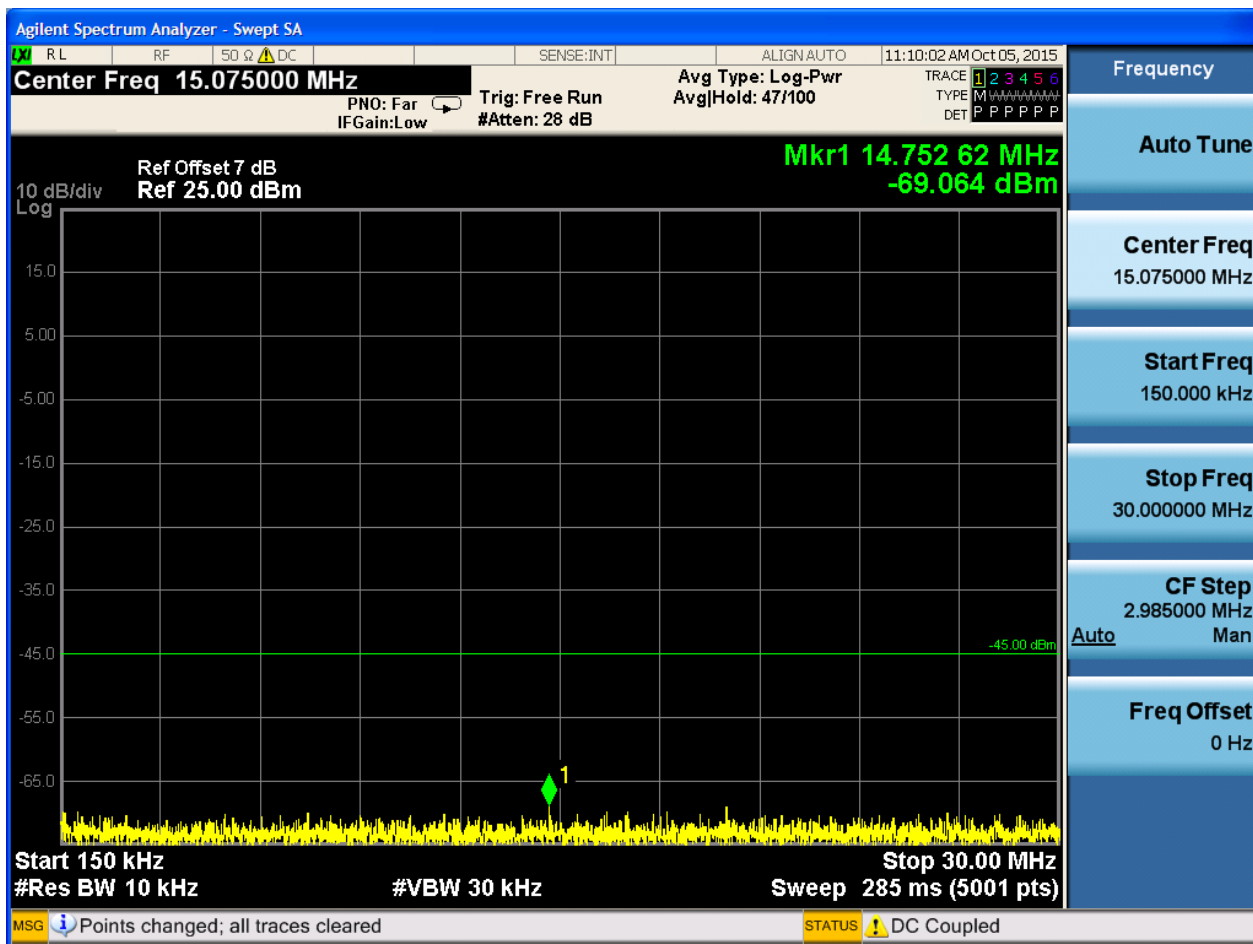
6.1.1.1 Test Mode = LTE/TM1

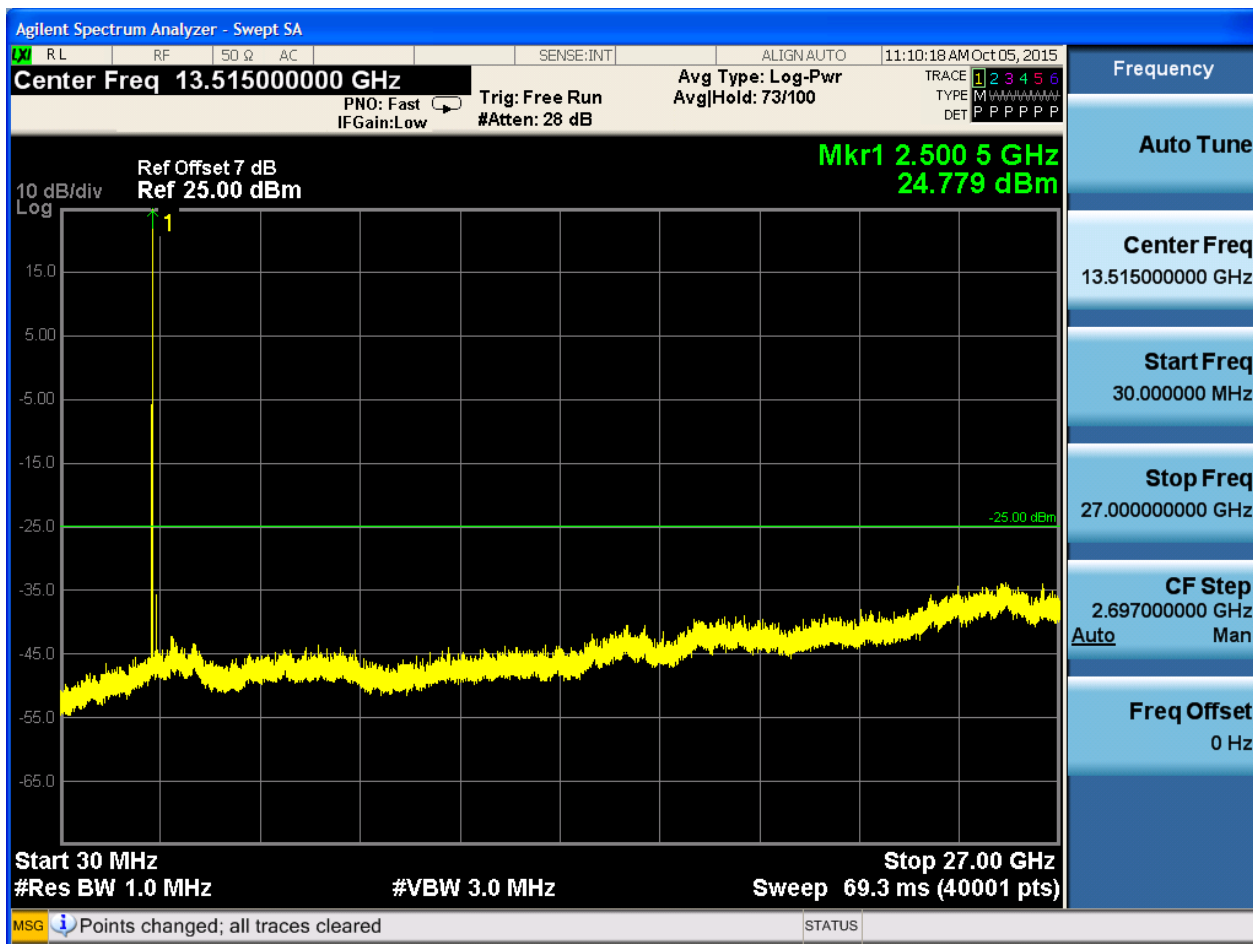
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

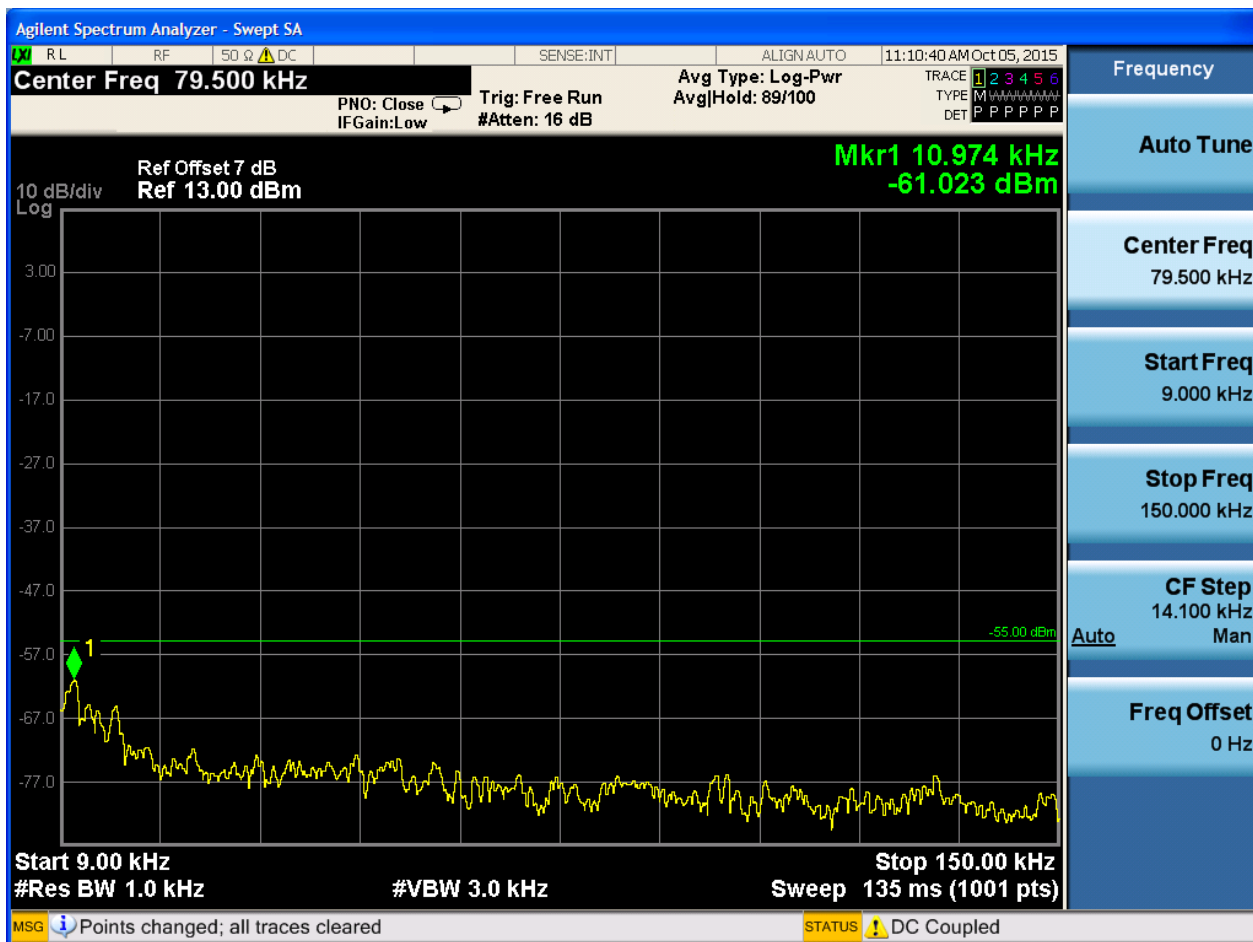


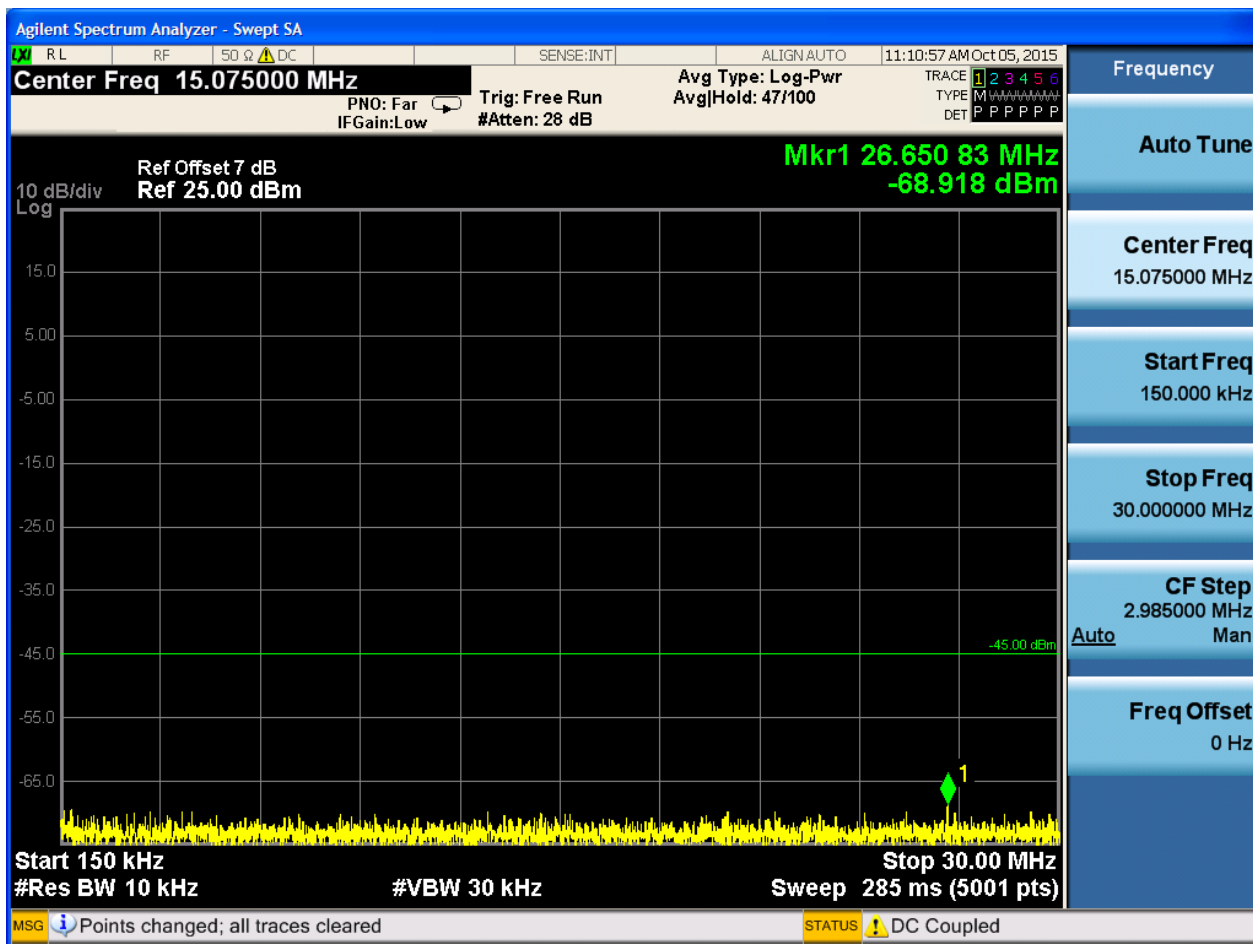


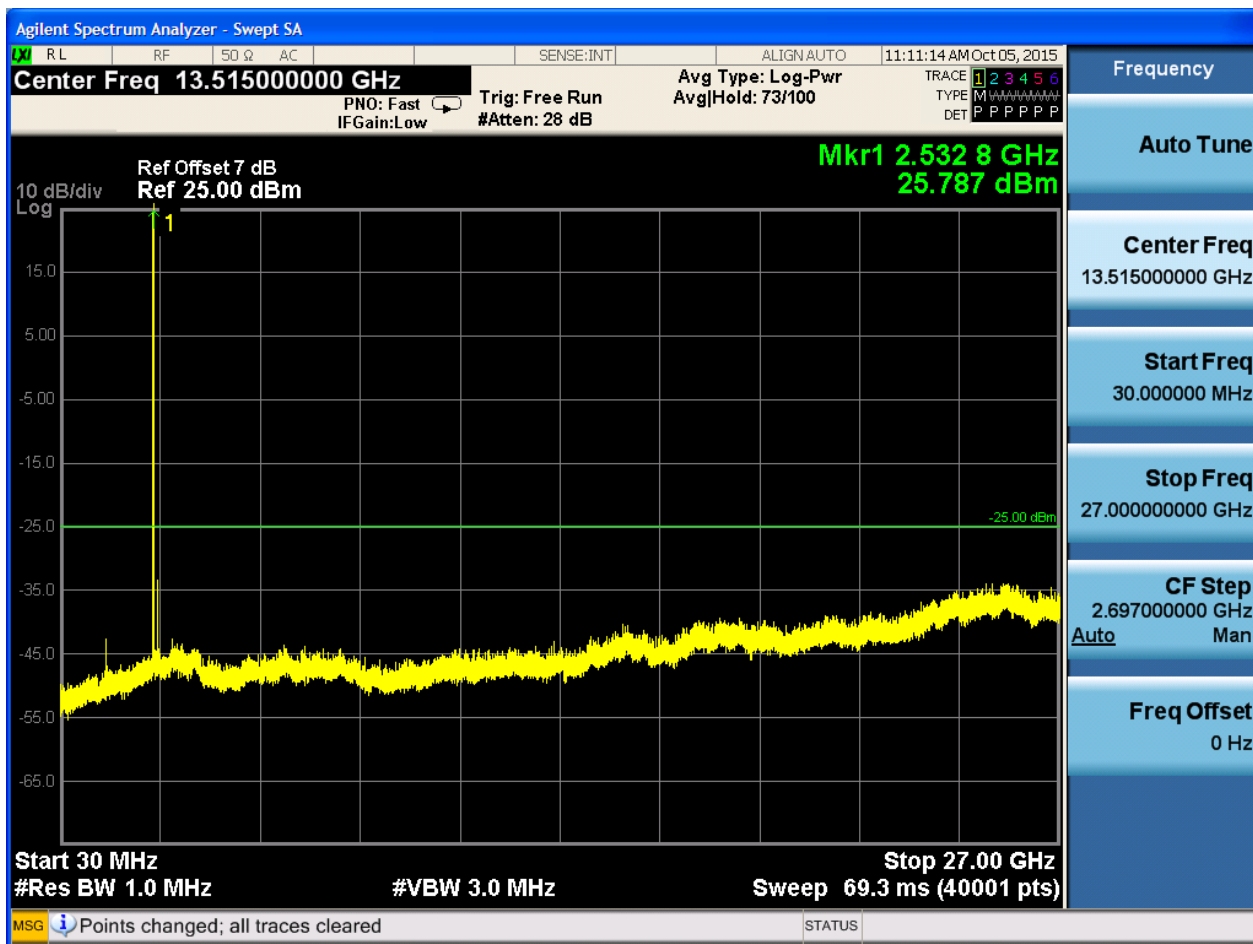


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

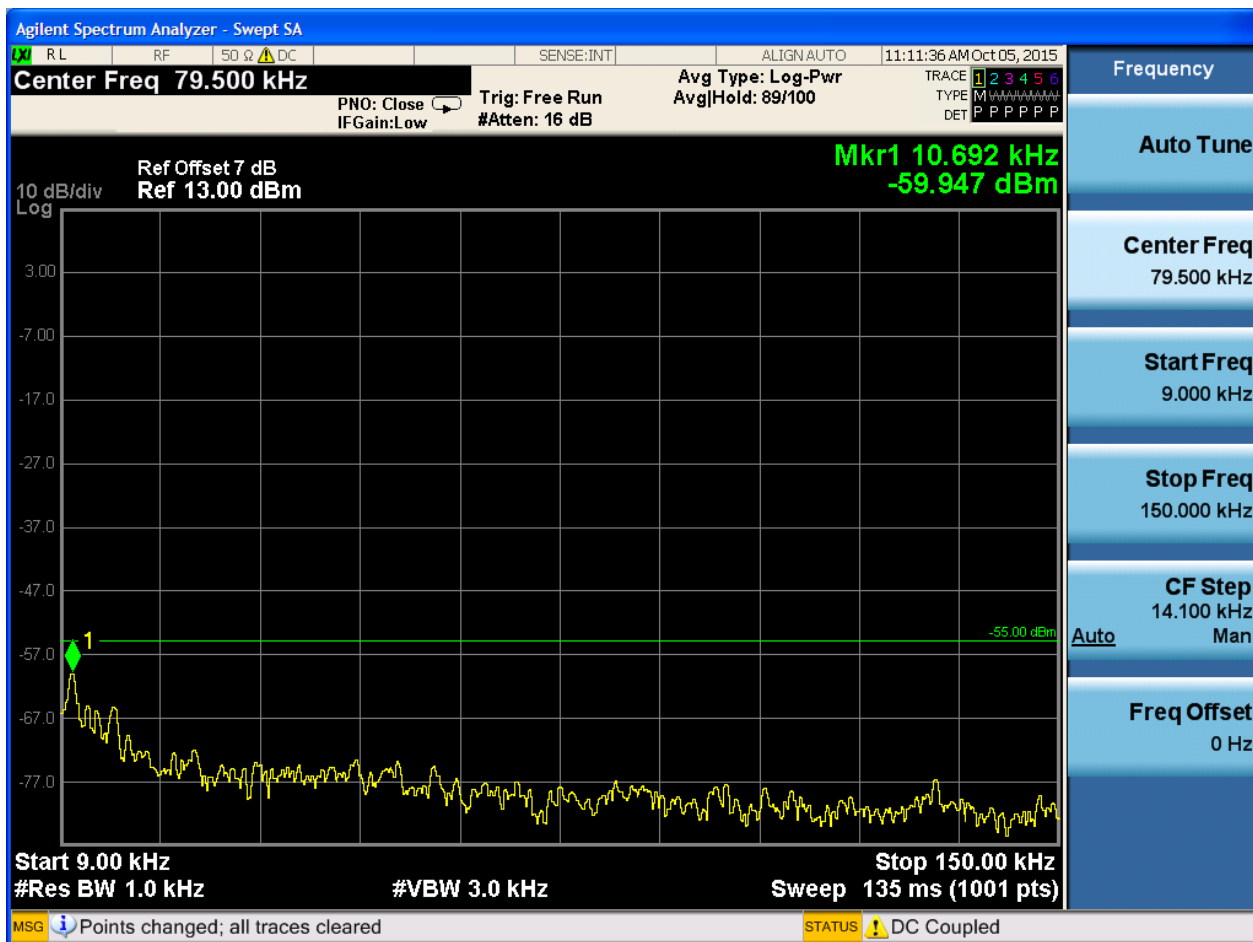


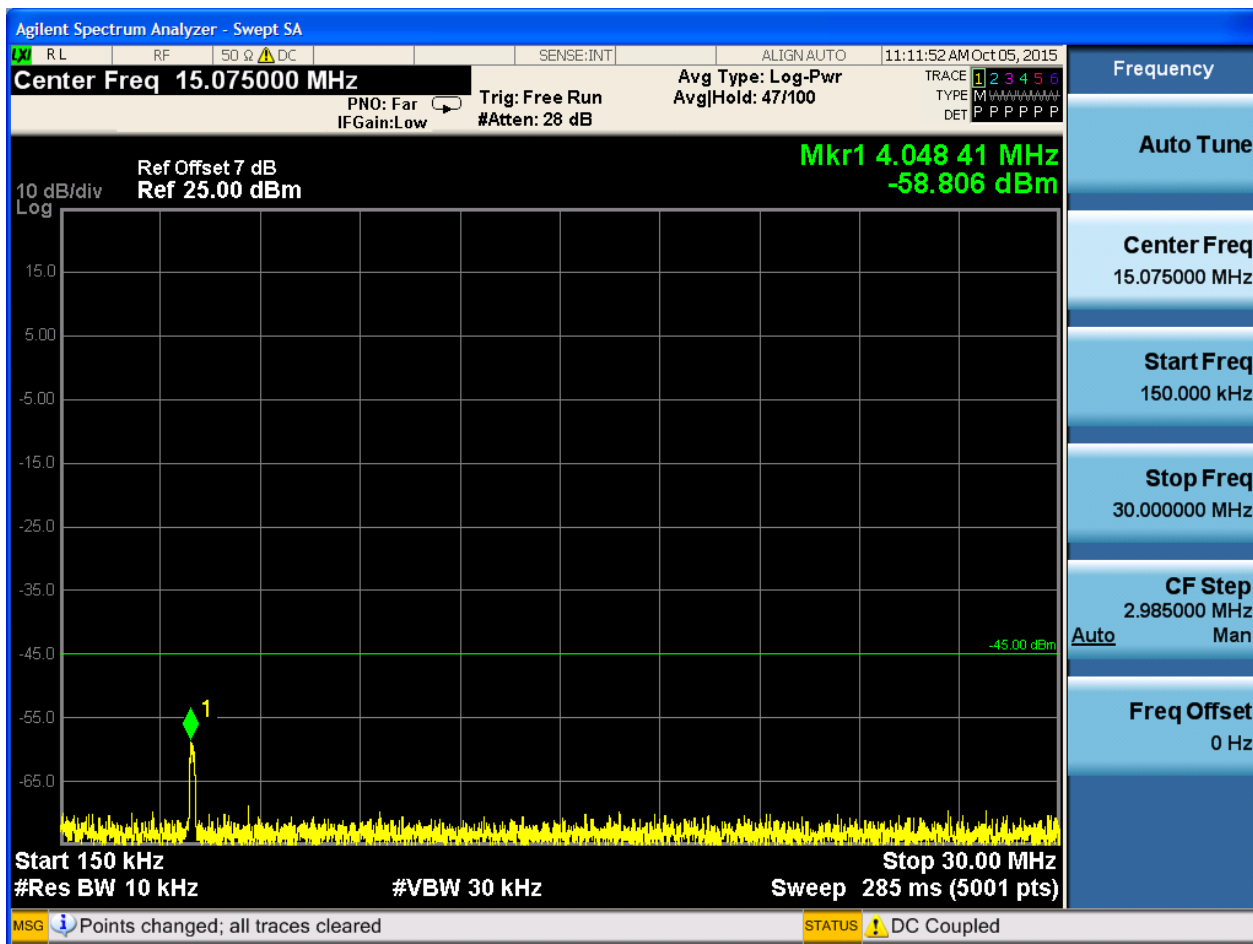


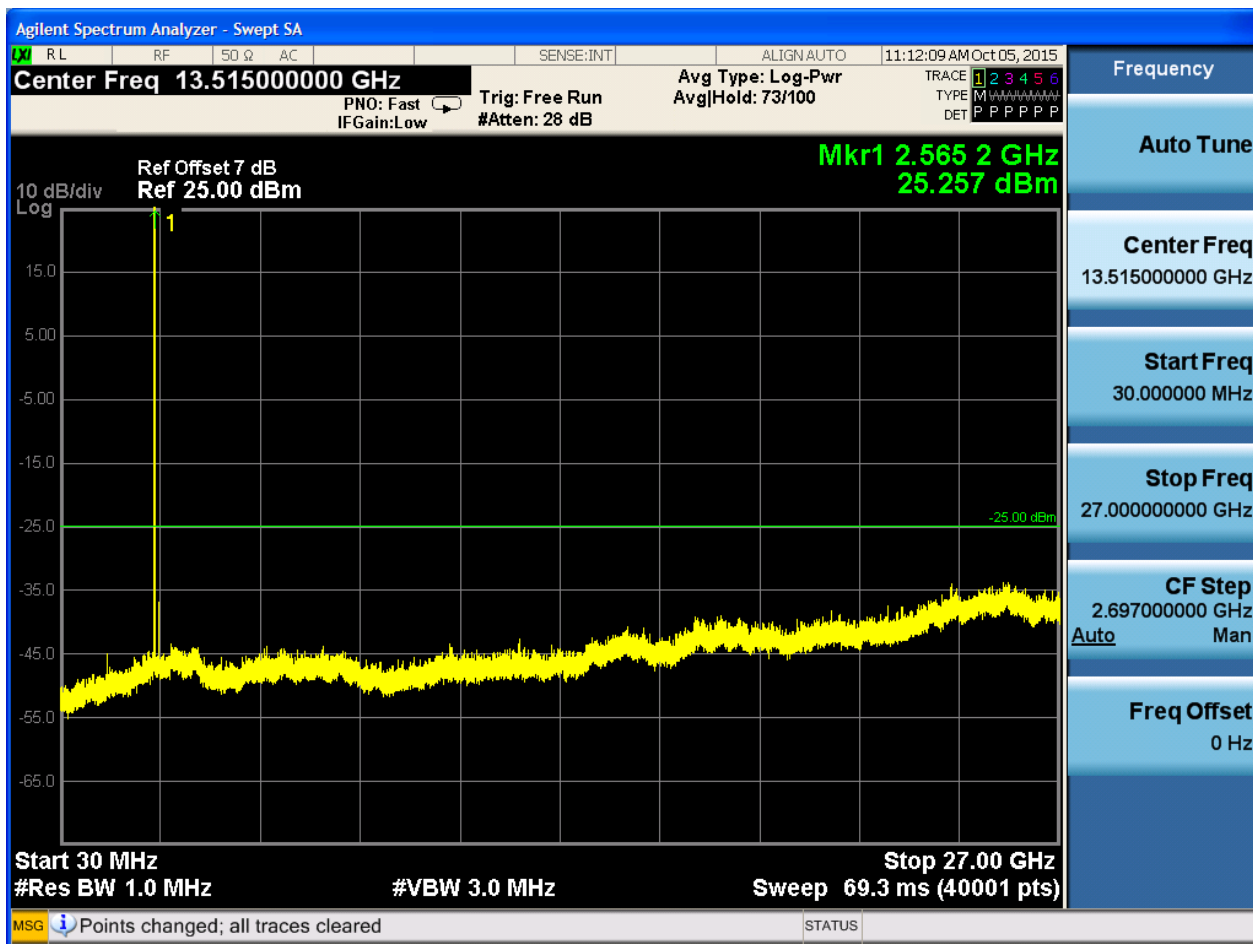


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0







6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

