



Appendix for test report



1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
CA_38C	LTE/T M1	15+15	LCH	1 # 0	0 # 0	23.24	22.29	33	PASS
				partial RBs # 0	0 # 0	23.14	22.19	33	PASS
				full RBs # 0	0 # 0	22.12	21.17	33	PASS
				full RBs # 0	full RBs # 0	21.27	20.32	33	PASS
			MCH	1 # 0	0 # 0	23.12	22.17	33	PASS
				partial RBs # 0	0 # 0	23.12	22.17	33	PASS
				full RBs # 0	0 # 0	22.08	21.13	33	PASS
				full RBs # 0	full RBs # 0	21.27	20.32	33	PASS
			HCH	1 # 0	0 # 0	23.05	22.10	33	PASS



Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				partial RBs # 0	0 # 0	23.10	22.15	33	PASS
				full RBs # 0	0 # 0	22.06	21.11	33	PASS
				full RBs # 0	full RBs # 0	21.01	20.06	33	PASS
				1 # 0	0 # 0	22.89	21.94	33	PASS
				partial RBs # 0	0 # 0	22.88	21.93	33	PASS
				full RBs # 0	0 # 0	21.60	20.65	33	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	19.11	18.16	33	PASS
		MCH		1 # 0	0 # 0	22.84	21.89	33	PASS
				partial RBs # 0	0 # 0	22.95	22.00	33	PASS
				full RBs # 0	0 # 0	21.47	20.52	33	PASS



Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict		
				full RBs # 0	full RBs # 0	18.96	18.01	33	PASS		
				1 # 0	0 # 0	22.85	21.90	33	PASS		
				partial RBs # 0	0 # 0	22.96	22.01	33	PASS		
				full RBs # 0	0 # 0	21.38	20.43	33	PASS		
				full RBs # 0	full RBs # 0	18.88	17.93	33	PASS		
				1 # 0	0 # 0	22.25	21.30	33	PASS		
				partial RBs # 0	0 # 0	22.14	21.19	33	PASS		
				full RBs # 0	0 # 0	21.02	20.07	33	PASS		
	LTE/T M2	15+15		LCH	full RBs # 0	full RBs # 0	18.61	18.66	33	PASS	
					1 # 0	0 # 0	22.34	21.39	33	PASS	
					partial	0 # 0	22.09	21.14	33	PASS	
					MCH	1 # 0	0 # 0	22.34	21.39	33	PASS
						partial	0 # 0	22.09	21.14	33	PASS



Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				RBs # 0					
				full RBs # 0	0 # 0	20.93	19.98	33	PASS
				full RBs # 0	full RBs # 0	18.63	18.68	33	PASS
			HCH	1 # 0	0 # 0	22.25	21.30	33	PASS
				partial RBs # 0	0 # 0	22.11	21.16	33	PASS
				full RBs # 0	0 # 0	20.90	19.95	33	PASS
				full RBs # 0	full RBs # 0	18.54	18.59	33	PASS
		20+20	LCH	1 # 0	0 # 0	22.90	21.95	33	PASS
				partial RBs # 0	0 # 0	21.94	20.99	33	PASS
				full RBs # 0	0 # 0	20.38	19.43	33	PASS



Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				full RBs # 0	full RBs # 0	18.02	17.07	33	PASS
			MCH	1 # 0	0 # 0	22.78	21.83	33	PASS
				partial RBs # 0	0 # 0	21.99	21.04	33	PASS
				full RBs # 0	0 # 0	20.42	19.47	33	PASS
				full RBs # 0	full RBs # 0	17.90	16.95	33	PASS
			HCH	1 # 0	0 # 0	22.58	21.63	33	PASS
				partial RBs # 0	0 # 0	21.90	20.95	33	PASS
				full RBs # 0	0 # 0	20.48	19.53	33	PASS
				full RBs # 0	full RBs # 0	17.84	16.89	33	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

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

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

b, SGP = Signal Generator Level

Note2:

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

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

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

SET Sweep time = auto - couple.

Detector: RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict
CA_38C	LTE/T M1	15+15	LCH	1 # 0	0 # 0	4.47	13	PASS
				partial RBs # 0	0 # 0	4.99	13	PASS
				full RBs # 0	0 # 0	6.20	13	PASS
				full RBs # 0	full RBs # 0	7.13	13	PASS
			MCH	1 # 0	0 # 0	4.77	13	PASS
				partial RBs # 0	0 # 0	5.14	13	PASS
				full RBs # 0	0 # 0	6.46	13	PASS
				full RBs # 0	full RBs # 0	6.96	13	PASS
			HCH	1 # 0	0 # 0	4.50	13	PASS
				partial RBs # 0	0 # 0	5.05	13	PASS
				full RBs # 0	0 # 0	6.13	13	PASS
				full RBs # 0	full RBs # 0	6.84	13	PASS
		20+20	LCH	1 # 0	0 # 0	4.54	13	PASS
				partial RBs # 0	0 # 0	4.81	13	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict		
				full RBs # 0	0 # 0	6.19	13	PASS		
				full RBs # 0	full RBs # 0	6.97	13	PASS		
			MCH	1 # 0	0 # 0	4.44	13	PASS		
				partial RBs # 0	0 # 0	4.84	13	PASS		
				full RBs # 0	0 # 0	6.21	13	PASS		
				full RBs # 0	full RBs # 0	6.83	13	PASS		
			HCH	1 # 0	0 # 0	4.45	13	PASS		
				partial RBs # 0	0 # 0	4.91	13	PASS		
				full RBs # 0	0 # 0	6.26	13	PASS		
				full RBs # 0	full RBs # 0	6.78	13	PASS		
			LTE/T M2	15+15	LCH	1 # 0	0 # 0	5.14	13	PASS
						partial RBs # 0	0 # 0	5.69	13	PASS
	full RBs # 0	0 # 0				6.92	13	PASS		
	full RBs # 0	full RBs # 0				7.71	13	PASS		
	MCH	1 # 0			0 # 0	4.72	13	PASS		
		partial RBs # 0			0 # 0	5.89	13	PASS		

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict		
				full RBs # 0	0 # 0	7.29	13	PASS		
				full RBs # 0	full RBs # 0	7.51	13	PASS		
			HCH	1 # 0	0 # 0	5.18	13	PASS		
				partial RBs # 0	0 # 0	6.10	13	PASS		
				full RBs # 0	0 # 0	7.03	13	PASS		
				full RBs # 0	full RBs # 0	7.16	13	PASS		
			LCH	1 # 0	0 # 0	4.62	13	PASS		
				partial RBs # 0	0 # 0	5.52	13	PASS		
				full RBs # 0	0 # 0	7.34	13	PASS		
				full RBs # 0	full RBs # 0	7.55	13	PASS		
			MCH	1 # 0	0 # 0	4.64	13	PASS		
				partial RBs # 0	0 # 0	5.78	13	PASS		
		full RBs # 0		0 # 0	7.09	13	PASS			
		full RBs # 0		full RBs # 0	7.72	13	PASS			
		HCH	1 # 0	0 # 0	4.93	13	PASS			
			partial RBs # 0	0 # 0	5.72	13	PASS			
		20+20				full RBs # 0	0 # 0	7.29	13	PASS
						full RBs # 0	full RBs # 0	7.51	13	PASS
						1 # 0	0 # 0	5.18	13	PASS
						partial RBs # 0	0 # 0	6.10	13	PASS
full RBs # 0	0 # 0					7.03	13	PASS		
full RBs # 0	full RBs # 0					7.16	13	PASS		
1 # 0	0 # 0					4.62	13	PASS		
partial RBs # 0	0 # 0					5.52	13	PASS		
full RBs # 0	0 # 0	7.34	13	PASS						
full RBs # 0	full RBs # 0	7.55	13	PASS						
1 # 0	0 # 0	4.64	13	PASS						
partial RBs # 0	0 # 0	5.78	13	PASS						
full RBs # 0	0 # 0	7.09	13	PASS						
full RBs # 0	full RBs # 0	7.72	13	PASS						
1 # 0	0 # 0	4.93	13	PASS						
partial RBs # 0	0 # 0	5.72	13	PASS						

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict
				full RBs # 0	0 # 0	7.24	13	PASS
				full RBs # 0	full RBs # 0	7.65	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

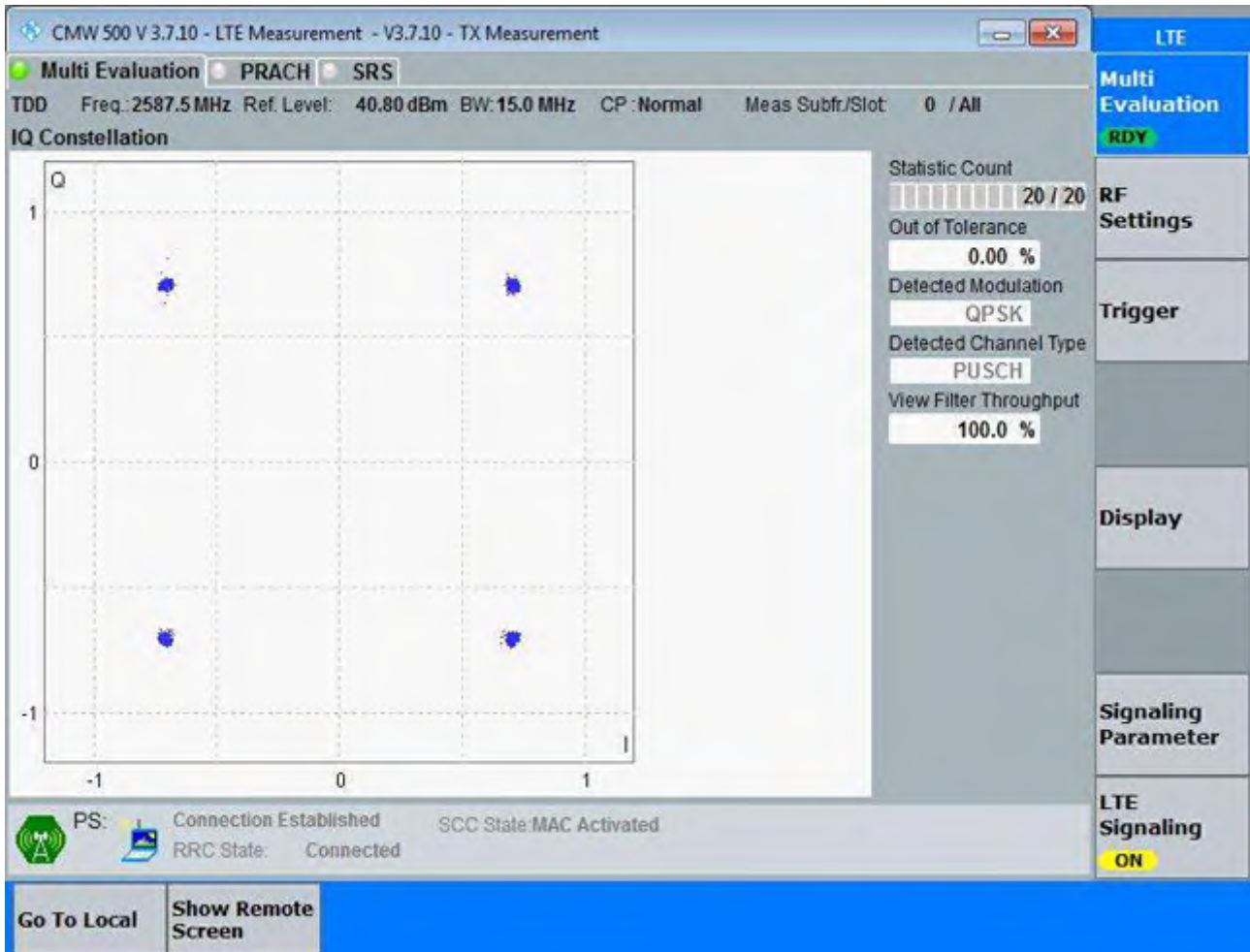
3.1.1 Test Band = CA_38C

3.1.1.1 Test Mode = LTE/TM1

3.1.1.1.1 Test Bandwidth = 15+15

3.1.1.1.1.1 Test Channel = MCH

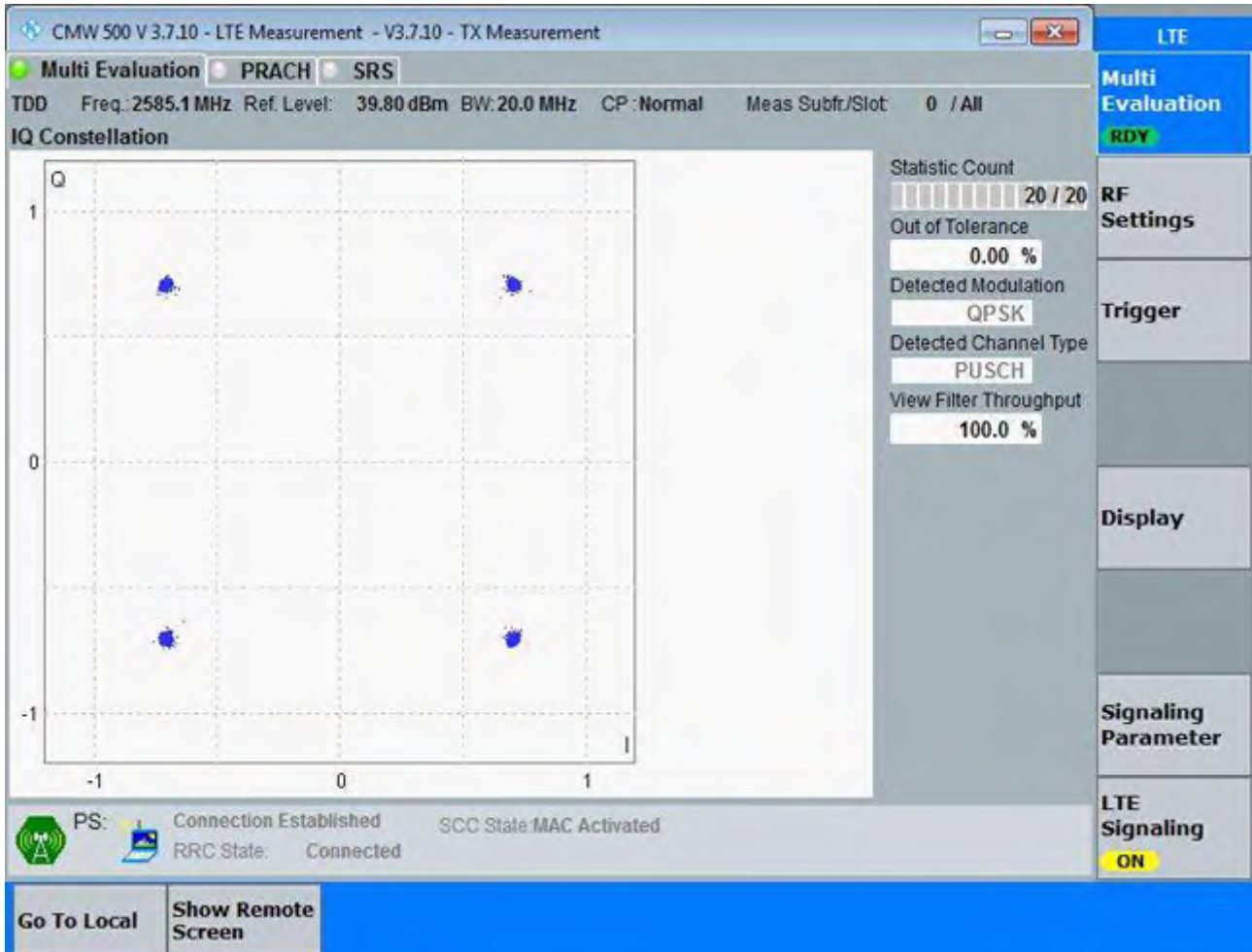
3.1.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



3.1.1.1.2 Test Bandwidth = 20+20

3.1.1.1.2.1 Test Channel = MCH

3.1.1.1.2.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs

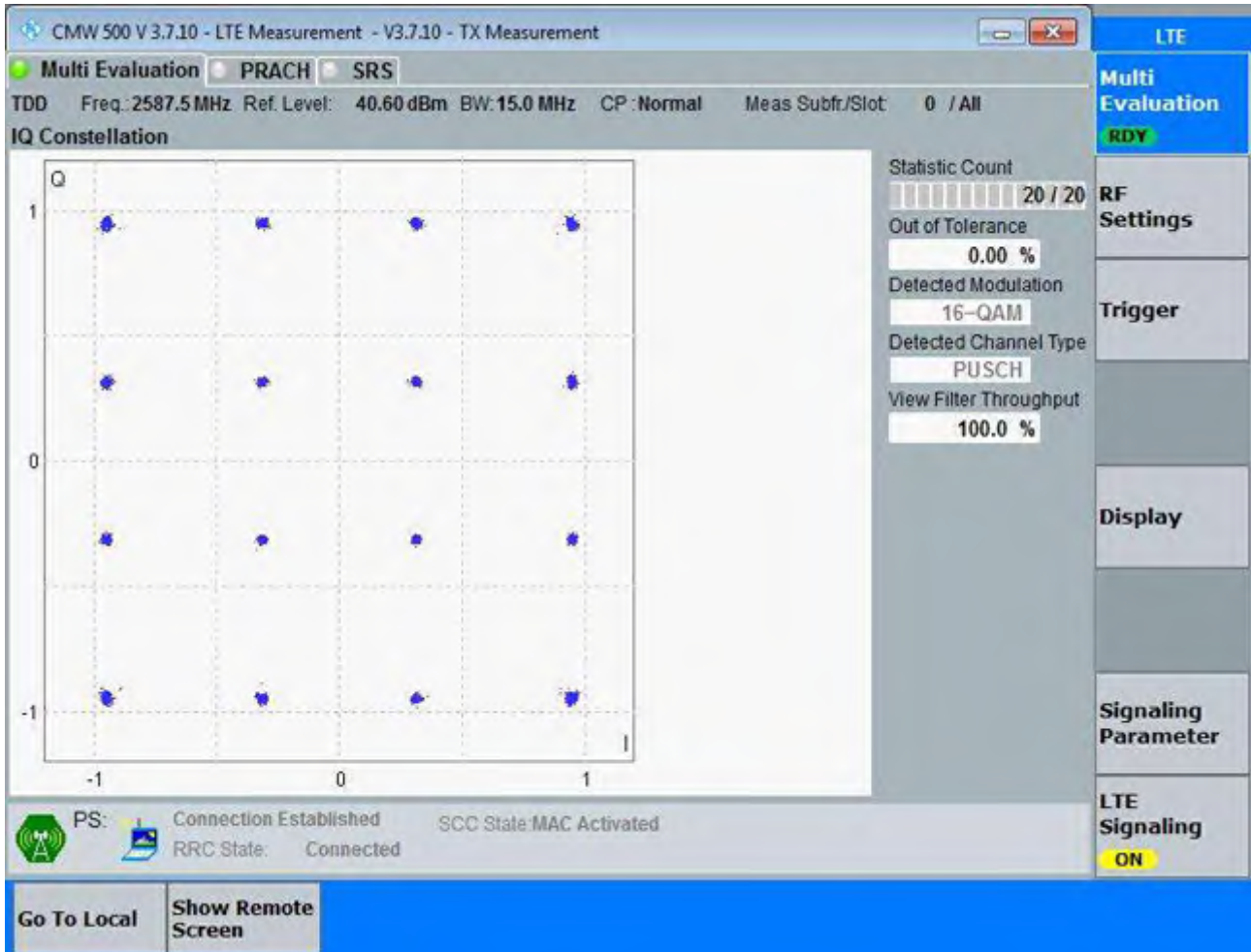


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 15+15

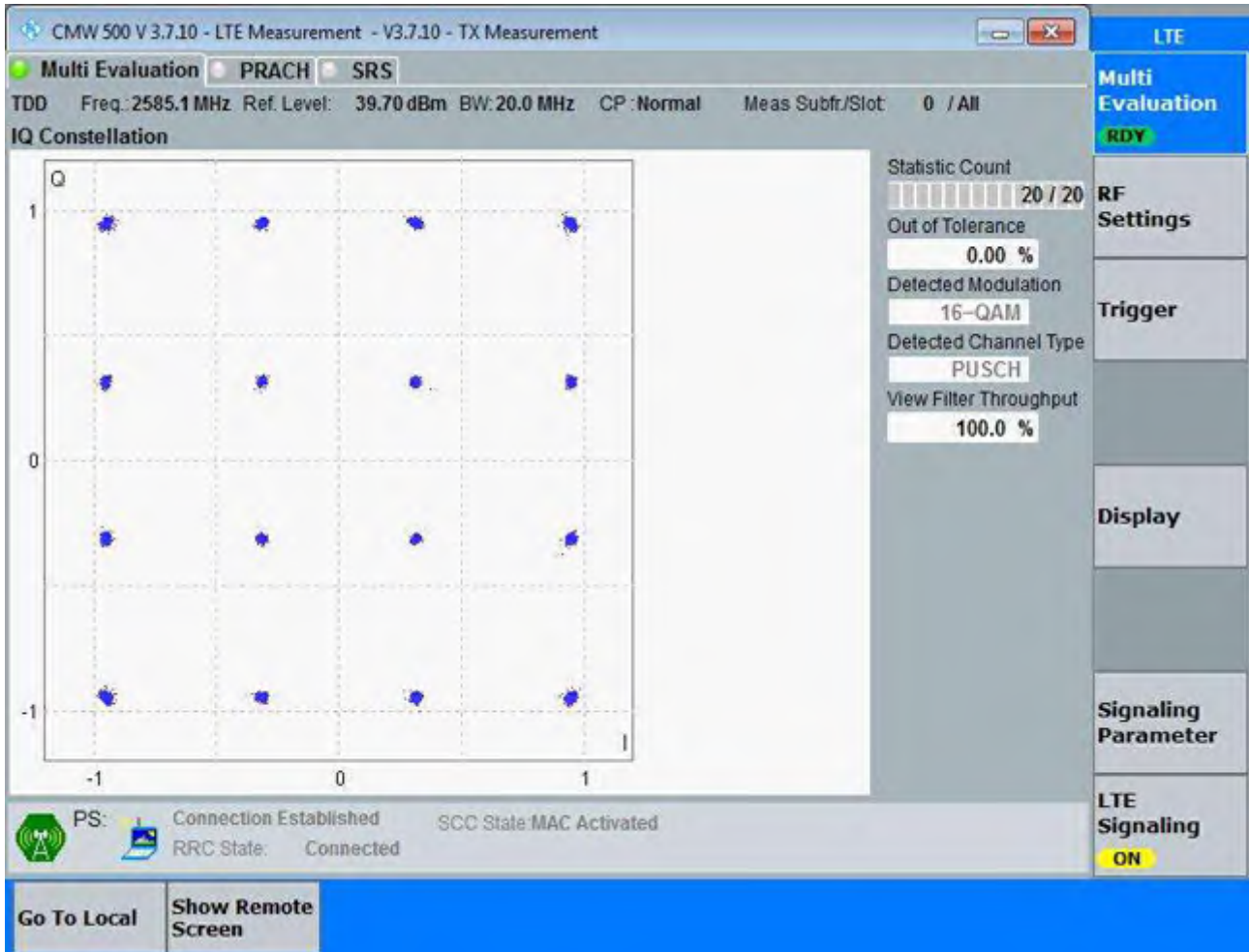
3.1.1.2.1.1 Test Channel = MCH

3.1.1.2.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



3.1.1.2.2 Test Bandwidth = 20+20

3.1.1.2.2.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



4Appendix_D: Bandwidth

Part I - Test Results

Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Occupied Band width [MHz]	Emission Band width [MHz]	Verdict
CA_38C	LTE/TM1	15+15	LCH	full RBs # 0	full RBs # 0	28.98	31.28	PASS
			MCH	full RBs # 0	full RBs # 0	28.95	32.34	PASS
			HCH	full RBs # 0	full RBs # 0	29.00	31.47	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.47	41.41	PASS
			MCH	full RBs # 0	full RBs # 0	38.55	41.64	PASS
			HCH	full RBs # 0	full RBs # 0	38.52	41.39	PASS
	LTE/TM2	15+15	LCH	full RBs # 0	full RBs # 0	28.98	31.38	PASS
			MCH	full RBs # 0	full RBs # 0	28.95	31.17	PASS
			HCH	full RBs # 0	full RBs # 0	28.99	31.31	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.44	41.46	PASS
			MCH	full RBs # 0	full RBs # 0	38.45	41.25	PASS
			HCH	full RBs # 0	full RBs # 0	38.50	41.40	PASS

Part II - Test Plots

4.1 For LTE

4.1.1 Test Band = CA_38C

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 15+15

4.1.1.1.1.1 Test Channel = LCH

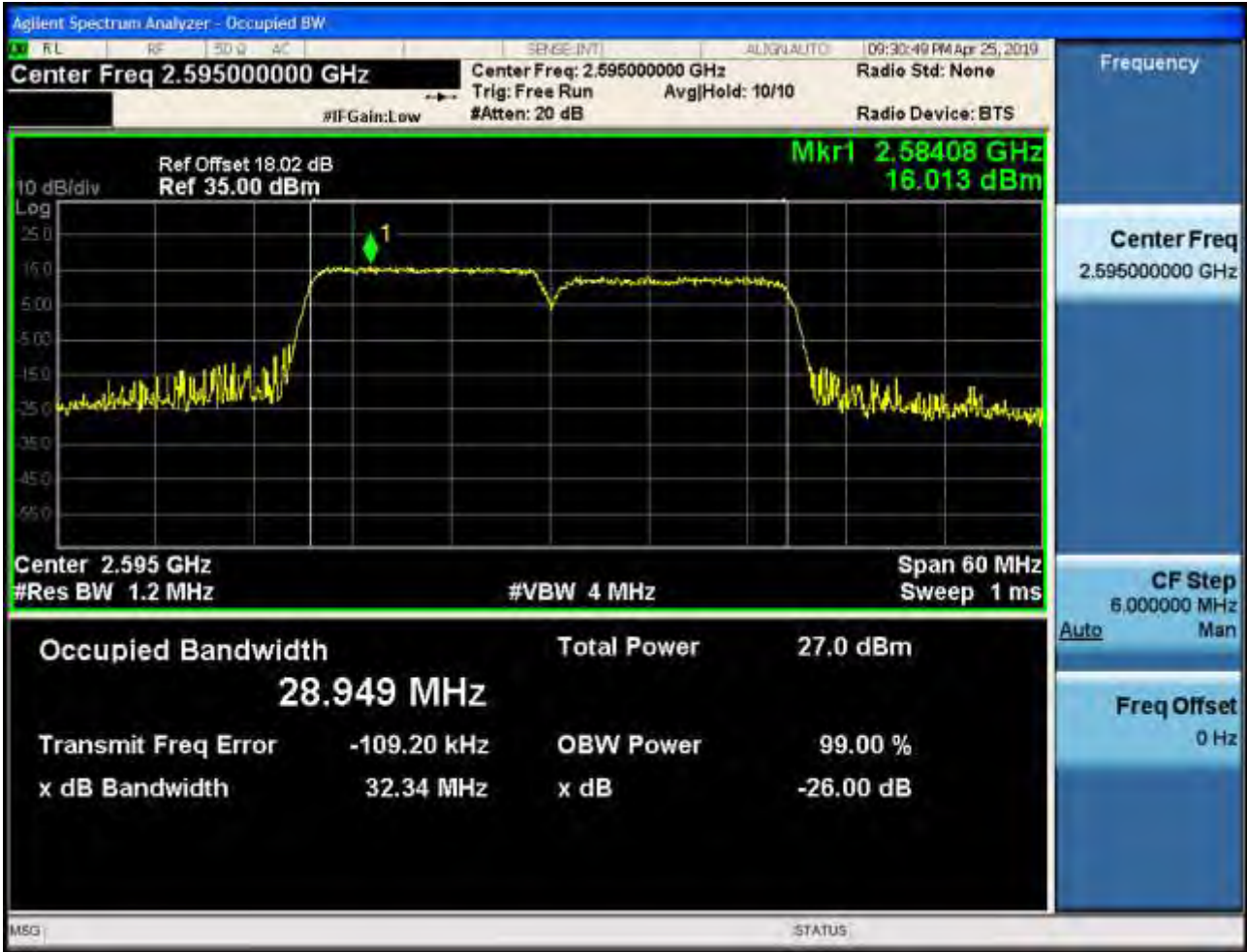
4.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.1.2 Test Channel = MCH

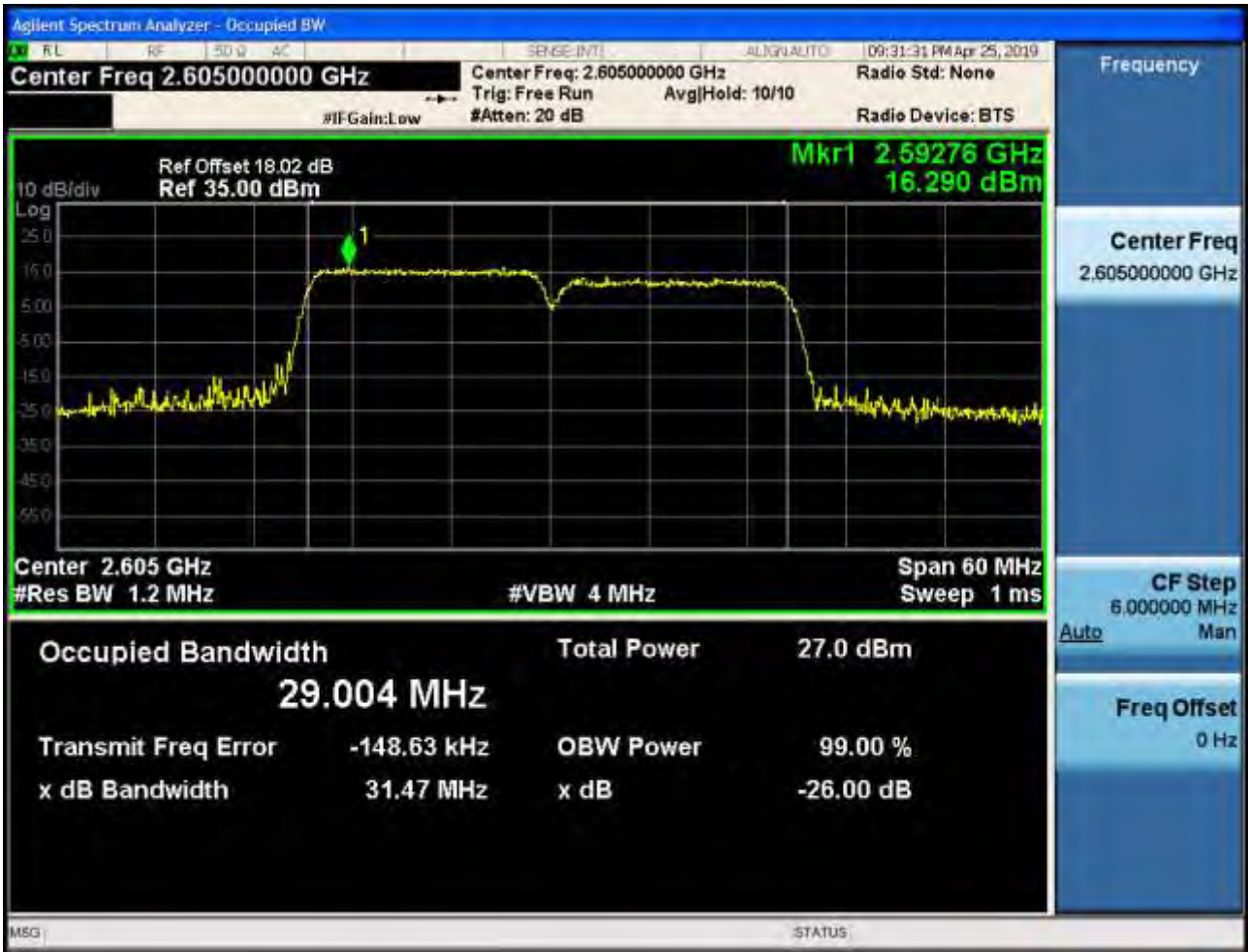
4.1.1.1.1.2.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.1.3 Test Channel = HCH

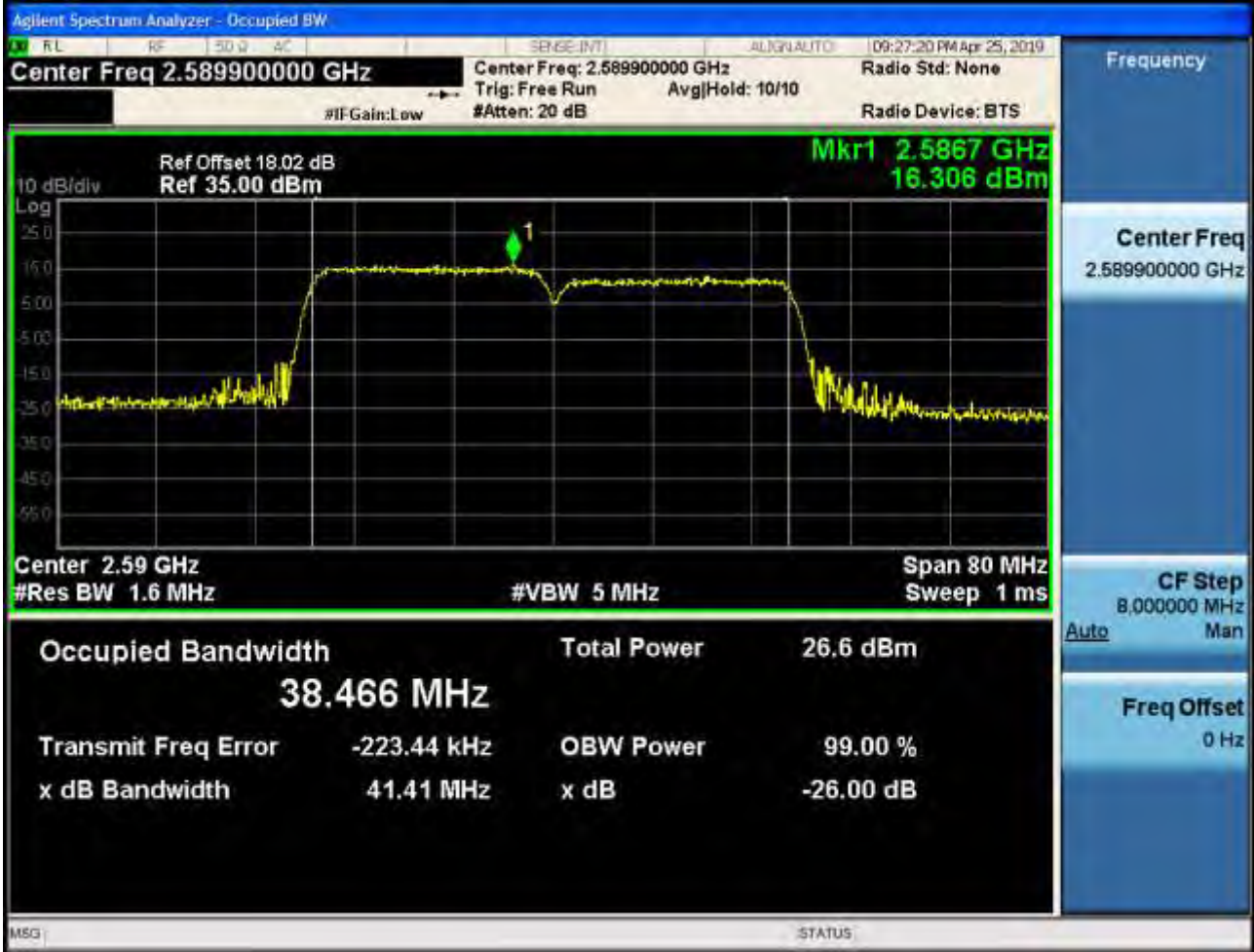
4.1.1.1.1.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



4.1.1.1.2 Test Bandwidth = 20+20

4.1.1.1.2.1 Test Channel = LCH

4.1.1.1.2.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs





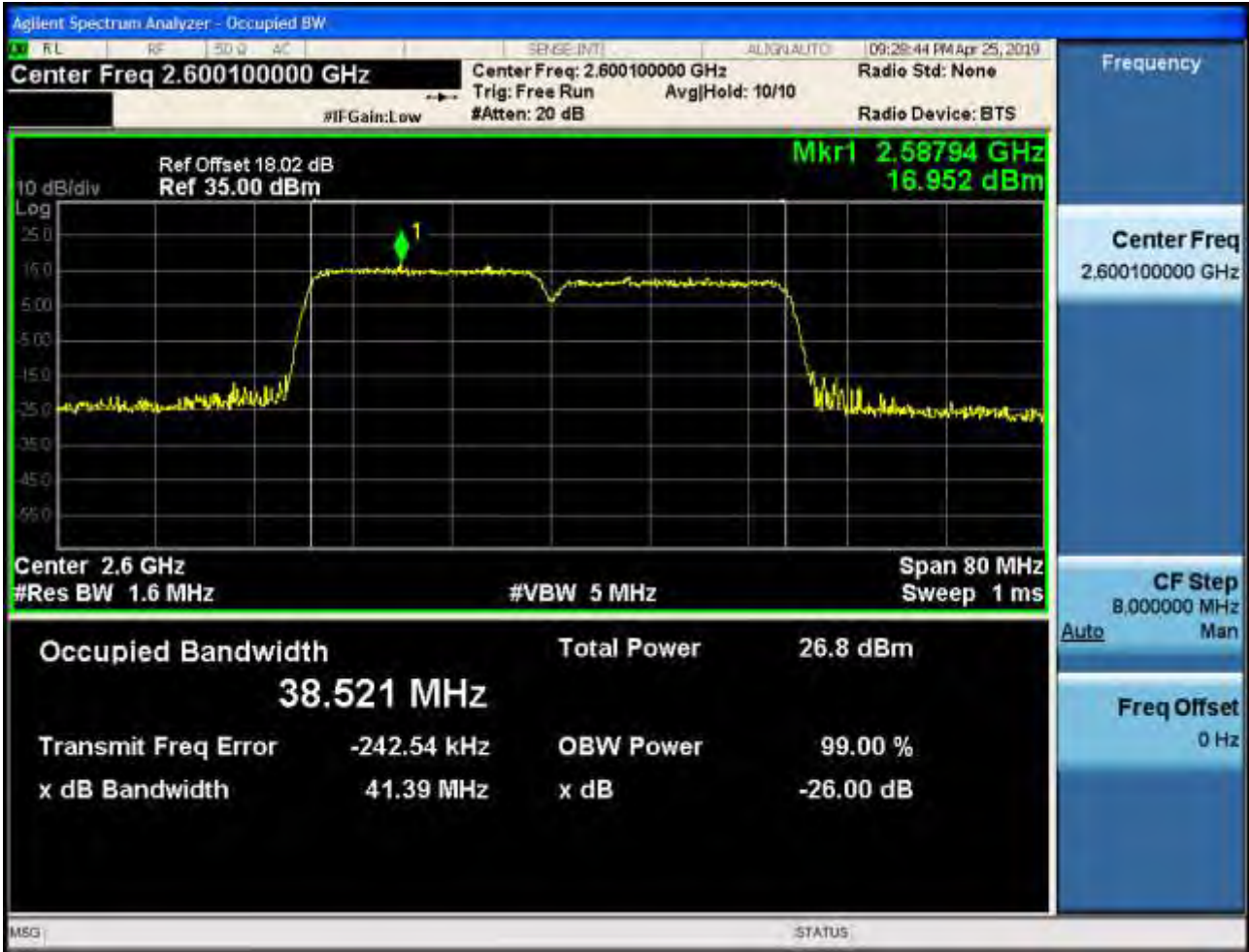
4.1.1.1.2.2 Test Channel = MCH

4.1.1.1.2.2.1 PCC Test RB = full RBs & SCC Test RB = full RBs



4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



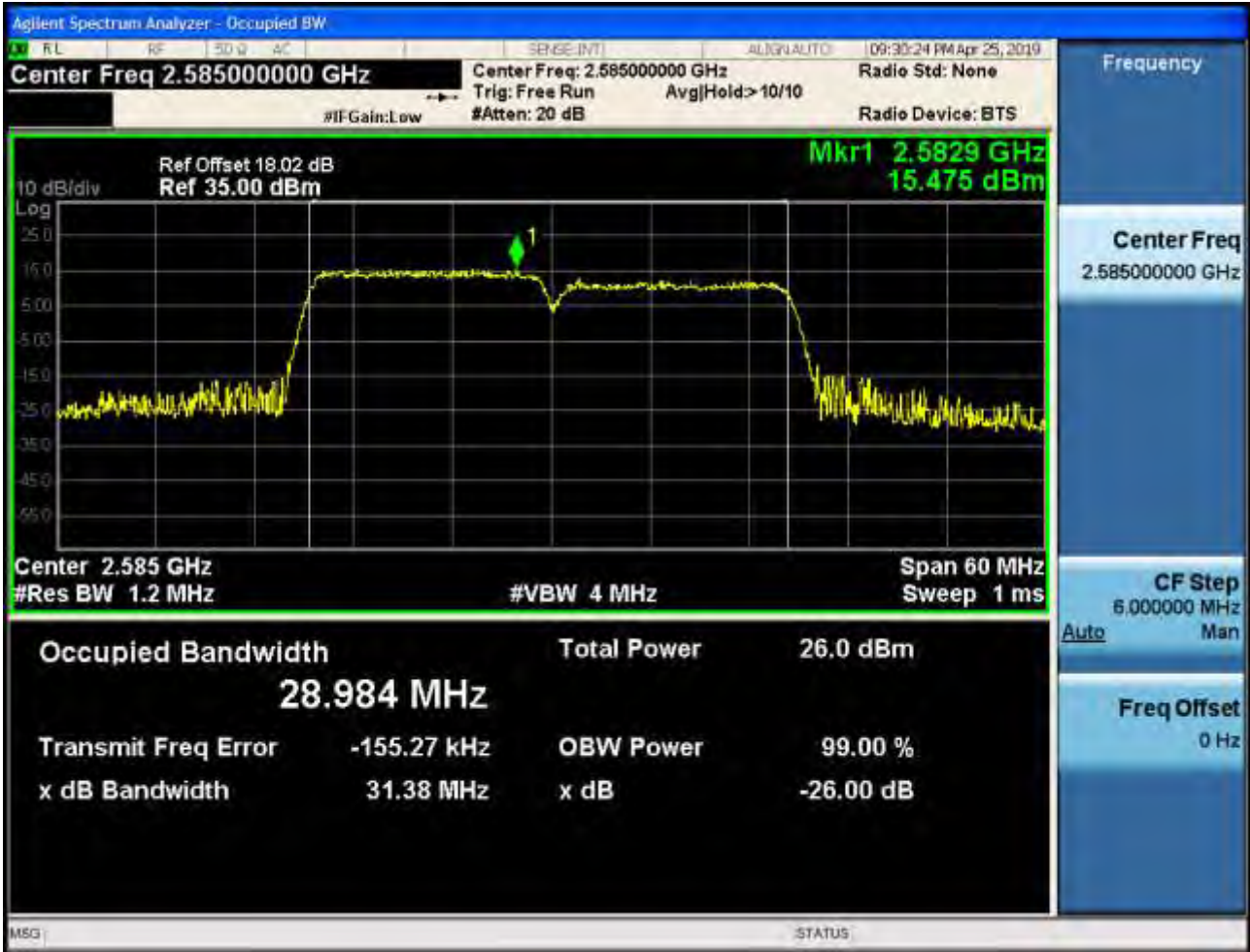


4.1.1.1 Test Mode = LTE/TM2

4.1.1.1.1 Test Bandwidth = 15+15

4.1.1.1.1.1 Test Channel = LCH

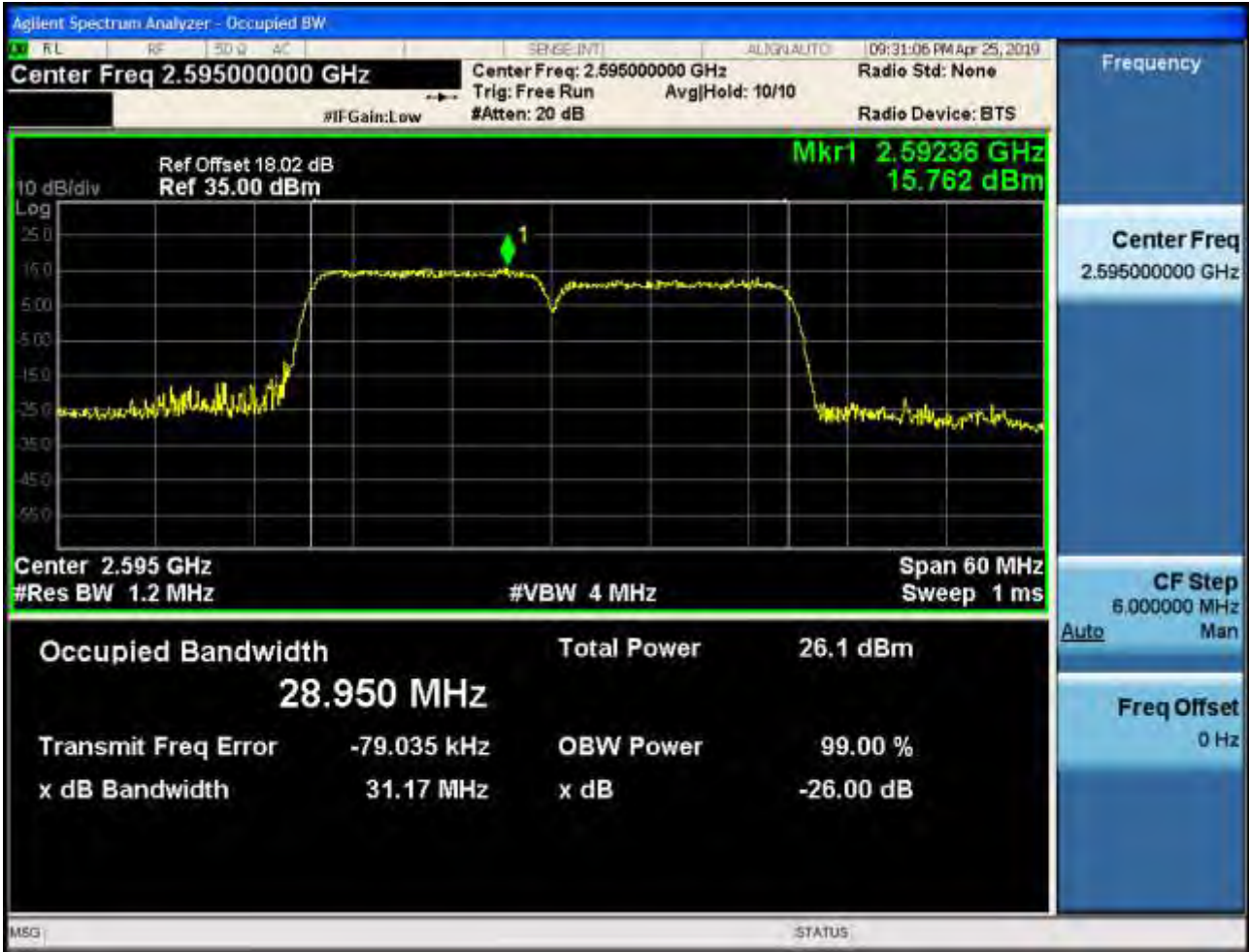
4.1.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.1.2 Test Channel = MCH

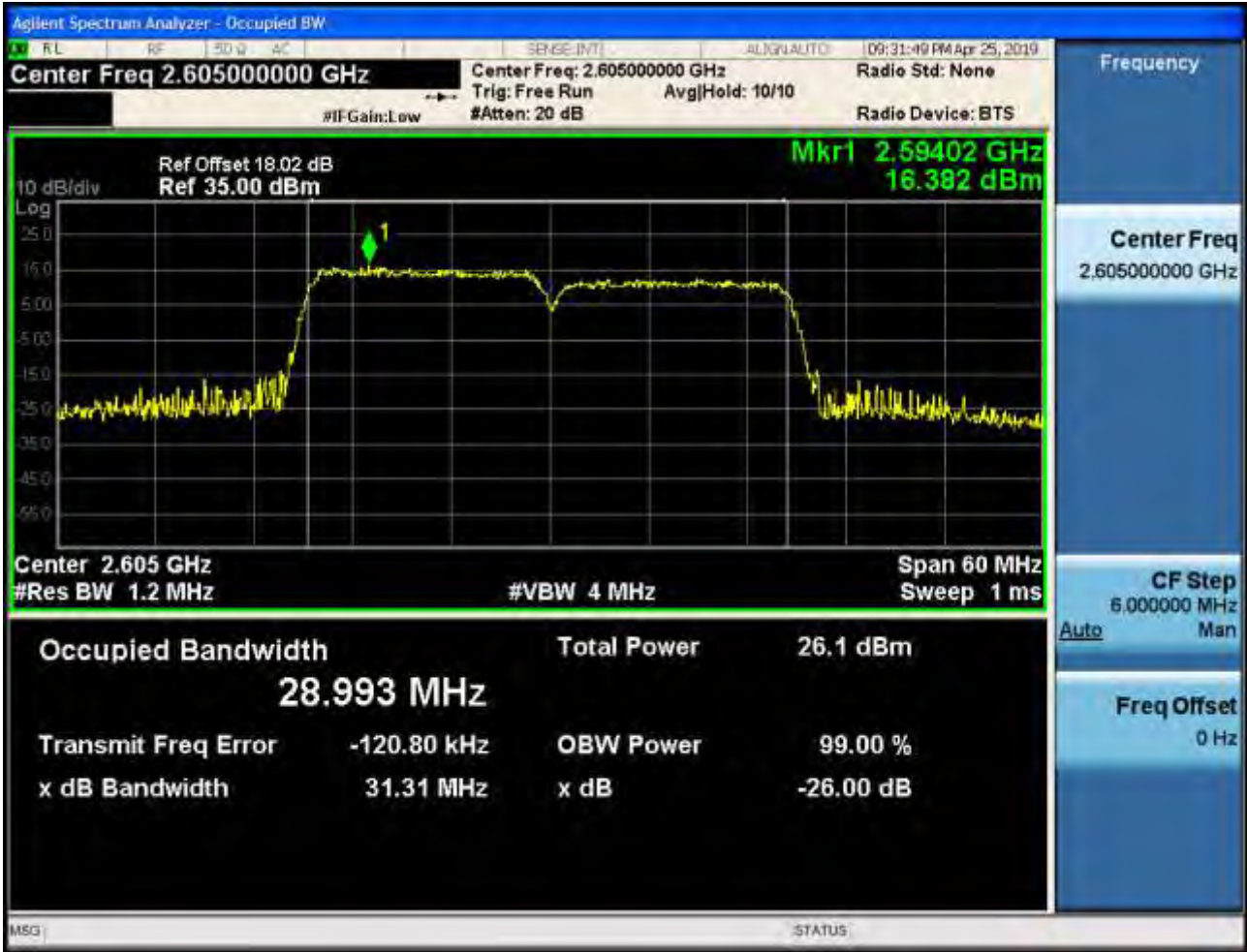
4.1.1.1.1.2.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.1.3 Test Channel = HCH

4.1.1.1.1.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



4.1.1.1.2 Test Bandwidth = 20+20

4.1.1.1.2.1 Test Channel = LCH

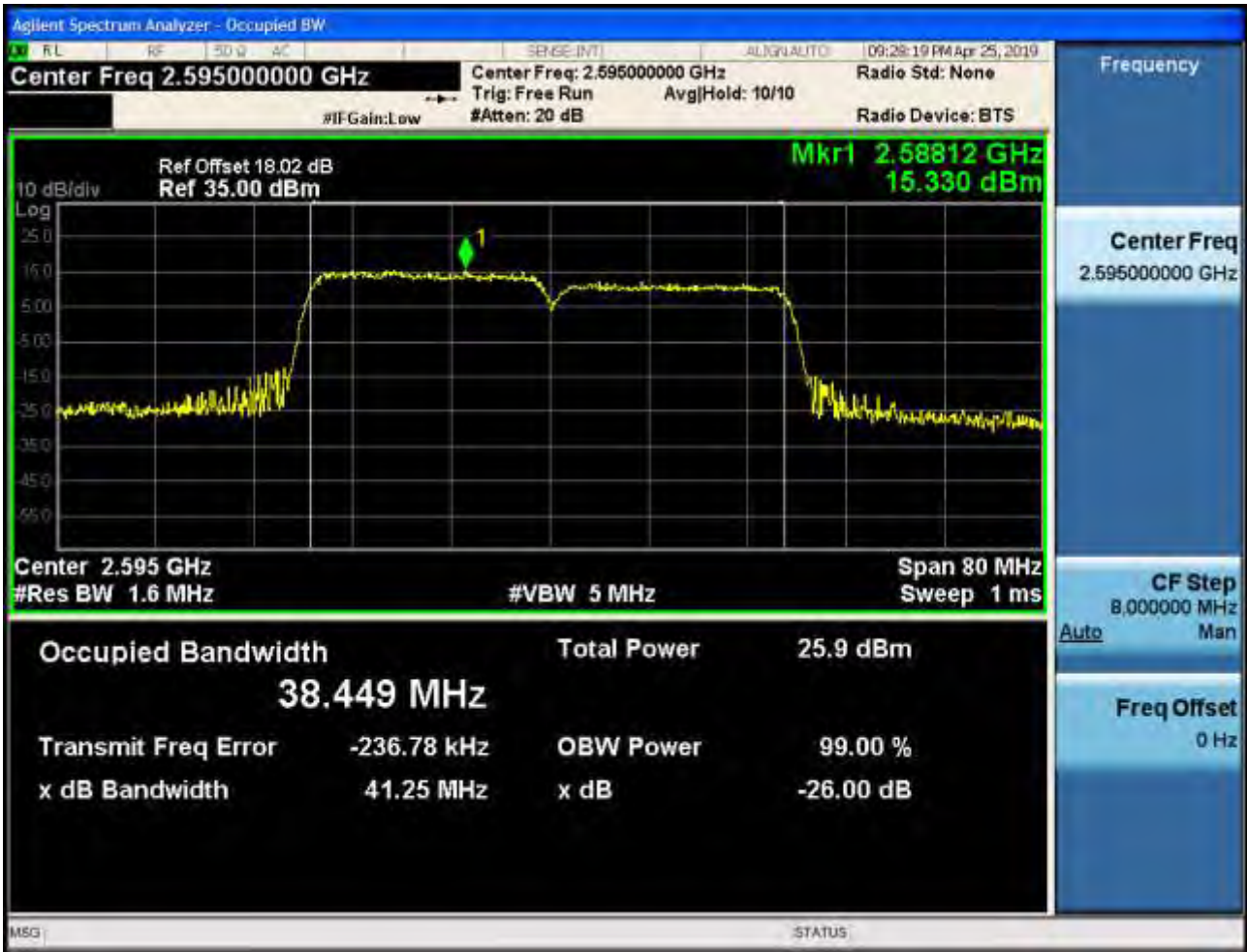
4.1.1.1.2.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.2.2 Test Channel = MCH

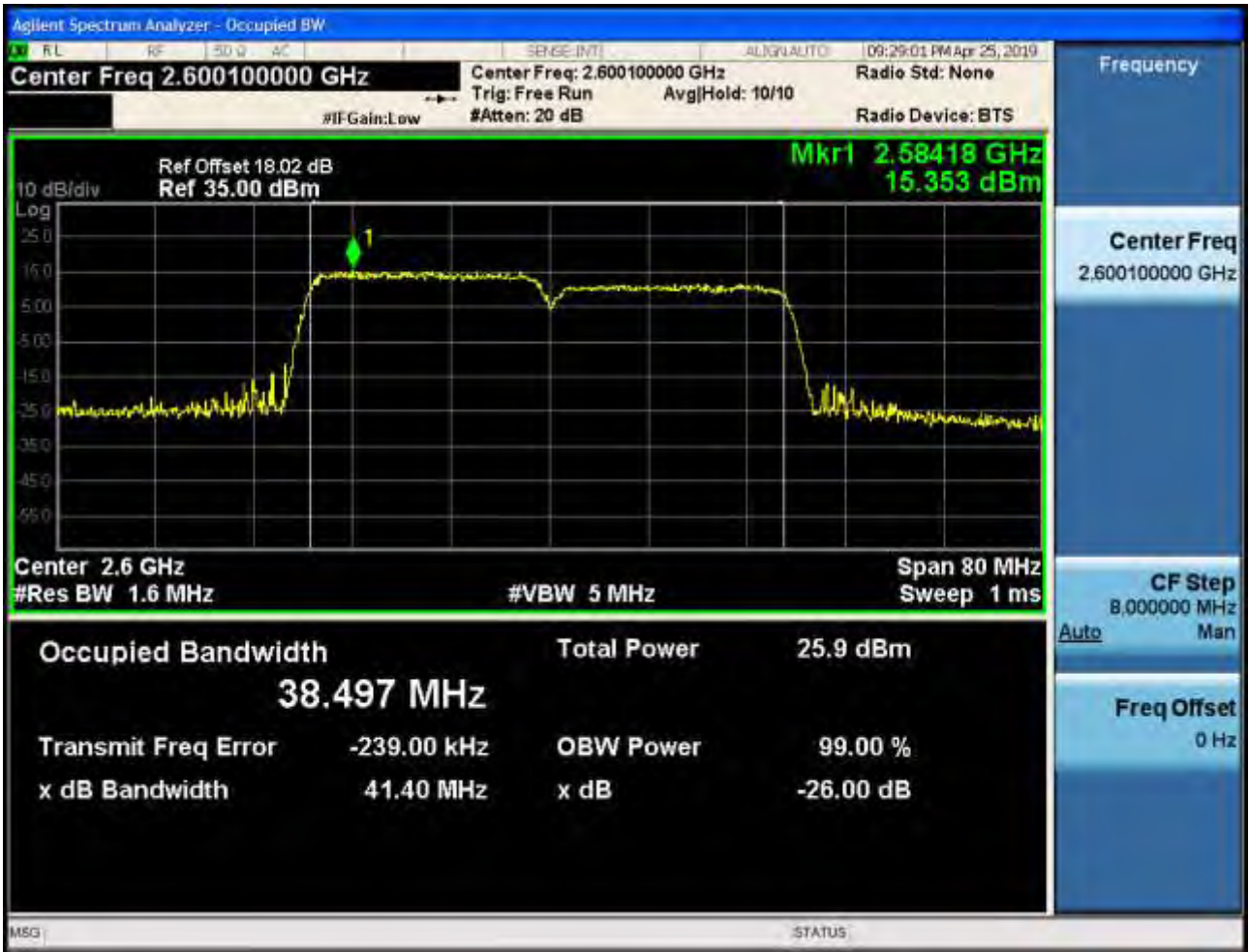
4.1.1.1.2.2.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.2.3 Test Channel = HCH

4.1.1.1.2.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



5Appendix_E: Band Edges Compliance

Part I - Test Plots

5.1 For LTE

5.1.1 Test Band = CA_38C

5.1.1.1 Test Mode = LTE/TM1

5.1.1.1.1 Test Bandwidth = 15+15

5.1.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0









5.1.1.1.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0









5.1.1.1.1.3 PCC Test RB = full RBs & SCC Test RB = 0









5.1.1.1.1.4 PCC Test RB = full RBs & SCC Test RB = full RBs







5.1.1.1.1.2 Test Channel = HCH

5.1.1.1.1.2.1 PCC Test RB = 0 & SCC Test RB = 1 # max









5.1.1.1.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max







5.1.1.1.2.3 PCC Test RB = 0 & SCC Test RB = full RBs









5.1.1.1.2.4 PCC Test RB = full RBs & SCC Test RB = full RBs





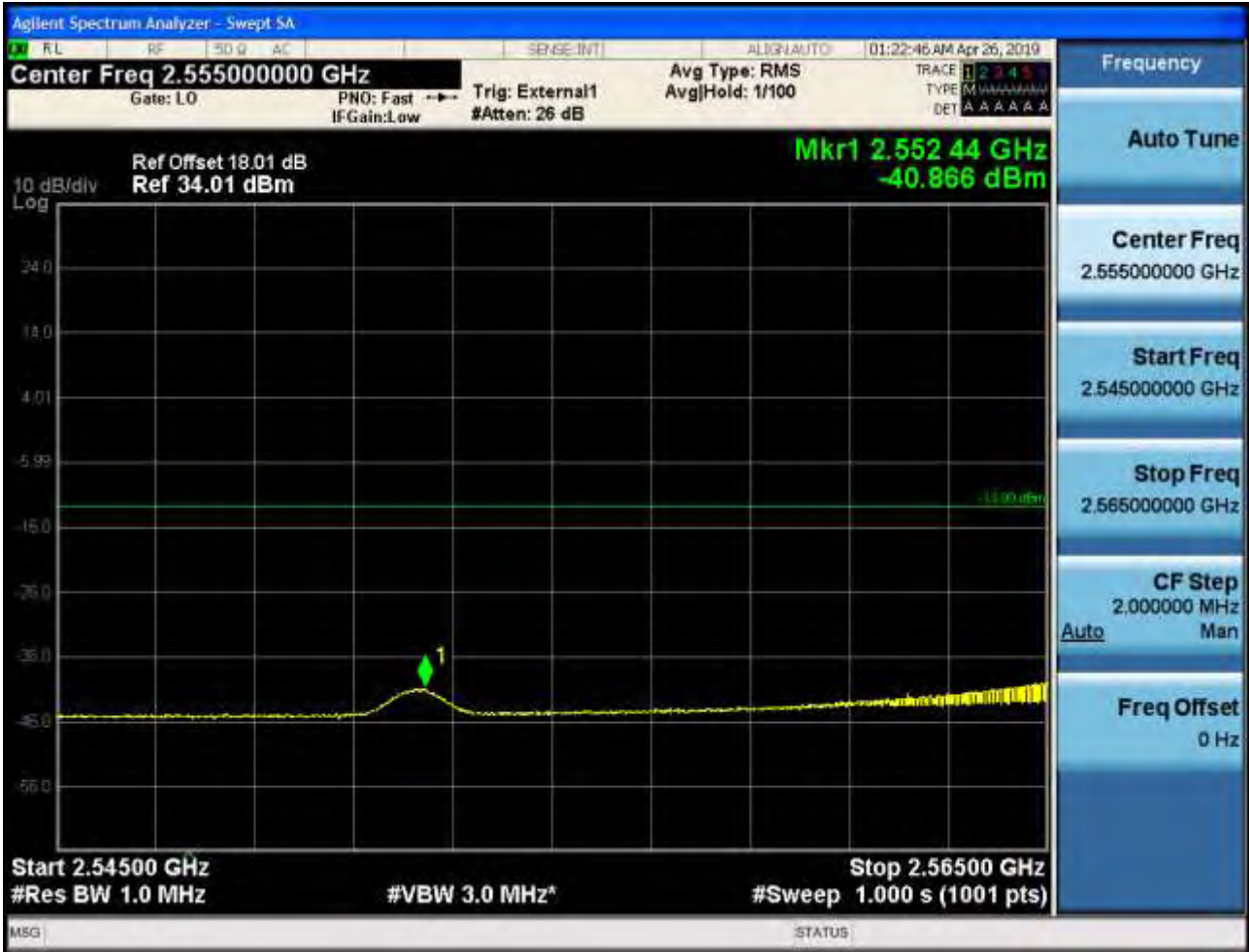




5.1.1.1.2 Test Bandwidth = 20+20

5.1.1.1.2.1 Test Channel = LCH

5.1.1.1.2.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0









5.1.1.1.2.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0









5.1.1.1.2.1.3 PCC Test RB = full RBs & SCC Test RB = 0









5.1.1.1.2.1.4 PCC Test RB = full RBs & SCC Test RB = full RBs







5.1.1.1.2.2 Test Channel = HCH

5.1.1.1.2.2.1 PCC Test RB = 0 & SCC Test RB = 1 # max









5.1.1.1.2.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max









5.1.1.1.2.2.3 PCC Test RB = 0 & SCC Test RB = full RBs







5.1.1.1.2.2.4 PCC Test RB = full RBs & SCC Test RB = full RBs







5.1.1.2 Test Mode = LTE/TM2

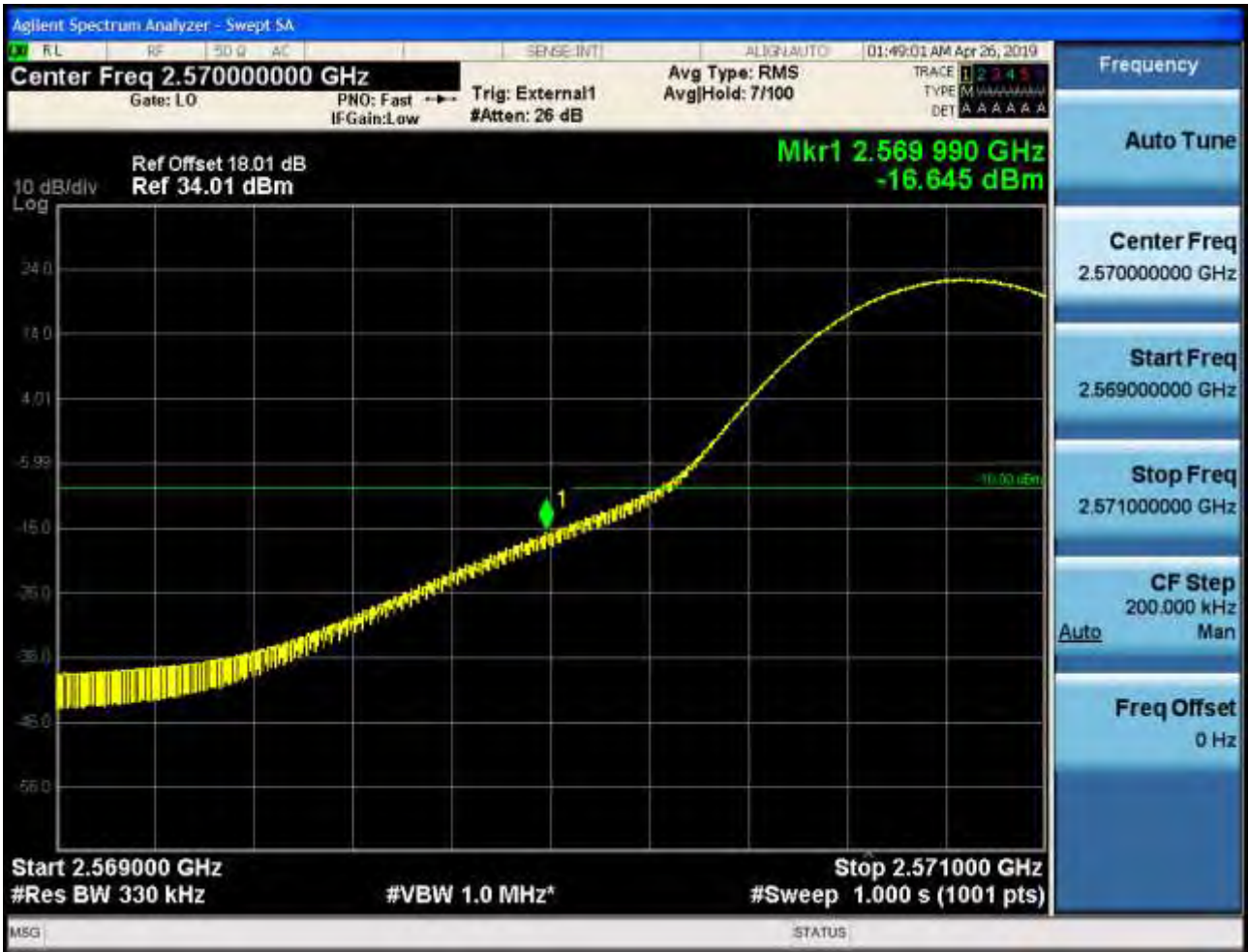
5.1.1.2.1 Test Bandwidth = 15+15

5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0









5.1.1.2.1.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0









5.1.1.2.1.1.3 PCC Test RB = full RBs & SCC Test RB = 0









5.1.1.2.1.1.4 PCC Test RB = full RBs & SCC Test RB = full RBs









5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 PCC Test RB = 0 & SCC Test RB = 1 # max







5.1.1.2.1.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max







5.1.1.2.1.2.3 PCC Test RB = 0 & SCC Test RB = full RBs









5.1.1.2.1.2.4 PCC Test RB = full RBs & SCC Test RB = full RBs



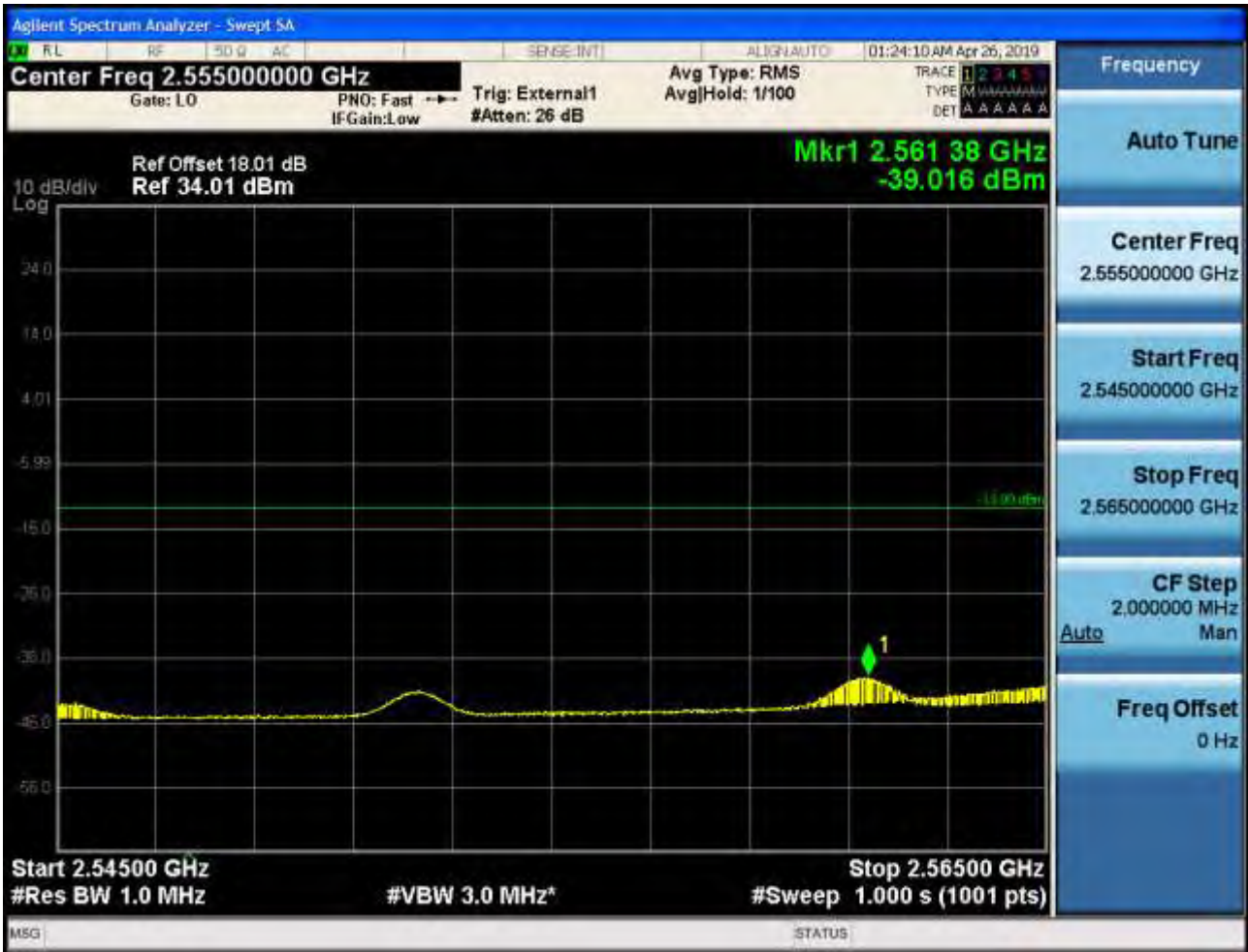


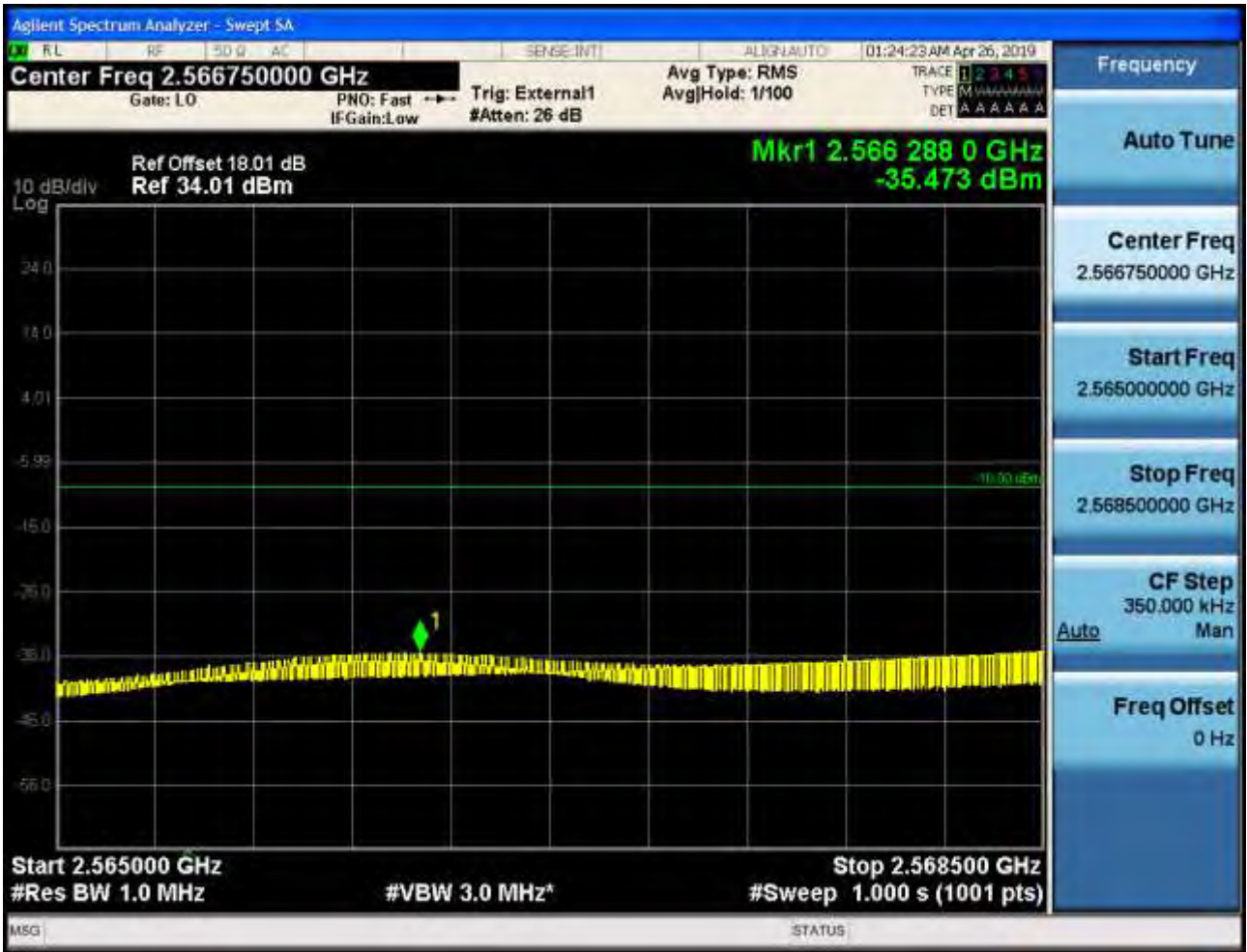


5.1.1.2.2 Test Bandwidth = 20+20

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0









5.1.1.2.2.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0









5.1.1.2.2.1.3 PCC Test RB = full RBs & SCC Test RB = 0









5.1.1.2.2.1.4 PCC Test RB = full RBs & SCC Test RB = full RBs

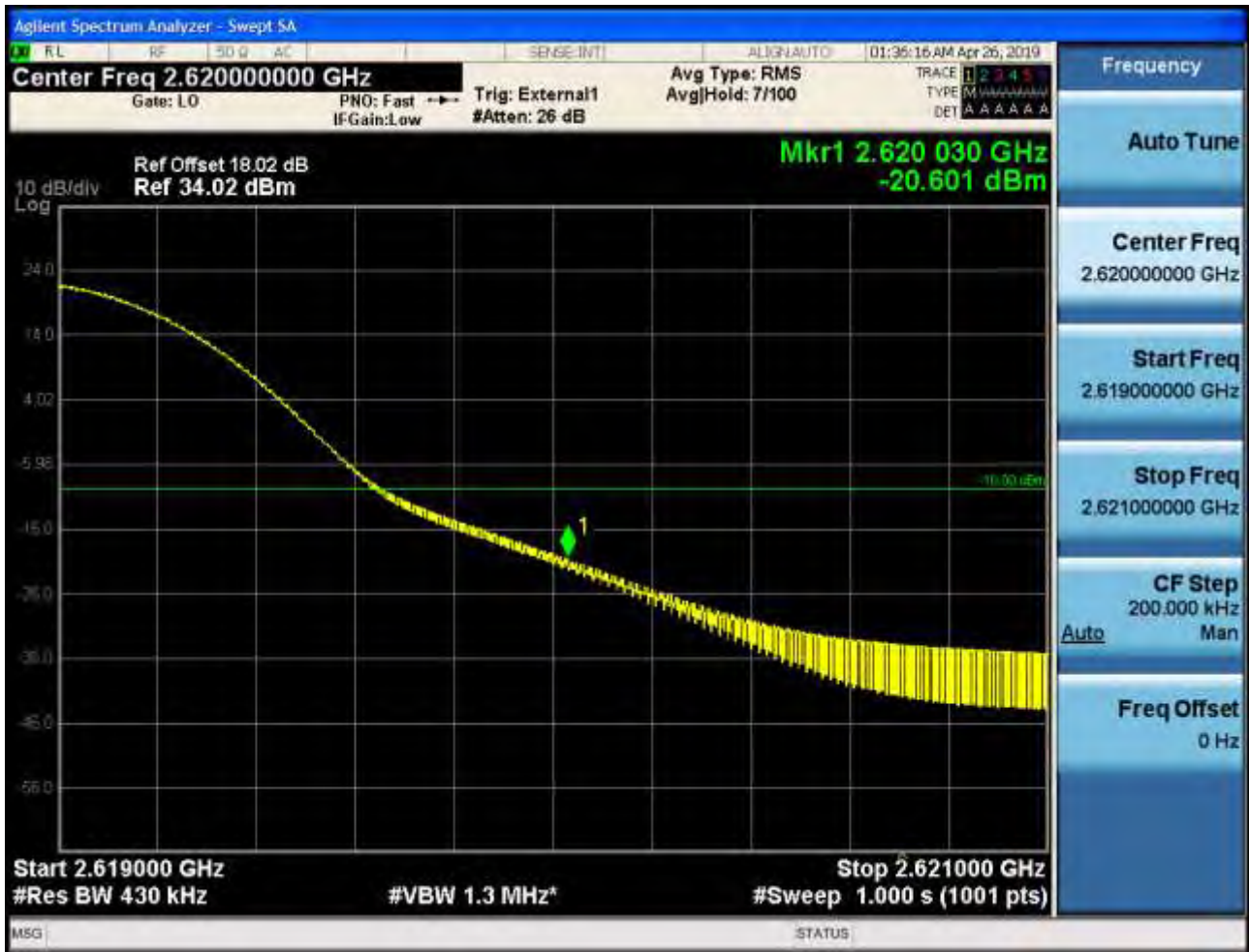






5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 PCC Test RB = 0 & SCC Test RB = 1 # max









5.1.1.2.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max







5.1.1.2.2.3 PCC Test RB = 0 & SCC Test RB = full RBs









5.1.1.2.2.4 PCC Test RB = full RBs & SCC Test RB = full RBs







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 = CA_38C

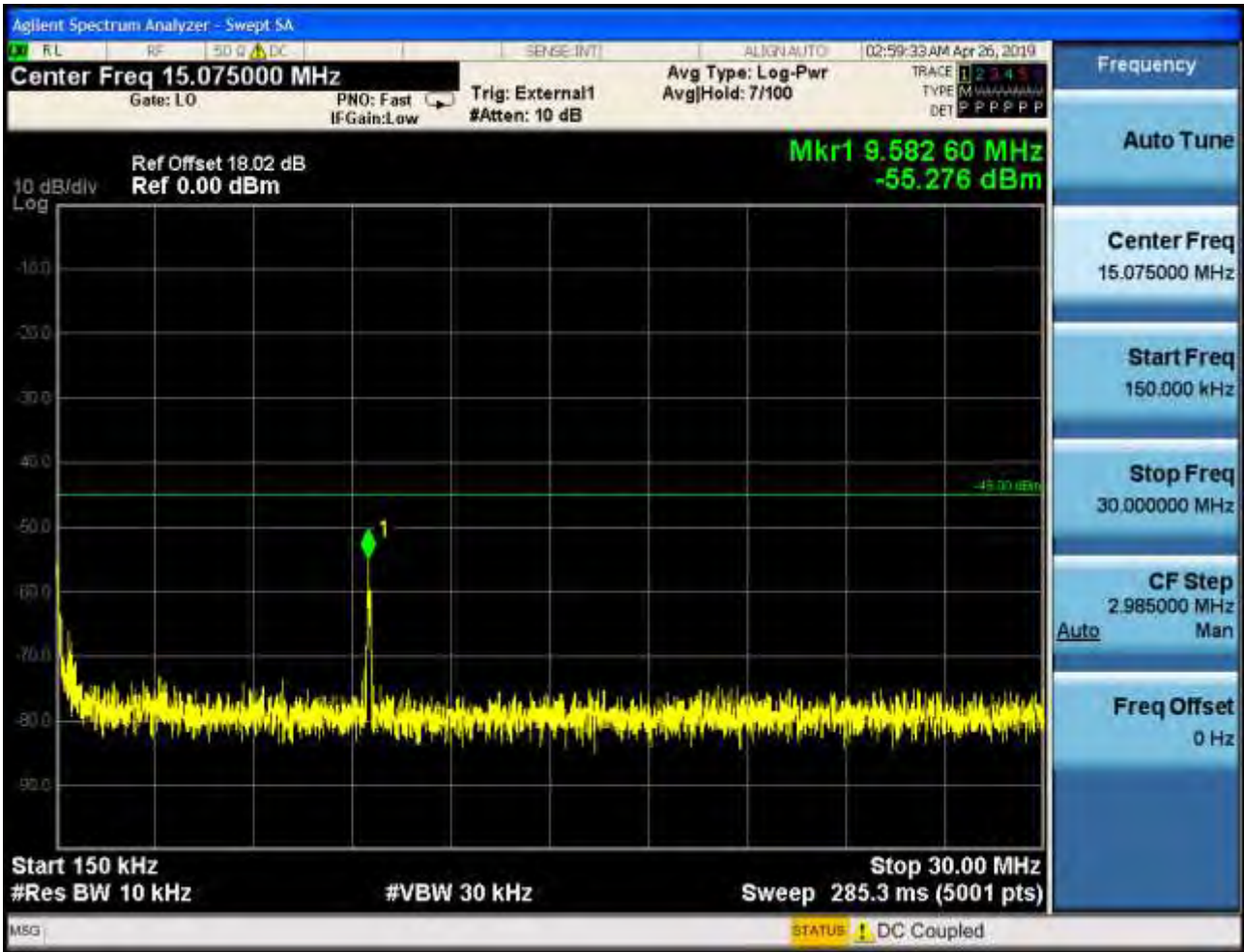
6.1.1.1 Test Mode = LTE/TM1

6.1.1.1.1 Test Bandwidth = 15+15

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 PCC Test RB = 1 # 0 & SCC Test RB = 0









6.1.1.1.2 Test Channel = MCH

6.1.1.1.2.1 PCC Test RB = 1 # 0 & SCC Test RB = 0



