



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_7C	LTE/T M1	15+15	LCH	1 # 0	0 # 0	22.35	22.33	33	PASS
				partial RBs # 0	0 # 0	22.26	22.24	33	PASS
				full RBs # 0	0 # 0	20.85	20.83	33	PASS
				full RBs # 0	full RBs # 0	18.83	18.81	33	PASS
			MCH	1 # 0	0 # 0	22.07	22.05	33	PASS
				partial RBs # 0	0 # 0	21.89	21.87	33	PASS
				full RBs # 0	0 # 0	20.77	20.75	33	PASS
				full RBs # 0	full RBs # 0	18.11	18.09	33	PASS
			HCH	1 # 0	0 # 0	22.21	22.19	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	22.15	22.13	33	PASS
				full RBs # 0	0 # 0	20.87	20.85	33	PASS
				full RBs # 0	full RBs # 0	18.42	18.40	33	PASS
		20+20	LCH	1 # 0	0 # 0	22.60	22.58	33	PASS
				partial RBs # 0	0 # 0	22.50	22.48	33	PASS
				full RBs # 0	0 # 0	21.30	21.28	33	PASS
				full RBs # 0	full RBs # 0	21.57	21.55	33	PASS
			MCH	1 # 0	0 # 0	22.44	22.42	33	PASS
				partial RBs # 0	0 # 0	22.25	22.23	33	PASS
				full RBs # 0	0 # 0	21.18	21.16	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	21.39	21.37	33	PASS
			HCH	1 # 0	0 # 0	22.41	22.39	33	PASS
				partial RBs # 0	0 # 0	22.42	22.40	33	PASS
				full RBs # 0	0 # 0	21.29	21.27	33	PASS
				full RBs # 0	full RBs # 0	21.39	21.37	33	PASS
	LTE/T M2	15+15	LCH	1 # 0	0 # 0	21.77	21.75	33	PASS
				partial RBs # 0	0 # 0	21.22	21.20	33	PASS
				full RBs # 0	0 # 0	19.87	19.85	33	PASS
				full RBs # 0	full RBs # 0	17.58	17.56	33	PASS
			MCH	1 # 0	0 # 0	21.71	21.69	33	PASS
				partial	0 # 0	20.91	20.89	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	19.86	19.84	33	PASS
				full RBs # 0	full RBs # 0	17.18	17.16	33	PASS
			HCH	1 # 0	0 # 0	21.85	21.83	33	PASS
				partial RBs # 0	0 # 0	21.20	21.18	33	PASS
				full RBs # 0	0 # 0	19.92	19.90	33	PASS
				full RBs # 0	full RBs # 0	17.44	17.42	33	PASS
		20+20	LCH	1 # 0	0 # 0	21.83	21.81	33	PASS
				partial RBs # 0	0 # 0	21.45	21.43	33	PASS
				full RBs # 0	0 # 0	20.17	20.15	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	20.27	20.25	33	PASS
				1 # 0	0 # 0	21.73	21.71	33	PASS
				partial RBs # 0	0 # 0	21.08	21.06	33	PASS
				full RBs # 0	0 # 0	20.16	20.14	33	PASS
				full RBs # 0	full RBs # 0	20.10	20.08	33	PASS
				1 # 0	0 # 0	21.52	21.50	33	PASS
				partial RBs # 0	0 # 0	21.31	21.29	33	PASS
				full RBs # 0	0 # 0	20.16	20.14	33	PASS
				full RBs # 0	full RBs # 0	20.16	20.14	33	PASS
				full RBs # 0	full RBs # 0	20.16	20.14	33	PASS

Note1:

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

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

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

b, SGP = Signal Generator Level

Note2:

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

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

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

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

Detector: RMS

2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
CA_7C	LTE/TM 1	15+15	LCH	1 # 0	0 # 0	4.03	13	PASS
				partial RBs # 0	0 # 0	4.64	13	PASS
				full RBs # 0	0 # 0	6.21	13	PASS
				full RBs # 0	full RBs # 0	6.14	13	PASS
			MCH	1 # 0	0 # 0	4.23	13	PASS
				partial RBs # 0	0 # 0	4.94	13	PASS
				full RBs # 0	0 # 0	6.30	13	PASS
				full RBs # 0	full RBs # 0	6.29	13	PASS
			HCH	1 # 0	0 # 0	4.53	13	PASS
				partial RBs # 0	0 # 0	5.08	13	PASS
				full RBs # 0	0 # 0	6.08	13	PASS
				full RBs # 0	full RBs # 0	6.04	13	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
		20+20	LCH	1 # 0	0 # 0	4.14	13	PASS
				partial RBs # 0	0 # 0	4.50	13	PASS
				full RBs # 0	0 # 0	6.03	13	PASS
				full RBs # 0	full RBs # 0	6.11	13	PASS
			MCH	1 # 0	0 # 0	4.12	13	PASS
				partial RBs # 0	0 # 0	4.66	13	PASS
				full RBs # 0	0 # 0	6.24	13	PASS
				full RBs # 0	full RBs # 0	6.18	13	PASS
			HCH	1 # 0	0 # 0	4.51	13	PASS
				partial RBs # 0	0 # 0	5.12	13	PASS
				full RBs # 0	0 # 0	6.07	13	PASS
				full RBs # 0	full RBs # 0	6.02	13	PASS
	LTE/TM 2	15+15	LCH	1 # 0	0 # 0	5.15	13	PASS
				partial RBs # 0	0 # 0	5.67	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	7.03	13	PASS
				full RBs # 0	full RBs # 0	7.05	13	PASS
			MCH	1 # 0	0 # 0	5.27	13	PASS
				partial RBs # 0	0 # 0	5.92	13	PASS
				full RBs # 0	0 # 0	7.23	13	PASS
				full RBs # 0	full RBs # 0	7.23	13	PASS
			HCH	1 # 0	0 # 0	5.41	13	PASS
				partial RBs # 0	0 # 0	6.10	13	PASS
				full RBs # 0	0 # 0	7.06	13	PASS
				full RBs # 0	full RBs # 0	6.95	13	PASS
		20+20	LCH	1 # 0	0 # 0	5.10	13	PASS
				partial RBs # 0	0 # 0	5.57	13	PASS
				full RBs # 0	0 # 0	7.08	13	PASS
				full RBs # 0	full RBs # 0	7.25	13	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
			MCH	1 # 0	0 # 0	5.28	13	PASS
				partial RBs # 0	0 # 0	5.71	13	PASS
				full RBs # 0	0 # 0	7.17	13	PASS
				full RBs # 0	full RBs # 0	7.18	13	PASS
			HCH	1 # 0	0 # 0	5.27	13	PASS
				partial RBs # 0	0 # 0	6.19	13	PASS
				full RBs # 0	0 # 0	7.19	13	PASS
				full RBs # 0	full RBs # 0	7.25	13	PASS

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

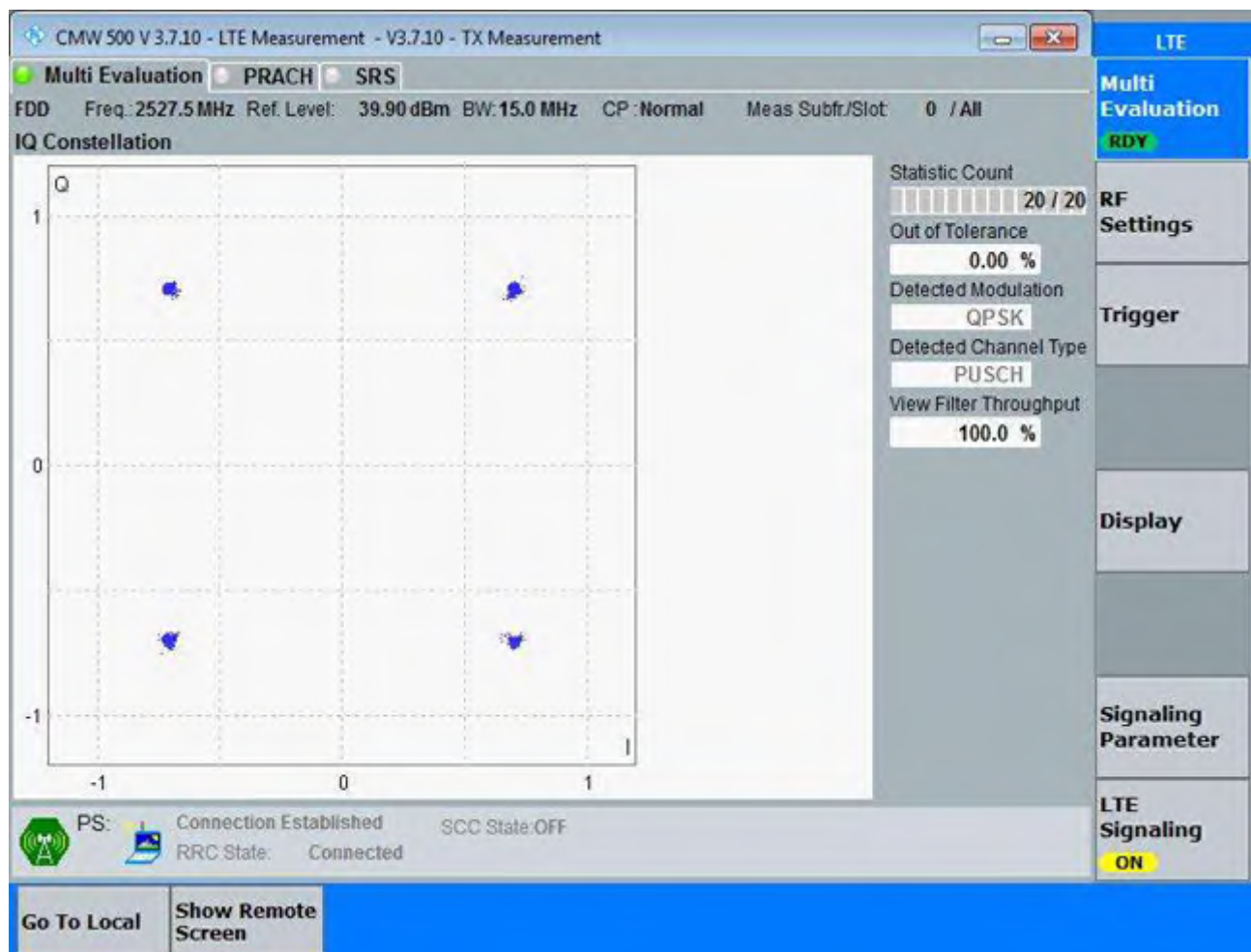
3.1.1 Test Band = CA_7C

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

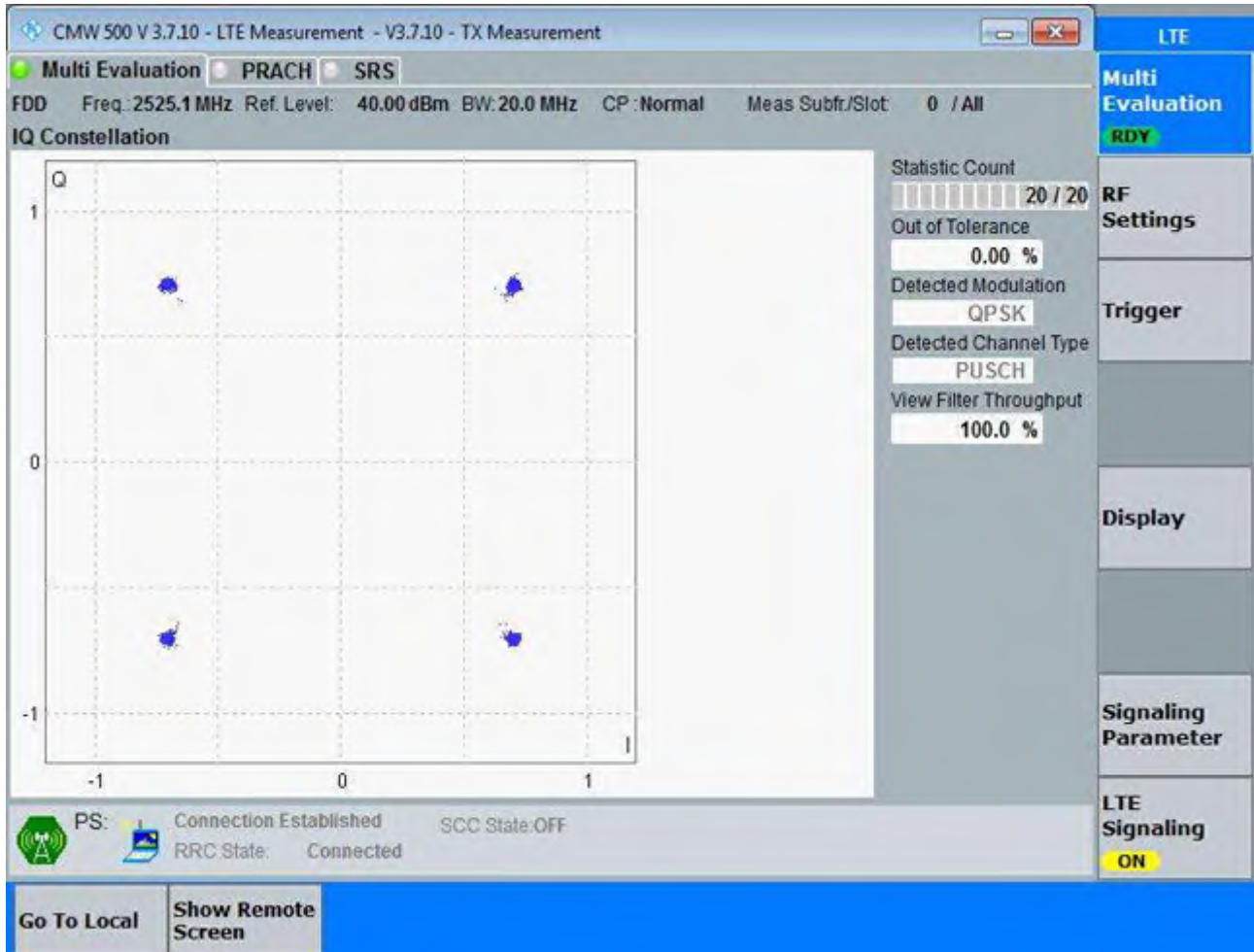
3.1.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



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

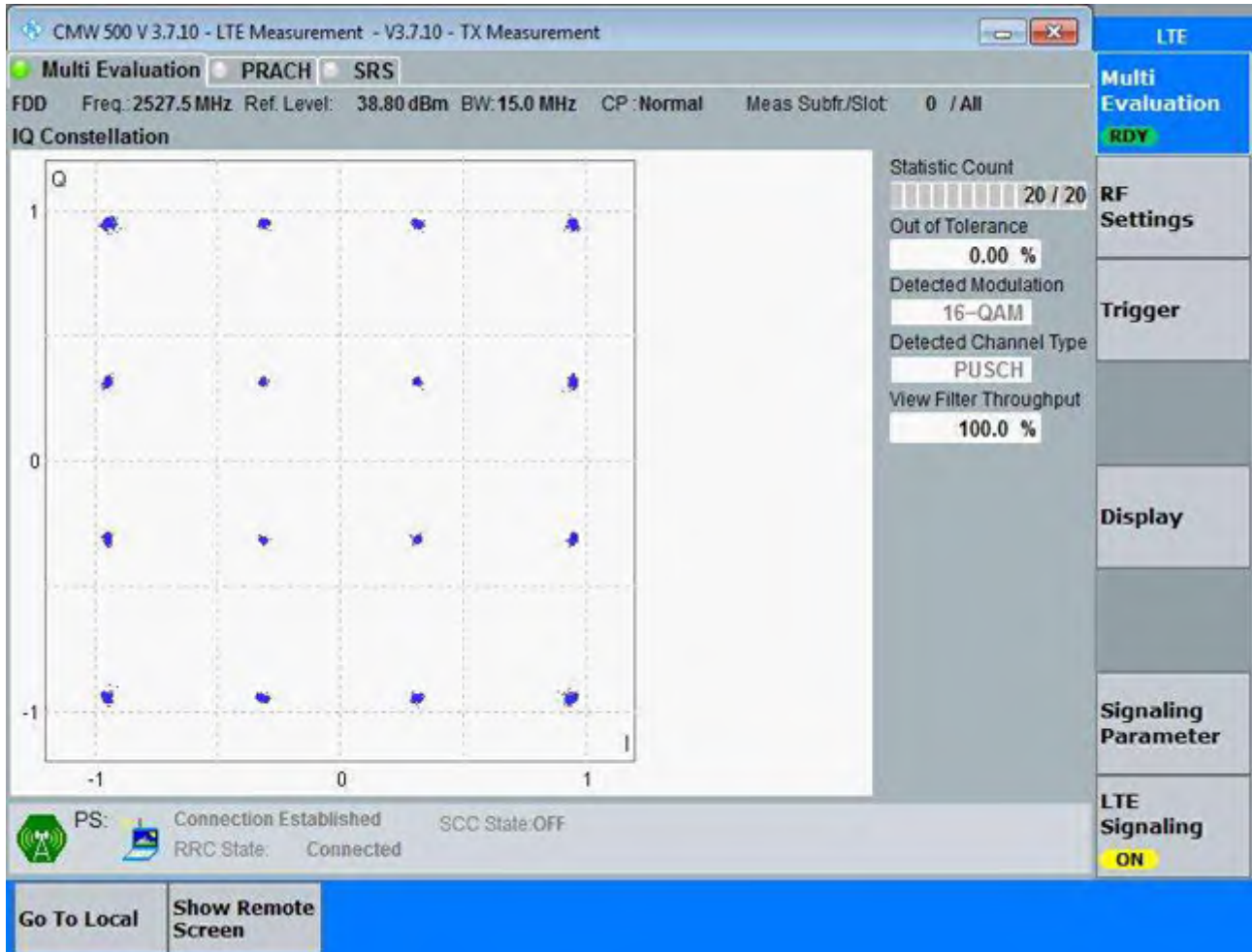


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 15+15

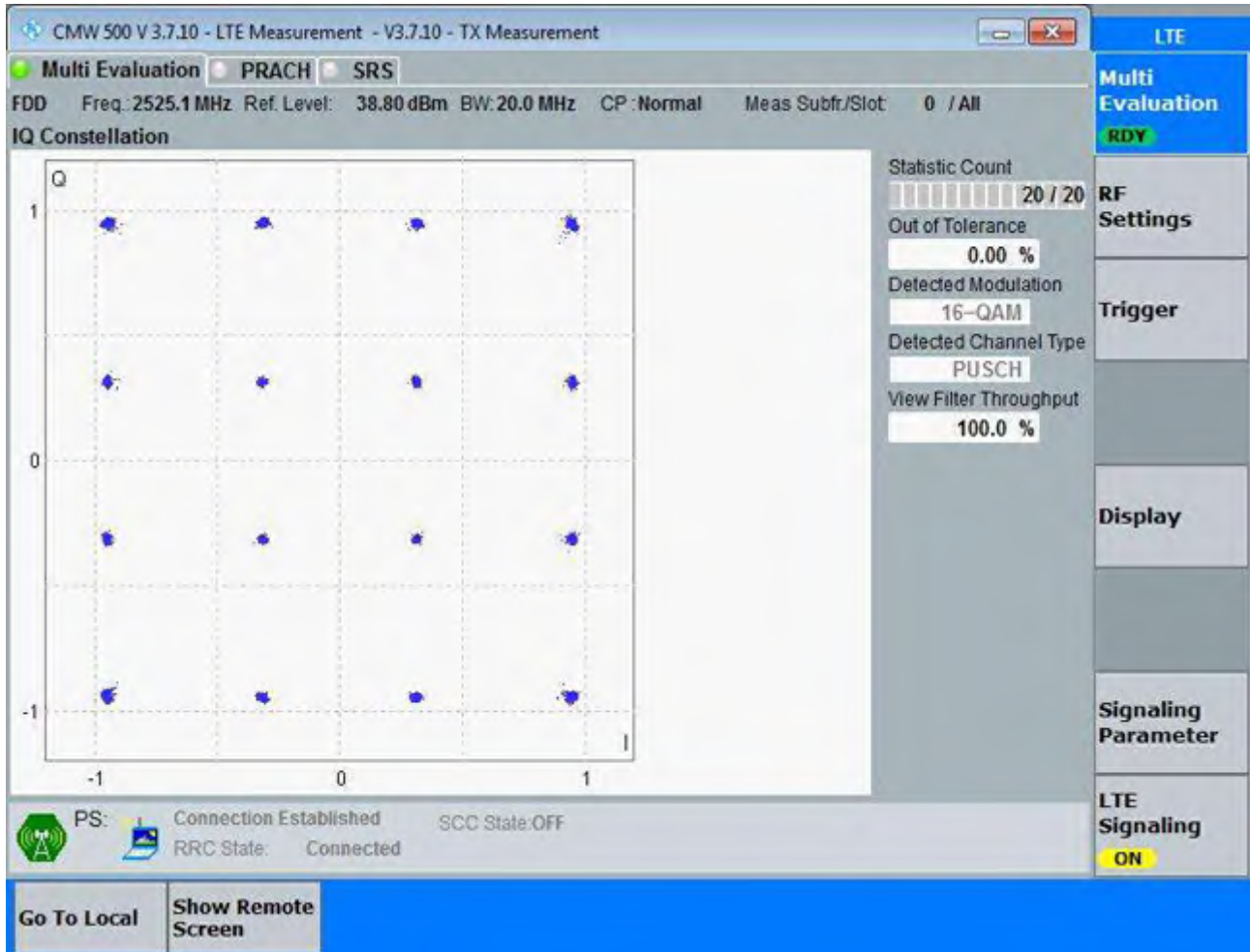
3.1.1.2.1.1 Test Channel = MCH

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_7C	LTE/TM1	15+15	LCH	full RBs # 0	full RBs # 0	28.98	31.25	PASS
			MCH	full RBs # 0	full RBs # 0	28.93	31.21	PASS
			HCH	full RBs # 0	full RBs # 0	29.07	31.38	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.58	41.44	PASS
			MCH	full RBs # 0	full RBs # 0	38.36	41.37	PASS
			HCH	full RBs # 0	full RBs # 0	38.49	41.35	PASS
	LTE/TM2	15+15	LCH	full RBs # 0	full RBs # 0	28.97	31.26	PASS
			MCH	full RBs # 0	full RBs # 0	28.92	31.28	PASS
			HCH	full RBs # 0	full RBs # 0	29.00	31.34	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.60	41.37	PASS
			MCH	full RBs # 0	full RBs # 0	38.29	41.36	PASS
			HCH	full RBs # 0	full RBs # 0	38.45	41.40	PASS

Part II - Test Plots

4.1 For LTE

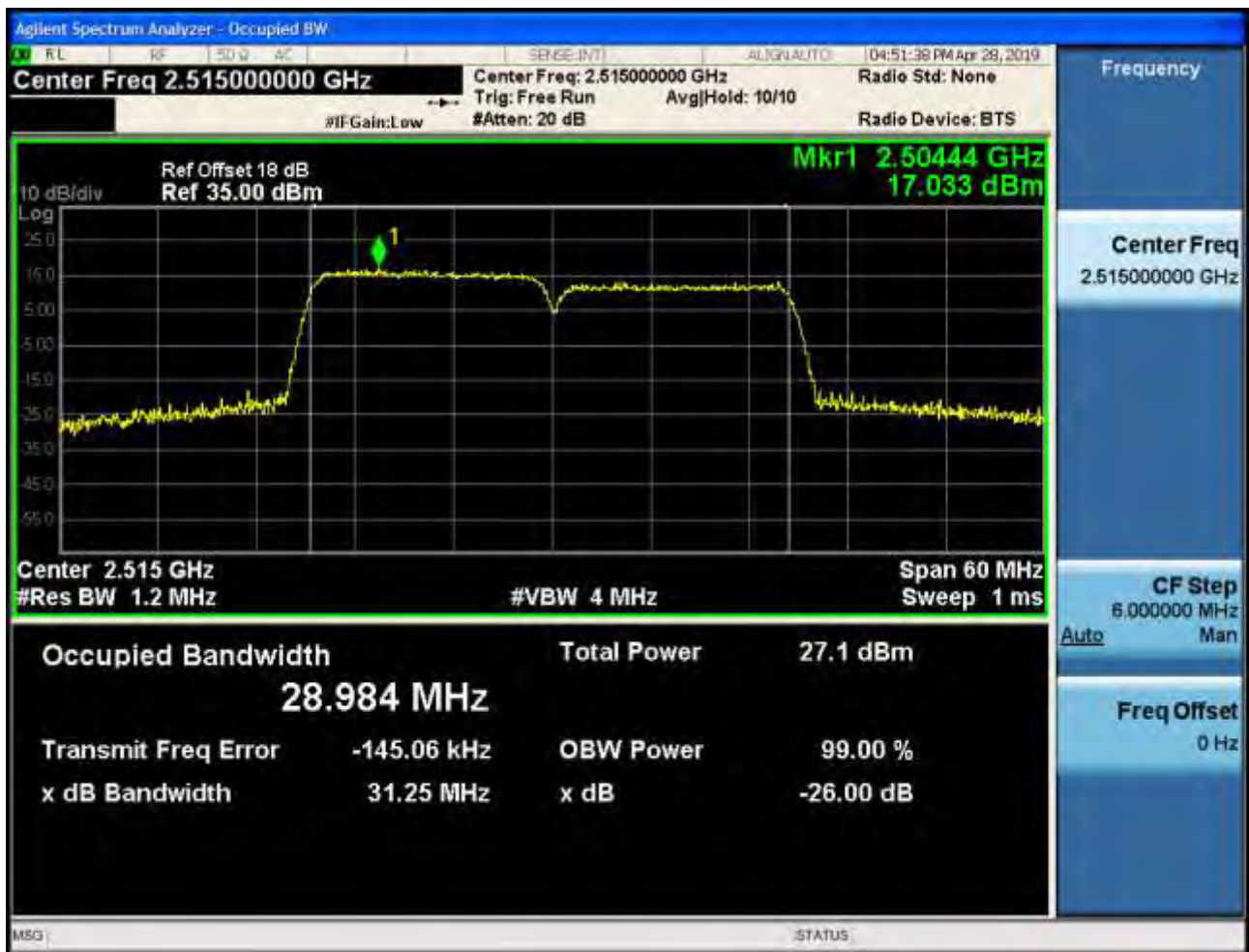
4.1.1 Test Band = CA_7C

4.1.1.1 Test Mode = LTE/TM1

4.1.1.1.1 Test Bandwidth = 15+15

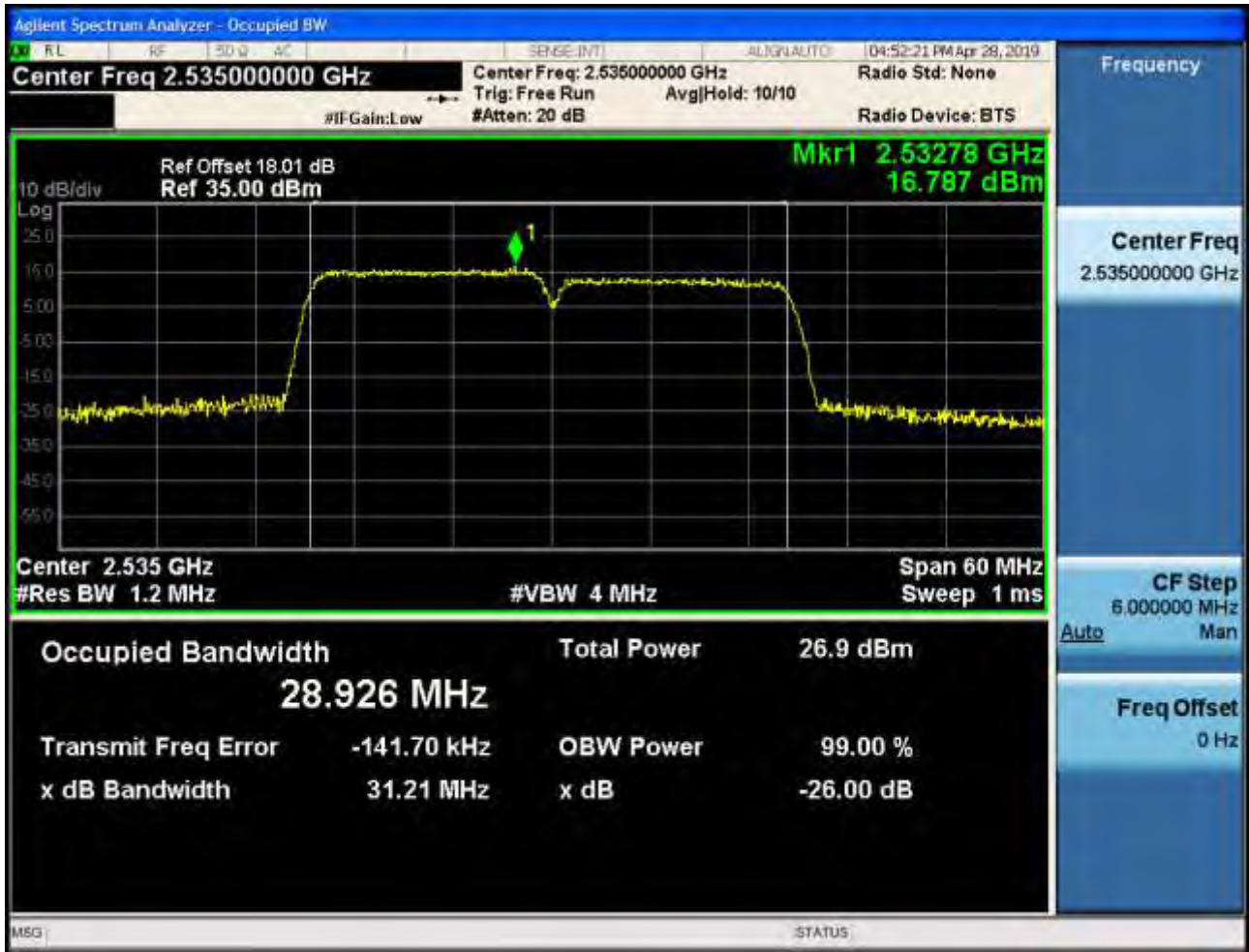
4.1.1.1.1.1 Test Channel = LCH

4.1.1.1.1.1.1 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

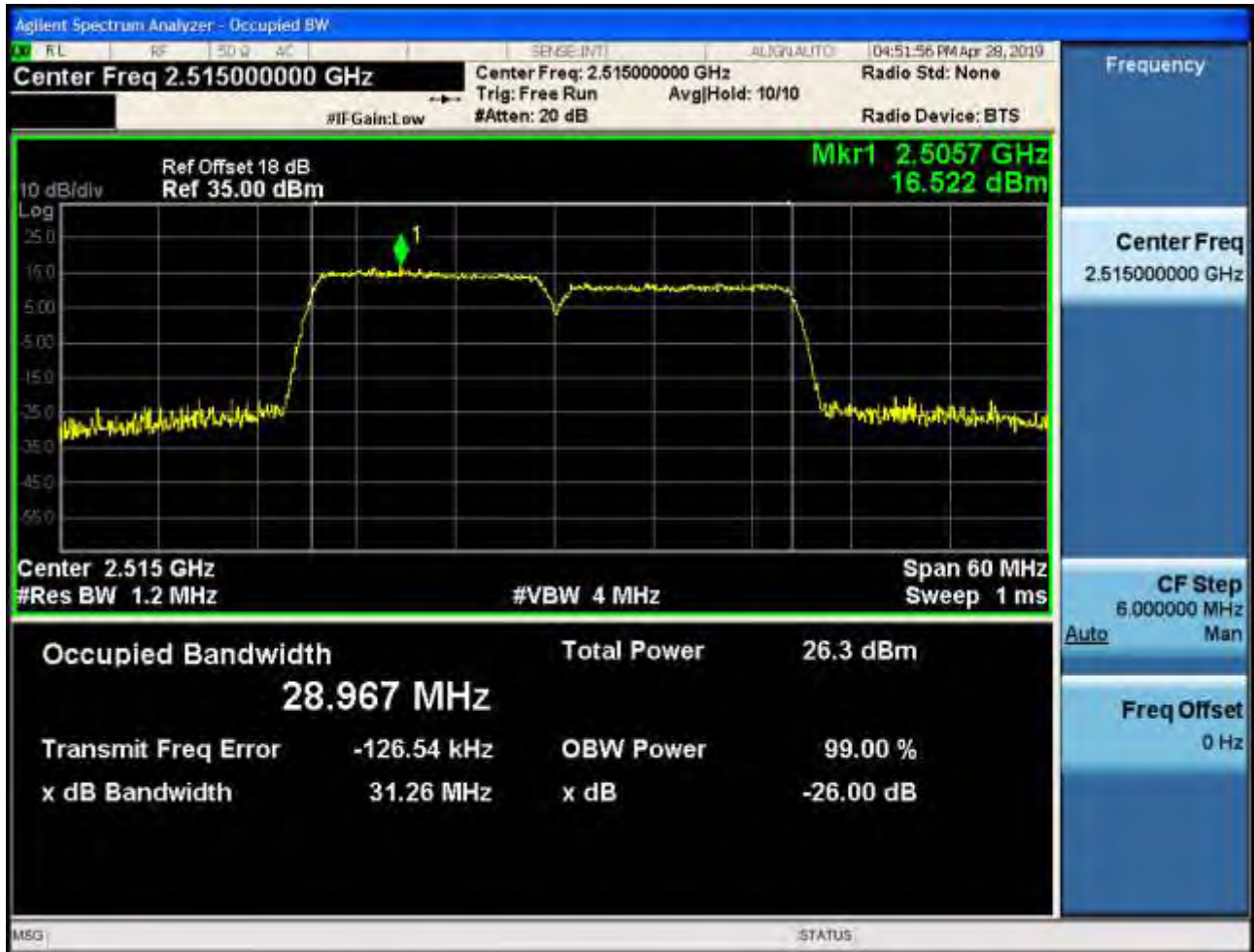


4.1.1.1 Test Mode = LTE/TM2

4.1.1.1.1 Test Bandwidth = 15+15

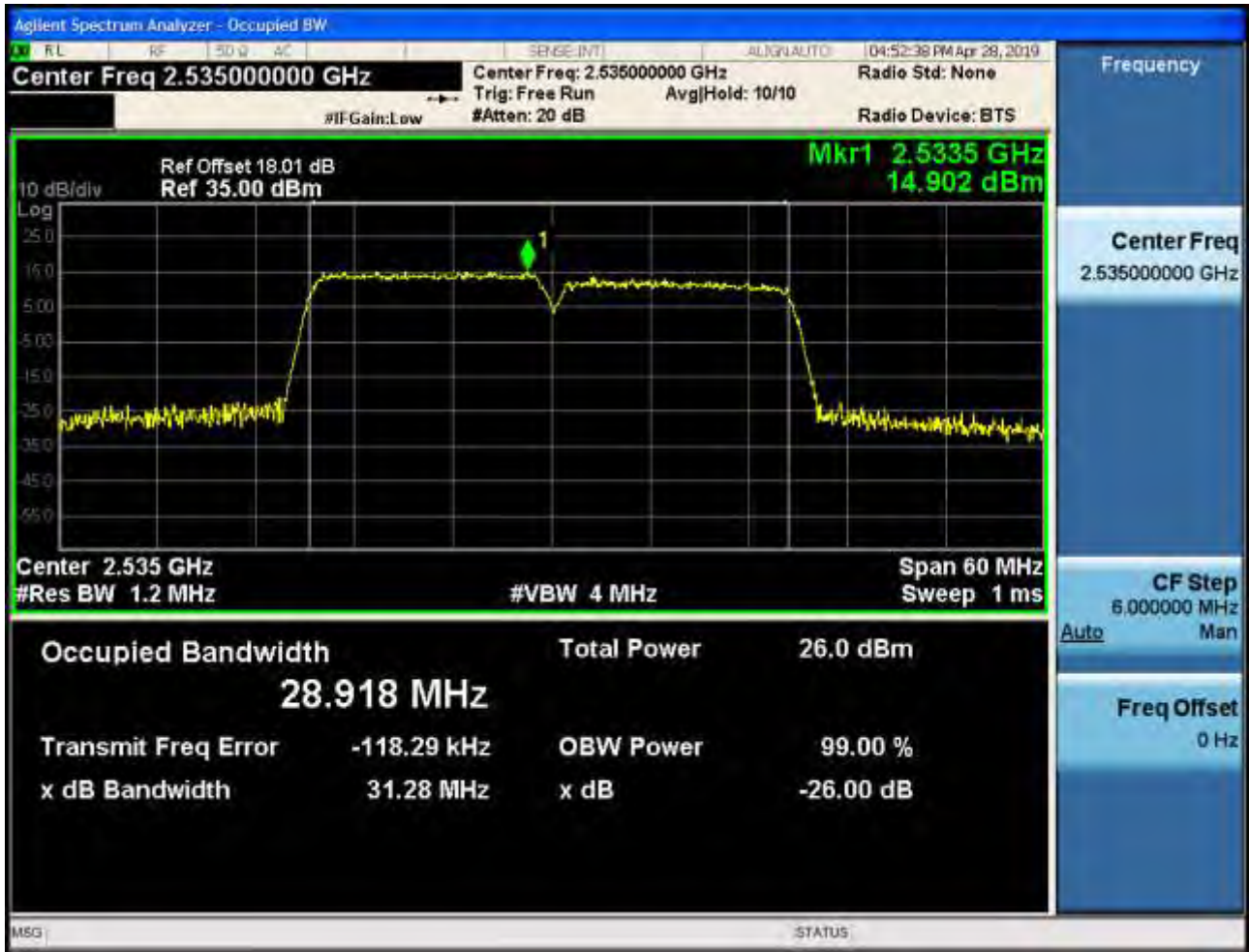
4.1.1.1.1.1 Test Channel = LCH

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

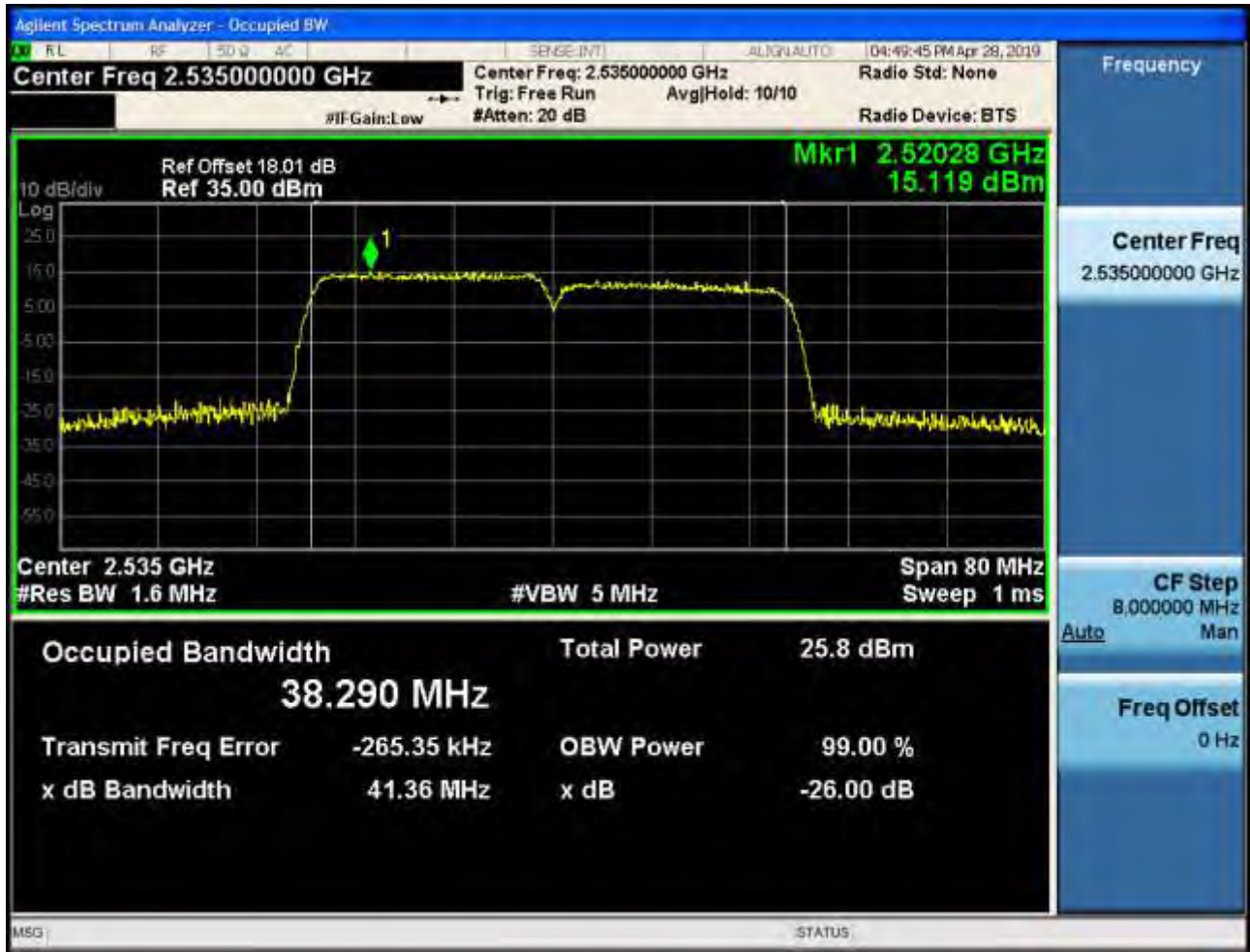
4.1.1.1.2.1 Test Channel = LCH

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



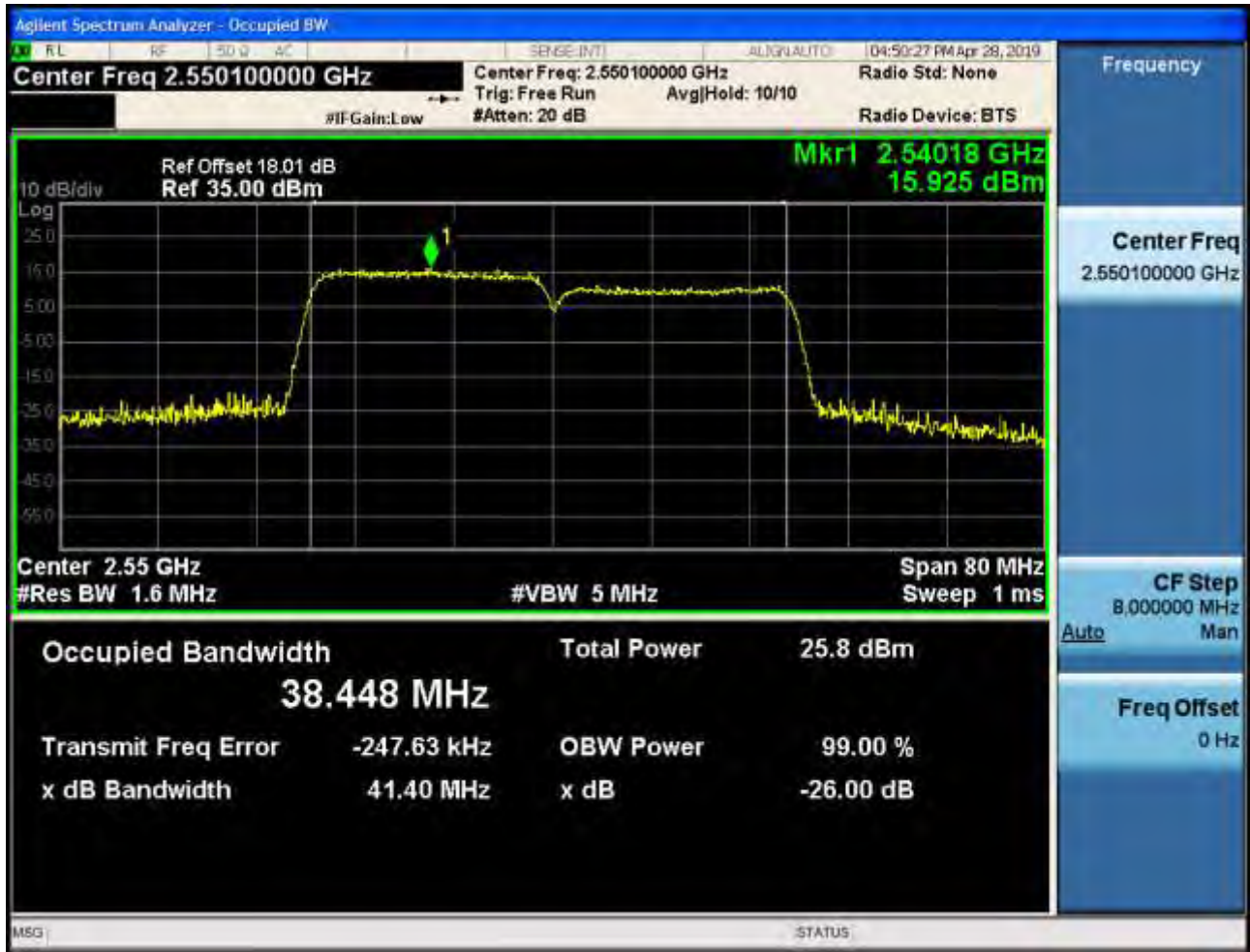
4.1.1.1.2.2 Test Channel = MCH

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_7C

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







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







5.1.1.1.1.2.4 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



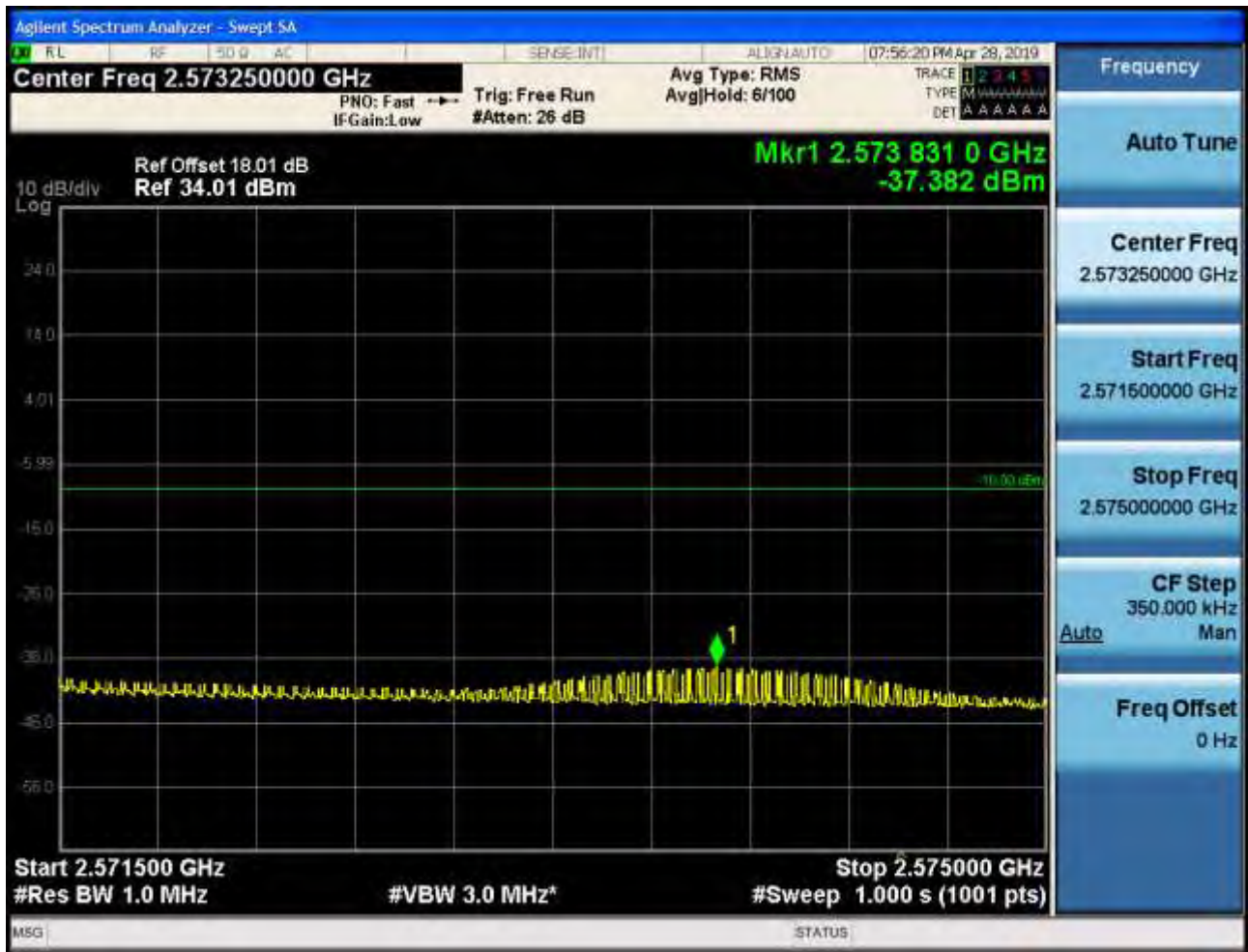




5.1.1.2.2.2 Test Channel = HCH

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_7C

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







6.1.1.1.1.2 Test Channel = MCH

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







6.1.1.1.1.3 Test Channel = HCH

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



