



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	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
CA_41 C	LTE/TM1	15+15	LCH	1 # 0	0 # 0	23.31	23.41	33	PASS
				partial RBs # 0	0 # 0	23.35	23.45	33	PASS
				full RBs # 0	0 # 0	22.40	22.50	33	PASS
				full RBs # 0	full RBs # 0	21.61	21.71	33	PASS
			MCH	1 # 0	0 # 0	23.31	23.41	33	PASS
				partial RBs # 0	0 # 0	23.35	23.45	33	PASS
				full RBs # 0	0 # 0	22.35	22.45	33	PASS
				full RBs # 0	full RBs # 0	21.30	21.40	33	PASS
			HCH	1 # 0	0 # 0	23.40	23.50	33	PASS
				partial RBs # 0	0 # 0	23.34	23.44	33	PASS
				full RBs # 0	0 # 0	22.39	22.49	33	PASS
				full RBs # 0	full RBs # 0	21.31	21.41	33	PASS
		20+20	LCH	1 # 0	0 # 0	23.41	23.51	33	PASS
				partial RBs # 0	0 # 0	23.38	23.48	33	PASS

Test Band (LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict		
				full RBs # 0	0 # 0	22.41	22.51	33	PASS		
				full RBs # 0	full RBs # 0	21.62	21.72	33	PASS		
			MCH	1 # 0	0 # 0	23.45	23.55	33	PASS		
				partial RBs # 0	0 # 0	23.33	23.43	33	PASS		
				full RBs # 0	0 # 0	22.40	22.50	33	PASS		
				full RBs # 0	full RBs # 0	21.27	21.37	33	PASS		
			HCH	1 # 0	0 # 0	23.41	23.51	33	PASS		
				partial RBs # 0	0 # 0	23.16	23.26	33	PASS		
				full RBs # 0	0 # 0	22.29	22.39	33	PASS		
				full RBs # 0	full RBs # 0	21.23	21.33	33	PASS		
			LTE/TM2	15+15	LCH	1 # 0	0 # 0	22.95	23.05	33	PASS
						partial RBs # 0	0 # 0	22.49	22.59	33	PASS
	full RBs # 0	0 # 0				21.47	21.57	33	PASS		
	full RBs # 0	full RBs # 0				20.50	20.60	33	PASS		
	MCH	1 # 0			0 # 0	22.98	23.08	33	PASS		
		partial RBs # 0			0 # 0	22.38	22.48	33	PASS		
				full RBs # 0	0 # 0	21.40	21.50	33	PASS		

Test Band (LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
				full RBs # 0	full RBs # 0	20.29	20.39	33	PASS
			HCH	1 # 0	0 # 0	22.76	22.86	33	PASS
				partial RBs # 0	0 # 0	22.50	22.60	33	PASS
				full RBs # 0	0 # 0	21.40	21.50	33	PASS
				full RBs # 0	full RBs # 0	20.41	20.51	33	PASS
		20+20	LCH	1 # 0	0 # 0	23.06	23.16	33	PASS
				partial RBs # 0	0 # 0	22.54	22.64	33	PASS
				full RBs # 0	0 # 0	21.43	21.53	33	PASS
				full RBs # 0	full RBs # 0	20.58	20.68	33	PASS
			MCH	1 # 0	0 # 0	23.04	23.14	33	PASS
				partial RBs # 0	0 # 0	22.43	22.53	33	PASS
				full RBs # 0	0 # 0	21.43	21.53	33	PASS
				full RBs # 0	full RBs # 0	20.38	20.48	33	PASS
			HCH	1 # 0	0 # 0	23.11	23.21	33	PASS
				partial RBs # 0	0 # 0	22.33	22.43	33	PASS
				full RBs # 0	0 # 0	21.27	21.37	33	PASS
				full RBs # 0	full RBs # 0	20.32	20.42	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_41C	LTE/TM1	15+15	LCH	1 # 0	0 # 0	3.39	13	PASS
				partial RBs # 0	0 # 0	3.97	13	PASS
				full RBs # 0	0 # 0	6.13	13	PASS
				full RBs # 0	full RBs # 0	6.09	13	PASS
			MCH	1 # 0	0 # 0	3.43	13	PASS
				partial RBs # 0	0 # 0	4.07	13	PASS
				full RBs # 0	0 # 0	5.95	13	PASS
				full RBs # 0	full RBs # 0	6.14	13	PASS
			HCH	1 # 0	0 # 0	3.43	13	PASS
				partial RBs # 0	0 # 0	3.99	13	PASS
				full RBs # 0	0 # 0	5.91	13	PASS
				full RBs # 0	full RBs # 0	6.18	13	PASS
		20+20	LCH	1 # 0	0 # 0	3.37	13	PASS
				partial RBs # 0	0 # 0	3.97	13	PASS
				full RBs # 0	0 # 0	5.74	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	full RBs # 0	5.82	13	PASS
			MCH	1 # 0	0 # 0	3.46	13	PASS
				partial RBs # 0	0 # 0	4.05	13	PASS
				full RBs # 0	0 # 0	5.80	13	PASS
				full RBs # 0	full RBs # 0	5.67	13	PASS
			HCH	1 # 0	0 # 0	3.44	13	PASS
				partial RBs # 0	0 # 0	4.05	13	PASS
				full RBs # 0	0 # 0	5.78	13	PASS
	full RBs # 0	full RBs # 0		5.97	13	PASS		
	LTE/TM2	15+15	LCH	1 # 0	0 # 0	4.59	13	PASS
				partial RBs # 0	0 # 0	5.47	13	PASS
				full RBs # 0	0 # 0	6.79	13	PASS
				full RBs # 0	full RBs # 0	6.85	13	PASS
			MCH	1 # 0	0 # 0	4.64	13	PASS
				partial RBs # 0	0 # 0	5.62	13	PASS
				full RBs # 0	0 # 0	6.71	13	PASS
full RBs # 0				full RBs # 0	6.93	13	PASS	

Test Band (LTE)	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict
			HCH	1 # 0	0 # 0	4.71	13	PASS
				partial RBs # 0	0 # 0	5.49	13	PASS
				full RBs # 0	0 # 0	6.79	13	PASS
				full RBs # 0	full RBs # 0	6.98	13	PASS
			LCH	1 # 0	0 # 0	4.43	13	PASS
				partial RBs # 0	0 # 0	5.46	13	PASS
				full RBs # 0	0 # 0	6.79	13	PASS
				full RBs # 0	full RBs # 0	6.81	13	PASS
		MCH	1 # 0	0 # 0	4.88	13	PASS	
			partial RBs # 0	0 # 0	5.56	13	PASS	
			full RBs # 0	0 # 0	6.81	13	PASS	
			full RBs # 0	full RBs # 0	6.88	13	PASS	
		HCH	1 # 0	0 # 0	4.39	13	PASS	
			partial RBs # 0	0 # 0	5.51	13	PASS	
			full RBs # 0	0 # 0	6.47	13	PASS	
			full RBs # 0	full RBs # 0	6.70	13	PASS	
20+20			HCH	1 # 0	0 # 0	4.71	13	PASS
				partial RBs # 0	0 # 0	5.49	13	PASS
				full RBs # 0	0 # 0	6.79	13	PASS
				full RBs # 0	full RBs # 0	6.98	13	PASS
			LCH	1 # 0	0 # 0	4.43	13	PASS
				partial RBs # 0	0 # 0	5.46	13	PASS
				full RBs # 0	0 # 0	6.79	13	PASS
				full RBs # 0	full RBs # 0	6.81	13	PASS
MCH	1 # 0	0 # 0	4.88	13	PASS			
	partial RBs # 0	0 # 0	5.56	13	PASS			
	full RBs # 0	0 # 0	6.81	13	PASS			
	full RBs # 0	full RBs # 0	6.88	13	PASS			

3Appendix_C: Modulation Characteristics

Part I - Test Plots

3.1 For LTE

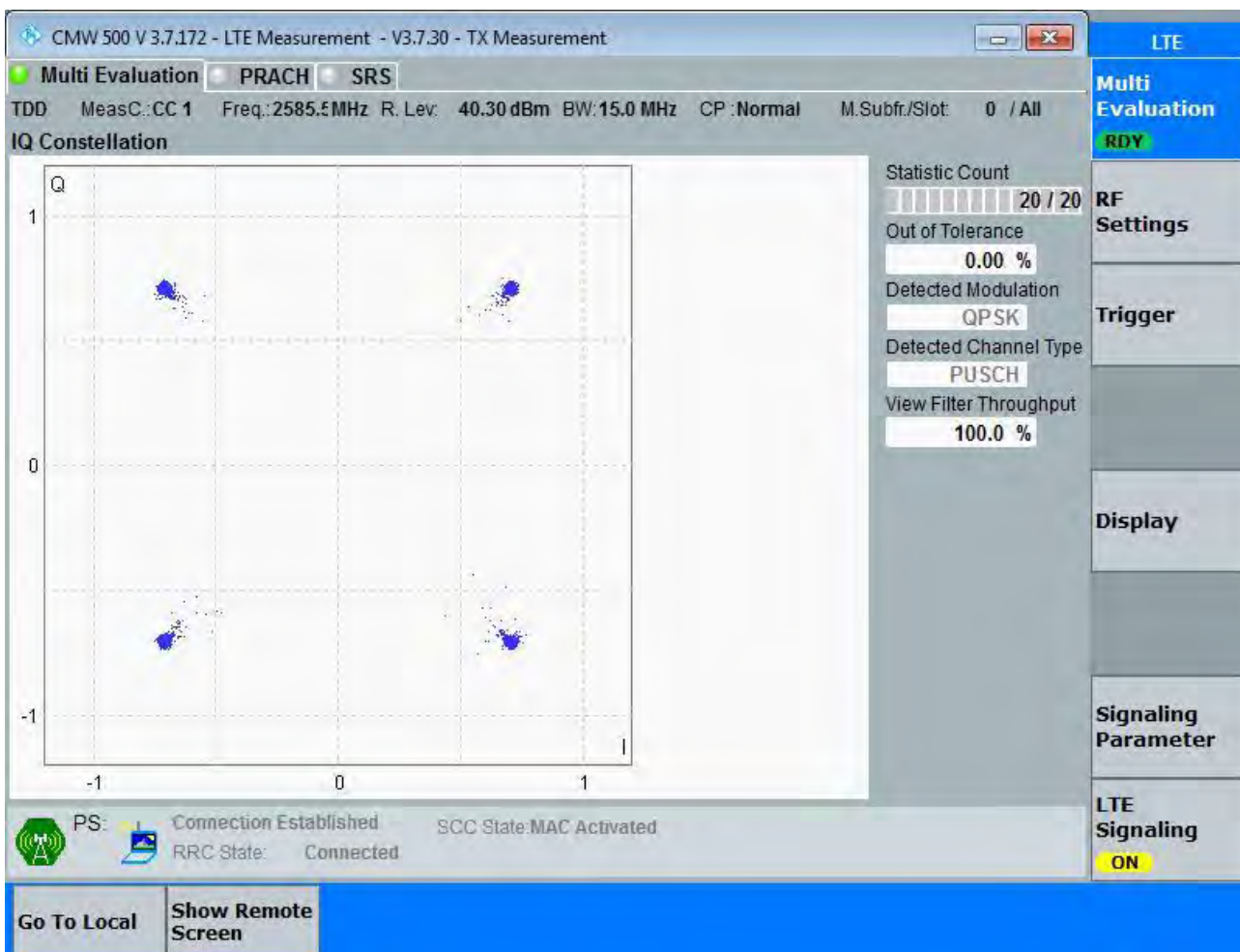
3.1.1 Test Band = CA_41C

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

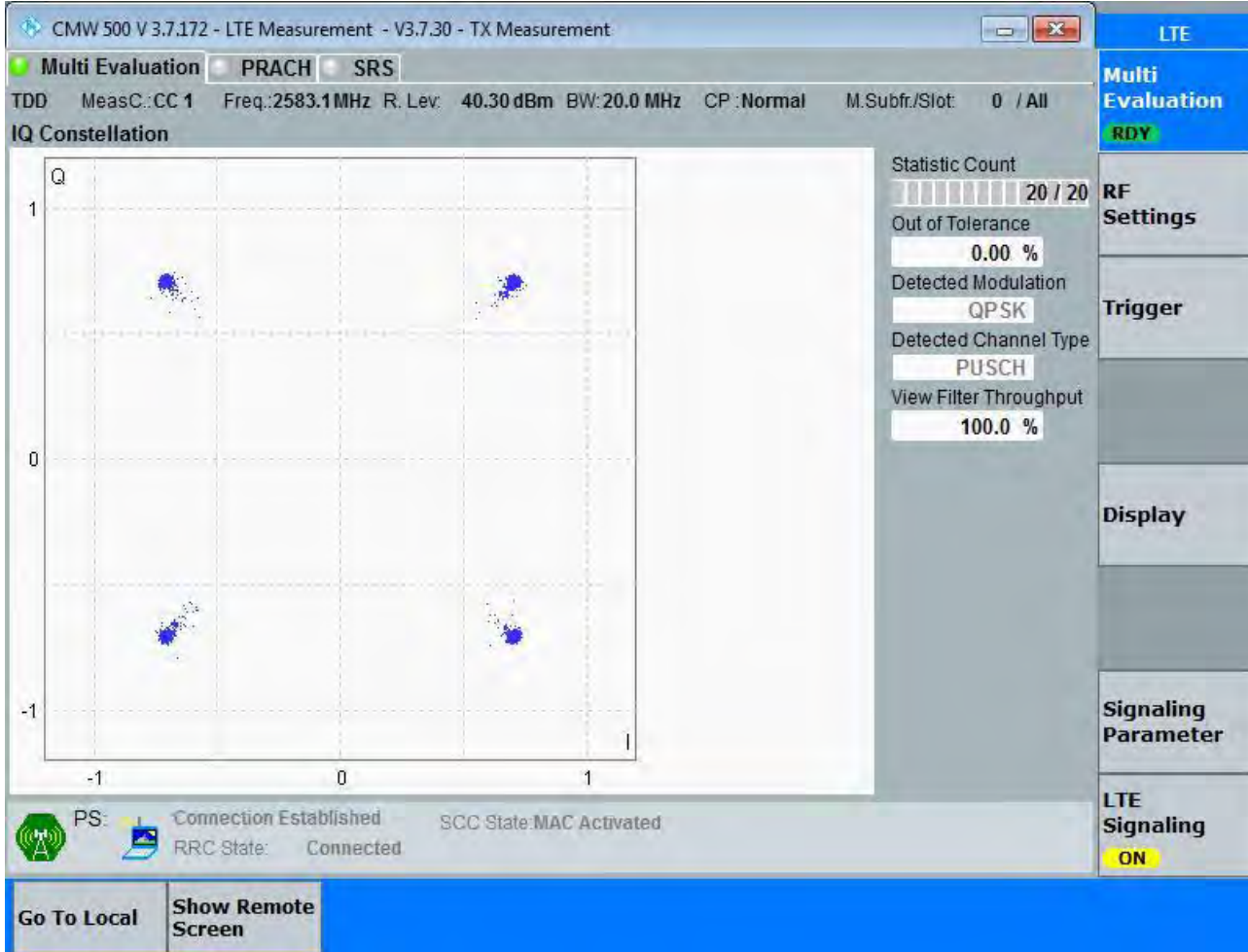
3.1.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



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

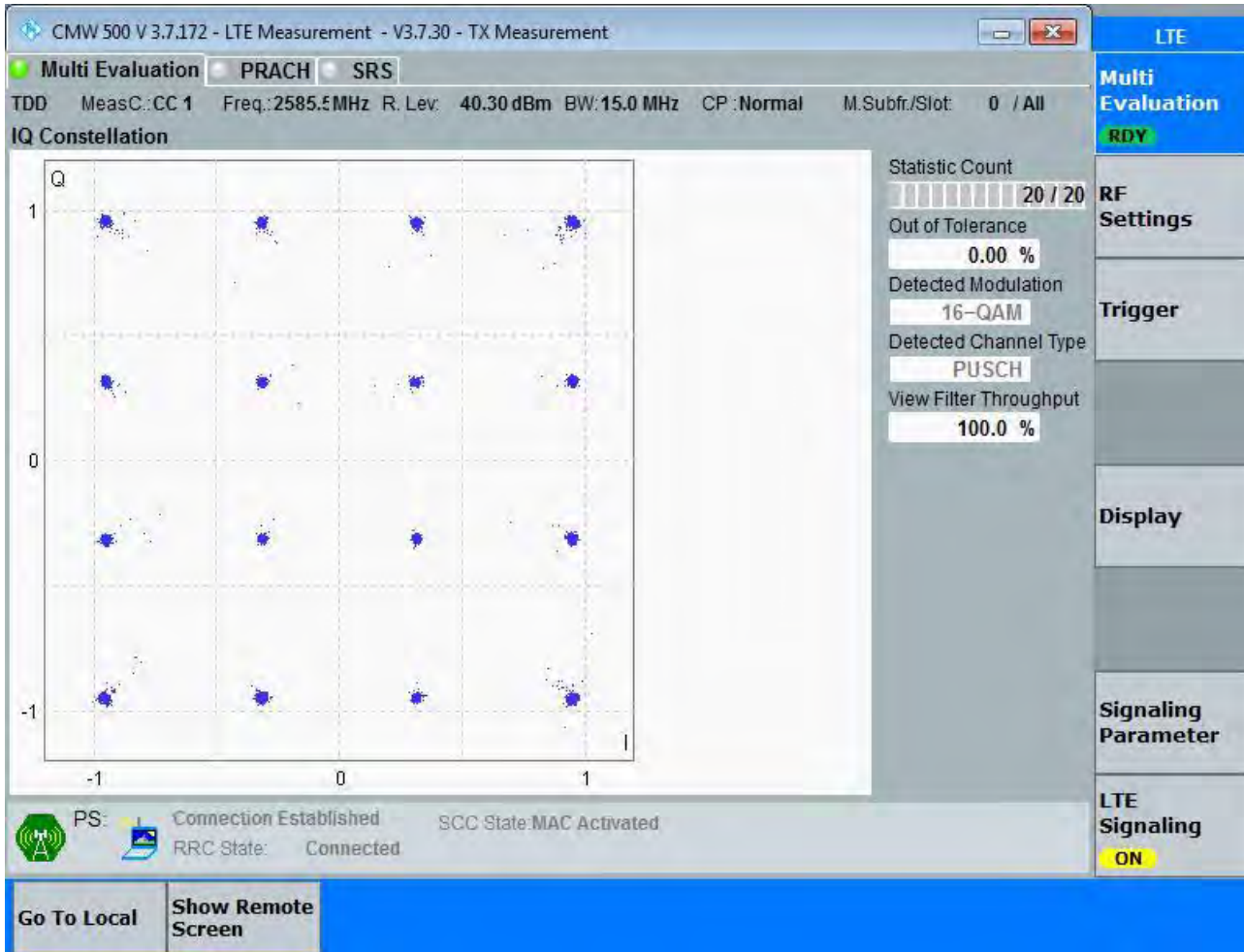


3.1.1.2 Test Mode = LTE/TM2

3.1.1.2.1 Test Bandwidth = 15+15

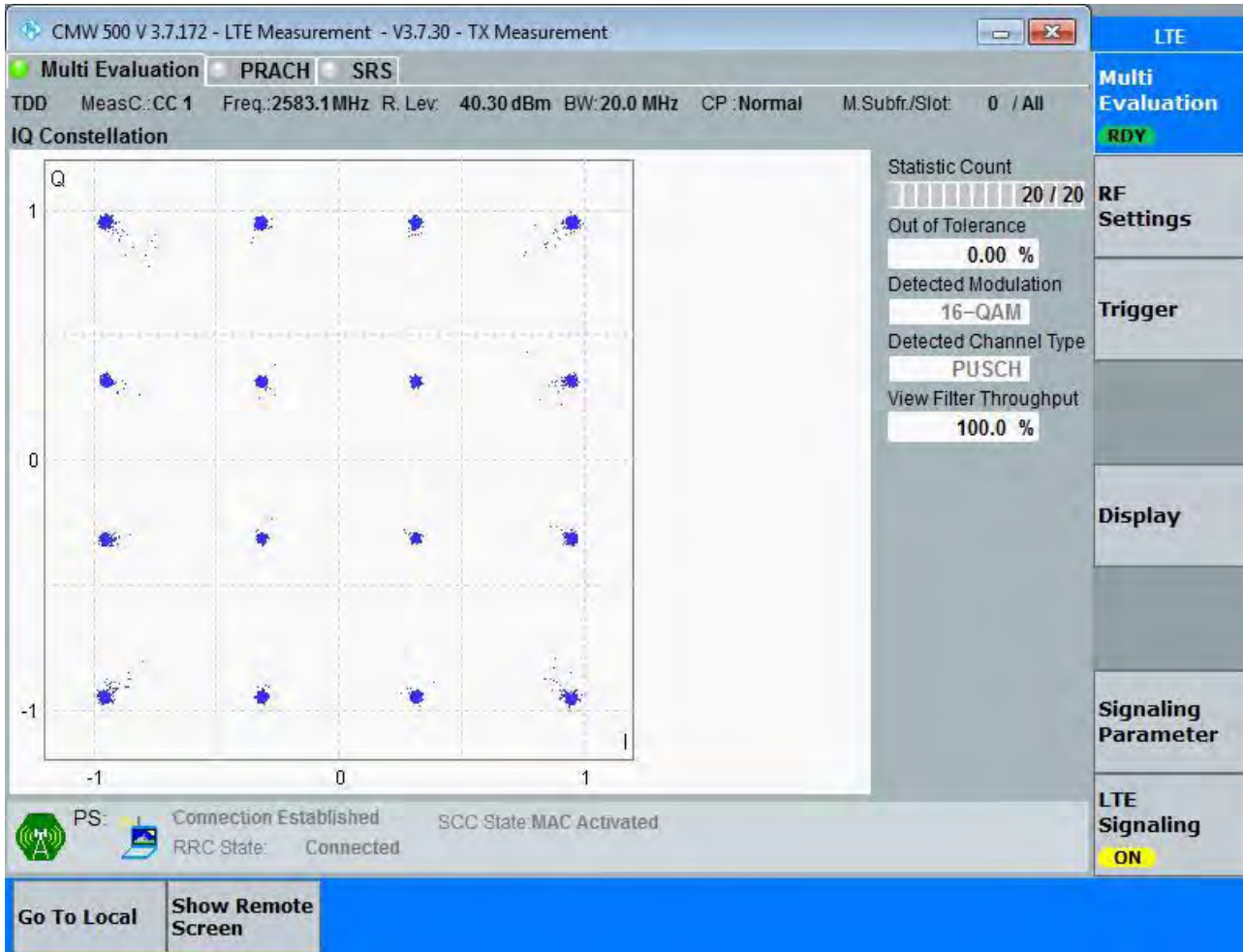
3.1.1.2.1.1 Test Channel = MCH

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 Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
CA_41C	LTE/TM1	15+15	LCH	full RBs # 0	full RBs # 0	28.74	31.00	PASS
			MCH	full RBs # 0	full RBs # 0	28.76	33.77	PASS
			HCH	full RBs # 0	full RBs # 0	28.68	33.95	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.30	42.40	PASS
			MCH	full RBs # 0	full RBs # 0	38.21	42.23	PASS
			HCH	full RBs # 0	full RBs # 0	38.26	41.48	PASS
	LTE/TM2	15+15	LCH	full RBs # 0	full RBs # 0	28.85	31.72	PASS
			MCH	full RBs # 0	full RBs # 0	28.78	30.95	PASS
			HCH	full RBs # 0	full RBs # 0	28.75	31.24	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.32	41.35	PASS
			MCH	full RBs # 0	full RBs # 0	38.29	42.28	PASS
			HCH	full RBs # 0	full RBs # 0	38.46	41.19	PASS

Part II - Test Plots

4.1 For LTE

4.1.1 Test Band = CA_41C

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

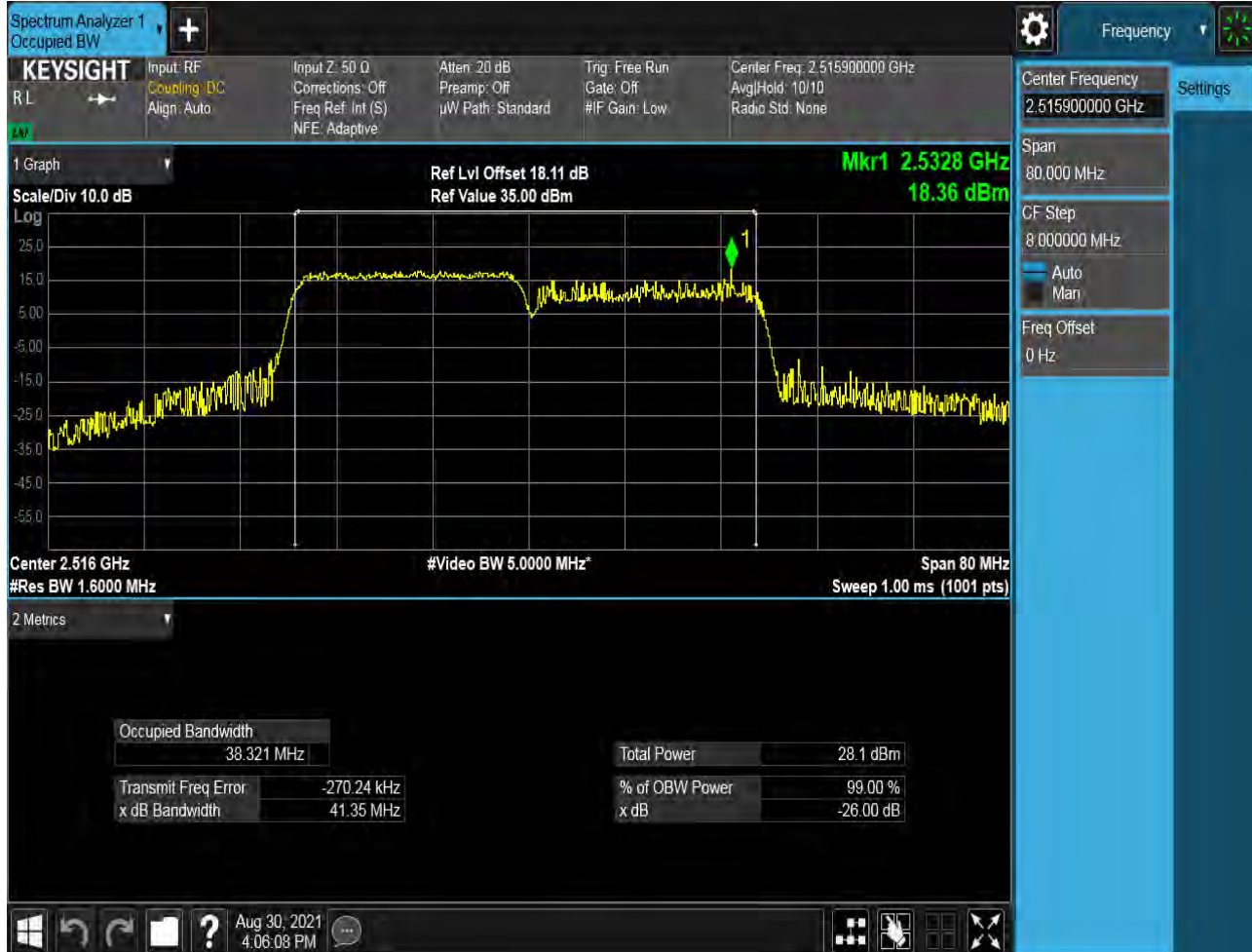
4.1.1.1.1.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



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

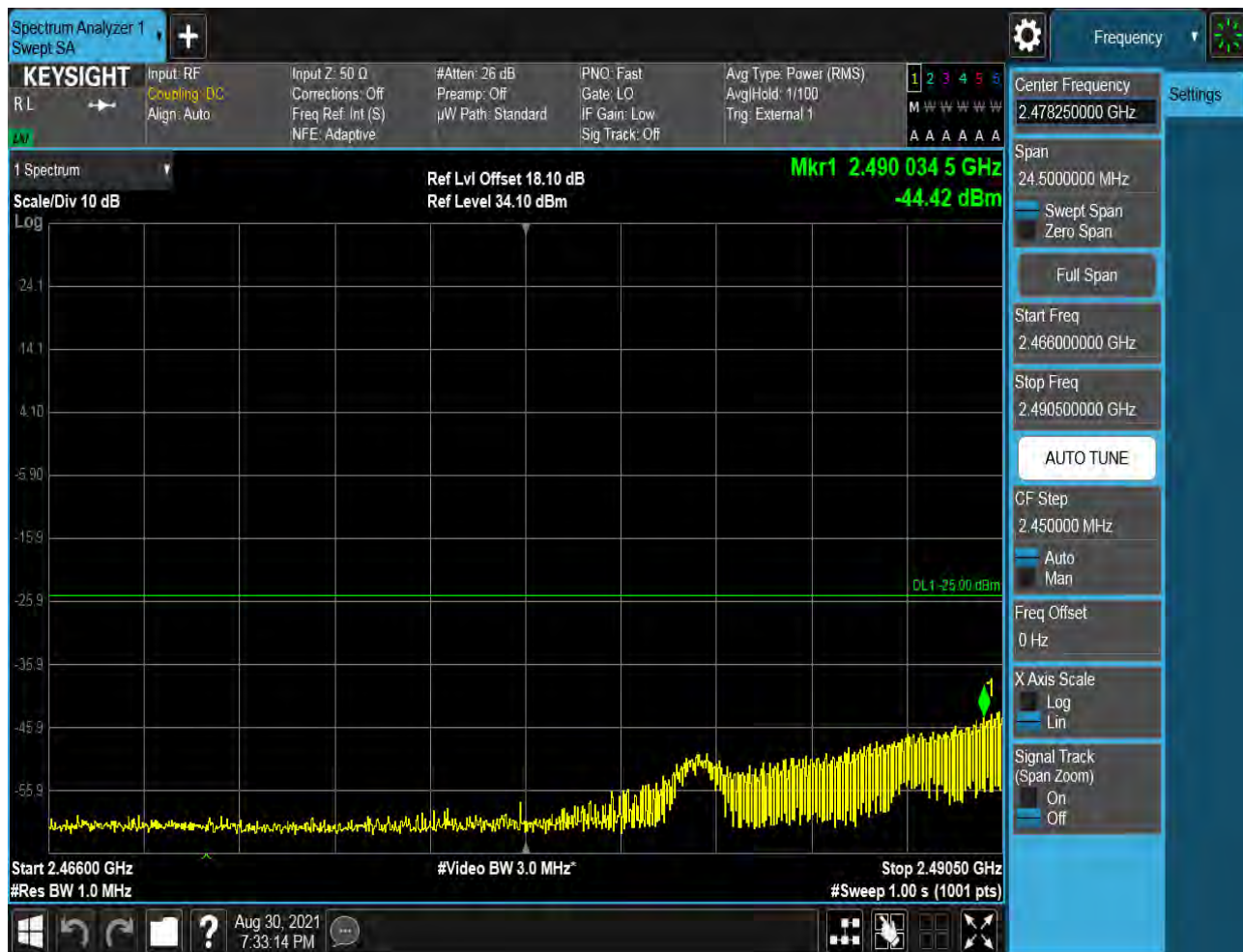
5.1.1 Test Band = CA_41C

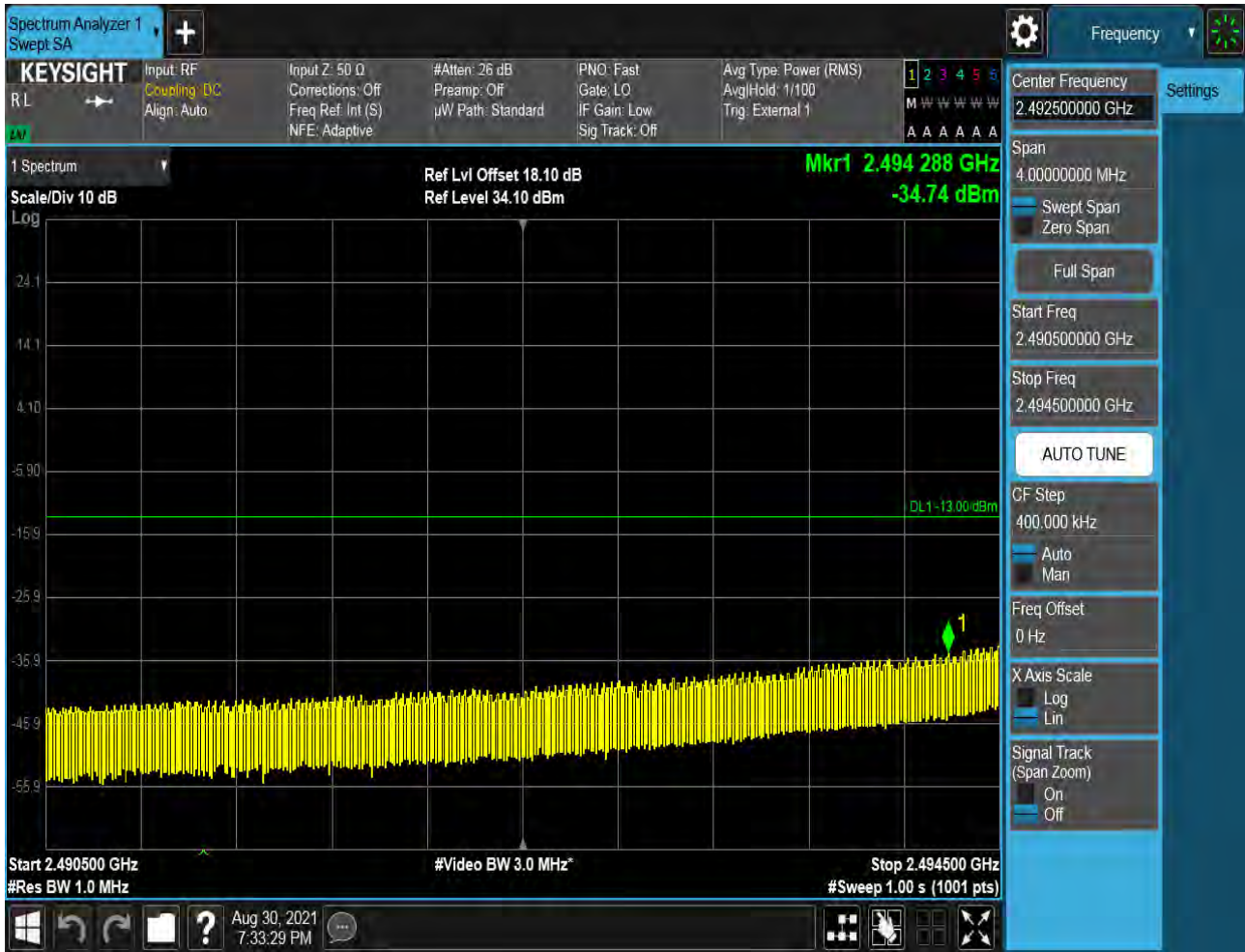
5.1.1.1 Test Mode = LTE/TM1

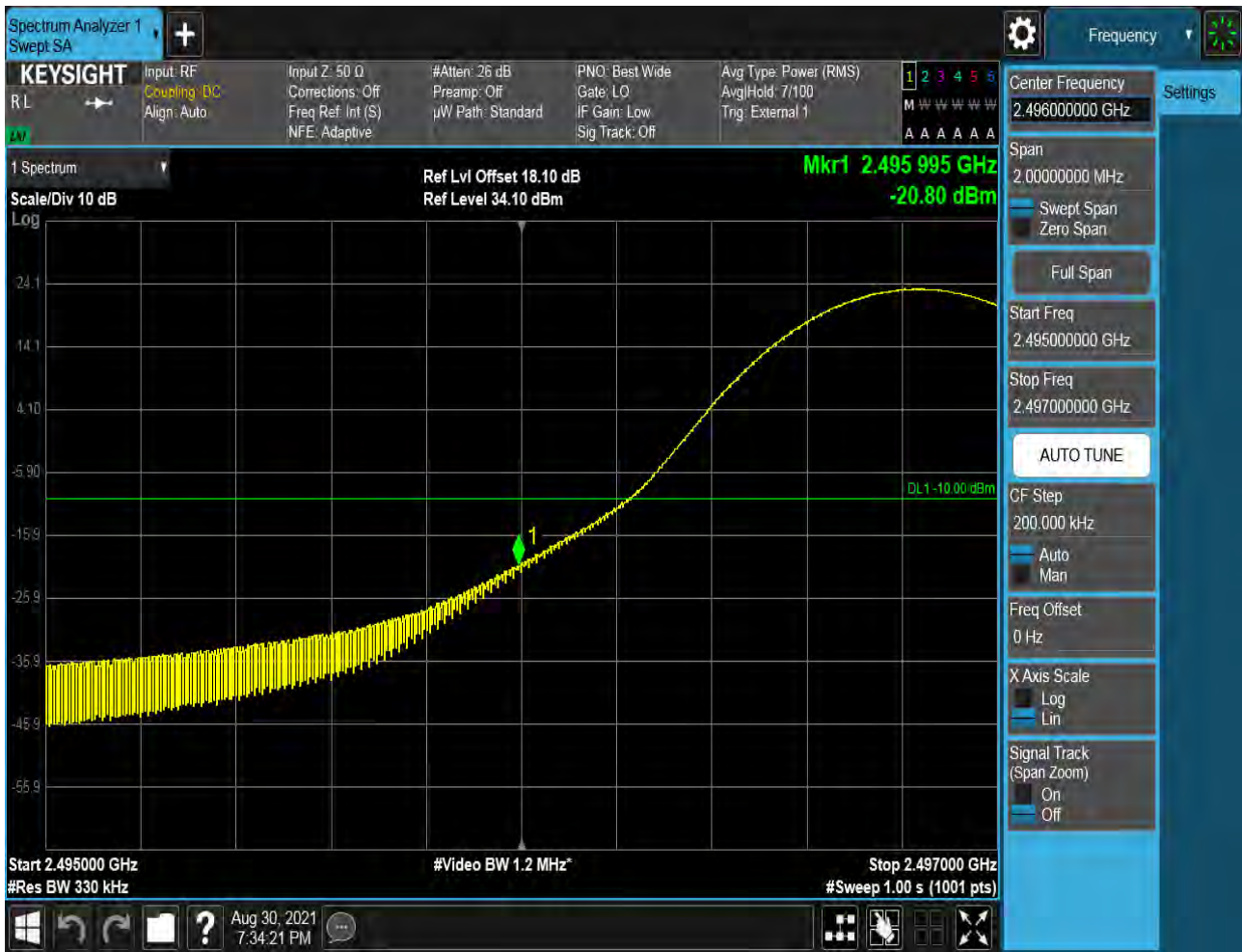
5.1.1.1.1 Test Bandwidth = 15+15

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

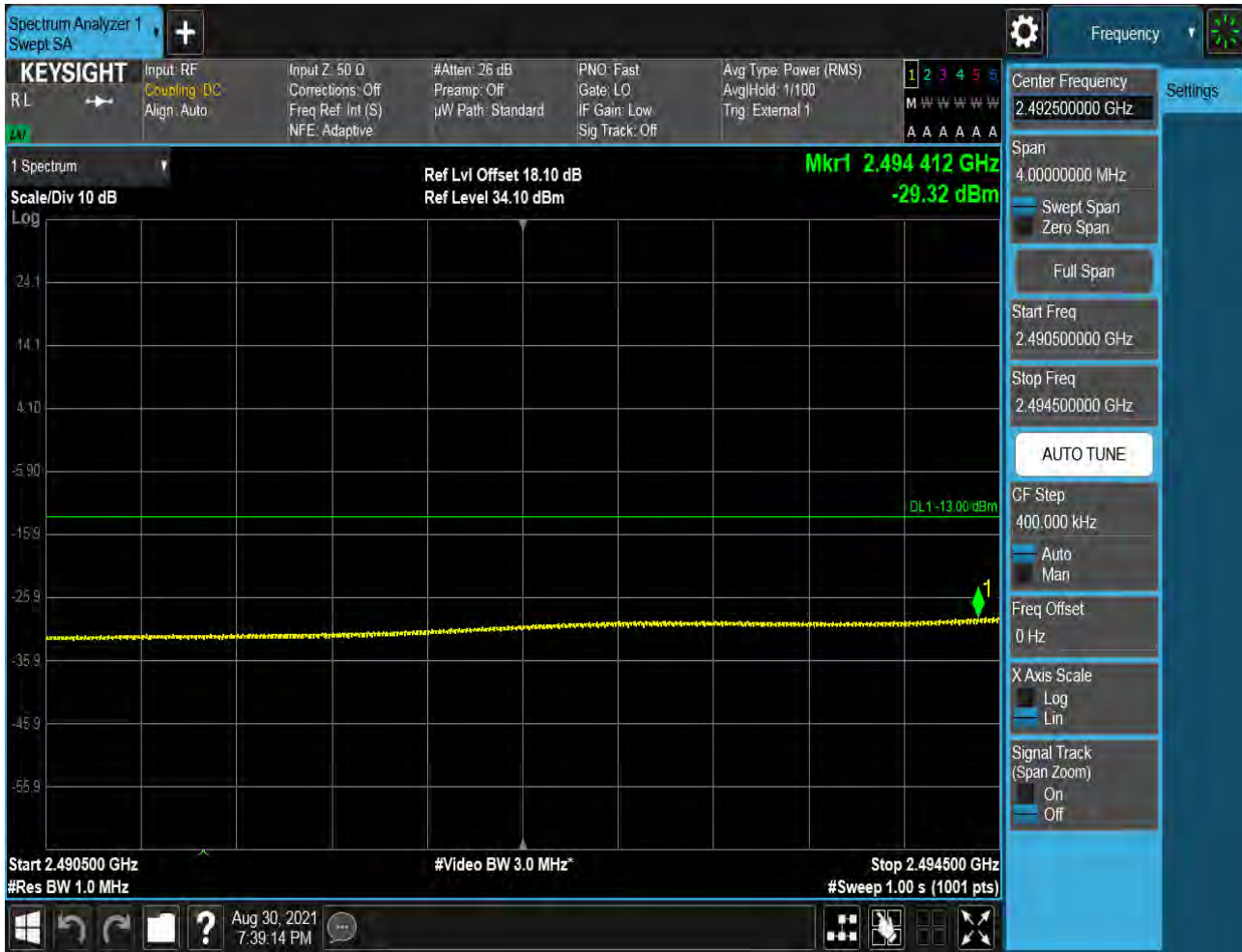






5.1.1.1.1.3 PCC Test RB = full RBs & SCC Test RB = 0

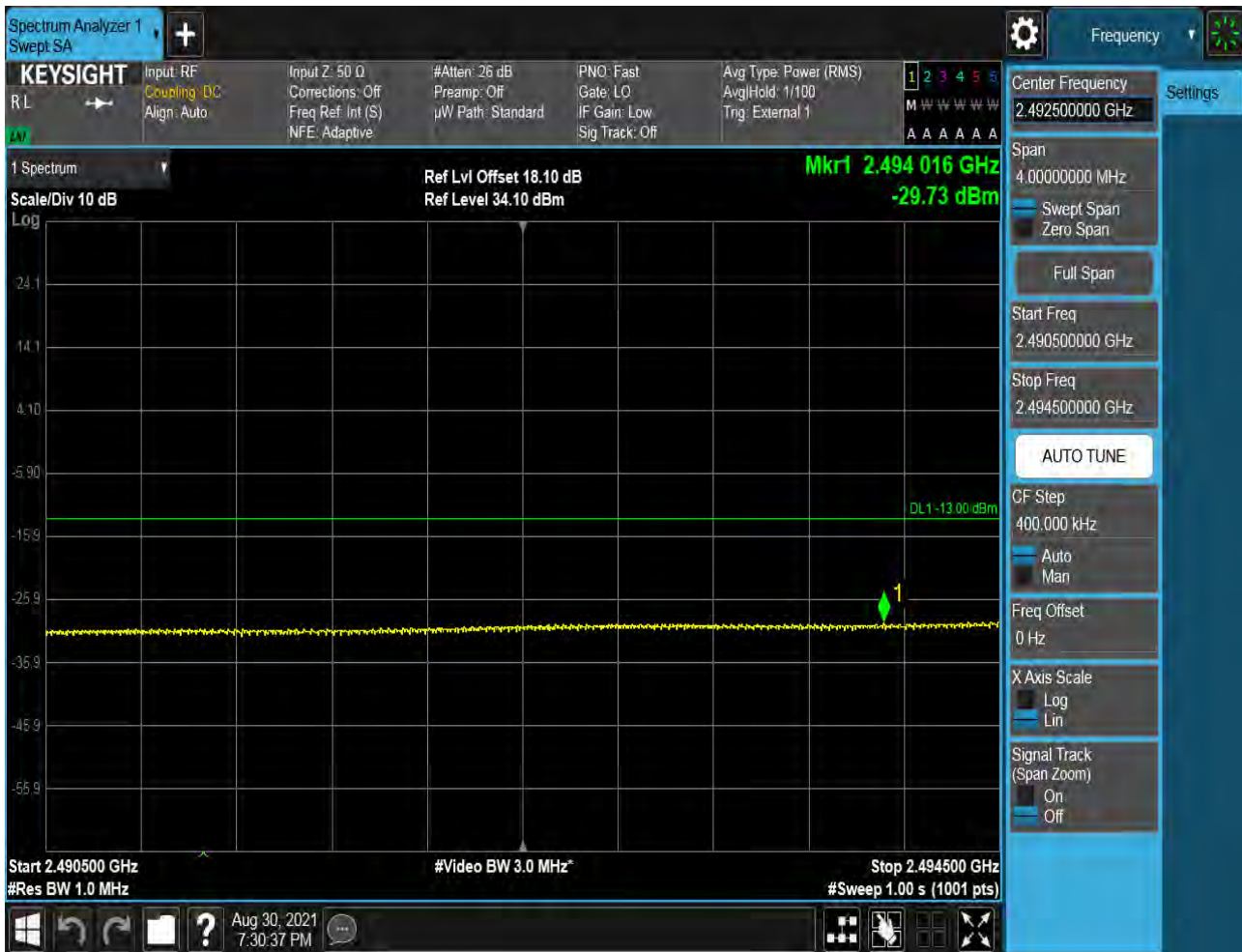






5.1.1.1.1.4 PCC Test RB = full RBs & SCC Test RB = full RBs



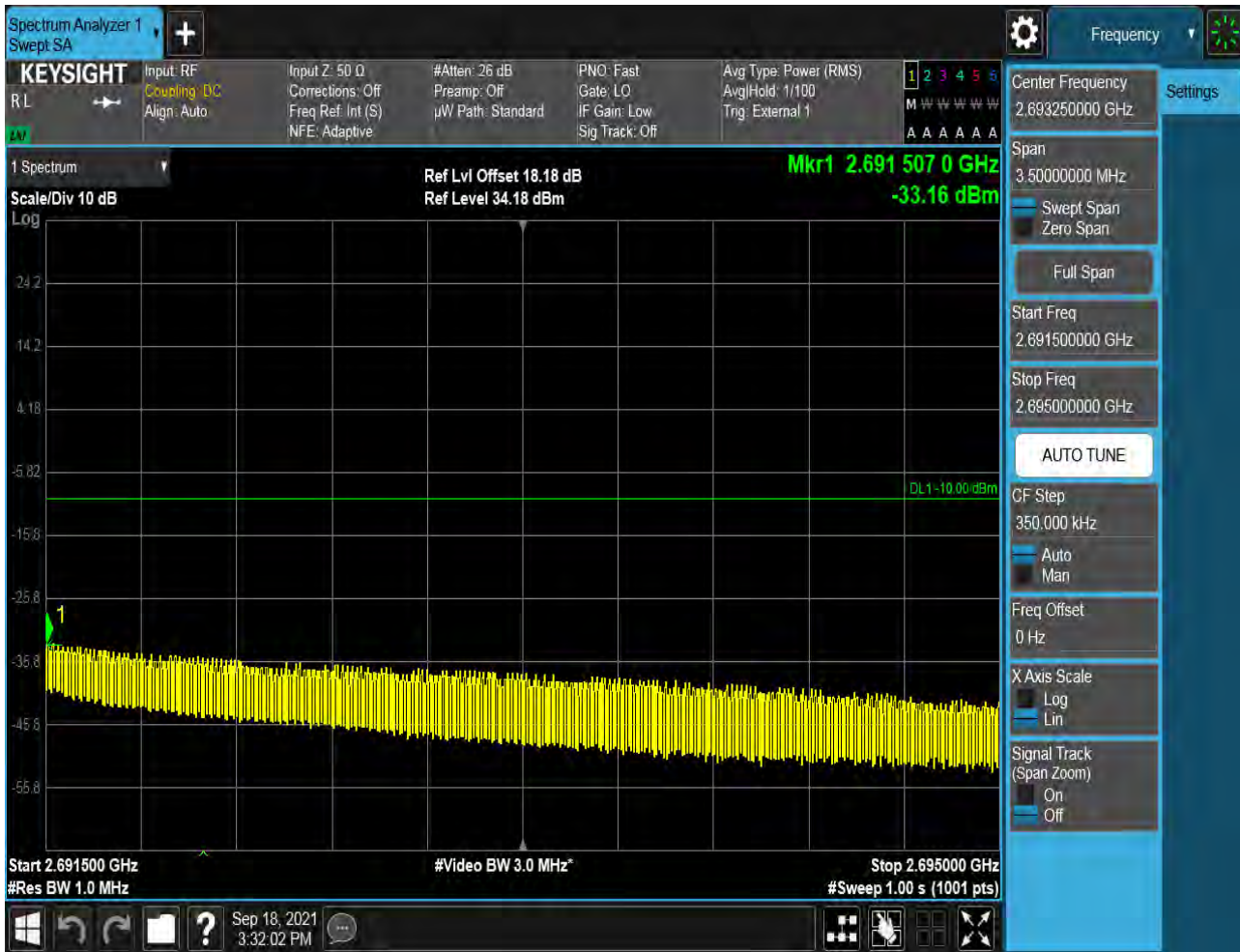


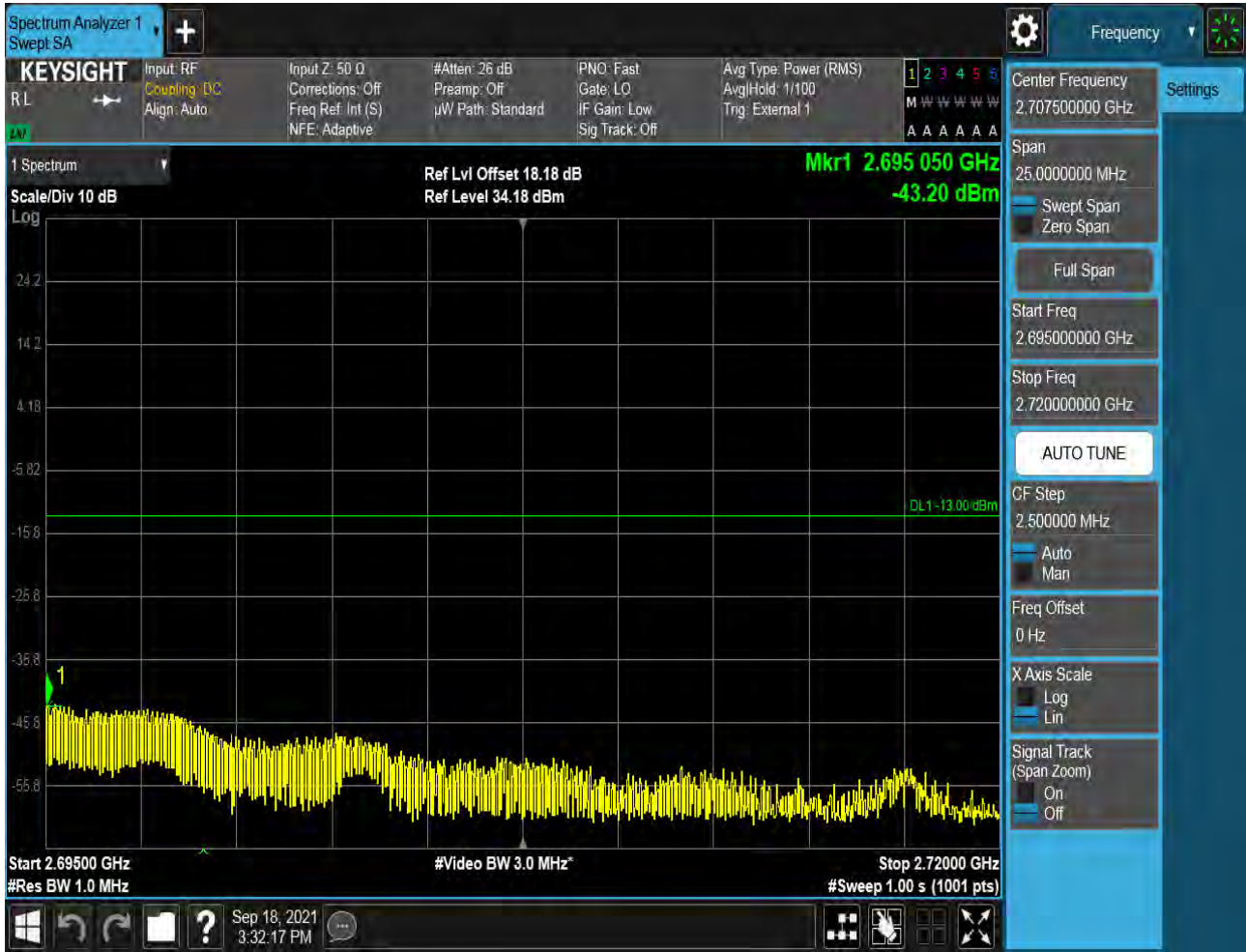


5.1.1.1.1.2 Test Channel = HCH

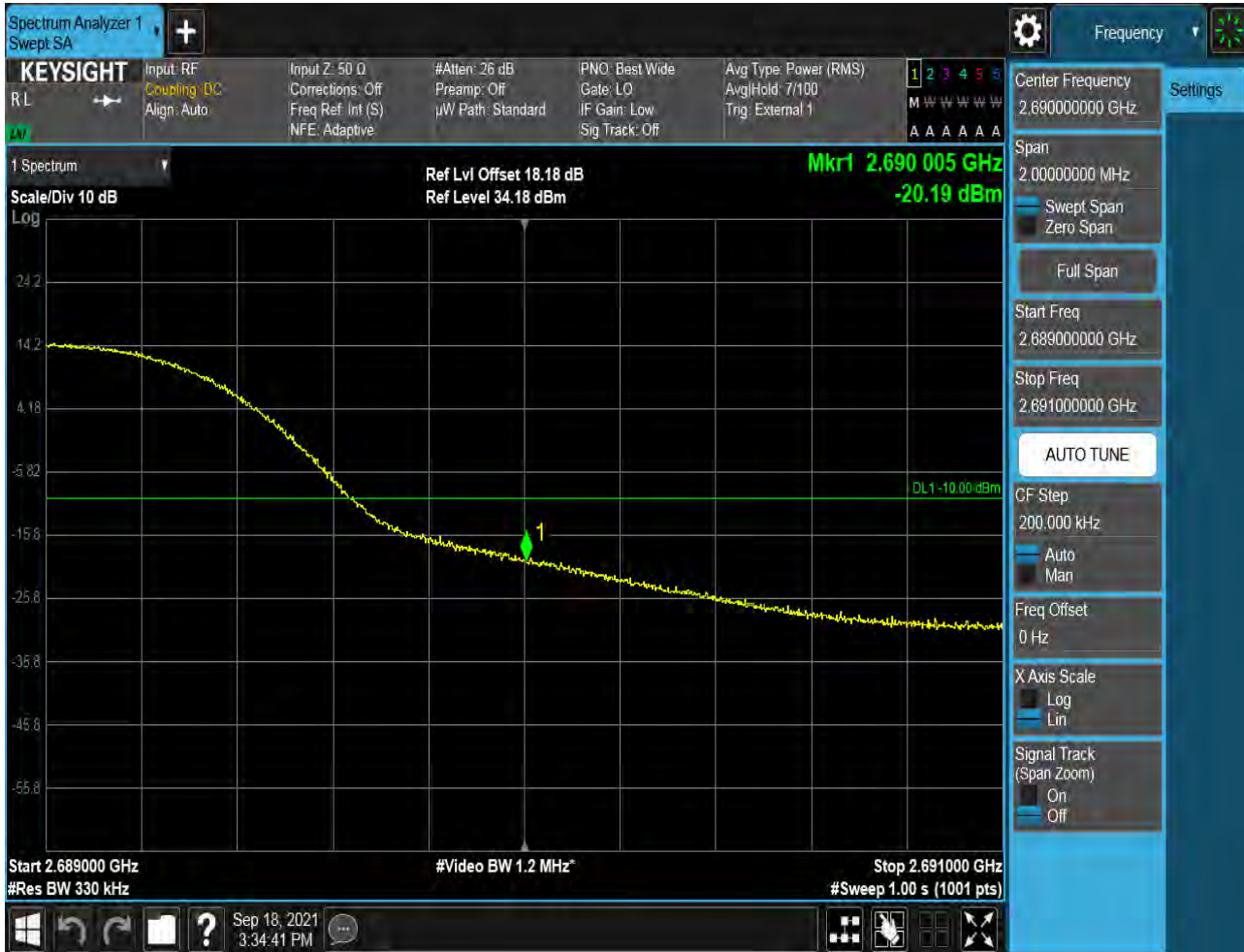
5.1.1.1.1.2.1 PCC Test RB = 0 & SCC Test RB = 1 # max

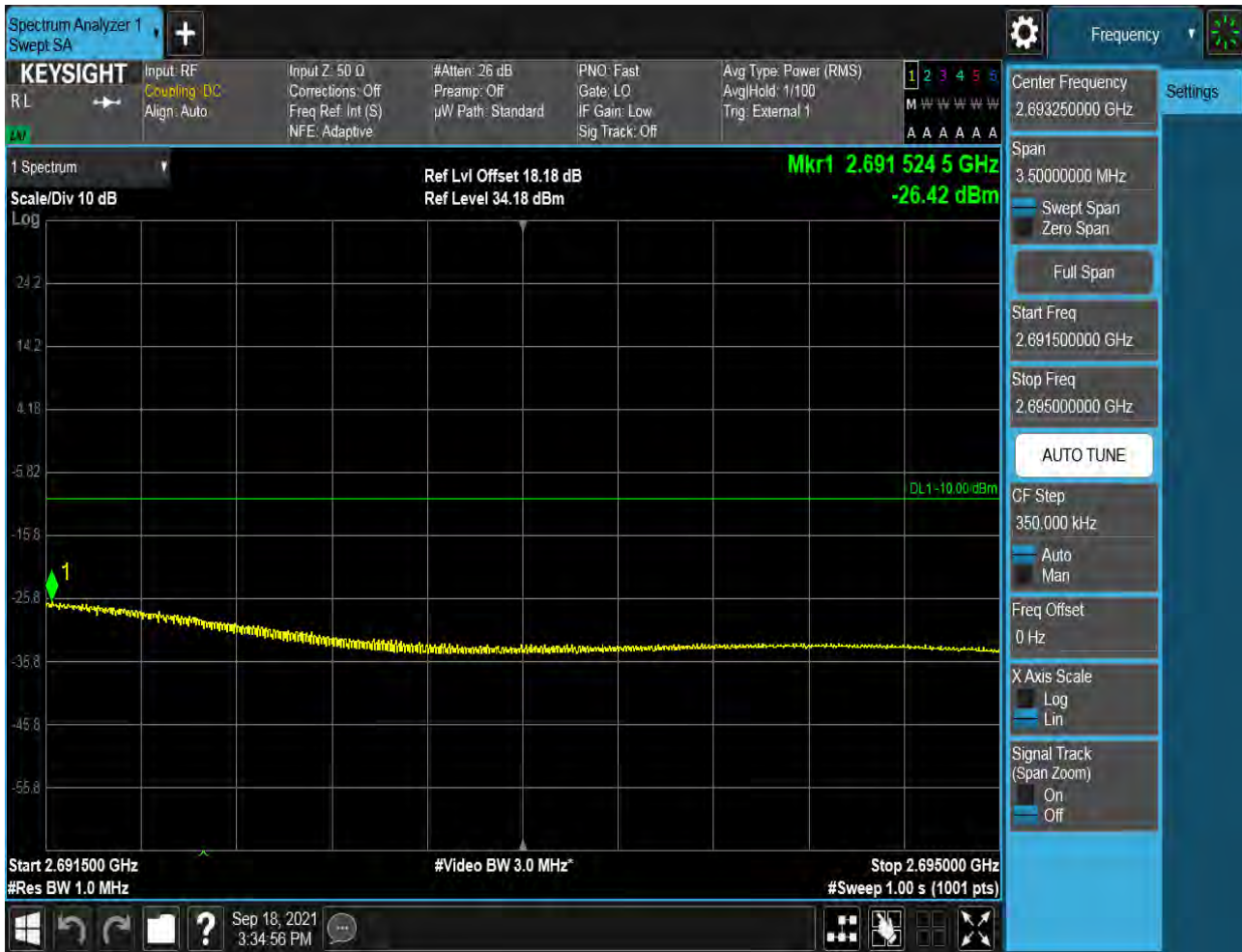


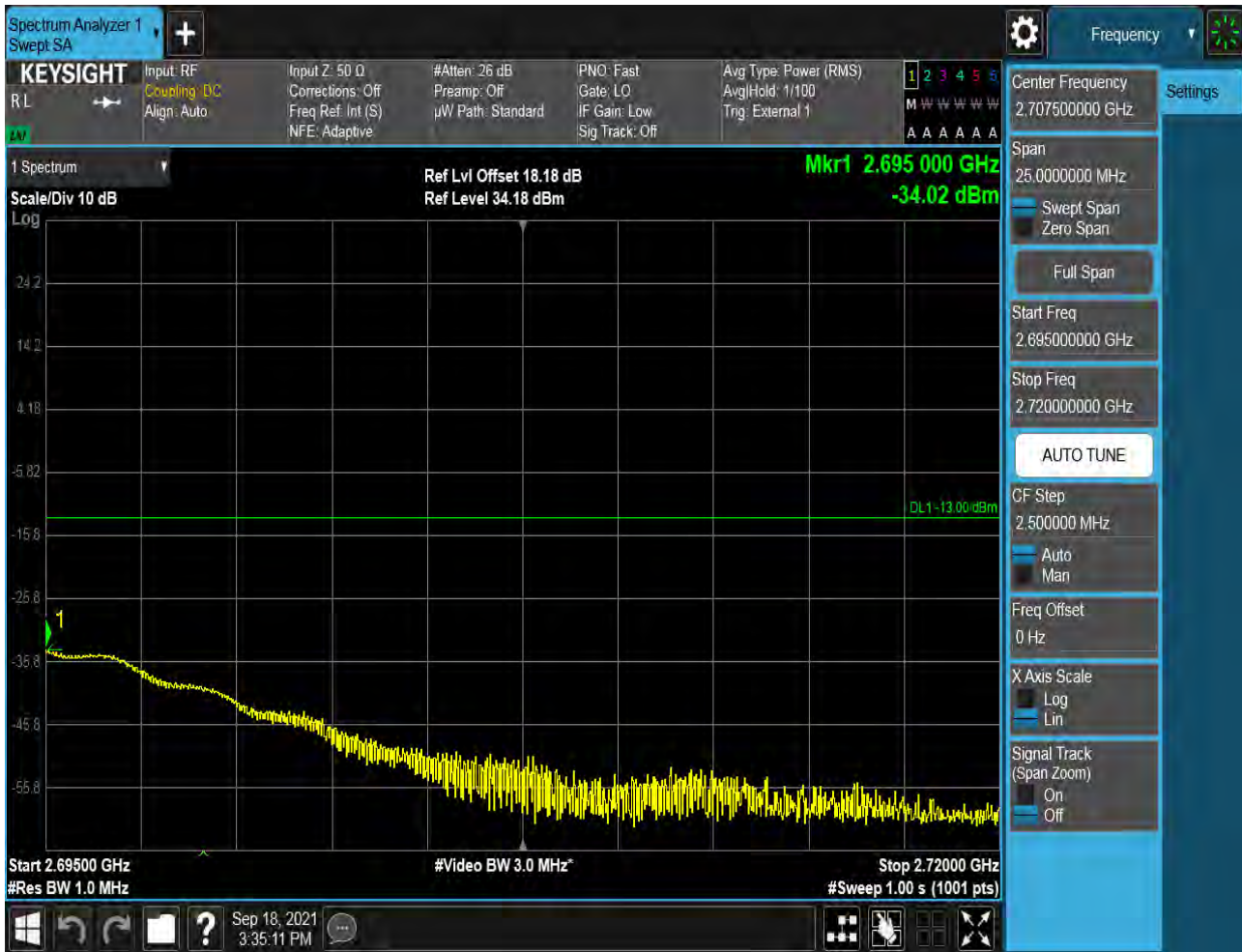




5.1.1.1.1.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max







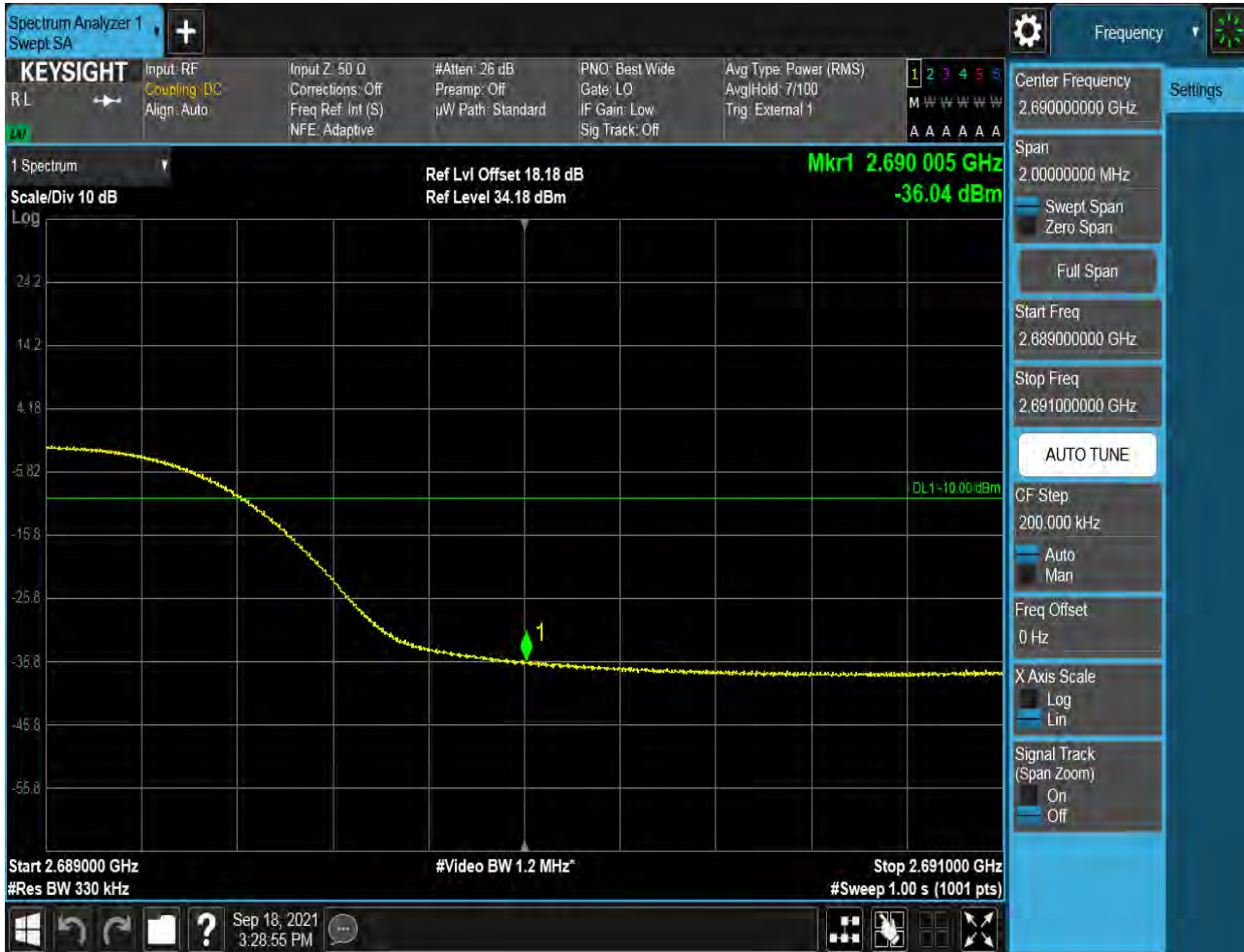
5.1.1.1.1.2.3 PCC Test RB = 0 & SCC Test RB = full RBs







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





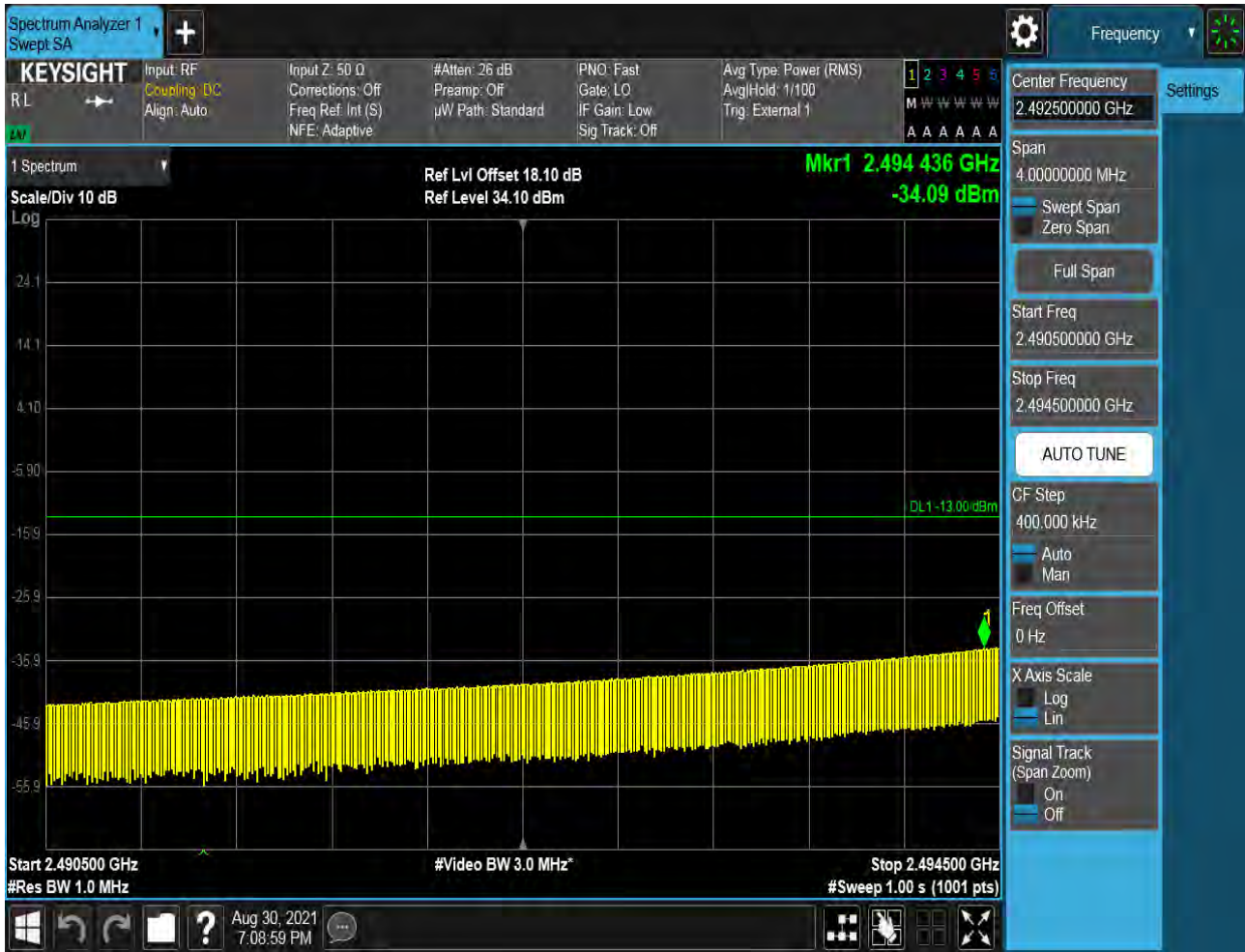


5.1.1.1.2 Test Bandwidth = 20+20

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

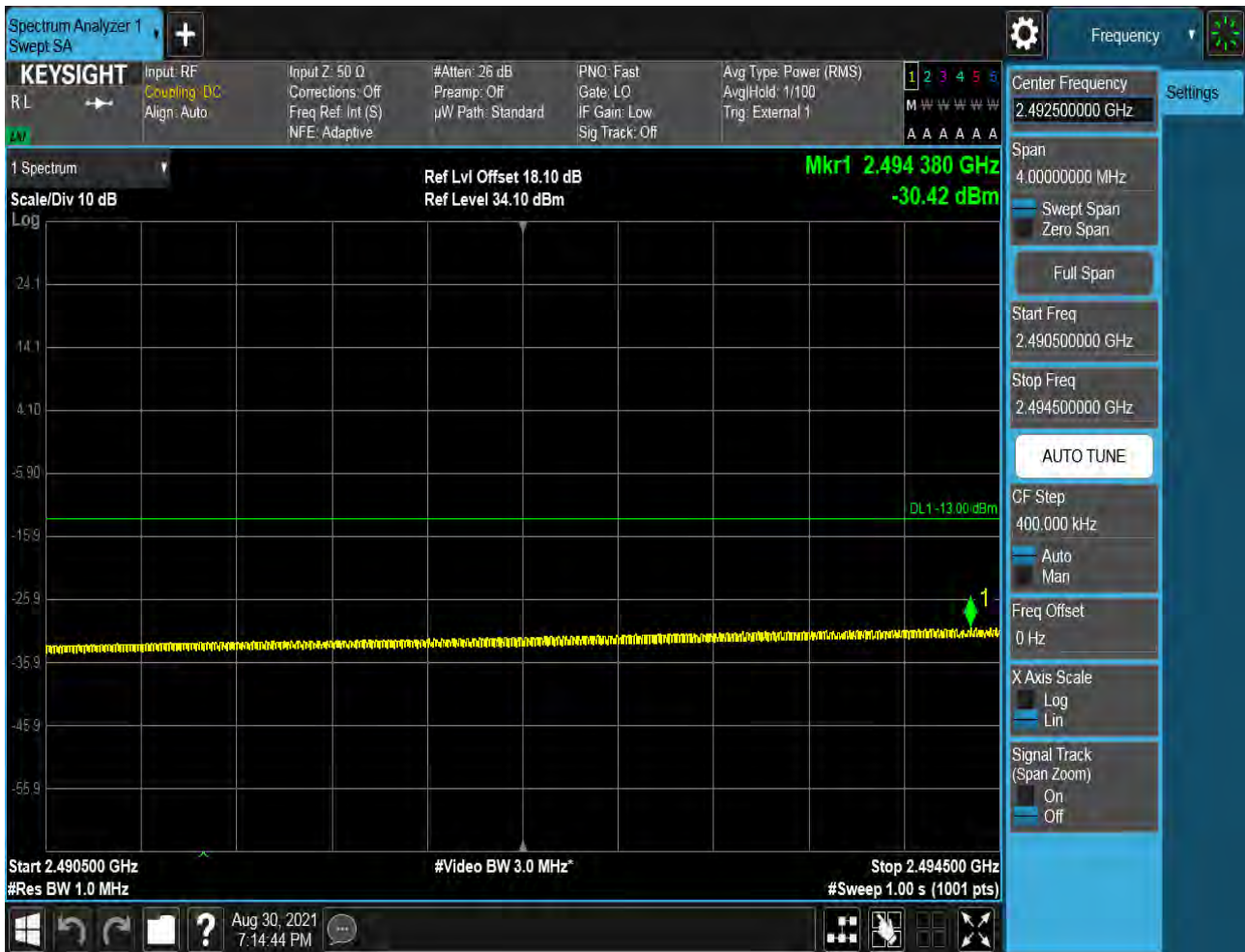






5.1.1.1.2.1.3 PCC Test RB = full RBs & SCC Test RB = 0







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



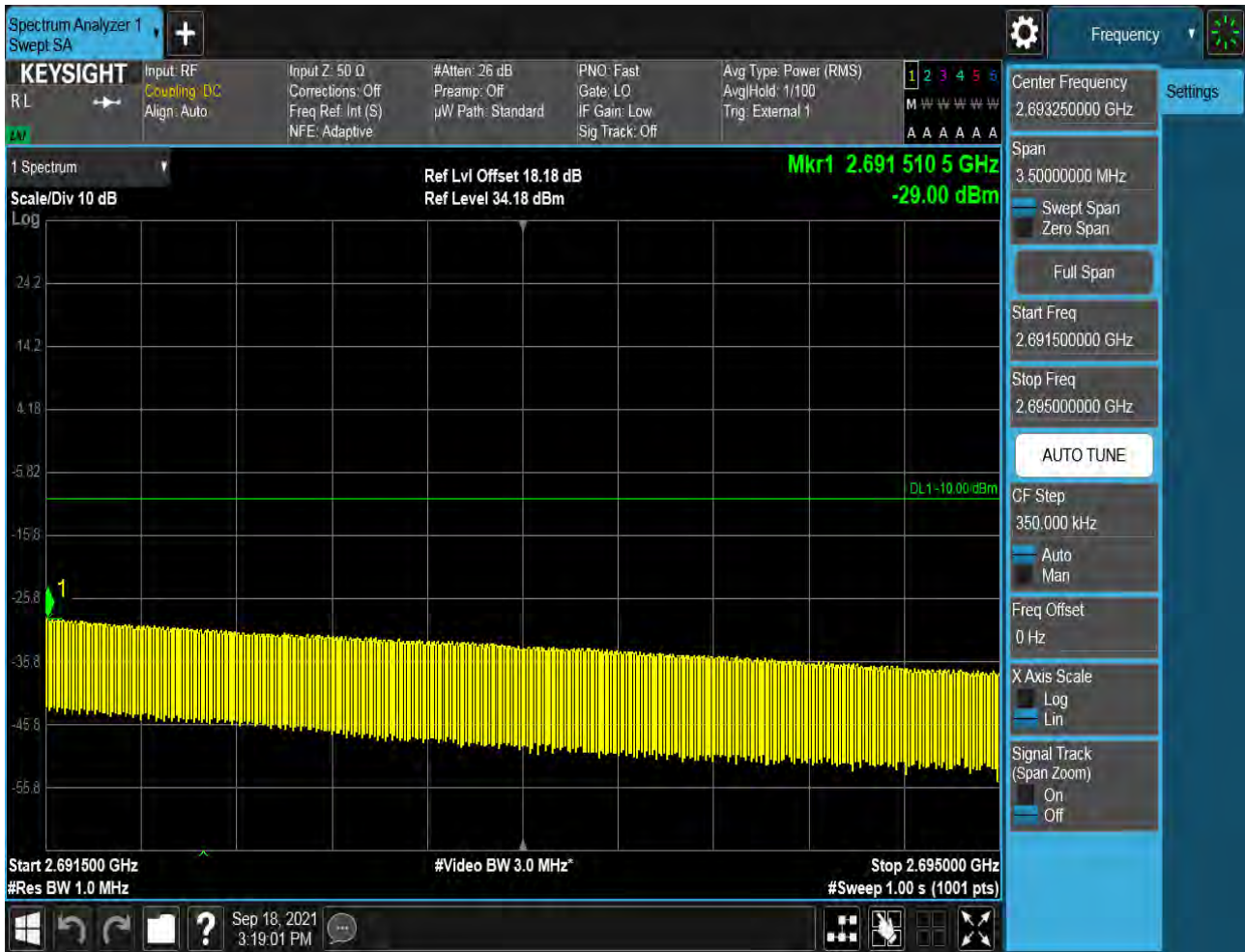


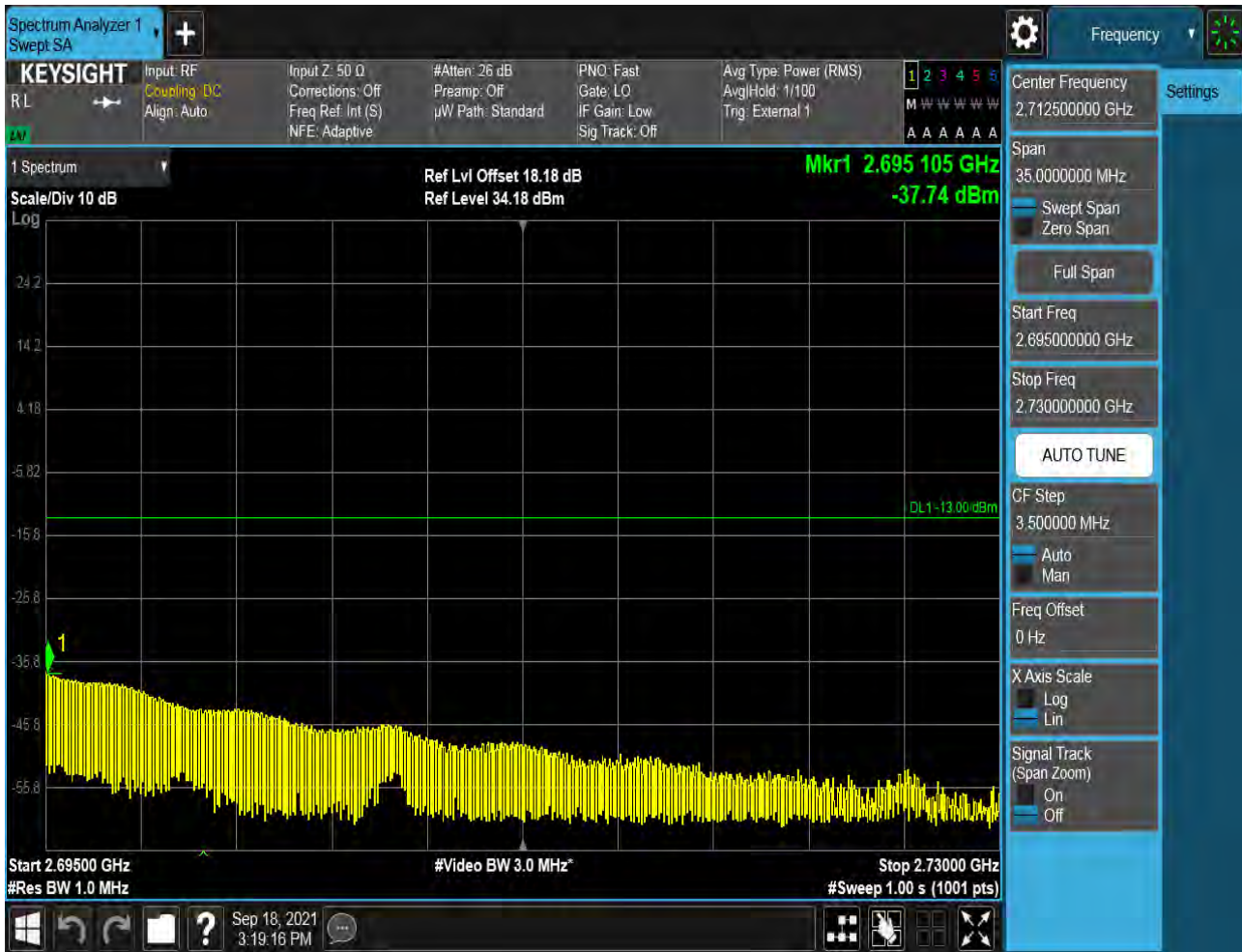


5.1.1.1.2.2 Test Channel = HCH

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



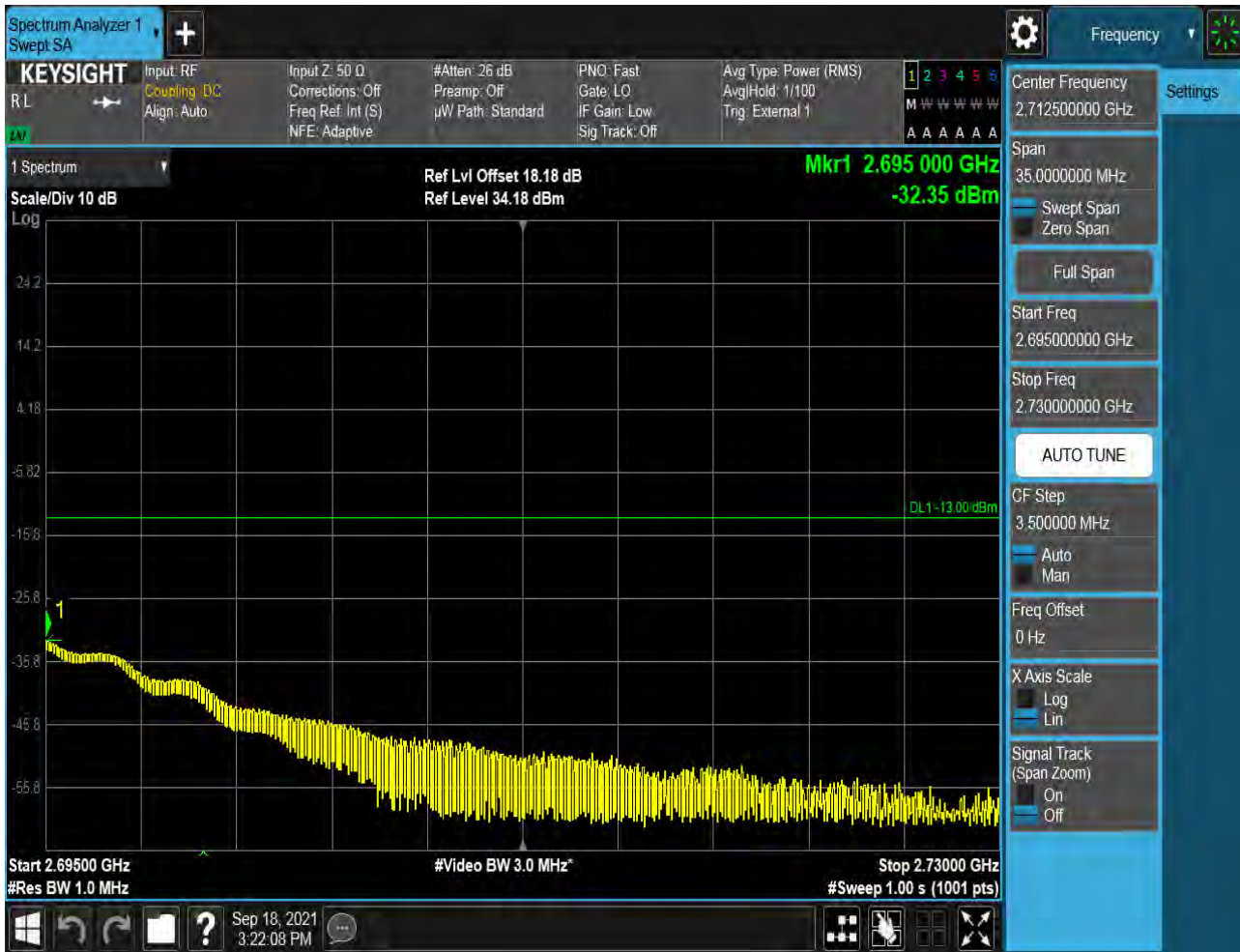




5.1.1.1.2.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max







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







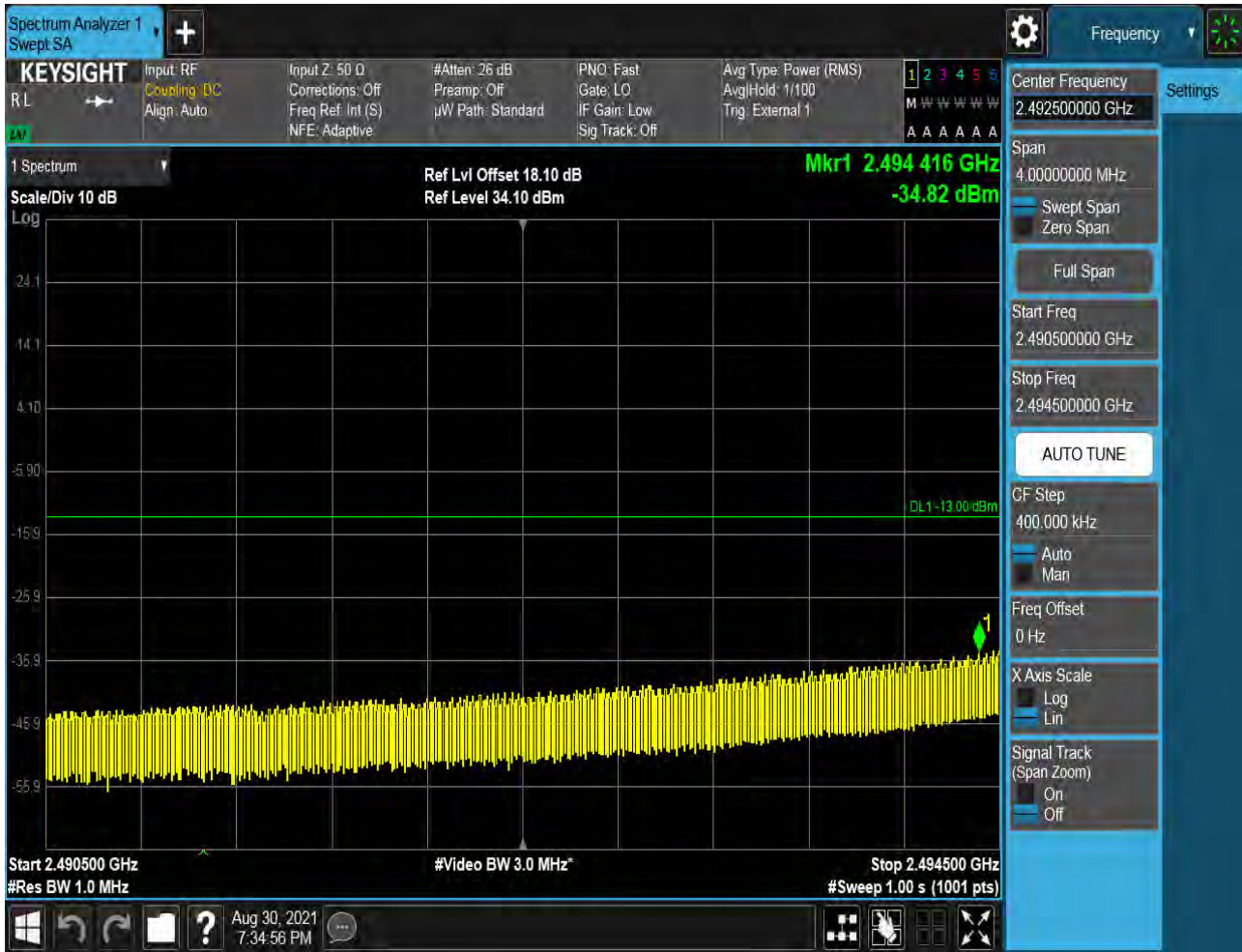
5.1.1.2 Test Mode = LTE/TM2

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



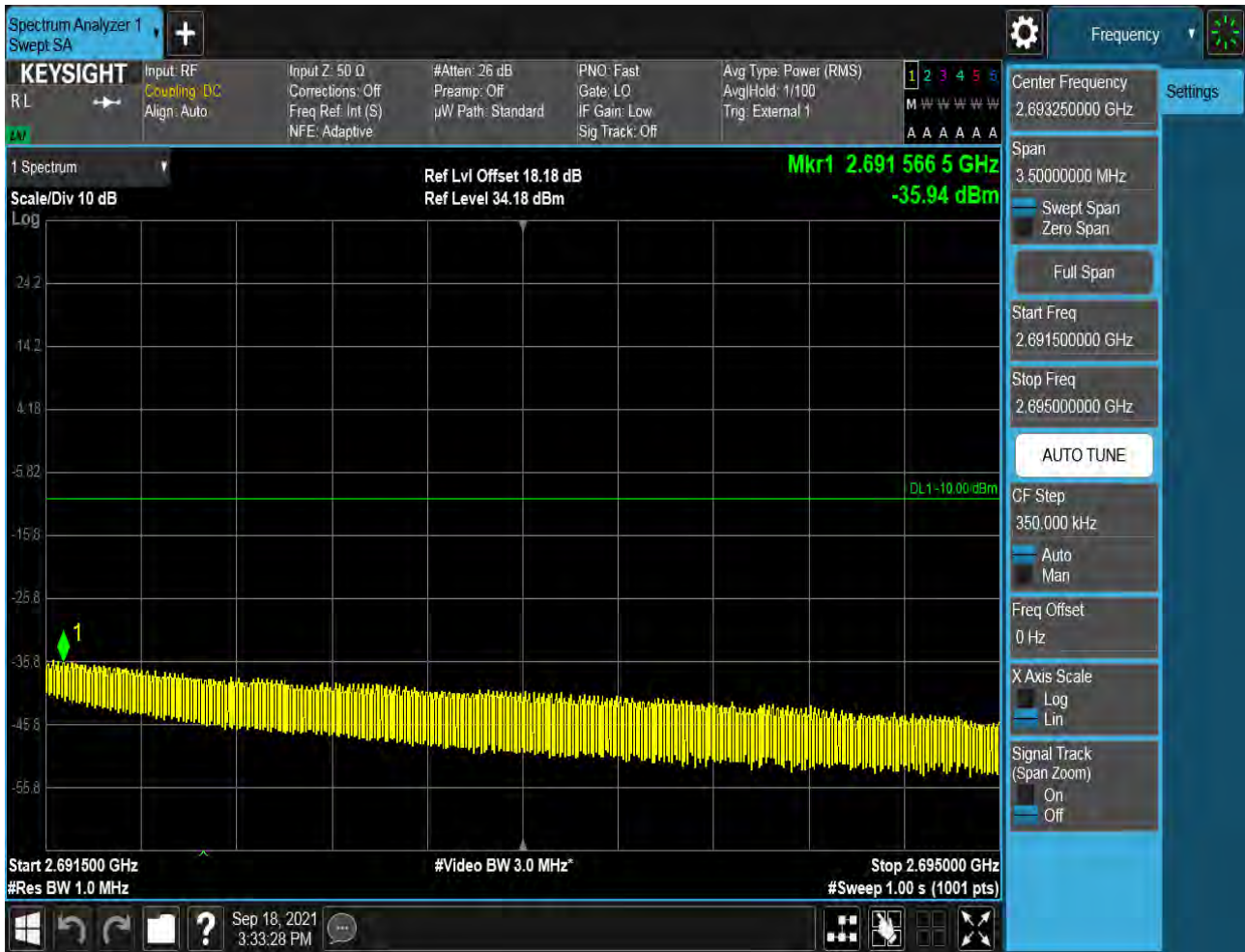


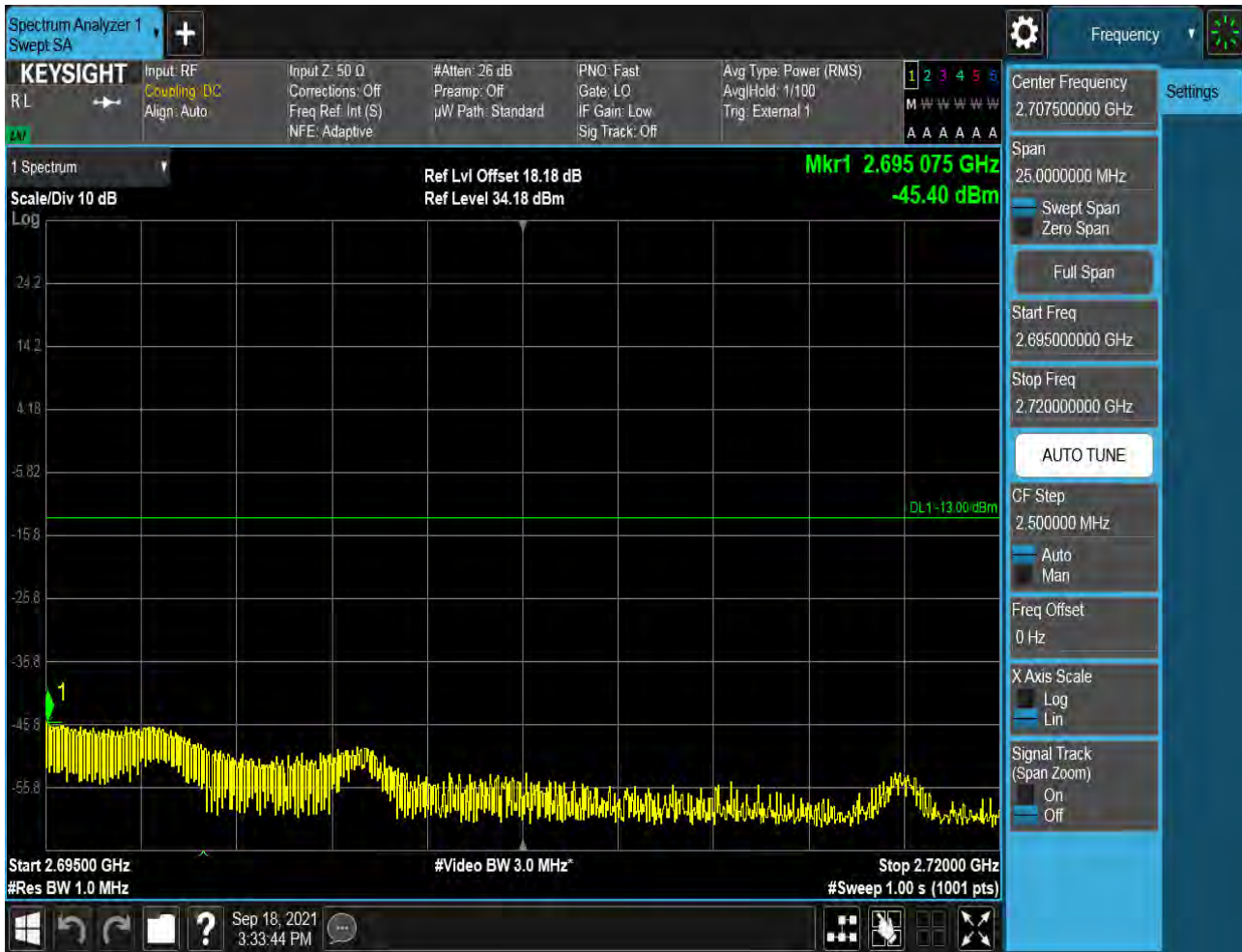


5.1.1.2.1.2 Test Channel = HCH

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



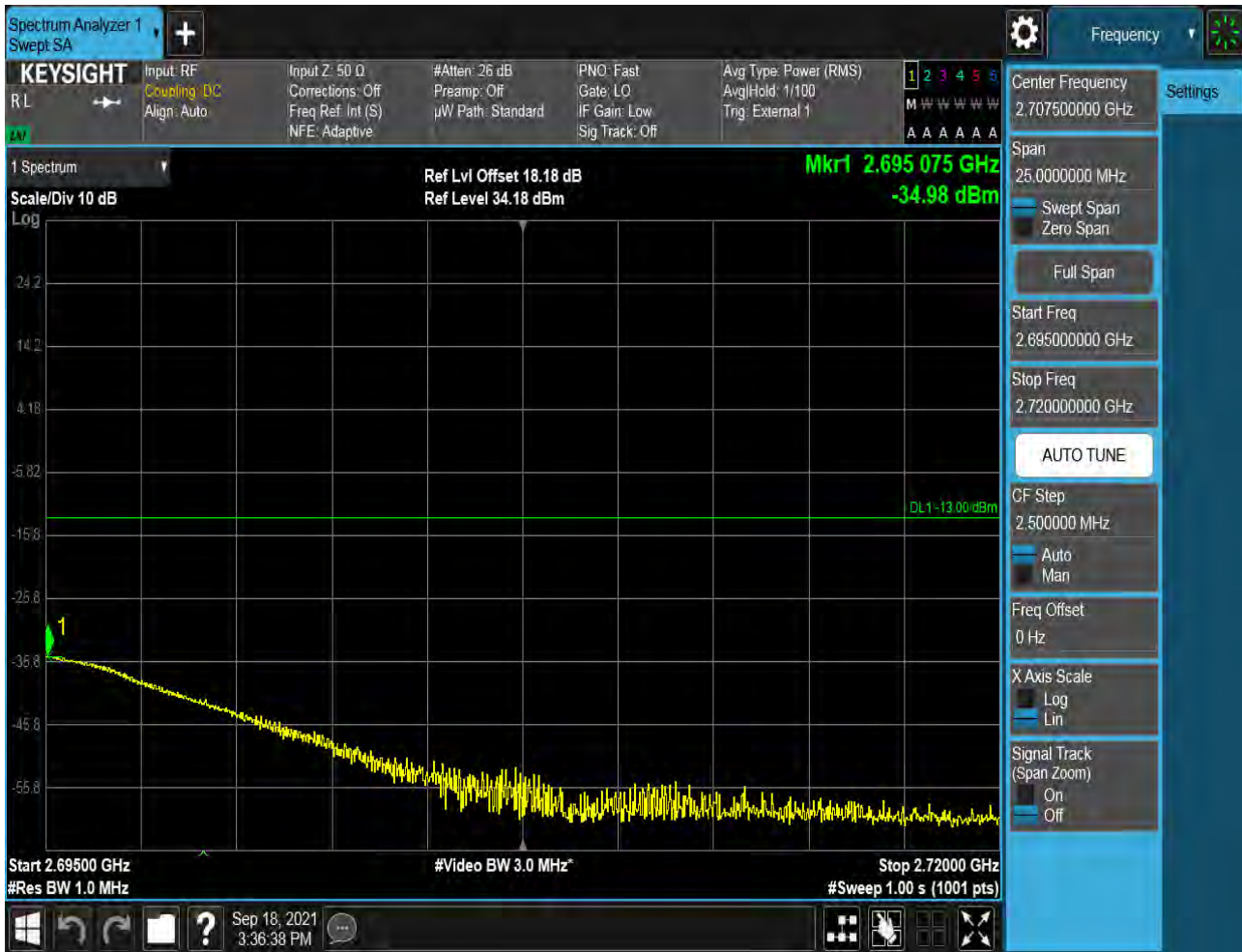




5.1.1.2.1.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max







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





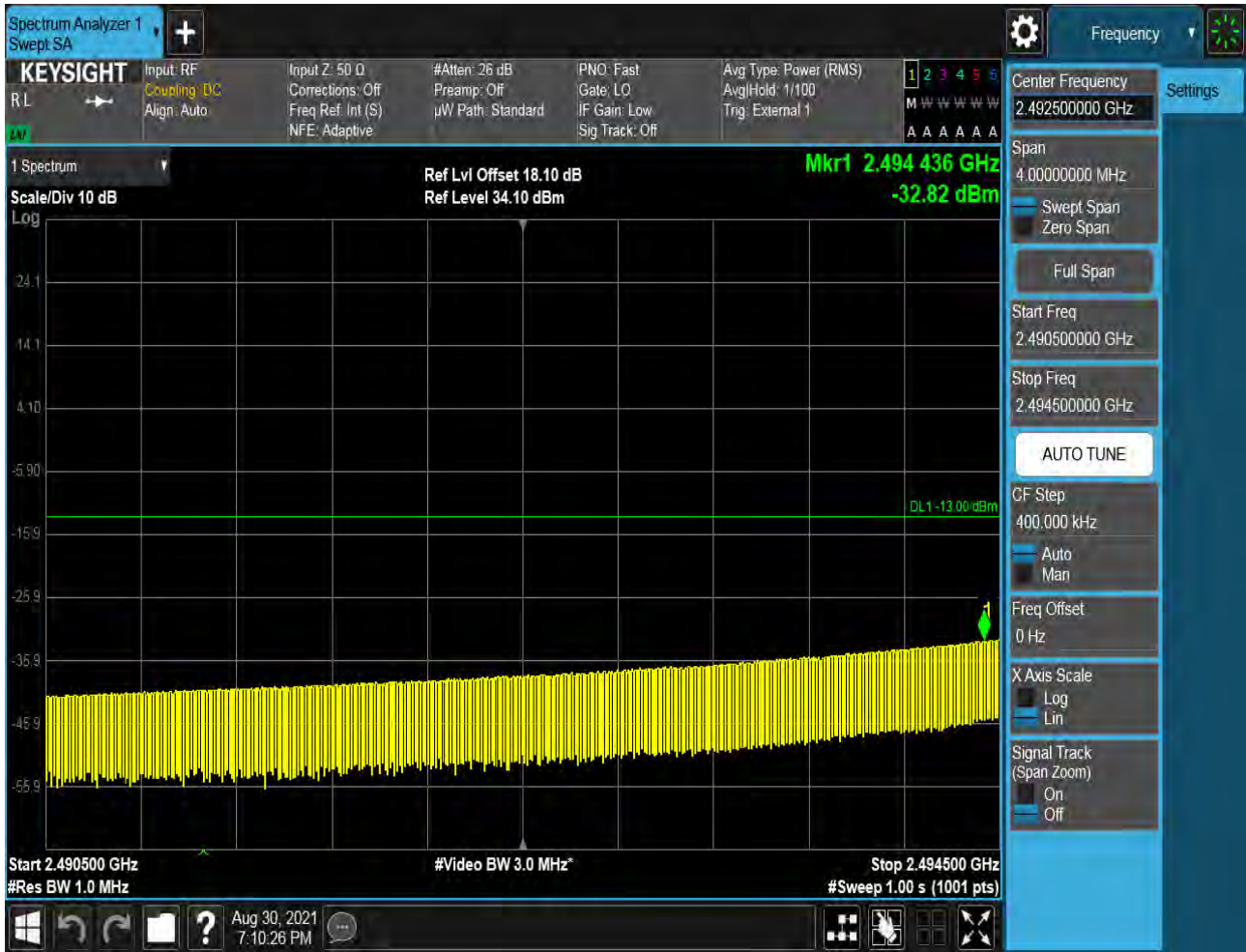


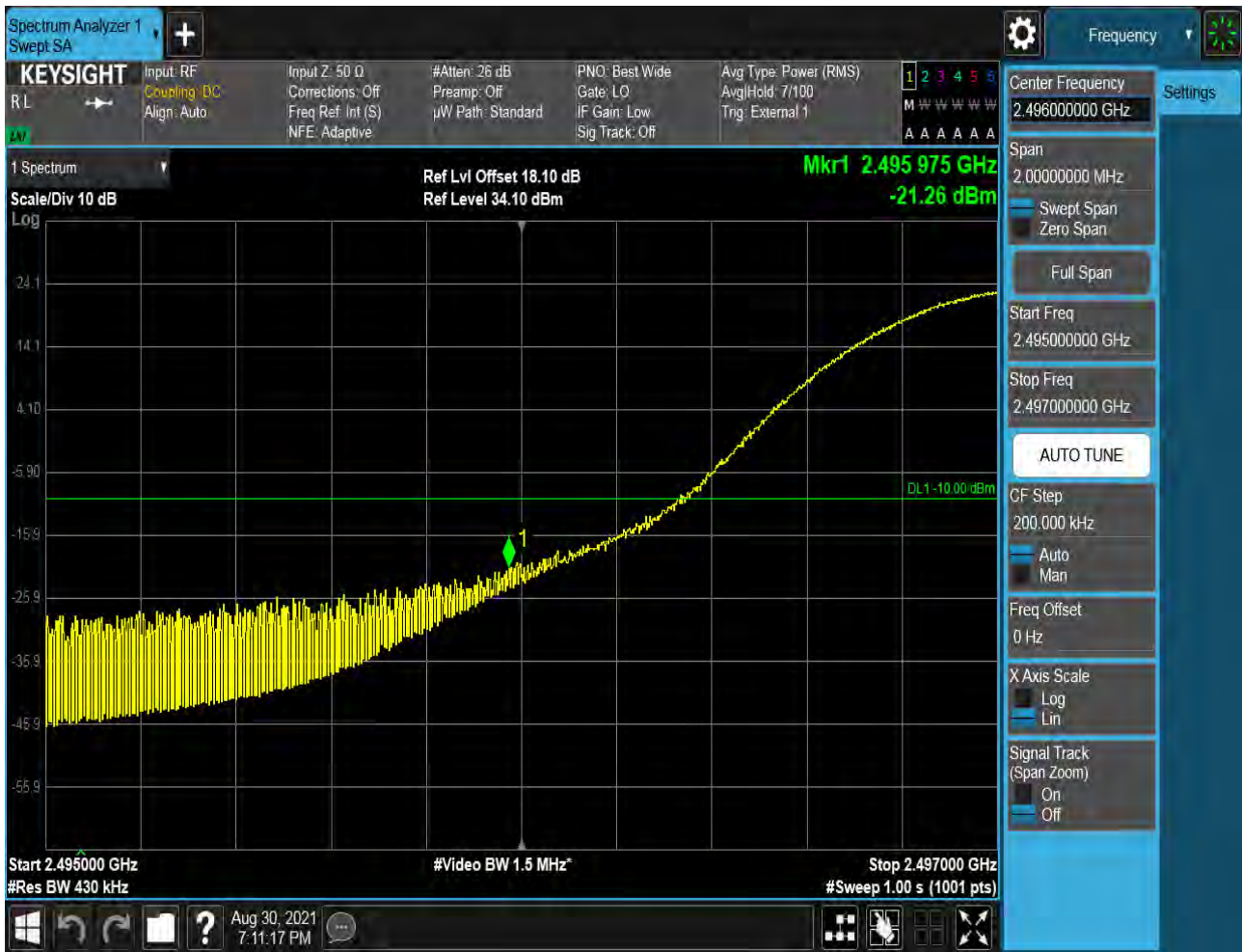
5.1.1.2.2 Test Bandwidth = 20+20

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



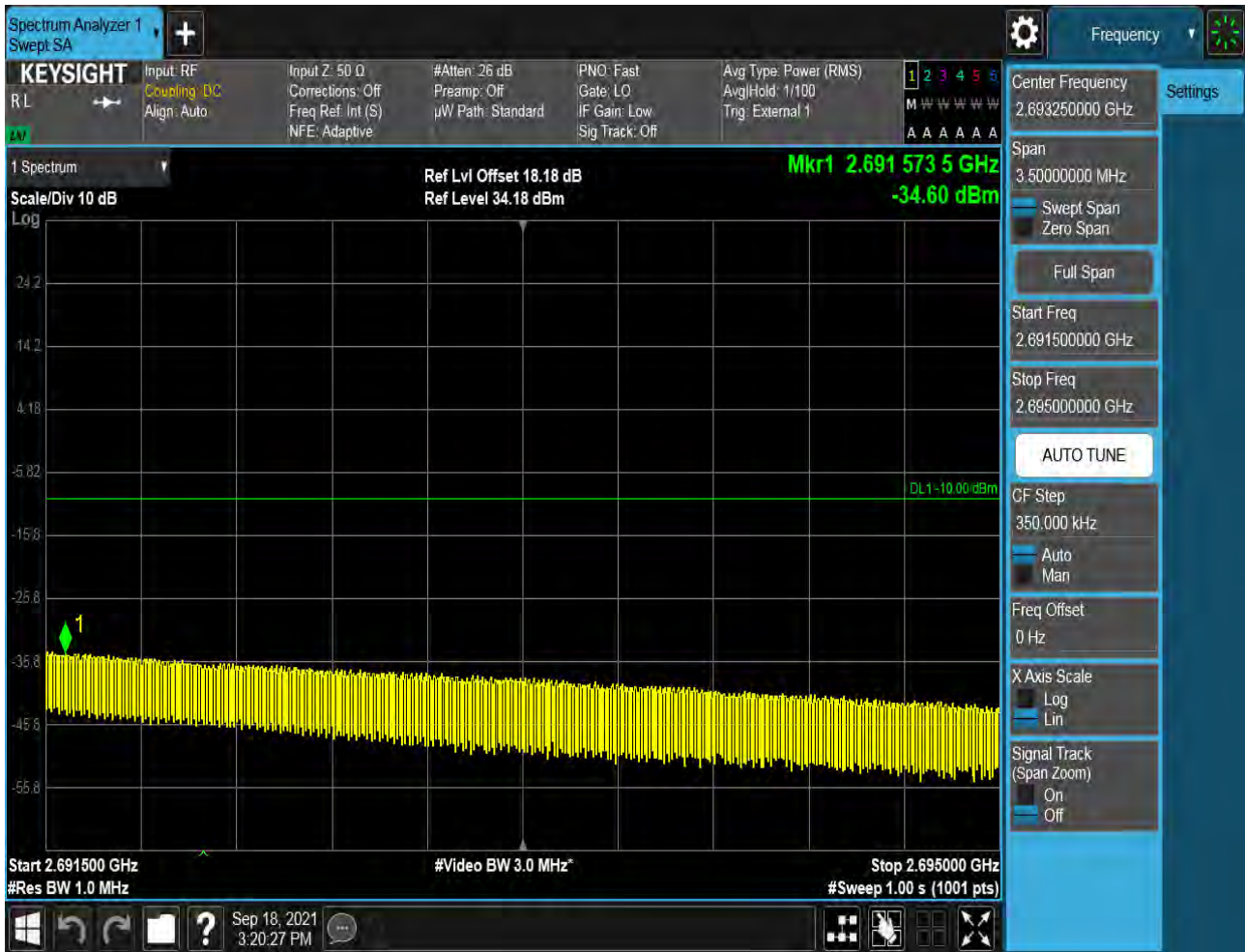


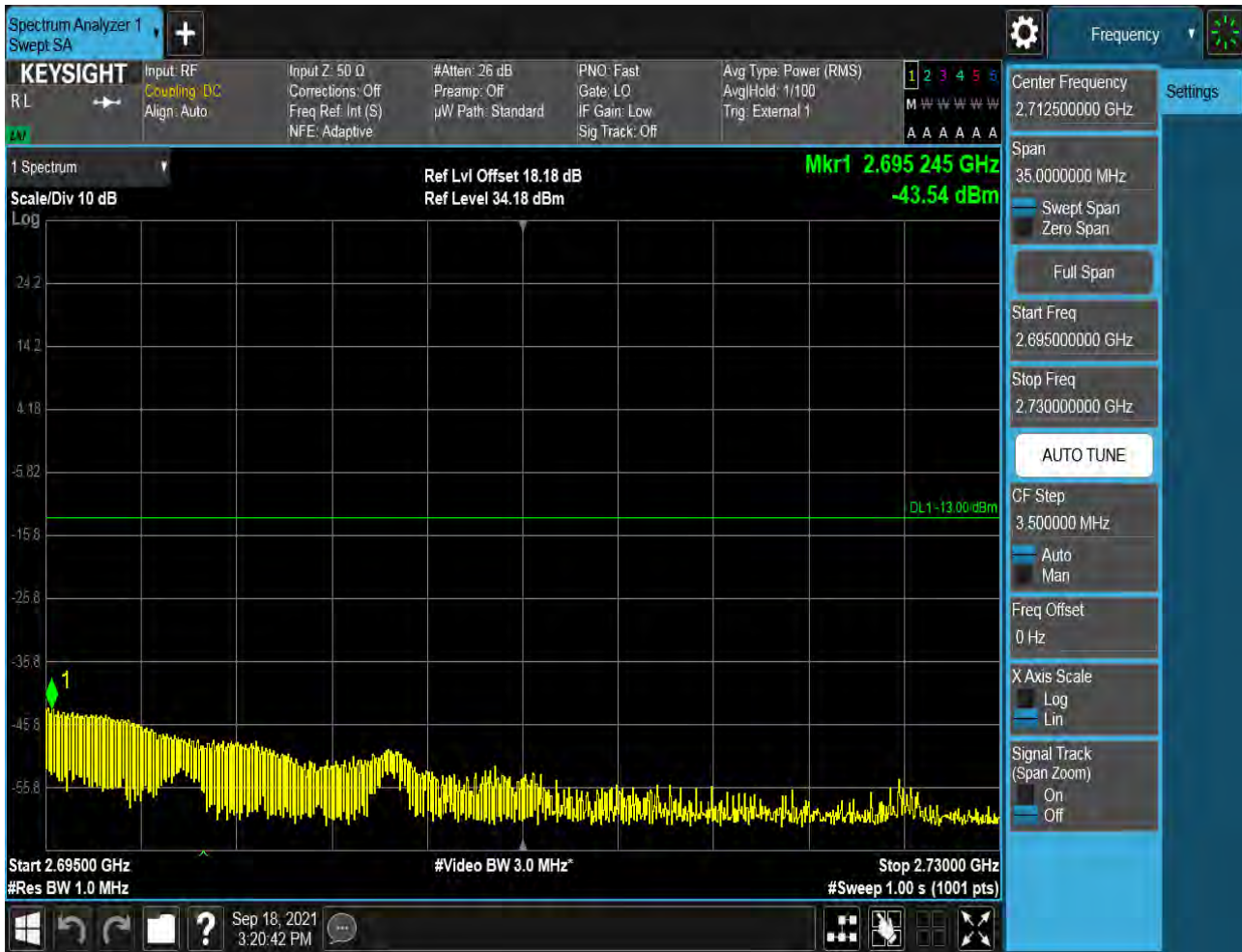


5.1.1.2.2.2 Test Channel = HCH

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







5.1.1.2.2.2.2 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







5.1.1.2.2.2.4 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

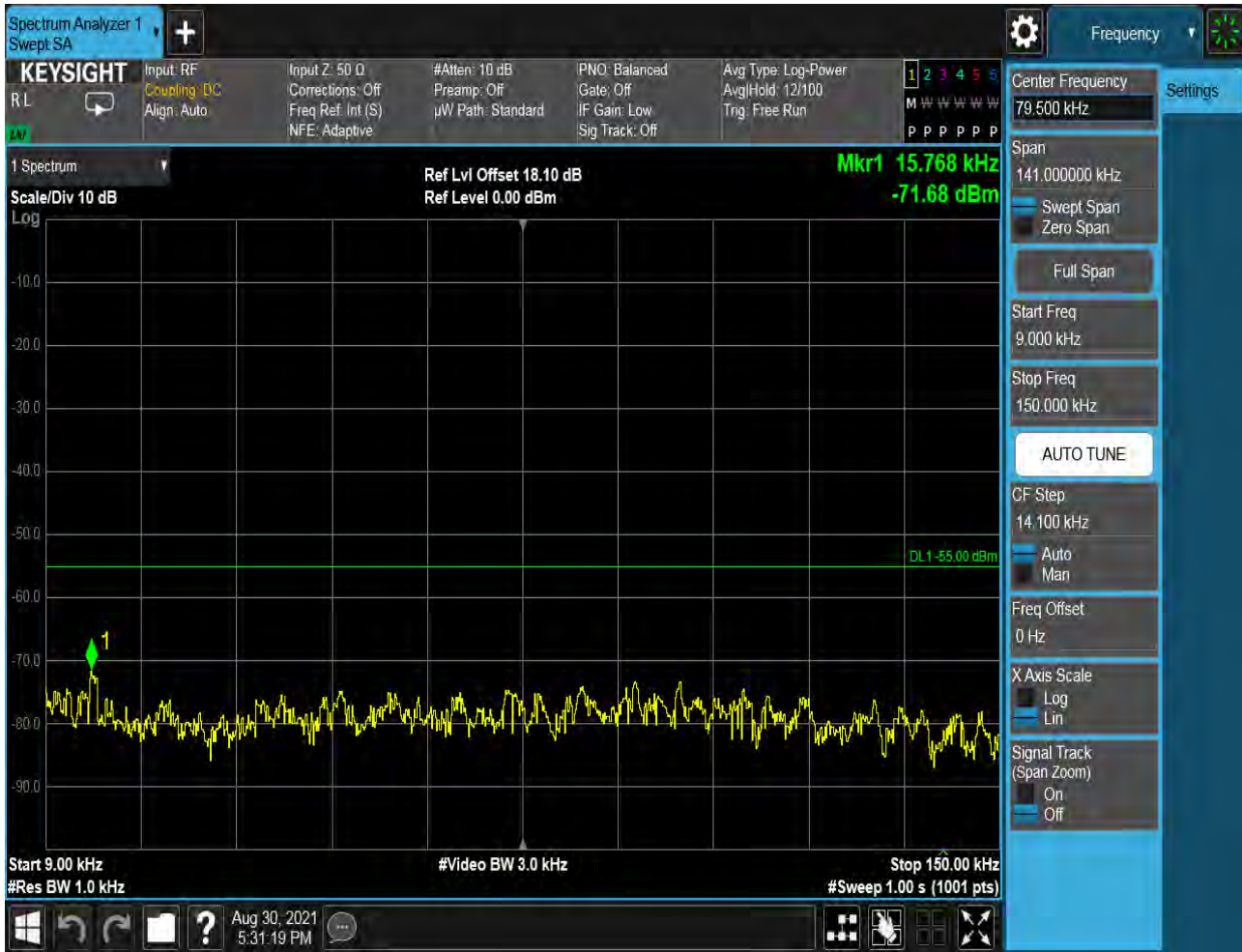
6.1.1 Test Band = CA_41C

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

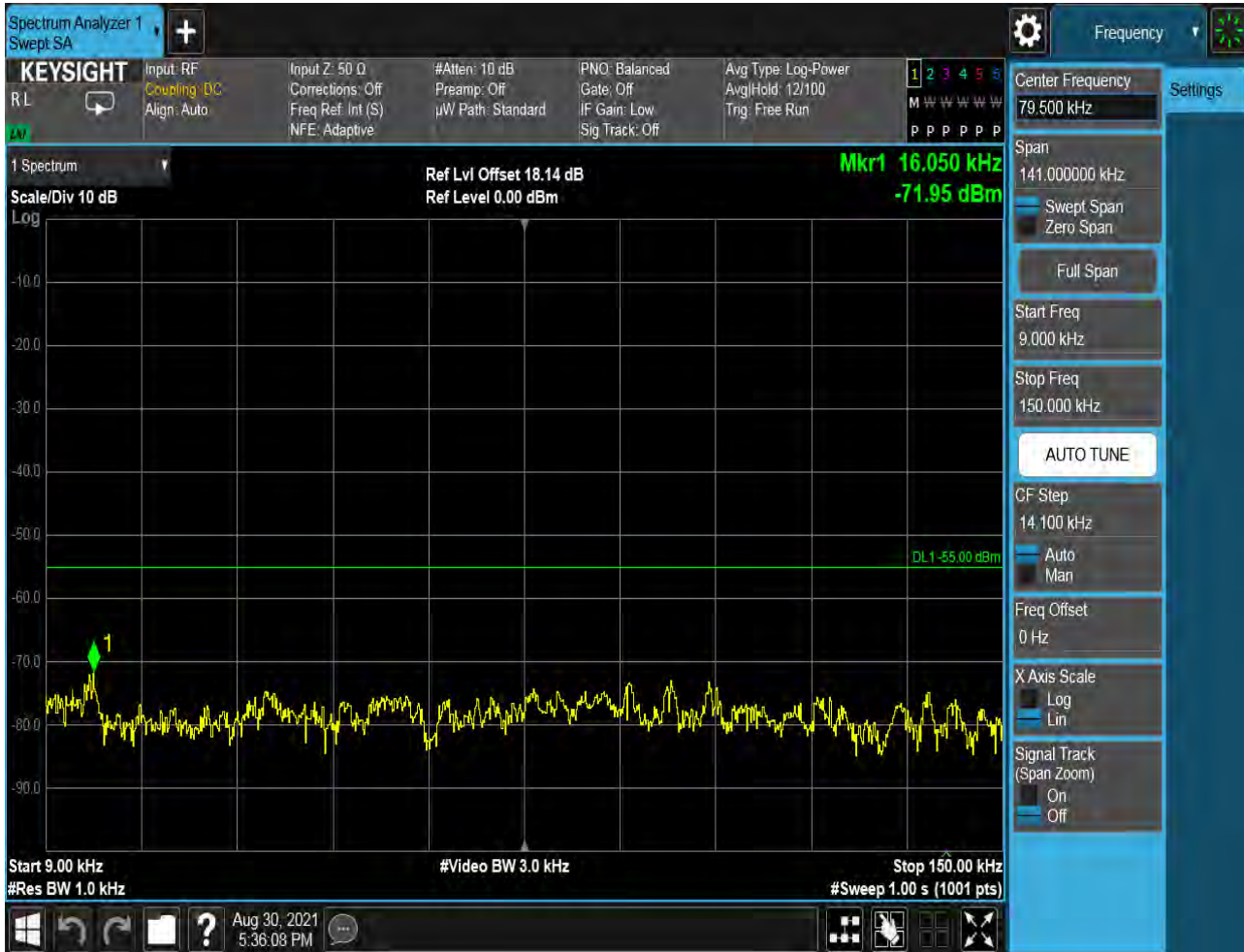


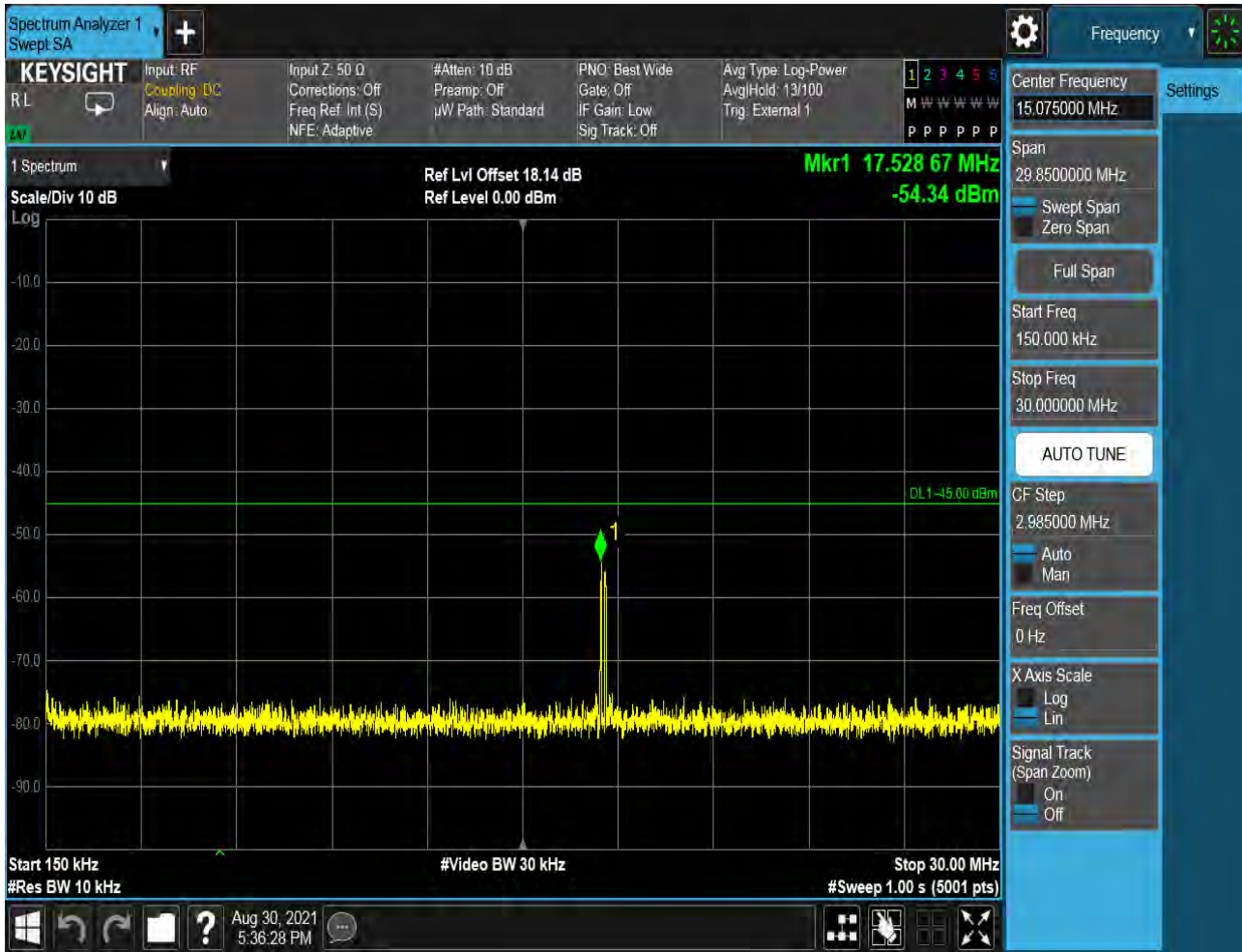


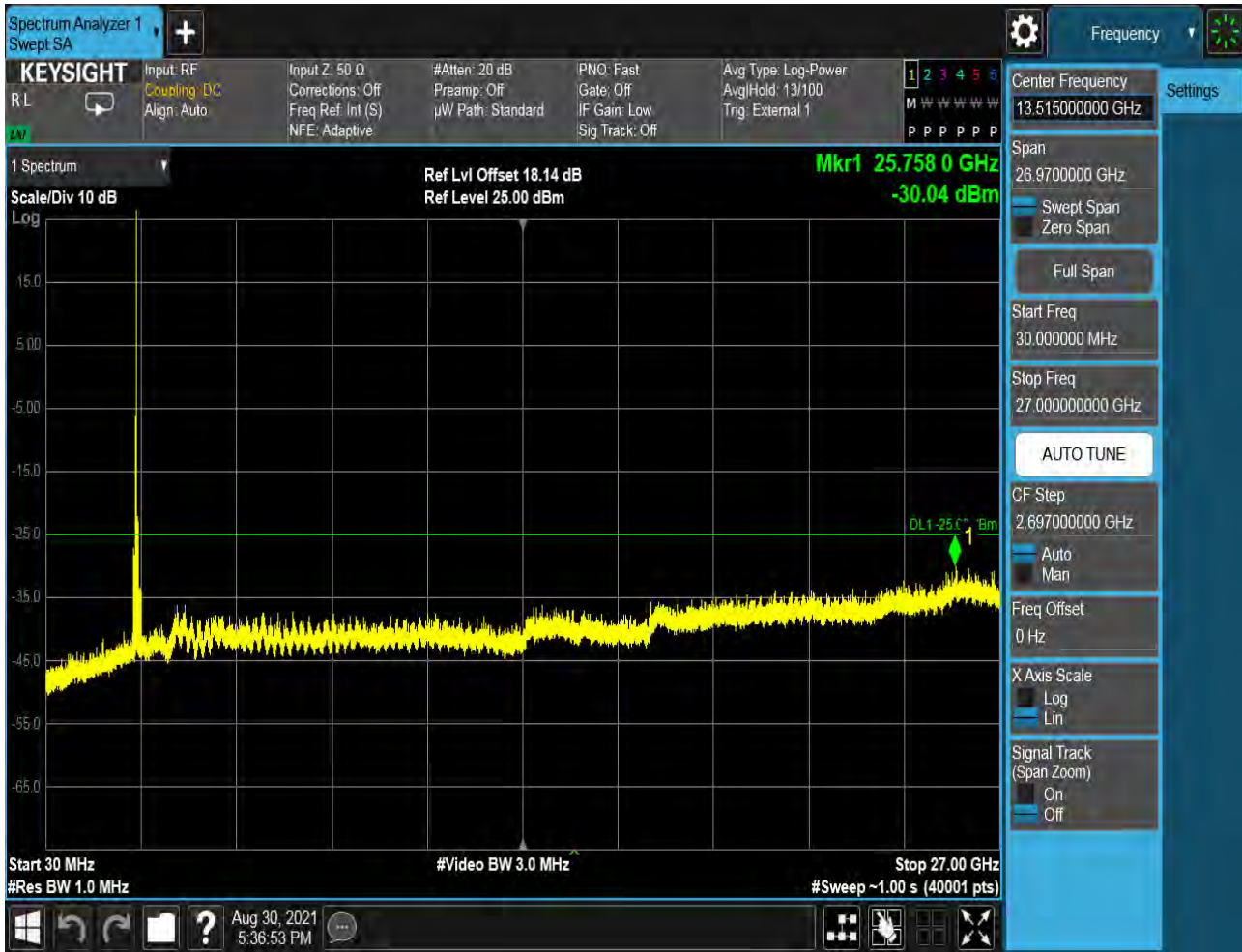


6.1.1.1.1.2 Test Channel = MCH

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

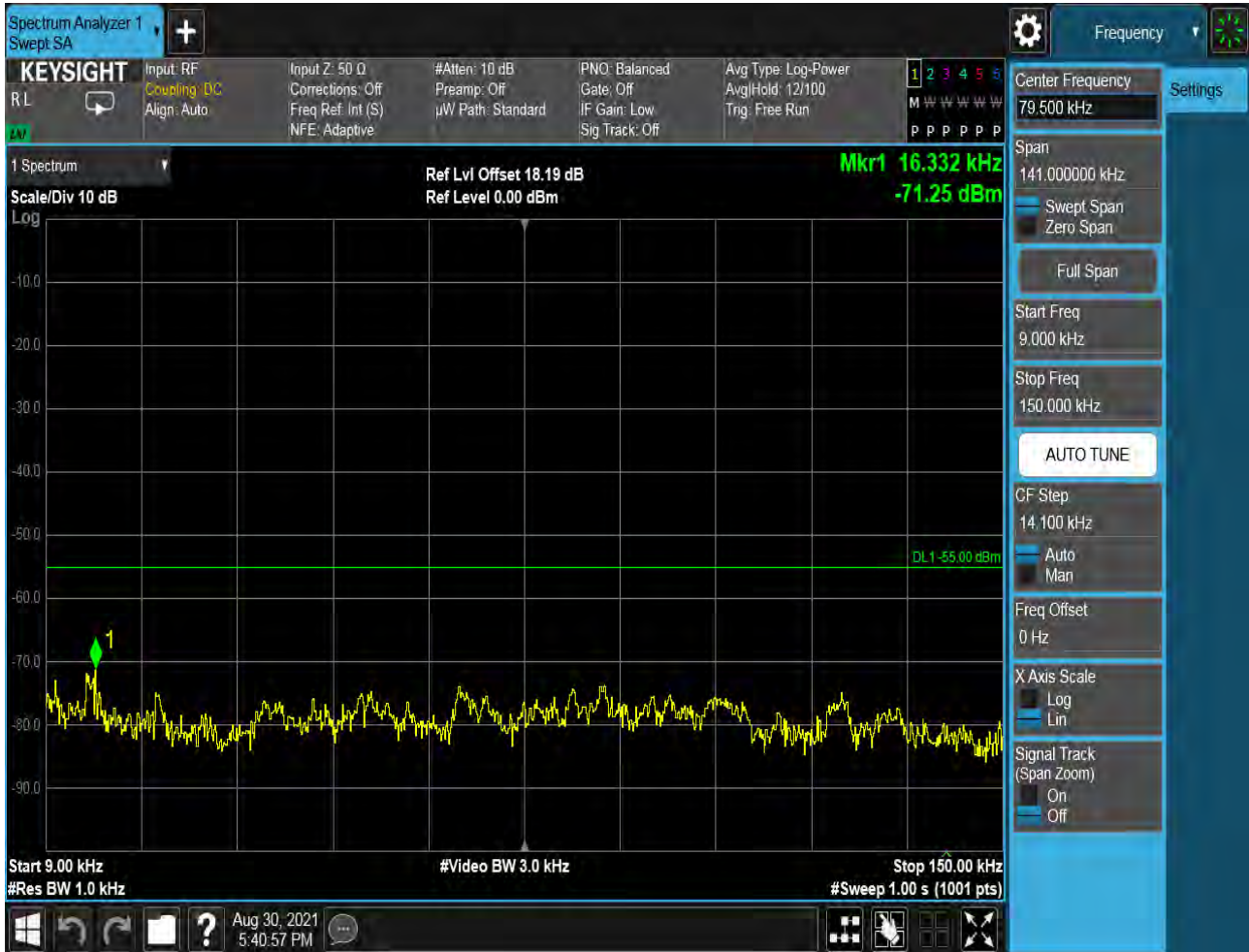






6.1.1.1.1.3 Test Channel = HCH

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







6.2.1.1.2 Test Bandwidth = 20+20

6.2.1.1.2.1 Test Channel = LCH

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



