



# 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_41C ( 2535-2 655MHZ )	LTE/T M1	15+15	LCH	1 # 0	0 # 0	22.44	21.92	33	PASS
				partial RBs # 0	0 # 0	22.31	21.79	33	PASS
				full RBs # 0	0 # 0	21.18	20.66	33	PASS
				full RBs # 0	full RBs # 0	18.80	18.28	33	PASS
			MCH	1 # 0	0 # 0	22.54	22.02	33	PASS
				partial RBs # 0	0 # 0	22.57	22.05	33	PASS
				full RBs # 0	0 # 0	21.60	21.08	33	PASS
				full RBs # 0	full RBs # 0	21.62	21.1	33	PASS
			HCH	1 # 0	0 # 0	22.56	22.04	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	22.56	22.04	33	PASS						
				full RBs # 0	0 # 0	21.46	20.94	33	PASS						
				full RBs # 0	full RBs # 0	21.42	20.9	33	PASS						
				1 # 0	0 # 0	22.47	21.95	33	PASS						
				partial RBs # 0	0 # 0	22.44	21.92	33	PASS						
				full RBs # 0	0 # 0	21.33	20.81	33	PASS						
		20+20	LCH			full RBs # 0	full RBs # 0	18.93	18.41	33	PASS				
						1 # 0	0 # 0	22.87	22.35	33	PASS				
						partial RBs # 0	0 # 0	22.67	22.15	33	PASS				
						MCH				full RBs # 0	0 # 0	21.63	21.11	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	21.59	21.07	33	PASS		
				1 # 0	0 # 0	22.61	22.09	33	PASS		
				partial RBs # 0	0 # 0	22.60	22.08	33	PASS		
				full RBs # 0	0 # 0	21.42	20.9	33	PASS		
				full RBs # 0	full RBs # 0	21.49	20.97	33	PASS		
				1 # 0	0 # 0	21.91	21.39	33	PASS		
				partial RBs # 0	0 # 0	21.44	20.92	33	PASS		
				full RBs # 0	0 # 0	20.15	19.63	33	PASS		
	LTE/T M2	15+15		LCH	full RBs # 0	full RBs # 0	17.74	17.22	33	PASS	
					1 # 0	0 # 0	21.88	21.36	33	PASS	
					partial	0 # 0	21.52	21	33	PASS	
					MCH	1 # 0	0 # 0	21.88	21.36	33	PASS
						partial	0 # 0	21.52	21	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	20.50	19.98	33	PASS		
				full RBs # 0	full RBs # 0	20.52	20	33	PASS		
			HCH	1 # 0	0 # 0	21.62	21.1	33	PASS		
				partial RBs # 0	0 # 0	21.57	21.05	33	PASS		
				full RBs # 0	0 # 0	20.38	19.86	33	PASS		
		20+20	LCH	full RBs # 0	full RBs # 0	20.37	19.85	33	PASS		
				1 # 0	0 # 0	22.27	21.75	33	PASS		
				partial RBs # 0	0 # 0	21.46	20.94	33	PASS		
						full RBs # 0	0 # 0	20.25	19.73	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	17.93	17.41	33	PASS
			MCH	1 # 0	0 # 0	22.25	21.73	33	PASS
				partial RBs # 0	0 # 0	21.58	21.06	33	PASS
				full RBs # 0	0 # 0	20.51	19.99	33	PASS
				full RBs # 0	full RBs # 0	20.55	20.03	33	PASS
			HCH	1 # 0	0 # 0	21.75	21.23	33	PASS
				partial RBs # 0	0 # 0	21.66	21.14	33	PASS
				full RBs # 0	0 # 0	20.28	19.76	33	PASS
				full RBs # 0	full RBs # 0	20.41	19.89	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:

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

SET RBW = 1% 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 Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict
CA_41C (2535-2655 MHZ)	LTE/TM 1	15+15	LCH	1 # 0	0 # 0	4.44	13	PASS
				partial RBs # 0	0 # 0	5.27	13	PASS
				full RBs # 0	0 # 0	6.43	13	PASS
				full RBs # 0	full RBs # 0	6.77	13	PASS
			MCH	1 # 0	0 # 0	4.31	13	PASS
				partial RBs # 0	0 # 0	5.13	13	PASS
				full RBs # 0	0 # 0	6.28	13	PASS
				full RBs # 0	full RBs # 0	6.48	13	PASS
		HCH	1 # 0	0 # 0	4.34	13	PASS	
			partial RBs # 0	0 # 0	4.92	13	PASS	
			full RBs # 0	0 # 0	6.34	13	PASS	
			full RBs # 0	full RBs # 0	6.29	13	PASS	
		20+20	LCH	1 # 0	0 # 0	4.42	13	PASS
				partial RBs # 0	0 # 0	5.10	13	PASS



Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict		
				full RBs # 0	0 # 0	6.18	13	PASS		
				full RBs # 0	full RBs # 0	7.08	13	PASS		
			MCH	1 # 0	0 # 0	4.50	13	PASS		
				partial RBs # 0	0 # 0	4.87	13	PASS		
				full RBs # 0	0 # 0	6.38	13	PASS		
				full RBs # 0	full RBs # 0	6.59	13	PASS		
			HCH	1 # 0	0 # 0	4.20	13	PASS		
				partial RBs # 0	0 # 0	4.73	13	PASS		
				full RBs # 0	0 # 0	6.05	13	PASS		
				full RBs # 0	full RBs # 0	6.34	13	PASS		
			LTE/TM 2	15+15	LCH	1 # 0	0 # 0	5.40	13	PASS
						partial RBs # 0	0 # 0	5.92	13	PASS
	full RBs # 0	0 # 0				6.99	13	PASS		
	full RBs # 0	full RBs # 0				7.45	13	PASS		
	MCH	1 # 0			0 # 0	5.46	13	PASS		
		partial RBs # 0			0 # 0	5.99	13	PASS		

Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict		
				full RBs # 0	0 # 0	6.96	13	PASS		
				full RBs # 0	full RBs # 0	7.27	13	PASS		
			HCH	1 # 0	0 # 0	4.85	13	PASS		
				partial RBs # 0	0 # 0	5.70	13	PASS		
				full RBs # 0	0 # 0	7.12	13	PASS		
				full RBs # 0	full RBs # 0	7.50	13	PASS		
			LCH	1 # 0	0 # 0	5.08	13	PASS		
				partial RBs # 0	0 # 0	5.87	13	PASS		
				full RBs # 0	0 # 0	7.16	13	PASS		
				full RBs # 0	full RBs # 0	7.68	13	PASS		
			MCH	1 # 0	0 # 0	4.71	13	PASS		
				partial RBs # 0	0 # 0	6.02	13	PASS		
		full RBs # 0		0 # 0	6.67	13	PASS			
		full RBs # 0		full RBs # 0	7.24	13	PASS			
		HCH	1 # 0	0 # 0	4.83	13	PASS			
			partial RBs # 0	0 # 0	5.59	13	PASS			
		20+20				1 # 0	0 # 0	5.08	13	PASS
						partial RBs # 0	0 # 0	5.87	13	PASS
full RBs # 0	0 # 0					7.16	13	PASS		
full RBs # 0	full RBs # 0					7.68	13	PASS		
1 # 0	0 # 0					4.71	13	PASS		
partial RBs # 0	0 # 0					6.02	13	PASS		
full RBs # 0	0 # 0	6.67	13	PASS						
full RBs # 0	full RBs # 0	7.24	13	PASS						
1 # 0	0 # 0	4.83	13	PASS						
partial RBs # 0	0 # 0	5.59	13	PASS						

Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Measured [dBm]	Limit [dBm]	Verdict
				full RBs # 0	0 # 0	7.23	13	PASS
				full RBs # 0	full RBs # 0	7.58	13	PASS

## 3Appendix\_C: Modulation Characteristics

### Part I - Test Plots

#### 3.1 For LTE

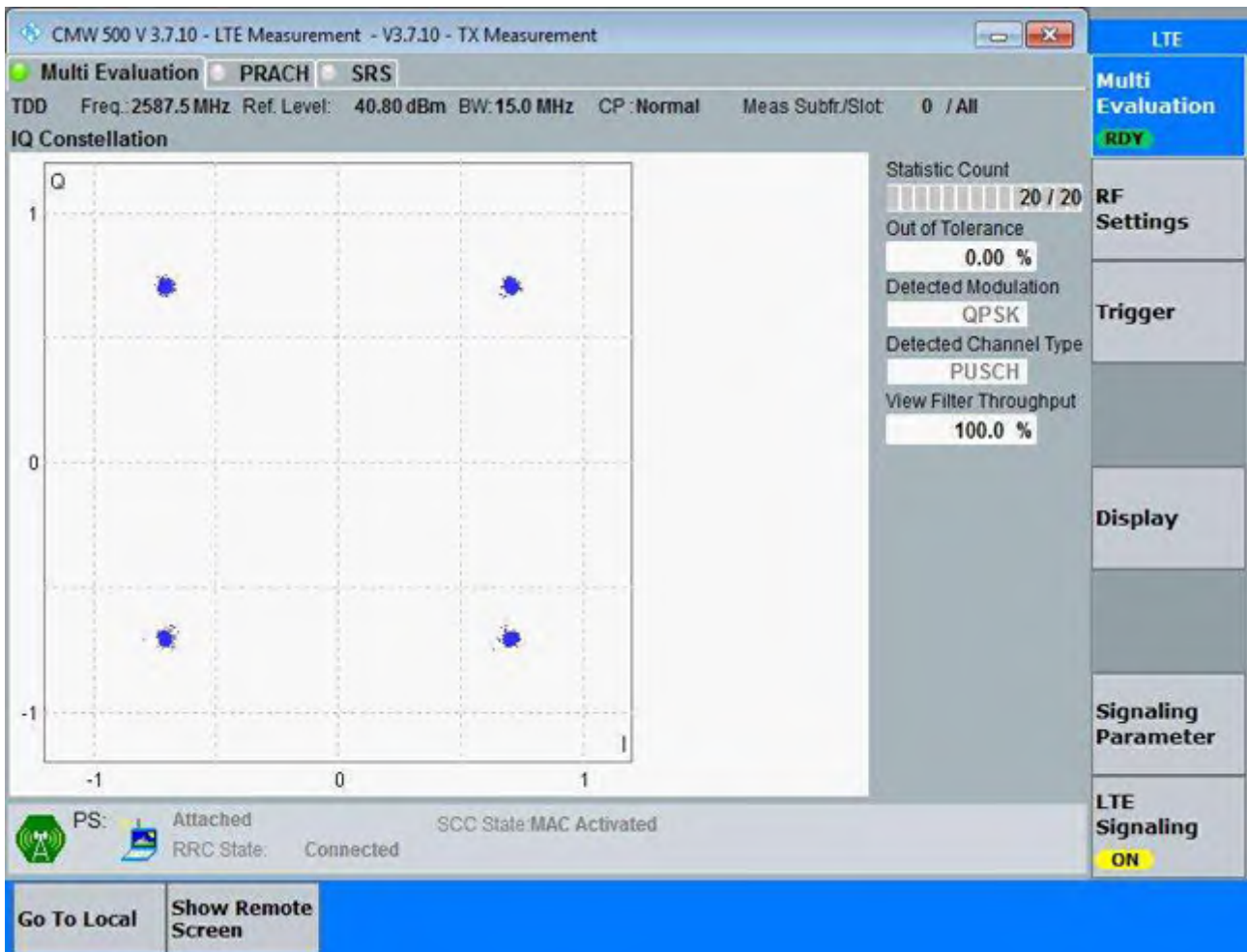
##### 3.1.1 Test Band = CA\_41C ( 2535-2655MHZ )

##### 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

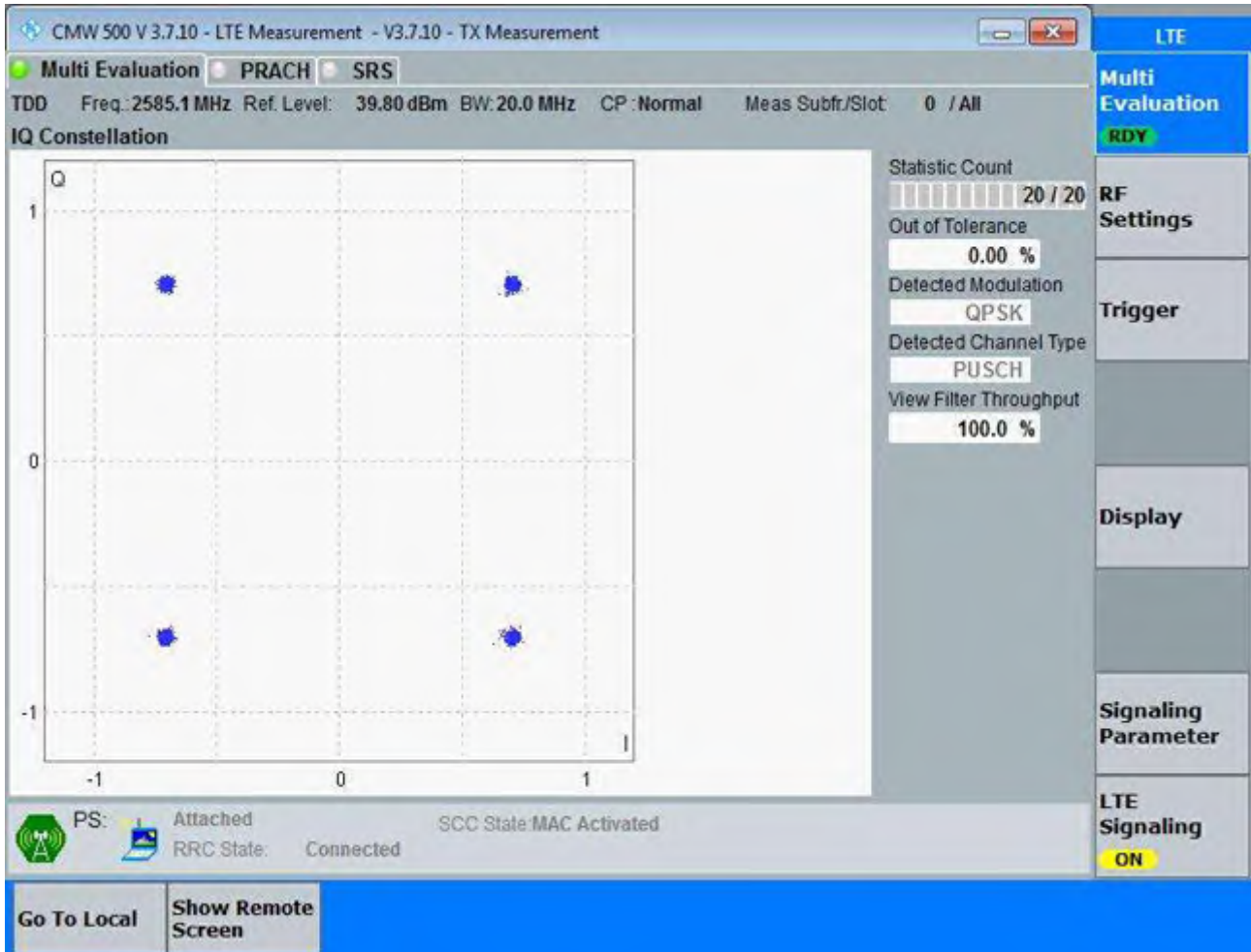
##### 3.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



### 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

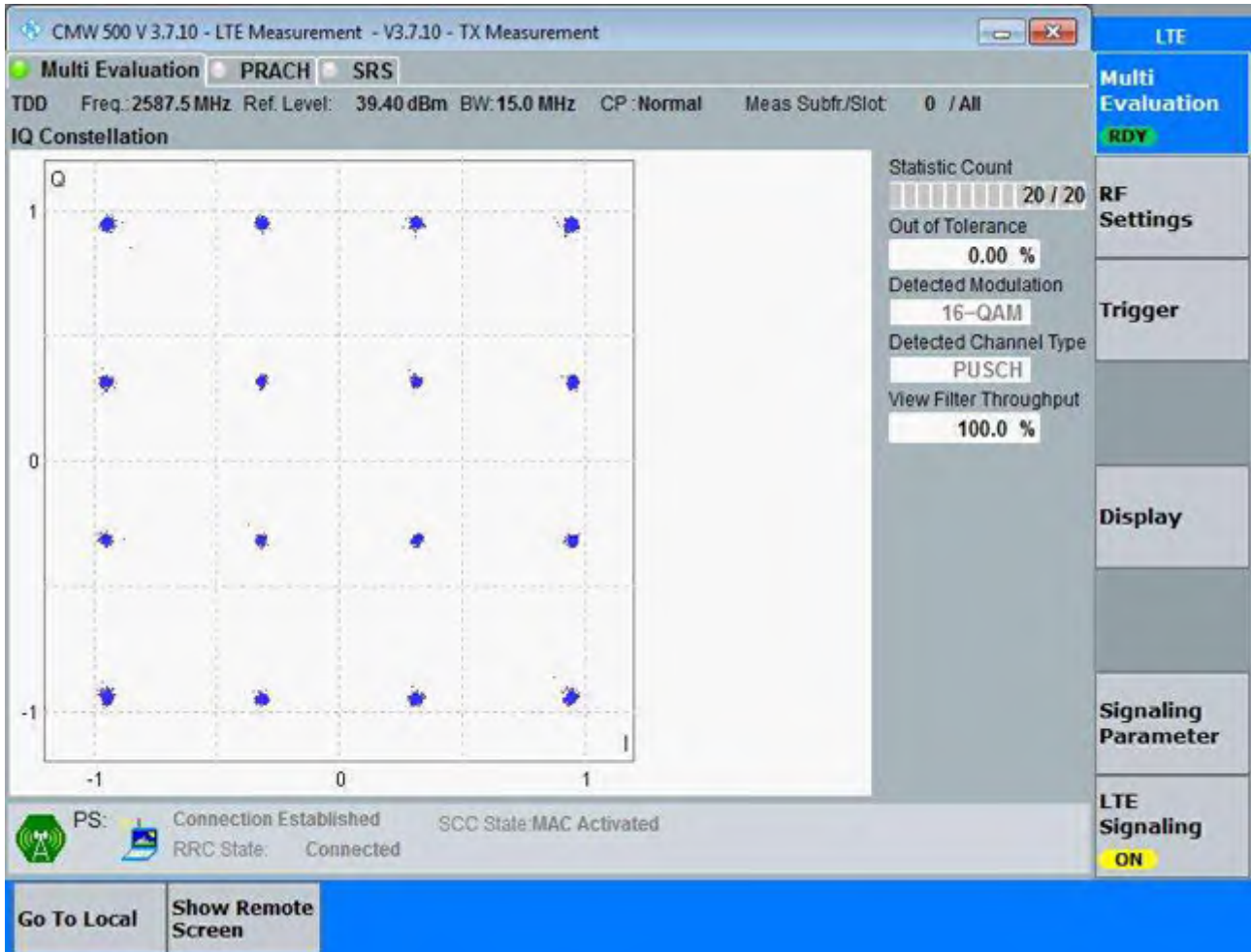


### 3.1.1.2 Test Mode = LTE/TM2

#### 3.1.1.2.1 Test Bandwidth = 15+15

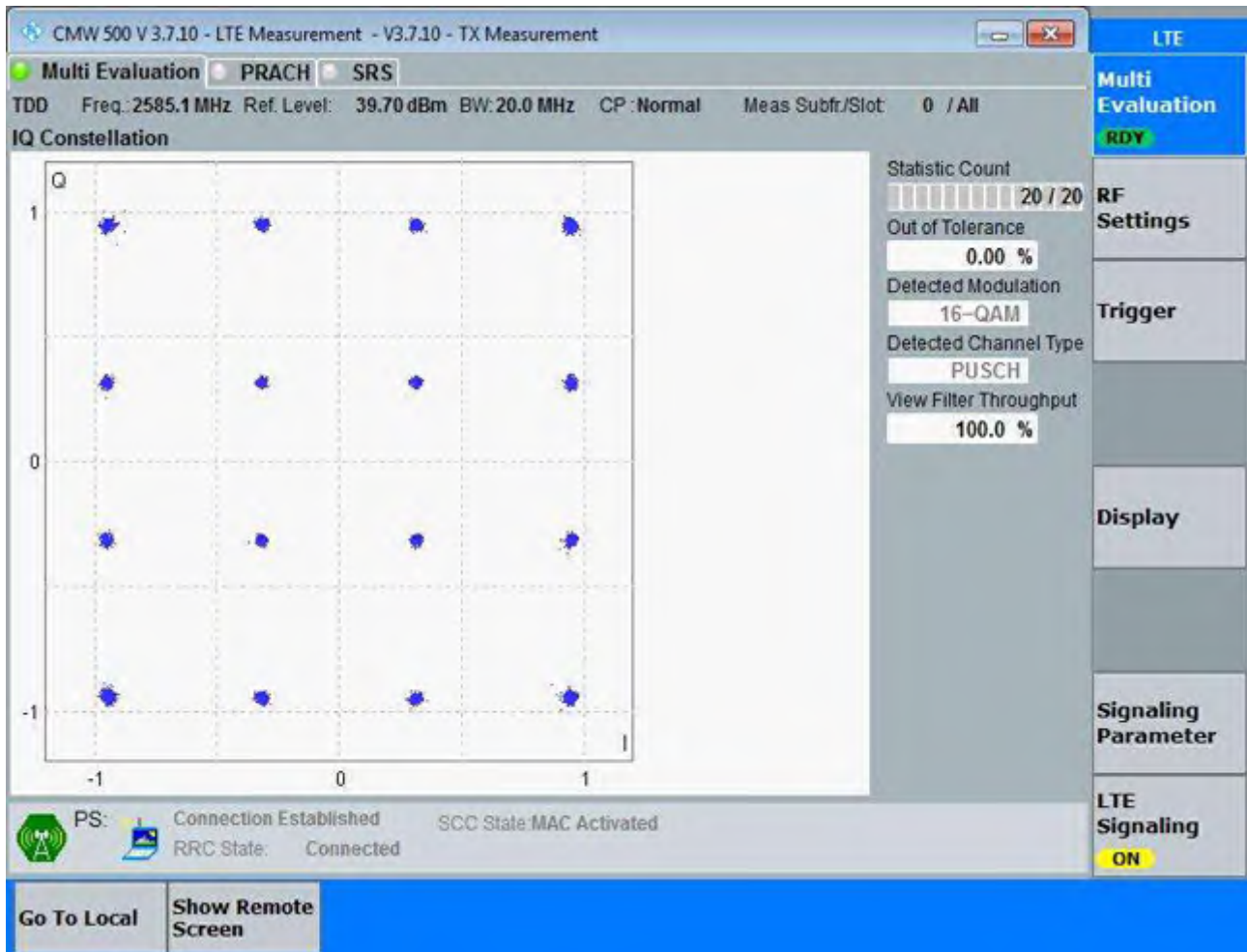
##### 3.1.1.2.1.1 Test Channel = MCH

###### 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 (2535-2655 MHz)	LTE/TM1	15+15	LCH	full RBs # 0	full RBs # 0	28.95	31.61	PASS
			MCH	full RBs # 0	full RBs # 0	28.98	31.41	PASS
			HCH	full RBs # 0	full RBs # 0	29.02	31.64	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.40	41.37	PASS
			MCH	full RBs # 0	full RBs # 0	38.48	42.34	PASS
			HCH	full RBs # 0	full RBs # 0	38.42	41.29	PASS
	LTE/TM2	15+15	LCH	full RBs # 0	full RBs # 0	28.97	31.30	PASS
			MCH	full RBs # 0	full RBs # 0	28.93	31.19	PASS
			HCH	full RBs # 0	full RBs # 0	29.00	31.75	PASS
		20+20	LCH	full RBs # 0	full RBs # 0	38.46	41.54	PASS
			MCH	full RBs # 0	full RBs # 0	38.45	41.48	PASS
			HCH	full RBs # 0	full RBs # 0	38.40	41.67	PASS



**Part II - Test Plots**

**4.1 For LTE**

**4.1.1 Test Band = CA\_41C ( 2535-2655MHZ )**

**4.1.1.1 Test Mode = LTE/TM1**

**4.1.1.1.1 Test Bandwidth = 15+15**

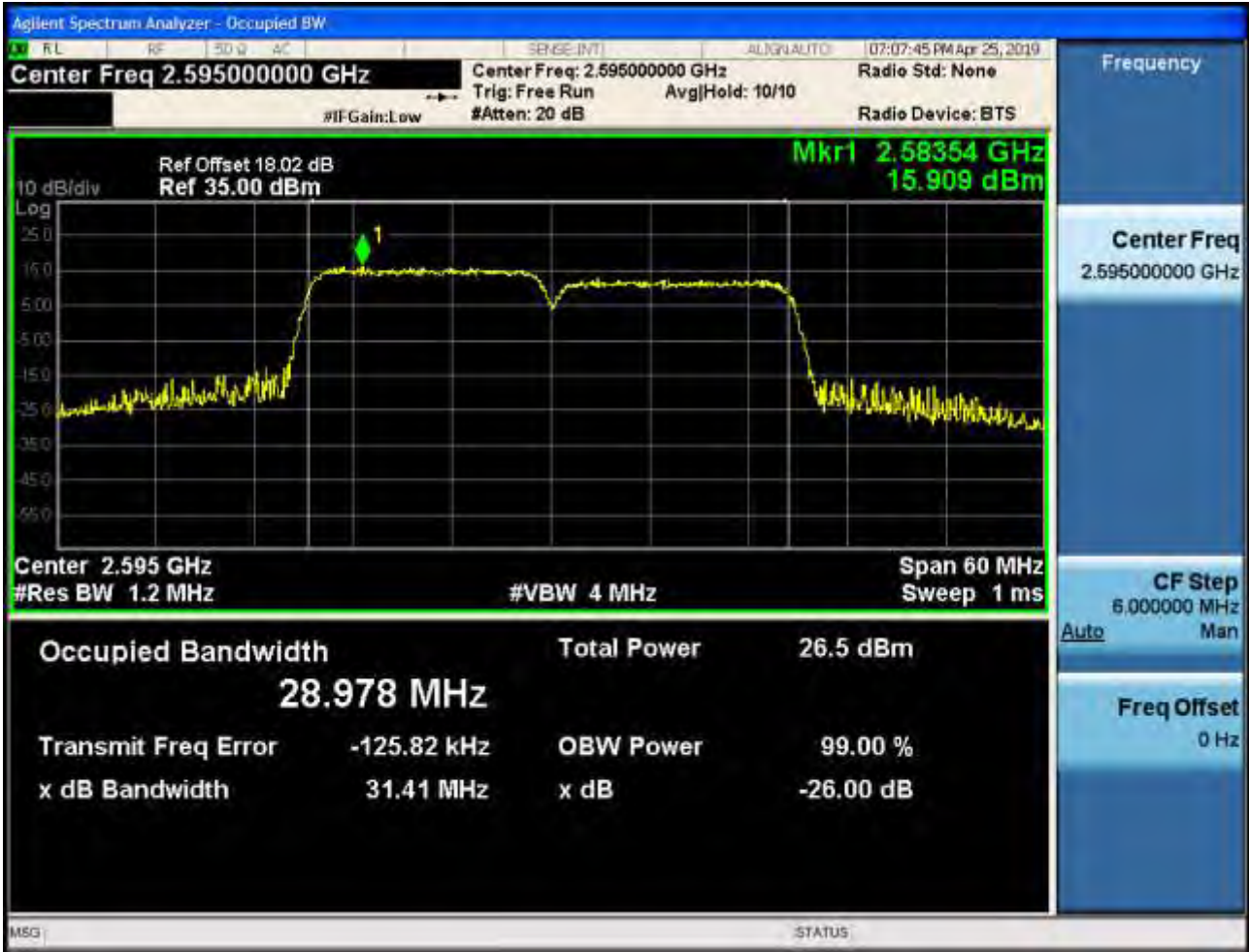
**4.1.1.1.1.1 Test Channel = LCH**

**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

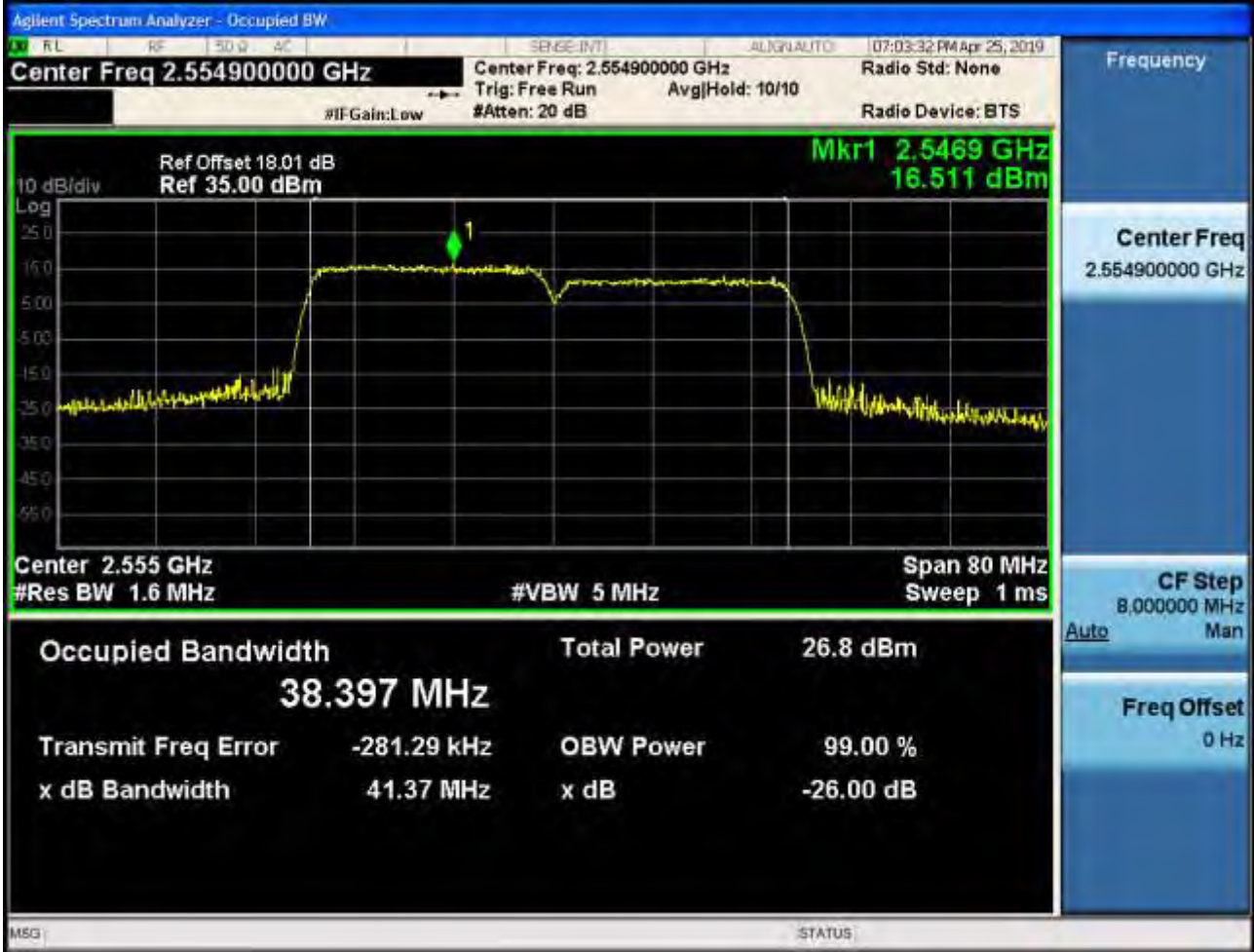
4.1.1.1.1.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



4.1.1.1.2 Test Bandwidth = 20+20

4.1.1.1.2.1 Test Channel = LCH

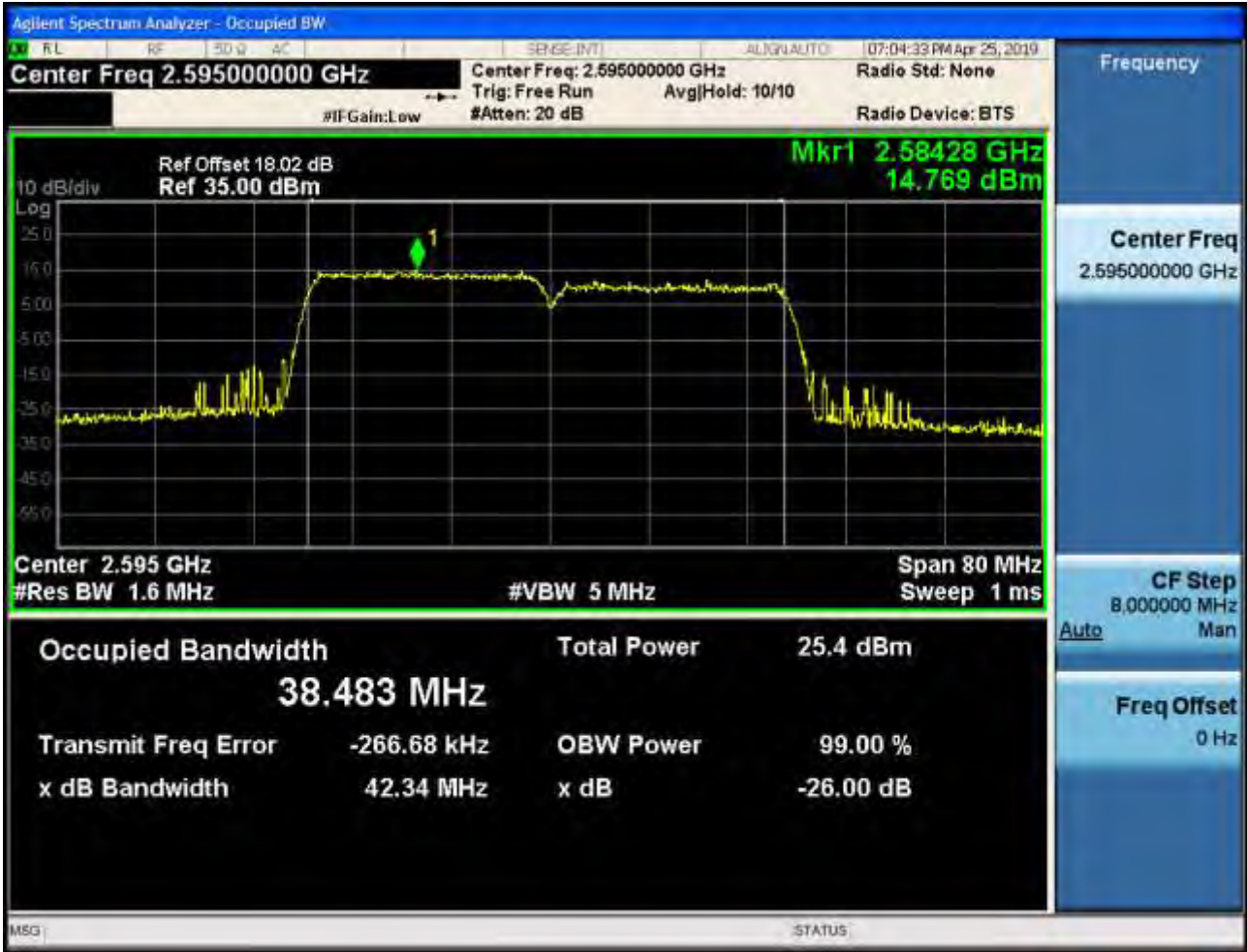
4.1.1.1.2.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs





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

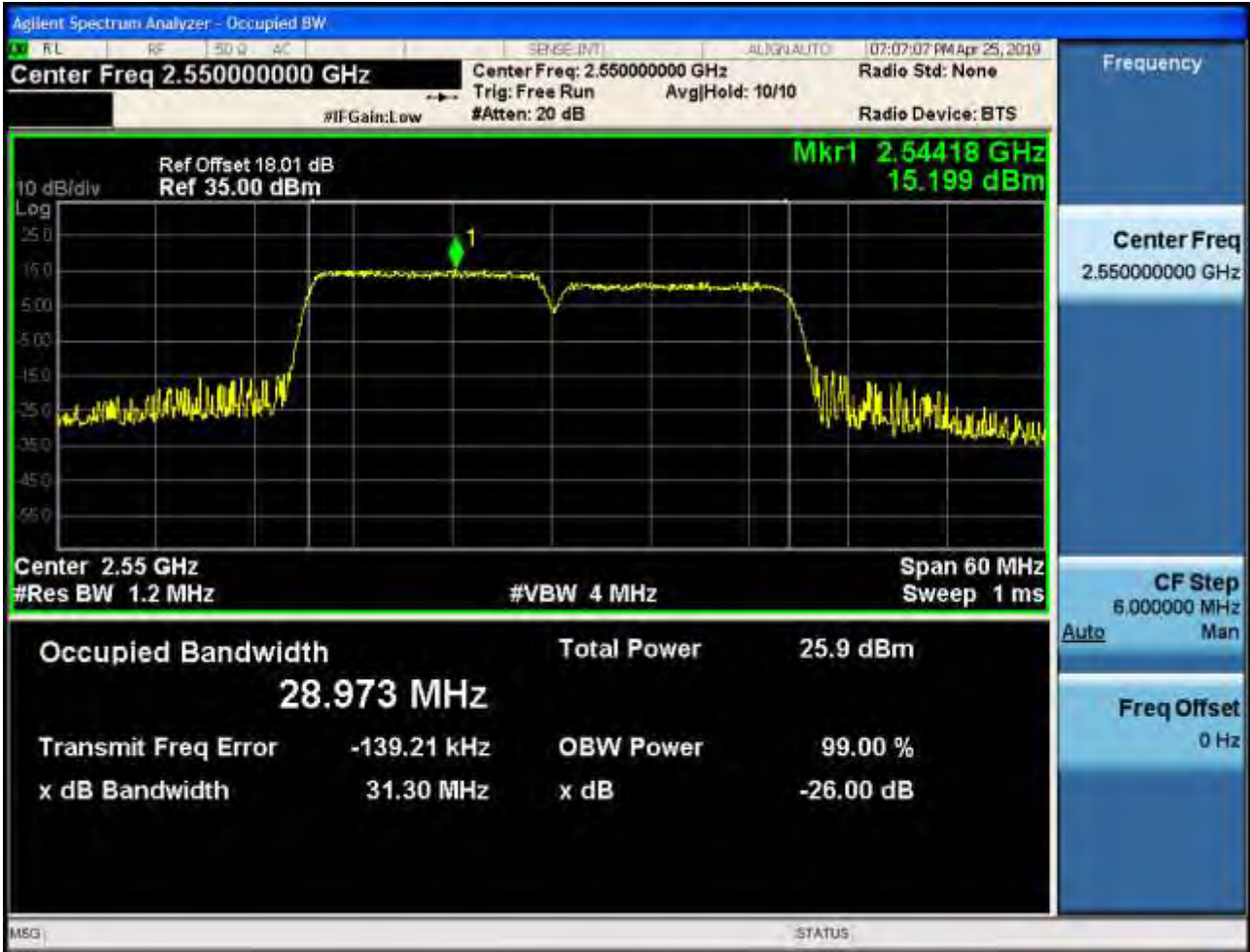


4.1.1.1 Test Mode = LTE/TM2

4.1.1.1.1 Test Bandwidth = 15+15

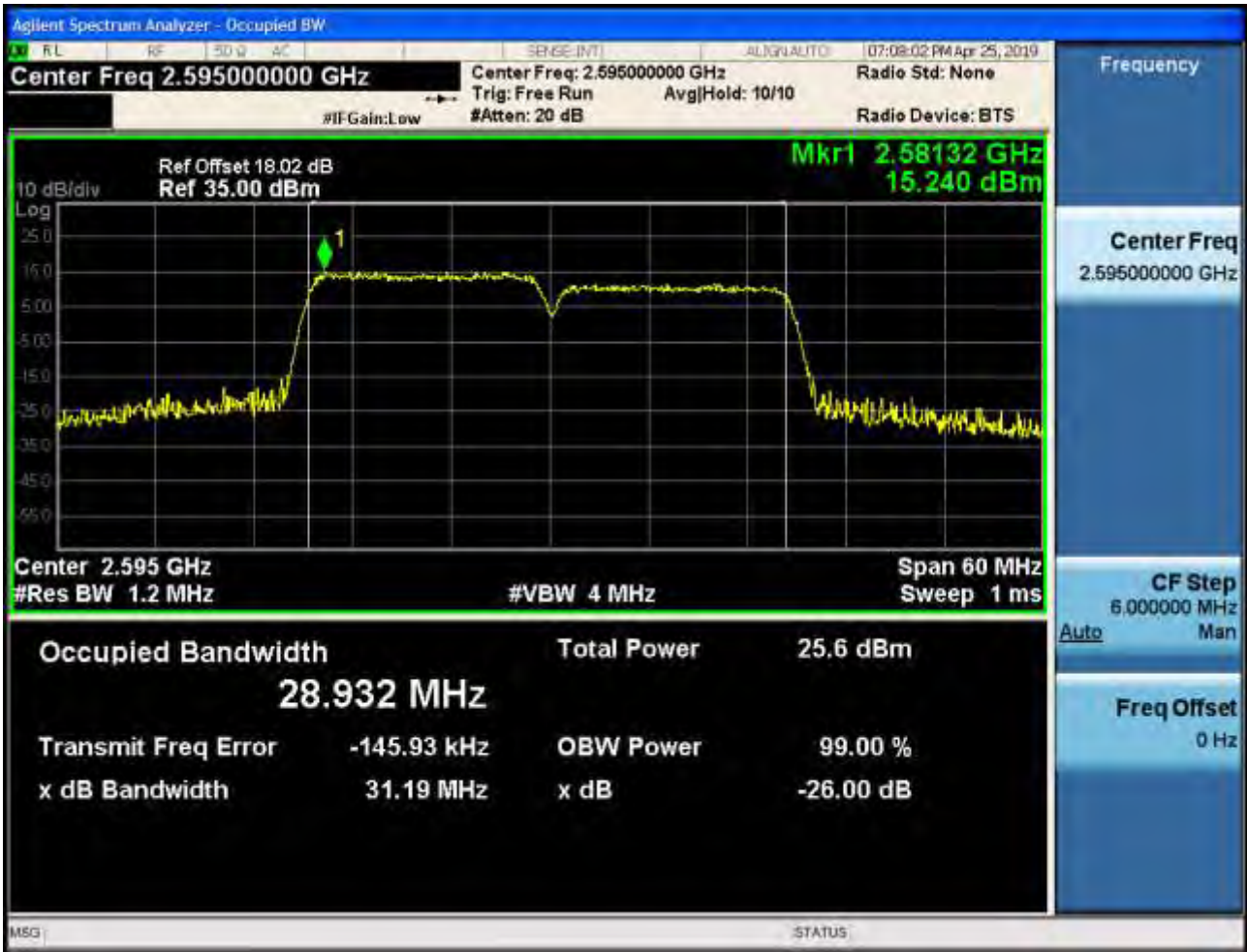
4.1.1.1.1.1 Test Channel = LCH

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

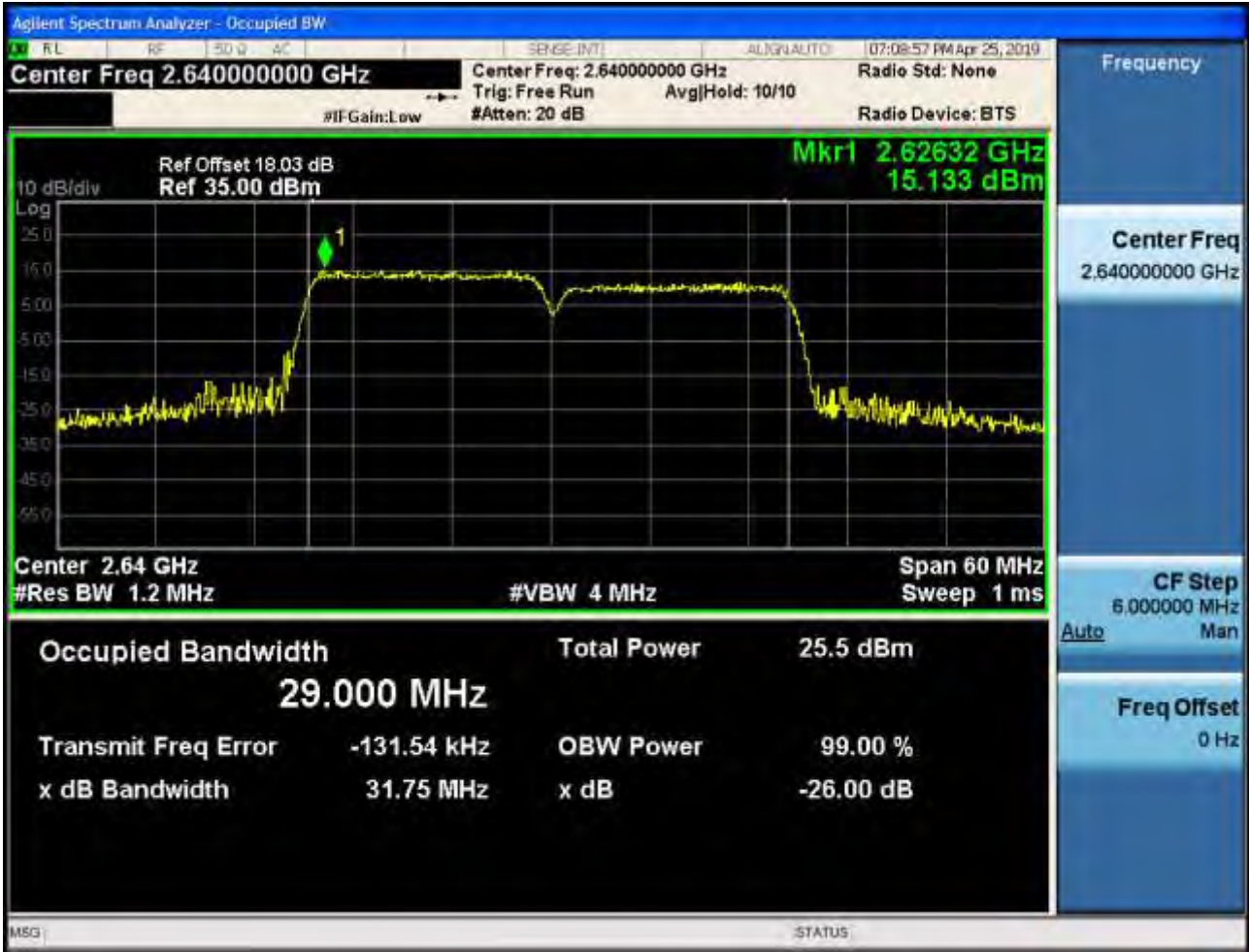
4.1.1.1.1.2.1 PCC Test RB = full RBs & SCC Test RB = full RBs





4.1.1.1.1.3 Test Channel = HCH

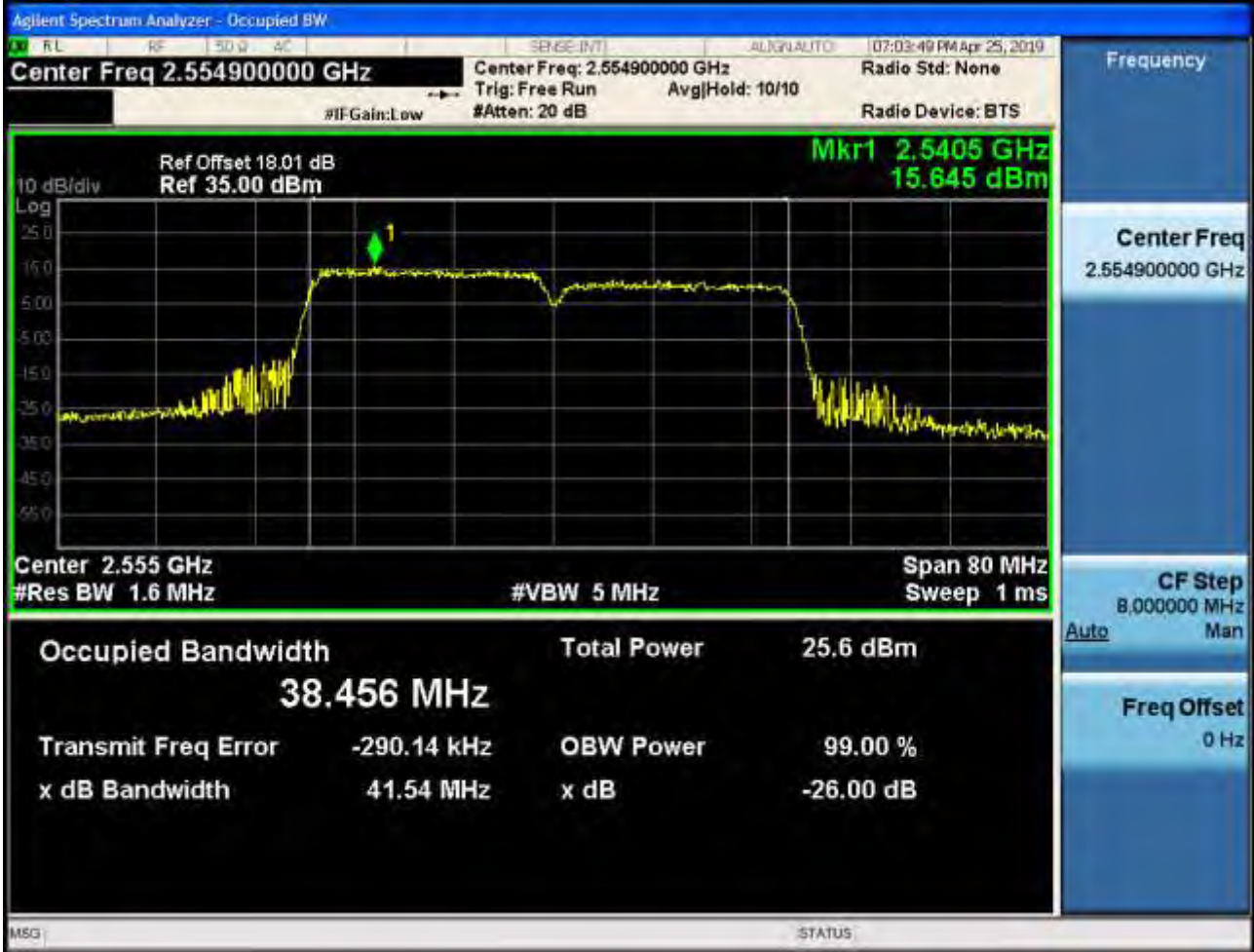
4.1.1.1.1.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



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 ( 2535-2655MHZ )

##### 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 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 &amp; SCC Test RB = 1 # max







## 5.1.1.1.2.2 PCC Test RB = 0 &amp; 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 &amp; 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



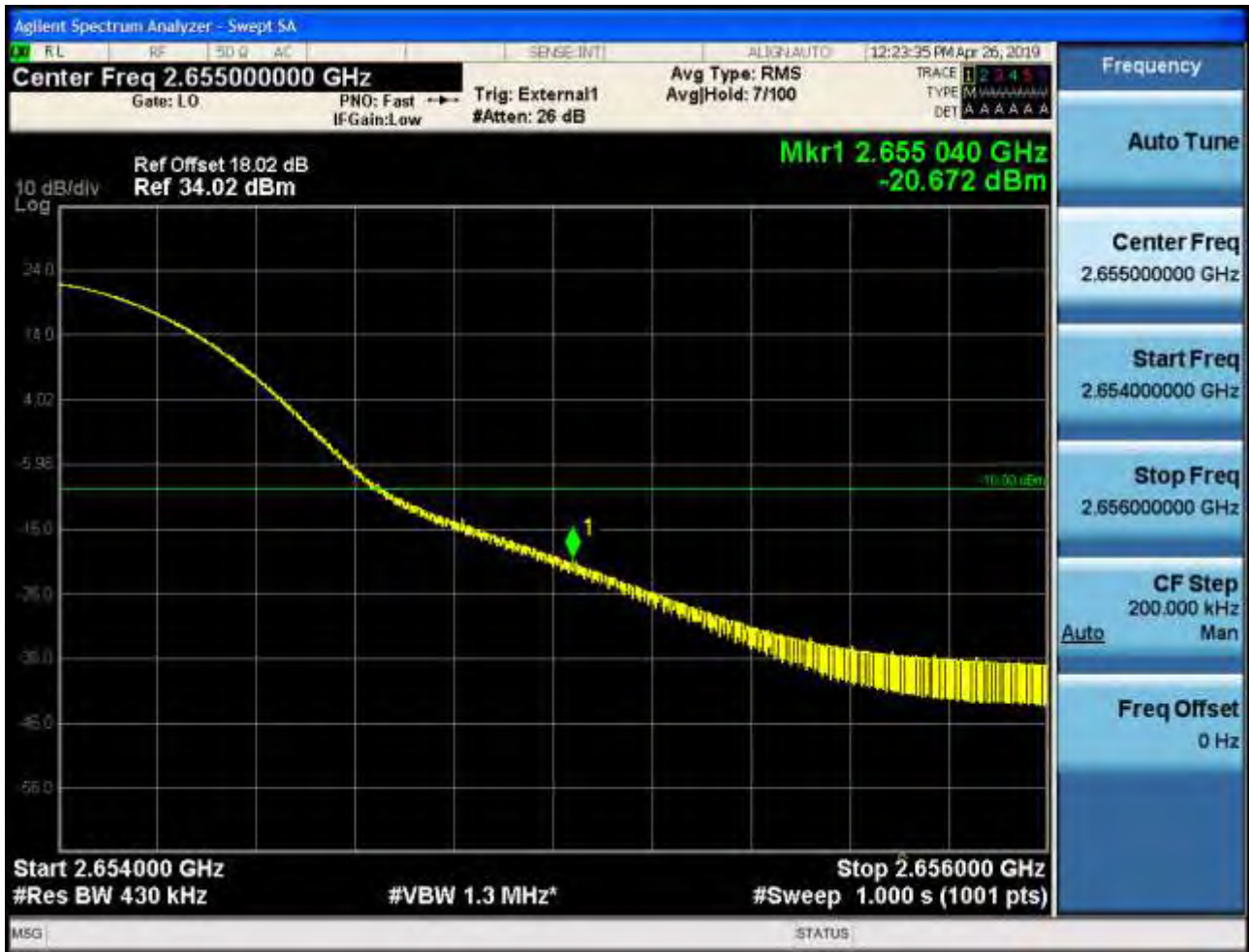






## 5.1.1.1.2.2 Test Channel = HCH

## 5.1.1.1.2.2.1 PCC Test RB = 0 &amp; 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





















5.1.1.2.1.1.2 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 &amp; SCC Test RB = 1 # max











## 5.1.1.2.1.2.2 PCC Test RB = 0 &amp; 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 &amp; SCC Test RB = 1 # max











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







## 5.1.1.2.2.3 PCC Test RB = 0 &amp; SCC Test RB = full RBs











## 5.1.1.2.2.4 PCC Test RB = full RBs &amp; 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 ( 2535-2655MHZ )

##### 6.1.1.1 Test Mode = LTE/TM1

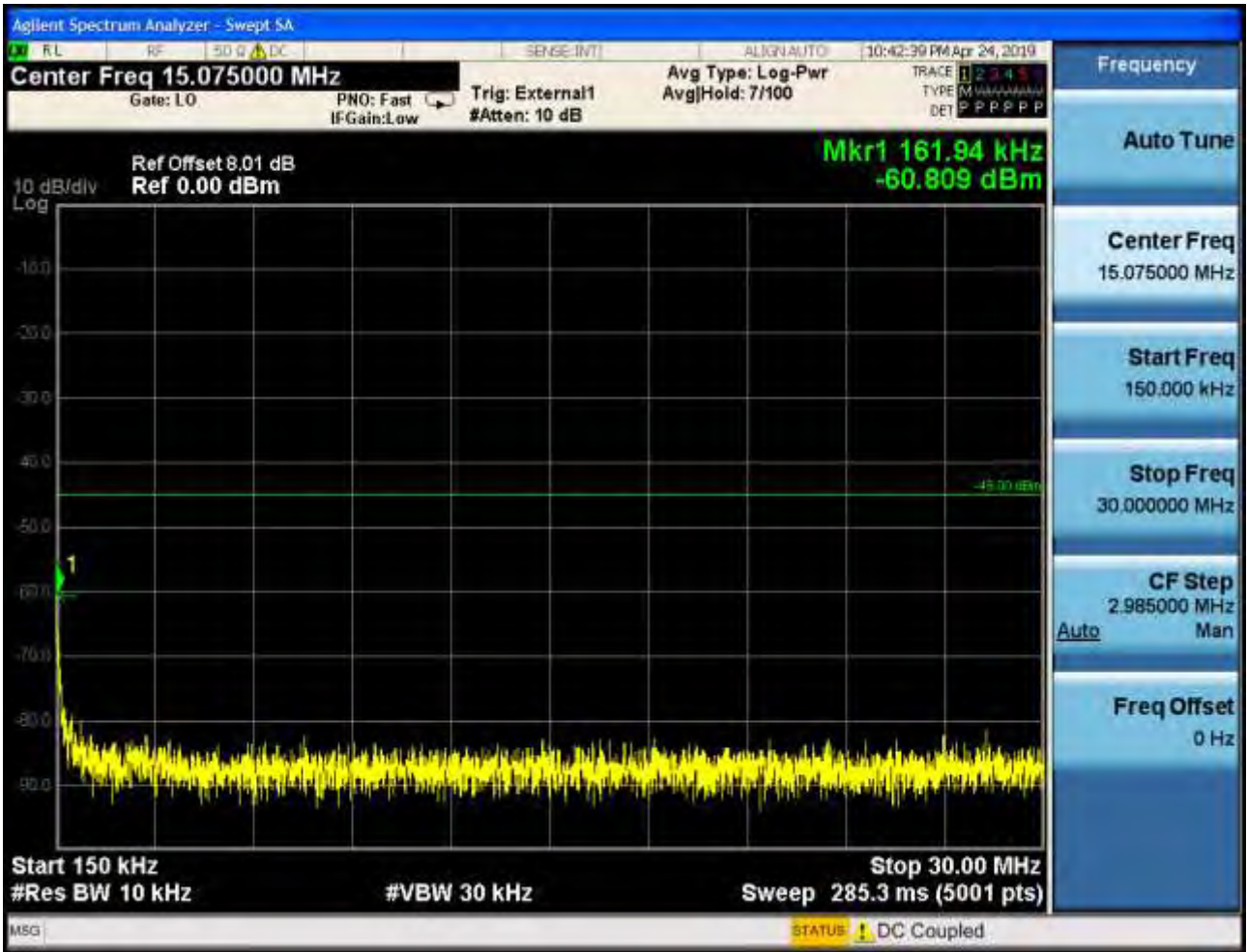
##### 6.1.1.1.1 Test Bandwidth = 15+15

##### 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 &amp; SCC Test RB = 0





