



# 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 (2535-2655MHz)	LTE/TM1	15MHz+15MHz	LCH	1 # 0	0 # 0	23.64	24.64	33	PASS
				partial RBs # 0	0 # 0	23.91	24.91	33	PASS
				full RBs # 0	0 # 0	22.85	23.85	33	PASS
				full RBs # 0	full RBs # 0	20.10	21.10	33	PASS
			MCH	1 # 0	0 # 0	23.47	24.47	33	PASS
				partial RBs # 0	0 # 0	23.61	24.61	33	PASS
				full RBs # 0	0 # 0	22.60	23.60	33	PASS
				full RBs # 0	full RBs # 0	20.06	21.06	33	PASS
			HCH	1 # 0	0 # 0	23.33	24.33	33	PASS
				partial RBs # 0	0 # 0	23.58	24.58	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	0 # 0	22.42	23.42	33	PASS	
				full RBs # 0	full RBs # 0	19.92	20.92	33	PASS	
		20MHz +20M Hz	LCH	1 # 0	0 # 0	23.22	24.22	33	PASS	
				partial RBs # 0	0 # 0	23.68	24.68	33	PASS	
				full RBs # 0	0 # 0	22.80	23.80	33	PASS	
				full RBs # 0	full RBs # 0	20.13	21.13	33	PASS	
				MCH	1 # 0	0 # 0	23.37	24.37	33	PASS
					partial RBs # 0	0 # 0	23.52	24.52	33	PASS
					full RBs # 0	0 # 0	22.56	23.56	33	PASS
					full RBs # 0	full RBs # 0	20.09	21.09	33	PASS
			HCH	1 # 0	0 # 0	23.20	24.20	33	PASS	
				partial RBs # 0	0 # 0	23.50	24.50	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	0 # 0	22.59	23.59	33	PASS
				full RBs # 0	full RBs # 0	19.91	20.91	33	PASS
	LTE/T M2	15MHz +15M Hz	LCH	1 # 0	0 # 0	23.38	24.38	33	PASS
				partial RBs # 0	0 # 0	22.84	23.84	33	PASS
				full RBs # 0	0 # 0	21.80	22.80	33	PASS
				full RBs # 0	full RBs # 0	19.01	20.01	33	PASS
				1 # 0	0 # 0	23.08	24.08	33	PASS
				partial RBs # 0	0 # 0	22.64	23.64	33	PASS
				full RBs # 0	0 # 0	21.64	22.64	33	PASS
				full RBs # 0	full RBs # 0	19.00	20.00	33	PASS
			HCH	1 # 0	0 # 0	22.95	23.95	33	PASS
				partial RBs # 0	0 # 0	22.51	23.51	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	0 # 0	21.48	22.48	33	PASS	
				full RBs # 0	full RBs # 0	18.79	19.79	33	PASS	
		20MHz +20M Hz	LCH	1 # 0	0 # 0	22.97	23.97	33	PASS	
				partial RBs # 0	0 # 0	22.63	23.63	33	PASS	
				full RBs # 0	0 # 0	21.70	22.70	33	PASS	
				full RBs # 0	full RBs # 0	19.01	20.01	33	PASS	
				MCH	1 # 0	0 # 0	22.87	23.87	33	PASS
					partial RBs # 0	0 # 0	22.53	23.53	33	PASS
					full RBs # 0	0 # 0	21.59	22.59	33	PASS
					full RBs # 0	full RBs # 0	19.07	20.07	33	PASS
			HCH	1 # 0	0 # 0	22.96	23.96	33	PASS	
				partial RBs # 0	0 # 0	22.39	23.39	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	0 # 0	21.35	22.35	33	PASS
				full RBs # 0	full RBs # 0	19.03	20.03	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 (2535-2655 MHz)	LTE/TM 1	15MHz+15 MHz	LCH	1 # 0	0 # 0	4.27	13	PASS
				partial RBs # 0	0 # 0	4.65	13	PASS
				full RBs # 0	0 # 0	6.00	13	PASS
				full RBs # 0	full RBs # 0	6.52	13	PASS
			MCH	1 # 0	0 # 0	4.02	13	PASS
				partial RBs # 0	0 # 0	4.49	13	PASS
				full RBs # 0	0 # 0	5.93	13	PASS
				full RBs # 0	full RBs # 0	6.50	13	PASS
			HCH	1 # 0	0 # 0	4.12	13	PASS
				partial RBs # 0	0 # 0	4.54	13	PASS
				full RBs	0 # 0	5.79	13	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel I	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
				# 0				
				full RBs # 0	full RBs # 0	6.58	13	PASS
		20MHz+20 MHz	LCH	1 # 0	0 # 0	4.52	13	PASS
				partial RBs # 0	0 # 0	4.69	13	PASS
				full RBs # 0	0 # 0	5.82	13	PASS
				full RBs # 0	full RBs # 0	6.56	13	PASS
			MCH	1 # 0	0 # 0	4.24	13	PASS
				partial RBs # 0	0 # 0	4.20	13	PASS
				full RBs # 0	0 # 0	5.82	13	PASS
				full RBs # 0	full RBs # 0	6.74	13	PASS
			HCH	1 # 0	0 # 0	4.18	13	PASS
				partial RBs # 0	0 # 0	4.27	13	PASS





Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel I	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
				full RBs # 0	0 # 0	5.71	13	PASS
				full RBs # 0	full RBs # 0	6.62	13	PASS
	LTE/TM 2	15MHz+15 MHz	LCH	1 # 0	0 # 0	4.81	13	PASS
				partial RBs # 0	0 # 0	5.38	13	PASS
				full RBs # 0	0 # 0	6.29	13	PASS
				full RBs # 0	full RBs # 0	7.13	13	PASS
				1 # 0	0 # 0	4.65	13	PASS
				partial RBs # 0	0 # 0	5.04	13	PASS
				full RBs # 0	0 # 0	6.12	13	PASS
				full RBs # 0	full RBs # 0	6.89	13	PASS
			HCH	1 # 0	0 # 0	4.65	13	PASS
				partial RBs # 0	0 # 0	5.10	13	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel I	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
				full RBs # 0	0 # 0	6.20	13	PASS
				full RBs # 0	full RBs # 0	6.91	13	PASS
		20MHz+20 MHz	LCH	1 # 0	0 # 0	4.86	13	PASS
				partial RBs # 0	0 # 0	5.37	13	PASS
				full RBs # 0	0 # 0	6.09	13	PASS
				full RBs # 0	full RBs # 0	7.03	13	PASS
			MCH	1 # 0	0 # 0	4.16	13	PASS
				partial RBs # 0	0 # 0	4.55	13	PASS
				full RBs # 0	0 # 0	6.23	13	PASS
				full RBs # 0	full RBs # 0	7.09	13	PASS
			HCH	1 # 0	0 # 0	4.07	13	PASS
				partial RBs # 0	0 # 0	5.03	13	PASS



Test Band(LTE)	Test Mode	Test Bandwidth	Test Channel I	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
				full RBs # 0	0 # 0	6.22	13	PASS
				full RBs # 0	full RBs # 0	6.99	13	PASS

### 3Appendix\_C: Modulation Characteristics

#### Part I - Test Plots

##### 3.1 For LTE

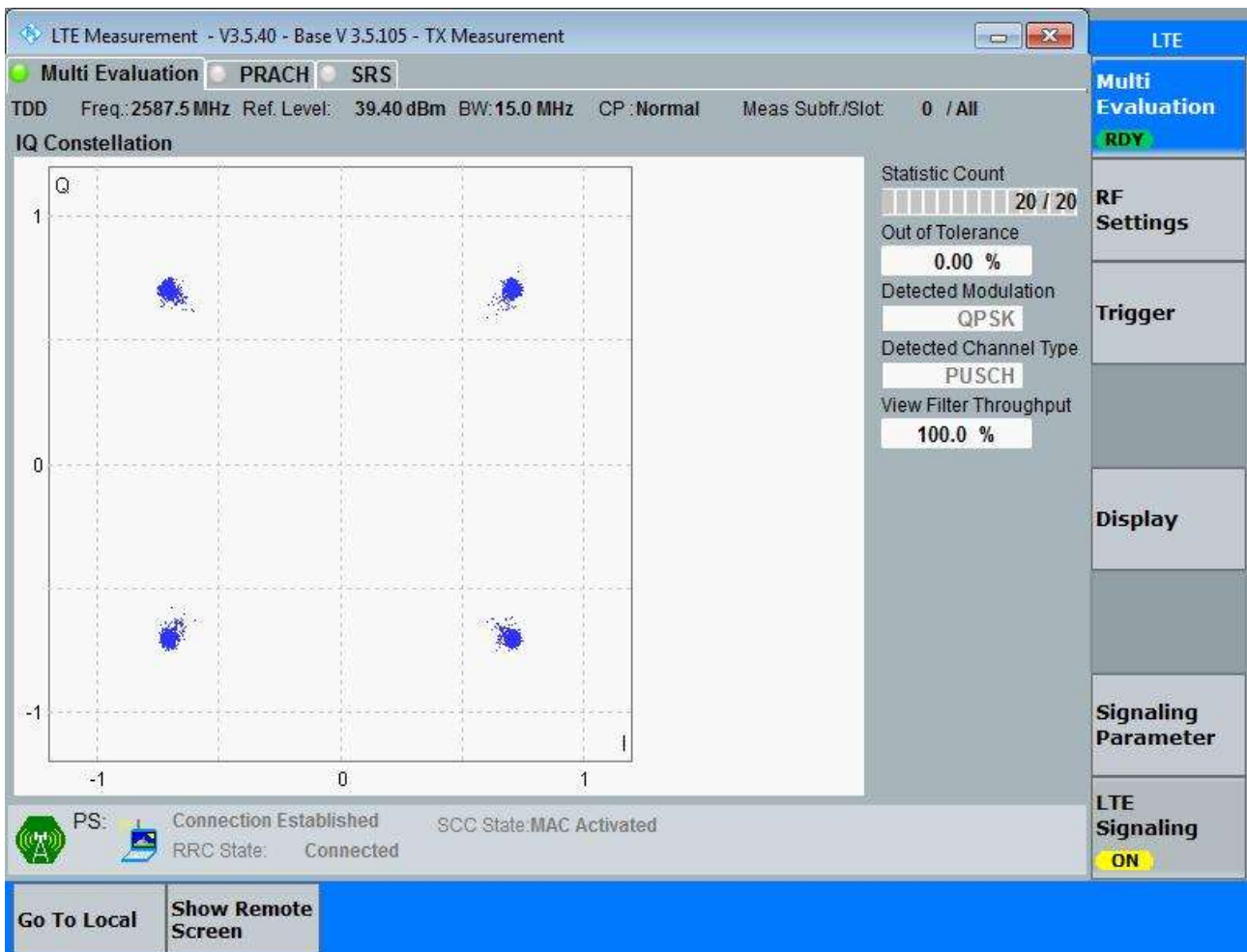
###### 3.1.1 Test Band = CA\_41C (2535-2655MHz)

###### 3.1.1.1 Test Mode = LTE/TM1

###### 3.1.1.1.1 Test Bandwidth = 15MHz+15MHz

###### 3.1.1.1.1.1 Test Channel = MCH

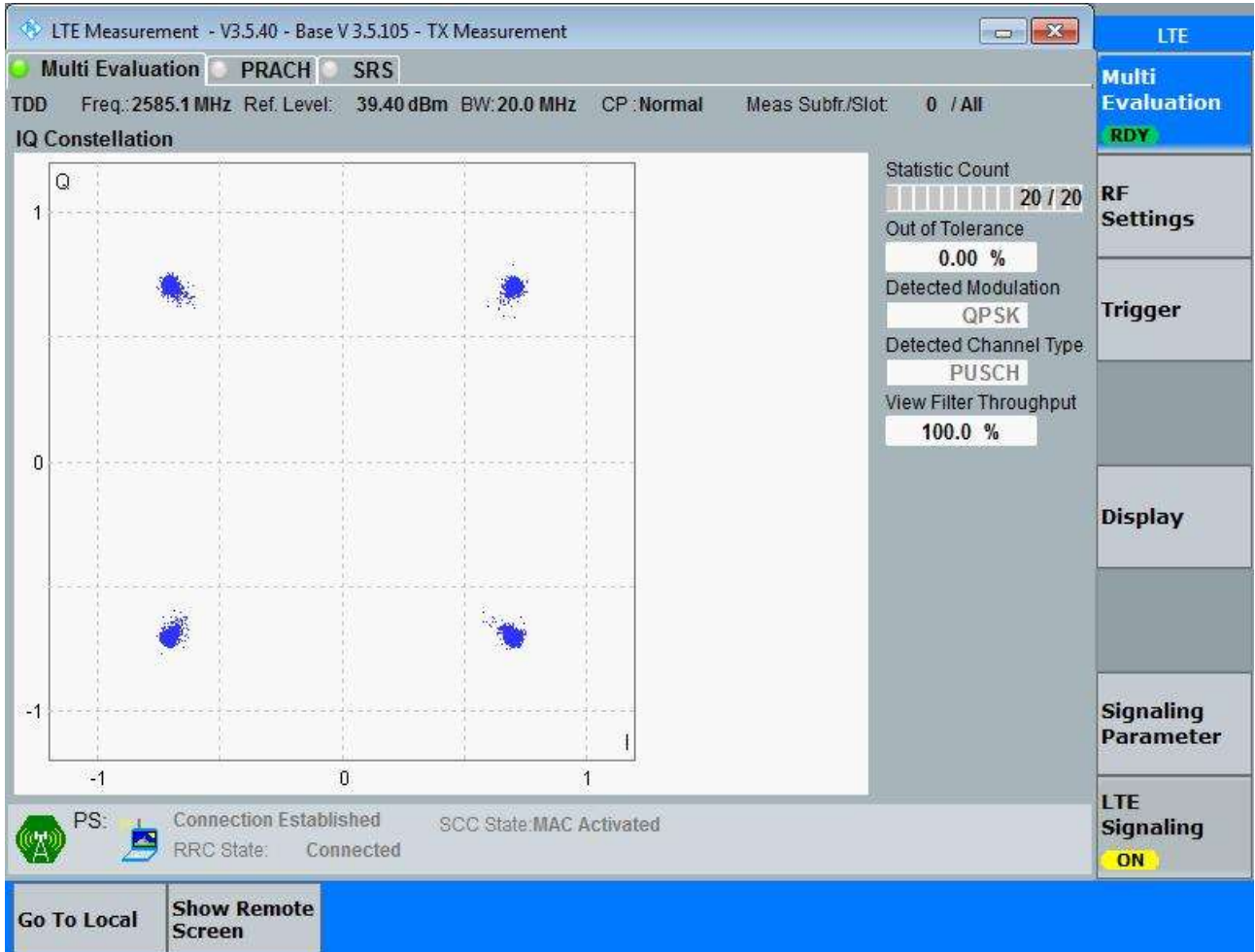
###### 3.1.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



### 3.1.1.1.2 Test Bandwidth = 20MHz+20MHz

#### 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

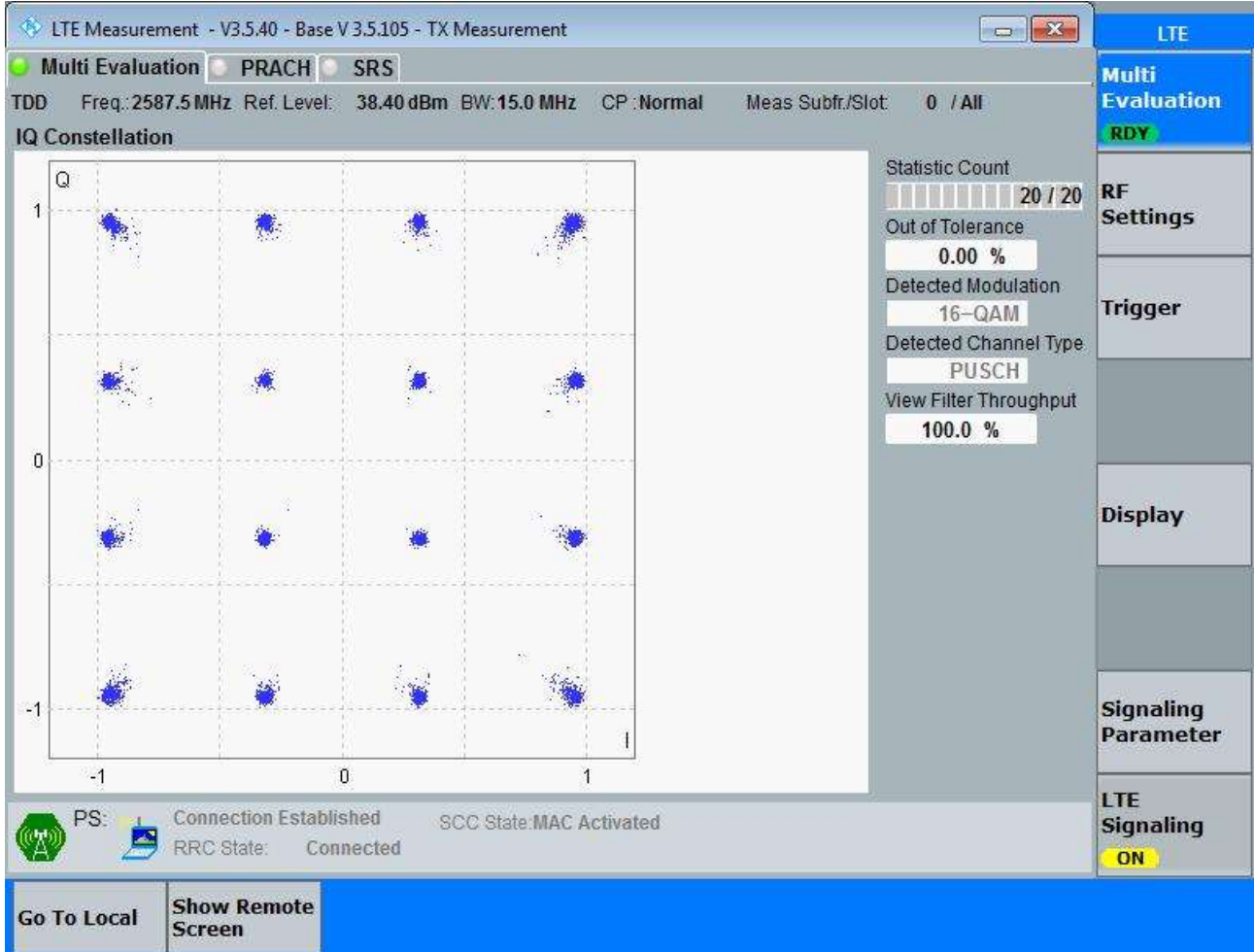


### 3.1.1.2 Test Mode = LTE/TM2

#### 3.1.1.2.1 Test Bandwidth = 15MHz+15MHz

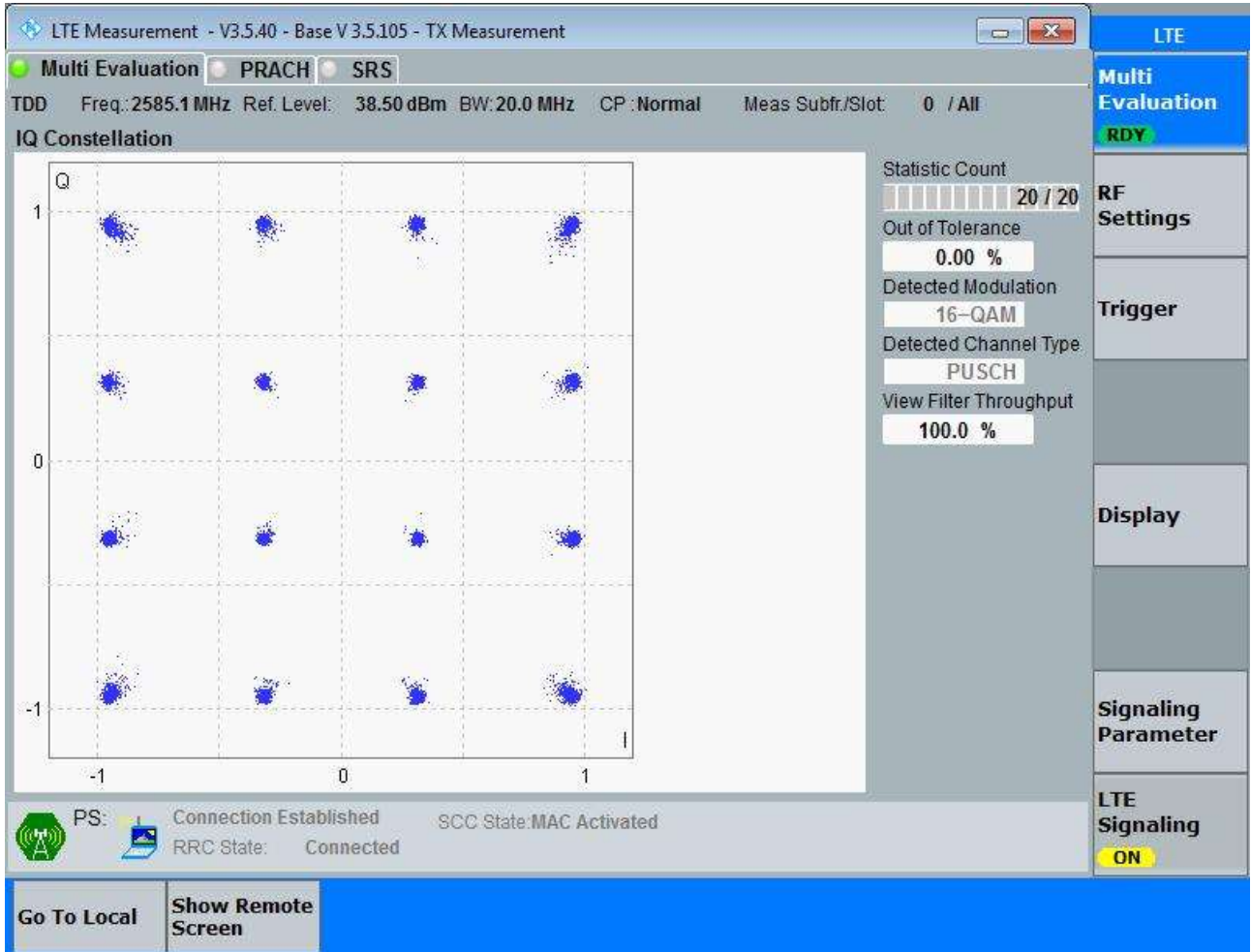
##### 3.1.1.2.1.1 Test Channel = MCH

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



### 3.1.1.2.2 Test Bandwidth = 20MHz+20MHz

#### 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	15MHz +15M Hz	LCH	full RBs # 0	full RBs # 0	29.06	31.36	PASS
			MCH	full RBs # 0	full RBs # 0	29.01	31.93	PASS
			HCH	full RBs # 0	full RBs # 0	29.06	31.59	PASS
		20MHz +20M Hz	LCH	full RBs # 0	full RBs # 0	38.49	41.41	PASS
			MCH	full RBs # 0	full RBs # 0	38.55	41.55	PASS
			HCH	full RBs # 0	full RBs # 0	38.60	41.38	PASS
	LTE/ TM2	15MHz +15M Hz	LCH	full RBs # 0	full RBs # 0	29.02	31.49	PASS
			MCH	full RBs # 0	full RBs # 0	29.00	31.32	PASS
			HCH	full RBs # 0	full RBs # 0	29.00	31.16	PASS
		20MHz +20M	LCH	full RBs # 0	full RBs # 0	38.56	41.40	PASS





Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		Hz	MCH	full RBs # 0	full RBs # 0	38.51	41.38	PASS
			HCH	full RBs # 0	full RBs # 0	38.52	41.38	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 = 15MHz+15MHz

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 = 20MHz+20MHz

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



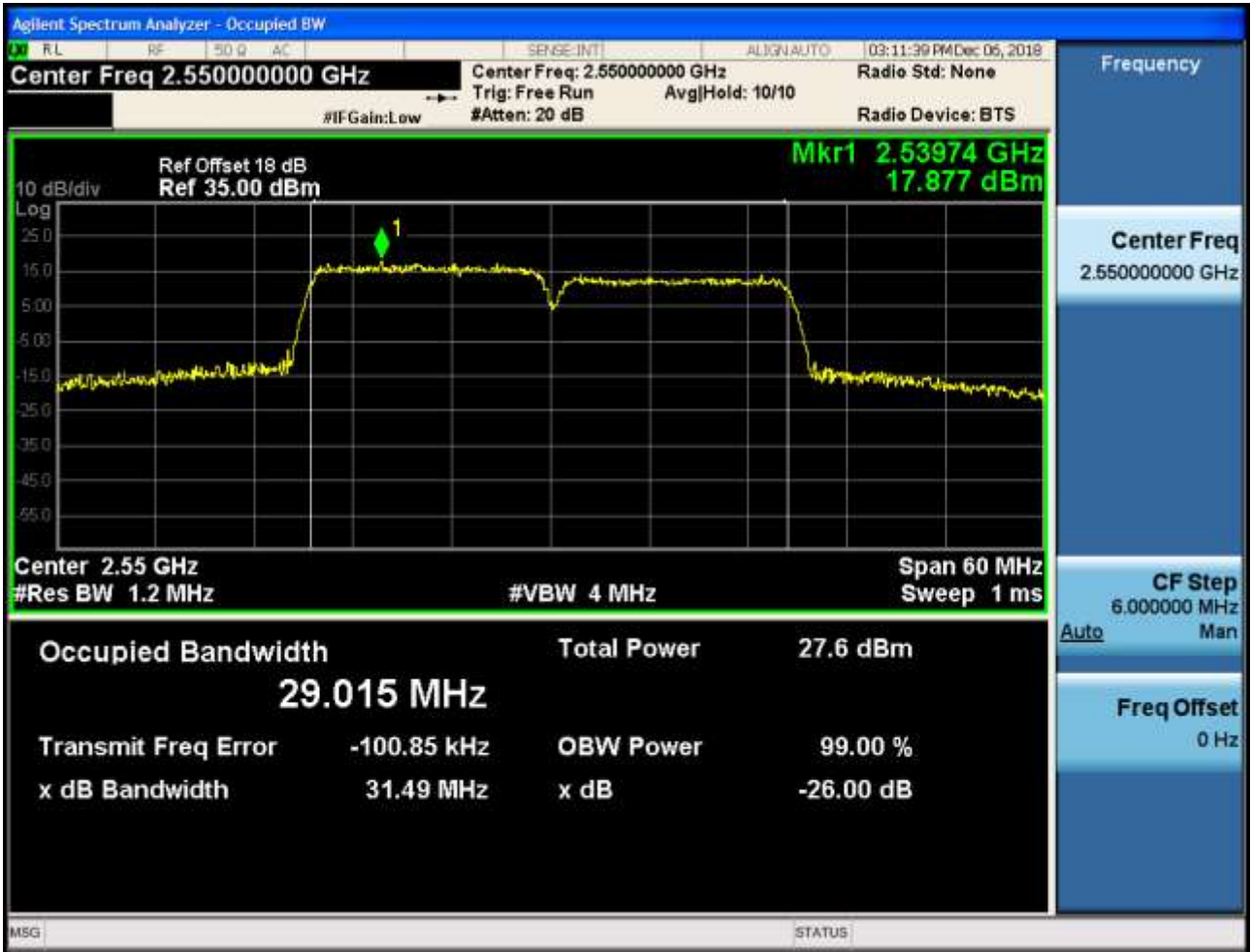


4.1.1.1 Test Mode = LTE/TM2

4.1.1.1.1 Test Bandwidth = 15MHz+15MHz

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 = 20MHz+20MHz

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 = 15MHz+15MHz

##### 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 & 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









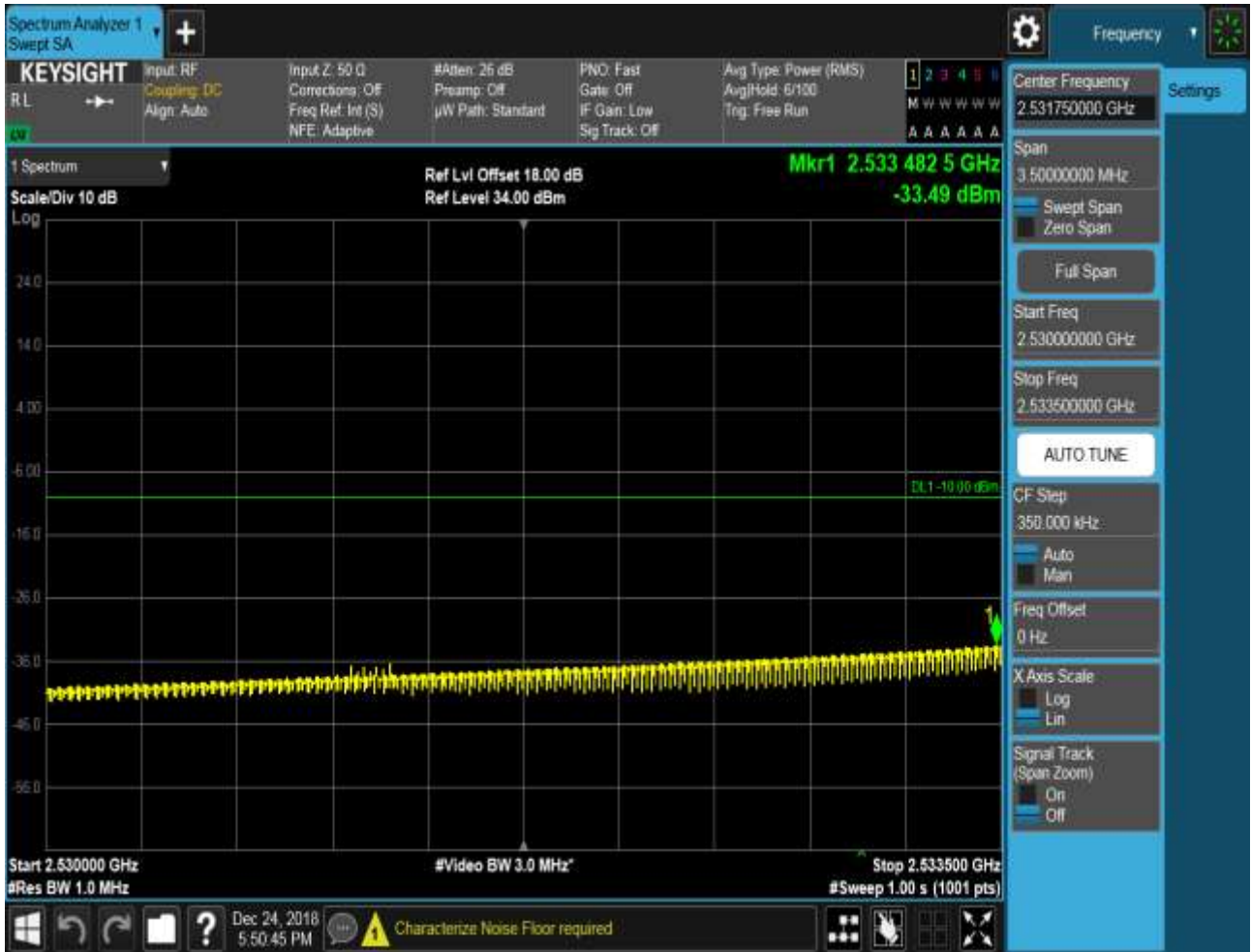
















5.1.1.1.2.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0







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





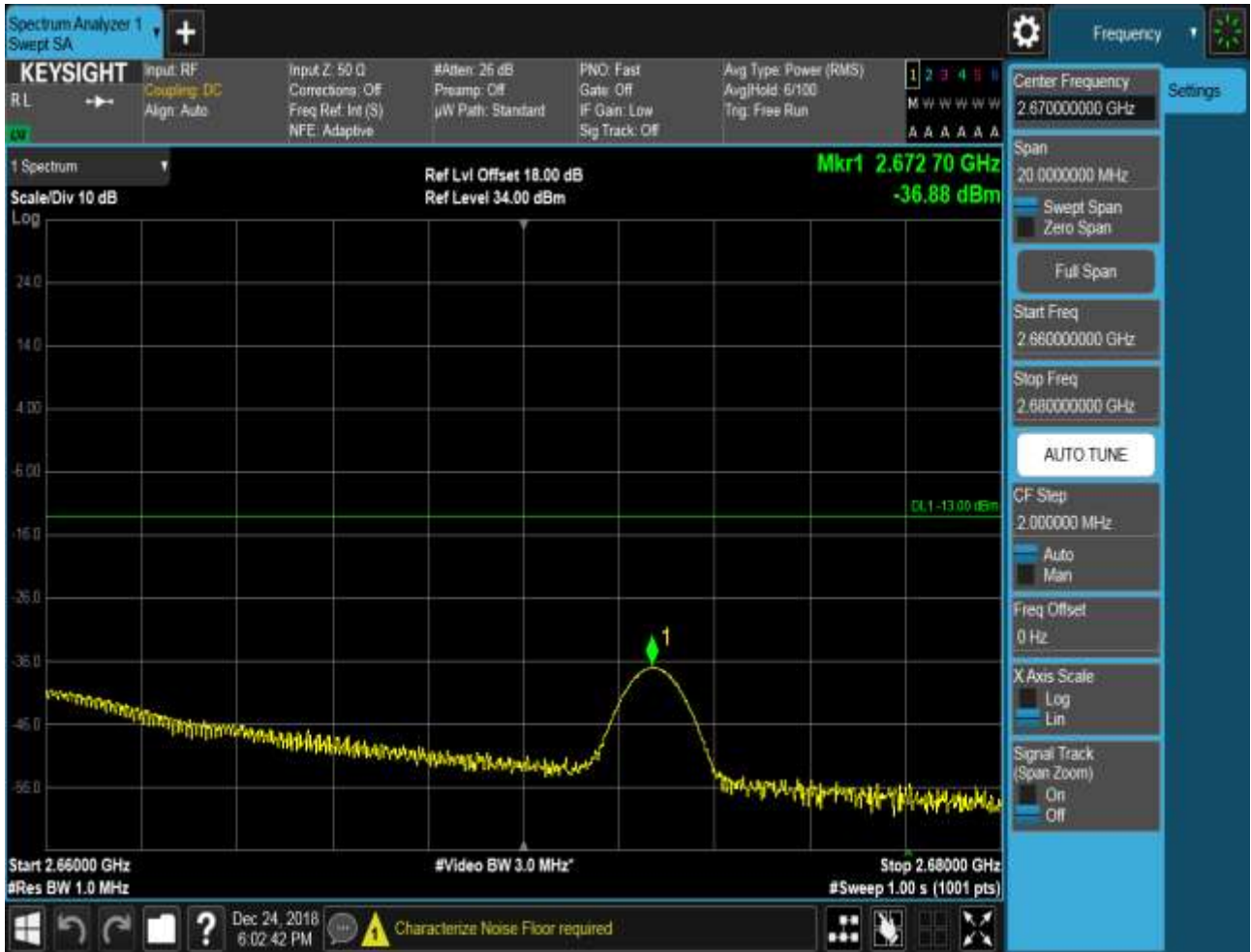


### 5.1.1.1.2.2 Test Channel = HCH

#### 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









5.1.1.1.2.3 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











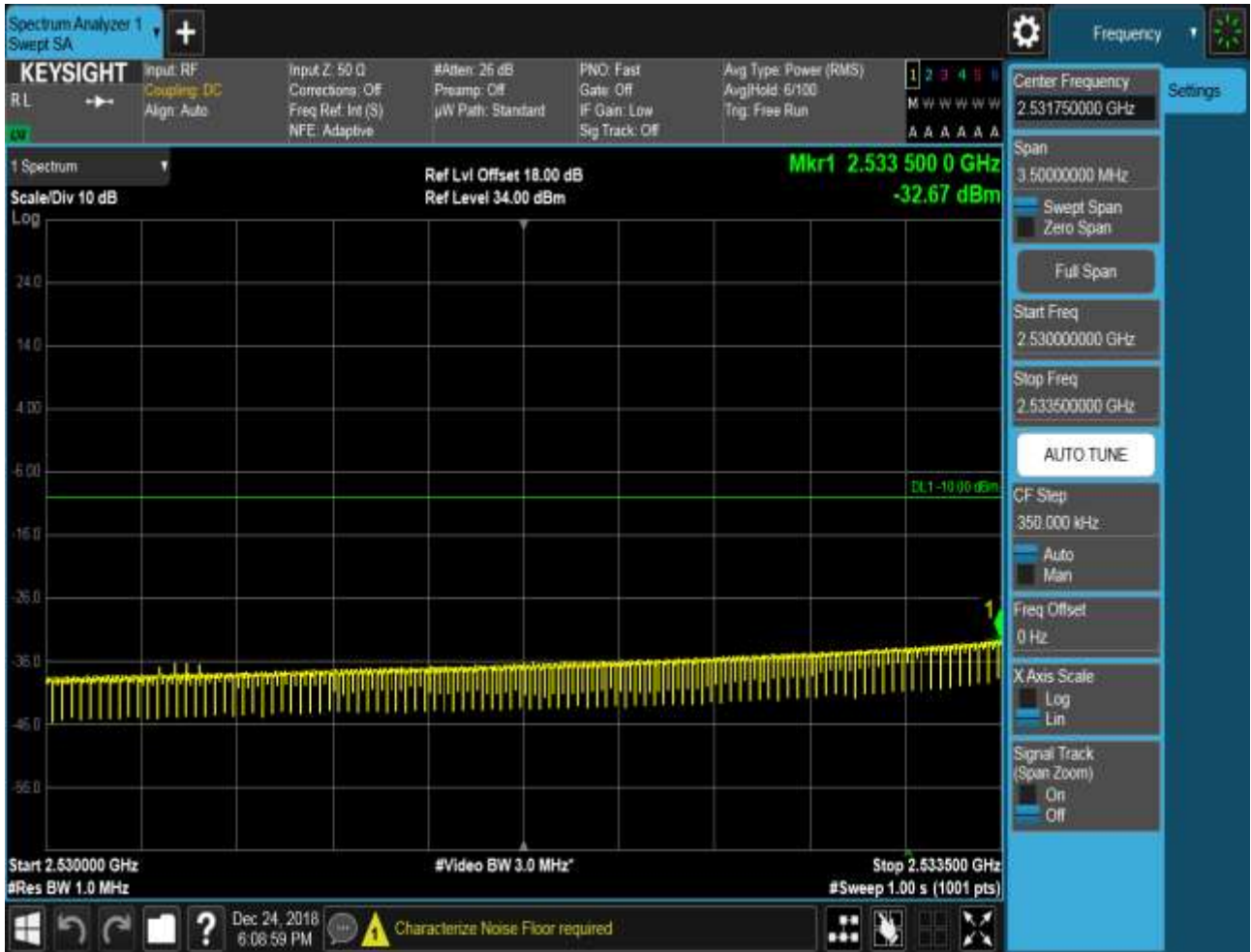
### 5.1.1.2 Test Mode = LTE/TM2

#### 5.1.1.2.1 Test Bandwidth = 15MHz+15MHz

##### 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







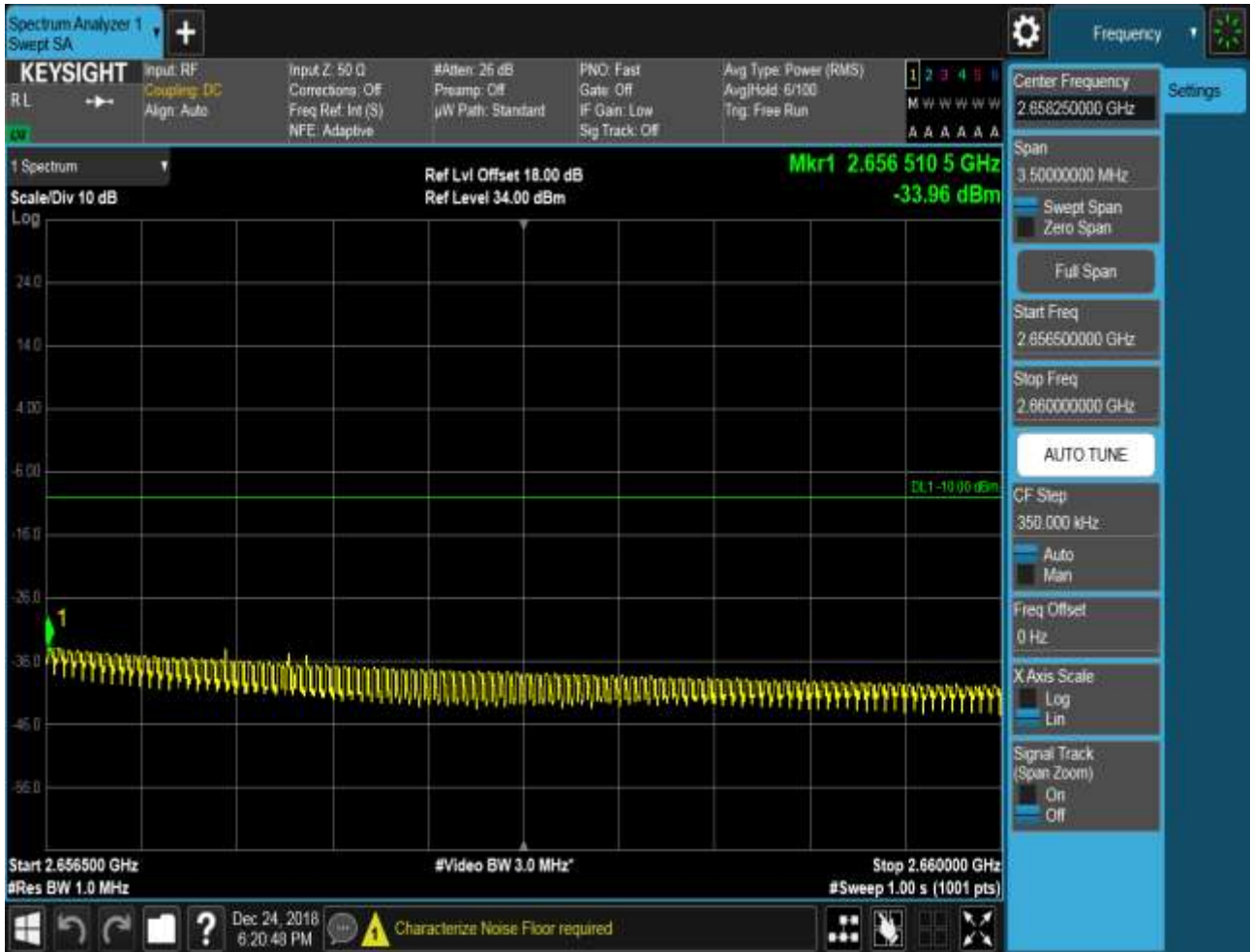


### 5.1.1.2.1.2 Test Channel = HCH

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

















5.1.1.2.1.2.3 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

















5.1.1.2.2.1.2 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





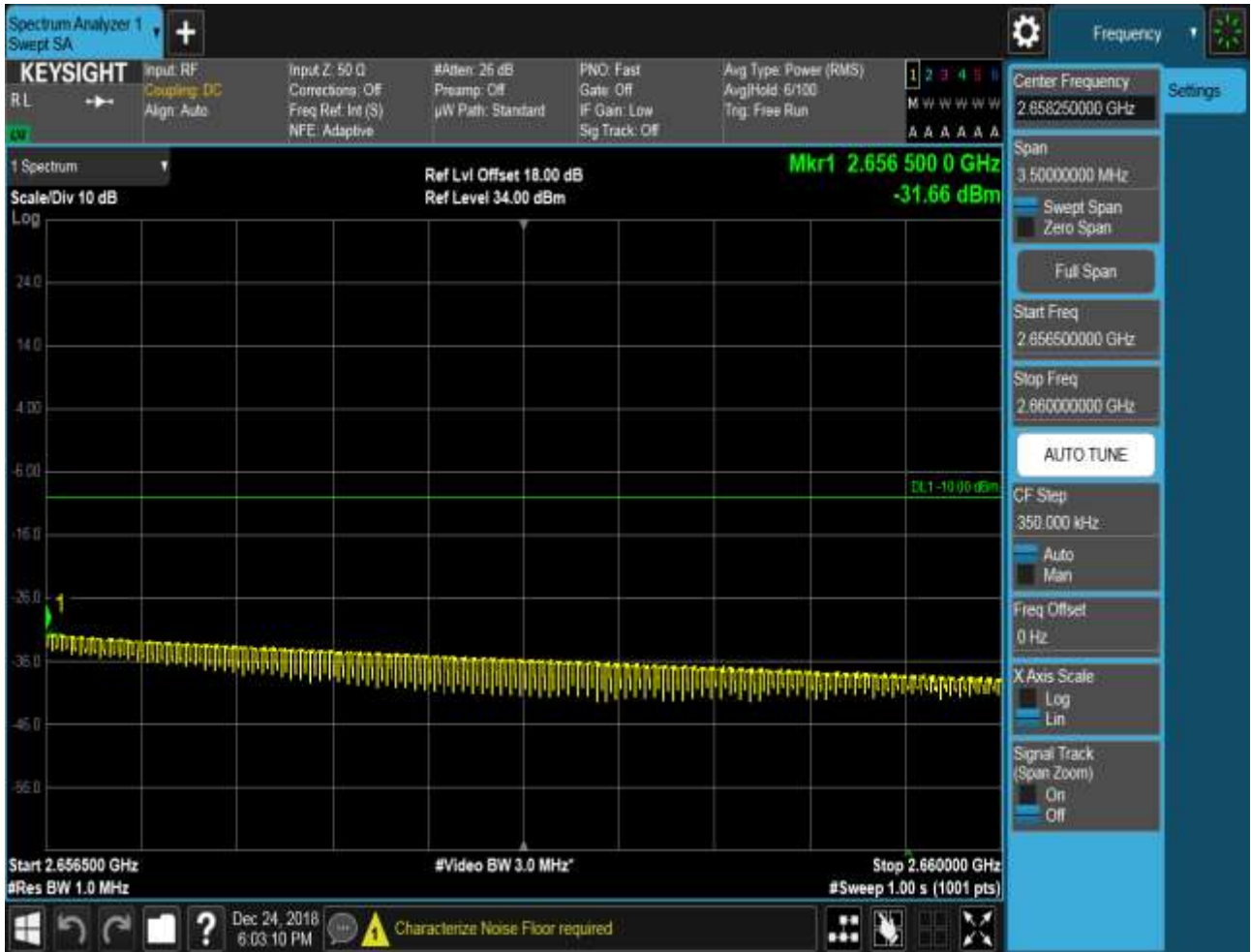




5.1.1.2.2.2 Test Channel = HCH

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\_41C (2535-2655MHz)

6.1.1.1 Test Mode = LTE/TM1

6.1.1.1.1 Test Bandwidth = 15MHz+15MHz

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





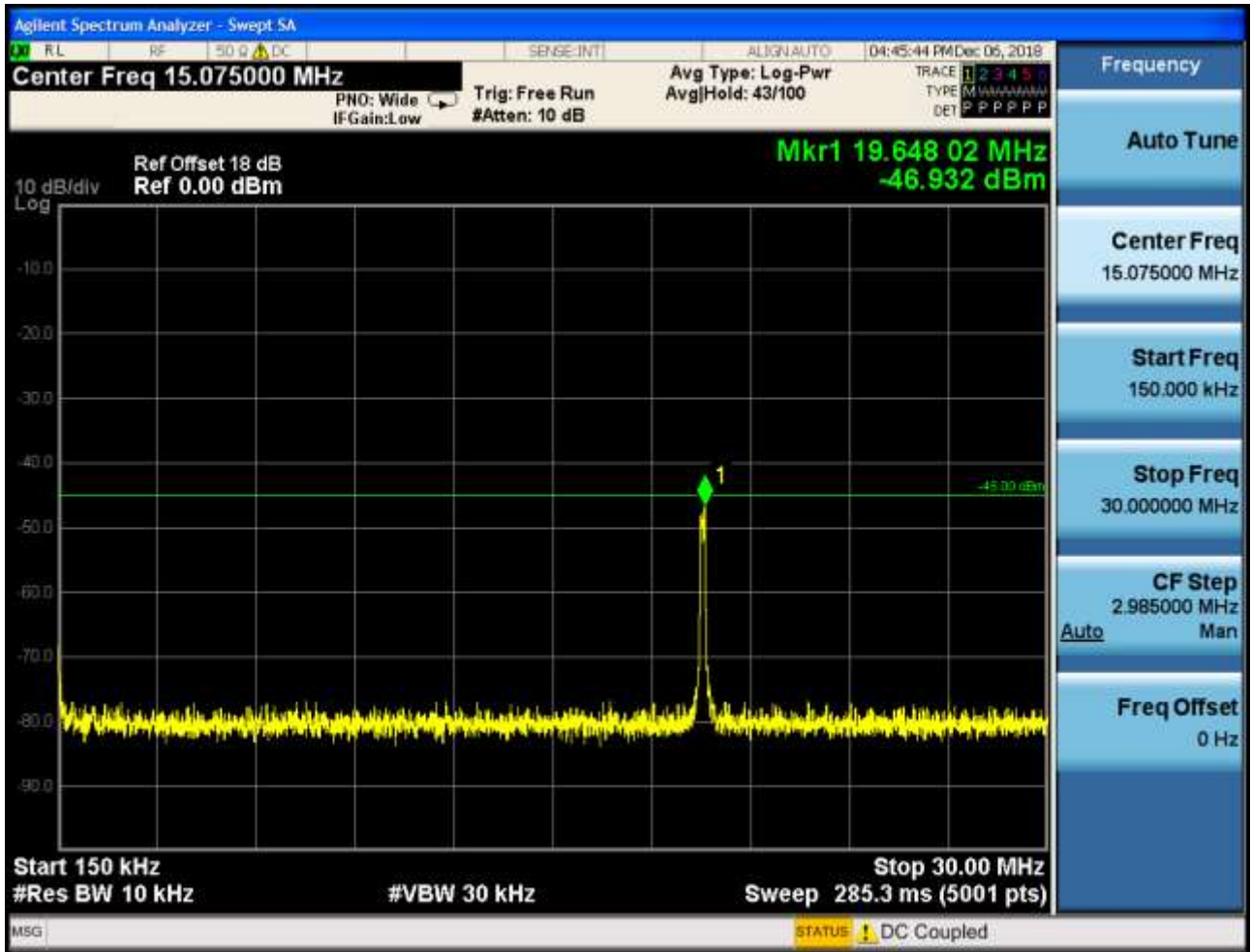




6.1.1.1.1.2 Test Channel = MCH

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







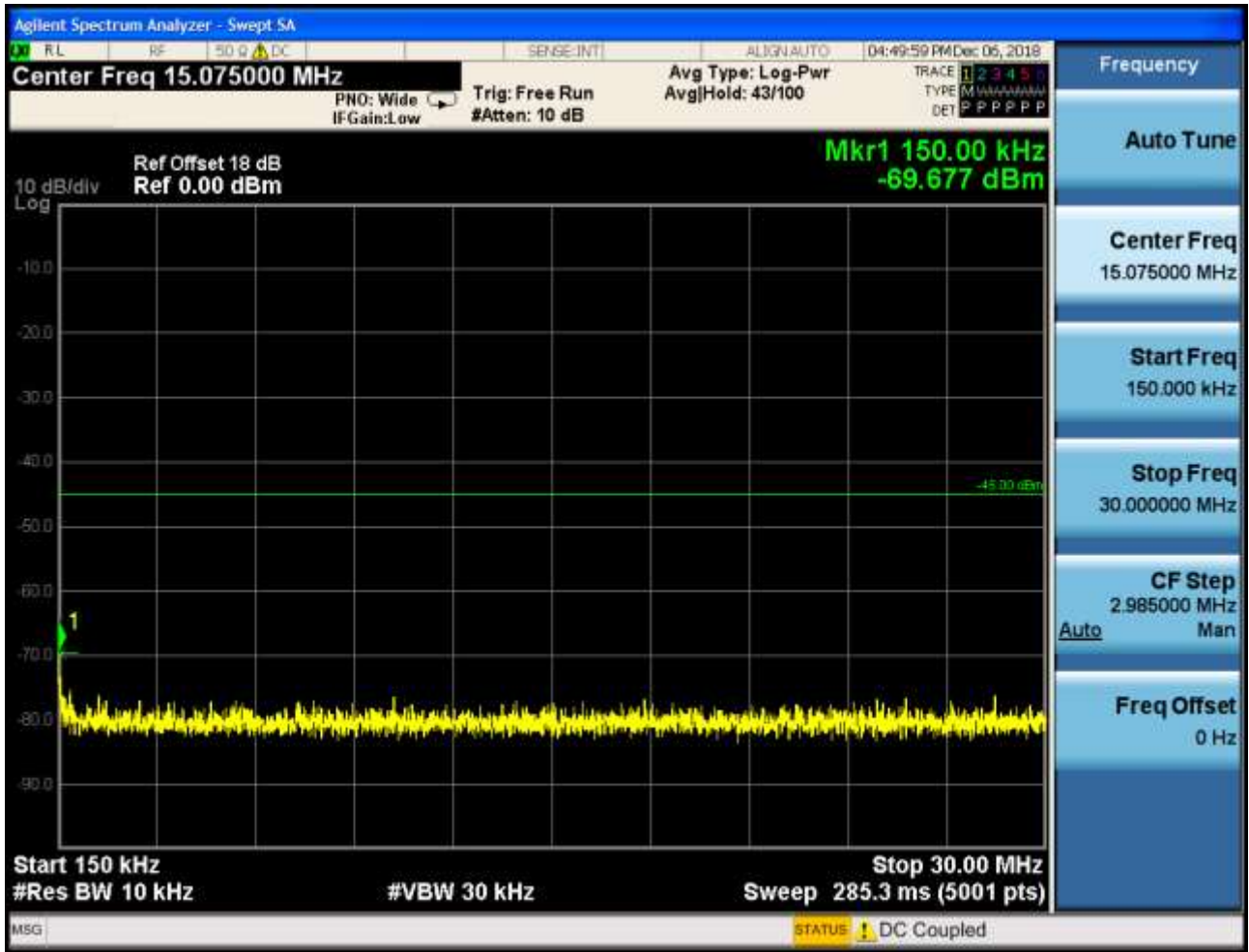




6.1.1.1.1.3 Test Channel = HCH

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







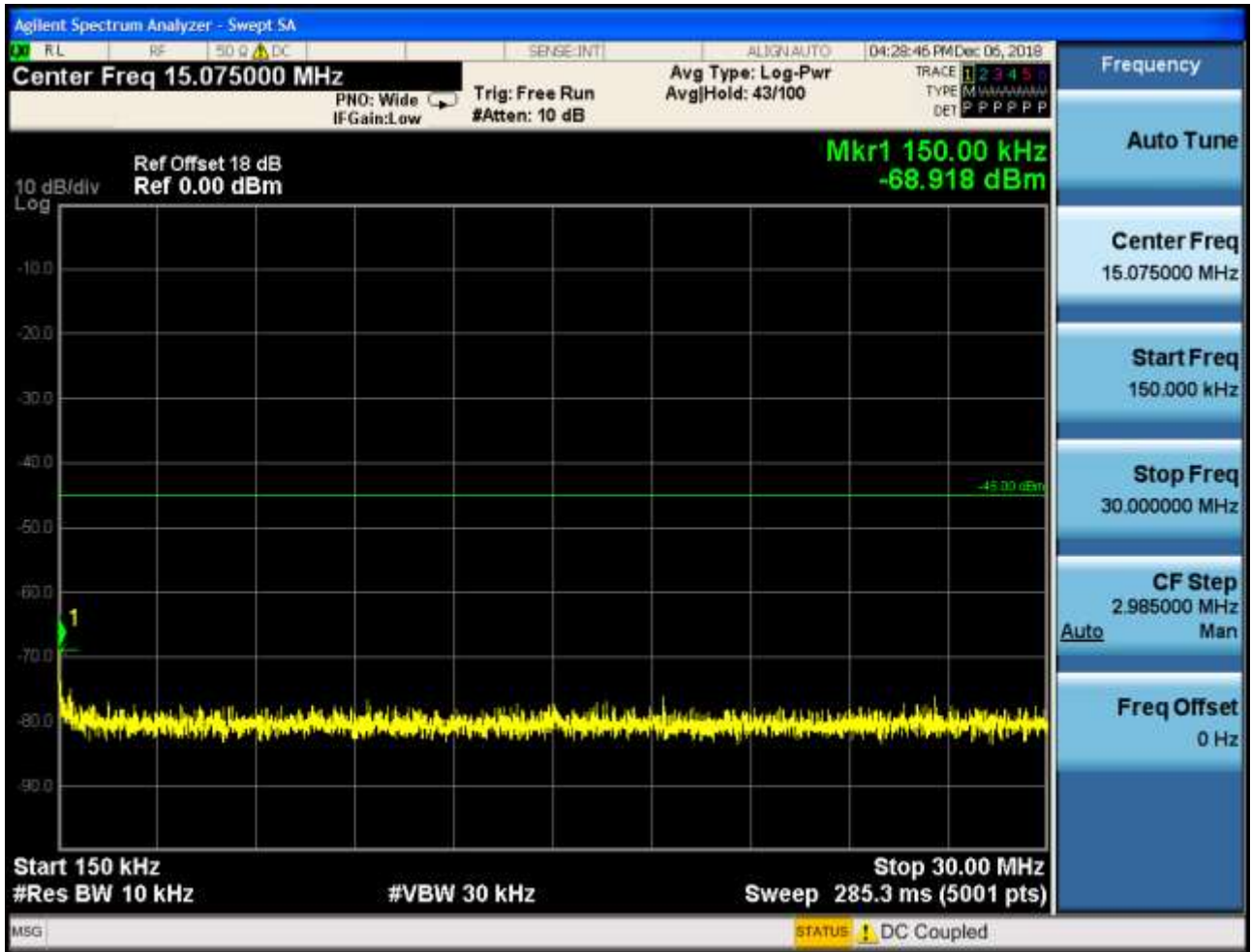


6.2.1.1.2 Test Bandwidth = 20MHz+20MHz

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













6.2.1.1.2.2 Test Channel = MCH

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



