



# 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	15MHz +15M Hz	LCH	1 # 0	0 # 0	24.45	24.48	33	PASS
				partial RBs # 0	0 # 0	24.56	24.59	33	PASS
				full RBs # 0	0 # 0	23.53	23.56	33	PASS
				full RBs # 0	full RBs # 0	20.87	20.9	33	PASS
			MCH	1 # 0	0 # 0	24.5	24.53	33	PASS
				partial RBs # 0	0 # 0	24.64	24.67	33	PASS
				full RBs # 0	0 # 0	23.62	23.65	33	PASS
				full RBs # 0	full RBs # 0	20.81	20.84	33	PASS
			HCH	1 # 0	0 # 0	24.52	24.55	33	PASS
				partial RBs # 0	0 # 0	24.59	24.62	33	PASS
				full RBs # 0	0 # 0	23.44	23.47	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
				0					
				full RBs # 0	full RBs # 0	20.79	20.82	33	PASS
		20MHz +20M Hz	LCH	1 # 0	0 # 0	24.17	24.2	33	PASS
				partial RBs # 0	0 # 0	24.54	24.57	33	PASS
				full RBs # 0	0 # 0	23.44	23.47	33	PASS
				full RBs # 0	full RBs # 0	20.93	20.96	33	PASS
			MCH	1 # 0	0 # 0	24.06	24.09	33	PASS
				partial RBs # 0	0 # 0	24.48	24.51	33	PASS
				full RBs # 0	0 # 0	23.48	23.51	33	PASS
				full RBs # 0	full RBs # 0	20.94	20.97	33	PASS
			HCH	1 # 0	0 # 0	24.40	24.43	33	PASS
				partial RBs # 0	0 # 0	24.55	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	23.46	23.49	33	PASS
				full RBs # 0	full RBs # 0	20.89	20.92	33	PASS
	LTE/T M2	15MHz +15M Hz	LCH	1 # 0	0 # 0	23.72	23.75	33	PASS
				partial RBs # 0	0 # 0	23.55	23.58	33	PASS
				full RBs # 0	0 # 0	22.44	22.47	33	PASS
				full RBs # 0	full RBs # 0	19.67	19.70	33	PASS
				1 # 0	0 # 0	23.94	23.97	33	PASS
				partial RBs # 0	0 # 0	23.53	23.56	33	PASS
				full RBs # 0	0 # 0	22.55	22.58	33	PASS
				full RBs # 0	full RBs # 0	19.93	19.96	33	PASS
			HCH	1 # 0	0 # 0	23.97	24.00	33	PASS
				partial	0 # 0	23.48	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
				RBs # 0					
				full RBs # 0	0 # 0	22.54	22.57	33	PASS
				full RBs # 0	full RBs # 0	19.99	20.02	33	PASS
				1 # 0	0 # 0	23.93	23.96	33	PASS
				partial RBs # 0	0 # 0	23.48	23.51	33	PASS
				full RBs # 0	0 # 0	22.41	22.44	33	PASS
		20MHz +20M Hz	LCH	full RBs # 0	full RBs # 0	19.80	19.83	33	PASS
				1 # 0	0 # 0	23.72	23.75	33	PASS
				partial RBs # 0	0 # 0	23.54	23.57	33	PASS
				full RBs # 0	0 # 0	22.34	22.37	33	PASS
				full RBs # 0	full RBs # 0	19.91	19.94	33	PASS
				HCH	1 # 0	0 # 0	23.84	23.87	33

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	23.62	23.65	33	PASS
				full RBs # 0	0 # 0	22.50	22.53	33	PASS
				full RBs # 0	full RBs # 0	19.97	20.00	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,

$$ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]$$

$$EIRP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBi]$$

b, SGP = Signal Generator Level

Note2:

$$SET Span = 1.5 * OBW$$

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

$$SET VBW \geq 3 * RBW$$

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/TM 1	15MHz+15MHz	LCH	1 # 0	0 # 0	4.07	13	PASS
				partial RBs # 0	0 # 0	5.05	13	PASS
				full RBs # 0	0 # 0	6.10	13	PASS
				full RBs # 0	full RBs # 0	7.01	13	PASS
			MCH	1 # 0	0 # 0	4.01	13	PASS
				partial RBs # 0	0 # 0	4.67	13	PASS
				full RBs # 0	0 # 0	5.85	13	PASS
				full RBs # 0	full RBs # 0	6.69	13	PASS
			HCH	1 # 0	0 # 0	4.00	13	PASS
				partial RBs # 0	0 # 0	4.63	13	PASS



Test Band(LTE )	Test Mode	Test Bandwidth	Test Channel	PCC Test RB	SCC Test RB	Measured[dBm]	Limit [dBm]	Verdict
				0				
				full RBs # 0	0 # 0	5.73	13	PASS
				full RBs # 0	full RBs # 0	6.63	13	PASS
			LCH	1 # 0	0 # 0	4.63	13	PASS
				partial RBs # 0	0 # 0	4.76	13	PASS
				full RBs # 0	0 # 0	6.15	13	PASS
		full RBs # 0		full RBs # 0	6.47	13	PASS	
		MCH	1 # 0	0 # 0	4.06	13	PASS	
			partial RBs # 0	0 # 0	4.53	13	PASS	
			full RBs # 0	0 # 0	5.89	13	PASS	
			full RBs # 0	full RBs # 0	6.39	13	PASS	
				20MHz+20MHz				



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	4.41	13	PASS
				partial RBs # 0	0 # 0	4.58	13	PASS
				full RBs # 0	0 # 0	5.61	13	PASS
				full RBs # 0	full RBs # 0	6.61	13	PASS
	LTE/TM 2	15MHz+15MHz	LCH	1 # 0	0 # 0	5.01	13	PASS
				partial RBs # 0	0 # 0	5.46	13	PASS
				full RBs # 0	0 # 0	6.71	13	PASS
				full RBs # 0	full RBs # 0	7.33	13	PASS
			MCH	1 # 0	0 # 0	4.89	13	PASS
				partial RBs # 0	0 # 0	5.51	13	PASS
				full RBs # 0	0 # 0	6.66	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	7.39	13	PASS	
			HCH	1 # 0	0 # 0	4.60	13	PASS	
				partial RBs # 0	0 # 0	5.22	13	PASS	
				full RBs # 0	0 # 0	6.70	13	PASS	
				full RBs # 0	full RBs # 0	7.16	13	PASS	
			20MHz+20MHz		1 # 0	0 # 0	4.65	13	PASS
				LCH	partial RBs # 0	0 # 0	5.56	13	PASS
					full RBs # 0	0 # 0	6.66	13	PASS
					full RBs # 0	full RBs # 0	7.25	13	PASS
		MCH			1 # 0	0 # 0	4.74	13	PASS
			partial RBs # 0	0 # 0	5.59	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	5.91	13	PASS
				full RBs # 0	full RBs # 0	7.07	13	PASS
			HCH	1 # 0	0 # 0	4.53	13	PASS
				partial RBs # 0	0 # 0	5.10	13	PASS
				full RBs # 0	0 # 0	5.96	13	PASS
				full RBs # 0	full RBs # 0	7.12	13	PASS

## 3Appendix\_C: Modulation Characteristics

### Part I - Test Plots

#### 3.1 For LTE

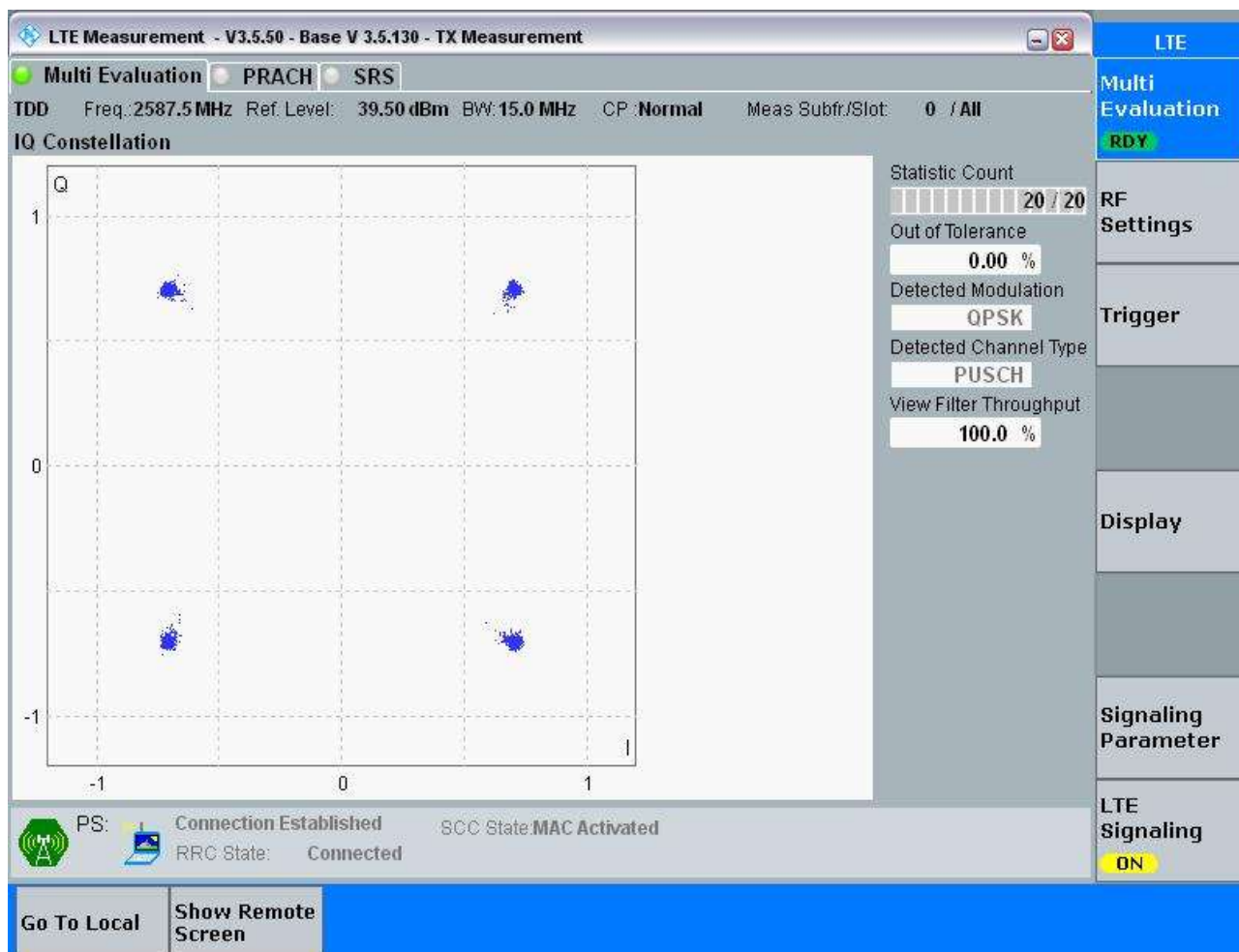
##### 3.1.1 Test Band = CA\_38C

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

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

##### 3.1.1.1.1.1 Test Channel = MCH

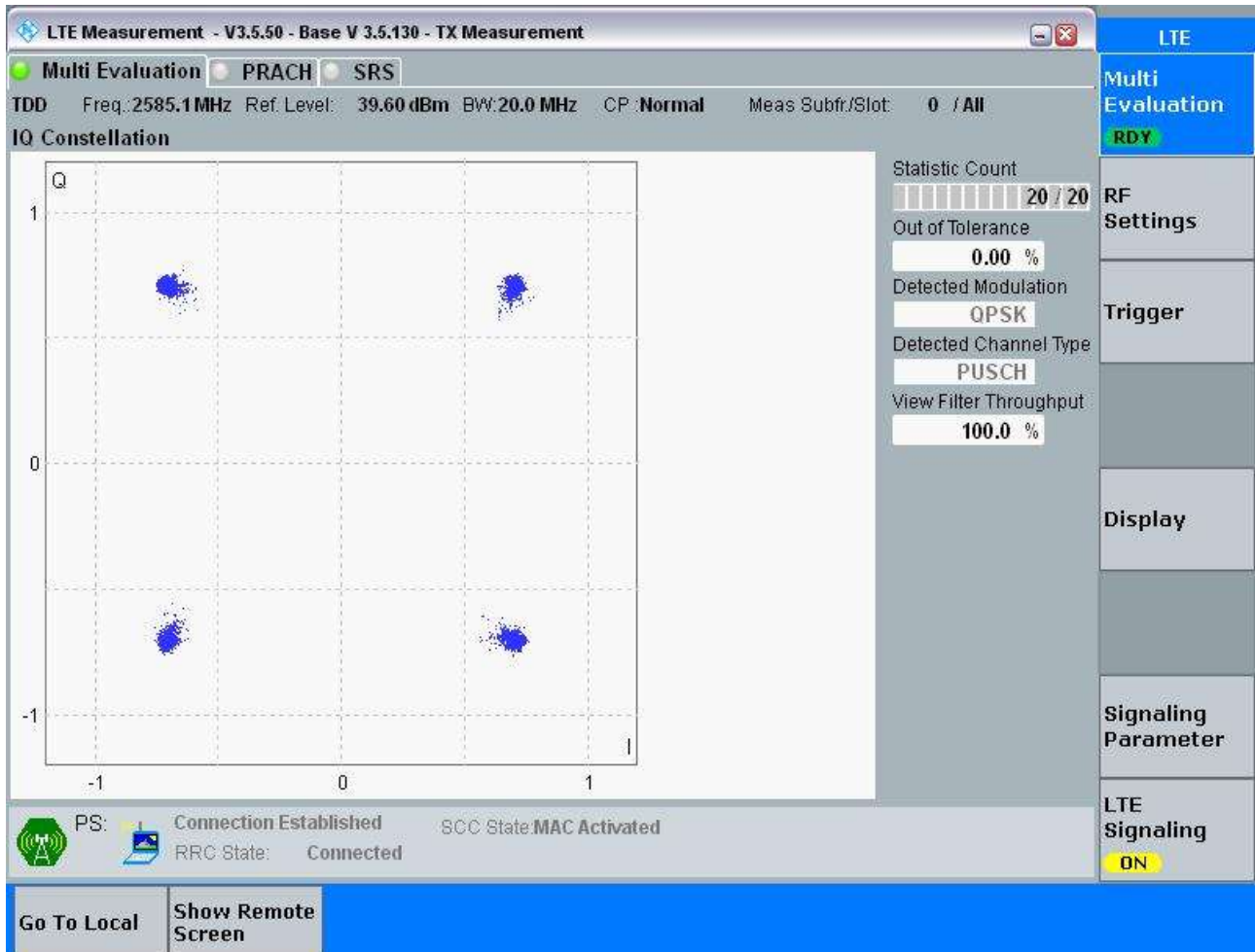
##### 3.1.1.1.1.1.1 PCC Test RB = full RBs & SCC Test RB = full RBs



### 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

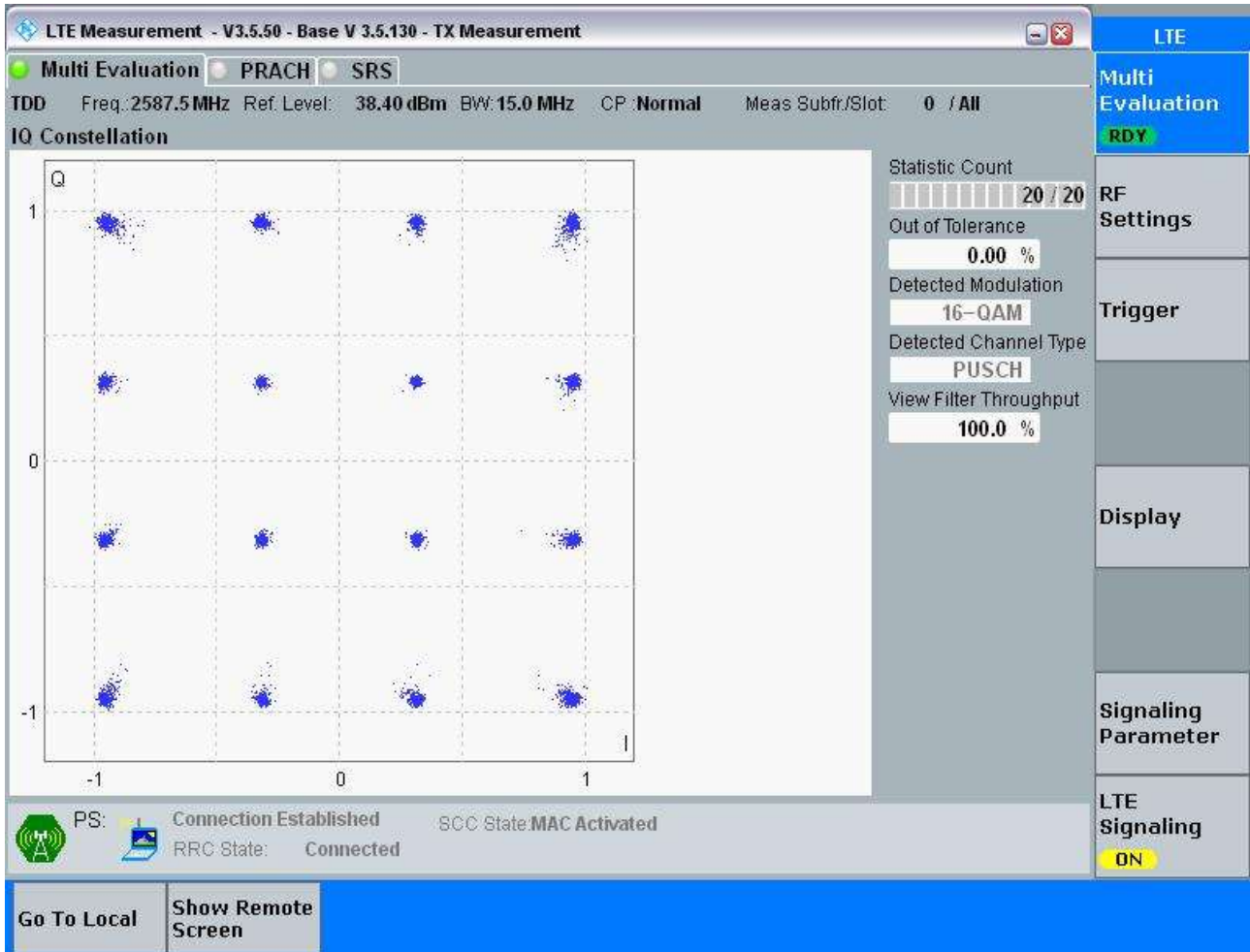


### 3.1.1.2 Test Mode = LTE/TM2

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

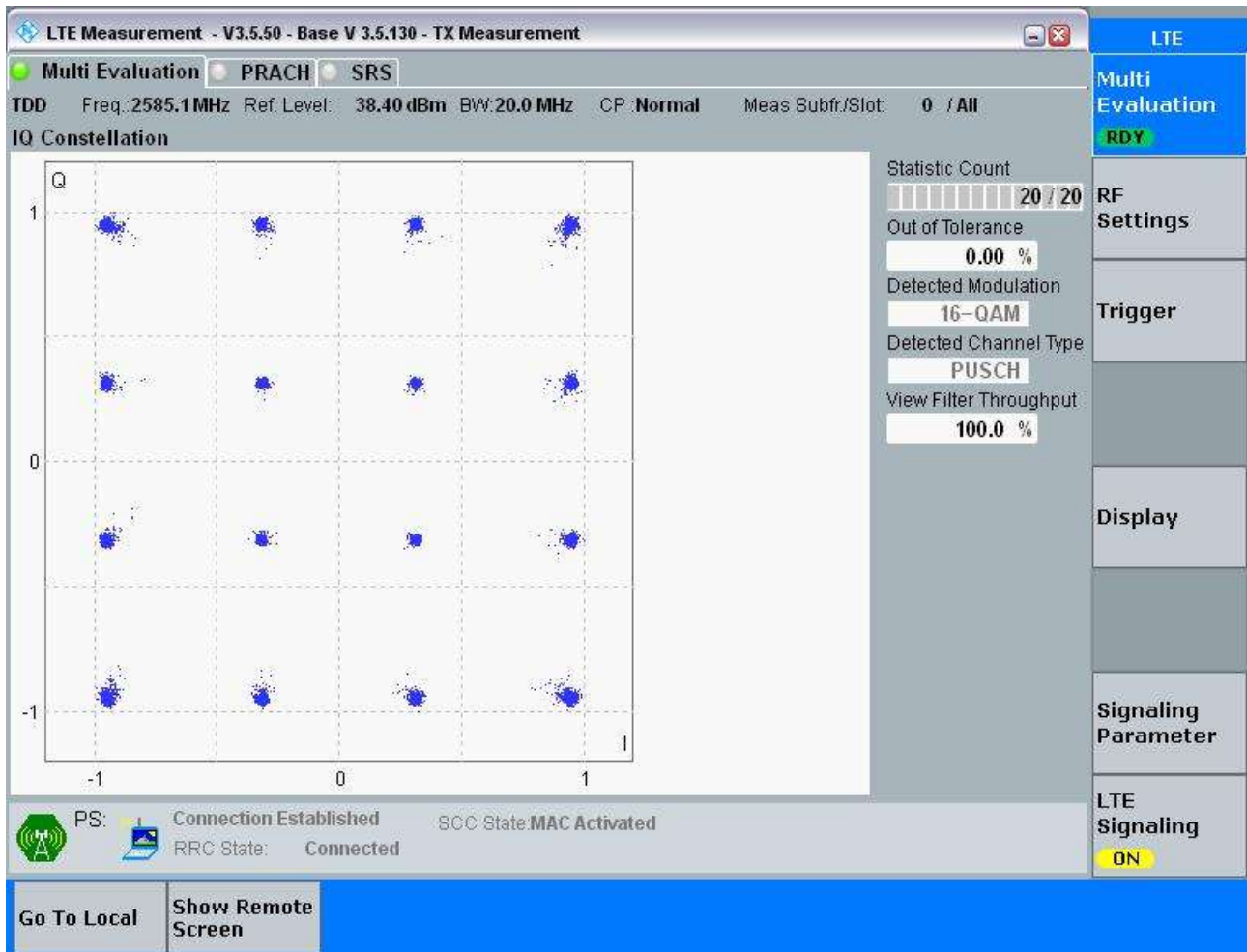
##### 3.1.1.2.1.1 Test Channel = MCH

##### 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 Chann el	PCC Test RB	SCC Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
CA_38C	LTE/ TM1	15MHz +15M Hz	LCH	full RBs # 0	full RBs # 0	28.97	31.30	PASS
			MCH	full RBs # 0	full RBs # 0	29.07	31.31	PASS
			HCH	full RBs # 0	full RBs # 0	28.95	31.19	PASS
		20MHz +20M Hz	LCH	full RBs # 0	full RBs # 0	38.48	41.51	PASS
			MCH	full RBs # 0	full RBs # 0	38.54	41.45	PASS
			HCH	full RBs # 0	full RBs # 0	38.52	41.32	PASS
	LTE/ TM2	15MHz +15M Hz	LCH	full RBs # 0	full RBs # 0	28.92	31.14	PASS
			MCH	full RBs # 0	full RBs # 0	29.07	31.26	PASS



Test Band(LTE)	Test Mode	Test Band width	Test Channel	PCC Test RB	SCC Test RB	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
			HCH	full RBs # 0	full RBs # 0	29.04	31.54	PASS
		20MHz +20M Hz	LCH	full RBs # 0	full RBs # 0	38.51	41.43	PASS
	MCH		full RBs # 0	full RBs # 0	38.50	41.32	PASS	
	HCH		full RBs # 0	full RBs # 0	38.57	41.92	PASS	

**Part II - Test Plots**

**4.1 For LTE**

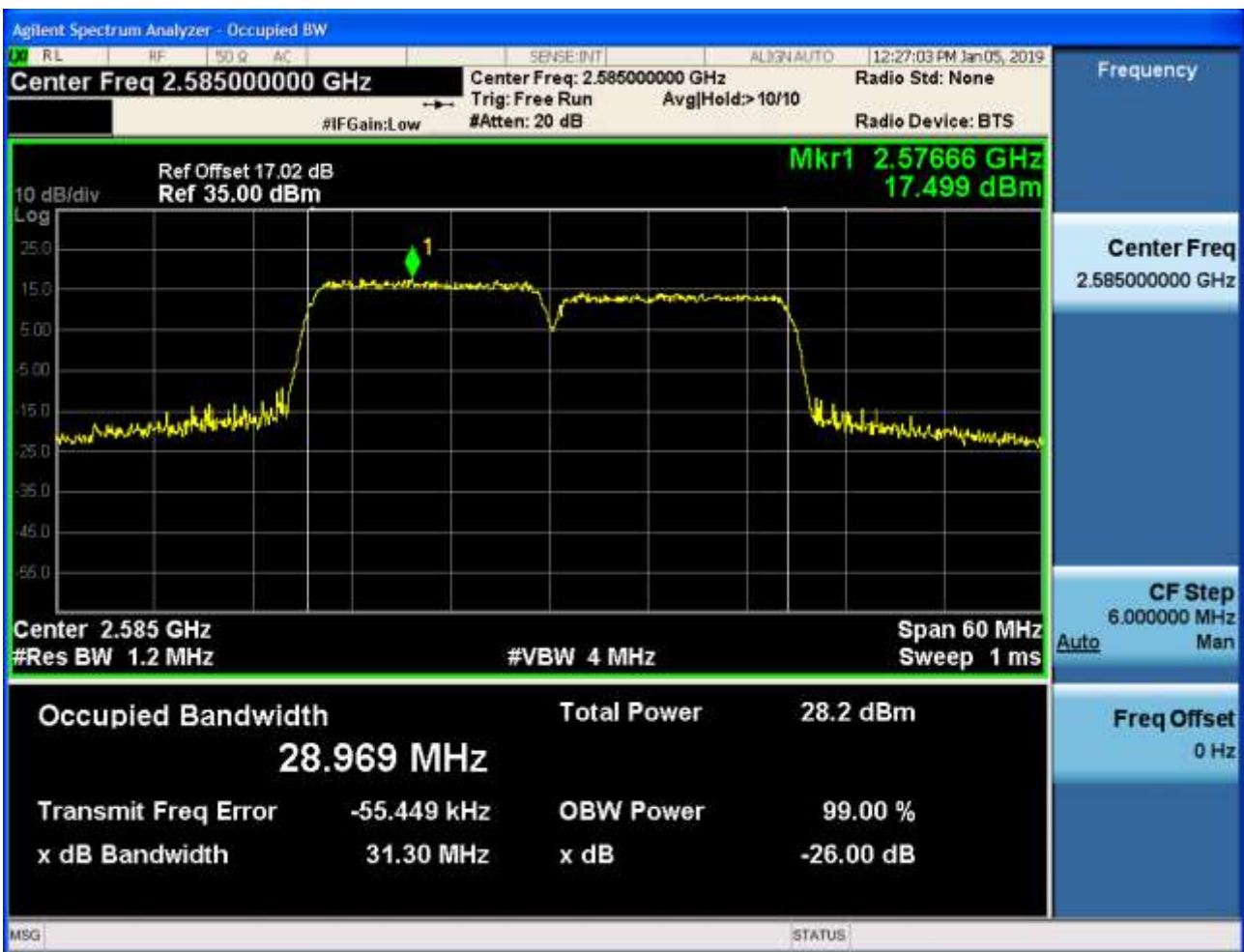
**4.1.1 Test Band = CA\_38C**

**4.1.1.1 Test Mode = LTE/TM1**

**4.1.1.1.1 Test Bandwidth = 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**



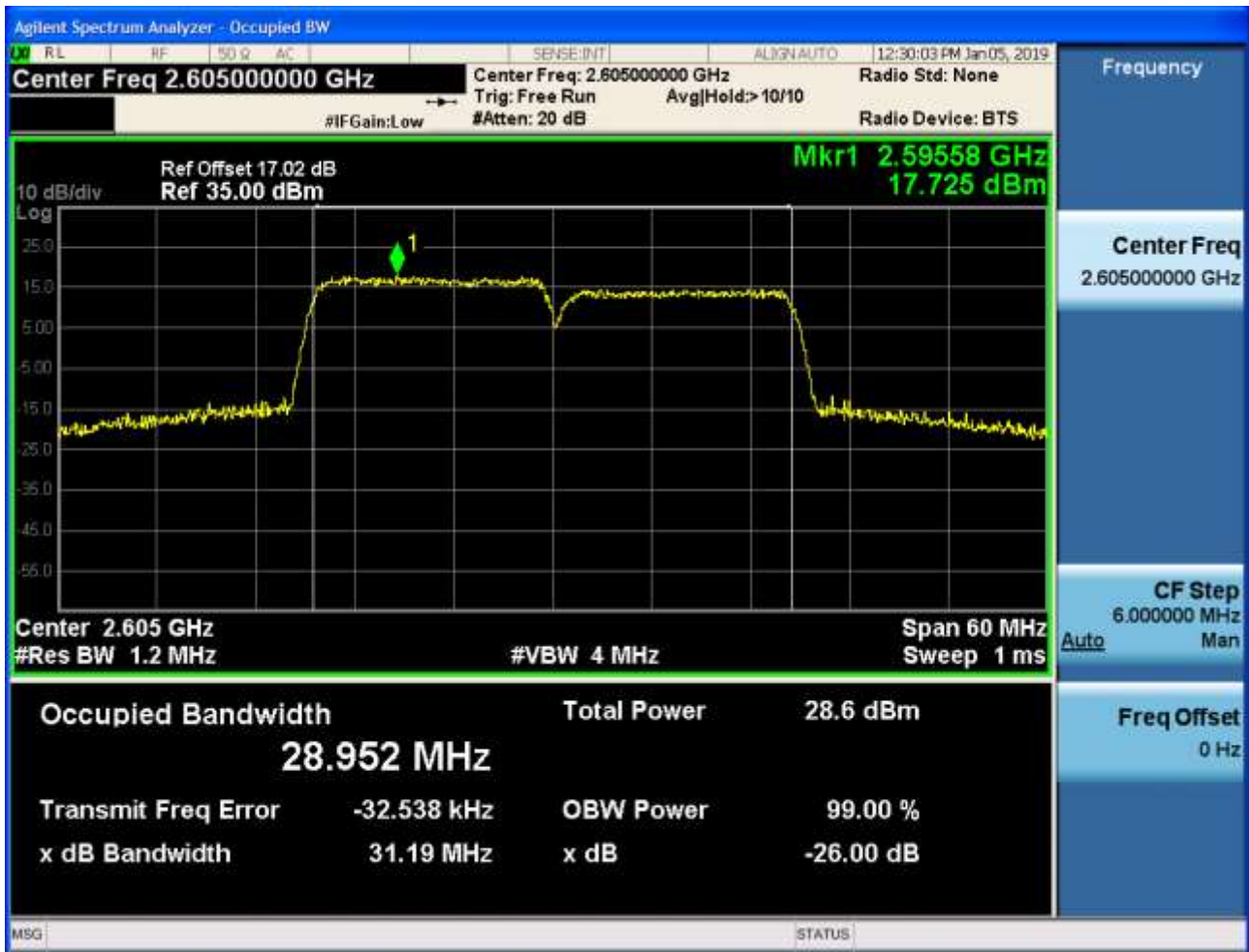
4.1.1.1.1.2 Test Channel = MCH

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

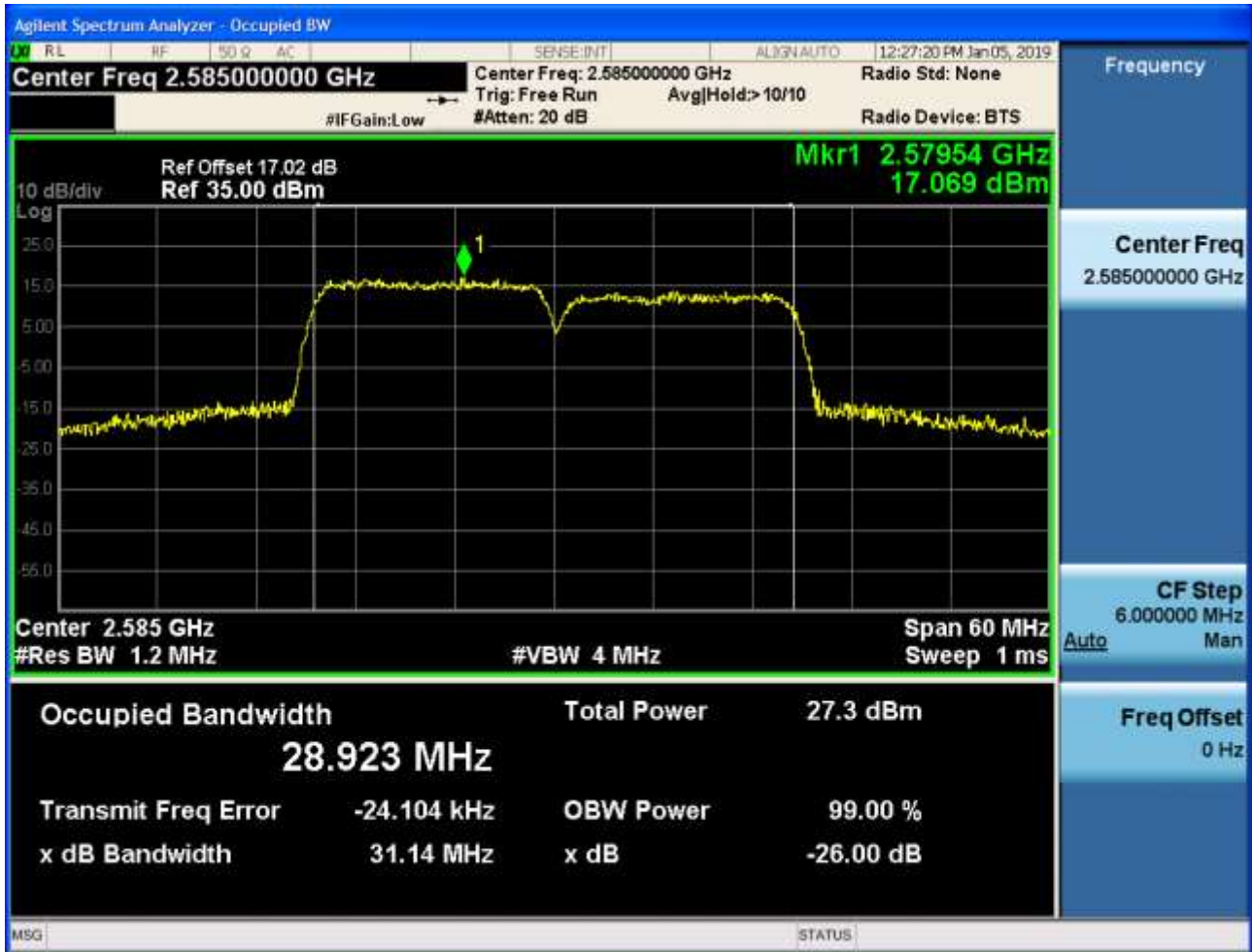


4.1.1.1 Test Mode = LTE/TM2

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

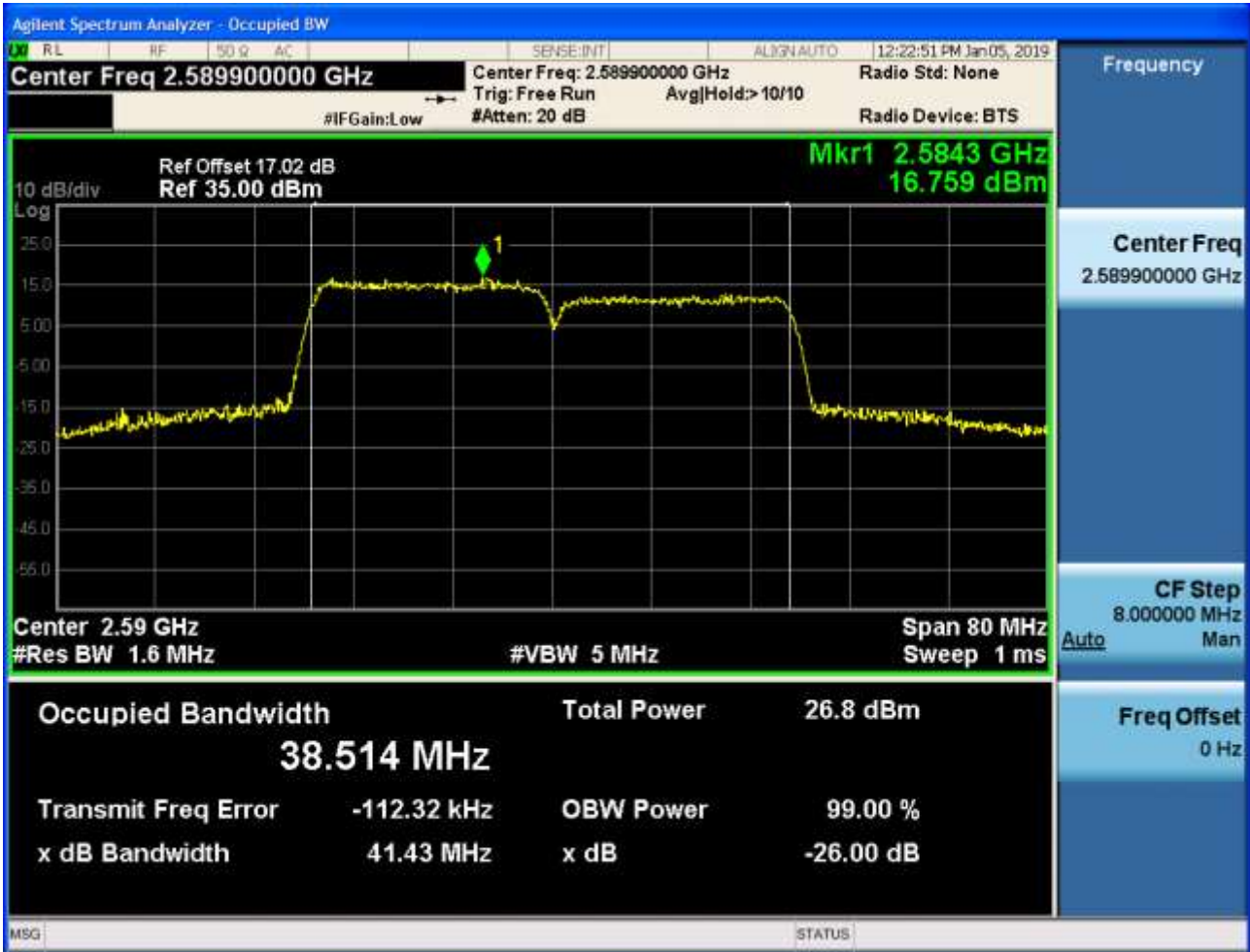
4.1.1.1.1.3.1 PCC Test RB = full RBs & SCC Test RB = full RBs



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

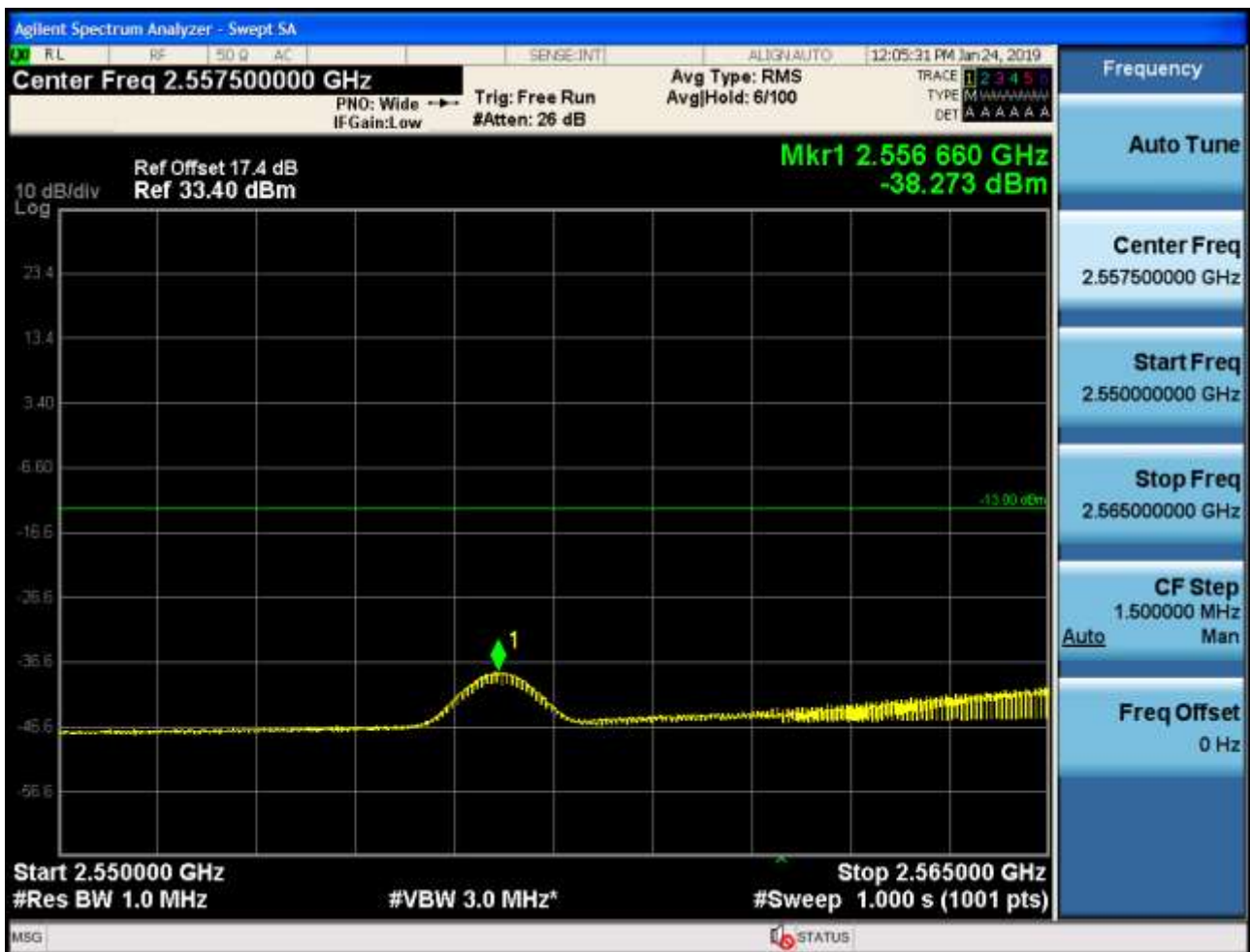
##### 5.1.1 Test Band = CA\_38C

##### 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 &amp; SCC Test RB = full RBs







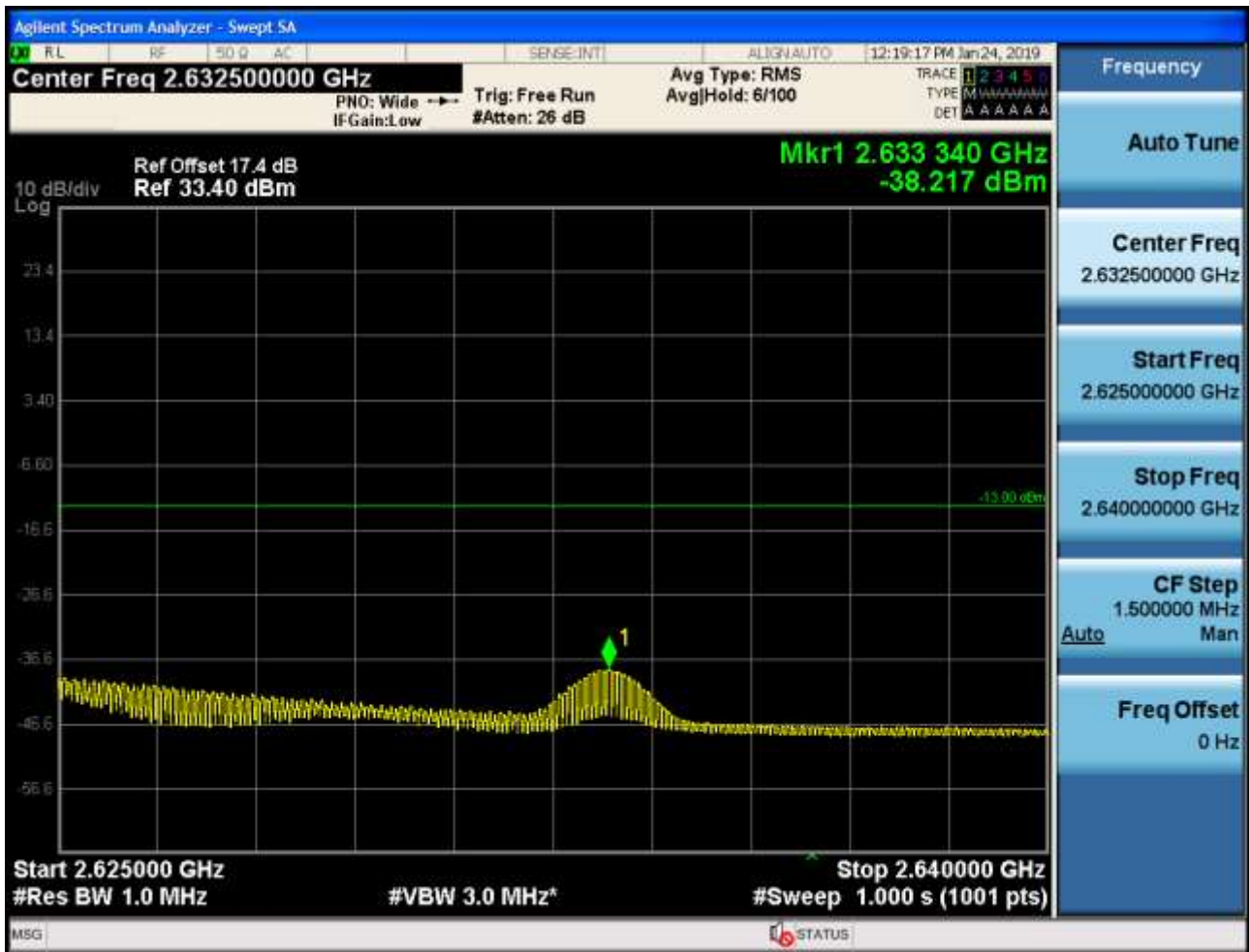


## 5.1.1.1.1.2 Test Channel = HCH

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







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











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



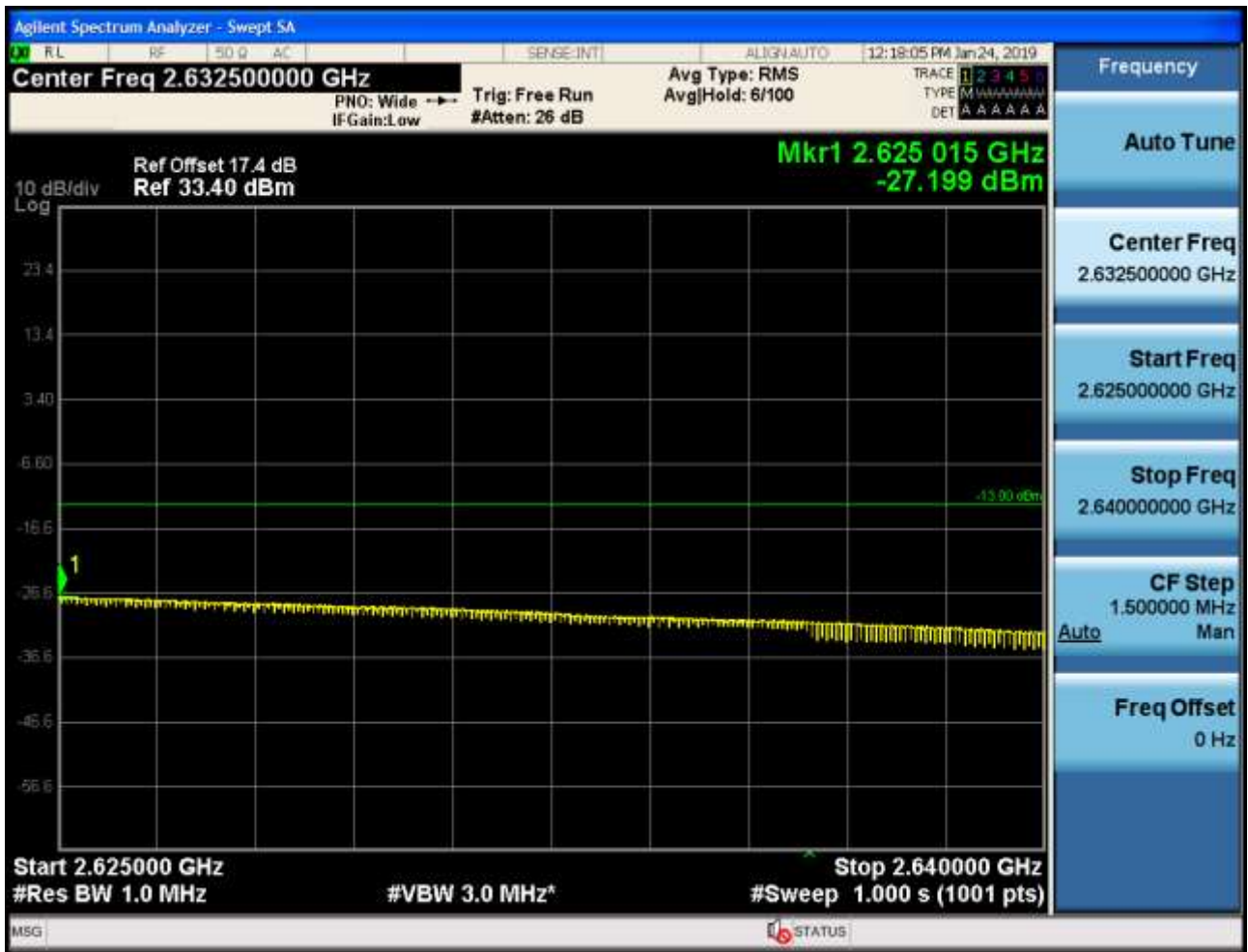




## 5.1.1.1.2.4 PCC Test RB = full RBs &amp; SCC Test RB = full RBs









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



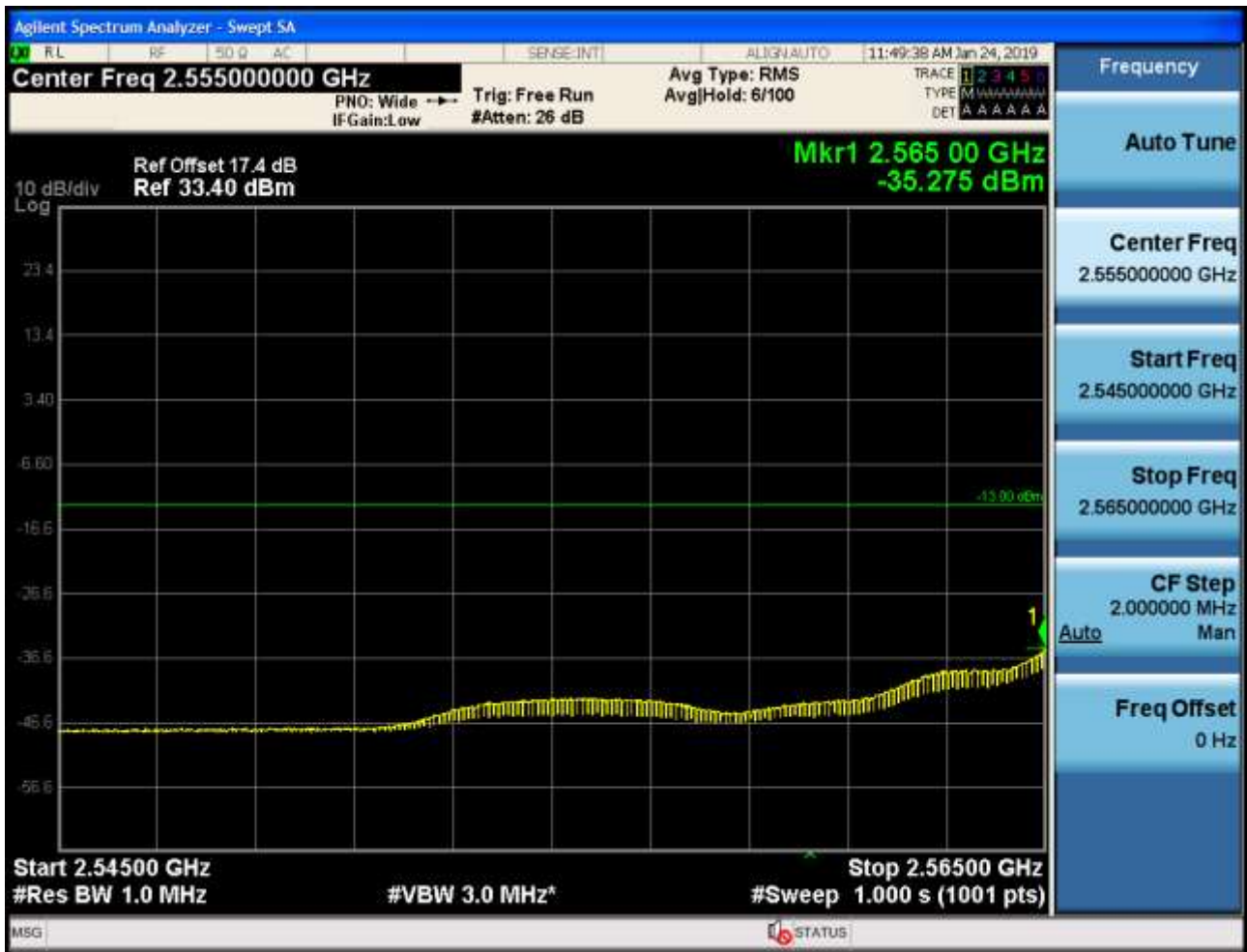








5.1.1.1.2.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0









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

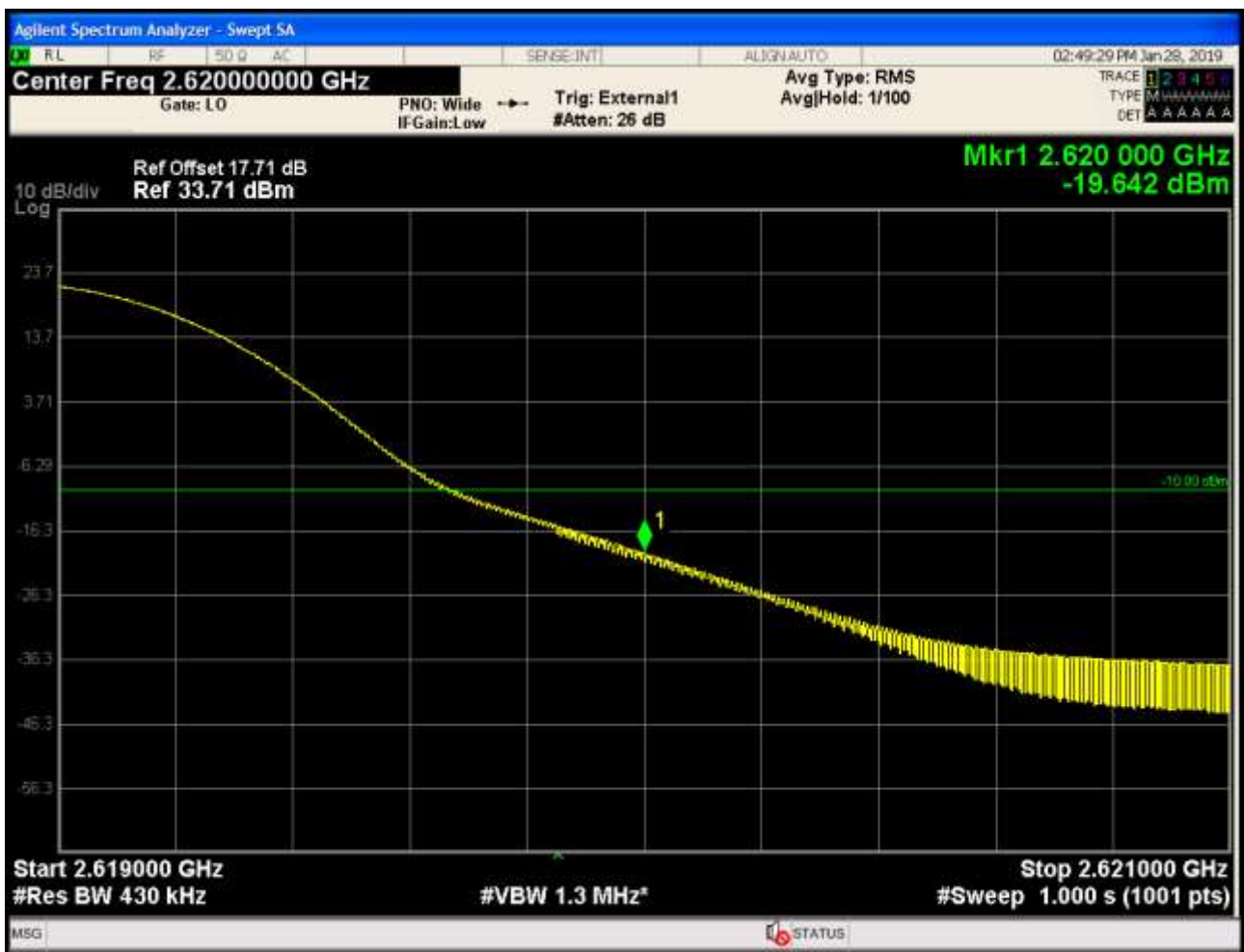


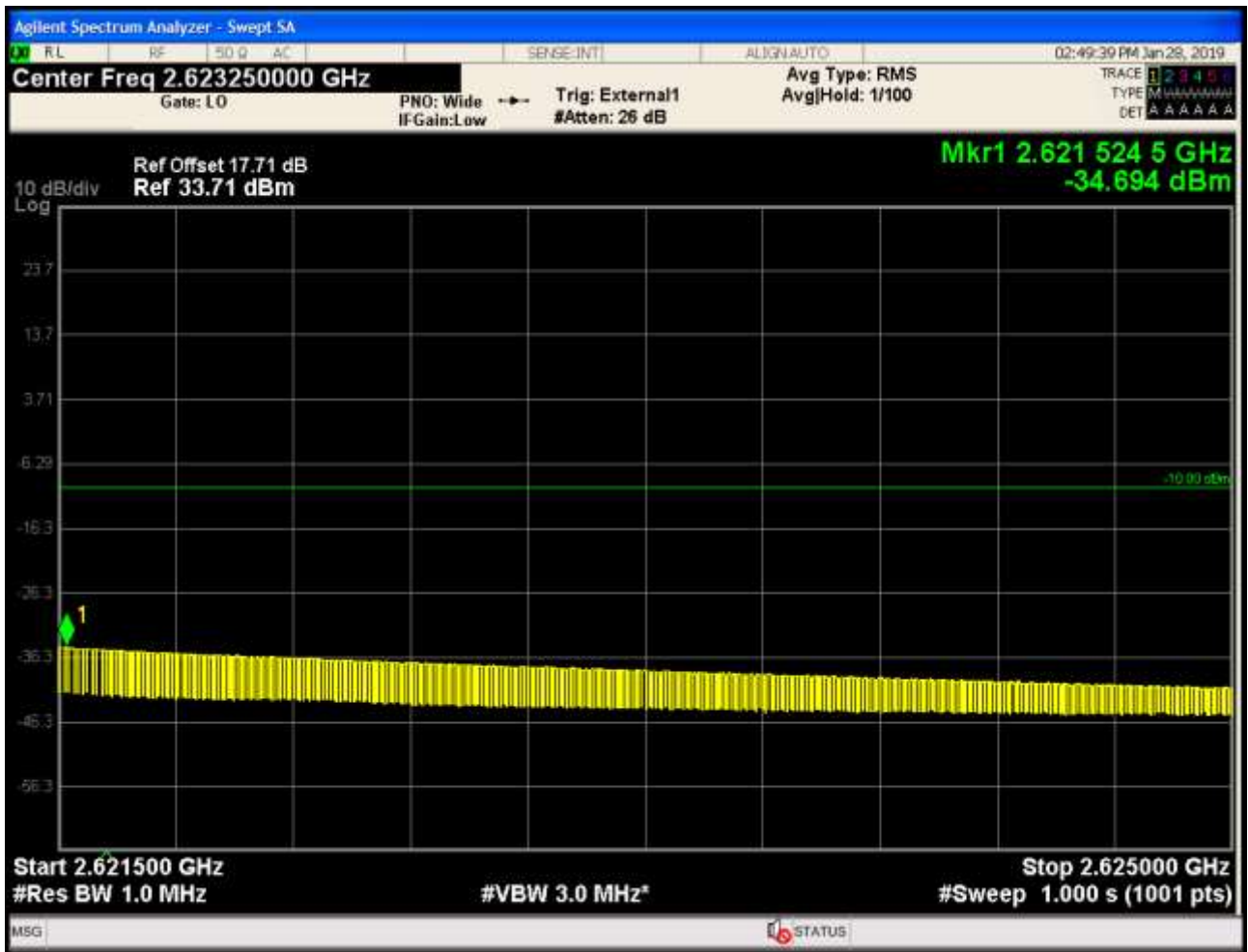


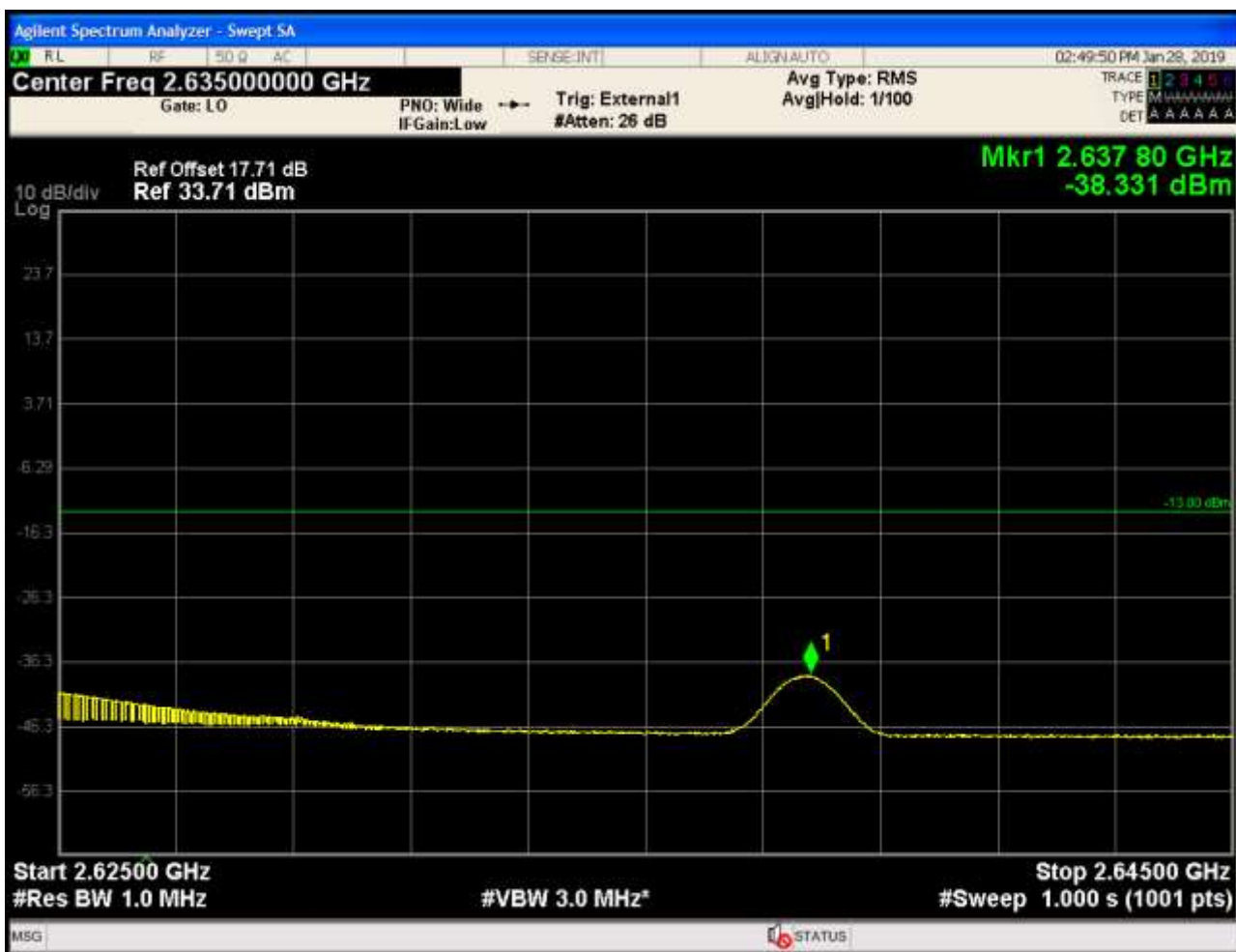


## 5.1.1.1.2.2 Test Channel = HCH

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



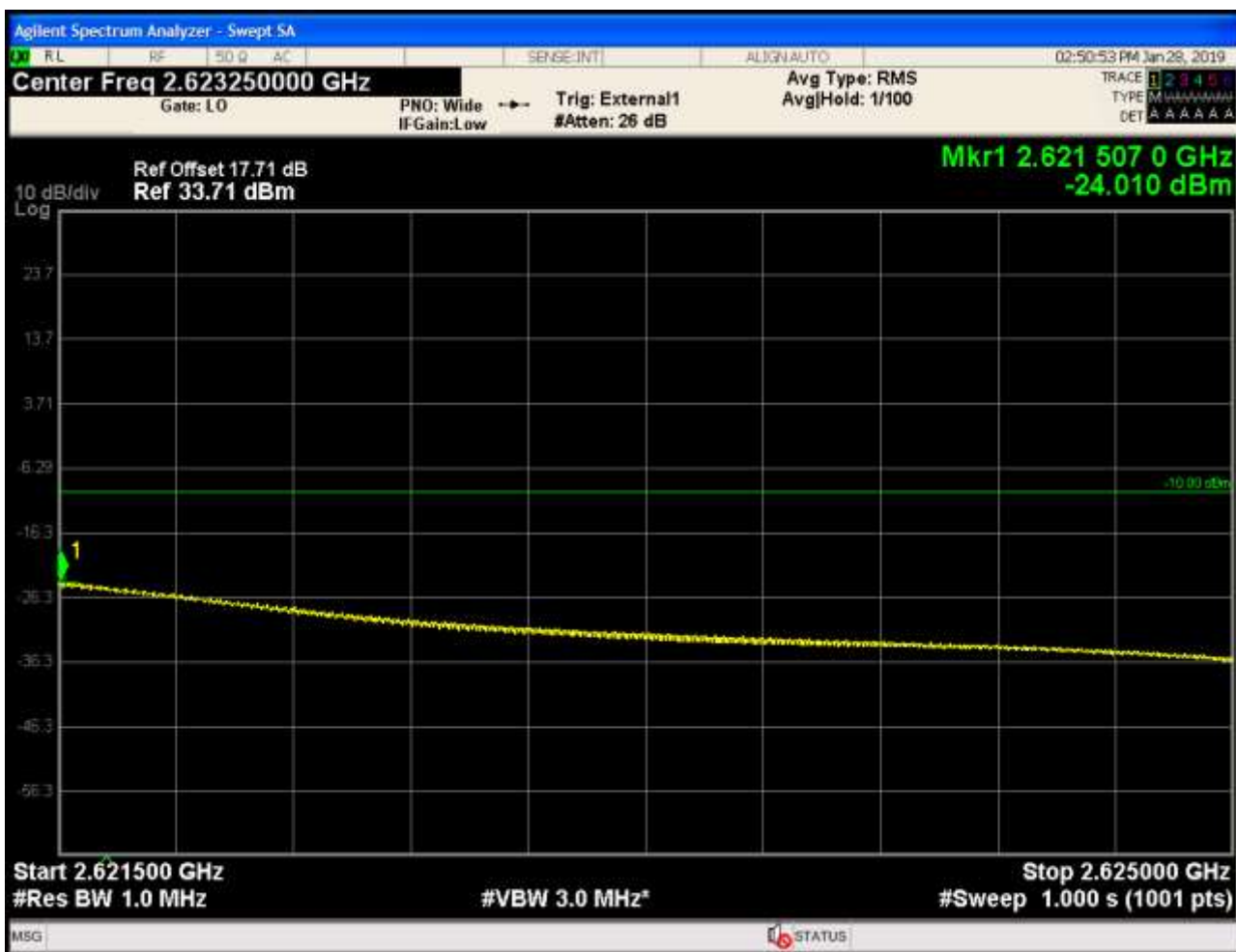






## 5.1.1.1.2.2.2 PCC Test RB = 0 &amp; SCC Test RB = partial RBs #max

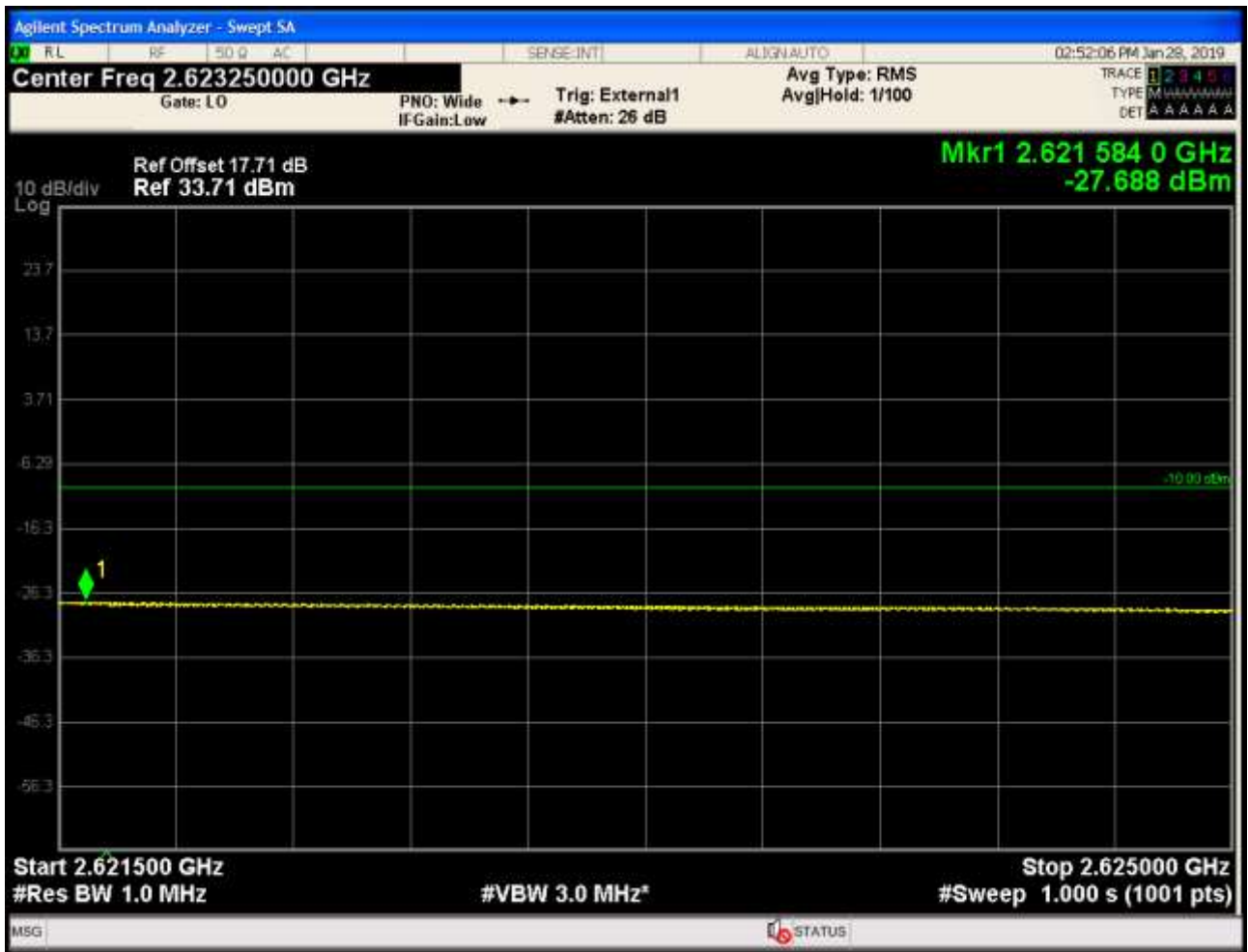






## 5.1.1.1.2.2.3 PCC Test RB = 0 &amp; SCC Test RB = full RBs







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









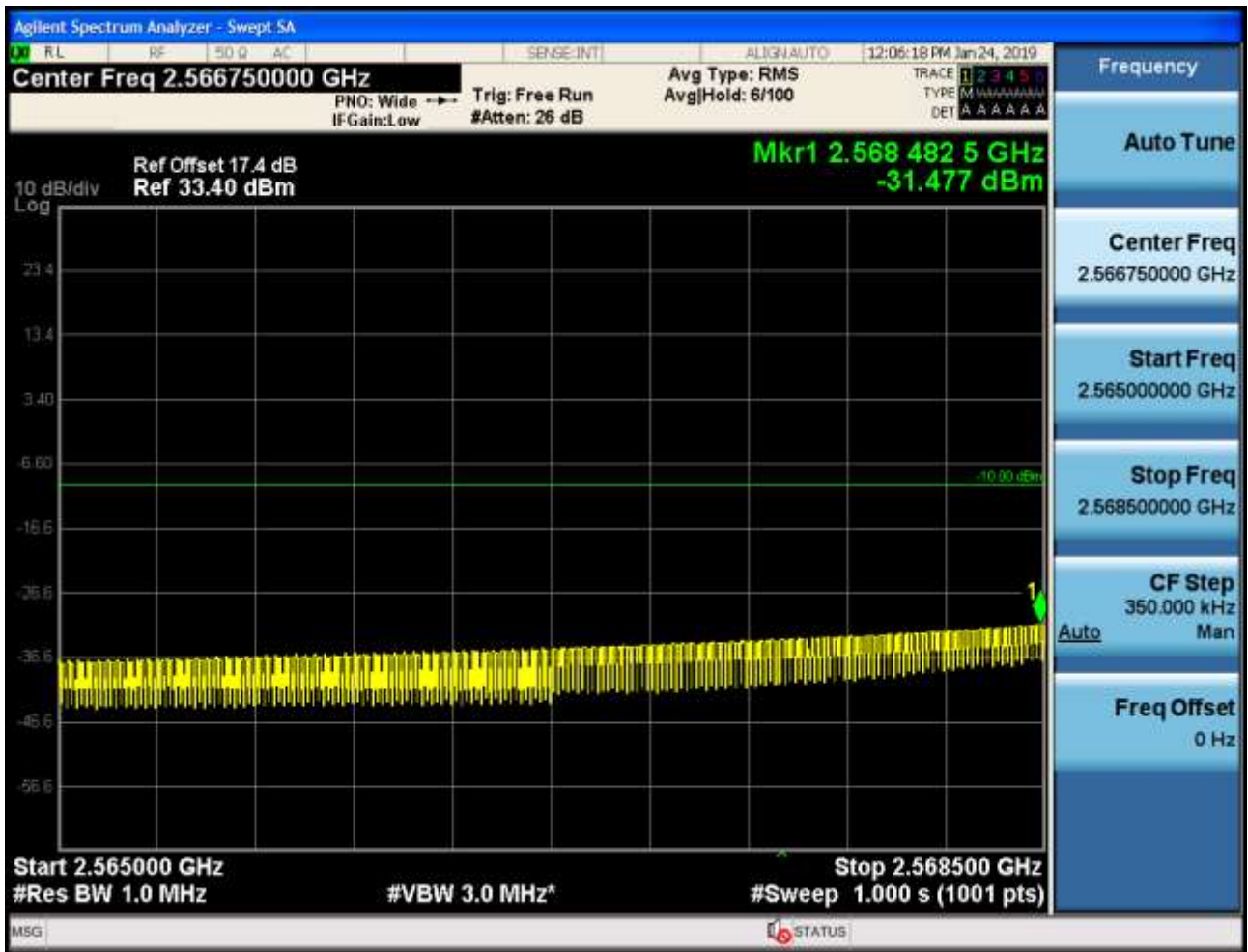
### 5.1.1.2 Test Mode = LTE/TM2

#### 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

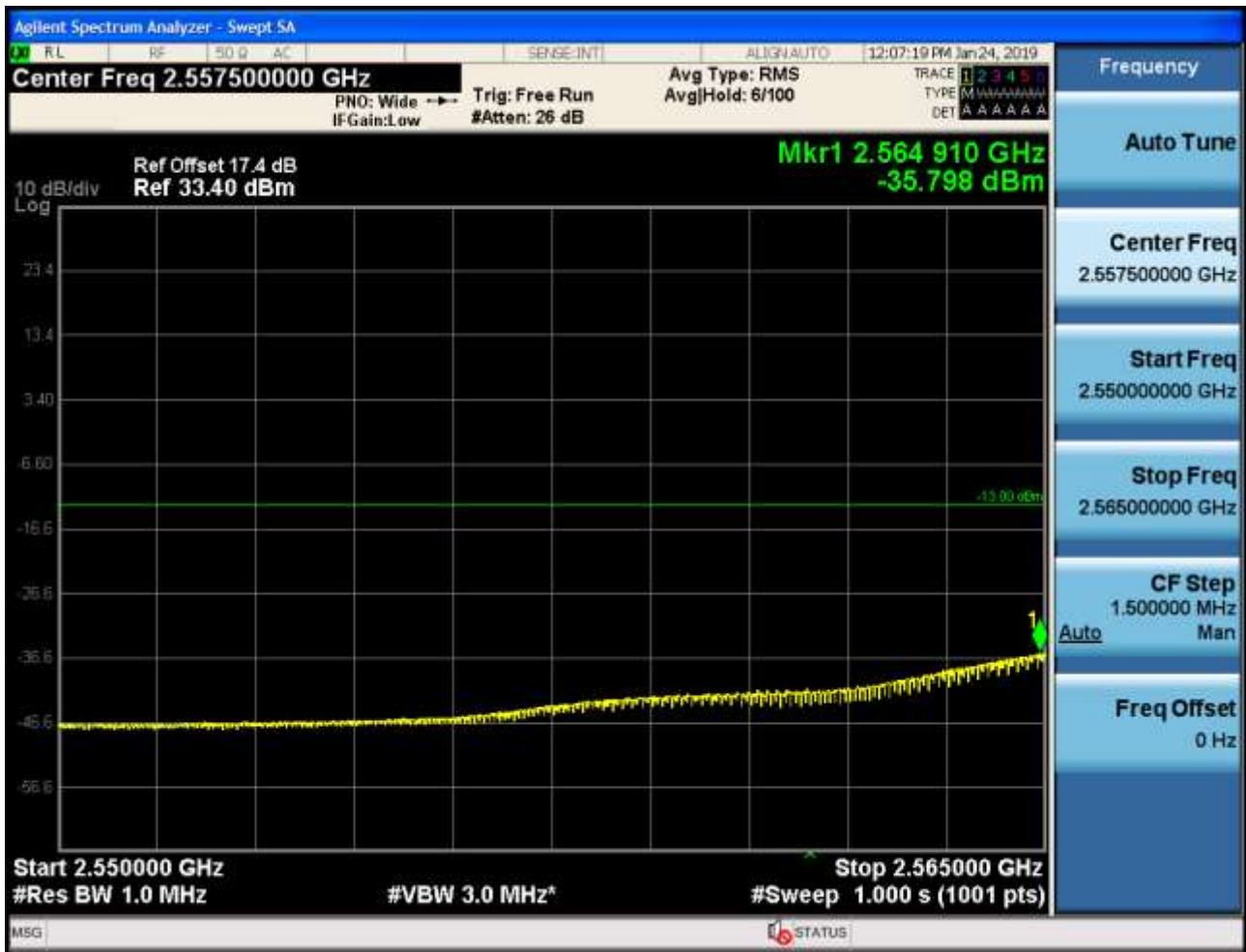




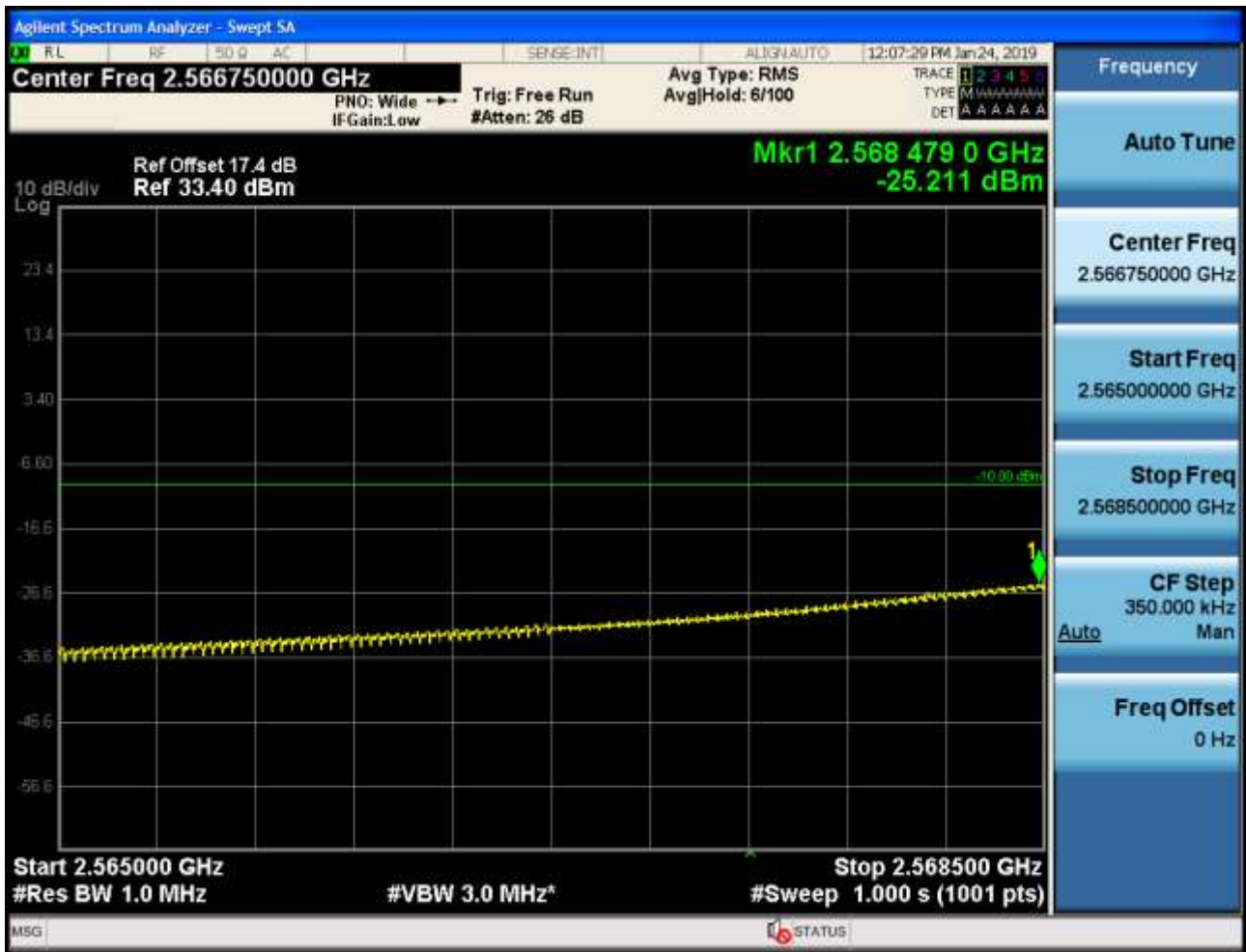




5.1.1.2.1.1.2 PCC Test RB = partial RBs #0 & SCC Test RB = 0





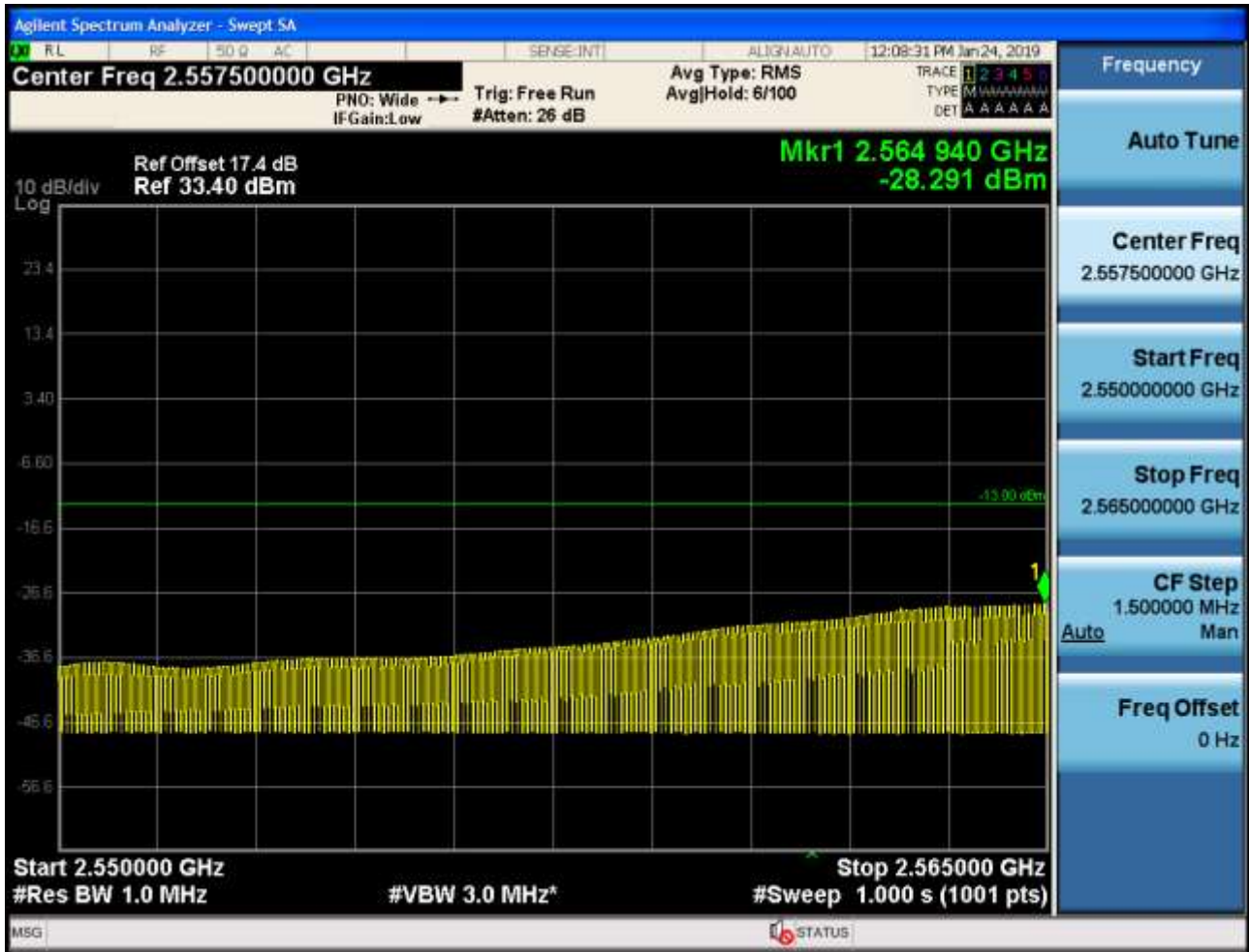








5.1.1.2.1.1.3 PCC Test RB = full RBs & SCC Test RB = 0







## 5.1.1.2.1.1.4 PCC Test RB = full RBs &amp; 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

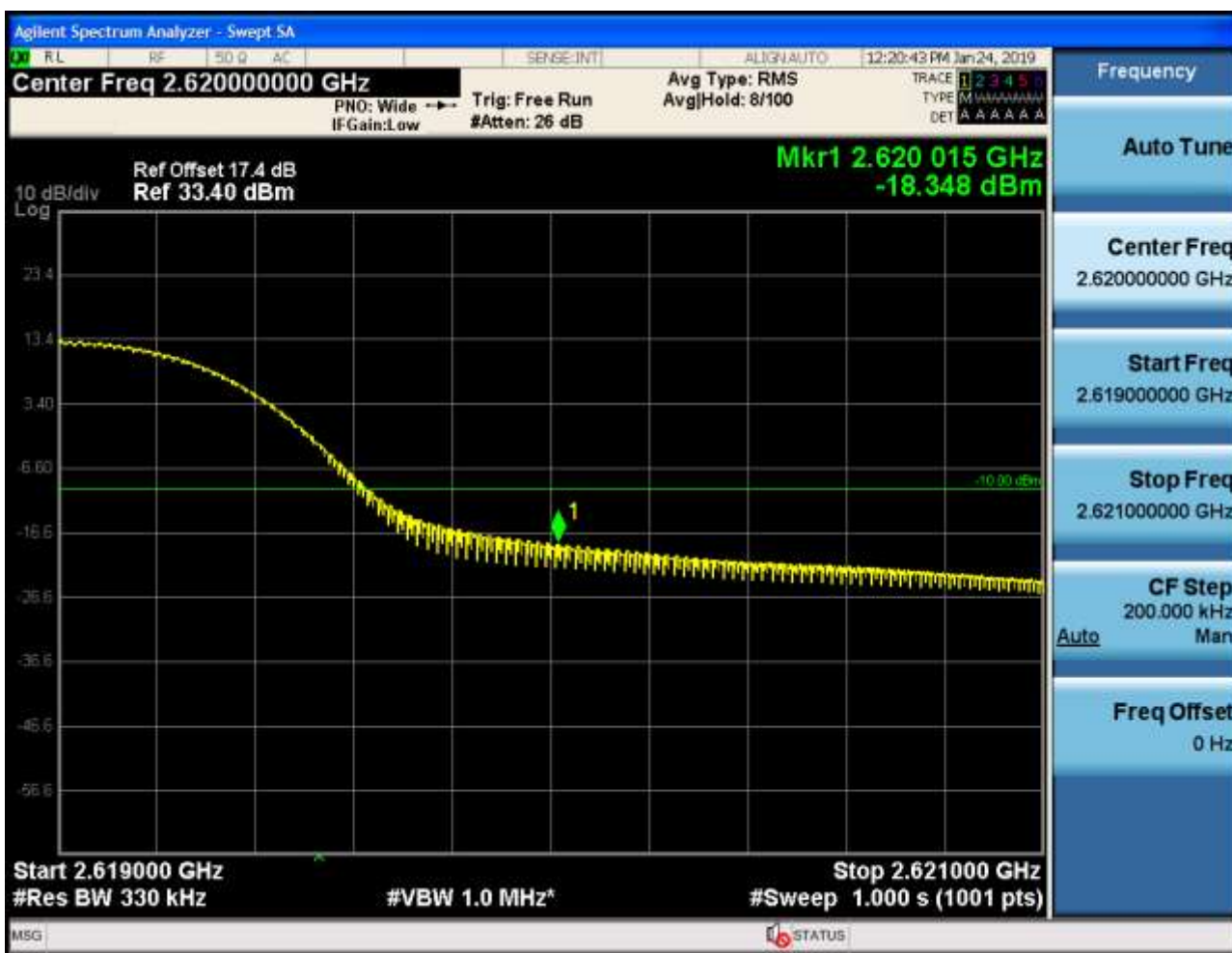








### 5.1.1.2.1.2.2 PCC Test RB = 0 & SCC Test RB = partial RBs #max









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









## 5.1.1.2.1.2.4 PCC Test RB = full RBs &amp; SCC Test RB = full RBs



