**4.1.1.2.3 Test Channel = HCH**

Agilent Spectrum Analyzer - Occupied BW

R L   RF   50 Ω   AC    SENSE:INT    ALIGN AUTO   09:28:44 PM Jul 17, 2013

**Center Freq 848.800000 MHz**

Center Freq: 848.800000 MHz    Radio Std: None
#IFGain:Low → Trig: Free Run    Avg|Hold: 10/10
#Atten: 46 dB    Radio Device: BTS

Ref Offset 12.8 dB
Ref 42.80 dBm

10 dB/div
Log

Mkr1 848.772 MHz
22.559 dBm

32.8
22.8
12.8
2.80
-7.20
-17.2
-27.2
-37.2
-47.2

Center 848.8 MHz    Span 1 MHz
#Res BW 10 kHz    #VBW 30 kHz    Sweep 12.4 ms

| Occupied Bandwidth | | Total Power | 32.3 dBm |
|---|---|---|---|
| **252.06 kHz** | | | |
| Transmit Freq Error | -670 Hz | OBW Power | 99.00 % |
| x dB Bandwidth | 325.6 kHz | x dB | -26.00 dB |

MSG File <PICTURE.png> saved    STATUS

Frequency

Center Freq
848.800000 MHz

CF Step
100.000 kHz
Auto   Man

Freq Offset
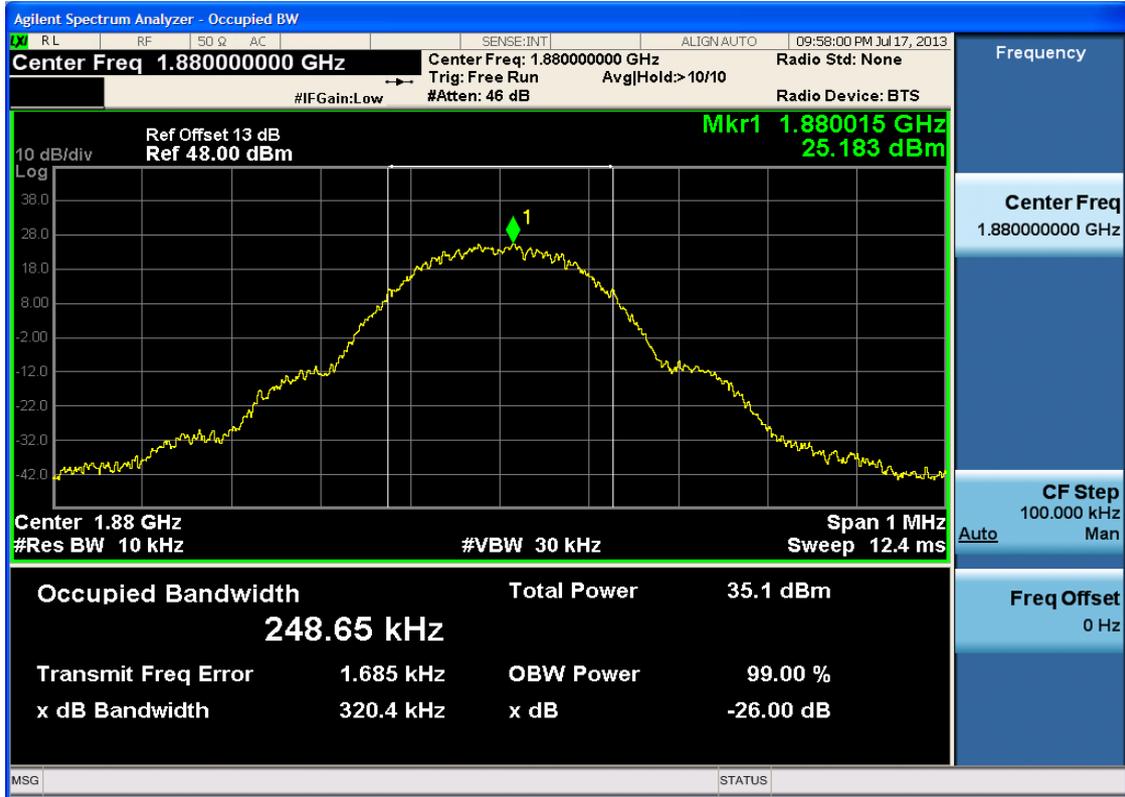0 Hz

## 4.1.2 Test Band = GSM1900

## 4.1.2.1 Test Mode = GSM/TM1

## 4.1.2.1.1 Test Channel = LCH

**4.1.2.1.2 Test Channel = MCH**



Agilent Spectrum Analyzer - Occupied BW

| | |
|---|---|
| Occupied Bandwidth | Total Power 35.1 dBm |
| 248.65 kHz | |
| Transmit Freq Error 1.685 kHz | OBW Power 99.00 % |
| x dB Bandwidth 320.4 kHz | x dB -26.00 dB |
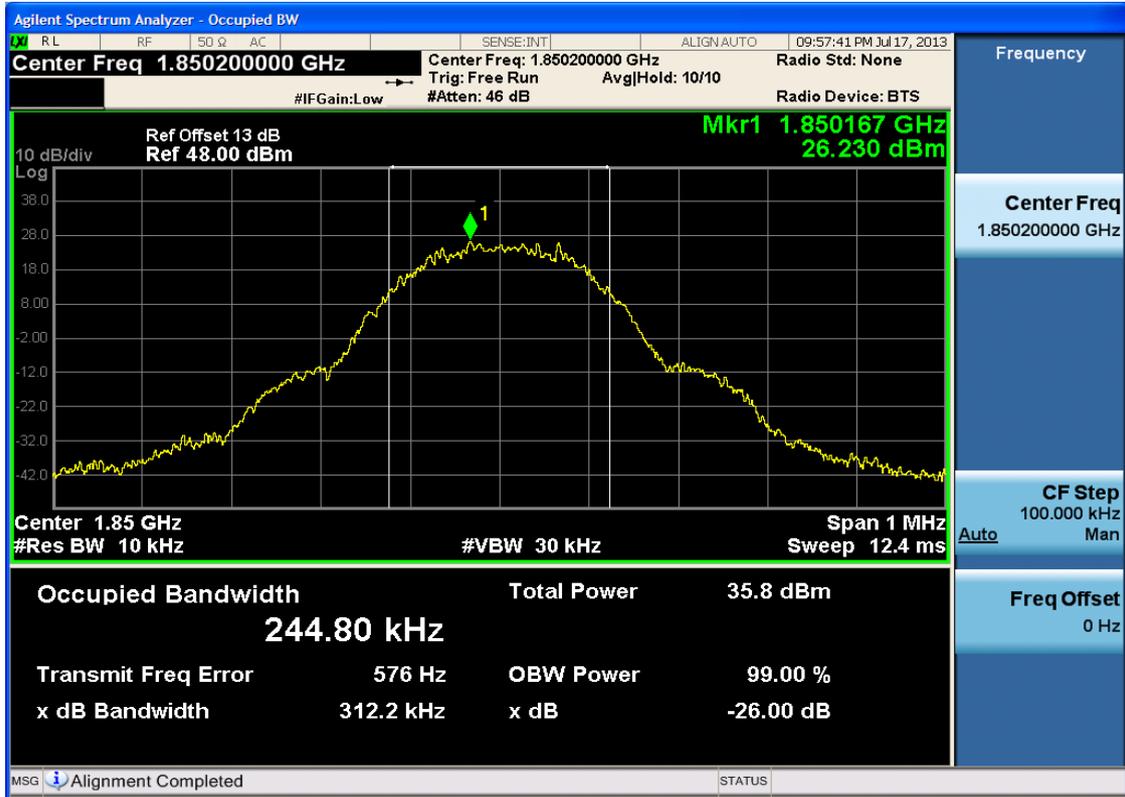
## 4.1.2.1.3 Test Channel = HCH

## 4.1.2.2 Test Mode = GSM/TM2

## 4.1.2.2.1 Test Channel = LCH

**4.1.2.2.2 Test Channel = MCH**

**4.1.2.2.3 Test Channel = HCH**
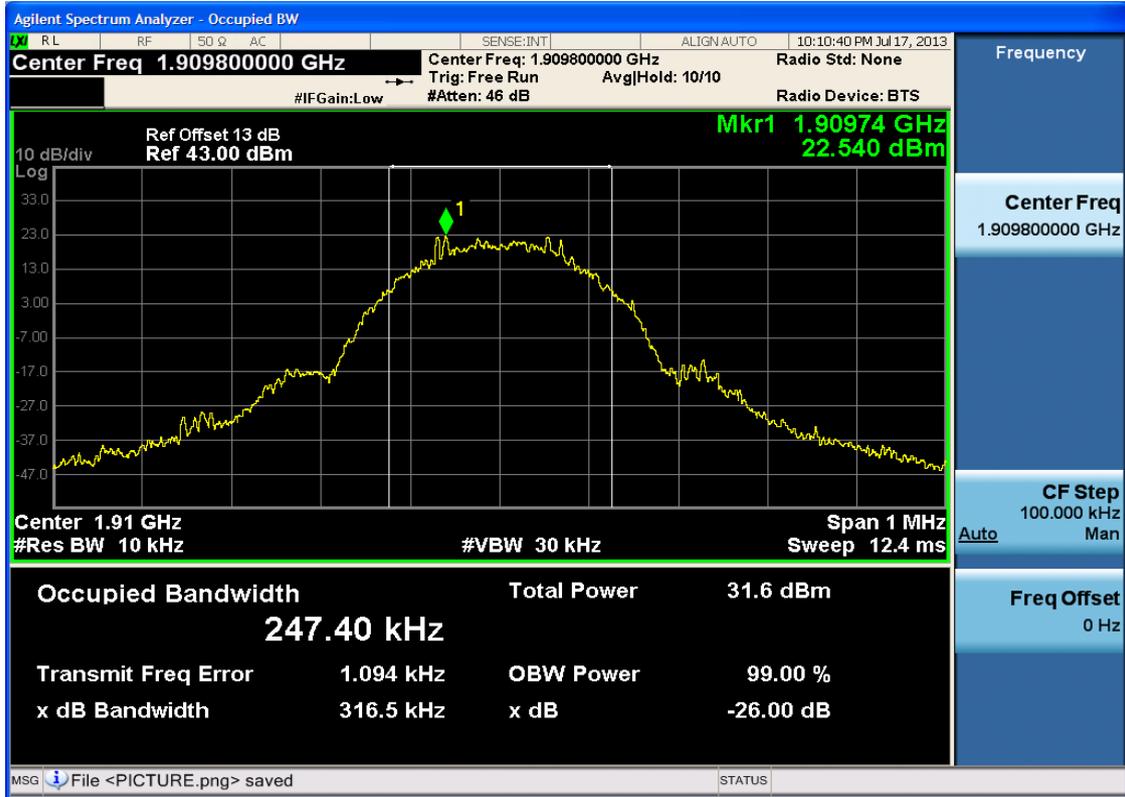
## 4.2 For UMTS

### 4.2.1 Test Band = WCDMA850

#### 4.2.1.1 Test Mode = UMTS/TM1

##### 4.2.1.1.1 Test Channel = LCH
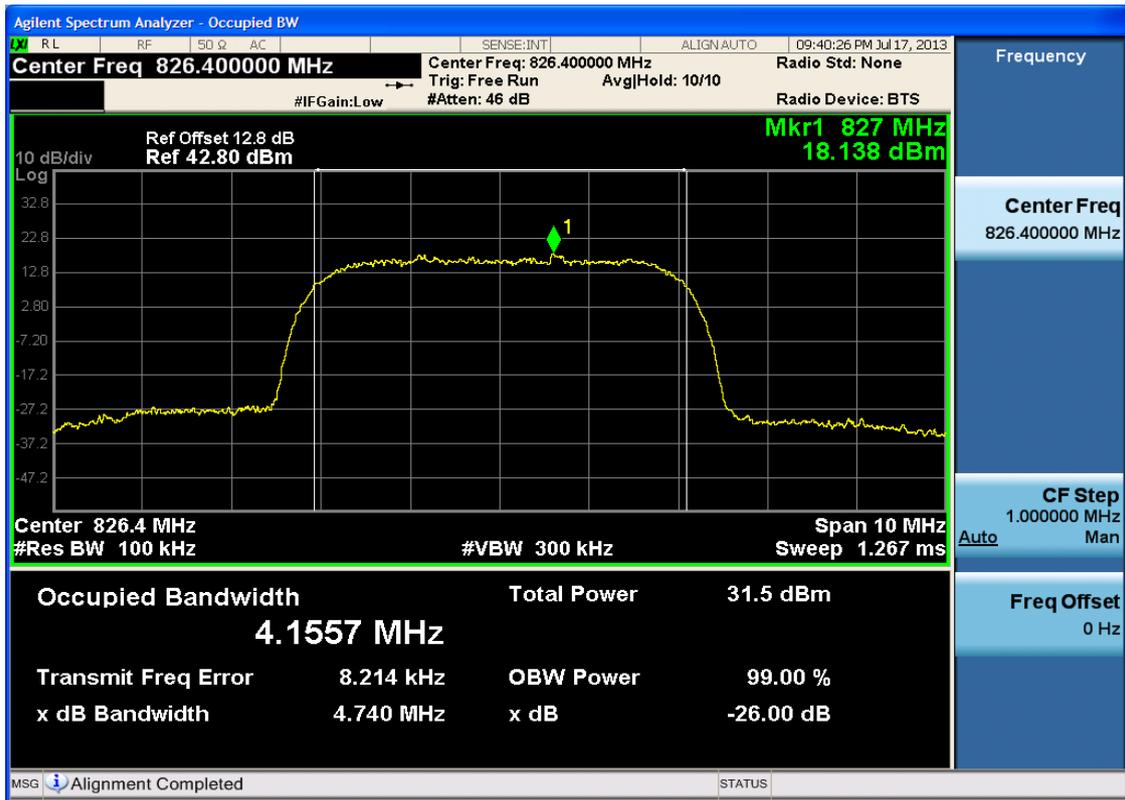
**4.2.1.1.2 Test Channel = MCH**
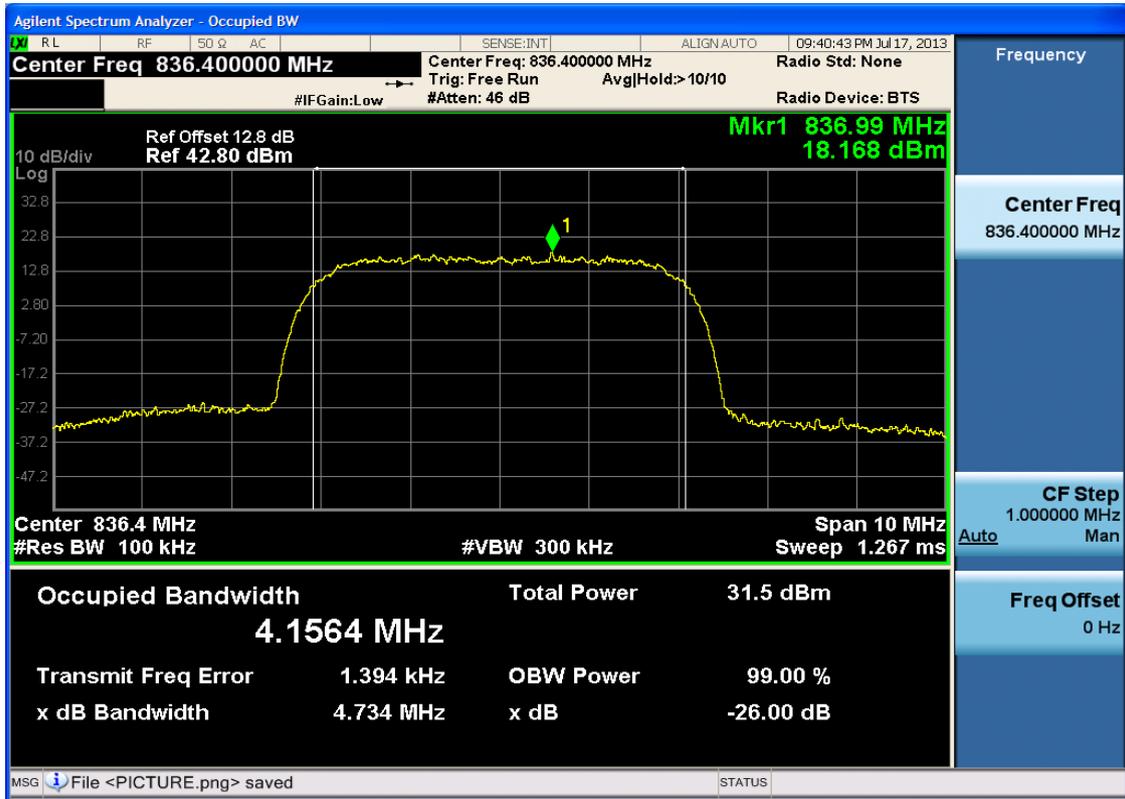
**4.2.1.1.3 Test Channel = HCH**
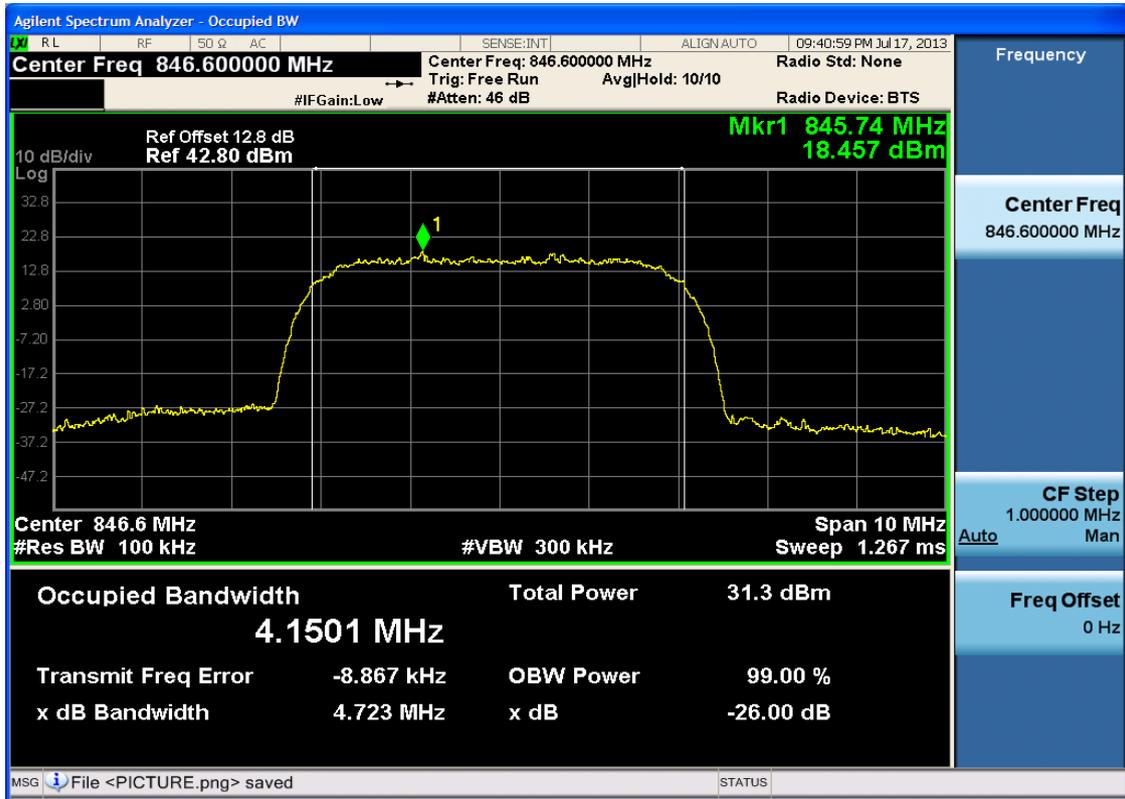
## 4.2.2 Test Band = WCDMA1900

## 4.2.2.1 Test Mode = UMTS/TM1
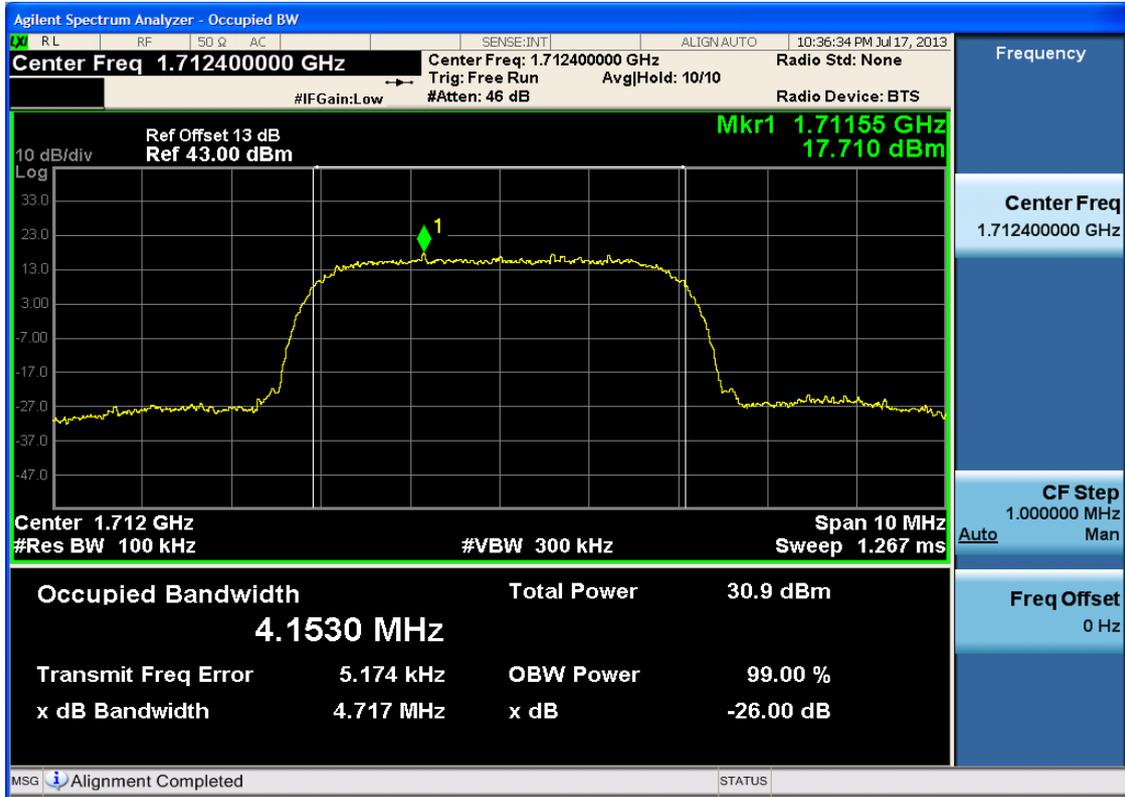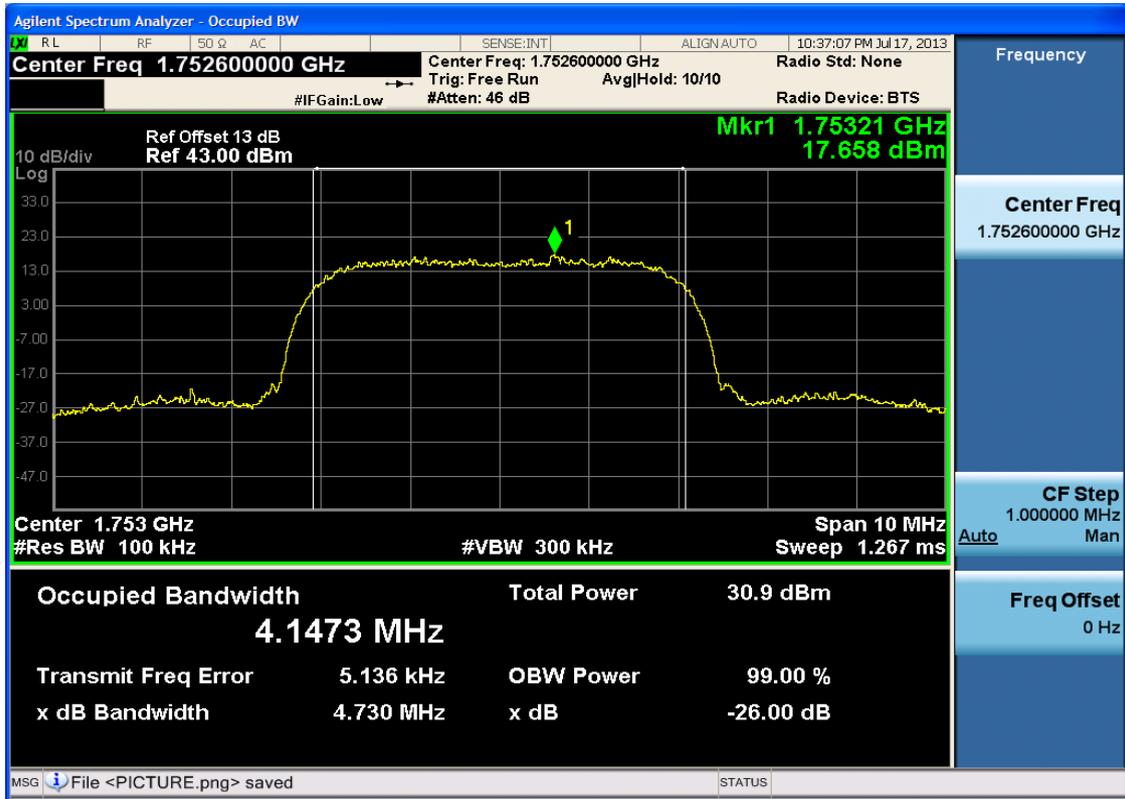
## 4.2.2.1.1 Test Channel = LCH
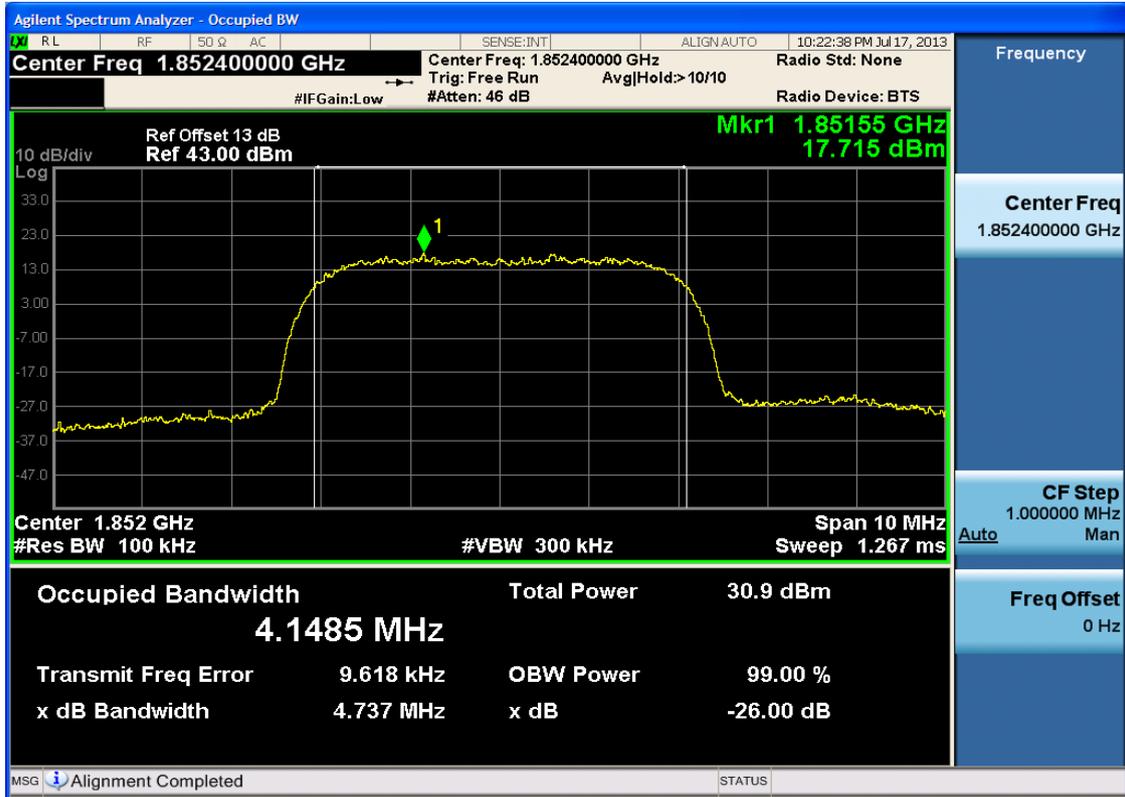
**4.2.2.1.2 Test Channel = MCH**
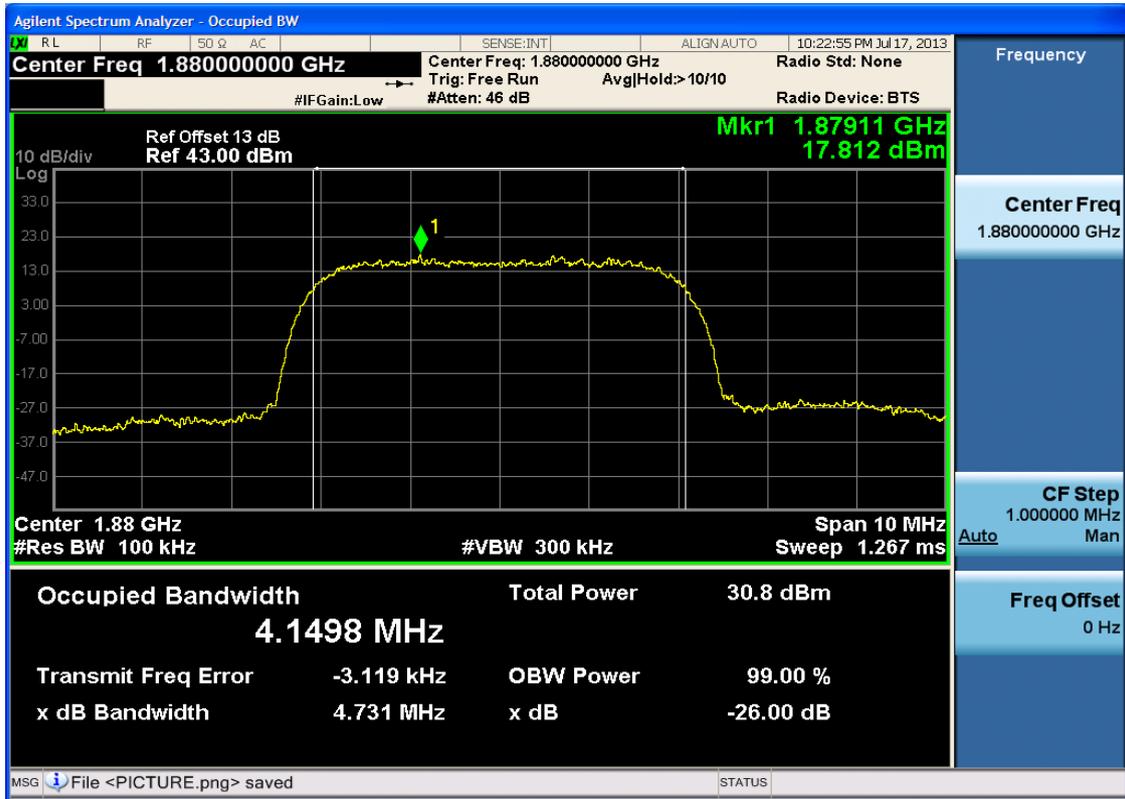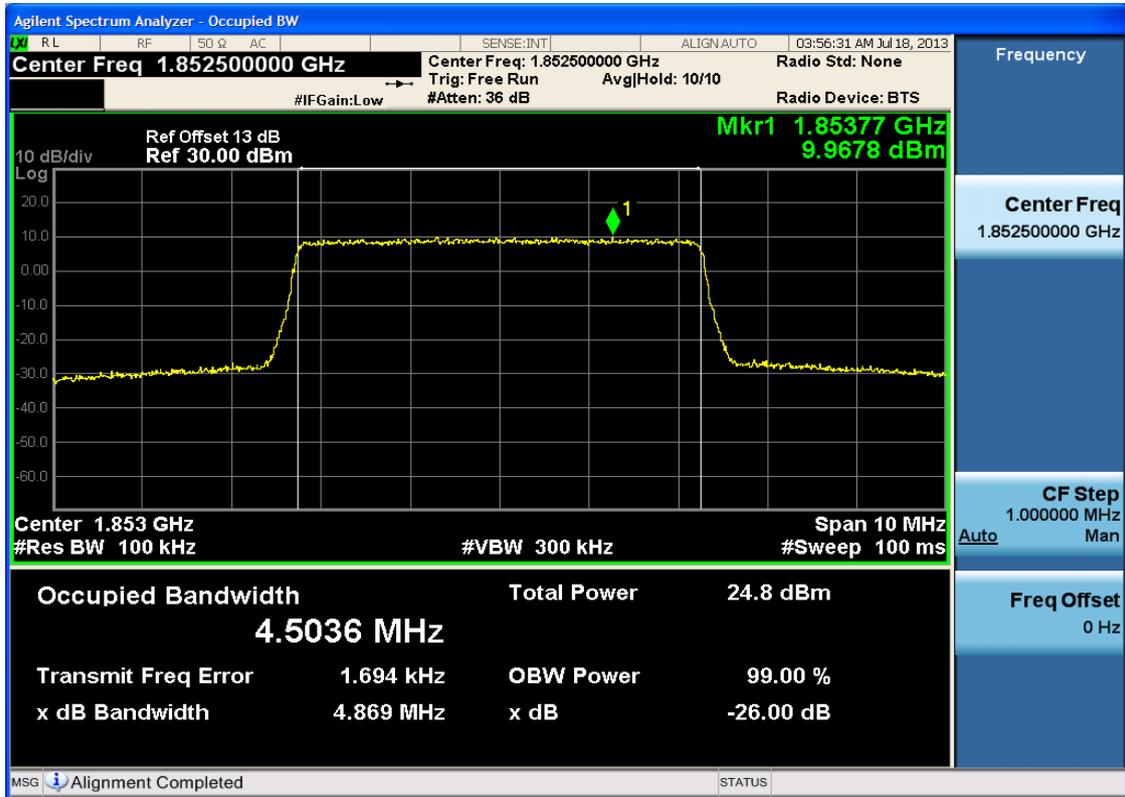
**4.2.2.1.3 Test Channel = HCH**
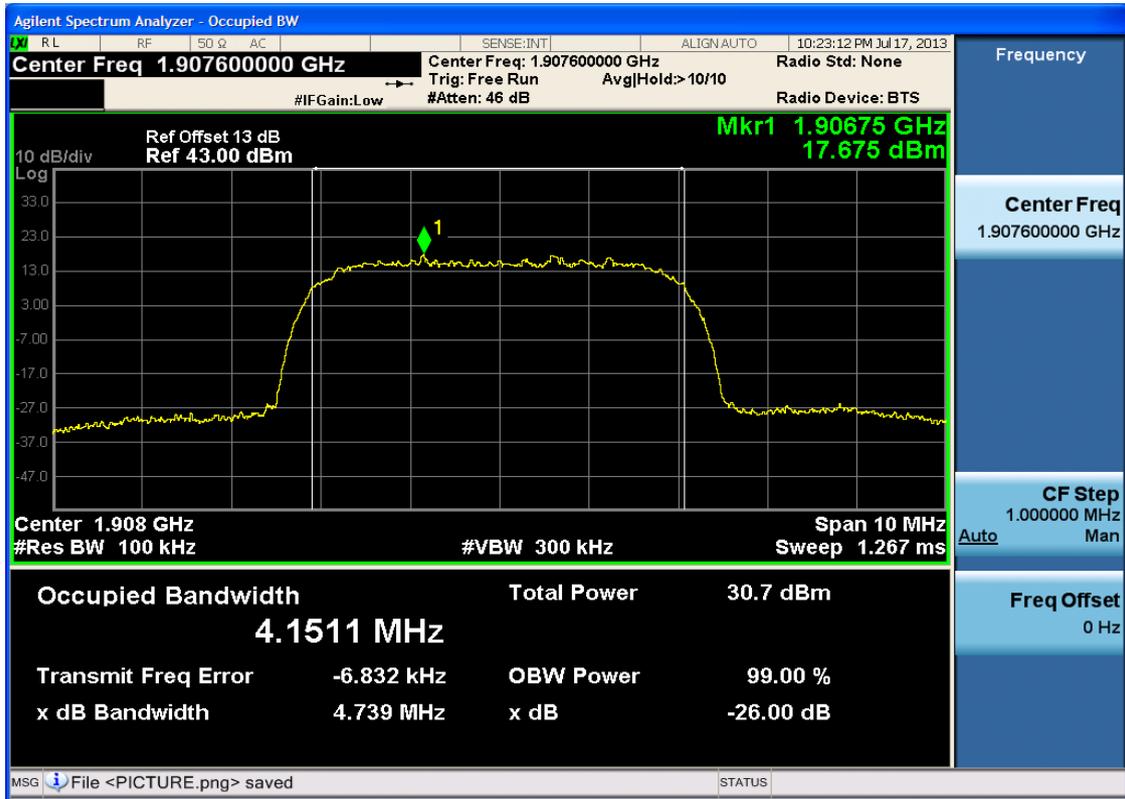
## 4.2.3 Test Band = WCDMA1700

## 4.2.3.1 Test Mode = UMTS/TM1

## 4.2.3.1.1 Test Channel = LCH

**4.2.3.1.2 Test Channel = MCH**
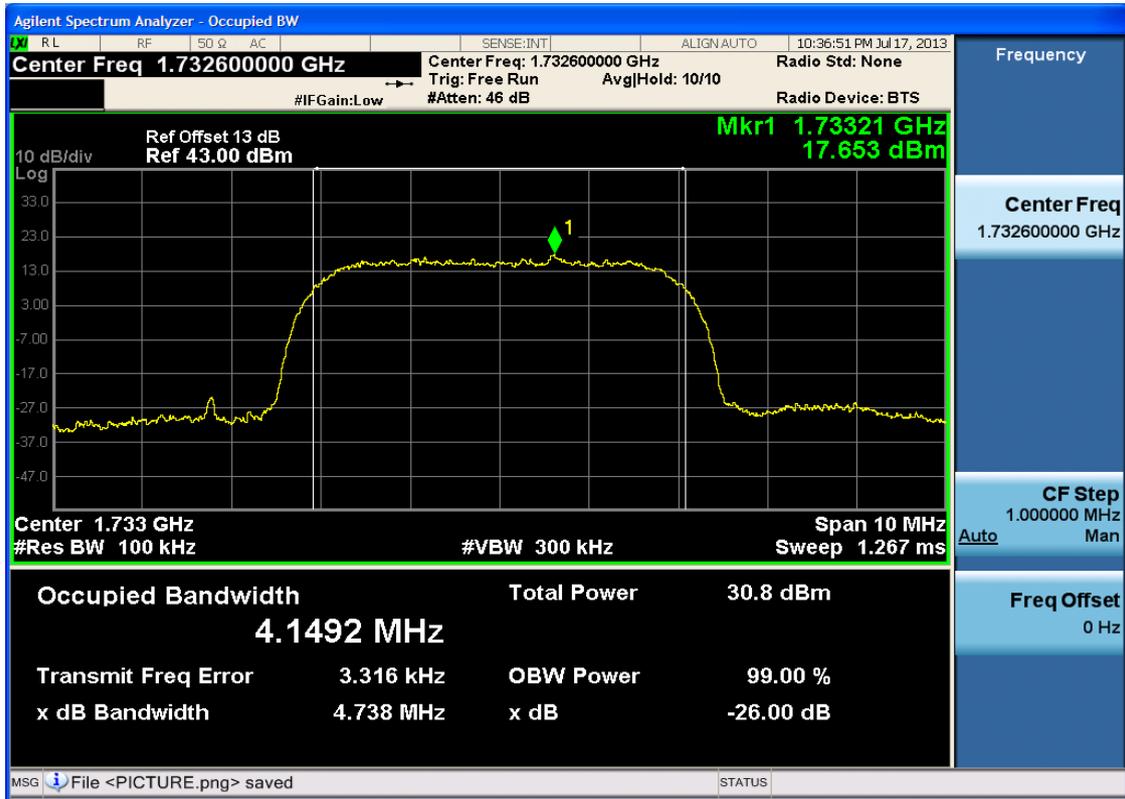
## 4.2.3.1.3 Test Channel = HCH

## 4.3 For LTE

### 4.3.1 Test Band = BAND2

#### 4.3.1.1 Test Mode = LTE/TM1

##### 4.3.1.1.1 Test Bandwidth = 5

###### 4.3.1.1.1.1 Test Channel = LCH

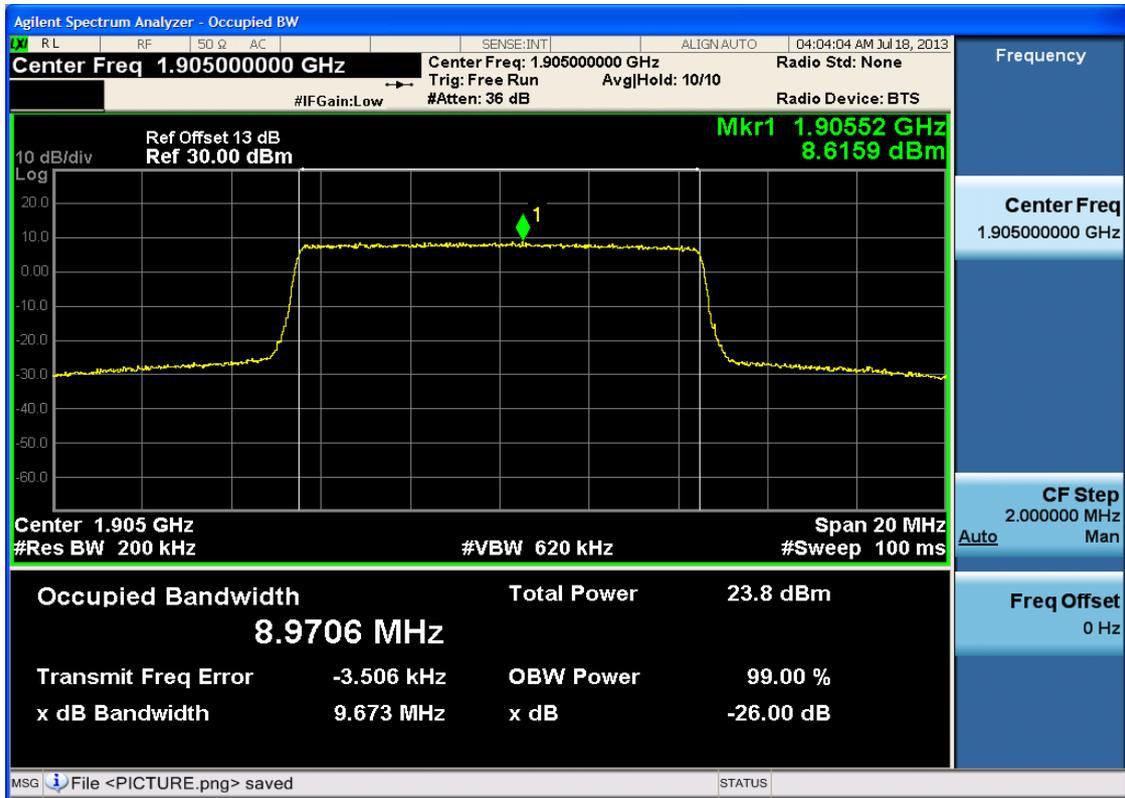###### 4.3.1.1.1.1.1 Test RB = RB25#0

## 4.3.1.1.1.2 Test Channel = MCH

### 4.3.1.1.1.2.1 Test RB = RB25#0

## 4.3.1.1.1.3 Test Channel = HCH

### 4.3.1.1.1.3.1 Test RB = RB25#0
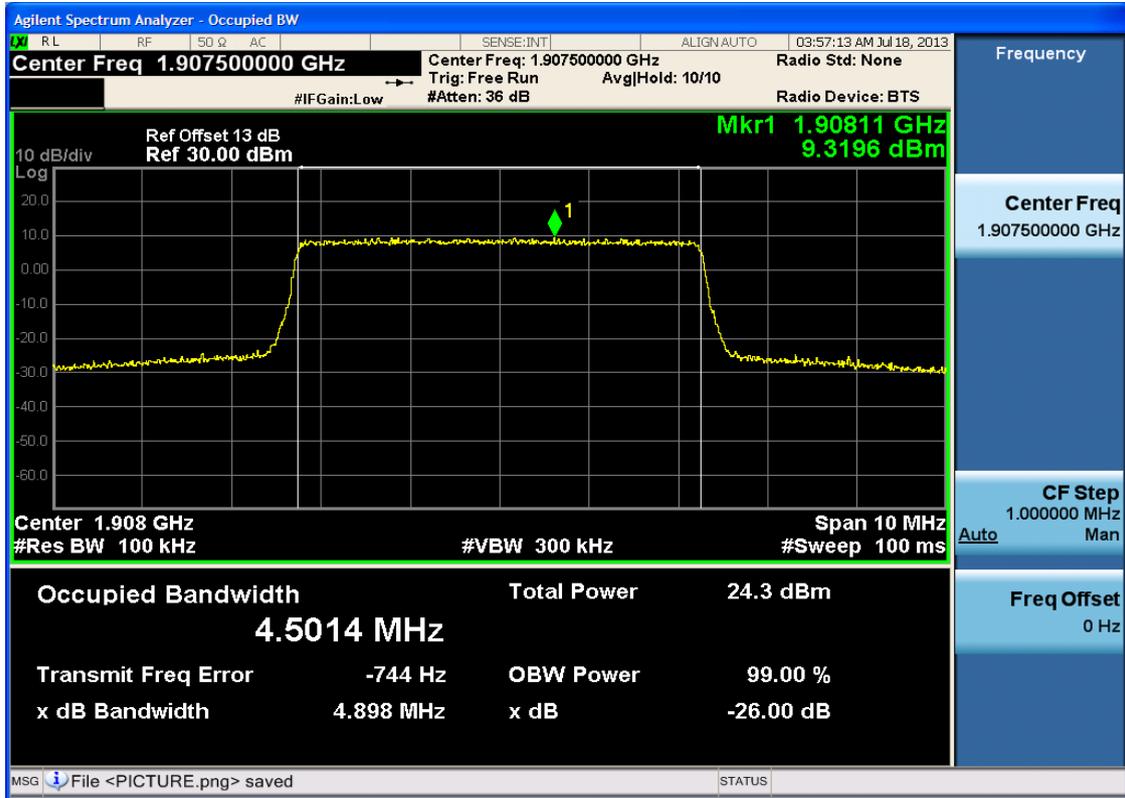
**4.3.1.1.2 Test Bandwidth = 10**

**4.3.1.1.2.1 Test Channel = LCH**

**4.3.1.1.2.1.1 Test RB = RB50#0**
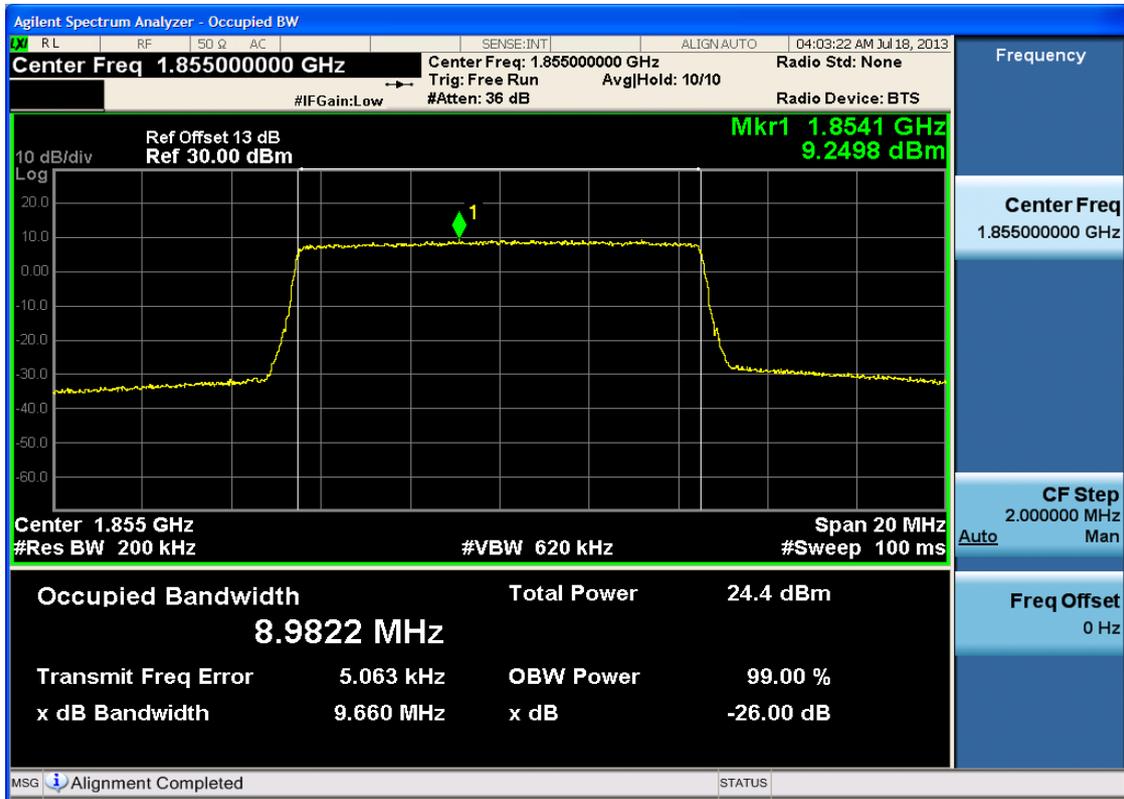
## 4.3.1.1.2.2 Test Channel = MCH

### 4.3.1.1.2.2.1 Test RB = RB50#0
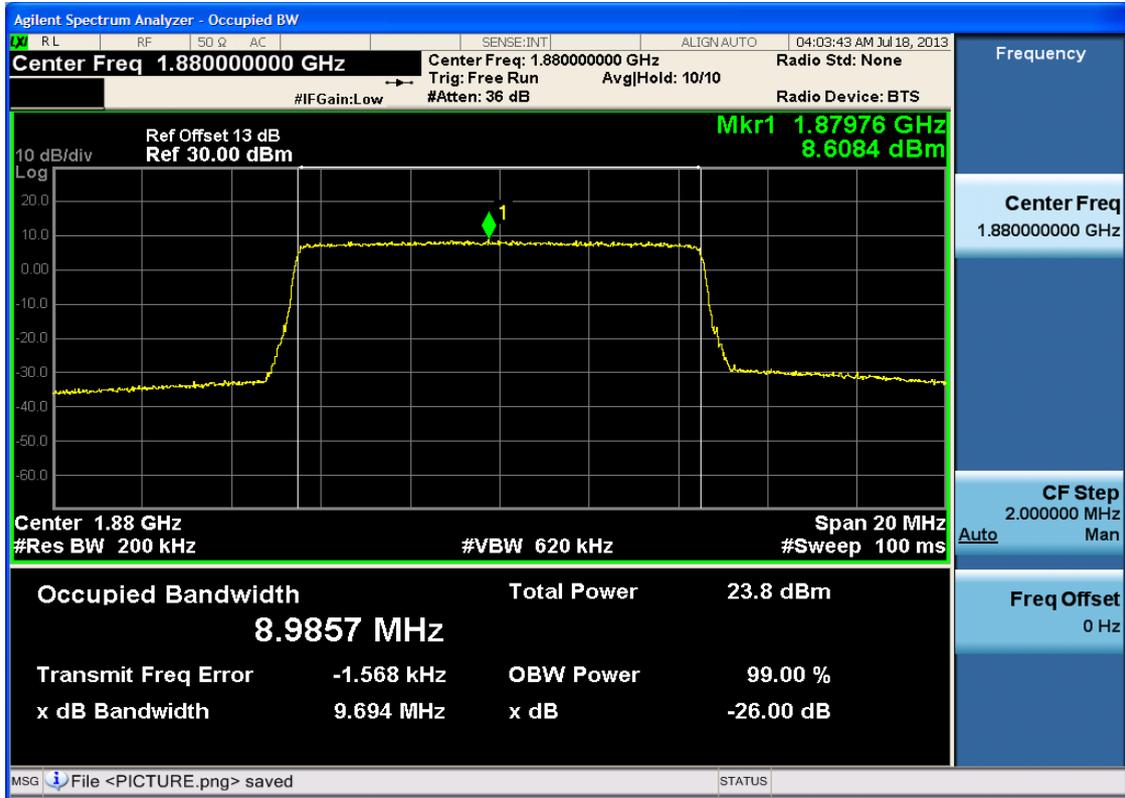
## 4.3.1.1.2.3 Test Channel = HCH

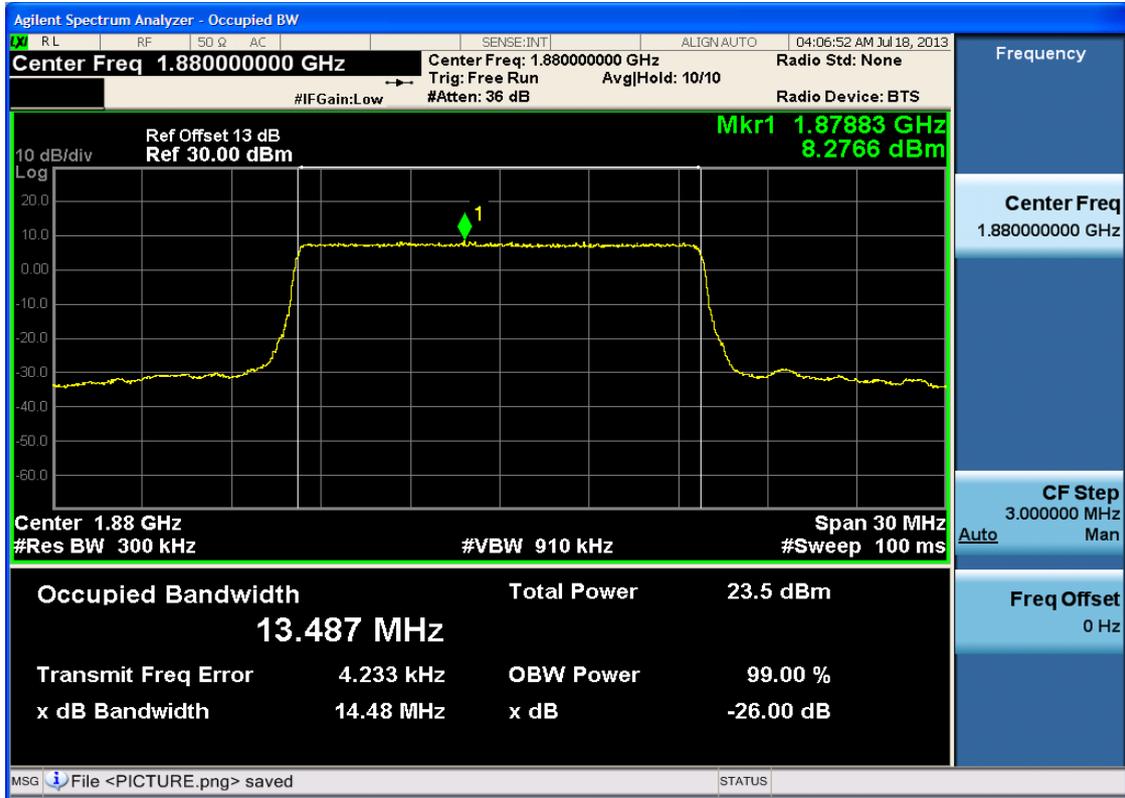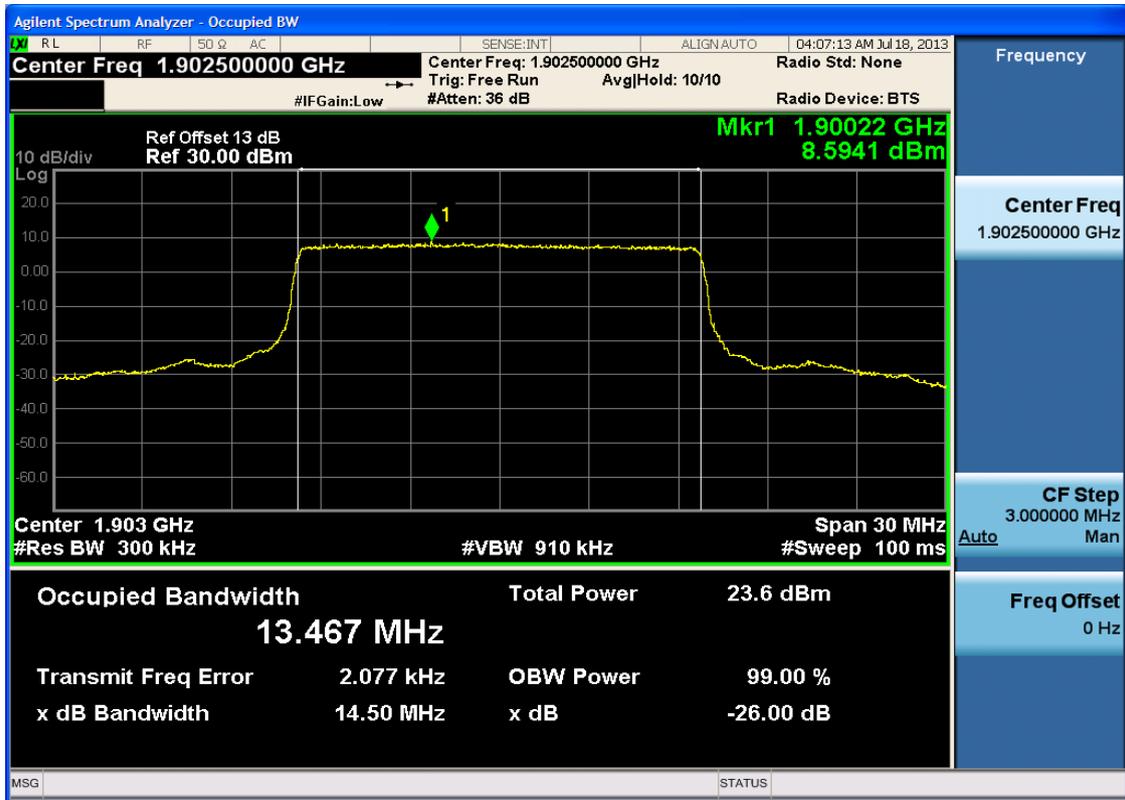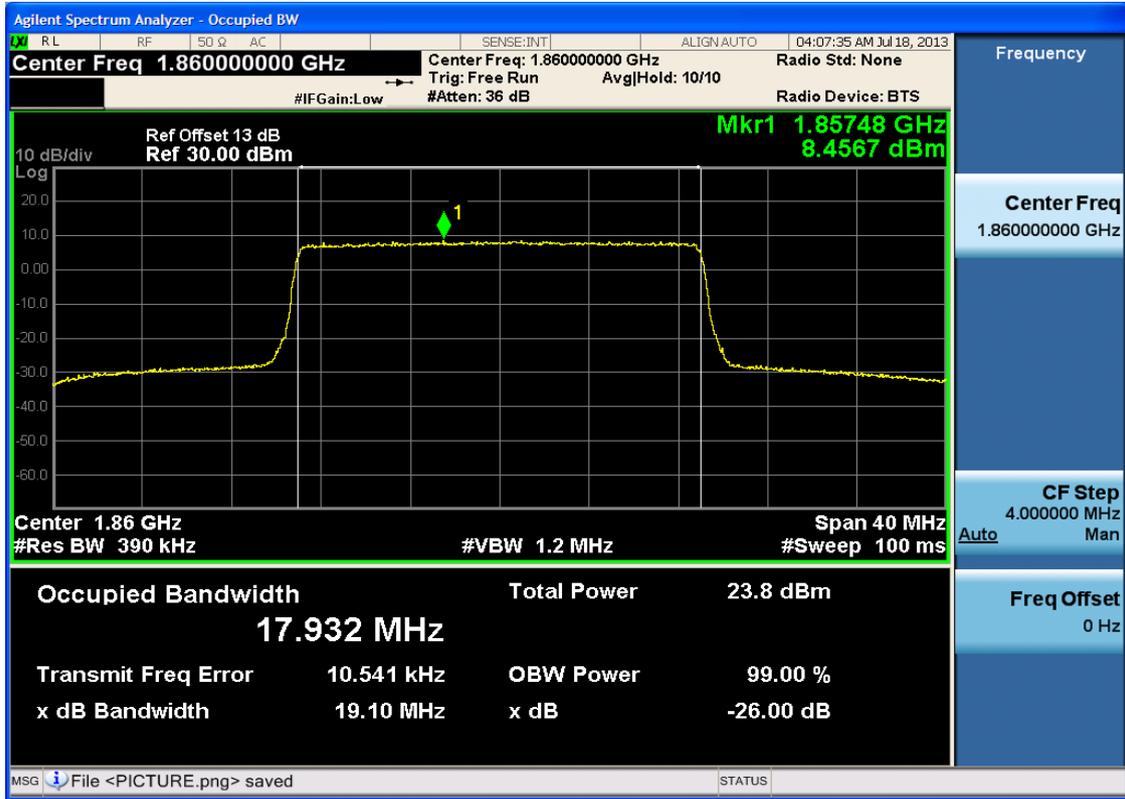## 4.3.1.1.2.3.1 Test RB = RB50#0
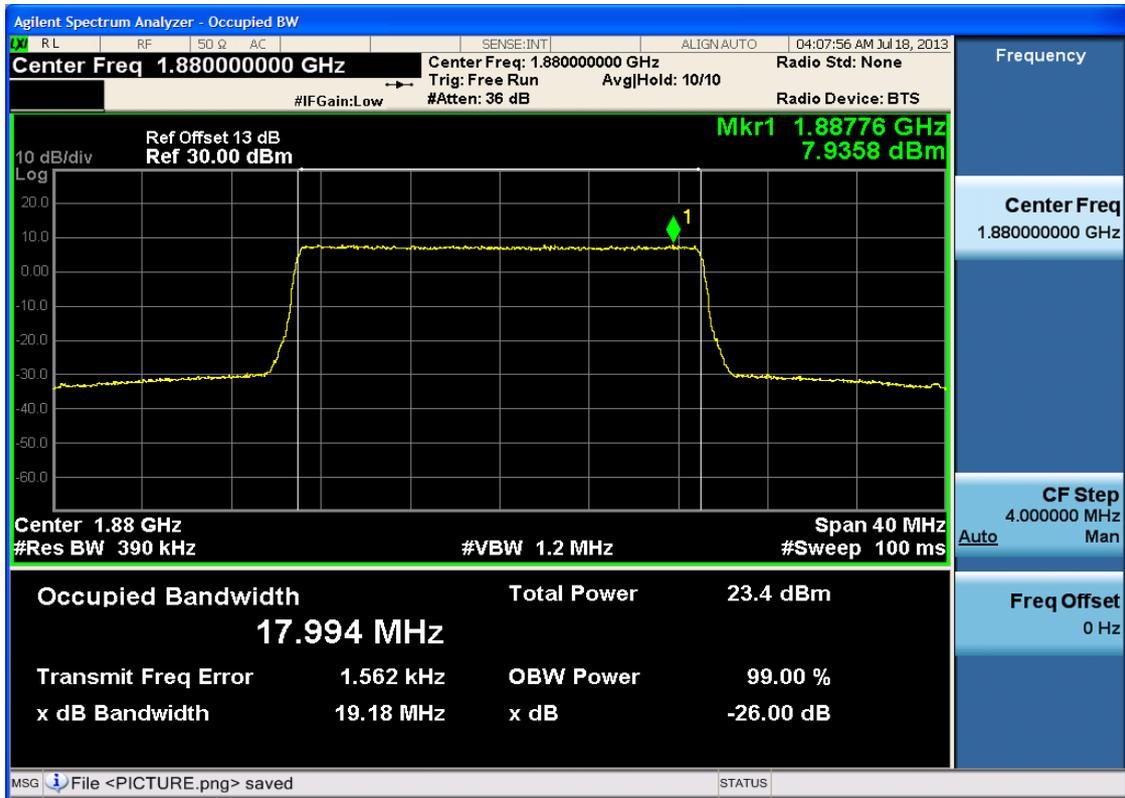
**4.3.1.1.3 Test Bandwidth = 15**

**4.3.1.1.3.1 Test Channel = LCH**

**4.3.1.1.3.1.1 Test RB = RB75#0**

## 4.3.1.1.3.2 Test Channel = MCH

## 4.3.1.1.3.2.1 Test RB = RB75#0

### 4.3.1.1.3.3 Test Channel = HCH

### 4.3.1.1.3.3.1 Test RB = RB75#0

**4.3.1.1.4 Test Bandwidth = 20**

**4.3.1.1.4.1 Test Channel = LCH**

**4.3.1.1.4.1.1 Test RB = RB100#0**

## 4.3.1.1.4.2 Test Channel = MCH

## 4.3.1.1.4.2.1 Test RB = RB100#0

## 4.3.1.1.4.3 Test Channel = HCH

## 4.3.1.1.4.3.1 Test RB = RB100#0

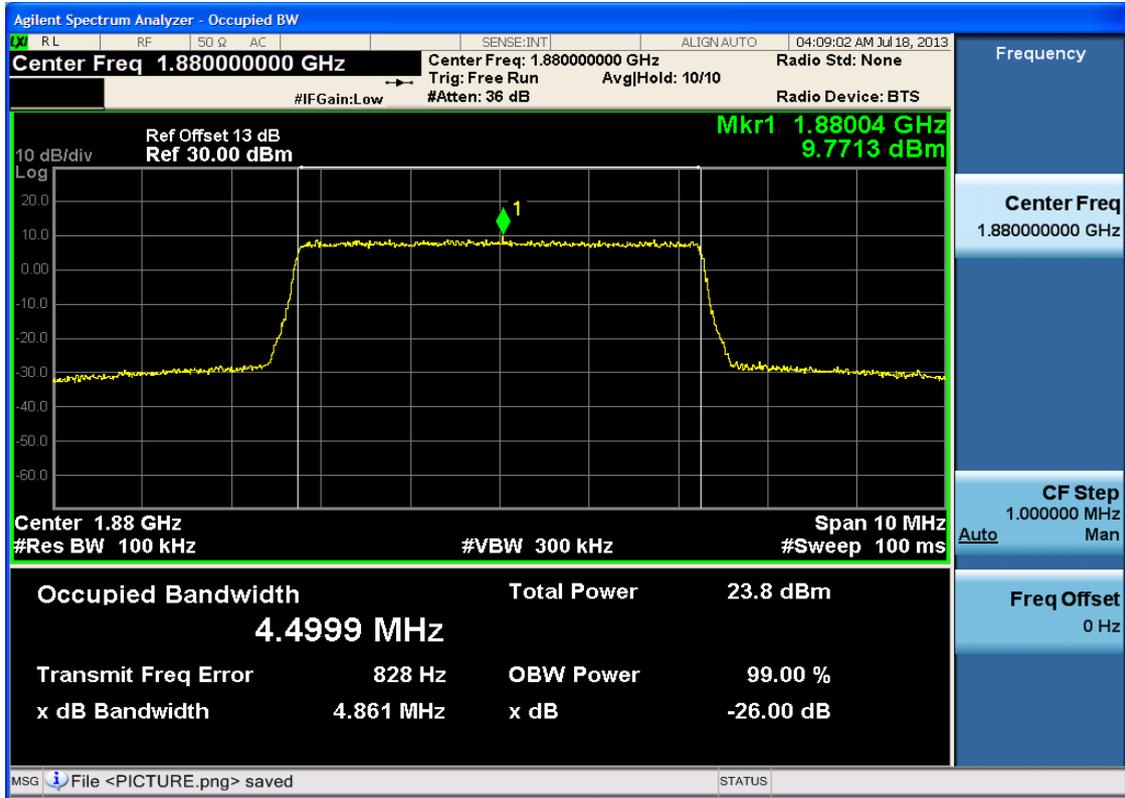**4.3.1.2 Test Mode = LTE/TM2**

**4.3.1.2.1 Test Bandwidth = 5**

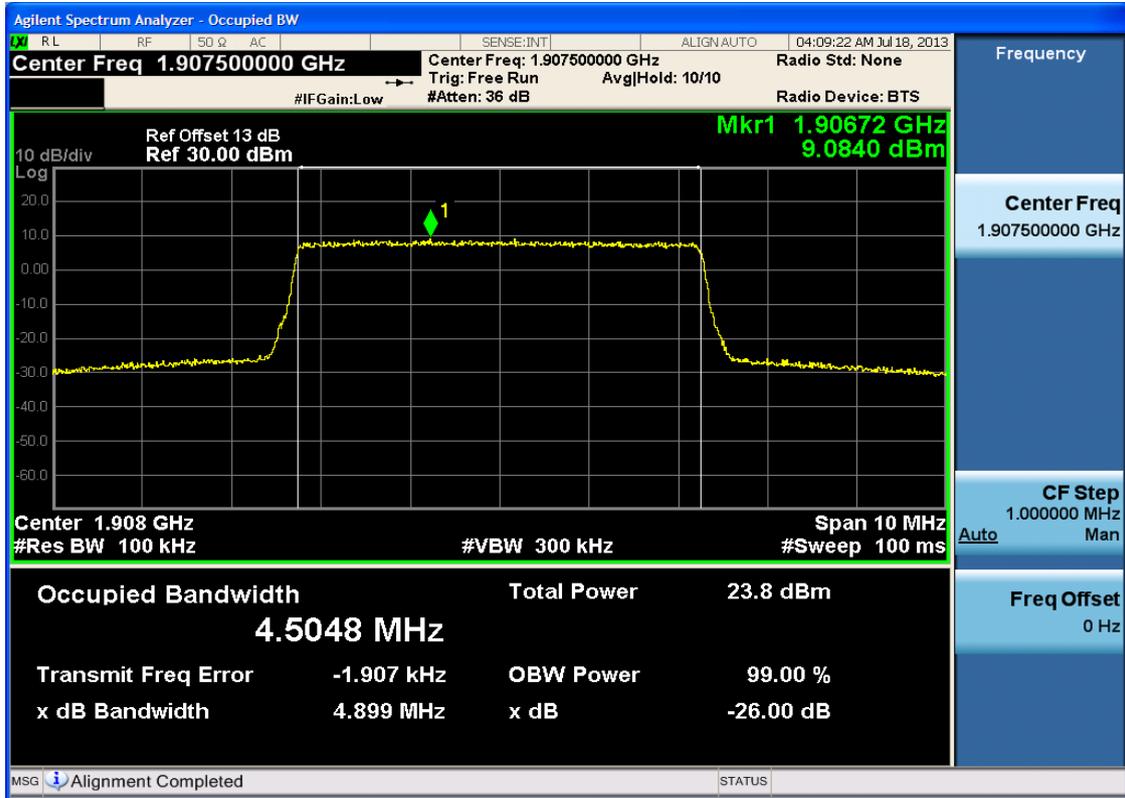**4.3.1.2.1.1 Test Channel = LCH**

**4.3.1.2.1.1.1 Test RB = RB25#0**
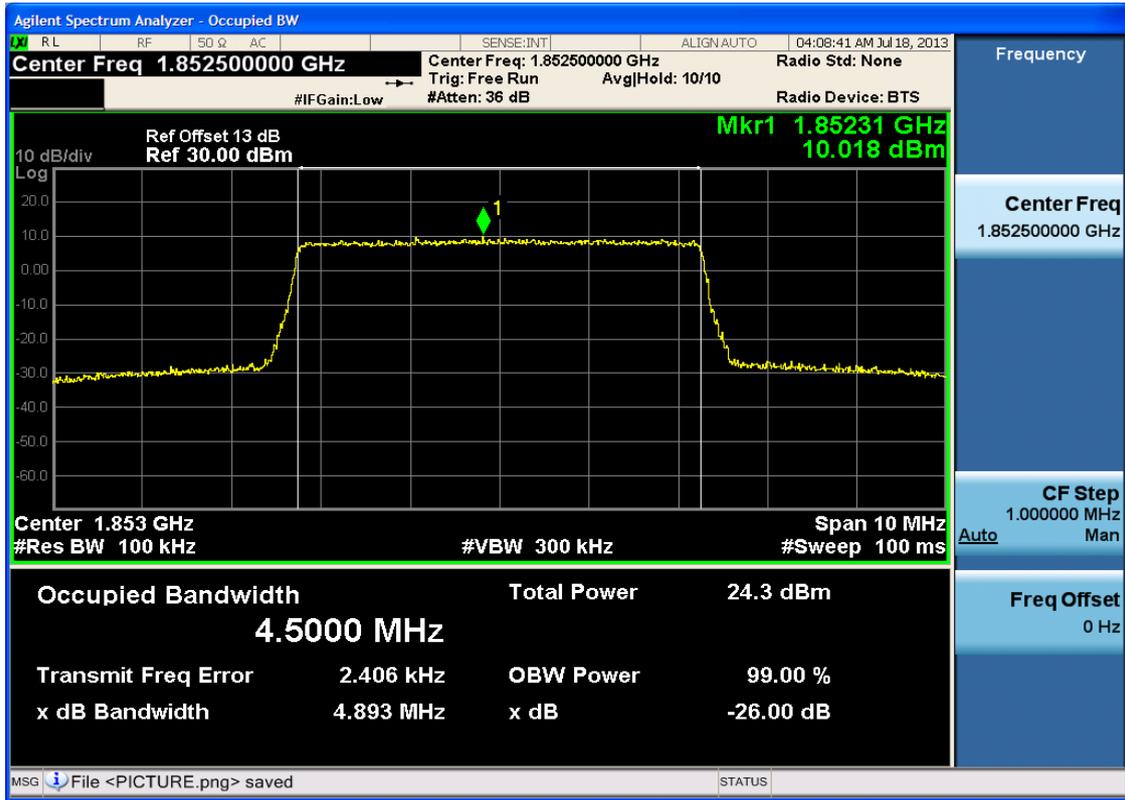
## 4.3.1.2.1.2 Test Channel = MCH

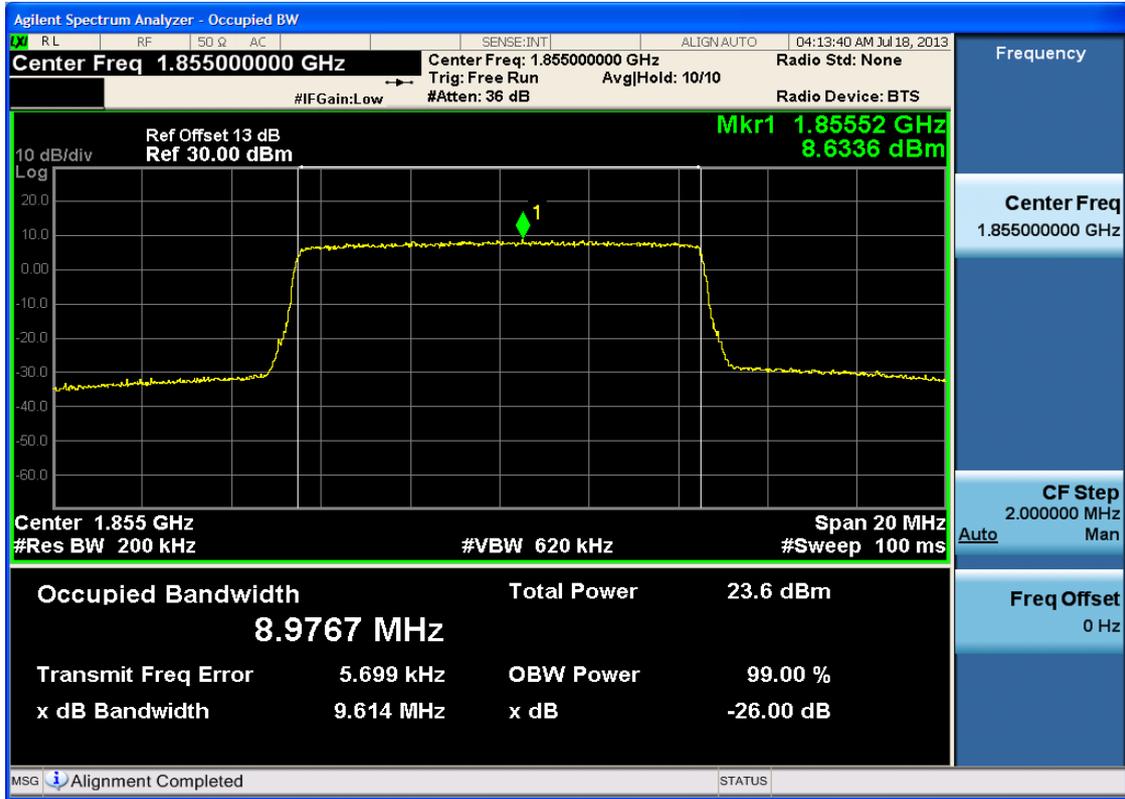### 4.3.1.2.1.2.1 Test RB = RB25#0

**4.3.1.2.1.3 Test Channel = HCH**

**4.3.1.2.1.3.1 Test RB = RB25#0**
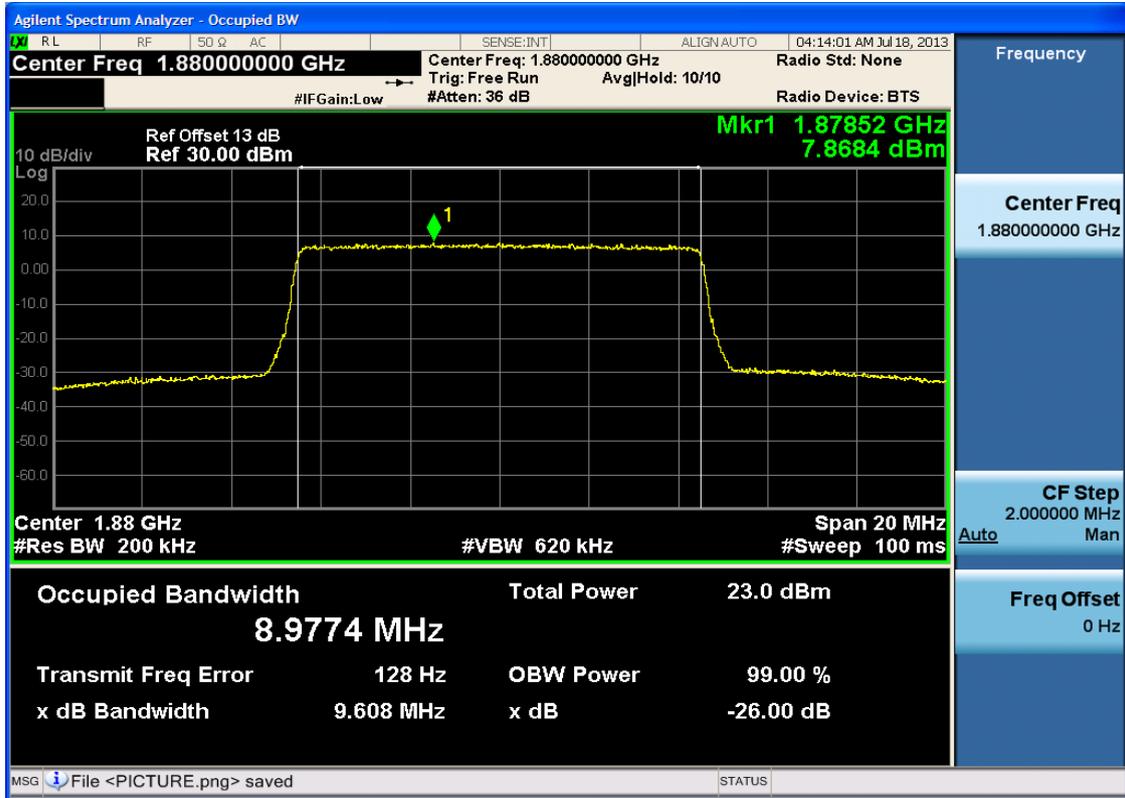
**4.3.1.2.2 Test Bandwidth = 10**

**4.3.1.2.2.1 Test Channel = LCH**
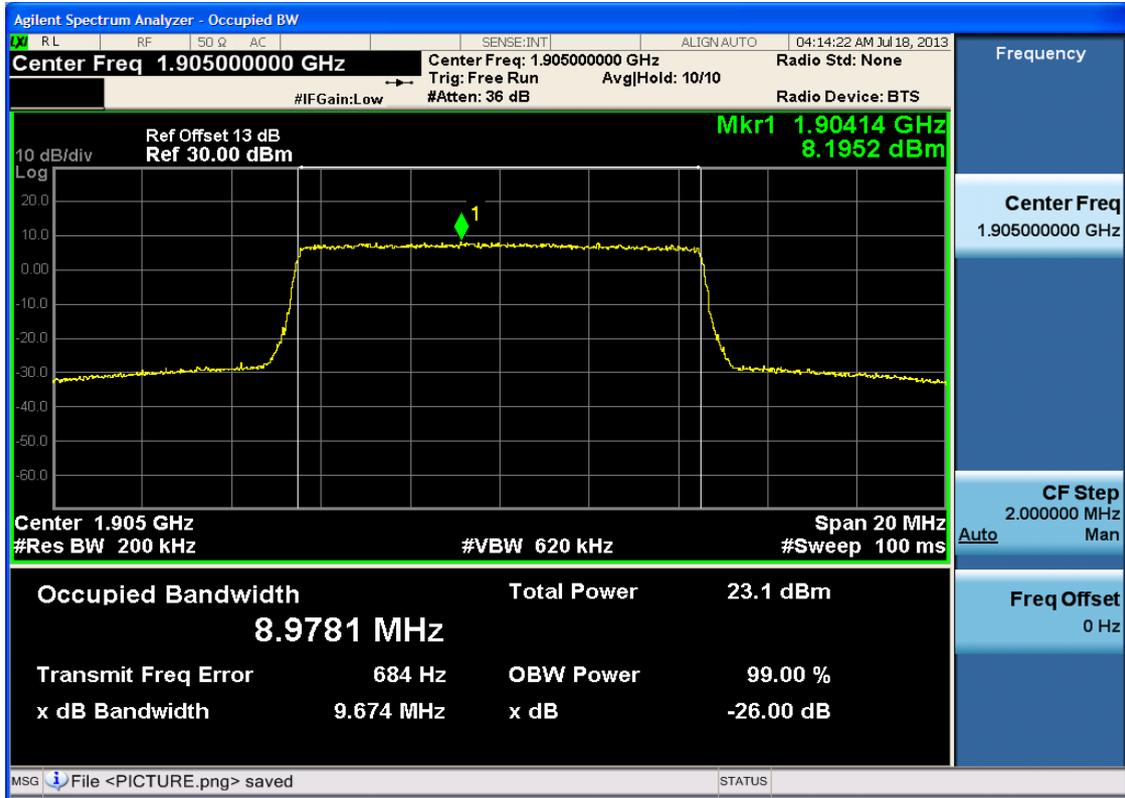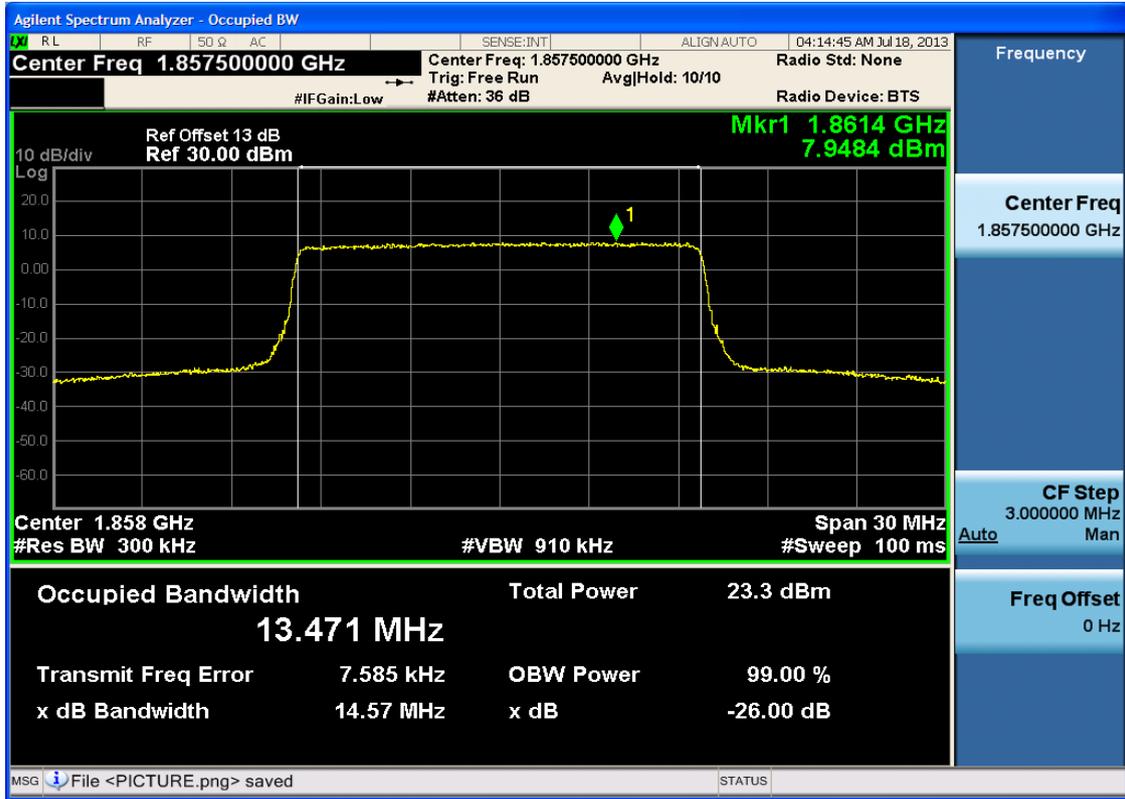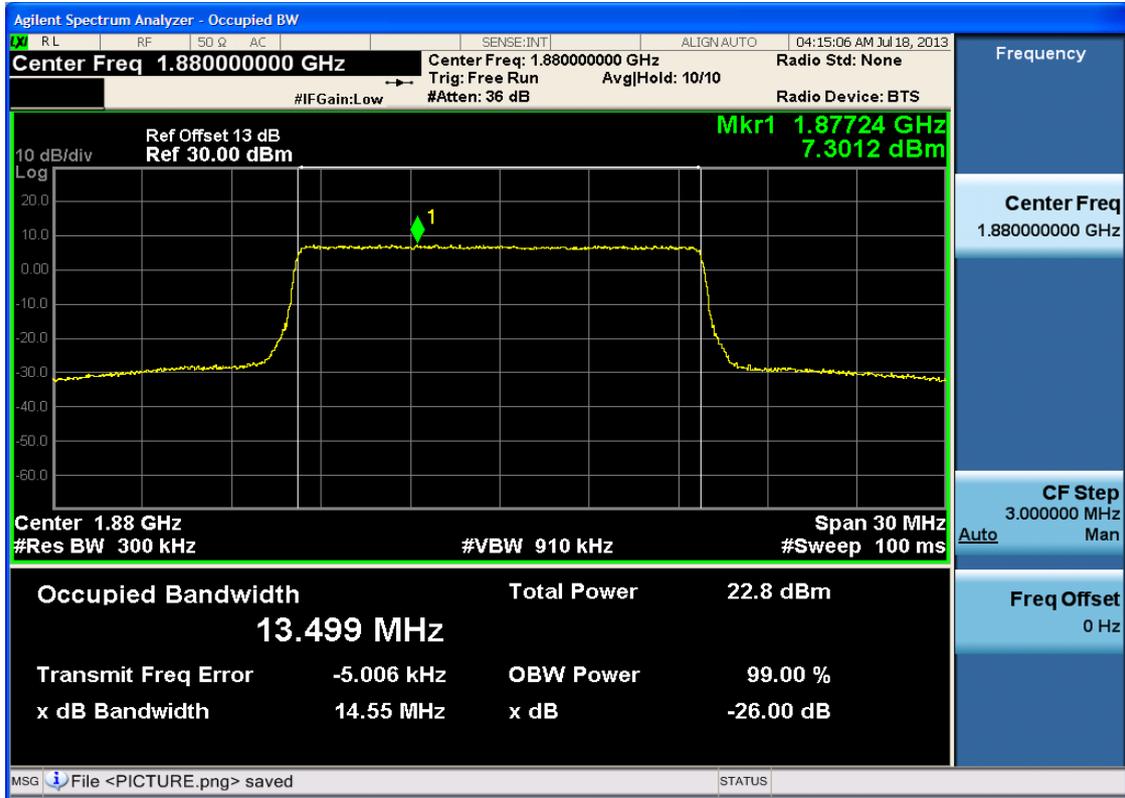
**4.3.1.2.2.1.1 Test RB = RB50#0**

## 4.3.1.2.2.2 Test Channel = MCH

### 4.3.1.2.2.2.1 Test RB = RB50#0

**4.3.1.2.2.3 Test Channel = HCH**

**4.3.1.2.2.3.1 Test RB = RB50#0**

**4.3.1.2.3 Test Bandwidth = 15**

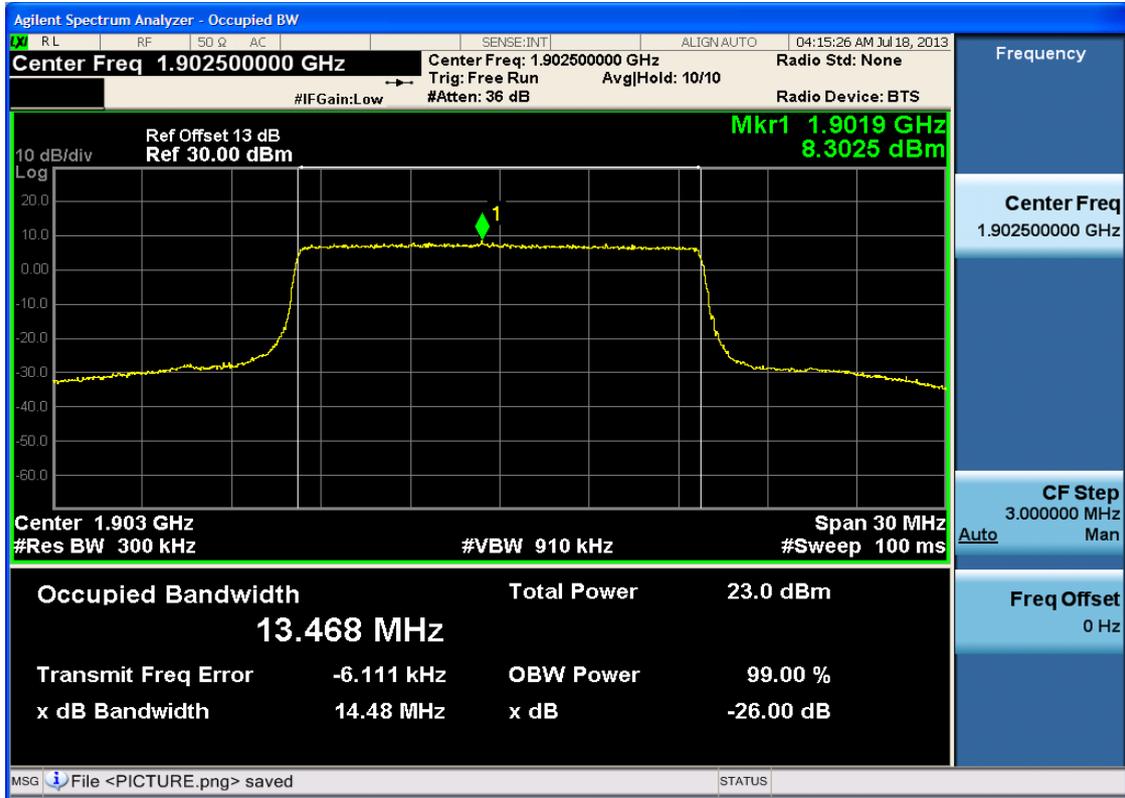**4.3.1.2.3.1 Test Channel = LCH**

**4.3.1.2.3.1.1 Test RB = RB75#0**

**4.3.1.2.3.2 Test Channel = MCH**

**4.3.1.2.3.2.1 Test RB = RB75#0**

## 4.3.1.2.3.3 Test Channel = HCH

## 4.3.1.2.3.3.1 Test RB = RB75#0

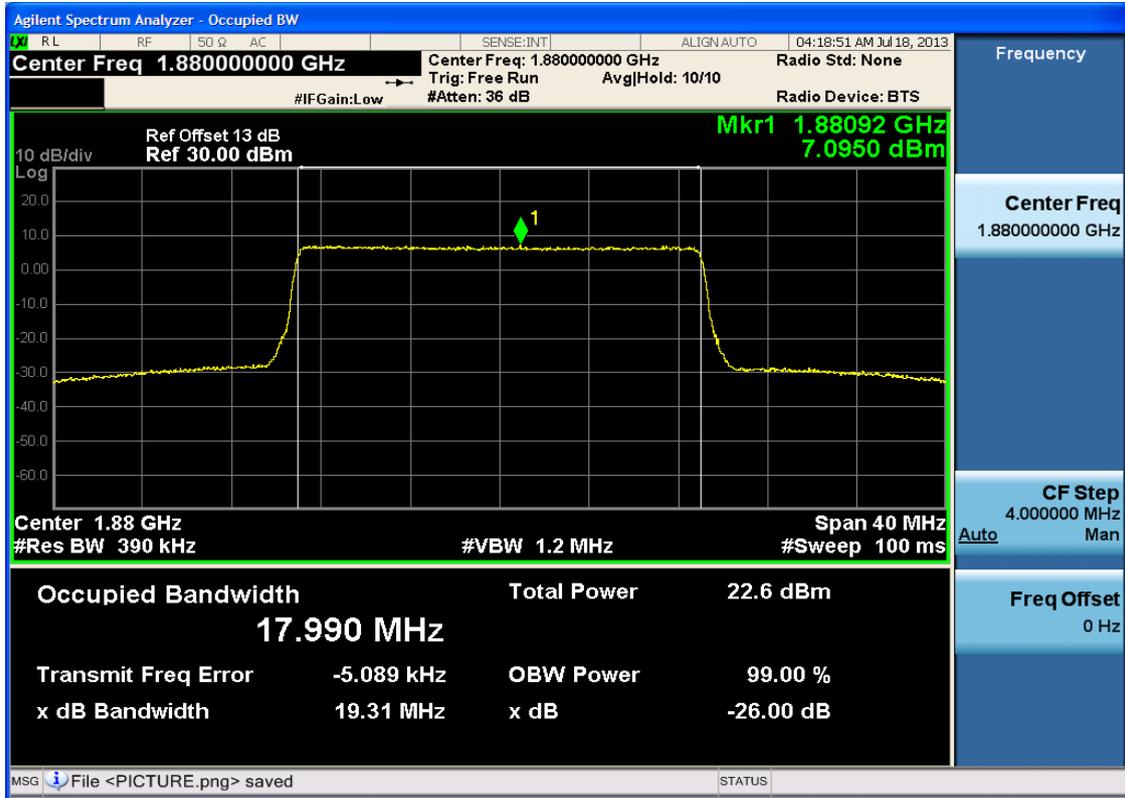## 4.3.1.2.4 Test Bandwidth = 20

## 4.3.1.2.4.1 Test Channel = LCH

## 4.3.1.2.4.1.1 Test RB = RB100#0

## 4.3.1.2.4.2 Test Channel = MCH

### 4.3.1.2.4.2.1 Test RB = RB100#0

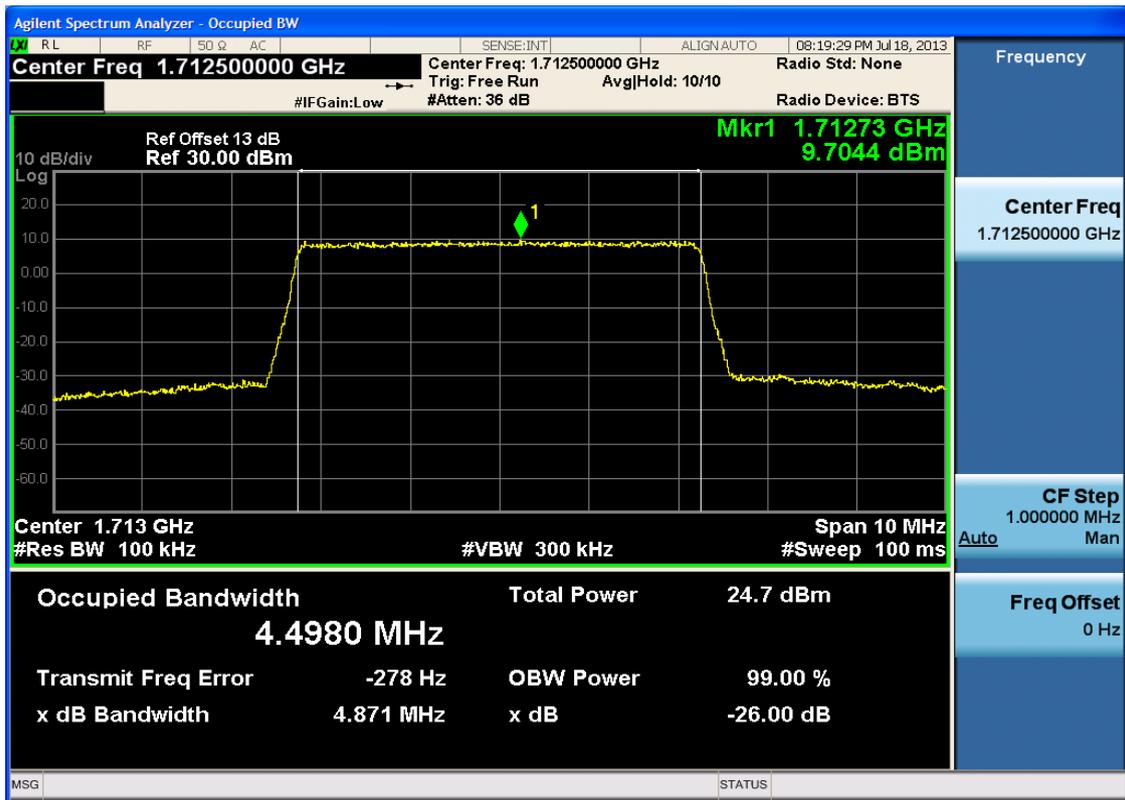## 4.3.1.2.4.3 Test Channel = HCH

## 4.3.1.2.4.3.1 Test RB = RB100#0

## 4.3.2 Test Band = BAND4

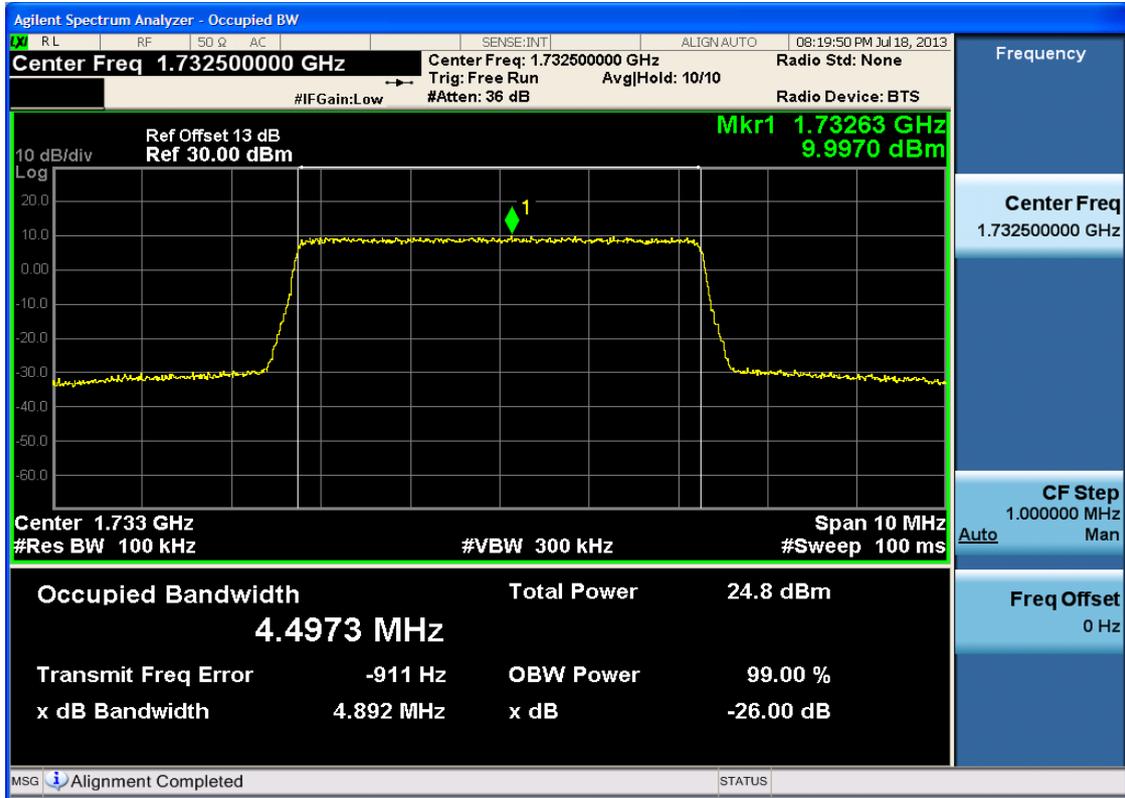## 4.3.2.1 Test Mode = LTE/TM1

## 4.3.2.1.1 Test Bandwidth = 5

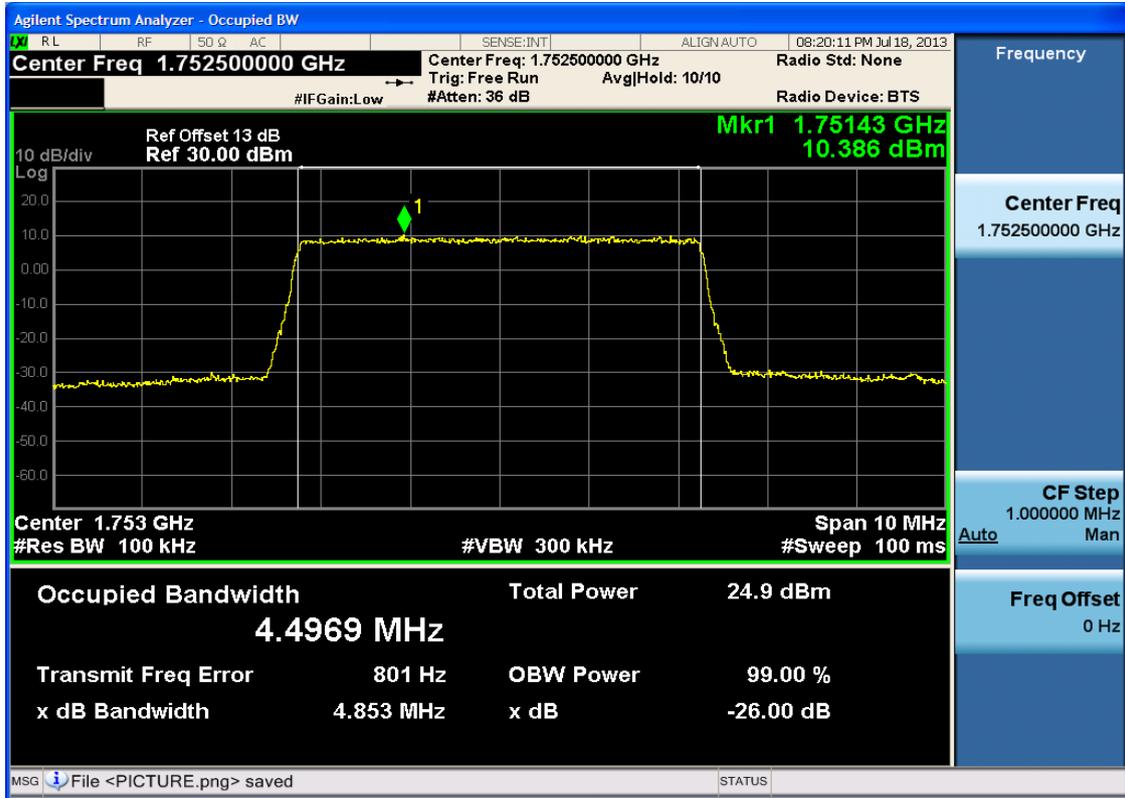## 4.3.2.1.1.1 Test Channel = LCH

## 4.3.2.1.1.1.1 Test RB = RB25#0

**4.3.2.1.1.2 Test Channel = MCH**

**4.3.2.1.1.2.1 Test RB = RB25#0**

### 4.3.2.1.1.3 Test Channel = HCH

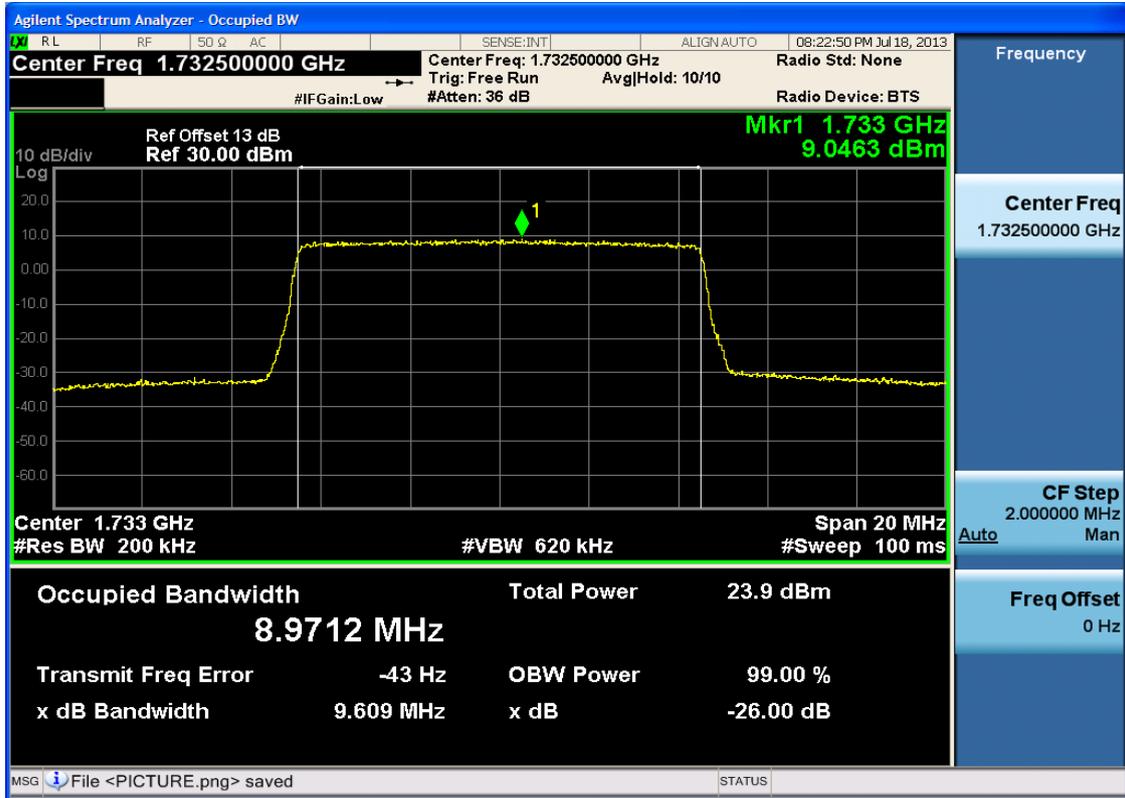### 4.3.2.1.1.3.1 Test RB = RB25#0

**4.3.2.1.2 Test Bandwidth = 10**

**4.3.2.1.2.1 Test Channel = LCH**

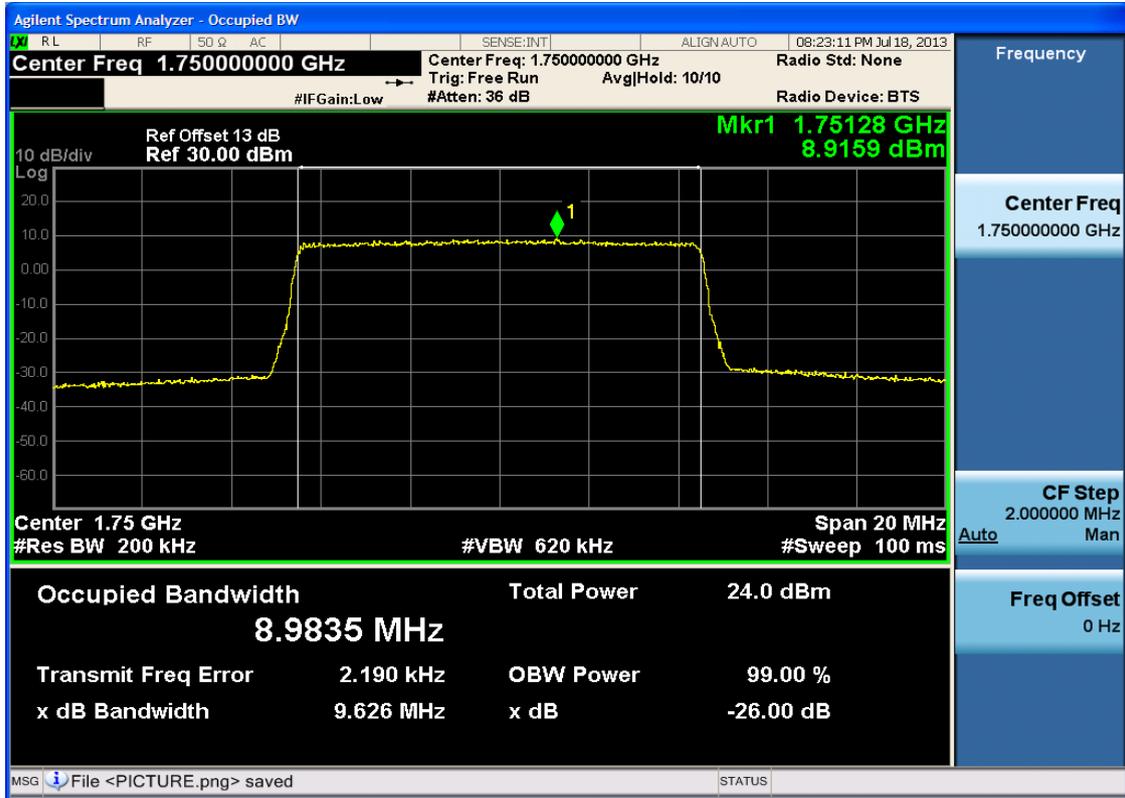**4.3.2.1.2.1.1 Test RB = RB50#0**

### 4.3.2.1.2.2 Test Channel = MCH

### 4.3.2.1.2.2.1 Test RB = RB50#0
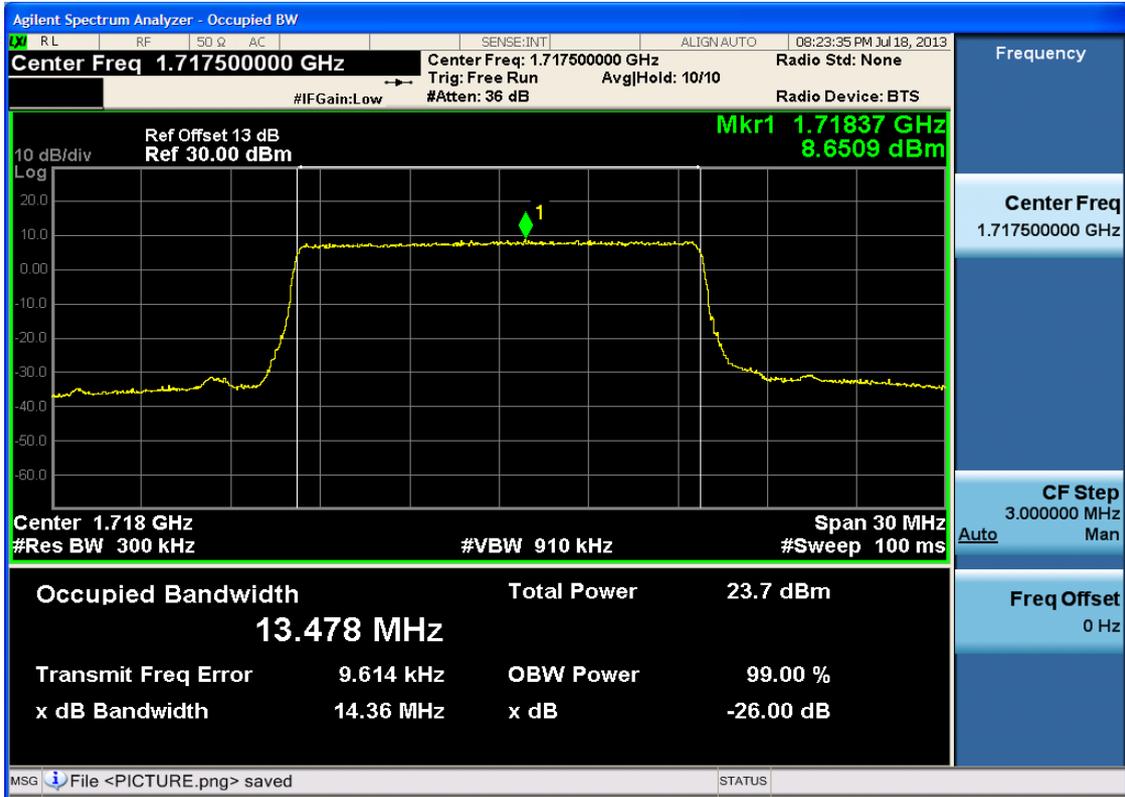
### 4.3.2.1.2.3 Test Channel = HCH

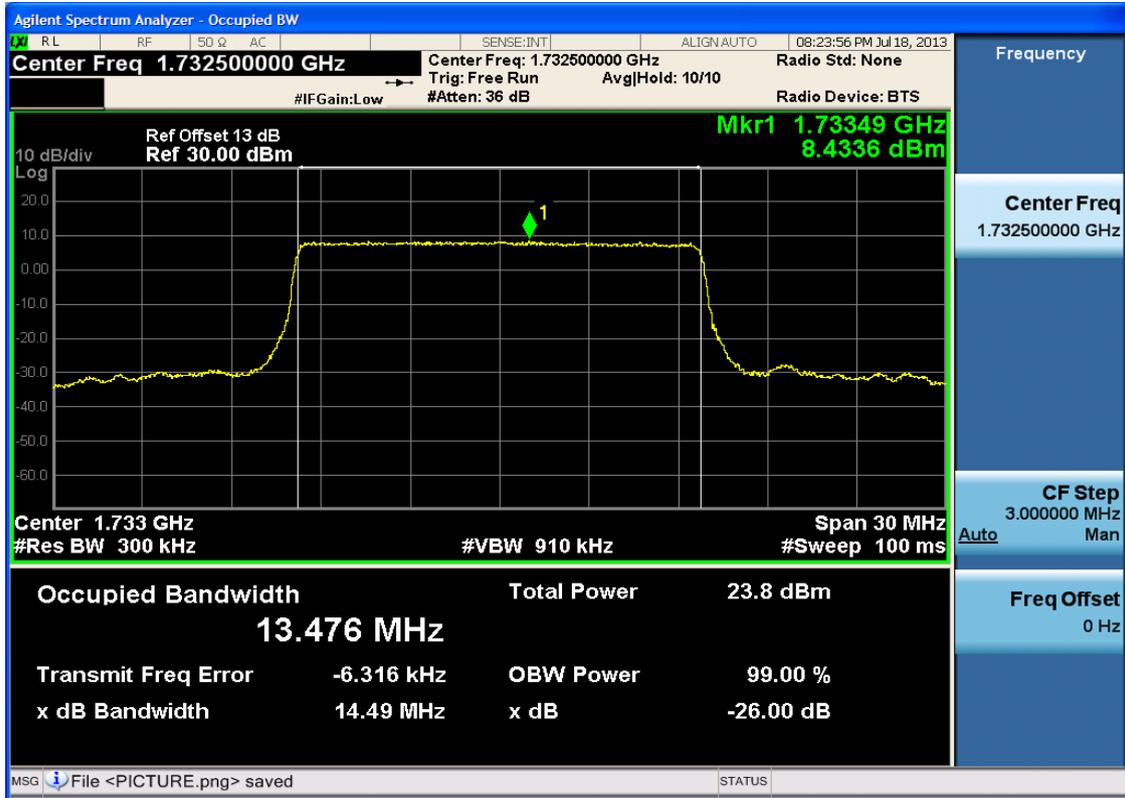### 4.3.2.1.2.3.1 Test RB = RB50#0

**4.3.2.1.3 Test Bandwidth = 15**

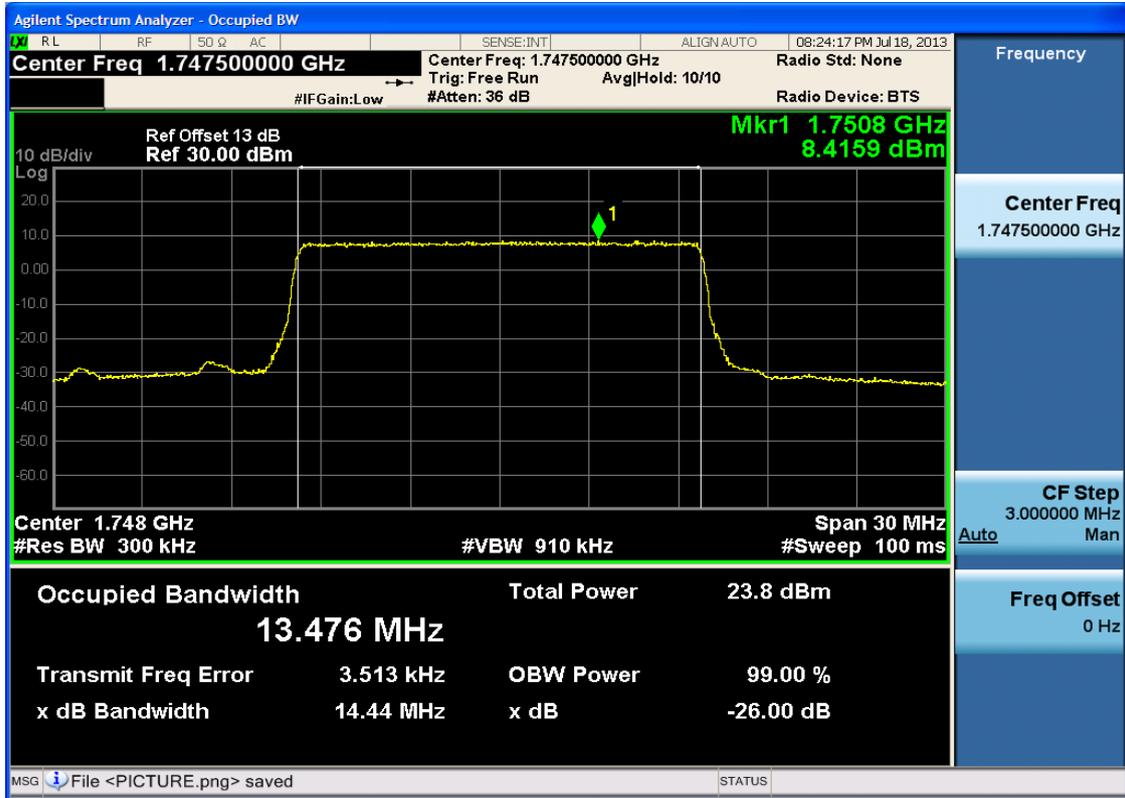**4.3.2.1.3.1 Test Channel = LCH**

**4.3.2.1.3.1.1 Test RB = RB75#0**

**4.3.2.1.3.2 Test Channel = MCH**

**4.3.2.1.3.2.1 Test RB = RB75#0**

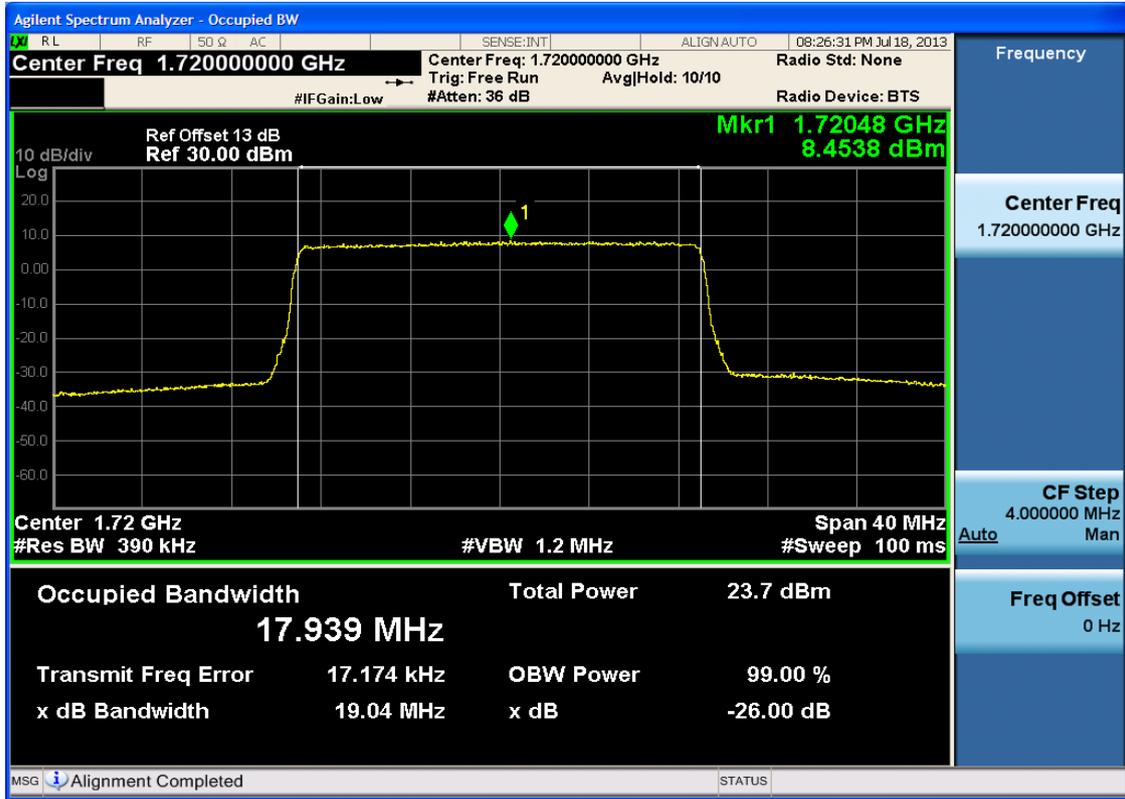**4.3.2.1.3.3 Test Channel = HCH**

**4.3.2.1.3.3.1 Test RB = RB75#0**

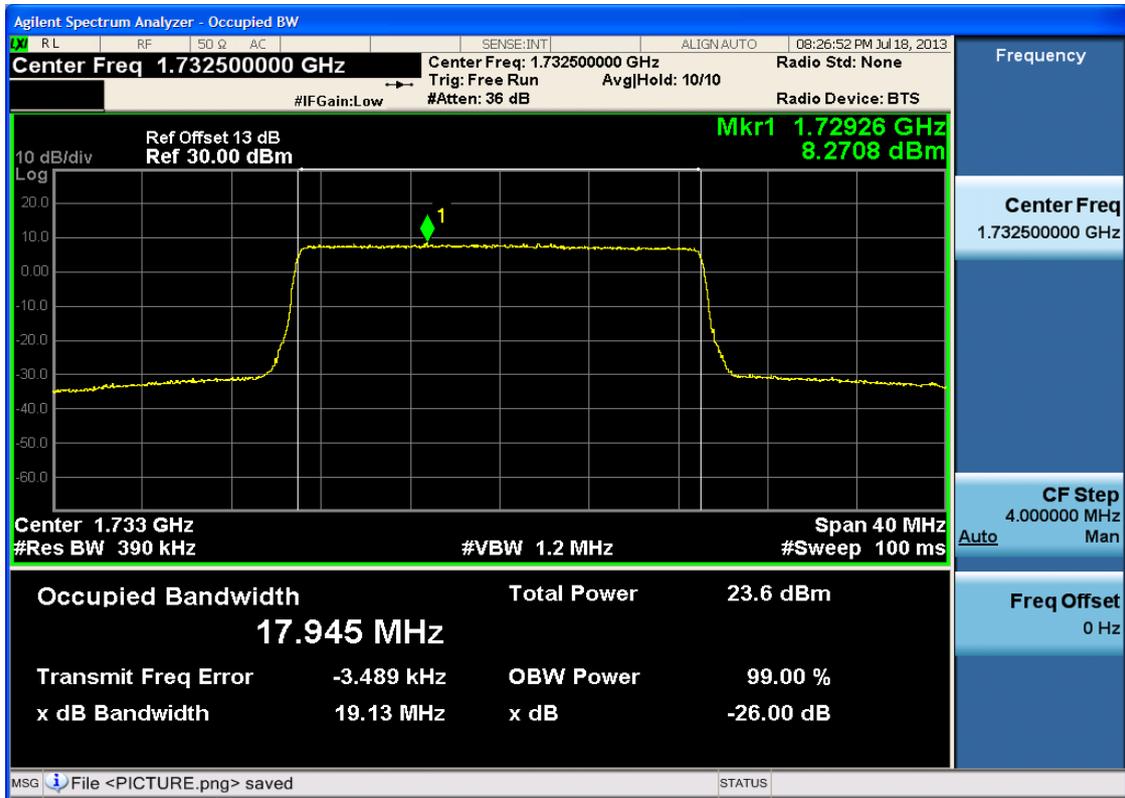### 4.3.2.1.4 Test Bandwidth = 20

### 4.3.2.1.4.1 Test Channel = LCH
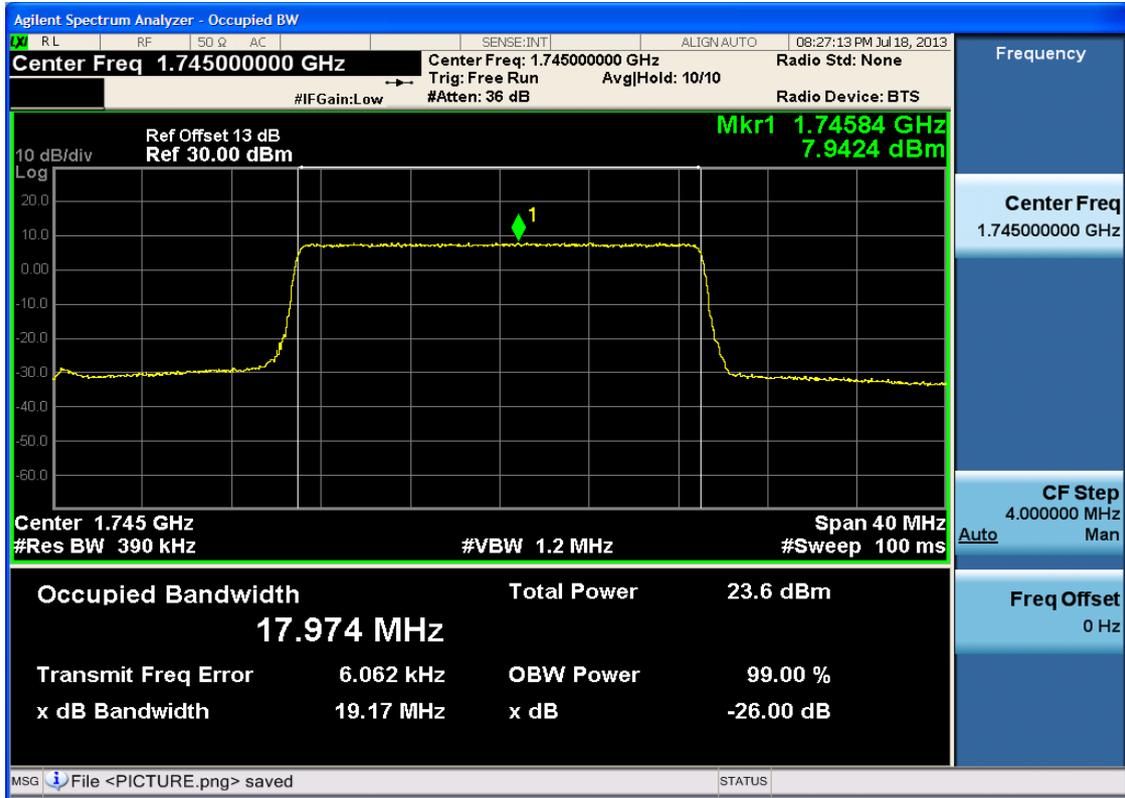
### 4.3.2.1.4.1.1 Test RB = RB100#0

**4.3.2.1.4.2 Test Channel = MCH**

**4.3.2.1.4.2.1 Test RB = RB100#0**

## 4.3.2.1.4.3 Test Channel = HCH
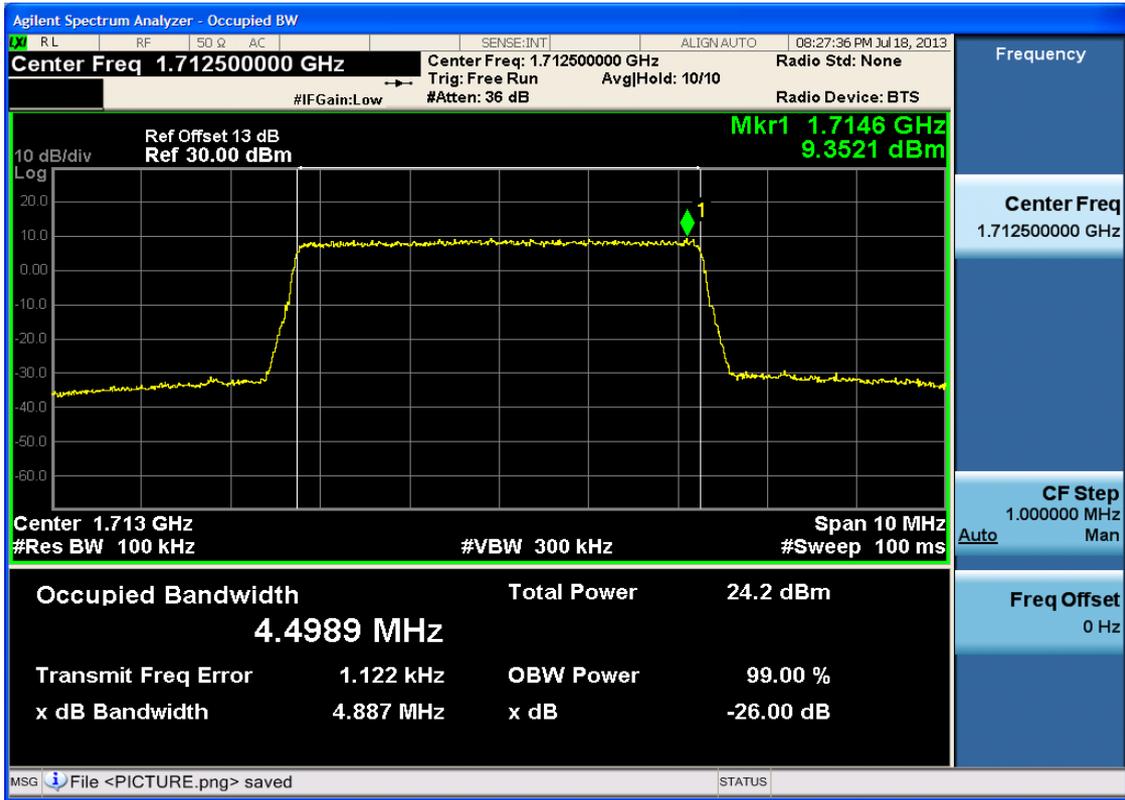
## 4.3.2.1.4.3.1 Test RB = RB100#0
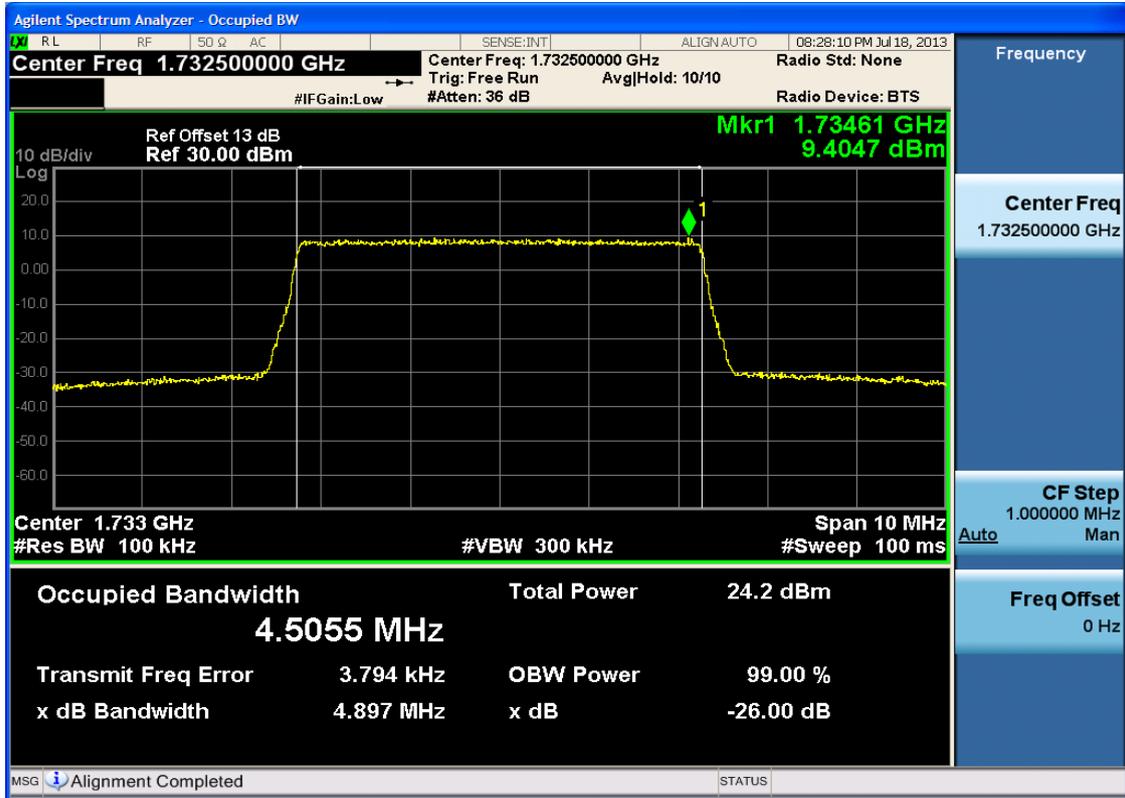
**4.3.2.2 Test Mode = LTE/TM2**

**4.3.2.2.1 Test Bandwidth = 5**

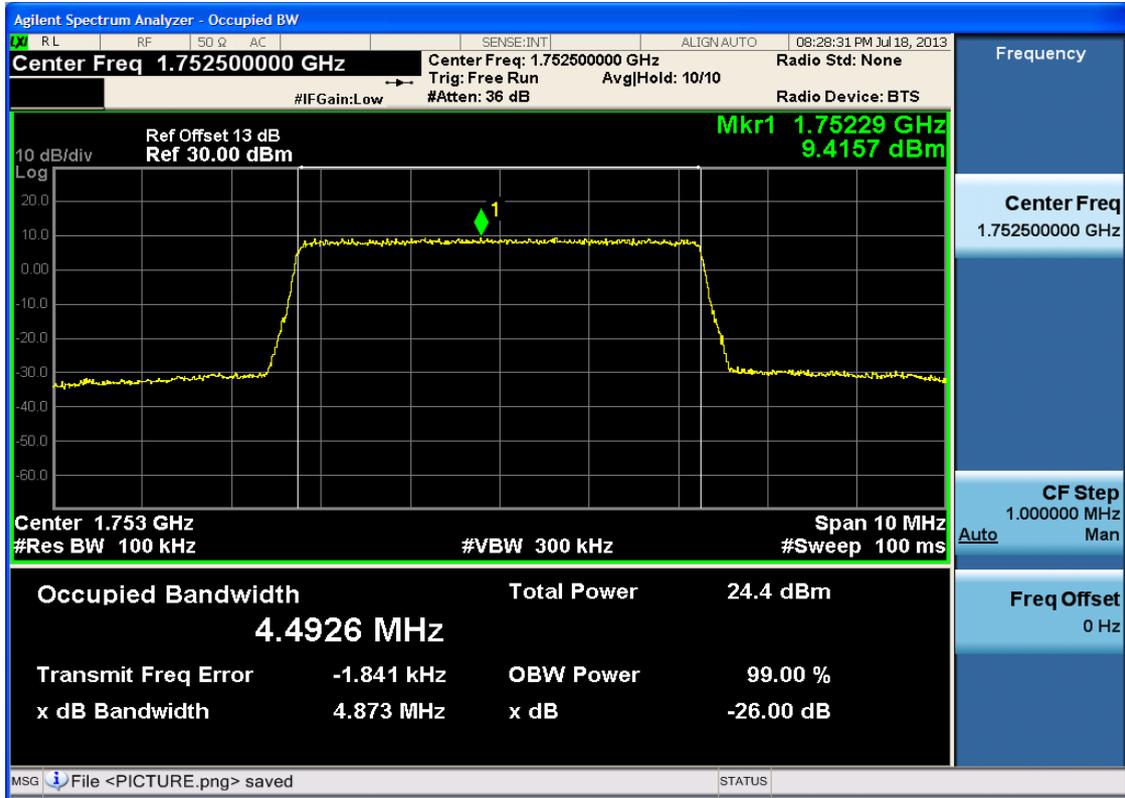**4.3.2.2.1.1 Test Channel = LCH**

**4.3.2.2.1.1.1 Test RB = RB25#0**

## 4.3.2.2.1.2 Test Channel = MCH

### 4.3.2.2.1.2.1 Test RB = RB25#0
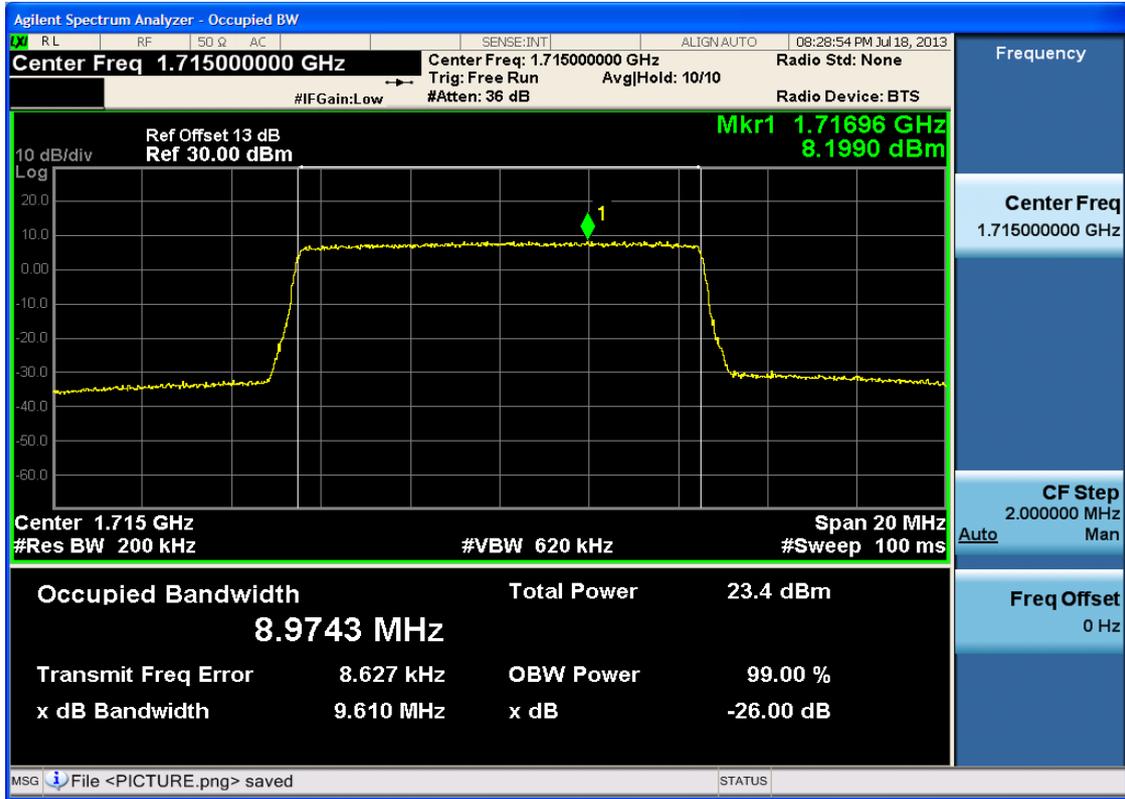
### 4.3.2.2.1.3 Test Channel = HCH

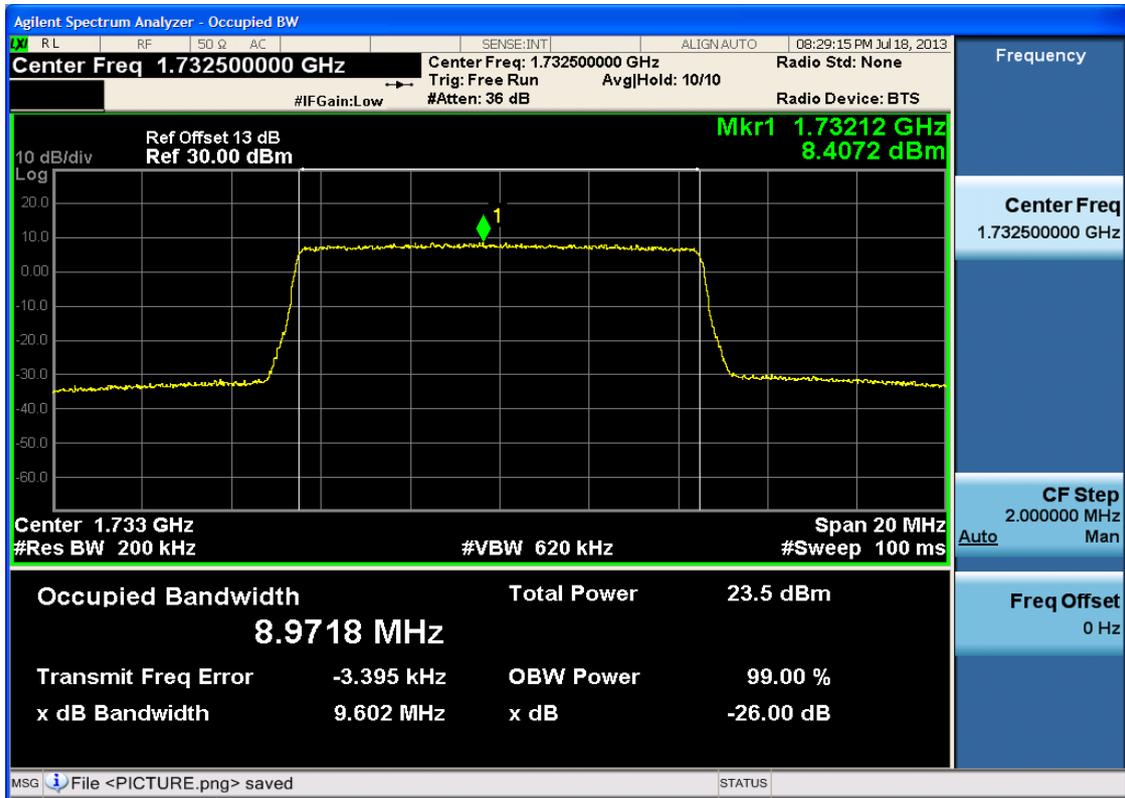### 4.3.2.2.1.3.1 Test RB = RB25#0

## 4.3.2.2.2 Test Bandwidth = 10

## 4.3.2.2.2.1 Test Channel = LCH
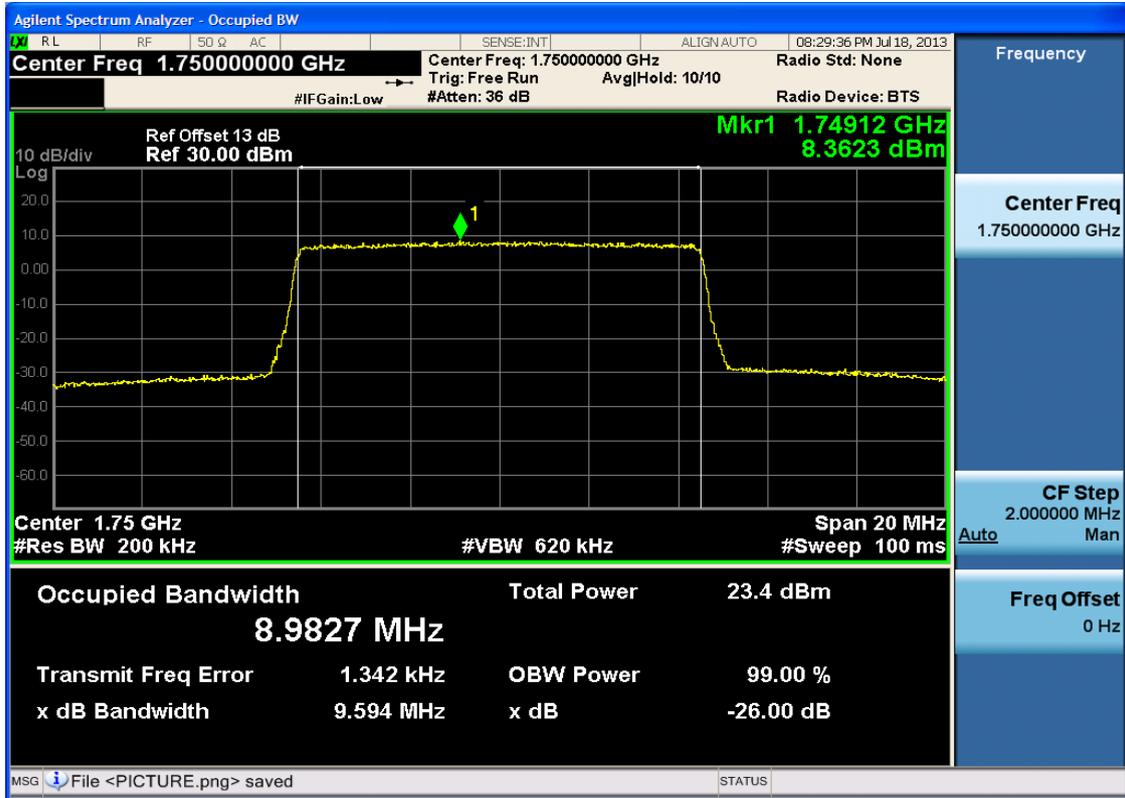
## 4.3.2.2.2.1.1 Test RB = RB50#0

## 4.3.2.2.2.2 Test Channel = MCH

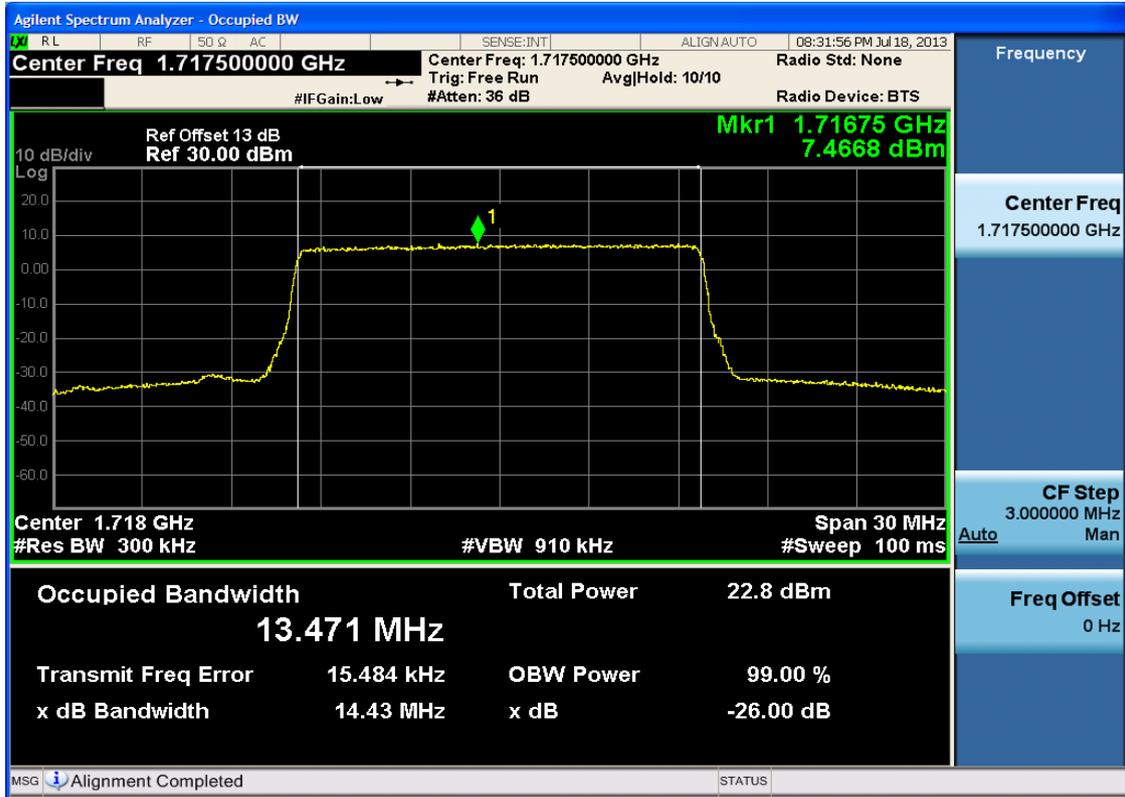### 4.3.2.2.2.2.1 Test RB = RB50#0

**4.3.2.2.2.3 Test Channel = HCH**

**4.3.2.2.2.3.1 Test RB = RB50#0**

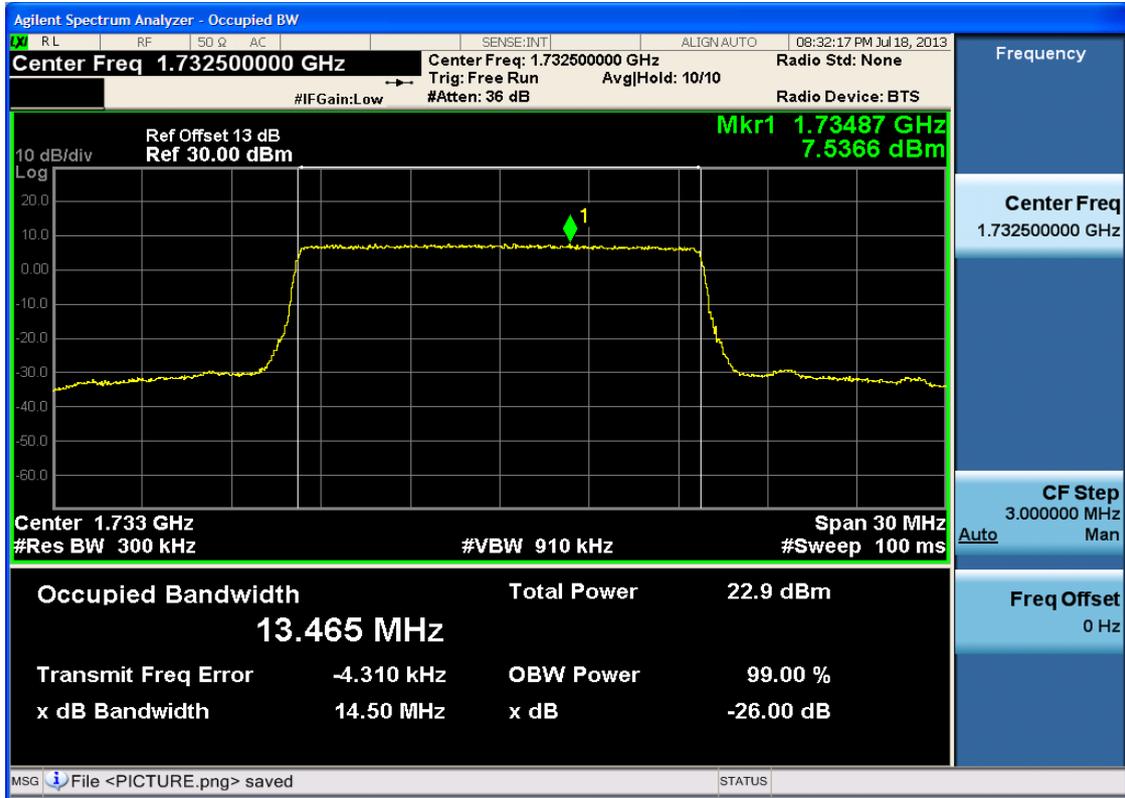**4.3.2.2.3 Test Bandwidth = 15**

**4.3.2.2.3.1 Test Channel = LCH**

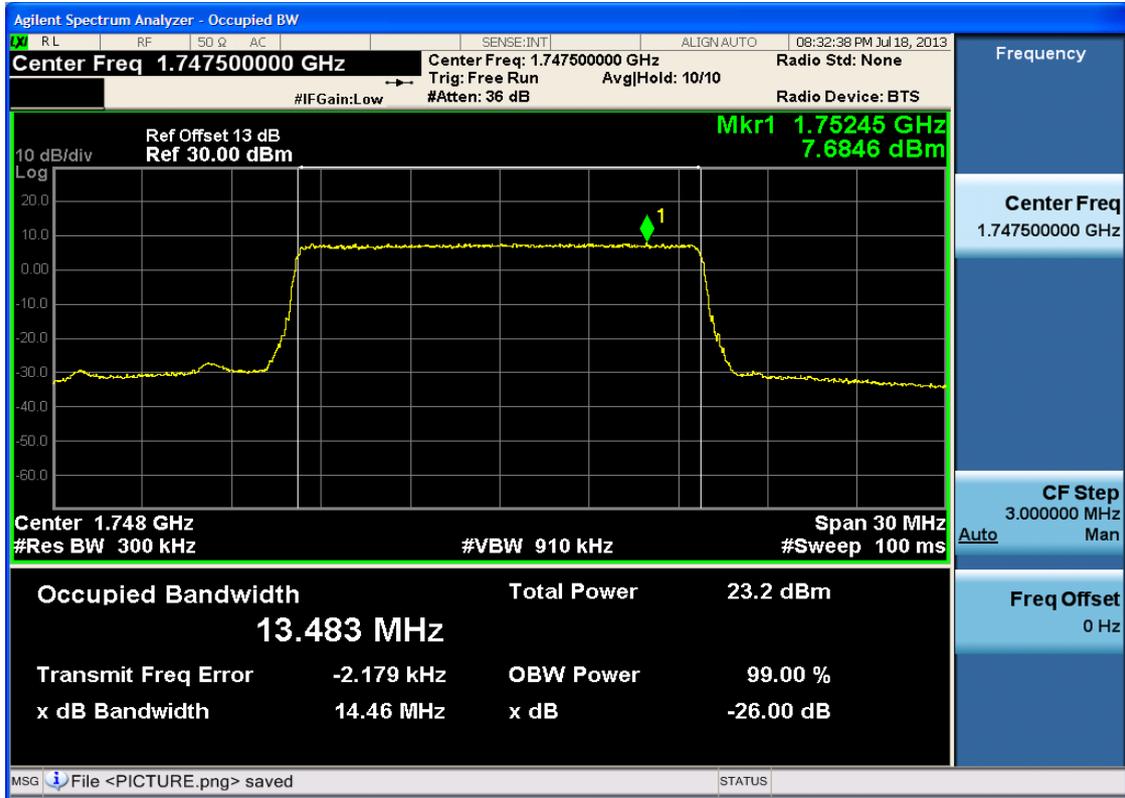**4.3.2.2.3.1.1 Test RB = RB75#0**

## 4.3.2.2.3.2 Test Channel = MCH

## 4.3.2.2.3.2.1 Test RB = RB75#0
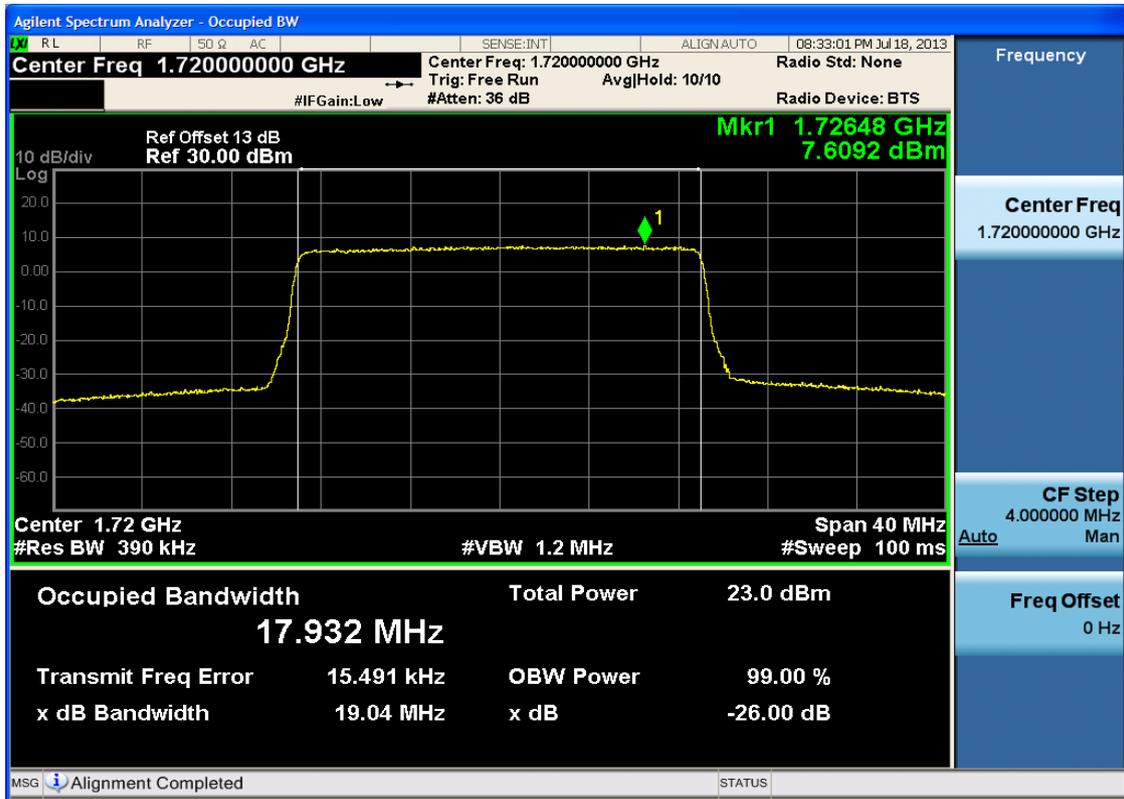
### 4.3.2.2.3.3 Test Channel = HCH
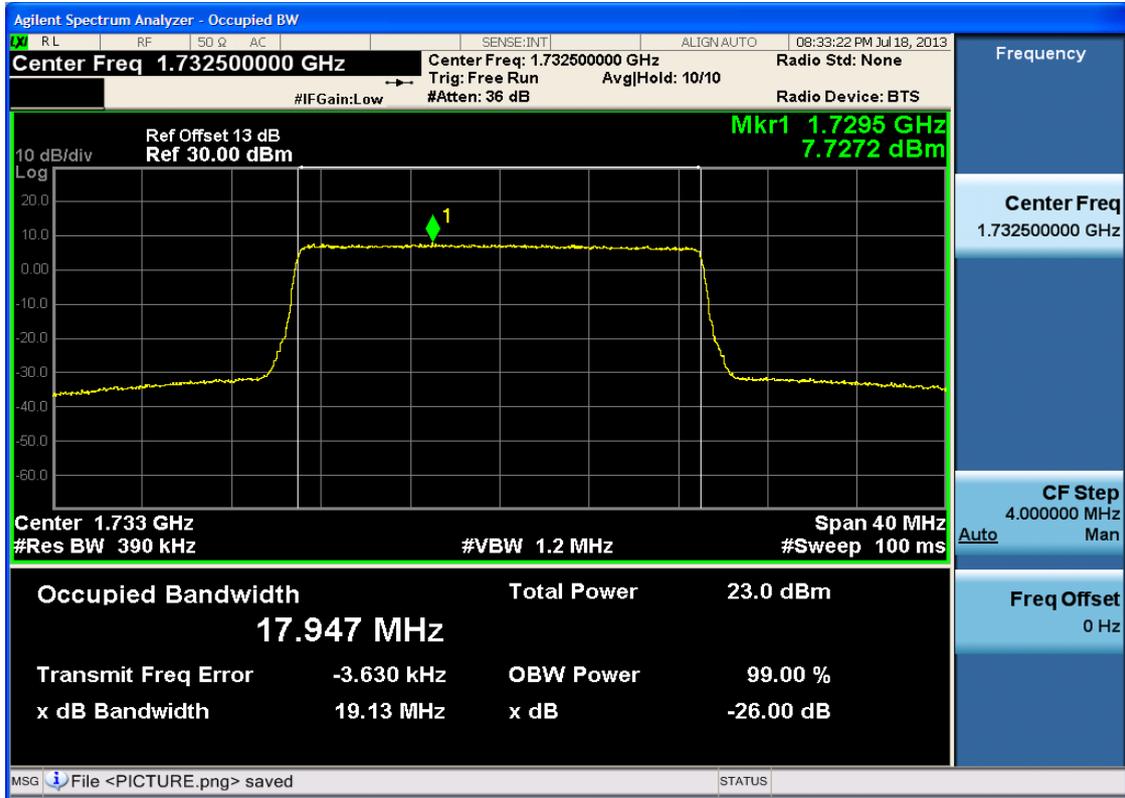
### 4.3.2.2.3.3.1 Test RB = RB75#0

**4.3.2.2.4 Test Bandwidth = 20**

**4.3.2.2.4.1 Test Channel = LCH**

**4.3.2.2.4.1.1 Test RB = RB100#0**

## 4.3.2.2.4.2 Test Channel = MCH

### 4.3.2.2.4.2.1 Test RB = RB100#0

### 4.3.2.2.4.3 Test Channel = HCH
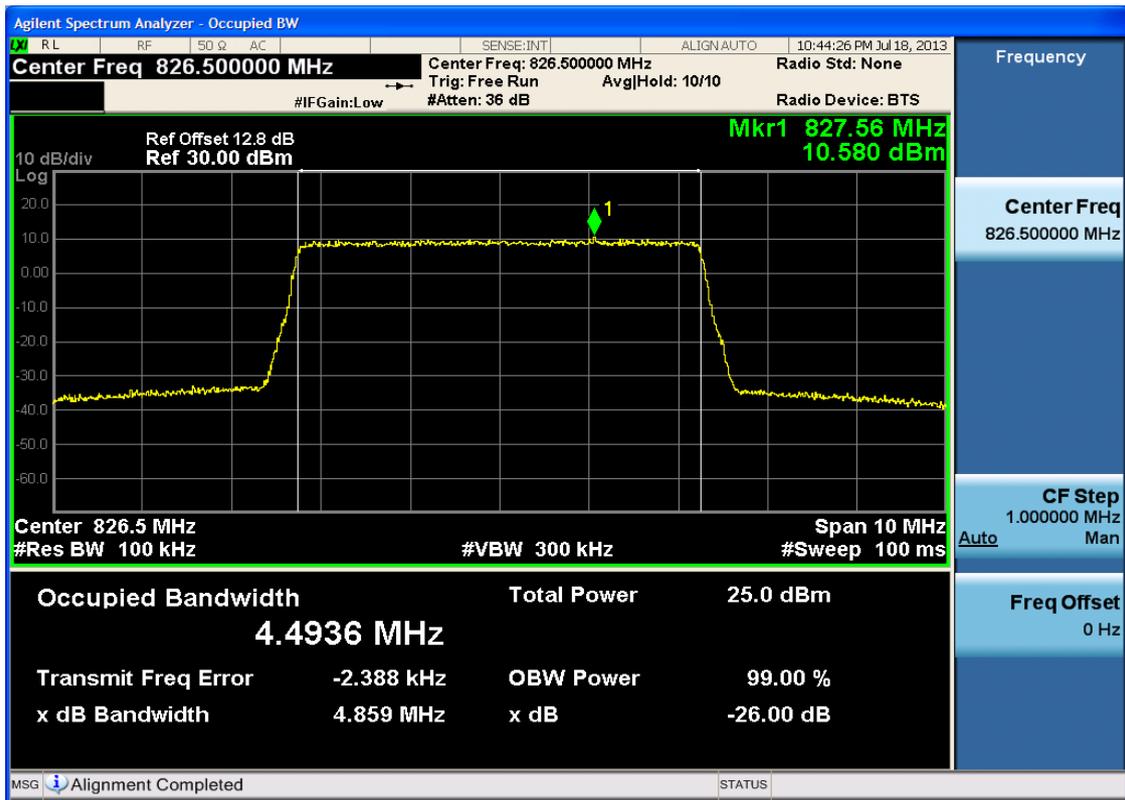
### 4.3.2.2.4.3.1 Test RB = RB100#0

**4.3.3 Test Band = BAND5**

**4.3.3.1 Test Mode = LTE/TM1**
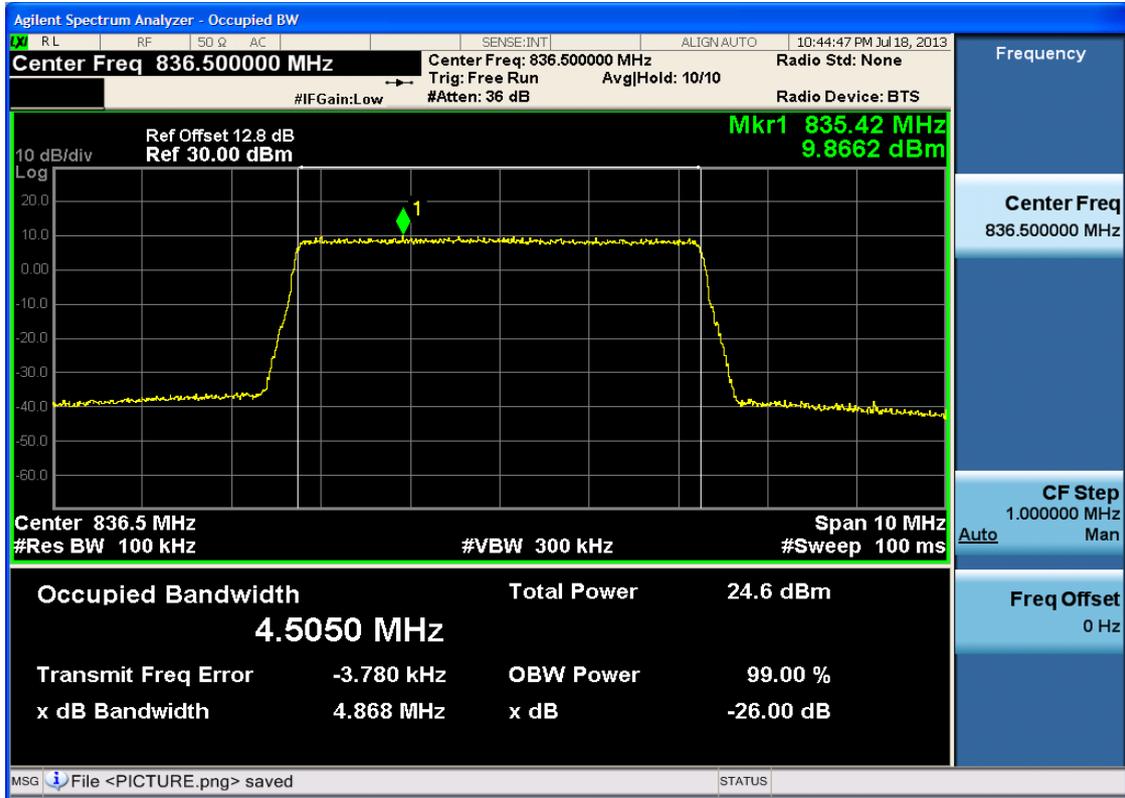
**4.3.3.1.1 Test Bandwidth = 5**

**4.3.3.1.1.1 Test Channel = LCH**
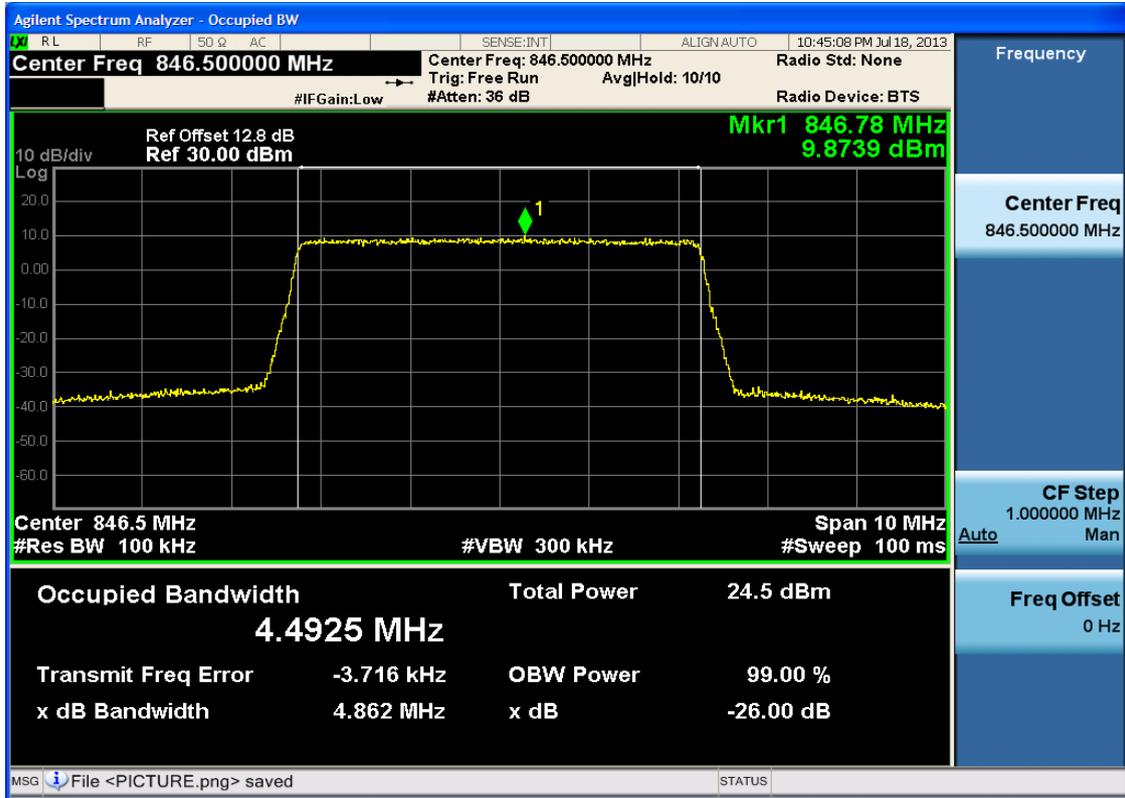
**4.3.3.1.1.1.1 Test RB = RB25#0**

## 4.3.3.1.1.2 Test Channel = MCH

## 4.3.3.1.1.2.1 Test RB = RB25#0

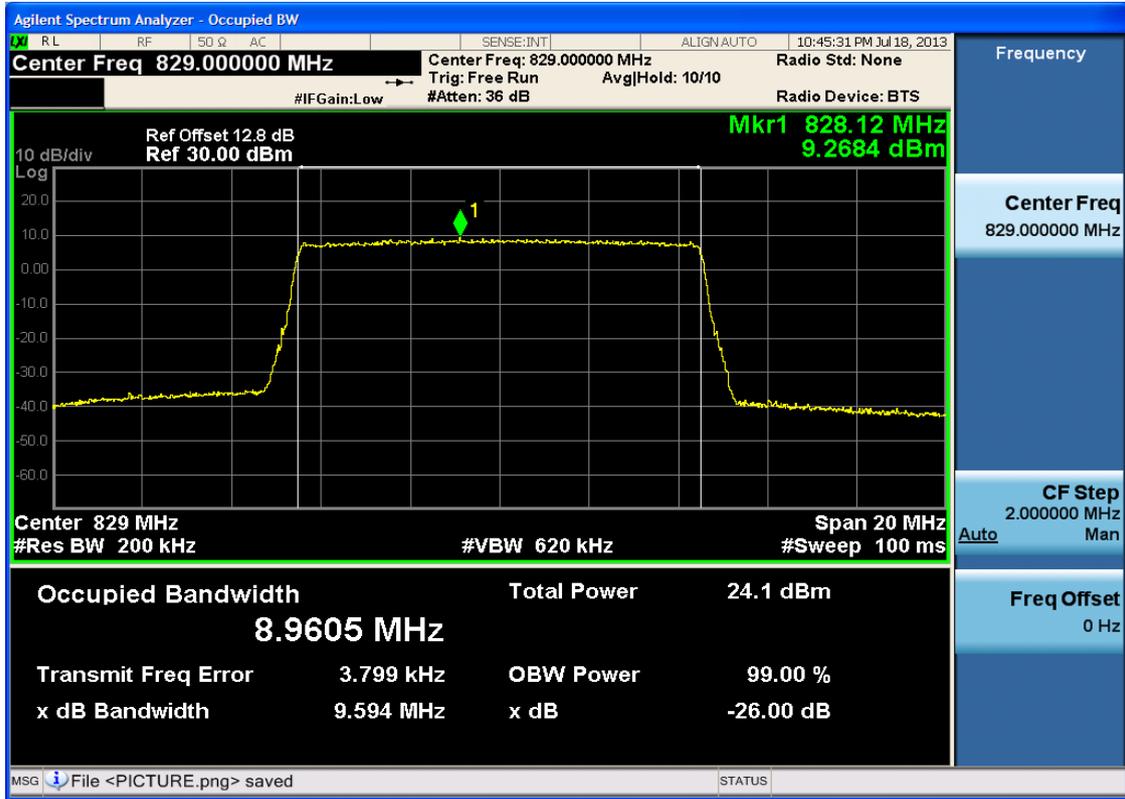### 4.3.3.1.1.3 Test Channel = HCH

### 4.3.3.1.1.3.1 Test RB = RB25#0

**4.3.3.1.2 Test Bandwidth = 10**

**4.3.3.1.2.1 Test Channel = LCH**

**4.3.3.1.2.1.1 Test RB = RB50#0**

## 4.3.3.1.2.2 Test Channel = MCH

### 4.3.3.1.2.2.1 Test RB = RB50#0

## 4.3.3.1.2.3 Test Channel = HCH

## 4.3.3.1.2.3.1 Test RB = RB50#0

**4.3.3.2 Test Mode = LTE/TM2**

**4.3.3.2.1 Test Bandwidth = 5**

**4.3.3.2.1.1 Test Channel = LCH**

**4.3.3.2.1.1.1 Test RB = RB25#0**

## 4.3.3.2.1.2 Test Channel = MCH

## 4.3.3.2.1.2.1 Test RB = RB25#0

## 4.3.3.2.1.3 Test Channel = HCH

## 4.3.3.2.1.3.1 Test RB = RB25#0
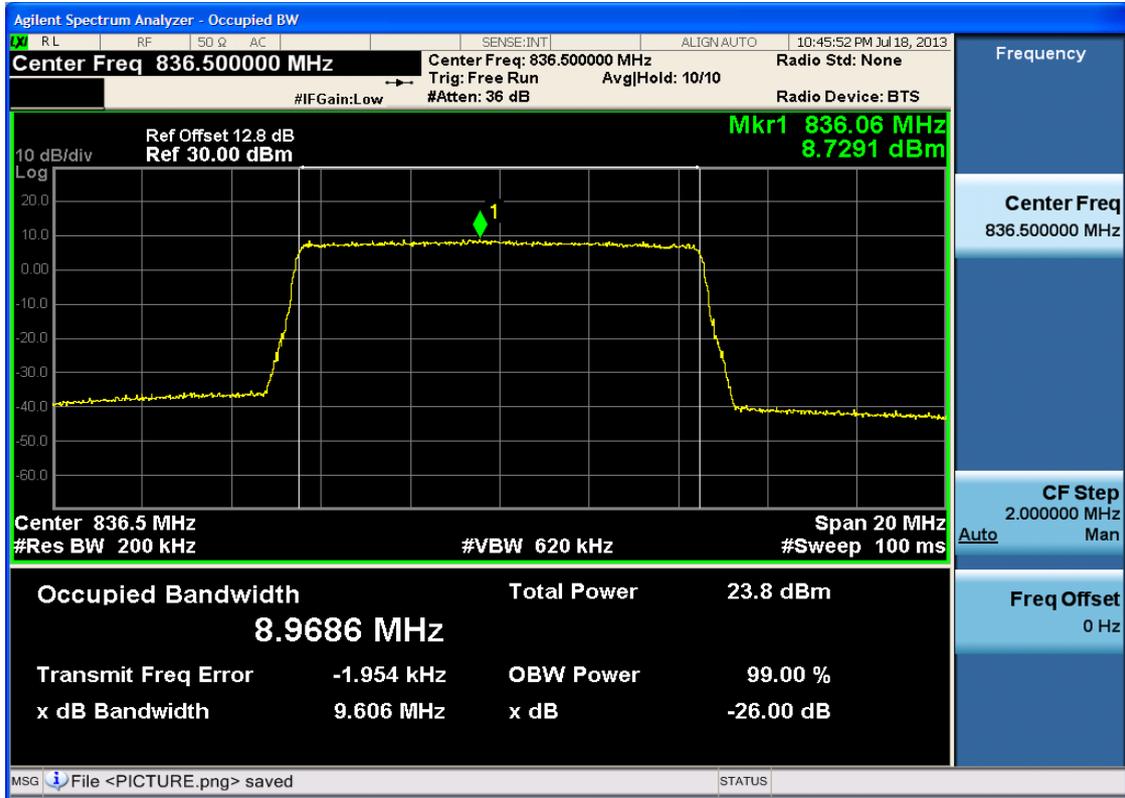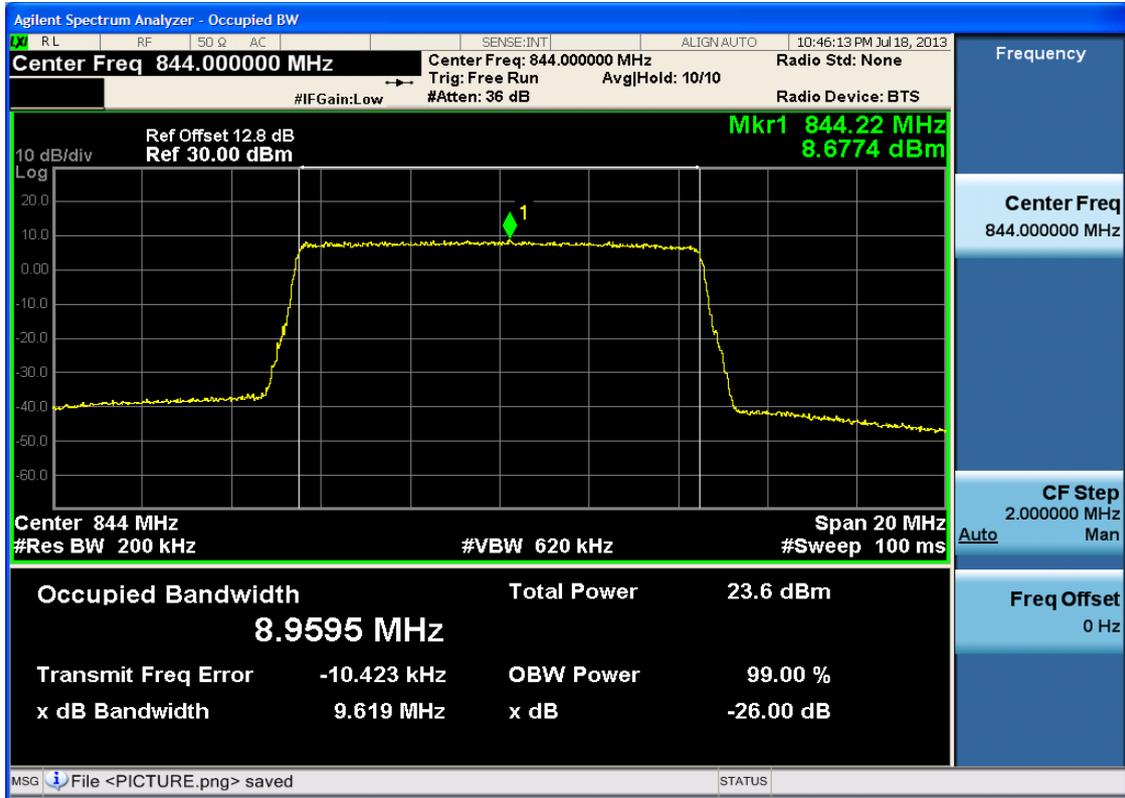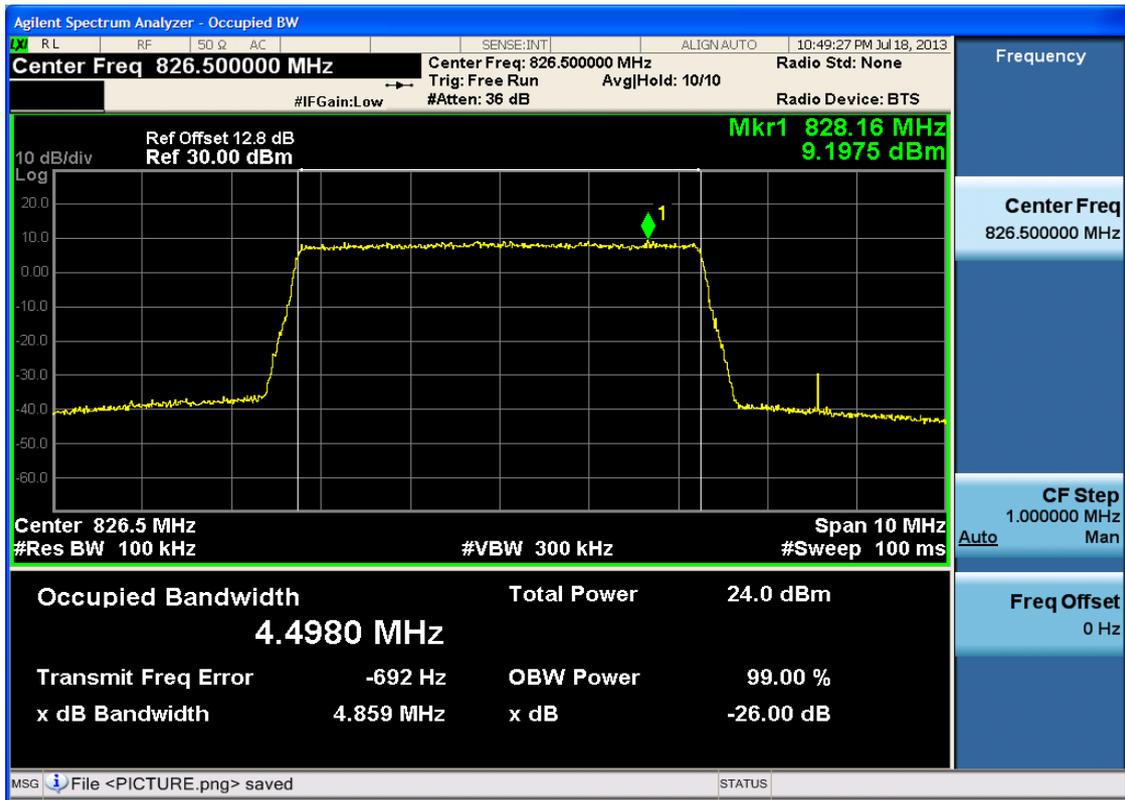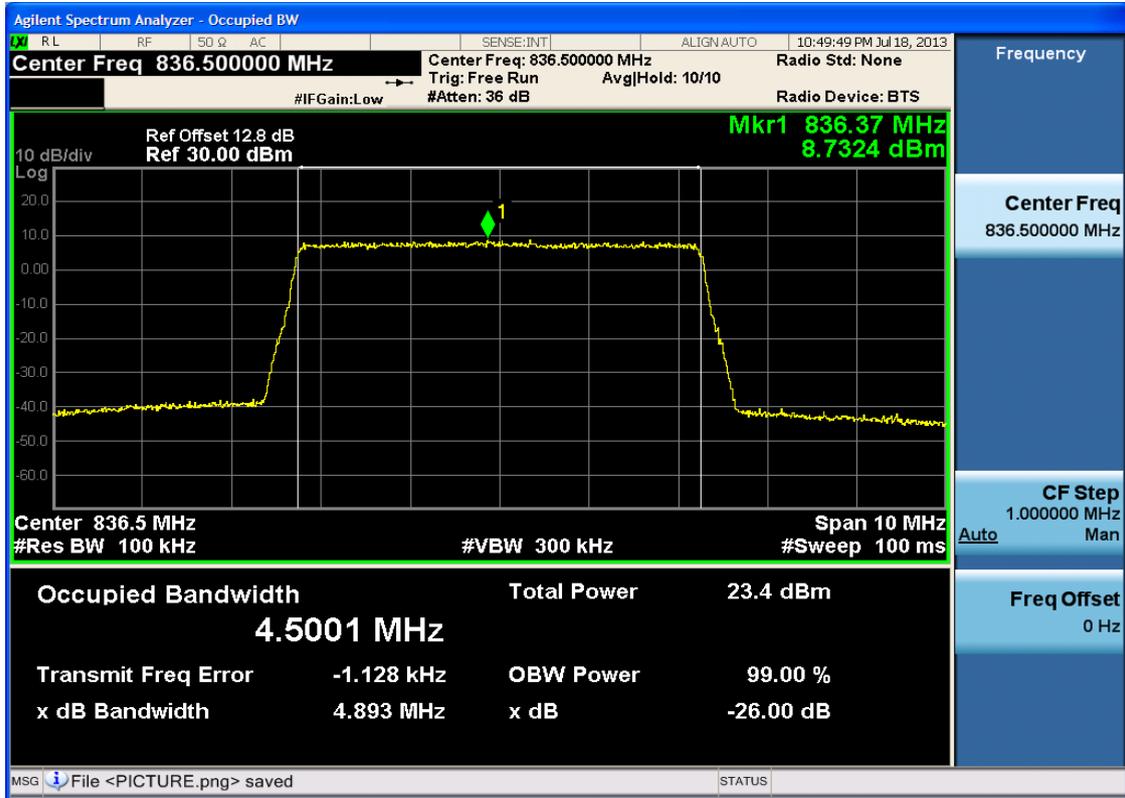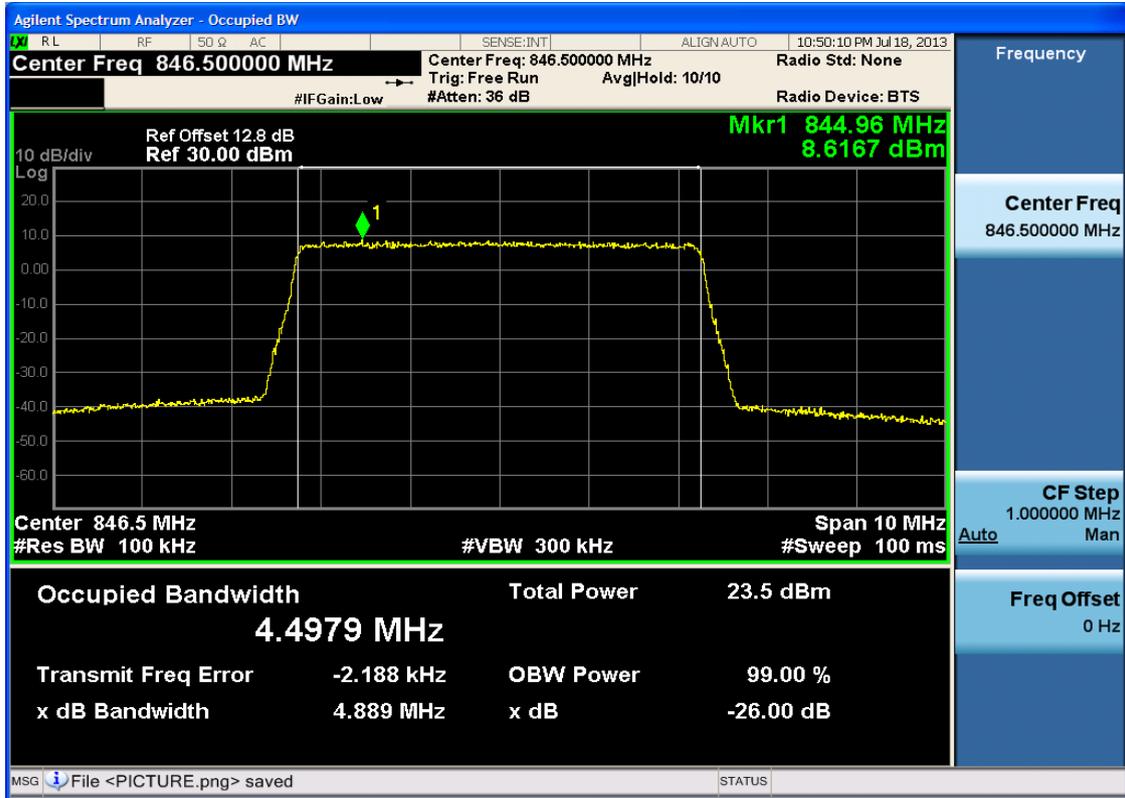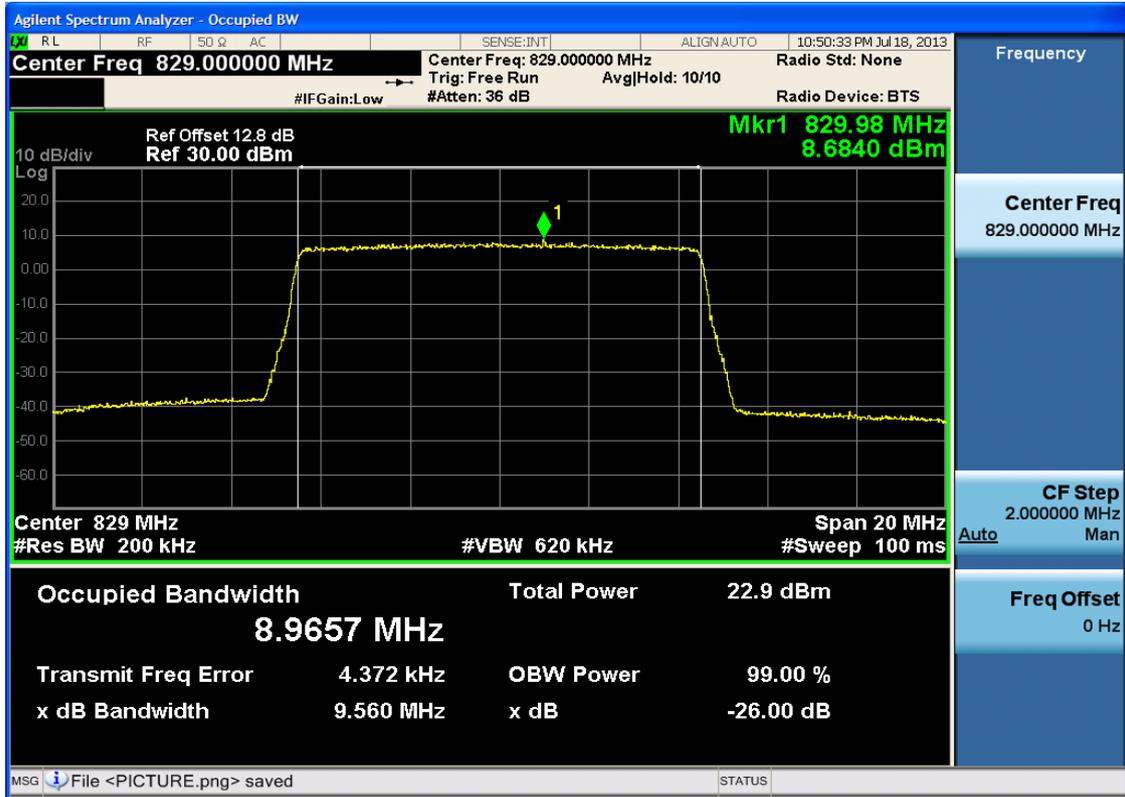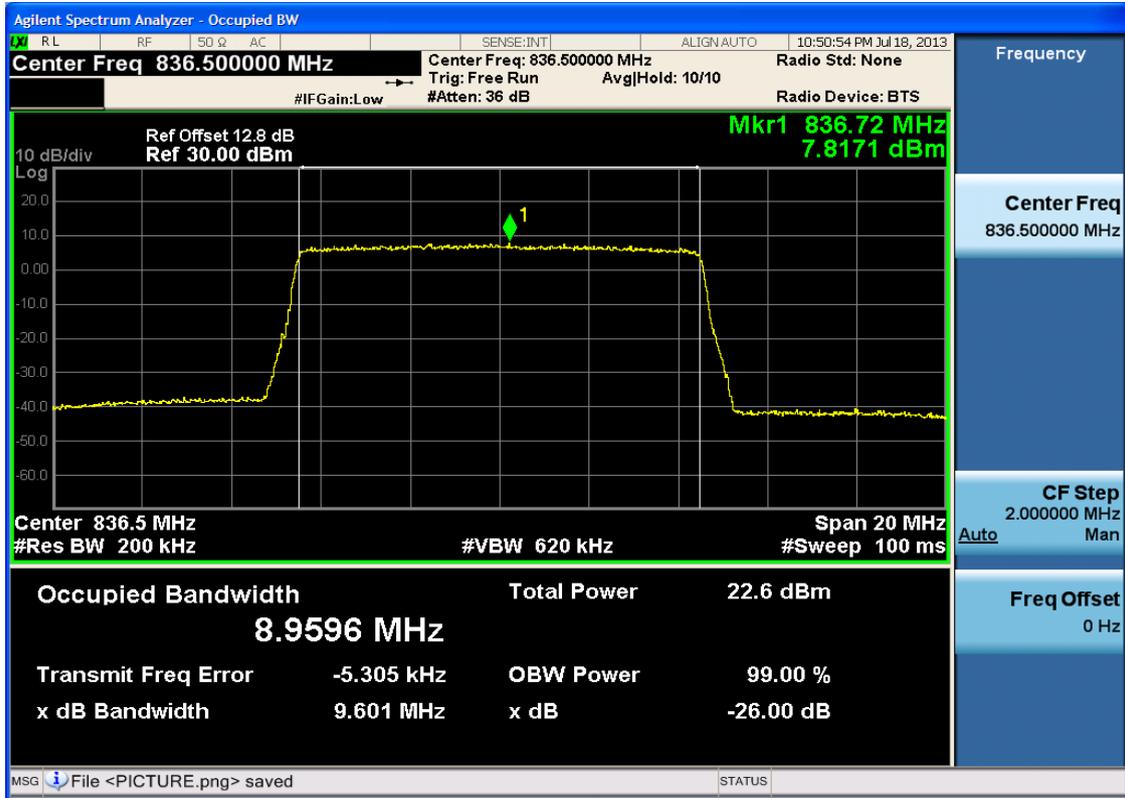
**4.3.3.2.2 Test Bandwidth = 10**
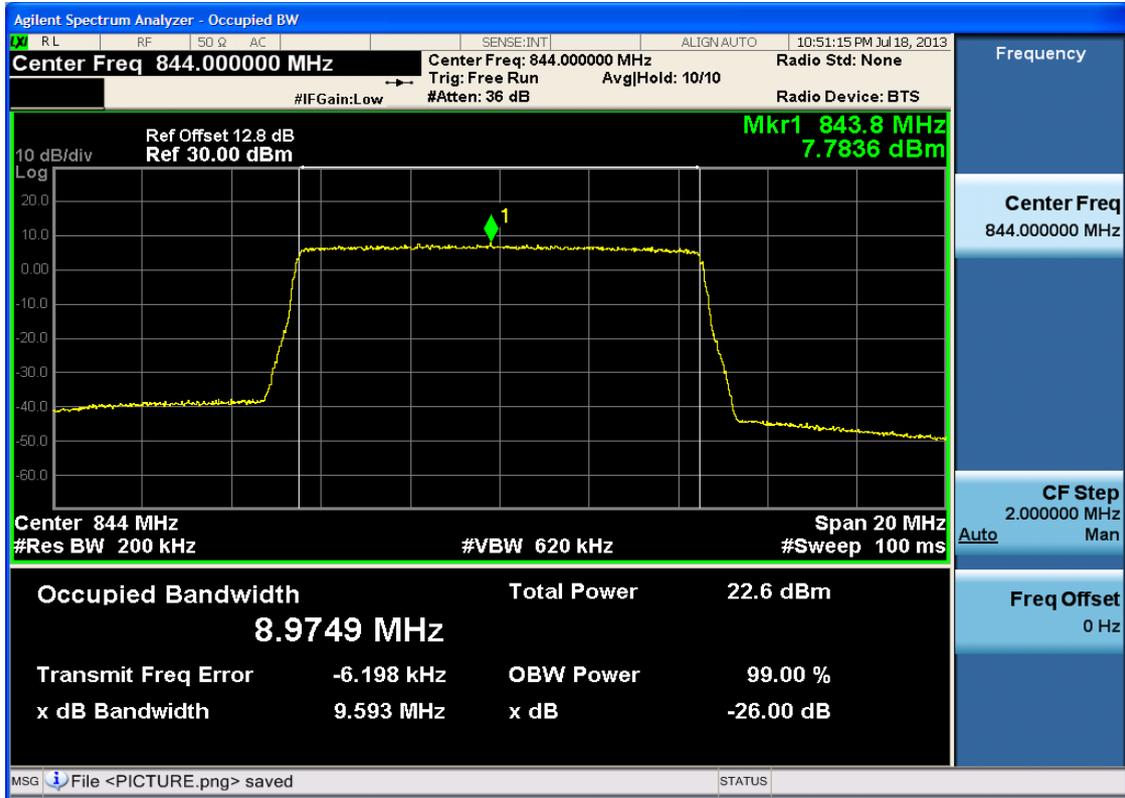
**4.3.3.2.2.1 Test Channel = LCH**

**4.3.3.2.2.1.1 Test RB = RB50#0**

### 4.3.3.2.2.2 Test Channel = MCH

### 4.3.3.2.2.2.1 Test RB = RB50#0

## 4.3.3.2.2.3 Test Channel = HCH

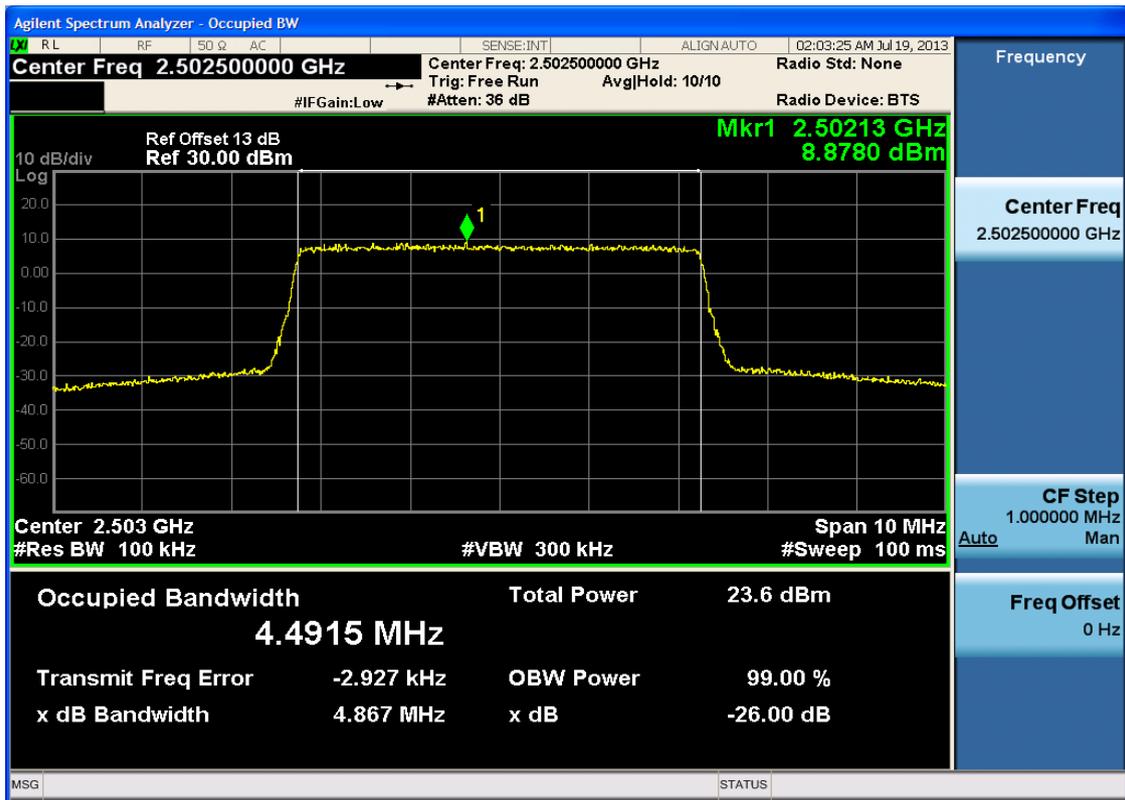### 4.3.3.2.2.3.1 Test RB = RB50#0

## 4.3.4 Test Band = BAND7

## 4.3.4.1 Test Mode = LTE/TM1
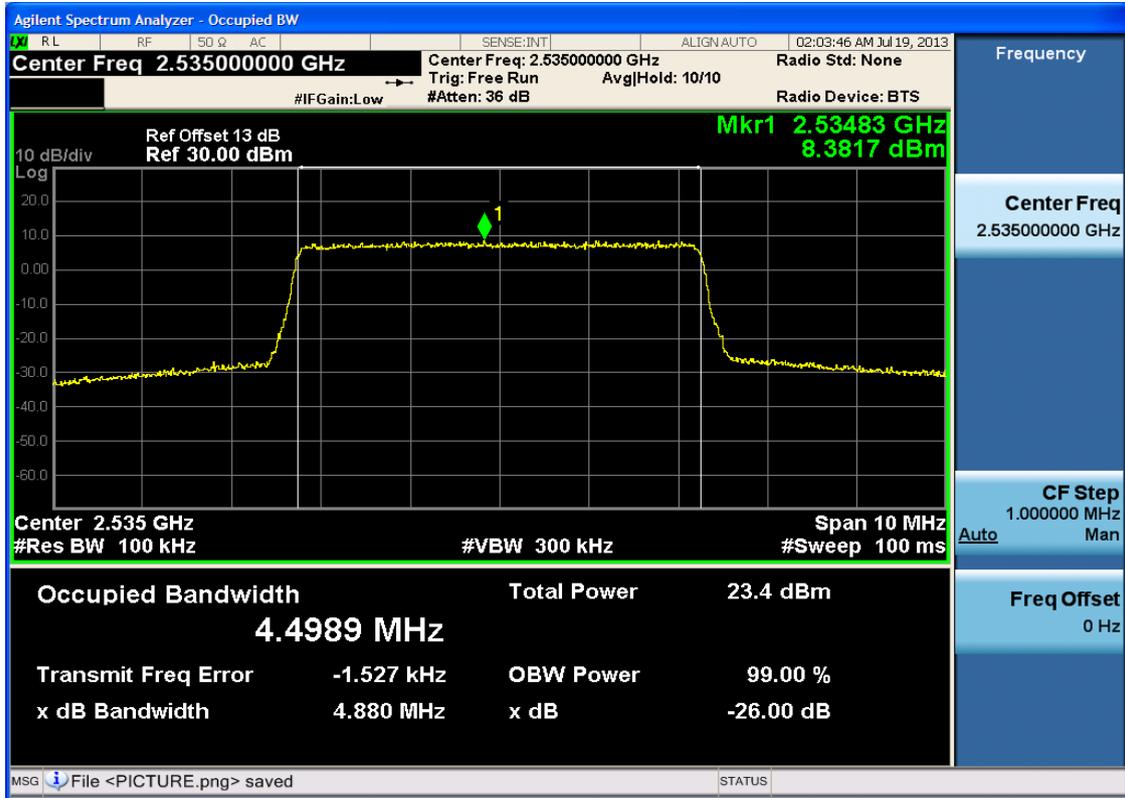
## 4.3.4.1.1 Test Bandwidth = 5

## 4.3.4.1.1.1 Test Channel = LCH

## 4.3.4.1.1.1.1 Test RB = RB25#0
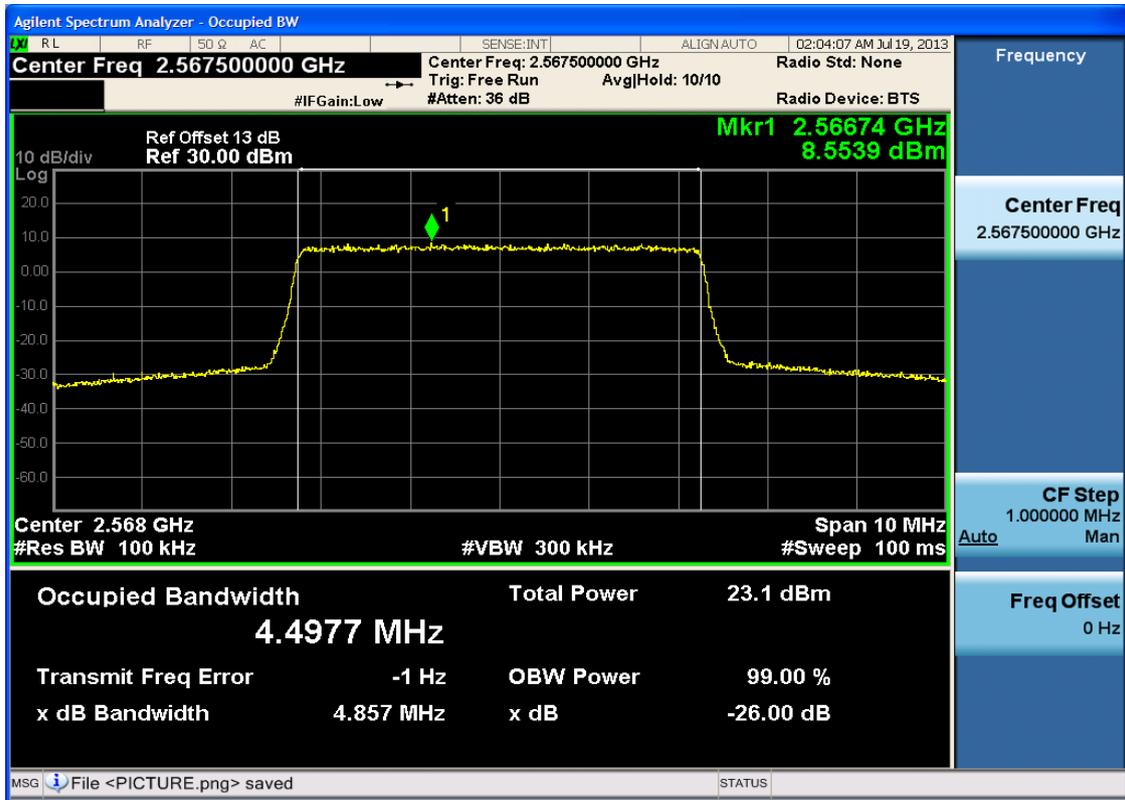
## 4.3.4.1.1.2 Test Channel = MCH

## 4.3.4.1.1.2.1 Test RB = RB25#0

## 4.3.4.1.1.3 Test Channel = HCH

## 4.3.4.1.1.3.1 Test RB = RB25#0

**4.3.4.1.2 Test Bandwidth = 10**

**4.3.4.1.2.1 Test Channel = LCH**

**4.3.4.1.2.1.1 Test RB = RB50#0**

## 4.3.4.1.2.2 Test Channel = MCH

## 4.3.4.1.2.2.1 Test RB = RB50#0

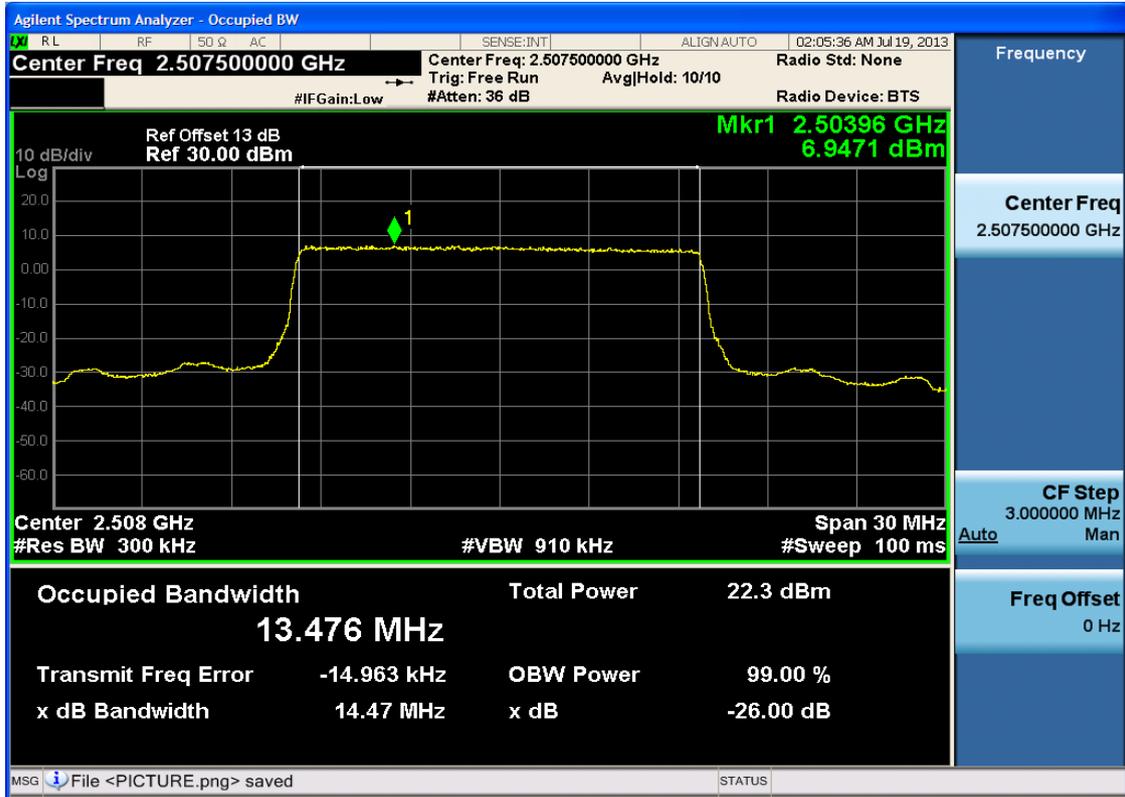## 4.3.4.1.2.3 Test Channel = HCH

## 4.3.4.1.2.3.1 Test RB = RB50#0
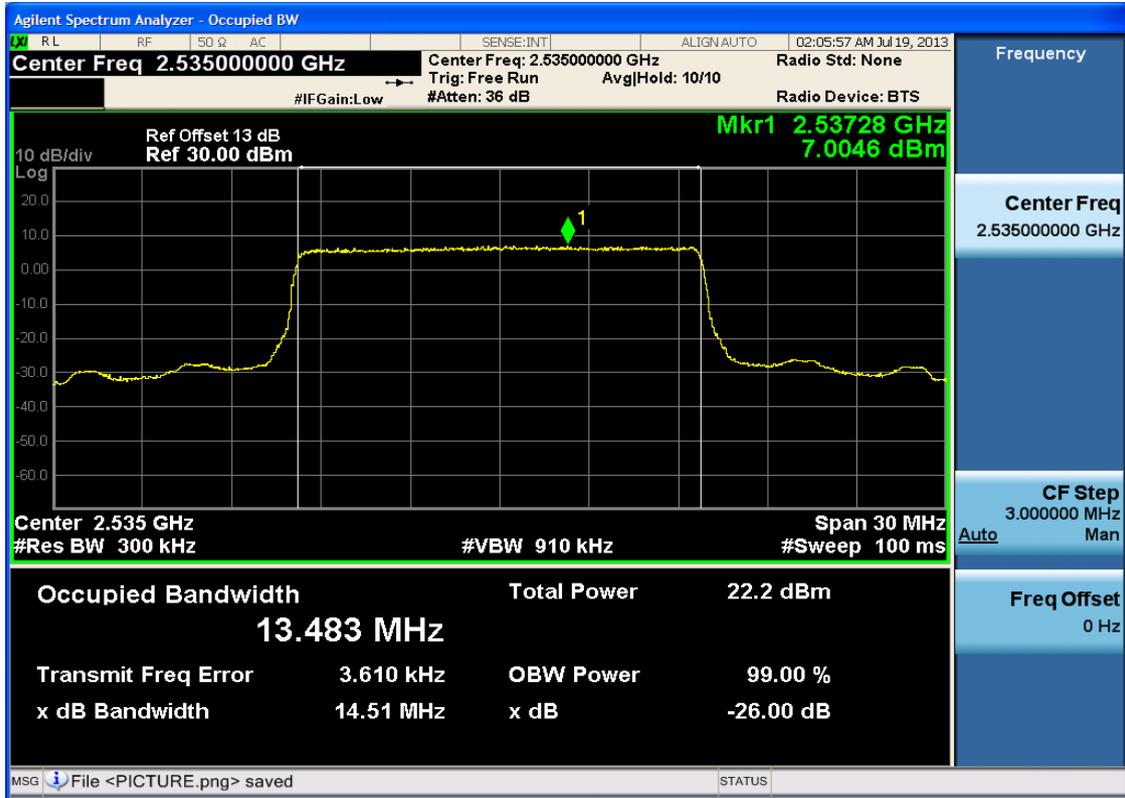
**4.3.4.1.3 Test Bandwidth = 15**

**4.3.4.1.3.1 Test Channel = LCH**

**4.3.4.1.3.1.1 Test RB = RB75#0**

## 4.3.4.1.3.2 Test Channel = MCH

### 4.3.4.1.3.2.1 Test RB = RB75#0

## 4.3.4.1.3.3 Test Channel = HCH
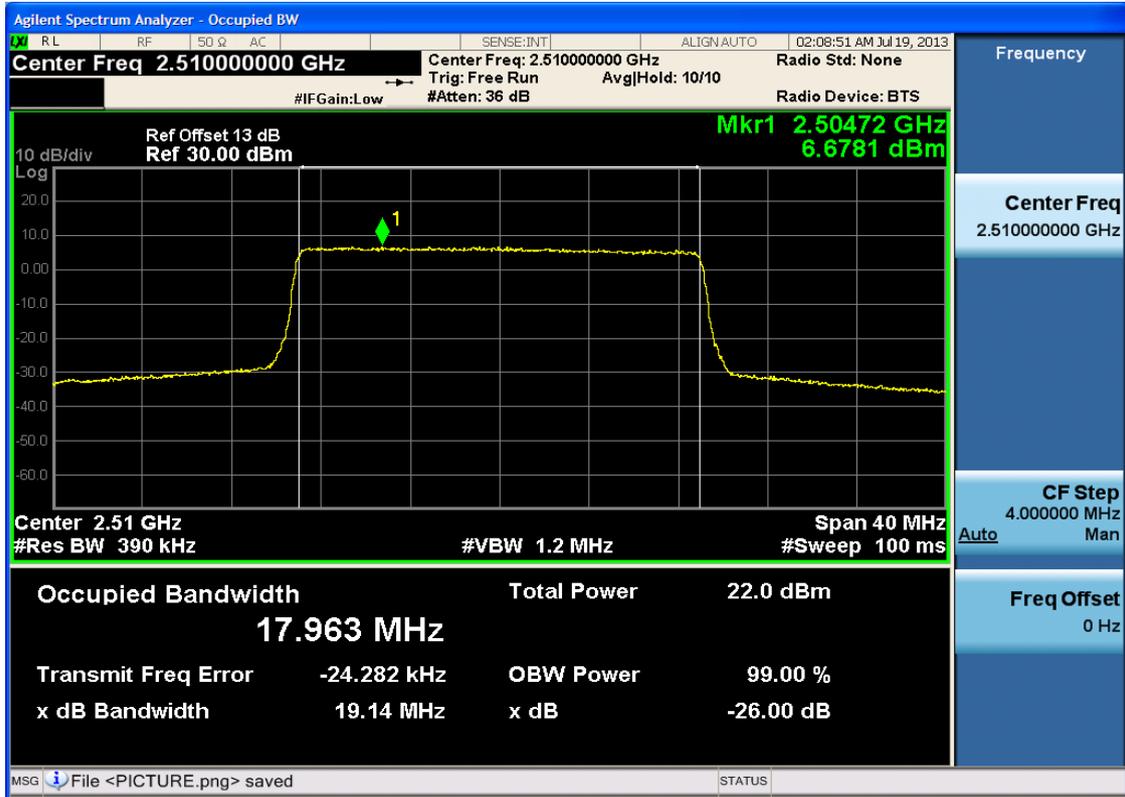
## 4.3.4.1.3.3.1 Test RB = RB75#0
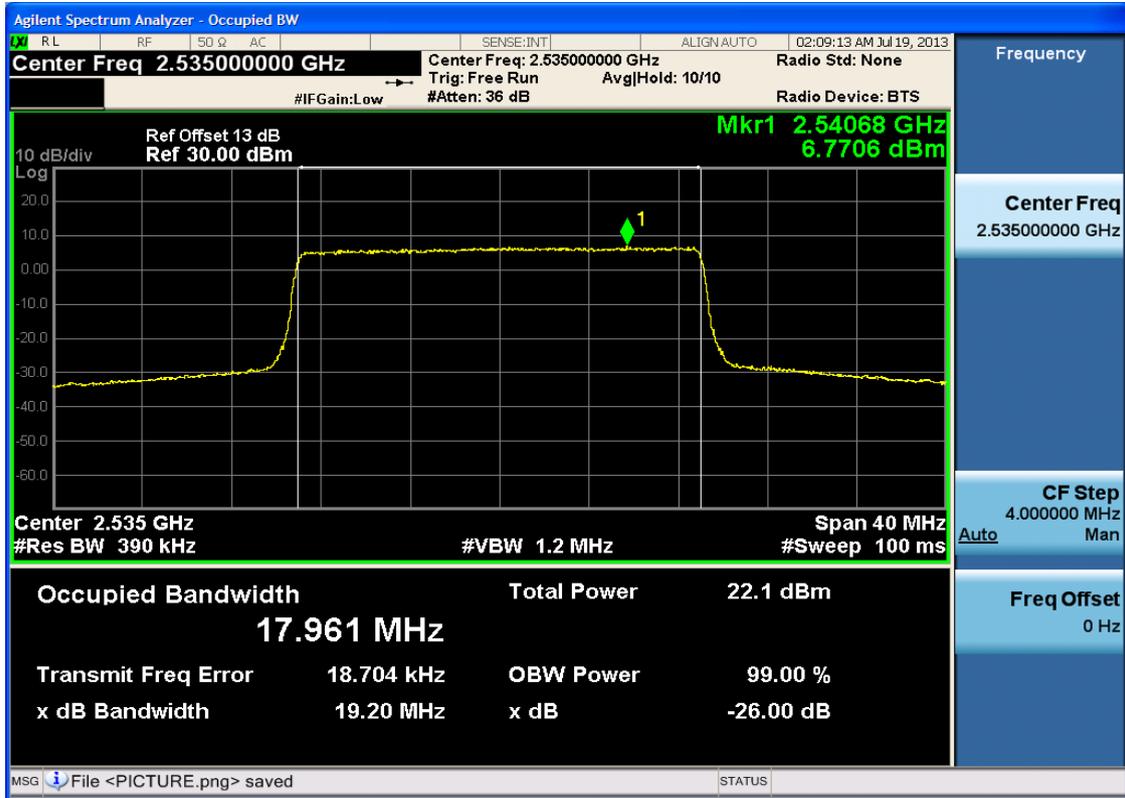
## 4.3.4.1.4 Test Bandwidth = 20

## 4.3.4.1.4.1 Test Channel = LCH

## 4.3.4.1.4.1.1 Test RB = RB100#0

## 4.3.4.1.4.2 Test Channel = MCH

## 4.3.4.1.4.2.1 Test RB = RB100#0

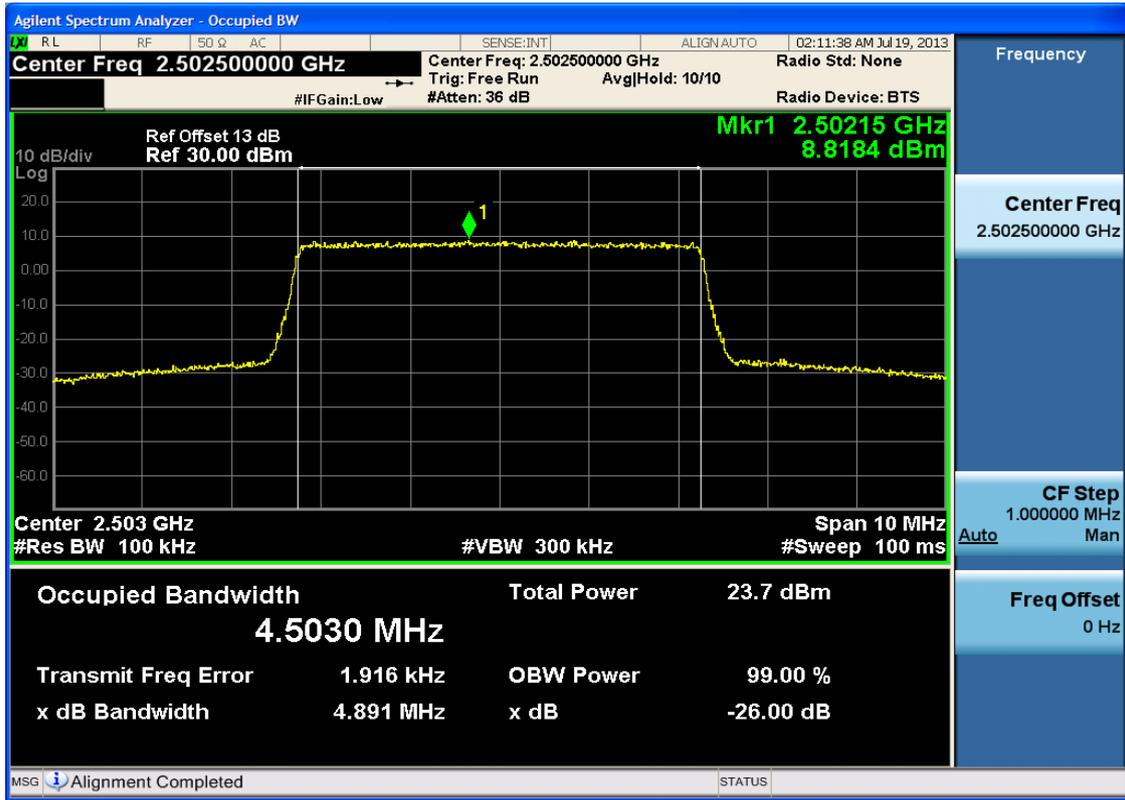## 4.3.4.1.4.3 Test Channel = HCH

### 4.3.4.1.4.3.1 Test RB = RB100#0

**4.3.4.2 Test Mode = LTE/TM2**

**4.3.4.2.1 Test Bandwidth = 5**

**4.3.4.2.1.1 Test Channel = LCH**

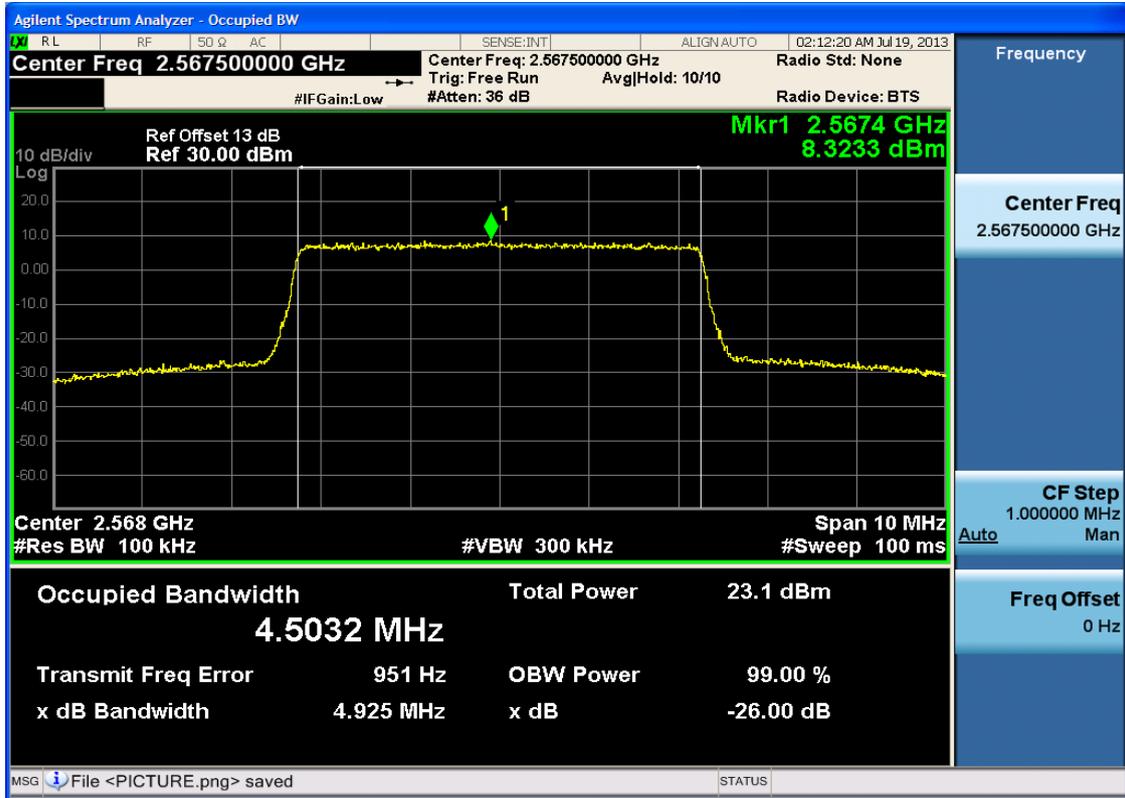**4.3.4.2.1.1.1 Test RB = RB25#0**

## 4.3.4.2.1.2 Test Channel = MCH

### 4.3.4.2.1.2.1 Test RB = RB25#0

## 4.3.4.2.1.3 Test Channel = HCH

## 4.3.4.2.1.3.1 Test RB = RB25#0

**4.3.4.2.2 Test Bandwidth = 10**

**4.3.4.2.2.1 Test Channel = LCH**

**4.3.4.2.2.1.1 Test RB = RB50#0**