

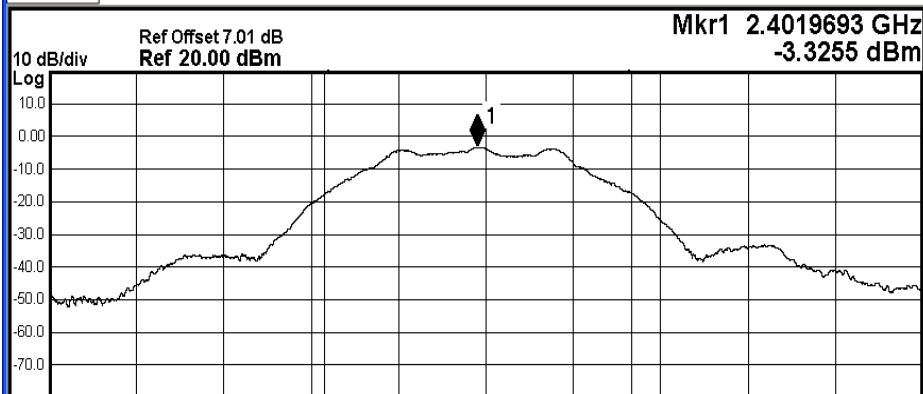
**B.1.6dB Bandwidth**

| Test Mode | Test Channel | Ant  | EBW[MHz] | Limit | Verdict |
|-----------|--------------|------|----------|-------|---------|
| BLE       | 2402         | Ant1 | 0.7009   | 0.5   | PASS    |
| BLE       | 2440         | Ant1 | 0.6981   | 0.5   | PASS    |
| BLE       | 2480         | Ant1 | 0.6898   | 0.5   | PASS    |

## 6dB Bandwidth\_BLE\_2402\_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.402000000 GHz  
 #IFGain:Low #Atten: 30 dB  
 SENSE:PULSE ALIGN AUTO 11:25:05 AM Jan 04, 2018  
 Radio Std: None  
 Radio Device: BTS



Center 2.402 GHz Span 3 MHz  
 #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms

Occupied Bandwidth 1.0455 MHz  
 Total Power 3.46 dBm  
 Transmit Freq Error -24.290 kHz OBW Power 99.00 %  
 x dB Bandwidth 700.9 kHz x dB -6.00 dB

MSG

STATUS

Frequency

Center Freq  
 2.402000000 GHz

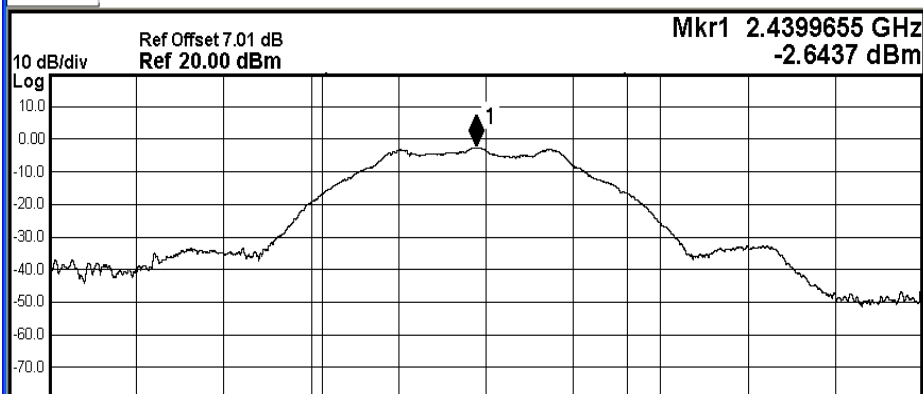
CF Step  
 300.000 kHz  
 Auto Man

Freq Offset  
 0 Hz

## 6dB Bandwidth\_BLE\_2440\_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 2.440000000 GHz  
 #IFGain:Low #Atten: 30 dB  
 SENSE:PULSE ALIGN AUTO 11:27:02 AM Jan 04, 2018  
 Radio Std: None  
 Radio Device: BTS



Center 2.44 GHz Span 3 MHz  
 #Res BW 100 kHz #VBW 300 kHz Sweep 1.067 ms

Occupied Bandwidth 1.0449 MHz  
 Total Power 4.14 dBm  
 Transmit Freq Error -35.648 kHz OBW Power 99.00 %  
 x dB Bandwidth 698.1 kHz x dB -6.00 dB

MSG

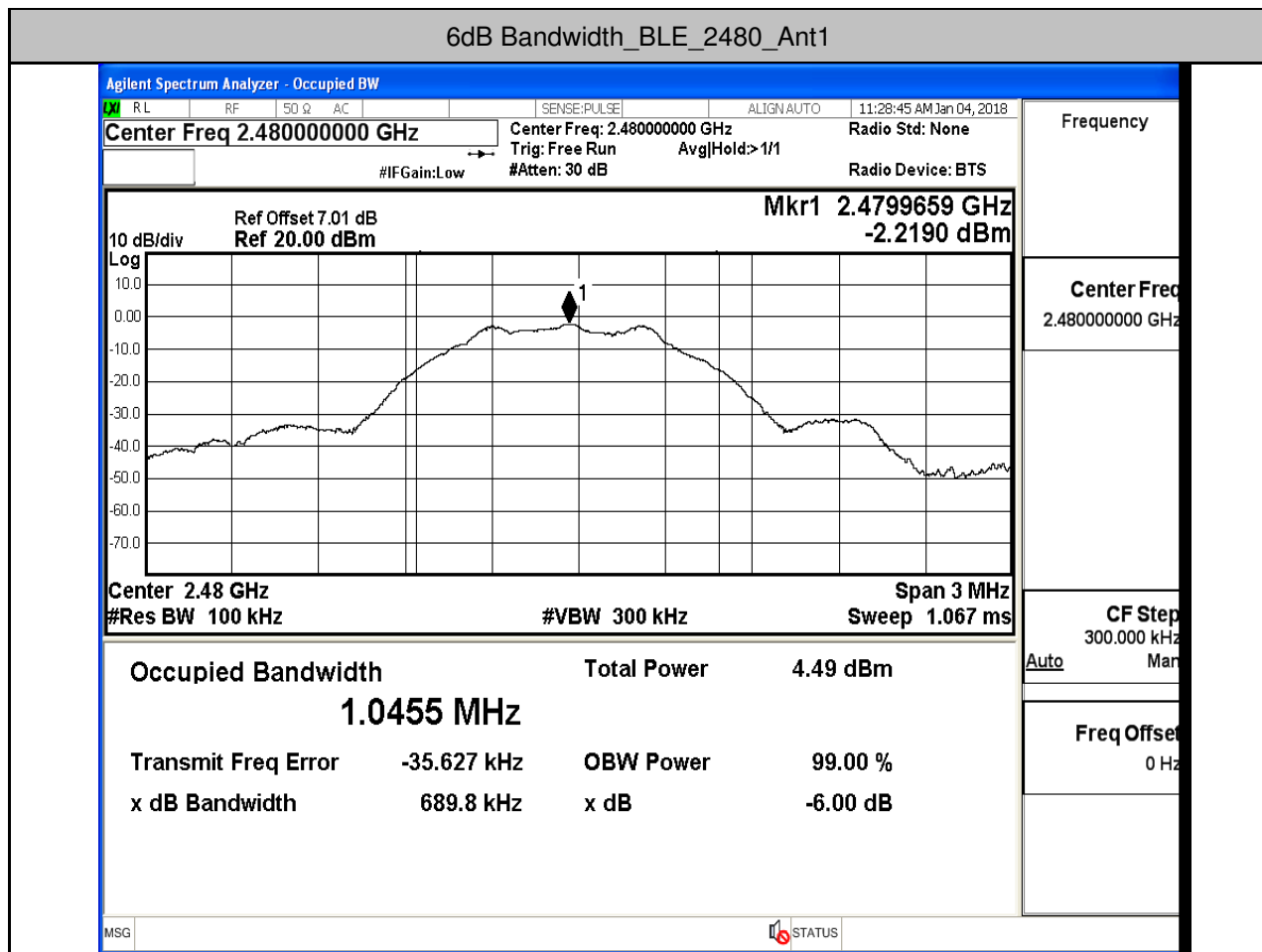
STATUS

Frequency

Center Freq  
 2.440000000 GHz

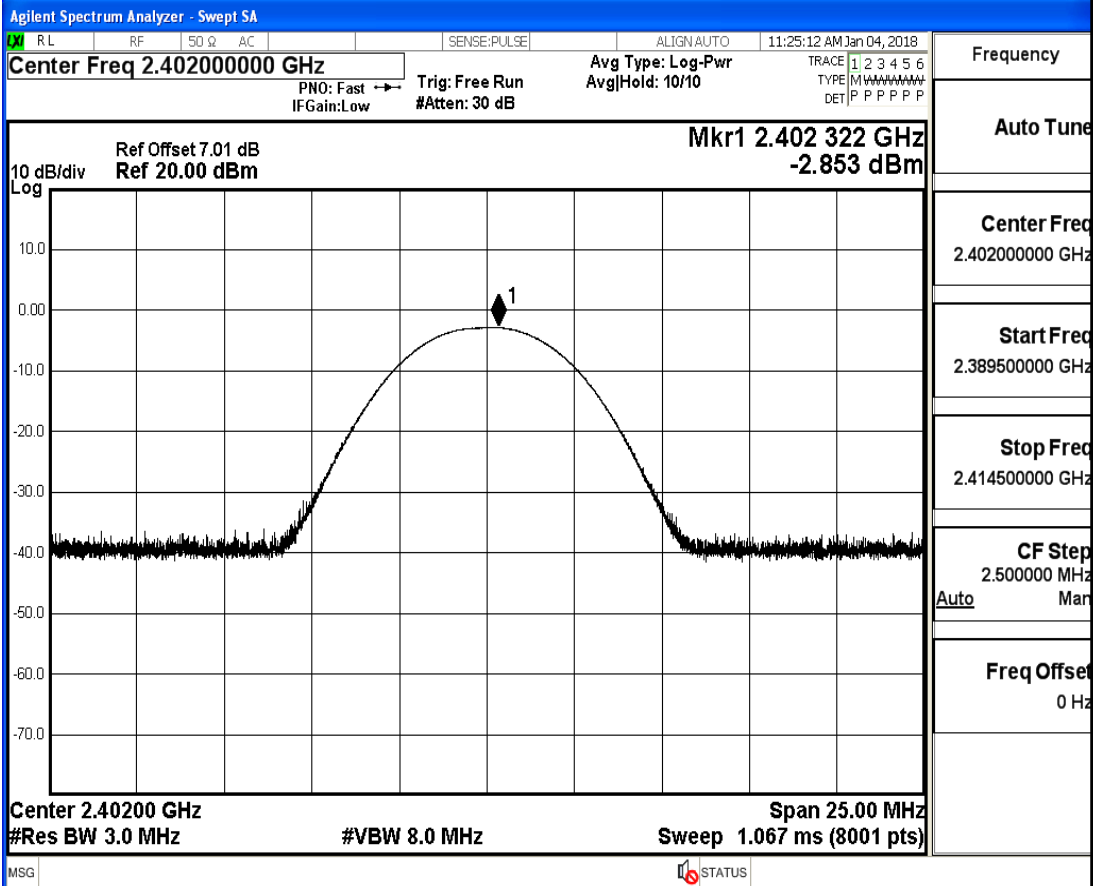
CF Step  
 300.000 kHz  
 Auto Man

Freq Offset  
 0 Hz

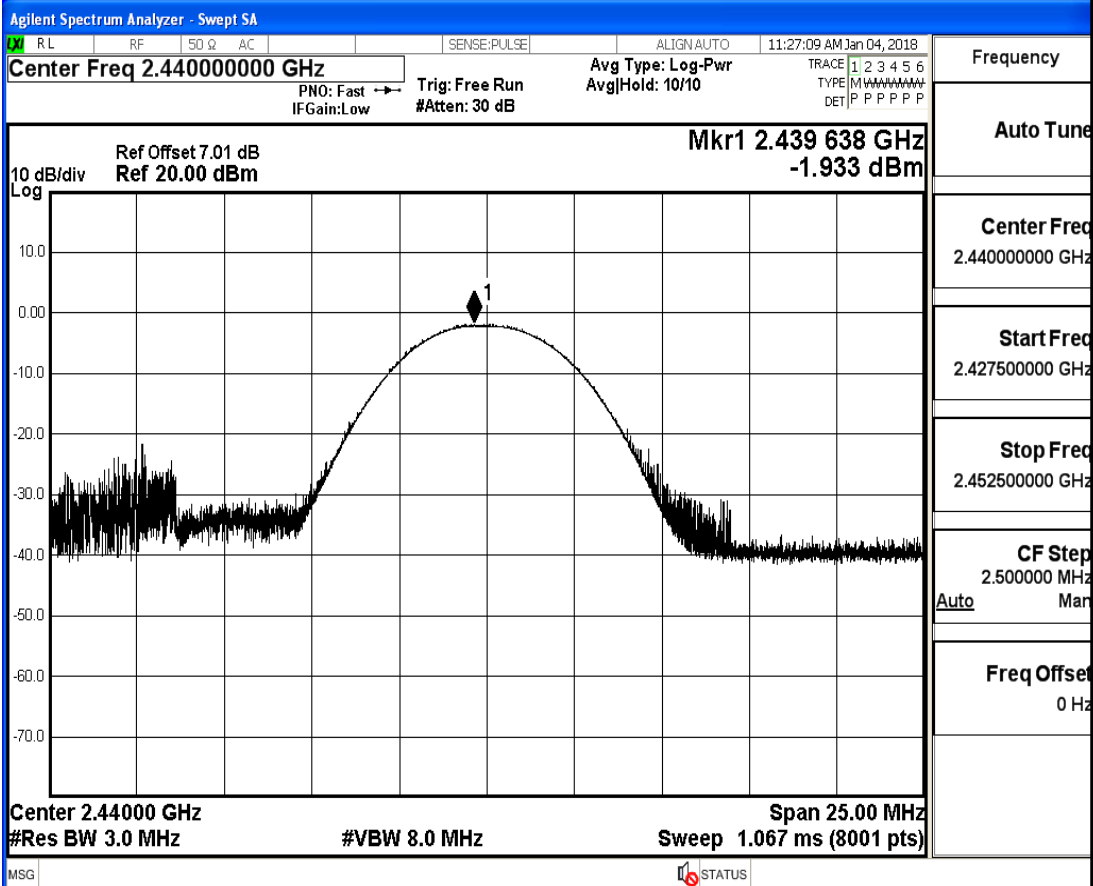


| Test Mode | Channel | Frequency (MHz) | Measured Maximum Peak Power(dBm) | Limits (dBm) | Verdict |
|-----------|---------|-----------------|----------------------------------|--------------|---------|
| BLE       | 0       | 2402            | -2.853                           | 30           | PASS    |
|           | 19      | 2440            | -1.933                           |              |         |
|           | 39      | 2480            | -1.865                           |              |         |

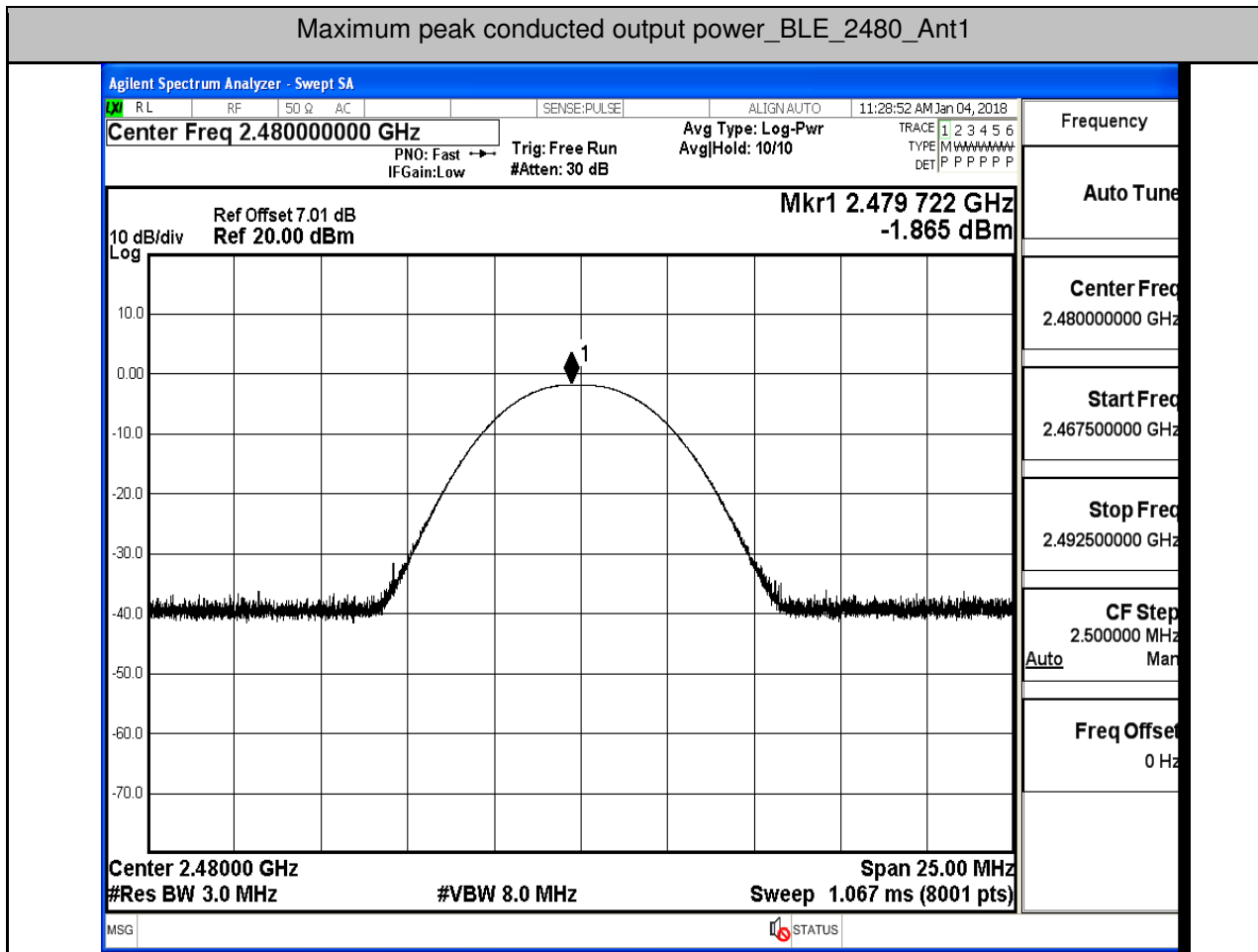
## Maximum peak conducted output power\_BLE\_2402\_Ant1



## Maximum peak conducted output power\_BLE\_2440\_Ant1



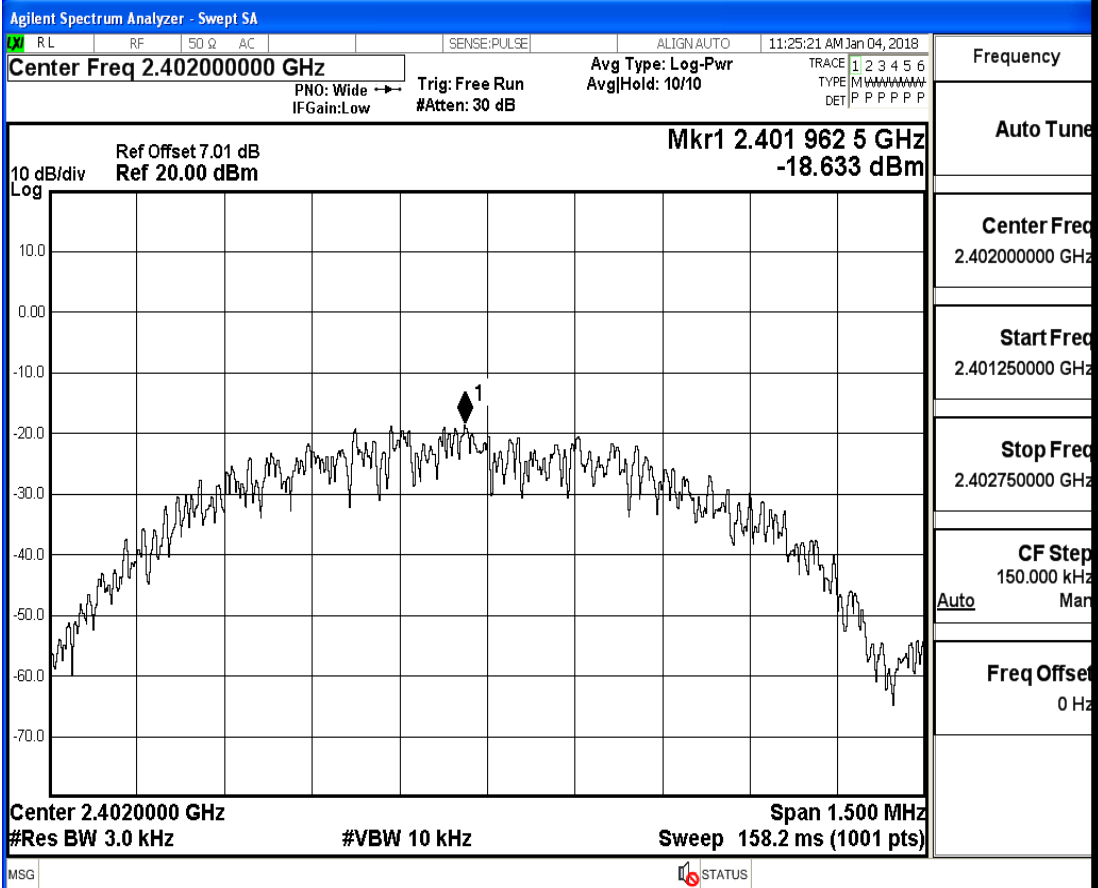
## Maximum peak conducted output power\_BLE\_2480\_Ant1



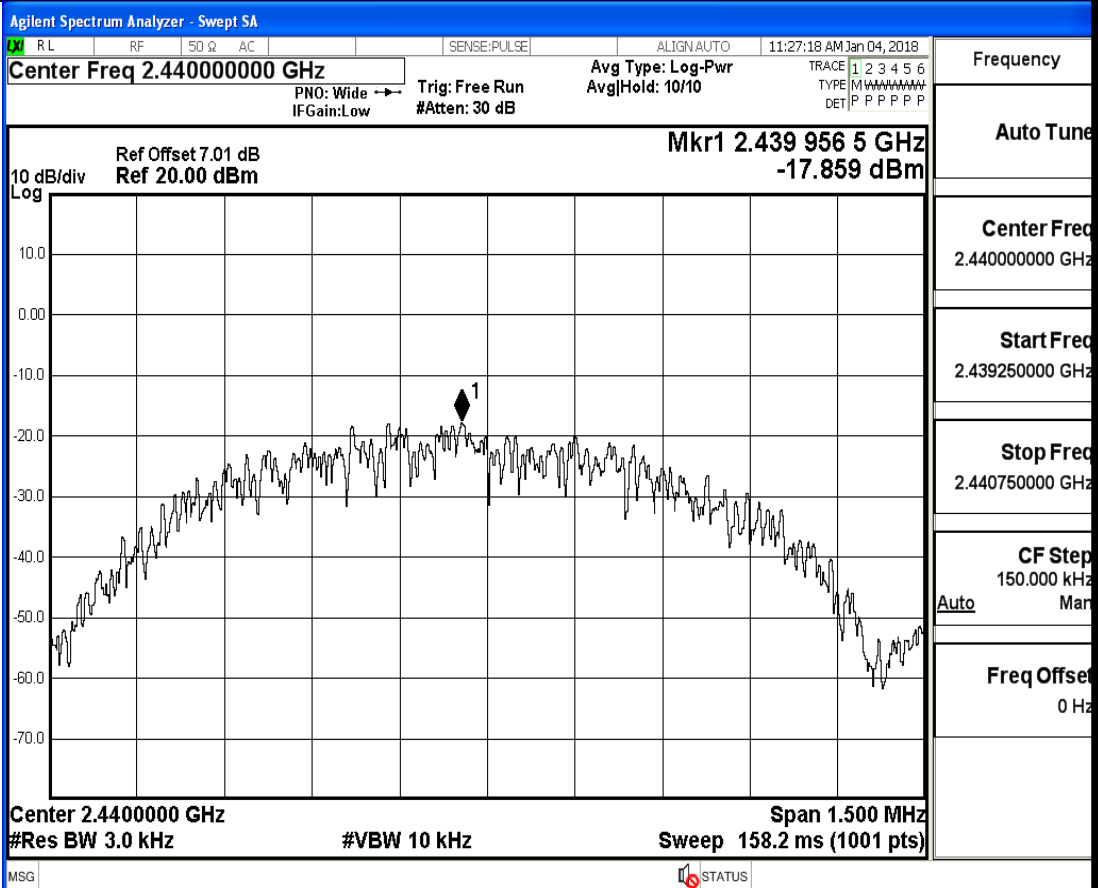
**B.3.Maximum Peak power spectral density**

| Test Mode | Test Channel | Ant  | PSD[dBm/MHz] | Limit[dBm/MHz] | Verdict |
|-----------|--------------|------|--------------|----------------|---------|
| BLE       | 2402         | Ant1 | -18.633      | 8.00           | PASS    |
| BLE       | 2440         | Ant1 | -17.859      | 8.00           | PASS    |
| BLE       | 2480         | Ant1 | -17.359      | 8.00           | PASS    |

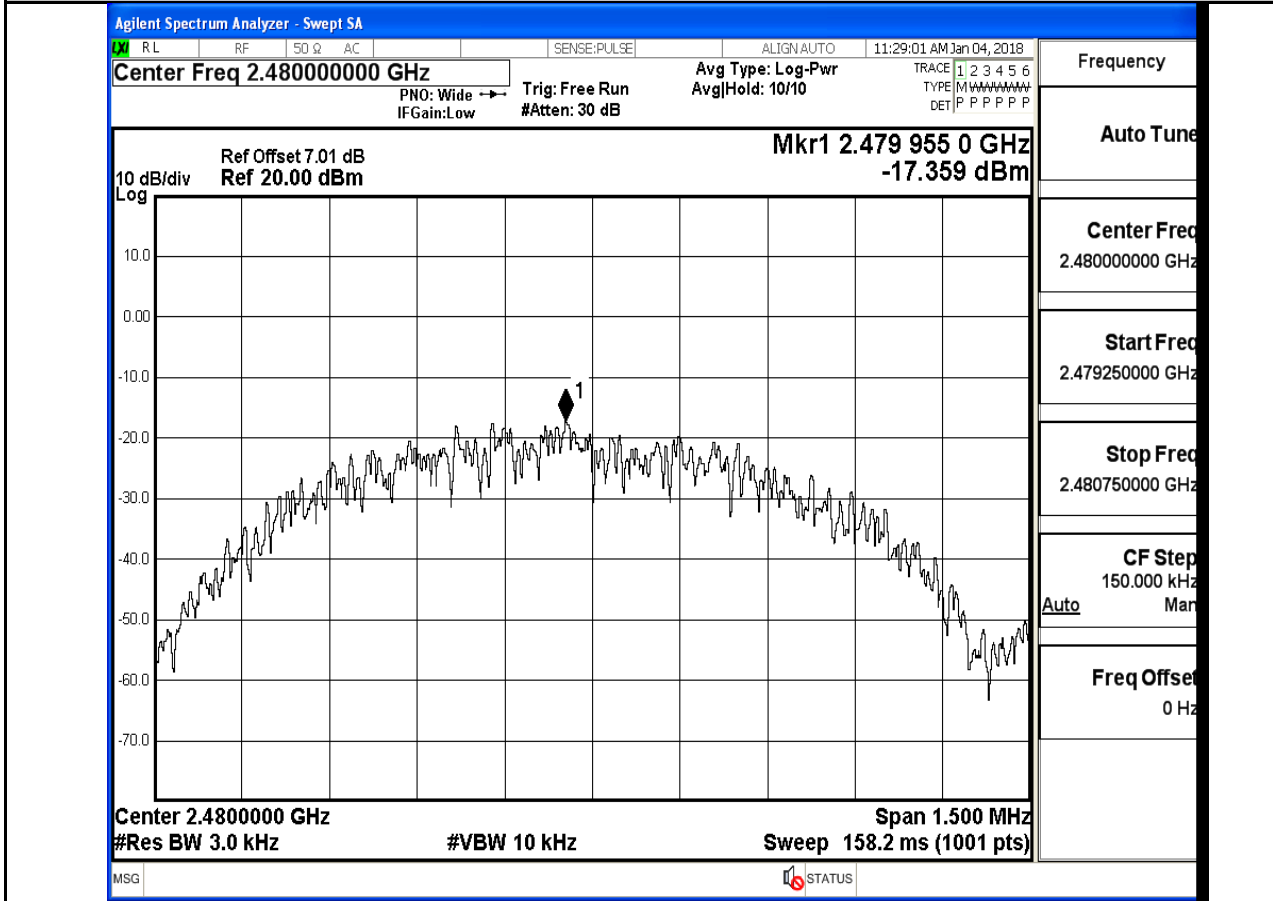
## Maximum Peak power spectral density\_BLE\_2402\_Ant1



## Maximum Peak power spectral density\_BLE\_2440\_Ant1



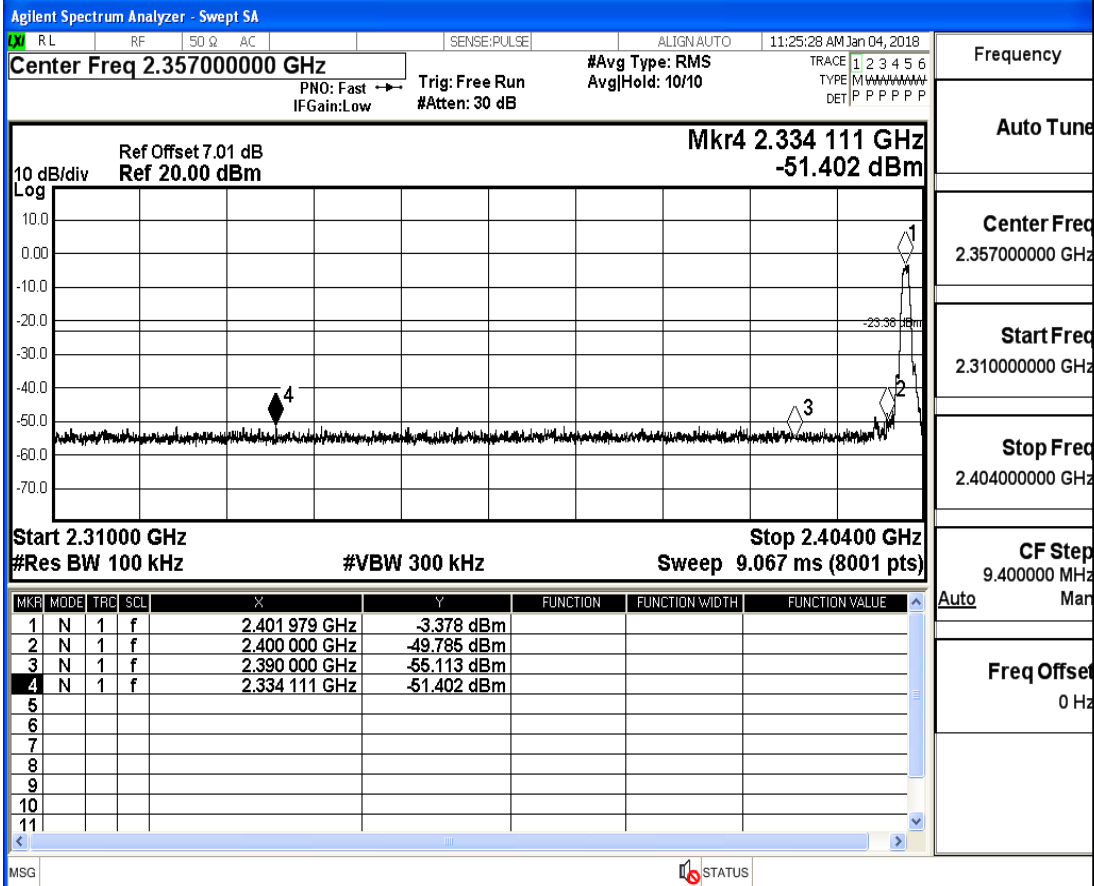
## Maximum Peak power spectral density\_BLE\_2480\_Ant1



**B.4.Band-edge for RF Conducted Emissions**

| Test Mode | Test Channel | Ant  | Carrier Power[dBm] | Max. Spurious Level [dBm] | Limit [dBm] | Verdict |
|-----------|--------------|------|--------------------|---------------------------|-------------|---------|
| BLE       | 2402         | Ant1 | -3.378             | -51.402                   | -23.38      | PASS    |
| BLE       | 2480         | Ant1 | -2.133             | -51.364                   | -22.13      | PASS    |

## Band-edge for RF Conducted Emissions\_BLE\_2402\_Ant1



Frequency

Auto Tune

Center Freq  
2.35700000 GHz

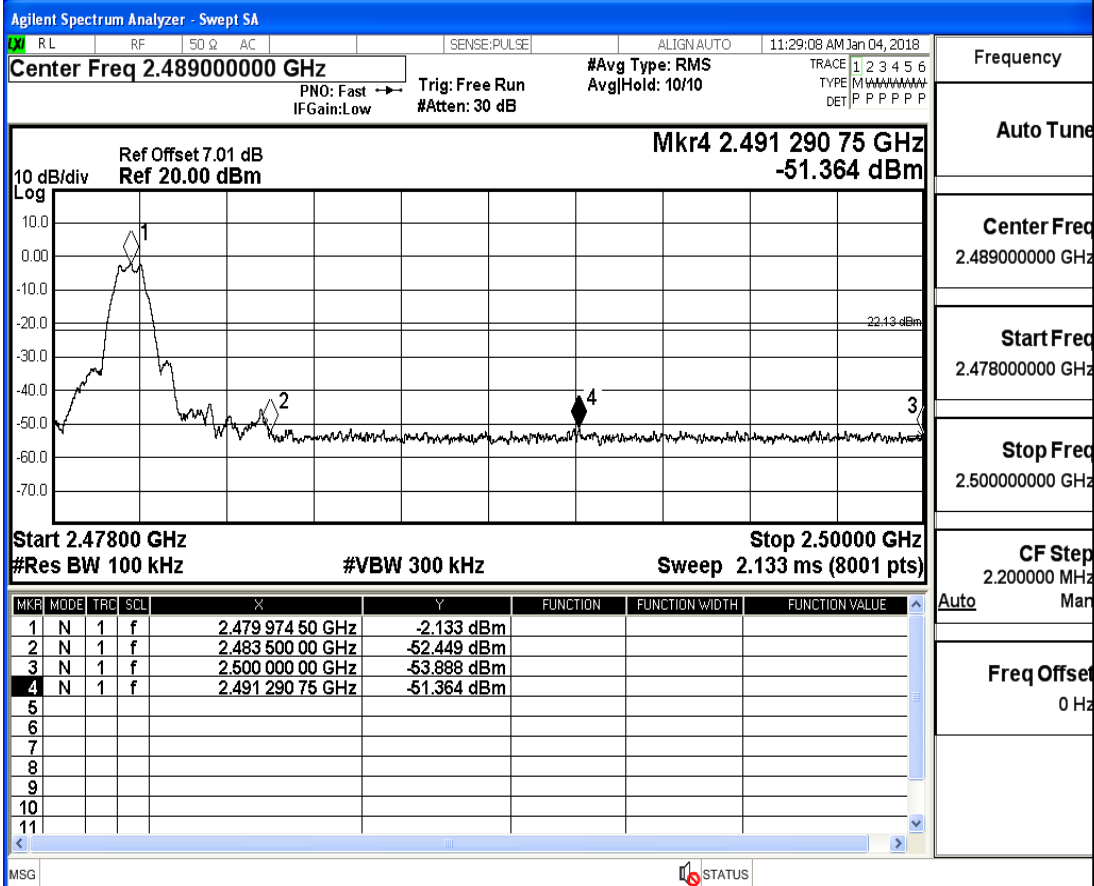
Start Freq  
2.31000000 GHz

Stop Freq  
2.40400000 GHz

CF Step  
9.400000 MHz

Freq Offset  
0 Hz

## Band-edge for RF Conducted Emissions\_BLE\_2480\_Ant1



Frequency

Auto Tune

Center Freq  
2.489000000 GHz

Start Freq  
2.478000000 GHz

Stop Freq  
2.500000000 GHz

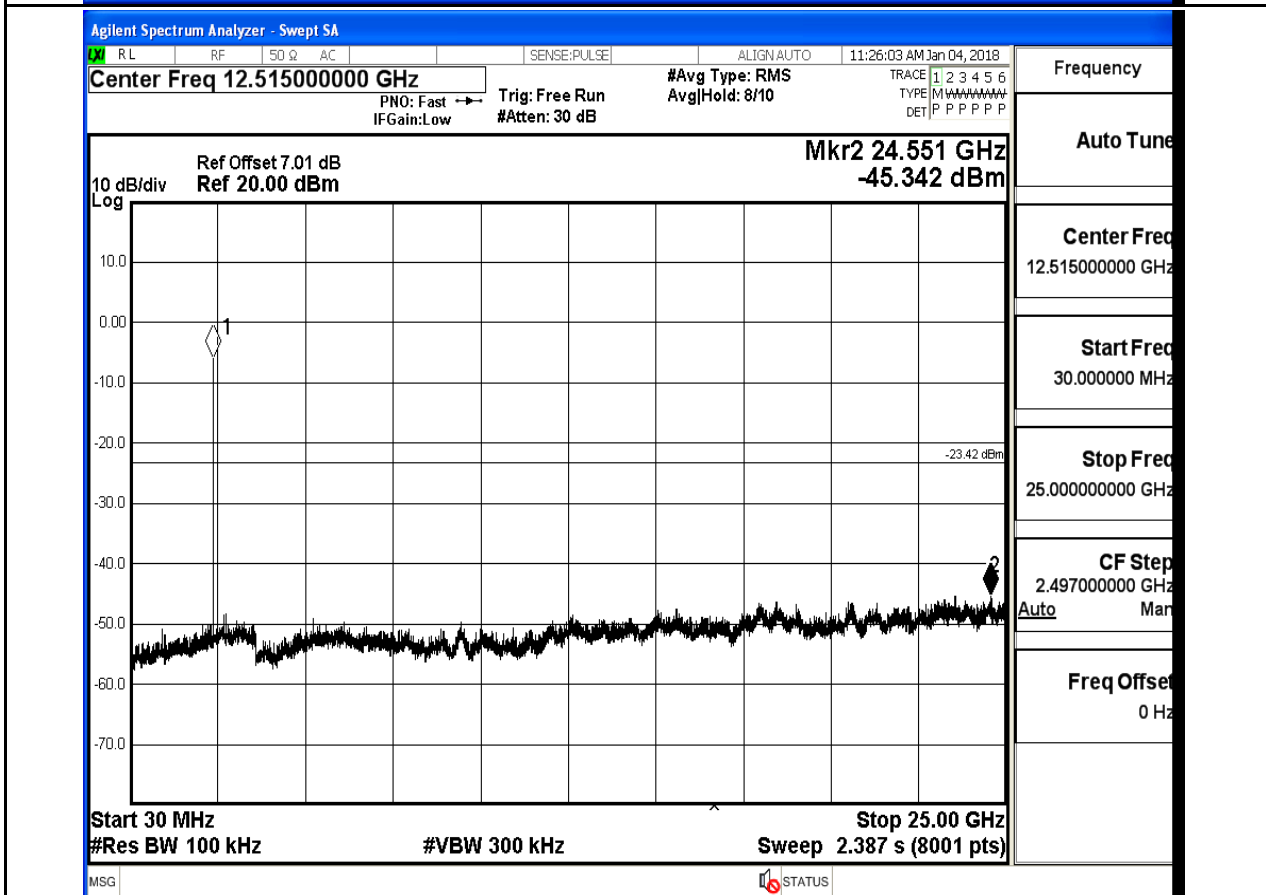
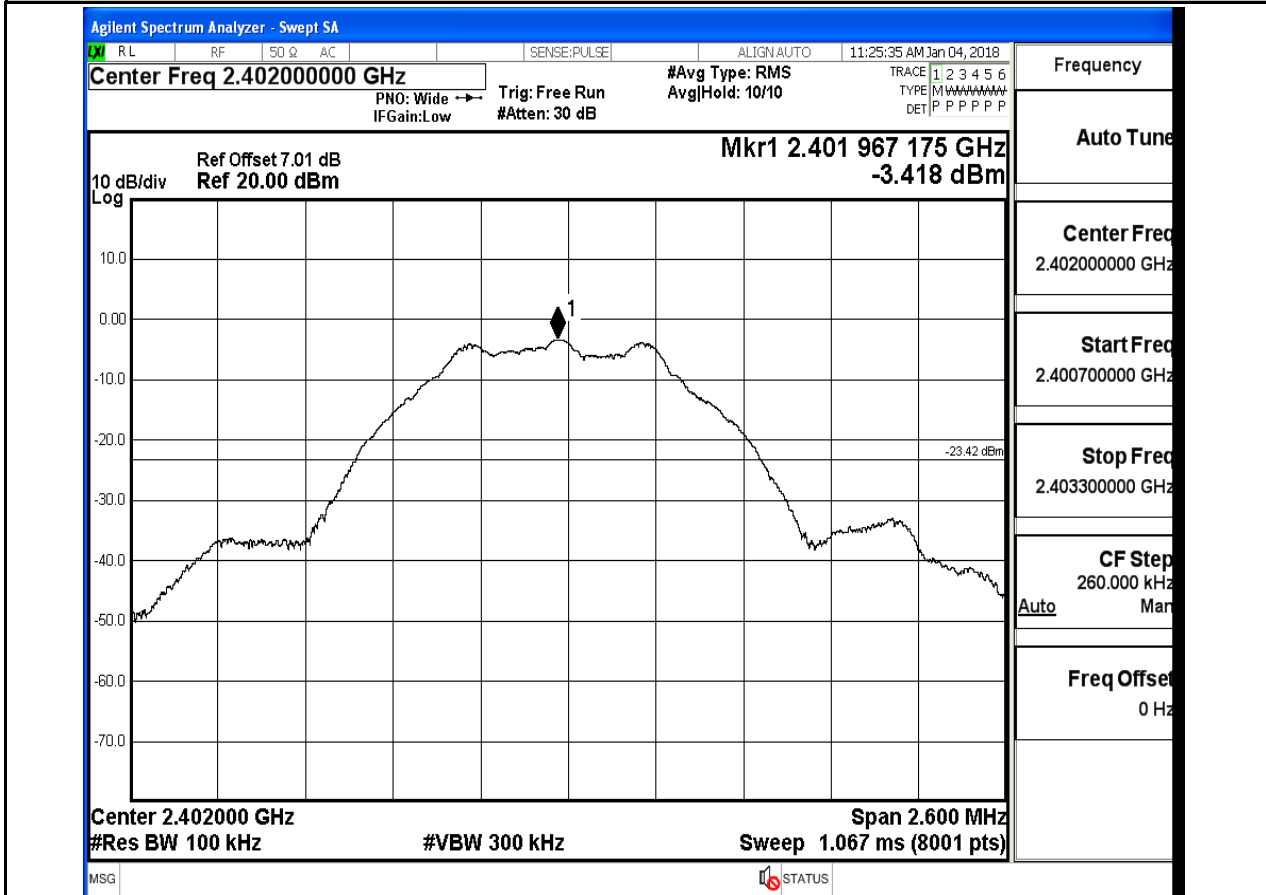
CF Step  
2.200000 MHz

Freq Offset  
0 Hz

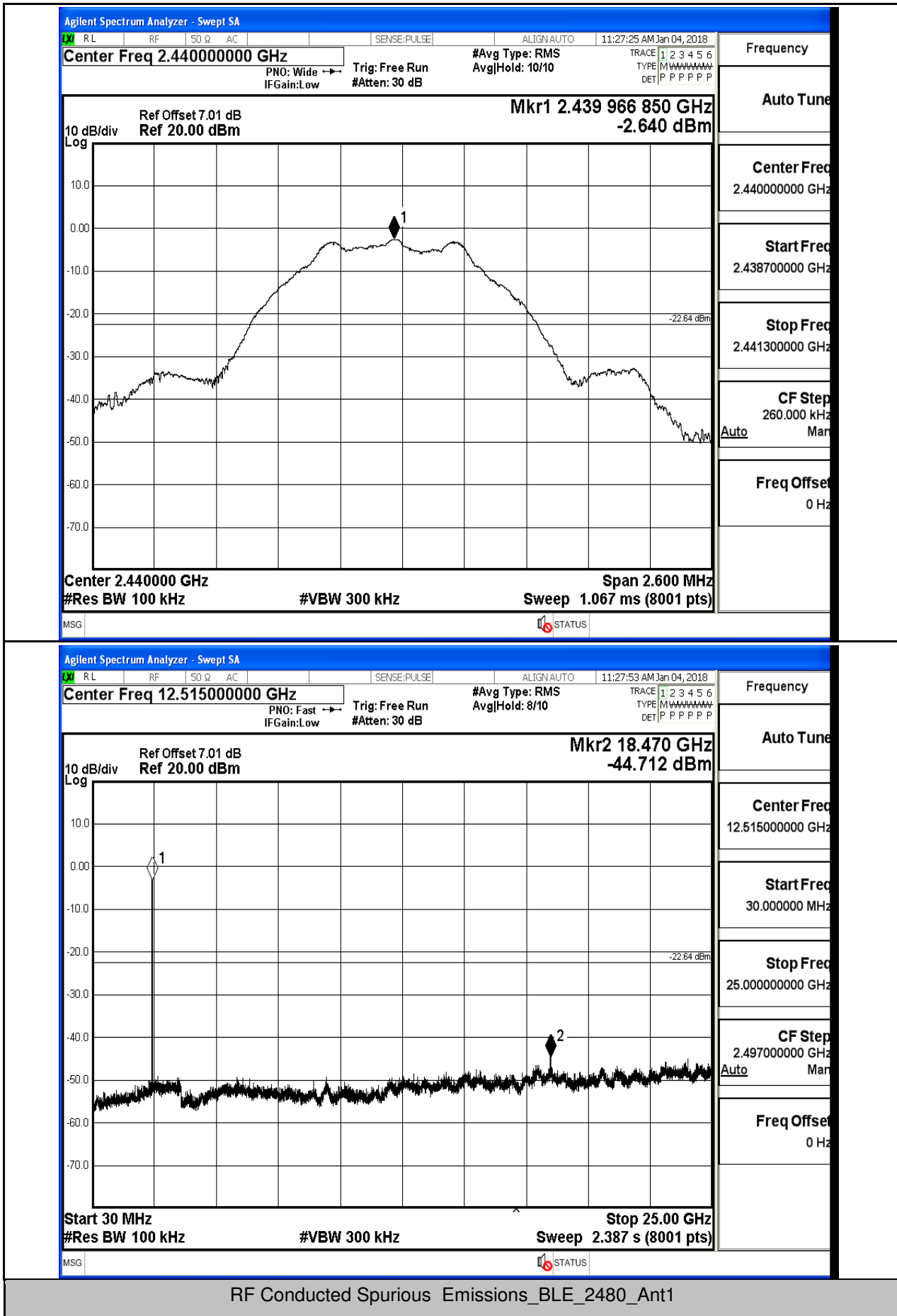
**B.5.RF Conducted Spurious Emissions**

| Test Mode | Test Channel | Ant  | StartFre [MHz] | StopFre [MHz] | RBW [kHz] | VBW [kHz] | Pref[dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-----------|--------------|------|----------------|---------------|-----------|-----------|-----------|------------------|-------------|---------|
| BLE       | 2402         | Ant1 | 30             | 25000         | 100       | 300       | -3.418    | -45.342          | <-23.418    | PASS    |
| BLE       | 2440         | Ant1 | 30             | 25000         | 100       | 300       | -2.64     | -44.712          | <-22.64     | PASS    |
| BLE       | 2480         | Ant1 | 30             | 25000         | 100       | 300       | -2.218    | -45.522          | <-22.218    | PASS    |

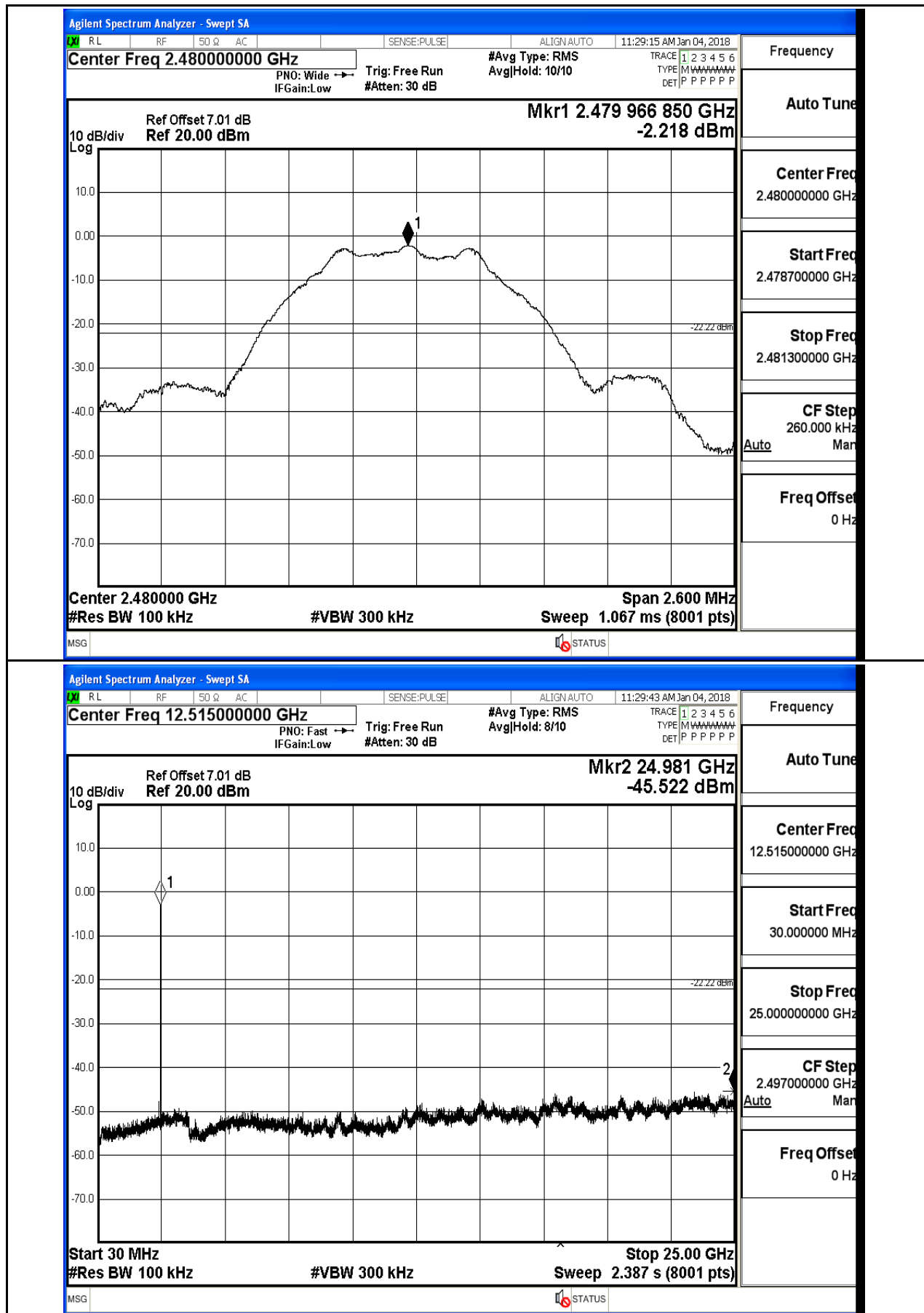
## RF Conducted Spurious Emissions\_BLE\_2402\_Ant1



## RF Conducted Spurious Emissions\_BLE\_2440\_Ant1



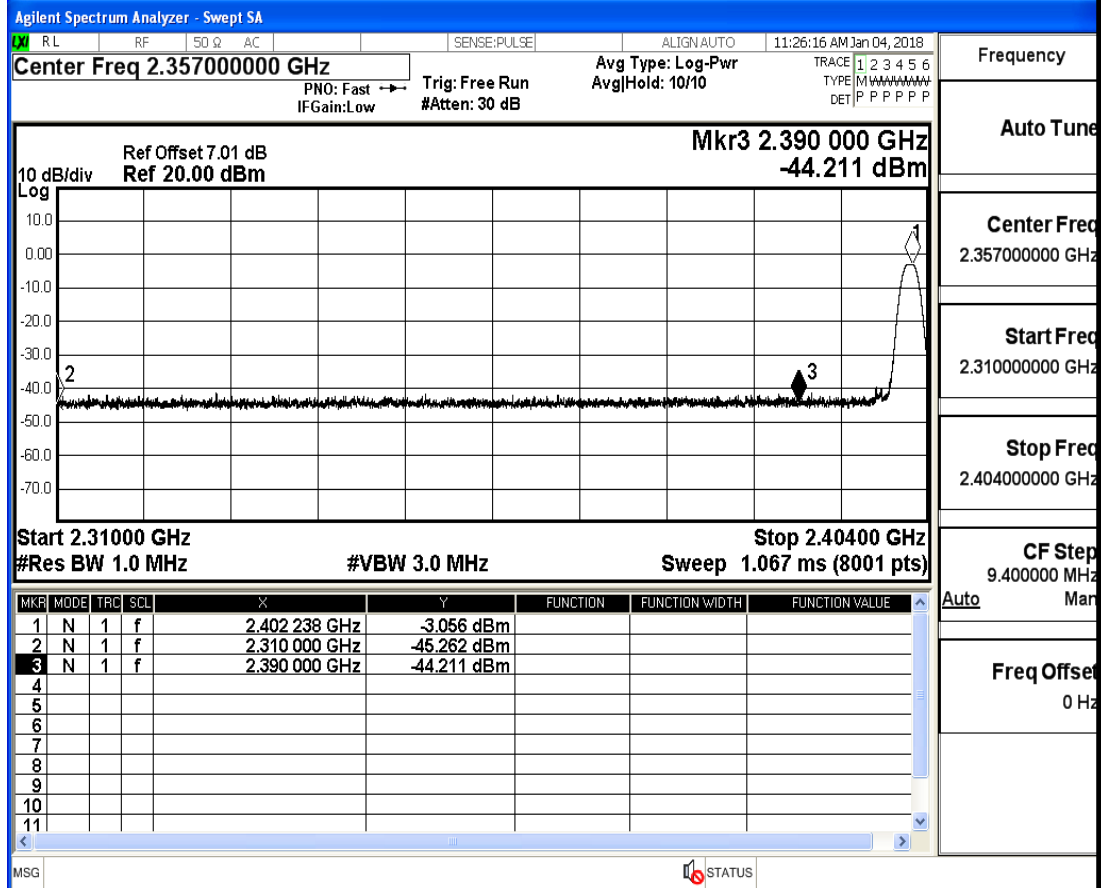
RF Conducted Spurious Emissions\_BLE\_2480\_Ant1



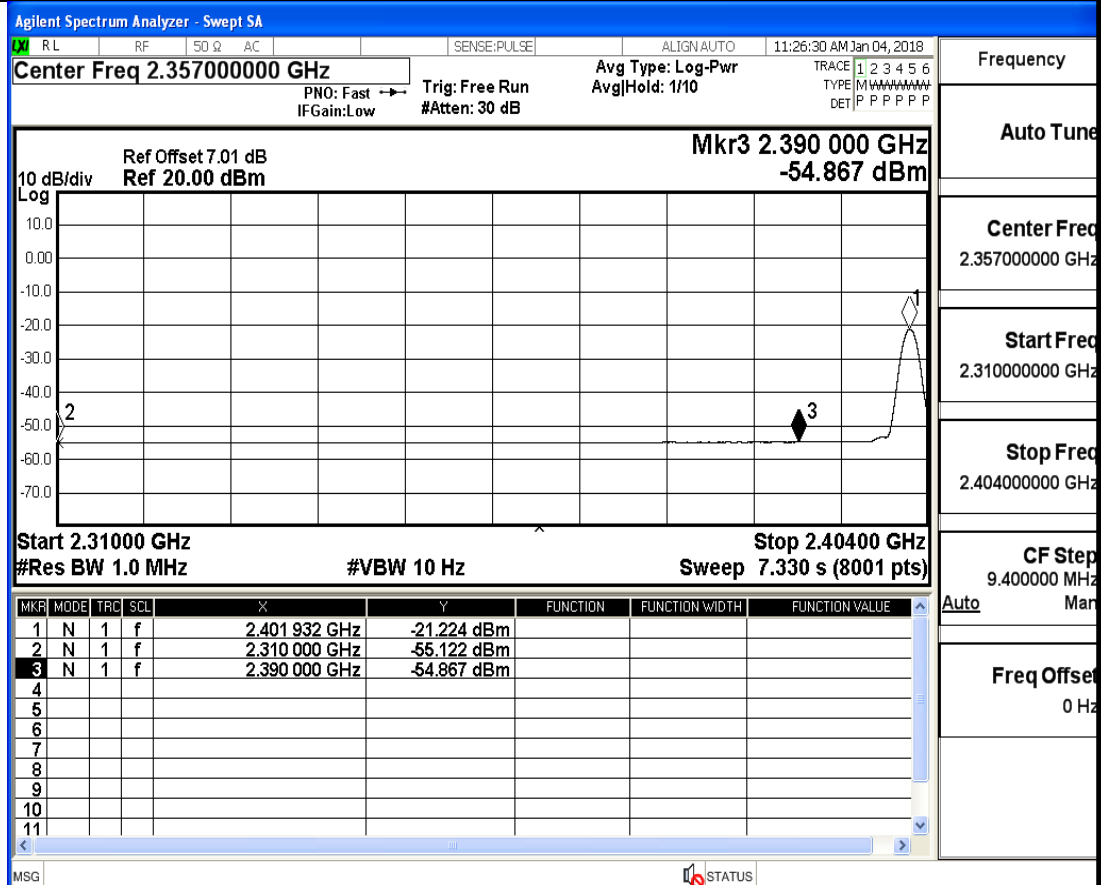
**B.6.Restrict-band band-edge measurements**

| Test Mode | Test Channel | Ant  | Freq.  | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|-----------|--------------|------|--------|-------------|------|---------------|------------|----------|----------------|---------|
| BLE       | 2402         | Ant1 | 2310.0 | -45.26      | 2    | 0             | 52.00      | PEAK     | 74             | PASS    |
| BLE       | 2402         | Ant1 | 2310.0 | -55.12      | 2    | 0             | 42.14      | AV       | 54             | PASS    |
| BLE       | 2402         | Ant1 | 2390.0 | -44.21      | 2    | 0             | 53.05      | PEAK     | 74             | PASS    |
| BLE       | 2402         | Ant1 | 2390.0 | -54.87      | 2    | 0             | 42.39      | AV       | 54             | PASS    |
| BLE       | 2480         | Ant1 | 2483.5 | -39.56      | 2    | 0             | 57.70      | PEAK     | 74             | PASS    |
| BLE       | 2480         | Ant1 | 2483.5 | -53.12      | 2    | 0             | 44.14      | AV       | 54             | PASS    |
| BLE       | 2480         | Ant1 | 2500.0 | -43.98      | 2    | 0             | 53.28      | PEAK     | 74             | PASS    |
| BLE       | 2480         | Ant1 | 2500.0 | -54.48      | 2    | 0             | 42.78      | AV       | 54             | PASS    |

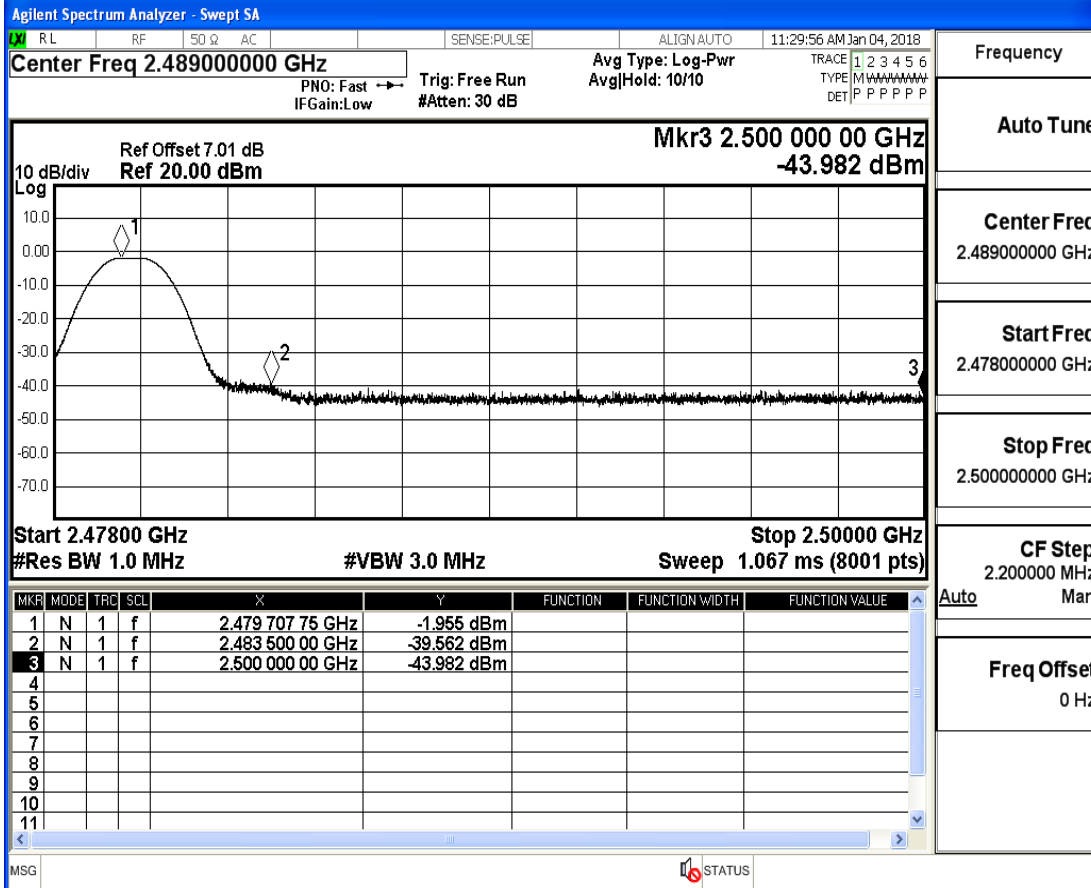
## Restrict-band band-edge measurements\_BLE\_2402\_Ant1\_PEAK



## Restrict-band band-edge measurements BLE\_2402\_Ant1\_AV



## Restrict-band band-edge measurements\_BLE\_2480\_Ant1\_PEAK



## Restrict-band band-edge measurements\_BLE\_2480\_Ant1\_AV

