

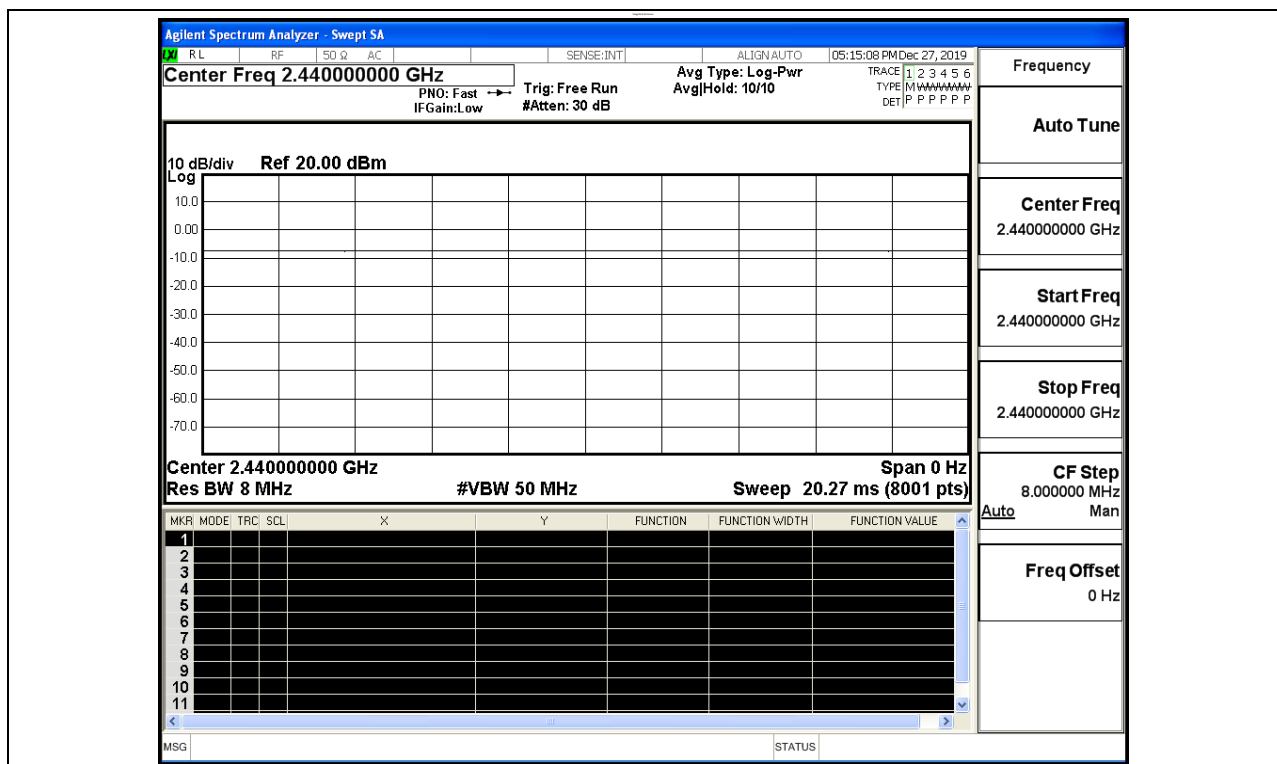
**Appendix A**  
**RF Test Data for BLE (Conducted Measurement)**  
**Product Name: LutiKey Tracker**  
**Trade Mark: LutiKey**  
**Test Model: LutiKey0001**

**Environmental Conditions**

|                    |             |
|--------------------|-------------|
| Temperature:       | 24.3 ° C    |
| Relative Humidity: | 53.1%       |
| ATM Pressure:      | 100.0 kPa   |
| Test Engineer:     | Qu Xin      |
| Supervised by:     | Wang Chuang |

**A.1 Duty Cycle**

| Test Mode | Test Channel | Ant  | Duty Cycle[%] | Verdict |
|-----------|--------------|------|---------------|---------|
| BT LE     | 2440         | Ant1 | 100           | PASS    |

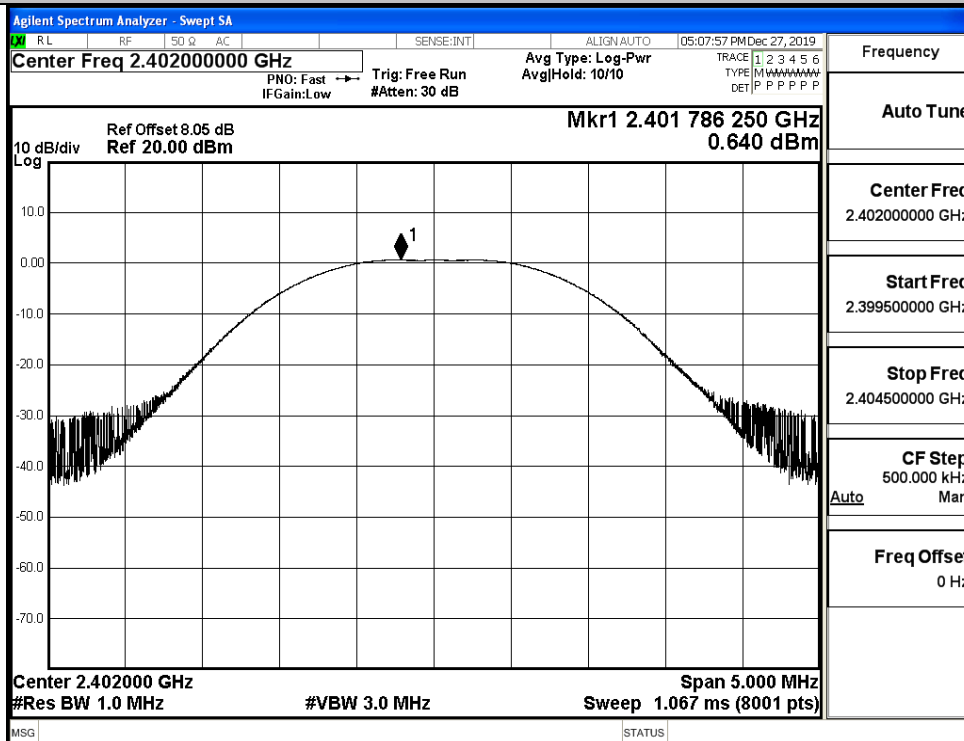


## A.2 Maximum Conducted Peak Output Power

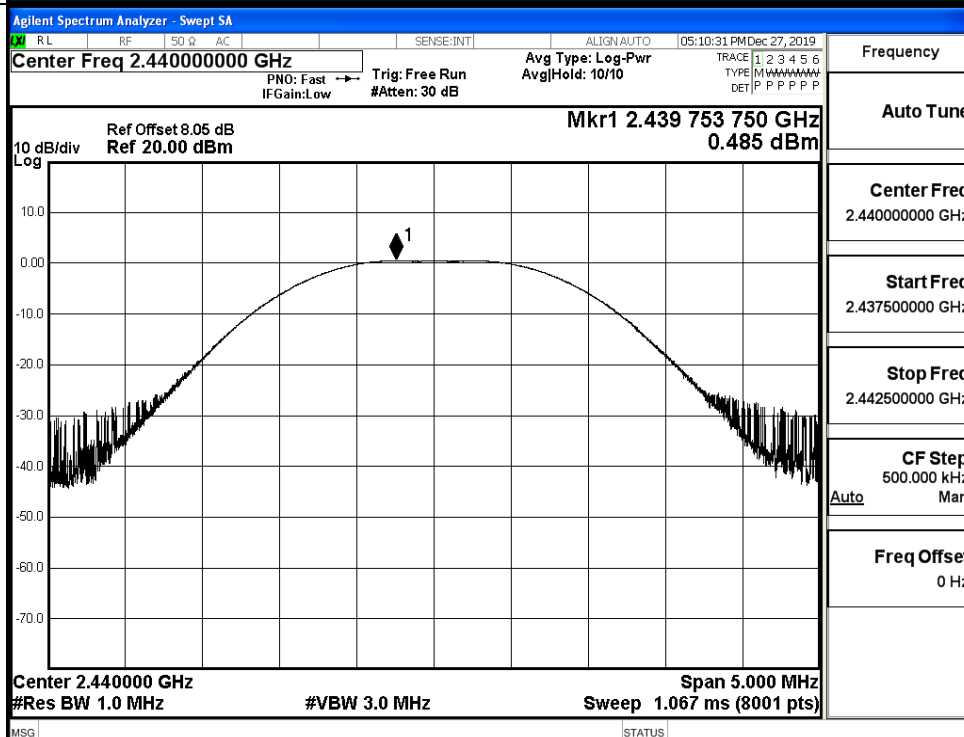
| Mode  | Channel | Conduct Peak Power[dBm] | Limit [dBm] | Verdict |
|-------|---------|-------------------------|-------------|---------|
| BT LE | LCH     | 0.640                   | 30          | PASS    |
| BT LE | MCH     | 0.485                   | 30          | PASS    |
| BT LE | HCH     | 0.323                   | 30          | PASS    |

Test Graphs

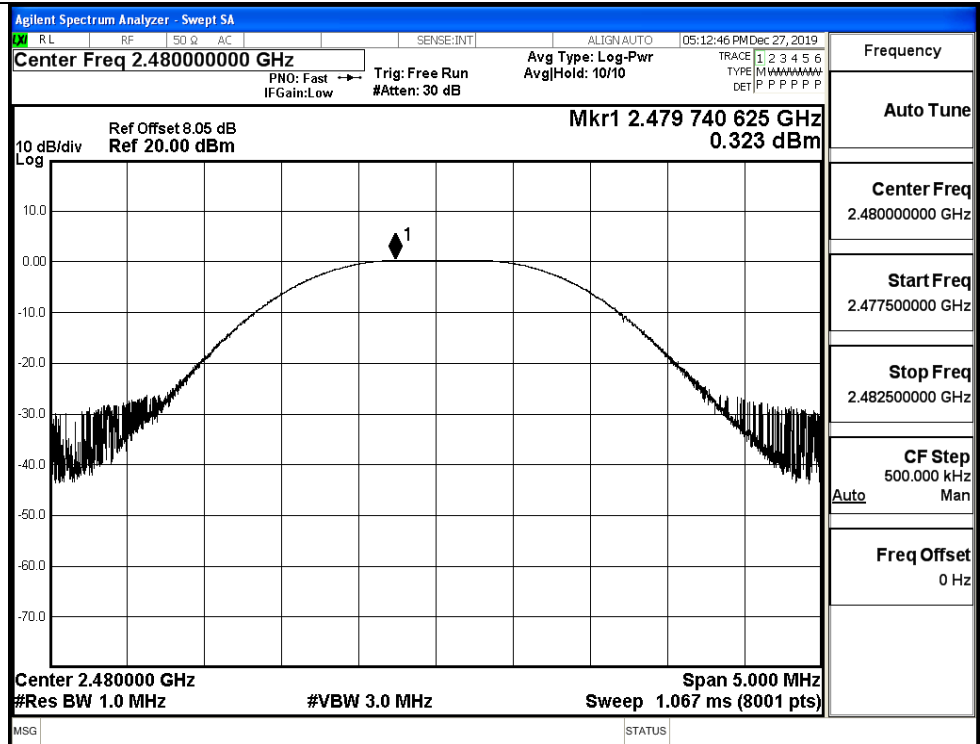
LCH



MCH



HCH

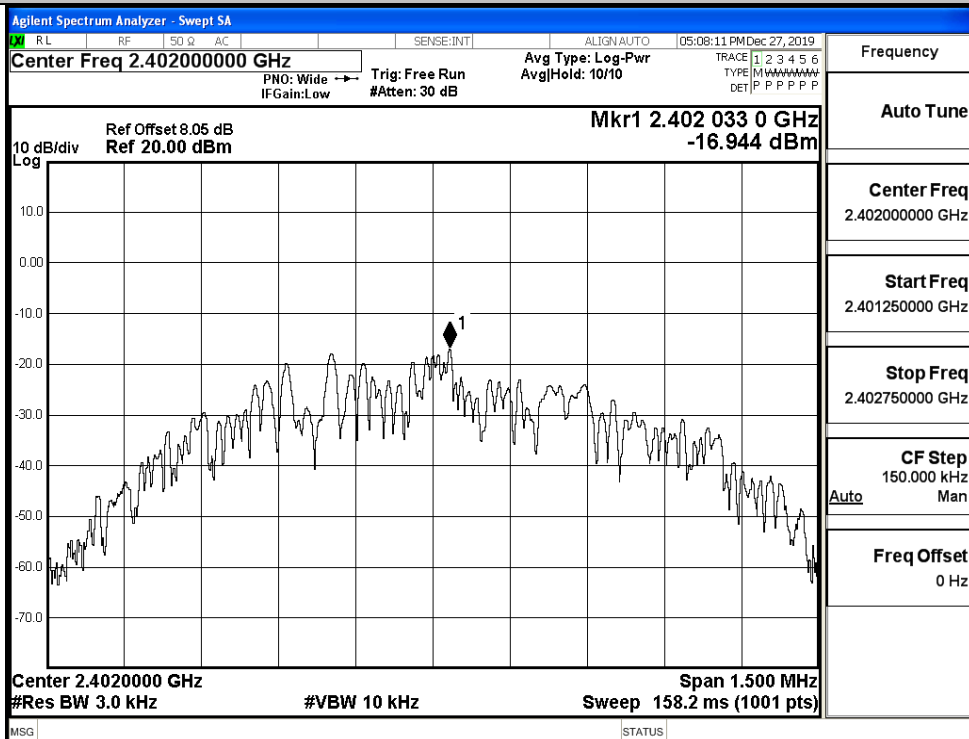


## A.3 Maximum Power Spectral Density

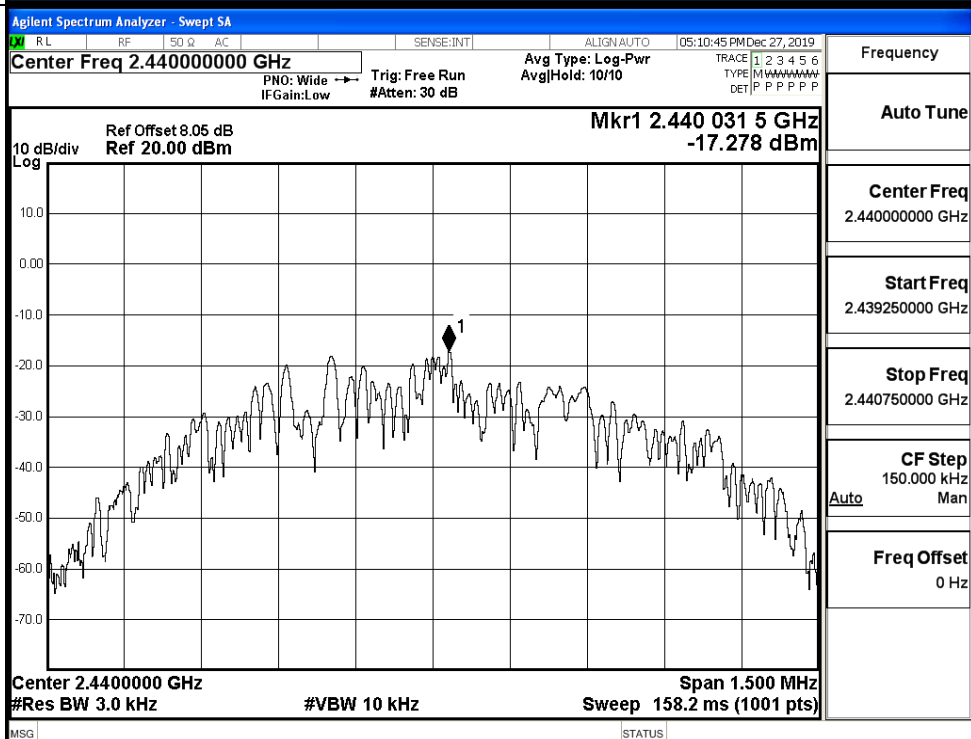
| Mode  | Channel | PSD [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-------|---------|----------------|------------------|---------|
| BT LE | LCH     | -16.944        | 8                | PASS    |
| BT LE | MCH     | -17.278        | 8                | PASS    |
| BT LE | HCH     | -17.624        | 8                | PASS    |

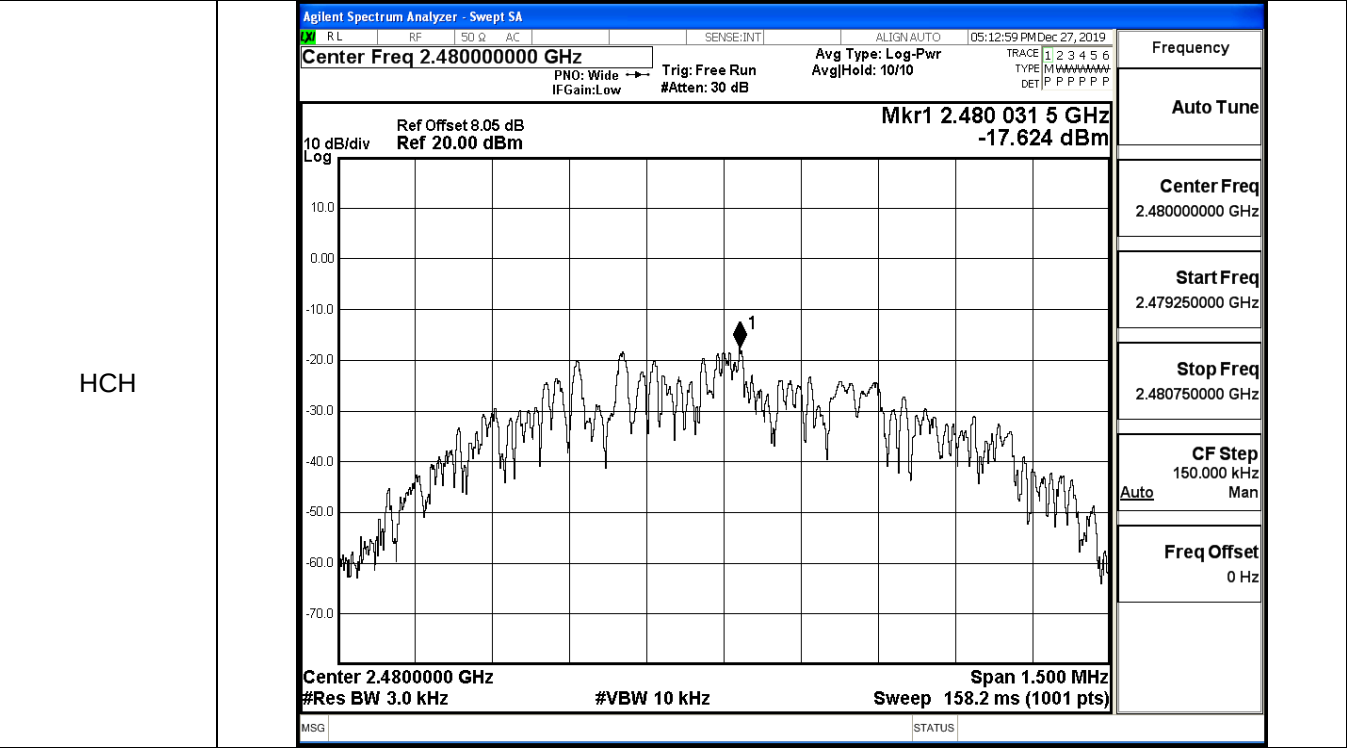
## Test Graphs

LCH



MCH



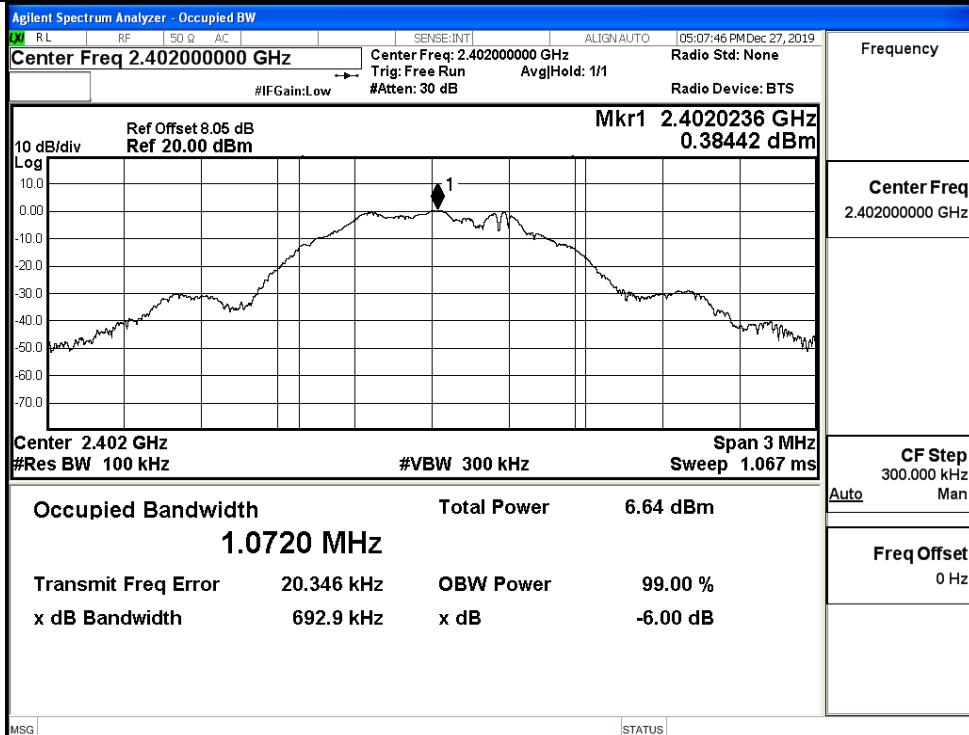


## A.4 6dB Bandwidth

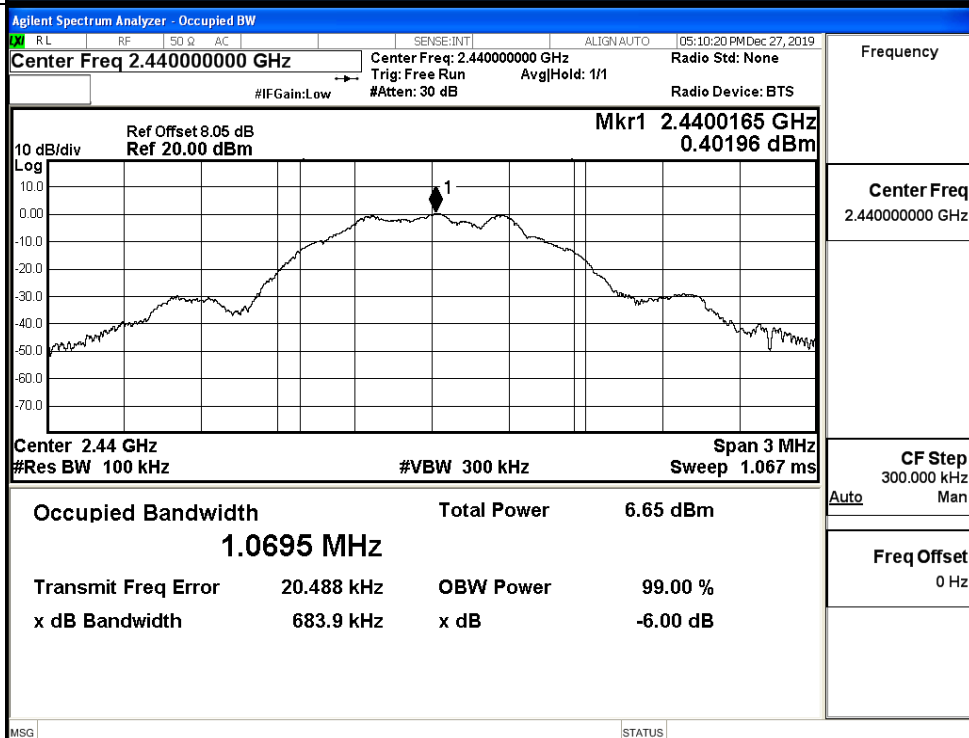
| Mode  | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-------|---------|---------------------|-------------|---------|
| BT LE | LCH     | 0.6929              | $\geq 0.5$  | PASS    |
| BT LE | MCH     | 0.6839              | $\geq 0.5$  | PASS    |
| BT LE | HCH     | 0.6826              | $\geq 0.5$  | PASS    |

## Test Graphs

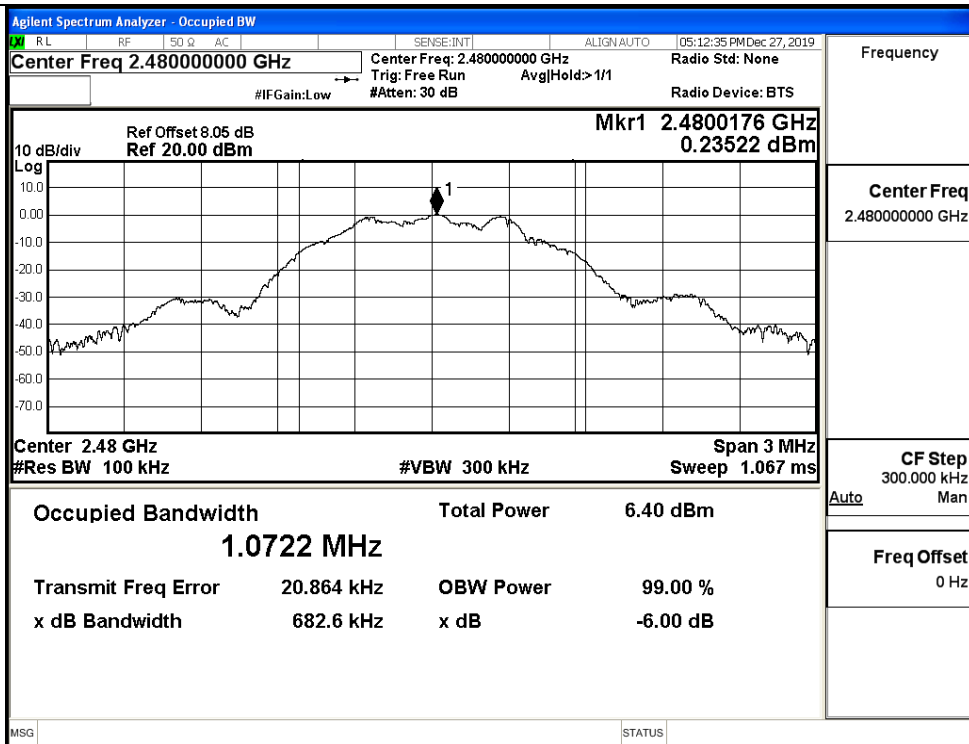
LCH



MCH



HCH

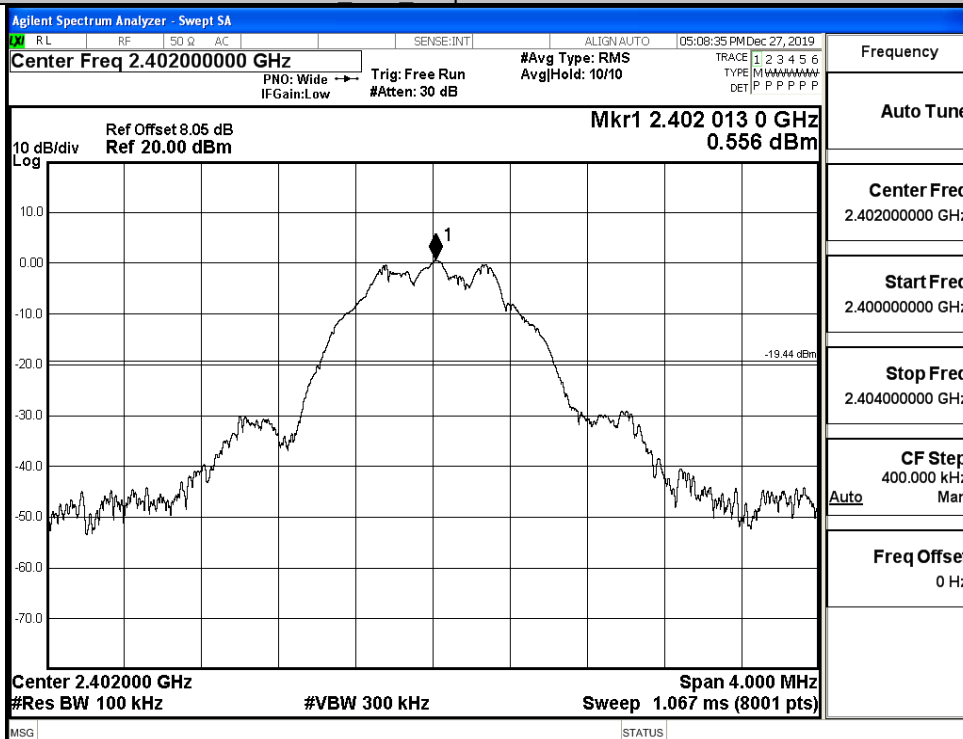


## A.5 RF Conducted Spurious Emissions

| Mode  | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|------------|------------------|-------------|---------|
| BT LE | LCH     | 0.556      | -36.959          | -19.444     | PASS    |
| BT LE | MCH     | 0.418      | -36.849          | -19.582     | PASS    |
| BT LE | HCH     | 0.234      | -37.202          | -19.766     | PASS    |

BT LE LCH Graphs

Pref/BT LE/LCH

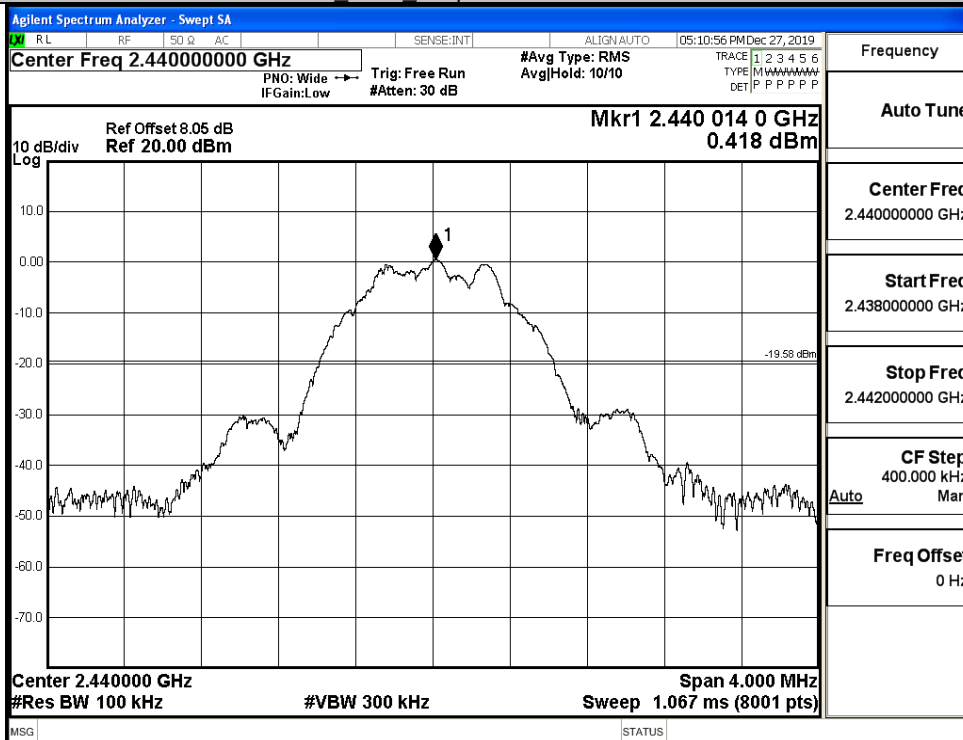


Puw/BT LE/LCH

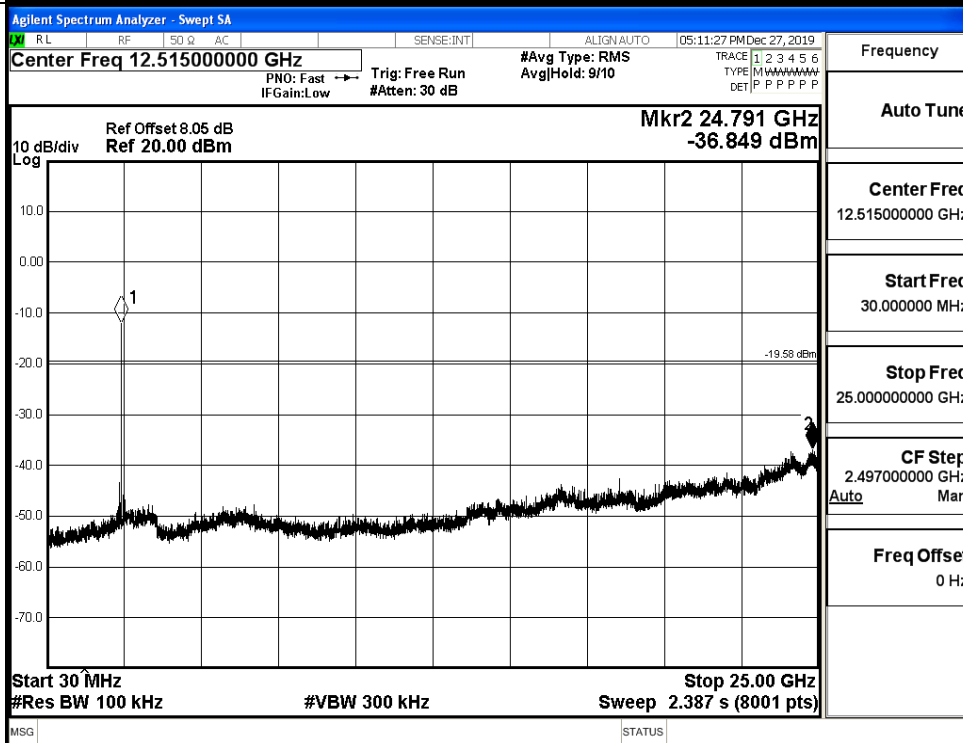


## BT LE MCH Graphs

Pref/BT LE/MCH

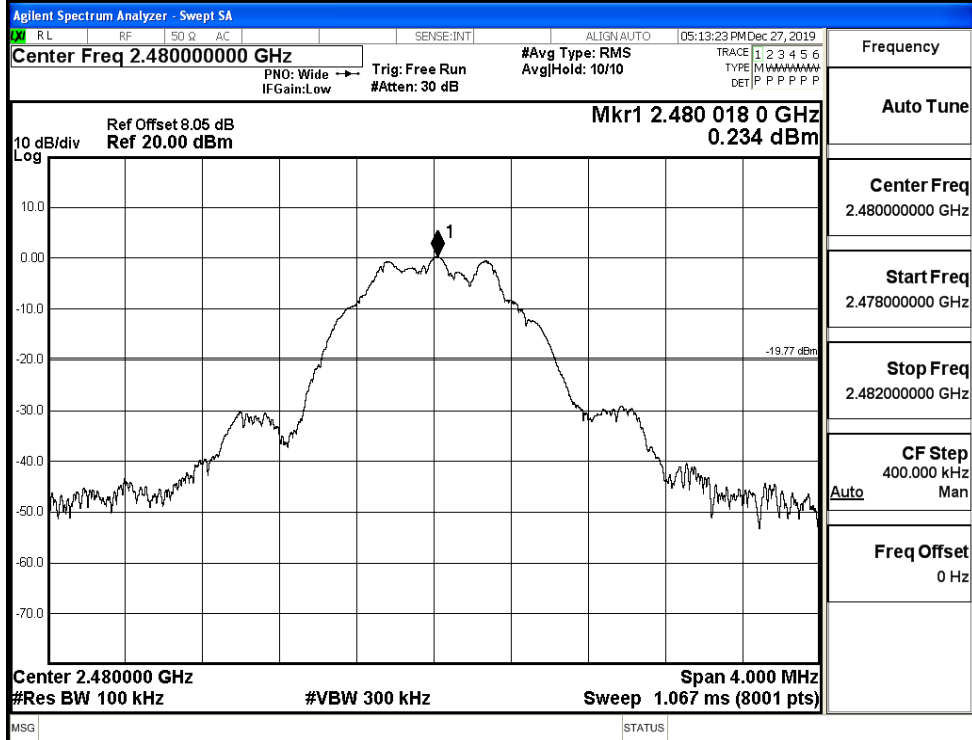


Puw/BT LE/MCH

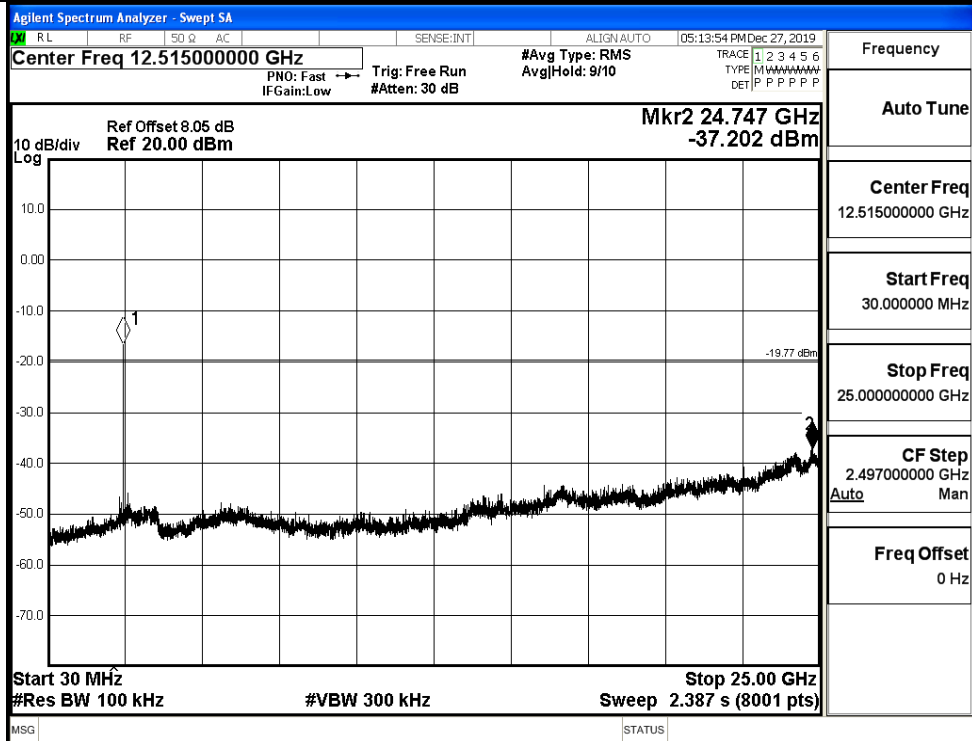


## BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

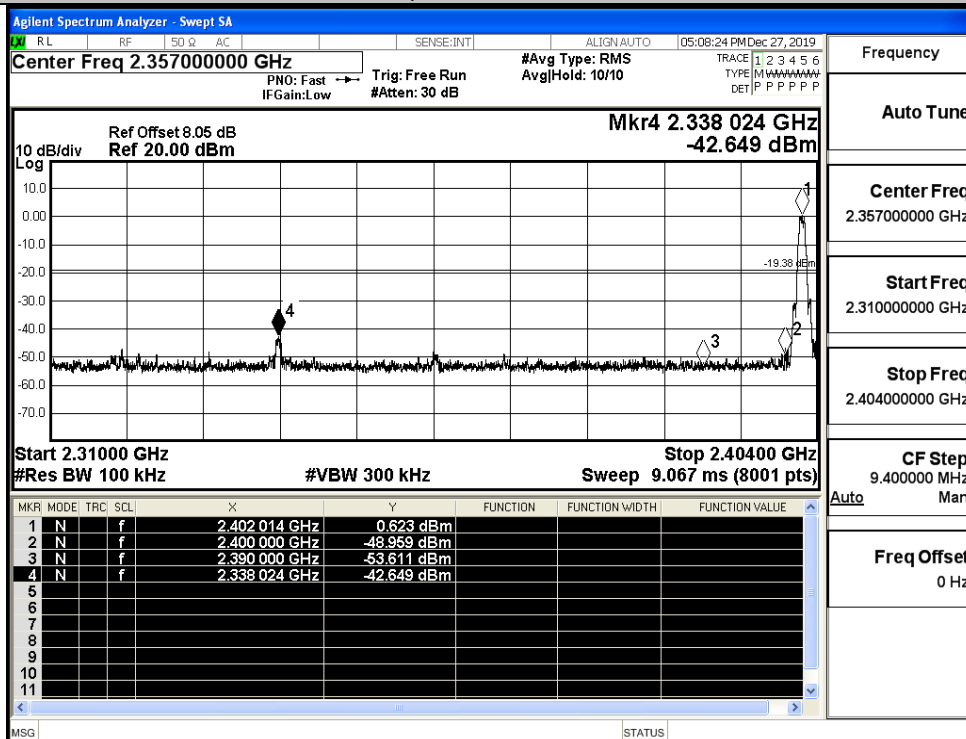


## A.6 Band-edge for RF Conducted Emissions

| Mode  | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|--------------------|--------------------------|-------------|---------|
| BT LE | LCH     | 0.623              | -42.649                  | -19.38      | PASS    |
| BT LE | HCH     | 0.363              | -47.753                  | -19.64      | PASS    |

Test Graphs

LCH



Frequency

Auto Tune

Center Freq  
2.357000000 GHz

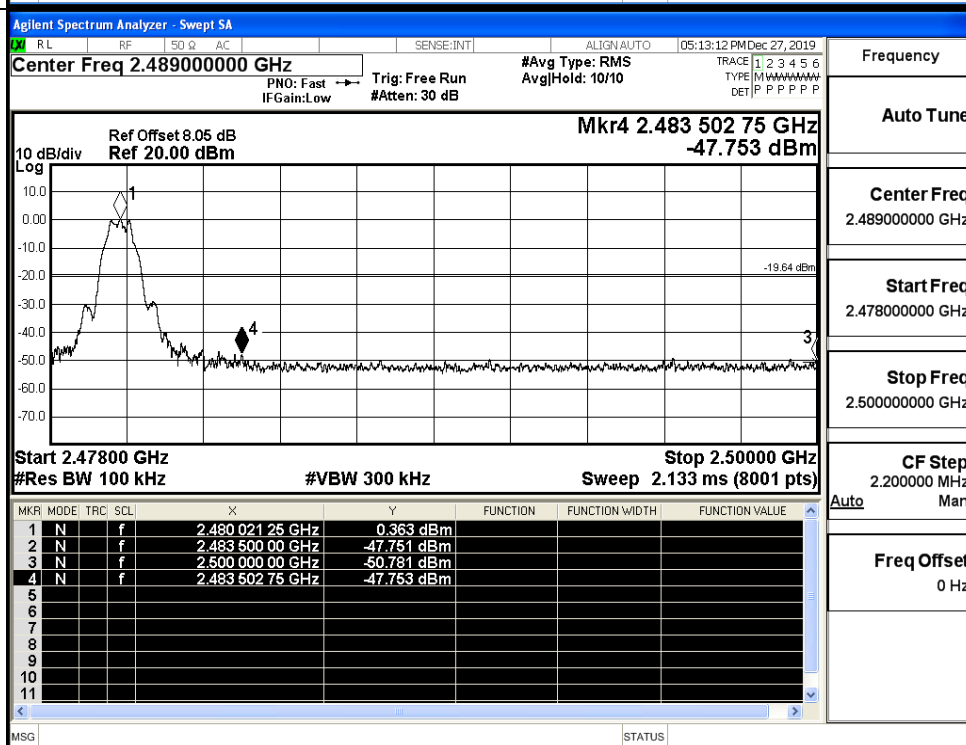
Start Freq  
2.310000000 GHz

Stop Freq  
2.404000000 GHz

CF Step  
9.400000 MHz

Freq Offset  
0 Hz

HCH



Frequency

Auto Tune

Center Freq  
2.489000000 GHz

Start Freq  
2.478000000 GHz

Stop Freq  
2.500000000 GHz

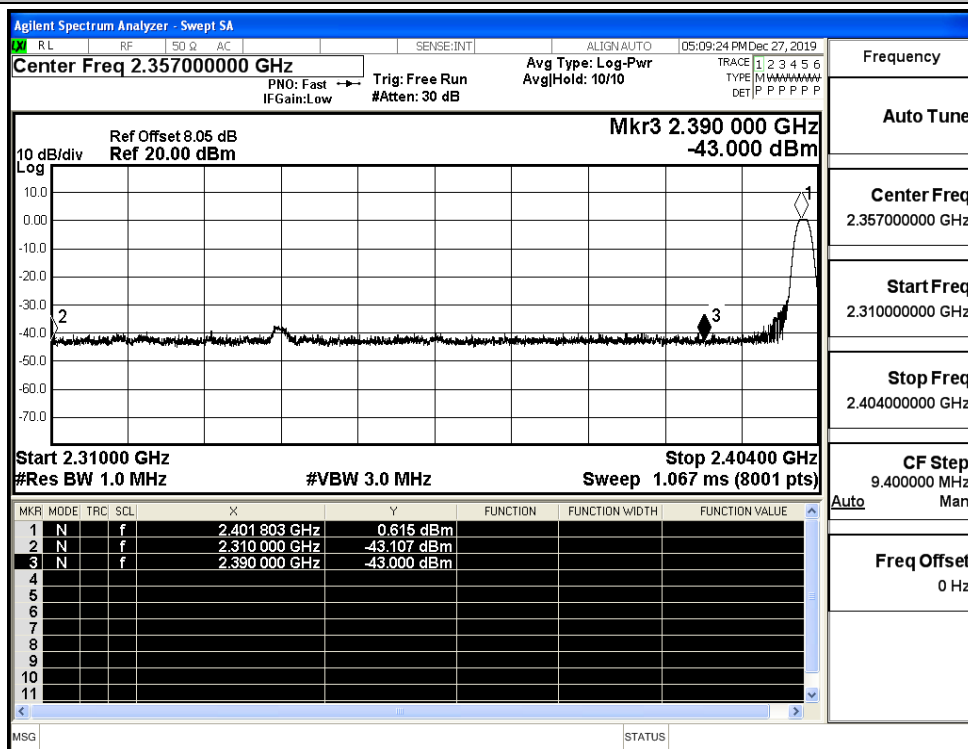
CF Step  
2.200000 MHz

Freq Offset  
0 Hz

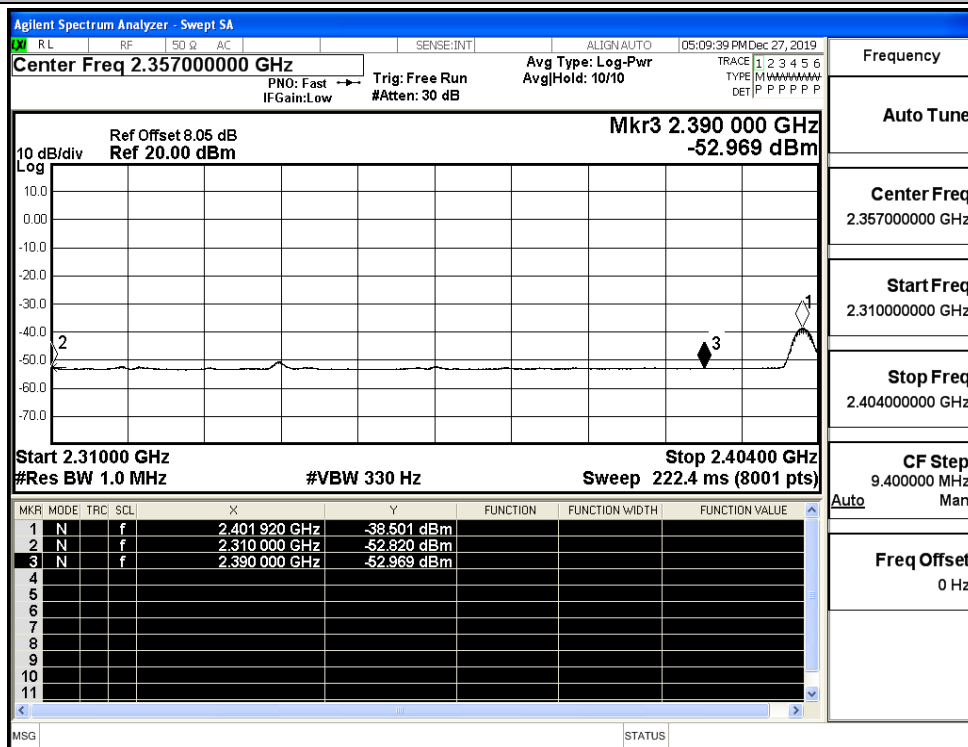
## A.7 Restrict-band band-edge measurements

| Test Mode | Test Channel | Ant  | Freq.  | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdi |
|-----------|--------------|------|--------|-------------|------|---------------|------------|----------|----------------|-------|
| BT LE     | 2402         | Ant1 | 2310.0 | -43.11      | 2.0  | 0             | 54.12      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2310.0 | -52.82      | 2.0  | 0             | 44.41      | AV       | 54             | PASS  |
|           |              | Ant1 | 2390.0 | -43.00      | 2.0  | 0             | 54.23      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2390.0 | -52.97      | 2.0  | 0             | 44.26      | AV       | 54             | PASS  |
|           | 2480         | Ant1 | 2483.5 | -34.67      | 2.0  | 0             | 62.56      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2483.5 | -52.60      | 2.0  | 0             | 44.63      | AV       | 54             | PASS  |
|           |              | Ant1 | 2500.0 | -42.54      | 2.0  | 0             | 54.69      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2500.0 | -52.30      | 2.0  | 0             | 44.93      | AV       | 54             | PASS  |

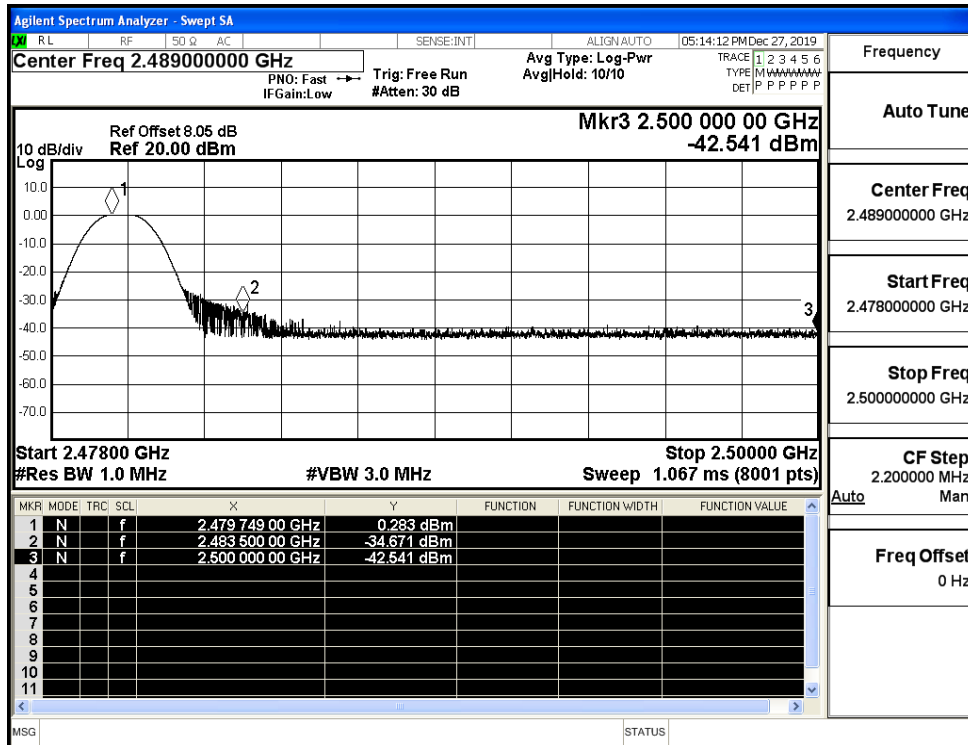
## Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



## Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_AV



## Restrict-band band-edge measurements\_BT LE\_2480\_Ant1\_PEAK



## Restrict-band band-edge measurements\_BT LE\_2480\_Ant1\_AV

