

## Appendix A

### RF Test Data for BT LE V4.2(DTS) (Conducted Measurement)

Product Name: bluetooth remote control

Trade Mark: N/A

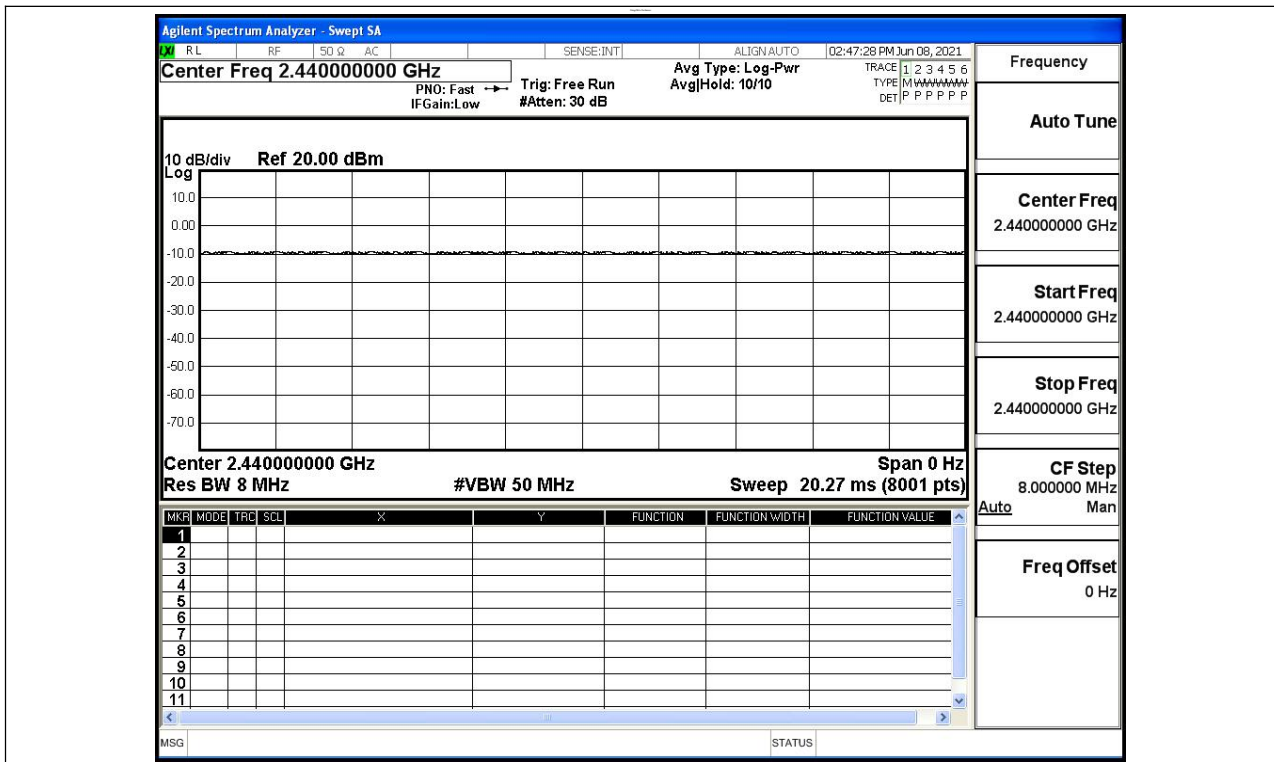
Test Model: T4HiU2005/35k

#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 24.6 ° C  |
| Relative Humidity: | 54.1%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Kay Hu    |
| Supervised by:     | Li Huan   |

#### A.1 Duty Cycle

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

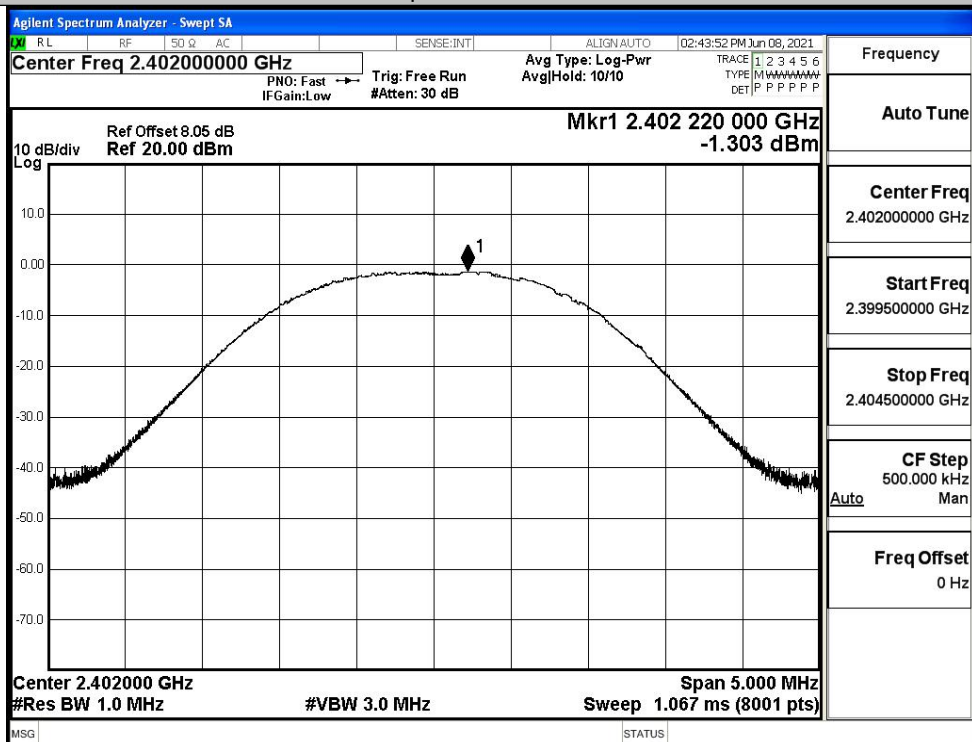


### A.2 Maximum Conducted Peak Output Power

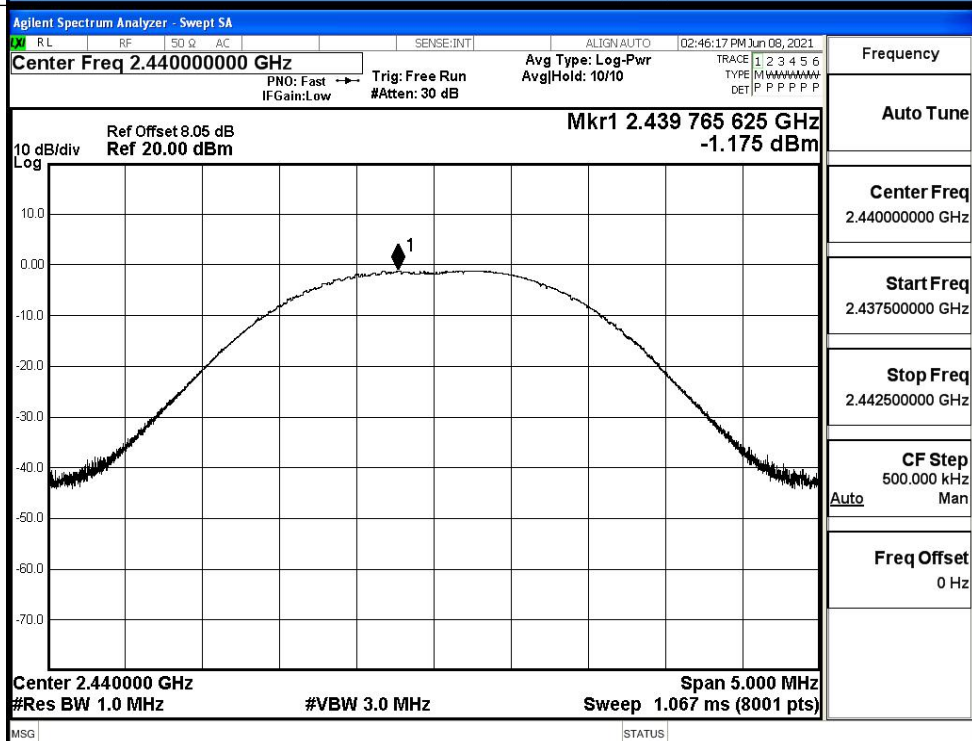
| Mode  | Channel | Conduct Peak Power[dBm] | Limit [dBm] | Verdict |
|-------|---------|-------------------------|-------------|---------|
| BT LE | LCH     | -1.303                  | 30          | PASS    |
| BT LE | MCH     | -1.175                  | 30          | PASS    |
| BT LE | HCH     | -0.769                  | 30          | PASS    |

#### Test Graphs

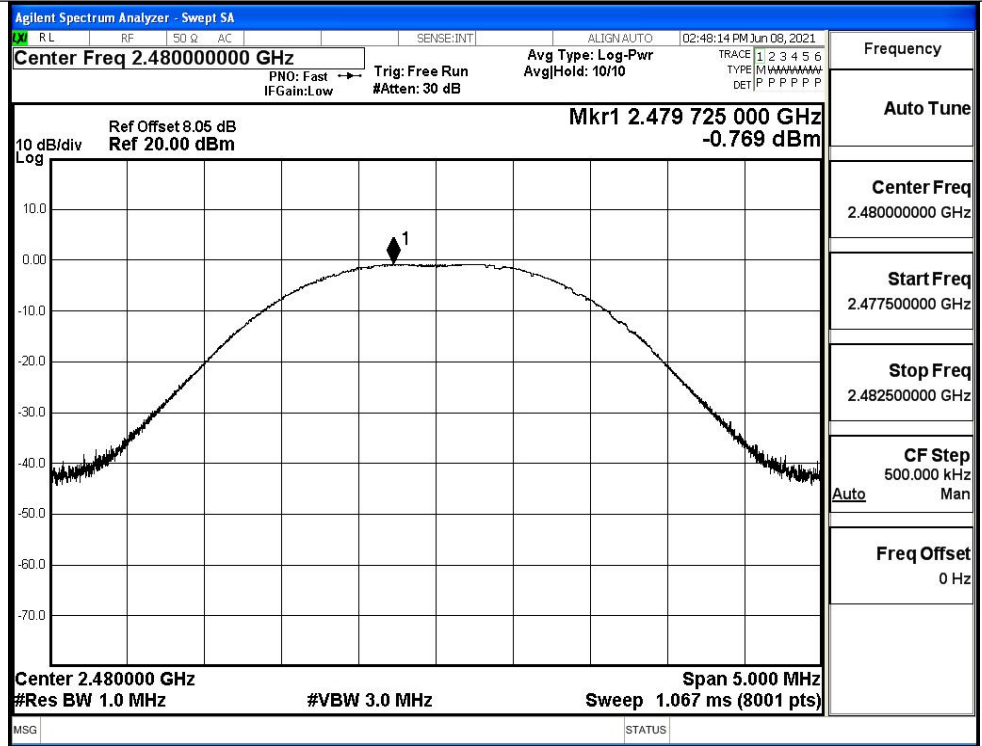
LCH



MCH

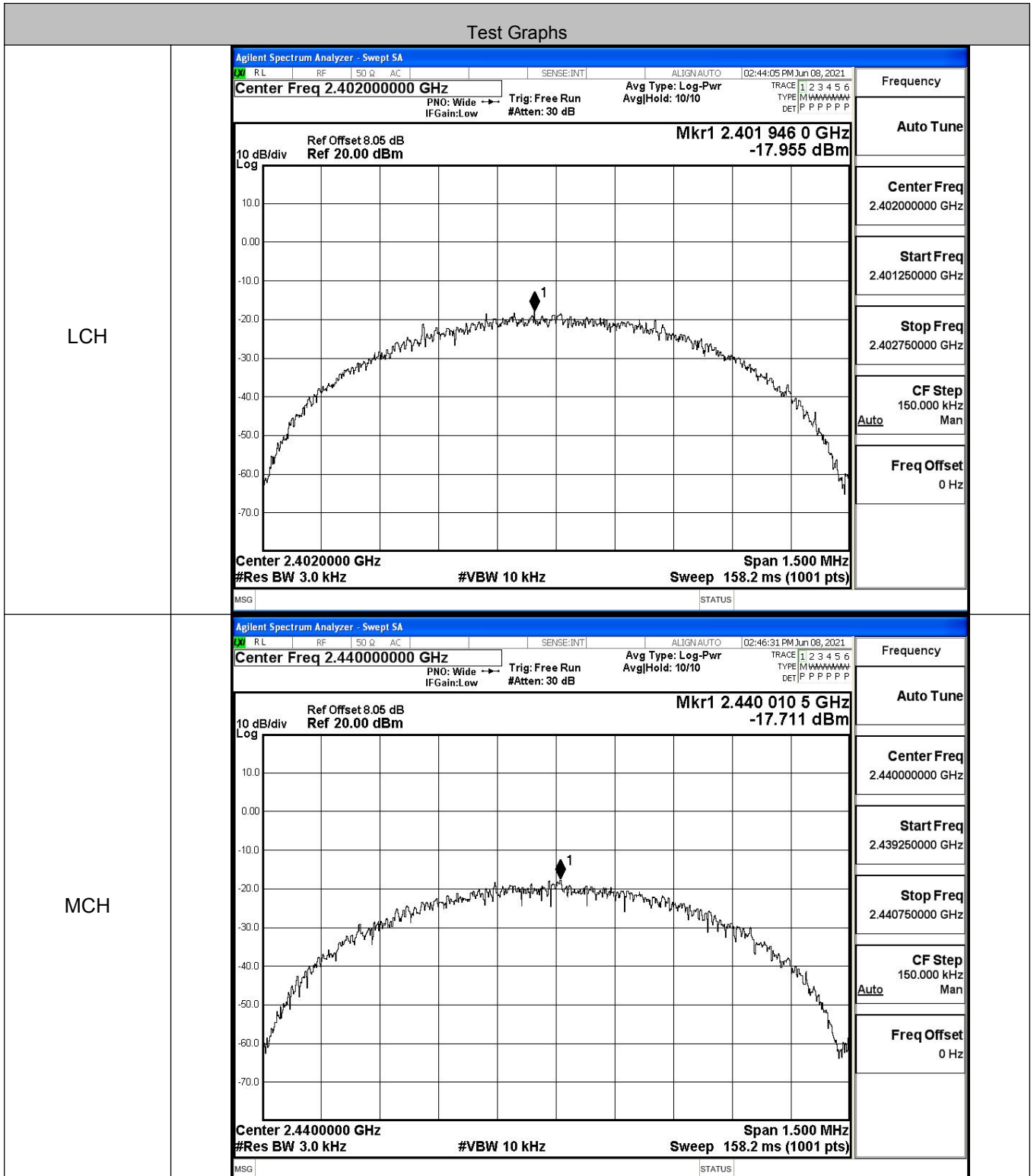


HCH

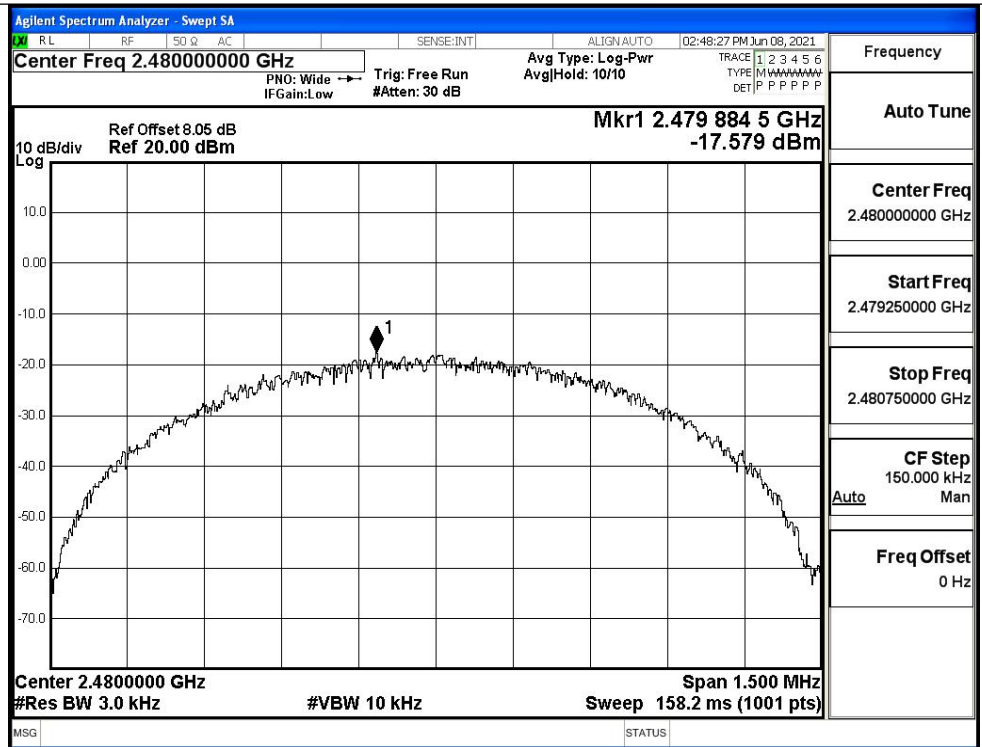


### A.3 Maximum Power Spectral Density

| Mode  | Channel | PSD [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-------|---------|----------------|------------------|---------|
| BT LE | LCH     | -17.955        | 8                | PASS    |
| BT LE | MCH     | -17.711        | 8                | PASS    |
| BT LE | HCH     | -17.579        | 8                | PASS    |



HCH



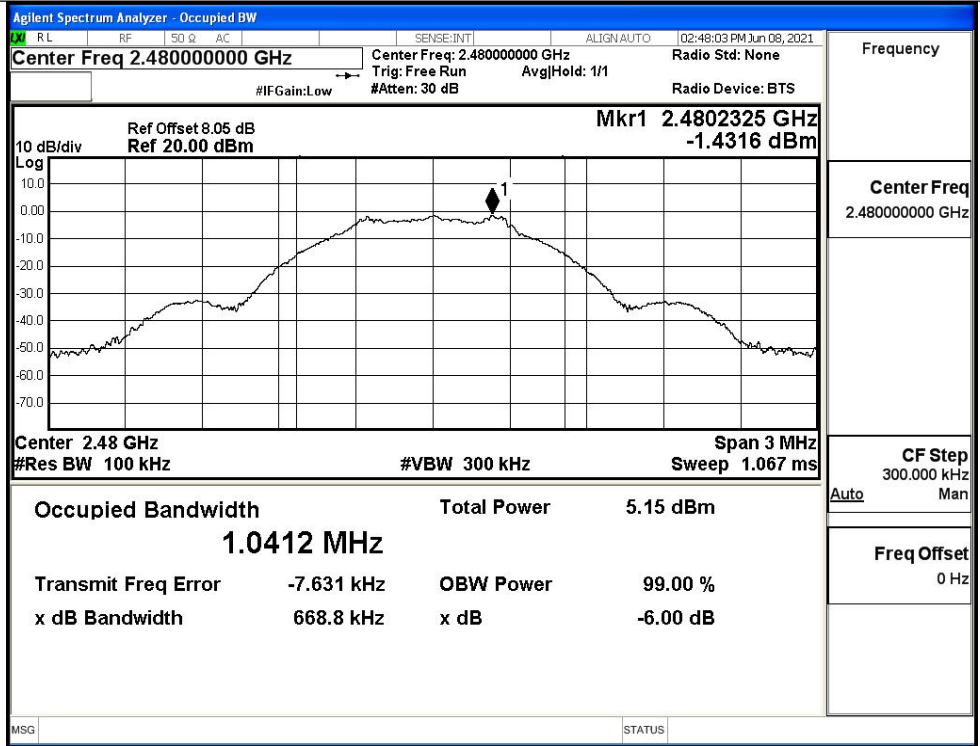
**A.4 6dB Bandwidth**

| Mode  | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-------|---------|---------------------|-------------|---------|
| BT LE | LCH     | 0.6553              | ≥0.5        | PASS    |
| BT LE | MCH     | 0.6686              | ≥0.5        | PASS    |
| BT LE | HCH     | 0.6688              | ≥0.5        | PASS    |

Test Graphs

|     |  |   |
|-----|--|---|
| LCH |  | <p>Frequency</p> <p>Center Freq<br/>2.402000000 GHz</p> <p>CF Step<br/>300.000 kHz<br/>Auto Man</p> <p>Freq Offset<br/>0 Hz</p> |
|     |  | <p>Frequency</p> <p>Center Freq<br/>2.440000000 GHz</p> <p>CF Step<br/>300.000 kHz<br/>Auto Man</p> <p>Freq Offset<br/>0 Hz</p> |

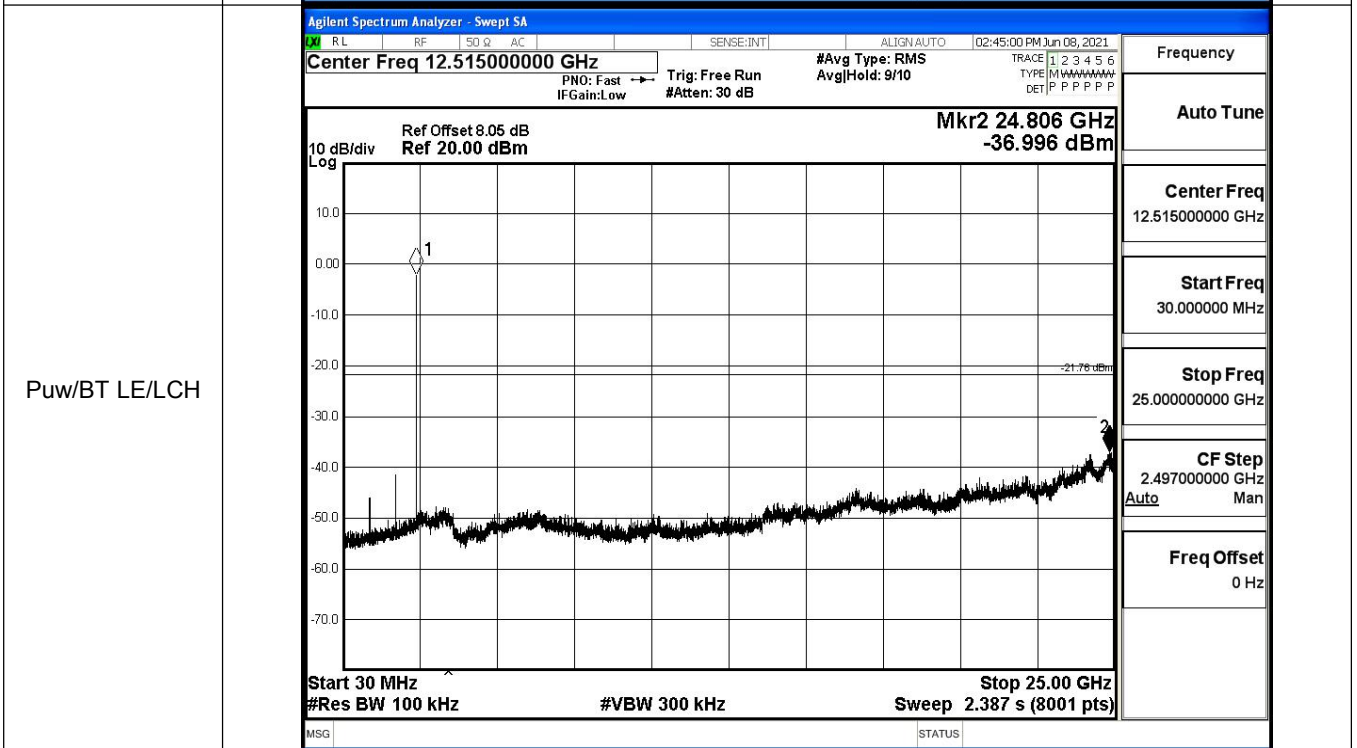
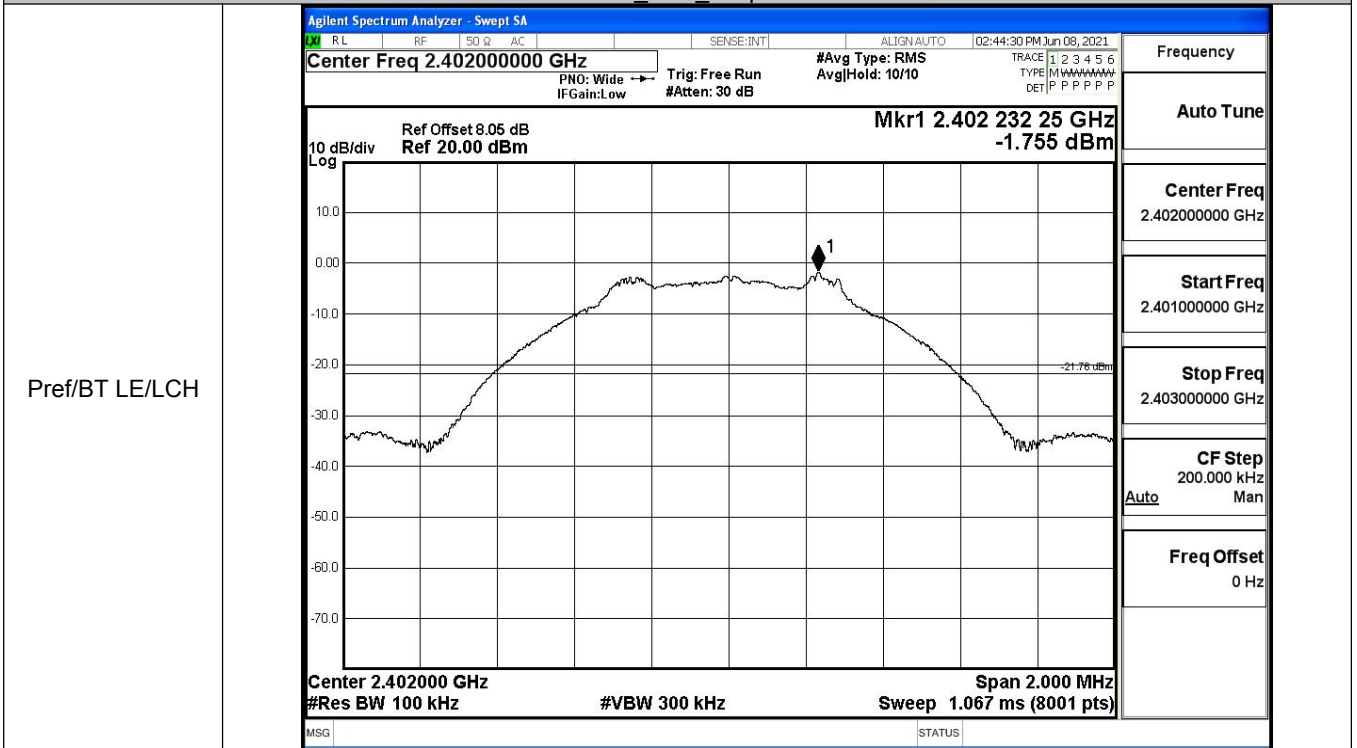
HCH



### A.5 RF Conducted Spurious Emissions

| Mode  | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|------------|------------------|-------------|---------|
| BT LE | LCH     | -1.755     | -36.996          | -21.755     | PASS    |
| BT LE | MCH     | -2.093     | -37.548          | -22.093     | PASS    |
| BT LE | HCH     | -1.382     | -35.941          | -21.382     | PASS    |

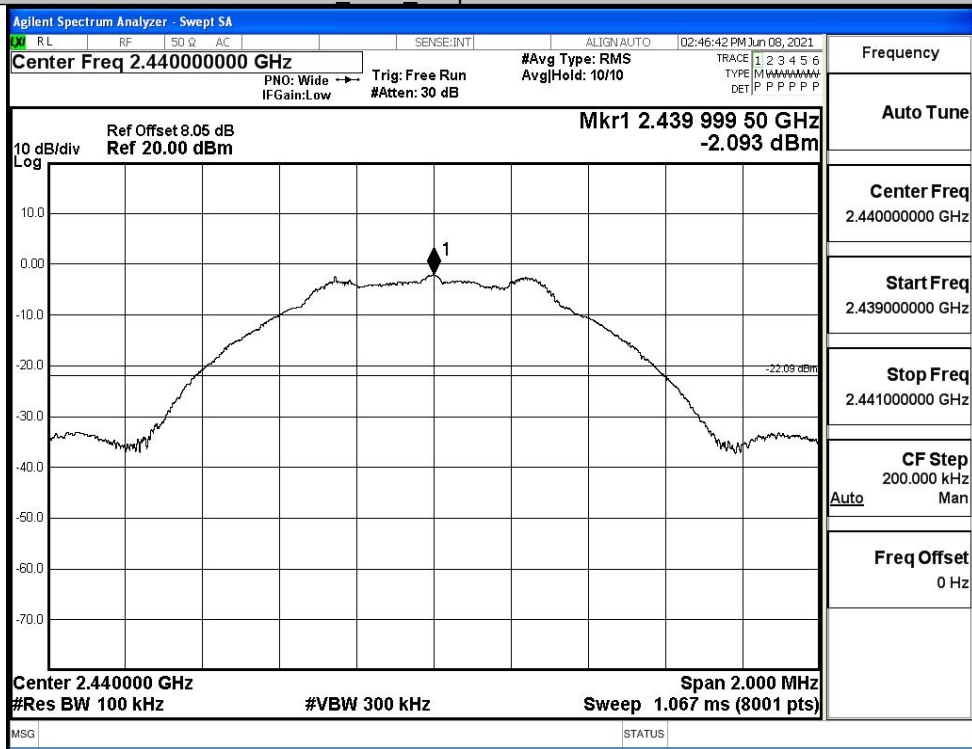
#### BT LE\_LCH\_Graphs



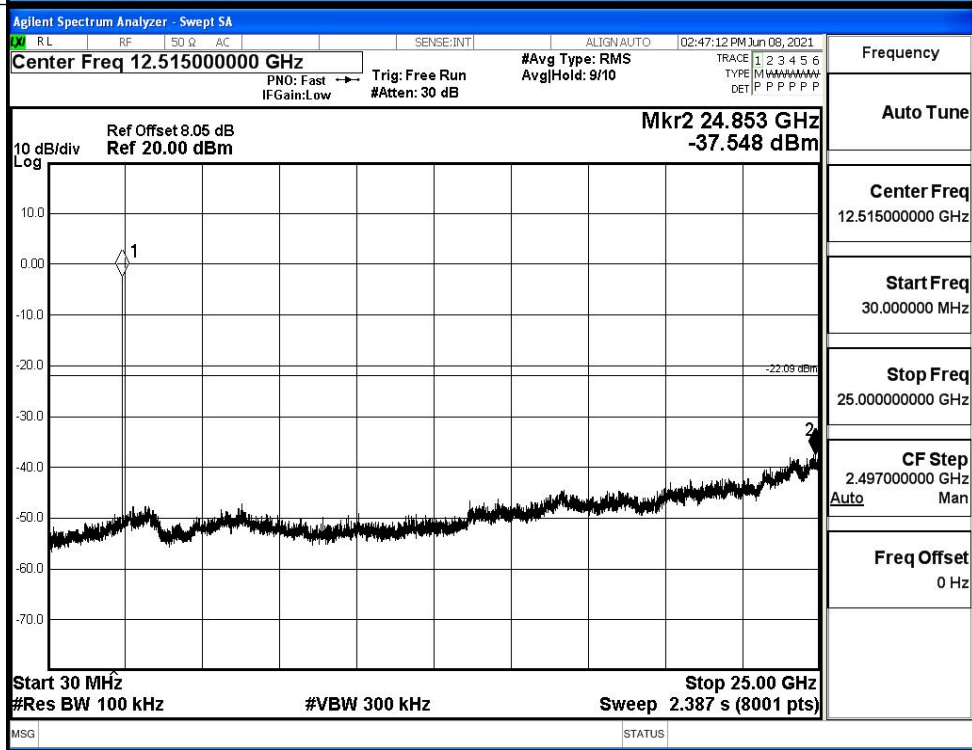


BT LE MCH Graphs

Pref/BT LE/MCH

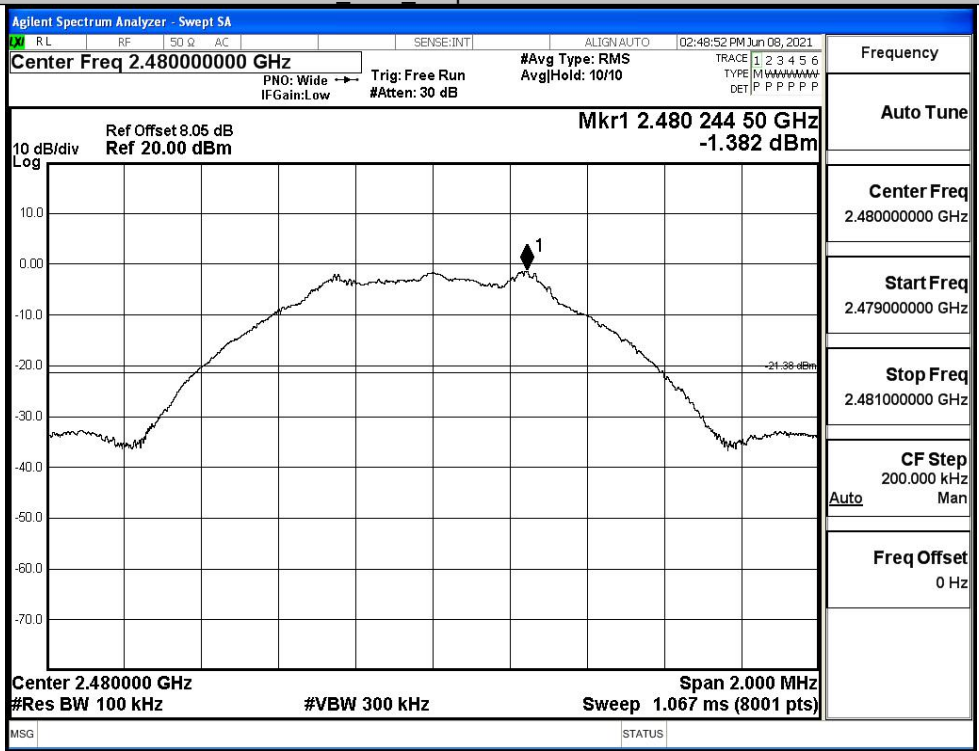


Puw/BT LE/MCH

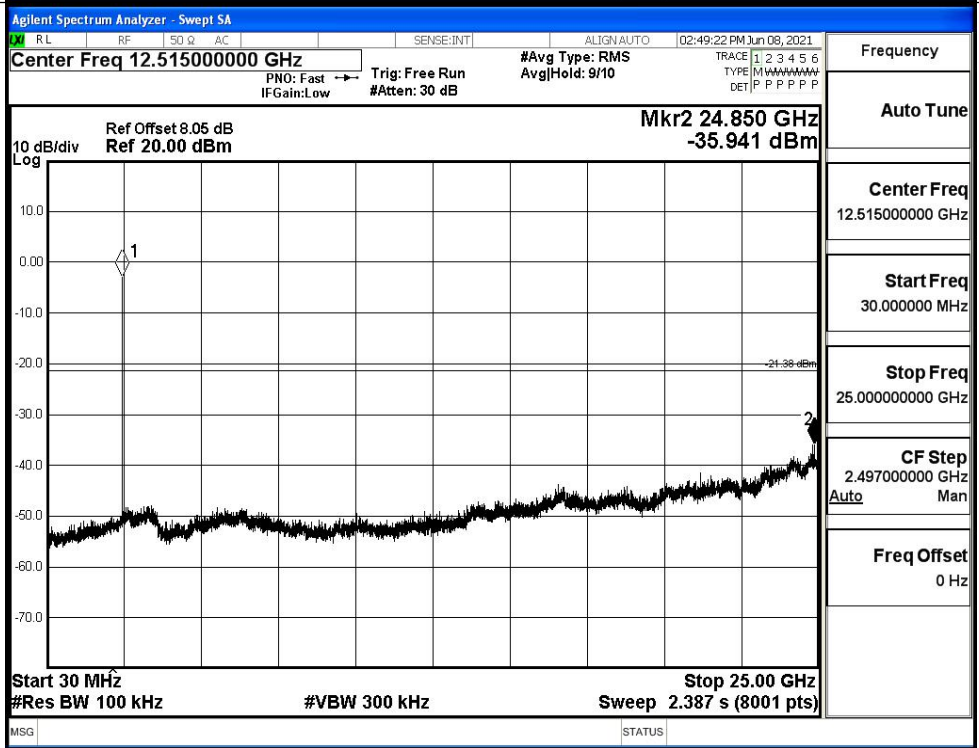


BT LE HCH Graphs

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     | -2.704             | -49.749                  | -22.7       | PASS    |
| BT LE | HCH     | -1.165             | -49.221                  | -21.17      | PASS    |

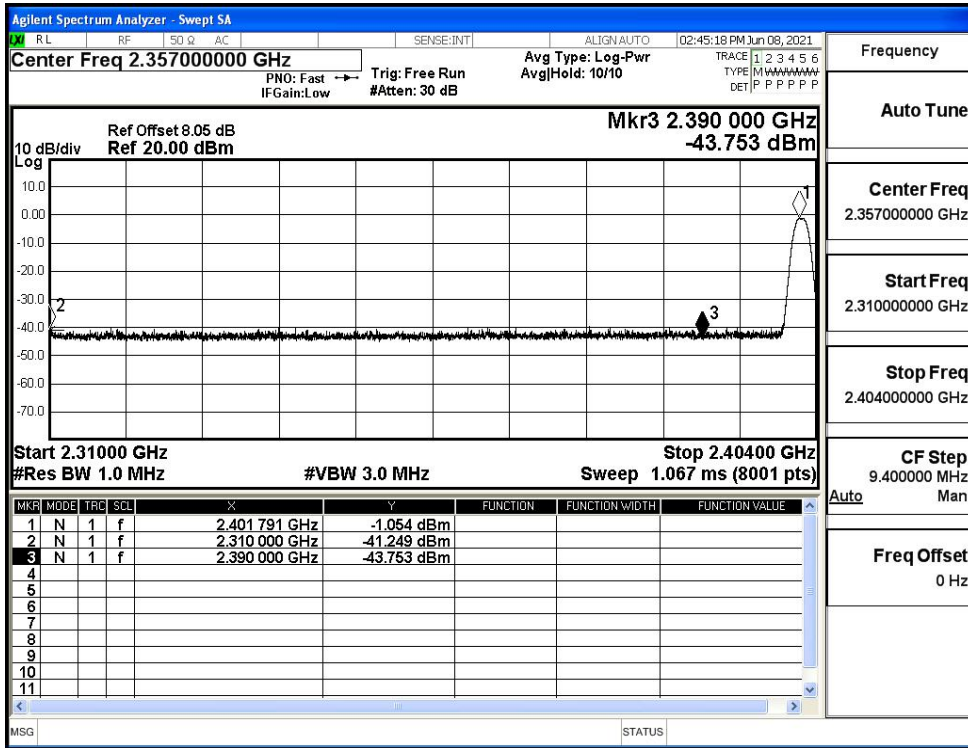
Test Graphs

|     |   |   |
|-----|---|---|
| LCH | <p>Agilent Spectrum Analyzer - Swept SA<br/>                 Center Freq 2.357000000 GHz<br/>                 PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB<br/>                 #Avg Type: RMS AvgHold: 10/10<br/>                 Ref Offset 8.05 dB Ref 20.00 dBm<br/>                 Mkr4 2.353 322 GHz -49.749 dBm<br/>                 10 dB/div Log<br/>                 Start 2.31000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.40400 GHz Sweep 9.067 ms (8001 pts)<br/>                 MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE<br/>                 1 N 1 f 2.402 238 GHz -2.704 dBm<br/>                 2 N 1 f 2.400 000 GHz -53.138 dBm<br/>                 3 N 1 f 2.390 000 GHz -52.730 dBm<br/>                 4 N 1 f 2.353 322 GHz -49.749 dBm</p>                | Frequency<br>Auto Tune<br>Center Freq<br>2.357000000 GHz<br>Start Freq<br>2.310000000 GHz<br>Stop Freq<br>2.404000000 GHz<br>CF Step<br>9.400000 MHz<br>Freq Offset<br>0 Hz |
| HCH | <p>Agilent Spectrum Analyzer - Swept SA<br/>                 Center Freq 2.489000000 GHz<br/>                 PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB<br/>                 #Avg Type: RMS AvgHold: 10/10<br/>                 Ref Offset 8.05 dB Ref 20.00 dBm<br/>                 Mkr4 2.483 989 50 GHz -49.221 dBm<br/>                 10 dB/div Log<br/>                 Start 2.47800 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.50000 GHz Sweep 2.133 ms (8001 pts)<br/>                 MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE<br/>                 1 N 1 f 2.480 241 25 GHz -1.165 dBm<br/>                 2 N 1 f 2.483 500 00 GHz -51.394 dBm<br/>                 3 N 1 f 2.500 000 00 GHz -51.079 dBm<br/>                 4 N 1 f 2.483 989 50 GHz -49.221 dBm</p> | Frequency<br>Auto Tune<br>Center Freq<br>2.489000000 GHz<br>Start Freq<br>2.478000000 GHz<br>Stop Freq<br>2.500000000 GHz<br>CF Step<br>2.200000 MHz<br>Freq Offset<br>0 Hz |

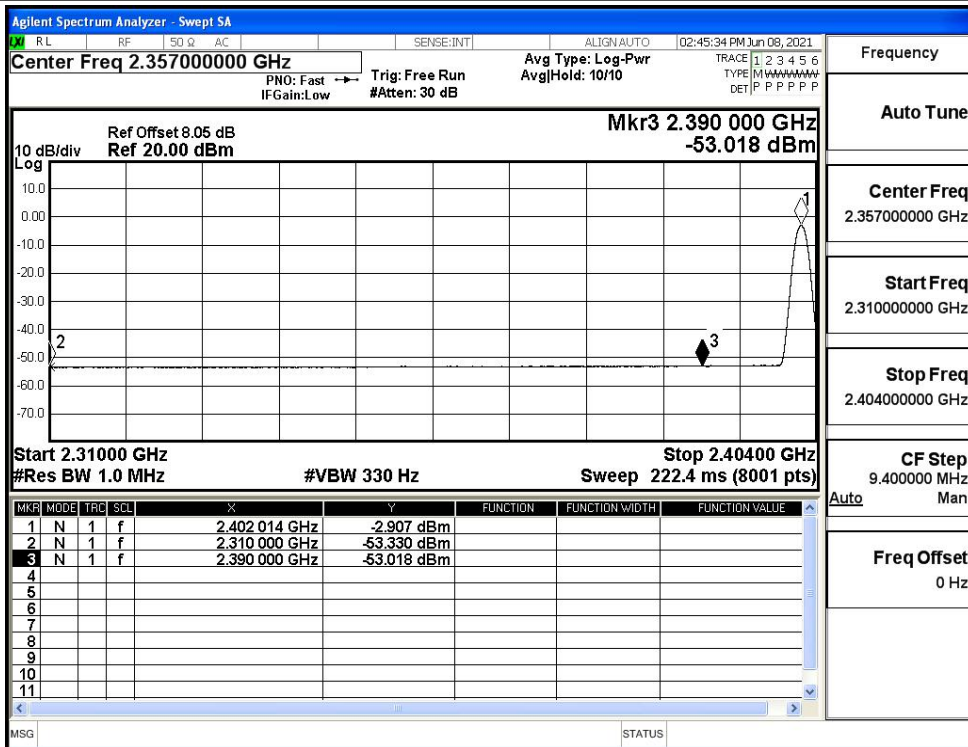
### A.7 Restrict-band band-edge measurements

| 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 | -41.25      | 2.0  | 0             | 55.98      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2310.0 | -53.33      | 2.0  | 0             | 43.90      | AV       | 54             | PASS  |
|           |              | Ant1 | 2390.0 | -43.75      | 2.0  | 0             | 53.48      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2390.0 | -53.02      | 2.0  | 0             | 44.21      | AV       | 54             | PASS  |
|           | 2480         | Ant1 | 2483.5 | -42.45      | 2.0  | 0             | 54.78      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2483.5 | -52.40      | 2.0  | 0             | 44.83      | AV       | 54             | PASS  |
|           |              | Ant1 | 2500.0 | -42.68      | 2.0  | 0             | 54.55      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2500.0 | -52.26      | 2.0  | 0             | 44.97      | AV       | 54             | PASS  |

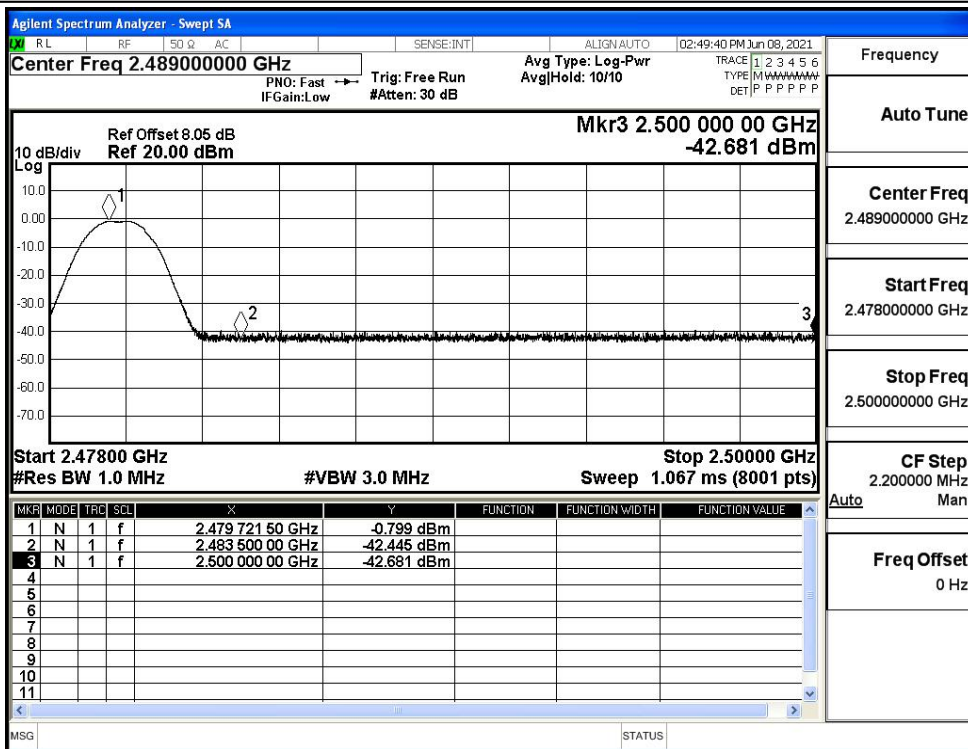
Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



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

