

## Appendix B

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

Product Name: Smartphone

Trade Mark: S Smooth

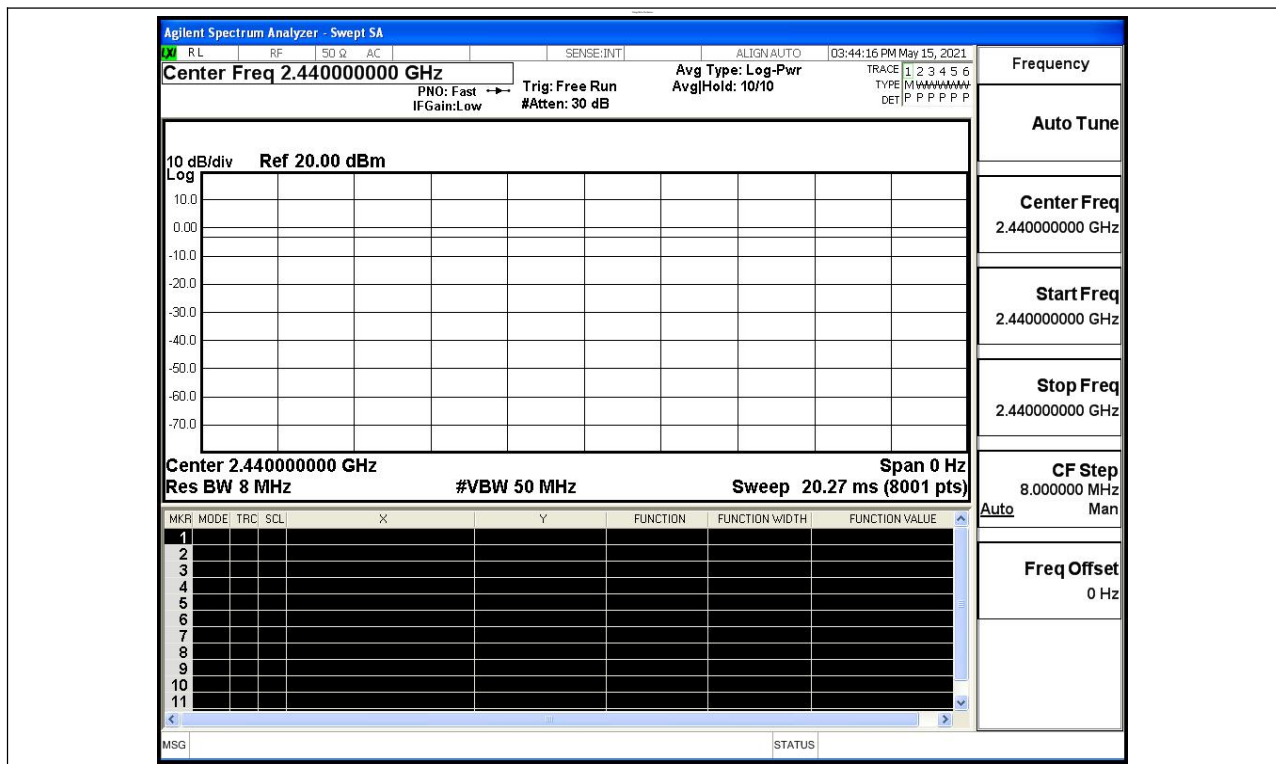
Test Model: Smooth 6.5

#### Environmental Conditions

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

#### B.1 Duty Cycle

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

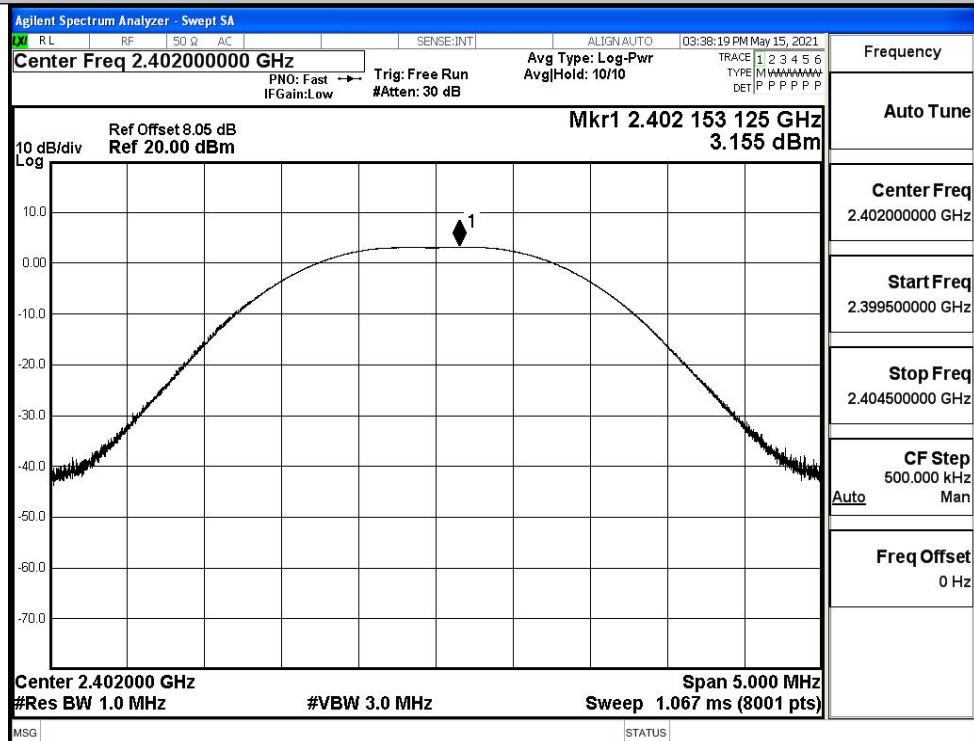


## B.2 Maximum Conducted Peak Output Power

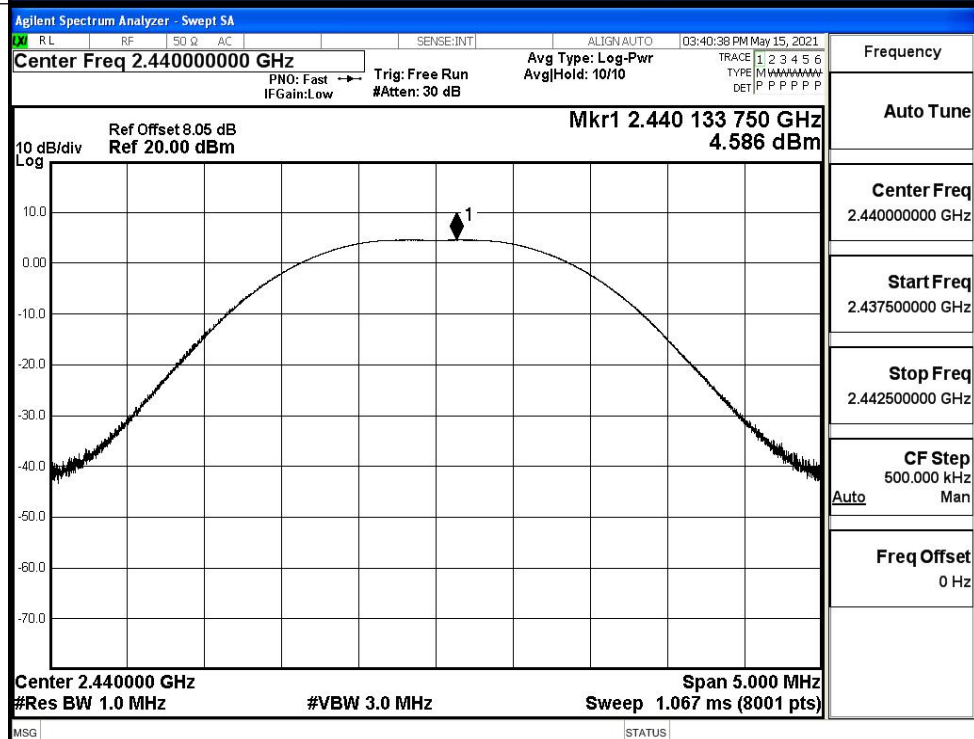
| Mode  | Channel | Conduct Peak Power[dBm] | Limit [dBm] | Verdict |
|-------|---------|-------------------------|-------------|---------|
| BT LE | LCH     | 3.155                   | 30          | PASS    |
| BT LE | MCH     | 4.586                   | 30          | PASS    |
| BT LE | HCH     | 2.998                   | 30          | PASS    |

Test Graphs

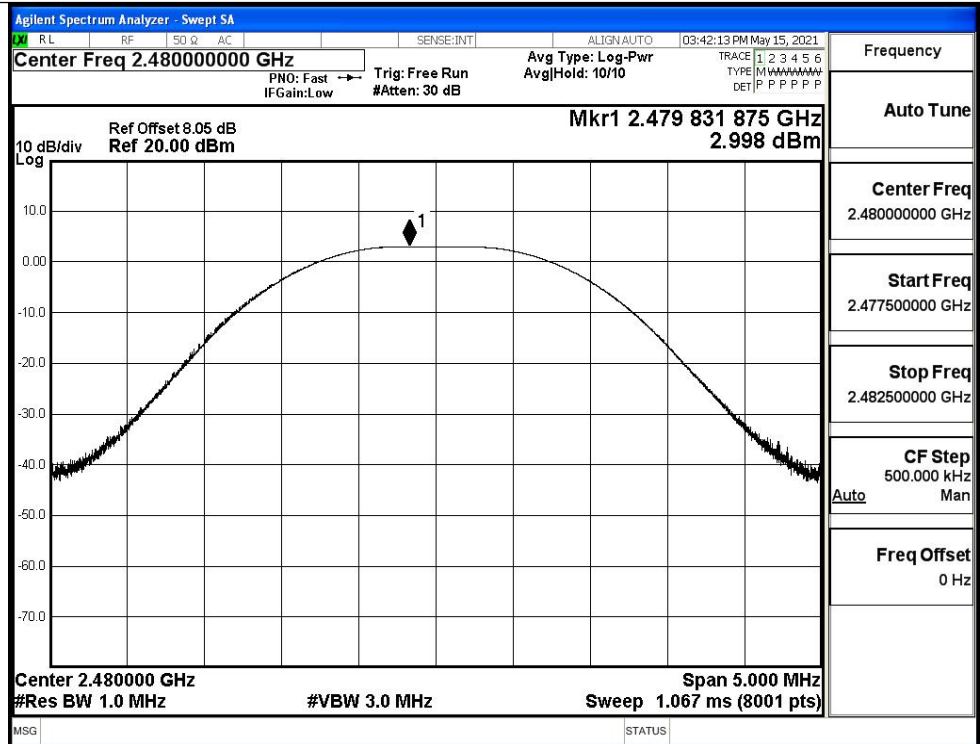
LCH



MCH



HCH

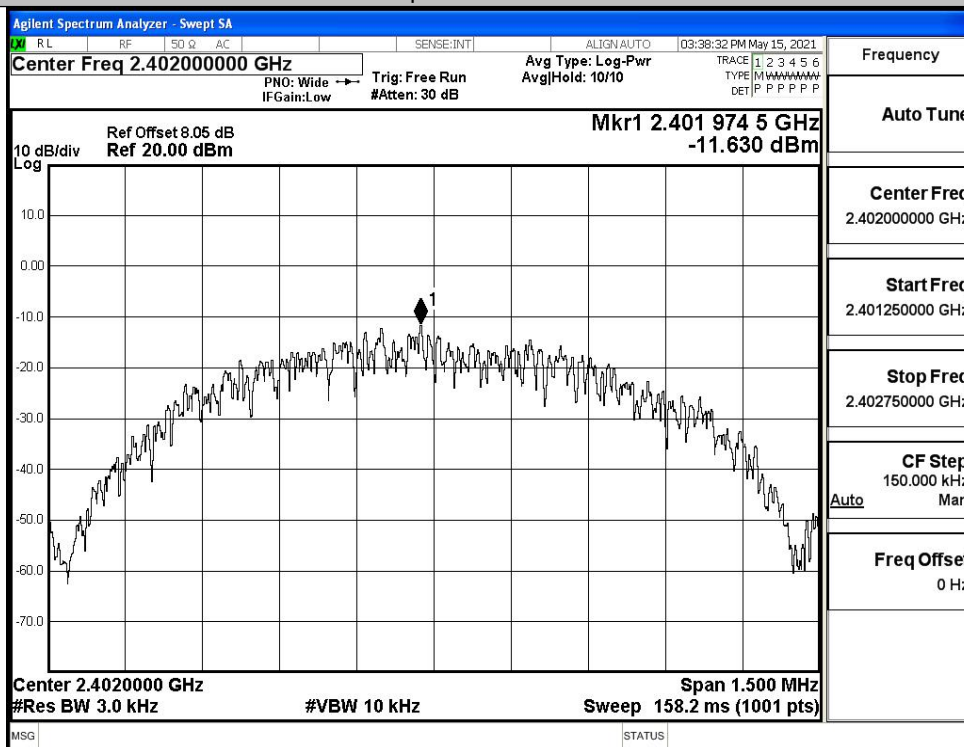


### B.3 Maximum Power Spectral Density

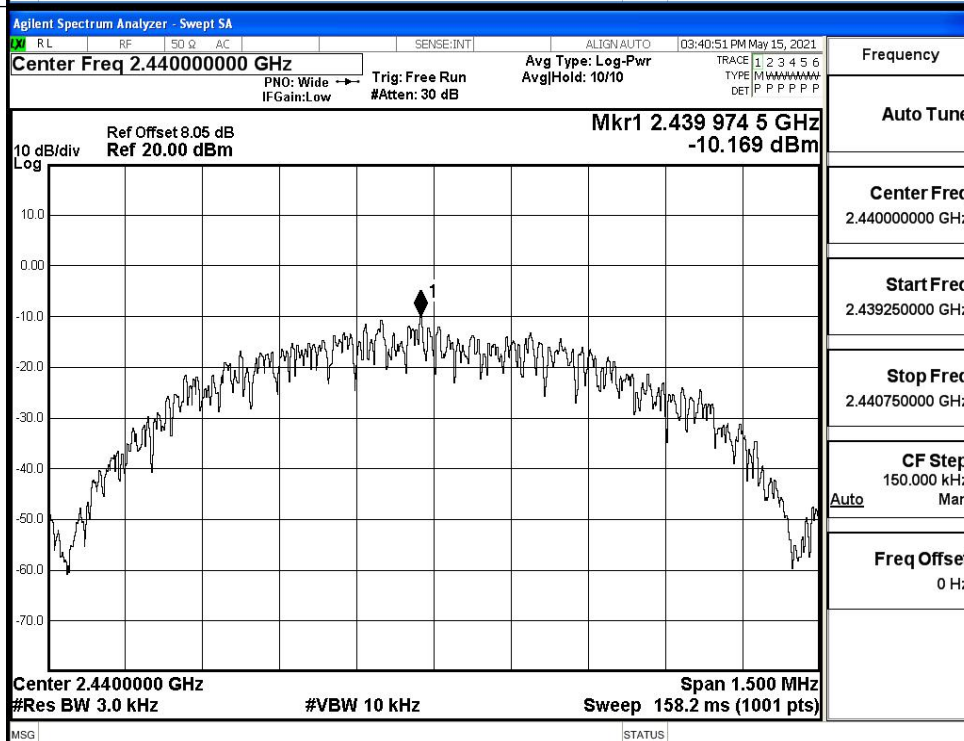
| Mode  | Channel | PSD [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-------|---------|----------------|------------------|---------|
| BT LE | LCH     | -11.630        | 8                | PASS    |
| BT LE | MCH     | -10.169        | 8                | PASS    |
| BT LE | HCH     | -11.968        | 8                | PASS    |

Test Graphs

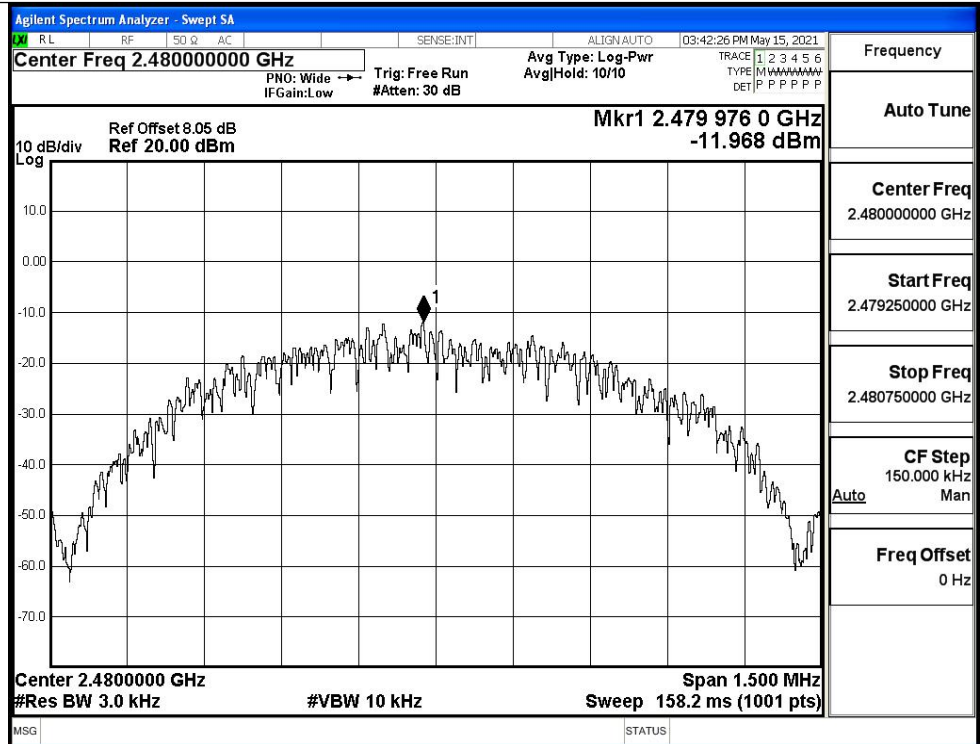
LCH



MCH



HCH

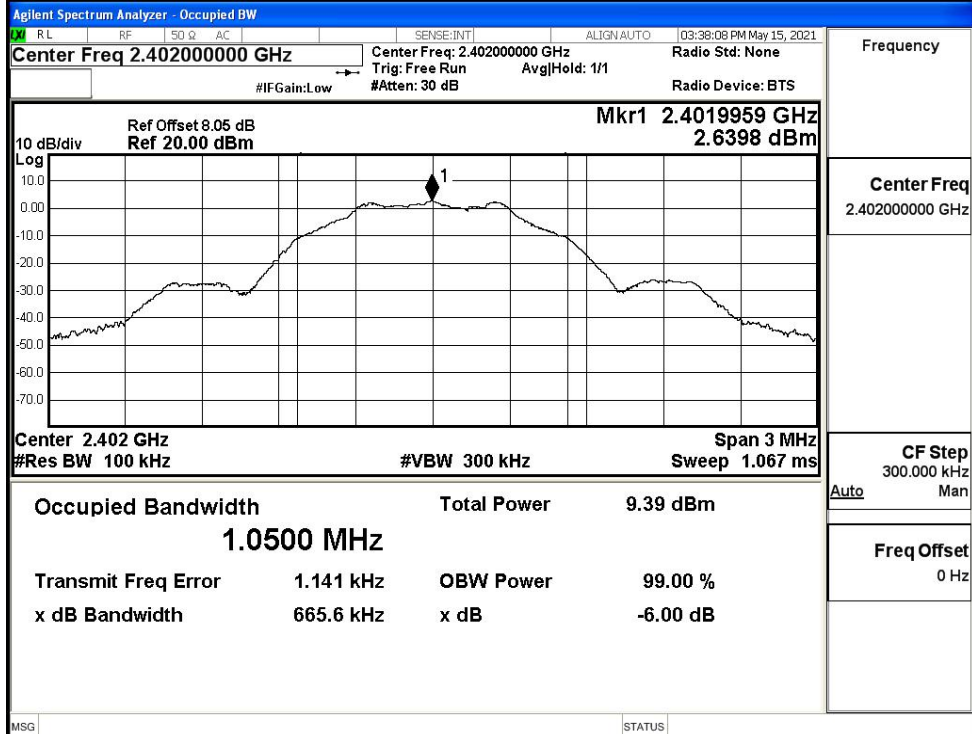


## B.4 6dB Bandwidth

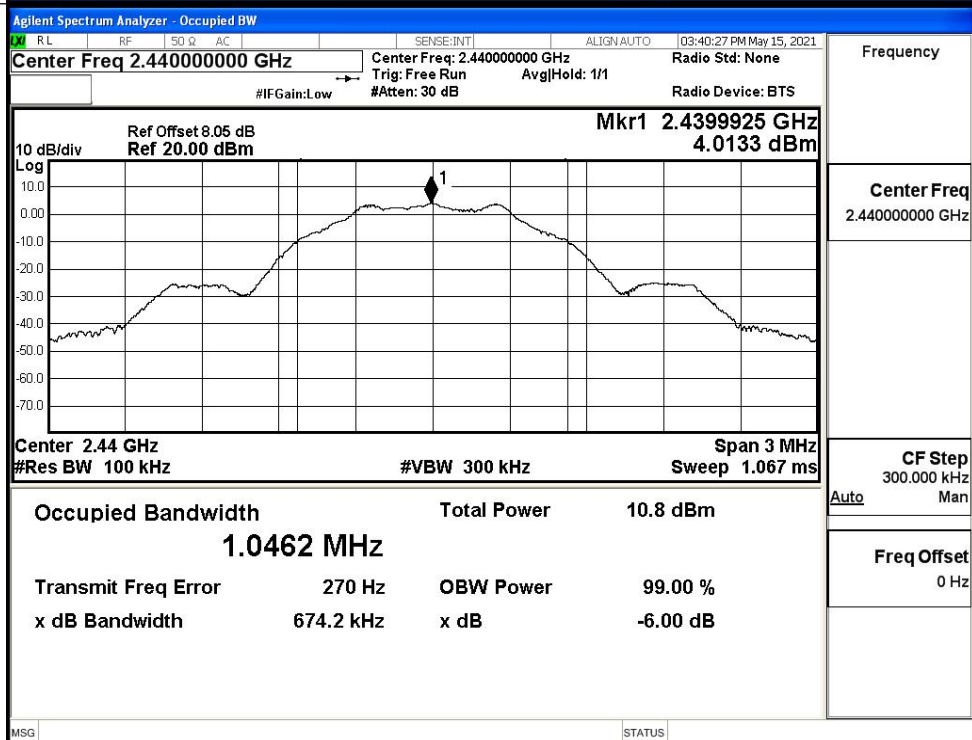
| Mode  | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-------|---------|---------------------|-------------|---------|
| BT LE | LCH     | 0.6656              | $\geq 0.5$  | PASS    |
| BT LE | MCH     | 0.6742              | $\geq 0.5$  | PASS    |
| BT LE | HCH     | 0.6629              | $\geq 0.5$  | PASS    |

## Test Graphs

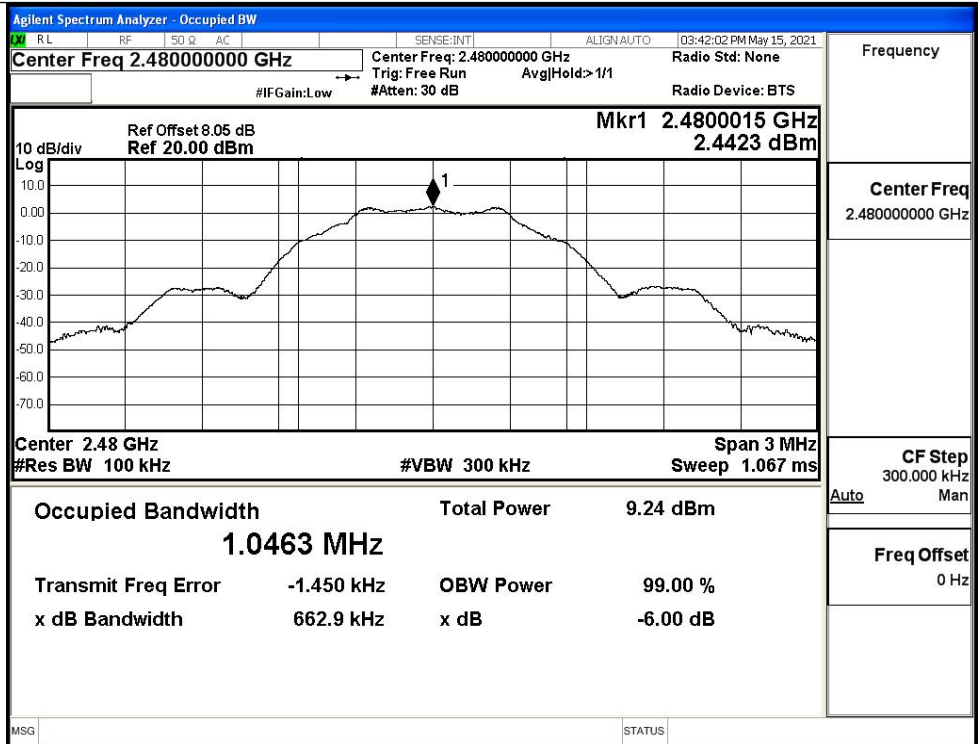
LCH



MCH



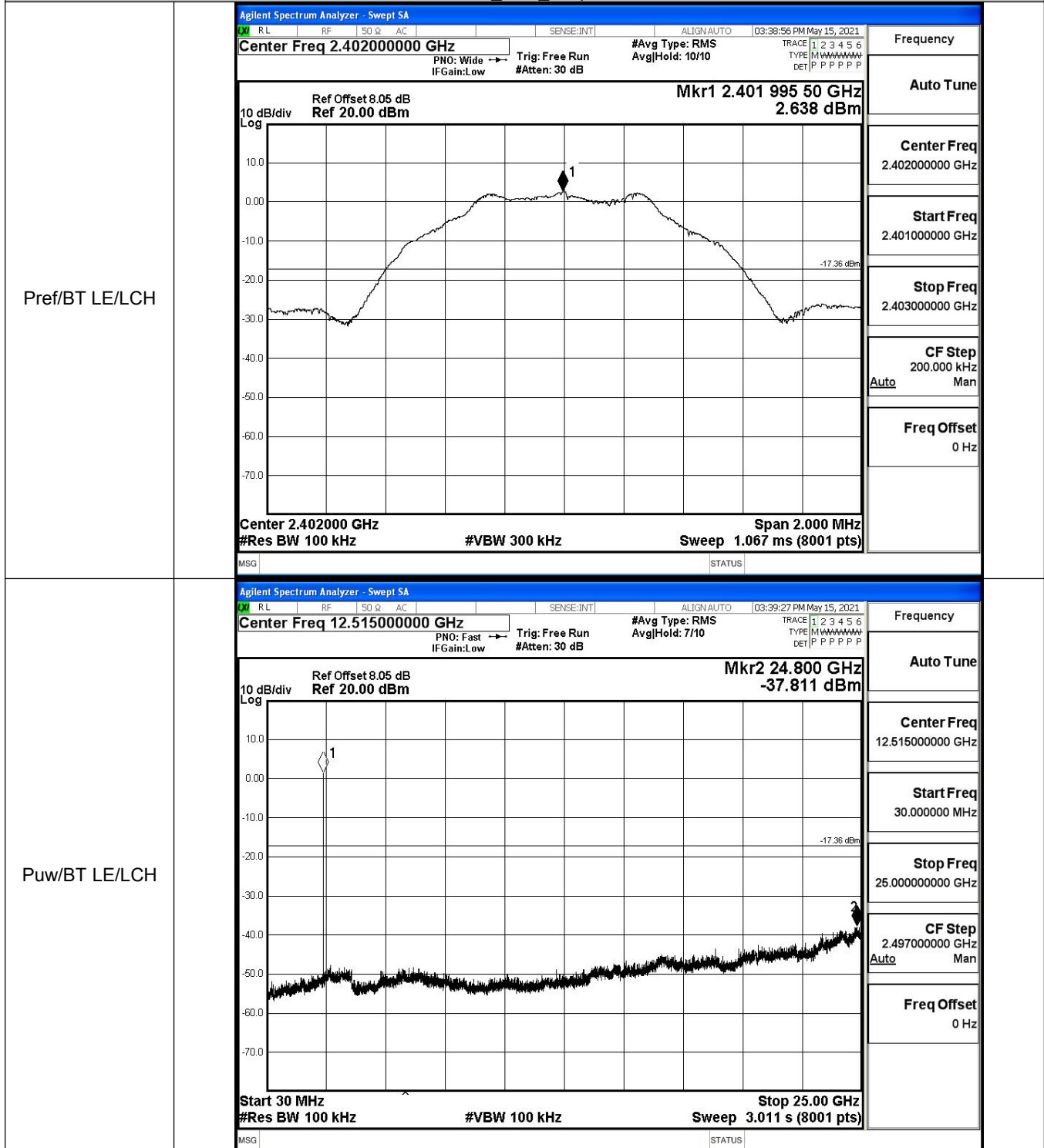
HCH



## B.5 RF Conducted Spurious Emissions

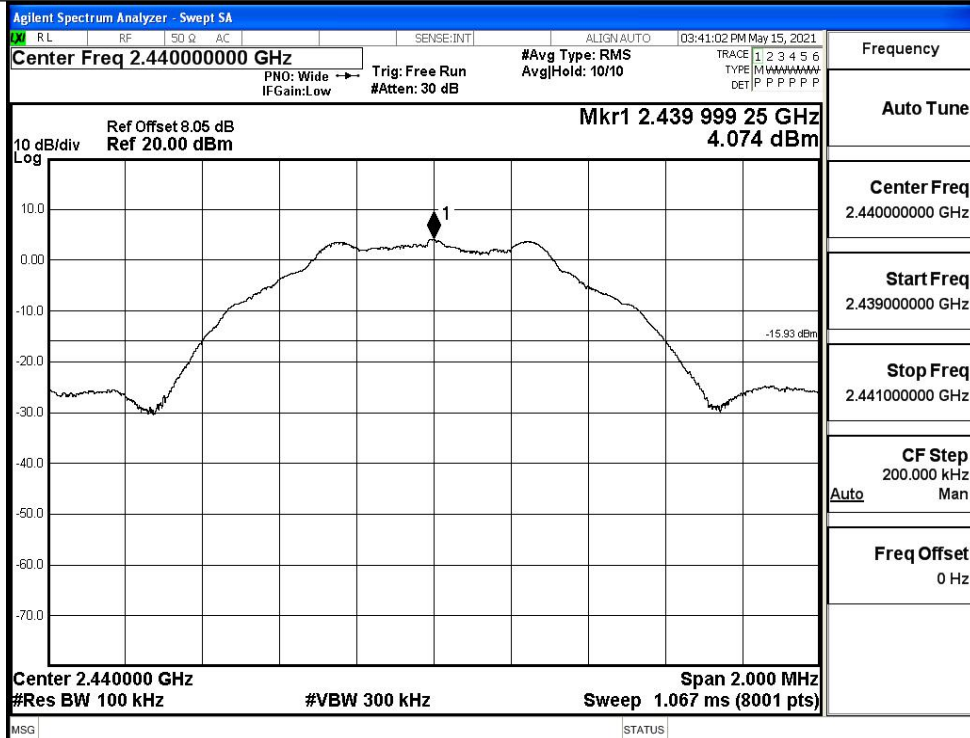
| Mode  | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|------------|------------------|-------------|---------|
| BT LE | LCH     | 2.638      | -37.811          | -17.362     | PASS    |
| BT LE | MCH     | 4.074      | -37.216          | -15.926     | PASS    |
| BT LE | HCH     | 2.482      | -37.492          | -17.518     | PASS    |

BT LE\_LCH\_Graphs

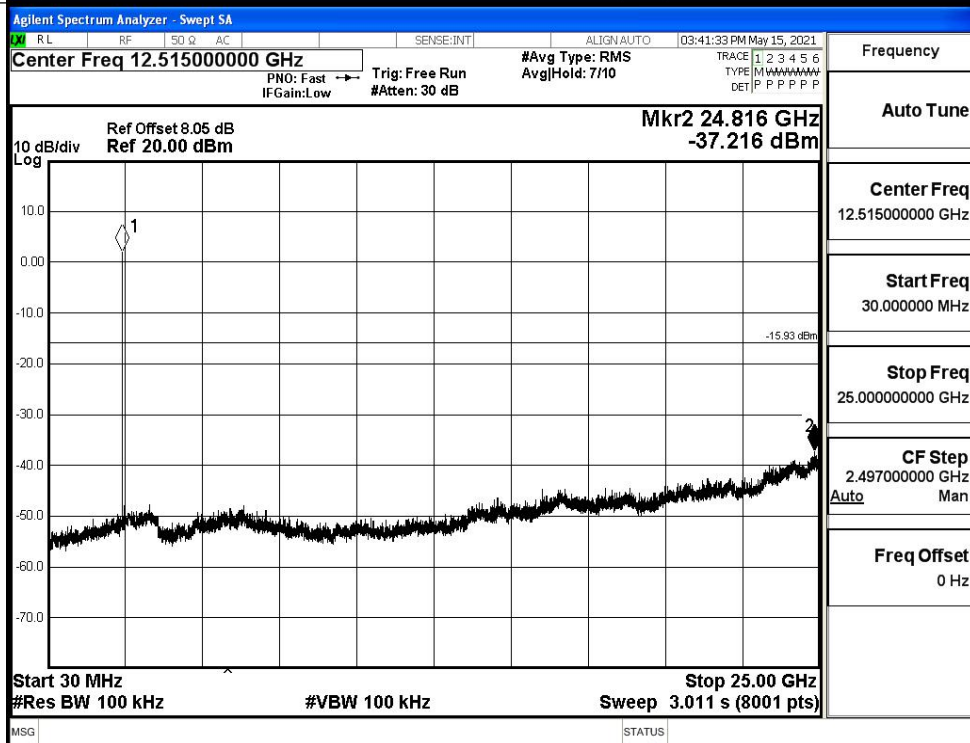


## BT LE MCH Graphs

Pref/BT LE/MCH

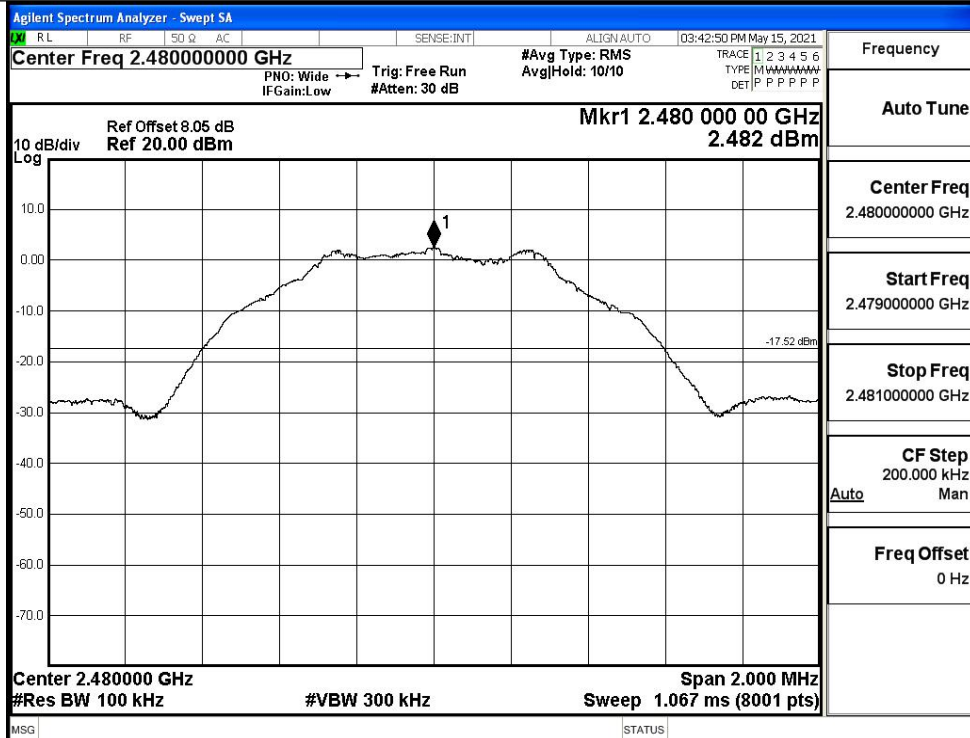


Puw/BT LE/MCH

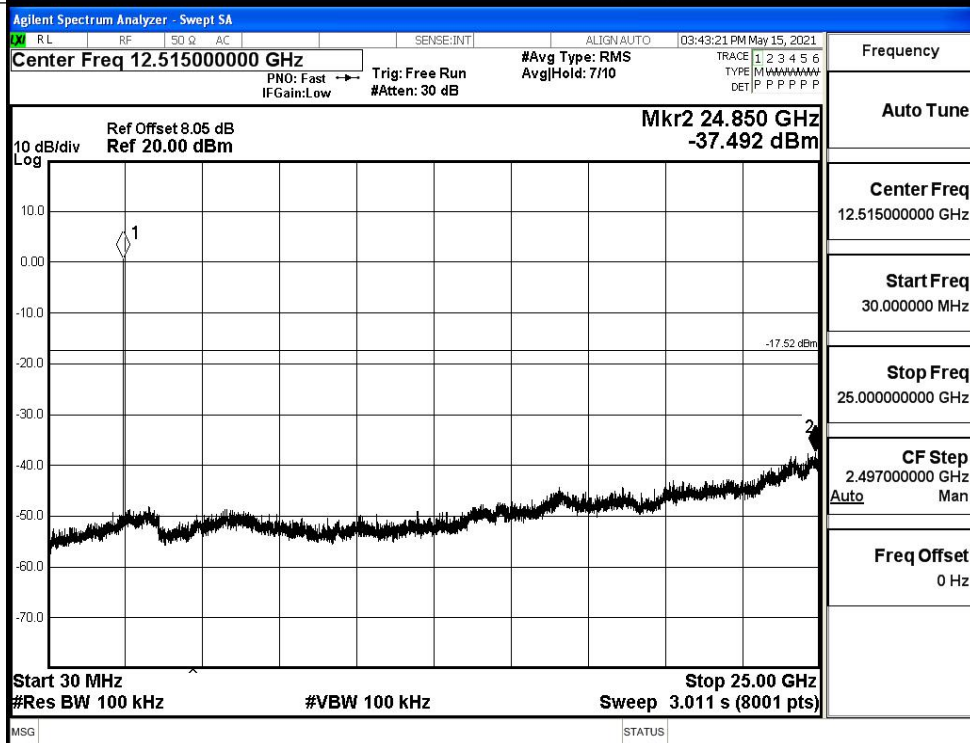


## BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

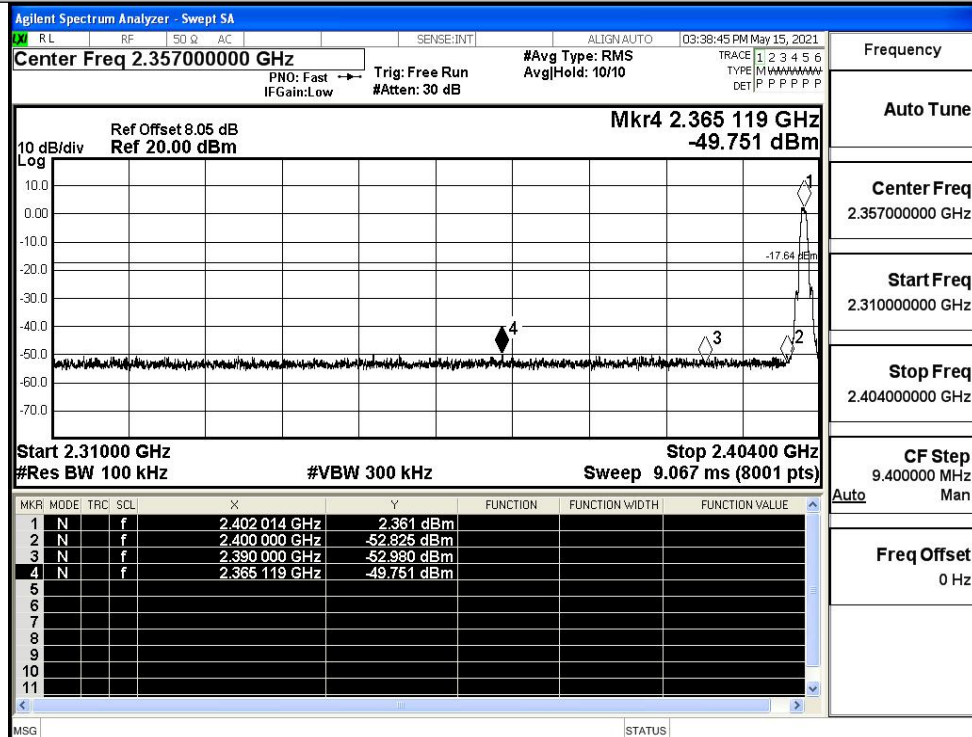


## B.6 Band-edge for RF Conducted Emissions

| Mode  | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|--------------------|--------------------------|-------------|---------|
| BT LE | LCH     | 2.361              | -49.751                  | -17.64      | PASS    |
| BT LE | HCH     | 2.582              | -49.449                  | -17.42      | PASS    |

## Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

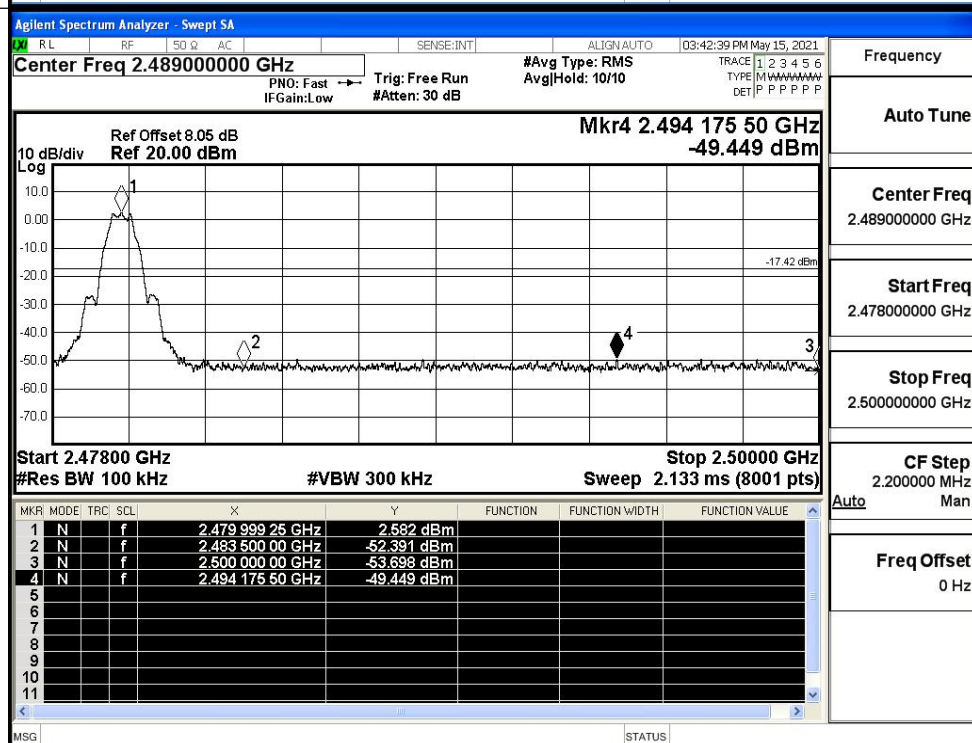
9.400000 MHz

Auto Man

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

Auto Man

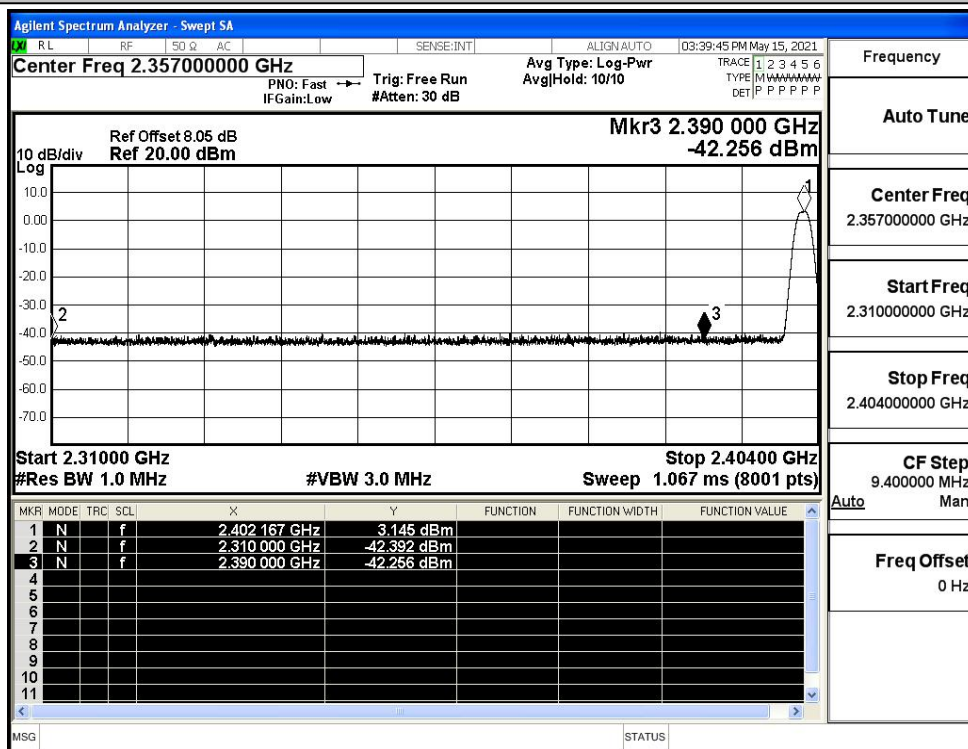
Freq Offset

0 Hz

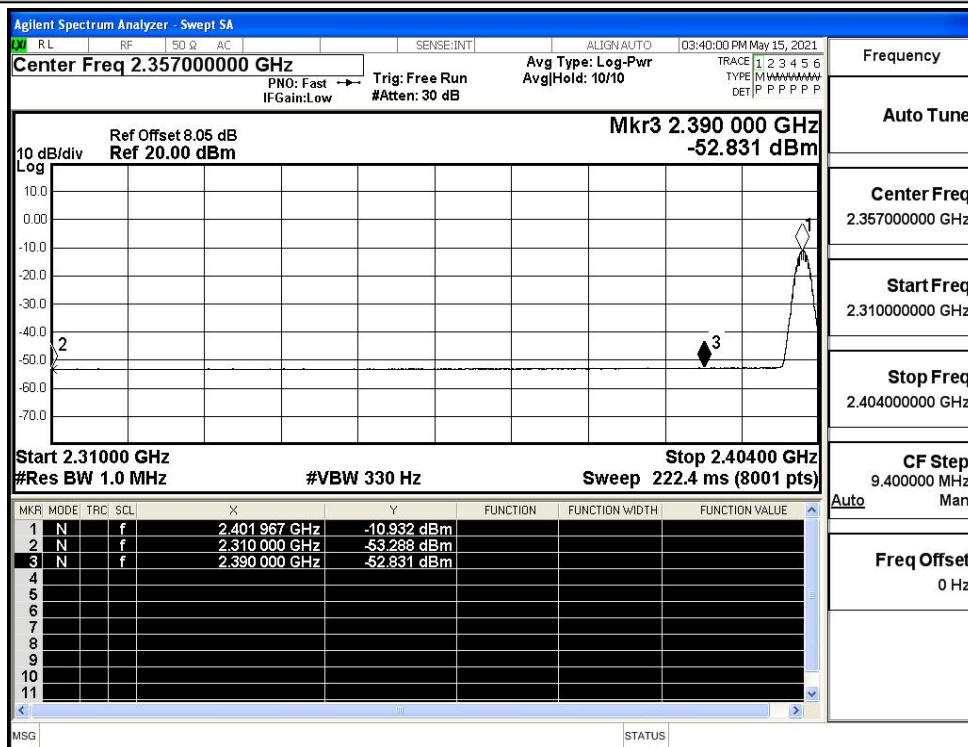
**B.7 Restrict-band band-edge measurements**

| 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 | -42.39      | 2.0  | 0             | 54.84      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2310.0 | -53.29      | 2.0  | 0             | 43.94      | AV       | 54             | PASS  |
|           |              | Ant1 | 2390.0 | -42.26      | 2.0  | 0             | 54.97      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2390.0 | -52.83      | 2.0  | 0             | 44.40      | AV       | 54             | PASS  |
|           | 2480         | Ant1 | 2483.5 | -42.82      | 2.0  | 0             | 54.41      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2483.5 | -52.34      | 2.0  | 0             | 44.89      | AV       | 54             | PASS  |
|           |              | Ant1 | 2500.0 | -42.20      | 2.0  | 0             | 55.03      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2500.0 | -52.24      | 2.0  | 0             | 44.99      | AV       | 54             | PASS  |

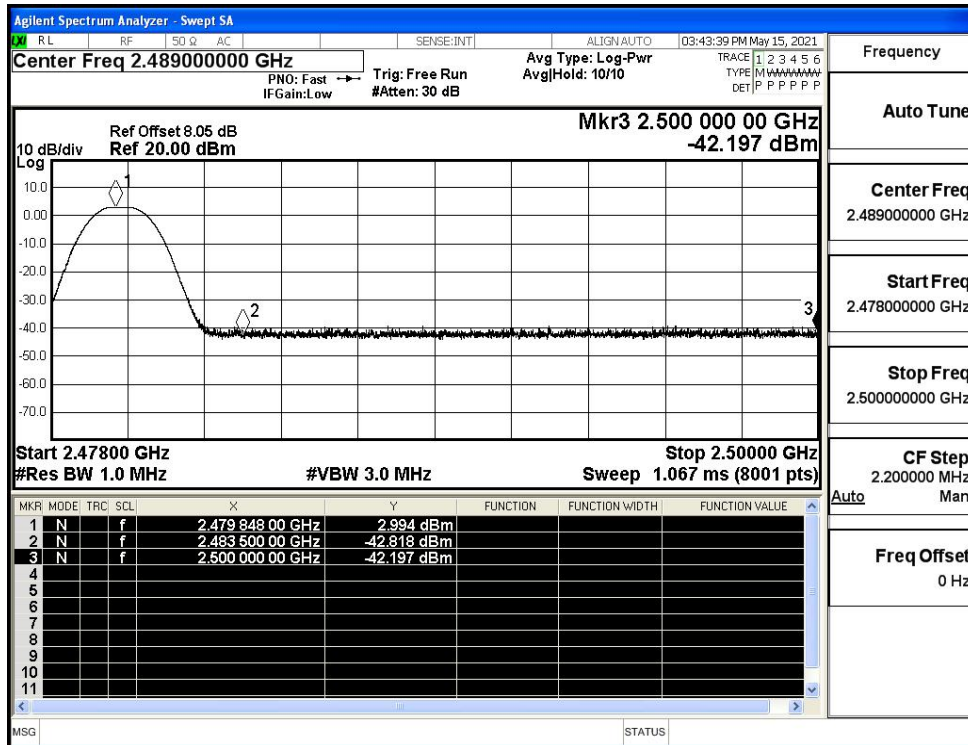
## Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



## 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

