

## Appendix B

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

Product Name: POWER TALKIE

Trade Mark: POWER TALKIE, IWOXS

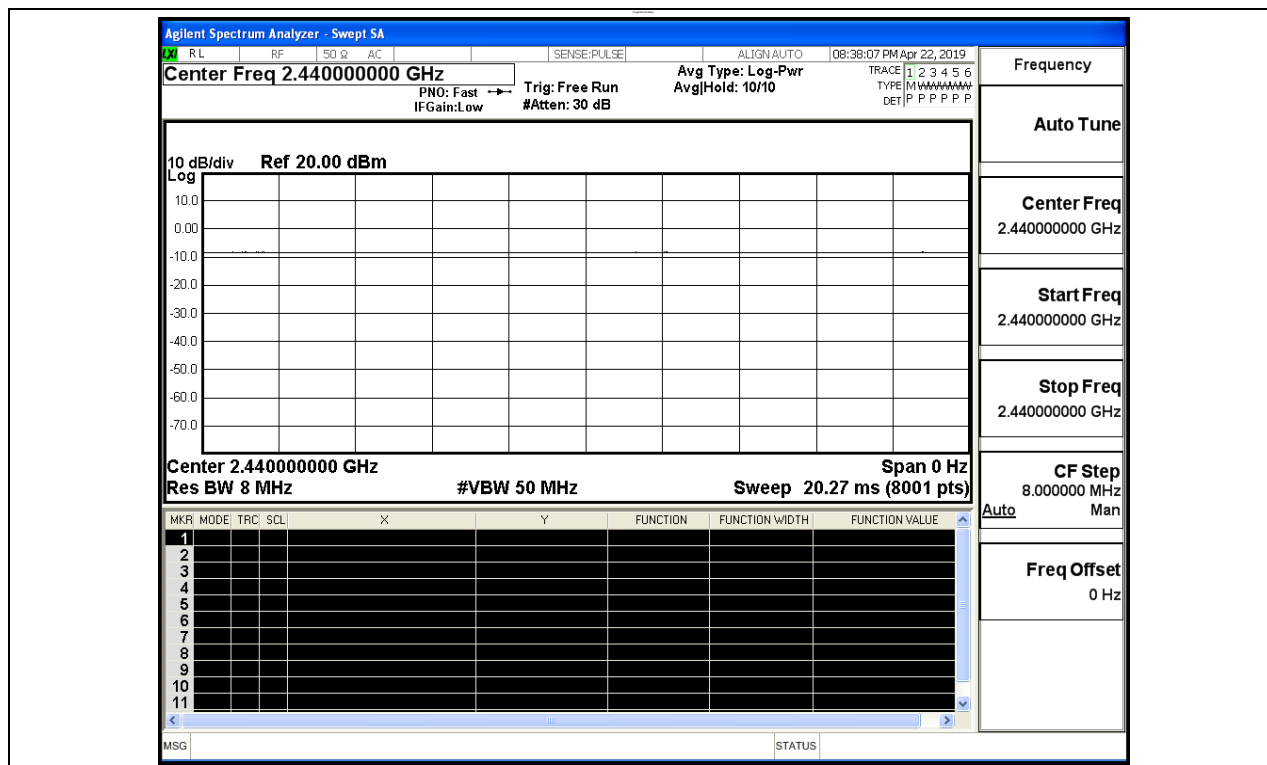
Test Model: PT01

#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 24.4 ° C  |
| Relative Humidity: | 52.9%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | David.Luo |
| Supervised by:     | Tom.Liu   |

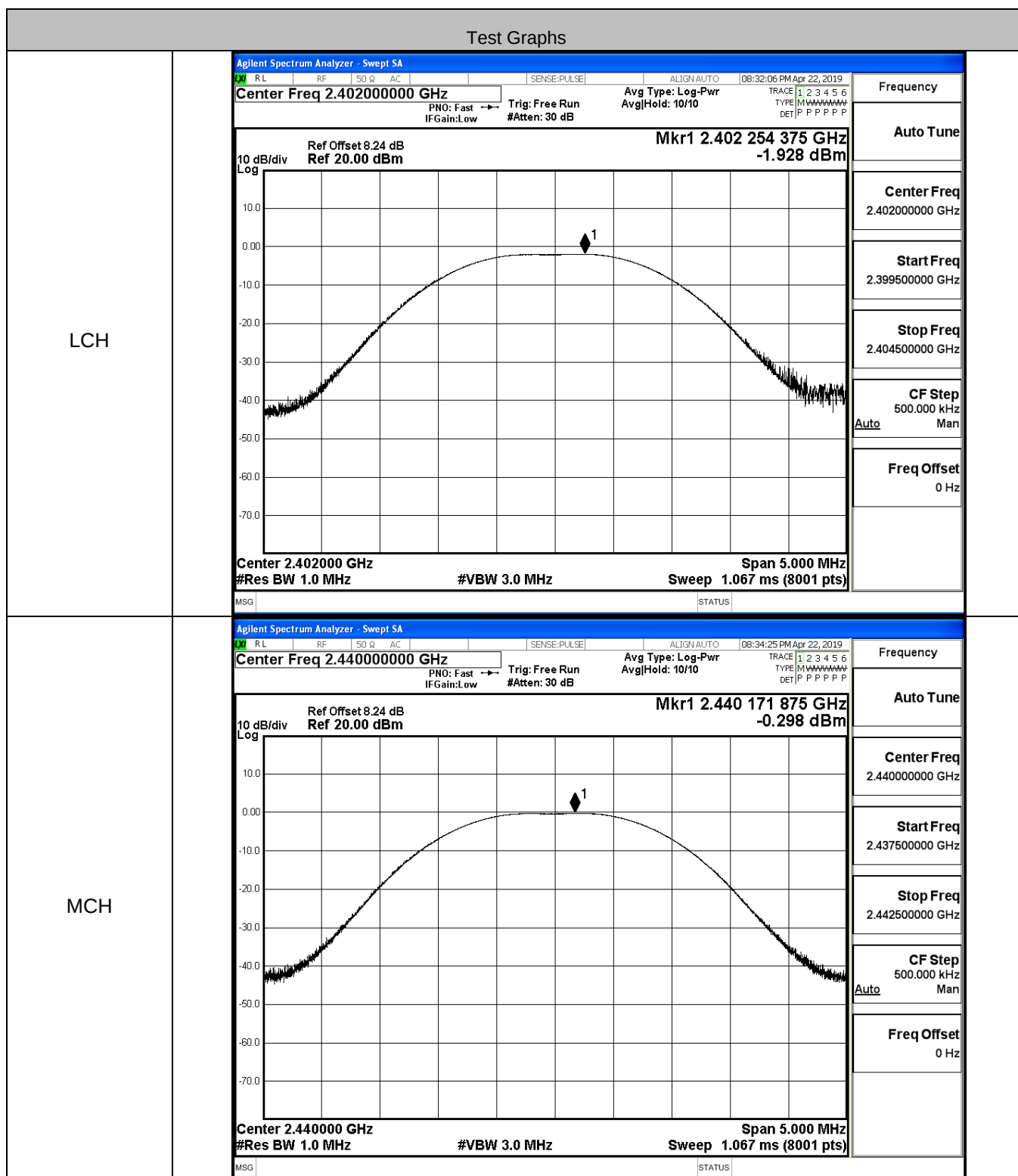
#### A.1 Duty Cycle

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

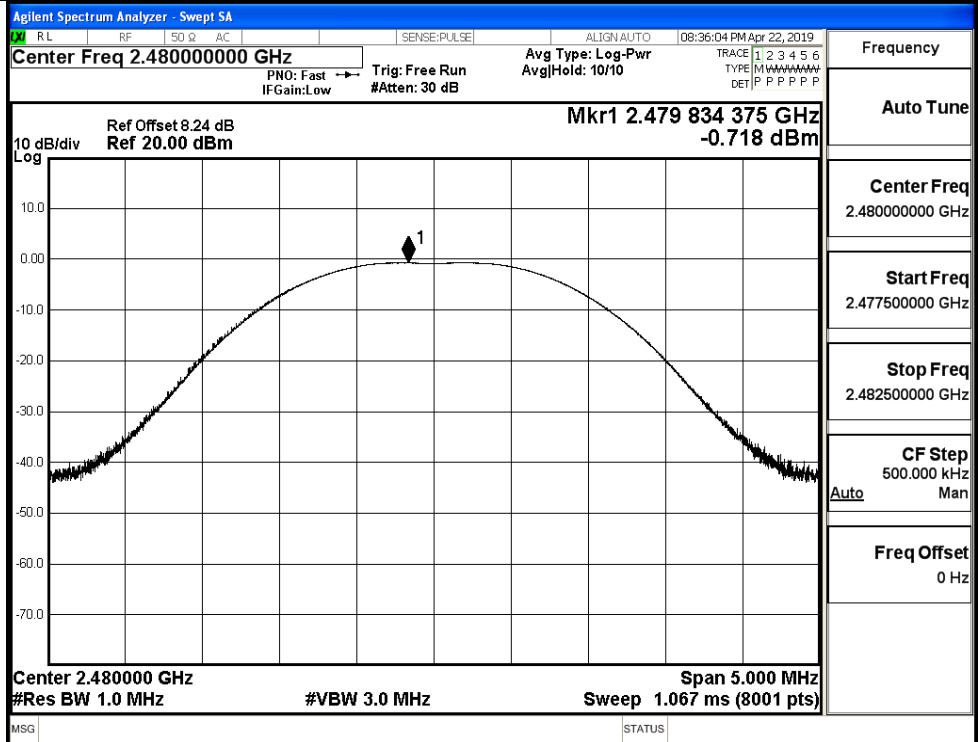


## A.2 Maximum Conducted Peak Output Power

| Mode  | Channel | Conduct Peak Power[dBm] | Limit [dBm] | Verdict |
|-------|---------|-------------------------|-------------|---------|
| BT LE | LCH     | -1.928                  | 30          | PASS    |
| BT LE | MCH     | -0.298                  | 30          | PASS    |
| BT LE | HCH     | -0.718                  | 30          | PASS    |



HCH

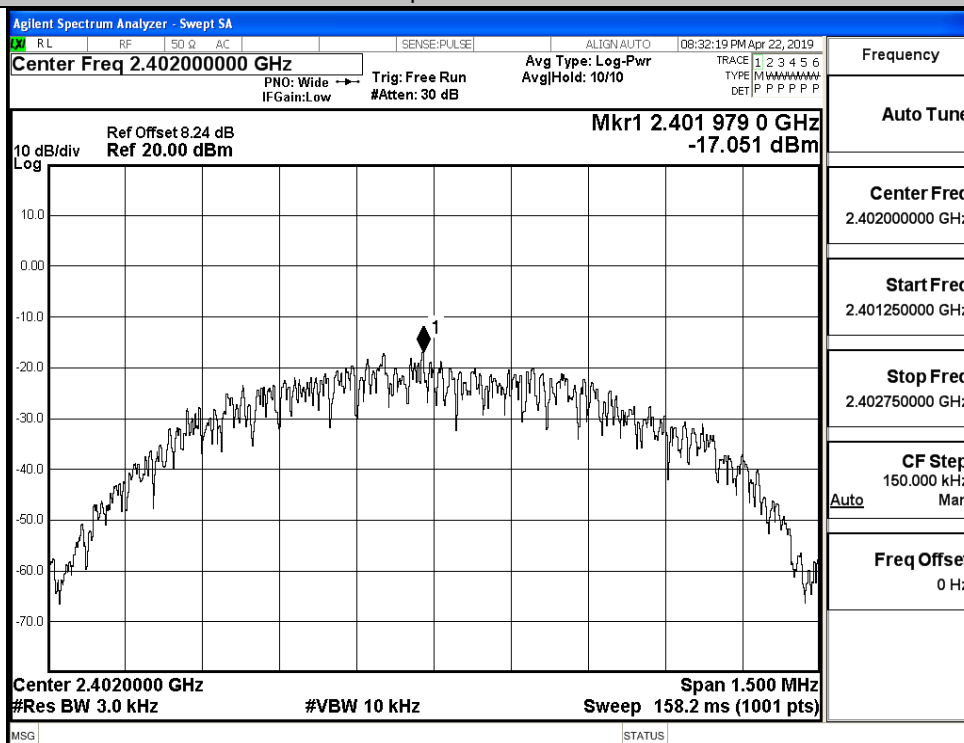


### A.3 Maximum Power Spectral Density

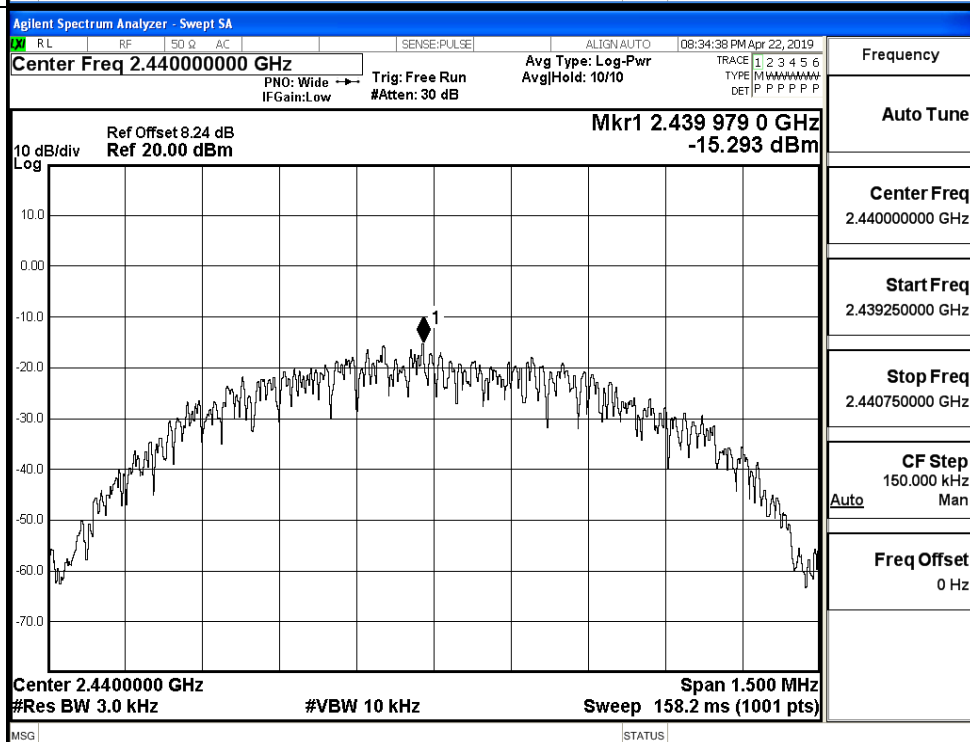
| Mode  | Channel | PSD [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-------|---------|----------------|------------------|---------|
| BT LE | LCH     | -17.051        | 8                | PASS    |
| BT LE | MCH     | -15.293        | 8                | PASS    |
| BT LE | HCH     | -15.611        | 8                | PASS    |

#### Test Graphs

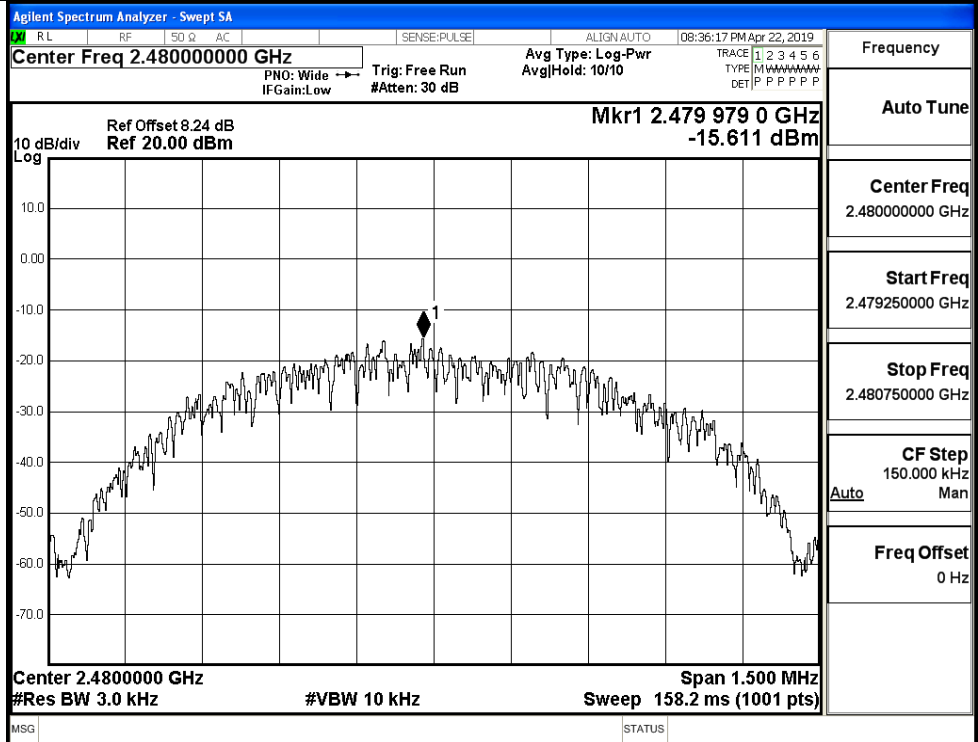
LCH



MCH



HCH

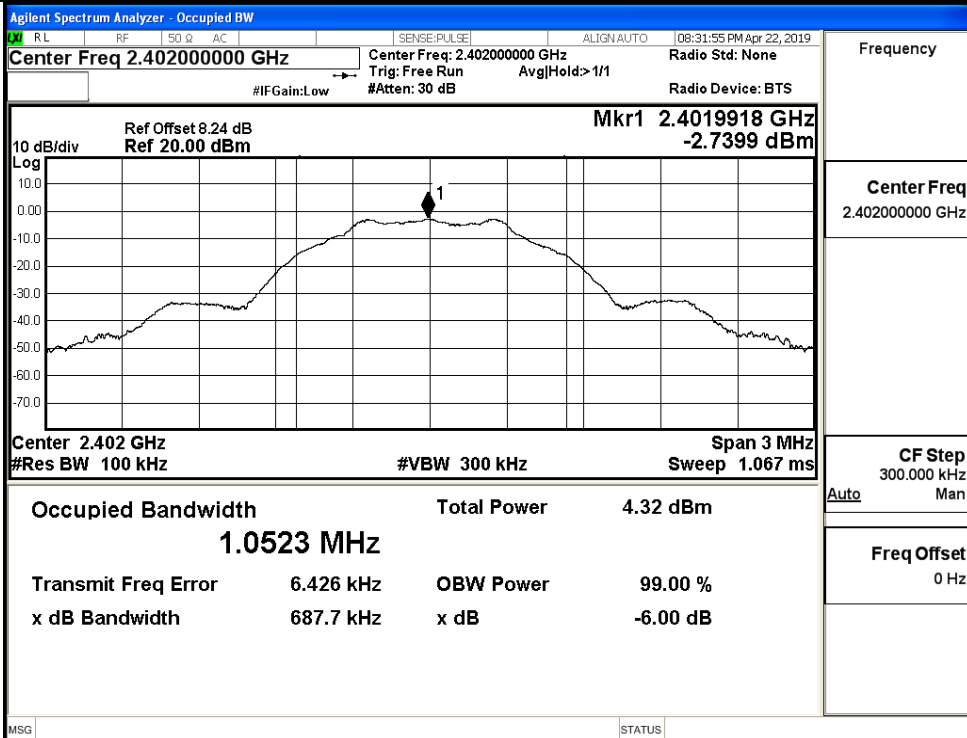


## A.4 6dB Bandwidth

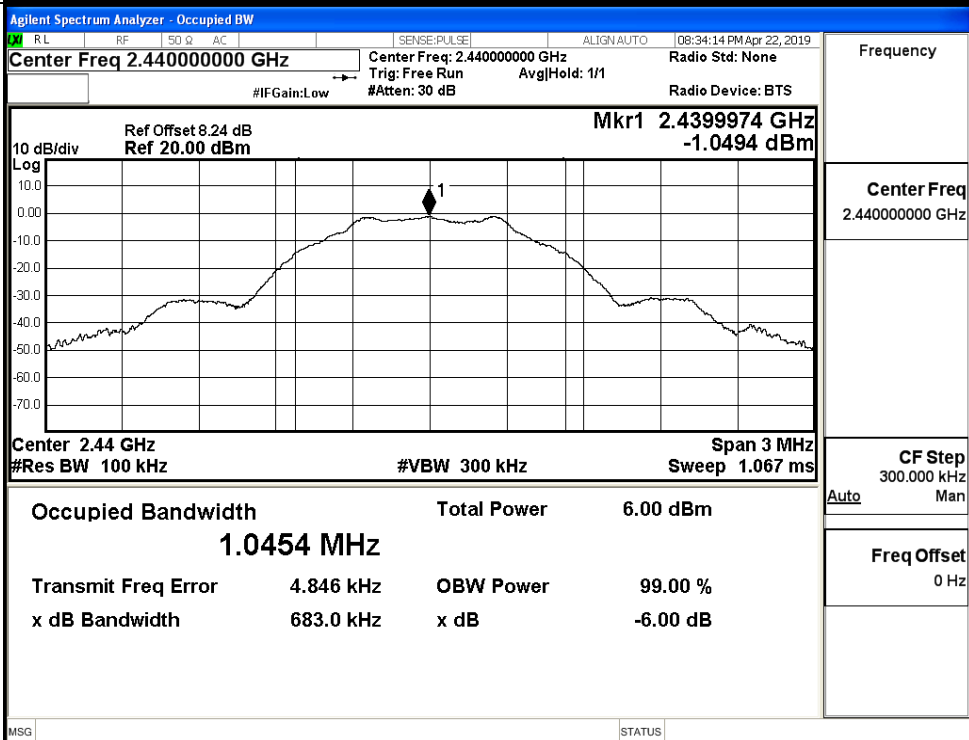
| Mode  | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-------|---------|---------------------|-------------|---------|
| BT LE | LCH     | 0.6877              | $\geq 0.5$  | PASS    |
| BT LE | MCH     | 0.6830              | $\geq 0.5$  | PASS    |
| BT LE | HCH     | 0.6862              | $\geq 0.5$  | PASS    |

## Test Graphs

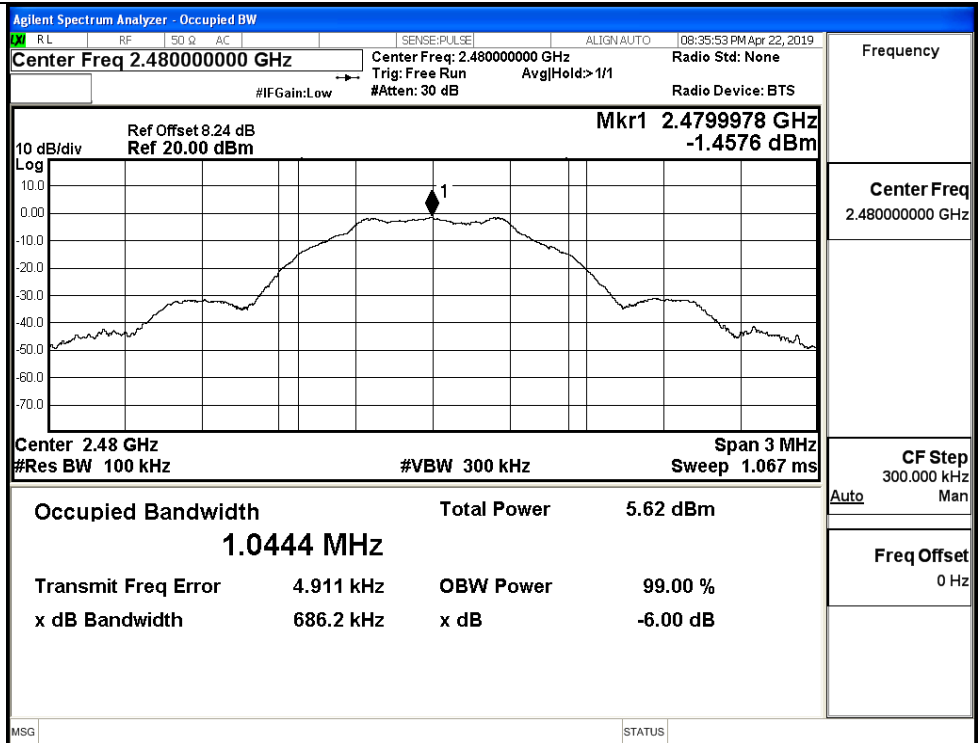
LCH



MCH



HCH

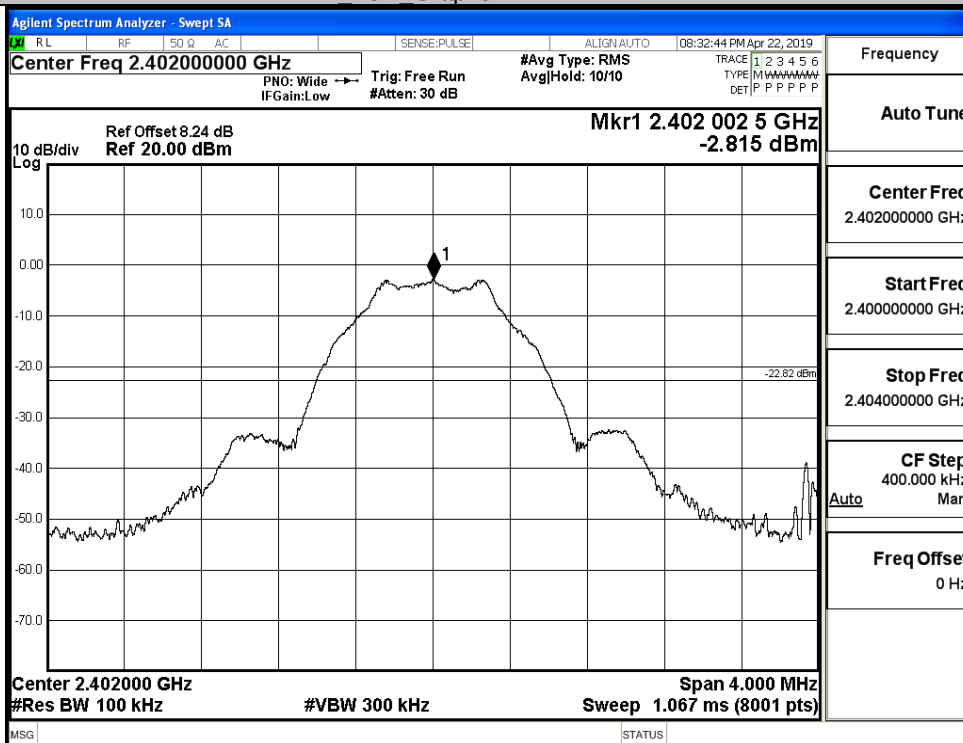


## A.5 RF Conducted Spurious Emissions

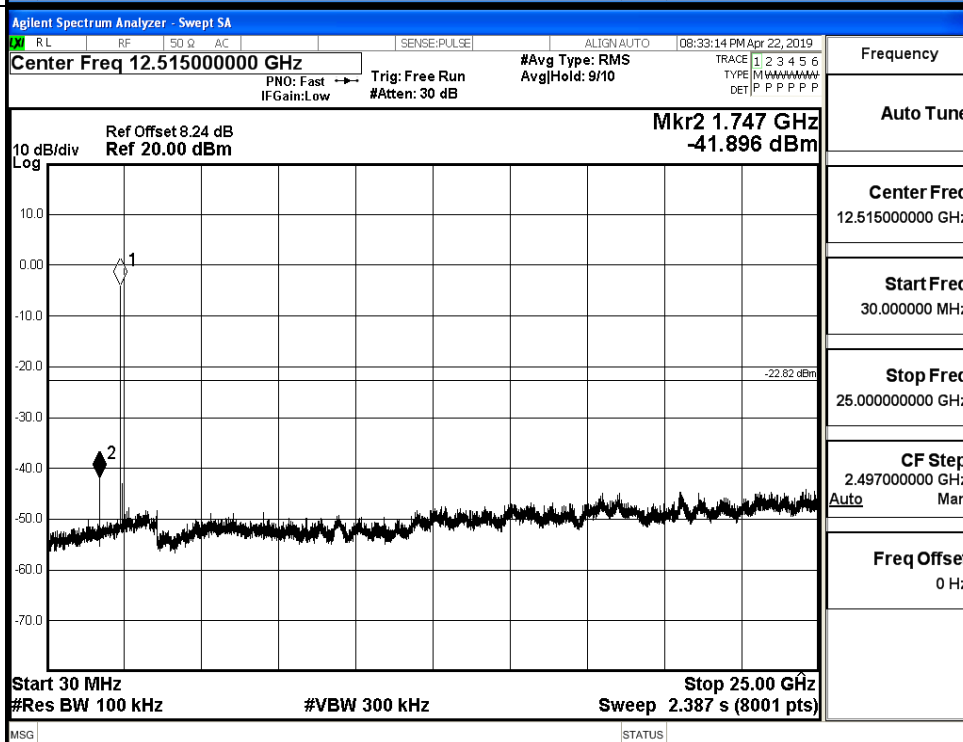
| Mode  | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|------------|------------------|-------------|---------|
| BT LE | LCH     | -2.815     | -41.896          | -22.815     | PASS    |
| BT LE | MCH     | -1.038     | -44.204          | -21.038     | PASS    |
| BT LE | HCH     | -1.478     | -43.685          | -21.478     | PASS    |

BT LE LCH Graphs

Pref/BT LE/LCH



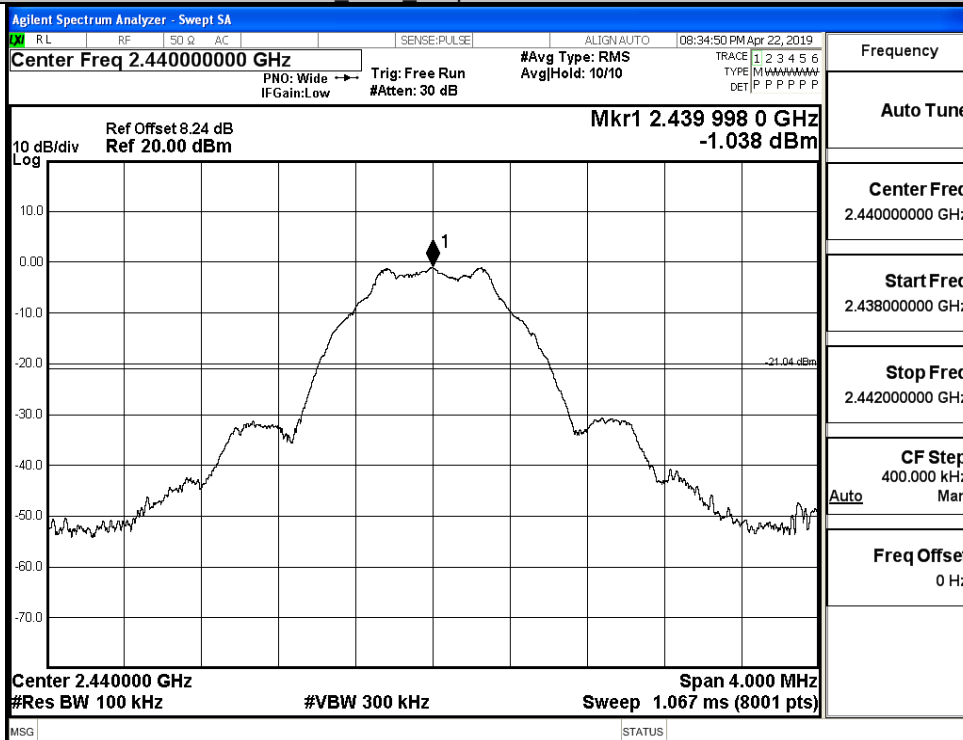
Puw/BT LE/LCH



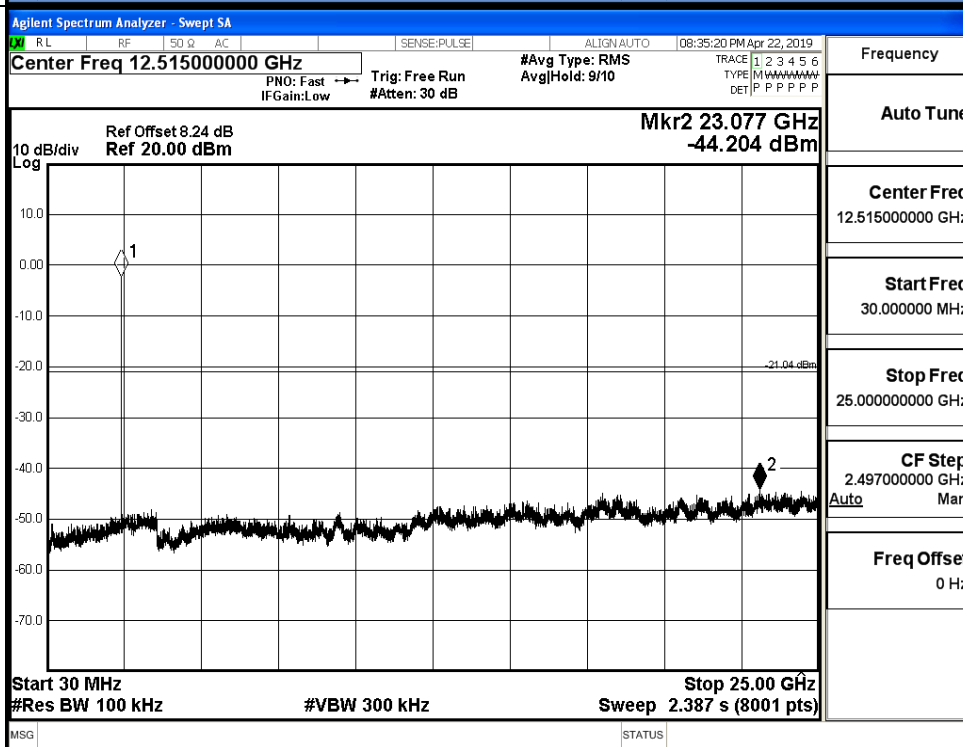
|  |  |
|--|--|
|  |  |
|--|--|

## BT LE MCH Graphs

Pref/BT LE/MCH

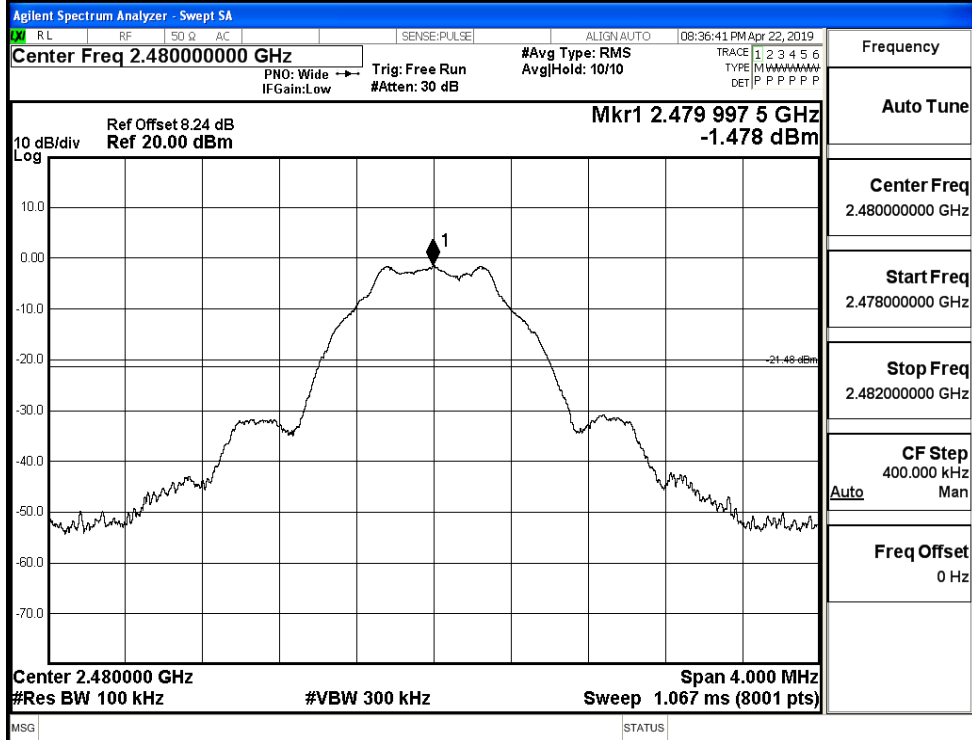


Puw/BT LE/MCH

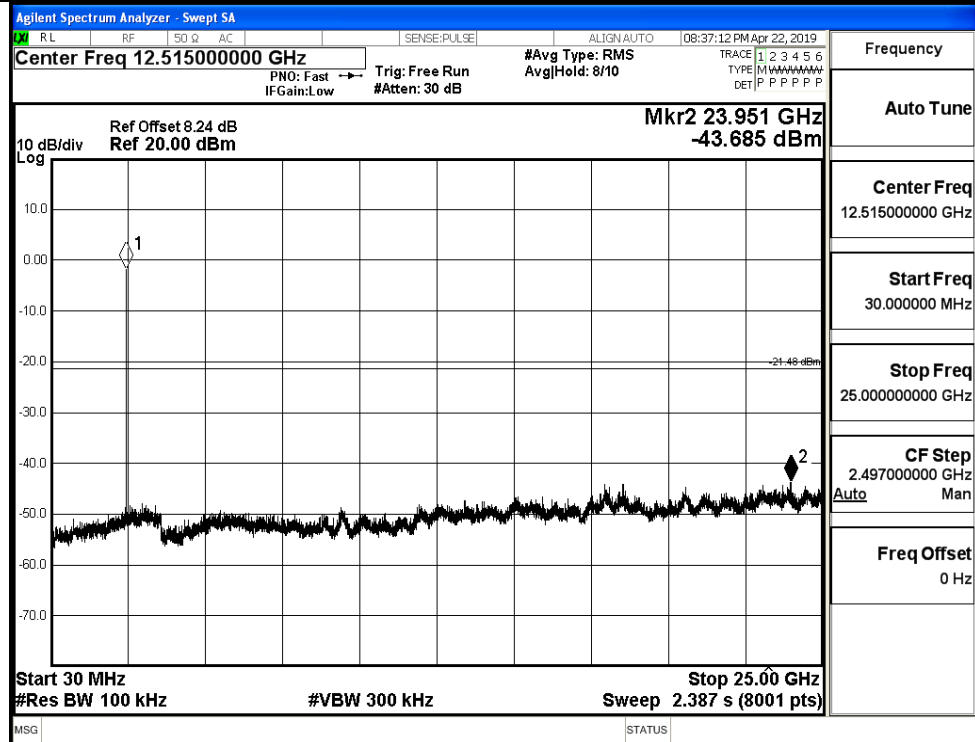


## BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

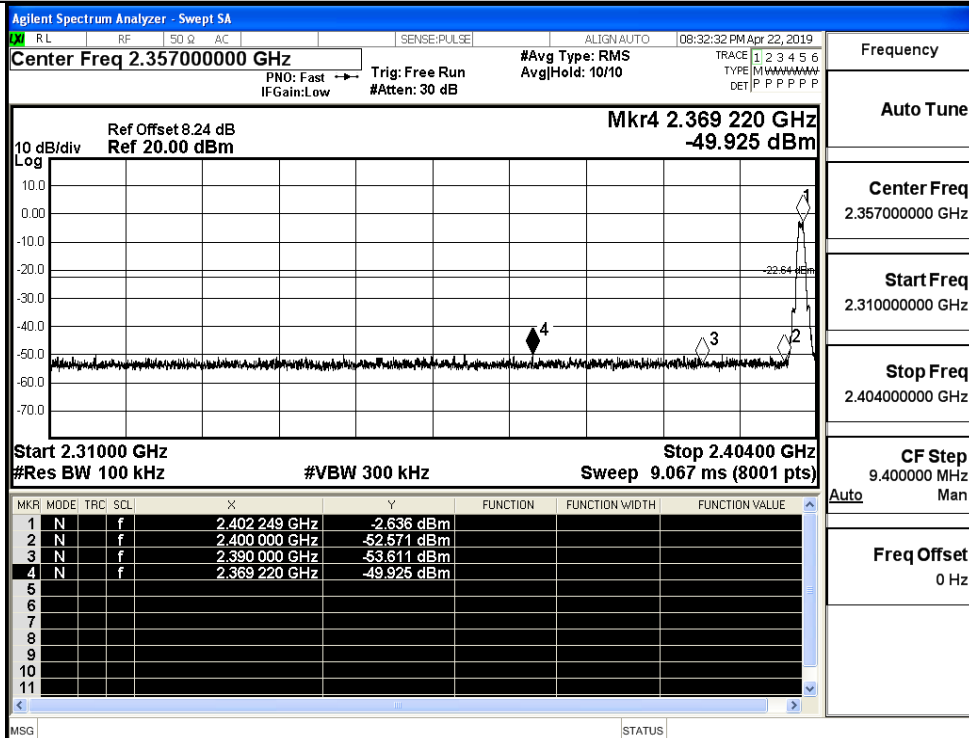


## A.6 Band-edge for RF Conducted Emissions

| Mode  | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|--------------------|--------------------------|-------------|---------|
| BT LE | LCH     | -2.636             | -49.925                  | -22.64      | PASS    |
| BT LE | HCH     | -1.173             | -50.022                  | -21.17      | PASS    |

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

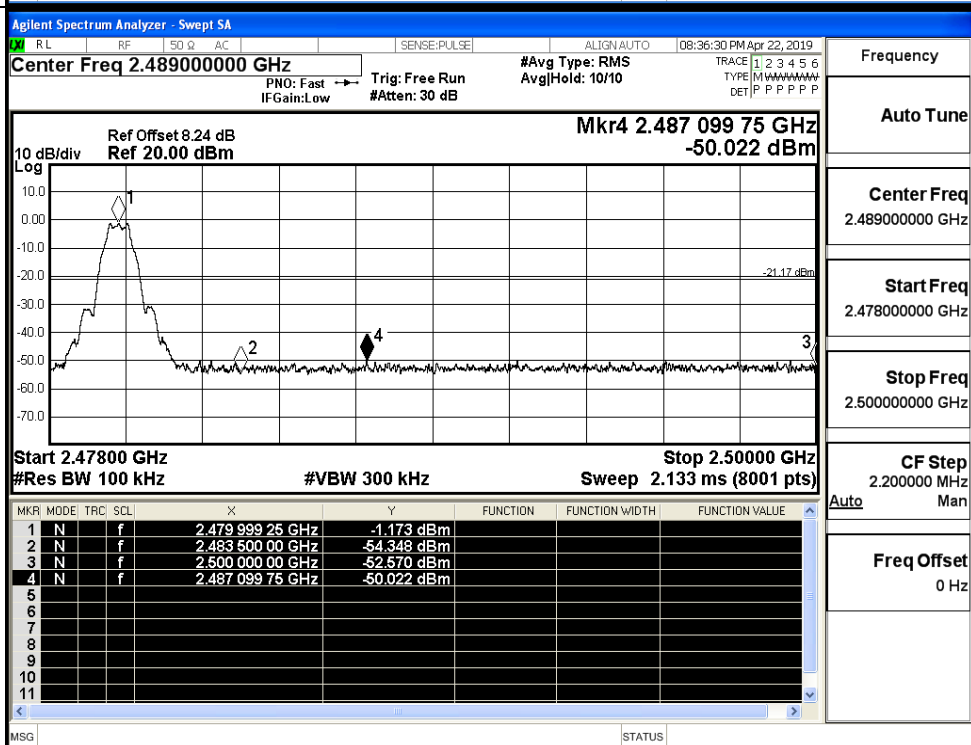
9.400000 MHz

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

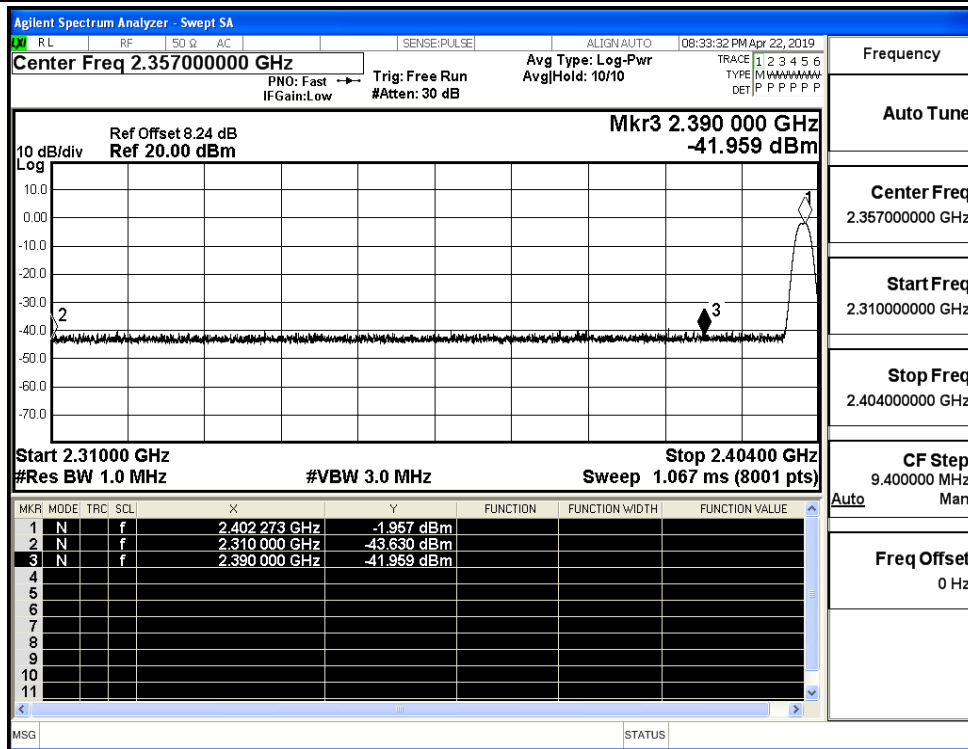
Freq Offset

0 Hz

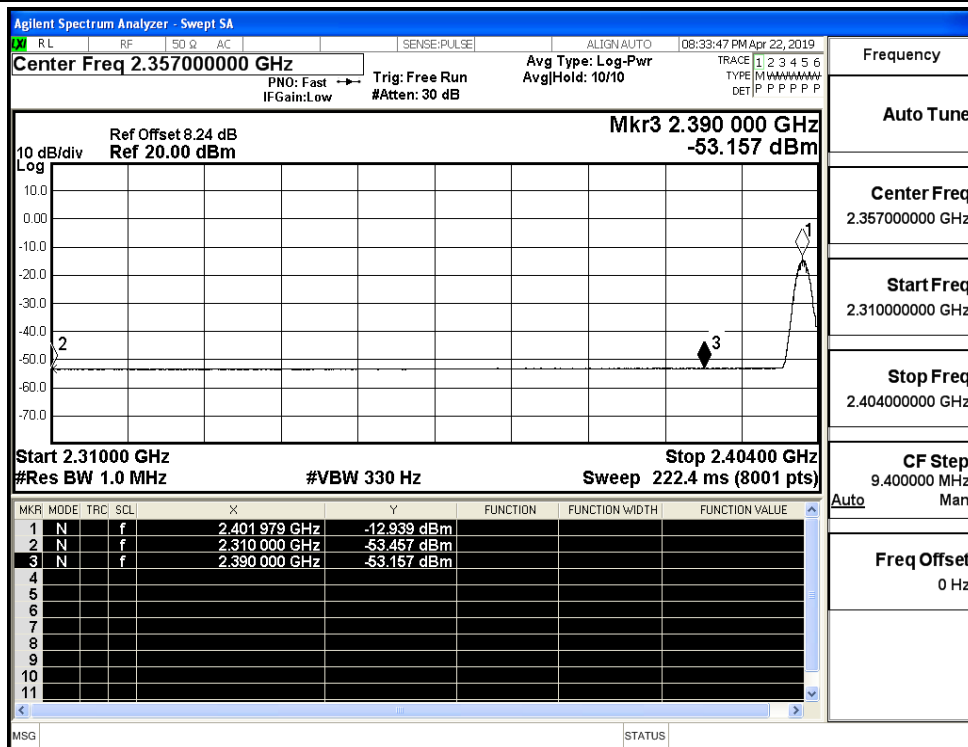
## A.7 Restrict-band band-edge measurements

| 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 | -43.63      | 2.0  | 0             | 53.63      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2310.0 | -53.46      | 2.0  | 0             | 43.80      | AV       | 54             | PASS  |
|           |              | Ant1 | 2390.0 | -41.96      | 2.0  | 0             | 55.30      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2390.0 | -53.16      | 2.0  | 0             | 44.10      | AV       | 54             | PASS  |
|           | 2480         | Ant1 | 2483.5 | -43.11      | 2.0  | 0             | 54.15      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2483.5 | -52.82      | 2.0  | 0             | 44.44      | AV       | 54             | PASS  |
|           |              | Ant1 | 2500.0 | -42.68      | 2.0  | 0             | 54.58      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2500.0 | -52.74      | 2.0  | 0             | 44.52      | AV       | 54             | PASS  |

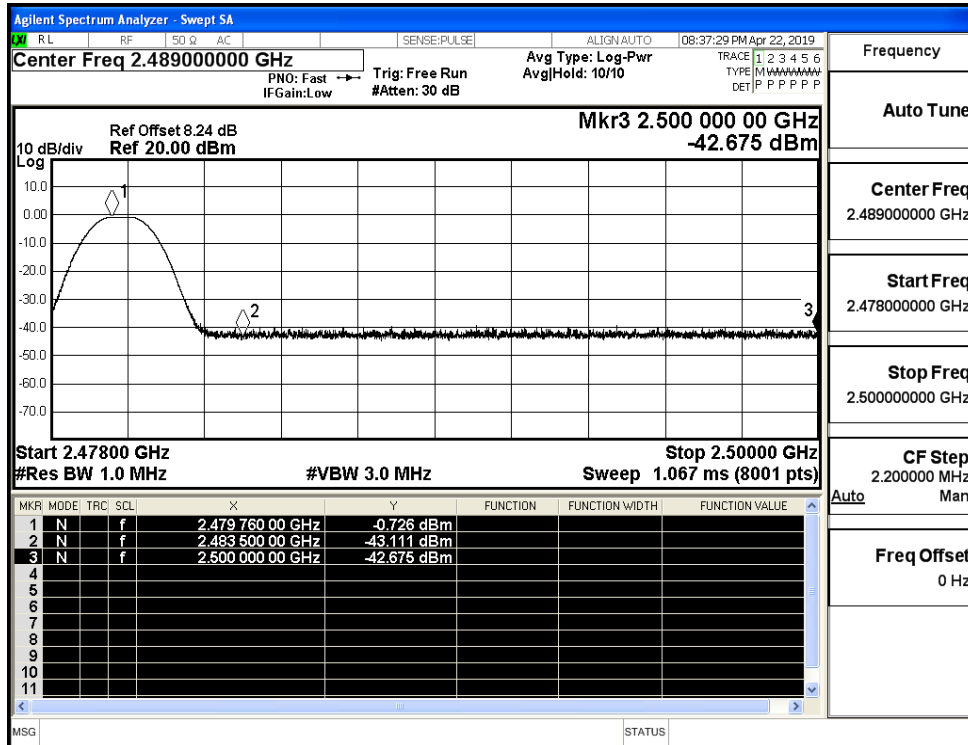
## Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



## 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

