

## Appendix B

### RF Test Data for BT V4.0(BDR/EDR) (Conducted Measurement)

Product Name: Smart phone

Trade Mark: S SMOOTH

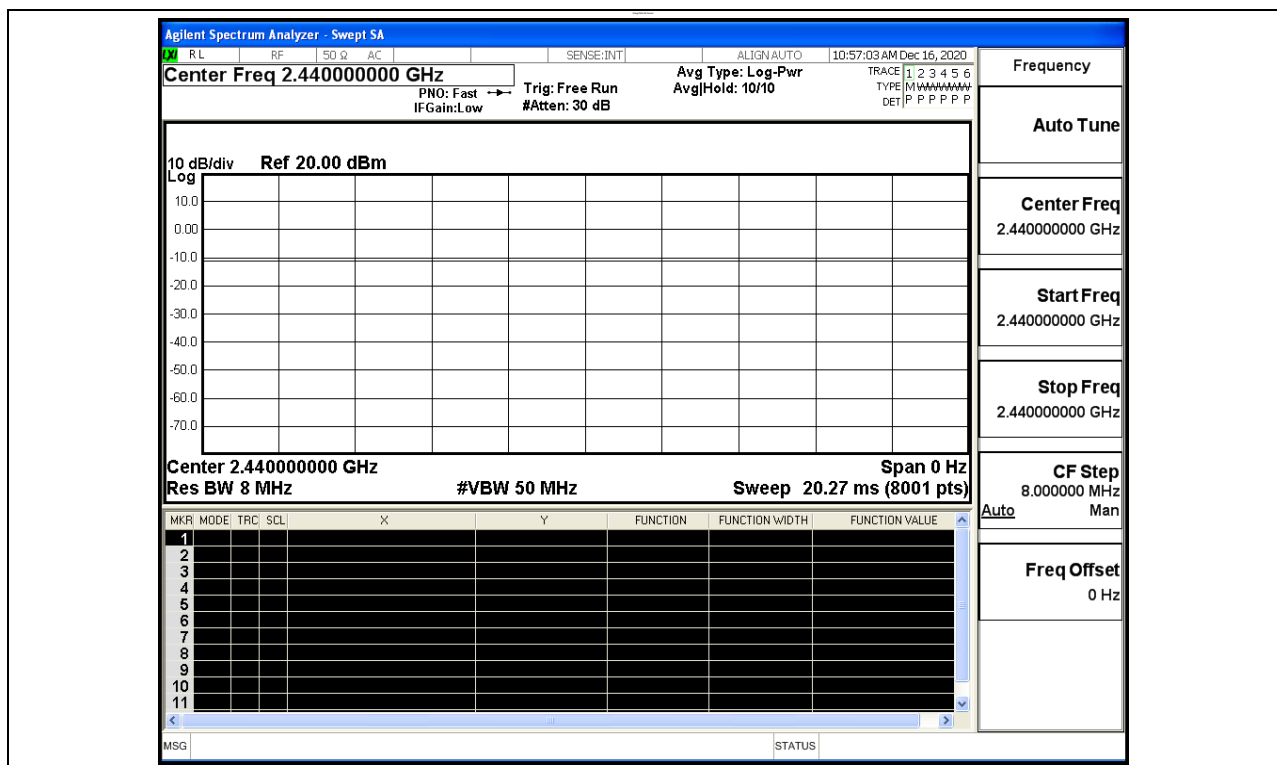
Test Model: SMOOTH 5.5

#### Environmental Conditions

|                    |            |
|--------------------|------------|
| Temperature:       | 22.5° C    |
| Relative Humidity: | 53.7%      |
| ATM Pressure:      | 100.0 kPa  |
| Test Engineer:     | Diamond Lu |
| Supervised by:     | Li Huan    |

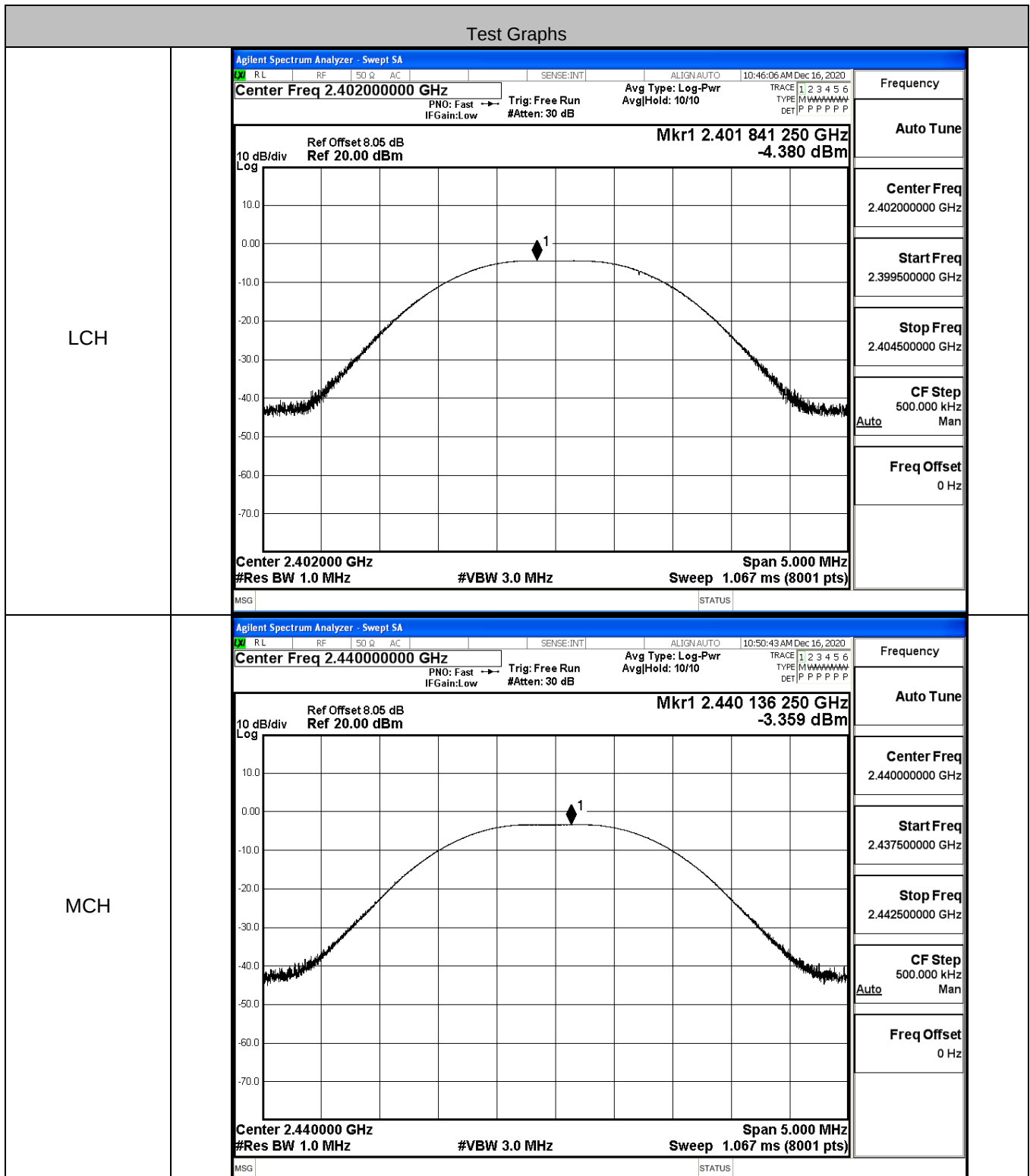
#### B.1 Duty Cycle

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

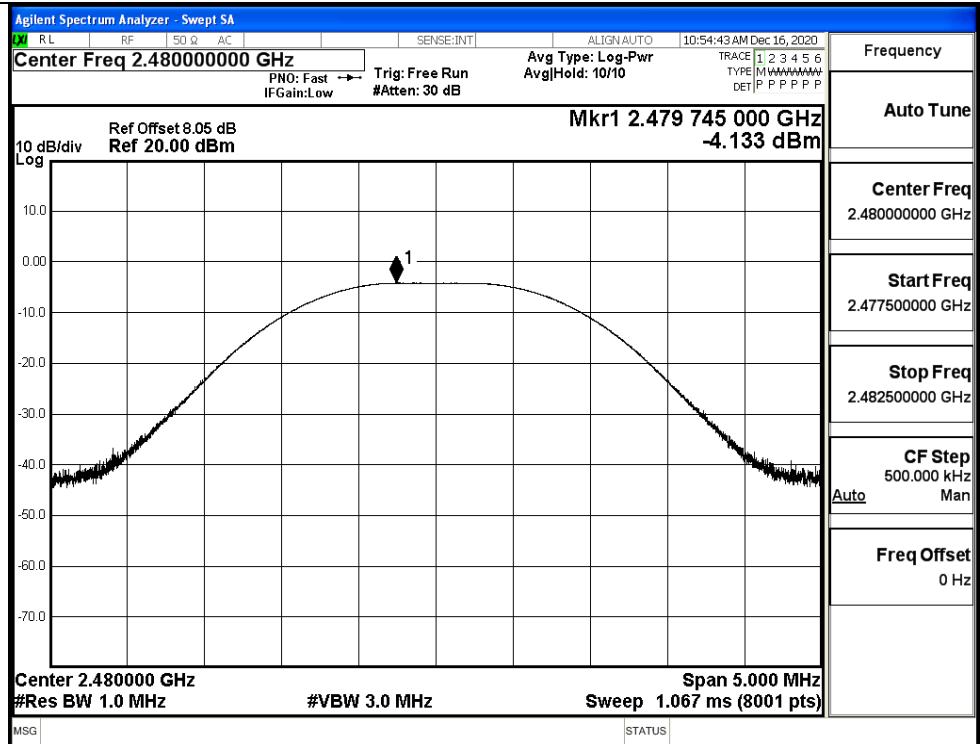


## B.2 Maximum Conducted Peak Output Power

| Mode  | Channel | Conduct Peak Power[dBm] | Limit [dBm] | Verdict |
|-------|---------|-------------------------|-------------|---------|
| BT LE | LCH     | -4.38                   | 30          | PASS    |
| BT LE | MCH     | -3.359                  | 30          | PASS    |
| BT LE | HCH     | -4.133                  | 30          | PASS    |



HCH

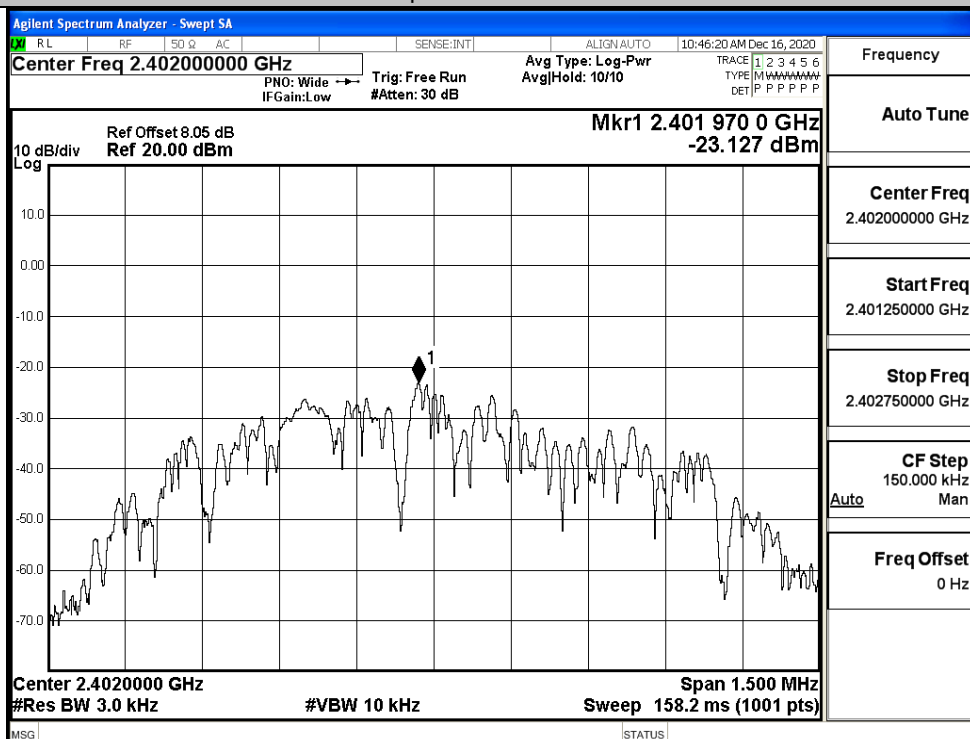


### B.3 Maximum Power Spectral Density

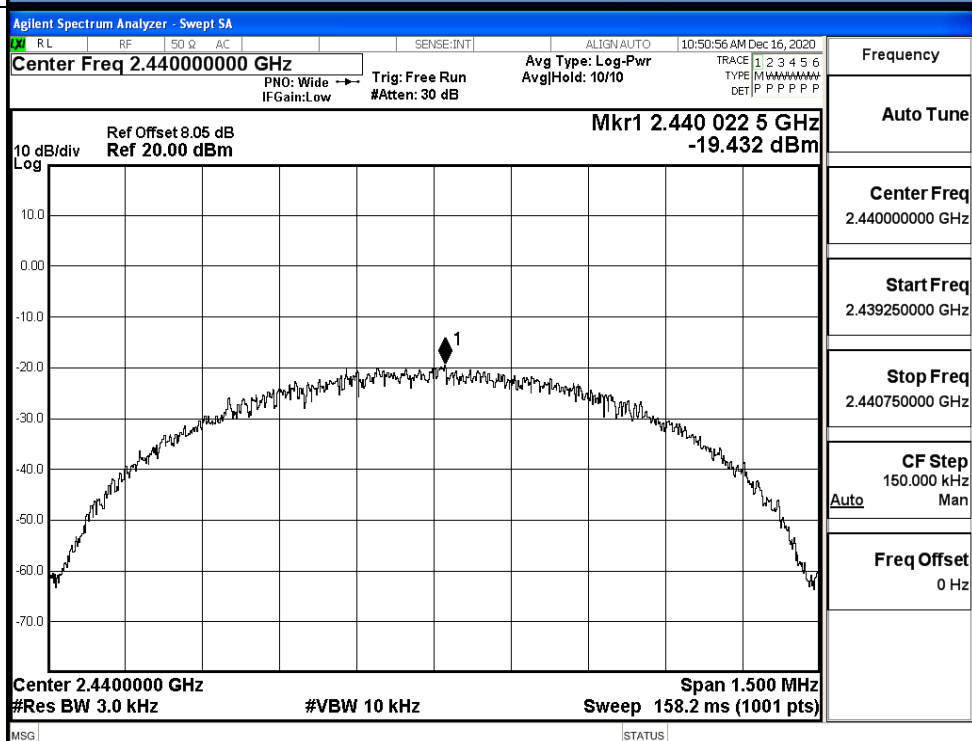
| Mode  | Channel | PSD [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-------|---------|----------------|------------------|---------|
| BT LE | LCH     | -23.127        | 8                | PASS    |
| BT LE | MCH     | -19.432        | 8                | PASS    |
| BT LE | HCH     | -20.582        | 8                | PASS    |

Test Graphs

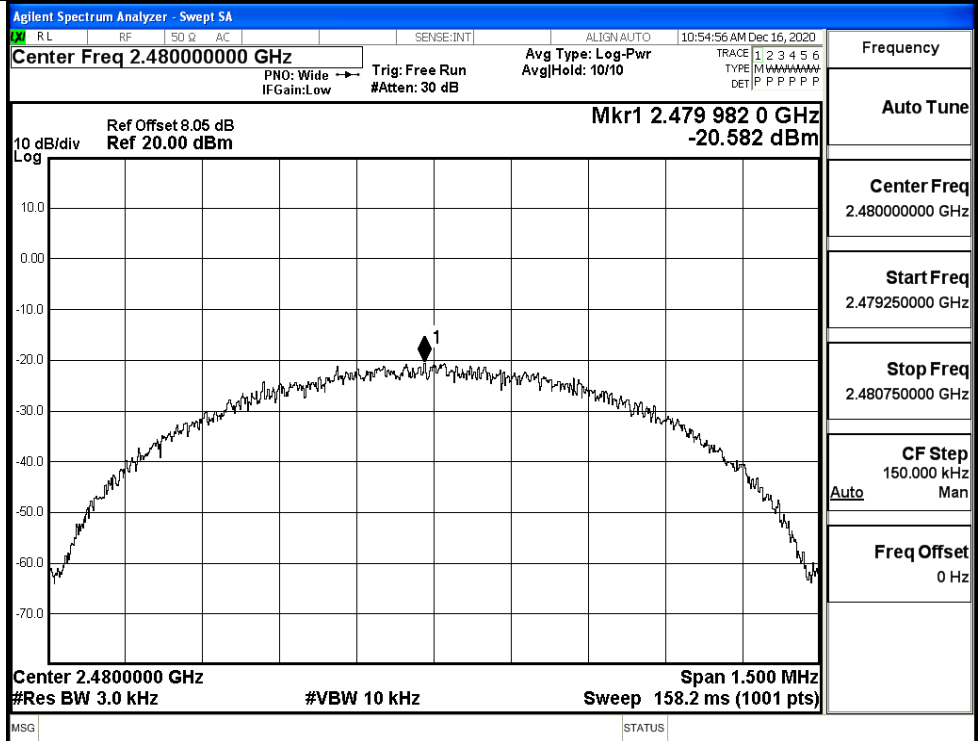
LCH



MCH



HCH

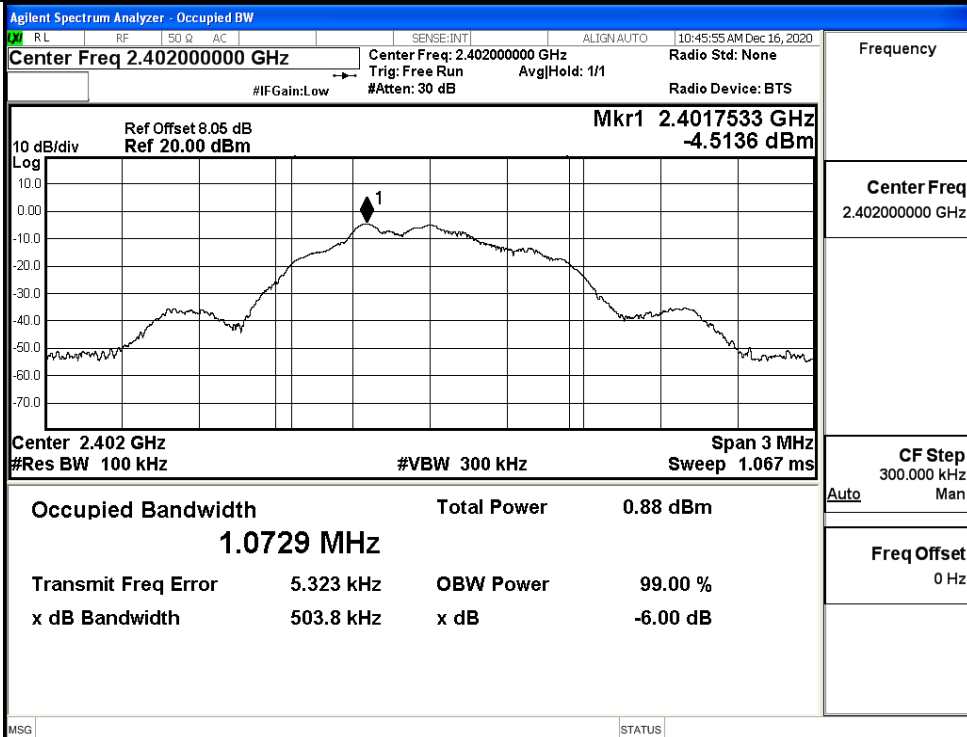


## B.4 6dB Bandwidth

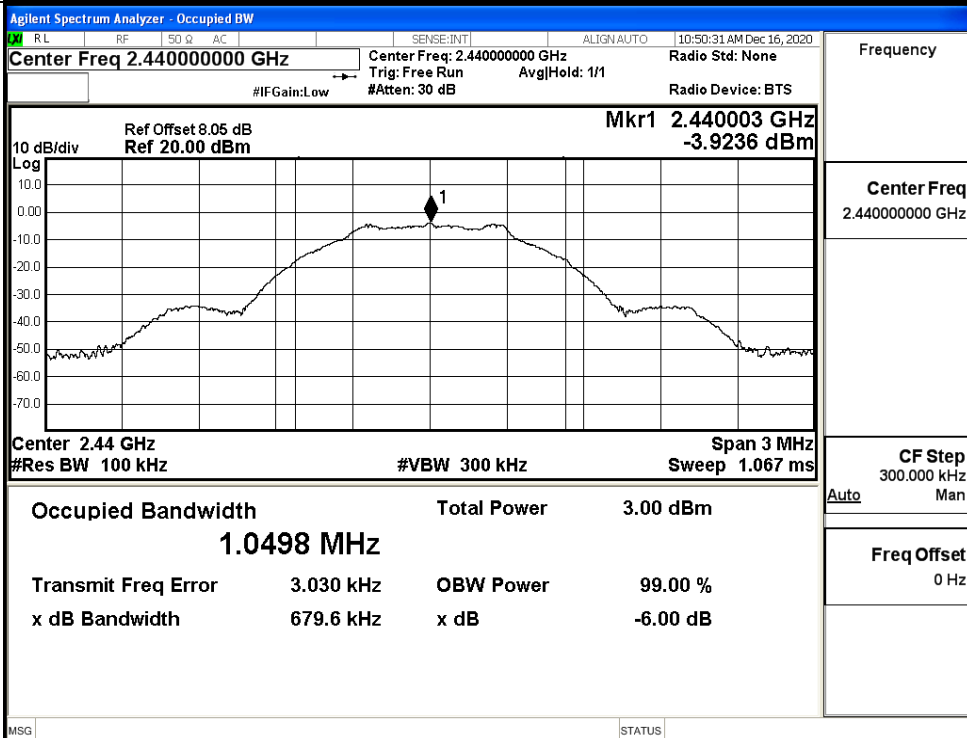
| Mode  | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-------|---------|---------------------|-------------|---------|
| BT LE | LCH     | 0.5038              | $\geq 0.5$  | PASS    |
| BT LE | MCH     | 0.6796              | $\geq 0.5$  | PASS    |
| BT LE | HCH     | 0.6566              | $\geq 0.5$  | PASS    |

## Test Graphs

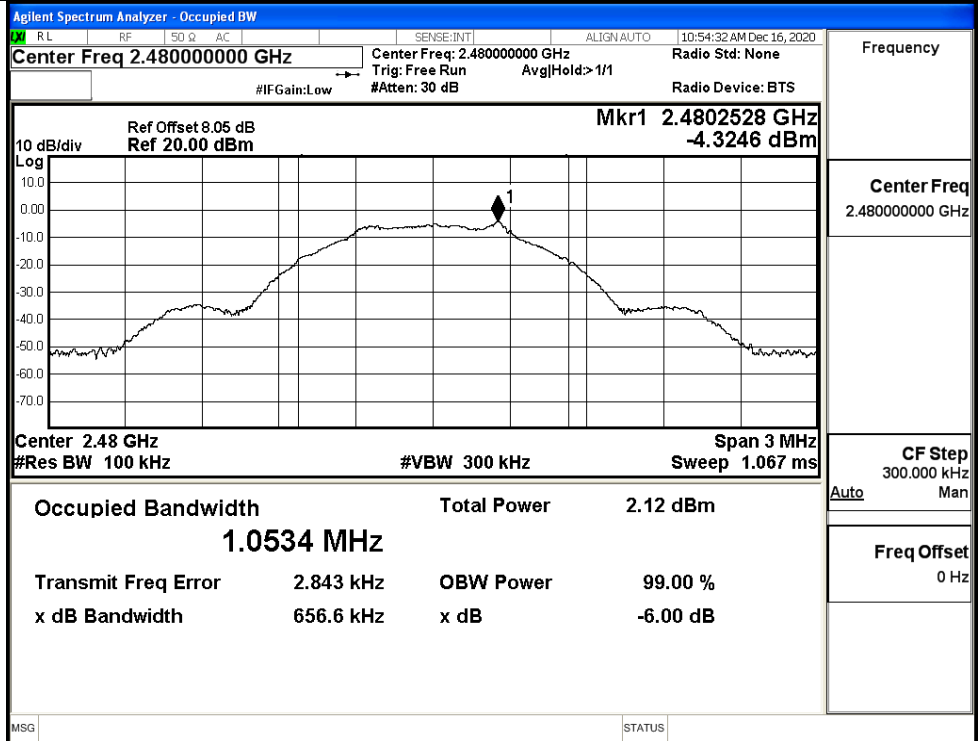
LCH



MCH



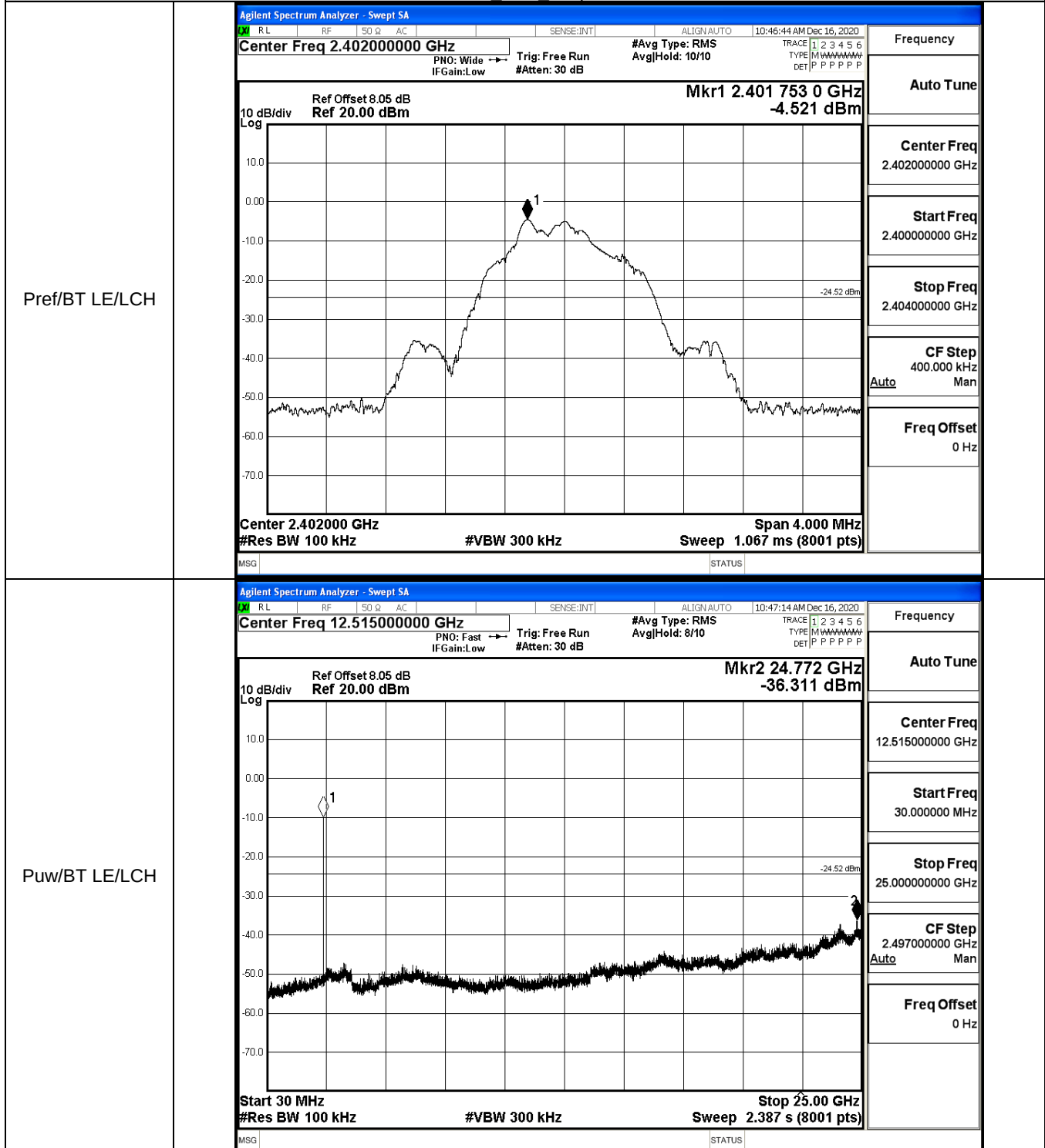
HCH



## B.5 RF Conducted Spurious Emissions

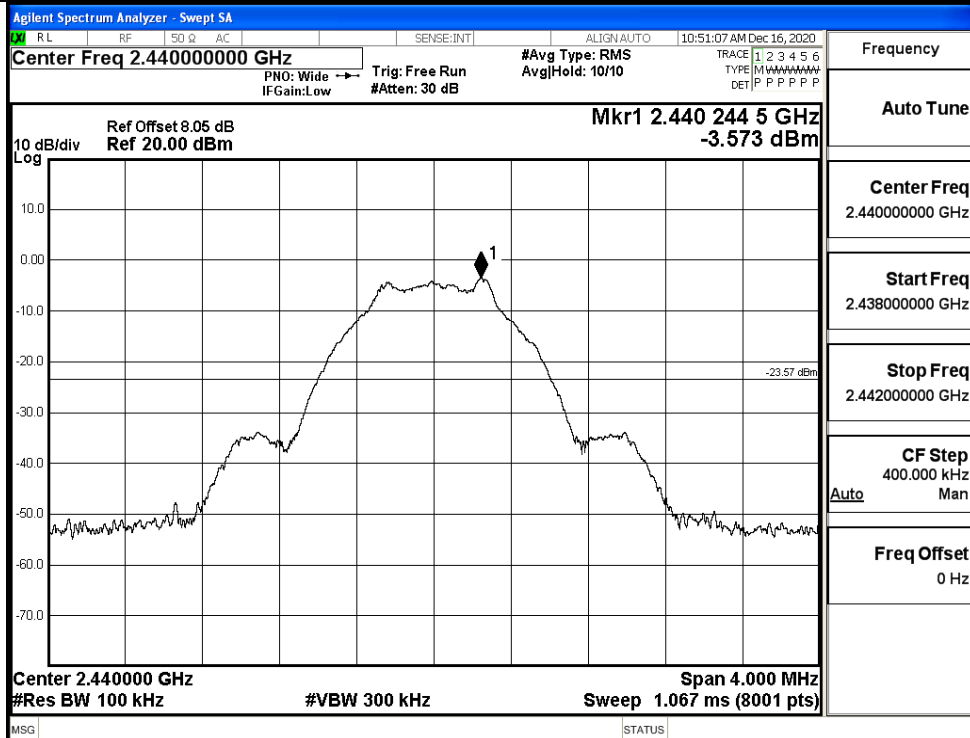
| Mode  | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|------------|------------------|-------------|---------|
| BT LE | LCH     | -4.521     | -36.311          | -24.521     | PASS    |
| BT LE | MCH     | -3.573     | -37.353          | -23.573     | PASS    |
| BT LE | HCH     | -4.478     | -36.698          | -24.478     | PASS    |

BT LE LCH Graphs

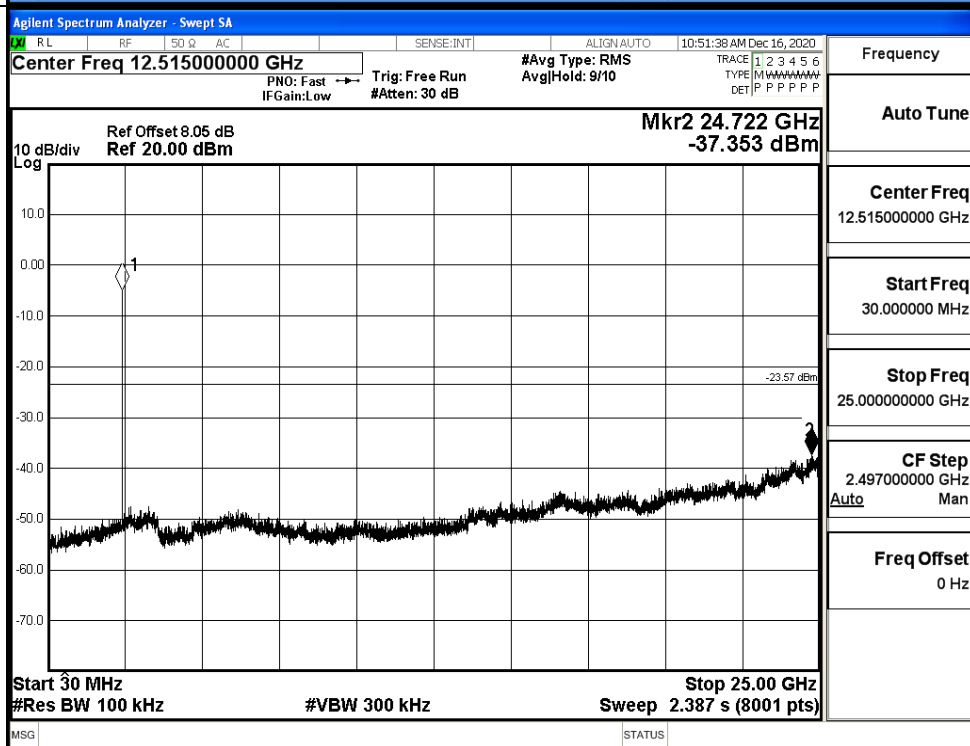


## BT LE MCH Graphs

Pref/BT LE/MCH

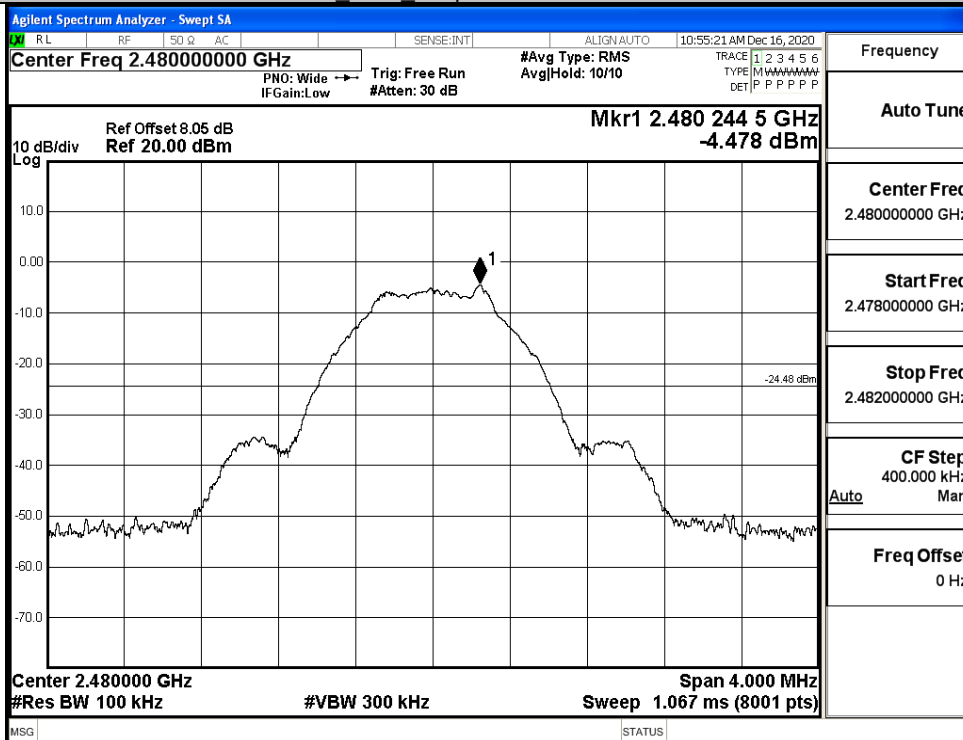


Puw/BT LE/MCH

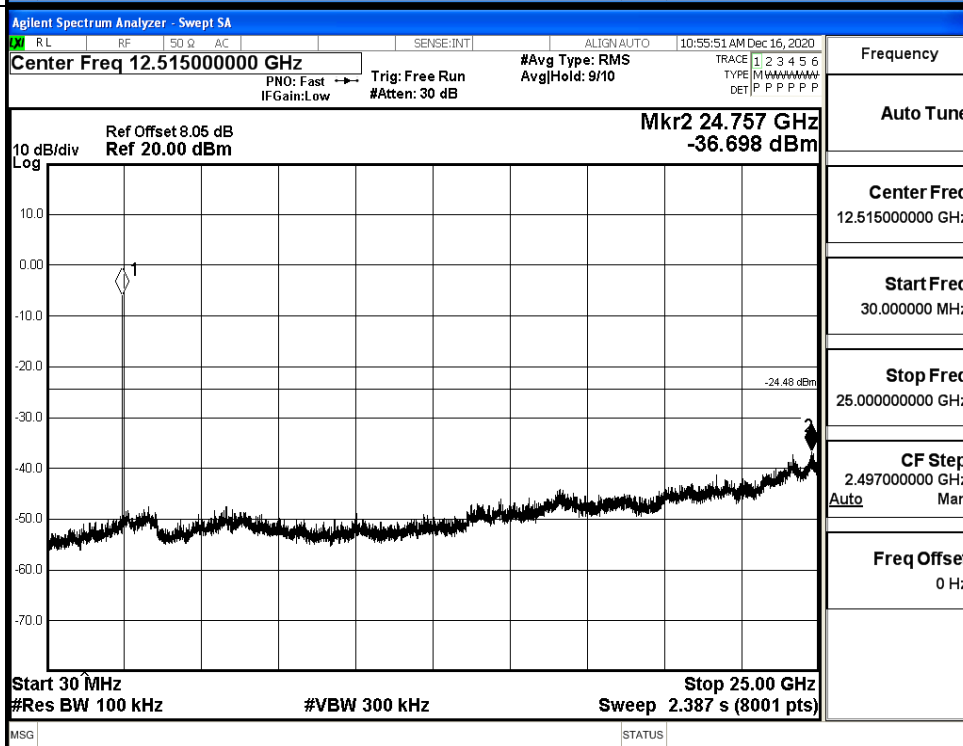


## BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

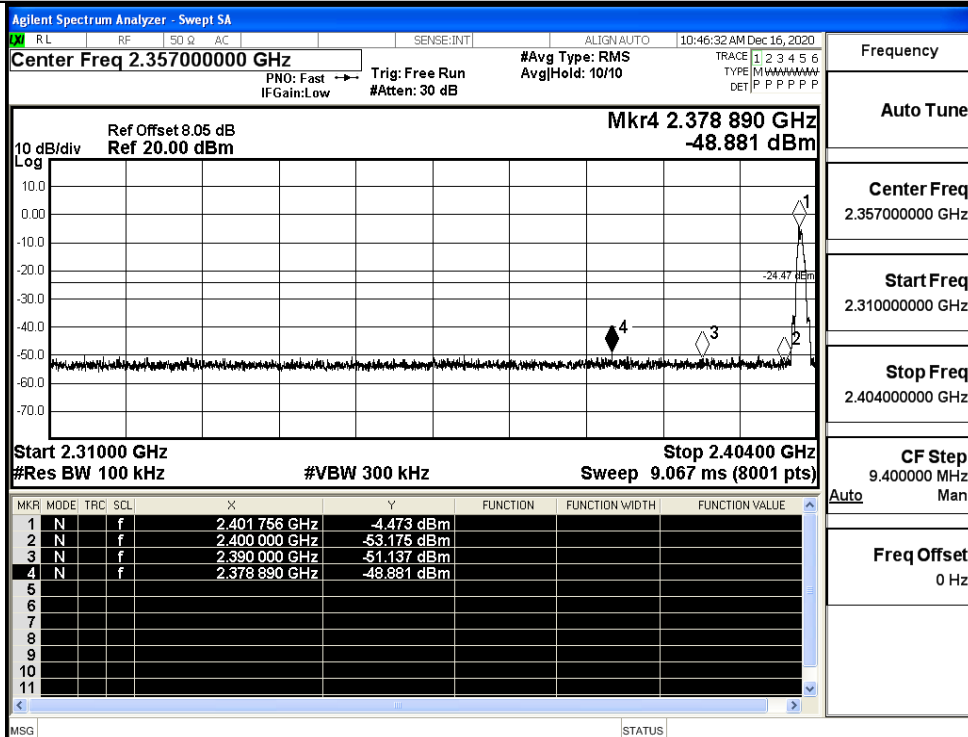


## B.6 Band-edge for RF Conducted Emissions

| Mode  | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|--------------------|--------------------------|-------------|---------|
| BT LE | LCH     | -4.473             | -48.881                  | -24.47      | PASS    |
| BT LE | HCH     | -4.756             | -49.532                  | -24.76      | PASS    |

## Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

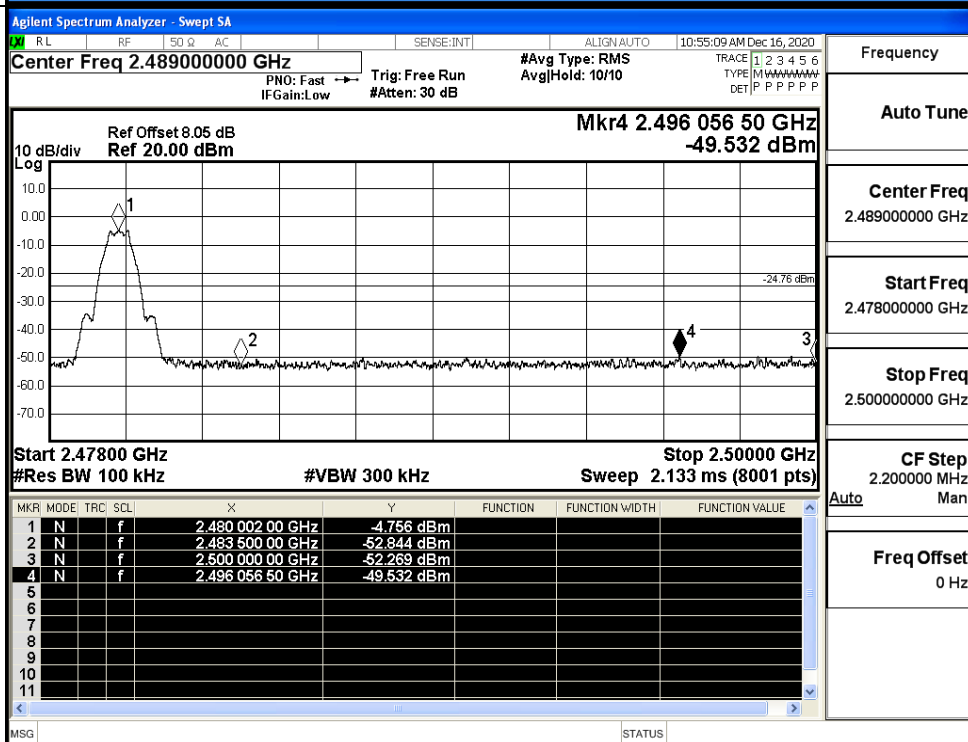
9.400000 MHz

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

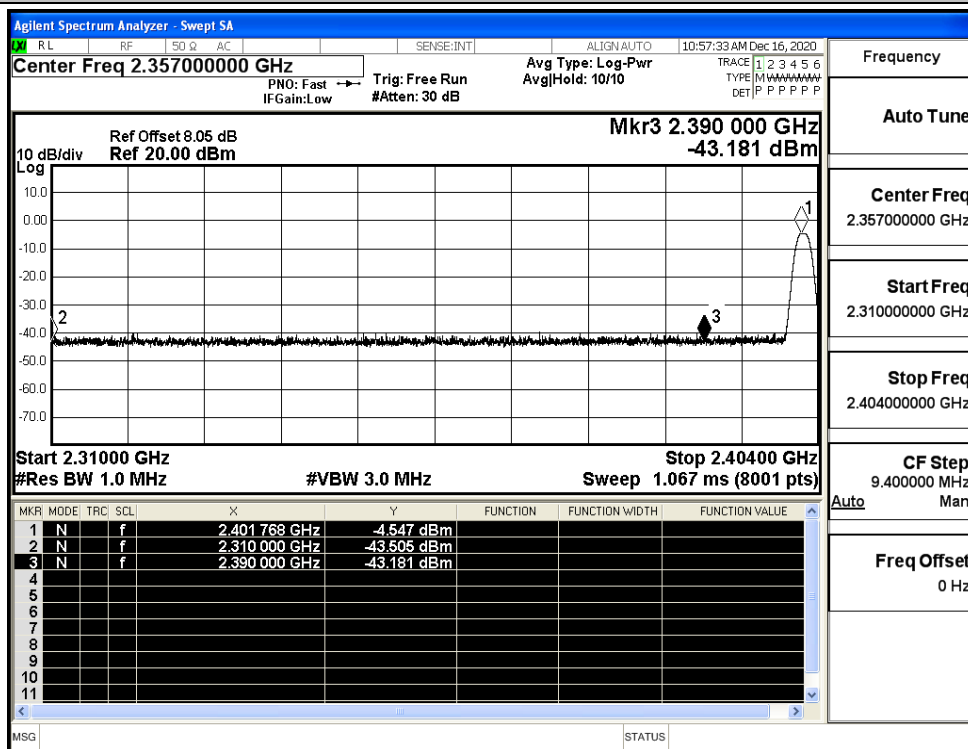
Freq Offset

0 Hz

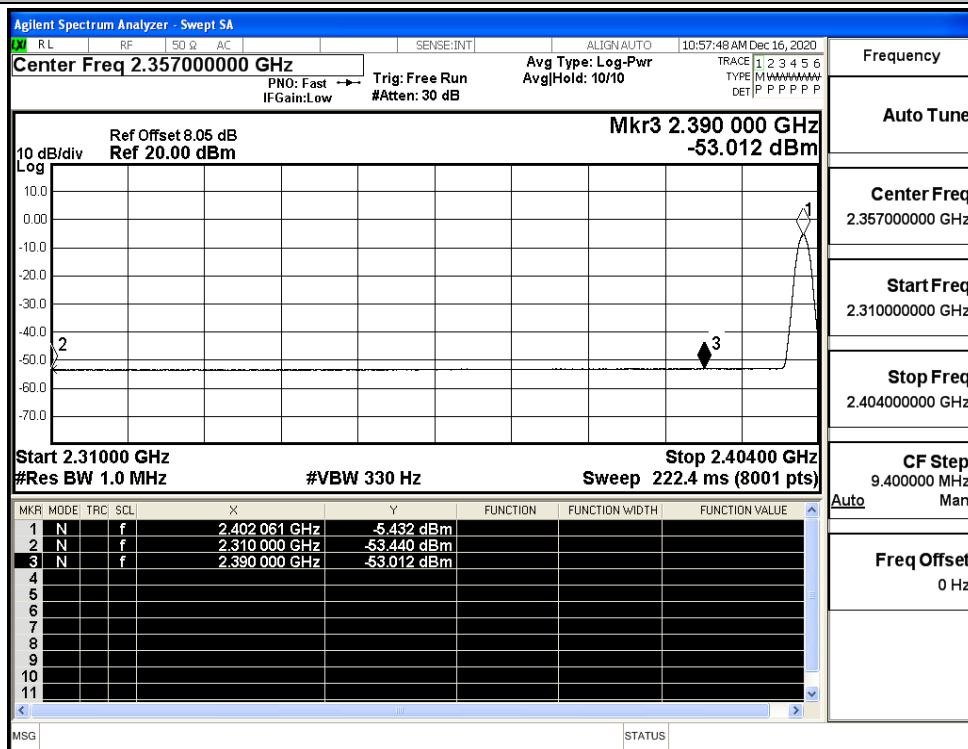
**B.7 Restrict-band band-edge measurements**

| 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 | -43.51      | 2.0  | 0             | 51.75      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2310.0 | -53.44      | 2.0  | 0             | 41.82      | AV       | 54             | PASS  |
|           |              | Ant1 | 2390.0 | -43.18      | 2.0  | 0             | 52.08      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2390.0 | -53.01      | 2.0  | 0             | 42.25      | AV       | 54             | PASS  |
|           | 2480         | Ant1 | 2483.5 | -42.17      | 2.0  | 0             | 53.09      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2483.5 | -52.61      | 2.0  | 0             | 42.65      | AV       | 54             | PASS  |
|           |              | Ant1 | 2500.0 | -42.10      | 2.0  | 0             | 53.16      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2500.0 | -52.43      | 2.0  | 0             | 42.83      | AV       | 54             | PASS  |

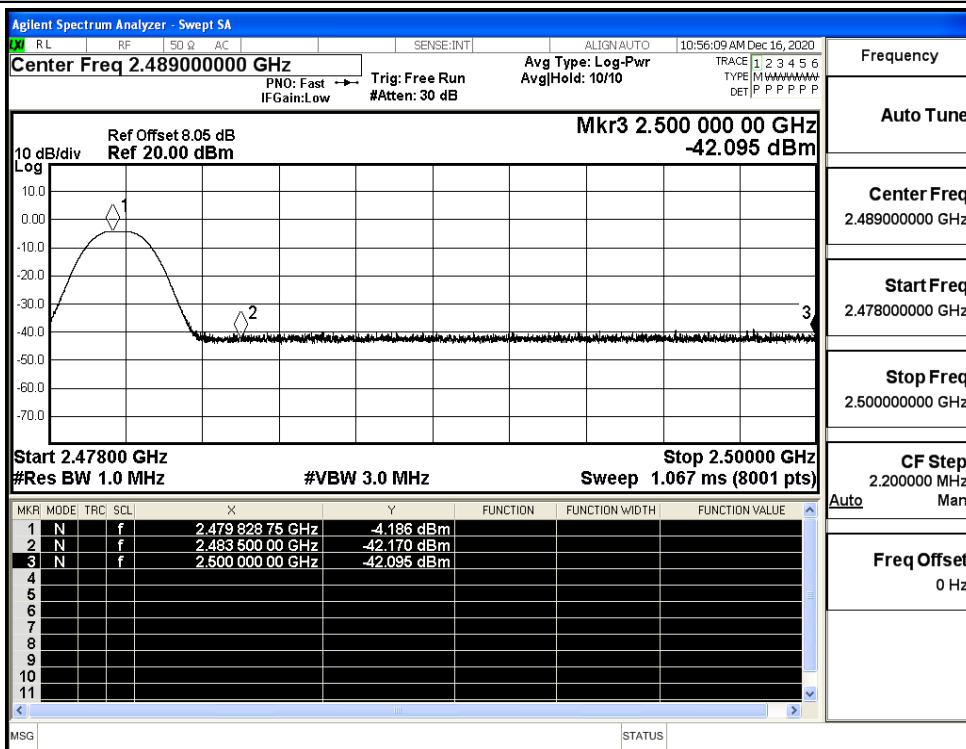
## Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



## 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

