

## Appendix B

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

Product Name: Carrier Air Monitor

Trade Mark: N/A

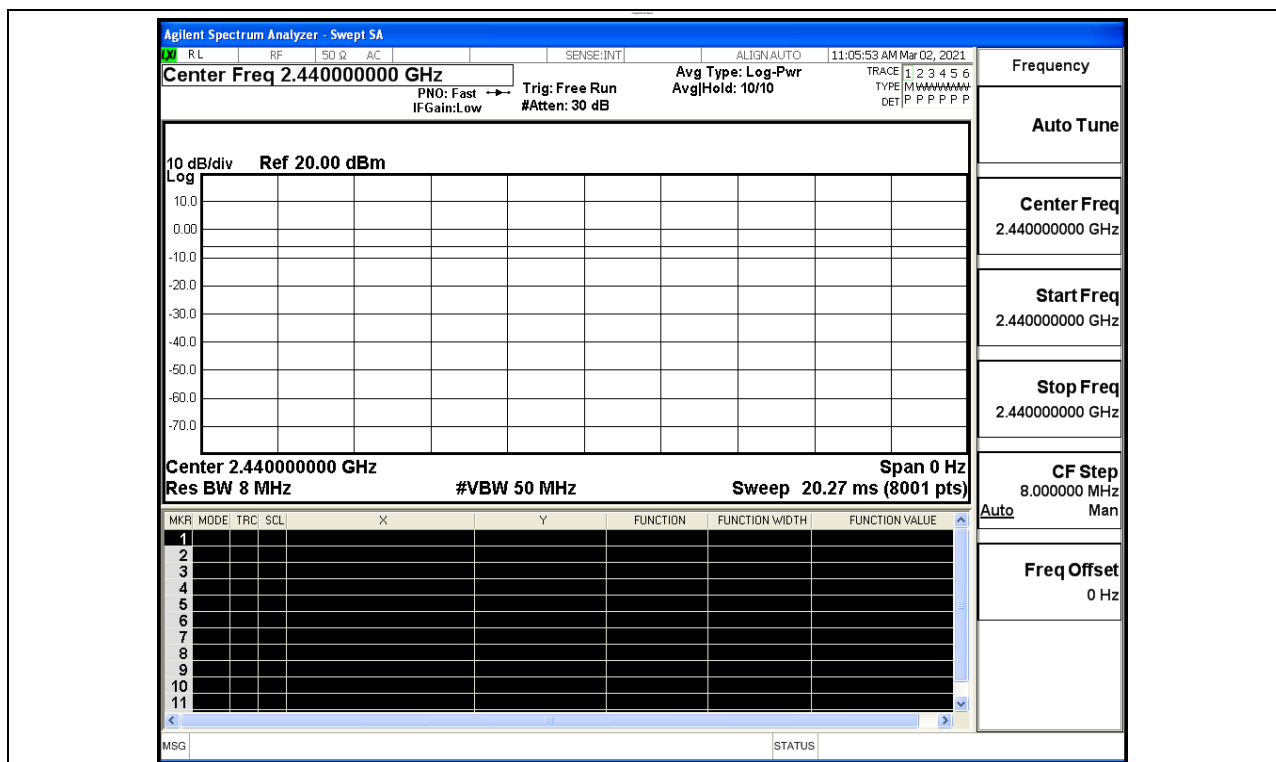
Test Model: IEQCCWWRT01

#### Environmental Conditions

|                    |            |
|--------------------|------------|
| Temperature:       | 22.5° C    |
| Relative Humidity: | 53.8%      |
| ATM Pressure:      | 100.0 kPa  |
| Test Engineer:     | Diamond Lu |
| Supervised by:     | Li Huan    |

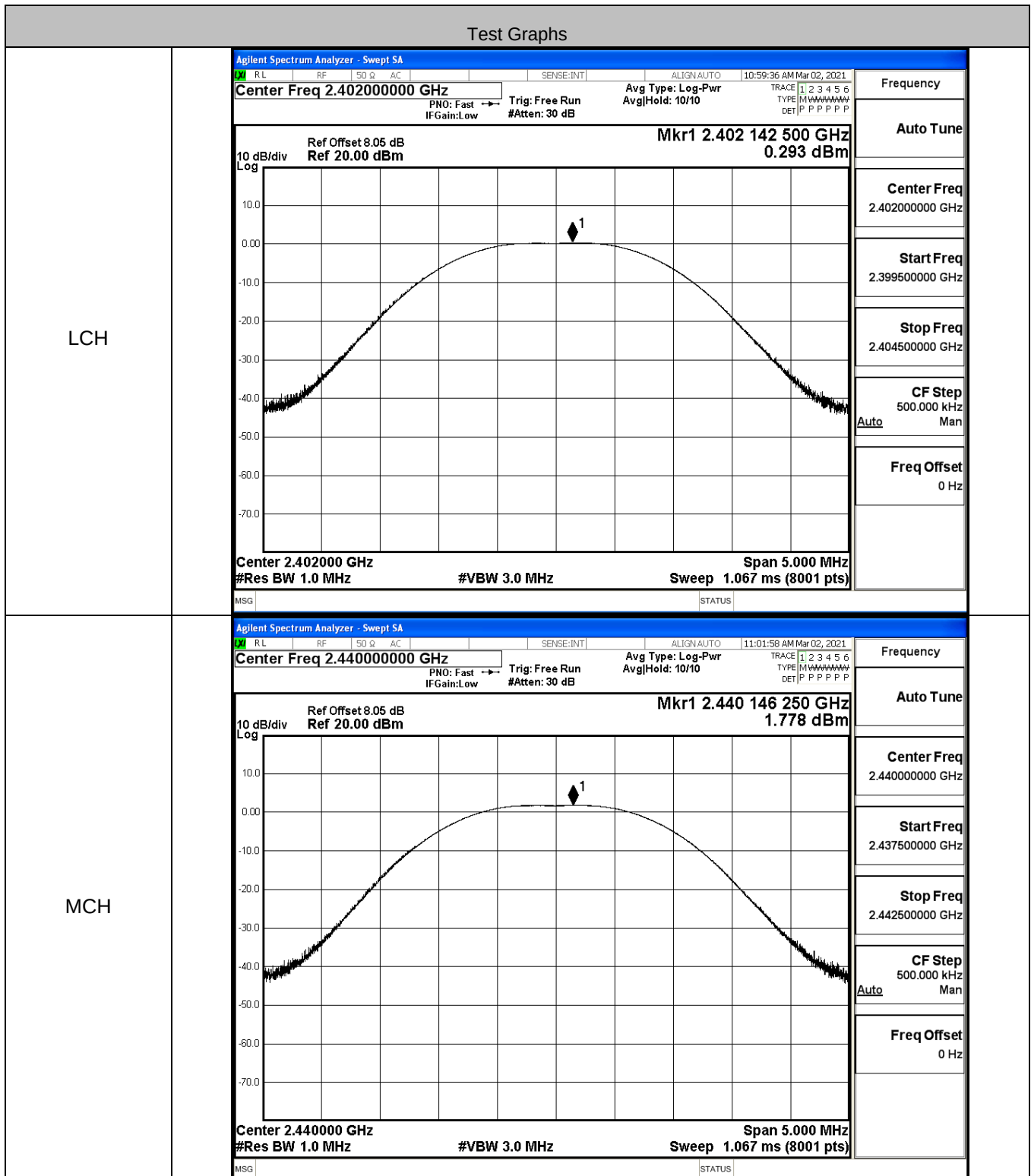
#### B.1 Duty Cycle

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

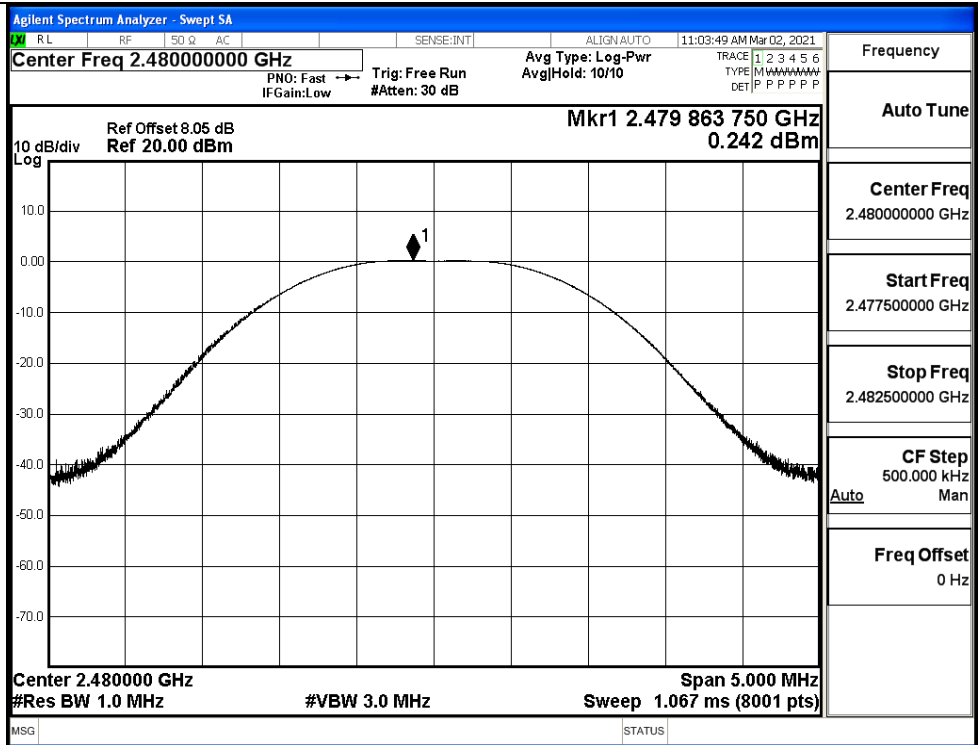


## B.2 Maximum Conducted Peak Output Power

| Mode  | Channel | Conduct Peak Power[dBm] | Limit [dBm] | Verdict |
|-------|---------|-------------------------|-------------|---------|
| BT LE | LCH     | 0.293                   | 30          | PASS    |
| BT LE | MCH     | 1.778                   | 30          | PASS    |
| BT LE | HCH     | 0.242                   | 30          | PASS    |

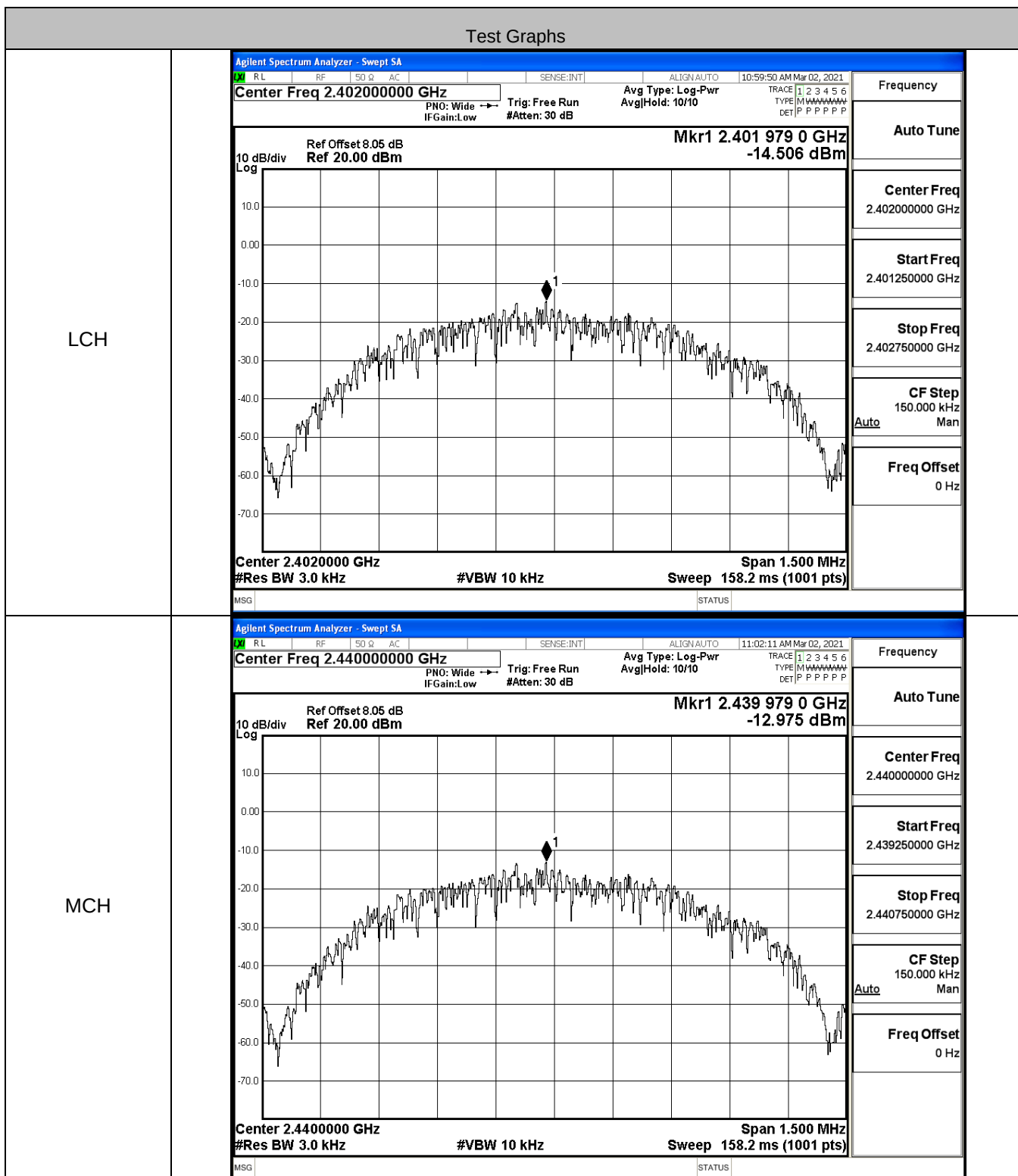


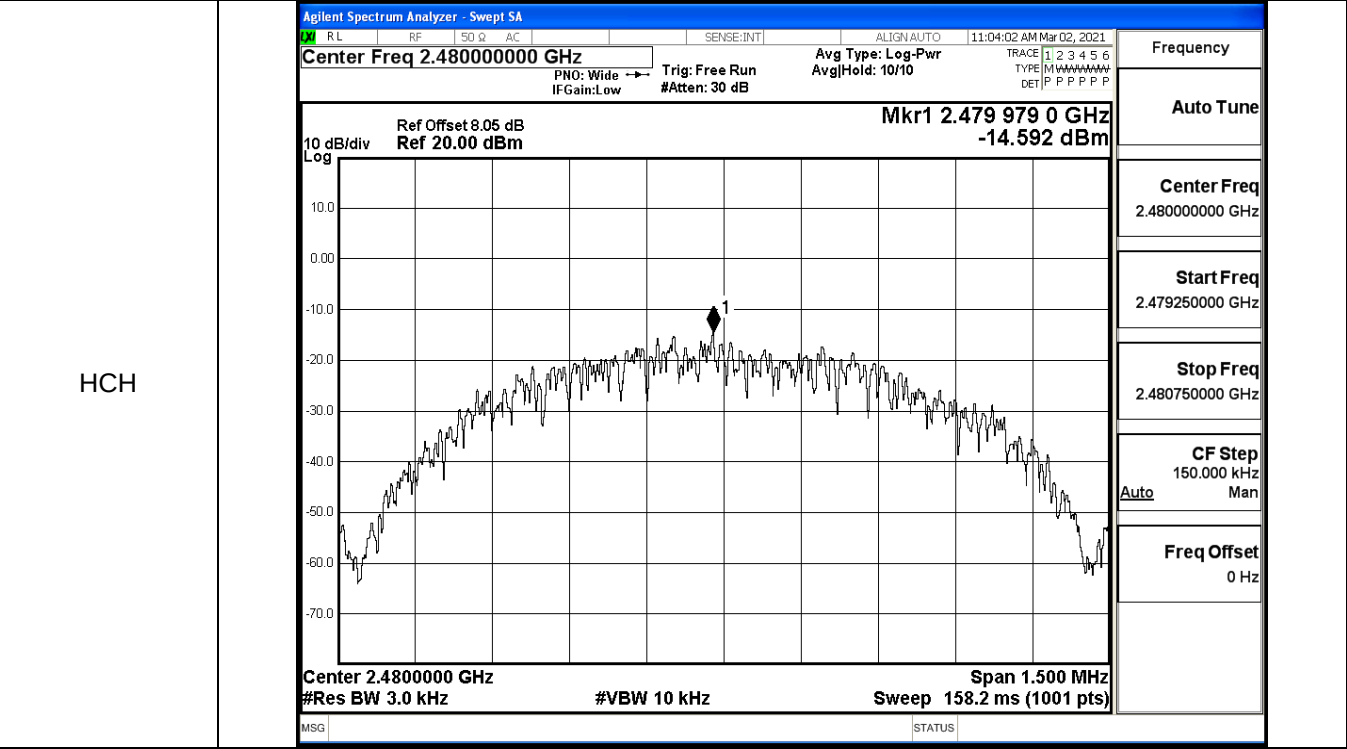
HCH



### B.3 Maximum Power Spectral Density

| Mode  | Channel | PSD [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-------|---------|----------------|------------------|---------|
| BT LE | LCH     | -14.506        | 8                | PASS    |
| BT LE | MCH     | -12.975        | 8                | PASS    |
| BT LE | HCH     | -14.592        | 8                | PASS    |



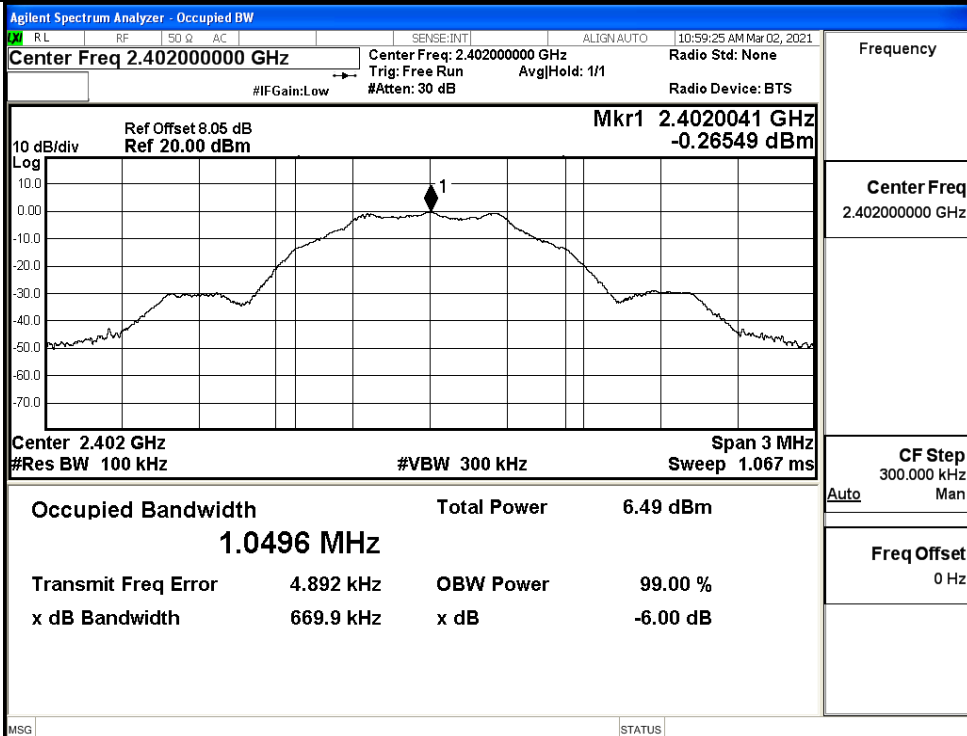


## B.4 6dB Bandwidth

| Mode  | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-------|---------|---------------------|-------------|---------|
| BT LE | LCH     | 0.6699              | $\geq 0.5$  | PASS    |
| BT LE | MCH     | 0.6596              | $\geq 0.5$  | PASS    |
| BT LE | HCH     | 0.6697              | $\geq 0.5$  | PASS    |

### Test Graphs

LCH



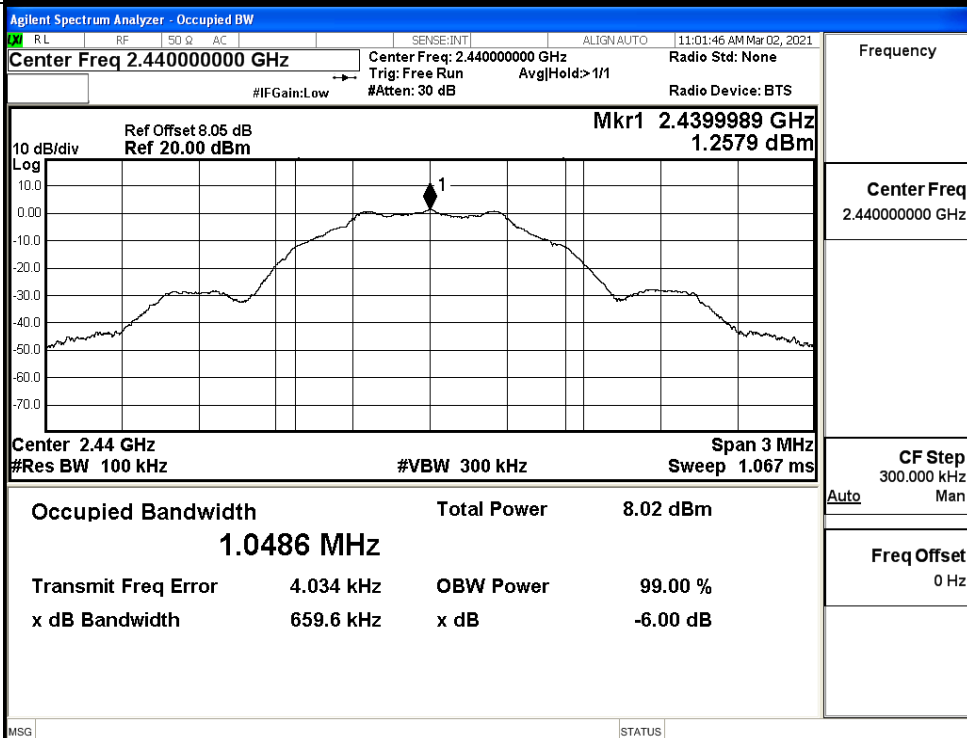
Frequency

Center Freq  
2.402000000 GHz

CF Step  
300.000 kHz  
Auto Man

Freq Offset  
0 Hz

MCH



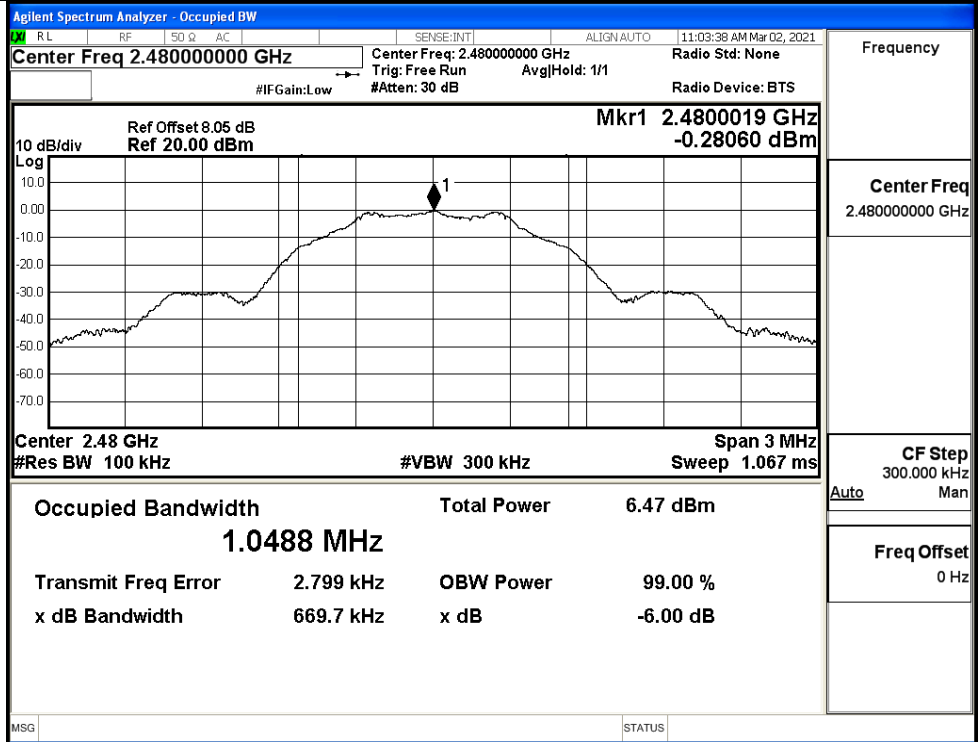
Frequency

Center Freq  
2.440000000 GHz

CF Step  
300.000 kHz  
Auto Man

Freq Offset  
0 Hz

HCH

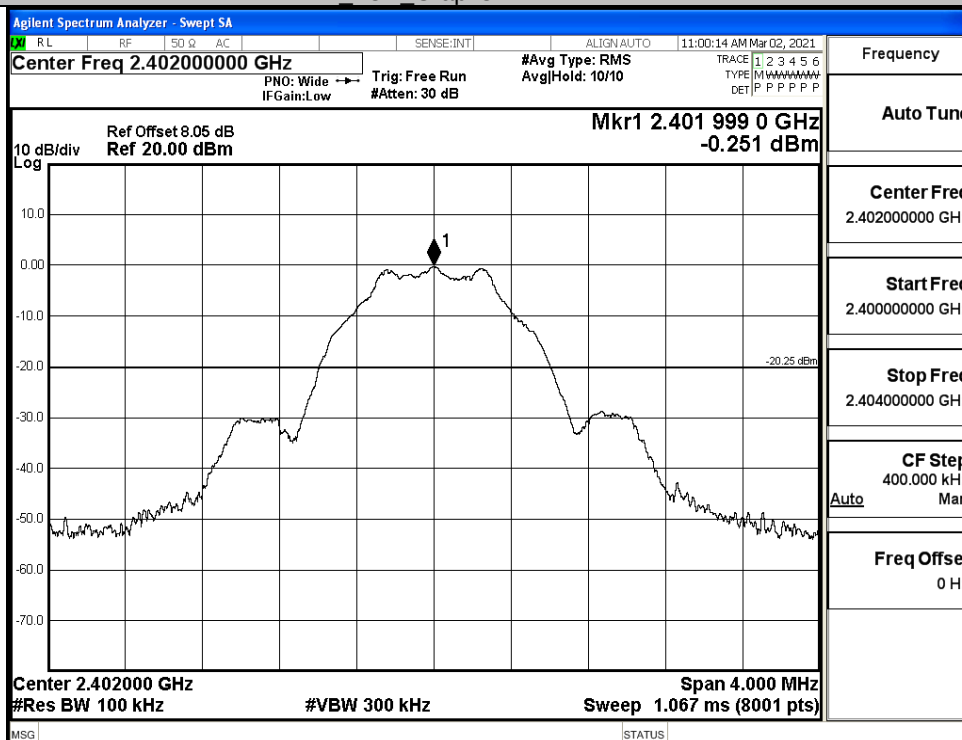


# B.5 RF Conducted Spurious Emissions

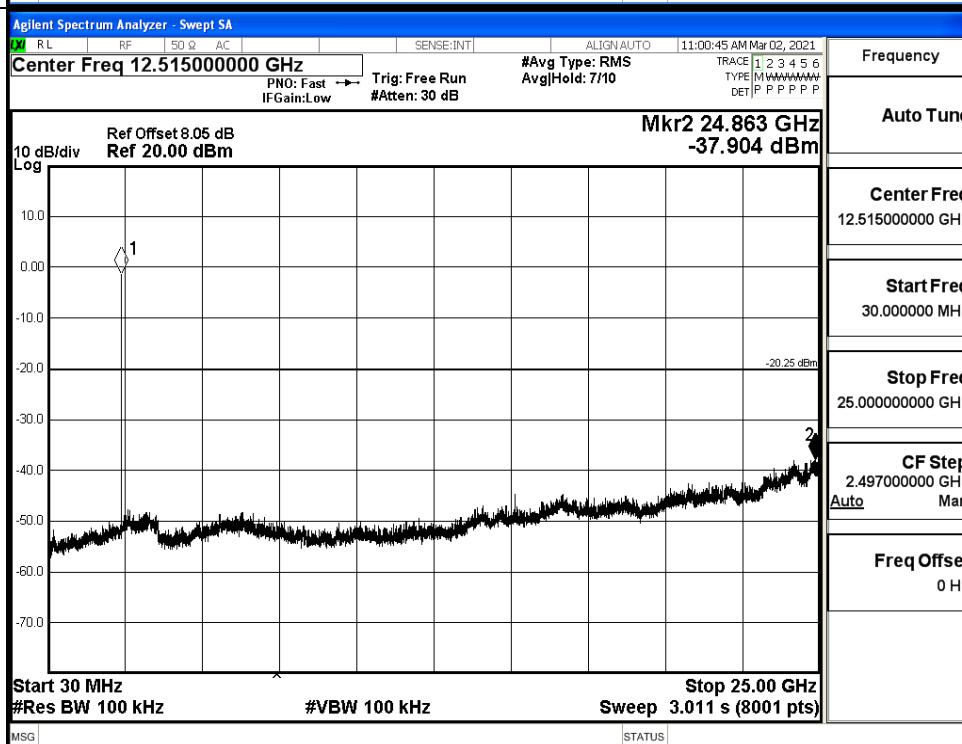
| Mode  | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|------------|------------------|-------------|---------|
| BT LE | LCH     | -0.251     | -37.904          | -20.251     | PASS    |
| BT LE | MCH     | 1.267      | -38.266          | -18.733     | PASS    |
| BT LE | HCH     | -0.342     | -37.571          | -20.342     | PASS    |

BT LE LCH Graphs

Pref/BT LE/LCH

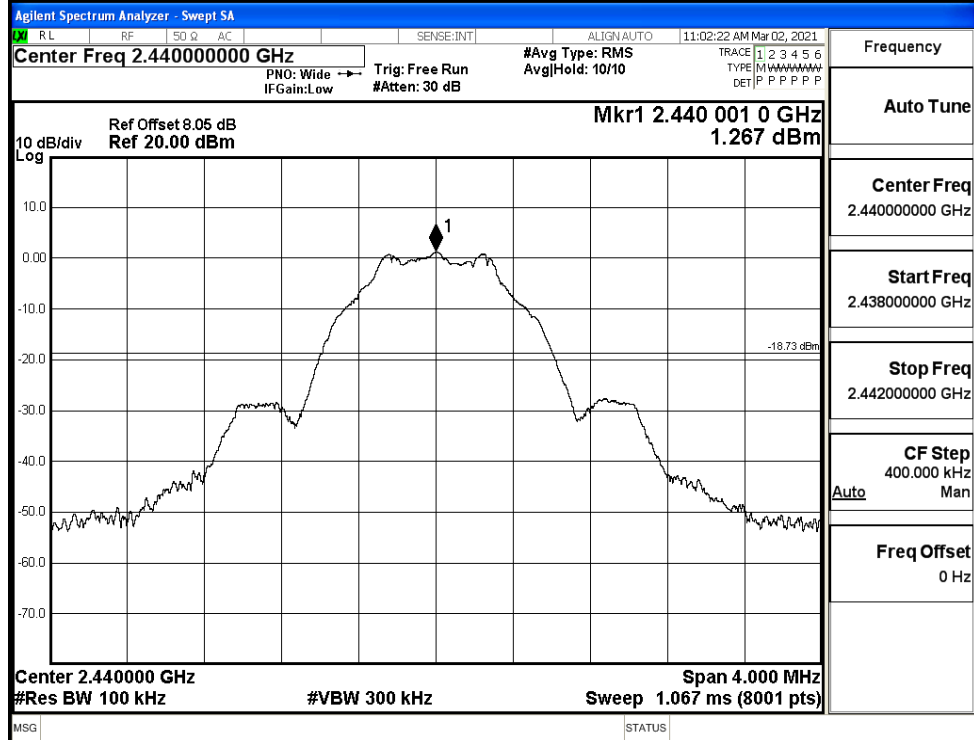


Puw/BT LE/LCH

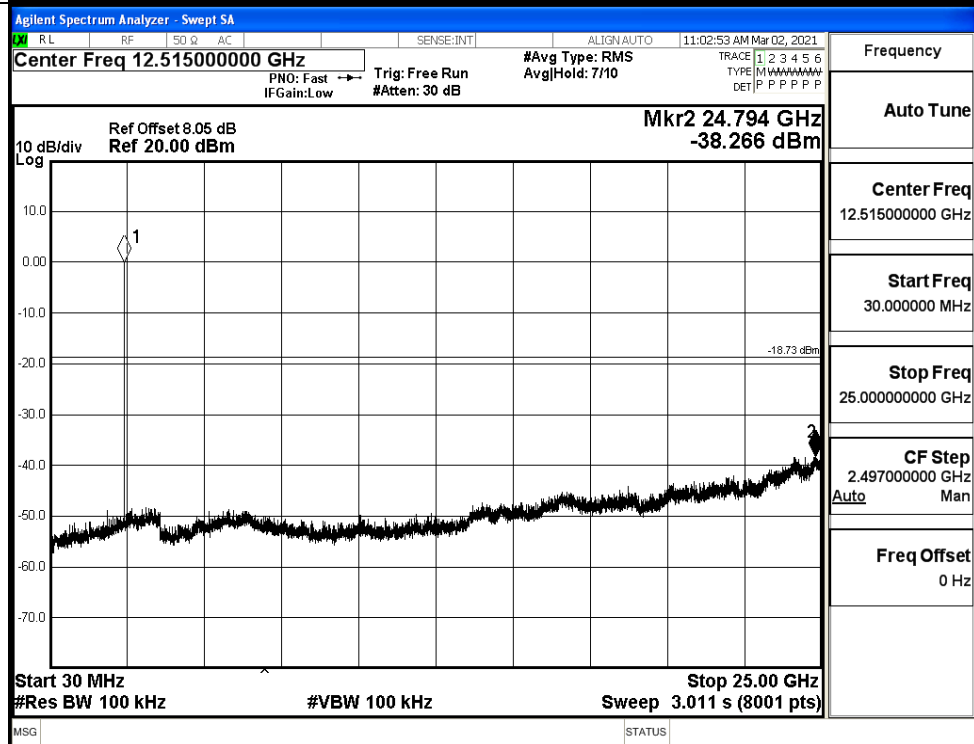


BT LE MCH Graphs

Pref/BT LE/MCH

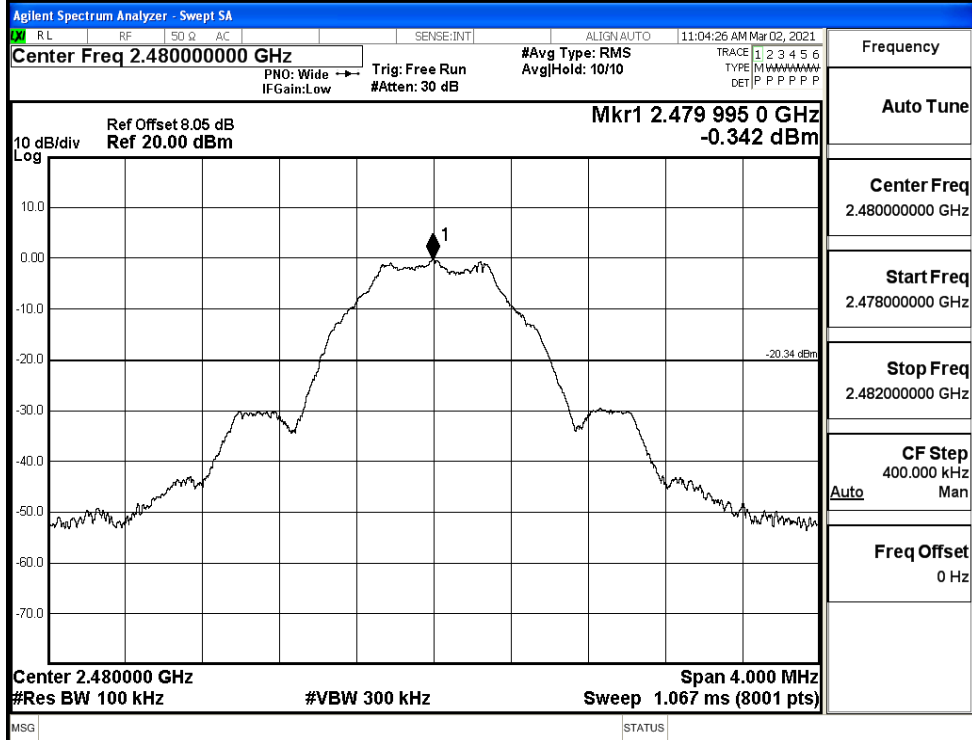


Puw/BT LE/MCH

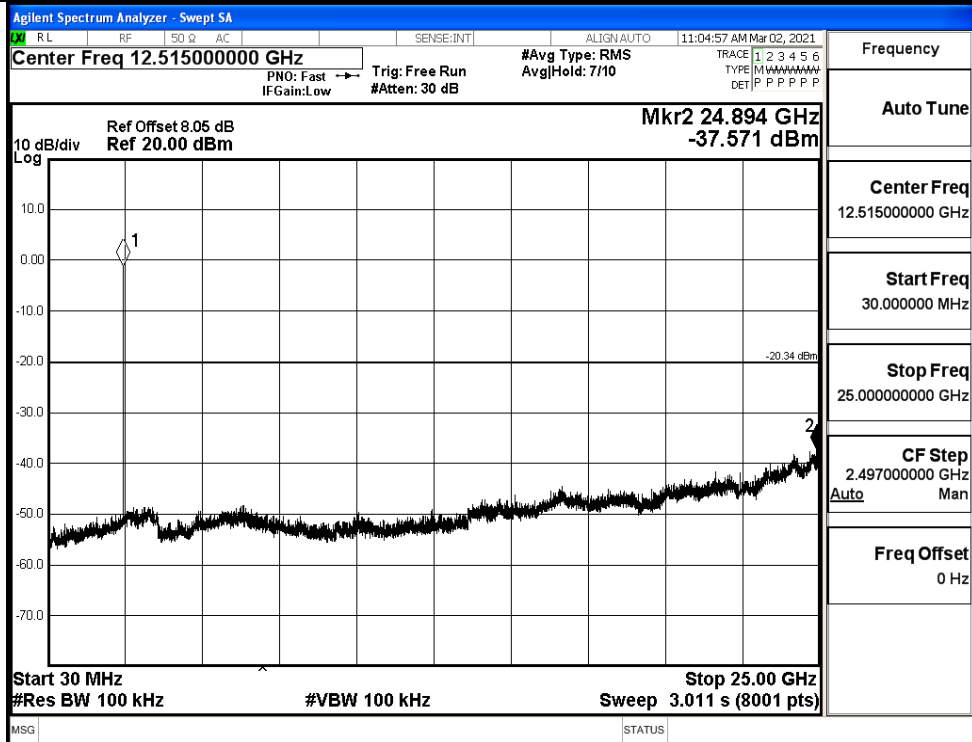


BT LE HCH Graphs

Pref/BT LE/HCH

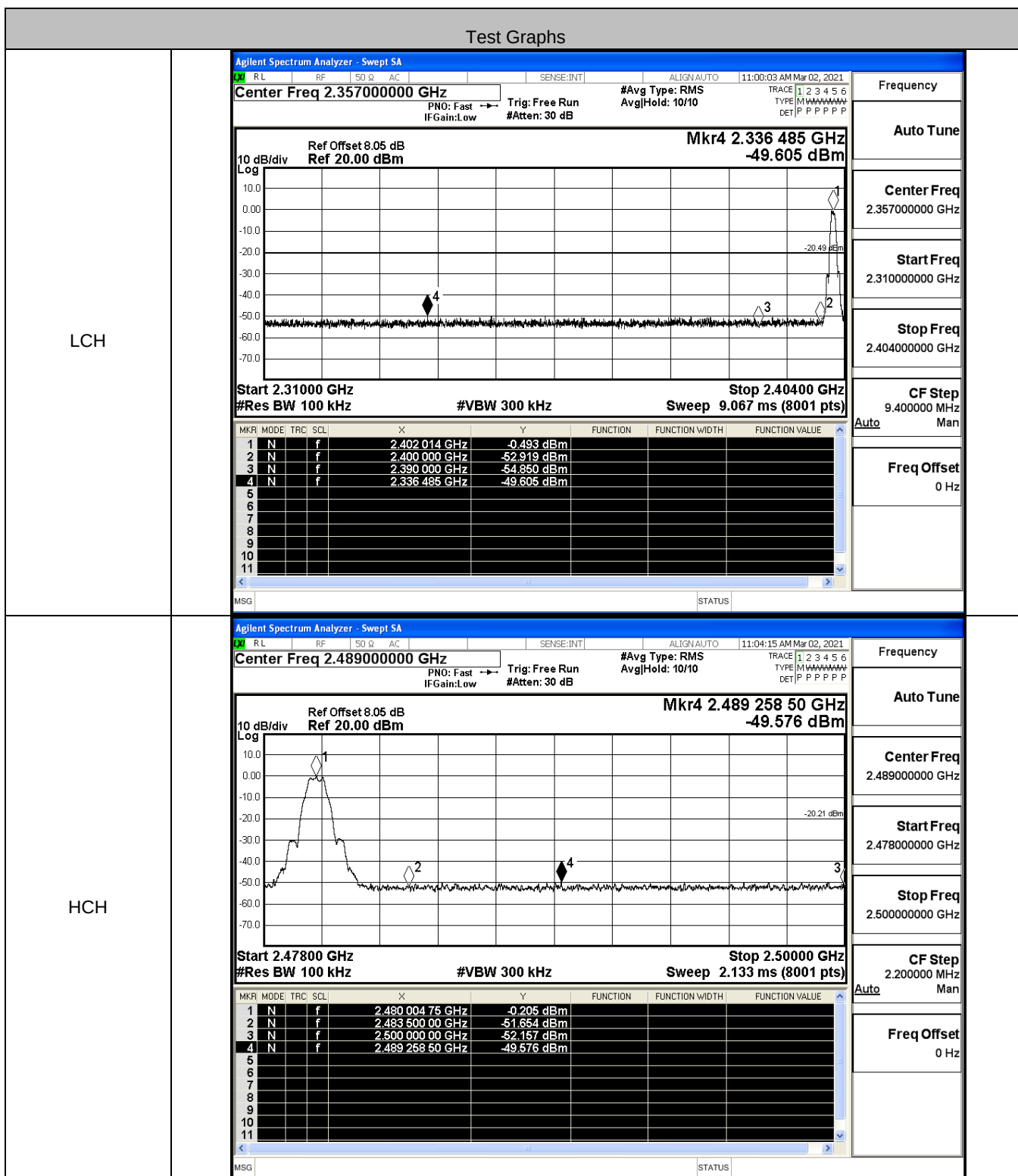


Puw/BT LE/HCH



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

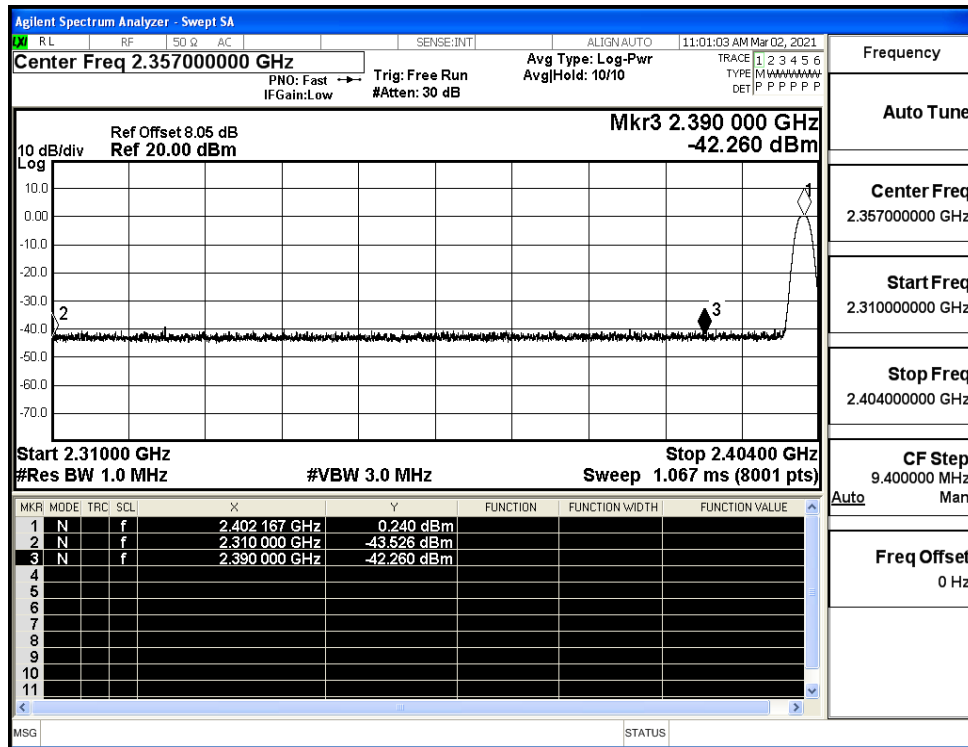
| Mode  | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-------|---------|--------------------|--------------------------|-------------|---------|
| BT LE | LCH     | -0.493             | -49.605                  | -20.49      | PASS    |
| BT LE | HCH     | -0.205             | -49.576                  | -20.21      | PASS    |



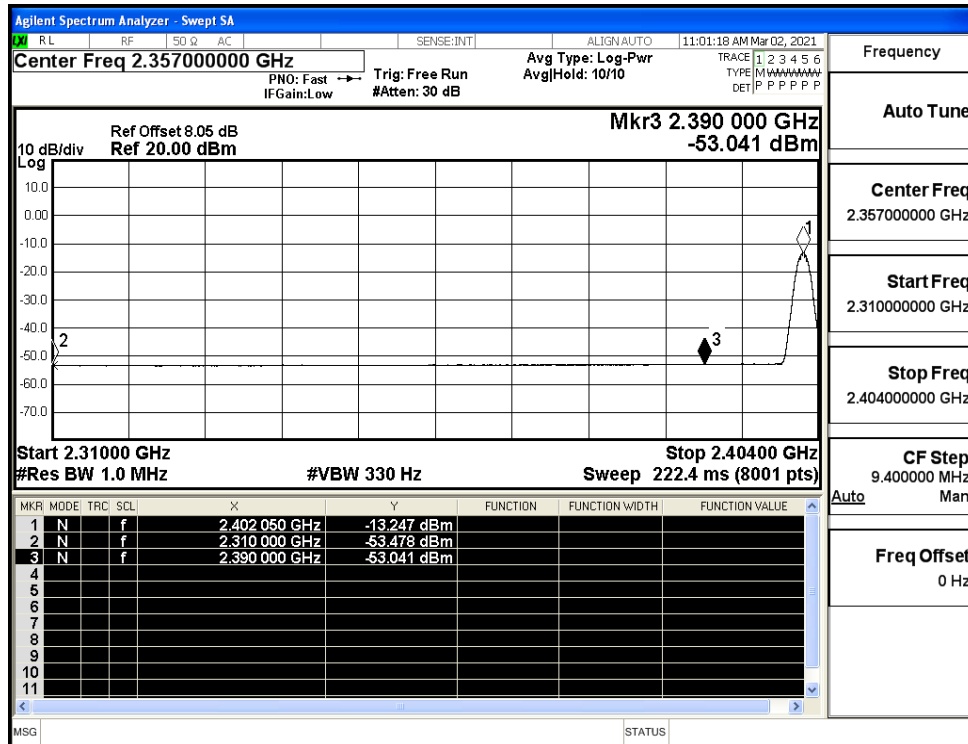
## B.7 Restrict-band band-edge measurements

| 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 | -43.53      | 2.0  | 0             | 51.73      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2310.0 | -53.48      | 2.0  | 0             | 41.78      | AV       | 54             | PASS  |
|           |              | Ant1 | 2390.0 | -42.26      | 2.0  | 0             | 53.00      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2390.0 | -53.04      | 2.0  | 0             | 42.22      | AV       | 54             | PASS  |
|           | 2480         | Ant1 | 2483.5 | -42.65      | 2.0  | 0             | 52.61      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2483.5 | -52.34      | 2.0  | 0             | 42.92      | AV       | 54             | PASS  |
|           |              | Ant1 | 2500.0 | -43.36      | 2.0  | 0             | 51.90      | PEAK     | 74             | PASS  |
|           |              | Ant1 | 2500.0 | -52.16      | 2.0  | 0             | 43.09      | AV       | 54             | PASS  |

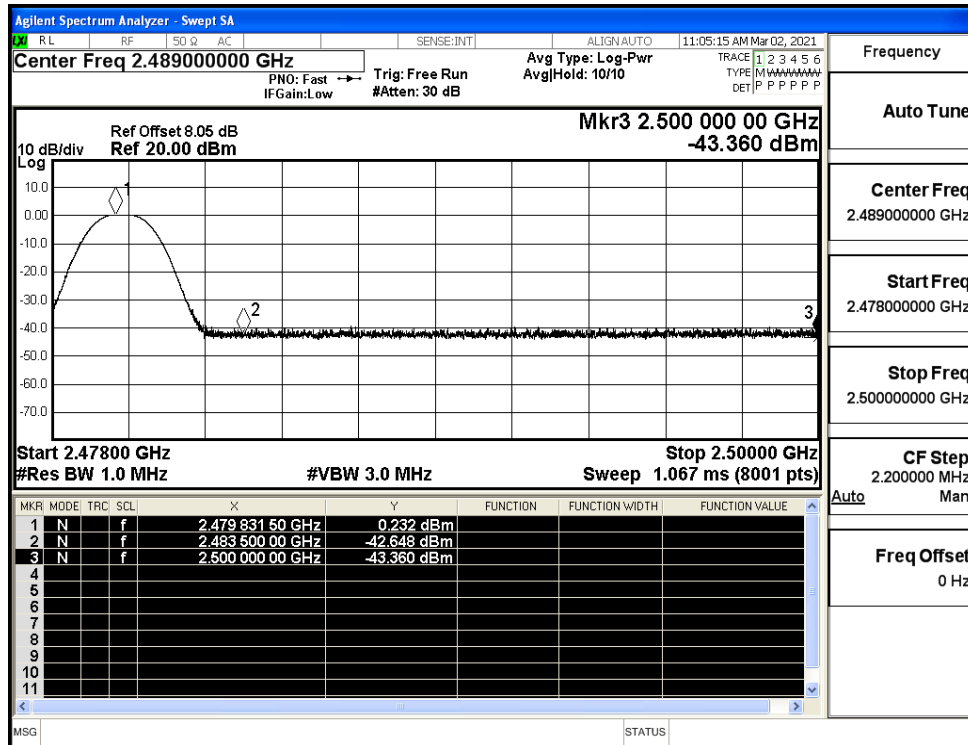
Restrict-band band-edge measurements\_BT LE\_2402\_Ant1\_PEAK



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

