

**Appendix B**  
**RF Test Data for 2.4G WIFI (Conducted Measurement)**  
**Product Name: Smart light**  
**Trade Mark: N/A**  
**Test Model: SD4015**

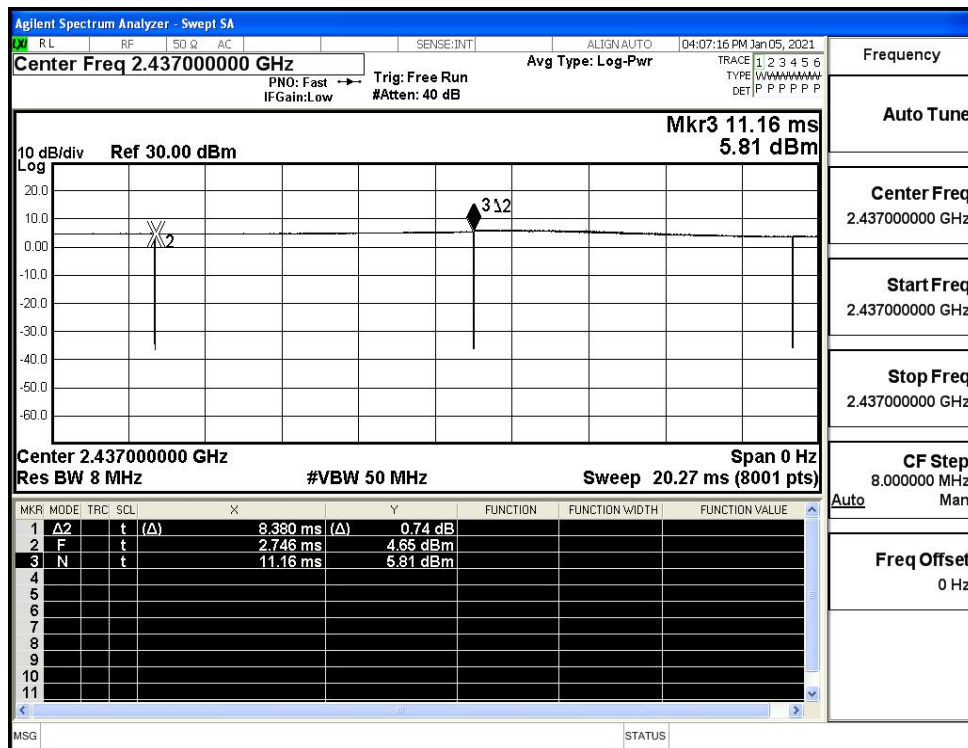
**Environmental Conditions**

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

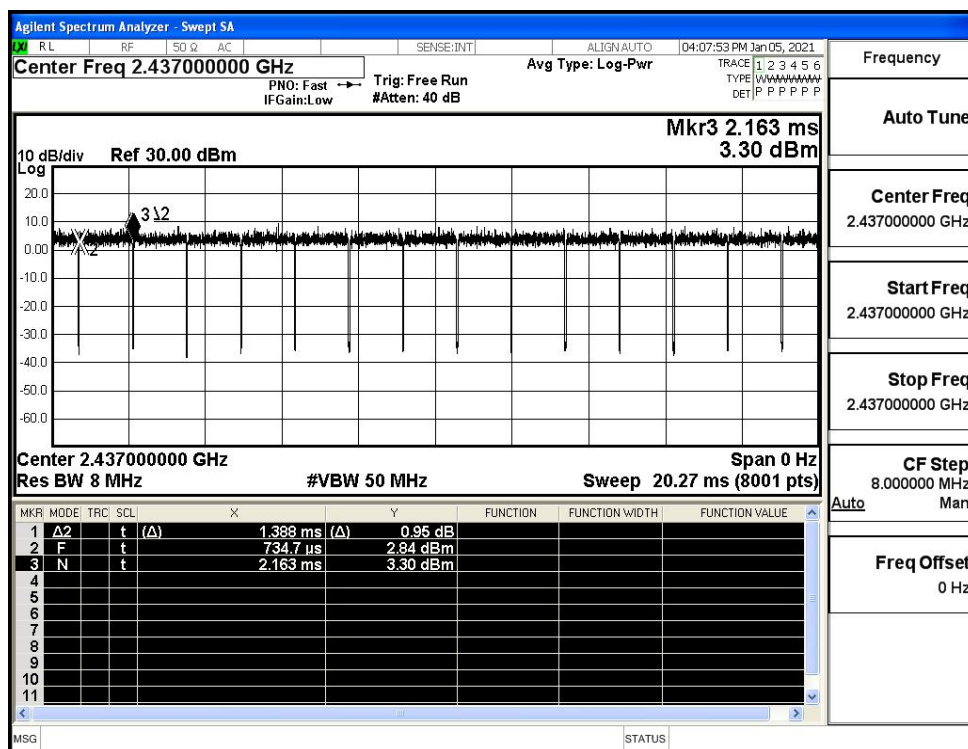
**B.1 Duty Cycle**

| Test Mode | Test Channel | Ant  | Duty Cycle[%] | Verdict |
|-----------|--------------|------|---------------|---------|
| 11B       | 2437         | Ant1 | 99.61         | PASS    |
| 11G       | 2437         | Ant1 | 97.16         | PASS    |
| 11N20SISO | 2437         | Ant1 | 96.96         | PASS    |

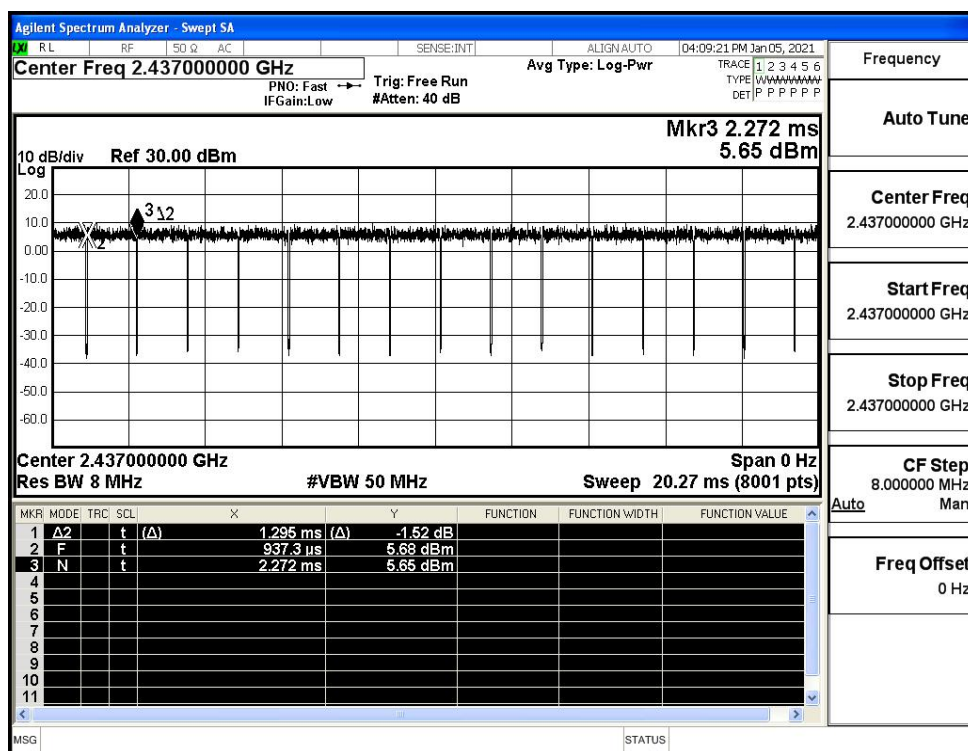
## Duty Cycle\_11B\_2437\_Ant1



## Duty Cycle\_11G\_2437\_Ant1



## Duty Cycle\_11N20SISO\_2437\_Ant1

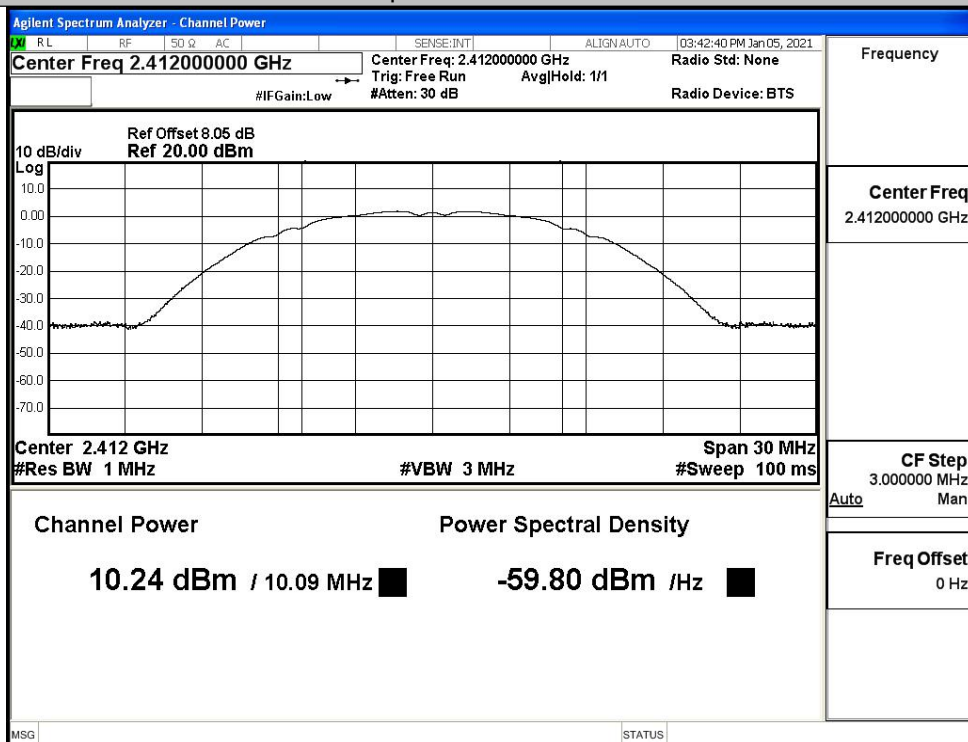


**B.2 Maximum Conducted Output Power**

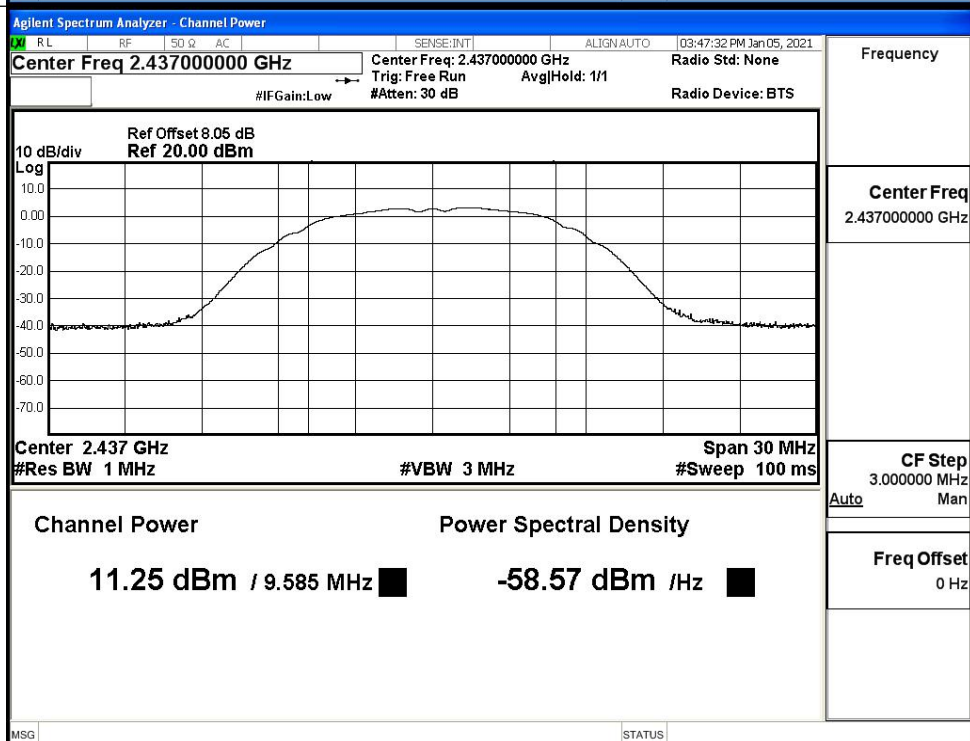
| Mode      | Channel | Meas.Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|------------------|-------------|---------|
| 11B       | LCH     | 10.24            | 30          | PASS    |
|           | MCH     | 11.25            | 30          | PASS    |
|           | HCH     | 10.60            | 30          | PASS    |
| 11G       | LCH     | 16.43            | 30          | PASS    |
|           | MCH     | 16.68            | 30          | PASS    |
|           | HCH     | 16.82            | 30          | PASS    |
| 11N20SISO | LCH     | 16.46            | 30          | PASS    |
|           | MCH     | 16.67            | 30          | PASS    |
|           | HCH     | 16.78            | 30          | PASS    |

## Test Graphs

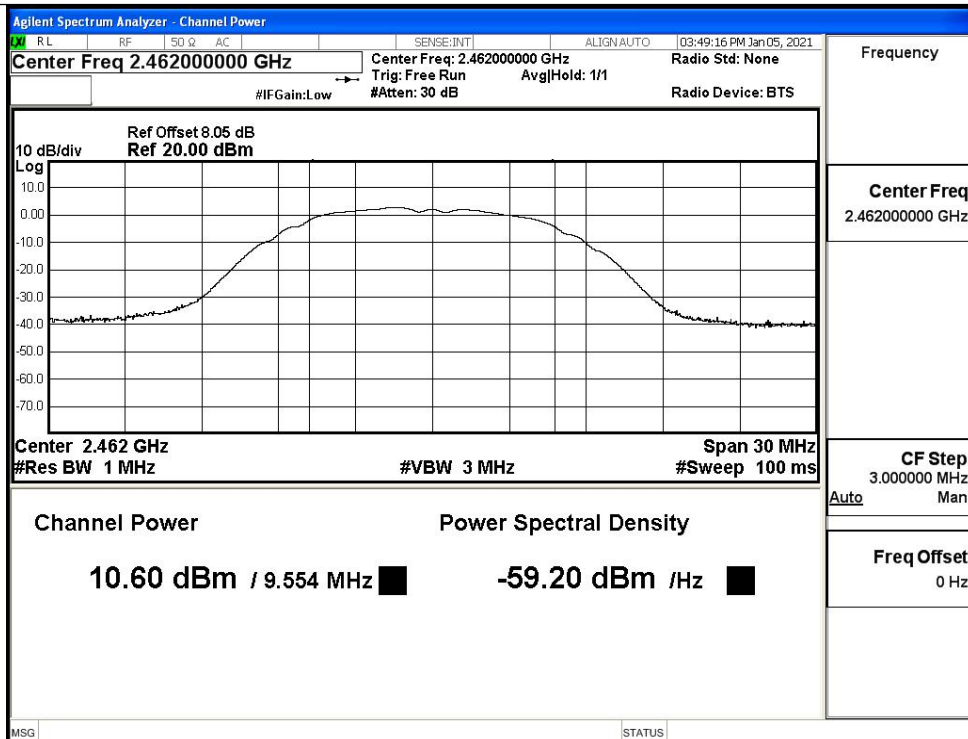
11B/LCH



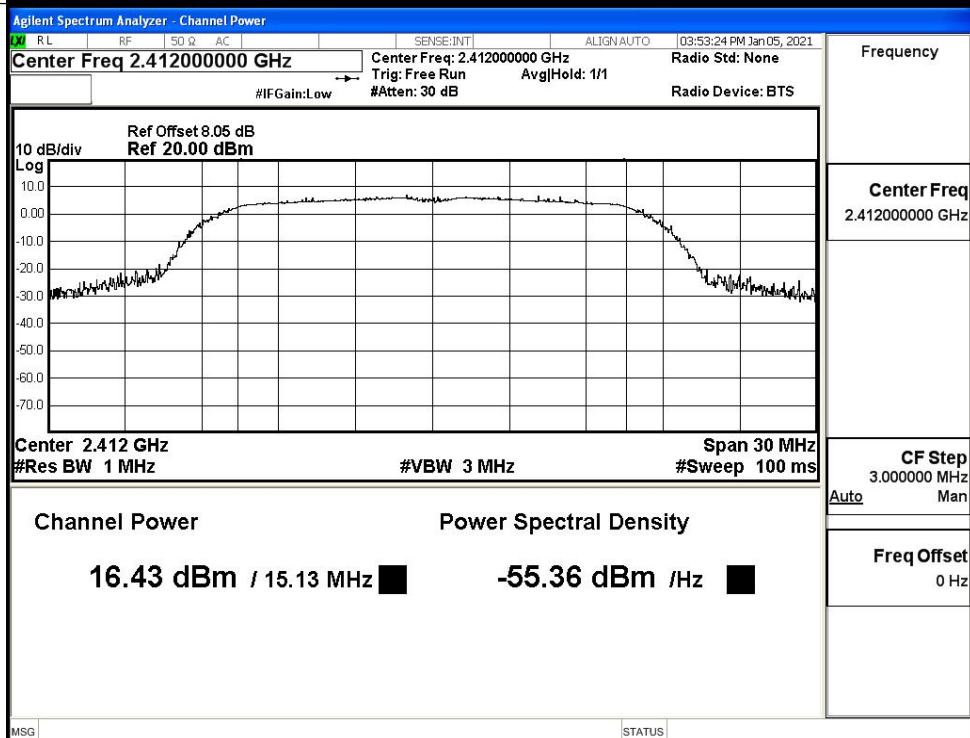
11B/MCH



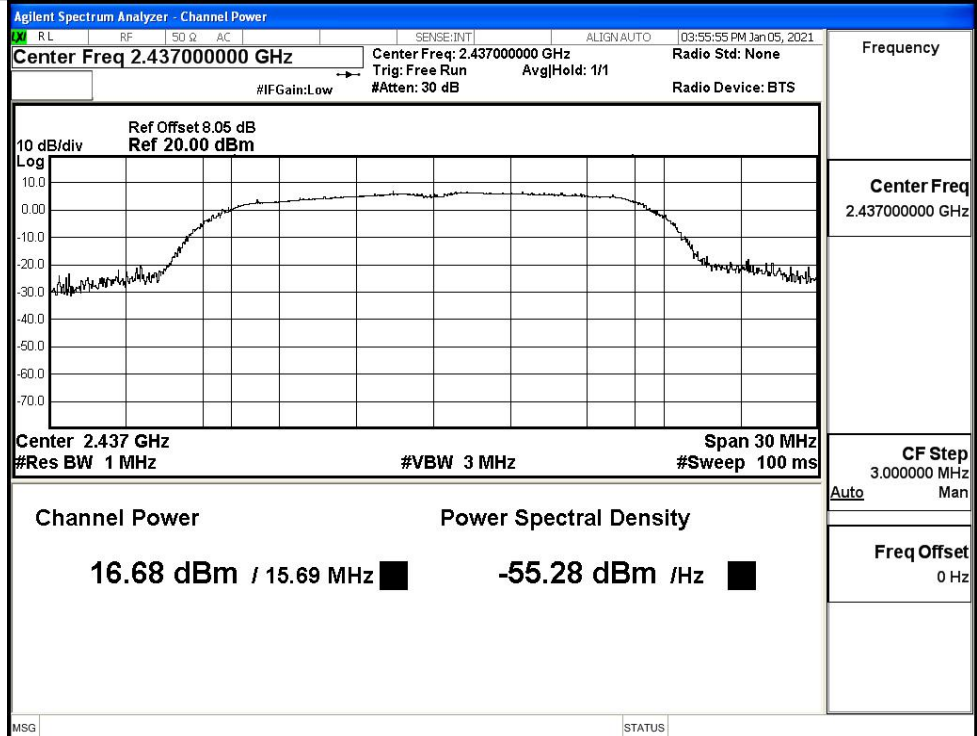
11B/HCH



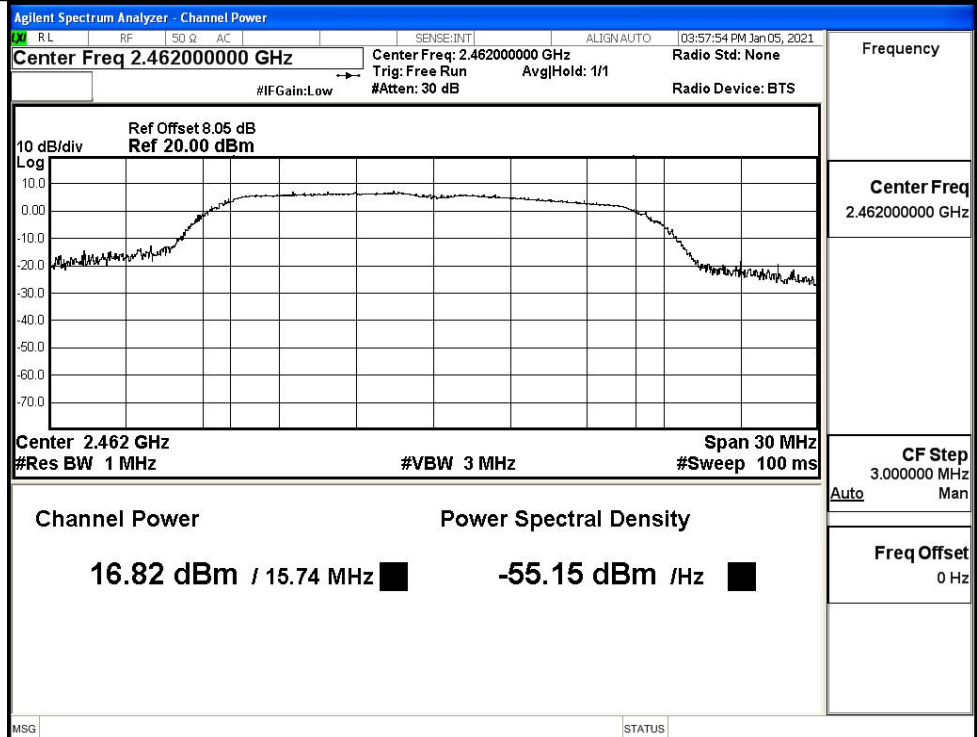
11G/LCH



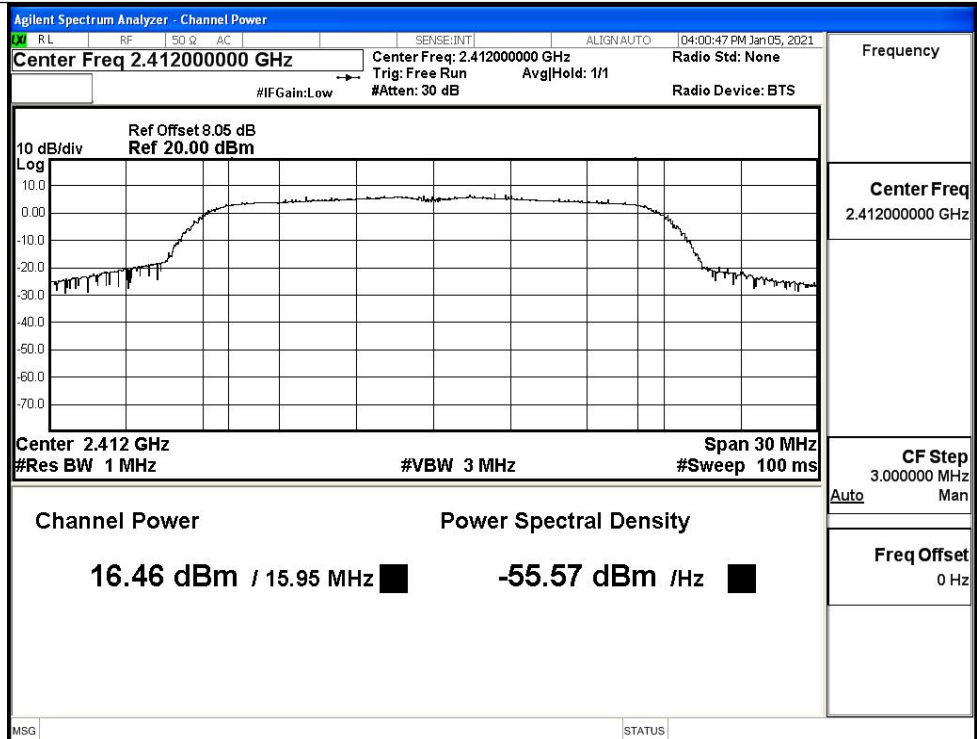
11G/MCH



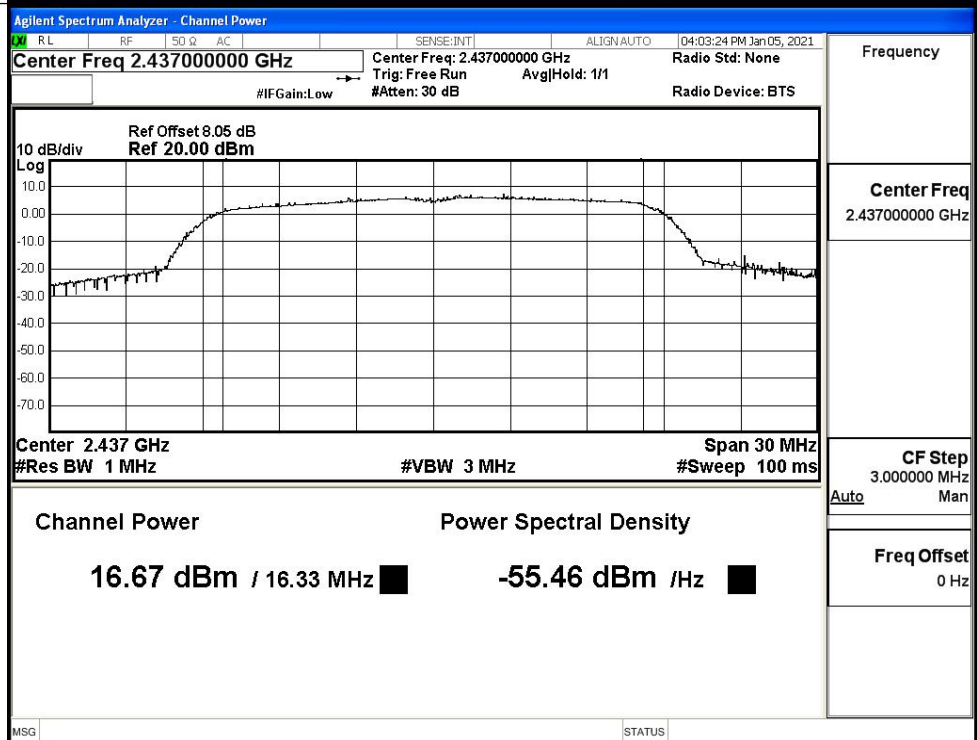
11G/HCH



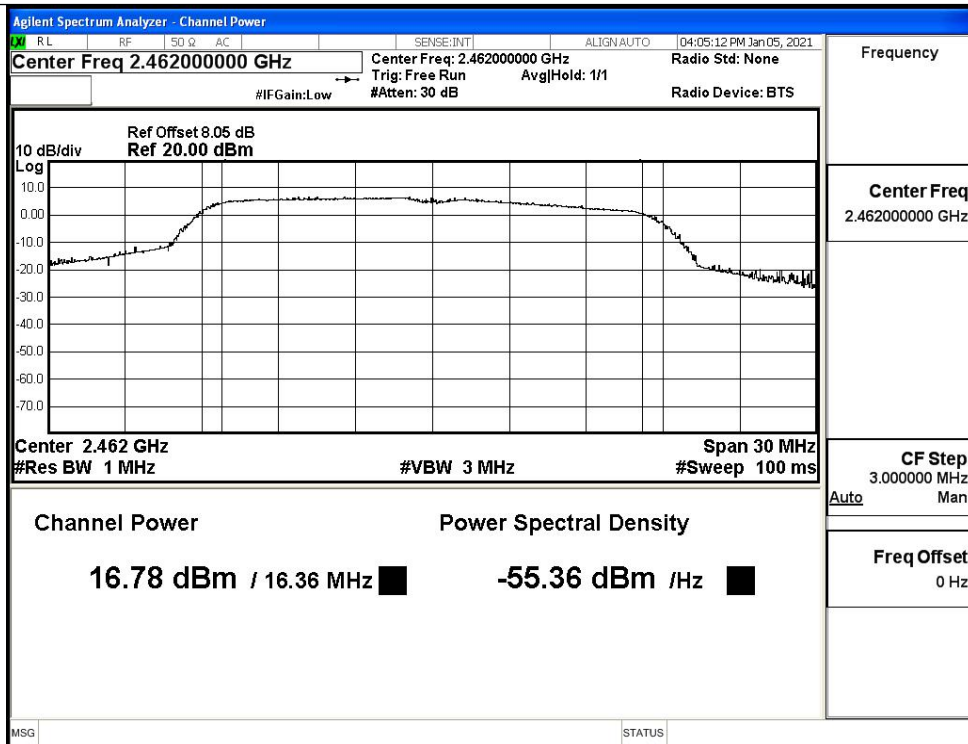
11N20SISO/LCH



11N20SISO/MCH



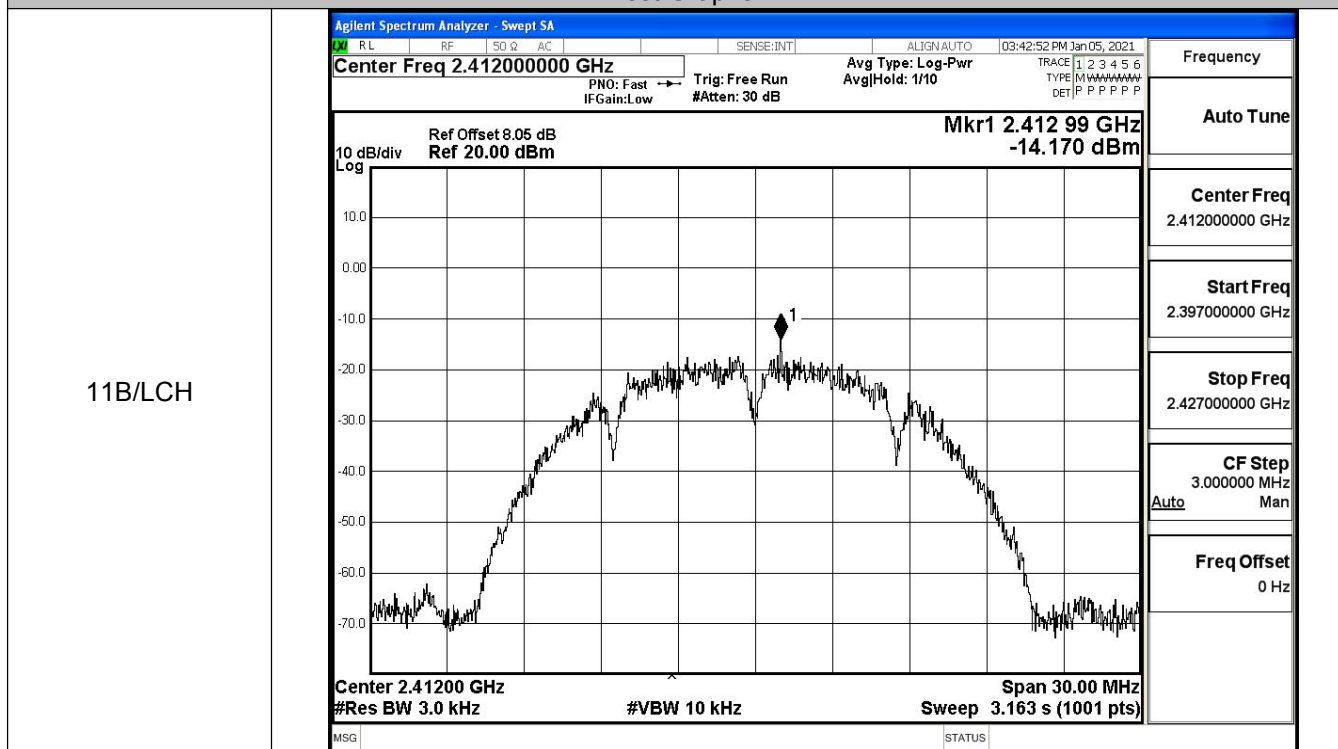
11N20SISO/HCH



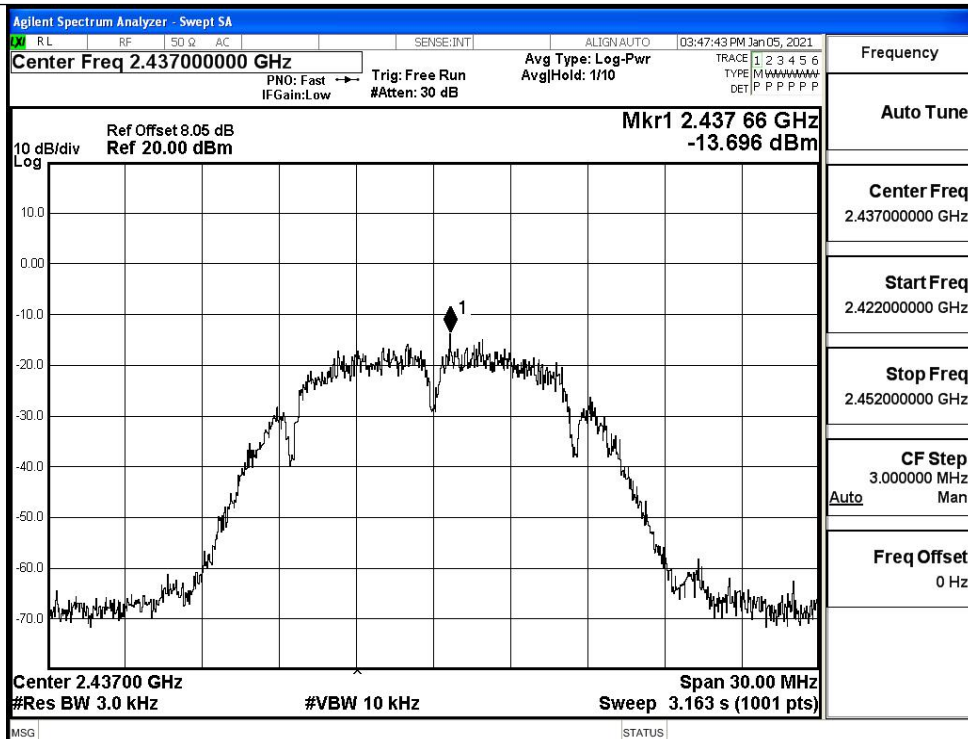
### B.3 Maximum Power Spectral Density

| Mode      | Channel | Meas.Level [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-----------|---------|-----------------------|------------------|---------|
| 11B       | LCH     | -14.170               | 8                | PASS    |
|           | MCH     | -13.696               | 8                | PASS    |
|           | HCH     | -16.128               | 8                | PASS    |
| 11G       | LCH     | -17.143               | 8                | PASS    |
|           | MCH     | -16.694               | 8                | PASS    |
|           | HCH     | -16.468               | 8                | PASS    |
| 11N20SISO | LCH     | -17.187               | 8                | PASS    |
|           | MCH     | -16.407               | 8                | PASS    |
|           | HCH     | -15.926               | 8                | PASS    |

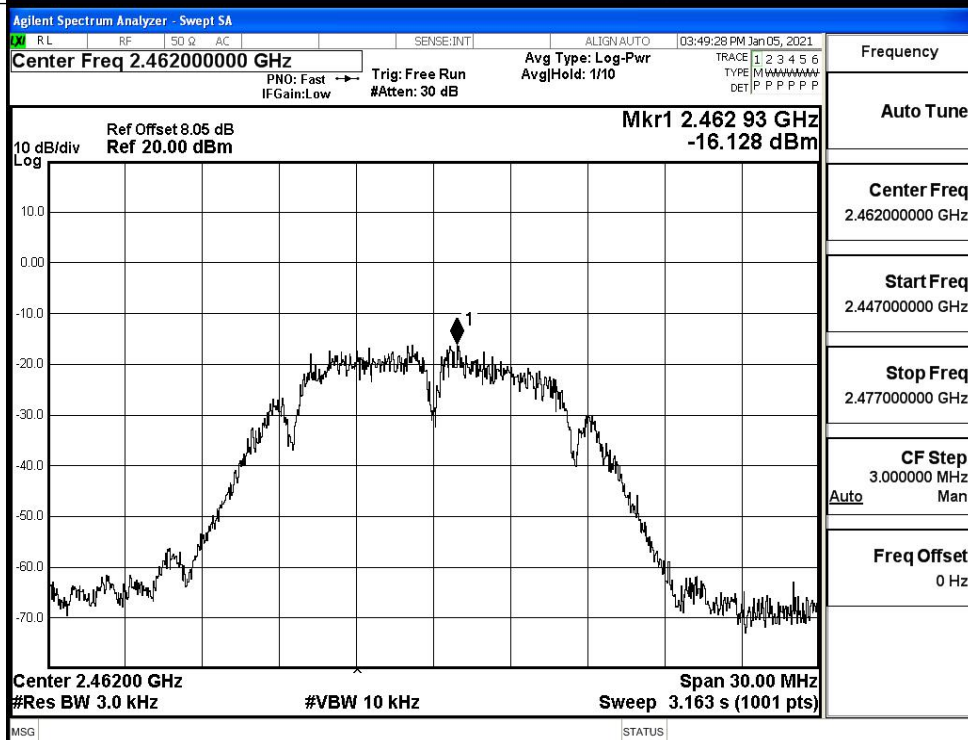
#### Test Graphs



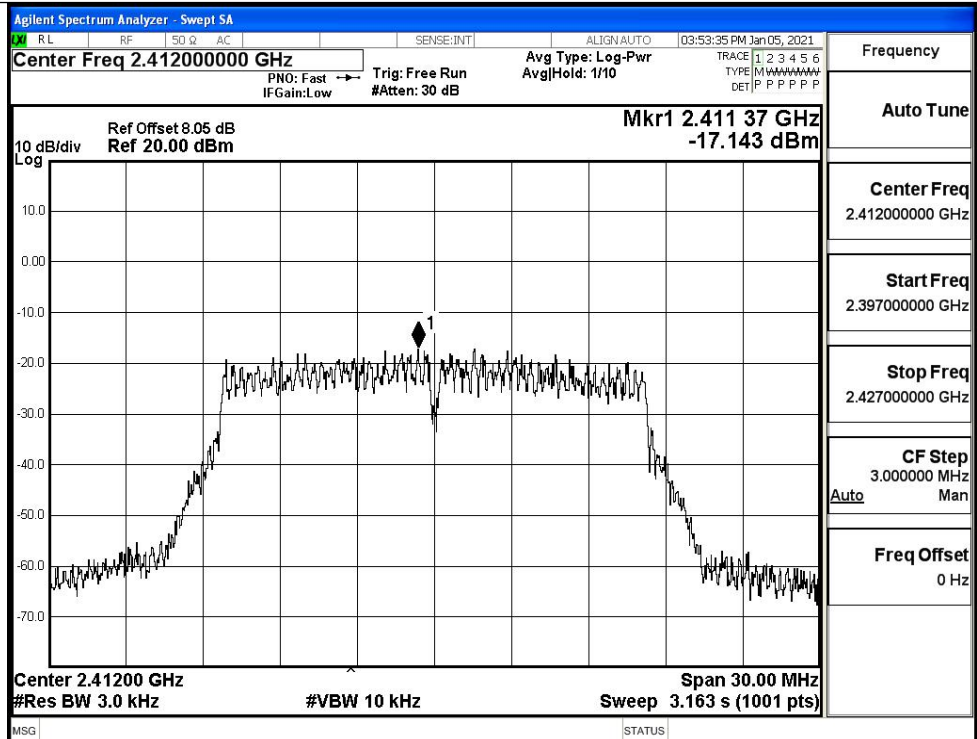
11B/MCH



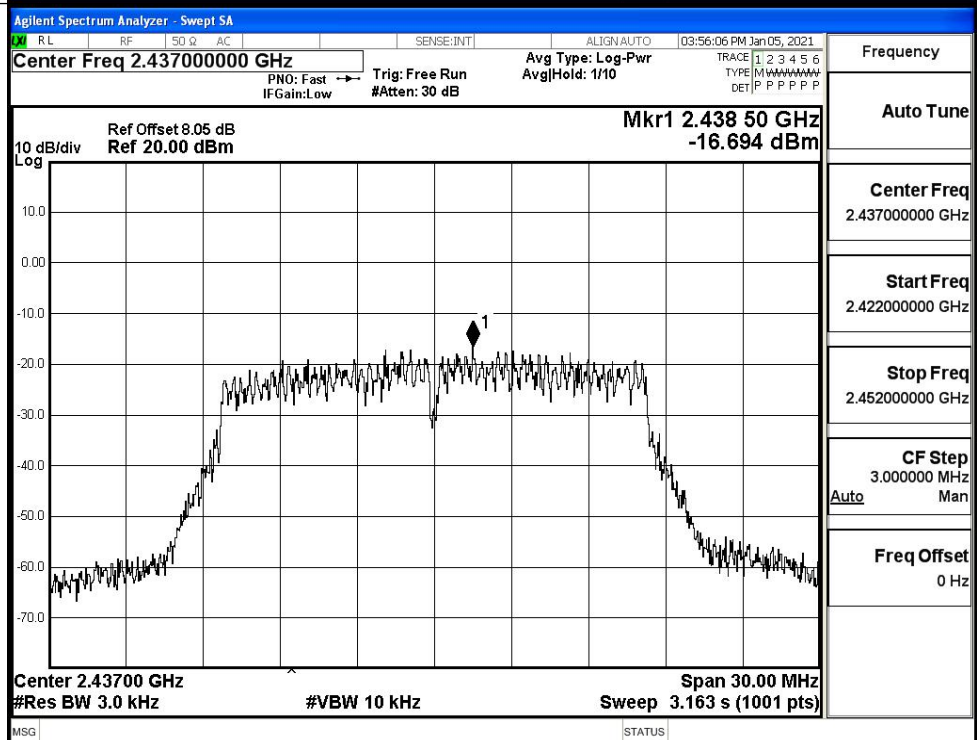
11B/HCH



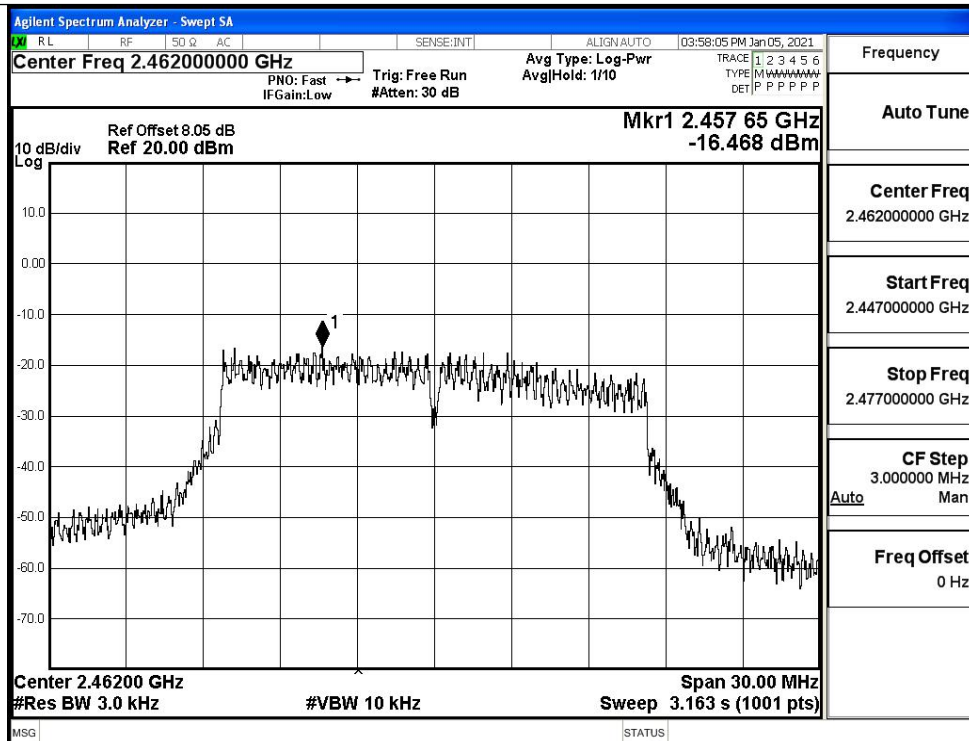
11G/LCH



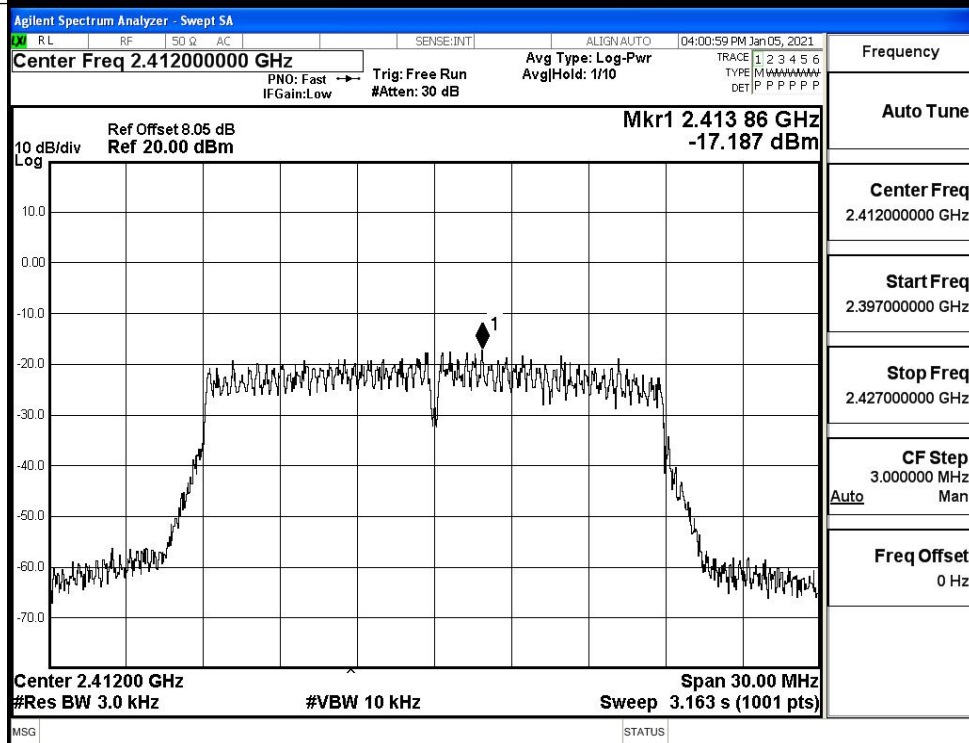
11G/MCH



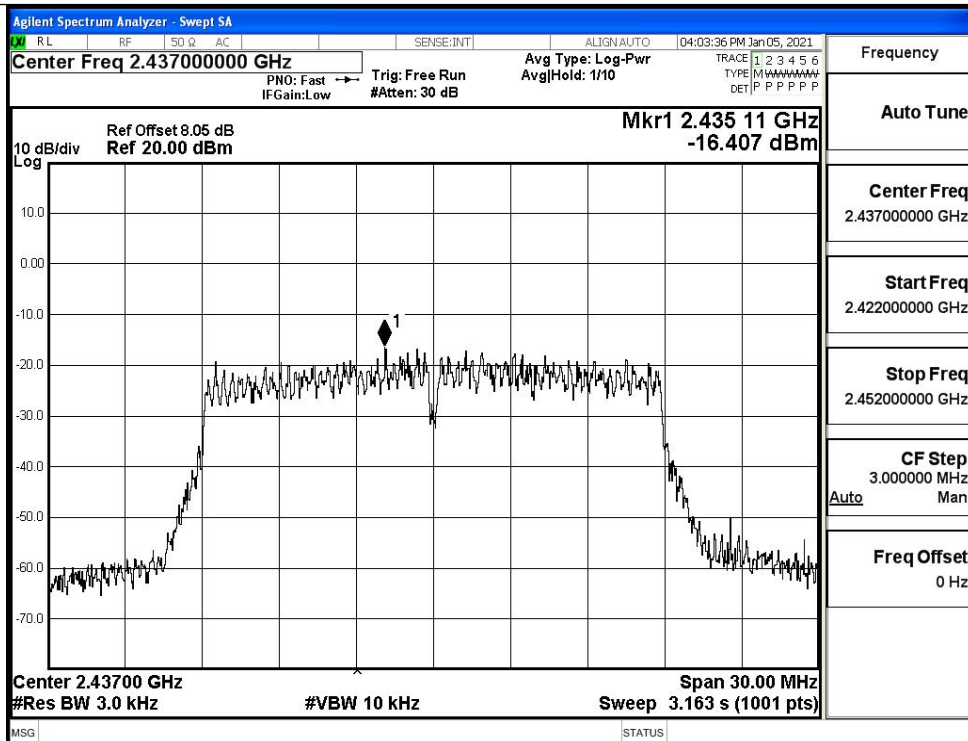
11G/HCH



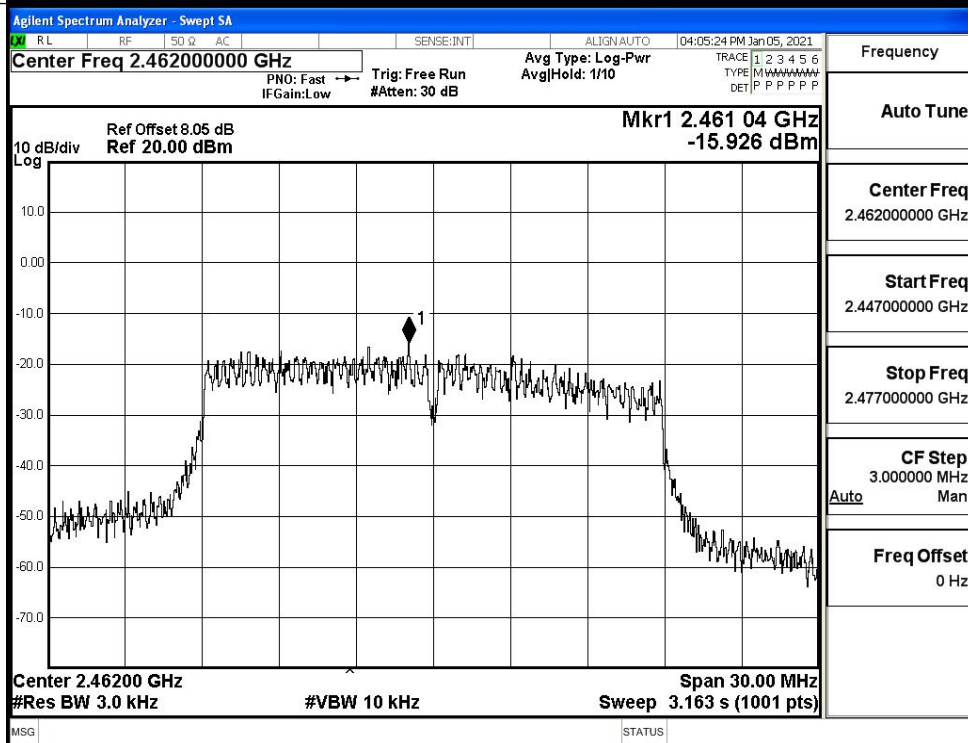
11N20SISO/LCH



11N20SISO/MCH



11N20SISO/HCH

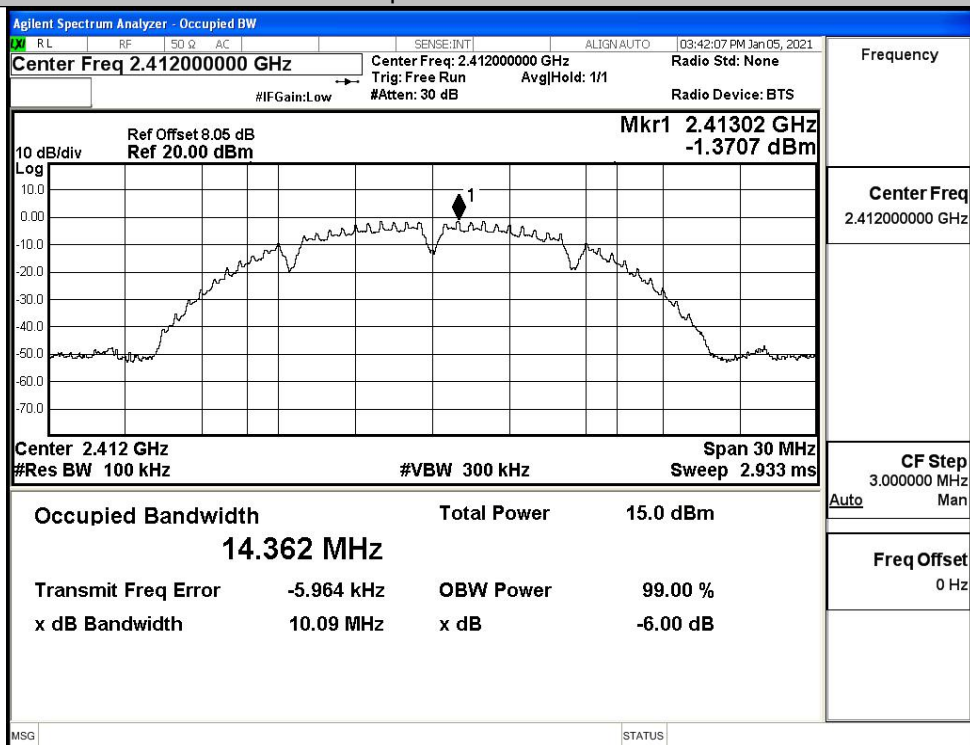


## B.4 6dB Bandwidth

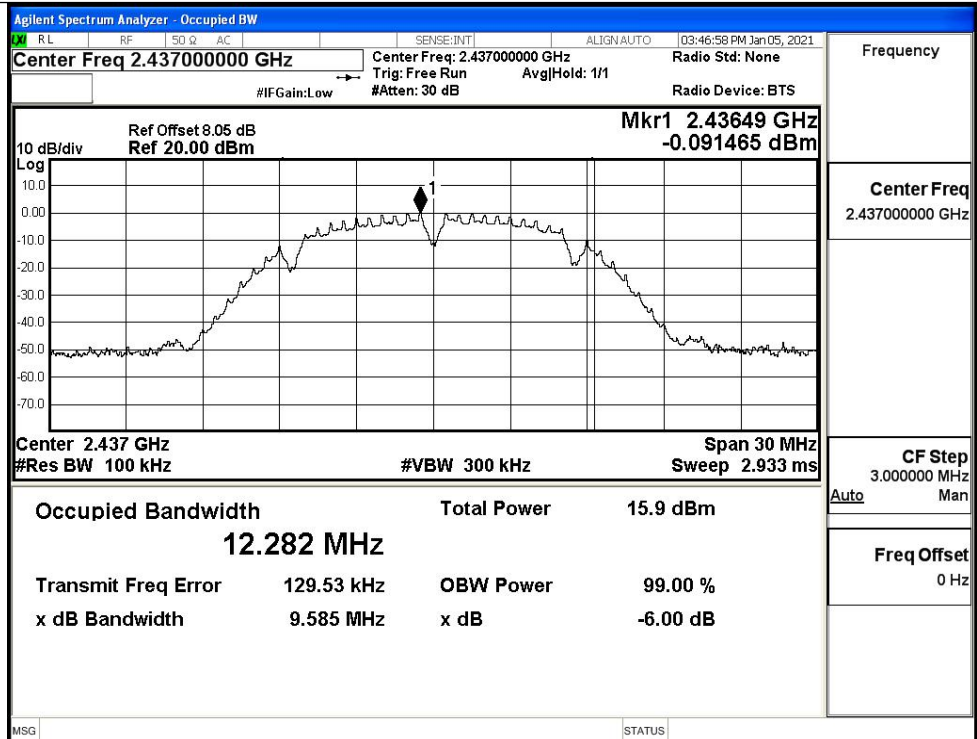
| Mode      | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-----------|---------|---------------------|-------------|---------|
| 11B       | LCH     | 10.09               | $\geq 0.5$  | PASS    |
|           | MCH     | 9.585               | $\geq 0.5$  | PASS    |
|           | HCH     | 9.554               | $\geq 0.5$  | PASS    |
| 11G       | LCH     | 15.13               | $\geq 0.5$  | PASS    |
|           | MCH     | 15.69               | $\geq 0.5$  | PASS    |
|           | HCH     | 15.74               | $\geq 0.5$  | PASS    |
| 11N20SISO | LCH     | 15.95               | $\geq 0.5$  | PASS    |
|           | MCH     | 16.33               | $\geq 0.5$  | PASS    |
|           | HCH     | 16.36               | $\geq 0.5$  | PASS    |

## Test Graphs

11B/LCH



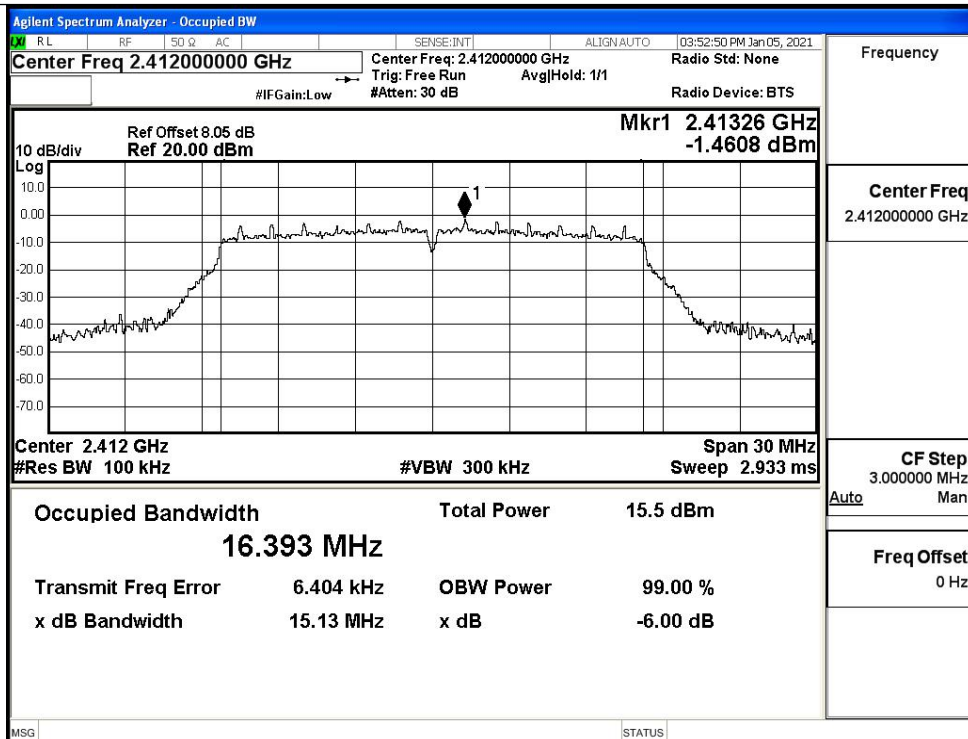
11B/MCH



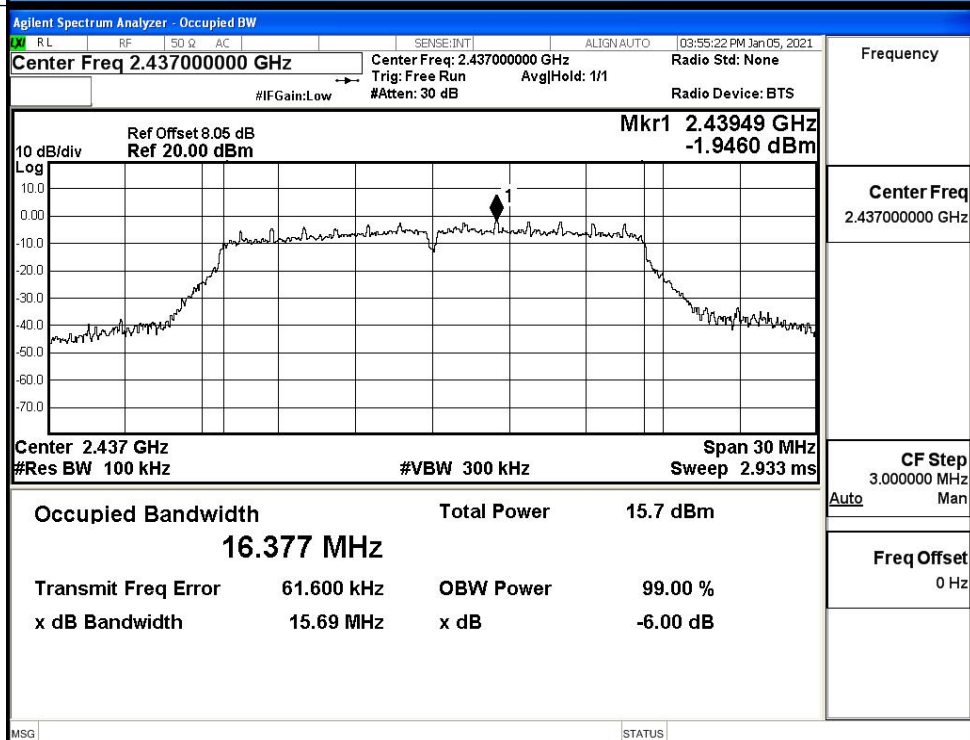
11B/HCH



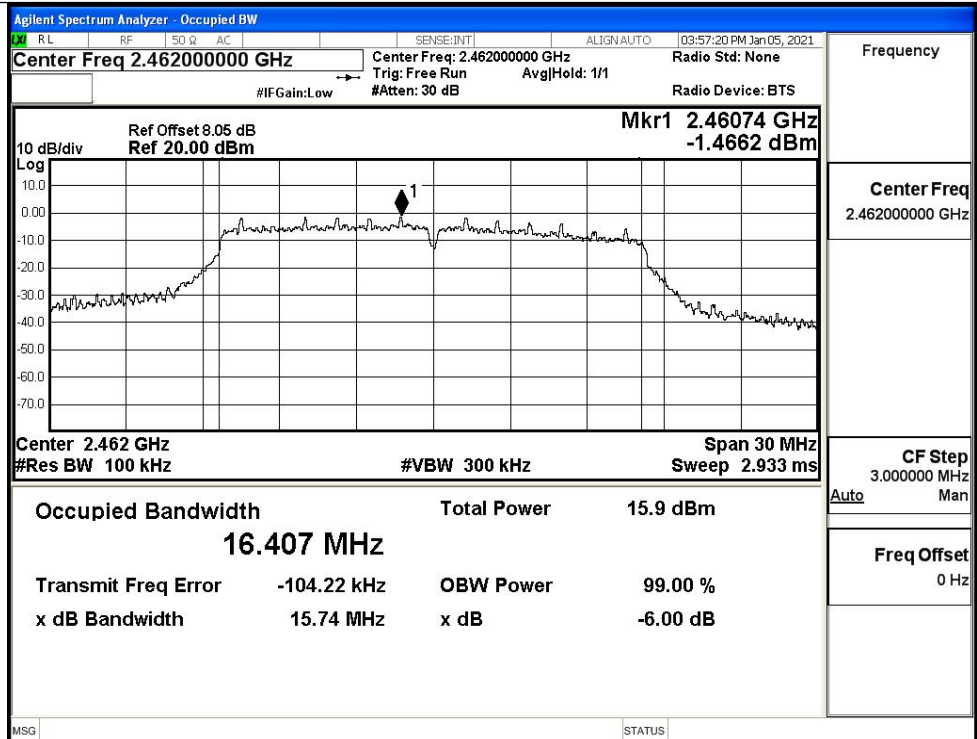
11G/LCH



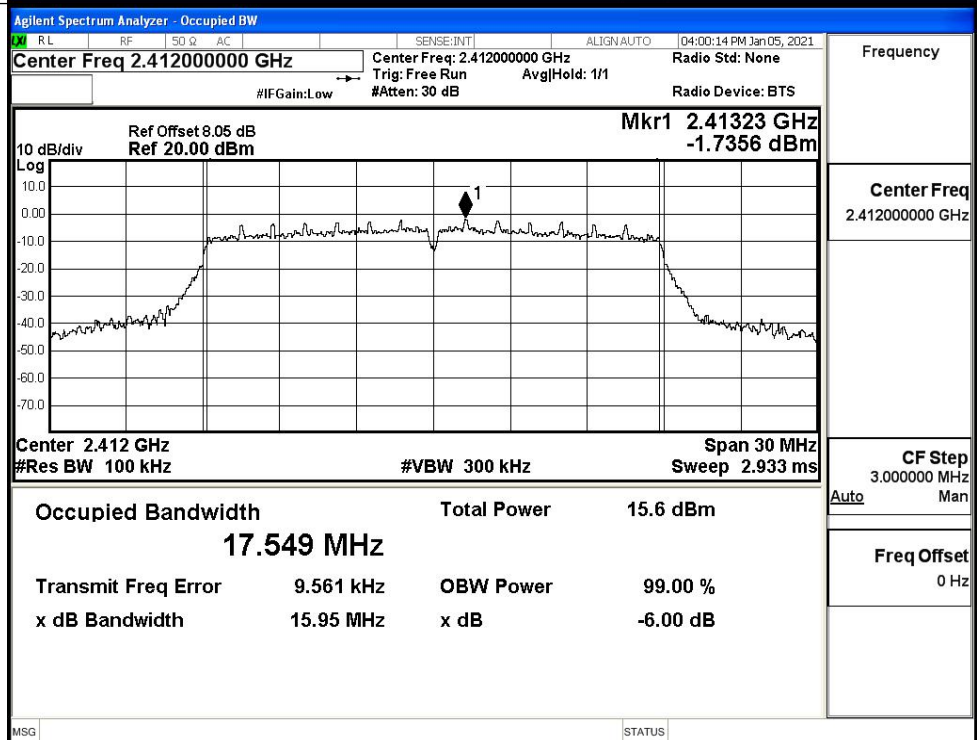
11G/MCH



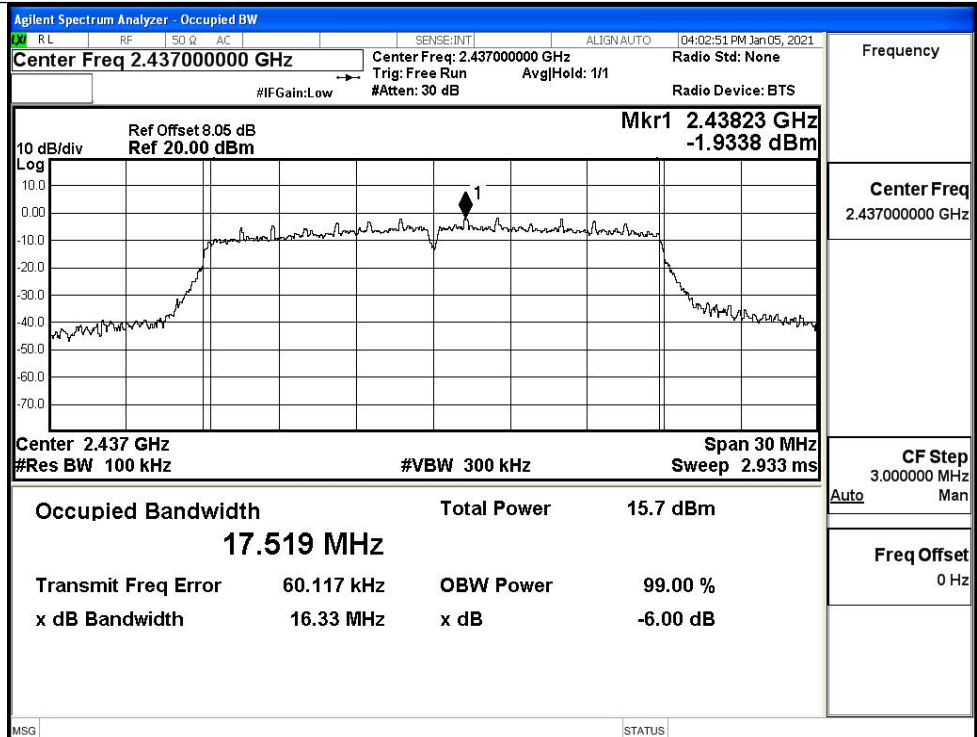
11G/HCH



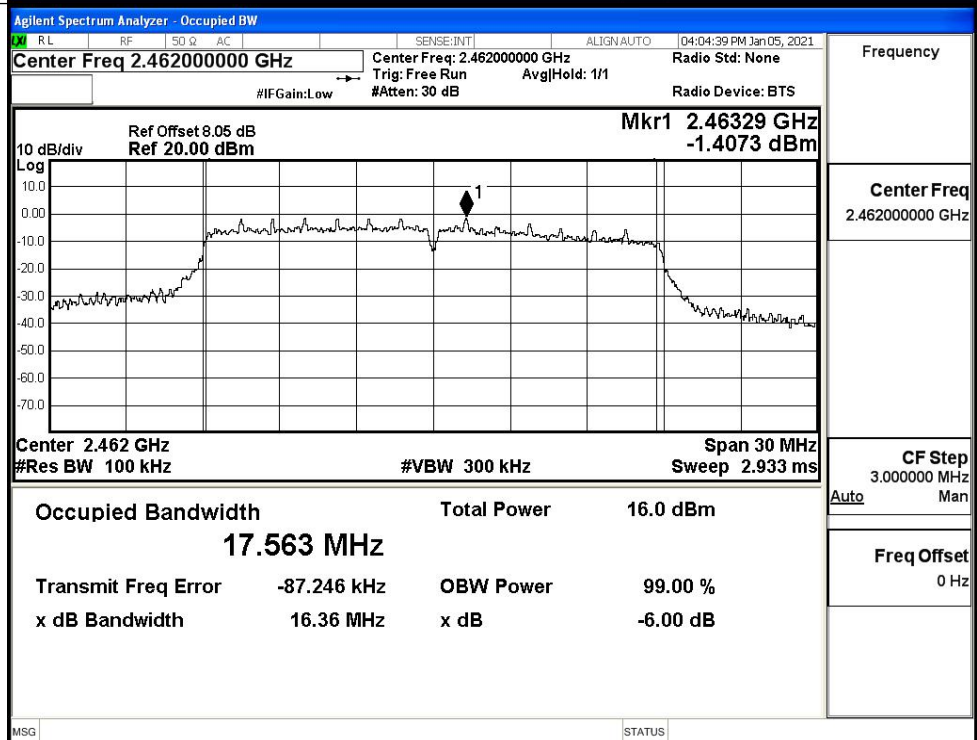
11N20SISO/LCH



11N20SISO/MCH



11N20SISO/HCH

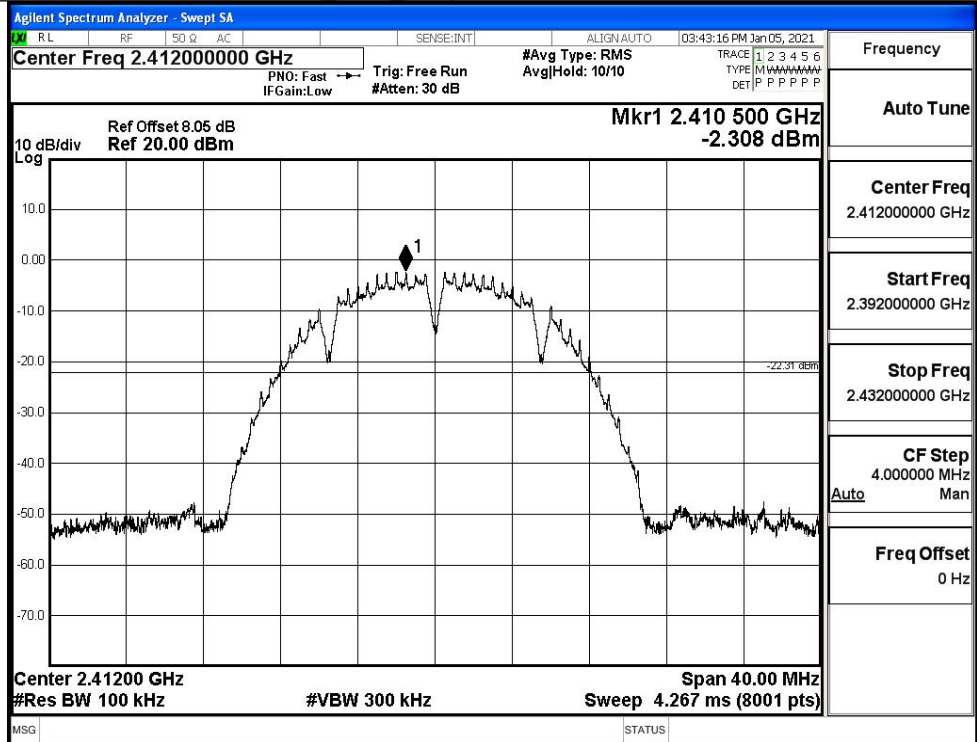


**B.5 RF Conducted Spurious Emissions**

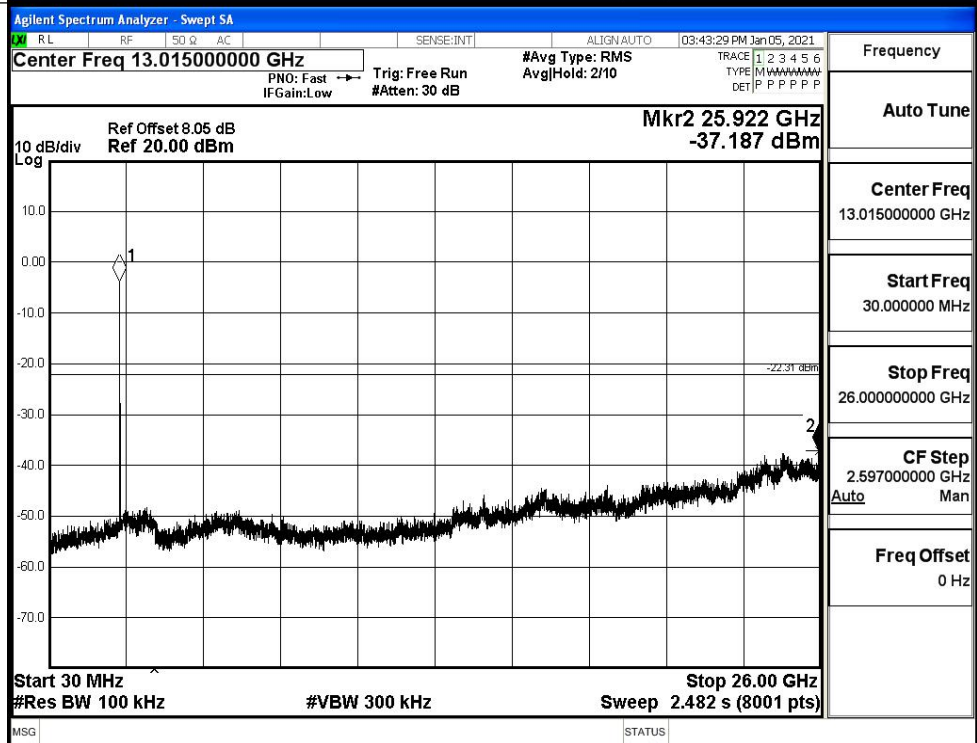
| Mode          | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|---------------|---------|------------|------------------|-------------|---------|
| 11B           | LCH     | -2.308     | -37.187          | -22.308     | PASS    |
|               | MCH     | 0.153      | -37.383          | -19.847     | PASS    |
|               | HCH     | -0.884     | -38.126          | -20.884     | PASS    |
| 11G           | LCH     | -1.431     | -37.732          | -21.431     | PASS    |
|               | MCH     | -1.08      | -38.124          | -21.080     | PASS    |
|               | HCH     | -1.417     | -37.356          | -21.417     | PASS    |
| 11N20<br>SISO | LCH     | -1.884     | -38.765          | -21.884     | PASS    |
|               | MCH     | -1.089     | -37.604          | -21.089     | PASS    |
|               | HCH     | -1.395     | -38.684          | -21.395     | PASS    |

## 11B LCH Graphs

Pref/11B/LCH

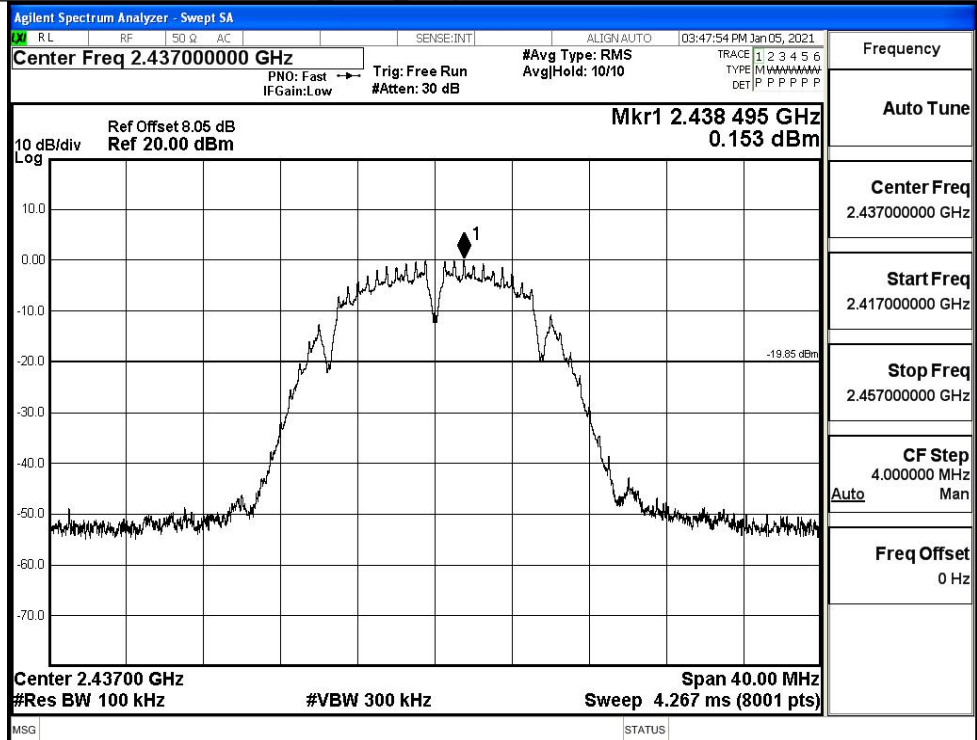


Puw/11B/LCH



## 11B MCH Graphs

Pref/11B/MCH



Puw/11B/MCH

