

# LTE Band13 Test Data

Report No. ENS2309250189W00207R Page 16 and Page 17  
Appendix A: Effective (Isotropic) Radiated Power Output Data

Report No. ENS2309250189W00207R Page 37  
Appendix B: Peak-to-Average Ratio

Report No. ENS2309250189W00207R Page 20  
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Report No. ENS2309250189W00207R Page 22  
Appendix D: Band Edge

Report No. ENS2309250189W00207R Page 23  
Appendix E: Conducted Spurious Emission

Report No. ENS2309250189W00207R Page 36  
Appendix F: Frequency Stability

## Appendix A: Effective (Isotropic) Radiated Power Output Data

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|---------|
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | 23.96       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#12           | 24.12       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#24           | 24.04       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 12RB#0           | 22.98       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 12RB#6           | 22.97       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 12RB#13          | 23.00       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 25RB#0           | 23.08       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | 24.19       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#12           | 24.14       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#24           | 24.16       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 12RB#0           | 23.02       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 12RB#6           | 23.06       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 12RB#13          | 23.02       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 25RB#0           | 23.03       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | 24.09       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#12           | 24.23       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#24           | 24.07       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 12RB#0           | 22.97       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 12RB#6           | 23.00       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 12RB#13          | 23.01       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 25RB#0           | 23.08       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#0            | 23.18       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#12           | 23.29       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#24           | 23.24       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 12RB#0           | 22.01       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 12RB#6           | 22.03       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 12RB#13          | 22.08       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 25RB#0           | 22.07       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 1RB#0            | 23.16       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 1RB#12           | 23.13       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 1RB#24           | 23.24       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 12RB#0           | 22.09       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 12RB#6           | 22.08       | PASS    |

|        |       |       |       |         |       |      |
|--------|-------|-------|-------|---------|-------|------|
| Band13 | 5MHz  | 16QAM | 23230 | 12RB#13 | 22.01 | PASS |
| Band13 | 5MHz  | 16QAM | 23230 | 25RB#0  | 22.06 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#0   | 23.29 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#12  | 23.43 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#24  | 23.36 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 12RB#0  | 22.04 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 12RB#6  | 22.06 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 12RB#13 | 22.10 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0  | 22.02 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#0   | 24.00 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#24  | 23.97 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#49  | 23.99 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 25RB#0  | 23.12 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 25RB#12 | 23.12 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 25RB#25 | 23.09 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0  | 23.03 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#0   | 23.14 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#24  | 23.21 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#49  | 23.16 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 25RB#0  | 22.09 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 25RB#12 | 22.10 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 25RB#25 | 22.07 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0  | 21.86 | PASS |

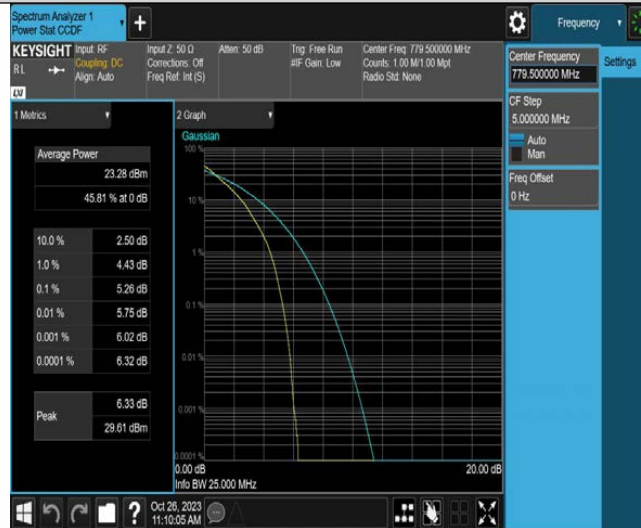
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

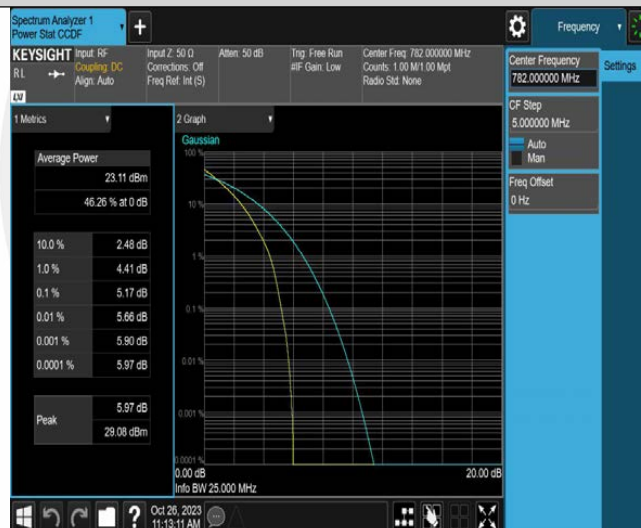
| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|--------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band13 | 5MHz      | QPSK       | 23205   | 25RB#0           | 5.26       | 13        | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 25RB#0           | 5.17       | 13        | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 25RB#0           | 5.23       | 13        | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 25RB#0           | 6.03       | 13        | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 25RB#0           | 6.03       | 13        | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 25RB#0           | 6.10       | 13        | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 50RB#0           | 5.14       | 13        | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 50RB#0           | 6.03       | 13        | PASS    |

## Test Graphs

Band13-5MHz-QPSK-23205-25RB#0



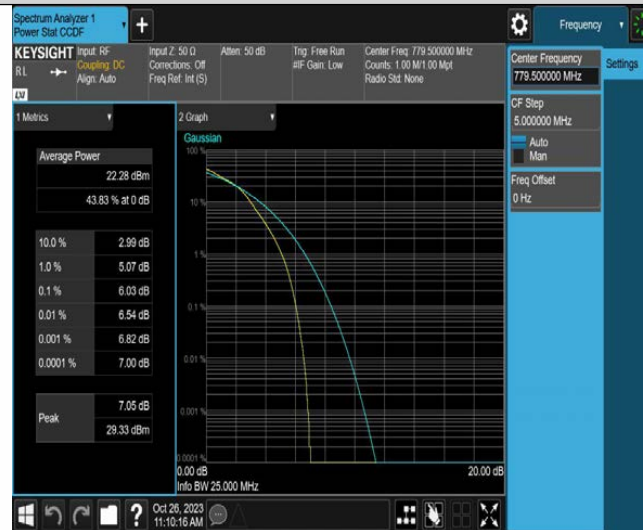
Band13-5MHz-QPSK-23230-25RB#0



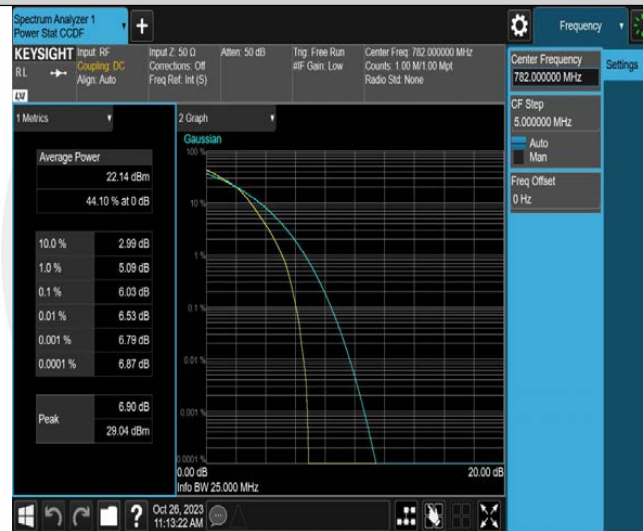
Band13-5MHz-QPSK-23255-25RB#0



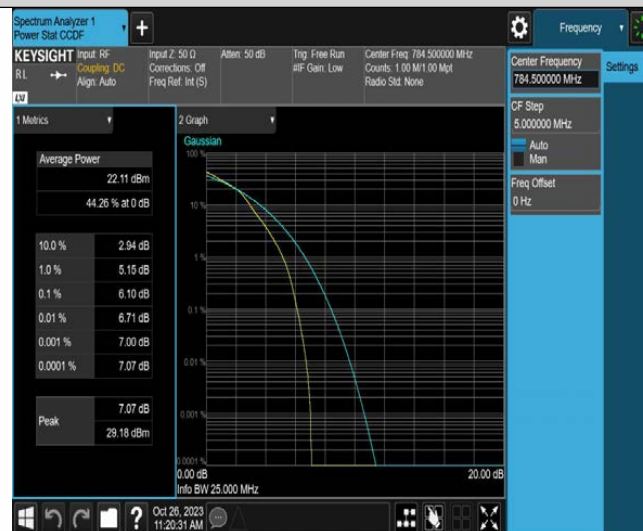
### Band13-5MHz-16QAM-23205-25RB#0



### Band13-5MHz-16QAM-23230-25RB#0



### Band13-5MHz-16QAM-23255-25RB#0



### Band13-10MHz-QPSK-23230-50RB#0





Band13-10MHz-16QAM-23230-50RB#0



## Appendix C: 26dB Bandwidth and Occupied Bandwidth

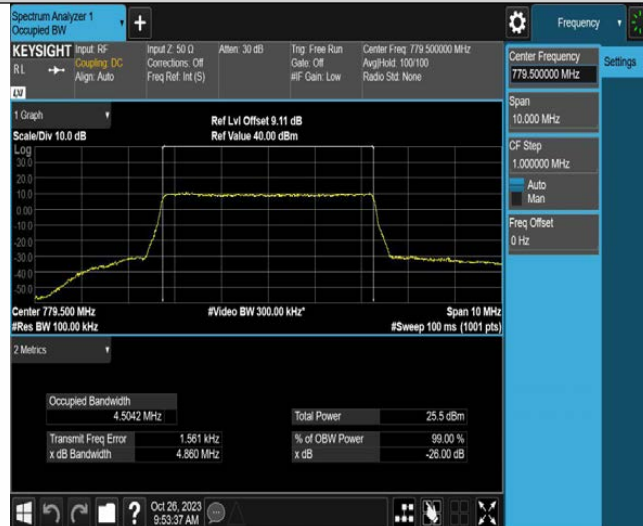
### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|--------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band13 | 5MHz      | QPSK       | 23205   | 25RB#0           | 4.5042                   | 4.860                | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 25RB#0           | 4.4895                   | 4.857                | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 25RB#0           | 4.4873                   | 4.837                | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 25RB#0           | 4.5146                   | 4.882                | PASS    |
| Band13 | 5MHz      | 16QAM      | 23230   | 25RB#0           | 4.4928                   | 4.847                | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 25RB#0           | 4.4890                   | 4.861                | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 50RB#0           | 8.9678                   | 9.519                | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 50RB#0           | 8.9644                   | 9.513                | PASS    |



## Test Graphs

Band13-5MHz-QPSK-23205-25RB#0



Band13-5MHz-QPSK-23230-25RB#0



Band13-5MHz-QPSK-23255-25RB#0



### Band13-5MHz-16QAM-23205-25RB#0



### Band13-5MHz-16QAM-23230-25RB#0



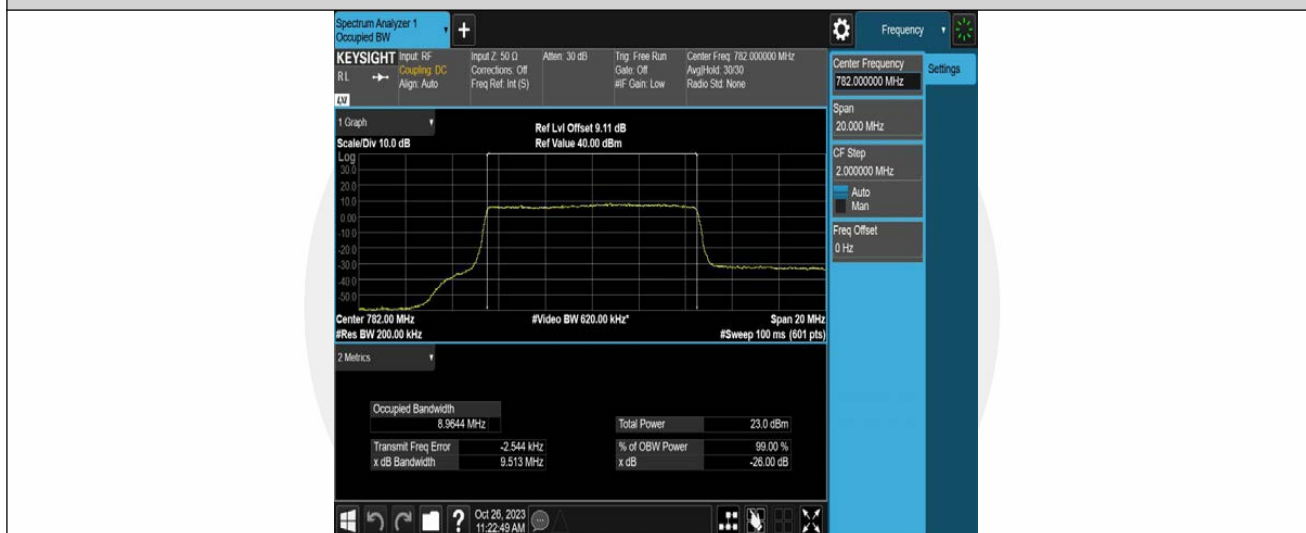
### Band13-5MHz-16QAM-23255-25RB#0



### Band13-10MHz-QPSK-23230-50RB#0



Band13-10MHz-16QAM-23230-50RB#0



## Appendix D: Band Edge

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Config. | Result (dBm)  | Verdict |
|--------|-----------|------------|---------|------------|---------------|---------|
| Band13 | 5MHz      | QPSK       | 23205   | 25RB#0     | -25.72        | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 25RB#0     | -27.16        | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 25RB#0     | -26.90        | PASS    |
| Band13 | 5MHz      | 16QAM      | 23255   | 25RB#0     | -27.66        | PASS    |
| Band13 | 10MHz     | QPSK       | 23230   | 50RB#0     | -28.79,-30.17 | PASS    |
| Band13 | 10MHz     | 16QAM      | 23230   | 50RB#0     | -30.84,-31.21 | PASS    |



## Test Graphs

Band13-5MHz-QPSK-23205-25RB#0



Band13-5MHz-QPSK-23255-25RB#0



Band13-5MHz-16QAM-23205-25RB#0





### Band13-5MHz-16QAM-23255-25RB#0



### Band13-10MHz-QPSK-23230-50RB#0



### Band13-10MHz-16QAM-23230-50RB#0



## Appendix E: Conducted Spurious Emission

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Frequency Range      | Result (dBm) | Verdict |
|--------|-----------|------------|---------|------------------|----------------------|--------------|---------|
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | Range1:30~1000MHz    | -46.19       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | Range3:763~775MHz    | -69.83       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | Range4:793~805MHz    | -70.78       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | Range2:1000~10000MHz | -36.36       | PASS    |
| Band13 | 5MHz      | QPSK       | 23205   | 1RB#0            | Range5:1559~1610MHz  | -60.99       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | Range1:30~1000MHz    | -45.21       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | Range3:763~775MHz    | -73.72       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | Range4:793~805MHz    | -66.04       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | Range2:1000~10000MHz | -36.39       | PASS    |
| Band13 | 5MHz      | QPSK       | 23230   | 1RB#0            | Range5:1559~1610MHz  | -61.9        | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | Range1:30~1000MHz    | -46.55       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | Range3:763~775MHz    | -73.72       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | Range4:793~805MHz    | -60.78       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | Range2:1000~10000MHz | -36.28       | PASS    |
| Band13 | 5MHz      | QPSK       | 23255   | 1RB#0            | Range5:1559~1610MHz  | -60.35       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#0            | Range1:30~1000MHz    | -45.38       | PASS    |
| Band13 | 5MHz      | 16QAM      | 23205   | 1RB#0            | Range3:763~775MHz    | -69.26       | PASS    |



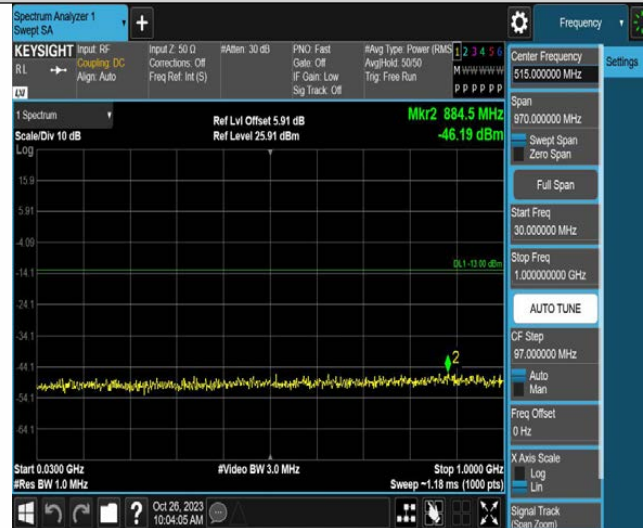
|        |       |       |       |       |                      |        |      |
|--------|-------|-------|-------|-------|----------------------|--------|------|
|        |       |       |       |       | 75MHz                |        |      |
| Band13 | 5MHz  | 16QAM | 23205 | 1RB#0 | Range4:793~805MHz    | -72.6  | PASS |
| Band13 | 5MHz  | 16QAM | 23205 | 1RB#0 | Range2:1000~10000MHz | -35.23 | PASS |
| Band13 | 5MHz  | 16QAM | 23205 | 1RB#0 | Range5:1559~1610MHz  | -59.9  | PASS |
| Band13 | 5MHz  | 16QAM | 23230 | 1RB#0 | Range1:30~1000MHz    | -45.62 | PASS |
| Band13 | 5MHz  | 16QAM | 23230 | 1RB#0 | Range3:763~775MHz    | -73.5  | PASS |
| Band13 | 5MHz  | 16QAM | 23230 | 1RB#0 | Range4:793~805MHz    | -70.74 | PASS |
| Band13 | 5MHz  | 16QAM | 23230 | 1RB#0 | Range2:1000~10000MHz | -36.03 | PASS |
| Band13 | 5MHz  | 16QAM | 23230 | 1RB#0 | Range5:1559~1610MHz  | -60.03 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#0 | Range1:30~1000MHz    | -44.08 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#0 | Range3:763~775MHz    | -74.1  | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#0 | Range4:793~805MHz    | -61.42 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#0 | Range2:1000~10000MHz | -35.77 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 1RB#0 | Range5:1559~1610MHz  | -60.92 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#0 | Range1:30~1000MHz    | -44.9  | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#0 | Range3:763~775MHz    | -71.45 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#0 | Range4:793~805MHz    | -67.05 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#0 | Range2:1000~10000MHz | -35.71 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 1RB#0 | Range5:1559~1610MHz  | -61.32 | PASS |

|        |       |       |       |       |                      |        |      |
|--------|-------|-------|-------|-------|----------------------|--------|------|
| Band13 | 10MHz | 16QAM | 23230 | 1RB#0 | Range1:30~1000MHz    | -46.04 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#0 | Range3:763~775MHz    | -71.13 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#0 | Range4:793~805MHz    | -69.4  | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#0 | Range2:1000~10000MHz | -35.88 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 1RB#0 | Range5:1559~1610MHz  | -61    | PASS |

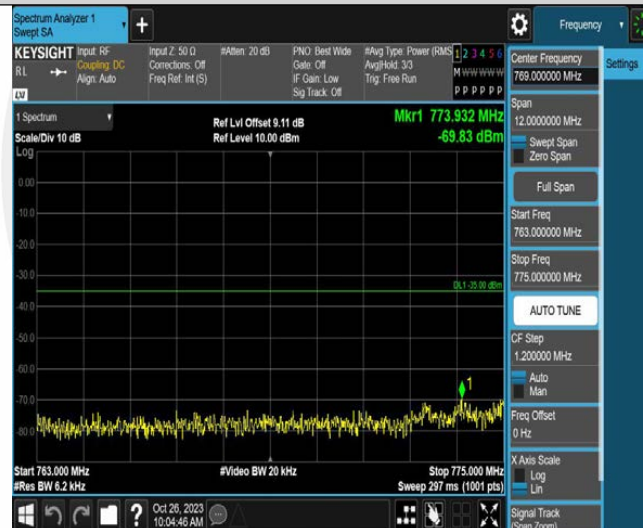


## Test Graphs

Band13-5MHz-QPSK-23205-1RB#0-Range1:30~1000MHz



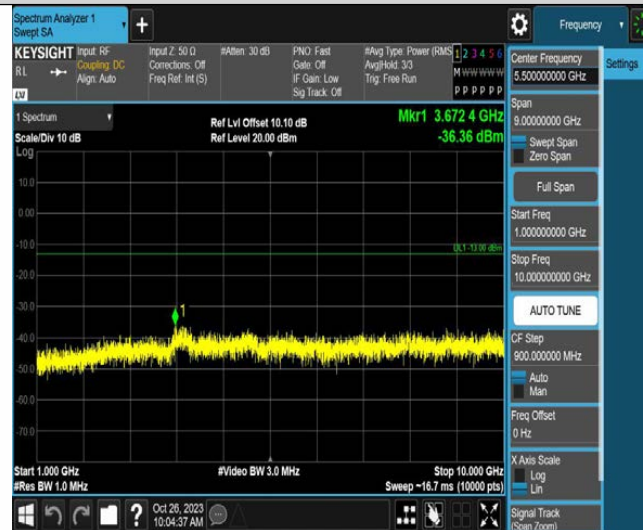
Band13-5MHz-QPSK-23205-1RB#0-Range3:763~775MHz



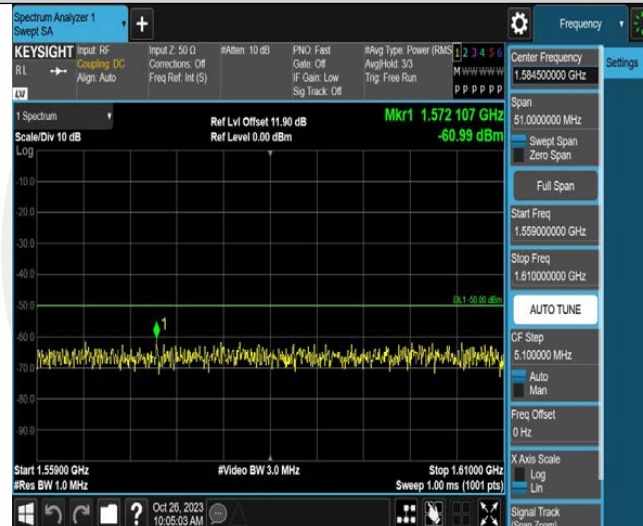
Band13-5MHz-QPSK-23205-1RB#0-Range4:793~805MHz



## Band13-5MHz-QPSK-23205-1RB#0-Range2:1000~10000MHz



## Band13-5MHz-QPSK-23205-1RB#0-Range5:1559~1610MHz



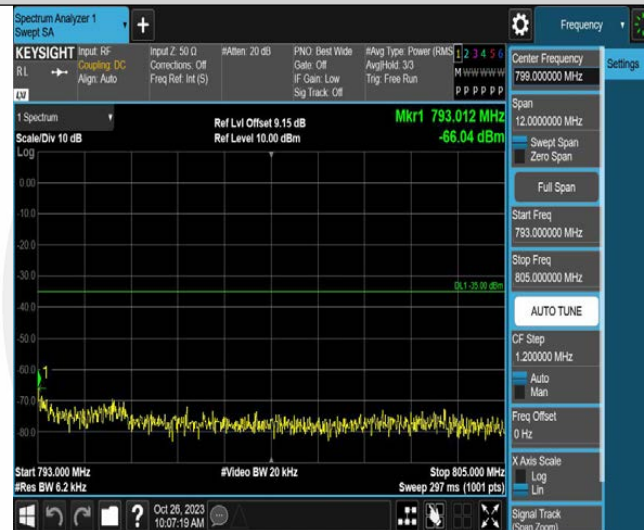
## Band13-5MHz-QPSK-23230-1RB#0-Range1:30~1000MHz



## Band13-5MHz-QPSK-23230-1RB#0-Range3:763~775MHz



Band13-5MHz-QPSK-23230-1RB#0-Range4:793~805MHz

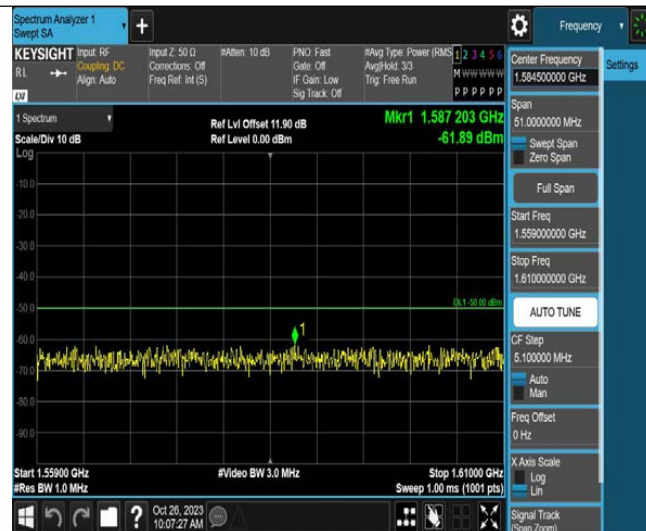


Band13-5MHz-QPSK-23230-1RB#0-Range2:1000~10000MHz



Band13-5MHz-QPSK-23230-1RB#0-Range5:1559~1610MHz

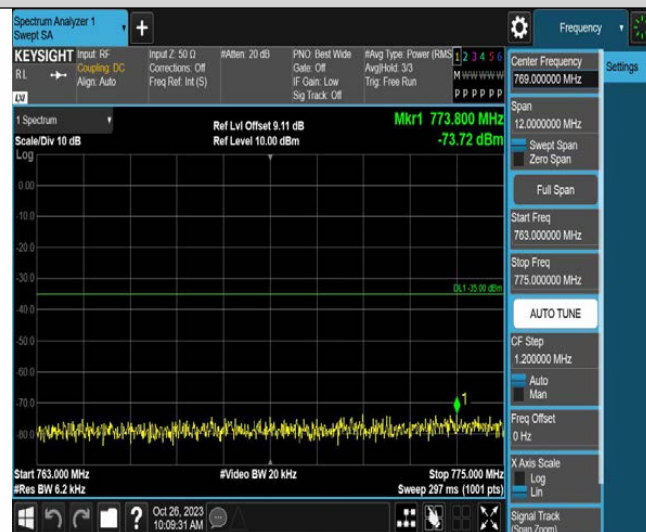




Band13-5MHz-QPSK-23255-1RB#0-Range1:30~1000MHz



Band13-5MHz-QPSK-23255-1RB#0-Range3:763~775MHz



Band13-5MHz-QPSK-23255-1RB#0-Range4:793~805MHz





Band13-5MHz-QPSK-23255-1RB#0-Range2:1000~10000MHz



Band13-5MHz-QPSK-23255-1RB#0-Range5:1559~1610MHz



Band13-5MHz-16QAM-23205-1RB#0-Range1:30~1000MHz



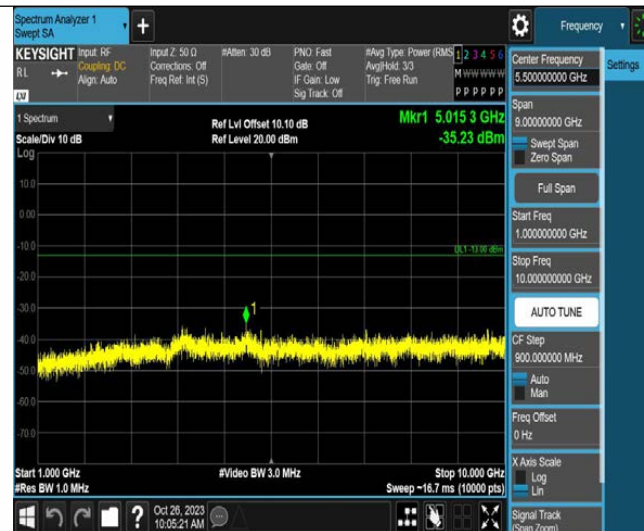
Band13-5MHz-16QAM-23205-1RB#0-Range3:763~775MHz



Band13-5MHz-16QAM-23205-1RB#0-Range4:793~805MHz



Band13-5MHz-16QAM-23205-1RB#0-Range2:1000~10000MHz



Band13-5MHz-16QAM-23205-1RB#0-Range5:1559~1610MHz



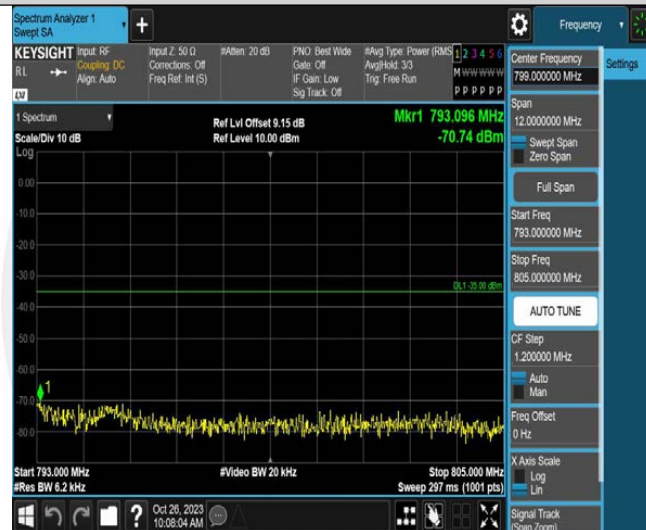
Band13-5MHz-16QAM-23230-1RB#0-Range1:30~1000MHz



Band13-5MHz-16QAM-23230-1RB#0-Range3:763~775MHz



Band13-5MHz-16QAM-23230-1RB#0-Range4:793~805MHz



Band13-5MHz-16QAM-23230-1RB#0-Range2:1000~10000MHz



Band13-5MHz-16QAM-23230-1RB#0-Range5:1559~1610MHz

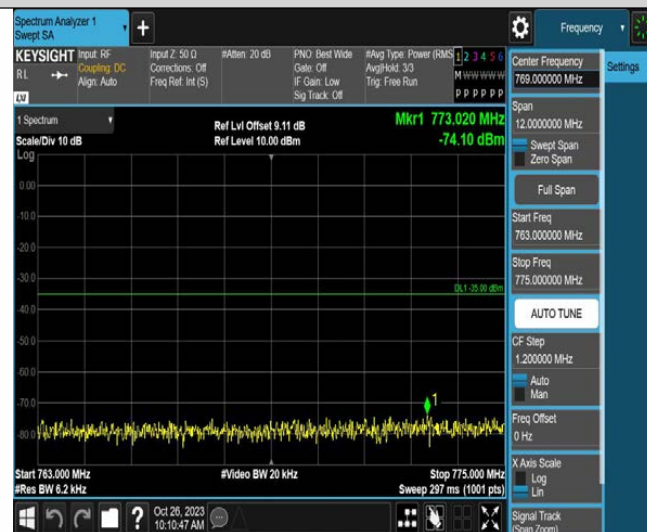




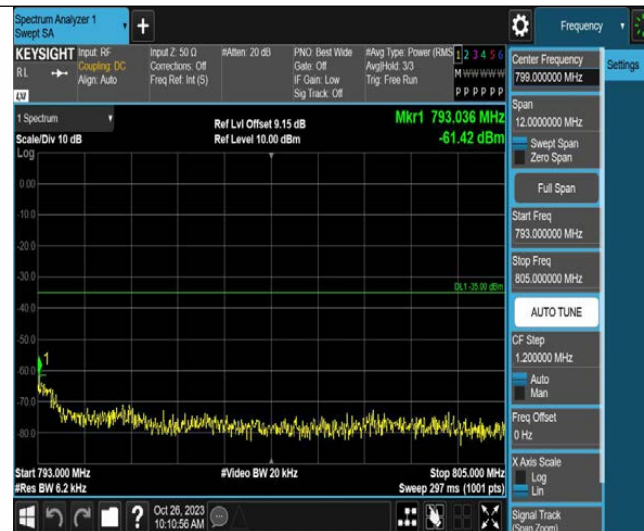
Band13-5MHz-16QAM-23255-1RB#0-Range1:30~1000MHz



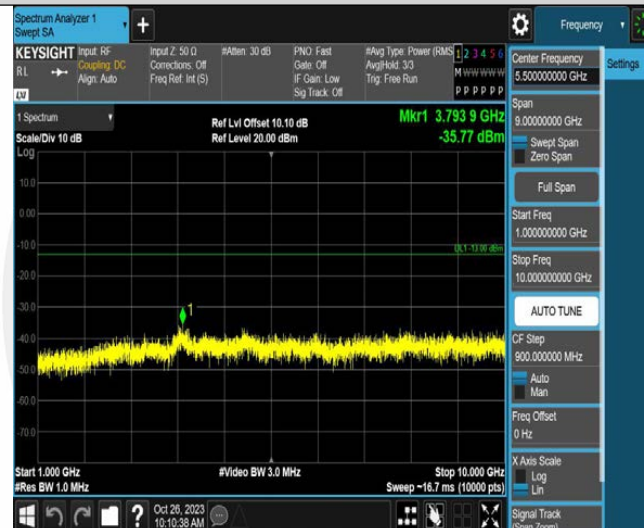
Band13-5MHz-16QAM-23255-1RB#0-Range3:763~775MHz



Band13-5MHz-16QAM-23255-1RB#0-Range4:793~805MHz



Band13-5MHz-16QAM-23255-1RB#0-Range2:1000~10000MHz



Band13-5MHz-16QAM-23255-1RB#0-Range5:1559~1610MHz



Band13-10MHz-QPSK-23230-1RB#0-Range1:30~1000MHz





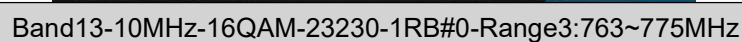
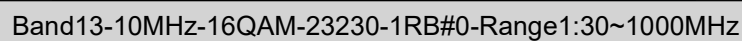
Band13-10MHz-QPSK-23230-1RB#0-Range3:763~775MHz

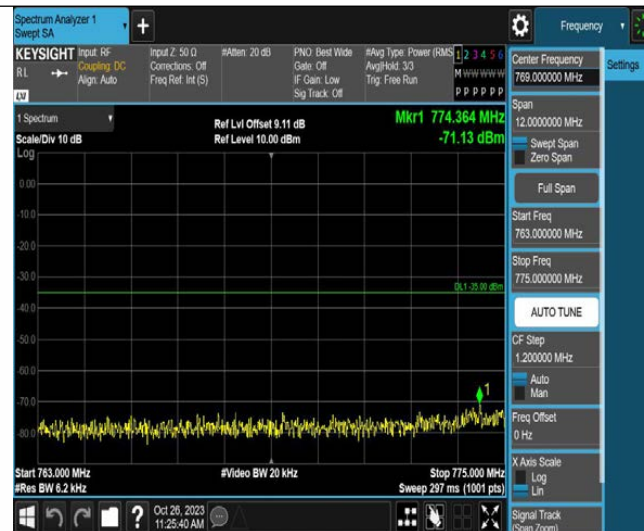


Band13-10MHz-QPSK-23230-1RB#0-Range4:793~805MHz



Band13-10MHz-QPSK-23230-1RB#0-Range2:1000~10000MHz





Band13-10MHz-16QAM-23230-1RB#0-Range4:793~805MHz



Band13-10MHz-16QAM-23230-1RB#0-Range2:1000~10000MHz



Band13-10MHz-16QAM-23230-1RB#0-Range5:1559~1610MHz



## Appendix F: Frequency Stability

### Test Result

| Voltage |           |            |         |              |               |                  |                |                 |             |         |
|---------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | VL            | NT               | 3.30           | 0.00423<br>3    | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | VN            | NT               | 6.51           | 0.00835<br>2    | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | VH            | NT               | -2.70          | -0.0034<br>64   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23230   | 25RB#0       | VL            | NT               | -7.72          | -0.0098<br>72   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23230   | 25RB#0       | VN            | NT               | -5.31          | -0.0067<br>90   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23230   | 25RB#0       | VH            | NT               | -2.79          | -0.0035<br>68   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23255   | 25RB#0       | VL            | NT               | 8.85           | 0.01128<br>1    | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23255   | 25RB#0       | VN            | NT               | 3.63           | 0.00462<br>7    | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23255   | 25RB#0       | VH            | NT               | 3.62           | 0.00461<br>4    | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23205   | 25RB#0       | VL            | NT               | 2.96           | 0.00379<br>7    | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23205   | 25RB#0       | VN            | NT               | -5.24          | -0.0067<br>22   | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23205   | 25RB#0       | VH            | NT               | -1.99          | -0.0025<br>53   | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23230   | 25RB#0       | VL            | NT               | -2.13          | -0.0027<br>24   | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23230   | 25RB#0       | VN            | NT               | -4.46          | -0.0057<br>03   | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23230   | 25RB#0       | VH            | NT               | -2.36          | -0.0030<br>18   | ±2.5        | PASS    |
| Band13  | 5MHz      | 16QAM      | 23255   | 25RB#0       | VL            | NT               | 4.31           | 0.00549<br>4    | ±2.5        | PASS    |



|        |       |       |       |        |    |    |       |               |      |      |
|--------|-------|-------|-------|--------|----|----|-------|---------------|------|------|
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | VN | NT | 9.27  | 0.01181<br>6  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | VH | NT | 3.86  | 0.00492<br>0  | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | VL | NT | -8.23 | -0.0105<br>24 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | VN | NT | -4.09 | -0.0052<br>30 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | VH | NT | -7.78 | -0.0099<br>49 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | VL | NT | -7.72 | -0.0098<br>72 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | VN | NT | -5.41 | -0.0069<br>18 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | VH | NT | 2.07  | 0.00264<br>7  | ±2.5 | PASS |

| Voltage |           |            |         |              |               |                  |                |                 |             |         |
|---------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | -30              | -1.57          | -0.0020<br>14   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | -20              | 2.57           | 0.00329<br>7    | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | -10              | -3.85          | -0.0049<br>39   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | 0                | 3.35           | 0.00429<br>8    | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | 10               | -1.56          | -0.0020<br>01   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | 20               | -6.09          | -0.0078<br>13   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | 30               | -6.74          | -0.0086<br>47   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | 40               | -7.58          | -0.0097<br>24   | ±2.5        | PASS    |
| Band13  | 5MHz      | QPSK       | 23205   | 25RB#0       | NV            | 50               | 2.22           | 0.00284<br>8    | ±2.5        | PASS    |

|        |      |       |       |        |    |     |       |               |      |      |
|--------|------|-------|-------|--------|----|-----|-------|---------------|------|------|
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | -30 | -4.94 | -0.0063<br>17 | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | -20 | -3.68 | -0.0047<br>06 | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | -10 | -2.36 | -0.0030<br>18 | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | 0   | 2.59  | 0.00331<br>2  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | 10  | 3.93  | 0.00502<br>6  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | 20  | -3.88 | -0.0049<br>62 | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | 30  | 2.15  | 0.00274<br>9  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | 40  | -5.78 | -0.0073<br>91 | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23230 | 25RB#0 | NV | 50  | 2.52  | 0.00322<br>3  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | -30 | 7.28  | 0.00928<br>0  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | -20 | 1.77  | 0.00225<br>6  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | -10 | 5.24  | 0.00667<br>9  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | 0   | 2.02  | 0.00257<br>5  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | 10  | 6.35  | 0.00809<br>4  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | 20  | 4.45  | 0.00567<br>2  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | 30  | 8.91  | 0.01135<br>8  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | 40  | 3.72  | 0.00474<br>2  | ±2.5 | PASS |
| Band13 | 5MHz | QPSK  | 23255 | 25RB#0 | NV | 50  | 10.76 | 0.01371<br>6  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | -30 | 3.52  | 0.00451       | ±2.5 | PASS |

|        |      |       |       |        |    |     |       |               |      |      |
|--------|------|-------|-------|--------|----|-----|-------|---------------|------|------|
|        |      |       |       |        |    |     |       | 6             |      |      |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | -20 | 4.71  | 0.00604<br>2  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | -10 | 5.14  | 0.00659<br>4  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | 0   | 4.75  | 0.00609<br>4  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | 10  | -5.01 | -0.0064<br>27 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | 20  | -4.19 | -0.0053<br>75 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | 30  | 4.71  | 0.00604<br>2  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | 40  | 6.91  | 0.00886<br>5  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23205 | 25RB#0 | NV | 50  | -3.46 | -0.0044<br>39 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | -30 | -3.42 | -0.0043<br>73 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | -20 | -6.57 | -0.0084<br>02 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | -10 | 4.06  | 0.00519<br>2  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | 0   | 3.00  | 0.00383<br>6  | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | 10  | -2.23 | -0.0028<br>52 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | 20  | -3.98 | -0.0050<br>90 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | 30  | -4.92 | -0.0062<br>92 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | 40  | -3.62 | -0.0046<br>29 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23230 | 25RB#0 | NV | 50  | -7.70 | -0.0098<br>47 | ±2.5 | PASS |
| Band13 | 5MHz | 16QAM | 23255 | 25RB#0 | NV | -30 | 6.52  | 0.00831<br>1  | ±2.5 | PASS |

|        |       |       |       |        |    |     |       |               |      |      |
|--------|-------|-------|-------|--------|----|-----|-------|---------------|------|------|
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | -20 | 7.57  | 0.00964<br>9  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | -10 | 7.64  | 0.00973<br>9  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | 0   | 8.47  | 0.01079<br>7  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | 10  | 9.46  | 0.01205<br>9  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | 20  | 9.51  | 0.01212<br>2  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | 30  | 8.78  | 0.01119<br>2  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | 40  | 7.22  | 0.00920<br>3  | ±2.5 | PASS |
| Band13 | 5MHz  | 16QAM | 23255 | 25RB#0 | NV | 50  | 5.46  | 0.00696<br>0  | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | -30 | -5.78 | -0.0073<br>91 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | -20 | -7.38 | -0.0094<br>37 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | -10 | -2.59 | -0.0033<br>12 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | 0   | -5.35 | -0.0068<br>41 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | 10  | 2.29  | 0.00292<br>8  | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | 20  | -5.22 | -0.0066<br>75 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | 30  | 2.52  | 0.00322<br>3  | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | 40  | -7.14 | -0.0091<br>30 | ±2.5 | PASS |
| Band13 | 10MHz | QPSK  | 23230 | 50RB#0 | NV | 50  | -4.52 | -0.0057<br>80 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | -30 | -5.44 | -0.0069<br>57 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | -20 | -3.85 | -0.0049       | ±2.5 | PASS |

|        |       |       |       |        |    |     |       |               |      |      |
|--------|-------|-------|-------|--------|----|-----|-------|---------------|------|------|
|        |       |       |       |        |    |     |       | 23            |      |      |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | -10 | -5.16 | -0.0065<br>98 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | 0   | -6.92 | -0.0088<br>49 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | 10  | -8.61 | -0.01101<br>0 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | 20  | -4.13 | -0.0052<br>81 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | 30  | -6.52 | -0.0083<br>38 | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | 40  | 2.13  | 0.00272<br>4  | ±2.5 | PASS |
| Band13 | 10MHz | 16QAM | 23230 | 50RB#0 | NV | 50  | -2.19 | -0.0028<br>01 | ±2.5 | PASS |



## Appendix A: Effective (Isotropic) Radiated Power Output Data

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dBm) | Verdict |
|--------|-----------|------------|---------|------------------|-------------|---------|
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#0            | 23.79       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#12           | 23.90       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#24           | 23.81       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 12RB#0           | 22.76       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 12RB#6           | 22.78       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 12RB#13          | 22.80       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 25RB#0           | 22.75       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#0            | 23.86       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#12           | 23.90       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#24           | 23.90       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 12RB#0           | 22.77       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 12RB#6           | 22.75       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 12RB#13          | 22.65       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 25RB#0           | 22.67       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#0            | 23.92       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#12           | 24.00       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#24           | 23.90       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 12RB#0           | 22.79       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 12RB#6           | 22.80       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 12RB#13          | 22.84       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 25RB#0           | 22.87       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 1RB#0            | 23.67       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 1RB#24           | 23.70       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 1RB#49           | 23.73       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 25RB#0           | 22.88       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 25RB#12          | 22.87       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 25RB#25          | 22.75       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 50RB#0           | 22.77       | PASS    |

## Appendix B: Peak-to-Average Ratio(CCDF)

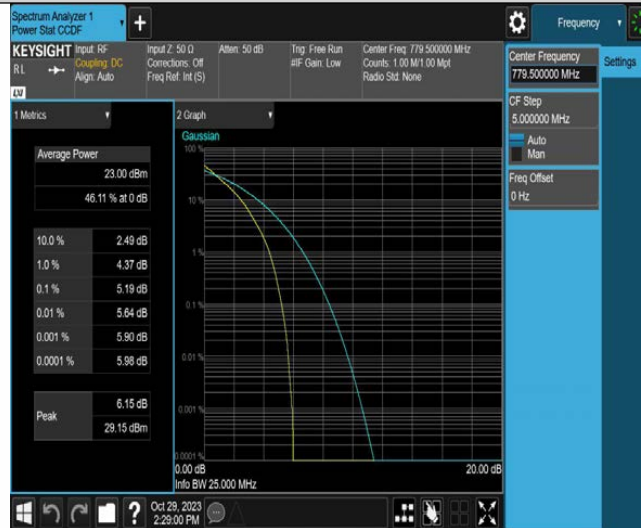
### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|--------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band13 | 5MHz      | 64QAM      | 23205   | 25RB#0           | 5.19       | 13        | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 25RB#0           | 5.17       | 13        | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 25RB#0           | 5.18       | 13        | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 50RB#0           | 5.48       | 13        | PASS    |

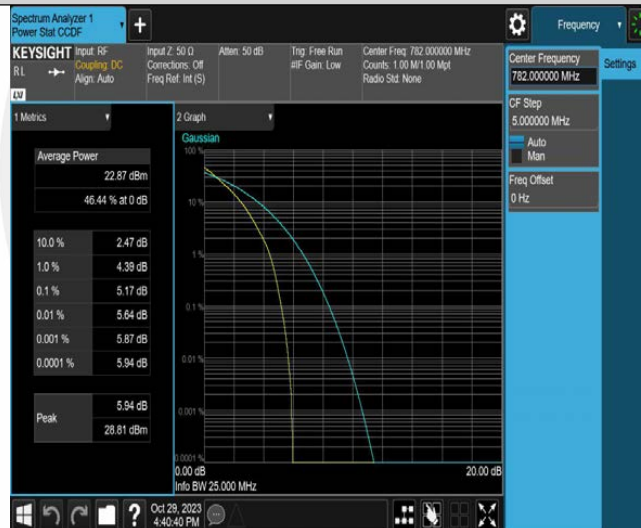


## Test Graphs

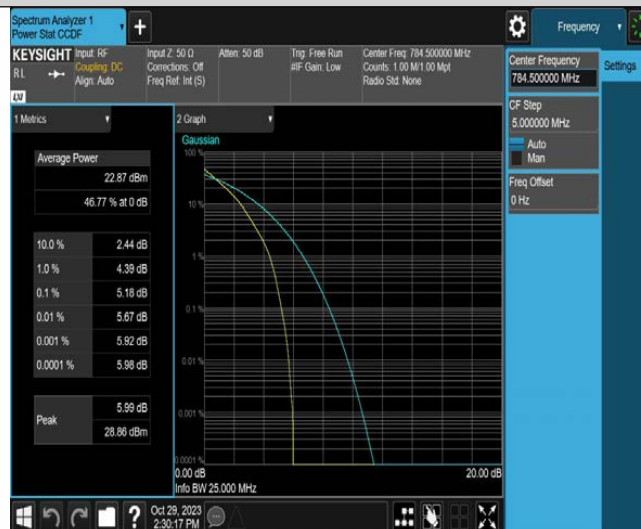
Band13-5MHz-64QAM-23205-25RB#0

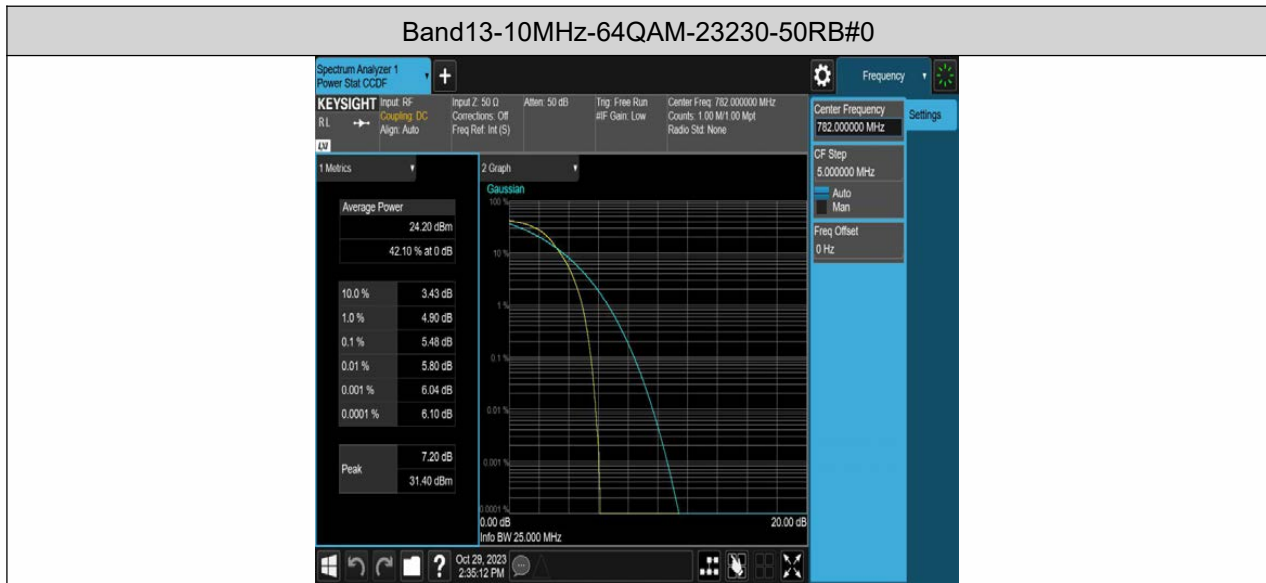


Band13-5MHz-64QAM-23230-25RB#0



Band13-5MHz-64QAM-23255-25RB#0





## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|--------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band13 | 5MHz      | 64QAM      | 23205   | 25RB#0           | 4.5061                   | 4.874                | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 25RB#0           | 4.4915                   | 4.830                | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 25RB#0           | 4.4863                   | 4.815                | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 50RB#0           | 8.9731                   | 9.522                | PASS    |





## Test Graphs

Band13-5MHz-64QAM-23205-25RB#0

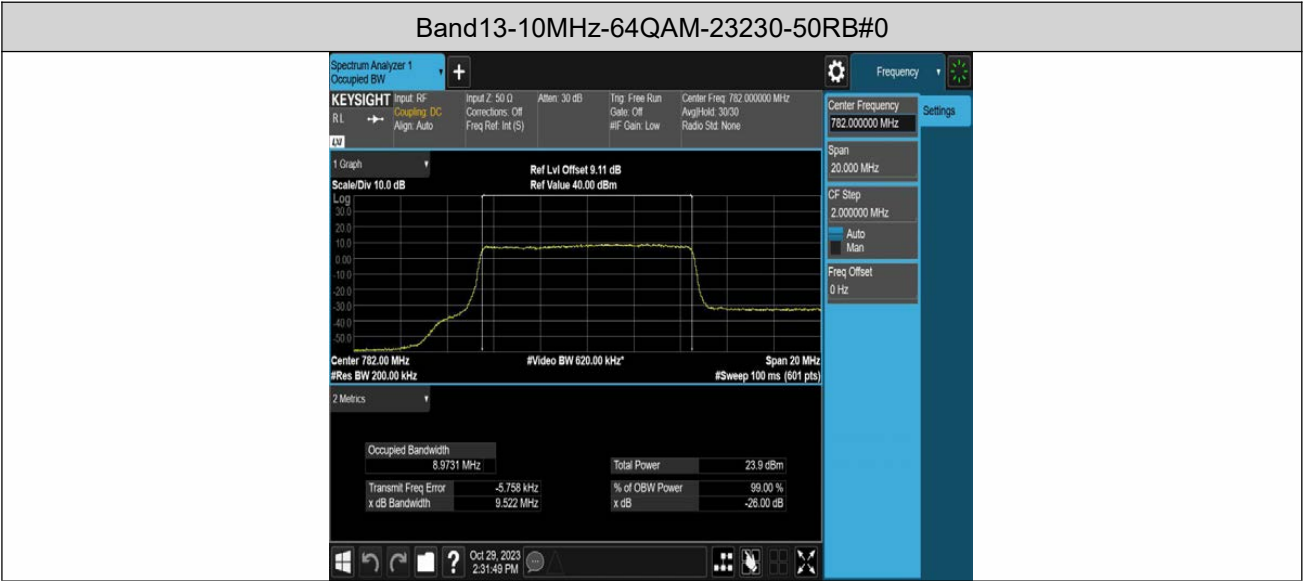


Band13-5MHz-64QAM-23230-25RB#0



Band13-5MHz-64QAM-23255-25RB#0





Appendix D: Band Edge

Test Result

| Band   | Bandwidth | Modulation | Channel | RB Config. | Result (dBm)  | Verdict |
|--------|-----------|------------|---------|------------|---------------|---------|
| Band13 | 5MHz      | 64QAM      | 23205   | 25RB#0     | -25.87        | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 25RB#0     | -27.94        | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 50RB#0     | -28.86,-30.76 | PASS    |



## Test Graphs

Band13-5MHz-64QAM-23205-25RB#0



Band13-5MHz-64QAM-23255-25RB#0



Band13-10MHz-64QAM-23230-50RB#0



## Appendix E: Conducted Spurious Emission

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Frequency Range      | Result (dBm) | Verdict |
|--------|-----------|------------|---------|------------------|----------------------|--------------|---------|
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#0            | Range1:30~1000MHz    | -45.6        | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#0            | Range3:763~775MHz    | -68.89       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#0            | Range4:793~805MHz    | -71.6        | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#0            | Range2:1000~10000MHz | -36.13       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23205   | 1RB#0            | Range5:1559~1610MHz  | -60.5        | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#0            | Range1:30~1000MHz    | -45.34       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#0            | Range3:763~775MHz    | -72.84       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#0            | Range4:793~805MHz    | -69.28       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#0            | Range2:1000~10000MHz | -34.67       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23230   | 1RB#0            | Range5:1559~1610MHz  | -61.35       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#0            | Range1:30~1000MHz    | -45.62       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#0            | Range3:763~775MHz    | -73.49       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#0            | Range4:793~805MHz    | -63.15       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#0            | Range2:1000~10000MHz | -34.79       | PASS    |
| Band13 | 5MHz      | 64QAM      | 23255   | 1RB#0            | Range5:1559~1610MHz  | -61.35       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 1RB#0            | Range1:30~1000MHz    | -44.43       | PASS    |
| Band13 | 10MHz     | 64QAM      | 23230   | 1RB#0            | Range3:763~775MHz    | -70.32       | PASS    |



|        |       |       |       |       |                      |        |      |
|--------|-------|-------|-------|-------|----------------------|--------|------|
|        |       |       |       |       | 75MHz                |        |      |
| Band13 | 10MHz | 64QAM | 23230 | 1RB#0 | Range4:793~805MHz    | -67.87 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 1RB#0 | Range2:1000~10000MHz | -35.99 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 1RB#0 | Range5:1559~1610MHz  | -60.14 | PASS |

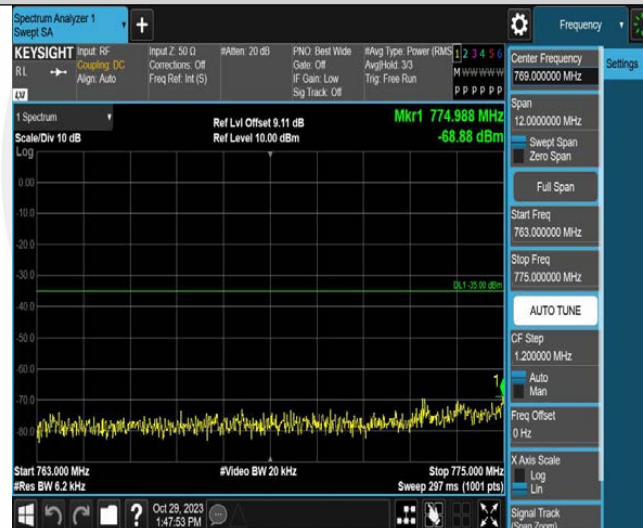


## Test Graphs

Band13-5MHz-64QAM-23205-1RB#0-Range1:30~1000MHz



Band13-5MHz-64QAM-23205-1RB#0-Range3:763~775MHz



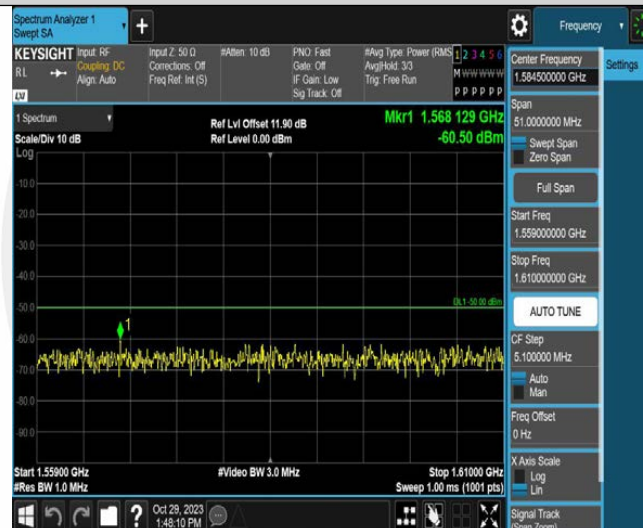
Band13-5MHz-64QAM-23205-1RB#0-Range4:793~805MHz



## Band13-5MHz-64QAM-23205-1RB#0-Range2:1000~10000MHz



## Band13-5MHz-64QAM-23205-1RB#0-Range5:1559~1610MHz



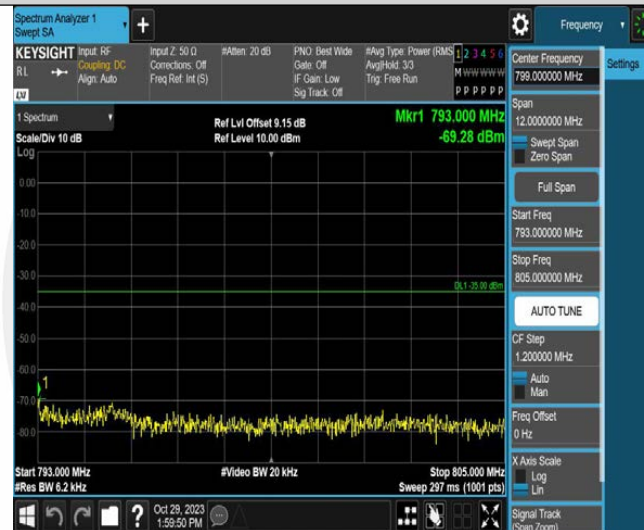
## Band13-5MHz-64QAM-23230-1RB#0-Range1:30~1000MHz



## Band13-5MHz-64QAM-23230-1RB#0-Range3:763~775MHz



Band13-5MHz-64QAM-23230-1RB#0-Range4:793~805MHz



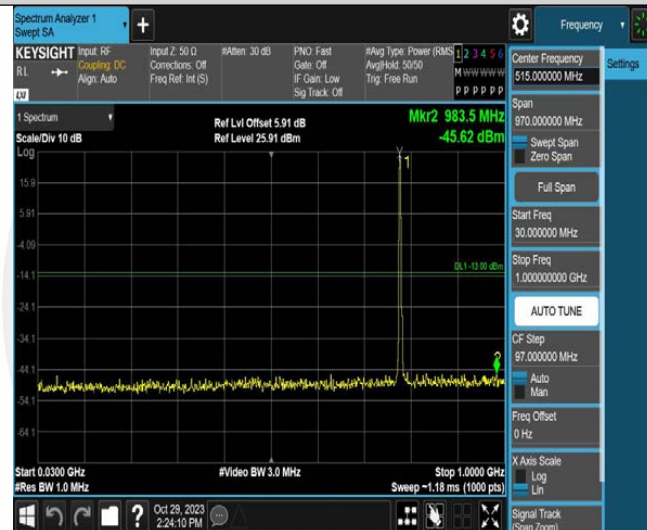
Band13-5MHz-64QAM-23230-1RB#0-Range2:1000~10000MHz



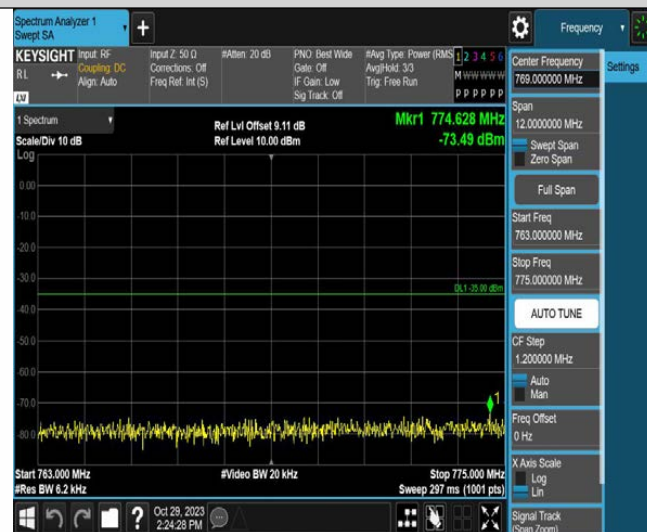
Band13-5MHz-64QAM-23230-1RB#0-Range5:1559~1610MHz



Band13-5MHz-64QAM-23255-1RB#0-Range1:30~1000MHz



Band13-5MHz-64QAM-23255-1RB#0-Range3:763~775MHz

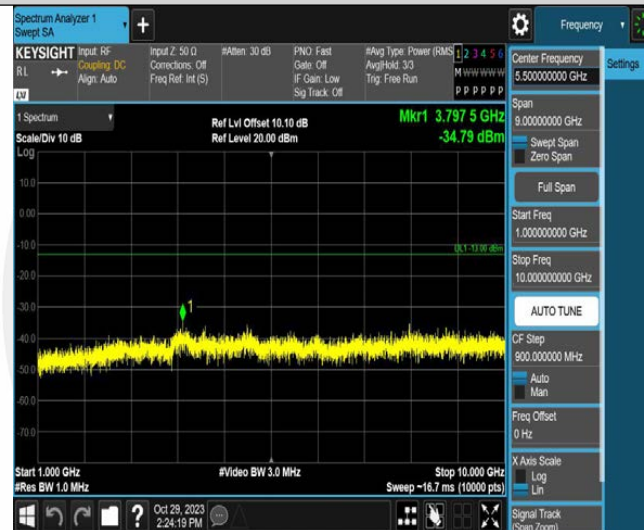


Band13-5MHz-64QAM-23255-1RB#0-Range4:793~805MHz

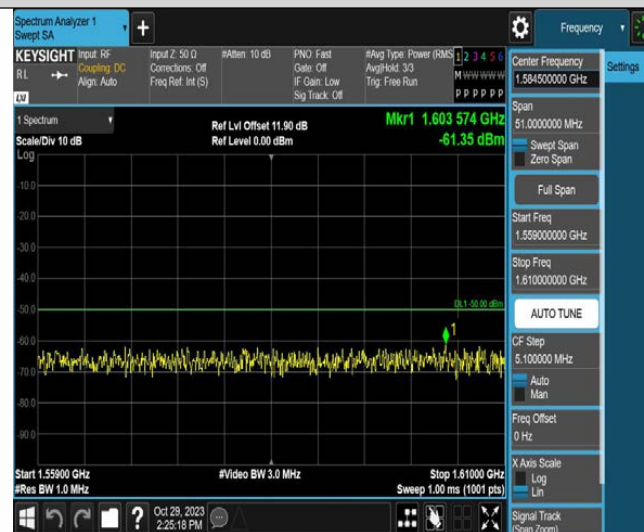




Band13-5MHz-64QAM-23255-1RB#0-Range2:1000~10000MHz



Band13-5MHz-64QAM-23255-1RB#0-Range5:1559~1610MHz

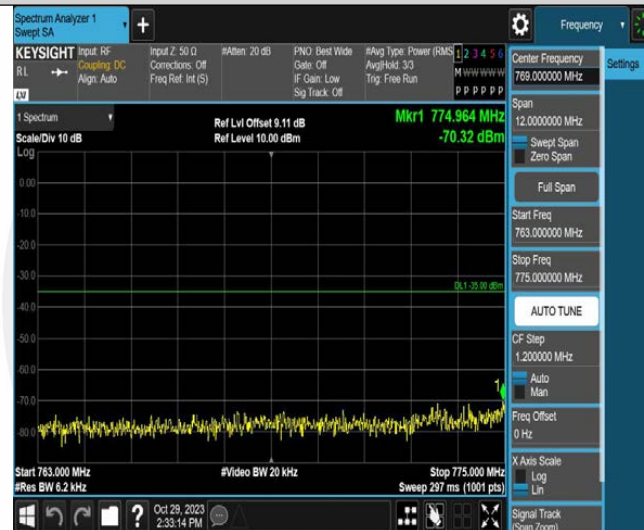


Band13-10MHz-64QAM-23230-1RB#0-Range1:30~1000MHz

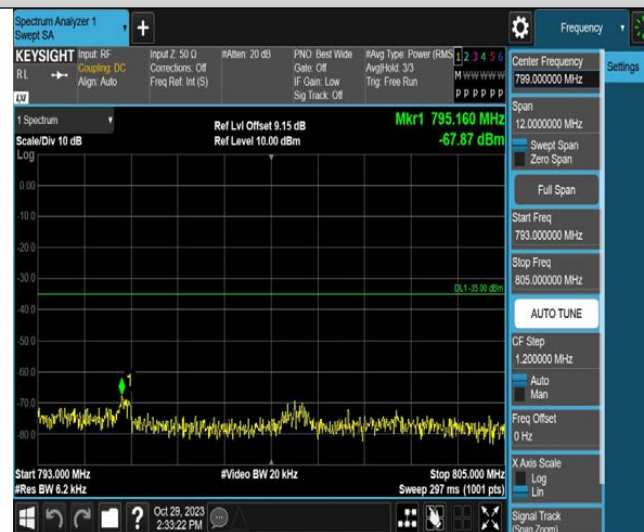




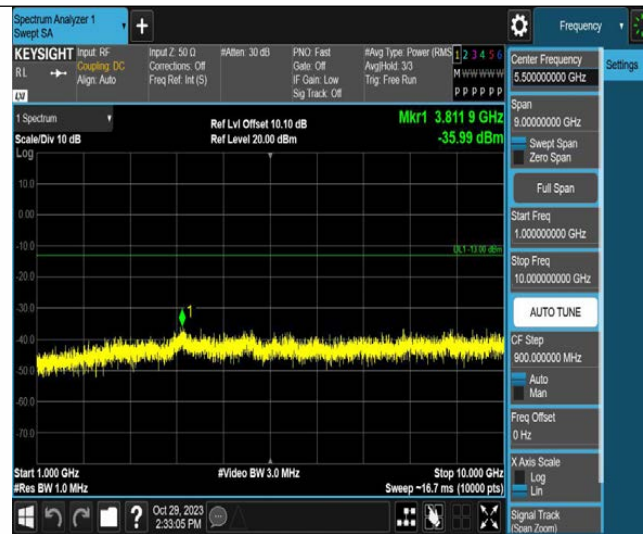
Band13-10MHz-64QAM-23230-1RB#0-Range3:763~775MHz



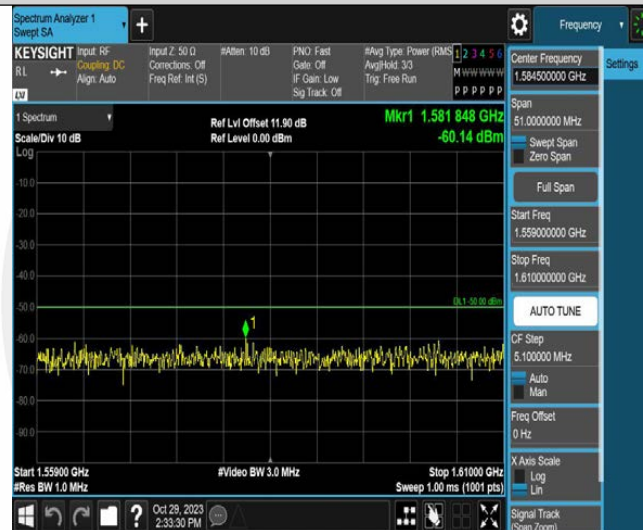
Band13-10MHz-64QAM-23230-1RB#0-Range4:793~805MHz



Band13-10MHz-64QAM-23230-1RB#0-Range2:1000~10000MHz



Band13-10MHz-64QAM-23230-1RB#0-Range5:1559~1610MHz



## Appendix F: Frequency Stability

### Test Result

| Voltage |           |            |         |              |               |                  |                |                 |             |         |
|---------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band13  | 5MHz      | 64QAM      | 23205   | 25RB#0       | VL            | NT               | 2.35           | 0.003015        | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23205   | 25RB#0       | VN            | NT               | -4.08          | -0.005234       | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23205   | 25RB#0       | VH            | NT               | 3.81           | 0.004888        | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23230   | 25RB#0       | VL            | NT               | -8.75          | -0.011189       | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23230   | 25RB#0       | VN            | NT               | -4.01          | -0.005128       | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23230   | 25RB#0       | VH            | NT               | -7.11          | -0.009092       | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23255   | 25RB#0       | VL            | NT               | 7.12           | 0.009076        | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23255   | 25RB#0       | VN            | NT               | 10.03          | 0.012785        | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23255   | 25RB#0       | VH            | NT               | -4.26          | -0.005430       | ±2.5        | PASS    |
| Band13  | 10MHz     | 64QAM      | 23230   | 50RB#0       | VL            | NT               | 3.60           | 0.004604        | ±2.5        | PASS    |
| Band13  | 10MHz     | 64QAM      | 23230   | 50RB#0       | VN            | NT               | -8.28          | -0.010588       | ±2.5        | PASS    |
| Band13  | 10MHz     | 64QAM      | 23230   | 50RB#0       | VH            | NT               | -2.40          | -0.003069       | ±2.5        | PASS    |

| Voltage |           |            |         |              |               |                  |                |                 |             |         |
|---------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band13  | 5MHz      | 64QAM      | 23205   | 25RB#0       | NV            | -30              | -5.39          | -0.006915       | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23205   | 25RB#0       | NV            | -20              | 9.24           | 0.011854        | ±2.5        | PASS    |
| Band13  | 5MHz      | 64QAM      | 23205   | 25RB#0       | NV            | -10              | -3.49          | -0.0044         | ±2.5        | PASS    |

|        |      |       |       |        |    |     |        |               |      |      |
|--------|------|-------|-------|--------|----|-----|--------|---------------|------|------|
|        |      |       |       |        |    |     |        | 77            |      |      |
| Band13 | 5MHz | 64QAM | 23205 | 25RB#0 | NV | 0   | -3.81  | -0.0048<br>88 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23205 | 25RB#0 | NV | 10  | 8.64   | 0.01108<br>4  | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23205 | 25RB#0 | NV | 20  | 8.23   | 0.01055<br>8  | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23205 | 25RB#0 | NV | 30  | 3.83   | 0.00491<br>3  | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23205 | 25RB#0 | NV | 40  | 7.25   | 0.00930<br>1  | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23205 | 25RB#0 | NV | 50  | -5.44  | -0.0069<br>79 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | -30 | -8.84  | -0.01130<br>4 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | -20 | -7.20  | -0.0092<br>07 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | -10 | -2.90  | -0.0037<br>08 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | 0   | -3.22  | -0.00411<br>8 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | 10  | -3.55  | -0.0045<br>40 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | 20  | -10.53 | -0.0134<br>65 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | 30  | -4.03  | -0.0051<br>53 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | 40  | -7.00  | -0.0089<br>51 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23230 | 25RB#0 | NV | 50  | -7.84  | -0.0100<br>26 | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23255 | 25RB#0 | NV | -30 | 6.82   | 0.00869<br>3  | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23255 | 25RB#0 | NV | -20 | 9.44   | 0.01203<br>3  | ±2.5 | PASS |
| Band13 | 5MHz | 64QAM | 23255 | 25RB#0 | NV | -10 | 10.53  | 0.01342<br>3  | ±2.5 | PASS |

|        |       |       |       |        |    |     |       |               |      |      |
|--------|-------|-------|-------|--------|----|-----|-------|---------------|------|------|
| Band13 | 5MHz  | 64QAM | 23255 | 25RB#0 | NV | 0   | 3.92  | 0.00499<br>7  | ±2.5 | PASS |
| Band13 | 5MHz  | 64QAM | 23255 | 25RB#0 | NV | 10  | 7.88  | 0.01004<br>5  | ±2.5 | PASS |
| Band13 | 5MHz  | 64QAM | 23255 | 25RB#0 | NV | 20  | 8.58  | 0.01093<br>7  | ±2.5 | PASS |
| Band13 | 5MHz  | 64QAM | 23255 | 25RB#0 | NV | 30  | 9.63  | 0.01227<br>5  | ±2.5 | PASS |
| Band13 | 5MHz  | 64QAM | 23255 | 25RB#0 | NV | 40  | 3.00  | 0.00382<br>4  | ±2.5 | PASS |
| Band13 | 5MHz  | 64QAM | 23255 | 25RB#0 | NV | 50  | 3.05  | 0.00388<br>8  | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | -30 | -1.75 | -0.0022<br>38 | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | -20 | -5.98 | -0.0076<br>47 | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | -10 | -7.70 | -0.0098<br>47 | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | 0   | 3.96  | 0.00506<br>4  | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | 10  | -8.35 | -0.0106<br>78 | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | 20  | -2.69 | -0.0034<br>40 | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | 30  | 5.92  | 0.00757<br>0  | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | 40  | -6.90 | -0.0088<br>24 | ±2.5 | PASS |
| Band13 | 10MHz | 64QAM | 23230 | 50RB#0 | NV | 50  | 3.40  | 0.00434<br>8  | ±2.5 | PASS |