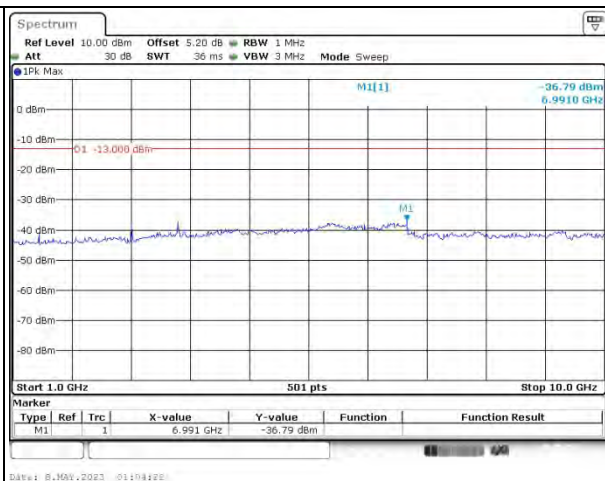
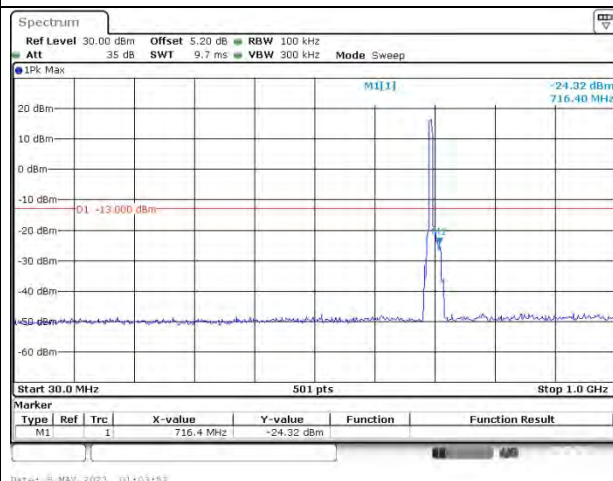


## Spurious Emissions at Antenna Terminal

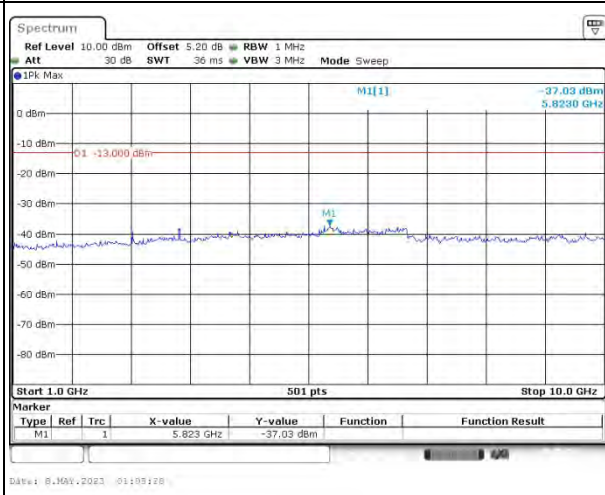
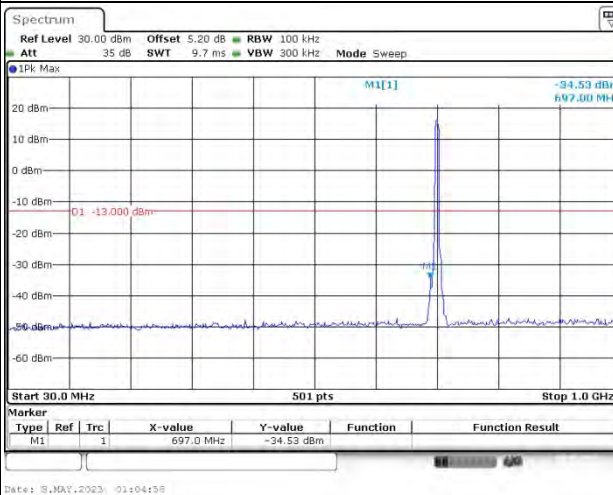
Channel

5MHz Bandwidth QPSK

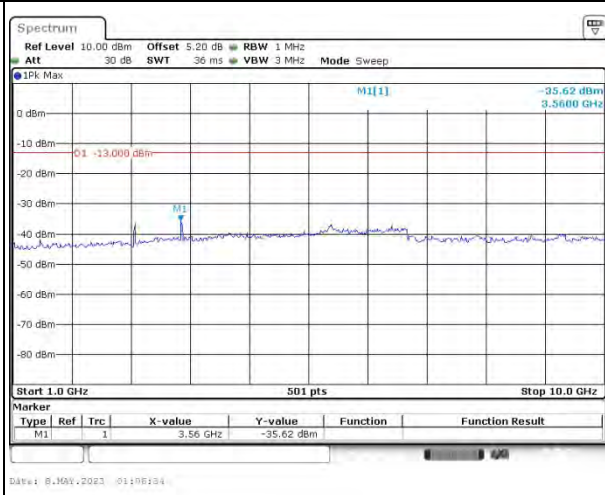
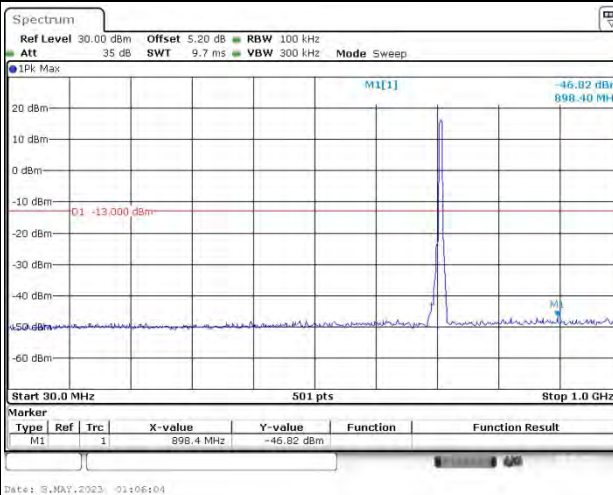
Lowest



Middle



Highest

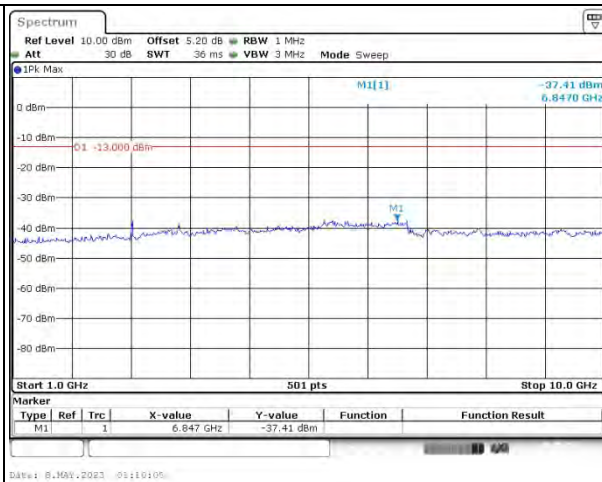
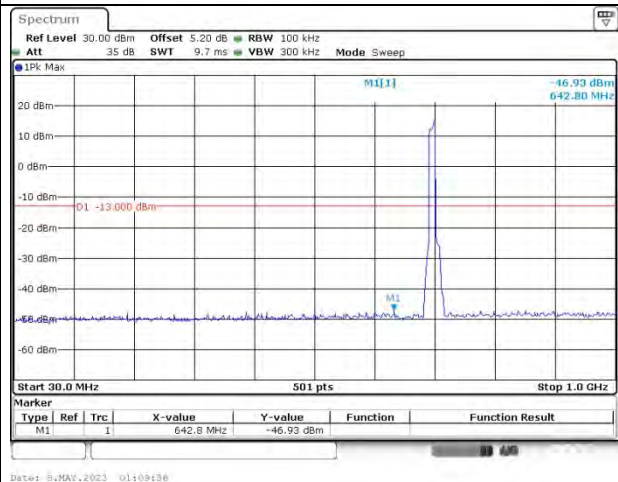


## Spurious Emissions at Antenna Terminal

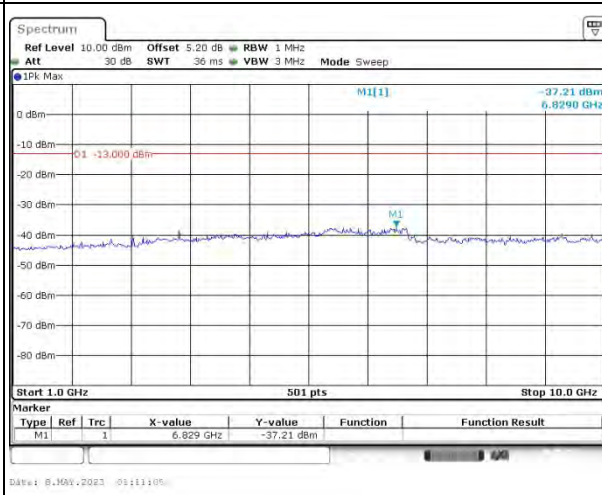
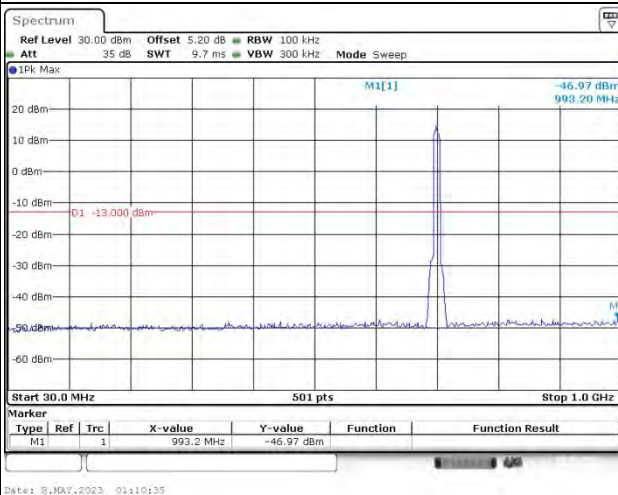
Channel

10MHz Bandwidth QPSK

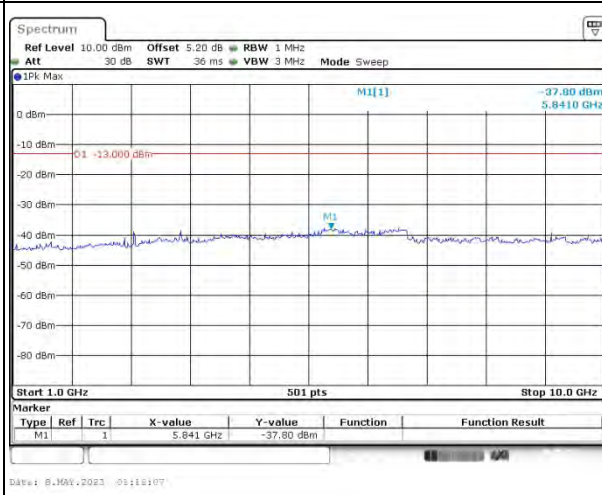
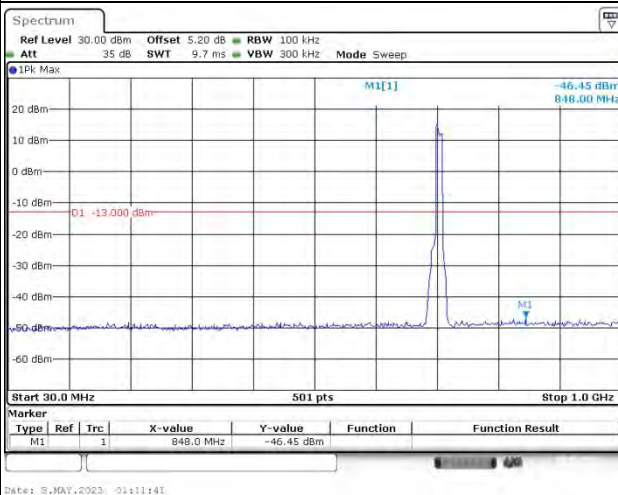
Lowest



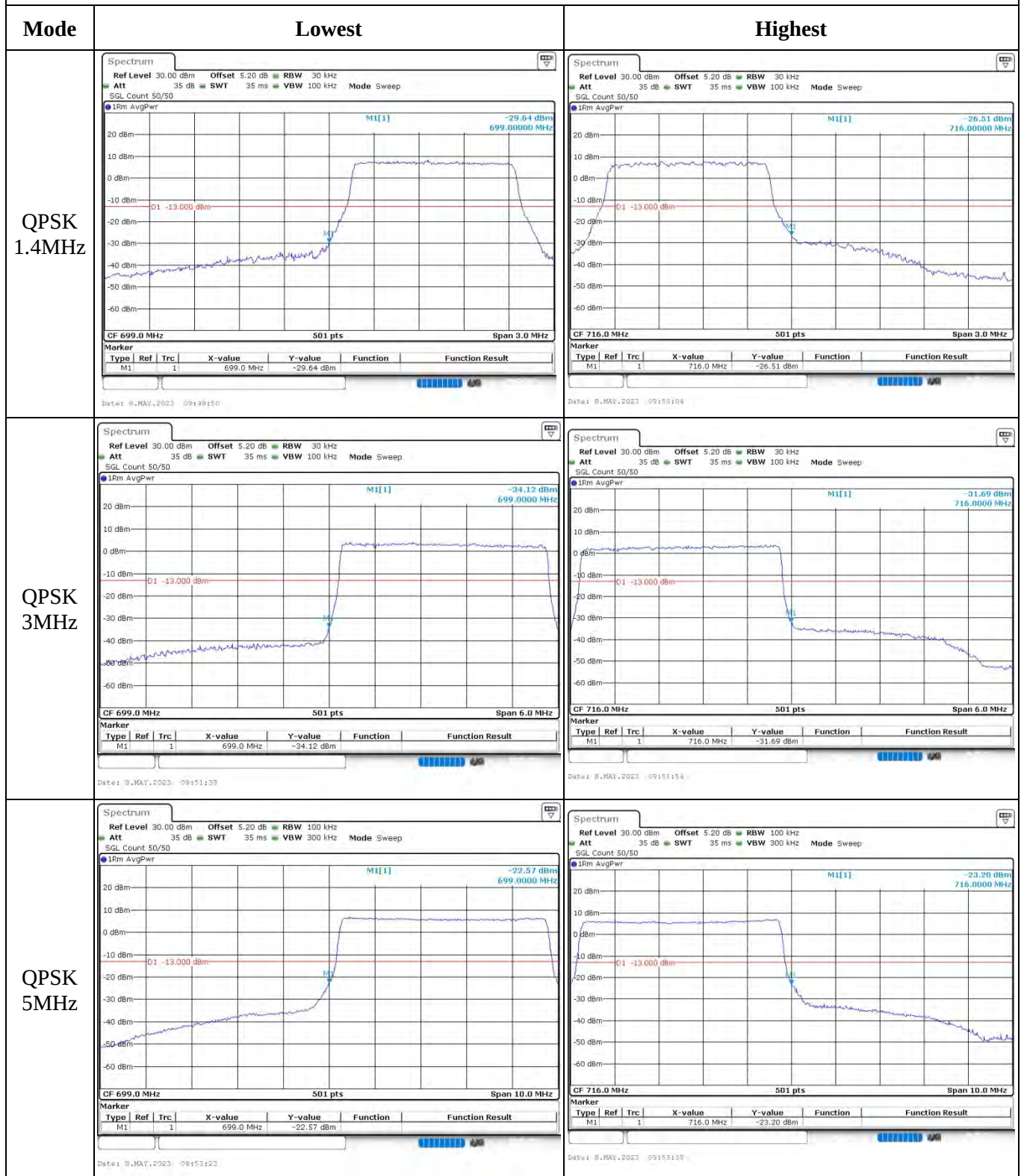
Middle



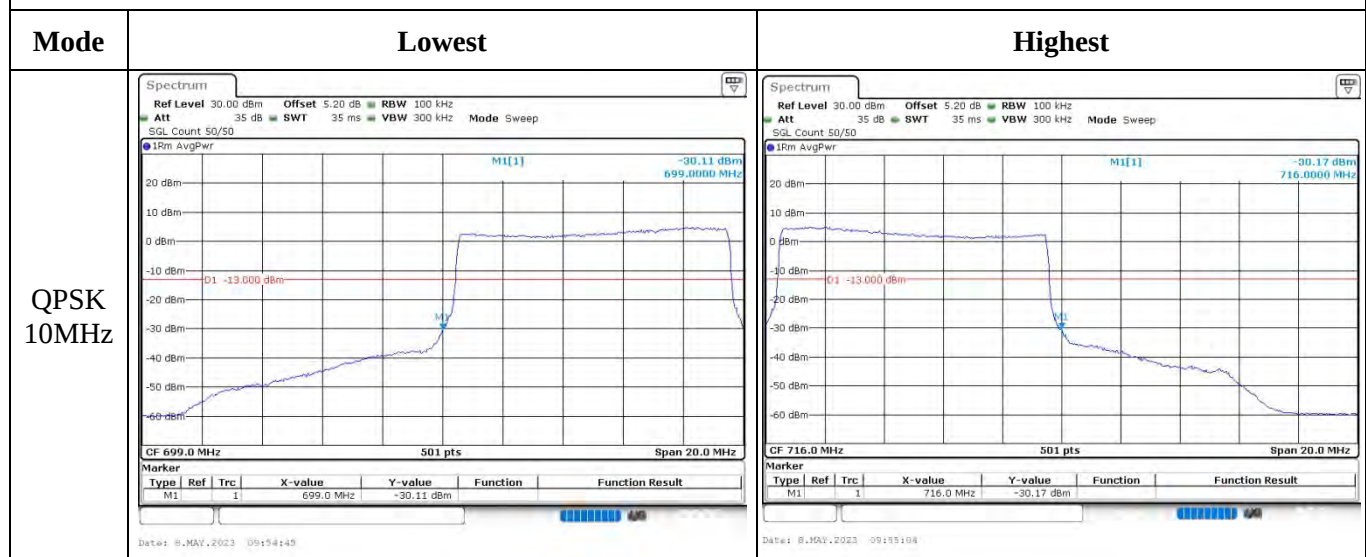
Highest



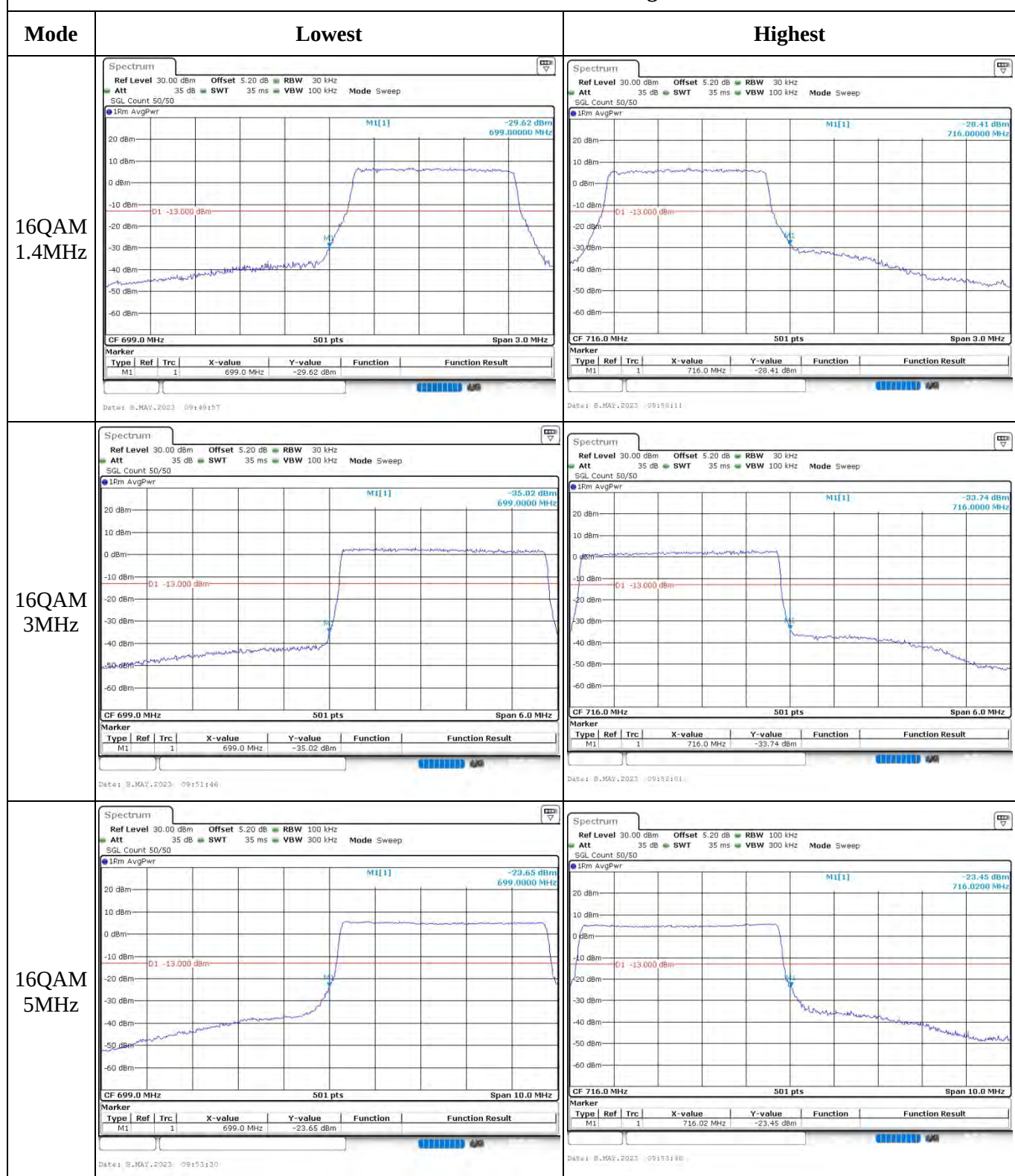
## Out of band emission, Band Edge



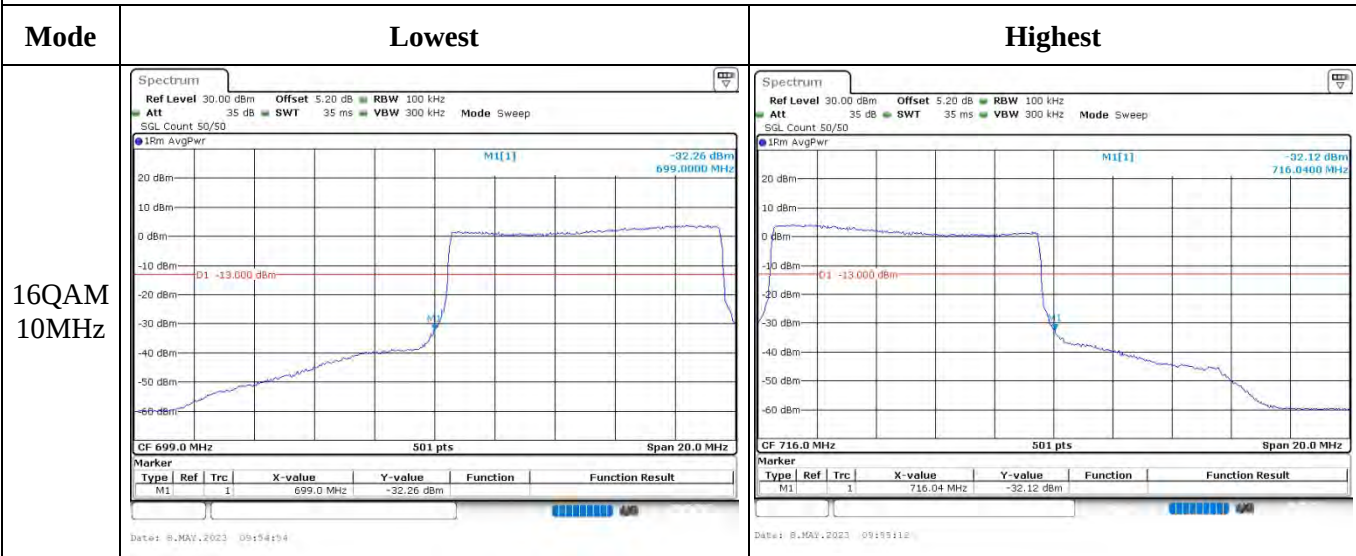
### Out of band emission, Band Edge



## Out of band emission, Band Edge



Out of band emission, Band Edge



**4.11 Antenna Port Test Data and Results for LTE Band 17**

|                |             |              |                    |
|----------------|-------------|--------------|--------------------|
| Serial Number: | 250W-1      | Test Date:   | 2023/5/6~2023/5/17 |
| Test Site:     | RF          | Test Mode:   | Transmitting       |
| Tester:        | George Chen | Test Result: | Pass               |

**Environmental Conditions:**

|                      |           |                           |       |                        |             |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|
| Temperature:<br>(°C) | 23.2~26.1 | Relative Humidity:<br>(%) | 39~58 | ATM Pressure:<br>(kPa) | 100.5~102.3 |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|

**Test Equipment List and Details:**

| Manufacturer  | Description                         | Model      | Serial Number   | Calibration Date | Calibration Due Date |
|---------------|-------------------------------------|------------|-----------------|------------------|----------------------|
| R&S           | Spectrum Analyzer                   | FSV40      | 101474          | 2022-07-15       | 2023-07-14           |
| zhuoxiang     | Coaxial Cable                       | SMA-178    | 211001          | Each time        | N/A                  |
| YINSAIGE      | Coaxial Cable                       | SS402      | SJ0100001       | Each time        | N/A                  |
| Mini-Circuits | DC Block                            | BLK-18-S+  | 1554403         | Each time        | N/A                  |
| Weinschel     | Power Splitter                      | 1515       | RA914           | Each time        | N/A                  |
| R&S           | Wideband Radio Communication Tester | CMW500     | 149218          | 2022-07-15       | 2023-07-14           |
| BACL          | TEMP&HUMI Test Chamber              | BTH-150-40 | 30174           | 2022-09-29       | 2023-09-28           |
| UNI-T         | Multimeter                          | UT39A+     | C210582554      | N/A              | N/A                  |
| ZHAOXIN       | DC Power Supply                     | RXN-6010D  | 21R6010D0912386 | 2022-07-15       | 2023-07-14           |

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Frequency For Each Mode:**

| Operation Bandwidth | Lowest Frequency (MHz) | Middle Frequency (MHz) | Highest Frequency (MHz) |
|---------------------|------------------------|------------------------|-------------------------|
| 5MHz                | 706.5                  | 710                    | 713.5                   |
| 10MHz               | 709                    | 710                    | 711                     |

**Test Data:****FCC§2.1046;§ 27.50(c) (10)****RF Output Power:**

| Test Bandwidth & Modulation | Resource Block & RB offset | Conducted Average Output Power(dBm) |                |                 | Maximum ERP (dBm) | ERP Limit (dBm) |
|-----------------------------|----------------------------|-------------------------------------|----------------|-----------------|-------------------|-----------------|
|                             |                            | Lowest Channel                      | Middle Channel | Highest Channel |                   |                 |
| 5MHz QPSK                   | RB1#0                      | 20.14                               | 20.06          | 20.05           | 15.16             | 34.77           |
|                             | RB1#13                     | 20.21                               | 20.14          | 20.17           |                   |                 |
|                             | RB1#24                     | 20.12                               | 20.07          | 20.04           |                   |                 |
|                             | RB15#0                     | 19.03                               | 19.38          | 19.21           |                   |                 |
|                             | RB15#10                    | 19.15                               | 19.08          | 19.31           |                   |                 |
|                             | RB25#0                     | 19.11                               | 19.18          | 19.24           |                   |                 |
| 5MHz 16QAM                  | RB1#0                      | 19.42                               | 19.14          | 19              | 14.42             | 34.77           |
|                             | RB1#13                     | 19.47                               | 19.26          | 19.08           |                   |                 |
|                             | RB1#24                     | 19.42                               | 19.15          | 18.95           |                   |                 |
|                             | RB15#0                     | 18.07                               | 18.47          | 18.29           |                   |                 |
|                             | RB15#10                    | 18.18                               | 18.16          | 18.42           |                   |                 |
|                             | RB25#0                     | 18.11                               | 18.31          | 18.37           |                   |                 |
| 10MHz QPSK                  | RB1#0                      | 20.2                                | 20.23          | 20.22           | 15.3              | 34.77           |
|                             | RB1#25                     | 20.35                               | 20.34          | 20.34           |                   |                 |
|                             | RB1#49                     | 20.21                               | 20.19          | 20.26           |                   |                 |
|                             | RB25#0                     | 19.18                               | 19.38          | 19.58           |                   |                 |
|                             | RB25#25                    | 19.13                               | 19.2           | 19.38           |                   |                 |
|                             | RB50#0                     | 19.16                               | 19.34          | 19.5            |                   |                 |
| 10MHz 16QAM                 | RB1#0                      | 19.76                               | 19.35          | 19.18           | 14.89             | 34.77           |
|                             | RB1#25                     | 19.94                               | 19.52          | 19.4            |                   |                 |
|                             | RB1#49                     | 19.81                               | 19.41          | 19.2            |                   |                 |
|                             | RB25#0                     | 18.29                               | 18.47          | 18.68           |                   |                 |
|                             | RB25#25                    | 18.21                               | 18.3           | 18.55           |                   |                 |
|                             | RB50#0                     | 18.26                               | 18.37          | 18.57           |                   |                 |

Note:

ERP= Conducted Power(dBm) - Lc(dB) + G<sub>T</sub>(dBd)G<sub>T</sub>(dBd)=G<sub>T</sub>(dBi)-2.15**Result:****Pass****Peak-to-average Ratio(PAR)**

| Test Bandwidth & Modulation | Resource Block & RB offset | Peak-to-average Ratio(dB) |                |                 | Limit (dB)  |
|-----------------------------|----------------------------|---------------------------|----------------|-----------------|-------------|
|                             |                            | Lowest Channel            | Middle Channel | Highest Channel |             |
| 10MHz QPSK                  | RB1#0                      | 4.81                      | 4.43           | 4.46            | 13          |
|                             | RB50#0                     | 5.04                      | 5.13           | 5.22            | 13          |
| 10MHz 16QAM                 | RB1#0                      | 5.8                       | 5.16           | 5.36            | 13          |
|                             | RB50#0                     | 6.03                      | 6.06           | 6.06            | 13          |
|                             |                            |                           |                | <b>Result:</b>  | <b>Pass</b> |

**FCC §2.1049, §27.53:Occupied Bandwidth**

| Operation Mode | 99% Occupied Bandwidth (MHz) |                |              | 26 dB Occupied Bandwidth (MHz) |                |              |
|----------------|------------------------------|----------------|--------------|--------------------------------|----------------|--------------|
|                | Low Channel                  | Middle channel | High Channel | Low Channel                    | Middle Channel | High Channel |
| 5MHz QPSK      | 4.531                        | 4.531          | 4.551        | 5.88                           | 5.14           | 5.22         |
| 5MHz 16QAM     | 4.511                        | 4.531          | 4.531        | 5.66                           | 5.2            | 5.3          |
| 10MHz QPSK     | 8.982                        | 8.942          | 8.982        | 9.92                           | 9.72           | 9.92         |
| 10MHz 16QAM    | 8.942                        | 8.942          | 8.982        | 9.8                            | 9.72           | 9.96         |

Note: The test plots please refer to the Plots of Occupied Bandwidth

**FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal**

|                |                                                                                        |
|----------------|----------------------------------------------------------------------------------------|
| <b>Result:</b> | <b>Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.</b> |
|----------------|----------------------------------------------------------------------------------------|

**FCC §2.1051, §27.53:Out of band emission, Band Edge**

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| <b>Result:</b> | <b>Pass, Please refer to the test plots of Out of band emission, Band Edge.</b> |
|----------------|---------------------------------------------------------------------------------|

**FCC §2.1055, §27.54: Frequency Stability**

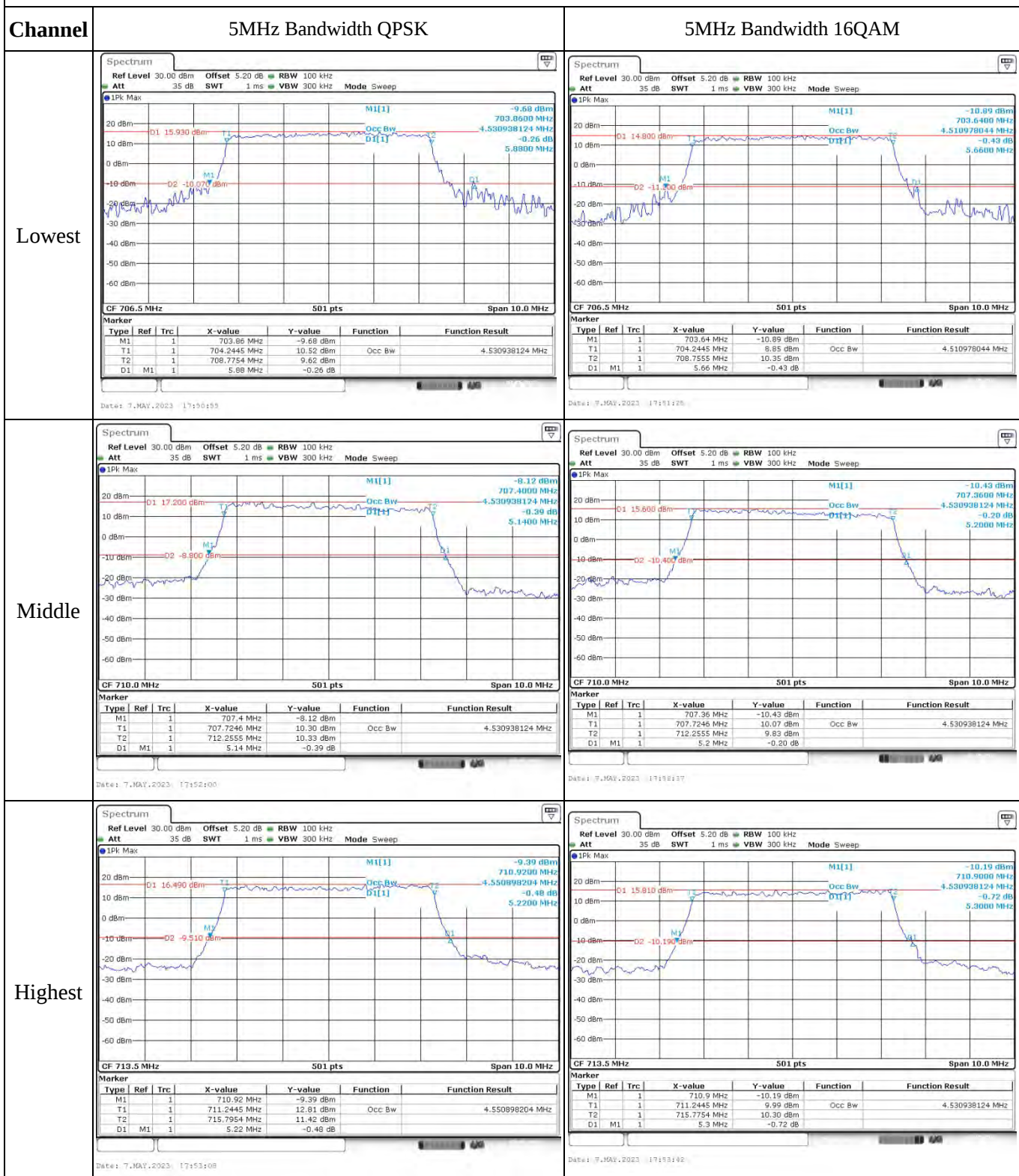
| Test Mode:                          | 10M QPSK         | Test Channel: Lowest for Lower Edge,Highest for Upper Edge |                  |        |                  |        |
|-------------------------------------|------------------|------------------------------------------------------------|------------------|--------|------------------|--------|
| Test Item                           | Temperature (°C) | Voltage (V <sub>DC</sub> )                                 | Lower Edge (MHz) |        | Upper Edge (MHz) |        |
|                                     |                  |                                                            | Result           | Limit  | Result           | Limit  |
| Frequency Stability vs. Temperature | -30              | 3.85                                                       | 704.471          | 704.00 | 715.508          | 716.00 |
|                                     | -20              | 3.85                                                       | 704.418          | 704.00 | 715.472          | 716.00 |
|                                     | -10              | 3.85                                                       | 704.496          | 704.00 | 715.472          | 716.00 |
|                                     | 0                | 3.85                                                       | 704.452          | 704.00 | 715.480          | 716.00 |
|                                     | 10               | 3.85                                                       | 704.408          | 704.00 | 715.470          | 716.00 |
|                                     | 20               | 3.85                                                       | 704.489          | 704.00 | 715.471          | 716.00 |
|                                     | 30               | 3.85                                                       | 704.488          | 704.00 | 715.514          | 716.00 |
|                                     | 40               | 3.85                                                       | 704.406          | 704.00 | 715.431          | 716.00 |
| Frequency Stability vs. Voltage     | 50               | 3.85                                                       | 704.441          | 704.00 | 715.500          | 716.00 |
|                                     | 20               | 3.5                                                        | 704.410          | 704.00 | 715.466          | 716.00 |
|                                     | 20               | 4.4                                                        | 704.419          | 704.00 | 715.478          | 716.00 |
| <b>Result:</b>                      |                  |                                                            |                  |        | <b>Pass</b>      |        |

| Test Mode:                          | 10M 16QAM        | Test Channel: Lowest for Lower Edge,Highest for Upper Edge |                  |        |                  |        |
|-------------------------------------|------------------|------------------------------------------------------------|------------------|--------|------------------|--------|
| Test Item                           | Temperature (°C) | Voltage (V <sub>DC</sub> )                                 | Lower Edge (MHz) |        | Upper Edge (MHz) |        |
|                                     |                  |                                                            | Result           | Limit  | Result           | Limit  |
| Frequency Stability vs. Temperature | -30              | 3.85                                                       | 704.501          | 704.00 | 715.495          | 716.00 |
|                                     | -20              | 3.85                                                       | 704.539          | 704.00 | 715.498          | 716.00 |
|                                     | -10              | 3.85                                                       | 704.596          | 704.00 | 715.495          | 716.00 |
|                                     | 0                | 3.85                                                       | 704.520          | 704.00 | 715.509          | 716.00 |

|                                       |    |      |         |        |                |             |
|---------------------------------------|----|------|---------|--------|----------------|-------------|
|                                       | 10 | 3.85 | 704.539 | 704.00 | 715.423        | 716.00      |
|                                       | 20 | 3.85 | 704.529 | 704.00 | 715.471        | 716.00      |
|                                       | 30 | 3.85 | 704.528 | 704.00 | 715.466        | 716.00      |
|                                       | 40 | 3.85 | 704.544 | 704.00 | 715.501        | 716.00      |
|                                       | 50 | 3.85 | 704.582 | 704.00 | 715.510        | 716.00      |
| Frequency<br>Stability vs.<br>Voltage | 20 | 3.5  | 704.593 | 704.00 | 715.503        | 716.00      |
|                                       | 20 | 4.4  | 704.556 | 704.00 | 715.478        | 716.00      |
|                                       |    |      |         |        | <b>Result:</b> | <b>Pass</b> |

**Test Plots**(Note: The 5.2 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):

### Occupied Bandwidth



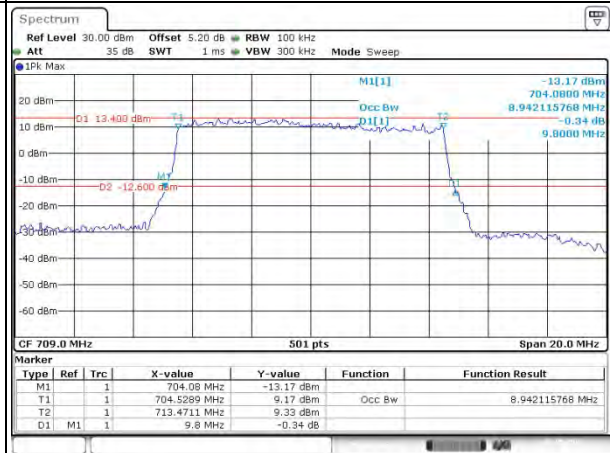
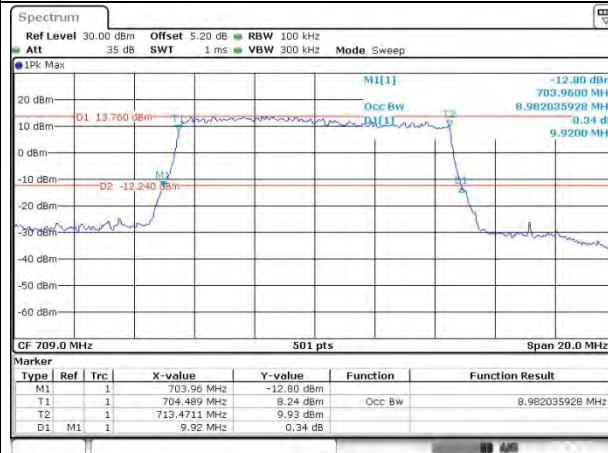
## Occupied Bandwidth

## Channel

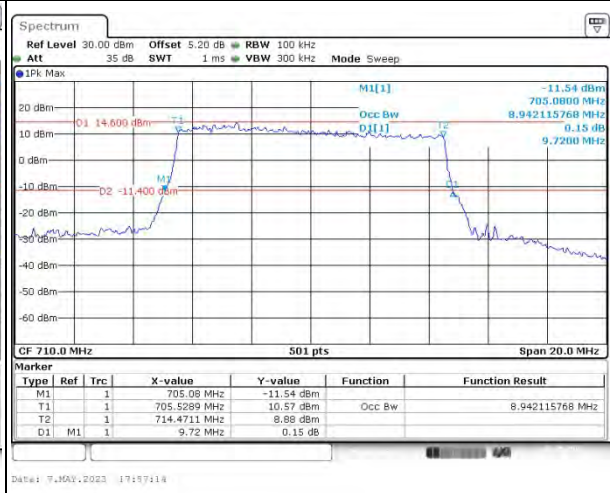
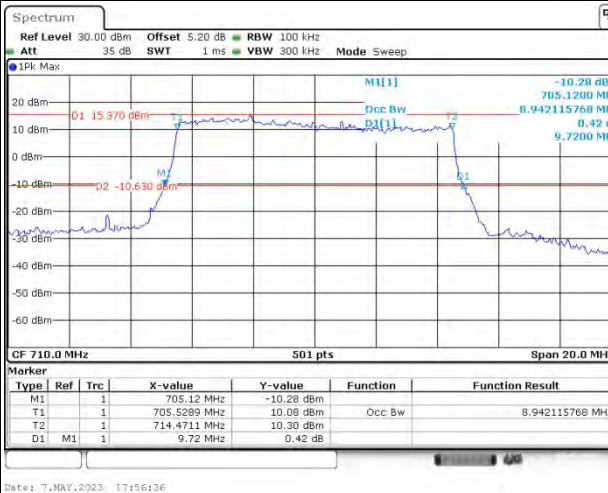
## 10MHz Bandwidth QPSK

## 10MHz Bandwidth 16QAM

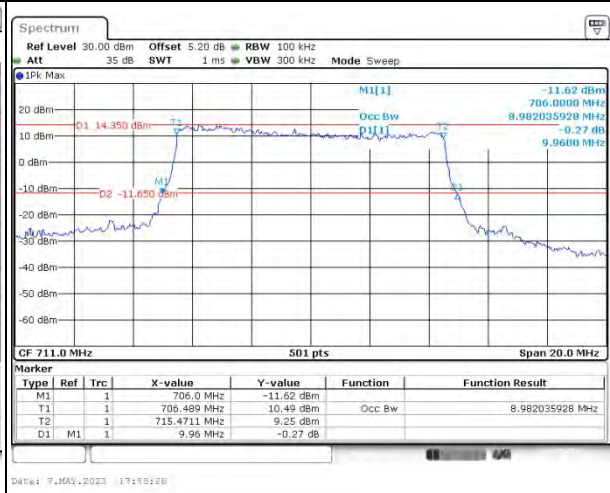
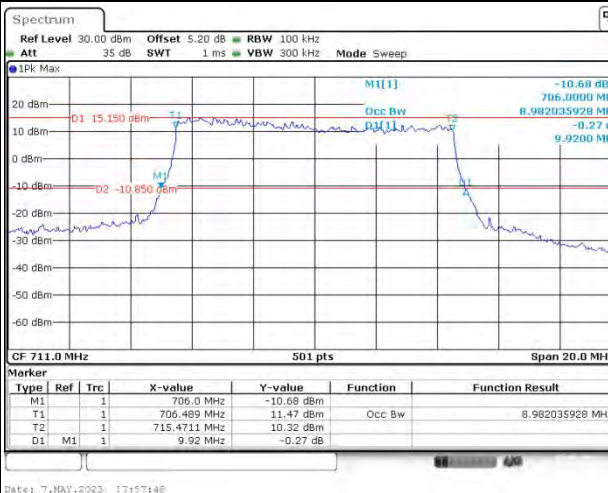
## Lowest



## Middle



## Highest

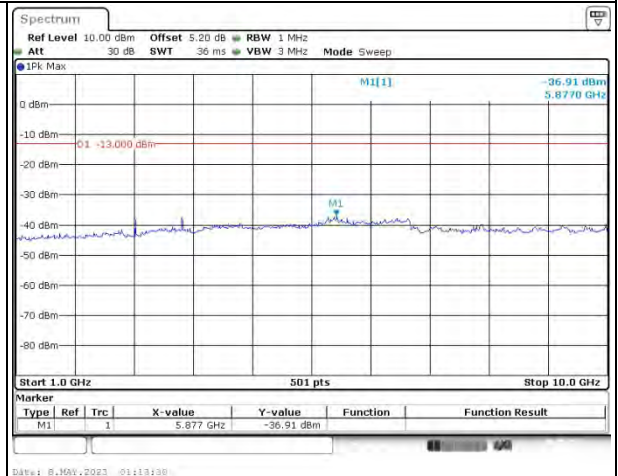
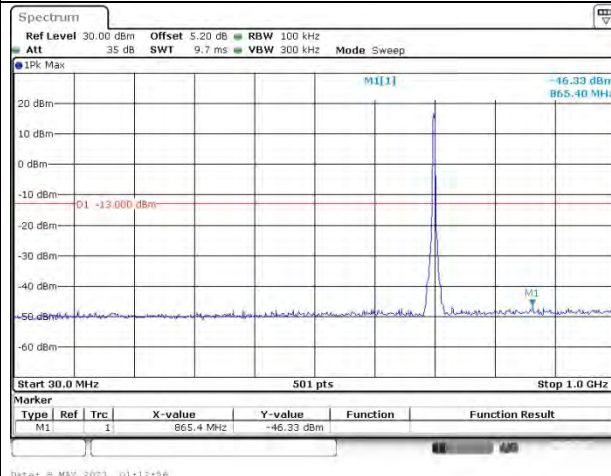


## Spurious Emissions at Antenna Terminal

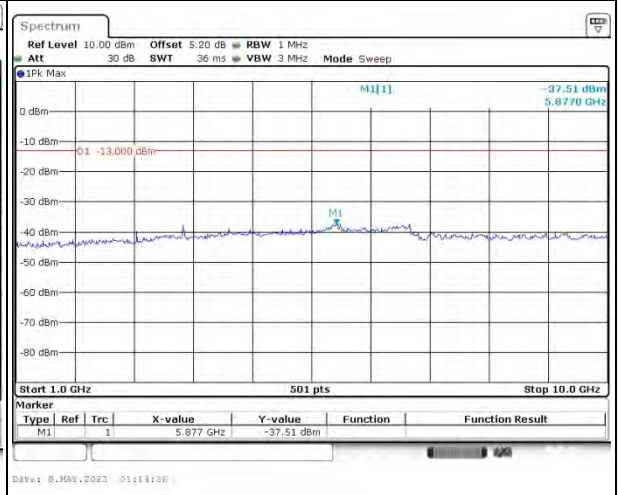
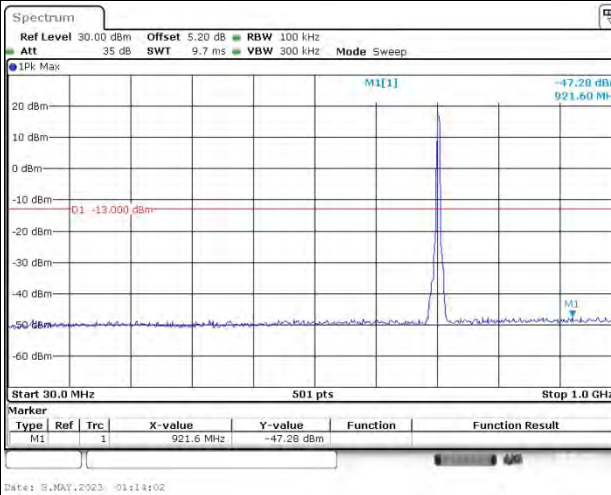
Channel

5MHz Bandwidth QPSK

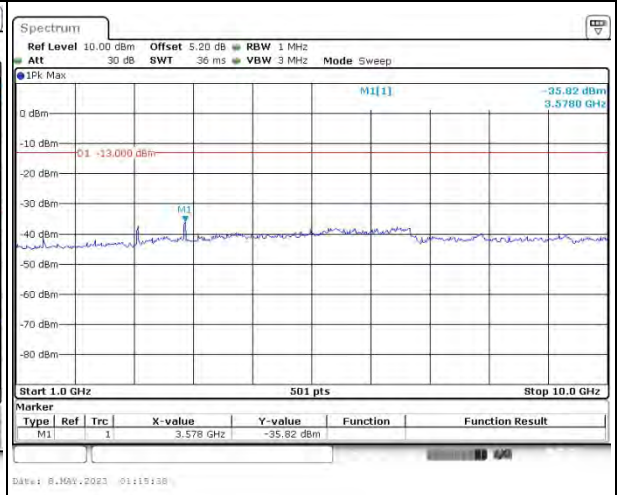
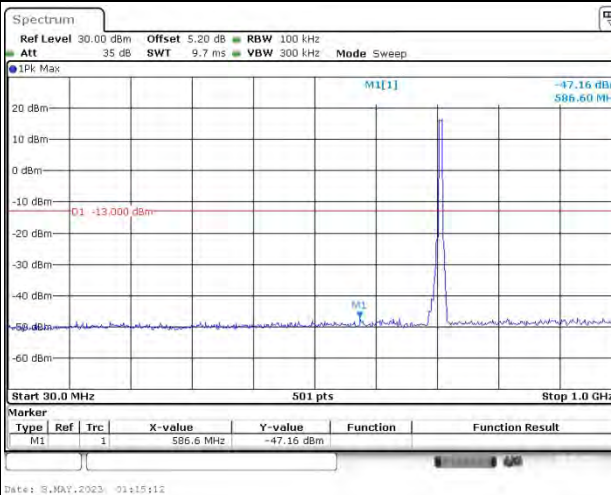
Lowest



Middle



Highest

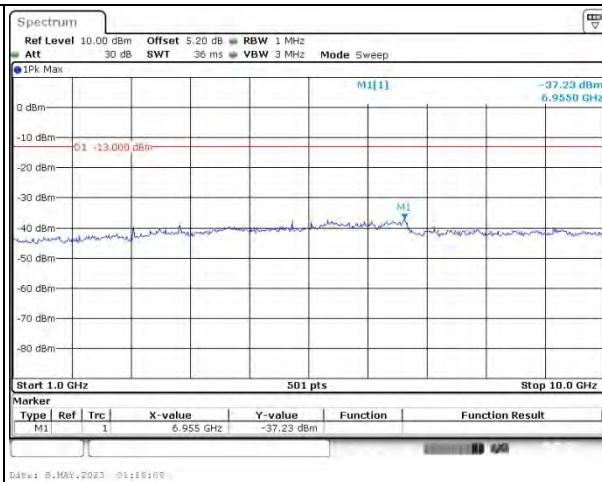
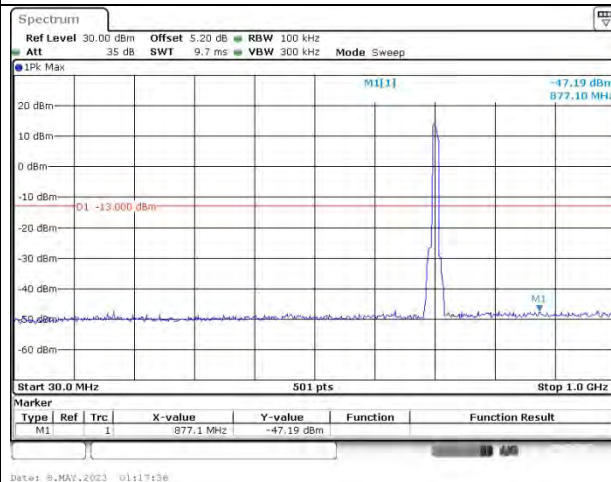


## Spurious Emissions at Antenna Terminal

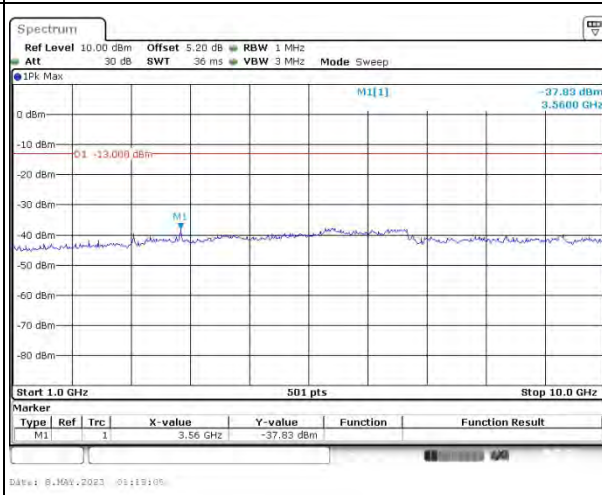
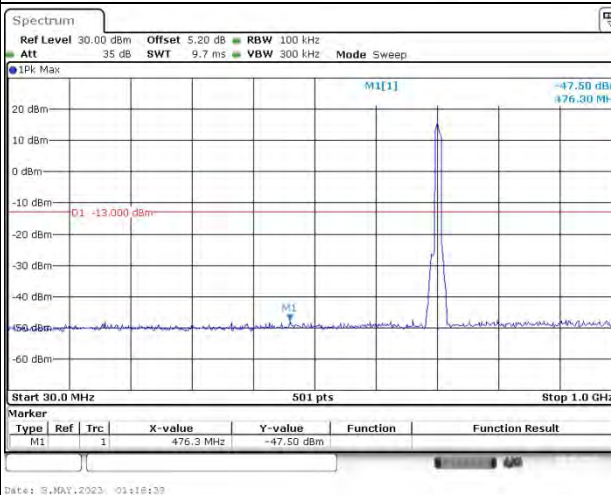
Channel

10MHz Bandwidth QPSK

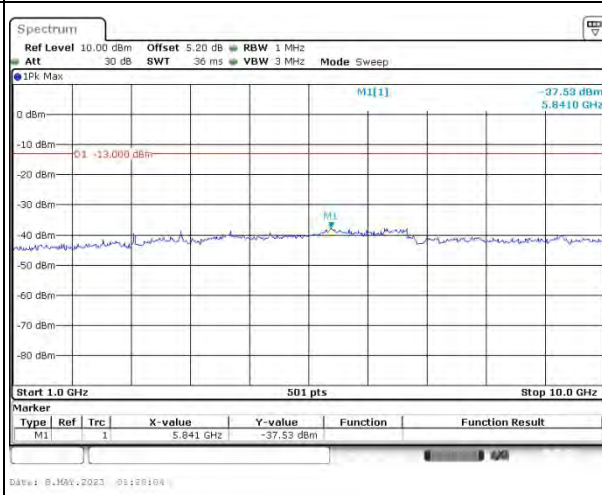
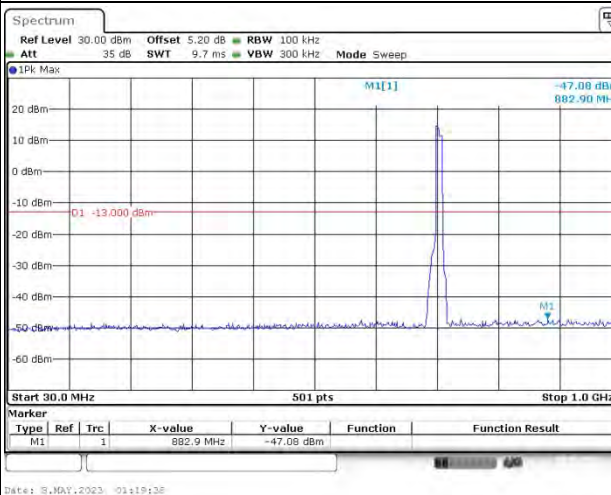
Lowest



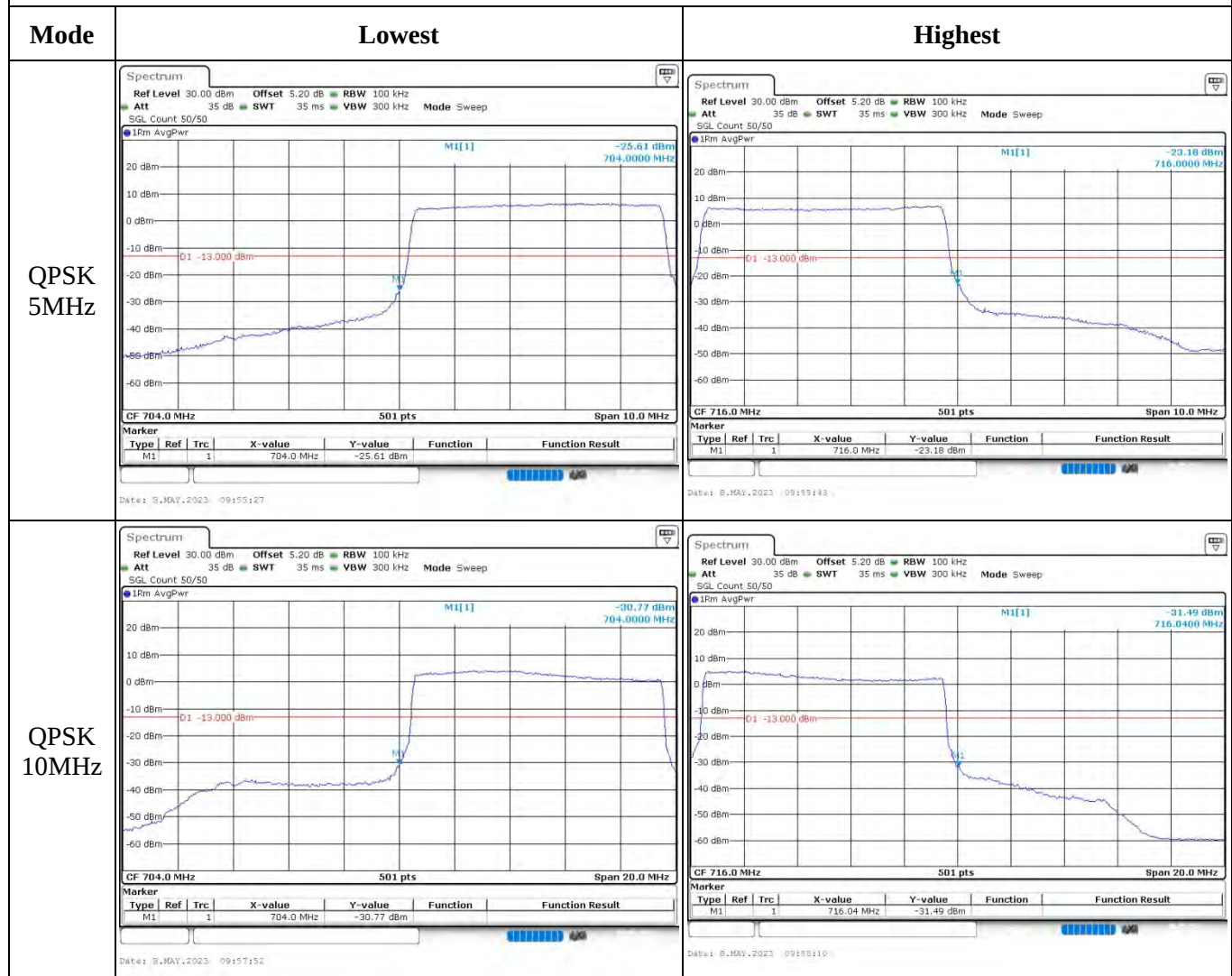
Middle



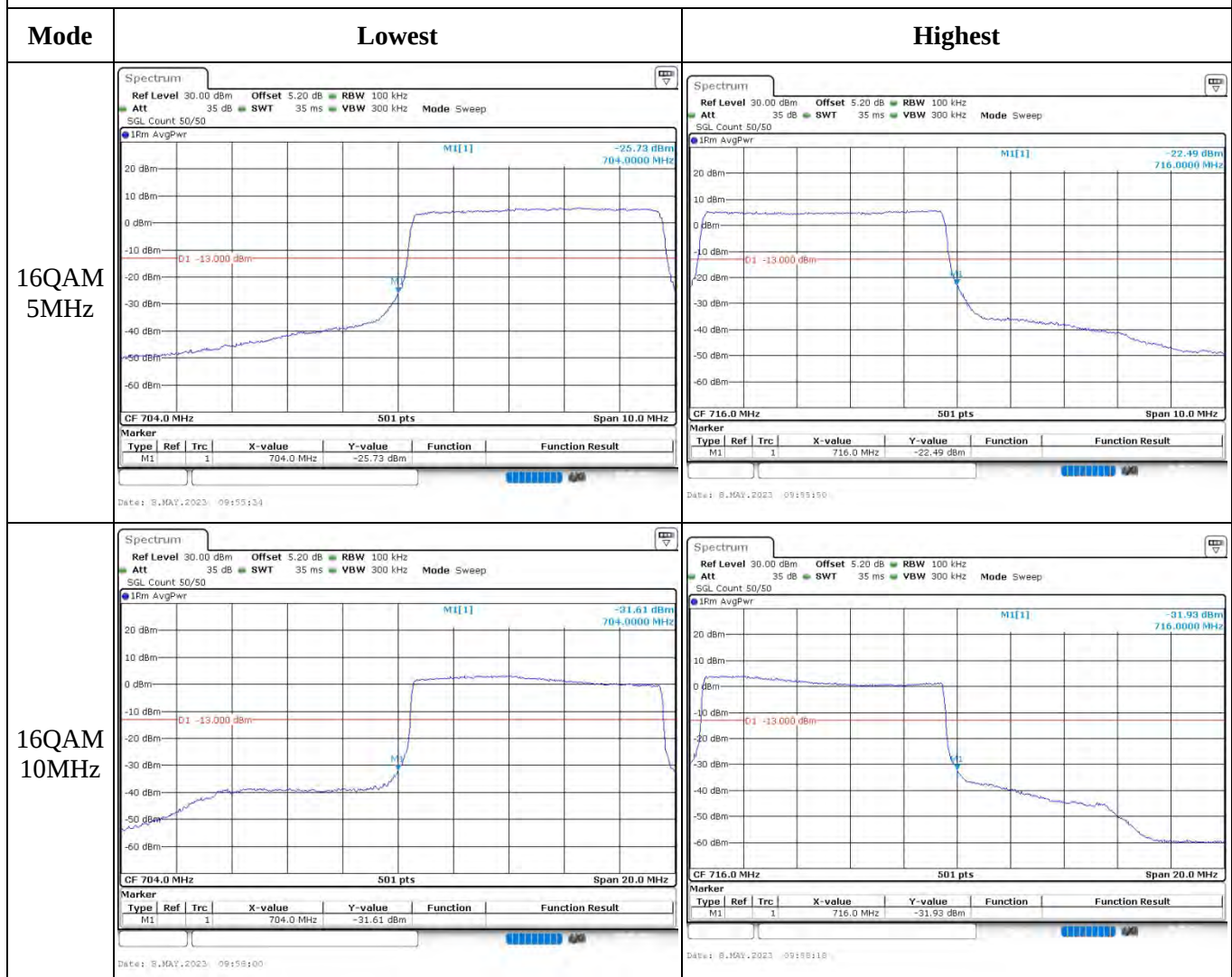
Highest



## Out of band emission, Band Edge



## Out of band emission, Band Edge



**4.12 Antenna Port Test Data and Results for LTE Band 25**

|                |             |              |                    |
|----------------|-------------|--------------|--------------------|
| Serial Number: | 250W-1      | Test Date:   | 2023/5/6~2023/5/17 |
| Test Site:     | RF          | Test Mode:   | Transmitting       |
| Tester:        | George Chen | Test Result: | Pass               |

**Environmental Conditions:**

|                      |           |                           |       |                        |             |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|
| Temperature:<br>(°C) | 23.2~26.1 | Relative Humidity:<br>(%) | 39~58 | ATM Pressure:<br>(kPa) | 100.5~102.3 |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|

**Test Equipment List and Details:**

| Manufacturer  | Description                         | Model      | Serial Number   | Calibration Date | Calibration Due Date |
|---------------|-------------------------------------|------------|-----------------|------------------|----------------------|
| R&S           | Spectrum Analyzer                   | FSV40      | 101474          | 2022-07-15       | 2023-07-14           |
| zhuoxiang     | Coaxial Cable                       | SMA-178    | 211001          | Each time        | N/A                  |
| YINSAIGE      | Coaxial Cable                       | SS402      | SJ0100001       | Each time        | N/A                  |
| Mini-Circuits | DC Block                            | BLK-18-S+  | 1554403         | Each time        | N/A                  |
| Weinschel     | Power Splitter                      | 1515       | RA914           | Each time        | N/A                  |
| R&S           | Wideband Radio Communication Tester | CMW500     | 149218          | 2022-07-15       | 2023-07-14           |
| BACL          | TEMP&HUMI Test Chamber              | BTH-150-40 | 30174           | 2022-09-29       | 2023-09-28           |
| UNI-T         | Multimeter                          | UT39A+     | C210582554      | N/A              | N/A                  |
| ZHAOXIN       | DC Power Supply                     | RXN-6010D  | 21R6010D0912386 | 2022-07-15       | 2023-07-14           |

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Frequency For Each Mode:**

| Operation Bandwidth | Lowest Frequency (MHz) | Middle Frequency (MHz) | Highest Frequency (MHz) |
|---------------------|------------------------|------------------------|-------------------------|
| 1.4MHz              | 1850.7                 | 1882.5                 | 1914.3                  |
| 3MHz                | 1851.5                 | 1882.5                 | 1913.5                  |
| 5MHz                | 1852.5                 | 1882.5                 | 1912.5                  |
| 10MHz               | 1855                   | 1882.5                 | 1910                    |
| 15MHz               | 1857.5                 | 1882.5                 | 1907.5                  |
| 20MHz               | 1860                   | 1882.5                 | 1905                    |

**Test Data:****FCC§2.1046;§ 24.232****RF Output Power:**

| Test Bandwidth & Modulation | Resource Block & RB offset | Conducted Average Output Power(dBm) |                |                 | Maximum EIRP (dBm) | EIRP Limit (dBm) |
|-----------------------------|----------------------------|-------------------------------------|----------------|-----------------|--------------------|------------------|
|                             |                            | Lowest Channel                      | Middle Channel | Highest Channel |                    |                  |
| 1.4MHz QPSK                 | RB1#0                      | 23.05                               | 22.88          | 22.61           | 24.22              | 33               |
|                             | RB1#3                      | 23.18                               | 23.11          | 22.35           |                    |                  |
|                             | RB1#5                      | 23.06                               | 22.89          | 22.12           |                    |                  |
|                             | RB3#0                      | 23.07                               | 22.86          | 21.9            |                    |                  |
|                             | RB3#3                      | 23.1                                | 22.74          | 21.87           |                    |                  |
|                             | RB6#0                      | 22.17                               | 21.81          | 21.14           |                    |                  |
| 1.4MHz 16QAM                | RB1#0                      | 22.19                               | 21.87          | 20.84           | 23.35              | 33               |
|                             | RB1#3                      | 22.31                               | 22.09          | 21.01           |                    |                  |
|                             | RB1#5                      | 22.16                               | 21.89          | 20.85           |                    |                  |
|                             | RB3#0                      | 22.06                               | 21.98          | 21.02           |                    |                  |
|                             | RB3#3                      | 22.13                               | 21.91          | 21.04           |                    |                  |
|                             | RB6#0                      | 21.12                               | 20.95          | 20.11           |                    |                  |
| 3MHz QPSK                   | RB1#0                      | 23.09                               | 22.98          | 22.64           | 24.14              | 33               |
|                             | RB1#8                      | 23.1                                | 22.98          | 22.72           |                    |                  |
|                             | RB1#14                     | 23.09                               | 22.97          | 22.28           |                    |                  |
|                             | RB6#0                      | 22.11                               | 21.95          | 21.16           |                    |                  |
|                             | RB6#9                      | 22.11                               | 21.92          | 21.24           |                    |                  |
|                             | RB15#0                     | 22.11                               | 22             | 21.12           |                    |                  |
| 3MHz 16QAM                  | RB1#0                      | 22.6                                | 22.13          | 21.25           | 23.67              | 33               |
|                             | RB1#8                      | 22.63                               | 22.09          | 21.16           |                    |                  |
|                             | RB1#14                     | 22.62                               | 22.06          | 21.03           |                    |                  |
|                             | RB6#0                      | 21.17                               | 21             | 20.2            |                    |                  |
|                             | RB6#9                      | 21.19                               | 21.04          | 20.17           |                    |                  |
|                             | RB15#0                     | 21.17                               | 20.96          | 20.49           |                    |                  |
| 5MHz QPSK                   | RB1#0                      | 23.01                               | 22.94          | 22.51           | 24.21              | 33               |
|                             | RB1#13                     | 23.17                               | 23.06          | 22.66           |                    |                  |
|                             | RB1#24                     | 23.07                               | 22.92          | 22.15           |                    |                  |
|                             | RB15#0                     | 22.19                               | 22.05          | 21.21           |                    |                  |
|                             | RB15#10                    | 22.22                               | 21.98          | 21.25           |                    |                  |
|                             | RB25#0                     | 22.16                               | 22.02          | 21.48           |                    |                  |
| 5MHz 16QAM                  | RB1#0                      | 21.93                               | 22.22          | 21.21           | 23.35              | 33               |
|                             | RB1#13                     | 22.11                               | 22.31          | 21.31           |                    |                  |
|                             | RB1#24                     | 21.98                               | 22.18          | 21.04           |                    |                  |
|                             | RB15#0                     | 21.22                               | 21.1           | 20.35           |                    |                  |
|                             | RB15#10                    | 21.26                               | 21.03          | 20.33           |                    |                  |
|                             | RB25#0                     | 21.25                               | 21.05          | 20.53           |                    |                  |
| 10MHz QPSK                  | RB1#0                      | 23.05                               | 22.99          | 22.55           | 24.29              | 33               |
|                             | RB1#25                     | 23.25                               | 23.12          | 22.44           |                    |                  |
|                             | RB1#49                     | 23.05                               | 22.92          | 22.16           |                    |                  |

|             |         |       |       |       |       |    |
|-------------|---------|-------|-------|-------|-------|----|
|             | RB25#0  | 22.15 | 22.02 | 21.16 |       |    |
|             | RB25#25 | 22.22 | 21.89 | 21.03 |       |    |
|             | RB50#0  | 22.2  | 21.82 | 21.24 |       |    |
| 10MHz 16QAM | RB1#0   | 22.23 | 21.94 | 21.62 | 23.47 | 33 |
|             | RB1#25  | 22.43 | 22.11 | 21.84 |       |    |
|             | RB1#49  | 22.22 | 21.83 | 21.34 |       |    |
|             | RB25#0  | 21.14 | 21.07 | 20.34 |       |    |
|             | RB25#25 | 21.24 | 21.07 | 20.25 |       |    |
|             | RB50#0  | 21.18 | 21.01 | 20.49 |       |    |
| 15MHz QPSK  | RB1#0   | 22.95 | 22.89 | 22.56 | 24.10 | 33 |
|             | RB1#38  | 23.06 | 22.95 | 22.31 |       |    |
|             | RB1#74  | 23.02 | 22.49 | 22.09 |       |    |
|             | RB36#0  | 22.14 | 21.73 | 21.27 |       |    |
|             | RB36#39 | 22.25 | 21.78 | 21.22 |       |    |
|             | RB75#0  | 22.2  | 21.61 | 21.25 |       |    |
| 15MHz 16QAM | RB1#0   | 22.49 | 21.81 | 21.4  | 23.63 | 33 |
|             | RB1#38  | 22.59 | 22.09 | 21.6  |       |    |
|             | RB1#74  | 22.49 | 21.58 | 21.1  |       |    |
|             | RB36#0  | 21.11 | 20.84 | 20.27 |       |    |
|             | RB36#39 | 21.22 | 20.98 | 20.21 |       |    |
|             | RB75#0  | 21.18 | 21    | 20.51 |       |    |
| 20MHz QPSK  | RB1#0   | 22.79 | 22.72 | 22.32 | 24.26 | 33 |
|             | RB1#50  | 23.22 | 23.01 | 22.36 |       |    |
|             | RB1#99  | 22.86 | 22.23 | 21.85 |       |    |
|             | RB50#0  | 21.98 | 21.85 | 21.24 |       |    |
|             | RB50#50 | 22.15 | 21.6  | 21.08 |       |    |
|             | RB100#0 | 22.08 | 21.61 | 21.17 |       |    |
| 20MHz 16QAM | RB1#0   | 22.01 | 21.86 | 21.27 | 23.44 | 33 |
|             | RB1#50  | 22.4  | 22.39 | 21.51 |       |    |
|             | RB1#99  | 22.02 | 21.73 | 21    |       |    |
|             | RB50#0  | 20.98 | 20.94 | 20.31 |       |    |
|             | RB50#50 | 21.14 | 20.65 | 20.34 |       |    |
|             | RB100#0 | 21.07 | 20.9  | 20.33 |       |    |

Note: EIRP=Conducted Power(dBm) - Lc(dB) + Gr(dBi)

**Result:****Pass****Peak-to-average Ratio(PAR)**

| Test Bandwidth & Modulation | Resource Block & RB offset | Peak-to-average Ratio(dB) |                |                 | Limit (dB)  |
|-----------------------------|----------------------------|---------------------------|----------------|-----------------|-------------|
|                             |                            | Lowest Channel            | Middle Channel | Highest Channel |             |
| 20MHz QPSK                  | RB1#0                      | 3.88                      | 4.09           | 3.74            | 13          |
|                             | RB100#0                    | 4.87                      | 4.96           | 4.49            | 13          |
| 20MHz 16QAM                 | RB1#0                      | 4.87                      | 4.93           | 4.67            | 13          |
|                             | RB100#0                    | 5.83                      | 5.91           | 5.51            | 13          |
|                             |                            |                           |                | <b>Result:</b>  | <b>Pass</b> |

| <b>FCC §2.1049, §24.238:Occupied Bandwidth</b>                       |                              |                |              |                                |                |              |
|----------------------------------------------------------------------|------------------------------|----------------|--------------|--------------------------------|----------------|--------------|
| Operation Mode                                                       | 99% Occupied Bandwidth (MHz) |                |              | 26 dB Occupied Bandwidth (MHz) |                |              |
|                                                                      | Low Channel                  | Middle channel | High Channel | Low Channel                    | Middle Channel | High Channel |
| 1.4MHz QPSK                                                          | 1.102                        | 1.102          | 1.12         | 1.302                          | 1.29           | 2.034        |
| 1.4MHz 16QAM                                                         | 1.096                        | 1.096          | 1.108        | 1.284                          | 1.29           | 1.578        |
| 3MHz QPSK                                                            | 2.683                        | 2.695          | 2.683        | 2.88                           | 2.88           | 2.988        |
| 3MHz 16QAM                                                           | 2.683                        | 2.683          | 2.683        | 2.892                          | 2.88           | 2.88         |
| 5MHz QPSK                                                            | 4.511                        | 4.531          | 4.551        | 5.2                            | 5.16           | 5.2          |
| 5MHz 16QAM                                                           | 4.551                        | 4.551          | 4.511        | 5.2                            | 5.24           | 5.16         |
| 10MHz QPSK                                                           | 8.942                        | 8.982          | 8.982        | 10.12                          | 9.92           | 10           |
| 10MHz 16QAM                                                          | 8.982                        | 8.982          | 8.942        | 9.84                           | 9.96           | 9.72         |
| 15MHz QPSK                                                           | 13.593                       | 13.533         | 13.533       | 15.24                          | 15.12          | 15.3         |
| 15MHz 16QAM                                                          | 13.533                       | 13.533         | 13.533       | 15.18                          | 15.12          | 15.24        |
| 20MHz QPSK                                                           | 17.964                       | 17.964         | 17.964       | 19.6                           | 19.68          | 19.92        |
| 20MHz 16QAM                                                          | 18.044                       | 18.044         | 17.964       | 19.76                          | 19.92          | 19.76        |
| Note: The test plots please refer to the Plots of Occupied Bandwidth |                              |                |              |                                |                |              |

| <b>FCC §2.1051, § 24.238 (a):Spurious Emissions at Antenna Terminal</b> |                                                                                        |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Result:</b>                                                          | <b>Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.</b> |

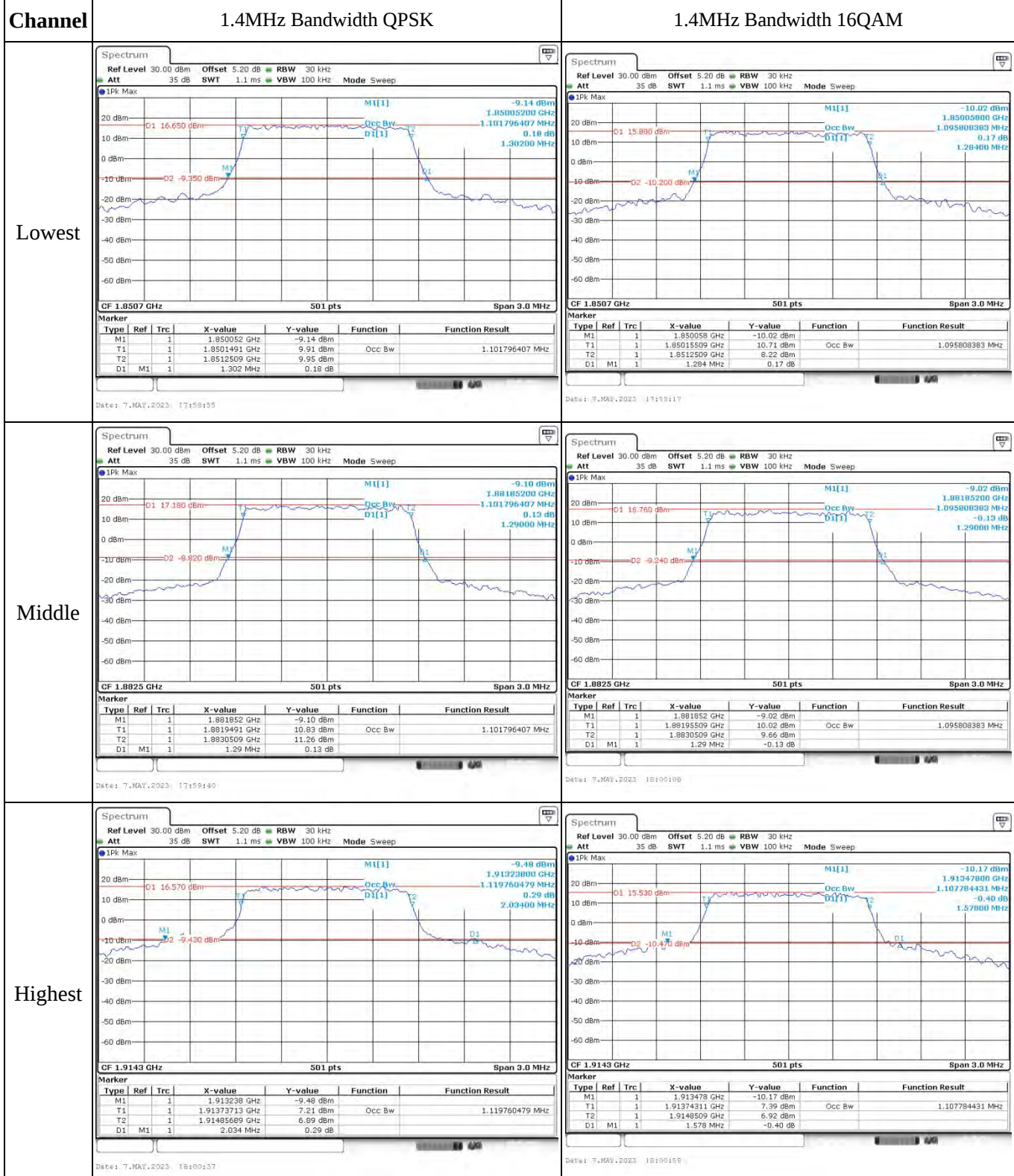
| <b>FCC §2.1051, § 24.238 (a):Out of band emission, Band Edge</b> |                                                                                 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Result:</b>                                                   | <b>Pass, Please refer to the test plots of Out of band emission, Band Edge.</b> |

| <b>FCC §2.1055, §24.235: Frequency Stability</b> |                  |                                                            |                  |          |                  |          |
|--------------------------------------------------|------------------|------------------------------------------------------------|------------------|----------|------------------|----------|
| Test Mode:                                       | 20M QPSK         | Test Channel: Lowest for Lower Edge,Highest for Upper Edge |                  |          |                  |          |
| Test Item                                        | Temperature (°C) | Voltage (V <sub>DC</sub> )                                 | Lower Edge (MHz) |          | Upper Edge (MHz) |          |
|                                                  |                  |                                                            | Result           | Limit    | Result           | Limit    |
| Frequency Stability vs. Temperature              | -30              | 3.85                                                       | 1851.045         | 1850.000 | 1913.900         | 1915.000 |
|                                                  | -20              | 3.85                                                       | 1851.065         | 1850.000 | 1913.948         | 1915.000 |
|                                                  | -10              | 3.85                                                       | 1851.039         | 1850.000 | 1913.951         | 1915.000 |
|                                                  | 0                | 3.85                                                       | 1851.028         | 1850.000 | 1913.968         | 1915.000 |
|                                                  | 10               | 3.85                                                       | 1851.047         | 1850.000 | 1913.934         | 1915.000 |
|                                                  | 20               | 3.85                                                       | 1851.058         | 1850.000 | 1913.942         | 1915.000 |
|                                                  | 30               | 3.85                                                       | 1851.020         | 1850.000 | 1913.987         | 1915.000 |
|                                                  | 40               | 3.85                                                       | 1851.091         | 1850.000 | 1913.996         | 1915.000 |
|                                                  | 50               | 3.85                                                       | 1851.060         | 1850.000 | 1913.972         | 1915.000 |
| Frequency Stability vs. Voltage                  | 20               | 3.5                                                        | 1851.044         | 1850.000 | 1913.947         | 1915.000 |
|                                                  | 20               | 4.4                                                        | 1851.048         | 1850.000 | 1913.970         | 1915.000 |
| <b>Result:</b>                                   |                  |                                                            |                  |          | <b>Pass</b>      |          |

| Test Mode:                                | 20M 16QAM           | Test Channel: Lowest for Lower Edge,Highest for Upper Edge |                     |          |                     |             |
|-------------------------------------------|---------------------|------------------------------------------------------------|---------------------|----------|---------------------|-------------|
| Test Item                                 | Temperature<br>(°C) | Voltage<br>(V <sub>DC</sub> )                              | Lower Edge<br>(MHz) |          | Upper Edge<br>(MHz) |             |
|                                           |                     |                                                            | Result              | Limit    | Result              | Limit       |
| Frequency<br>Stability vs.<br>Temperature | -30                 | 3.85                                                       | 1851.061            | 1850.000 | 1914.016            | 1915.000    |
|                                           | -20                 | 3.85                                                       | 1851.082            | 1850.000 | 1914.078            | 1915.000    |
|                                           | -10                 | 3.85                                                       | 1851.026            | 1850.000 | 1914.033            | 1915.000    |
|                                           | 0                   | 3.85                                                       | 1851.063            | 1850.000 | 1914.028            | 1915.000    |
|                                           | 10                  | 3.85                                                       | 1851.024            | 1850.000 | 1914.060            | 1915.000    |
|                                           | 20                  | 3.85                                                       | 1851.058            | 1850.000 | 1914.022            | 1915.000    |
|                                           | 30                  | 3.85                                                       | 1851.004            | 1850.000 | 1914.015            | 1915.000    |
|                                           | 40                  | 3.85                                                       | 1851.067            | 1850.000 | 1914.001            | 1915.000    |
|                                           | 50                  | 3.85                                                       | 1851.001            | 1850.000 | 1914.071            | 1915.000    |
| Frequency<br>Stability vs.<br>Voltage     | 20                  | 3.5                                                        | 1851.041            | 1850.000 | 1914.060            | 1915.000    |
|                                           | 20                  | 4.4                                                        | 1851.018            | 1850.000 | 1914.020            | 1915.000    |
|                                           |                     |                                                            |                     |          | <b>Result:</b>      | <b>Pass</b> |

**Test Plots**(Note: The 5.2dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

### Occupied Bandwidth



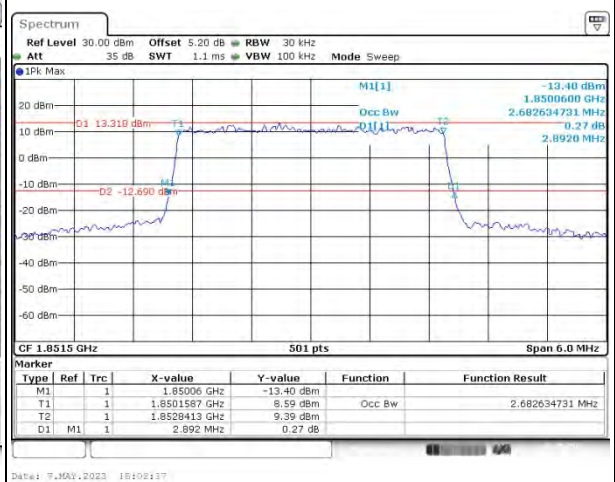
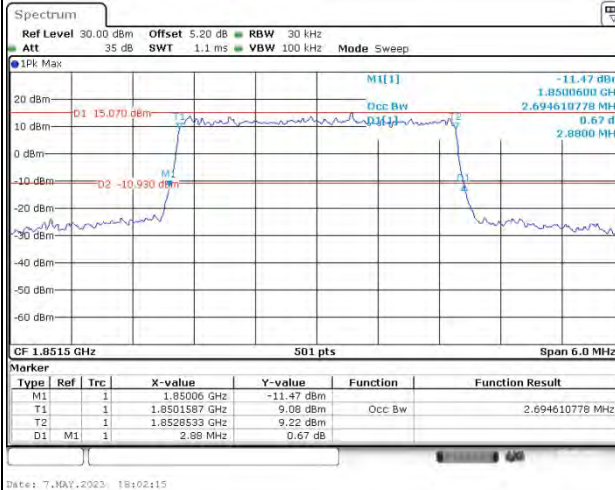
## Occupied Bandwidth

## Channel

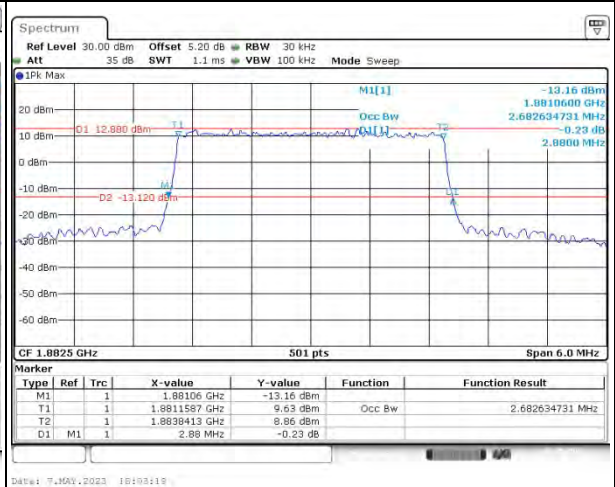
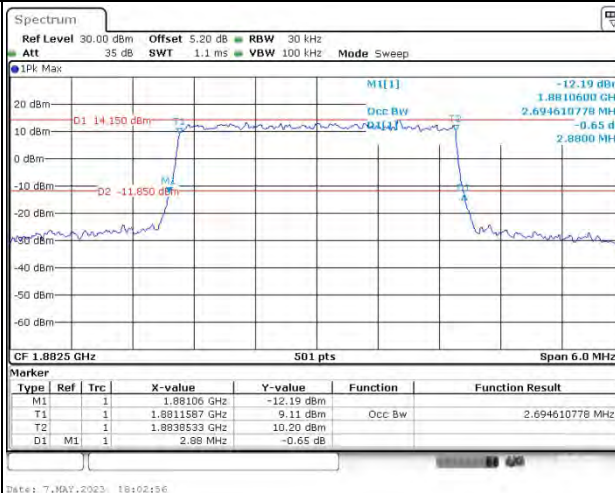
## 3MHz Bandwidth QPSK

## 3MHz Bandwidth 16QAM

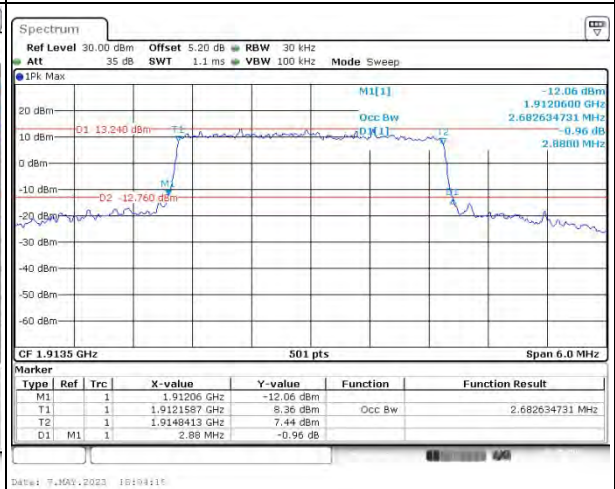
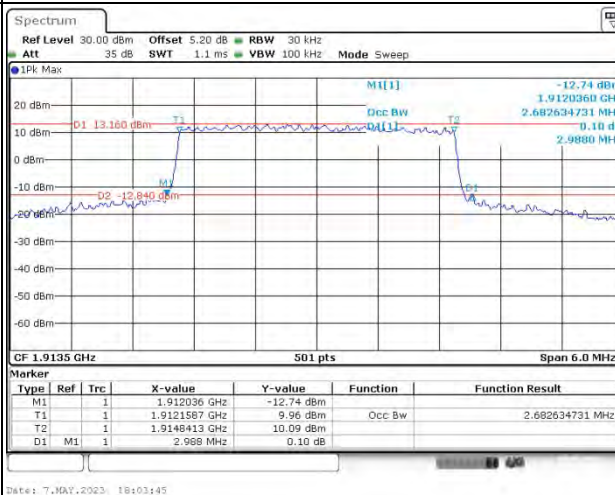
## Lowest



## Middle



## Highest



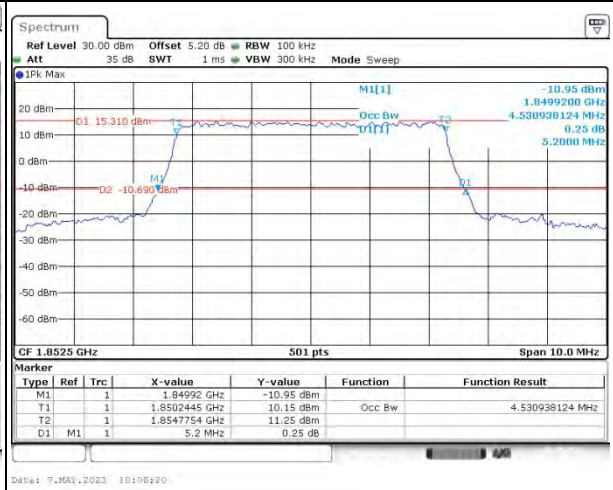
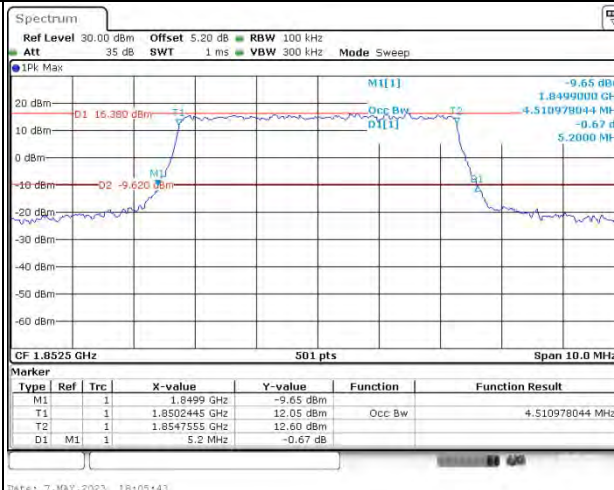
## Occupied Bandwidth

## Channel

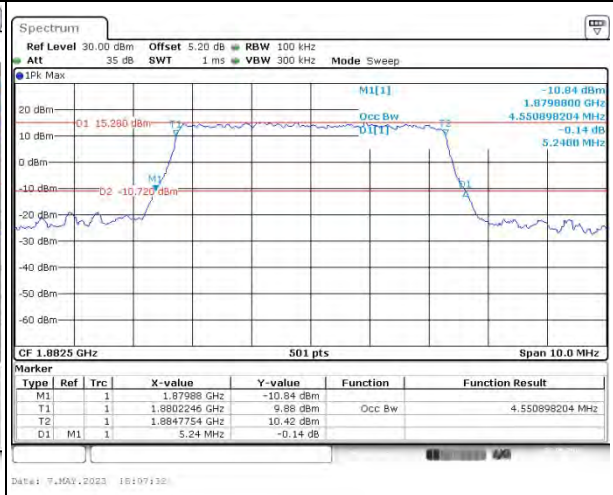
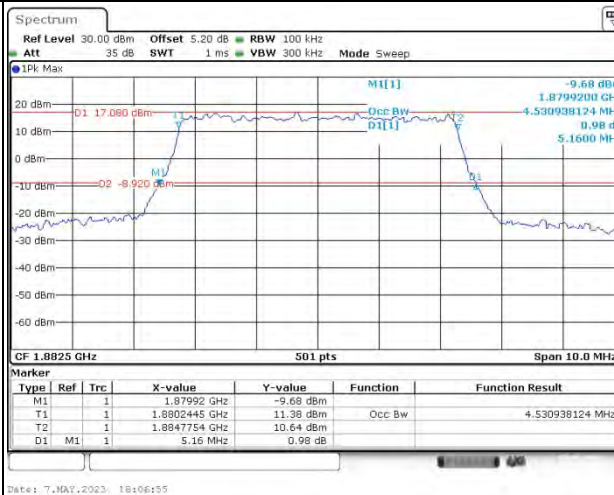
## 5MHz Bandwidth QPSK

## 5MHz Bandwidth 16QAM

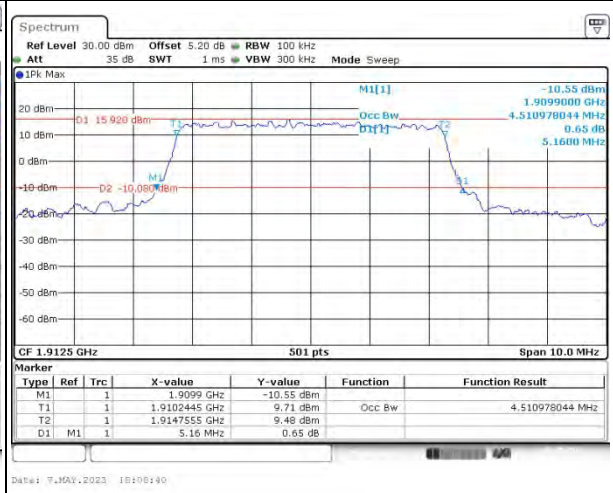
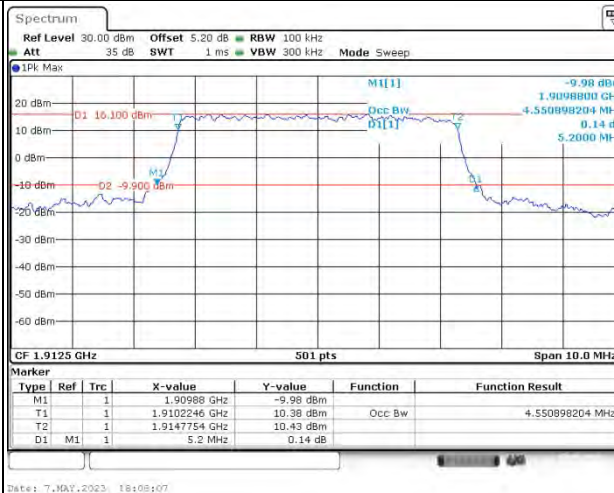
## Lowest



## Middle



## Highest



## Occupied Bandwidth

| Channel | 10MHz Bandwidth QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 10MHz Bandwidth 16QAM |               |            |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|------------|----------|-----------------|----------|-----------------|----|---|--|-------------|------------|--|--|----|---|--|---------------|-----------|--|--|----|---|--|---------------|-----------|--|--|----|----|---|-----------|---------|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|-----|---------|---------|----------|-----------------|----|---|--|-------------|------------|--|--|----|---|--|---------------|----------|--|--|----|---|--|---------------|-----------|--|--|----|----|---|----------|---------|--|--|
| Lowest  | <p>CF 1.855 GHz 501 pts Span 20.0 MHz</p> <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>1.84984 GHz</td><td>-19.17 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>1.8505289 GHz</td><td>10.27 dBm</td><td></td><td></td></tr><tr><td>T2</td><td>1</td><td></td><td>1.8594711 GHz</td><td>10.62 dBm</td><td></td><td></td></tr><tr><td>D1</td><td>M1</td><td>1</td><td>10.12 MHz</td><td>1.64 dB</td><td></td><td></td></tr></table> <p>Date: 7.MAY.2023 18:11:07</p> | Type                  | Ref           | Trc        | X-value  | Y-value         | Function | Function Result | M1 | 1 |  | 1.84984 GHz | -19.17 dBm |  |  | T1 | 1 |  | 1.8505289 GHz | 10.27 dBm |  |  | T2 | 1 |  | 1.8594711 GHz | 10.62 dBm |  |  | D1 | M1 | 1 | 10.12 MHz | 1.64 dB |  |  | <p>CF 1.855 GHz 501 pts Span 20.0 MHz</p> <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>1.85004 GHz</td><td>-14.31 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>1.8505289 GHz</td><td>9.93 dBm</td><td></td><td></td></tr><tr><td>T2</td><td>1</td><td></td><td>1.8595111 GHz</td><td>8.87 dBm</td><td></td><td></td></tr><tr><td>D1</td><td>M1</td><td>1</td><td>9.84 MHz</td><td>2.62 dB</td><td></td><td></td></tr></table> <p>Date: 7.MAY.2023 18:11:01</p> | Type | Ref | Trc | X-value | Y-value | Function | Function Result | M1 | 1 |  | 1.85004 GHz | -14.31 dBm |  |  | T1 | 1 |  | 1.8505289 GHz | 9.93 dBm |  |  | T2 | 1 |  | 1.8595111 GHz | 8.87 dBm  |  |  | D1 | M1 | 1 | 9.84 MHz | 2.62 dB |  |  |
| Type    | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trc                   | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| M1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.84984 GHz   | -19.17 dBm |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8505289 GHz | 10.27 dBm  |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T2      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8594711 GHz | 10.62 dBm  |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| D1      | M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                     | 10.12 MHz     | 1.64 dB    |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| Type    | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trc                   | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| M1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.85004 GHz   | -14.31 dBm |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8505289 GHz | 9.93 dBm   |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T2      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8595111 GHz | 8.87 dBm   |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| D1      | M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                     | 9.84 MHz      | 2.62 dB    |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| Middle  | <p>CF 1.8825 GHz 501 pts Span 20.0 MHz</p> <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>1.87754 GHz</td><td>-12.25 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>1.877989 GHz</td><td>10.43 dBm</td><td></td><td></td></tr><tr><td>T2</td><td>1</td><td></td><td>1.8869711 GHz</td><td>10.16 dBm</td><td></td><td></td></tr><tr><td>D1</td><td>M1</td><td>1</td><td>9.92 MHz</td><td>0.71 dB</td><td></td><td></td></tr></table> <p>Date: 7.MAY.2023 18:12:16</p>  | Type                  | Ref           | Trc        | X-value  | Y-value         | Function | Function Result | M1 | 1 |  | 1.87754 GHz | -12.25 dBm |  |  | T1 | 1 |  | 1.877989 GHz  | 10.43 dBm |  |  | T2 | 1 |  | 1.8869711 GHz | 10.16 dBm |  |  | D1 | M1 | 1 | 9.92 MHz  | 0.71 dB |  |  | <p>CF 1.8825 GHz 501 pts Span 20.0 MHz</p> <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>1.8775 GHz</td><td>-13.19 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>1.877989 GHz</td><td>9.55 dBm</td><td></td><td></td></tr><tr><td>T2</td><td>1</td><td></td><td>1.8869711 GHz</td><td>9.55 dBm</td><td></td><td></td></tr><tr><td>D1</td><td>M1</td><td>1</td><td>9.96 MHz</td><td>0.20 dB</td><td></td><td></td></tr></table> <p>Date: 7.MAY.2023 18:12:16</p>  | Type | Ref | Trc | X-value | Y-value | Function | Function Result | M1 | 1 |  | 1.8775 GHz  | -13.19 dBm |  |  | T1 | 1 |  | 1.877989 GHz  | 9.55 dBm |  |  | T2 | 1 |  | 1.8869711 GHz | 9.55 dBm  |  |  | D1 | M1 | 1 | 9.96 MHz | 0.20 dB |  |  |
| Type    | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trc                   | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| M1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.87754 GHz   | -12.25 dBm |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.877989 GHz  | 10.43 dBm  |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T2      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8869711 GHz | 10.16 dBm  |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| D1      | M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                     | 9.92 MHz      | 0.71 dB    |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| Type    | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trc                   | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| M1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8775 GHz    | -13.19 dBm |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.877989 GHz  | 9.55 dBm   |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T2      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.8869711 GHz | 9.55 dBm   |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| D1      | M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                     | 9.96 MHz      | 0.20 dB    |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| Highest | <p>CF 1.91 GHz 501 pts Span 20.0 MHz</p> <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>1.90492 GHz</td><td>-12.39 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>1.905489 GHz</td><td>8.13 dBm</td><td></td><td></td></tr><tr><td>T2</td><td>1</td><td></td><td>1.9144711 GHz</td><td>10.94 dBm</td><td></td><td></td></tr><tr><td>D1</td><td>M1</td><td>1</td><td>10.0 MHz</td><td>0.51 dB</td><td></td><td></td></tr></table> <p>Date: 7.MAY.2023 18:13:24</p>     | Type                  | Ref           | Trc        | X-value  | Y-value         | Function | Function Result | M1 | 1 |  | 1.90492 GHz | -12.39 dBm |  |  | T1 | 1 |  | 1.905489 GHz  | 8.13 dBm  |  |  | T2 | 1 |  | 1.9144711 GHz | 10.94 dBm |  |  | D1 | M1 | 1 | 10.0 MHz  | 0.51 dB |  |  | <p>CF 1.91 GHz 501 pts Span 20.0 MHz</p> <table><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr><tr><td>M1</td><td>1</td><td></td><td>1.90512 GHz</td><td>-12.15 dBm</td><td></td><td></td></tr><tr><td>T1</td><td>1</td><td></td><td>1.905289 GHz</td><td>8.45 dBm</td><td></td><td></td></tr><tr><td>T2</td><td>1</td><td></td><td>1.9144711 GHz</td><td>10.84 dBm</td><td></td><td></td></tr><tr><td>D1</td><td>M1</td><td>1</td><td>9.72 MHz</td><td>0.01 dB</td><td></td><td></td></tr></table> <p>Date: 7.MAY.2023 18:13:01</p>  | Type | Ref | Trc | X-value | Y-value | Function | Function Result | M1 | 1 |  | 1.90512 GHz | -12.15 dBm |  |  | T1 | 1 |  | 1.905289 GHz  | 8.45 dBm |  |  | T2 | 1 |  | 1.9144711 GHz | 10.84 dBm |  |  | D1 | M1 | 1 | 9.72 MHz | 0.01 dB |  |  |
| Type    | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trc                   | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| M1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.90492 GHz   | -12.39 dBm |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.905489 GHz  | 8.13 dBm   |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T2      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.9144711 GHz | 10.94 dBm  |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| D1      | M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                     | 10.0 MHz      | 0.51 dB    |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| Type    | Ref                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Trc                   | X-value       | Y-value    | Function | Function Result |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| M1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.90512 GHz   | -12.15 dBm |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T1      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.905289 GHz  | 8.45 dBm   |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| T2      | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | 1.9144711 GHz | 10.84 dBm  |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |
| D1      | M1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                     | 9.72 MHz      | 0.01 dB    |          |                 |          |                 |    |   |  |             |            |  |  |    |   |  |               |           |  |  |    |   |  |               |           |  |  |    |    |   |           |         |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |     |     |         |         |          |                 |    |   |  |             |            |  |  |    |   |  |               |          |  |  |    |   |  |               |           |  |  |    |    |   |          |         |  |  |

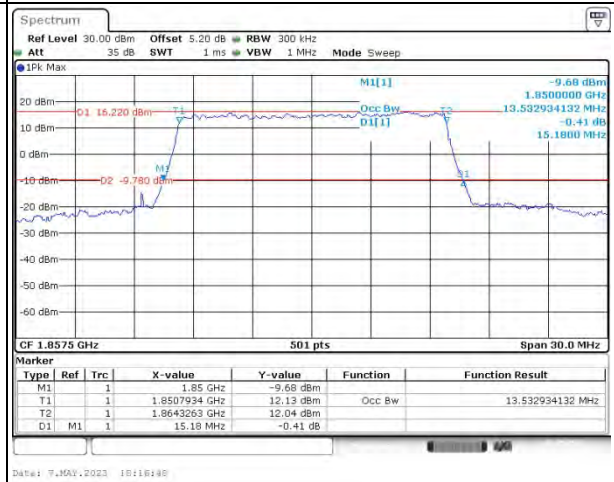
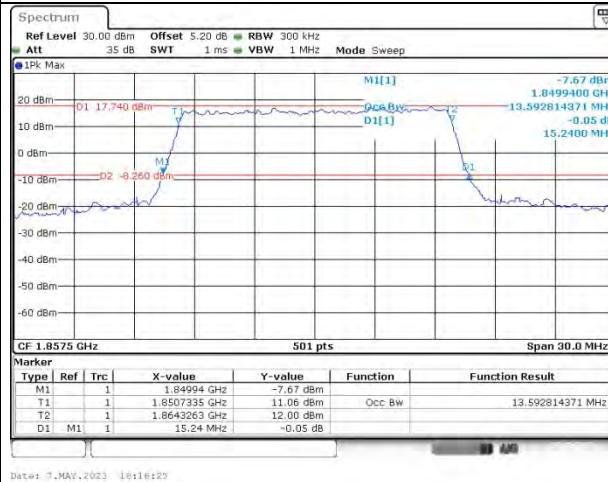
## Occupied Bandwidth

## Channel

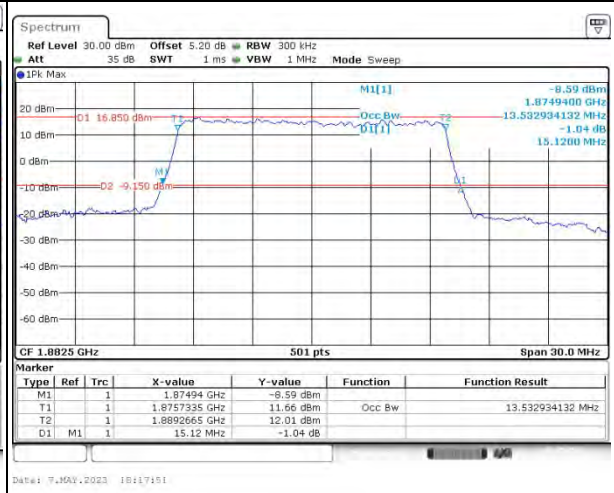
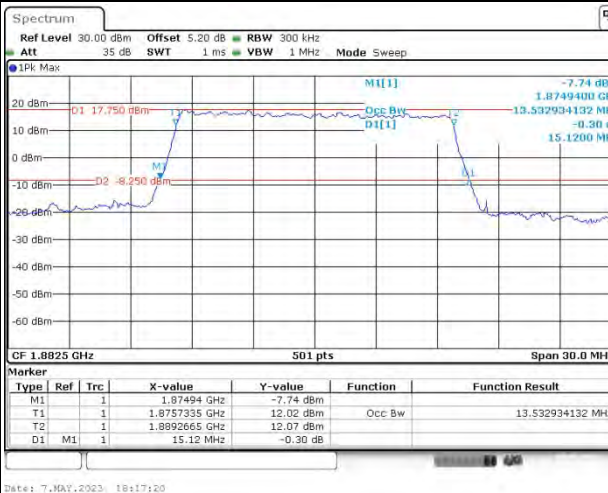
## 15MHz Bandwidth QPSK

## 15MHz Bandwidth 16QAM

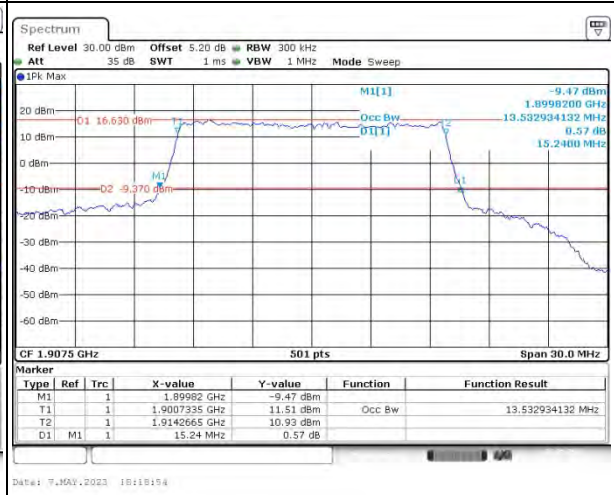
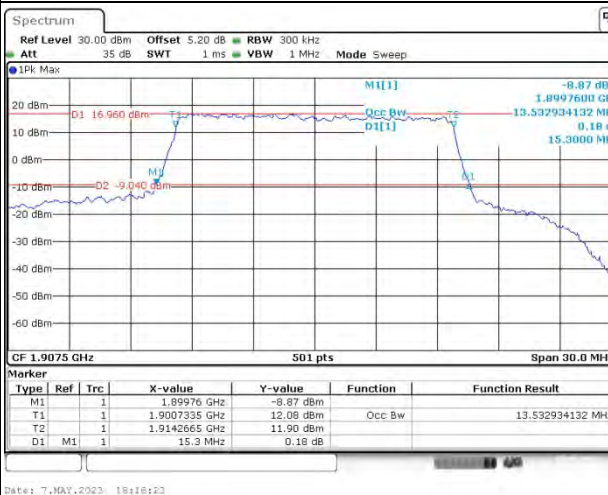
## Lowest



## Middle



## Highest



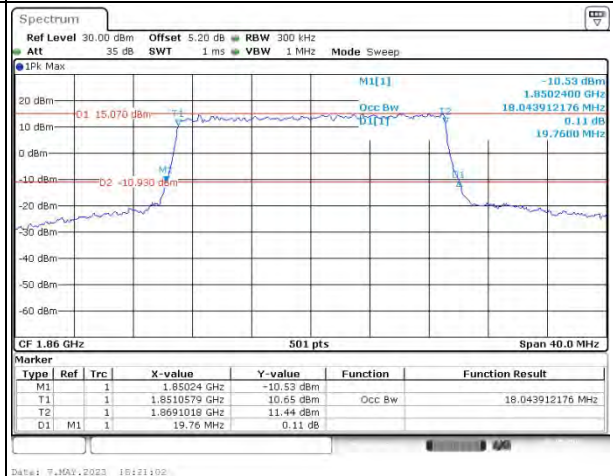
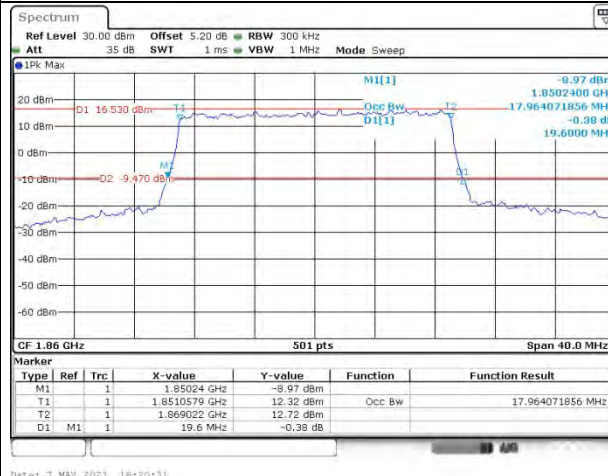
## Occupied Bandwidth

## Channel

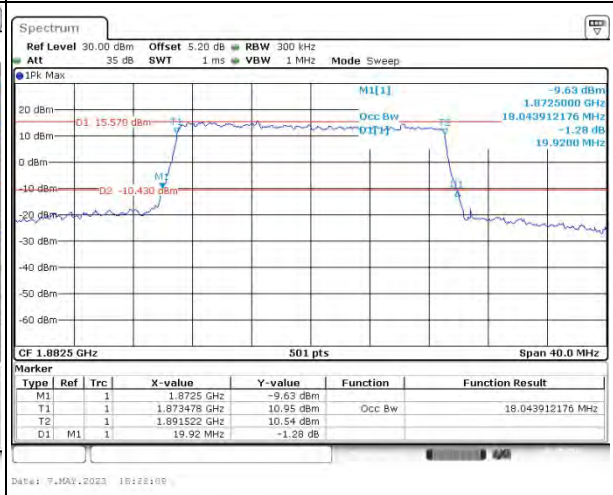
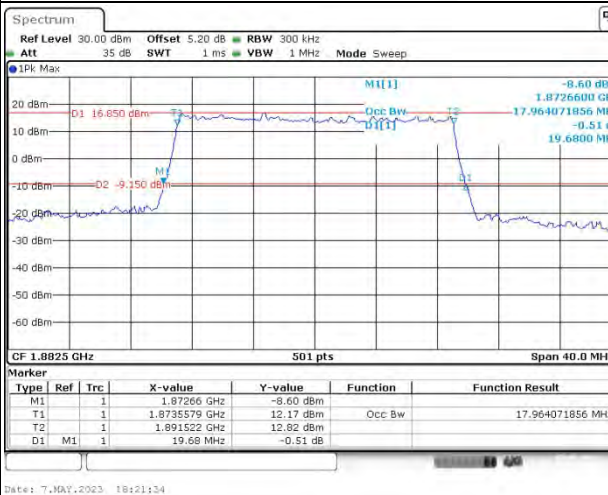
## 20MHz Bandwidth QPSK

## 20MHz Bandwidth 16QAM

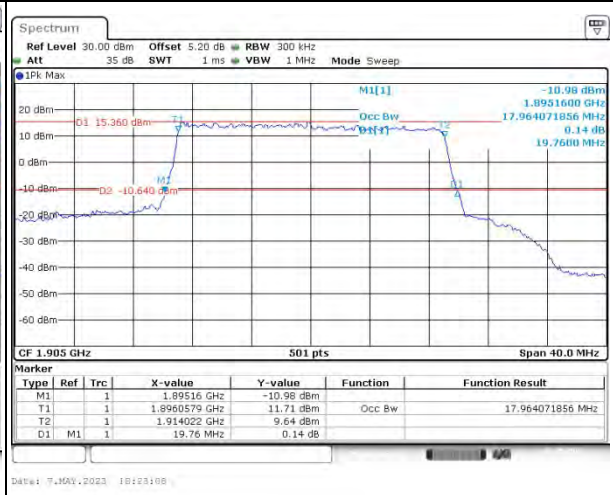
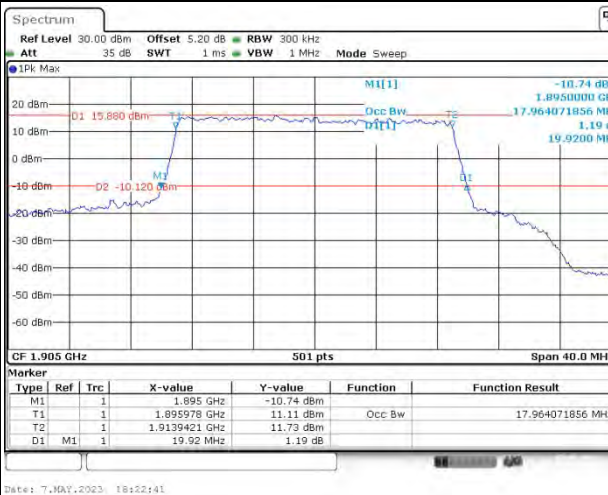
## Lowest



## Middle



## Highest

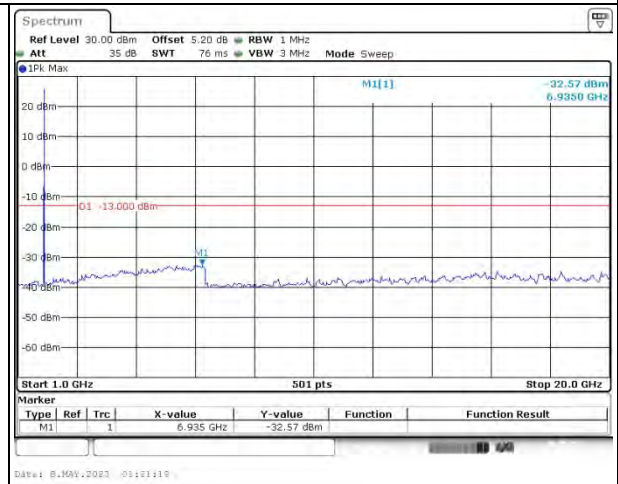
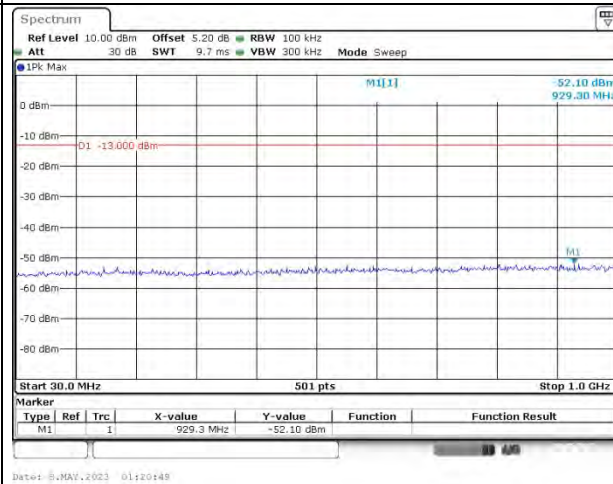


## Spurious Emissions at Antenna Terminal

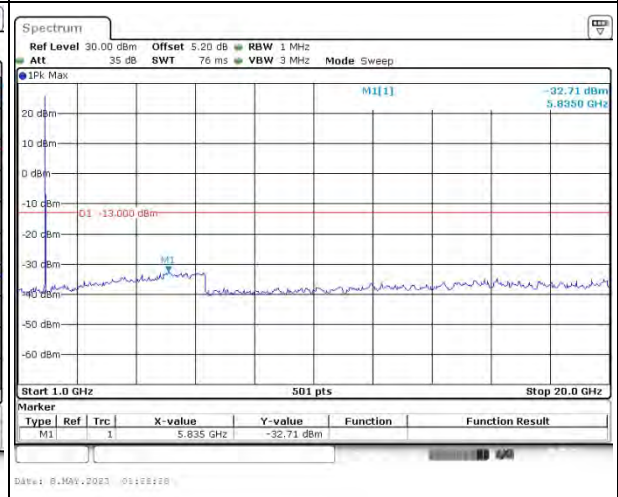
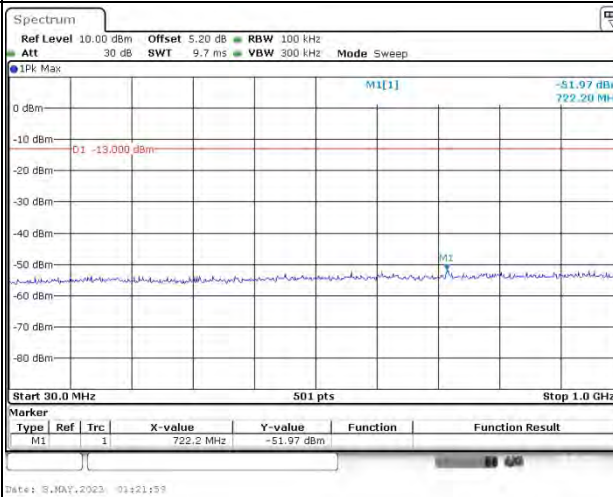
Channel

1.4MHz Bandwidth QPSK

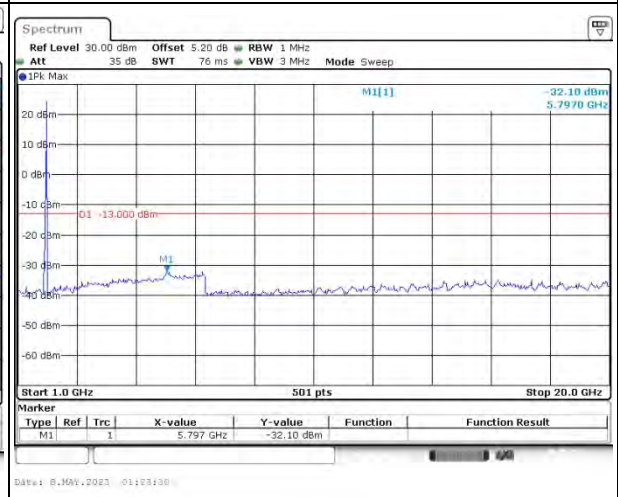
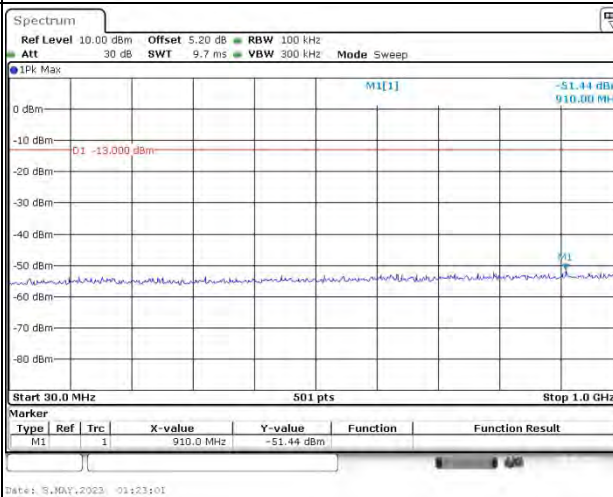
Lowest



Middle



Highest

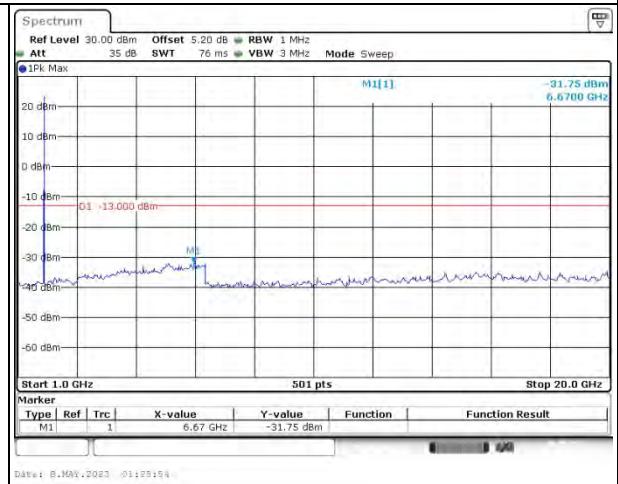
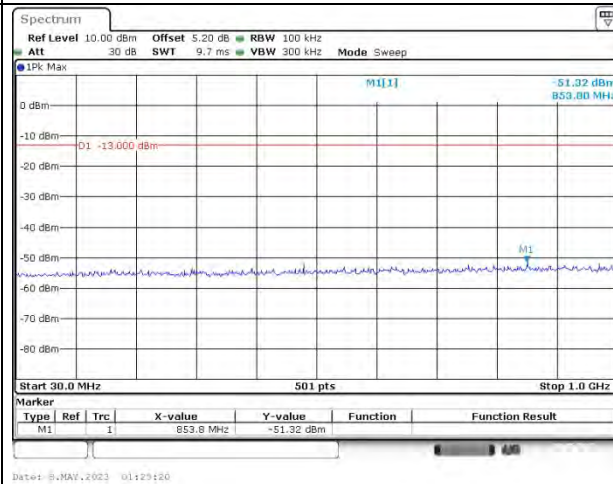


## Spurious Emissions at Antenna Terminal

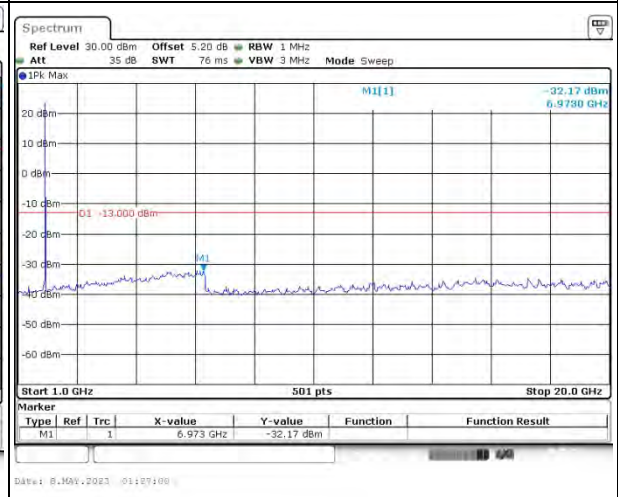
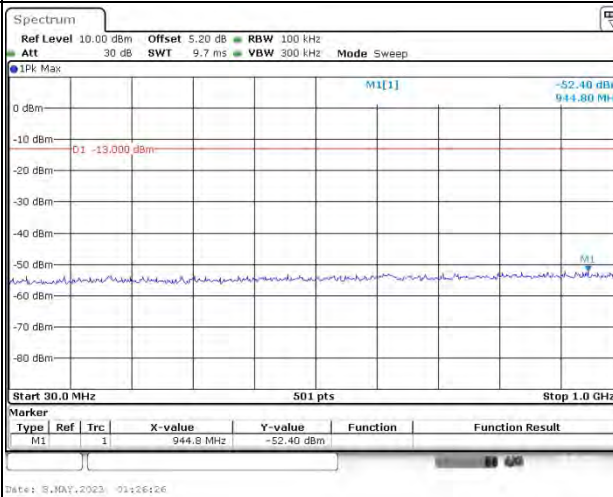
Channel

3MHz Bandwidth QPSK

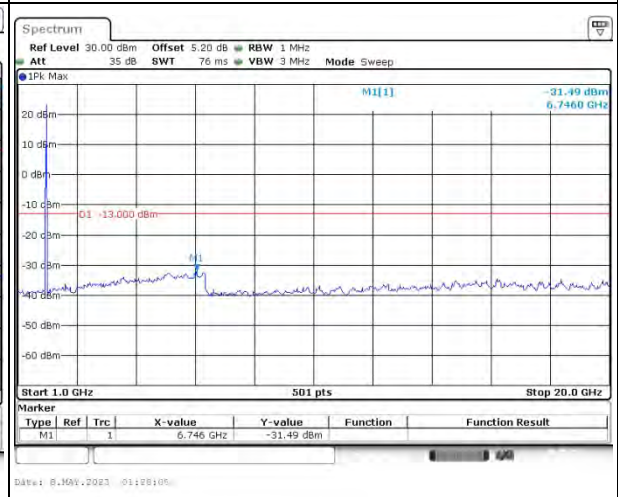
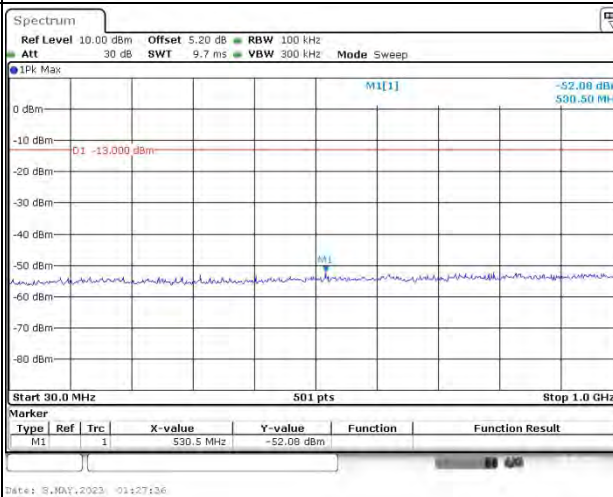
Lowest



Middle



Highest

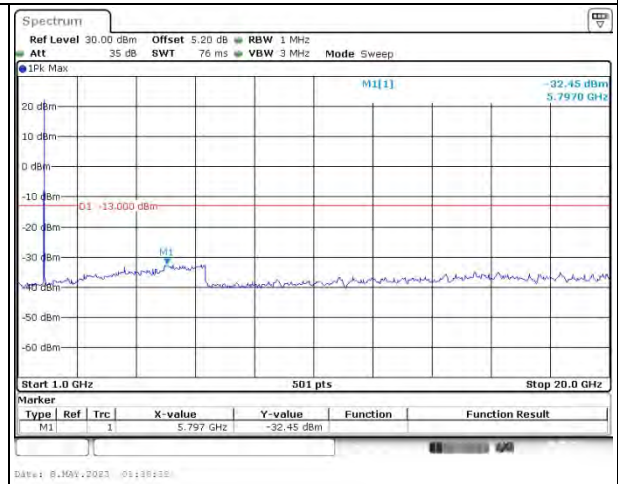
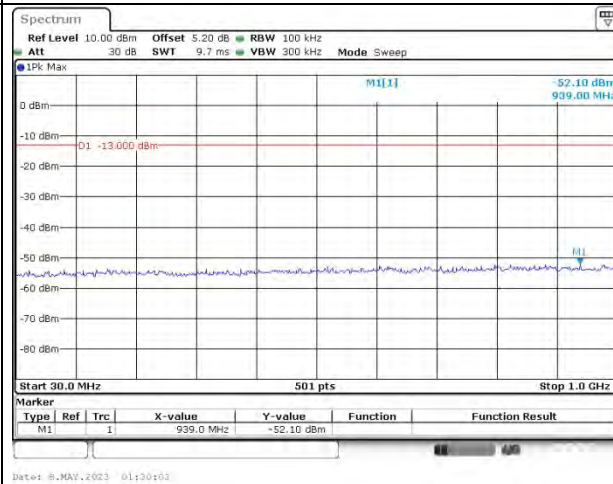


## Spurious Emissions at Antenna Terminal

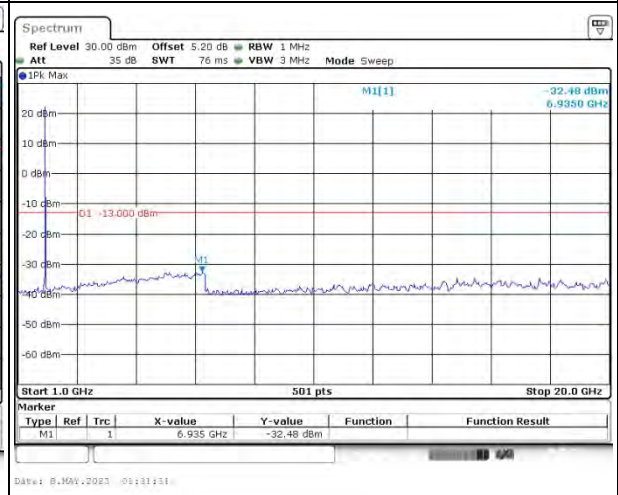
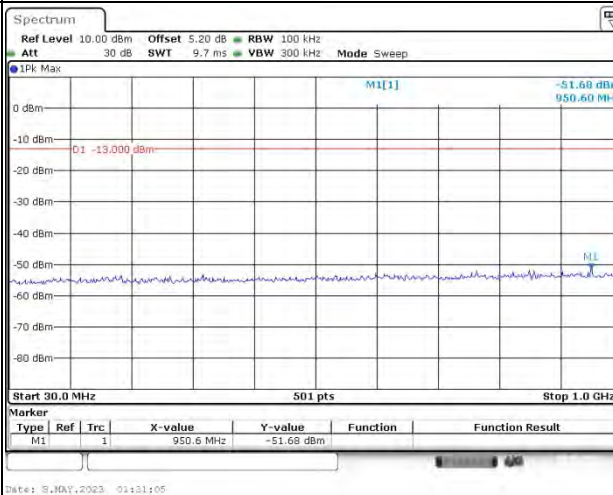
Channel

5MHz Bandwidth QPSK

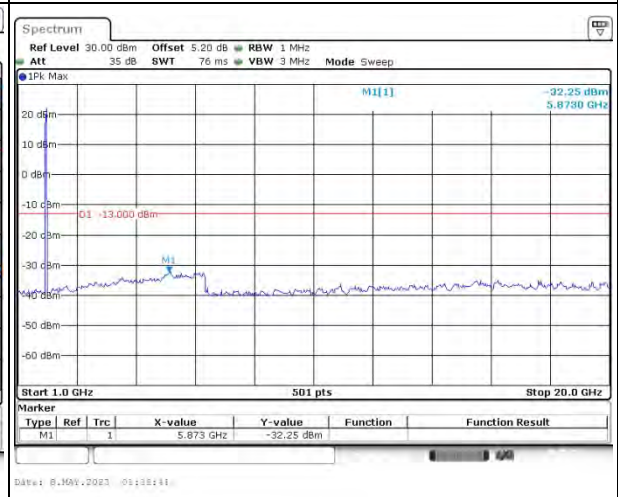
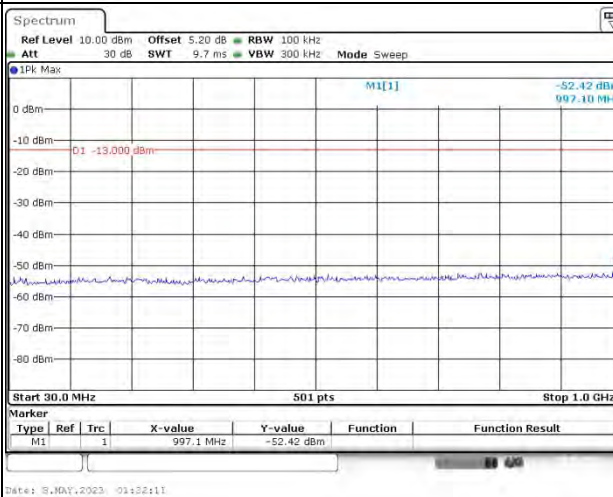
Lowest



Middle



Highest

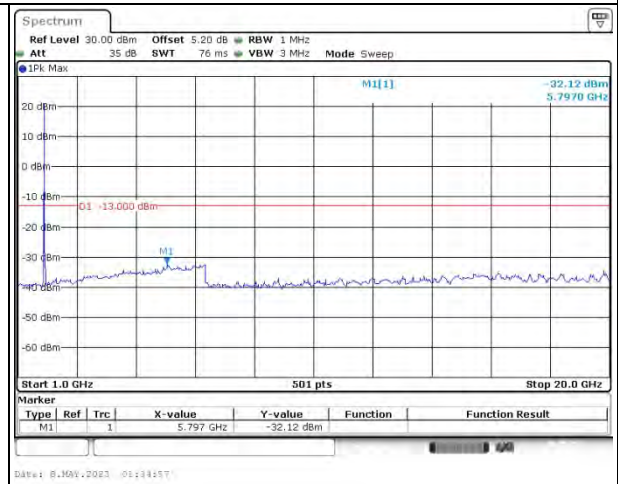
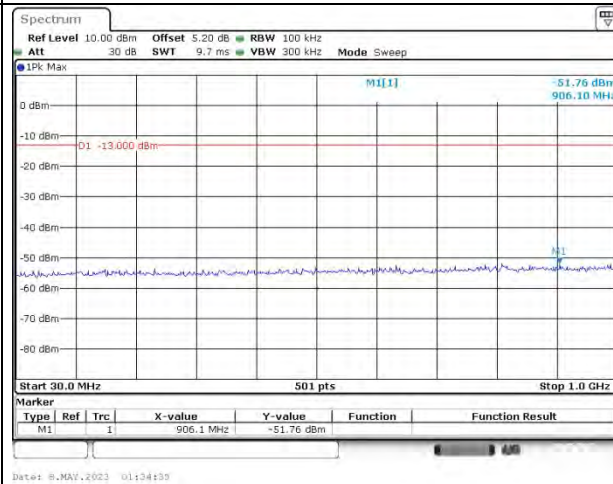


## Spurious Emissions at Antenna Terminal

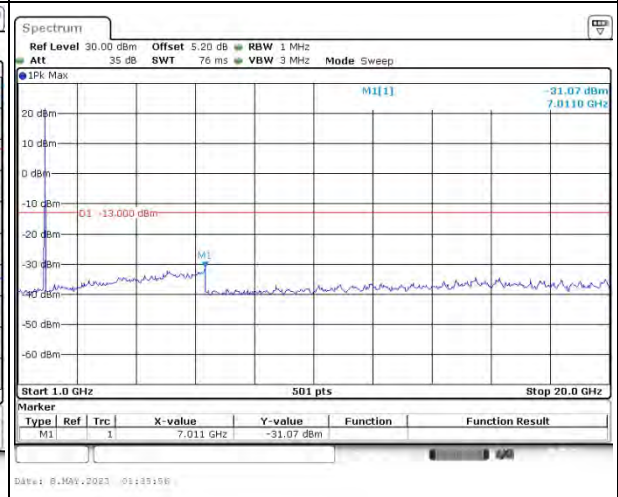
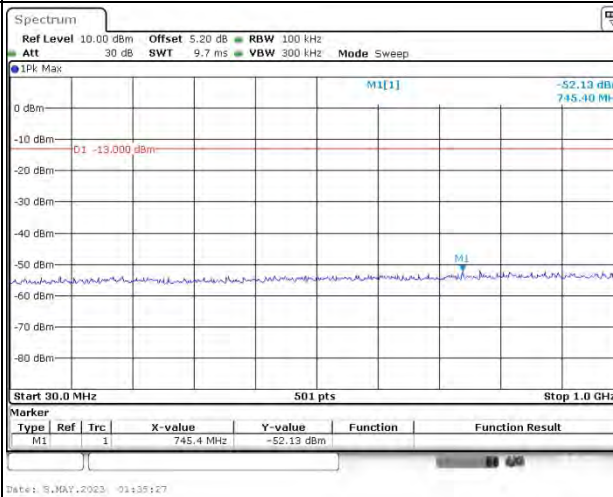
Channel

10MHz Bandwidth QPSK

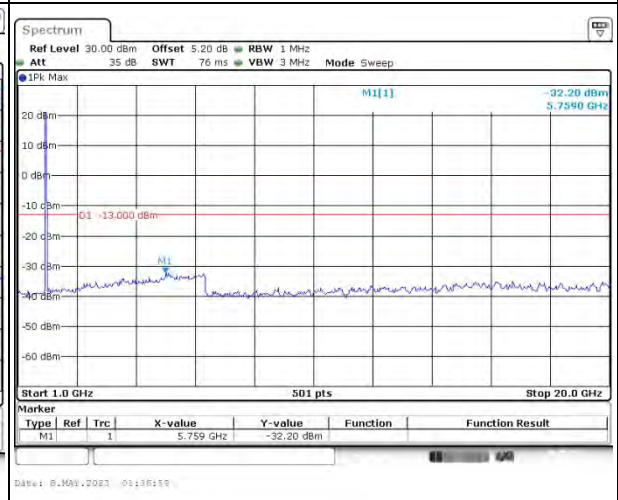
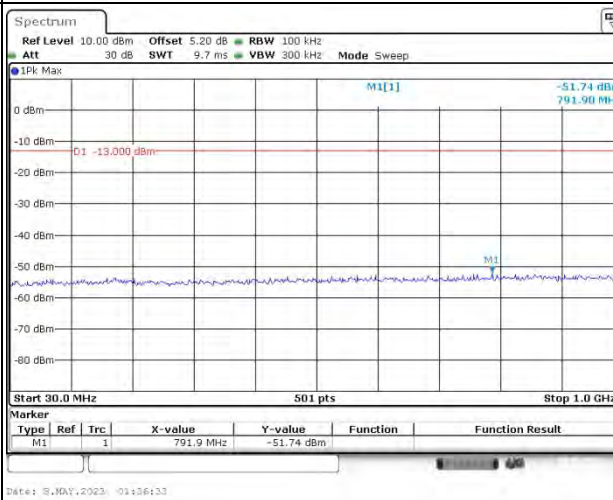
Lowest



Middle



Highest

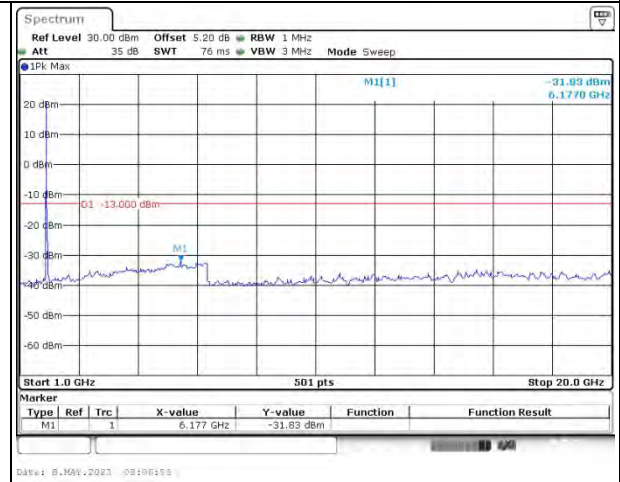
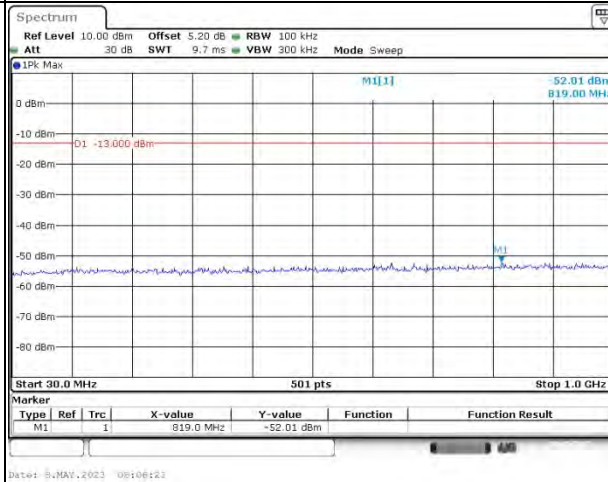


## Spurious Emissions at Antenna Terminal

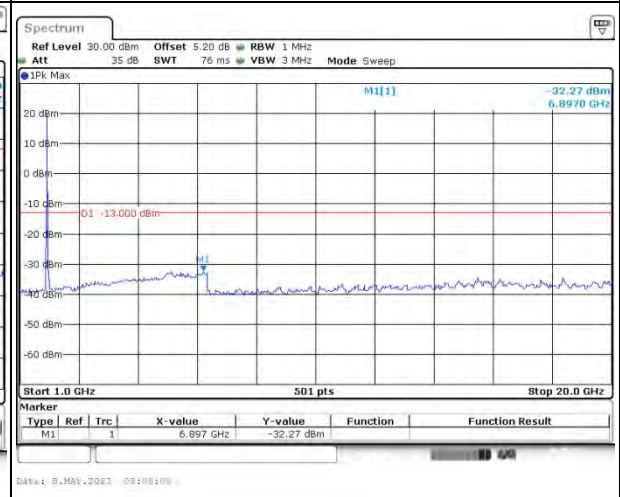
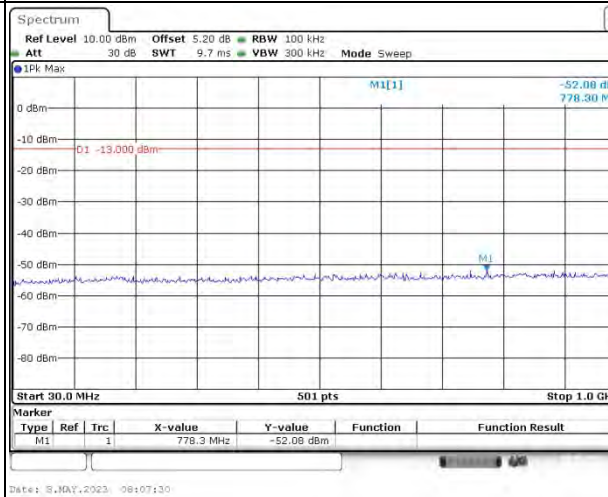
Channel

15MHz Bandwidth QPSK

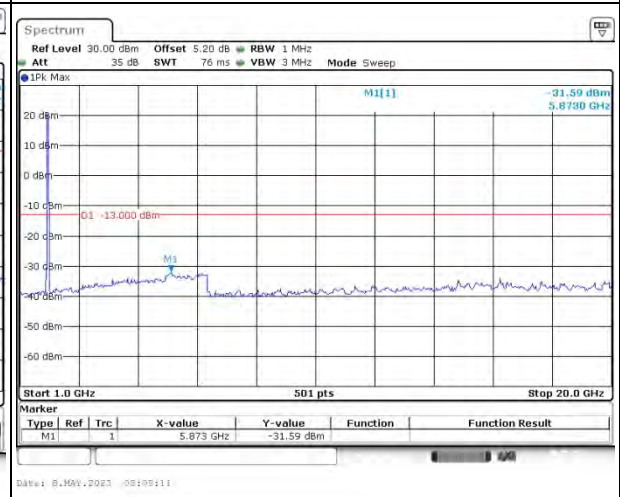
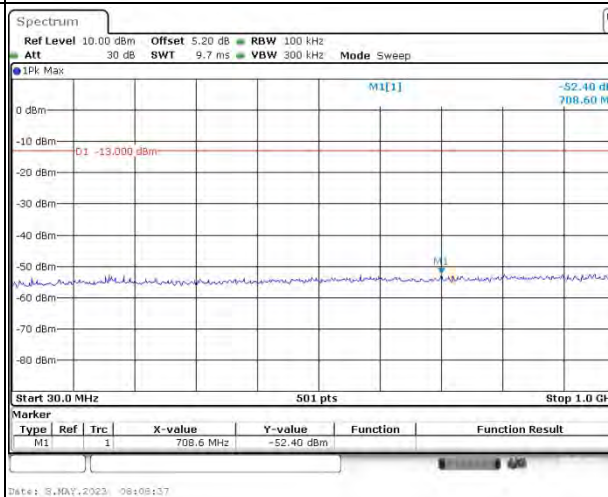
Lowest



Middle



Highest

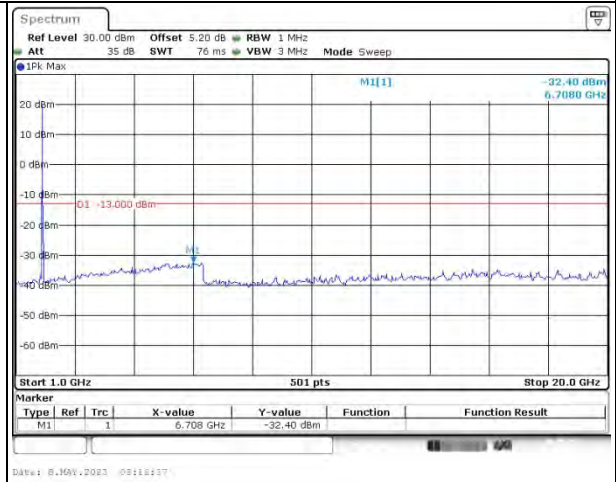
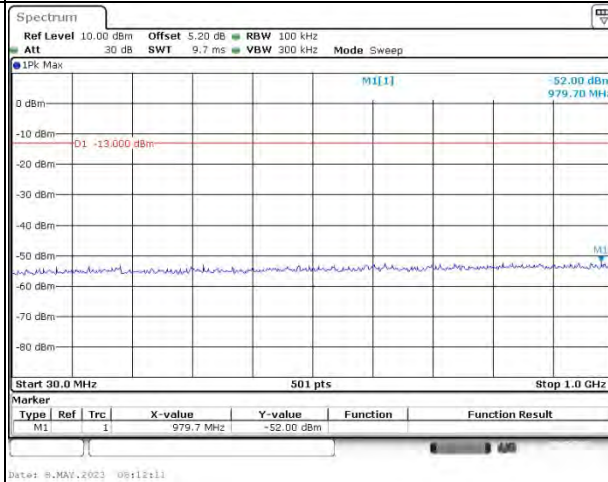


## Spurious Emissions at Antenna Terminal

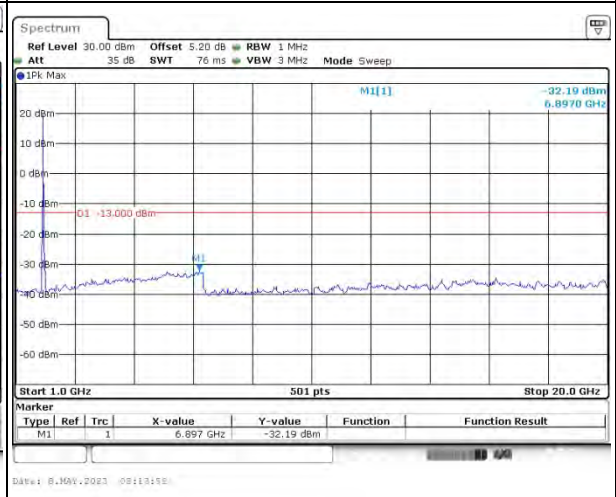
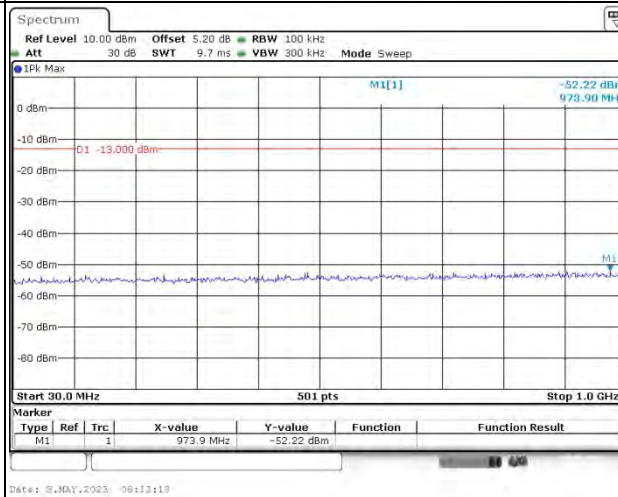
Channel

20MHz Bandwidth QPSK

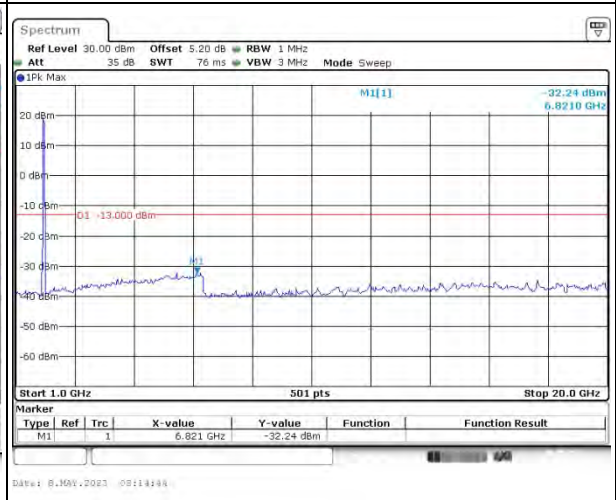
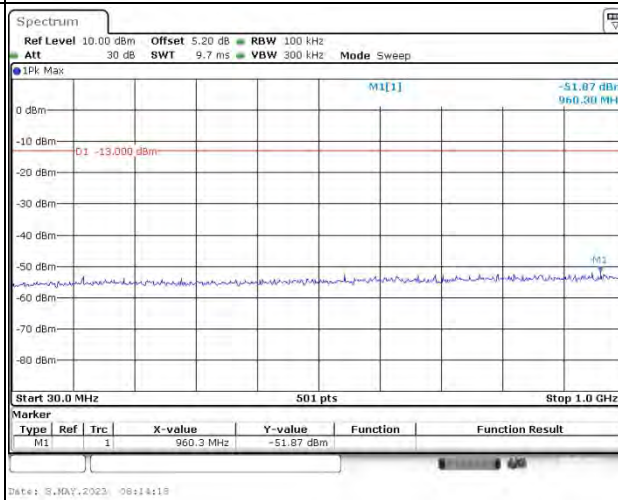
Lowest



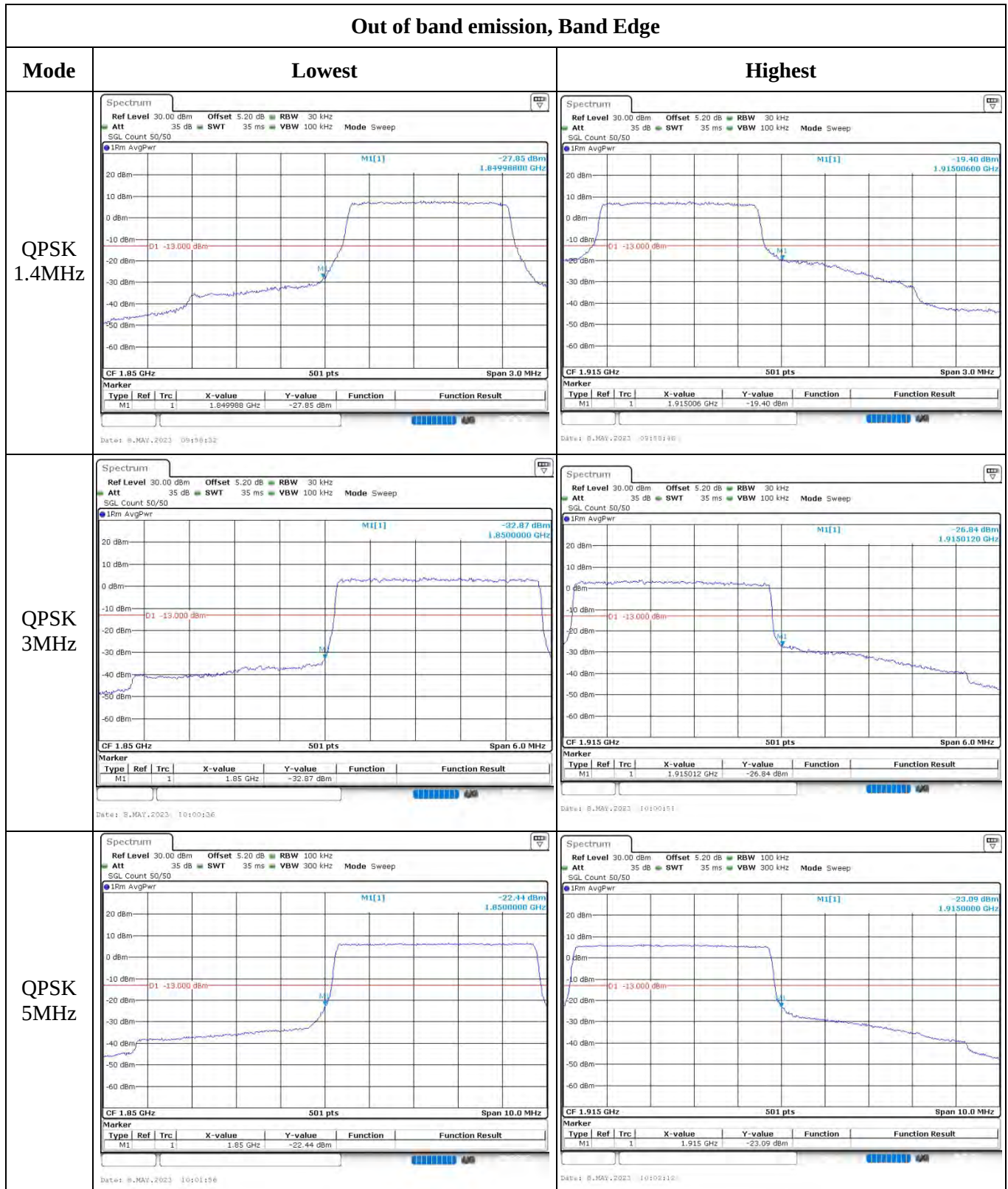
Middle



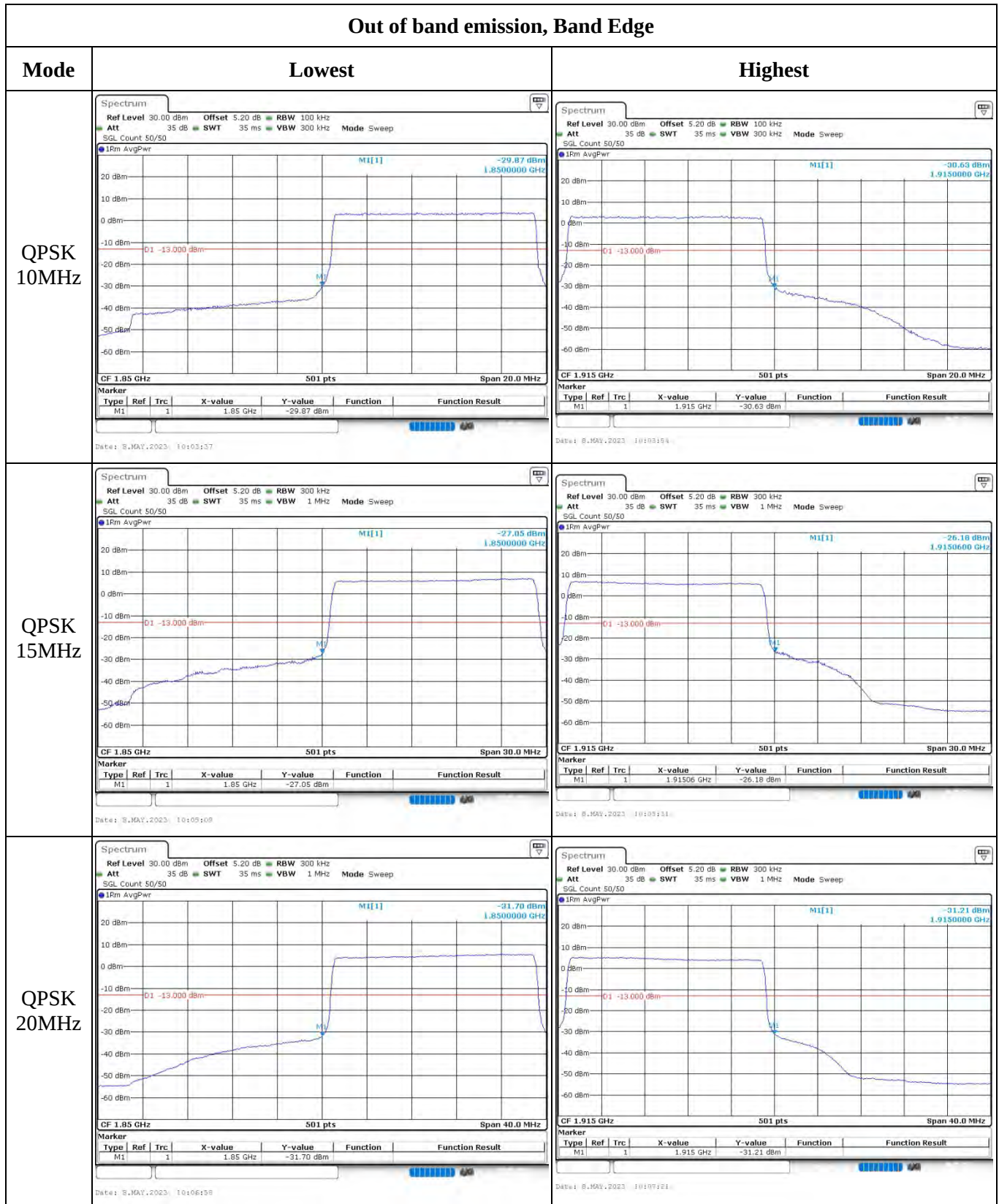
Highest



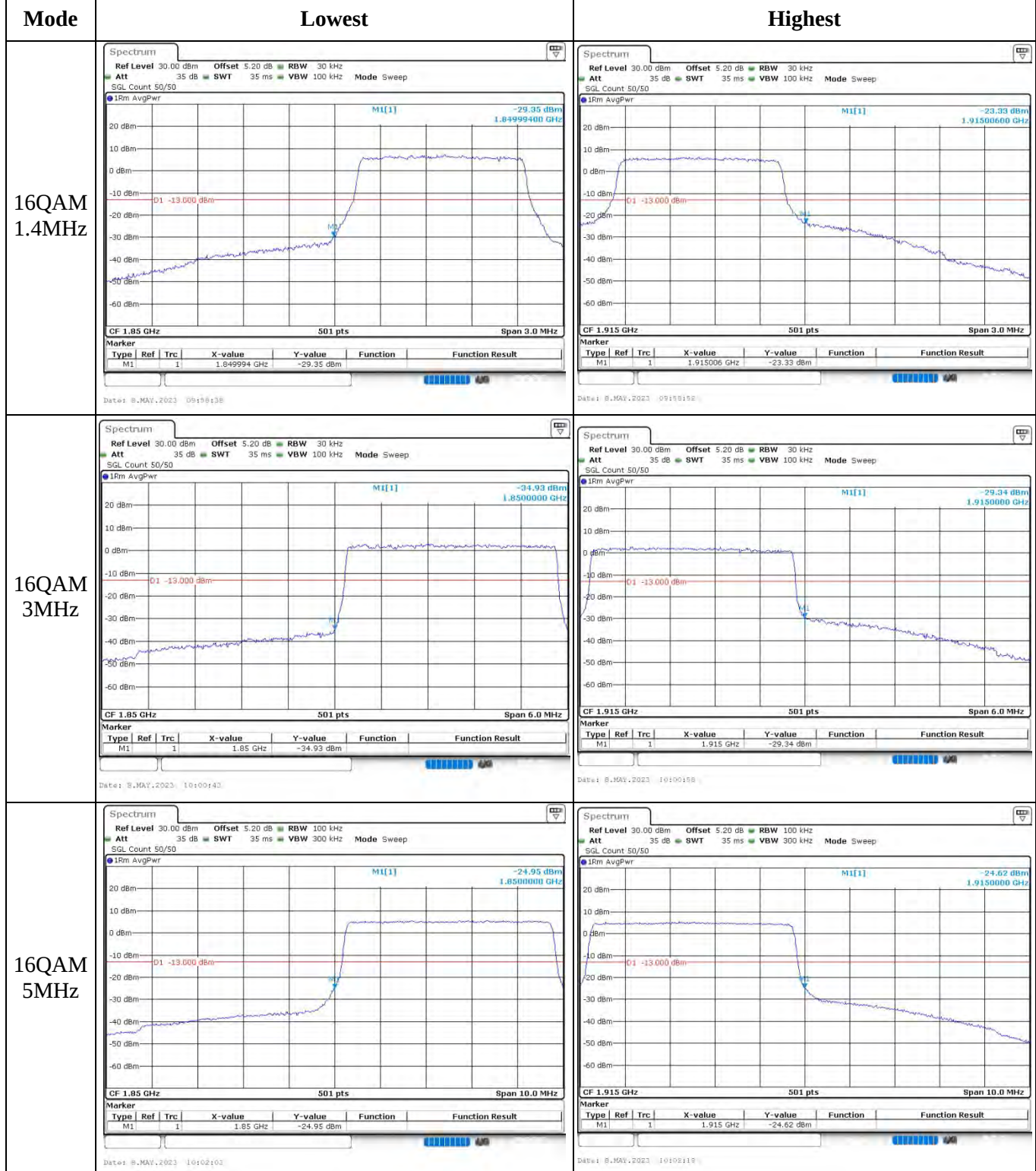
## Out of band emission, Band Edge



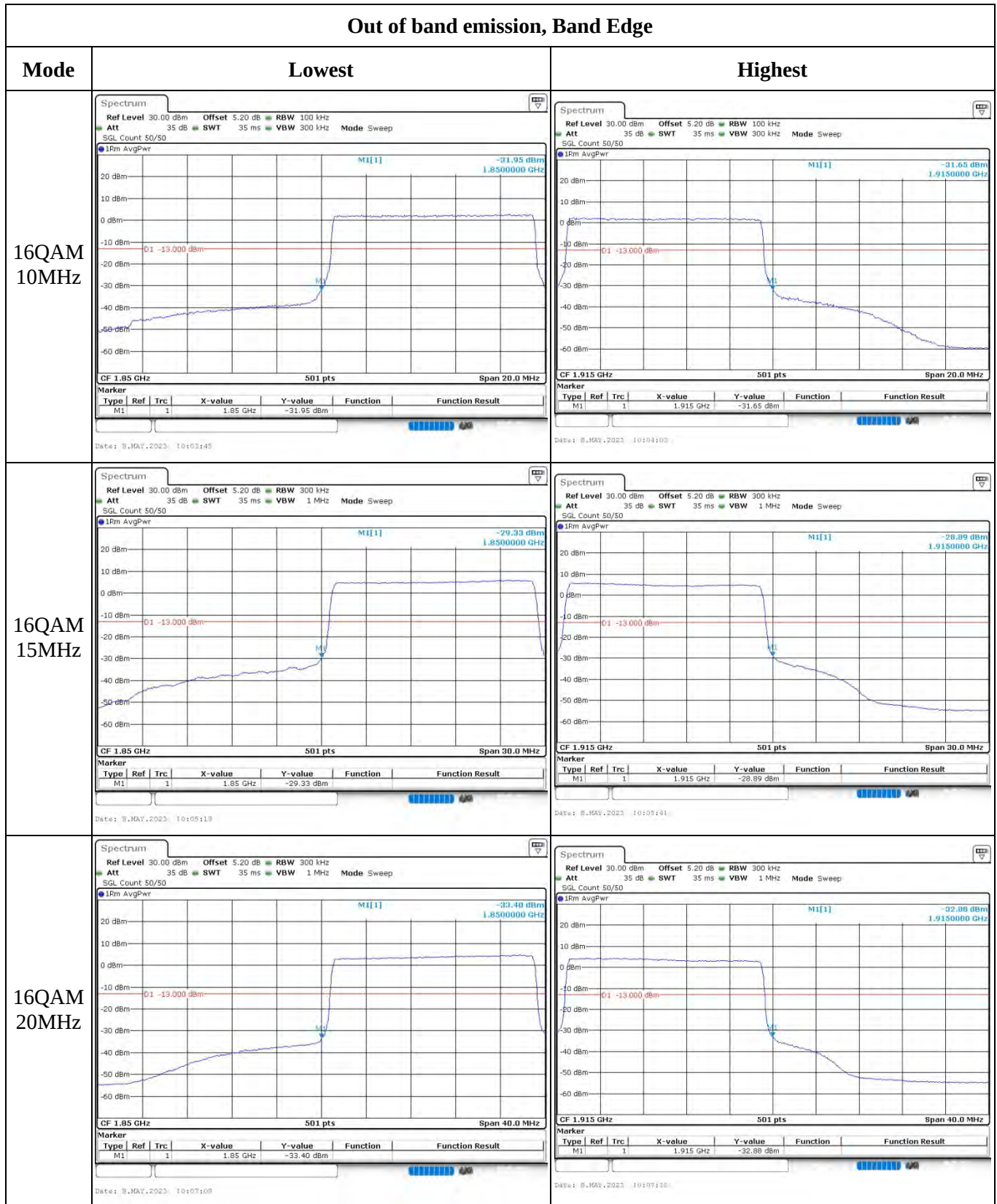
## Out of band emission, Band Edge



## Out of band emission, Band Edge



## Out of band emission, Band Edge



**4.13 Antenna Port Test Data and Results for LTE Band 26**

|                |             |              |                    |
|----------------|-------------|--------------|--------------------|
| Serial Number: | 250W-1      | Test Date:   | 2023/5/6~2023/6/13 |
| Test Site:     | RF          | Test Mode:   | Transmitting       |
| Tester:        | George Chen | Test Result: | Pass               |

**Environmental Conditions:**

|                      |           |                           |       |                        |             |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|
| Temperature:<br>(°C) | 23.2~26.1 | Relative Humidity:<br>(%) | 39~58 | ATM Pressure:<br>(kPa) | 100.5~102.3 |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|

**Test Equipment List and Details:**

| Manufacturer  | Description                         | Model      | Serial Number   | Calibration Date | Calibration Due Date |
|---------------|-------------------------------------|------------|-----------------|------------------|----------------------|
| R&S           | Spectrum Analyzer                   | FSV40      | 101474          | 2022-07-15       | 2023-07-14           |
| zhuoxiang     | Coaxial Cable                       | SMA-178    | 211001          | Each time        | N/A                  |
| YINSAIGE      | Coaxial Cable                       | SS402      | SJ0100001       | Each time        | N/A                  |
| Mini-Circuits | DC Block                            | BLK-18-S+  | 1554403         | Each time        | N/A                  |
| Weinschel     | Power Splitter                      | 1515       | RA914           | Each time        | N/A                  |
| R&S           | Wideband Radio Communication Tester | CMW500     | 149218          | 2022-07-15       | 2023-07-14           |
| BACL          | TEMP&HUMI Test Chamber              | BTH-150-40 | 30174           | 2022-09-29       | 2023-09-28           |
| UNI-T         | Multimeter                          | UT39A+     | C210582554      | N/A              | N/A                  |
| ZHAOXIN       | DC Power Supply                     | RXN-6010D  | 21R6010D0912386 | 2022-07-15       | 2023-07-14           |

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Frequency For Each Mode:**

| Operation Bandwidth | Lowest Frequency For 90S (MHz) | Highest Frequency For 90S (MHz) | Channel Cross Rules 90S and 22H | Lowest Frequency For 22H (MHz) | Middle Frequency For 22H (MHz) | Highest Frequency For 22H (MHz) |
|---------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|---------------------------------|
| 1.4MHz              | 814.7                          | 823.3                           | 824.0                           | 824.7                          | 831.5                          | 848.3                           |
| 3MHz                | 815.5                          | 822.5                           | 824.0                           | 825.5                          | 831.5                          | 847.5                           |
| 5MHz                | 816.5                          | 821.5                           | 824.0                           | 826.5                          | 831.5                          | 846.5                           |
| 10MHz               | 819                            | /                               | 824.0                           | 829                            | 831.5                          | 844                             |
| 15MHz               | 821.5                          | /                               | 824.0                           | 831.5                          | 836.5                          | 841.5                           |

Note: 15MHz bandwidth 821.5MHz cross Rules 90S and 22H

**Test Data:****FCC§2.1046;§ 22.913 (a),§ 90.635****RF Output Power:**

| Test Bandwidth & Modulation | Resource Block & RB offset | Conducted Average Output Power (dBm) |                         |               |                        |                        |                         | Maximum ERP (dBm) | ERP Limit (dBm) |
|-----------------------------|----------------------------|--------------------------------------|-------------------------|---------------|------------------------|------------------------|-------------------------|-------------------|-----------------|
|                             |                            | Lowest Channel For 90S               | Highest Channel For 90S | Cross Channel | Lowest Channel For 22H | Middle Channel For 22H | Highest Channel For 22H |                   |                 |
| 1.4MHz QPSK                 | RB1#0                      | 20.46                                | 20.57                   | 20.67         | 20.78                  | 20.87                  | 21.14                   | 18.25             | 38.45           |
|                             | RB1#3                      | 20.66                                | 20.76                   | 20.84         | 20.96                  | 21.05                  | 21.38                   |                   |                 |
|                             | RB1#5                      | 20.46                                | 20.57                   | 20.65         | 20.73                  | 20.93                  | 21.13                   |                   |                 |
|                             | RB3#0                      | 20.51                                | 20.61                   | 20.68         | 20.79                  | 20.77                  | 21.21                   |                   |                 |
|                             | RB3#3                      | 20.47                                | 20.58                   | 20.7          | 20.8                   | 20.81                  | 21.2                    |                   |                 |
|                             | RB6#0                      | 19.6                                 | 19.69                   | 19.78         | 19.89                  | 19.99                  | 20.32                   |                   |                 |
| 1.4MHz 16QAM                | RB1#0                      | 19.56                                | 19.67                   | 19.7          | 19.77                  | 19.76                  | 20.15                   | 17.24             | 38.45           |
|                             | RB1#3                      | 19.8                                 | 19.88                   | 19.95         | 19.99                  | 19.96                  | 20.36                   |                   |                 |
|                             | RB1#5                      | 19.55                                | 19.67                   | 19.77         | 19.82                  | 19.8                   | 20.17                   |                   |                 |
|                             | RB3#0                      | 19.43                                | 19.52                   | 19.63         | 19.72                  | 19.81                  | 20.37                   |                   |                 |
|                             | RB3#3                      | 19.47                                | 19.59                   | 19.67         | 19.75                  | 19.8                   | 20.35                   |                   |                 |
|                             | RB6#0                      | 18.57                                | 18.69                   | 18.73         | 18.86                  | 18.83                  | 19.28                   |                   |                 |
| 3MHz QPSK                   | RB1#0                      | 20.54                                | 20.65                   | 20.73         | 20.82                  | 20.98                  | 21.23                   | 18.13             | 38.45           |
|                             | RB1#8                      | 20.56                                | 20.64                   | 20.76         | 20.86                  | 20.94                  | 21.24                   |                   |                 |
|                             | RB1#14                     | 20.56                                | 20.65                   | 20.77         | 20.85                  | 20.97                  | 21.26                   |                   |                 |
|                             | RB6#0                      | 19.59                                | 19.7                    | 19.81         | 19.92                  | 19.98                  | 20.21                   |                   |                 |
|                             | RB6#9                      | 19.6                                 | 19.72                   | 19.81         | 19.89                  | 20.01                  | 20.29                   |                   |                 |
|                             | RB15#0                     | 19.58                                | 19.69                   | 19.78         | 19.86                  | 19.92                  | 20.24                   |                   |                 |
| 3MHz 16QAM                  | RB1#0                      | 20.07                                | 20.06                   | 20.16         | 20.17                  | 19.98                  | 20.29                   | 17.16             | 38.45           |
|                             | RB1#8                      | 20.04                                | 20.15                   | 20.16         | 20.08                  | 19.99                  | 20.27                   |                   |                 |
|                             | RB1#14                     | 20.06                                | 20.08                   | 20.17         | 20.21                  | 20.06                  | 20.28                   |                   |                 |
|                             | RB6#0                      | 18.6                                 | 18.68                   | 18.78         | 18.89                  | 18.88                  | 19.15                   |                   |                 |
|                             | RB6#9                      | 18.6                                 | 18.68                   | 18.76         | 18.84                  | 18.95                  | 19.18                   |                   |                 |
|                             | RB15#0                     | 18.61                                | 18.69                   | 18.78         | 18.88                  | 18.83                  | 19.28                   |                   |                 |
| 5MHz QPSK                   | RB1#0                      | 20.4                                 | 20.52                   | 20.58         | 20.61                  | 20.77                  | 21.07                   | 18.06             | 38.45           |
|                             | RB1#13                     | 20.54                                | 20.63                   | 20.74         | 20.82                  | 20.91                  | 21.19                   |                   |                 |
|                             | RB1#24                     | 20.58                                | 20.7                    | 20.8          | 20.88                  | 20.86                  | 21.12                   |                   |                 |
|                             | RB15#0                     | 19.62                                | 19.7                    | 19.81         | 19.93                  | 19.93                  | 20.25                   |                   |                 |
|                             | RB15#10                    | 19.56                                | 19.65                   | 19.73         | 19.84                  | 19.87                  | 20.27                   |                   |                 |
|                             | RB25#0                     | 19.56                                | 19.65                   | 19.73         | 19.81                  | 19.86                  | 20.26                   |                   |                 |
| 5MHz 16QAM                  | RB1#0                      | 19.33                                | 19.41                   | 19.6          | 19.71                  | 19.92                  | 20.13                   | 17.15             | 38.45           |
|                             | RB1#13                     | 19.45                                | 19.55                   | 19.67         | 19.79                  | 20.07                  | 20.28                   |                   |                 |
|                             | RB1#24                     | 19.48                                | 19.59                   | 19.78         | 19.98                  | 20.09                  | 20.23                   |                   |                 |
|                             | RB15#0                     | 18.59                                | 18.67                   | 18.78         | 18.89                  | 18.86                  | 19.25                   |                   |                 |
|                             | RB15#10                    | 18.61                                | 18.72                   | 18.76         | 18.81                  | 18.79                  | 19.27                   |                   |                 |
|                             | RB25#0                     | 18.61                                | 18.71                   | 18.75         | 18.81                  | 18.79                  | 19.25                   |                   |                 |

|                |         |       |   |       |       |       |       |       |       |
|----------------|---------|-------|---|-------|-------|-------|-------|-------|-------|
| 10MHz<br>QPSK  | RB1#0   | 20.44 | / | 20.59 | 20.69 | 20.82 | 21    | 18.24 | 38.45 |
|                | RB1#25  | 20.74 | / | 20.89 | 21.04 | 21.14 | 21.37 |       |       |
|                | RB1#49  | 20.73 | / | 20.87 | 20.97 | 20.94 | 21.31 |       |       |
|                | RB25#0  | 19.7  | / | 19.86 | 19.97 | 19.98 | 20.24 |       |       |
|                | RB25#25 | 19.86 | / | 19.84 | 19.88 | 19.92 | 20.26 |       |       |
|                | RB50#0  | 19.8  | / | 19.88 | 19.99 | 19.95 | 20.25 |       |       |
| 10MHz<br>16QAM | RB1#0   | 19.65 | / | 19.7  | 19.72 | 19.73 | 20.61 | 17.66 | 38.45 |
|                | RB1#25  | 19.91 | / | 19.99 | 20.04 | 20.03 | 20.76 |       |       |
|                | RB1#49  | 19.92 | / | 20.01 | 19.97 | 19.98 | 20.79 |       |       |
|                | RB25#0  | 18.72 | / | 18.89 | 19.04 | 19.05 | 19.27 |       |       |
|                | RB25#25 | 18.88 | / | 18.92 | 19.03 | 19.01 | 19.29 |       |       |
|                | RB50#0  | 18.77 | / | 18.82 | 18.95 | 18.98 | 19.22 |       |       |
| 15MHz<br>QPSK  | RB1#0   | 20.4  | / | 20.43 | 20.61 | 20.62 | 20.88 | 18.07 | 38.45 |
|                | RB1#38  | 20.67 | / | 20.85 | 20.94 | 20.92 | 21.13 |       |       |
|                | RB1#74  | 20.85 | / | 20.89 | 20.94 | 20.98 | 21.2  |       |       |
|                | RB36#0  | 19.76 | / | 19.81 | 19.92 | 20.03 | 20    |       |       |
|                | RB36#39 | 19.95 | / | 20.09 | 20.2  | 20.13 | 20.26 |       |       |
|                | RB75#0  | 19.86 | / | 19.95 | 20.09 | 20.1  | 20.11 |       |       |
| 15MHz<br>16QAM | RB1#0   | 19.94 | / | 20.1  | 20.03 | 19.75 | 20.15 | 17.43 | 38.45 |
|                | RB1#38  | 20.25 | / | 20.41 | 20.54 | 19.99 | 20.44 |       |       |
|                | RB1#74  | 20.2  | / | 20.22 | 20.25 | 20.14 | 20.56 |       |       |
|                | RB36#0  | 18.7  | / | 18.88 | 18.87 | 18.89 | 18.92 |       |       |
|                | RB36#39 | 18.86 | / | 18.95 | 19.07 | 19.03 | 19.14 |       |       |
|                | RB75#0  | 18.82 | / | 18.89 | 18.96 | 18.99 | 19.02 |       |       |

Note:

ERP= Conducted Power(dBm) - Lc(dB) + G<sub>T</sub>(dBd)G<sub>T</sub>(dBd)=G<sub>T</sub>(dBi)-2.15

Result:

Pass

**Peak-to-average Ratio(PAR)**

| Test Bandwidth & Modulation | Resource Block & RB offset | Peak-to-average Ratio(dB) |                        |                         | Limit (dB) |
|-----------------------------|----------------------------|---------------------------|------------------------|-------------------------|------------|
|                             |                            | Lowest Channel For 22H    | Middle Channel For 22H | Highest Channel For 22H |            |
| 15MHz QPSK                  | RB1#0                      | 3.94                      | 3.42                   | 4.7                     | 13         |
|                             | RB75#0                     | 4.99                      | 4.2                    | 4.9                     | 13         |
| 15MHz 16QAM                 | RB1#0                      | 4.9                       | 4.23                   | 5.51                    | 13         |
|                             | RB75#0                     | 5.91                      | 5.1                    | 5.74                    | 13         |
| Result:                     |                            |                           |                        |                         | Pass       |

**FCC §2.1049, §22.905, §90.209:Occupied Bandwidth**

| Operation Mode | 99% Occupied Bandwidth (MHz) |                 |        |                |                |                 | 26 dB Occupied Bandwidth (MHz) |                 |        |                |                |                 |
|----------------|------------------------------|-----------------|--------|----------------|----------------|-----------------|--------------------------------|-----------------|--------|----------------|----------------|-----------------|
|                | Lowest For 90S               | Highest For 90S | Cross  | Lowest For 22H | Middle For 22H | Highest For 22H | Lowest For 90S                 | Highest For 90S | Cross  | Lowest For 22H | Middle For 22H | Highest For 22H |
| 1.4MHz QPSK    | 1.102                        | 1.102           | 1.096  | 1.301          | 1.114          | 1.102           | 1.308                          | 1.311           | 1.319  | 1.301          | 1.338          | 1.308           |
| 1.4MHz 16QAM   | 1.102                        | 1.096           | 1.096  | 1.301          | 1.102          | 1.102           | 1.284                          | 1.325           | 1.289  | 1.301          | 1.32           | 1.326           |
| 3MHz QPSK      | 2.683                        | 2.683           | 2.683  | 2.695          | 2.683          | 2.683           | 2.686                          | 2.904           | 2.683  | 2.695          | 2.988          | 2.88            |
| 3MHz 16QAM     | 2.683                        | 2.683           | 2.683  | 2.683          | 2.683          | 2.683           | 2.880                          | 2.886           | 2.863  | 2.683          | 2.892          | 2.892           |
| 5MHz QPSK      | 4.511                        | 4.511           | 4.531  | 4.511          | 4.511          | 4.531           | 4.960                          | 4.492           | 4.945  | 4.974          | 4.98           | 4.96            |
| 5MHz 16QAM     | 4.531                        | 4.491           | 4.491  | 4.531          | 4.531          | 4.511           | 4.960                          | 4.492           | 4.945  | 4.974          | 5              | 4.96            |
| 10MHz QPSK     | 8.942                        | /               | 8.942  | 8.942          | 8.982          | 8.942           | 9.600                          | /               | 9.716  | 9.725          | 9.6            | 9.72            |
| 10MHz 16QAM    | 8.942                        | /               | 8.942  | 8.942          | 8.982          | 8.942           | 9.680                          | /               | 9.596  | 9.645          | 9.64           | 9.6             |
| 15MHz QPSK     | 13.593                       | /               | 13.473 | 13.533         | 13.533         | 13.473          | 16.74                          | /               | 13.473 | 14.854         | 14.82          | 14.76           |
| 15MHz 16QAM    | 13.473                       | /               | 13.473 | 13.533         | 13.533         | 13.473          | 14.70                          | /               | 13.473 | 14.735         | 14.7           | 14.7            |

Note: The test plots please refer to the Plots of Occupied Bandwidth

**FCC §2.1051, §22.917(a),§90.691:Spurious Emissions at Antenna Terminal**

|                |                                                                                        |
|----------------|----------------------------------------------------------------------------------------|
| <b>Result:</b> | <b>Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.</b> |
|----------------|----------------------------------------------------------------------------------------|

**FCC §2.1051, §22.917(a),§90.691:Out of band emission, Band Edge**

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| <b>Result:</b> | <b>Pass, Please refer to the test plots of Out of band emission, Band Edge.</b> |
|----------------|---------------------------------------------------------------------------------|

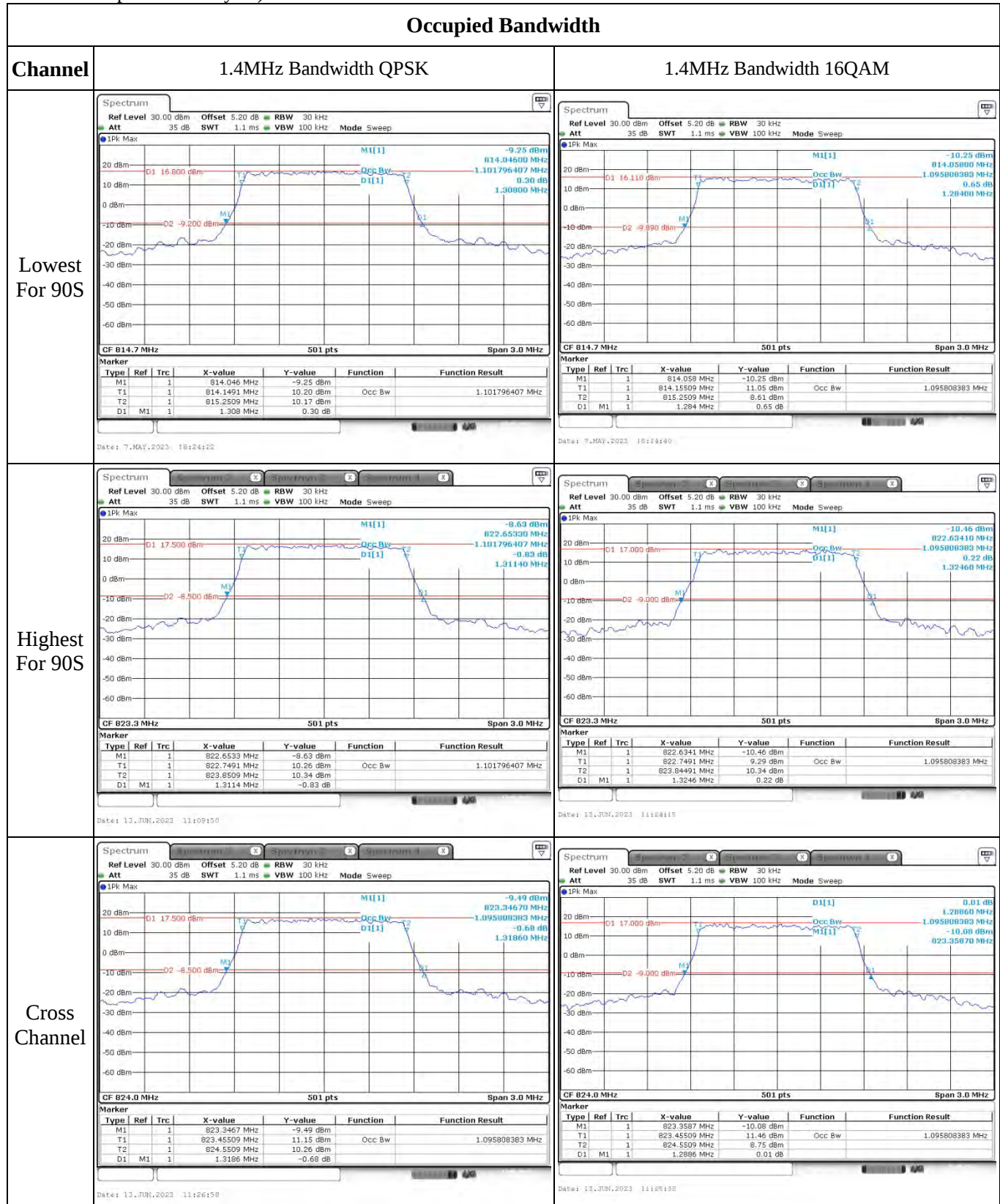
| Test Modulation:                       | 15 MHz QPSK         |                               | Test Channel:   | 821.5          | MHz         |
|----------------------------------------|---------------------|-------------------------------|-----------------|----------------|-------------|
| Test Item                              | Temperature<br>(°C) | Voltage<br>(V <sub>DC</sub> ) | Frequency Error |                | Limit       |
|                                        |                     |                               | (Hz)            | (ppm)          | (ppm)       |
| Frequency Stability vs.<br>Temperature | -30                 | 3.85                          | 7.62            | 0.009          | 2.5         |
|                                        | -20                 | 3.85                          | 9.52            | 0.011          | 2.5         |
|                                        | -10                 | 3.85                          | 6.76            | 0.008          | 2.5         |
|                                        | 0                   | 3.85                          | 11.41           | 0.014          | 2.5         |
|                                        | 10                  | 3.85                          | 10.43           | 0.013          | 2.5         |
|                                        | 20                  | 3.85                          | 8.65            | 0.010          | 2.5         |
|                                        | 30                  | 3.85                          | 8.58            | 0.010          | 2.5         |
|                                        | 40                  | 3.85                          | 8.33            | 0.010          | 2.5         |
|                                        | 50                  | 3.85                          | 7.94            | 0.010          | 2.5         |
| Frequency Stability vs.<br>Voltage     | 20                  | 3.5                           | 9.58            | 0.012          | 2.5         |
|                                        | 20                  | 4.4                           | 7.21            | 0.009          | 2.5         |
|                                        |                     |                               |                 | <b>Result:</b> | <b>Pass</b> |

| Test Modulation:                       | 15 MHz 16QAM        |                               | Test Channel:   | 821.5          | MHz         |
|----------------------------------------|---------------------|-------------------------------|-----------------|----------------|-------------|
| Test Item                              | Temperature<br>(°C) | Voltage<br>(V <sub>DC</sub> ) | Frequency Error |                | Limit       |
|                                        |                     |                               | (Hz)            | (ppm)          | (ppm)       |
| Frequency Stability vs.<br>Temperature | -30                 | 3.85                          | 9.85            | 0.012          | 2.5         |
|                                        | -20                 | 3.85                          | 5               | 0.006          | 2.5         |
|                                        | -10                 | 3.85                          | 6.02            | 0.007          | 2.5         |
|                                        | 0                   | 3.85                          | 8.43            | 0.010          | 2.5         |
|                                        | 10                  | 3.85                          | 9.56            | 0.011          | 2.5         |
|                                        | 20                  | 3.85                          | 7.38            | 0.009          | 2.5         |
|                                        | 30                  | 3.85                          | 4.38            | 0.005          | 2.5         |
|                                        | 40                  | 3.85                          | 7.11            | 0.009          | 2.5         |
|                                        | 50                  | 3.85                          | 5.5             | 0.007          | 2.5         |
| Frequency Stability vs.<br>Voltage     | 20                  | 3.5                           | 7.22            | 0.009          | 2.5         |
|                                        | 20                  | 4.4                           | 6.63            | 0.008          | 2.5         |
|                                        |                     |                               |                 | <b>Result:</b> | <b>Pass</b> |

| Test Modulation:                    | 15 MHz QPSK      |                            | Test Channel:   | 831.5          | MHz         |
|-------------------------------------|------------------|----------------------------|-----------------|----------------|-------------|
| Test Item                           | Temperature (°C) | Voltage (V <sub>DC</sub> ) | Frequency Error |                | Limit       |
|                                     |                  |                            | (Hz)            | (ppm)          | (ppm)       |
| Frequency Stability vs. Temperature | -30              | 3.85                       | -5.94           | -0.007         | 2.5         |
|                                     | -20              | 3.85                       | -8.69           | -0.010         | 2.5         |
|                                     | -10              | 3.85                       | 5.7             | 0.007          | 2.5         |
|                                     | 0                | 3.85                       | 9.12            | 0.011          | 2.5         |
|                                     | 10               | 3.85                       | -8.55           | -0.010         | 2.5         |
|                                     | 20               | 3.85                       | 7.51            | 0.009          | 2.5         |
|                                     | 30               | 3.85                       | -7.9            | -0.010         | 2.5         |
|                                     | 40               | 3.85                       | -5.46           | -0.007         | 2.5         |
|                                     | 50               | 3.85                       | 8.4             | 0.010          | 2.5         |
| Frequency Stability vs. Voltage     | 20               | 3.5                        | -7.71           | -0.009         | 2.5         |
|                                     | 20               | 4.4                        | 5.87            | 0.007          | 2.5         |
|                                     |                  |                            |                 | <b>Result:</b> | <b>Pass</b> |

| Test Modulation:                    | 15 MHz 16QAM     |                            | Test Channel:   | 831.5          | MHz         |
|-------------------------------------|------------------|----------------------------|-----------------|----------------|-------------|
| Test Item                           | Temperature (°C) | Voltage (V <sub>DC</sub> ) | Frequency Error |                | Limit       |
|                                     |                  |                            | (Hz)            | (ppm)          | (ppm)       |
| Frequency Stability vs. Temperature | -30              | 3.85                       | -7.38           | -0.009         | 2.5         |
|                                     | -20              | 3.85                       | -9.88           | -0.012         | 2.5         |
|                                     | -10              | 3.85                       | -7.99           | -0.010         | 2.5         |
|                                     | 0                | 3.85                       | 7.26            | 0.009          | 2.5         |
|                                     | 10               | 3.85                       | 5.71            | 0.007          | 2.5         |
|                                     | 20               | 3.85                       | 9.11            | 0.011          | 2.5         |
|                                     | 30               | 3.85                       | -6.47           | -0.008         | 2.5         |
|                                     | 40               | 3.85                       | -7.37           | -0.009         | 2.5         |
|                                     | 50               | 3.85                       | 9.03            | 0.011          | 2.5         |
| Frequency Stability vs. Voltage     | 20               | 3.5                        | -9.44           | -0.011         | 2.5         |
|                                     | 20               | 4.4                        | -8.88           | -0.011         | 2.5         |
|                                     |                  |                            |                 | <b>Result:</b> | <b>Pass</b> |

**Test Plots**(Note: The 5.6dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

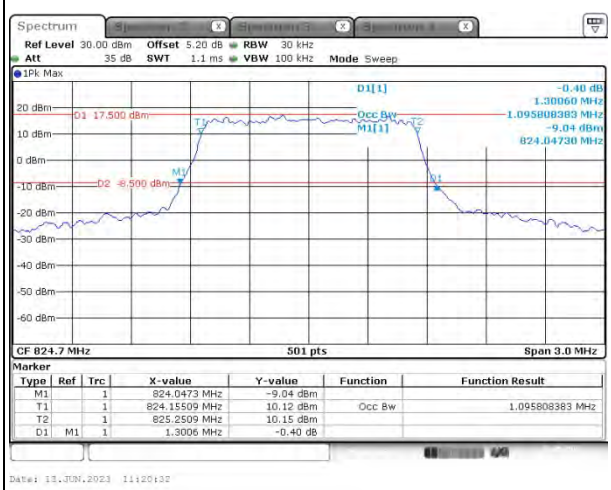
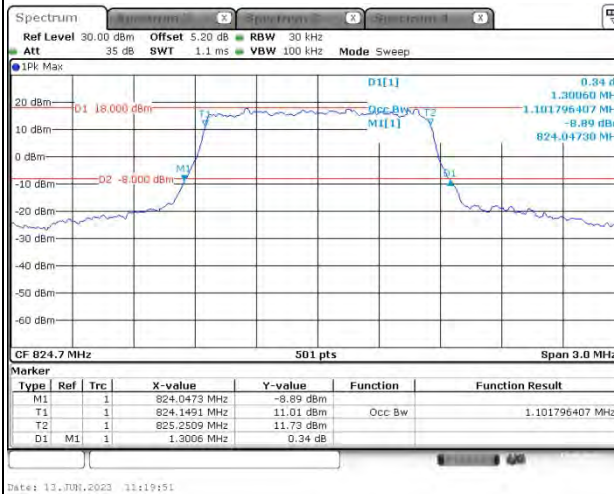
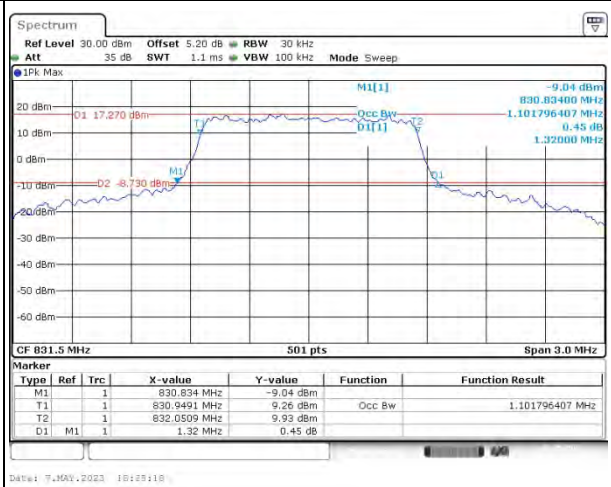
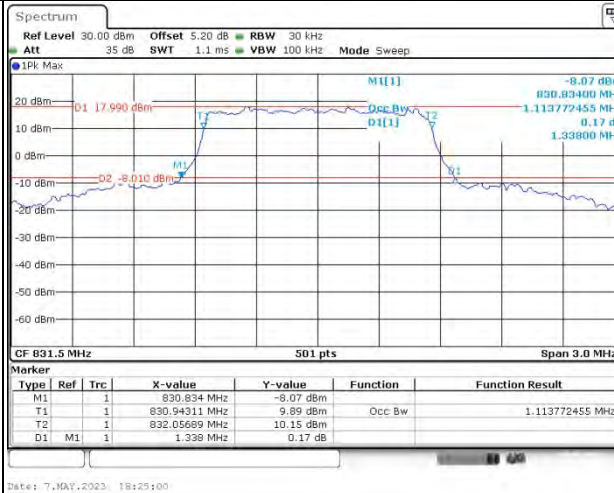
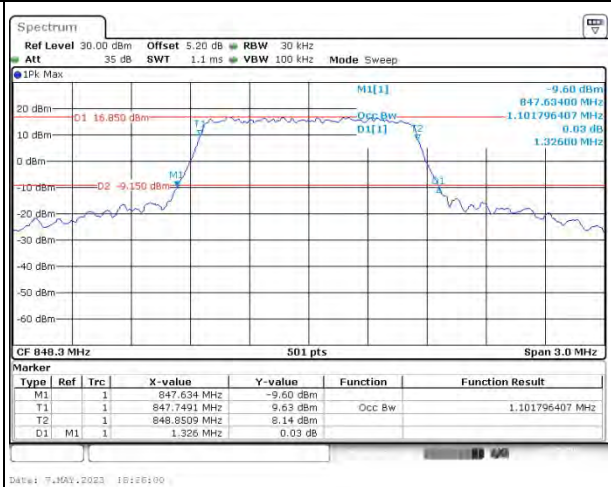
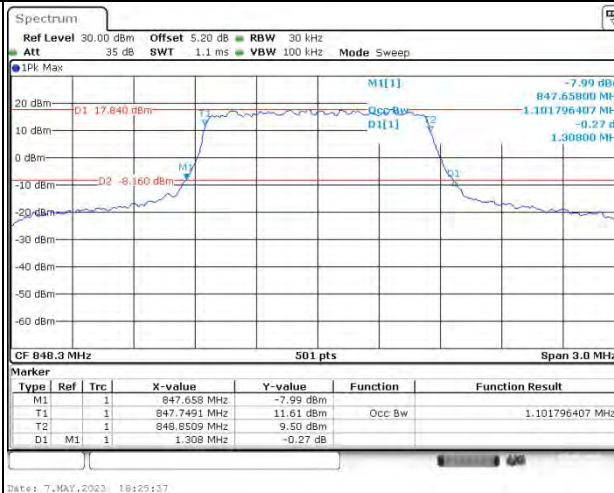


## Occupied Bandwidth

## Channel

1.4MHz Bandwidth QPSK

1.4MHz Bandwidth 16QAM

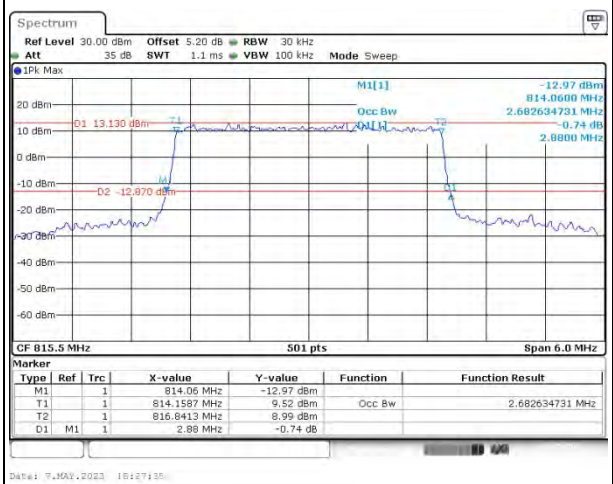
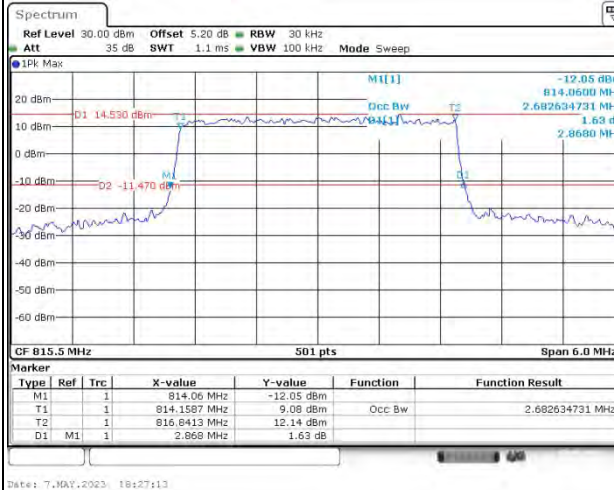
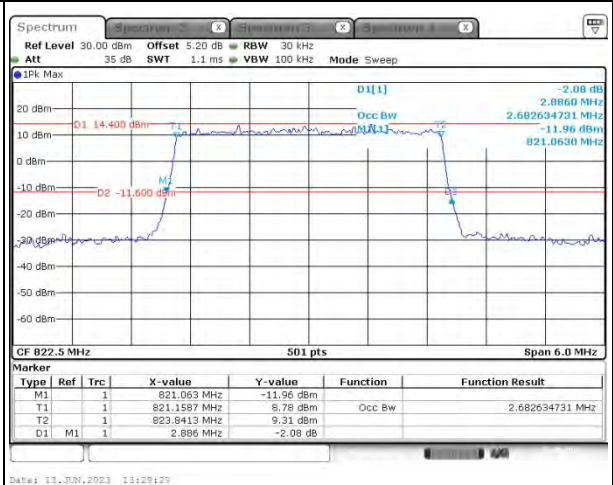
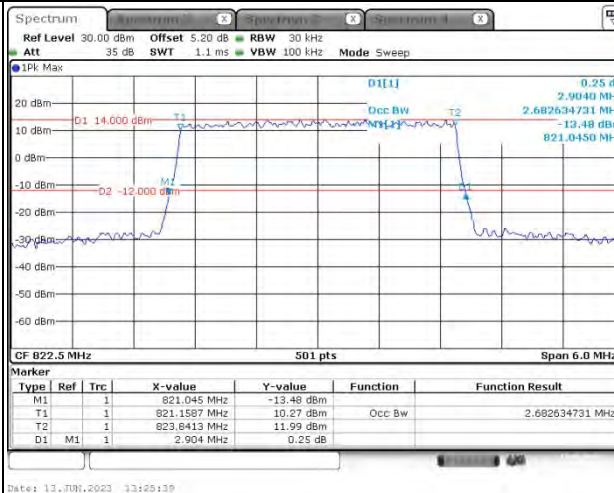
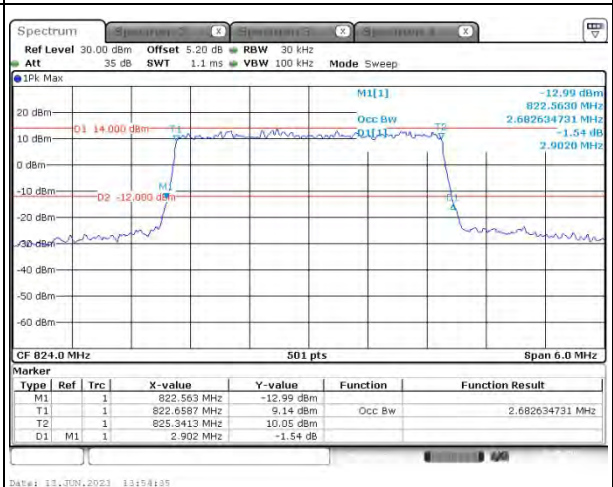
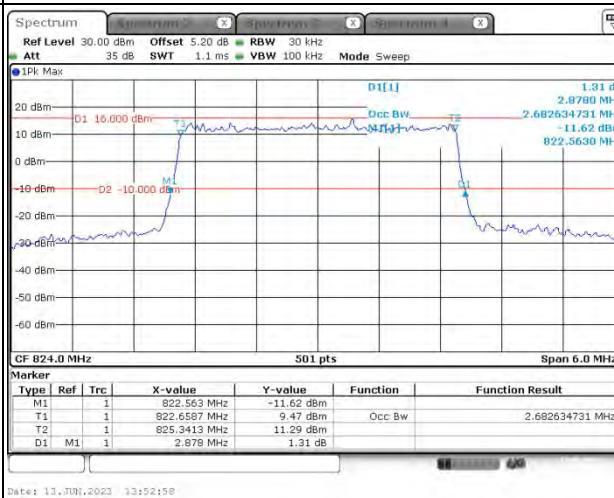
Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Occupied Bandwidth

## Channel

3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

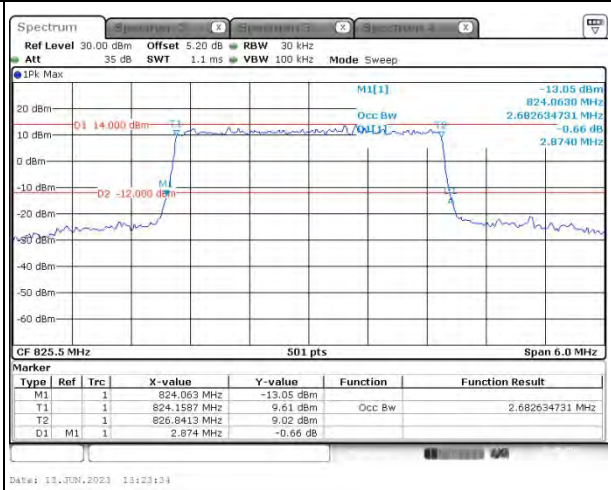
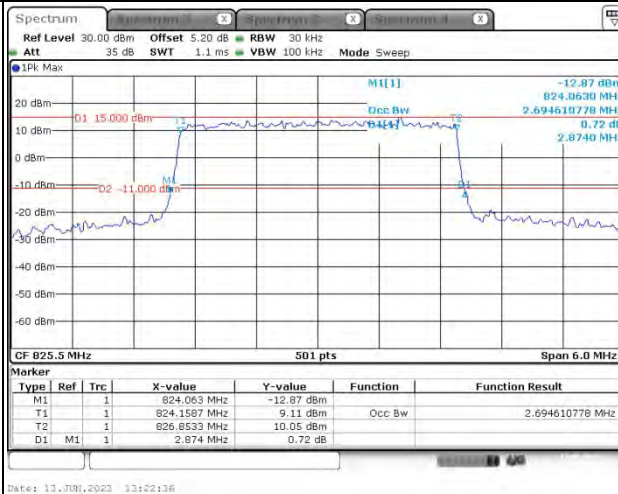
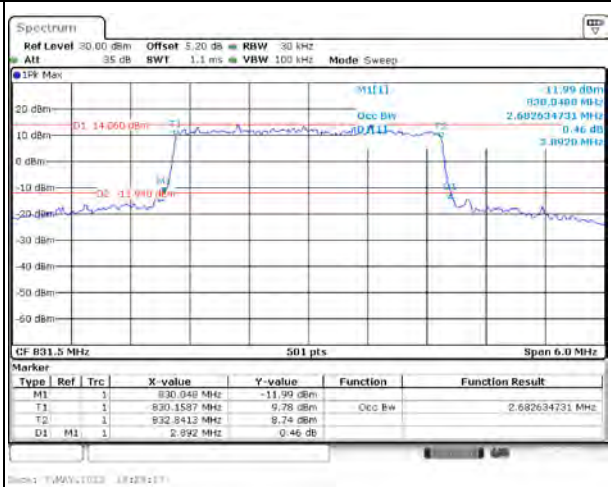
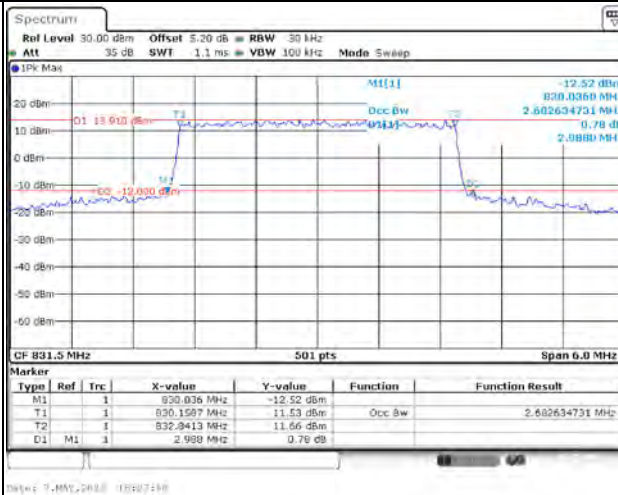
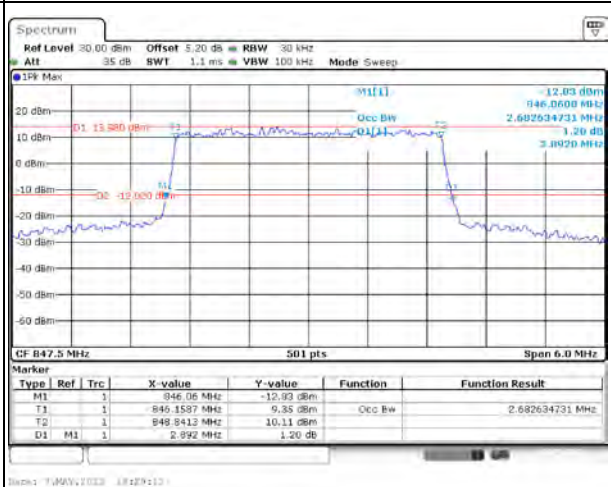
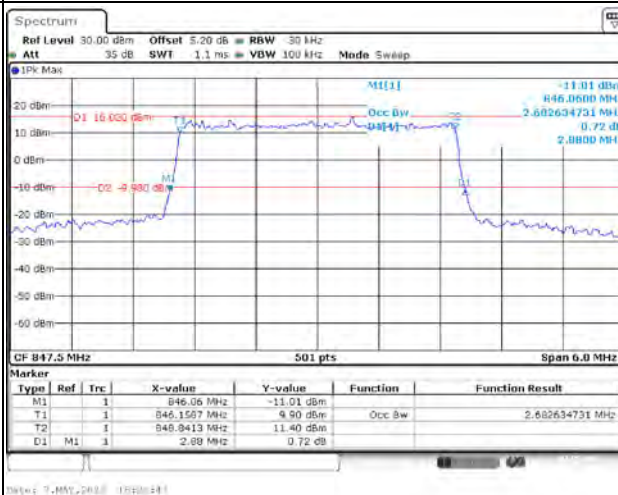
Lowest  
For 90SHighest  
For 90SCross  
Channel

## Occupied Bandwidth

## Channel

## 3MHz Bandwidth QPSK

## 3MHz Bandwidth 16QAM

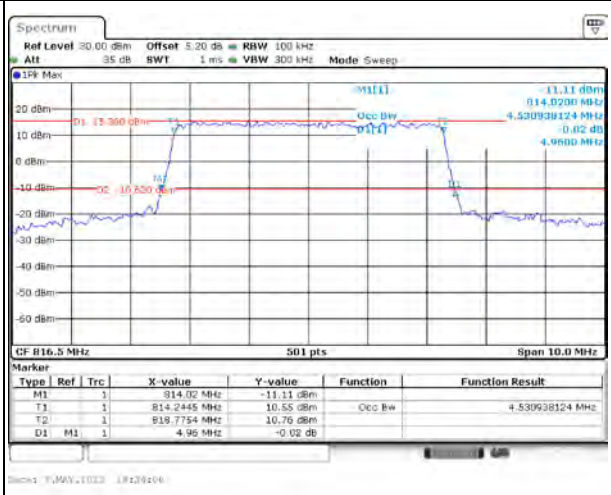
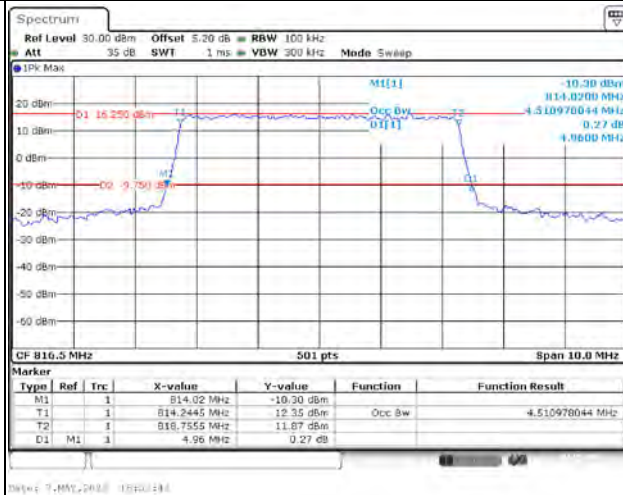
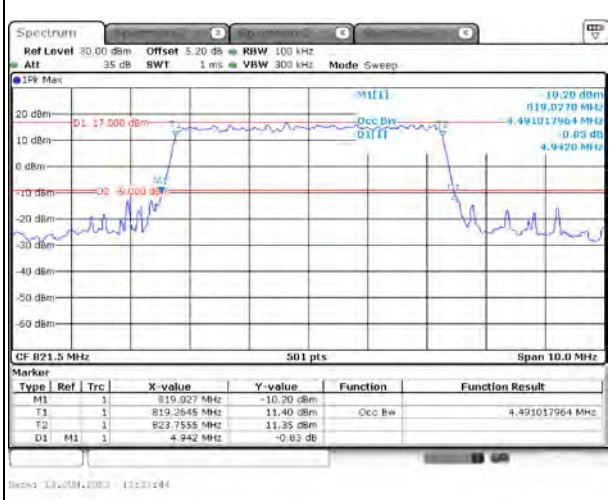
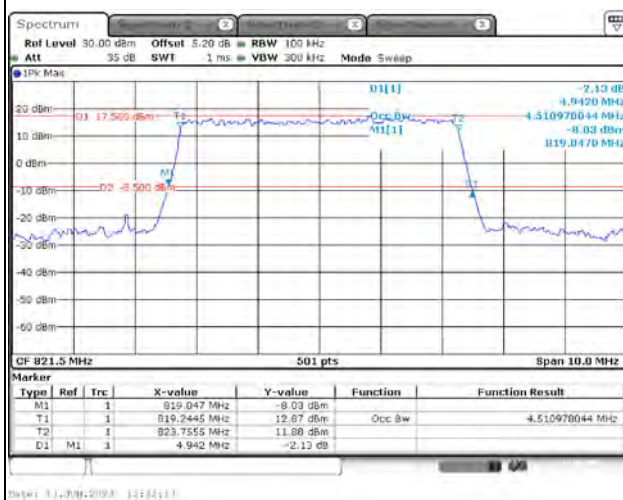
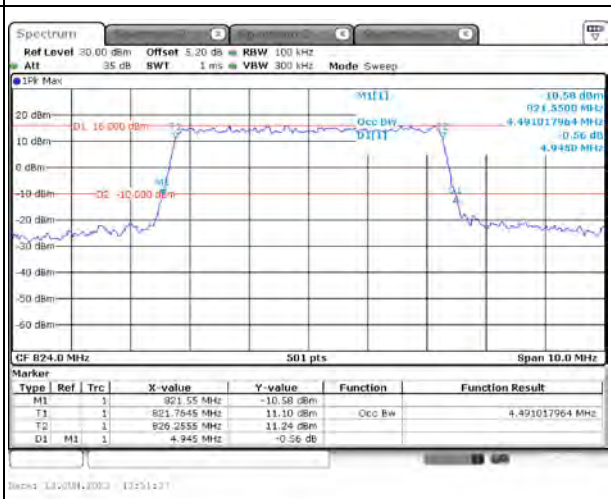
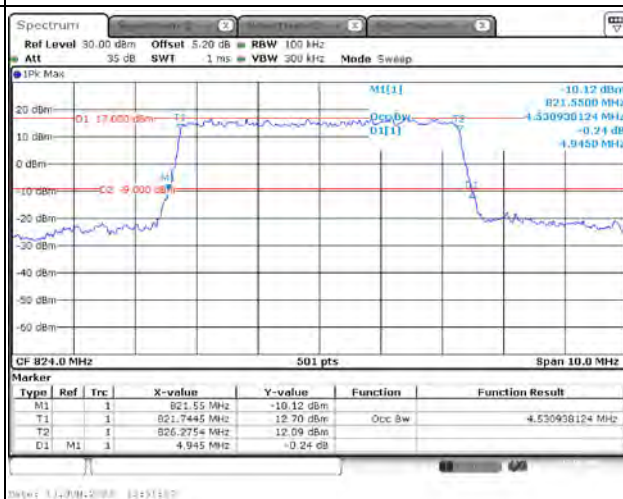
Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Occupied Bandwidth

## Channel

## 5MHz Bandwidth QPSK

## 5MHz Bandwidth 16QAM

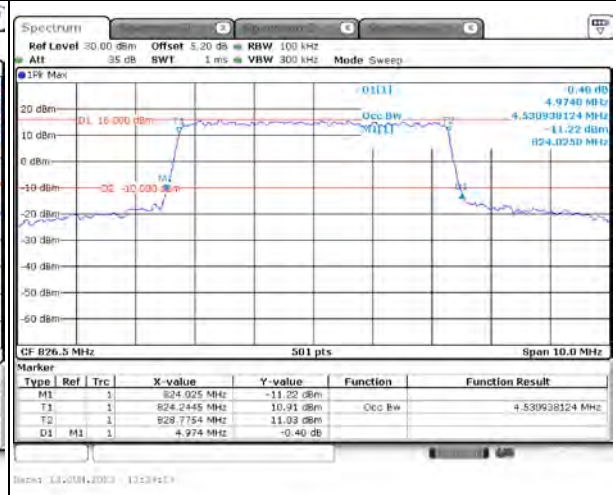
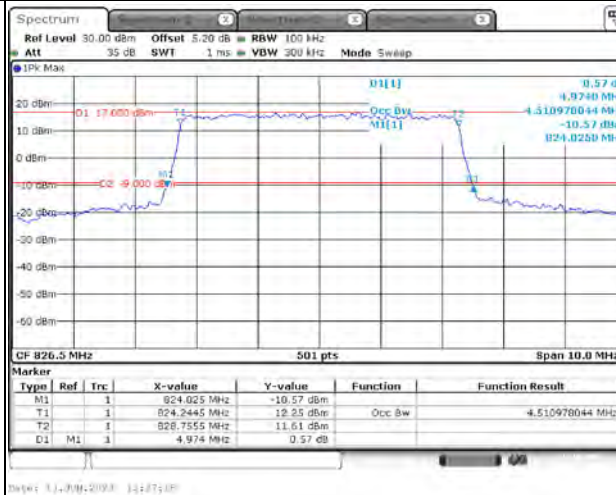
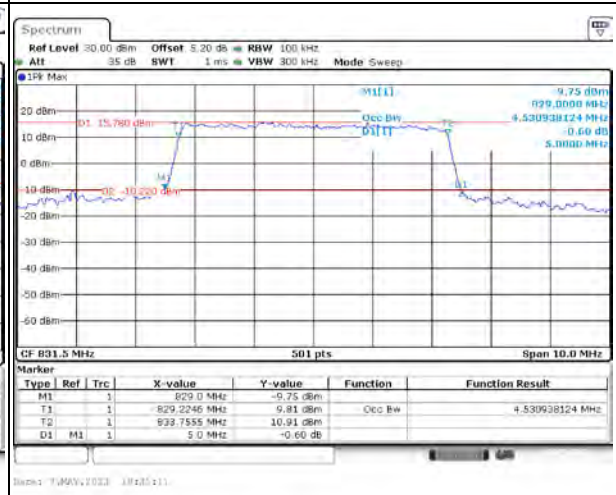
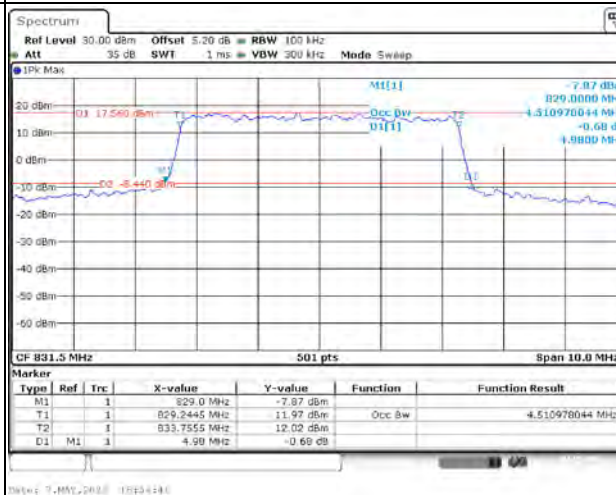
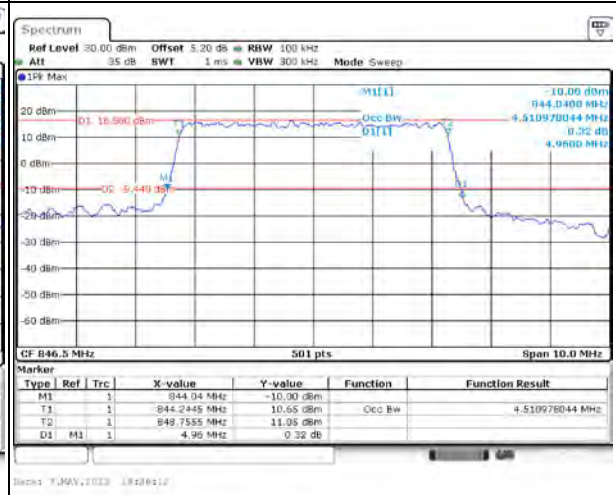
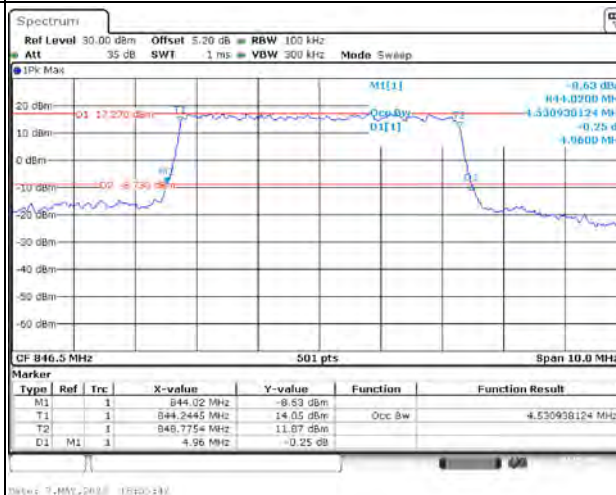
Lowest  
For 90SHighest  
For 90SCross  
Channel

## Occupied Bandwidth

Channel

5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

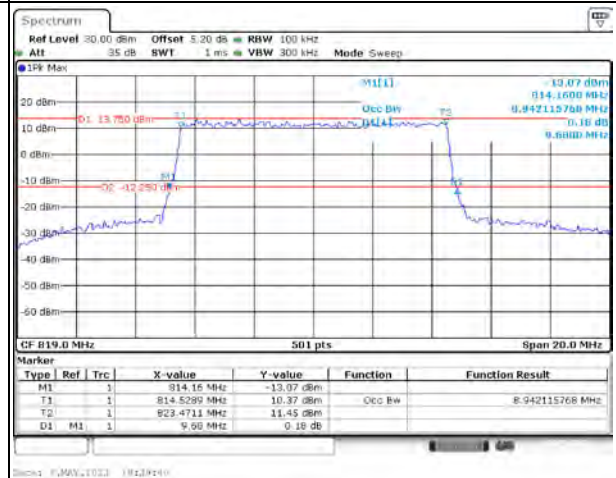
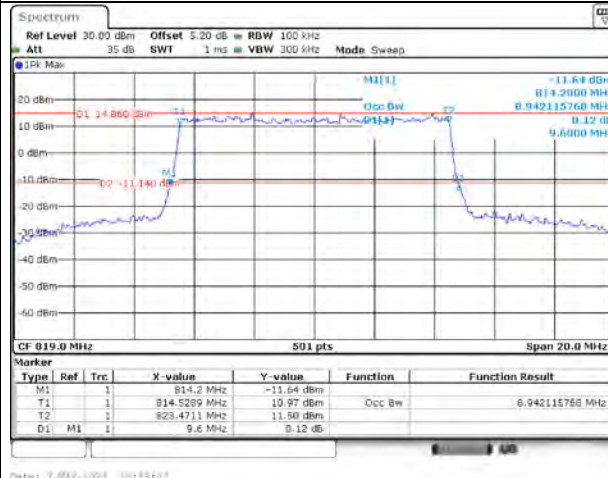
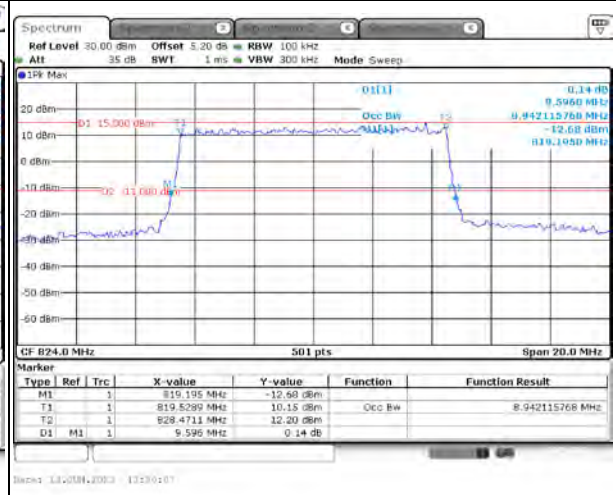
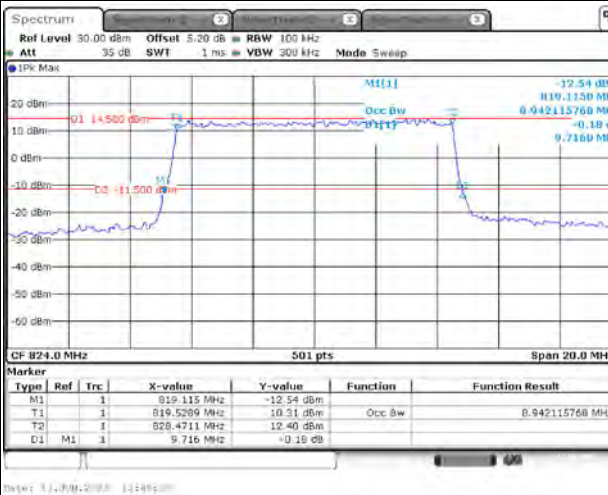
Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Occupied Bandwidth

## Channel

## 10MHz Bandwidth QPSK

## 10MHz Bandwidth 16QAM

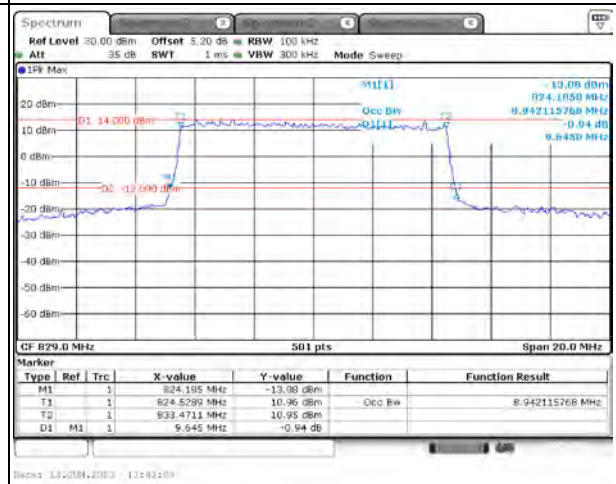
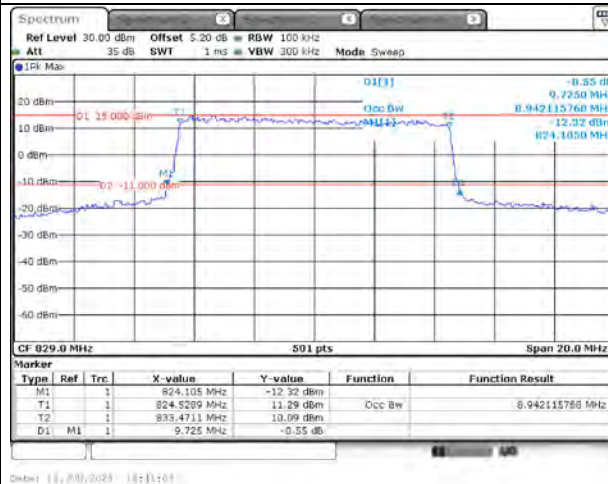
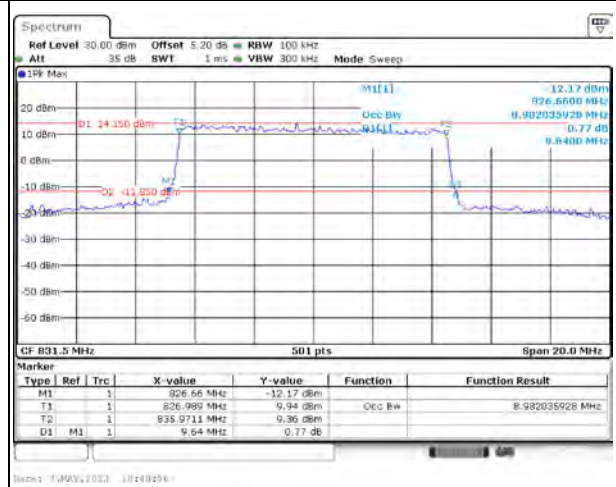
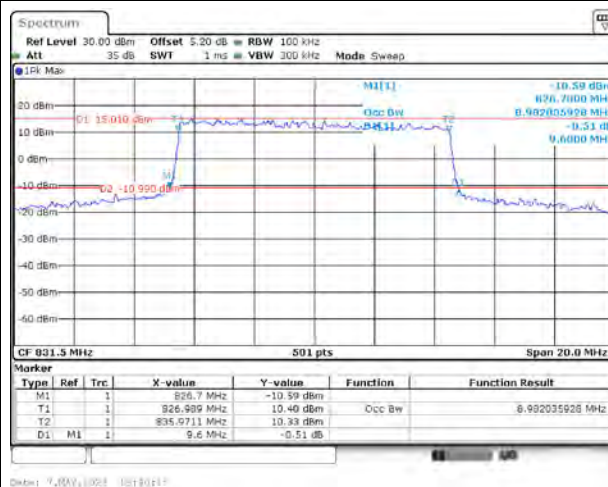
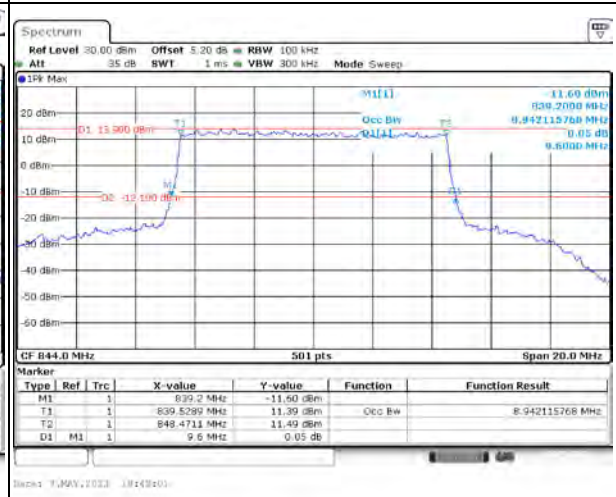
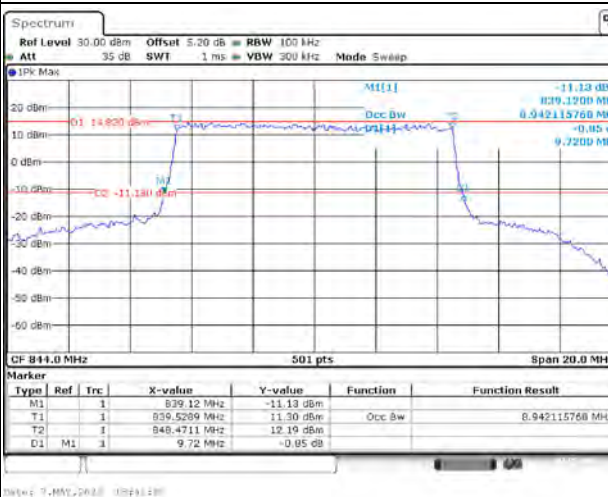
Lowest  
For 90SCross  
Channel

## Occupied Bandwidth

## Channel

## 10MHz Bandwidth QPSK

## 10MHz Bandwidth 16QAM

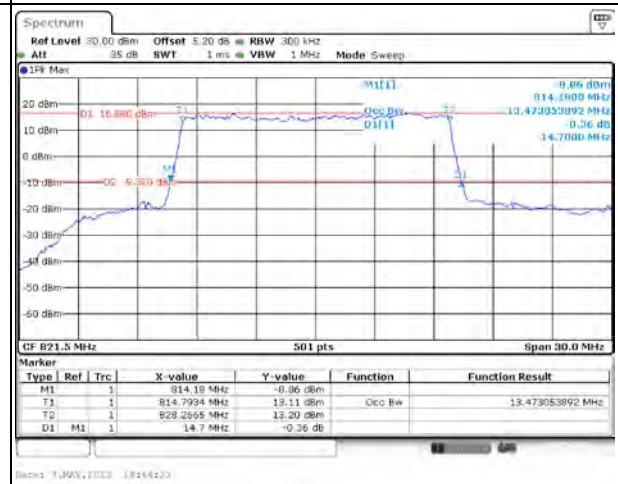
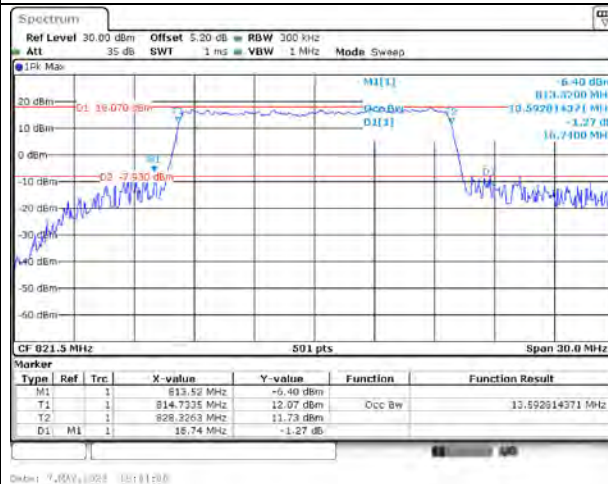
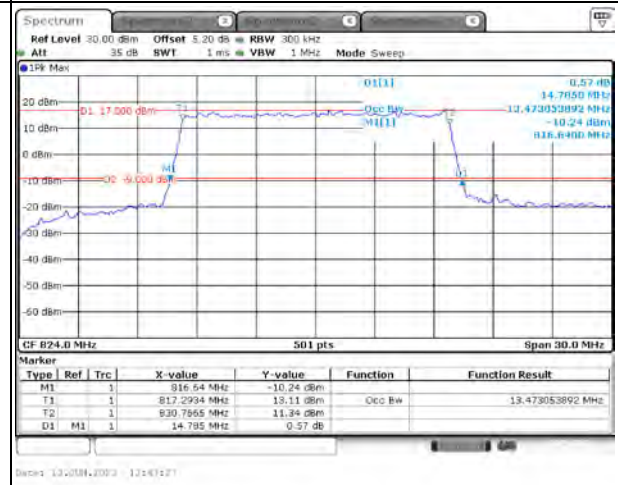
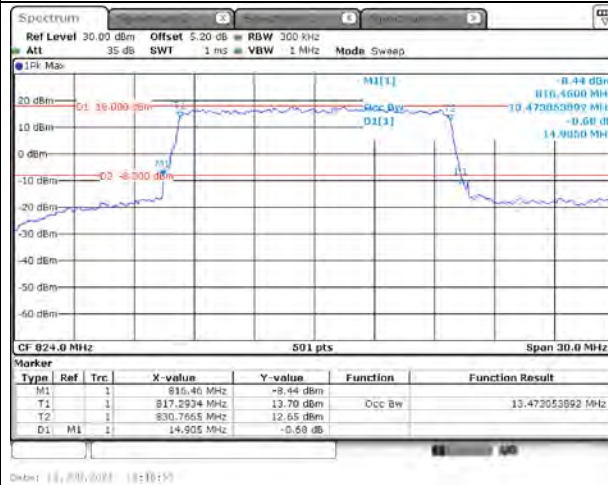
Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Occupied Bandwidth

Channel

15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

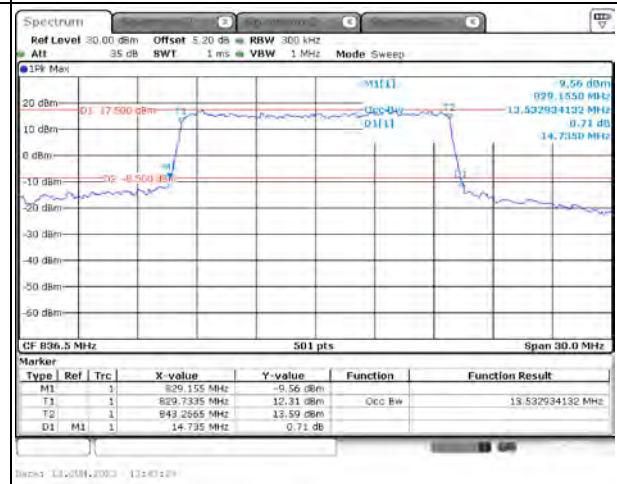
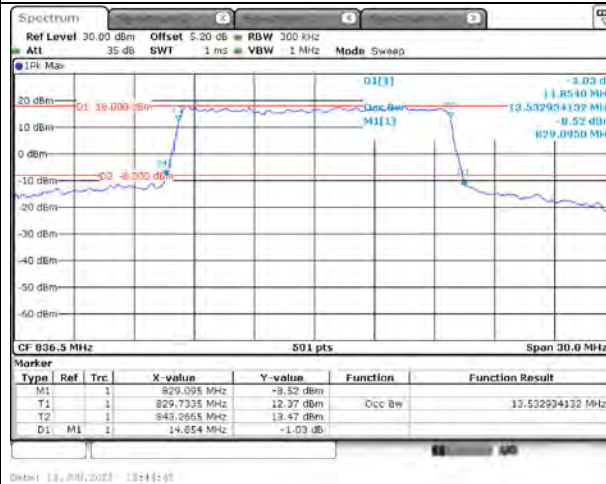
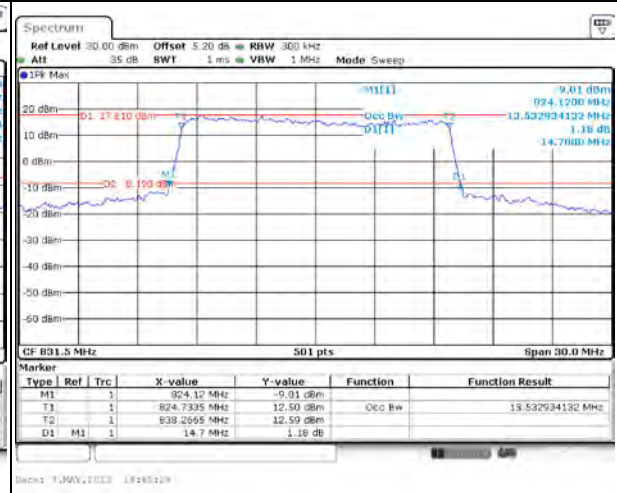
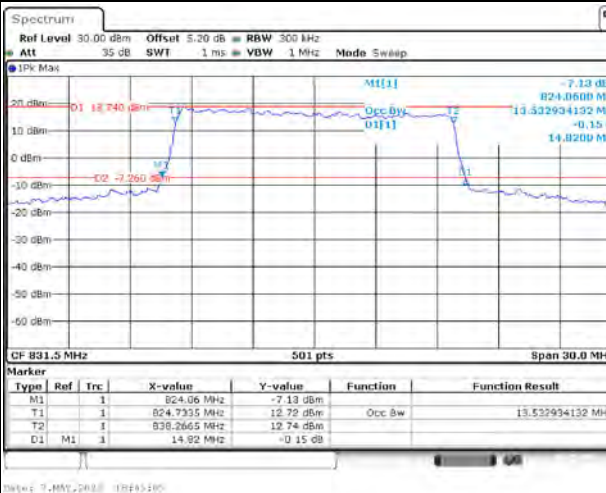
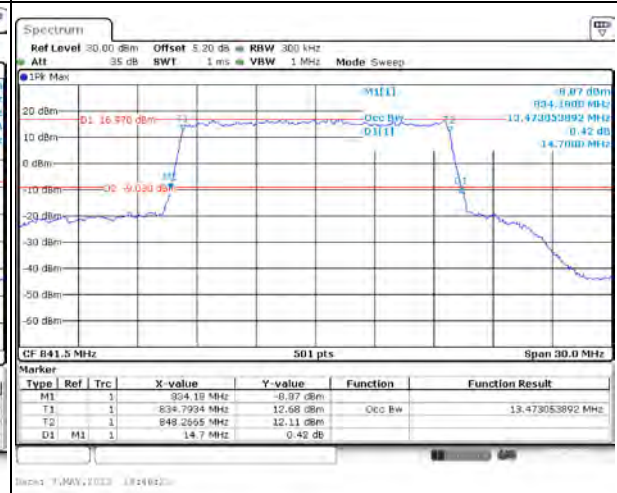
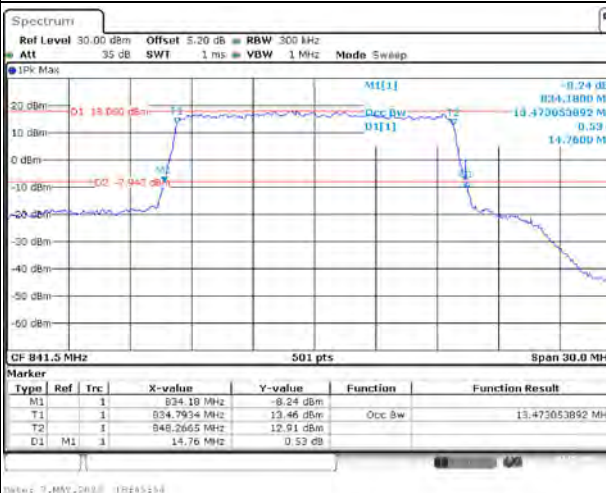
Lowest  
For 90SCross  
Channel

## Occupied Bandwidth

## Channel

15MHz Bandwidth QPSK

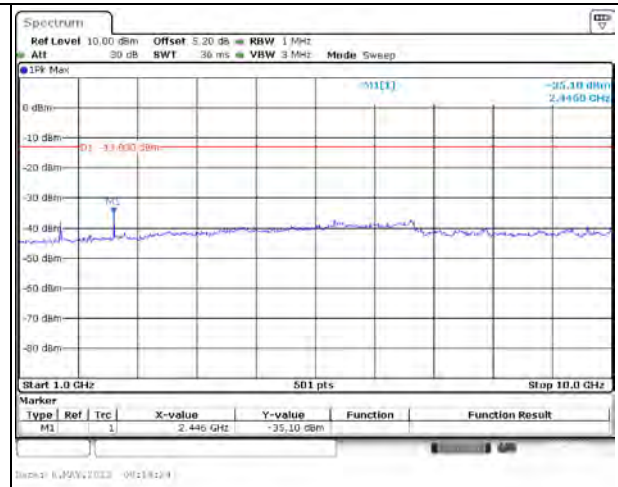
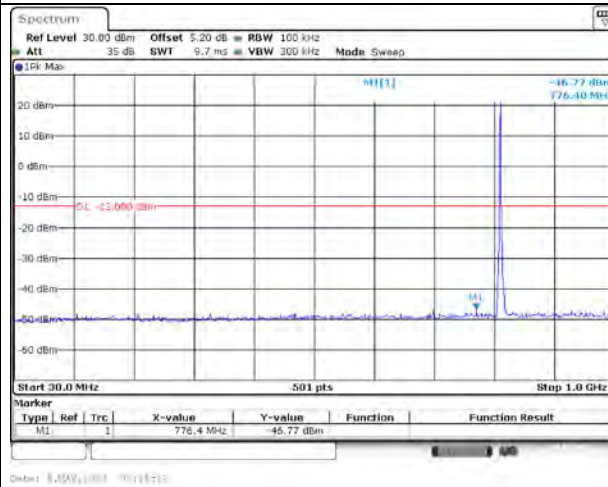
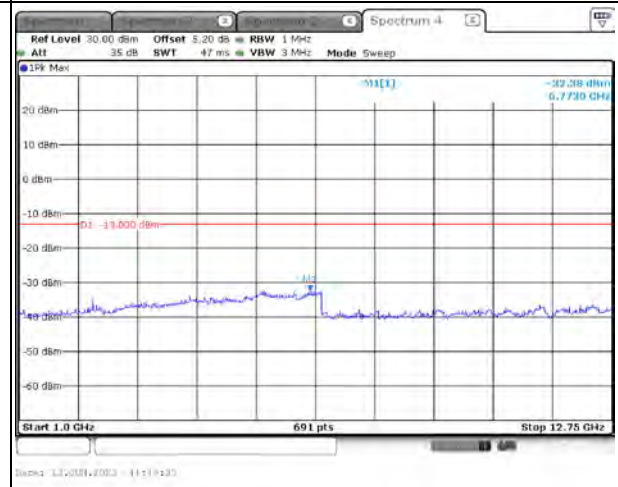
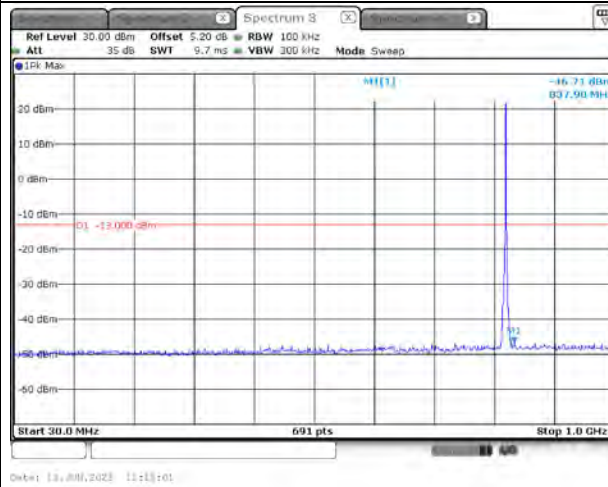
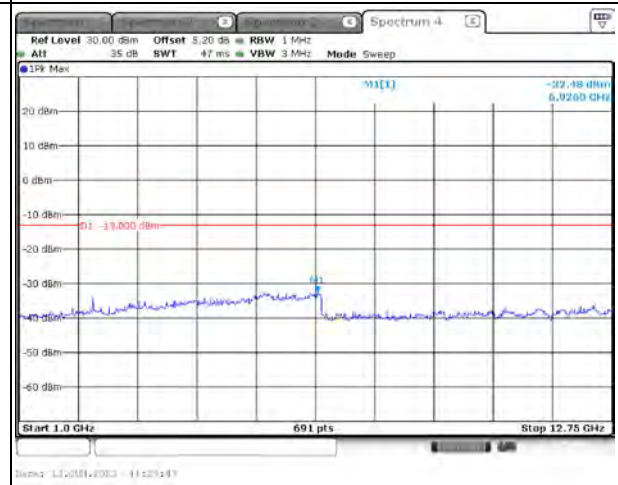
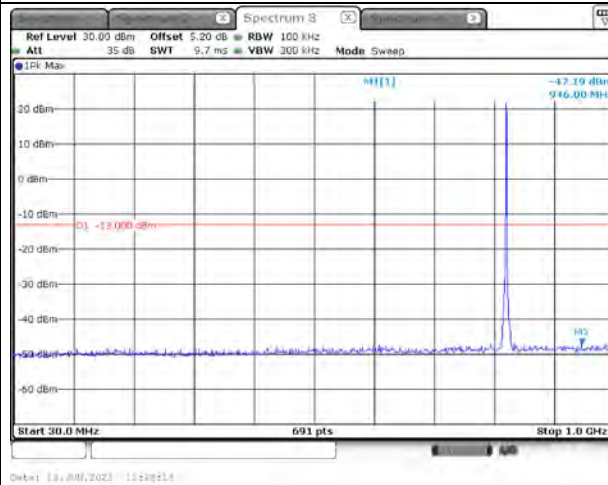
15MHz Bandwidth 16QAM

Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Spurious Emissions at Antenna Terminal

Channel

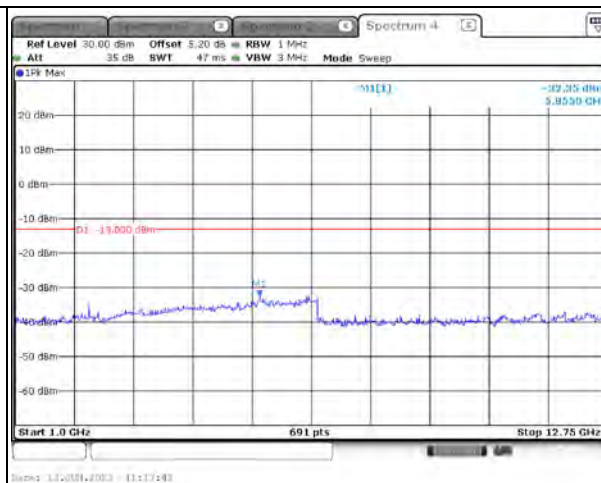
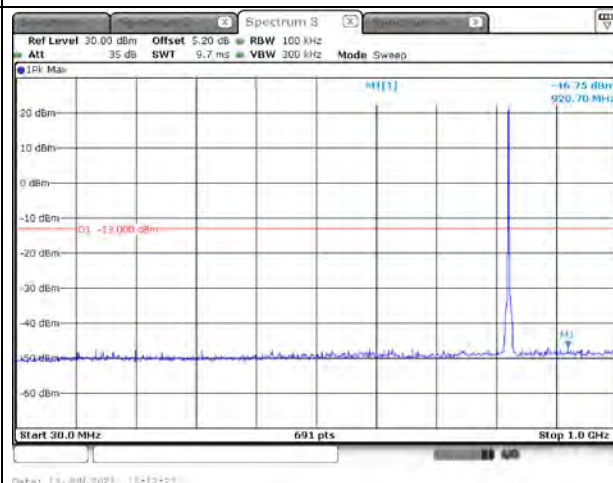
1.4MHz Bandwidth QPSK

Lowest  
For 90SHighest  
For 90SCross  
Channel

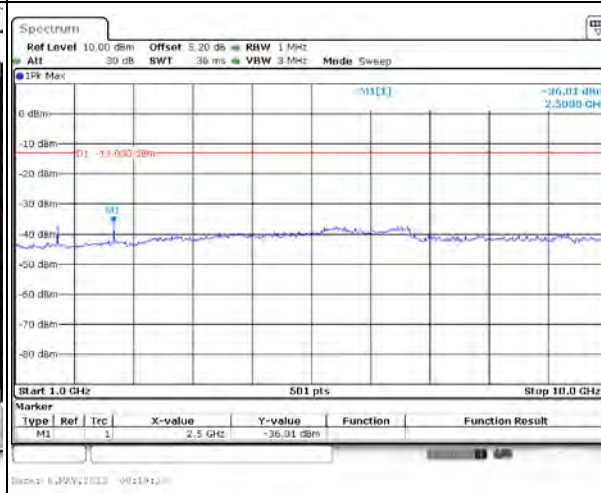
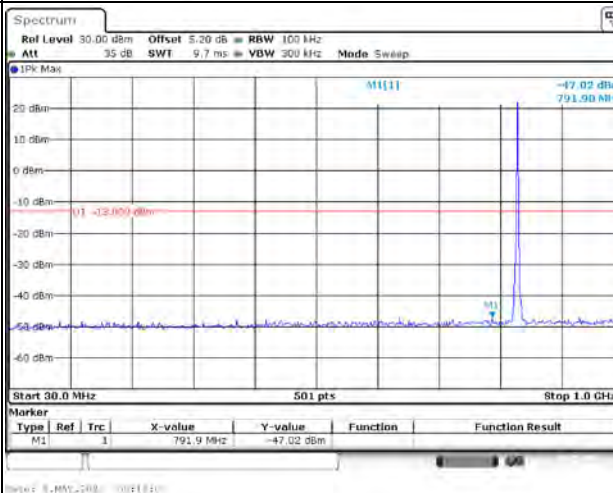
## Channel

### 1.4MHz Bandwidth QPSK

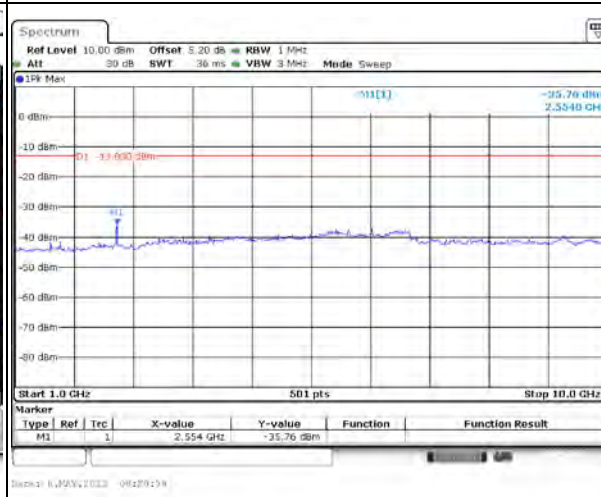
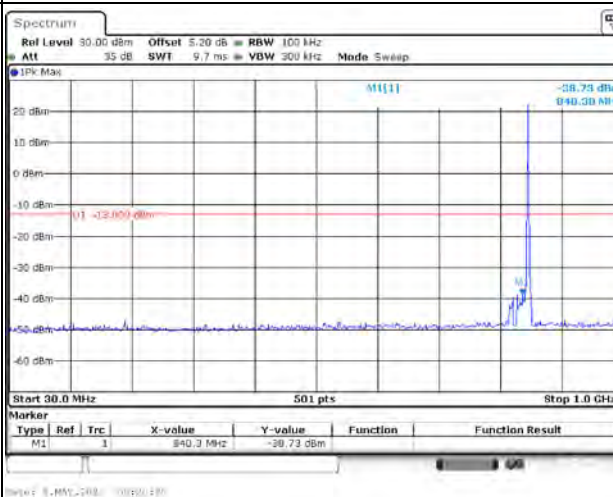
Lowest  
For 22H



|         |
|---------|
| Middle  |
| For 22H |



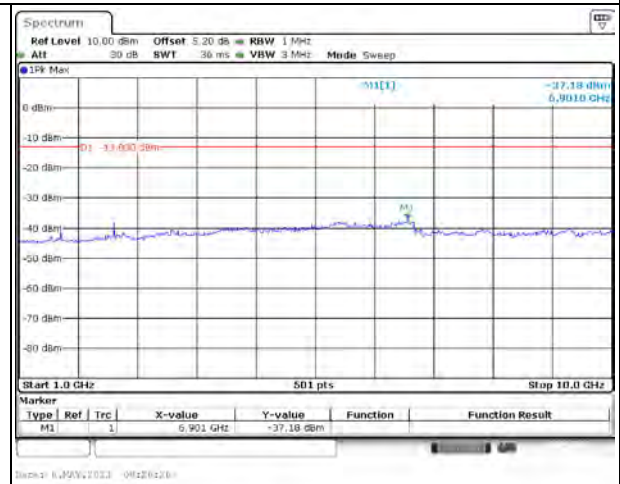
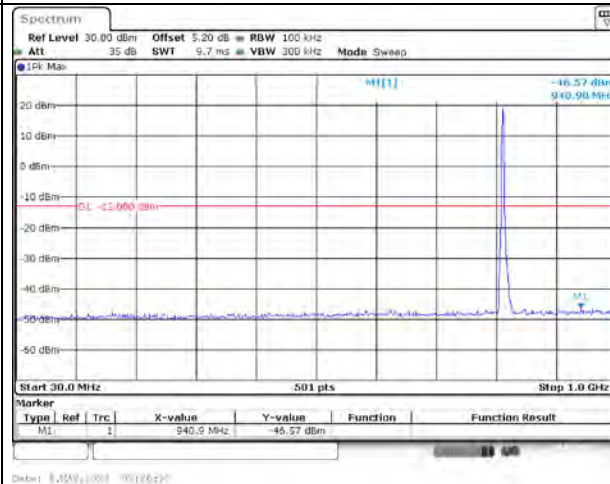
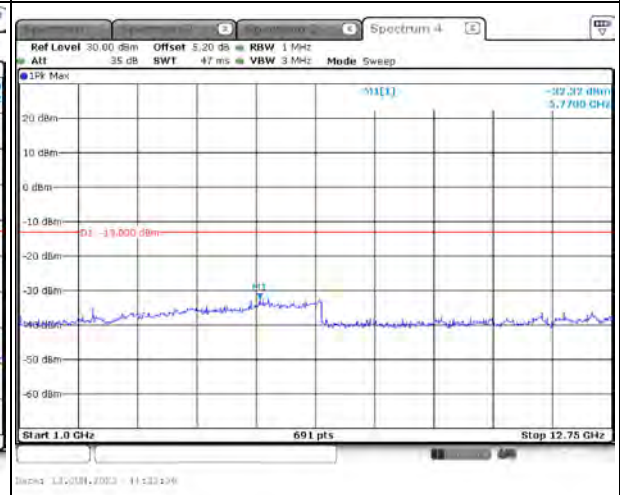
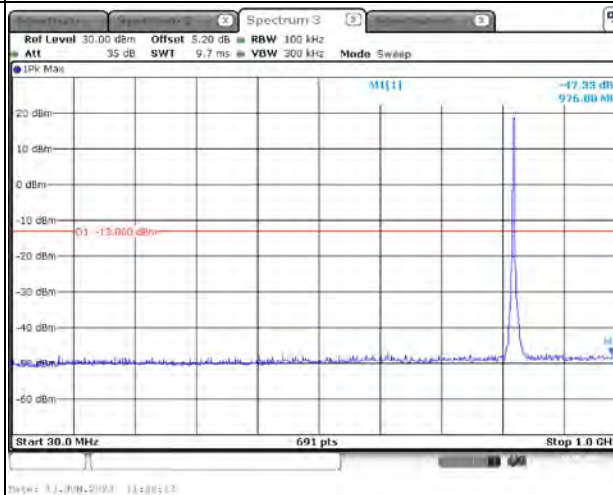
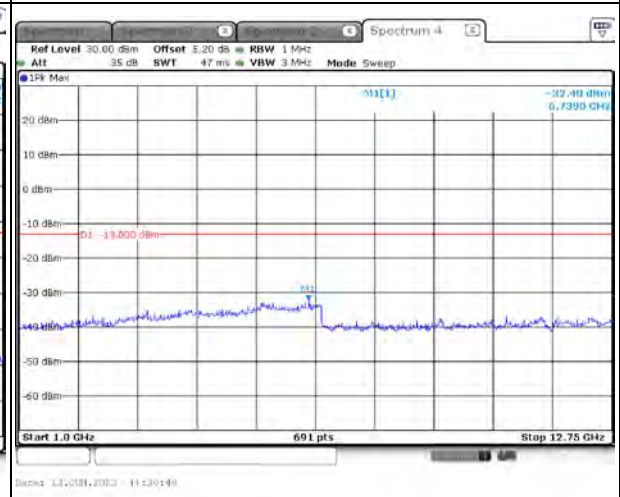
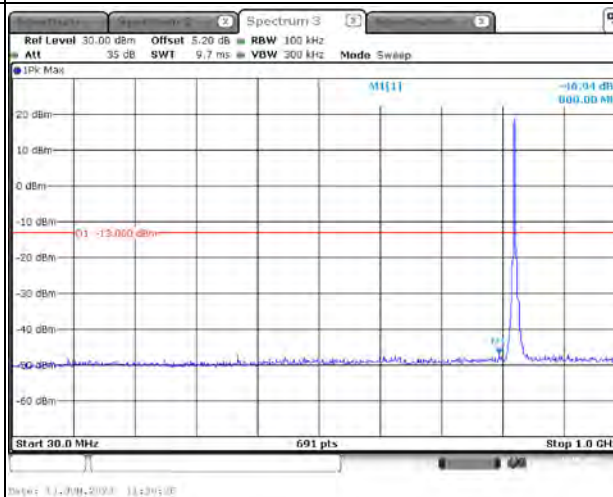
Highest  
For 22H



## Spurious Emissions at Antenna Terminal

Channel

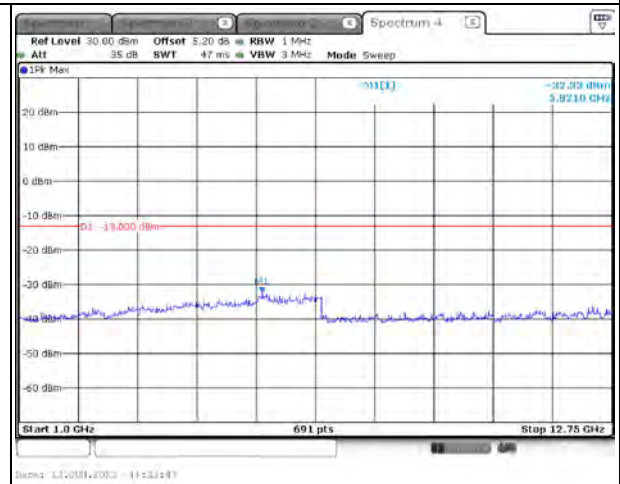
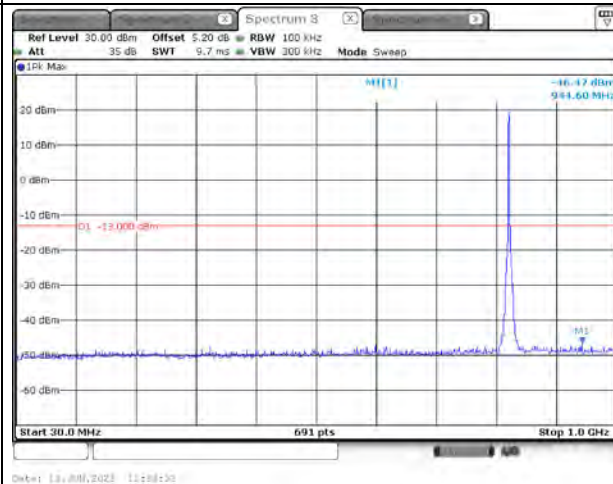
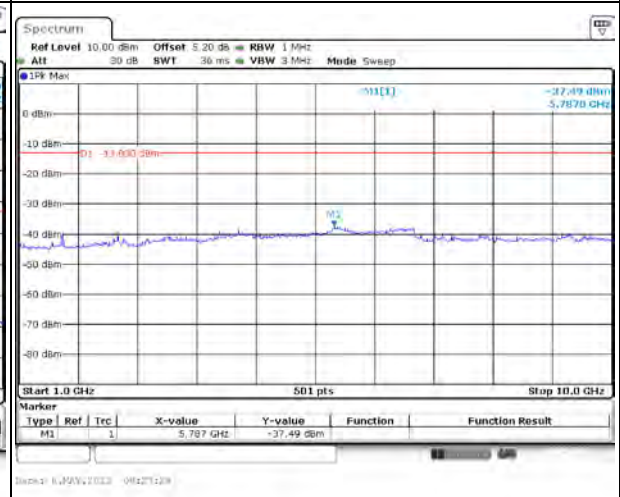
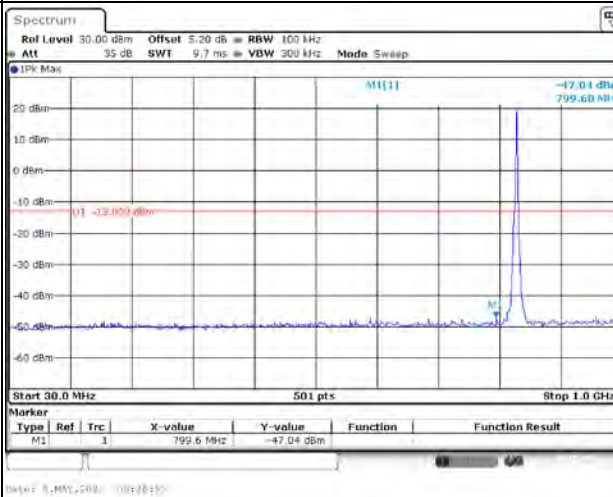
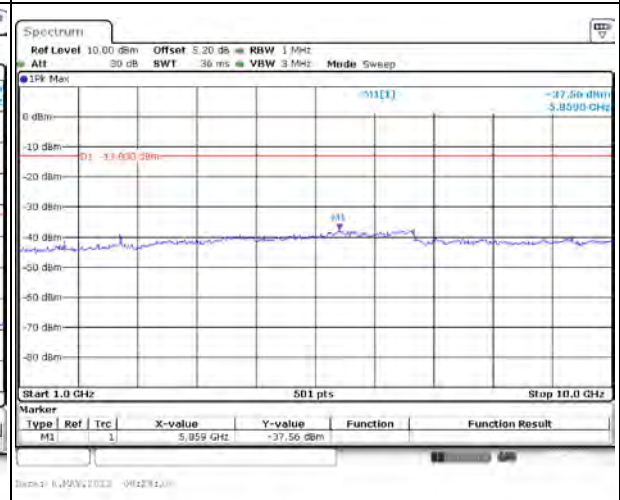
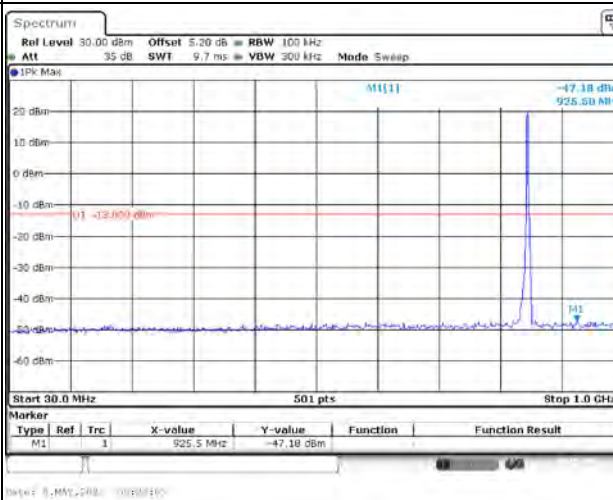
3MHz Bandwidth QPSK

Lowest  
For 90SHighest  
For 90SCross  
Channel

## Spurious Emissions at Antenna Terminal

Channel

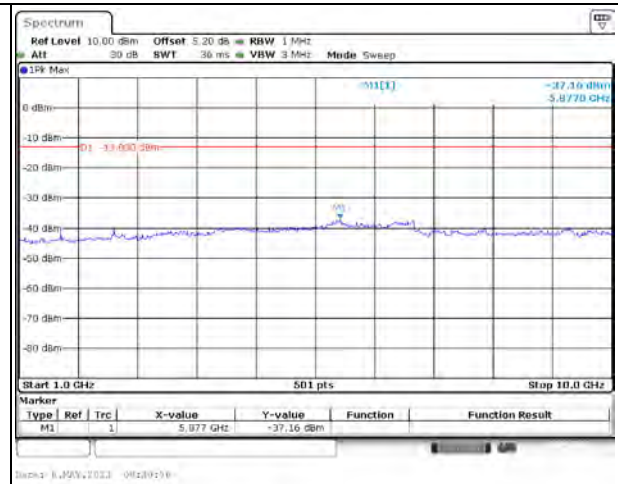
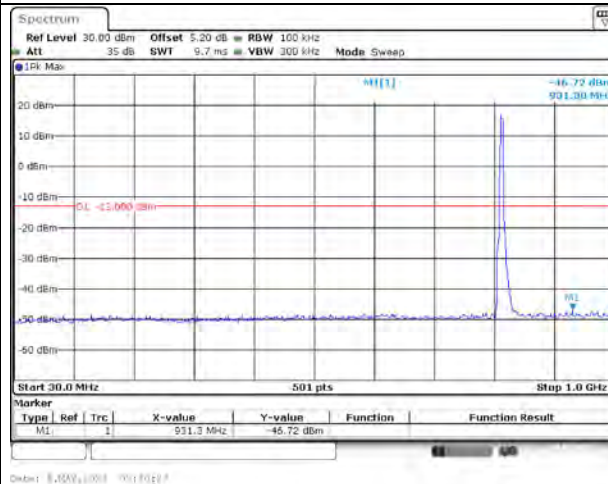
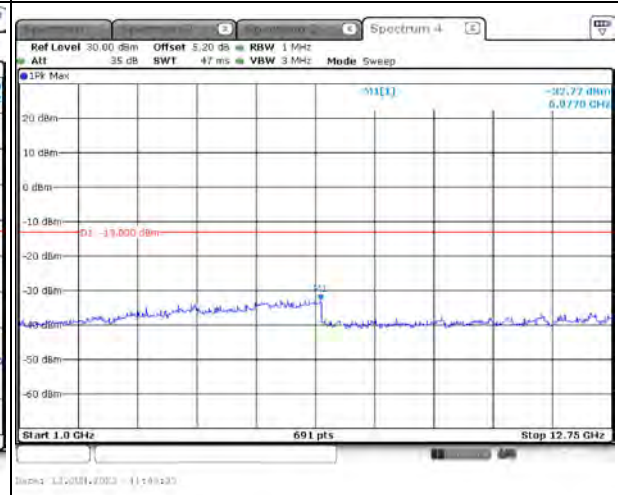
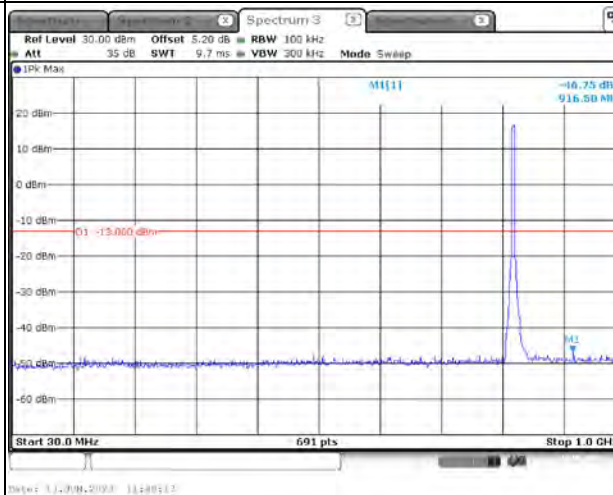
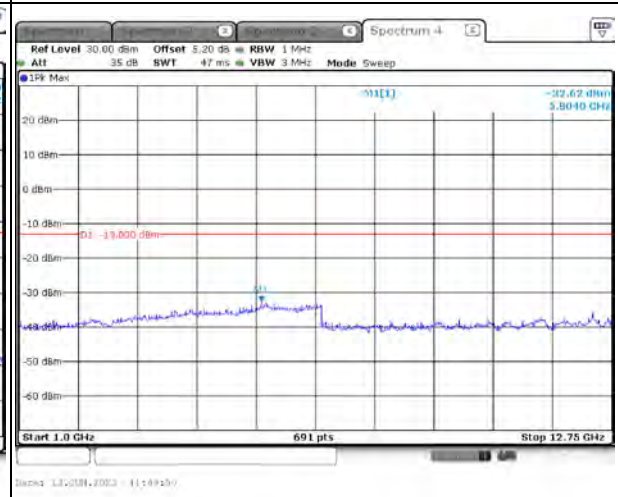
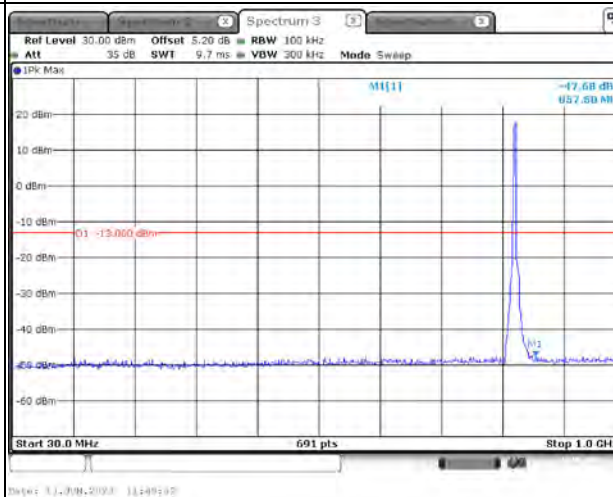
3MHz Bandwidth QPSK

Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Spurious Emissions at Antenna Terminal

Channel

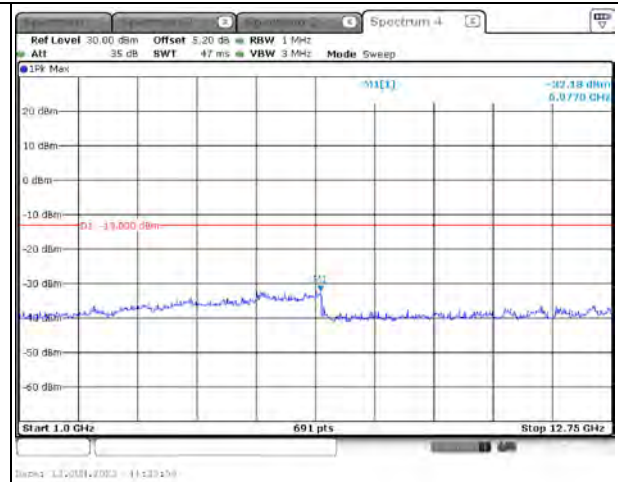
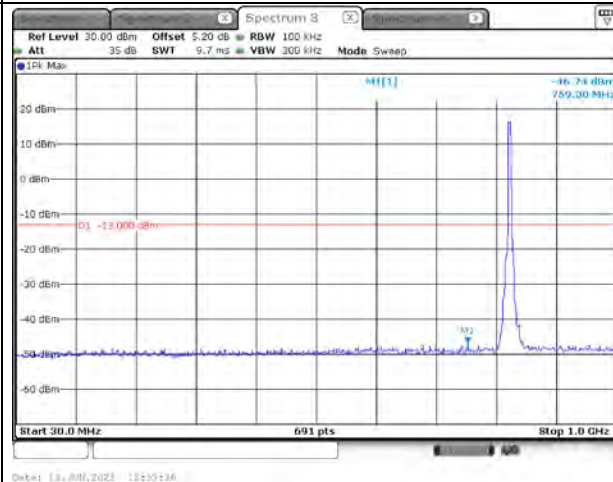
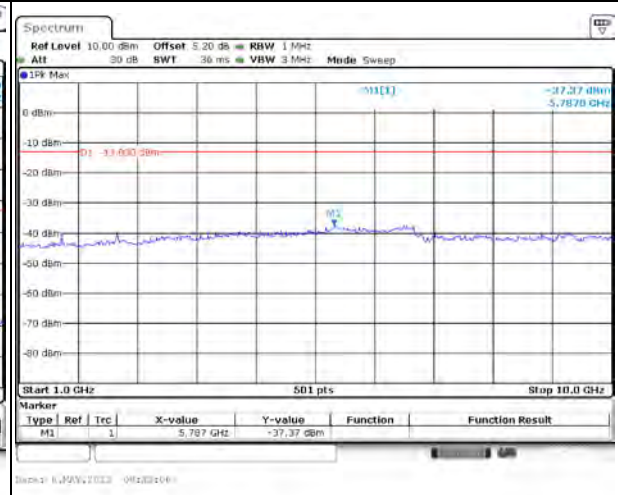
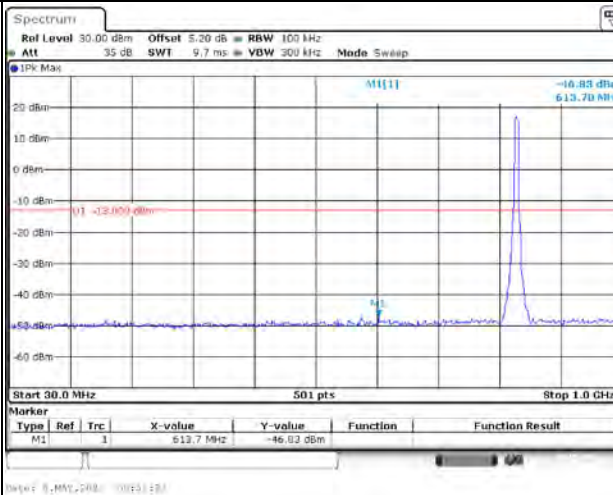
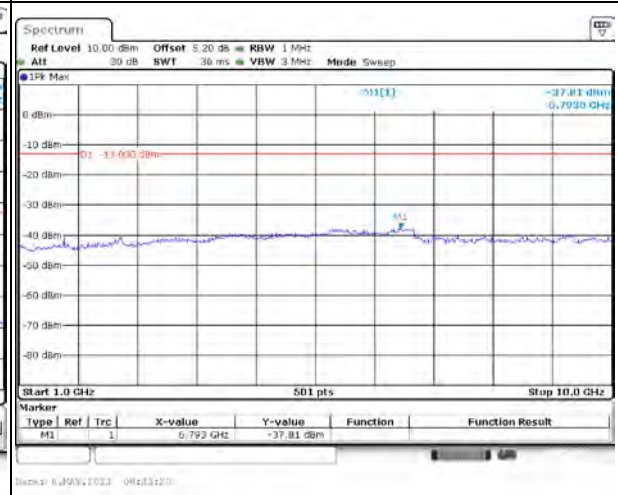
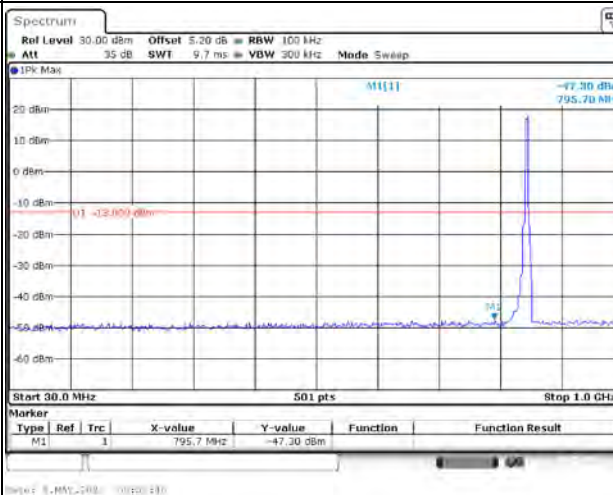
5MHz Bandwidth QPSK

Lowest  
For 90SHighest  
For 90SCross  
Channel

## Spurious Emissions at Antenna Terminal

Channel

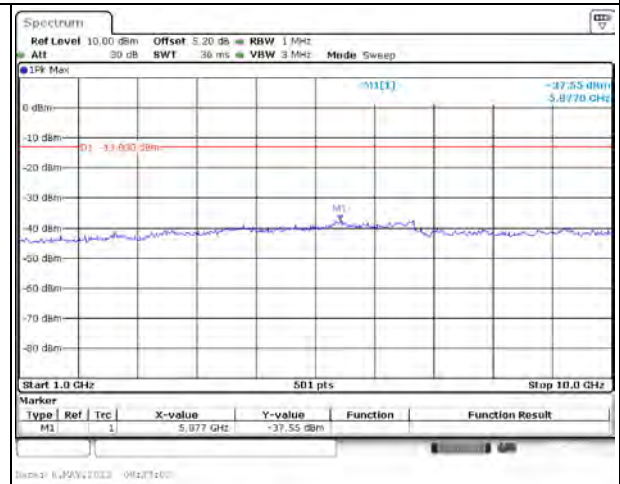
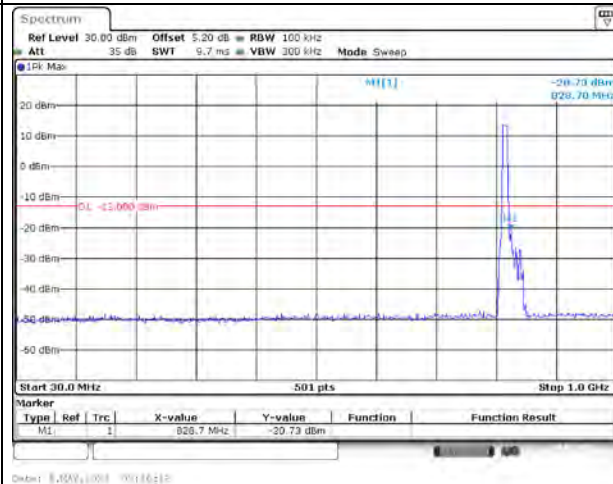
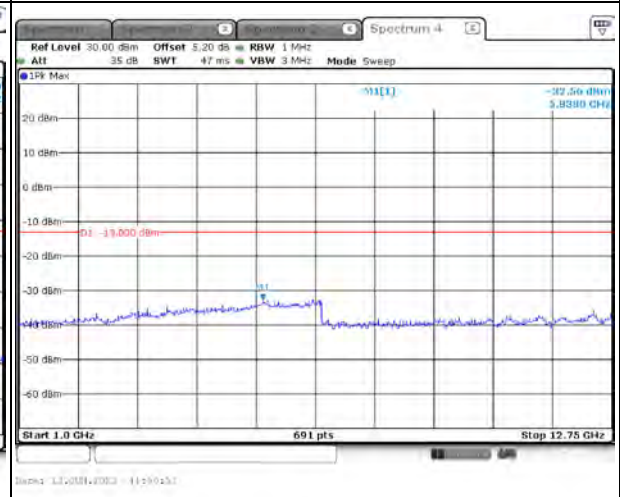
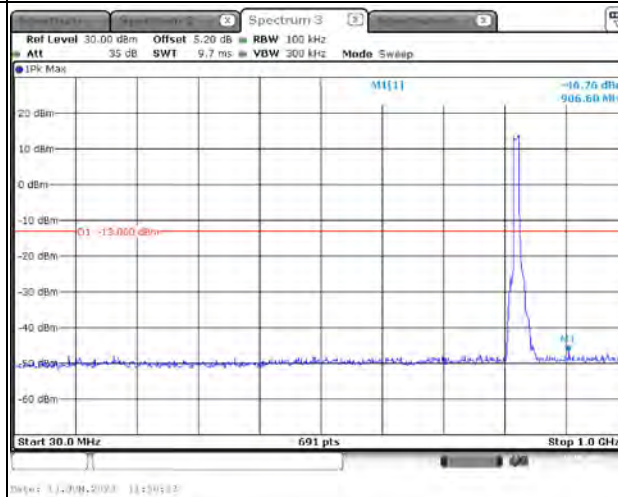
5MHz Bandwidth QPSK

Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

## Spurious Emissions at Antenna Terminal

Channel

10MHz Bandwidth QPSK

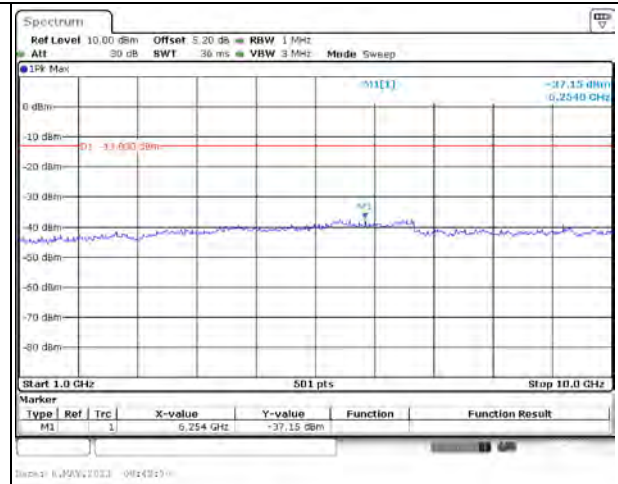
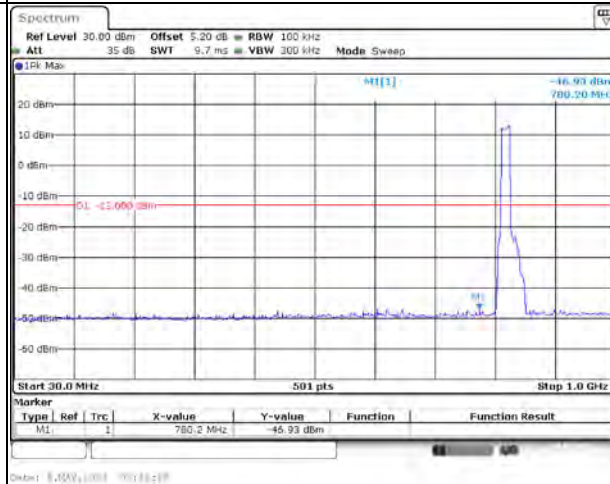
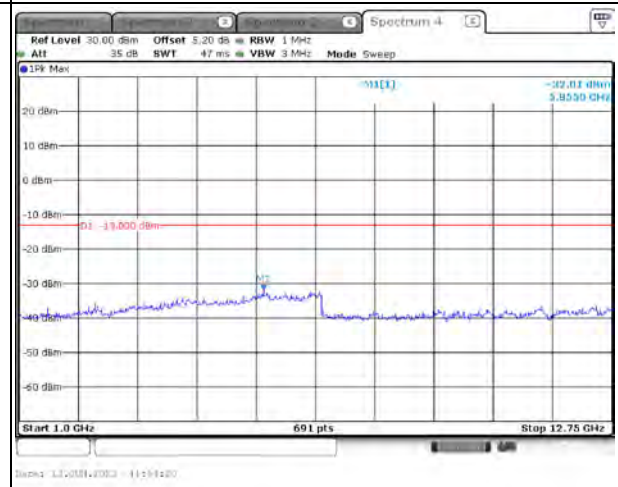
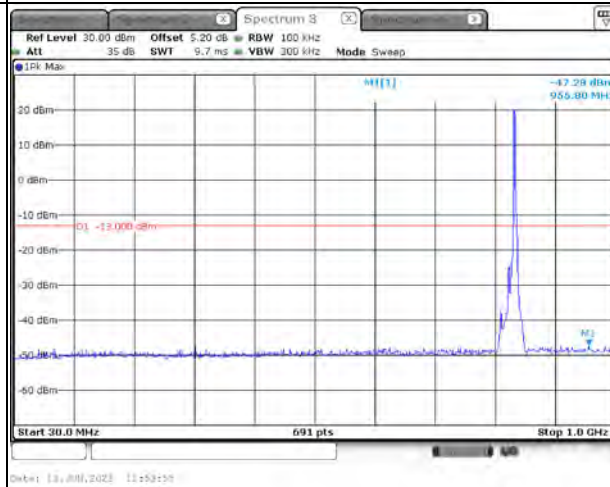
Lowest  
For 90SCross  
Channel



## Spurious Emissions at Antenna Terminal

Channel

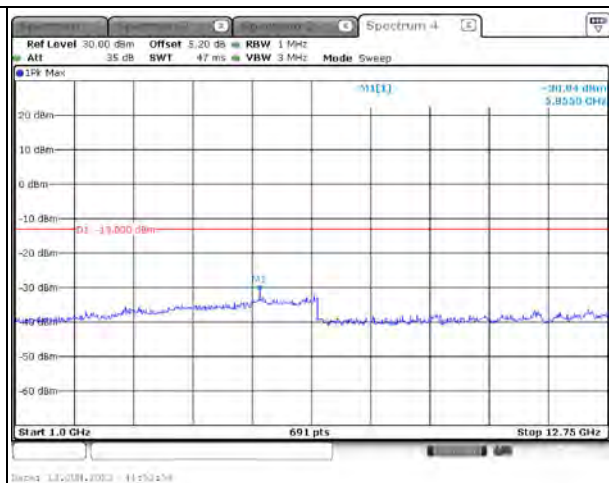
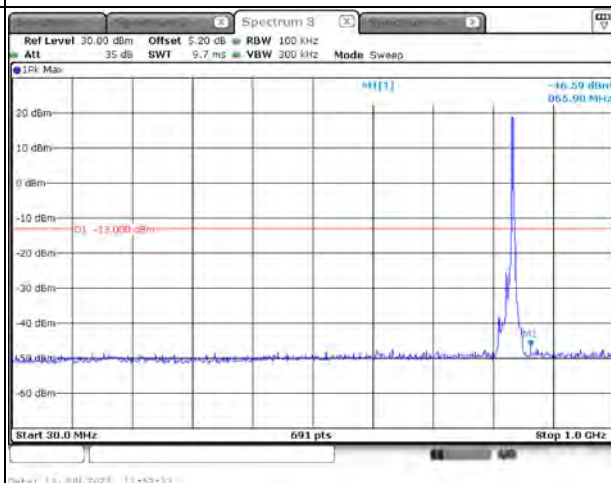
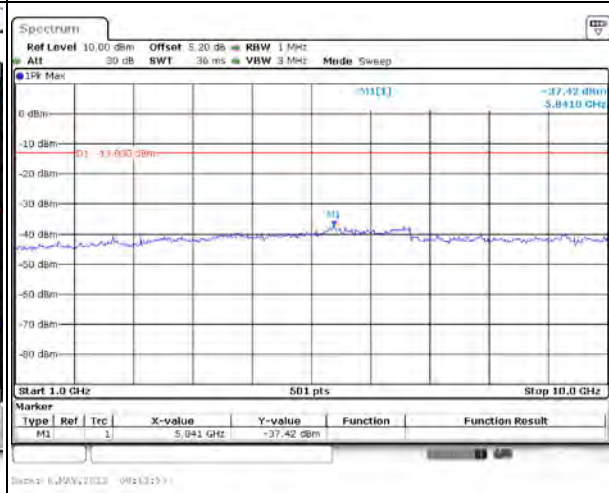
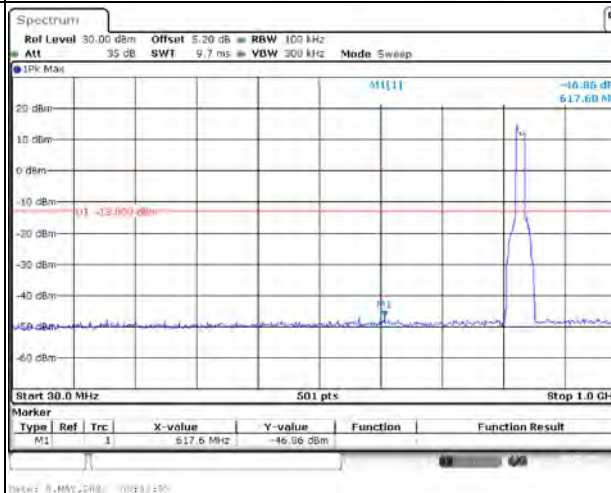
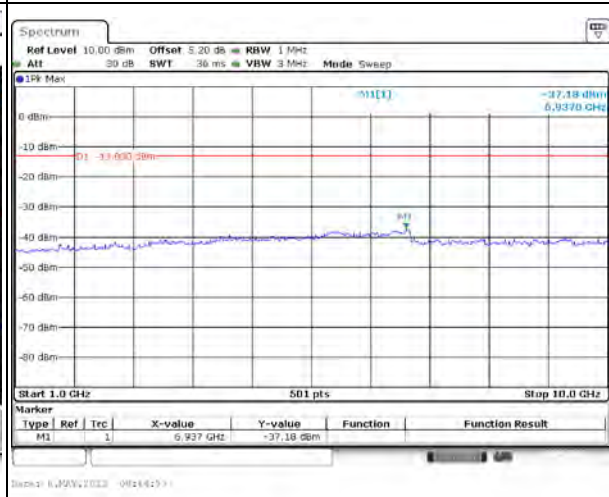
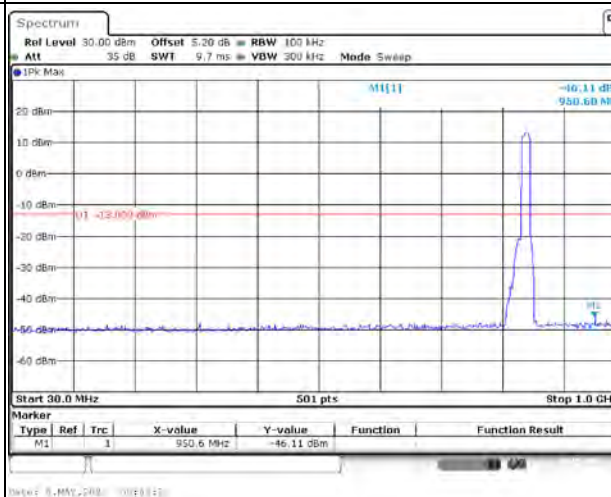
15MHz Bandwidth QPSK

Lowest  
For 90SCross  
Channel

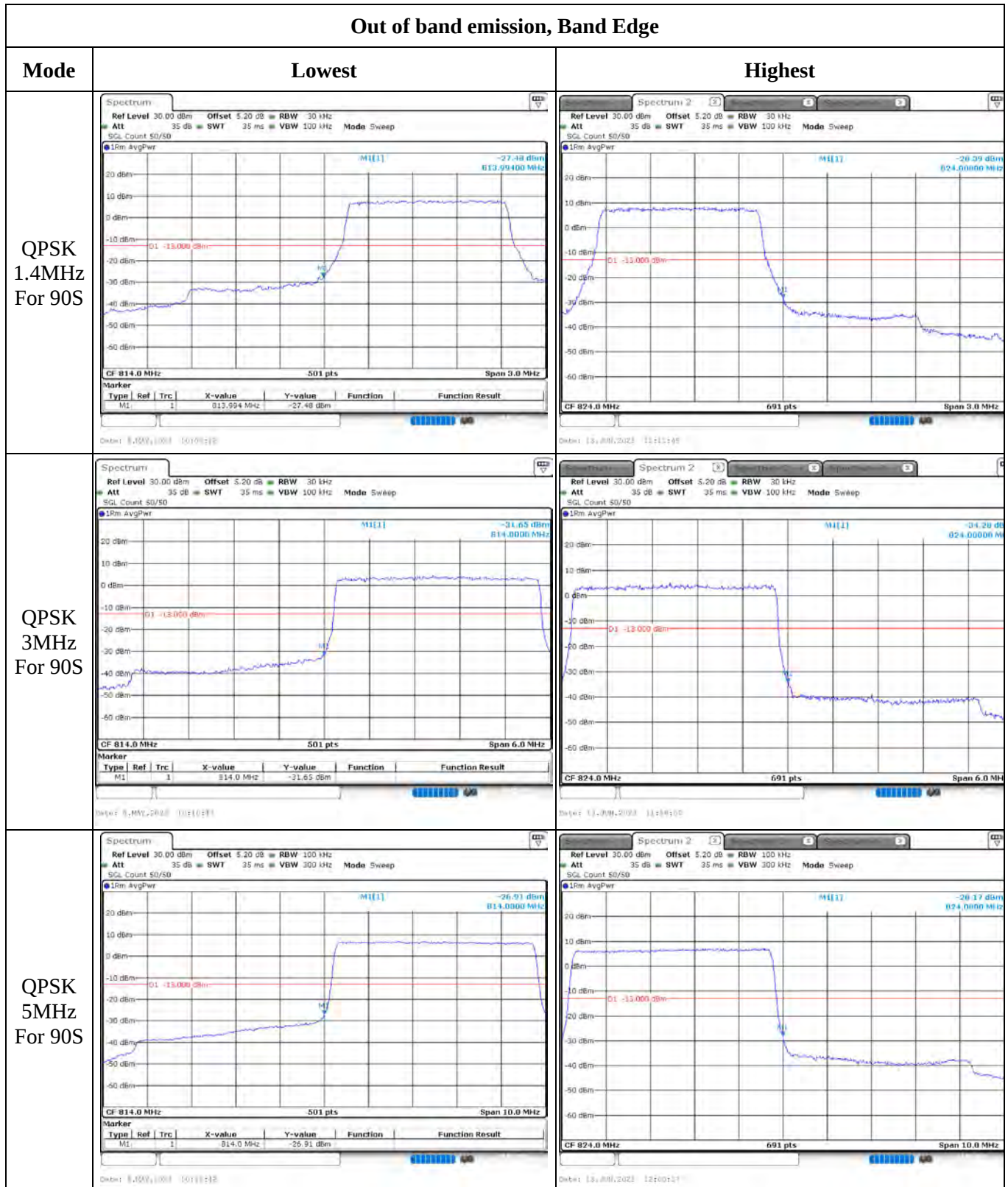
## Spurious Emissions at Antenna Terminal

Channel

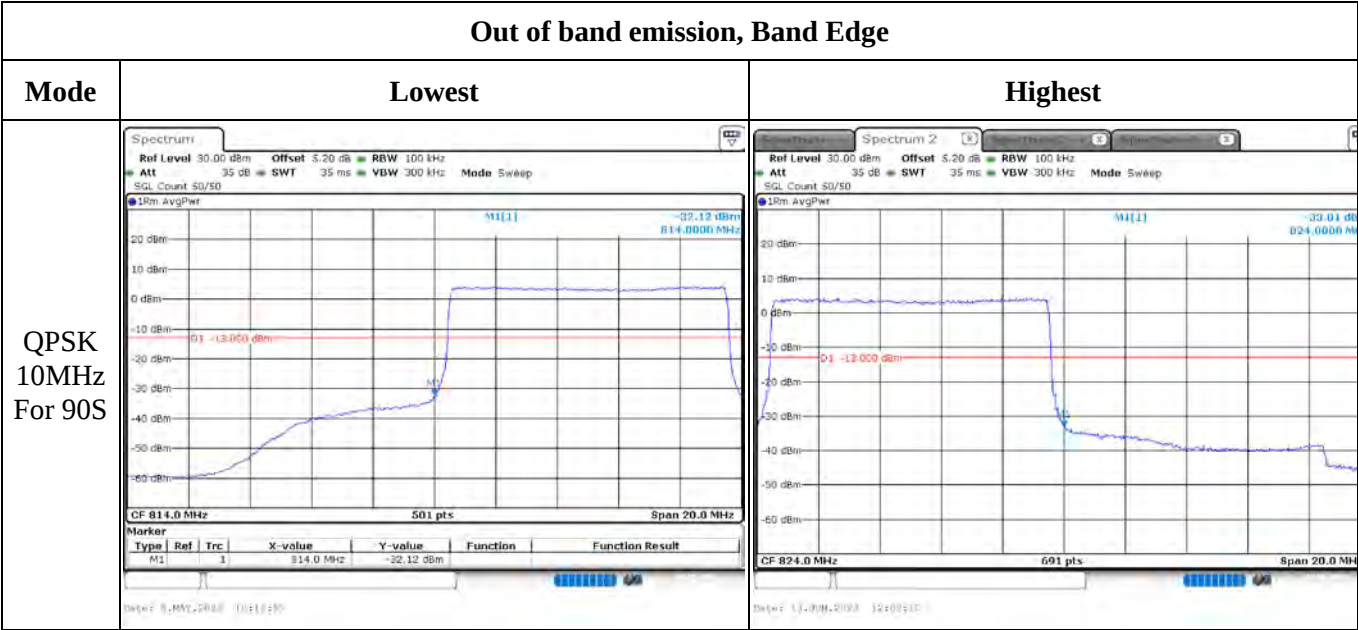
15MHz Bandwidth QPSK

Lowest  
For 22HMiddle  
For 22HHighest  
For 22H

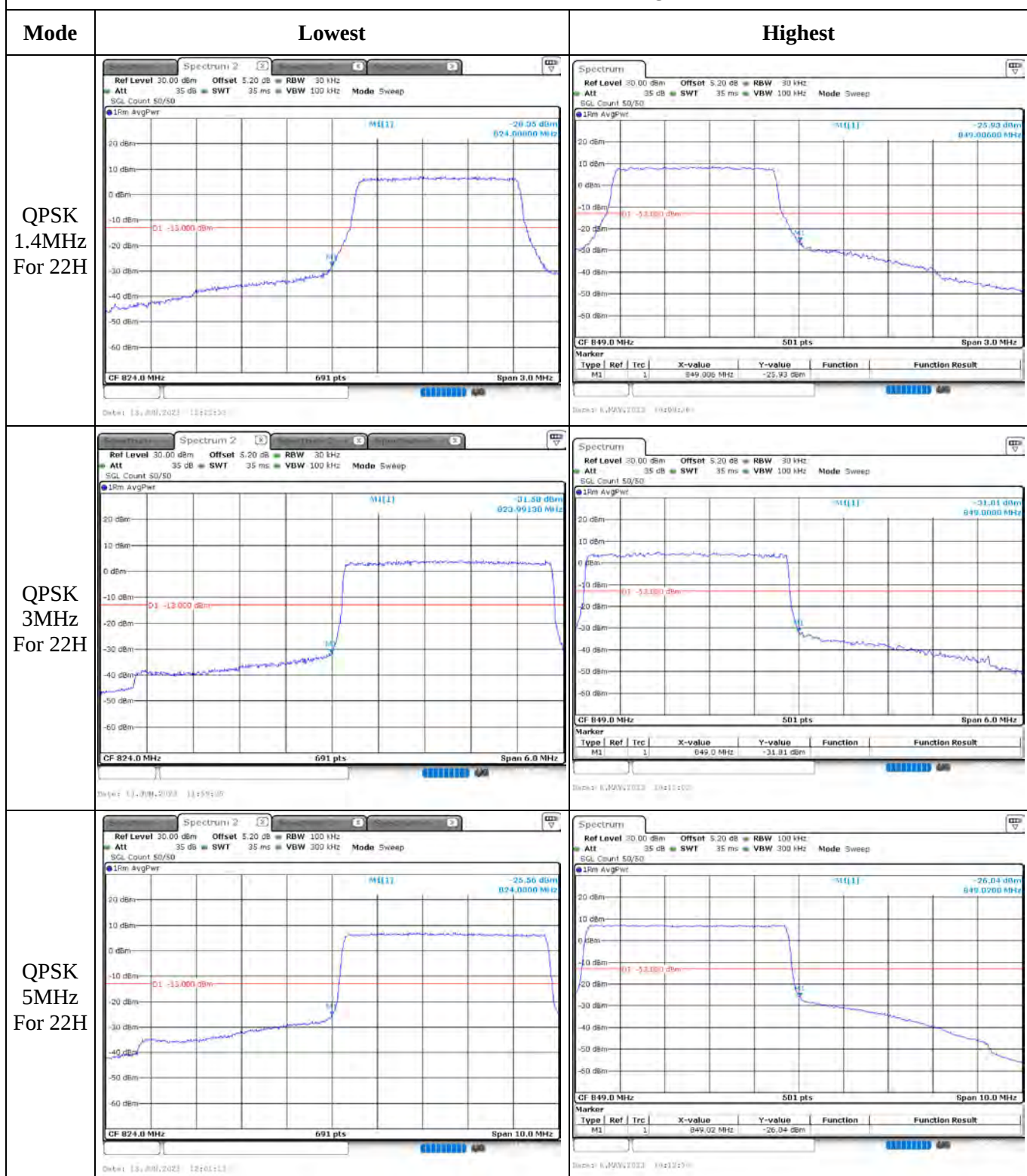
## Out of band emission, Band Edge



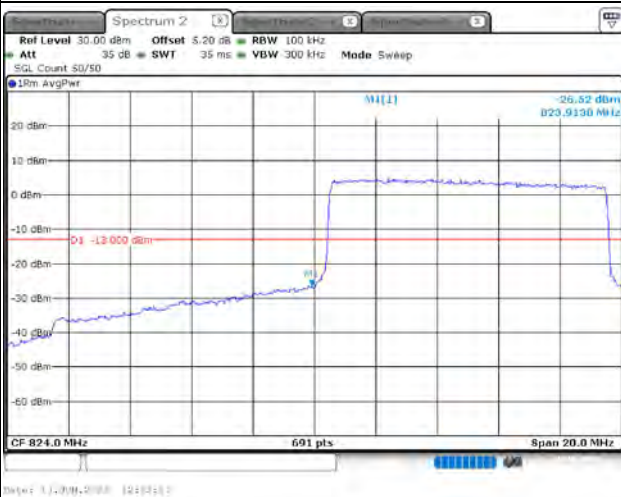
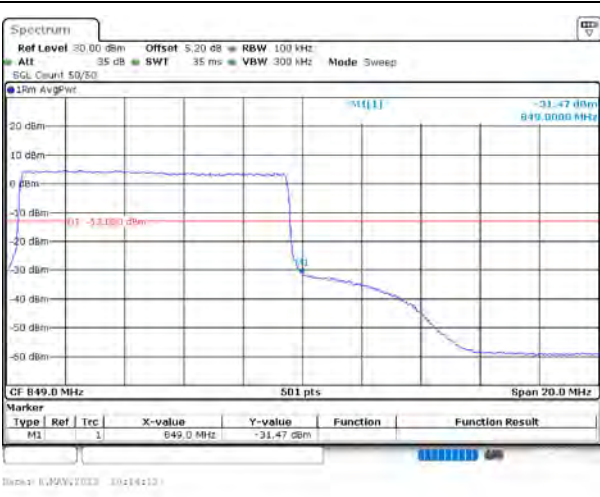
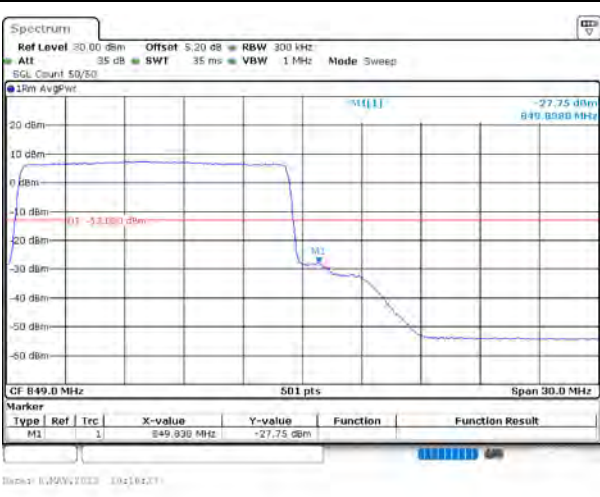
Out of band emission, Band Edge



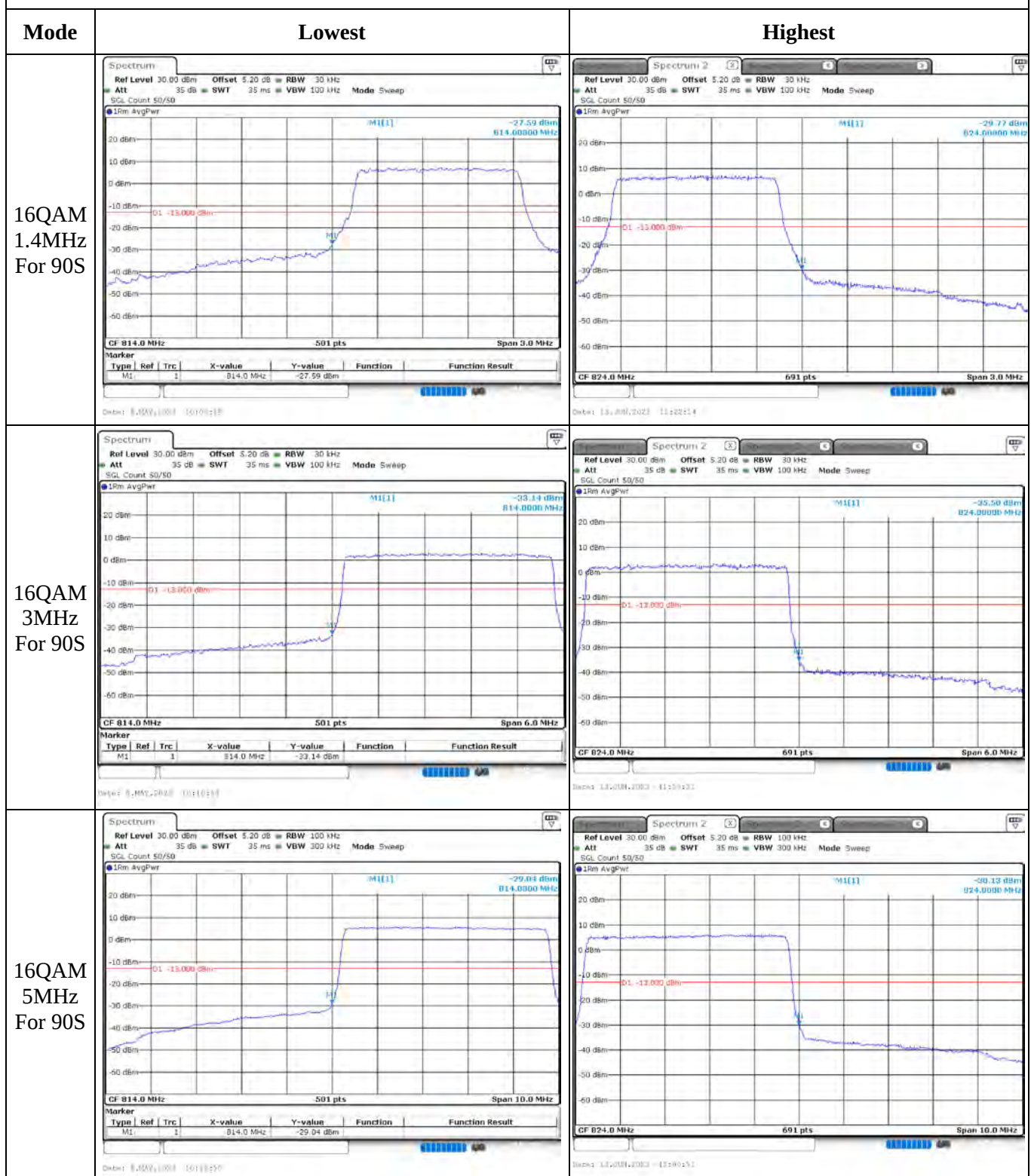
## Out of band emission, Band Edge



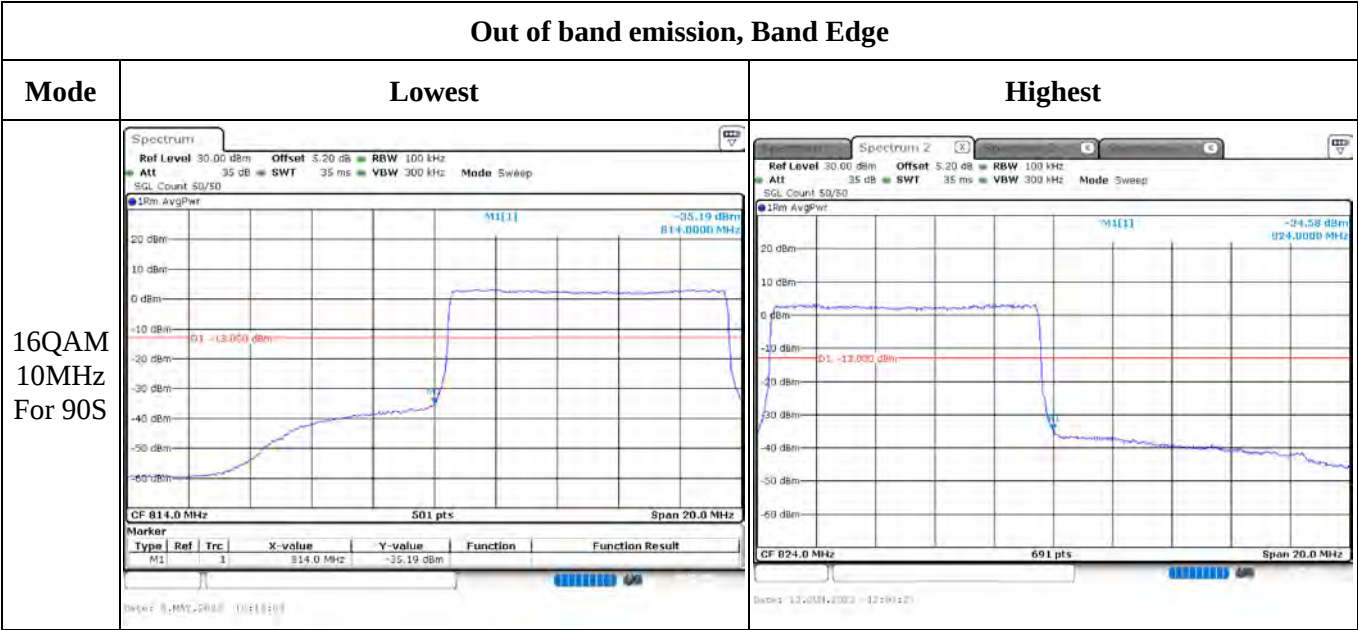
## Out of band emission, Band Edge

| Mode                                      | Lowest                                                                               | Highest                                                                             |
|-------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| QPSK<br>10MHz<br>For 22H                  |     |   |
| QPSK<br>15MHz<br>For 22H                  |    |  |
| QPSK<br>15MHz<br>Across<br>90S and<br>22H |  |                                                                                     |

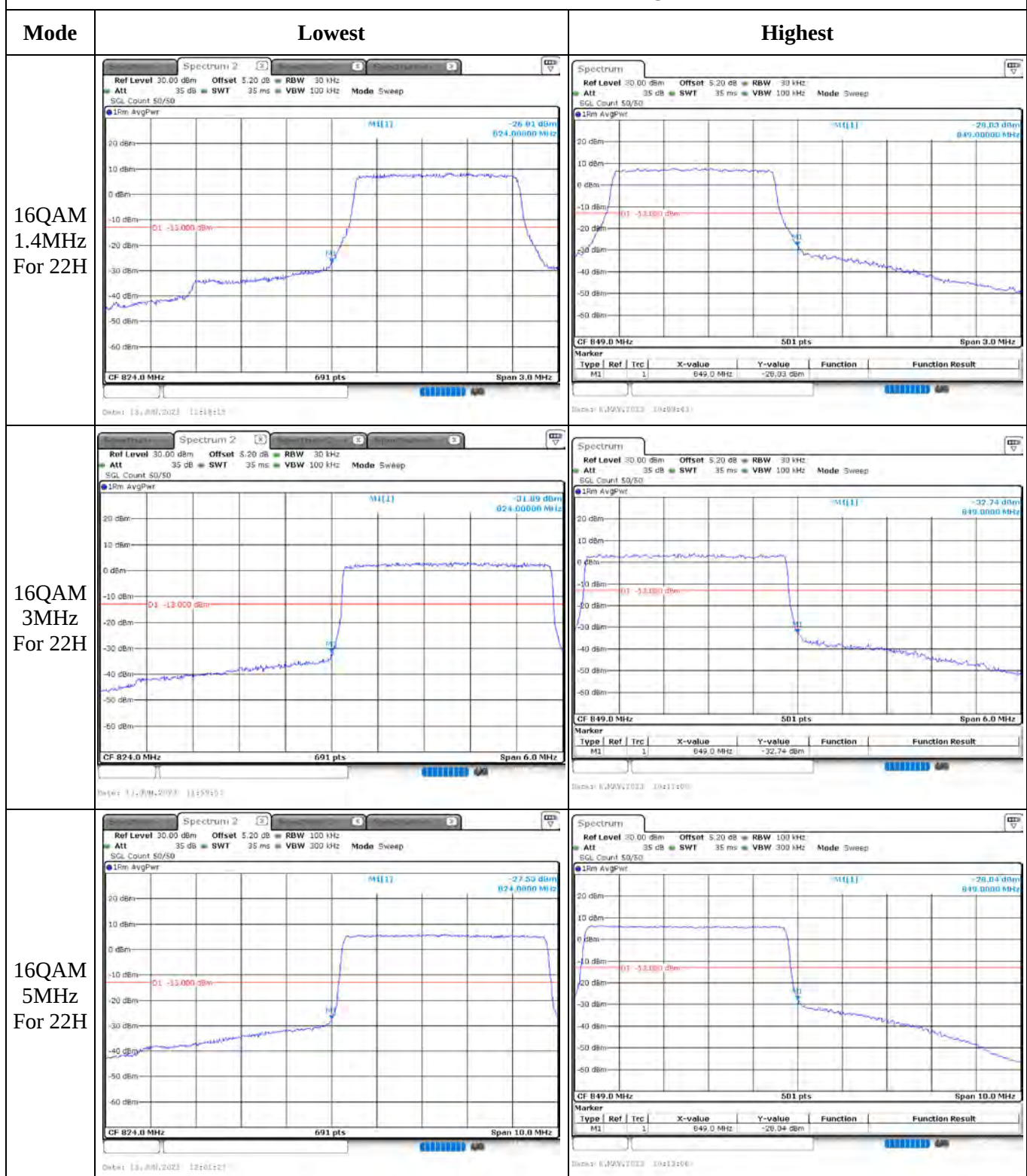
## Out of band emission, Band Edge



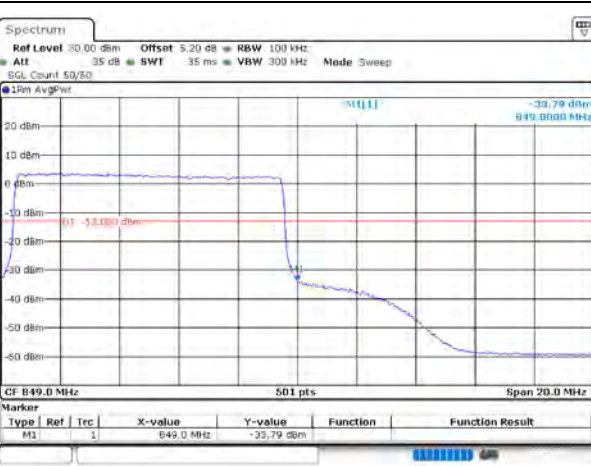
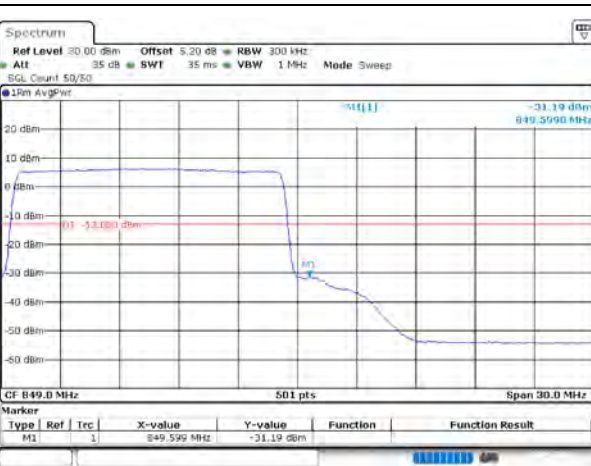
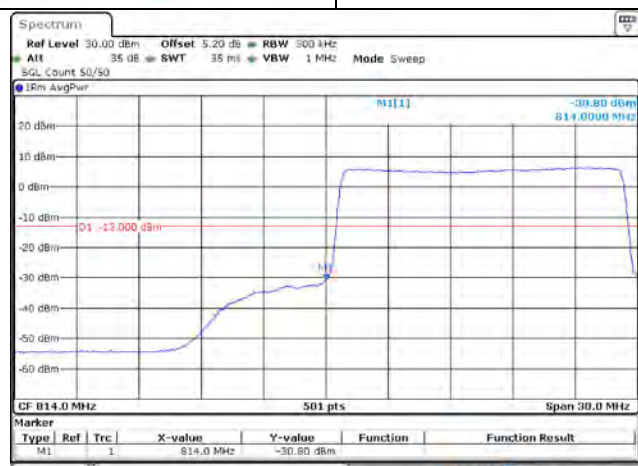
Out of band emission, Band Edge



## Out of band emission, Band Edge



## Out of band emission, Band Edge

| Mode                                       | Lowest                                                                               | Highest                                                                             |
|--------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 16QAM<br>10MHz<br>For 22H                  |     |   |
| 16QAM<br>15MHz<br>For 22H                  |    |  |
| 16QAM<br>15MHz<br>Across<br>90S and<br>22H |  |                                                                                     |

**4.14 Antenna Port Test Data and Results for LTE Band 38**

|                |             |              |                    |
|----------------|-------------|--------------|--------------------|
| Serial Number: | 250W-1      | Test Date:   | 2023/5/6~2023/5/17 |
| Test Site:     | RF          | Test Mode:   | Transmitting       |
| Tester:        | George Chen | Test Result: | Pass               |

**Environmental Conditions:**

|                   |           |                        |       |                     |             |
|-------------------|-----------|------------------------|-------|---------------------|-------------|
| Temperature: (°C) | 23.2~26.1 | Relative Humidity: (%) | 39~58 | ATM Pressure: (kPa) | 100.5~102.3 |
|-------------------|-----------|------------------------|-------|---------------------|-------------|

**Test Equipment List and Details:**

| Manufacturer  | Description                         | Model      | Serial Number   | Calibration Date | Calibration Due Date |
|---------------|-------------------------------------|------------|-----------------|------------------|----------------------|
| R&S           | Spectrum Analyzer                   | FSV40      | 101474          | 2022-07-15       | 2023-07-14           |
| zhuoxiang     | Coaxial Cable                       | SMA-178    | 211001          | Each time        | N/A                  |
| YINSAIGE      | Coaxial Cable                       | SS402      | SJ0100001       | Each time        | N/A                  |
| Mini-Circuits | DC Block                            | BLK-18-S+  | 1554403         | Each time        | N/A                  |
| Weinschel     | Power Splitter                      | 1515       | RA914           | Each time        | N/A                  |
| R&S           | Wideband Radio Communication Tester | CMW500     | 149218          | 2022-07-15       | 2023-07-14           |
| BACL          | TEMP&HUMI Test Chamber              | BTH-150-40 | 30174           | 2022-09-29       | 2023-09-28           |
| UNI-T         | Multimeter                          | UT39A+     | C210582554      | N/A              | N/A                  |
| ZHAOXIN       | DC Power Supply                     | RXN-6010D  | 21R6010D0912386 | 2022-07-15       | 2023-07-14           |

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Frequency For Each Mode:**

| Operation Bandwidth | Lowest Frequency (MHz) | Middle Frequency (MHz) | Highest Frequency (MHz) |
|---------------------|------------------------|------------------------|-------------------------|
| 5MHz                | 2572.5                 | 2595                   | 2617.5                  |
| 10MHz               | 2575                   | 2595                   | 2615                    |
| 15MHz               | 2577.5                 | 2595                   | 2612.5                  |
| 20MHz               | 2580                   | 2595                   | 2610                    |