

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standard:** 47 CFR FCC Part 96  
47 CFR FCC Part 2  
**Report No.:** RFBEDW-WTW-P24070638-5  
**FCC ID:** GKRRXLN3  
**Product:** LGA Module  
**Brand:** COMPAL  
**Model No.:** RXL-N3  
**Received Date:** 2024/7/29  
**Test Date:** 2024/8/12 ~ 2024/11/15  
**Issued Date:** 2024/11/22

**Applicant:** Compal Electronics, Inc.

**Address:** No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei, (114) Taiwan

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

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**Test Location(2):** No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

**FCC Registration /** 788550 / TW0003 for Test Location(1)

**Designation Number:** 281270 / TW0032 for Test Location(2)

Approved by: \_\_\_\_\_

*Jeremy Lin*

, Date: \_\_\_\_\_

2024/11/22

Jeremy Lin / Project Engineer

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Prepared by : Pettie Chen / Senior Specialist



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## Release Control Record

| Issue No.              | Description       | Date Issued |
|------------------------|-------------------|-------------|
| RFBEDW-WTW-P24070638-5 | Original release. | 2024/11/22  |

## 1 Certificate

**Product:** LGA Module

**Brand:** COMPAL

**Test Model:** RXL-N3

**Sample Status:** Engineering sample

**Applicant:** Compal Electronics, Inc.

**Test Date:** 2024/8/12 ~ 2024/11/15

**Standard:** 47 CFR FCC Part 96  
47 CFR FCC Part 2

**Measurement Procedure:** ANSI/TIA/EIA-603-E 2016

ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 940660 D01 Part 96 CBRS Eqpt v03

KDB 662911 D01 Multiple Transmitter Output v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

## 2 Summary of Test Results

| Standard / Clause            | Test Item                              | Result | Remark                                              |
|------------------------------|----------------------------------------|--------|-----------------------------------------------------|
| Part 2.1046<br>Part 96.41(b) | Maximum EIRP                           | Pass   | Meet the requirement of limit.                      |
| Part 2.1047                  | Modulation Characteristics             | Pass   | Meet the requirement of limit.                      |
| Part 2.1046<br>Part 96.41(b) | Maximum Power Spectral Density         | N/A    | This device is End User Device.                     |
| Part 96.41(g)                | Peak to Average Ratio                  | Pass   | Meet the requirement of limit.                      |
| Part 2.1049                  | Bandwidth                              | Pass   | Meet the requirement of limit.                      |
| Part 2.1051<br>Part 96.41(e) | Conducted Spurious Emissions           | Pass   | Meet the requirement of limit.                      |
| Part 2.1053<br>Part 96.41(e) | Radiated Spurious Emissions below 1GHz | Pass   | Minimum passing margin is -6.03 dB at 942.77 MHz    |
| Part 2.1053<br>Part 96.41(e) | Radiated Spurious Emissions above 1GHz | Pass   | Minimum passing margin is -14.03 dB at 14499.96 MHz |
| Part 2.1055                  | Frequency Stability                    | Pass   | Meet the requirement of limit.                      |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Parameter                                                            | Specification   | Uncertainty (±) |
|----------------------------------------------------------------------|-----------------|-----------------|
| Effective Radiated Power and Equivalent Isotropically Radiated Power | -               | 1.371 dB        |
| Peak to Average Ratio                                                | -               | 0.920 dB        |
| Bandwidth                                                            | -               | 960 Hz          |
| Conducted Spurious Emissions                                         | -               | 2.12 dB         |
| Radiated Spurious Emissions below 1GHz                               | 9 kHz ~ 30 MHz  | 3 dB            |
|                                                                      | 30 MHz ~ 1 GHz  | 2.93 dB         |
| Radiated Spurious Emissions above 1GHz                               | 1 GHz ~ 18 GHz  | 1.76 dB         |
|                                                                      | 18 GHz ~ 40 GHz | 1.77 dB         |
| Frequency Stability                                                  | -               | 0.176 ppm       |

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

### 2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

|                     |                    |
|---------------------|--------------------|
| Product             | LGA Module         |
| Brand               | COMPAL             |
| Test Model          | RXL-N3             |
| Status of EUT       | Engineering sample |
| Power Supply Rating | 3.8Vdc             |
| EUT Category        | End User Device    |

Note:

##### 1. EUT Overview

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)**

**Output Power: Full Power**

**Ant. 0**

| Bandwidth | TX Frequency Range (MHz) | Modulation  | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|-------------|---------------|-----------------|---------------------|
| 10 MHz    | 3555 ~ 3694.98           | DFT-S BPSK  | 0.187         | 22.72           | 8M58G7D             |
|           |                          | DFT-S QPSK  | 0.186         | 22.69           | 8M57G7D             |
|           |                          | DFT-S 16QAM | 0.12          | 20.80           | 8M58D7W             |
|           |                          | DFT-S 64QAM | 0.086         | 19.36           | 8M58D7W             |
|           |                          | CP 256QAM   | 0.043         | 16.36           | 8M58D7W             |
|           |                          | CP QPSK     | 0.133         | 21.24           | 8M57G7D             |
| 15 MHz    | 3557.52 ~ 3692.49        | DFT-S BPSK  | 0.177         | 22.49           | 12M9G7D             |
|           |                          | DFT-S QPSK  | 0.181         | 22.57           | 13M6G7D             |
|           |                          | DFT-S 16QAM | 0.114         | 20.55           | 13M6D7W             |
|           |                          | DFT-S 64QAM | 0.081         | 19.11           | 13M6D7W             |
|           |                          | CP 256QAM   | 0.041         | 16.14           | 13M6D7W             |
|           |                          | CP QPSK     | 0.128         | 21.07           | 13M6G7D             |
| 20 MHz    | 3560.01 ~ 3690           | DFT-S BPSK  | 0.183         | 22.63           | 17M9G7D             |
|           |                          | DFT-S QPSK  | 0.185         | 22.66           | 18M2G7D             |
|           |                          | DFT-S 16QAM | 0.114         | 20.57           | 18M2D7W             |
|           |                          | DFT-S 64QAM | 0.083         | 19.19           | 18M2D7W             |
|           |                          | CP 256QAM   | 0.042         | 16.24           | 18M2D7W             |
|           |                          | CP QPSK     | 0.13          | 21.13           | 18M2G7D             |
| 30 MHz    | 3565.02 ~ 3684.99        | DFT-S BPSK  | 0.071         | 18.52           | 26M8G7D             |
|           |                          | DFT-S QPSK  | 0.187         | 22.73           | 27M9G7D             |
|           |                          | DFT-S 16QAM | 0.074         | 18.71           | 27M8D7W             |
|           |                          | DFT-S 64QAM | 0.073         | 18.62           | 27M8D7W             |
|           |                          | CP 256QAM   | 0.043         | 16.34           | 27M8D7W             |
|           |                          | CP QPSK     | 0.072         | 18.60           | 27M9G7D             |
| 40 MHz    | 3570 ~ 3679.98           | DFT-S BPSK  | 0.073         | 18.66           | 35M7G7D             |
|           |                          | DFT-S QPSK  | 0.188         | 22.75           | 37M9G7D             |
|           |                          | DFT-S 16QAM | 0.075         | 18.75           | 37M9D7W             |
|           |                          | DFT-S 64QAM | 0.073         | 18.63           | 37M9D7W             |
|           |                          | CP 256QAM   | 0.044         | 16.46           | 37M9D7W             |
|           |                          | CP QPSK     | 0.073         | 18.64           | 37M9G7D             |

# MIMO

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 10 MHz    | 3555 ~ 3694.98           | BPSK       | 0.129         | 21.11           | 8M58G7D             |
|           |                          | QPSK       | 0.132         | 21.19           | 8M57G7D             |
|           |                          | 16QAM      | 0.114         | 20.58           | 8M58D7W             |
|           |                          | 64QAM      | 0.081         | 19.08           | 8M58D7W             |
|           |                          | 256QAM     | 0.041         | 16.14           | 8M58D7W             |
| 15 MHz    | 3557.52 ~ 3692.49        | BPSK       | 0.123         | 20.89           | 12M9G7D             |
|           |                          | QPSK       | 0.132         | 21.19           | 13M6G7D             |
|           |                          | 16QAM      | 0.11          | 20.41           | 13M6D7W             |
|           |                          | 64QAM      | 0.079         | 18.97           | 13M6D7W             |
|           |                          | 256QAM     | 0.041         | 16.11           | 13M6D7W             |
| 20 MHz    | 3560.01 ~ 3690           | BPSK       | 0.124         | 20.93           | 17M9G7D             |
|           |                          | QPSK       | 0.126         | 21.02           | 18M2G7D             |
|           |                          | 16QAM      | 0.108         | 20.33           | 18M2D7W             |
|           |                          | 64QAM      | 0.074         | 18.67           | 18M2D7W             |
|           |                          | 256QAM     | 0.038         | 15.85           | 18M2D7W             |
| 30 MHz    | 3565.02 ~ 3684.99        | BPSK       | 0.076         | 18.79           | 26M8G7D             |
|           |                          | QPSK       | 0.145         | 21.61           | 27M9G7D             |
|           |                          | 16QAM      | 0.077         | 18.89           | 27M8D7W             |
|           |                          | 64QAM      | 0.071         | 18.54           | 27M8D7W             |
|           |                          | 256QAM     | 0.044         | 16.40           | 27M8D7W             |
| 40 MHz    | 3570 ~ 3679.98           | BPSK       | 0.07          | 18.47           | 35M7G7D             |
|           |                          | QPSK       | 0.149         | 21.74           | 37M9G7D             |
|           |                          | 16QAM      | 0.077         | 18.85           | 37M9D7W             |
|           |                          | 64QAM      | 0.073         | 18.62           | 37M9D7W             |
|           |                          | 256QAM     | 0.042         | 16.21           | 37M9D7W             |

**Output Power: dBm/10 MHz**

**Ant. 0**

| Bandwidth | TX Frequency Range (MHz) | Modulation   | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|--------------|---------------|-----------------|---------------------|
| 10 MHz    | 3555 ~ 3694.98           | DFT-S BPSK   | 0.187         | 22.72           | 8M58G7D             |
|           |                          | DFT-S QPSK   | 0.186         | 22.69           | 8M57G7D             |
|           |                          | DFT-S 16QAM  | 0.120         | 20.80           | 8M58D7W             |
|           |                          | DFT-S 64QAM  | 0.086         | 19.36           | 8M58D7W             |
|           |                          | DFT-S 256QAM | 0.043         | 16.36           | 8M58D7W             |
|           |                          | CP QPSK      | 0.133         | 21.24           | 8M57G7D             |
| 15 MHz    | 3557.52 ~ 3692.49        | DFT-S BPSK   | 0.179         | 22.54           | 12M9G7D             |
|           |                          | DFT-S QPSK   | 0.182         | 22.59           | 13M6G7D             |
|           |                          | DFT-S 16QAM  | 0.112         | 20.51           | 13M6D7W             |
|           |                          | DFT-S 64QAM  | 0.081         | 19.10           | 13M6D7W             |
|           |                          | DFT-S 256QAM | 0.042         | 16.22           | 13M6D7W             |
|           |                          | CP QPSK      | 0.130         | 21.13           | 13M6G7D             |
| 20 MHz    | 3560.01 ~ 3690           | DFT-S BPSK   | 0.178         | 22.51           | 17M9G7D             |
|           |                          | DFT-S QPSK   | 0.184         | 22.65           | 18M2G7D             |
|           |                          | DFT-S 16QAM  | 0.112         | 20.50           | 18M2D7W             |
|           |                          | DFT-S 64QAM  | 0.081         | 19.09           | 18M2D7W             |
|           |                          | DFT-S 256QAM | 0.042         | 16.19           | 18M2D7W             |
|           |                          | CP QPSK      | 0.130         | 21.13           | 18M2G7D             |
| 30 MHz    | 3565.02 ~ 3684.99        | DFT-S BPSK   | 0.072         | 18.58           | 26M8G7D             |
|           |                          | DFT-S QPSK   | 0.174         | 22.41           | 27M9G7D             |
|           |                          | DFT-S 16QAM  | 0.073         | 18.62           | 27M8D7W             |
|           |                          | DFT-S 64QAM  | 0.073         | 18.63           | 27M8D7W             |
|           |                          | DFT-S 256QAM | 0.044         | 16.46           | 27M8D7W             |
|           |                          | CP QPSK      | 0.071         | 18.54           | 27M9G7D             |
| 40 MHz    | 3570 ~ 3679.98           | DFT-S BPSK   | 0.073         | 18.66           | 35M7G7D             |
|           |                          | DFT-S QPSK   | 0.179         | 22.53           | 37M9G7D             |
|           |                          | DFT-S 16QAM  | 0.074         | 18.69           | 37M9D7W             |
|           |                          | DFT-S 64QAM  | 0.073         | 18.63           | 37M9D7W             |
|           |                          | DFT-S 256QAM | 0.043         | 16.33           | 37M9D7W             |
|           |                          | CP QPSK      | 0.073         | 18.64           | 37M9G7D             |

# MIMO

| Bandwidth | TX Frequency Range (MHz) | Modulation | Max. EIRP (W) | Max. EIRP (dBm) | Emission Designator |
|-----------|--------------------------|------------|---------------|-----------------|---------------------|
| 10 MHz    | 3555 ~ 3694.98           | BPSK       | 0.129         | 21.11           | 8M58G7D             |
|           |                          | QPSK       | 0.132         | 21.19           | 8M57G7D             |
|           |                          | 16QAM      | 0.114         | 20.58           | 8M58D7W             |
|           |                          | 64QAM      | 0.081         | 19.08           | 8M58D7W             |
|           |                          | 256QAM     | 0.041         | 16.14           | 8M58D7W             |
| 15 MHz    | 3557.52 ~ 3692.49        | BPSK       | 0.121         | 20.81           | 12M9G7D             |
|           |                          | QPSK       | 0.127         | 21.05           | 13M6G7D             |
|           |                          | 16QAM      | 0.107         | 20.29           | 13M6D7W             |
|           |                          | 64QAM      | 0.078         | 18.90           | 13M6D7W             |
|           |                          | 256QAM     | 0.041         | 16.08           | 13M6D7W             |
| 20 MHz    | 3560.01 ~ 3690           | BPSK       | 0.121         | 20.82           | 17M9G7D             |
|           |                          | QPSK       | 0.124         | 20.92           | 18M2G7D             |
|           |                          | 16QAM      | 0.106         | 20.24           | 18M2D7W             |
|           |                          | 64QAM      | 0.072         | 18.59           | 18M2D7W             |
|           |                          | 256QAM     | 0.038         | 15.78           | 18M2D7W             |
| 30 MHz    | 3565.02 ~ 3684.99        | BPSK       | 0.074         | 18.69           | 26M8G7D             |
|           |                          | QPSK       | 0.141         | 21.50           | 27M9G7D             |
|           |                          | 16QAM      | 0.075         | 18.76           | 27M8D7W             |
|           |                          | 64QAM      | 0.070         | 18.44           | 27M8D7W             |
|           |                          | 256QAM     | 0.043         | 16.29           | 27M8D7W             |
| 40 MHz    | 3570 ~ 3679.98           | BPSK       | 0.069         | 18.40           | 35M7G7D             |
|           |                          | QPSK       | 0.145         | 21.62           | 37M9G7D             |
|           |                          | 16QAM      | 0.075         | 18.74           | 37M9D7W             |
|           |                          | 64QAM      | 0.071         | 18.51           | 37M9D7W             |
|           |                          | 256QAM     | 0.041         | 16.12           | 37M9D7W             |

2. The EUT uses following accessories.

| Item | Brand | Model           |
|------|-------|-----------------|
| Ant  | INPAQ | ANT0/1/2/3 GNSS |

3. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

### 3.2 Antenna Description of EUT

1. The antenna information is listed as below.

| NR Band        |                   |                                    |              |              |              |
|----------------|-------------------|------------------------------------|--------------|--------------|--------------|
| Type           | External          |                                    |              |              |              |
| Brand          | INPAQ             |                                    |              |              |              |
| Band           | Freq. Range (MHz) | Peak Gain without cable loss (dBi) |              |              |              |
|                |                   | Ant. 0 (Main)                      | Ant. 1 (DRx) | Ant. 2 (DRx) | Ant. 3 (Aux) |
| NR n48 (Ant 0) | 3550 ~3700        | 0                                  | 0            | 0            | 0            |

| Ant. No. | Cable Loss (dB) | Cable Length (mm) |
|----------|-----------------|-------------------|
| Ant. 0   | 1.5             | 141.1             |
| Ant. 1   | 1.3             | 120.3             |
| Ant. 2   | 1               | 78.2              |
| Ant. 3   | 1.3             | 121.2             |

\*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

\*For MIMO mode:

- TDD n48 were fixed on Ant. 0+ Ant. 3
- The MIMO mode signal was uncorrelated signal.
- Regarding EIRP calculation that we will use the maximum antenna gain/frequency band as calculation parameters.  
Directional gain =  $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/2]$  dBi.

### 3.3 Test Mode Applicability and Tested Channel Detail

|             |                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Scan:   | 1. The antenna of EUT can be used in the following ways: 0 degree/90 degrees. Pre-scan these ways and find the worst case as a representative test condition.<br>2. Pre-Scan has been conducted to determine the worst-case from all possible combinations of EUT configure mode (1TX or 2TX if available), channel, bandwidth, modulation and RB mode. See below table(s) for details. |
| Worst Case: | 1. 0 degree/90 degrees Worst Condition: 90 degrees                                                                                                                                                                                                                                                                                                                                      |

#### 3.3.1 NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)

| Test Item                  | EUT Configure Mode | Tested Channel                                                    | Channel Bandwidth | Modulation                                       | Mode                       |
|----------------------------|--------------------|-------------------------------------------------------------------|-------------------|--------------------------------------------------|----------------------------|
| Maximum EIRP               | 1TX, 2TX           | 637000(3555.00 MHz)<br>641666(3624.99 MHz)<br>646332(3694.98 MHz) | 10 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB<br>Half RB<br>Full RB |
|                            |                    | 637168(3557.52 MHz)<br>641666(3624.99 MHz)<br>646166(3692.49 MHz) | 15 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB<br>Half RB<br>Full RB |
|                            |                    | 637334(3560.01 MHz)<br>641666(3624.99 MHz)<br>646000(3690.00 MHz) | 20 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB<br>Half RB<br>Full RB |
|                            |                    | 637668(3565.02 MHz)<br>641666(3624.99 MHz)<br>645666(3684.99 MHz) | 30 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB<br>Half RB<br>Full RB |
|                            |                    | 638000(3570.00 MHz)<br>641666(3624.99 MHz)<br>645332(3679.98 MHz) | 40 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB<br>Half RB<br>Full RB |
| Modulation Characteristics | 2TX                | 641666(3624.99 MHz)                                               | 40 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | Full RB                    |
| Peak to Average Ratio      | 2TX                | 637000(3555.00 MHz)<br>641666(3624.99 MHz)<br>646332(3694.98 MHz) | 10 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB                       |
|                            |                    | 637168(3557.52 MHz)<br>641666(3624.99 MHz)<br>646166(3692.49 MHz) | 15 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB                       |

| Test Item | EUT<br>Configure<br>Mode | Tested Channel                                                    | Channel<br>Bandwidth | Modulation                                       | Mode |
|-----------|--------------------------|-------------------------------------------------------------------|----------------------|--------------------------------------------------|------|
|           |                          | 637334(3560.01 MHz)<br>641666(3624.99 MHz)<br>646000(3690.00 MHz) | 20 MHz               | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB |

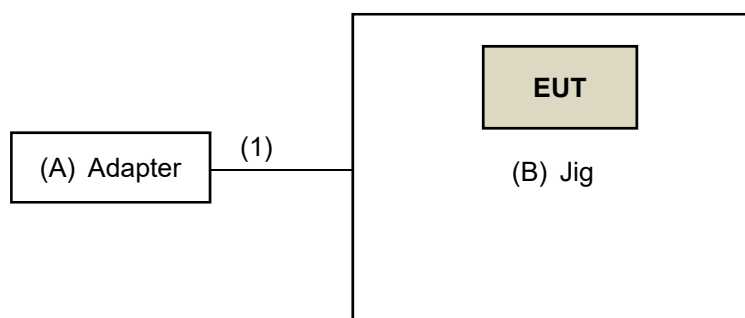
| Test Item                              | EUT Configure Mode | Tested Channel                                                    | Channel Bandwidth | Modulation                                       | Mode            |
|----------------------------------------|--------------------|-------------------------------------------------------------------|-------------------|--------------------------------------------------|-----------------|
| Peak to Average Ratio                  | 2TX                | 637668(3565.02 MHz)<br>641666(3624.99 MHz)<br>645666(3684.99 MHz) | 30 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB            |
|                                        |                    | 638000(3570.00 MHz)<br>641666(3624.99 MHz)<br>645332(3679.98 MHz) | 40 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB            |
| Bandwidth                              | 2TX                | 637000(3555.00 MHz)<br>641666(3624.99 MHz)<br>646332(3694.98 MHz) | 10 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | Full RB         |
|                                        |                    | 637168(3557.52 MHz)<br>641666(3624.99 MHz)<br>646166(3692.49 MHz) | 15 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | Full RB         |
|                                        |                    | 637334(3560.01 MHz)<br>641666(3624.99 MHz)<br>646000(3690.00 MHz) | 20 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | Full RB         |
|                                        |                    | 637668(3565.02 MHz)<br>641666(3624.99 MHz)<br>645666(3684.99 MHz) | 30 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | Full RB         |
|                                        |                    | 638000(3570.00 MHz)<br>641666(3624.99 MHz)<br>645332(3679.98 MHz) | 40 MHz            | BPSK /<br>QPSK /<br>16QAM /<br>64QAM /<br>256QAM | Full RB         |
| Conducted Spurious Emissions           | 2TX                | 637000(3555.00 MHz)<br>641666(3624.99 MHz)<br>646332(3694.98 MHz) | 10 MHz            | QPSK                                             | 1 RB<br>Full RB |
|                                        |                    | 637168(3557.52 MHz)<br>641666(3624.99 MHz)<br>646166(3692.49 MHz) | 15 MHz            | QPSK                                             | 1 RB<br>Full RB |
|                                        |                    | 637334(3560.01 MHz)<br>641666(3624.99 MHz)<br>646000(3690.00 MHz) | 20 MHz            | QPSK                                             | 1 RB<br>Full RB |
|                                        |                    | 637668(3565.02 MHz)<br>641666(3624.99 MHz)<br>645666(3684.99 MHz) | 30 MHz            | QPSK                                             | 1 RB<br>Full RB |
|                                        |                    | 638000(3570.00 MHz)<br>641666(3624.99 MHz)<br>645332(3679.98 MHz) | 40 MHz            | QPSK                                             | 1 RB<br>Full RB |
| Radiated Spurious Emissions below 1GHz | 2TX                | 641666(3624.99 MHz)                                               | 10 MHz            | QPSK                                             | 1 RB            |

| Test Item                                   | EUT<br>Configure<br>Mode | Tested Channel                                                    | Channel<br>Bandwidth | Modulation | Mode    |
|---------------------------------------------|--------------------------|-------------------------------------------------------------------|----------------------|------------|---------|
| Radiated Spurious Emissions<br>above 1GHz   | 2TX                      | 637000(3555.00 MHz)<br>641666(3624.99 MHz)<br>646332(3694.98 MHz) | 10 MHz               | QPSK       | 1 RB    |
|                                             |                          | 637334(3560.01 MHz)<br>641666(3624.99 MHz)<br>646000(3690.00 MHz) | 20 MHz               | QPSK       | 1 RB    |
|                                             |                          | 638000(3570.00 MHz)<br>641666(3624.99 MHz)<br>645332(3679.98 MHz) | 40 MHz               | QPSK       | 1 RB    |
| Frequency Stability<br>(3550MHz to 3700MHz) | 2TX                      | 637000(3555.00 MHz)<br>646332(3694.98 MHz)                        | 10 MHz               | BPSK       | Full RB |
|                                             |                          | 637168(3557.52 MHz)<br>646166(3692.49 MHz)                        | 15 MHz               | BPSK       | Full RB |
|                                             |                          | 637334(3560.01 MHz)<br>646000(3690.00 MHz)                        | 20 MHz               | BPSK       | Full RB |
|                                             |                          | 637668(3565.02 MHz)<br>645666(3684.99 MHz)                        | 30 MHz               | BPSK       | Full RB |
|                                             |                          | 638000(3570.00 MHz)<br>645332(3679.98 MHz)                        | 40 MHz               | BPSK       | Full RB |

### 3.4 Test Program Used and Operation Descriptions

There is no need to controlling software during the test, and the EUT can be paired with the Simulator to test the connection when it is powered on.

### 3.5 Connection Diagram of EUT and Peripheral Devices



Under Table

Remote Site



(C) UXM 5G  
Wireless Test  
Platform

### 3.6 Configuration of Peripheral Devices and Cable Connections

| ID | Product                       | Brand                              | Model No.         | Serial No. | FCC ID | Remarks               |
|----|-------------------------------|------------------------------------|-------------------|------------|--------|-----------------------|
| A  | Adapter                       | ChenzhouFrecom Electronics Co. Ltd | F24L5-120200SOPAU | NA         | NA     | Supplied by applicant |
| B  | Jig                           | Compal                             | ZYN1              | NA         | NA     | Supplied by applicant |
| C  | UXM 5G Wireless Test Platform | Keysight                           | E7515B            | MY60102115 | NA     | Provided by Lab       |

| ID | Cable Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks               |
|----|--------------------|------|------------|--------------------|--------------|-----------------------|
| 1  | AC Cable           | 1    | 1          | No                 | 0            | Supplied by applicant |

## 4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 4.1 Maximum EIRP

| Description<br>Manufacturer               | Model No.                        | Serial No. | Calibrated<br>Date | Calibrated<br>Until |
|-------------------------------------------|----------------------------------|------------|--------------------|---------------------|
| PXA Signal Analyzer<br>Keysight           | N9030B                           | MY57140938 | 2024/3/20          | 2025/3/19           |
| Software<br>BV                            | ADT_RF Test Software<br>V7.6.5.4 | N/A        | N/A                | N/A                 |
| UXM 5G Wireless Test Platform<br>Keysight | E7515B                           | MY60102115 | 2024/5/26          | 2025/5/25           |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/8/12 ~ 2024/11/15

### 4.2 Modulation Characteristics

Refer to section 4.1 to get the tested date and information of the instruments.

### 4.3 Peak to Average Ratio

Refer to section 4.1 to get the tested date and information of the instruments.

### 4.4 Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

### 4.5 Conducted Spurious Emissions

Refer to section 4.1 to get the tested date and information of the instruments.

#### 4.6 Radiated Spurious Emissions below 1GHz

| Description<br>Manufacturer       | Model No.                    | Serial No.       | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------|------------------------------|------------------|--------------------|---------------------|
| Antenna Tower<br>Max-Full         | MFT-151SS-0.5T               | N/A              | N/A                | N/A                 |
| Bi_Log Antenna<br>Schwarzbeck     | VULB 9168                    | 9168-1213        | 2023/10/13         | 2024/10/12          |
| EMI Test Receiver<br>R&S          | ESR3                         | 102782           | 2023/12/7          | 2024/12/6           |
| Loop Antenna<br>Electro-Metrics   | EM-6879                      | 269              | 2023/9/23          | 2024/9/22           |
| MXA Signal Analyzer<br>Keysight   | N9020B                       | MY60110513       | 2023/12/22         | 2024/12/21          |
| Preamplifier<br>EMCI              | EMC330N                      | 980782           | 2024/1/15          | 2025/1/14           |
|                                   | EMC001340                    | 980201           | 2023/9/27          | 2024/9/26           |
| RF Coaxial Cable<br>EMCI          | EMCCFD400-NM-NM-500          | 201233           | 2024/1/15          | 2025/1/14           |
|                                   | EMCCFD400-NM-NM-3000         | 201235           | 2024/1/15          | 2025/1/14           |
|                                   | EMCCFD400-NM-NM-9000         | 201236(with PAD) | 2024/1/15          | 2025/1/14           |
| Software<br>BV ADT                | ADT_Radiated_<br>V7.6.15.9.5 | N/A              | N/A                | N/A                 |
| Turn Table<br>Max-Full            | MF-7802BS                    | N/A              | N/A                | N/A                 |
| Turn Table Controller<br>Max-Full | MF-7802BS                    | MF780208674      | N/A                | N/A                 |

Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2024/8/12

#### 4.7 Radiated Spurious Emissions above 1GHz

| Description<br>Manufacturer       | Model No.                    | Serial No.  | Calibrated<br>Date | Calibrated<br>Until |
|-----------------------------------|------------------------------|-------------|--------------------|---------------------|
| Antenna Tower<br>Max-Full         | MFT-151SS-0.5T               | N/A         | N/A                | N/A                 |
| EMI Test Receiver<br>R&S          | ESR3                         | 102782      | 2023/12/7          | 2024/12/6           |
| Horn Antenna<br>RFSPIN            | DRH18-E                      | 210103A18E  | 2023/11/12         | 2024/11/11          |
| Horn Antenna<br>Schwarzbeck       | BBHA 9170                    | 9170-1049   | 2023/11/12         | 2024/11/11          |
| MXA Signal Analyzer<br>Keysight   | N9020B                       | MY60110513  | 2023/12/22         | 2024/12/21          |
| Preamplifier<br>EMCI              | EMC118A45SE                  | 980808      | 2023/12/28         | 2024/12/27          |
|                                   | EMC184045SE                  | 980788      | 2024/1/15          | 2025/1/14           |
| RF Coaxial Cable<br>EMCI          | EMC101G-KM-KM-2000           | 201254      | 2024/1/15          | 2025/1/14           |
|                                   | EMC101G-KM-KM-3000           | 201258      | 2024/1/15          | 2025/1/14           |
|                                   | EMC101G-KM-KM-5000           | 201261      | 2024/1/15          | 2025/1/14           |
|                                   | EMC104-SM-SM-1000            | 210102      | 2024/1/15          | 2025/1/14           |
|                                   | EMC104-SM-SM-3000            | 201231      | 2024/1/15          | 2025/1/14           |
|                                   | EMC104-SM-SM-9000            | 201243      | 2024/1/15          | 2025/1/14           |
| Software<br>BV ADT                | ADT_Radiated_<br>V7.6.15.9.5 | N/A         | N/A                | N/A                 |
| Turn Table<br>Max-Full            | MF-7802BS                    | N/A         | N/A                | N/A                 |
| Turn Table Controller<br>Max-Full | MF-7802BS                    | MF780208674 | N/A                | N/A                 |

##### Notes:

1. The test was performed in WM - 966 chamber 8.
2. Tested Date: 2024/10/28

#### 4.8 Frequency Stability

| Description<br>Manufacturer                     | Model No.                        | Serial No.     | Calibrated<br>Date | Calibrated<br>Until |
|-------------------------------------------------|----------------------------------|----------------|--------------------|---------------------|
| 3-channel DC power supply<br>JIN YIH Technology | ODP3033                          | ODP30332128138 | N/A                | N/A                 |
| Digital Multimeter<br>Fluke                     | 8050A                            | 4660081        | 2024/6/14          | 2025/6/13           |
| PXA Signal Analyzer<br>Keysight                 | N9030B                           | MY57140938     | 2024/3/20          | 2025/3/19           |
| Software<br>BV                                  | ADT_RF Test Software<br>V7.6.5.4 | N/A            | N/A                | N/A                 |
| Temperature & Humidity Chamber<br>Terchy        | HRM-120RF                        | 931022         | 2023/12/19         | 2024/12/18          |
| UXM 5G Wireless Test Platform<br>Keysight       | E7515B                           | MY60102115     | 2024/5/26          | 2025/5/25           |

##### Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/10/8

## 5 Limits of Test Items

### 5.1 Maximum EIRP

For NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz):

| Device Category | Maximum EIRP<br>(dBm/10 MHz) |
|-----------------|------------------------------|
| End User Device | 23                           |
| Category A CBSD | 30                           |
| Category B CBSD | 47                           |

### 5.2 Modulation Characteristics

A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.

### 5.3 Peak to Average Ratio

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

### 5.4 Bandwidth

According to FCC 47 CFR part 2.1049, the occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission.

### 5.5 Conducted Spurious Emissions

For NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz):

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed  $-13$  dBm/MHz within 0 to B MHz (where B is the bandwidth in MHz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B MHz below the lower CBSD-assigned channel edge. At all frequencies greater than B MHz above the upper CBSD assigned channel edge and less than B MHz below the lower CBSD-assigned channel edge, the conducted power of any end user device emission shall not exceed  $-25$  dBm/MHz.

Additional protection levels: The conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed  $-25$  dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed  $-40$  dBm/MHz.

Note: This device can be implement MIMO function, so the limit of emission mask / conducted emissions needs to be reduced by  $10 \cdot \log(\text{NumbersAnt})$  according to FCC KDB 662911 D01 guidance.

### 5.6 Radiated Spurious Emissions below 1GHz

For NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz):

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed  $-40$  dBm/MHz.

### 5.7 Radiated Spurious Emissions above 1GHz

For NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz):

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed  $-40$  dBm/MHz.

### 5.8 Frequency Stability

For NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz):

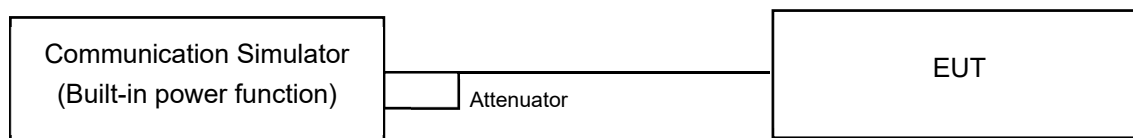
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation (authorized frequency block).

## 6 Test Arrangements

### 6.1 Maximum EIRP

#### 6.1.1 Test Setup

##### Conducted Power Measurement:



#### 6.1.2 Test Procedure

##### Channel Power Measurement:

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology. The average (rms) power measurement was performed on emulator and power value was measured from power function on emulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

##### Power 10 MHz Measurement:

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology and link to spectrum analyzer measurements. Set the EUT to transmit under low, middle and high channel and record the power level shown on spectrum analyzer. Power measurements use detector average (rms).

Measurement method refers to ANSI C63.26 section 5.2.4.4.

- Set span to 2 × to 3 × the OBW.
- Set RBW = 1% to 5% of the OBW.
- Set VBW ≥ 3 × RBW.
- Set number of measurement points in sweep ≥ 2 × span / RBW.
- Set Sweep time = auto-couple.
- Detector = power averaging (rms).
- Set sweep trigger to “free run.”
- Trace average at least 100 traces in power averaging (rms) mode.
- Use the Band/Channel Power function to determine the integrated power per 10 MHz bandwidth, according to the 47 CFR FCC Part 96 standard.
- If Duty cycle < 98%, Add 10 log (1/duty cycle) to the measured power level to compute the average power during continuous transmission.

##### Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = P_{\text{Meas}} + G_T$$

$$\text{ERP} = P_{\text{Meas}} + G_T - 2.15$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively

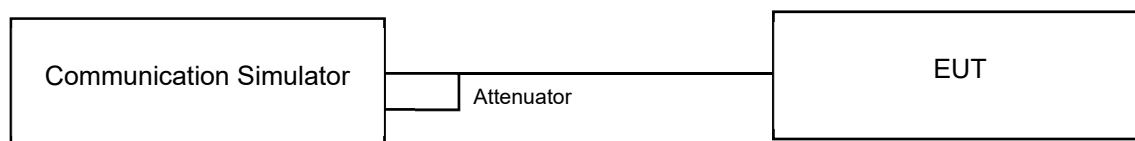
(expressed in the same units as  $P_{\text{Meas}}$ , e.g., dBm or dBW)

$P_{\text{Meas}}$  measured transmitter output power or PSD, in dBm or dBW

$G_T$  gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

## 6.2 Modulation Characteristics

### 6.2.1 Test Setup

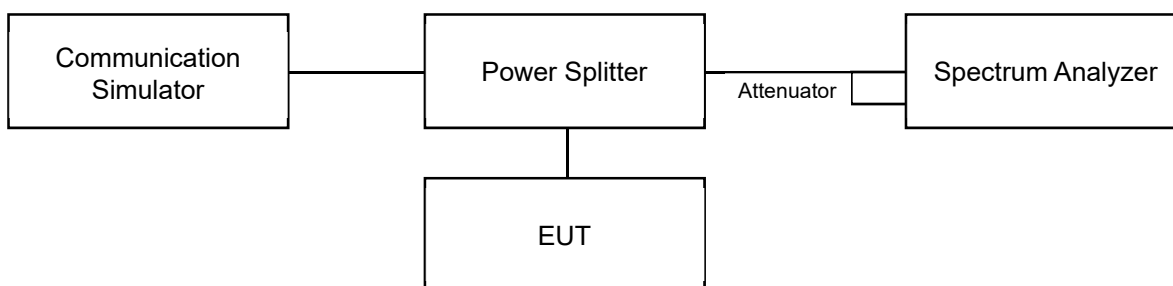


### 6.2.2 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector, the frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

## 6.3 Peak to Average Ratio

### 6.3.1 Test Setup

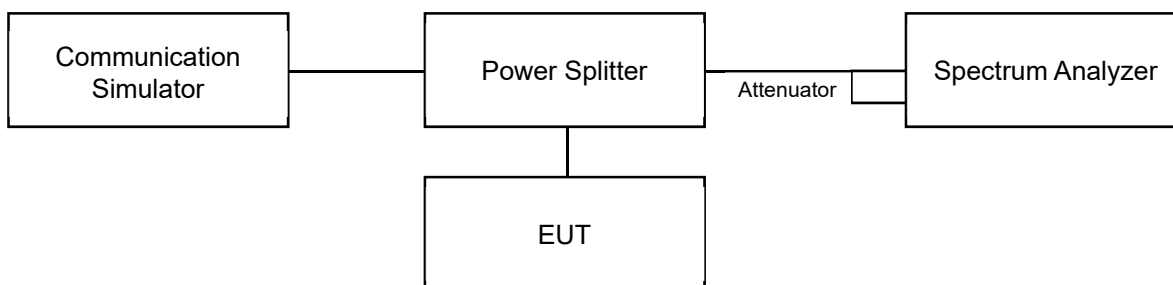


### 6.3.2 Test Procedure

- Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1%.

## 6.4 Bandwidth

### 6.4.1 Test Setup



### 6.4.2 Test Procedure

For the 26 dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

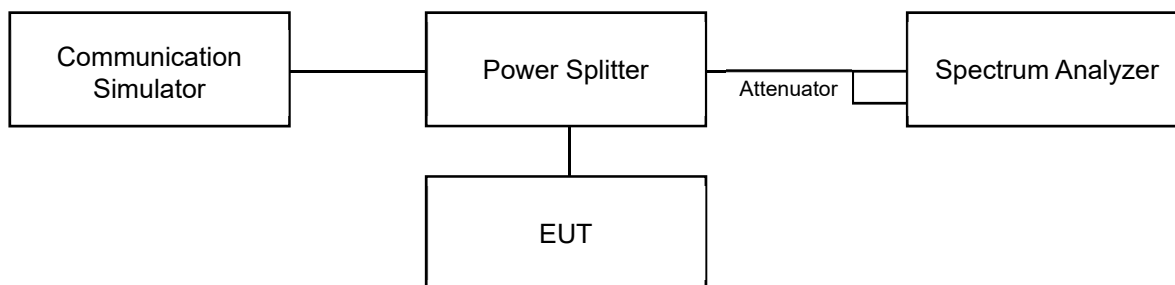
- The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- Determine the following reference values: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- Determine the “-X dB amplitude” as equal to (Reference Value - X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
- Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB amplitude” determined in step f). If a marker is below this “-X dB amplitude” value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers.
- The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

For the occupied bandwidth measurement method, please refer to section 5.4.4 of ANSI C63.26.

- a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
- d. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
- f. Determine the reference value by either of the following:
  - g. 1) Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
  - h. 2) Set the EUT to transmit an unmodulated carrier. Set the spectrum analyzer marker to the level of the carrier.
- i. Determine the “-X dB amplitude” as equal to (Reference Value - X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
- j. If the reference value was determined using an unmodulated carrier, turn the EUT modulation on, then either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise the trace from step f) shall be used for step i).
- k. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB amplitude” determined in step f). If a marker is below this “-X dB amplitude” value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers. The spectral envelope can cross the “-X dB amplitude” at multiple points. The lowest or highest frequency shall be selected as the frequencies that are the farthest away from the center frequency at which the spectral envelope crosses the “-X dB amplitude.”
- l. The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

## 6.5 Conducted Spurious Emissions

### 6.5.1 Test Setup



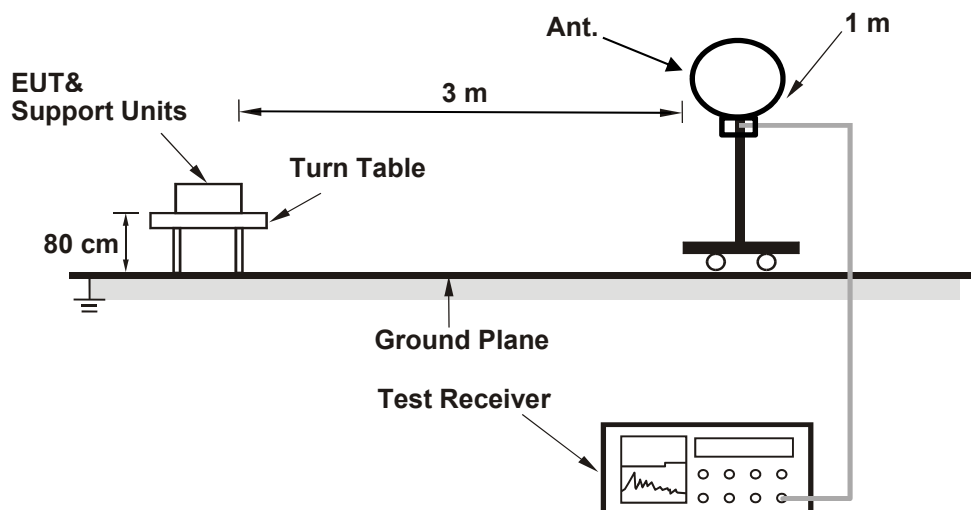
### 6.5.2 Test Procedure

- a. Measurement refer to ANSI C63.26 section 5.7.
- b. All measurements were done at 3 channels: low, middle and high operational frequency range.
- c. Measuring frequency range is from 9 kHz up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. 20 dB attenuation pad is connected with spectrum.
- d. The fundamental frequency above 1 GHz, the spectrum set RBW = 1 MHz, VBW = 3 MHz, Detector = Average.
- e. The fundamental frequency below 1 GHz, the spectrum set RBW  $\geq$  100 kHz, VBW  $\geq$  3 x RBW, Detector = Average.
- f. Measuring frequency band edge, narrow RBW (no less than 1% of the OBW) is used for conducted emission measurement.
- g. For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.  
For example: Where Reference RBW = 1 MHz and a smaller RBW = 100 kHz is used, worst-case integrated BW power = [Max Measured Value (dBm) with RBW = 100 kHz] +  $10 \cdot \log(1000/100)$ . To compensate for this integration before comparison to the value, the adjusted reference level offset was increase by 10 dB accordingly.
- a. The device has MIMO function, so the limit of conducted spurious emissions need to be measurement add  $10\log(\text{Numbers}_{\text{ANT}})$  according to FCC KDB 662911 D01 guidance. Therefore, the  $10\log(\text{Numbers}_{\text{ANT}})$  value is added to the spectrum Ref. level offset during testing.
- b. Record the maximum power value test plot.

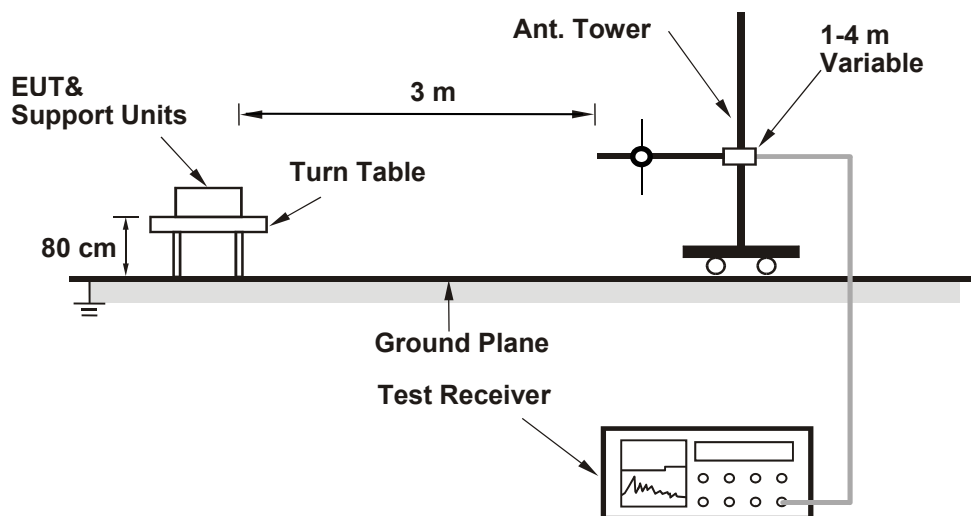
## 6.6 Radiated Spurious Emissions below 1GHz

### 6.6.1 Test Setup

#### For Radiated emission below 30 MHz



#### For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 6.6.2 Test Procedure

The EUT is configured to set data modulation and maximum power using WWAN technology.

- a. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following ANSI C63.26 section 5.5 and 5.2.7
- e.  $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
- f.  $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

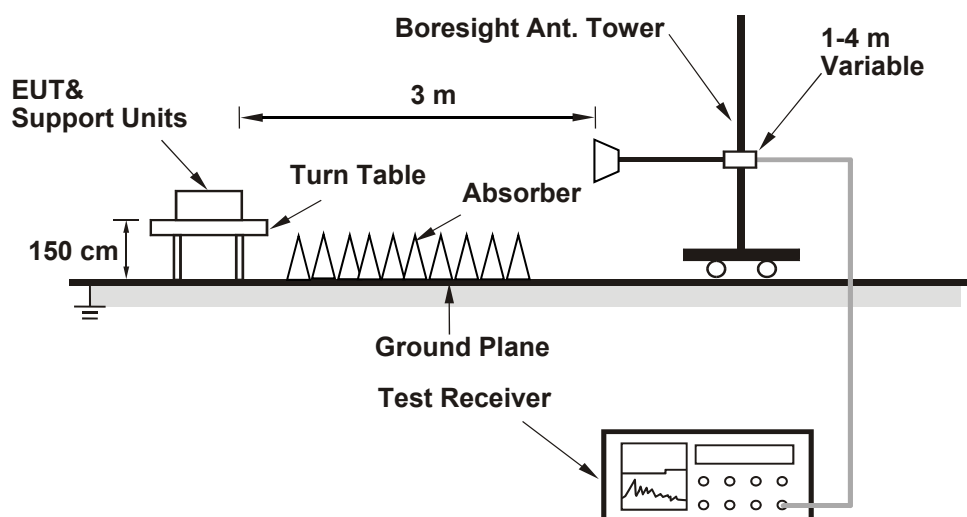
#### Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.
2. The amplitude of spurious emissions in the range 9 kHz to 30 MHz which are attenuated more than 20 dB below the permissible value need not be reported.

## 6.7 Radiated Spurious Emissions above 1GHz

### 6.7.1 Test Setup

For radiated emission above 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 6.7.2 Test Procedure

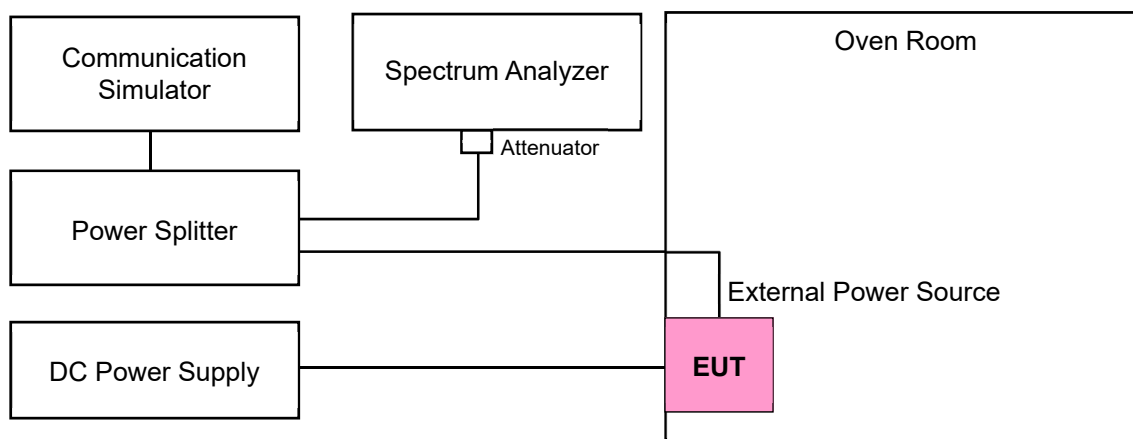
The EUT is configured to set data modulation and maximum power using WWAN technology.

- In the semi-anechoic chamber, EUT placed on the 1.5 m height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- Following ANSI C63.26 section 5.5 and 5.2.7
- $EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
- $ERP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.

## 6.8 Frequency Stability

### 6.8.1 Test Setup



### 6.8.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the  $\pm 0.5^{\circ}\text{C}$  during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

Note: The frequency error was recorded frequency error from the communication simulator.

## 7 Test Results of Test Item

### 7.1 Maximum EIRP

|              |         |                           |              |            |            |
|--------------|---------|---------------------------|--------------|------------|------------|
| Input Power: | 3.8 Vdc | Environmental Conditions: | 23°C, 71% RH | Tested By: | James Yang |
|--------------|---------|---------------------------|--------------|------------|------------|

#### 7.1.1 NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)

#### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 10 MHz

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 637000                         | CH 641666   | CH 646332   |
|              |         |           | 3555 MHz                          | 3624.99 MHz | 3694.98 MHz |
| DFT-S BPSK   | 1       | 1         | 22.30                             | 22.72       | 22.04       |
| DFT-S QPSK   | 1       | 1         | 22.24                             | 22.69       | 21.98       |
|              | 1       | 11        | 22.14                             | 22.67       | 21.82       |
|              | 1       | 22        | 22.11                             | 22.56       | 21.82       |
|              | 12      | 0         | 21.23                             | 21.68       | 21.00       |
|              | 12      | 6         | 22.01                             | 22.62       | 21.97       |
|              | 12      | 12        | 21.13                             | 21.65       | 20.89       |
|              | 24      | 0         | 21.21                             | 21.65       | 21.00       |
| DFT-S 16 QAM | 1       | 1         | 20.27                             | 20.80       | 20.03       |
| DFT-S 64 QAM | 1       | 1         | 18.86                             | 19.36       | 18.58       |
| CP 256 QAM   | 1       | 1         | 16.04                             | 16.36       | 15.74       |
| CP QPSK      | 1       | 1         | 20.75                             | 21.24       | 20.51       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 22.04                     | 22.72                     | 22.04              | 22.72              | 23               |
| DFT-S QPSK   | 20.89                     | 22.69                     | 20.89              | 22.69              | 23               |
| DFT-S 16QAM  | 20.03                     | 20.80                     | 20.03              | 20.80              | 23               |
| DFT-S 64QAM  | 18.58                     | 19.36                     | 18.58              | 19.36              | 23               |
| CP 256QAM    | 15.74                     | 16.36                     | 15.74              | 16.36              | 23               |
| CP QPSK      | 20.51                     | 21.24                     | 20.51              | 21.24              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 15 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 637168                         | CH 641666   | CH 646166   |
|              |         |           | 3557.52 MHz                       | 3624.99 MHz | 3692.49 MHz |
| DFT-S BPSK   | 1       | 1         | 18.08                             | 22.49       | 21.89       |
| DFT-S QPSK   | 1       | 1         | 18.01                             | 22.49       | 21.73       |
|              | 1       | 19        | 21.82                             | 22.44       | 21.76       |
|              | 1       | 36        | 21.88                             | 22.32       | 17.70       |
|              | 18      | 0         | 18.00                             | 21.64       | 20.76       |
|              | 18      | 10        | 22.01                             | 22.57       | 21.70       |
|              | 18      | 20        | 20.90                             | 21.51       | 20.78       |
|              | 36      | 0         | 17.99                             | 21.53       | 17.76       |
| DFT-S 16 QAM | 1       | 1         | 16.20                             | 20.55       | 19.73       |
| DFT-S 64 QAM | 1       | 1         | 16.14                             | 19.11       | 18.40       |
| CP 256 QAM   | 1       | 1         | 15.67                             | 16.14       | 15.63       |
| CP QPSK      | 1       | 1         | 16.14                             | 21.07       | 20.25       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 18.08                     | 22.49                     | 18.08              | 22.49              | 23               |
| DFT-S QPSK   | 17.70                     | 22.57                     | 17.70              | 22.57              | 23               |
| DFT-S 16QAM  | 16.20                     | 20.55                     | 16.20              | 20.55              | 23               |
| DFT-S 64QAM  | 16.14                     | 19.11                     | 16.14              | 19.11              | 23               |
| CP 256QAM    | 15.63                     | 16.14                     | 15.63              | 16.14              | 23               |
| CP QPSK      | 16.14                     | 21.07                     | 16.14              | 21.07              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 20 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |           |
|--------------|---------|-----------|-----------------------------------|-------------|-----------|
|              |         |           | CH 637334                         | CH 641666   | CH 646000 |
|              |         |           | 3560.01 MHz                       | 3624.99 MHz | 3690 MHz  |
| DFT-S BPSK   | 1       | 1         | 18.22                             | 22.63       | 21.91     |
| DFT-S QPSK   | 1       | 1         | 18.12                             | 22.57       | 21.85     |
|              | 1       | 26        | 21.94                             | 22.53       | 21.76     |
|              | 1       | 49        | 21.89                             | 22.42       | 17.76     |
|              | 25      | 0         | 18.09                             | 21.65       | 20.90     |
|              | 25      | 13        | 22.01                             | 22.66       | 21.85     |
|              | 25      | 26        | 20.99                             | 21.53       | 20.80     |
|              | 50      | 0         | 18.13                             | 21.57       | 17.87     |
| DFT-S 16 QAM | 1       | 1         | 16.20                             | 20.57       | 19.88     |
| DFT-S 64 QAM | 1       | 1         | 16.20                             | 19.19       | 18.42     |
| CP 256 QAM   | 1       | 1         | 15.73                             | 16.24       | 15.70     |
| CP QPSK      | 1       | 1         | 16.14                             | 21.13       | 20.38     |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 18.22                     | 22.63                     | 18.22              | 22.63              | 23               |
| DFT-S QPSK   | 17.76                     | 22.66                     | 17.76              | 22.66              | 23               |
| DFT-S 16QAM  | 16.20                     | 20.57                     | 16.20              | 20.57              | 23               |
| DFT-S 64QAM  | 16.20                     | 19.19                     | 16.20              | 19.19              | 23               |
| CP 256QAM    | 15.70                     | 16.24                     | 15.70              | 16.24              | 23               |
| CP QPSK      | 16.14                     | 21.13                     | 16.14              | 21.13              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 30 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 637668                         | CH 641666   | CH 645666   |
|              |         |           | 3565.02 MHz                       | 3624.99 MHz | 3684.99 MHz |
| DFT-S BPSK   | 1       | 1         | 11.66                             | 18.52       | 11.54       |
| DFT-S QPSK   | 1       | 1         | 11.63                             | 18.56       | 11.45       |
|              | 1       | 39        | 21.99                             | 22.52       | 21.80       |
|              | 1       | 76        | 11.59                             | 18.06       | 11.14       |
|              | 36      | 0         | 11.72                             | 21.63       | 15.96       |
|              | 36      | 21        | 11.61                             | 22.73       | 11.42       |
|              | 36      | 42        | 16.20                             | 21.39       | 11.37       |
|              | 75      | 0         | 11.54                             | 18.02       | 11.35       |
| DFT-S 16 QAM | 1       | 1         | 10.72                             | 18.71       | 10.59       |
| DFT-S 64 QAM | 1       | 1         | 10.76                             | 18.62       | 10.74       |
| CP 256 QAM   | 1       | 1         | 10.94                             | 16.34       | 10.94       |
| CP QPSK      | 1       | 1         | 10.68                             | 18.60       | 10.66       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 11.54                     | 18.52                     | 11.54              | 18.52              | 23               |
| DFT-S QPSK   | 11.14                     | 22.73                     | 11.14              | 22.73              | 23               |
| DFT-S 16QAM  | 10.59                     | 18.71                     | 10.59              | 18.71              | 23               |
| DFT-S 64QAM  | 10.74                     | 18.62                     | 10.74              | 18.62              | 23               |
| CP 256QAM    | 10.94                     | 16.34                     | 10.94              | 16.34              | 23               |
| CP QPSK      | 10.66                     | 18.60                     | 10.66              | 18.60              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 40 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 638000                         | CH 641666   | CH 645332   |
|              |         |           | 3570 MHz                          | 3624.99 MHz | 3679.98 MHz |
| DFT-S BPSK   | 1       | 1         | 11.73                             | 18.66       | 11.67       |
| DFT-S QPSK   | 1       | 1         | 11.67                             | 18.62       | 11.60       |
|              | 1       | 53        | 22.01                             | 22.55       | 21.88       |
|              | 1       | 104       | 11.62                             | 18.12       | 11.21       |
|              | 50      | 0         | 11.76                             | 21.69       | 16.11       |
|              | 50      | 28        | 11.71                             | 22.75       | 11.50       |
|              | 50      | 56        | 16.21                             | 21.51       | 11.45       |
|              | 100     | 0         | 11.68                             | 18.12       | 11.49       |
| DFT-S 16 QAM | 1       | 1         | 10.79                             | 18.75       | 10.69       |
| DFT-S 64 QAM | 1       | 1         | 10.90                             | 18.63       | 10.79       |
| CP 256 QAM   | 1       | 1         | 11.03                             | 16.46       | 10.94       |
| CP QPSK      | 1       | 1         | 10.69                             | 18.64       | 10.67       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 11.67                     | 18.66                     | 11.67              | 18.66              | 23               |
| DFT-S QPSK   | 11.21                     | 22.75                     | 11.21              | 22.75              | 23               |
| DFT-S 16QAM  | 10.69                     | 18.75                     | 10.69              | 18.75              | 23               |
| DFT-S 64QAM  | 10.79                     | 18.63                     | 10.79              | 18.63              | 23               |
| CP 256QAM    | 10.94                     | 16.46                     | 10.94              | 16.46              | 23               |
| CP QPSK      | 10.67                     | 18.64                     | 10.67              | 18.64              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

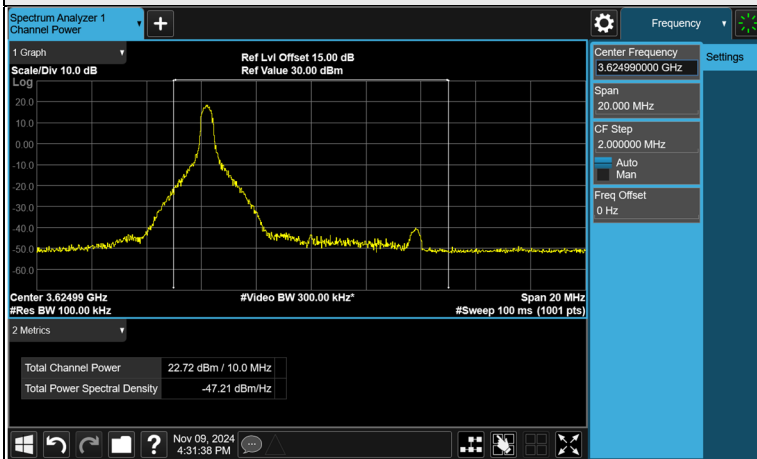
**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 10 MHz, Output Power: dBm/10 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 637000                         | CH 641666   | CH 646332   |
|              |         |           | 3555 MHz                          | 3624.99 MHz | 3694.98 MHz |
| DFT-S BPSK   | 1       | 1         | 22.30                             | 22.72       | 22.04       |
| DFT-S QPSK   | 1       | 1         | 22.24                             | 22.69       | 21.98       |
|              | 1       | 11        | 22.14                             | 22.67       | 21.82       |
|              | 1       | 22        | 22.11                             | 22.56       | 21.82       |
|              | 12      | 0         | 21.23                             | 21.68       | 21.00       |
|              | 12      | 6         | 22.01                             | 22.62       | 21.97       |
|              | 12      | 12        | 21.13                             | 21.65       | 20.89       |
|              | 24      | 0         | 21.21                             | 21.65       | 21.00       |
| DFT-S 16 QAM | 1       | 1         | 20.27                             | 20.80       | 20.03       |
| DFT-S 64 QAM | 1       | 1         | 18.86                             | 19.36       | 18.58       |
| CP 256 QAM   | 1       | 1         | 16.04                             | 16.36       | 15.74       |
| CP QPSK      | 1       | 1         | 20.75                             | 21.24       | 20.51       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 22.04                     | 22.72                     | 22.04              | 22.72              | 23               |
| DFT-S QPSK   | 20.89                     | 22.69                     | 20.89              | 22.69              | 23               |
| DFT-S 16QAM  | 20.03                     | 20.80                     | 20.03              | 20.80              | 23               |
| DFT-S 64QAM  | 18.58                     | 19.36                     | 18.58              | 19.36              | 23               |
| CP 256QAM    | 15.74                     | 16.36                     | 15.74              | 16.36              | 23               |
| CP QPSK      | 20.51                     | 21.24                     | 20.51              | 21.24              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

## Spectrum Plot of Worst Value



QPSK CH 641666 (3624.99 MHz) Ant.0

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 15 MHz, Output Power: dBm/10 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 637168                         | CH 641666   | CH 646166   |
|              |         |           | 3557.52 MHz                       | 3624.99 MHz | 3692.48 MHz |
| DFT-S BPSK   | 1       | 1         | 18.15                             | 22.54       | 21.77       |
| DFT-S QPSK   | 1       | 1         | 18.03                             | 22.51       | 21.84       |
|              | 1       | 19        | 21.87                             | 22.46       | 21.66       |
|              | 1       | 36        | 21.74                             | 22.40       | 17.71       |
|              | 18      | 0         | 18.09                             | 21.57       | 20.83       |
|              | 18      | 10        | 21.97                             | 22.59       | 21.81       |
|              | 18      | 20        | 20.91                             | 21.40       | 20.74       |
|              | 36      | 0         | 16.85                             | 19.53       | 16.17       |
| DFT-S 16 QAM | 1       | 1         | 16.09                             | 20.51       | 19.84       |
| DFT-S 64 QAM | 1       | 1         | 16.15                             | 19.10       | 18.28       |
| CP 256 QAM   | 1       | 1         | 15.70                             | 16.22       | 15.63       |
| CP QPSK      | 1       | 1         | 16.14                             | 21.13       | 20.37       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 18.15                     | 22.54                     | 18.15              | 22.54              | 23               |
| DFT-S QPSK   | 16.17                     | 22.59                     | 16.17              | 22.59              | 23               |
| DFT-S 16QAM  | 16.09                     | 20.51                     | 16.09              | 20.51              | 23               |
| DFT-S 64QAM  | 16.15                     | 19.10                     | 16.15              | 19.10              | 23               |
| CP 256QAM    | 15.63                     | 16.22                     | 15.63              | 16.22              | 23               |
| CP QPSK      | 16.14                     | 21.13                     | 16.14              | 21.13              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 20 MHz, Output Power: dBm/10 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |           |
|--------------|---------|-----------|-----------------------------------|-------------|-----------|
|              |         |           | CH 637334                         | CH 641666   | CH 646000 |
|              |         |           | 3560.01 MHz                       | 3624.99 MHz | 3690 MHz  |
| DFT-S BPSK   | 1       | 1         | 18.21                             | 22.51       | 21.85     |
| DFT-S QPSK   | 1       | 1         | 18.06                             | 22.49       | 21.74     |
|              | 1       | 26        | 21.90                             | 22.43       | 21.61     |
|              | 1       | 49        | 21.76                             | 22.40       | 17.65     |
|              | 25      | 0         | 17.95                             | 21.53       | 20.85     |
|              | 25      | 13        | 21.92                             | 22.65       | 21.77     |
|              | 25      | 26        | 20.95                             | 21.50       | 20.79     |
|              | 50      | 0         | 15.59                             | 18.00       | 14.88     |
| DFT-S 16 QAM | 1       | 1         | 16.20                             | 20.50       | 19.75     |
| DFT-S 64 QAM | 1       | 1         | 16.13                             | 19.09       | 18.39     |
| CP 256 QAM   | 1       | 1         | 15.71                             | 16.19       | 15.57     |
| CP QPSK      | 1       | 1         | 16.01                             | 21.13       | 20.28     |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 18.21                     | 22.51                     | 18.21              | 22.51              | 23               |
| DFT-S QPSK   | 14.88                     | 22.65                     | 14.88              | 22.65              | 23               |
| DFT-S 16QAM  | 16.20                     | 20.50                     | 16.20              | 20.50              | 23               |
| DFT-S 64QAM  | 16.13                     | 19.09                     | 16.13              | 19.09              | 23               |
| CP 256QAM    | 15.57                     | 16.19                     | 15.57              | 16.19              | 23               |
| CP QPSK      | 16.01                     | 21.13                     | 16.01              | 21.13              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 30 MHz, Output Power: dBm/10 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 637668                         | CH 641666   | CH 645666   |
|              |         |           | 3565.02 MHz                       | 3624.99 MHz | 3684.99 MHz |
| DFT-S BPSK   | 1       | 1         | 11.68                             | 18.58       | 11.59       |
| DFT-S QPSK   | 1       | 1         | 11.66                             | 18.59       | 11.51       |
|              | 1       | 39        | 21.92                             | 22.41       | 21.85       |
|              | 1       | 76        | 11.60                             | 18.03       | 11.16       |
|              | 36      | 0         | 10.51                             | 20.21       | 15.92       |
|              | 36      | 21        | 21.28                             | 20.67       | 10.00       |
|              | 36      | 42        | 16.55                             | 16.46       | 9.85        |
|              | 75      | 0         | 7.19                              | 13.54       | 6.73        |
| DFT-S 16 QAM | 1       | 1         | 10.79                             | 18.62       | 10.55       |
| DFT-S 64 QAM | 1       | 1         | 10.89                             | 18.63       | 10.65       |
| CP 256 QAM   | 1       | 1         | 11.02                             | 16.46       | 10.84       |
| CP QPSK      | 1       | 1         | 10.62                             | 18.54       | 10.60       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 11.59                     | 18.58                     | 11.59              | 18.58              | 23               |
| DFT-S QPSK   | 6.73                      | 22.41                     | 6.73               | 22.41              | 23               |
| DFT-S 16QAM  | 10.55                     | 18.62                     | 10.55              | 18.62              | 23               |
| DFT-S 64QAM  | 10.65                     | 18.63                     | 10.65              | 18.63              | 23               |
| CP 256QAM    | 10.84                     | 16.46                     | 10.84              | 16.46              | 23               |
| CP QPSK      | 10.60                     | 18.54                     | 10.60              | 18.54              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - Ant 0, Channel Bandwidth: 40 MHz, Output Power: dBm/10 MHz**

| Modulation   | RB Size | RB Offset | Measurement Conducted Power (dBm) |             |             |
|--------------|---------|-----------|-----------------------------------|-------------|-------------|
|              |         |           | CH 638000                         | CH 641666   | CH 645332   |
|              |         |           | 3570 MHz                          | 3624.99 MHz | 3679.98 MHz |
| DFT-S BPSK   | 1       | 1         | 11.72                             | 18.66       | 11.52       |
| DFT-S QPSK   | 1       | 1         | 11.62                             | 18.50       | 11.60       |
|              | 1       | 53        | 21.95                             | 22.53       | 21.87       |
|              | 1       | 104       | 11.60                             | 18.08       | 11.16       |
|              | 50      | 0         | 9.22                              | 18.11       | 13.06       |
|              | 50      | 28        | 9.29                              | 19.20       | 8.41        |
|              | 50      | 56        | 13.86                             | 18.03       | 8.31        |
|              | 100     | 0         | 6.74                              | 11.54       | 5.45        |
| DFT-S 16 QAM | 1       | 1         | 10.73                             | 18.69       | 10.66       |
| DFT-S 64 QAM | 1       | 1         | 10.89                             | 18.63       | 10.72       |
| CP 256 QAM   | 1       | 1         | 11.00                             | 16.33       | 10.86       |
| CP QPSK      | 1       | 1         | 10.54                             | 18.64       | 10.65       |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| DFT-S BPSK   | 11.52                     | 18.66                     | 11.52              | 18.66              | 23               |
| DFT-S QPSK   | 5.45                      | 22.53                     | 5.45               | 22.53              | 23               |
| DFT-S 16QAM  | 10.66                     | 18.69                     | 10.66              | 18.69              | 23               |
| DFT-S 64QAM  | 10.72                     | 18.63                     | 10.72              | 18.63              | 23               |
| CP 256QAM    | 10.86                     | 16.33                     | 10.86              | 16.33              | 23               |
| CP QPSK      | 10.54                     | 18.64                     | 10.54              | 18.64              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 10 MHz, Output Power: Full Power**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 637000                         |       |       | CH 641666   |       |       | CH 646332   |       |       |
|            |         |           | 3555 MHz                          |       |       | 3624.99 MHz |       |       | 3694.98 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 18.15                             | 17.81 | 20.99 | 18.09       | 18.10 | 21.11 | 17.38       | 17.65 | 20.53 |
| QPSK       | 1       | 1         | 18.22                             | 17.89 | 21.07 | 18.23       | 18.12 | 21.19 | 17.46       | 17.73 | 20.61 |
|            | 1       | 11        | 18.23                             | 17.76 | 21.01 | 18.22       | 17.93 | 21.09 | 17.35       | 17.69 | 20.53 |
|            | 1       | 22        | 18.29                             | 17.88 | 21.10 | 18.21       | 18.09 | 21.16 | 17.49       | 17.78 | 20.65 |
|            | 12      | 0         | 16.73                             | 16.23 | 19.50 | 16.66       | 16.51 | 19.60 | 15.88       | 16.23 | 19.07 |
|            | 12      | 6         | 18.21                             | 17.76 | 21.00 | 18.14       | 17.95 | 21.06 | 17.28       | 17.65 | 20.48 |
|            | 12      | 12        | 16.69                             | 16.26 | 19.49 | 16.66       | 16.39 | 19.54 | 15.77       | 16.09 | 18.94 |
|            | 24      | 0         | 16.66                             | 16.11 | 19.40 | 16.61       | 16.39 | 19.51 | 15.83       | 16.17 | 19.01 |
| 16QAM      | 1       | 1         | 17.71                             | 17.35 | 20.54 | 17.77       | 17.35 | 20.58 | 16.92       | 17.30 | 20.12 |
| 64QAM      | 1       | 1         | 15.96                             | 15.65 | 18.82 | 16.35       | 15.76 | 19.08 | 15.54       | 15.58 | 18.57 |
| 256QAM     | 1       | 1         | 13.35                             | 12.81 | 16.10 | 13.32       | 12.94 | 16.14 | 12.49       | 12.76 | 15.64 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 20.53                     | 21.11                     | 20.53              | 21.11              | 23               |
| QPSK         | 18.94                     | 21.19                     | 18.94              | 21.19              | 23               |
| 16QAM        | 20.12                     | 20.58                     | 20.12              | 20.58              | 23               |
| 64QAM        | 18.57                     | 19.08                     | 18.57              | 19.08              | 23               |
| 256QAM       | 15.64                     | 16.14                     | 15.64              | 16.14              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 15 MHz, Output Power: Full Power**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 637168                         |       |       | CH 641666   |       |       | CH 646166   |       |       |
|            |         |           | 3557.52 MHz                       |       |       | 3624.99 MHz |       |       | 3692.49 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 13.66                             | 13.20 | 16.45 | 18.00       | 17.75 | 20.89 | 17.36       | 17.65 | 20.52 |
| QPSK       | 1       | 1         | 13.77                             | 13.25 | 16.53 | 18.16       | 17.79 | 20.99 | 17.43       | 17.69 | 20.57 |
|            | 1       | 19        | 18.14                             | 17.72 | 20.95 | 18.27       | 18.08 | 21.19 | 17.32       | 17.66 | 20.50 |
|            | 1       | 36        | 18.21                             | 17.73 | 20.99 | 18.06       | 17.90 | 20.99 | 12.66       | 12.92 | 15.80 |
|            | 18      | 0         | 13.53                             | 13.12 | 16.34 | 16.64       | 16.39 | 19.53 | 15.74       | 16.09 | 18.93 |
|            | 18      | 10        | 18.16                             | 17.64 | 20.92 | 18.06       | 17.88 | 20.98 | 17.25       | 17.55 | 20.41 |
|            | 18      | 20        | 16.56                             | 16.14 | 19.37 | 16.51       | 16.45 | 19.49 | 15.79       | 16.06 | 18.94 |
|            | 36      | 0         | 13.52                             | 13.16 | 16.35 | 16.56       | 16.26 | 19.42 | 12.74       | 12.93 | 15.85 |
| 16QAM      | 1       | 1         | 13.86                             | 13.16 | 16.53 | 17.52       | 17.28 | 20.41 | 16.77       | 17.27 | 20.04 |
| 64QAM      | 1       | 1         | 13.32                             | 13.19 | 16.27 | 16.34       | 15.54 | 18.97 | 15.24       | 15.40 | 18.33 |
| 256QAM     | 1       | 1         | 13.07                             | 12.63 | 15.87 | 13.28       | 12.91 | 16.11 | 12.45       | 12.63 | 15.55 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 16.45                     | 20.89                     | 16.45              | 20.89              | 23               |
| QPSK         | 15.80                     | 21.19                     | 15.80              | 21.19              | 23               |
| 16QAM        | 16.53                     | 20.41                     | 16.53              | 20.41              | 23               |
| 64QAM        | 16.27                     | 18.97                     | 16.27              | 18.97              | 23               |
| 256QAM       | 15.55                     | 16.11                     | 15.55              | 16.11              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 20 MHz, Output Power: Full Power**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |           |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-----------|-------|-------|
|            |         |           | CH 637334                         |       |       | CH 641666   |       |       | CH 646000 |       |       |
|            |         |           | 3560.01 MHz                       |       |       | 3624.99 MHz |       |       | 3690 MHz  |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1      | TX 2  | Total |
| BPSK       | 1       | 1         | 13.44                             | 12.88 | 16.18 | 18.09       | 17.75 | 20.93 | 17.22     | 17.43 | 20.34 |
| QPSK       | 1       | 1         | 13.48                             | 12.96 | 16.24 | 18.11       | 17.78 | 20.96 | 17.27     | 17.55 | 20.42 |
|            | 1       | 26        | 18.20                             | 17.61 | 20.93 | 18.15       | 17.87 | 21.02 | 17.02     | 17.49 | 20.27 |
|            | 1       | 49        | 18.05                             | 17.48 | 20.78 | 18.05       | 17.92 | 21.00 | 12.62     | 12.89 | 15.77 |
|            | 25      | 0         | 13.56                             | 12.99 | 16.29 | 16.54       | 16.19 | 19.38 | 15.73     | 16.11 | 18.93 |
|            | 25      | 13        | 18.02                             | 17.60 | 20.83 | 18.06       | 17.78 | 20.93 | 17.20     | 17.57 | 20.40 |
|            | 25      | 26        | 16.59                             | 16.07 | 19.35 | 16.54       | 16.31 | 19.44 | 15.71     | 16.06 | 18.90 |
|            | 50      | 0         | 13.56                             | 13.03 | 16.31 | 16.51       | 16.24 | 19.39 | 12.75     | 13.16 | 15.97 |
| 16QAM      | 1       | 1         | 13.70                             | 12.85 | 16.31 | 17.26       | 17.37 | 20.33 | 16.65     | 17.09 | 19.89 |
| 64QAM      | 1       | 1         | 13.44                             | 13.17 | 16.32 | 15.94       | 15.36 | 18.67 | 15.42     | 15.47 | 18.46 |
| 256QAM     | 1       | 1         | 13.06                             | 12.48 | 15.79 | 13.02       | 12.65 | 15.85 | 12.20     | 12.47 | 15.35 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 16.18                     | 20.93                     | 16.18              | 20.93              | 23               |
| QPSK         | 15.77                     | 21.02                     | 15.77              | 21.02              | 23               |
| 16QAM        | 16.31                     | 20.33                     | 16.31              | 20.33              | 23               |
| 64QAM        | 16.32                     | 18.67                     | 16.32              | 18.67              | 23               |
| 256QAM       | 15.35                     | 15.85                     | 15.35              | 15.85              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 30 MHz, Output Power: Full Power**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 637668                         |       |       | CH 641666   |       |       | CH 645666   |       |       |
|            |         |           | 3565.02 MHz                       |       |       | 3624.99 MHz |       |       | 3684.99 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 8.69                              | 7.80  | 11.28 | 16.00       | 15.55 | 18.79 | 8.01        | 7.54  | 10.79 |
| QPSK       | 1       | 1         | 8.80                              | 7.87  | 11.37 | 16.11       | 15.60 | 18.87 | 8.13        | 7.66  | 10.91 |
|            | 1       | 39        | 18.94                             | 18.16 | 21.58 | 18.79       | 18.40 | 21.61 | 17.81       | 17.75 | 20.79 |
|            | 1       | 76        | 8.53                              | 7.83  | 11.20 | 16.13       | 15.56 | 18.86 | 7.82        | 7.57  | 10.71 |
|            | 36      | 0         | 8.59                              | 7.96  | 11.30 | 17.09       | 16.74 | 19.93 | 13.88       | 13.62 | 16.76 |
|            | 36      | 21        | 18.91                             | 17.98 | 21.48 | 18.68       | 18.26 | 21.49 | 7.86        | 7.53  | 10.71 |
|            | 36      | 42        | 14.57                             | 13.92 | 17.27 | 16.07       | 15.73 | 18.91 | 7.89        | 7.43  | 10.68 |
|            | 75      | 0         | 8.56                              | 7.85  | 11.23 | 16.07       | 15.73 | 18.91 | 7.79        | 7.90  | 10.86 |
| 16QAM      | 1       | 1         | 8.59                              | 8.14  | 11.38 | 16.00       | 15.75 | 18.89 | 8.13        | 7.76  | 10.96 |
| 64QAM      | 1       | 1         | 8.20                              | 7.94  | 11.08 | 15.74       | 15.31 | 18.54 | 7.75        | 7.61  | 10.69 |
| 256QAM     | 1       | 1         | 8.50                              | 8.03  | 11.28 | 13.69       | 13.06 | 16.40 | 8.02        | 7.71  | 10.88 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 10.79                     | 18.79                     | 10.79              | 18.79              | 23               |
| QPSK         | 10.68                     | 21.61                     | 10.68              | 21.61              | 23               |
| 16QAM        | 10.96                     | 18.89                     | 10.96              | 18.89              | 23               |
| 64QAM        | 10.69                     | 18.54                     | 10.69              | 18.54              | 23               |
| 256QAM       | 10.88                     | 16.40                     | 10.88              | 16.40              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 40 MHz, Output Power: Full Power**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 638000                         |       |       | CH 641666   |       |       | CH 645332   |       |       |
|            |         |           | 3570 MHz                          |       |       | 3624.99 MHz |       |       | 3679.98 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 8.46                              | 7.88  | 11.19 | 15.76       | 15.13 | 18.47 | 7.88        | 7.86  | 10.88 |
| QPSK       | 1       | 1         | 8.54                              | 7.89  | 11.24 | 15.83       | 15.20 | 18.54 | 7.97        | 7.95  | 10.97 |
|            | 1       | 53        | 18.90                             | 17.93 | 21.45 | 19.09       | 18.33 | 21.74 | 17.90       | 17.85 | 20.89 |
|            | 1       | 104       | 8.32                              | 7.57  | 10.97 | 15.61       | 15.32 | 18.48 | 7.48        | 7.44  | 10.47 |
|            | 50      | 0         | 8.61                              | 7.95  | 11.30 | 17.13       | 16.58 | 19.87 | 12.35       | 12.42 | 15.40 |
|            | 50      | 28        | 8.66                              | 7.85  | 11.28 | 17.05       | 16.67 | 19.87 | 7.81        | 7.85  | 10.84 |
|            | 50      | 56        | 13.10                             | 12.36 | 15.76 | 17.00       | 16.61 | 19.82 | 7.58        | 7.75  | 10.68 |
|            | 100     | 0         | 8.63                              | 7.96  | 11.32 | 15.59       | 15.07 | 18.35 | 7.81        | 7.97  | 10.90 |
| 16QAM      | 1       | 1         | 8.41                              | 7.99  | 11.22 | 16.13       | 15.53 | 18.85 | 8.18        | 8.04  | 11.12 |
| 64QAM      | 1       | 1         | 8.42                              | 7.56  | 11.02 | 15.85       | 15.35 | 18.62 | 8.12        | 7.97  | 11.06 |
| 256QAM     | 1       | 1         | 8.57                              | 7.87  | 11.24 | 13.52       | 12.86 | 16.21 | 7.96        | 7.98  | 10.98 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 10.88                     | 18.47                     | 10.88              | 18.47              | 23               |
| QPSK         | 10.47                     | 21.74                     | 10.47              | 21.74              | 23               |
| 16QAM        | 11.12                     | 18.85                     | 11.12              | 18.85              | 23               |
| 64QAM        | 11.02                     | 18.62                     | 11.02              | 18.62              | 23               |
| 256QAM       | 10.98                     | 16.21                     | 10.98              | 16.21              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 10 MHz, Output Power: dBm/10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 637000                         |       |       | CH 641666   |       |       | CH 646332   |       |       |
|            |         |           | 3555 MHz                          |       |       | 3624.99 MHz |       |       | 3694.98 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 18.15                             | 17.81 | 20.99 | 18.09       | 18.10 | 21.11 | 17.38       | 17.65 | 20.53 |
| QPSK       | 1       | 1         | 18.22                             | 17.89 | 21.07 | 18.23       | 18.12 | 21.19 | 17.46       | 17.73 | 20.61 |
|            | 1       | 11        | 18.23                             | 17.76 | 21.01 | 18.22       | 17.93 | 21.09 | 17.35       | 17.69 | 20.53 |
|            | 1       | 22        | 18.29                             | 17.88 | 21.10 | 18.21       | 18.09 | 21.16 | 17.49       | 17.78 | 20.65 |
|            | 12      | 0         | 16.73                             | 16.23 | 19.50 | 16.66       | 16.51 | 19.60 | 15.88       | 16.23 | 19.07 |
|            | 12      | 6         | 18.21                             | 17.76 | 21.00 | 18.14       | 17.95 | 21.06 | 17.28       | 17.65 | 20.48 |
|            | 12      | 12        | 16.69                             | 16.26 | 19.49 | 16.66       | 16.39 | 19.54 | 15.77       | 16.09 | 18.94 |
|            | 24      | 0         | 16.66                             | 16.11 | 19.40 | 16.61       | 16.39 | 19.51 | 15.83       | 16.17 | 19.01 |
| 16QAM      | 1       | 1         | 17.71                             | 17.35 | 20.54 | 17.77       | 17.35 | 20.58 | 16.92       | 17.30 | 20.12 |
| 64QAM      | 1       | 1         | 15.96                             | 15.65 | 18.82 | 16.35       | 15.76 | 19.08 | 15.54       | 15.58 | 18.57 |
| 256QAM     | 1       | 1         | 13.35                             | 12.81 | 16.10 | 13.32       | 12.94 | 16.14 | 12.49       | 12.76 | 15.64 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 20.53                     | 21.11                     | 20.53              | 21.11              | 23               |
| QPSK         | 18.94                     | 21.19                     | 18.94              | 21.19              | 23               |
| 16QAM        | 20.12                     | 20.58                     | 20.12              | 20.58              | 23               |
| 64QAM        | 18.57                     | 19.08                     | 18.57              | 19.08              | 23               |
| 256QAM       | 15.64                     | 16.14                     | 15.64              | 16.14              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 15 MHz, Output Power: dBm/10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 637168                         |       |       | CH 641666   |       |       | CH 646166   |       |       |
|            |         |           | 3557.52 MHz                       |       |       | 3264.99 MHz |       |       | 3692.49 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 13.65                             | 13.17 | 16.43 | 17.90       | 17.70 | 20.81 | 17.23       | 17.63 | 20.44 |
| QPSK       | 1       | 1         | 13.77                             | 13.21 | 16.51 | 18.15       | 17.71 | 20.95 | 17.42       | 17.68 | 20.56 |
|            | 1       | 19        | 18.01                             | 17.60 | 20.82 | 18.13       | 17.94 | 21.05 | 17.29       | 17.63 | 20.47 |
|            | 1       | 36        | 18.11                             | 17.62 | 20.88 | 17.94       | 17.90 | 20.93 | 12.57       | 12.88 | 15.74 |
|            | 18      | 0         | 13.46                             | 13.06 | 16.27 | 16.58       | 16.35 | 19.48 | 15.70       | 16.08 | 18.90 |
|            | 18      | 10        | 18.08                             | 17.52 | 20.82 | 17.91       | 17.76 | 20.85 | 17.20       | 17.53 | 20.38 |
|            | 18      | 20        | 16.48                             | 16.00 | 19.26 | 16.49       | 16.39 | 19.45 | 15.67       | 16.01 | 18.85 |
|            | 36      | 0         | 12.17                             | 11.83 | 15.01 | 15.23       | 14.92 | 18.09 | 11.41       | 11.68 | 14.56 |
| 16QAM      | 1       | 1         | 13.74                             | 13.04 | 16.41 | 17.37       | 17.18 | 20.29 | 16.77       | 17.20 | 20.00 |
| 64QAM      | 1       | 1         | 13.28                             | 13.07 | 16.19 | 16.30       | 15.43 | 18.90 | 15.13       | 15.38 | 18.27 |
| 256QAM     | 1       | 1         | 12.93                             | 12.50 | 15.73 | 13.28       | 12.84 | 16.08 | 12.43       | 12.50 | 15.48 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 16.43                     | 20.81                     | 16.43              | 20.81              | 23               |
| QPSK         | 14.56                     | 21.05                     | 14.56              | 21.05              | 23               |
| 16QAM        | 16.41                     | 20.29                     | 16.41              | 20.29              | 23               |
| 64QAM        | 16.19                     | 18.90                     | 16.19              | 18.90              | 23               |
| 256QAM       | 15.48                     | 16.08                     | 15.48              | 16.08              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 20 MHz, Output Power: dBm/10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |           |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-----------|-------|-------|
|            |         |           | CH 637334                         |       |       | CH 641666   |       |       | CH 646000 |       |       |
|            |         |           | 3560.01 MHz                       |       |       | 3624.99 MHz |       |       | 3690 MHz  |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1      | TX 2  | Total |
| BPSK       | 1       | 1         | 13.30                             | 12.87 | 16.10 | 17.98       | 17.64 | 20.82 | 17.18     | 17.30 | 20.25 |
| QPSK       | 1       | 1         | 13.48                             | 12.81 | 16.17 | 18.06       | 17.75 | 20.92 | 17.21     | 17.51 | 20.37 |
|            | 1       | 26        | 18.08                             | 17.58 | 20.85 | 18.04       | 17.76 | 20.91 | 16.88     | 17.48 | 20.20 |
|            | 1       | 49        | 18.04                             | 17.42 | 20.75 | 17.95       | 17.78 | 20.88 | 12.52     | 12.89 | 15.72 |
|            | 25      | 0         | 13.52                             | 12.89 | 16.23 | 16.49       | 16.04 | 19.28 | 15.73     | 16.01 | 18.88 |
|            | 25      | 13        | 17.98                             | 17.58 | 20.79 | 17.94       | 17.73 | 20.85 | 17.07     | 17.49 | 20.30 |
|            | 25      | 26        | 16.46                             | 15.96 | 19.23 | 16.51       | 16.19 | 19.36 | 15.67     | 15.98 | 18.84 |
|            | 50      | 0         | 10.97                             | 10.45 | 13.73 | 13.91       | 13.59 | 16.76 | 10.15     | 10.52 | 13.35 |
| 16QAM      | 1       | 1         | 13.61                             | 12.78 | 16.23 | 17.20       | 17.26 | 20.24 | 16.65     | 17.03 | 19.85 |
| 64QAM      | 1       | 1         | 13.30                             | 13.10 | 16.21 | 15.81       | 15.33 | 18.59 | 15.31     | 15.46 | 18.40 |
| 256QAM     | 1       | 1         | 13.05                             | 12.48 | 15.78 | 12.96       | 12.56 | 15.77 | 12.05     | 12.46 | 15.27 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 16.10                     | 20.82                     | 16.10              | 20.82              | 23               |
| QPSK         | 13.35                     | 20.92                     | 13.35              | 20.92              | 23               |
| 16QAM        | 16.23                     | 20.24                     | 16.23              | 20.24              | 23               |
| 64QAM        | 16.21                     | 18.59                     | 16.21              | 18.59              | 23               |
| 256QAM       | 15.27                     | 15.78                     | 15.27              | 15.78              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

**NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 30 MHz, Output Power: dBm/10 MHz**

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 637668                         |       |       | CH 641666   |       |       | CH 645666   |       |       |
|            |         |           | 3565.02 MHz                       |       |       | 3624.99 MHz |       |       | 3684.99 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 8.61                              | 7.72  | 11.20 | 15.88       | 15.48 | 18.69 | 7.93        | 7.46  | 10.71 |
| QPSK       | 1       | 1         | 8.70                              | 7.80  | 11.28 | 15.98       | 15.47 | 18.74 | 8.07        | 7.58  | 10.84 |
|            | 1       | 39        | 18.83                             | 18.11 | 21.50 | 18.65       | 18.32 | 21.50 | 17.67       | 17.65 | 20.67 |
|            | 1       | 76        | 8.41                              | 7.78  | 11.12 | 15.99       | 15.46 | 18.74 | 7.75        | 7.48  | 10.63 |
|            | 36      | 0         | 7.60                              | 6.89  | 10.27 | 16.00       | 15.56 | 18.80 | 12.84       | 12.57 | 15.72 |
|            | 36      | 21        | 17.56                             | 16.99 | 20.29 | 17.58       | 17.13 | 20.37 | 6.75        | 6.51  | 9.64  |
|            | 36      | 42        | 13.48                             | 12.83 | 16.18 | 14.87       | 14.64 | 17.77 | 6.73        | 6.33  | 9.54  |
|            | 75      | 0         | 4.24                              | 3.35  | 6.83  | 11.63       | 11.18 | 14.42 | 3.31        | 3.02  | 6.18  |
| 16QAM      | 1       | 1         | 8.44                              | 8.05  | 11.26 | 15.88       | 15.61 | 18.76 | 8.08        | 7.63  | 10.87 |
| 64QAM      | 1       | 1         | 8.10                              | 7.84  | 10.98 | 15.65       | 15.20 | 18.44 | 7.68        | 7.53  | 10.62 |
| 256QAM     | 1       | 1         | 8.38                              | 7.89  | 11.15 | 13.60       | 12.94 | 16.29 | 7.89        | 7.57  | 10.74 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 10.71                     | 18.69                     | 10.71              | 18.69              | 23               |
| QPSK         | 6.18                      | 21.50                     | 6.18               | 21.50              | 23               |
| 16QAM        | 10.87                     | 18.76                     | 10.87              | 18.76              | 23               |
| 64QAM        | 10.62                     | 18.44                     | 10.62              | 18.44              | 23               |
| 256QAM       | 10.74                     | 16.29                     | 10.74              | 16.29              | 23               |

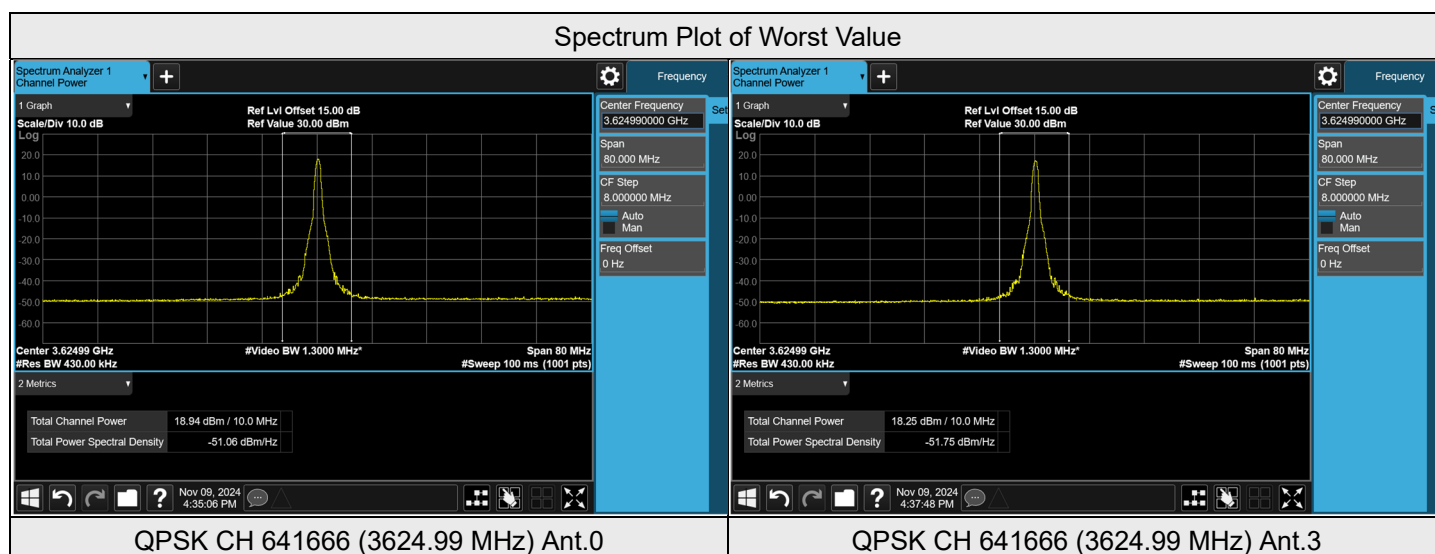
Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO, Channel Bandwidth: 40 MHz, Output Power: dBm/10 MHz

| Modulation | RB Size | RB Offset | Measurement Conducted Power (dBm) |       |       |             |       |       |             |       |       |
|------------|---------|-----------|-----------------------------------|-------|-------|-------------|-------|-------|-------------|-------|-------|
|            |         |           | CH 638000                         |       |       | CH 641666   |       |       | CH 645332   |       |       |
|            |         |           | 3570 MHz                          |       |       | 3624.99 MHz |       |       | 3679.98 MHz |       |       |
|            |         |           | TX 1                              | TX 2  | Total | TX 1        | TX 2  | Total | TX 1        | TX 2  | Total |
| BPSK       | 1       | 1         | 8.39                              | 7.80  | 11.12 | 15.69       | 15.07 | 18.40 | 7.78        | 7.80  | 10.80 |
| QPSK       | 1       | 1         | 8.47                              | 7.80  | 11.16 | 15.77       | 15.09 | 18.45 | 7.91        | 7.88  | 10.91 |
|            | 1       | 53        | 18.85                             | 17.87 | 21.40 | 18.94       | 18.25 | 21.62 | 17.76       | 17.78 | 20.78 |
|            | 1       | 104       | 8.25                              | 7.45  | 10.88 | 15.48       | 15.19 | 18.35 | 7.35        | 7.34  | 10.36 |
|            | 50      | 0         | 5.85                              | 5.18  | 8.54  | 14.26       | 13.82 | 17.06 | 9.58        | 9.66  | 12.63 |
|            | 50      | 28        | 5.88                              | 5.06  | 8.50  | 14.25       | 13.78 | 17.03 | 4.91        | 5.06  | 8.00  |
|            | 50      | 56        | 10.28                             | 9.59  | 12.96 | 14.24       | 13.86 | 17.06 | 4.81        | 4.91  | 7.87  |
|            | 100     | 0         | 2.93                              | 2.13  | 5.56  | 9.83        | 9.39  | 12.63 | 1.97        | 2.13  | 5.06  |
| 16QAM      | 1       | 1         | 8.36                              | 7.87  | 11.13 | 16.01       | 15.42 | 18.74 | 8.09        | 7.99  | 11.05 |
| 64QAM      | 1       | 1         | 8.35                              | 7.44  | 10.93 | 15.73       | 15.26 | 18.51 | 7.97        | 7.91  | 10.95 |
| 256QAM     | 1       | 1         | 8.50                              | 7.78  | 11.17 | 13.44       | 12.76 | 16.12 | 7.86        | 7.90  | 10.89 |

| Output Power |                           |                           |                    |                    |                  |
|--------------|---------------------------|---------------------------|--------------------|--------------------|------------------|
| Modulation   | Minimum Cond. Power (dBm) | Maximum Cond. Power (dBm) | Minimum EIRP (dBm) | Maximum EIRP (dBm) | EIRP Limit (dBm) |
| BPSK         | 10.80                     | 18.40                     | 10.80              | 18.40              | 23               |
| QPSK         | 5.06                      | 21.62                     | 5.06               | 21.62              | 23               |
| 16QAM        | 11.05                     | 18.74                     | 11.05              | 18.74              | 23               |
| 64QAM        | 10.93                     | 18.51                     | 10.93              | 18.51              | 23               |
| 256QAM       | 10.89                     | 16.12                     | 10.89              | 16.12              | 23               |

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

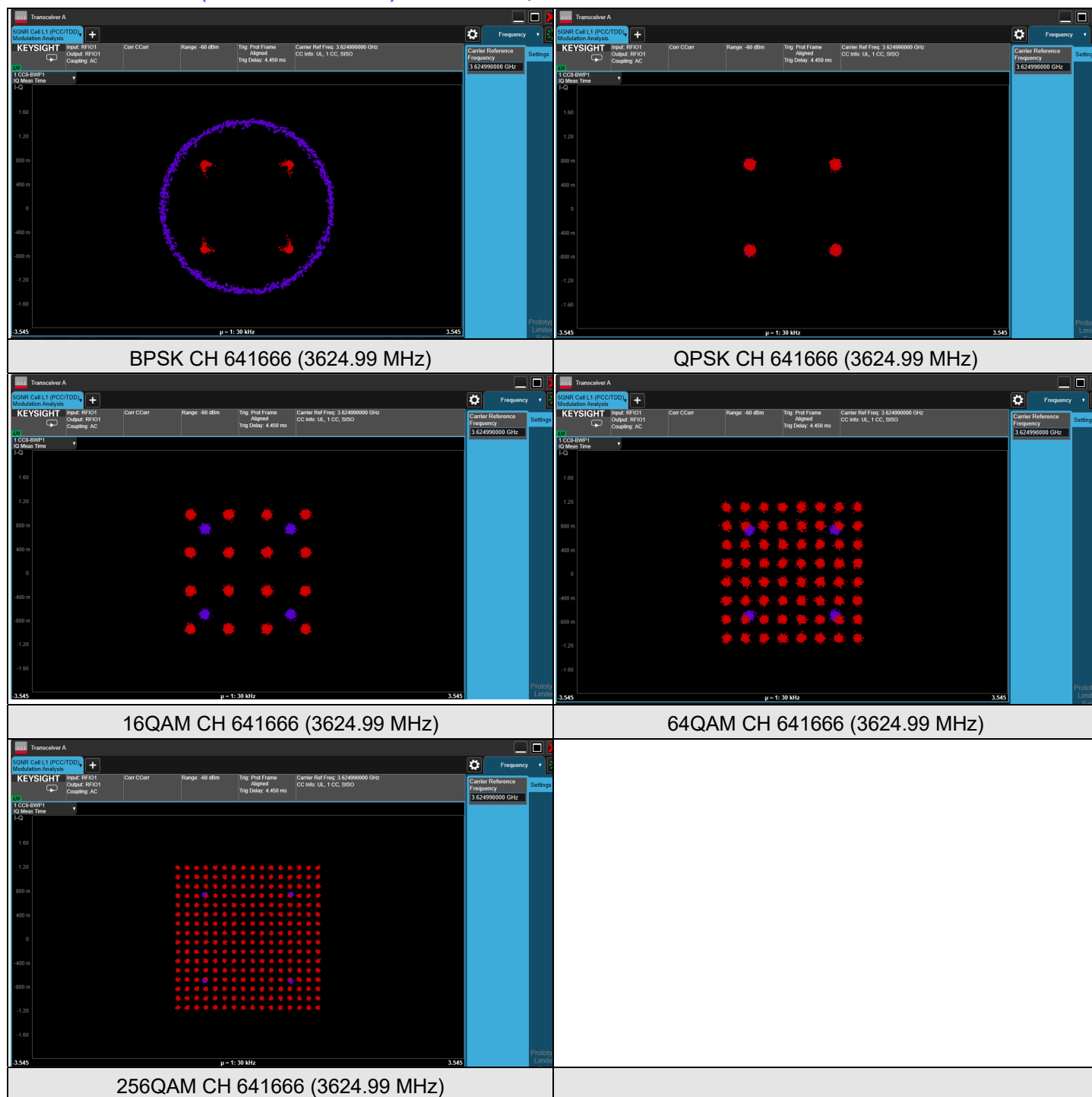


## 7.2 Modulation Characteristics

|              |         |                           |              |            |            |
|--------------|---------|---------------------------|--------------|------------|------------|
| Input Power: | 3.8 Vdc | Environmental Conditions: | 22°C, 73% RH | Tested By: | James Yang |
|--------------|---------|---------------------------|--------------|------------|------------|

### 7.2.1 NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)

#### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 40 MHz



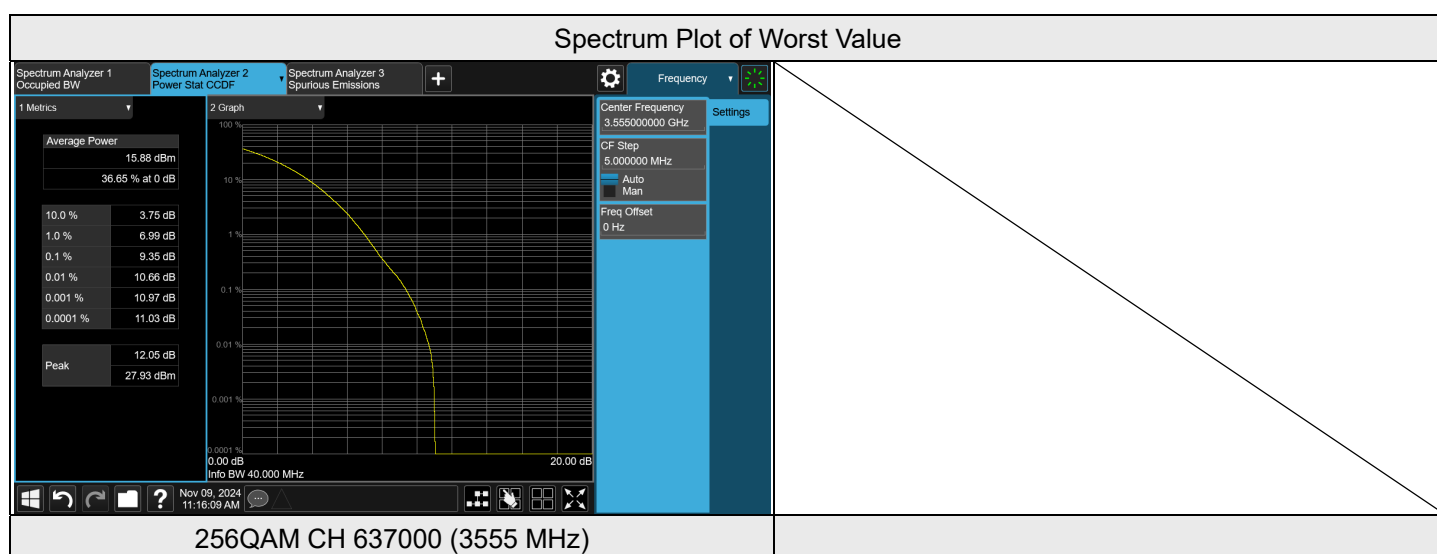
### 7.3 Peak to Average Ratio

|              |         |                           |              |            |            |
|--------------|---------|---------------------------|--------------|------------|------------|
| Input Power: | 3.8 Vdc | Environmental Conditions: | 22°C, 73% RH | Tested By: | James Yang |
|--------------|---------|---------------------------|--------------|------------|------------|

#### 7.3.1 NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)

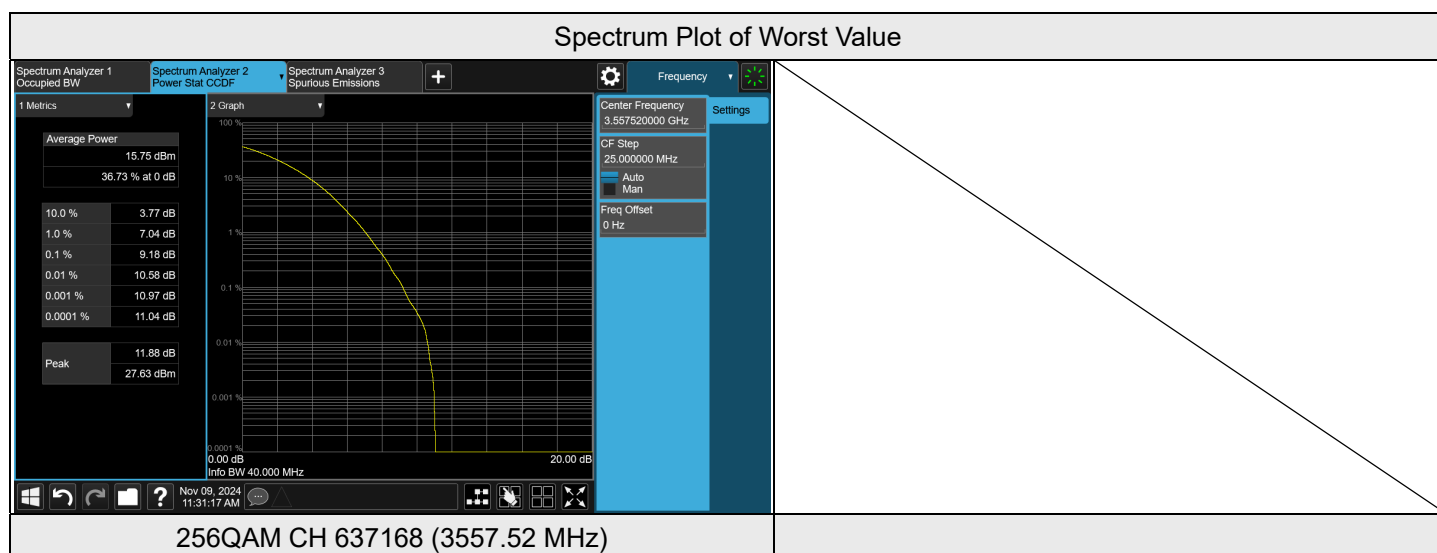
#### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 637000                  | CH 641666   | CH 646332   |
|            |         |           | 3555 MHz                   | 3624.99 MHz | 3694.98 MHz |
| BPSK       | 1       | 23        | 4.46                       | 4.04        | 4.63        |
|            | 1       | 0         | 4.96                       | 4.67        | 5.16        |
|            | 24      | 0         | 4.19                       | 4.16        | 4.56        |
| QPSK       | 1       | 23        | 7.33                       | 6.98        | 7.52        |
|            | 1       | 0         | 8.09                       | 7.6         | 8.18        |
|            | 24      | 0         | 7.56                       | 6.74        | 7.42        |
| 16QAM      | 1       | 23        | 7.31                       | 7.01        | 7.96        |
|            | 1       | 0         | 8.16                       | 7.8         | 8.52        |
|            | 24      | 0         | 7.48                       | 7.29        | 7.97        |
| 64QAM      | 1       | 23        | 7.66                       | 7.28        | 7.49        |
|            | 1       | 0         | 8.4                        | 8.04        | 8.19        |
|            | 24      | 0         | 7.69                       | 7.27        | 7.54        |
| 256QAM     | 1       | 23        | 8.67                       | 8.36        | 8.11        |
|            | 1       | 0         | 9.35                       | 9.02        | 8.89        |
|            | 24      | 0         | 8.68                       | 8.28        | 8.16        |



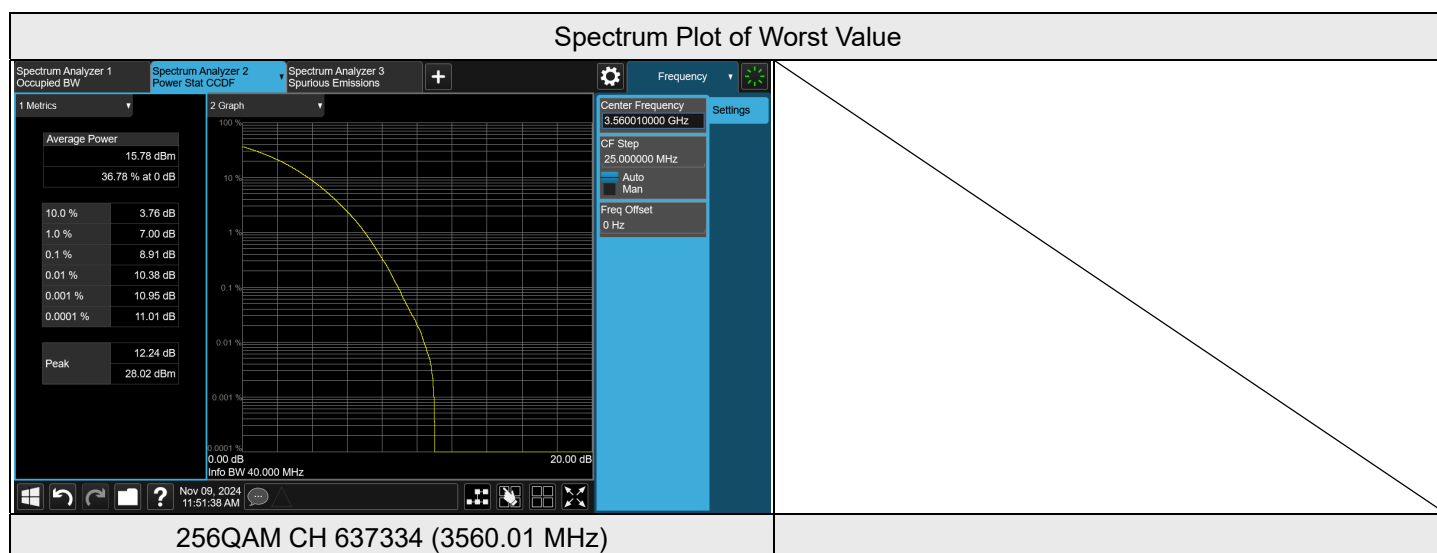
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 637168                  | CH 641666   | CH 646166   |
|            |         |           | 3557.52 MHz                | 3624.99 MHz | 3692.49 MHz |
| BPSK       | 1       | 37        | 4.13                       | 4.11        | 4.47        |
|            | 1       | 0         | 4.84                       | 4.68        | 5.03        |
|            | 36      | 0         | 4.28                       | 3.92        | 4.25        |
| QPSK       | 1       | 37        | 7.95                       | 7.45        | 6.83        |
|            | 1       | 0         | 8.8                        | 7.95        | 7.34        |
|            | 38      | 0         | 8.16                       | 7.07        | 6.74        |
| 16QAM      | 1       | 37        | 8.41                       | 7.22        | 6.62        |
|            | 1       | 0         | 8.97                       | 8.1         | 7.47        |
|            | 38      | 0         | 8.25                       | 7.55        | 6.81        |
| 64QAM      | 1       | 37        | 7.68                       | 7.96        | 7.22        |
|            | 1       | 0         | 8.51                       | 8.72        | 7.81        |
|            | 38      | 0         | 7.98                       | 7.85        | 7.07        |
| 256QAM     | 1       | 37        | 8.37                       | 8.47        | 8.09        |
|            | 1       | 0         | 9.18                       | 8.99        | 8.9         |
|            | 38      | 0         | 8.3                        | 8.4         | 8.13        |



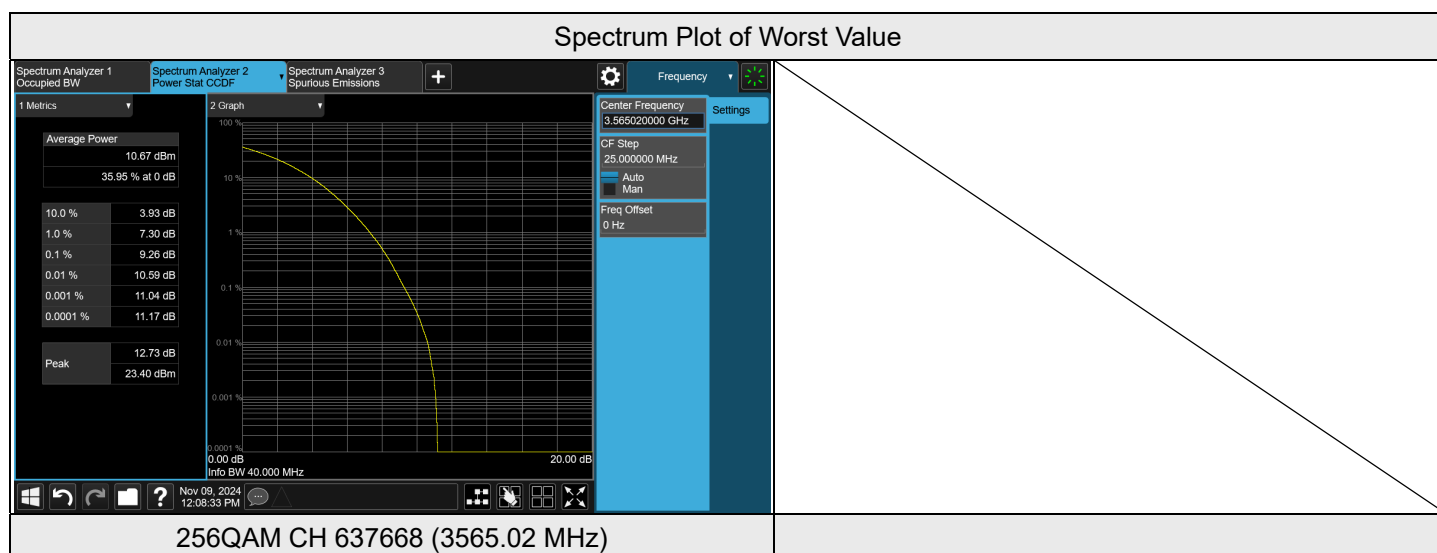
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |           |
|------------|---------|-----------|----------------------------|-------------|-----------|
|            |         |           | CH 637334                  | CH 641666   | CH 646000 |
|            |         |           | 3560.01 MHz                | 3624.99 MHz | 3690 MHz  |
| BPSK       | 1       | 50        | 4.34                       | 4.24        | 4.14      |
|            | 1       | 0         | 5.12                       | 4.87        | 4.99      |
|            | 50      | 0         | 4.45                       | 4.23        | 4.27      |
| QPSK       | 1       | 50        | 6.45                       | 6.97        | 6.94      |
|            | 1       | 0         | 6.98                       | 7.76        | 7.68      |
|            | 51      | 0         | 6.16                       | 6.93        | 6.88      |
| 16QAM      | 1       | 50        | 6.4                        | 7.11        | 7.33      |
|            | 1       | 0         | 7.11                       | 7.79        | 7.85      |
|            | 51      | 0         | 6.32                       | 7.23        | 7.31      |
| 64QAM      | 1       | 50        | 7.24                       | 7.26        | 7.37      |
|            | 1       | 0         | 8.11                       | 7.99        | 7.91      |
|            | 51      | 0         | 7.32                       | 7.1         | 7.04      |
| 256QAM     | 1       | 50        | 8.41                       | 8.16        | 8.23      |
|            | 1       | 0         | 8.91                       | 8.67        | 8.74      |
|            | 51      | 0         | 8.13                       | 7.97        | 7.87      |



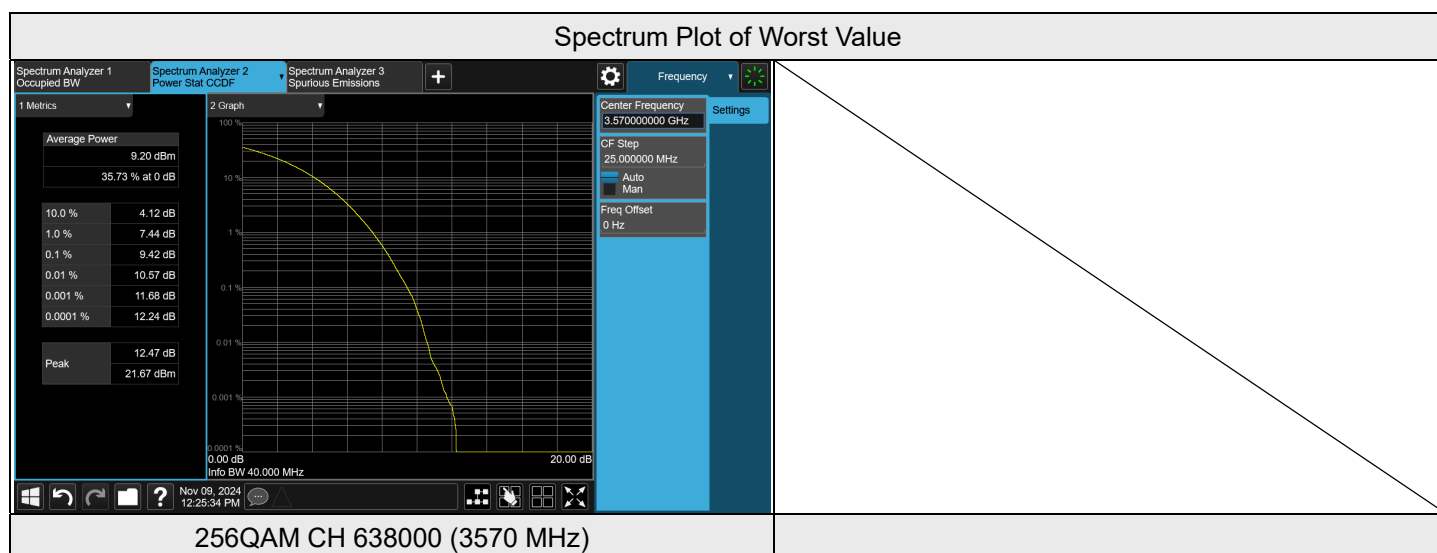
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 30 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 637668                  | CH 641666   | CH 645666   |
|            |         |           | 3565.02 MHz                | 3624.99 MHz | 3684.99 MHz |
| BPSK       | 1       | 77        | 4.15                       | 4.06        | 4.09        |
|            | 1       | 0         | 4.77                       | 4.88        | 4.76        |
|            | 75      | 0         | 4.17                       | 4.27        | 4.04        |
| QPSK       | 1       | 77        | 7.93                       | 7.22        | 7.36        |
|            | 1       | 0         | 8.79                       | 8.09        | 8.12        |
|            | 78      | 0         | 7.99                       | 7.56        | 7.43        |
| 16QAM      | 1       | 77        | 7.97                       | 7.61        | 7.9         |
|            | 1       | 0         | 8.69                       | 8.29        | 8.4         |
|            | 78      | 0         | 7.92                       | 7.55        | 7.87        |
| 64QAM      | 1       | 77        | 7.98                       | 7.35        | 7.42        |
|            | 1       | 0         | 8.62                       | 8.11        | 8.02        |
|            | 78      | 0         | 7.92                       | 7.29        | 7.42        |
| 256QAM     | 1       | 77        | 8.6                        | 8.01        | 8.27        |
|            | 1       | 0         | 9.26                       | 8.73        | 8.95        |
|            | 78      | 0         | 8.55                       | 7.97        | 8.17        |



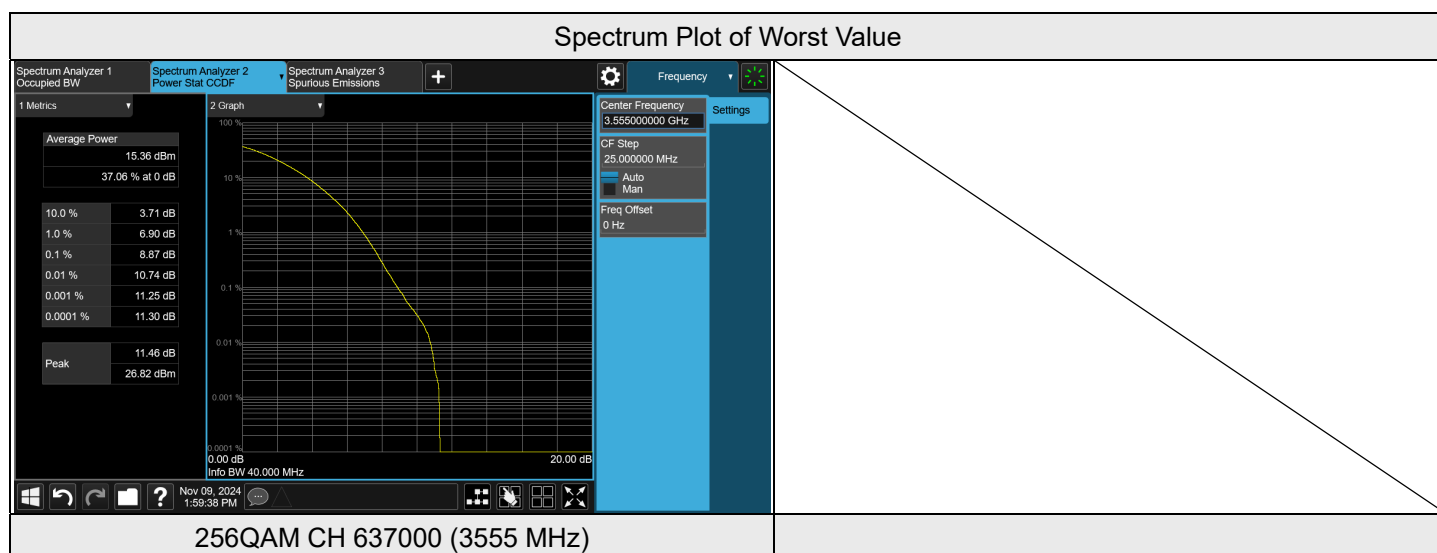
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 40 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 638000                  | CH 641666   | CH 645332   |
|            |         |           | 3570 MHz                   | 3624.99 MHz | 3679.98 MHz |
| BPSK       | 1       | 105       | 4.64                       | 4.76        | 4.62        |
|            | 1       | 0         | 5.35                       | 5.36        | 5.31        |
|            | 100     | 0         | 4.69                       | 4.47        | 4.55        |
| QPSK       | 1       | 105       | 8.09                       | 7.7         | 7.51        |
|            | 1       | 0         | 8.71                       | 8.33        | 8.4         |
|            | 106     | 0         | 7.9                        | 7.64        | 7.77        |
| 16QAM      | 1       | 105       | 7.95                       | 7.8         | 8           |
|            | 1       | 0         | 8.77                       | 8.38        | 8.61        |
|            | 106     | 0         | 8.17                       | 7.83        | 7.8         |
| 64QAM      | 1       | 105       | 8.6                        | 8.15        | 8.1         |
|            | 1       | 0         | 9.19                       | 9           | 8.69        |
|            | 106     | 0         | 8.34                       | 8.23        | 8.02        |
| 256QAM     | 1       | 105       | 8.87                       | 8.4         | 8.02        |
|            | 1       | 0         | 9.42                       | 9.27        | 8.83        |
|            | 106     | 0         | 8.89                       | 8.41        | 8.18        |



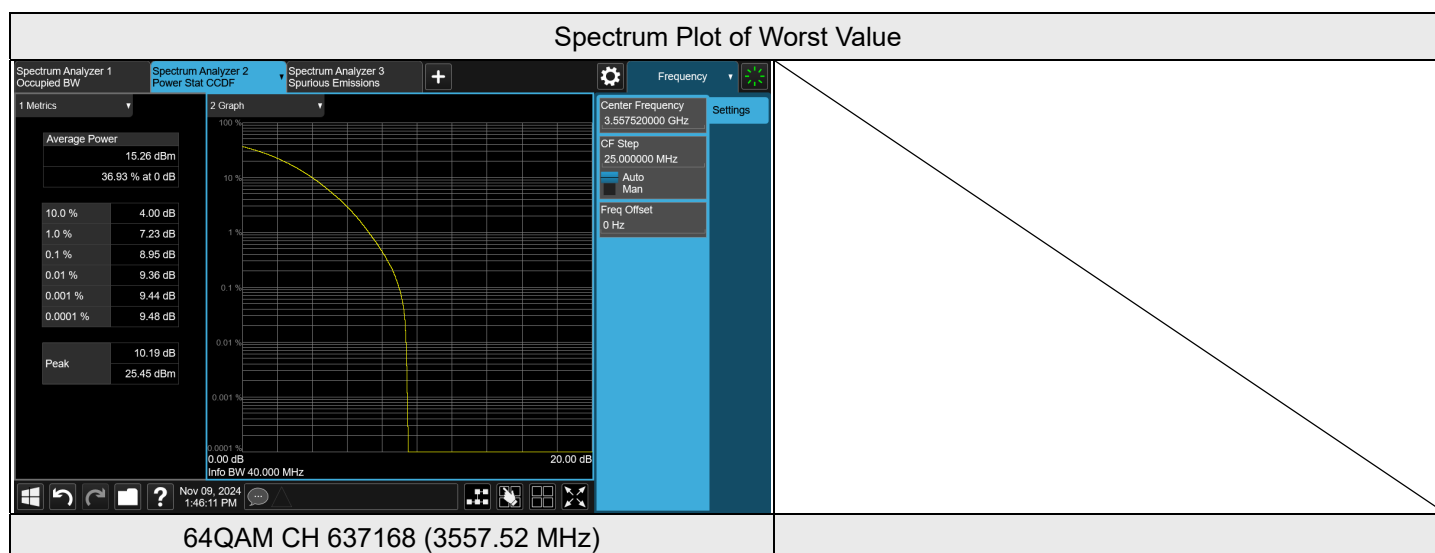
### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 10 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 637000                  | CH 641666   | CH 646332   |
|            |         |           | 3555 MHz                   | 3624.99 MHz | 3694.98 MHz |
| BPSK       | 1       | 23        | 4.44                       | 3.94        | 3.87        |
|            | 1       | 0         | 5.01                       | 4.72        | 4.67        |
|            | 24      | 0         | 4.21                       | 3.83        | 4.15        |
| QPSK       | 1       | 23        | 7.07                       | 7.44        | 7.18        |
|            | 1       | 0         | 7.93                       | 8.05        | 7.98        |
|            | 24      | 0         | 7.21                       | 7.5         | 7.28        |
| 16QAM      | 1       | 23        | 7.53                       | 7.73        | 7.46        |
|            | 1       | 0         | 8.11                       | 8.31        | 8.07        |
|            | 24      | 0         | 7.5                        | 7.61        | 7.54        |
| 64QAM      | 1       | 23        | 7.91                       | 8.15        | 7.76        |
|            | 1       | 0         | 8.59                       | 8.67        | 8.49        |
|            | 24      | 0         | 7.94                       | 7.86        | 7.74        |
| 256QAM     | 1       | 23        | 8.17                       | 8.23        | 7.98        |
|            | 1       | 0         | 8.87                       | 8.8         | 8.73        |
|            | 24      | 0         | 8.36                       | 7.98        | 8.21        |



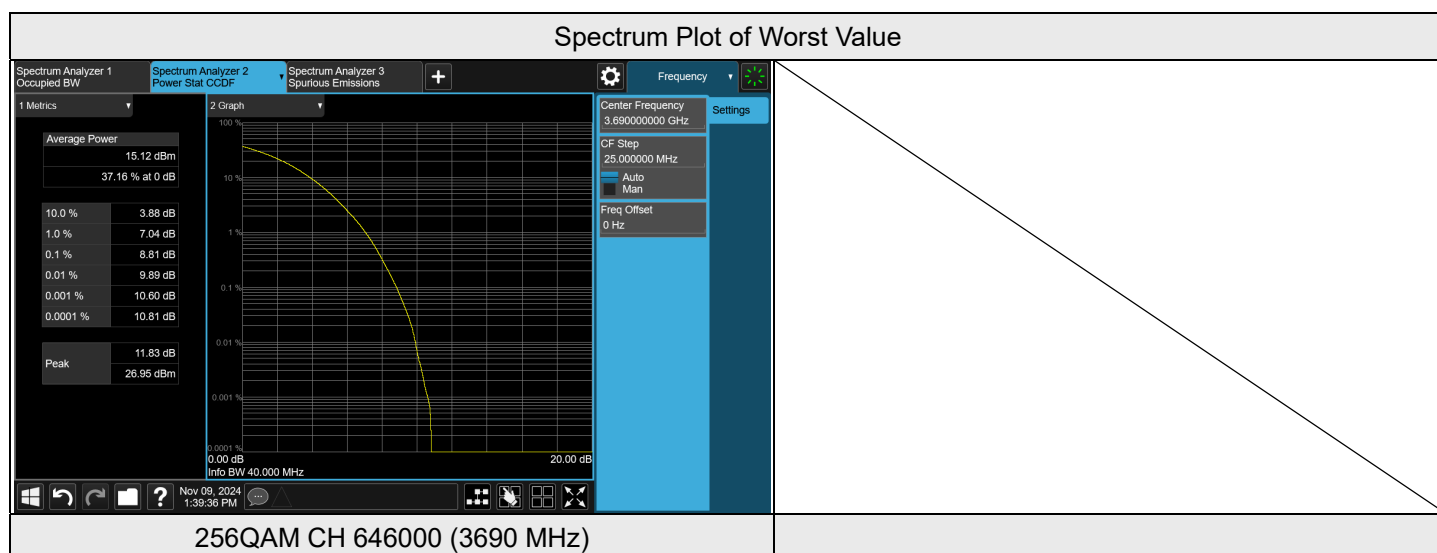
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 15 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 637168                  | CH 641666   | CH 646166   |
|            |         |           | 3557.52 MHz                | 3624.99 MHz | 3692.49 MHz |
| BPSK       | 1       | 37        | 3.6                        | 3.88        | 3.28        |
|            | 1       | 0         | 4.36                       | 4.58        | 4.17        |
|            | 36      | 0         | 3.49                       | 3.81        | 3.65        |
| QPSK       | 1       | 37        | 6.96                       | 7.33        | 6.89        |
|            | 1       | 0         | 7.83                       | 8.19        | 7.63        |
|            | 38      | 0         | 7.15                       | 7.64        | 6.86        |
| 16QAM      | 1       | 37        | 7.31                       | 7.59        | 7.03        |
|            | 1       | 0         | 7.84                       | 8.26        | 7.73        |
|            | 38      | 0         | 7.33                       | 7.76        | 7.16        |
| 64QAM      | 1       | 37        | 8.15                       | 7.97        | 7.08        |
|            | 1       | 0         | 8.95                       | 8.61        | 7.94        |
|            | 38      | 0         | 8.4                        | 7.85        | 7.25        |
| 256QAM     | 1       | 37        | 8.27                       | 7.78        | 7.82        |
|            | 1       | 0         | 8.84                       | 8.56        | 8.49        |
|            | 38      | 0         | 8.1                        | 7.79        | 7.92        |



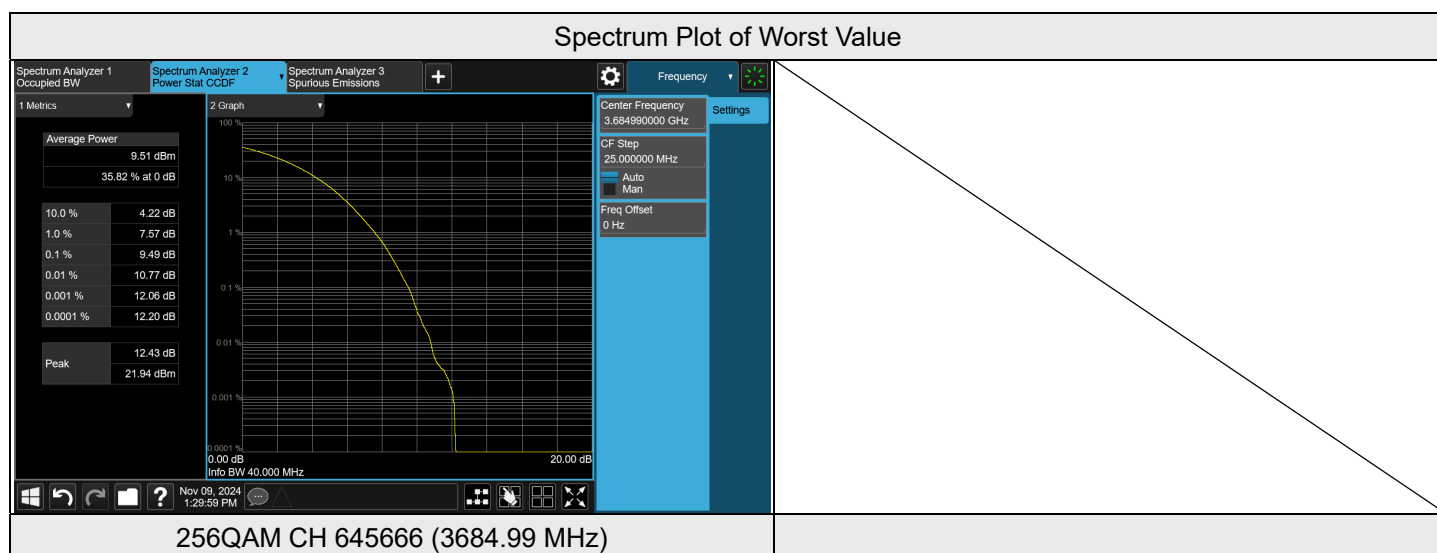
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 20 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |           |
|------------|---------|-----------|----------------------------|-------------|-----------|
|            |         |           | CH 637334                  | CH 641666   | CH 646000 |
|            |         |           | 3560.01 MHz                | 3624.99 MHz | 3690 MHz  |
| BPSK       | 1       | 50        | 3.78                       | 3.84        | 3.74      |
|            | 1       | 0         | 4.58                       | 4.47        | 4.24      |
|            | 50      | 0         | 3.73                       | 3.92        | 3.59      |
| QPSK       | 1       | 50        | 6.6                        | 7.39        | 6.53      |
|            | 1       | 0         | 7.16                       | 8.08        | 7.4       |
|            | 51      | 0         | 6.33                       | 7.24        | 6.87      |
| 16QAM      | 1       | 50        | 6.92                       | 7.62        | 6.95      |
|            | 1       | 0         | 7.46                       | 8.23        | 7.81      |
|            | 51      | 0         | 6.95                       | 7.73        | 7.08      |
| 64QAM      | 1       | 50        | 7.74                       | 7.77        | 7.9       |
|            | 1       | 0         | 8.48                       | 8.35        | 8.48      |
|            | 51      | 0         | 7.62                       | 7.79        | 7.86      |
| 256QAM     | 1       | 50        | 8.12                       | 8.22        | 8.28      |
|            | 1       | 0         | 8.69                       | 8.74        | 8.81      |
|            | 51      | 0         | 7.88                       | 8.05        | 7.99      |



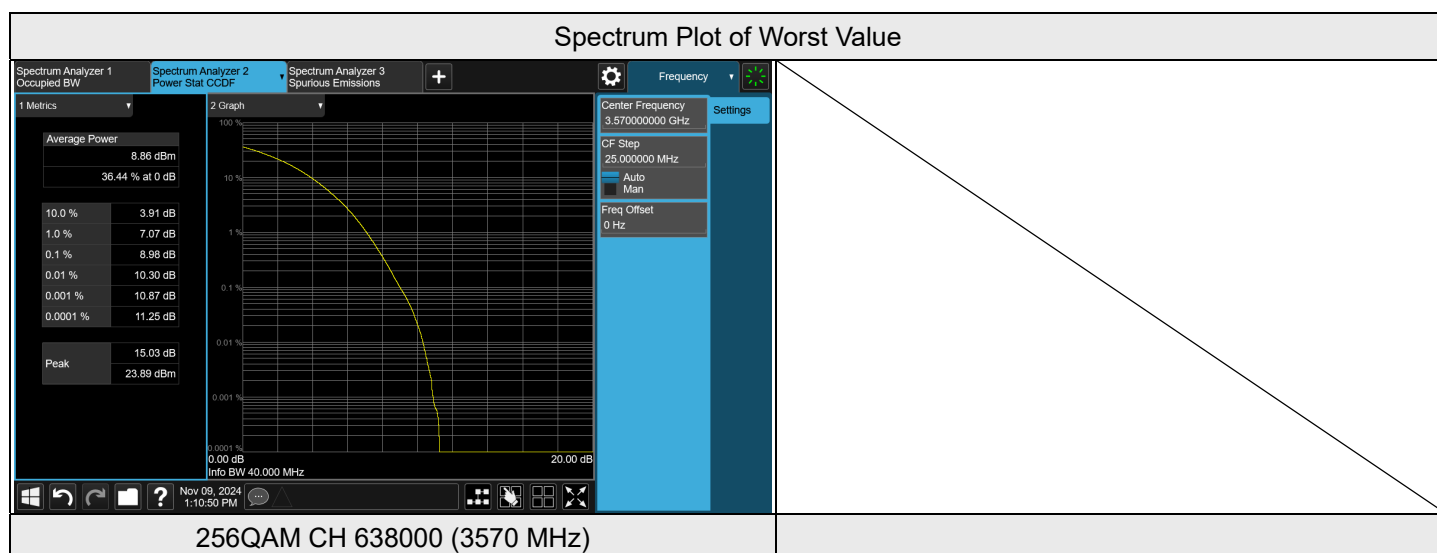
### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 30 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 637668                  | CH 641666   | CH 645666   |
|            |         |           | 3565.02 MHz                | 3624.99 MHz | 3684.99 MHz |
| BPSK       | 1       | 77        | 3.87                       | 3.76        | 4.3         |
|            | 1       | 0         | 4.45                       | 4.38        | 5.18        |
|            | 75      | 0         | 3.73                       | 3.5         | 4.45        |
| QPSK       | 1       | 77        | 7.2                        | 7.36        | 6.85        |
|            | 1       | 0         | 7.91                       | 8.11        | 7.44        |
|            | 78      | 0         | 7.07                       | 7.57        | 6.88        |
| 16QAM      | 1       | 77        | 7.29                       | 7.76        | 7.5         |
|            | 1       | 0         | 7.95                       | 8.27        | 8.27        |
|            | 78      | 0         | 7.1                        | 7.54        | 7.57        |
| 64QAM      | 1       | 77        | 7.96                       | 7.74        | 7.86        |
|            | 1       | 0         | 8.54                       | 8.37        | 8.49        |
|            | 78      | 0         | 7.76                       | 7.81        | 7.97        |
| 256QAM     | 1       | 77        | 8.2                        | 7.83        | 8.9         |
|            | 1       | 0         | 8.97                       | 8.67        | 9.49        |
|            | 78      | 0         | 8.41                       | 7.83        | 8.75        |



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 40 MHz

| Modulation | RB Size | RB Offset | Peak To Average Ratio (dB) |             |             |
|------------|---------|-----------|----------------------------|-------------|-------------|
|            |         |           | CH 638000                  | CH 641666   | CH 645332   |
|            |         |           | 3570 MHz                   | 3624.99 MHz | 3679.98 MHz |
| BPSK       | 1       | 105       | 4.74                       | 4.41        | 4.66        |
|            | 1       | 0         | 5.48                       | 5.23        | 5.36        |
|            | 100     | 0         | 4.71                       | 4.59        | 4.47        |
| QPSK       | 1       | 105       | 7.46                       | 7.78        | 7.35        |
|            | 1       | 0         | 8.34                       | 8.29        | 8.06        |
|            | 106     | 0         | 7.8                        | 7.73        | 7.5         |
| 16QAM      | 1       | 105       | 7.59                       | 7.6         | 7.71        |
|            | 1       | 0         | 8.35                       | 8.47        | 8.22        |
|            | 106     | 0         | 7.58                       | 7.96        | 7.63        |
| 64QAM      | 1       | 105       | 7.87                       | 7.92        | 7.88        |
|            | 1       | 0         | 8.51                       | 8.57        | 8.49        |
|            | 106     | 0         | 7.68                       | 7.74        | 7.97        |
| 256QAM     | 1       | 105       | 8.46                       | 8.07        | 8.17        |
|            | 1       | 0         | 8.98                       | 8.59        | 8.9         |
|            | 106     | 0         | 8.24                       | 7.9         | 8.15        |



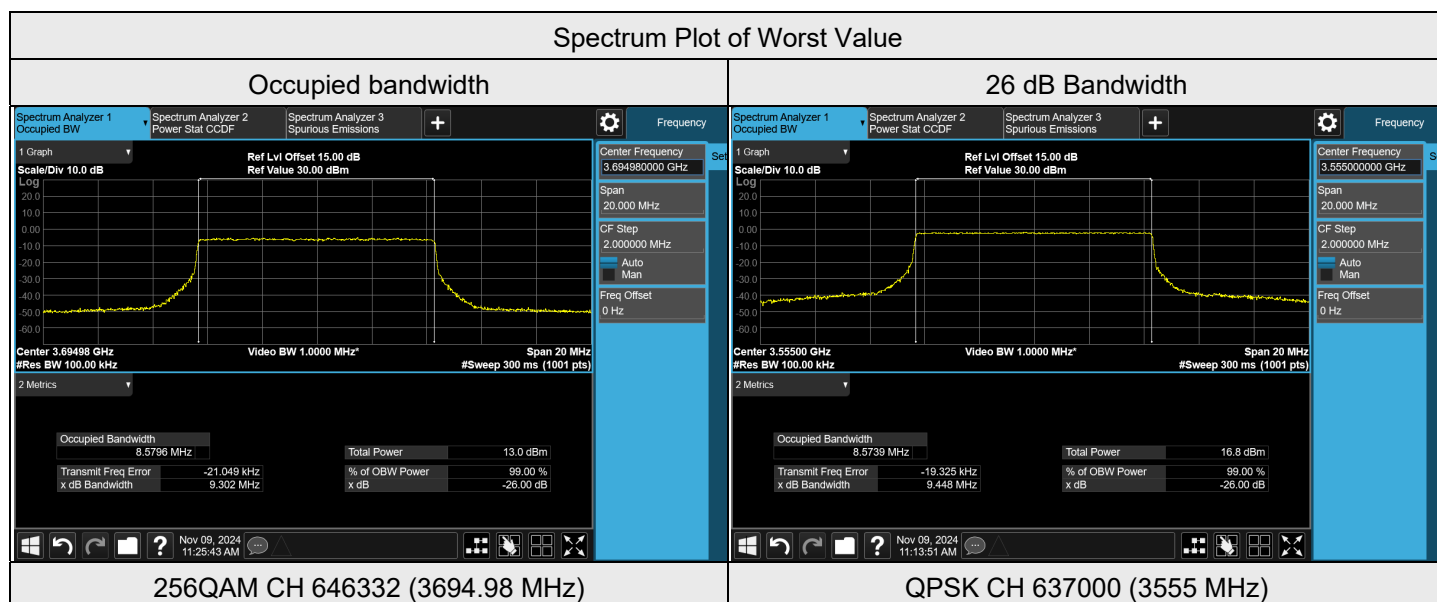
## 7.4 Bandwidth

|              |         |                           |              |            |            |
|--------------|---------|---------------------------|--------------|------------|------------|
| Input Power: | 3.8 Vdc | Environmental Conditions: | 22°C, 73% RH | Tested By: | James Yang |
|--------------|---------|---------------------------|--------------|------------|------------|

### 7.4.1 NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)

#### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 10 MHz

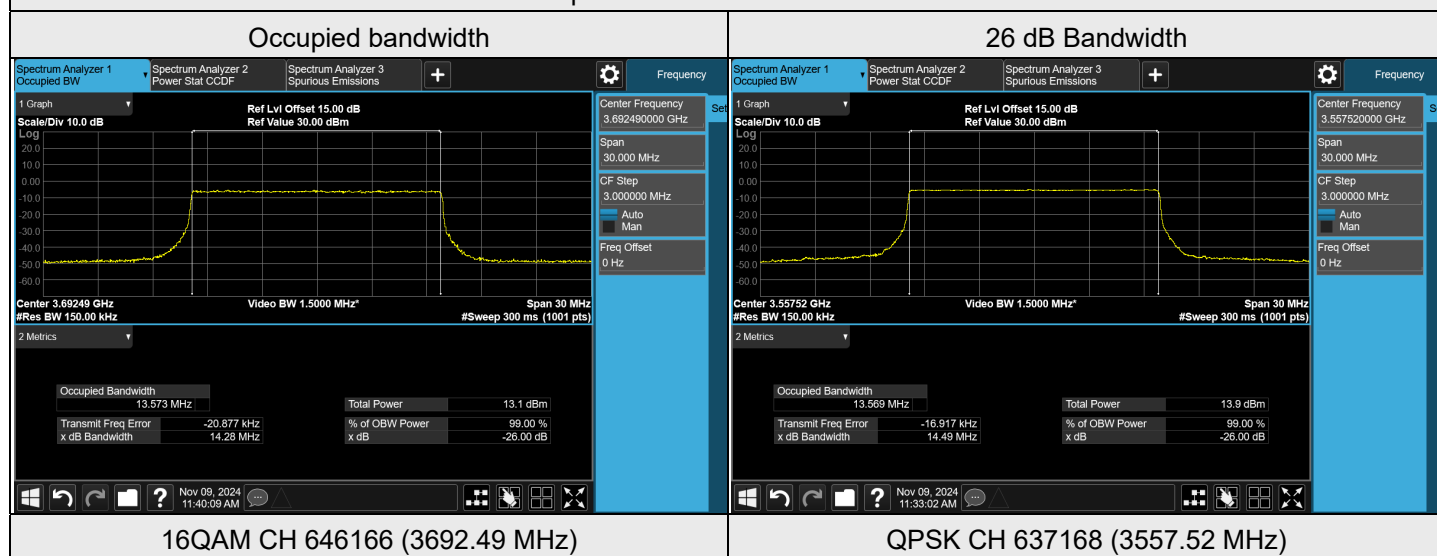
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637000  | 3555            | 8.5791                   | 9.333                 |
| BPSK       | 641666  | 3624.99         | 8.5745                   | 9.322                 |
| BPSK       | 646332  | 3694.98         | 8.5701                   | 9.250                 |
| QPSK       | 637000  | 3555            | 8.5739                   | 9.448                 |
| QPSK       | 641666  | 3624.99         | 8.5733                   | 9.273                 |
| QPSK       | 646332  | 3694.98         | 8.5700                   | 9.364                 |
| 16QAM      | 637000  | 3555            | 8.5763                   | 9.316                 |
| 16QAM      | 641666  | 3624.99         | 8.5718                   | 9.347                 |
| 16QAM      | 646332  | 3694.98         | 8.5778                   | 9.329                 |
| 64QAM      | 637000  | 3555            | 8.5654                   | 9.302                 |
| 64QAM      | 641666  | 3624.99         | 8.5648                   | 9.274                 |
| 64QAM      | 646332  | 3694.98         | 8.5639                   | 9.261                 |
| 256QAM     | 637000  | 3555            | 8.5757                   | 9.162                 |
| 256QAM     | 641666  | 3624.99         | 8.5754                   | 9.306                 |
| 256QAM     | 646332  | 3694.98         | 8.5796                   | 9.302                 |



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 15 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637168  | 3557.52         | 12.852                   | 13.59                 |
| BPSK       | 641666  | 3624.99         | 12.875                   | 13.66                 |
| BPSK       | 646166  | 3692.49         | 12.874                   | 13.65                 |
| QPSK       | 637168  | 3557.52         | 13.569                   | 14.49                 |
| QPSK       | 641666  | 3624.99         | 13.566                   | 14.31                 |
| QPSK       | 646166  | 3692.49         | 13.568                   | 14.41                 |
| 16QAM      | 637168  | 3557.52         | 13.571                   | 14.43                 |
| 16QAM      | 641666  | 3624.99         | 13.570                   | 14.32                 |
| 16QAM      | 646166  | 3692.49         | 13.573                   | 14.28                 |
| 64QAM      | 637168  | 3557.52         | 13.570                   | 14.39                 |
| 64QAM      | 641666  | 3624.99         | 13.564                   | 14.21                 |
| 64QAM      | 646166  | 3692.49         | 13.571                   | 14.27                 |
| 256QAM     | 637168  | 3557.52         | 13.566                   | 14.31                 |
| 256QAM     | 641666  | 3624.99         | 13.567                   | 14.31                 |
| 256QAM     | 646166  | 3692.49         | 13.572                   | 14.39                 |

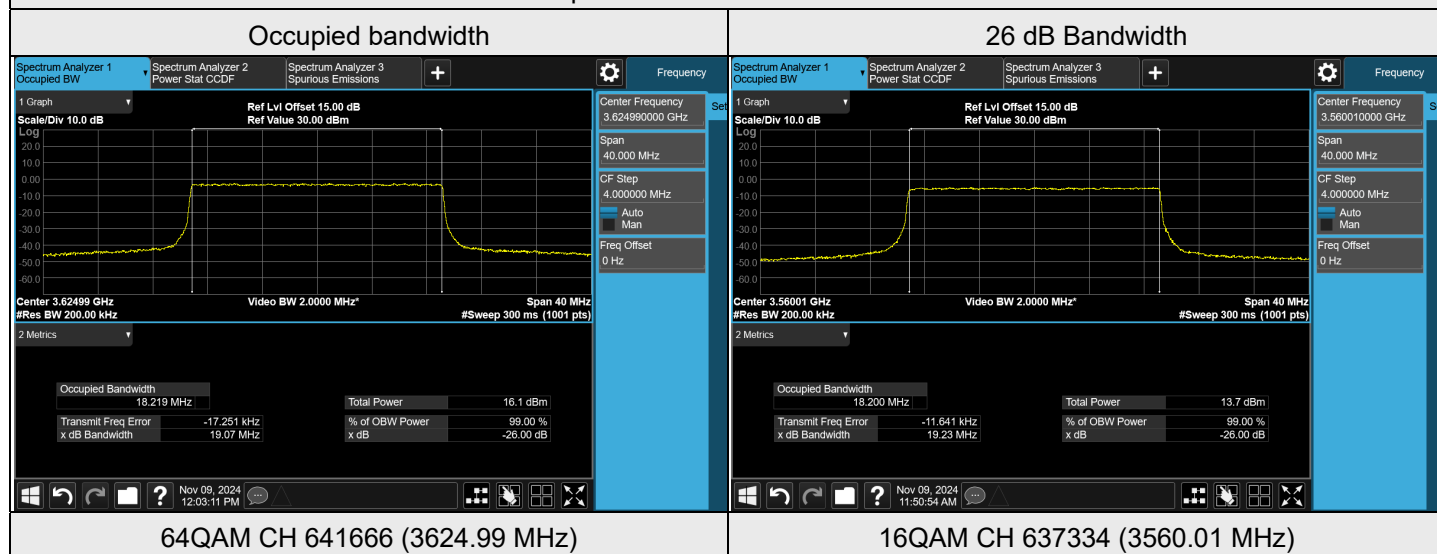
## Spectrum Plot of Worst Value



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 20 MHz

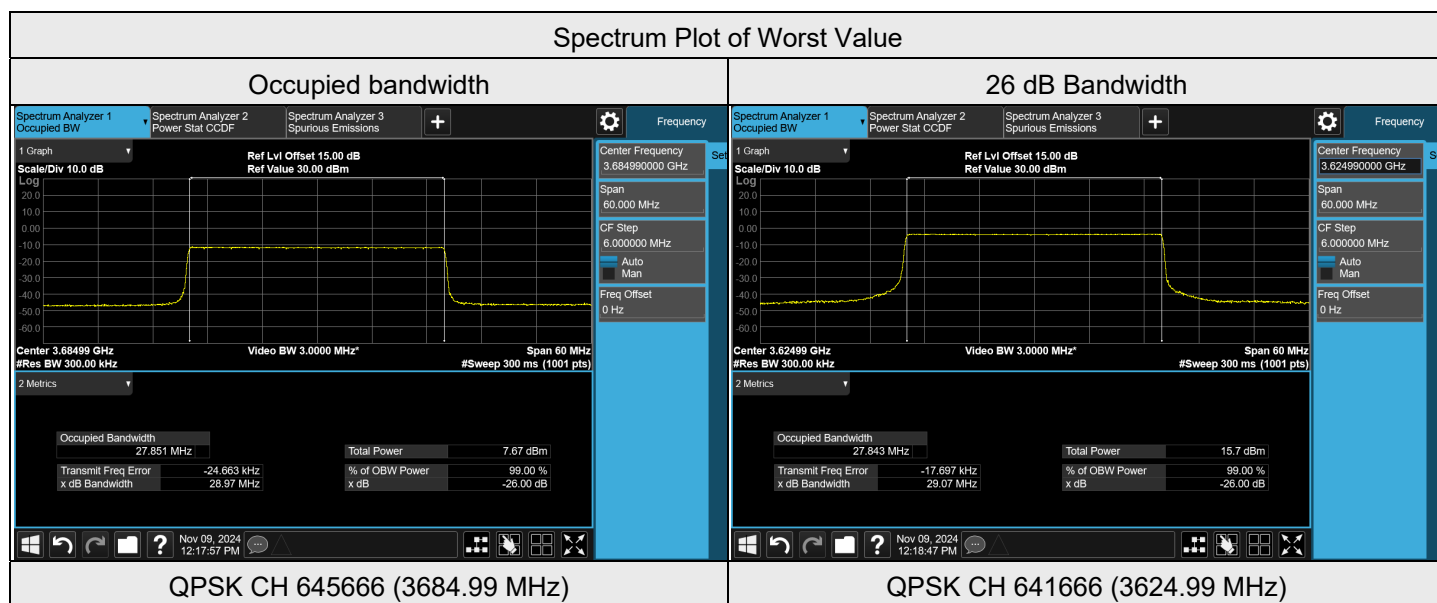
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637334  | 3560.01         | 17.850                   | 18.67                 |
| BPSK       | 641666  | 3624.99         | 17.856                   | 18.65                 |
| BPSK       | 646000  | 3690            | 17.841                   | 18.56                 |
| QPSK       | 637334  | 3560.01         | 18.196                   | 19.07                 |
| QPSK       | 641666  | 3624.99         | 18.196                   | 19.14                 |
| QPSK       | 646000  | 3690            | 18.201                   | 19.06                 |
| 16QAM      | 637334  | 3560.01         | 18.200                   | 19.23                 |
| 16QAM      | 641666  | 3624.99         | 18.196                   | 19.08                 |
| 16QAM      | 646000  | 3690            | 18.195                   | 19.10                 |
| 64QAM      | 637334  | 3560.01         | 18.210                   | 19.08                 |
| 64QAM      | 641666  | 3624.99         | 18.219                   | 19.07                 |
| 64QAM      | 646000  | 3690            | 18.213                   | 18.98                 |
| 256QAM     | 637334  | 3560.01         | 18.206                   | 19.03                 |
| 256QAM     | 641666  | 3624.99         | 18.203                   | 19.07                 |
| 256QAM     | 646000  | 3690            | 18.207                   | 19.02                 |

## Spectrum Plot of Worst Value



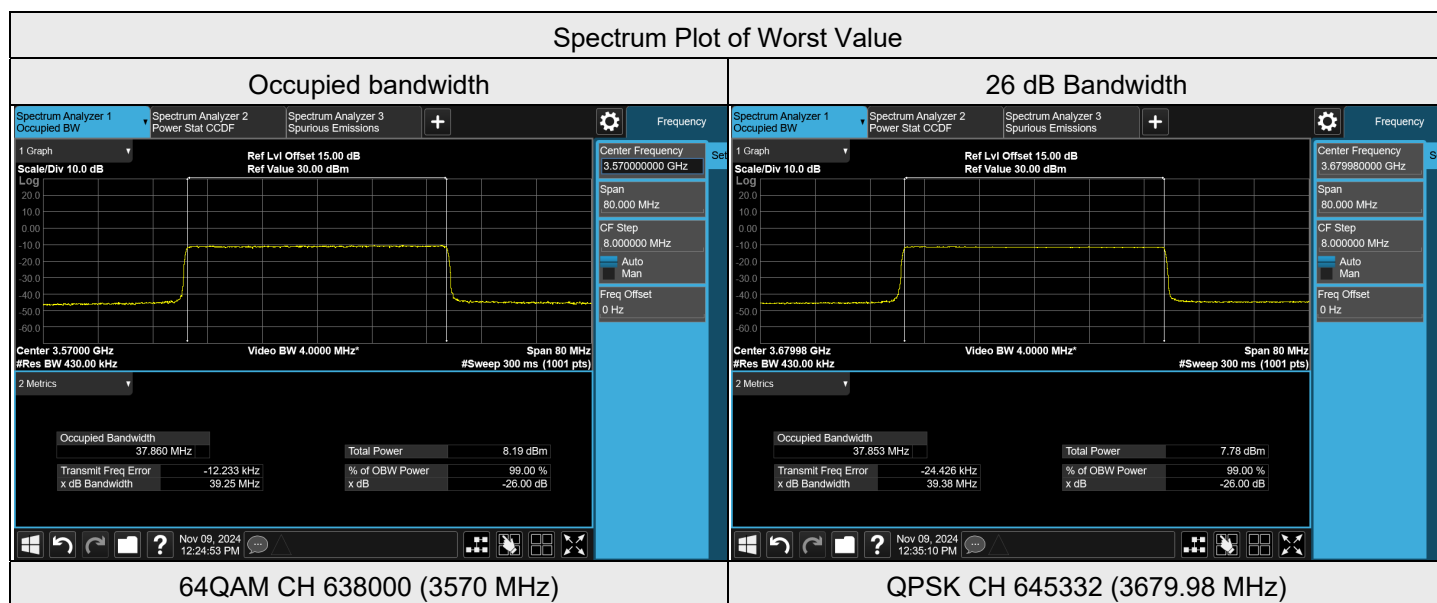
# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 30 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637668  | 3565.02         | 26.781                   | 27.93                 |
| BPSK       | 641666  | 3624.99         | 26.779                   | 27.83                 |
| BPSK       | 645666  | 3684.99         | 26.787                   | 27.87                 |
| QPSK       | 637668  | 3565.02         | 27.842                   | 28.96                 |
| QPSK       | 641666  | 3624.99         | 27.843                   | 29.07                 |
| QPSK       | 645666  | 3684.99         | 27.851                   | 28.97                 |
| 16QAM      | 637668  | 3565.02         | 27.823                   | 28.90                 |
| 16QAM      | 641666  | 3624.99         | 27.798                   | 28.94                 |
| 16QAM      | 645666  | 3684.99         | 27.830                   | 28.88                 |
| 64QAM      | 637668  | 3565.02         | 27.845                   | 28.89                 |
| 64QAM      | 641666  | 3624.99         | 27.827                   | 28.89                 |
| 64QAM      | 645666  | 3684.99         | 27.837                   | 28.90                 |
| 256QAM     | 637668  | 3565.02         | 27.829                   | 28.97                 |
| 256QAM     | 641666  | 3624.99         | 27.836                   | 28.86                 |
| 256QAM     | 645666  | 3684.99         | 27.837                   | 28.94                 |



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 40 MHz

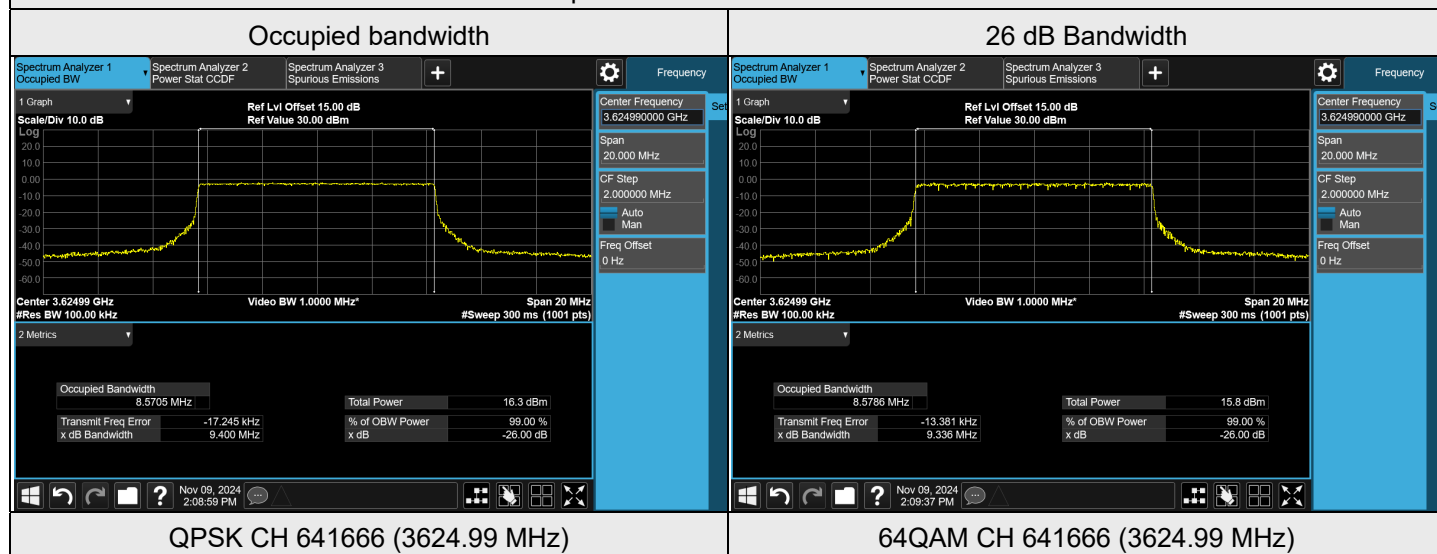
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 638000  | 3570            | 35.690                   | 37.11                 |
| BPSK       | 641666  | 3624.99         | 35.685                   | 37.11                 |
| BPSK       | 645332  | 3679.98         | 35.670                   | 37.11                 |
| QPSK       | 638000  | 3570            | 37.837                   | 39.28                 |
| QPSK       | 641666  | 3624.99         | 37.838                   | 39.26                 |
| QPSK       | 645332  | 3679.98         | 37.853                   | 39.38                 |
| 16QAM      | 638000  | 3570            | 37.835                   | 39.29                 |
| 16QAM      | 641666  | 3624.99         | 37.829                   | 39.27                 |
| 16QAM      | 645332  | 3679.98         | 37.842                   | 39.28                 |
| 64QAM      | 638000  | 3570            | 37.860                   | 39.25                 |
| 64QAM      | 641666  | 3624.99         | 37.841                   | 39.24                 |
| 64QAM      | 645332  | 3679.98         | 37.857                   | 39.26                 |
| 256QAM     | 638000  | 3570            | 37.837                   | 39.21                 |
| 256QAM     | 641666  | 3624.99         | 37.822                   | 39.22                 |
| 256QAM     | 645332  | 3679.98         | 37.851                   | 39.26                 |



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 10 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637000  | 3555            | 8.5683                   | 9.195                 |
| BPSK       | 641666  | 3624.99         | 8.5730                   | 9.172                 |
| BPSK       | 646332  | 3694.98         | 8.5658                   | 9.241                 |
| QPSK       | 637000  | 3555            | 8.5706                   | 9.356                 |
| QPSK       | 641666  | 3624.99         | 8.5705                   | 9.400                 |
| QPSK       | 646332  | 3694.98         | 8.5724                   | 9.282                 |
| 16QAM      | 637000  | 3555            | 8.5765                   | 9.294                 |
| 16QAM      | 641666  | 3624.99         | 8.5673                   | 9.291                 |
| 16QAM      | 646332  | 3694.98         | 8.5707                   | 9.296                 |
| 64QAM      | 637000  | 3555            | 8.5773                   | 9.391                 |
| 64QAM      | 641666  | 3624.99         | 8.5786                   | 9.336                 |
| 64QAM      | 646332  | 3694.98         | 8.5740                   | 9.394                 |
| 256QAM     | 637000  | 3555            | 8.5583                   | 9.294                 |
| 256QAM     | 641666  | 3624.99         | 8.5573                   | 9.244                 |
| 256QAM     | 646332  | 3694.98         | 8.5594                   | 9.194                 |

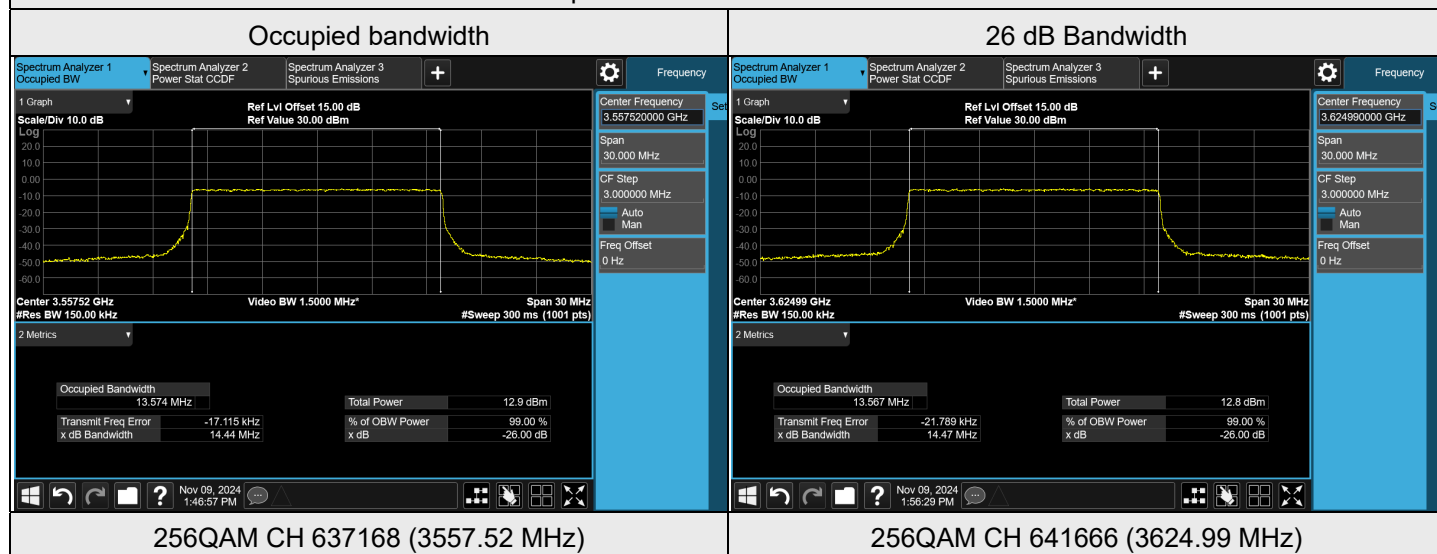
## Spectrum Plot of Worst Value



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 15 MHz

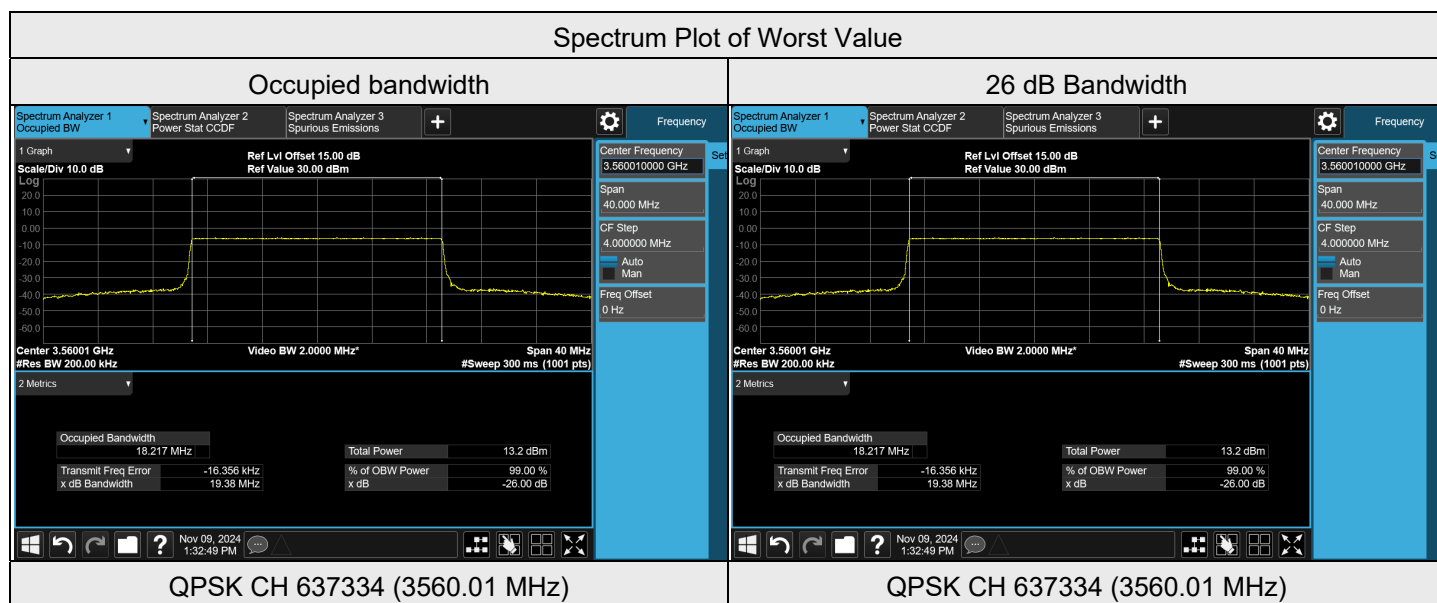
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637168  | 3557.52         | 12.858                   | 13.58                 |
| BPSK       | 641666  | 3624.99         | 12.855                   | 13.54                 |
| BPSK       | 646166  | 3692.49         | 12.847                   | 13.54                 |
| QPSK       | 637168  | 3557.52         | 13.565                   | 14.38                 |
| QPSK       | 641666  | 3624.99         | 13.567                   | 14.46                 |
| QPSK       | 646166  | 3692.49         | 13.566                   | 14.42                 |
| 16QAM      | 637168  | 3557.52         | 13.574                   | 14.46                 |
| 16QAM      | 641666  | 3624.99         | 13.571                   | 14.47                 |
| 16QAM      | 646166  | 3692.49         | 13.570                   | 14.38                 |
| 64QAM      | 637168  | 3557.52         | 13.560                   | 14.25                 |
| 64QAM      | 641666  | 3624.99         | 13.564                   | 14.32                 |
| 64QAM      | 646166  | 3692.49         | 13.568                   | 14.46                 |
| 256QAM     | 637168  | 3557.52         | 13.574                   | 14.44                 |
| 256QAM     | 641666  | 3624.99         | 13.567                   | 14.47                 |
| 256QAM     | 646166  | 3692.49         | 13.570                   | 14.45                 |

## Spectrum Plot of Worst Value



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 20 MHz

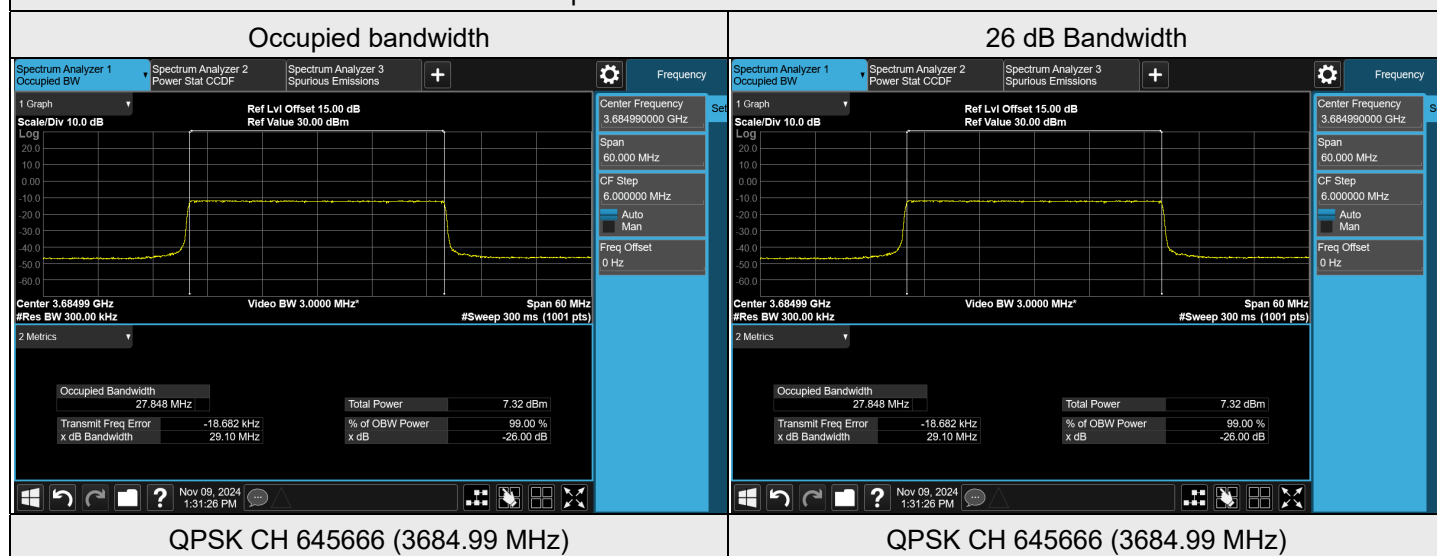
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637334  | 3560.01         | 17.842                   | 18.61                 |
| BPSK       | 641666  | 3624.99         | 17.830                   | 18.61                 |
| BPSK       | 646000  | 3690            | 17.837                   | 18.59                 |
| QPSK       | 637334  | 3560.01         | 18.217                   | 19.38                 |
| QPSK       | 641666  | 3624.99         | 18.203                   | 19.26                 |
| QPSK       | 646000  | 3690            | 18.202                   | 19.13                 |
| 16QAM      | 637334  | 3560.01         | 18.211                   | 19.10                 |
| 16QAM      | 641666  | 3624.99         | 18.197                   | 19.09                 |
| 16QAM      | 646000  | 3690            | 18.207                   | 19.13                 |
| 64QAM      | 637334  | 3560.01         | 18.193                   | 19.02                 |
| 64QAM      | 641666  | 3624.99         | 18.193                   | 18.99                 |
| 64QAM      | 646000  | 3690            | 18.201                   | 18.97                 |
| 256QAM     | 637334  | 3560.01         | 18.204                   | 19.00                 |
| 256QAM     | 641666  | 3624.99         | 18.207                   | 19.01                 |
| 256QAM     | 646000  | 3690            | 18.205                   | 18.95                 |



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 30 MHz

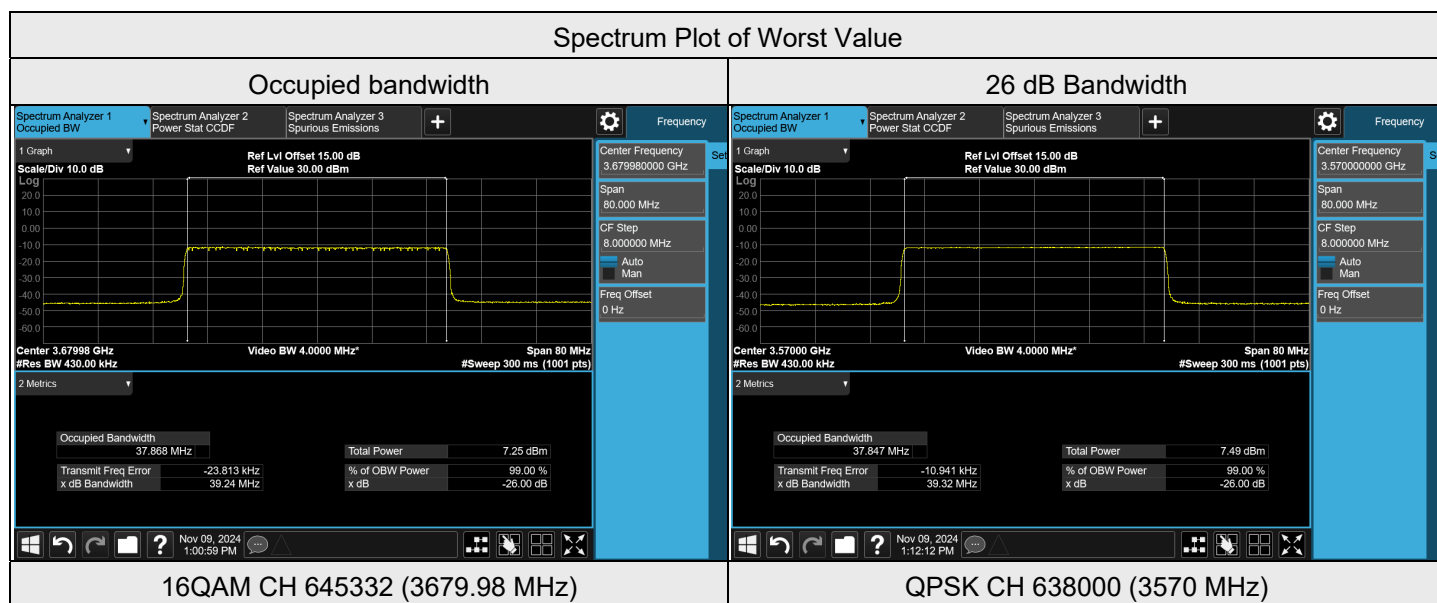
| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 637668  | 3565.02         | 26.763                   | 27.80                 |
| BPSK       | 641666  | 3624.99         | 26.764                   | 27.85                 |
| BPSK       | 645666  | 3684.99         | 26.743                   | 27.83                 |
| QPSK       | 637668  | 3565.02         | 27.841                   | 28.99                 |
| QPSK       | 641666  | 3624.99         | 27.838                   | 29.01                 |
| QPSK       | 645666  | 3684.99         | 27.848                   | 29.10                 |
| 16QAM      | 637668  | 3565.02         | 27.834                   | 28.91                 |
| 16QAM      | 641666  | 3624.99         | 27.834                   | 28.90                 |
| 16QAM      | 645666  | 3684.99         | 27.833                   | 28.94                 |
| 64QAM      | 637668  | 3565.02         | 27.824                   | 28.91                 |
| 64QAM      | 641666  | 3624.99         | 27.830                   | 28.89                 |
| 64QAM      | 645666  | 3684.99         | 27.830                   | 28.94                 |
| 256QAM     | 637668  | 3565.02         | 27.827                   | 28.88                 |
| 256QAM     | 641666  | 3624.99         | 27.828                   | 28.91                 |
| 256QAM     | 645666  | 3684.99         | 27.833                   | 28.93                 |

## Spectrum Plot of Worst Value



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 3, Channel Bandwidth: 40 MHz

| Modulation | Channel | Frequency (MHz) | Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|------------|---------|-----------------|--------------------------|-----------------------|
| BPSK       | 638000  | 3570            | 35.652                   | 37.06                 |
| BPSK       | 641666  | 3624.99         | 35.671                   | 37.08                 |
| BPSK       | 645332  | 3679.98         | 35.680                   | 37.08                 |
| QPSK       | 638000  | 3570            | 37.847                   | 39.32                 |
| QPSK       | 641666  | 3624.99         | 37.839                   | 39.32                 |
| QPSK       | 645332  | 3679.98         | 37.846                   | 39.31                 |
| 16QAM      | 638000  | 3570            | 37.841                   | 39.20                 |
| 16QAM      | 641666  | 3624.99         | 37.827                   | 39.26                 |
| 16QAM      | 645332  | 3679.98         | 37.868                   | 39.24                 |
| 64QAM      | 638000  | 3570            | 37.830                   | 39.26                 |
| 64QAM      | 641666  | 3624.99         | 37.822                   | 39.29                 |
| 64QAM      | 645332  | 3679.98         | 37.844                   | 39.28                 |
| 256QAM     | 638000  | 3570            | 37.819                   | 39.22                 |
| 256QAM     | 641666  | 3624.99         | 37.819                   | 39.28                 |
| 256QAM     | 645332  | 3679.98         | 37.853                   | 39.25                 |

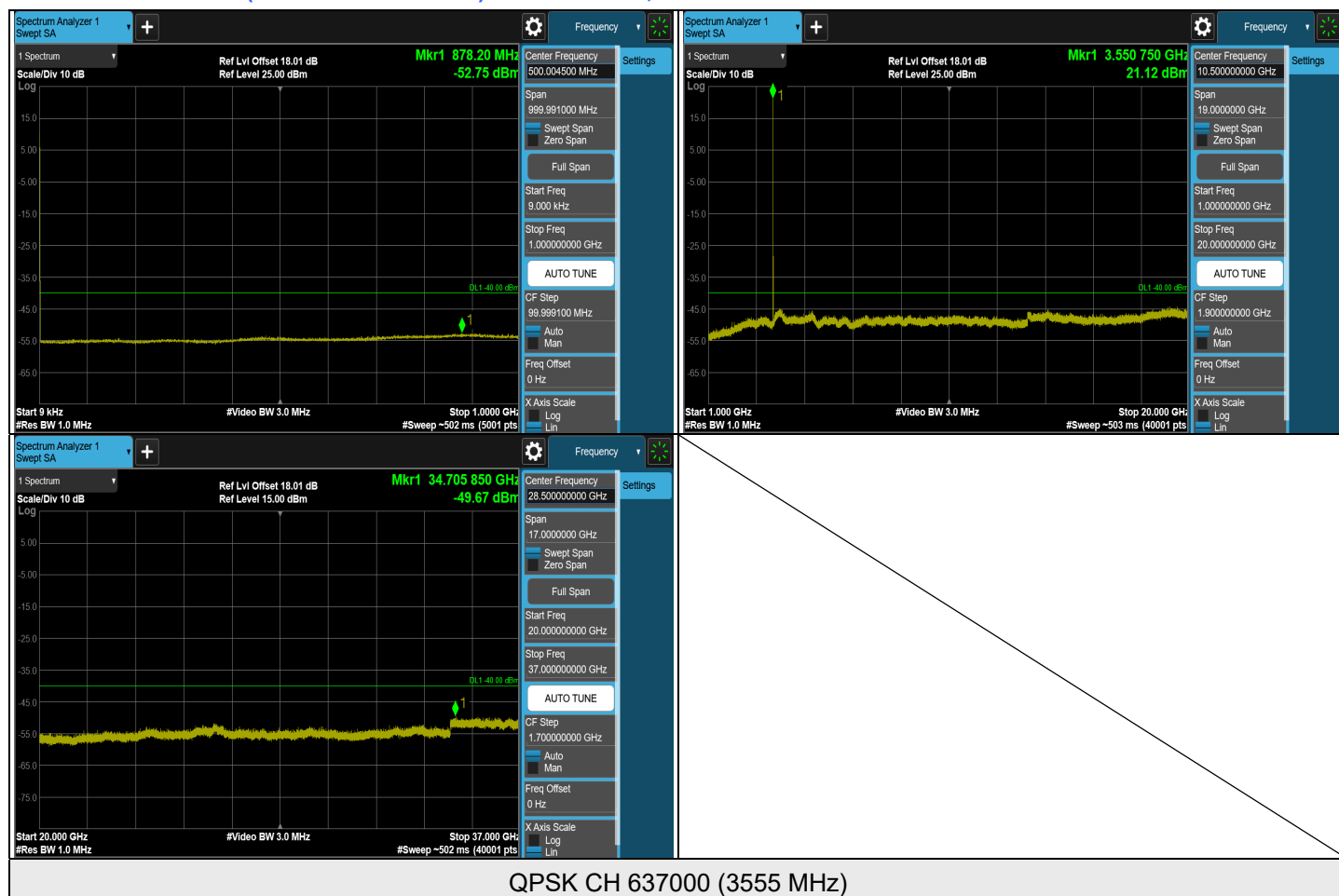


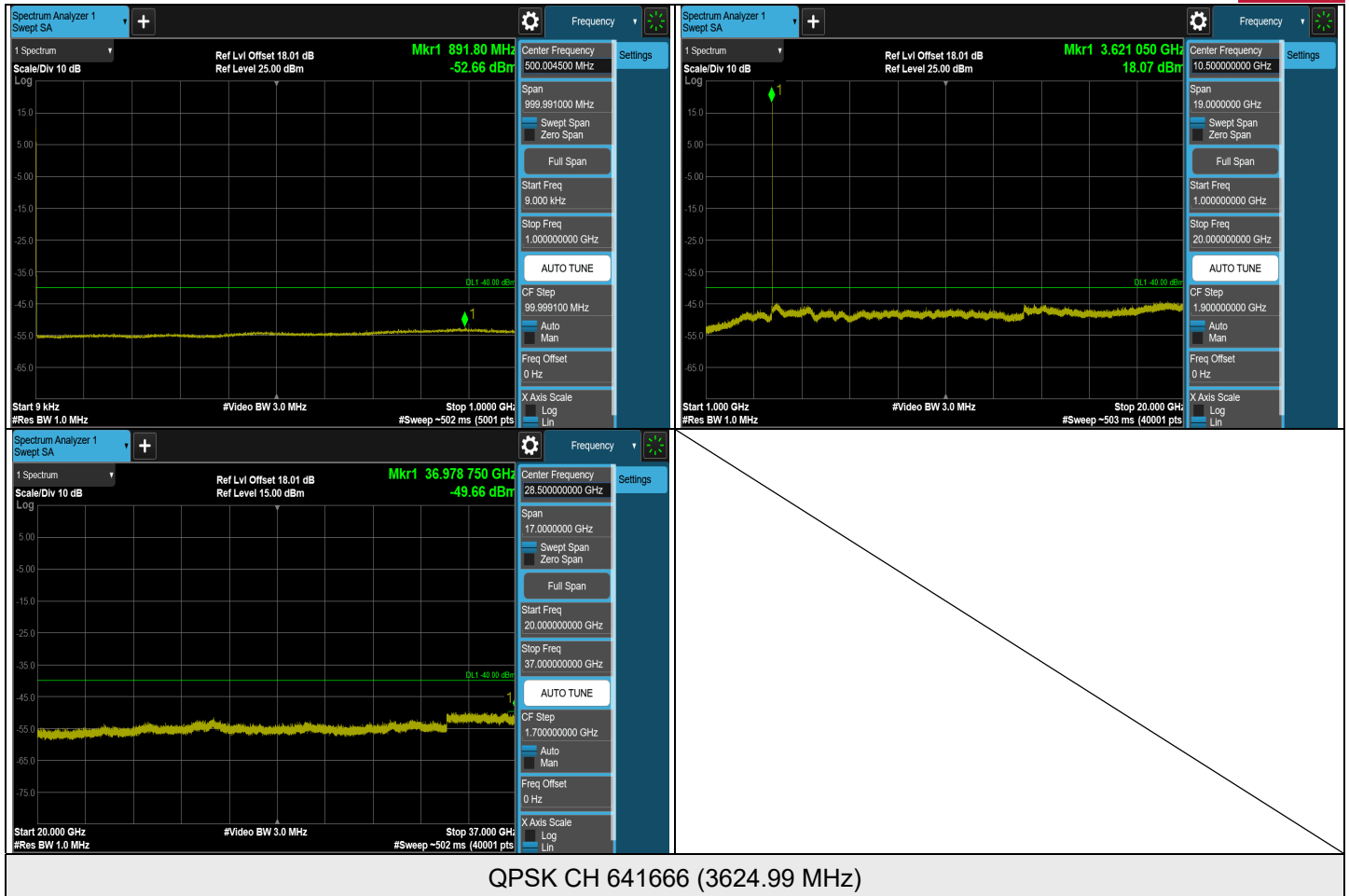
## 7.5 Conducted Spurious Emissions

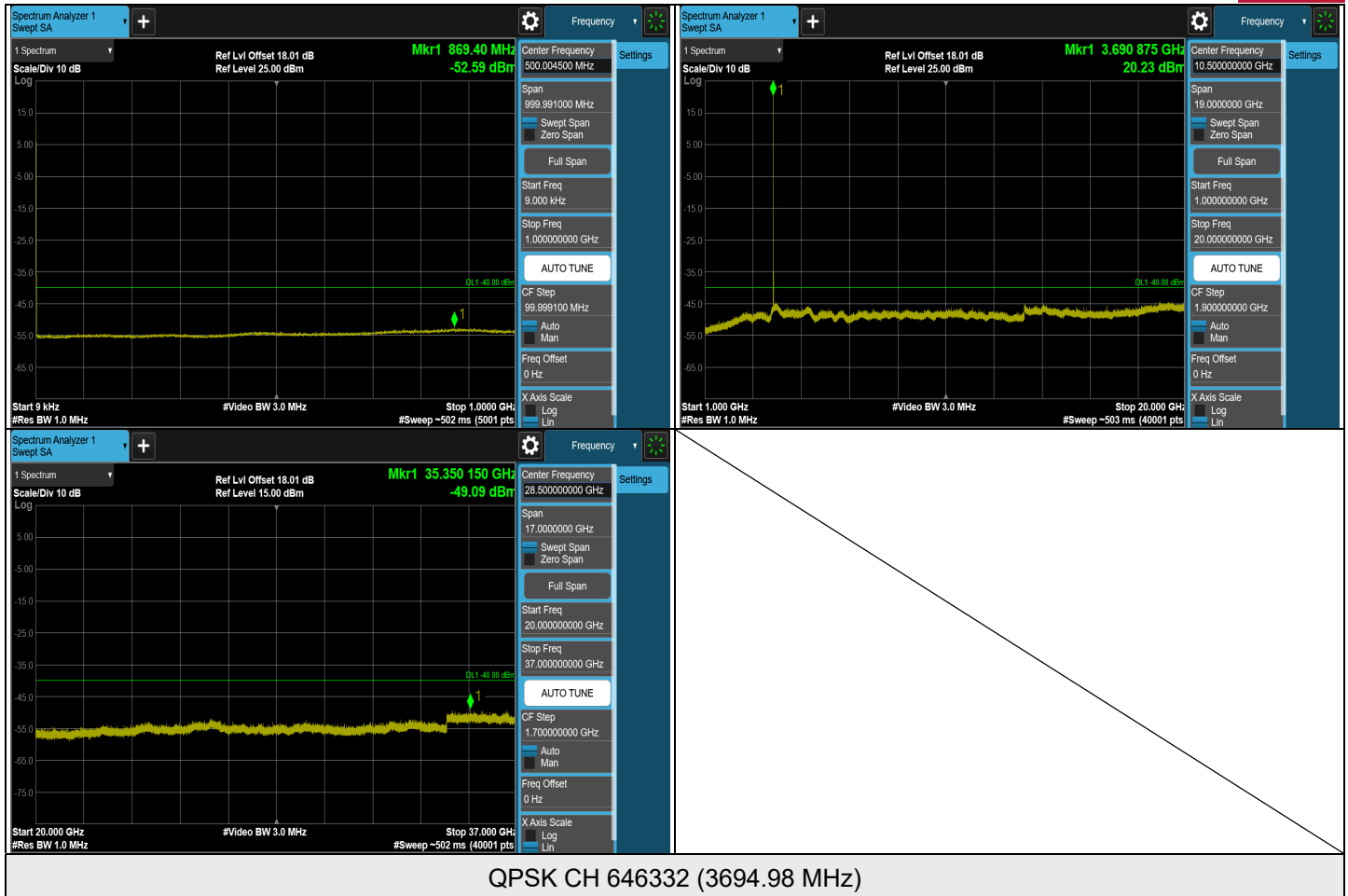
|              |         |                           |              |            |            |
|--------------|---------|---------------------------|--------------|------------|------------|
| Input Power: | 3.8 Vdc | Environmental Conditions: | 21°C, 75% RH | Tested By: | James Yang |
|--------------|---------|---------------------------|--------------|------------|------------|

### 7.5.1 NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz)

#### NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 10 MHz



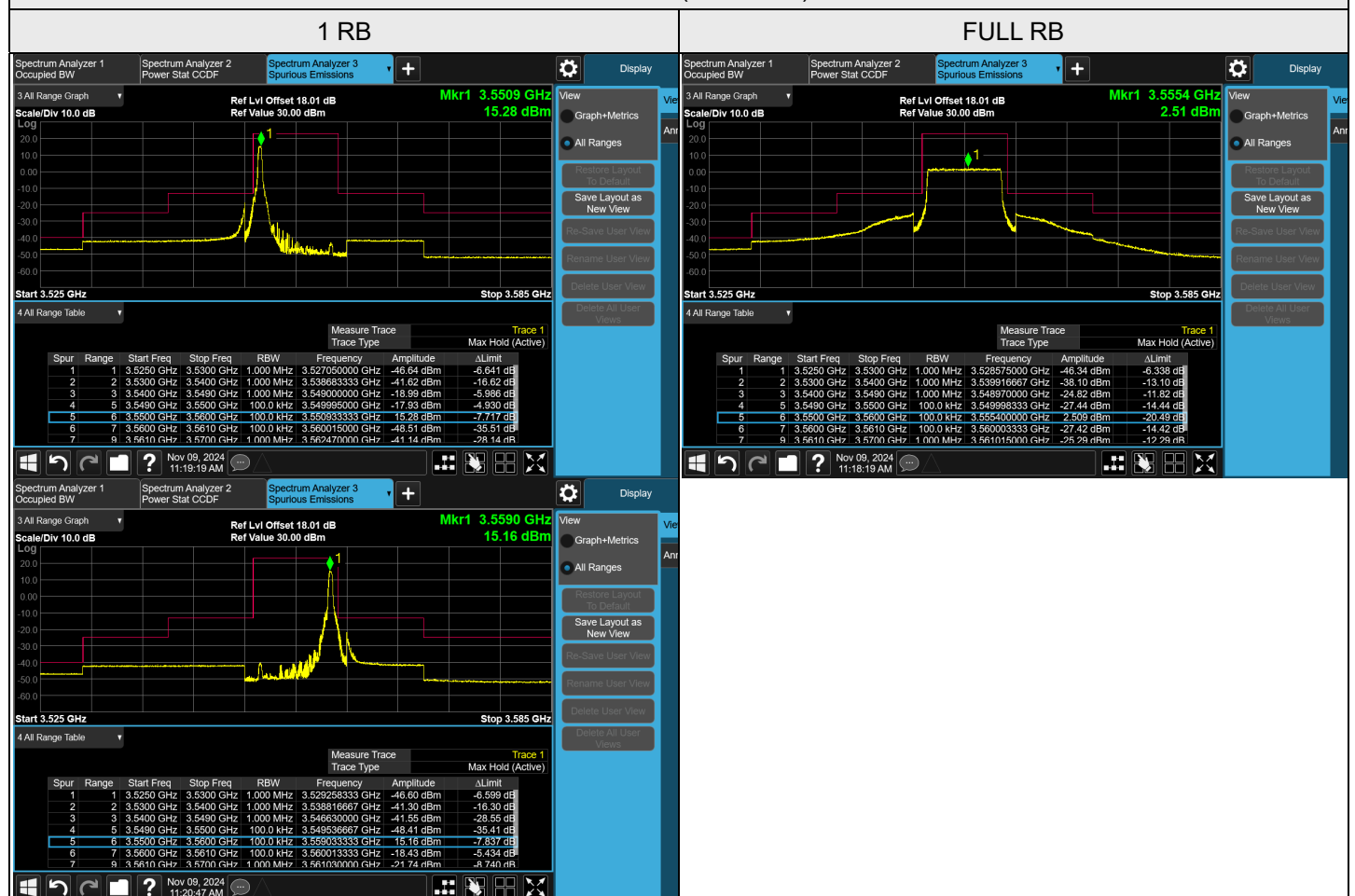




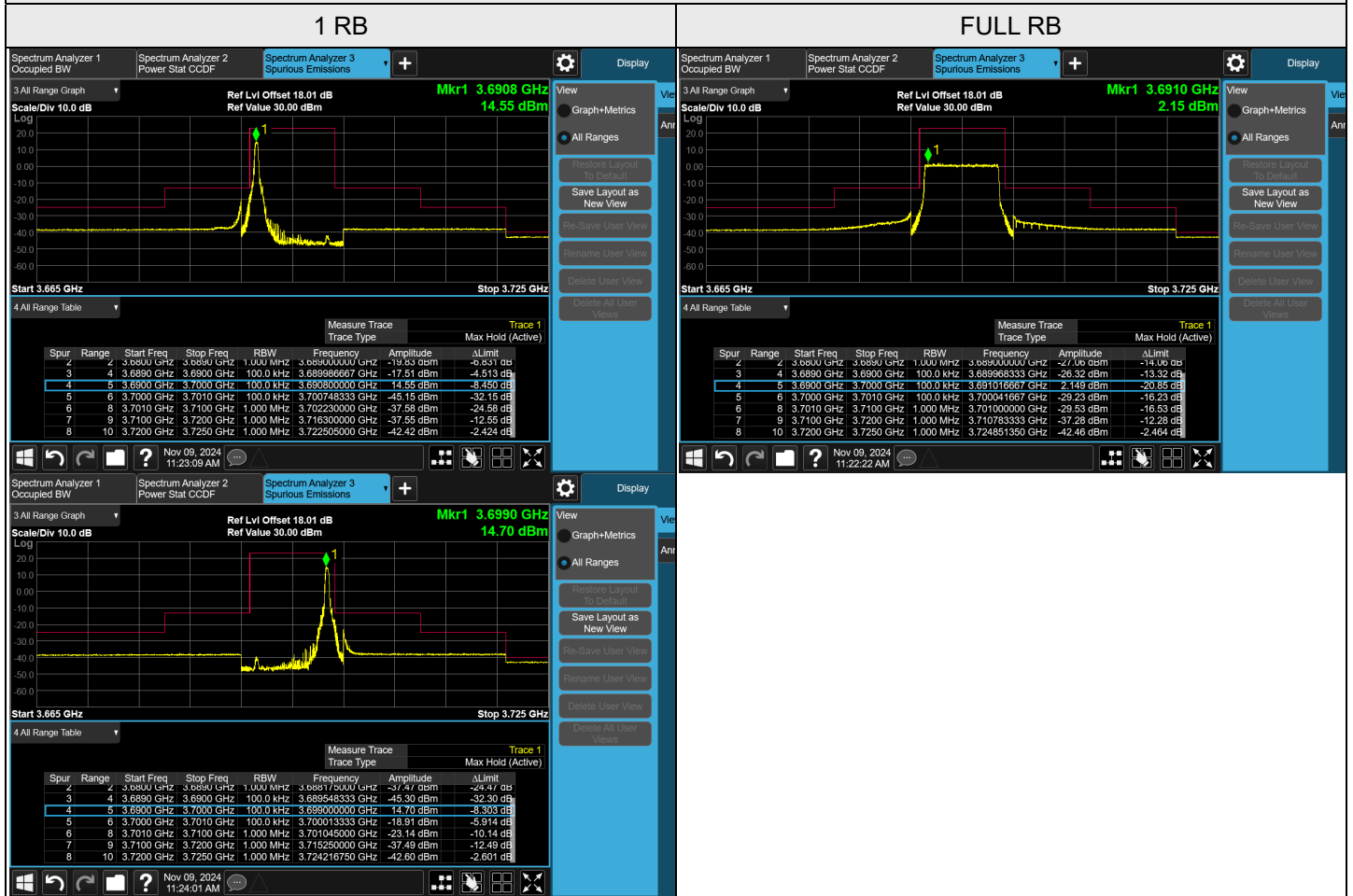
Note: The signal at 9 kHz is IF signal from spectrum analyzer.

# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 10 MHz

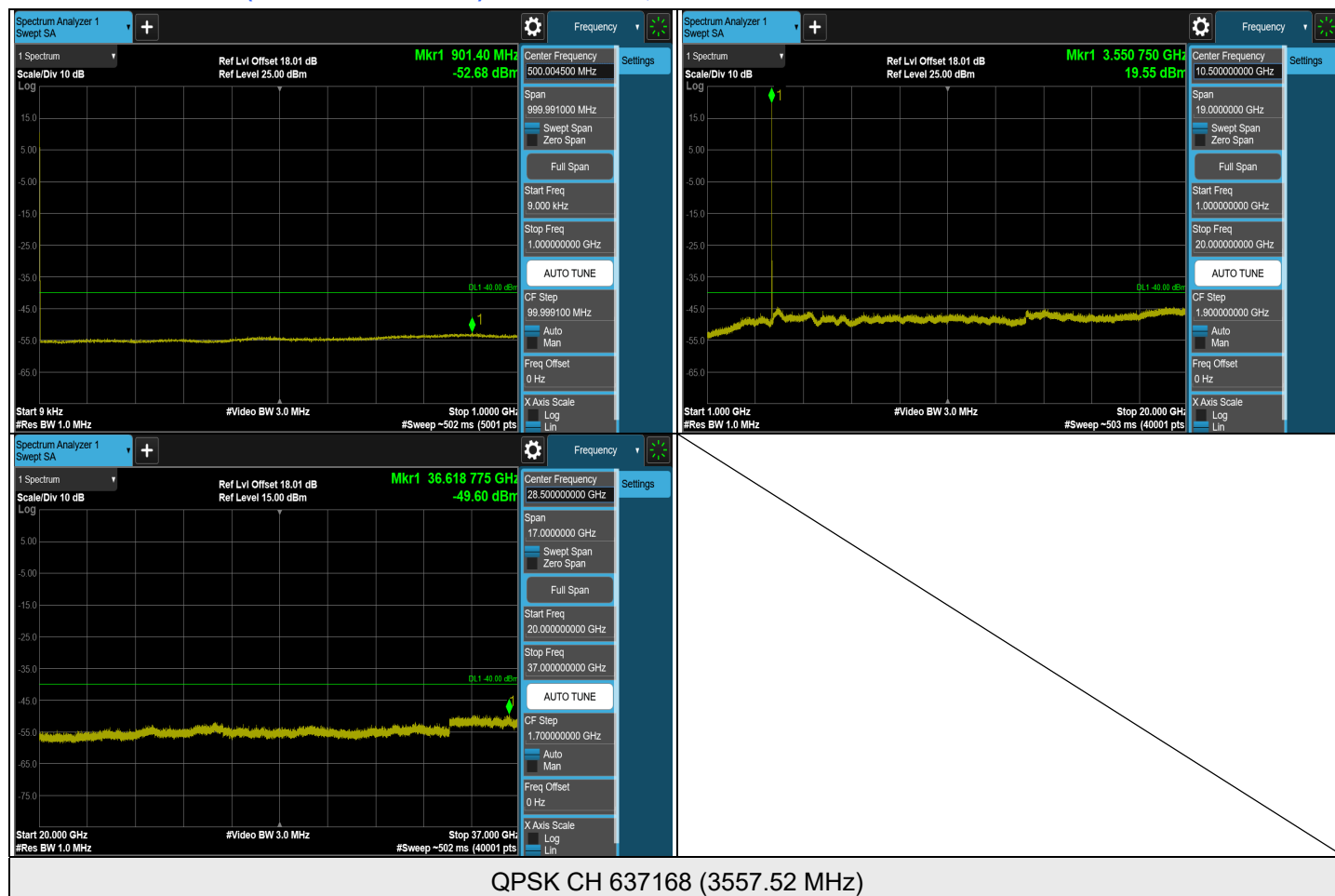
CH 637000 (3555 MHz)

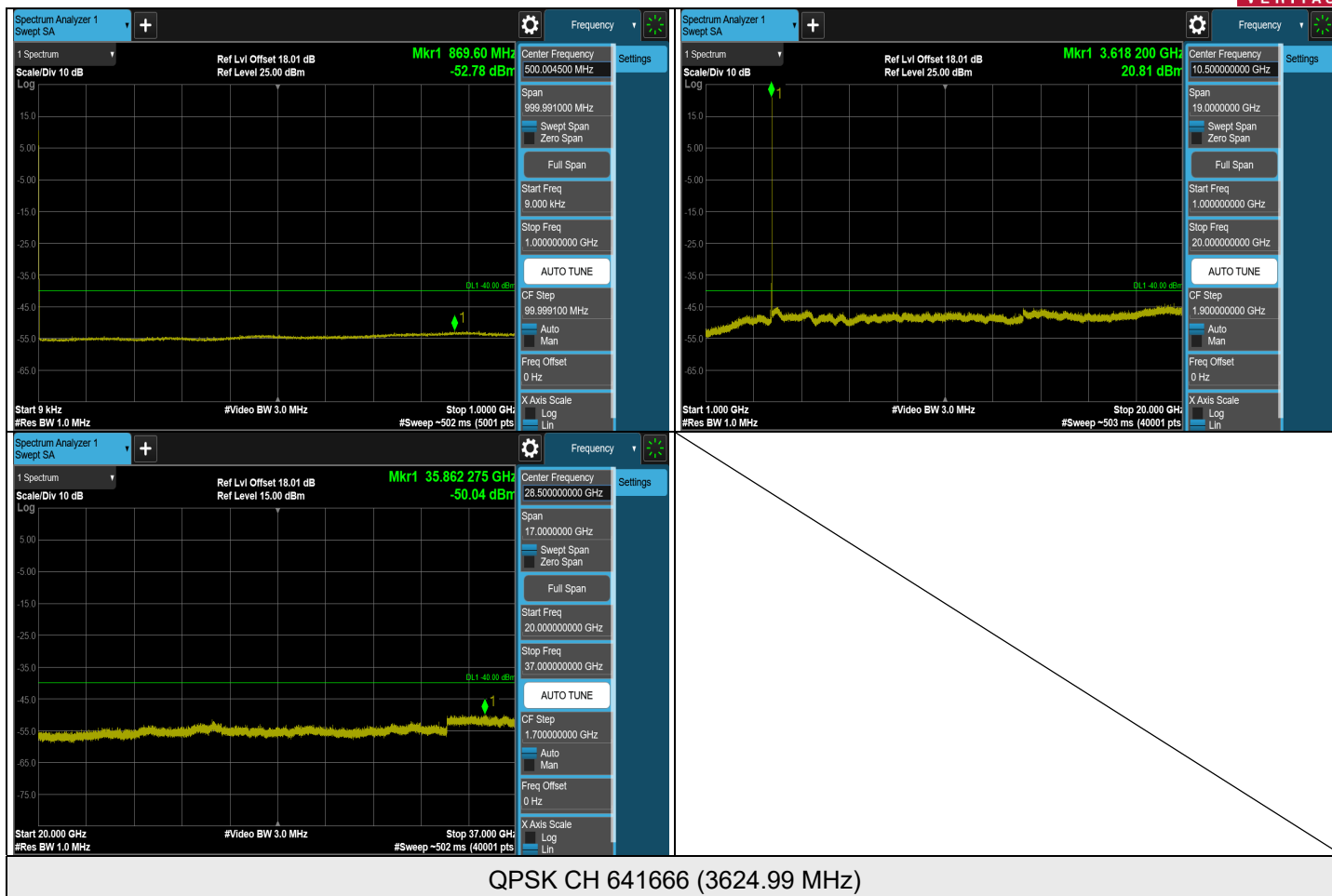


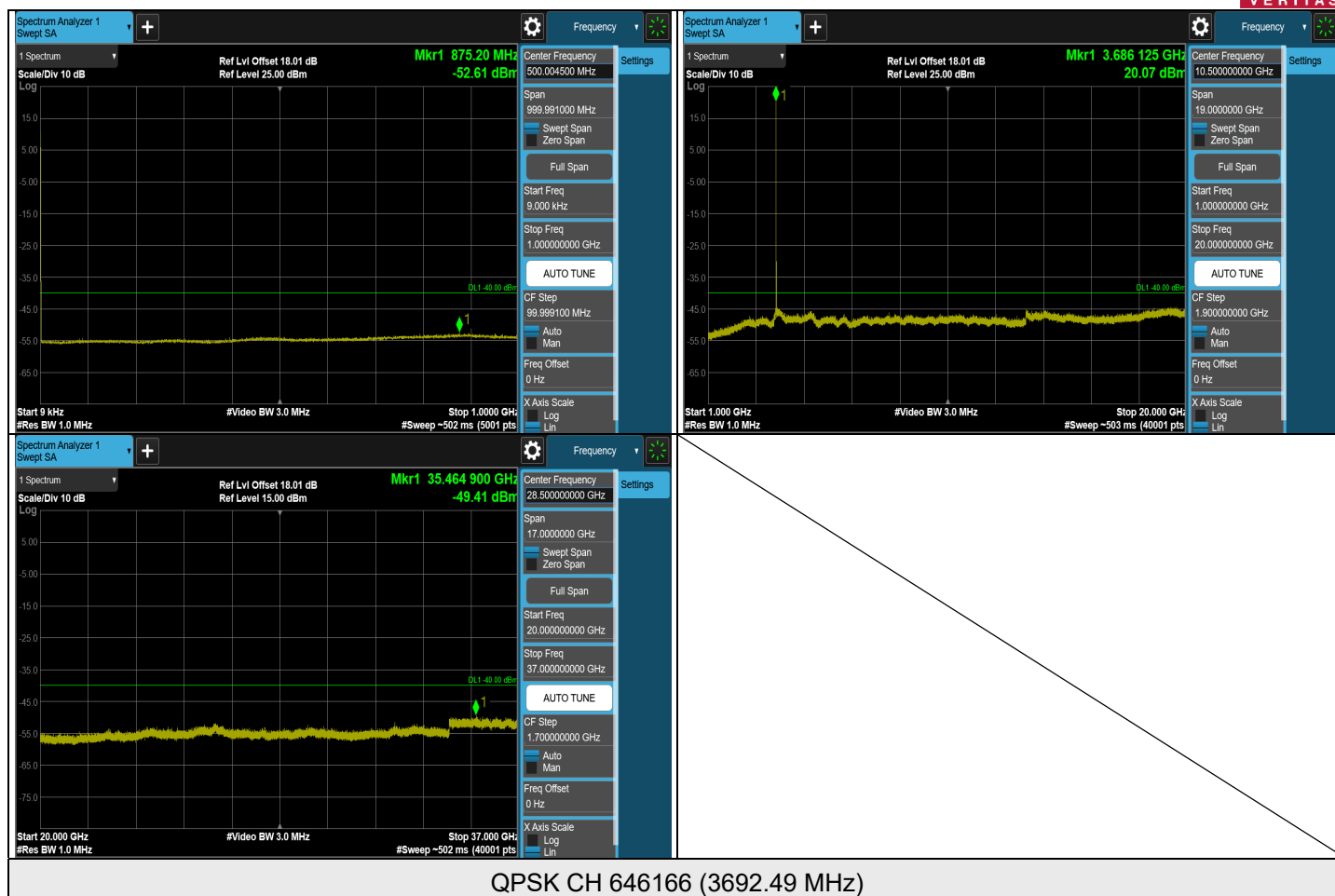
CH 646332 (3694.98 MHz)



## NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 15 MHz



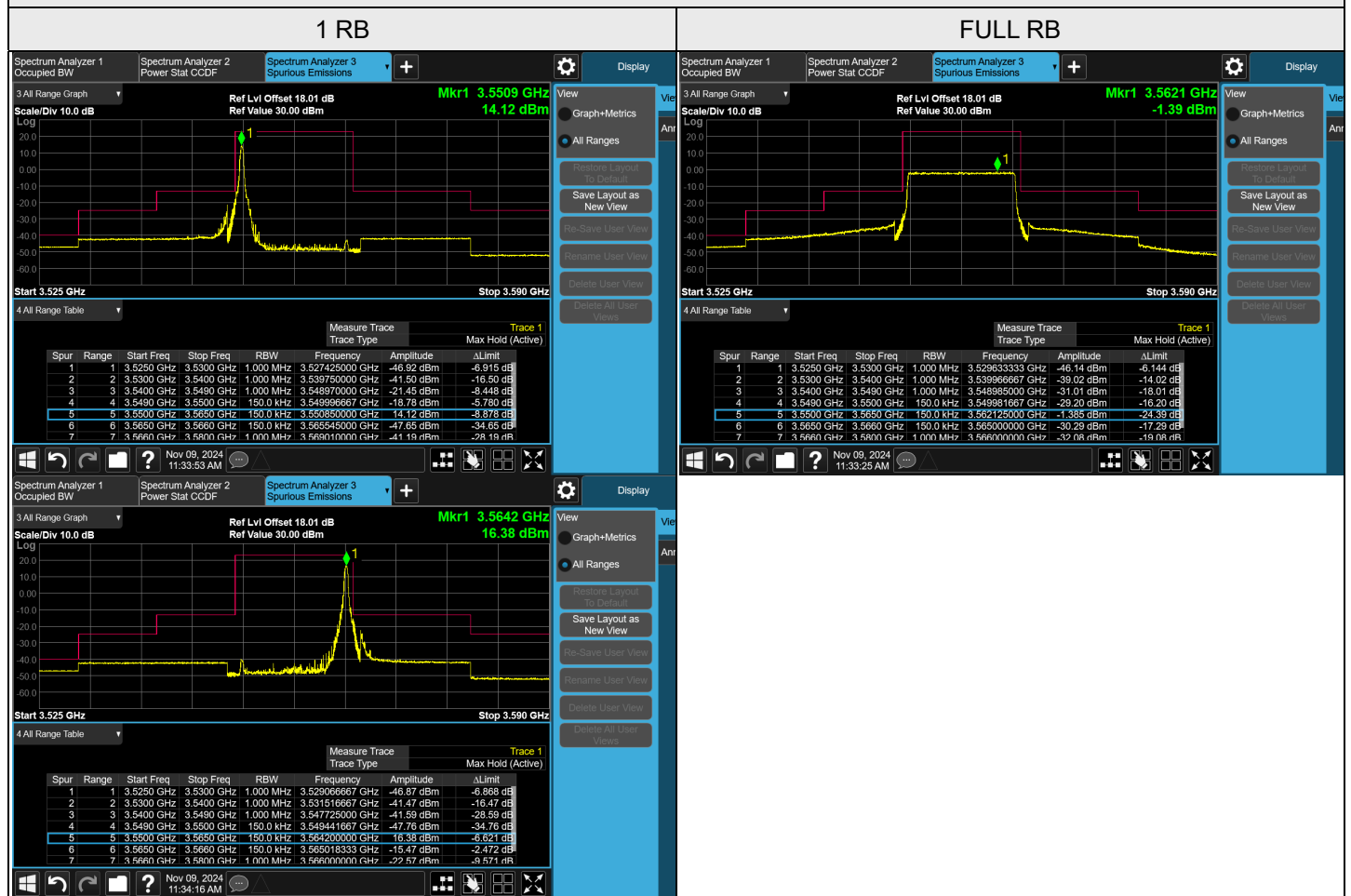




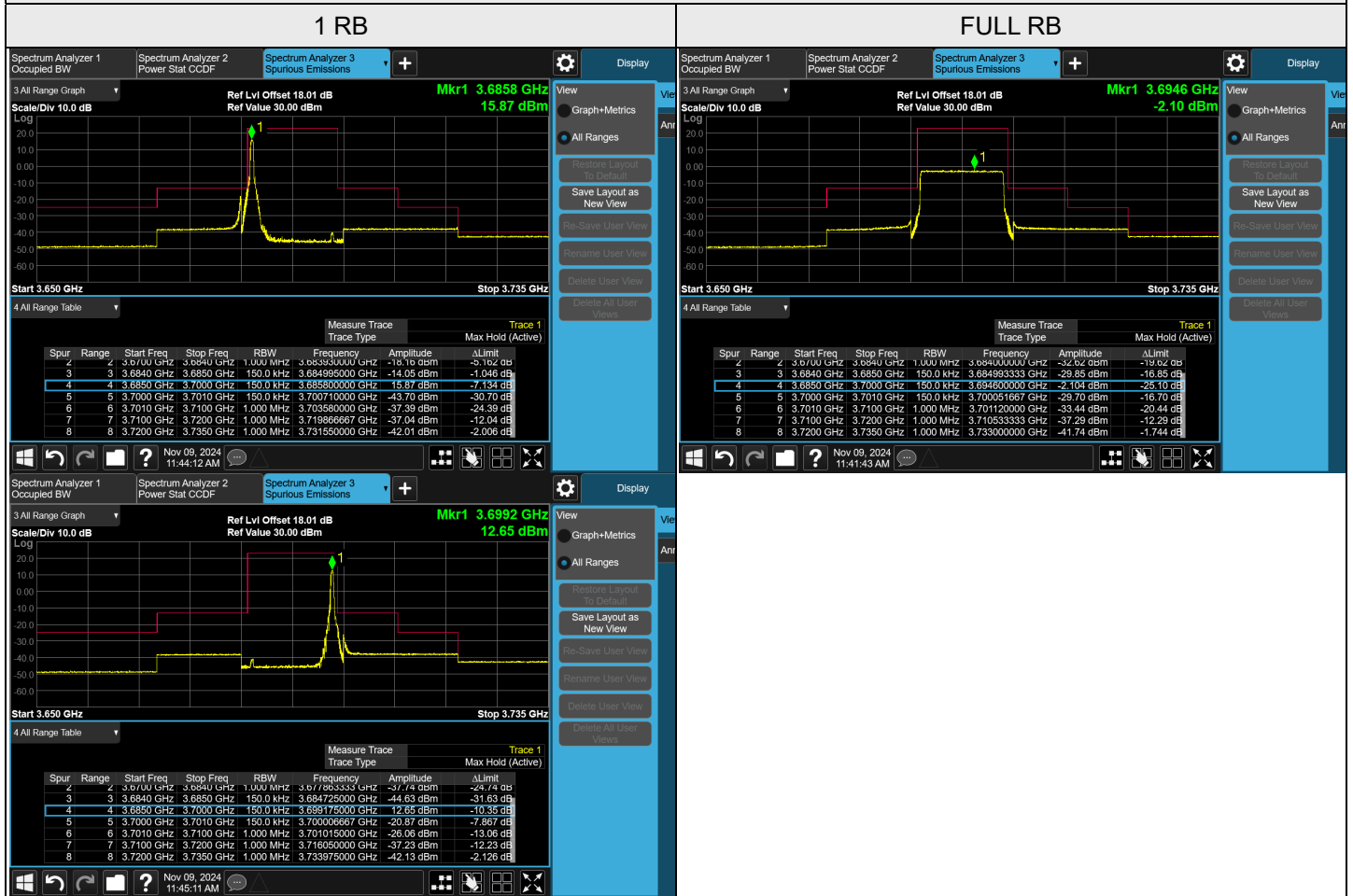
Note: The signal at 9 kHz is IF signal from spectrum analyzer.

## NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 15 MHz

CH 637168 (3557.52 MHz)



# CH 646166 (3692.49 MHz)



# NR n48 SCS 30 kHz (3.55 GHz ~ 3.7 GHz) - MIMO-Ant 0, Channel Bandwidth: 20 MHz

