

## FCC Test Report (Part 96)

**Report No.:** RFBHQN-WTW-P20120273-4

**FCC ID:** MCLT77W968

**Test Model:** T77W968

**Received Date:** Dec. 09, 2020

**Test Date:** Dec. 22, 2020 to Jan. 28, 2021

**Issued Date:** Apr. 08, 2021

**Applicant:** HON HAI PRECISION IND. CO., LTD.

**Address:** 5F-1,5 Hsin-An Road Hsinchu, Science-Based Industrial Park Taiwan,  
R.O.C.

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan

**Test Location :** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan

**FCC Registration /  
Designation Number:** 723255 / TW2022



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

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### Release Control Record

| Issue No.              | Description       | Date Issued   |
|------------------------|-------------------|---------------|
| RFBHQN-WTW-P20120273-4 | Original release. | Apr. 08, 2021 |

## 1 Certificate of Conformity

**Product:** LTE M.2 Module  
**Brand:** FOXCONN  
**Test Model:** T77W968  
**Sample Status:** Engineering sample  
**Applicant:** HON HAI PRECISION IND. CO., LTD.  
**Test Date:** Dec. 22, 2020 to Jan. 28, 2021  
**Standards:** 47 CFR FCC Part 96, Subpart E

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.

**Prepared by :**  , **Date:** Apr. 08, 2021  
Claire Kuan / Specialist

**Approved by :**  , **Date:** Apr. 08, 2021  
Clark Lin / Technical Manager

## 2 Summary of Test Results

| 47 CFR FCC Part 96 |                                            |        |                                                                                     |
|--------------------|--------------------------------------------|--------|-------------------------------------------------------------------------------------|
| FCC Clause         | Test Item                                  | Result | Remarks                                                                             |
| 2.1046<br>96.41(b) | Maximum Peak Output Power and Maximum EIRP | Pass   | Meet the requirement of limit.                                                      |
| 2.1047<br>96.41(a) | Modulation characteristics                 | Pass   | Meet the requirement.                                                               |
| 96.41(g)           | Peak to Average Ratio                      | Pass   | Meet the requirement of limit.                                                      |
| 2.1049             | Emission Bandwidth                         | Pass   | Meet the requirement of limit.                                                      |
| 2.1055             | Frequency Stability                        | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>96.41(e) | Conducted Spurious Emissions               | Pass   | Meet the requirement of limit.                                                      |
| 2.1053<br>96.41(e) | Radiated Spurious Emissions                | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -21.22dB at 16312.5MHz. |

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:

| Measurement                    | Frequency     | Expanded Uncertainty (k=2) ( $\pm$ ) |
|--------------------------------|---------------|--------------------------------------|
| Radiated Emissions up to 1 GHz | 9kHz ~ 30MHz  | 3.1 dB                               |
|                                | 30MHz ~ 1GHz  | 5.4 dB                               |
| Radiated Emissions above 1 GHz | 1GHz ~ 18GHz  | 5.0 dB                               |
|                                | 18GHz ~ 40GHz | 5.3 dB                               |

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

|                              |                             |                         |           |
|------------------------------|-----------------------------|-------------------------|-----------|
| Product                      | LTE M.2 Module              |                         |           |
| Brand                        | FOXCONN                     |                         |           |
| Test Model                   | T77W968                     |                         |           |
| Status of EUT                | Engineering sample          |                         |           |
| Power Supply Rating          | DC 3.3V from host equipment |                         |           |
| Modulation Type              | QPSK, 16QAM, 64QAM          |                         |           |
| Operating Frequency          | LTE Band 42                 | TX: 3552.5 ~ 3597.5 MHz |           |
|                              |                             | RX: 3552.5 ~ 3597.5 MHz |           |
|                              | LTE Band 48                 | TX: 3552.5 ~ 3697.5 MHz |           |
|                              |                             | RX: 3552.5 ~ 3697.5 MHz |           |
| Channel Bandwidth            | 5MHz, 10MHz, 15MHz & 20MHz  |                         |           |
| Max. EIRP Power (dBm/10MHz)  | LTE Band 42                 | Channel Bandwidth 5MHz  | 22.79 dBm |
|                              |                             | Channel Bandwidth 10MHz | 22.93 dBm |
|                              |                             | Channel Bandwidth 15MHz | 22.90 dBm |
|                              |                             | Channel Bandwidth 20MHz | 22.93 dBm |
|                              | LTE Band 48                 | Channel Bandwidth 5MHz  | 22.84 dBm |
|                              |                             | Channel Bandwidth 10MHz | 22.93 dBm |
|                              |                             | Channel Bandwidth 15MHz | 22.97 dBm |
|                              |                             | Channel Bandwidth 20MHz | 22.94 dBm |
| Max. EIRP Power (Full Power) | LTE Band 42                 | Channel Bandwidth 5MHz  | 22.79 dBm |
|                              |                             | Channel Bandwidth 10MHz | 22.93 dBm |
|                              |                             | Channel Bandwidth 15MHz | 22.96 dBm |
|                              |                             | Channel Bandwidth 20MHz | 22.96 dBm |
|                              | LTE Band 48                 | Channel Bandwidth 5MHz  | 22.84 dBm |
|                              |                             | Channel Bandwidth 10MHz | 22.93 dBm |
|                              |                             | Channel Bandwidth 15MHz | 22.99 dBm |
|                              |                             | Channel Bandwidth 20MHz | 22.98 dBm |

|                     |             |                         |                |
|---------------------|-------------|-------------------------|----------------|
| Emission Designator | LTE Band 42 | Channel Bandwidth 5MHz  | QPSK: 4M48G7D  |
|                     |             |                         | 16QAM: 4M48D7W |
|                     |             |                         | 64QAM: 4M48D7W |
|                     |             | Channel Bandwidth 10MHz | QPSK: 8M96G7D  |
|                     |             |                         | 16QAM: 8M96D7W |
|                     |             |                         | 64QAM: 8M94D7W |
|                     |             | Channel Bandwidth 15MHz | QPSK: 13M4G7D  |
|                     |             |                         | 16QAM: 13M4D7W |
|                     |             |                         | 64QAM: 13M4D7W |
|                     |             | Channel Bandwidth 20MHz | QPSK: 17M9G7D  |
|                     |             |                         | 16QAM: 17M8D7W |
|                     |             |                         | 64QAM: 17M8D7W |
|                     | LTE Band 48 | Channel Bandwidth 5MHz  | QPSK: 4M47G7D  |
|                     |             |                         | 16QAM: 4M48D7W |
|                     |             |                         | 64QAM: 4M47D7W |
|                     |             | Channel Bandwidth 10MHz | QPSK: 8M94G7D  |
|                     |             |                         | 16QAM: 8M96D7W |
|                     |             |                         | 64QAM: 8M94D7W |
|                     |             | Channel Bandwidth 15MHz | QPSK: 13M4G7D  |
|                     |             |                         | 16QAM: 13M4D7W |
|                     |             |                         | 64QAM: 13M4D7W |
|                     |             | Channel Bandwidth 20MHz | QPSK: 17M9G7D  |
|                     |             |                         | 16QAM: 17M8D7W |
|                     |             |                         | 64QAM: 17M8D7W |
| Antenna Type        |             | Refer to Note           |                |
| Antenna Connector   |             | Refer to Note           |                |
| Accessory Device    |             | NA                      |                |
| Data Cable Supplied |             | NA                      |                |

**Note:**

1. This report is prepared for FCC Class II permissive change. The difference compared with the original report is as the following information:
  - ◆ Added the LTE Band 42, LTE Band 42C and LTE Band 48.
2. According to above condition, all test items need to be performed. And all data are verified to meet the requirements. Only LTE Band 42 and LTE Band 48 test data was records this test report, for LTE Band 42C test data refer to the other test report (Report No.: RFBHQN-WTW-P20120273-5)
3. The EUT incorporates a 1T4R function.



4. The antennas provided to the EUT, please refer to the following table:

| Antenna No. | Antenna Net Gain(dBi)       | Frequency range (MHz)     | Antenna Type | Connector Type | Cable Length |
|-------------|-----------------------------|---------------------------|--------------|----------------|--------------|
| 1           | Please refer to below table | 699~803                   | PIFA         | i-pex(MHF)     | 100mm        |
| 2           | Please refer to below table | 791~960<br>1447.9~1606    | PIFA         | i-pex(MHF)     | 100mm        |
| 3           | Please refer to below table | 1710~2170<br>2500~2690    | PIFA         | i-pex(MHF)     | 100mm        |
| 4           | Please refer to below table | 5110~5925<br>(for LAA RX) | PIFA         | i-pex(MHF)     | 100mm        |
| 5           | Please refer to below table | 2305~2315                 | Dipole       | i-pex(MHF)     | 80mm         |
| 6           | Please refer to below table | 3500~3700                 | PCB          | i-pex(MHF)     | 100mm        |

| Antenna gain list |               |                   |            |
|-------------------|---------------|-------------------|------------|
| Antenna No.       | Band          | Freq. Range (MHz) | Gain (dBi) |
| 3                 | WCDMA II (B2) | 1850~1910         | 4.92       |
| 3                 | WCDMA IV (B4) | 1710~1755         | 5.99       |
| 2                 | WCDMA V (B5)  | 824~849           | 2.68       |
| 3                 | LTE Band (2)  | 1850~1910         | 4.92       |
| 3                 | LTE Band (4)  | 1710~1755         | 5.99       |
| 2                 | LTE Band (5)  | 824~849           | 2.68       |
| 3                 | LTE Band (7)  | 2500~2570         | 5.2        |
| 1                 | LTE Band (12) | 698~716           | 4.17       |
| 1                 | LTE Band (13) | 777~787           | 3.05       |
| 1                 | LTE Band (14) | 788~798           | 2.87       |
| 1                 | LTE Band (17) | 704~716           | 4.17       |
| 3                 | LTE Band (25) | 1850~1915         | 4.92       |
| 2                 | LTE Band (26) | 814~849           | 2.92       |
| 5                 | LTE Band (30) | 2305~2315         | 3.02       |
| 3                 | LTE Band (38) | 2570~2620         | 4.82       |
| 3                 | LTE Band (41) | 2496~2690         | 5.38       |
| 6                 | LTE Band (42) | 3550~3700         | 0.92       |
| 6                 | LTE Band (48) | 3550~3700         | 0.92       |
| 3                 | LTE Band (66) | 1710~1780         | 5.99       |

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

6. 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.

### 3.2 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports

The worst case was found when positioned on X-plane. Following channel(s) was (were) selected for the final test as listed below:

#### Band 42

| Test Item                  | Available Frequency (MHz) | Tested Frequency (MHz) | Channel Bandwidth | Modulation         |
|----------------------------|---------------------------|------------------------|-------------------|--------------------|
| Maximum Output Power       | 3552.5 to 3597.5          | 3552.5, 3575, 3597.5   | 5MHz              | QPSK, 16QAM, 64QAM |
|                            | 3555 to 3595              | 3555, 3575, 3595       | 10MHz             | QPSK, 16QAM, 64QAM |
|                            | 3557.5 to 3592.5          | 3557.5, 3575, 3592.5   | 15MHz             | QPSK, 16QAM, 64QAM |
|                            | 3560 to 3590              | 3560, 3575, 3590       | 20MHz             | QPSK, 16QAM, 64QAM |
| Modulation Characteristics | 3552.5 to 3597.5          | 3575                   | 5MHz              | QPSK, 16QAM, 64QAM |
| Frequency Stability        | 3552.5 to 3597.5          | 3575                   | 5MHz              | QPSK               |
|                            | 3555 to 3595              | 3575                   | 10MHz             | QPSK               |
|                            | 3557.5 to 3592.5          | 3575                   | 15MHz             | QPSK               |
|                            | 3560 to 3590              | 3575                   | 20MHz             | QPSK               |
| Occupied Bandwidth         | 3552.5 to 3597.5          | 3552.5, 3575, 3597.5   | 5MHz              | QPSK, 16QAM, 64QAM |
|                            | 3555 to 3595              | 3555, 3575, 3595       | 10MHz             | QPSK, 16QAM, 64QAM |
|                            | 3557.5 to 3592.5          | 3557.5, 3575, 3592.5   | 15MHz             | QPSK, 16QAM, 64QAM |
|                            | 3560 to 3590              | 3560, 3575, 3590       | 20MHz             | QPSK, 16QAM, 64QAM |
| Peak to Average Ratio      | 3552.5 to 3597.5          | 3552.5, 3575, 3597.5   | 5MHz              | QPSK               |
|                            | 3555 to 3595              | 3555, 3575, 3595       | 10MHz             | QPSK               |
|                            | 3557.5 to 3592.5          | 3557.5, 3575, 3592.5   | 15MHz             | QPSK               |
|                            | 3560 to 3590              | 3560, 3575, 3590       | 20MHz             | QPSK               |

**NOTE:** All supported modulation types were evaluated. The Worst case of QPSK was selected. Therefore, the Frequency Stability and Peak to Average Ratio were presented under QPSK mode only.

#### Test Condition:

| Test Item                  | Environmental Conditions | Input Power (System) | Tested By |
|----------------------------|--------------------------|----------------------|-----------|
| Maximum Output Power       | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Modulation Characteristics | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Frequency Stability        | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Occupied Bandwidth         | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Peak to Average Ratio      | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |

## Band 48

| Test Item                  | Available Frequency (MHz) | Tested Frequency (MHz) | Channel Bandwidth | Modulation         |
|----------------------------|---------------------------|------------------------|-------------------|--------------------|
| Maximum Output Power       | 3552.5 to 3697.5          | 3552.5, 3625, 3697.5   | 5MHz              | QPSK, 16QAM, 64QAM |
|                            | 3555 to 3695              | 3555, 3625, 3695       | 10MHz             | QPSK, 16QAM, 64QAM |
|                            | 3557.5 to 3692.5          | 3557.5, 3625, 3692.5   | 15MHz             | QPSK, 16QAM, 64QAM |
|                            | 3560 to 3690              | 3560, 3625, 3690       | 20MHz             | QPSK, 16QAM, 64QAM |
| Modulation Characteristics | 3552.5 to 3697.5          | 3625                   | 5MHz              | QPSK, 16QAM, 64QAM |
| Frequency Stability        | 3552.5 to 3697.5          | 3625                   | 5MHz              | QPSK               |
|                            | 3555 to 3695              | 3625                   | 10MHz             | QPSK               |
|                            | 3557.5 to 3692.5          | 3625                   | 15MHz             | QPSK               |
|                            | 3560 to 3690              | 3625                   | 20MHz             | QPSK               |
| Occupied Bandwidth         | 3552.5 to 3697.5          | 3552.5, 3625, 3697.5   | 5MHz              | QPSK, 16QAM, 64QAM |
|                            | 3555 to 3695              | 3555, 3625, 3695       | 10MHz             | QPSK, 16QAM, 64QAM |
|                            | 3557.5 to 3692.5          | 3557.5, 3625, 3692.5   | 15MHz             | QPSK, 16QAM, 64QAM |
|                            | 3560 to 3690              | 3560, 3625, 3690       | 20MHz             | QPSK, 16QAM, 64QAM |
| Peak to Average Ratio      | 3552.5 to 3697.5          | 3552.5, 3625, 3697.5   | 5MHz              | QPSK               |
|                            | 3555 to 3695              | 3555, 3625, 3695       | 10MHz             | QPSK               |
|                            | 3557.5 to 3692.5          | 3557.5, 3625, 3692.5   | 15MHz             | QPSK               |
|                            | 3560 to 3690              | 3560, 3625, 3690       | 20MHz             | QPSK               |
| Conducted Emission         | 3552.5 to 3697.5          | 3552.5, 3625, 3697.5   | 5MHz              | QPSK               |
|                            | 3555 to 3695              | 3555, 3625, 3695       | 10MHz             | QPSK               |
|                            | 3557.5 to 3692.5          | 3557.5, 3625, 3692.5   | 15MHz             | QPSK               |
|                            | 3560 to 3690              | 3560, 3625, 3690       | 20MHz             | QPSK               |
| Radiated Emission          | 3552.5 to 3697.5          | 3552.5, 3625, 3697.5   | 5MHz              | QPSK               |
|                            | 3555 to 3695              | 3555, 3625, 3695       | 10MHz             | QPSK               |
|                            | 3557.5 to 3692.5          | 3557.5, 3625, 3692.5   | 15MHz             | QPSK               |
|                            | 3560 to 3690              | 3560, 3625, 3690       | 20MHz             | QPSK               |

### NOTE:

1. All supported modulation types were evaluated. The Worst case of QPSK was selected. Therefore, the Frequency Stability, Peak to Average Ratio were presented under QPSK mode only.
2. For conducted emission and radiated emission test, select the LTE band48 with the maximum power for final test.

### Test Condition:

| Test Item                  | Environmental Conditions | Input Power (System) | Tested By |
|----------------------------|--------------------------|----------------------|-----------|
| Maximum Output Power       | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Modulation Characteristics | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Frequency Stability        | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Occupied Bandwidth         | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Peak to Average Ratio      | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Conducted Emission         | 24deg. C, 58%RH          | 120Vac, 60Hz         | Kevin Ko  |
| Radiated Emission          | 25deg. C, 75%RH          | 120Vac, 60Hz         | Ryan Du   |

### 3.3 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

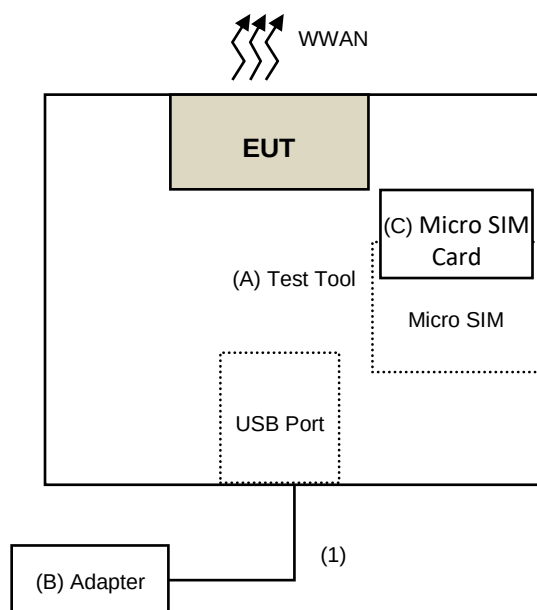
| ID | Product        | Brand    | Model No. | Serial No. | FCC ID | Remarks            |
|----|----------------|----------|-----------|------------|--------|--------------------|
| A. | Test Tool      | Foxconn  | NA        | NA         | NA     | Supplied by client |
| B. | Adapter        | ASUS     | EXA1205UA | NA         | NA     | Provided by Lab    |
| C. | Micro SIM Card | NA       | NA        | NA         | NA     | Provided by Lab    |
| D. | Simulator      | Keysight | E7515A    | MY56030229 | NA     | Provided by Lab    |

Note:

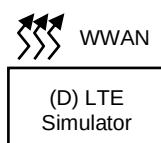
1. All power cords of the above support units are non-shielded (1.8m).

| ID | Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks         |
|----|--------------|------|------------|--------------------|--------------|-----------------|
| 1. | USB Cable    | 1    | 1          | Yes                | 0            | Provided by Lab |

### 3.3.1 Configuration of System under Test



Remote Site



### **3.4 General Description of Applied Standards and References**

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

**Test Standard:**

47 CFR FCC Part 2

47 CFR FCC Part 96, Subpart E

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

All test items have been performed and recorded as per the above standards.

**References Test Guidance:**

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 940660 D01 Part 96 CBRS Eqpt v02

All test items have been performed and recorded as per the above standards and KDB test guidance.

## 4 Test Types and Results

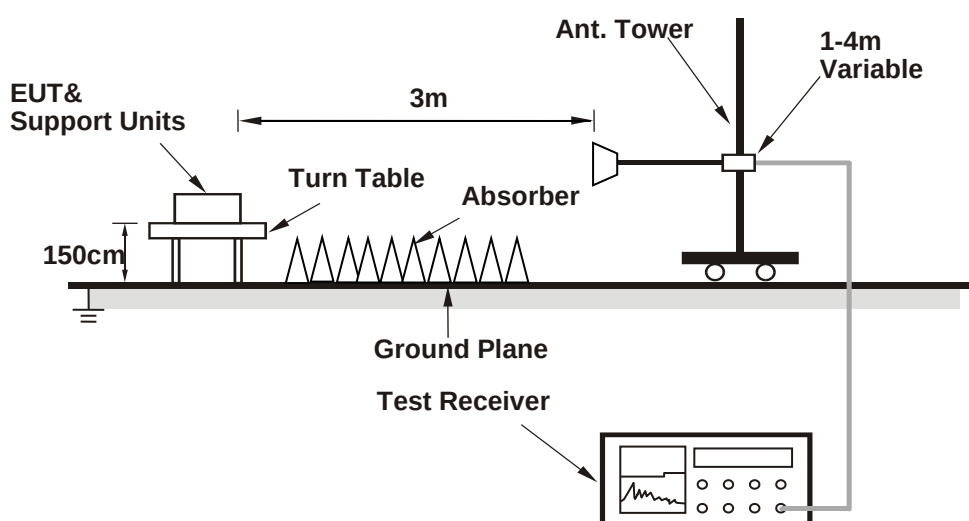
### 4.1 Maximum Output Power Measurement

#### 4.1.1 Limits of Maximum Output Power Measurement

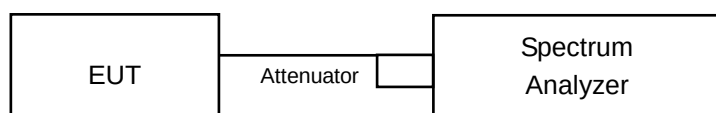
| Device                              |                 | Maximum EIRP<br>(dBm/10 MHz) |
|-------------------------------------|-----------------|------------------------------|
| <input checked="" type="checkbox"/> | End User Device | 23                           |
| <input type="checkbox"/>            | Category A CBSD | 30                           |
| <input type="checkbox"/>            | Category B CBSD | 47                           |

#### 4.1.2 Test Setup

##### Radiated Measurement Method



##### Conducted Measurement Method



#### 4.1.3 Test Instruments

##### For Band 42 radiated emissions test:

| DESCRIPTION & MANUFACTURER                 | MODEL NO.            | SERIAL NO.  | CALIBRATED DATE | CALIBRATED UNTIL |
|--------------------------------------------|----------------------|-------------|-----------------|------------------|
| Test Receiver<br>Keysight                  | N9038A               | MY54450088  | July 06, 2020   | July 05, 2021    |
| Pre-Amplifier<br>EMCI                      | EMC001340            | 980142      | May 25, 2020    | May 24, 2021     |
| Loop Antenna<br>Electro-Metrics            | EM-6879              | 264         | Feb. 18, 2020   | Feb. 17, 2021    |
| RF Cable                                   | 5D-FB                | LOOPCAB-001 | Jan. 07, 2021   | Jan. 06, 2022    |
| RF Cable                                   | 5D-FB                | LOOPCAB-002 | Jan. 07, 2021   | Jan. 06, 2022    |
| Pre-Amplifier<br>Mini-Circuits             | ZFL-1000VH2          | QA0838008   | Oct. 20, 2020   | Oct. 19, 2021    |
| Trilog Broadband<br>Antenna<br>SCHWARZBECK | VULB 9168            | 9168-361    | Nov. 05, 2020   | Nov. 04, 2021    |
| RF Cable                                   | 8D                   | 966-3-1     | Mar. 17, 2020   | Mar. 16, 2021    |
| RF Cable                                   | 8D                   | 966-3-2     | Mar. 17, 2020   | Mar. 16, 2021    |
| RF Cable                                   | 8D                   | 966-3-3     | Mar. 17, 2020   | Mar. 16, 2021    |
| Fixed attenuator<br>Mini-Circuits          | UNAT-5+              | PAD-3m-3-01 | Sep. 24, 2020   | Sep. 23, 2021    |
| Horn_Antenna<br>SCHWARZBECK                | BBHA9120-D           | 9120D-406   | Nov. 22, 2020   | Nov. 21, 2021    |
| Pre-Amplifier<br>EMCI                      | EMC12630SE           | 980384      | Jan. 11, 2021   | Jan. 10, 2022    |
| RF Cable                                   | EMC104-SM-SM-1500    | 180504      | Apr. 29, 2020   | Apr. 28, 2021    |
| RF Cable                                   | EMC104-SM-SM-2000    | 180601      | June 09, 2020   | June 08, 2021    |
| RF Cable                                   | EMC104-SM-SM-6000    | 180602      | June 09, 2020   | June 08, 2021    |
| Spectrum Analyzer<br>Keysight              | N9030A               | MY54490679  | July 13, 2020   | July 12, 2021    |
| Pre-Amplifier<br>EMCI                      | EMC184045SE          | 980387      | Jan. 11, 2021   | Jan. 10, 2022    |
| Horn_Antenna<br>SCHWARZBECK                | BBHA 9170            | BBHA9170519 | Nov. 22, 2020   | Nov. 21, 2021    |
| RF Cable                                   | EMC102-KM-KM-1200    | 160924      | Jan. 11, 2021   | Jan. 10, 2022    |
| RF Cable                                   | EMC-KM-KM-4000       | 200214      | Mar. 11, 2020   | Mar. 10, 2021    |
| Software                                   | ADT_Radiated_V8.7.08 | NA          | NA              | NA               |
| Antenna Tower & Turn<br>Table<br>Max-Full  | MF-7802              | MF780208406 | NA              | NA               |
| Boresight Antenna<br>Fixture               | FBA-01               | FBA-SIP01   | NA              | NA               |

##### Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Tested Date: Jan. 28, 2021



**For Band 48 radiated emissions test:**

| DESCRIPTION & MANUFACTURER                 | MODEL NO.            | SERIAL NO.  | CALIBRATED DATE | CALIBRATED UNTIL |
|--------------------------------------------|----------------------|-------------|-----------------|------------------|
| Test Receiver<br>Keysight                  | N9038A               | MY54450088  | July 06, 2020   | July 05, 2021    |
| Pre-Amplifier<br>EMCI                      | EMC001340            | 980142      | May 25, 2020    | May 24, 2021     |
| Loop Antenna<br>Electro-Metrics            | EM-6879              | 264         | Feb. 18, 2020   | Feb. 17, 2021    |
| RF Cable                                   | NA                   | LOOPCAB-001 | Jan. 08, 2020   | Jan. 07, 2021    |
| RF Cable                                   | NA                   | LOOPCAB-002 | Jan. 08, 2020   | Jan. 07, 2021    |
| Pre-Amplifier<br>Mini-Circuits             | ZFL-1000VH2B         | AMP-ZFL-05  | Apr. 28, 2020   | Apr. 27, 2021    |
| Trilog Broadband<br>Antenna<br>SCHWARZBECK | VULB 9168            | 9168-361    | Nov. 05, 2020   | Nov. 04, 2021    |
| RF Cable                                   | 8D                   | 966-3-1     | Mar. 17, 2020   | Mar. 16, 2021    |
| RF Cable                                   | 8D                   | 966-3-2     | Mar. 17, 2020   | Mar. 16, 2021    |
| RF Cable                                   | 8D                   | 966-3-3     | Mar. 17, 2020   | Mar. 16, 2021    |
| Fixed attenuator<br>Mini-Circuits          | UNAT-5+              | PAD-3m-3-01 | Sep. 24, 2020   | Sep. 23, 2021    |
| Horn_Antenna<br>SCHWARZBECK                | BBHA9120-D           | 9120D-406   | Nov. 22, 2020   | Nov. 21, 2021    |
| Pre-Amplifier<br>EMCI                      | EMC12630SE           | 980384      | Jan. 15, 2020   | Jan. 14, 2021    |
| RF Cable                                   | EMC104-SM-SM-1500    | 180504      | Apr. 29, 2020   | Apr. 28, 2021    |
| RF Cable                                   | EMC104-SM-SM-2000    | 180601      | June 09, 2020   | June 08, 2021    |
| RF Cable                                   | EMC104-SM-SM-6000    | 180602      | June 09, 2020   | June 08, 2021    |
| Spectrum Analyzer<br>Keysight              | N9030A               | MY54490679  | July 13, 2020   | July 12, 2021    |
| Pre-Amplifier<br>EMCI                      | EMC184045SE          | 980387      | Jan. 15, 2020   | Jan. 14, 2021    |
| Horn_Antenna<br>SCHWARZBECK                | BBHA 9170            | BBHA9170519 | Nov. 22, 2020   | Nov. 21, 2021    |
| RF Cable                                   | EMC102-KM-KM-1200    | 160924      | Jan. 15, 2020   | Jan. 14, 2021    |
| RF Cable                                   | EMC-KM-KM-4000       | 200214      | Mar. 11, 2020   | Mar. 10, 2021    |
| Software                                   | ADT_Radiated_V8.7.08 | NA          | NA              | NA               |
| Antenna Tower & Turn<br>Table<br>Max-Full  | MF-7802              | MF780208406 | NA              | NA               |
| Boresight Antenna<br>Fixture               | FBA-01               | FBA-SIP01   | NA              | NA               |

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Tested Date: Dec. 22, 2020

**For other test items:**

| DESCRIPTION & MANUFACTURER           | MODEL NO.                     | SERIAL NO.    | CALIBRATED DATE | CALIBRATED UNTIL |
|--------------------------------------|-------------------------------|---------------|-----------------|------------------|
| Spectrum Analyzer R&S                | FSV40                         | 100964        | May 29, 2020    | May 28, 2021     |
| Spectrum Analyzer Keysight           | N9030A                        | MY54490679    | July 13, 2020   | July 12, 2021    |
| Power meter Anritsu                  | ML2495A                       | 1529002       | July 22, 2020   | July 21, 2021    |
| Power sensor Anritsu                 | MA2411B                       | 1339443       | July 22, 2020   | July 21, 2021    |
| Fixed Attenuator Mini-Circuits       | MDCS18N-10                    | MDCS18N-10-01 | Apr. 14, 2020   | Apr. 13, 2021    |
| Mech Switch Absorptive Mini-Circuits | MSP4TA-18+                    | 0140          | Feb. 10, 2020   | Feb. 09, 2021    |
| FXD ATTEN Mini-Circuits              | BW-S3W2+                      | MN71981       | Feb. 10, 2020   | Feb. 09, 2021    |
| Software                             | ADT_RF Test Software V6.6.5.4 | NA            | NA              | NA               |

- NOTE:**
1. The test was performed in Oven room 2.
  2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
  3. Tested Date: Jan. 16, 2021

#### 4.1.4 Test Procedures

##### Conducted output power measurement

1. Connect the DUT transmitter output to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
2. Set span to at least 1.5 times the OBW.
3. Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
4. Set VBW  $\geq 3 \times$  RBW.
5. Set number of points in sweep  $\geq 2 \times$  span / RBW.
6. Sweep time = auto-couple.
7. Detector = RMS (power averaging).
8. If the EUT can be configured to transmit continuously (i.e., burst duty cycle  $\geq 98\%$ ), then set the trigger to free run.
9. If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle  $< 98\%$ ), then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Ensure that the sweep time is less than or equal to the transmission burst duration.
10. Trace average at least 100 traces in power averaging (i.e., RMS) mode.
11. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
12. For per 10MHz method, channel power integrating bandwidth 10MHz is used for bandwidth 5M, 10M, 15M and 20M.
13. For full power method, channel power integrating bandwidth 10MHz is used for bandwidth 5M, 10M, integrating bandwidth 15MHz is used for bandwidth 15M, integrating bandwidth 20MHz is used for bandwidth 20M.

##### Maximum EIRP

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

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

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)

#### 4.1.5 Deviation from Test Standard

No deviation.

#### 4.1.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

#### 4.1.7 Test Results

##### Conducted Output Power (dBm/10MHz)

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               |
|           |         |           | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 5M   | 1       | 0         | 21.87  | 21.43  | 21.46   | 0             | 20.65  | 20.16  | 20.11   | 1             | 19.44  | 18.88  | 18.81   | 2             |
|           | 1       | 12        | 21.64  | 21.42  | 21.43   | 0             | 20.59  | 20.11  | 20.07   | 1             | 19.31  | 18.79  | 18.79   | 2             |
|           | 1       | 24        | 21.63  | 21.45  | 21.42   | 0             | 20.54  | 20.09  | 20.06   | 1             | 19.17  | 18.73  | 18.77   | 2             |
|           | 12      | 0         | 20.71  | 20.27  | 20.32   | 1             | 19.79  | 19.34  | 19.37   | 2             | 18.75  | 18.35  | 18.32   | 3             |
|           | 12      | 6         | 20.67  | 20.24  | 20.37   | 1             | 19.88  | 19.39  | 19.41   | 2             | 18.79  | 18.23  | 18.24   | 3             |
|           | 12      | 13        | 20.64  | 20.23  | 20.24   | 1             | 19.84  | 19.38  | 19.43   | 2             | 18.66  | 18.24  | 18.29   | 3             |
|           | 25      | 0         | 20.75  | 20.31  | 20.49   | 1             | 19.87  | 19.51  | 19.53   | 2             | 18.99  | 18.36  | 18.42   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               |
|           |         |           | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 10M  | 1       | 0         | 22.01  | 21.58  | 21.51   | 0             | 20.88  | 20.54  | 20.46   | 1             | 19.84  | 19.45  | 19.45   | 2             |
|           | 1       | 24        | 21.87  | 21.41  | 21.49   | 0             | 20.65  | 20.37  | 20.31   | 1             | 19.46  | 18.99  | 19.28   | 2             |
|           | 1       | 49        | 21.84  | 21.37  | 21.48   | 0             | 20.61  | 20.34  | 20.35   | 1             | 19.57  | 19.23  | 19.17   | 2             |
|           | 25      | 0         | 20.82  | 20.43  | 20.55   | 1             | 19.87  | 19.49  | 19.47   | 2             | 18.89  | 18.55  | 18.56   | 3             |
|           | 25      | 12        | 20.81  | 20.42  | 20.37   | 1             | 19.95  | 19.55  | 19.57   | 2             | 18.76  | 18.39  | 18.46   | 3             |
|           | 25      | 25        | 20.79  | 20.39  | 20.49   | 1             | 19.88  | 19.46  | 19.53   | 2             | 18.77  | 18.45  | 18.44   | 3             |
|           | 50      | 0         | 20.95  | 20.54  | 20.47   | 1             | 20.01  | 19.55  | 19.57   | 2             | 18.90  | 18.59  | 18.57   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               |
|           |         |           | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 15M  | 1       | 0         | 21.98  | 21.37  | 21.55   | 0             | 20.78  | 20.44  | 20.39   | 1             | 19.67  | 19.36  | 19.12   | 2             |
|           | 1       | 37        | 20.79  | 21.19  | 21.37   | 0             | 20.53  | 20.26  | 20.08   | 1             | 19.41  | 19.10  | 19.08   | 2             |
|           | 1       | 74        | 21.66  | 21.20  | 21.44   | 0             | 20.66  | 20.17  | 20.15   | 1             | 19.64  | 19.07  | 19.16   | 2             |
|           | 36      | 0         | 20.64  | 20.35  | 20.29   | 1             | 19.64  | 19.28  | 19.43   | 2             | 18.67  | 18.17  | 18.40   | 3             |
|           | 36      | 19        | 20.65  | 20.27  | 20.23   | 1             | 19.65  | 19.22  | 19.47   | 2             | 18.36  | 18.22  | 18.46   | 3             |
|           | 36      | 39        | 20.61  | 20.19  | 20.27   | 1             | 19.66  | 19.43  | 19.30   | 2             | 18.44  | 18.28  | 18.17   | 3             |
|           | 75      | 0         | 19.28  | 18.94  | 18.99   | 1             | 18.30  | 17.95  | 18.10   | 2             | 17.30  | 16.99  | 16.84   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               |
|           |         |           | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 20M  | 1       | 0         | 22.01  | 21.67  | 21.55   | 0             | 20.83  | 20.54  | 20.58   | 1             | 19.67  | 19.78  | 19.66   | 2             |
|           | 1       | 50        | 21.57  | 21.36  | 21.24   | 0             | 20.78  | 20.41  | 20.36   | 1             | 19.43  | 19.18  | 19.23   | 2             |
|           | 1       | 99        | 21.40  | 21.25  | 21.39   | 0             | 20.57  | 20.36  | 20.39   | 1             | 19.61  | 19.17  | 19.37   | 2             |
|           | 50      | 0         | 20.79  | 20.34  | 20.20   | 1             | 19.58  | 19.30  | 19.27   | 2             | 19.65  | 18.24  | 18.35   | 3             |
|           | 50      | 25        | 20.54  | 20.33  | 20.24   | 1             | 19.53  | 19.33  | 19.24   | 2             | 18.57  | 18.25  | 18.17   | 3             |
|           | 50      | 50        | 20.66  | 20.30  | 20.36   | 1             | 19.55  | 19.20  | 19.22   | 2             | 18.46  | 18.27  | 18.20   | 3             |
|           | 100     | 0         | 17.82  | 17.49  | 17.48   | 1             | 16.78  | 16.43  | 16.41   | 2             | 15.77  | 15.53  | 15.43   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               |
|           |         |           | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 5M   | 1       | 0         | 21.92  | 21.43  | 21.46   | 0             | 20.68  | 20.18  | 20.14   | 1             | 19.42  | 18.90  | 18.82   | 2             |
|           | 1       | 12        | 21.79  | 21.42  | 21.43   | 0             | 20.57  | 20.13  | 20.02   | 1             | 19.35  | 18.81  | 18.77   | 2             |
|           | 1       | 24        | 21.81  | 21.45  | 21.42   | 0             | 20.48  | 20.11  | 20.08   | 1             | 19.15  | 18.74  | 18.71   | 2             |
|           | 12      | 0         | 20.67  | 20.26  | 20.34   | 1             | 19.82  | 19.35  | 19.43   | 2             | 18.73  | 18.32  | 18.32   | 3             |
|           | 12      | 6         | 20.73  | 20.22  | 20.36   | 1             | 19.92  | 19.40  | 19.38   | 2             | 18.80  | 18.22  | 18.27   | 3             |
|           | 12      | 13        | 20.65  | 20.25  | 20.25   | 1             | 19.87  | 19.36  | 19.37   | 2             | 18.64  | 18.25  | 18.25   | 3             |
|           | 25      | 0         | 20.78  | 20.30  | 20.51   | 1             | 19.90  | 19.53  | 19.49   | 2             | 18.96  | 18.38  | 18.40   | 3             |

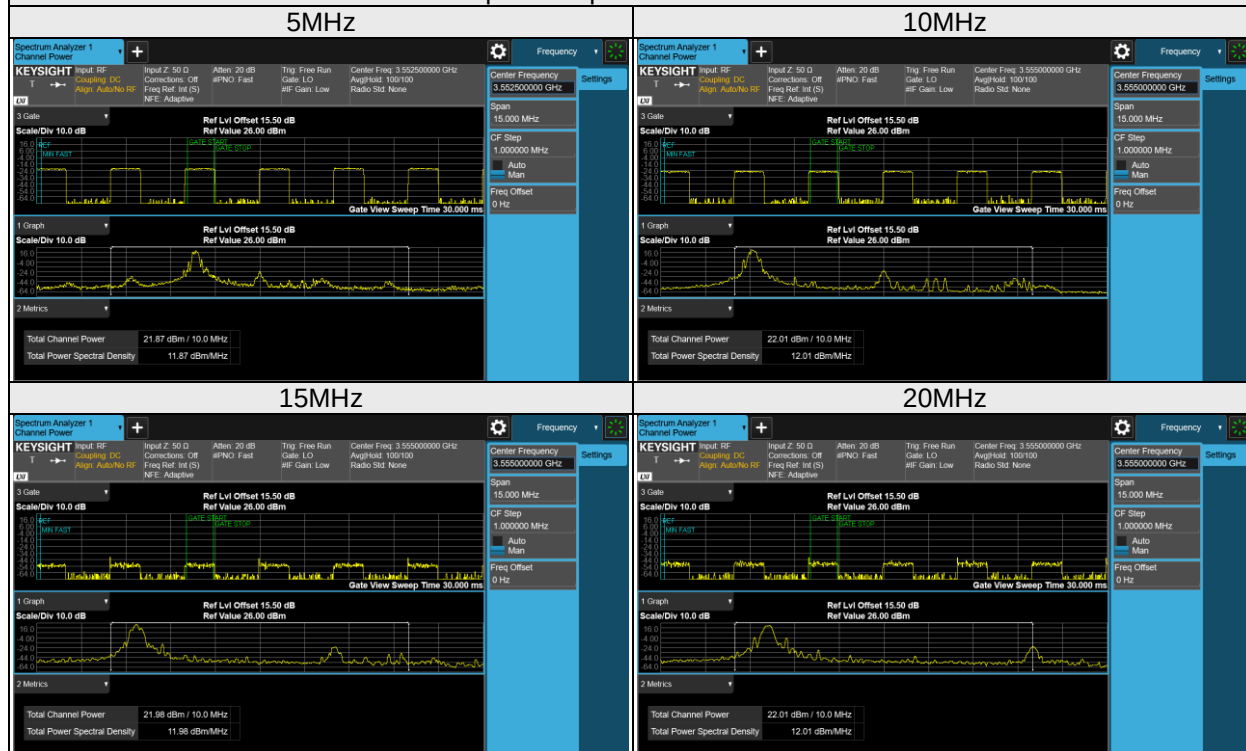
| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               |
|           |         |           | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 10M  | 1       | 0         | 22.01  | 21.61  | 21.49   | 0             | 20.96  | 20.45  | 20.45   | 1             | 19.86  | 19.45  | 19.46   | 2             |
|           | 1       | 24        | 21.77  | 21.35  | 21.40   | 0             | 20.67  | 20.16  | 20.21   | 1             | 19.47  | 18.92  | 19.11   | 2             |
|           | 1       | 49        | 21.89  | 21.39  | 21.48   | 0             | 20.63  | 20.25  | 20.32   | 1             | 19.60  | 19.14  | 19.14   | 2             |
|           | 25      | 0         | 20.84  | 20.45  | 20.53   | 1             | 19.95  | 19.50  | 19.51   | 2             | 18.92  | 18.52  | 18.52   | 3             |
|           | 25      | 12        | 20.89  | 20.39  | 20.33   | 1             | 19.90  | 19.53  | 19.48   | 2             | 18.75  | 18.37  | 18.40   | 3             |
|           | 25      | 25        | 20.77  | 20.41  | 20.50   | 1             | 19.85  | 19.44  | 19.55   | 2             | 18.76  | 18.42  | 18.43   | 3             |
|           | 50      | 0         | 20.96  | 20.55  | 20.43   | 1             | 20.01  | 19.56  | 19.60   | 2             | 18.88  | 18.53  | 18.60   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               |
|           |         |           | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 15M  | 1       | 0         | 22.05  | 21.38  | 21.56   | 0             | 20.81  | 20.47  | 20.41   | 1             | 19.69  | 19.40  | 19.12   | 2             |
|           | 1       | 37        | 20.82  | 21.13  | 21.33   | 0             | 20.47  | 20.28  | 20.06   | 1             | 19.35  | 19.05  | 19.08   | 2             |
|           | 1       | 74        | 21.62  | 21.21  | 21.40   | 0             | 20.63  | 20.15  | 20.16   | 1             | 19.66  | 19.06  | 19.16   | 2             |
|           | 36      | 0         | 20.65  | 20.36  | 20.27   | 1             | 19.63  | 19.32  | 19.45   | 2             | 18.68  | 18.20  | 18.40   | 3             |
|           | 36      | 19        | 20.60  | 20.28  | 20.25   | 1             | 19.67  | 19.21  | 19.44   | 2             | 18.38  | 18.19  | 18.46   | 3             |
|           | 36      | 39        | 20.59  | 20.21  | 20.28   | 1             | 19.68  | 19.41  | 19.28   | 2             | 18.50  | 18.31  | 18.17   | 3             |
|           | 75      | 0         | 19.29  | 18.93  | 18.95   | 1             | 18.29  | 17.90  | 18.09   | 2             | 17.29  | 16.95  | 16.83   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               |
|           |         |           | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 20M  | 1       | 0         | 22.02  | 21.65  | 21.53   | 0             | 20.81  | 20.58  | 20.57   | 1             | 19.69  | 19.75  | 19.64   | 2             |
|           | 1       | 50        | 21.54  | 21.33  | 21.25   | 0             | 20.74  | 20.42  | 20.33   | 1             | 19.41  | 19.16  | 19.20   | 2             |
|           | 1       | 99        | 21.38  | 21.22  | 21.37   | 0             | 20.59  | 20.35  | 20.42   | 1             | 19.67  | 19.15  | 19.38   | 2             |
|           | 50      | 0         | 20.77  | 20.33  | 20.19   | 1             | 19.61  | 19.29  | 19.22   | 2             | 19.62  | 18.27  | 18.33   | 3             |
|           | 50      | 25        | 20.58  | 20.34  | 20.22   | 1             | 19.49  | 19.27  | 19.24   | 2             | 18.57  | 18.26  | 18.15   | 3             |
|           | 50      | 50        | 20.61  | 20.27  | 20.33   | 1             | 19.51  | 19.13  | 19.21   | 2             | 18.46  | 18.29  | 18.14   | 3             |
|           | 100     | 0         | 17.81  | 17.50  | 17.47   | 1             | 16.79  | 16.40  | 16.45   | 2             | 15.71  | 15.50  | 15.41   | 3             |

## Band 42

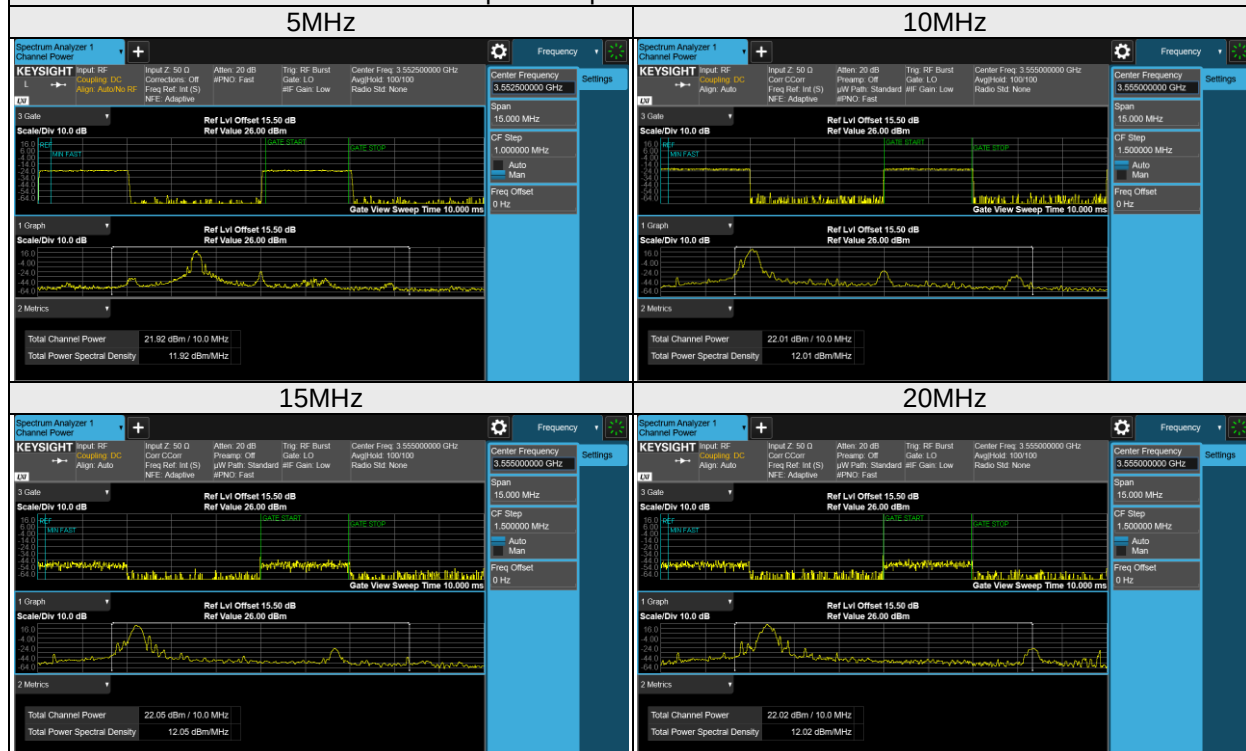
### Spectrum plot of worst case





## Band 48

### Spectrum plot of worst case



### EIRP (dBm/10MHz)

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               |
|           |         |           | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 5M   | 1       | 0         | 22.79  | 22.35  | 22.38   | 0             | 21.57  | 21.08  | 21.03   | 1             | 20.36  | 19.80  | 19.73   | 2             |
|           | 1       | 12        | 22.56  | 22.34  | 22.35   | 0             | 21.51  | 21.03  | 20.99   | 1             | 20.23  | 19.71  | 19.71   | 2             |
|           | 1       | 24        | 22.55  | 22.37  | 22.34   | 0             | 21.46  | 21.01  | 20.98   | 1             | 20.09  | 19.65  | 19.69   | 2             |
|           | 12      | 0         | 21.63  | 21.19  | 21.24   | 1             | 20.71  | 20.26  | 20.29   | 2             | 19.67  | 19.27  | 19.24   | 3             |
|           | 12      | 6         | 21.59  | 21.16  | 21.29   | 1             | 20.80  | 20.31  | 20.33   | 2             | 19.71  | 19.15  | 19.16   | 3             |
|           | 12      | 13        | 21.56  | 21.15  | 21.16   | 1             | 20.76  | 20.30  | 20.35   | 2             | 19.58  | 19.16  | 19.21   | 3             |
|           | 25      | 0         | 21.67  | 21.23  | 21.41   | 1             | 20.79  | 20.43  | 20.45   | 2             | 19.91  | 19.28  | 19.34   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               |
|           |         |           | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 10M  | 1       | 0         | 22.93  | 22.50  | 22.43   | 0             | 21.80  | 21.46  | 21.38   | 1             | 20.76  | 20.37  | 20.37   | 2             |
|           | 1       | 24        | 22.79  | 22.33  | 22.41   | 0             | 21.57  | 21.29  | 21.23   | 1             | 20.38  | 19.91  | 20.20   | 2             |
|           | 1       | 49        | 22.76  | 22.29  | 22.40   | 0             | 21.53  | 21.26  | 21.27   | 1             | 20.49  | 20.15  | 20.09   | 2             |
|           | 25      | 0         | 21.74  | 21.35  | 21.47   | 1             | 20.79  | 20.41  | 20.39   | 2             | 19.81  | 19.47  | 19.48   | 3             |
|           | 25      | 12        | 21.73  | 21.34  | 21.29   | 1             | 20.87  | 20.47  | 20.49   | 2             | 19.68  | 19.31  | 19.38   | 3             |
|           | 25      | 25        | 21.71  | 21.31  | 21.41   | 1             | 20.80  | 20.38  | 20.45   | 2             | 19.69  | 19.37  | 19.36   | 3             |
|           | 50      | 0         | 21.87  | 21.46  | 21.39   | 1             | 20.93  | 20.47  | 20.49   | 2             | 19.82  | 19.51  | 19.49   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               |
|           |         |           | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 15M  | 1       | 0         | 22.90  | 22.29  | 22.47   | 0             | 21.70  | 21.36  | 21.31   | 1             | 20.59  | 20.28  | 20.04   | 2             |
|           | 1       | 37        | 21.71  | 22.11  | 22.29   | 0             | 21.45  | 21.18  | 21.00   | 1             | 20.33  | 20.02  | 20.00   | 2             |
|           | 1       | 74        | 22.58  | 22.12  | 22.36   | 0             | 21.58  | 21.09  | 21.07   | 1             | 20.56  | 19.99  | 20.08   | 2             |
|           | 36      | 0         | 21.56  | 21.27  | 21.21   | 1             | 20.56  | 20.20  | 20.35   | 2             | 19.59  | 19.09  | 19.32   | 3             |
|           | 36      | 19        | 21.57  | 21.19  | 21.15   | 1             | 20.57  | 20.14  | 20.39   | 2             | 19.28  | 19.14  | 19.38   | 3             |
|           | 36      | 39        | 21.53  | 21.11  | 21.19   | 1             | 20.58  | 20.35  | 20.22   | 2             | 19.36  | 19.20  | 19.09   | 3             |
|           | 75      | 0         | 20.20  | 19.86  | 19.91   | 1             | 19.22  | 18.87  | 19.02   | 2             | 18.22  | 17.91  | 17.76   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               |
|           |         |           | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 20M  | 1       | 0         | 22.93  | 22.59  | 22.47   | 0             | 21.75  | 21.46  | 21.50   | 1             | 20.59  | 20.70  | 20.58   | 2             |
|           | 1       | 50        | 22.49  | 22.28  | 22.16   | 0             | 21.70  | 21.33  | 21.28   | 1             | 20.35  | 20.10  | 20.15   | 2             |
|           | 1       | 99        | 22.32  | 22.17  | 22.31   | 0             | 21.49  | 21.28  | 21.31   | 1             | 20.53  | 20.09  | 20.29   | 2             |
|           | 50      | 0         | 21.71  | 21.26  | 21.12   | 1             | 20.50  | 20.22  | 20.19   | 2             | 20.57  | 19.16  | 19.27   | 3             |
|           | 50      | 25        | 21.46  | 21.25  | 21.16   | 1             | 20.45  | 20.25  | 20.16   | 2             | 19.49  | 19.17  | 19.09   | 3             |
|           | 50      | 50        | 21.58  | 21.22  | 21.28   | 1             | 20.47  | 20.12  | 20.14   | 2             | 19.38  | 19.19  | 19.12   | 3             |
|           | 100     | 0         | 18.74  | 18.41  | 18.40   | 1             | 17.70  | 17.35  | 17.33   | 2             | 16.69  | 16.45  | 16.35   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               |
|           |         |           | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 5M   | 1       | 0         | 22.84  | 22.35  | 22.38   | 0             | 21.60  | 21.10  | 21.06   | 1             | 20.34  | 19.82  | 19.74   | 2             |
|           | 1       | 12        | 22.71  | 22.34  | 22.35   | 0             | 21.49  | 21.05  | 20.94   | 1             | 20.27  | 19.73  | 19.69   | 2             |
|           | 1       | 24        | 22.73  | 22.37  | 22.34   | 0             | 21.40  | 21.03  | 21.00   | 1             | 20.07  | 19.66  | 19.63   | 2             |
|           | 12      | 0         | 21.59  | 21.18  | 21.26   | 1             | 20.74  | 20.27  | 20.35   | 2             | 19.65  | 19.24  | 19.24   | 3             |
|           | 12      | 6         | 21.65  | 21.14  | 21.28   | 1             | 20.84  | 20.32  | 20.30   | 2             | 19.72  | 19.14  | 19.19   | 3             |
|           | 12      | 13        | 21.57  | 21.17  | 21.17   | 1             | 20.79  | 20.28  | 20.29   | 2             | 19.56  | 19.17  | 19.17   | 3             |
|           | 25      | 0         | 21.70  | 21.22  | 21.43   | 1             | 20.82  | 20.45  | 20.41   | 2             | 19.88  | 19.30  | 19.32   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               |
|           |         |           | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 10M  | 1       | 0         | 22.93  | 22.53  | 22.41   | 0             | 21.88  | 21.37  | 21.37   | 1             | 20.78  | 20.37  | 20.38   | 2             |
|           | 1       | 24        | 22.69  | 22.27  | 22.32   | 0             | 21.59  | 21.08  | 21.13   | 1             | 20.39  | 19.84  | 20.03   | 2             |
|           | 1       | 49        | 22.81  | 22.31  | 22.40   | 0             | 21.55  | 21.17  | 21.24   | 1             | 20.52  | 20.06  | 20.06   | 2             |
|           | 25      | 0         | 21.76  | 21.37  | 21.45   | 1             | 20.87  | 20.42  | 20.43   | 2             | 19.84  | 19.44  | 19.44   | 3             |
|           | 25      | 12        | 21.81  | 21.31  | 21.25   | 1             | 20.82  | 20.45  | 20.40   | 2             | 19.67  | 19.29  | 19.32   | 3             |
|           | 25      | 25        | 21.69  | 21.33  | 21.42   | 1             | 20.77  | 20.36  | 20.47   | 2             | 19.68  | 19.34  | 19.35   | 3             |
|           | 50      | 0         | 21.88  | 21.47  | 21.35   | 1             | 20.93  | 20.48  | 20.52   | 2             | 19.80  | 19.45  | 19.52   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               |
|           |         |           | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 15M  | 1       | 0         | 22.97  | 22.30  | 22.48   | 0             | 21.73  | 21.39  | 21.33   | 1             | 20.61  | 20.32  | 20.04   | 2             |
|           | 1       | 37        | 21.74  | 22.05  | 22.25   | 0             | 21.39  | 21.20  | 20.98   | 1             | 20.27  | 19.97  | 20.00   | 2             |
|           | 1       | 74        | 22.54  | 22.13  | 22.32   | 0             | 21.55  | 21.07  | 21.08   | 1             | 20.58  | 19.98  | 20.08   | 2             |
|           | 36      | 0         | 21.57  | 21.28  | 21.19   | 1             | 20.55  | 20.24  | 20.37   | 2             | 19.60  | 19.12  | 19.32   | 3             |
|           | 36      | 19        | 21.52  | 21.20  | 21.17   | 1             | 20.59  | 20.13  | 20.36   | 2             | 19.30  | 19.11  | 19.38   | 3             |
|           | 36      | 39        | 21.51  | 21.13  | 21.20   | 1             | 20.60  | 20.33  | 20.20   | 2             | 19.42  | 19.23  | 19.09   | 3             |
|           | 75      | 0         | 20.21  | 19.85  | 19.87   | 1             | 19.21  | 18.82  | 19.01   | 2             | 18.21  | 17.87  | 17.75   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               |
|           |         |           | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 20M  | 1       | 0         | 22.94  | 22.57  | 22.45   | 0             | 21.73  | 21.50  | 21.49   | 1             | 20.61  | 20.67  | 20.56   | 2             |
|           | 1       | 50        | 22.46  | 22.25  | 22.17   | 0             | 21.66  | 21.34  | 21.25   | 1             | 20.33  | 20.08  | 20.12   | 2             |
|           | 1       | 99        | 22.30  | 22.14  | 22.29   | 0             | 21.51  | 21.27  | 21.34   | 1             | 20.59  | 20.07  | 20.30   | 2             |
|           | 50      | 0         | 21.69  | 21.25  | 21.11   | 1             | 20.53  | 20.21  | 20.14   | 2             | 20.54  | 19.19  | 19.25   | 3             |
|           | 50      | 25        | 21.50  | 21.26  | 21.14   | 1             | 20.41  | 20.19  | 20.16   | 2             | 19.49  | 19.18  | 19.07   | 3             |
|           | 50      | 50        | 21.53  | 21.19  | 21.25   | 1             | 20.43  | 20.05  | 20.13   | 2             | 19.38  | 19.21  | 19.06   | 3             |
|           | 100     | 0         | 18.73  | 18.42  | 18.39   | 1             | 17.71  | 17.32  | 17.37   | 2             | 16.63  | 16.42  | 16.33   | 3             |

### Conducted Full Power

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               |
|           |         |           | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 5M   | 1       | 0         | 21.87  | 21.43  | 21.46   | 0             | 20.65  | 20.16  | 20.11   | 1             | 19.44  | 18.88  | 18.81   | 2             |
|           | 1       | 12        | 21.64  | 21.42  | 21.43   | 0             | 20.59  | 20.11  | 20.07   | 1             | 19.31  | 18.79  | 18.79   | 2             |
|           | 1       | 24        | 21.63  | 21.45  | 21.42   | 0             | 20.54  | 20.09  | 20.06   | 1             | 19.17  | 18.73  | 18.77   | 2             |
|           | 12      | 0         | 20.71  | 20.27  | 20.32   | 1             | 19.79  | 19.34  | 19.37   | 2             | 18.75  | 18.35  | 18.32   | 3             |
|           | 12      | 6         | 20.67  | 20.24  | 20.37   | 1             | 19.88  | 19.39  | 19.41   | 2             | 18.79  | 18.23  | 18.24   | 3             |
|           | 12      | 13        | 20.64  | 20.23  | 20.24   | 1             | 19.84  | 19.38  | 19.43   | 2             | 18.66  | 18.24  | 18.29   | 3             |
|           | 25      | 0         | 20.75  | 20.31  | 20.49   | 1             | 19.87  | 19.51  | 19.53   | 2             | 18.99  | 18.36  | 18.42   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               |
|           |         |           | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 10M  | 1       | 0         | 22.01  | 21.58  | 21.51   | 0             | 20.88  | 20.54  | 20.46   | 1             | 19.84  | 19.45  | 19.45   | 2             |
|           | 1       | 24        | 21.87  | 21.41  | 21.49   | 0             | 20.65  | 20.37  | 20.31   | 1             | 19.46  | 18.99  | 19.28   | 2             |
|           | 1       | 49        | 21.84  | 21.37  | 21.48   | 0             | 20.61  | 20.34  | 20.35   | 1             | 19.57  | 19.23  | 19.17   | 2             |
|           | 25      | 0         | 20.82  | 20.43  | 20.55   | 1             | 19.87  | 19.49  | 19.47   | 2             | 18.89  | 18.55  | 18.56   | 3             |
|           | 25      | 12        | 20.81  | 20.42  | 20.37   | 1             | 19.95  | 19.55  | 19.57   | 2             | 18.76  | 18.39  | 18.46   | 3             |
|           | 25      | 25        | 20.79  | 20.39  | 20.49   | 1             | 19.88  | 19.46  | 19.53   | 2             | 18.77  | 18.45  | 18.44   | 3             |
|           | 50      | 0         | 20.95  | 20.54  | 20.47   | 1             | 20.01  | 19.55  | 19.57   | 2             | 18.90  | 18.59  | 18.57   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               |
|           |         |           | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 15M  | 1       | 0         | 22.04  | 21.49  | 21.66   | 0             | 21.01  | 20.58  | 20.51   | 1             | 19.87  | 19.56  | 19.38   | 2             |
|           | 1       | 37        | 21.10  | 21.38  | 21.46   | 0             | 20.70  | 20.36  | 20.36   | 1             | 19.56  | 19.17  | 19.29   | 2             |
|           | 1       | 74        | 21.81  | 21.37  | 21.50   | 0             | 20.88  | 20.33  | 20.39   | 1             | 19.84  | 19.27  | 19.31   | 2             |
|           | 36      | 0         | 20.87  | 20.51  | 20.54   | 1             | 19.81  | 19.61  | 19.61   | 2             | 18.80  | 18.45  | 18.61   | 3             |
|           | 36      | 19        | 20.84  | 20.45  | 20.49   | 1             | 19.88  | 19.57  | 19.66   | 2             | 18.65  | 18.36  | 18.55   | 3             |
|           | 36      | 39        | 20.80  | 20.38  | 20.48   | 1             | 19.84  | 19.50  | 19.58   | 2             | 18.77  | 18.44  | 18.43   | 3             |
|           | 75      | 0         | 20.87  | 20.49  | 20.60   | 1             | 19.95  | 19.61  | 19.67   | 2             | 18.79  | 18.60  | 18.46   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               |
|           |         |           | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 20M  | 1       | 0         | 22.04  | 21.69  | 21.57   | 0             | 20.98  | 20.84  | 20.71   | 1             | 19.88  | 19.88  | 19.75   | 2             |
|           | 1       | 50        | 21.77  | 21.43  | 21.38   | 0             | 20.91  | 20.54  | 20.53   | 1             | 19.73  | 19.40  | 19.49   | 2             |
|           | 1       | 99        | 21.69  | 21.33  | 21.55   | 0             | 20.88  | 20.45  | 20.66   | 1             | 19.86  | 19.37  | 19.55   | 2             |
|           | 50      | 0         | 20.90  | 20.46  | 20.48   | 1             | 19.91  | 19.51  | 19.57   | 2             | 18.85  | 18.45  | 18.51   | 3             |
|           | 50      | 25        | 20.83  | 20.46  | 20.55   | 1             | 19.79  | 19.53  | 19.56   | 2             | 18.76  | 18.38  | 18.37   | 3             |
|           | 50      | 50        | 20.81  | 20.47  | 20.47   | 1             | 19.81  | 19.37  | 19.47   | 2             | 18.65  | 18.46  | 18.28   | 3             |
|           | 100     | 0         | 20.84  | 20.45  | 20.43   | 1             | 19.88  | 19.50  | 19.53   | 2             | 18.83  | 18.45  | 18.45   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               |
|           |         |           | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 5M   | 1       | 0         | 21.92  | 21.43  | 21.46   | 0             | 20.68  | 20.18  | 20.14   | 1             | 19.42  | 18.90  | 18.82   | 2             |
|           | 1       | 12        | 21.79  | 21.42  | 21.43   | 0             | 20.57  | 20.13  | 20.02   | 1             | 19.35  | 18.81  | 18.77   | 2             |
|           | 1       | 24        | 21.81  | 21.45  | 21.42   | 0             | 20.48  | 20.11  | 20.08   | 1             | 19.15  | 18.74  | 18.71   | 2             |
|           | 12      | 0         | 20.67  | 20.26  | 20.34   | 1             | 19.82  | 19.35  | 19.43   | 2             | 18.73  | 18.32  | 18.32   | 3             |
|           | 12      | 6         | 20.73  | 20.22  | 20.36   | 1             | 19.92  | 19.40  | 19.38   | 2             | 18.80  | 18.22  | 18.27   | 3             |
|           | 12      | 13        | 20.65  | 20.25  | 20.25   | 1             | 19.87  | 19.36  | 19.37   | 2             | 18.64  | 18.25  | 18.25   | 3             |
|           | 25      | 0         | 20.78  | 20.30  | 20.51   | 1             | 19.90  | 19.53  | 19.49   | 2             | 18.96  | 18.38  | 18.40   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               |
|           |         |           | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 10M  | 1       | 0         | 22.01  | 21.61  | 21.49   | 0             | 20.96  | 20.45  | 20.45   | 1             | 19.86  | 19.45  | 19.46   | 2             |
|           | 1       | 24        | 21.77  | 21.35  | 21.40   | 0             | 20.67  | 20.16  | 20.21   | 1             | 19.47  | 18.92  | 19.11   | 2             |
|           | 1       | 49        | 21.89  | 21.39  | 21.48   | 0             | 20.63  | 20.25  | 20.32   | 1             | 19.60  | 19.14  | 19.14   | 2             |
|           | 25      | 0         | 20.84  | 20.45  | 20.53   | 1             | 19.95  | 19.50  | 19.51   | 2             | 18.92  | 18.52  | 18.52   | 3             |
|           | 25      | 12        | 20.89  | 20.39  | 20.33   | 1             | 19.90  | 19.53  | 19.48   | 2             | 18.75  | 18.37  | 18.40   | 3             |
|           | 25      | 25        | 20.77  | 20.41  | 20.50   | 1             | 19.85  | 19.44  | 19.55   | 2             | 18.76  | 18.42  | 18.43   | 3             |
|           | 50      | 0         | 20.96  | 20.55  | 20.43   | 1             | 20.01  | 19.56  | 19.60   | 2             | 18.88  | 18.53  | 18.60   | 3             |

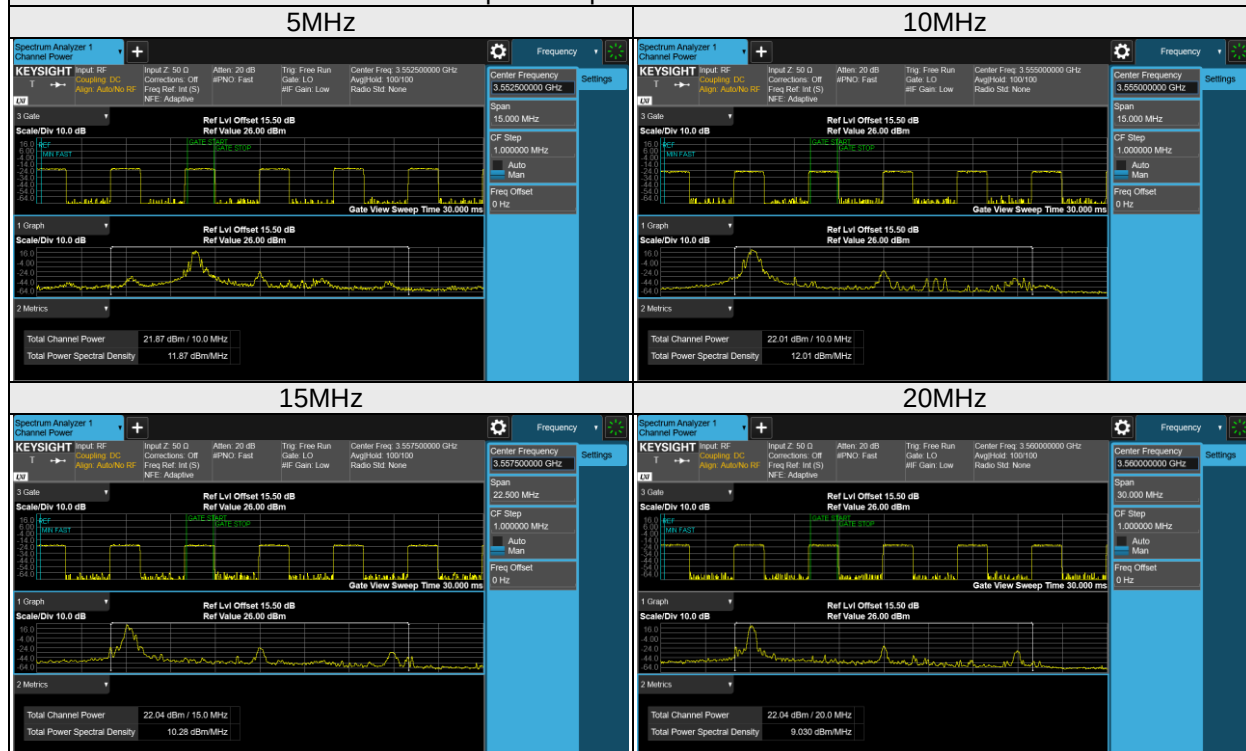


| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               |
|           |         |           | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 15M  | 1       | 0         | 22.07  | 21.47  | 21.61   | 0             | 21.00  | 20.57  | 20.52   | 1             | 19.85  | 19.57  | 19.36   | 2             |
|           | 1       | 37        | 21.00  | 21.38  | 21.43   | 0             | 20.66  | 20.39  | 20.35   | 1             | 19.53  | 19.18  | 19.28   | 2             |
|           | 1       | 74        | 21.82  | 21.36  | 21.54   | 0             | 20.87  | 20.31  | 20.41   | 1             | 19.84  | 19.26  | 19.29   | 2             |
|           | 36      | 0         | 20.89  | 20.55  | 20.55   | 1             | 19.89  | 19.62  | 19.63   | 2             | 18.79  | 18.47  | 18.60   | 3             |
|           | 36      | 19        | 20.86  | 20.43  | 20.43   | 1             | 19.81  | 19.50  | 19.61   | 2             | 18.62  | 18.36  | 18.57   | 3             |
|           | 36      | 39        | 20.77  | 20.39  | 20.44   | 1             | 19.85  | 19.53  | 19.55   | 2             | 18.76  | 18.46  | 18.42   | 3             |
|           | 75      | 0         | 20.85  | 20.48  | 20.58   | 1             | 19.92  | 19.56  | 19.66   | 2             | 18.81  | 18.59  | 18.48   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               |
|           |         |           | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 20M  | 1       | 0         | 22.06  | 21.69  | 21.55   | 0             | 21.02  | 20.84  | 20.69   | 1             | 19.85  | 19.85  | 19.76   | 2             |
|           | 1       | 50        | 21.75  | 21.40  | 21.39   | 0             | 20.89  | 20.55  | 20.57   | 1             | 19.71  | 19.37  | 19.45   | 2             |
|           | 1       | 99        | 21.66  | 21.32  | 21.53   | 0             | 20.85  | 20.46  | 20.67   | 1             | 19.83  | 19.38  | 19.53   | 2             |
|           | 50      | 0         | 20.91  | 20.43  | 20.48   | 1             | 19.89  | 19.55  | 19.52   | 2             | 19.86  | 18.46  | 18.49   | 3             |
|           | 50      | 25        | 20.79  | 20.46  | 20.51   | 1             | 19.78  | 19.47  | 19.50   | 2             | 18.79  | 18.38  | 18.34   | 3             |
|           | 50      | 50        | 20.75  | 20.43  | 20.45   | 1             | 19.79  | 19.38  | 19.46   | 2             | 18.60  | 18.45  | 18.31   | 3             |
|           | 100     | 0         | 20.82  | 20.49  | 20.39   | 1             | 19.85  | 19.49  | 19.48   | 2             | 18.88  | 18.42  | 18.41   | 3             |

## Band 42

### Spectrum plot of worst case



## Band 48

### Spectrum plot of worst case



### EIRP Full Power

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               | 43115  | 43340  | 43565   |               |
|           |         |           | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               | 3552.5 | 3575   | 3597.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 5M   | 1       | 0         | 22.79  | 22.35  | 22.38   | 0             | 21.57  | 21.08  | 21.03   | 1             | 20.36  | 19.80  | 19.73   | 2             |
|           | 1       | 12        | 22.56  | 22.34  | 22.35   | 0             | 21.51  | 21.03  | 20.99   | 1             | 20.23  | 19.71  | 19.71   | 2             |
|           | 1       | 24        | 22.55  | 22.37  | 22.34   | 0             | 21.46  | 21.01  | 20.98   | 1             | 20.09  | 19.65  | 19.69   | 2             |
|           | 12      | 0         | 21.63  | 21.19  | 21.24   | 1             | 20.71  | 20.26  | 20.29   | 2             | 19.67  | 19.27  | 19.24   | 3             |
|           | 12      | 6         | 21.59  | 21.16  | 21.29   | 1             | 20.80  | 20.31  | 20.33   | 2             | 19.71  | 19.15  | 19.16   | 3             |
|           | 12      | 13        | 21.56  | 21.15  | 21.16   | 1             | 20.76  | 20.30  | 20.35   | 2             | 19.58  | 19.16  | 19.21   | 3             |
|           | 25      | 0         | 21.67  | 21.23  | 21.41   | 1             | 20.79  | 20.43  | 20.45   | 2             | 19.91  | 19.28  | 19.34   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               | 43140  | 43340  | 43540   |               |
|           |         |           | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               | 3555   | 3575   | 3595    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 10M  | 1       | 0         | 22.93  | 22.50  | 22.43   | 0             | 21.80  | 21.46  | 21.38   | 1             | 20.76  | 20.37  | 20.37   | 2             |
|           | 1       | 24        | 22.79  | 22.33  | 22.41   | 0             | 21.57  | 21.29  | 21.23   | 1             | 20.38  | 19.91  | 20.20   | 2             |
|           | 1       | 49        | 22.76  | 22.29  | 22.40   | 0             | 21.53  | 21.26  | 21.27   | 1             | 20.49  | 20.15  | 20.09   | 2             |
|           | 25      | 0         | 21.74  | 21.35  | 21.47   | 1             | 20.79  | 20.41  | 20.39   | 2             | 19.81  | 19.47  | 19.48   | 3             |
|           | 25      | 12        | 21.73  | 21.34  | 21.29   | 1             | 20.87  | 20.47  | 20.49   | 2             | 19.68  | 19.31  | 19.38   | 3             |
|           | 25      | 25        | 21.71  | 21.31  | 21.41   | 1             | 20.80  | 20.38  | 20.45   | 2             | 19.69  | 19.37  | 19.36   | 3             |
|           | 50      | 0         | 21.87  | 21.46  | 21.39   | 1             | 20.93  | 20.47  | 20.49   | 2             | 19.82  | 19.51  | 19.49   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               | 43165  | 43340  | 43515   |               |
|           |         |           | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               | 3557.5 | 3575   | 3592.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 15M  | 1       | 0         | 22.96  | 22.41  | 22.58   | 0             | 21.93  | 21.50  | 21.43   | 1             | 20.79  | 20.48  | 20.30   | 2             |
|           | 1       | 37        | 22.02  | 22.30  | 22.38   | 0             | 21.62  | 21.28  | 21.28   | 1             | 20.48  | 20.09  | 20.21   | 2             |
|           | 1       | 74        | 22.73  | 22.29  | 22.42   | 0             | 21.80  | 21.25  | 21.31   | 1             | 20.76  | 20.19  | 20.23   | 2             |
|           | 36      | 0         | 21.79  | 21.43  | 21.46   | 1             | 20.73  | 20.53  | 20.53   | 2             | 19.72  | 19.37  | 19.53   | 3             |
|           | 36      | 19        | 21.76  | 21.37  | 21.41   | 1             | 20.80  | 20.49  | 20.58   | 2             | 19.57  | 19.28  | 19.47   | 3             |
|           | 36      | 39        | 21.72  | 21.30  | 21.40   | 1             | 20.76  | 20.42  | 20.50   | 2             | 19.69  | 19.36  | 19.35   | 3             |
|           | 75      | 0         | 21.79  | 21.41  | 21.52   | 1             | 20.87  | 20.53  | 20.59   | 2             | 19.71  | 19.52  | 19.38   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               | 43190  | 43340  | 43490   |               |
|           |         |           | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               | 3560   | 3575   | 3590    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 42 / 20M  | 1       | 0         | 22.96  | 22.61  | 22.49   | 0             | 21.90  | 21.76  | 21.63   | 1             | 20.80  | 20.80  | 20.67   | 2             |
|           | 1       | 50        | 22.69  | 22.35  | 22.30   | 0             | 21.83  | 21.46  | 21.45   | 1             | 20.65  | 20.32  | 20.41   | 2             |
|           | 1       | 99        | 22.61  | 22.25  | 22.47   | 0             | 21.80  | 21.37  | 21.58   | 1             | 20.78  | 20.29  | 20.47   | 2             |
|           | 50      | 0         | 21.82  | 21.38  | 21.40   | 1             | 20.83  | 20.43  | 20.49   | 2             | 19.77  | 19.37  | 19.43   | 3             |
|           | 50      | 25        | 21.75  | 21.38  | 21.47   | 1             | 20.71  | 20.45  | 20.48   | 2             | 19.68  | 19.30  | 19.29   | 3             |
|           | 50      | 50        | 21.73  | 21.39  | 21.39   | 1             | 20.73  | 20.29  | 20.39   | 2             | 19.57  | 19.38  | 19.20   | 3             |
|           | 100     | 0         | 21.76  | 21.37  | 21.35   | 1             | 20.80  | 20.42  | 20.45   | 2             | 19.75  | 19.37  | 19.37   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               | 55265  | 55990  | 56715   |               |
|           |         |           | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               | 3552.5 | 3625   | 3697.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 5M   | 1       | 0         | 22.84  | 22.35  | 22.38   | 0             | 21.60  | 21.10  | 21.06   | 1             | 20.34  | 19.82  | 19.74   | 2             |
|           | 1       | 12        | 22.71  | 22.34  | 22.35   | 0             | 21.49  | 21.05  | 20.94   | 1             | 20.27  | 19.73  | 19.69   | 2             |
|           | 1       | 24        | 22.73  | 22.37  | 22.34   | 0             | 21.40  | 21.03  | 21.00   | 1             | 20.07  | 19.66  | 19.63   | 2             |
|           | 12      | 0         | 21.59  | 21.18  | 21.26   | 1             | 20.74  | 20.27  | 20.35   | 2             | 19.65  | 19.24  | 19.24   | 3             |
|           | 12      | 6         | 21.65  | 21.14  | 21.28   | 1             | 20.84  | 20.32  | 20.30   | 2             | 19.72  | 19.14  | 19.19   | 3             |
|           | 12      | 13        | 21.57  | 21.17  | 21.17   | 1             | 20.79  | 20.28  | 20.29   | 2             | 19.56  | 19.17  | 19.17   | 3             |
|           | 25      | 0         | 21.70  | 21.22  | 21.43   | 1             | 20.82  | 20.45  | 20.41   | 2             | 19.88  | 19.30  | 19.32   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               | 55290  | 55990  | 56690   |               |
|           |         |           | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               | 3555   | 3625   | 3695    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 10M  | 1       | 0         | 22.93  | 22.53  | 22.41   | 0             | 21.88  | 21.37  | 21.37   | 1             | 20.78  | 20.37  | 20.38   | 2             |
|           | 1       | 24        | 22.69  | 22.27  | 22.32   | 0             | 21.59  | 21.08  | 21.13   | 1             | 20.39  | 19.84  | 20.03   | 2             |
|           | 1       | 49        | 22.81  | 22.31  | 22.40   | 0             | 21.55  | 21.17  | 21.24   | 1             | 20.52  | 20.06  | 20.06   | 2             |
|           | 25      | 0         | 21.76  | 21.37  | 21.45   | 1             | 20.87  | 20.42  | 20.43   | 2             | 19.84  | 19.44  | 19.44   | 3             |
|           | 25      | 12        | 21.81  | 21.31  | 21.25   | 1             | 20.82  | 20.45  | 20.40   | 2             | 19.67  | 19.29  | 19.32   | 3             |
|           | 25      | 25        | 21.69  | 21.33  | 21.42   | 1             | 20.77  | 20.36  | 20.47   | 2             | 19.68  | 19.34  | 19.35   | 3             |
|           | 50      | 0         | 21.88  | 21.47  | 21.35   | 1             | 20.93  | 20.48  | 20.52   | 2             | 19.80  | 19.45  | 19.52   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               | 55315  | 55990  | 56665   |               |
|           |         |           | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               | 3557.5 | 3625   | 3692.5  |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 15M  | 1       | 0         | 22.99  | 22.39  | 22.53   | 0             | 21.92  | 21.49  | 21.44   | 1             | 20.77  | 20.49  | 20.28   | 2             |
|           | 1       | 37        | 21.92  | 22.30  | 22.35   | 0             | 21.58  | 21.31  | 21.27   | 1             | 20.45  | 20.10  | 20.20   | 2             |
|           | 1       | 74        | 22.74  | 22.28  | 22.46   | 0             | 21.79  | 21.23  | 21.33   | 1             | 20.76  | 20.18  | 20.21   | 2             |
|           | 36      | 0         | 21.81  | 21.47  | 21.47   | 1             | 20.81  | 20.54  | 20.55   | 2             | 19.71  | 19.39  | 19.52   | 3             |
|           | 36      | 19        | 21.78  | 21.35  | 21.35   | 1             | 20.73  | 20.42  | 20.53   | 2             | 19.54  | 19.28  | 19.49   | 3             |
|           | 36      | 39        | 21.69  | 21.31  | 21.36   | 1             | 20.77  | 20.45  | 20.47   | 2             | 19.68  | 19.38  | 19.34   | 3             |
|           | 75      | 0         | 21.77  | 21.40  | 21.50   | 1             | 20.84  | 20.48  | 20.58   | 2             | 19.73  | 19.51  | 19.40   | 3             |

| Band / BW | RB Size | RB Offset | QPSK   |        |         | 3GPP MPR (dB) | 16QAM  |        |         | 3GPP MPR (dB) | 64QAM  |        |         | 3GPP MPR (dB) |
|-----------|---------|-----------|--------|--------|---------|---------------|--------|--------|---------|---------------|--------|--------|---------|---------------|
|           |         |           | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               | Low CH | Mid CH | High CH |               |
|           |         |           | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               | 55340  | 55990  | 56640   |               |
|           |         |           | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               | 3560   | 3625   | 3690    |               |
|           |         |           | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               | MHz    | MHz    | MHz     |               |
| 48 / 20M  | 1       | 0         | 22.98  | 22.61  | 22.47   | 0             | 21.94  | 21.76  | 21.61   | 1             | 20.77  | 20.77  | 20.68   | 2             |
|           | 1       | 50        | 22.67  | 22.32  | 22.31   | 0             | 21.81  | 21.47  | 21.49   | 1             | 20.63  | 20.29  | 20.37   | 2             |
|           | 1       | 99        | 22.58  | 22.24  | 22.45   | 0             | 21.77  | 21.38  | 21.59   | 1             | 20.75  | 20.30  | 20.45   | 2             |
|           | 50      | 0         | 21.83  | 21.35  | 21.40   | 1             | 20.81  | 20.47  | 20.44   | 2             | 20.78  | 19.38  | 19.41   | 3             |
|           | 50      | 25        | 21.71  | 21.38  | 21.43   | 1             | 20.70  | 20.39  | 20.42   | 2             | 19.71  | 19.30  | 19.26   | 3             |
|           | 50      | 50        | 21.67  | 21.35  | 21.37   | 1             | 20.71  | 20.30  | 20.38   | 2             | 19.52  | 19.37  | 19.23   | 3             |
|           | 100     | 0         | 21.74  | 21.41  | 21.31   | 1             | 20.77  | 20.41  | 20.40   | 2             | 19.80  | 19.34  | 19.33   | 3             |

## 4.2 Modulation Characteristics Measurement

### 4.2.1 Limits of Modulation Characteristics

N/A

### 4.2.2 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.

### 4.2.3 Test Setup

