# FCC Test Report (Part 96)

| | |
|---|---|
| **Report No.:** | RF181220E07-1 |
| **FCC ID:** | I88LTE7480-S905 |
| **Test Model:** | LTE7480-S905 |
| **Received Date:** | Dec. 20, 2018 |
| **Test Date:** | Jan. 31 to Feb. 26, 2019 |
| **Issued Date:** | Mar. 27, 2019 |
| **Applicant:** | Zyxel Communications Corporation |
| **Address:** | No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan |
| **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 R.O.C. |
| **Test Location :** | E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C. |
| **FCC Registration / Designation Number:** | 723255 / TW2022 |

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## Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| RF181220E07-1 | Original release. | Mar. 27, 2019 |

## 1 Certificate of Conformity

| | |
|---|---|
| **Product:** | LTE-A Pro Outdoor Router |
| **Brand:** | ZYXEL |
| **Test Model:** | LTE7480-S905 |
| **Sample Status:** | ENGINEERING SAMPLE |
| **Applicant:** | Zyxel Communications Corporation |
| **Test Date:** | Jan. 31 to Feb. 26, 2019 |
| **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:** Mar. 27, 2019

Claire Kuan / Specialist

**Approved by :** _____ , **Date:** Mar. 27, 2019

May Chen / 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. |
| 2.1046<br>96.41(b) | Maximum Power Spectral Density | NA | Not Applicable. |
| 2.1047<br>96.41(a) | Modulation characteristics | Pass | Meet the requirement. |
| 96.41(g) | Peak to Average Ration | 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 -7.26dB at 14790.00MHz. |

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) (±) |
|---|---|---|
| Radiated Emissions up to 1 GHz | 30MHz ~ 1GHz | 4.9 dB |
| Radiated Emissions above 1 GHz | 1GHz ~ 6GHz | 5.1 dB |
| | 6GHz ~ 18GHz | 4.9 dB |
| | 18GHz ~ 40GHz | 5.2 dB |

### 2.2 Modification Record

There were no modifications required for compliance.

## 3 General Information

### 3.1 General Description of EUT

| | | |
|---|---|---|
| Product | LTE-A Pro Outdoor Router | |
| Brand | ZYXEL | |
| Test Model | LTE7480-S905 | |
| CPU Model No. | MT7621AT | |
| WiFi Chip Model No. | MT7603E | |
| LTE chip Model No. | SDX20 | |
| FW version | LTE7480-S905 V2.00(ABQT.0)C0 | |
| Status of EUT | ENGINEERING SAMPLE | |
| Power Supply Rating | DC 48V from adapter (POE) | |
| Modulation Type | QPSK, 16QAM, 64QAM | |
| Operating Frequency | Channel Bandwidth 5MHz | TX: 3552.5 ~ 3697.5 MHz |
| | | RX: 3552.5 ~ 3697.5 MHz |
| | Channel Bandwidth 10MHz | TX: 3555 ~ 3695 MHz |
| | | RX: 3555 ~ 3695 MHz |
| | Channel Bandwidth 15MHz | TX: 3557.5 ~ 3692.5 MHz |
| | | RX: 3557.5 ~ 3692.5 MHz |
| | Channel Bandwidth 20MHz | TX: 3560 ~ 3690 MHz |
| | | RX: 3560 ~ 3690 MHz |
| Channel Bandwidth | 5MHz, 10MHz, 15MHz & 20MHz | |
| Max. EIRP Power | Channel Bandwidth 5MHz | 22.77 dBm |
| | Channel Bandwidth 10MHz | 22.66 dBm |
| | Channel Bandwidth 15MHz | 22.75 dBm |
| | Channel Bandwidth 20MHz | 22.69 dBm |
| Emission Designator | Channel Bandwidth 5MHz | QPSK: 4M47G7D |
| | | 16QAM: 4M47D7W |
| | | 64QAM: 4M47D7W |
| | Channel Bandwidth 10MHz | QPSK: 8M92G7D |
| | | 16QAM: 8M94D7W |
| | | 64QAM: 8M92D7W |
| | Channel Bandwidth 15MHz | QPSK: 13M5G7D |
| | | 16QAM: 13M4D7W |
| | | 64QAM: 13M4D7W |
| | Channel Bandwidth 20MHz | QPSK: 17M9G7D |
| | | 16QAM: 17M8D7W |
| | | 64QAM: 17M8D7W |
| Antenna Type | Refer to note as below | |
| Antenna Connector | Refer to note as below | |
| Accessory Device | Adapter (POE) x 1 | |
| Data Cable Supplied | RJ45 cable (Unshielded, 1.8m) | |

Note:

1. There are WLAN and WWAN technology used for the EUT. The EUT has below radios as following table:

| Radio 1 | Radio 2 |
|---|---|
| WLAN (2.4GHz) | WWAN (LTE) / 3G |

2. Simultaneously transmission condition.

| Condition | Technology | |
|---|---|---|
| 1 | WLAN (2.4GHz) | WWAN (LTE) / 3G |

**Note:** The emission of the simultaneous operation has been evaluated and no non-compliance was found.

3. The EUT must be supplied with a adapter (POE) as following table:

| Brand | Model No. | Spec. |
|---|---|---|
| SHENZHEN | TPT24S48A-MC | Input: 100-240Vac, 0.5A, 50/60Hz<br>AC input cable: Unshielded 1.8m<br>Output: 48Vdc |

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

| Chain No. | Antenna Net Gain(dBi) | Frequency range | Antenna Type | Connector Type |
|---|---|---|---|---|
| WLAN-ANT0 | 6 | 2.4 ~ 2.4835GHz | PIFA | iPEX |
| WLAN-ANT1 | 5 | 2.4 ~ 2.4835GHz | PIFA | iPEX |
| WWAN_0 (TX & RX) | 9.85 | 3550 ~ 3700 MHz | Dipole | iPEX |
| WWAN_1 (RX only) | 9.85 | 3550 ~ 3700 MHz | Dipole | iPEX |
| WWAN_2 (RX only) | 9.85 | 3550 ~ 3700 MHz | Dipole | iPEX |
| WWAN_3 (RX only) | 9.85 | 3550 ~ 3700 MHz | Dipole | iPEX |

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.

### 3.2 Description of Test Modes

| Channel Bandwidth (MHz) | Channel |
|---|---|
| 5 | Low |
| | Middle |
| | High |
| 10 | Low |
| | Middle |
| | High |
| 15 | Low |
| | Middle |
| | High |
| 20 | Low |
| | Middle |
| | High |

### 3.2.1 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, 0 degree, Vertical +30 degree, Vertical -30 degree, 0 degree clockwise 45 degree and 0 degree counterclockwise 45 degree antenna ports and RB configs
The worst case was found when positioned on 0 degree and RB configs wors case is 1RB. Following channel(s) was (were) selected for the final test as listed below:

| Test Item | Available Channel | Tested Channel | Channel Bandwidth | Modulation |
|---|---|---|---|---|
| EIRP | 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 |
| 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 |
| 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 |

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

**Test Condition:**

| Test Item | Environmental Conditions | Input Power | Tested By |
|---|---|---|---|
| EIRP | 24deg. C, 58%RH | 120Vac, 60Hz | Allen Chuang |
| Modulation Characteristics | 20deg. C, 76%RH | 120Vac, 60Hz | Allen Chuang |
| Frequency Stability | 20deg. C, 76%RH | 120Vac, 60Hz | Allen Chuang |
| Occupied Bandwidth | 20deg. C, 76%RH | 120Vac, 60Hz | Allen Chuang |
| Peak to Average Ratio | 20deg. C, 76%RH | 120Vac, 60Hz | Allen Chuang |
| Conducted Emission | 20deg. C, 76%RH | 120Vac, 60Hz | Allen Chuang |
| Radiated Emission | 22deg. C, 64%RH | 120Vac, 60Hz | Robert Cheng |

### 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.

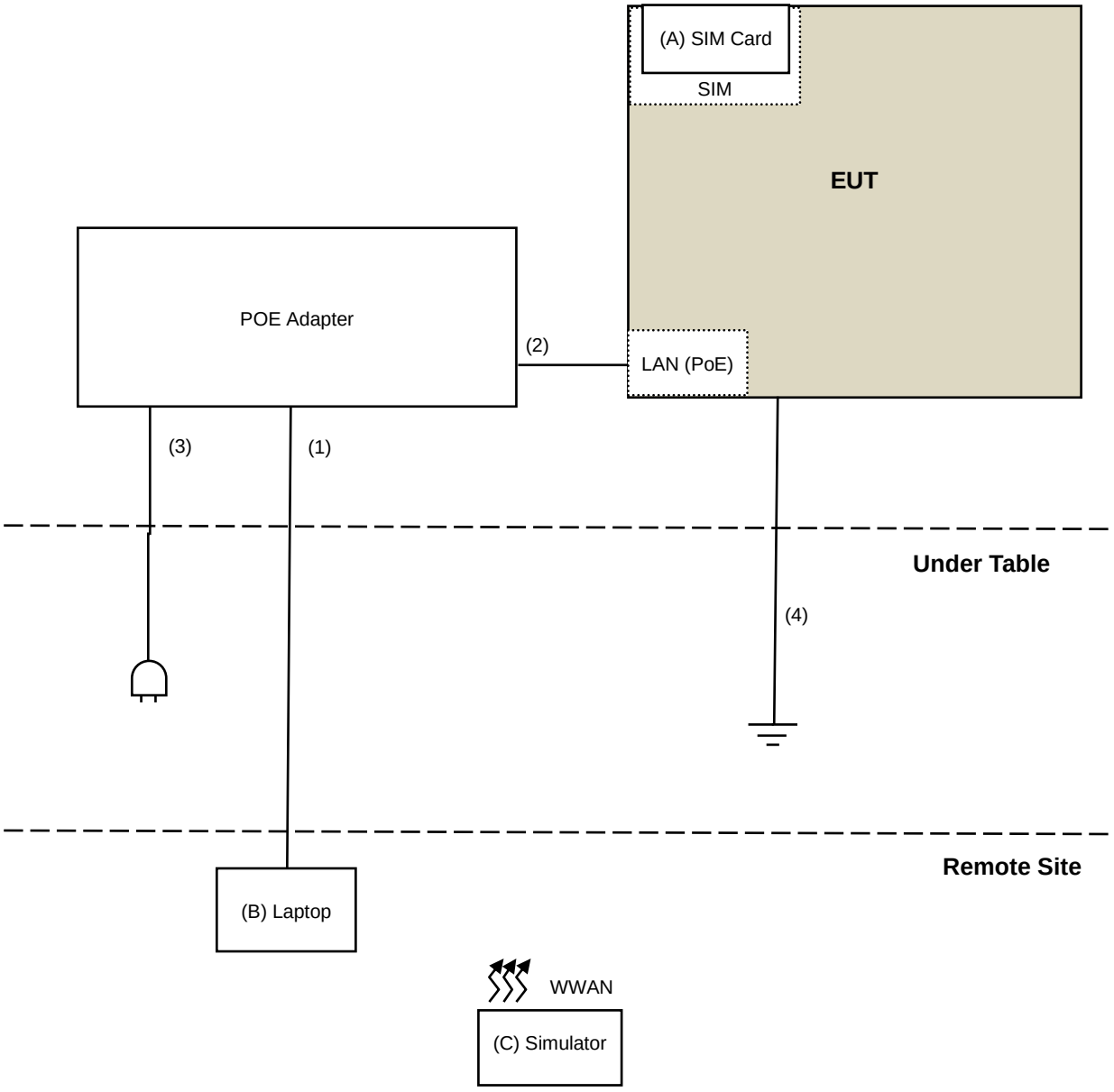
| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
|---|---|---|---|---|---|---|
| A. | SIM Card | R&S | NA | NA | NA | Provided by Lab |
| B. | Laptop | DELL | E6420 | B92T3R1 | FCC DoC | Provided by Lab |

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. | RJ-45 Cable | 1 | 10 | No | 0 | Provided by Lab |
| 2. | RJ-45 Cable | 1 | 1.8 | No | 0 | Supplied by client |
| 3. | AC Cable | 1 | 1.8 | No | 0 | Supplied by client |
| 4. | GND Cable | 1 | 2.8 | No | 0 | Provided by Lab |

### 3.3.1 Configuration of System under Test



### 3.4 General Description of Applied Standards

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

47 CFR FCC Part 96, Subpart E

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 940660 D01 Part 96 CBRS Equipment v01

ANSI/TIA/EIA-603-D-2010

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

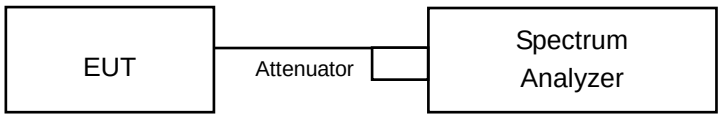
# 4 Test Types and Results

## 4.1 Maximum EIRP Measurement

### 4.1.1 Limits of Maximum EIRP Measurement

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

### 4.1.2 Test Setup



4.1.3 Test Instruments

For radiated emissions above 1GHz test:

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver Keysight | N9038A | MY54450088 | July 05, 2018 | July 04, 2019 |
| Horn_Antenna SCHWARZBECK | BBHA 9120D | 9120D-783 | Nov. 25, 2018 | Nov. 24, 2019 |
| Pre-Amplifier EMCI | EMC12630SE | 980385 | Aug. 16, 2018 | Aug. 15, 2019 |
| RF Cable | EMC104-SM-SM-1200 | 160923 | Jan. 28, 2019 | Jan. 27, 2020 |
| RF Cable | 104 RF cable | 131215 | Jan. 10, 2019 | Jan. 09, 2020 |
| RF Cable | EMC104-SM-SM-6000 | 180418 | May 07, 2018 | May 06, 2019 |
| Pre-Amplifier EMCI | EMC184045SE | 980387 | Jan. 28, 2019 | Jan. 27, 2020 |
| Horn_Antenna SCHWARZBECK | BBHA 9170 | BBHA9170519 | Nov. 25, 2018 | Nov. 24, 2019 |
| RF Cable | EMC102-KM-KM-1200 | 160924 | Jan. 28, 2019 | Jan. 27, 2020 |
| RF Cable | EMC102-KM-KM-1200 | 160925 | Jan. 28, 2019 | Jan. 27, 2020 |
| Software | ADT_Radiated_V8.7.08 | NA | NA | NA |
| Boresight Antenna Tower & Turn Table Max-Full | MF-7802BS | MF780208530 | 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. 4.
3. The CANADA Site Registration No. is 20331-2
4. Loop antenna was used for all emissions below 30 MHz.
5. Tested Date: Jan. 31, 2019

For other test items:

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|---|---|---|---|---|
| Test Receiver<br>Keysight | N9038A | MY54450088 | July 05, 2018 | July 04, 2019 |
| Pre-Amplifier<br>EMCI | EMC001340 | 980142 | Jan. 25, 2019 | Jan. 24, 2020 |
| Loop Antenna<br>Electro-Metrics | EM-6879 | 269 | Sep. 07, 2018 | Sep. 06, 2019 |
| RF Cable | NA | LOOPCAB-001 | Jan. 14, 2019 | Jan. 13, 2020 |
| RF Cable | NA | LOOPCAB-002 | Jan. 14, 2019 | Jan. 13, 2020 |
| Pre-Amplifier<br>Mini-Circuits | ZFL-1000VH2B | AMP-ZFL-01 | Oct. 30, 2018 | Oct. 29, 2019 |
| Trilog Broadband Antenna<br>SCHWARZBECK | VULB 9168 | 9168-406 | Nov. 22, 2018 | Nov. 21, 2019 |
| RF Cable | 8D | 966-4-1 | Mar. 21, 2018 | Mar. 20, 2019 |
| RF Cable | 8D | 966-4-2 | Mar. 21, 2018 | Mar. 20, 2019 |
| RF Cable | 8D | 966-4-3 | Mar. 21, 2018 | Mar. 20, 2019 |
| Fixed attenuator<br>Mini-Circuits | UNAT-5+ | PAD-3m-4-01 | Sep. 27, 2018 | Sep. 26, 2019 |
| Software | ADT_Radiated_V8.7.08 | NA | NA | NA |
| Boresight Antenna Tower & Turn Table<br>Max-Full | MF-7802BS | MF780208530 | NA | NA |
| Spectrum Analyzer<br>R&S | FSV40 | 100964 | June 20, 2018 | June 19, 2019 |
| Power meter<br>Anritsu | ML2495A | 1014008 | May 09, 2018 | May 08, 2019 |
| Power sensor<br>Anritsu | MA2411B | 0917122 | May 09, 2018 | May 08, 2019 |
| Fixed Attenuator<br>Mini-Circuits | MDCS18N-10 | MDCS18N-10-01 | Apr. 16, 2018 | Apr. 15, 2019 |

**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. 4.
3. The CANADA Site Registration No. is 20331-2
4. Loop antenna was used for all emissions below 30 MHz.
5. Tested Date: Feb. 11 to 26, 2019

### 4.1.4 Test Procedures

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 ≥ 3 × RBW.
5. Set number of points in sweep ≥ 2 × 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 ≥ 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 power measurement function, with the band limits set equal to the OBW band edges. If the instrument does not have a band 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.

### 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

| Channel | Freq. (MHz) | 5MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | QPSK | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3552.5 | 12.15 | 22.00 | | 23.0 | Pass |
| Middle | 3625 | 12.39 | 22.24 | | 23.0 | Pass |
| High | 3697.5 | 12.04 | 21.89 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 10MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | QPSK | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3555 | 12.06 | 21.91 | | 23.0 | Pass |
| Middle | 3625 | 12.48 | 22.33 | | 23.0 | Pass |
| High | 3695 | 12.51 | 22.36 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 15MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | QPSK | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3557.5 | 12.03 | 21.88 | | 23.0 | Pass |
| Middle | 3625 | 12.31 | 22.16 | | 23.0 | Pass |
| High | 3692.5 | 12.03 | 21.88 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 20MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | QPSK | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3560 | 12.07 | 21.92 | | 23.0 | Pass |
| Middle | 3625 | 12.40 | 22.25 | | 23.0 | Pass |
| High | 3690 | 12.09 | 21.94 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 5MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 16QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3552.5 | 12.40 | 22.25 | | 23.0 | Pass |
| Middle | 3625 | 12.92 | 22.77 | | 23.0 | Pass |
| High | 3697.5 | 12.43 | 22.28 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 10MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 16QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3555 | 12.45 | 22.30 | | 23.0 | Pass |
| Middle | 3625 | 12.81 | 22.66 | | 23.0 | Pass |
| High | 3695 | 12.29 | 22.14 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 15MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 16QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3557.5 | 12.55 | 22.40 | | 23.0 | Pass |
| Middle | 3625 | 12.90 | 22.75 | | 23.0 | Pass |
| High | 3692.5 | 12.59 | 22.44 | | 23.0 | Pass |

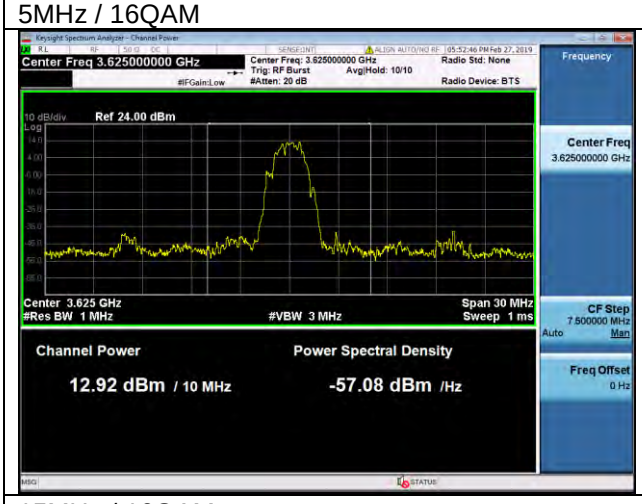
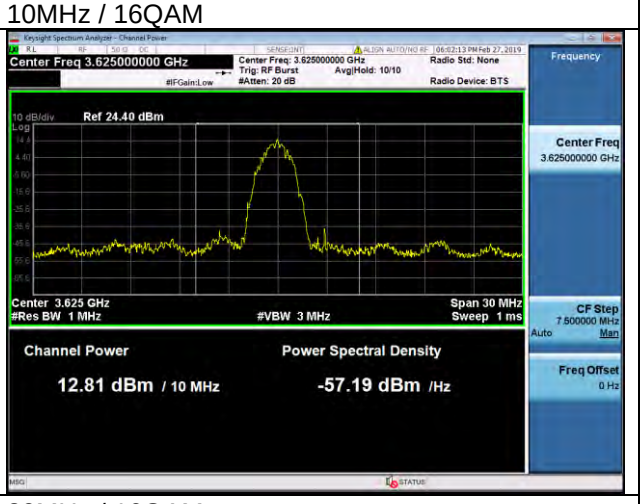
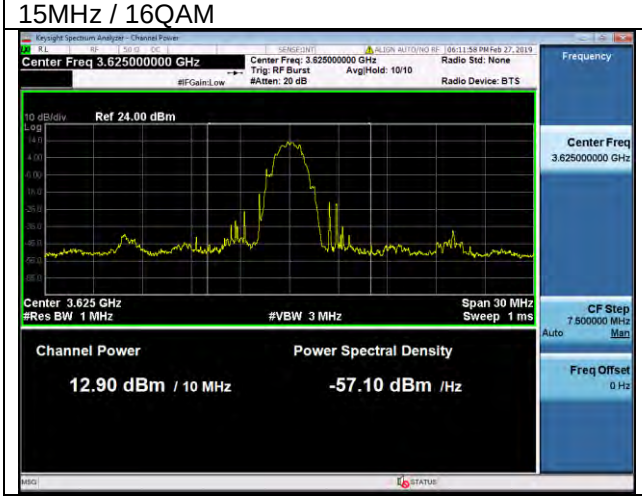
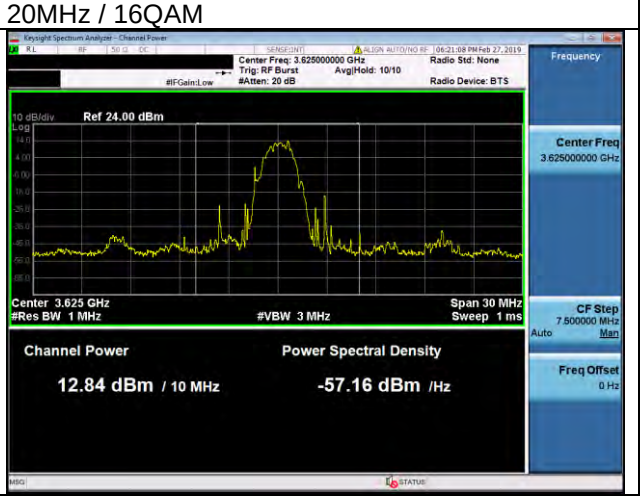
| Channel | Freq. (MHz) | 20MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 16QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3560 | 12.56 | 22.41 | | 23.0 | Pass |
| Middle | 3625 | 12.84 | 22.69 | | 23.0 | Pass |
| High | 3690 | 12.49 | 22.34 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 5MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 64QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3552.5 | 12.31 | 22.16 | | 23.0 | Pass |
| Middle | 3625 | 12.44 | 22.29 | | 23.0 | Pass |
| High | 3697.5 | 12.17 | 22.02 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 10MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 64QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3555 | 12.39 | 22.24 | | 23.0 | Pass |
| Middle | 3625 | 12.52 | 22.37 | | 23.0 | Pass |
| High | 3695 | 12.30 | 22.15 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 15MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 64QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3557.5 | 12.30 | 22.15 | | 23.0 | Pass |
| Middle | 3625 | 12.61 | 22.46 | | 23.0 | Pass |
| High | 3692.5 | 12.41 | 22.26 | | 23.0 | Pass |

| Channel | Freq. (MHz) | 20MHz | | | Limit (dBm/10MHz) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 64QAM | | | | |
| | | Conducted Average Power (dBm/10MHz) | Gain(dBi) | 9.85 | | |
| | | | EIRP | | Maximum | |
| Low | 3560 | 12.18 | 22.03 | | 23.0 | Pass |
| Middle | 3625 | 12.38 | 22.23 | | 23.0 | Pass |
| High | 3690 | 12.24 | 22.09 | | 23.0 | Pass |

| 5MHz / 16QAM | 10MHz / 16QAM |
|---|---|
|  |  |
| 15MHz / 16QAM | 20MHz / 16QAM |
|  |  |

## 4.2 Modulation Characteristics Measurement

### 4.2.1 Limits of Modulation Characteristics

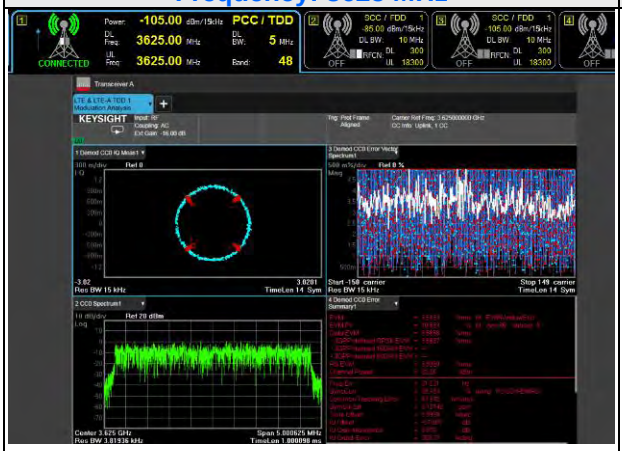
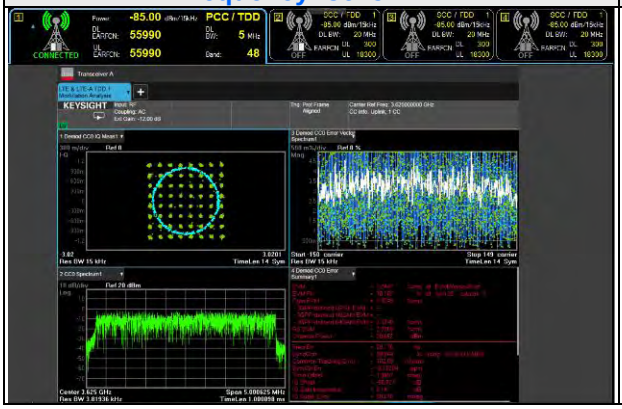
N/A

### 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

4.2.4 Test Results

| LTE QPSK / Channel Bandwidth: 5MHz / Frequency: 3625 MHz | LTE 16QAM / Channel Bandwidth: 5MHz / Frequency: 3625 MHz |
|---|---|
|  |  |
| **LTE 64QAM / Channel Bandwidth: 5MHz / Frequency: 3625 MHz** | |
|  | |

## 4.3 Frequency Stability Measurement

### 4.3.1 Limits of Frequency Stabiliity Measurement

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency band.

### 4.3.2 Test Procedure

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the AC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

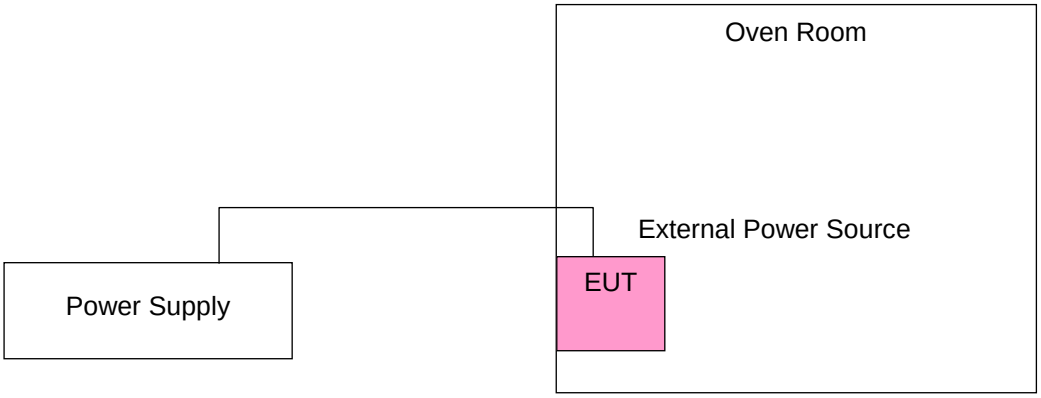
c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

**NOTE:** The frequency error was recorded frequency error from the communication simulator.

### 4.3.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

### 4.3.4 Test Setup



4.3.5 Test Results

Frequency Error vs. Voltage

| Voltage (Volts) | Frequency Error (MHz) | | | | Pass/Fail |
|---|---|---|---|---|---|
| | 5MHz | 10MHz | 15MHz | 20MHz | |
| 102 | 3625.000043 | 3625.000038 | 3625.000042 | 3625.000038 | Pass |
| 120 | 3625.000042 | 3625.000044 | 3625.000035 | 3625.000041 | Pass |
| 138 | 3625.000038 | 3625.000034 | 3625.000038 | 3625.000041 | Pass |

Frequency Error vs. Temperature.

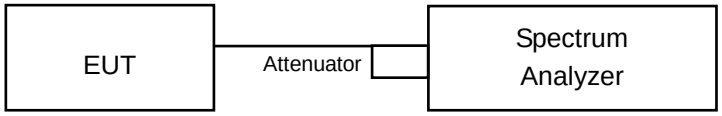
| TEMP. (℃) | Frequency Error (MHz) | | | | Pass/Fail |
|---|---|---|---|---|---|
| | 5MHz | 10MHz | 15MHz | 20MHz | |
| 75 | 3625.000035 | 3625.000041 | 3625.000040 | 3625.000044 | Pass |
| 70 | 3625.000041 | 3625.000037 | 3625.000039 | 3625.000042 | Pass |
| 60 | 3625.000044 | 3625.000035 | 3625.000038 | 3625.000043 | Pass |
| 50 | 3625.000042 | 3625.000035 | 3625.000043 | 3625.000034 | Pass |
| 40 | 3625.000042 | 3625.000040 | 3625.000043 | 3625.000040 | Pass |
| 30 | 3625.000041 | 3625.000039 | 3625.000042 | 3625.000040 | Pass |
| 20 | 3625.000037 | 3625.000041 | 3625.000043 | 3625.000041 | Pass |
| 10 | 3625.000036 | 3625.000037 | 3625.000037 | 3625.000035 | Pass |
| 0 | 3625.000037 | 3625.000041 | 3625.000044 | 3625.000034 | Pass |
| -10 | 3625.000043 | 3625.000036 | 3625.000037 | 3625.000039 | Pass |
| -20 | 3625.000041 | 3625.000043 | 3625.000039 | 3625.000042 | Pass |
| -30 | 3625.000036 | 3625.000043 | 3625.000034 | 3625.000035 | Pass |

## 4.4 Emission Bandwidth Measurement

### 4.4.1 Limit of Emission Bandwidth Measurement

Reference only

### 4.4.2 Test Setup




### 4.4.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

### 4.4.4 Test Procedure

Occupied Bandwdith:
All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

26dBc Bandwidth:
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW = 51 kHz (5 MHz bandwidth), RBW = 100 kHz (10 MHz bandwidth), RBW = 150 kHz (15 MHz bandwidth), RBW = 200 kHz (20 MHz bandwidth). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

### 4.4.5 Deviation fromTest Standard

No deviation.

### 4.4.6 EUT Operating Conditions

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

4.4.7 Test Result (-26dB Bandwidth)

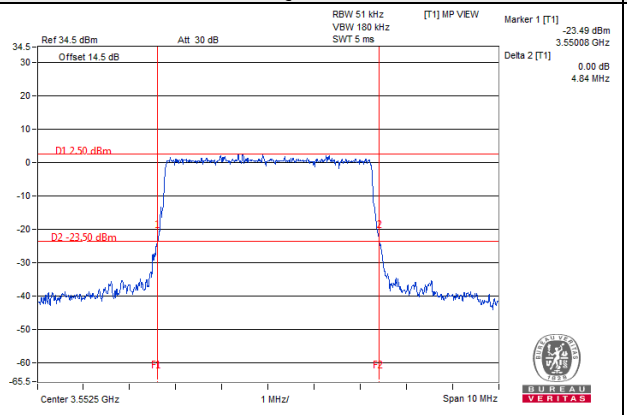
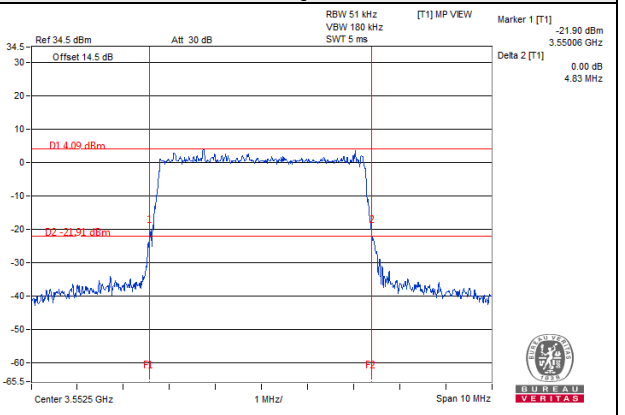
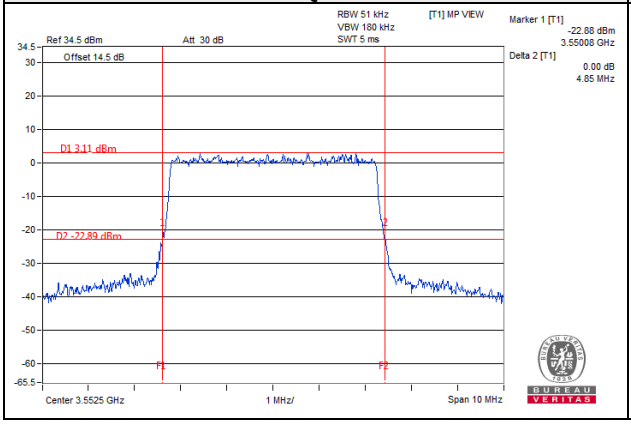
| Channel | Freq. (MHz) | 26dB Down Bandwidth (MHz) | | |
|---|---|---|---|---|
| | | 5MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3552.5 | 4.84 | 4.83 | 4.85 |
| Middle | 3625 | 4.84 | 4.81 | 4.82 |
| High | 3697.5 | 4.81 | 4.82 | 4.77 |

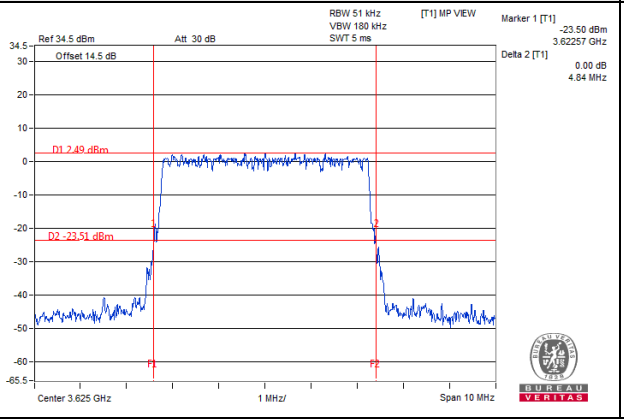
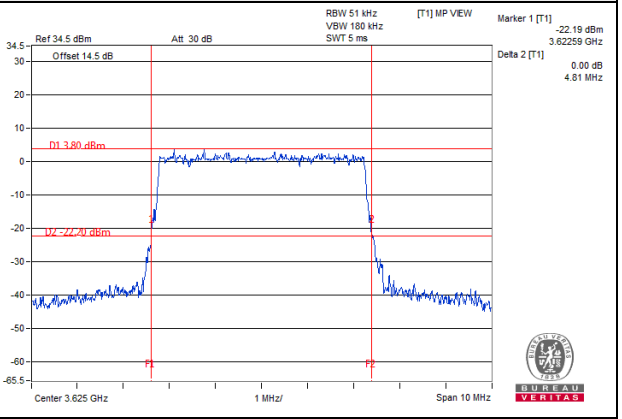
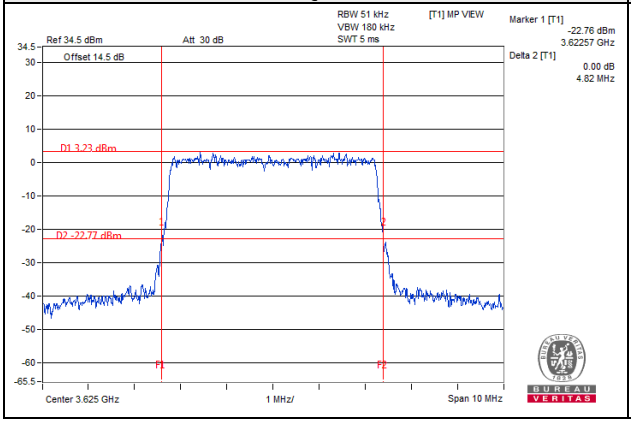
| Channel | Freq. (MHz) | 26dB Down Bandwidth (MHz) | | |
|---|---|---|---|---|
| | | 10MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3555 | 9.61 | 9.73 | 9.69 |
| Middle | 3625 | 9.43 | 9.45 | 9.37 |
| High | 3695 | 9.42 | 9.51 | 9.47 |

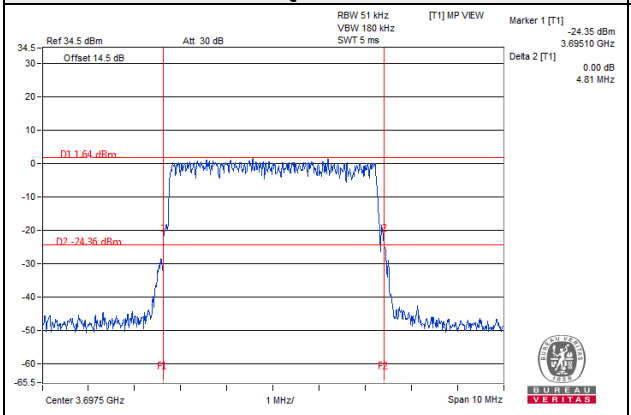
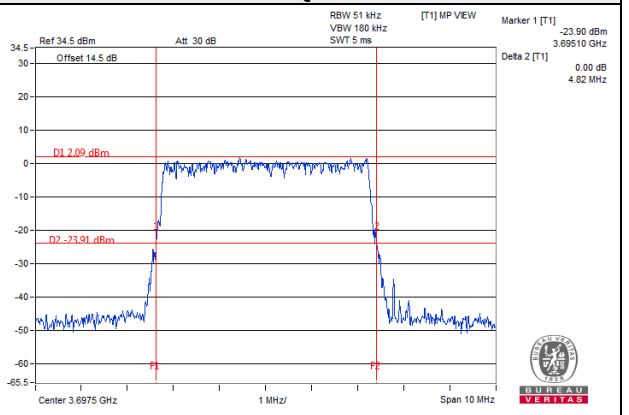
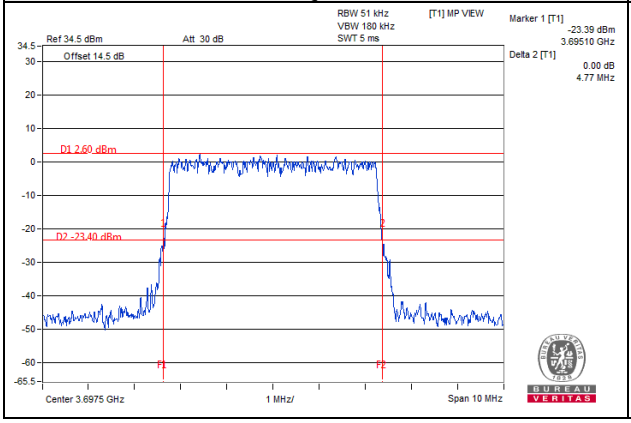
| Channel | Freq. (MHz) | 26dB Down Bandwidth (MHz) | | |
|---|---|---|---|---|
| | | 15MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3557.5 | 14.46 | 14.51 | 14.45 |
| Middle | 3625 | 14.30 | 14.03 | 14.24 |
| High | 3692.5 | 14.30 | 14.30 | 14.08 |

| Channel | Freq. (MHz) | 26dB Down Bandwidth (MHz) | | |
|---|---|---|---|---|
| | | 20MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3560 | 19.14 | 19.09 | 19.31 |
| Middle | 3625 | 18.65 | 18.75 | 18.66 |
| High | 3690 | 18.76 | 18.94 | 18.68 |

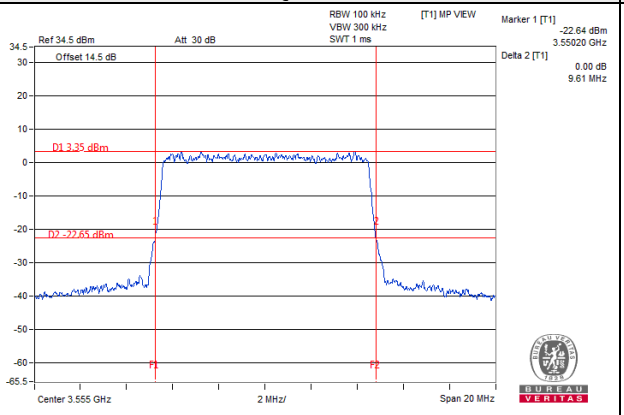
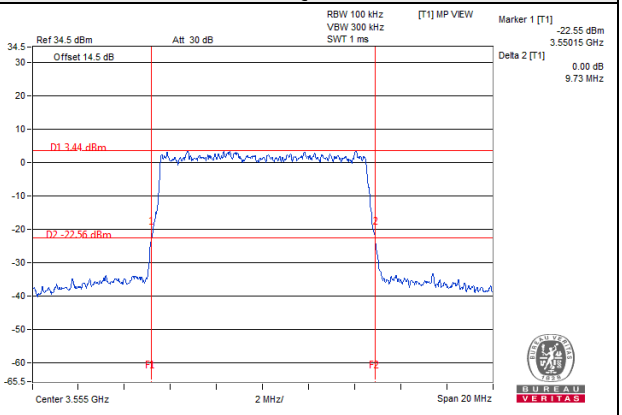
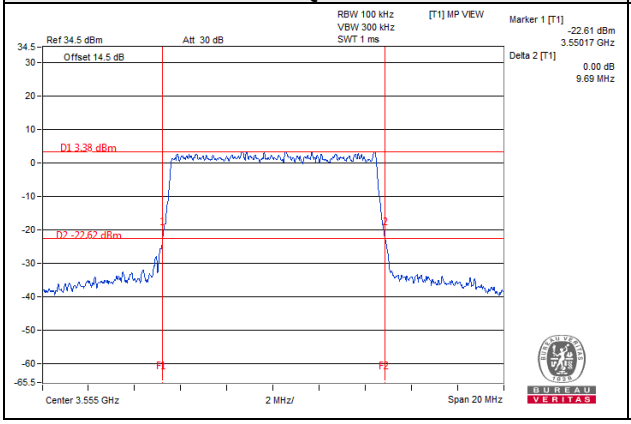
## 5MHz:

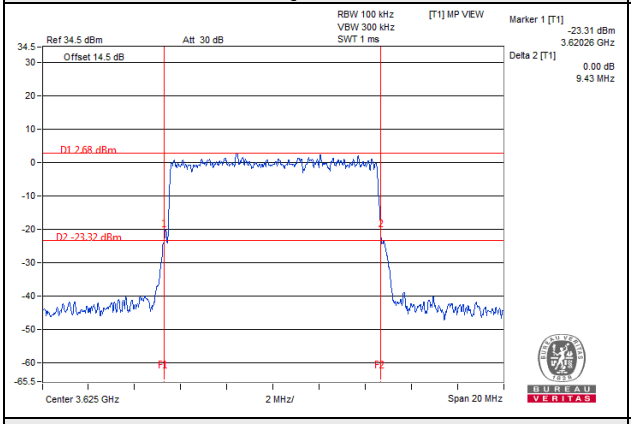
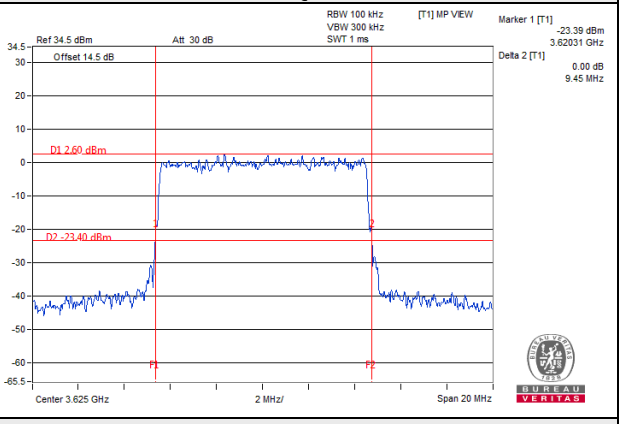
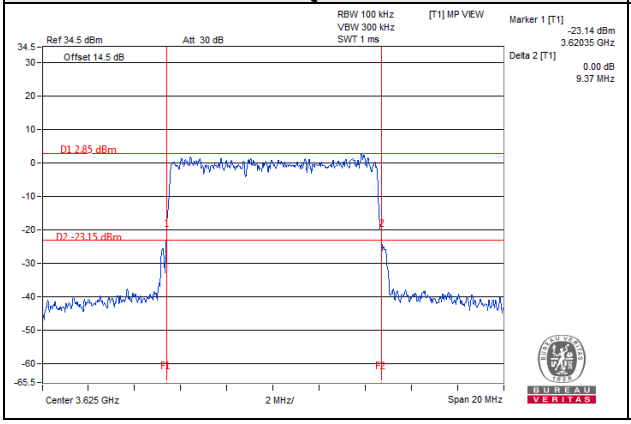
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

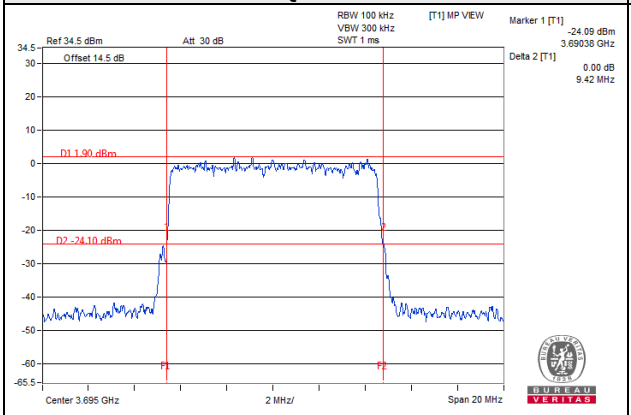
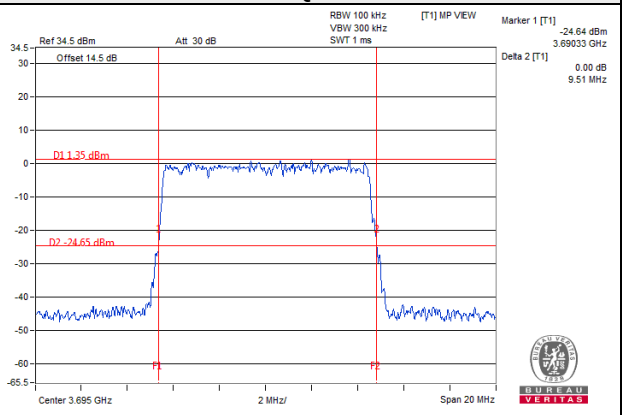
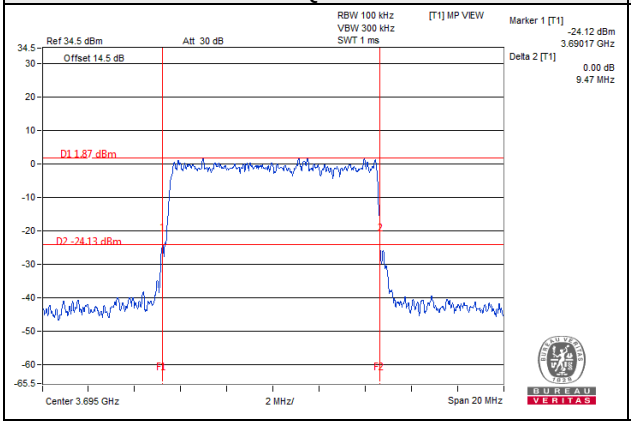
| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

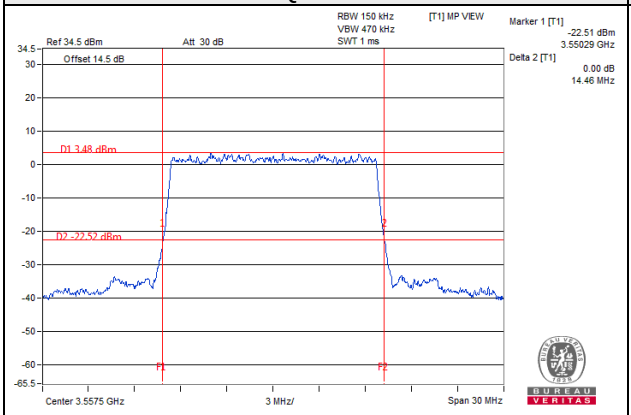
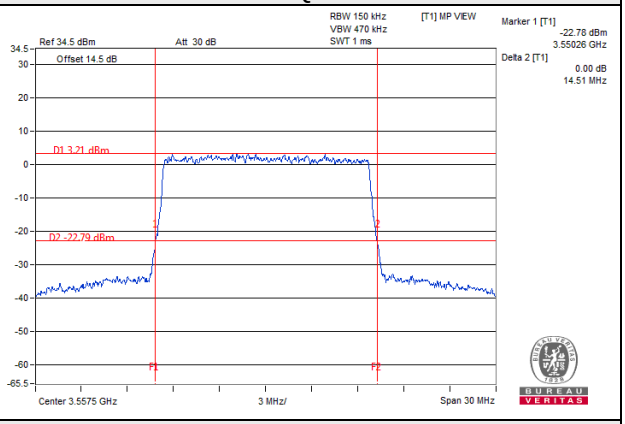
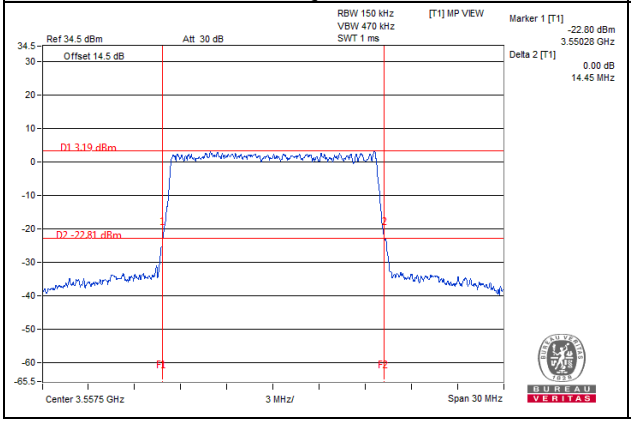
## 10MHz:

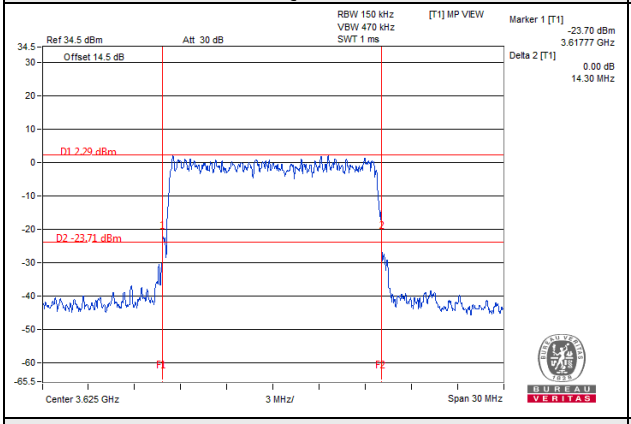
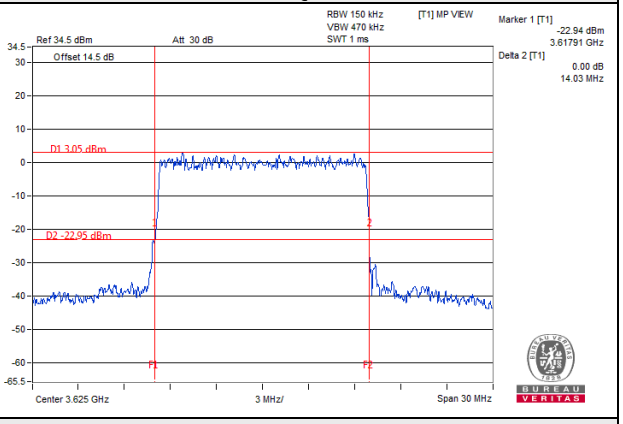
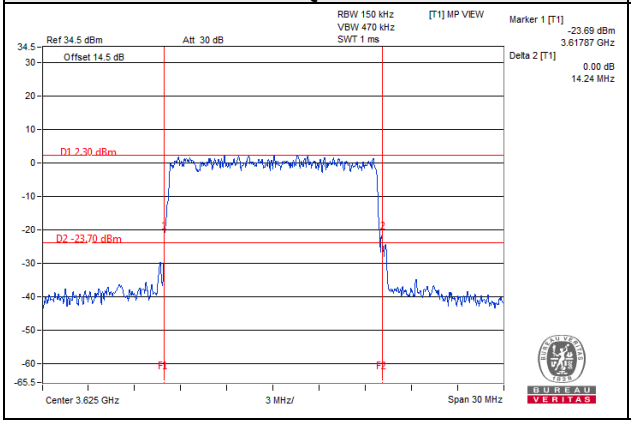
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

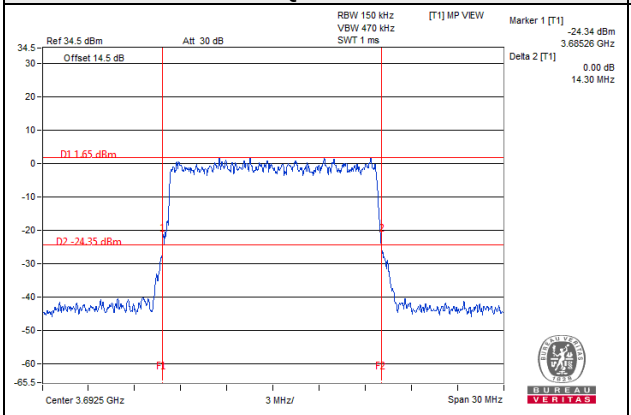
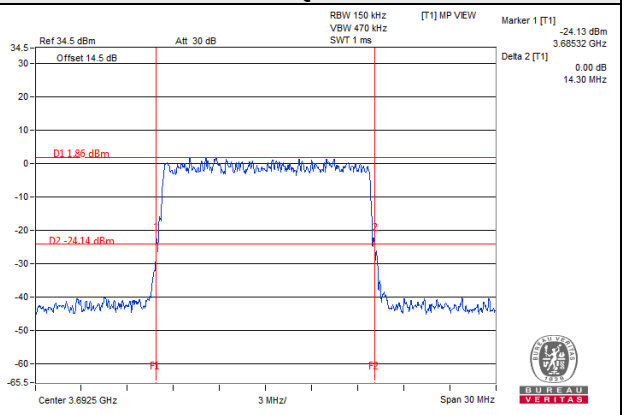
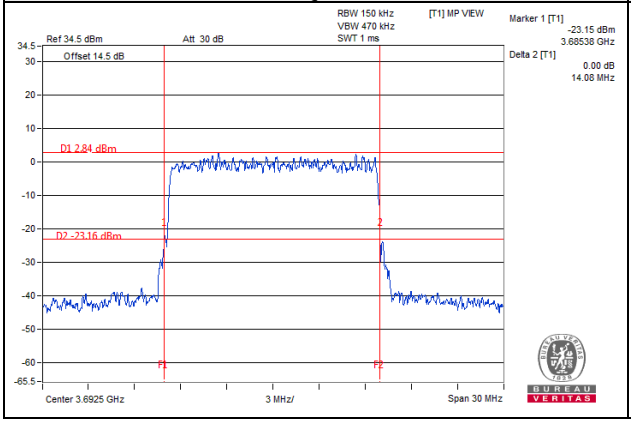
| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

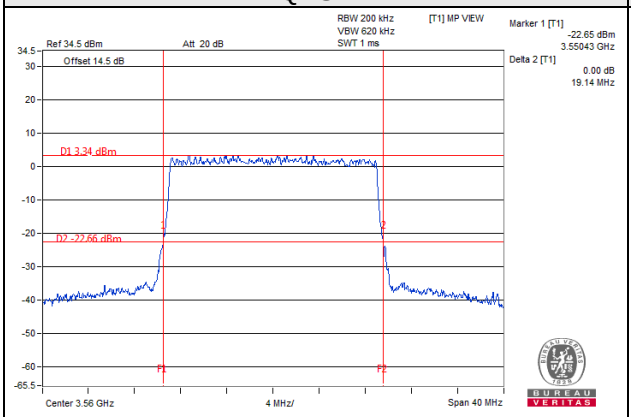
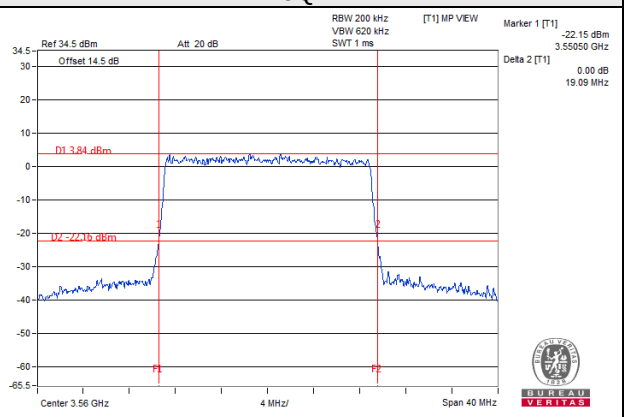
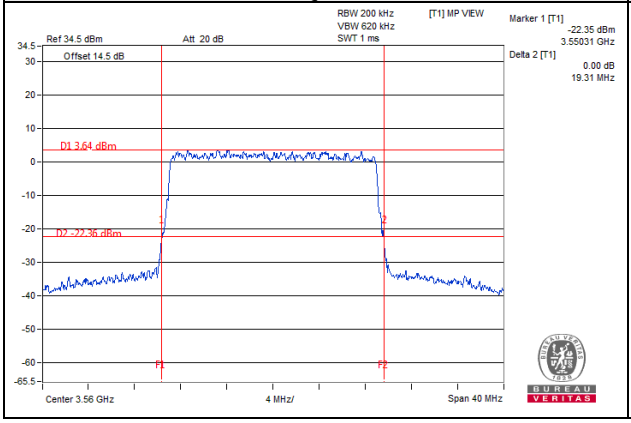
## 15MHz:

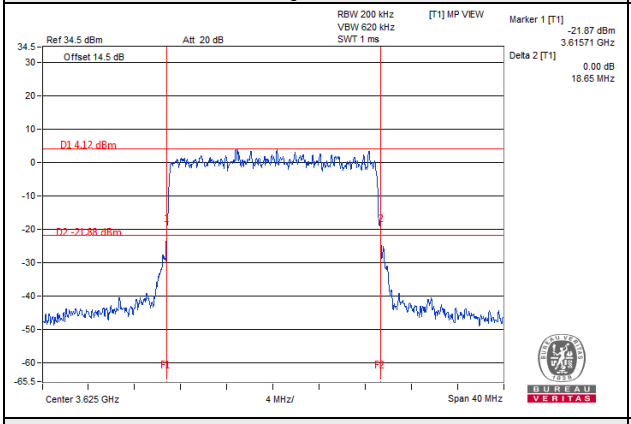
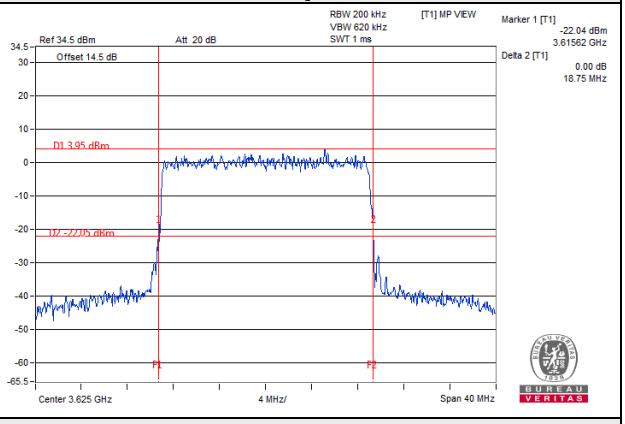
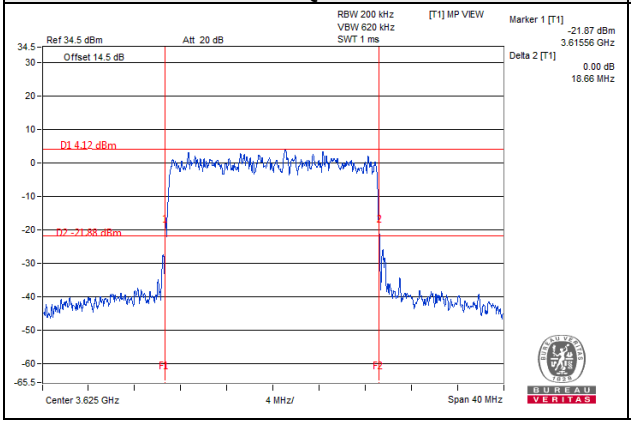
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

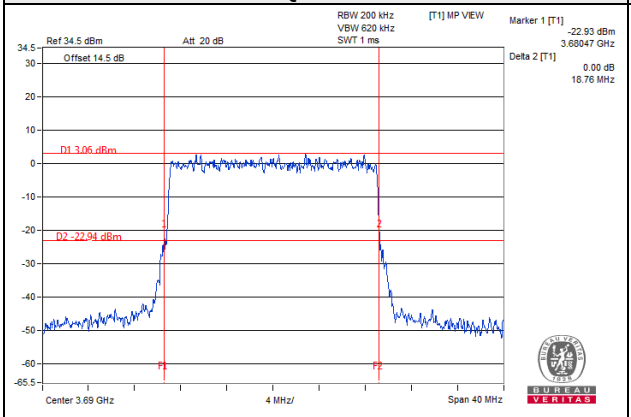
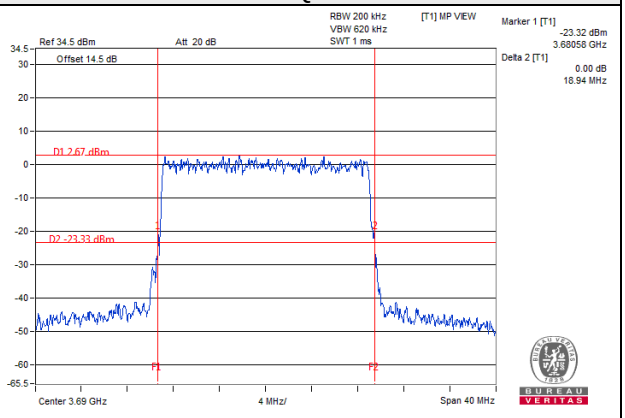
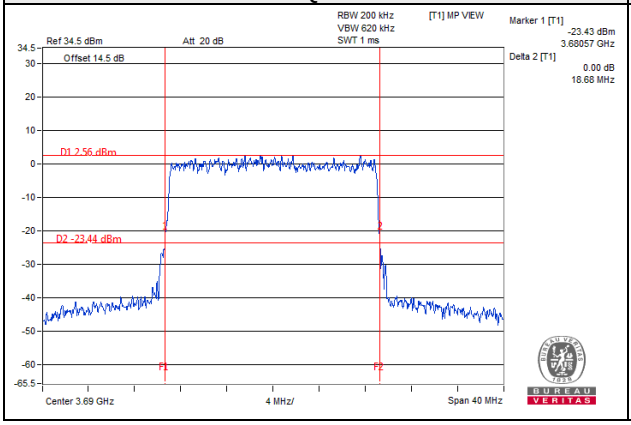
| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

## 20MHz:

| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

### 4.4.8 Test Result (Occupied Bandwidth)

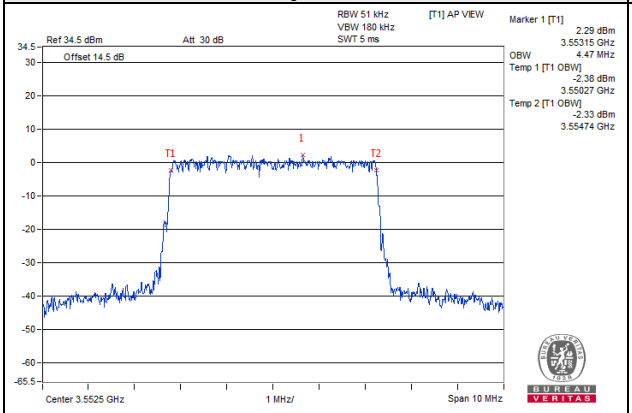
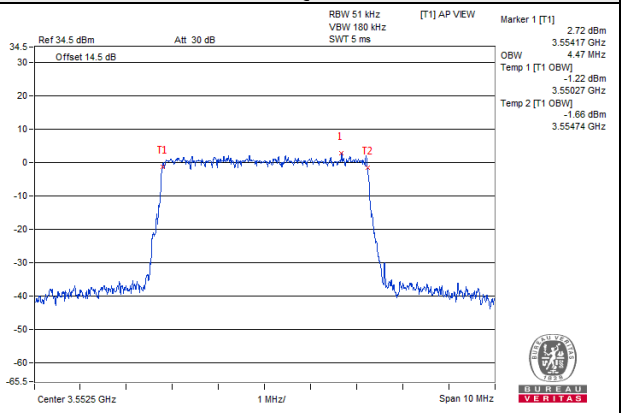
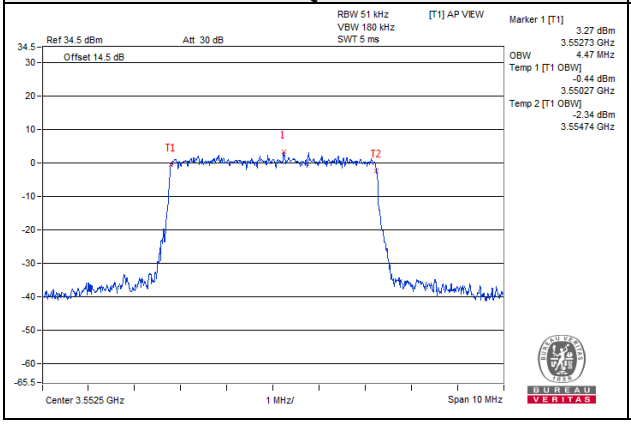
| Channel | Freq. (MHz) | OCP 99 Band Width (MHz) | | |
|---|---|---|---|---|
| | | 5MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3552.5 | 4.47 | 4.47 | 4.47 |
| Middle | 3625 | 4.46 | 4.47 | 4.47 |
| High | 3697.5 | 4.46 | 4.46 | 4.45 |

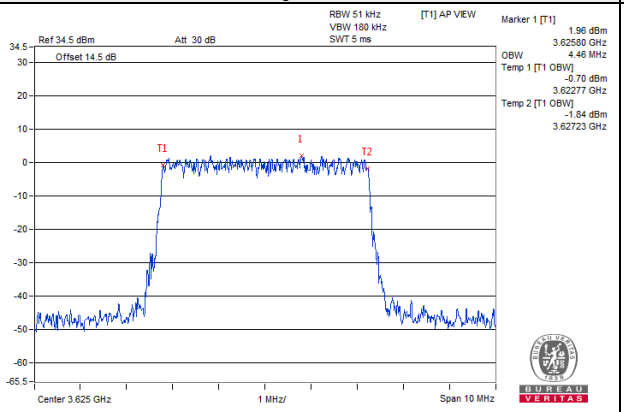
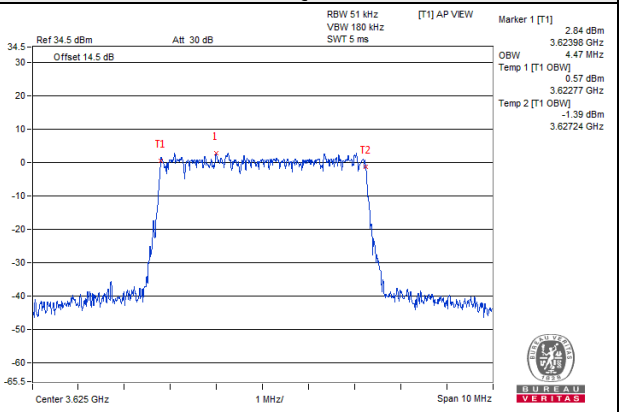
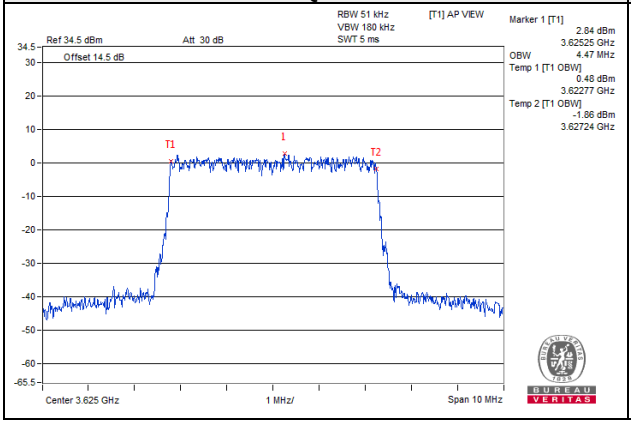
| Channel | Freq. (MHz) | OCP 99 Band Width (MHz) | | |
|---|---|---|---|---|
| | | 10MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3555 | 8.92 | 8.94 | 8.92 |
| Middle | 3625 | 8.90 | 8.94 | 8.92 |
| High | 3695 | 8.92 | 8.92 | 8.92 |

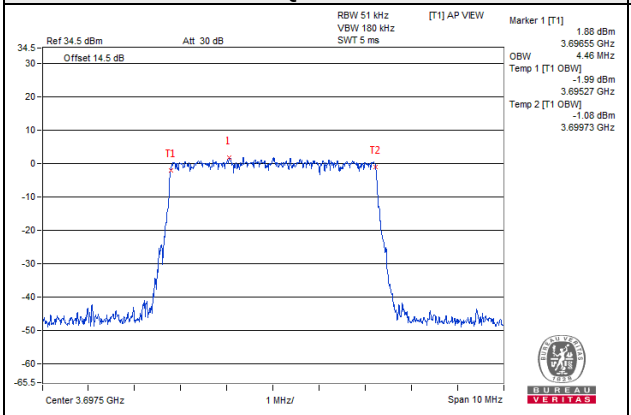
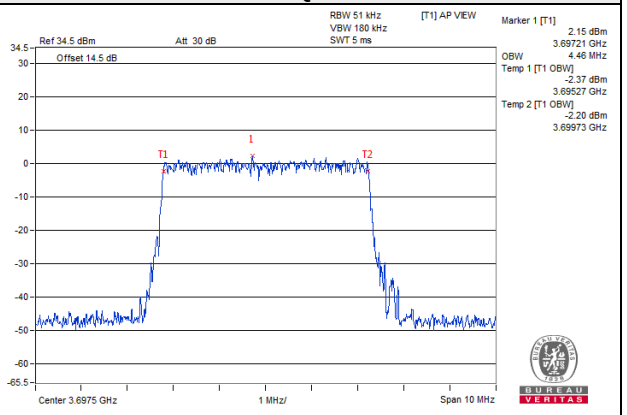
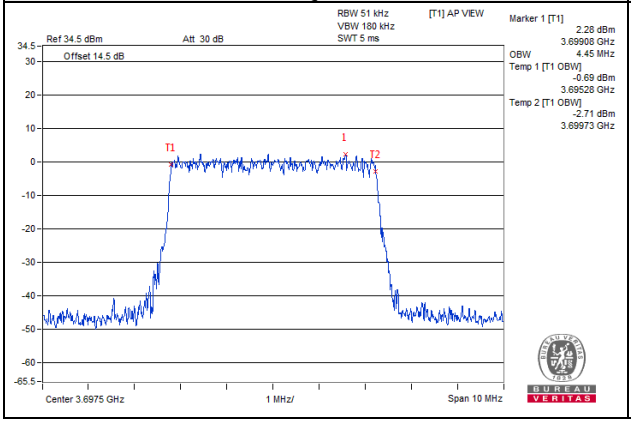
| Channel | Freq. (MHz) | OCP 99 Band Width (MHz) | | |
|---|---|---|---|---|
| | | 15MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3557.5 | 13.38 | 13.38 | 13.41 |
| Middle | 3625 | 13.47 | 13.38 | 13.38 |
| High | 3692.5 | 13.38 | 13.38 | 13.35 |

| Channel | Freq. (MHz) | OCP 99 Band Width (MHz) | | |
|---|---|---|---|---|
| | | 20MHz | | |
| | | QPSK | 16QAM | 64QAM |
| Low | 3560 | 17.92 | 17.84 | 17.84 |
| Middle | 3625 | 17.84 | 17.84 | 17.84 |
| High | 3690 | 17.92 | 17.84 | 17.84 |

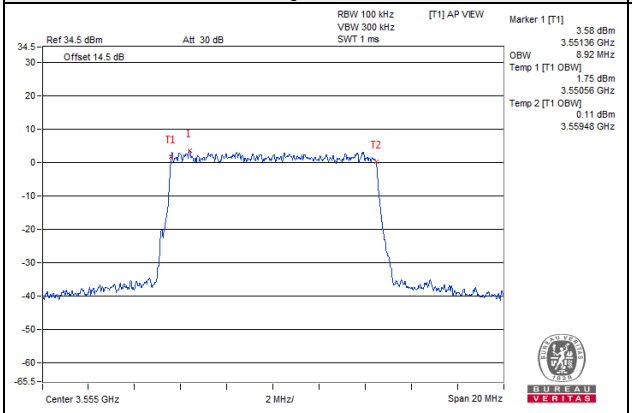
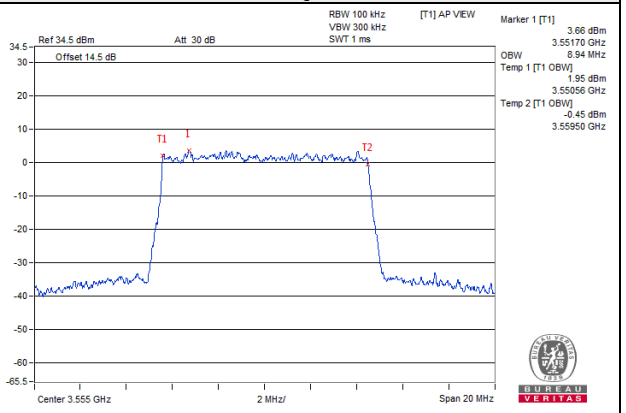
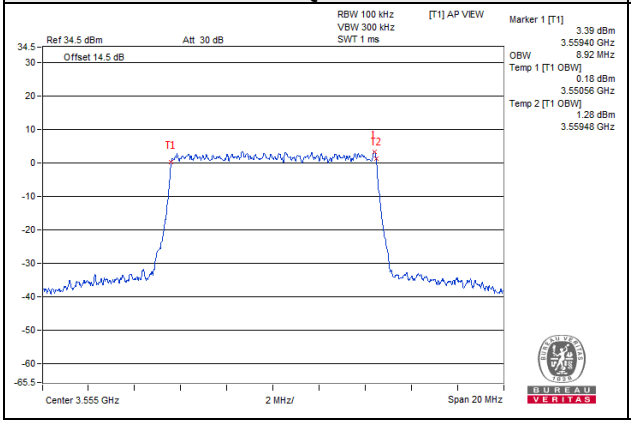
## 5MHz:

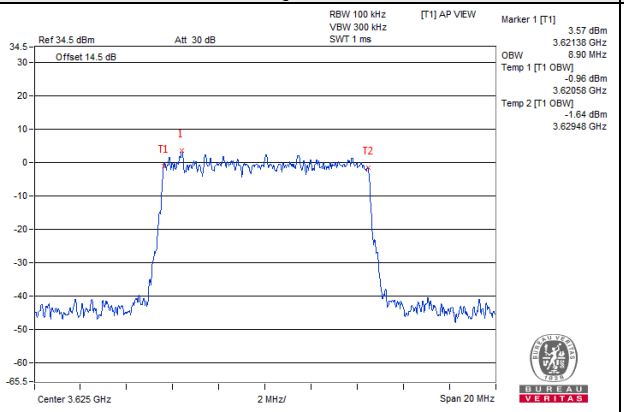
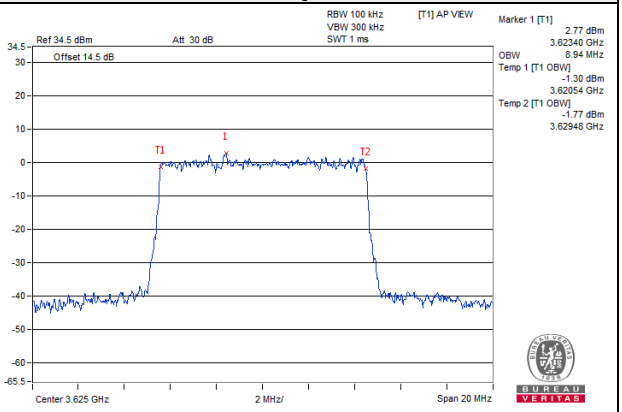
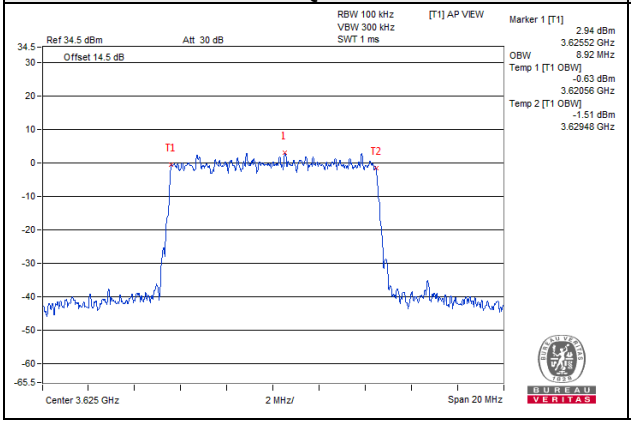
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

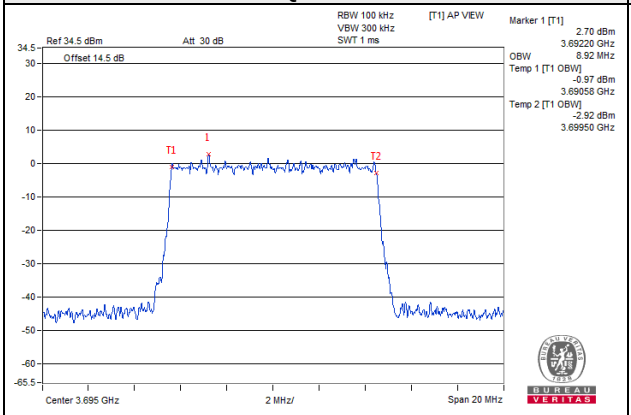
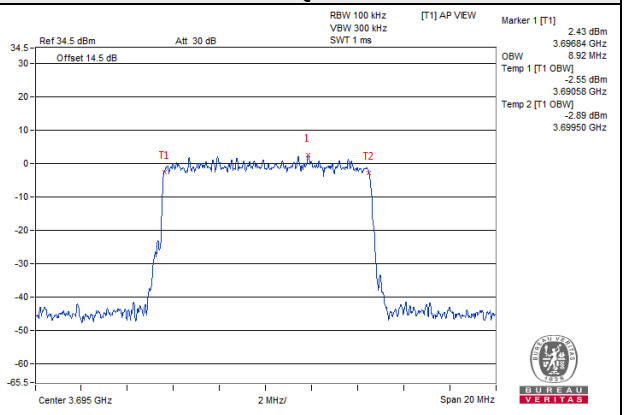
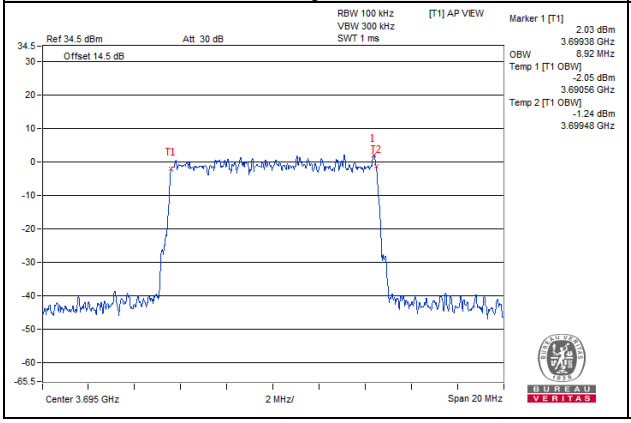
| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

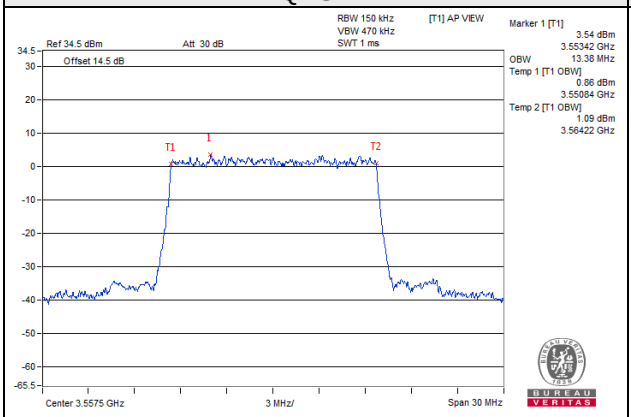
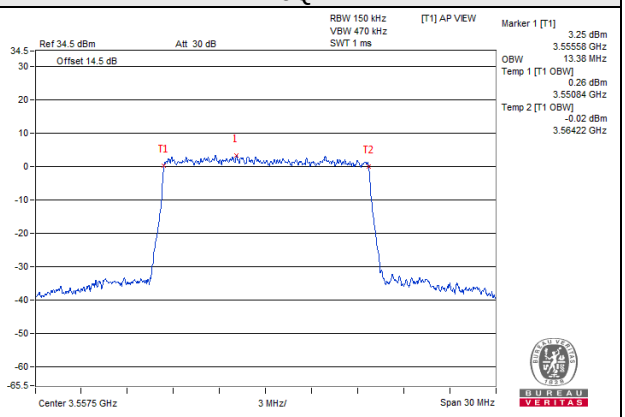
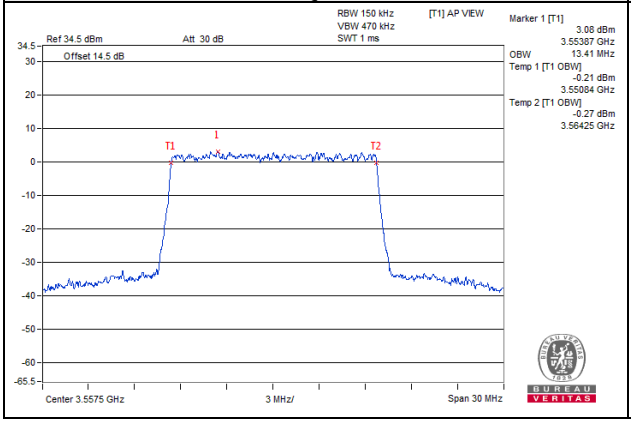
## 10MHz:

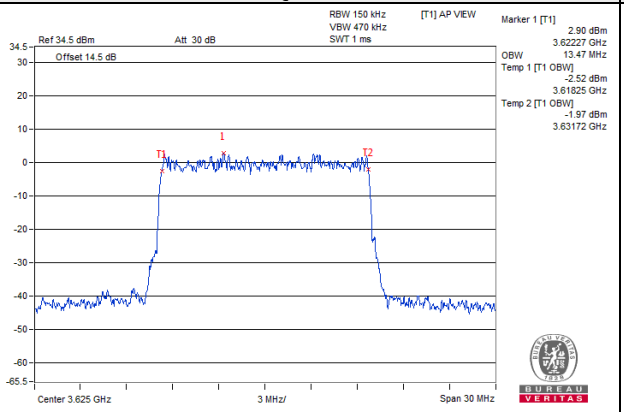
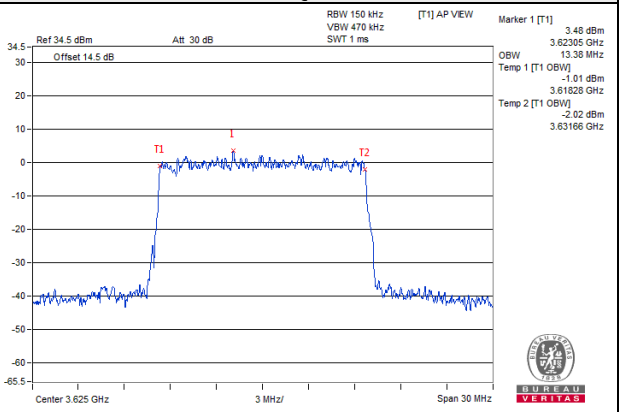
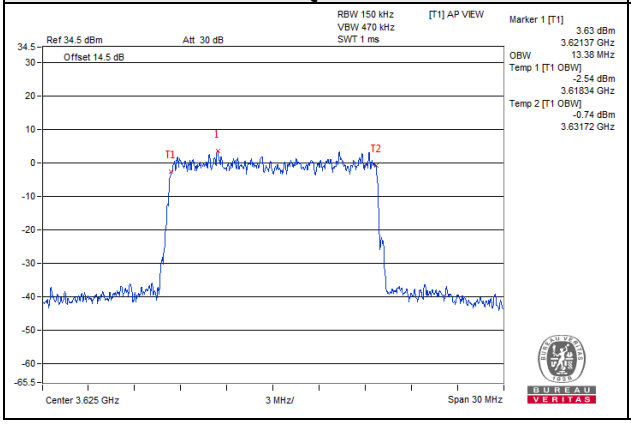
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

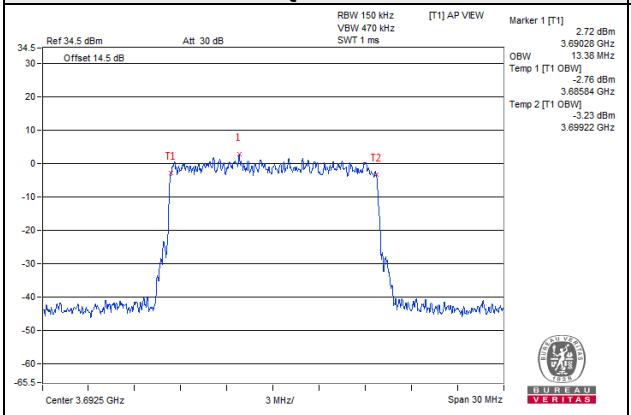
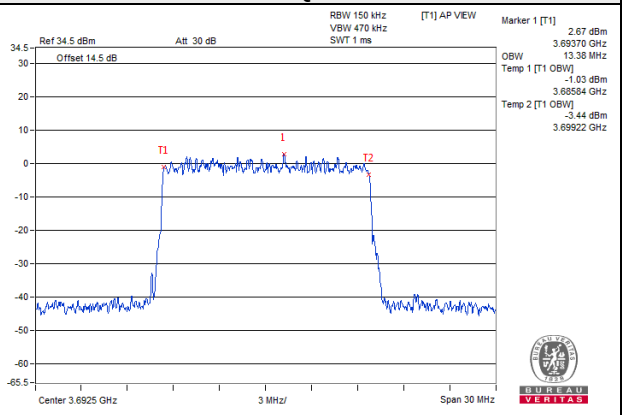
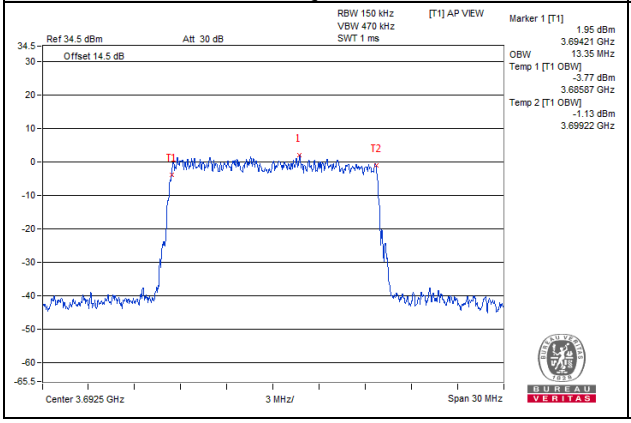
| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

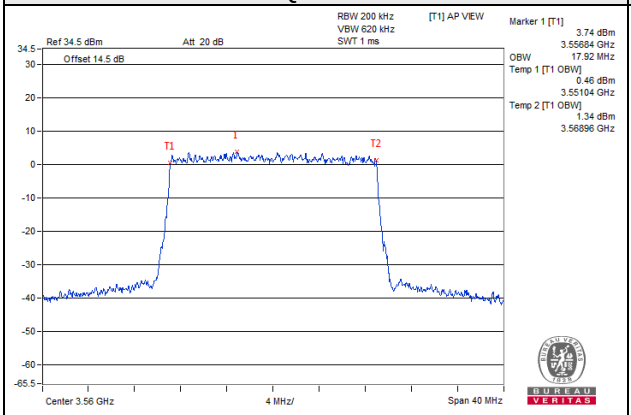
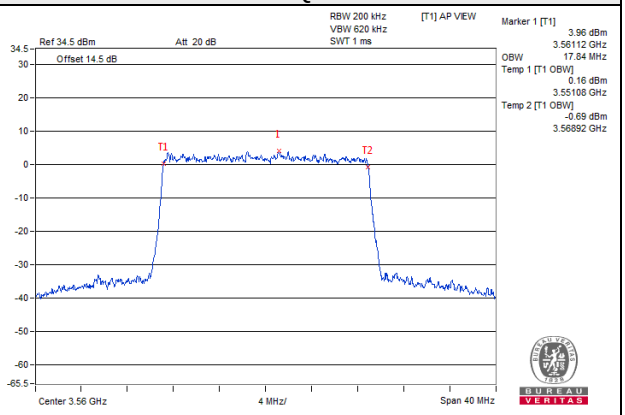
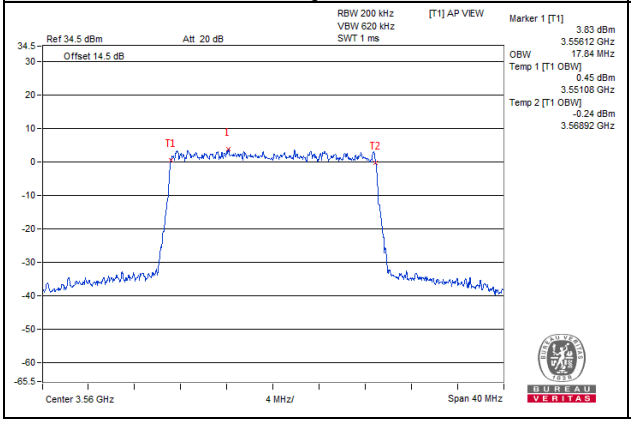
## 15MHz:

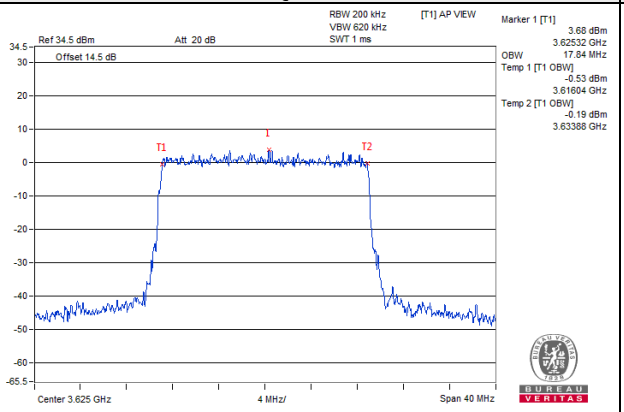
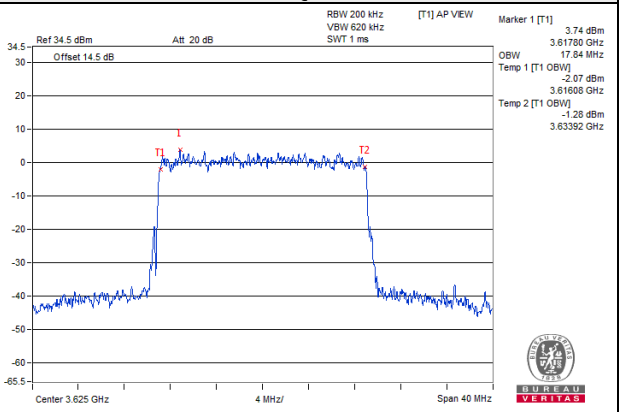
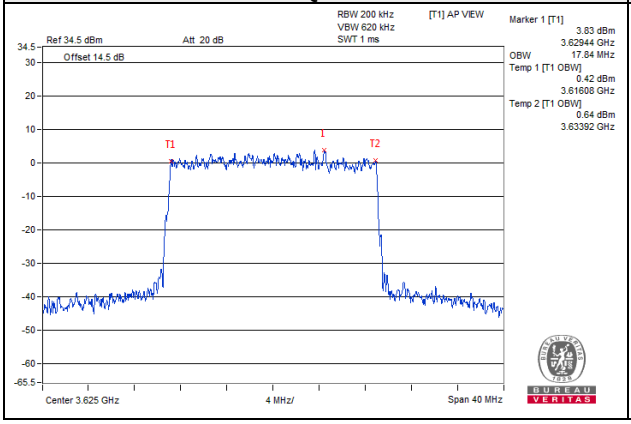
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

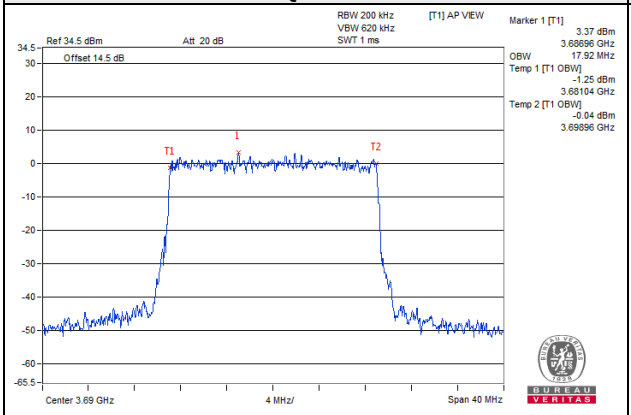
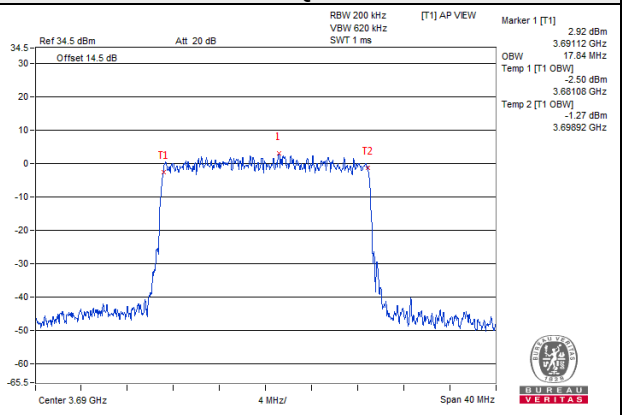
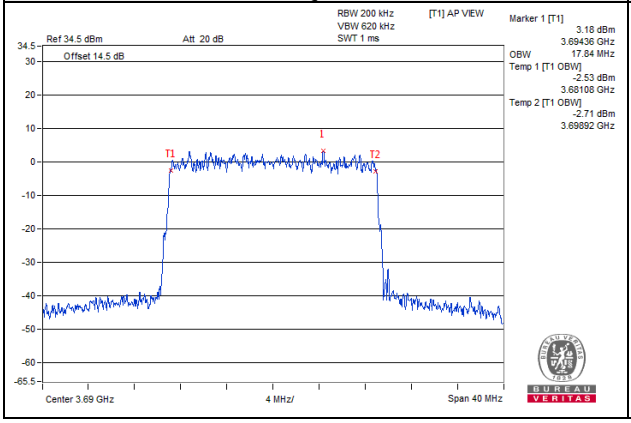
| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

## 20MHz:

| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Spectrum Plot of Value | |
|---|---|
| Middle | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

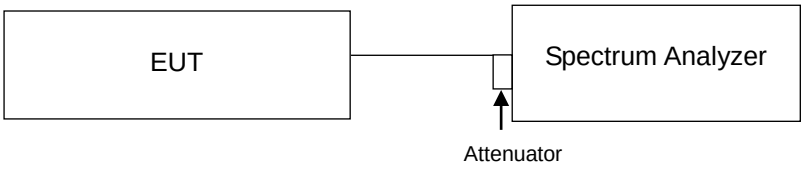
| Spectrum Plot of Value | |
|---|---|
| High | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

## 4.5 Peak to Average Ratio

### 4.5.1 Limits of Peak to Average Ratio Measurement

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

### 4.5.2 Test Setup




### 4.5.3 Test Procedures

a. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

b. Set the number of counts to a value that stabilizes the measured CCDF curve;

c. Record the maximum PAPR level associated with a probability of 0.1%.

### 4.5.4 Test Results

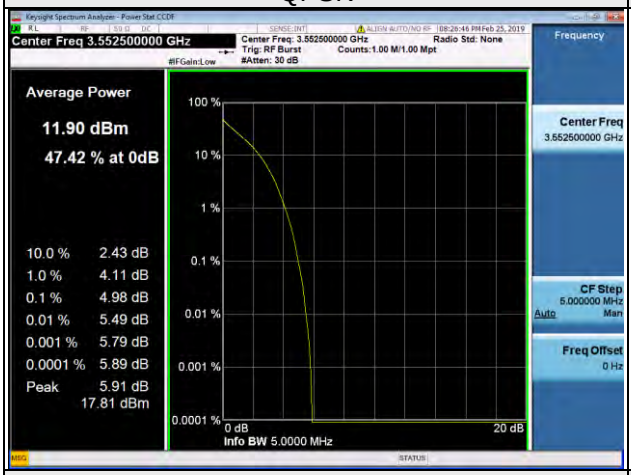
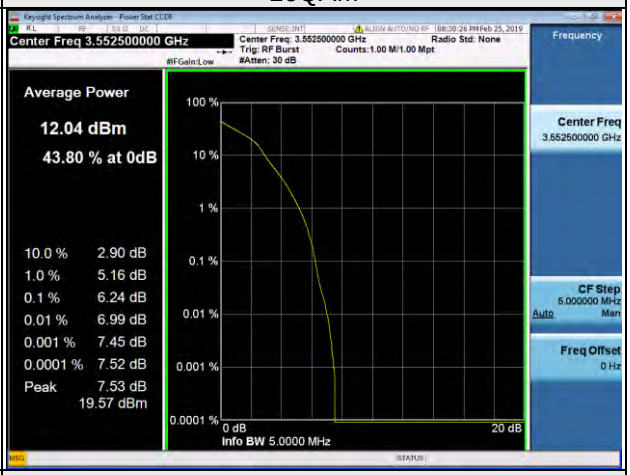
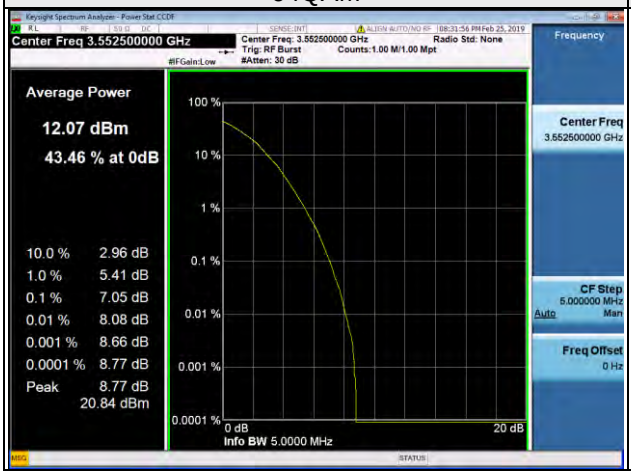
| Channel | Freq. (MHz) | Peak to Average Ratio (dB) | | | Limit(dB) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 5MHz | | | | |
| | | QPSK | 16QAM | 64QAM | | |
| Low | 3552.5 | 4.98 | 6.24 | 7.05 | 13 | Pass |
| Middle | 3625 | 4.85 | 6.21 | 7.13 | 13 | Pass |
| High | 3697.5 | 4.87 | 6.03 | 6.69 | 13 | Pass |

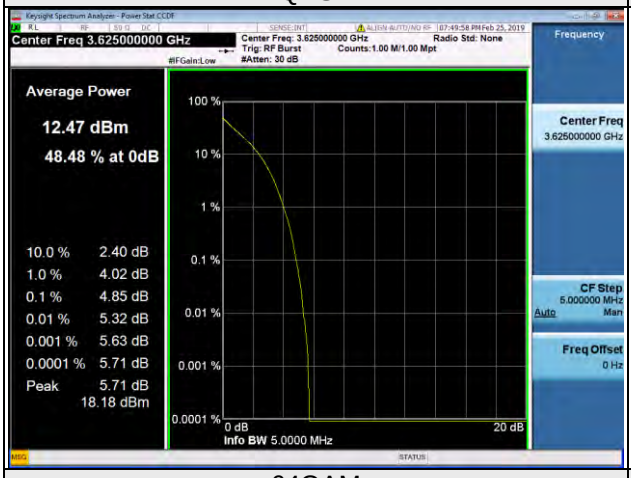
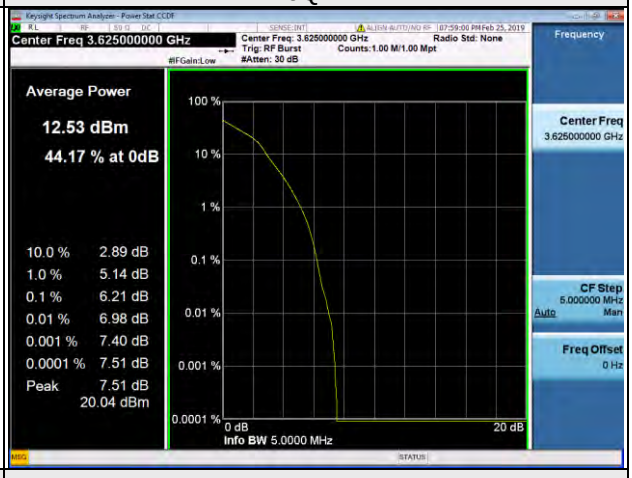
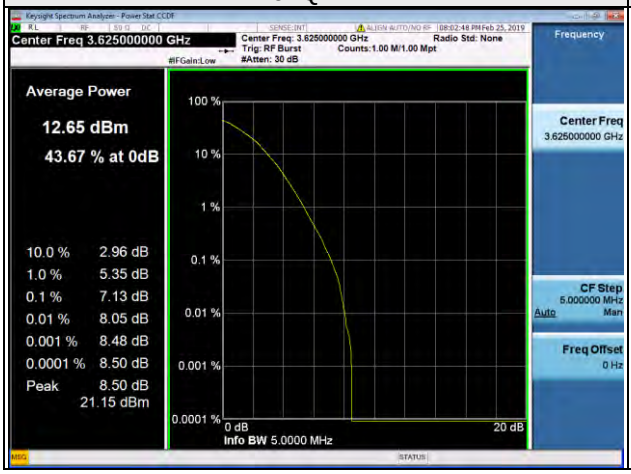
| Channel | Freq. (MHz) | Peak to Average Ratio (dB) | | | Limit(dB) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 10MHz | | | | |
| | | QPSK | 16QAM | 64QAM | | |
| Low | 3555 | 4.98 | 6.36 | 6.96 | 13 | Pass |
| Middle | 3625 | 4.87 | 6.26 | 6.78 | 13 | Pass |
| High | 3695 | 4.84 | 6.08 | 6.78 | 13 | Pass |

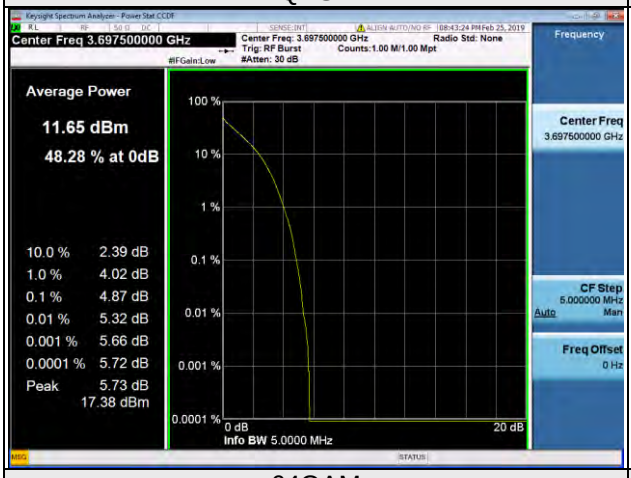
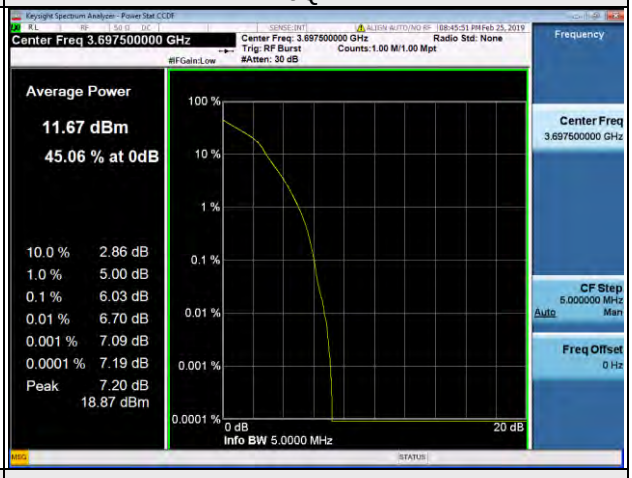
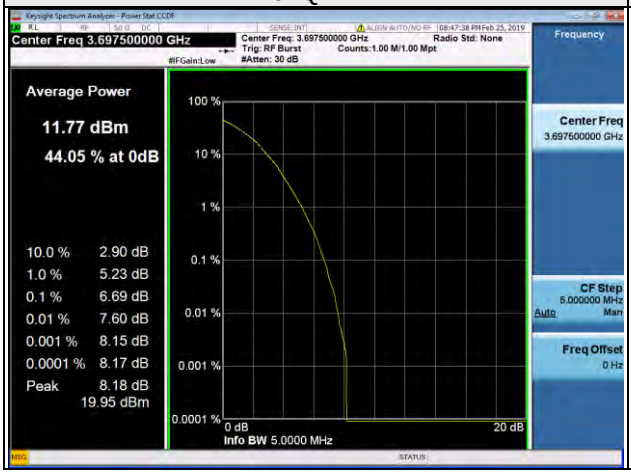
| Channel | Freq. (MHz) | Peak to Average Ratio (dB) | | | Limit(dB) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 15MHz | | | | |
| | | QPSK | 16QAM | 64QAM | | |
| Low | 3557.5 | 5.19 | 6.45 | 6.98 | 13 | Pass |
| Middle | 3625 | 4.98 | 6.25 | 6.81 | 13 | Pass |
| High | 3692.5 | 4.93 | 6.11 | 6.67 | 13 | Pass |

| Channel | Freq. (MHz) | Peak to Average Ratio (dB) | | | Limit(dB) | Pass /Fail |
|---|---|---|---|---|---|---|
| | | 20MHz | | | | |
| | | QPSK | 16QAM | 64QAM | | |
| Low | 3560 | 4.96 | 6.22 | 6.90 | 13 | Pass |
| Middle | 3625 | 4.81 | 6.12 | 6.74 | 13 | Pass |
| High | 3690 | 4.82 | 6.03 | 6.73 | 13 | Pass |

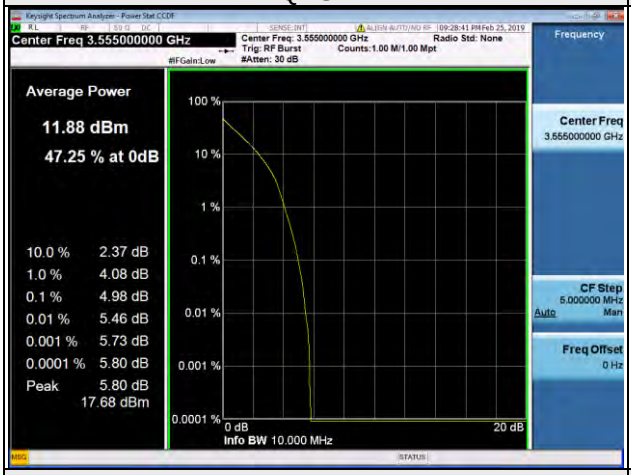
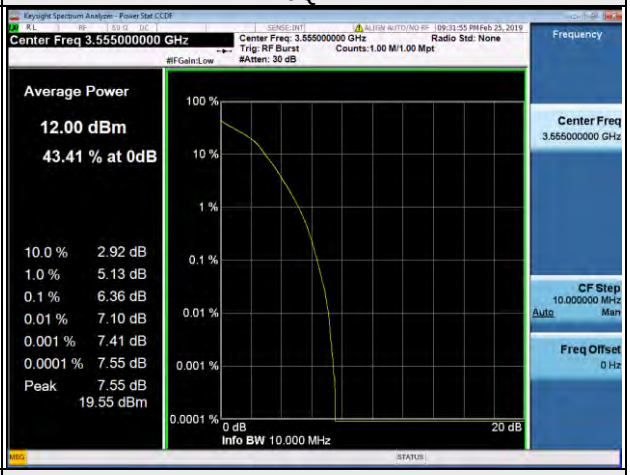
**5MHz:**

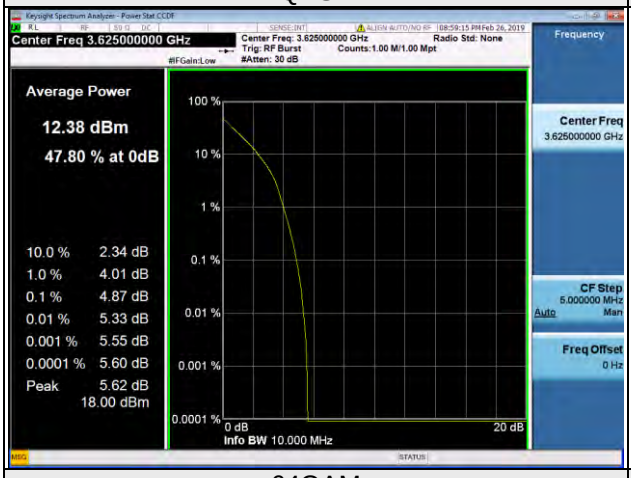
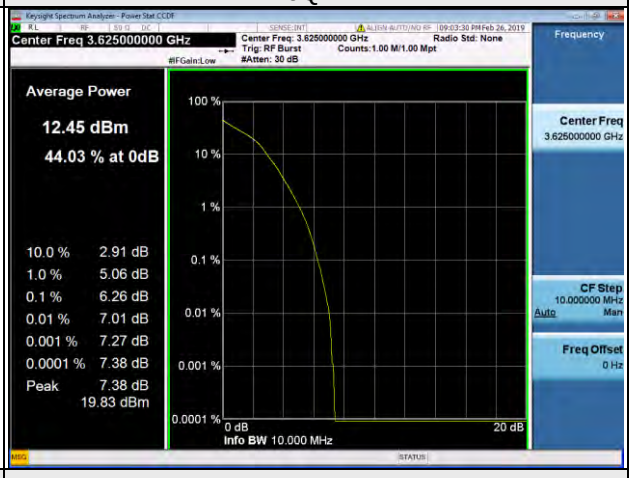
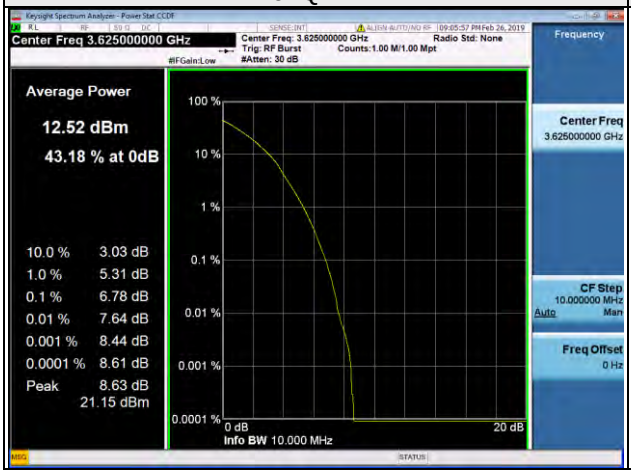
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

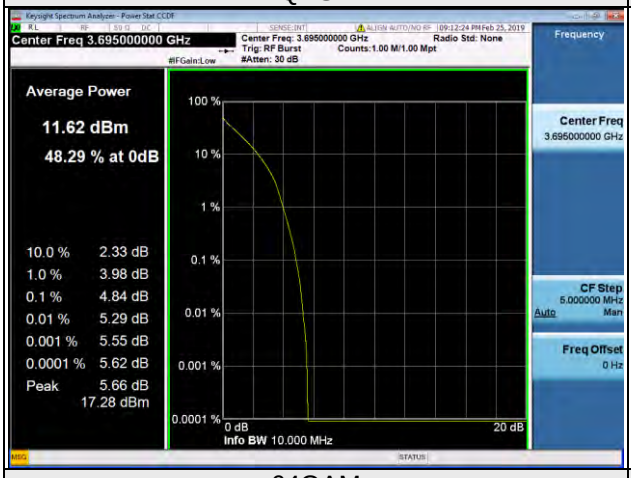
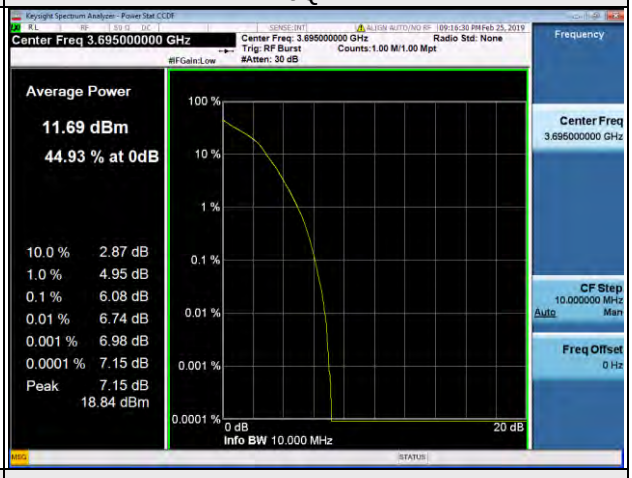
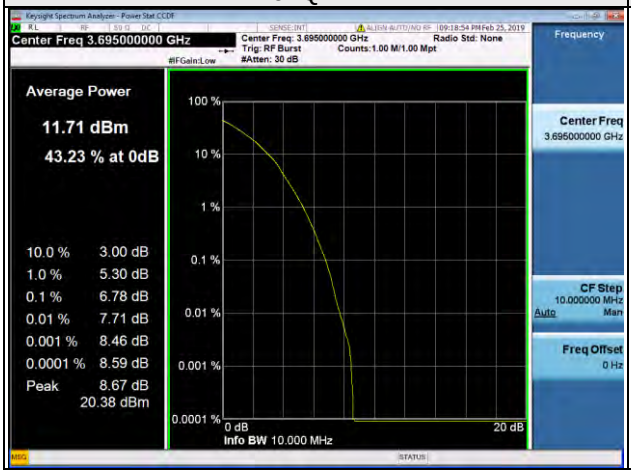
| Middle | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| High | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

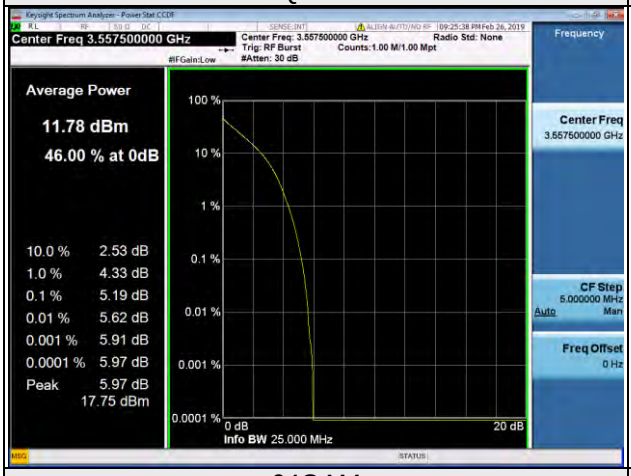
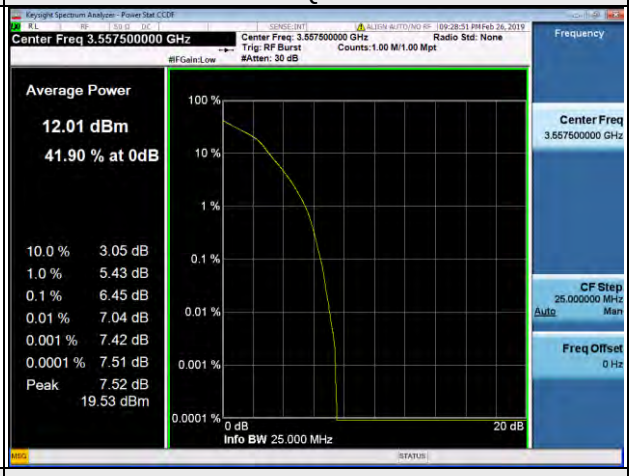
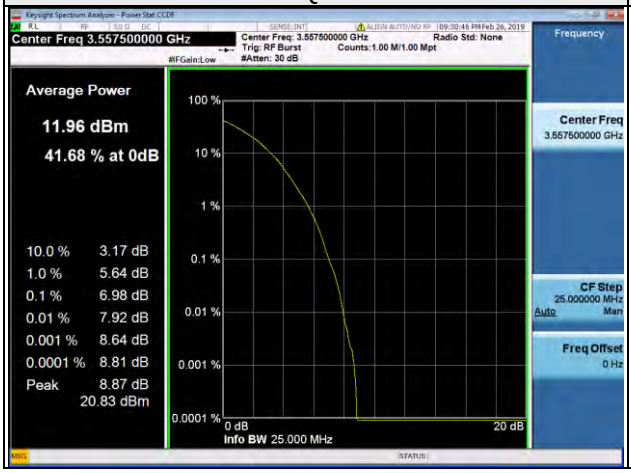
## 10MHz:

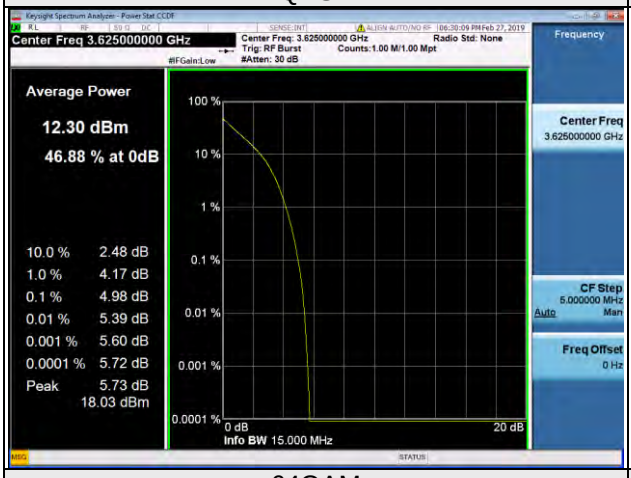
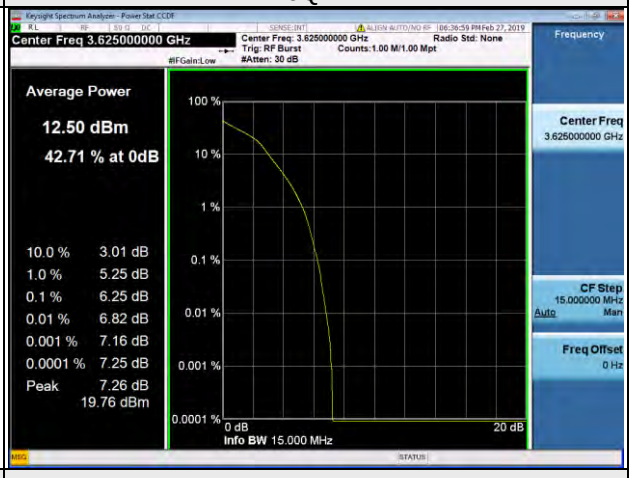
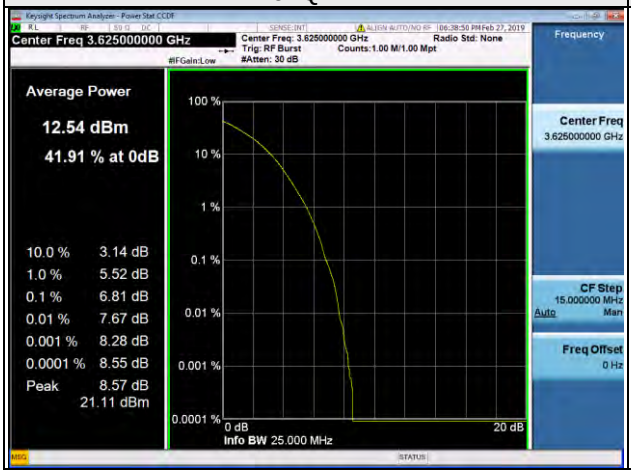
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

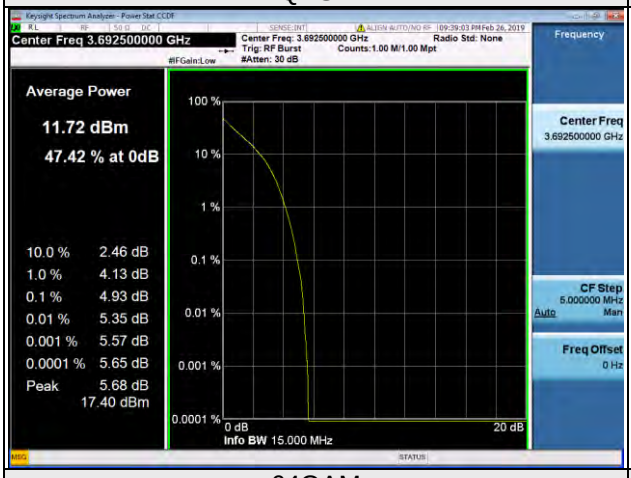
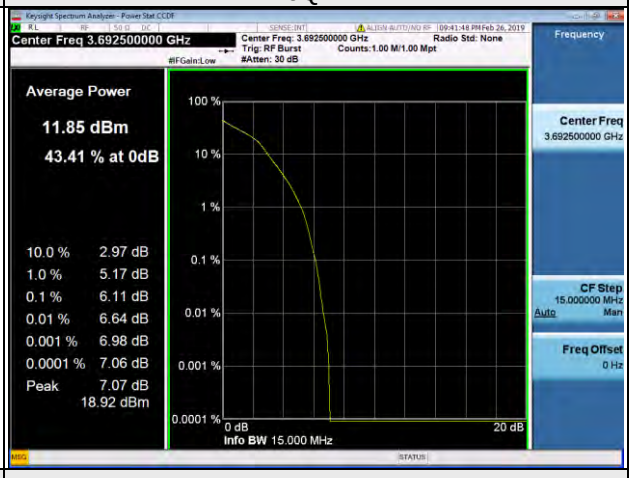
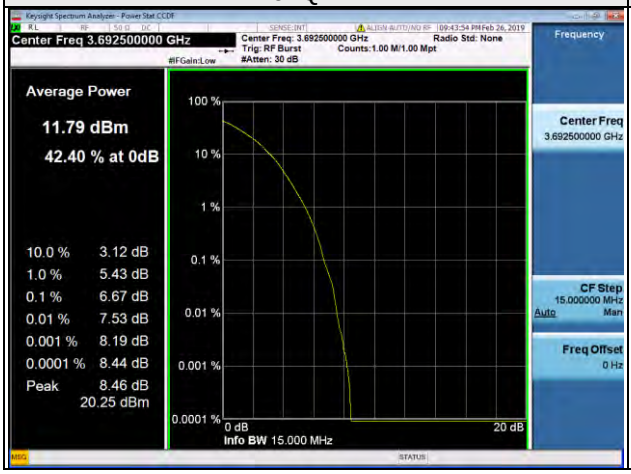
| Middle | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| High | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

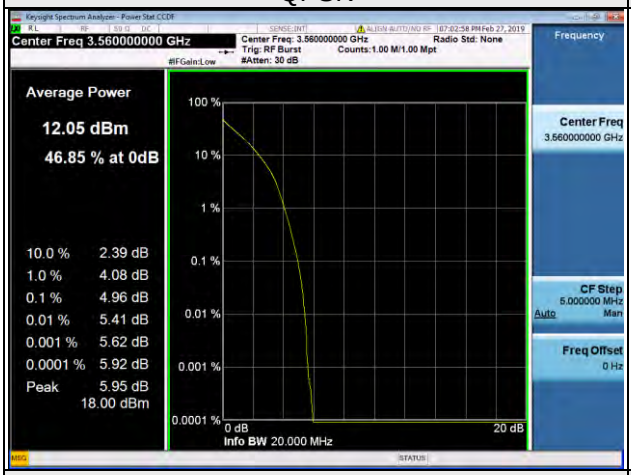
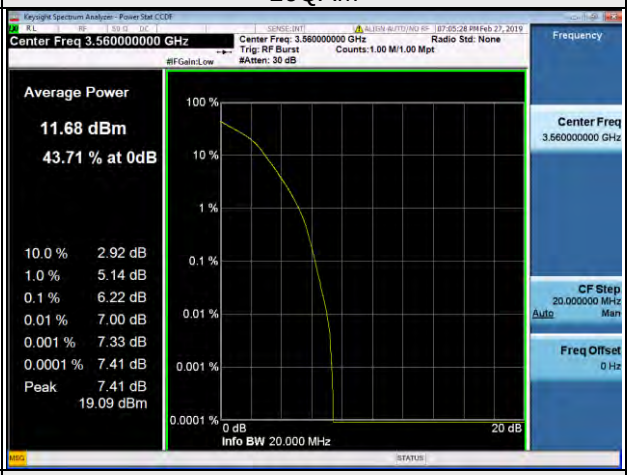
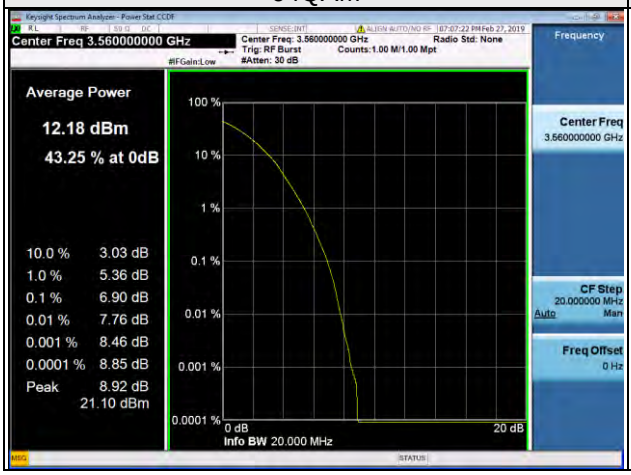
**15MHz:**

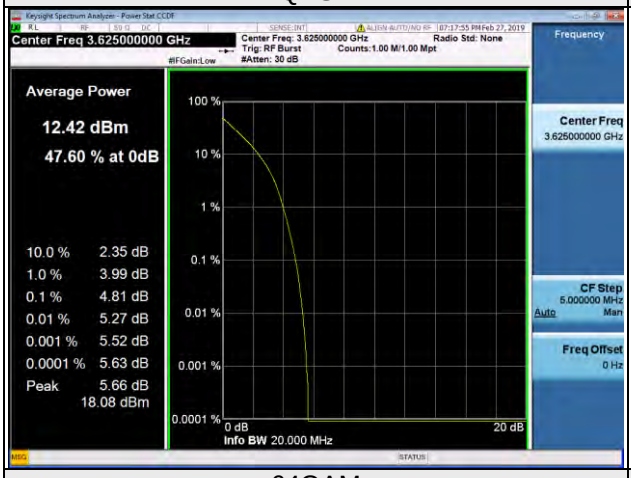
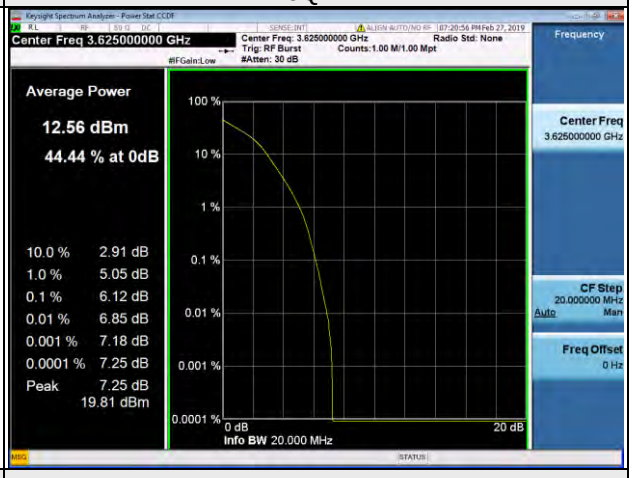
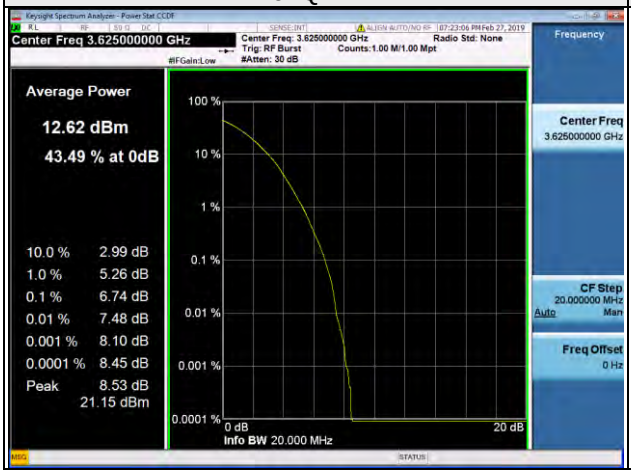
| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

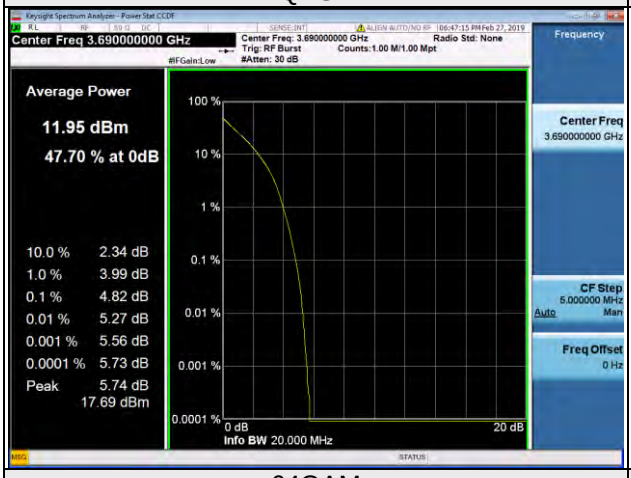
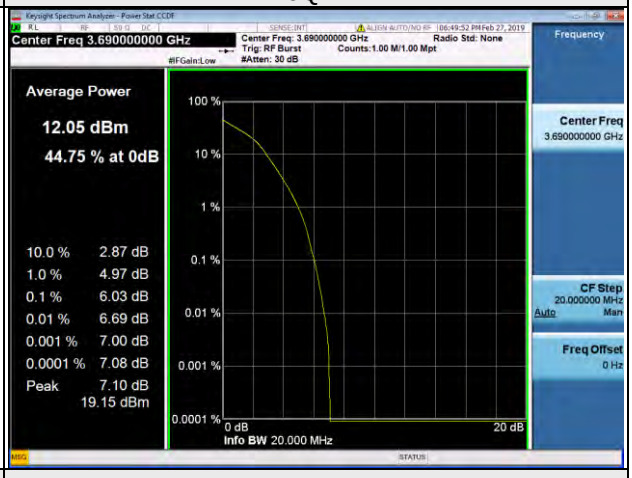
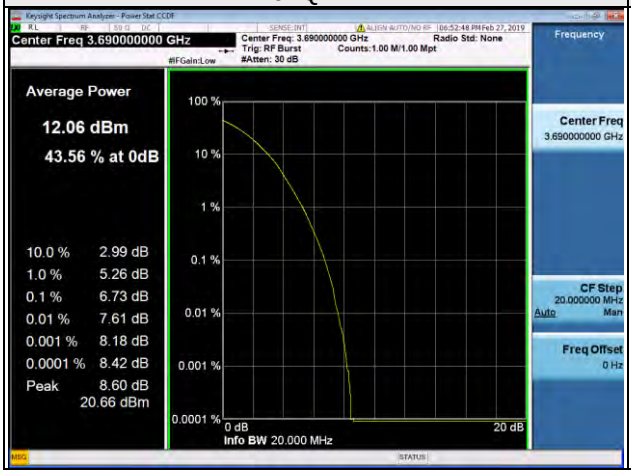
| Middle | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| High | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

**20MHz:**

| Spectrum Plot of Value | |
|---|---|
| Low | |
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

| Middle | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

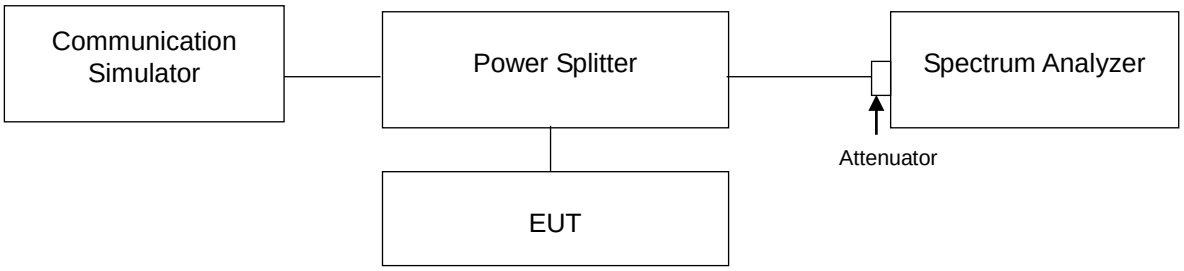
| High | |
|---|---|
| QPSK | 16QAM |
|  |  |
| 64QAM | |
|  | |

## 4.6 Conducted Spurious Emissions

### 4.6.1 Limits of Conducted Spurious Emissions Measurement

| Power of any emissions outside the Fundamental | Limit |
|---|---|
| Within 0-10MHz above the Assigned Channel | -13 dBm/MHz |
| Within 0-10MHz below the Assigned Channel | |
| Greater than 10MHz above the Assigned Channel | -25 dBm/MHz |
| Greater than 10MHz below the Assigned Channel | |
| Power of any emission below 3530MHz | -40 dBm/MHz |
| Power of any emission above 3720MHz | |

### 4.6.2 Test Setup



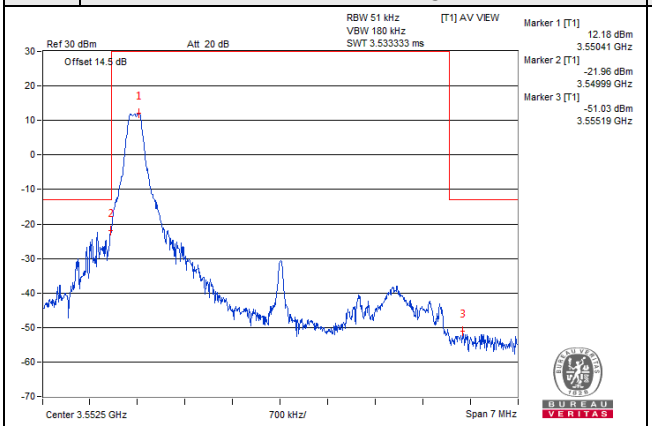
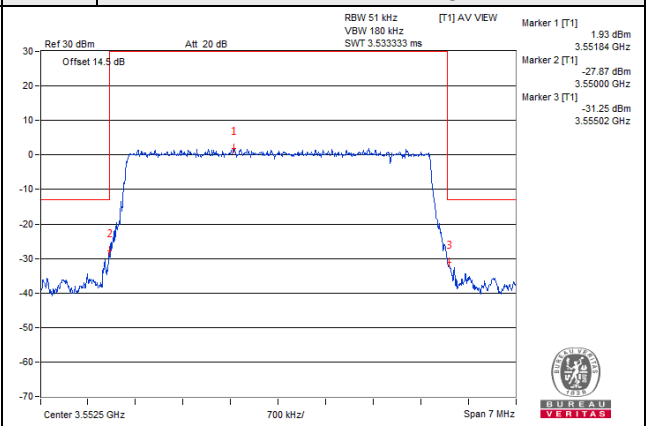
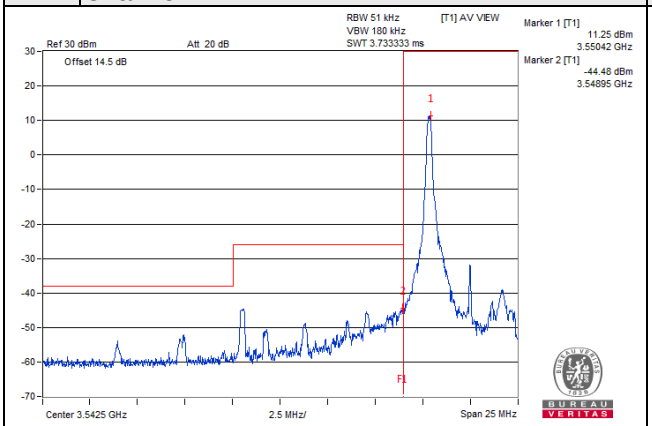
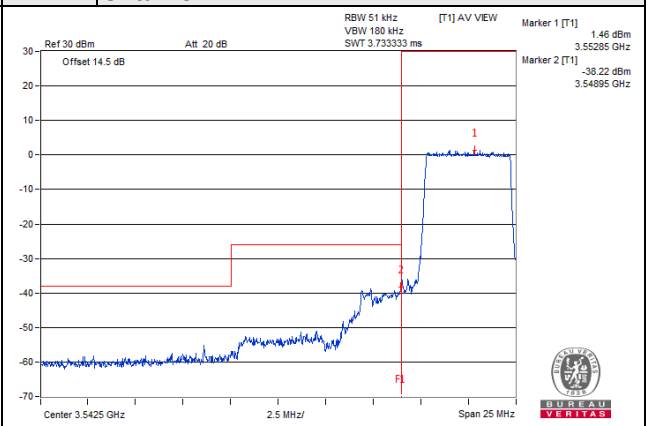
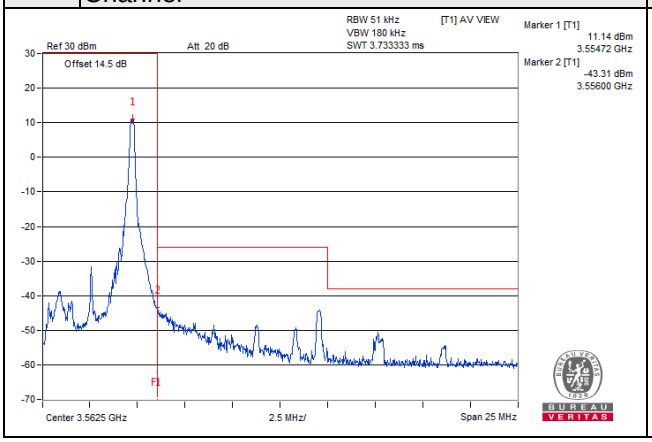
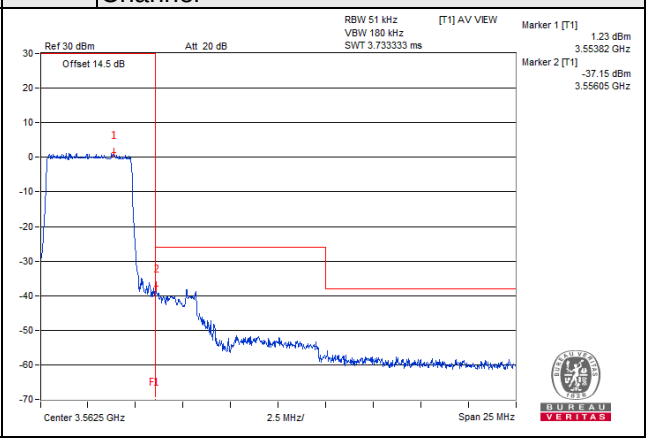

### 4.6.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

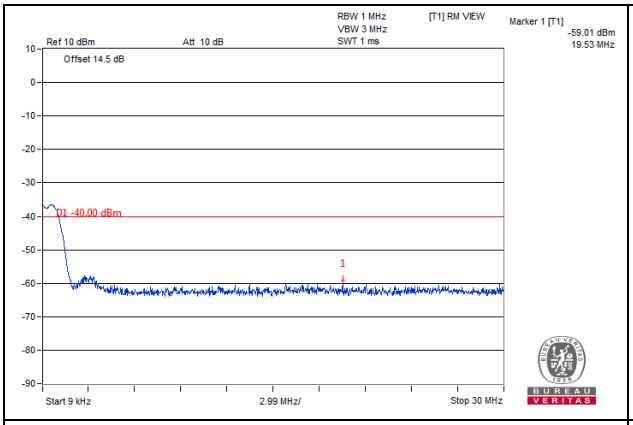
### 4.6.4 Test Procedure

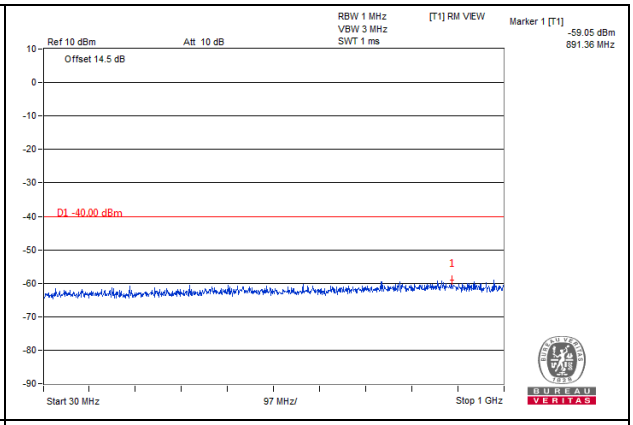
a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
b. Measuring frequency range is from 9 kHz to 37.5 GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

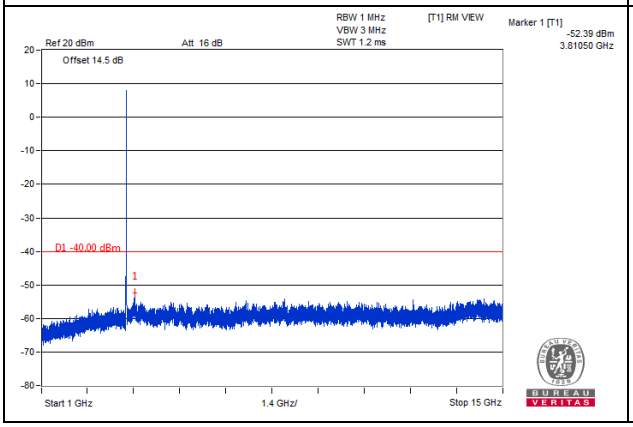
4.6.5 Test Results

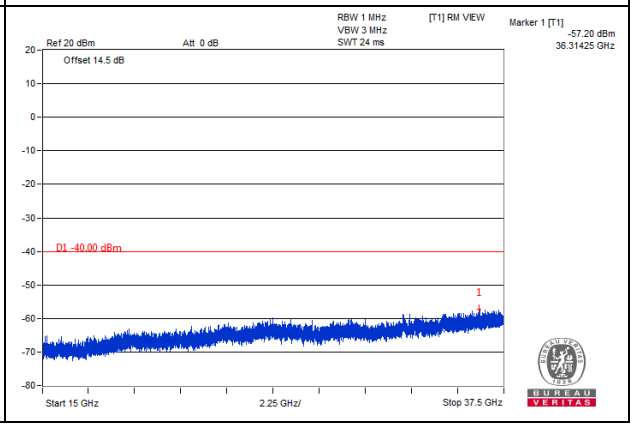
| LTE Band 48 | | | |
|---|---|---|---|
| Channel Bandwidth 5MHz QPSK | | | |
| Low Channel 3552.5MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

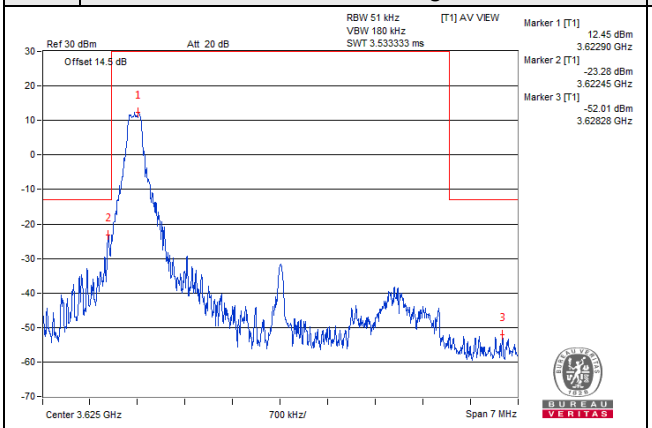
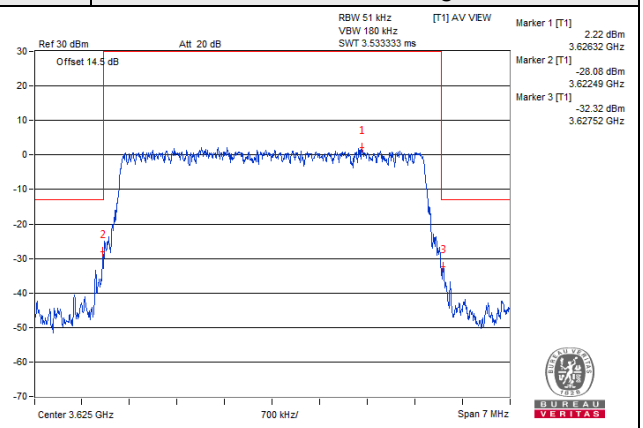
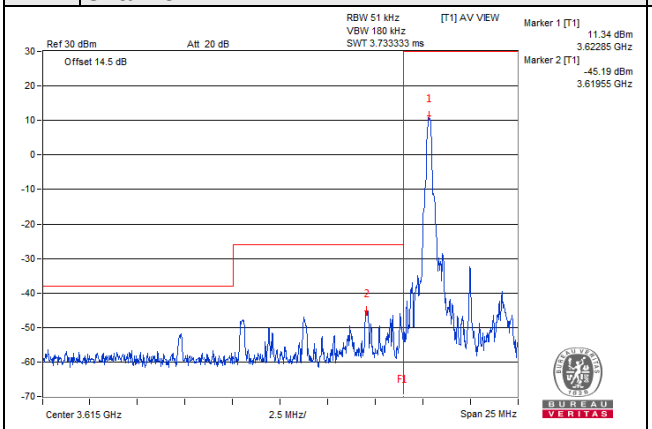
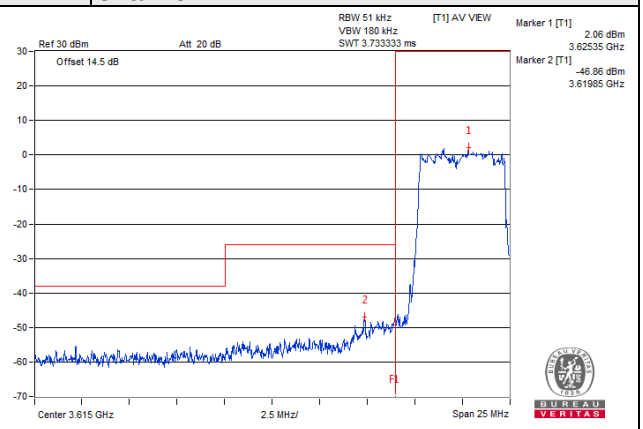
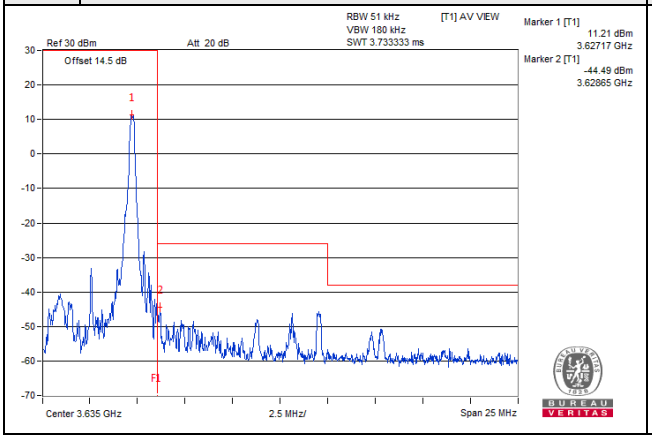
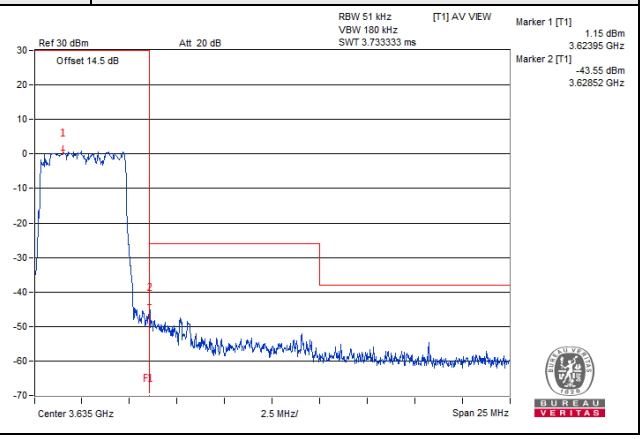
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(51kHz/1MHz) = -25.92 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(51kHz/1MHz) = -25.92 dBm
10MHz above the Assigned channel Limit is -25+10*Log(51kHz/1MHz) = -37.92 dBm
10MHz below the Assigned channel Limit is -25+10*Log(51kHz/1MHz) = -37.92 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.01 dBm
19.53 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

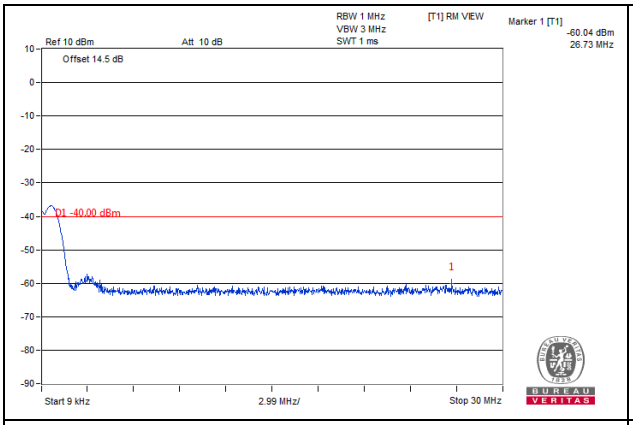

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.05 dBm
891.36 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

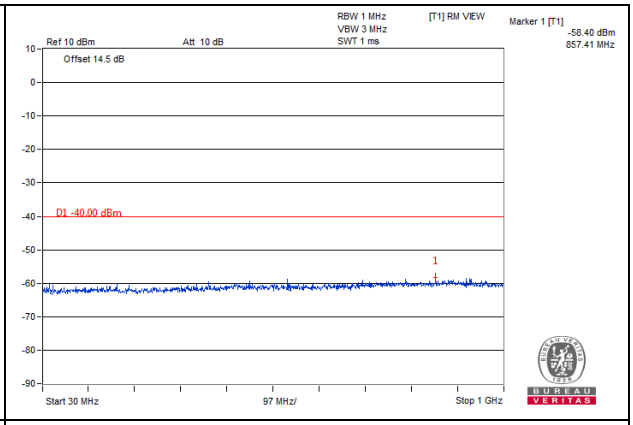

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-52.39 dBm
3.81050 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

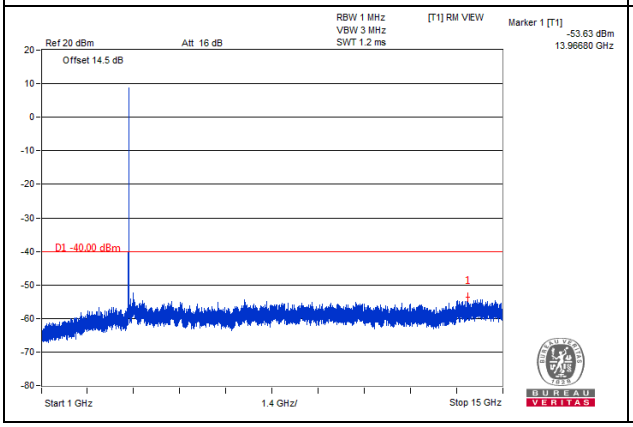

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-57.20 dBm
36.31425 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

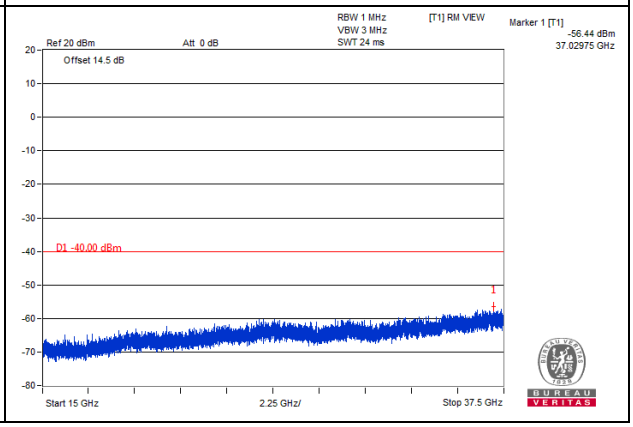
| Channel Bandwidth 5MHz QPSK | | | |
|---|---|---|---|
| Middle Channel 3625MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

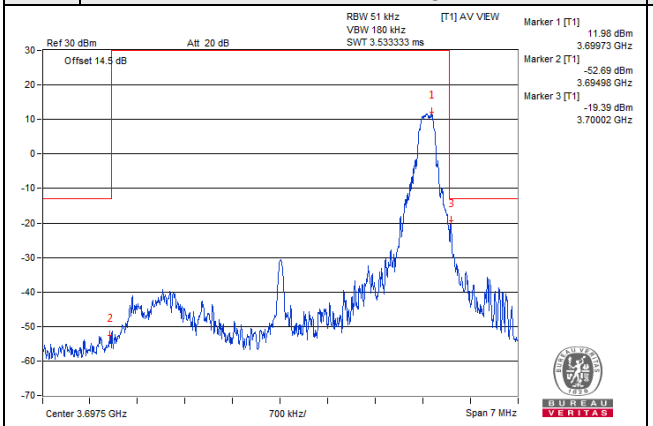
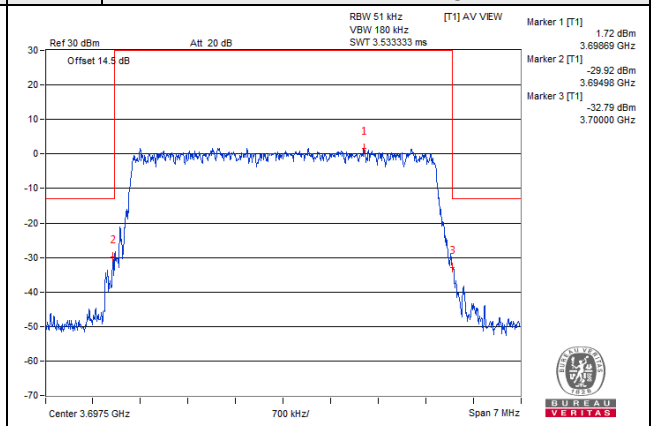
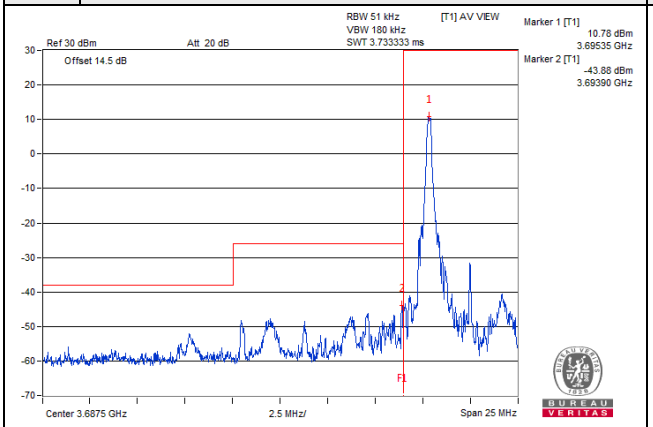
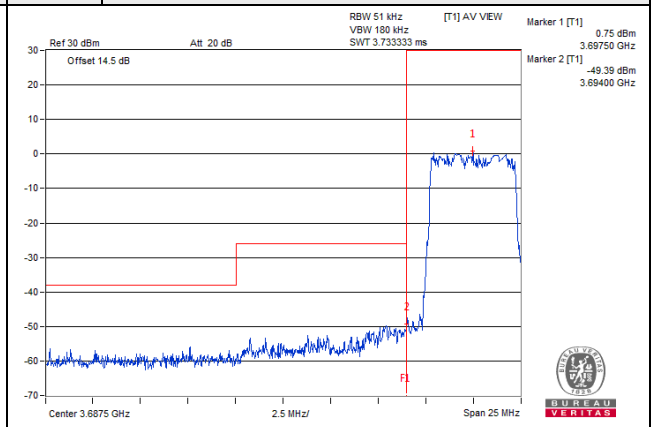
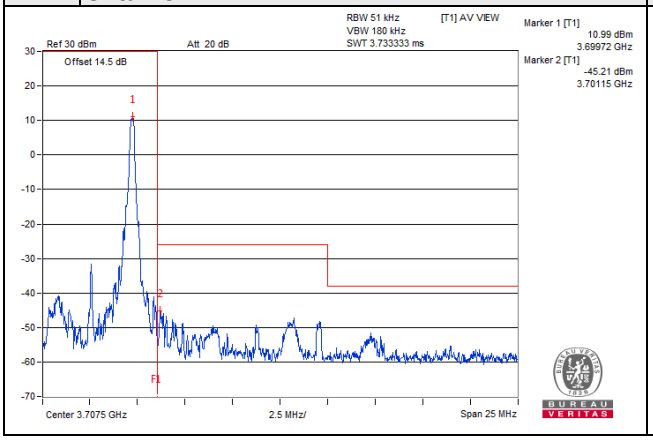
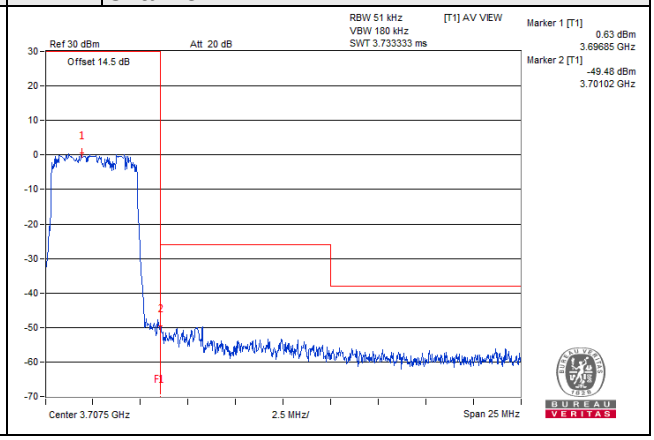
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(51kHz/1MHz) = -25.92 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(51kHz/1MHz) = -25.92 dBm
10MHz above the Assigned channel Limit is -25+10*Log(51kHz/1MHz) = -37.92 dBm
10MHz below the Assigned channel Limit is -25+10*Log(51kHz/1MHz) = -37.92 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-60.04 dBm
26.73 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

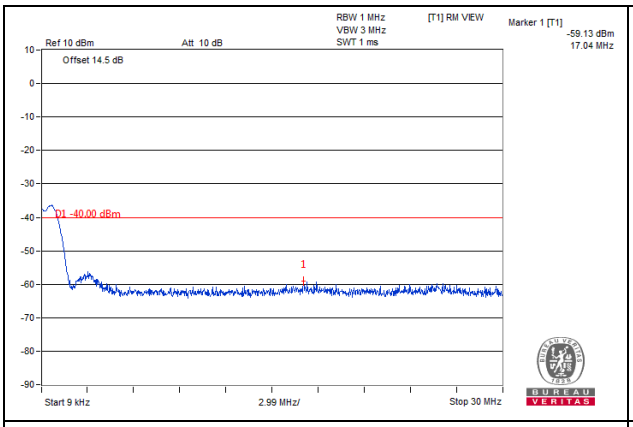

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-58.40 dBm
857.41 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

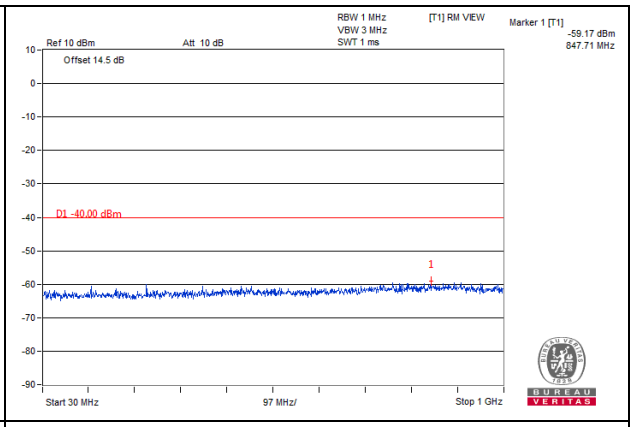

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.63 dBm
13.96680 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

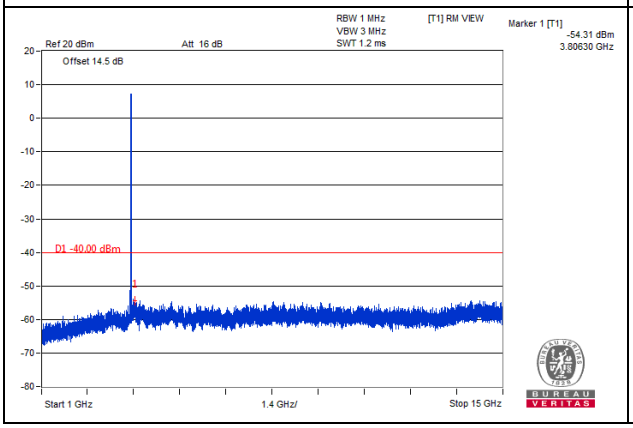

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-56.44 dBm
37.02975 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

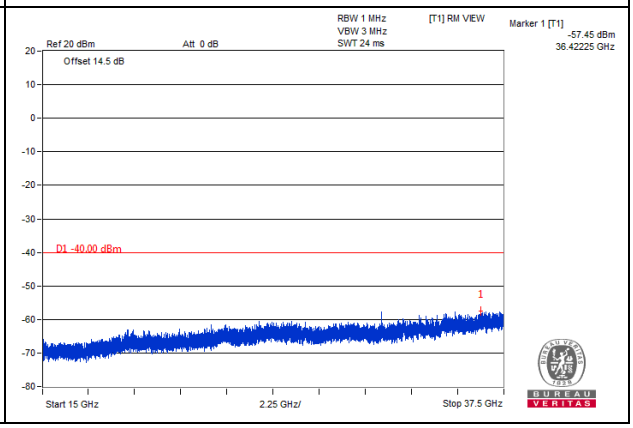
| Channel Bandwidth 5MHz QPSK | | | |
|---|---|---|---|
| High Channel 3697.5MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

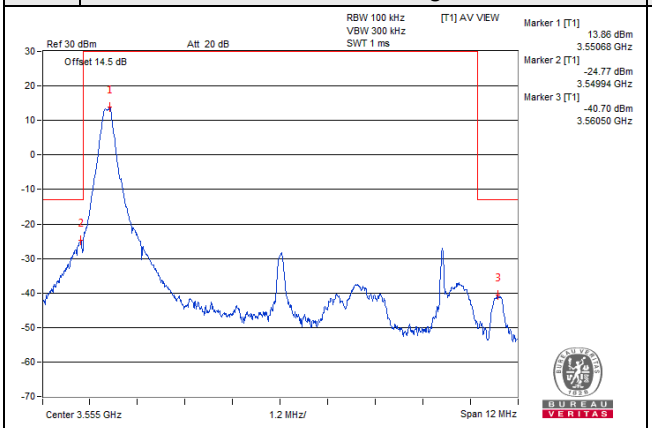
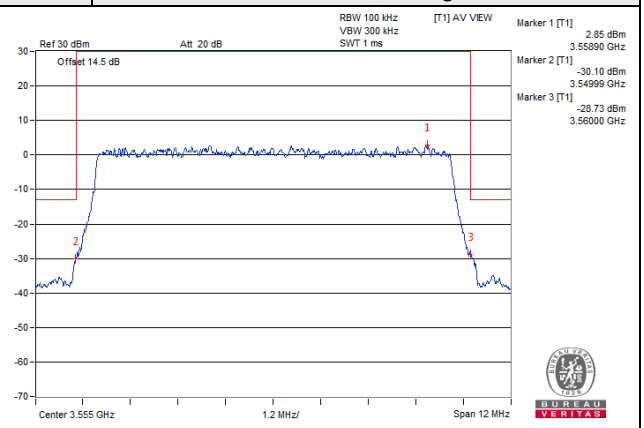
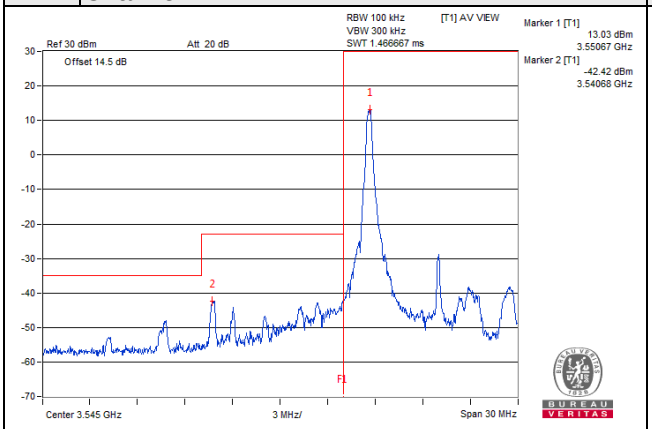
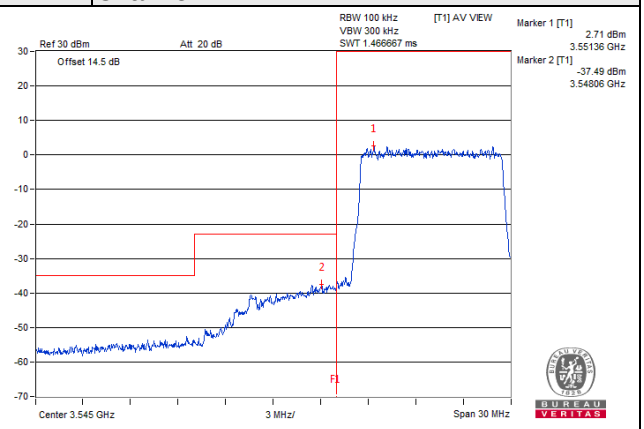
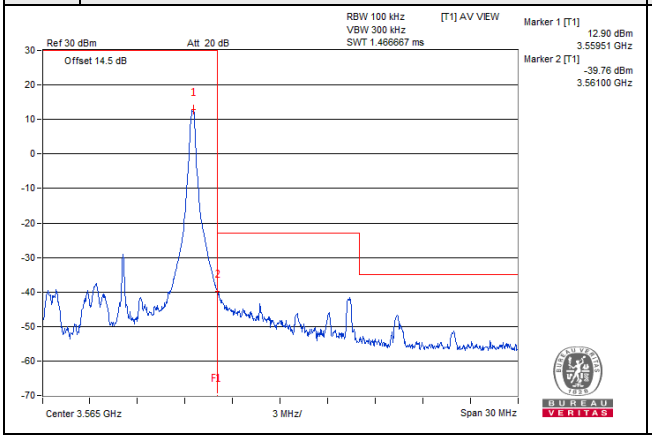
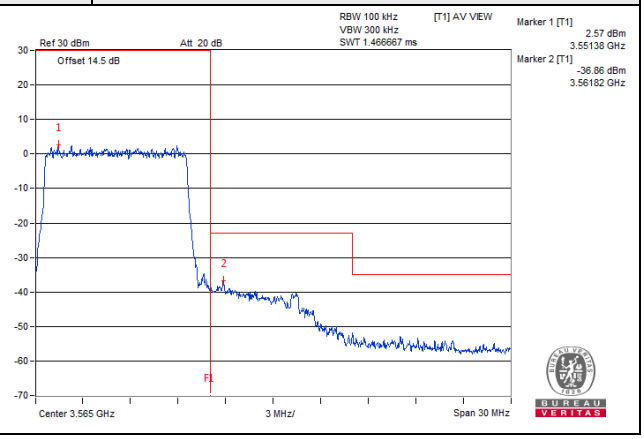
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(51kHz/1MHz) = -25.92 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(51kHz/1MHz) = -25.92 dBm
10MHz above the Assigned channel Limit is -25+10*Log(51kHz/1MHz) = -37.92 dBm
10MHz below the Assigned channel Limit is -25+10*Log(51kHz/1MHz) = -37.92 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.13 dBm
17.04 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

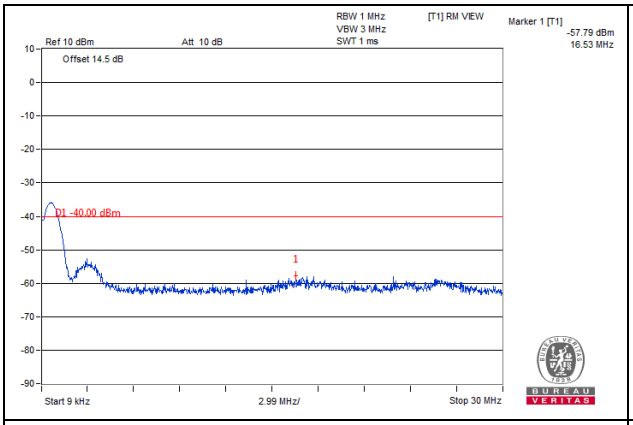

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.17 dBm
847.71 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

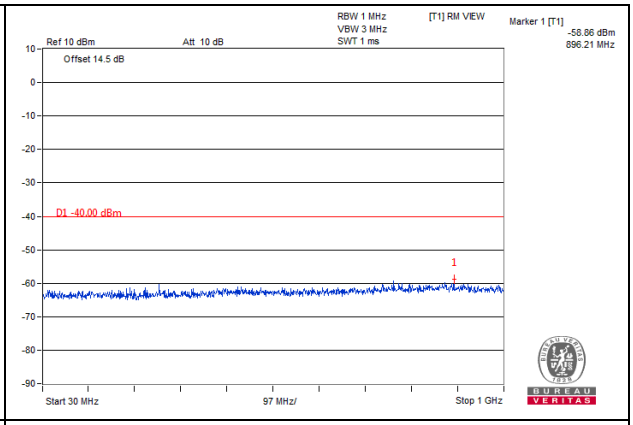

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-54.31 dBm
3.80630 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

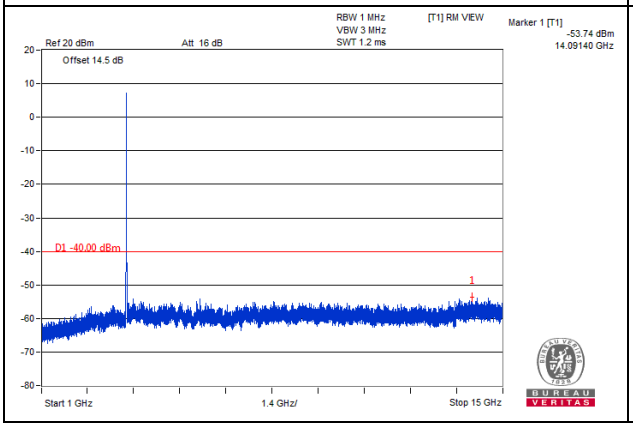

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-57.45 dBm
36.42225 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

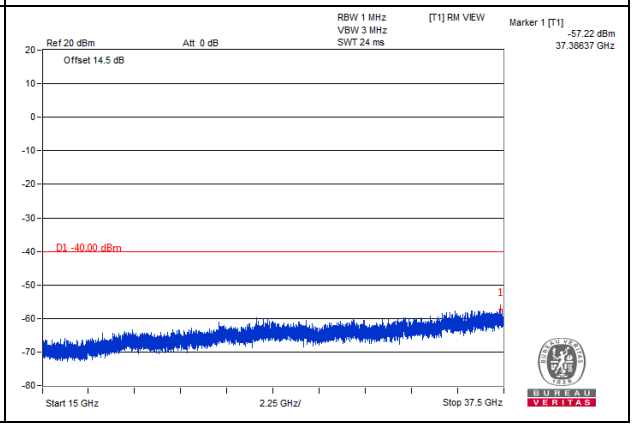
| Channel Bandwidth 10MHz QPSK | | | |
|---|---|---|---|
| Low Channel 3555MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

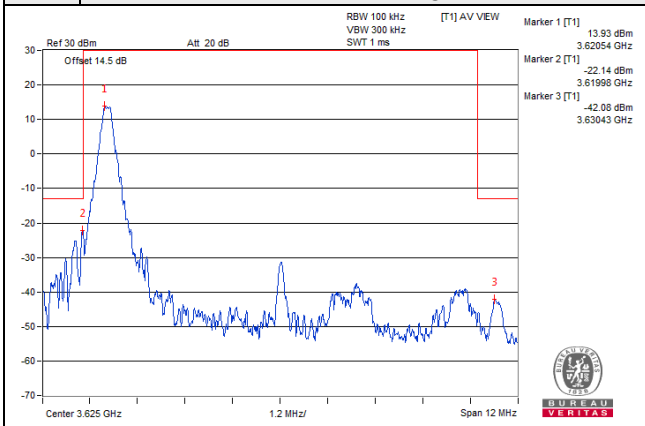
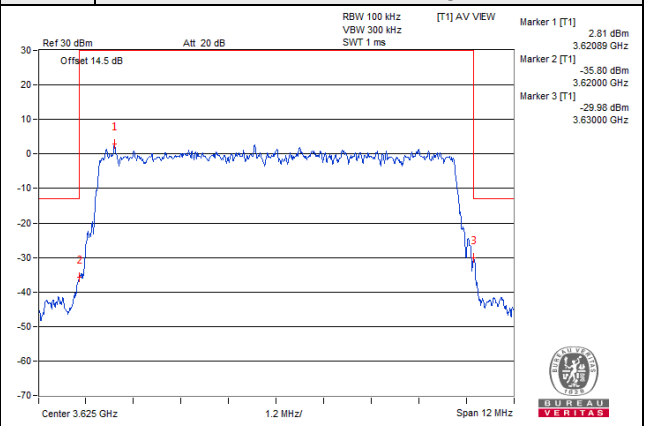
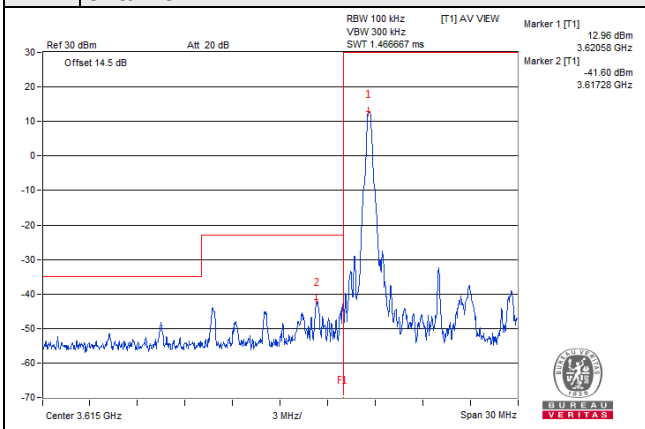
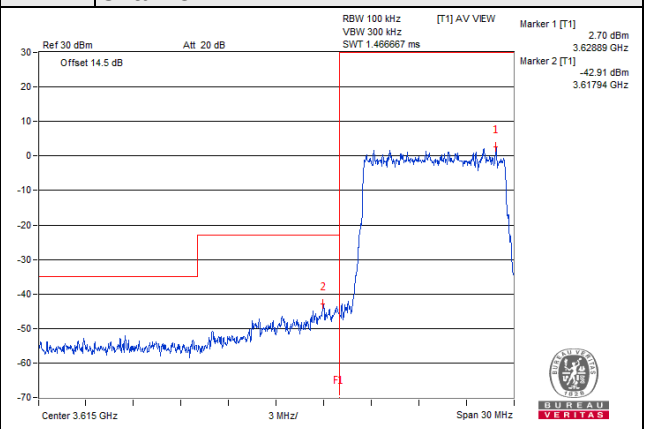
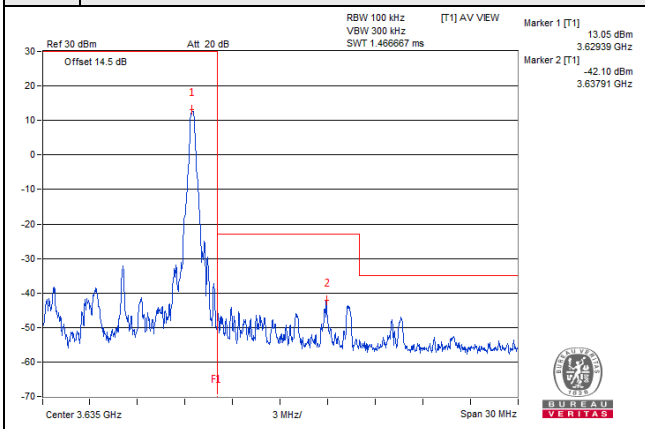
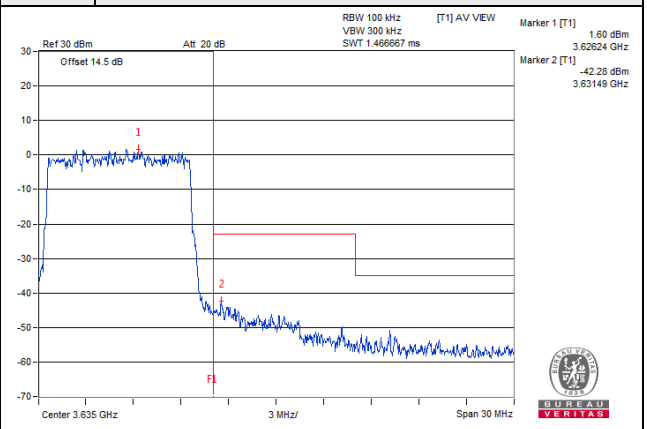
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(100kHz/1MHz) = -23 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(100kHz/1MHz) = -23 dBm
10MHz above the Assigned channel Limit is -25+10*Log(100kHz/1MHz) = -35 dBm
10MHz below the Assigned channel Limit is -25+10*Log(100kHz/1MHz) = -35 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-57.79 dBm
16.53 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

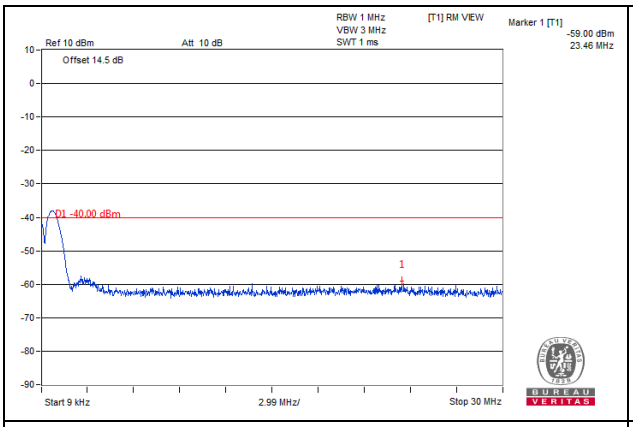

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-58.86 dBm
896.21 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

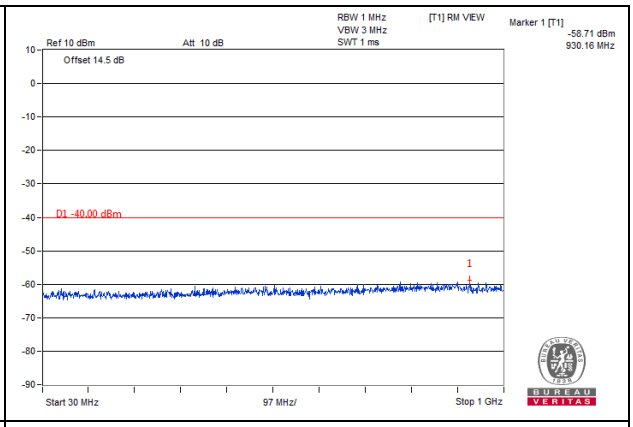

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.74 dBm
14.09140 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

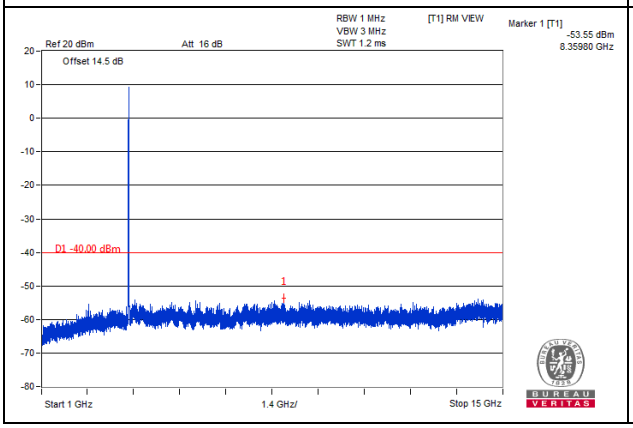

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-57.22 dBm
37.38637 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

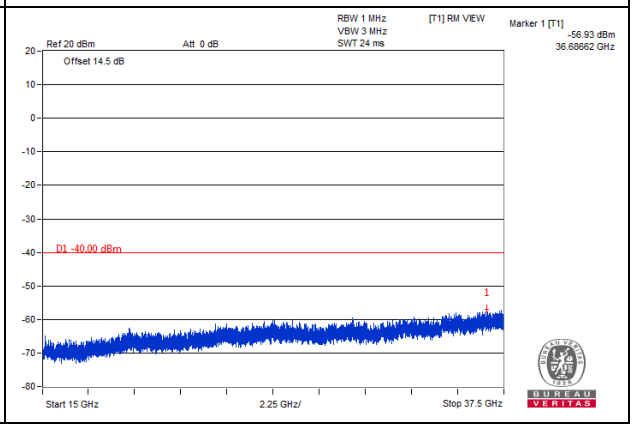
| Channel Bandwidth 10MHz QPSK | | | |
|---|---|---|---|
| Middle Channel 3625MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

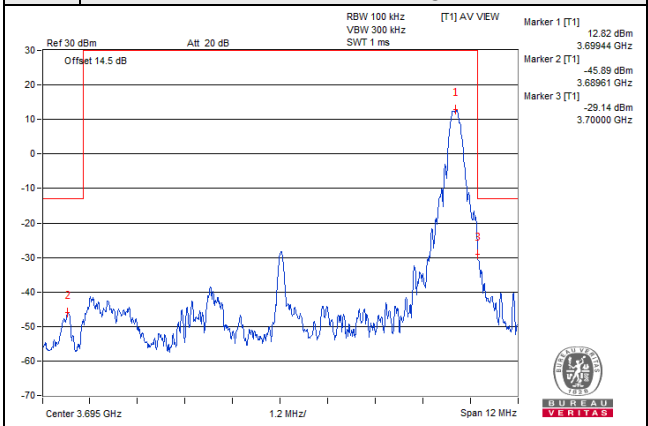
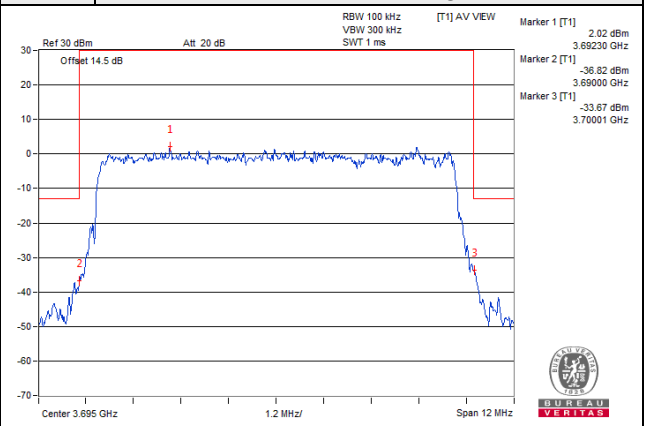
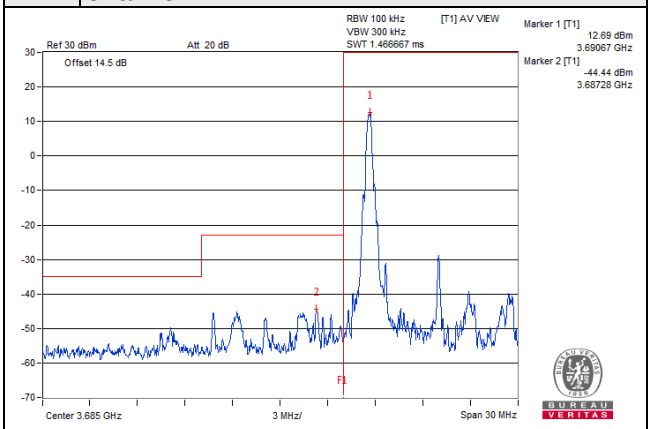
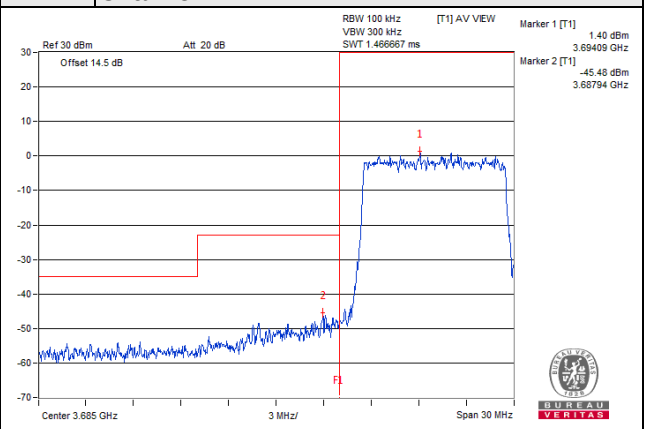
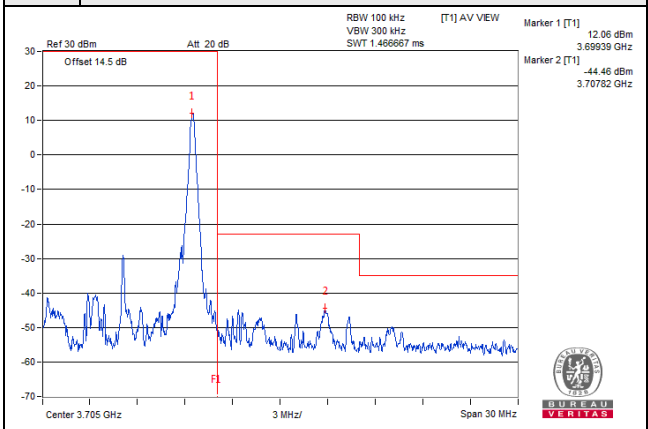
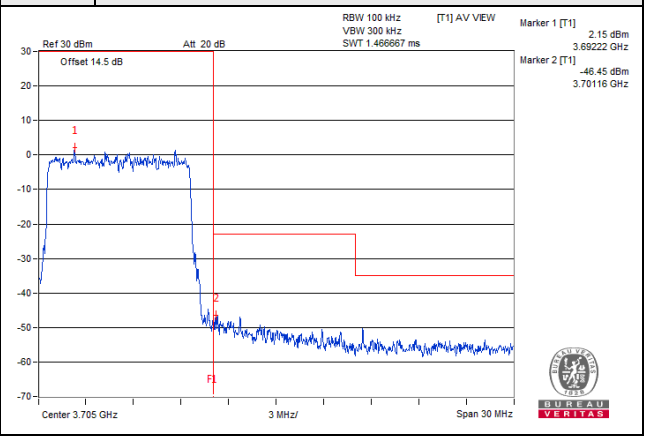
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(100kHz/1MHz) = -23 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(100kHz/1MHz) = -23 dBm
10MHz above the Assigned channel Limit is -25+10*Log(100kHz/1MHz) = -35 dBm
10MHz below the Assigned channel Limit is -25+10*Log(100kHz/1MHz) = -35 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.00 dBm
23.46 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

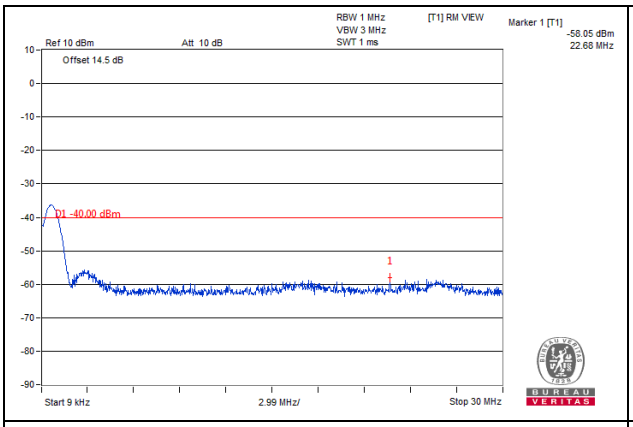

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-58.71 dBm
930.16 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

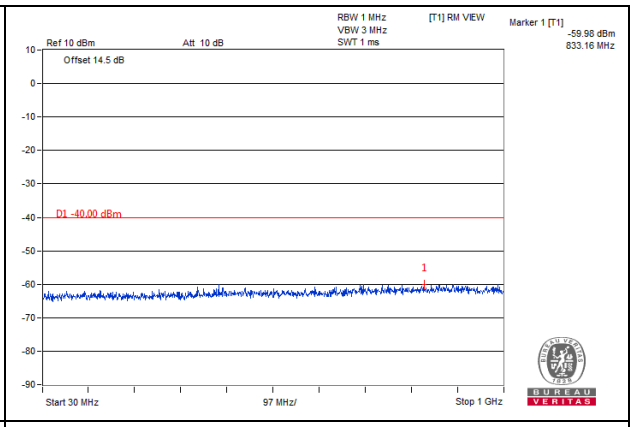

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.55 dBm
8.35980 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

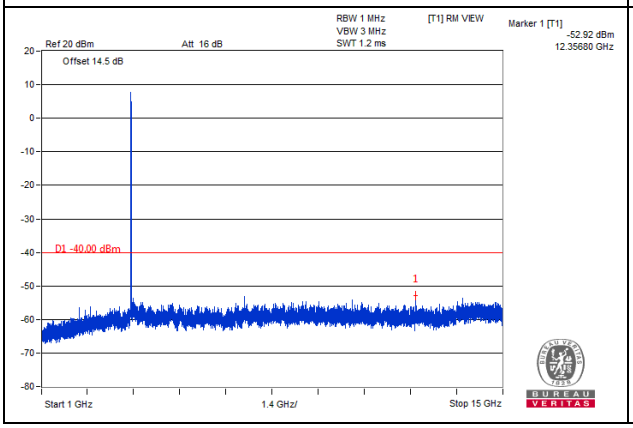

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-56.93 dBm
36.68662 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

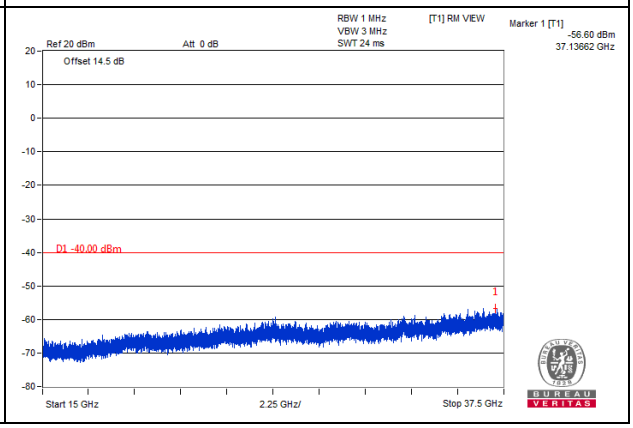
| Channel Bandwidth 10MHz QPSK | | | |
|---|---|---|---|
| High Channel 3695MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

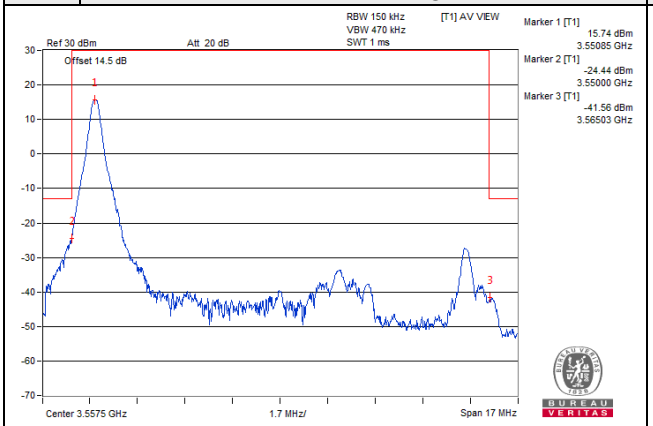
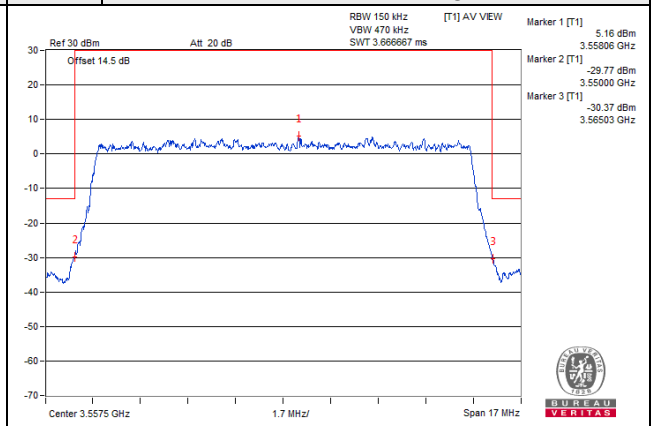
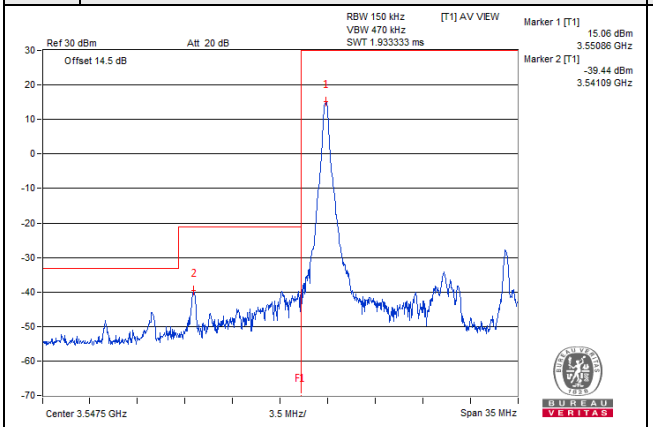
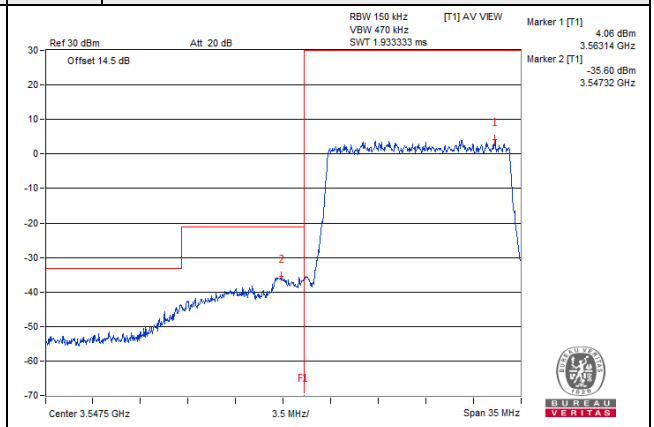
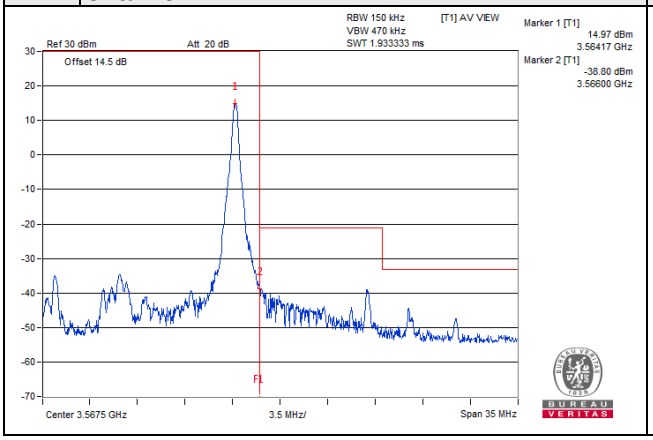
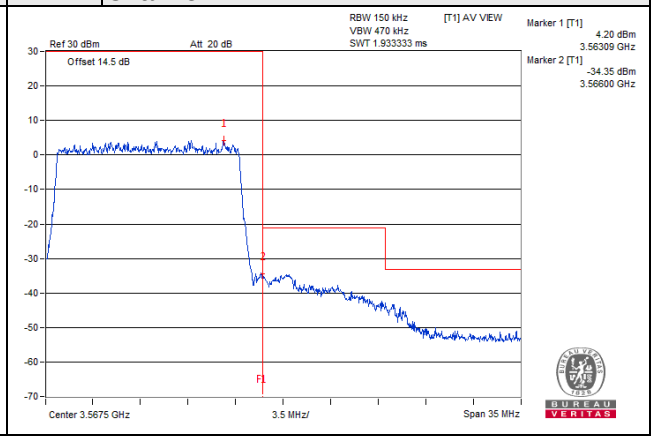
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(100kHz/1MHz) = -23 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(100kHz/1MHz) = -23 dBm
10MHz above the Assigned channel Limit is -25+10*Log(100kHz/1MHz) = -35 dBm
10MHz below the Assigned channel Limit is -25+10*Log(100kHz/1MHz) = -35 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-58.05 dBm
22.68 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

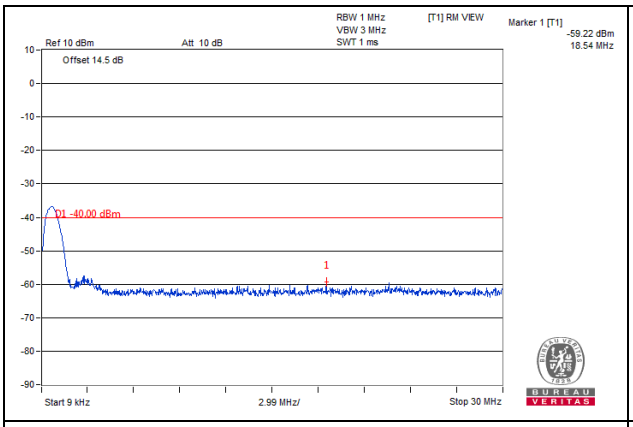

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.98 dBm
833.16 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

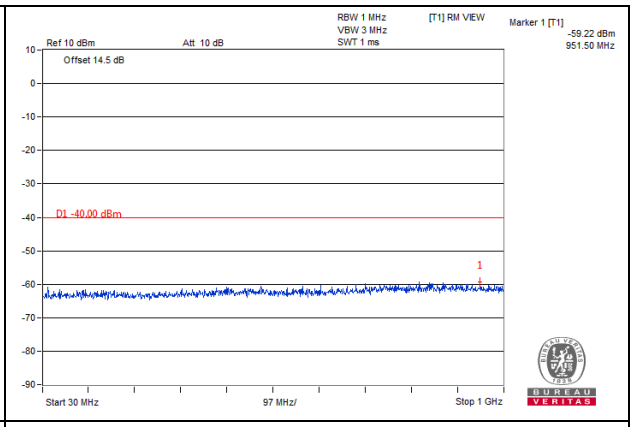

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-52.92 dBm
12.35680 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

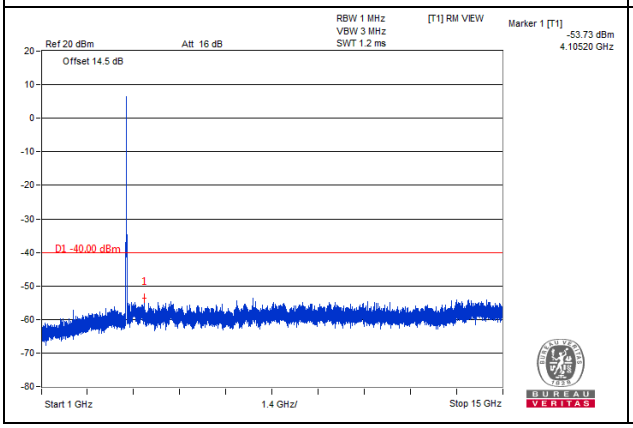

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-56.60 dBm
37.13662 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

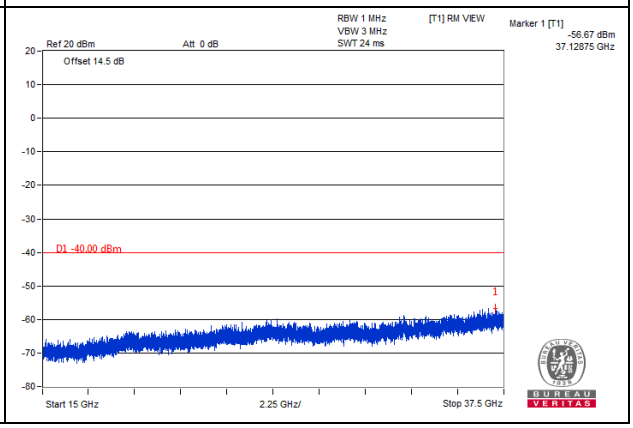
| Channel Bandwidth 15MHz QPSK | | | |
|---|---|---|---|
| Low Channel 3557.5MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

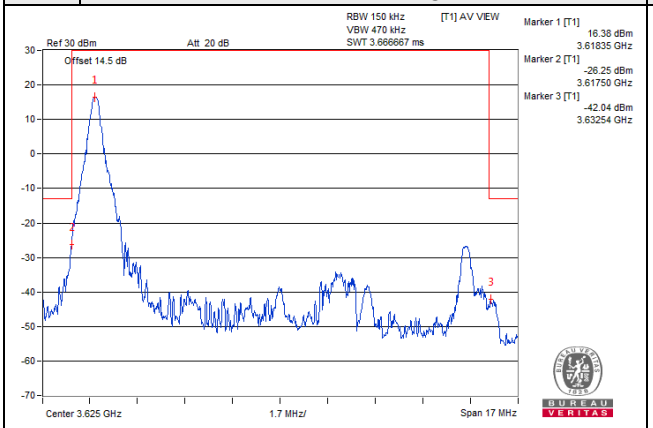
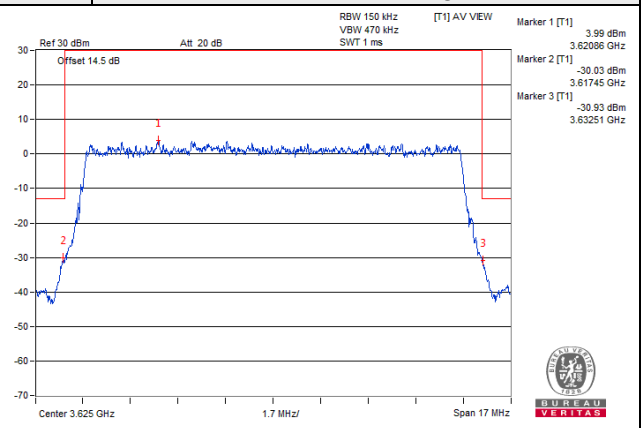
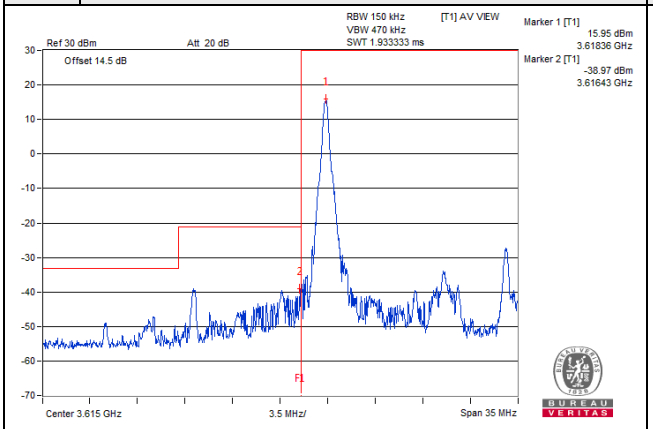
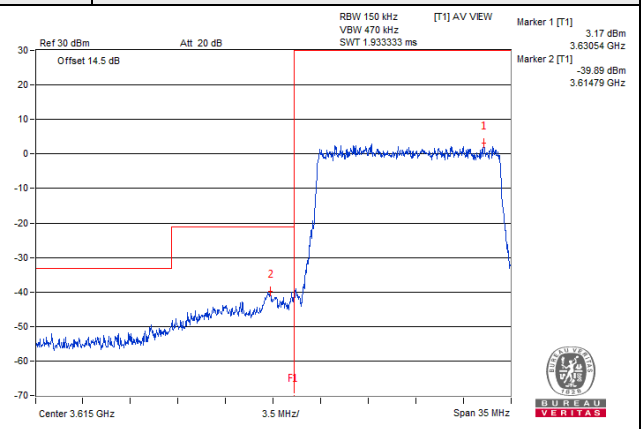
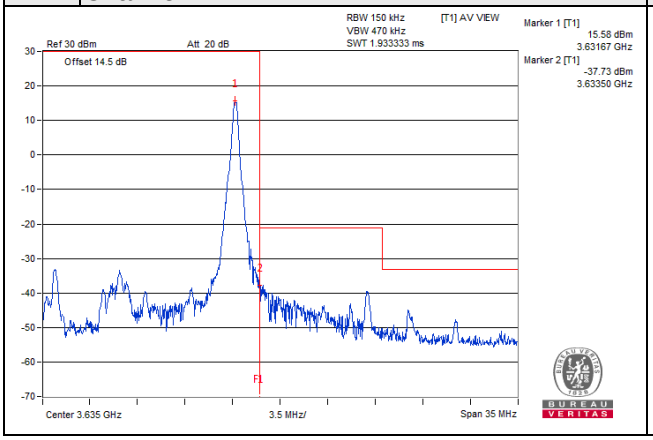
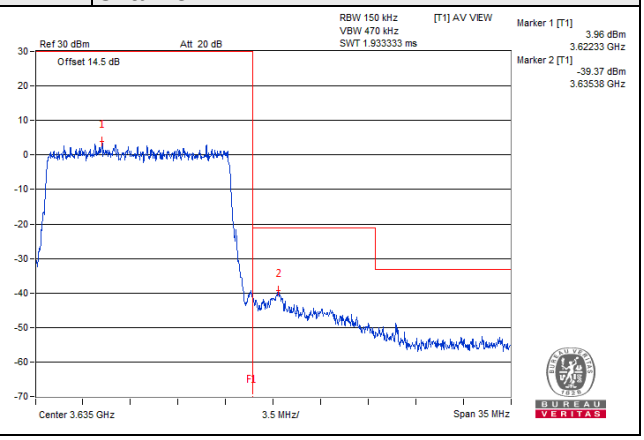
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(150kHz/1MHz) = -21.24 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(150kHz/1MHz) = -21.24 dBm
10MHz above the Assigned channel Limit is -25+10*Log(150kHz/1MHz) = -33.24 dBm
10MHz below the Assigned channel Limit is -25+10*Log(150kHz/1MHz) = -33.24 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.22 dBm
18.54 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

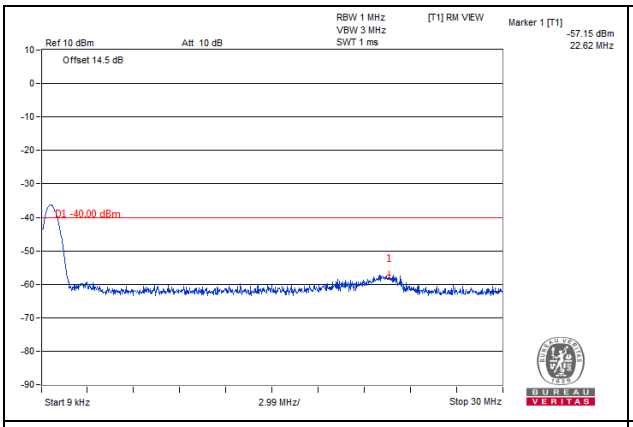

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.22 dBm
951.50 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

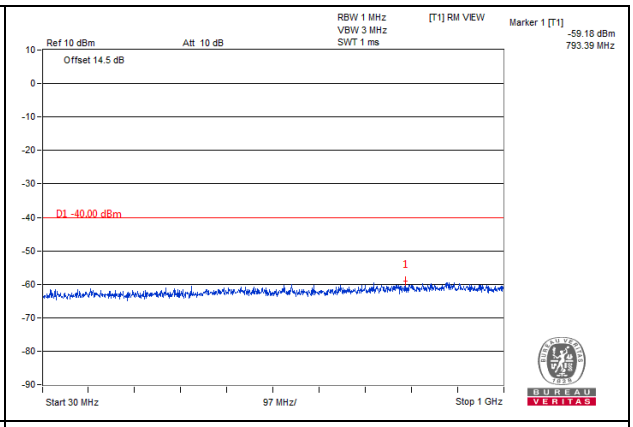

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.73 dBm
4.10520 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

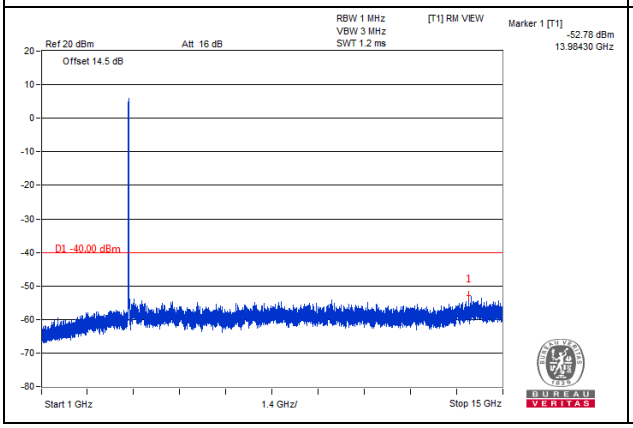

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-56.67 dBm
37.12875 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

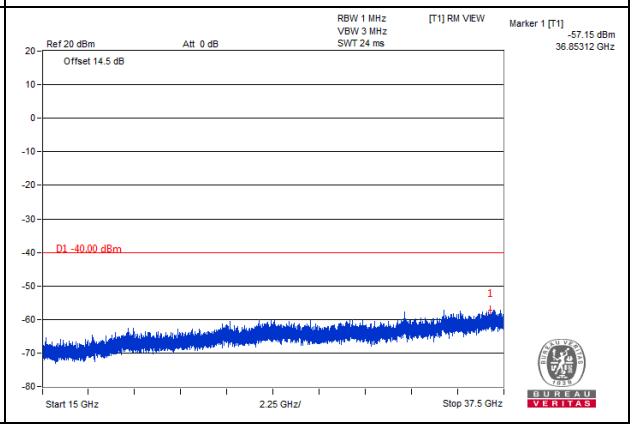
| Channel Bandwidth 15MHz QPSK | | | |
|---|---|---|---|
| Middle Channel 3625MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

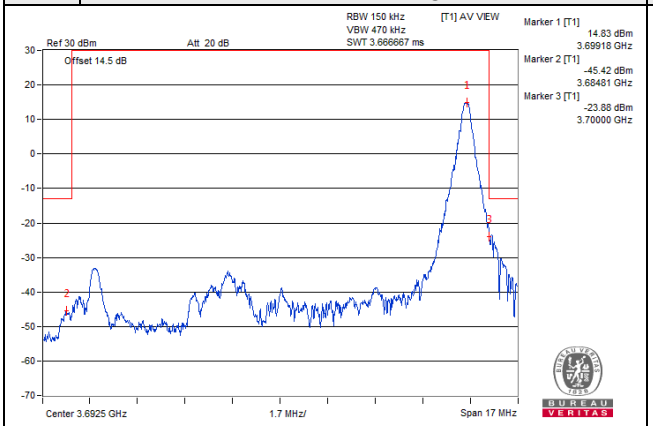
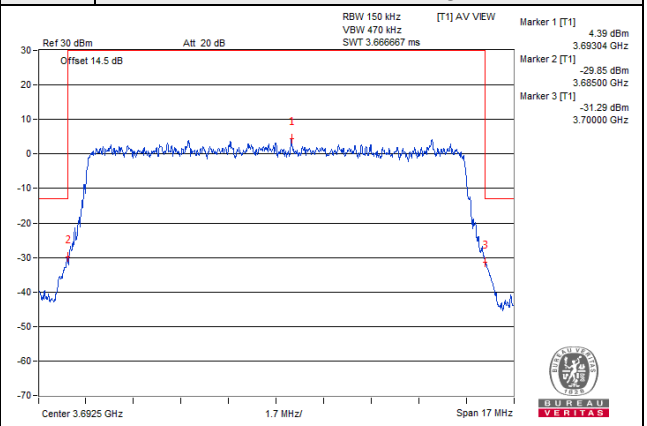
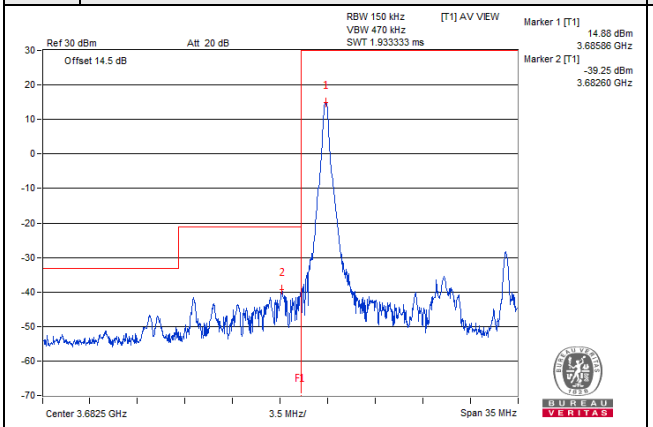
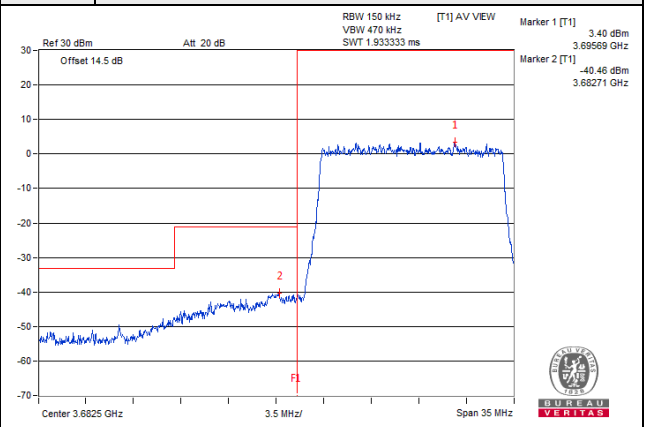
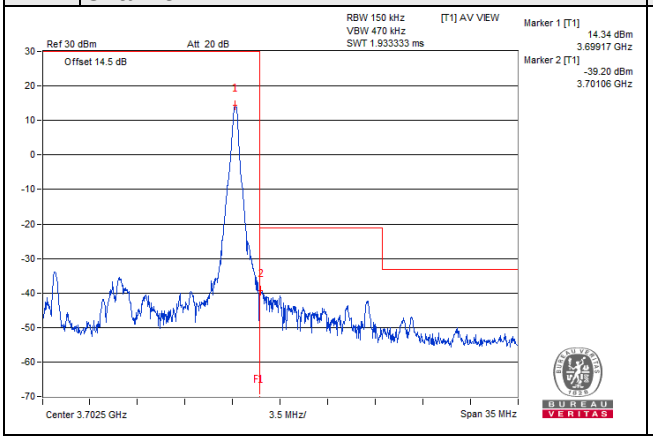
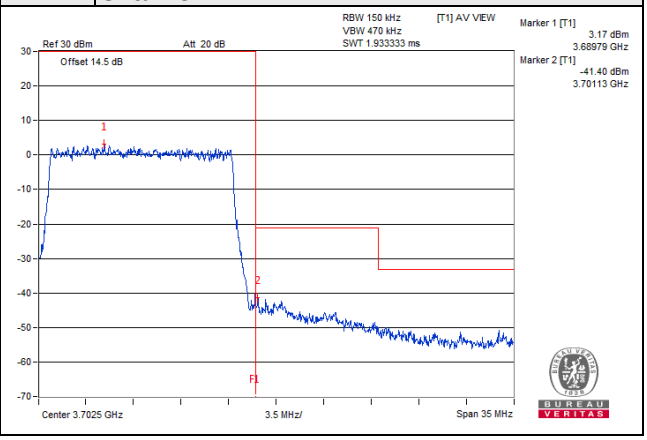
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(150kHz/1MHz) = -21.24 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(150kHz/1MHz) = -21.24 dBm
10MHz above the Assigned channel Limit is -25+10*Log(150kHz/1MHz) = -33.24 dBm
10MHz below the Assigned channel Limit is -25+10*Log(150kHz/1MHz) = -33.24 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-57.15 dBm
22.62 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

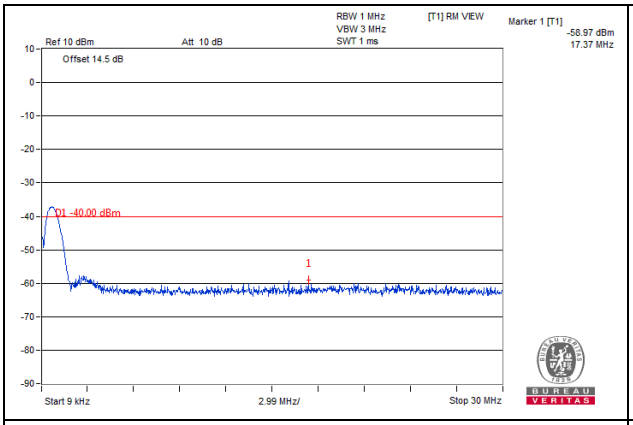

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.18 dBm
793.39 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

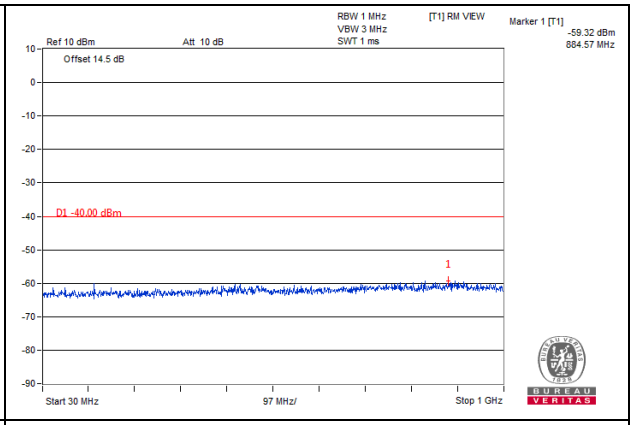

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-52.78 dBm
13.98430 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

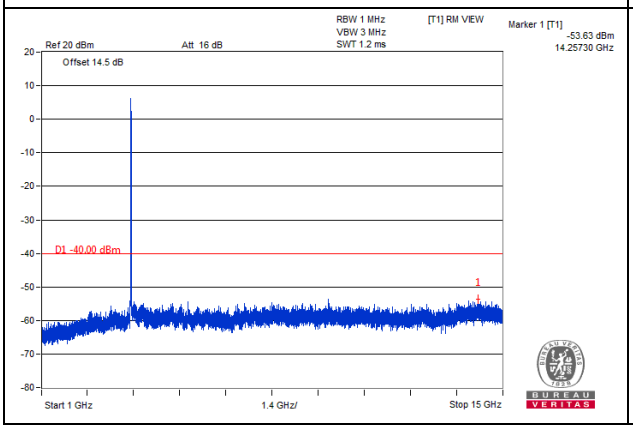

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-57.15 dBm
36.85312 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

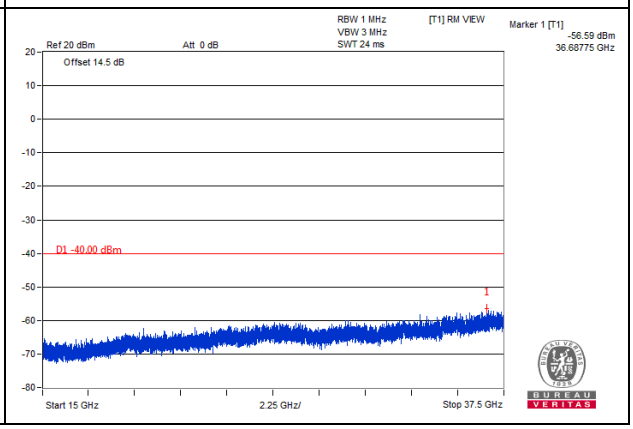
| Channel Bandwidth 15MHz QPSK | | | |
|---|---|---|---|
| High Channel 3692.5MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

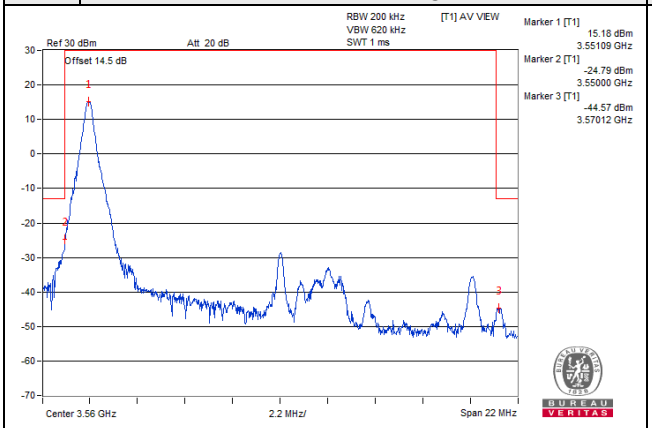
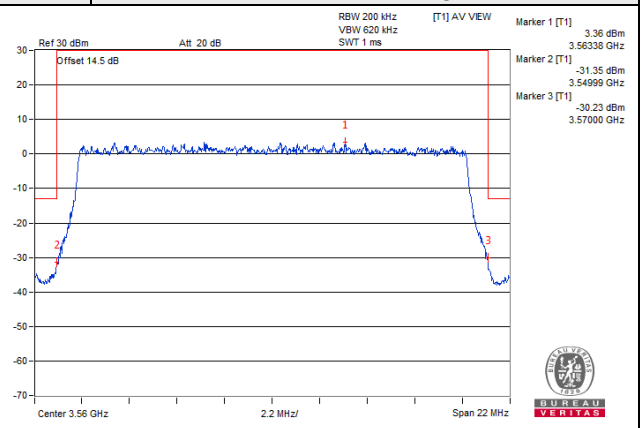
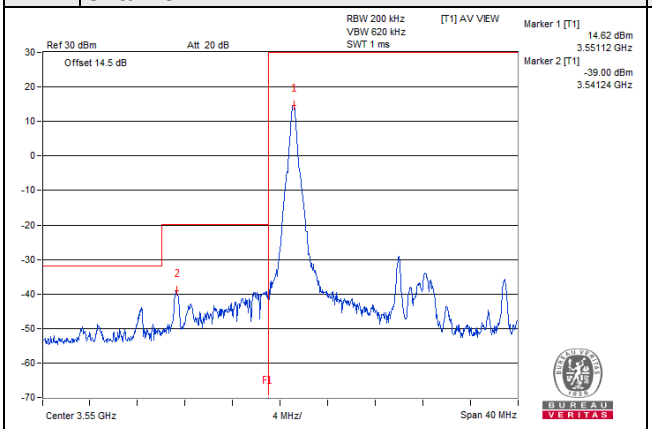
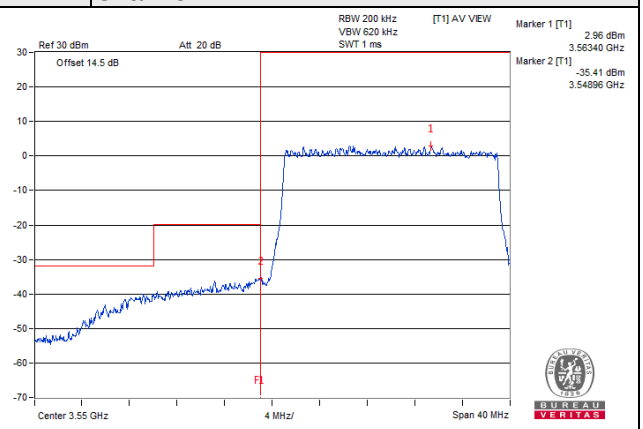
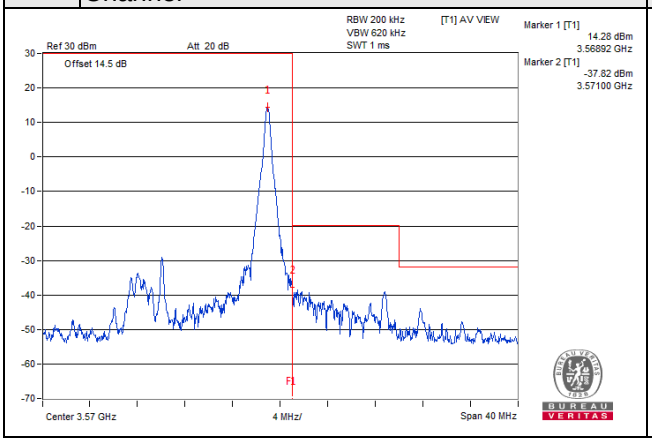
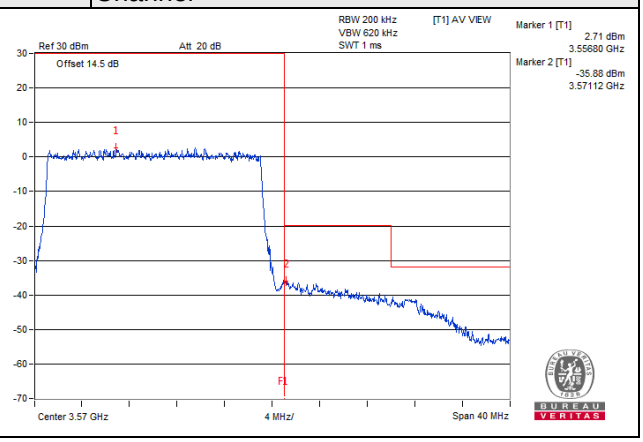
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(150kHz/1MHz) = -21.24 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(150kHz/1MHz) = -21.24 dBm
10MHz above the Assigned channel Limit is -25+10*Log(150kHz/1MHz) = -33.24 dBm
10MHz below the Assigned channel Limit is -25+10*Log(150kHz/1MHz) = -33.24 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-58.97 dBm
17.37 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

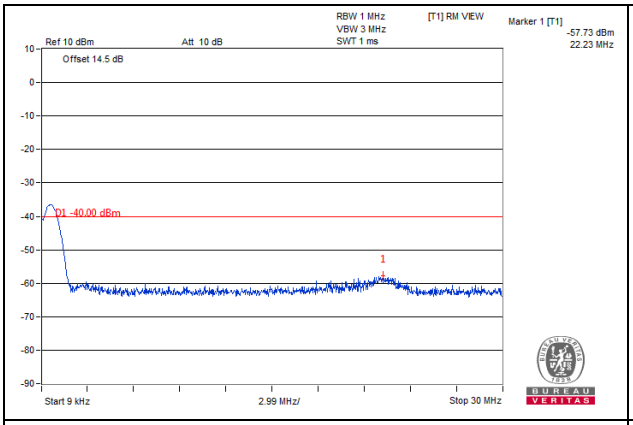

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.32 dBm
884.57 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

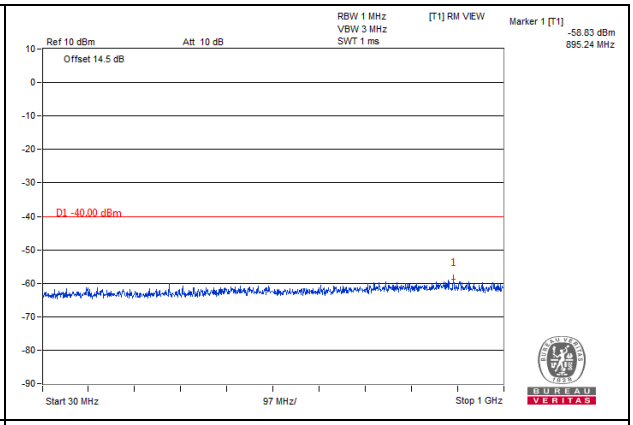

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.63 dBm
14.25730 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz

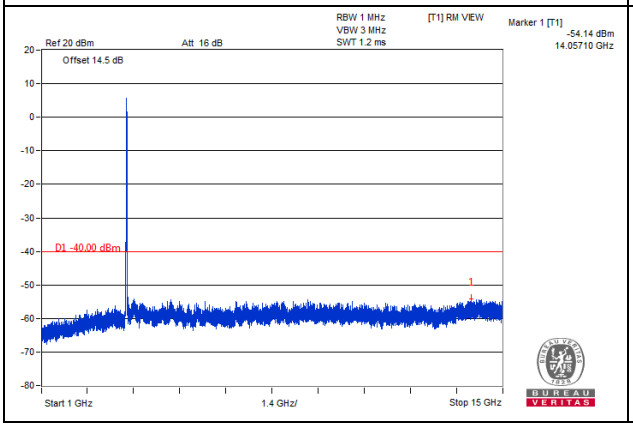

RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-56.59 dBm
36.68775 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

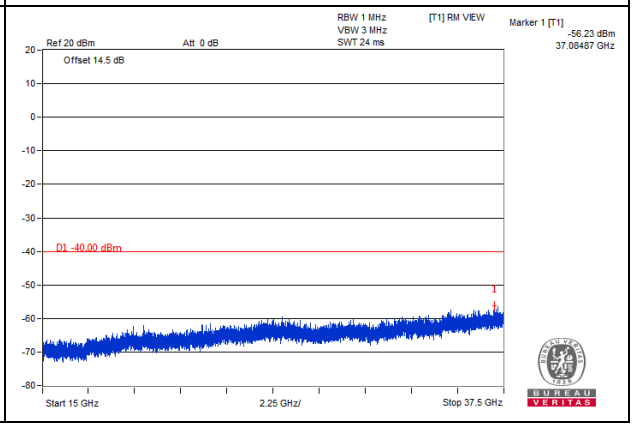
| Channel Bandwidth 20MHz QPSK | | | |
|---|---|---|---|
| Low Channel 3560MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

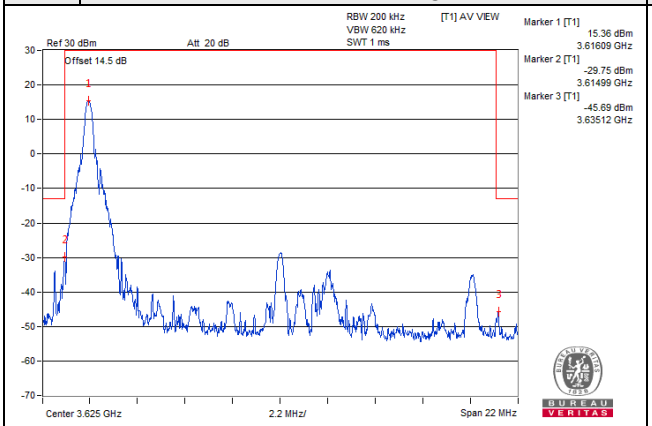
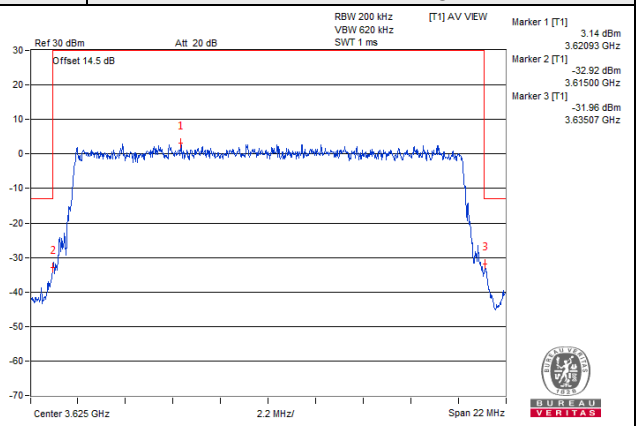
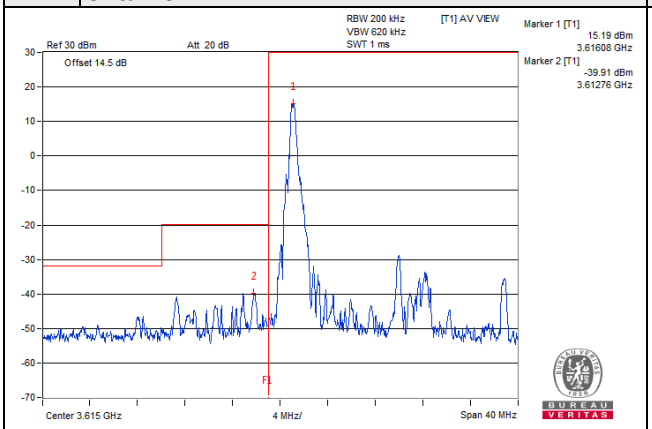
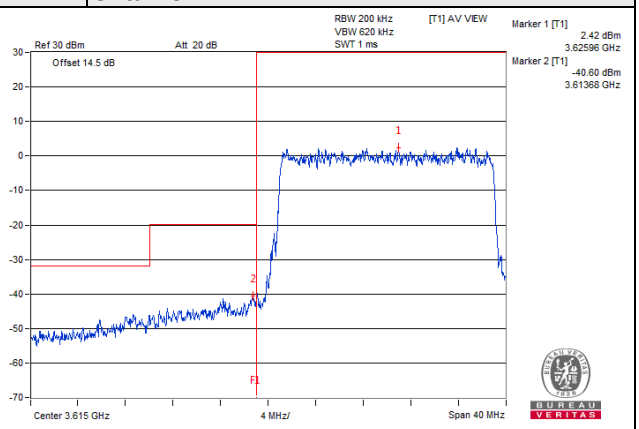
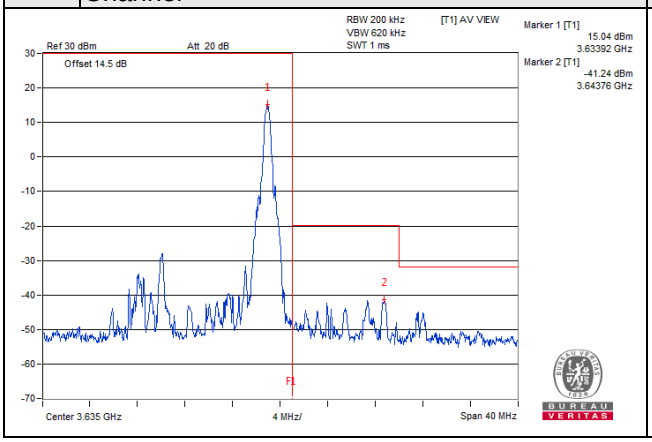
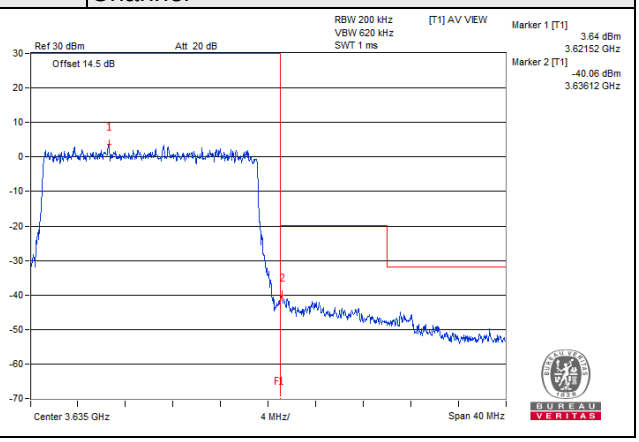
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(200kHz/1MHz) = -19.99 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(200kHz/1MHz) = -19.99 dBm
10MHz above the Assigned channel Limit is -25+10*Log(200kHz/1MHz) = -31.99 dBm
10MHz below the Assigned channel Limit is -25+10*Log(200kHz/1MHz) = -31.99 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-57.73 dBm
22.23 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz

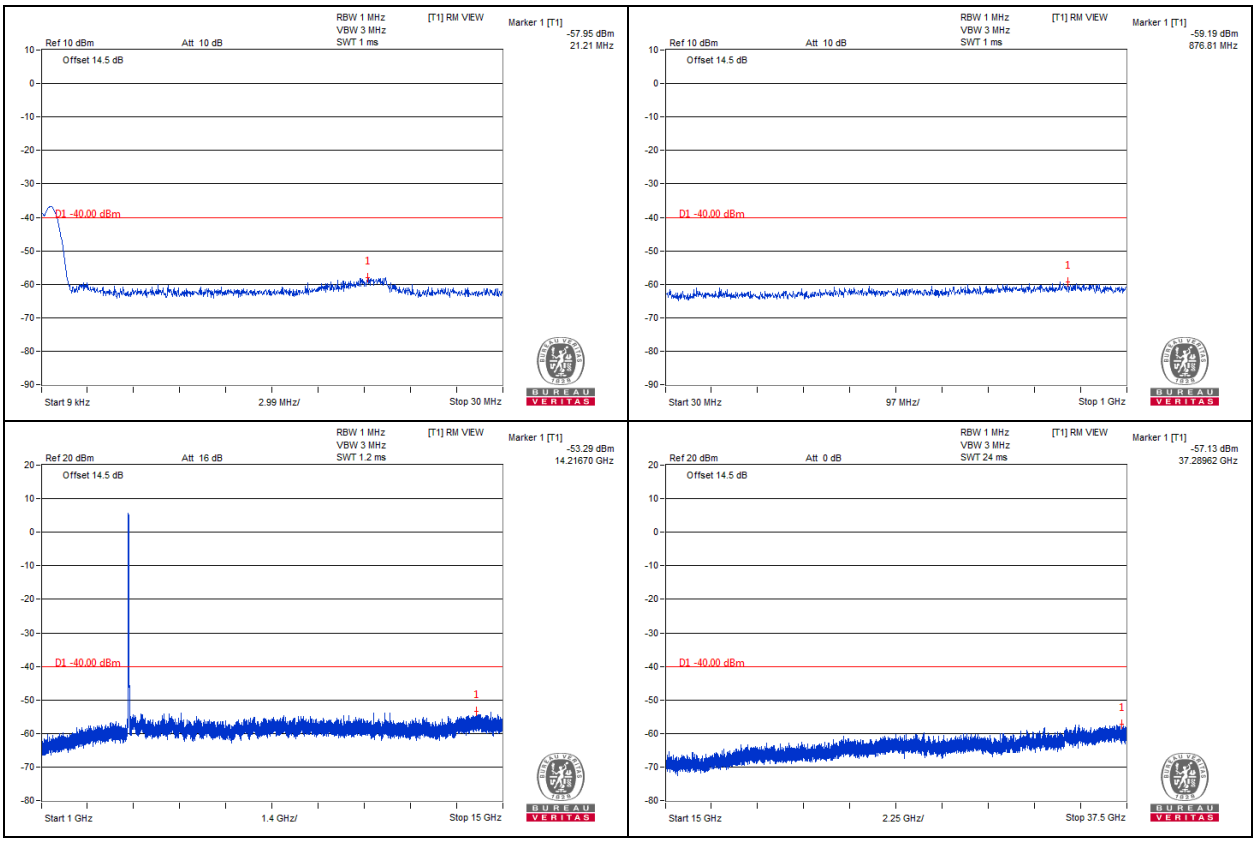

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-58.83 dBm
895.24 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz

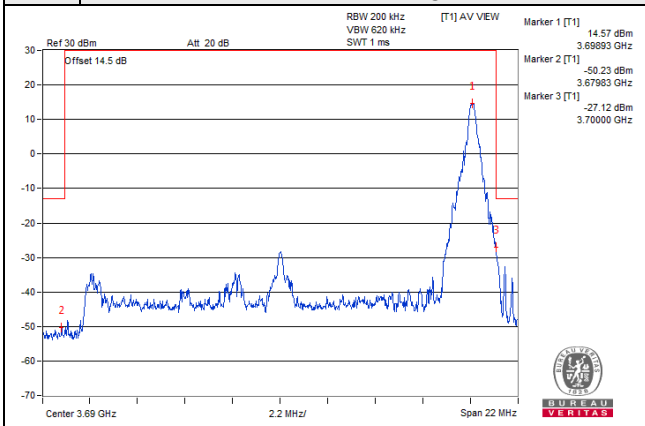
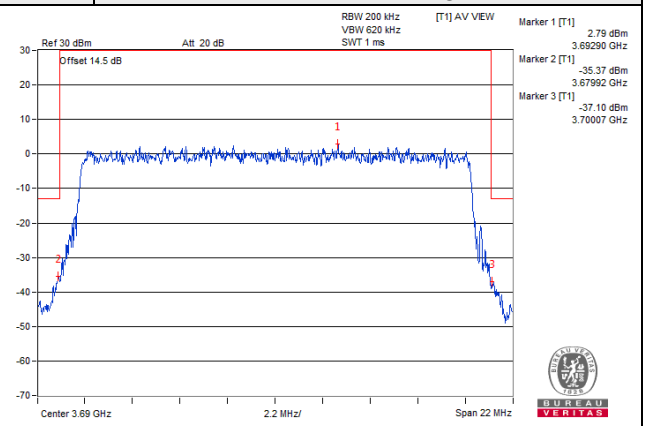
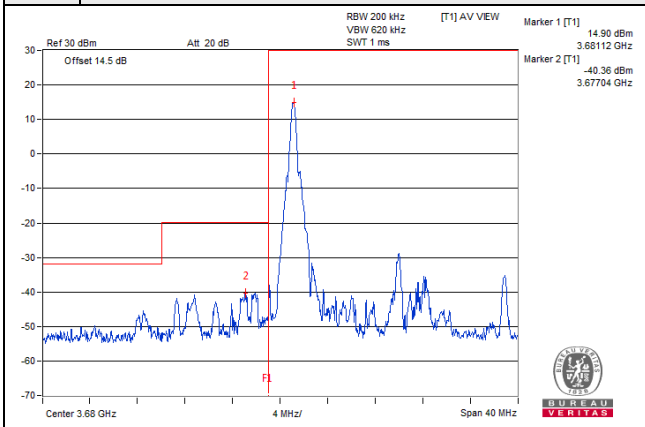
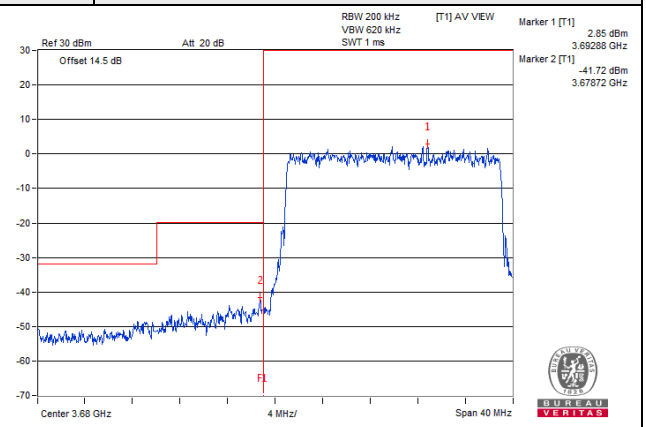
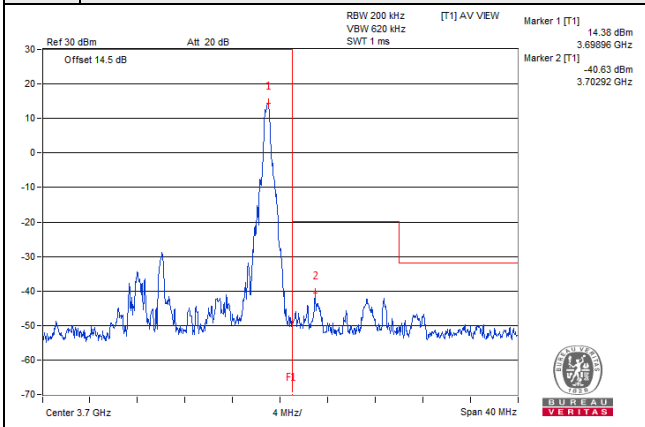
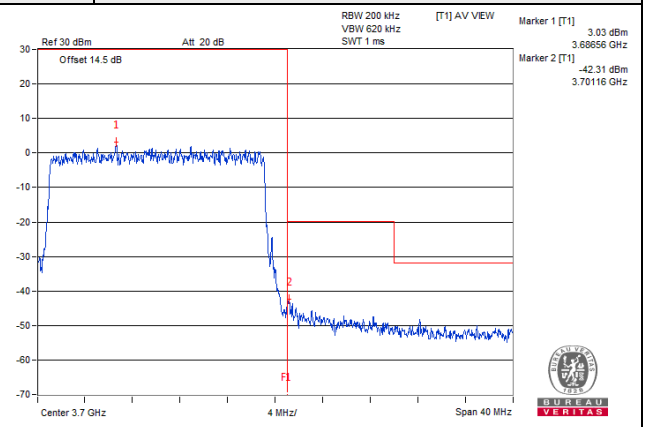

RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-54.14 dBm
14.05710 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz


RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-56.23 dBm
37.08487 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

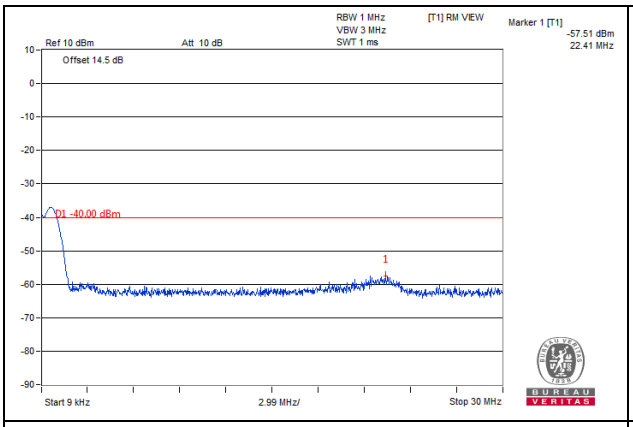
| Channel Bandwidth 20MHz QPSK | | | |
|---|---|---|---|
| Middle Channel 3625MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | |

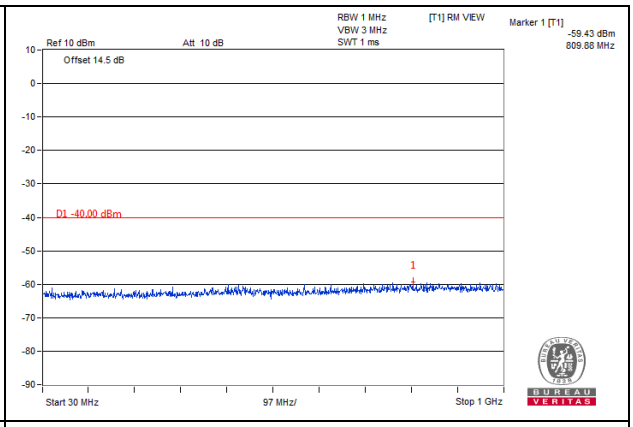
NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(200kHz/1MHz) = -19.99 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(200kHz/1MHz) = -19.99 dBm
10MHz above the Assigned channel Limit is -25+10*Log(200kHz/1MHz) = -31.99 dBm
10MHz below the Assigned channel Limit is -25+10*Log(200kHz/1MHz) = -31.99 dBm

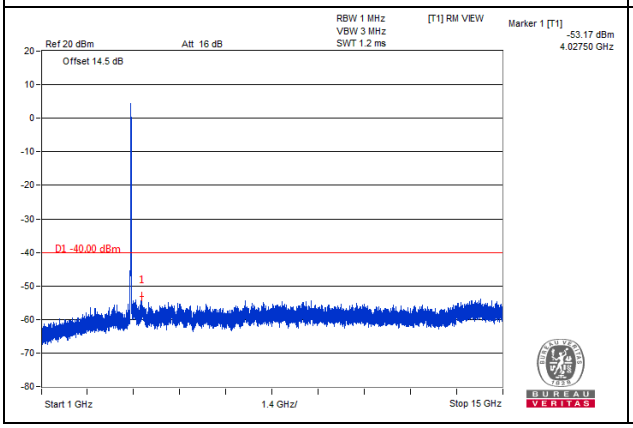

RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-57.95 dBm
21.21 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz
RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.19 dBm
876.61 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz
RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.29 dBm
14.21670 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz
RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-57.13 dBm
37.28962 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

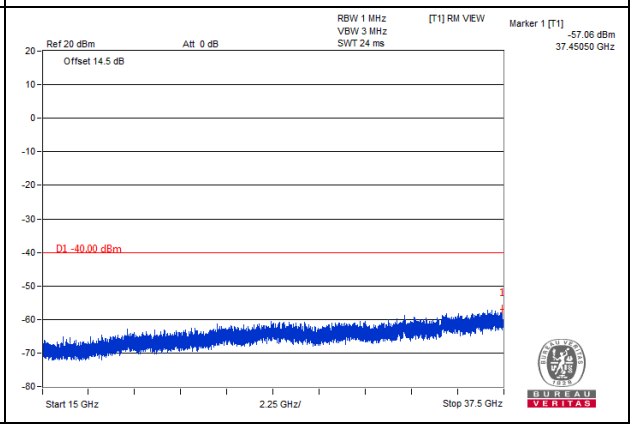
| Channel Bandwidth 20MHz QPSK | | | |
|---|---|---|---|
| High Channel 3690MHz | | | |
| 1 RB | Within 1MHz outside the designated channel | Full RB | Within 1MHz outside the designated channel |
|  | |  | | |
| 1 RB | Greater than 1MHz below the Assigned Channel | Full RB | Greater than 1MHz below the Assigned Channel |
|  | |  | | |
| 1 RB | Greater than 1MHz above the Assigned Channel | Full RB | Greater than 1MHz above the Assigned Channel |
|  | |  | | |

NOTE:
1MHz outside of designated channel needs to reduce the limit, When measured RBW less than 1MHz.
Withn 1-10MHz above the Assigned channel Limit is -13+10*Log(200kHz/1MHz) = -19.99 dBm
Withn 1-10MHz below the Assigned channel Limit is -13+10*Log(200kHz/1MHz) = -19.99 dBm
10MHz above the Assigned channel Limit is -25+10*Log(200kHz/1MHz) = -31.99 dBm
10MHz below the Assigned channel Limit is -25+10*Log(200kHz/1MHz) = -31.99 dBm


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-57.51 dBm
22.41 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 9 kHz
2.99 MHz/
Stop 30 MHz


RBW 1 MHz
VBW 3 MHz
SWT 1 ms
[T1] RM VIEW
Marker 1 [T1]
-59.43 dBm
809.88 MHz
Ref 10 dBm
Att 10 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 30 MHz
97 MHz/
Stop 1 GHz


RBW 1 MHz
VBW 3 MHz
SWT 1.2 ms
[T1] RM VIEW
Marker 1 [T1]
-53.17 dBm
4.02750 GHz
Ref 20 dBm
Att 16 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 1 GHz
1.4 GHz/
Stop 15 GHz


RBW 1 MHz
VBW 3 MHz
SWT 24 ms
[T1] RM VIEW
Marker 1 [T1]
-57.06 dBm
37.45050 GHz
Ref 20 dBm
Att 0 dB
Offset 14.5 dB
D1 -40.00 dBm
Start 15 GHz
2.25 GHz/
Stop 37.5 GHz

## 4.7 Radiated Emission Measurement

### 4.7.1 Limits of Radiated Emission Measurement

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

### 4.7.2 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

### 4.7.3 Test Procedures

a. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.

b. The substitution antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G

c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.

d. ERP power can be calculated form EIRP power by subtracting the gain of dipole, ERP power = EIPR power - 2.15dBi.

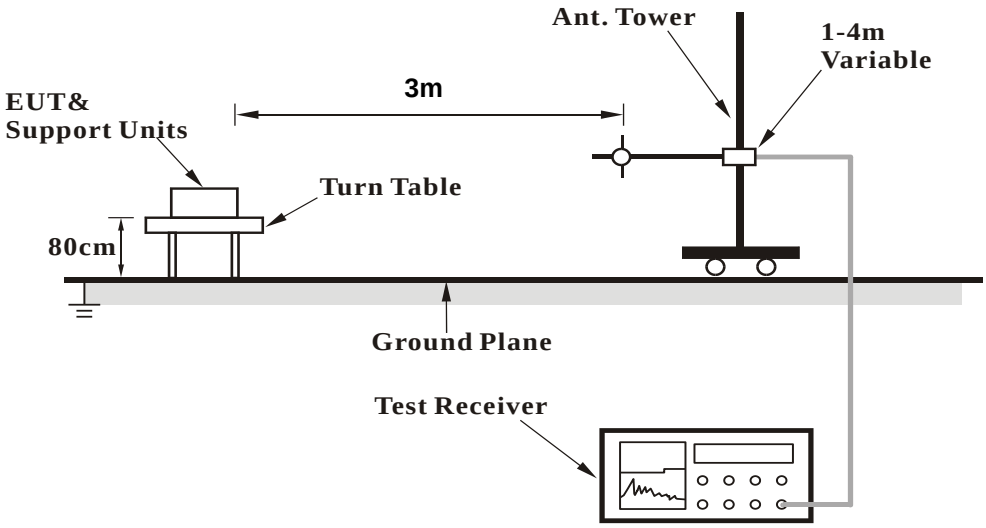
**Note:** The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

### 4.7.4 Deviation from Test Standard

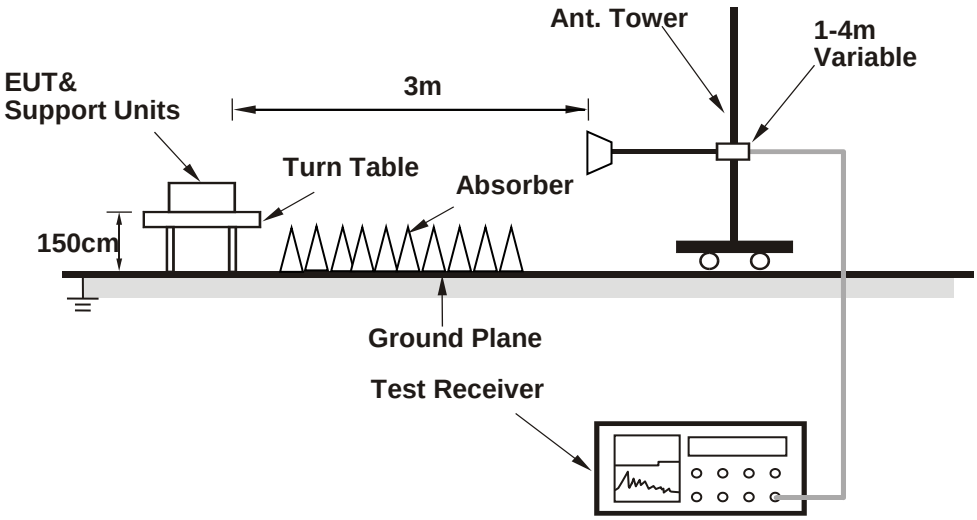
No deviation.

4.7.5 Test Set Up

**<Frequency Range below 1GHz>**




**<Frequency Range above 1GHz>**




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

4.7.6 Test Results

**Test was done with 50ohm terminator on antenna port.**

**Below 1GHz Data：**

**5MHz**

| Mode | TX Low | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.15 | 31.38 | -56.31 | -0.96 | -57.27 | -40 | -17.27 |
| 2 | 243.62 | 28.36 | -66.85 | 3.84 | -63.01 | -40 | -23.01 |
| 3 | 336.07 | 29.65 | -68.22 | 3.67 | -64.55 | -40 | -24.55 |
| 4 | 526.6 | 28.60 | -66.61 | 2.69 | -63.91 | -40 | -23.91 |
| 5 | 703.66 | 27.28 | -69.06 | 1.56 | -67.50 | -40 | -27.50 |
| 6 | 802.7 | 30.98 | -67.52 | 1.52 | -66.00 | -40 | -26.00 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.94 | 31.40 | -62.21 | -1.61 | -63.82 | -40 | -23.82 |
| 2 | 161.45 | 30.16 | -58.45 | -0.49 | -58.94 | -40 | -18.94 |
| 3 | 244.46 | 32.95 | -62.23 | 3.85 | -58.38 | -40 | -18.38 |
| 4 | 337.92 | 33.54 | -64.33 | 3.66 | -60.67 | -40 | -20.67 |
| 5 | 430.59 | 34.50 | -63.60 | 3.01 | -60.59 | -40 | -20.59 |
| 6 | 524.34 | 31.97 | -63.26 | 2.71 | -60.55 | -40 | -20.55 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.88 | 30.58 | -57.31 | -0.86 | -58.17 | -40 | -18.17 |
| 2 | 242.81 | 26.93 | -68.32 | 3.84 | -64.48 | -40 | -24.48 |
| 3 | 337.02 | 28.97 | -68.90 | 3.66 | -65.24 | -40 | -25.24 |
| 4 | 527.32 | 28.24 | -66.96 | 2.69 | -64.27 | -40 | -24.27 |
| 5 | 702.82 | 26.40 | -69.94 | 1.57 | -68.37 | -40 | -28.37 |
| 6 | 802.6 | 30.27 | -68.24 | 1.53 | -66.72 | -40 | -26.72 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.65 | 30.10 | -63.56 | -1.63 | -65.18 | -40 | -25.18 |
| 2 | 161.26 | 30.03 | -58.53 | -0.52 | -59.04 | -40 | -19.04 |
| 3 | 243.91 | 31.85 | -63.35 | 3.85 | -59.51 | -40 | -19.51 |
| 4 | 337.66 | 32.44 | -65.43 | 3.66 | -61.77 | -40 | -21.77 |
| 5 | 429.78 | 34.11 | -63.98 | 3.02 | -60.96 | -40 | -20.96 |
| 6 | 524.99 | 30.73 | -64.49 | 2.70 | -61.79 | -40 | -21.79 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.64 | 31.18 | -56.64 | -0.89 | -57.54 | -40 | -17.54 |
| 2 | 242.86 | 27.54 | -67.70 | 3.84 | -63.87 | -40 | -23.87 |
| 3 | 335.59 | 29.05 | -68.82 | 3.67 | -65.15 | -40 | -25.15 |
| 4 | 526.84 | 27.58 | -67.62 | 2.69 | -64.93 | -40 | -24.93 |
| 5 | 704.24 | 27.09 | -69.25 | 1.55 | -67.70 | -40 | -27.70 |
| 6 | 801.74 | 30.93 | -67.65 | 1.53 | -66.12 | -40 | -26.12 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 83.02 | 30.75 | -62.84 | -1.61 | -64.45 | -40 | -24.45 |
| 2 | 160.61 | 29.23 | -59.14 | -0.61 | -59.75 | -40 | -19.75 |
| 3 | 244.72 | 32.09 | -63.08 | 3.85 | -59.23 | -40 | -19.23 |
| 4 | 337.67 | 32.65 | -65.22 | 3.66 | -61.56 | -40 | -21.56 |
| 5 | 431.54 | 33.97 | -64.13 | 3.00 | -61.13 | -40 | -21.13 |
| 6 | 523.53 | 31.16 | -64.08 | 2.71 | -61.37 | -40 | -21.37 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**10MHz**

| Mode | TX Low | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.94 | 31.19 | -56.72 | -0.85 | -57.57 | -40 | -17.57 |
| 2 | 243.96 | 28.27 | -66.93 | 3.85 | -63.08 | -40 | -23.08 |
| 3 | 335.28 | 29.44 | -68.43 | 3.67 | -64.76 | -40 | -24.76 |
| 4 | 526.59 | 27.39 | -67.82 | 2.69 | -65.12 | -40 | -25.12 |
| 5 | 702.81 | 25.85 | -70.49 | 1.57 | -68.92 | -40 | -28.92 |
| 6 | 803.38 | 30.41 | -68.04 | 1.52 | -66.52 | -40 | -26.52 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.34 | 30.88 | -62.83 | -1.64 | -64.47 | -40 | -24.47 |
| 2 | 161.76 | 29.80 | -58.90 | -0.44 | -59.34 | -40 | -19.34 |
| 3 | 244.95 | 32.23 | -62.93 | 3.85 | -59.08 | -40 | -19.08 |
| 4 | 338.92 | 32.08 | -65.79 | 3.65 | -62.14 | -40 | -22.14 |
| 5 | 429.92 | 33.91 | -64.18 | 3.02 | -61.16 | -40 | -21.16 |
| 6 | 523.81 | 31.36 | -63.88 | 2.71 | -61.17 | -40 | -21.17 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 159.05 | 30.68 | -57.26 | -0.83 | -58.09 | -40 | -18.09 |
| 2 | 242.86 | 28.18 | -67.06 | 3.84 | -63.23 | -40 | -23.23 |
| 3 | 335.18 | 29.12 | -68.75 | 3.67 | -65.08 | -40 | -25.08 |
| 4 | 527.02 | 28.38 | -66.82 | 2.69 | -64.13 | -40 | -24.13 |
| 5 | 703.38 | 27.13 | -69.21 | 1.56 | -67.65 | -40 | -27.65 |
| 6 | 802.6 | 29.90 | -68.61 | 1.53 | -67.09 | -40 | -27.09 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 83.42 | 30.02 | -63.50 | -1.58 | -65.09 | -40 | -25.09 |
| 2 | 162.37 | 29.85 | -59.02 | -0.36 | -59.37 | -40 | -19.37 |
| 3 | 245.29 | 32.23 | -62.92 | 3.86 | -59.06 | -40 | -19.06 |
| 4 | 337.62 | 32.74 | -65.13 | 3.66 | -61.47 | -40 | -21.47 |
| 5 | 431.58 | 34.29 | -63.81 | 3.00 | -60.81 | -40 | -20.81 |
| 6 | 524.91 | 31.64 | -63.59 | 2.70 | -60.88 | -40 | -20.88 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.03 | 30.69 | -56.96 | -0.98 | -57.94 | -40 | -17.94 |
| 2 | 242.92 | 28.33 | -66.91 | 3.84 | -63.07 | -40 | -23.07 |
| 3 | 336.63 | 28.89 | -68.98 | 3.67 | -65.32 | -40 | -25.32 |
| 4 | 527.54 | 27.47 | -67.72 | 2.69 | -65.04 | -40 | -25.04 |
| 5 | 703.63 | 26.20 | -70.14 | 1.56 | -68.58 | -40 | -28.58 |
| 6 | 803.58 | 30.27 | -68.16 | 1.52 | -66.65 | -40 | -26.65 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 83.26 | 31.10 | -62.45 | -1.59 | -64.04 | -40 | -24.04 |
| 2 | 160.46 | 29.36 | -58.97 | -0.63 | -59.60 | -40 | -19.60 |
| 3 | 244.56 | 31.66 | -63.52 | 3.85 | -59.67 | -40 | -19.67 |
| 4 | 337.47 | 33.01 | -64.86 | 3.66 | -61.20 | -40 | -21.20 |
| 5 | 431.4 | 33.03 | -65.07 | 3.00 | -62.07 | -40 | -22.07 |
| 6 | 524.38 | 30.72 | -64.51 | 2.71 | -61.80 | -40 | -21.80 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**15MHz**

| Mode | TX Low | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 157.99 | 29.94 | -57.70 | -0.99 | -58.69 | -40 | -18.69 |
| 2 | 243.53 | 26.90 | -68.32 | 3.84 | -64.47 | -40 | -24.47 |
| 3 | 336.94 | 28.30 | -69.57 | 3.66 | -65.91 | -40 | -25.91 |
| 4 | 527.42 | 28.39 | -66.81 | 2.69 | -64.12 | -40 | -24.12 |
| 5 | 702.76 | 26.48 | -69.86 | 1.57 | -68.29 | -40 | -28.29 |
| 6 | 802.08 | 29.88 | -68.67 | 1.53 | -67.14 | -40 | -27.14 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 83.72 | 31.26 | -62.21 | -1.56 | -63.78 | -40 | -23.78 |
| 2 | 161.45 | 29.61 | -59.00 | -0.49 | -59.49 | -40 | -19.49 |
| 3 | 244.58 | 32.60 | -62.58 | 3.85 | -58.72 | -40 | -18.72 |
| 4 | 338.26 | 32.82 | -65.05 | 3.66 | -61.39 | -40 | -21.39 |
| 5 | 430.67 | 33.88 | -64.22 | 3.01 | -61.21 | -40 | -21.21 |
| 6 | 523.9 | 31.42 | -63.82 | 2.71 | -61.10 | -40 | -21.10 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.03 | 31.01 | -56.64 | -0.98 | -57.62 | -40 | -17.62 |
| 2 | 242.91 | 28.15 | -67.09 | 3.84 | -63.25 | -40 | -23.25 |
| 3 | 336.68 | 29.35 | -68.52 | 3.66 | -64.86 | -40 | -24.86 |
| 4 | 525.88 | 28.59 | -66.62 | 2.70 | -63.93 | -40 | -23.93 |
| 5 | 702.95 | 27.15 | -69.19 | 1.57 | -67.62 | -40 | -27.62 |
| 6 | 802.57 | 30.16 | -68.35 | 1.53 | -66.83 | -40 | -26.83 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 83.19 | 30.27 | -63.29 | -1.60 | -64.89 | -40 | -24.89 |
| 2 | 161.47 | 29.52 | -59.09 | -0.49 | -59.58 | -40 | -19.58 |
| 3 | 244.81 | 31.49 | -63.68 | 3.85 | -59.82 | -40 | -19.82 |
| 4 | 337.21 | 33.40 | -64.47 | 3.66 | -60.81 | -40 | -20.81 |
| 5 | 430.01 | 33.40 | -64.69 | 3.02 | -61.67 | -40 | -21.67 |
| 6 | 523.62 | 30.67 | -64.57 | 2.71 | -61.86 | -40 | -21.86 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 157.34 | 31.27 | -56.19 | -1.08 | -57.27 | -40 | -17.27 |
| 2 | 243.71 | 27.94 | -67.27 | 3.84 | -63.43 | -40 | -23.43 |
| 3 | 336.16 | 29.59 | -68.28 | 3.67 | -64.61 | -40 | -24.61 |
| 4 | 527.38 | 27.20 | -68.00 | 2.69 | -65.31 | -40 | -25.31 |
| 5 | 703.67 | 27.08 | -69.26 | 1.56 | -67.70 | -40 | -27.70 |
| 6 | 803.51 | 29.49 | -68.95 | 1.52 | -67.43 | -40 | -27.43 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.99 | 30.23 | -63.37 | -1.61 | -64.97 | -40 | -24.97 |
| 2 | 162.18 | 29.39 | -59.42 | -0.38 | -59.81 | -40 | -19.81 |
| 3 | 244.3 | 32.35 | -62.84 | 3.85 | -58.99 | -40 | -18.99 |
| 4 | 337.53 | 32.67 | -65.20 | 3.66 | -61.54 | -40 | -21.54 |
| 5 | 430.88 | 33.48 | -64.62 | 3.01 | -61.61 | -40 | -21.61 |
| 6 | 524.47 | 31.46 | -63.77 | 2.71 | -61.06 | -40 | -21.06 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**20MHz**

| Mode | TX Low | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 157.64 | 30.67 | -56.87 | -1.04 | -57.91 | -40 | -17.91 |
| 2 | 244.52 | 27.24 | -67.94 | 3.85 | -64.09 | -40 | -24.09 |
| 3 | 336.17 | 28.67 | -69.20 | 3.67 | -65.53 | -40 | -25.53 |
| 4 | 526.93 | 27.45 | -67.75 | 2.69 | -65.06 | -40 | -25.06 |
| 5 | 704.56 | 27.20 | -69.14 | 1.54 | -67.60 | -40 | -27.60 |
| 6 | 802.12 | 30.20 | -68.35 | 1.53 | -66.82 | -40 | -26.82 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.05 | 31.32 | -62.44 | -1.66 | -64.10 | -40 | -24.10 |
| 2 | 160.7 | 28.74 | -59.66 | -0.60 | -60.25 | -40 | -20.25 |
| 3 | 244.62 | 32.63 | -62.54 | 3.85 | -58.69 | -40 | -18.69 |
| 4 | 338.05 | 32.63 | -65.24 | 3.66 | -61.58 | -40 | -21.58 |
| 5 | 429.76 | 34.01 | -64.08 | 3.02 | -61.06 | -40 | -21.06 |
| 6 | 525.03 | 31.55 | -63.67 | 2.70 | -60.97 | -40 | -20.97 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.16 | 30.81 | -56.88 | -0.96 | -57.84 | -40 | -17.84 |
| 2 | 244.06 | 28.24 | -66.96 | 3.85 | -63.11 | -40 | -23.11 |
| 3 | 336.83 | 28.29 | -69.58 | 3.66 | -65.92 | -40 | -25.92 |
| 4 | 525.82 | 28.32 | -66.89 | 2.70 | -64.20 | -40 | -24.20 |
| 5 | 704.32 | 25.83 | -70.51 | 1.55 | -68.96 | -40 | -28.96 |
| 6 | 802.45 | 30.87 | -67.65 | 1.53 | -66.13 | -40 | -26.13 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.37 | 30.93 | -62.77 | -1.64 | -64.42 | -40 | -24.42 |
| 2 | 161.2 | 30.08 | -58.46 | -0.52 | -58.98 | -40 | -18.98 |
| 3 | 244.25 | 31.83 | -63.36 | 3.85 | -59.51 | -40 | -19.51 |
| 4 | 337.37 | 32.11 | -65.76 | 3.66 | -62.10 | -40 | -22.10 |
| 5 | 431.18 | 33.62 | -64.48 | 3.00 | -61.48 | -40 | -21.48 |
| 6 | 524.56 | 30.87 | -64.36 | 2.71 | -61.65 | -40 | -21.65 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Below 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 158.29 | 30.60 | -57.12 | -0.94 | -58.07 | -40 | -18.07 |
| 2 | 244.07 | 27.98 | -67.22 | 3.85 | -63.37 | -40 | -23.37 |
| 3 | 335.42 | 29.49 | -68.38 | 3.67 | -64.71 | -40 | -24.71 |
| 4 | 526.01 | 27.94 | -67.27 | 2.70 | -64.58 | -40 | -24.58 |
| 5 | 704.5 | 26.77 | -69.57 | 1.55 | -68.03 | -40 | -28.03 |
| 6 | 803.34 | 30.33 | -68.12 | 1.52 | -66.60 | -40 | -26.60 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 82.33 | 30.98 | -62.73 | -1.64 | -64.38 | -40 | -24.38 |
| 2 | 160.87 | 28.78 | -59.67 | -0.57 | -60.24 | -40 | -20.24 |
| 3 | 244.06 | 32.61 | -62.59 | 3.85 | -58.74 | -40 | -18.74 |
| 4 | 337.59 | 33.39 | -64.48 | 3.66 | -60.82 | -40 | -20.82 |
| 5 | 431.33 | 33.66 | -64.44 | 3.00 | -61.44 | -40 | -21.44 |
| 6 | 525.12 | 30.48 | -64.74 | 2.70 | -62.04 | -40 | -22.04 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**Above 1GHz Data：**

**5MHz**

| Mode | TX Low | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7105.00 | 44.30 | -57.85 | 4.88 | -52.96 | -40 | -12.96 |
| 2 | 10657.50 | 44.00 | -57.94 | 3.42 | -54.52 | -40 | -14.52 |
| 3 | 14210.00 | 46.10 | -52.80 | 2.50 | -50.30 | -40 | -10.30 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7105.00 | 43.40 | -58.75 | 4.88 | -53.86 | -40 | -13.86 |
| 2 | 10657.50 | 43.30 | -58.64 | 3.42 | -55.22 | -40 | -15.22 |
| 3 | 14210.00 | 44.60 | -54.30 | 2.50 | -51.80 | -40 | -11.80 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 44.19 | -58.13 | 4.76 | -53.37 | -40 | -13.37 |
| 2 | 10875.00 | 44.02 | -57.67 | 3.21 | -54.46 | -40 | -14.46 |
| 3 | 14500.00 | 45.59 | -52.53 | 2.97 | -49.56 | -40 | -9.56 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 43.37 | -58.95 | 4.76 | -54.19 | -40 | -14.19 |
| 2 | 10875.00 | 42.97 | -58.72 | 3.21 | -55.51 | -40 | -15.51 |
| 3 | 14500.00 | 44.31 | -53.81 | 2.97 | -50.84 | -40 | -10.84 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7395.00 | 43.84 | -58.65 | 4.63 | -54.02 | -40 | -14.02 |
| 2 | 11092.50 | 44.00 | -57.44 | 3.00 | -54.44 | -40 | -14.44 |
| **3** | **14790.00** | **46.64** | **-50.70** | **3.44** | **-47.26** | **-40** | **-7.26** |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7395.00 | 43.96 | -58.53 | 4.63 | -53.90 | -40 | -13.90 |
| 2 | 11092.50 | 43.82 | -57.62 | 3.00 | -54.62 | -40 | -14.62 |
| 3 | 14790.00 | 44.85 | -52.49 | 3.44 | -49.05 | -40 | -9.05 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**10MHz**

| Mode | TX Low | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7110.00 | 44.35 | -57.80 | 4.88 | -52.92 | -40 | -12.92 |
| 2 | 10665.00 | 43.97 | -57.96 | 3.41 | -54.55 | -40 | -14.55 |
| 3 | 14220.00 | 45.88 | -53.00 | 2.52 | -50.48 | -40 | -10.48 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7110.00 | 43.53 | -58.62 | 4.88 | -53.74 | -40 | -13.74 |
| 2 | 10665.00 | 43.24 | -58.69 | 3.41 | -55.28 | -40 | -15.28 |
| 3 | 14220.00 | 45.47 | -53.41 | 2.52 | -50.89 | -40 | -10.89 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 44.19 | -58.13 | 4.76 | -53.37 | -40 | -13.37 |
| 2 | 10875.00 | 44.51 | -57.18 | 3.21 | -53.97 | -40 | -13.97 |
| 3 | 14500.00 | 46.48 | -51.64 | 2.97 | -48.67 | -40 | -8.67 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 44.33 | -57.99 | 4.76 | -53.23 | -40 | -13.23 |
| 2 | 10875.00 | 44.03 | -57.66 | 3.21 | -54.45 | -40 | -14.45 |
| 3 | 14500.00 | 44.32 | -53.80 | 2.97 | -50.83 | -40 | -10.83 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7390.00 | 43.57 | -58.92 | 4.64 | -54.28 | -40 | -14.28 |
| 2 | 11085.00 | 44.41 | -57.04 | 3.01 | -54.03 | -40 | -14.03 |
| 3 | 14780.00 | 46.44 | -50.92 | 3.42 | -47.50 | -40 | -7.50 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7390.00 | 42.69 | -59.80 | 4.64 | -55.16 | -40 | -15.16 |
| 2 | 11085.00 | 43.07 | -58.38 | 3.01 | -55.37 | -40 | -15.37 |
| 3 | 14780.00 | 44.05 | -53.31 | 3.42 | -49.89 | -40 | -9.89 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**15MHz**

| Mode | TX Low | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7115.00 | 44.00 | -58.16 | 4.87 | -53.29 | -40 | -13.29 |
| 2 | 10672.50 | 44.88 | -57.04 | 3.41 | -53.64 | -40 | -13.64 |
| 3 | 14230.00 | 46.53 | -52.32 | 2.53 | -49.79 | -40 | -9.79 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7115.00 | 42.49 | -59.67 | 4.87 | -54.80 | -40 | -14.80 |
| 2 | 10672.50 | 42.36 | -59.56 | 3.41 | -56.16 | -40 | -16.16 |
| 3 | 14230.00 | 45.16 | -53.69 | 2.53 | -51.16 | -40 | -11.16 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 45.11 | -57.21 | 4.76 | -52.45 | -40 | -12.45 |
| 2 | 10875.00 | 43.65 | -58.04 | 3.21 | -54.83 | -40 | -14.83 |
| 3 | 14500.00 | 46.71 | -51.41 | 2.97 | -48.44 | -40 | -8.44 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 42.70 | -59.62 | 4.76 | -54.86 | -40 | -14.86 |
| 2 | 10875.00 | 44.21 | -57.48 | 3.21 | -54.27 | -40 | -14.27 |
| 3 | 14500.00 | 44.18 | -53.94 | 2.97 | -50.97 | -40 | -10.97 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7385.00 | 43.78 | -58.70 | 4.64 | -54.06 | -40 | -14.06 |
| 2 | 11077.50 | 44.65 | -56.81 | 3.02 | -53.80 | -40 | -13.80 |
| 3 | 14770.00 | 45.78 | -51.61 | 3.40 | -48.21 | -40 | -8.21 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7385.00 | 42.68 | -59.80 | 4.64 | -55.16 | -40 | -15.16 |
| 2 | 11077.50 | 43.29 | -58.17 | 3.02 | -55.16 | -40 | -15.16 |
| 3 | 14770.00 | 45.33 | -52.06 | 3.40 | -48.66 | -40 | -8.66 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

**20MHz**

| Mode | TX Low | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7120.00 | 44.16 | -58.00 | 4.87 | -53.14 | -40 | -13.14 |
| 2 | 10680.00 | 43.04 | -58.87 | 3.40 | -55.48 | -40 | -15.48 |
| 3 | 14240.00 | 46.92 | -51.90 | 2.55 | -49.35 | -40 | -9.35 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7120.00 | 42.42 | -59.74 | 4.87 | -54.88 | -40 | -14.88 |
| 2 | 10680.00 | 42.40 | -59.51 | 3.40 | -56.12 | -40 | -16.12 |
| 3 | 14240.00 | 44.05 | -54.77 | 2.55 | -52.22 | -40 | -12.22 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX Middle | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 43.33 | -58.99 | 4.76 | -54.23 | -40 | -14.23 |
| 2 | 10875.00 | 44.79 | -56.90 | 3.21 | -53.69 | -40 | -13.69 |
| 3 | 14500.00 | 46.41 | -51.71 | 2.97 | -48.74 | -40 | -8.74 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7250.00 | 43.07 | -59.25 | 4.76 | -54.49 | -40 | -14.49 |
| 2 | 10875.00 | 42.32 | -59.37 | 3.21 | -56.16 | -40 | -16.16 |
| 3 | 14500.00 | 43.89 | -54.23 | 2.97 | -51.26 | -40 | -11.26 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

| Mode | TX High | Frequency Range | Above 1000 MHz |
|---|---|---|---|

| Antenna Polarity & Test Distance: Horizontal at 3 M | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7380.00 | 43.65 | -58.83 | 4.65 | -54.18 | -40 | -14.18 |
| 2 | 11070.00 | 43.25 | -58.22 | 3.02 | -55.20 | -40 | -15.20 |
| 3 | 14760.00 | 45.49 | -51.93 | 3.39 | -48.54 | -40 | -8.54 |
| Antenna Polarity & Test Distance: Vertical at 3 M | | | | | | | |
| No. | Freq. (MHz) | Reading (dBm) | S.G Power Value (dBm) | Correction Factor (dB) | Emission Value (dBm) | Limit (dBm) | Margin (dB) |
| 1 | 7380.00 | 44.06 | -58.42 | 4.65 | -53.77 | -40 | -13.77 |
| 2 | 11070.00 | 43.11 | -58.36 | 3.02 | -55.34 | -40 | -15.34 |
| 3 | 14760.00 | 44.04 | -53.38 | 3.39 | -49.99 | -40 | -9.99 |

Remarks:
1. Emission Value (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) - Cable Loss (dB).

## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

**Appendix – Information of the Testing Laboratories**

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following: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The address and road map of all our labs can be found in our web site also.

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