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# Radio Test report – AIR 3246 B66

356913-1TRFWL-R1

Applicant:

Ericsson Canada

Product:

AIR 3246

Models:

AIR 3246 B66

Part numbers:

KRD 901 190/1

| FCC ID: | ISED Reg. Number | HVIN: |
|---|---|---|
| TA8AKRD901190-1 | 287AB-AS9011901 | AS9011901 |

Requirements/Summary:

| Standard | Environmental phenomenon | Compliance |
|---|---|---|
| FCC 47 CFR Part 27 | Miscellaneous wireless communications services | Yes |
| RSS-139 Issue 3, July 16, 2015 | Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710–1780 MHz and 2110–2180 MHz | Yes |

| | |
|---|---|
| Tested by: | Andrey Adelberg, Senior EMC/Wireless Specialist |
| Reviewed by: | Kevin Rose, Wireless/EMC Specialist |
| Date of issue: | October 5, 2018 |
| Reviewer signature |  |

Two test locations

| | | |
|---|---|---|
| Company name | Nemko Canada Inc. | |
| Address | 303 River Road | 349 Terry Fox |
| City | Ottawa | Ottawa |
| Province | Ontario | Ontario |
| Postal code | K1V 1H2 | K2K 2V6 |
| Country | Canada | Canada |
| Telephone | +1 613 737 9680 | +1 613 963 8000 |
| Facsimile | +1 613 737 9691 | |
| Toll free | +1 800 563 6336 | |
| Website | www.nemko.com | |
| Site number | FCC test site registration number: CA2040, IC: 2040A-4 (3 m semi anechoic chamber) | |

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.
This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this reAnt Are within Nemko Canada's ISO/IEC 17025 accreditation.

Copyright notification

# Table of contents

# **Section 1.** Report summary

## 1.1 Applicant and manufacturer

| | |
|---|---|
| Company name | Ericsson Canada Inc. |
| Address | 349 Terry Fox Drive |
| City | Ottawa |
| Province/State | Ontario |
| Postal/Zip code | K2K 2V6 |
| Country | Canada |

## 1.2 Test specifications

| | |
|---|---|
| FCC 47 CFR Part 27 | Miscellaneous wireless communications services |
| FCC 47 CFR Part 2 | Frequency Allocations and Radio Treaty Maters; General Rules and Regulations |
| RSS-139 Issue 3, July 16, 2015 | Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710–1780 MHz and 2110–2180 MHz |
| RSS-Gen, Issue 5, April 2018 | General Requirements for Compliance of Radio Apparatus |

## 1.3 Test method

| | |
|---|---|
| ANSI C63.26-2015 | American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services |
| KDB 662911 D01 | Multiple Transmitter Output v02r01 |
| KDB 662911 D02 | MIMO with Cross-Polarized Antennas v01 |

## 1.4 Statement of compliance

In the configuration tested, the EUT was found compliant.

Testing was completed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested.

This report applies to the AIR 3246 B66 with model number KRD 901 190/1.

See “Summary of test results” for full details.

## 1.5 Exclusions

None

## 1.6 Test report revision history

| Revision # | Details of changes made to test report |
|---|---|
| TRF | Original report issued |

# **Section 2.** Summary of test results

## 2.1 FCC Part 27 test results

| Part | Test description | Verdict |
|---|---|---|
| §27.50(b) | Maximum output power at RF antenna connector | Pass |
| §27.53 | Spurious emissions at RF antenna connector | Pass |
| §27.53 | Radiated spurious emissions | Pass |
| §27.54 | Frequency stability | Pass |
| §2.1049 | Occupied bandwidth | Pass |

Notes: None

## 2.2 RSS-139 test results

| Part | Test description | Verdict |
|---|---|---|
| 4.1 | Transmitter output power and Equivalent Isotropic Radiated Power (e.i.r.p.) | Pass |
| 4.2 | Spurious emissions at RF antenna connector | Pass |
| 4.2 | Radiated spurious emissions | Pass |
| 6.4 | Transmitter frequency stability | Pass |
| RSS-Gen, 6.7 | Occupied bandwidth | Pass |

Notes: None

# **Section 3.** Equipment under test (EUT) details

## 3.1 Sample information

| | |
|---|---|
| Receipt date | July 9, 2018 |
| Nemko sample ID number | None |

## 3.2 EUT information

| | |
|---|---|
| Product name | AIR 3246 |
| Model | AIR 3246 B66 |
| Part number | KRD 901 190/1 |
| Revision | R1B |
| Serial number | C82A582472 (Conducted)<br>C82A682497 (Radiated) |
| Antenna ports | 32 TX/RX Ports |
| RF BW / IBW | IBW DL: 90 MHz<br>IBW UL: 70 MHz |
| FDD | 400 MHz |
| Frequency | LTE TX (DL): 2110–2200 MHz<br>LTE RX (UL): 1710–1780 MHz |
| Nominal O/P per antenna port<br>Up to 20 MHz Carrier BW | Single Carrier: 1 × 5 W (37 dBm) |
| Accuracy (nominal) | ±0.1 ppm |
| Nominal voltage | −48 $V_{DC}$ @ 26 A |
| RAT | LTE: SC |
| Modulation | LTE: QPSK, 16 QAM, 64 QAM, 256QAM |
| Channel bandwidth | LTE: 5, 10, 15, 20 MHz |
| Maximum combined OBW per port | N/A |
| CPRI | 10 Gbps |
| Channel raster | LTE: 100 kHz |
| Regulatory requirements | Radio: FCC Part 2, 27, RSS-Gen, RSS-139 |
| | EMC: FCC Part 15, ICES-003 |
| | Safety: IEC/EN 62368-1, UL/CSA 62368-1<br>IEC/EN 60950-22, UL 50E |
| Emission Designator: | LTE: 5M00W7D, 10M0W7D, 15M0W7D, 20M0W7D |
| Multi-carrier | Single Antenna, TX Diversity, MIMO, Carrier Aggregation |
| Operating temperature | −40 °C to +55 °C |
| Total Power based on IBW | 32 × 5 W |
| Supported carrier / port | LTE: (1-3) |

## 3.3 Product description and theory of operation

**EUT description of the methods used to exercise the EUT and all relevant ports:**

**Description/theory of operation**

The AIR 3246 B66 (KRD 901 190/1) is a multi-standard remote radio forming part of the Ericsson RBS (Radio Base Station) equipment. The AIR 3246 provides radio access for mobile and fixed devices and is designed for the outdoor environment. The AIR 3246 operates over 32 TX/RX ports connected directly into an integrated antenna. Radio unit installation is designed for pole, wall or mast mount options. A fiber optic interface provides the RRU/RBS control and digital interface between the Radio and the RBS. The AIR 3246 product is convection cooled and shall be mounted vertically.

Output RF Power is rated at 32 x 5W.
Altitude during operation: Below 4000m

***Test Configuration:***

KRC 161 714/1: The radio functionality and performance are evaluated without the antenna attached. This alternate configuration replaces the antenna with the Ericsson RDNB (Radio Distribution Network Board) to allow access to the RF Ports for compliance measurements. All RF paths / components are identical. The RDNB is an ODM supplied assembly.

**Ant Description**

| Port | Description |
|---|---|
| ANT 1-32 | RF Output ports from 1 to 32 |
| Alarm | Alarm |
| Data 1 | Optical Interface Data 1 |
| Data 2 | Optical Interface Data 2 |
| Data 3 | Optical Interface Data 3 |
| Data 4 | Optical Interface Data 4 |
| DC Input | −48 $V_{DC}$ |
| MMI | Display - Radio Status |
| GND | Ground |

**Physical**

| | |
|---|---|
| **Dimensions** | 1490mm x 400mm x 240mm (H x W x D) |
| **Weight** | 100kg |
| **Operating Temperature** | −40 to +55 °C |
| **Mounting** | Pole, Wall Mount |
| **Cooling** | Convection (forced air) |

**Software details**

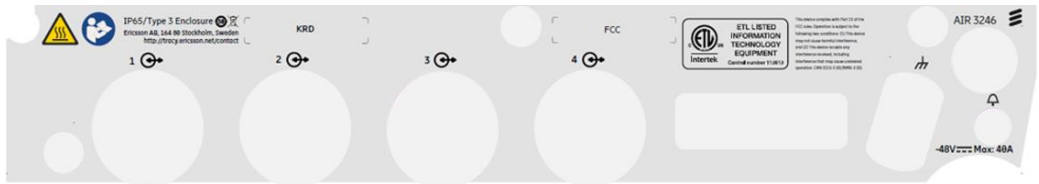
CXP9017316%25-R72XE

**Radio Hardware Configuration**

| Product: KRD 901 190/1 | R1B | KRC 161 714/1 | | Description |
|---|---|---|---|---|
| KRY 901 410/66 | R1B | KRY 901 410/66 | | Radio Unit (2) |
| ROA 128 6510/66 | R1C | ROA 128 6510/66 | | PCB/Radio Board B66 |
| NTB 101 0110/66 | R1A | NTB 101 0110/66 | | Parts |
| KRF 901 320 | R1A | KRF 901 320 | | Filter Unit |
| KRY 901 420/66 | R1B | KRY 901 420/66 | | FIB/PSU |
| ROA 128 6520/66 | R1B | ROA 128 6520/66 | | PCB FIB/PSU |
| NTB 101 0120/66 | R1A | NTB 101 0120/66 | | Parts |
| KRE 105 290 | R1B | *KRE 105 288/2* | | Antenna / *RDNB Fixture* |
| NTB 101 0100/66 | R1A | NTB 101 0100/66 | | Parts |

**Product Identification Label**


FCC ID: TA8AKRD901190-1



## 3.4 EUT test details

EUT setup/configuration rationale:

Down link

| RAT | Modulation | Performance Requirement | Test Model / Configuration |
|---|---|---|---|
| LTE | QPSK | N/A | E-TM1.1 |
| LTE | 16QAM | N/A | E-TM3.2 |
| LTE | 64QAM | N/A | E-TM3.1 |
| LTE | 256QAM | N/A | E-TM3.1a |

Up link

| RAT | Modulation | Performance Requirement | Input Signal | Test Model / Configuration |
|---|---|---|---|---|
| LTE | QPSK | N/A | | E-UTRA-UL |

Carrier Configurations:

**Single carrier**

| Bandwidth, MHz | LTE Transmit / DL, MHz | | | | | |
|---|---|---|---|---|---|---|
| | B | EARFCN | M | EARFCN | T | EARFCN |
| 5 | 2112.5 | *66461* | 2145.0 | *66786* | 2177.5 | *67111* |
| 10 | 2115.0 | *66486* | 2145.0 | *66786* | 2175.0 | *67086* |
| 15 | 2117.5 | *66511* | 2145.0 | *66786* | 2172.5 | *67061* |
| 20 | 2120.0 | *66536* | 2145.0 | *66786* | 2170.0 | *67036* |

| Bandwidth, MHz | LTE Receive / UL, MHz | | | | | |
|---|---|---|---|---|---|---|
| | B | EARFCN | M | EARFCN | T | EARFCN |
| 5 | 1712.5 | *131997* | 1745.0 | *132322* | 1777.5 | *132647* |
| 10 | 1715.0 | *132022* | 1745.0 | *132322* | 1775.0 | *132622* |
| 15 | 1717.5 | *132047* | 1745.0 | *132322* | 1772.5 | *132597* |
| 20 | 1720.0 | *132072* | 1745.0 | *132322* | 1770.0 | *132572* |

**LTE Multiple-Carriers for spurious emissions**

| Bandwidth, MHz | Transmit / DL, MHz | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **B1** | **EARFCN** | **B2** | **EARFCN** | **M1** | **EARFCN** | **M2** | **EARFCN** | **T1** | **EARFCN** | **T2** | **EARFCN** |
| 5 | 2112.5 | ***66461*** | 2177.5 | ***67111*** | 2112.5 | ***66461*** | 2177.5 | ***67111*** | 2112.5 | ***66461*** | 2177.5 | ***67111*** |
| 10 | 2115.0 | ***66486*** | 2175.0 | ***67086*** | 2115.0 | ***66486*** | 2175.0 | ***67086*** | 2115.0 | ***66486*** | 2175.0 | ***67086*** |
| 15 | 2117.5 | ***66511*** | 2172.5 | ***67061*** | 2117.5 | ***66511*** | 2172.5 | ***67061*** | 2117.5 | ***66511*** | 2172.5 | ***67061*** |
| 20 | 2120.0 | ***66536*** | 2170.0 | ***67036*** | 2120.0 | ***66536*** | 2170.0 | ***67036*** | 2120.0 | ***66536*** | 2170.0 | ***67036*** |

| Bandwidth, MHz | Receive / UL, MHz | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **B1** | **EARFCN** | **B2** | **EARFCN** | **M1** | **EARFCN** | **M2** | **EARFCN** | **T1** | **EARFCN** | **T2** | **EARFCN** |
| 5 | 1712.5 | *131997* | 1777.5 | *132647* | 1712.5 | *131997* | 1777.5 | *132647* | 1712.5 | *131997* | 1777.5 | *132647* |
| 10 | 1715.0 | *132022* | 1775.0 | *132622* | 1715.0 | *132022* | 1775.0 | *132622* | 1715.0 | *132022* | 1775.0 | *132622* |
| 15 | 1717.5 | *132047* | 1772.5 | *132597* | 1717.5 | *132047* | 1772.5 | *132597* | 1717.5 | *132047* | 1772.5 | *132597* |
| 20 | 1720.0 | *132072* | 1770.0 | *132572* | 1720.0 | *132072* | 1770.0 | *132572* | 1720.0 | *132072* | 1770.0 | *132572* |

EUT Monitoring Method / Equipment:

| | |
|---|---|
| Support equipment | **Node EMC Test System**<br>- Anritsu MS 2691 VSA/Sig Gen<br>- HP Laptop<br>- Timing and Synchronization box (GPS)<br>- Ethernet Switch<br>- Isolation Transformer<br><br>**RBS 6601, BFM 901 009/1:**<br>- DUS 4101 KDU 137 624/ 11, R4G, S/N: T48X68357<br>- DUS SW: CXP102051/27-R18A179<br>- Input Voltage: −48 $V_{DC}$ |

## 3.5 EUT setup diagram

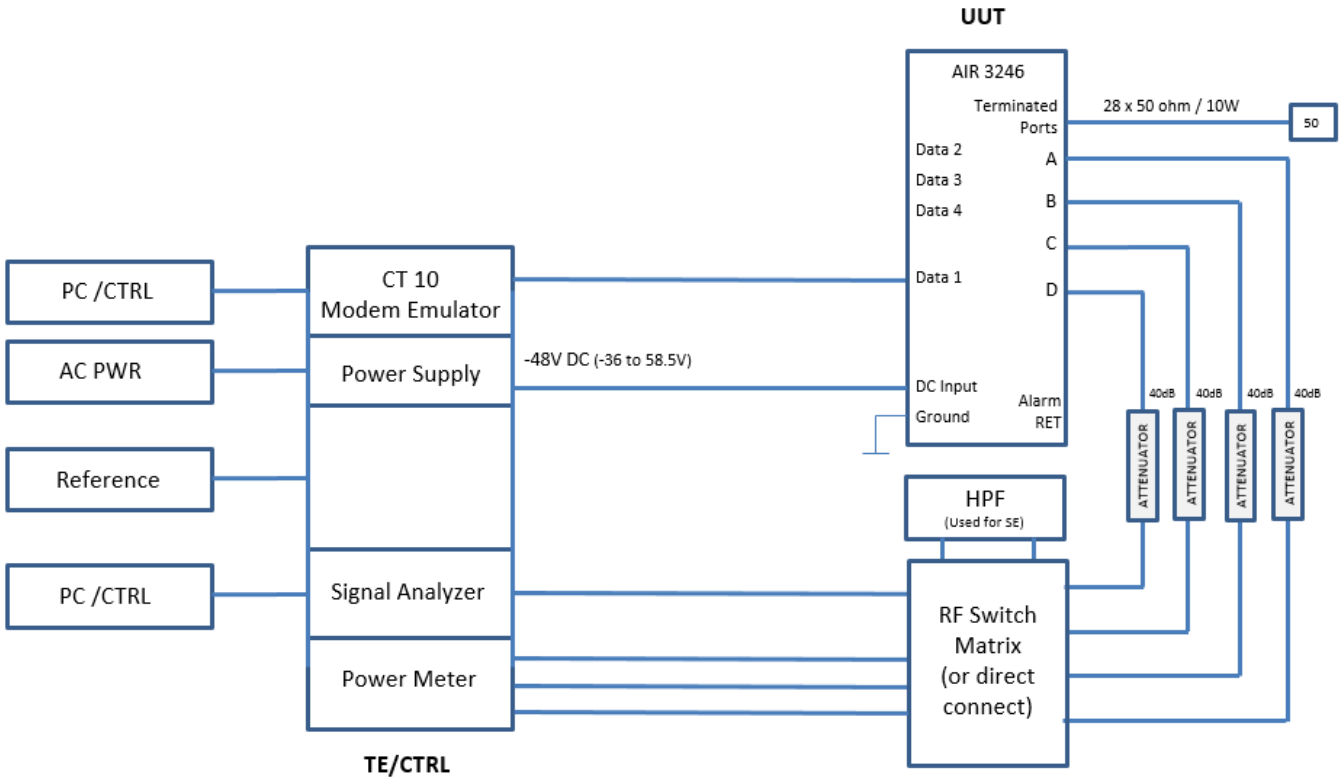



***Figure 3.5-1:*** *Setup diagram – Radio Compliance*

## 3.6 Setup photographs

***Figure 3.6-1:*** *Test / Measurement Equipment - Set up for Radio Compliance Testing*


***Figure 3.6-2:*** *EUT Set-up for Radio Compliance Testing*

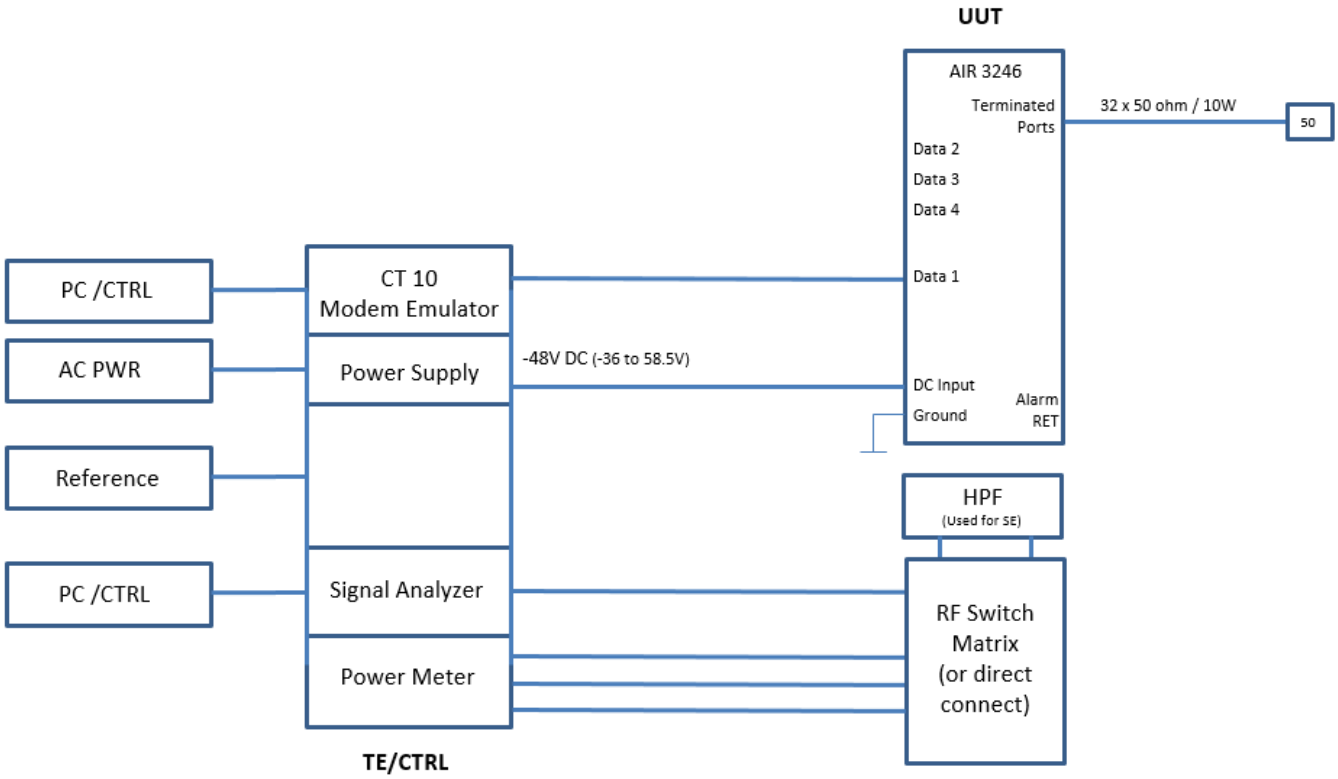



***Figure 3.6-3:*** *EUT Set-up for Radiated Compliance Testing*

# **Section 4.** Engineering considerations

## 4.1 Modifications incorporated in the EUT

There were no modifications performed to the EUT during this assessment.

## 4.2 Technical judgment

The testing was performed in accordance with the test plan, which suggested to measure output power on all 32 antenna ports, to find the port with the highest output power and perform the rest of the testing on that one representing antenna port.

## 4.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

# **Section 5.** Test conditions

## 5.1 Atmospheric conditions

| | |
|---|---|
| Temperature | 15–30 °C |
| Relative humidity | 20–75 % |
| Air pressure | 860–1060 mbar |

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

## 5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages ±5 %, for which the equipment was designed.

# **Section 6.** Measurement uncertainty

## 6.1 Uncertainty of measurement

Measurement uncertainty budgets for the tests are detailed below. Measurement uncertainty calculations assume a coverage factor of K = 2 with 95% certainty.

| Test name | Measurement uncertainty, dB |
|---|---|
| All antenna port measurements | 0.55 |
| Conducted spurious emissions | 1.13 |
| Radiated spurious emissions | 3.78 |
| AC power line conducted emissions | 3.55 |

# **Section 7.** Test equipment

## 7.1 Test equipment list

***Table 7.1-1:*** *Equipment list*

| Equipment | Manufacturer | Model no. | Asset no. | Cal cycle | Next cal. |
|---|---|---|---|---|---|
| DMM | Digital Multimeter | 34401A | US36048294 | 1 year | NCR |
| Spectrum Analyser | Keysight | PXA N9030A | MY55410202 | 1 year | 30-Sept-18 |
| PSU (DC) | Xantrex | XKW60-50 | 1001425551 | NCR | NCR |
| USB Power Sensor | Keysight | U2044XA | MY58090002 | 1 year | 16-Apr-19 |
| USB Power Sensor | Keysight | U2044XA | MY58040008 | 1 year | 16-Apr-19 |
| USB Power Sensor | Keysight | U2044XA | MY57510012 | 1 year | 15-Apr-19 |
| USB Power Sensor | Keysight | U2044XA | MY57520003 | 1 year | 15-Apr-19 |
| RF Swtich | Ericsson | RARFSW4X1 | 1 | NCR | NCR |
| Switch Driver | Hewlett Packard | 11713A | 3748A06076 | NCR | NCR |
| PSU (DC) | Leader | 730-3D | 9801135 | NCR | NCR |
| CT10 | Ericsson | Testing Equipment | T01F311639 | NCR | NCR |
| Thermometer | Fluke | 52 K/J Thermocouple | FA002289 | 1 year | Sep. 8/18 |
| 3 m EMI test chamber | TDK | SAC-3 | FA002047 | 1 year | Dec. 09/18 |
| Receiver/spectrum analyzer | Rohde & Schwarz | ESU 26 | FA002043 | 1 year | Oct 26/18 |
| Bilog antenna (20–3000 MHz) | Sunol | JB3 | FA002108 | 1 year | Aug. 31/18 |
| Horn with Preamp (1–18 GHz) | ETS-Lindgren | 3117 | FA002840 | 1 year | Dec. 07/18 |
| 50 Ω coax cable | C.C.A. | None | FA002555 | 1 year | May 1/19 |

Note: NCR - no calibration required

# Section 8. Testing data

## 8.1 FCC 27.50(d) and RSS-139, 4.1 Maximum output power at RF antenna connector

### 8.1.1 Definitions and limits

**§ 27.50(d) Operation within the bands: 2110–2155 MHz and 2155–2180 MHz.**

(1) The power of each fixed or base station transmitting in the 1995–2000 MHz, 2110–2155 MHz, 2155–2180 MHz or 2180–2200 MHz band and located in any county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, is limited to:

(i) An equivalent isotropically radiated power (EIRP) of 3280 watts when transmitting with an emission bandwidth of 1 MHz or less;

(ii) An EIRP of 3280 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

(2) The power of each fixed or base station transmitting in the 1995–2000 MHz, the 2110–2155 MHz 2155–2180 MHz band, or 2180–2200 MHz band and situated in any geographic location other than that described in paragraph (d)(1) of this section is limited to:

(i) An equivalent isotropically radiated power (EIRP) of 1640 watts when transmitting with an emission bandwidth of 1 MHz or less;

(ii) An EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

(3) A licensee operating a base or fixed station in the 2110–2155 MHz band utilizing a power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must coordinate such operations in advance with all Government and non-Government satellite entities in the 2025–2110 MHz band. A licensee operating a base or fixed station in the 2110–2180 MHz band utilizing power greater than 1640 watts EIRP and greater than 1640 watts/MHz EIRP must be coordinated in advance with the following licensees authorized to operate within 120 kilometers (75 miles) of the base or fixed station operating in this band: All Broadband Radio Service (BRS) licensees authorized under this part in the 2155–2160 MHz band and all advanced wireless services (AWS) licensees authorized to operate on adjacent frequency blocks in the 2110–2180 MHz band.

(5) Equipment employed must be authorized in accordance with the provisions of §24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. 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.

(6) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

**RSS-139, Section 4.1**

The transmitter power shall be measured in terms of a root-mean-square (RMS) average value.

**RSS-139, Section 6.5**

Consult SRSP-513 for e.i.r.p. limits on fixed and base stations operating in the band 2110–2180 MHz.

In addition, the peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

**SRSP-513, Section 5.1**

5.1.1 Fixed and base stations

5.1.1.1 For fixed and base stations operating within the frequency range 2110–2180 MHz with a channel bandwidth equal to or less than 1 MHz, the maximum permissible equivalent isotropically radiated power (e.i.r.p.) is 1640 watts with an antenna height above average terrain (HAAT) up to 300 metres.

5.1.1.2 For fixed and base stations operating within the frequency range 2110–2180 MHz with a channel bandwidth greater than 1 MHz, the maximum permissible e.i.r.p. is 1640 watts/MHz e.i.r.p. (i.e. no more than 1640 watts e.i.r.p. in any 1 MHz band segment) with an antenna height above average terrain (HAAT) up to 300 metres.

5.1.1.3 Fixed and base stations located in geographic areas at a distance greater than 26 km from large or medium population centres, and transmitting within the frequency range 2110–2180 MHz, may increase their e.i.r.p. up to a maximum of 3280 watts/MHz (i.e. no more than 3280 watts e.i.r.p. in any 1 MHz band segment), with an antenna HAAT up to 300 metres.

Within 26 km of any large or medium population centre, fixed and base stations may operate at increased e.i.r.p. if more than 50% of the population within a particular sector's coverage is located outside these large and medium population centres.

Fixed and base stations with increased e.i.r.p. must not be used to provide coverage to large and medium population centres. However, some incidental coverage of these large and medium population centres by stations with increased e.i.r.p. is permitted.

This provision also applies for fixed and base stations with a channel bandwidth equal to or less than 1 MHz (i.e. the e.i.r.p. may be increased up to a maximum of 3280 watts).

5.1.1.4 Fixed and base station antenna heights above average terrain may exceed 300 metres with a reduction in e.i.r.p. The maximum permissible e.i.r.p. for installations with antenna HAAT in excess of 300 metres is given in the following table:

***Table 8.1-1:*** *Reduction to Maximum Allowable E.I.R.P. for HAAT > 300 m*

| HAAT (m) | Maximum EIRP, W/MHz |
|---|---|
| HAAT ≤ 300 | 1640 (or 3280[1]) |
| 300 < HAAT ≤ 500 | 1070 |
| 500 < HAAT ≤ 1000 | 490 |
| 1000 < HAAT ≤ 1500 | 270 |
| 1500 < HAAT ≤ 2000 | 160 |

Note: [1]for fixed and base stations with a channel bandwidth equal to or less than 1 MHz

## 8.1.2 Test summary

| | |
|---|---|
| Test date | July 9, 2018 |
| Test engineer | Andrey Adelberg |

### 8.1.3 Observations, settings and special notes

Output power was measured with RMS power meter.
Antenna sub-array gain is 10.5 dBi with uncorrelated signals.
Test receiver settings for PSD measurements:

| | |
|---|---|
| Detector mode | RMS |
| Resolution bandwidth | 1 MHz |
| Video bandwidth | >RBW |
| Measurement mode | Power over emission bandwidth |
| Trace mode | Averaging |
| Measurement time | Auto |

### 8.1.4 Test data

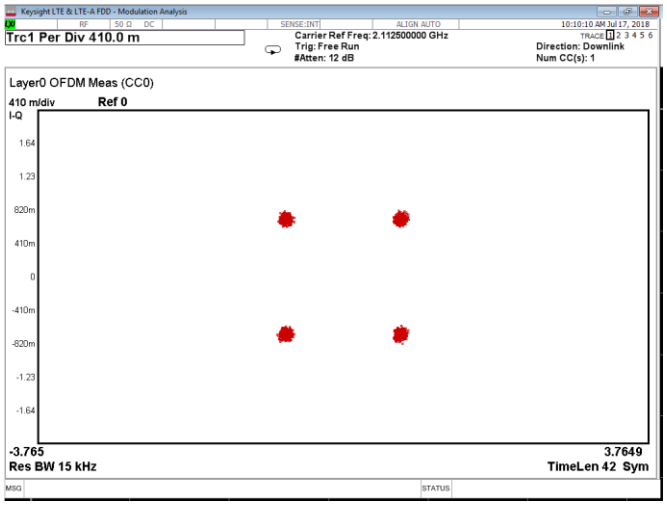



***Figure 8.1-1:*** *Modulation characteristics, QPSK*

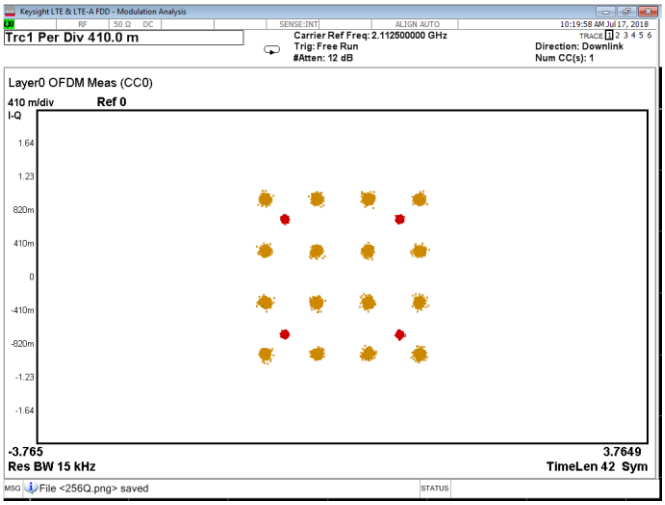



***Figure 8.1-2:*** *Modulation characteristics, 16QAM*

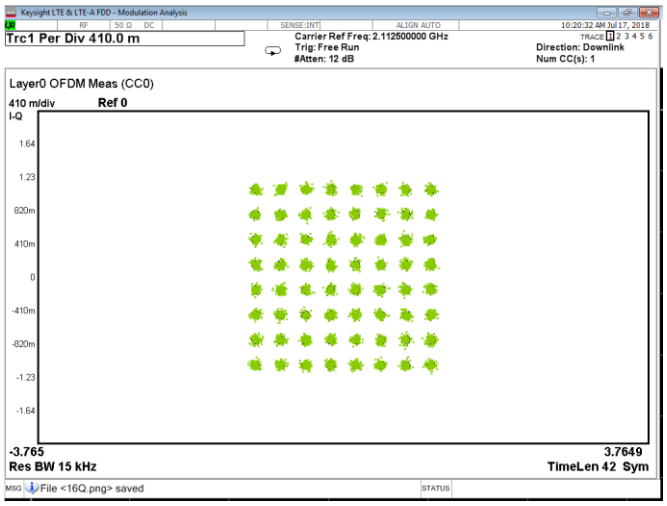



***Figure 8.1-3:*** *Modulation characteristics, 64QAM*

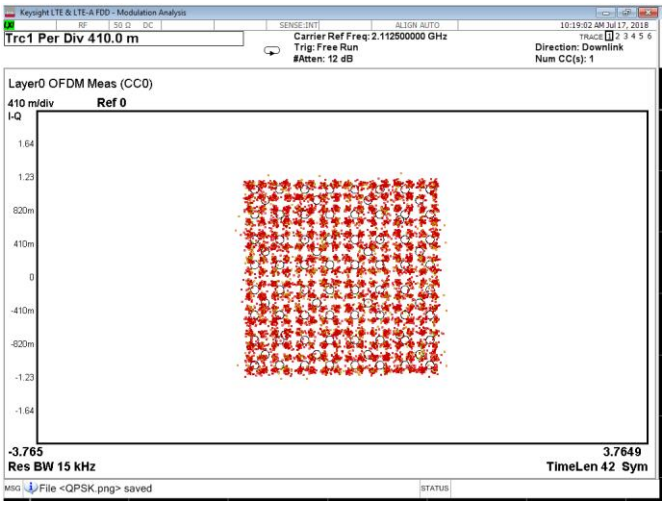



***Figure 8.1-4:*** *Modulation characteristics, 256QAM*

***Table 8.1-2:*** *Output power measurement results for Port **0,0,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.36 | 37.29 | 30.78 | 10.50 | 41.28 | 62.15 | 20.87 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.32 | 37.26 | 30.93 | 10.50 | 41.43 | 62.15 | 20.72 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.80 | 10.50 | 41.30 | 62.15 | 20.85 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.25 | 37.20 | 30.76 | 10.50 | 41.26 | 62.15 | 20.89 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.18 | 37.14 | 30.84 | 10.50 | 41.34 | 62.15 | 20.81 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.07 | 37.05 | 30.94 | 10.50 | 41.44 | 62.15 | 20.71 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.30 | 37.24 | 27.93 | 10.50 | 38.43 | 62.15 | 23.72 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.27 | 37.22 | 27.95 | 10.50 | 38.45 | 62.15 | 23.70 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.27 | 37.22 | 27.95 | 10.50 | 38.45 | 62.15 | 23.70 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.32 | 37.26 | 27.98 | 10.50 | 38.48 | 62.15 | 23.67 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.20 | 37.16 | 27.94 | 10.50 | 38.44 | 62.15 | 23.71 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.12 | 37.09 | 28.04 | 10.50 | 38.54 | 62.15 | 23.61 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.31 | 37.25 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.24 | 37.19 | 26.38 | 10.50 | 36.88 | 62.15 | 25.27 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.37 | 10.50 | 36.87 | 62.15 | 25.28 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.22 | 37.18 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.26 | 37.21 | 26.33 | 10.50 | 36.83 | 62.15 | 25.32 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.20 | 37.16 | 26.24 | 10.50 | 36.74 | 62.15 | 25.41 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.32 | 37.26 | 25.13 | 10.50 | 35.63 | 62.15 | 26.52 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.28 | 10.50 | 35.78 | 62.15 | 26.37 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.27 | 37.22 | 25.24 | 10.50 | 35.74 | 62.15 | 26.41 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.30 | 37.24 | 25.24 | 10.50 | 35.74 | 62.15 | 26.41 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.25 | 37.20 | 25.23 | 10.50 | 35.73 | 62.15 | 26.42 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.22 | 37.18 | 25.15 | 10.50 | 35.65 | 62.15 | 26.50 |

***Table 8.1-3:*** *Output power measurement results for Port* ***0,0,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.42 | 37.34 | 30.57 | 10.50 | 41.07 | 62.15 | 21.08 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.41 | 37.33 | 30.55 | 10.50 | 41.05 | 62.15 | 21.10 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.38 | 37.31 | 30.50 | 10.50 | 41.00 | 62.15 | 21.15 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.32 | 37.26 | 30.49 | 10.50 | 40.99 | 62.15 | 21.16 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.53 | 37.43 | 30.60 | 10.50 | 41.10 | 62.15 | 21.05 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.31 | 37.25 | 30.46 | 10.50 | 40.96 | 62.15 | 21.19 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.41 | 37.33 | 27.69 | 10.50 | 38.19 | 62.15 | 23.96 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.42 | 37.34 | 27.75 | 10.50 | 38.25 | 62.15 | 23.90 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.38 | 37.31 | 27.63 | 10.50 | 38.13 | 62.15 | 24.02 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.45 | 37.36 | 27.68 | 10.50 | 38.18 | 62.15 | 23.97 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.55 | 37.44 | 27.69 | 10.50 | 38.19 | 62.15 | 23.96 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.33 | 37.27 | 27.58 | 10.50 | 38.08 | 62.15 | 24.07 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.47 | 37.38 | 26.10 | 10.50 | 36.60 | 62.15 | 25.55 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.45 | 37.36 | 26.15 | 10.50 | 36.65 | 62.15 | 25.50 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.42 | 37.34 | 26.09 | 10.50 | 36.59 | 62.15 | 25.56 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.42 | 37.34 | 26.00 | 10.50 | 36.50 | 62.15 | 25.65 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.58 | 37.47 | 26.23 | 10.50 | 36.73 | 62.15 | 25.42 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.42 | 37.34 | 26.15 | 10.50 | 36.65 | 62.15 | 25.50 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.52 | 37.42 | 24.99 | 10.50 | 35.49 | 62.15 | 26.66 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.52 | 37.42 | 25.02 | 10.50 | 35.52 | 62.15 | 26.63 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.50 | 37.40 | 24.99 | 10.50 | 35.49 | 62.15 | 26.66 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.51 | 37.41 | 25.00 | 10.50 | 35.50 | 62.15 | 26.65 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.57 | 37.46 | 25.06 | 10.50 | 35.56 | 62.15 | 26.59 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.51 | 37.41 | 25.01 | 10.50 | 35.51 | 62.15 | 26.64 |

***Table 8.1-4:*** *Output power measurement results for Port* ***0,1,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.37 | 37.30 | 30.69 | 10.50 | 41.19 | 62.15 | 20.96 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.36 | 37.29 | 30.65 | 10.50 | 41.15 | 62.15 | 21.00 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.33 | 37.27 | 30.61 | 10.50 | 41.11 | 62.15 | 21.04 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.26 | 37.21 | 30.61 | 10.50 | 41.11 | 62.15 | 21.04 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.37 | 37.30 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.14 | 37.11 | 30.62 | 10.50 | 41.12 | 62.15 | 21.03 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.32 | 37.26 | 27.83 | 10.50 | 38.33 | 62.15 | 23.82 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.33 | 37.27 | 27.82 | 10.50 | 38.32 | 62.15 | 23.83 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.31 | 37.25 | 27.90 | 10.50 | 38.40 | 62.15 | 23.75 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.37 | 37.30 | 27.92 | 10.50 | 38.42 | 62.15 | 23.73 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.36 | 37.29 | 27.92 | 10.50 | 38.42 | 62.15 | 23.73 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.13 | 37.10 | 27.84 | 10.50 | 38.34 | 62.15 | 23.81 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.40 | 37.32 | 26.34 | 10.50 | 36.84 | 62.15 | 25.31 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.36 | 37.29 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.33 | 37.27 | 26.37 | 10.50 | 36.87 | 62.15 | 25.28 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.33 | 37.27 | 26.30 | 10.50 | 36.80 | 62.15 | 25.35 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.38 | 37.31 | 26.32 | 10.50 | 36.82 | 62.15 | 25.33 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.19 | 37.15 | 26.27 | 10.50 | 36.77 | 62.15 | 25.38 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.46 | 37.37 | 25.27 | 10.50 | 35.77 | 62.15 | 26.38 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.45 | 37.36 | 25.28 | 10.50 | 35.78 | 62.15 | 26.37 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.40 | 37.32 | 25.27 | 10.50 | 35.77 | 62.15 | 26.38 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.42 | 37.34 | 25.21 | 10.50 | 35.71 | 62.15 | 26.44 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.37 | 37.30 | 25.13 | 10.50 | 35.63 | 62.15 | 26.52 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.24 | 37.19 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |

***Table 8.1-5:*** *Output power measurement results for Port* ***0,1,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.24 | 37.19 | 30.92 | 10.50 | 41.42 | 62.15 | 20.73 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.22 | 37.18 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.22 | 37.18 | 30.79 | 10.50 | 41.29 | 62.15 | 20.86 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.16 | 37.13 | 30.84 | 10.50 | 41.34 | 62.15 | 20.81 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.25 | 37.20 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.22 | 37.18 | 30.67 | 10.50 | 41.17 | 62.15 | 20.98 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.20 | 37.16 | 27.99 | 10.50 | 38.49 | 62.15 | 23.66 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.19 | 37.15 | 28.03 | 10.50 | 38.53 | 62.15 | 23.62 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.19 | 37.15 | 28.01 | 10.50 | 38.51 | 62.15 | 23.64 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.24 | 37.19 | 28.01 | 10.50 | 38.51 | 62.15 | 23.64 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.26 | 37.21 | 27.93 | 10.50 | 38.43 | 62.15 | 23.72 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.24 | 37.19 | 27.80 | 10.50 | 38.30 | 62.15 | 23.85 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.27 | 37.22 | 26.49 | 10.50 | 36.99 | 62.15 | 25.16 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.26 | 37.21 | 26.45 | 10.50 | 36.95 | 62.15 | 25.20 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.22 | 37.18 | 26.48 | 10.50 | 36.98 | 62.15 | 25.17 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.22 | 37.18 | 26.47 | 10.50 | 36.97 | 62.15 | 25.18 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.30 | 37.24 | 26.51 | 10.50 | 37.01 | 62.15 | 25.14 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.32 | 37.26 | 26.61 | 10.50 | 37.11 | 62.15 | 25.04 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.30 | 37.24 | 25.39 | 10.50 | 35.89 | 62.15 | 26.26 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.39 | 10.50 | 35.89 | 62.15 | 26.26 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.28 | 37.23 | 25.38 | 10.50 | 35.88 | 62.15 | 26.27 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.27 | 37.22 | 25.36 | 10.50 | 41.42 | 62.15 | 20.73 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.28 | 37.23 | 25.33 | 10.50 | 41.33 | 62.15 | 20.82 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.36 | 37.29 | 25.38 | 10.50 | 41.29 | 62.15 | 20.86 |

***Table 8.1-6:*** *Output power measurement results for Port* ***0,2,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.13 | 37.10 | 30.71 | 10.50 | 41.21 | 62.15 | 20.94 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.06 | 37.04 | 30.62 | 10.50 | 41.12 | 62.15 | 21.03 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.07 | 37.05 | 30.65 | 10.50 | 41.15 | 62.15 | 21.00 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.04 | 37.02 | 30.71 | 10.50 | 41.21 | 62.15 | 20.94 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.33 | 37.27 | 30.89 | 10.50 | 41.39 | 62.15 | 20.76 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.50 | 37.40 | 30.82 | 10.50 | 41.32 | 62.15 | 20.83 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.05 | 37.03 | 27.70 | 10.50 | 38.20 | 62.15 | 23.95 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.09 | 37.07 | 27.77 | 10.50 | 38.27 | 62.15 | 23.88 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.11 | 37.08 | 27.83 | 10.50 | 38.33 | 62.15 | 23.82 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.12 | 37.09 | 27.81 | 10.50 | 38.31 | 62.15 | 23.84 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.22 | 37.18 | 27.98 | 10.50 | 38.48 | 62.15 | 23.67 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.40 | 37.32 | 27.95 | 10.50 | 38.45 | 62.15 | 23.70 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.02 | 37.01 | 26.15 | 10.50 | 36.65 | 62.15 | 25.50 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.00 | 36.99 | 26.16 | 10.50 | 36.66 | 62.15 | 25.49 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.01 | 37.00 | 26.20 | 10.50 | 36.70 | 62.15 | 25.45 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.04 | 37.02 | 26.19 | 10.50 | 36.69 | 62.15 | 25.46 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.19 | 37.15 | 26.32 | 10.50 | 36.82 | 62.15 | 25.33 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.36 | 37.29 | 26.40 | 10.50 | 36.90 | 62.15 | 25.25 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.11 | 37.08 | 24.91 | 10.50 | 35.41 | 62.15 | 26.74 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.07 | 37.05 | 25.01 | 10.50 | 35.51 | 62.15 | 26.64 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.11 | 37.08 | 24.80 | 10.50 | 35.30 | 62.15 | 26.85 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.09 | 37.07 | 25.07 | 10.50 | 35.57 | 62.15 | 26.58 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.18 | 37.14 | 25.20 | 10.50 | 35.70 | 62.15 | 26.45 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.35 | 37.28 | 25.07 | 10.50 | 35.57 | 62.15 | 26.58 |

***Table 8.1-7:*** *Output power measurement results for Port* ***0,2,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.50 | 37.40 | 30.57 | 10.50 | 41.07 | 62.15 | 21.08 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.43 | 37.35 | 30.51 | 10.50 | 41.01 | 62.15 | 21.14 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.42 | 37.34 | 30.54 | 10.50 | 41.04 | 62.15 | 21.11 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.47 | 37.38 | 30.52 | 10.50 | 41.02 | 62.15 | 21.13 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.77 | 37.61 | 30.11 | 10.50 | 40.61 | 62.15 | 21.54 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.25 | 37.20 | 30.46 | 10.50 | 40.96 | 62.15 | 21.19 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.47 | 37.38 | 27.72 | 10.50 | 38.22 | 62.15 | 23.93 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.53 | 37.43 | 27.75 | 10.50 | 38.25 | 62.15 | 23.90 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.53 | 37.43 | 27.75 | 10.50 | 38.25 | 62.15 | 23.90 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.56 | 37.45 | 27.79 | 10.50 | 38.29 | 62.15 | 23.86 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.66 | 37.53 | 27.17 | 10.50 | 37.67 | 62.15 | 24.48 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.30 | 37.24 | 27.64 | 10.50 | 38.14 | 62.15 | 24.01 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.47 | 37.38 | 26.14 | 10.50 | 36.64 | 62.15 | 25.51 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.48 | 37.39 | 26.09 | 10.50 | 36.59 | 62.15 | 25.56 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.48 | 37.39 | 26.16 | 10.50 | 36.66 | 62.15 | 25.49 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.52 | 37.42 | 26.13 | 10.50 | 36.63 | 62.15 | 25.52 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.62 | 37.50 | 25.52 | 10.50 | 36.02 | 62.15 | 26.13 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.33 | 37.27 | 26.08 | 10.50 | 36.58 | 62.15 | 25.57 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.60 | 37.48 | 25.11 | 10.50 | 35.61 | 62.15 | 26.54 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.57 | 37.46 | 24.97 | 10.50 | 35.47 | 62.15 | 26.68 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.60 | 37.48 | 25.06 | 10.50 | 35.56 | 62.15 | 26.59 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.61 | 37.49 | 25.04 | 10.50 | 35.54 | 62.15 | 26.61 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.61 | 37.49 | 24.40 | 10.50 | 34.90 | 62.15 | 27.25 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.40 | 37.32 | 24.95 | 10.50 | 35.45 | 62.15 | 26.70 |

***Table 8.1-8:*** *Output power measurement results for Port* ***0,3,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.40 | 37.32 | 30.82 | 10.50 | 41.32 | 62.15 | 20.83 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.37 | 37.30 | 30.80 | 10.50 | 41.30 | 62.15 | 20.85 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.40 | 37.32 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.41 | 37.33 | 30.76 | 10.50 | 41.26 | 62.15 | 20.89 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.62 | 37.50 | 31.01 | 10.50 | 41.51 | 62.15 | 20.64 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.18 | 37.14 | 30.68 | 10.50 | 41.18 | 62.15 | 20.97 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.31 | 37.25 | 27.90 | 10.50 | 38.40 | 62.15 | 23.75 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.40 | 37.32 | 27.94 | 10.50 | 38.44 | 62.15 | 23.71 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.42 | 37.34 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.41 | 37.33 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.51 | 37.41 | 28.02 | 10.50 | 38.52 | 62.15 | 23.63 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.22 | 37.18 | 27.86 | 10.50 | 38.36 | 62.15 | 23.79 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.31 | 37.25 | 26.28 | 10.50 | 36.78 | 62.15 | 25.37 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.31 | 37.25 | 26.32 | 10.50 | 36.82 | 62.15 | 25.33 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.32 | 37.26 | 26.23 | 10.50 | 36.73 | 62.15 | 25.42 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.32 | 37.26 | 26.33 | 10.50 | 36.83 | 62.15 | 25.32 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.47 | 37.38 | 26.42 | 10.50 | 36.92 | 62.15 | 25.23 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.24 | 37.19 | 26.29 | 10.50 | 36.79 | 62.15 | 25.36 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.38 | 37.31 | 25.22 | 10.50 | 35.72 | 62.15 | 26.43 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.35 | 37.28 | 25.17 | 10.50 | 35.67 | 62.15 | 26.48 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.40 | 37.32 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.37 | 37.30 | 25.21 | 10.50 | 35.71 | 62.15 | 26.44 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.48 | 37.39 | 25.30 | 10.50 | 35.80 | 62.15 | 26.35 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.28 | 37.23 | 25.19 | 10.50 | 35.69 | 62.15 | 26.46 |

***Table 8.1-9:*** *Output power measurement results for Port* ***0,3,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.28 | 37.23 | 30.96 | 10.50 | 41.46 | 62.15 | 20.69 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.22 | 37.18 | 30.89 | 10.50 | 41.39 | 62.15 | 20.76 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.22 | 37.18 | 30.89 | 10.50 | 41.39 | 62.15 | 20.76 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.16 | 37.13 | 30.90 | 10.50 | 41.40 | 62.15 | 20.75 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.47 | 37.38 | 31.10 | 10.50 | 41.60 | 62.15 | 20.55 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.04 | 37.02 | 30.80 | 10.50 | 41.30 | 62.15 | 20.85 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.20 | 37.16 | 27.98 | 10.50 | 38.48 | 62.15 | 23.67 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.28 | 37.23 | 28.04 | 10.50 | 38.54 | 62.15 | 23.61 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.28 | 37.23 | 28.11 | 10.50 | 38.61 | 62.15 | 23.54 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.18 | 37.14 | 28.06 | 10.50 | 38.56 | 62.15 | 23.59 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.38 | 37.31 | 28.15 | 10.50 | 38.65 | 62.15 | 23.50 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.04 | 37.02 | 27.95 | 10.50 | 38.45 | 62.15 | 23.70 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.20 | 37.16 | 26.45 | 10.50 | 36.95 | 62.15 | 25.20 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.21 | 37.17 | 26.43 | 10.50 | 36.93 | 62.15 | 25.22 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.21 | 37.17 | 26.47 | 10.50 | 36.97 | 62.15 | 25.18 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.22 | 37.18 | 26.34 | 10.50 | 36.84 | 62.15 | 25.31 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.33 | 37.27 | 26.55 | 10.50 | 37.05 | 62.15 | 25.10 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.04 | 37.02 | 26.38 | 10.50 | 36.88 | 62.15 | 25.27 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.27 | 37.22 | 25.38 | 10.50 | 35.88 | 62.15 | 26.27 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.26 | 37.21 | 25.31 | 10.50 | 35.81 | 62.15 | 26.34 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.28 | 37.23 | 25.36 | 10.50 | 35.86 | 62.15 | 26.29 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.32 | 10.50 | 35.82 | 62.15 | 26.33 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.33 | 37.27 | 25.31 | 10.50 | 35.81 | 62.15 | 26.34 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.11 | 37.08 | 25.31 | 10.50 | 35.81 | 62.15 | 26.34 |

***Table 8.1-10:*** *Output power measurement results for Port* ***1,0,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.15 | 37.12 | 30.71 | 10.50 | 41.21 | 62.15 | 20.94 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.22 | 37.18 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.14 | 37.11 | 30.73 | 10.50 | 41.23 | 62.15 | 20.92 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.18 | 37.14 | 30.74 | 10.50 | 41.24 | 62.15 | 20.91 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.15 | 37.12 | 30.74 | 10.50 | 41.24 | 62.15 | 20.91 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.08 | 37.06 | 30.59 | 10.50 | 41.09 | 62.15 | 21.06 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.16 | 37.13 | 27.91 | 10.50 | 38.41 | 62.15 | 23.74 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.15 | 37.12 | 27.76 | 10.50 | 38.26 | 62.15 | 23.89 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.15 | 37.12 | 27.83 | 10.50 | 38.33 | 62.15 | 23.82 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.13 | 37.10 | 27.85 | 10.50 | 38.35 | 62.15 | 23.80 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.16 | 37.13 | 27.90 | 10.50 | 38.40 | 62.15 | 23.75 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.11 | 37.08 | 27.71 | 10.50 | 38.21 | 62.15 | 23.94 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.27 | 10.50 | 36.77 | 62.15 | 25.38 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.11 | 37.08 | 26.26 | 10.50 | 36.76 | 62.15 | 25.39 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.12 | 37.09 | 26.25 | 10.50 | 36.75 | 62.15 | 25.40 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.11 | 37.08 | 26.20 | 10.50 | 36.70 | 62.15 | 25.45 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.22 | 37.18 | 26.25 | 10.50 | 36.75 | 62.15 | 25.40 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.16 | 37.13 | 26.14 | 10.50 | 36.64 | 62.15 | 25.51 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.24 | 37.19 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.09 | 37.07 | 25.09 | 10.50 | 35.59 | 62.15 | 26.56 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.06 | 37.04 | 25.04 | 10.50 | 35.54 | 62.15 | 26.61 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.19 | 37.15 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.19 | 37.15 | 25.09 | 10.50 | 35.59 | 62.15 | 26.56 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.16 | 37.13 | 25.03 | 10.50 | 35.53 | 62.15 | 26.62 |

***Table 8.1-11:*** *Output power measurement results for Port* ***1,0,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.46 | 10.50 | 40.96 | 62.15 | 21.19 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.35 | 37.28 | 30.47 | 10.50 | 40.97 | 62.15 | 21.18 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.25 | 37.20 | 30.40 | 10.50 | 40.90 | 62.15 | 21.25 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.37 | 37.3 | 30.49 | 10.50 | 40.99 | 62.15 | 21.16 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.36 | 37.29 | 30.50 | 10.50 | 41.00 | 62.15 | 21.15 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.36 | 37.29 | 30.55 | 10.50 | 41.05 | 62.15 | 21.10 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.33 | 37.27 | 27.63 | 10.50 | 38.13 | 62.15 | 24.02 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.30 | 37.24 | 27.44 | 10.50 | 37.94 | 62.15 | 24.21 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.31 | 37.25 | 27.49 | 10.50 | 37.99 | 62.15 | 24.16 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.31 | 37.25 | 27.57 | 10.50 | 38.07 | 62.15 | 24.08 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.38 | 37.31 | 27.65 | 10.50 | 38.15 | 62.15 | 24.00 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.38 | 37.31 | 27.62 | 10.50 | 38.12 | 62.15 | 24.03 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.45 | 37.36 | 26.00 | 10.50 | 36.50 | 62.15 | 25.65 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.31 | 37.25 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.30 | 37.24 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.30 | 37.24 | 25.96 | 10.50 | 36.46 | 62.15 | 25.69 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.46 | 37.37 | 26.06 | 10.50 | 36.56 | 62.15 | 25.59 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.43 | 37.35 | 26.04 | 10.50 | 36.54 | 62.15 | 25.61 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.45 | 37.36 | 24.87 | 10.50 | 35.37 | 62.15 | 26.78 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.27 | 37.22 | 24.85 | 10.50 | 35.35 | 62.15 | 26.80 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.25 | 37.20 | 24.79 | 10.50 | 35.29 | 62.15 | 26.86 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.40 | 37.32 | 24.88 | 10.50 | 35.38 | 62.15 | 26.77 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.42 | 37.34 | 24.89 | 10.50 | 35.39 | 62.15 | 26.76 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.42 | 37.34 | 24.96 | 10.50 | 35.46 | 62.15 | 26.69 |

***Table 8.1-12:*** *Output power measurement results for Port* ***1,1,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.38 | 37.31 | 30.84 | 10.50 | 41.34 | 62.15 | 20.81 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.46 | 37.37 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.35 | 37.28 | 30.76 | 10.50 | 41.26 | 62.15 | 20.89 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.46 | 37.37 | 30.90 | 10.50 | 41.40 | 62.15 | 20.75 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.46 | 37.37 | 30.89 | 10.50 | 41.39 | 62.15 | 20.76 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.07 | 37.05 | 30.59 | 10.50 | 41.09 | 62.15 | 21.06 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.45 | 37.36 | 28.00 | 10.50 | 38.50 | 62.15 | 23.65 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.38 | 37.31 | 27.91 | 10.50 | 38.41 | 62.15 | 23.74 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.38 | 37.31 | 27.95 | 10.50 | 38.45 | 62.15 | 23.70 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.40 | 37.32 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.48 | 37.39 | 28.04 | 10.50 | 38.54 | 62.15 | 23.61 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.13 | 37.10 | 27.60 | 10.50 | 38.10 | 62.15 | 24.05 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.50 | 37.40 | 26.37 | 10.50 | 36.87 | 62.15 | 25.28 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.36 | 37.29 | 26.31 | 10.50 | 36.81 | 62.15 | 25.34 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.35 | 37.28 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.36 | 37.29 | 26.31 | 10.50 | 36.81 | 62.15 | 25.34 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.56 | 37.45 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.25 | 37.20 | 26.25 | 10.50 | 36.75 | 62.15 | 25.40 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.52 | 37.42 | 25.26 | 10.50 | 35.76 | 62.15 | 26.39 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.35 | 37.28 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.45 | 37.36 | 25.26 | 10.50 | 35.76 | 62.15 | 26.39 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.51 | 37.41 | 25.25 | 10.50 | 35.75 | 62.15 | 26.40 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.25 | 37.20 | 24.99 | 10.50 | 35.49 | 62.15 | 26.66 |

***Table 8.1-13:*** *Output power measurement results for Port* ***1,1,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.27 | 37.22 | 30.97 | 10.50 | 41.47 | 62.15 | 20.68 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.33 | 37.27 | 31.03 | 10.50 | 41.53 | 62.15 | 20.62 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.22 | 37.18 | 30.87 | 10.50 | 41.37 | 62.15 | 20.78 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.35 | 37.28 | 30.93 | 10.50 | 41.43 | 62.15 | 20.72 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.28 | 37.23 | 31.01 | 10.50 | 41.51 | 62.15 | 20.64 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.13 | 37.10 | 30.80 | 10.50 | 41.30 | 62.15 | 20.85 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.32 | 37.26 | 28.11 | 10.50 | 38.61 | 62.15 | 23.54 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.30 | 37.24 | 28.04 | 10.50 | 38.54 | 62.15 | 23.61 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.28 | 37.23 | 28.07 | 10.50 | 38.57 | 62.15 | 23.58 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.30 | 37.24 | 28.09 | 10.50 | 38.59 | 62.15 | 23.56 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.32 | 37.26 | 28.18 | 10.50 | 38.68 | 62.15 | 23.47 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.21 | 37.17 | 28.04 | 10.50 | 38.54 | 62.15 | 23.61 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.37 | 37.30 | 26.42 | 10.50 | 36.92 | 62.15 | 25.23 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.52 | 10.50 | 37.02 | 62.15 | 25.13 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.49 | 10.50 | 36.99 | 62.15 | 25.16 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.24 | 37.19 | 26.46 | 10.50 | 36.96 | 62.15 | 25.19 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.40 | 37.32 | 26.47 | 10.50 | 36.97 | 62.15 | 25.18 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.30 | 37.24 | 26.53 | 10.50 | 37.03 | 62.15 | 25.12 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.36 | 37.29 | 25.39 | 10.50 | 35.89 | 62.15 | 26.26 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.19 | 37.15 | 25.22 | 10.50 | 35.72 | 62.15 | 26.43 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.18 | 37.14 | 25.27 | 10.50 | 35.77 | 62.15 | 26.38 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.27 | 37.22 | 25.32 | 10.50 | 35.82 | 62.15 | 26.33 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.38 | 37.31 | 25.35 | 10.50 | 35.85 | 62.15 | 26.30 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.30 | 37.24 | 25.32 | 10.50 | 35.82 | 62.15 | 26.33 |

***Table 8.1-14:*** *Output power measurement results for Port* ***1,2,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.18 | 37.14 | 30.63 | 10.50 | 41.13 | 62.15 | 21.02 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.98 | 36.97 | 30.48 | 10.50 | 40.98 | 62.15 | 21.17 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.95 | 36.95 | 30.53 | 10.50 | 41.03 | 62.15 | 21.12 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.01 | 37.00 | 30.56 | 10.50 | 41.06 | 62.15 | 21.09 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.45 | 37.36 | 30.89 | 10.50 | 41.39 | 62.15 | 20.76 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.57 | 37.46 | 30.81 | 10.50 | 41.31 | 62.15 | 20.84 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.21 | 37.17 | 27.72 | 10.50 | 38.22 | 62.15 | 23.93 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.07 | 37.05 | 27.75 | 10.50 | 38.25 | 62.15 | 23.90 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 4.99 | 36.98 | 27.70 | 10.50 | 38.20 | 62.15 | 23.95 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.00 | 36.99 | 27.69 | 10.50 | 38.19 | 62.15 | 23.96 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.45 | 37.36 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.52 | 37.42 | 27.98 | 10.50 | 38.48 | 62.15 | 23.67 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.26 | 37.21 | 26.12 | 10.50 | 36.62 | 62.15 | 25.53 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.06 | 37.04 | 26.18 | 10.50 | 36.68 | 62.15 | 25.47 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.05 | 37.03 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.06 | 37.04 | 26.19 | 10.50 | 36.69 | 62.15 | 25.46 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.45 | 37.36 | 26.37 | 10.50 | 36.87 | 62.15 | 25.28 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.50 | 37.40 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.22 | 37.18 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.18 | 37.14 | 25.21 | 10.50 | 35.71 | 62.15 | 26.44 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.14 | 37.11 | 25.13 | 10.50 | 35.63 | 62.15 | 26.52 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.14 | 37.11 | 25.15 | 10.50 | 35.65 | 62.15 | 26.50 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.32 | 37.26 | 25.22 | 10.50 | 35.72 | 62.15 | 26.43 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.41 | 37.33 | 25.26 | 10.50 | 35.76 | 62.15 | 26.39 |

***Table 8.1-15:*** *Output power measurement results for Port* ***1,2,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.43 | 37.35 | 30.46 | 10.50 | 40.96 | 62.15 | 21.19 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.28 | 37.23 | 30.41 | 10.50 | 40.91 | 62.15 | 21.24 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.25 | 37.20 | 30.34 | 10.50 | 40.84 | 62.15 | 21.31 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.41 | 10.50 | 40.91 | 62.15 | 21.24 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.57 | 37.46 | 30.58 | 10.50 | 41.08 | 62.15 | 21.07 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.22 | 37.18 | 30.28 | 10.50 | 40.78 | 62.15 | 21.37 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.51 | 37.41 | 27.61 | 10.50 | 38.11 | 62.15 | 24.04 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.38 | 37.31 | 27.49 | 10.50 | 37.99 | 62.15 | 24.16 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.30 | 37.24 | 27.57 | 10.50 | 38.07 | 62.15 | 24.08 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.32 | 37.26 | 27.57 | 10.50 | 38.07 | 62.15 | 24.08 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.57 | 37.46 | 27.68 | 10.50 | 38.18 | 62.15 | 23.97 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.24 | 37.19 | 27.45 | 10.50 | 37.95 | 62.15 | 24.20 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.55 | 37.44 | 26.05 | 10.50 | 36.55 | 62.15 | 25.60 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.37 | 37.30 | 26.05 | 10.50 | 36.55 | 62.15 | 25.60 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.37 | 37.30 | 26.04 | 10.50 | 36.54 | 62.15 | 25.61 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.38 | 37.31 | 26.03 | 10.50 | 36.53 | 62.15 | 25.62 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.56 | 37.45 | 25.85 | 10.50 | 36.35 | 62.15 | 25.80 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.28 | 37.23 | 25.91 | 10.50 | 36.41 | 62.15 | 25.74 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.52 | 37.42 | 24.97 | 10.50 | 35.47 | 62.15 | 26.68 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.48 | 37.39 | 25.02 | 10.50 | 35.52 | 62.15 | 26.63 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.46 | 37.37 | 24.98 | 10.50 | 35.48 | 62.15 | 26.67 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.47 | 37.38 | 24.96 | 10.50 | 35.46 | 62.15 | 26.69 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.46 | 37.37 | 24.93 | 10.50 | 35.43 | 62.15 | 26.72 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.22 | 37.18 | 24.79 | 10.50 | 35.29 | 62.15 | 26.86 |

***Table 8.1-16:*** *Output power measurement results for Port* ***1,3,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.67 | 10.50 | 41.17 | 62.15 | 20.98 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.13 | 37.10 | 30.51 | 10.50 | 41.01 | 62.15 | 21.14 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.14 | 37.11 | 30.54 | 10.50 | 41.04 | 62.15 | 21.11 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.19 | 37.15 | 30.58 | 10.50 | 41.08 | 62.15 | 21.07 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.47 | 37.38 | 30.76 | 10.50 | 41.26 | 62.15 | 20.89 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.24 | 37.19 | 30.56 | 10.50 | 41.06 | 62.15 | 21.09 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.38 | 37.31 | 27.69 | 10.50 | 38.19 | 62.15 | 23.96 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.26 | 37.21 | 27.68 | 10.50 | 38.18 | 62.15 | 23.97 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.18 | 37.14 | 27.73 | 10.50 | 38.23 | 62.15 | 23.92 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.19 | 37.15 | 27.73 | 10.50 | 38.23 | 62.15 | 23.92 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.46 | 37.37 | 27.90 | 10.50 | 38.40 | 62.15 | 23.75 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.27 | 37.22 | 27.74 | 10.50 | 38.24 | 62.15 | 23.91 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.42 | 37.34 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.23 | 10.50 | 36.73 | 62.15 | 25.42 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.26 | 37.21 | 26.27 | 10.50 | 36.77 | 62.15 | 25.38 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.24 | 37.19 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.46 | 37.37 | 26.25 | 10.50 | 36.75 | 62.15 | 25.40 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.31 | 37.25 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.40 | 37.32 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.36 | 37.29 | 25.16 | 10.50 | 35.66 | 62.15 | 26.49 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.33 | 37.27 | 25.19 | 10.50 | 35.69 | 62.15 | 26.46 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.32 | 37.26 | 25.12 | 10.50 | 35.62 | 62.15 | 26.53 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.24 | 37.19 | 25.13 | 10.50 | 35.63 | 62.15 | 26.52 |

***Table 8.1-17:*** *Output power measurement results for Port* ***1,3,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.27 | 37.22 | 30.89 | 10.50 | 41.39 | 62.15 | 20.76 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.13 | 37.10 | 30.77 | 10.50 | 41.27 | 62.15 | 20.88 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.14 | 37.11 | 30.79 | 10.50 | 41.29 | 62.15 | 20.86 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.20 | 37.16 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.37 | 37.30 | 30.95 | 10.50 | 41.45 | 62.15 | 20.70 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.08 | 37.06 | 30.66 | 10.50 | 41.16 | 62.15 | 20.99 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.35 | 37.28 | 28.01 | 10.50 | 38.51 | 62.15 | 23.64 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.24 | 37.19 | 28.04 | 10.50 | 38.54 | 62.15 | 23.61 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.16 | 37.13 | 27.98 | 10.50 | 38.48 | 62.15 | 23.67 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.18 | 37.14 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.37 | 37.30 | 28.05 | 10.50 | 38.55 | 62.15 | 23.60 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.13 | 37.10 | 27.89 | 10.50 | 38.39 | 62.15 | 23.76 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.38 | 37.31 | 26.31 | 10.50 | 36.81 | 62.15 | 25.34 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.21 | 37.17 | 26.45 | 10.50 | 36.95 | 62.15 | 25.20 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.19 | 37.15 | 26.46 | 10.50 | 36.96 | 62.15 | 25.19 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.19 | 37.15 | 26.45 | 10.50 | 36.95 | 62.15 | 25.20 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.40 | 37.32 | 26.45 | 10.50 | 36.95 | 62.15 | 25.20 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.15 | 37.12 | 26.31 | 10.50 | 36.81 | 62.15 | 25.34 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.37 | 10.50 | 35.87 | 62.15 | 26.28 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.28 | 37.23 | 25.36 | 10.50 | 35.86 | 62.15 | 26.29 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.24 | 37.19 | 25.35 | 10.50 | 35.85 | 62.15 | 26.30 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.26 | 37.21 | 25.36 | 10.50 | 35.86 | 62.15 | 26.29 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.30 | 37.24 | 25.33 | 10.50 | 35.83 | 62.15 | 26.32 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.08 | 37.06 | 25.25 | 10.50 | 35.75 | 62.15 | 26.40 |

***Table 8.1-18:*** *Output power measurement results for Port* ***2,0,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.26 | 37.21 | 30.60 | 10.50 | 41.10 | 62.15 | 21.05 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.98 | 36.97 | 30.64 | 10.50 | 41.14 | 62.15 | 21.01 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.08 | 37.06 | 30.62 | 10.50 | 41.12 | 62.15 | 21.03 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.07 | 37.05 | 30.63 | 10.50 | 41.13 | 62.15 | 21.02 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.31 | 37.25 | 30.69 | 10.50 | 41.19 | 62.15 | 20.96 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.12 | 37.09 | 30.51 | 10.50 | 41.01 | 62.15 | 21.14 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.32 | 37.26 | 27.80 | 10.50 | 38.30 | 62.15 | 23.85 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.16 | 37.13 | 27.84 | 10.50 | 38.34 | 62.15 | 23.81 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.16 | 37.13 | 27.74 | 10.50 | 38.24 | 62.15 | 23.91 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.08 | 37.06 | 27.80 | 10.50 | 38.30 | 62.15 | 23.85 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.42 | 37.34 | 27.92 | 10.50 | 38.42 | 62.15 | 23.73 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.25 | 37.20 | 27.71 | 10.50 | 38.21 | 62.15 | 23.94 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.33 | 37.27 | 26.27 | 10.50 | 36.77 | 62.15 | 25.38 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.15 | 37.12 | 26.28 | 10.50 | 36.78 | 62.15 | 25.37 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.16 | 37.13 | 26.24 | 10.50 | 36.74 | 62.15 | 25.41 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.14 | 37.11 | 26.27 | 10.50 | 36.77 | 62.15 | 25.38 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.38 | 37.31 | 26.29 | 10.50 | 36.79 | 62.15 | 25.36 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.19 | 37.15 | 26.12 | 10.50 | 36.62 | 62.15 | 25.53 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.38 | 37.31 | 25.17 | 10.50 | 35.67 | 62.15 | 26.48 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.41 | 37.33 | 25.34 | 10.50 | 35.84 | 62.15 | 26.31 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.13 | 37.10 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.14 | 37.11 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.38 | 37.31 | 25.15 | 10.50 | 35.65 | 62.15 | 26.50 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.20 | 37.16 | 25.04 | 10.50 | 35.54 | 62.15 | 26.61 |

***Table 8.1-19:*** *Output power measurement results for Port* ***2,0,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.23 | 10.50 | 40.73 | 62.15 | 21.42 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.05 | 37.03 | 30.21 | 10.50 | 40.71 | 62.15 | 21.44 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.14 | 37.11 | 30.27 | 10.50 | 40.77 | 62.15 | 21.38 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.08 | 37.06 | 30.23 | 10.50 | 40.73 | 62.15 | 21.42 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.53 | 37.43 | 30.55 | 10.50 | 41.05 | 62.15 | 21.10 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.30 | 37.24 | 30.39 | 10.50 | 40.89 | 62.15 | 21.26 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.40 | 37.32 | 27.40 | 10.50 | 37.90 | 62.15 | 24.25 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.25 | 37.20 | 27.49 | 10.50 | 37.99 | 62.15 | 24.16 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.24 | 37.19 | 27.44 | 10.50 | 37.94 | 62.15 | 24.21 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.14 | 37.11 | 27.40 | 10.50 | 37.90 | 62.15 | 24.25 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.64 | 37.51 | 27.69 | 10.50 | 38.19 | 62.15 | 23.96 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.41 | 37.33 | 27.58 | 10.50 | 38.08 | 62.15 | 24.07 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.46 | 37.37 | 25.96 | 10.50 | 36.46 | 62.15 | 25.69 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.30 | 37.24 | 25.94 | 10.50 | 36.44 | 62.15 | 25.71 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.28 | 37.23 | 25.96 | 10.50 | 36.46 | 62.15 | 25.69 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.28 | 37.23 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.60 | 37.48 | 26.09 | 10.50 | 36.59 | 62.15 | 25.56 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.37 | 37.30 | 26.02 | 10.50 | 36.52 | 62.15 | 25.63 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.53 | 37.43 | 24.91 | 10.50 | 35.41 | 62.15 | 26.74 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.57 | 37.46 | 25.08 | 10.50 | 35.58 | 62.15 | 26.57 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.30 | 37.24 | 24.83 | 10.50 | 35.33 | 62.15 | 26.82 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.30 | 37.24 | 24.84 | 10.50 | 35.34 | 62.15 | 26.81 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.58 | 37.47 | 24.98 | 10.50 | 35.48 | 62.15 | 26.67 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.46 | 37.37 | 24.89 | 10.50 | 35.39 | 62.15 | 26.76 |

***Table 8.1-20:*** *Output power measurement results for Port* ***2,1,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.25 | 37.20 | 30.51 | 10.50 | 41.01 | 62.15 | 21.14 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.02 | 37.01 | 30.47 | 10.50 | 40.97 | 62.15 | 21.18 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.09 | 37.07 | 30.51 | 10.50 | 41.01 | 62.15 | 21.14 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.07 | 37.05 | 30.52 | 10.50 | 41.02 | 62.15 | 21.13 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.30 | 37.24 | 30.65 | 10.50 | 41.15 | 62.15 | 21.00 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.02 | 37.01 | 30.47 | 10.50 | 40.97 | 62.15 | 21.18 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.36 | 37.29 | 27.75 | 10.50 | 38.25 | 62.15 | 23.90 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.22 | 37.18 | 27.77 | 10.50 | 38.27 | 62.15 | 23.88 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.21 | 37.17 | 27.81 | 10.50 | 38.31 | 62.15 | 23.84 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.13 | 37.10 | 27.73 | 10.50 | 38.23 | 62.15 | 23.92 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.40 | 37.32 | 27.80 | 10.50 | 38.30 | 62.15 | 23.85 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.16 | 37.13 | 27.68 | 10.50 | 38.18 | 62.15 | 23.97 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.36 | 37.29 | 26.18 | 10.50 | 36.68 | 62.15 | 25.47 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.22 | 37.18 | 26.24 | 10.50 | 36.74 | 62.15 | 25.41 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.21 | 37.17 | 26.23 | 10.50 | 36.73 | 62.15 | 25.42 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.20 | 37.16 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.37 | 37.30 | 26.17 | 10.50 | 36.67 | 62.15 | 25.48 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.16 | 37.13 | 26.07 | 10.50 | 36.57 | 62.15 | 25.58 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.40 | 37.32 | 25.12 | 10.50 | 35.62 | 62.15 | 26.53 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.42 | 37.34 | 25.26 | 10.50 | 35.76 | 62.15 | 26.39 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.20 | 37.16 | 25.08 | 10.50 | 35.58 | 62.15 | 26.57 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.20 | 37.16 | 25.06 | 10.50 | 35.56 | 62.15 | 26.59 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.35 | 37.28 | 25.06 | 10.50 | 35.56 | 62.15 | 26.59 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.19 | 37.15 | 24.56 | 10.50 | 35.06 | 62.15 | 27.09 |

***Table 8.1-21:*** *Output power measurement results for Port* ***2,1,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 4.519 | 36.55 | 30.86 | 10.50 | 41.36 | 62.15 | 20.79 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.406 | 36.44 | 30.94 | 10.50 | 41.44 | 62.15 | 20.71 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.365 | 36.40 | 30.83 | 10.50 | 41.33 | 62.15 | 20.82 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 4.446 | 36.48 | 30.94 | 10.50 | 41.44 | 62.15 | 20.71 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 4.592 | 36.62 | 31.04 | 10.50 | 41.54 | 62.15 | 20.61 |
| QPSK, 5 MHz, High channel | 2197.5 | 4.571 | 36.60 | 31.08 | 10.50 | 41.58 | 62.15 | 20.57 |
| QPSK, 10 MHz, Low channel | 2115.0 | 4.446 | 36.48 | 28.01 | 10.50 | 38.51 | 62.15 | 23.64 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 4.426 | 36.46 | 28.06 | 10.50 | 38.56 | 62.15 | 23.59 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 4.365 | 36.40 | 28.01 | 10.50 | 38.51 | 62.15 | 23.64 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 4.416 | 36.45 | 28.19 | 10.50 | 38.69 | 62.15 | 23.46 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 4.457 | 36.49 | 27.99 | 10.50 | 38.49 | 62.15 | 23.66 |
| QPSK, 10 MHz, High channel | 2195.0 | 4.529 | 36.56 | 28.12 | 10.50 | 38.62 | 62.15 | 23.53 |
| QPSK, 15 MHz, Low channel | 2117.5 | 4.406 | 36.44 | 26.38 | 10.50 | 36.88 | 62.15 | 25.27 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 4.385 | 36.42 | 26.49 | 10.50 | 36.99 | 62.15 | 25.16 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 4.385 | 36.42 | 26.51 | 10.50 | 37.01 | 62.15 | 25.14 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 4.395 | 36.43 | 26.51 | 10.50 | 37.01 | 62.15 | 25.14 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 4.539 | 36.57 | 26.50 | 10.50 | 37.00 | 62.15 | 25.15 |
| QPSK, 15 MHz, High channel | 2192.5 | 4.539 | 36.57 | 26.61 | 10.50 | 37.11 | 62.15 | 25.04 |
| QPSK, 20 MHz, Low channel | 2120.0 | 4.498 | 36.53 | 25.37 | 10.50 | 35.87 | 62.15 | 26.28 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 4.467 | 36.50 | 25.40 | 10.50 | 35.90 | 62.15 | 26.25 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 4.406 | 36.44 | 25.37 | 10.50 | 35.87 | 62.15 | 26.28 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 4.395 | 36.43 | 25.37 | 10.50 | 35.87 | 62.15 | 26.28 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 4.498 | 36.53 | 25.35 | 10.50 | 35.85 | 62.15 | 26.30 |
| QPSK, 20 MHz, High channel | 2190.0 | 4.508 | 36.54 | 25.44 | 10.50 | 35.94 | 62.15 | 26.21 |

***Table 8.1-22:*** *Output power measurement results for Port* ***2,2,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.16 | 37.13 | 30.56 | 10.50 | 41.06 | 62.15 | 21.09 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.97 | 36.96 | 30.58 | 10.50 | 41.08 | 62.15 | 21.07 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.98 | 36.97 | 30.57 | 10.50 | 41.07 | 62.15 | 21.08 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 4.83 | 36.84 | 30.43 | 10.50 | 40.93 | 62.15 | 21.22 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.36 | 37.29 | 30.76 | 10.50 | 41.26 | 62.15 | 20.89 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.46 | 37.37 | 30.74 | 10.50 | 41.24 | 62.15 | 20.91 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.11 | 37.08 | 27.70 | 10.50 | 38.20 | 62.15 | 23.95 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.01 | 37.00 | 27.72 | 10.50 | 38.22 | 62.15 | 23.93 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.00 | 36.99 | 27.77 | 10.50 | 38.27 | 62.15 | 23.88 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 4.98 | 36.97 | 27.72 | 10.50 | 38.22 | 62.15 | 23.93 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.28 | 37.23 | 27.86 | 10.50 | 38.36 | 62.15 | 23.79 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.37 | 37.30 | 27.88 | 10.50 | 38.38 | 62.15 | 23.77 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.13 | 37.10 | 26.17 | 10.50 | 36.67 | 62.15 | 25.48 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.05 | 37.03 | 26.13 | 10.50 | 36.63 | 62.15 | 25.52 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.07 | 37.05 | 26.20 | 10.50 | 36.70 | 62.15 | 25.45 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 4.95 | 36.95 | 26.12 | 10.50 | 36.62 | 62.15 | 25.53 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.28 | 37.23 | 26.31 | 10.50 | 36.81 | 62.15 | 25.34 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.36 | 37.29 | 26.36 | 10.50 | 36.86 | 62.15 | 25.29 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.24 | 37.19 | 24.98 | 10.50 | 35.48 | 62.15 | 26.67 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.00 | 36.99 | 25.02 | 10.50 | 35.52 | 62.15 | 26.63 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.16 | 37.13 | 25.01 | 10.50 | 35.51 | 62.15 | 26.64 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.13 | 37.10 | 25.08 | 10.50 | 35.58 | 62.15 | 26.57 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.31 | 37.25 | 25.16 | 10.50 | 35.66 | 62.15 | 26.49 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.38 | 37.31 | 25.16 | 10.50 | 35.66 | 62.15 | 26.49 |

***Table 8.1-23:*** *Output power measurement results for Port* ***2,2,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.47 | 37.38 | 30.44 | 10.50 | 40.94 | 62.15 | 21.21 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.41 | 10.50 | 40.91 | 62.15 | 21.24 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.32 | 37.26 | 30.40 | 10.50 | 40.90 | 62.15 | 21.25 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.21 | 37.17 | 30.36 | 10.50 | 40.86 | 62.15 | 21.29 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.57 | 37.46 | 30.51 | 10.50 | 41.01 | 62.15 | 21.14 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.42 | 37.34 | 30.39 | 10.50 | 40.89 | 62.15 | 21.26 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.45 | 37.36 | 27.58 | 10.50 | 38.08 | 62.15 | 24.07 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.36 | 37.29 | 27.58 | 10.50 | 38.08 | 62.15 | 24.07 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.33 | 37.27 | 27.64 | 10.50 | 38.14 | 62.15 | 24.01 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.33 | 37.27 | 27.57 | 10.50 | 38.07 | 62.15 | 24.08 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.50 | 37.40 | 27.60 | 10.50 | 38.10 | 62.15 | 24.05 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.38 | 37.31 | 27.60 | 10.50 | 38.10 | 62.15 | 24.05 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.47 | 37.38 | 26.07 | 10.50 | 36.57 | 62.15 | 25.58 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.40 | 37.32 | 26.03 | 10.50 | 36.53 | 62.15 | 25.62 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.41 | 37.33 | 26.07 | 10.50 | 36.57 | 62.15 | 25.58 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.32 | 37.26 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.51 | 37.41 | 26.07 | 10.50 | 36.57 | 62.15 | 25.58 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.40 | 37.32 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.55 | 37.44 | 24.95 | 10.50 | 35.45 | 62.15 | 26.70 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.36 | 37.29 | 24.85 | 10.50 | 35.35 | 62.15 | 26.80 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.37 | 37.30 | 24.91 | 10.50 | 35.41 | 62.15 | 26.74 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.46 | 37.37 | 24.91 | 10.50 | 35.41 | 62.15 | 26.74 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.53 | 37.43 | 24.90 | 10.50 | 35.40 | 62.15 | 26.75 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.43 | 37.35 | 24.90 | 10.50 | 35.40 | 62.15 | 26.75 |

***Table 8.1-24:*** *Output power measurement results for Port* ***2,3,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.37 | 37.30 | 30.58 | 10.50 | 41.08 | 62.15 | 21.07 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.16 | 37.13 | 30.59 | 10.50 | 41.09 | 62.15 | 21.06 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.08 | 37.06 | 30.74 | 10.50 | 41.24 | 62.15 | 20.91 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.07 | 37.05 | 30.54 | 10.50 | 41.04 | 62.15 | 21.11 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.51 | 37.41 | 30.75 | 10.50 | 41.25 | 62.15 | 20.90 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.32 | 37.26 | 30.66 | 10.50 | 41.16 | 62.15 | 20.99 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.32 | 37.26 | 27.72 | 10.50 | 38.22 | 62.15 | 23.93 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.22 | 37.18 | 27.82 | 10.50 | 38.32 | 62.15 | 23.83 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.22 | 37.18 | 27.79 | 10.50 | 38.29 | 62.15 | 23.86 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.20 | 37.16 | 27.78 | 10.50 | 38.28 | 62.15 | 23.87 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.43 | 37.35 | 27.85 | 10.50 | 38.35 | 62.15 | 23.80 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.31 | 37.25 | 27.83 | 10.50 | 38.33 | 62.15 | 23.82 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.36 | 37.29 | 26.25 | 10.50 | 36.75 | 62.15 | 25.40 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.28 | 37.23 | 26.27 | 10.50 | 36.77 | 62.15 | 25.38 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.31 | 37.25 | 26.20 | 10.50 | 36.70 | 62.15 | 25.45 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.16 | 37.13 | 26.17 | 10.50 | 36.67 | 62.15 | 25.48 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.46 | 37.37 | 26.34 | 10.50 | 36.84 | 62.15 | 25.31 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.33 | 37.27 | 26.28 | 10.50 | 36.78 | 62.15 | 25.37 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.43 | 37.35 | 25.10 | 10.50 | 35.60 | 62.15 | 26.55 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.24 | 37.19 | 25.06 | 10.50 | 35.56 | 62.15 | 26.59 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.27 | 37.22 | 25.08 | 10.50 | 35.58 | 62.15 | 26.57 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.35 | 37.28 | 25.15 | 10.50 | 35.65 | 62.15 | 26.50 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.47 | 37.38 | 25.16 | 10.50 | 35.66 | 62.15 | 26.49 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.36 | 37.29 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |

***Table 8.1-25:*** *Output power measurement results for Port* ***2,3,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.09 | 37.07 | 30.67 | 10.50 | 41.17 | 62.15 | 20.98 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.97 | 36.96 | 30.64 | 10.50 | 41.14 | 62.15 | 21.01 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.86 | 36.87 | 30.54 | 10.50 | 41.04 | 62.15 | 21.11 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 4.88 | 36.88 | 30.56 | 10.50 | 41.06 | 62.15 | 21.09 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.45 | 37.36 | 30.92 | 10.50 | 41.42 | 62.15 | 20.73 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.05 | 37.03 | 30.62 | 10.50 | 41.12 | 62.15 | 21.03 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.04 | 37.02 | 27.77 | 10.50 | 38.27 | 62.15 | 23.88 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 4.95 | 36.95 | 27.76 | 10.50 | 38.26 | 62.15 | 23.89 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 4.94 | 36.94 | 27.76 | 10.50 | 38.26 | 62.15 | 23.89 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 4.93 | 36.93 | 27.76 | 10.50 | 38.26 | 62.15 | 23.89 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.37 | 37.30 | 28.06 | 10.50 | 38.56 | 62.15 | 23.59 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.02 | 37.01 | 27.84 | 10.50 | 38.34 | 62.15 | 23.81 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.08 | 37.06 | 26.23 | 10.50 | 36.73 | 62.15 | 25.42 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.01 | 37.00 | 26.30 | 10.50 | 36.80 | 62.15 | 25.35 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.01 | 37.00 | 26.20 | 10.50 | 36.70 | 62.15 | 25.45 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 4.92 | 36.92 | 26.21 | 10.50 | 36.71 | 62.15 | 25.44 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.36 | 37.29 | 26.49 | 10.50 | 36.99 | 62.15 | 25.16 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.04 | 37.02 | 26.24 | 10.50 | 36.74 | 62.15 | 25.41 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.19 | 37.15 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.04 | 37.02 | 25.09 | 10.50 | 35.59 | 62.15 | 26.56 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.01 | 37.00 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.11 | 37.08 | 25.17 | 10.50 | 35.67 | 62.15 | 26.48 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.35 | 37.28 | 25.31 | 10.50 | 35.81 | 62.15 | 26.34 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.11 | 37.08 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |

***Table 8.1-26:*** *Output power measurement results for Port* ***3,0,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.13 | 37.10 | 30.67 | 10.50 | 41.17 | 62.15 | 20.98 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.08 | 37.06 | 29.86 | 10.50 | 40.36 | 62.15 | 21.79 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.07 | 37.05 | 30.67 | 10.50 | 41.17 | 62.15 | 20.98 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.01 | 37.00 | 30.55 | 10.50 | 41.05 | 62.15 | 21.10 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.27 | 37.22 | 30.79 | 10.50 | 41.29 | 62.15 | 20.86 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.14 | 37.11 | 30.58 | 10.50 | 41.08 | 62.15 | 21.07 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.18 | 37.14 | 27.77 | 10.50 | 38.27 | 62.15 | 23.88 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.15 | 37.12 | 27.79 | 10.50 | 38.29 | 62.15 | 23.86 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.09 | 37.07 | 27.86 | 10.50 | 38.36 | 62.15 | 23.79 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.09 | 37.07 | 27.78 | 10.50 | 38.28 | 62.15 | 23.87 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.26 | 37.21 | 27.89 | 10.50 | 38.39 | 62.15 | 23.76 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.15 | 37.12 | 27.73 | 10.50 | 38.23 | 62.15 | 23.92 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.20 | 37.16 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.08 | 37.06 | 26.24 | 10.50 | 36.74 | 62.15 | 25.41 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.12 | 37.09 | 26.24 | 10.50 | 36.74 | 62.15 | 25.41 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.08 | 37.06 | 26.25 | 10.50 | 36.75 | 62.15 | 25.40 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.22 | 37.18 | 26.22 | 10.50 | 36.72 | 62.15 | 25.43 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.12 | 37.09 | 26.11 | 10.50 | 36.61 | 62.15 | 25.54 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.31 | 37.25 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.19 | 37.15 | 25.16 | 10.50 | 35.66 | 62.15 | 26.49 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.19 | 37.15 | 25.11 | 10.50 | 35.61 | 62.15 | 26.54 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.18 | 37.14 | 25.16 | 10.50 | 35.66 | 62.15 | 26.49 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.26 | 37.21 | 25.11 | 10.50 | 35.61 | 62.15 | 26.54 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.22 | 37.18 | 25.06 | 10.50 | 35.56 | 62.15 | 26.59 |

***Table 8.1-27:*** *Output power measurement results for Port* ***3,0,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.20 | 37.16 | 30.37 | 10.50 | 40.87 | 62.15 | 21.28 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.18 | 37.14 | 30.52 | 10.50 | 41.02 | 62.15 | 21.13 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.18 | 37.14 | 30.30 | 10.50 | 40.80 | 62.15 | 21.35 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.08 | 37.06 | 30.24 | 10.50 | 40.74 | 62.15 | 21.41 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.35 | 37.28 | 30.42 | 10.50 | 40.92 | 62.15 | 21.23 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.36 | 37.29 | 30.45 | 10.50 | 40.95 | 62.15 | 21.20 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.25 | 37.20 | 27.44 | 10.50 | 37.94 | 62.15 | 24.21 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.21 | 37.17 | 27.32 | 10.50 | 37.82 | 62.15 | 24.33 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.12 | 37.09 | 27.39 | 10.50 | 37.89 | 62.15 | 24.26 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.12 | 37.09 | 27.38 | 10.50 | 37.88 | 62.15 | 24.27 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.33 | 37.27 | 27.55 | 10.50 | 38.05 | 62.15 | 24.10 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.40 | 37.32 | 27.66 | 10.50 | 38.16 | 62.15 | 23.99 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.24 | 37.19 | 25.84 | 10.50 | 36.34 | 62.15 | 25.81 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.14 | 37.11 | 25.85 | 10.50 | 36.35 | 62.15 | 25.80 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.14 | 37.11 | 25.85 | 10.50 | 36.35 | 62.15 | 25.80 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.12 | 37.09 | 25.87 | 10.50 | 36.37 | 62.15 | 25.78 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.31 | 37.25 | 25.91 | 10.50 | 36.41 | 62.15 | 25.74 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.35 | 37.28 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.33 | 37.27 | 24.77 | 10.50 | 35.27 | 62.15 | 26.88 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.26 | 37.21 | 24.46 | 10.50 | 34.96 | 62.15 | 27.19 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.12 | 37.09 | 24.79 | 10.50 | 35.29 | 62.15 | 26.86 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.22 | 37.18 | 24.76 | 10.50 | 35.26 | 62.15 | 26.89 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.36 | 37.29 | 24.79 | 10.50 | 35.29 | 62.15 | 26.86 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.46 | 37.37 | 24.93 | 10.50 | 35.43 | 62.15 | 26.72 |

***Table 8.1-28:*** *Output power measurement results for Port* ***3,1,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.012 | 37.00 | 31.13 | 10.50 | 41.63 | 62.15 | 20.52 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.920 | 36.92 | 30.76 | 10.50 | 41.26 | 62.15 | 20.89 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.943 | 36.94 | 30.94 | 10.50 | 41.44 | 62.15 | 20.71 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 4.864 | 36.87 | 30.97 | 10.50 | 41.47 | 62.15 | 20.68 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 4.920 | 36.92 | 31.04 | 10.50 | 41.54 | 62.15 | 20.61 |
| QPSK, 5 MHz, High channel | 2197.5 | 4.603 | 36.63 | 30.72 | 10.50 | 41.22 | 62.15 | 20.93 |
| QPSK, 10 MHz, Low channel | 2115.0 | 4.955 | 36.95 | 28.16 | 10.50 | 38.66 | 62.15 | 23.49 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 4.898 | 36.90 | 28.15 | 10.50 | 38.65 | 62.15 | 23.50 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 4.943 | 36.94 | 28.18 | 10.50 | 38.68 | 62.15 | 23.47 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.012 | 37.00 | 28.25 | 10.50 | 38.75 | 62.15 | 23.40 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 4.786 | 36.80 | 27.97 | 10.50 | 38.47 | 62.15 | 23.68 |
| QPSK, 10 MHz, High channel | 2195.0 | 4.571 | 36.60 | 27.88 | 10.50 | 38.38 | 62.15 | 23.77 |
| QPSK, 15 MHz, Low channel | 2117.5 | 4.955 | 36.95 | 26.54 | 10.50 | 37.04 | 62.15 | 25.11 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 4.943 | 36.94 | 26.65 | 10.50 | 37.15 | 62.15 | 25.00 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 4.932 | 36.93 | 26.55 | 10.50 | 37.05 | 62.15 | 25.10 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 4.966 | 36.96 | 26.66 | 10.50 | 37.16 | 62.15 | 24.99 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 4.797 | 36.81 | 26.39 | 10.50 | 36.89 | 62.15 | 25.26 |
| QPSK, 15 MHz, High channel | 2192.5 | 4.656 | 36.68 | 26.36 | 10.50 | 36.86 | 62.15 | 25.29 |
| QPSK, 20 MHz, Low channel | 2120.0 | 4.955 | 36.95 | 25.40 | 10.50 | 35.90 | 62.15 | 26.25 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 4.989 | 36.98 | 25.52 | 10.50 | 36.02 | 62.15 | 26.13 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 4.909 | 36.91 | 25.39 | 10.50 | 35.89 | 62.15 | 26.26 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 4.943 | 36.94 | 25.53 | 10.50 | 36.03 | 62.15 | 26.12 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 4.732 | 36.75 | 25.19 | 10.50 | 35.69 | 62.15 | 26.46 |
| QPSK, 20 MHz, High channel | 2190.0 | 4.581 | 36.61 | 25.18 | 10.50 | 35.68 | 62.15 | 26.47 |

***Table 8.1-29:*** *Output power measurement results for Port* ***3,1,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.047 | 37.03 | 31.45 | 10.50 | 41.95 | 62.15 | 20.20 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.909 | 36.91 | 32.01 | 10.50 | 42.51 | 62.15 | 19.64 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.943 | 36.94 | 31.43 | 10.50 | 41.93 | 62.15 | 20.22 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 4.898 | 36.90 | 31.20 | 10.50 | 41.70 | 62.15 | 20.45 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 4.932 | 36.93 | 31.36 | 10.50 | 41.86 | 62.15 | 20.29 |
| QPSK, 5 MHz, High channel | 2197.5 | 4.786 | 36.80 | 31.81 | 10.50 | 42.31 | 62.15 | 19.84 |
| QPSK, 10 MHz, Low channel | 2115.0 | 4.943 | 36.94 | 28.46 | 10.50 | 38.96 | 62.15 | 23.19 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 4.853 | 36.86 | 28.37 | 10.50 | 38.87 | 62.15 | 23.28 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 4.887 | 36.89 | 28.36 | 10.50 | 38.86 | 62.15 | 23.29 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 4.966 | 36.96 | 28.48 | 10.50 | 38.98 | 62.15 | 23.17 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 4.786 | 36.80 | 28.23 | 10.50 | 38.73 | 62.15 | 23.42 |
| QPSK, 10 MHz, High channel | 2195.0 | 4.764 | 36.78 | 28.31 | 10.50 | 38.81 | 62.15 | 23.34 |
| QPSK, 15 MHz, Low channel | 2117.5 | 4.887 | 36.89 | 26.75 | 10.50 | 37.25 | 62.15 | 24.90 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 4.875 | 36.88 | 26.80 | 10.50 | 37.30 | 62.15 | 24.85 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 4.864 | 36.87 | 26.81 | 10.50 | 37.31 | 62.15 | 24.84 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 4.875 | 36.88 | 26.86 | 10.50 | 37.36 | 62.15 | 24.79 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 4.786 | 36.80 | 26.67 | 10.50 | 37.17 | 62.15 | 24.98 |
| QPSK, 15 MHz, High channel | 2192.5 | 4.853 | 36.86 | 26.81 | 10.50 | 37.31 | 62.15 | 24.84 |
| QPSK, 20 MHz, Low channel | 2120.0 | 4.887 | 36.89 | 25.56 | 10.50 | 36.06 | 62.15 | 26.09 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 4.943 | 36.94 | 25.75 | 10.50 | 36.25 | 62.15 | 25.90 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 4.864 | 36.87 | 25.66 | 10.50 | 36.16 | 62.15 | 25.99 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 4.864 | 36.87 | 25.66 | 10.50 | 36.16 | 62.15 | 25.99 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 4.753 | 36.77 | 25.47 | 10.50 | 35.97 | 62.15 | 26.18 |
| QPSK, 20 MHz, High channel | 2190.0 | 4.831 | 36.84 | 25.60 | 10.50 | 36.10 | 62.15 | 26.05 |

***Table 8.1-30:*** *Output power measurement results for Port* ***3,2,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 4.613 | 36.64 | 30.71 | 10.50 | 41.21 | 62.15 | 20.94 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 4.436 | 36.47 | 29.05 | 10.50 | 39.55 | 62.15 | 22.60 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 4.487 | 36.52 | 29.13 | 10.50 | 39.63 | 62.15 | 22.52 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 4.446 | 36.48 | 30.78 | 10.50 | 41.28 | 62.15 | 20.87 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 4.955 | 36.95 | 31.13 | 10.50 | 41.63 | 62.15 | 20.52 |
| QPSK, 5 MHz, High channel | 2197.5 | 4.742 | 36.76 | 30.84 | 10.50 | 41.34 | 62.15 | 20.81 |
| QPSK, 10 MHz, Low channel | 2115.0 | 4.571 | 36.60 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 4.571 | 36.60 | 28.02 | 10.50 | 38.52 | 62.15 | 23.63 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 4.487 | 36.52 | 27.86 | 10.50 | 38.36 | 62.15 | 23.79 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 4.571 | 36.60 | 27.93 | 10.50 | 38.43 | 62.15 | 23.72 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 4.797 | 36.81 | 28.15 | 10.50 | 38.65 | 62.15 | 23.50 |
| QPSK, 10 MHz, High channel | 2195.0 | 4.677 | 36.70 | 28.00 | 10.50 | 38.50 | 62.15 | 23.65 |
| QPSK, 15 MHz, Low channel | 2117.5 | 4.603 | 36.63 | 26.39 | 10.50 | 36.89 | 62.15 | 25.26 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 4.571 | 36.60 | 26.23 | 10.50 | 36.73 | 62.15 | 25.42 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 4.592 | 36.62 | 26.36 | 10.50 | 36.86 | 62.15 | 25.29 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 4.603 | 36.63 | 26.29 | 10.50 | 36.79 | 62.15 | 25.36 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 4.764 | 36.78 | 26.49 | 10.50 | 36.99 | 62.15 | 25.16 |
| QPSK, 15 MHz, High channel | 2192.5 | 4.753 | 36.77 | 26.50 | 10.50 | 37.00 | 62.15 | 25.15 |
| QPSK, 20 MHz, Low channel | 2120.0 | 4.656 | 36.68 | 25.31 | 10.50 | 35.81 | 62.15 | 26.34 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 4.677 | 36.70 | 25.36 | 10.50 | 35.86 | 62.15 | 26.29 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 4.603 | 36.63 | 25.25 | 10.50 | 35.75 | 62.15 | 26.40 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 4.603 | 36.63 | 25.32 | 10.50 | 35.82 | 62.15 | 26.33 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 4.753 | 36.77 | 25.25 | 10.50 | 35.75 | 62.15 | 26.40 |
| QPSK, 20 MHz, High channel | 2190.0 | 4.732 | 36.75 | 25.49 | 10.50 | 35.99 | 62.15 | 26.16 |

***Table 8.1-31:*** *Output power measurement results for Port* ***3,2,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.30 | 37.24 | 30.27 | 10.50 | 40.77 | 62.15 | 21.38 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.27 | 37.22 | 28.74 | 10.50 | 39.24 | 62.15 | 22.91 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.24 | 37.19 | 28.77 | 10.50 | 39.27 | 62.15 | 22.88 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.24 | 37.19 | 30.31 | 10.50 | 40.81 | 62.15 | 21.34 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.42 | 37.34 | 30.43 | 10.50 | 40.93 | 62.15 | 21.22 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.08 | 37.06 | 30.15 | 10.50 | 40.65 | 62.15 | 21.50 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.33 | 37.27 | 27.54 | 10.50 | 38.04 | 62.15 | 24.11 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.24 | 37.19 | 27.47 | 10.50 | 37.97 | 62.15 | 24.18 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.31 | 37.25 | 27.44 | 10.50 | 37.94 | 62.15 | 24.21 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.28 | 37.23 | 27.48 | 10.50 | 37.98 | 62.15 | 24.17 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.43 | 37.35 | 27.61 | 10.50 | 38.11 | 62.15 | 24.04 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.11 | 37.08 | 27.37 | 10.50 | 37.87 | 62.15 | 24.28 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.37 | 37.30 | 25.98 | 10.50 | 36.48 | 62.15 | 25.67 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.37 | 37.30 | 25.94 | 10.50 | 36.44 | 62.15 | 25.71 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.38 | 37.31 | 25.97 | 10.50 | 36.47 | 62.15 | 25.68 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.38 | 37.31 | 25.99 | 10.50 | 36.49 | 62.15 | 25.66 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.42 | 37.34 | 26.01 | 10.50 | 36.51 | 62.15 | 25.64 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.12 | 37.09 | 25.83 | 10.50 | 36.33 | 62.15 | 25.82 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.47 | 37.38 | 24.95 | 10.50 | 35.45 | 62.15 | 26.70 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.30 | 37.24 | 24.86 | 10.50 | 35.36 | 62.15 | 26.79 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.33 | 37.27 | 24.81 | 10.50 | 35.31 | 62.15 | 26.84 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.32 | 37.26 | 24.80 | 10.50 | 35.30 | 62.15 | 26.85 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.43 | 37.35 | 24.87 | 10.50 | 35.37 | 62.15 | 26.78 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.11 | 37.08 | 25.13 | 10.50 | 35.63 | 62.15 | 26.52 |

***Table 8.1-32:*** *Output power measurement results for Port* ***3,3,1***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.20 | 37.16 | 30.54 | 10.50 | 41.04 | 62.15 | 21.11 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.18 | 37.14 | 28.96 | 10.50 | 39.46 | 62.15 | 22.69 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.20 | 37.16 | 28.95 | 10.50 | 39.45 | 62.15 | 22.70 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.13 | 37.10 | 30.60 | 10.50 | 41.10 | 62.15 | 21.05 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.26 | 37.21 | 30.52 | 10.50 | 41.02 | 62.15 | 21.13 |
| QPSK, 5 MHz, High channel | 2197.5 | 5.19 | 37.15 | 30.57 | 10.50 | 41.07 | 62.15 | 21.08 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.21 | 37.17 | 27.75 | 10.50 | 38.25 | 62.15 | 23.90 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.05 | 37.03 | 27.70 | 10.50 | 38.20 | 62.15 | 23.95 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.15 | 37.12 | 27.65 | 10.50 | 38.15 | 62.15 | 24.00 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.14 | 37.11 | 27.68 | 10.50 | 38.18 | 62.15 | 23.97 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.25 | 37.20 | 27.77 | 10.50 | 38.27 | 62.15 | 23.88 |
| QPSK, 10 MHz, High channel | 2195.0 | 5.07 | 37.05 | 27.72 | 10.50 | 38.22 | 62.15 | 23.93 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.19 | 37.15 | 26.10 | 10.50 | 36.60 | 62.15 | 25.55 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.19 | 37.15 | 26.09 | 10.50 | 36.59 | 62.15 | 25.56 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.21 | 37.17 | 26.04 | 10.50 | 36.54 | 62.15 | 25.61 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.18 | 37.14 | 26.08 | 10.50 | 36.58 | 62.15 | 25.57 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.26 | 37.21 | 26.11 | 10.50 | 36.61 | 62.15 | 25.54 |
| QPSK, 15 MHz, High channel | 2192.5 | 5.22 | 37.18 | 26.18 | 10.50 | 36.68 | 62.15 | 25.47 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.24 | 37.19 | 25.02 | 10.50 | 35.52 | 62.15 | 26.63 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.11 | 37.08 | 24.93 | 10.50 | 35.43 | 62.15 | 26.72 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.12 | 37.09 | 24.97 | 10.50 | 35.47 | 62.15 | 26.68 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.08 | 37.06 | 24.95 | 10.50 | 35.45 | 62.15 | 26.70 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.30 | 37.24 | 25.10 | 10.50 | 35.60 | 62.15 | 26.55 |
| QPSK, 20 MHz, High channel | 2190.0 | 5.15 | 37.12 | 24.66 | 10.50 | 35.16 | 62.15 | 26.99 |

***Table 8.1-33:*** *Output power measurement results for Port* ***3,3,0***

| Remarks | Frequency, MHz | RF output power, W | RF output power, dBm | RF power density, dBm/MHz | Antenna gain, dBi | EIRP, dBm/MHz | EIRP limit, dBm/MHz | Margin, dB |
|---|---|---|---|---|---|---|---|---|
| QPSK, 5 MHz, Low channel | 2112.5 | 5.21 | 37.17 | 30.81 | 10.50 | 41.31 | 62.15 | 20.84 |
| 16QAM, 5 MHz, Low channel | 2112.5 | 5.20 | 37.16 | 29.11 | 10.50 | 39.61 | 62.15 | 22.54 |
| 64QAM, 5 MHz, Low channel | 2112.5 | 5.20 | 37.16 | 29.11 | 10.50 | 39.61 | 62.15 | 22.54 |
| 256QAM, 5 MHz, Low channel | 2112.5 | 5.14 | 37.11 | 30.84 | 10.50 | 41.34 | 62.15 | 20.81 |
| QPSK, 5 MHz, Mid channel | 2155.0 | 5.20 | 37.16 | 30.73 | 10.50 | 41.23 | 62.15 | 20.92 |
| QPSK, 5 MHz, High channel | 2197.5 | 4.94 | 36.94 | 30.59 | 10.50 | 41.09 | 62.15 | 21.06 |
| QPSK, 10 MHz, Low channel | 2115.0 | 5.25 | 37.20 | 27.91 | 10.50 | 38.41 | 62.15 | 23.74 |
| 16QAM, 10 MHz, Low channel | 2115.0 | 5.14 | 37.11 | 27.98 | 10.50 | 38.48 | 62.15 | 23.67 |
| 64QAM, 10 MHz, Low channel | 2115.0 | 5.22 | 37.18 | 27.94 | 10.50 | 38.44 | 62.15 | 23.71 |
| 256QAM, 10 MHz, Low channel | 2115.0 | 5.19 | 37.15 | 27.96 | 10.50 | 38.46 | 62.15 | 23.69 |
| QPSK, 10 MHz, Mid channel | 2155.0 | 5.20 | 37.16 | 27.93 | 10.50 | 38.43 | 62.15 | 23.72 |
| QPSK, 10 MHz, High channel | 2195.0 | 4.97 | 36.96 | 27.73 | 10.50 | 38.23 | 62.15 | 23.92 |
| QPSK, 15 MHz, Low channel | 2117.5 | 5.21 | 37.17 | 26.37 | 10.50 | 36.87 | 62.15 | 25.28 |
| 16QAM, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.40 | 10.50 | 36.90 | 62.15 | 25.25 |
| 64QAM, 15 MHz, Low channel | 2117.5 | 5.25 | 37.20 | 26.32 | 10.50 | 36.82 | 62.15 | 25.33 |
| 256QAM, 15 MHz, Low channel | 2117.5 | 5.22 | 37.18 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| QPSK, 15 MHz, Mid channel | 2155.0 | 5.20 | 37.16 | 26.35 | 10.50 | 36.85 | 62.15 | 25.30 |
| QPSK, 15 MHz, High channel | 2192.5 | 4.99 | 36.98 | 27.20 | 10.50 | 37.70 | 62.15 | 24.45 |
| QPSK, 20 MHz, Low channel | 2120.0 | 5.26 | 37.21 | 25.35 | 10.50 | 35.85 | 62.15 | 26.30 |
| 16QAM, 20 MHz, Low channel | 2120.0 | 5.11 | 37.08 | 25.24 | 10.50 | 35.74 | 62.15 | 26.41 |
| 64QAM, 20 MHz, Low channel | 2120.0 | 5.15 | 37.12 | 25.22 | 10.50 | 35.72 | 62.15 | 26.43 |
| 256QAM, 20 MHz, Low channel | 2120.0 | 5.13 | 37.10 | 25.25 | 10.50 | 35.75 | 62.15 | 26.40 |
| QPSK, 20 MHz, Mid channel | 2155.0 | 5.22 | 37.18 | 25.27 | 10.50 | 35.77 | 62.15 | 26.38 |
| QPSK, 20 MHz, High channel | 2190.0 | 4.95 | 36.95 | 25.14 | 10.50 | 35.64 | 62.15 | 26.51 |

***Table 8.1-34:*** *Total EIRP calculation*

| Maximum PSD sum, dBm/MHz | Antenna Gain, dBi | Antenna Array Column Gain[1], dB | EIRP per polarization[2], dBm/MHz | EIRP per polarization, W/MHz | Limit, W | Margin, dB |
|---|---|---|---|---|---|---|
| 42.87 | 10.5 | 6.00 | 59.37 | 865 | 1640 | 2.78 |

Notes: [1] Antenna Array Column Gain = 10 Log(4)
[2]EIRP = PSD Sum + Antenna Gain + Antenna Array Column Gain

***Table 8.1-35:*** *EIRP calculation for Macro Narrow beans*

| Maximum PSD sum, dBm/MHz | Antenna Gain, dBi | EIRP per polarization[5], dBm/MHz | EIRP per polarization, W/MHz |
|---|---|---|---|
| 42.87 | 22.00 | 64.87 | 3069 |

***Table 8.1-36:*** *PSD linear sum for x,x,1 ports*

| Port | Test mode 1 | | Test mode 2 | | Test mode 3 | | Test mode 4 | | Test mode 5 | | Test mode 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW |
| 0 0 1 | 30.78 | 1196.7 | 30.93 | 1238.8 | 30.80 | 1202.3 | 30.76 | 1191.2 | 30.84 | 1213.4 | 30.94 | 1241.7 |
| 0 1 1 | 30.69 | 1172.2 | 30.65 | 1161.4 | 30.61 | 1150.8 | 30.61 | 1150.8 | 30.83 | 1210.6 | 30.62 | 1153.5 |
| 0 2 1 | 30.71 | 1177.6 | 30.62 | 1153.5 | 30.65 | 1161.4 | 30.71 | 1177.6 | 30.89 | 1227.4 | 30.82 | 1207.8 |
| 0 3 1 | 30.82 | 1207.8 | 30.80 | 1202.3 | 30.83 | 1210.6 | 30.76 | 1191.2 | 31.01 | 1261.8 | 30.68 | 1169.5 |
| 1 0 1 | 30.71 | 1177.6 | 30.83 | 1210.6 | 30.73 | 1183.0 | 30.74 | 1185.8 | 30.74 | 1185.8 | 30.59 | 1145.5 |
| 1 1 1 | 30.84 | 1213.4 | 30.83 | 1210.6 | 30.76 | 1191.2 | 30.90 | 1230.3 | 30.89 | 1227.4 | 30.59 | 1145.5 |
| 1 2 1 | 30.63 | 1156.1 | 30.48 | 1116.9 | 30.53 | 1129.8 | 30.56 | 1137.6 | 30.89 | 1227.4 | 30.81 | 1205.0 |
| 1 3 1 | 30.67 | 1166.8 | 30.51 | 1124.6 | 30.54 | 1132.4 | 30.58 | 1142.9 | 30.76 | 1191.2 | 30.56 | 1137.6 |
| 2 0 1 | 30.60 | 1148.2 | 30.64 | 1158.8 | 30.62 | 1153.5 | 30.63 | 1156.1 | 30.69 | 1172.2 | 30.51 | 1124.6 |
| 2 1 1 | 30.51 | 1124.6 | 30.47 | 1114.3 | 30.51 | 1124.6 | 30.52 | 1127.2 | 30.65 | 1161.4 | 30.47 | 1114.3 |
| 2 2 1 | 30.56 | 1137.6 | 30.58 | 1142.9 | 30.57 | 1140.2 | 30.43 | 1104.1 | 30.76 | 1191.2 | 30.74 | 1185.8 |
| 2 3 1 | 30.58 | 1142.9 | 30.59 | 1145.5 | 30.74 | 1185.8 | 30.54 | 1132.4 | 30.75 | 1188.5 | 30.66 | 1164.1 |
| 3 0 1 | 30.67 | 1166.8 | 29.86 | 968.3 | 30.67 | 1166.8 | 30.55 | 1135.0 | 30.79 | 1199.5 | 30.58 | 1142.9 |
| 3 1 1 | 31.13 | 1297.2 | 30.76 | 1191.2 | 30.94 | 1241.7 | 30.97 | 1250.3 | 31.04 | 1270.6 | 30.72 | 1180.3 |
| 3 2 1 | 30.71 | 1177.6 | 29.05 | 803.5 | 29.13 | 818.5 | 30.78 | 1196.7 | 31.13 | 1297.2 | 30.84 | 1213.4 |
| 3 3 1 | 30.54 | 1132.4 | 28.96 | 787.0 | 28.95 | 785.2 | 30.60 | 1148.2 | 30.52 | 1127.2 | 30.57 | 1140.2 |
| ∑ = | 42.74 | 18795.5 | 42.49 | 17730.2 | 42.55 | 17977.8 | 42.71 | 18657.4 | **42.87** | 19353.0 | 42.71 | 18671.7 |

***Table 8.1-37:*** *PSD linear sum for x,x,0 ports*

| Port | Test mode 1 | | Test mode 2 | | Test mode 3 | | Test mode 4 | | Test mode 5 | | Test mode 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW | dBm/MHz | mW |
| 0 0 0 | 30.57 | 1140.2 | 30.55 | 1135.0 | 30.50 | 1122.0 | 30.49 | 1119.4 | 30.60 | 1148.2 | 30.46 | 1111.7 |
| 0 1 0 | 30.92 | 1235.9 | 30.83 | 1210.6 | 30.79 | 1199.5 | 30.84 | 1213.4 | 30.83 | 1210.6 | 30.67 | 1166.8 |
| 0 2 0 | 30.57 | 1140.2 | 30.51 | 1124.6 | 30.54 | 1132.4 | 30.52 | 1127.2 | 30.11 | 1025.7 | 30.46 | 1111.7 |
| 0 3 0 | 30.96 | 1247.4 | 30.89 | 1227.4 | 30.89 | 1227.4 | 30.90 | 1230.3 | 31.10 | 1288.2 | 30.80 | 1202.3 |
| 1 0 0 | 30.46 | 1111.7 | 30.47 | 1114.3 | 30.40 | 1096.5 | 30.49 | 1119.4 | 30.50 | 1122.0 | 30.55 | 1135.0 |
| 1 1 0 | 30.97 | 1250.3 | 31.03 | 1267.7 | 30.87 | 1221.8 | 30.93 | 1238.8 | 31.01 | 1261.8 | 30.80 | 1202.3 |
| 1 2 0 | 30.46 | 1111.7 | 30.41 | 1099.0 | 30.34 | 1081.4 | 30.41 | 1099.0 | 30.58 | 1142.9 | 30.28 | 1066.6 |
| 1 3 0 | 30.89 | 1227.4 | 30.77 | 1194.0 | 30.79 | 1199.5 | 30.83 | 1210.6 | 30.95 | 1244.5 | 30.66 | 1164.1 |
| 2 0 0 | 30.23 | 1054.4 | 30.21 | 1049.5 | 30.27 | 1064.1 | 30.23 | 1054.4 | 30.55 | 1135.0 | 30.39 | 1094.0 |
| 2 1 0 | 30.86 | 1219.0 | 30.94 | 1241.7 | 30.83 | 1210.6 | 30.94 | 1241.7 | 31.04 | 1270.6 | 31.08 | 1282.3 |
| 2 2 0 | 30.44 | 1106.6 | 30.41 | 1099.0 | 30.40 | 1096.5 | 30.36 | 1086.4 | 30.51 | 1124.6 | 30.39 | 1094.0 |
| 2 3 0 | 30.67 | 1166.8 | 30.64 | 1158.8 | 30.54 | 1132.4 | 30.56 | 1137.6 | 30.92 | 1235.9 | 30.62 | 1153.5 |
| 3 0 0 | 30.37 | 1088.9 | 30.52 | 1127.2 | 30.30 | 1071.5 | 30.24 | 1056.8 | 30.42 | 1101.5 | 30.45 | 1109.2 |
| 3 1 0 | 31.45 | 1396.4 | 32.01 | 1588.5 | 31.43 | 1390.0 | 31.20 | 1318.3 | 31.36 | 1367.7 | 31.81 | 1517.1 |
| 3 2 0 | 30.27 | 1064.1 | 28.74 | 748.2 | 28.77 | 753.4 | 30.31 | 1074.0 | 30.43 | 1104.1 | 30.15 | 1035.1 |
| 3 3 0 | 30.81 | 1205.0 | 29.11 | 814.7 | 29.11 | 814.7 | 30.84 | 1213.4 | 30.73 | 1183.0 | 30.59 | 1145.5 |
| ∑ = | 42.73 | 18766.3 | 42.60 | 18200.2 | 42.51 | 17813.7 | 42.68 | 18540.7 | 42.78 | 18966.4 | 42.69 | 18591.1 |

Test modes:

| | |
|---|---|
| 1 | QPSK, 5 MHz, Low channel |
| 2 | 16QAM, 5 MHz, Low channel |
| 3 | 64QAM, 5 MHz, Low channel |
| 4 | 256QAM, 5 MHz, Low channel |
| 5 | QPSK, 5 MHz, Mid channel |
| 6 | QPSK, 5 MHz, High channel |
| ∑ = | denotes linear sum |

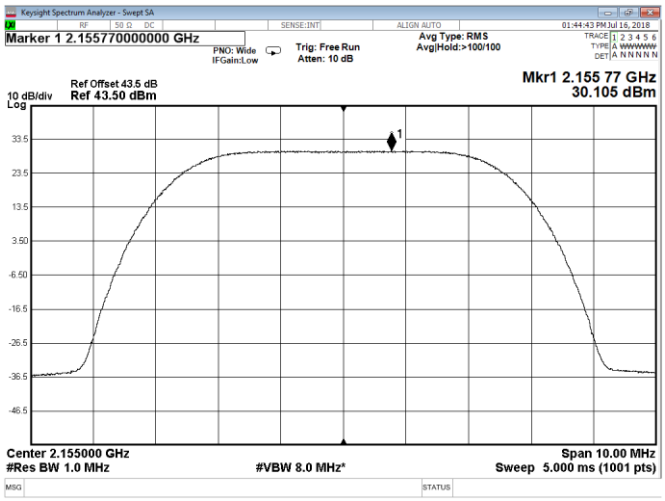



***Figure 8.1-5:*** *PSD sample plot, 5 MHz bandwidth*

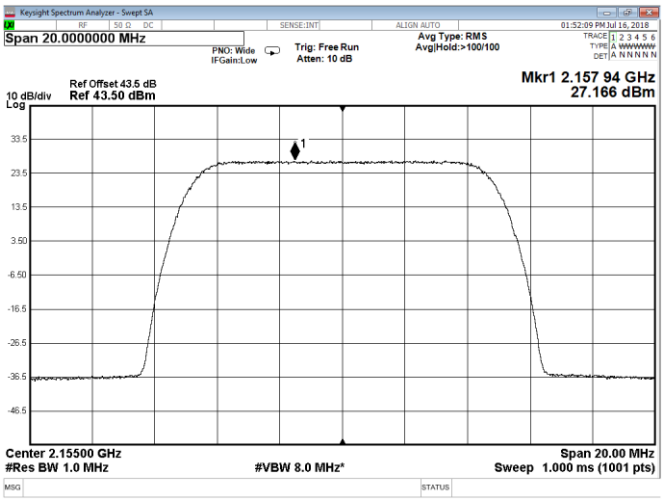



***Figure 8.1-6:*** *PSD sample plot, 10 MHz bandwidth*

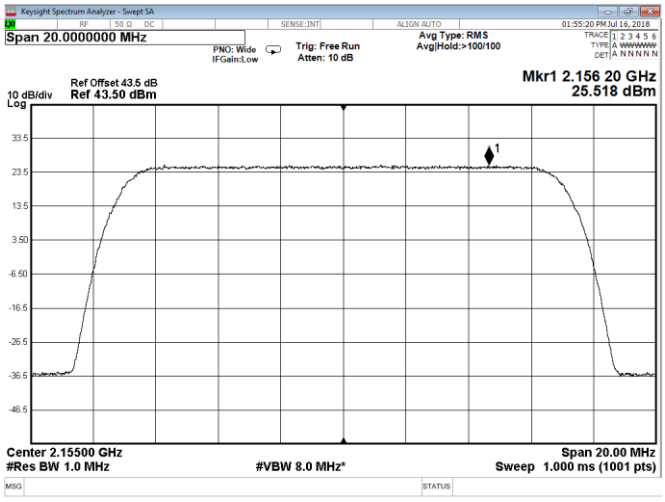



***Figure 8.1-7:*** *PSD sample plot, 15 MHz bandwidth*

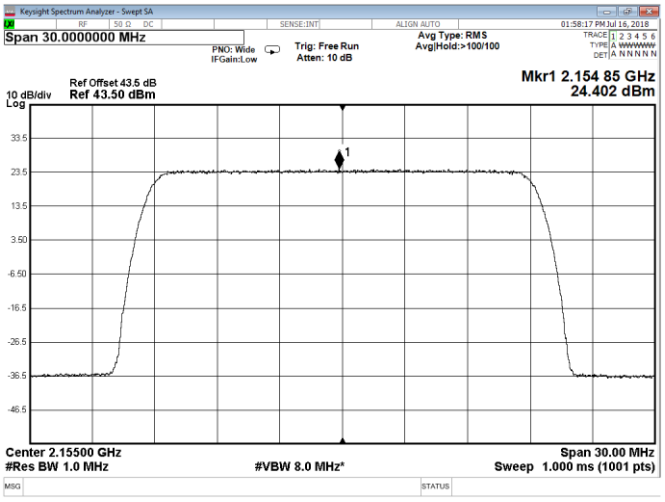



***Figure 8.1-8:*** *PSD sample plot, 20 MHz bandwidth*

***Table 8.1-38:*** *Complementary Cumulative Distribution Function (CCDF) of the PAPR reduction measurement results*

| Remarks | Frequency, MHz | 0.1% CCDF, dB | PAPR reduction limit, dB | Margin, dB |
|---|---|---|---|---|
| 5 MHz, QPSK, low channel | 2112.5 | 7.28 | 13.00 | 5.72 |
| 5 MHz, 16QAM, low channel, Ant A | 2112.5 | 7.29 | 13.00 | 5.71 |
| 5 MHz, 64QAM, low channel, Ant A | 2112.5 | 7.30 | 13.00 | 5.70 |
| 5 MHz, 256QAM, low channel, Ant A | 2112.5 | 7.30 | 13.00 | 5.70 |
| 5 MHz, QPSK, mid channel, Ant A | 2155.0 | 7.28 | 13.00 | 5.72 |
| 5 MHz, QPSK, high channel, Ant A | 2197.5 | 7.27 | 13.00 | 5.73 |
| 10 MHz, QPSK, low channel | 2115.0 | 7.29 | 13.00 | 5.71 |
| 10 MHz, 16QAM, low channel, Ant A | 2115.0 | 7.31 | 13.00 | 5.69 |
| 10 MHz, 64QAM, low channel, Ant A | 2115.0 | 7.29 | 13.00 | 5.71 |
| 10 MHz, 256QAM, low channel, Ant A | 2115.0 | 7.28 | 13.00 | 5.72 |
| 10 MHz, QPSK, mid channel, Ant A | 2155.0 | 7.28 | 13.00 | 5.72 |
| 10 MHz, QPSK, high channel, Ant A | 2195.0 | 7.30 | 13.00 | 5.70 |
| 15 MHz, QPSK, low channel | 2117.5 | 7.31 | 13.00 | 5.69 |
| 15 MHz, 16QAM, low channel, Ant A | 2117.5 | 7.31 | 13.00 | 5.69 |
| 15 MHz, 64QAM, low channel, Ant A | 2117.5 | 7.33 | 13.00 | 5.67 |
| 15 MHz, 256QAM, low channel, Ant A | 2117.5 | 7.31 | 13.00 | 5.69 |
| 15 MHz, QPSK, mid channel, Ant A | 2155.0 | 7.28 | 13.00 | 5.72 |
| 15 MHz, QPSK, high channel, Ant A | 2192.5 | 7.32 | 13.00 | 5.68 |
| 20 MHz, QPSK, low channel | 2120.0 | 7.32 | 13.00 | 5.68 |
| 20 MHz, 16QAM, low channel, Ant A | 2120.0 | 7.31 | 13.00 | 5.69 |
| 20 MHz, 64QAM, low channel, Ant A | 2120.0 | 7.34 | 13.00 | 5.66 |
| 20 MHz, 256QAM, low channel, Ant A | 2120.0 | 7.32 | 13.00 | 5.68 |
| 20 MHz, QPSK, mid channel, Ant A | 2155.0 | 7.28 | 13.00 | 5.72 |
| 20 MHz, QPSK, high channel, Ant A | 2190.0 | 7.33 | 13.00 | 5.67 |

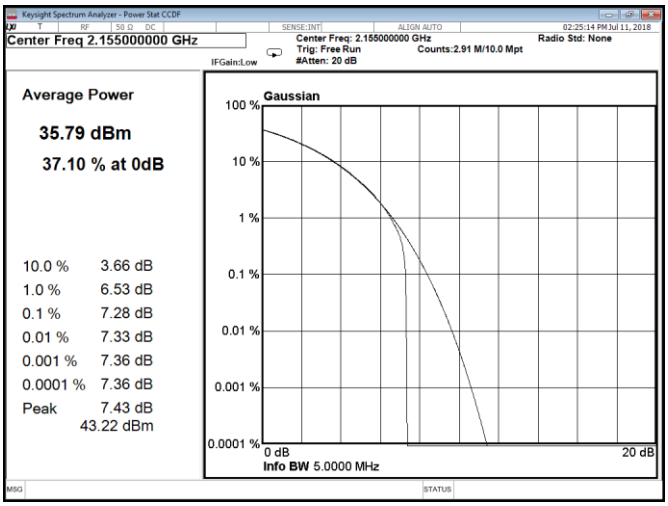



***Figure 8.1-9:*** *CCDF sample plot, 5 MHz channel*

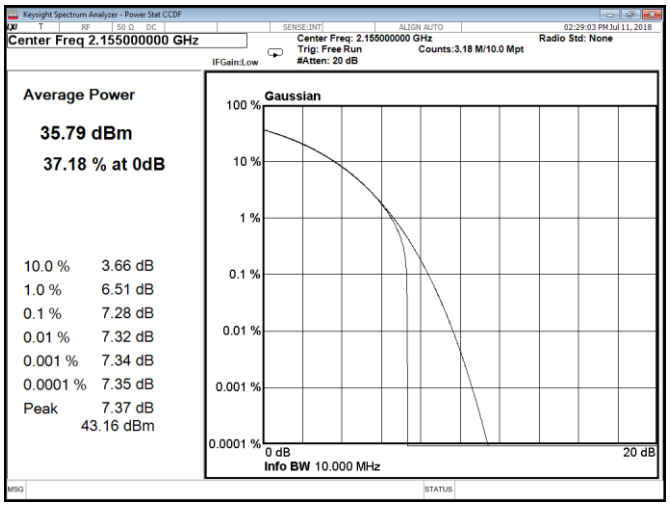



***Figure 8.1-10:*** *CCDF sample plot, 10 MHz channel*

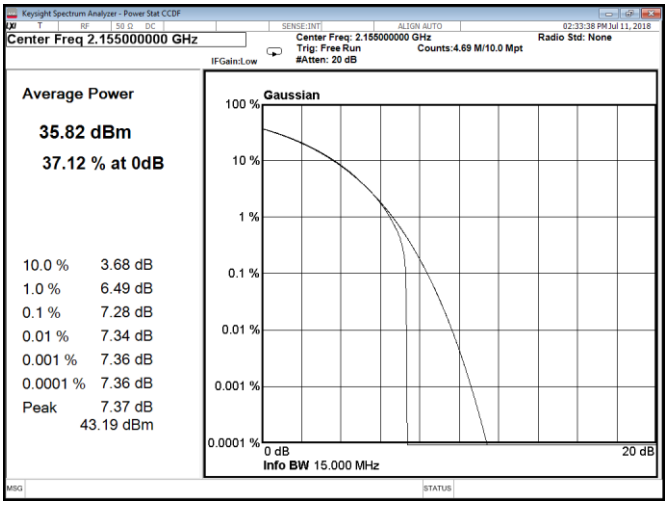



***Figure 8.1-11:*** *CCDF sample plot, 15 MHz channel*

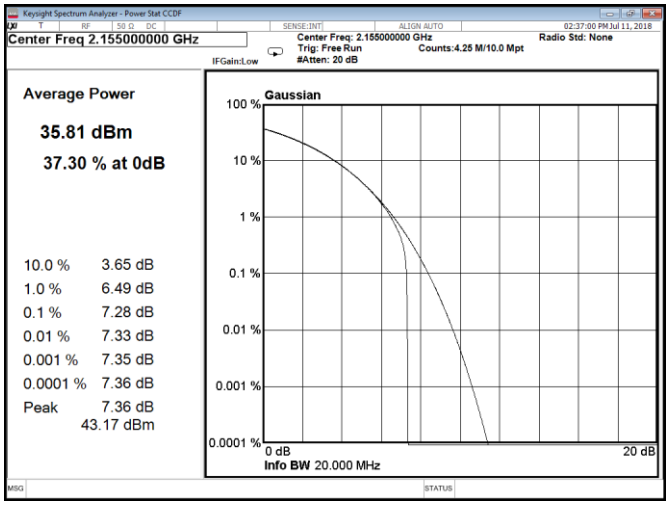



***Figure 8.1-12:*** *CCDF sample plot, 20 MHz channel*

## 8.2 FCC 27.53 and RSS-139, 4.2 Spurious emissions at RF antenna connector

### 8.2.1 Definitions and limits

**FCC:**
(h) AWS emission limits
(1) General protection levels. Except as otherwise specified below, for operations in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz, and 2180–2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}$ (P) dB.

(3) Measurement procedure.

(i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. 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.
(ii) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.
(iii) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

**RSS-139, Section 6.6:**
i. In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least $43 + 10 \log_{10}$ p (watts) dB.
ii. After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least $43 + 10 \log_{10}$ p (watts) dB.

### 8.2.2 Test summary

| | |
|---|---|
| Test date | July 12, 2018 |
| Test engineer | Andrey Adelberg |

### 8.2.3 Observations, settings and special notes

The spectrum was searched from 30 MHz to the 10th harmonic.
All measurements were performed using an average (RMS) detector.
Limit line was adjusted for MIMO operation by 15.05 dB (for *32* ports: $10 \times \text{Log}_{10}(32)$): −13 dBm – 15.05 dB = −28.05 dBm
RBW 1 MHz, VBW was wider than RBW.

### 8.2.4 Test data

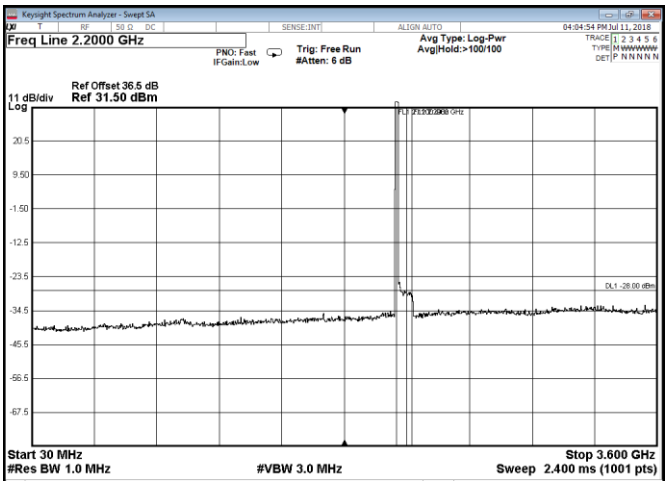



***Figure 8.2-1:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 5 MHz, low channel*

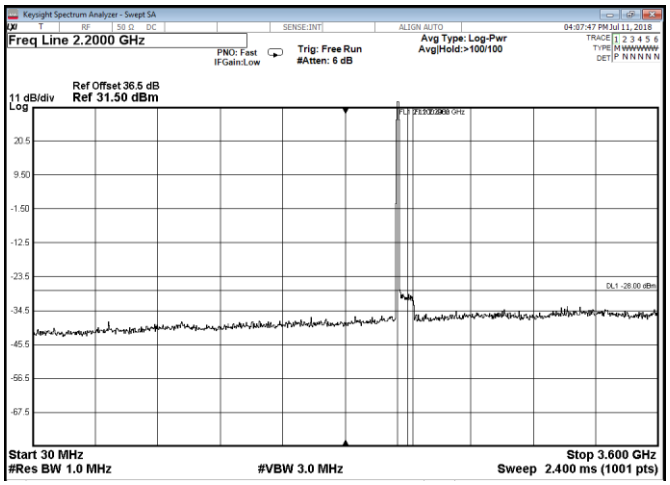



***Figure 8.2-2:*** *Conducted spurious emissions below 3.6 GHz, 16QAM, 5 MHz, low channel*

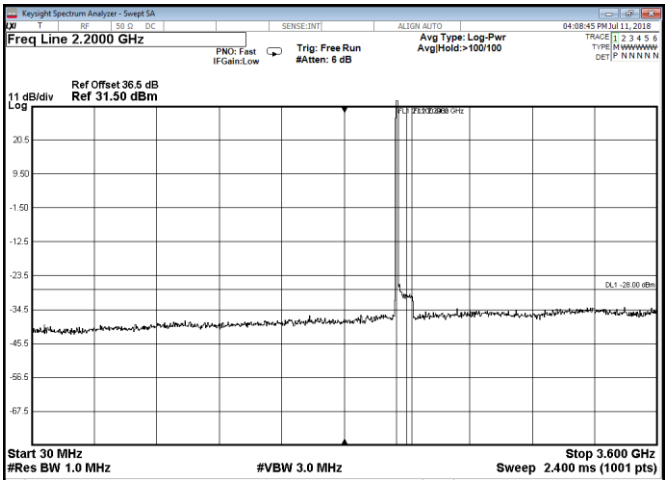



***Figure 8.2-3:*** *Conducted spurious emissions below 3.6 GHz, 64QAM, 5 MHz, low channel*

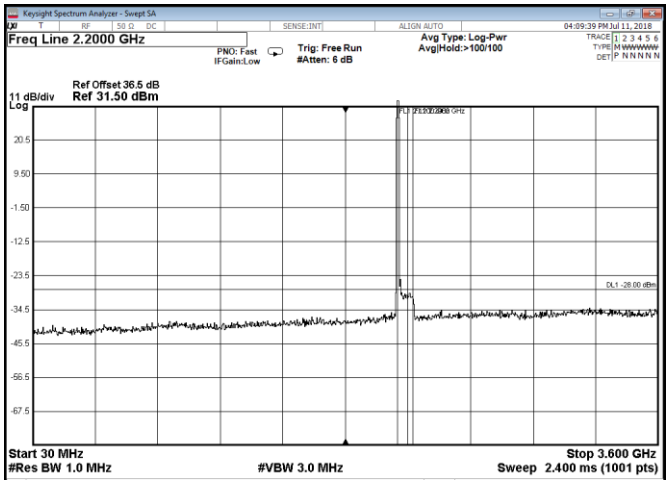



***Figure 8.2-4:*** *Conducted spurious emissions below 3.6 GHz, 256QAM, 5 MHz, low channel*

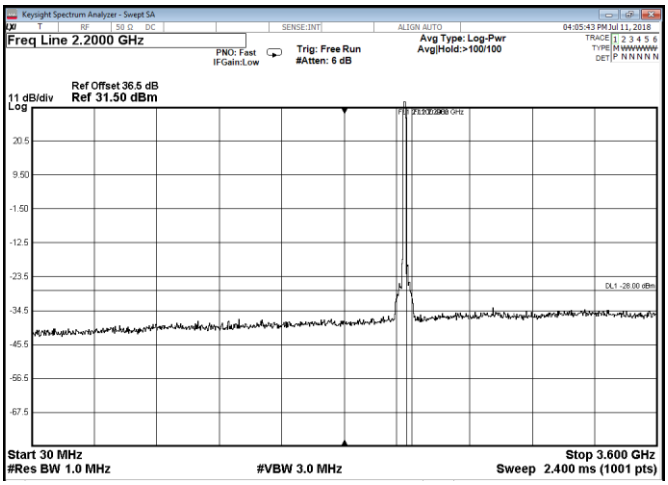



***Figure 8.2-5:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 5 MHz, mid channel*

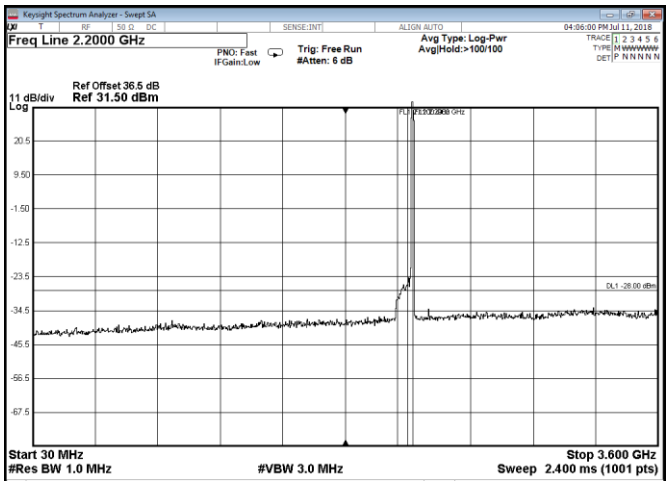



***Figure 8.2-6:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 5 MHz, high channel*

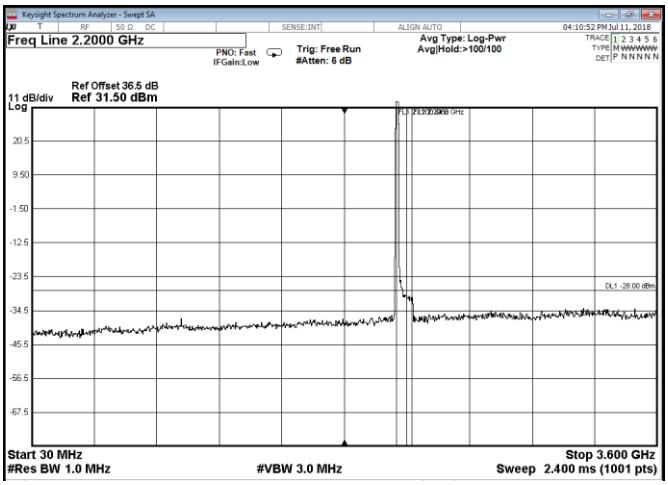



***Figure 8.2-7:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 10 MHz, low channel*

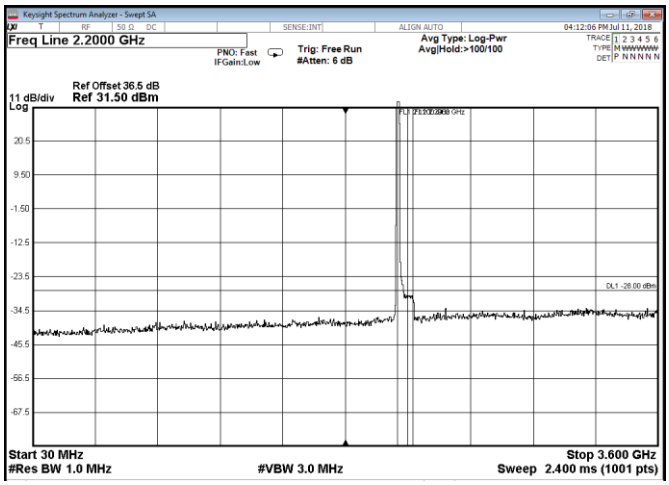



***Figure 8.2-8:*** *Conducted spurious emissions below 3.6 GHz, 16QAM, 10 MHz, low channel*

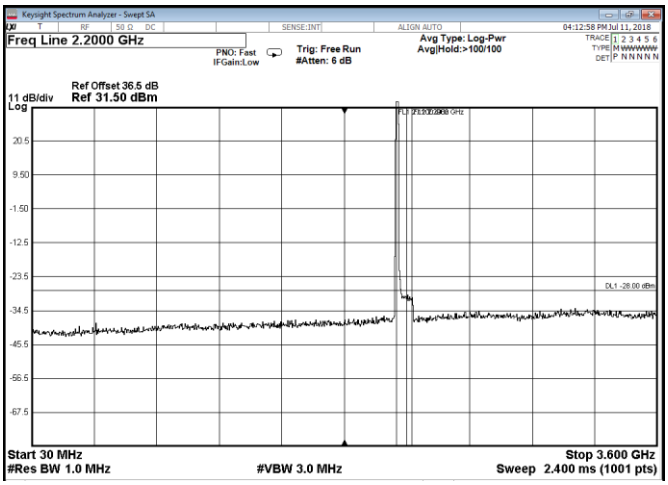



***Figure 8.2-9:*** *Conducted spurious emissions below 3.6 GHz, 64QAM, 10 MHz, low channel*

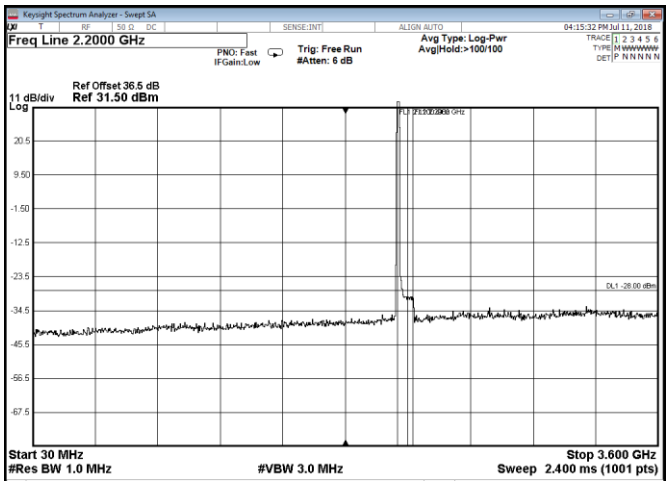



***Figure 8.2-10:*** *Conducted spurious emissions below 3.6 GHz, 256QAM, 10 MHz, low channel*

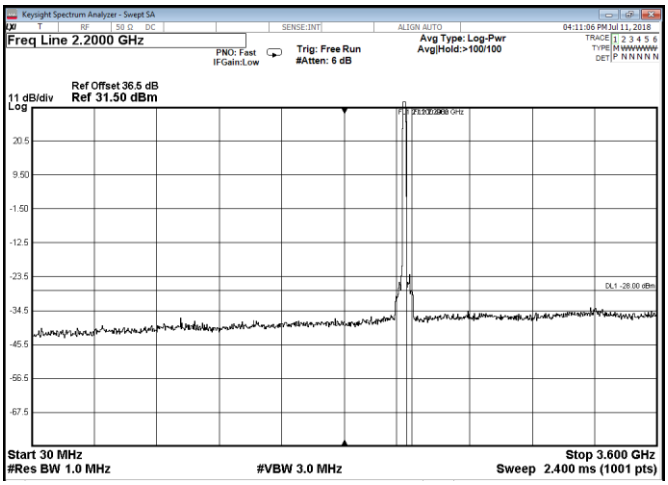



***Figure 8.2-11:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 10 MHz, mid channel*

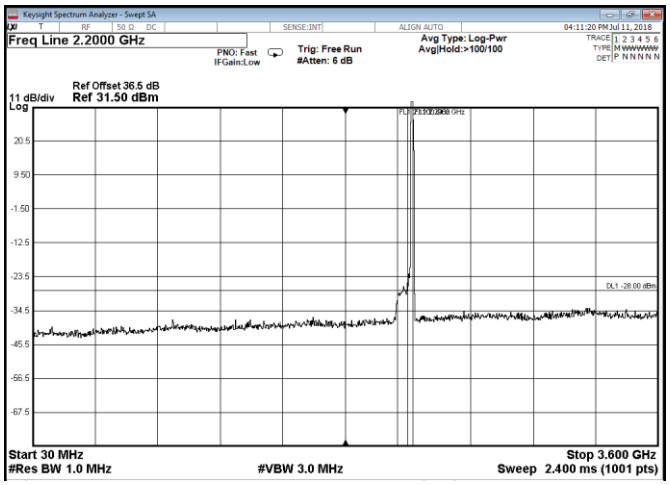



***Figure 8.2-12:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 10 MHz, high channel*

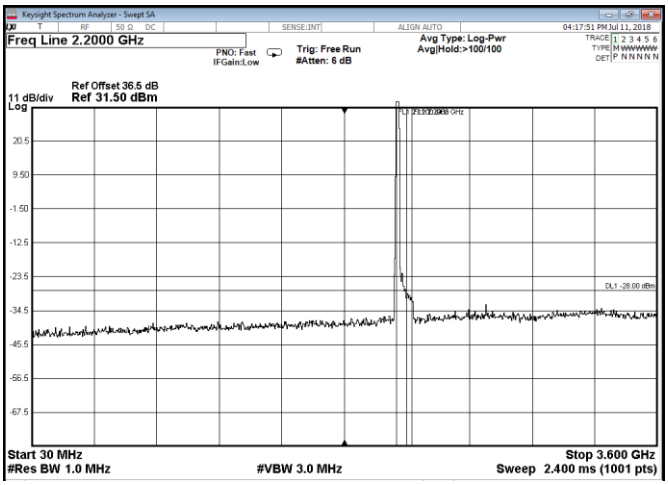



***Figure 8.2-13:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 15 MHz, low channel*

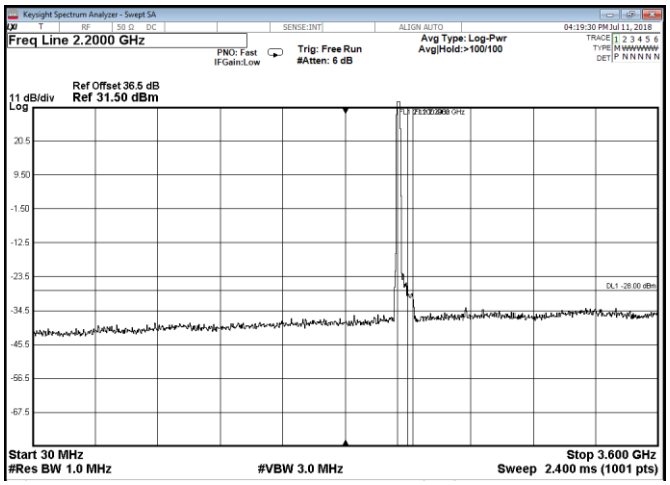



***Figure 8.2-14:*** *Conducted spurious emissions below 3.6 GHz, 16QAM, 15 MHz, low channel*

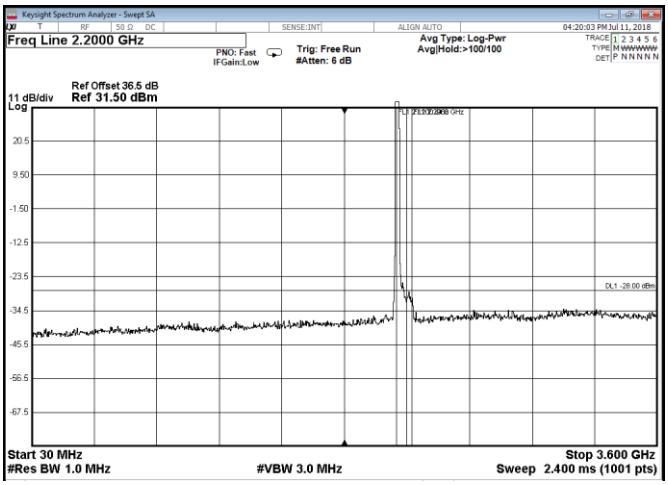



***Figure 8.2-15:*** *Conducted spurious emissions below 3.6 GHz, 64QAM, 15 MHz, low channel*

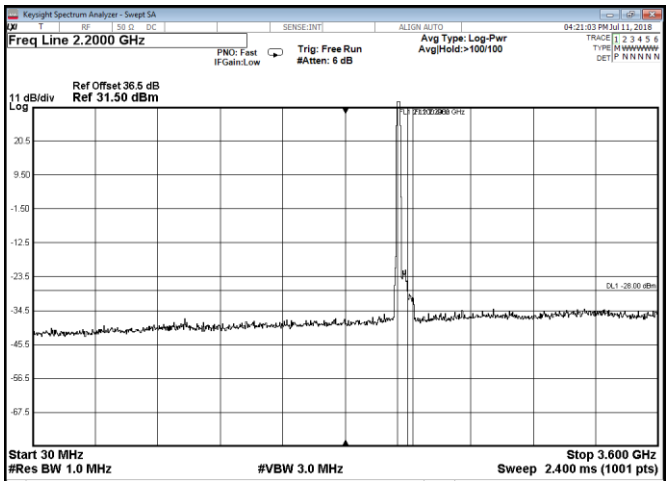



***Figure 8.2-16:*** *Conducted spurious emissions below 3.6 GHz, 256QAM, 15 MHz, low channel*

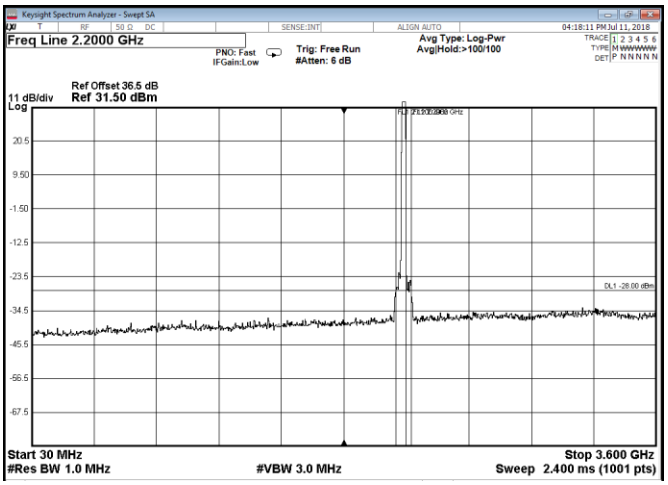



***Figure 8.2-17:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 15 MHz, mid channel*

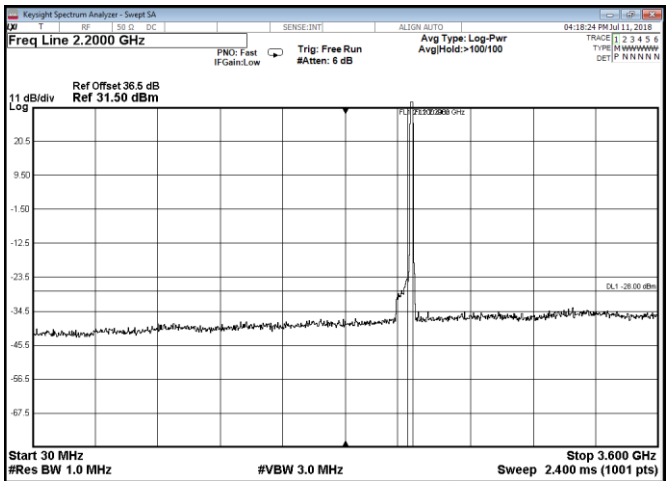



***Figure 8.2-18:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 15 MHz, high channel*

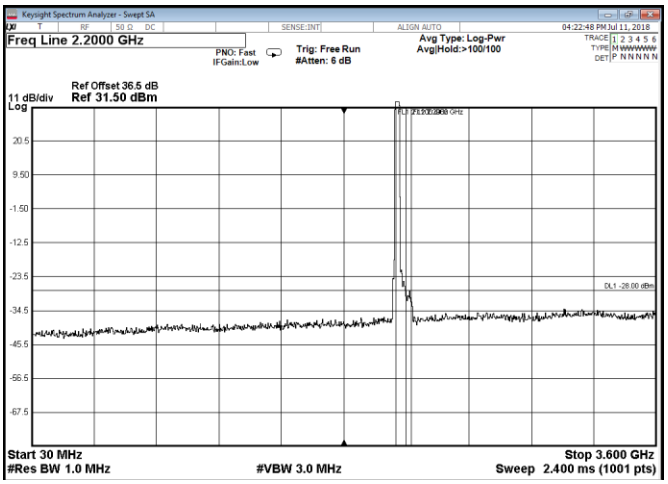



***Figure 8.2-19:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 20 MHz, low channel*

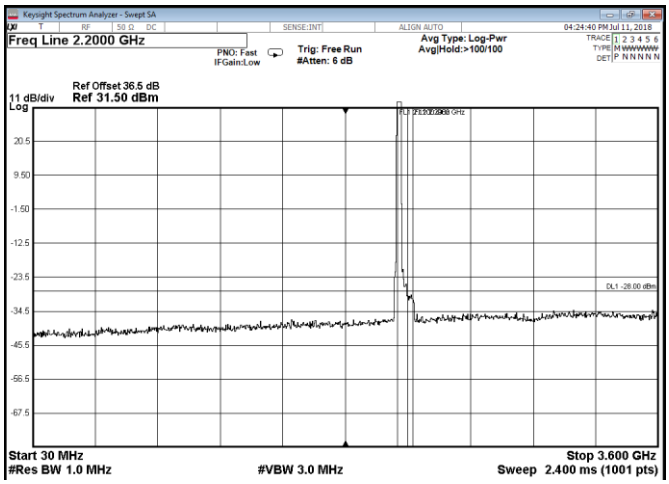



***Figure 8.2-20:*** *Conducted spurious emissions below 3.6 GHz, 16QAM, 20 MHz, low channel*

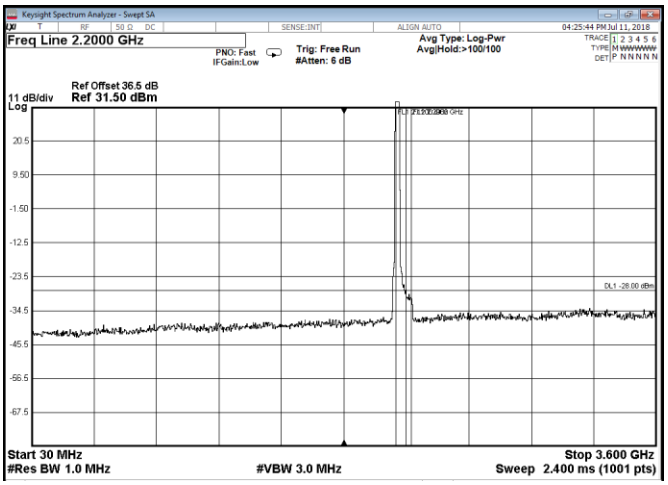



***Figure 8.2-21:*** *Conducted spurious emissions below 3.6 GHz, 64QAM, 20 MHz, low channel*

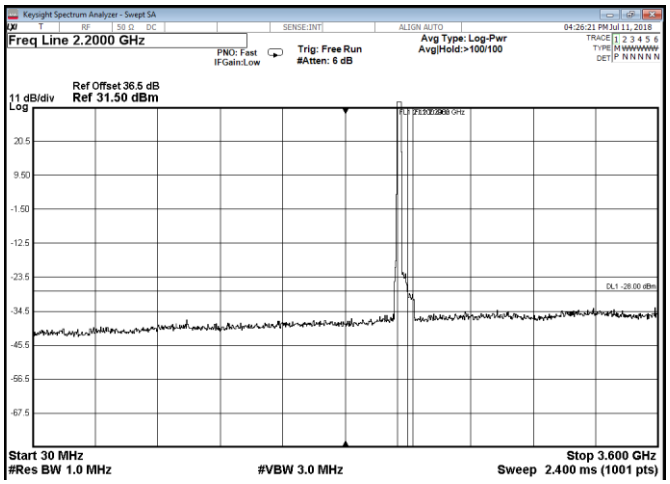



***Figure 8.2-22:*** *Conducted spurious emissions below 3.6 GHz, 256QAM, 20 MHz, low channel*

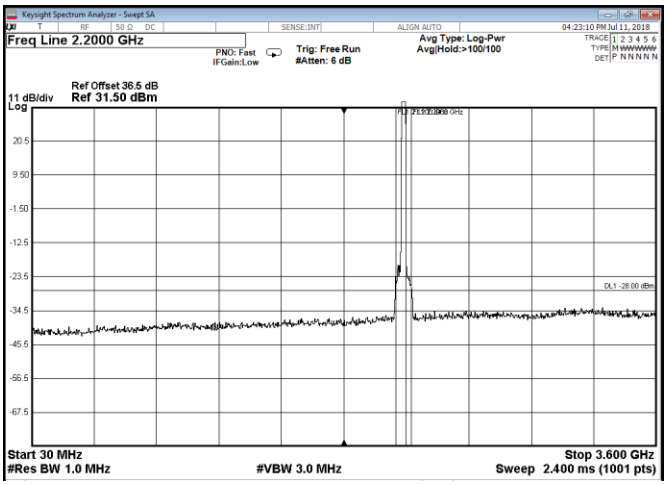



***Figure 8.2-23:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 20 MHz, mid channel*

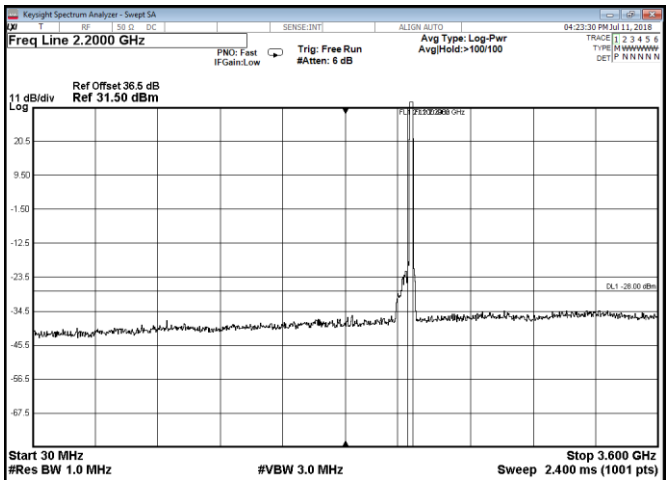



***Figure 8.2-24:*** *Conducted spurious emissions below 3.6 GHz, QPSK, 20 MHz, high channel*

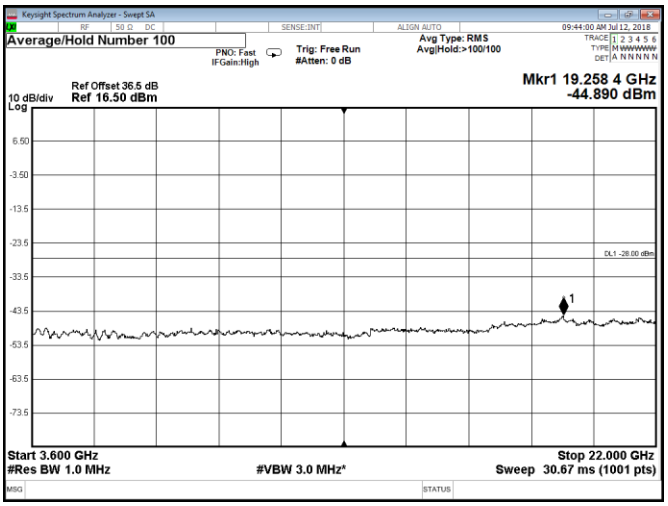



***Figure 8.2-25:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 5 MHz, low channel*

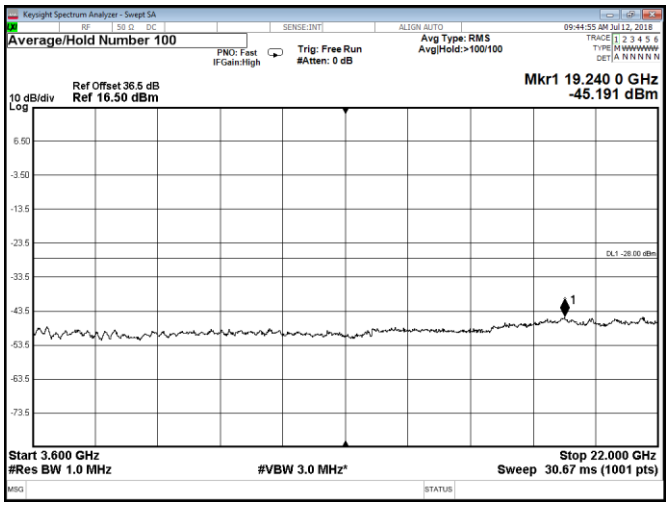



***Figure 8.2-26:*** *Conducted spurious emissions above 3.6 GHz, 16QAM, 5 MHz, low channel*

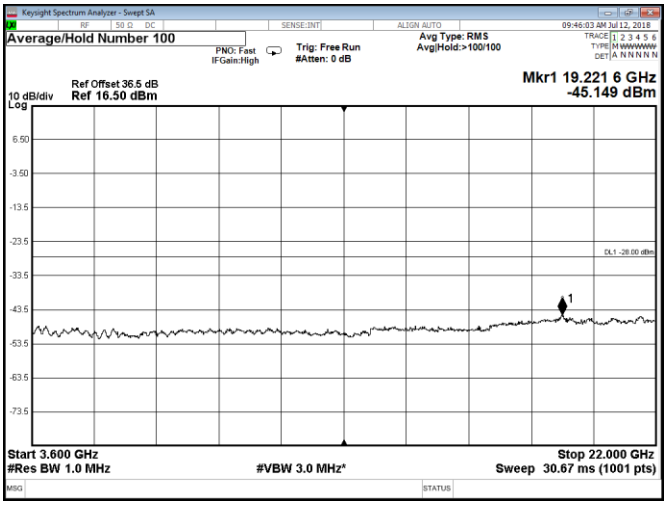



***Figure 8.2-27:*** *Conducted spurious emissions above 3.6 GHz, 64QAM, 5 MHz, low channel*

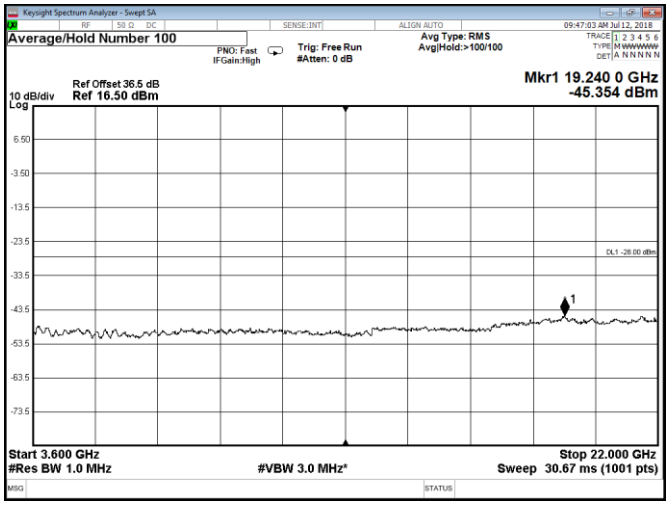



***Figure 8.2-28:*** *Conducted spurious emissions above 3.6 GHz, 256QAM, 5 MHz, low channel*

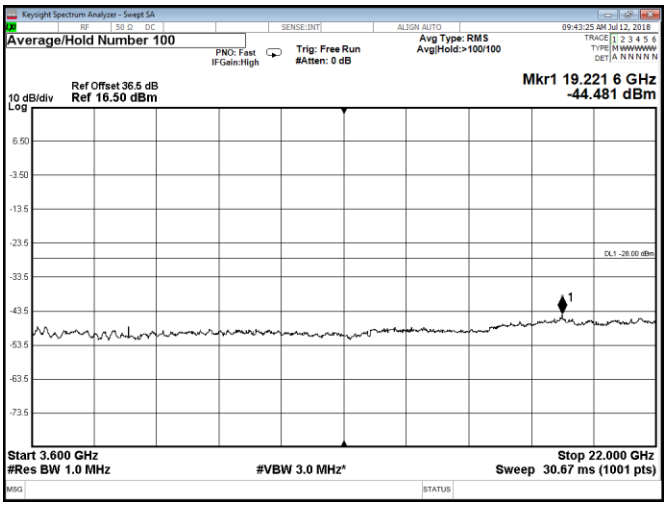



***Figure 8.2-29:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 5 MHz, mid channel*

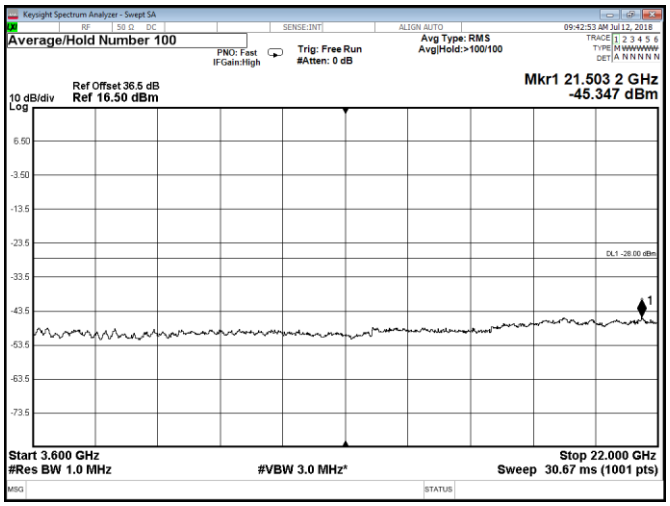



***Figure 8.2-30:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 5 MHz, high channel*

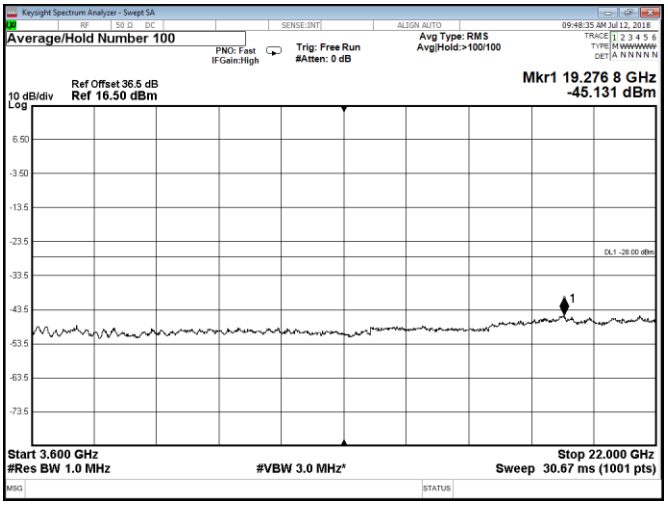



***Figure 8.2-31:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 10 MHz, low channel*

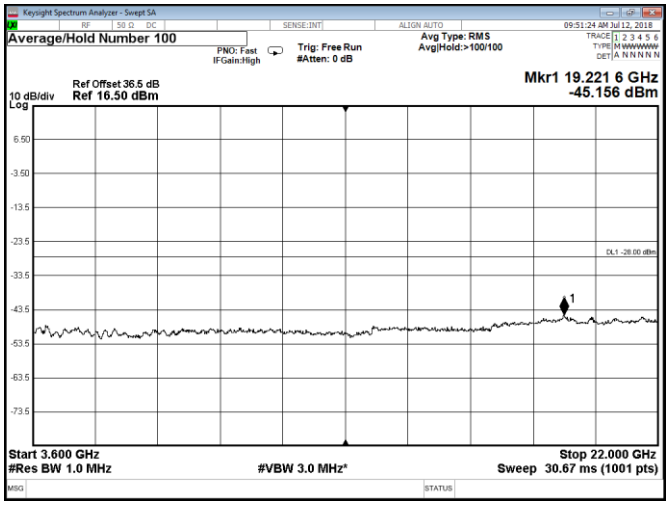



***Figure 8.2-32:*** *Conducted spurious emissions above 3.6 GHz, 16QAM, 10 MHz, low channel*

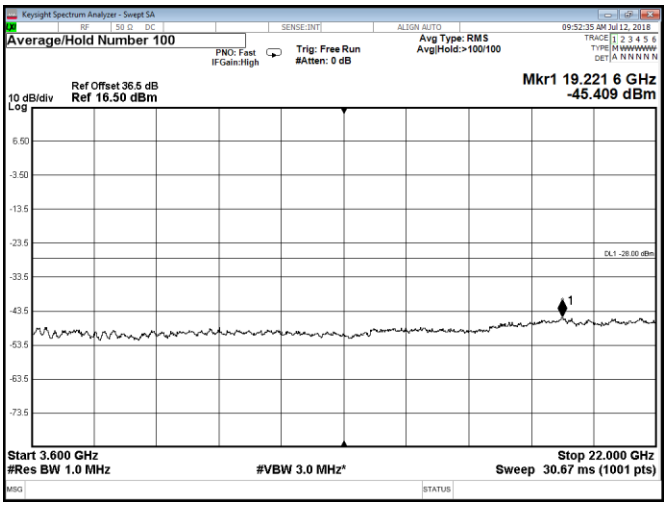



***Figure 8.2-33:*** *Conducted spurious emissions above 3.6 GHz, 64QAM, 10 MHz, low channel*

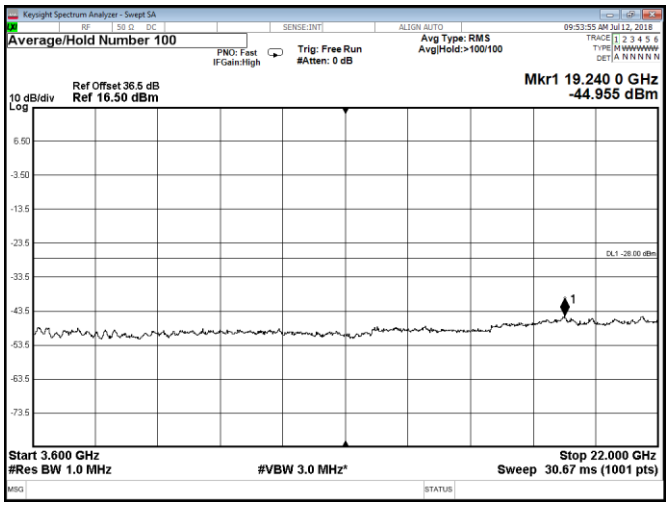



***Figure 8.2-34:*** *Conducted spurious emissions above 3.6 GHz, 256QAM, 10 MHz, low channel*

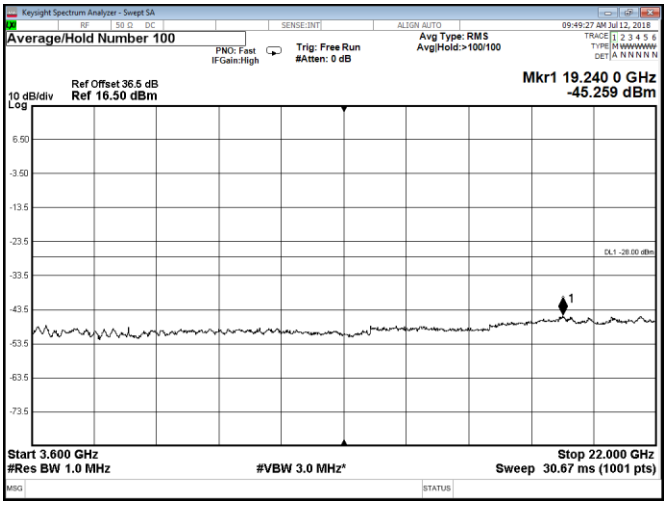



***Figure 8.2-35:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 10 MHz, mid channel*

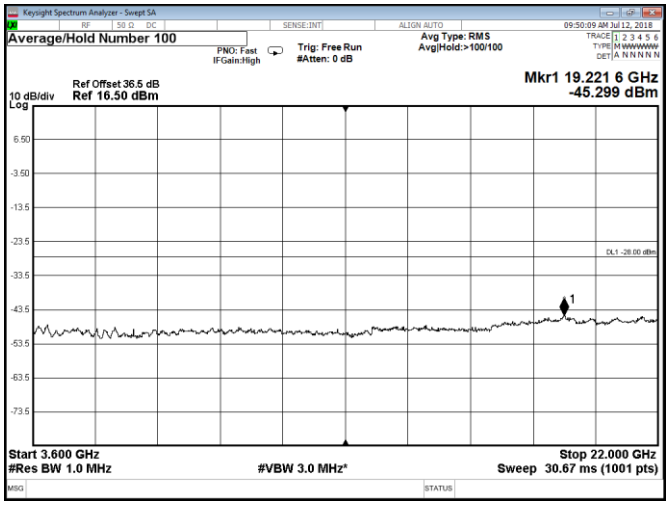



***Figure 8.2-36:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 10 MHz, high channel*

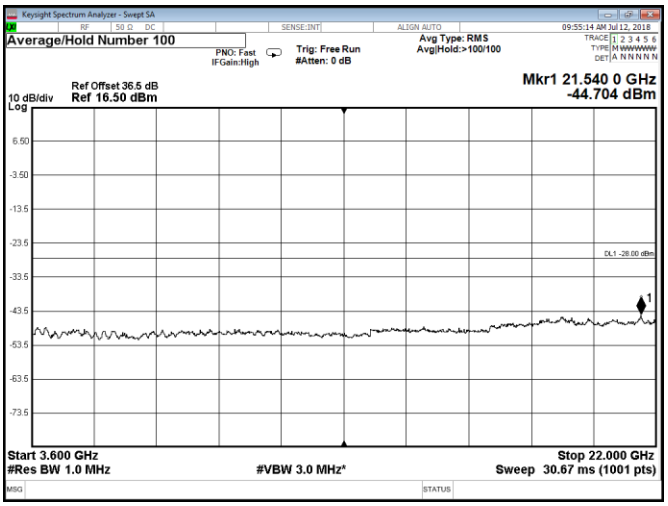



***Figure 8.2-37:*** *Conducted spurious emissions above 3.6 GHz, QPSK, 15 MHz, low channel*

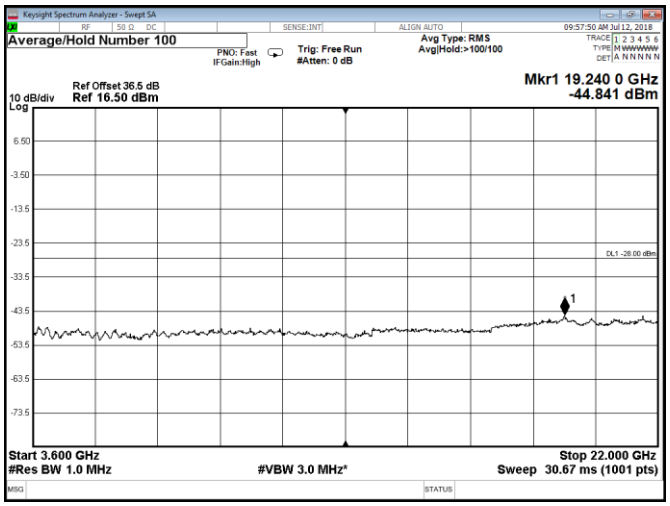



***Figure 8.2-38:*** *Conducted spurious emissions above 3.6 GHz, 16QAM, 15 MHz, low channel*

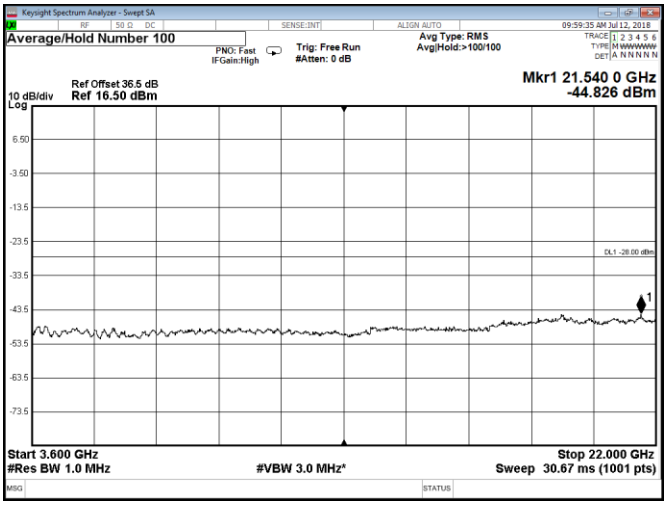



***Figure 8.2-39:*** *Conducted spurious emissions above 3.6 GHz, 64QAM, 15 MHz, low channel*

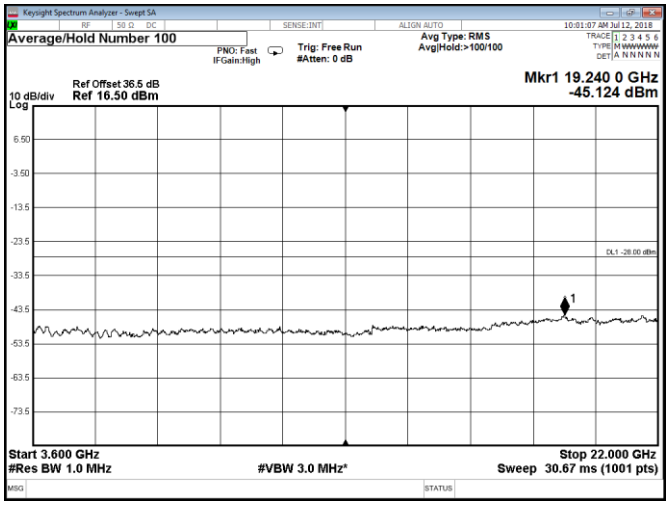



***Figure 8.2-40:*** *Conducted spurious emissions above 3.6 GHz, 256QAM, 15 MHz, low channel*