

# Test report

**467685-1R2TRFWL**

Date of issue: August 29, 2022

Applicant:

**Fujitsu Network Communications, Inc.**

Product:

**Gen2 Dual Band RU for North America**

Model:

**G2\_N70N66-RU**

Model variant:

**None**

Specifications:

◆ **FCC 47 CFR Part 27**

Miscellaneous Wireless Communications Services

#### Lab and test locations

---

Company name	Nemko USA Inc.
Address	2210 Faraday Ave, Suite 150
City	Carlsbad
Province	California
Postal code	92008
Country	USA
Telephone	+1 760 444 3500
Website	www.nemko.com

Tested by	Lan Sayasane, EMC Test Engineer
Reviewed by	James Cunningham, EMC/MIL/WL Supervisor
Review date	August 29, 2022
Reviewer signature	

#### 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 report are within Nemko USA's ISO/IEC 17025 accreditation.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

#### Copyright notification

---

Nemko USA Inc. authorizes the applicant to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

Nemko USA Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

© Nemko USA Inc.

## Table of contents

<b>Table of contents</b> .....	<b>3</b>
<b>Section 1. Report summary</b> .....	<b>4</b>
1.1 Applicant and manufacturer .....	4
1.2 Test specifications .....	4
1.3 Statement of compliance .....	4
1.4 Exclusions .....	4
1.5 Test report revision history .....	4
<b>Section 2. Summary of test results</b> .....	<b>5</b>
2.1 FCC Part 27 test results .....	5
<b>Section 3. Equipment under test (EUT) details</b> .....	<b>6</b>
3.1 Sample information .....	6
3.2 EUT information .....	6
3.3 Technical information .....	6
3.4 Product description and theory of operation .....	6
3.5 EUT exercise details .....	6
3.6 EUT setup diagram .....	7
<b>Section 4. Engineering considerations</b> .....	<b>8</b>
4.1 Modifications incorporated in the EUT .....	8
4.2 Technical judgment .....	8
4.3 Deviations from laboratory tests procedures .....	8
<b>Section 5. Test conditions</b> .....	<b>9</b>
5.1 Atmospheric conditions .....	9
5.2 Power supply range .....	9
<b>Section 6. Measurement uncertainty</b> .....	<b>10</b>
6.1 Uncertainty of measurement .....	10
<b>Section 7. Test equipment</b> .....	<b>11</b>
7.1 Test equipment list .....	11
<b>Section 8. Testing data</b> .....	<b>12</b>
8.1 FCC §2.1033(c)(4) Modulation type .....	12
8.2 FCC §2.1049(h) 99% Occupied Bandwidth and frequency ranges .....	13
8.3 FCC §27.53 (h)(3) 26 dB Occupied Bandwidth .....	44
8.4 FCC 27.50(d)(2) Output power .....	75
8.5 FCC 27.50(B) Peak to Average Power Ratio .....	98
8.6 FCC 27.53(h) Emission Limits .....	129
8.7 FCC 27.54 Frequency Stability .....	227
<b>Section 9. Block diagrams of test setups</b> .....	<b>228</b>
9.1 Radiated emissions set-up .....	228

## Section 1. Report summary

---

### 1.1 Applicant and manufacturer

---

Company name	Fujitsu Networks Communications, Inc.
Address	2801 Telecom Parkway
City	Richardson
Province/State	TX
Postal/Zip code	75082
Country	United States of America

### 1.2 Test specifications

---

FCC 47 CFR Part 27	Miscellaneous Wireless Communications Services
--------------------	--

### 1.3 Statement of compliance

---

In the configuration tested, the EUT was found compliant.

Testing was performed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See "Summary of test results" for full details.

### 1.4 Exclusions

---

None

### 1.5 Test report revision history

---

Revision #	Details of changes made to test report
467685-1TRFWL	Original report issued
467685-1R1TRFWL	Updated following TCB comments

## Section 2. Summary of test results

---

### 2.1 FCC Part 27 test results

---

Part	Test description	Verdict
§2.1033(c)(4)	Modulation type	Pass
§2.1049(h)	99% Occupied bandwidth	Pass
§27.50(h)(j)	Frequency ranges	Pass
§27.50(d)(2)(ii)	Output power at RF antenna connector	Pass
§27.50(d)(5)	Peak to average power ratio	Pass
§27.53(h)(1)	Conducted spurious emissions	Pass
§27.53(h)(1)	Radiated spurious emissions	Pass
§27.53(h)(3)	26 dB Occupied bandwidth	Pass
§27.54	Frequency stability	Pass

Note: None.

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

---

### 3.1 Sample information

---

Receipt date	July 15, 2022
Nemko sample ID number	NEx: 467685

### 3.2 EUT information

---

Product name	Gen2 Dual Band RU for North America
Model	G2_N70N66-RU
Part Number	TA08029-B213/01
Serial number	10003

### 3.3 Technical information

---

Frequency band	2110 – 2200 MHz (Band n66) 1995 – 2020 MHz (Band n70)
RF power Max (W), Conducted	Band n66: 45.86 dBm / 38.55 W (or 51.88 dBm / 154.17 Watts - Total power across all ports) Band n70: 44.30 dBm / 26.92 W (or 50.32 dBm / 107.65 Watts – Total power across all ports)
Supported bandwidths:	5, 10, 15, 20 MHz (Band n66) 5, 10, 20, 25 MHz (Band n70)
Type of modulation	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
Power requirements	DC 48 VDC
Antenna information	The EUT is professionally installed.

### 3.4 Product description and theory of operation

---

The radio unit (RU) is one of the components to configure the 5G RAN mobile communication system. The RU has two band frequencies: band n66 and band n70. Four antenna ports are shared across the frequency bands.

### 3.5 EUT exercise details

---

A laptop computer was used to send test commands to EUT to force it to transmit the appropriate signal. Unit transmit the selected signal at full power. The unit was tested using a conducted port. The antenna installation shall be done by professionals, and they are not within the scope of the tests evaluated on this document.

### 3.6 EUT setup diagram

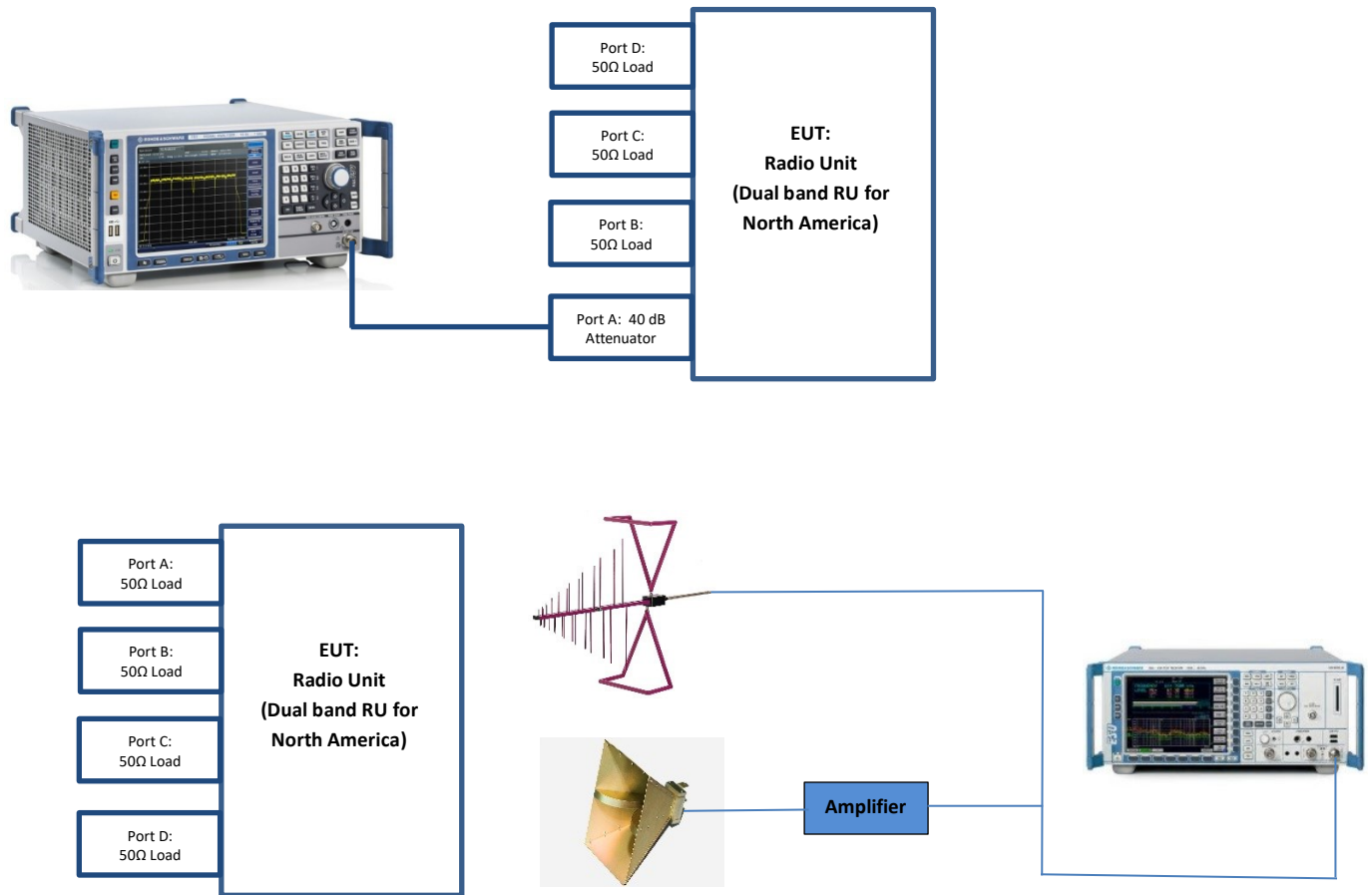


Figure 3.6-1: Setup diagram

## 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

---

---

None

### 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  $\pm 5\%$ , 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.

**Table 6.1-1: Measurement uncertainty.**

Test name	Measurement uncertainty, dB
All antenna port measurements/ including OBW	0.55
Conducted spurious emissions	1.13
Radiated spurious emissions	3.78
AC power line conducted emissions	1.38
Supply Voltages	0.05%
Time	2.09%

## 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.
EMC Test Receiver	Rohde & Schwarz	ESU 40	E1121	1 year	31-May-2023
System Controller	Sunol Sciences	SC104V	E1191	NCR	NCR
Antenna, Bilog	Schaffner-Chase	CBL 6111D	1763	2 years	01-Apr-2024
Antenna, DRG Horn	ETS-Lindgren	3117-PA	E1139	2 years	19-Apr-2023
Signal Generator	Rohde & Schwarz	SMB100A	E1128	1 year	23-Dec-2022
Signal & Spectrum Analyzer	Rohde & Schwarz	FSW43	E1302	1 year	08-Nov-2022
Band Reject Filter	Micro-Tonics	BRM50702-02	E1141	NCR	NCR
Environmental Chamber	Cincinnati Sub-Zero	ZPH-32-2-2-H/AC	S1179	1 year	18-Aug-2022
Wireless pressure, humidity, and temperature data logger	OMEGA	RF2000A	S1170	1 year	30-Sep-2022

Notes: N/A – not applicable  
 NCR – no calibration required  
 VOUs – verify on use

## Section 8. Testing data

### 8.1 FCC §2.1033(c)(4) Modulation type

#### 8.1.1 Definitions and limits

(c) Applications for equipment other than that operating under parts 15, 11 and 18 of this chapter shall be accompanied by a technical report containing the following information:

(4) Type or types of emission

#### 8.1.2 Test summary

Test date	July 15, 2022	Temperature	22 °C
Test engineer	Lan Sayasane, EMC Test Engineer	Air pressure	1001 mbar
Verdict	Pass	Relative humidity	62 %

#### 8.1.3 Observations, settings and special notes

None

#### 8.1.4 Test data

##### Band n66:

Bandwidth (MHz)	Emission type
5	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
10	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
15	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
20	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM

##### Band n70:

Bandwidth (MHz)	Emission type
5	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
10	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
20	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM
25	QPSK; 16QAM; 64QAM; 256QAM; 1024QAM

**Table 8.1-1:** Types of emission

## 8.2 FCC §2.1049(h) 99% Occupied Bandwidth and frequency ranges

---

### 8.2.1 Definitions and limits

---

§2.1049 (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the use.

### 8.2.2 Test summary

---

Test date	July 15, 2022	Temperature	22 °C
Test engineer	Lan Sayasane, EMC Test Engineer	Air pressure	1001 mbar
Verdict	Pass	Relative humidity	62%

### 8.2.3 Observations, settings and special notes

---

Selection of Port D (Band n66) and Port C (Band n70) was according to section 8.2.4 of this document.

Test method: ANSI C63.26 Section 5.4.4

Spectrum analyzer settings:

Resolution bandwidth	1% - 5% OBW
Video bandwidth	3*RBW
Frequency span	2*OBW
Detector mode	Peak
Trace mode	Max Hold

8.2.4 Test data

Band n66:

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	5 MHz	D	2112.5	4.489
n66	5 MHz	D	2155	4.480
n66	5 MHz	D	2197.5	4.499

*Table 8.2-1: 99% Occupied bandwidth, QPSK Modulation, 5 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	5 MHz	D	2112.5	4.504
n66	5 MHz	D	2155	4.501
n66	5 MHz	D	2197.5	4.514

*Table 8.2-2: 99% Occupied bandwidth, 16QAM Modulation, 5 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	5 MHz	D	2112.5	4.497
n66	5 MHz	D	2155	4.517
n66	5 MHz	D	2197.5	4.493

*Table 8.2-3: 99% Occupied bandwidth, 64QAM Modulation, 5 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	5 MHz	D	2112.5	4.487
n66	5 MHz	D	2155	4.498
n66	5 MHz	D	2197.5	4.507

*Table 8.2-4: 99% Occupied bandwidth, 256QAM Modulation, 5 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	5 MHz	D	2112.5	4.486
n66	5 MHz	D	2155	4.491
n66	5 MHz	D	2197.5	4.493

*Table 8.2-5: 99% Occupied bandwidth, 1024QAM Modulation, 5 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	10 MHz	D	2115	9.34
n66	10 MHz	D	2155	9.345
n66	10 MHz	D	2195	9.33

**Table 8.2-6:** 99% Occupied bandwidth, QPSK Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	10 MHz	D	2115	9.264
n66	10 MHz	D	2155	9.258
n66	10 MHz	D	2195	9.266

**Table 8.2-7:** 99% Occupied bandwidth, 16QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	10 MHz	D	2115	9.312
n66	10 MHz	D	2155	9.314
n66	10 MHz	D	2195	9.314

**Table 8.2-8:** 99% Occupied bandwidth, 64QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	10 MHz	D	2115	9.351
n66	10 MHz	D	2155	9.344
n66	10 MHz	D	2195	9.323

**Table 8.2-9:** 99% Occupied bandwidth, 256QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	10 MHz	D	2115	9.312
n66	10 MHz	D	2155	9.332
n66	10 MHz	D	2195	9.315

**Table 8.2-10:** 99% Occupied bandwidth, 1024QAM Modulation, 10 MHz



Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	15 MHz	D	2117.5	14.127
n66	15 MHz	D	2155	14.111
n66	15 MHz	D	2192.5	14.122

**Table 8.2-11:** 99% Occupied bandwidth, QPSK Modulation, 15 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	15 MHz	D	2117.5	14.179
n66	15 MHz	D	2155	14.173
n66	15 MHz	D	2192.5	14.154

**Table 8.2-12:** 99% Occupied bandwidth, 16QAM Modulation, 15 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	15 MHz	D	2117.5	14.129
n66	15 MHz	D	2155	14.128
n66	15 MHz	D	2192.5	14.116

**Table 8.2-13:** 99% Occupied bandwidth, 64QAM Modulation, 15MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	15 MHz	D	2117.5	14.121
n66	15 MHz	D	2155	14.105
n66	15 MHz	D	2192.5	14.123

**Table 8.2-14:** 99% Occupied bandwidth, 256QAM Modulation, 15 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	15 MHz	D	2117.5	14.139
n66	15 MHz	D	2155	14.116
n66	15 MHz	D	2192.5	14.102

**Table 8.2-15:** 99% Occupied bandwidth, 1024QAM Modulation, 15MHz





Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	20 MHz	D	2120	18.96
n66	20 MHz	D	2155	18.945
n66	20 MHz	D	2190	18.908

**Table 8.2-16:** 99% Occupied bandwidth, QPSK Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	20 MHz	D	2120	19.051
n66	20 MHz	D	2155	19.008
n66	20 MHz	D	2190	19.024

**Table 8.2-17:** 99% Occupied bandwidth, 16QAM Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	20 MHz	D	2120	18.927
n66	20 MHz	D	2155	18.949
n66	20 MHz	D	2190	18.966

**Table 8.2-18:** 99% Occupied bandwidth, 64QAM Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	20 MHz	D	2120	18.964
n66	20 MHz	D	2155	18.974
n66	20 MHz	D	2190	18.965

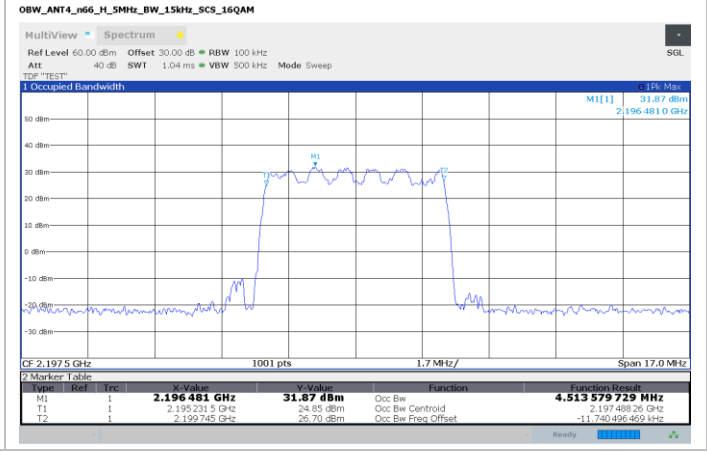
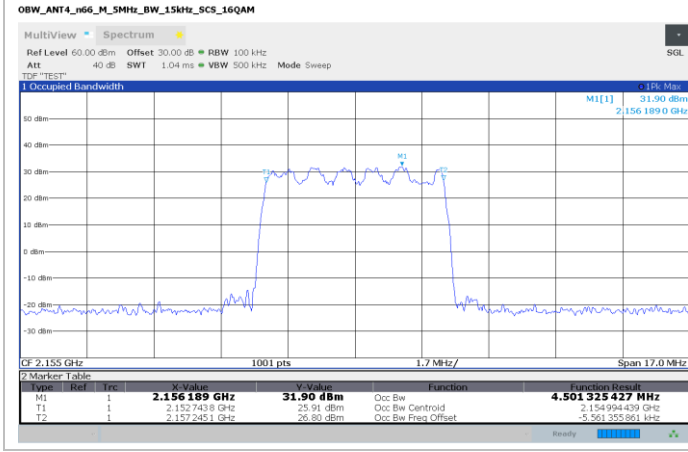
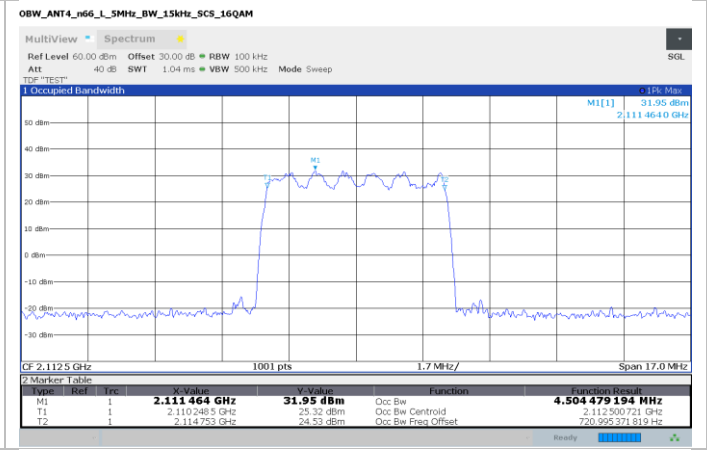
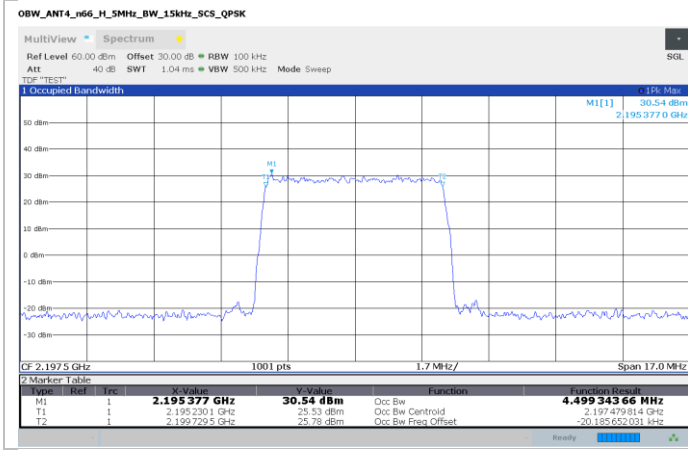
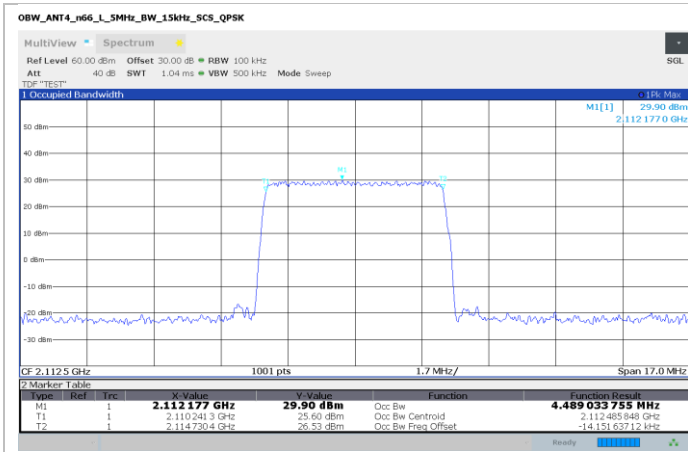
**Table 8.2-19:** 99% Occupied bandwidth, 256QAM Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n66	20 MHz	D	2120	18.914
n66	20 MHz	D	2155	19.01
n66	20 MHz	D	2190	18.933

**Table 8.2-20:** 99% Occupied bandwidth, 1024QAM Modulation, 20 MHz

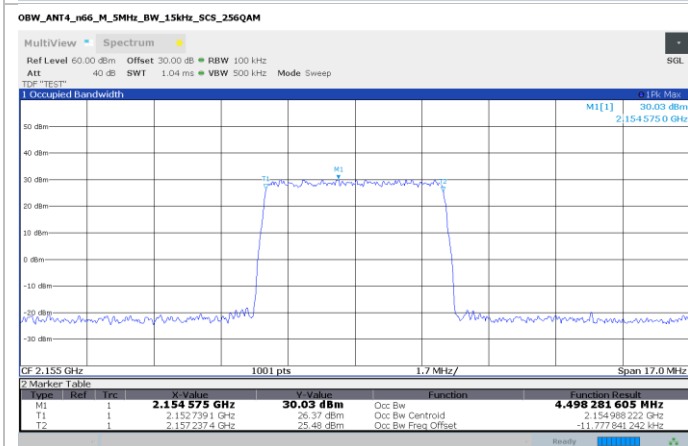
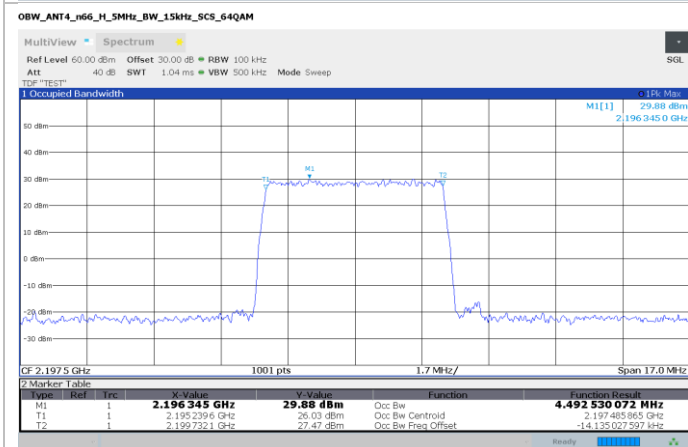
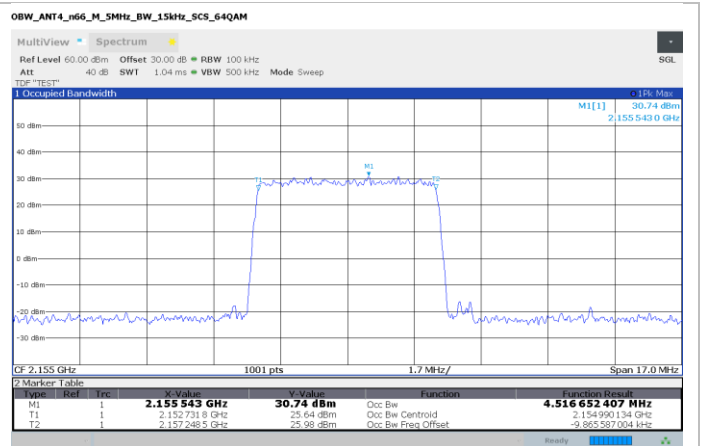
Band n66

5 MHz



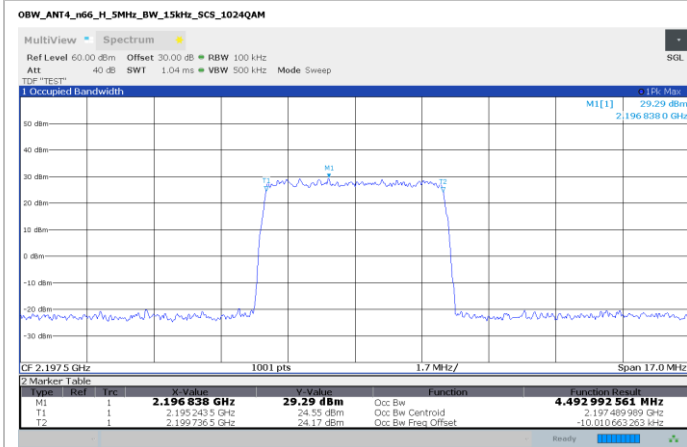
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



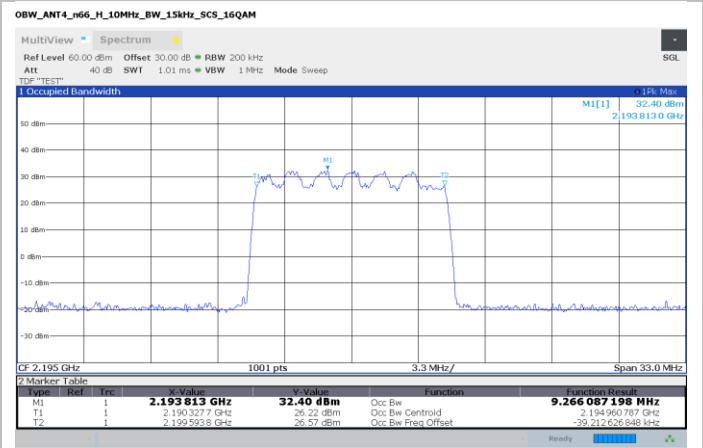
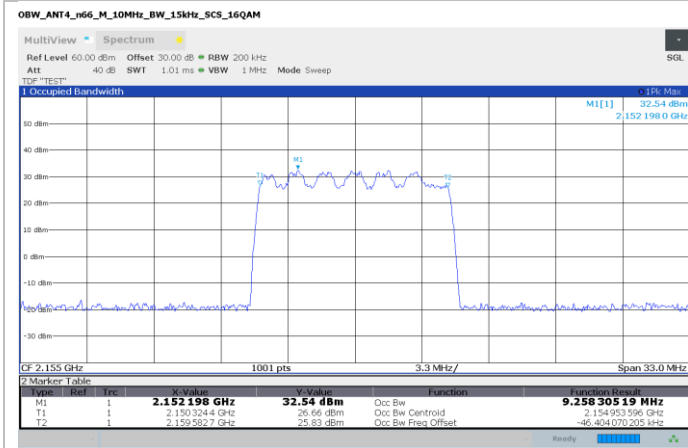
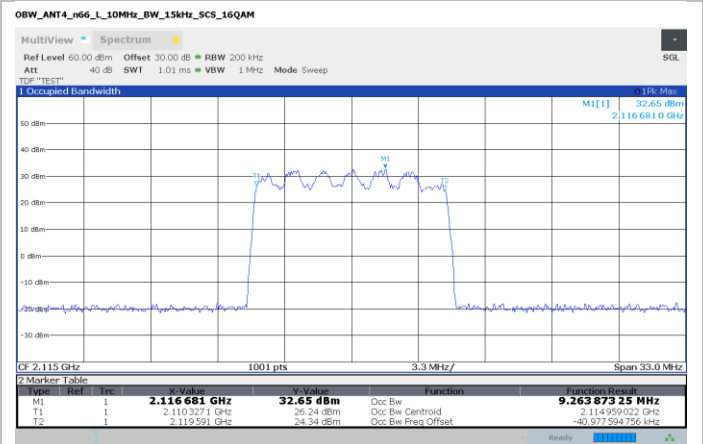
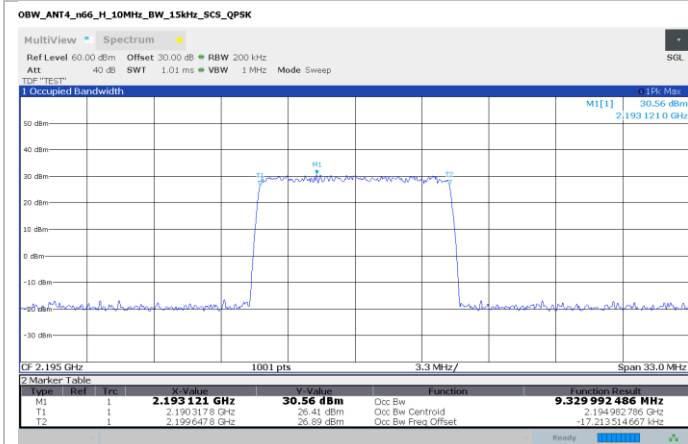
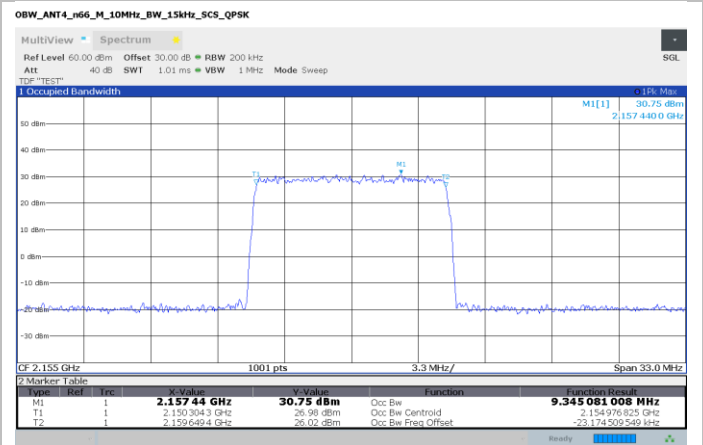
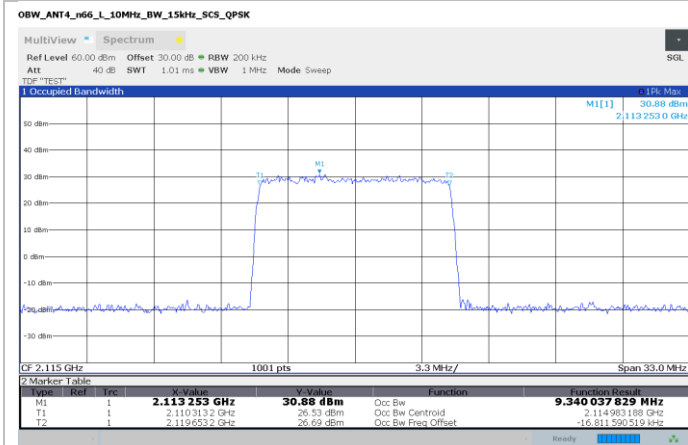
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



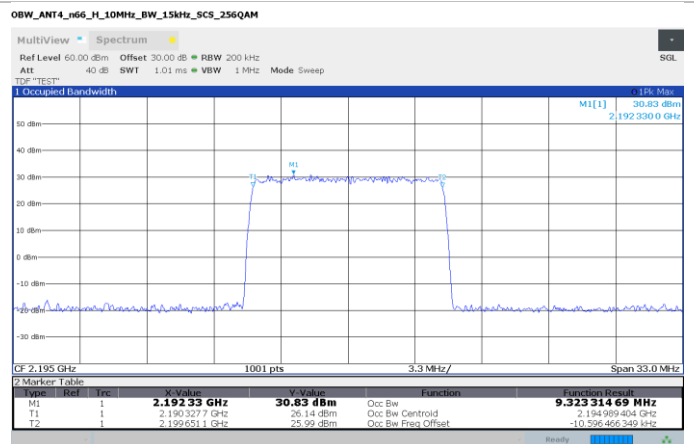
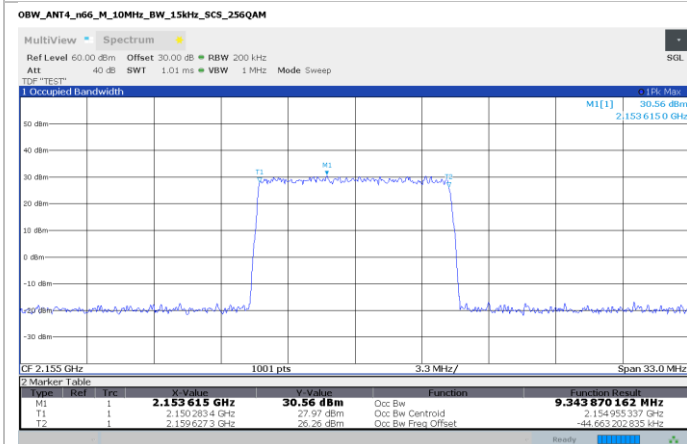
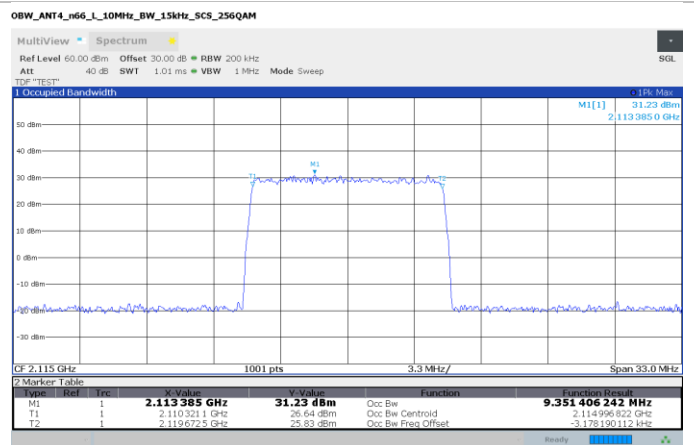
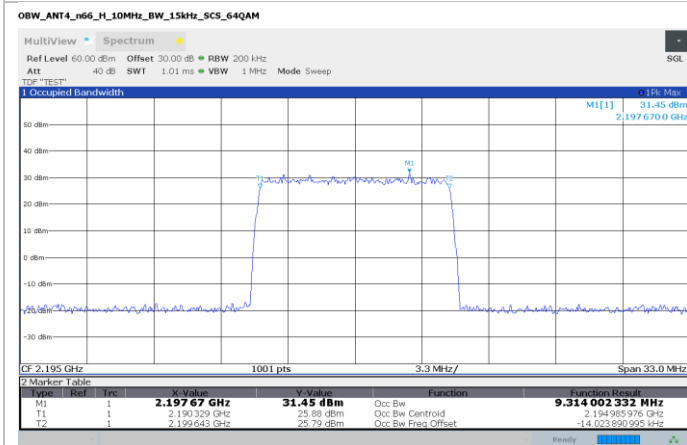
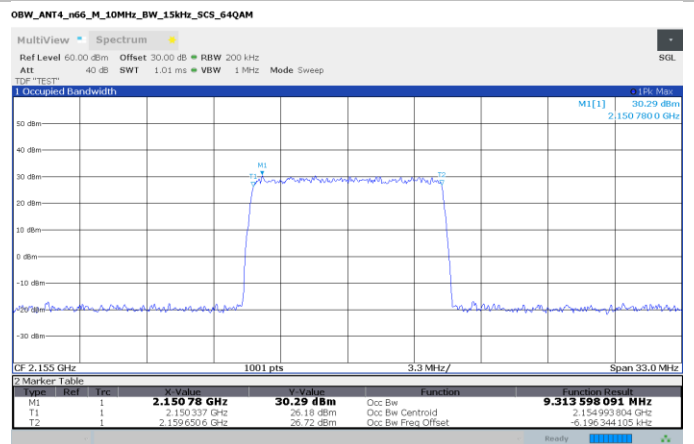
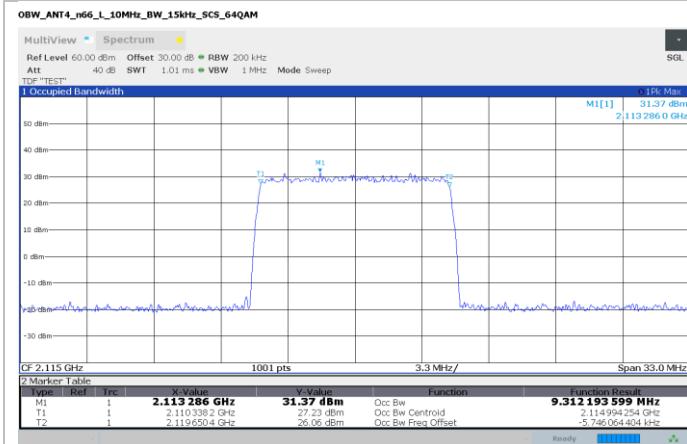
Band n66

10 MHz



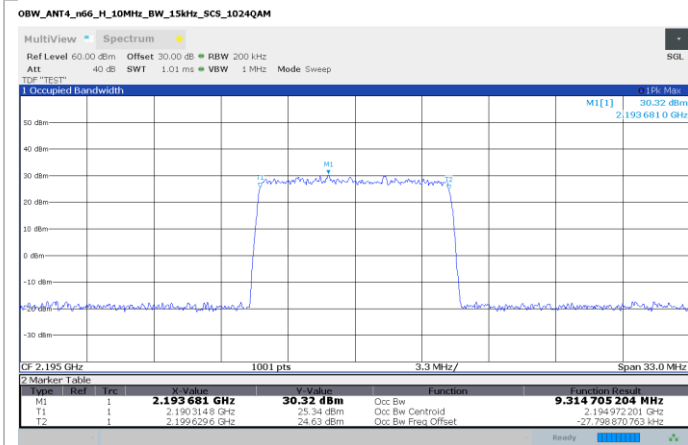
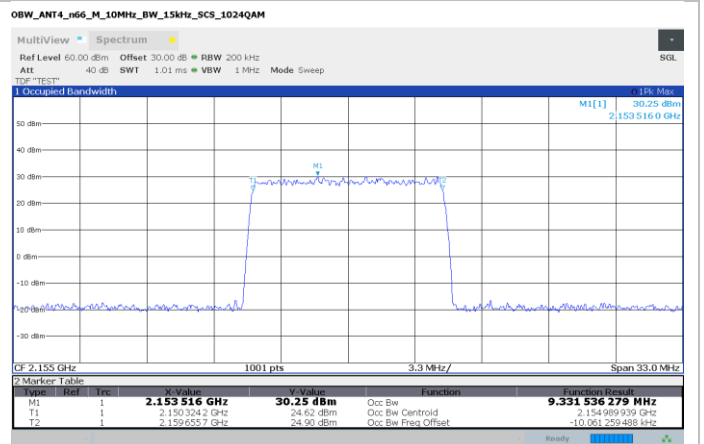
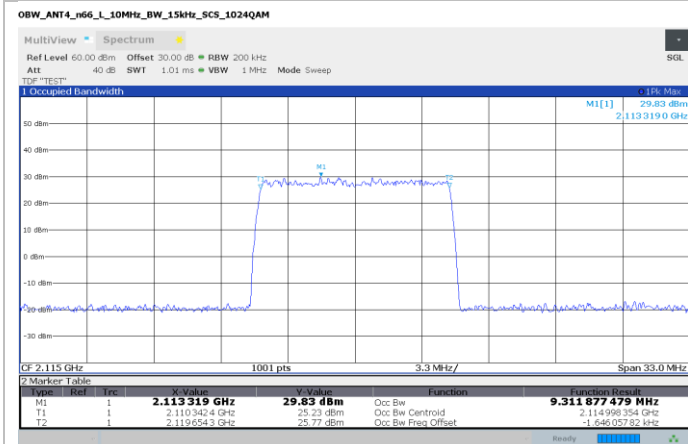
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



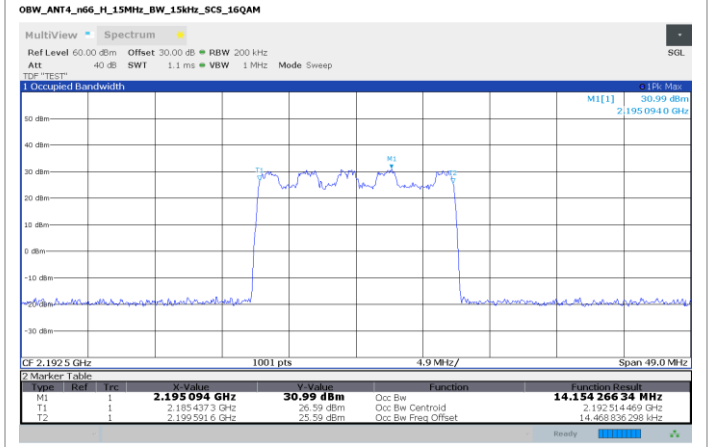
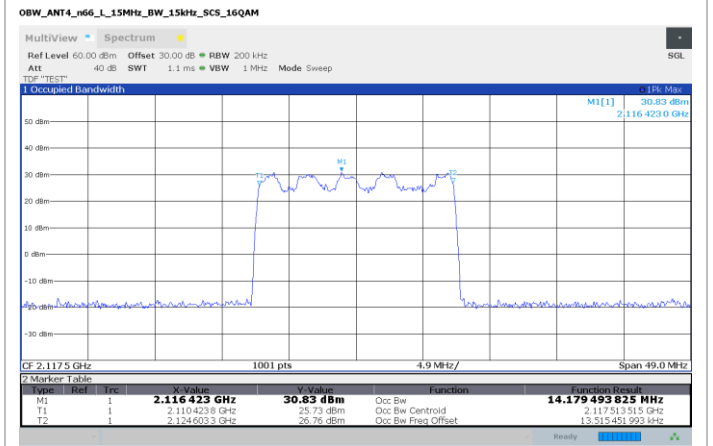
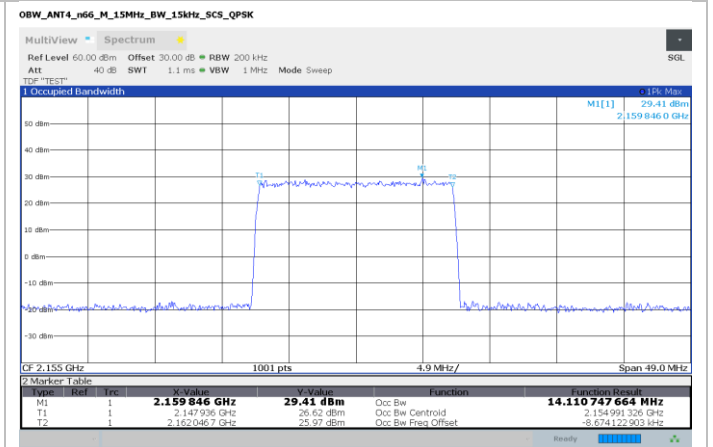
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



Band n66:

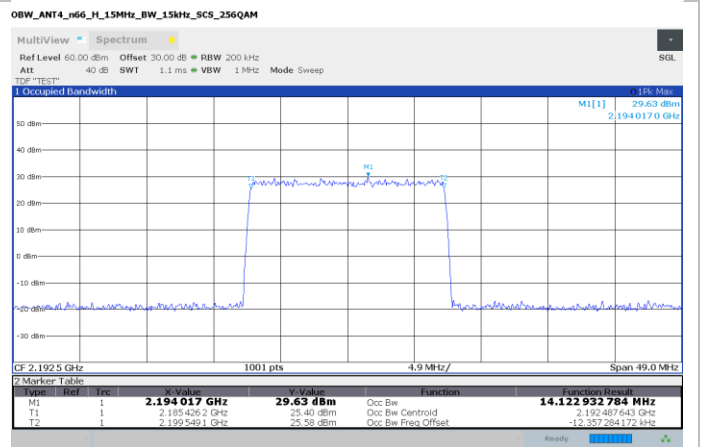
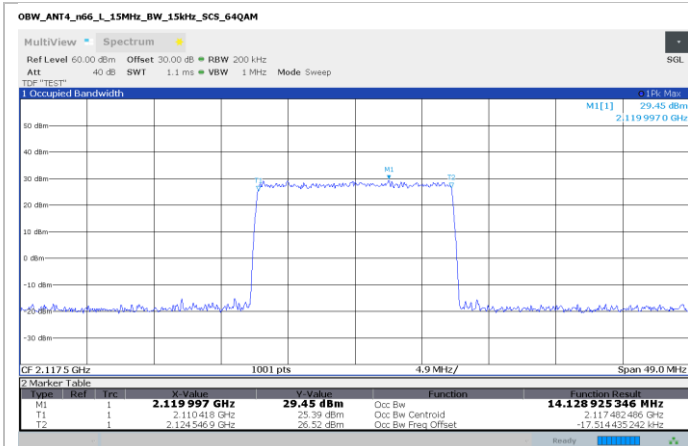
15 MHz





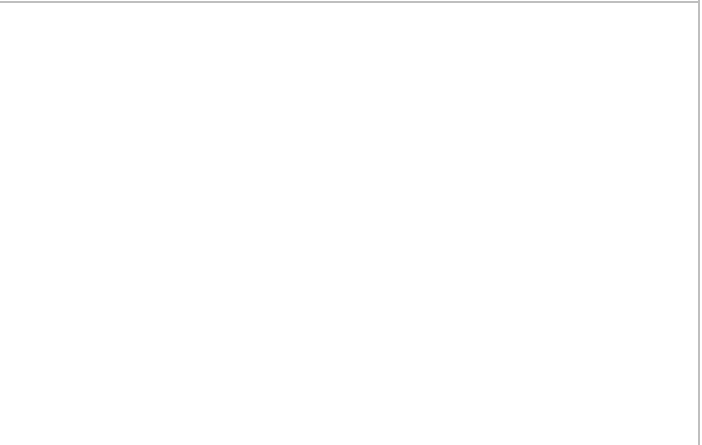
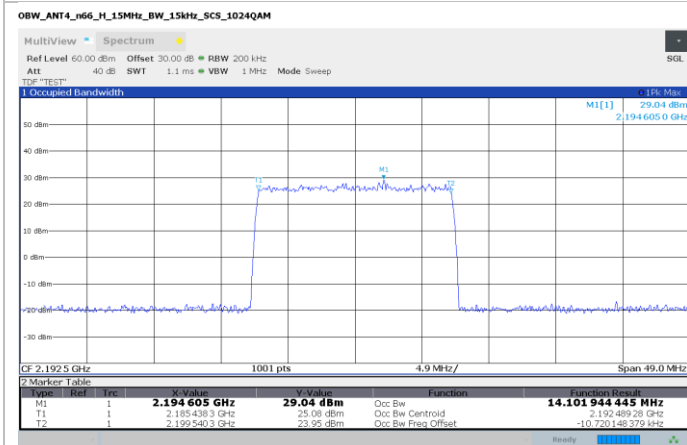
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



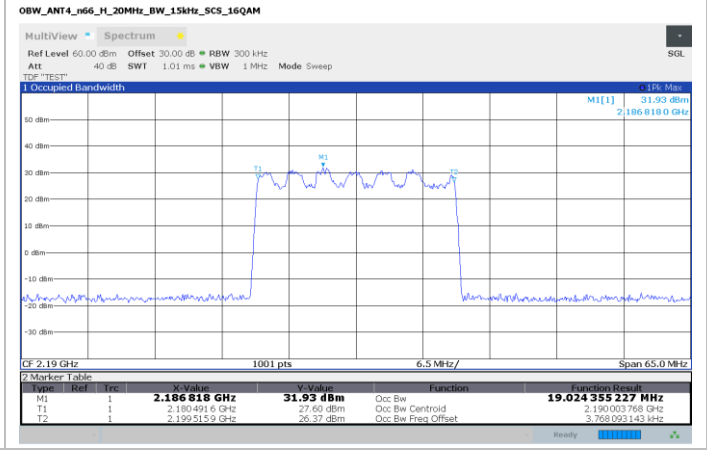
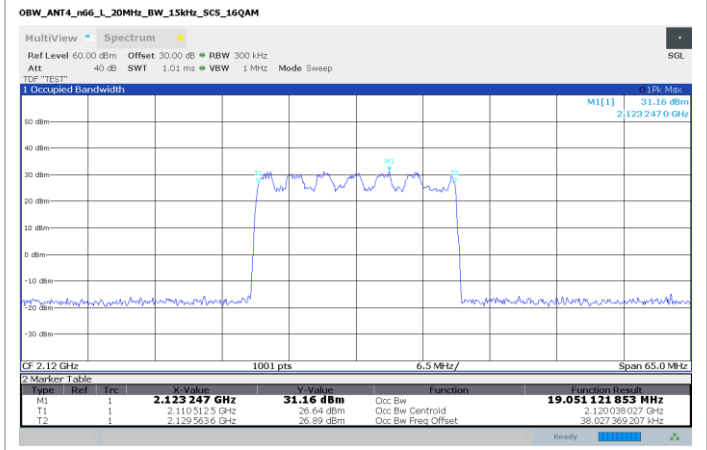
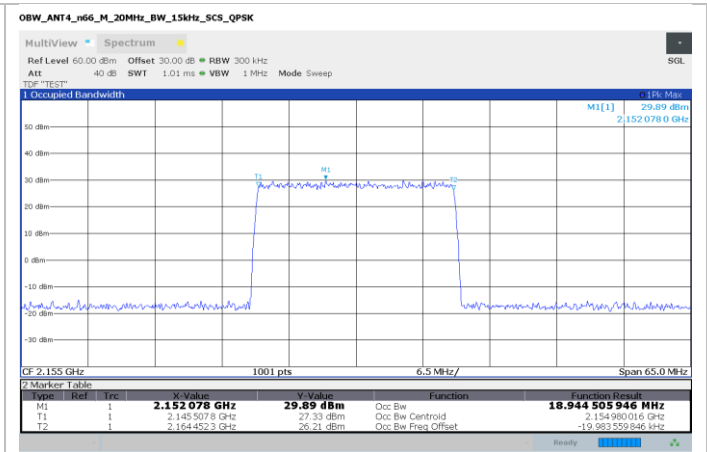
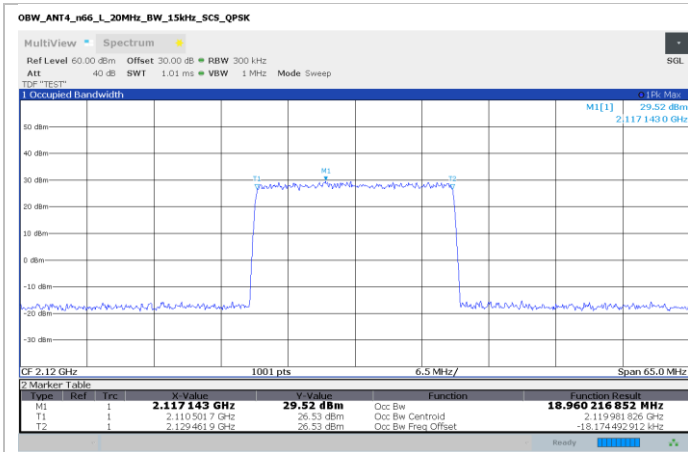
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



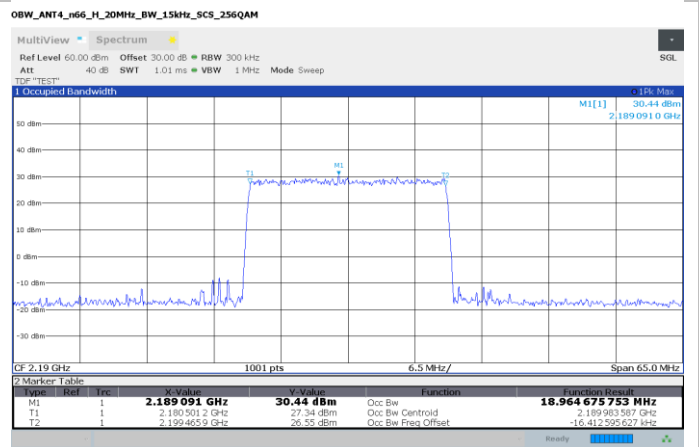
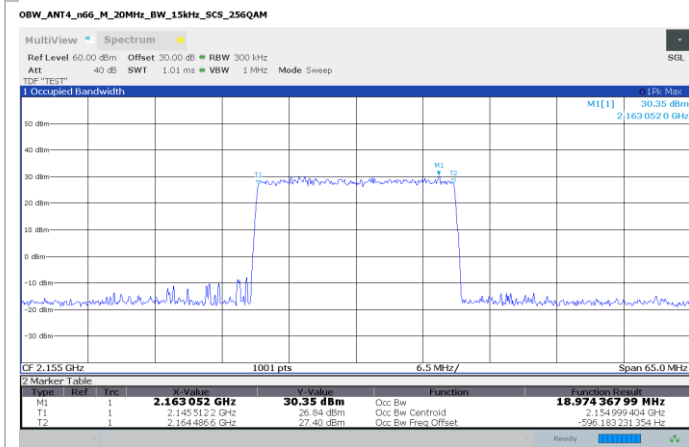
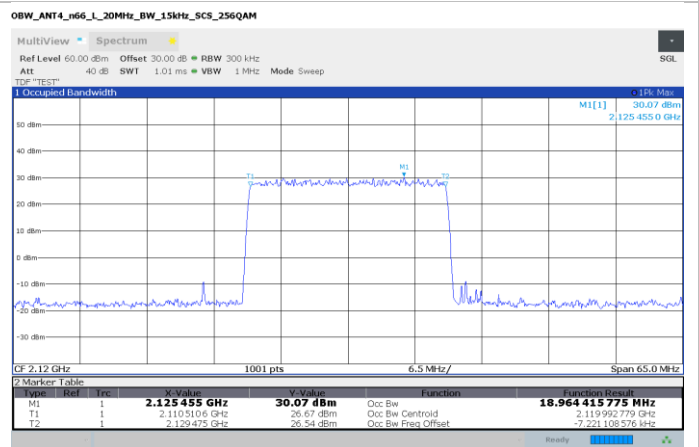
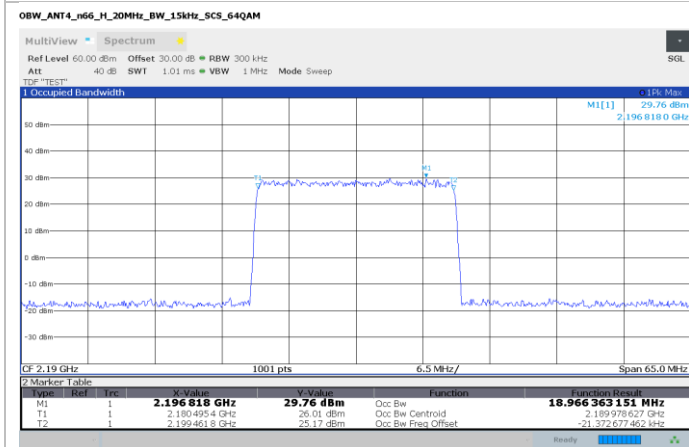
Band n66:

20 MHz



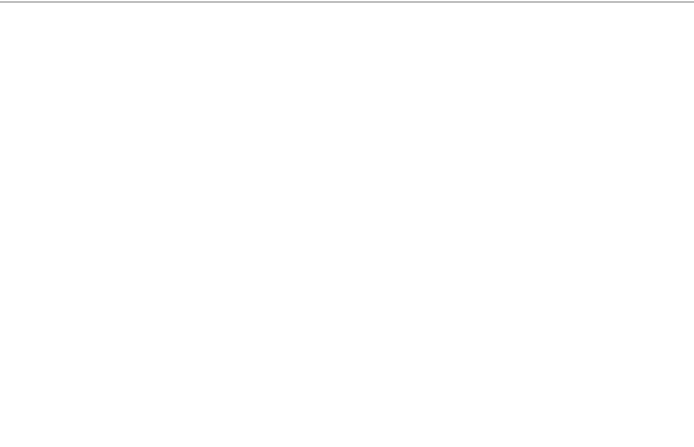
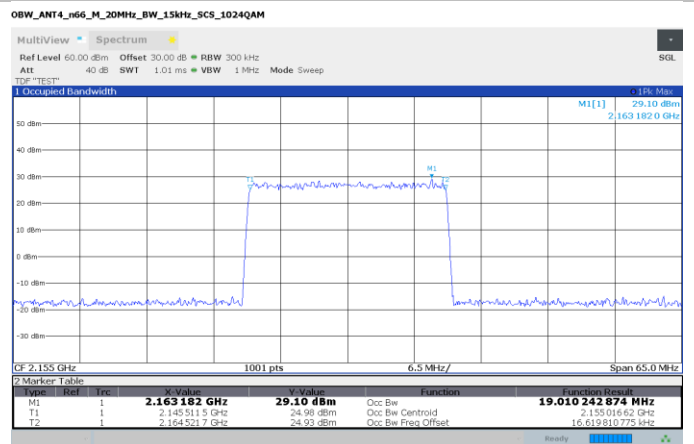
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



Band n70:

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	5 MHz	C	1997.5	4.516
n70	5 MHz	C	2007.5	4.495
n70	5 MHz	C	2017.5	4.489

**Table 8.2-21:** 99% Occupied bandwidth, QPSK Modulation, 5 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	5 MHz	C	1997.5	4.514
n70	5 MHz	C	2007.5	4.493
n70	5 MHz	C	2017.5	4.497

**Table 8.2-22:** 99% Occupied bandwidth, 16QAM Modulation, 5 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	5 MHz	C	1997.5	4.493
n70	5 MHz	C	2007.5	4.51
n70	5 MHz	C	2017.5	4.492

**Table 8.2-23:** 99% Occupied bandwidth, 64QAM Modulation, 5 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	5 MHz	C	1997.5	4.491
n70	5 MHz	C	2007.5	4.495
n70	5 MHz	C	2017.5	4.494

**Table 8.2-24:** 99% Occupied bandwidth, 256QAM Modulation, 5 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	5 MHz	C	1997.5	4.489
n70	5 MHz	C	2007.5	4.497
n70	5 MHz	C	2017.5	4.493

**Table 8.2-25:** 99% Occupied bandwidth, 1024QAM Modulation, 5 MHz



Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	10 MHz	C	2000	9.339
n70	10 MHz	C	2007.5	9.316
n70	10 MHz	C	2015	9.313

**Table 8.2-26:** 99% Occupied bandwidth, QPSK Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	10 MHz	C	2000	9.264
n70	10 MHz	C	2007.5	9.27
n70	10 MHz	C	2015	9.267

**Table 8.2-27:** 99% Occupied bandwidth, 16QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	10 MHz	C	2000	9.348
n70	10 MHz	C	2007.5	9.341
n70	10 MHz	C	2015	9.329

**Table 8.2-28:** 99% Occupied bandwidth, 64QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	10 MHz	C	2000	9.333
n70	10 MHz	C	2007.5	9.354
n70	10 MHz	C	2015	9.356

**Table 8.2-29:** 99% Occupied bandwidth, 256QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	10 MHz	C	2000	9.311
n70	10 MHz	C	2007.5	9.31
n70	10 MHz	C	2015	9.292

**Table 8.2-30:** 99% Occupied bandwidth, 1024QAM Modulation, 10 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	20 MHz	C	2005	18.941
n70	20 MHz	C	2007.5	18.941
n70	20 MHz	C	2010	19.011

**Table 8.2-31:** 99% Occupied bandwidth, QPSK Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	20 MHz	C	2005	19.003
n70	20 MHz	C	2007.5	19.071
n70	20 MHz	C	2010	19.045

**Table 8.2-32:** 99% Occupied bandwidth, 16QAM Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	20 MHz	C	2005	18.961
n70	20 MHz	C	2007.5	18.981
n70	20 MHz	C	2010	18.965

**Table 8.2-33:** 99% Occupied bandwidth, 64QAM Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	20 MHz	C	2005	18.99
n70	20 MHz	C	2007.5	18.966
n70	20 MHz	C	2010	18.957

**Table 8.2-34:** 99% Occupied bandwidth, 256QAM Modulation, 20 MHz

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	20 MHz	C	2005	18.945
n70	20 MHz	C	2007.5	19.008
n70	20 MHz	C	2010	18.938

**Table 8.2-35:** 99% Occupied bandwidth, 1024QAM Modulation, 20 MHz





Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	25 MHz	C	2007.5	23.767

*Table 8.2-36: 99% Occupied bandwidth, QPSK Modulation, 25 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	25 MHz	C	2007.5	23.839

*Table 8.2-37: 99% Occupied bandwidth, 16QAM Modulation, 25 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	25 MHz	C	2007.5	23.768

*Table 8.2-38: 99% Occupied bandwidth, 64QAM Modulation, 25 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	25 MHz	C	2007.5	23.74

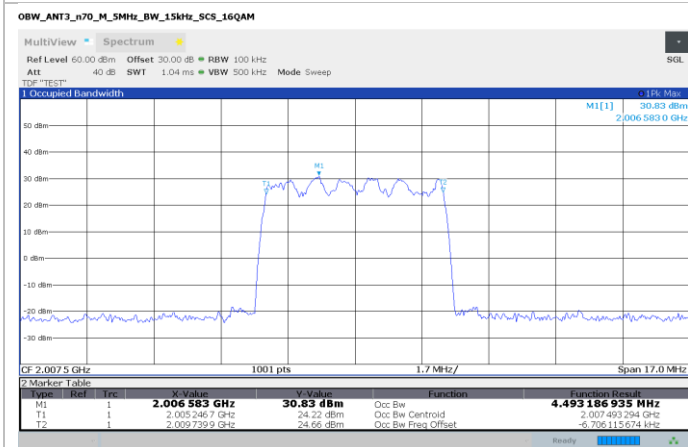
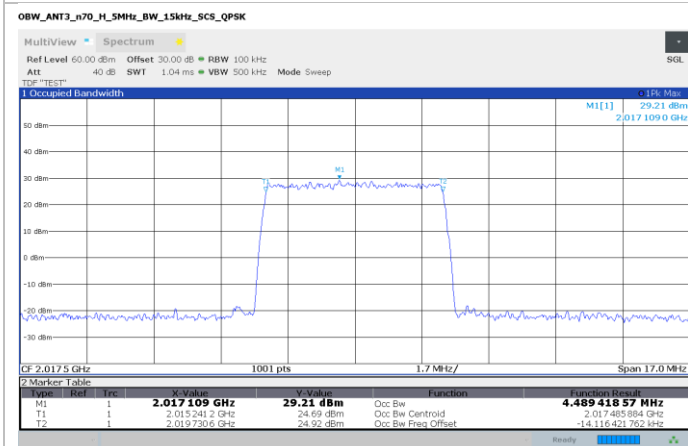
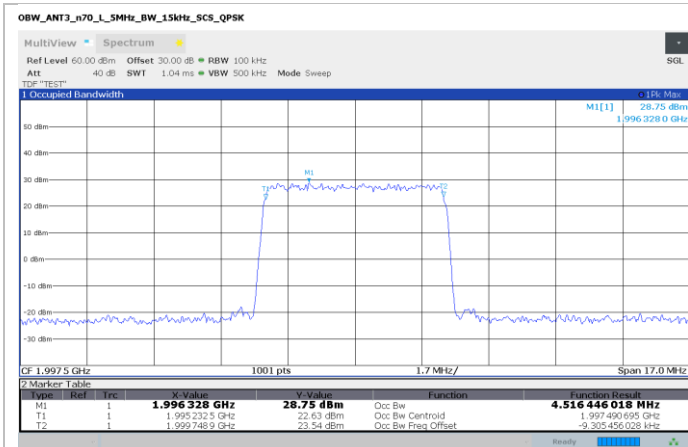
*Table 8.2-39: 99% Occupied bandwidth, 256QAM Modulation, 25 MHz*

Band	OBW Declared	Port	Channel (MHz)	99% OBW (MHz)
n70	25 MHz	C	2007.5	23.784

*Table 8.2-40: 99% Occupied bandwidth, 1024QAM Modulation, 25 MHz*

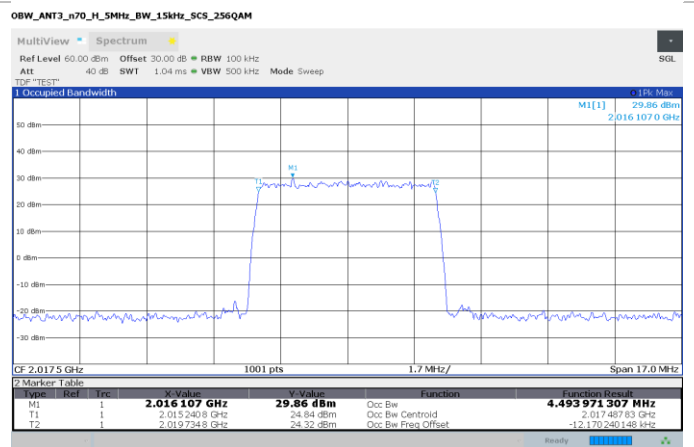
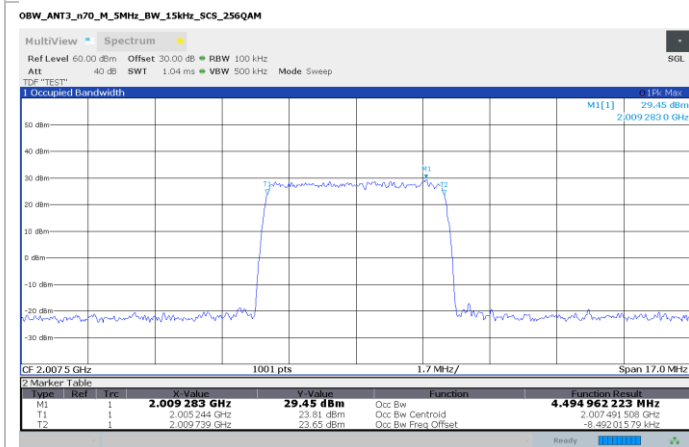
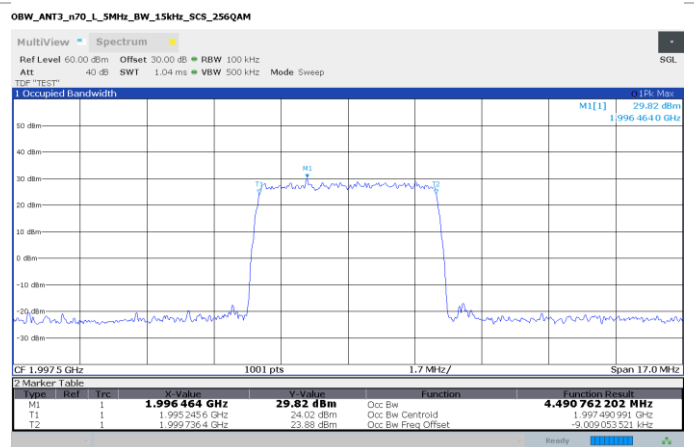
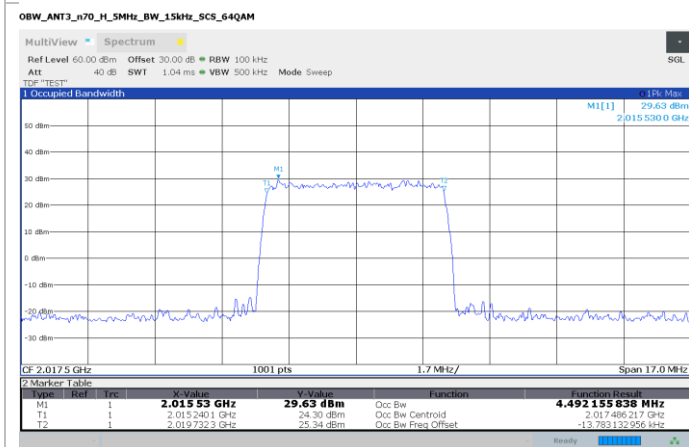
Band n70

5 MHz



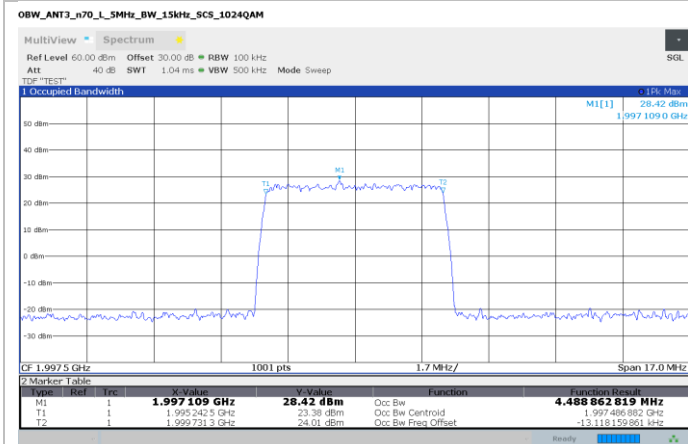
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



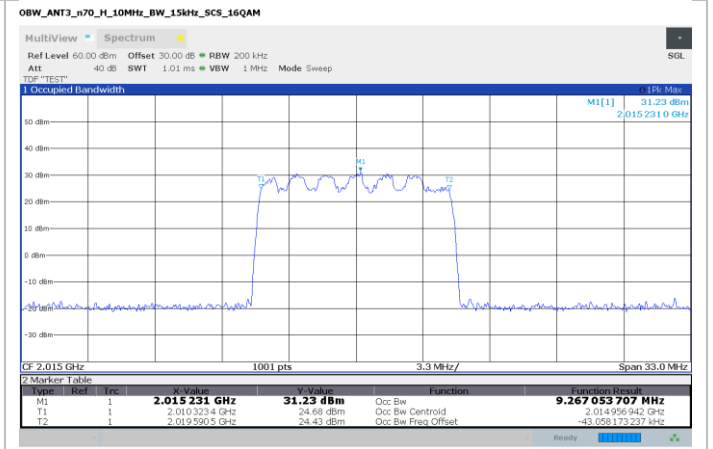
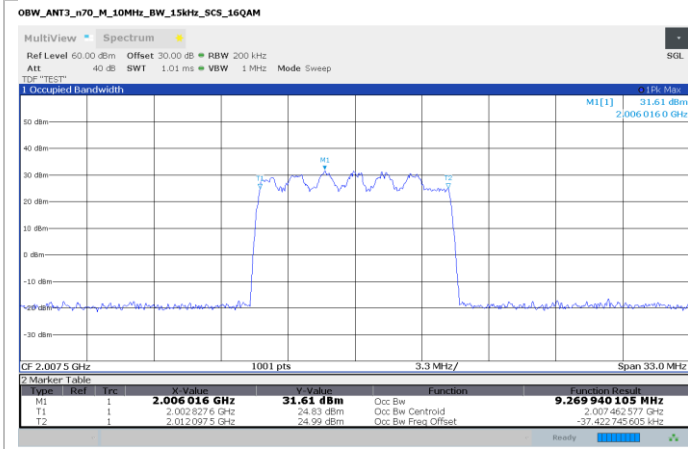
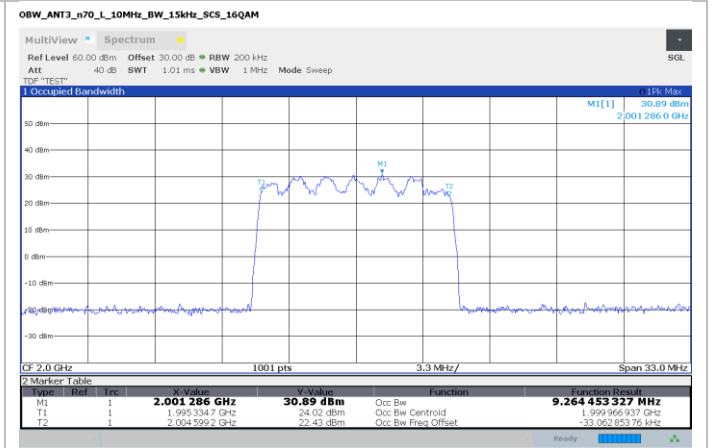
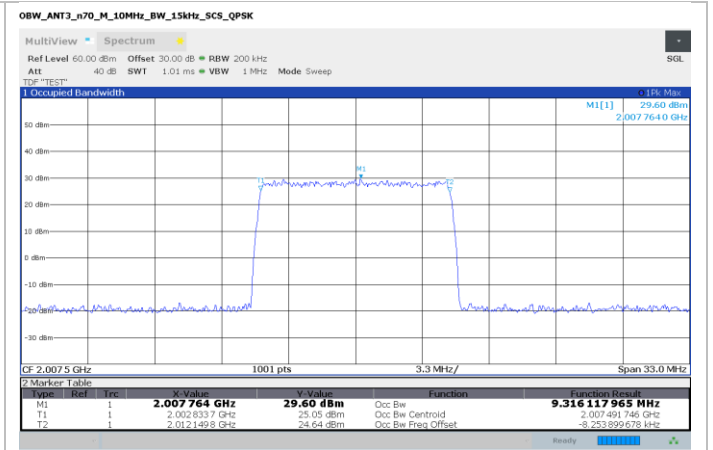
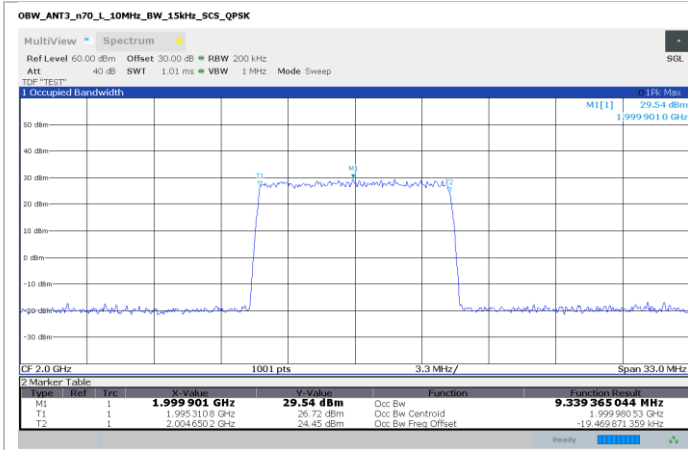
**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



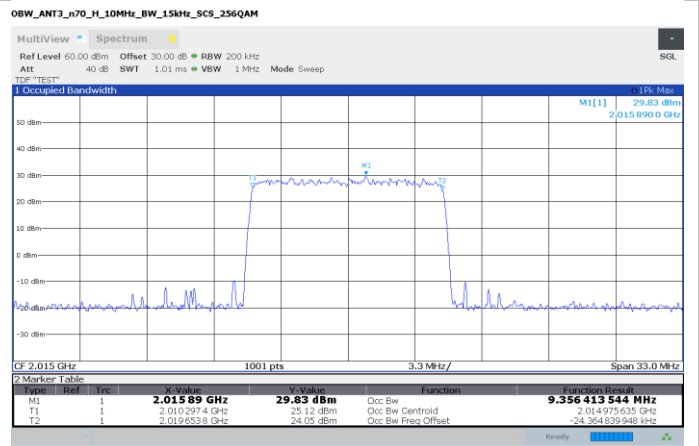
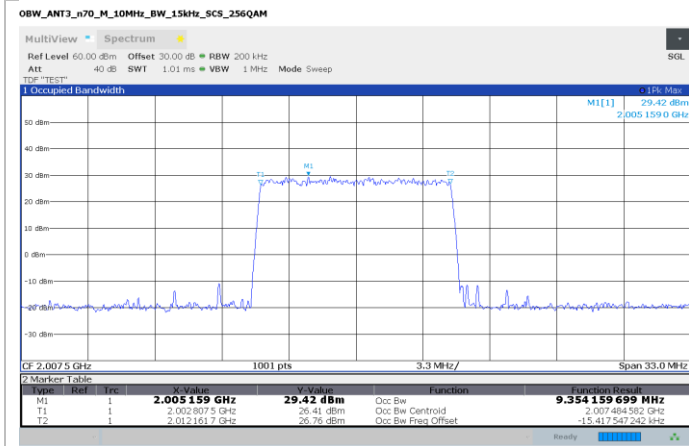
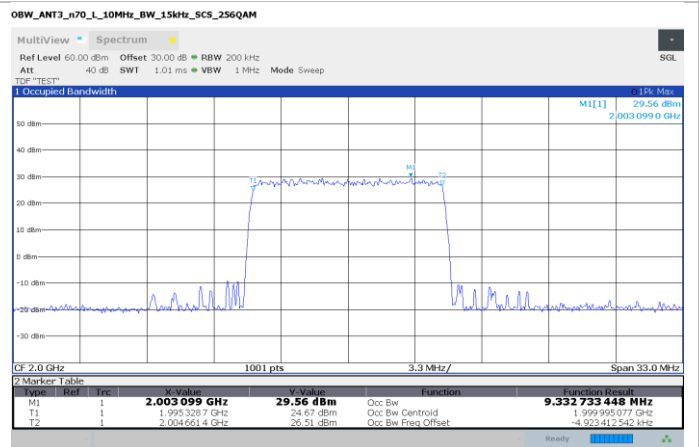
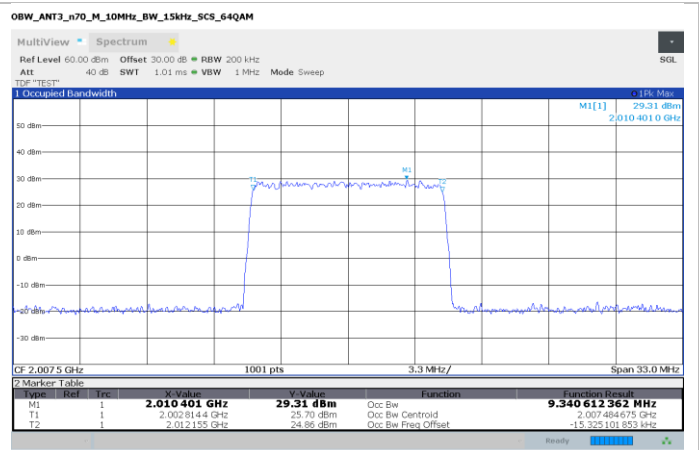
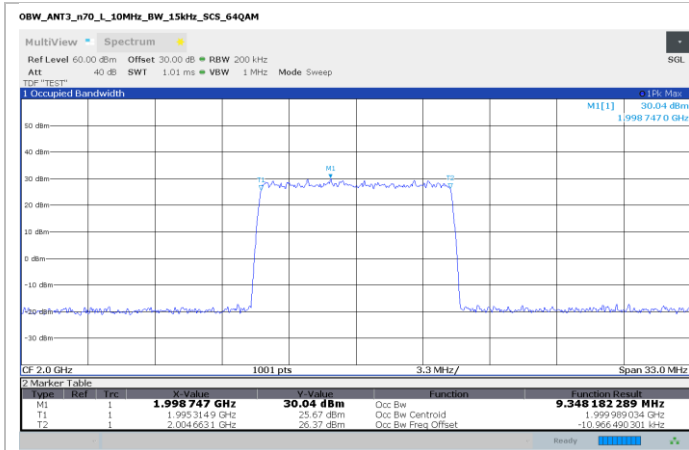
Band n70

10 MHz



**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27



**Section 8**  
**Test name**  
**Specification**

Testing data  
 FCC §2.1049(h) 99% Occupied Bandwidth  
 FCC Part 27

