



RF MEASUREMENT REPORT

FCC ID: R68NTC551
Applicant: Lantronix, Inc.
Product: 5G Industrial IOT Router
Model No.: NTC-551
Brand Name: Lantronix
FCC Rule(s): Part 27 Subpart O & Q, Part 96
Result: Complies
Received Date: 2023-10-27
Test Date: 2024-01-12 ~ 2024-01-17

Reviewed By:

Sunny Sun

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26-2015. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2310RSU045-U9	V01	Initial Report	2024-01-25	Invalid
2310RSU045-U9	V02	Updated the cellular antenna gain	2024-02-07	Invalid
2310RSU045-U9	V03	Modify applicant & manufacturer information	2025-06-17	Valid

CONTENTS

Description	Page
1. General Information	5
1.1. Applicant	5
1.2. Manufacturer	5
1.3. Testing Facility	5
1.4. Product Information	6
1.5. Radio Specification under Testing	6
1.6. Description of Available Antennas	7
1.7. Test Methodology	7
2. Test Configuration	8
2.1. Test System Connection Diagram	8
2.2. Test Environment Condition	8
3. Measuring Instrument	9
4. Decision Rules and Measurement Uncertainty	10
4.1. Decision Rules	10
4.2. Measurement Uncertainty	10
5. Test Result	11
5.1. Summary	11
5.2. Occupied Bandwidth Measurement	12
5.2.1. Test Limit	12
5.2.2. Test Procedure	12
5.2.3. Test Setting	12
5.2.4. Test Setup	12
5.2.5. Test Result	12
5.3. Frequency Stability Measurement	13
5.3.1. Test Limit	13
5.3.2. Test Procedure	13
5.3.3. Test Setting	13
5.3.4. Test Setup	14
5.3.5. Test Result	14
5.4. Equivalent Isotropically Radiated Power Measurement	15
5.4.1. Test Limit	15
5.4.2. Test Procedure	15
5.4.3. Test Setting	15
5.4.4. Test Setup	16

5.4.5.	Test Result	16
5.5.	Peak to Average Ratio Measurement	17
5.5.1.	Test Limit	17
5.5.2.	Test Procedure	17
5.5.3.	Test Setting	17
5.5.4.	Test Setup	17
5.5.5.	Test Result	17
5.6.	Band Edge Measurement	18
5.6.1.	Test Limit	18
5.6.2.	Test Procedure	18
5.6.3.	Test Setting	19
5.6.4.	Test Setup	19
5.6.5.	Test Result	19
5.7.	Conducted Spurious Emissions Measurement.....	20
5.7.1.	Test Limit	20
5.7.2.	Test Procedure	20
5.7.3.	Test Setting	20
5.7.4.	Test Setup	21
5.7.5.	Test Result	21
5.8.	Radiated Spurious Emissions Measurement.....	22
5.8.1.	Test Limit	22
5.8.2.	Test Procedure	22
5.8.3.	Test Setting	22
5.8.4.	Test Setup	23
5.8.5.	Test Result	23
Appendix A - Test Result		24
A.1	Occupied Bandwidth Test Result	24
A.2	Frequency Stability Test Result.....	30
A.3	Equivalent Isotropically Radited Power Test Result.....	32
A.4	Peak to Average Radio Test Result	48
A.5	Band Edge Test Result	50
A.6	Conducted Spurious Emissions Test Result	68
A.7	Radiated Spurious Emissions Test Result	74
Appendix B - Test Setup Photograph		76
Appendix C - EUT Photograph		77

1. General Information

1.1. Applicant

Lantronix, Inc.

48 Discovery, Suite 250, Irvine, California, 92618, United States

1.2. Manufacturer

Lantronix, Inc.

48 Discovery, Suite 250, Irvine, California, 92618, United States

1.3. Testing Facility

☒	Test Site – MRT Suzhou Laboratory				
	Laboratory Location (Suzhou - Wuzhong)				
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China				
	Laboratory Location (Suzhou - SIP)				
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
☐	Laboratory Accreditations				
	A2LA: 3628.01		CNAS: L10551		
	FCC: CN1166		ISED: CN0001		
	VCCI:	☐ R-20025	☐ G-20034	☐ C-20020	☐ T-20020
		☐ R-20141	☐ G-20134	☐ C-20103	☐ T-20104
☐	Test Site – MRT Shenzhen Laboratory				
	Laboratory Location (Shenzhen)				
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
☐	FCC: CN1284		ISED: CN0105		
	Test Site – MRT Taiwan Laboratory				
	Laboratory Location (Taiwan)				
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
☐	TAF: 3261				
	FCC: 291082, TW3261		ISED: TW3261		

1.4. Product Information

Product Name	5G Industrial IOT Router
Model No.	NTC-551
IMEI	863109050035497
GNSS Specification	GPS/Galileo/GLONASS/BDS
Bluetooth Specification	V4.0 single mode
Wi-Fi Specification	802.11a/b/g/n/ac/ax
3GPP Specification	LTE Band 2/4/5/7/12/13/14/17/25/26/29/30/38/41/42/43/46/48/66/71 NR SA/NSA Band n2/5/7/12/13/14/25/26/29/30/38/41/48/66/70/71/77/78
Temperature Operating Range	-30 ~ 70 °C
Power Supply Rating	8 ~ 40Vdc, typical 12Vdc
Integrated Modular Information	
Modular Name	5G Sub-6 GHz LGA Module
Mode No.	RG520N-NA
FCC ID	XMR2023RG520NNA
Manufacturer	Quectel
Accessories	
AC/DC adapter	Model No.: AD0361-1203000F Input: 100V-240V~50-60Hz 1.0A Max Output: 12.0V=3.0A 36.0W
Remark:	
1. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	
2. The Bluetooth BLE function of the device is implemented by ESP32-D0WDQ6-V3 chipset.	

1.5. Radio Specification under Testing

E-UTRA Specification	
TX&RX Frequency Range	LTE Band 42: 3450 ~ 3550MHz LTE Band 43: 3700 ~ 3800MHz LTE Band 42: 3550 ~ 3600MHz LTE Band 43: 3600 ~ 3700MHz
Modulation	UL up to 256QAM & DL up to 256QAM
Power Class	3

1.6. Description of Available Antennas

Technology	Frequency Range (MHz)	Antenna Type	MaxPeak Gain (dBi)
Band 42	3450 ~ 3550	Isotropic	8
Band 43	3700 ~ 3800		8
Band 42	3550 ~ 3600		8
Band 43	3600 ~ 3700		8

Note 1: All antenna information (Antenna type and Peak Gain) is provided by the manufacturer.

Note 2: The representative antennas used for radiation spurious emission tests.

Technology	Frequency Range (MHz)	Antenna Type	MaxPeak Gain (dBi)
Band 42	3450 ~ 3550	Dipole	-2.4
Band 43	3700 ~ 3800		-2.4
Band 42	3550 ~ 3600		-2.4
Band 43	3600 ~ 3700		-2.4

Note 1: All antenna information (Antenna type and Peak Gain) is provided by the manufacturer.

Note 2: The representative antennas used to calculate the ERP (EIRP).

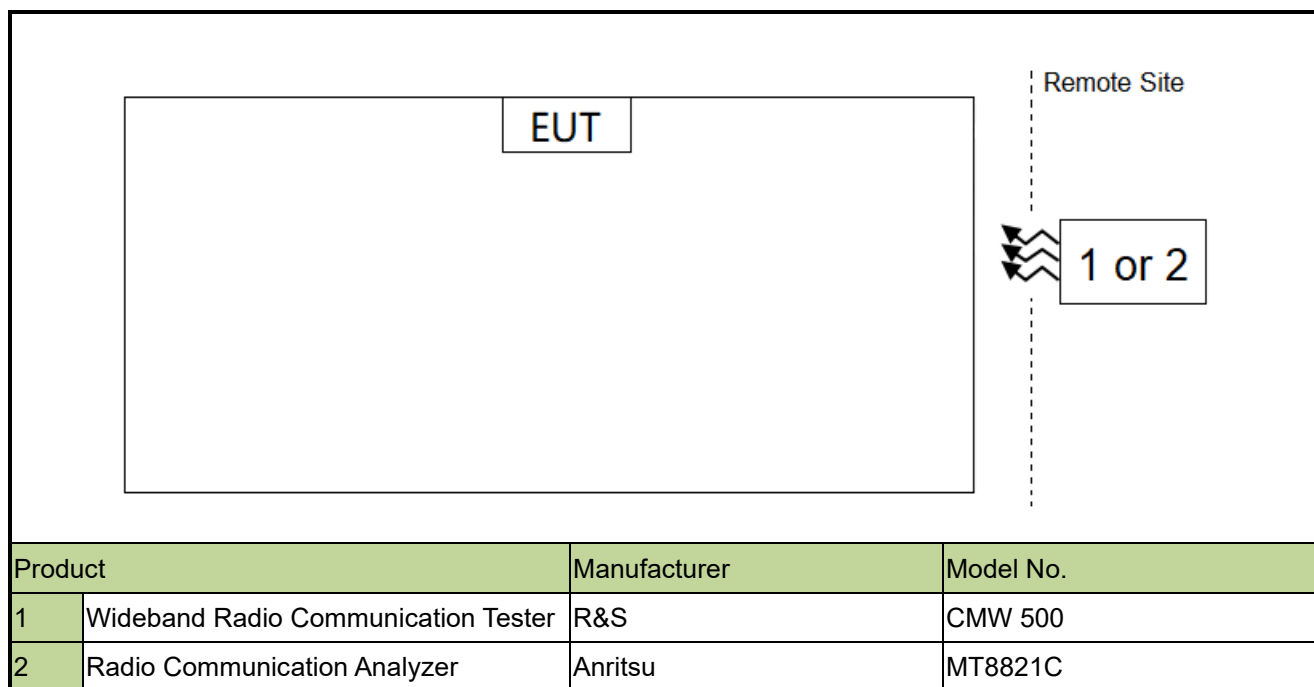
1.7. Test Methodology

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 27, Part 96
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems
- FCC KDB 971168 D02 v02r01: Misc Rev Approv License Devices
- FCC KDB 412172 D01 v01r01: Determining ERP and EIRP

2. Test Configuration

2.1. Test System Connection Diagram



2.2. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20% ~ 75%RH

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2024-12-17	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2024-08-09	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06024	1 year	2024-10-11	WZ-AC1
Preamplifier	Agilent	83017A	MRTSUE06076	1 year	2024-05-07	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2024-06-09	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2024-04-20	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE06403	1 year	2024-05-31	WZ-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2024-10-23	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE11039	1 year	2024-10-25	WZ-AC1
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2024-09-27	WZ-TR3
Vibration Test System	DongLing	ES-1-150	MRTSUE06206	1 year	2024-07-02	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE11268	1 year	2024-12-14	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE06362	1 year	2024-02-14	WZ-SR6
Shielding Room	HUAMING	WZ-SR6	MRTSUE06443	N/A	N/A	WZ-SR6
Signal Analyzer	Keysight	N9020B	MRTSUE06583	1 year	2024-09-27	WZ-SR6
Signal Generator	Keysight	N5173B	MRTSUE06606	1 year	2024-10-23	WZ-SR6
5G Wireless Test Platform	Keysight	E7515B	MRTSUE06942	1 year	2024-02-29	WZ-SR6
Radio Communication Test Station	Anritsu	MT8000A	MRTSUE06961	1 year	2024-06-29	WZ-SR6

Software	Version	Function
EMI V3	V3.0.0	EMI Test Software
Controller_MF 7802	2.03C	RE Antenna & Turntable
Controller_MF 7802	1.02	RE Antenna & Turntable

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.

(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Radiated Spurious Emissions	
The maximum measurement uncertainty is evaluated as:	
Coaxial:	9kHz~30MHz: 2.59dB
Coplanar:	9kHz~30MHz: 2.60dB
Horizontal:	30MHz~200MHz: 3.85dB
	200MHz~1GHz: 4.36dB
	1GHz~40GHz: 4.98dB
Vertical:	30MHz~200MHz: 4.06dB
	200MHz~1GHz: 5.28dB
	1GHz~40GHz: 4.91dB
Conducted Spurious Emissions	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
1.47dB	
Output Power	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
0.66dB	
Occupied Bandwidth	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
69.28kHz	
Frequency Stability	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$):	
8.04Hz	

5. Test Result

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result
2.1049	Occupied Bandwidth	Conducted	Pass
27.54	Frequency Stability		Pass
27.50(k)(3) (j)(3)	Equivalent Radiated Power		Pass
27.50(k)(4) (j)(4)	Peak to Average Ratio		Pass
27.53(n)(2) (l)(2) 96.41(e)(1)	Band Edge		Pass
27.53(n)(2) (l)(2)	Spurious Emission		Pass
27.53(n)(2) (l)(2)	Spurious Emissions	Radiated	Pass

Notes:

- 1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 2) All supported modulation types were evaluated. The worst-case emission of modulation was selected. Therefore, the Frequency Stability, Peak to Average Ratio, Channel Band Edge, Conducted Spurious Emission, Radiated Spurious Emission were presented the worst-case in the test report.
- 3) For radiated emission tests, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
- 4) Band 48 (3550 ~ 3700 MHz) overlaps the entire frequency range of Band 42 (3550 ~ 3600 MHz). Therefore, test data provided in this report covers Band 42 as well as Band 48.
- 5) Band 48 (3550 ~ 3700 MHz) overlaps the entire frequency range of Band 43 (3600 ~ 3700 MHz). Therefore, test data provided in this report covers Band 43 as well as Band 48.
- 6) The test data of Band 48 (3550 ~ 3700 MHz) is based on reference FCC ID: XMR2023RG520NNA, added the Bandedge test data of LTE Band 42 (3550 ~ 3600 MHz) / 43 (3600 ~ 3700 MHz).

5.2. Occupied Bandwidth Measurement

5.2.1. Test Limit

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

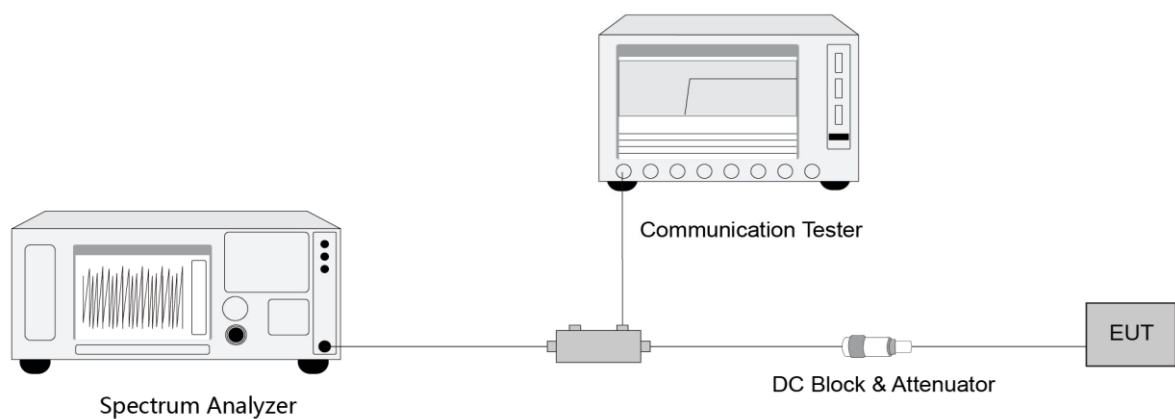
5.2.2. Test Procedure

ANSI C63.26-2015 - Section 5.4

5.2.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency
2. RBW = The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

5.2.4. Test Setup



5.2.5. Test Result

Refer to Appendix A.1.

5.3. Frequency Stability Measurement

5.3.1. Test Limit

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

5.3.2. Test Procedure

ANSI C63.26-2015 - Section 5.4 & 5.6

5.3.3. Test Setting

1. Use the occupied bandwidth function of the instrument and record the low edge for low channel occupancy bandwidth and the high edge for high channel occupancy bandwidth.
2. Change the temperature of equipment and repeat Steps 1.
3. Change the Voltage of equipment and repeat Steps 1.
4. Use the frequency error function of the instrument and record the frequency error.
5. Change the temperature of equipment and repeat Steps 4.
6. Change the Voltage of equipment and repeat Steps 4.

Frequency Stability Under Temperature Variations:

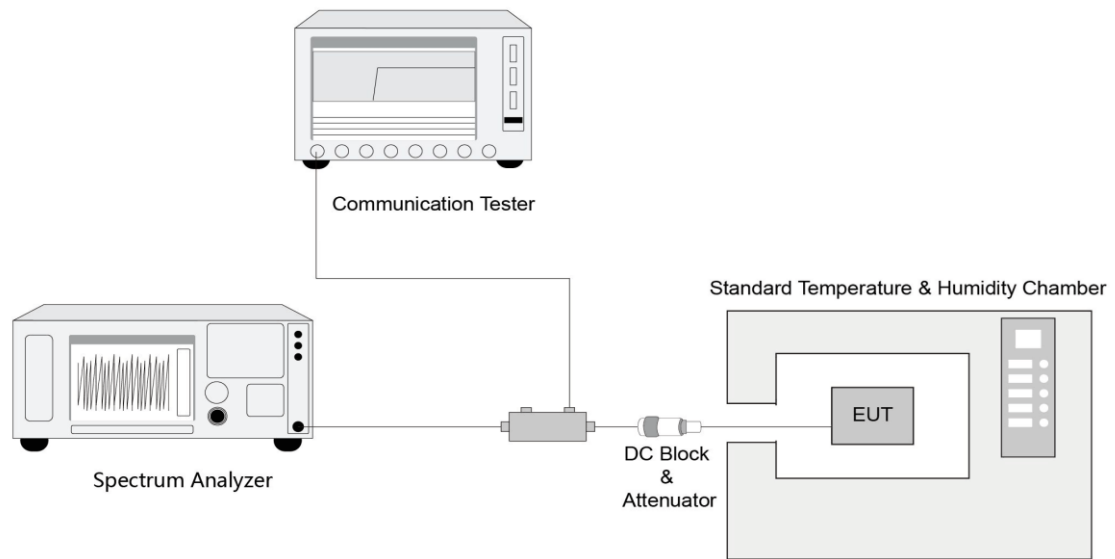
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

5.3.4. Test Setup



5.3.5. Test Result

Refer to Appendix A.2.

5.4. Equivalent Isotropically Radiated Power Measurement

5.4.1. Test Limit

The EIRP of mobile transmitters must not exceed 1 watt.

5.4.2. Test Procedure

ANSI C63.26-2015 - Section 5.2

5.4.3. Test Setting

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

Average Power Density Measurement

1. Set span to $2 \times$ to $3 \times$ the OBW;
2. Set RBW = 1MHz;
3. Set VBW $\geq 3 \times$ RBW;
4. Set number of measurement points in sweep $\geq 2 \times$ span / RBW;
5. Sweep time set to auto;
6. Detector = power averaging (rms);
7. If the EUT can be configured to transmit continuously, then set the trigger to free run;
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over multiple symbols, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.
9. Compute power by integrating the spectrum across the specified bandwidth of the signal using the instrument's band or channel power measurement function with band/channel limits set equal to the specified bandwidth band edges. If the instrument does not have a band or channel power function, sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire specified bandwidth of the spectrum.

EIRP & ERP Measurement

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

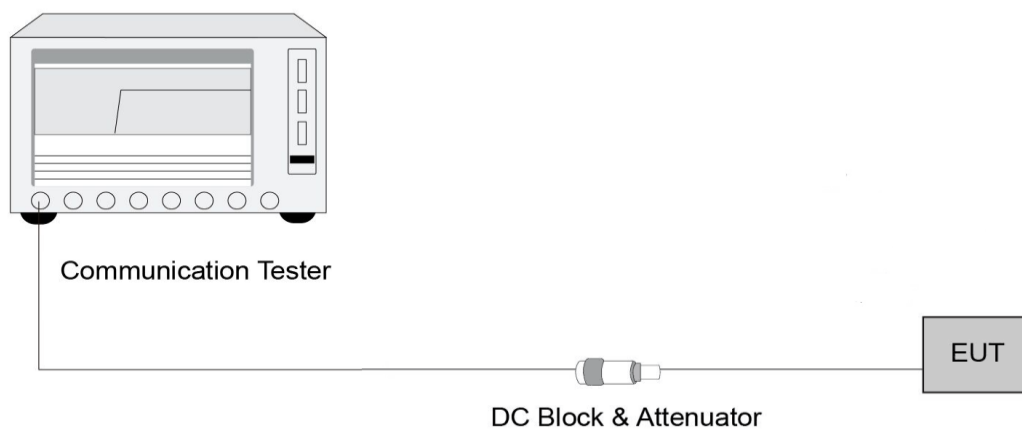
$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , e.g., dBm or dBW)

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

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

5.4.4. Test Setup**5.4.5. Test Result**

Refer to Appendix A.3.

5.5. Peak to Average Ratio Measurement

5.5.1. Test Limit

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

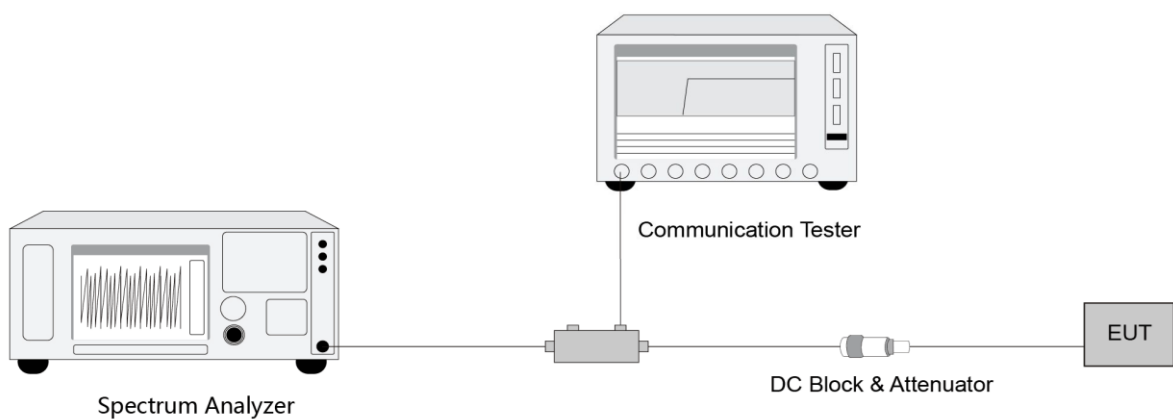
5.5.2. Test Procedure

ANSI C63.26-2015 - Section 5.2.3.4 (CCDF).

5.5.3. Test Setting

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

5.5.4. Test Setup



5.5.5. Test Result

Refer to Appendix A.4

5.6. Band Edge Measurement

5.6.1. Test Limit

27.53 (n)(2)

For mobile operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) 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, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

27.53 (l)(2)

For mobile operations in the 3700–3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(2) 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, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

96.41 (e) (1)

For End User Device in the 3550–3700 MHz band, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz.

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

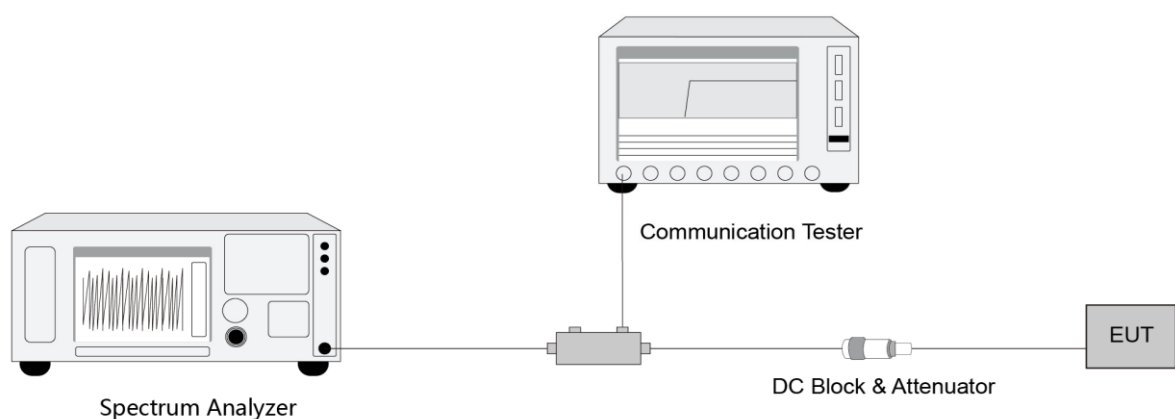
5.6.2. Test Procedure

ANSI C63.26-2015 - Section 5.7

5.6.3. Test Setting

1. Set the analyzer frequency to low or high channel
2. $RBW \geq$ The nominal RBW shall be in the range of 1% of the anticipated OBW (in the 1MHz band immediately outside and adjacent to the band edge). For improvement of the accuracy in the measurement of the average power of a noise-like emission, a RBW narrower than the specified reference bandwidth can be used (generally limited to no less than 1% of the OBW), provided that a subsequent integration is performed over the full required measurement bandwidth. This integration should be performed using the spectrum analyzer's band power functions.
3. $VBW \geq 3 \times RBW$
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run."
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

5.6.4. Test Setup



5.6.5. Test Result

Refer to Appendix A.5.

5.7. Conducted Spurious Emissions Measurement

5.7.1. Test Limit

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

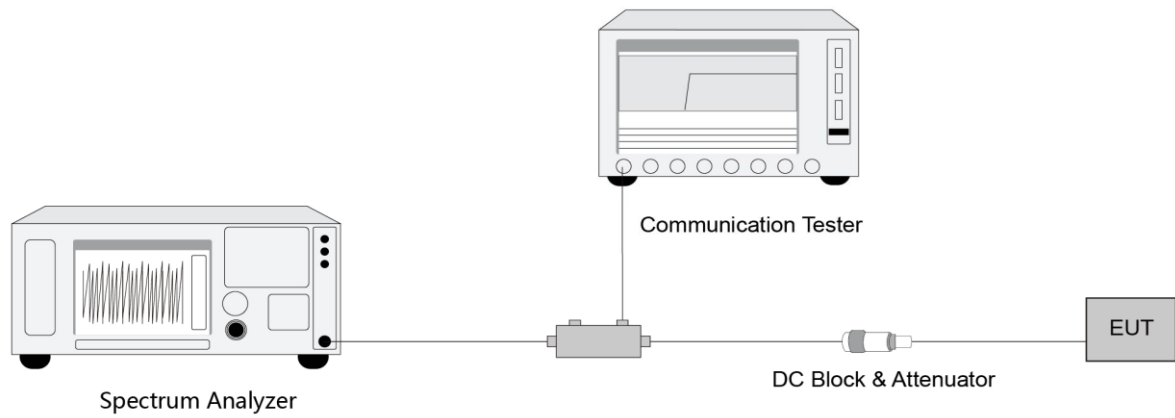
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

5.7.2. Test Procedure

ANSI C63.26-2015 - Section 5.7

5.7.3. Test Setting

1. Set the analyzer frequency to low, mid, high channel.
2. RBW = 1MHz
3. VBW $\geq 3 \times$ RBW
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run."
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power.
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

5.7.4. Test Setup**5.7.5. Test Result**

Refer to Appendix A.6

5.8. Radiated Spurious Emissions Measurement

5.8.1. Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

E (dBμV/m) = EIRP (dBm) - $20 \log D$ + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m.

5.8.2. Test Procedure

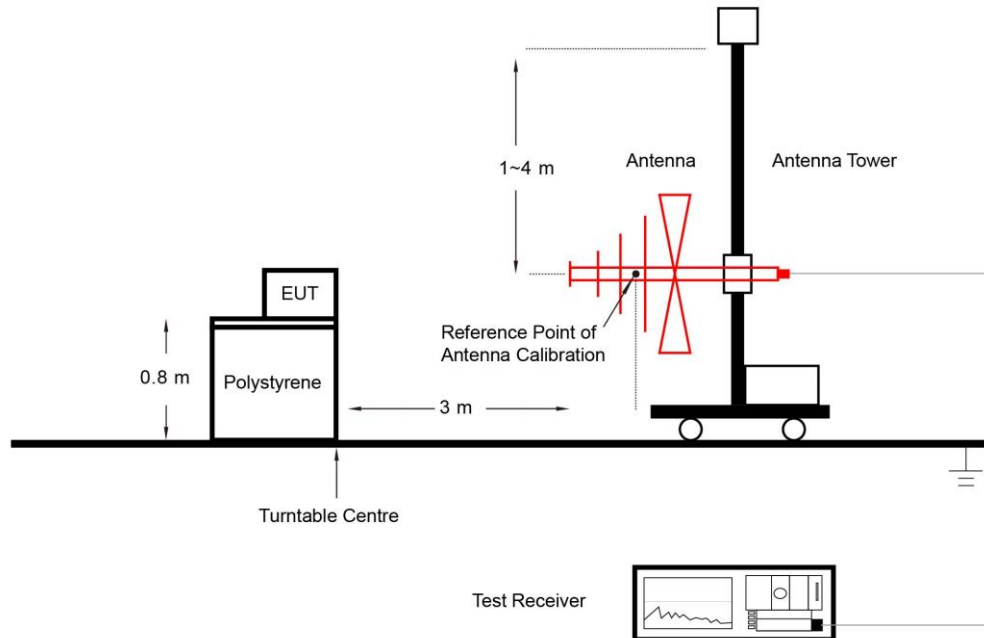
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.8.3. Test Setting

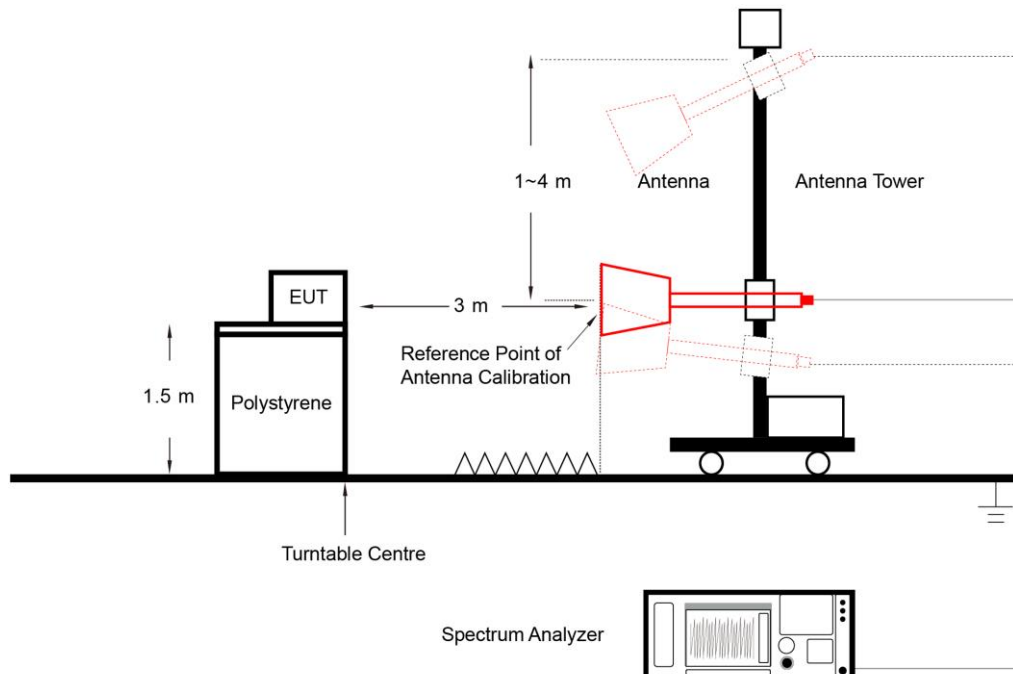
1. RBW = 1MHz
2. VBW $\geq 3 \times$ RBW
3. Sweep time $\geq 10 \times$ (number of points in sweep) $\times$ (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.8.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.8.5. Test Result

Refer to Appendix A.7.

Appendix A - Test Result

A.1 Occupied Bandwidth Test Result

Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-13	Test Band	Band 42 (3450 ~ 3550 MHz)

Modulation	Bandwidth (MHz)	Frequency (MHz)	99% Bandwidth (MHz)
QPSK	5	3500.0	4.4687
	10		8.9353
	15		13.363
	20		17.842
16QAM	5	3500.0	4.4758
	10		8.9388
	15		13.408
	20		17.844
64QAM	5	3500.0.	4.4703
	10		8.9407
	15		13.399
	20		17.836
256QAM	5	3500.0	4.4765
	10		8.9353
	15		13.397
	20		17.836

99% Bandwidth - QPSK

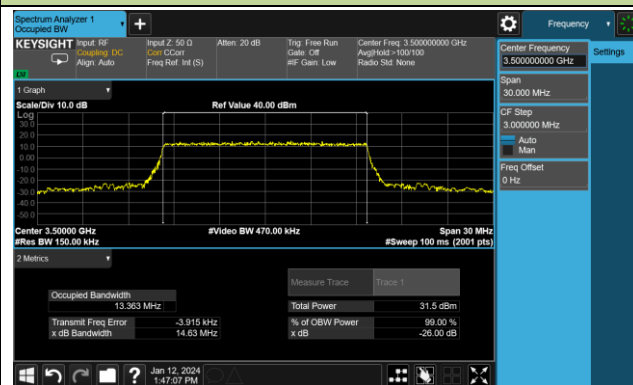
5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth

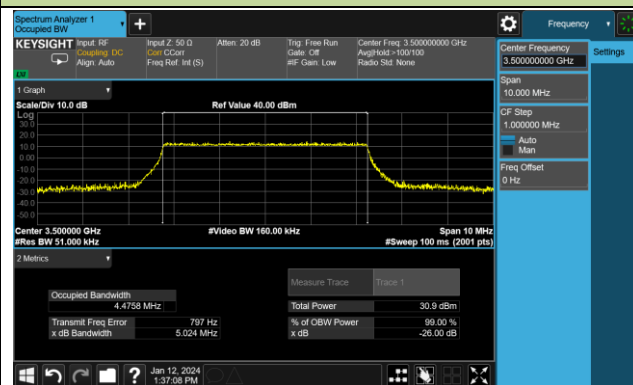


20MHz Channel Bandwidth

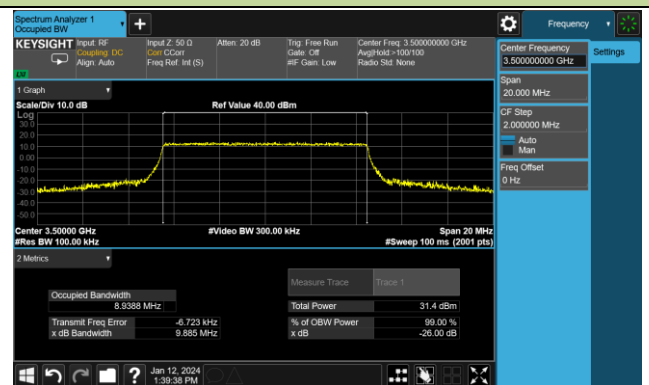


99% Bandwidth - 16QAM

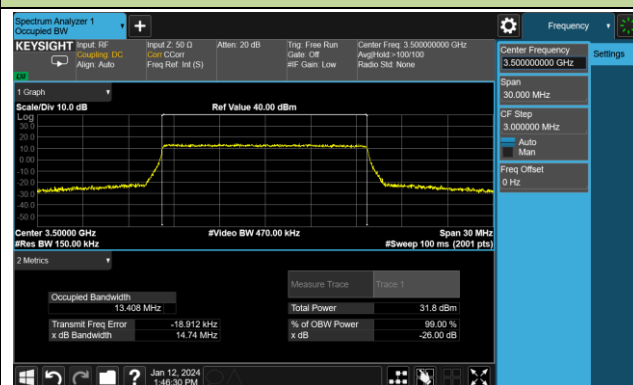
5MHz Channel Bandwidth



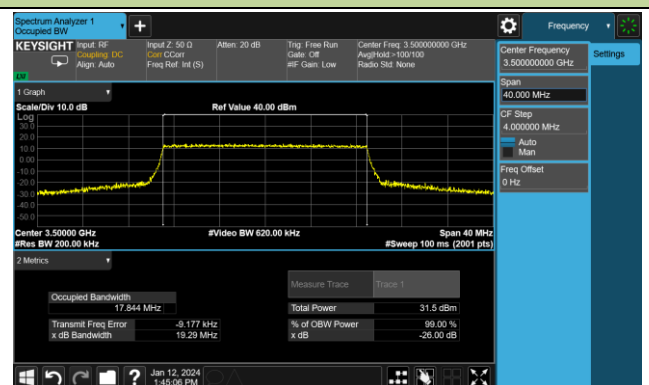
10MHz Channel Bandwidth



15MHz Channel Bandwidth

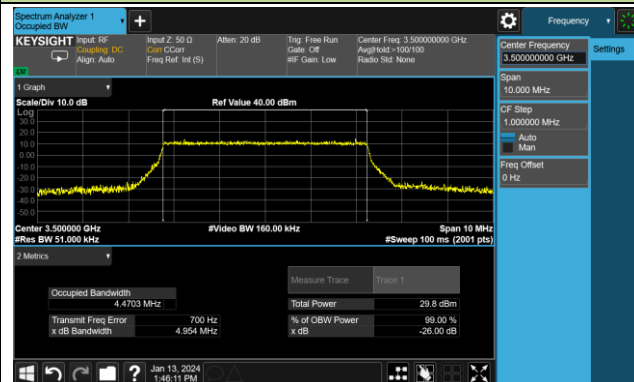


20MHz Channel Bandwidth



99% Bandwidth – 64QAM

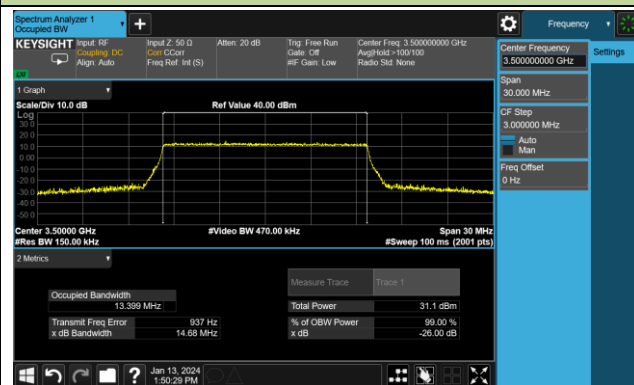
5MHz Channel Bandwidth



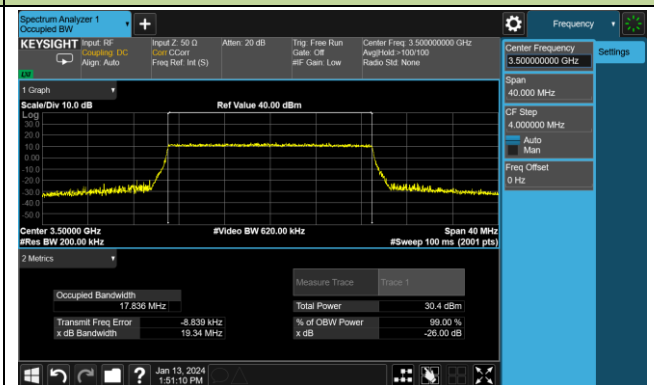
10MHz Channel Bandwidth



15MHz Channel Bandwidth

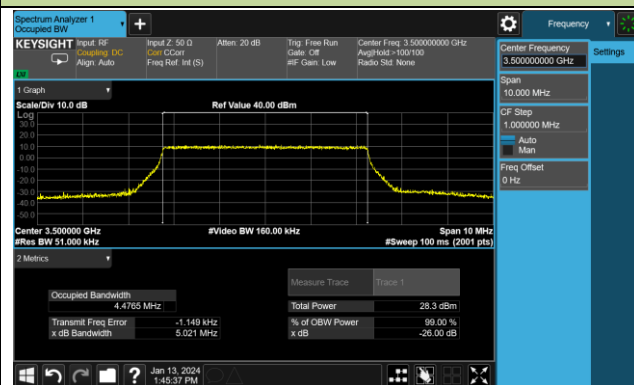


20MHz Channel Bandwidth

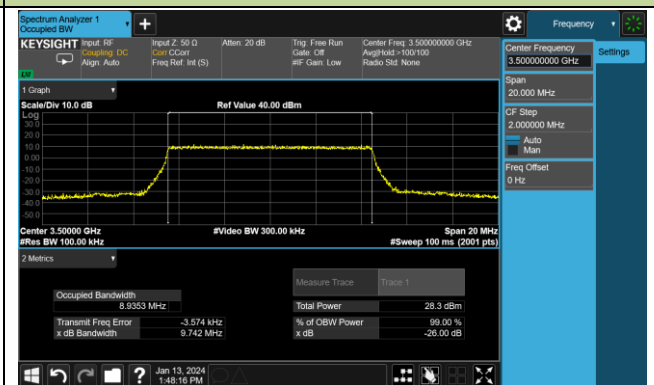


99% Bandwidth – 256QAM

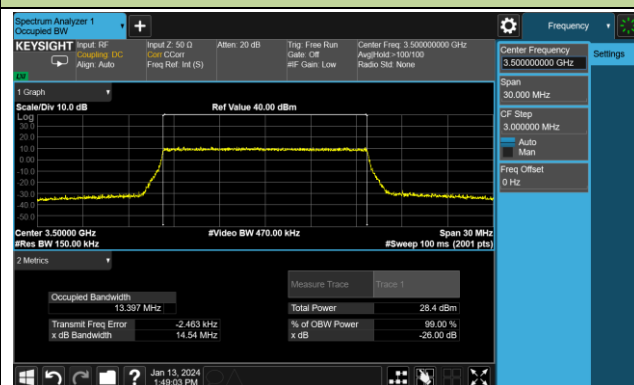
5MHz Channel Bandwidth



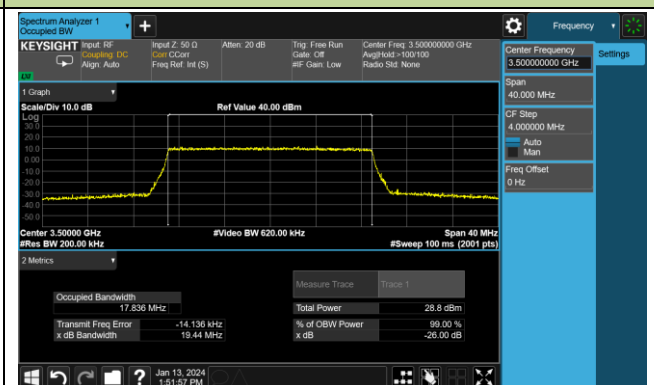
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth

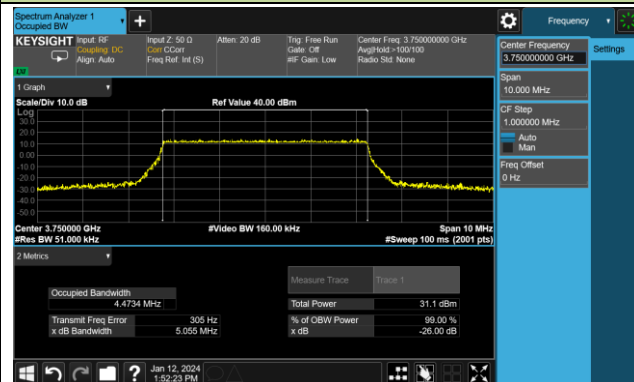


Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-13	Test Band	Band 43 (3700 ~ 3800 MHz)

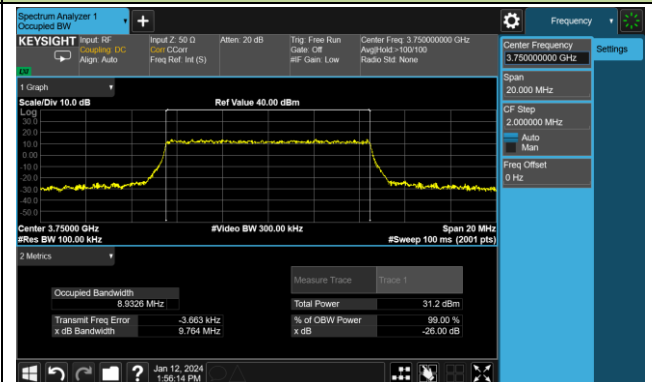
Modulation	Bandwidth (MHz)	Frequency (MHz)	99% Bandwidth (MHz)
QPSK	5	3750.0	4.4734
	10		8.9326
	15		13.389
	20		17.860
16QAM	5	3750.0	4.4721
	10		8.9370
	15		13.405
	20		17.876
64QAM	5	3750.0	4.4747
	10		8.9392
	15		13.406
	20		17.843
256QAM	5	3750.0	4.4711
	10		8.9379
	15		13.380
	20		17.830

99% Bandwidth - QPSK

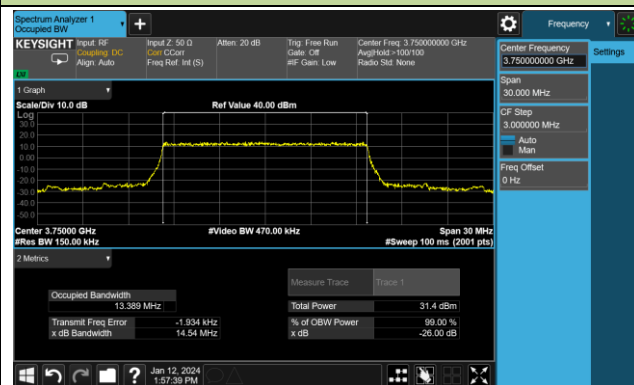
5MHz Channel Bandwidth



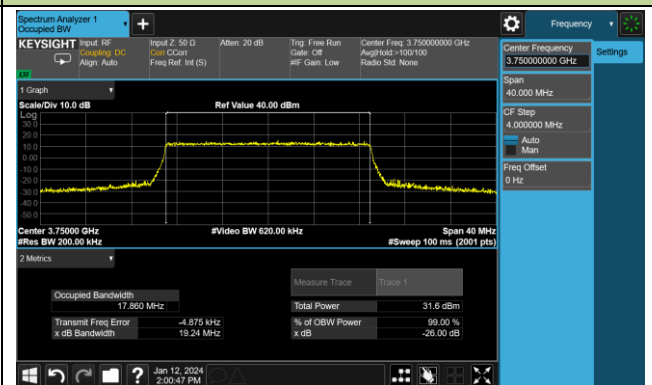
10MHz Channel Bandwidth



15MHz Channel Bandwidth

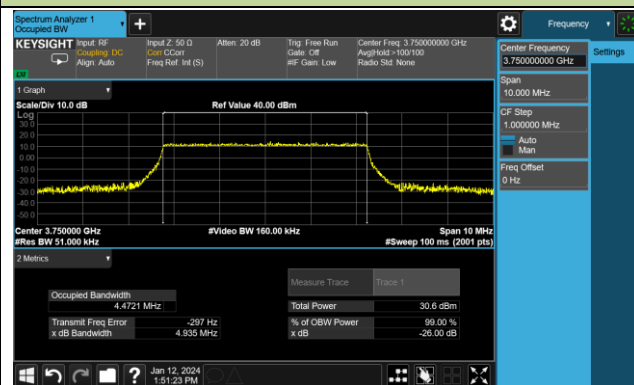


20MHz Channel Bandwidth



99% Bandwidth - 16QAM

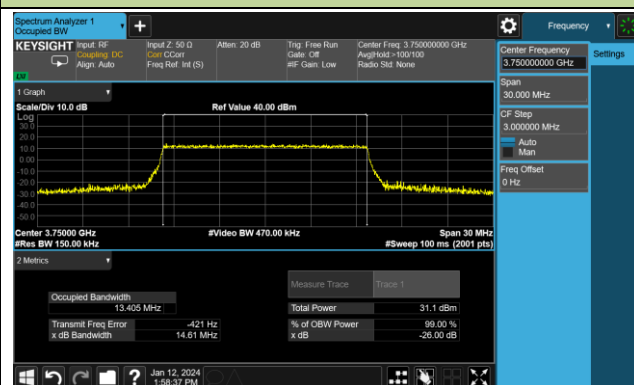
5MHz Channel Bandwidth



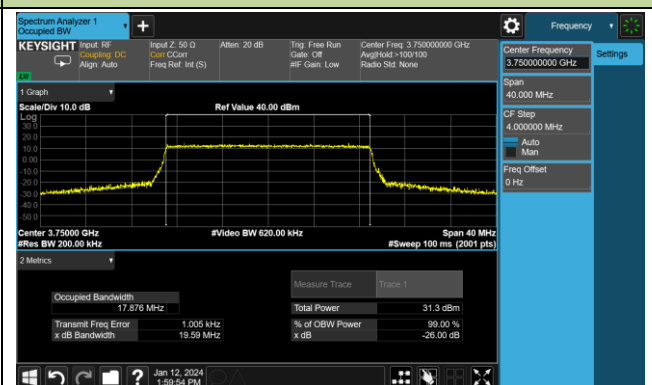
10MHz Channel Bandwidth



15MHz Channel Bandwidth

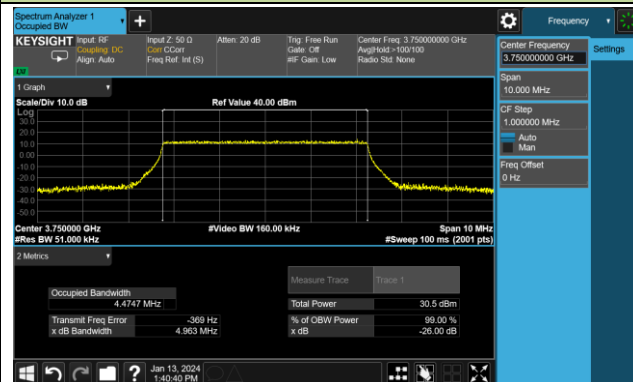


20MHz Channel Bandwidth

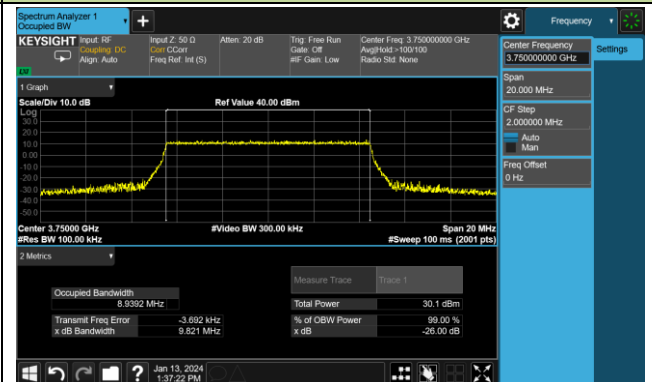


99% Bandwidth – 64QAM

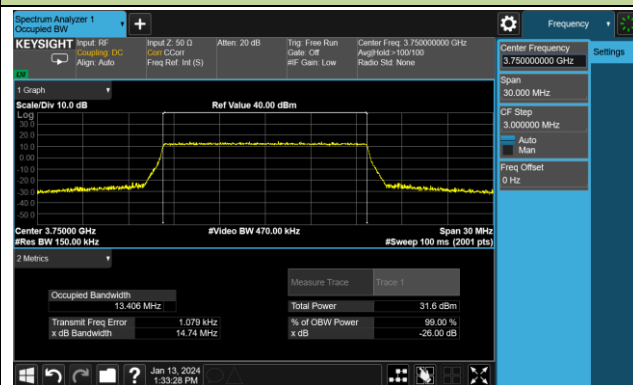
5MHz Channel Bandwidth



10MHz Channel Bandwidth



15MHz Channel Bandwidth

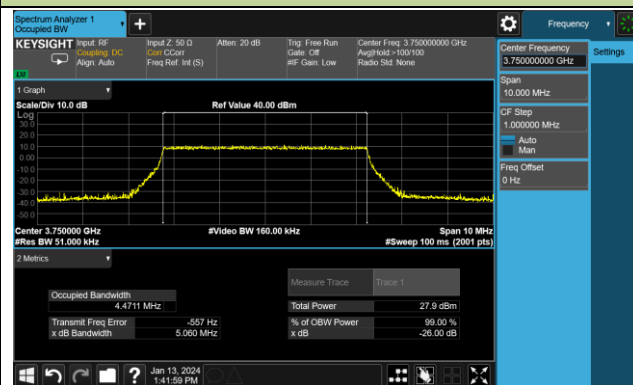


20MHz Channel Bandwidth



99% Bandwidth – 256QAM

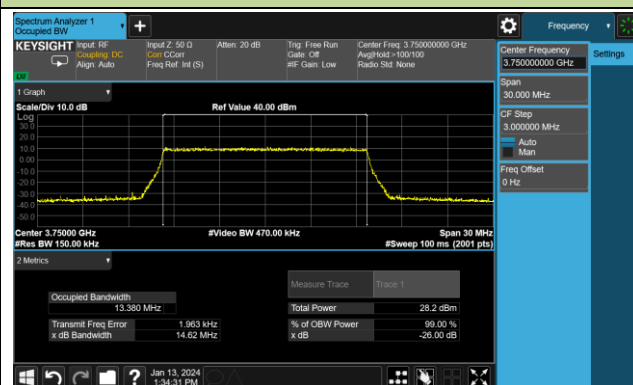
5MHz Channel Bandwidth



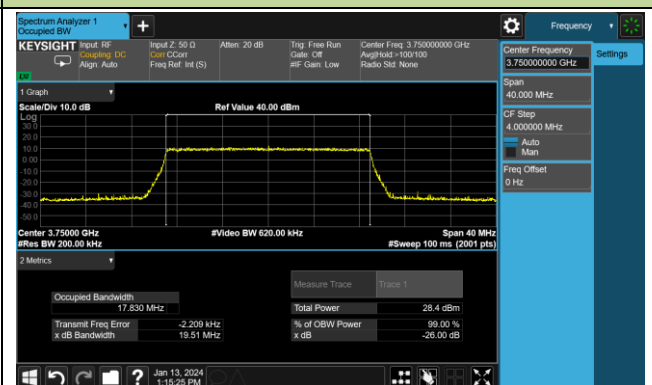
10MHz Channel Bandwidth



15MHz Channel Bandwidth



20MHz Channel Bandwidth



A.2 Frequency Stability Test Result

Test Site	WZ-TR3	Test Engineer	Lucas Wang
Test Date	2024-01-17	Test Band	Band 42 (3450 ~ 3550 MHz)

Voltage	Temp (°C)	Frequency Range (MHz)		Delta (Hz)	Frequency stability (ppm)	Within Authorized Frequency Block
		3450	3550			
		F _L	F _H			
Normal	+ 20 (Ref)	3450.1550	3549.8300	0.00	0.0000	Pass
	+ 50	3450.1550	3549.8300	0.20	0.0001	Pass
	+ 40	3450.1550	3549.8300	-1.50	-0.0004	Pass
	+ 30	3450.1550	3549.8300	-0.30	-0.0001	Pass
	+ 10	3450.1550	3549.8300	-1.30	-0.0004	Pass
	0	3450.1550	3549.8300	0.10	0.0000	Pass
	- 10	3450.1550	3549.8300	1.30	0.0004	Pass
	- 20	3450.1550	3549.8300	1.20	0.0003	Pass
	- 30	3450.1550	3549.8300	1.50	0.0004	Pass
15%	+ 20	3450.1550	3549.8300	-0.60	-0.0002	Pass
-15%	+ 20	3450.1550	3549.8300	-0.50	-0.0001	Pass

Test Site	WZ-TR3	Test Engineer	Lucas Wang
Test Date	2024-01-17	Test Band	Band 43 (3700 ~ 3800 MHz)

Voltage	Temp (°C)	Frequency Range (MHz)		Delta (Hz)	Frequency stability (ppm)	Within Authorized Frequency Block
		3700	3800			
		F _L	F _H			
Normal	+ 20 (Ref)	3700.1750	3799.8200	0.00	0.0000	Pass
	+ 50	3700.1750	3799.8200	1.40	0.0004	Pass
	+ 40	3700.1750	3799.8200	0.70	0.0002	Pass
	+ 30	3700.1750	3799.8200	-0.30	-0.0001	Pass
	+ 10	3700.1750	3799.8200	0.30	0.0001	Pass
	0	3700.1750	3799.8200	0.70	0.0002	Pass
	- 10	3700.1750	3799.8200	1.10	0.0003	Pass
	- 20	3700.1750	3799.8200	1.50	0.0004	Pass
	- 30	3700.1750	3799.8200	2.10	0.0006	Pass
15%	+ 20	3700.1750	3799.8200	0.10	0.0000	Pass
-15%	+ 20	3700.1750	3799.8200	-0.70	-0.0002	Pass

A.3 Equivalent Isotropically Radited Power Test Result

Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-13	Test Band	Band 42 (3450 ~ 3550 MHz)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	3452.50	1	0	23.10	20.70	< 30
	3500.00			22.91	20.51	< 30
	3547.50			23.10	20.70	< 30
5	3452.50	1	12	23.22	20.82	< 30
	3500.00			22.98	20.58	< 30
	3547.50			23.17	20.77	< 30
5	3452.50	1	24	23.14	20.74	< 30
	3500.00			22.89	20.49	< 30
	3547.50			23.13	20.73	< 30
5	3452.50	25	0	23.15	20.75	< 30
	3500.00			22.93	20.53	< 30
	3547.50			23.08	20.68	< 30
10	3455.00	1	0	23.19	20.79	< 30
	3500.00			22.95	20.55	< 30
	3545.00			23.07	20.67	< 30
10	3455.00	1	24	23.22	20.82	< 30
	3500.00			22.97	20.57	< 30
	3545.00			23.13	20.73	< 30
10	3455.00	1	49	23.18	20.78	< 30
	3500.00			22.84	20.44	< 30
	3545.00			23.13	20.73	< 30
10	3455.00	50	0	23.20	20.80	< 30
	3500.00			22.94	20.54	< 30
	3545.00			23.01	20.61	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	3457.50	1	0	23.01	20.61	< 30
	3500.00			22.81	20.41	< 30
	3542.50			22.82	20.42	< 30
15	3457.50	1	37	23.06	20.66	< 30
	3500.00			22.76	20.36	< 30
	3542.50			22.89	20.49	< 30
15	3457.50	1	74	22.99	20.59	< 30
	3500.00			22.69	20.29	< 30
	3542.50			22.87	20.47	< 30
15	3457.50	75	0	23.02	20.62	< 30
	3500.00			22.87	20.47	< 30
	3542.50			22.97	20.57	< 30
20	3460.00	1	0	23.01	20.61	< 30
	3500.00			22.87	20.47	< 30
	3540.00			22.83	20.43	< 30
20	3460.00	1	49	23.04	20.64	< 30
	3500.00			22.78	20.38	< 30
	3540.00			22.90	20.50	< 30
20	3460.00	1	99	22.92	20.52	< 30
	3500.00			22.71	20.31	< 30
	3540.00			22.84	20.44	< 30
20	3460.00	100	0	22.98	20.58	< 30
	3500.00			22.85	20.45	< 30
	3540.00			22.93	20.53	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM						
5	3452.50	1	0	23.30	20.90	< 30
	3500.00			23.08	20.68	< 30
	3547.50			23.24	20.84	< 30
5	3452.50	1	12	23.31	20.91	< 30
	3500.00			23.12	20.72	< 30
	3547.50			23.32	20.92	< 30
5	3452.50	1	24	23.28	20.88	< 30
	3500.00			23.06	20.66	< 30
	3547.50			23.31	20.91	< 30
5	3452.50	25	0	22.76	20.36	< 30
	3500.00			22.43	20.03	< 30
	3547.50			22.62	20.22	< 30
10	3455.00	1	0	23.33	20.93	< 30
	3500.00			23.11	20.71	< 30
	3545.00			23.16	20.76	< 30
10	3455.00	1	24	23.39	20.99	< 30
	3500.00			23.17	20.77	< 30
	3545.00			23.24	20.84	< 30
10	3455.00	1	49	23.34	20.94	< 30
	3500.00			23.07	20.67	< 30
	3545.00			23.23	20.83	< 30
10	3455.00	50	0	22.73	20.33	< 30
	3500.00			22.46	20.06	< 30
	3545.00			22.52	20.12	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM						
15	3457.50	1	0	23.19	20.79	< 30
	3500.00			23.02	20.62	< 30
	3542.50			22.96	20.56	< 30
15	3457.50	1	37	23.17	20.77	< 30
	3500.00			22.98	20.58	< 30
	3542.50			22.97	20.57	< 30
15	3457.50	1	74	23.10	20.70	< 30
	3500.00			22.92	20.52	< 30
	3542.50			22.95	20.55	< 30
15	3457.50	75	0	22.56	20.16	< 30
	3500.00			22.37	19.97	< 30
	3542.50			22.46	20.06	< 30
20	3460.00	1	0	23.06	20.66	< 30
	3500.00			23.00	20.60	< 30
	3540.00			23.09	20.69	< 30
20	3460.00	1	49	23.13	20.73	< 30
	3500.00			22.96	20.56	< 30
	3540.00			23.12	20.72	< 30
20	3460.00	1	99	22.97	20.57	< 30
	3500.00			22.88	20.48	< 30
	3540.00			23.07	20.67	< 30
20	3460.00	100	0	22.52	20.12	< 30
	3500.00			22.35	19.95	< 30
	3540.00			22.44	20.04	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
64QAM						
5	3452.50	1	0	23.14	20.74	< 30
	3500.00			22.84	20.44	< 30
	3547.50			23.04	20.64	< 30
5	3452.50	1	12	23.15	20.75	< 30
	3500.00			22.94	20.54	< 30
	3547.50			23.12	20.72	< 30
5	3452.50	1	24	23.10	20.70	< 30
	3500.00			22.79	20.39	< 30
	3547.50			23.09	20.69	< 30
5	3452.50	25	0	21.91	19.51	< 30
	3500.00			22.58	20.18	< 30
	3547.50			21.84	19.44	< 30
10	3455.00	1	0	23.12	20.72	< 30
	3500.00			22.83	20.43	< 30
	3545.00			23.02	20.62	< 30
10	3455.00	1	24	23.11	20.71	< 30
	3500.00			22.83	20.43	< 30
	3545.00			23.07	20.67	< 30
10	3455.00	1	49	23.01	20.61	< 30
	3500.00			22.81	20.41	< 30
	3545.00			23.06	20.66	< 30
10	3455.00	50	0	21.82	19.42	< 30
	3500.00			21.50	19.10	< 30
	3545.00			21.70	19.30	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
64QAM						
15	3457.50	1	0	22.91	20.51	< 30
	3500.00			22.58	20.18	< 30
	3542.50			22.85	20.45	< 30
15	3457.50	1	37	22.95	20.55	< 30
	3500.00			22.71	20.31	< 30
	3542.50			22.93	20.53	< 30
15	3457.50	1	74	22.77	20.37	< 30
	3500.00			22.61	20.21	< 30
	3542.50			22.81	20.41	< 30
15	3457.50	75	0	21.59	19.19	< 30
	3500.00			21.39	18.99	< 30
	3542.50			21.69	19.29	< 30
20	3460.00	1	0	22.95	20.55	< 30
	3500.00			22.63	20.23	< 30
	3540.00			22.83	20.43	< 30
20	3460.00	1	49	22.80	20.40	< 30
	3500.00			22.60	20.20	< 30
	3540.00			22.96	20.56	< 30
20	3460.00	1	99	22.59	20.19	< 30
	3500.00			22.56	20.16	< 30
	3540.00			22.85	20.45	< 30
20	3460.00	100	0	21.53	19.13	< 30
	3500.00			21.33	18.93	< 30
	3540.00			21.62	19.22	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
256QAM						
5	3452.50	1	0	20.05	17.65	< 30
	3500.00			19.68	17.28	< 30
	3547.50			19.85	17.45	< 30
5	3452.50	1	12	20.05	17.65	< 30
	3500.00			19.72	17.32	< 30
	3547.50			20.00	17.60	< 30
5	3452.50	1	24	20.03	17.63	< 30
	3500.00			19.70	17.30	< 30
	3547.50			19.91	17.51	< 30
5	3452.50	25	0	19.90	17.50	< 30
	3500.00			19.61	17.21	< 30
	3547.50			19.88	17.48	< 30
10	3455.00	1	0	20.01	17.61	< 30
	3500.00			19.70	17.30	< 30
	3545.00			19.77	17.37	< 30
10	3455.00	1	24	19.94	17.54	< 30
	3500.00			19.66	17.26	< 30
	3545.00			19.92	17.52	< 30
10	3455.00	1	49	19.88	17.48	< 30
	3500.00			19.65	17.25	< 30
	3545.00			19.90	17.50	< 30
10	3455.00	50	0	19.84	17.44	< 30
	3500.00			19.52	17.12	< 30
	3545.00			19.74	17.34	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
256QAM						
15	3457.50	1	0	19.90	17.50	< 30
	3500.00			19.50	17.10	< 30
	3542.50			19.73	17.33	< 30
15	3457.50	1	37	19.94	17.54	< 30
	3500.00			19.63	17.23	< 30
	3542.50			19.94	17.54	< 30
15	3457.50	1	74	19.67	17.27	< 30
	3500.00			19.60	17.20	< 30
	3542.50			19.74	17.34	< 30
15	3457.50	75	0	19.65	17.25	< 30
	3500.00			19.40	17.00	< 30
	3542.50			19.71	17.31	< 30
20	3460.00	1	0	19.83	17.43	< 30
	3500.00			19.51	17.11	< 30
	3540.00			19.72	17.32	< 30
20	3460.00	1	49	19.67	17.27	< 30
	3500.00			19.45	17.05	< 30
	3540.00			19.62	17.22	< 30
20	3460.00	1	99	19.52	17.12	< 30
	3500.00			19.53	17.13	< 30
	3540.00			19.84	17.44	< 30
20	3460.00	100	0	19.57	17.17	< 30
	3500.00			19.38	16.98	< 30
	3540.00			19.65	17.25	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-13	Test Band	Band 43 (3700 ~ 3800 MHz)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
5	3702.50	1	0	23.35	20.95	< 30
	3750.00			23.46	21.06	< 30
	3797.50			23.29	20.89	< 30
5	3702.50	1	12	23.42	21.02	< 30
	3750.00			23.53	21.13	< 30
	3797.50			23.34	20.94	< 30
5	3702.50	1	24	23.38	20.98	< 30
	3750.00			23.47	21.07	< 30
	3797.50			23.27	20.87	< 30
5	3702.50	25	0	23.31	20.91	< 30
	3750.00			23.50	21.10	< 30
	3797.50			23.20	20.80	< 30
10	3705.00	1	0	23.36	20.96	< 30
	3750.00			23.45	21.05	< 30
	3795.00			23.29	20.89	< 30
10	3705.00	1	24	23.40	21.00	< 30
	3750.00			23.47	21.07	< 30
	3795.00			23.33	20.93	< 30
10	3705.00	1	49	23.34	20.94	< 30
	3750.00			23.42	21.02	< 30
	3795.00			23.20	20.80	< 30
10	3705.00	50	0	23.39	20.99	< 30
	3750.00			23.53	21.13	< 30
	3795.00			23.24	20.84	< 30

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
15	3707.50	1	0	23.12	20.72	< 30
	3750.00			23.26	20.86	< 30
	3792.50			23.15	20.75	< 30
15	3707.50	1	37	23.19	20.79	< 30
	3750.00			23.28	20.88	< 30
	3792.50			23.12	20.72	< 30
15	3707.50	1	74	23.15	20.75	< 30
	3750.00			23.22	20.82	< 30
	3792.50			23.02	20.62	< 30
15	3707.50	75	0	23.15	20.75	< 30
	3750.00			23.40	21.00	< 30
	3792.50			23.18	20.78	< 30
20	3710.00	1	0	23.19	20.79	< 30
	3750.00			23.33	20.93	< 30
	3790.00			23.27	20.87	< 30
20	3710.00	1	49	23.21	20.81	< 30
	3750.00			23.41	21.01	< 30
	3790.00			23.24	20.84	< 30
20	3710.00	1	99	23.13	20.73	< 30
	3750.00			23.25	20.85	< 30
	3790.00			23.04	20.64	< 30
20	3710.00	100	0	23.16	20.76	< 30
	3750.00			23.39	20.99	< 30
	3790.00			23.17	20.77	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM						
5	3702.50	1	0	23.57	21.17	< 30
	3750.00			23.64	21.24	< 30
	3797.50			23.51	21.11	< 30
5	3702.50	1	12	23.60	21.20	< 30
	3750.00			23.70	21.30	< 30
	3797.50			23.58	21.18	< 30
5	3702.50	1	24	23.51	21.11	< 30
	3750.00			23.61	21.21	< 30
	3797.50			23.50	21.10	< 30
5	3702.50	25	0	22.83	20.43	< 30
	3750.00			23.08	20.68	< 30
	3797.50			22.73	20.33	< 30
10	3705.00	1	0	23.49	21.09	< 30
	3750.00			23.73	21.33	< 30
	3795.00			23.45	21.05	< 30
10	3705.00	1	24	23.55	21.15	< 30
	3750.00			23.78	21.38	< 30
	3795.00			23.42	21.02	< 30
10	3705.00	1	49	23.47	21.07	< 30
	3750.00			23.71	21.31	< 30
	3795.00			23.39	20.99	< 30
10	3705.00	50	0	22.91	20.51	< 30
	3750.00			23.01	20.61	< 30
	3795.00			22.72	20.32	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
16QAM						
15	3707.50	1	0	23.24	20.84	< 30
	3750.00			23.52	21.12	< 30
	3792.50			23.33	20.93	< 30
15	3707.50	1	37	23.32	20.92	< 30
	3750.00			23.57	21.17	< 30
	3792.50			23.34	20.94	< 30
15	3707.50	1	74	23.26	20.86	< 30
	3750.00			23.49	21.09	< 30
	3792.50			23.20	20.80	< 30
15	3707.50	75	0	22.68	20.28	< 30
	3750.00			22.92	20.52	< 30
	3792.50			22.71	20.31	< 30
20	3710.00	1	0	23.23	20.83	< 30
	3750.00			23.51	21.11	< 30
	3790.00			23.50	21.10	< 30
20	3710.00	1	49	23.35	20.95	< 30
	3750.00			23.57	21.17	< 30
	3790.00			23.47	21.07	< 30
20	3710.00	1	99	23.19	20.79	< 30
	3750.00			23.47	21.07	< 30
	3790.00			23.27	20.87	< 30
20	3710.00	100	0	22.69	20.29	< 30
	3750.00			22.94	20.54	< 30
	3790.00			22.70	20.30	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
64QAM						
5	3702.50	1	0	23.18	20.78	< 30
	3750.00			23.09	20.69	< 30
	3797.50			22.99	20.59	< 30
5	3702.50	1	12	23.26	20.86	< 30
	3750.00			23.22	20.82	< 30
	3797.50			23.11	20.71	< 30
5	3702.50	1	24	23.21	20.81	< 30
	3750.00			23.14	20.74	< 30
	3797.50			23.08	20.68	< 30
5	3702.50	25	0	21.87	19.47	< 30
	3750.00			21.78	19.38	< 30
	3797.50			21.70	19.30	< 30
10	3705.00	1	0	23.19	20.79	< 30
	3750.00			23.13	20.73	< 30
	3795.00			23.05	20.65	< 30
10	3705.00	1	24	23.31	20.91	< 30
	3750.00			23.15	20.75	< 30
	3795.00			23.05	20.65	< 30
10	3705.00	1	49	23.22	20.82	< 30
	3750.00			23.09	20.69	< 30
	3795.00			23.04	20.64	< 30
10	3705.00	50	0	21.94	19.54	< 30
	3750.00			21.87	19.47	< 30
	3795.00			21.68	19.28	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
64QAM						
15	3707.50	1	0	23.04	20.64	< 30
	3750.00			23.08	20.68	< 30
	3792.50			22.79	20.39	< 30
15	3707.50	1	37	23.08	20.68	< 30
	3750.00			23.12	20.72	< 30
	3792.50			22.85	20.45	< 30
15	3707.50	1	74	23.09	20.69	< 30
	3750.00			23.02	20.62	< 30
	3792.50			22.86	20.46	< 30
15	3707.50	75	0	21.79	19.39	< 30
	3750.00			21.80	19.40	< 30
	3792.50			21.60	19.20	< 30
20	3710.00	1	0	23.07	20.67	< 30
	3750.00			23.01	20.61	< 30
	3790.00			22.83	20.43	< 30
20	3710.00	1	49	23.18	20.78	< 30
	3750.00			23.05	20.65	< 30
	3790.00			22.83	20.43	< 30
20	3710.00	1	99	23.07	20.67	< 30
	3750.00			22.82	20.42	< 30
	3790.00			22.79	20.39	< 30
20	3710.00	100	0	21.83	19.43	< 30
	3750.00			21.77	19.37	< 30
	3790.00			21.52	19.12	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

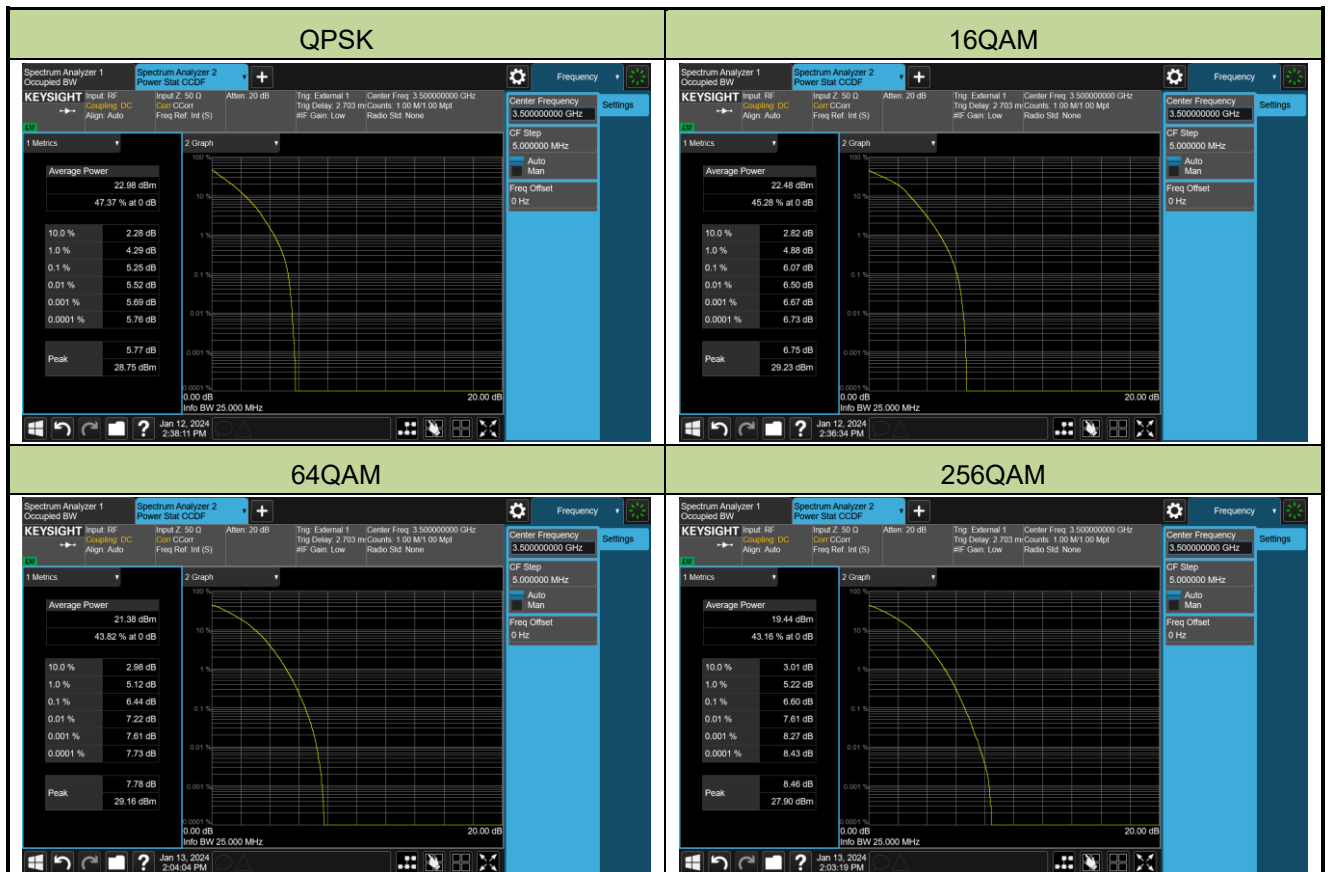
Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
256QAM						
5	3702.50	1	0	19.93	17.53	< 30
	3750.00			19.92	17.52	< 30
	3797.50			19.70	17.30	< 30
5	3702.50	1	12	20.15	17.75	< 30
	3750.00			19.93	17.53	< 30
	3797.50			19.96	17.56	< 30
5	3702.50	1	24	20.10	17.70	< 30
	3750.00			19.92	17.52	< 30
	3797.50			19.90	17.50	< 30
5	3702.50	25	0	19.89	17.49	< 30
	3750.00			19.76	17.36	< 30
	3797.50			19.68	17.28	< 30
10	3705.00	1	0	19.97	17.57	< 30
	3750.00			19.89	17.49	< 30
	3795.00			19.75	17.35	< 30
10	3705.00	1	24	20.16	17.76	< 30
	3750.00			20.01	17.61	< 30
	3795.00			19.88	17.48	< 30
10	3705.00	1	49	20.10	17.70	< 30
	3750.00			19.91	17.51	< 30
	3795.00			19.89	17.49	< 30
10	3705.00	50	0	20.00	17.60	< 30
	3750.00			19.85	17.45	< 30
	3795.00			19.68	17.28	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
256QAM						
15	3707.50	1	0	19.84	17.44	< 30
	3750.00			19.88	17.48	< 30
	3792.50			19.42	17.02	< 30
15	3707.50	1	37	19.95	17.55	< 30
	3750.00			20.03	17.63	< 30
	3792.50			19.76	17.36	< 30
15	3707.50	1	74	20.01	17.61	< 30
	3750.00			19.85	17.45	< 30
	3792.50			19.77	17.37	< 30
15	3707.50	75	0	19.81	17.41	< 30
	3750.00			19.83	17.43	< 30
	3792.50			19.59	17.19	< 30
20	3710.00	1	0	19.92	17.52	< 30
	3750.00			19.83	17.43	< 30
	3790.00			19.60	17.20	< 30
20	3710.00	1	49	20.03	17.63	< 30
	3750.00			19.89	17.49	< 30
	3790.00			19.73	17.33	< 30
20	3710.00	1	99	20.06	17.66	< 30
	3750.00			19.79	17.39	< 30
	3790.00			19.82	17.42	< 30
20	3710.00	100	0	19.82	17.42	< 30
	3750.00			19.75	17.35	< 30
	3790.00			19.50	17.10	< 30
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

A.4 Peak to Average Radio Test Result

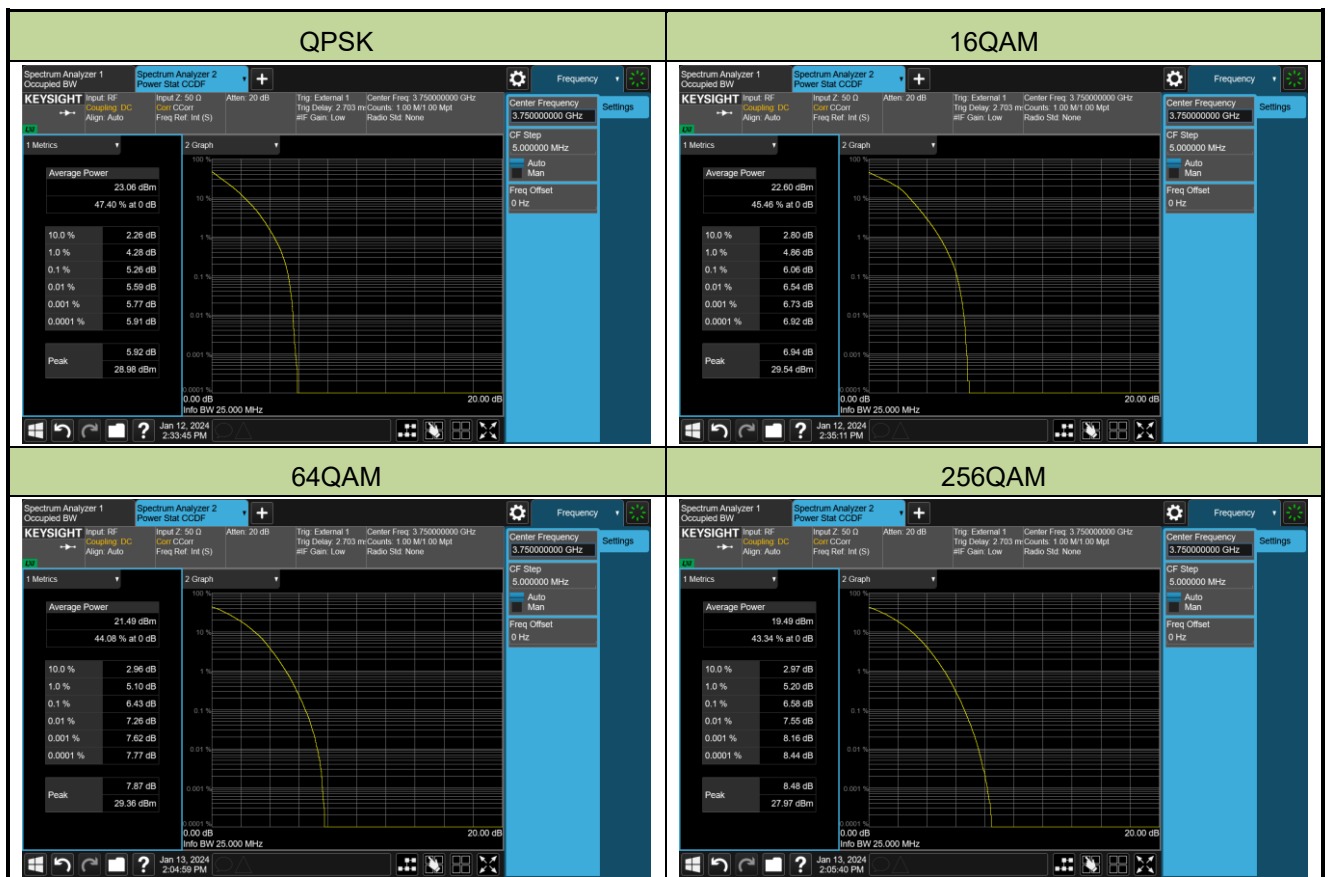
Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-13	Test Band	Band 42 (3450 ~ 3550 MHz)

Channel Bandwidth (MHz)	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK				
20	3500.0	5.25	≤ 13.00	Pass
16QAM				
20	3500.0	6.07	≤ 13.00	Pass
64QAM				
20	3500.0	6.44	≤ 13.00	Pass
256QAM				
20	3500.0	6.60	≤ 13.00	Pass



Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-13	Test Band	Band 43 (3700 ~ 3800 MHz)

Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK				
20	3750.0	5.26	≤ 13.00	Pass
16QAM				
20	3750.0	6.06	≤ 13.00	Pass
64QAM				
20	3750.0	6.43	≤ 13.00	Pass
256QAM				
20	3750.0	6.58	≤ 13.00	Pass

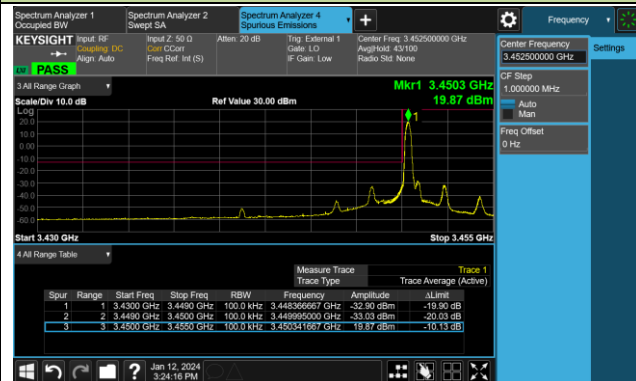


A.5 Band Edge Test Result

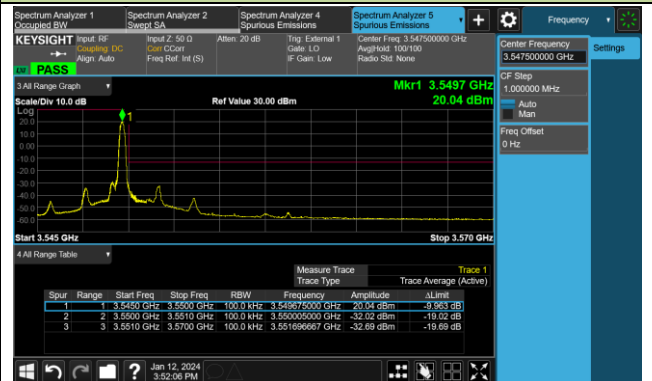
Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-15	Test Band	Band 42 (3450 ~ 3550 MHz)

5MHz Channel Bandwidth - 1RB

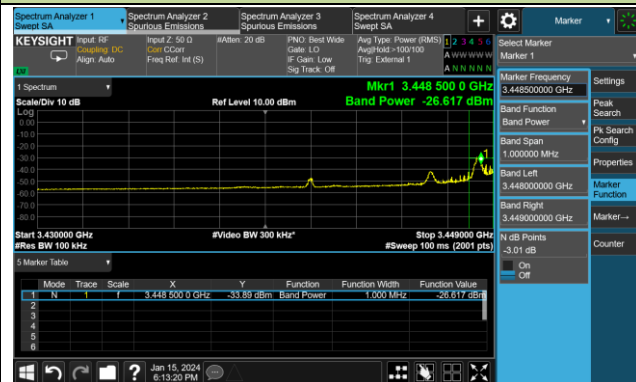
Lower Band Edge



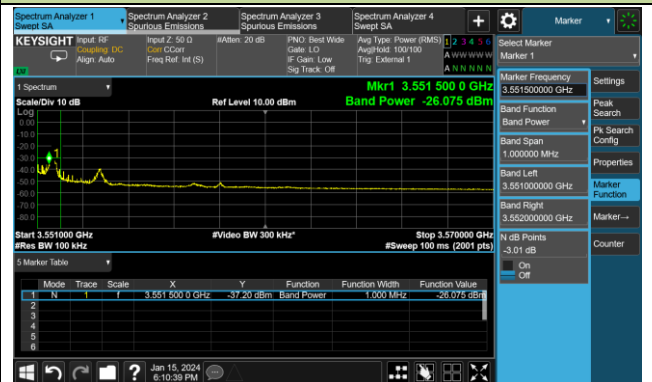
Upper Band Edge



Lower Extended Band Edge

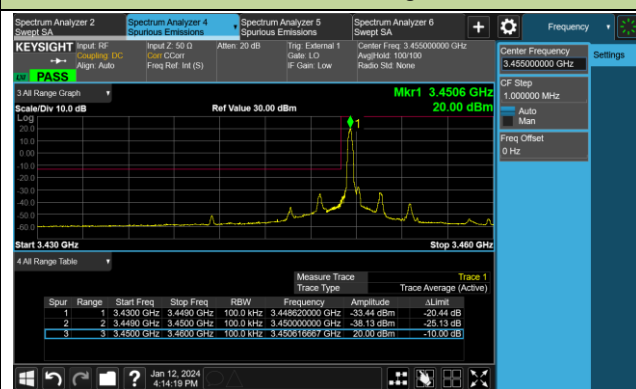


Upper Extended Band Edge

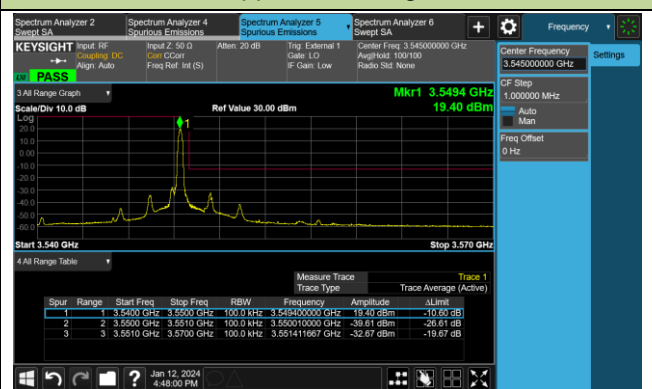


10MHz Channel Bandwidth - 1RB

Lower Band Edge



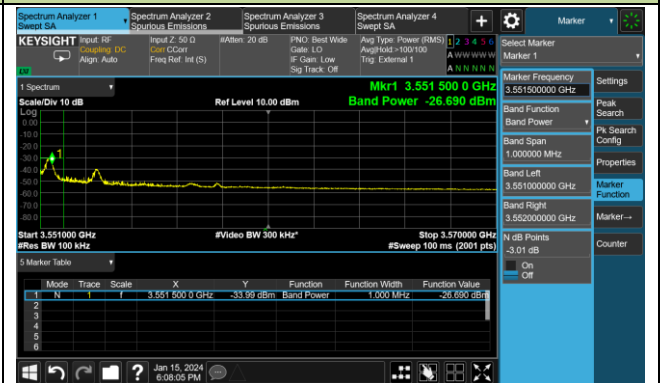
Upper Band Edge



Lower Extended Band Edge

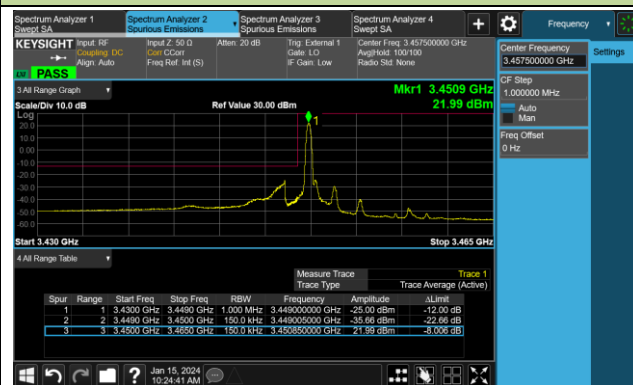


Upper Extended Band Edge

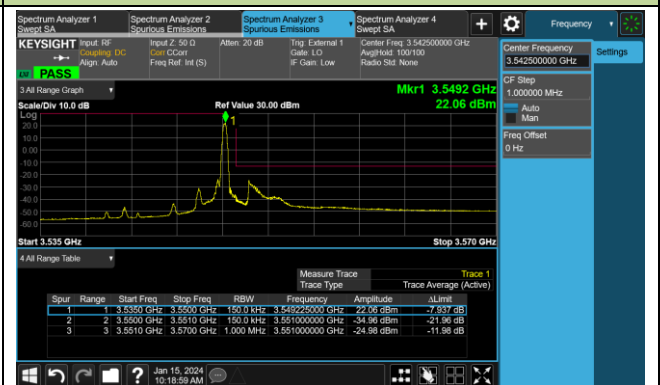


15MHz Channel Bandwidth - 1RB

Lower Band Edge

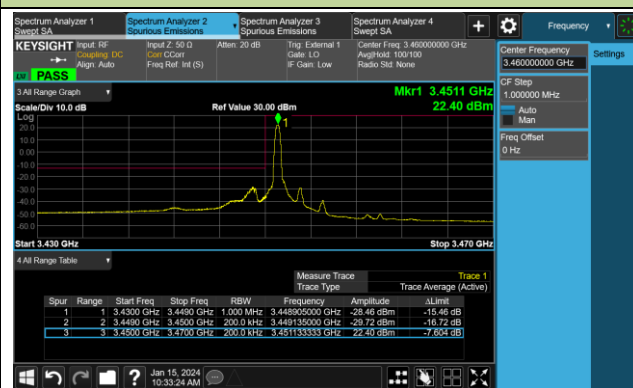


Upper Band Edge

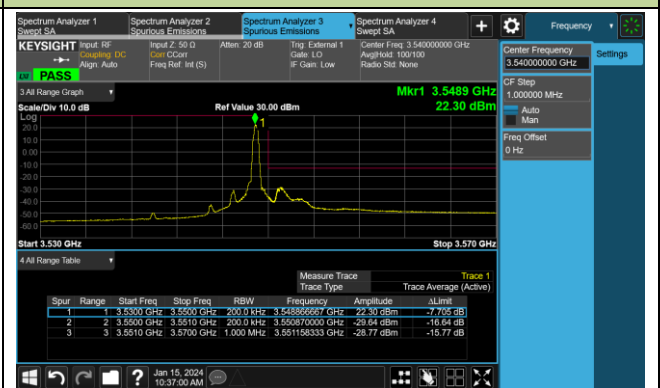


20MHz Channel Bandwidth - 1RB

Lower Band Edge

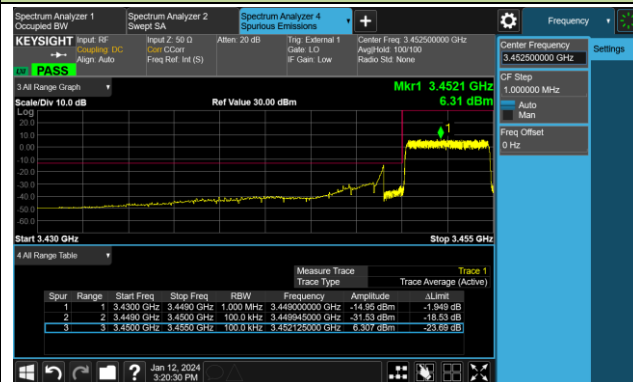


Upper Band Edge

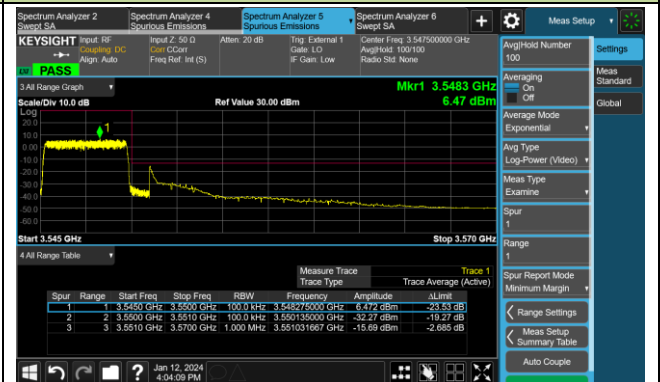


5MHz Channel Bandwidth - Full RB

Lower Band Edge

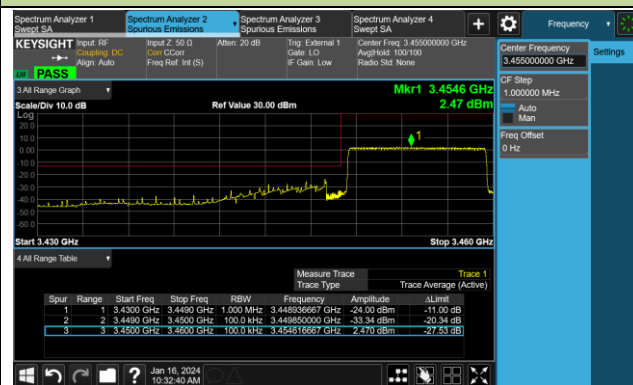


Upper Band Edge

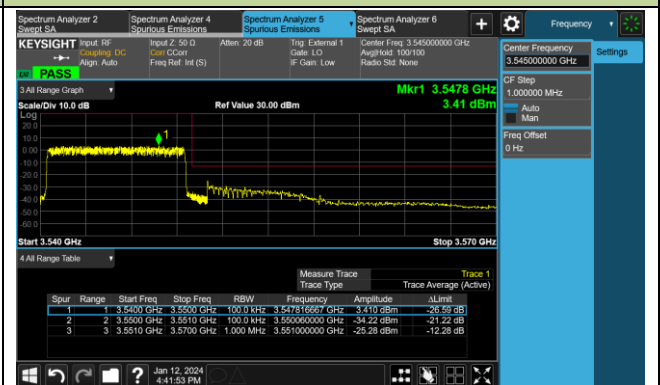


10MHz Channel Bandwidth - Full RB

Lower Band Edge

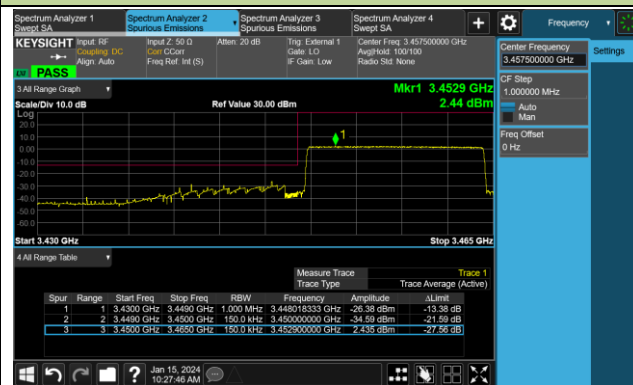


Upper Band Edge

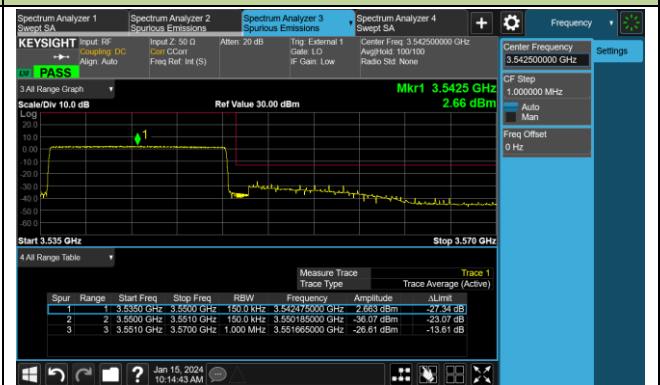


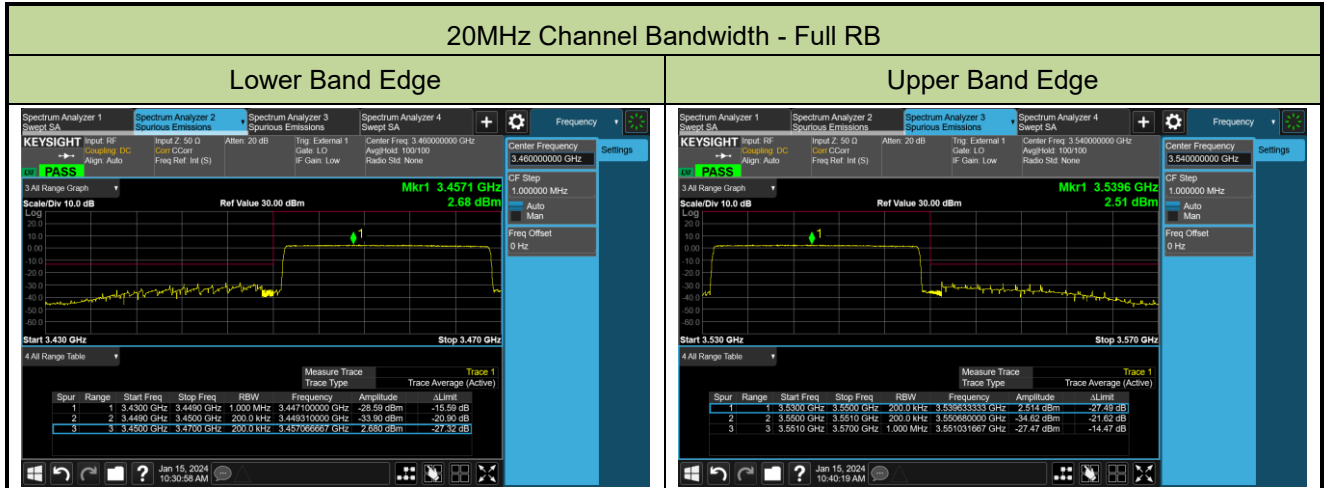
15MHz Channel Bandwidth - Full RB

Lower Band Edge



Upper Band Edge

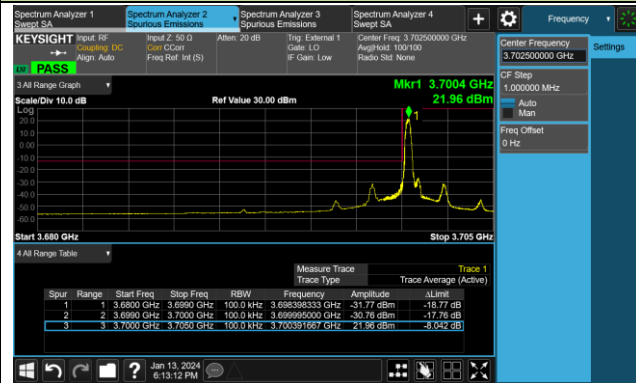




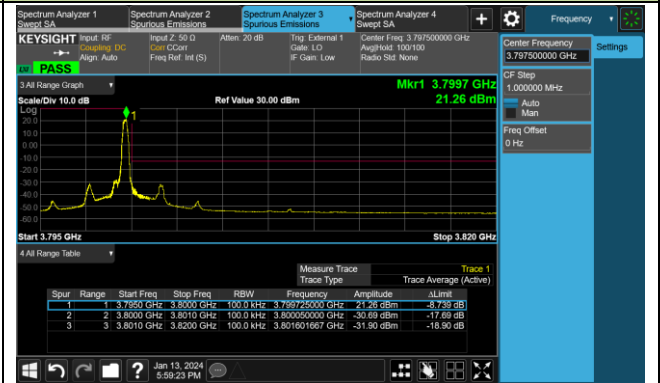
Test Site	WZ-SR6	Test Engineer	Lucas Wang
Test Date	2024-01-12 ~ 2024-01-15	Test Band	Band 43 (3700 ~ 3800 MHz)

5MHz Channel Bandwidth - 1RB

Lower Band Edge



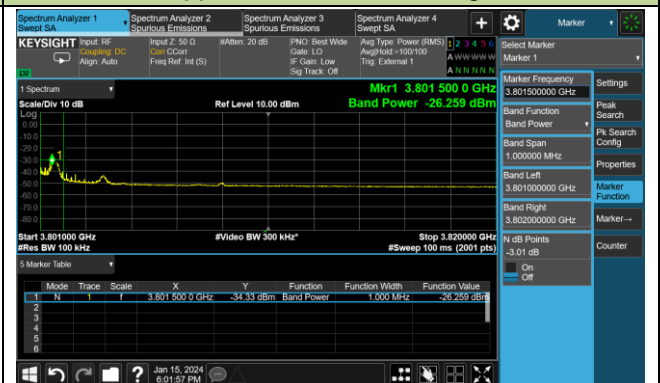
Upper Band Edge



Lower Extended Band Edge

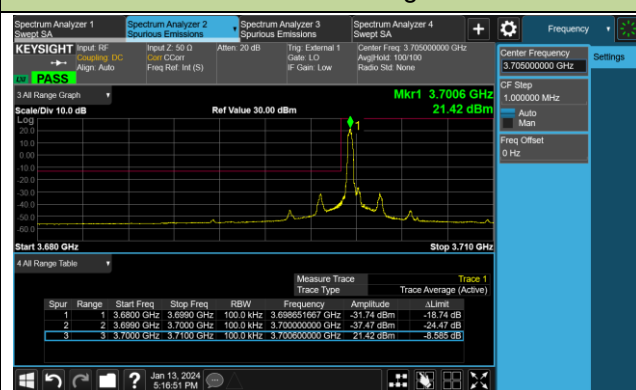


Upper Extended Band Edge



10MHz Channel Bandwidth - 1RB

Lower Band Edge



Upper Band Edge

