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PART 27 MEASUREMENT REPORT

Applicant Name:
Sony Corporation
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Japan

Date of Testing:
02/21/2023 - 4/12/2023
Test Report Issue Date:
4/12/2023
Test Site/Location:
Element lab., Columbia, MD, USA
Test Report Serial No.:
1M2302060006-05-R1.PY7

FCC ID:	**PY7-84558E**
Applicant Name:	**Sony Corporation**

Application Type:	Certification
EUT Type:	Portable Handset
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part:	27
Test Procedure(s):	ANSI C63.26-2015, KDB 648474 D03 v01r04

Note: This revised Test Report (S/N: 1M2302060006-05-R1.PY7) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

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 §2.947. Test results reported herein relate only to the item(s) tested.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez
Executive Vice President

ACCREDITED
CERT #2041.01

TABLE OF CONTENTS

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3450 - 3550MHz) Main1	100 MHz	π/2 BPSK	3500.0	0.176	22.46	96M9G7D
		QPSK	3500.0	0.176	22.47	97M9G7D
		16QAM	3500.0	0.151	21.79	97M7W7D
	80 MHz	π/2 BPSK	3490.0 - 3510.0	0.174	22.40	77M6G7D
		QPSK	3490.0 - 3510.0	0.178	22.51	77M8G7D
		16QAM	3490.0 - 3510.0	0.155	21.90	77M9W7D
	60 MHz	π/2 BPSK	3480.0 - 3520.0	0.182	22.61	58M0G7D
		QPSK	3480.0 - 3520.0	0.186	22.69	58M1G7D
		16QAM	3480.0 - 3520.0	0.159	22.02	58M3W7D
	40 MHz	π/2 BPSK	3470.0 - 3530.0	0.194	22.88	36M0G7D
		QPSK	3470.0 - 3530.0	0.197	22.95	38M0G7D
		16QAM	3470.0 - 3530.0	0.169	22.27	38M0W7D
	30 MHz	π/2 BPSK	3465.0 - 3535.0	0.187	22.73	27M1G7D
		QPSK	3465.0 - 3535.0	0.191	22.82	28M0G7D
		16QAM	3465.0 - 3535.0	0.166	22.21	28M0W7D
	20 MHz	π/2 BPSK	3460.0 - 3540.0	0.189	22.76	18M0G7D
		QPSK	3460.0 - 3540.0	0.192	22.83	18M3G7D
		16QAM	3460.0 - 3540.0	0.165	22.19	18M3W7D
NR Band n77 PC2 (3700 - 3980MHz) Main1	100 MHz	π/2 BPSK	3750.0 - 3930.0	0.181	22.58	96M6G7D
		QPSK	3750.0 - 3930.0	0.193	22.86	97M8G7D
		16QAM	3750.0 - 3930.0	0.156	21.92	97M7W7D
	80 MHz	π/2 BPSK	3740.0 - 3940.0	0.180	22.55	77M3G7D
		QPSK	3740.0 - 3940.0	0.195	22.89	77M8G7D
		16QAM	3740.0 - 3940.0	0.161	22.07	77M8W7D
	60 MHz	π/2 BPSK	3730.0 - 3950.0	0.183	22.63	58M1G7D
		QPSK	3730.0 - 3950.0	0.197	22.95	58M1G7D
		16QAM	3730.0 - 3950.0	0.156	21.94	58M1W7D
	40 MHz	π/2 BPSK	3720.0 - 3960.0	0.200	23.00	36M0G7D
		QPSK	3720.0 - 3960.0	0.212	23.27	38M0G7D
		16QAM	3720.0 - 3960.0	0.177	22.48	38M0W7D
	30 MHz	π/2 BPSK	3715.0 - 3965.0	0.192	22.83	27M0G7D
		QPSK	3715.0 - 3965.0	0.206	23.13	28M0G7D
		16QAM	3715.0 - 3965.0	0.163	22.13	28M1W7D
	20 MHz	π/2 BPSK	3710.0 - 3970.0	0.194	22.87	18M0G7D
		QPSK	3710.0 - 3970.0	0.204	23.10	18M4G7D
		16QAM	3710.0 - 3970.0	0.167	22.23	18M3W7D

EUT Overview (Main1)

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3450 - 3550MHz) Sub-UHB	100 MHz	π/2 BPSK	3500.0	0.028	14.40	97M1G7D
		QPSK	3500.0	0.027	14.31	98M2G7D
		16QAM	3500.0	0.027	14.35	98M0W7D
		64QAM	3500.0	0.027	14.32	98M1W7D
		256QAM	3500.0	0.022	13.39	97M9W7D
	80 MHz	π/2 BPSK	3490.0 - 3510.0	0.031	14.86	77M4G7D
		QPSK	3490.0 - 3510.0	0.030	14.74	77M7G7D
		16QAM	3490.0 - 3510.0	0.030	14.81	77M8W7D
		64QAM	3490.0 - 3510.0	0.031	14.97	77M7W7D
		256QAM	3490.0 - 3510.0	0.028	14.48	77M7W7D
	60 MHz	π/2 BPSK	3480.0 - 3520.0	0.030	14.76	58M2G7D
		QPSK	3480.0 - 3520.0	0.030	14.75	58M2G7D
		16QAM	3480.0 - 3520.0	0.030	14.83	58M2W7D
		64QAM	3480.0 - 3520.0	0.031	14.85	58M4W7D
		256QAM	3480.0 - 3520.0	0.030	14.77	58M1W7D
	40 MHz	π/2 BPSK	3470.0 - 3530.0	0.031	14.97	35M9G7D
		QPSK	3470.0 - 3530.0	0.030	14.75	38M0G7D
		16QAM	3470.0 - 3530.0	0.031	14.86	38M1W7D
		64QAM	3470.0 - 3530.0	0.030	14.79	38M1W7D
		256QAM	3470.0 - 3530.0	0.029	14.57	38M0W7D
	30 MHz	π/2 BPSK	3465.0 - 3535.0	0.029	14.62	27M0G7D
		QPSK	3465.0 - 3535.0	0.029	14.67	28M0G7D
		16QAM	3465.0 - 3535.0	0.031	14.85	28M2W7D
		64QAM	3465.0 - 3535.0	0.030	14.82	28M1W7D
		256QAM	3465.0 - 3535.0	0.029	14.62	28M0W7D
	20 MHz	π/2 BPSK	3460.0 - 3540.0	0.030	14.75	18M0G7D
		QPSK	3460.0 - 3540.0	0.030	14.72	18M3G7D
		16QAM	3460.0 - 3540.0	0.030	14.84	18M3W7D
		64QAM	3460.0 - 3540.0	0.031	14.85	18M3W7D
		256QAM	3460.0 - 3540.0	0.029	14.67	18M3W7D
NR Band n77 PC2 (3700 - 3980MHz) Sub-UHB	100 MHz	π/2 BPSK	3750.0 - 3930.0	0.051	17.04	96M9G7D
		QPSK	3750.0 - 3930.0	0.051	17.06	98M0G7D
		16QAM	3750.0 - 3930.0	0.049	16.86	97M8W7D
		64QAM	3750.0 - 3930.0	0.056	17.45	98M0W7D
		256QAM	3750.0 - 3930.0	0.043	16.33	97M7W7D
	80 MHz	π/2 BPSK	3740.0 - 3940.0	0.052	17.13	77M4G7D
		QPSK	3740.0 - 3940.0	0.055	17.37	77M9G7D
		16QAM	3740.0 - 3940.0	0.051	17.11	77M8W7D
		64QAM	3740.0 - 3940.0	0.054	17.30	77M4W7D
		256QAM	3740.0 - 3940.0	0.042	16.18	77M4W7D
	60 MHz	π/2 BPSK	3730.0 - 3950.0	0.053	17.24	58M1G7D
		QPSK	3730.0 - 3950.0	0.055	17.38	58M2G7D
		16QAM	3730.0 - 3950.0	0.053	17.20	58M1W7D
		64QAM	3730.0 - 3950.0	0.057	17.54	58M1W7D
		256QAM	3730.0 - 3950.0	0.045	16.50	58M1W7D
	40 MHz	π/2 BPSK	3720.0 - 3960.0	0.050	16.98	35M9G7D
		QPSK	3720.0 - 3960.0	0.053	17.23	38M1G7D
		16QAM	3720.0 - 3960.0	0.053	17.24	38M1W7D
		64QAM	3720.0 - 3960.0	0.057	17.53	38M0W7D
		256QAM	3720.0 - 3960.0	0.046	16.66	38M0W7D
	30 MHz	π/2 BPSK	3715.0 - 3965.0	0.047	16.68	26M9G7D
		QPSK	3715.0 - 3965.0	0.050	16.95	28M0G7D
		16QAM	3715.0 - 3965.0	0.047	16.69	28M0W7D
		64QAM	3715.0 - 3965.0	0.050	17.03	28M1W7D
		256QAM	3715.0 - 3965.0	0.045	16.53	28M0W7D
	20 MHz	π/2 BPSK	3710.0 - 3970.0	0.052	17.13	18M0G7D
		QPSK	3710.0 - 3970.0	0.050	17.03	18M3G7D
		16QAM	3710.0 - 3970.0	0.050	16.97	18M3W7D
		64QAM	3710.0 - 3970.0	0.057	17.54	18M5W7D
		256QAM	3710.0 - 3970.0	0.042	16.19	18M3W7D

EUT Overview (Sub-UHB)

Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP	
				Max. Power [W]	Max. Power [dBm]
NR Band n77 PC3 (3450 - 3550MHz) UL-MIMO	100 MHz	QPSK	3500.0	0.087	19.42
		16QAM	3500.0	0.069	18.40
		64QAM	3500.0	0.062	17.93
		256QAM	3500.0	0.060	17.80
	80 MHz	QPSK	3490.0 - 3510.0	0.092	19.66
		16QAM	3490.0 - 3510.0	0.066	18.19
		64QAM	3490.0 - 3510.0	0.062	17.95
		256QAM	3490.0 - 3510.0	0.089	19.51
	60 MHz	QPSK	3480.0 - 3520.0	0.101	20.06
		16QAM	3480.0 - 3520.0	0.071	18.49
		64QAM	3480.0 - 3520.0	0.068	18.32
		256QAM	3480.0 - 3520.0	0.100	20.00
	40 MHz	QPSK	3470.0 - 3530.0	0.101	20.05
		16QAM	3470.0 - 3530.0	0.078	18.94
		64QAM	3470.0 - 3530.0	0.068	18.32
		256QAM	3470.0 - 3530.0	0.101	20.03
	30 MHz	QPSK	3465.0 - 3535.0	0.101	20.06
		16QAM	3465.0 - 3535.0	0.085	19.27
		64QAM	3465.0 - 3535.0	0.069	18.40
		256QAM	3465.0 - 3535.0	0.101	20.03
	20 MHz	QPSK	3460.0 - 3540.0	0.101	20.06
		16QAM	3460.0 - 3540.0	0.077	18.87
		64QAM	3460.0 - 3540.0	0.068	18.31
		256QAM	3460.0 - 3540.0	0.100	20.02
NR Band n77 PC3 (3700 - 3980MHz) UL-MIMO	100 MHz	QPSK	3750.0 - 3930.0	0.136	21.34
		16QAM	3750.0 - 3930.0	0.117	20.67
		64QAM	3750.0 - 3930.0	0.080	19.04
		256QAM	3750.0 - 3930.0	0.061	17.86
	80 MHz	QPSK	3740.0 - 3940.0	0.153	21.85
		16QAM	3740.0 - 3940.0	0.145	21.62
		64QAM	3740.0 - 3940.0	0.095	19.77
		256QAM	3740.0 - 3940.0	0.072	18.59
	60 MHz	QPSK	3730.0 - 3950.0	0.160	22.04
		16QAM	3730.0 - 3950.0	0.133	21.24
		64QAM	3730.0 - 3950.0	0.103	20.13
		256QAM	3730.0 - 3950.0	0.070	18.43
	40 MHz	QPSK	3720.0 - 3960.0	0.165	22.18
		16QAM	3720.0 - 3960.0	0.147	21.68
		64QAM	3720.0 - 3960.0	0.108	20.33
		256QAM	3720.0 - 3960.0	0.079	18.98
	30 MHz	QPSK	3715.0 - 3965.0	0.166	22.21
		16QAM	3715.0 - 3965.0	0.151	21.78
		64QAM	3715.0 - 3965.0	0.113	20.54
		256QAM	3715.0 - 3965.0	0.089	19.50
	20 MHz	QPSK	3710.0 - 3970.0	0.175	22.44
		16QAM	3710.0 - 3970.0	0.158	21.99
		64QAM	3710.0 - 3970.0	0.115	20.60
		256QAM	3710.0 - 3970.0	0.082	19.12

EUT Overview (UL-MIMO)

1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

1.2 Element Test Location

These measurement tests were conducted at the Element laboratory located at 7185 Oakland Mills Road, Columbia, MD 21046. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014.

1.3 Test Facility / Accreditations

Measurements were performed at Element lab located in Columbia, MD 21046, U.S.A.

- Element Washington DC LLC is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.

- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).

- Element Washington DC LLC facility is a registered (2451B) test laboratory with the site description on file with ISED.

- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreement.

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Sony Portable Handset FCC ID: PY7-84558E**. The test data contained in this report pertains only to the emissions due to the EUT's licensed transmitters that operate under the provisions of Part 27.

Test Device Serial No.: 01443, 02904, 02227

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 GSM/GPRS/EDGE, 850/1700/1900 WCDMA/HSPA, Multi-band LTE, Multi-band 5G NR FR1, 802.11b/g/n/ax WLAN, 802.11a/n/ac/ax UNII (5 and 6 GHz), Bluetooth (1x, EDR, LE), NFC, Wireless Power Transfer

2.3 Test Configuration

The EUT was tested per the guidance of ANSI C63.26-2015. See Section 7.0 of this test report for a description of the radiated and antenna port conducted emissions tests.

This device supports wireless charging capability and, thus, is subject to the test requirements of KDB 648474 D03 v01r04. Additional radiated spurious emission measurements were performed with the EUT lying flat on an authorized wireless charging pad (WCP) Model: Belkin F7U050 while operating under normal conditions in a simulated call or data transmission configuration. The worst case radiated emissions data is shown in this report.

2.4 Software and Firmware

Testing was performed on device(s) using software/firmware version 0.621 installed on the EUT.

2.5 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added, and no modifications were made during testing.

3.0 DESCRIPTION OF TESTS

3.1 Evaluation Procedure

The measurement procedures described in the "American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services" (ANSI C63.26-2015) were used in the measurement of the EUT**.**

Deviation from Measurement Procedure……..None

3.2 Radiated Power and Radiated Spurious Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. For measurements below 1GHz, the absorbers are removed. A raised turntable is used for radiated measurement. The turn table is a continuously rotatable, remote-controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm tall test table made of Styrodur is placed on top of the turn table. A Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

The equipment under test was transmitting while connected to its integral antenna and is placed on a turntable 3 meters from the receive antenna. The receive antenna height is adjusted between 1 and 4 meter height, the turntable is rotated through 360 degrees, and the EUT is manipulated through all orthogonal planes representative of its typical use to achieve the highest reading on the receive spectrum analyzer.

For radiated power measurements, substitution method is used per the guidance of ANSI C63.26-2015. For emissions below 1GHz, a half-wave dipole is substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer level previously recorded from the spurious emission from the EUT. The power of the emission is calculated using the following formula:

$$P_{d\ [dBm]} = P_{g\ [dBm]} - \text{cable loss}_{\ [dB]} + \text{antenna gain}_{\ [dBd/dBi]};$$

where P_d is the dipole equivalent power, P_g is the generator output into the substitution antenna, and the antenna gain is the gain of the substitute antenna used relative to either a half-wave dipole (dBd) or an isotropic source (dBi). The substitute level is equal to $P_{g\ [dBm]} - \text{cable loss}_{\ [dB]}$.

For radiated spurious emissions measurements, the field strength conversion method is used per the formulas in Section 5.2.7 of ANSI C63.26-2015. Field Strength (EIRP) is calculated using the following formulas:

$$E_{[dB\mu V/m]} = \text{Measured amplitude level}_{[dBm]} + 107 + \text{Cable Loss}_{[dB]} + \text{Antenna Factor}_{[dB/m]}$$

And

$$EIRP_{[dBm]} = E_{[dB\mu V/m]} + 20\log D - 104.8;$$ where D is the measurement distance in meters.

All radiated measurements are performed in a chamber that meets the site requirements per ANSI C63.4-2014. Additionally, radiated emissions below 30MHz are also validated on an Open Area Test Site to assert correlation with the chamber measurements per the requirements of KDB 414788 D01 v01r01.

Radiated power and radiated spurious emission levels are investigated with the receive antenna horizontally and vertically polarized per ANSI C63.26-2015.

4.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Contribution	Expanded Uncertainty (±dB)
Conducted Bench Top Measurements	1.13
Radiated Disturbance (<1GHz)	4.98
Radiated Disturbance (>1GHz)	5.07
Radiated Disturbance (>18GHz)	5.09

5.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2017.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	AP1-002	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	AP1-001
	ETS-001	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	ETS-001
-	ETS-002	EMC Cable and Switch System	1/11/2023	Annual	1/11/2024	ETS-002
-	LTx1	Licensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTx1
-	LTx2	Licensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTx2
-	LTx3	LIcensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTx3
-	LTx4	Licensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTx4
-	LTx5	LIcensed Transmitter Cable Set	1/12/2023	Annual	1/12/2024	LTx5
Anritsu	MT8821C	Radio Communication Analyzer	N/A			6201525694
Emco	3115	Horn Antenna (1-18GHz)	8/8/2022	Biennial	8/8/2023	9704-5182
Espec	SCP-220	Environmental Chamber	5/25/2022	Annual	5/25/2023	OCPS5H0612K05
ETS Lindgren	3117	1-18 GHz DRG Horn (Medium)	2021/04/20	Biennial	2023/04/20	00125518
ETS Lindgren	3164-10	Quad Ridge Horn 400MHz - 10000MHz	5/10/2021	Biennial	5/10/2023	00166283
Keysight Technologies	N9030A	PXA Signal Analyzer	9/6/2022	Annual	9/6/2023	MY54490576
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A			112347
Rohde & Schwarz	ESU40	EMI Test Receiver (40GHz)	8/25/2022	Annual	8/25/2023	100348
Rohde & Schwarz	FSW26	2Hz-26.5GHz Signal and Spectrum Analyzer	11/6/2022	Annual	11/6/2023	103187
Sunol Sciences	JB5	Bi-Log Antenna (30M - 5GHz)	8/30/2022	Biennial	8/30/2024	A051107

Table 5-1. Test Equipment

Notes:

1. For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

2. Equipment with a calibration date of “N/A” shown in this list was not used to make direct calibrated measurements.

6.0 SAMPLE CALCULATIONS

QPSK Modulation

Emission Designator = 8M62G7D
LTE BW = 8.62 MHz
G = Phase Modulation
7 = Quantized/Digital Info
D = Data transmission, telemetry, telecommand

QAM Modulation

Emission Designator = 8M45W7D
LTE BW = 8.45 MHz
W = Amplitude/Angle Modulated
7 = Quantized/Digital Info
D = Data transmission, telemetry, telecommand

Spurious Radiated Emission

Example: Spurious emission at 3700.40 MHz

The receive spectrum analyzer reading at 3 meters with the EUT on the turntable was –81.0 dBm. The gain of the substituted antenna is 8.1 dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of –81.0 dBm on the spectrum analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0 dB at 3700.40 MHz. So 6.1 dB is added to the signal generator reading of –30.9 dBm yielding –24.80 dBm. The fundamental EIRP was 25.50 dBm so this harmonic was 25.50 dBm – (-24.80) = 50.3 dBc.

7.0 TEST RESULTS

7.1 Summary

Company Name: Sony Corporation

FCC ID: PY7-84558E

FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)

Mode(s): NR

Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference
CONDUCTED	Transmitter Conducted Output Power	2.1046(a), 2.1046(c)	N/A	PASS	Section 7.2
	Occupied Bandwidth	2.1049(h)	N/A	PASS	Section 7.3
	Conducted Band Edge / Spurious Emissions (NR Band n77)	2.1051, 27.53(l), 27.53(n)	≤ 13 dBm / MHz	PASS	Sections 7.4, 7.5
	Peak-to-Average Ratio (NR Band n77)	27.50(j)(4), 27.50(k)(4)	≤ 13 dB	PASS	Section 7.6
	Frequency Stability	2.1055, 27.54	Fundamental emissions stay within authorized frequency block.	PASS	Section 7.9
RADIATED	Effective Radiated Power / Equivalent Isotropic Radiated Power (NR Band n77)	27.50(j)(3), 27.50(k)(3)	≤ 1 Watt EIRP	PASS	Section 7.7
	Radiated Spurious Emissions (NR Band n77)	2.1053, 27.53(l), 27.53(n)	≤ 13 dBm / MHz	PASS	Section 7.8

* The only transmitter output conducted powers included in this report are those where the Pmax value, per the tune-up document, is higher than any of the DSI power levels. For the remaining conducted power measurements, see the **RF Exposure Report**.

Table 7-1. Summary of Test Results (FCC)

Notes:

1) All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst-case emissions.
2) The analyzer plots were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables, directional couplers, and attenuators used as part of the system to maintain a link between the call box and the EUT at all frequencies of interest.
3) All antenna ports conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables, attenuators, and couplers.
4) All conducted emissions measurements are performed with automated test software to capture the corresponding plots necessary to show compliance. The measurement software utilized is EMC Software Tool v1.1.

7.2 Conducted Output Power Data

Test Overview

All 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.

Test Procedure Used

ANSI C63.26-2015 – Section 5.2

Test Settings

1. Span = 2 x OBW to 3 x OBW
2. Detector = RMS
3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
4. Sweep time = auto couple
5. The trace was allowed to stabilize.
6. Please see test notes below for RBW and VBW settings

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

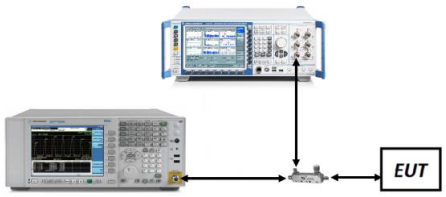


Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. Conducted power measurements were evaluated using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.

2. Higher order modulations (e.g., 64QAM and 256QAM) have been confirmed to be lower than 16QAM in Tables 7-2 through 7-9.

3. All other conducted power measurements are contained in the RF exposure report for this filing.

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	633334	3500.01	1 / 136	26.76
	QPSK	633334	3500.01	1 / 271	26.63
	16-QAM	633334	3500.01	1 / 271	25.65
80 MHz	π/2 BPSK	632668	3490.02	1 / 1	26.68
		633334	3500.01	1 / 108	26.67
		634000	3510.00	1 / 1	26.70
	QPSK	632668	3490.02	1 / 108	26.67
		633334	3500.01	1 / 1	26.61
		634000	3510.00	1 / 1	26.64
	16-QAM	632668	3490.02	1 / 108	25.76
60 MHz	π/2 BPSK	632000	3480.00	1 / 81	26.90
		633334	3500.01	1 / 81	26.91
		634666	3519.99	1 / 1	26.90
	QPSK	632000	3480.00	1 / 81	26.79
		633334	3500.01	1 / 81	26.85
		634666	3519.99	1 / 1	26.76
	16-QAM	632000	3480.00	1 / 81	25.88
40 MHz	π/2 BPSK	631334	3470.01	1 / 104	27.18
		633334	3500.01	1 / 1	27.10
		635332	3529.98	1 / 104	27.09
	QPSK	631334	3470.01	1 / 104	27.11
		633334	3500.01	1 / 1	27.04
		635332	3529.98	1 / 104	27.01
	16-QAM	635332	3529.98	1 / 104	26.13
30 MHz	π/2 BPSK	631000	3465.00	1 / 1	27.03
		633334	3500.01	1 / 1	27.03
		635666	3534.99	1 / 1	26.97
	QPSK	631000	3465.00	1 / 1	26.98
		633334	3500.01	1 / 1	26.96
		635666	3534.99	1 / 39	26.91
	16-QAM	631000	3465.00	1 / 76	26.07
20 MHz	π/2 BPSK	630668	3460.02	1 / 49	27.04
		633334	3500.01	1 / 1	27.06
		636000	3540.00	1 / 49	27.01
	QPSK	630668	3460.02	1 / 49	26.99
		633334	3500.01	1 / 1	26.96
		636000	3540.00	1 / 49	26.95
	16-QAM	633334	3500.01	1 / 1	26.05

Table 7-2. Conducted Power Output Data (NR Band n77 PC2 (DoD) – Main1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	650000	3750.00	1 / 1	26.26
		656000	3840.00	1 / 136	26.13
		662000	3930.00	1 / 136	26.17
	QPSK	650000	3750.00	1 / 1	26.20
		656000	3840.00	1 / 136	26.08
		662000	3930.00	1 / 136	26.06
	16-QAM	650000	3750.00	1 / 136	25.23
80 MHz	π/2 BPSK	649334	3740.01	1 / 108	26.23
		656000	3840.00	1 / 108	26.25
		662666	3939.99	1 / 108	26.12
	QPSK	649334	3740.01	1 / 108	26.23
		656000	3840.00	1 / 108	26.16
		662666	3939.99	1 / 108	26.10
	16-QAM	649334	3740.01	1 / 108	25.38
60 MHz	π/2 BPSK	648668	3730.02	1 / 1	26.31
		656000	3840.00	1 / 81	26.29
		663332	3949.98	1 / 81	26.20
	QPSK	648668	3730.02	1 / 1	26.29
		656000	3840.00	1 / 81	26.33
		663332	3949.98	1 / 81	26.09
	16-QAM	648668	3730.02	1 / 1	25.25
40 MHz	π/2 BPSK	648000	3720.00	1 / 1	26.68
		656000	3840.00	1 / 1	26.49
		664000	3960.00	1 / 1	26.62
	QPSK	648000	3720.00	1 / 1	26.61
		656000	3840.00	1 / 1	26.43
		664000	3960.00	1 / 1	26.57
	16-QAM	648000	3720.00	1 / 1	25.79
30 MHz	π/2 BPSK	647668	3715.02	1 / 1	26.51
		656000	3840.00	1 / 76	26.37
		664332	3964.98	1 / 76	26.51
	QPSK	647668	3715.02	1 / 1	26.47
		656000	3840.00	1 / 76	26.40
		664332	3964.98	1 / 1	26.52
	16-QAM	647668	3715.02	1 / 76	25.44
20 MHz	π/2 BPSK	647334	3710.01	1 / 1	26.55
		656000	3840.00	1 / 25	26.37
		664666	3969.99	1 / 1	26.54
	QPSK	647334	3710.01	1 / 49	26.44
		656000	3840.00	1 / 25	26.29
		664666	3969.99	1 / 1	26.50
	16-QAM	647334	3710.01	1 / 1	25.54

Table 7-3. Conducted Power Output Data (NR Band n77 PC2 (C-band) – Main1)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	633334	3500.01	273 / 0	23.13
	QPSK	633334	3500.01	273 / 0	23.05
	16-QAM	633334	3500.01	273 / 0	22.97
	64-QAM	633334	3500.01	273 / 0	22.96
	256-QAM	633334	3500.01	273 / 0	20.97
80 MHz	π/2 BPSK	632668	3490.02	1 / 54	23.49
		633334	3500.01	1 / 54	23.38
		634000	3510.00	1 / 162	23.42
	QPSK	632668	3490.02	217 / 0	23.48
		633334	3500.01	1 / 54	23.48
		634000	3510.00	1 / 162	23.35
	16-QAM	632668	3490.02	217 / 0	23.42
		633334	3500.01	1 / 54	23.43
		634000	3510.00	1 / 162	23.30
	64-QAM	632668	3490.02	217 / 0	23.48
		633334	3500.01	1 / 54	23.41
		634000	3510.00	1 / 162	23.45
	256-QAM	632668	3490.02	217 / 0	22.06
		633334	3500.01	1 / 54	21.88
		634000	3510.00	1 / 162	22.05
60 MHz	π/2 BPSK	632000	3480.00	162 / 0	23.49
		633334	3500.01	1 / 40	23.48
		634666	3519.99	1 / 81	23.49
	QPSK	632000	3480.00	1 / 121	23.48
		633334	3500.01	1 / 40	23.38
		634666	3519.99	1 / 121	23.49
	16-QAM	632000	3480.00	1 / 121	23.45
		633334	3500.01	1 / 40	23.15
		634666	3519.99	1 / 121	23.38
	64-QAM	632000	3480.00	1 / 121	23.49
		633334	3500.01	1 / 40	23.46
		634666	3519.99	1 / 121	23.49
	256-QAM	632000	3480.00	1 / 121	22.35
		633334	3500.01	1 / 40	22.00
		634666	3519.99	1 / 121	22.18
40 MHz	π/2 BPSK	631334	3470.01	106 / 0	23.49
		633334	3500.01	1 / 26	23.41
		635332	3529.98	1 / 53	23.48
	QPSK	631334	3470.01	1 / 26	23.49
		633334	3500.01	1 / 26	23.37
		635332	3529.98	1 / 79	23.41
	16-QAM	631334	3470.01	1 / 26	23.48
		633334	3500.01	1 / 26	23.45
		635332	3529.98	1 / 79	23.41
	64-QAM	631334	3470.01	1 / 26	23.29
		633334	3500.01	1 / 26	23.16
		635332	3529.98	1 / 79	23.43
	256-QAM	631334	3470.01	1 / 26	22.10
		633334	3500.01	1 / 26	22.15
		635332	3529.98	1 / 79	22.08
30 MHz	π/2 BPSK	631000	3465.00	1 / 58	23.29
		633334	3500.01	1 / 19	22.91
		635666	3534.99	1 / 58	23.35
	QPSK	631000	3465.00	1 / 58	23.16
		633334	3500.01	1 / 19	23.01
		635666	3534.99	1 / 58	23.41
	16-QAM	631000	3465.00	1 / 58	23.44
		633334	3500.01	1 / 19	22.80
		635666	3534.99	1 / 58	23.47
	64-QAM	631000	3465.00	1 / 58	22.96
		633334	3500.01	1 / 19	22.94
		635666	3534.99	1 / 58	23.46
	256-QAM	631000	3465.00	1 / 58	22.12
		633334	3500.01	1 / 19	22.20
		635666	3534.99	1 / 58	22.15
20 MHz	π/2 BPSK	630668	3460.02	1 / 37	23.48
		633334	3500.01	1 / 13	23.11
		636000	3540.00	1 / 37	23.44
	QPSK	630668	3460.02	1 / 37	23.41
		633334	3500.01	1 / 13	23.22
		636000	3540.00	1 / 37	23.46
	16-QAM	630668	3460.02	1 / 37	23.46
		633334	3500.01	1 / 13	23.07
		636000	3540.00	1 / 37	23.42
	64-QAM	630668	3460.02	1 / 37	23.49
		633334	3500.01	1 / 13	23.08
		636000	3540.00	1 / 37	23.45
	256-QAM	630668	3460.02	1 / 37	22.15
		633334	3500.01	1 / 13	22.25
		636000	3540.00	1 / 37	22.10

Table 7-4. Conducted Power Output Data (NR Band n77 PC2 (DoD) – Sub-UHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	650000	3750.00	273 / 0	23.19
		656000	3840.00	1 / 136	23.29
		662000	3930.00	1 / 136	23.19
	QPSK	650000	3750.00	1 / 136	23.15
		656000	3840.00	1 / 136	23.16
		662000	3930.00	1 / 136	23.05
	16-QAM	650000	3750.00	1 / 136	23.18
		656000	3840.00	1 / 136	23.11
		662000	3930.00	1 / 136	23.15
	64-QAM	650000	3750.00	1 / 136	23.00
		656000	3840.00	1 / 136	23.40
		662000	3930.00	1 / 136	23.22
	256-QAM	650000	3750.00	1 / 136	22.49
		656000	3840.00	1 / 136	22.48
		662000	3930.00	1 / 136	22.55
80 MHz	π/2 BPSK	649334	3740.01	1 / 162	23.31
		656000	3840.00	1 / 162	23.38
		662666	3939.99	1 / 108	23.36
	QPSK	649334	3740.01	1 / 162	23.14
		656000	3840.00	1 / 162	23.47
		662666	3939.99	1 / 108	23.30
	16-QAM	649334	3740.01	1 / 162	23.04
		656000	3840.00	1 / 162	23.36
		662666	3939.99	1 / 108	23.28
	64-QAM	649334	3740.01	1 / 162	23.41
		656000	3840.00	1 / 162	23.25
		662666	3939.99	1 / 108	23.10
	256-QAM	649334	3740.01	1 / 162	22.27
		656000	3840.00	1 / 162	22.33
		662666	3939.99	1 / 108	22.50
60 MHz	π/2 BPSK	648668	3730.02	1 / 81	23.49
		656000	3840.00	162 / 0	23.49
		663332	3949.98	162 / 0	23.49
	QPSK	648668	3730.02	1 / 81	23.33
		656000	3840.00	1 / 81	23.48
		663332	3949.98	1 / 81	23.49
	16-QAM	648668	3730.02	1 / 81	23.44
		656000	3840.00	1 / 81	23.45
		663332	3949.98	1 / 81	23.15
	64-QAM	648668	3730.02	1 / 81	23.16
		656000	3840.00	1 / 81	23.49
		663332	3949.98	1 / 81	23.42
	256-QAM	648668	3730.02	1 / 81	22.51
		656000	3840.00	1 / 81	22.65
		663332	3949.98	1 / 81	22.71
40 MHz	π/2 BPSK	648000	3720.00	1 / 79	23.36
		656000	3840.00	1 / 26	23.23
		664000	3960.00	1 / 79	23.42
	QPSK	648000	3720.00	1 / 79	23.33
		656000	3840.00	1 / 26	23.33
		664000	3960.00	1 / 79	23.44
	16-QAM	648000	3720.00	1 / 79	23.48
		656000	3840.00	1 / 26	23.49
		664000	3960.00	1 / 79	22.96
	64-QAM	648000	3720.00	1 / 79	23.48
		656000	3840.00	1 / 26	23.48
		664000	3960.00	1 / 79	23.34
	256-QAM	648000	3720.00	1 / 79	22.58
		656000	3840.00	1 / 26	22.81
		664000	3960.00	1 / 79	22.71
30 MHz	π/2 BPSK	647668	3715.02	1 / 58	23.04
		656000	3840.00	1 / 19	22.93
		664332	3964.98	1 / 58	23.03
	QPSK	647668	3715.02	1 / 58	23.09
		656000	3840.00	1 / 19	23.05
		664332	3964.98	1 / 58	22.90
	16-QAM	647668	3715.02	1 / 58	22.80
		656000	3840.00	1 / 19	22.94
		664332	3964.98	1 / 58	23.17
	64-QAM	647668	3715.02	1 / 58	23.01
		656000	3840.00	1 / 19	22.98
		664332	3964.98	1 / 58	22.84
	256-QAM	647668	3715.02	1 / 58	22.73
		656000	3840.00	1 / 19	22.68
		664332	3964.98	1 / 58	22.66
20 MHz	π/2 BPSK	647334	3710.01	51 / 0	23.39
		656000	3840.00	1 / 25	23.38
		664666	3969.99	1 / 37	23.50
	QPSK	647334	3710.01	51 / 0	23.29
		656000	3840.00	1 / 25	23.13
		664666	3969.99	1 / 37	23.48
	16-QAM	647334	3710.01	51 / 0	23.30
		656000	3840.00	1 / 25	23.22
		664666	3969.99	1 / 37	23.23
	64-QAM	647334	3710.01	51 / 0	23.24
		656000	3840.00	1 / 25	23.49
		664666	3969.99	1 / 37	23.49
	256-QAM	647334	3710.01	51 / 0	22.32
		656000	3840.00	1 / 25	22.34
		664666	3969.99	1 / 37	22.50

Table 7-5. Conducted Power Output Data (NR Band n77 PC2 (C-band) – Sub-UHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	633334	3500.01	1 / 136	20.86
	QPSK	633334	3500.01	1 / 136	20.85
	16-QAM	633334	3500.01	1 / 136	19.75

Table 7-6. Conducted Power Output Data (NR Band n77 PC2 (DoD) – 3rd-LMHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	650000	3750.00	1 / 136	21.65
		656000	3840.00	1 / 136	21.49
		662000	3930.00	1 / 271	21.42
	QPSK	650000	3750.00	1 / 136	21.67
		656000	3840.00	1 / 136	21.41
		662000	3930.00	1 / 271	21.39
	16-QAM	662000	3930.00	1 / 271	21.08

Table 7-7. Conducted Power Output Data (NR Band n77 PC2 (C-band) – 3rd-LMHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	633334	3500.01	1 / 136	23.30
	QPSK	633334	3500.01	1 / 136	23.05
	16-QAM	633334	3500.01	1 / 136	22.74

Table 7-8. Conducted Power Output Data (NR Band n77 PC2 (DoD) – 4th-MHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	π/2 BPSK	650000	3750.00	1 / 68	23.28
		656000	3840.00	1 / 136	23.43
		662000	3930.00	1 / 136	23.17
	QPSK	650000	3750.00	1 / 68	23.01
		656000	3840.00	1 / 136	23.26
		662000	3930.00	1 / 136	23.44
	16-QAM	656000	3840.00	1 / 136	22.88

Table 7-9. Conducted Power Output Data (NR Band n77 PC2 (C-band) – 4th-MHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	Main1 RB Size/Offset	Main1 Conducted Power [dBm]	Sub-UHB RB Size/Offset	Sub-UHB Conducted Power [dBm]	UL-MIMO Conducted Power [dBm]
100 MHz	QPSK	633334	3500.01	273 / 0	20.15	273 / 0	19.55	22.87
	16-QAM	633334	3500.01	1 / 1	20.25	273 / 0	19.53	22.91
	64-QAM	633334	3500.01	1 / 1	20.39	1 / 136	19.73	23.08
	256-QAM	633334	3500.01	1 / 136	18.56	1 / 271	19.68	22.17
80 MHz	QPSK	632668	3490.02	217 / 0	20.12	1 / 108	19.78	22.96
		633334	3500.01	1 / 1	20.39	1 / 108	19.82	23.12
		634000	3510.00	217 / 0	19.94	1 / 108	19.92	22.94
	16-QAM	632668	3490.02	217 / 0	19.91	1 / 108	19.75	22.84
		633334	3500.01	1 / 1	19.67	1 / 108	19.97	22.83
		634000	3510.00	217 / 0	20.04	1 / 108	19.83	22.95
	64-QAM	632668	3490.02	217 / 0	19.92	1 / 108	19.82	22.88
		633334	3500.01	1 / 1	20.41	1 / 108	19.84	23.14
		634000	3510.00	217 / 0	20.05	1 / 108	19.95	23.01
	256-QAM	632668	3490.02	217 / 0	19.90	1 / 108	19.78	22.85
		633334	3500.01	1 / 1	20.27	1 / 108	19.82	23.06
		634000	3510.00	217 / 0	20.06	1 / 108	19.88	22.98
60 MHz	QPSK	632000	3480.00	1 / 1	20.79	1 / 121	19.69	23.29
		633334	3500.01	1 / 1	20.24	1 / 81	19.66	22.97
		634666	3519.99	1 / 160	20.55	1 / 81	19.78	23.19
	16-QAM	632000	3480.00	1 / 1	20.22	1 / 121	19.55	22.91
		633334	3500.01	1 / 1	20.18	1 / 81	19.73	22.97
		634666	3519.99	1 / 160	20.34	1 / 81	19.82	23.10
	64-QAM	632000	3480.00	1 / 1	20.78	1 / 121	19.62	23.25
		633334	3500.01	1 / 1	20.61	1 / 81	19.72	23.20
		634666	3519.99	1 / 160	20.67	1 / 81	19.78	23.26
	256-QAM	632000	3480.00	1 / 1	20.76	1 / 121	19.69	23.27
		633334	3500.01	1 / 1	20.06	1 / 81	19.88	22.98
		634666	3519.99	1 / 160	19.80	1 / 81	19.74	22.78
40 MHz	QPSK	631334	3470.01	106 / 0	20.78	1 / 53	19.62	23.25
		633334	3500.01	1 / 1	20.59	1 / 53	19.66	23.16
		635332	3529.98	1 / 1	20.78	1 / 53	19.67	23.27
	16-QAM	631334	3470.01	106 / 0	20.59	1 / 53	19.66	23.16
		633334	3500.01	1 / 1	20.79	1 / 53	19.62	23.25
		635332	3529.98	1 / 104	20.78	1 / 53	19.63	23.25
	64-QAM	631334	3470.01	106 / 0	20.63	1 / 53	19.67	23.19
		633334	3500.01	1 / 1	20.78	1 / 53	19.79	23.32
		635332	3529.98	1 / 104	20.72	1 / 53	19.82	23.30
	256-QAM	631334	3470.01	106 / 0	20.79	1 / 53	19.48	23.19
		633334	3500.01	1 / 1	20.55	1 / 53	19.55	23.09
		635332	3529.98	1 / 104	19.36	1 / 53	19.43	22.41
30 MHz	QPSK	631000	3465.00	1 / 39	20.78	1 / 39	19.66	23.27
		633334	3500.01	1 / 1	20.79	1 / 58	19.76	23.32
		635666	3534.99	1 / 76	20.77	1 / 58	19.82	23.33
	16-QAM	631000	3465.00	1 / 39	20.79	1 / 39	19.54	23.22
		633334	3500.01	1 / 1	20.62	1 / 58	19.69	23.19
		635666	3534.99	1 / 76	21.12	1 / 58	19.68	23.47
	64-QAM	631000	3465.00	1 / 39	20.86	1 / 39	19.48	23.23
		633334	3500.01	1 / 1	20.77	1 / 58	19.79	23.32
		635666	3534.99	1 / 76	20.72	1 / 58	19.83	23.31
	256-QAM	631000	3465.00	1 / 39	20.79	1 / 39	19.37	23.15
		633334	3500.01	1 / 1	20.76	1 / 58	19.82	23.33
		635666	3534.99	1 / 76	19.33	1 / 58	19.88	22.62
20 MHz	QPSK	630668	3460.02	1 / 1	20.79	1 / 25	19.62	23.25
		633334	3500.01	1 / 25	20.66	1 / 37	19.66	23.20
		636000	3540.00	1 / 49	20.76	1 / 37	19.72	23.28
	16-QAM	630668	3460.02	1 / 1	20.72	1 / 25	19.55	23.18
		633334	3500.01	1 / 25	20.68	1 / 37	19.69	23.22
		636000	3540.00	1 / 49	20.64	1 / 37	19.79	23.25
	64-QAM	630668	3460.02	1 / 1	20.77	1 / 25	19.47	23.18
		633334	3500.01	1 / 25	20.61	1 / 37	19.63	23.16
		636000	3540.00	1 / 49	20.75	1 / 37	19.65	23.25
	256-QAM	630668	3460.02	1 / 1	20.78	1 / 25	19.58	23.23
		633334	3500.01	1 / 25	20.38	1 / 37	19.57	23.00
		636000	3540.00	1 / 49	19.55	1 / 37	19.45	22.51

Table 7-10. Conducted Power Output Data (NR n77 (DoD) UL-MIMO Main1+Sub-UHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	Main1 RB Size/Offset	Main1 Conducted Power [dBm]	Sub-UHB RB Size/Offset	Sub-UHB Conducted Power [dBm]	UL-MIMO Conducted Power [dBm]
100 MHz	QPSK	650000	3750.00	273 / 0	19.59	273 / 0	19.22	22.42
		656000	3840.00	1 / 136	19.58	1 / 136	19.55	22.57
		662000	3930.00	273 / 0	19.23	273 / 0	19.13	22.19
	16-QAM	650000	3750.00	273 / 0	19.63	1 / 271	19.35	22.50
		656000	3840.00	273 / 0	19.43	273 / 0	19.30	22.38
		662000	3930.00	273 / 0	19.19	273 / 0	19.13	22.17
	64-QAM	650000	3750.00	1 / 136	19.97	1 / 136	19.91	22.95
		656000	3840.00	1 / 1	19.53	1 / 136	19.59	22.57
		662000	3930.00	1 / 271	19.25	1 / 136	19.14	22.21
	256-QAM	650000	3750.00	1 / 136	17.82	273 / 0	19.31	21.64
		656000	3840.00	1 / 136	17.69	1 / 136	19.57	21.74
		662000	3930.00	273 / 0	17.18	1 / 136	19.20	21.32
90 MHz	QPSK	649668	3745.02	1 / 243	19.84	1 / 122	19.42	22.65
		656000	3840.00	245 / 0	19.82	1 / 122	19.50	22.67
		662332	3934.98	1 / 122	19.95	1 / 122	19.46	22.72
	16-QAM	649668	3745.02	1 / 122	20.48	1 / 122	19.69	23.11
		656000	3840.00	245 / 0	19.70	1 / 122	19.39	22.56
		662332	3934.98	245 / 0	19.37	245 / 0	19.09	22.24
	64-QAM	649668	3745.02	1 / 122	20.57	1 / 122	19.63	23.13
		656000	3840.00	1 / 122	19.97	1 / 122	19.77	22.88
		662332	3934.98	1 / 122	19.62	1 / 122	19.40	22.52
	256-QAM	649668	3745.02	1 / 122	18.49	245 / 0	19.45	22.01
		656000	3840.00	245 / 0	17.72	245 / 0	19.42	21.66
		662332	3934.98	245 / 0	17.30	245 / 0	19.13	21.32
80 MHz	QPSK	649334	3740.01	1 / 108	20.11	1 / 108	19.51	22.83
		656000	3840.00	1 / 108	20.10	1 / 108	19.54	22.84
		662666	3939.99	217 / 0	19.62	217 / 0	19.02	22.34
	16-QAM	649334	3740.01	217 / 0	19.96	217 / 0	19.45	22.72
		656000	3840.00	1 / 1	20.37	1 / 108	19.79	23.10
		662666	3939.99	1 / 215	19.77	217 / 0	19.04	22.43
	64-QAM	649334	3740.01	1 / 215	20.35	1 / 108	19.67	23.03
		656000	3840.00	1 / 1	20.27	1 / 108	19.79	23.04
		662666	3939.99	1 / 108	20.00	1 / 54	19.22	22.64
	256-QAM	649334	3740.01	1 / 108	18.21	217 / 0	19.45	21.88
		656000	3840.00	1 / 1	18.26	217 / 0	19.45	21.91
		662666	3939.99	1 / 215	17.92	217 / 0	19.11	21.56
60 MHz	QPSK	648668	3730.02	1 / 160	20.46	1 / 40	19.55	23.04
		656000	3840.00	1 / 1	20.29	162 / 0	19.50	22.92
		663332	3949.98	1 / 160	19.91	1 / 40	19.17	22.57
	16-QAM	648668	3730.02	162 / 0	20.48	162 / 0	19.54	23.04
		656000	3840.00	162 / 0	20.00	162 / 0	19.49	22.76
		663332	3949.98	1 / 160	19.77	1 / 40	19.23	22.52
	64-QAM	648668	3730.02	1 / 160	20.75	1 / 81	19.88	23.35
		656000	3840.00	1 / 81	20.62	1 / 40	20.11	23.38
		663332	3949.98	1 / 160	20.18	1 / 81	19.37	22.81
	256-QAM	648668	3730.02	162 / 0	18.37	162 / 0	19.47	21.96
		656000	3840.00	1 / 1	18.30	162 / 0	19.46	21.93
		663332	3949.98	162 / 0	17.75	162 / 0	19.15	21.52
40 MHz	QPSK	648000	3720.00	106 / 0	20.76	1 / 26	19.96	23.39
		656000	3840.00	1 / 1	20.42	1 / 26	19.84	23.15
		664000	3960.00	1 / 53	20.51	1 / 26	19.79	23.18
	16-QAM	648000	3720.00	106 / 0	20.77	1 / 26	19.86	23.35
		656000	3840.00	1 / 1	20.44	106 / 0	19.78	23.13
		664000	3960.00	1 / 104	20.60	1 / 79	19.75	23.21
	64-QAM	648000	3720.00	1 / 53	20.80	1 / 26	20.04	23.44
		656000	3840.00	1 / 104	20.79	1 / 26	20.15	23.49
		664000	3960.00	1 / 1	20.56	1 / 79	19.98	23.29
	256-QAM	648000	3720.00	106 / 0	18.88	106 / 0	19.82	22.39
		656000	3840.00	106 / 0	18.44	1 / 26	19.89	22.24
		664000	3960.00	1 / 104	18.30	1 / 79	19.84	22.15
30 MHz	QPSK	647668	3715.02	1 / 76	20.74	1 / 58	19.99	23.39
		656000	3840.00	1 / 39	20.45	1 / 19	19.83	23.16
		664332	3964.98	1 / 39	20.63	1 / 58	19.85	23.27
	16-QAM	647668	3715.02	1 / 76	20.77	78 / 0	19.90	23.36
		656000	3840.00	78 / 0	20.54	78 / 0	19.89	23.24
		664332	3964.98	78 / 0	20.31	78 / 0	19.56	22.96
	64-QAM	647668	3715.02	78 / 0	20.71	78 / 0	19.93	23.35
		656000	3840.00	1 / 1	20.98	1 / 19	20.17	23.61
		664332	3964.98	1 / 76	20.78	1 / 19	19.92	23.38
	256-QAM	647668	3715.02	1 / 76	18.91	1 / 58	19.99	22.50
		656000	3840.00	78 / 0	18.48	78 / 0	19.77	22.18
		664332	3964.98	1 / 76	18.82	1 / 19	19.76	22.33
20 MHz	QPSK	647334	3710.01	1 / 49	20.48	1 / 37	19.83	23.18
		656000	3840.00	1 / 25	20.68	1 / 25	19.88	23.31
		664666	3969.99	1 / 25	20.76	1 / 37	19.40	23.14
	16-QAM	647334	3710.01	1 / 49	20.58	51 / 0	19.84	23.23
		656000	3840.00	1 / 1	20.75	51 / 0	19.83	23.33
		664666	3969.99	1 / 25	20.62	1 / 37	19.56	23.13
	64-QAM	647334	3710.01	1 / 49	20.79	1 / 25	20.07	23.46
		656000	3840.00	1 / 1	20.80	1 / 25	20.31	23.57
		664666	3969.99	1 / 49	20.83	1 / 37	19.84	23.37
	256-QAM	647334	3710.01	1 / 49	18.74	51 / 0	19.84	22.34
		656000	3840.00	1 / 1	18.57	51 / 0	19.80	22.24
		664666	3969.99	51 / 0	18.44	51 / 0	19.39	21.95

Table 7-11. Conducted Power Output Data (NR n77 (C-band) UL-MIMO Main1+Sub-UHB)

Bandwidth	Modulation	Channel	Frequency [MHz]	3rd-LMHB RB Size/Offset	3rd-LMHB Conducted Power [dBm]	4th-LMH RB Size/Offset	4th-LMH Conducted Power [dBm]	SRS 2T4R Conducted Power [dBm]
100 MHz	QPSK	633334	3500.01	273 / 0	15.21	273 / 0	14.19	17.74
	16-QAM	633334	3500.01	1 / 136	15.20	1 / 136	14.34	17.81
	64-QAM	633334	3500.01	1 / 136	15.30	273 / 0	14.19	17.79
	256-QAM	633334	3500.01	1 / 136	15.28	273 / 0	14.20	17.78

Table 7-12. Conducted Power Output Data (NR n77 (DoD) SRS 2T4R 3rd-LMHB+4th-LMH)

Bandwidth	Modulation	Channel	Frequency [MHz]	3rd-LMHB RB Size/Offset	3rd-LMHB Conducted Power [dBm]	4th-LMH RB Size/Offset	4th-LMH Conducted Power [dBm]	SRS 2T4R Conducted Power [dBm]
100 MHz	QPSK	650000	3750.00	1 / 136	14.98	1 / 136	14.00	17.53
		656000	3840.00	273 / 0	14.50	273 / 0	13.89	17.22
		662000	3930.00	273 / 0	14.40	273 / 0	14.53	17.48
	16-QAM	650000	3750.00	1 / 136	14.95	273 / 0	13.37	17.24
		656000	3840.00	1 / 136	14.62	273 / 0	13.88	17.27
		662000	3930.00	1 / 136	14.72	273 / 0	14.51	17.63
	64-QAM	650000	3750.00	1 / 136	14.74	1 / 136	13.49	17.17
		656000	3840.00	1 / 136	14.54	273 / 0	13.89	17.24
		662000	3930.00	1 / 136	14.72	1 / 136	14.74	17.74
	256-QAM	650000	3750.00	273 / 0	14.48	273 / 0	13.39	16.98
		656000	3840.00	273 / 0	14.50	273 / 0	13.90	17.22
		662000	3930.00	273 / 0	14.46	273 / 0	14.52	17.50

Table 7-13. Conducted Power Output Data (NR n77 (C-band) SRS 2T4R 3rd-LMHB+4th-LMH)

NR							LTE							NR Conducted Power [dBm]	LTE Conducted Power [dBm]	EN-DC Total Tx. Power [dBm]
NR Band	Antenna	NR Bandwidth [MHz]	NR Channel	NR Frequency [MHz]	Mod.	NR RB#/Offset	LTE Band	Antenna	LTE Bandwidth [MHz]	LTE Channel	LTE Frequency [MHz]	Mod.	LTE RB#/Offset			
n77 (C)	Main1	100	656000	3840	QPSK	270/0	66	Main2	20	132322	1745	QPSK	100/0	18.76	23.36	24.65
					QPSK	270/0						QPSK	1/50	17.37	24.41	25.19
					QPSK	1/136						QPSK	100/0	18.71	23.34	24.63
					QPSK	1/136						QPSK	1/50	17.33	24.39	25.17
					16QAM	270/0						16QAM	1/50	18.74	23.89	25.05
n77 (C)	Main1	100	656000	3840	QPSK	270/0	30	Main2	10	27710	2310	QPSK	50/0	19.48	23.17	24.72
					QPSK	270/0						QPSK	1/25	18.63	24.23	25.29
					QPSK	1/136						QPSK	50/0	19.53	23.16	24.72
					QPSK	1/136						QPSK	1/25	18.58	24.20	25.25
					16QAM	270/0						16QAM	1/25	19.64	23.56	25.04
n77 (C)	Main1	100	656000	3840	QPSK	270/0	5	Sub	10	20525	836.5	QPSK	50/0	23.79	22.32	26.13
					QPSK	270/0						QPSK	1/25	23.76	22.35	26.12
					QPSK	1/136						QPSK	50/0	23.79	22.34	26.14
					QPSK	1/136						QPSK	1/25	23.83	22.38	26.18
					16QAM	1/136						16QAM	1/25	23.62	22.71	26.20
n77 (C)	Sub-UHB	100	656000	3840	QPSK	270/0	5	Sub	10	20525	836.5	QPSK	50/0	17.73	22.86	24.02
					QPSK	270/0						QPSK	1/25	16.58	24.03	24.75
					QPSK	1/136						QPSK	50/0	17.54	22.86	23.98
					QPSK	1/136						QPSK	1/25	16.61	23.92	24.66
					16QAM	270/0						16QAM	1/25	17.60	23.31	24.34
n77 (C)	Main1	100	656000	3840	QPSK	270/0	5	Main1	10	20525	836.5	QPSK	50/0	22.44	21.87	25.17
					QPSK	270/0						QPSK	1/25	21.25	23.27	25.39
					QPSK	1/136						QPSK	50/0	22.43	21.88	25.17
					QPSK	1/136						QPSK	1/25	21.28	23.22	25.37
					16QAM	270/0						16QAM	1/25	22.43	22.20	25.33
n77 (DoD)	Main1	100	633334	3500.1	QPSK	270/0	66	Main2	20	132322	1745	QPSK	100/0	18.86	23.36	24.68
					QPSK	270/0						QPSK	1/50	17.56	24.45	25.26
					QPSK	1/136						QPSK	100/0	18.70	23.36	24.64
					QPSK	1/136						QPSK	1/50	17.38	24.49	25.26
					16QAM	270/0						16QAM	1/50	18.80	23.71	24.93
n77 (DoD)	Main1	100	633334	3500.1	QPSK	270/0	30	Main2	10	27710	2310	QPSK	50/0	19.96	23.10	24.82
					QPSK	270/0						QPSK	1/25	18.97	24.15	25.30
					QPSK	1/136						QPSK	50/0	19.92	23.07	24.78
					QPSK	1/136						QPSK	1/25	18.87	24.09	25.23
					16QAM	270/0						16QAM	1/25	19.87	23.43	25.02
n77 (DoD)	Main1	100	633334	3500.1	QPSK	270/0	5	Sub	10	20525	836.5	QPSK	50/0	23.78	22.42	26.16
					QPSK	270/0						QPSK	1/25	23.78	22.39	26.15
					QPSK	1/136						QPSK	50/0	23.80	22.37	26.15
					QPSK	1/136						QPSK	1/25	23.82	22.38	26.17
					16QAM	1/136						16QAM	1/25	23.75	22.52	26.19
n77 (DoD)	Main1	100	633334	3500.1	QPSK	270/0	5	Main1	10	20525	836.5	QPSK	50/0	23.13	21.87	25.56
					QPSK	270/0						QPSK	1/25	22.15	23.20	25.72
					QPSK	1/136						QPSK	50/0	23.19	21.89	25.60
					QPSK	1/136						QPSK	1/25	21.98	23.20	25.64
					16QAM	270/0						16QAM	1/25	23.17	22.24	25.74
n77 (DoD)	Sub-UHB	100	633334	3500.1	QPSK	270/0	5	Sub	10	20525	836.5	QPSK	50/0	17.90	22.93	24.12
					QPSK	270/0						QPSK	1/25	16.61	24.01	24.74
					QPSK	1/136						QPSK	50/0	17.75	22.91	24.07
					QPSK	1/136						QPSK	1/25	16.63	23.99	24.72
					16QAM	270/0						16QAM	1/25	17.26	23.37	24.32

Table 7-14. Conducted Power Output Data (EN-DC: NR Band n77)

7.3 Occupied Bandwidth

Test Overview

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. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Procedure Used

ANSI C63.26-2015 – Section 5.4.4

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

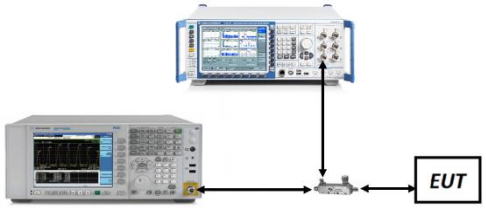
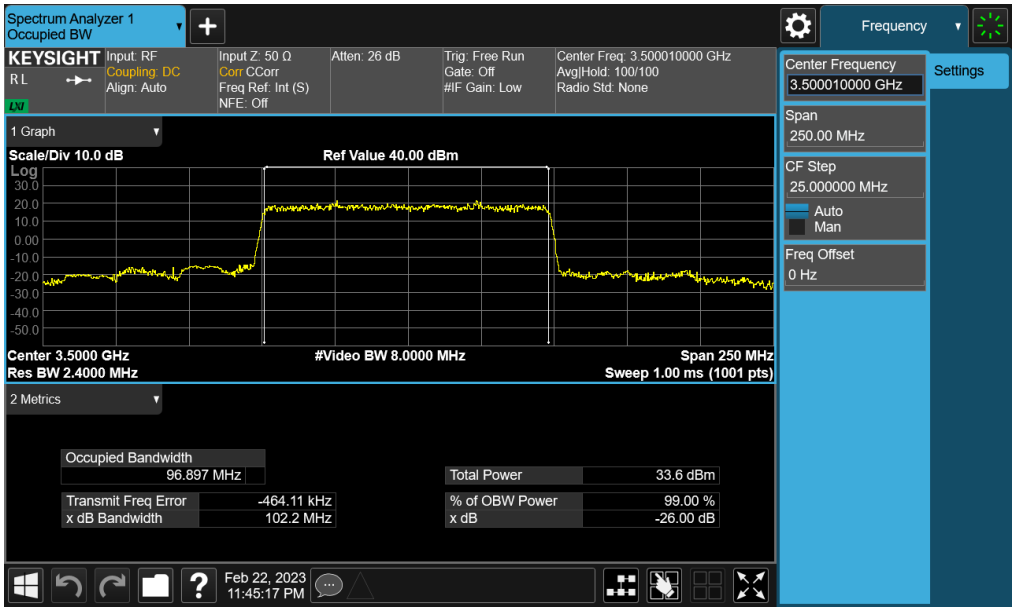


Figure 7-2. Test Instrument & Measurement Setup

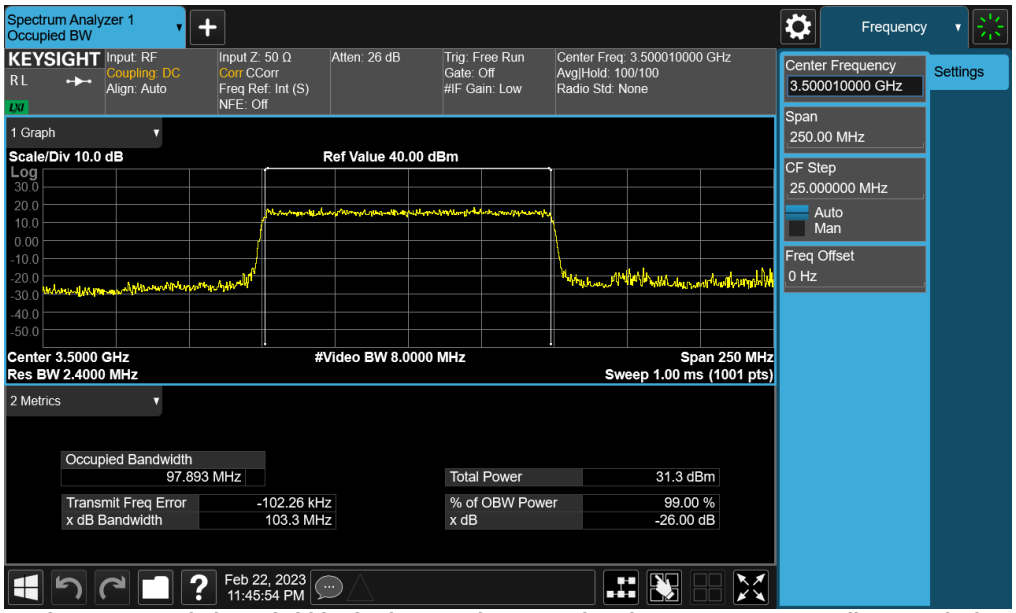
Test Notes

None.

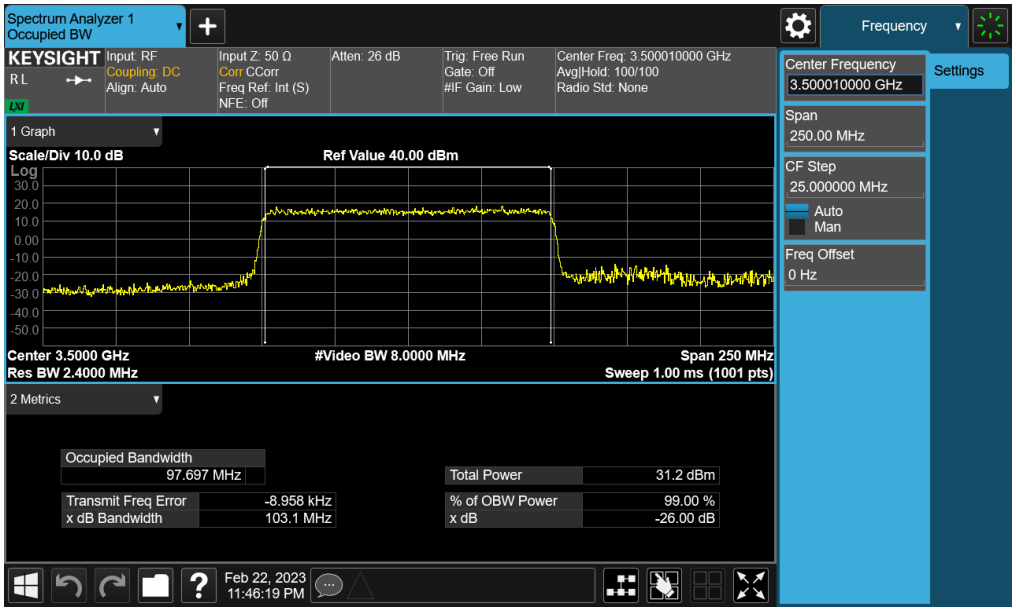
NR Band n77 PC2 (DoD) – Main1



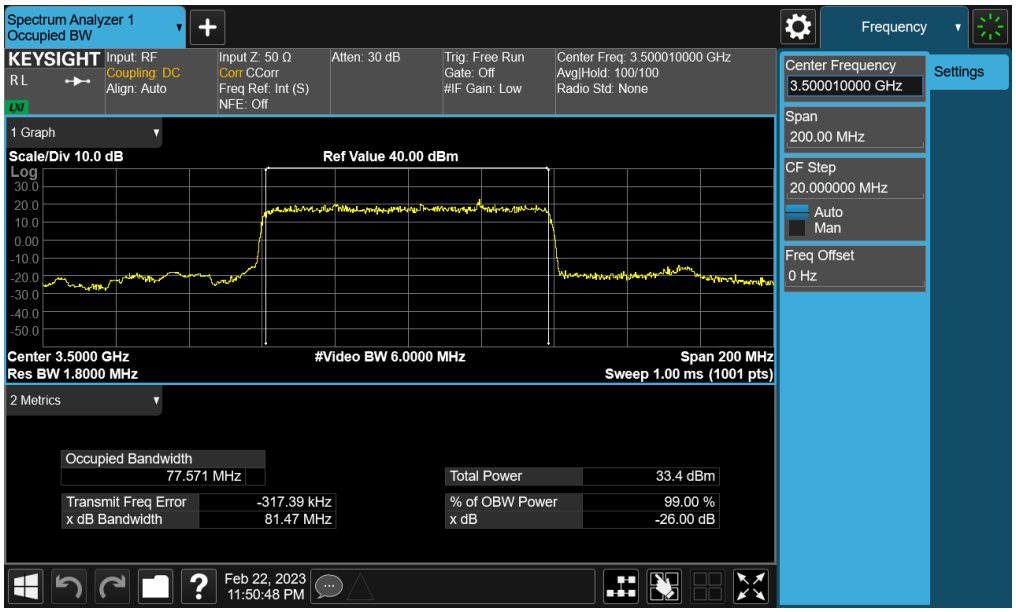
Plot 7-1. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz π/2 BPSK - Full RB – Main1)



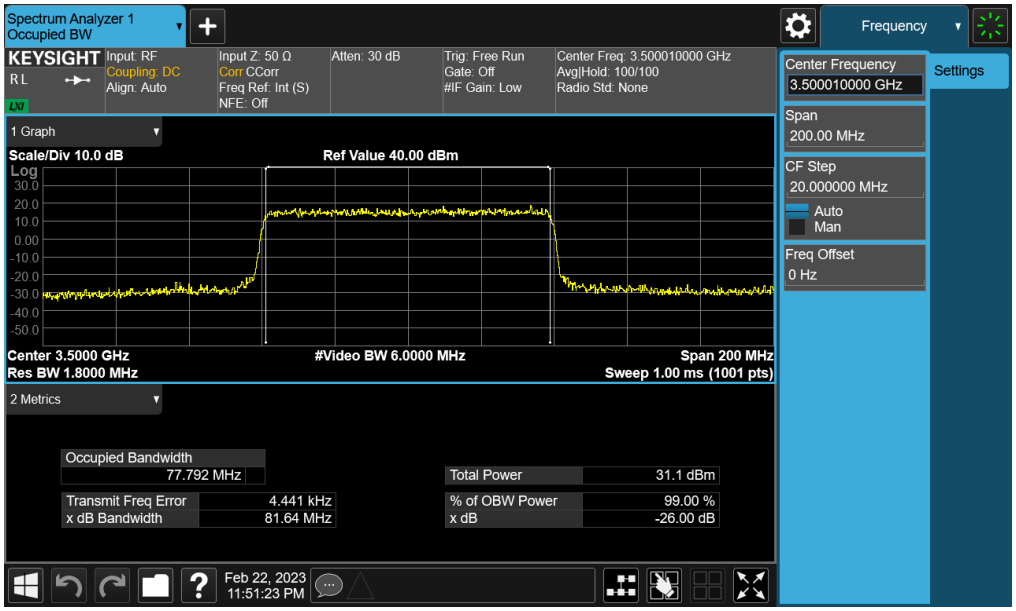
Plot 7-2. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz QPSK - Full RB - Main1)



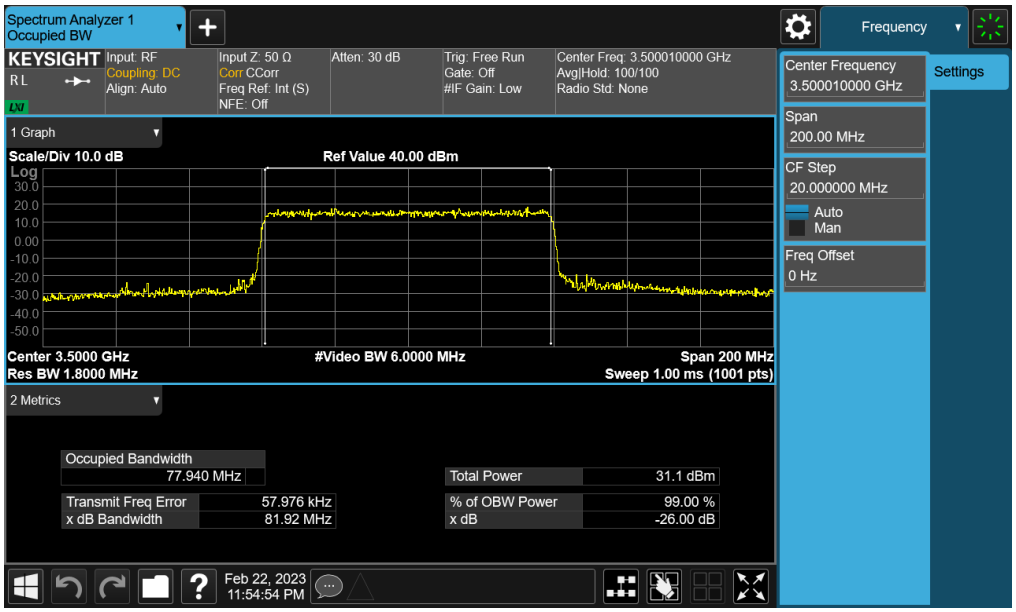
Plot 7-3. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz 16-QAM - Full RB - Main1)



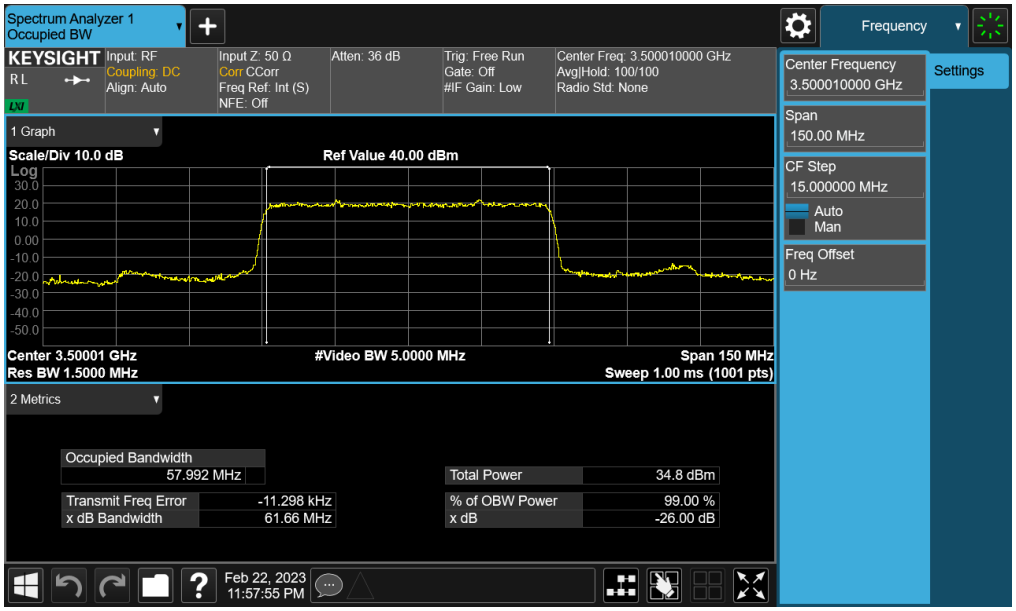
Plot 7-4. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz π/2 BPSK - Full RB - Main1)



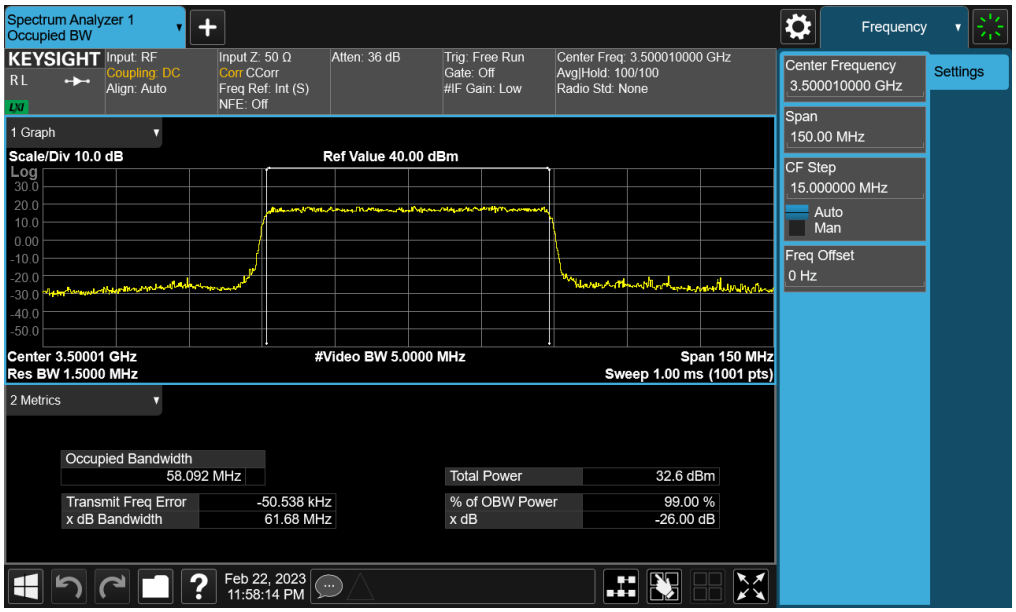
Plot 7-5. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz QPSK - Full RB - Main1)



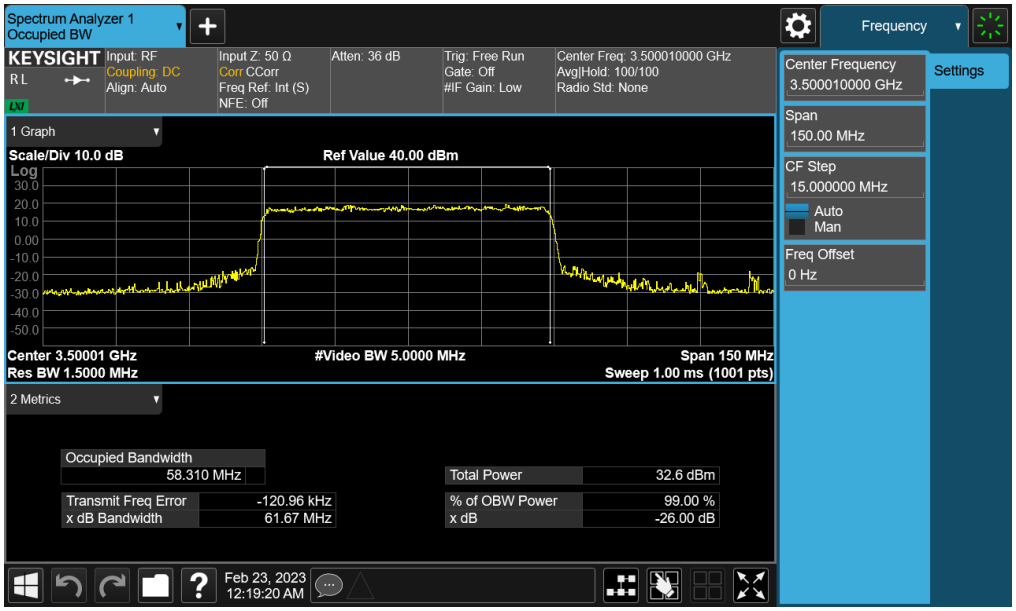
Plot 7-6. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz 16-QAM - Full RB - Main1)



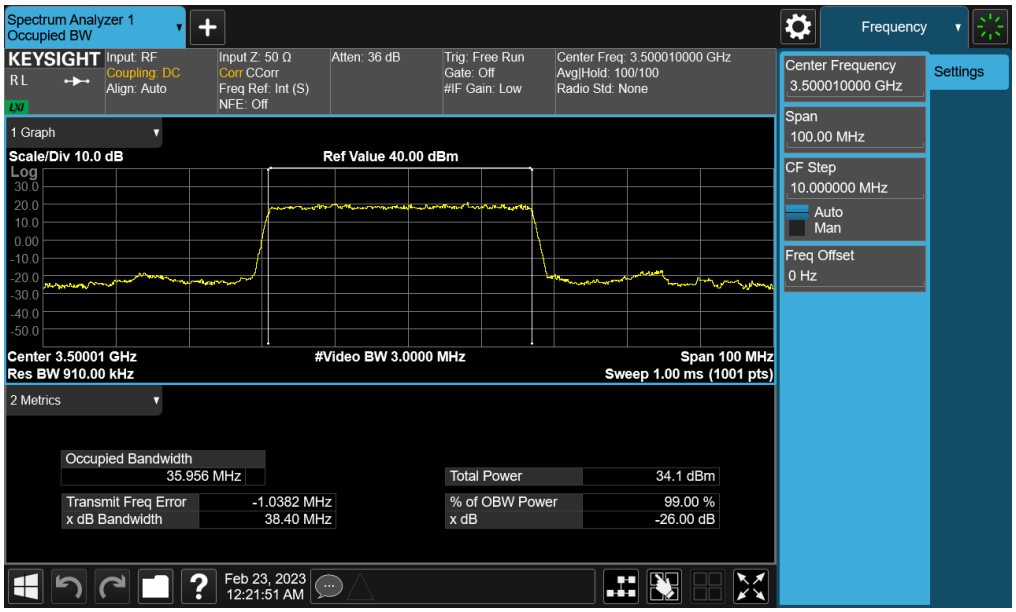
Plot 7-7. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz π/2 BPSK - Full RB - Main1)



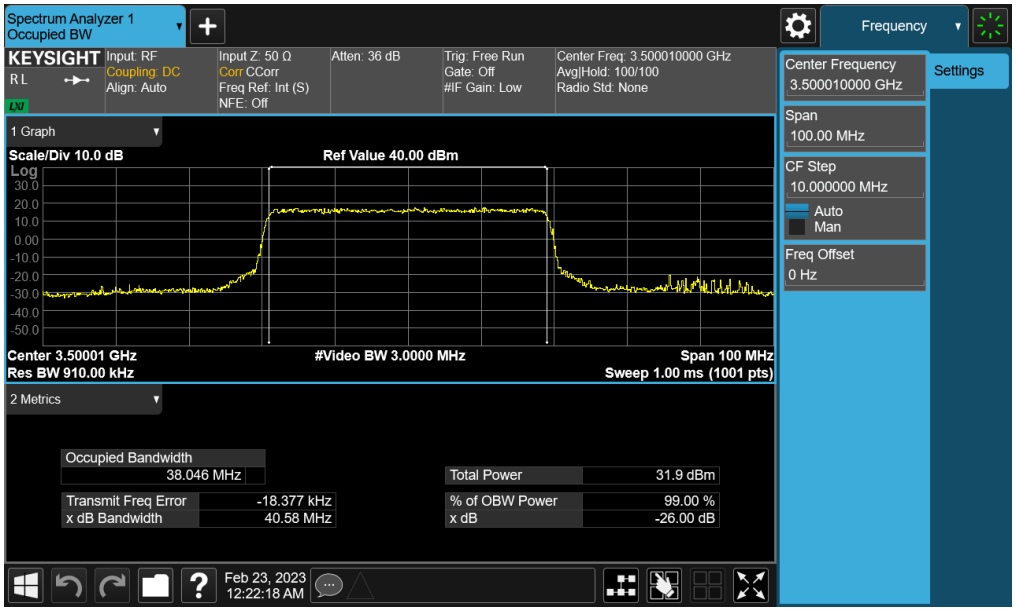
Plot 7-8. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz QPSK - Full RB - Main1)



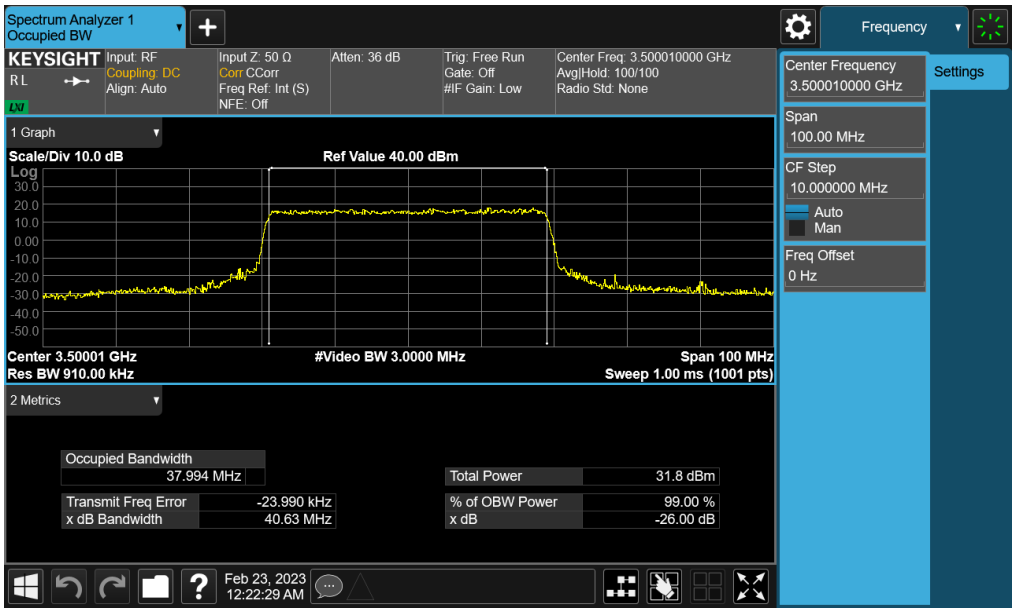
Plot 7-9. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz 16-QAM - Full RB - Main1)



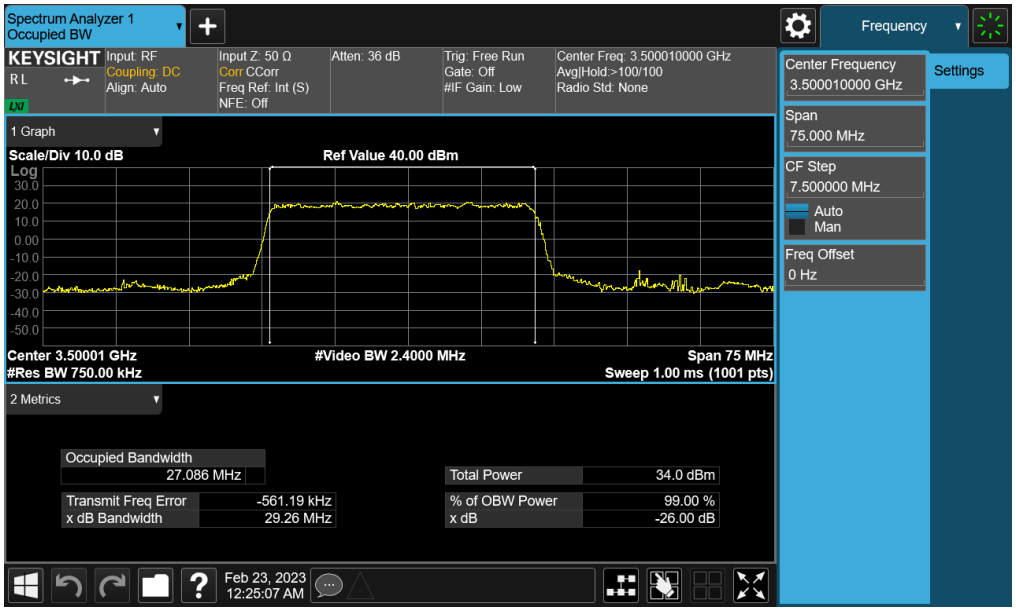
Plot 7-10. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz π/2 BPSK - Full RB - Main1)



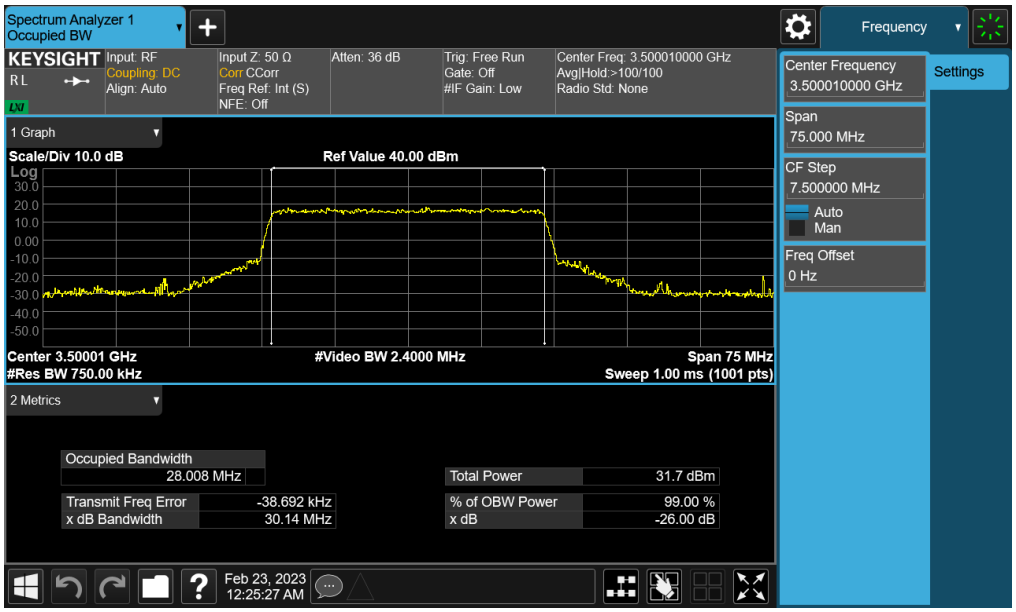
Plot 7-11. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz QPSK - Full RB - Main1)



Plot 7-12. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz 16-QAM - Full RB - Main1)

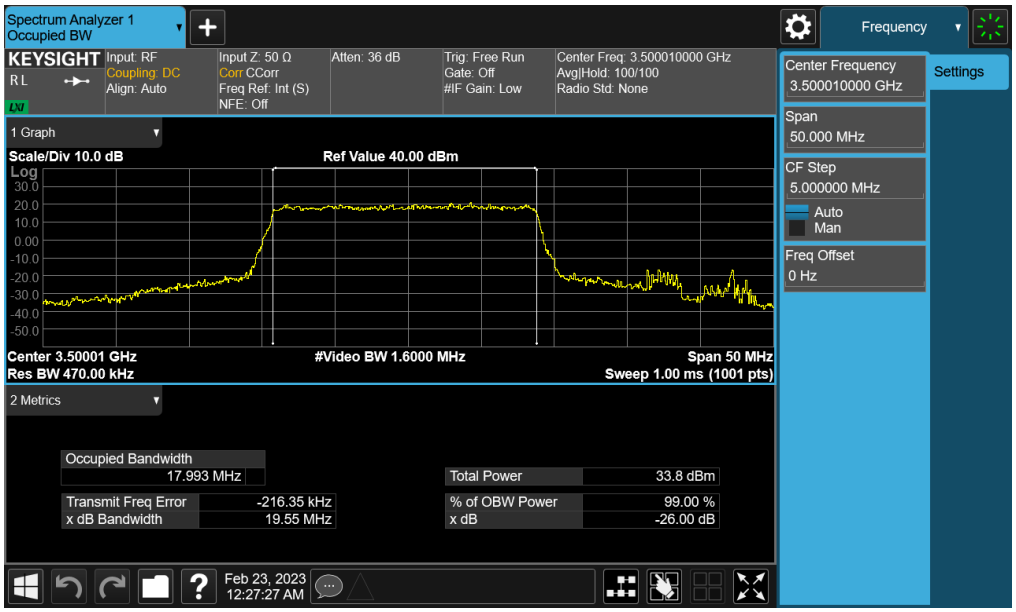


Plot 7-13. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz π/2 BPSK - Full RB - Main1)

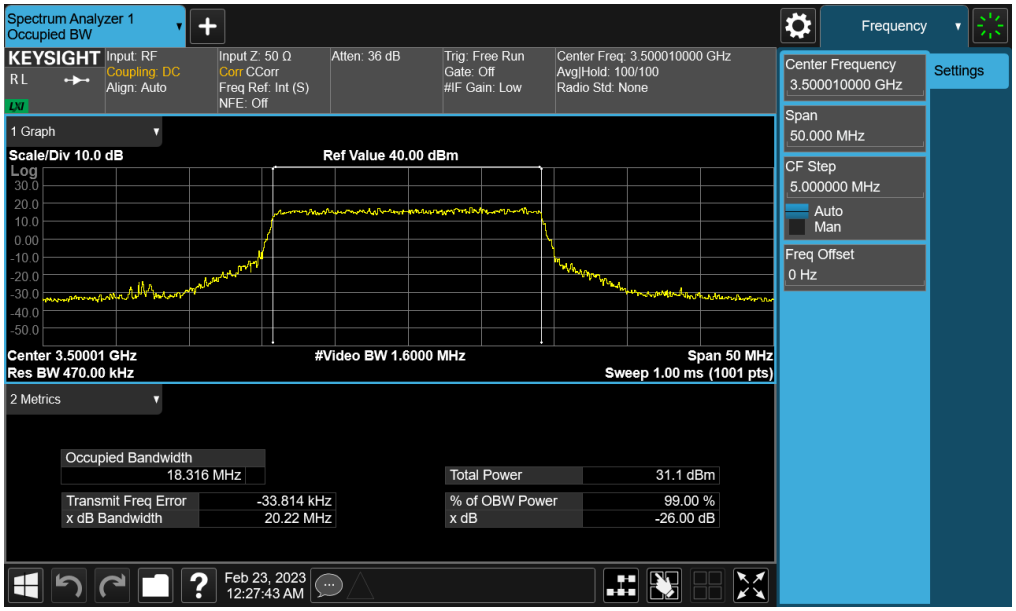


Plot 7-14. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz QPSK - Full RB - Main1)

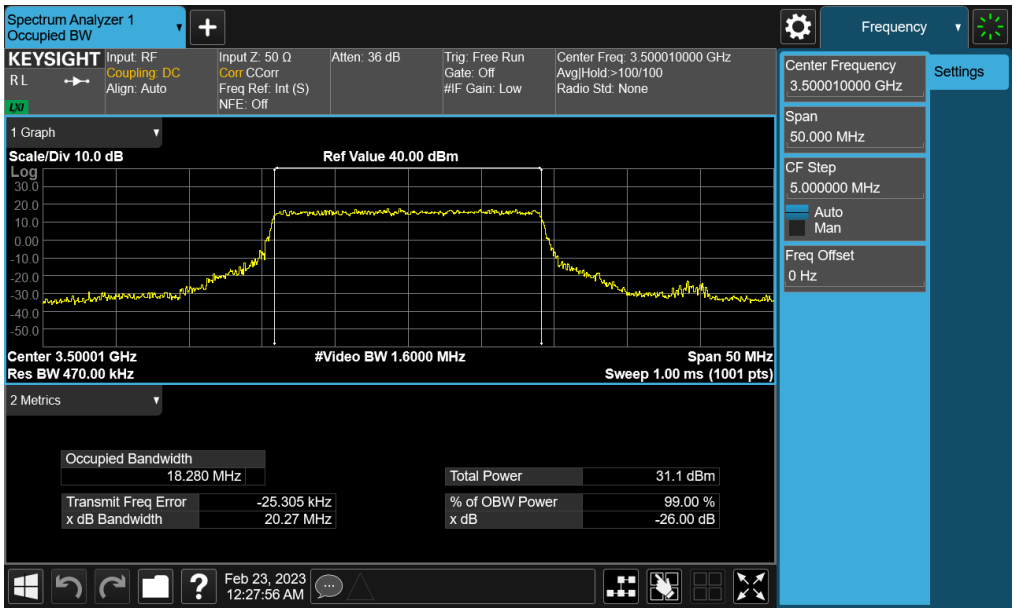
Plot 7-15. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz 16-QAM - Full RB - Main1)



Plot 7-16. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 20MHz π/2 BPSK - Full RB - Main1)

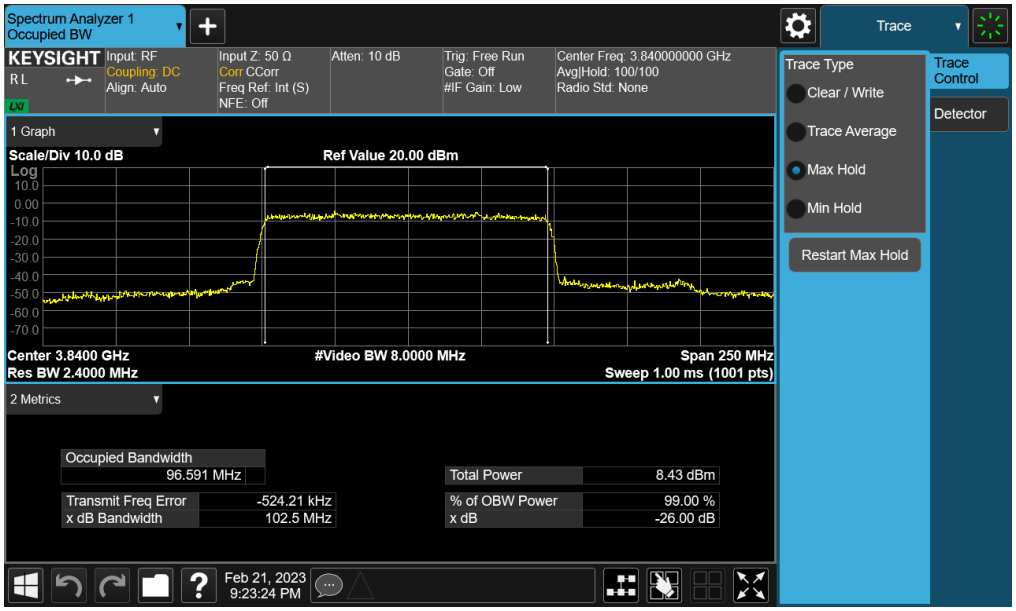


Plot 7-17. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 20MHz QPSK - Full RB - Main1)

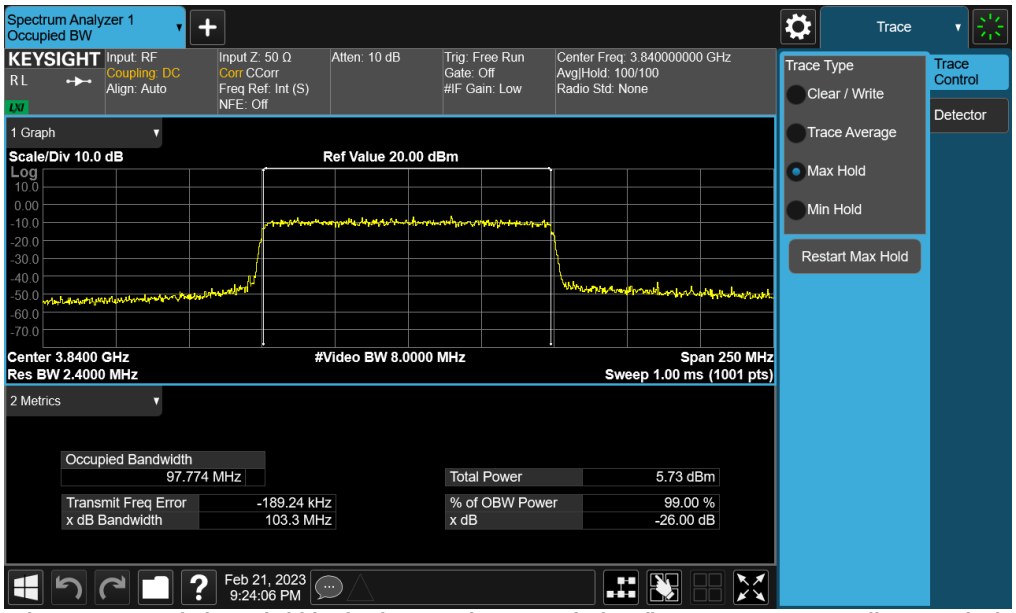


Plot 7-18. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 20MHz 16-QAM - Full RB - Main1)

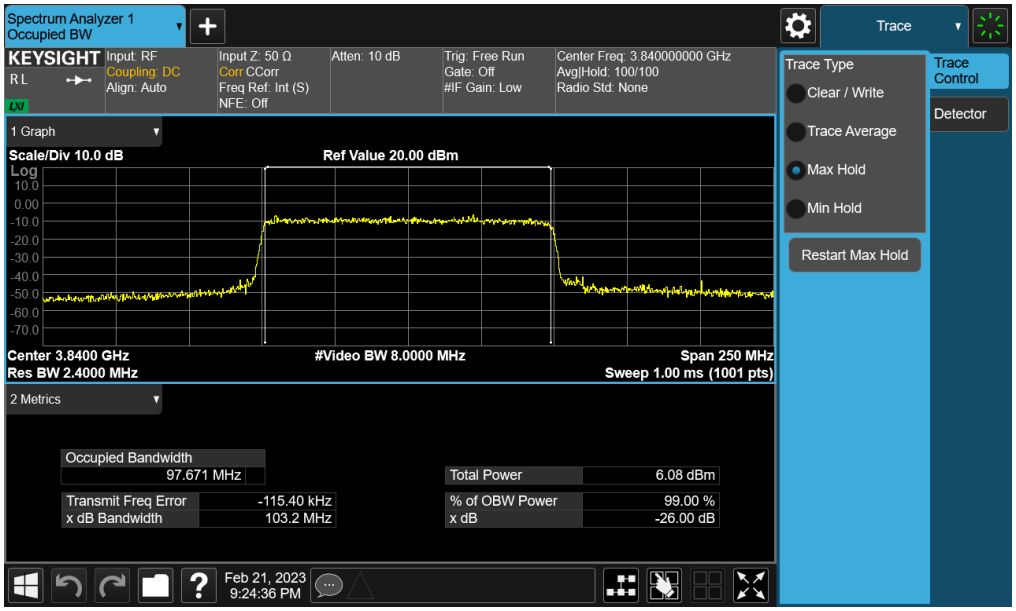
NR Band n77 PC2 (C-band) – Main1



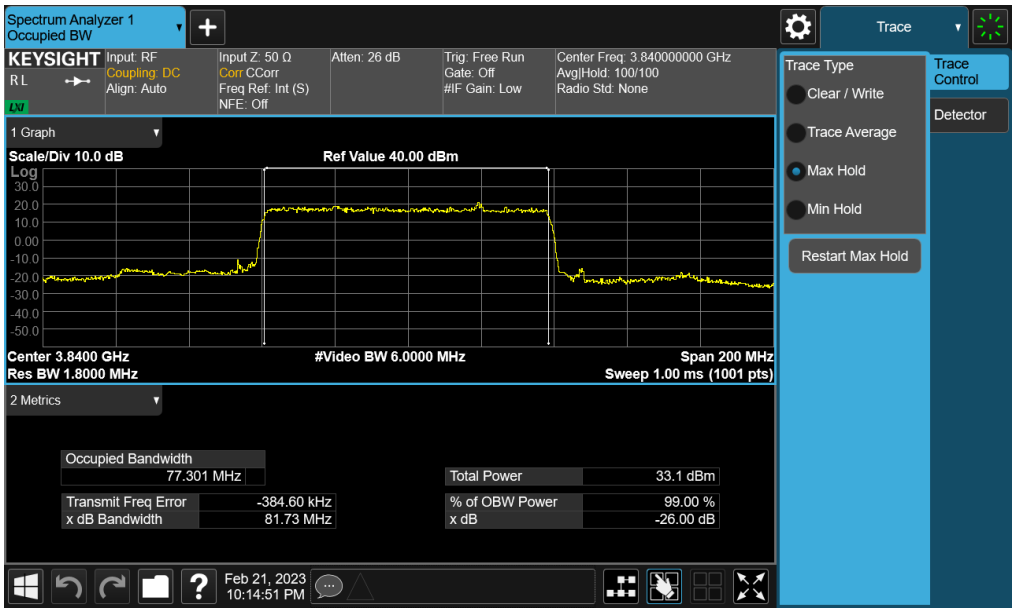
Plot 7-19. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 100MHz π/2 BPSK - Full RB – Main1)



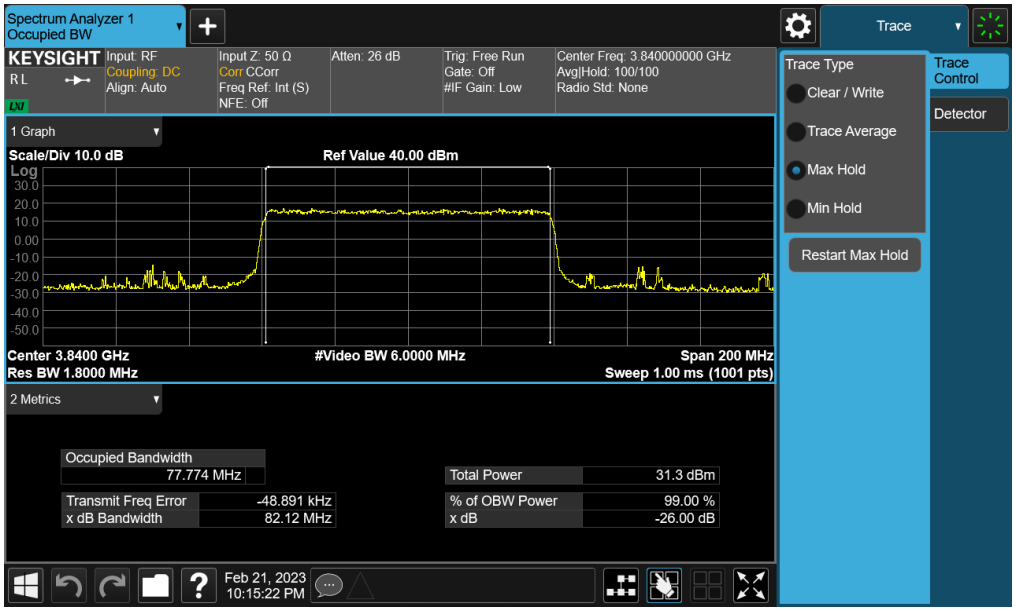
Plot 7-20. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 100MHz QPSK - Full RB - Main1)



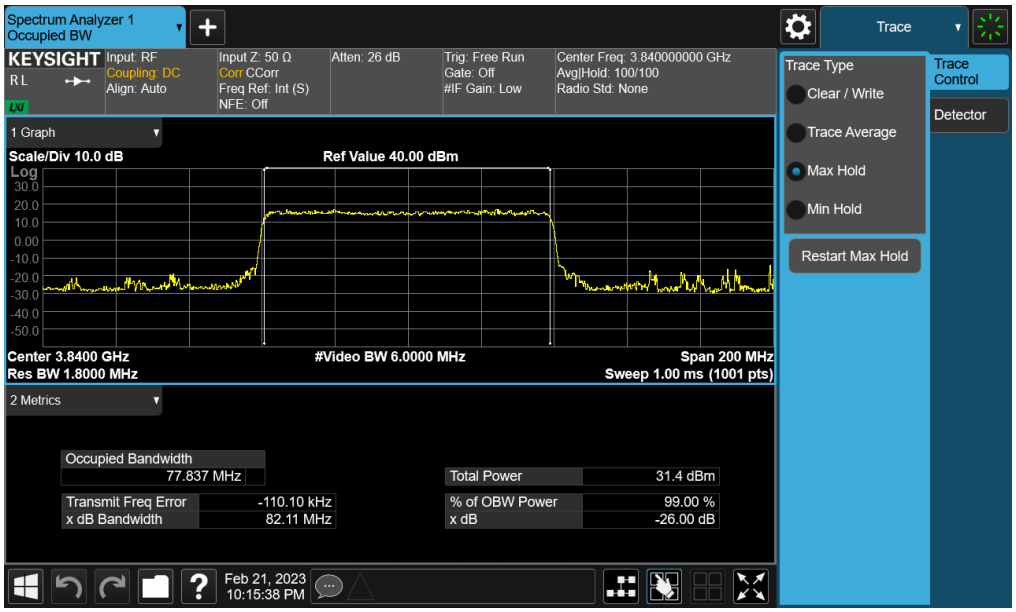
Plot 7-21. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 100MHz 16-QAM - Full RB - Main1)



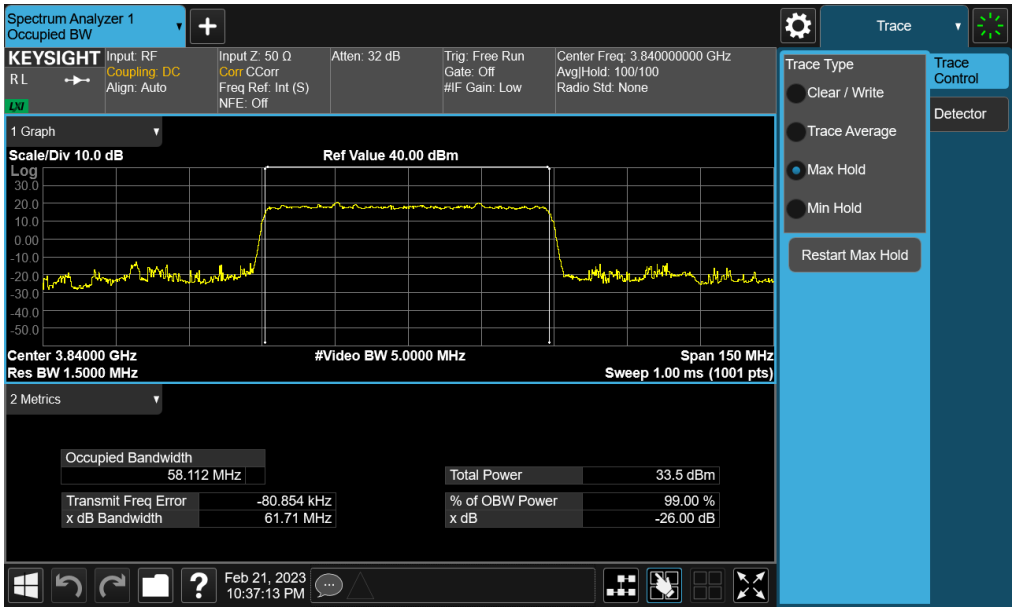
Plot 7-22. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 80MHz π/2 BPSK - Full RB - Main1)



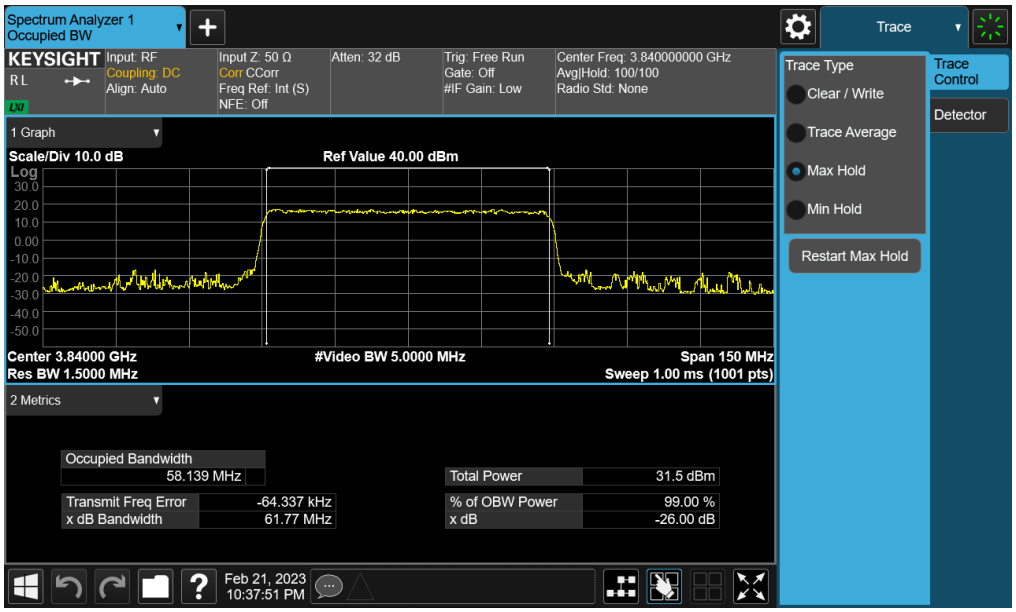
Plot 7-23. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 80MHz QPSK - Full RB - Main1)



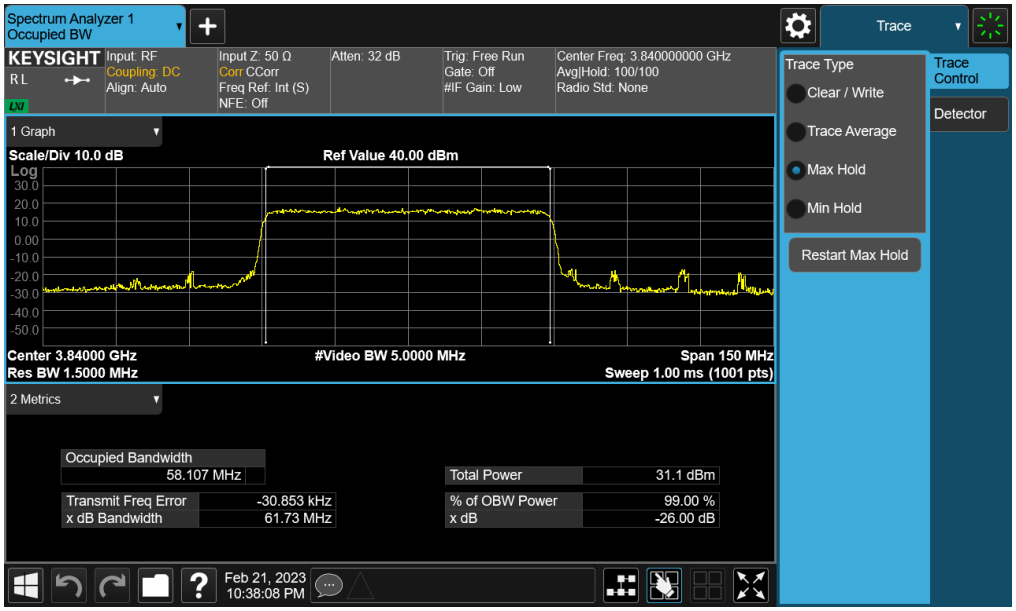
Plot 7-24. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 80MHz 16-QAM - Full RB - Main1)



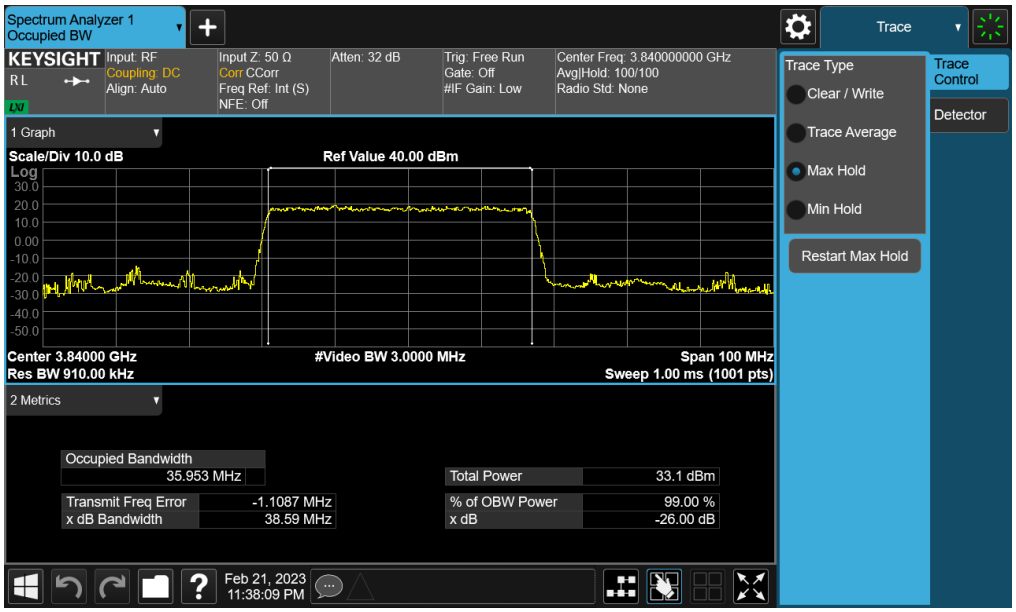
Plot 7-25. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 60MHz π/2 BPSK - Full RB - Main1)



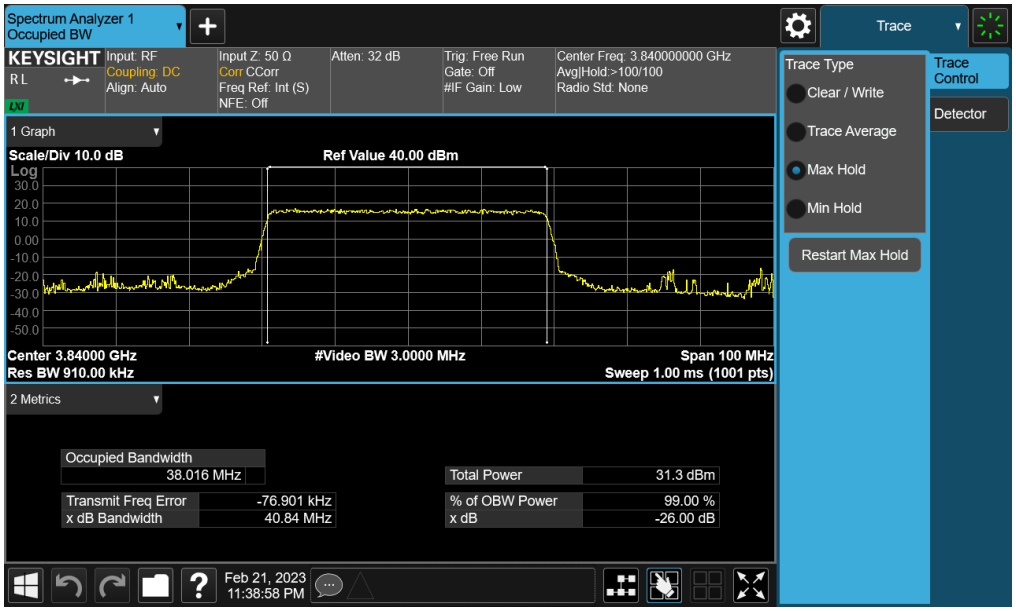
Plot 7-26. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 60MHz QPSK - Full RB - Main1)



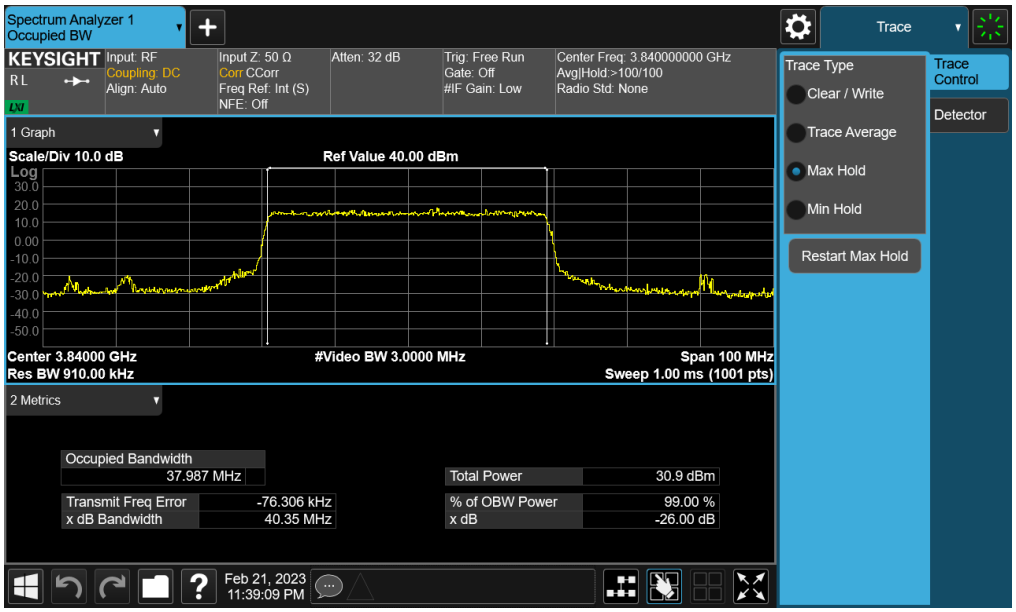
Plot 7-27. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 60MHz 16-QAM - Full RB - Main1)



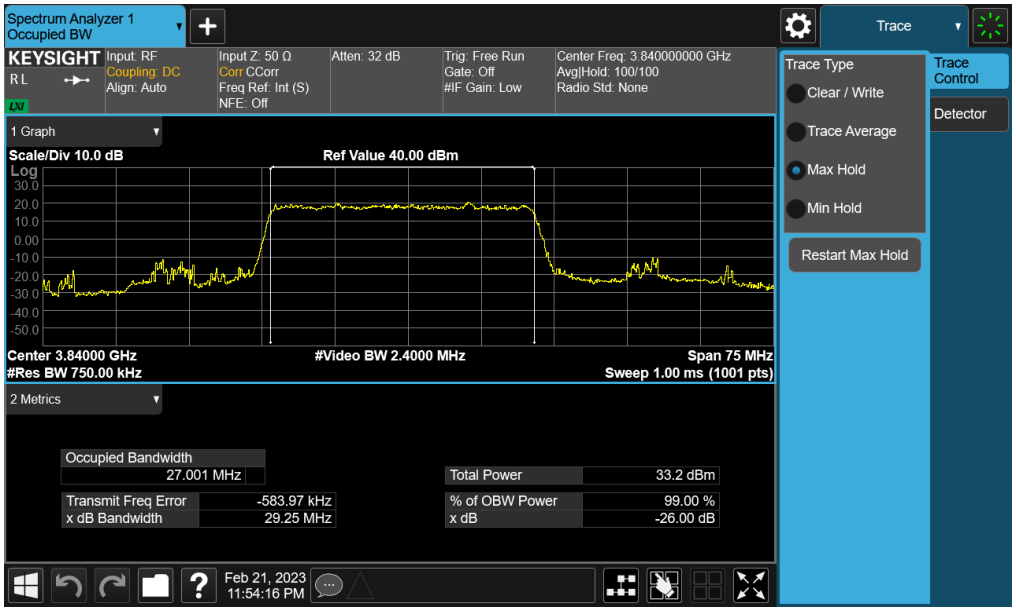
Plot 7-28. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 40MHz π/2 BPSK - Full RB - Main1)



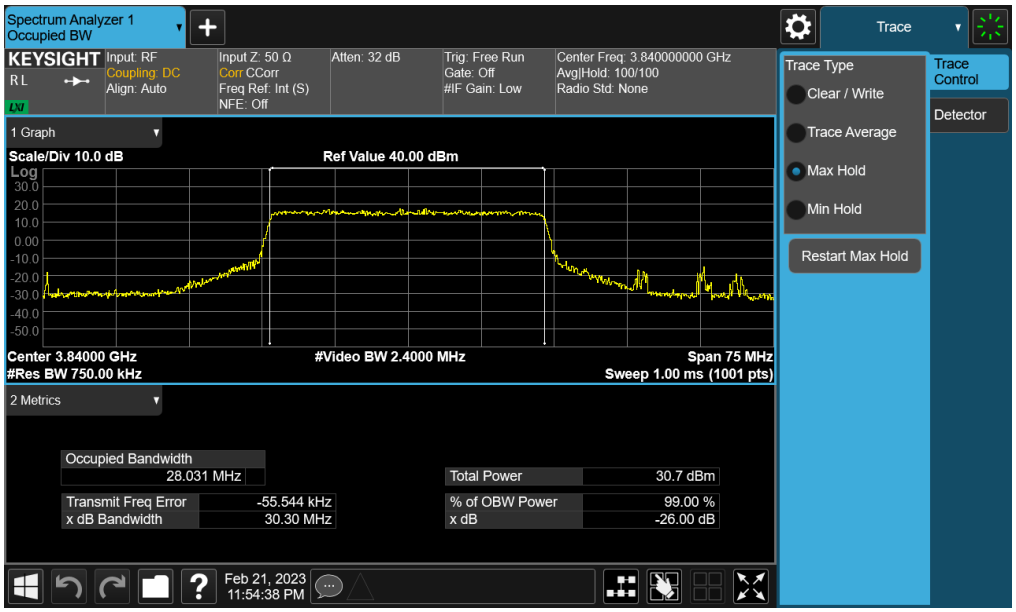
Plot 7-29. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 40MHz QPSK - Full RB - Main1)



Plot 7-30. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 40MHz 16-QAM - Full RB - Main1)

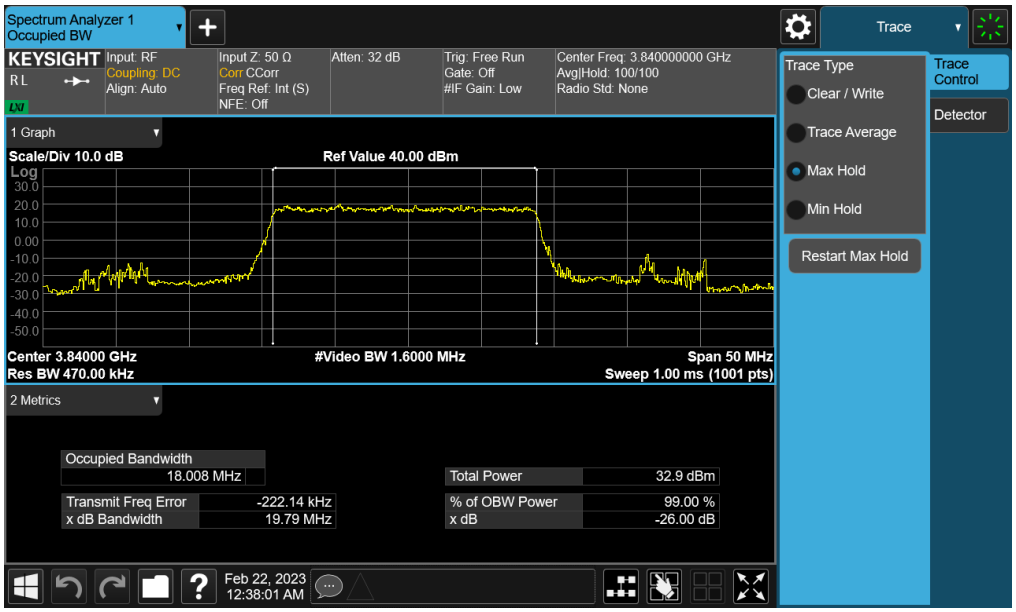


Plot 7-31. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 30MHz π/2 BPSK - Full RB - Main1)

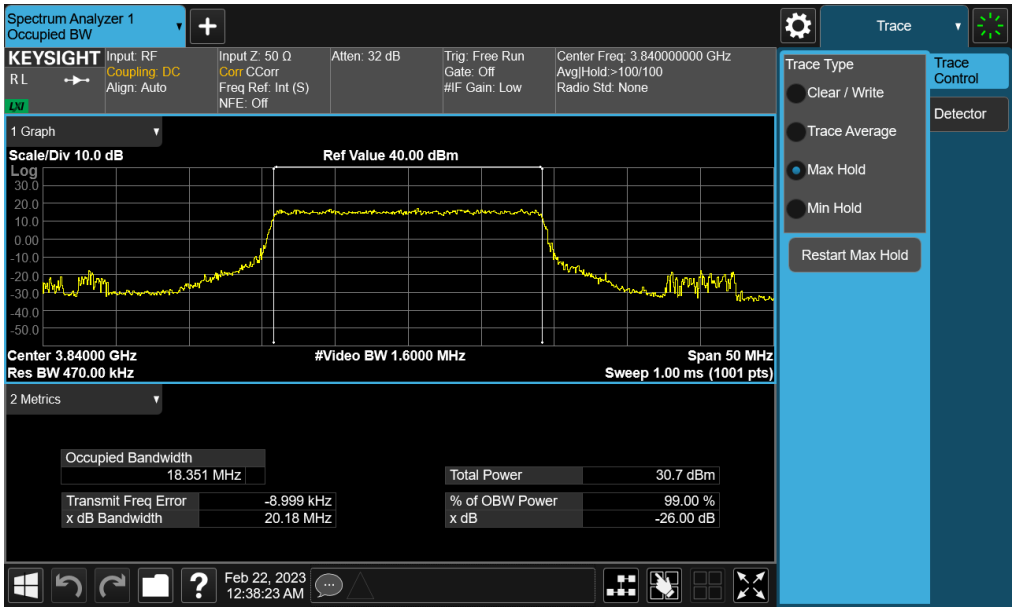


Plot 7-32. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 30MHz QPSK - Full RB - Main1)

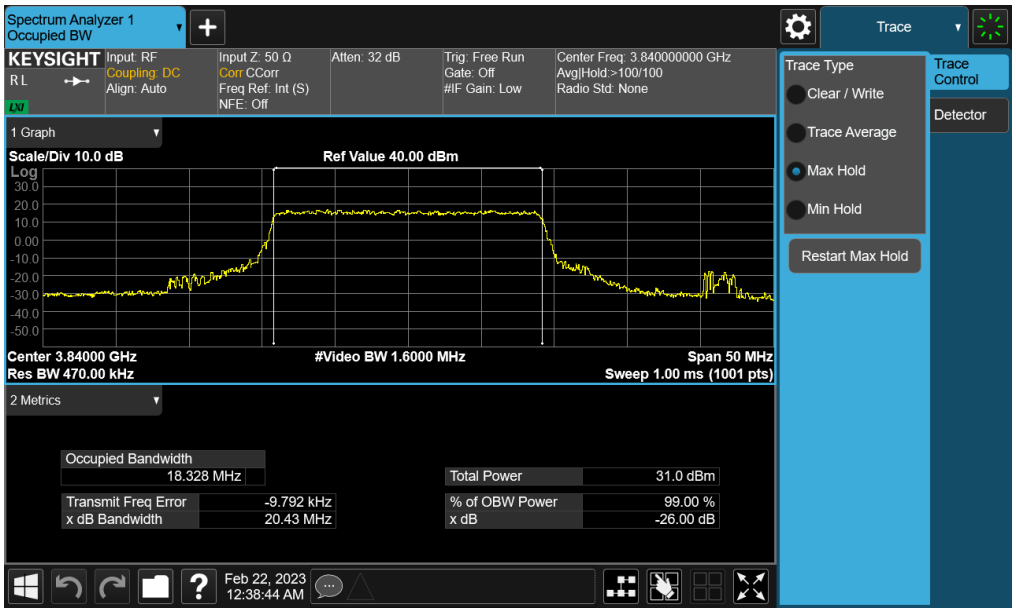
Plot 7-33. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 30MHz 16-QAM - Full RB - Main1)



Plot 7-34. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 20MHz π/2 BPSK - Full RB - Main1)

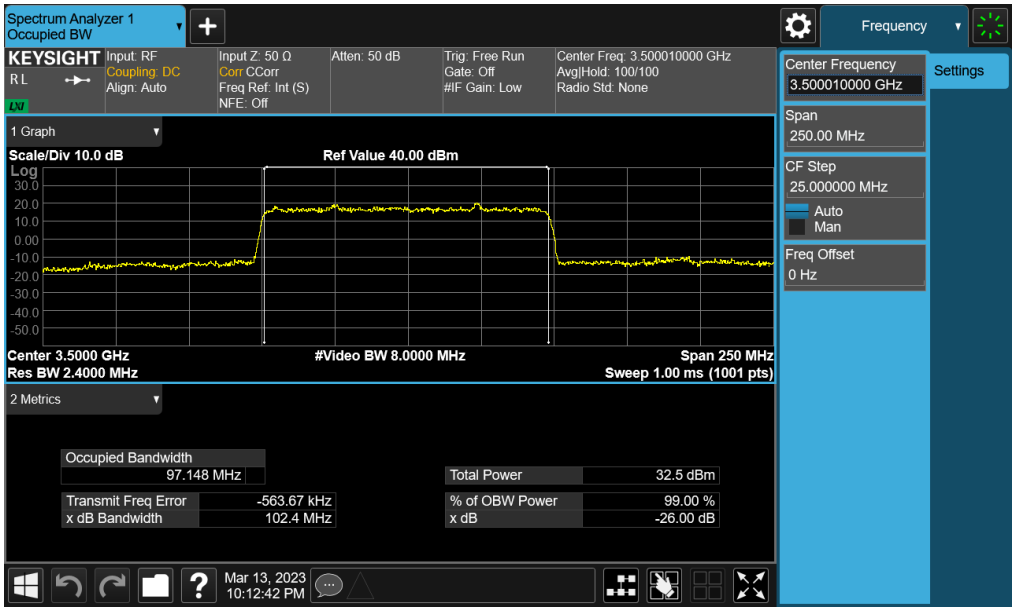


Plot 7-35. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 20MHz QPSK - Full RB - Main1)

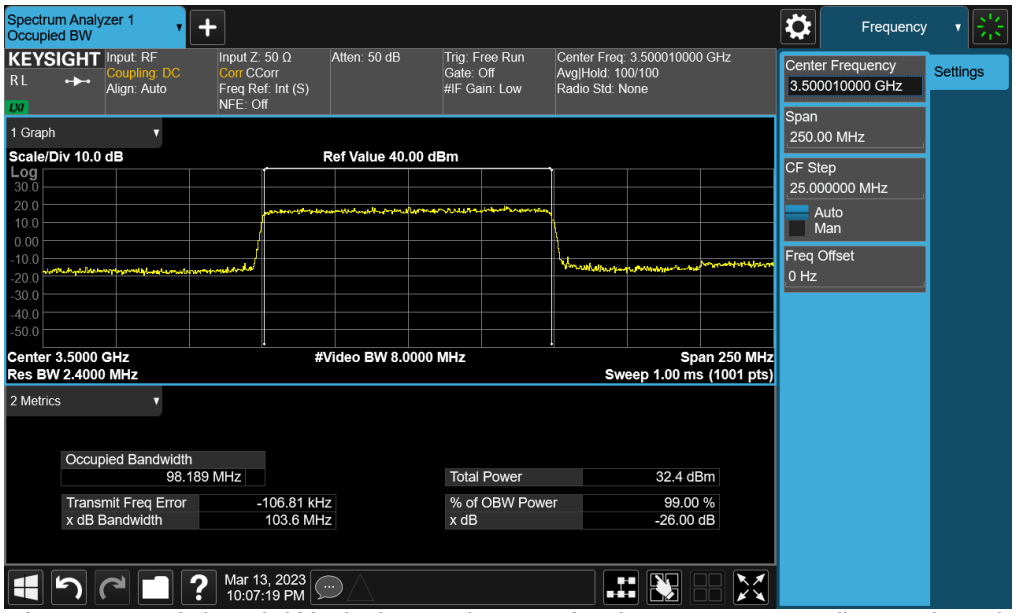


Plot 7-36. Occupied Bandwidth Plot (NR Band n77 PC2 (C-band) - 20MHz 16-QAM - Full RB - Main1)

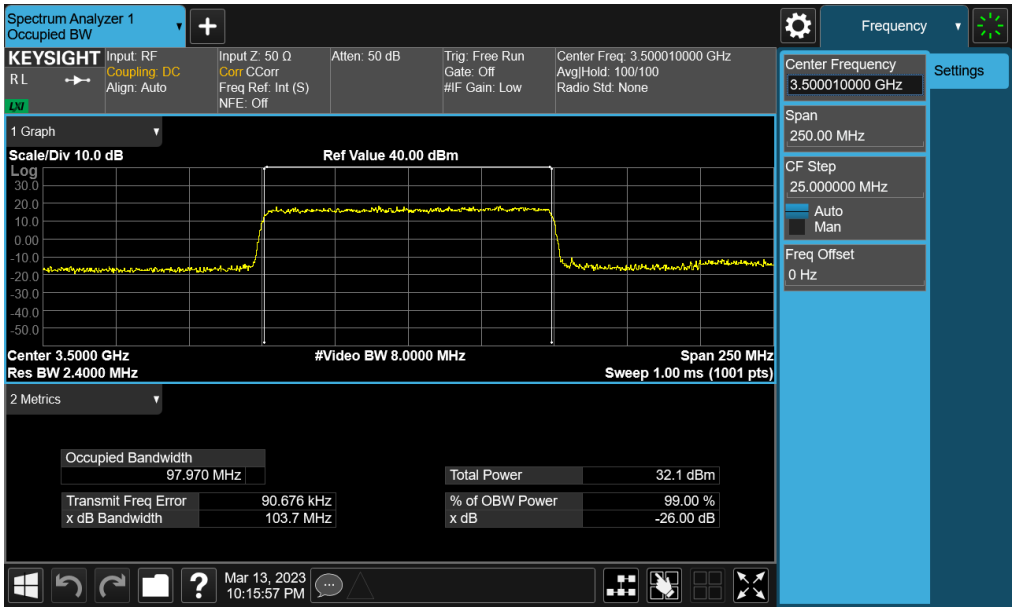
NR Band n77 PC2 (DoD) – Sub-UHB



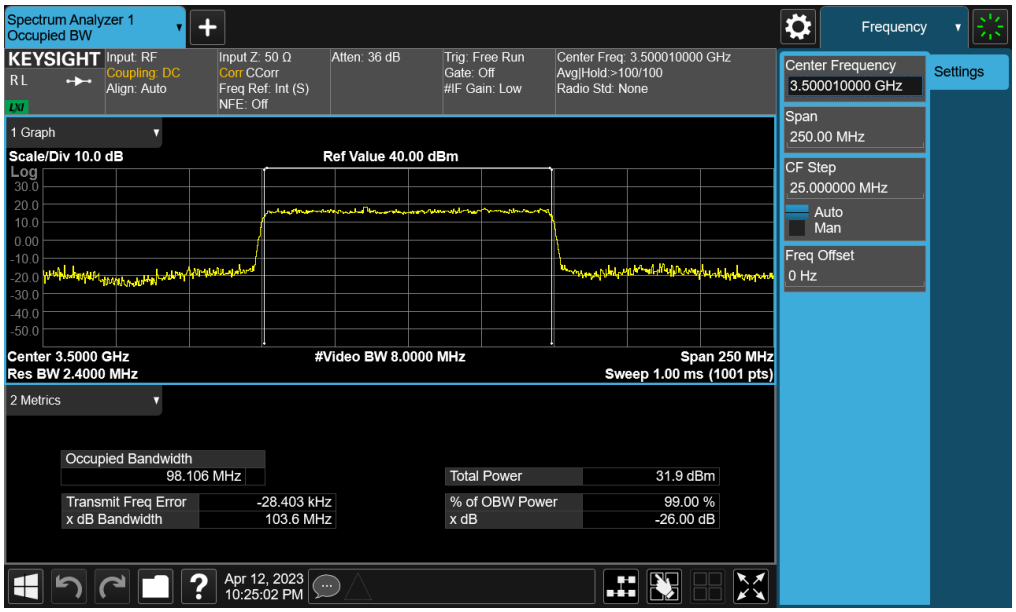
Plot 7-37. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz π/2 BPSK - Full RB – Sub-UHB)



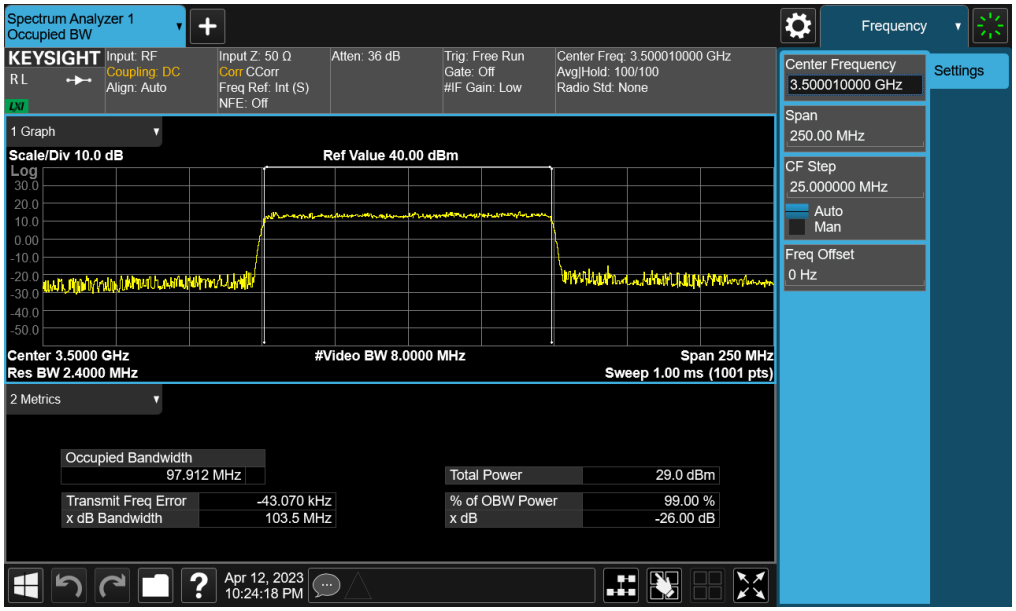
Plot 7-38. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz QPSK - Full RB - Sub-UHB)



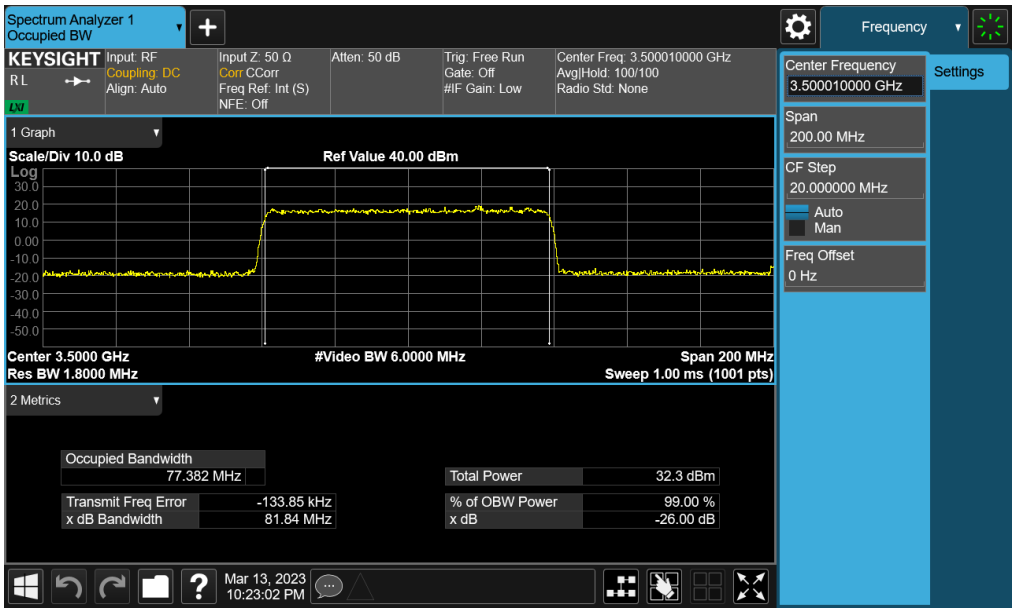
Plot 7-39. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz 16-QAM - Full RB - Sub-UHB)



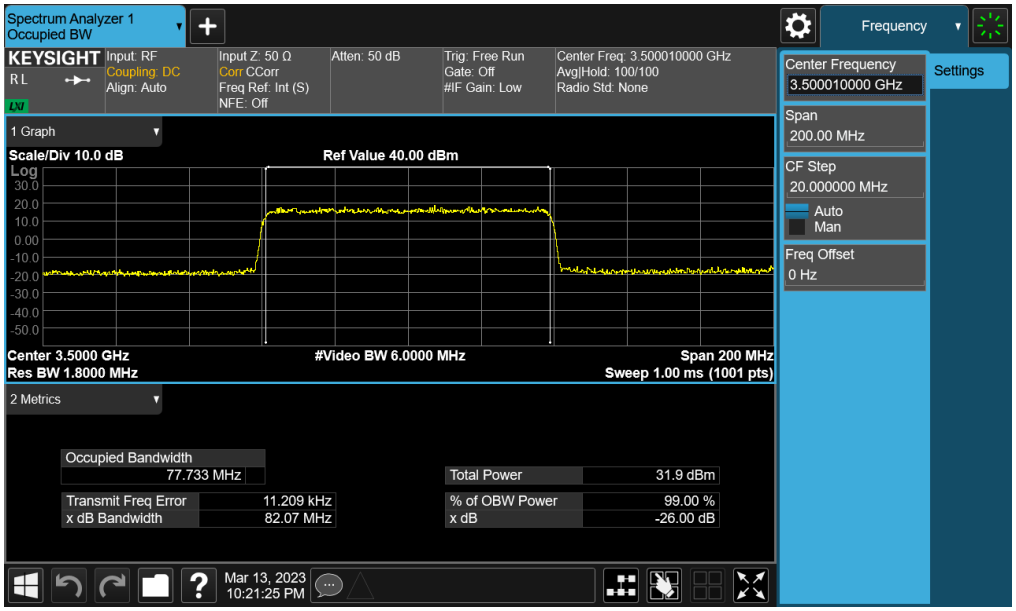
Plot 7-40. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz 64-QAM - Full RB - Sub-UHB)



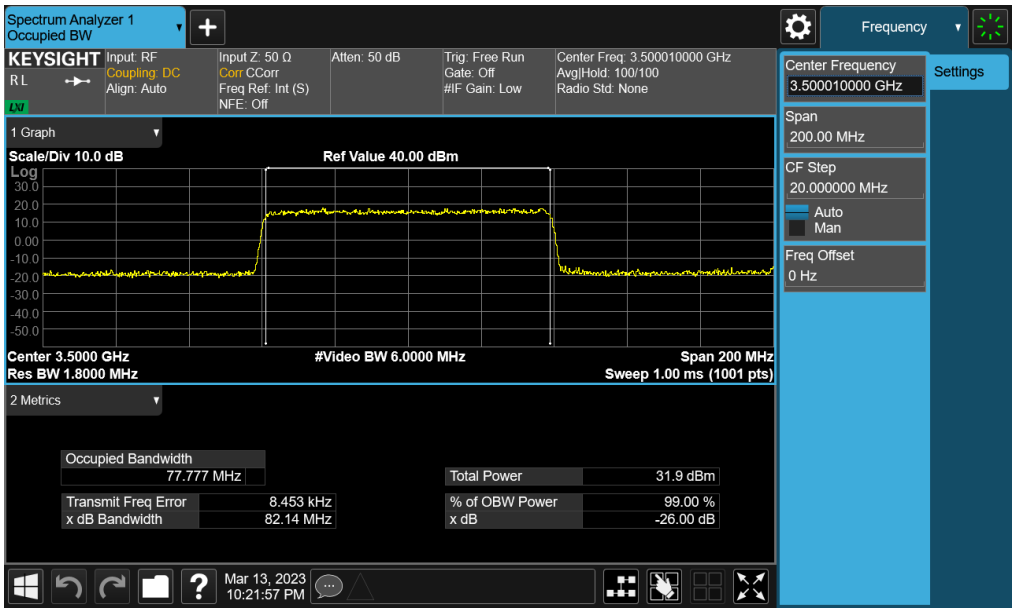
Plot 7-41. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 100MHz 256-QAM - Full RB - Sub-UHB)



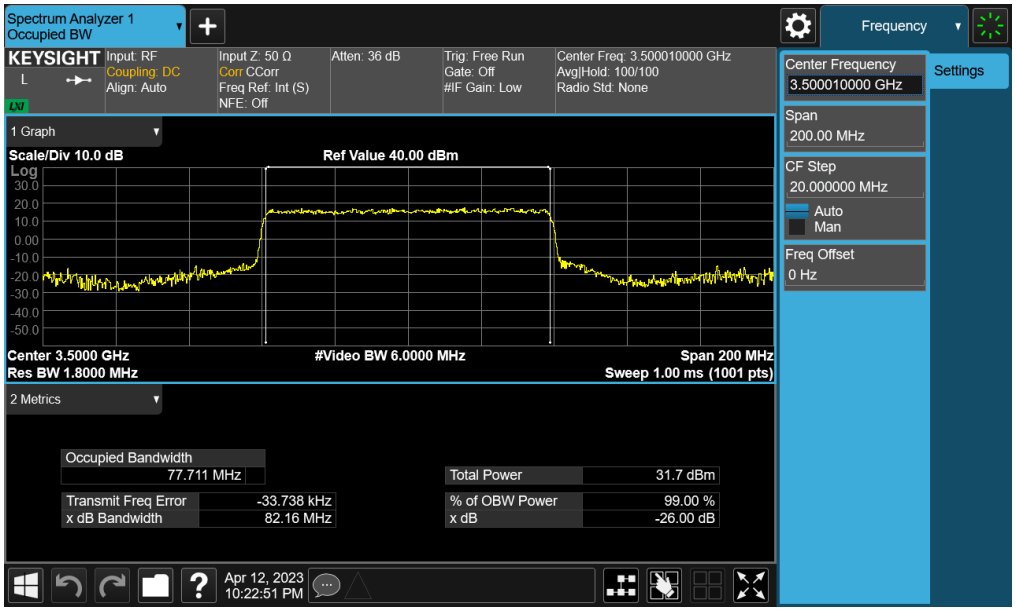
Plot 7-42. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz π/2 BPSK - Full RB - Sub-UHB)



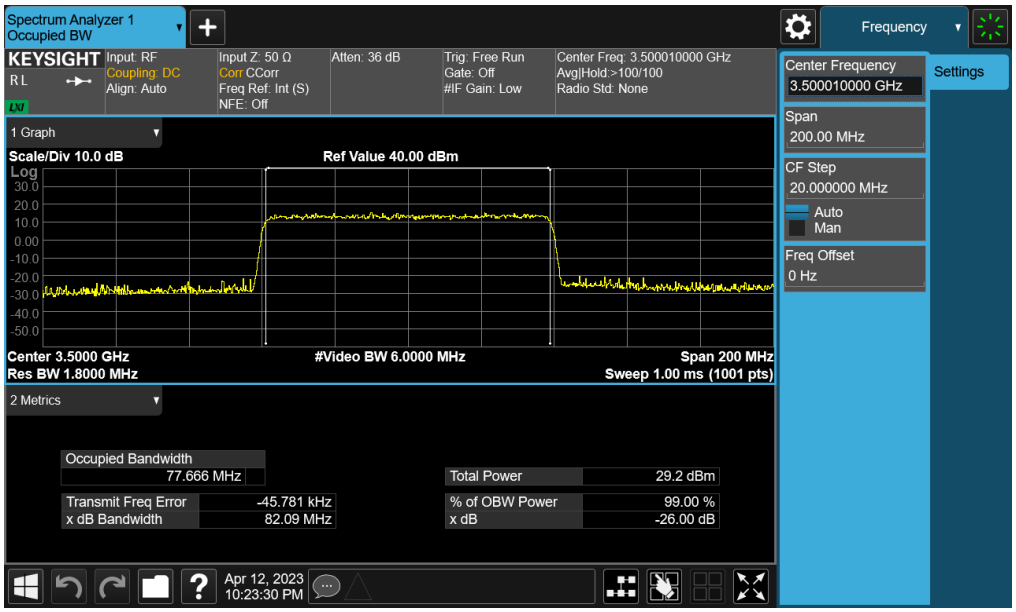
Plot 7-43. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz QPSK - Full RB - Sub-UHB)



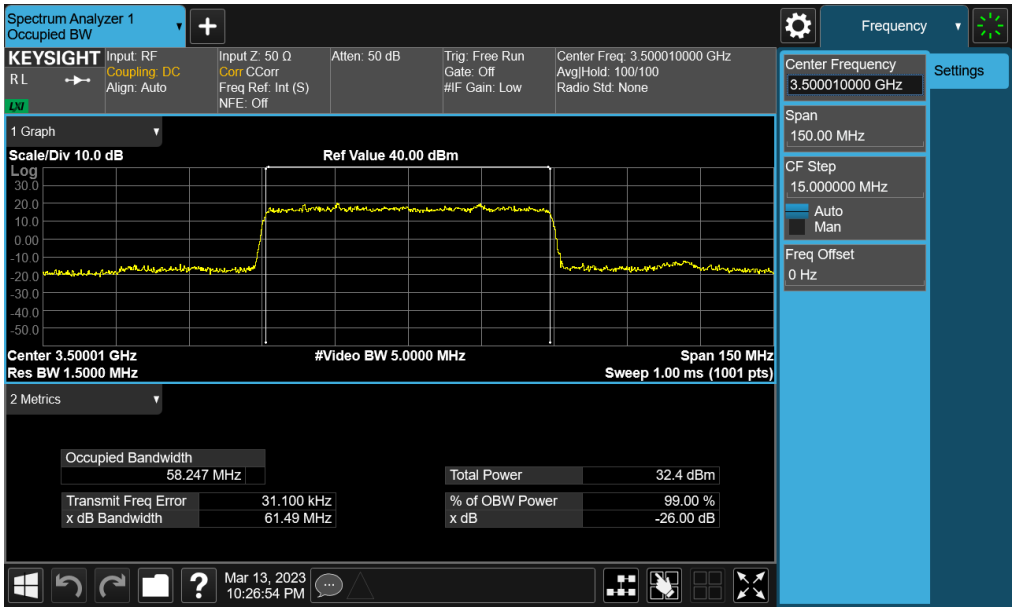
Plot 7-44. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz 16-QAM - Full RB - Sub-UHB)



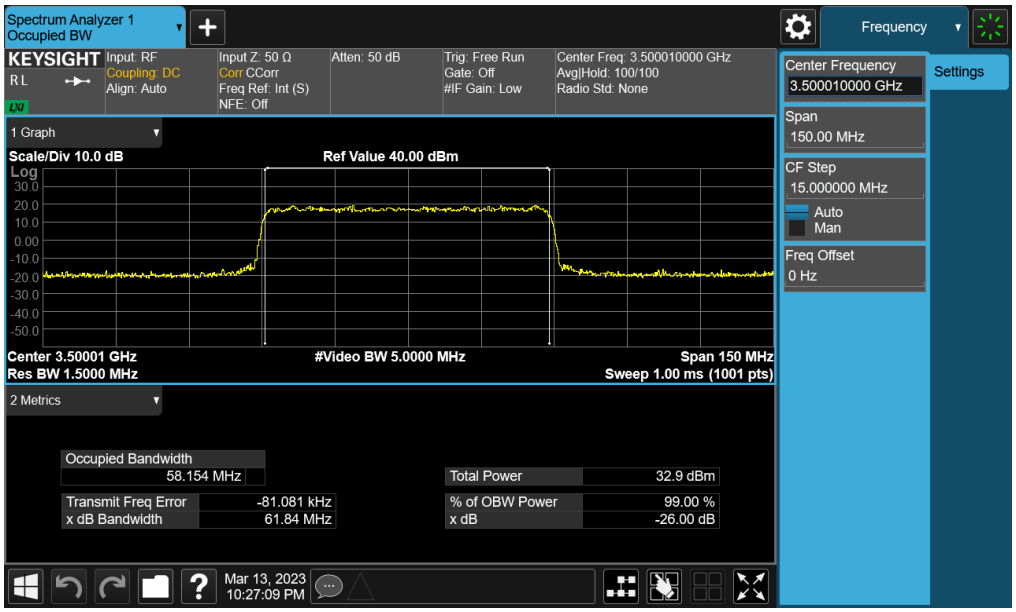
Plot 7-45. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz 64-QAM - Full RB - Sub-UHB)



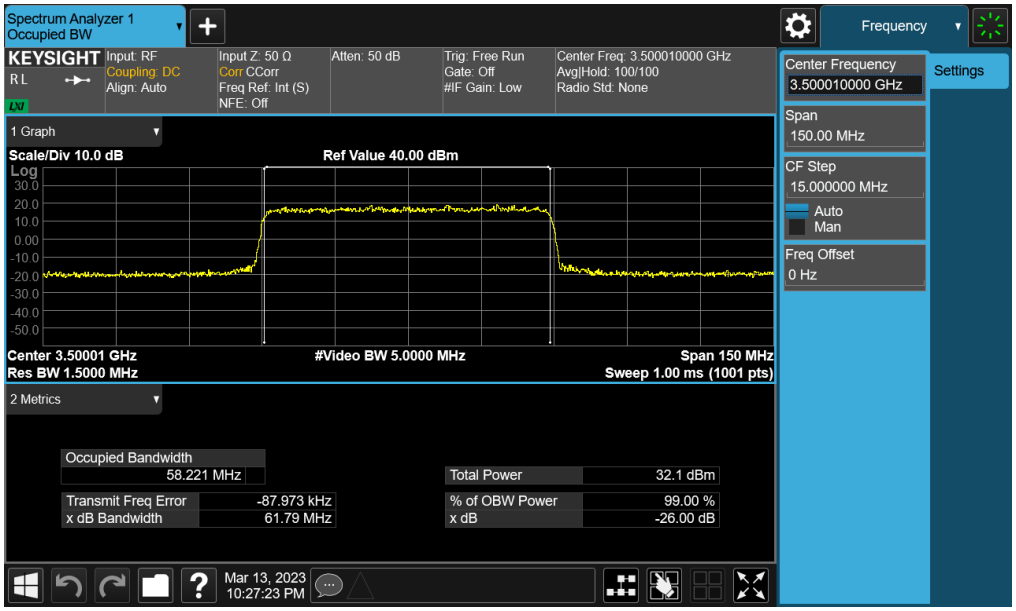
Plot 7-46. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 80MHz 256-QAM - Full RB - Sub-UHB)



Plot 7-47. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz π/2 BPSK - Full RB - Sub-UHB)

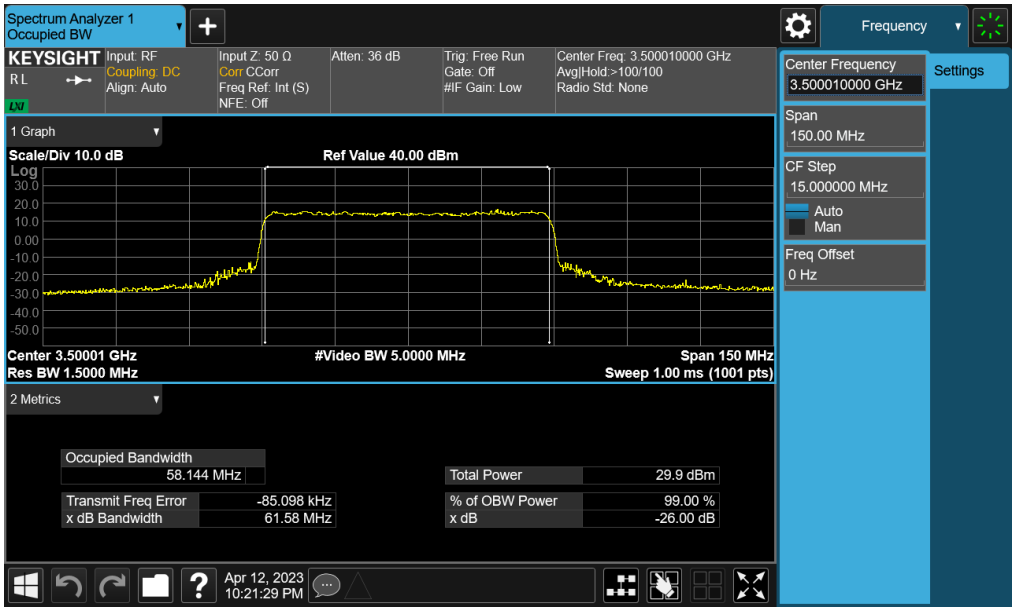


Plot 7-48. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz QPSK - Full RB - Sub-UHB)

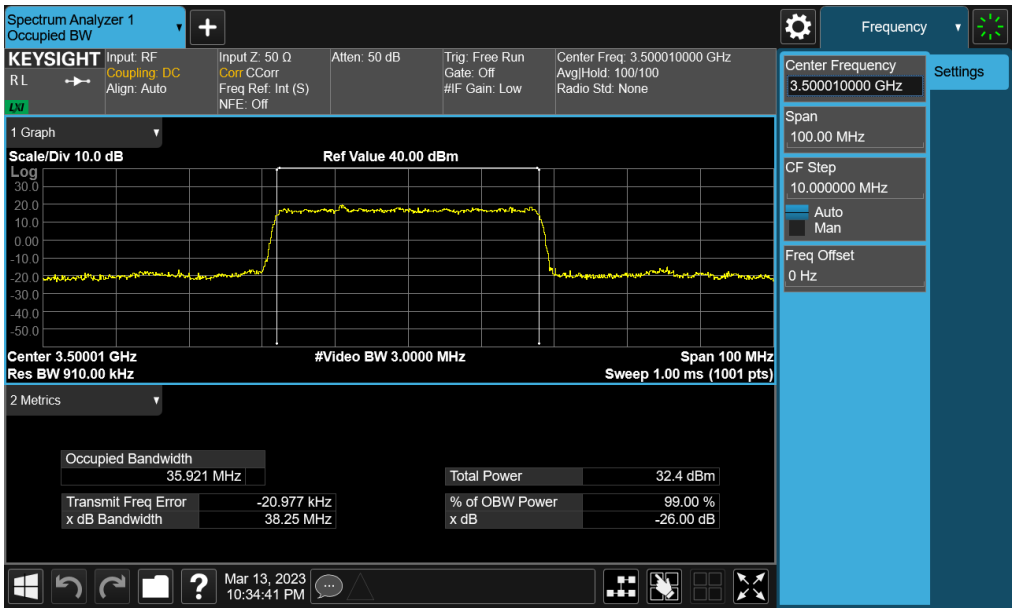


Plot 7-49. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz 16-QAM - Full RB - Sub-UHB)

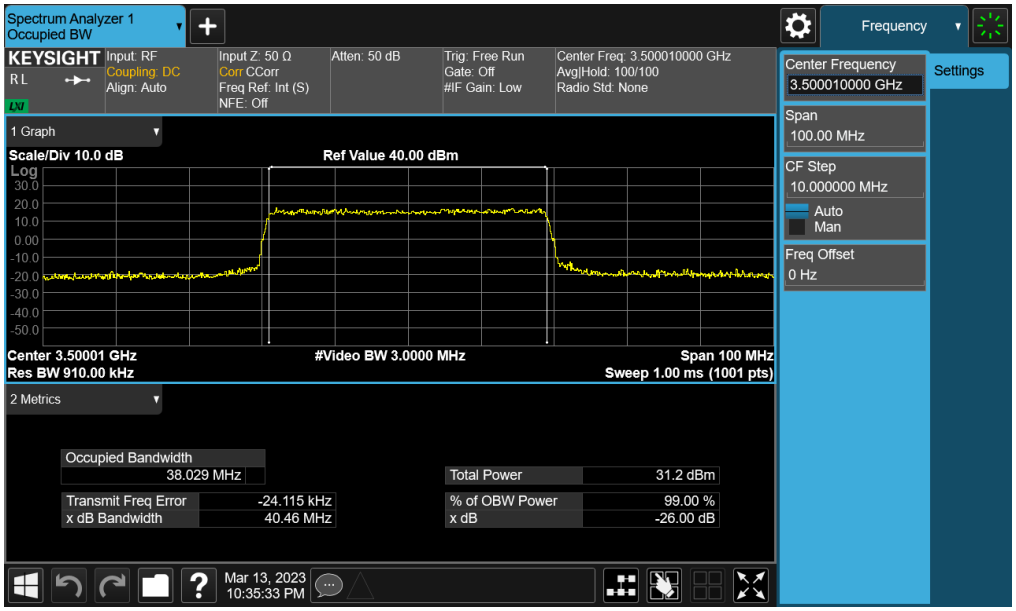
Plot 7-50. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz 64-QAM - Full RB - Sub-UHB)



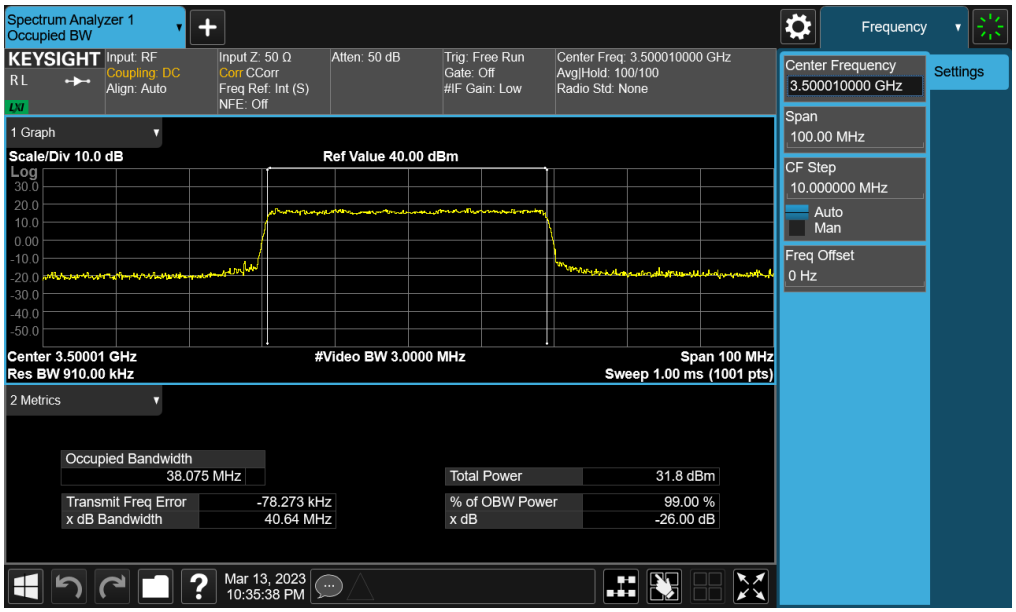
Plot 7-51. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 60MHz 256-QAM - Full RB - Sub-UHB)



Plot 7-52. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz π/2 BPSK - Full RB - Sub-UHB)

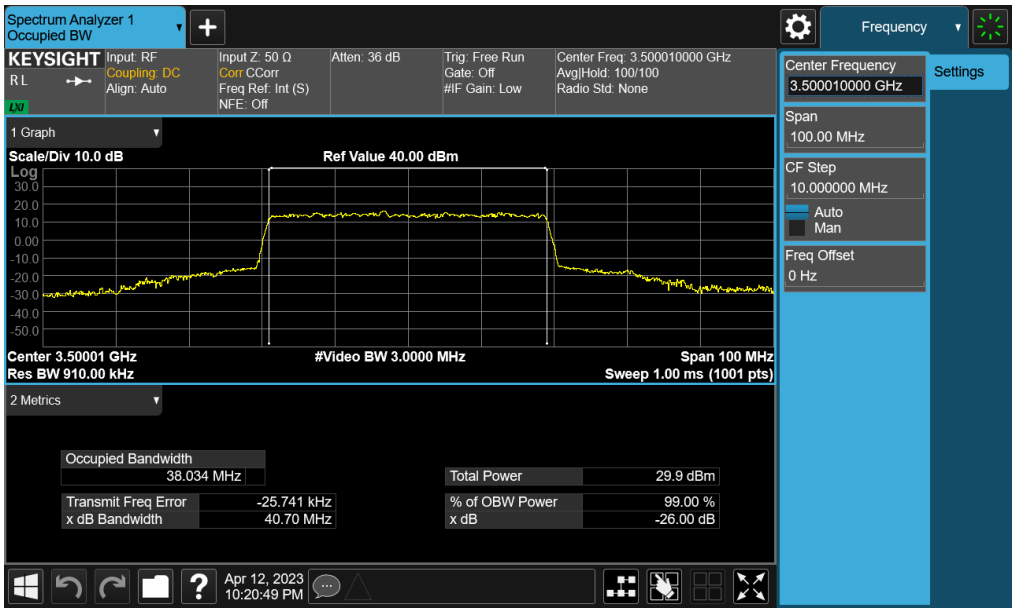


Plot 7-53. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz QPSK - Full RB - Sub-UHB)

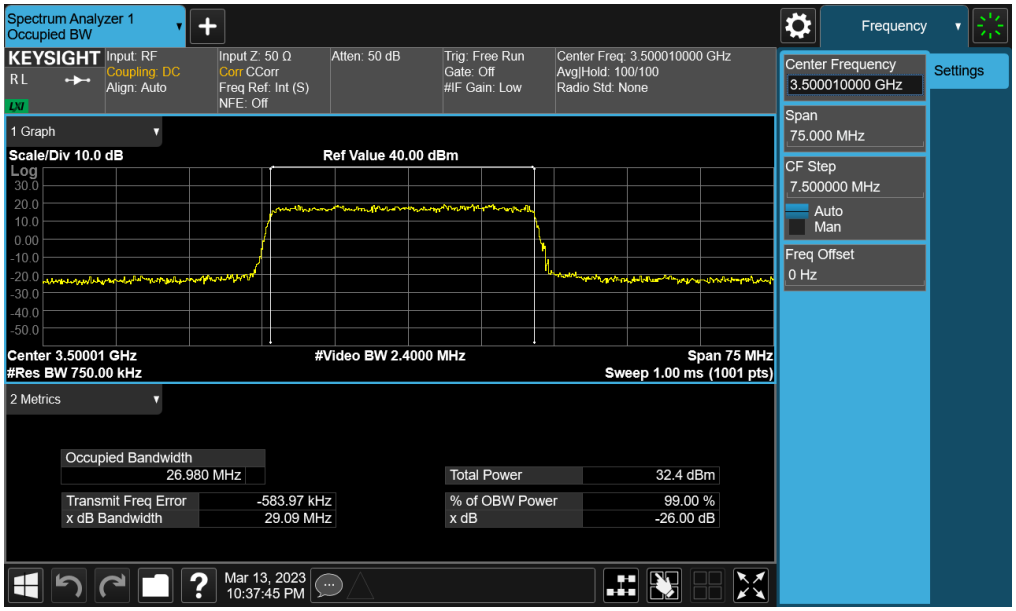


Plot 7-54. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz 16-QAM - Full RB - Sub-UHB)

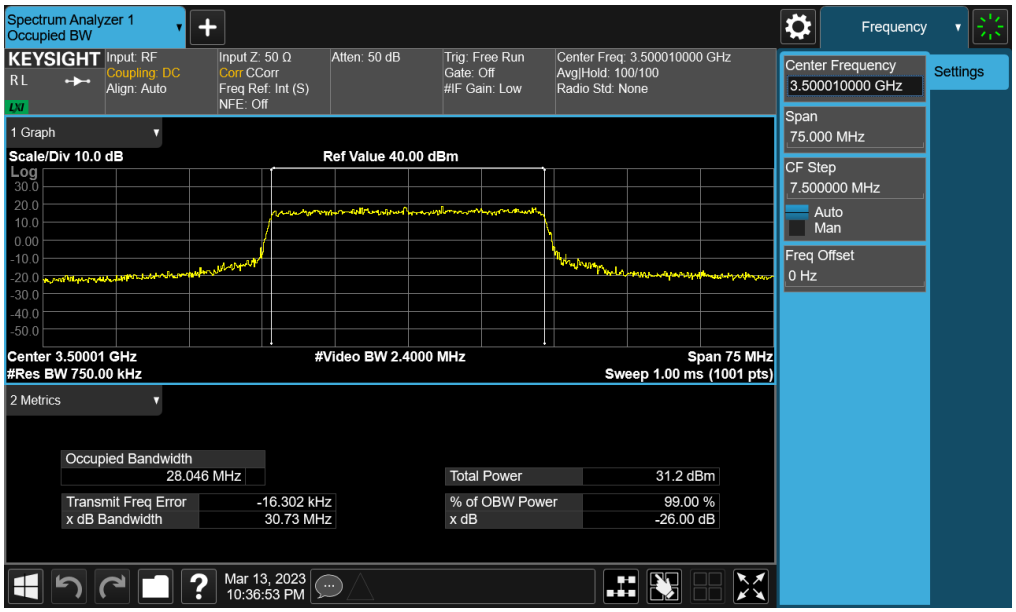
Plot 7-55. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz 64-QAM - Full RB - Sub-UHB)



Plot 7-56. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 40MHz 256-QAM - Full RB - Sub-UHB)



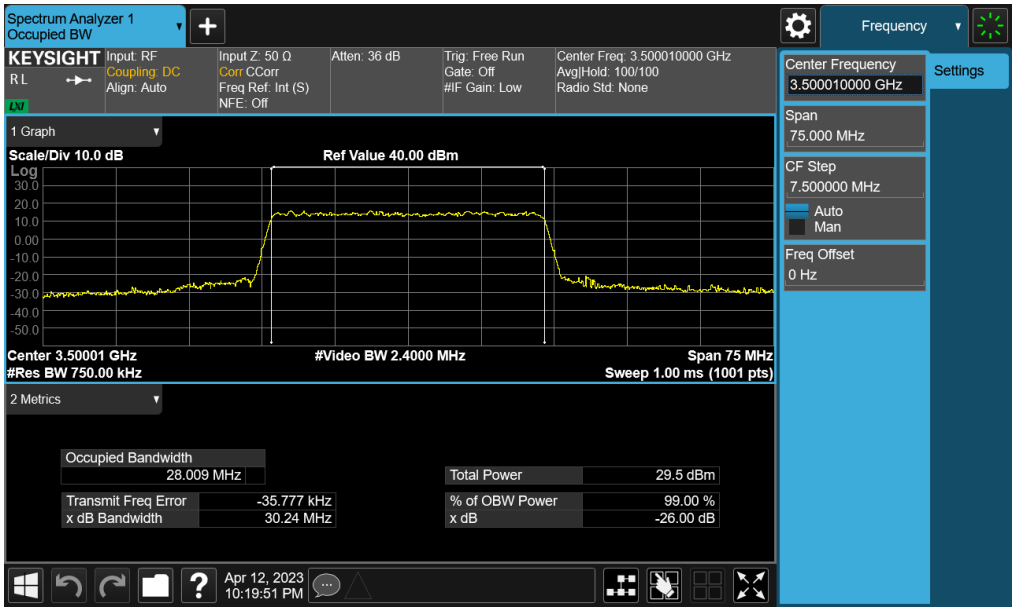
Plot 7-57. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz π/2 BPSK - Full RB - Sub-UHB)



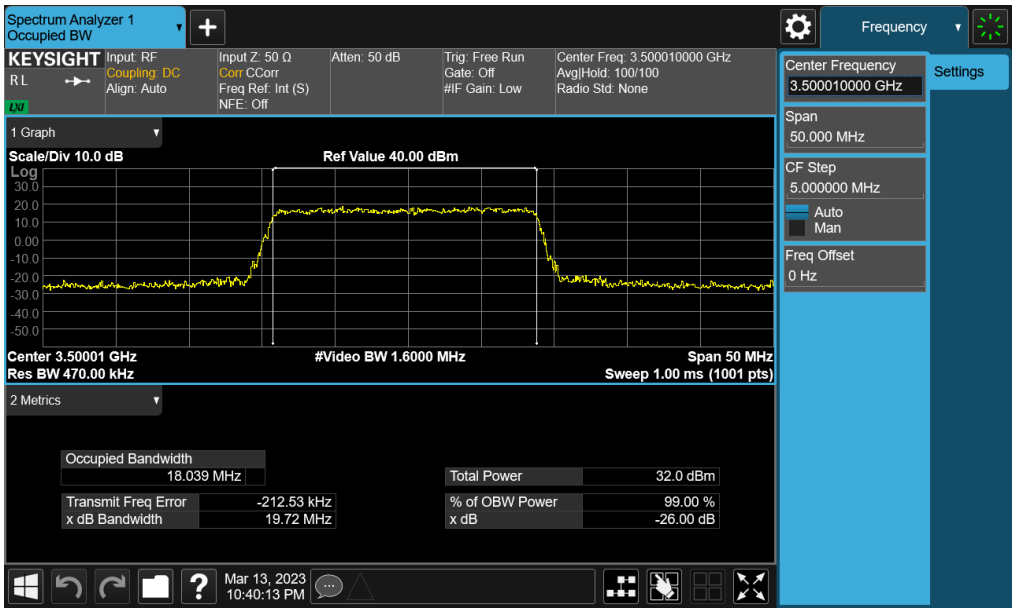
Plot 7-58. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz QPSK - Full RB - Sub-UHB)

Plot 7-59. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz 16-QAM - Full RB - Sub-UHB)

Plot 7-60. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz 64-QAM - Full RB - Sub-UHB)



Plot 7-61. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 30MHz 256-QAM - Full RB - Sub-UHB)



Plot 7-62. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 20MHz π/2 BPSK - Full RB - Sub-UHB)

Plot 7-63. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 20MHz QPSK - Full RB - Sub-UHB)

Plot 7-64. Occupied Bandwidth Plot (NR Band n77 PC2 (DoD) - 20MHz 16-QAM - Full RB - Sub-UHB)