

**ELEMENT WASHINGTON DC LLC**

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<http://www.element.com>**PART 27 MEASUREMENT REPORT****Applicant Name:**

Samsung Electronics Co., Ltd.
129, Samsung-ro,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:

2/24/2025 – 4/30/2025

Test Report Issue Date:

5/7/2025

Test Site/Location:

Element Lab., Columbia, MD, USA

Test Report Serial No.:

1M2502270019-05.A3L

FCC ID:**A3LSMF966B****APPLICANT:****Samsung Electronics Co., Ltd.****Application Type:**

Certification

Model:

SM-F966B

Additional Model(s):

SM-F966B/DS

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
KDB 484596 D01 v03

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



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Antenna-1 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3450 - 3550MHz)	100 MHz	$\pi/2$ BPSK	3500.0	0.260	24.14	97M2G7D
		QPSK	3500.0	0.254	24.05	96M9G7D
		16QAM	3500.0	0.204	23.09	96M9W7D
	90 MHz	$\pi/2$ BPSK	3495.0 - 3505.0	0.256	24.08	87M4G7D
		QPSK	3495.0 - 3505.0	0.257	24.09	87M4G7D
		16QAM	3495.0 - 3505.0	0.206	23.14	87M4W7D
	80 MHz	$\pi/2$ BPSK	3490.0 - 3510.0	0.254	24.05	77M5G7D
		QPSK	3490.0 - 3510.0	0.251	23.99	77M6G7D
		16QAM	3490.0 - 3510.0	0.202	23.05	77M5W7D
	70 MHz	$\pi/2$ BPSK	3485.0 - 3515.0	0.259	24.13	64M6G7D
		QPSK	3485.0 - 3515.0	0.251	23.99	64M7G7D
		16QAM	3485.0 - 3515.0	0.199	22.99	64M8W7D
	60 MHz	$\pi/2$ BPSK	3480.0 - 3520.0	0.247	23.92	58M3G7D
		QPSK	3480.0 - 3520.0	0.246	23.91	58M2G7D
		16QAM	3480.0 - 3520.0	0.197	22.93	58M4W7D
	50 MHz	$\pi/2$ BPSK	3475.0 - 3525.0	0.259	24.12	46M1G7D
		QPSK	3475.0 - 3525.0	0.255	24.06	46M1G7D
		16QAM	3475.0 - 3525.0	0.204	23.10	46M0W7D
	40 MHz	$\pi/2$ BPSK	3470.0 - 3530.0	0.251	23.99	36M0G7D
		QPSK	3470.0 - 3530.0	0.247	23.92	36M0G7D
		16QAM	3470.0 - 3530.0	0.197	22.94	36M0W7D
	30 MHz	$\pi/2$ BPSK	3465.0 - 3535.0	0.255	24.06	27M1G7D
		QPSK	3465.0 - 3535.0	0.250	23.98	27M0G7D
		16QAM	3465.0 - 3535.0	0.205	23.12	27M0W7D
	25 MHz	$\pi/2$ BPSK	3462.5 - 3537.5	0.261	24.16	23M0G7D
		QPSK	3462.5 - 3537.5	0.253	24.03	23M1G7D
		16QAM	3462.5 - 3537.5	0.200	23.01	23M0W7D
	20 MHz	$\pi/2$ BPSK	3460.0 - 3540.0	0.249	23.96	18M1G7D
		QPSK	3460.0 - 3540.0	0.243	23.85	18M0G7D
		16QAM	3460.0 - 3540.0	0.195	22.89	18M1W7D
	15 MHz	$\pi/2$ BPSK	3457.5 - 3542.5	0.249	23.95	13M1G7D
		QPSK	3457.5 - 3542.5	0.243	23.85	13M0G7D
		16QAM	3457.5 - 3542.5	0.197	22.95	13M1W7D
	10 MHz	$\pi/2$ BPSK	3455.0 - 3545.0	0.249	23.96	8M71G7D
		QPSK	3455.0 - 3545.0	0.250	23.97	8M73G7D
		16QAM	3455.0 - 3545.0	0.203	23.06	8M69W7D

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Antenna-2 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3450 - 3550MHz)	100 MHz	$\pi/2$ BPSK	3500.0	0.089	19.48	586KG7D
		QPSK	3500.0	0.089	19.49	718KG7D
		16QAM	3500.0	0.070	18.44	673KW7D

Antenna-3 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3450 - 3550MHz)	100 MHz	$\pi/2$ BPSK	3500.0	0.152	21.82	632KG7D
		QPSK	3500.0	0.153	21.85	743KG7D
		16QAM	3500.0	0.130	21.15	707KW7D

Antenna-4 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3450 - 3550MHz)	100 MHz	$\pi/2$ BPSK	3500.0	0.047	16.69	584KG7D
		QPSK	3500.0	0.046	16.62	707KG7D
		16QAM	3500.0	0.036	15.58	657KW7D

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Antenna-1 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3700 - 3980MHz)	100 MHz	$\pi/2$ BPSK	3750.0 - 3930.0	0.453	26.56	97M0G7D
		QPSK	3750.0 - 3930.0	0.444	26.47	98M1G7D
		16QAM	3750.0 - 3930.0	0.323	25.09	97M8W7D
	90 MHz	$\pi/2$ BPSK	3745.0 - 3935.0	0.452	26.55	87M0G7D
		QPSK	3745.0 - 3935.0	0.452	26.55	87M9G7D
		16QAM	3745.0 - 3935.0	0.343	25.35	88M1W7D
	80 MHz	$\pi/2$ BPSK	3740.0 - 3940.0	0.447	26.50	77M5G7D
		QPSK	3740.0 - 3940.0	0.444	26.47	77M5G7D
		16QAM	3740.0 - 3940.0	0.323	25.09	77M9W7D
	70 MHz	$\pi/2$ BPSK	3735.0 - 3945.0	0.432	26.35	64M7G7D
		QPSK	3735.0 - 3945.0	0.442	26.45	67M6G7D
		16QAM	3735.0 - 3945.0	0.325	25.12	67M7W7D
	60 MHz	$\pi/2$ BPSK	3730.0 - 3950.0	0.426	26.29	58M1G7D
		QPSK	3730.0 - 3950.0	0.434	26.37	58M2G7D
		16QAM	3730.0 - 3950.0	0.320	25.04	58M2W7D
	50 MHz	$\pi/2$ BPSK	3725.0 - 3955.0	0.434	26.37	45M9G7D
		QPSK	3725.0 - 3955.0	0.439	26.42	47M7G7D
		16QAM	3725.0 - 3955.0	0.342	25.34	47M7W7D
	40 MHz	$\pi/2$ BPSK	3720.0 - 3960.0	0.435	26.38	36M0G7D
		QPSK	3720.0 - 3960.0	0.434	26.37	38M0G7D
		16QAM	3720.0 - 3960.0	0.332	25.21	38M0W7D
	30 MHz	$\pi/2$ BPSK	3715.0 - 3965.0	0.427	26.30	27M1G7D
		QPSK	3715.0 - 3965.0	0.431	26.34	28M1G7D
		16QAM	3715.0 - 3965.0	0.331	25.19	28M0W7D
	25 MHz	$\pi/2$ BPSK	3712.5 - 3967.5	0.441	26.44	22M8G7D
		QPSK	3712.5 - 3967.5	0.444	26.47	23M3G7D
		16QAM	3712.5 - 3967.5	0.330	25.18	23M2W7D
	20 MHz	$\pi/2$ BPSK	3710.0 - 3970.0	0.423	26.26	17M9G7D
		QPSK	3710.0 - 3970.0	0.427	26.30	18M3G7D
		16QAM	3710.0 - 3970.0	0.328	25.15	18M3W7D
	15 MHz	$\pi/2$ BPSK	3707.5 - 3972.5	0.429	26.32	13M0G7D
		QPSK	3707.5 - 3972.5	0.433	26.36	13M6G7D
		16QAM	3707.5 - 3972.5	0.329	25.17	13M6W7D
	10 MHz	$\pi/2$ BPSK	3705.0 - 3975.0	0.431	26.34	8M60G7D
		QPSK	3705.0 - 3975.0	0.433	26.36	8M66G7D
		16QAM	3705.0 - 3975.0	0.324	25.10	8M65W7D

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Antenna-2 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3700 - 3980MHz)	100 MHz	$\pi/2$ BPSK	3750.0 - 3930.0	0.079	18.99	561KG7D
		QPSK	3750.0 - 3930.0	0.080	19.04	669KG7D
		16QAM	3750.0 - 3930.0	0.064	18.07	605KW7D

Antenna-3 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3700 - 3980MHz)	100 MHz	$\pi/2$ BPSK	3750.0 - 3930.0	0.237	23.75	499KG7D
		QPSK	3750.0 - 3930.0	0.239	23.78	652KG7D
		16QAM	3750.0 - 3930.0	0.187	22.73	618KW7D

Antenna-4 Main						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
NR Band n77 PC2 (3700 - 3980MHz)	100 MHz	$\pi/2$ BPSK	3750.0 - 3930.0	0.038	15.84	503KG7D
		QPSK	3750.0 - 3930.0	0.039	15.96	667KG7D
		16QAM	3750.0 - 3930.0	0.031	14.90	628KW7D

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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

Measurements were conducted at the Element laboratory(ies) indicated in Section 1.3 below. All measurement facilities are compliant with the test site requirements specified in ANSI C63.4-2014 and KDB 414788 D01 v01r01.

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 ISSED Standards (RSS).
- Element Washington DC LLC facility is a registered (2451B) test laboratory with the site description on file with ISSED.
- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISSED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs).

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2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung Portable Handset FCC ID: A3LSMF966B**. 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.

The authorization for these models (SM-F966B and SM-F966B/DS) utilize data referencing from FCC ID: A3LSMF966U (Model SM-F966U) as permitted per KDB 484596 v03. Data referencing data test results are included in Appendix A of this report.

Test Device Serial No.: 2203R, 0173M, 0164R, 1929R, 0127M, 0324M, 0354M, 0151M, 0156M, 0170M, 1028M, 0574M, 0157R, 0150M, 0567M

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/ac/ax/be WLAN, 802.11a/n/ac/ax/be UNII (5GHz and 6GHz), Bluetooth (1x, EDR, LE), Wireless Power Transfer, UWB, NTN, SCS

This device uses a tuner circuit that dynamically updates the antenna impedance parameters to optimize antenna performance for certain bands and modes of operation. The tuner for this device was set to simulate a "free space" condition where the transmit antenna is matched to the medium into which it is transmitting and, thus, the power is at its maximum level.

This device can transmit in the 5G NR Band n77 band over four separate antennas labelled SRS-1, SRS-2, SRS-3, and SRS-4. With SRS operations, any of these four antennas can transmit an SRS signal to check the channel quality for transmission in the n77 Band. However, these antennas cannot simultaneously transmit and only the SRS-1 antenna is capable of data transmission. The test data is marked to indicate the specific antenna transmitting in the n77 band.

Antenna SRS-Label	Alternate Label
NR Band n77 – Main – SRS-1	Ant F
NR Band n77 – Main – SRS-2	Ant C
NR Band n77 – Main – SRS-3	Ant G
NR Band n77 – Main – SRS-4	Ant A

Table 2-1. Antenna Labelling Scheme Correlation

Band	Ant1	Ant2	Ant3	Ant4
NR Band n77 - Main	Ant F	Ant C	Ant G	Ant A

Table 2-2. Antenna Report Naming Convention

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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: EP-2400 while operating under normal conditions in a simulated call or data transmission configuration. The worst case radiated emissions data is shown in this report.

This device supports three folder configurations: one is with folder fully open, one is where the folder is half open (90 degrees), and one is with folder closed. All configurations are tested, and 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 FAV0_F966UFAU0AYB3 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.

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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:

$$P_d \text{ [dBm]} = P_g \text{ [dBm]} - \text{cable loss [dB]} + \text{antenna gain [dBd/dBi]};$$

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 $P_g \text{ [dBm]} - \text{cable loss [dB]}$.

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:

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

And

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

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.

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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 ($\pm$ dB)
Conducted Bench Top Measurements	1.13
Radiated Disturbance (<1GHz)	4.98
Radiated Disturbance (>1GHz)	5.07
Radiated Disturbance (>18GHz)	5.09

Table 4-1. Measurement Uncertainty Budget

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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
-	AP2	EMC Cable and Switch System	2/25/2025	Annual	2/25/2026	AP2
-	AP1	EMC Cable and Switch System	2/25/2025	Annual	2/25/2026	AP1
-	ETS	EMC Cable and Switch System	12/11/2024	Annual	12/11/2026	ETS
-	LTx4	Licensed Transmitter Cable Set	2/25/2025	Annual	2/25/2026	LTx4
-	LTx5	Licensed Transmitter Cable Set	2/25/2025	Annual	2/25/2026	LTx5
Espec	ESX-2CA	Environmental Chamber	11/20/2024	Biennial	11/20/2026	17620
ETS Lindgren	3117	1-18 GHz DRG Horn (Medium)	5/3/2023	Biennial	5/3/2025	00125518
Keysight Technologies	N9020A	MXA Signal Analyzer	4/11/2024	Annual	4/11/2025	MY54500644
Keysight Technologies	N9030A	PXA Signal Analyzer (44GHz)	4/9/2024	Annual	4/9/2025	MY52350166
Keysight Technologies	N9038A	MXE EMI Receiver	9/16/2024	Annual	9/16/2025	MY51210133
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A			100976
Rohde & Schwarz	CMW500	Radio Communication Tester	N/A			112347
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	10/16/2024	Annual	10/16/2025	100342
Rohde & Schwarz	ESU40	EMI Test Receiver (40GHz)	10/16/2024	Annual	10/16/2025	100348
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	9/11/2024	Biennial	9/11/2026	A051107

Table 5-1. Test Equipment Calibration Table

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.

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6.0 SAMPLE EMISSION DESIGNATORS

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

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7.0 TEST RESULTS

7.1 Summary

Company Name: Samsung Electronics Co., Ltd.
 FCC ID: A3LSMF966B
 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	Test Lab Location	Data Referencing?
CONDUCTED	Transmitter Conducted Output Power	2.1046(a), 2.1046(c)	N/A	PASS	Section 7.2	MD	Yes
	Occupied Bandwidth	2.1049(h)	N/A	PASS	Section 7.3	MD	Yes
	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	MD	Yes
	Peak-to-Average Ratio (NR Band n77)	27.50(j)(4), 27.50(k)(4)	≤ 13 dB	PASS	Section 7.6	MD	Yes
	Frequency Stability	2.1055, 27.54	Fundamental emissions stay within authorized frequency block.	PASS	Section 7.9	MD	Yes
RADIATED	Equivalent Isotropic Radiated Power (NR Band n77)	27.50(j)(3), 27.50(k)(3)	≤ 1 Watt EIRP	PASS	Section 7.7	MD	Yes
	Radiated Spurious Emissions (NR Band n77)	2.1053, 27.53(l), 27.53(n)	≤ -13 dBm / MHz	PASS	Section 7.8	MD	Yes

* 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 DSL power levels. For the remaining conducted power measurements, see the **RF Exposure Report**.

Table 7-1. Summary of Test Results

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 port 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 v2.3.0.
- 5) The authorization for these models (SM-F966B and SM-F966B/DS) utilize data referencing from FCC ID: A3LSMF966U (Model: SM-F966U) as permitted per KDB 484596 v03. Data referencing data test results are included in Section 9.0 - Appendix A of this report.

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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.

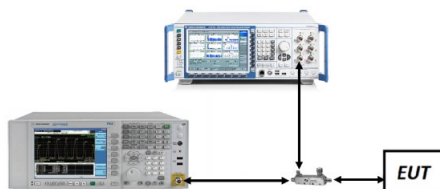


Figure 7-1. Test Instrument & Measurement Setup

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. All other conducted power measurements are contained in the RF exposure report for this filing.
3. Conducted power was found to reduce for the higher order QAM modulations when compared to 16QAM. Due to this trend, only the worst-case QAM (16QAM) powers are included in this section.

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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	26.17
	QPSK	633334	3500.01	1 / 1	26.06
	16-QAM	633334	3500.01	1 / 1	24.96
90 MHz	$\pi/2$ BPSK	633000	3495.00	1 / 1	26.09
		633334	3500.01	1 / 1	26.10
		633666	3504.99	1 / 122	26.11
	QPSK	633000	3495.00	1 / 1	26.10
		633334	3500.01	1 / 1	26.04
		633666	3504.99	1 / 1	26.02
80 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	25.01
		632668	3490.02	1 / 1	26.04
		634000	3510.00	1 / 1	26.08
	QPSK	632668	3490.02	1 / 1	26.00
		633334	3500.01	1 / 1	25.93
		634000	3510.00	1 / 1	26.00
70 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	24.92
		632334	3485.01	1 / 1	26.16
		634332	3514.98	1 / 94	26.02
	QPSK	632334	3485.01	1 / 1	26.04
		633334	3500.01	1 / 1	26.00
		634332	3514.98	1 / 187	25.90
60 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	24.86
		632000	3480.00	1 / 1	26.00
		634666	3519.99	1 / 1	25.91
	QPSK	632000	3480.00	1 / 1	25.92
		633334	3500.01	1 / 1	25.84
		634666	3519.99	1 / 1	25.85
50 MHz	$\pi/2$ BPSK	632000	3480.00	1 / 1	24.80
		631668	3475.02	1 / 1	26.14
		635000	3525.00	1 / 1	26.13
	QPSK	631668	3475.02	1 / 1	26.07
		633334	3500.01	1 / 66	26.04
		635000	3525.00	1 / 1	26.05
40 MHz	$\pi/2$ BPSK	631668	3475.02	1 / 1	24.97
		631334	3470.01	1 / 53	26.02
		635332	3529.98	1 / 53	25.99
	QPSK	631334	3470.01	1 / 1	25.93
		633334	3500.01	1 / 1	25.92
		635332	3529.98	1 / 1	25.88
30 MHz	$\pi/2$ BPSK	631334	3470.01	1 / 1	24.81
		631000	3465.00	1 / 1	26.06
		635666	3534.99	1 / 39	26.03
	QPSK	631000	3465.00	1 / 1	26.09
		633334	3500.01	1 / 39	25.99
		635666	3534.99	1 / 1	25.93
25 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	25.96
		630834	3462.51	1 / 32	24.99
		635832	3537.48	1 / 32	26.19
	QPSK	630834	3462.51	1 / 32	26.08
		633334	3500.01	1 / 32	26.04
		635832	3537.48	1 / 32	26.00
20 MHz	$\pi/2$ BPSK	630834	3462.51	1 / 1	25.99
		630668	3460.02	1 / 49	24.88
		636000	3540.00	1 / 1	25.88
	QPSK	630668	3460.02	1 / 1	25.99
		633334	3500.01	1 / 1	25.95
		636000	3540.00	1 / 1	25.84
15 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	25.85
		630500	3457.50	1 / 1	24.76
		636166	3542.49	1 / 1	25.90
	QPSK	630500	3457.50	1 / 1	25.98
		633334	3500.01	1 / 36	25.78
		636166	3542.49	1 / 1	25.83
10 MHz	$\pi/2$ BPSK	636166	3542.49	1 / 1	24.82
		630334	3455.01	1 / 1	25.92
		636332	3544.98	1 / 22	25.96
	QPSK	630334	3455.01	1 / 1	25.99
		633334	3500.01	1 / 22	25.71
		636332	3544.98	1 / 1	25.98
10 MHz	16-QAM	636332	3544.98	1 / 1	24.93
		636332	3544.98	1 / 1	24.93

Table 7-2. Conducted Power Results – n77 – Ant1 – DoD Band – Main

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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	20.91
	QPSK	633334	3500.01	1 / 1	20.91
	16-QAM	633334	3500.01	1 / 1	19.68

Table 7-3. Conducted Power Results – n77 – Ant2 – DoD Band – Main

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	25.20
	QPSK	633334	3500.01	1 / 1	25.21
	16-QAM	633334	3500.01	1 / 1	24.93

Table 7-4. Conducted Power Results – n77 – Ant3 – DoD Band – Main

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	633334	3500.01	1 / 1	19.99
	QPSK	633334	3500.01	1 / 1	19.95
	16-QAM	633334	3500.01	1 / 1	18.66

Table 7-5. Conducted Power Results – n77 – Ant4 – DoD Band – Main

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	650000	3750.00	1 / 271	25.93
		656000	3840.00	1 / 271	26.20
		662000	3930.00	1 / 271	26.36
	QPSK	650000	3750.00	1 / 1	25.76
		656000	3840.00	1 / 271	26.15
		662000	3930.00	1 / 271	26.34
	16-QAM	650000	3750.00	1 / 1	24.45
		649668	3745.02	1 / 243	25.92
		656000	3840.00	1 / 243	26.21
90 MHz	$\pi/2$ BPSK	662332	3934.98	1 / 243	26.42
		649668	3745.02	1 / 1	25.84
		656000	3840.00	1 / 243	26.19
	QPSK	662332	3934.98	1 / 243	26.31
		649668	3745.02	1 / 1	24.71
		656000	3840.00	1 / 215	25.87
	16-QAM	649334	3740.01	1 / 215	26.20
		662666	3939.99	1 / 215	26.33
		649334	3740.01	1 / 1	25.76
80 MHz	$\pi/2$ BPSK	656000	3840.00	1 / 215	26.15
		662666	3939.99	1 / 215	26.34
		649334	3740.01	1 / 1	24.45
	QPSK	649000	3735.00	1 / 1	25.72
		656000	3840.00	1 / 187	26.07
		663000	3945.00	1 / 187	26.24
	16-QAM	649000	3735.00	1 / 1	25.74
		656000	3840.00	1 / 187	26.05
		663000	3945.00	1 / 187	26.23
70 MHz	$\pi/2$ BPSK	649000	3735.00	1 / 1	24.48
		648668	3730.02	1 / 160	25.66
		656000	3840.00	1 / 160	25.89
	QPSK	663332	3949.98	1 / 81	26.19
		648668	3730.02	1 / 160	25.66
		656000	3840.00	1 / 160	25.85
	16-QAM	663332	3949.98	1 / 1	26.11
		648668	3730.02	1 / 1	24.40
		648334	3725.01	1 / 131	25.74
60 MHz	$\pi/2$ BPSK	656000	3840.00	1 / 66	26.12
		663666	3954.99	1 / 131	26.38
		648334	3725.01	1 / 1	25.71
	QPSK	656000	3840.00	1 / 131	26.10
		663666	3954.99	1 / 131	26.33
		648334	3725.01	1 / 1	24.70
	16-QAM	648000	3720.00	1 / 53	25.75
		656000	3840.00	1 / 53	25.88
		664000	3960.00	1 / 104	26.21
50 MHz	$\pi/2$ BPSK	648000	3720.00	1 / 53	25.66
		656000	3840.00	1 / 104	25.86
		664000	3960.00	1 / 104	26.14
	QPSK	648000	3720.00	1 / 1	24.57
		647668	3715.02	1 / 1	25.67
		656000	3840.00	1 / 1	25.95
	16-QAM	664332	3964.98	1 / 76	26.32
		647668	3715.02	1 / 1	25.63
		656000	3840.00	1 / 76	25.91
40 MHz	$\pi/2$ BPSK	664332	3964.98	1 / 76	26.19
		647668	3715.02	1 / 1	24.55
		647500	3712.50	1 / 32	25.81
	QPSK	656000	3840.00	1 / 63	25.99
		664500	3967.50	1 / 63	26.26
		647500	3712.50	1 / 32	25.76
	16-QAM	656000	3840.00	1 / 63	25.94
		664500	3967.50	1 / 32	26.13
		647500	3712.50	1 / 1	24.54
30 MHz	$\pi/2$ BPSK	647334	3710.01	1 / 25	25.63
		656000	3840.00	1 / 1	25.86
		664666	3969.99	1 / 49	26.21
	QPSK	647334	3710.01	1 / 49	25.59
		656000	3840.00	1 / 1	25.78
		664666	3969.99	1 / 25	26.06
	16-QAM	647334	3710.01	1 / 1	24.51
		647168	3707.52	1 / 1	25.69
		656000	3840.00	1 / 1	25.91
25 MHz	$\pi/2$ BPSK	664832	3972.48	1 / 19	26.22
		647168	3707.52	1 / 1	25.65
		656000	3840.00	1 / 36	25.78
	QPSK	664832	3972.48	1 / 36	26.15
		647168	3707.52	1 / 1	24.53
		647000	3705.00	1 / 22	25.71
	16-QAM	656000	3840.00	1 / 22	25.92
		664332	3975.00	1 / 22	26.24
		647000	3705.00	1 / 22	25.65
20 MHz	$\pi/2$ BPSK	656000	3840.00	1 / 22	25.88
		664332	3975.00	1 / 22	26.19
		647000	3705.00	1 / 1	24.78
	QPSK	656000	3840.00	1 / 1	24.78
		664332	3975.00	1 / 22	25.88
		647000	3705.00	1 / 22	25.65
	16-QAM	656000	3840.00	1 / 22	25.88
		664332	3975.00	1 / 22	26.19
		647000	3705.00	1 / 1	24.78

Table 7-6. Conducted Power Results – n77 – Ant1 – C-Band – Main

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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	650000	3750.00	1 / 136	20.04
		656000	3840.00	1 / 136	19.71
		662000	3930.00	1 / 136	20.18
	QPSK	650000	3750.00	1 / 136	19.98
		656000	3840.00	1 / 136	19.61
		662000	3930.00	1 / 136	20.07
	16-QAM	650000	3750.00	1 / 136	19.01

Table 7-7. Conducted Power Results – n77 – Ant2 – C-Band – Main

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	650000	3750.00	1 / 1	24.16
		656000	3840.00	1 / 136	24.65
		662000	3930.00	1 / 136	24.72
	QPSK	650000	3750.00	1 / 1	24.15
		656000	3840.00	1 / 136	24.58
		662000	3930.00	1 / 136	24.60
	16-QAM	656000	3840.00	1 / 136	24.03

Table 7-8. Conducted Power Results – n77 – Ant3 – C-Band – Main

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
100 MHz	$\pi/2$ BPSK	650000	3750.00	1 / 136	19.21
		656000	3840.00	1 / 1	19.01
		662000	3930.00	1 / 1	18.28
	QPSK	650000	3750.00	1 / 136	19.07
		656000	3840.00	1 / 1	18.96
		662000	3930.00	1 / 1	18.04
	16-QAM	656000	3840.00	1 / 1	17.80

Table 7-9. Conducted Power Results – n77 – Ant4 – C-Band – Main

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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 $\geq 3 \times$ 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.

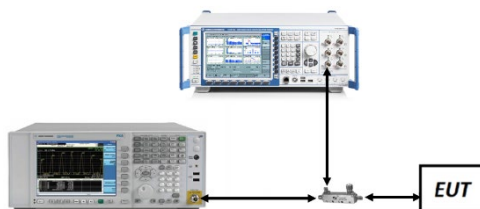


Figure 7-2. Test Instrument & Measurement Setup

Test Notes

None.

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Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 DoD Band	100MHz	$\pi/2$ BPSK	97.205
		QPSK	96.904
		16QAM	96.932
	90MHz	$\pi/2$ BPSK	87.390
		QPSK	87.411
		16QAM	87.368
	80MHz	$\pi/2$ BPSK	77.508
		QPSK	77.620
		16QAM	77.489
	70MHz	$\pi/2$ BPSK	64.648
		QPSK	64.717
		16QAM	64.782
	60MHz	$\pi/2$ BPSK	58.276
		QPSK	58.203
		16QAM	58.362
	50MHz	$\pi/2$ BPSK	46.145
		QPSK	46.103
		16QAM	46.011
	40MHz	$\pi/2$ BPSK	36.033
		QPSK	36.047
		16QAM	35.960
	30MHz	$\pi/2$ BPSK	27.057
		QPSK	27.044
		16QAM	27.017
	25MHz	$\pi/2$ BPSK	23.024
		QPSK	23.051
		16QAM	22.969
	20MHz	$\pi/2$ BPSK	18.067
		QPSK	18.007
		16QAM	18.077
	15MHz	$\pi/2$ BPSK	13.070
		QPSK	13.033
		16QAM	13.057
	10MHz	$\pi/2$ BPSK	8.712
		QPSK	8.728
		16QAM	8.690

Table 7-10. Occupied Bandwidth Results - Ant1 - DoD Band – Main

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 DoD Band	100MHz	$\pi/2$ BPSK	0.586
		QPSK	0.718
		16QAM	0.673

Table 7-11. Occupied Bandwidth Results – Ant2 - DoD Band – Main

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 DoD Band	100MHz	$\pi/2$ BPSK	0.632
		QPSK	0.743
		16QAM	0.707

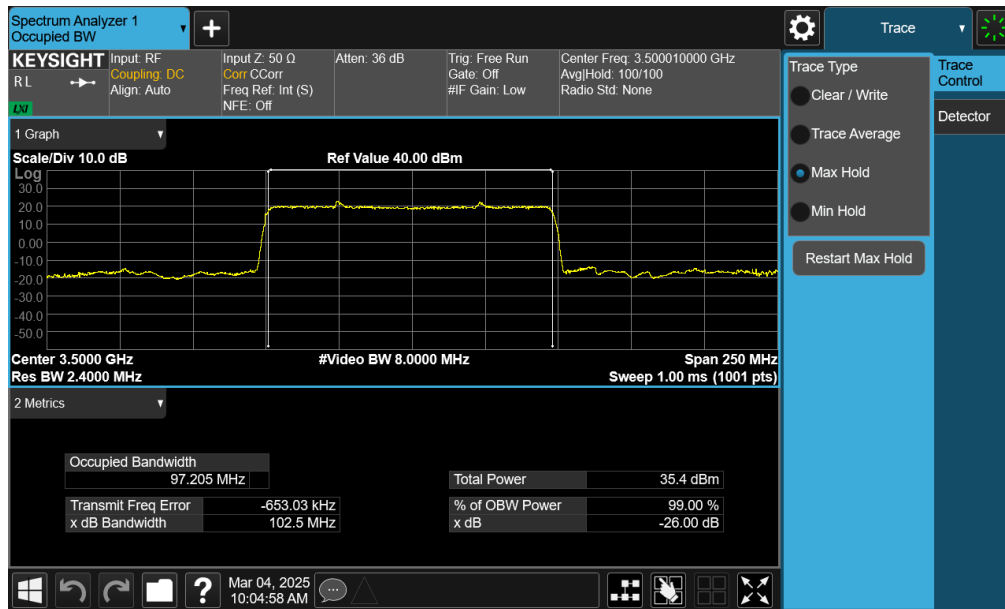
Table 7-12. Occupied Bandwidth Results – Ant3 - DoD Band - Main

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 DoD Band	100MHz	$\pi/2$ BPSK	0.584
		QPSK	0.707
		16QAM	0.657

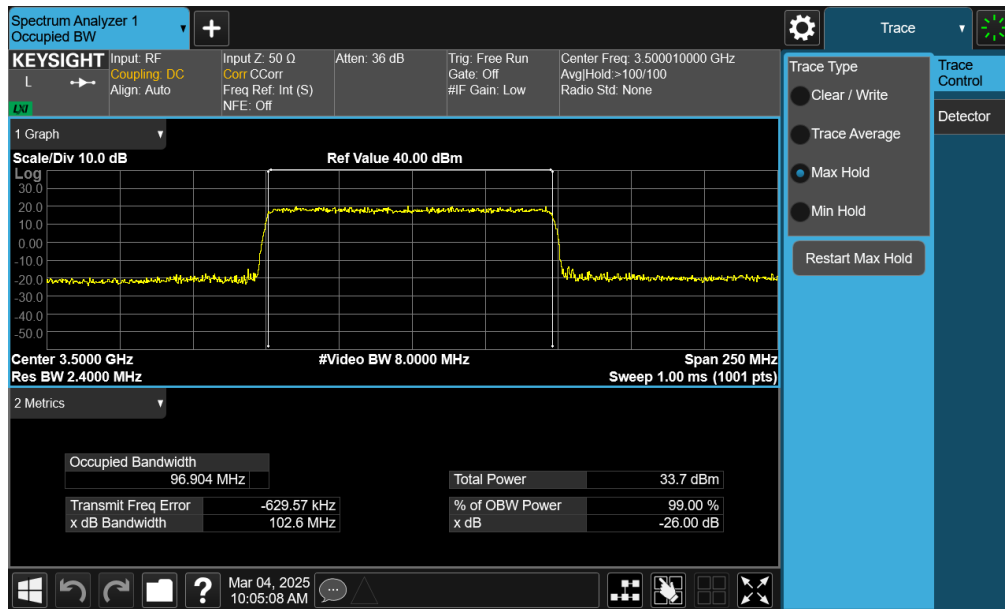
Table 7-13. Occupied Bandwidth Results – Ant4 - DoD Band - Main

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77PC2 - Ant1 - DoD Band - Main

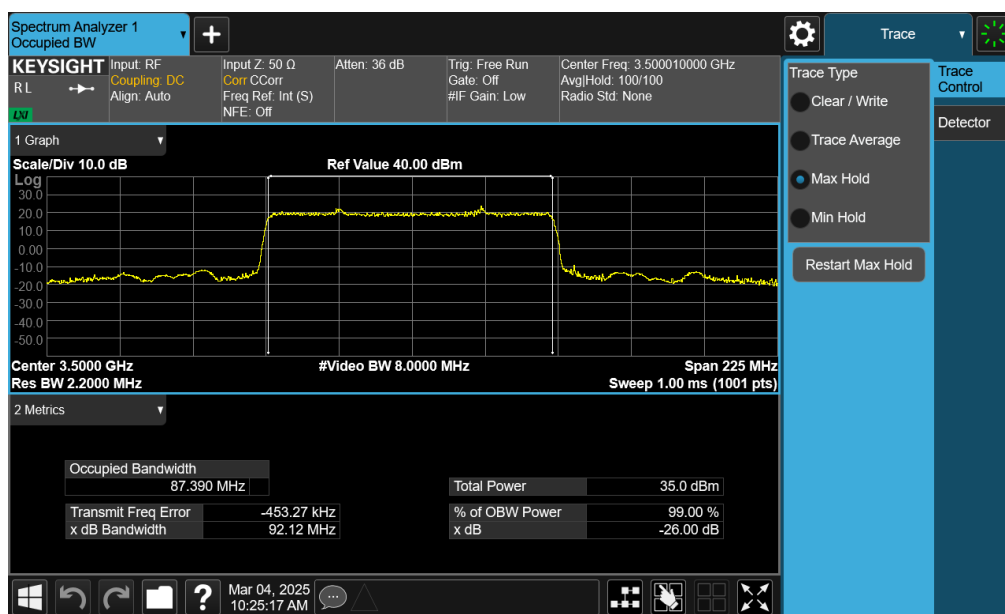
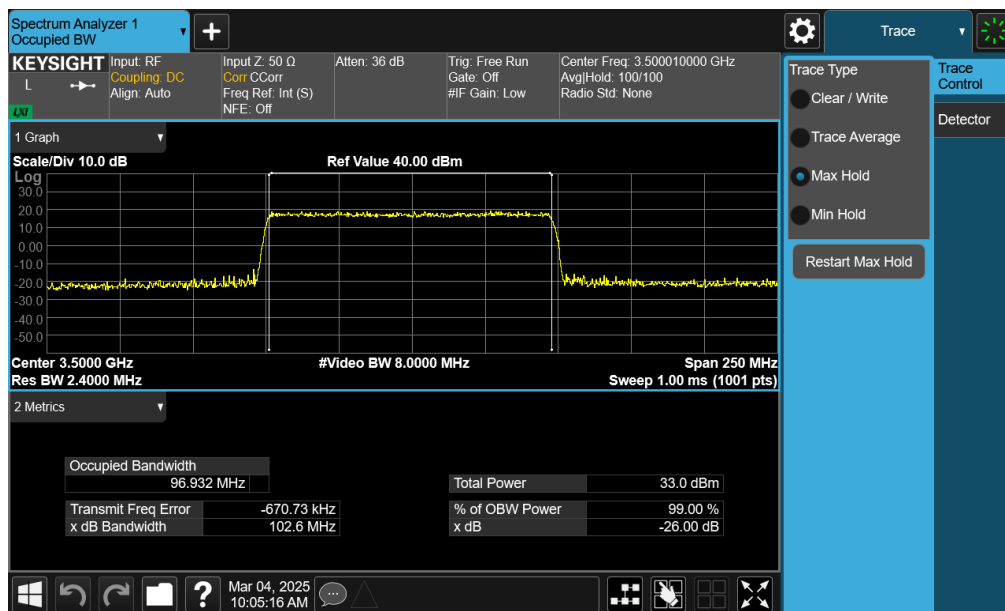


Plot 7-1. Occupied Bandwidth Plot (NR Band n77PC2 - 100MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

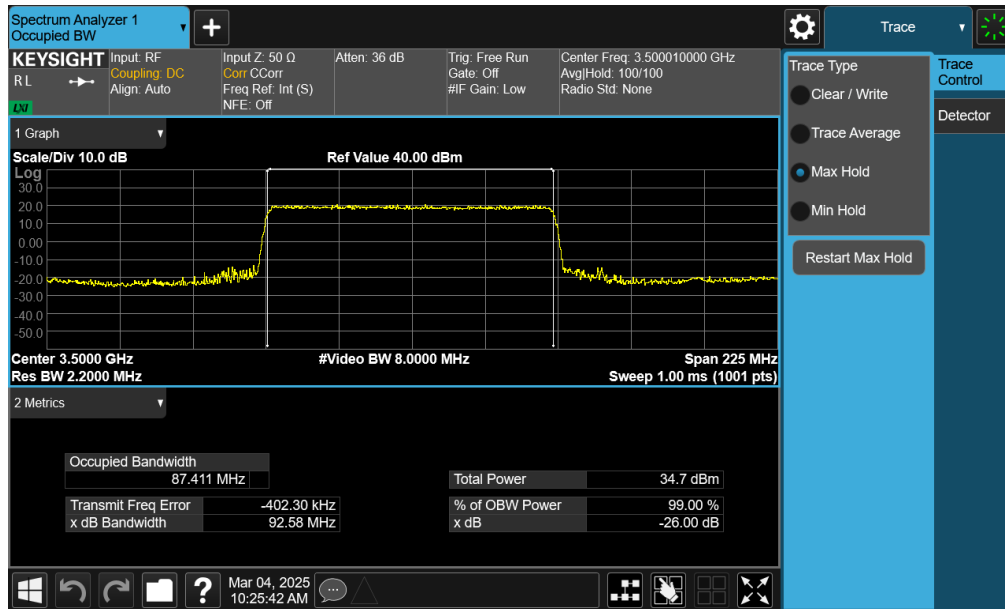


Plot 7-2. Occupied Bandwidth Plot (NR Band n77PC2 - 100MHz QPSK - Full RB - Ant1 - DoD Band - Main)

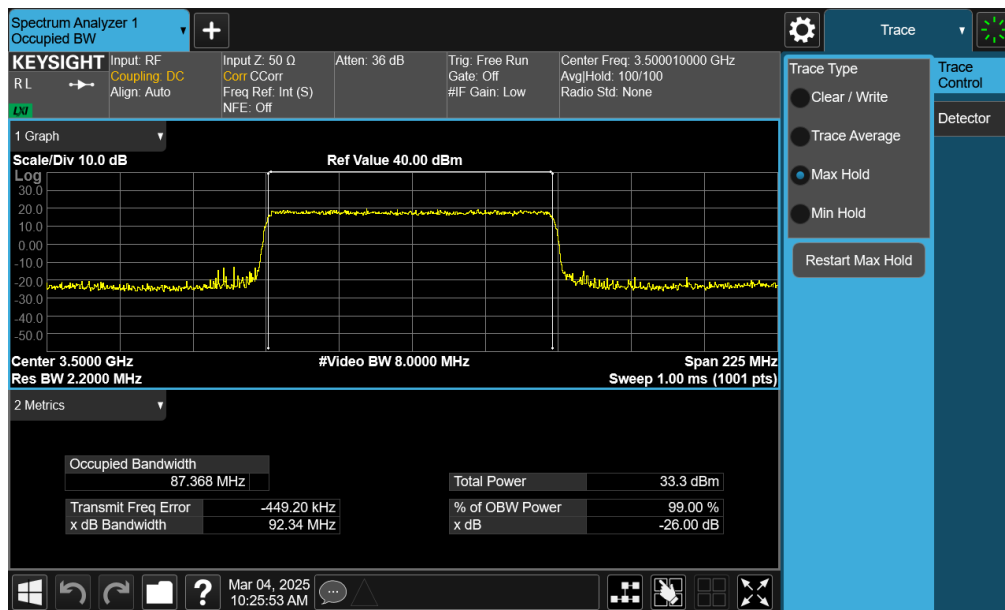
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502270019-05.A3L	Test Dates: 2/24/2025 - 4/30/2025	EUT Type: Portable Handset	Page 23 of 171



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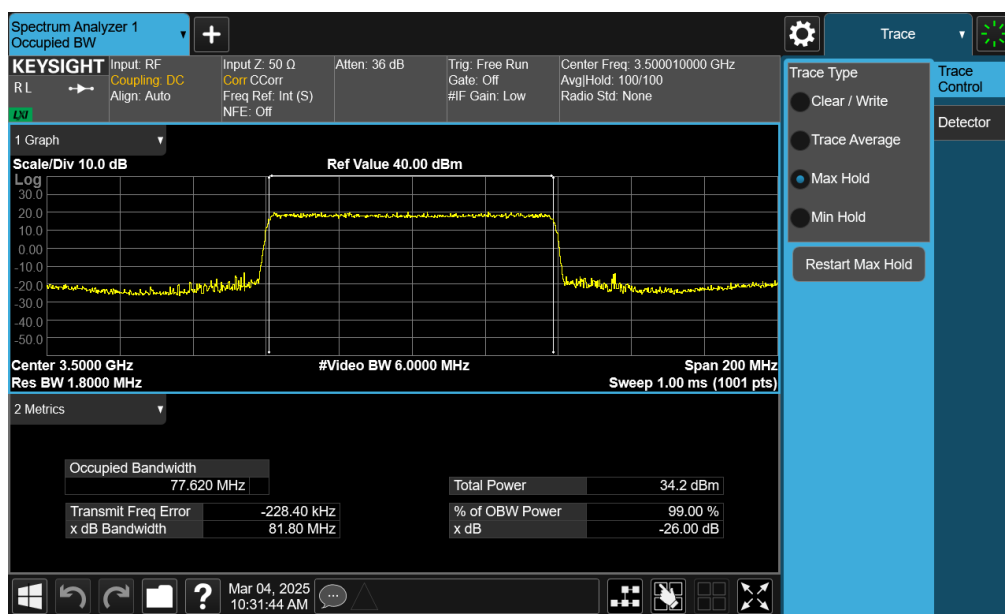
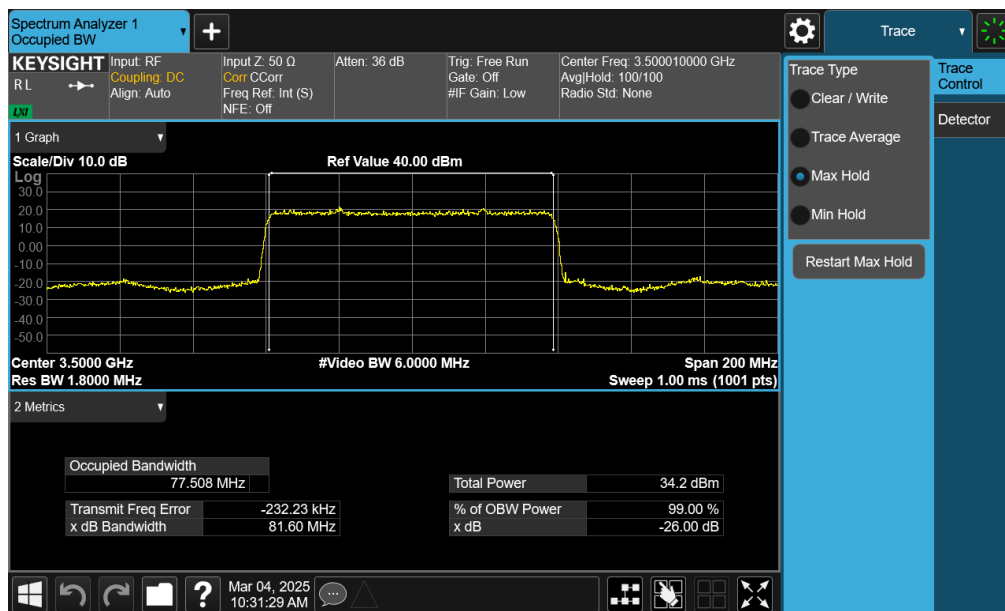


Plot 7-5. Occupied Bandwidth Plot (NR Band n77 - 90MHz QPSK - Full RB - Ant1 - DoD Band - Main)

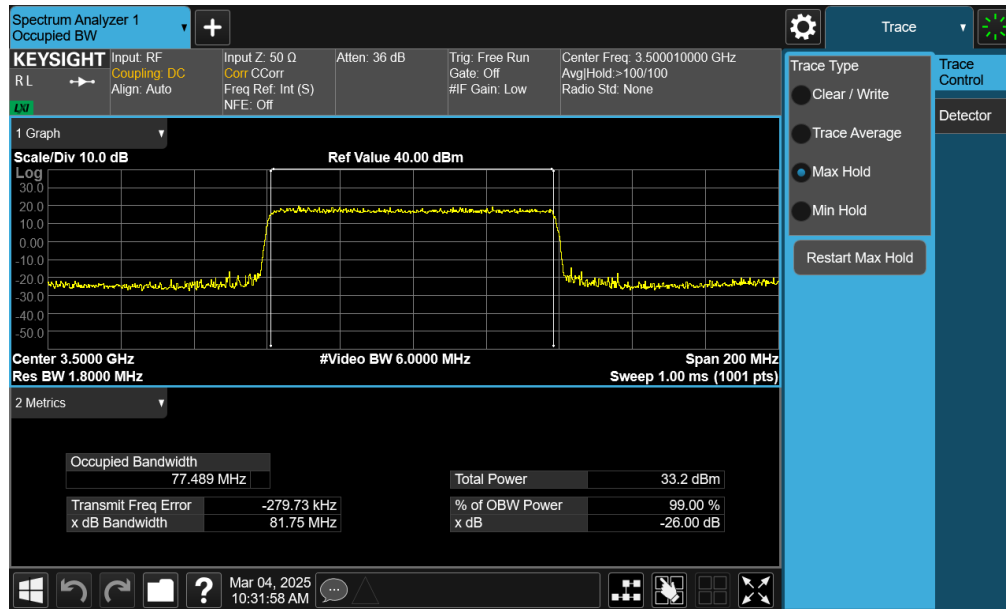


Plot 7-6. Occupied Bandwidth Plot (NR Band n77 - 90MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

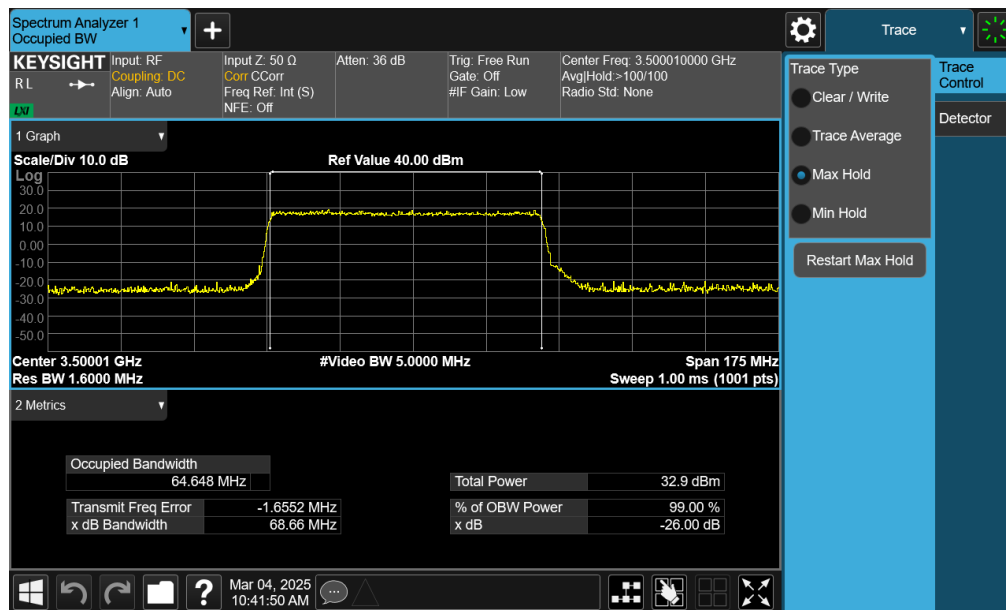
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502270019-05.A3L	Test Dates: 2/24/2025 - 4/30/2025	EUT Type: Portable Handset	Page 25 of 171



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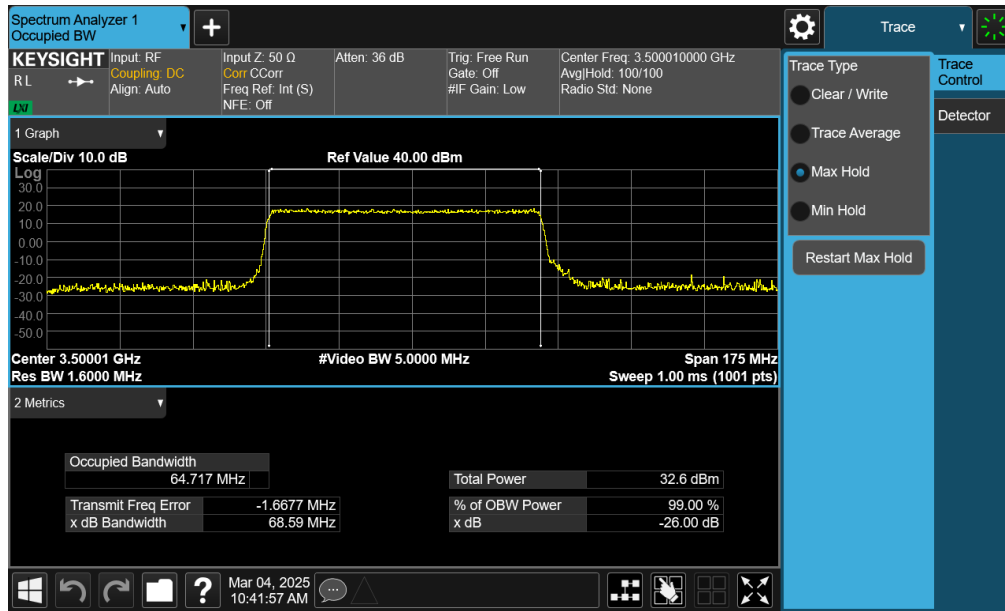


Plot 7-9. Occupied Bandwidth Plot (NR Band n77 - 80MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

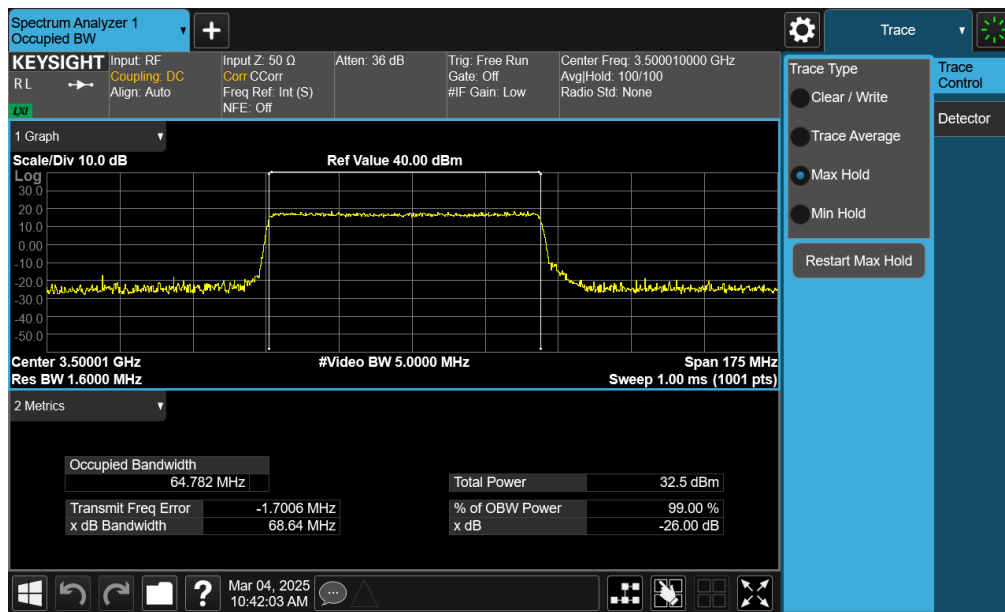


Plot 7-10. Occupied Bandwidth Plot (NR Band n77 - 70MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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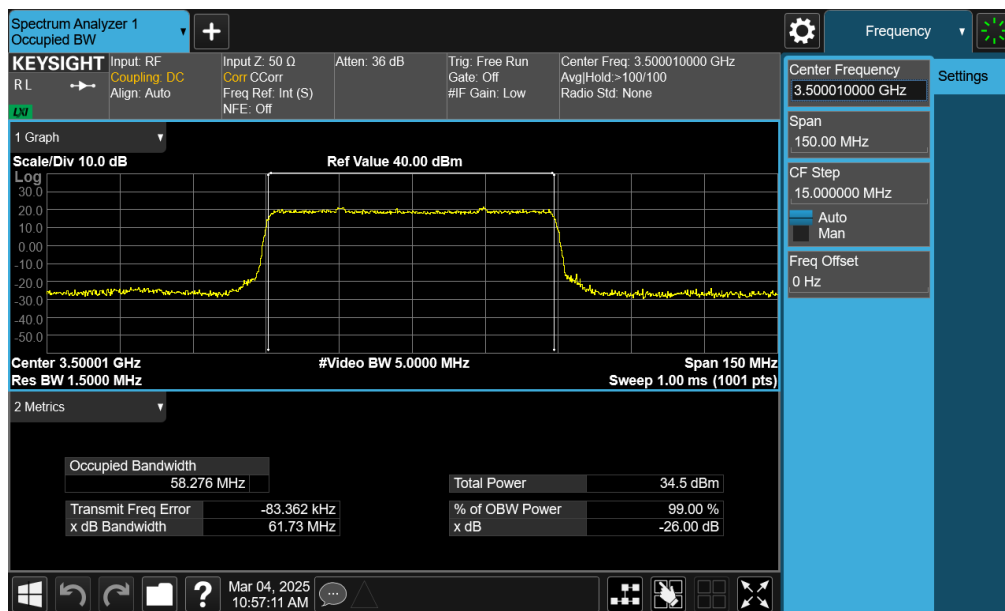


Plot 7-11. Occupied Bandwidth Plot (NR Band n77 - 70MHz QPSK - Full RB - Ant1 - DoD Band - Main)

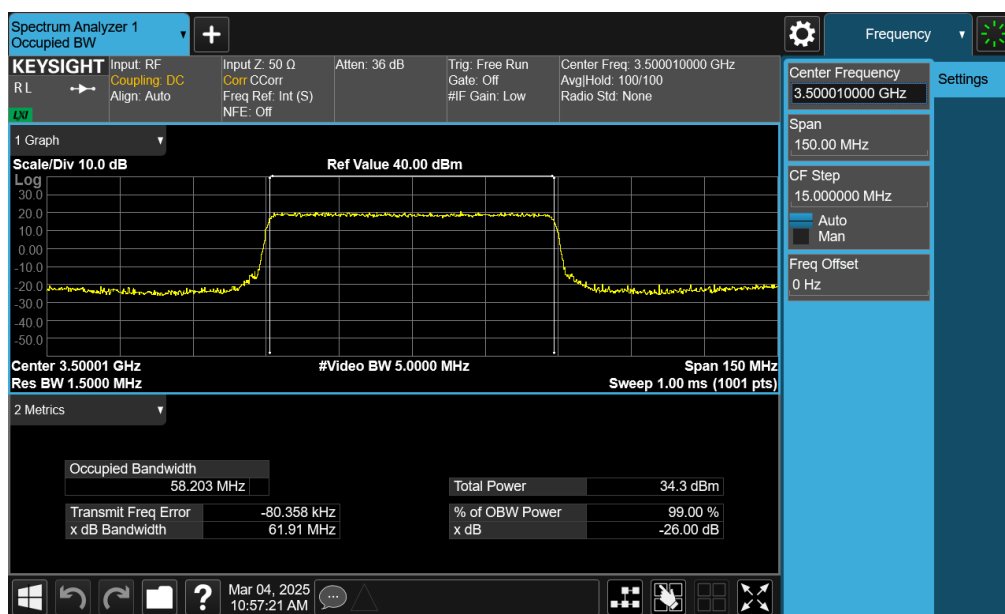


Plot 7-12. Occupied Bandwidth Plot (NR Band n77 - 70MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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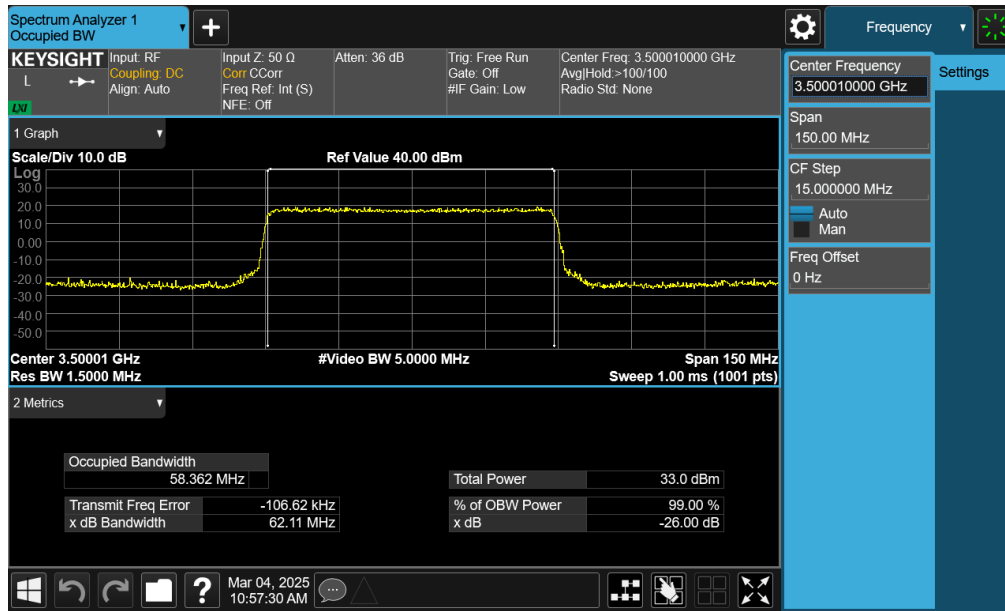


Plot 7-13. Occupied Bandwidth Plot (NR Band n77 - 60MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

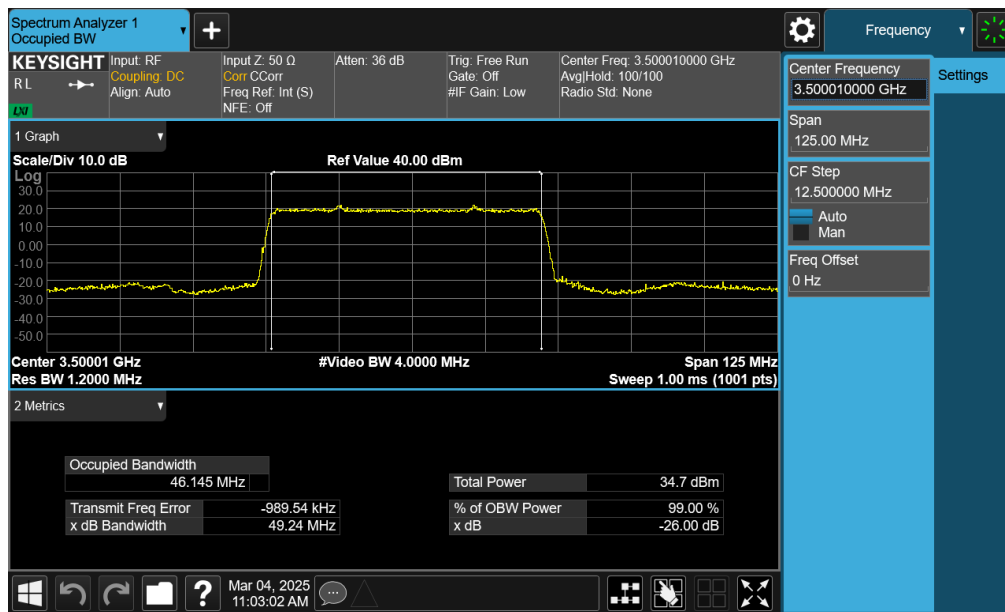


Plot 7-14. Occupied Bandwidth Plot (NR Band n77 - 60MHz QPSK - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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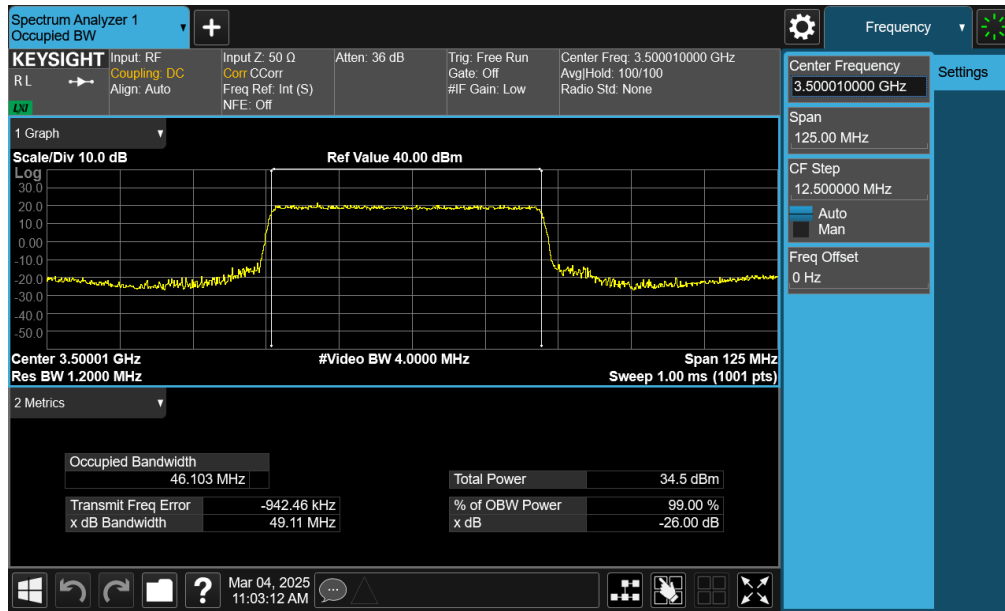


Plot 7-15. Occupied Bandwidth Plot (NR Band n77 - 60MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

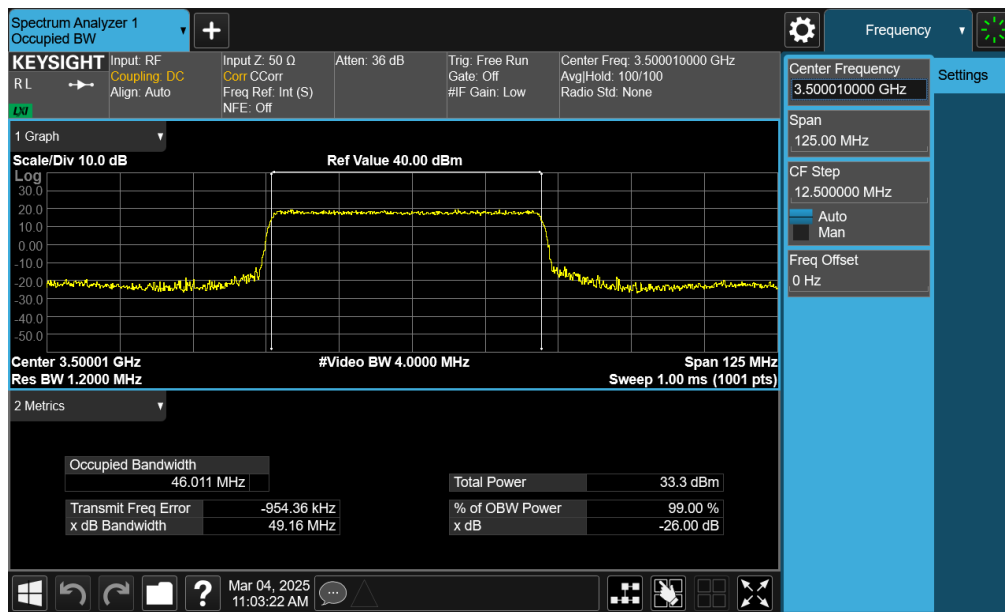


Plot 7-16. Occupied Bandwidth Plot (NR Band n77 - 50MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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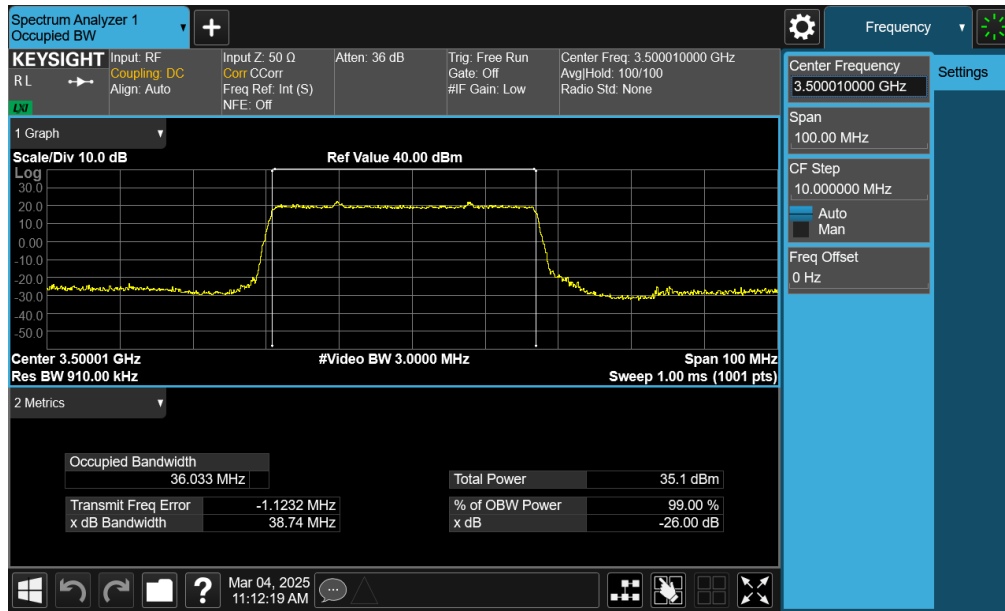


Plot 7-17. Occupied Bandwidth Plot (NR Band n77 - 50MHz QPSK - Full RB - Ant1 - DoD Band - Main)

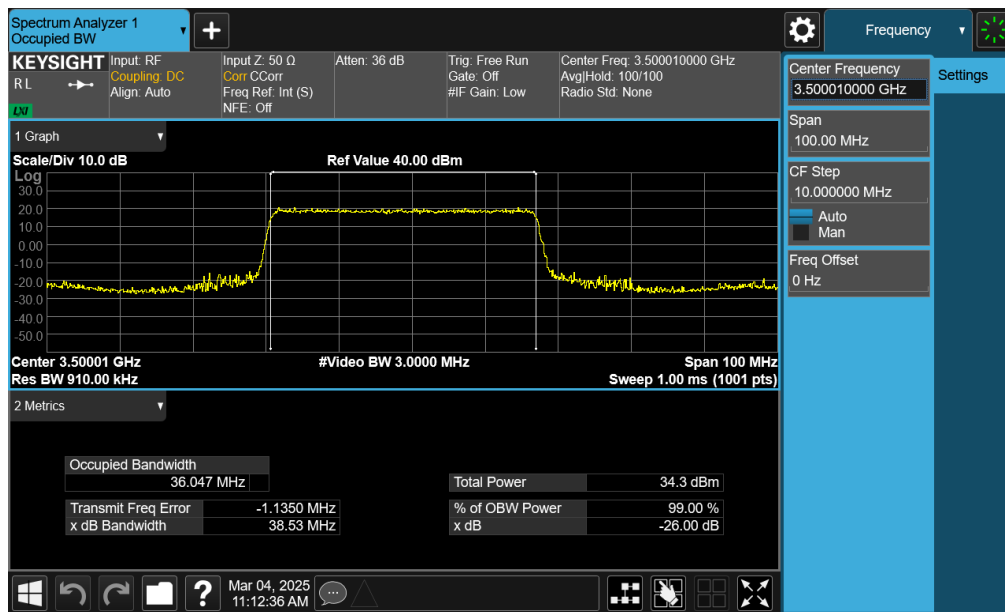


Plot 7-18. Occupied Bandwidth Plot (NR Band n77 - 50MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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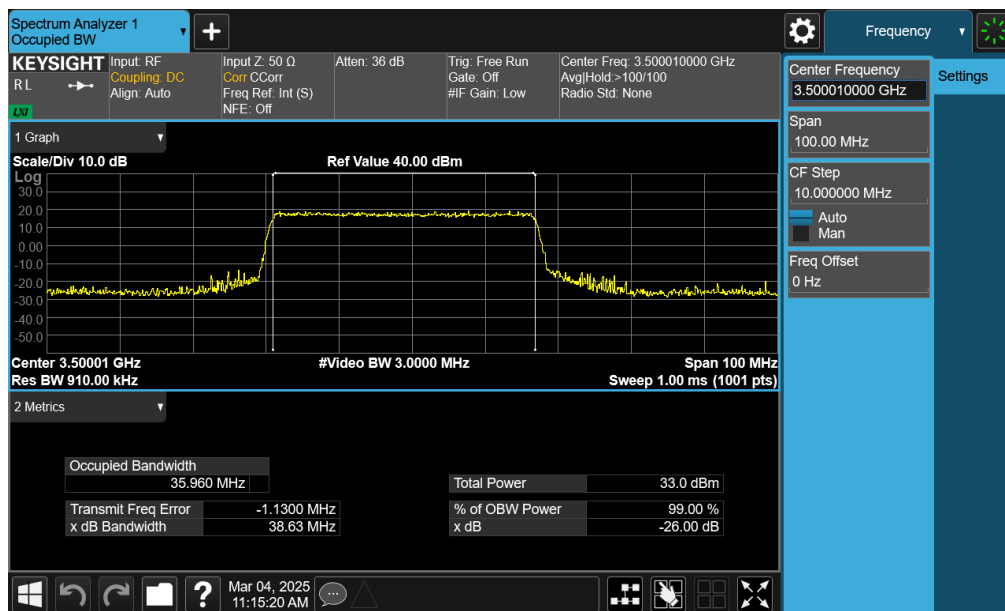


Plot 7-19. Occupied Bandwidth Plot (NR Band n77 - 40MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

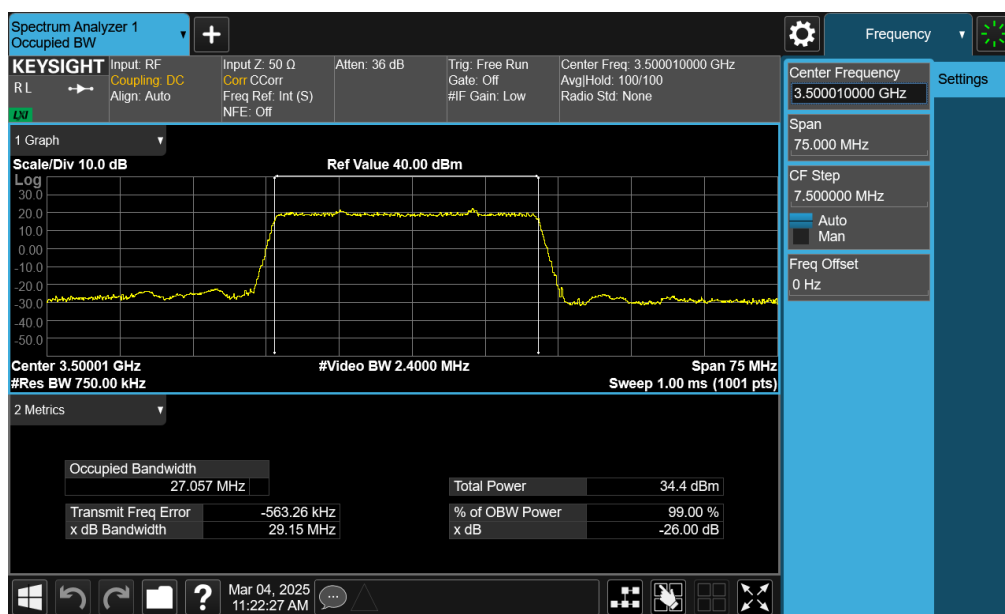


Plot 7-20. Occupied Bandwidth Plot (NR Band n77 - 40MHz QPSK - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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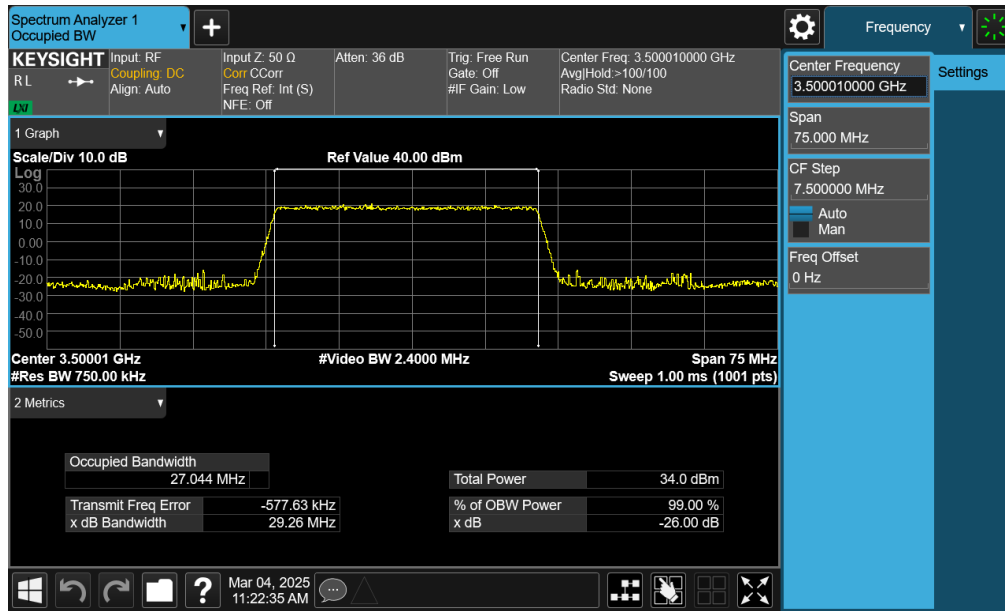


Plot 7-21. Occupied Bandwidth Plot (NR Band n77 - 40MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

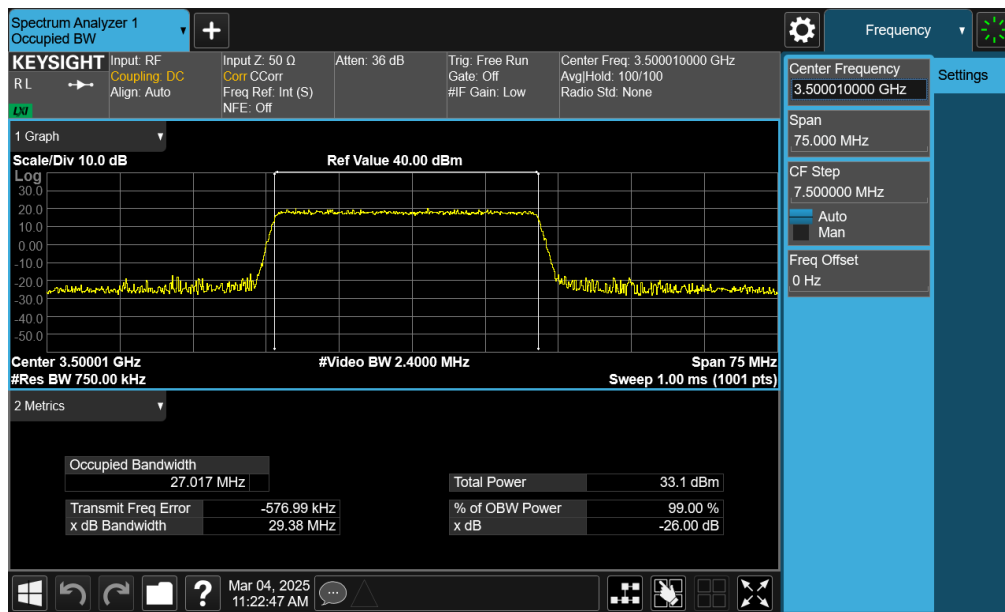


Plot 7-22. Occupied Bandwidth Plot (NR Band n77 - 30MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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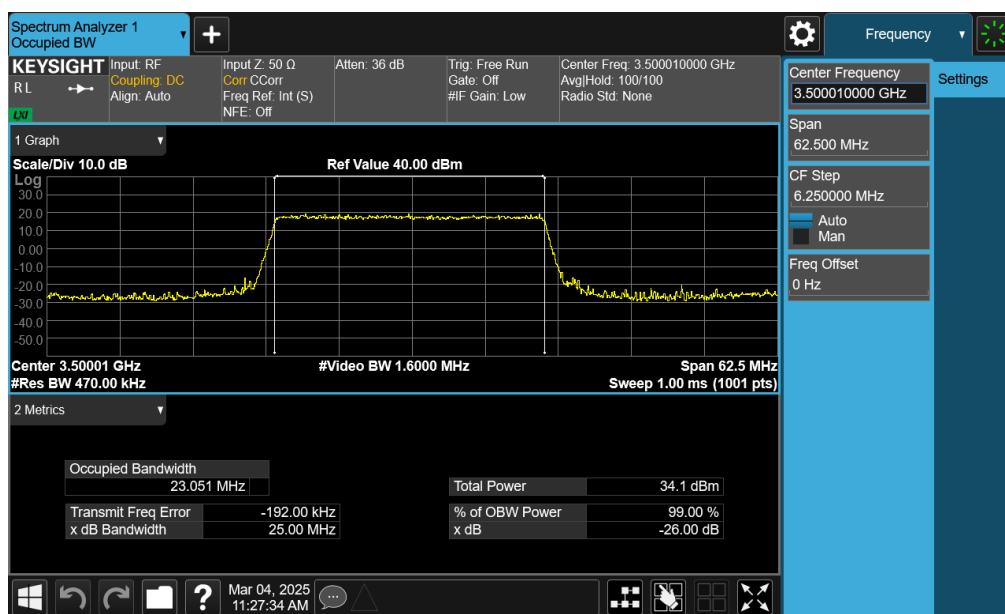
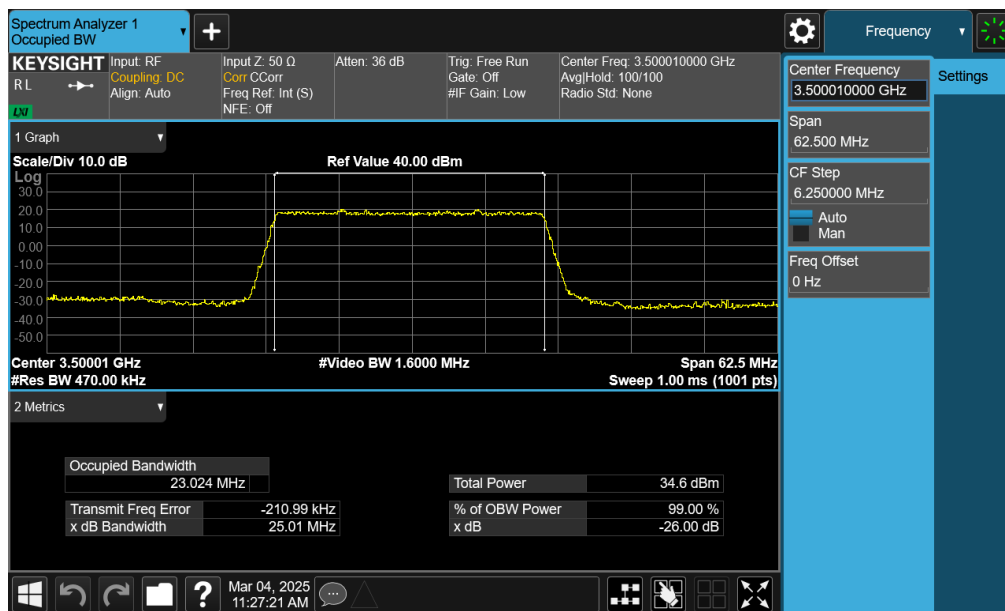


Plot 7-23. Occupied Bandwidth Plot (NR Band n77 - 30MHz QPSK - Full RB - Ant1 - DoD Band - Main)

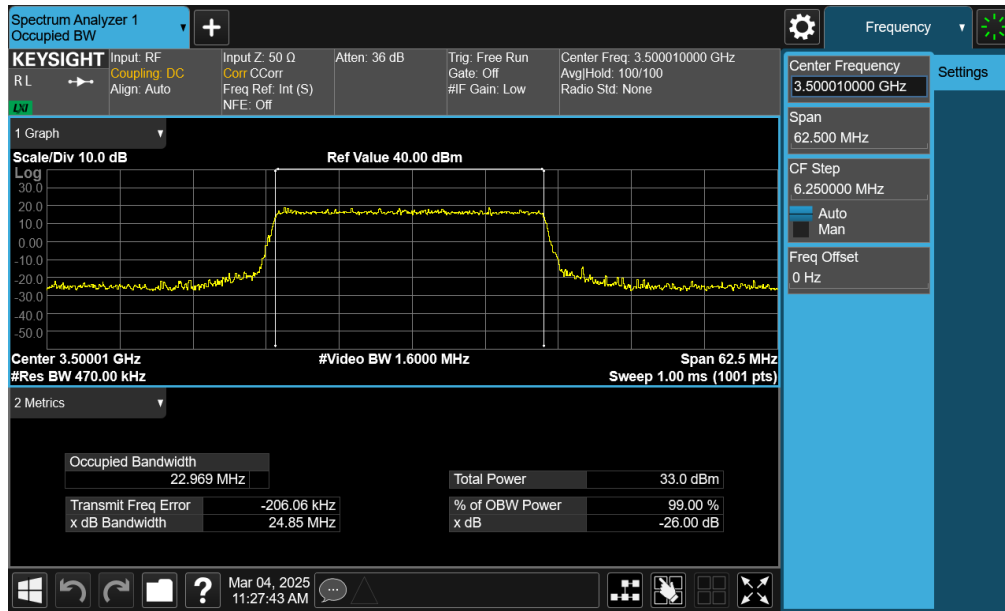


Plot 7-24. Occupied Bandwidth Plot (NR Band n77 - 30MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

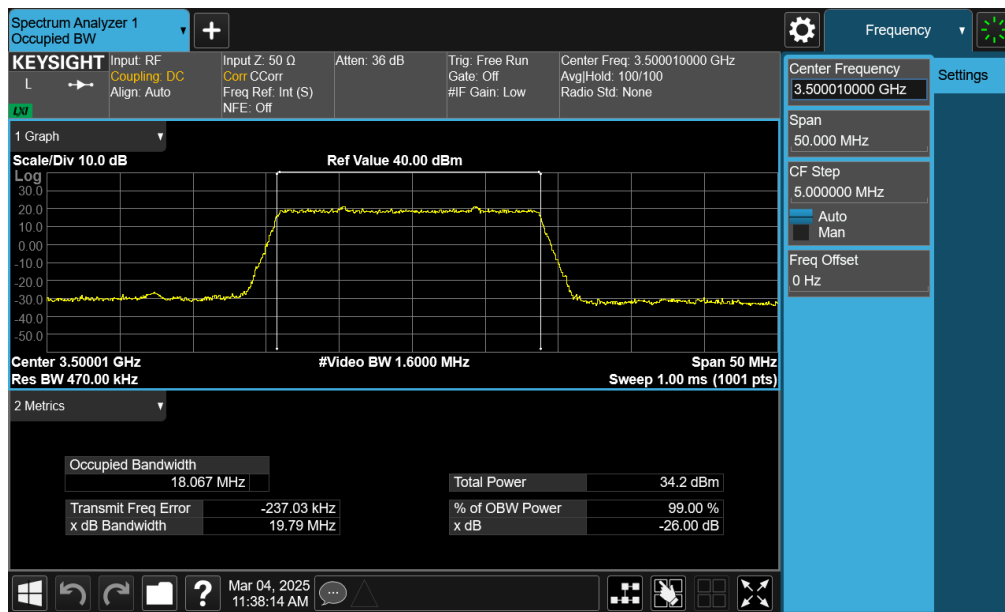
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502270019-05.A3L	Test Dates: 2/24/2025 - 4/30/2025	EUT Type: Portable Handset	Page 34 of 171



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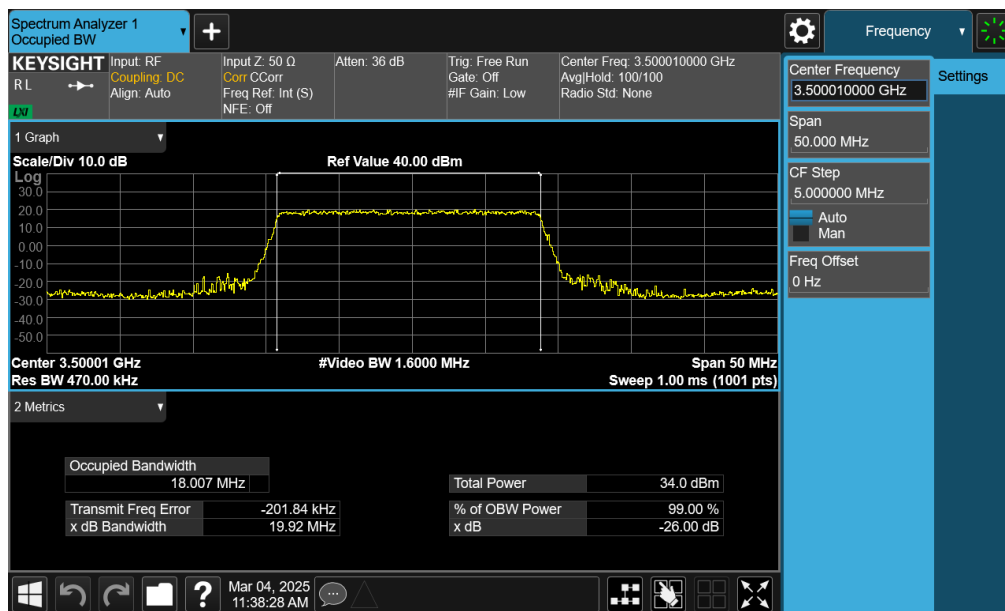


Plot 7-27. Occupied Bandwidth Plot (NR Band n77 - 20MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

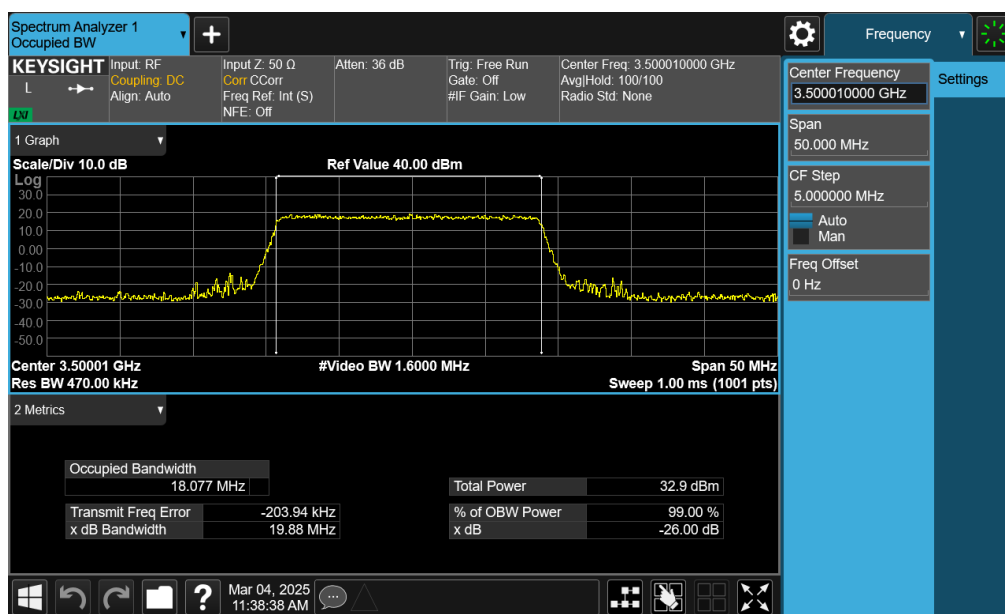


Plot 7-28. Occupied Bandwidth Plot (NR Band n77 - 20MHz $\pi/2$ BPSK - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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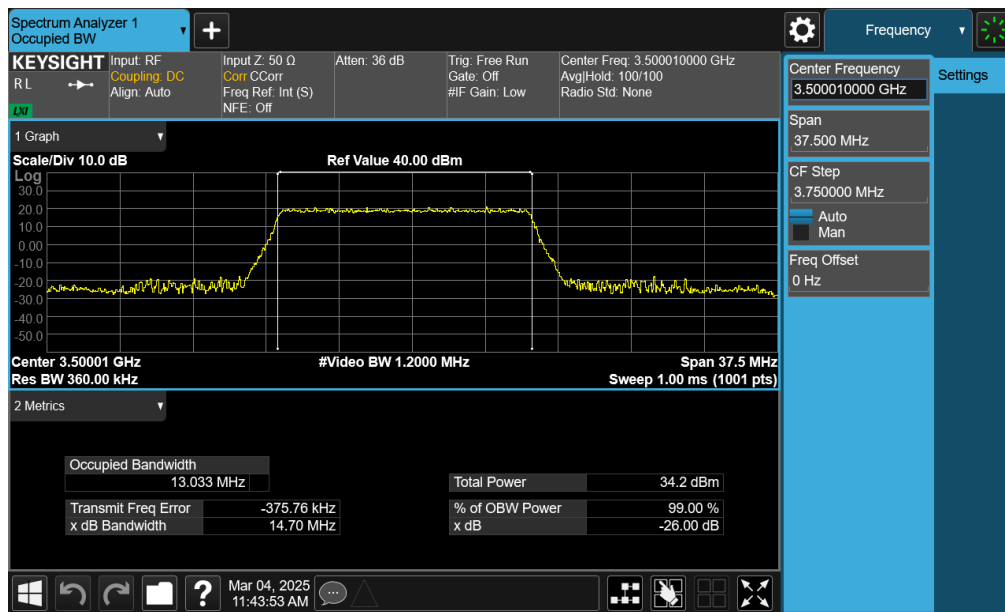
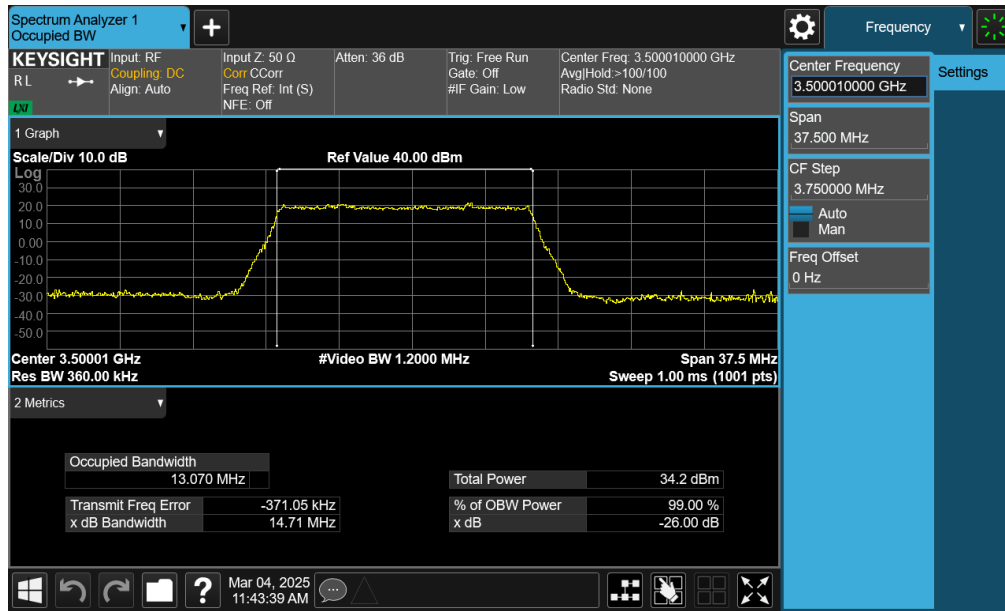


Plot 7-29. Occupied Bandwidth Plot (NR Band n77 - 20MHz QPSK - Full RB - Ant1 - DoD Band - Main)

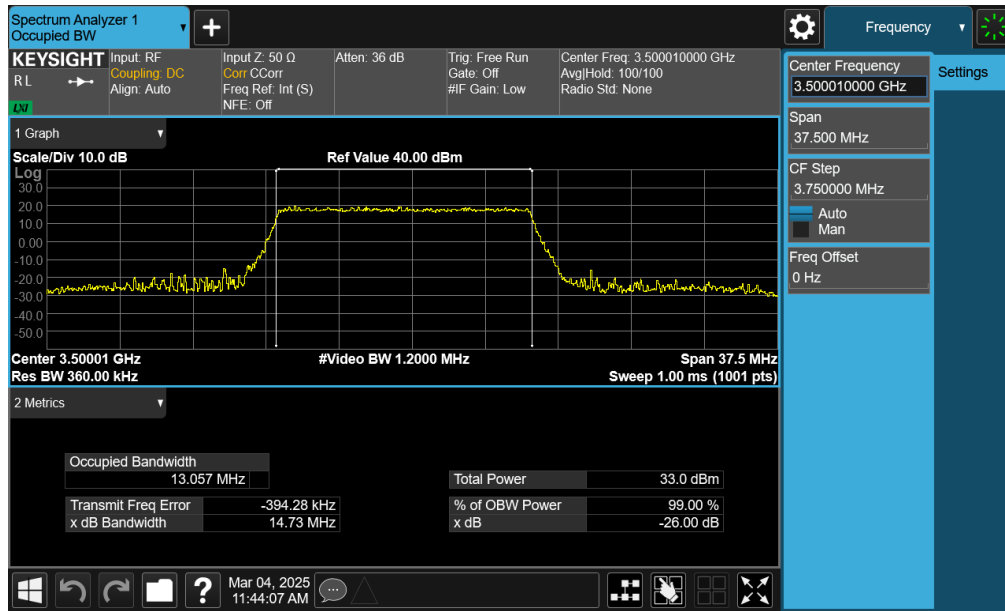


Plot 7-30. Occupied Bandwidth Plot (NR Band n77 - 20MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

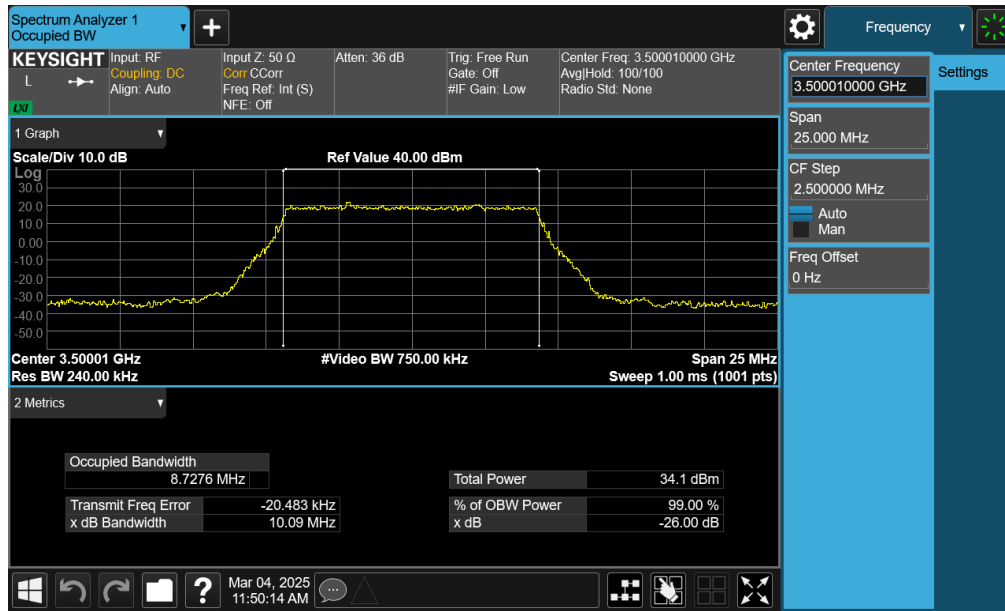
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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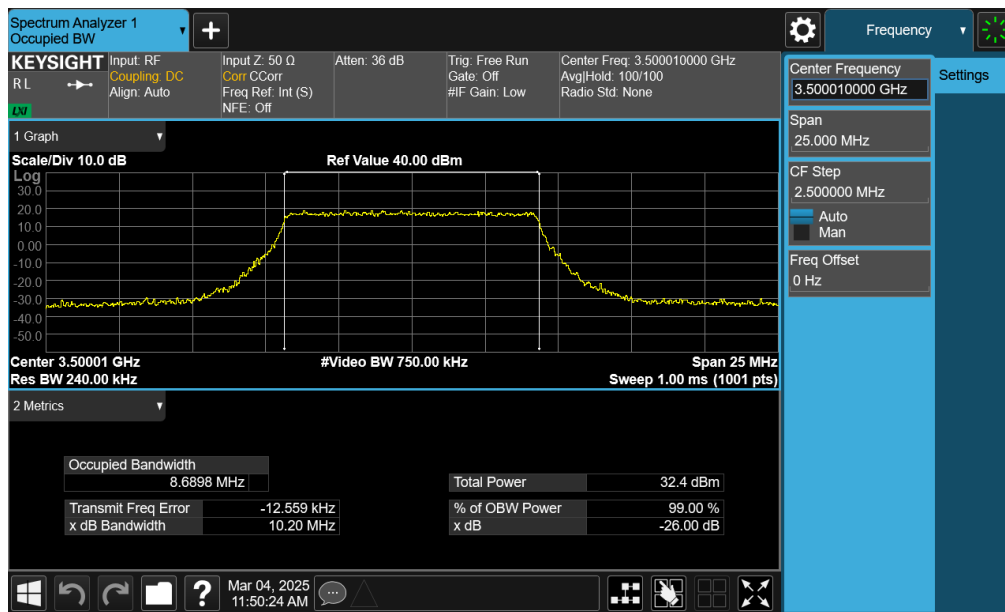
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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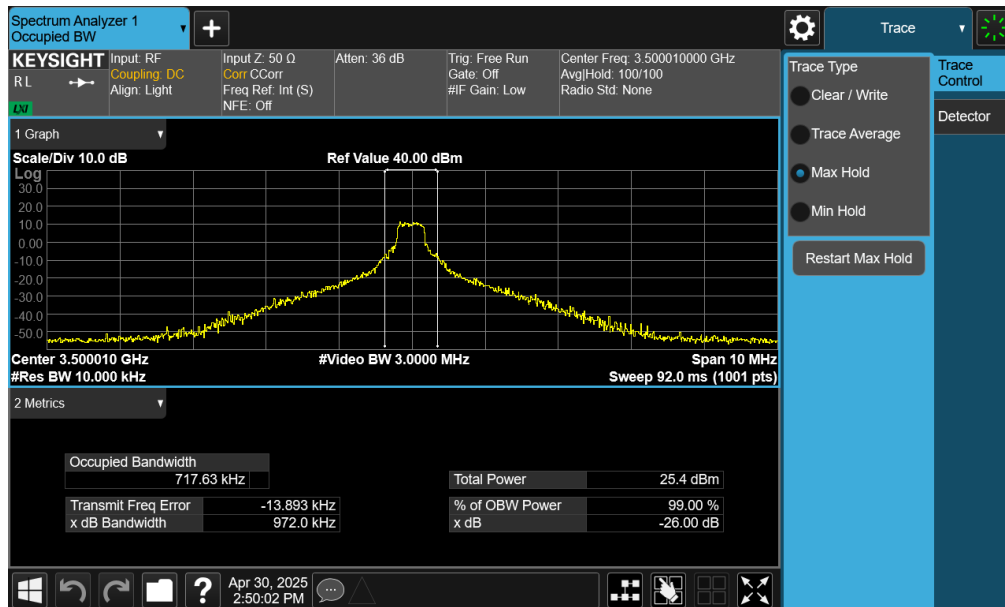
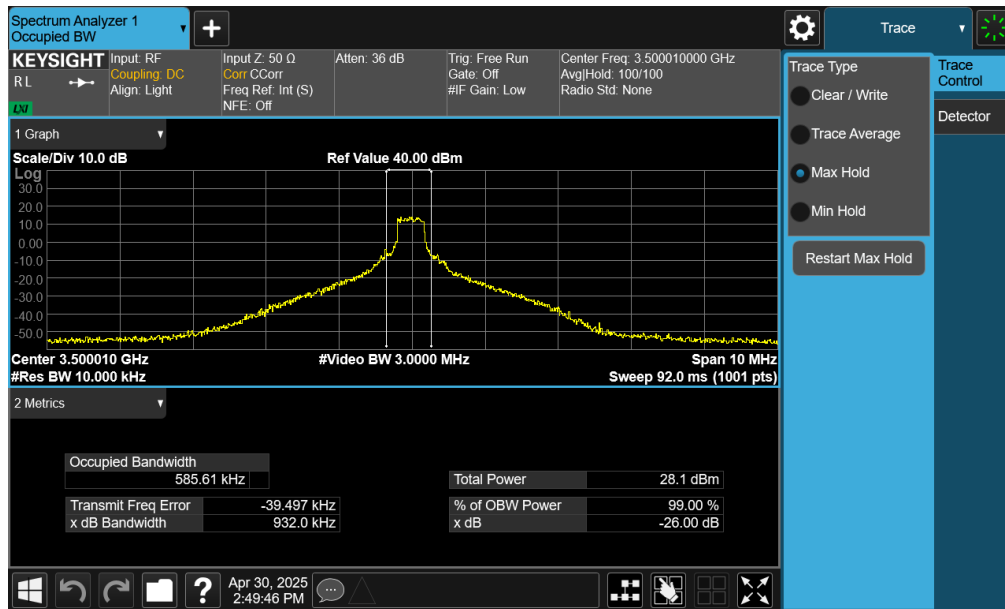
Plot 7-35. Occupied Bandwidth Plot (NR Band n77 - 10MHz QPSK - Full RB - Ant1 - DoD Band - Main)



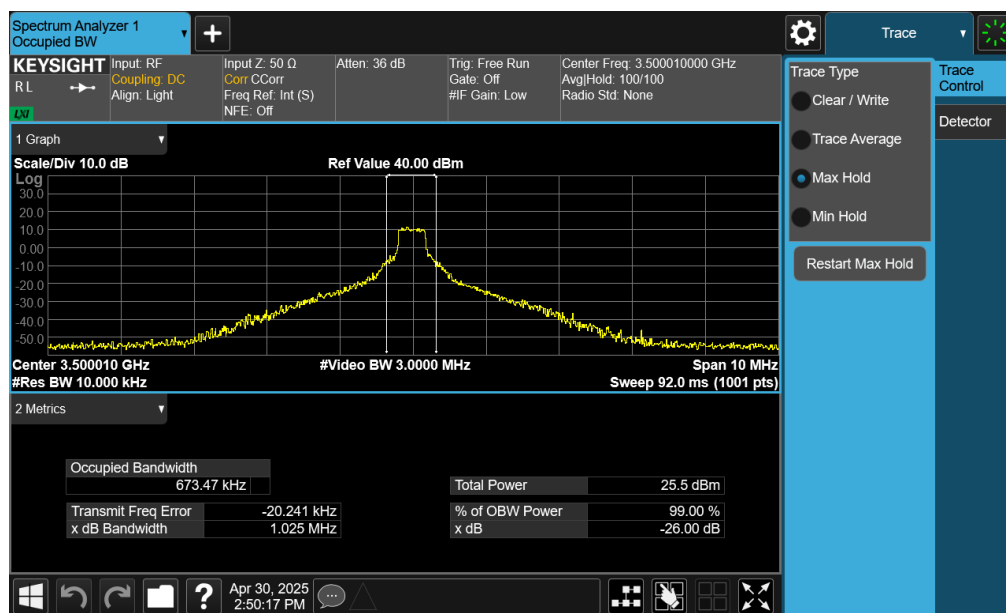
Plot 7-36. Occupied Bandwidth Plot (NR Band n77 - 10MHz 16-QAM - Full RB - Ant1 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77 – Ant2 – DoD Band – Main



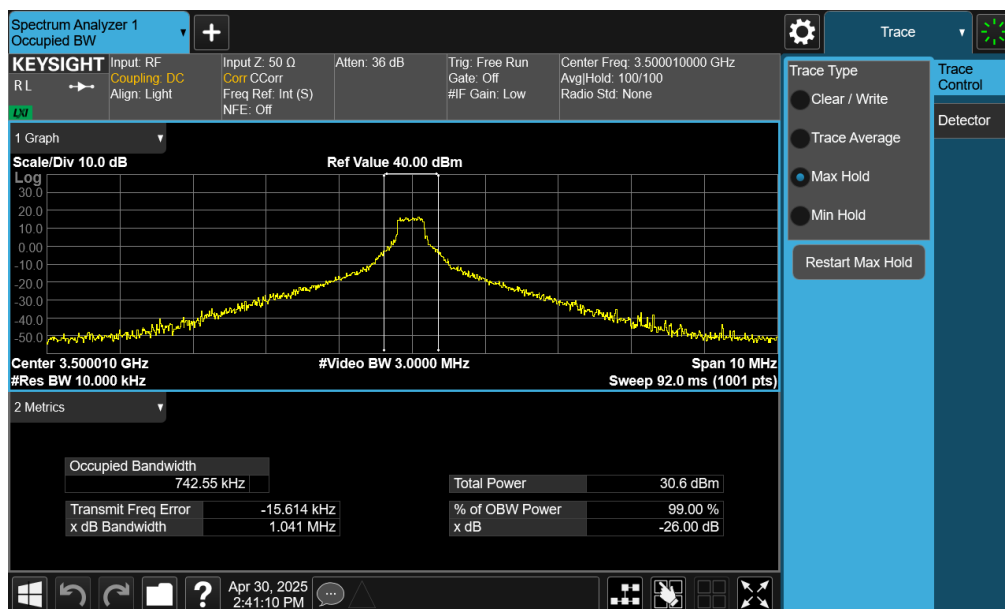
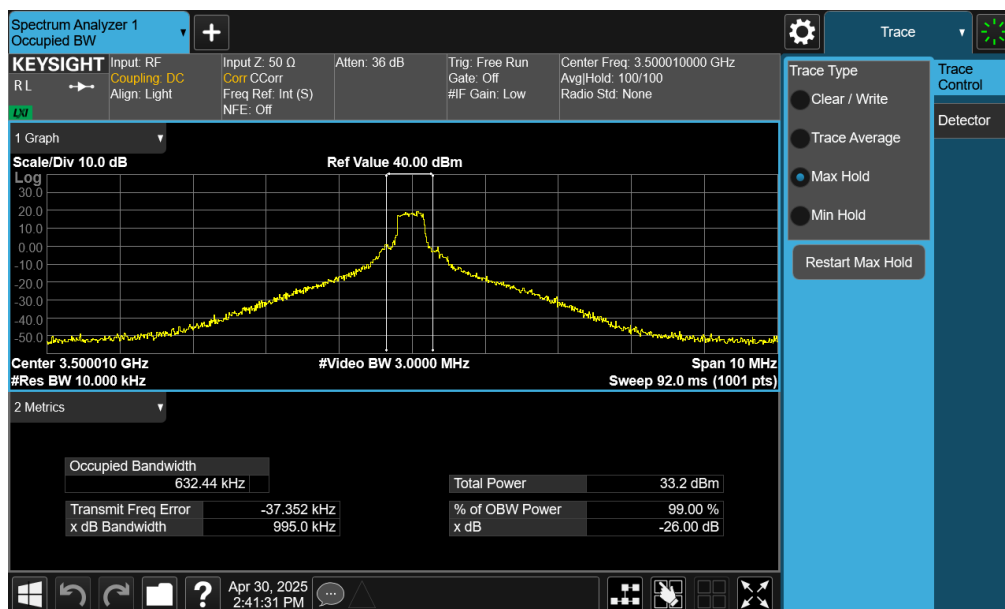
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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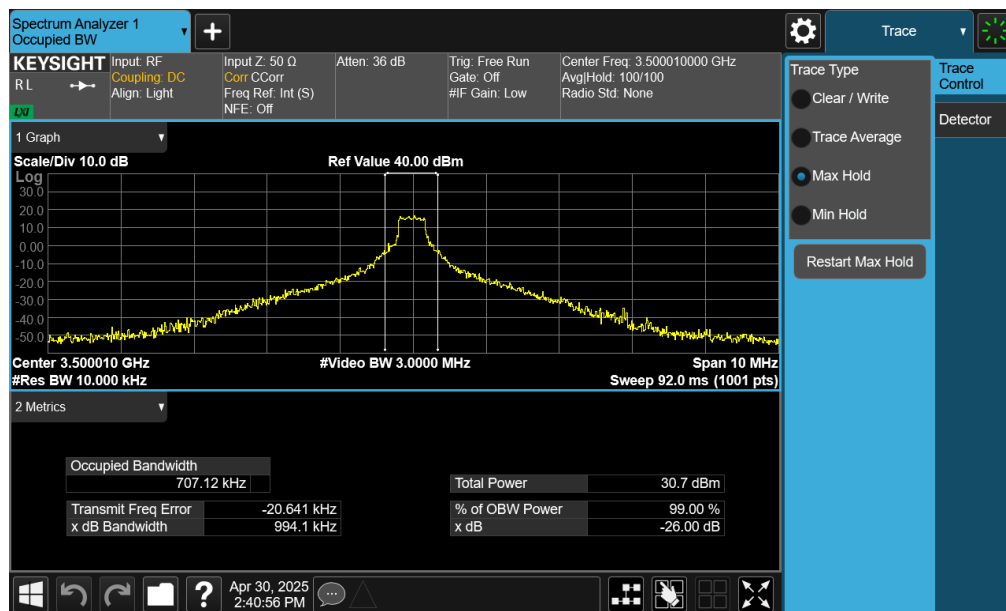
Plot 7-39. Occupied Bandwidth Plot (NR Band n77 - 100MHz 16-QAM - Full RB - Ant2 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77 – Ant3 – DoD Band – Main



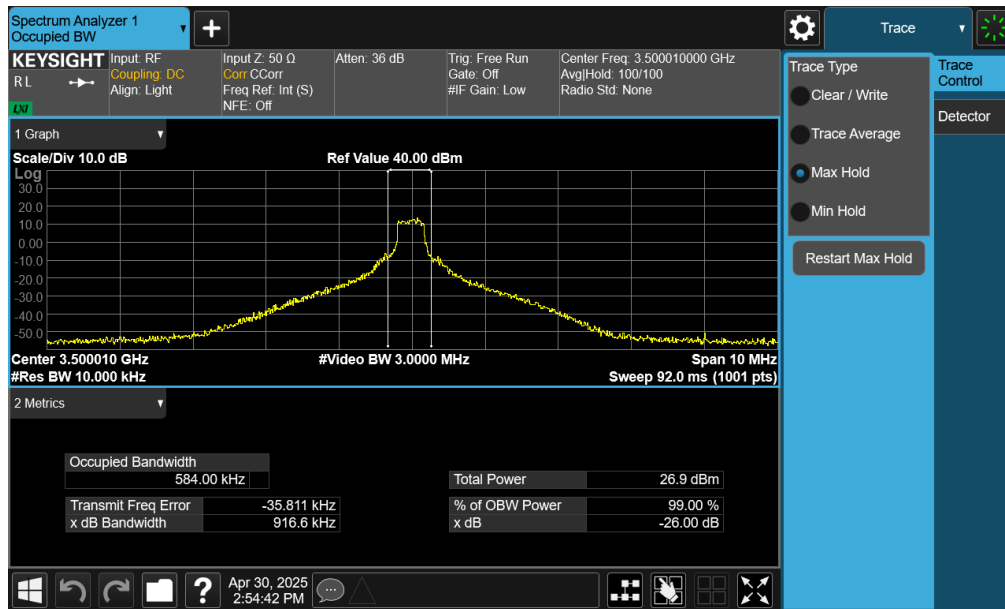
FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502270019-05.A3L	Test Dates: 2/24/2025 - 4/30/2025	EUT Type: Portable Handset	Page 43 of 171



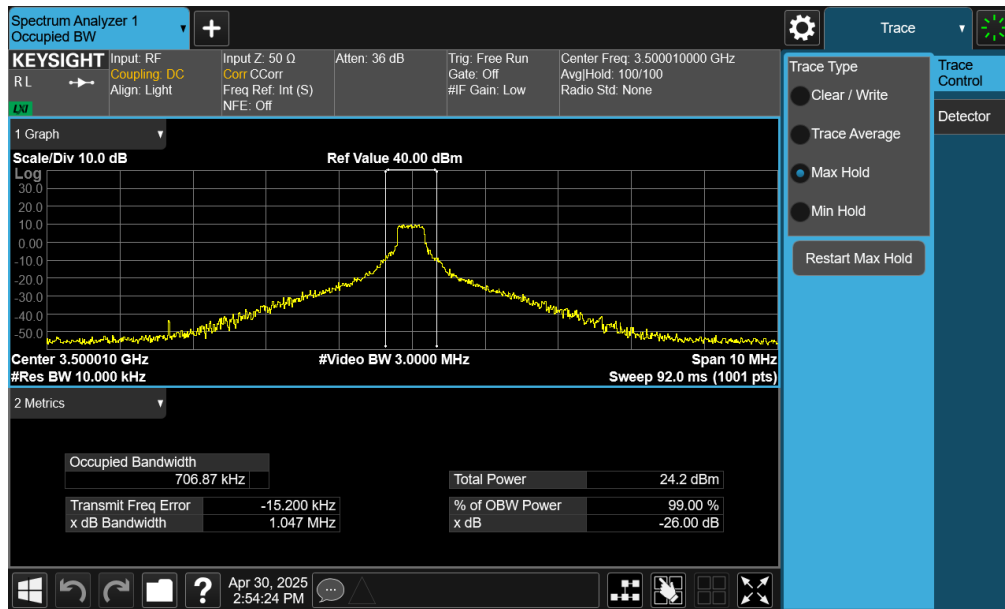
Plot 7-42. Occupied Bandwidth Plot (NR Band n77 - 100MHz 16-QAM - Full RB - Ant3 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77 – Ant4 – DoD Band – Main

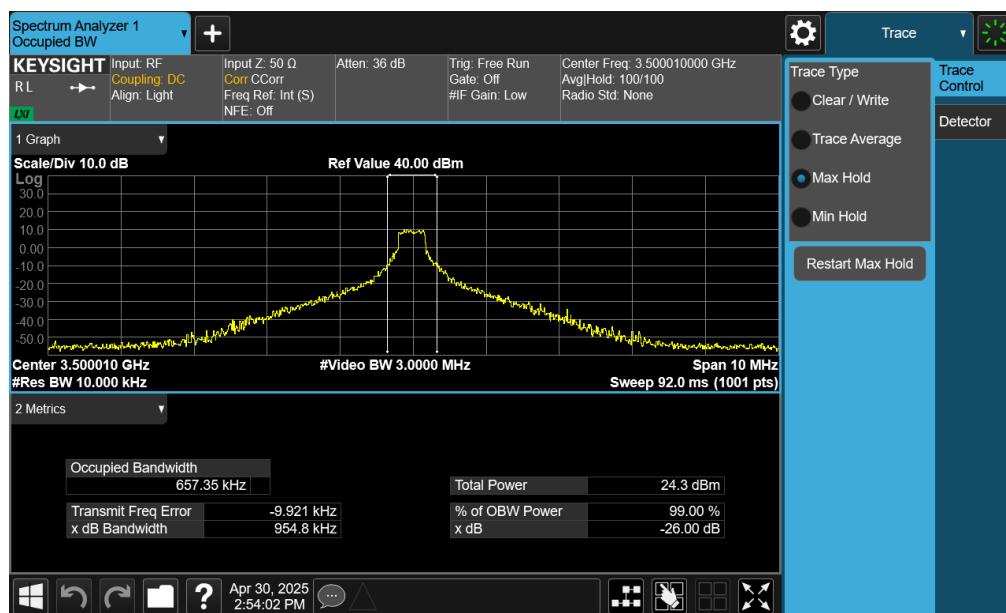


Plot 7-43. Occupied Bandwidth Plot (NR Band n77 - 100MHz $\pi/2$ BPSK - Full RB - Ant4 - DoD Band - Main)



Plot 7-44. Occupied Bandwidth Plot (NR Band n77 - 100MHz QPSK - Full RB - Ant4 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-45. Occupied Bandwidth Plot (NR Band n77 - 100MHz 16-QAM - Full RB - Ant4 - DoD Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 C-Band	100MHz	$\pi/2$ BPSK	97.005
		QPSK	98.052
		16QAM	97.794
	90MHz	$\pi/2$ BPSK	87.028
		QPSK	87.850
		16QAM	88.095
	80MHz	$\pi/2$ BPSK	77.542
		QPSK	77.524
		16QAM	77.905
	70MHz	$\pi/2$ BPSK	64.717
		QPSK	67.577
		16QAM	67.670
	60MHz	$\pi/2$ BPSK	58.118
		QPSK	58.155
		16QAM	58.216
	50MHz	$\pi/2$ BPSK	45.898
		QPSK	47.721
		16QAM	47.696
	40MHz	$\pi/2$ BPSK	35.984
		QPSK	38.028
		16QAM	38.040
	30MHz	$\pi/2$ BPSK	27.071
		QPSK	28.075
		16QAM	28.038
	25MHz	$\pi/2$ BPSK	22.780
		QPSK	23.287
		16QAM	23.248
	20MHz	$\pi/2$ BPSK	17.949
		QPSK	18.330
		16QAM	18.300
	15MHz	$\pi/2$ BPSK	12.976
		QPSK	13.648
		16QAM	13.635
	10MHz	$\pi/2$ BPSK	8.597
		QPSK	8.661
		16QAM	8.651

Table 7-14. Occupied Bandwidth Results - Ant1 – C-Band – Main

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 C-Band	100MHz	$\pi/2$ BPSK	0.561
		QPSK	0.669
		16QAM	0.605

Table 7-15. Occupied Bandwidth Results – Ant2 - C-Band – Main

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 C-Band	100MHz	$\pi/2$ BPSK	0.499
		QPSK	0.652
		16QAM	0.618

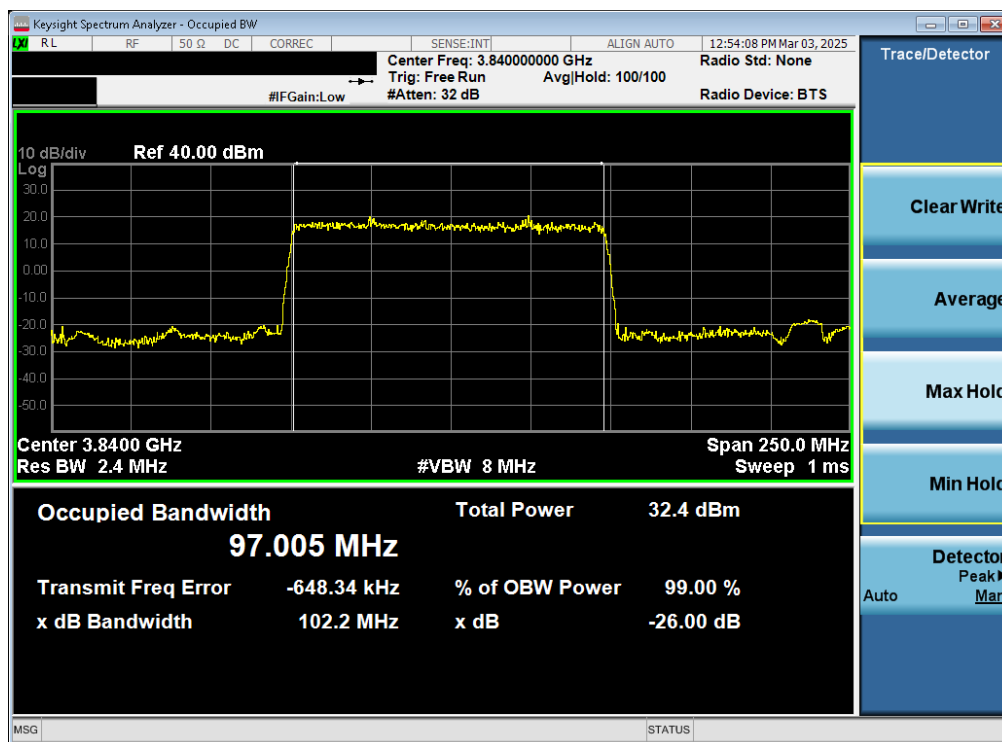
Table 7-16. Occupied Bandwidth Results – Ant3 - C-Band - Main

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n77PC2 C-Band	100MHz	$\pi/2$ BPSK	0.503
		QPSK	0.667
		16QAM	0.628

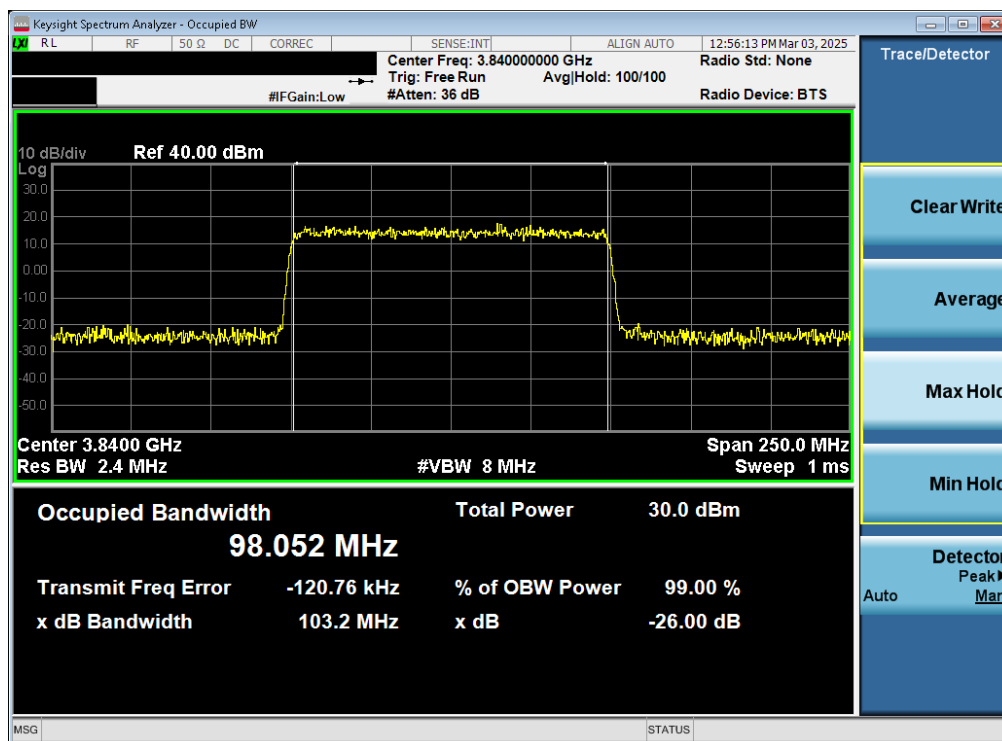
Table 7-17. Occupied Bandwidth Results – Ant4 - C-Band - Main

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77PC2 - Ant1 - C-Band - Main

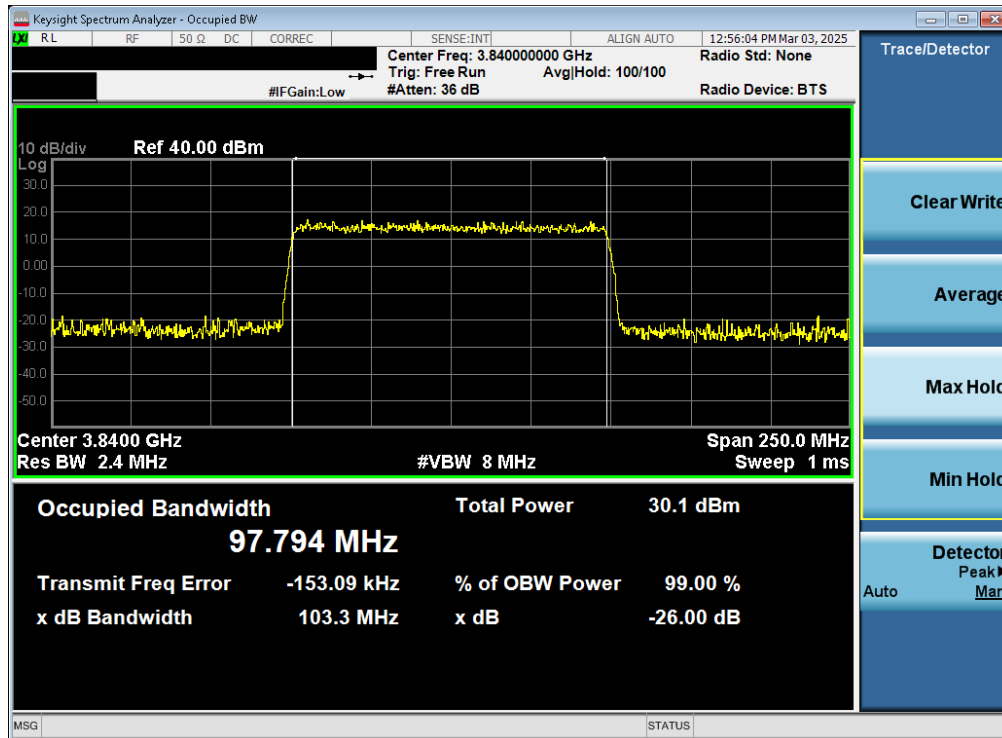


Plot 7-46. Occupied Bandwidth Plot (NR Band n77PC2 - 100MHz $\pi/2$ BPSK - Full RB - Ant1 - C-Band - Main)

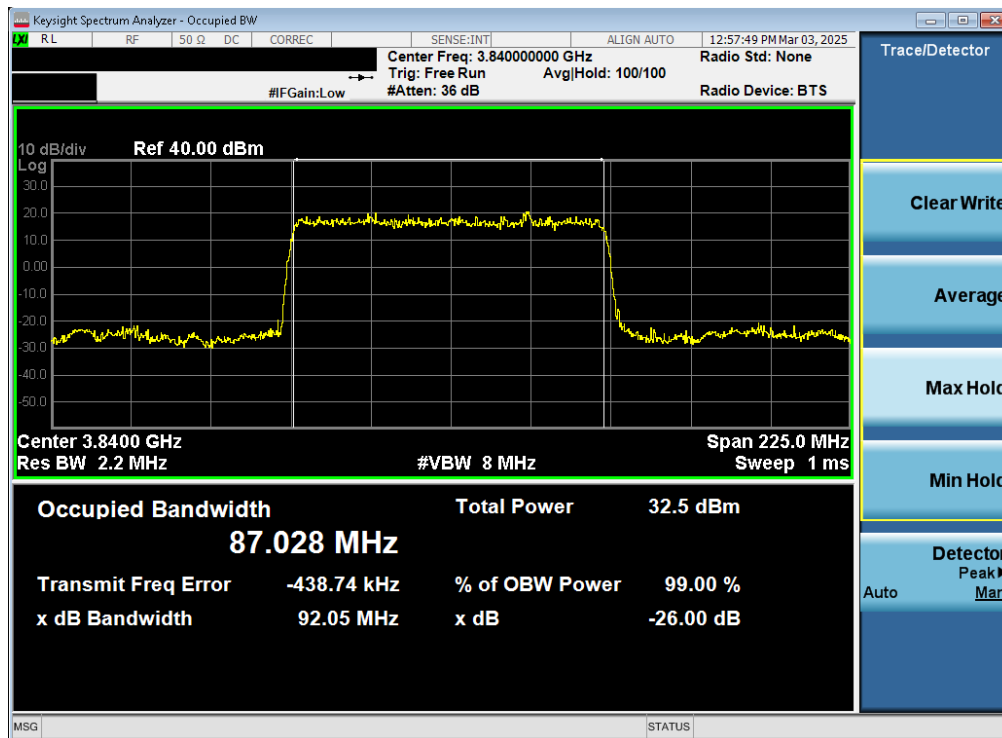


Plot 7-47. Occupied Bandwidth Plot (NR Band n77PC2 - 100MHz QPSK - Full RB - Ant1 - C-Band - Main)

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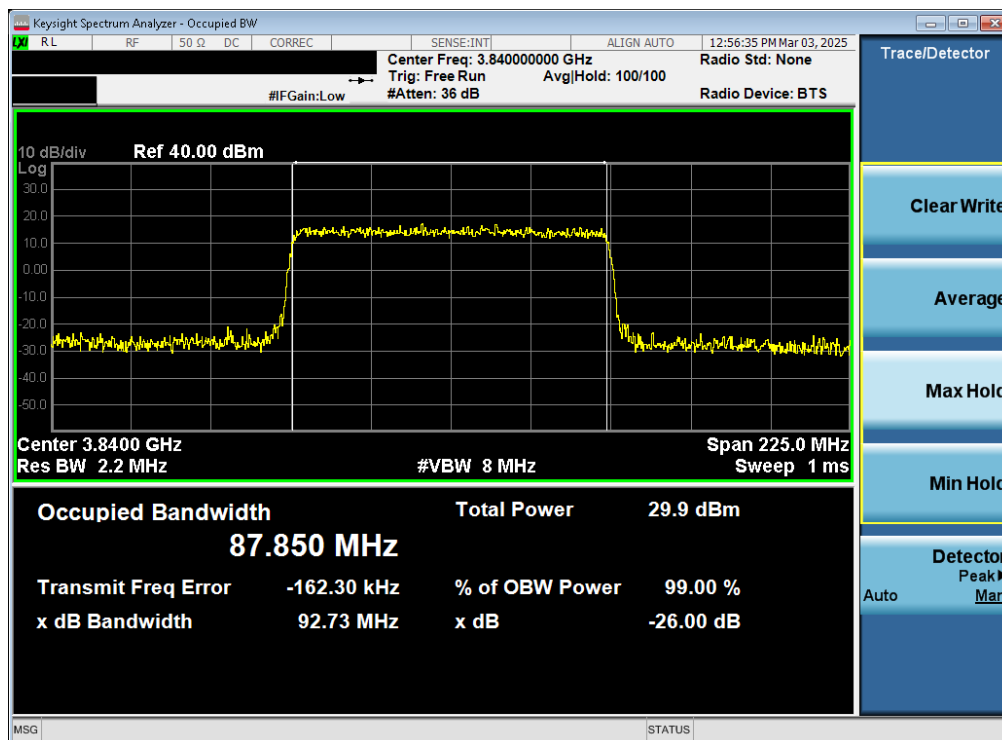


Plot 7-48. Occupied Bandwidth Plot (NR Band n77PC2 - 100MHz 16-QAM - Full RB - Ant1 - C-Band - Main)

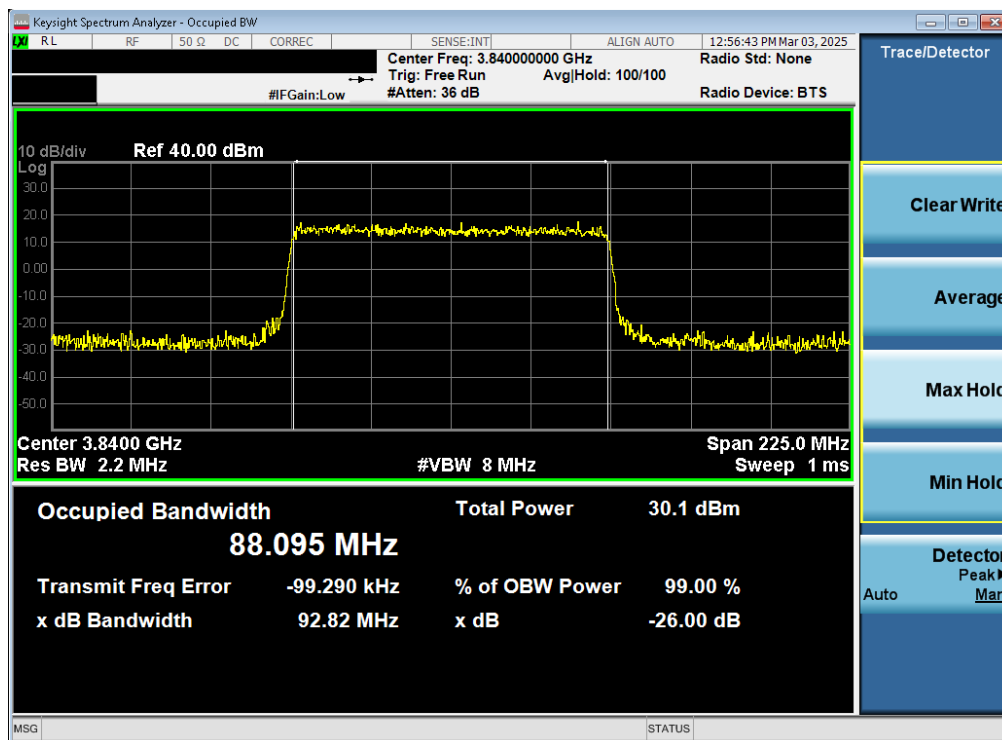


Plot 7-49. Occupied Bandwidth Plot (NR Band n77 - 90MHz $\pi/2$ BPSK - Full RB - Ant1 - C-Band - Main)

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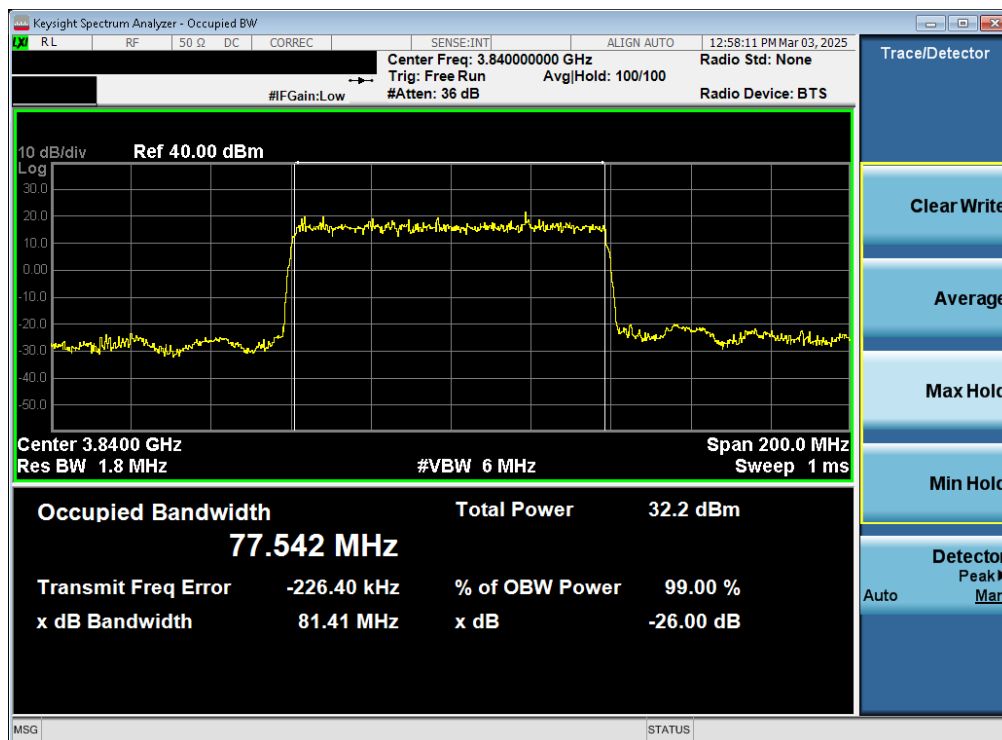


Plot 7-50. Occupied Bandwidth Plot (NR Band n77 - 90MHz QPSK - Full RB - Ant1 - C-Band - Main)

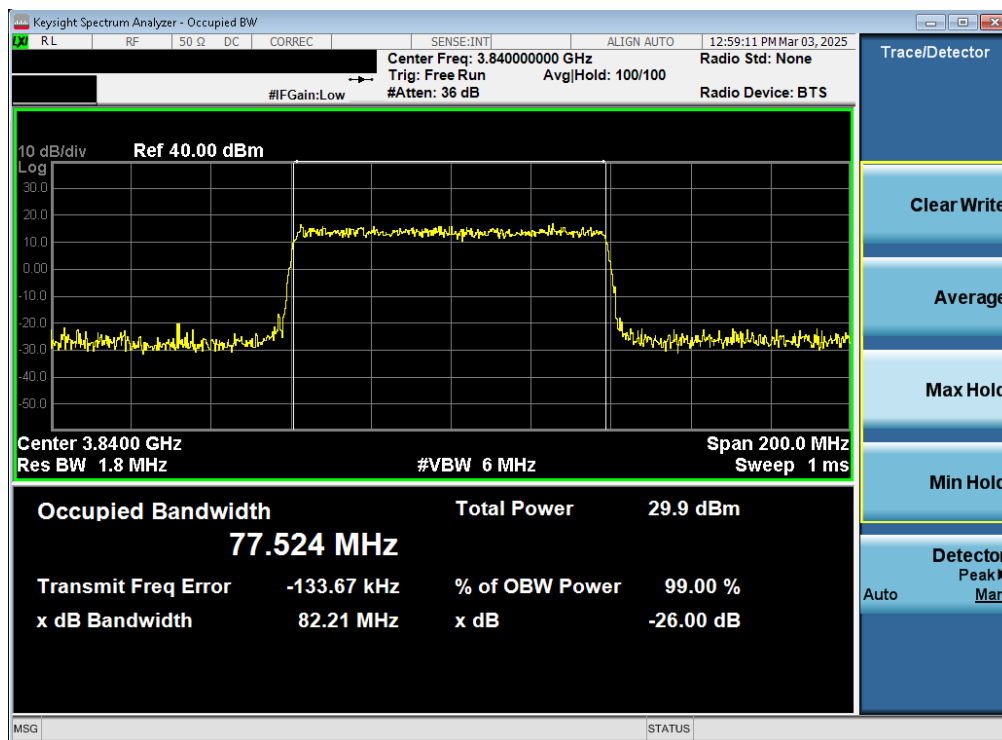


Plot 7-51. Occupied Bandwidth Plot (NR Band n77 - 90MHz 16-QAM - Full RB - Ant1 - C-Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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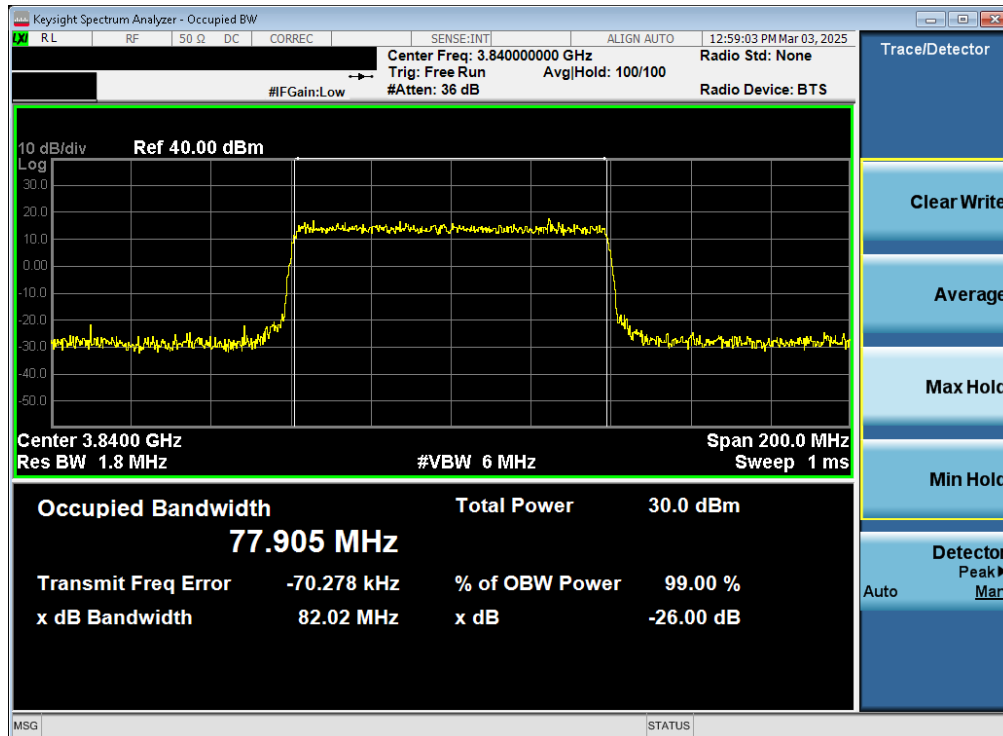


Plot 7-52. Occupied Bandwidth Plot (NR Band n77 - 80MHz $\pi/2$ BPSK - Full RB - Ant1 - C-Band - Main)

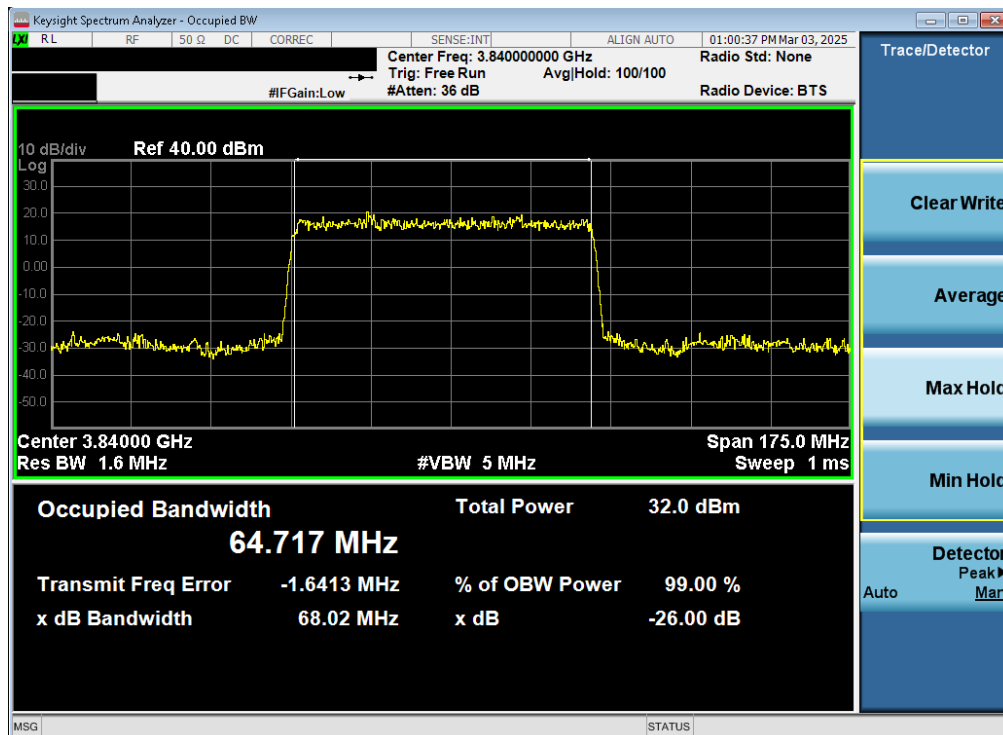


Plot 7-53. Occupied Bandwidth Plot (NR Band n77 - 80MHz QPSK - Full RB - Ant1 - C-Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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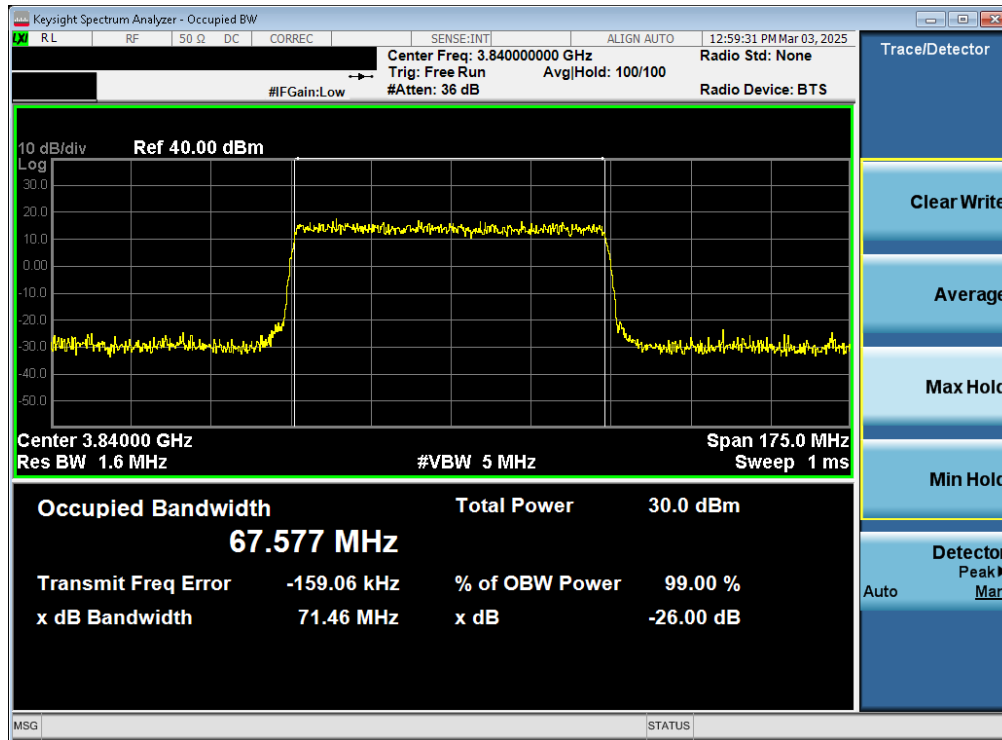


Plot 7-54. Occupied Bandwidth Plot (NR Band n77 - 80MHz 16-QAM - Full RB - Ant1 - C-Band - Main)

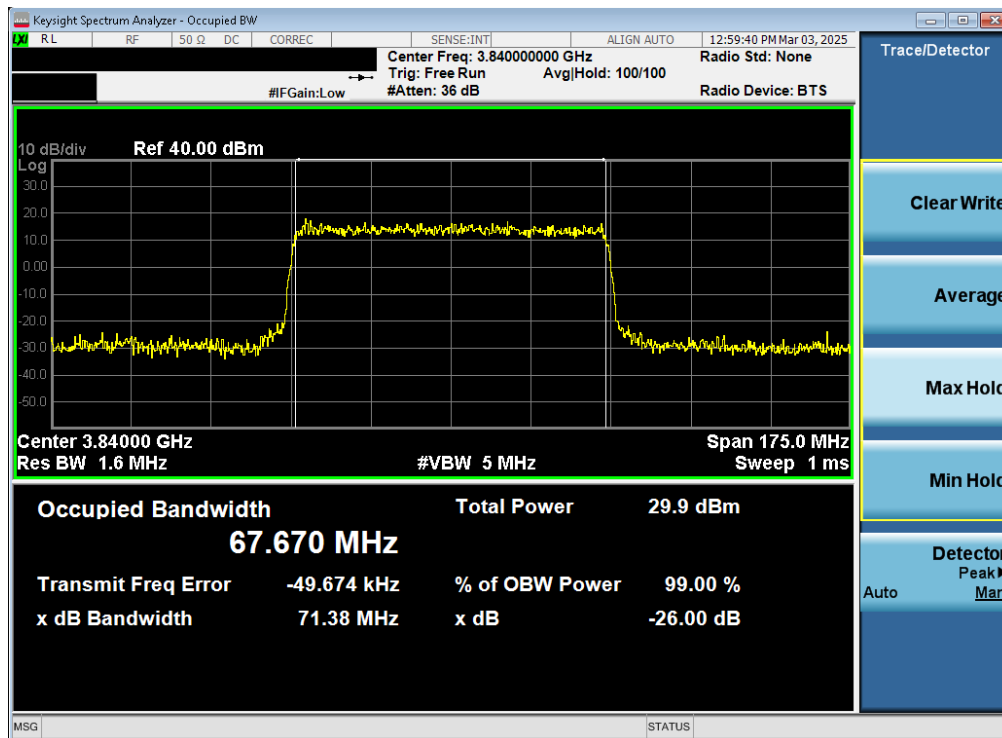


Plot 7-55. Occupied Bandwidth Plot (NR Band n77 - 70MHz $\pi/2$ BPSK - Full RB - Ant1 - C-Band - Main)

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Plot 7-56. Occupied Bandwidth Plot (NR Band n77 - 70MHz QPSK - Full RB - Ant1 - C-Band - Main)



Plot 7-57. Occupied Bandwidth Plot (NR Band n77 - 70MHz 16-QAM - Full RB - Ant1 - C-Band - Main)

FCC ID: A3LSMF966B	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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