

Part 96 MEASUREMENT REPORT

Applicant Name:

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

Date of Testing:

11/3/2025 – 12/30/2025

Test Report Issue Date:

1/26/2026

Test Site/Location:

Element Lab., Yongin-Si, Gyeonggi-do, South Korea

Test Report Serial No.:

1M2510280090-11-R2.A3L

FCC ID:

A3LSMA576U

APPLICANT:

Samsung Electronics Co., Ltd.

Application Type:

Certification

Model:

SM-A576U1

EUT Type:

Portable Handset

FCC Classification:

Citizens Band End User Devices (CBE)

FCC Rule Part(s):

96

Test Procedure(s):

ANSI C63.26-2015, KDB 940660 D01 v03r01

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.

This revised Test Report (S/N: 1M2510280090-11-R2.A3L) supersedes and replaces the previously issued test report (S/N: 1M2510280090-11.A3L) 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.

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.

Prepared by

Reviewed by

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Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 1 of 82

TEST REPORT REVISION HISTORY

Rev. No.	Description	Issue Date	Revised By
-	Initial Release	12/31/2025	WKR0002421
1	Addressed comments made by TCB reviewer	1/6/2026	WKR0002421
2	Addressed additional comments made by TCB reviewer	1/26/2026	WKR0000005883

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Antenna-1						
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	
LTE Band 48 ULCA	40 MHz	QPSK	3570.0 - 3680.0	0.148	21.72	37M8G7D
		16QAM	3570.0 - 3680.0	0.147	21.68	37M8W7D
	35 MHz	QPSK	3567.5 - 3682.5	0.148	21.72	32M8G7D
		16QAM	3567.5 - 3682.5	0.147	21.68	32M8W7D
	30 MHz	QPSK	3565.0 - 3685.0	0.157	21.95	27M9G7D
		16QAM	3565.0 - 3685.0	0.142	21.52	28M0W7D
	25 MHz	QPSK	3562.5 - 3687.5	0.156	21.94	23M0G7D
		16QAM	3562.5 - 3687.5	0.138	21.39	23M1W7D
	20 MHz	QPSK	3560.0 - 3690.0	0.152	21.82	18M0G7D
		16QAM	3560.0 - 3690.0	0.123	20.91	18M0W7D
LTE Band 48	15 MHz	QPSK	3557.5 - 3692.5	0.145	21.61	13M5G7D
		16QAM	3557.5 - 3692.5	0.090	19.56	13M5W7D
	10 MHz	QPSK	3555.0 - 3695.0	0.156	21.94	9M03G7D
		16QAM	3555.0 - 3695.0	0.111	20.44	9M01W7D
	5 MHz	QPSK	3552.5 - 3697.5	0.149	21.75	4M52G7D
		16QAM	3552.5 - 3697.5	0.102	20.07	4M51W7D
NR Band n48	40 MHz	$\pi/2$ BPSK	3570.0 - 3680.0	0.125	20.99	36M0G7D
		QPSK	3570.0 - 3680.0	0.124	20.93	38M0G7D
		16QAM	3570.0 - 3680.0	0.119	20.75	38M1W7D
	30 MHz	$\pi/2$ BPSK	3565.0 - 3685.0	0.127	21.03	27M0G7D
		QPSK	3565.0 - 3685.0	0.123	20.90	28M0G7D
		16QAM	3565.0 - 3685.0	0.114	20.58	27M9W7D
	20 MHz	$\pi/2$ BPSK	3560.0 - 3690.0	0.128	21.08	18M1G7D
		QPSK	3560.0 - 3690.0	0.129	21.10	18M2G7D
		16QAM	3560.0 - 3690.0	0.121	20.82	18M3W7D
	15 MHz	$\pi/2$ BPSK	3557.5 - 3692.5	0.129	21.10	13M0G7D
		QPSK	3557.5 - 3692.5	0.122	20.86	13M5G7D
		16QAM	3557.5 - 3692.5	0.116	20.64	13M7W7D
	10 MHz	$\pi/2$ BPSK	3555.0 - 3695.0	0.105	20.22	8M72G7D
		QPSK	3555.0 - 3695.0	0.099	19.97	8M76G7D
		16QAM	3555.0 - 3695.0	0.104	20.16	8M71W7D

Note: EIRP levels shown in the table above are measured over the full channel bandwidth. These values will appear on the Grant of Authorization.

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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.

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 Materials Technology Suwon, Ltd. located in Yongin-si, Gyeonggi-do, 16954, South Korea.

- Element Materials Technology Suwon, Ltd. is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation(A2LA) with Certificate number 2041.04 for Specific Absorption Rate (SAR), and Electromagnetic Compatibility (EMC) & Telecommunications testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Materials Technology Suwon, Ltd. facility is accredited, designated, and recognized in accordance with the provision of Radio Wave Act and International Standard ISO/IEC 17025:2017 under the National Radio Research Agency.
 - Designation Number / CABID: KR0169
 - Test Firm Registration Number of FCC: 417945
 - Test Firm Registration Number of ISED: 26168

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2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung Portable Handset FCC ID: A3LSMA576U**. The test data contained in this report pertains only to the emissions due to the EUT's LTE Band 48 operation in the CBR5 band. Per FCC Part 96, this device is evaluated as a Citizens Band End User Devices (CBE).

Test Device Serial No.: 3123M, 3119M, 3070M, 0551M, 2298M, 0111M

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 (5GHz and 6GHz), Bluetooth (1x, EDR, LE), NFC, SCS

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.

2.4 Duty Cycle Information

For 5G NR operations, the EUT was set to transmit either via a Factory Test Mode (FTM) software provided by the manufacturer or in an online mode. The EUT duty cycle was set to 100% in all cases during FTM operation. During online operation the EUT duty cycle was set to an operational max using a callbox, where the max duty cycle was determined to be 20.0%. Gated and triggered measurement settings were used in this case. SRS operations were conducted using FTM while all other cases were conducted in an online mode.

For LTE TDD operation, a call box was used to force maximum transmission for each band. For LTE TDD bands, the maximum duty cycle is 63.3% for PC3 and 43.3% for PC2.

This device can transmit in the 5G NR Band n48 band over four separate antennas labelled SRS-1, SRS-2, SRS-3, and SRS-4. SRS operation can occur on the main path. With SRS operations, any of these four antennas can transmit an SRS signal to check the channel quality for transmission in the n48 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 n48 band. Transmission on SRS-2, SRS-3 and SRS-4 antennas are typically limited to very small pulses; testing on these modes are reported as 1 RB to approximate a worst-case real-world scenario.

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Antenna SRS-Label	Alternate Label
NR Band n48 – Default – SRS-1	Ant F
NR Band n48 – Default – SRS-2	Ant C
NR Band n48 – Default – SRS-3	Ant I
NR Band n48 – Default – SRS-4	Ant D

Table 2-1. Antenna Labelling Scheme Correlation

2.5 Software and Firmware

Testing was performed on device(s) using software/firmware version A57U1UEU0AYK8 installed on the EUT.

2.6 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 Measurement 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	1.95
Radiated Disturbance (<1GHz)	4.10
Radiated Disturbance (>1GHz)	4.82
Radiated Disturbance (>18GHz)	4.96

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
Agilent	N9030A	PXA Signal Analyzer	2025-05-23	Annual	2026-05-22	MY49432391
Anritsu	S820E	Cable and Antenna Analyzer	2025-06-13	Annual	2026-06-12	1839097
Rohde & Schwarz	NRP-Z81	POWER SENSOR	2025-05-23	Annual	2026-05-22	101499
Anritsu	MT8000A	Radio Communicatino Test Station	2025-10-17	Annual	2026-10-16	6272337405
Com-Power	AL-130	9kHz - 30MHz Loop Antenna	2024-10-10	Biennial	2026-10-09	10160045
Espec	SH-242	Environmental Chamber	2025-09-17	Annual	2026-09-16	93011064
Fairview Microwave	FM2CP1122-10	2.92mm Directional Coupler	2025-07-17	Annual	2026-07-16	1946
Keysight Technologies	N9030B	PXA Signal Analyzer	2025-07-07	Annual	2026-07-06	MY57143278
Mini-Circuits	BW-N10W5+	Attenuator	2025-07-03	Annual	2026-07-02	TEMPNO.01-151
Mini-Circuits	BW-N10W5+	Attenuator	2025-07-17	Annual	2026-07-16	TEMPNO.01-150
NARDA	180-442A-KF	Horn Antenna (small)	2025-01-13	Annual	2026-01-12	180-442A-KF
Rohde & Schwarz	SMF100A	Signal Generator	2025-07-03	Annual	2026-07-02	104154
Rohde & Schwarz	CMW500	Wideband Radio Communicatino Tester	2025-01-06	Annual	2026-01-05	171075
Rohde & Schwarz	FSW	Signal and Spectrum Analyzer	2025-09-15	Annual	2026-09-14	101955
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	2025-01-06	Annual	2026-01-05	103295
Schwarzbeck	VULB9162	Broadband TRILOG Antenna	2025-06-05	Biennial	2027-06-04	9162-217
Sunol	DRH-118	Horn Antenna	2025-06-04	Annual	2026-06-03	A102416-1

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

Emission Designator

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: A3LSMA576U
 FCC Classification: Citizens Band End User Devices (CBE)
 Mode(s): LTE/NR/ULCA

Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference
CONDUCTED	Conducted 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 (EUD)	2.1051, 96.41(e)(ii)	-13 dBm/MHz at frequencies within 0-B MHz of channel edge (where B is the bandwidth of the assigned channel) -25 dBm/MHz at frequencies greater than B MHz above and below channel edge -40 dBm/MHz at frequencies below 3530 MHz and above 3720 MHz	PASS	Sections 7.4, 7.5
	Frequency Stability	2.1055	Fundamental emissions stay within authorized frequency block	PASS	Section 7.8
	End User Device Additional Requirements (CBSD Protocol)	96.47	End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation. An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.	PASS	Section 7.9
	Uplink Carrier Aggregation	96.41(e)	> 43 + 10log(P[Watts]) at Band Edge and for all out-of-band emissions	PASS	Section 7.5
RADIATED	Equivalent Isotropic Radiated Power (EIRP) (EUD)	96.41(b)	23 dBm/10MHz	PASS	Section 7.6
	Radiated Spurious Emissions	2.1053, 96.41(e)	-40 dBm/MHz	PASS	Section 7.7

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) For conducted spurious emissions, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is EMC Software Tool v2.3.0.

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7.2 Conducted Output Power Data

Test Overview

The EUT is set up to transmit at maximum power for LTE. All power levels 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.

A-MPR is implemented in this device per the A-MPR specification in 3GPP TS 36.101. The conducted powers are shown herein to cover the different A-MPR levels specified in the standard. Measurement equipment was set up with triggering/gating on the spectrum analyzer such that powers were measured only during the on-time of the signal.

Test Procedure Used

ANSI C63.26:2015 – Section 5.2

Test Settings – Online Mode

1. Span = 2 x OBW to 3 x OBW
2. RBW = 1% to 5% of the OBW
3. Number of measurement points in sweep $\geq 2 \times \text{span} / \text{RBW}$
4. Sweep = auto-couple (less than transmission burst duration)
5. Detector = RMS (power)
6. Trigger was set to enable power measurements only on full power bursts
7. Trace was allowed to stabilize
8. Spectrum analyzer's "Channel Power" function was used to compute the power by integrating the spectrum across the OBW of the signal

Test Settings – FTM Mode

1. When an average power meter is used to perform RF output power measurements, the fundamental condition that measurements be performed only over durations of active transmissions at maximum output power level applies. Thus, an average power meter can always be used to perform the measurement when the EUT can be configured to transmit continuously.
2. If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle < 98%), then the following options can be implemented to facilitate measurement of the average power with an average power meter:
 - a. A gated average power meter can be used to perform the measurement if the gating parameters can be adjusted such that the power is measured only during active transmission bursts at maximum output power levels.
 - b. A conventional average power meter with no signal gating capability can also be used if the measured burst duty cycle is constant (i.e., duty cycle variations are less than or equal to $\pm 2\%$) by performing the measurement over the on/off burst cycles and then correcting (increasing) the measured level by a factor equal to $[10 \log (1/\text{duty cycle})]$. See 5.2.4.3.4 for guidance with respect to measuring the transmitter duty cycle.

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Test Setup

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



Figure 7-1. Test Instrument & Measurement Setup – Online Mode

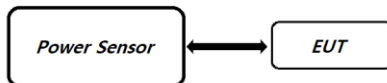


Figure 7-2. Test Instrument & Measurement Setup – FTM Mode

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. 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]
20 MHz	QPSK	55340	3560.0	1 / 49	23.88
		55990	3625.0	1 / 49	24.01
		56640	3690.0	1 / 49	23.74
	16-QAM	55340	3560.0	1 / 49	22.47
		55990	3625.0	1 / 49	22.66
		56640	3690.0	1 / 49	22.25
15 MHz	QPSK	55315	3557.5	1 / 19	23.58
		55990	3625.0	1 / 19	23.80
		56665	3692.5	1 / 36	23.52
	16-QAM	55315	3557.5	1 / 19	22.30
		55990	3625.0	1 / 19	21.14
		56665	3692.5	1 / 36	22.35
10 MHz	QPSK	55290	3555.0	1 / 22	23.83
		55990	3625.0	1 / 22	24.13
		56690	3695.0	1 / 1	24.06
	16-QAM	55290	3555.0	1 / 22	21.48
		55990	3625.0	1 / 22	22.19
		56690	3695.0	1 / 1	22.56
5 MHz	QPSK	55265	3552.5	1 / 5	23.85
		55990	3625.0	1 / 1	23.94
		56715	3697.5	1 / 5	23.67
	16-QAM	55265	3552.5	1 / 5	21.16
		55990	3625.0	1 / 1	21.82
		56715	3697.5	1 / 5	22.09

Table 7-2. Conducted Power Output Data (LTE Band 48 – Ant F)

Bandwidth	Modulation	PCC			SCC			Conducted Power [dBm]
		Bandwidth [MHz]	Frequency [MHz]	RB / Offset	Bandwidth [MHz]	Frequency [MHz]	RB / Offset	
40 MHz	QPSK	20	3560.0	1 / 99	20	3579.8	1 / 0	21.72
		20	3625.0	1 / 99	20	3644.8	1 / 0	21.79
		20	3690.0	1 / 0	20	3670.2	1 / 99	22.06
	16-QAM	20	3560.0	1 / 99	20	3579.8	1 / 0	20.82
		20	3625.0	1 / 99	20	3644.8	1 / 0	20.93
		20	3690.0	1 / 0	20	3670.2	1 / 99	20.90
35 MHz	QPSK	20	3560.0	1 / 99	15	3577.1	1 / 0	21.72
		20	3625.0	1 / 99	15	3642.1	1 / 0	21.79
		20	3690.0	1 / 0	15	3672.9	1 / 74	22.06
	16-QAM	20	3560.0	1 / 99	15	3577.1	1 / 0	20.82
		20	3625.0	1 / 99	15	3642.1	1 / 0	20.93
		20	3690.0	1 / 0	15	3672.9	1 / 74	20.90
30 MHz	QPSK	20	3560.0	1 / 99	10	3574.4	1 / 0	21.93
		20	3625.0	1 / 99	10	3639.4	1 / 0	22.02
		20	3690.0	1 / 0	10	3675.6	1 / 49	22.06
	16-QAM	20	3560.0	1 / 99	10	3574.4	1 / 0	20.73
		20	3625.0	1 / 99	10	3639.4	1 / 0	20.77
		20	3690.0	1 / 0	10	3675.6	1 / 49	20.64
25 MHz	QPSK	20	3560.0	1 / 99	5	3571.7	1 / 0	21.98
		20	3625.0	1 / 99	5	3636.7	1 / 0	22.01
		20	3690.0	1 / 0	5	3678.3	1 / 24	21.68
	16-QAM	20	3560.0	1 / 99	5	3571.7	1 / 0	20.69
		20	3625.0	1 / 99	5	3636.7	1 / 0	20.64
		20	3690.0	1 / 0	5	3678.3	1 / 24	20.57

Table 7-3. Conducted Power Output Data (ULCA LB48 – Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
40 MHz	π/2 BPSK	638000	3570.0	1 / 53	22.60
		641666	3625.0	1 / 1	22.34
		645332	3680.0	1 / 53	22.34
	QPSK	638000	3570.0	1 / 53	22.58
		641666	3625.0	1 / 1	22.33
		645332	3680.0	1 / 53	22.28
	16-QAM	638000	3570.0	1 / 53	21.13
		641666	3625.0	1 / 1	21.35
		645332	3680.0	1 / 53	21.98
30 MHz	π/2 BPSK	637666	3565.0	1 / 1	22.49
		641666	3625.0	1 / 1	22.38
		645666	3685.0	1 / 39	22.38
	QPSK	637666	3565.0	1 / 1	22.58
		641666	3625.0	1 / 1	22.23
		645666	3685.0	1 / 39	22.25
	16-QAM	637666	3565.0	1 / 1	21.68
		641666	3625.0	1 / 1	21.31
		645666	3685.0	1 / 39	21.35
20 MHz	π/2 BPSK	637334	3560.0	1 / 1	21.56
		641666	3625.0	1 / 25	22.35
		646000	3690.0	1 / 25	22.43
	QPSK	637334	3560.0	1 / 49	21.46
		641666	3625.0	1 / 25	22.58
		646000	3690.0	1 / 25	22.45
	16-QAM	637334	3560.0	1 / 49	20.35
		641666	3625.0	1 / 25	21.93
		646000	3690.0	1 / 25	21.89
15 MHz	π/2 BPSK	637166	3557.5	1 / 1	21.56
		641666	3625.0	1 / 19	22.34
		646166	3692.5	1 / 19	22.45
	QPSK	637166	3557.5	1 / 1	21.63
		641666	3625.0	1 / 19	22.13
		646166	3692.5	1 / 19	22.21
	16-QAM	637166	3557.5	1 / 1	20.73
		641666	3625.0	1 / 19	21.75
		646166	3692.5	1 / 19	21.79
10 MHz	π/2 BPSK	637000	3555.0	1 / 12	21.41
		641666	3625.0	1 / 12	22.03
		646332	3695.0	1 / 12	21.53
	QPSK	637000	3555.0	1 / 12	21.32
		641666	3625.0	1 / 12	21.46
		646332	3695.0	1 / 12	21.32
	16-QAM	637000	3555.0	1 / 12	21.26
		641666	3625.0	1 / 12	21.13
		646332	3695.0	1 / 12	21.12

Table 7-4. Conducted Power Output Data (NR Band n48 – Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
40 MHz	$\pi/2$ BPSK	638000	3570.0	1 / 1	17.65
		641666	3625.0	1 / 1	18.23
		645332	3680.0	1 / 104	19.48
	QPSK	638000	3570.0	1 / 1	17.67
		641666	3625.0	1 / 1	18.09
		645332	3680.0	1 / 104	19.38
	16-QAM	638000	3570.0	1 / 1	17.43
		641666	3625.0	1 / 1	17.57
		645332	3680.0	1 / 104	19.32

Table 7-5. Conducted Power Output Data (NR Band n48 – Ant C)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
40 MHz	$\pi/2$ BPSK	638000	3570.0	1 / 1	19.65
		641666	3625.0	1 / 1	18.86
		645332	3680.0	1 / 53	18.24
	QPSK	638000	3570.0	1 / 1	19.51
		641666	3625.0	1 / 1	18.92
		645332	3680.0	1 / 53	18.48
	16-QAM	638000	3570.0	1 / 1	19.54
		641666	3625.0	1 / 1	18.90
		645332	3680.0	1 / 53	18.65

Table 7-6. Conducted Power Output Data (NR Band n48 – Ant I)

Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
40 MHz	$\pi/2$ BPSK	638000	3570.0	1 / 104	19.01
		641666	3625.0	1 / 1	19.54
		645332	3680.0	1 / 1	19.76
	QPSK	638000	3570.0	1 / 104	19.05
		641666	3625.0	1 / 1	19.47
		645332	3680.0	1 / 1	19.66
	16-QAM	638000	3570.0	1 / 104	18.44
		641666	3625.0	1 / 1	19.21
		645332	3680.0	1 / 1	18.93

Table 7-7. Conducted Power Output Data (NR Band n48 – Ant D)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT			Approved by: Technical Manager
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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.

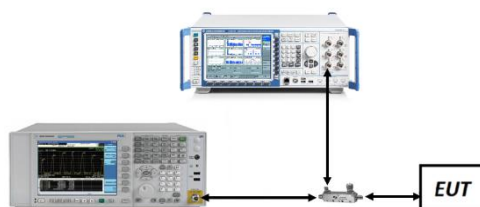


Figure 7-3. Test Instrument & Measurement Setup

Test Notes

None

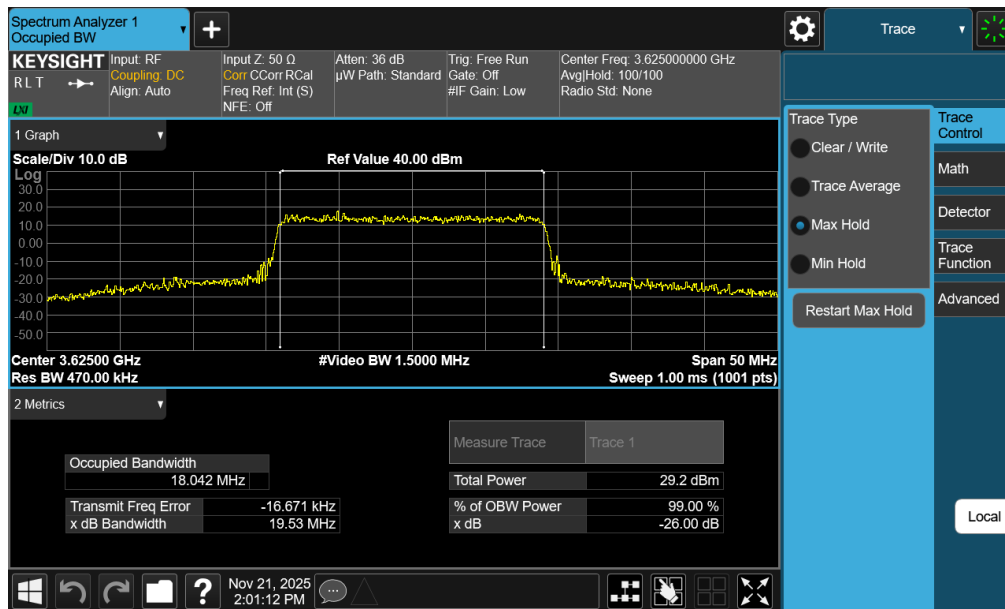
FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Modulation	OBW [MHz]
LTE-B48	20 MHz	QPSK	18.04
		16QAM	17.97
	15 MHz	QPSK	13.50
		16QAM	13.50
	10 MHz	QPSK	9.03
		16QAM	9.01
	5 MHz	QPSK	4.52
		16QAM	4.51
ULCA LTE-B48	20+20MHz	QPSK	37.84
		16QAM	37.76
	20+15MHz	QPSK	32.80
		16QAM	32.79
	20+10MHz	QPSK	27.92
		16QAM	27.96
	20+5MHz	QPSK	23.04
		16QAM	23.09
NR-n48	40MHz	$\pi/2$ BPSK	35.99
		QPSK	38.02
		16QAM	38.06
	30MHz	$\pi/2$ BPSK	26.97
		QPSK	28.01
		16QAM	27.93
	20MHz	$\pi/2$ BPSK	18.08
		QPSK	18.23
		16QAM	18.34
	15MHz	$\pi/2$ BPSK	13.00
		QPSK	13.54
		16QAM	13.71
	10 MHz	$\pi/2$ BPSK	8.72
		QPSK	8.76
		16QAM	8.71

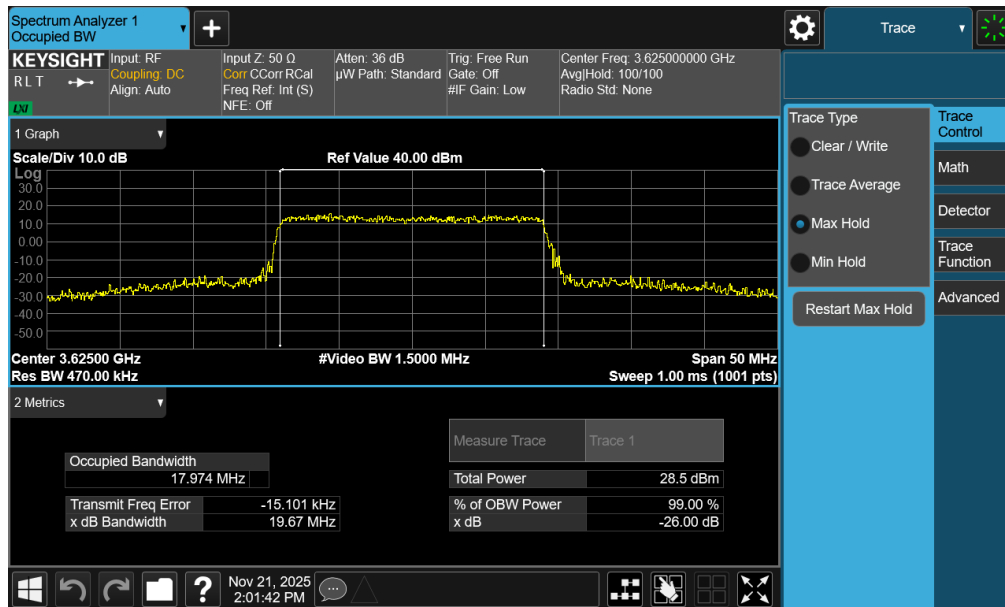
Table 7-8. Occupied Bandwidth Test Results – Ant F

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 48 – Ant F

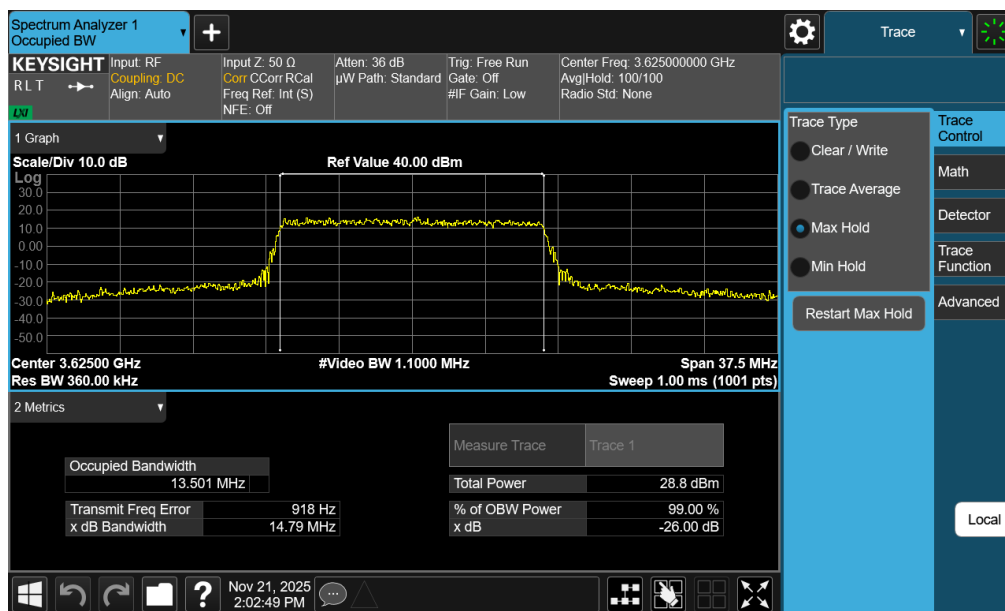


Plot 7-1. Occupied Bandwidth Plot (LTE Band 48 - 20MHz QPSK - Full RB Configuration - Ant F)

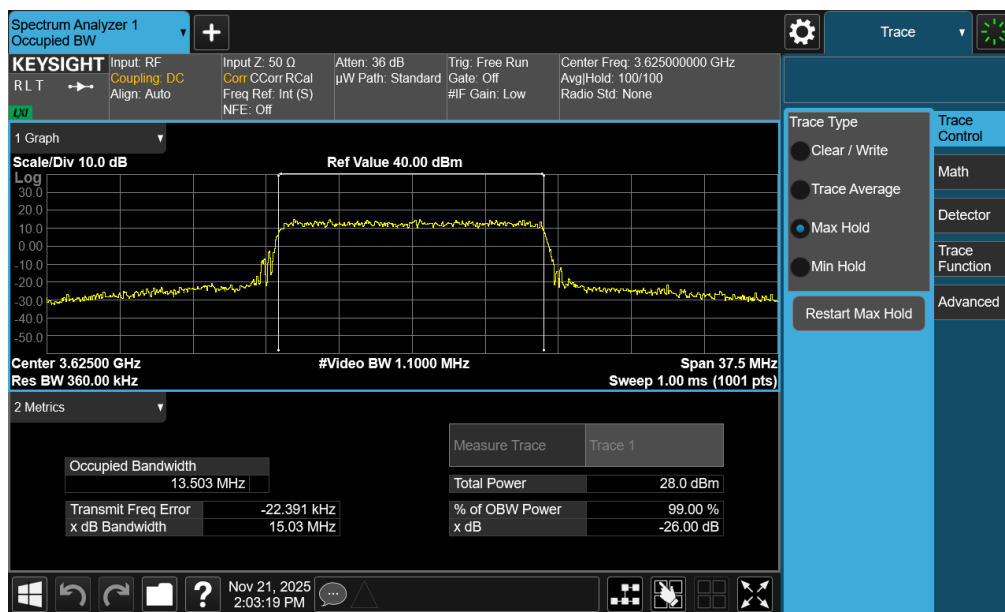


Plot 7-2. Occupied Bandwidth Plot (LTE Band 48 - 20MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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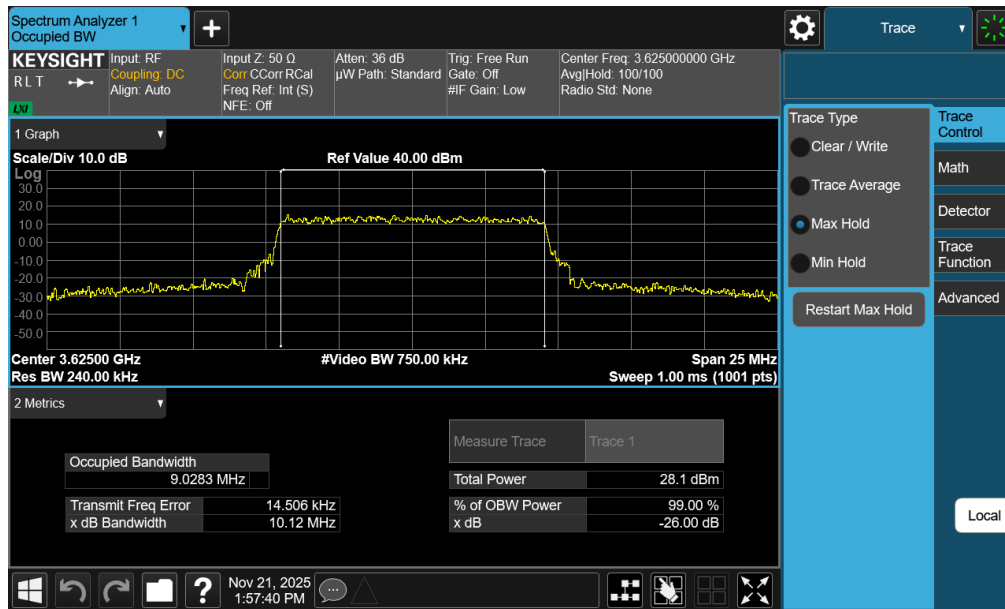


Plot 7-3. Occupied Bandwidth Plot (LTE Band 48 - 15MHz QPSK - Full RB Configuration - Ant F)

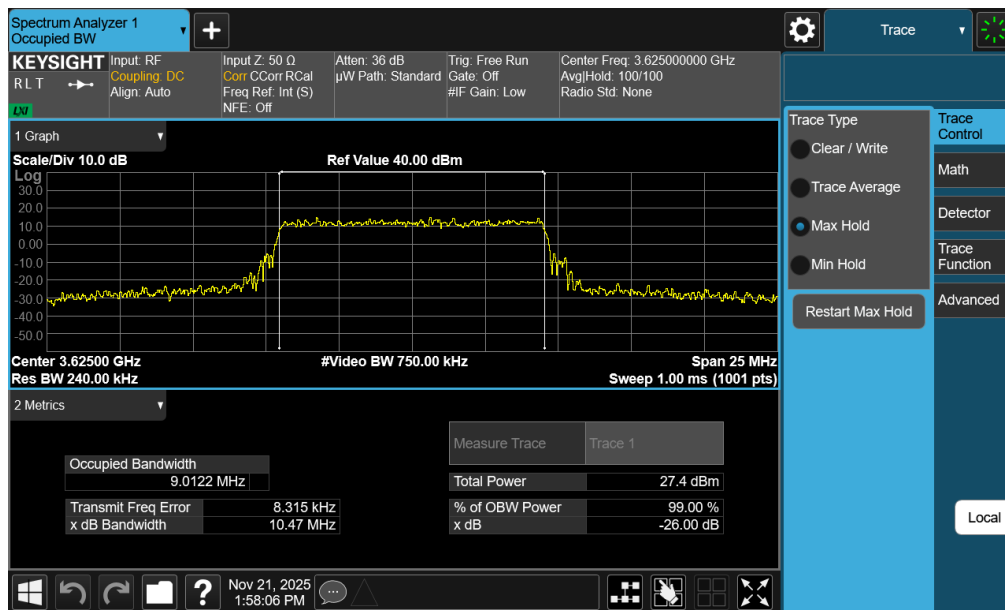


Plot 7-4. Occupied Bandwidth Plot (LTE Band 48 - 15MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 21 of 82

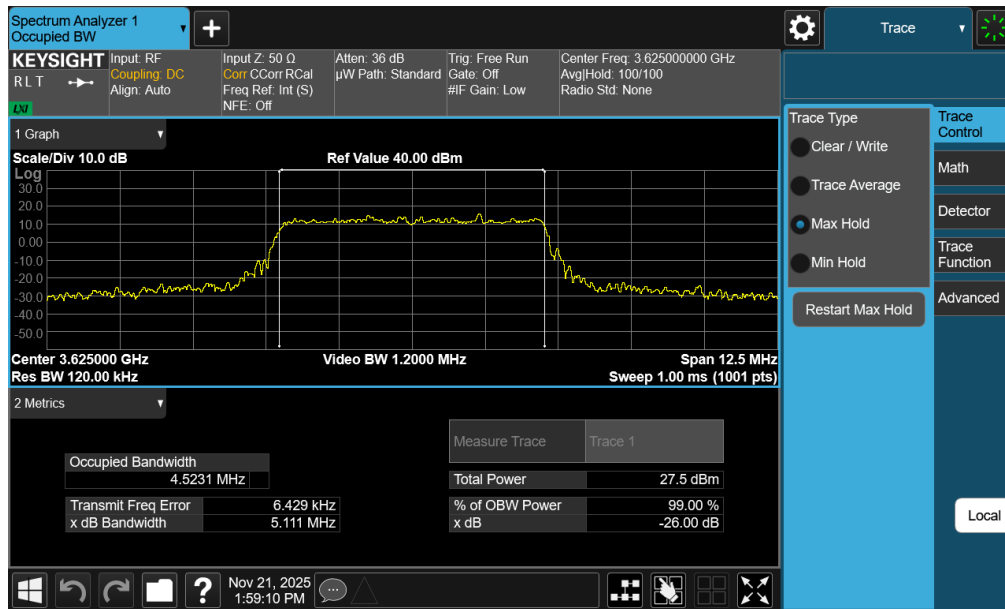


Plot 7-5. Occupied Bandwidth Plot (LTE Band 48 - 10MHz QPSK - Full RB Configuration - Ant F)

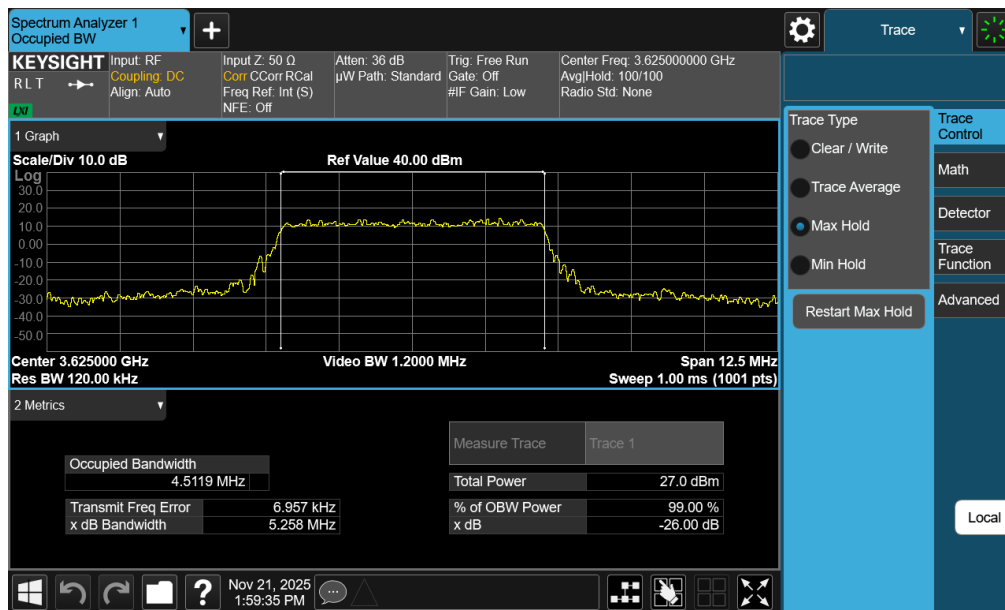


Plot 7-6. Occupied Bandwidth Plot (LTE Band 48 - 10MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2-A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 22 of 82



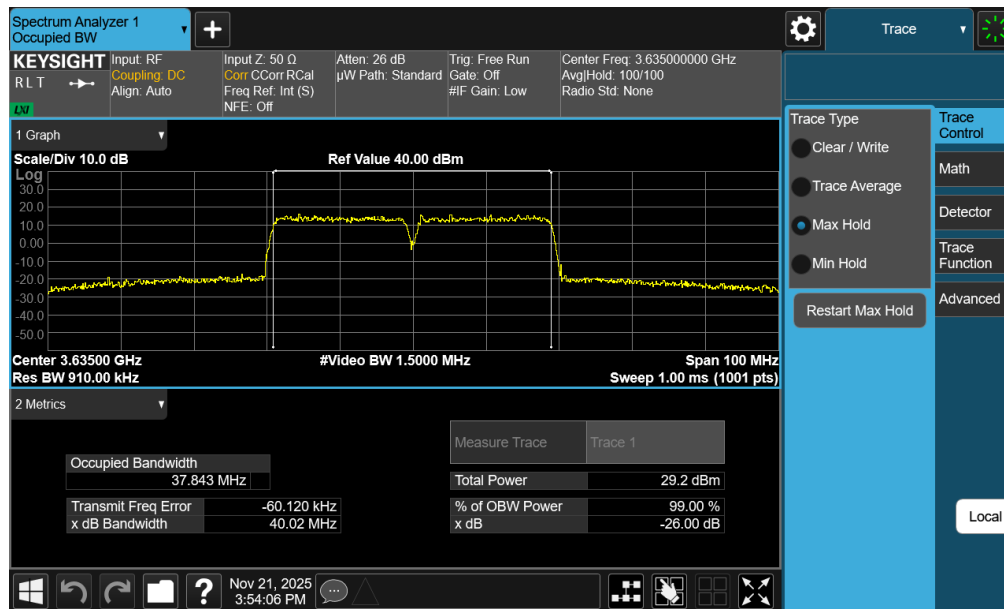
Plot 7-7. Occupied Bandwidth Plot (LTE Band 48 - 5MHz QPSK - Full RB Configuration - Ant F)



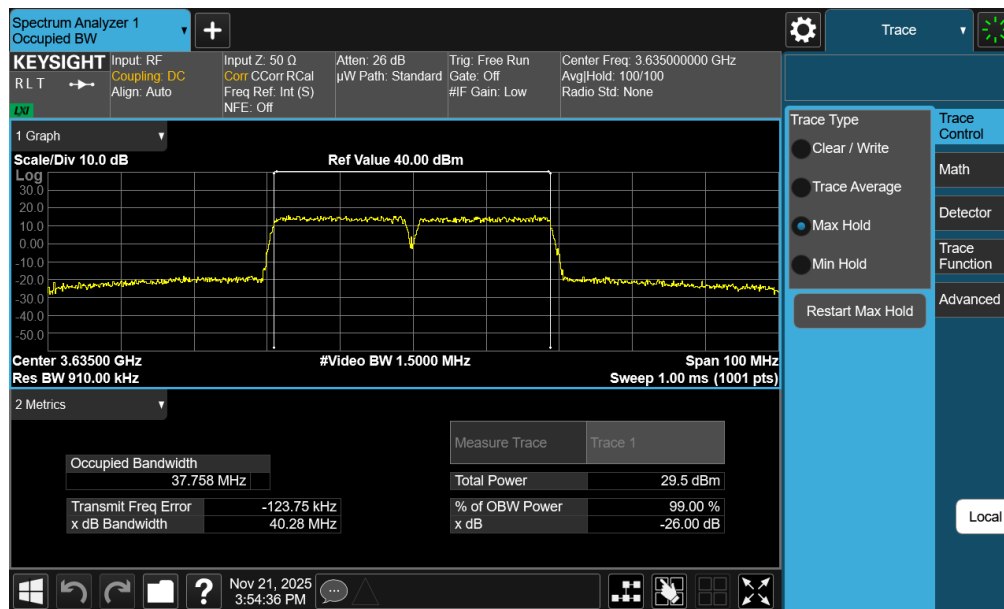
Plot 7-8. Occupied Bandwidth Plot (LTE Band 48 - 5MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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ULCA LTE Band 48 – Ant F

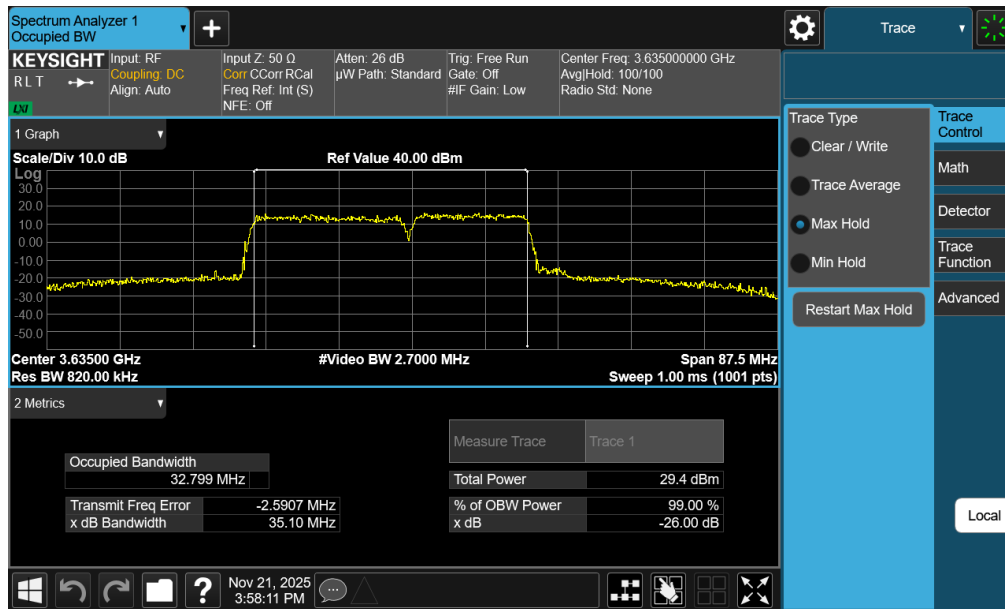


Plot 7-9. Occupied Bandwidth Plot (ULCA LB48 - 20+20MHz QPSK - Full RB Configuration - Ant F)

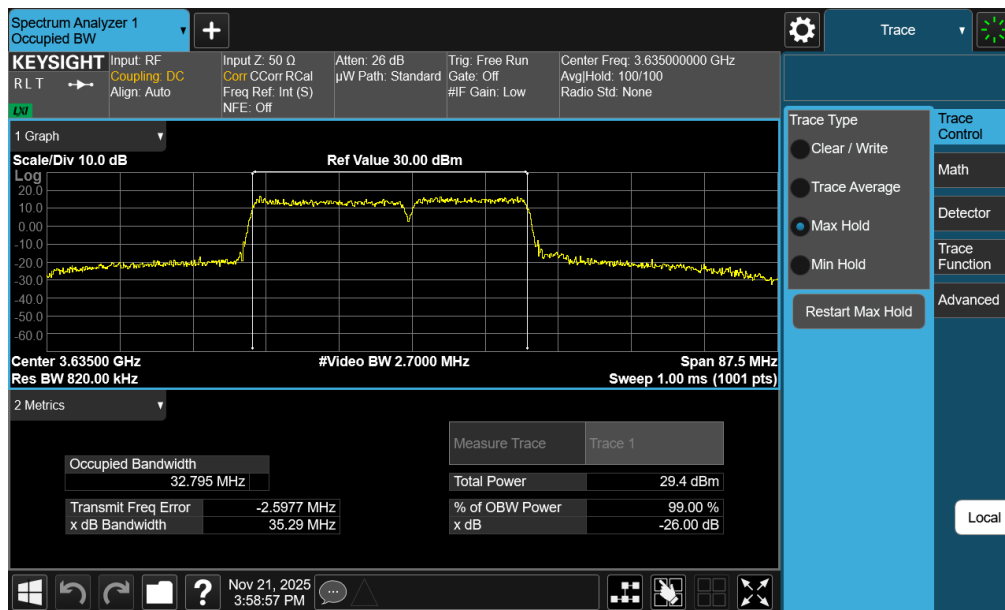


Plot 7-10. Occupied Bandwidth Plot (ULCA LB48 - 20+20MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-11. Occupied Bandwidth Plot (ULCA LB48 - 20+15MHz QPSK - Full RB Configuration - Ant F)

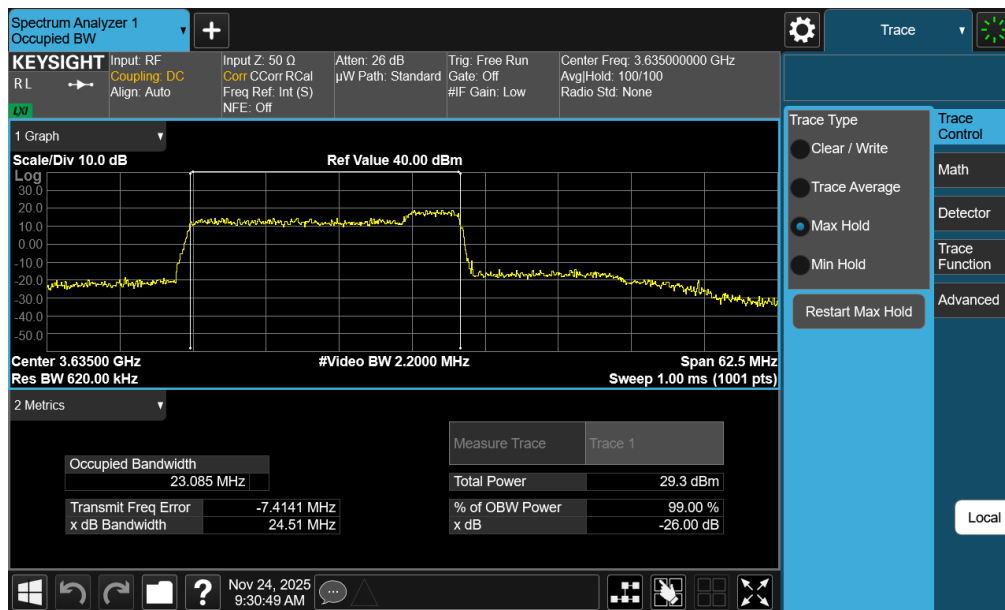


Plot 7-12. Occupied Bandwidth Plot (ULCA LB48 - 20+15MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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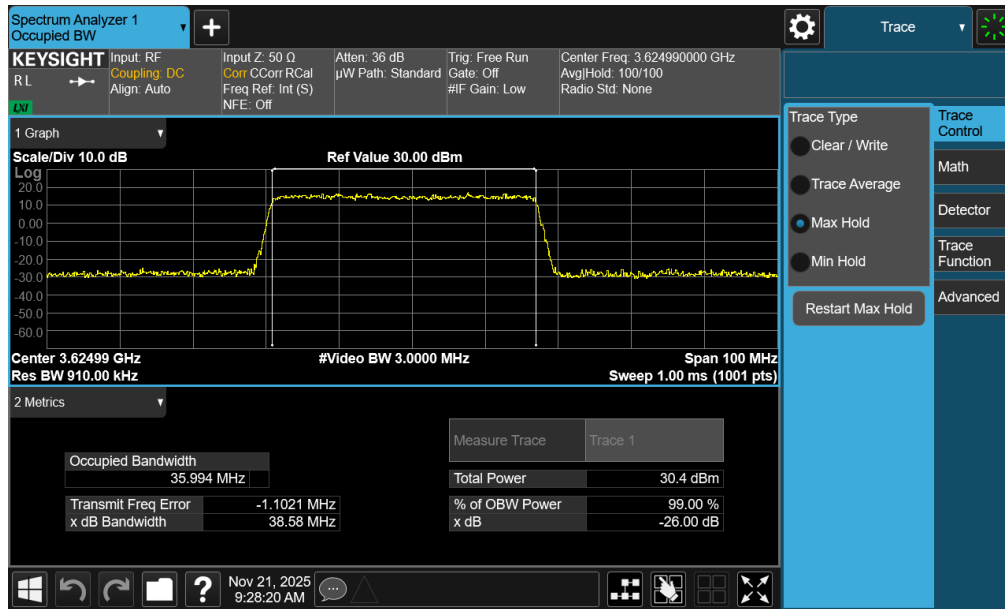
Plot 7-15. Occupied Bandwidth Plot (ULCA LB48 - 20+5MHz QPSK - Full RB Configuration - Ant F)



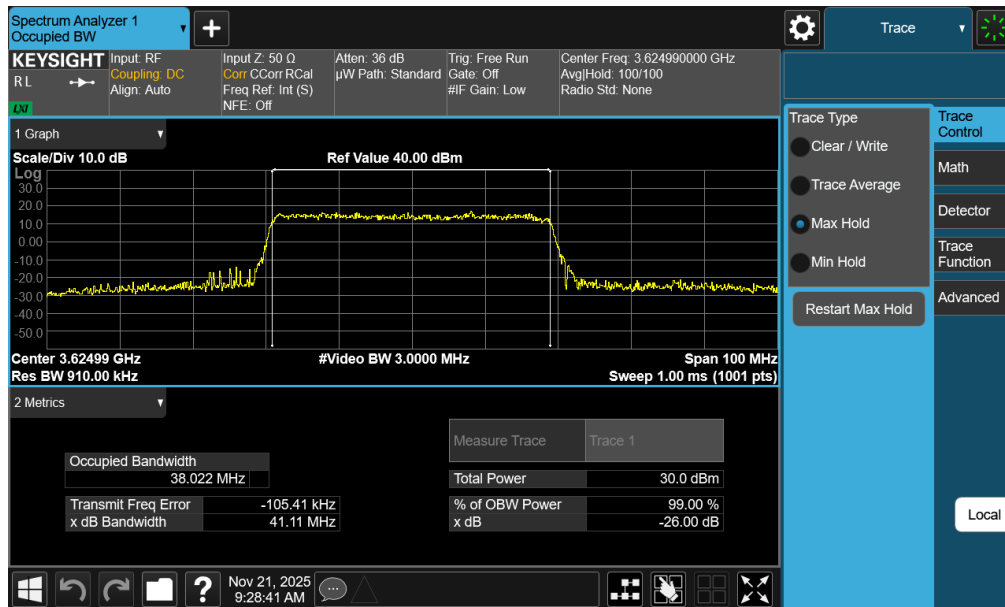
Plot 7-16. Occupied Bandwidth Plot (ULCA LB48 - 20+5MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n48 – Ant F

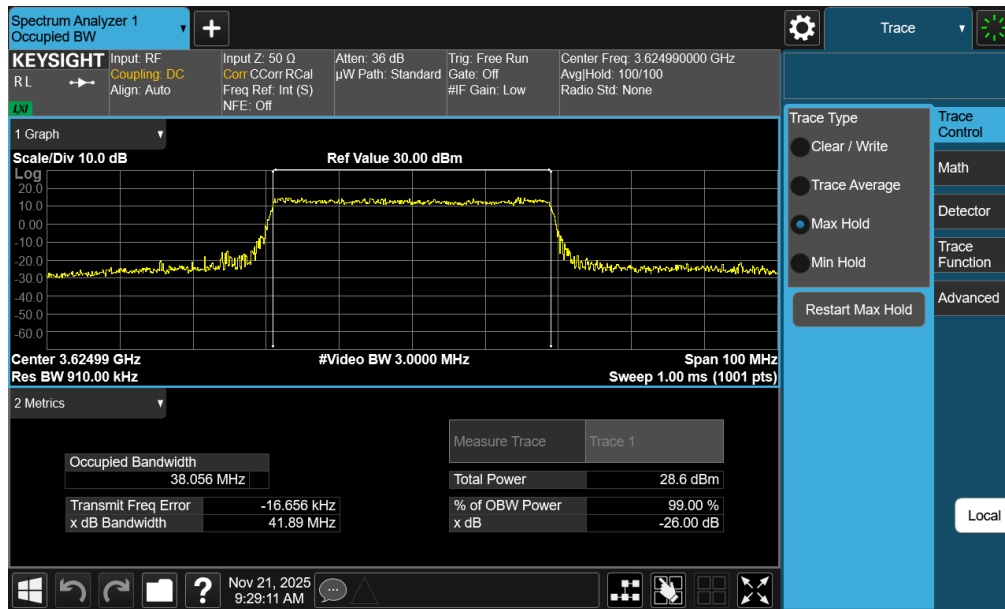


Plot 7-17. Occupied Bandwidth Plot (NR Band n48 - 40MHz $\pi/2$ BPSK - Full RB Configuration - Ant F)

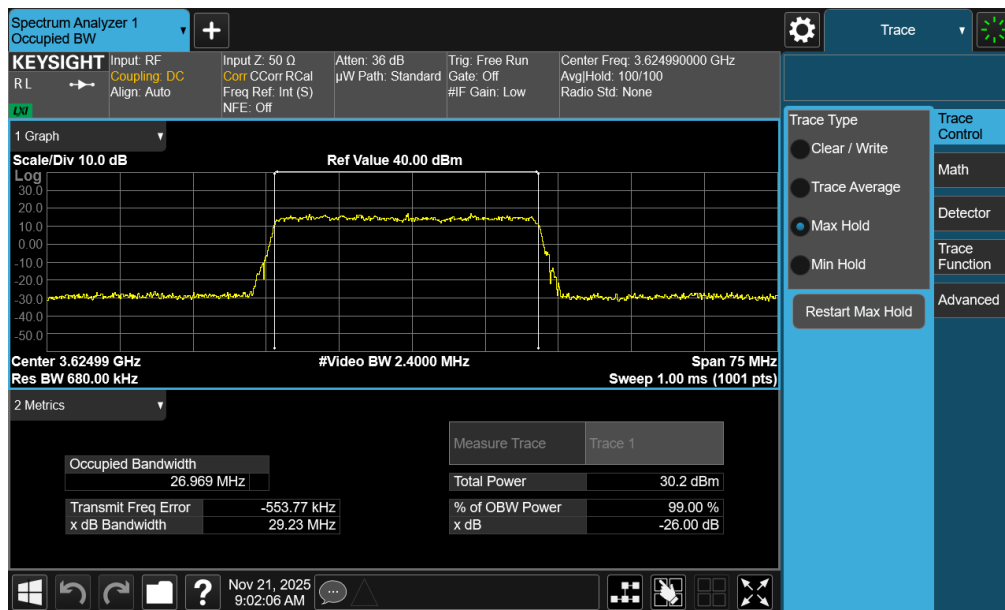


Plot 7-18. Occupied Bandwidth Plot (NR Band n48 - 40MHz QPSK - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 28 of 82

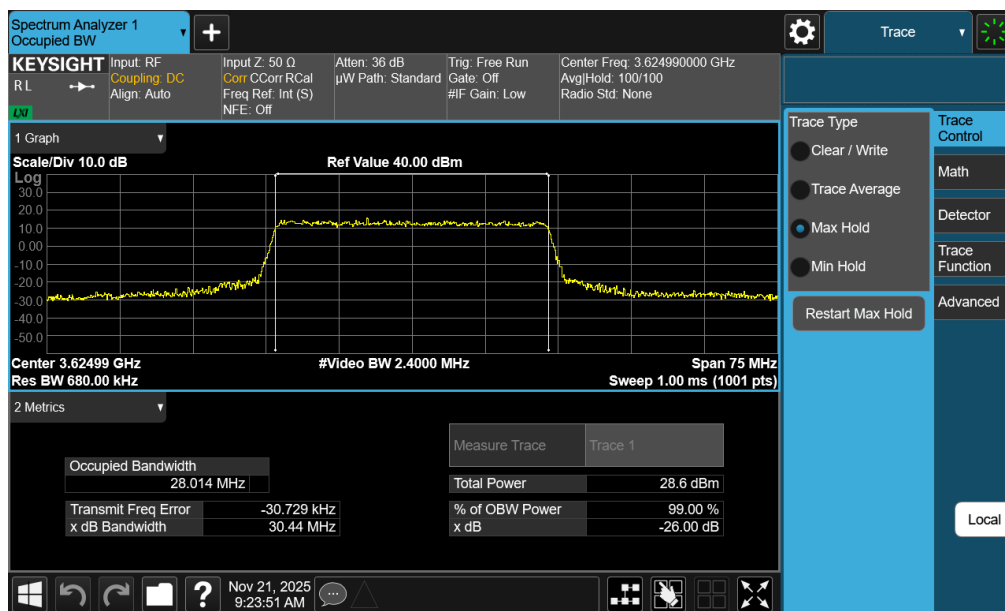


Plot 7-19. Occupied Bandwidth Plot (NR Band n48 - 40MHz 16-QAM - Full RB Configuration - Ant F)

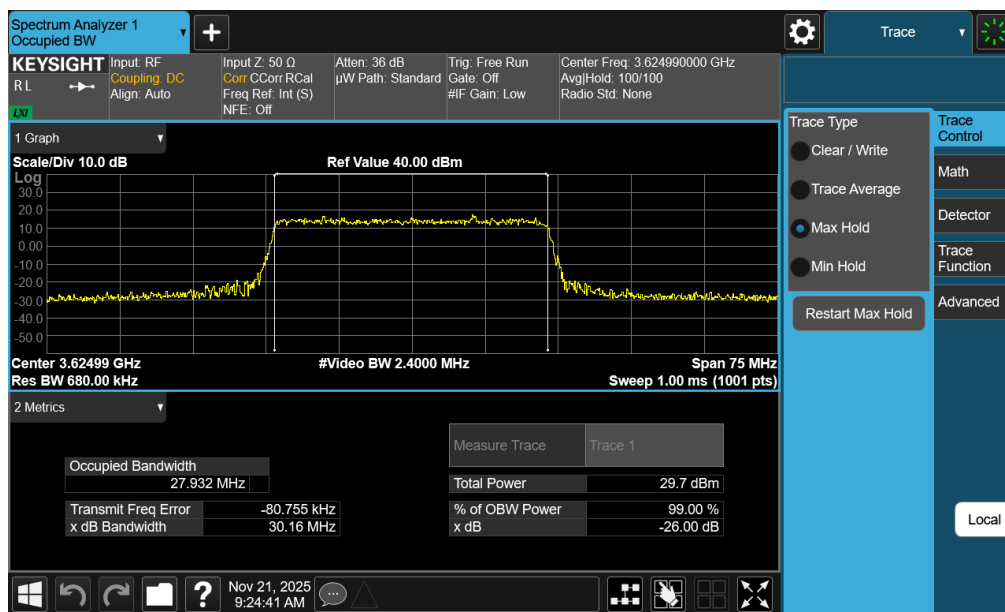


Plot 7-20. Occupied Bandwidth Plot (NR Band n48 - 30MHz $\pi/2$ BPSK - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 29 of 82

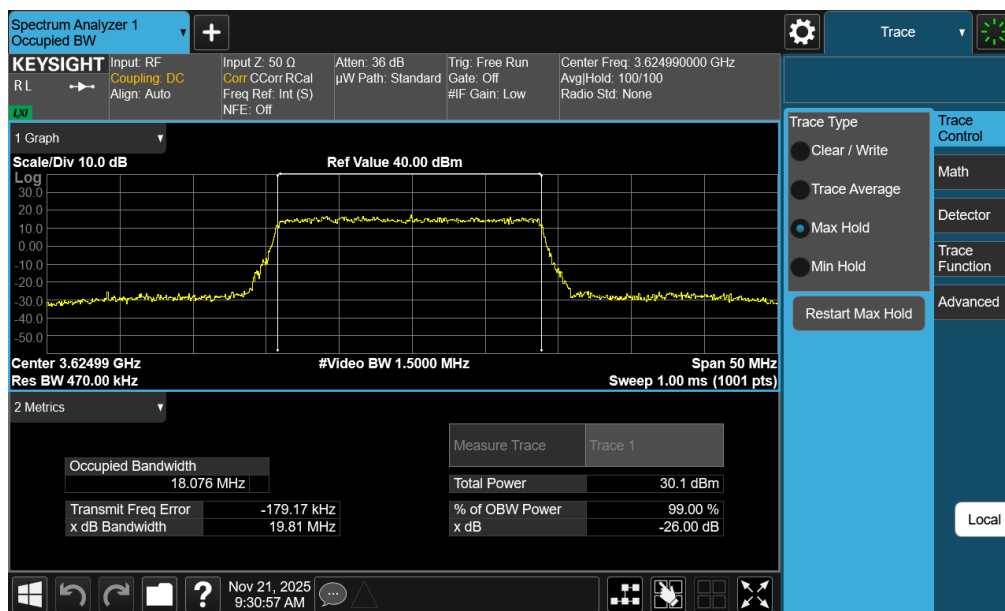


Plot 7-21. Occupied Bandwidth Plot (NR Band n48 - 30MHz QPSK - Full RB Configuration - Ant F)

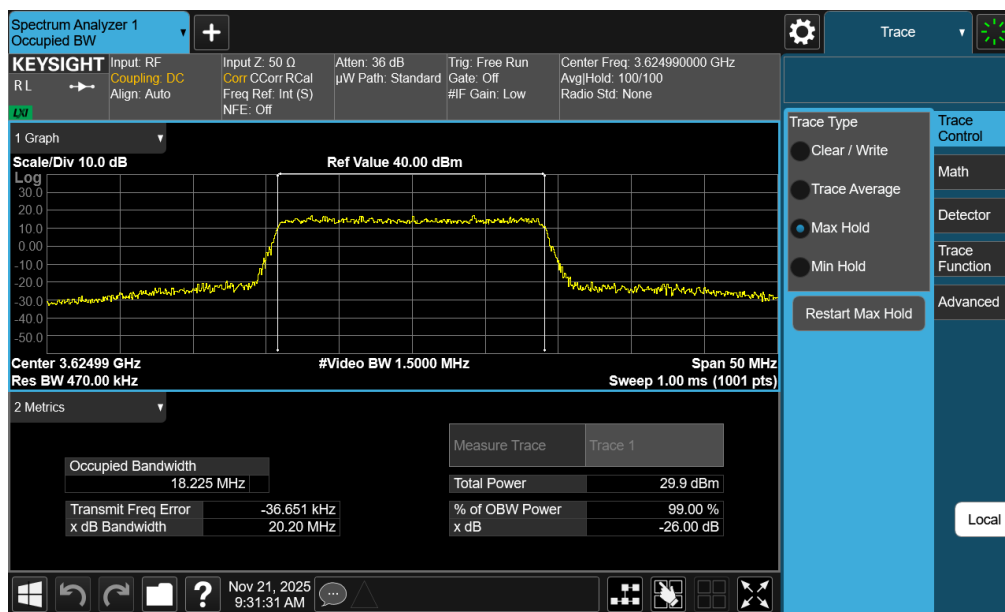


Plot 7-22. Occupied Bandwidth Plot (NR Band n48 - 30MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 30 of 82

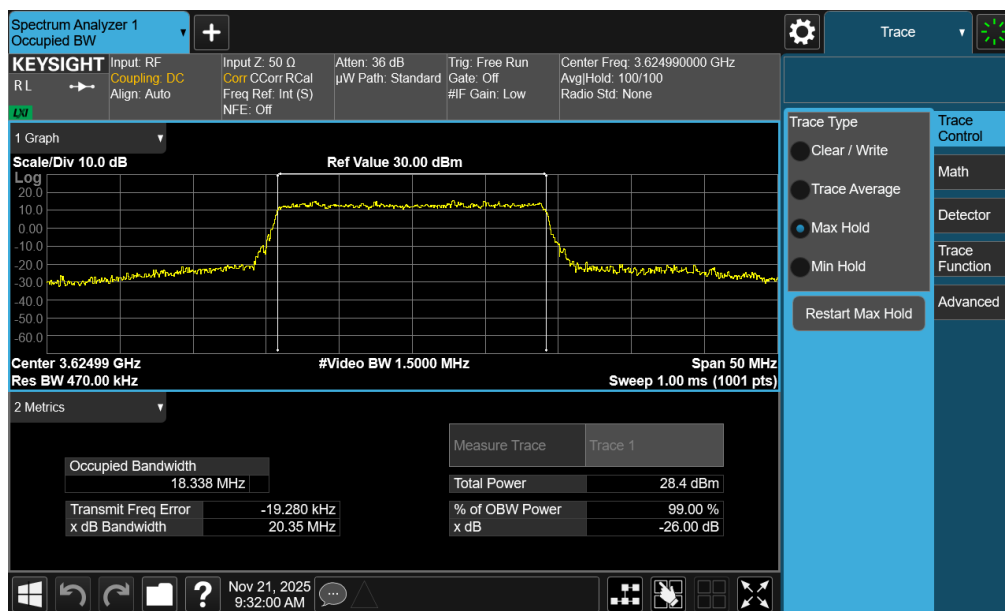


Plot 7-23. Occupied Bandwidth Plot (NR Band n48 - 20MHz $\pi/2$ BPSK - Full RB Configuration - Ant F)

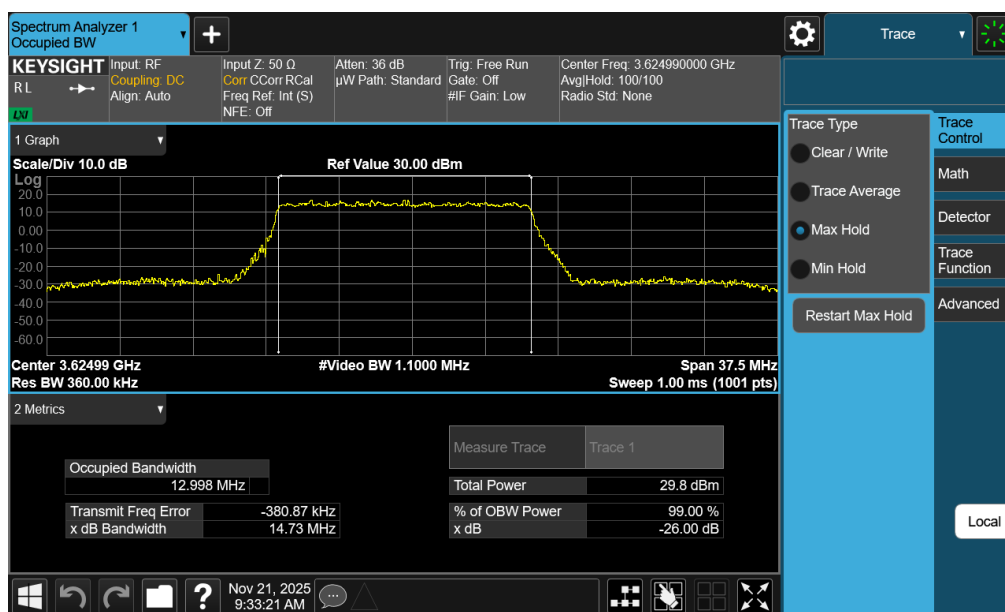


Plot 7-24. Occupied Bandwidth Plot (NR Band n48 - 20MHz QPSK - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 31 of 82

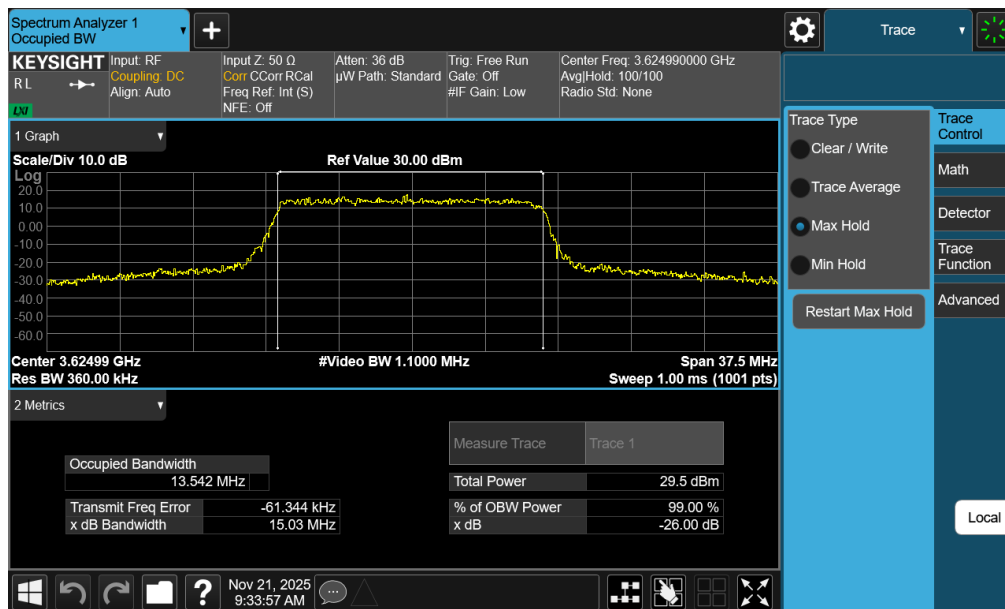


Plot 7-25. Occupied Bandwidth Plot (NR Band n48 - 20MHz 16-QAM - Full RB Configuration - Ant F)

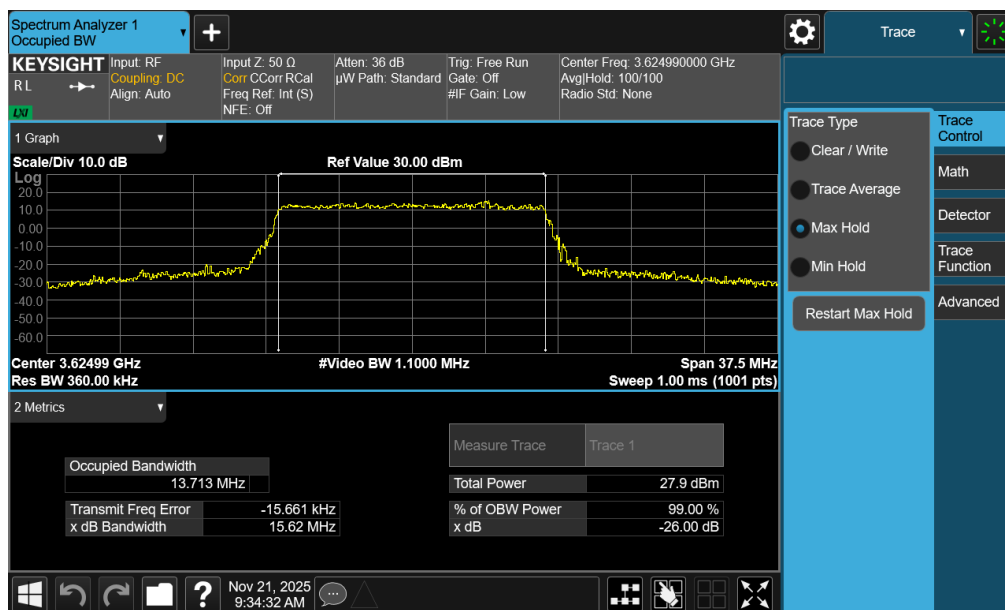


Plot 7-26. Occupied Bandwidth Plot (NR Band n48 - 15MHz $\pi/2$ BPSK - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 32 of 82

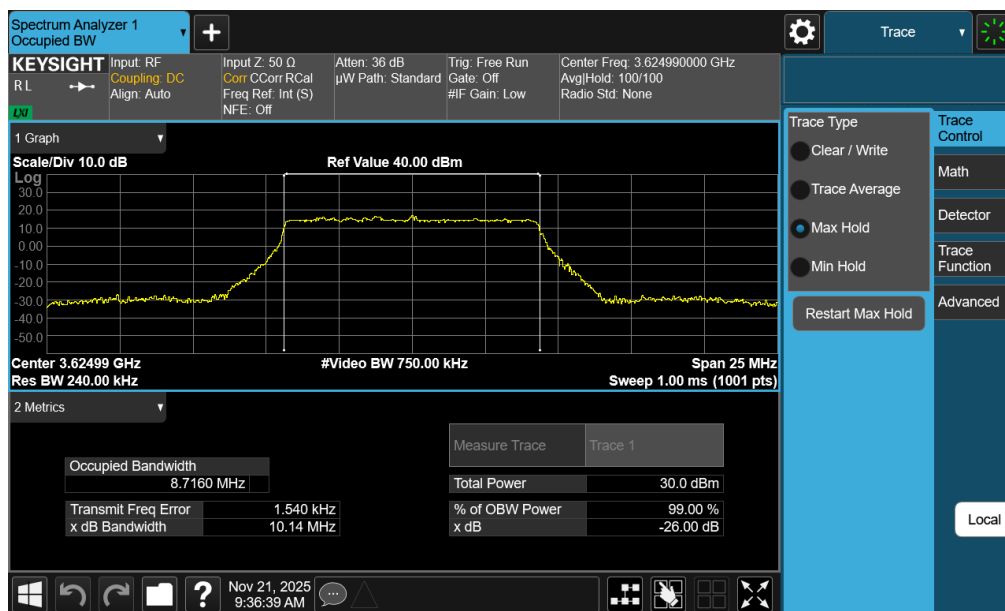


Plot 7-27. Occupied Bandwidth Plot (NR Band n48 - 15MHz QPSK - Full RB Configuration - Ant F)



Plot 7-28. Occupied Bandwidth Plot (NR Band n48 - 15MHz 16-QAM - Full RB Configuration - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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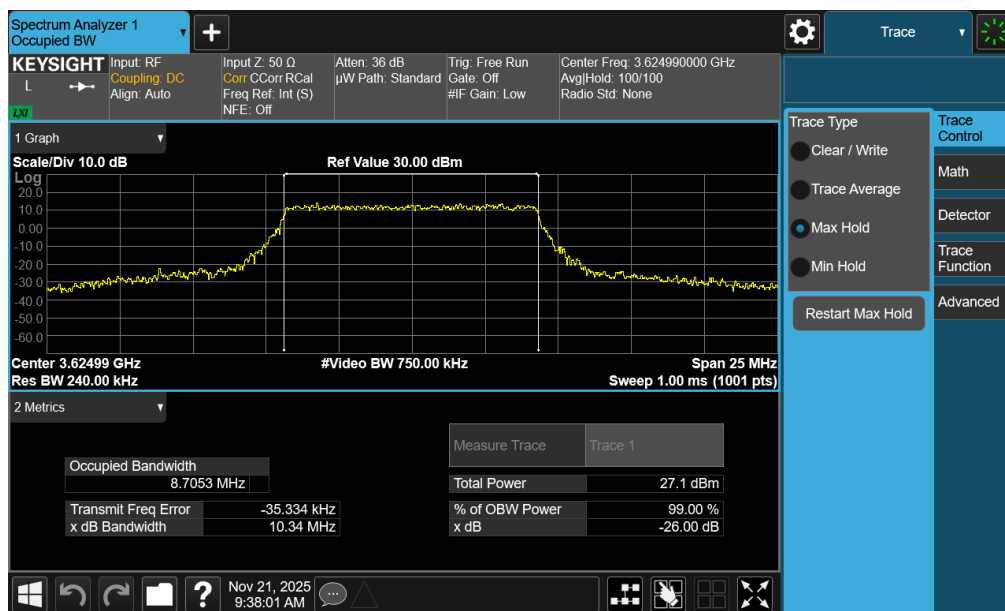


Plot 7-29. Occupied Bandwidth Plot (NR Band n48 - 10MHz $\pi/2$ BPSK - Full RB Configuration - Ant F)



Plot 7-30. Occupied Bandwidth Plot (NR Band n48 - 10MHz QPSK - Full RB Configuration - Ant F)

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Plot 7-31. Occupied Bandwidth Plot (NR Band n48 - 10MHz 16-QAM - Full RB Configuration - Ant F)

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7.4 Spurious and Harmonic Emissions at Antenna Terminal

Test Overview

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

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

Test Procedure Used

ANSI C63.26:2015 – Section 5.7.4

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = Max Hold
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.

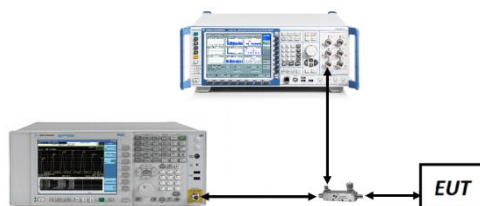


Figure 7-4. Test Instrument & Measurement Setup

Test Notes

1. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz.
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.
3. Since, SRS-1 (Antenna F) has the highest target power, only Antenna F CSE is reported for the overall n48 worst case.

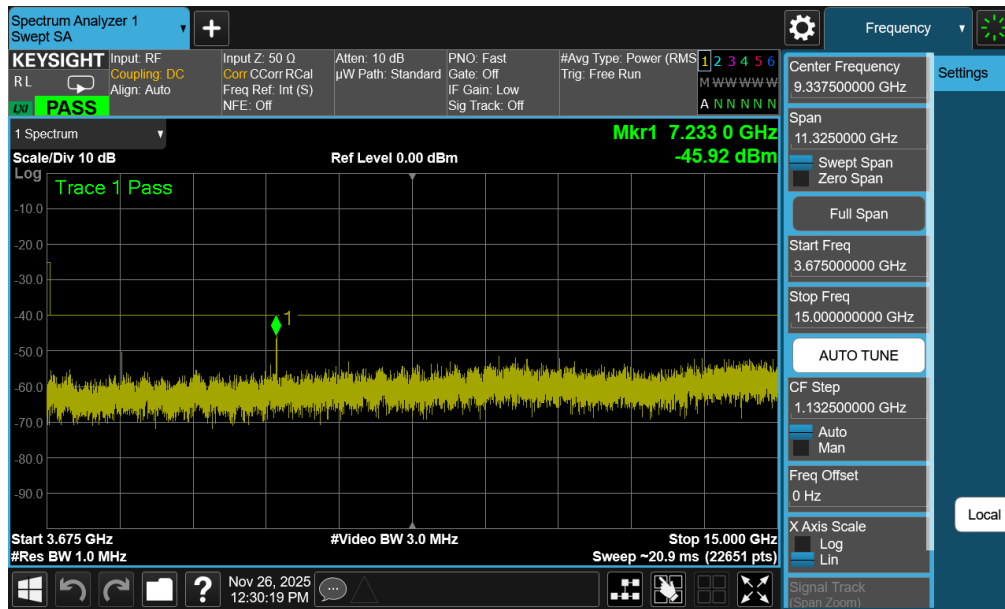
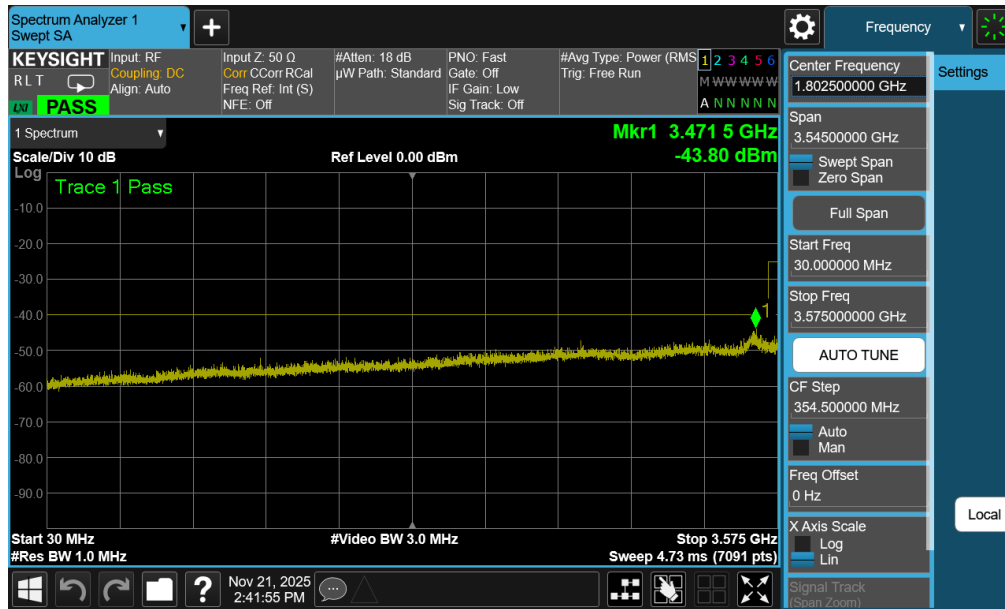
FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B48	20MHz	Low	30.0 - 3510.0	-43.07	-40.0	-3.07
		Low	3610.0 - 15000.0	-43.94	-40.0	-3.94
		Low	15000.0 - 27000.0	-52.1	-40.0	-12.10
		Low	27000.0 - 40000.0	-45.82	-40.0	-5.82
		Mid	30.0 - 35750.0	-43.8	-40.0	-3.80
		Mid	3675.0 - 15000.0	-45.92	-40.0	-5.92
		Mid	15000.0 - 27000.0	-51.99	-40.0	-11.99
		Mid	27000.0 - 40000.0	-45.47	-40.0	-5.47
		High	30.0 - 3640.0	-43.61	-40.0	-3.61
		High	3740.0 - 15000.0	-43.44	-40.0	-3.43
		High	15000.0 - 27000.0	-52.2	-40.0	-12.20
		High	27000.0 - 40000.0	-45.2	-40.0	-5.20
LTE Band 48 ULCA	20+20MHz	Low	30.0 - 3510.0	-43.49	-40.0	-3.49
		Low	3630.0 - 15000.0	-43.45	-40.0	-3.45
		Low	15000.0 - 27000.0	-50.97	-40.0	-10.97
		Low	27000.0 - 40000.0	-46.19	-40.0	-6.19
		Mid	30.0 - 3575.0	-43.13	-40.0	-3.13
		Mid	3695.0 - 15000.0	-44.38	-40.0	-4.38
		Mid	15000.0 - 27000.0	-52.16	-40.0	-12.16
		Mid	27000.0 - 40000.0	-45.23	-40.0	-5.23
		High	30.0 - 3640.0	-43.91	-40.0	-3.91
		High	3740.0 - 15000.0	-44.73	-40.0	-4.73
		High	15000.0 - 27000.0	-53.15	-40.0	-13.15
		High	27000.0 - 40000.0	-45.93	-40.0	-5.93
NR-n48	40MHz	Low	30.0 - 3510.0	-43.26	-40.0	-3.26
		Low	3610.0 - 15000.0	-43.17	-40.0	-3.17
		Low	15000.0 - 27000.0	-52.63	-40.0	-12.63
		Low	27000.0 - 40000.0	-45.58	-40.0	-5.58
		Mid	30.0 - 35750.0	-43.03	-40.0	-3.03
		Mid	3675.0 - 15000.0	-44.12	-40.0	-4.12
		Mid	15000.0 - 27000.0	-51.83	-40.0	-11.83
		Mid	27000.0 - 40000.0	-45.58	-40.0	-5.58
		High	30.0 - 3640.0	-46.94	-40.0	-6.94
		High	3740.0 - 15000.0	-44.02	-40.0	-4.02
		High	15000.0 - 27000.0	-52.74	-40.0	-12.74
		High	27000.0 - 40000.0	-45.23	-40.0	-5.23

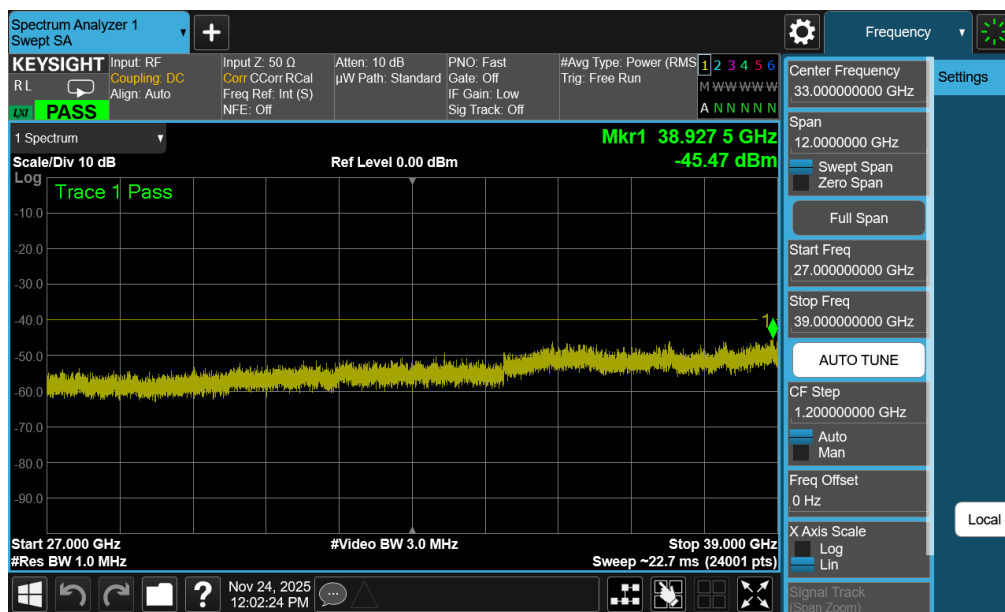
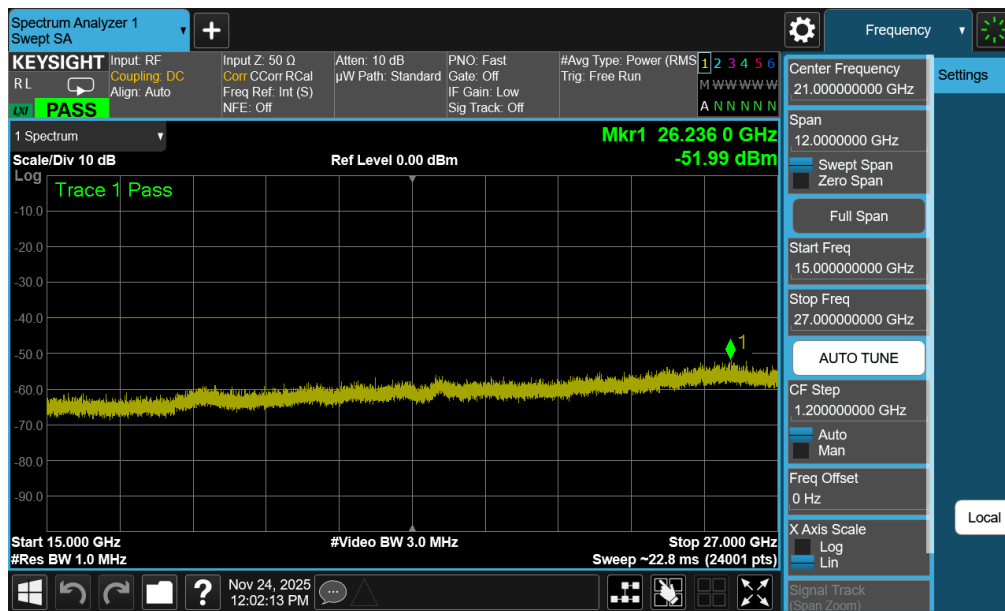
Table 7-9. Conducted Emission Test Results – Ant F

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 48 – Ant F

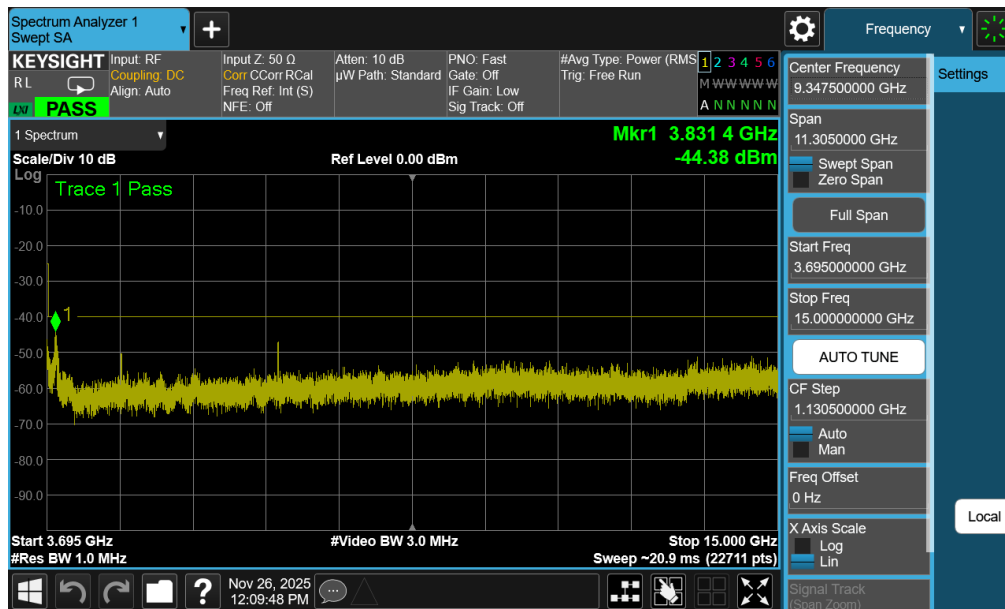
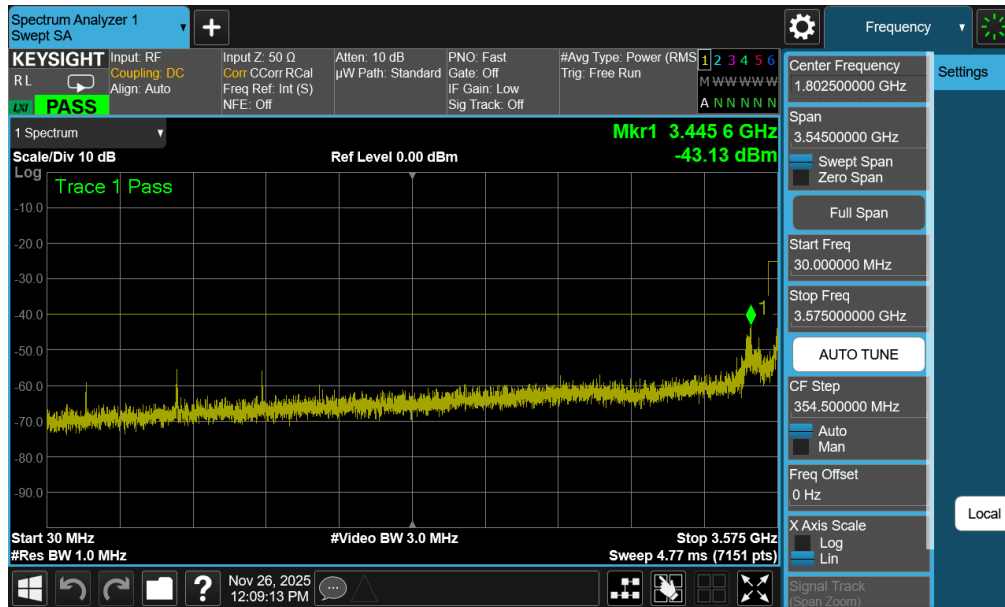


FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 38 of 82

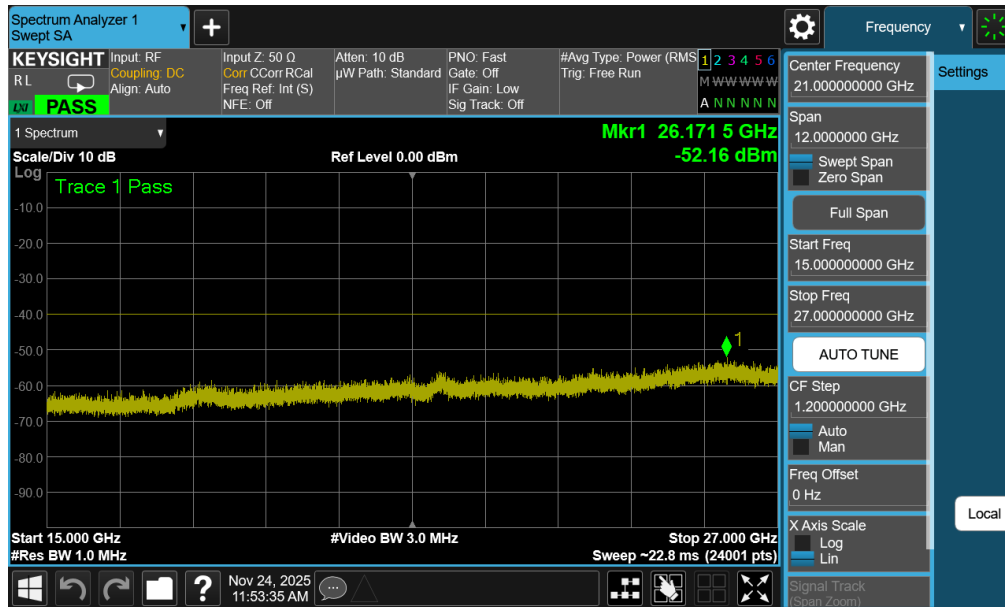


FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2-A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 39 of 82

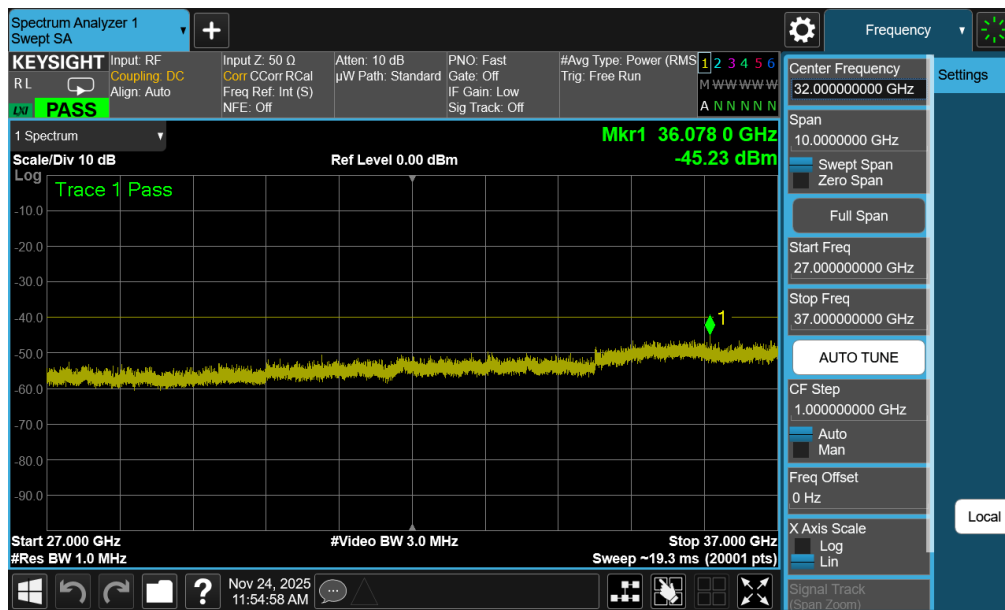
ULCA LB48 – Ant F



FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 40 of 82



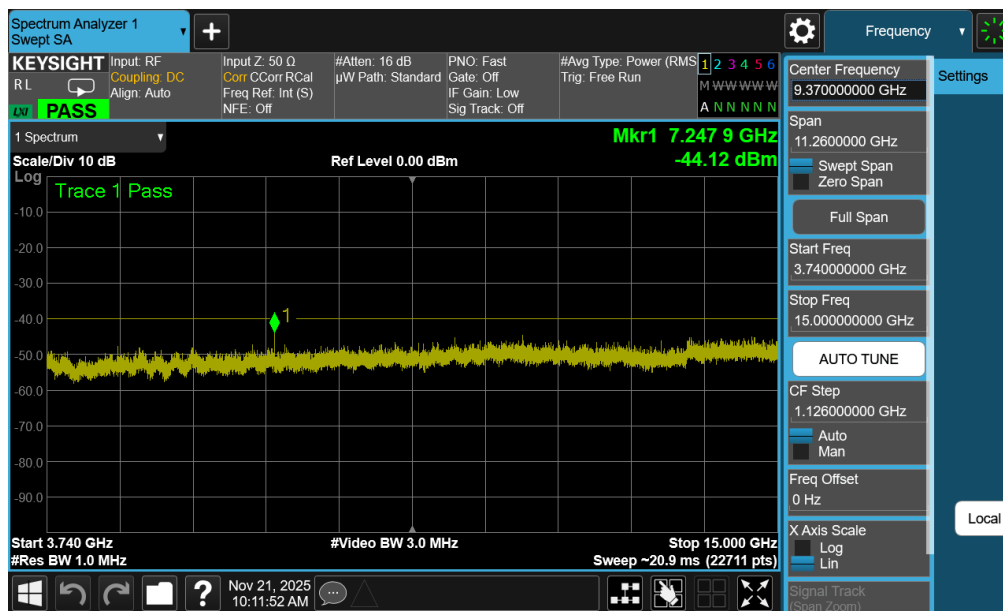
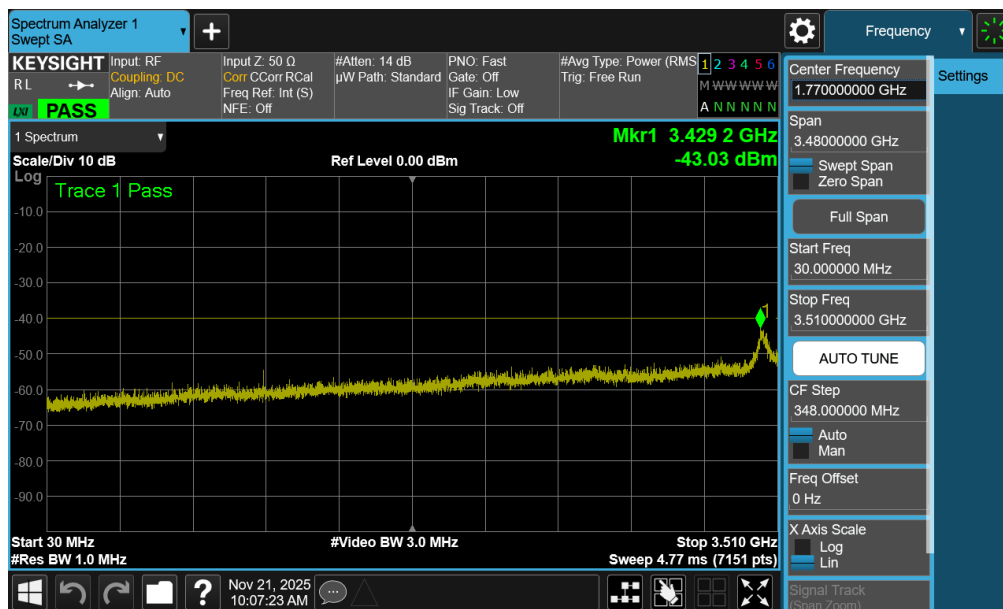
Plot 7-38. Conducted Spurious Plot (ULCA LB48 - 20+20MHz QPSK - Mid Channel - Ant F)



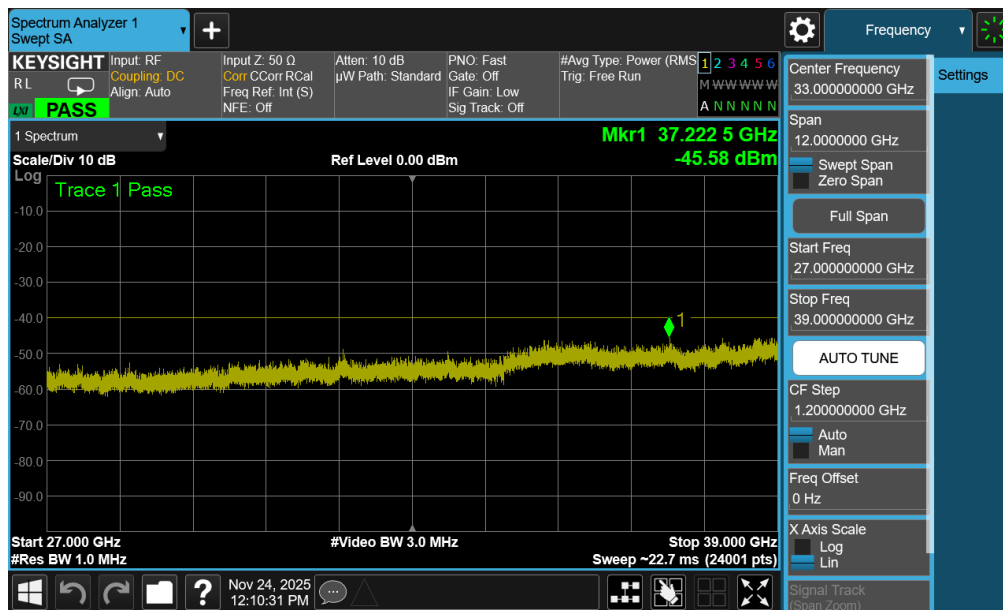
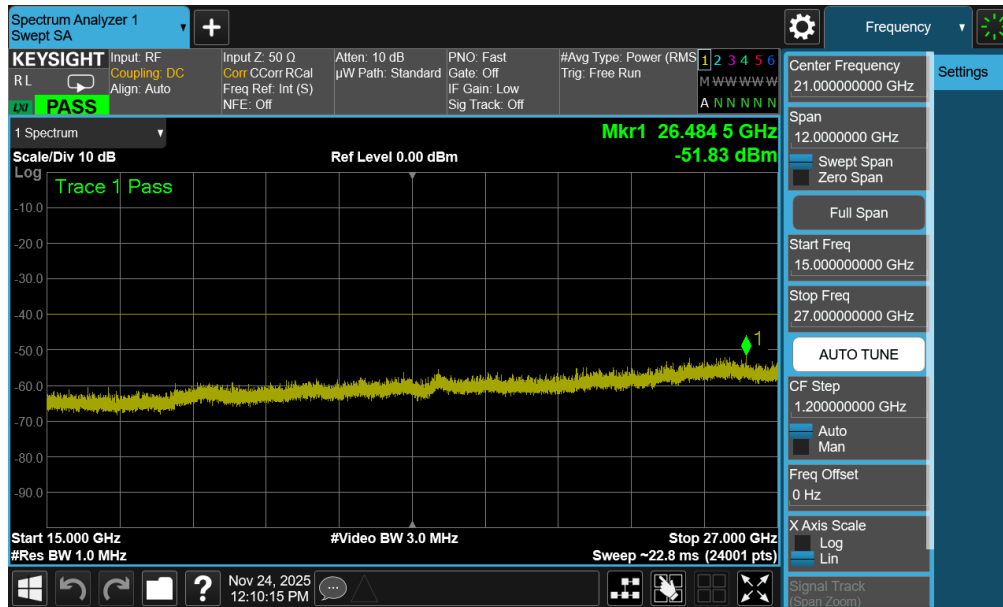
Plot 7-39. Conducted Spurious Plot (ULCA LB48 - 20+20MHz QPSK - Mid Channel - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n48 – Ant F



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7.5 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

For an End User Device, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B MHz (where B is the bandwidth in MHz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B MHz below the lower CBSD-assigned channel edge. At all frequencies greater than B MHz above the upper CBSD assigned channel edge and less than B MHz below the lower CBSD-assigned channel edge, the conducted power of any end user device emission shall not exceed -25 dBm/MHz. The conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

Test Procedure Used

ANSI C63.26:2015 – Section 5.7.3

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW $\geq 1\%$ of the emission bandwidth
4. VBW $\geq 3 \times$ RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times$ Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

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

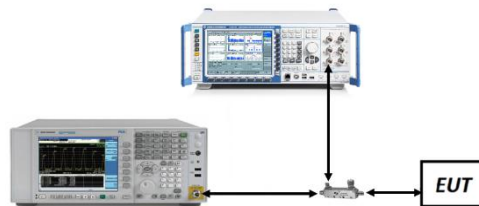


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Test Notes

1. Per 96.41(e)(3)(i), compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The fundamental emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.
3. Since, SRS-1 (Antenna F) has the highest target power, only Antenna F CBE is reported for the overall n48 worst case.

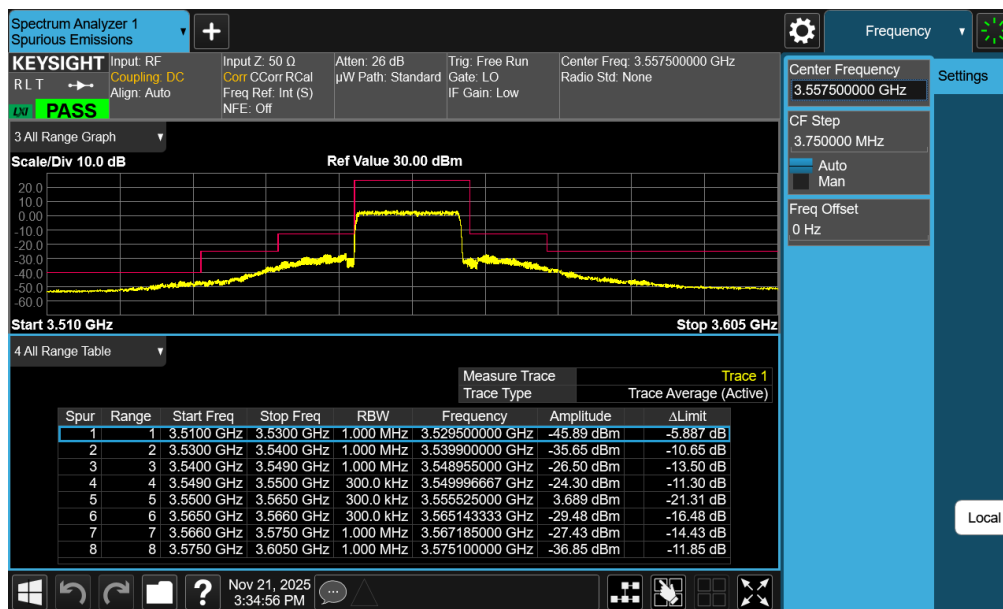
FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B48	20 MHz	Low	Band Edge	-48.10	-40	-8.10
		Mid	Band Edge	-35.77	-25	-10.77
		High	Band Edge	-44.06	-40	-4.06
	15 MHz	Low	Band Edge	-45.89	-40	-5.89
		Mid	Band Edge	-36.35	-25	-11.35
		High	Band Edge	-43.57	-40	-3.57
	10 MHz	Low	Band Edge	-49.99	-40	-9.99
		Mid	Band Edge	-41.35	-25	-16.35
		High	Band Edge	-47.91	-40	-7.91
	5 MHz	Low	Band Edge	-49.01	-40	-9.01
		Mid	Band Edge	-41.61	-25	-16.61
		High	Band Edge	-47.36	-40	-7.36
ULCA LB48	20+20MHz	Low	Band Edge	-44.23	-40	-4.23
		Mid	Band Edge	-18.77	-13	-5.77
		High	Band Edge	-44.72	-40	-4.72
NR-n48	40MHz	Low	Band Edge	-41.21	-40	-1.21
		Mid	Band Edge	-37.19	-25	-12.19
		High	Band Edge	-41.82	-40	-1.82
	30MHz	Low	Band Edge	-41.01	-40	-1.01
		Mid	Band Edge	-38.63	-25	-13.63
		High	Band Edge	-41.38	-40	-1.38
	20MHz	Low	Band Edge	-46.09	-40	-6.09
		Mid	Band Edge	-36.02	-25	-11.02
		High	Band Edge	-42.75	-40	-2.75
	15MHz	Low	Band Edge	-47.18	-40	-7.18
		Mid	Band Edge	-39.13	-25	-14.13
		High	Band Edge	-44.45	-40	-4.45
	10MHz	Low	Band Edge	-50.13	-40	-10.13
		Mid	Band Edge	-42.60	-25	-17.60
		High	Band Edge	-42.48	-40	-2.48

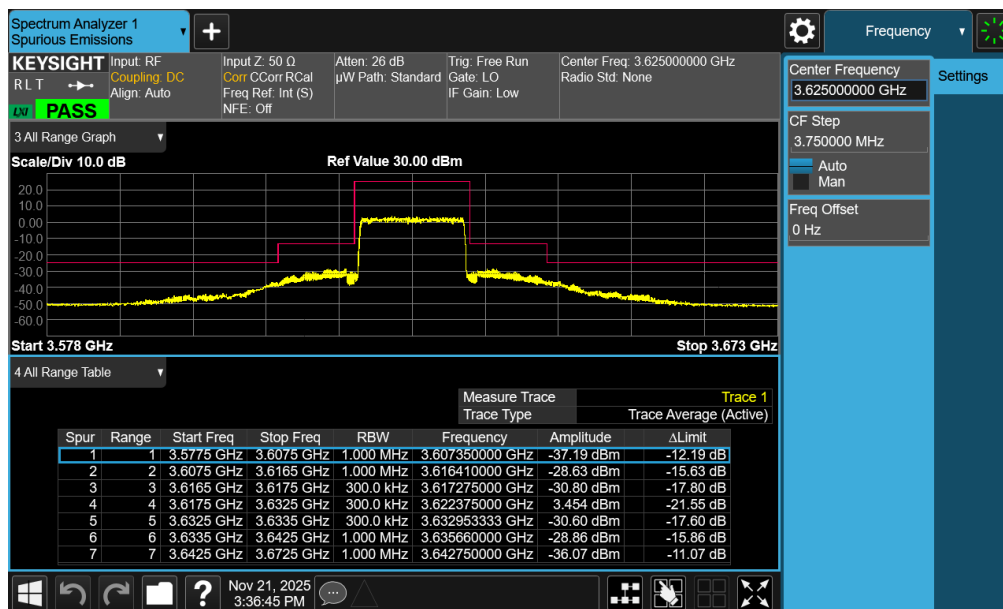
Table 7-10. Conducted Band Edge Test Results – Ant F

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 48 – Ant F

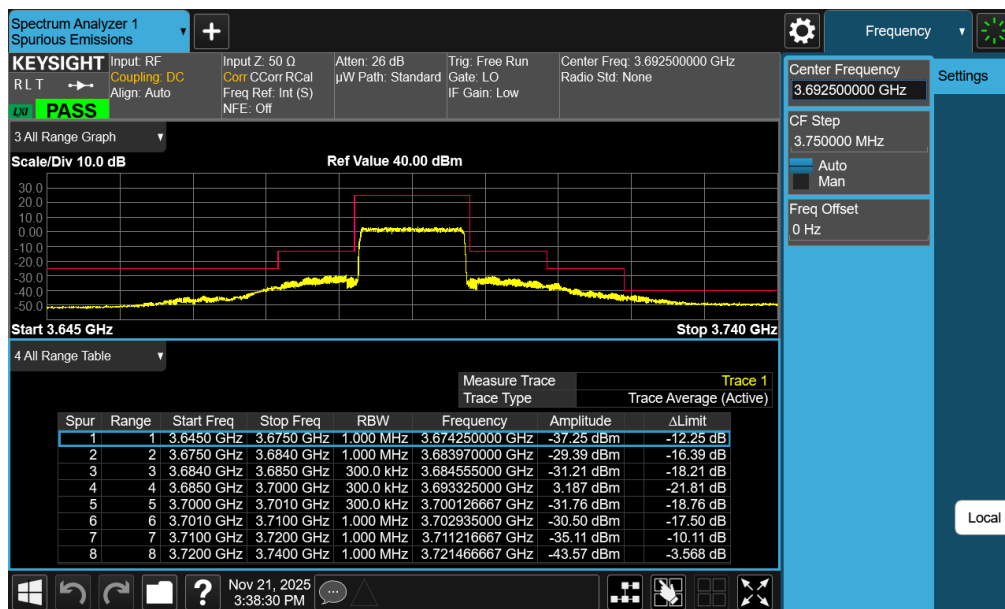


Plot 7-44. Channel Edge Plot (LTE Band 48 - 15MHz QPSK - Low Channel - Ant F)



Plot 7-45. Channel Edge Plot (LTE Band 48 - 15MHz QPSK - Mid Channel - Ant F)

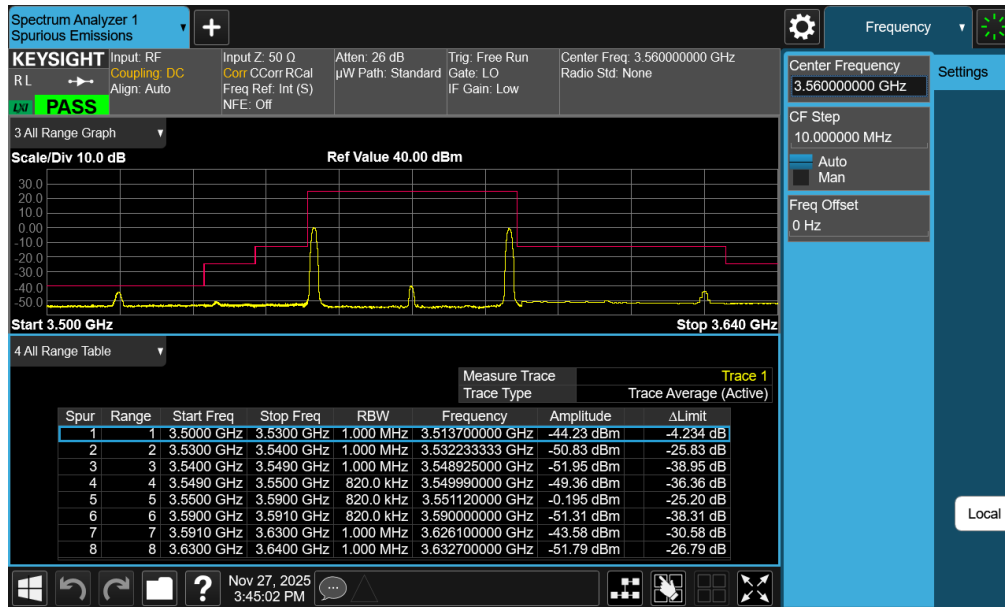
FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 47 of 82



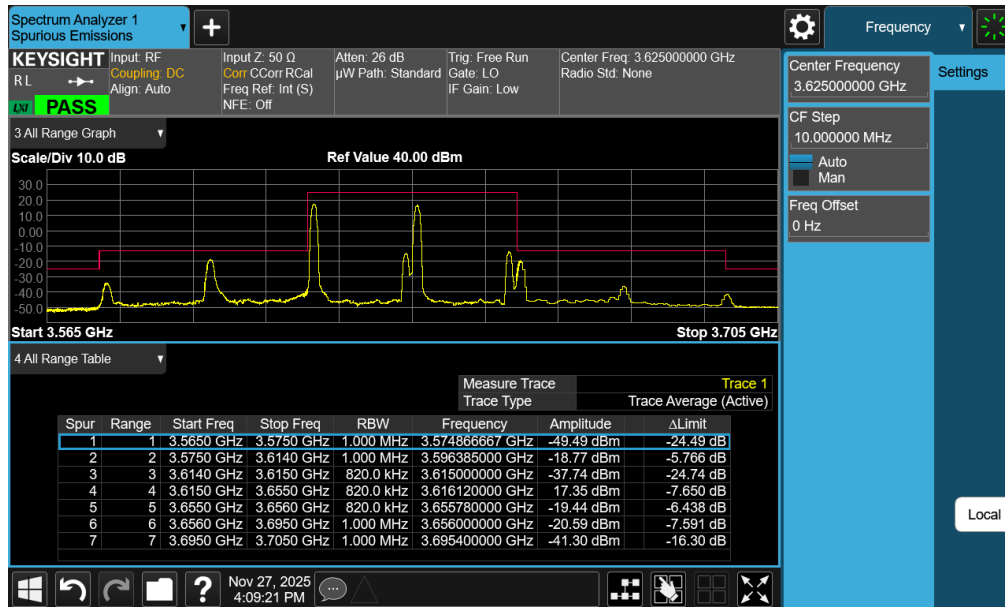
Plot 7-46. Channel Edge Plot (LTE Band 48 - 15MHz QPSK - High Channel - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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ULCA LB48 – Ant F

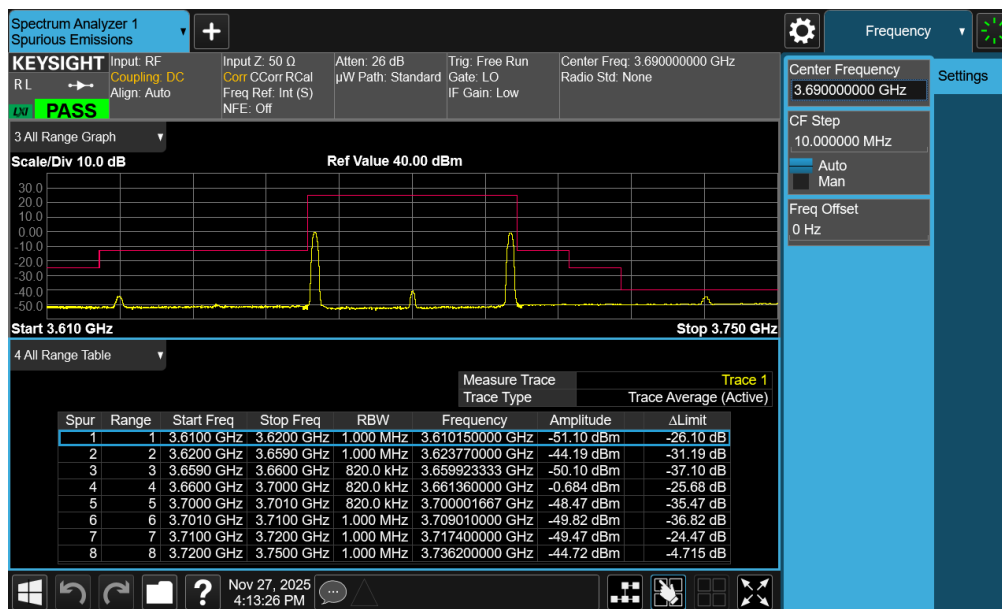


Plot 7-47. Channel Edge Plot (LTE Band 48 – 20+20MHz QPSK - Low Channel - Ant F)



Plot 7-48. Channel Edge Plot (LTE Band 48 – 20+20MHz QPSK - Mid Channel - Ant F)

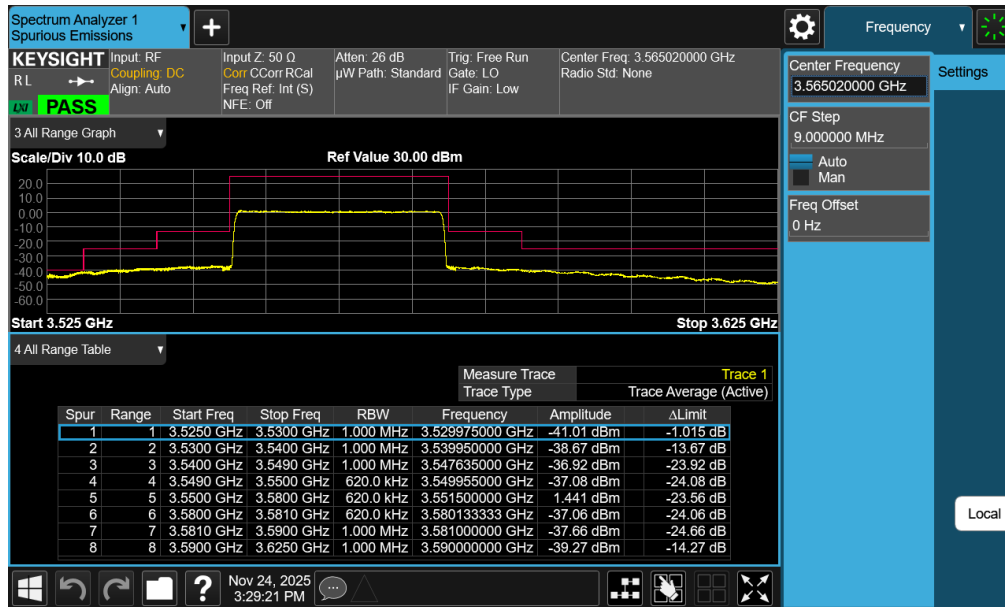
FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2510280090-11-R2.A3L	Test Dates: 11/3/2025 – 12/31/2025	EUT Type: Portable Handset	Page 49 of 82



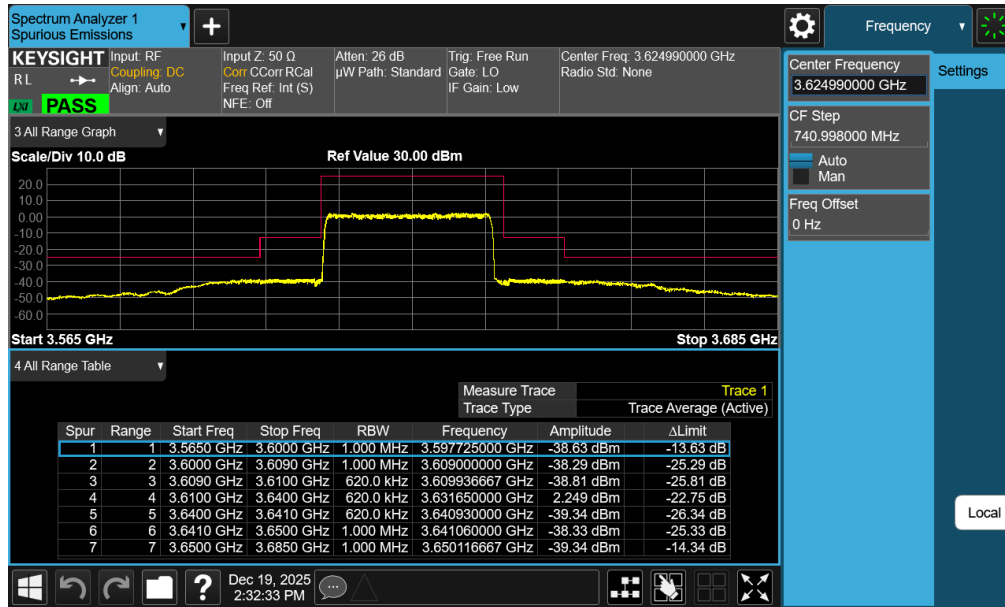
Plot 7-49. Channel Edge Plot (LTE Band 48 – 20+20MHz QPSK - High Channel - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n48 – Ant F



Plot 7-50. Channel Edge Plot (NR Band n48 - 30MHz CP-OFDM-QPSK - Low Channel - Ant F)



Plot 7-51. Channel Edge Plot (NR Band n48 - 30MHz DFT-s-OFDM-BPSK – Mid Channel - Ant F)

FCC ID: A3LSMA576U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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