



**ELEMENT MATERIALS TECHNOLOGY,
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PART 22 MEASUREMENT REPORT

Applicant Name:

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

Date of Testing:

9/2/2025 - 10/20/2025

Test Report Issue Date:

12/11/2025

Test Site/Location:

Element Lab., Columbia, MD, USA
Element Lab., Yongin-Si, Gyeonggi-do, South Korea

Test Report Serial No.:

1M2508270082-02.A3L

FCC ID:

A3LSMS948JPN

APPLICANT:

Samsung Electronics Co., Ltd.

Application Type:

Certification

Model:

SC-53G

Additional Model(s):

SCG37

EUT Type:

Portable Handset

FCC Classification:

PCS Licensed Transmitter Held to Ear (PCE)

FCC Rule Part:

22

Test Procedure(s):

ANSI C63.26-2015, KDB 648474 D03 v01r04

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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TEST REPORT REVISION HISTORY

Rev. No.	Report S/N	Description	Issue Date
-	1M2508270082-02.A3L	Initial Release	12/11/2025

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Antenna-1								
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	ERP		EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	Max. Power [W]	Max. Power [dBm]	
GSM/GPRS	N/A	GMSK	824.2 - 848.8	0.738	28.68	1.211	30.83	248KGXW
EDGE	N/A	8-PSK	824.2 - 848.8	0.117	20.69	0.192	22.84	238KG7W
WCDMA	N/A	Spread Spectrum	826.4 - 846.6	0.092	19.65	0.151	21.80	4M16F9W
LTE Band 5	10 MHz	QPSK	829.0 - 844.0	0.111	20.44	0.181	22.59	9M06G7D
		16QAM	829.0 - 844.0	0.107	20.29	0.175	22.44	9M07W7D
	5 MHz	QPSK	826.5 - 846.5	0.111	20.45	0.182	22.60	4M56G7D
		16QAM	826.5 - 846.5	0.104	20.19	0.171	22.34	4M56W7D
	3 MHz	QPSK	825.5 - 847.5	0.108	20.35	0.178	22.50	2M74G7D
		16QAM	825.5 - 847.5	0.105	20.22	0.173	22.37	2M74W7D
	1.4 MHz	QPSK	824.7 - 848.3	0.109	20.37	0.179	22.52	1M11G7D
		16QAM	824.7 - 848.3	0.106	20.26	0.174	22.41	1M11W7D
NR Band n5	20 MHz	$\pi/2$ BPSK	834.0 - 839.0	0.119	20.75	0.195	22.90	18M0G7D
		QPSK	834.0 - 839.0	0.117	20.70	0.193	22.85	19M1G7D
		16QAM	834.0 - 839.0	0.093	19.70	0.153	21.85	19M0W7D
	15 MHz	$\pi/2$ BPSK	831.5 - 841.5	0.123	20.91	0.202	23.06	13M5G7D
		QPSK	831.5 - 841.5	0.120	20.79	0.197	22.94	14M2G7D
		16QAM	831.5 - 841.5	0.095	19.76	0.155	21.91	14M2W7D
	10 MHz	$\pi/2$ BPSK	829.0 - 844.0	0.122	20.85	0.200	23.00	9M01G7D
		QPSK	829.0 - 844.0	0.121	20.82	0.198	22.97	9M36G7D
		16QAM	829.0 - 844.0	0.093	19.69	0.153	21.84	9M35W7D
	5 MHz	$\pi/2$ BPSK	826.5 - 846.5	0.126	20.99	0.206	23.14	4M55G7D
		QPSK	826.5 - 846.5	0.125	20.96	0.205	23.11	4M54G7D
		16QAM	826.5 - 846.5	0.092	19.66	0.152	21.81	4M52W7D

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Antenna-2								
Mode	Bandwidth	Modulation	Tx Frequency Range [MHz]	ERP		EIRP		Emission Designator
				Max. Power [W]	Max. Power [dBm]	Max. Power [W]	Max. Power [dBm]	
GSM/GPRS	N/A	GMSK	824.2 - 848.8	0.318	25.02	0.521	27.17	244KGXW
EDGE	N/A	8-PSK	824.2 - 848.8	0.048	16.81	0.079	18.96	244KG7W
WCDMA	N/A	Spread Spectrum	826.4 - 846.6	0.056	17.45	0.091	19.60	4M18F9W
LTE Band 5	10 MHz	QPSK	829.0 - 844.0	0.054	17.31	0.088	19.46	9M07G7D
		16QAM	829.0 - 844.0	0.044	16.42	0.072	18.57	9M07W7D
	5 MHz	QPSK	826.5 - 846.5	0.052	17.14	0.085	19.29	4M55G7D
		16QAM	826.5 - 846.5	0.044	16.45	0.072	18.60	4M56W7D
	3 MHz	QPSK	825.5 - 847.5	0.054	17.33	0.089	19.48	2M74G7D
		16QAM	825.5 - 847.5	0.045	16.56	0.074	18.71	2M74W7D
	1.4 MHz	QPSK	824.7 - 848.3	0.052	17.18	0.086	19.33	1M11G7D
		16QAM	824.7 - 848.3	0.045	16.52	0.074	18.67	1M11W7D
NR Band n5	20 MHz	$\pi/2$ BPSK	834.0 - 839.0	0.054	17.36	0.089	19.51	18M0G7D
		QPSK	834.0 - 839.0	0.054	17.34	0.089	19.49	19M0G7D
		16QAM	834.0 - 839.0	0.044	16.48	0.073	18.63	19M0W7D
	15 MHz	$\pi/2$ BPSK	831.5 - 841.5	0.054	17.34	0.089	19.49	13M5G7D
		QPSK	831.5 - 841.5	0.056	17.48	0.092	19.63	14M2G7D
		16QAM	831.5 - 841.5	0.044	16.40	0.072	18.55	14M2W7D
	10 MHz	$\pi/2$ BPSK	829.0 - 844.0	0.057	17.56	0.094	19.71	9M02G7D
		QPSK	829.0 - 844.0	0.055	17.41	0.090	19.56	9M37G7D
		16QAM	829.0 - 844.0	0.045	16.51	0.073	18.66	9M37W7D
	5 MHz	$\pi/2$ BPSK	826.5 - 846.5	0.057	17.56	0.094	19.71	4M53G7D
		QPSK	826.5 - 846.5	0.057	17.58	0.094	19.73	4M53G7D
		16QAM	826.5 - 846.5	0.045	16.49	0.073	18.64	4M54W7D

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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. ("MD")

- Element Washington DC LLC is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).
- Element Washington DC LLC facility is a registered test laboratory with the site description on file with ISED (Wireless Test Lab number 2451B) and FCC (Designation Number US1113).
- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs).

Measurements were performed at Element Materials Technology Suwon, Ltd. located in Yongin-si, Gyeonggi-do, 16954, South Korea. ("EK")

- 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: A3LSMS948JPN**. 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 22.

The authorization for this device utilize data referencing from FCC ID: A3LSMS948U as permitted per KDB 484596 D01 v03. Data referencing data test results are included in Appendix A of this report.

Test Device Serial No.: 0731M, 0545M, 0734M, 0490M, 0789M, 0489M, 0544M

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 GSM/GPRS/EDGE, 850WCDMA/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), NFC, Wireless Power Transfer, UWB

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.

Band	Ant1	Ant2
GSM/GPRS	Ant E	Ant A
WCDMA	Ant E	Ant A
LTE Band 5	Ant E	Ant A
NR Band n5	Ant E	Ant A

2.4 Duty Cycle Information

For all 5G NR and LTE operations in FDD mode, the EUT duty cycle was set to 100%.

2.5 Software and Firmware

Testing was performed on device(s) using software/firmware version S948USQU0AYIB 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 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 – MD

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 4-2. Measurement Uncertainty Budget – EK

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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
-	LTx1	Licensed Transmitter Cable Set	2/25/2025	Annual	2/25/2026	LTx1
-	LTx2	Licensed Transmitter Cable Set	2/25/2025	Annual	2/25/2026	LTx2
-	LTx3	Licensed Transmitter Cable Set	2/25/2025	Annual	2/25/2026	LTx3
-	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
-	AP2	EMC Cable and Switch System	2/25/2025	Annual	2/25/2026	AP2
-	ETS	EMC Cable and Switch System	12/11/2024	Annual	12/11/2025	ETS
Anritsu	MT8820C	Radio Communication Analyzer	N/A			6201240328
EMCO	3115	Horn Antenna (1-18GHz)	9/6/2024	Biennial	9/6/2026	9704-5182
Espec	ESX-2CA	Environmental Chamber	11/20/2024	Biennial	11/20/2026	17620
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	N/A			100976
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	10/16/2024	Annual	10/16/2025	100342
Rohde & Schwarz	ESW44	EMI Test Receiver (44 GHz)	3/25/2025	Annual	3/25/2026	101716
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	9/11/2024	Biennial	9/11/2026	A051107
Sunol	DRH-118	Horn Antenna (1-18GHz)	2/21/2024	Biennial	2/21/2026	A050307

Table 5-1. Test Equipment Calibration Table – MD

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	N9030A	PXA Signal Analyzer	5/23/2025	Annual	5/22/2026	MY49432391
Anritsu	S820E	Cable and Antenna Analyzer	6/13/2025	Annual	6/12/2026	1839097
Rohde & Schwarz	NRP-Z81	POWER SENSOR	5/23/2025	Annual	5/22/2026	101499
Anritsu	MT8000A	Radio Communicatino Test Station	11/12/2024	Annual	11/11/2025	6272337405
Com-Power	AL-130	9kHz - 30MHz Loop Antenna	10/10/2024	Biennial	10/9/2026	10160045
Espec	SH-242	Environmental Chamber	9/17/2025	Annual	9/16/2026	93011064
Fairview Microwave	FM2CP1122-10	2.92mm Directional Coupler	7/17/2025	Annual	7/16/2026	1946
Keysight Technologies	N9030B	PXA Signal Analyzer	7/7/2025	Annual	7/6/2026	MY57143278
Mini-Circuits	BW-N10W5+	Attenuator	7/3/2025	Annual	7/2/2026	TEMPNO.01-151
Mini-Circuits	BW-N10W5+	Attenuator	7/17/2025	Annual	7/16/2026	TEMPNO.01-150
NARDA	180-442A-KF	Horn Antenna (small)	1/13/2025	Annual	1/12/2026	180-442A-KF
Rohde & Schwarz	SMF100A	Signal Generator	7/3/2025	Annual	7/2/2026	104154
Rohde & Schwarz	CMW500	Wideband Radio Communicatino Tester	1/6/2025	Annual	1/5/2026	171075
Rohde & Schwarz	FSW	Signal and Spectrum Analyzer	9/15/2025	Annual	9/14/2026	101955
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	1/6/2025	Annual	1/5/2026	103295
Schwarzbeck	VULB9162	Broadband TRILOG Antenna	6/5/2025	Biennial	6/4/2027	9162-217
Sunol	DRH-118	Horn Antenna	6/4/2025	Annual	6/3/2026	A102416-1

Table 5-2. Test Equipment Calibration Table – EK

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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Component	Serial Number
Flex Cable	P2A-0001
Micro-Coax Utilflex Cable UFB311A-Q-3346-50U50U MFR 64639	231978-003
Chamber Passthrough	CP4/X12
Micro-Coax Utilflex Cable UFB311A-1-0629-50U50U MFR 64639	231986-003
Micro-Coax Utilflex Cable UFB142A-0-0629-5GU200 MFR 6463	232069-001
Rohde & Schwarz TS-PR8 Pre-Amplifier	102335
Rohde & Schwarz OSP130 Open Switch and Control Unit	101181

Table 5-3. AP2-001 EMC Cable and Switch System Components

Component	Serial Number
MiniCircuits Cable CBL-0.5M-SMNM+	47261
Micro-Coax Utilflex Cable UFB311A-Q-3346-50U50U MFR 64639	231978-001
Micro-Coax Utilflex Cable UFB311A-1-0629-50U50U MFR 64639	231986-002
MegaPhase (CAGE 1GVT4) Cable NC29-N1N1-324	19046401 001
Megaphase (CAGE 1GVT4) Flex Cable 10511-1	15044701-006
Micro-Coax Utilflex Cable UFB311A-Q-3346-50U50U MFR 64639	231978-002
Micro-Coax Utilflex Cable UFB311A-1-0629-50U50U MFR 64639	231986-004
Micro-Coax Utilflex Cable UFB142A-0-0629-5GU200 MFR 64639	232069-001
Rohde & Schwarz SF Unit	102138
Rohde & Schwarz OSP130 Open Switch and Control Unit	101181
Micro-Coax Utilflex Cable UFB311A-Q-3346-50U50U MFR 64639	231978-003
Micro-Coax Utilflex Cable UFB311A-1-0629-50U50U MFR 64639	231986-003
Rohde & Schwarz TS-PR8 Pre-Amplifier	102335

Table 5-4. AP2-002 EMC Cable and Switch System Components

Component	Serial Number
Pasternack Cable RG214/U	111815
MegaPhase (CAGE 1GVT4) Cable GR18-N5N5-24	14042714 001

Table 5-5. ETS-001 EMC Cable and Switch System Components

Component	Serial Number
MegaPhase (CAGE 1GVT4) Cable GR18-N5N5-24	14042714 001
MegaPhase (CAGE 1GVT4) Cable NC29-N1N1-324	20502201 001
Rohde & Schwarz SF Unit	102134
Minicircuits Cable CBL=0.5M-NMNM+	15440

Table 5-6. ETS-002 EMC Cable and Switch System Components

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Component	Serial Number
Keysight Directional Coupler, Model: 87300C	55300398
Mini Circuits 6dB Attenuator, BW S6 2W263+	2105
MegaPhase Cable, Model: TM26-S1S1-30	20233001 004

Table 5-7. LTx1 Licensed Transmitter Cable Set

Component	Serial Number
Keysight Directional Coupler, Model: 87300C	55300391
Mini Circuits 6dB Attenuator, Model: BW S6 2W263+	1845
MegaPhase Cable, Model: TM26-S1S1-30	20233001 006

Table 5-8. LTx2 Licensed Transmitter Cable Set

Component	Serial Number
Keysight Directional Coupler, Model: 87300C	55300390
Pasternack 10dB Attenuator, Model: PE7005-10	N/A
MegaPhase Cable, Model: TM26-S1S1-36	18160103 002

Table 5-9. LTx3 Licensed Transmitter Cable Set

Component	Serial Number
Keysight Directional Coupler, Model: 87300C	55300518
MCL 6dB Attenuator, Model: BW K62W44+	2013
MegaPhase Cable, Model: TM40-K1K1-36	19026201 002

Table 5-10. LTx4 Licensed Transmitter Cable Set

Component	Serial Number
Keysight Directional Coupler, Model: 87300C	55300519
MCL 6dB Attenuator, Model: BW-K62W44+	1905
MegaPhase Cable, Model: TM40-K1K1-36	19026201 001

Table 5-11. LTx5 Licensed Transmitter Cable Set

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6.0 SAMPLE EMISSION DESIGNATORS

GSM Emission Designator

Emission Designator = 250KGXW

GSM BW = 250 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 250KG7W

EDGE BW = 250 kHz

G = Phase Modulation

7 = Quantized/Digital Info

W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M16F9W

WCDMA BW = 4.16 MHz

F = Frequency Modulation

9 = Composite Digital Info

W = Combination (Audio/Data)

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: A3LSMS948JPN
 FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)
 Mode(s): GSM/GPRS/WCDMA/LTE/NR

Test Condition	Test Description	FCC Part Section(s)	RSS Section(s)	Test Limit	Test Result	Reference	Test Lab Location	Data Referencing
CONDUCTED	Transmitter Conducted Output Power	2.1046(a), 2.1046(c)	RSS-Gen(6.12)	N/A	PASS	Section 7.2	EK	Yes
	Occupied Bandwidth	2.1049(h)	RSS-Gen(6.7)	N/A	PASS	Section 7.3	EK	Yes
	Conducted Band Edge / Spurious Emissions	2.1051, 22.917(a)	RSS-Gen(6.13), RSS-132(5.5)	$\geq 43 + 10 \log (P[\text{Watts}])$ dB of attenuation below transmitter power	PASS	Sections 7.4, 7.5	EK	Yes
	Peak-to-Average Ratio	N/A	RSS-132(5.4)	≤ 13 dB	PASS	Section 7.6	EK	Yes
	Frequency Stability	2.1055, 22.355	RSS-Gen(6.11), RSS-132(5.3)	The carrier frequency of the transmitter must be maintained within the 2.5ppm	PASS	Section 7.9	MD	Yes
RADIATED	Effective Radiated Power / Equivalent Isotropic Radiated Power	22.913(a)(5)	RSS-Gen(6.12), RSS-132(5.4)	< 7 Watts max. ERP	PASS	Section 7.7	EK	Yes
	Radiated Spurious Emissions	2.1053, 22.917(a)	RSS-Gen(7.3), RSS-132(5.6)	$> 43 + 10 \log_{10} (P[\text{Watts}])$ for all out-of-band emissions	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 DSI 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) Data was referenced from model SM-S948U for the certification of SM-S948D. See Section 9.0 for spot-check results.

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7.2 Conducted Power Output 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. Detector = RMS
2. Trace mode = trace average for continuous emissions, max hold for pulse emissions
3. Sweep time = auto couple
4. The trace was allowed to stabilize
5. 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.

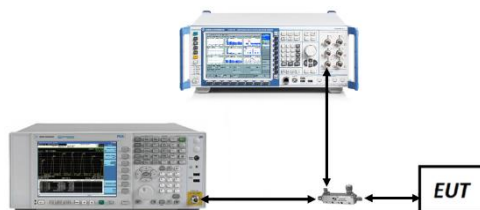


Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. Conducted power measurements were evaluated for the two contiguous channels 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]
10 MHz	QPSK	26840	829.0	1 / 0	24.46
		26915	836.5	1 / 0	24.51
		26990	844.0	1 / 0	24.37
	16QAM	26840	829.0	1 / 0	24.66
		26915	836.5	1 / 0	24.49
		26990	844.0	1 / 0	24.53
5 MHz	QPSK	26815	826.5	1 / 0	24.47
		26915	836.5	1 / 12	24.63
		27015	846.5	1 / 0	24.34
	16QAM	26815	826.5	1 / 12	24.51
		26915	836.5	1 / 12	24.78
		27015	846.5	1 / 12	24.74
3 MHz	QPSK	26805	825.5	1 / 7	24.38
		26915	836.5	1 / 14	24.43
		27025	847.5	1 / 7	24.36
	16QAM	26805	825.5	1 / 14	24.59
		26915	836.5	1 / 14	24.77
		27025	847.5	1 / 7	24.61
1.4 MHz	QPSK	26797	824.7	1 / 5	24.40
		26915	836.5	1 / 5	24.46
		27033	848.3	1 / 5	24.46
	16QAM	26797	824.7	1 / 5	24.63
		26915	836.5	1 / 5	24.66
		27033	848.3	1 / 5	24.71

Table 7-2. Conducted Power Output Data (LTE Band 5 – Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth	Modulation	Channel	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]
20 MHz	$\pi/2$ BPSK	166800	834.0	1 / 53	24.27
		167300	836.5	1 / 104	24.26
		167800	839.0	1 / 53	24.25
	QPSK	166800	834.0	1 / 104	24.27
		167300	836.5	1 / 104	24.23
		167800	839.0	1 / 53	24.25
	16-QAM	166800	834.0	1 / 104	23.28
		167300	836.5	1 / 104	23.26
		167800	839.0	1 / 104	23.23
15 MHz	$\pi/2$ BPSK	166300	831.5	1 / 39	24.37
		167300	836.5	1 / 39	24.42
		168300	841.5	1 / 77	24.43
	QPSK	166300	831.5	1 / 77	24.27
		167300	836.5	1 / 77	24.33
		168300	841.5	1 / 77	24.24
	16-QAM	166300	831.5	1 / 77	23.28
		167300	836.5	1 / 77	23.32
		168300	841.5	1 / 77	23.35
10 MHz	$\pi/2$ BPSK	165800	829.0	1 / 26	24.30
		167300	836.5	1 / 50	24.36
		168800	844.0	1 / 26	24.26
	QPSK	165800	829.0	1 / 26	24.25
		167300	836.5	1 / 50	24.35
		168800	844.0	1 / 26	24.39
	16-QAM	165800	829.0	1 / 50	23.43
		167300	836.5	1 / 50	23.25
		168800	844.0	1 / 50	23.15
5 MHz	$\pi/2$ BPSK	165300	826.5	1 / 12	24.50
		167300	836.5	1 / 23	24.49
		169300	846.5	1 / 23	24.42
	QPSK	165300	826.5	1 / 12	24.45
		167300	836.5	1 / 12	24.50
		169300	846.5	1 / 23	24.54
	16-QAM	165300	826.5	1 / 23	23.22
		167300	836.5	1 / 23	23.20
		169300	846.5	1 / 23	23.36

Table 7-3. Conducted Power Output Data (NR Band n5 – Ant1)

FCC ID: A3LSMS948JPN	PART 22 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.

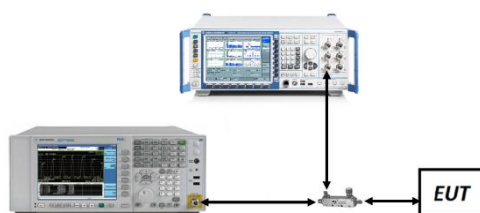


Figure 7-2. Test Instrument & Measurement Setup

Test Notes

None.

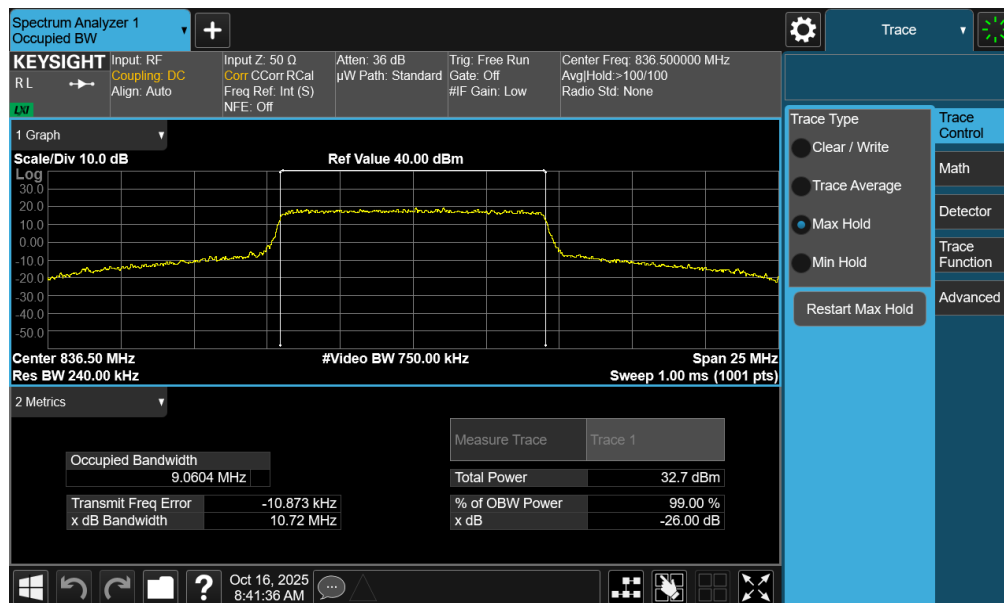
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Mode	Bandwidth	Modulation	OBW [MHz]
GSM-Cell	N/A	GMSK	0.248
GSM-Cell Edge		8-PSK	0.238
WCDMA-Cell		Spread Spectrum	4.16
LTE-B5	10MHz	QPSK	9.06
		16QAM	9.07
	5 MHz	QPSK	4.56
		16QAM	4.56
	3 MHz	QPSK	2.74
		16QAM	2.74
	1.4 MHz	QPSK	1.11
		16QAM	1.11
NR-n5	20 MHz	$\pi/2$ BPSK	17.99
		QPSK	19.05
		16QAM	19.03
	15 MHz	$\pi/2$ BPSK	13.51
		QPSK	14.18
		16QAM	14.22
	10 MHz	$\pi/2$ BPSK	9.01
		QPSK	9.36
		16QAM	9.35
	5 MHz	$\pi/2$ BPSK	4.55
		QPSK	4.54
		16QAM	4.52

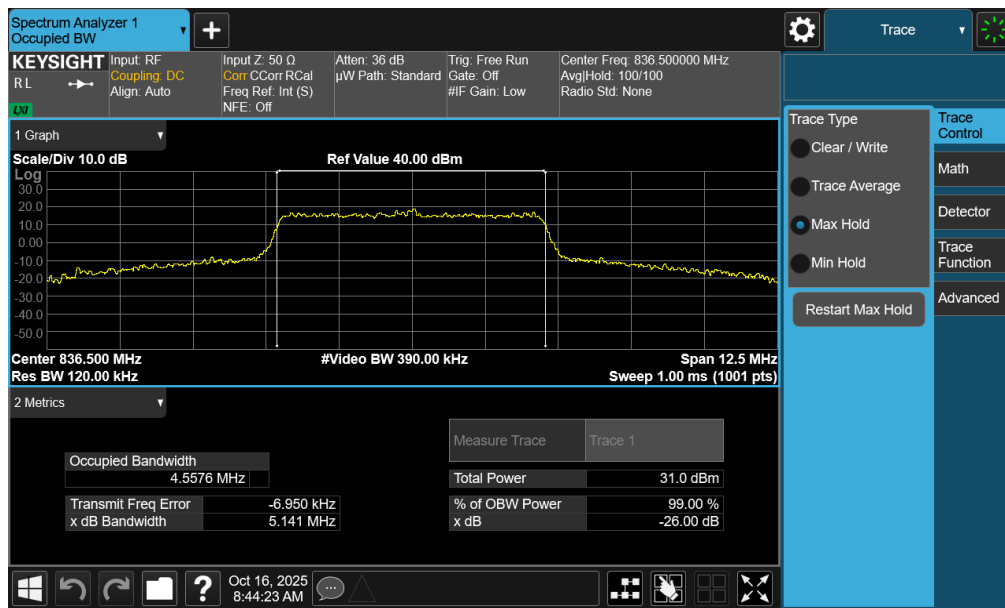
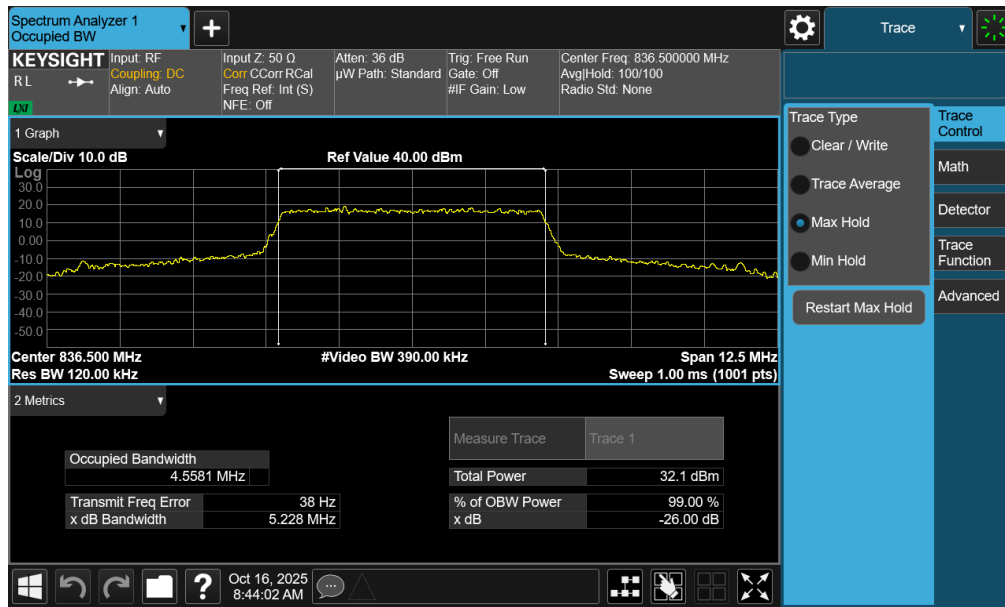
Table 7-4. Occupied Bandwidth Results - Ant1

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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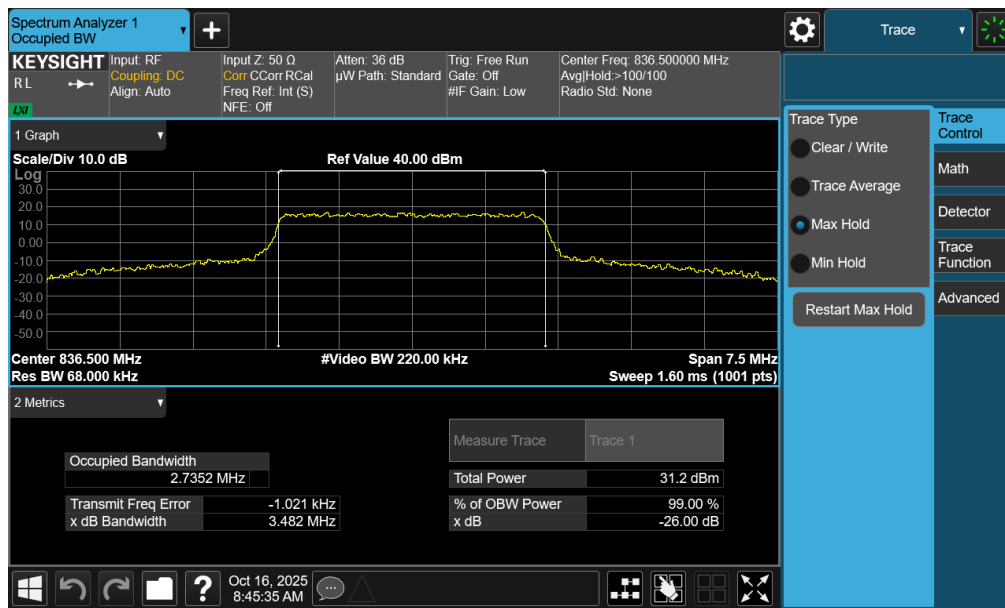
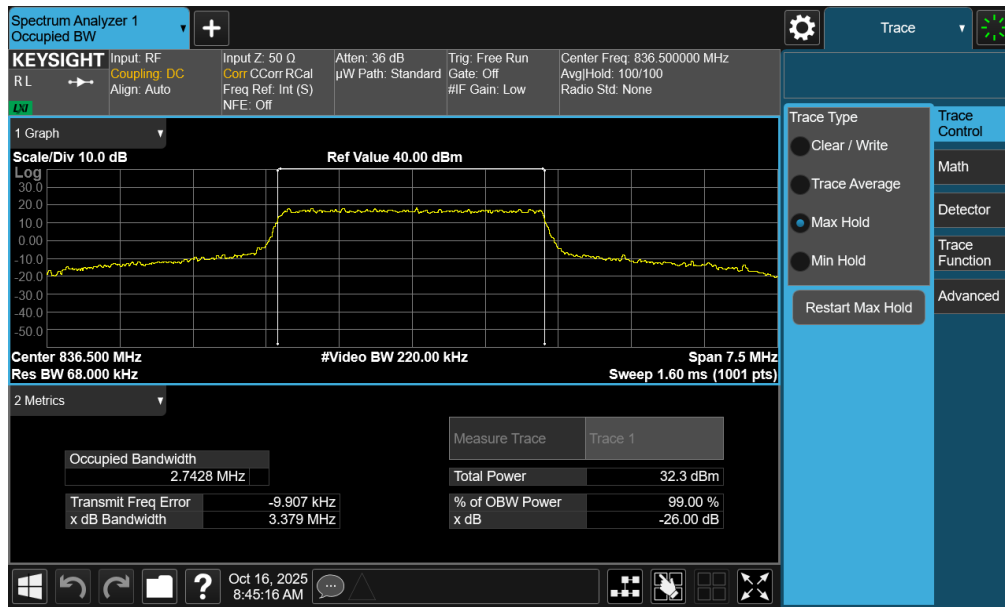
LTE Band 5 – Ant1



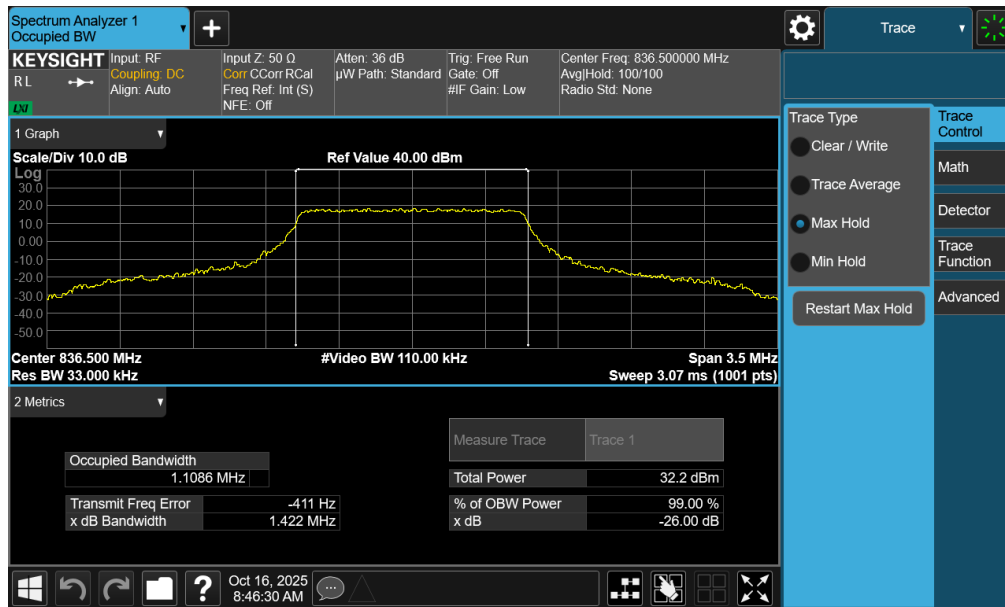
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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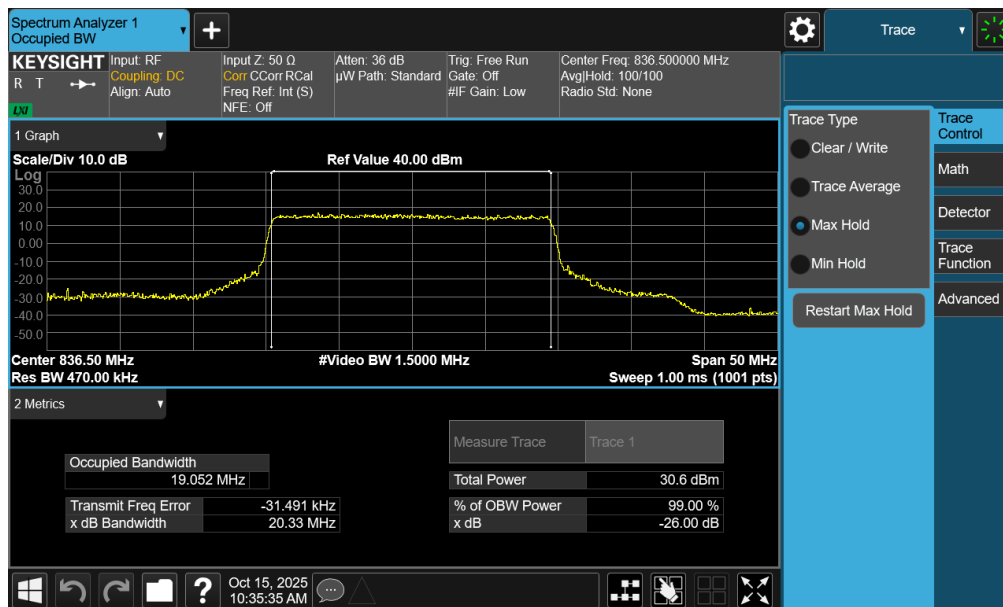
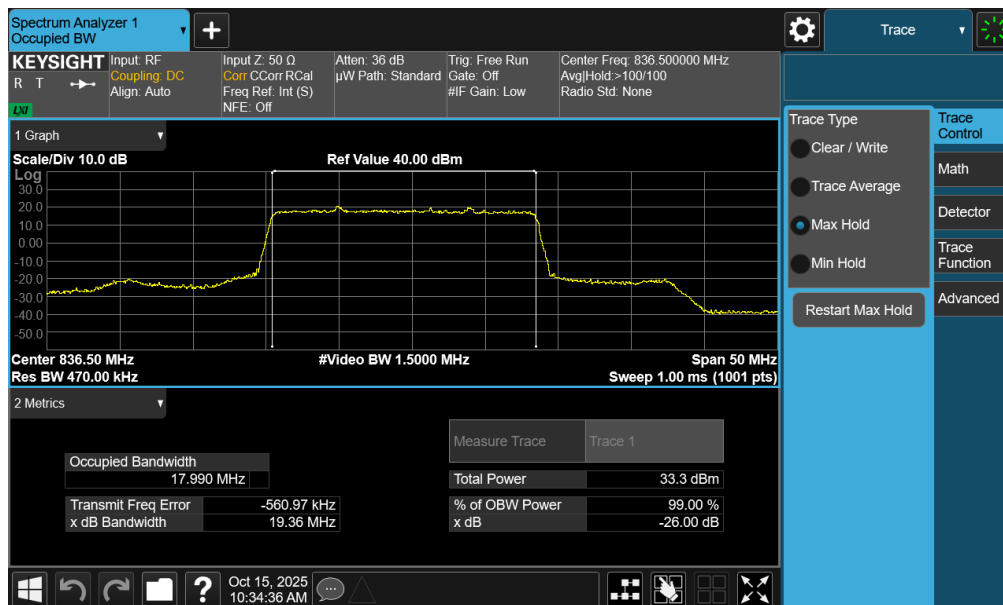
Plot 7-7. Occupied Bandwidth Plot (LTE Band 5 - 1.4MHz QPSK - Full RB - Ant1)



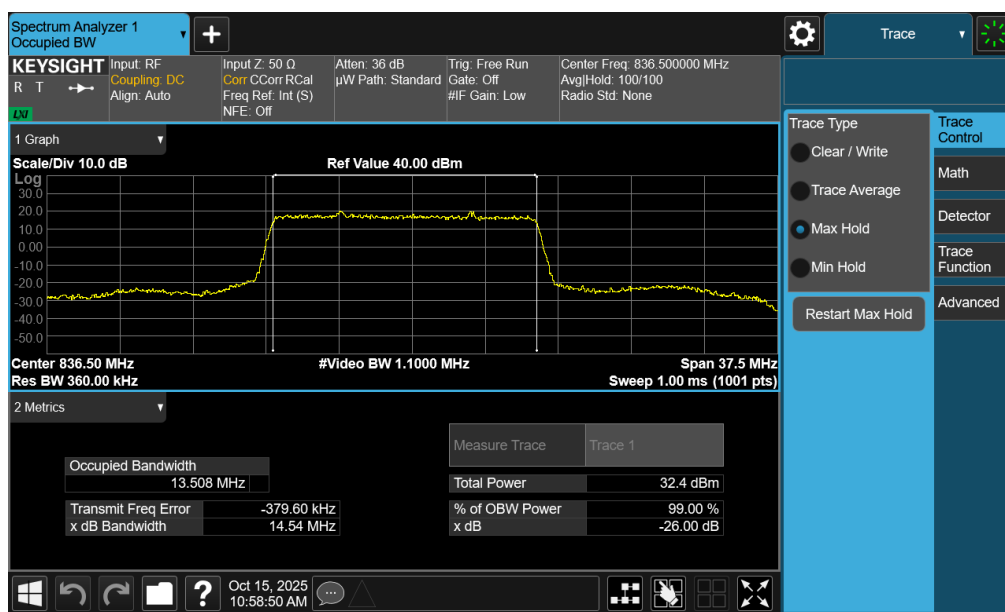
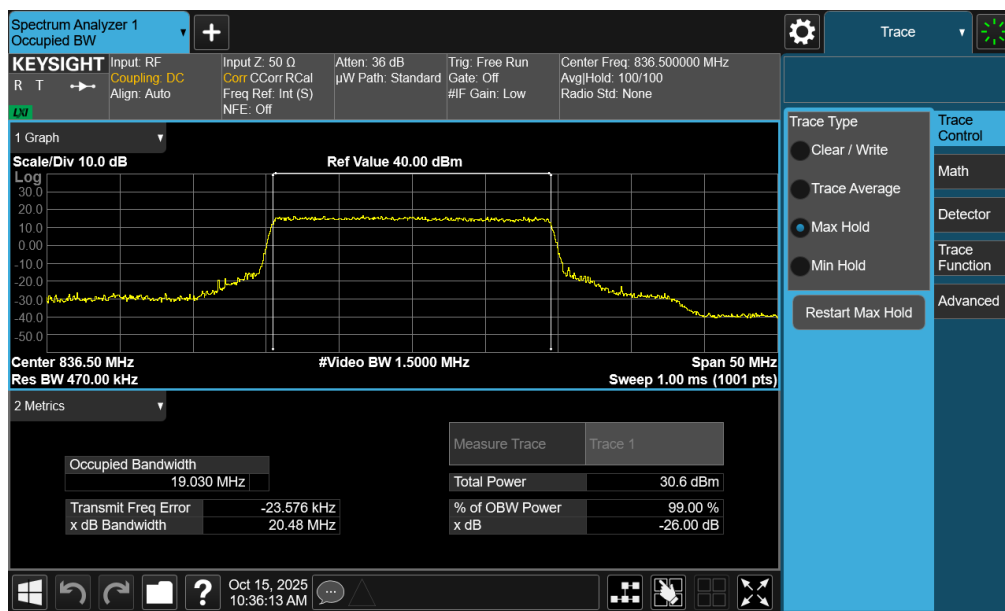
Plot 7-8. Occupied Bandwidth Plot (LTE Band 5 - 1.4MHz 16-QAM - Full RB - Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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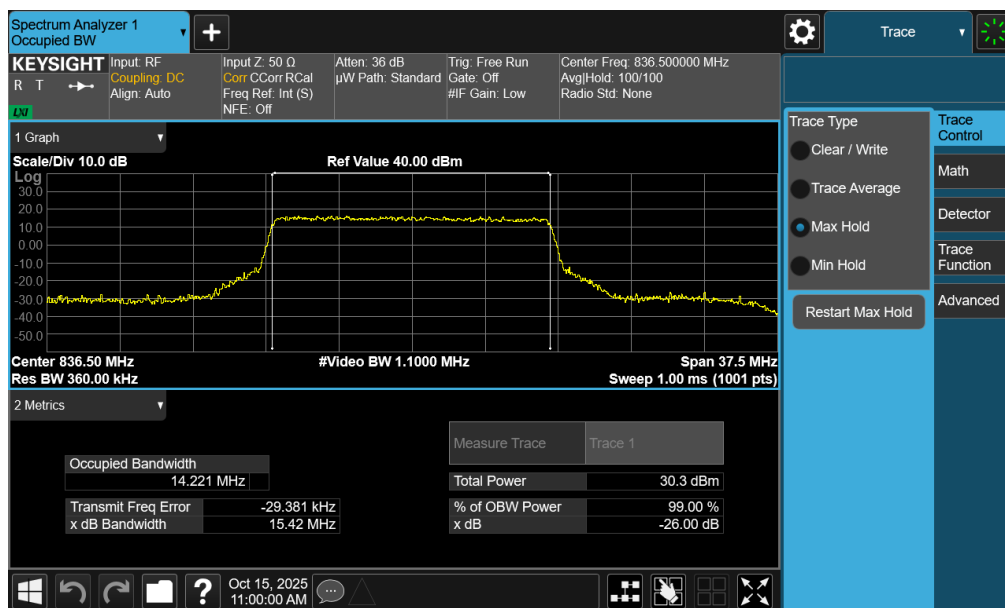
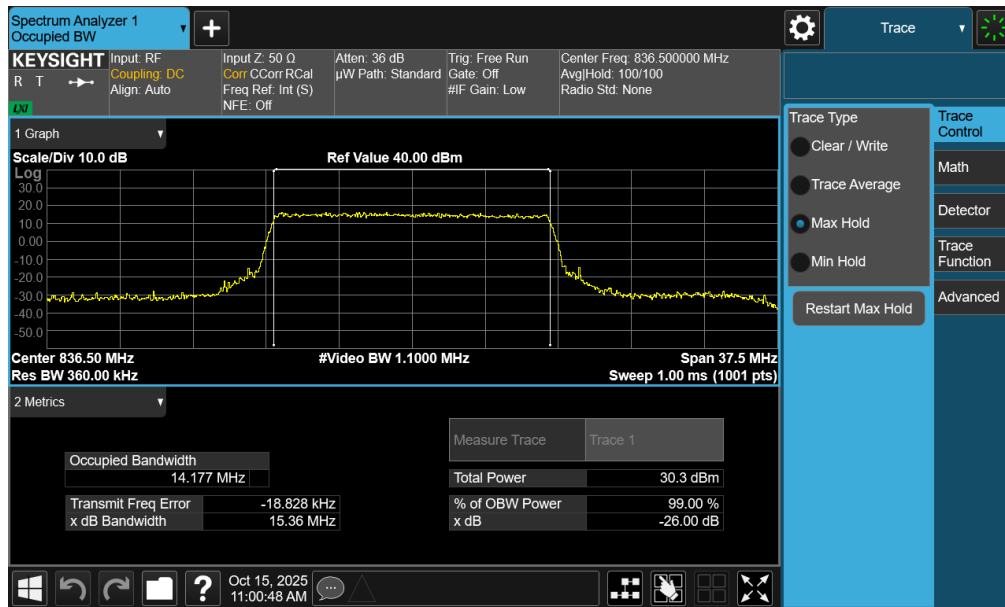
NR Band n5 – Ant1



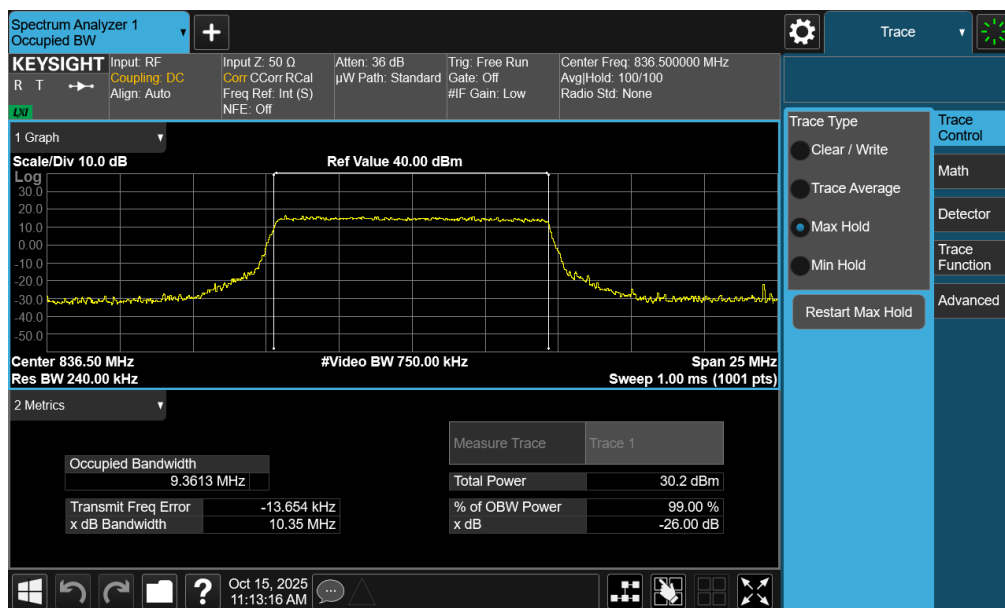
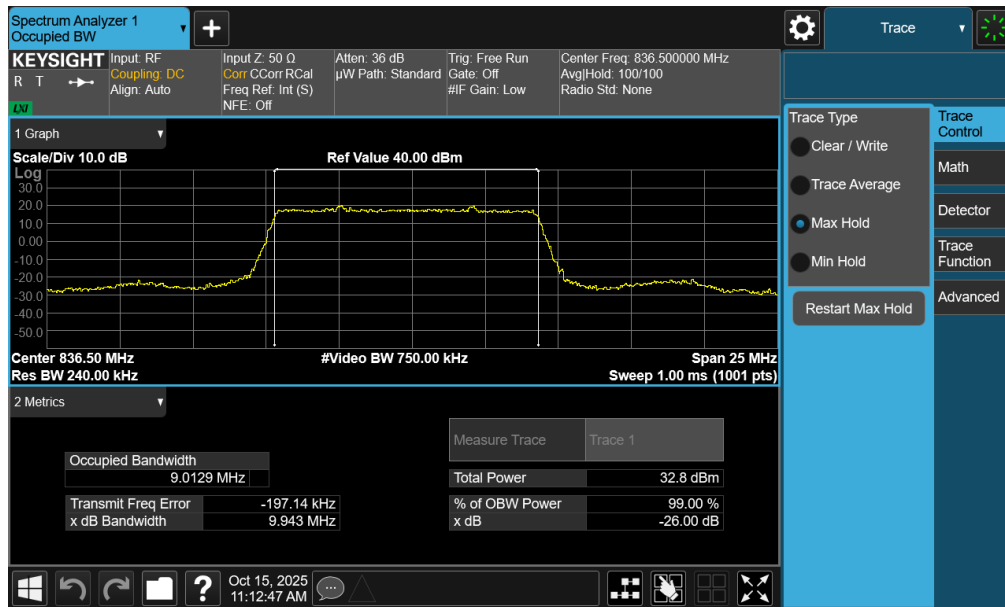
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Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 24 of 158



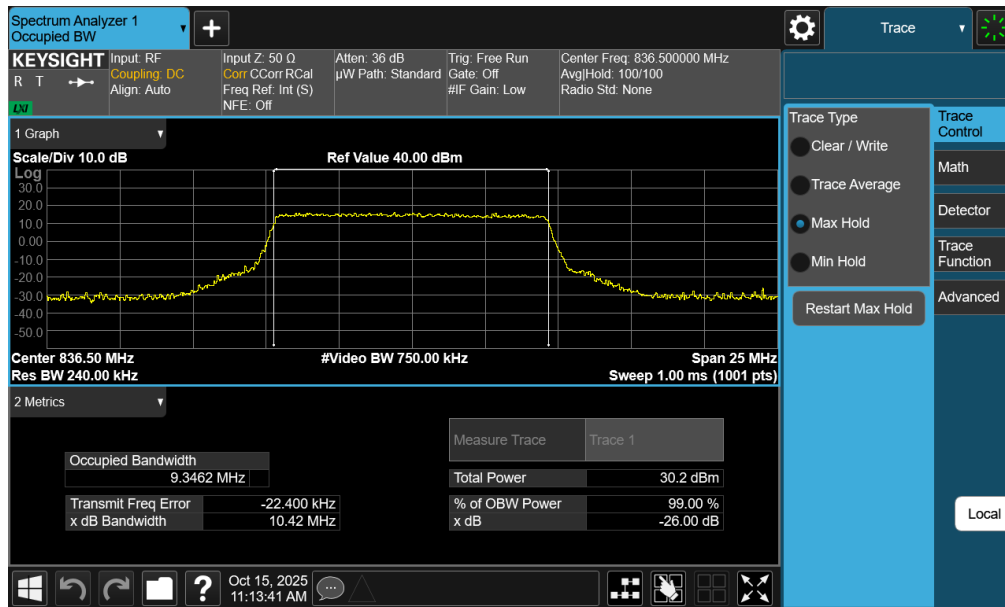
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Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 25 of 158



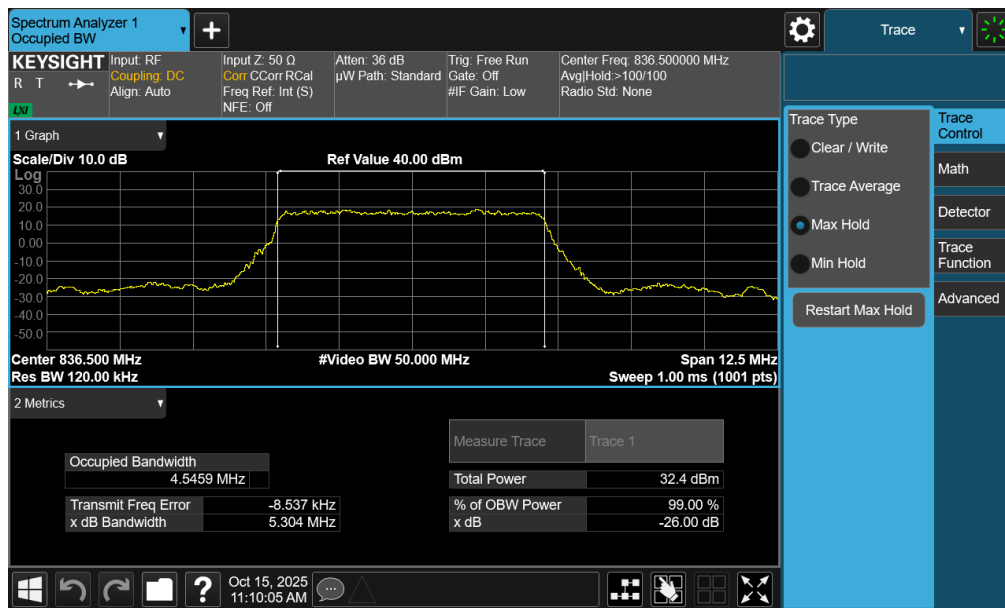
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 26 of 158



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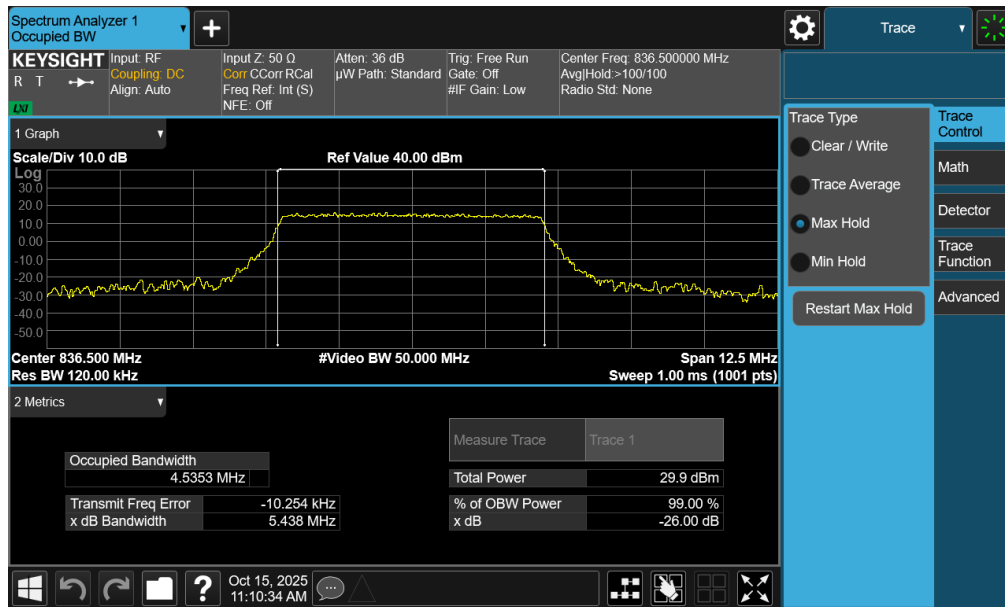


Plot 7-17. Occupied Bandwidth Plot (NR Band n5 - 10MHz 16-QAM - Full RB - Ant1)

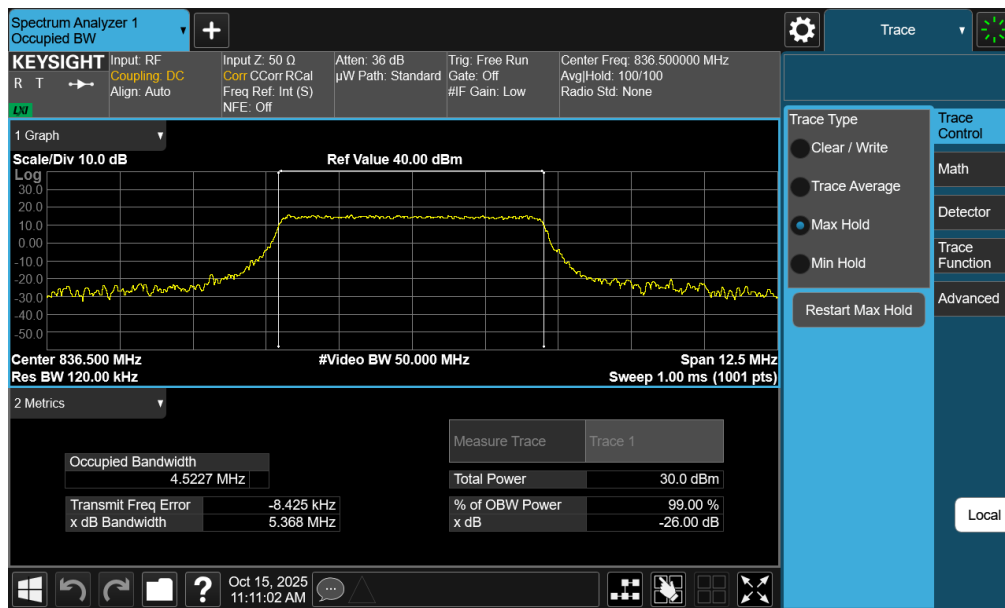


Plot 7-18. Occupied Bandwidth Plot (NR Band n5 - 5MHz $\pi/2$ BPSK - Full RB - Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-19. Occupied Bandwidth Plot (NR Band n5 - 5MHz QPSK - Full RB - Ant1)



Plot 7-20. Occupied Bandwidth Plot (NR Band n5 - 5MHz 16-QAM - Full RB - Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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GPRS Cell – Ant1



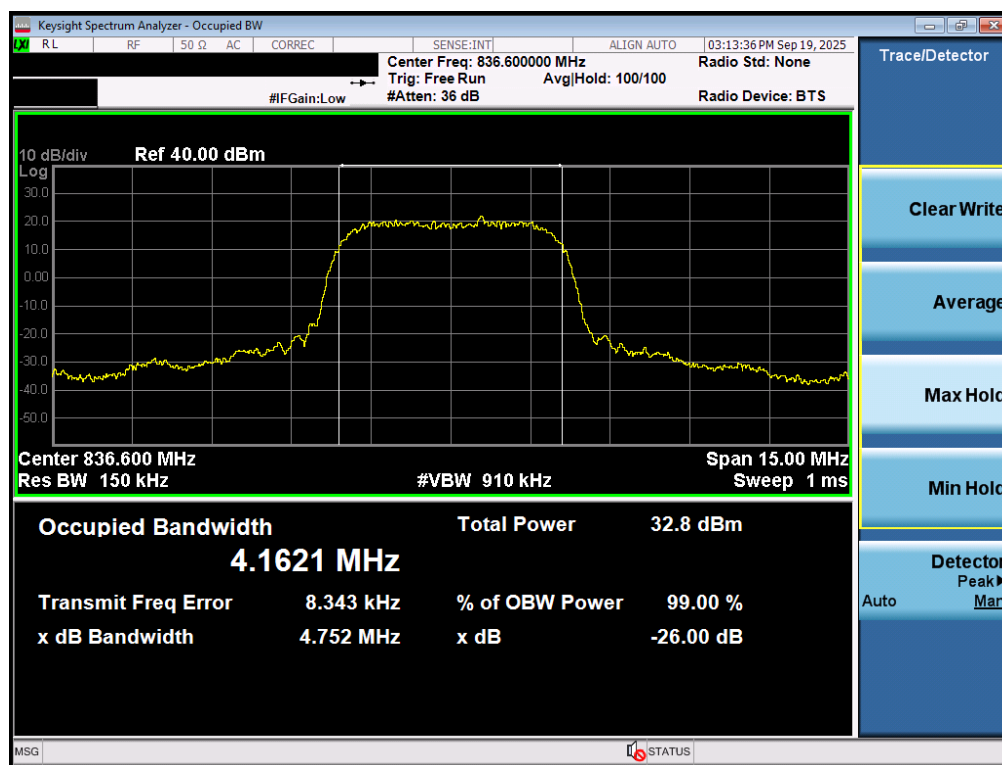
Plot 7-21. Occupied Bandwidth Plot (GPRS, Ch. 190 – Ant1)



Plot 7-22. Occupied Bandwidth Plot (EDGE, Ch. 190 – Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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WCDMA Cell – Ant1



Plot 7-23. Occupied Bandwidth Plot (WCDMA, Ch. 4183 – Ant1)

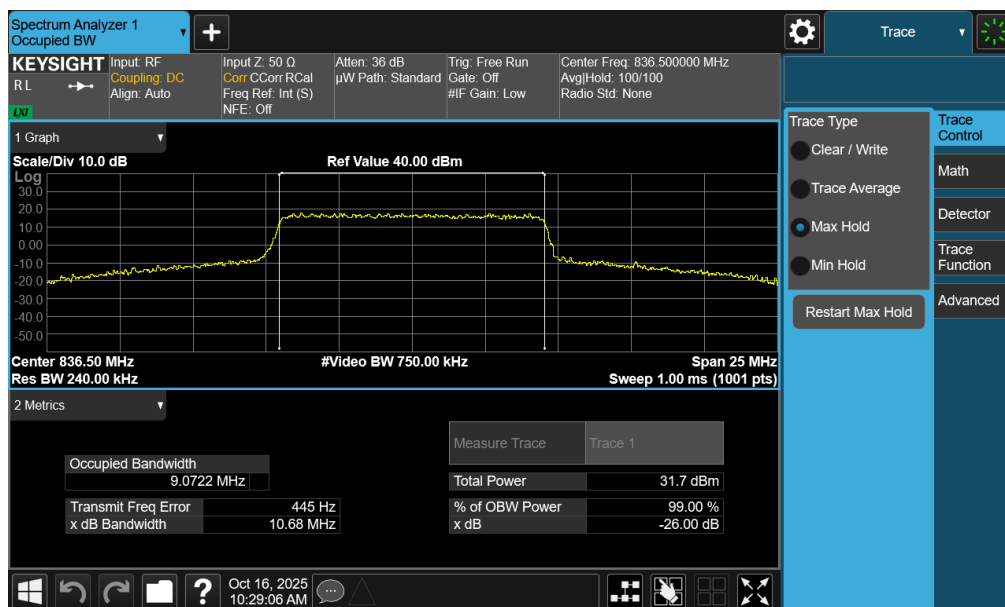
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Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 31 of 158

Mode	Bandwidth	Modulation	OBW [MHz]
GSM-Cell	N/A	GMSK	0.244
GSM-Cell Edge		8-PSK	0.244
WCDMA-Cell		Spread Spectrum	4.18
LTE-B5	10MHz	QPSK	9.07
		16QAM	9.07
	5 MHz	QPSK	4.55
		16QAM	4.56
	3 MHz	QPSK	2.74
		16QAM	2.74
	1.4 MHz	QPSK	1.11
		16QAM	1.11
NR-n5	20 MHz	$\pi/2$ BPSK	18.00
		QPSK	19.05
		16QAM	19.04
	15 MHz	$\pi/2$ BPSK	13.53
		QPSK	14.20
		16QAM	14.21
	10 MHz	$\pi/2$ BPSK	9.02
		QPSK	9.37
		16QAM	9.37
	5 MHz	$\pi/2$ BPSK	4.53
		QPSK	4.53
		16QAM	4.54

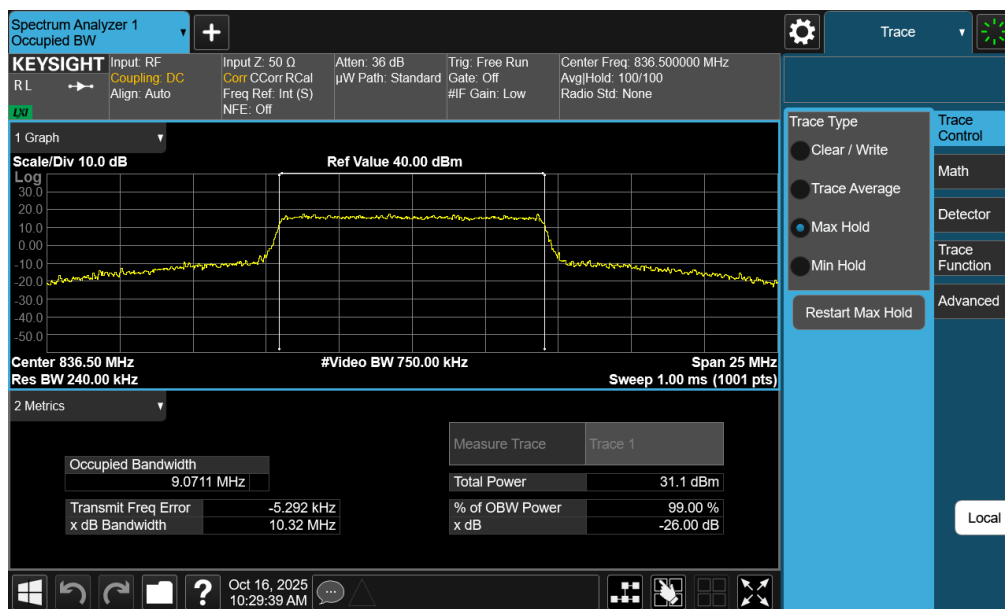
Table 7-5. Occupied Bandwidth Results – Ant2

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 32 of 158

LTE Band 5 – Ant2

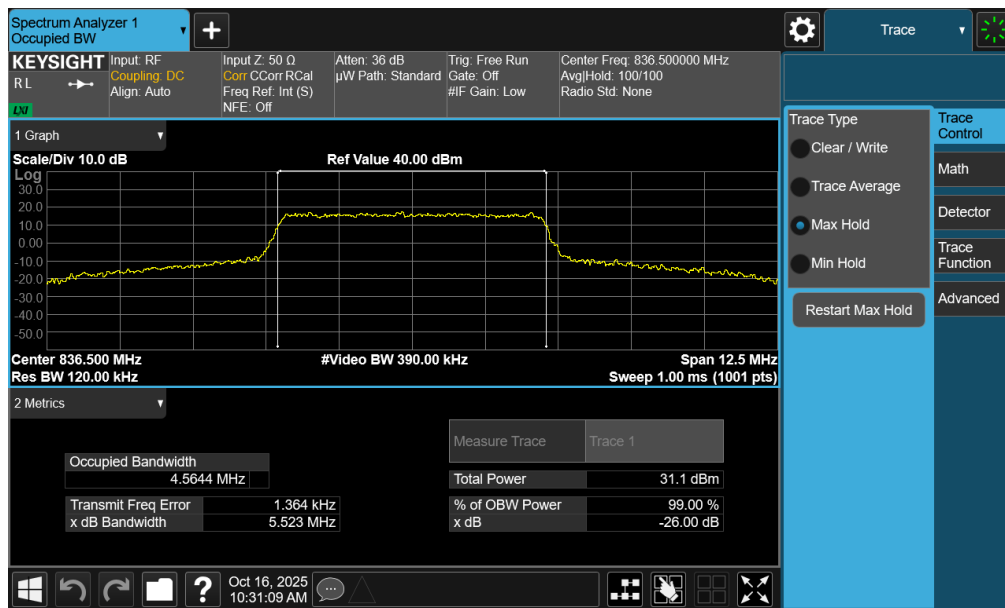
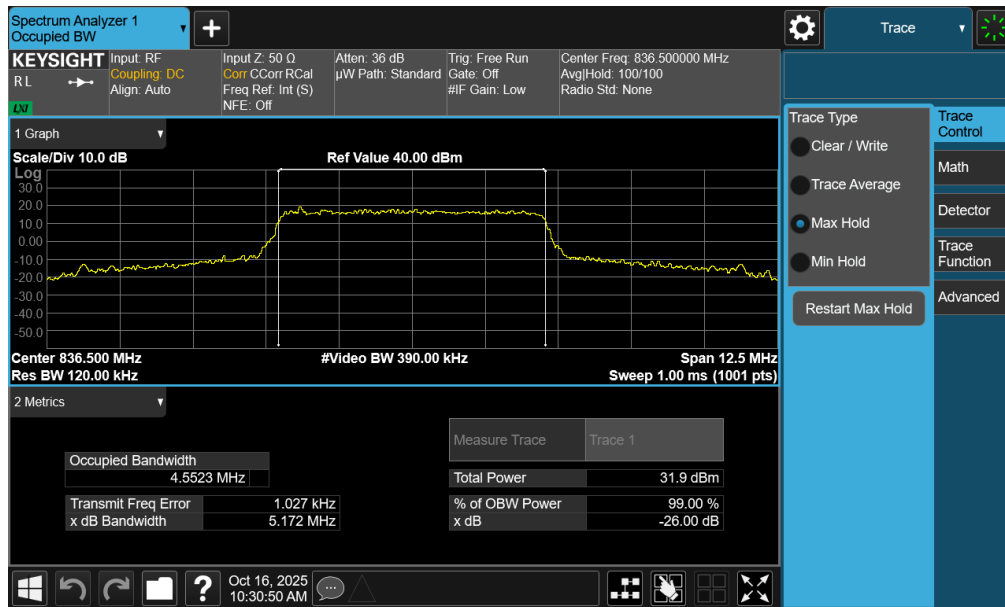


Plot 7-24. Occupied Bandwidth Plot (LTE Band 5 - 10MHz QPSK - Full RB - Ant2)

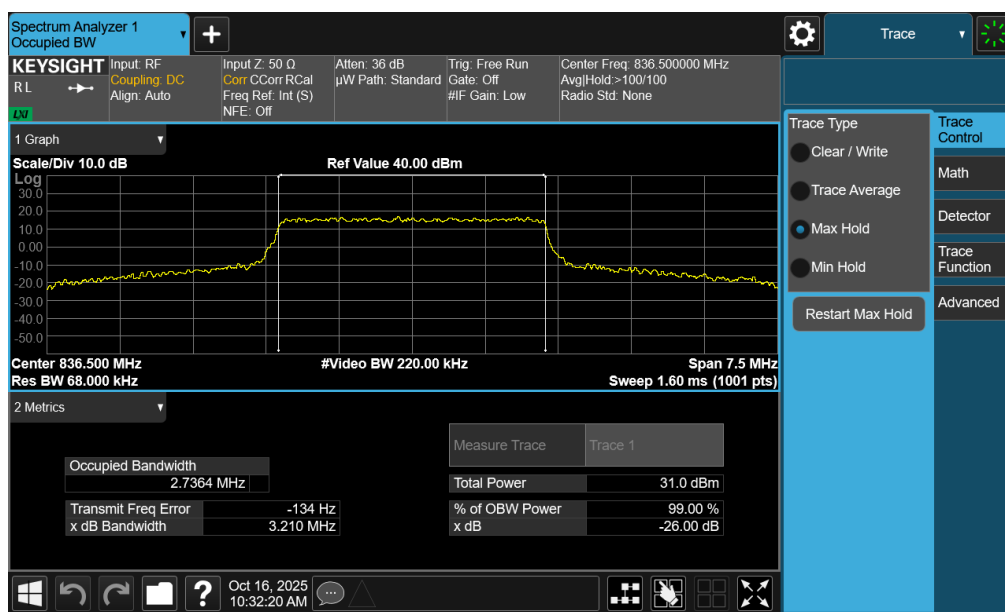
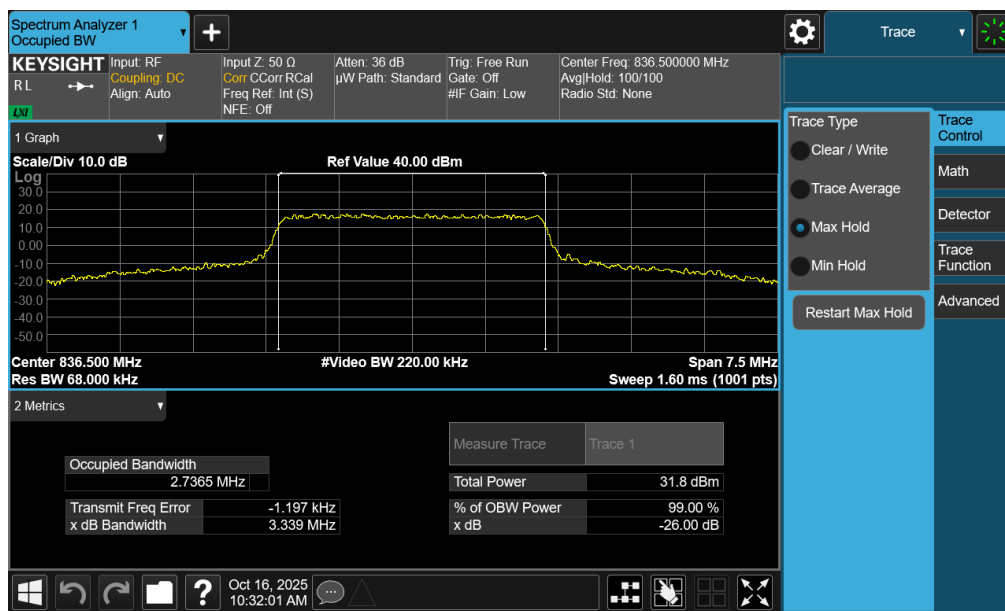


Plot 7-25. Occupied Bandwidth Plot (LTE Band 5 - 10MHz 16-QAM - Full RB - Ant2)

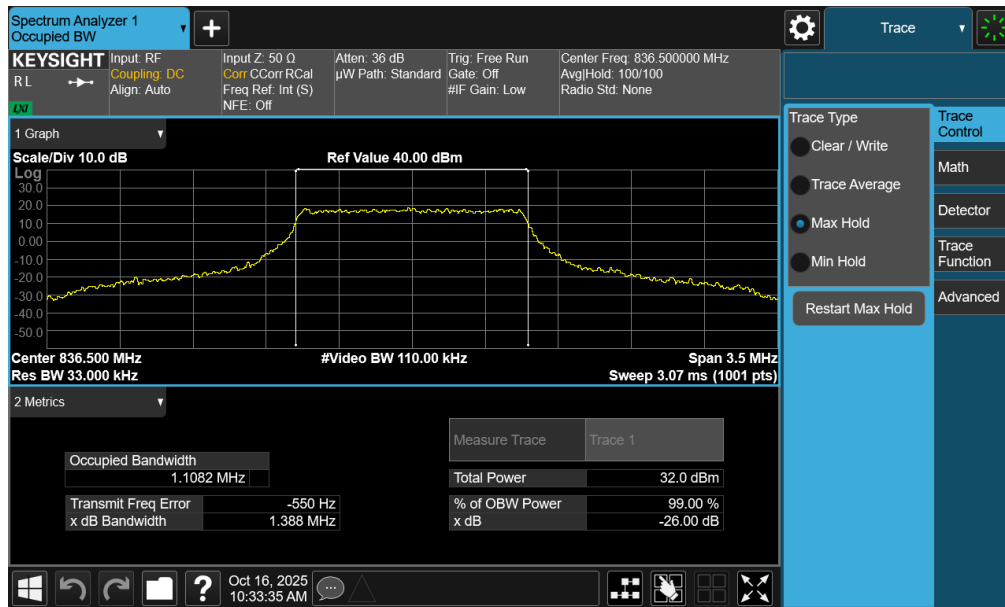
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 33 of 158



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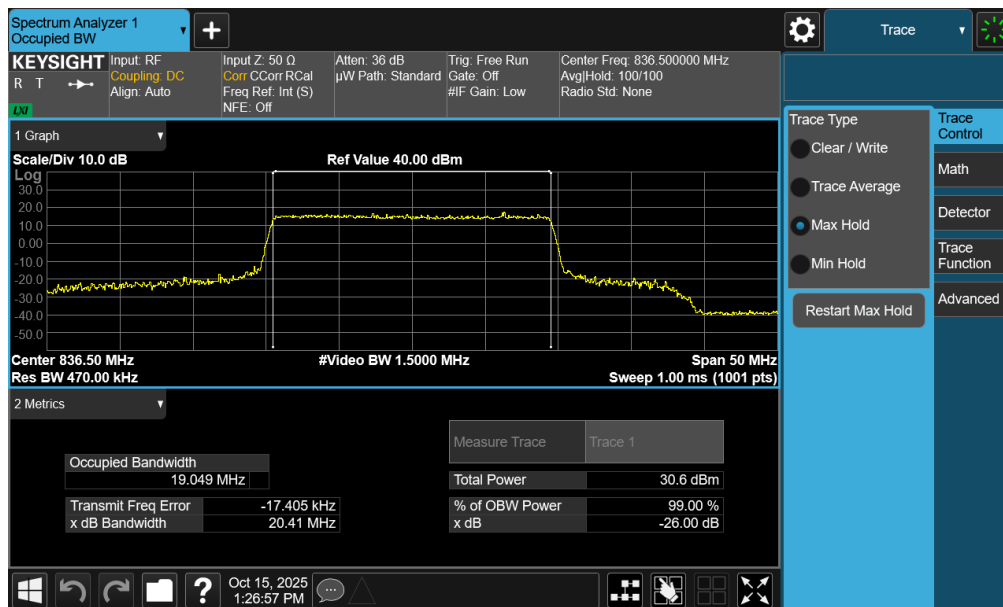
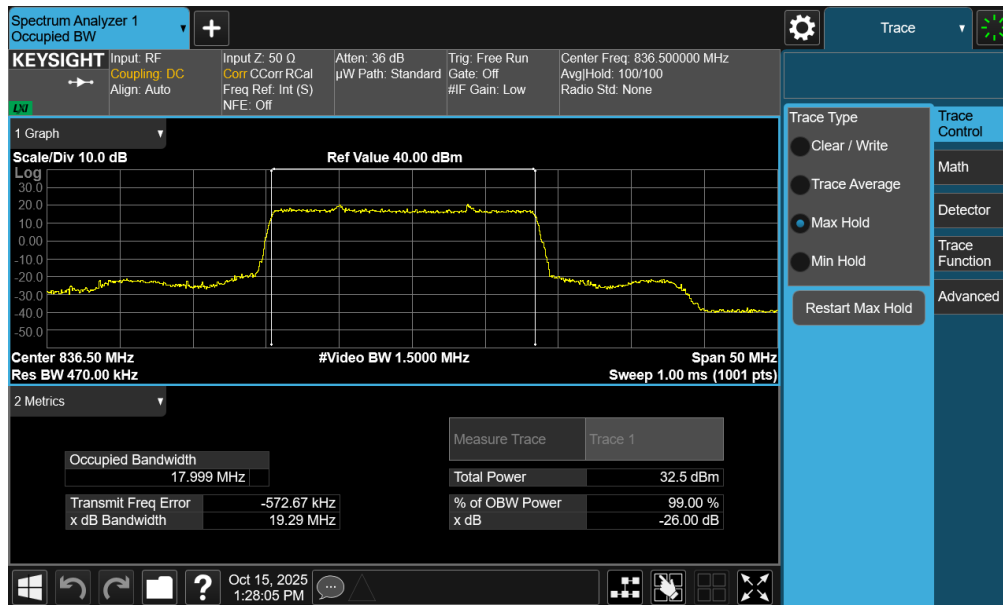
Plot 7-30. Occupied Bandwidth Plot (LTE Band 5 - 1.4MHz QPSK - Full RB - Ant2)



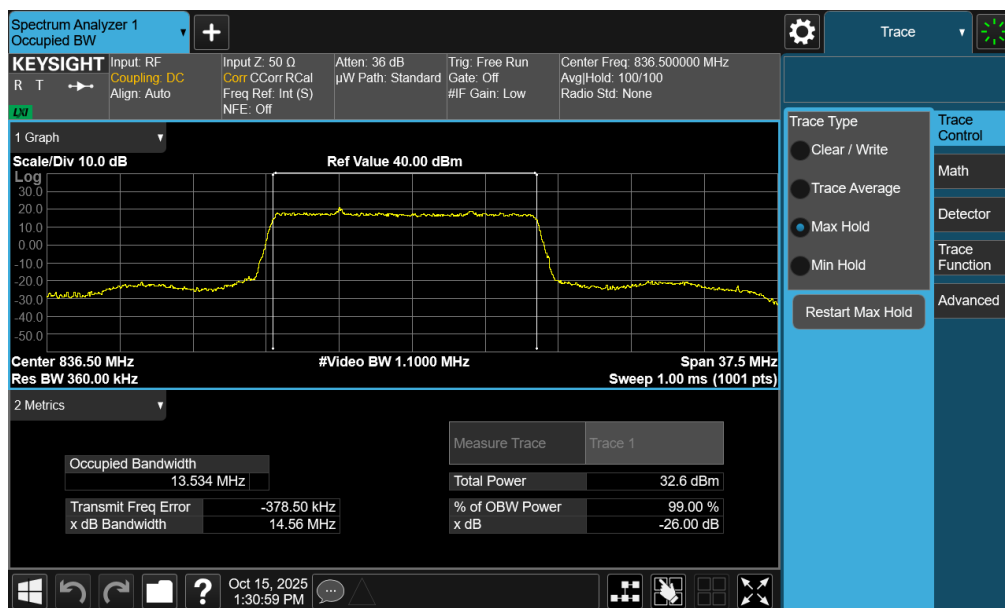
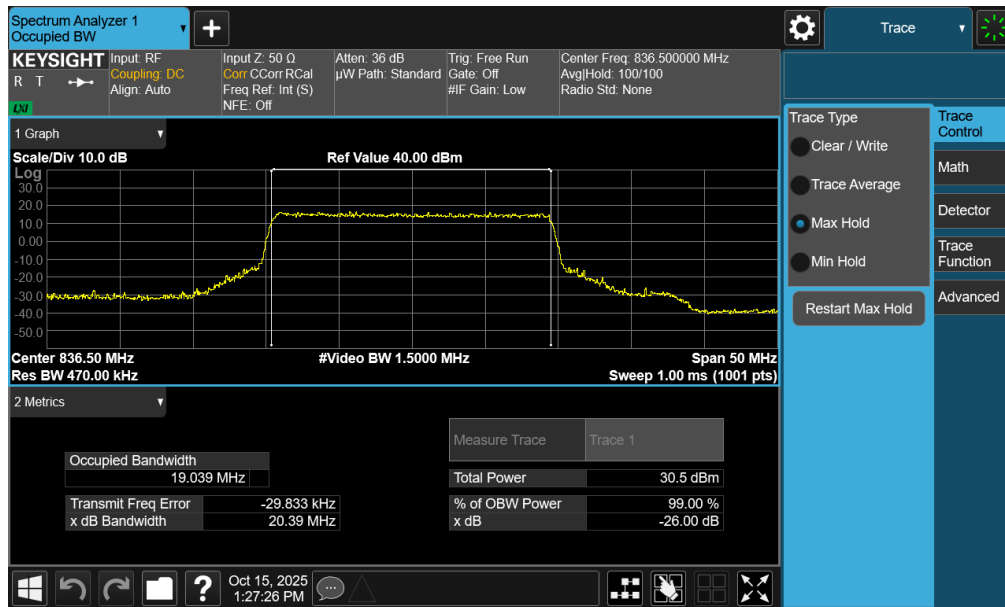
Plot 7-31. Occupied Bandwidth Plot (LTE Band 5 - 1.4MHz 16-QAM - Full RB - Ant2)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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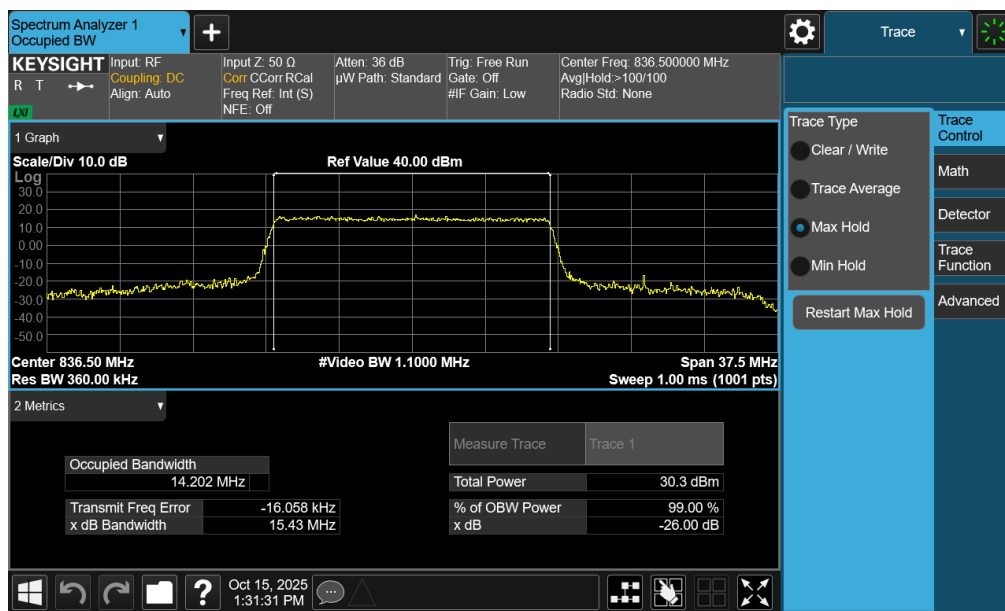
NR Band n5 – Ant2



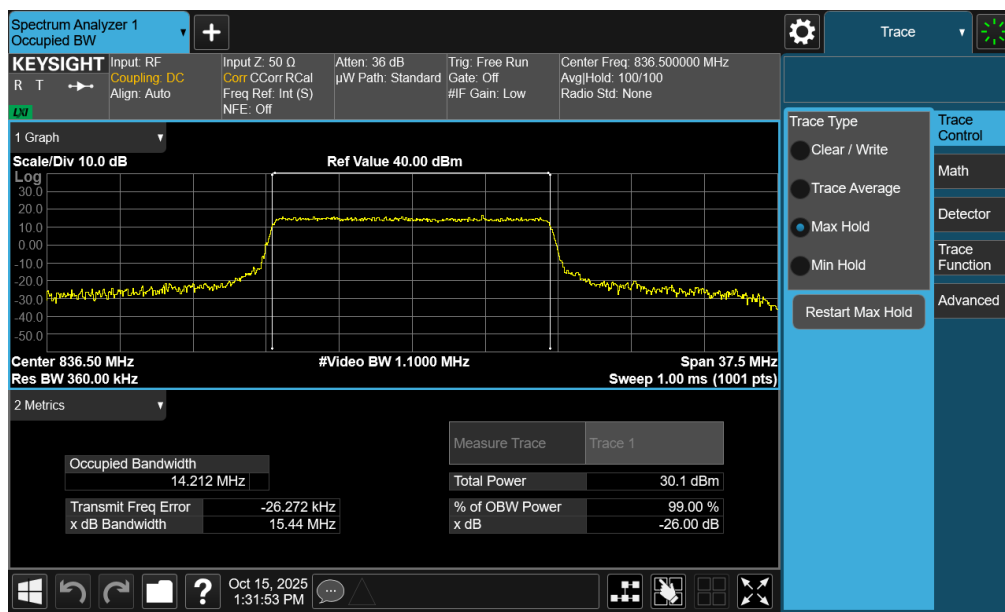
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 37 of 158



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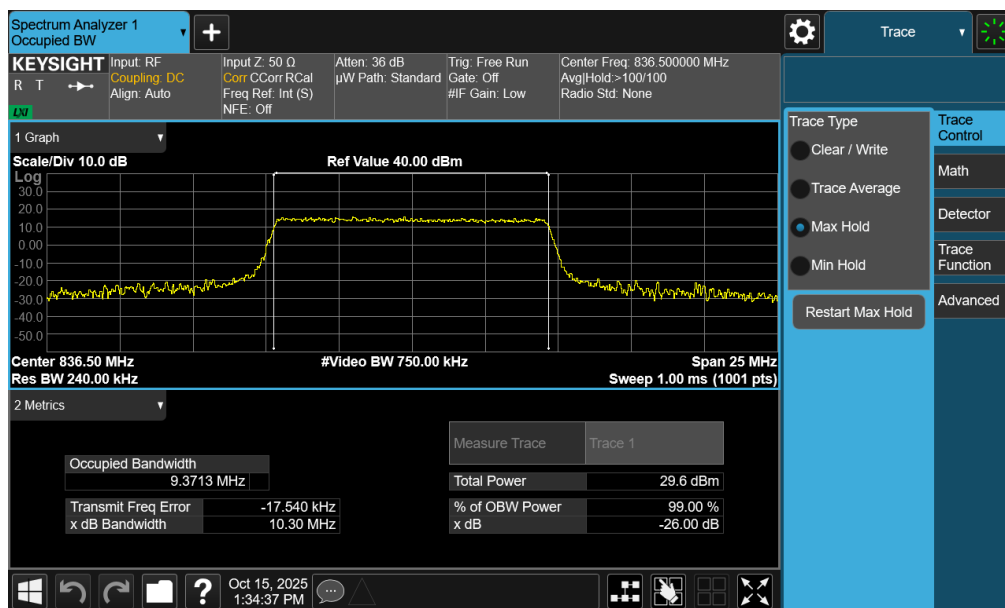
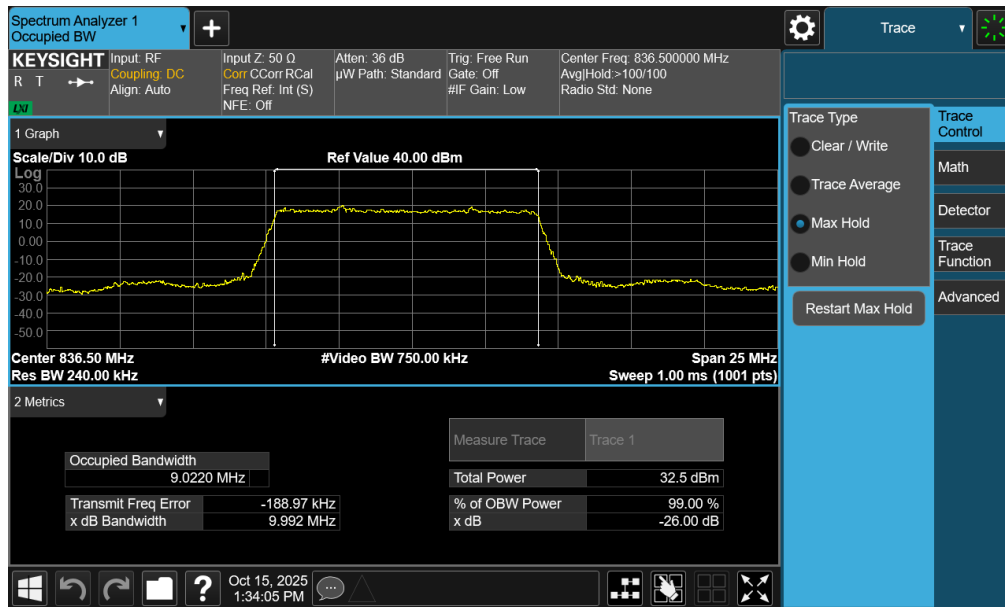


Plot 7-36. Occupied Bandwidth Plot (NR Band n5 - 15MHz QPSK - Full RB - Ant2)

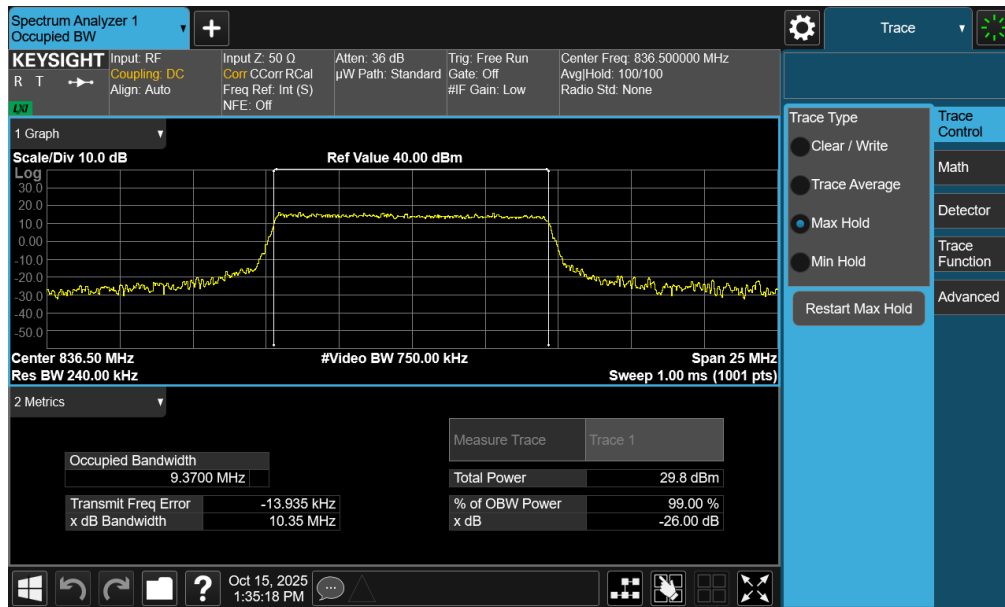


Plot 7-37. Occupied Bandwidth Plot (NR Band n5 - 15MHz 16-QAM - Full RB - Ant2)

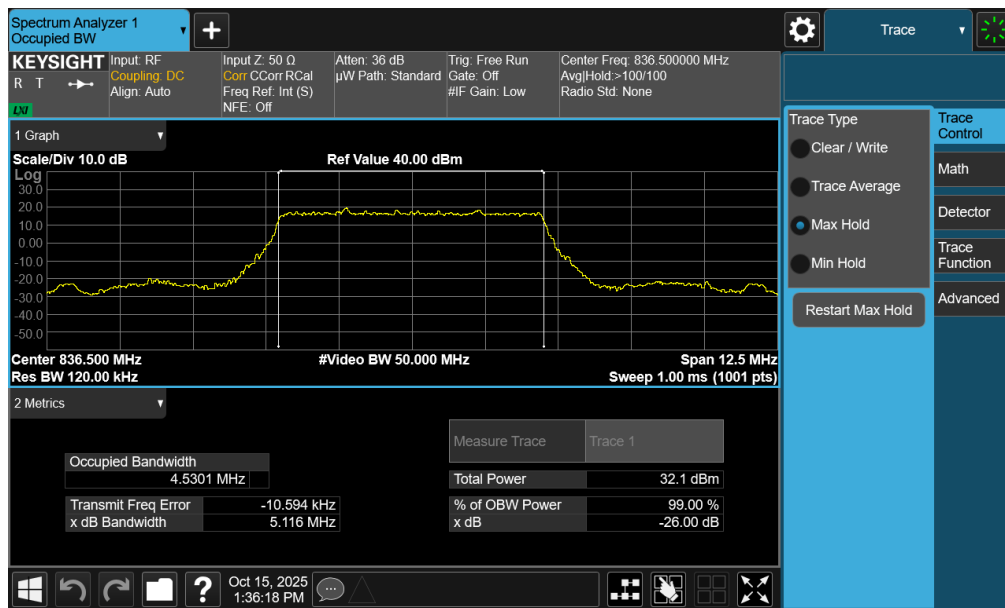
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 39 of 158



FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 40 of 158

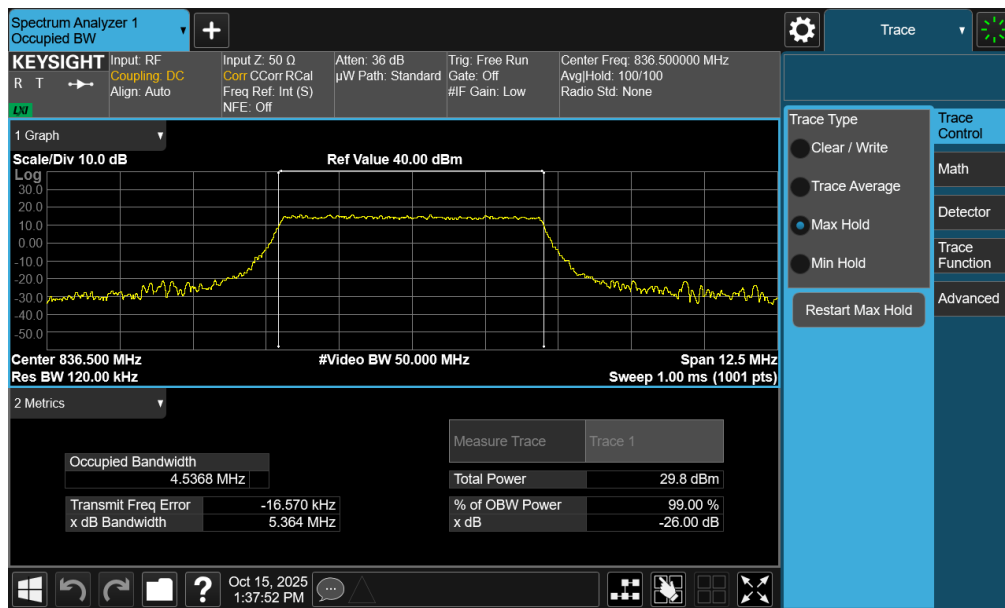
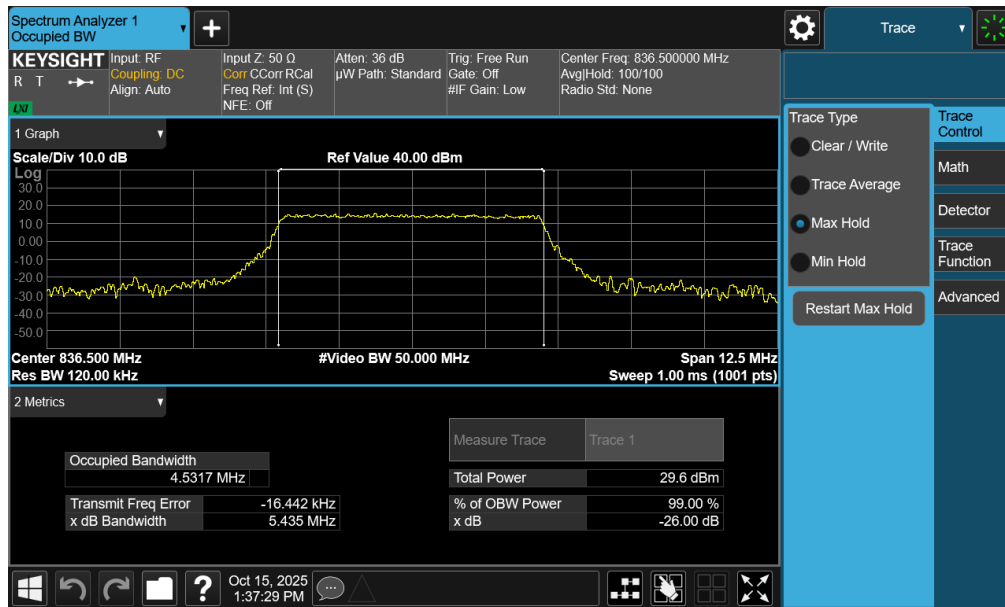


Plot 7-40. Occupied Bandwidth Plot (NR Band n5 - 10MHz 16-QAM - Full RB - Ant2)



Plot 7-41. Occupied Bandwidth Plot (NR Band n5 - 5MHz $\pi/2$ BPSK - Full RB - Ant2)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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GPRS Cell – Ant2



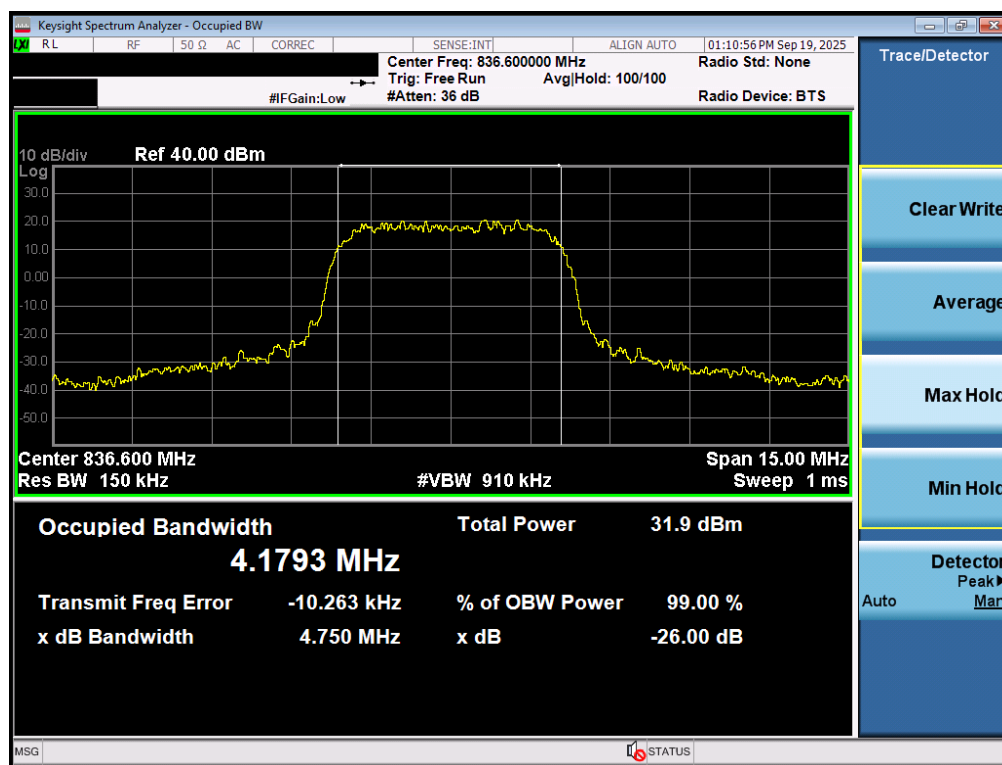
Plot 7-44. Occupied Bandwidth Plot (GPRS, Ch. 190 – Ant2)



Plot 7-45. Occupied Bandwidth Plot (EDGE, Ch. 190 – Ant2)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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WCDMA Cell – Ant2



Plot 7-46. Occupied Bandwidth Plot (WCDMA, Ch. 4183 – Ant2)

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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 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 minimum permissible attenuation level of any spurious emission is $43 + 10 \log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

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 10GHz (separated into at least two plots per channel)
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.

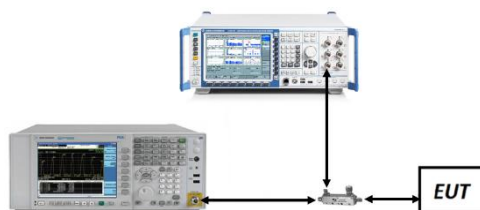


Figure 7-3. Test Instrument & Measurement Setup

Test Notes

1. Per Part 22 and RSS-132, compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth 100 kHz or greater for measurements below 1GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The 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 emission 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.

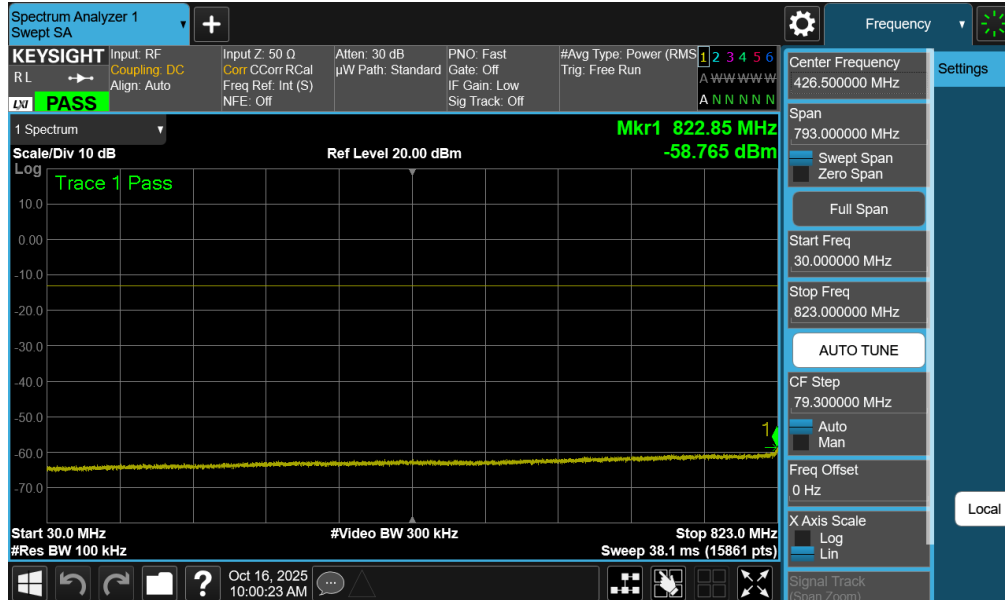
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
GSM-Cell	250kHz	Low	30.0 - 823.0	-39.729	-13.0	-26.73
		Low	849.0 - 1000.0	-51.44	-13.0	-38.44
		Low	1000.0 - 10000.0	-27.53	-13.0	-14.53
		Mid	30.0 - 824.0	-50.54	-13.0	-37.54
		Mid	849.0 - 1000.0	-50.98	-13.0	-37.98
		Mid	1000.0 - 10000.0	-27.44	-13.0	-14.44
		High	30.0 - 824.0	-51.29	-13.0	-38.29
		High	850.0 - 1000.0	-39.52	-13.0	-26.52
		High	1000.0 - 10000.0	-28.31	-13.0	-15.31
WCDMA-Cell	5MHz	Low	30.0 - 823.0	-37.29	-13.0	-24.29
		Low	849.0 - 1000.0	-60.06	-13.0	-47.06
		Low	1000.0 - 10000.0	-42.31	-13.0	-29.31
		Mid	30.0 - 824.0	-52.99	-13.0	-39.99
		Mid	849.0 - 1000.0	-54.74	-13.0	-41.74
		Mid	1000.0 - 10000.0	-42.28	-13.0	-29.28
		High	30.0 - 824.0	-60.07	-13.0	-47.07
		High	850.0 - 1000.0	-36.30	-13.0	-23.29
		High	1000.0 - 10000.0	-42.20	-13.0	-29.20
LTE-B5	10MHz	Low	30.0 - 823.0	-58.77	-13.0	-45.77
		Low	849.0 - 1000.0	-60.61	-13.0	-47.61
		Low	1000.0 - 10000.0	-39.35	-13.0	-26.35
		Mid	30.0 - 824.0	-59.93	-13.0	-46.93
		Mid	849.0 - 1000.0	-59.26	-13.0	-46.26
		Mid	1000.0 - 10000.0	-39.62	-13.0	-26.62
		High	30.0 - 824.0	-60.25	-13.0	-47.25
		High	850.0 - 1000.0	-59.33	-13.0	-46.33
		High	1000.0 - 10000.0	-39.57	-13.0	-26.57
NR-n5	20MHz	Low	30.0 - 824.0	-59.53	-13.0	-46.53
		Low	849.0 - 1000.0	-60.36	-13.0	-47.36
		Low	1000.0 - 10000.0	-39.54	-13.0	-26.54
		Mid	30.0 - 824.0	-59.42	-13.0	-46.42
		Mid	849.0 - 1000.0	-60.25	-13.0	-47.25
		Mid	1000.0 - 10000.0	-36.04	-13.0	-23.04
		High	30.0 - 824.0	-60.33	-13.0	-47.33
		High	849.0 - 1000.0	-59.98	-13.0	-46.98
		High	1000.0 - 10000.0	-38.91	-13.0	-25.91

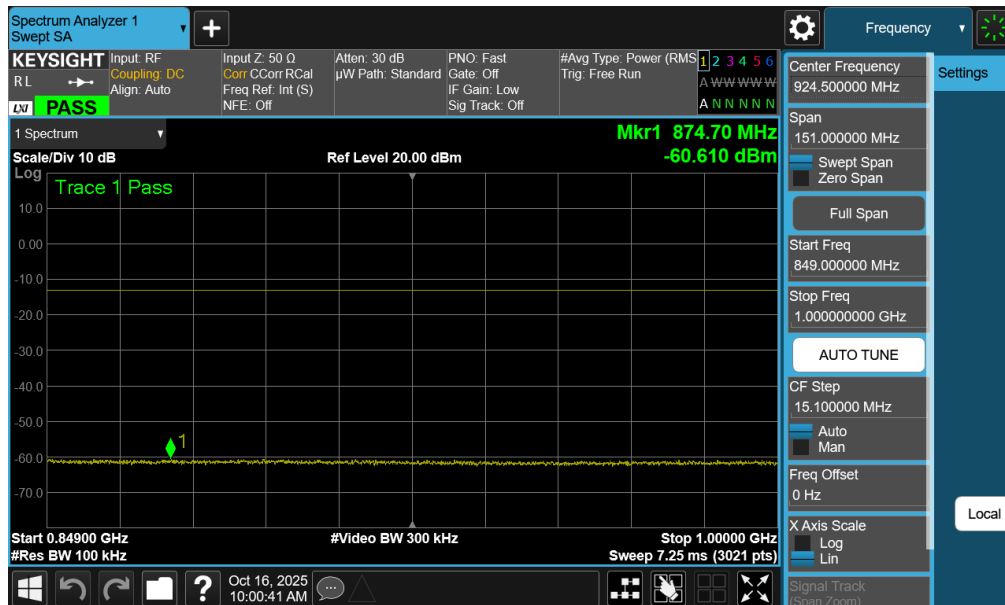
Table 7-6. Conducted Emission Test Results - Ant1

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 5 – Ant1

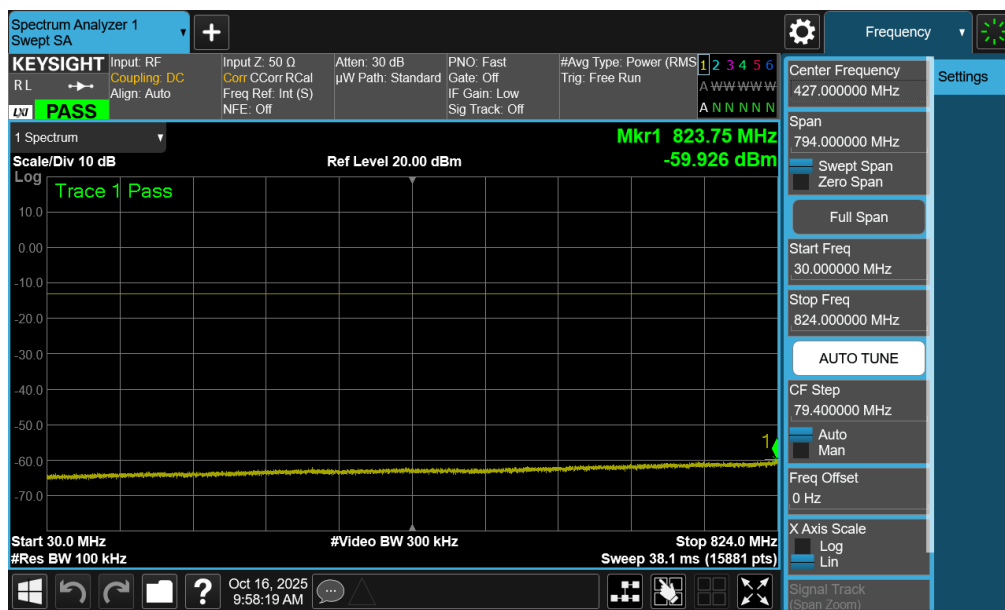
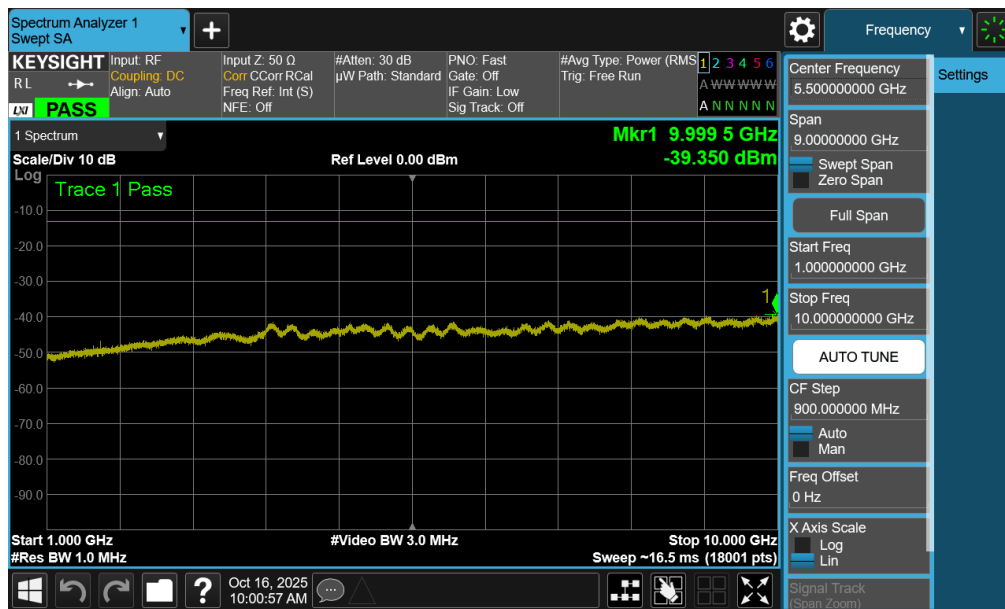


Plot 7-47. Conducted Spurious Plot (LTE Band 5 - 10MHz QPSK – 1 RB - Low Channel – Ant1)

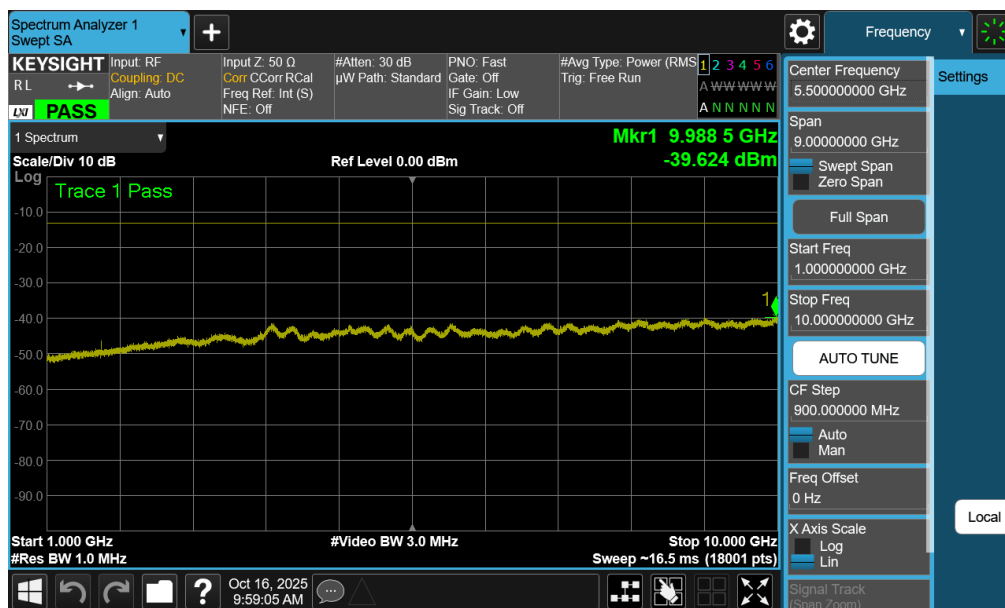
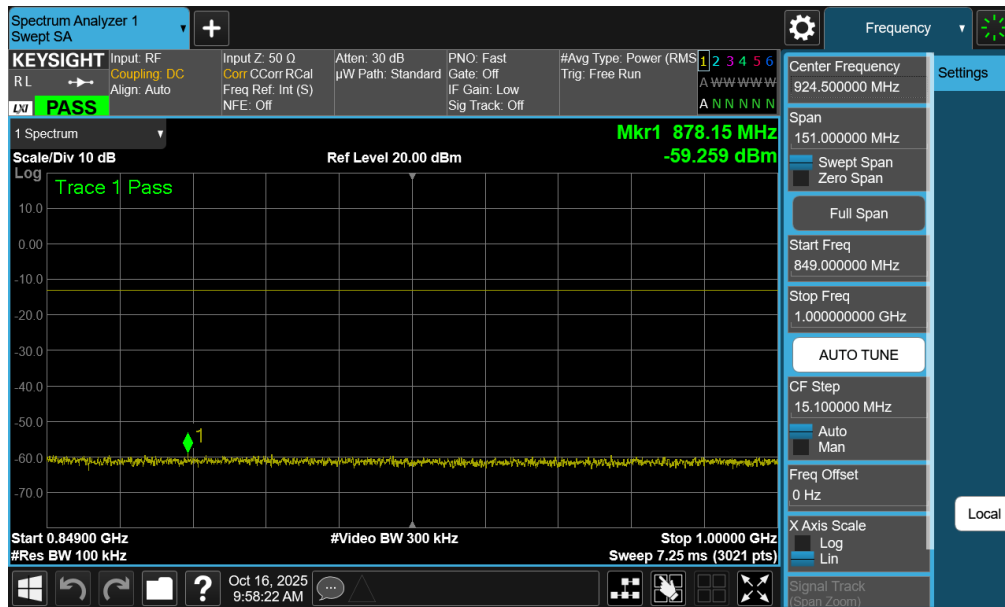


Plot 7-48. Conducted Spurious Plot (LTE Band 5 - 10MHz QPSK - 1 RB - Low Channel – Ant1)

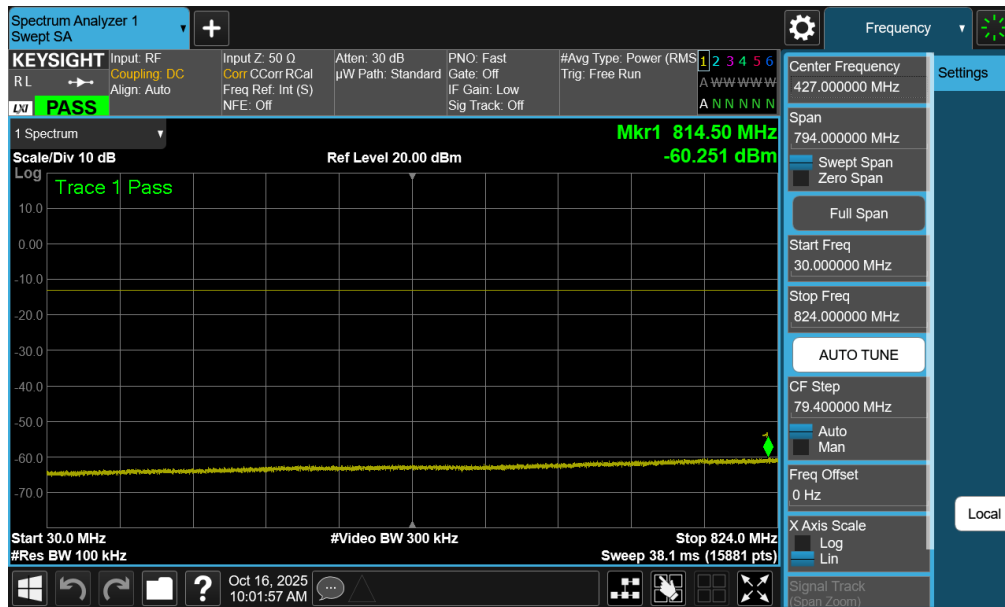
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 47 of 158



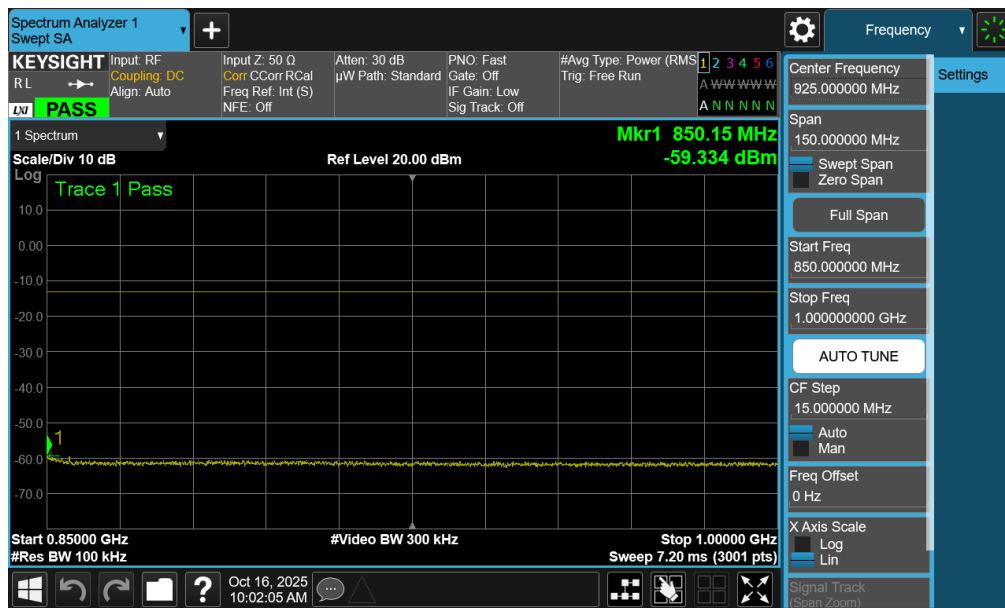
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 48 of 158



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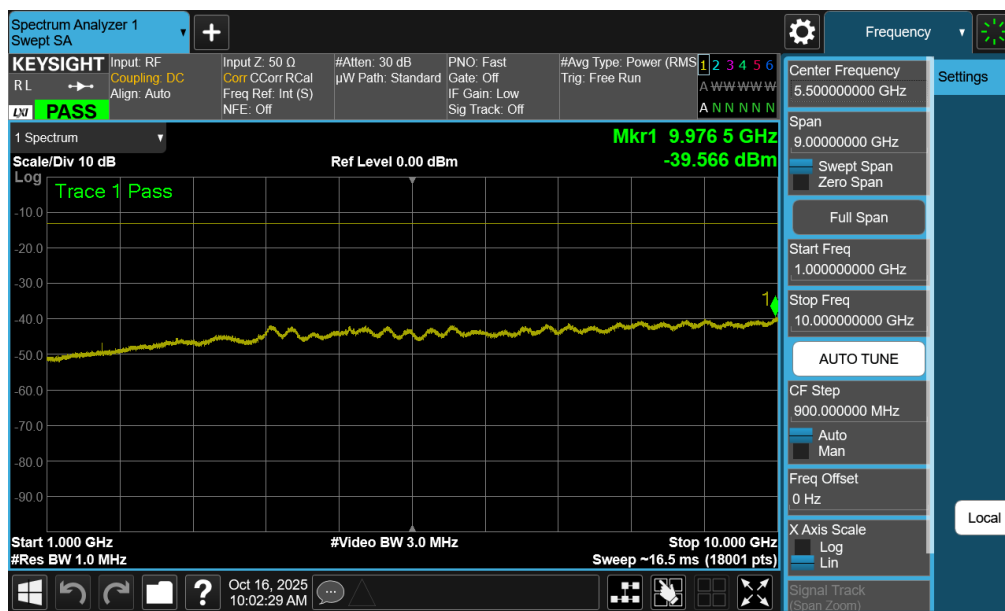


Plot 7-53. Conducted Spurious Plot (LTE Band 5 - 10MHz QPSK - 1 RB - High Channel – Ant1)



Plot 7-54. Conducted Spurious Plot (LTE Band 5 - 10MHz QPSK - 1 RB - High Channel – Ant1)

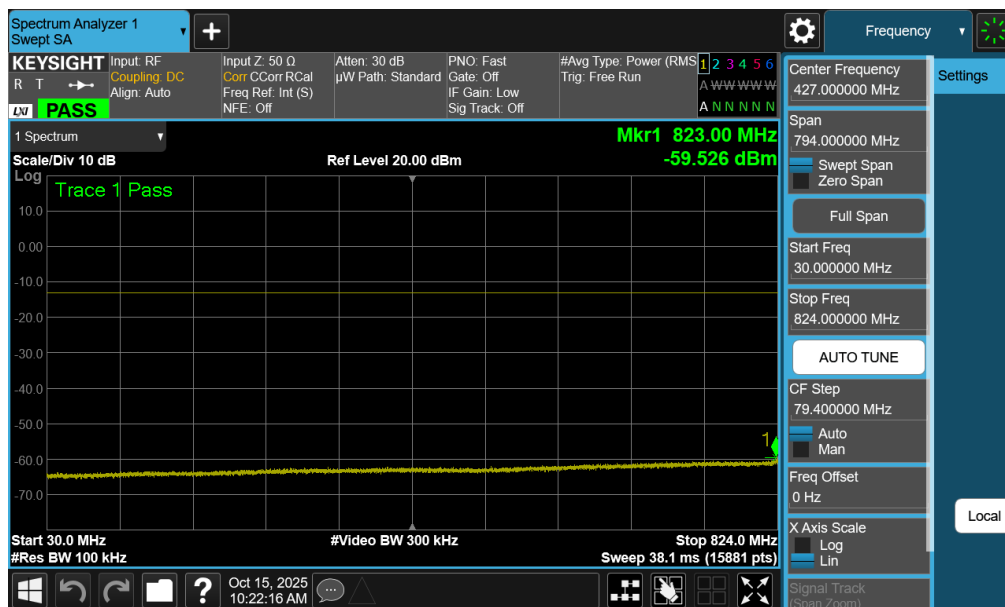
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 50 of 158



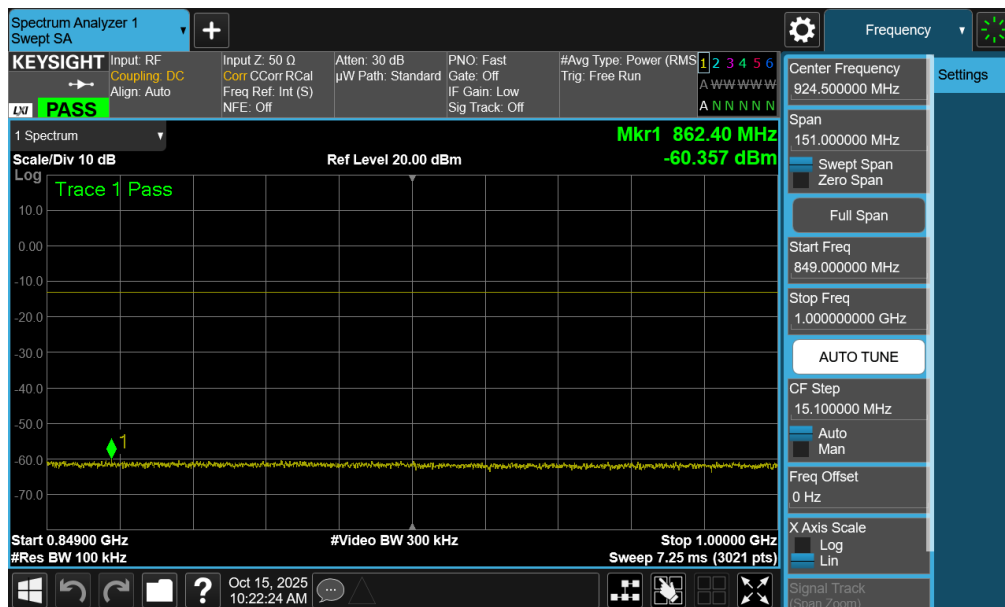
Plot 7-55. Conducted Spurious Plot (LTE Band 5 - 10MHz QPSK - 1 RB - High Channel – Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n5 – Ant1

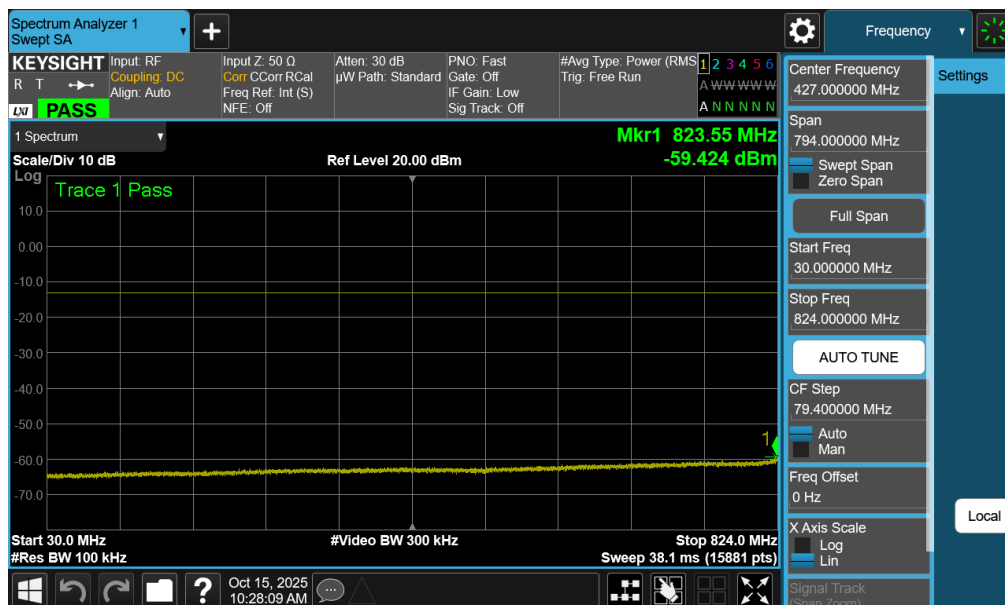
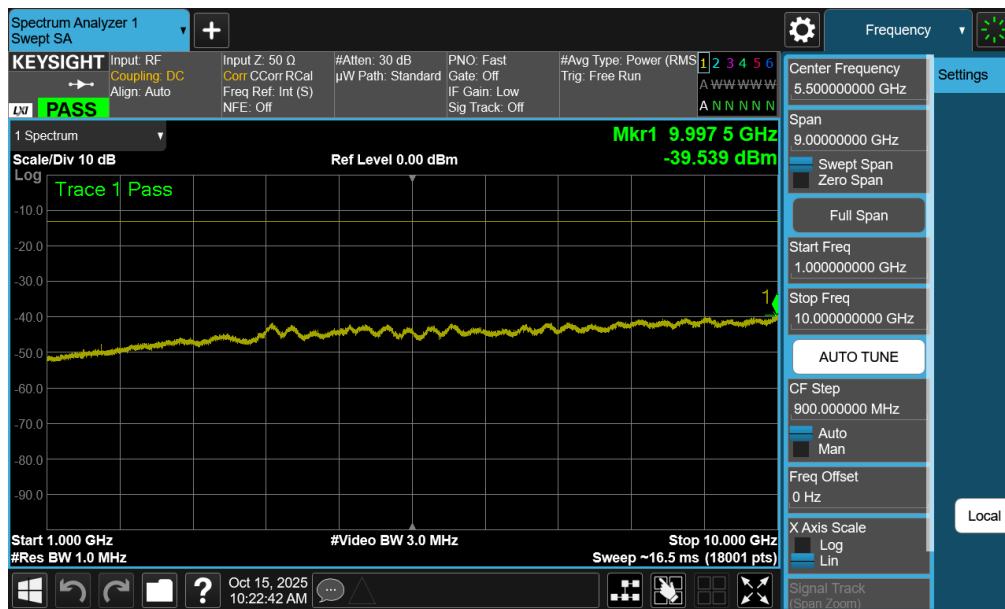


Plot 7-56. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Low Channel - Ant1)

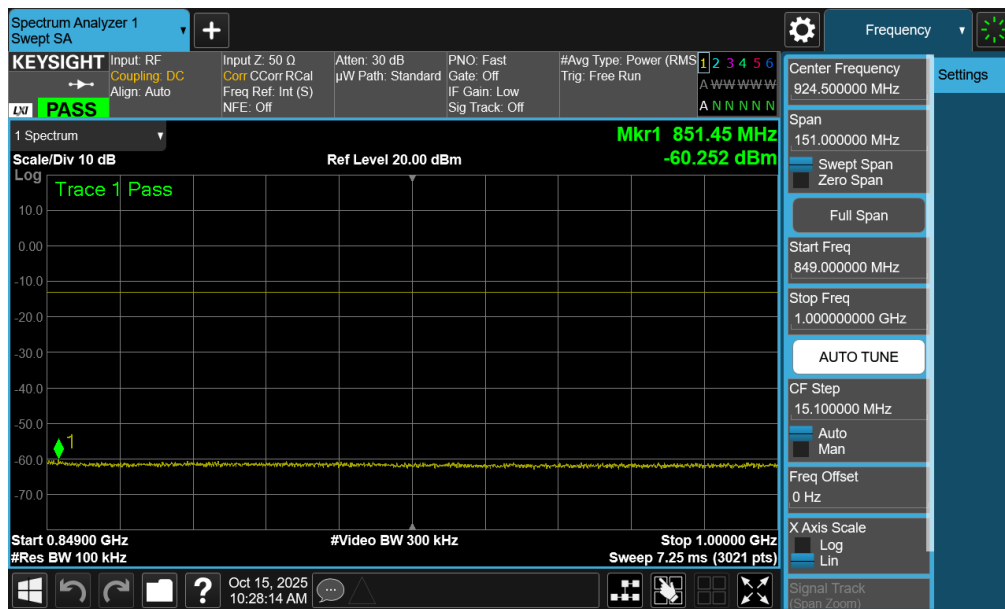


Plot 7-57. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Low Channel - Ant1)

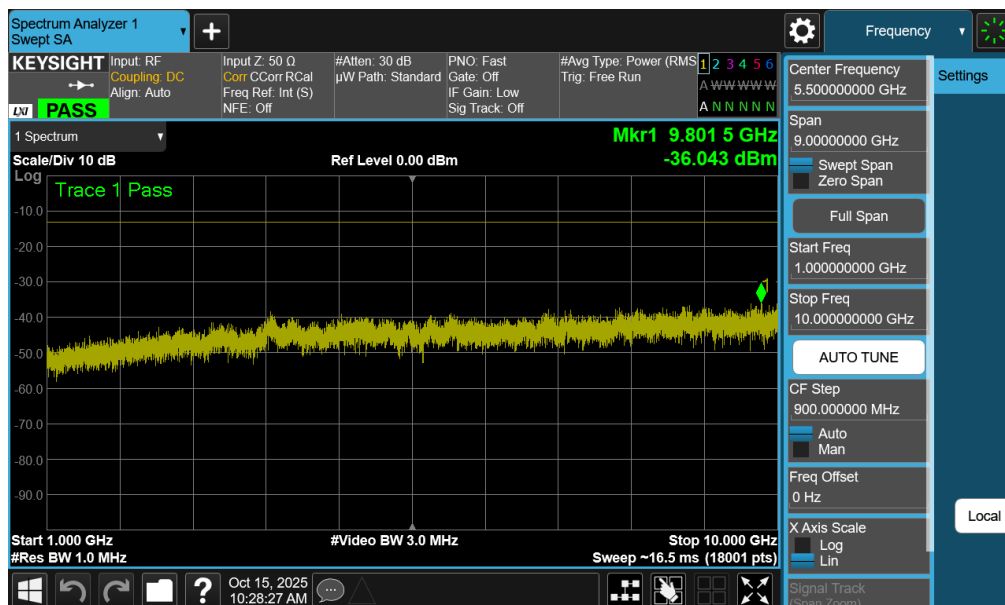
FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2508270082-02.A3L	Test Dates: 9/2/2025 - 10/20/2025	EUT Type: Portable Handset	Page 52 of 158



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Plot 7-60. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant1)



Plot 7-61. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant1)

FCC ID: A3LSMS948JPN	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
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