



**ELEMENT MATERIALS TECHNOLOGY,
Columbia MD**

(formerly PCTEST)
7185 Oakland Mills Road, Columbia, MD 21046 USA
Tel. 410.290.6652 / Fax 410.290.6654
<http://www.element.com>

Part 96 MEASUREMENT REPORT

Applicant Name:

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

Date of Testing:

11/17/2025 – 11/20/2025

Test Report Issue Date:

11/21/2025

Test Site/Location:

Element Lab., Columbia, MD, USA

Test Report Serial No.:

1M2511200096-02.A3L

FCC ID:

A3LSMS942U

APPLICANT:

Samsung Electronics Co., Ltd.

Application Type:

Certification

Model:

SM-S942U

Additional Model:

SM-S942U1

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 v03

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.

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

RJ Ortanez
Executive Vice President



FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 1 of 20

TEST REPORT REVISION HISTORY

Rev. No.	Report S/N	Description	Issue Date
-	1M2511200096-02.A3L	Initial Release	11/21/25

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 2 of 20

T A B L E O F C O N T E N T S

INTRODUCTION	4
1.1 Scope	4
1.2 Element Test Location.....	4
1.3 Test Facility / Accreditations.....	4
2.0 PRODUCT INFORMATION.....	5
2.1 Equipment Description	5
2.2 Device Capabilities.....	5
2.3 Test Configuration	5
2.4 Software and Firmware	5
2.5 EMI Suppression Device(s)/Modifications	5
3.0 DESCRIPTION OF TESTS	6
3.1 Measurement Procedure.....	6
4.0 MEASUREMENT UNCERTAINTY	7
5.0 TEST EQUIPMENT CALIBRATION DATA	8
6.0 TEST RESULTS	9
6.1 Summary.....	9
6.2 End User Device Additional Requirement (CBSD Protocol).....	10
7.0 CONCLUSION.....	19
Appendix A: Test Setup.....	20

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 3 of 20

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 lab located in Columbia, MD 21046, U.S.A.

- Element Washington DC LLC is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).
- Element Washington DC LLC facility is a registered 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).

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 4 of 20

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung Portable Handset FCC ID: A3LSMS942U**. The test data contained in this report pertains only to the emissions due to the EUT's LTE and NR Band 48 operation in the CBRS band. Per FCC Part 96, this device is evaluated as a Citizens Band End User Devices (CBE).

Test Device Serial No.: 0135M

2.2 Device Capabilities

This device contains the following capabilities:

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

2.3 Test Configuration

The EUT was tested per the guidance of ANSI C63.26:2015. See Section 6.0 of this test report for a description of the antenna port conducted emissions tests.

2.4 Software and Firmware

Testing was performed on device(s) using software/firmware version S942USQU0AYI3 installed on the EUT.

2.5 EMI Suppression Device(s)/Modifications

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

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 5 of 20

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

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 6 of 20

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

Table 4-1. Measurement Uncertainty Budget – MD

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 7 of 20

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
Anritsu	MA24408A	Microwave Peak Power Sensor	2/11/2025	Annual	2/11/2026	12776
Keysight	N9030A	PXA Signal Analyzer	6/6/2025	Annual	6/6/2026	MY51210133
-	LTx6-40	Conducted Cable Set (40GHz)	2/25/2025	Annual	2/25/2026	LTx6-40

Table 5-1. Test Equipment Calibration Table – MD

Notes:

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

Component	Serial Number
Fairview Microwave Directional Coupler, FM2CP1122-10	2122
MCL 6dB Attenuator, Model: BW-K6 2W44+	2013
MegaPhase Cable, Model: TM40-K1K1-30	20233002 003

Table 5-2. LTx6-40 Passive Components

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 8 of 20

6.0 TEST RESULTS

6.1 Summary

Company Name: Samsung Electronics Co., Ltd.

FCC ID: A3LSMS942U

FCC Classification: Citizens Band End User Devices (CBE)

Mode(s): LTE/NR

Test Condition	Test Description	FCC Part Section(s)	Test Limit	Test Result	Reference	Test Lab Location
CONDUCTED	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 6.2	MD

Table 6-1. 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.

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 9 of 20



6.2 End User Device Additional Requirement (CBSD Protocol)

Test Overview and Limit

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. During testing, the EUT is connected to a certified LTE CBSD (Ruckus FCC ID: S9GQ910US00) or to a certified NR CBSD (FCC ID: PIDAV2700) as a companion device to show compliance with Part 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.

Test Procedure Used

KDB 940660 D01 v03, WINNF-18-IN-00178 v1.0.0.00

Test Setup/Method

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer. The following procedure is performed by applying WINNF-TS-0122 CBRS CBSD Test Specification.

LTE

1. Run#1:
 - a. Setup WINNF.PT.C.HBT.1 with 3615MHz – 3635MHz.
 - b. Enable AP service from Ruckus Cloud management.
 - c. Check EUT Tx frequency.
 - d. Disable AP service from Ruckus Cloud management and check EUT stop transmission within 10s.
2. Run#2:
 - a. Setup WINNF.PT.C.HBT.1 with 3660MHz – 3680MHz.
 - b. Enable AP service from Ruckus Cloud management.
 - c. Check EUT Tx frequency.
 - d. Disable AP service from Ruckus Cloud management and check EUT stop transmission within 10s.

NR

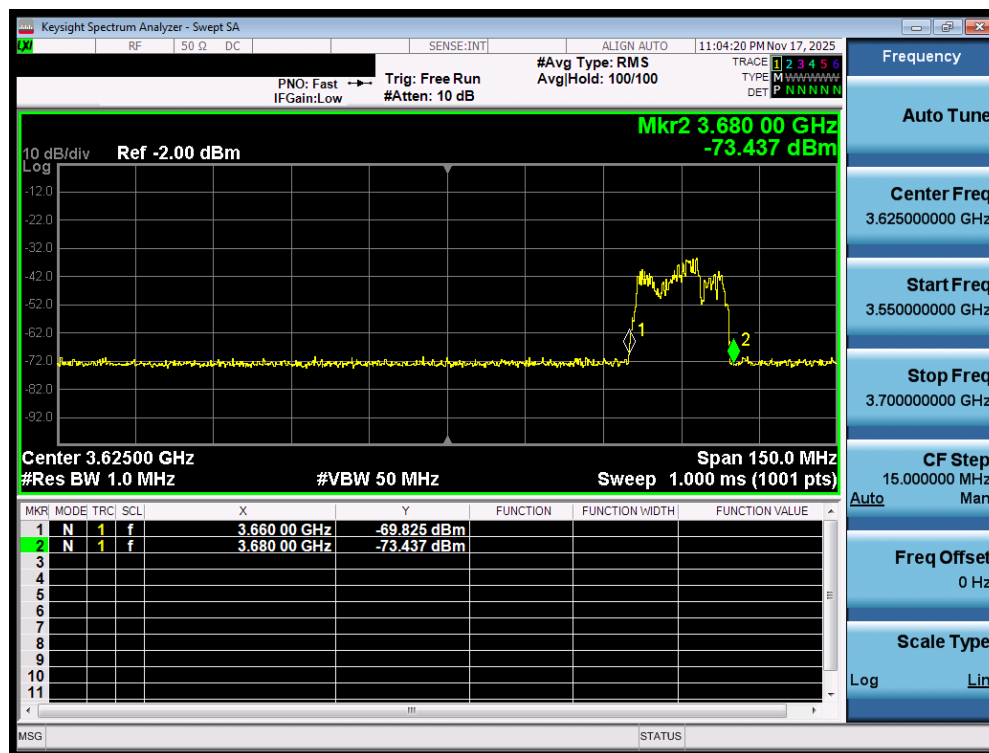
1. Run#1:
 - a. Setup WINNF.PT.C.HBT.1 with 3615MHz – 3635MHz.
 - b. Enable AP service from Airspan Control Platform.
 - c. Check EUT Tx frequency.
 - d. Disable AP service from Airspan Control Platform and check EUT stop transmission within 10s.
2. Run#2:
 - a. Setup WINNF.PT.C.HBT.1 with 3660MHz – 3680MHz.
 - b. Enable AP service from Airspan Control Platform.
 - c. Check EUT Tx frequency.
 - d. Disable AP service from Airspan Control Platform and check EUT stop transmission within 10s.

Test Notes

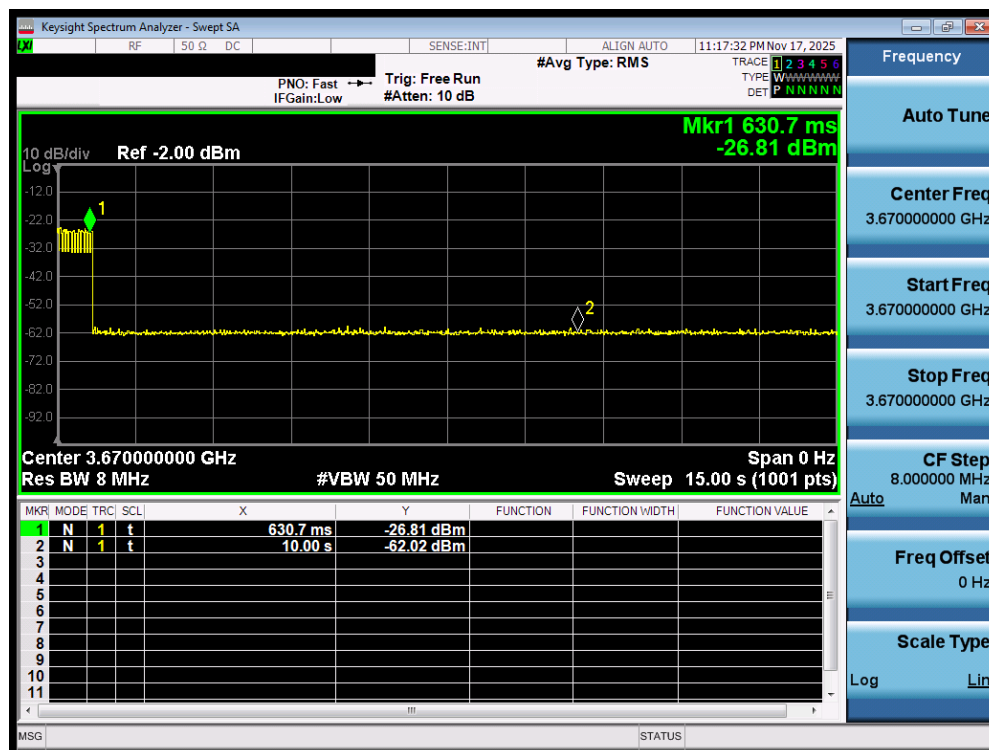
The EUT is an End User Device.

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 10 of 20

LTE Run#1:



Plot 6-1. Run#1 End User Device Frequency of Operations



Plot 6-2. Run#1 End User Device Discontinues Operations within 10s

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 11 of 20



Note:

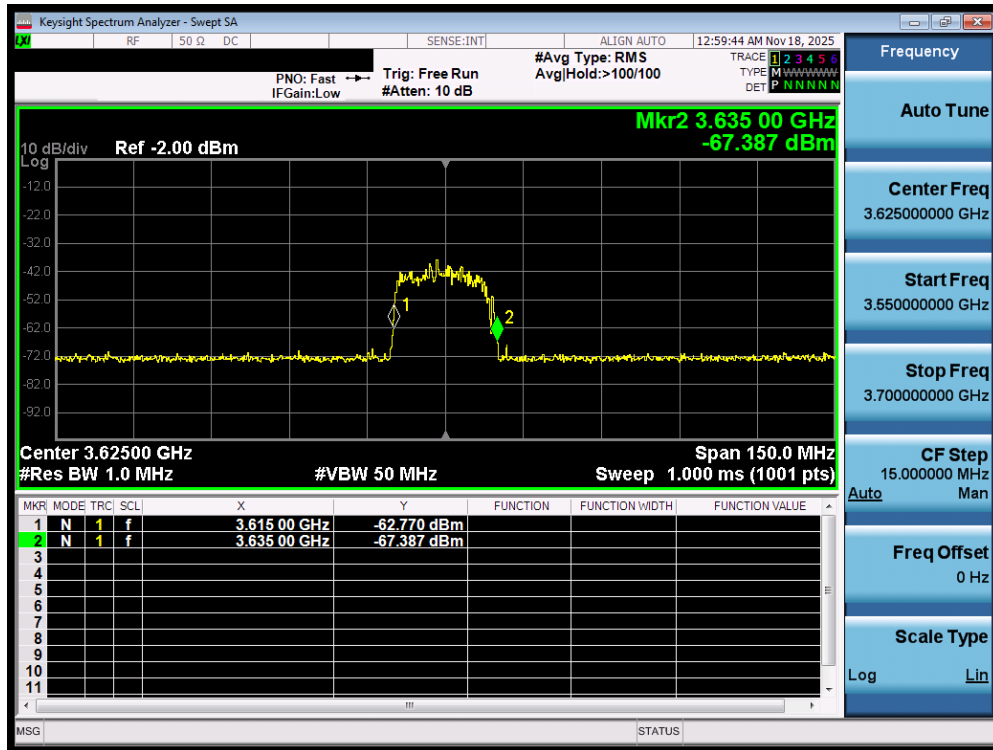
Plot Start: CBSD sends instructions to discontinue LTE operations.

Marker 1: Last Tx before EUT ceases LTE operations

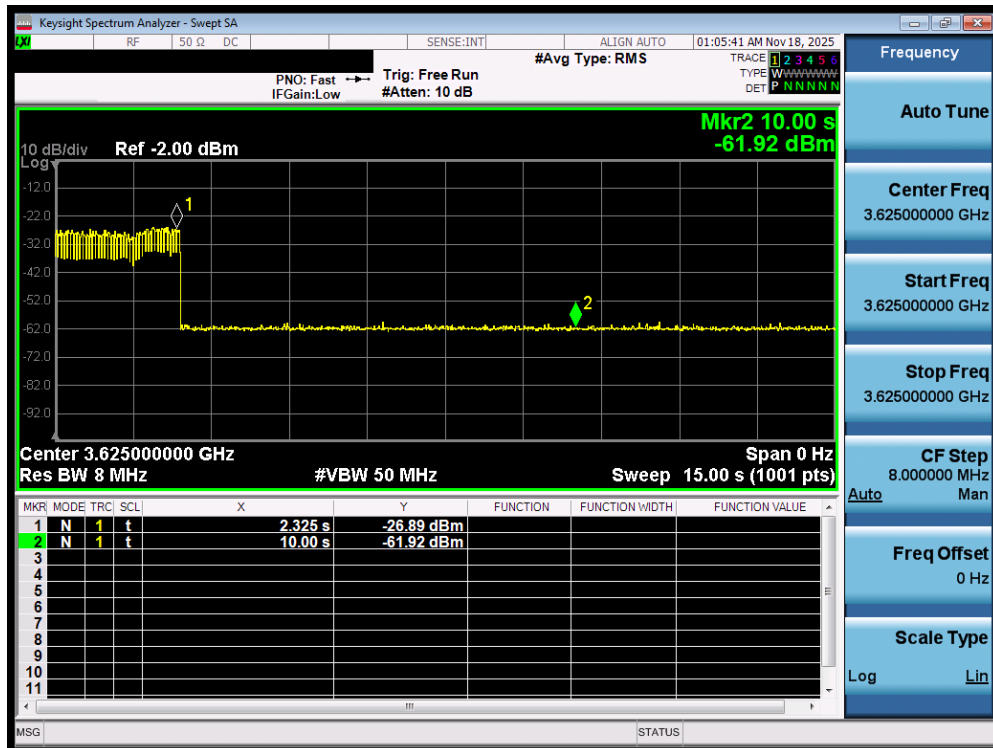
Marker 2: 10 seconds elapsed time from CBSD sending instructions to EUT.

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 12 of 20

LTE Run#2:



Plot 6-3. Run#2 End User Device Frequency of Operations



Plot 6-4. Run#2 End User Device Discontinues Operations within 10s

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 13 of 20



Note:

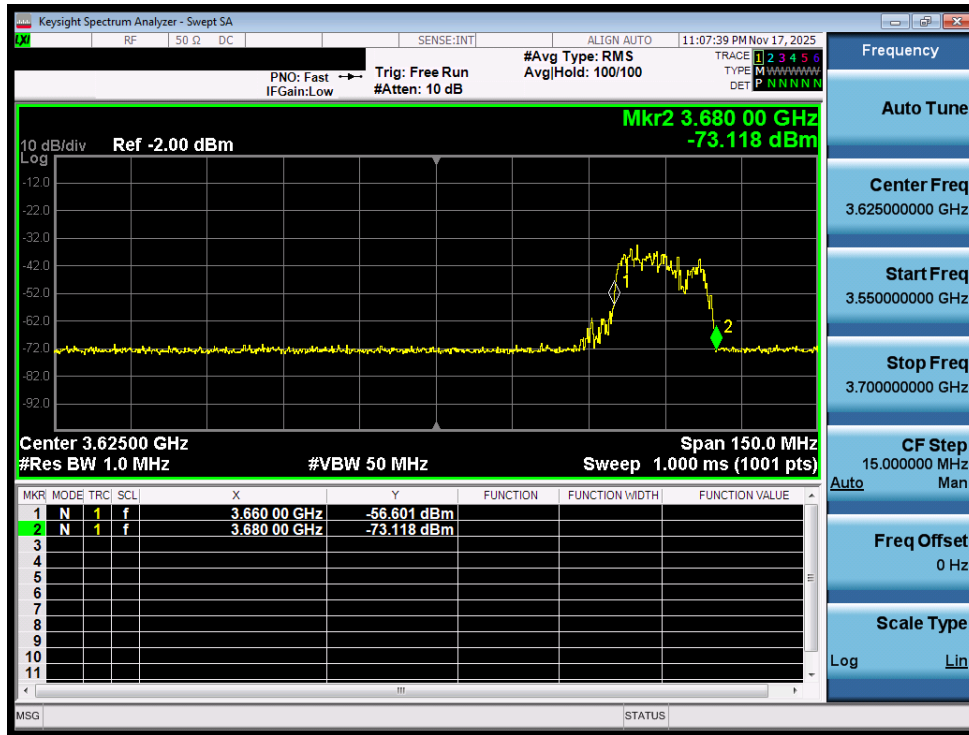
Plot Start: CBSD sends instructions to discontinue LTE operations.

Marker 1: Last Tx before EUT ceases LTE operations

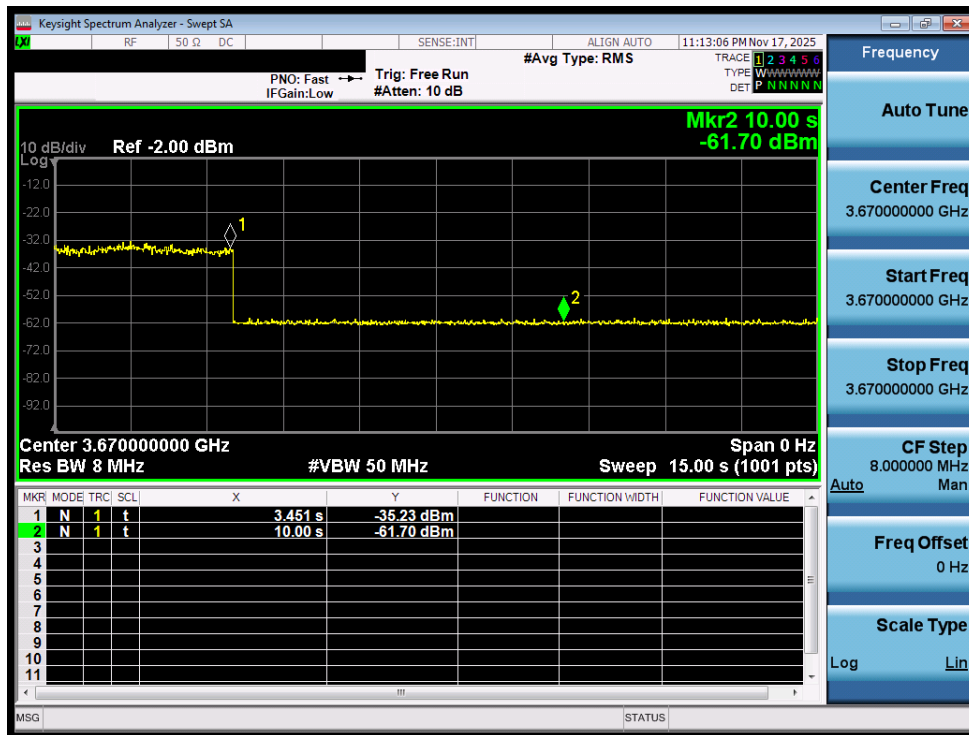
Marker 2: 10 seconds elapsed time from CBSD sending instructions to EUT.

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 14 of 20

NR Run#1:



Plot 6-5. Run#1 End User Device Frequency of Operations



Plot 6-6. Run#1 End User Device Discontinues Operations within 10s

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 15 of 20

**Note:**

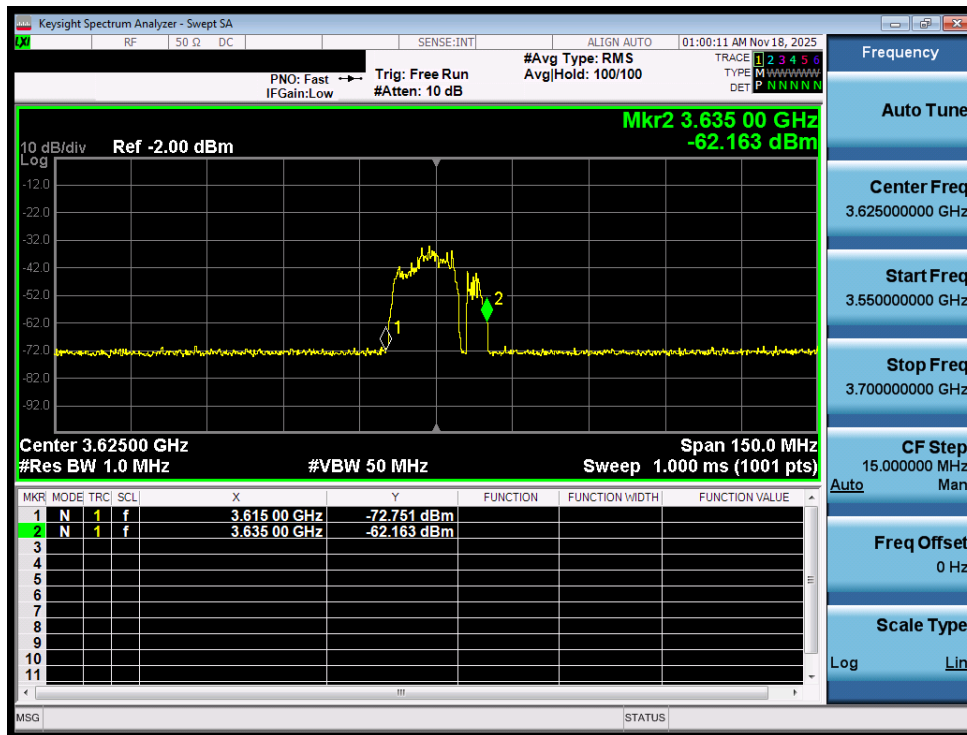
Plot Start: CBSD sends instructions to discontinue NR operations.

Marker 1: Last Tx before EUT ceases NR operations

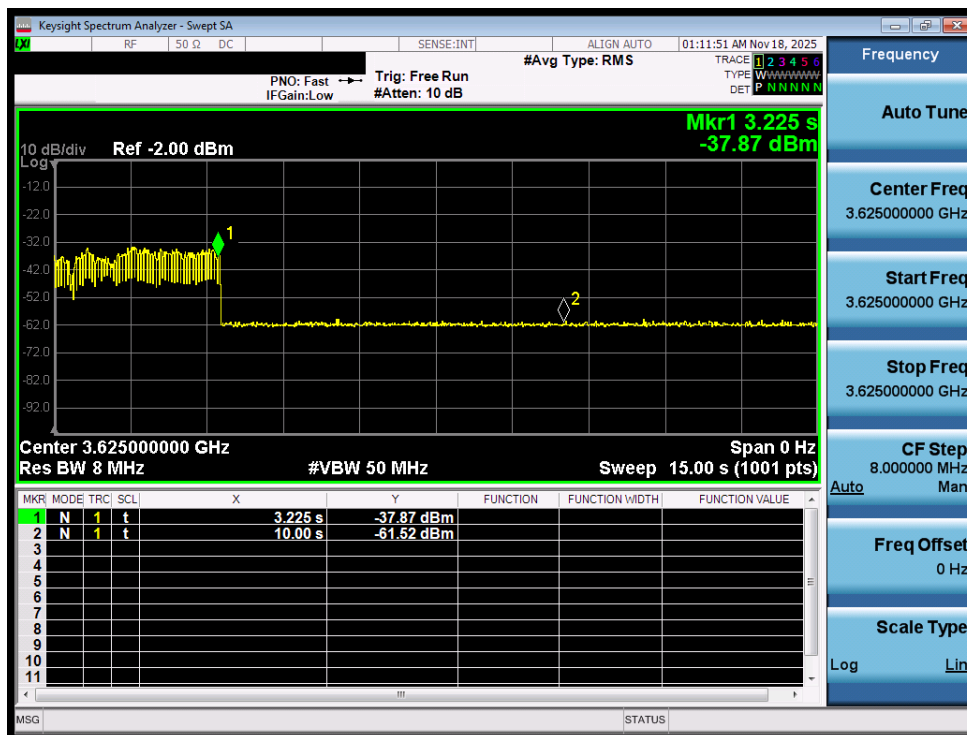
Marker 2: 10 seconds elapsed time from CBSD sending instructions to EUT.

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 16 of 20

NR Run#2:



Plot 6-7. Run#2 End User Device Frequency of Operations



Plot 6-8. Run#2 End User Device Discontinues Operations within 10s

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 17 of 20



Note:

Plot Start: CBSD sends instructions to discontinue NR operations.

Marker 1: Last Tx before EUT ceases NR operations

Marker 2: 10 seconds elapsed time from CBSD sending instructions to EUT.

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 18 of 20

7.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMS942U** complies with CBSD Protocol End User Device requirement of Part 96 of the FCC Rules for LTE and NR operation only.

- END OF TEST REPORT -

FCC ID: A3LSMS942U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2511200096-02.A3L	Test Dates: 11/17/25 – 11/20/25	EUT Type: Portable Handset	Page 19 of 20