

FCC Part 96.47 REPORT

Certification

Applicant Name:

SAMSUNG Electronics Co., Ltd.

Date of Issue:

June 27, 2022

Address:

129, Samsung-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Location:

HCT CO., LTD.,
74, Seoicheon-ro 578beon-gil, Majang-myeon,
Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

Report No.: HCT-RF-2206-FC026

FCC ID:

A3LSMA236U

APPLICANT:

SAMSUNG Electronics Co., Ltd.

Model(s): SM-A236U
Additional Model(s): SM-A236U1/DS, SM-S236DL
EUT Type: Mobile phone
FCC Classification: Citizens Band End User Devices (CBE)
FCC Rule Part(s): §96.47

Report No.: HCT-RF-2206-FC026

REVIEWED BY



Report prepared by : Kwon Jeong
Engineer of Telecommunication Testing Center

Report approved by : Jong Seok Lee
Manager of Telecommunication Testing Center

This test results were applied only to the test methods required by the standard.

This laboratory is not accredited for the test results marked *.

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (HCT Accreditation No.: KT197)

* The report shall not be reproduced except in full(only partly) without approval of the laboratory.

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2206-FC026	June 27, 2022	- First Approval Report

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMA236U
Application Type:	Certification
FCC Classification:	Citizens Band End User Devices (CBE)
FCC Rule Part(s):	§96
EUT Type:	Mobile Phone
Model(s):	SM-A236U
Additional Model(s):	SM-A236U1/DS, SM-S236DL
Bandwidth(MHz):	5, 10, 15, 20
Modulation	QPSK, 16QAM, 64QAM, 256QAM
Tx Frequency:	3552.5 – 3697.5 : 5 MHz 3555.0 – 3695.0 : 10 MHz 3557.5 – 3692.5 : 15 MHz 3560.0 – 3690.0 : 20 MHz
Date(s) of Tests:	June 25, 2022
Serial number:	R3CT50S8ARX

2. INTRODUCTION

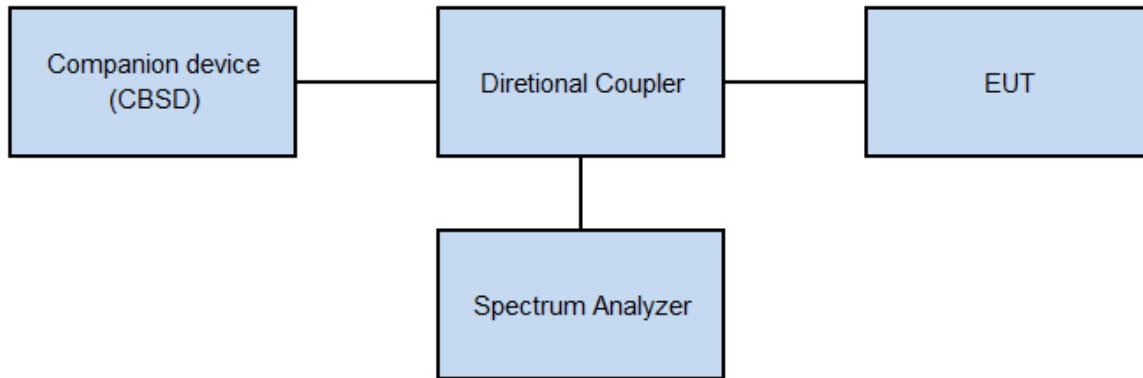
The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
End User Device Additional Requirement (CBSD Protocol)	- KDB 940660 D01 v01 - WINNF-TS-0122 V1.0.2 CBRS CBSD Test Specification

3.2 End User Device Additional Requirement (CBSD Protocol)



Test setup

Test Overview

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. During testing, the EUT is connected to a certified CBSD (FCC ID: 2AS48SC-220) 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.

Test Channel & Power

1. Setup companion device with 3570 MHz and power level 8 dBm/MHz
2. Setup companion device with 3610 MHz and power level 16 dBm/MHz

Test Procedure

1. Enable AP service from companion device.
2. EUT is connected to a companion device.
3. Check EUT Tx frequency and power.
4. Disable AP service from companion device and check EUT stop transmission within 10 s.

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/05/2022	Annual
STEP ATTENUATOR	8494B	Hewlett Packard	2812A19007	08/18/2022	Annual
Directional Coupler	87300B	AGILENT	3116A03621	11/02/2022	Annual
Signal Analyzer (5 Hz ~ 50.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/30/2023	Annual

Note:

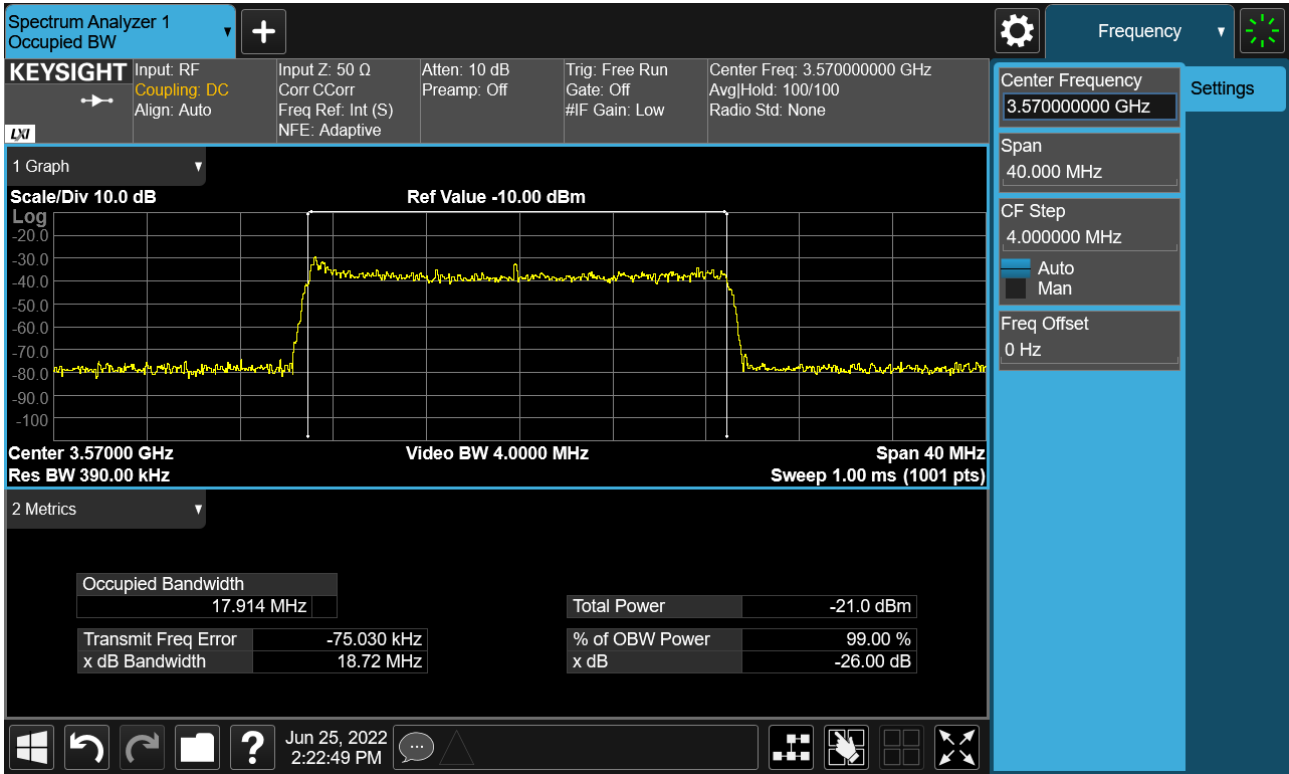
1. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
2. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

5. SUMMARY OF TEST RESULTS

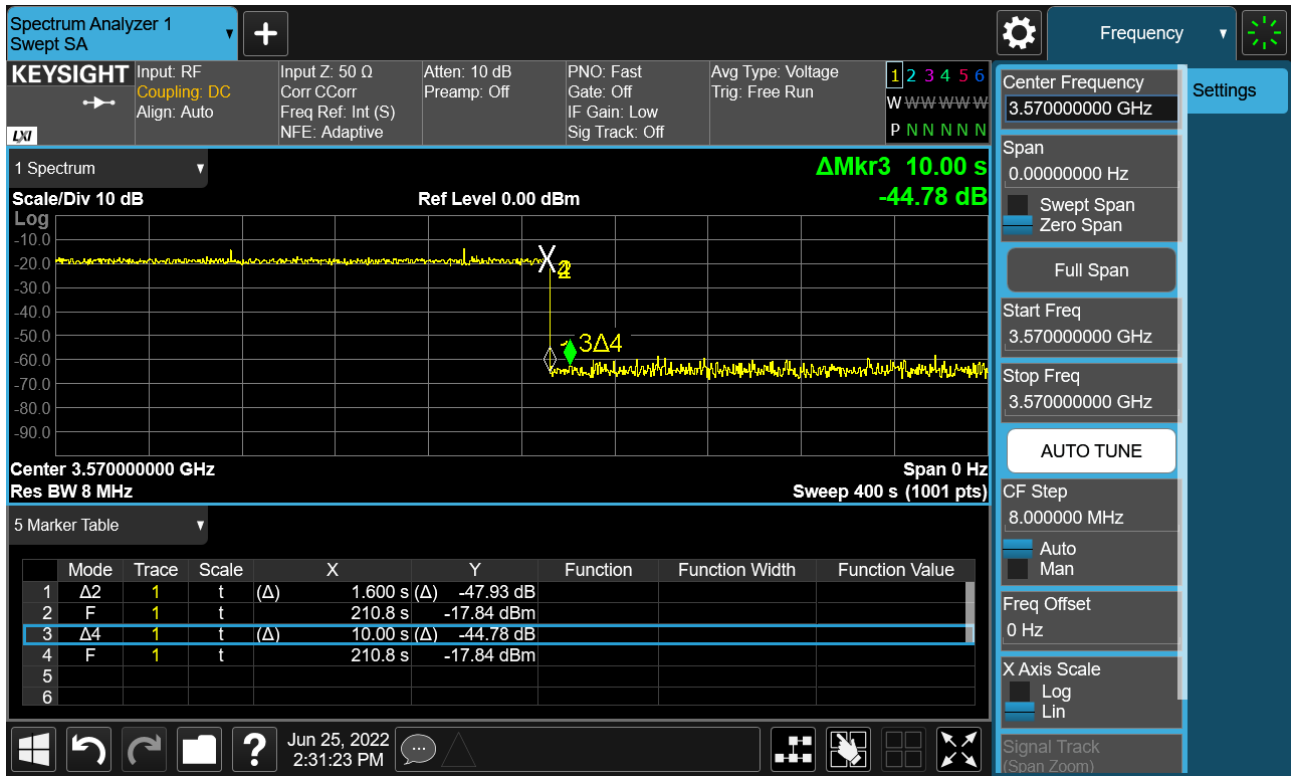
Test Description	FCC Part Section(s)	Test Limit	Test Result
End User Device Additional Requirements (CBSD Protocol)	§96.47	End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation. 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

6. TEST RESULT

Test#1: 3570 MHz(BW: 20 MHz)



Stop Operation Within 10 s



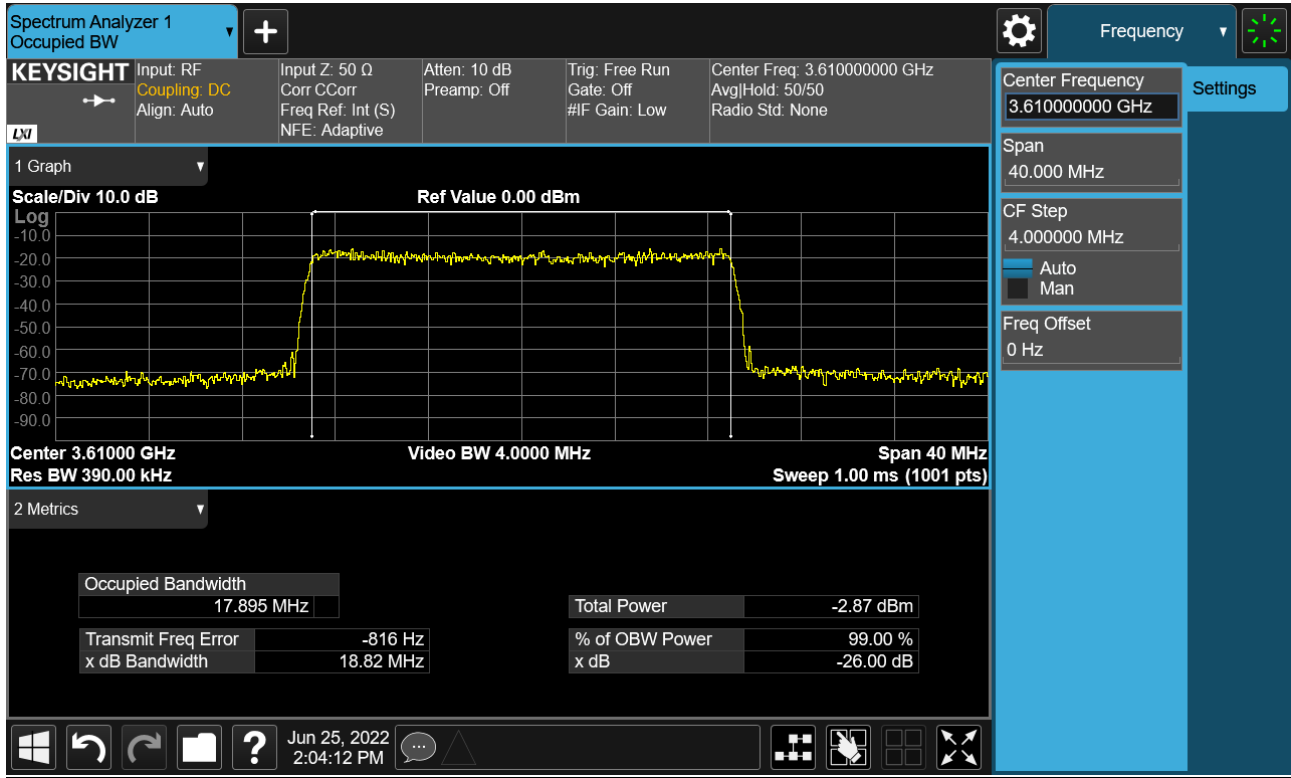
Note:

Marker 2: CBSD sends instructions to discontinue NR n48 operations.

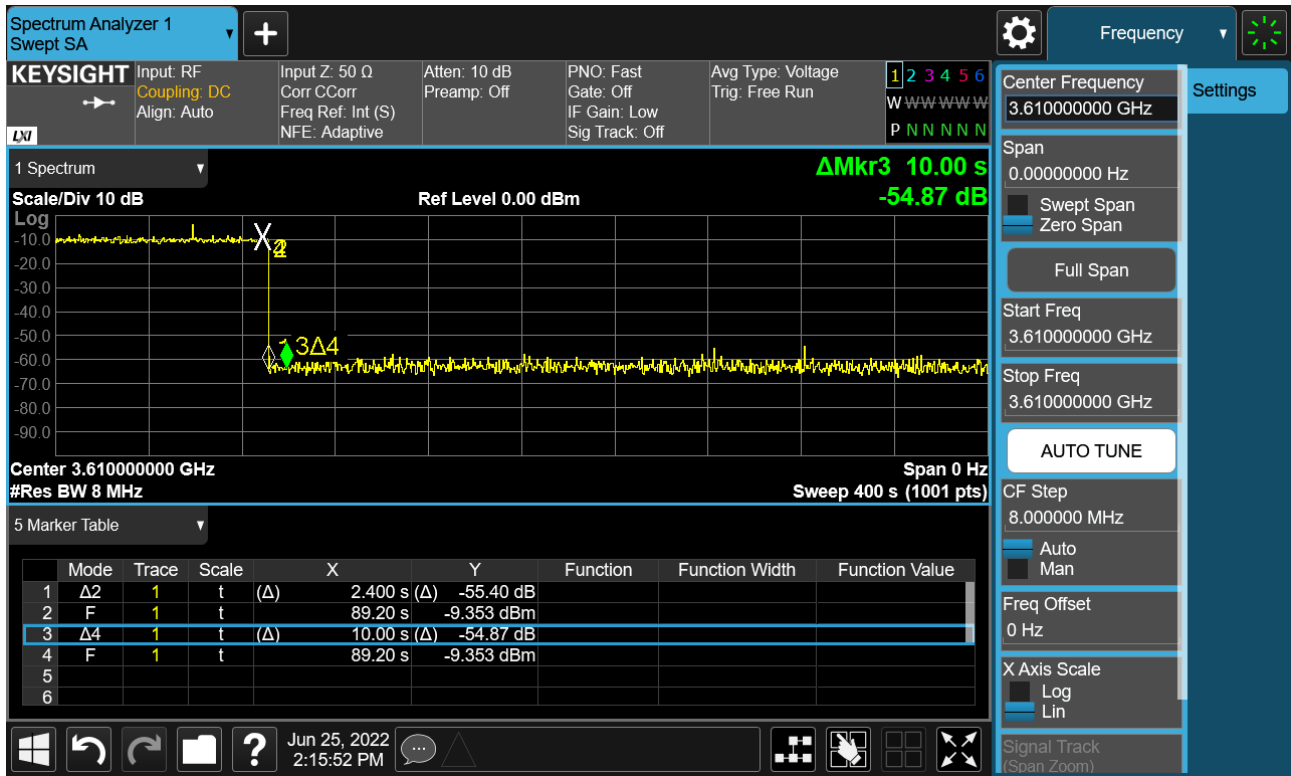
Marker 1Δ2: EUT discontinues operation. (1.60 s)

Marker 3Δ4: 10 seconds elapsed time from CBSD sending instructions to EUT.(10.0 s)

Test#2: 3610 MHz(BW: 20 MHz)



Stop Operation Within 10 s



Note:

Marker 2: CBSD sends instructions to discontinue NR n48 operations..

Marker 1 Δ 2: EUT discontinues operation. (2.40 s)

Marker 3 Δ 4: 10 seconds elapsed time from CBSD sending instructions to EUT.(10.0 s)

7. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2206-FC026-P