



PART 25 SCS TEST REPORT

Report Number. : S-4791440365-E11V1

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Model : SM-A166U, SM-A166U1, SM-S166V

FCC ID : A3LSMA166U

EUT Description : GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac
and NFC

Test Standard(s) : FCC 47 CFR PART 25

Date Of Issue:
2024-10-14

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2024-10-14	Initial issue	David Jung

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac and NFC.

MODEL NUMBER: SM-A166U, SM-A166U1, SM-S166V

DATE TESTED: 2024-08-22 – 2024-10-14

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART § 25.109 (f), § 25.204 (g)	Complies

UL KOREA LTD. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL KOREA LTD. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and Modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL KOREA LTD. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL KOREA LTD. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL KOREA LTD. By:

Tested By:



Seokhwan Hong
Suwon Lab Engineer
UL KOREA LTD.



David Jung
Suwon Lab Engineer
UL KOREA LTD.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC 47 CFR Part 2, Part 22H, Part 24E, Part27, and Part 90R
2. FCC KDB 273109 D02 Part 25 SCS and CMRS-Bands v01r01
3. ANSI C63.26: 2015

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro	
<input checked="" type="checkbox"/>	Chamber 1(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 2(3m semi-anechoic chamber)
<input type="checkbox"/>	Chamber 3(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 4(3m Full-anechoic chamber)
<input type="checkbox"/>	Chamber 5(3m Full-anechoic chamber)

UL KOREA LTD. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

4. EQUIPMENT UNDER TEST

4.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac, and NFC.
This test report addresses the WWAN operational mode.

Representative model	Difference	Derivative model
		SM-A166U1, SM-S166V
SM-A166U	Hardware	Same
	Software	The UI has changed according to Service Provider

The model SM-A166U was used for final testing and is representative of the test results in this report.

4.2. SUPPLEMENTAL COVERAGE FROM SPACE(SCS)

Under section § 25.109 (f) of the FCC rules Space and SCS earth stations providing SCS are subject to technical rules in parts 2, 22, 24, and 27 of this chapter based on the operating frequency band. Section § 25.204 (g) specifies that earth stations providing SCS pursuant to §§ 25.125 and 25.115 shall comply with the power requirements and out-of-band emission limits corresponding to devices operating in parts 22, 24, or 27 of this chapter (e.g., §§ 22.913, 24.232, 27.50), as required for their operating frequencies. We have clarified through KDB inquiry that the technical requirements from Part 90R should be applied for SCS operations in the 700 MHz Public Safety Band.

The table below identifies the SCS frequencies available for use and, for each band, the applicable FCC Part 22, 24, 27, and 90R technical requirements, the air interfaces supported by the device for SCS use and, in the final column, the reference to the test report containing the relevant test data showing compliance with the technical requirements.

The bands available for SCS and the bands supported by the devices in the scope of this report are:

Frequency			Part 22/24/27/ 90 Rule parts	3GPP Band	Supported	Reference to test report showing compliance with § 25.204 (g) for power requirements and out-ofband emission limits
Band	DL (MHz)	UL (MHz)				
600 MHz:	614-652	663-698	27.5 (l)	71/n71	Yes	S-4791440365-E4
			27.50 (c)			
			27.53 (g)			
700 MHz:	729-746	699-716	27.5 (c)	12	Yes	S-4791440365-E4
			27.50 (c)			
			27.53 (g)			
	746-756	777-787	27.5 (b)	13	Yes	S-4791440365-E4
			27.50 (b)			
			27.53 (f)			
	758-769	788-799	90R	14	Yes(Note 1)	S-4791440365-E2
	805-806				No	
800 MHz:	869-894	824-849	22H	WCDMA5 5/n5 26	Yes	S-4791440365-E2
Broad band PCS:	1930- 1995	1850- 1915	24E	WCDMA2 2/n2 25/n25	Yes	S-4791440365-E3
Note 1: Technical requirements for SCS use of bands 14/n14, which fall under Part 90 of FCC rules, have been confirmed through a KDB inquiry.						

END OF REPORT

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