



**RF SAFETY
LAB**

A NEXT GENERATION
TEST LABORATORY™

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PART 0 RF EXPOSURE REPORT

FCC ID:	A3LSMF976JPN
Model (s):	SC-56G, SCG39
Device Type:	Portable Handset
Report Issue Date:	June 04, 2026

Samsung Electronics Co., Ltd.

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Suwon-si, Gyeonggi-do, 16677, Rep.
of Korea

Certification

The measurement evaluations presented in this report are based on the maximum performance of the tested device(s), which has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/ general population exposure federal limits in 47CFR § 1.1310 and has been tested in accordance with the measurement procedures specified within this report.

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This document has been revised and replaces all previously issued versions of this document with the same Test Report S/N.



Steve Liu
President



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1. DUT Specifics

1.1. Device under Test

The device under test is a wireless device, incorporating the technologies listed in Part 1 RF Exposure report. This device uses the Qualcomm® Gen2 Smart Transmit feature to control and manage transmitting at all times for WWAN/WLAN/BT operations. Additionally, this device support NFC/WPC/UWB technologies, but the output power of these modes are not controlled by the Smart Transmit algorithm.

RF Exposure Part 1 report in this report refers to report SN: 2026.007.01

1.2. Time-Averaging Algorithm for RF Exposure Compliance

This device is enabled with the Qualcomm® Smart Transmit Gen2 feature. This feature implements a time-averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time.

This Part 0 report shows SAR characterization of Smart Transmit enabled radios. Characterization is achieved by determining P_{limit} for those radios that corresponds to the exposure design targets after accounting for all device design related uncertainty. The SAR characterization is denoted as SAR Char in this report.

1.3. Nomenclature

Technology	Term	Description
Sub6 WWAN/WLAN/BT	P_{limit}	Power level that corresponds to the exposure design target (<i>SAR_design_target</i>) after accounting for all device design related uncertainties
	P_{max}	Maximum tune-up output power
	<i>SAR_design_target</i>	Target SAR level < FCC SAR limit after accounting for all device design related uncertainties
	<i>SAR Char</i>	Table containing P_{limit} for all technologies and bands



2. SAR Characterization

2.1. DSI and SAR Determination

This device uses different Device State Index (DSI) to configure different time averaged power levels based on certain exposure scenarios. Depending on the detection scheme implemented in the smartphone, the worst-case SAR was determined by measurements for the relevant exposure conditions for that DSI. Detailed descriptions of the detection mechanisms are included in the operational description.

When 1g SAR and 10g SAR exposure comparison is needed, the worst-case was determined from SAR normalized to 1g or 10g SAR limit.

The device state index (DSI) conditions used in Table 3-1 represent different exposure scenarios.

Table 2-1

Scenario	Description
Head (DSI = 2)	_ DUT Configuration is Folder Open _ Device positioned next to ear _ Receiver Active
Head (DSI = 3)	_ DUT Configuration is Folder Closed _ Device positioned next to ear _ Receiver Active
Body-worn (DSI = 0)	_ DUT Configuration is Folder Open _ Device being used with a body-worn accessory
Hotspot (DSI = 0)	_ DUT Configuration is Folder Open _ Device transmits in hotspot mode near body _ Hotspot Mode Active
Phablet (DSI = 0)	_ DUT Configuration is Folder Open _ Device is held to hand
Body-worn (DSI = 1)	_ DUT Configuration is Folder Closed _ Device being used with a body-worn accessory
Hotspot (DSI = 1)	_ DUT Configuration is Folder Closed _ Device transmits in hotspot mode near body _ Hotspot Mode Active
Phablet (DSI = 1)	_ DUT Configuration is Folder Closed _ Device is held to hand

2.2. SAR design Target

SAR_design_target is determined by ensuring that it is less than FCC SAR limit after accounting for total device designed related uncertainties specified by the manufacturer.

Table 2-2

SAR_design_target			
$SAR_design_target < SAR_regulatory_limit \times 10^{\frac{-Total\ Uncertainty}{10}}$			
1g SAR		10g SAR	
<i>Total Uncertainty</i>	1.0 dB	<i>Total Uncertainty</i>	1.0 dB
<i>SAR_regulatory_limit</i>	1.6 W/kg	<i>SAR_regulatory_limit</i>	4.0 W/kg
<i>SAR_design_target</i>	1.0 W/kg	<i>SAR_design_target</i>	2.5 W/kg

2.3. SAR Char

SAR test results corresponding to P_{max} for each antenna/technology/band/DSI can be found in Part 1 report and SAR results section in this report.

P_{limit} is calculated by linearly scaling with the measured SAR at the P_{part0} to correspond to the SAR_design_target. When $P_{limit} < P_{max}$, P_{part0} was used as P_{limit} in the Smart Transmit EFS. When $P_{limit} > P_{max}$ and $P_{part0}=P_{max}$, calculated P_{limit} was used in the Smart Transmit EFS. All reported SAR obtained from the P_{part0} SAR tests was less than SAR_Design_target+ 1 dB Uncertainty. The final P_{limit} determination for each exposure scenario corresponding to SAR_design_target is shown in the below table.

Table 2-3

Device State Index (DSI)	P_{limit} Determination Scenarios
0	The worst-case SAR exposure for Folder Open is determined as maximum SAR normalized to the limit (i.e. lowest P_{limit}) among: 1. Body-worn SAR 2. Hotspot SAR 3. Phablet SAR
1	The worst-case SAR exposure for Folder Closed is determined as maximum SAR normalized to the limit (i.e. lowest P_{limit}) among: 1. Body-worn SAR 2. Hotspot SAR 3. Phablet SAR
2	Folder Open P_{limit} is calculated based on Head SAR
3	Folder Closed P_{limit} is calculated based on Head SAR

Notes:

- When $P_{max} < P_{limit}$ EFS, the DUT will operate at a power level up to P_{max}
- All P_{limit} EFS and maximum tune up output power P_{max} levels entered in below Table correspond to average power levels after accounting for duty cycle in the case of TDD, GMSK, or OFDM modulation schemes (e.g. GSM, LTE TDD and WLAN/BT).
- Maximum tune up output power P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1dB device design uncertainty.
- All MIMO P_{max} and P_{limit} are defined per antenna chain
- Refer to Reference Model reports (2026.005.01 & 2026.005.08) for Part 0 data.



Table 2-4

Band/Mode	Antenna	Antenna Group	Exposure Scenario		Folder Open Body-worn/ Hotspot/ Phablet	Folder Closed Body-worn/ Hotspot/ Phablet	Folder Open Head	Folder Closed Head
			Maximum Tune-Up Output Power		DSI 0	DSI 1	DSI 2	DSI 3
			Pmax Burst (dBm)	Pmax Frame Avg (dBm)	Plimit (dBm)	Plimit (dBm)	Plimit (dBm)	Plimit (dBm)
GSM 850	A+C	AG0	32.5	25.3	21.8	24.3	24.8	26.2
GSM 1900	B	AG0	30.0	22.1	16.8	17.8	27.1	27.3
UMTS Band 5	A+C	AG0	24.3	24.3	22.5	23.5	26.4	26.2
LTE Band 12	A+C	AG0	24.2	24.2	22.5	23.5	27.0	26.1
LTE Band 13	A+C	AG0	24.5	24.5	22.5	23.5	27.3	26.7
LTE Band 5	A+C	AG0	24.5	24.5	22.5	23.5	25.9	25.5
LTE Band 66	B	AG0	24.0	24.0	17.0	18.0	25.9	27.3
LTE Band 66	G	AG1	24.0	24.0	16.5	17.5	19.5	19.5
LTE Band 4	B	AG0	24.0	24.0	17.0	18.0	25.9	27.3
LTE Band 25	B	AG0	24.0	24.0	17.0	17.0	28.3	26.7
LTE Band 25	G	AG1	24.0	24.0	16.5	16.5	19.0	19.0
LTE Band 2	B	AG0	24.0	24.0	17.0	17.0	28.3	26.7
LTE Band 41	B	AG0	24.0	22.0	16.0	17.0	29.6	29.5
LTE Band 41	G	AG1	24.0	22.0	15.0	16.0	16.5	16.5
NR Band n5	A+C	AG0	24.5	24.5	22.5	23.5	26.2	26.0
NR Band n66	B	AG0	24.0	24.0	17.0	18.0	25.6	27.6
NR Band n66	G	AG1	24.0	24.0	16.5	17.5	19.5	19.5
NR Band n41 PC2 Default	G	AG1	26.0	26.0	15.0	16.0	16.5	16.5
NR Band n41 PC2 Switching	B	AG0	26.0	26.0	16.0	17.0	23.0	23.0
2.4 GHz WIFI	F	AG1	19.0	19.0	20.3	21.5	21.2	23.6
2.4 GHz WIFI	H	AG1	19.0	19.0	23.6	24.5	26.6	32.3
2.4 GHz WIFI	MIMO (H&F)	AG1	17.0	17.0	20.3	19.3	19.9	20.6
5 GHz WIFI	E	AG1	17.0	17.0	15.0	15.0	20.7	21.1
5 GHz WIFI	F	AG1	17.0	17.0	15.0	15.0	21.7	24.4
5 GHz WIFI	MIMO (F&E)	AG1	17.0	17.0	15.0	15.0	20.2	19.5
6 GHz WIFI	E	AG1	16.0	16.0	12.0	10.0	12.0	21.0
6 GHz WIFI	F	AG1	16.0	16.0	12.0	10.0	12.0	17.8
6 GHz WIFI	MIMO (F&E)	AG1	16.0	16.0	12.0	10.0	12.0	17.0
2.4 GHz Bluetooth	F	AG1	17.0	16.0	20.8	21.8	22.7	23.9
2.4 GHz Bluetooth	H	AG1	17.0	16.0	23.6	24.2	23.5	24.6
2.4 GHz Bluetooth	MIMO (H&F)	AG1	13.5	12.5	17.5	19.5	18.3	19.9



3. SAR Data

Table 2-1

Exposure Condition	DUT configuration	Band/Mode	Antenna	DUT SN	Power Drift [dB]	Maximum Duty Cycle [%]	Measured Duty Cycle [%]	Frequency [MHz]	Channel	Modulation/Configuration	RB/Tone Size or Data Rate [Mbps]	RB/Tone Offset or # of Tx slots, or BW [MHz]	Measured Conducted Power [dBm]	Measured Conducted Power 2nd Ant [dBm]	Separation Distance [mm]	Position	Measured 10g SAR [W/kg]	Part0 Frame Avg Plimit [dBm]	Part0 Overall Frame Avg Plimit [dBm]
Phablet	Folder Closed	2.4 GHz WIFI	MIMO (H&F)	18S8M	-0.08	100.0%	96.6%	2462	11	IEEE 802.11n - 20 MHz	13	20	17.85	16.60	0	Back	1.310	19.25	19.25
Phablet	Folder Open	2.4 GHz WIFI	MIMO (H&F)	18S8M	0.01	100.0%	96.6%	2462	11	IEEE 802.11n - 20 MHz	13	20	17.85	16.60	0	Back	0.989	20.47	20.28

4. Equipment List

Manufacturer	Model	Description	Serial Number	Calibration Date	Calibration Due	CBT
Amplifier Research	1554GBAM1	RF Broadband Amplifier (4 - 8 GHz)	554497	-	-	✓
Amplifier Research	551G4	RF Broadband Amplifier (800 MHz - 4.2 GHz)	331258	-	-	✓
Rohde & Schwarz	SMCV100B	8&S SMCV100B Vector Signal Generator (VSG)	4343	12/30/25	12/30/27	-
SPEAG	PowersourceP1	Signal Generator	4343	1/8/26	1/8/27	-
Anritsu	MA24118A	Microwave USB Power Sensor (10MHz - 18 GHz)	2123431	1/22/26	1/22/27	-
Anritsu	MA24118A	Microwave USB Power Sensor (10MHz - 18 GHz)	2123500	1/22/26	1/22/27	-
Rohde & Schwarz	NRPS	Power Sensor 10 MHz - 8 GHz	114184	3/12/26	3/12/27	-
Rohde & Schwarz	NRPS	Power Sensor 10 MHz - 8 GHz	114183	3/12/26	3/12/27	-
Rohde & Schwarz	NRPS	Power Sensor 10 MHz - 8 GHz	114343	4/1/26	4/1/27	-
Anritsu	MT8000A	MT8000A Radio Communication Test Station	6262261936	8/21/25	8/21/27	-
Rohde & Schwarz	CMW500	CMW500 Radio Communication Test Station	1201.0002X50-165091-BW	1/28/26	1/28/28	-
Rohde & Schwarz	CMW500	CMW500 Radio Communication Test Station	1201.0002X50-171214-yj	1/16/26	1/16/28	-
Anritsu	MT8820C	Radio Communication Test Station	6201342024	-	-	✓
Anritsu	MT8820C	Radio Communication Test Station	6201179629	-	-	✓
Anritsu	MT8820C	Radio Communication Test Station	6201342019	-	-	✓
Anritsu	SR20E	Vector Network Analyzer	2348026	1/13/26	1/13/28	-
Control Company	4040	Ambient Thermometer	250440190	7/17/25	7/17/27	-
Control Company	4040	Ambient Thermometer	250440191	7/17/25	7/17/27	-
Control Company	4040	Ambient Thermometer	250440199	7/17/25	7/17/27	-
Control Company	4352	Long Stem Liquid Thermometer	250257657	4/23/25	4/23/27	-
Control Company	4352	Long Stem Liquid Thermometer	250257660	4/23/25	4/23/27	-
Control Company	4352	Long Stem Liquid Thermometer	250257665	4/23/25	4/23/27	-
Micro-Cable	UFB205A-0-0240-30x30	SMA N-F RF Test Cable (DC - 18 GHz)	-	-	-	✓
Mini-Circuits	BW-N20W20+	20dB RF Fixed Attenuator (DC - 18 GHz)	-	-	-	✓
Mini-Circuits	BW-N20W20+	20dB RF Fixed Attenuator (DC - 18 GHz)	-	-	-	✓
Mini-Circuits	BW-S3W2+	3dB RF Fixed Attenuator (DC - 18 GHz)	-	-	-	✓
Mini-Circuits	BW-S3W2+	3dB RF Fixed Attenuator (DC - 18 GHz)	-	-	-	✓
Mini-Circuits	CLB-6FT-SMNM+	Precision Test Cable SMA/N (DC - 18 GHz)	3318	-	-	✓
Mini-Circuits	CLB-6FT-SMNM+	Precision Test Cable SMA/N (DC - 18 GHz)	3335	-	-	✓
Mini-Circuits	CLB-6FT-SMNM+	Precision Test Cable SMA/N (DC - 18 GHz)	3329	-	-	✓
Mini-Circuits	NF-SF50+	RF Adapter N Male to SMA Female (DC - 18 GHz)	-	-	-	✓
Mini-Circuits	VLF-6A00+	Coaxial Low Pass Filter (DC - 8.4 GHz)	-	-	-	✓
Mini-Circuits	VLF-6000+	Coaxial Low Pass Filter (DC - 6 GHz)	-	-	-	✓
Mini-Circuits	VLF-3000+	Coaxial Low Pass Filter (DC - 3 GHz)	-	-	-	✓
Mini-Circuits	VLF-1000+	Coaxial Low Pass Filter (DC - 1 GHz)	-	-	-	✓
Narda	24785-20	20 dB SMA Fixed Attenuator (DC - 4.0 GHz)	-	-	-	✓
Narda	4226-20 (24713)	20 dB SMA Directional Coupler (0.5 - 18 GHz)	201	-	-	✓
Mitutoyo	CD-4"AX	Digital Caliper	823243217	8/28/25	8/28/27	-
SPEAG	DAK-12	DAK-12 Dielectric Probe	1194	10/10/25	10/10/26	-
SPEAG	DAK-3.5	DAK-3.5 Dielectric Probe	1349	8/5/25	8/5/26	-
SPEAG	10 GHz System Verification Source	10 GHz System Verification Source	1074	9/15/25	9/15/26	-
SPEAG	ElumWVA	mmWave Measurement Probe	9690	9/17/25	9/17/26	-
SPEAG	CLA13	CLA-13 Confined Loop Antenna	1041	10/11/24	10/11/26	-
SPEAG	D750V3	D750V3 System Validation Dipole	1235	10/11/23	10/11/26	-
SPEAG	D835V2	D835V2 System Validation Dipole	40311	10/9/23	10/9/26	-
SPEAG	D1750V2	D1750V2 System Validation Dipole	1205	10/11/23	10/11/26	-
SPEAG	D1900V2	D1900V2 System Validation Dipole	56252	10/6/23	10/6/26	-
SPEAG	D2450V2	D2450V2 System Validation Dipole	1112	11/15/24	11/15/26	-
SPEAG	D2600V2	D2600V2 System Validation Dipole	1215	11/15/24	11/15/26	-
SPEAG	D560HV2	D560HV2 System Validation Dipole	1396	11/15/24	11/15/26	-
SPEAG	DS-5GHzV2	DS-5GHzV2 System Validation Dipole	1104	11/14/24	11/14/26	-
SPEAG	D8GHV2	D8GHV2 System Validation Dipole	1016	11/14/24	11/14/26	-
SPEAG	DAE4ip	Data Acquisition Electronics with Integ. Power	1843	7/30/25	7/30/26	-
SPEAG	DAE4ip	Data Acquisition Electronics with Integ. Power	1933	1/7/26	1/7/27	-
SPEAG	DAE4ip	Data Acquisition Electronics with Integ. Power	1844	11/5/25	11/5/26	-
SPEAG	DAE4ip	Data Acquisition Electronics with Integ. Power	1838	12/4/25	12/4/26	-
SPEAG	DAE4ip	Data Acquisition Electronics with Integ. Power	1862	1/8/26	1/8/27	-
SPEAG	DAE4ip	Data Acquisition Electronics with Integ. Power	1839	9/15/25	9/15/26	-
SPEAG	EX3DV4	SAR Measurement Probe	7872	8/8/25	8/8/26	-
SPEAG	EX3DV4	SAR Measurement Probe	7965	1/13/26	1/13/27	-
SPEAG	EX3DV4	SAR Measurement Probe	7853	11/7/25	11/7/26	-
SPEAG	EX3DV4	SAR Measurement Probe	7857	12/9/25	12/9/26	-
SPEAG	EX3DV4	SAR Measurement Probe	7971	4/14/26	4/14/27	-
SPEAG	SE UMS 171 E	MAIA Modulation and Interference Analyzer	1814	-	-	-
SPEAG	SE UMS 171 E	MAIA Modulation and Interference Analyzer	1817	-	-	-
SPEAG	SE UMS 171 EA	MAIA Modulation and Interference Analyzer	1820	-	-	-
SPEAG	SE UMS 171 EA	MAIA Modulation and Interference Analyzer	1815	-	-	-
SPEAG	SE UMS 176 C	ANT Wideband Communication Antenna	1579	-	-	-
SPEAG	SE UMS 176 C	ANT Wideband Communication Antenna	1601	-	-	-
SPEAG	SE UMS 176 C	ANT Wideband Communication Antenna	1610	-	-	-
SPEAG	SE UMS 176 C	ANT Wideband Communication Antenna	1590	-	-	-

✓Note: Components calibrated before testing. Prior to testing, the measurement paths containing a cable, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator, power sensor, or VNA) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.