

TEST REPORT

FCC SAR Part 0 Test for SM-A276B/DS
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-SR-2604-FC008

DATE OF ISSUE
April 27, 2026

Tested by
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TEST REPORT

SAR PART 0 Test
for certification

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FCC ID

A3LSMA276B

Applicant

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

Product Name

Mobile Phone

Model Name

SM-A276B/DS

Additional Model Name

SM-A276B

Date of Test

Mar. 18, 2026 ~ Apr. 15, 2026

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing Lab
(Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)

FCC Rule Part(s)

CFR § 2.1093

Test Results

PASS (1g SAR Limit: 1.6 W/kg, 10g SAR Limit: 4.0 W/kg)
Refer to the clause 3.2 Attestation of test result

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	Apr. 27, 2026	Initial Release

Notice

Content

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

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

Information provided by the applicant is marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

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1. Test Location

1.1 Test Laboratory

Company Name	HCT Co., Ltd.
Address	74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea
Telephone	031-645-6300
Fax.	031-645-6401

1.2 Test Facilities

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Korea	National Radio Research Agency (Designation No. KR0032)
	KOLAS (Testing No. KT197)

1.3 General Information of the EUT

Model Name	SM-A276B/DS
Additional Model Name	SM-A276B
Equipment Type	Mobile Phone
FCC ID	A3LSMA276B
Application Type	Certification
Applicant	SAMSUNG Electronics Co., Ltd.

2. Device Under Test Description

Device Wireless specification overview		
Band & Mode	Operating Mode	Tx Frequency
GSM850	Voice / Data	824.2 MHz ~ 848.8 MHz
GSM1900	Voice / Data	1 850.2 MHz ~ 1 909.8 MHz
UMTS Band 2	Voice / Data	1 852.4 MHz ~ 1 907.6 MHz
UMTS Band 4	Voice / Data	1 712.4 MHz ~ 1 752.6 MHz
UMTS Band 5	Voice / Data	826.4 MHz ~ 846.6 MHz
LTE FDD Band 2 (PCS)	Voice / Data	1 850.7 MHz ~ 1 909.3 MHz
LTE FDD Band 4 (AWS)	Voice / Data	1 710.7 MHz ~ 1 754.3 MHz
LTE FDD Band 5 (Cell)	Voice / Data	824.7 MHz ~ 848.3 MHz
LTE FDD Band 12	Voice / Data	699.7 MHz ~ 715.3 MHz
LTE FDD Band 13	Voice / Data	779.5 MHz ~ 784.5 MHz
LTE FDD Band 17	Voice / Data	706.5 MHz ~ 713.5 MHz
LTE FDD Band 26	Voice / Data	814.7 MHz ~ 848.3 MHz
LTE TDD Band 41	Voice / Data	2 498.5 MHz ~ 2 687.5 MHz
LTE FDD Band 66 (AWS)	Voice / Data	1 710.7 MHz ~ 1 779.3 MHz
NR FDD Band n5	Voice / Data	826.5 MHz ~ 846.5 MHz
NR TDD Band n41	Voice / Data	2 501.01 MHz ~ 2 685 MHz
NR FDD Band n66	Voice / Data	1 712.5 MHz ~ 1 777.5 MHz
NR TDD Band n77	Voice / Data	3 705 MHz ~ 3 975 MHz
NR TDD Band n77 DoD	Voice / Data	3 445.01 MHz ~ 3 544.98 MHz
U-NII-1	Voice / Data	5 180 MHz ~ 5 240 MHz
U-NII-2A	Voice / Data	5 260 MHz ~ 5 320 MHz
U-NII-2C	Voice / Data	5 500 MHz ~ 5 720 MHz
U-NII-3	Voice / Data	5 745 MHz ~ 5 825 MHz
2.4 GHz WLAN	Voice / Data	2 412 MHz ~ 2 462 MHz
Bluetooth / LE	Data	2 402 MHz ~ 2 480 MHz
NFC	Data	13.56 MHz
Device Description		
Device Serial Numbers	Mode	Serial Number
	NFC	ZC90933M
	GSM850, GSM1900, UMTS Band 2,4,5, LTE Band 2,4,5,12,13,17,26,66 NR Band n5,n66	ZC90931M, ZC90933M, ZC90848M, ZC90856M, ZC90544M, ZC90529M, ZC90937M, ZC90843M, ZD23241M, ZD23244M
	LTE Band 41 NR Band n41, n77, n77 DoD NR Band n41 SRS1, SRS2, SRS3 NR Band n77 SRS1, SRS2, SRS3 NR Band n77 DoD SRS1, SRS2, SRS3	
	WLAN 2.4G, 5G, BT	ZC90904M, ZC90905M ZCV0326M
	The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics are within operational tolerances expected for production units.	

2.1 Time-Averaging for SAR

This device uses the Qualcomm® Smart Transmit feature to control and manage transmitting power for 2G/3G/4G/5G WWAN operations in real time and to ensure the time-averaged RF exposure is in compliance with the FCC requirement at all times. Additionally, this device supports WLAN, BT and NFC technologies, but the output power of these modems is not controlled by the TAS algorithm.

This device is enabled with Qualcomm® Smart Transmit algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from WWAN is in compliance with FCC requirements.

This Part 0 report shows SAR characterization of WWAN radios. Characterization is achieved by determining P_{limit} for WWAN that corresponds to the exposure design targets after accounting for all device design related uncertainties, i.e., SAR_{design_target} (< FCC SAR limit) for WWAN.

The compliance test under the static transmission scenario and simultaneous transmission analysis are reported in Part 1 SAR report for WWAN/WLAN/BT. The validation of the time-averaging algorithm and compliance under the dynamic (time-varying) transmission scenario for WWAN technologies are reported in A3LSMA276B_SAR Part 2 Report.

2.2 Nomenclature for Part 0 Report

Technology	Term	Description
2G/3G/4G/5G Sub 6 NR	P_{limit}	Power level that corresponds to the exposure design target (SAR_design_target) after accounting for all device design related uncertainties
	P_{max}	Maximum tune up output power
	SAR_design_target	Target SAR level < FCC SAR limit after accounting for all device design related uncertainties.
	SAR Char	Table containing P_{limit} for all technologies and bands

3. SAR MEASUREMENTS

3.1 SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative of the incremental electromagnetic energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body

$$SAR = \frac{d}{dt} \left(\frac{dW}{dm} \right)$$

SAR Mathematical Equation

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \sigma E^2 / \rho$$

Where:

σ = conductivity of the tissue-simulant material (S/m)

ρ = mass density of the tissue-simulant material (kg/m³)

E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.

3.2 SAR Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

1. The SAR distribution at the exposed side of the head or body was measured at a distance no more than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the DUT's head and body area and the horizontal grid resolution was depending on the FCC KDB 865664 D01v01r04 (see table 3-1) & IEEE 1528-2013.
2. Based on step, the area of the maximum absorption was determined by sophisticated interpolations routines implemented in DASY software. When an Area Scan has measured all reachable point. DASY system computes the field maximal found in the scanned are, within a range of the maximum. SAR at this fixed point was measured and used as a reference value.
3. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB 865664 D01v01r04 table 4-1 and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (reference from the DASY manual.)
 - a. The data at the surface were extrapolated, since the center of the dipoles is no more than 2.7 mm away from the tip of the probe (it is different from the probe type) and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
 - b. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y, and z directions. The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.
 - c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan. If the value changed by more than 5 %, the SAR evaluation and drift measurements were repeated.

Table 3-1

Frequency	Maximum Area Scan Resolution(mm) (ΔXarea, ΔYarea)	Maximum Zoom Scan Resolution (mm) (ΔXzoom, ΔYzoom)	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
				ΔZzoom(n)	ΔZ zoom(1)*	
≤2 GHz	≤15	≤8	≤5	≤4	≤1.5* ΔZzoom(n-1)	≥30
2-3 GHz	≤12	≤5	≤5	≤4	≤1.5* ΔZzoom (n-1)	≥30
3-4 GHz	≤12	≤5	≤4	≤3	≤1.5* ΔZzoom (n-1)	≥28
4-5 GHz	≤10	≤4	≤3	≤2.5	≤1.5* ΔZzoom (n-1)	≥25
5-6 GHz	≤10	≤4	≤2	≤2	≤1.5* ΔZzoom (n-1)	≥22

Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

4. SAR CHARACTERIZATION

4.1 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 SAR Index (DSI) conditions used in Table 4-1 represent different exposure scenarios.

Table 4-1 DSI and Corresponding Exposure Scenarios

Scenario		Description	SAR Test Cases
Head	DSI = 1	Device positioned next to head When RCV is activated for voice call	Head SAR per KDB Publication 648474 D04
Non –Head Body worn Hotspot mode Phablet	DSI = 0	Device is held with hand Device transmits in hotspot mode near body Device being used with a body-worn accessory	Phablet SAR per KDB Publication 648474 D04 Hotspot SAR per KDB Publication 941225 D06 Body-worn SAR per KDB Publication 648474 D04

4.2 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 (see Table 4-2).

<i>SAR_design_target</i>			
<i>SAR_design_target</i> < <i>SAR_regulatory_limit</i> x $10^{Total\ Uncertainty/10}$			
1g SAR (W/kg)		10g SAR (W/kg)	
<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

Table 4-2 *SAR_design_target* Calculations for WWAN Bands

4.3 SAR Characterization

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 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} are shown in Table 4-3 and Table 4-4

Device State Index (DSI)	P_{Limit} Determination Scenarios
0	The worst-case SAR exposure is determined as maximum SAR normalized to the limit (i.e. lowest P_{limit}) among: 1. Body Worn SAR at 5 mm for Rear and Front positions 2. Hotspot SAR at 10 mm for top, bottom, right, and left positions and at 5mm for back and front positions 3. Extremity SAR measured at 0 mm spacing for back, front, top, bottom, right and left.
1	P_{Limit} is calculated based on 1g Head SAR

Plimit values in green indicate Plimit ≤ Pmax			Plimit values in grey indicate Plimit > Pmax			
Plimit corresponding to 1 W/kg (1g) 2.5W/kg(10g) SAR_Design_target						Pmax
SAR Exposure Position			Non-Head Bodyworn Hotspot	Head (RCV ON)	Phablet	Maximum Tune-up Output Power [dBm]
Averaging volume			1g	1g	10g	
separation Distance			5,10 mm	0 mm	0 mm	
Mode	Antenna	Antenna Group	DSI=0	DSI=1	DSI=0	
GSM/GPRS/EDGE 850	A	AG0	22.8	29.0	22.8	25.1
GSM/GPRS/EDGE1900	A	AG0	19.3	28.8	19.3	22.6
UMTS Band 2	A	AG0	20.5	21.5	20.5	23.5
UMTS Band 4	A	AG0	20.0	29.0	20.0	23.0
UMTS Band 5	A	AG0	23.5	23.5	23.5	24.5
LTE Band 2	A	AG0	18.0	28.1	18.0	23.5
LTE Band 5	A	AG0	24.0	27.7	24.0	24.5
LTE Band 12/17	A	AG0	26.7	27.3	26.7	24.0
LTE Band 13	A	AG0	26.0	27.7	26.0	24.0
LTE Band 26	A	AG0	25.9	27.2	25.9	24.0
LTE Band 41	A	AG0	17.0	25.6	17.0	23.5
LTE Band 41	C	AG1	11.5	17.0	11.5	23.0
LTE Band 4/66	A	AG0	20.0	29.8	20.0	24.0
LTE Band 4/66	F	AG1	20.0	18.0	20.0	24.0
NR Band n5	A	AG0	24.0	26.6	24.0	24.5
NR Band n41	A	AG0	17.0	27.0	17.0	23.5
NR Band n41 SRS1	E	AG1	17.0	17.0	17.0	20.0
NR Band n41 SRS2	C	AG1	10.0	17.0	10.0	21.0
NR Band n41 SRS3	K	AG1	17.0	17.0	17.0	19.0
NR Band n66	A	AG0	20.0	29.2	20.0	24.0
NR Band n66	F	AG1	20.0	18.0	20.0	24.0
NR Band n71	A	AG0	26.1	28.0	26.1	24.0
NR Band n77 / n77 DoD(PC3)	G	AG1	14.0	16.0	14.0	23.5
NR Band n77 / n77 DoD SRS1 (PC3)	D	AG1	14.0	14.0	14.0	20.5
NR Band n77 / n77 DoD SRS2 (PC3)	I	AG1	14.0	16.0	14.0	21.5
NR Band n77 / n77 DoD SRS3 (PC3)	H	AG1	14.0	16.0	14.0	18.5
NR Band n77 / n77 DoD (PC2)	G	AG1	14.0	16.0	14.0	23.5
NR Band n77 / n77 DoD SRS1 (PC2)	D	AG1	14.0	14.0	14.0	20.5
NR Band n77 / n77 DoD SRS2 (PC2)	I	AG1	14.0	16.0	14.0	21.5
NR Band n77 / n77 DoD SRS3 (PC2)	H	AG1	14.0	16.0	14.0	18.5

Table 4-4 SAR Characterization

5. Equipment List

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
SPEAG	ELI Phantom	-	N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F17/59CHA1/C/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/59CHA1/A/01	N/A	N/A	N/A
Staubli	D21142606B	10963	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331915309	12/18/2025	Annual	12/18/2026
Staubli	CS8Cspeag-TX90	F17/59RAA1/C/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F17/59RAA1/A/01	N/A	N/A	N/A
Staubli	D21142606B	11578	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331922309	12/18/2025	Annual	12/18/2026
Staubli	CS8Cspeag-TX90	F08/5AJ0A1/C/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F08/5AJ0A1/A/01	N/A	N/A	N/A
Staubli	D21143300	S-0008	N/A	N/A	N/A
TESTO	175-H1/Thermometer	40331949309	12/26/2025	Annual	12/26/2026
SPEAG	DAE4	1225	09/25/2025	Annual	09/25/2026
SPEAG	DAE4	780	06/04/2025	Annual	06/04/2026
SPEAG	DAE4	1254	05/21/2025	Annual	05/21/2026
SPEAG	E-Field Probe EX3DV4	3903	07/23/2025	Annual	07/23/2026
SPEAG	E-Field Probe EX3DV4	7732	06/25/2025	Annual	06/25/2026
SPEAG	E-Field Probe EX3DV4	7681	11/21/2025	Annual	11/21/2026
SPEAG	Dipole D750V3	1014	05/20/2025	Annual	05/20/2026
SPEAG	Dipole D835V2	4d165	04/14/2025	Annual	04/14/2026
SPEAG	Dipole D1800V2	2d007	03/12/2026	Annual	03/12/2027
SPEAG	Dipole D1900V2	5d032	01/28/2026	Annual	01/28/2027
SPEAG	Dipole D2600V2	1043	05/22/2025	Annual	05/22/2026
SPEAG	Dipole D3500V2.	1132	01/28/2026	Annual	01/28/2027
SPEAG	Dipole D3700V2	1066	09/15/2025	Annual	09/15/2026
SPEAG	Dipole D3900V2	1019	05/21/2025	Annual	05/21/2026
Agilent	Power Meter / E4419B	MY41291386	09/13/2025	Annual	09/13/2026
Agilent	Power Meter / E4419B	MY40330223	09/15/2025	Annual	09/15/2026
Agilent	Power Meter / N1911A	MY45101406	05/19/2025	Annual	05/19/2026
Agilent	Power Sensor / 8481A	SG1091286	09/09/2025	Annual	09/09/2026
Agilent	Power Sensor / 8481A	MY41090873	01/06/2026	Annual	01/06/2027
Keysight	Power Sensor / N1921A	MY55220026	08/07/2025	Annual	08/07/2026
SPEAG	DAK-3.5	1377	09/08/2025	Annual	09/08/2026
SPEAG	DAKS-12	1048	06/10/2025	Annual	06/10/2026
R&S	VECTOR NETWORK ANALYZER / ZNB 20	102279	07/07/2025	Annual	07/07/2026
R&S	VECTOR NETWORK ANALYZER / ZNB 8	103719	03/31/2026	Annual	03/31/2027
Agilent	SIGNAL GENERATOR / E8267D	MY50350097	02/26/2026	Annual	02/26/2027
Agilent	SIGNAL GENERATOR/E4421B	MY41000790	10/21/2025	Annual	10/21/2026
Agilent	SIGNAL GENERATOR / E4433B	US40052109	01/08/2026	Annual	01/08/2027
MICRO LAB	LP Filter / LA-15N	10453	09/15/2025	Annual	09/15/2026
MICRO LAB	LP Filter / LA-30N	-	09/15/2025	Annual	09/15/2026
MICRO LAB	LP Filter / LA-60N	32011	09/15/2025	Annual	09/15/2026
Agilent	Attenuator (3dB) / 8693B	MY39260298	08/18/2025	Annual	08/18/2026
RF COREA	Attenuator (30dB)	A-0830	06/24/2025	Annual	06/24/2026
NARDA	Directional Coupler / 4226-10	7083	01/16/2026	Annual	01/16/2027
Agilent	Directional Bridge / 86205A	3140A04581	04/18/2025	Annual	04/18/2026
Agilent	Directional Bridge / 86205A	3140A04581	04/07/2026	Annual	04/07/2027
R&S	Wireless Communication Test Set / CMW500	139333	12/02/2025	Annual	12/02/2026
Anritsu	Radio Communication Tester / MT8820C	6201041449	12/17/2025	Annual	12/17/2026
Anritsu	Radio Communication Tester / MT8820C	6201144485	07/14/2025	Annual	07/14/2026
Anritsu	Radio Communication Tester / MT8821C	6201664725	01/06/2026	Annual	01/06/2027
Anritsu	Radio Communication Tester / MT8821C	6201664727	12/02/2025	Annual	12/02/2026

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
Anritsu	Radio Communication Test Station / MT8000A	6262148305	12/18/2025	Annual	12/18/2026
Anritsu	Radio Communication Test Station / MT8000A	6261987928	01/07/2026	Annual	01/07/2027
Agilent	WIRELESS COMMUNICATION / E5515C	MY50260992	05/20/2025	Annual	05/20/2026
Agilent	WIRELESS COMMUNICATION / E5515C	GB42230619	05/20/2025	Annual	05/20/2026
Agilent	Power Divider / 11636B	58698	01/09/2026	Annual	01/09/2027
EMPOWER	RF Power Amplifier / 2135DEFAAXLXX	1084	05/20/2025	Annual	05/20/2026
EMPOWER	RF Power Amplifier / 2001-BBS3Q7EBK	1041D/C0508	05/20/2025	Annual	05/20/2026
EMPOWER	RF Power Amplifier / BBS5K8CAJ	1011	09/15/2025	Annual	09/15/2026

Note: All measurements were performed within the valid calibration period of the specific equipment.

* The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material.

6. Measurement Uncertainty

The measured SAR was <1.5 W/Kg for 1g SAR and <3.75 W/Kg, for 10g SAR for all frequency Bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE1528-2013 was not required.

Appendix A: SAR Test Results For P_{limit} CALCULATIONS

For some bands/modes, a lower P_{limit} was selected as a more conservative evaluation.

Table L-1 DSI = 0 *PLimit* Calculations – 2G/3G Phablet SAR

Freq.(MHz)	Ch.	Band	Mode	Ant.	Frame Avg. Meas. Power(dBm)	Test Position	Distance (mm)	Duty Cycle	Meas. 10g SAR(W/kg)	PLimit	Minimum PLimit	EFS PLimit [dBm]
836.6	190	GSM 850	GPRS 2TX	A	22.41	LEFT	0	1:4.15	0.100	36.4	29.1	22.8
836.6	190	GSM 850	GPRS 2TX	A	22.41	RIGHT	0	1:4.15	0.342	31.0		
836.6	190	GSM 850	GPRS 2TX	A	22.41	BOTTOM	0	1:4.15	0.531	29.1		
1 880	661	GSM 1900	GPRS 2TX	A	20.20	LEFT	0	1:4.15	0.076	35.4	24.6	19.3
1 880	661	GSM 1900	GPRS 2TX	A	20.20	RIGHT	0	1:4.15	0.403	28.1		
1 880	661	GSM 1900	GPRS 2TX	A	20.20	BOTTOM	0	1:4.15	0.900	24.6		
1 880	9400	RMC	UMTS 2	A	21.28	Left	0	1:1	0.510	28.2	24.4	20.5
1 880	9400	RMC	UMTS 2	A	21.28	Right	0	1:1	0.115	34.7		
1 880	9400	RMC	UMTS 2	A	21.28	Bottom	0	1:1	1.220	24.4		
1 732.6	1413	RMC	UMTS 4	A	20.51	Left	0	1:1	0.020	41.5	23.1	20.0
1 732.6	1413	RMC	UMTS 4	A	20.51	Right	0	1:1	0.115	33.9		
1 732.6	1413	RMC	UMTS 4	A	20.51	Bottom	0	1:1	1.370	23.1		
836.6	4183	RMC	UMTS 5	A	23.36	Left	0	1:1	0.075	38.6	28.2	23.5
836.6	4183	RMC	UMTS 5	A	23.36	Right	0	1:1	0.489	30.4		
836.6	4183	RMC	UMTS 5	A	23.36	Bottom	0	1:1	0.828	28.2		

Table L-2 DSI = 0 *PLimit* Calculations – 4G Phablet SAR

Freq.(MHz)	Ch.	Band	Mode	Ant.	Frame Avg. Meas. Power(dBm)	Test Position	Distance (mm)	Duty Cycle	Meas. 10g SAR(W/kg)	PLimit [dBm]	Minimum PLimit [dBm]	EFS PLimit [dBm]
1 860	18700	LTE 2	QPSK	A	17.64	Left	0	1:1	0.230	28.0	23.8	18.0
1 860	18700	LTE 2	QPSK	A	17.64	Right	0	1:1	0.066	33.4		
1 860	18700	LTE 2	QPSK	A	17.64	Bottom	0	1:1	0.601	23.8		
836.5	20525	LTE 5	QPSK	A	24.20	Left	0	1:1	0.091	38.6	28.6	24.0
836.5	20525	LTE 5	QPSK	A	24.20	Right	0	1:1	0.555	30.7		
836.5	20525	LTE 5	QPSK	A	24.20	Bottom	0	1:1	0.903	28.6		
707.5	23095	LTE 12	QPSK	A	23.29	Rear	0	1:1	0.080	38.2	29.1	26.7
707.5	23095	LTE 12	QPSK	A	23.29	Rear	0	1:1	0.385	31.4		
707.5	23095	LTE 12	QPSK	A	23.29	Rear	0	1:1	0.656	29.1		
782	23230	LTE 13	QPSK	A	24.10	Left	0	1:1	0.095	38.3	28.7	26.0
782	23230	LTE 13	QPSK	A	24.10	Right	0	1:1	0.607	30.2		
782	23230	LTE 13	QPSK	A	24.10	Bottom	0	1:1	0.862	28.7		
831.5	26865	LTE 26	QPSK	A	23.93	Left	0	1:1	0.079	38.9	28.8	25.9
831.5	26865	LTE 26	QPSK	A	23.93	Right	0	1:1	0.539	30.6		
831.5	26865	LTE 26	QPSK	A	23.93	Bottom	0	1:1	0.812	28.8		
2 593	40620	LTE 41	QPSK	A	17.30	Left	0	1:1.58	0.202	28.2	24.6	17.0
2 593	40620	LTE 41	QPSK	A	17.30	Right	0	1:1.58	0.079	32.3		
2 593	40620	LTE 41	QPSK	A	17.30	Bottom	0	1:1.58	0.466	24.6		
2 593	40620	LTE 41	QPSK	C	11.50	Left	0	1:1.58	0.206	22.3	22.3	11.5
2 593	40620	LTE 41	QPSK	C	11.50	Top	0	1:1.58	0.019	32.7		
1 720	132072	LTE 66	QPSK	A	20.12	Left	0	1:1	0.339	28.8	23.3	20.0
1 720	132072	LTE 66	QPSK	A	20.12	Right	0	1:1	0.075	35.3		
1 720	132072	LTE 66	QPSK	A	20.12	Bottom	0	1:1	1.200	23.3		
1 745	132322	LTE 66	QPSK	F	19.22	Left	0	1:1	0.816	24.1	24.1	20.0
1 745	132322	LTE 66	QPSK	F	19.22	Top	0	1:1	0.330	28.0		

Table L-3 DSI = 0 *PLimit* Calculations – NR Phablet SAR

Freq.(MHz)	Ch.	Band	Mode	Ant.	Frame Avg. Meas. Power(dBm)	Test Position	Distance (mm)	Duty Cycle	Meas. 10g SAR (W/kg)	PLimit [dBm]	Minimum PLimit [dBm]	EFS PLimit [dBm]
836.5	167300	NR n5	DFT-S QPSK	A	24.54	Left	0	1:1	0.556	31.1	30.0	24.0
836.5	167300	NR n5	DFT-S QPSK	A	24.54	Right	0	1:1	0.511	31.4		
836.5	167300	NR n5	DFT-S QPSK	A	24.54	Bottom	0	1:1	0.708	30.0		
2 592.99	518598	NR n41	DFT-S QPSK	A	17.45	Left	0	1:1	0.282	26.9	23.3	17.0
2 592.99	518598	NR n41	DFT-S QPSK	A	17.45	Right	0	1:1	0.119	30.6		
2 592.99	518598	NR n41	DFT-S QPSK	A	17.45	Bottom	0	1:1	0.648	23.3		
2 592.99	518598	NR n41	CW	E	17.26	Right	0	1:1	0.081	32.2	25.1	17.0
2 592.99	518598	NR n41	CW	E	17.26	Top	0	1:1	0.414	25.1		
2 592.99	518598	NR n41	CW	C	11.89	Left	0	1:1	0.308	21.0	21.0	10.0
2 592.99	518598	NR n41	CW	C	11.89	Top	0	1:1	0.024	21.1		
2 592.99	518598	NR n41	CW	K	16.23	Right	0	1:1	0.283	25.7	25.7	17.0
2 592.99	518598	NR n41	CW	K	16.23	Top	0	1:1	0.027	35.9		
1 745	349000	NR n66	DFT-S QPSK	A	20.60	Left	0	1:1	0.357	29.0	23.6	20.0
1 745	349000	NR n66	DFT-S QPSK	A	20.60	Right	0	1:1	0.100	34.5		
1 745	349000	NR n66	DFT-S QPSK	A	20.60	Bottom	0	1:1	1.230	23.6		
1 745	349000	NR n66	DFT-S QPSK	F	20.35	Left	0	1:1	0.844	25.1	25.1	20.0
1 745	349000	NR n66	DFT-S QPSK	F	20.35	Top	0	1:1	0.308	29.4		
3 750	650000	NR n77	DFT-S QPSK	G	14.11	Left	0	1:1	0.384	22.2	22.2	14.0
3 750	650000	NR n77	DFT-S QPSK	G	14.11	Top	0	1:1	0.051	31.0		
3 500.01	633334	NR n77DoD	DFT-S QPSK	G	14.66	Left	0	1:1	0.336	23.4	23.4	14.0
3 500.01	633334	NR n77DoD	DFT-S QPSK	G	14.66	Top	0	1:1	0.063	30.6		
3 930	662000	NR n77	CW	D	10.05	Right	0	1:1	0.112	23.5	21.5	14.0
3 930	662000	NR n77	CW	D	10.05	Top	0	1:1	0.177	21.5		
3 500.01	633334	NR n77DoD	CW	D	10.72	Right	0	1:1	0.012	33.9	25.3	14.0
3 500.01	633334	NR n77DoD	CW	D	10.72	Top	0	1:1	0.088	25.3		
3 750	650000	NR n77	CW	I	12.84	Left	0	1:1	0.039	30.9	26.4	14.0
3 750	650000	NR n77	CW	I	12.84	Top	0	1:1	0.110	26.4		
3 500.01	633334	NR n77DoD	CW	I	11.65	Left	0	1:1	0.034	18.7	13.6	14.0
3 500.01	633334	NR n77DoD	CW	I	11.65	Top	0	1:1	0.110	13.6		
3 750	650000	NR n77	CW	H	9.92	Right	0	1:1	0.047	27.2	27.2	14.0
3 750	650000	NR n77	CW	H	9.92	Top	0	1:1	0.015	32.1		
3 500.01	633334	NR n77DoD	CW	H	8.24	Right	0	1:1	0.094	22.5	22.5	14.0
3 500.01	633334	NR n77DoD	CW	H	8.24	Top	0	1:1	0.006	34.4		

End.