FCC 47 CFR § 2.1093
IEEE Std 1528-2013

SAR EVALUATION REPORT
(SAR CHARACTERIZATION Report)

FOR

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

MODEL NUMBER: SM-A546U, SM-A546U1, SM-S546VL

FCC ID: A3LSMA546U

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Revision History

Rev.	Date	Revisions	Revised By
V1	1/20/2023	Initial Issue	--
V2	1/25/2023	Revised section 5.1. Revised Pmax target of NR Band n77 PC3 & PC2 in Section 6.3.	Seungyeon Kim
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1. Attestation of SAR Characterization

Applicant Name	SAMSUNG ELECTRONICS CO.,LTD.
FCC ID	A3LSMA546U
Model Number	SM-A546U, SM-A546U1,SM-S546VL
Applicable Standards	FCC 47 CFR § 2.1093 IEEE Std 1528-2013 Published RF exposure KDB procedures
Report type	SAR Characterization Report
Date Tested	12/1/2022 to 1/20/2022
SAR Characterization Purpose	SAR Char is the procedures for determining P_{Limit} for 2G/3G/4G/5G NR sub6 to satisfy *SAR_design_target* in order to FCC limit's requirement.

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 By:	Prepared By:
	
Justin Park Operations Leader UL Korea, Ltd. Suwon Laboratory	Seungyeon Kim Laboratory Senior Technician UL Korea, Ltd. Suwon Laboratory

2. Introduction

The equipment under test (EUT) is SAMSUNG Smartphone (FCC ID : A3LSMA546U), it contains S.LSI chipset supporting 2G/3G/4G/5G NR technologies. These chipsets are enabled with Samsung S.LSI proprietary TAS (Time Average SAR) algorithm has been designed to meet the compliance limits over the required duration, while still allowing dynamic control of transmit power for meeting system performance.

This purpose of the SAR Char report is to determine SAR char is derived from SAR test measurements and conducted power measurements to determine P_{Limit} for each technology/band. The P_{Limit} represents the maximum time-averaged power level for the corresponding radio/antenna configuration.

3. Facilities and Accreditation

The test sites and measurement facilities used to collect data are located at

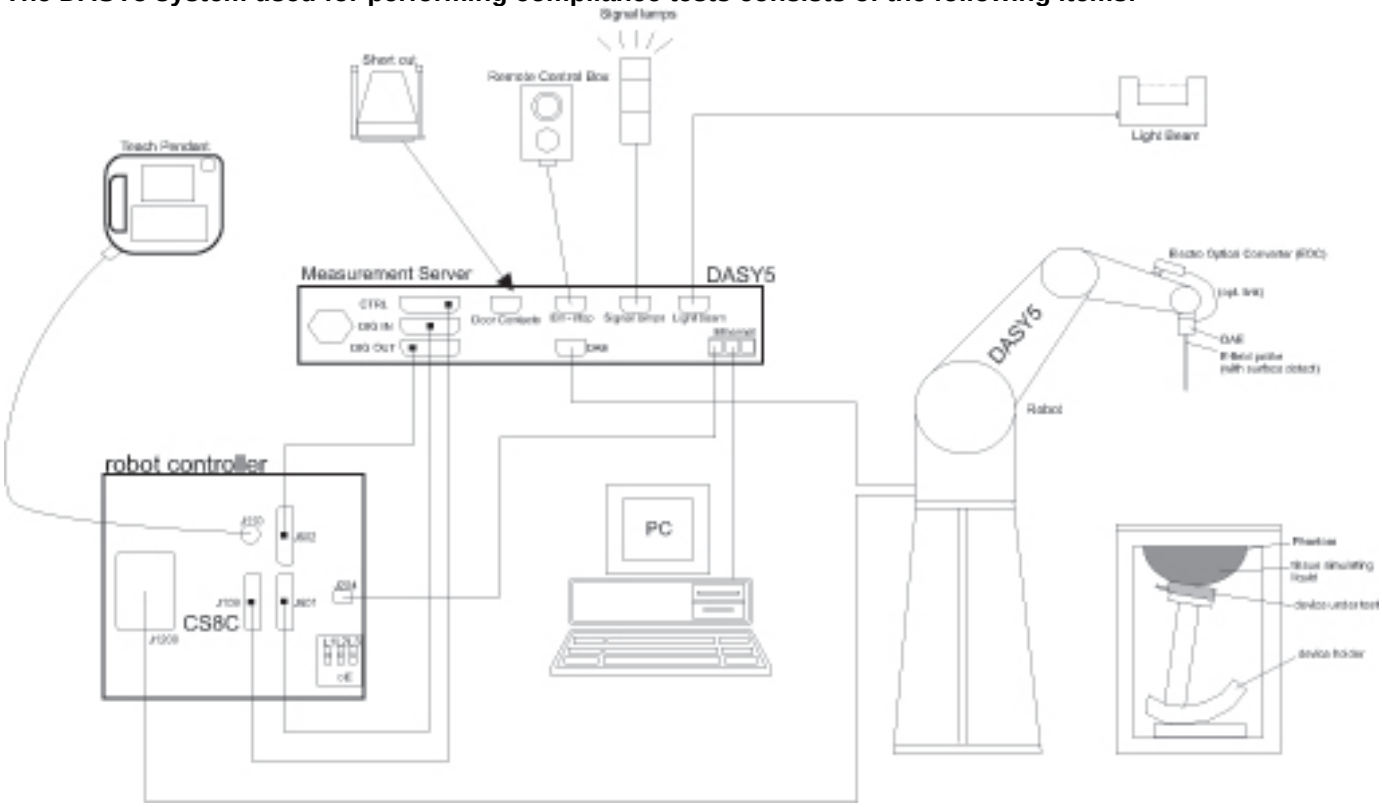
Suwon	
SAR 1 Room	SAR 6 Room
SAR 2 Room	SAR 7 Room
SAR 3 Room	SAR 8 Room
SAR 4 Room	SAR 9 Room
SAR 5 Room	

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. SAR Measurement System & Test Equipment

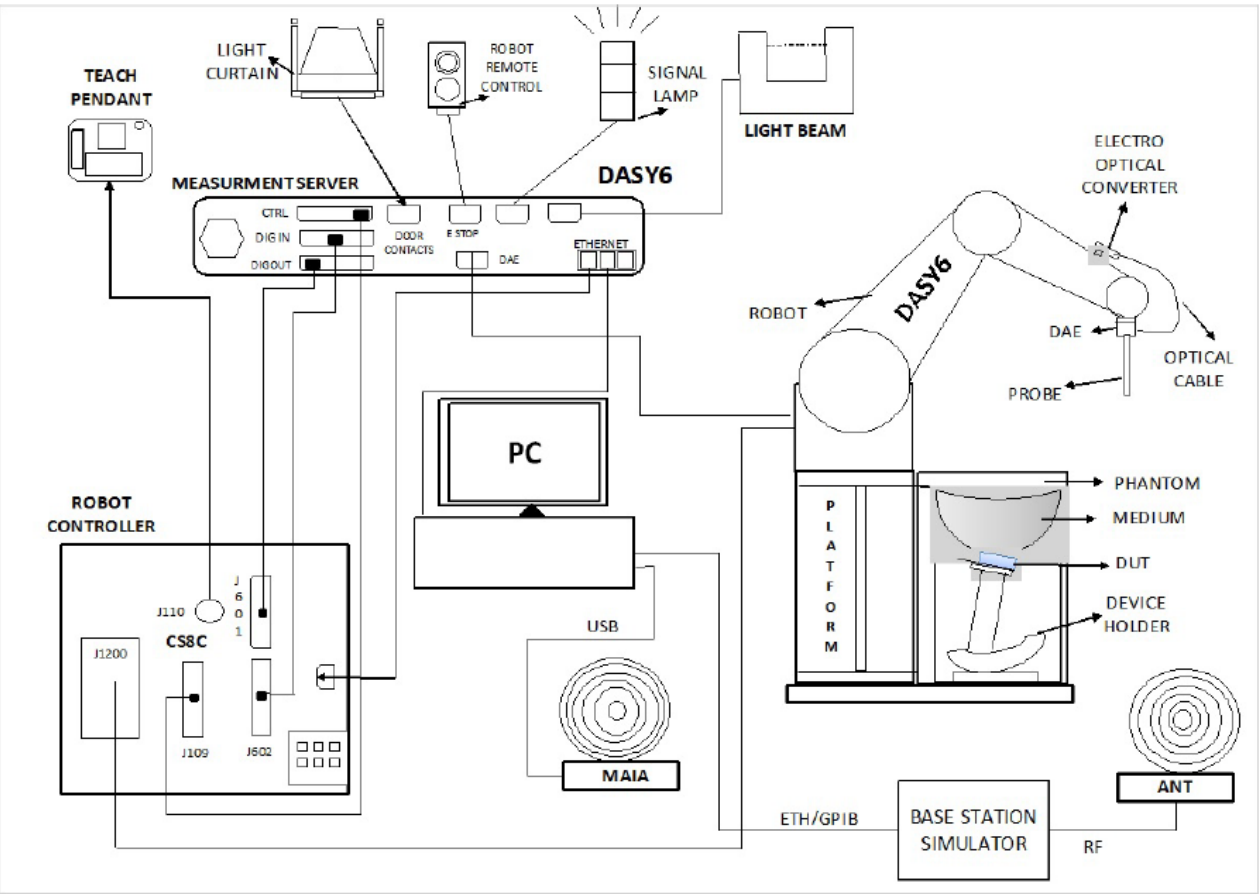
4.1. SAR Measurement System

The DASY5 system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

The DASY6 & 8 system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win10 and the DASY6 or 8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

4.2. SAR Scan Procedures

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 2.1 mm. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

Step 4: Power drift measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

Step 5: Z-Scan (FCC only)

The Z Scan measures points along a vertical straight line. The line runs along the Z-axis of a one-dimensional grid. In order to get a reasonable extrapolation the extrapolated distance should not be larger than the step size in Z-direction.

4.3. Test Equipment

The measuring equipment used to perform the tests documented in this report has been calibrated in accordance with the manufacturers' recommendations, and is traceable to recognized national standards.

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	E5071C	MY46522054	8-5-2023
Network Analyzer	ROHDE & SCHWARZ	ZNB 20	102256	8-5-2023
Dielectric Assessment Kit	SPEAG	DAK-12	1158	11-17-2023
Dielectric Assessment Kit	SPEAG	DAK-3.5	1196	7-25-2023
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	LKM	DTM3000	3851	8-3-2023
Thermometer	LKM	DTM3000	3862	8-3-2023

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
MXG Analog Signal Generator	Agilent	N5181A	MY50145882	8-4-2023
MXG Analog Signal Generator	Keysight	N5181B	MY59100587	8-4-2023
MXG Analog Signal Generator	Keysight	N5173B	MY59101083	8-4-2023
Power Sensor	Keysight	U2000A	MY60180020	8-3-2023
Power Sensor	Keysight	U2000A	MY60490008	8-3-2023
Power Sensor	Keysight	U2000A	MY61060004	8-3-2023
Power Sensor	Keysight	U2000A	MY61010010	8-3-2023
Power Amplifier	EXODUS	AMP2027	1410025-AMP2027-10003	11-2-2023
Power Amplifier	MINI-CIRCUITS	TVA-R5-13A+	2111006	2-15-2023
				1-6-2024
Power Amplifier	EXODUS	AMP2027ADB	10002	3-30-2023
				1-6-2024
Directional Coupler	Agilent	772D	MY52180193	8-3-2023
Directional Coupler	H.P	778D	16133	8-3-2023
Directional Coupler	NARDA	4216-10	02836	8-3-2023
Directional Coupler	MINI-CIRCUITS	ZMDC-30-1+	SF569102123	8-3-2023
Low Pass Filter	FILTRON	L14012FL	1410003S	8-3-2023
Low Pass Filter	MICROLAB	LA-60N	3942	8-3-2023
Low Pass Filter	MINI-CIRCUITS	VLF-6000+	S0142	8-2-2023
Low Pass Filter	MINI-CIRCUITS	VLF-3000+	S0143	8-2-2023
Low Pass Filter	MINI-CIRCUITS	NLP-1200	VUU19301915	8-2-2023
Attenuator	KEYSIGHT	8491B/003	MY39272276	8-3-2023
Attenuator	KEYSIGHT	8491B/010	MY39271981	8-3-2023
Attenuator	KEYSIGHT	8491B/010	MY39272011	8-2-2023
Attenuator	KEYSIGHT	8491B/020	MY39272301	8-3-2023
Attenuator	KEYSIGHT	8491B/020	MY39272302	8-2-2023
Attenuator	KEYSIGHT	8491B/003	MY39272275	8-2-2023

Note(s):

1. All equipments were used until Cal.Due data.

Test Equipment (Continued)

E-Field Probe	SPEAG	EX3DV4	7313	3-2-2023
E-Field Probe	SPEAG	EX3DV4	7330	1-28-2023
E-Field Probe	SPEAG	EX3DV4	7376	7-27-2023
E-Field Probe	SPEAG	EX3DV4	7314	5-31-2023
E-Field Probe	SPEAG	EX3DV4	7645	11-15-2023
E-Field Probe	SPEAG	EX3DV4	7651	5-30-2023
E-Field Probe	SPEAG	EX3DV4	7652	4-28-2023
E-Field Probe	SPEAG	EX3DV4	7646	3-29-2023
Data Acquisition Electronics	SPEAG	DAE4	1447	3-25-2023
Data Acquisition Electronics	SPEAG	DAE4	1468	8-18-2023
Data Acquisition Electronics	SPEAG	DAE4	1494	7-18-2023
Data Acquisition Electronics	SPEAG	DAE4	1670	6-7-2023
Data Acquisition Electronics	SPEAG	DAE4	1671	5-31-2023
Data Acquisition Electronics	SPEAG	DAE4	1667	4-27-2023
Data Acquisition Electronics	SPEAG	DAE4	1343	2023-0823
System Validation Dipole	SPEAG	D750V3	1205	4-27-2023
System Validation Dipole	SPEAG	D835V2	4d174	9-21-2023
System Validation Dipole	SPEAG	D1750V2	1125	11-30-2023
System Validation Dipole	SPEAG	D1750V2	1180	9-21-2023
System Validation Dipole	SPEAG	D1900V2	5d190	11-16-2023
System Validation Dipole	SPEAG	D1900V2	5d199	3-25-2023
System Validation Dipole	SPEAG	D2300V2	1115	4-23-2023
System Validation Dipole	SPEAG	D2450V2	960	3-24-2023
System Validation Dipole	SPEAG	D2600V2	1178	4-23-2023
System Validation Dipole	SPEAG	D2600V2	1097	9-29-2023
System Validation Dipole	SPEAG	D3500V2	1121	4-21-2023
System Validation Dipole	SPEAG	D3700V2	1036	5-21-2023
System Validation Dipole	SPEAG	D3900V2	1069	4-21-2023
System Validation Dipole	SPEAG	D5GHzV2	1184	11-23-2023
System Validation Dipole	SPEAG	CLA-13	1015	8-23-2023
Thermometer	Lutron	MHB-382SD	AH.91463	8-4-2023
				1-11-2024
Thermometer	Lutron	MHB-382SD	AH.50215	8-9-2023
				1-9-2024
Thermometer	Lutron	MHB-382SD	AH.50213	8-4-2023
				1-11-2024
Thermometer	Lutron	MHB-382SD	AH.45903	8-9-2023
				1-9-2024
Thermometer	Lutron	MHB-382SD	AK.12123	8-9-2023
				1-9-2024
Thermometer	Lutron	MHB-382SD	AK.18789	8-9-2023
Thermometer	Lutron	MHB-382SD	AK.12103	8-9-2023

Others

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	R & S	CMW500	150313	8-2-2023
Base Station Simulator	R & S	CMW500	169801	1-5-2024
Base Station Simulator	R & S	CMW500	150314	8-2-2023
Base Station Simulator	R & S	CMW500	162790	8-2-2023
Base Station Simulator	R & S	CMW500	169803	5-27-2023
				1-5-2024
Base Station Simulator	R & S	CMW500	169799	8-2-2023
Base Station Simulator	R & S	CMW500	169800	8-2-2023
Base Station Simulator	R & S	CMW500	169798	8-2-2023
UXM 5G Wireless Test Platform	Keysight	E7515B	MY59150850	**12-13-2022**
				1-9-2024
UXM 5G Wireless Test Platform	Keysight	E7515B	MY58120110	**1-7-2023**
				1-10-2024
UXM 5G Wireless Test Platform	Keysight	E7515B	MY57510596	8-5-2023
Radio Communication Test Station	Anritsu	MT8000A	6272466165	9-8-2023
Radio Communication Analyzer	Anritsu	MT8821C	6161094351	9-8-2023

Note(s):

1. For System Validation Dipole, Calibration interval applied every 2 years according to referencing KDB 865664 guidance.
2. Refer to Appendix F that mentioned about justification for Extended SAR Dipole Calibrations. (for blue box items)
3. All equipments were used until Cal.Due data.

5. Device Under Test (DUT) Information

5.1 Wireless Technologies

Wireless technologies	Frequency bands	Operating mode		Duty Cycle used for SAR testing
GSM	850 1900	Voice (GMSK) GPRS (GMSK) EGPRS (8PSK)	GPRS Multi-Slot Class: ☐ Class 8 - 1 Up, 4 Down ☐ Class 10 - 2 Up, 4 Down ☐ Class 12 - 4 Up, 4 Down ☒ Class 33 - 4 Up, 5 Down	GSM Voice: 12.5% (E)GPRS: 1 Slot: 12.5% 2 Slots: 25% 3 Slots: 37.5% 4 Slots: 50%
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No			
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Category 14) HSUPA (Category 6) DC-HSDPA (Category 14) HSPA+ (DL only)		100%
LTE	FDD Band 2 / FDD Band 4 FDD Band 5 / FDD Band 7 FDD Band 12 / FDD Band 13 FDD Band 14 / FDD Band 25 FDD Band 26 / FDD Band 30 FDD Band 66 / FDD Band 71 TDD Band 38 / TDD Band 40 TDD Band 41-Power Class 3 TDD Band 41-Power Class 2 TDD Band 48	QPSK 16QAM 64QAM 256QAM Rel. 16 Carrier Aggregation (2 Uplink and 4 Downlinks) **<u>Uplink Carrier Aggregation(2CC)</u>** CA_41C, 48C		100% (FDD) 63.3% (TDD) 43.3% (TDD)
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No			
5G NR (Sub 6)	FDD Band n2 / FDD Band n5 FDD Band n12 / FDD Band n25 FDD Band n30 / FDD Band n66 FDD Band n71 TDD Band n41-Power Class 3 TDD Band n41-Power Class 2 TDD Band n48 TDD Band n77-Power Class 3 TDD Band n77-Power Class 2	DFT-s-ODFM: ■ π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-ODFM: ■QPSK, 16QAM, 64QAM, 256QAM		100%
Wi-Fi	2.4 GHz	802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20)		98.7% (802.11b)
	5 GHz	802.11a / 802.11n (HT20/40) 802.11ac (VHT20/40/80) 802.11ax (HE20/40/80)		96.0% (802.11a) 95.2% (802.11ac (VHT80)
	Does this device support bands 5.60 ~ 5.65 GHz? ☒ Yes ☐ No			
	Does this device support Band gap channel(s)? ☒ Yes ☐ No			
Bluetooth	2.4 GHz	Version 5.3 LE		77.1%
NFC	13.56 MHz	Type A/B/F		100%

Notes:

1. The Bluetooth protocol is considered source-based averaging. Bluetooth was verified to have the highest duty cycle and was considered and used for SAR Testing.
2. Duty cycle for Wi-Fi is referenced from the SAR report.
3. This device supports Power Class 2(HPUE) and Power Class 3 for NR Band n41 & n77
4. This device supports UL CA Intra-band Continues.
5. NR TDD Band n48 & n77 has support SRS (Sounding Reference Signal) 0/1/2/3 operates.

5.2 Time-Averaging for SAR

This device is enabled with Samsung S.LSI proprietary TAS (Time Average SAR) algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from 2G/3G/4G/5G NR Sub6 WWAN is compliance with FCC requirement. This SAR Char report shows SAR characterization of WWAN radios for 2G/3G/4G/5G NR Sub6. Characterization is achieved by determining P_{limit} for 2G/3G/4G/5G NR Sub6 that correspond to the *SAR_design_target* after accounting for all device design related uncertainty. The SAR Characterization is denoted as SAR Char in this report.

5.3 Nomenclature for SAR Characterization Report

Term	Descroption
P_{max}	Maximum Tx power that can be transmitted physically from RFIC for a given RAT.
SAR_regulatory_limit	SAR value limit specified by FCC.
SAR_design_target	Target SAR level using in TAS algorithm. This SAR value should be less than SAR regulatory limit and should be determined after accounting for all uncertainties and other design considerations.
P_{limit}	Power level corresponds to the SAR design target.

Table 5.3.1 Definitions for TAS algorithm

6. SAR Characterizations

6.1 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.

SAR_design_target			
$SAR\_design\_target < SAR\_regulatory\_limit \times 10^{\frac{-Total\ Uncertainty}{10}}$			
1g SAR (W/kg)		**10g SAR (W/kg)**	
Total Uncertainty	**1.0 dB**	**Total Uncertainty**	**1.0 dB**
SAR_regulatory_limit	**1.6 W/kg**	***SAR_regulatory_limit***	**4.0 W/kg**
SAR_design_target	**1.0 W/kg**	***SAR_design_target***	**2.5 W/kg**

Table 6.1.1 Definitions of uncertainty and design target

6.2 RSI and SAR Determination

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

The radio SAR Index (RSI) conditions used in below table represent different exposure scenarios.

RF exposure Scenarios	RSI No.	Descroption	KDB guide For SAR test
Head exposure	4	1. Next to the ear exposure condition. 2. Handset's Receiver(ear piece) is active during voice or VoIP call.	KDB 648474 D04
Body-worn exposure	0	1. Handset are used with body-worn accessories.	KDB 648474 D04
Hotspot exposure	3	1. SAR test requirements for Handset with wireless router or hotspot mode capabilities. 2. Hotspot mode SAR test for Near body use condition.	KDB 941225 D06
Product Specific 10-g	1 or 2	1. Hand use conditions for Handset(Phablet) and Proximity sensor is triggered 2. Connected ear-jack.	KDB 648474 D04 KDB 616217 D04
	0	1. Hand use conditions for Handset(Phablet) and Proximity sensor is not triggered.	KDB 648474 D04 KDB 616217 D04

Table 6.2.1 RSI and Corresponding Exposure Scenarios

6.3 Plimit determination of each RSI scenarios

SAR results corresponding to P_{max} for each antenna/technology/band/RSI can be found in Section.7. P_{limit} is calculated by linearly scaling with the measured SAR at the P_{max} to correspond to *the SAR_ design_target*. P_{limit} determination for each exposure scenario corresponding to *SAR_design_target* are shown in table.

Table 6.3.1 P_{Limit} Determination

Radio SAR Index (RSI)	Plimit Determination Scenarios
RSI = 0	The worst-case SAR exposure is determined as maximum SAR normalized to the limit among; 1. Body-worn exposure SAR 2. Product Specific 10-g SAR measured at 11, 7 and 13 mm spacing for Rear, Front, Edge.3 3. Product Specific 10-g SAR measued at 0 mm for Edge1, Edge2, Edge4.
RSI = 1 or 2	1. Plimit is calculated based on Product Spectic 10-g SAR at 0 mm for Rear, Front, Edge 3.
RSI = 4	1. Plimit is calculated based on Head exposure SAR
RSI = 3	1. Plimit is calculated based on Hotspot SAR at 10mm.

Notes:

For RSI = 0, P_{limit} is calculated by:

Main.1 Ant

P_{limit} = min{ P_{limit} corresponding to 1g Body worn SAR evaluation at 15 mm spacing,

P_{limit} corresponding to Product specifc 10g SAR evaluation at 11(Rear), 7(Front). 13(Edge3) mm spacing,

P_{limit} corresponding to Product specifc 10g SAR evaluation at 0 mm for Edge2 surfaces}

Main.2 Ant

P_{limit} = min{ P_{limit} corresponding to 1g Body worn SAR evaluation at 15 mm spacing,

P_{limit} corresponding to Product specifc 10g SAR evaluation at 11(Rear), 7(Front). 13(Edge3) mm spacing,

P_{limit} corresponding to Product specifc 10g SAR evaluation at 0 mm for Edge4 surfaces}

Other Antennas (Sub.2 / Sub.3 / Sub.5 / Sub.8)

P_{limit} = min{ P_{limit} corresponding to 1g Body worn SAR evaluation at 15 mm spacing,

P_{limit} corresponding to Product specifc 10g SAR evaluation at 0 mm on all surfaces and side edges with each antenna location at within 25mm from that surface or edge.}

Table 6.3.2 Plimit result according to technologies and bands in each RSI

Exposure condition		Body-Worn	Product Specific 10-g Without triggering sensor	Product Specific 10-g With triggering sensor	Head (RCV)	Hotspot	Ear-jack	Pmax (Maximum tune-up Power) (dBm)
Spatial-average		1g	10g	10g	1g	1g	10g	
Test distance (mm)		15	11/7/0/13	0	0	10	0	
RSI:		0	0	2	4	3	1	
RF Air Interface	Antenna	Plimit (all values are time averaged)						
GSM 850	Main.1	24.98	24.98	24.98	24.98	24.98	21.48	24.98
GSM 1900	Main.2	20.99	20.99	20.99	20.99	20.99	20.99	20.99
WCDMA Band II	Main.2	23.00	23.00	21.00	23.00	21.00	21.00	23.00
WCDMA Band IV	Main.1	23.00	23.00	20.50	23.00	20.50	20.50	23.00
WCDMA Band V	Main.1	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 2	Sub.2	21.00	21.00	21.00	20.00	21.00	21.00	21.00
LTE Band 5	Main.1	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 7	Main.2	23.00	23.00	20.00	23.00	20.00	20.00	23.00
LTE Band 12	Main.1	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 13	Main.1	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 14	Main.1	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE Band 25(2)	Main.2	24.00	24.00	22.00	24.00	22.00	22.00	24.00
LTE Band 26	Main.1	24.50	24.50	24.50	24.50	24.50	24.50	24.50
LTE Band 30	Main.2	23.00	23.00	23.00	23.00	23.00	23.00	23.00
LTE Band 38	Main.2	21.00	21.00	21.00	21.00	21.00	21.00	21.00
LTE Band 40	Main.2	11.00	11.00	11.00	11.00	11.00	11.00	11.00
LTE Band 41-PC3	Main.2	21.00	21.00	19.00	21.00	19.00	19.00	21.00
LTE Band 41-PC2	Main.2	22.40	22.40	18.40	22.40	18.40	18.40	22.40
LTE Band 48	Sub.3	18.00	18.00	18.00	17.50	18.00	18.00	21.00
LTE Band 66(4)	Main.2	24.00	24.00	22.00	24.00	22.00	22.00	24.00
LTE Band 66	Sub.2	20.50	20.50	20.50	19.50	20.50	20.50	20.50
LTE Band 71	Main.1	24.50	24.50	24.50	24.50	24.50	24.50	24.50
NR Band n5	Main.1	24.50	24.50	24.50	24.50	24.50	24.50	24.50
NR Band n12	Main.1	24.00	24.00	24.00	24.00	24.00	24.00	24.00
NR Band n25(2)	Main.2	24.00	24.00	22.00	24.00	22.00	22.00	24.00
NR Band n30	Main.2	23.00	23.00	23.00	23.00	23.00	23.00	23.00
NR Band n66	Main.2	24.00	24.00	22.00	24.00	22.00	22.00	24.00
NR Band n71	Main.1	24.50	24.50	24.50	24.50	24.50	24.50	24.50
NR Band n41(PC3)	Main.2	17.00	17.00	16.00	17.00	16.00	16.00	23.00
NR Band n41(PC2)	Main.2	20.00	20.00	16.00	20.00	16.00	16.00	26.00
NR Band n48 -SRS 0-	Sub.3	14.00	14.00	14.00	13.00	14.00	14.00	23.00
NR Band n48 -SRS 1-	Main.2	14.50	14.50	14.50	13.50	14.50	14.50	23.00
NR Band n48 -SRS 2-	Sub.5	14.00	14.00	14.00	13.00	14.00	14.00	22.50
NR Band n48 -SRS 3-	Sub.8	14.00	14.00	14.00	12.00	14.00	14.00	22.00
NR Band n77 -SRS 0-PC3/PC2	Sub.3	15.00	15.00	15.00	15.00	15.00	15.00	22.20 / 27.00
NR Band n77 -SRS 1-PC3/PC2 (DoD)	Main.2	13.00	13.00	13.00	13.00	13.00	13.00	19.50
NR Band n77 -SRS 1-PC3/PC2	Main.2	15.00	15.00	15.00	15.00	15.00	15.00	19.50
NR Band n77 -SRS 2-PC3/PC2	Sub.5	15.00	15.00	15.00	15.00	15.00	15.00	21.00
NR Band n77 -SRS 3-PC3/PC2	Sub.8	15.00	15.00	15.00	15.00	15.00	15.00	18.50

Notes:

1. If P_{limit} is higher than P_{max} for some modes/bands, The modes/bands will operate at a power level up to P_{max}.
2. P_{max} (Maximum tune-up power) is specified in tune-up document. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty.
3. All P_{limit} NV and maximum tune up output P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of GSM & LTE TDD modulation schemes.
4. For NR FR1 TDD Bands, P_{limit} listed averaged power level, and P_{max} listed burst power level.
5. P_{limit} (RSI=0) was determined to be the lower of “Body-worn” and “Product Specific 10-g at Max power” in each WWAN Bands.

7. SAR Test results for P_{limit} calculations

Head exposure (RSI = 4)

RF Exposure Conditions	RSI	band	Antenna	mode	Ch.	Test distance (mm)	Test position	Output power (dbm)	meas SAR 1g (W/kg)	Plimit (dBm)	Minimum Plimit (dBm)
Head	4	GSM 850	Main 1	GPRS 2 Slots	190	0	Left Touch	24.42	0.211	31.18	29.46
						0	Left Tilt	24.42	0.111	33.97	
						0	Right Touch	24.42	0.313	29.46	
						0	Right Tilt	24.42	0.140	32.96	
Head	4	GSM 1900	Main 2	GPRS 4 Slots	661	0	Left Touch	20.70	0.132	29.49	28.74
						0	Left Tilt	20.70	0.092	31.07	
						0	Right Touch	20.70	0.157	28.74	
						0	Right Tilt	20.70	0.078	31.77	
Head	4	WCDMA Band II	Main 2	Rel 99 RMC 12.2 kbps	9400	0	Left Touch	22.99	0.292	28.34	28.03
						0	Left Tilt	22.99	0.166	30.79	
						0	Right Touch	22.99	0.313	28.03	
						0	Right Tilt	22.99	0.156	31.06	
Head	4	WCDMA Band IV	Main 2	Rel 99 RMC 12.2 kbps	1413	0	Left Touch	22.74	0.256	28.66	27.72
						0	Left Tilt	22.74	0.121	31.91	
						0	Right Touch	22.74	0.318	27.72	
						0	Right Tilt	22.74	0.123	31.84	
Head	4	WCDMA Band V	Main 1	Rel 99 RMC 12.2 kbps	4183	0	Left Touch	23.73	0.193	30.87	29.72
						0	Left Tilt	23.73	0.113	33.20	
						0	Right Touch	23.73	0.252	29.72	
						0	Right Tilt	23.73	0.137	32.36	
Head	4	LTE Band 5	Main 1	QPSK BW=10 RB 1/25	20525	0	Left Touch	24.30	0.243	30.44	29.43
						0	Left Tilt	24.30	0.141	32.81	
						0	Right Touch	24.30	0.307	29.43	
						0	Right Tilt	24.30	0.159	32.29	
Head	4	LTE Band 7	Main 2	QPSK BW=20 RB 1/0	20850	0	Left Touch	23.50	0.222	30.04	30.04
						0	Left Tilt	23.50	0.062	35.56	
						0	Right Touch	23.50	0.152	31.68	
						0	Right Tilt	23.50	0.122	32.64	
Head	4	LTE Band 12	Main 1	QPSK BW=10 RB 1/25	23095	0	Left Touch	24.24	0.167	32.01	30.80
						0	Left Tilt	24.24	0.082	35.13	
						0	Right Touch	24.24	0.221	30.80	
						0	Right Tilt	24.24	0.102	34.15	
Head	4	LTE Band 13	Main 1	QPSK BW=10 RB 1/0	23230	0	Left Touch	23.93	0.176	31.47	30.49
						0	Left Tilt	23.93	0.094	34.22	
						0	Right Touch	23.93	0.221	30.49	
						0	Right Tilt	23.93	0.111	33.48	
Head	4	LTE Band 14	Main 1	QPSK BW=10 RB 1/0	23330	0	Left Touch	23.79	0.149	32.06	30.87
						0	Left Tilt	23.79	0.084	34.53	
						0	Right Touch	23.79	0.196	30.87	
						0	Right Tilt	23.79	0.095	34.01	
Head	4	LTE Band 25(2)	Main.2	QPSK BW=20 RB 1/0	26140	0	Left Touch	24.26	0.240	30.46	29.99
						0	Left Tilt	24.26	0.169	31.98	
						0	Right Touch	24.26	0.267	29.99	
						0	Right Tilt	24.26	0.137	32.89	
Head	4	LTE Band 2	Sub.2	QPSK BW=20 RB 50/50	18700	0	Left Touch	20.94	0.258	26.82	23.72
						0	Left Tilt	20.94	0.340	25.63	
						0	Right Touch	20.94	0.383	25.11	
						0	Right Tilt	20.94	0.527	23.72	
Head	4	LTE Band 26	Main 1	QPSK BW=15 RB 1/0	26865	0	Left Touch	24.49	0.238	30.72	29.93
						0	Left Tilt	24.49	0.125	33.52	
						0	Right Touch	24.49	0.286	29.93	
						0	Right Tilt	24.49	0.144	32.91	
Head	4	LTE Band 30	Main.2	QPSK BW=10 RB 1/25	27710	0	Left Touch	23.41	0.108	33.08	33.08
						0	Left Tilt	23.41	0.057	35.85	
						0	Right Touch	23.41	0.090	33.85	
						0	Right Tilt	23.41	0.103	33.28	
Head	4	LTE Band 40	Main.2	QPSK BW=10 RB 1/25	39200	0	Left Touch	11.44	0.007	32.71	32.71
						0	Left Tilt	11.44	0.001	41.44	
						0	Right Touch	11.44	0.001	41.44	
						0	Right Tilt	11.44	0.001	41.44	
Head	4	LTE Band 41(38) -PC3-	Main.2	QPSK BW=20 RB 1/0	41055	0	Left Touch	21.53	0.147	29.86	29.86
						0	Left Tilt	21.53	0.049	34.59	
						0	Right Touch	21.53	0.097	31.66	
						0	Right Tilt	21.53	0.097	31.65	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Head	4	LTE Band 48	Sub.5	QPSK BW=20 RB 50/50	55773	0	Left Touch	17.71	0.197	24.77	19.41
						0	Left Tilt	17.71	0.156	25.78	
						0	Right Touch	17.71	0.676	19.41	
						0	Right Tilt	17.71	0.454	21.14	
Head	4	LTE Band 66(4)	Main.2	QPSK BW=20 RB 1/49	132322	0	Left Touch	23.88	0.224	30.38	28.95
						0	Left Tilt	23.88	0.151	32.09	
						0	Right Touch	23.88	0.311	28.95	
						0	Right Tilt	23.88	0.106	33.63	
Head	4	LTE Band 66	Sub.2	QPSK BW=20 RB 50/24	132322	0	Left Touch	20.29	0.353	24.81	22.17
						0	Left Tilt	20.29	0.431	23.95	
						0	Right Touch	20.29	0.582	22.64	
						0	Right Tilt	20.29	0.648	22.17	
Head	4	LTE Band 71	Main 1	QPSK BW=20 RB 1/0	133297	0	Left Touch	24.64	0.151	32.85	31.00
						0	Left Tilt	24.64	0.083	35.43	
						0	Right Touch	24.64	0.231	31.00	
						0	Right Tilt	24.64	0.114	34.07	
Head	4	NR Band n5	Main 1	DFT-s QPSK BW=20 RB 1/1	167300	0	Left Touch	24.68	0.214	31.38	30.40
						0	Left Tilt	24.68	0.118	33.96	
						0	Right Touch	24.68	0.268	30.40	
						0	Right Tilt	24.68	0.142	33.16	
Head	4	NR Band n12	Main 1	DFT-s QPSK BW=15 RB 36/22	141500	0	Left Touch	24.42	0.150	32.66	31.63
						0	Left Tilt	24.42	0.082	35.28	
						0	Right Touch	24.42	0.190	31.63	
						0	Right Tilt	24.42	0.094	34.67	
Head	4	NR Band n25(2)	Main.2	DFT-s QPSK BW=40 RB 108/54	376500	0	Left Touch	24.51	0.246	30.60	30.07
						0	Left Tilt	24.51	0.133	33.27	
						0	Right Touch	24.51	0.278	30.07	
						0	Right Tilt	24.51	0.176	32.05	
Head	4	NR Band n30	Main.2	DFT-s QPSK BW=10 RB 1/50	462000	0	Left Touch	23.58	0.145	31.97	31.97
						0	Left Tilt	23.58	0.050	36.59	
						0	Right Touch	23.58	0.100	33.60	
						0	Right Tilt	23.58	0.095	33.82	
Head	4	NR Band n41(PC3)	Main.2	DFT-s QPSK BW=100 RB 1/1	518598	0	Left Touch	16.65	0.058	28.99	28.99
						0	Left Tilt	16.65	0.016	34.66	
						0	Right Touch	16.65	0.042	30.38	
						0	Right Tilt	16.65	0.001	46.65	
Head	4	NR Band n41(PC2)	Main.2	DFT-s QPSK BW=100 RB 135/69	518598	0	Left Touch	19.52	0.163	27.40	27.40
						0	Left Tilt	19.52	0.036	34.02	
						0	Right Touch	19.52	0.086	30.19	
						0	Right Tilt	19.52	0.076	30.73	
Head	4	NR Band n66	Main.2	DFT-s QPSK BW=40 RB 108/54	349000	0	Left Touch	24.30	0.217	30.94	30.52
						0	Left Tilt	24.30	0.134	33.03	
						0	Right Touch	24.30	0.239	30.52	
						0	Right Tilt	24.30	0.109	33.93	
Head	4	NR Band n71	Main 1	DFT-s QPSK BW=20 RB 50/28	136100	0	Left Touch	24.57	0.181	31.99	31.47
						0	Left Tilt	24.57	0.104	34.40	
						0	Right Touch	24.57	0.204	31.47	
						0	Right Tilt	24.57	0.126	33.57	
Head	4	NR Band n48-SRS0-	Sub.3	DFT-s QPSK BW=40 RB 50/28	641666	0	Left Touch	12.78	0.076	23.95	17.56
						0	Left Tilt	12.78	0.071	24.29	
						0	Right Touch	12.78	0.333	17.56	
						0	Right Tilt	12.78	0.189	20.02	
Head	4	NR Band n48-SRS1-	Main.2	CW	641666	0	Left Touch	13.71	0.003	38.50	38.50
						0	Left Tilt	13.71	0.001	43.71	
						0	Right Touch	13.71	0.001	42.92	
						0	Right Tilt	13.71	0.001	43.71	
Head	4	NR Band n48-SRS2-	Sub.5	CW	645332	0	Left Touch	13.07	0.045	26.53	21.40
						0	Left Tilt	13.07	0.005	35.87	
						0	Right Touch	13.07	0.147	21.40	
						0	Right Tilt	13.07	0.031	28.10	
Head	4	NR Band n48-SRS3-	Sub.8	CW	645332	0	Left Touch	12.18	0.067	23.95	20.39
						0	Left Tilt	12.18	0.086	22.84	
						0	Right Touch	12.18	0.127	21.14	
						0	Right Tilt	12.18	0.151	20.39	
Head	4	NR Band n77-SRS0-	Sub.3	DFT-s QPSK BW=100 RB 135/138	633334	0	Left Touch	14.93	0.145	23.32	18.64
						0	Left Tilt	14.93	0.141	23.44	
						0	Right Touch	14.93	0.426	18.64	
						0	Right Tilt	14.93	0.257	20.83	
Head	4	NR Band n77-SRS1-	Main.2	CW	662000	0	Left Touch	15.88	0.001	45.88	38.89
						0	Left Tilt	15.88	0.001	45.88	
						0	Right Touch	15.88	0.005	38.89	
						0	Right Tilt	15.88	0.001	45.88	
Head	4	NR Band n77-SRS2-	Sub.5	CW	633334	0	Left Touch	15.24	0.173	22.86	19.93
						0	Left Tilt	15.24	0.050	28.25	
						0	Right Touch	15.24	0.340	19.93	
						0	Right Tilt	15.24	0.076	26.43	
Head	4	NR Band n77-SRS3-	Sub.8	CW	650000	0	Left Touch	14.55	0.094	24.82	21.69
						0	Left Tilt	14.55	0.103	24.42	
						0	Right Touch	14.55	0.172	22.19	
						0	Right Tilt	14.55	0.193	21.69	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Body-worn exposure (RSI = 0)

RF Exposure Conditions	RSI	band	Antenna	mode	Ch.	Test distance (mm)	Test position	Output power (dbm)	meas SAR 1g (W/kg)	Plimit (dBm)	Minimum Plimit (dBm)
Body-worn	0	GSM 850	Main 1	GPRS 2 Slots	190	15	Rear	24.42	0.237	30.67	30.27
						15	Front	24.42	0.260	30.27	
Body-worn	0	GSM 1900	Main 2	GPRS 4 Slots	661	15	Rear	20.70	0.279	26.24	26.24
						15	Front	20.70	0.197	27.76	
Body-worn	0	WCDMA Band II	Main 2	Rel 99 RMC 12.2 kbps	9400	15	Rear	22.99	0.526	25.78	25.78
						15	Front	22.99	0.472	26.25	
Body-worn	0	WCDMA Band IV	Main 2	Rel 99 RMC 12.2 kbps	1413	15	Rear	22.74	0.498	25.77	25.77
						15	Front	22.74	0.469	26.03	
Body-worn	0	WCDMA Band V	Main 1	Rel 99 RMC 12.2 kbps	4183	15	Rear	23.73	0.235	30.02	29.72
						15	Front	23.73	0.252	29.72	
Body-worn	0	LTE Band 5	Main 1	QPSK BW=10 RB 1/25	20525	15	Rear	24.30	0.238	30.53	30.10
						15	Front	24.30	0.263	30.10	
Body-worn	0	LTE Band 7	Main 2	QPSK BW=20 RB 1/0	20850	15	Rear	23.50	0.364	27.89	27.89
						15	Front	23.50	0.310	28.59	
Body-worn	0	LTE Band 12	Main 1	QPSK BW=10 RB 1/25	23095	15	Rear	24.24	0.277	29.82	29.82
						15	Front	24.24	0.235	30.53	
Body-worn	0	LTE Band 13	Main 1	QPSK BW=10 RB 1/0	23230	15	Rear	23.93	0.291	29.29	29.29
						15	Front	23.93	0.270	29.62	
Body-worn	0	LTE Band 14	Main 1	QPSK BW=10 RB 1/0	23330	15	Rear	23.79	0.246	29.88	29.88
						15	Front	23.79	0.238	30.02	
Body-worn	0	LTE Band 25(2)	Main.2	QPSK BW=20 RB 1/0	26140	15	Rear	24.26	0.470	27.54	27.54
						15	Front	24.26	0.340	28.95	
Body-worn	0	LTE Band 2	Sub.2	QPSK BW=20 RB 50/24	18700	15	Rear	21.73	0.097	31.86	31.86
						15	Front	21.73	0.051	34.65	
Body-worn	0	LTE Band 26	Main 1	QPSK BW=15 RB 1/0	26865	15	Rear	24.49	0.295	29.79	29.79
						15	Front	24.49	0.293	29.82	
Body-worn	0	LTE Band 30	Main.2	QPSK BW=10 RB 1/25	27710	15	Rear	23.41	0.267	29.14	29.14
						15	Front	23.41	0.250	29.43	
Body-worn	0	LTE Band 40	Main.2	QPSK BW=10 RB 25/0	39200	15	Rear	11.30	0.005	34.11	32.37
						15	Front	11.30	0.008	32.37	
Body-worn	0	LTE Band 41(38)-PC3	Main.2	QPSK BW=20 RB 1/0	41055	15	Rear	21.53	0.242	27.69	27.69
						15	Front	21.53	0.211	28.29	
Body-worn	0	LTE Band 41(PC2)	Main.2	QPSK BW=20 RB 1/0	41055	15	Rear	23.27	0.251	29.27	29.27
Body-worn	0	LTE Band 48	Sub.5	QPSK BW=20 RB 50/50	55773	15	Rear	18.93	0.168	26.68	26.68
						15	Front	18.93	0.086	29.59	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Body-worn	0	LTE Band 66(4)	Main.2	QPSK BW=20 RB 1/49	132322	15	Rear	23.88	0.472	27.14	27.14
						15	Front	23.88	0.450	27.35	
Body-worn	0	LTE Band 66	Sub.2	QPSK BW=20 RB 50/24	132322	15	Rear	21.25	0.189	28.49	28.49
						15	Front	21.25	0.084	31.99	
Body-worn	0	LTE Band 71	Main 1	QPSK BW=20 RB 1/0	133297	15	Rear	24.64	0.286	30.08	30.08
						15	Front	24.64	0.232	30.99	
Body-worn	0	NR Band n5	Main 1	DFT-s QPSK BW=20 RB 1/1	167300	15	Rear	24.68	0.268	30.40	30.40
						15	Front	24.68	0.262	30.50	
Body-worn	0	NR Band n12	Main 1	DFT-s QPSK BW=15 RB 36/22	141500	15	Rear	24.42	0.241	30.60	30.60
						15	Front	24.42	0.207	31.26	
Body-worn	0	NR Band n25(2)	Main.2	DFT-s QPSK BW=40 RB 108/54	376500	15	Rear	24.51	0.480	27.70	27.70
						15	Front	24.51	0.425	28.23	
Body-worn	0	NR Band n30	Main.2	DFT-s QPSK BW=10 RB 25/14	462000	15	Rear	23.59	0.239	29.81	29.81
						15	Front	23.59	0.236	29.86	
Body-worn	0	NR Band n41(PC3)	Main.2	DFT-s QPSK BW=100 RB 1/1	518598	15	Rear	16.65	0.101	26.61	26.61
						15	Front	16.65	0.078	27.76	
Body-worn	0	NR Band n41(PC2)	Main.2	DFT-s QPSK BW=100 RB 135/69	518598	15	Rear	19.52	0.238	25.75	25.75
						15	Front	19.52	0.194	26.64	
Body-worn	0	NR Band n66	Main.2	DFT-s QPSK BW=40 RB 108/54	349000	15	Rear	24.30	0.477	27.51	27.51
						15	Front	24.30	0.467	27.61	
Body-worn	0	NR Band n71	Main 1	DFT-s QPSK BW=20 RB 1/53	136100	15	Rear	24.71	0.301	29.92	29.92
						15	Front	24.71	0.248	30.77	
Body-worn	0	NR Band n48-SRS0-	Sub.3	DFT-s QPSK BW=40 RB 50/28	641666	15	Rear	14.31	0.042	28.08	28.08
						15	Front	14.31	0.036	28.75	
Body-worn	0	NR Band n48-SRS1-	Main.2	CW	641666	15	Rear	14.92	0.045	28.39	28.39
						15	Front	14.92	0.033	29.72	
Body-worn	0	NR Band n48-SRS2-	Sub.5	CW	645332	15	Rear	14.32	0.016	32.20	32.20
						15	Front	14.32	0.008	35.39	
Body-worn	0	NR Band n48-SRS3-	Sub.8	CW	645332	15	Rear	13.57	0.056	26.06	26.06
						15	Front	13.57	0.019	30.71	
Body-worn	0	NR Band n77-SRS0-	Sub.3	DFT-s QPSK BW=100 RB 135/138	633334	15	Rear	14.93	0.096	25.11	25.11
						15	Front	14.93	0.063	26.94	
Body-worn	0	NR Band n77-SRS1-	Main.2	CW	662000	15	Rear	15.88	0.023	32.32	32.32
						15	Front	15.88	0.021	32.74	
Body-worn	0	NR Band n77-SRS2-	Sub.5	CW	633334	15	Rear	15.24	0.055	27.84	27.84
						15	Front	15.24	0.035	29.80	
Body-worn	0	NR Band n77-SRS3-	Sub.8	CW	650000	15	Rear	14.55	0.001	44.55	44.55
						15	Front	14.55	0.001	44.55	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Hotspot exposure (RSI = 3)

RF Exposure Conditions	RSI	band	Antenna	mode	Ch.	Test distance (mm)	Test position	Output power (dbm)	meas SAR 1g (W/kg)	Plimit (dBm)	Minimum Plimit (dBm)
Hotspot	3	GSM 850	Main.1	GPRS 2 Slots	190	10	Rear	24.42	0.585	26.75	26.75
						10	Front	24.42	0.300	29.65	
						10	Edge 2	24.42	0.322	29.34	
						10	Edge 3	24.42	0.381	28.61	
Hotspot	3	GSM 1900	Main.2	GPRS 4 Slots	810	10	Rear	20.70	0.497	23.74	22.47
						10	Front	20.70	0.328	25.54	
						10	Edge 3	20.70	0.665	22.47	
						10	Edge 4	20.70	0.204	27.60	
Hotspot	3	WCDMA Band II	Main.2	Rel 99 RMC 12.2 kbps	9400	10	Rear	21.05	0.441	24.61	24.20
						10	Front	21.05	0.317	26.04	
						10	Edge 3	21.05	0.484	24.20	
						10	Edge 4	21.05	0.196	28.13	
Hotspot	3	WCDMA Band IV	Main.2	Rel 99 RMC 12.2 kbps	1413	10	Rear	20.51	0.391	24.59	24.59
						10	Front	20.51	0.351	25.06	
						10	Edge 3	20.51	0.251	26.51	
						10	Edge 4	20.51	0.105	30.30	
Hotspot	3	WCDMA Band V	Main.1	Rel 99 RMC 12.2 kbps	4183	10	Rear	23.73	0.502	26.72	26.72
						10	Front	23.73	0.273	29.37	
						10	Edge 2	23.73	0.346	28.34	
						10	Edge 3	23.73	0.371	28.04	
Hotspot	3	LTE Band 5	Main.1	QPSK BW=10 RB 1/25	20525	10	Rear	24.30	0.541	26.97	26.97
						10	Front	24.30	0.280	29.83	
						10	Edge 2	24.30	0.331	29.10	
						10	Edge 3	24.30	0.429	27.98	
Hotspot	3	LTE Band 7	Main.2	QPSK BW=20 RB 1/0	20850	10	Rear	20.21	0.444	23.74	23.74
						10	Front	20.21	0.267	25.94	
						10	Edge 3	20.21	0.398	24.21	
						10	Edge 4	20.21	0.115	29.60	
Hotspot	3	LTE Band 12	Main.1	QPSK BW=10 RB 1/25	23095	10	Rear	24.24	0.384	28.40	28.40
						10	Front	24.24	0.221	30.80	
						10	Edge 2	24.24	0.227	30.68	
						10	Edge 3	24.24	0.273	29.88	
Hotspot	3	LTE Band 13	Main.1	QPSK BW=10 RB 1/0	23230	10	Rear	23.93	0.442	27.48	27.48
						10	Front	23.93	0.235	30.22	
						10	Edge 2	23.93	0.393	27.99	
						10	Edge 3	23.93	0.306	29.07	
Hotspot	3	LTE Band 14	Main.1	QPSK BW=10 RB 1/0	23330	10	Rear	23.79	0.303	28.98	28.34
						10	Front	23.79	0.209	30.59	
						10	Edge 2	23.79	0.351	28.34	
						10	Edge 3	23.79	0.265	29.56	
Hotspot	3	LTE Band 25(2)	Main.2	QPSK BW=20 RB 1/0	26140	10	Rear	22.37	0.548	24.98	24.53
						10	Front	22.37	0.439	25.95	
						10	Edge 3	22.37	0.608	24.53	
						10	Edge 4	22.37	0.239	28.59	
Hotspot	3	LTE Band 2	Sub.2	QPSK BW=20 RB 50/24	18700	10	Rear	21.73	0.236	28.00	26.08
						10	Front	21.73	0.085	32.45	
						10	Edge 1	21.73	0.367	26.08	
						10	Edge 4	21.73	0.057	34.20	
Hotspot	3	LTE Band 26	Main.1	QPSK BW=15 RB 1/0	26865	10	Rear	24.49	0.491	27.58	27.58
						10	Front	24.49	0.292	29.84	
						10	Edge 2	24.49	0.332	29.28	
						10	Edge 3	24.49	0.350	29.05	
Hotspot	3	LTE Band 30	Main.2	QPSK BW=10 RB 1/25	27710	10	Rear	23.41	0.464	26.74	26.31
						10	Front	23.41	0.333	28.19	
						10	Edge 3	23.41	0.513	26.31	
						10	Edge 4	23.41	0.231	29.77	
Hotspot	3	LTE Band 38	Main.2	QPSK BW=20 RB 1/49	38000	10	Rear	20.40	0.366	24.77	24.77
						10	Front	20.40	0.215	27.08	
						10	Edge 3	20.40	0.353	24.92	
						10	Edge 4	20.40	0.083	31.19	
Hotspot	3	LTE Band 40	Main.2	QPSK BW=10 RB 25/0	39200	10	Rear	11.30	0.024	27.53	26.28
						10	Front	11.30	0.021	28.10	
						10	Edge 3	11.30	0.032	26.28	
						10	Edge 4	11.30	0.011	30.81	
Hotspot	3	LTE Band 41(PC3)	Main.2	QPSK BW=20 RB 1/0	41055	10	Rear	19.67	0.376	23.92	23.92
						10	Front	19.67	0.270	25.36	
						10	Edge 3	19.67	0.302	24.87	
						10	Edge 4	19.67	0.092	30.02	
Hotspot	3	LTE Band 41(PC2)	Main.2	QPSK BW=20 RB 1/0	41055	10	Rear	19.67	0.376	23.92	23.92
						10	Front	19.67	0.270	25.36	
						10	Edge 3	19.67	0.302	24.87	
						10	Edge 4	19.67	0.092	30.02	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Hotspot	3	LTE Band 48	Sub.3	QPSK BW=20 RB 1/99	55773	10	Rear	18.93	0.324	23.82	22.84
						10	Front	18.93	0.160	26.89	
						10	Edge 1	18.93	0.190	26.14	
						10	Edge 4	18.93	0.406	22.84	
Hotspot	3	LTE Band 66(4)	Main.2	QPSK BW=20 RB 1/49	132322	10	Rear	21.76	0.537	24.46	22.76
						10	Front	21.76	0.509	24.69	
						10	Edge 3	21.76	0.795	22.76	
						10	Edge 4	21.76	0.267	27.49	
Hotspot	3	LTE Band 66	Sub.2	QPSK BW=20 RB 50/24	132322	10	Rear	21.25	0.420	25.02	24.47
						10	Front	21.25	0.145	29.64	
						10	Edge 1	21.25	0.476	24.47	
						10	Edge 4	21.25	0.065	33.12	
Hotspot	3	LTE Band 71	Main.1	QPSK BW=20 RB 1/0	133297	10	Rear	24.64	0.327	29.49	29.40
						10	Front	24.64	0.284	30.11	
						10	Edge 2	24.64	0.334	29.40	
						10	Edge 3	24.64	0.213	31.36	
Hotspot	3	NR Band n5	Main.1	DFT-s QPSK BW=20 RB 1/1	167300	10	Rear	24.68	0.505	27.65	27.65
						10	Front	24.68	0.265	30.45	
						10	Edge 2	24.68	0.344	29.31	
						10	Edge 3	24.68	0.363	29.08	
Hotspot	3	NR Band n12	Main.1	DFT-s QPSK BW=15 RB 36/22	141500	10	Rear	24.42	0.345	29.04	29.04
						10	Front	24.42	0.213	31.14	
						10	Edge 2	24.42	0.270	30.11	
						10	Edge 3	24.42	0.259	30.29	
Hotspot	3	NR Band n25(2)	Main.2	DFT-s QPSK BW=40 RB 108/54	376500	10	Rear	22.60	0.652	24.46	24.46
						10	Front	22.60	0.520	25.44	
						10	Edge 3	22.60	0.555	25.16	
						10	Edge 4	22.60	0.232	28.95	
Hotspot	3	NR Band n30	Main.2	DFT-s QPSK BW=10 RB 1/50	462000	10	Rear	23.58	0.526	26.37	25.44
						10	Front	23.58	0.410	27.45	
						10	Edge 3	23.58	0.651	25.44	
						10	Edge 4	23.58	0.236	29.85	
Hotspot	3	NR Band n41(PC2/PC3)	Main.2	DFT-s QPSK BW=100 RB 135/69	518598	10	Rear	15.48	0.217	22.12	22.12
						10	Front	15.48	0.125	24.51	
						10	Edge 3	15.48	0.210	22.26	
						10	Edge 4	15.48	0.061	27.61	
Hotspot	3	NR Band n66	Main.2	DFT-s QPSK BW=40 RB 1/214	349000	10	Rear	22.56	0.560	25.08	23.67
						10	Front	22.56	0.504	25.54	
						10	Edge 3	22.56	0.775	23.67	
						10	Edge 4	22.56	0.278	28.12	
Hotspot	3	NR Band n71	Main.1	DFT-s QPSK BW=20 RB 1/53	136100	10	Rear	24.71	0.290	30.09	29.33
						10	Front	24.71	0.258	30.59	
						10	Edge 2	24.71	0.345	29.33	
						10	Edge 3	24.71	0.222	31.25	
Hotspot	3	NR Band n48-SRS0-	Sub.3	DFT-s QPSK BW=40 RB 50/28	641666	10	Rear	14.31	0.066	26.11	21.85
						10	Front	14.31	0.065	26.18	
						10	Edge 1	14.31	0.116	23.67	
						10	Edge 4	14.31	0.176	21.85	
Hotspot	3	NR Band n48-SRS1-	Main.2	CW	641666	10	Rear	14.92	0.097	25.04	23.71
						10	Front	14.92	0.065	26.80	
						10	Edge 3	14.92	0.132	23.71	
						10	Edge 4	14.92	0.020	31.89	
Hotspot	3	NR Band n48-SRS2-	Sub.5	CW	645332	10	Rear	14.32	0.035	28.93	25.72
						10	Front	14.32	0.025	30.36	
						10	Edge 1	14.32	0.006	36.85	
						10	Edge 4	14.32	0.073	25.72	
Hotspot	3	NR Band n48-SRS3-	Sub.8	CW	645332	10	Rear	13.57	0.098	23.68	23.68
						10	Front	13.57	0.032	28.46	
						10	Edge 1	13.57	0.075	24.80	
						10	Edge 4	13.57	0.021	30.33	
Hotspot	3	NR Band n77-SRS0-	Sub.3	DFT-s QPSK BW=100 RB 135.138	633334	10	Rear	13.93	0.160	21.89	18.40
						10	Front	13.93	0.125	22.96	
						10	Edge 1	13.93	0.120	23.14	
						10	Edge 4	13.93	0.357	18.40	
Hotspot	3	NR Band n77-SRS1-	Main.2	CW	662000	10	Rear	15.88	0.022	32.46	24.74
						10	Front	15.88	0.046	29.25	
						10	Edge 3	15.88	0.130	24.74	
						10	Edge 4	15.88	0.056	28.40	
Hotspot	3	NR Band n77-SRS2-	Sub.5	CW	633334	10	Rear	15.24	0.136	23.90	19.98
						10	Front	15.24	0.057	27.68	
						10	Edge 1	15.24	0.004	39.22	
						10	Edge 4	15.24	0.336	19.98	
Hotspot	3	NR Band n77-SRS3-	Sub.8	CW	650000	10	Rear	14.55	0.005	37.56	37.56
						10	Front	14.55	0.001	44.55	
						10	Edge 1	14.55	0.004	38.53	
						10	Edge 4	14.55	0.001	44.55	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Product Specific 10-g without triggering sensor (RSI = 0)

RF Exposure Conditions	RSI	band	Antenna	mode	Ch.	Test distance (mm)	Test position	Output power (dbm)	meas SAR 1g (W/kg)	Plimit (dBm)	Minimum Plimit (dBm)
Product Specific-10g (Sensor Off)	0	GSM 850	Main.1	GPRS 2 Slots	190	0	Rear	24.42	1.090	28.02	28.02
						0	Front	24.42	0.829	29.21	
						0	Edge 2	24.42	0.444	31.92	
						0	Edge 3	24.42	1.040	28.23	
Product Specific-10g (Sensor Off)	0	GSM 1900	Main.2	GPRS 4 Slots	661	0	Rear	20.70	2.170	21.31	21.31
						0	Front	20.70	1.930	21.82	
						0	Edge 3	20.70	1.860	21.98	
						0	Edge 4	20.70	0.586	27.00	
Product Specific-10g (Sensor Off)	0	WCDMA Band II	Main.2	Rel 99 RMC 12.2 kbps	9400	11	Rear	22.99	0.338	31.68	28.00
						7	Front	22.99	0.413	30.81	
						13	Edge 3	22.99	0.296	32.26	
						0	Edge 4	22.99	0.788	28.00	
Product Specific-10g (Sensor Off)	0	WCDMA Band IV	Main.2	Rel 99 RMC 12.2 kbps	1413	11	Rear	22.74	0.325	31.60	27.28
						7	Front	22.74	0.401	30.69	
						13	Edge 3	22.74	0.408	30.61	
						0	Edge 4	22.74	0.879	27.28	
Product Specific-10g (Sensor Off)	0	WCDMA Band V	Main.1	Rel 99 RMC 12.2 kbps	4183	0	Rear	23.73	1.310	26.54	26.54
Product Specific-10g (Sensor Off)	0	LTE Band 5	Main.1	QPSK BW=10 RB 1/25	20525	0	Rear	24.30	0.938	28.56	28.56
						0	Front	24.30	0.598	30.51	
						0	Edge 2	24.30	0.402	32.24	
						0	Edge 3	24.30	0.922	28.63	
Product Specific-10g (Sensor Off)	0	LTE Band 7	Main.2	QPSK BW=20 RB 1/0	20850	11	Rear	23.50	0.421	31.24	28.54
						7	Front	23.50	0.627	29.51	
						13	Edge 3	23.50	0.361	31.90	
						0	Edge 4	23.50	0.784	28.54	
Product Specific-10g (Sensor Off)	0	LTE Band 12	Main.1	QPSK BW=10 RB 1/25	23095	0	Rear	24.24	0.914	28.61	28.61
						0	Front	24.24	0.675	29.93	
						0	Edge 2	24.24	0.384	32.38	
						0	Edge 3	24.24	0.809	29.14	
Product Specific-10g (Sensor Off)	0	LTE Band 13	Main.1	QPSK BW=10 RB 1/0	23230	0	Rear	23.93	0.785	28.96	28.96
Product Specific-10g (Sensor Off)	0	LTE Band 14	Main.1	QPSK BW=10 RB 1/0	23330	0	Rear	23.79	0.712	29.24	29.24
Product Specific-10g (Sensor Off)	0	LTE Band 25(2)	Main.2	QPSK BW=20 RB 1/0	26140	11	Rear	24.26	0.359	32.69	28.15
						7	Front	24.26	0.498	31.27	
						13	Edge 3	24.26	0.411	32.10	
						0	Edge 4	24.26	1.020	28.15	
Product Specific-10g (Sensor Off)	0	LTE Band 2	Sub.2	QPSK BW=20 RB 50/24	18700	0	Rear	21.71	0.772	26.81	24.58
						0	Front	21.71	0.448	29.18	
						0	Edge 1	21.71	1.290	24.58	
						0	Edge 4	21.71	0.204	32.59	
Product Specific-10g (Sensor Off)	0	LTE Band 26	Main.1	QPSK BW=15 RB 1/0	26865	0	Rear	24.49	1.190	27.71	27.71
						0	Front	24.49	0.858	29.13	
						0	Edge 2	24.49	0.371	32.78	
						0	Edge 3	24.49	1.080	28.14	
Product Specific-10g (Sensor Off)	0	LTE Band 30	Main.2	QPSK BW=10 RB 1/25	27710	0	Edge 3	23.41	1.580	25.40	#DIV/0!
Product Specific-10g (Sensor Off)	0	LTE Band 38	Main.2	QPSK BW=20 RB 1/49	38000	0	Rear	20.40	1.640	22.23	22.23
						0	Front	20.40	1.220	23.52	
						0	Edge 3	20.40	0.993	24.41	
						0	Edge 4	20.40	0.323	29.29	
Product Specific-10g (Sensor Off)	0	LTE Band 40	Main.2	QPSK BW=10 RB 1/25	39200	0	Rear	11.44	0.173	23.04	23.04
						0	Front	11.44	0.137	24.05	
						0	Edge 3	11.44	0.108	25.09	
						0	Edge 4	11.44	0.032	30.33	
Product Specific-10g (Sensor Off)	0	LTE Band 41(PC3)	Main.2	QPSK BW=20 RB 1/0	41055	11	Rear	21.53	0.215	32.19	30.77
						7	Front	21.53	0.223	32.03	
						13	Edge 3	21.53	0.166	33.31	
						0	Edge 4	21.53	0.298	30.77	
Product Specific-10g (Sensor Off)	0	LTE Band 48	Sub.3	QPSK BW=20 RB 1/99	55773	0	Rear	18.93	0.726	24.30	21.48
						0	Front	18.93	0.069	34.53	
						0	Edge 1	18.93	0.350	27.47	
						0	Edge 4	18.93	1.390	21.48	
Product Specific-10g (Sensor Off)	0	LTE Band 66(4)	Main.2	QPSK BW=20 RB 1/49	132322	11	Rear	23.88	0.410	31.73	26.96
						7	Front	23.88	0.630	29.87	
						13	Edge 3	23.88	0.556	30.41	
						0	Edge 4	23.88	1.230	26.96	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Product Specific-10g (Sensor Off)	0	LTE Band 66	Sub.2	QPSK BW=20 RB 1/99	132322	0	Rear	21.15	0.868	25.74	24.60
						0	Front	21.15	0.569	27.58	
						0	Edge 1	21.15	1.130	24.60	
						0	Edge 4	21.15	0.139	33.70	
Product Specific-10g (Sensor Off)	0	LTE Band 71	Main.1	QPSK BW=20 RB 1/0	133297	0	Rear	24.64	1.230	27.72	27.72
Product Specific-10g (Sensor Off)	0	NR Band n5	Main.1	DFT-s QPSK BW=20 RB 1/1	167300	0	Rear	24.68	0.924	29.00	29.00
						0	Front	24.68	0.676	30.36	
						0	Edge 2	24.68	0.469	31.95	
						0	Edge 3	24.68	0.902	29.11	
Product Specific-10g (Sensor Off)	0	NR Band n12	Main.1	DFT-s QPSK BW=15 RB 36/22	141500	0	Rear	24.41	0.778	29.48	29.48
						0	Front	24.41	0.422	32.14	
						0	Edge 2	24.41	0.357	32.86	
						0	Edge 3	24.41	0.616	30.49	
Product Specific-10g (Sensor Off)	0	NR Band n25(2)	Main.2	DFT-s QPSK BW=40 RB 1/1	376500	11	Rear	24.54	0.575	30.92	27.41
						7	Front	24.54	0.605	30.70	
						13	Edge 3	24.54	0.559	31.05	
						0	Edge 4	24.54	1.290	27.41	
Product Specific-10g (Sensor Off)	0	NR Band n30	Main.2	DFT-s QPSK BW=10 RB 1/50	462000	0	Rear	23.58	2.930	22.89	22.89
						0	Front	23.58	2.240	24.06	
						0	Edge 3	23.58	1.900	24.77	
						0	Edge 4	23.58	0.616	29.66	
Product Specific-10g (Sensor Off)	0	NR Band n41(PC3)	Main.2	DFT-s QPSK BW=100 RB 1/1	518598	11	Rear	16.65	0.105	30.42	26.97
						7	Front	16.65	0.161	28.56	
						13	Edge 3	16.65	0.091	31.05	
						0	Edge 4	16.65	0.232	26.97	
Product Specific-10g (Sensor Off)	0	NR Band n41(PC2)	Main.2	DFT-s QPSK BW=100 RB 135/69	518598	11	Rear	19.50	0.089	33.99	30.81
						7	Front	19.50	0.127	32.44	
						13	Edge 3	19.50	0.074	34.78	
						0	Edge 4	19.50	0.185	30.81	
Product Specific-10g (Sensor Off)	0	NR Band n66	Main.2	DFT-s QPSK BW=40 RB 1/214	349000	11	Rear	24.40	0.374	32.65	27.93
						7	Front	24.40	0.519	31.23	
						13	Edge 3	24.40	0.486	31.51	
						0	Edge 4	24.40	1.110	27.93	
Product Specific-10g (Sensor Off)	0	NR Band n71	Main.1	DFT-s QPSK BW=20 RB 1/53	136100	0	Rear	24.71	1.100	28.28	28.28
						0	Front	24.71	0.691	30.29	
						0	Edge 2	24.71	0.530	31.45	
						0	Edge 3	24.71	0.843	29.43	
Product Specific-10g (Sensor Off)	0	NR Band n48-SRS0-	Sub.3	DFT-s QPSK BW=40 RB 50/28	641666	0	Rear	14.26	0.197	25.29	20.08
						0	Front	14.26	0.178	25.74	
						0	Edge 1	14.26	0.098	28.33	
						0	Edge 4	14.26	0.654	20.08	
Product Specific-10g (Sensor Off)	0	NR Band n48-SRS1-	Main.2	CW	641666	0	Rear	14.92	0.338	23.61	23.58
						0	Front	14.92	0.246	24.99	
						0	Edge 3	14.92	0.340	23.58	
						0	Edge 4	14.92	0.048	32.09	
Product Specific-10g (Sensor Off)	0	NR Band n48-SRS2-	Sub.5	CW	645332	0	Rear	14.32	0.200	25.29	23.23
						0	Front	14.32	0.149	26.57	
						0	Edge 1	14.32	0.012	37.69	
						0	Edge 4	14.32	0.321	23.23	
Product Specific-10g (Sensor Off)	0	NR Band n48-SRS3-	Sub.8	CW	645332	0	Rear	13.57	0.229	23.95	23.47
						0	Front	13.57	0.082	28.44	
						0	Edge 1	13.57	0.256	23.47	
						0	Edge 4	13.57	0.029	32.94	
Product Specific-10g (Sensor Off)	0	NR Band n77-SRS0-	Sub.3	DFT-s QPSK BW=100 RB 1/271	633334	0	Rear	15.23	0.389	23.31	19.17
						0	Front	15.23	0.327	24.06	
						0	Edge 1	15.23	0.171	26.88	
						0	Edge 4	15.23	1.010	19.17	
Product Specific-10g (Sensor Off)	0	NR Band n77-SRS1-	Main.2	CW	662000	0	Rear	15.88	0.163	27.74	23.57
						0	Front	15.88	0.170	27.55	
						0	Edge 3	15.88	0.426	23.57	
						0	Edge 4	15.88	0.072	31.29	
Product Specific-10g (Sensor Off)	0	NR Band n77-SRS2-	Sub.5	CW	633334	0	Rear	15.24	0.449	22.70	18.54
						0	Front	15.24	0.216	25.87	
						0	Edge 1	15.24	0.019	36.43	
						0	Edge 4	15.24	1.170	18.54	
Product Specific-10g (Sensor Off)	0	NR Band n77-SRS3-	Sub.8	CW	650000	0	Rear	14.55	0.097	28.66	28.66
						0	Front	14.55	0.005	41.54	
						0	Edge 1	14.55	0.044	32.09	
						0	Edge 4	14.55	0.001	48.53	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

Product Specific 10-g with triggering sensor (RSI = 1 or 2)

RF Exposure Conditions	RSI	band	Antenna	mode	Ch.	Test distance (mm)	Test position	Output power (dbm)	meas SAR 1g (W/kg)	Plimit (dBm)	Minimum Plimit (dBm)
Product Specific-10g (Sensor On)	1 or 2	WCDMA Band II	Main.2	Rel 99 RMC 12.2 kbps	9400	0	Rear	21.12	1.610	23.03	23.03
						0	Front	21.12	1.330	23.86	
						0	Edge 3	21.12	1.130	24.57	
Product Specific-10g (Sensor On)	1 or 2	WCDMA Band IV	Main.2	Rel 99 RMC 12.2 kbps	1413	0	Rear	20.47	1.430	22.90	22.90
						0	Front	20.47	0.649	26.33	
						0	Edge 3	20.47	1.180	23.73	
Product Specific-10g (Sensor On)	1 or 2	LTE Band 7	Main.2	QPSK BW=20 RB 1/0	20850	0	Rear	20.54	1.790	21.99	21.99
						0	Front	20.54	1.540	22.64	
						0	Edge 3	20.54	1.620	22.42	
Product Specific-10g (Sensor On)	1 or 2	LTE Band 25(2)	Main.2	QPSK BW=20 RB 1/0	26140	0	Rear	22.23	2.070	23.05	23.05
						0	Front	22.23	1.680	23.96	
						0	Edge 3	22.23	1.590	24.20	
Product Specific-10g (Sensor On)	1 or 2	LTE Band 41(38)-PC3	Main.2	QPSK BW=20 RB 1/0	41055	0	Rear	19.66	1.370	22.27	22.27
						0	Front	19.66	0.944	23.89	
						0	Edge 3	19.66	0.837	24.41	
Product Specific-10g (Sensor On)	1 or 2	LTE Band 66(4)	Main.2	QPSK BW=20 RB 50/0	132572	0	Rear	21.70	1.980	22.71	22.71
						0	Front	21.70	1.820	23.08	
						0	Edge 3	21.70	1.930	22.82	
Product Specific-10g (Sensor On)	1 or 2	NR Band n25(2)	Main.2	DFT-s QPSK BW=40 RB 1/1	376500	0	Rear	22.54	2.040	23.42	23.42
						0	Front	22.54	1.620	24.42	
						0	Edge 3	22.54	1.320	25.31	
Product Specific-10g (Sensor On)	1 or 2	NR Band n41(PC2)	Main.2	DFT-s QPSK BW=100 RB 135/69	518598	0	Rear	15.45	0.959	19.61	19.61
						0	Front	15.45	0.831	20.23	
						0	Edge 3	15.45	0.695	21.01	
Product Specific-10g (Sensor On)	1 or 2	NR Band n66	Main.2	DFT-s QPSK BW=40 RB 1/214	349000	0	Rear	22.55	2.250	23.01	23.01
						0	Front	22.55	1.940	23.65	
						0	Edge 3	22.55	1.710	24.20	

Notes:

1. The maximum allowed power is equal to maximum tune up power + 1 dB device design uncertainty
2. Measured Output power refer to Sec.9 in SAR report.

END OF REPORT