FCC 47 CFR § 2.1093
IEEE Std 1528-2013

SAR EVALUATION REPORT
(SAR CHARACTERIZATION Report)

FOR

WCDMA/LTE/5G NR Tablet + BT/BLE, DTS/UNII a/b/g/n/ac/ax

MODEL NUMBER: SM-X518U

FCC ID: A3LSMX518U

REPORT NUMBER: 4790841154-S1V1

ISSUE DATE: 7/19/2023

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

Prepared by

UL Korea, Ltd.

26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea

Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
FAX: (031) 213-5433

IAS ACCREDITED

Testing Laboratory

TL-637

Revision History

Rev.	Date	Revisions	Revised By
V1	7/19/2023	Initial Issue	--

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1. Attestation of SAR Characterization

Applicant Name	SAMSUNG ELECTRONICS CO.,LTD.
FCC ID	A3LSMX518U
Model Number	SM-X518U
Applicable Standards	FCC 47 CFR § 2.1093 IEEE Std 1528-2013 Published RF exposure KDB procedures
Report type	SAR Characterization Report
Date Tested	6/5/2023 to 7/18/2023
SAR Characterization Purpose	SAR Char is the procedures for determining P_{Limit} for 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	Sunghoon Kim Senior Laboratory Engineer UL Korea, Ltd. Suwon Laboratory

2. Introduction

The equipment under test (EUT) is SAMSUNG Tablet (FCC ID : A3LSMX518U), it contains S.LSI chipset supporting 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

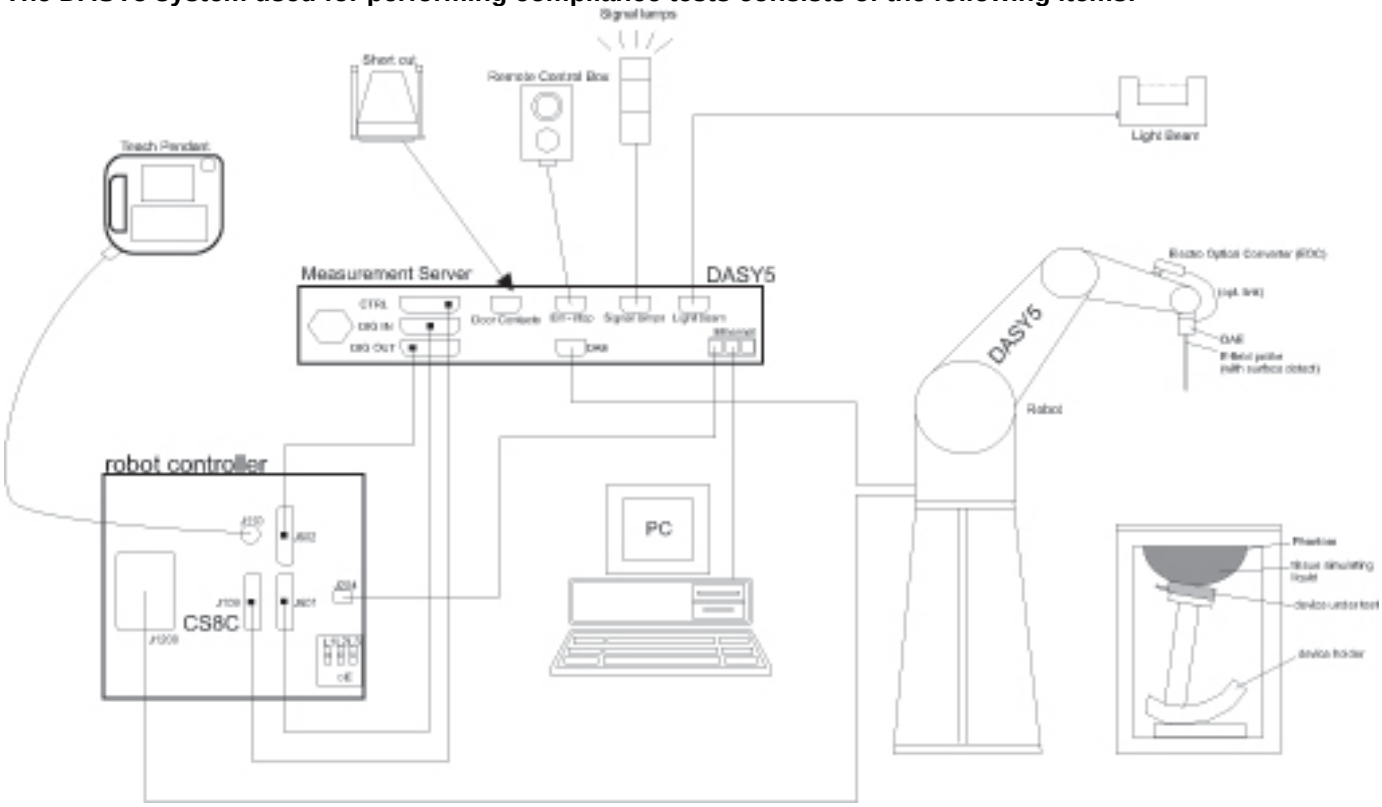
Suwon	
SAR 1 Room	SAR 6 Room
SAR 2 Room	SAR 7 Room
SAR 3 Room	SAR 8 Room
SAR 4 Room	SAR 9 Room
SAR 5 Room	

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

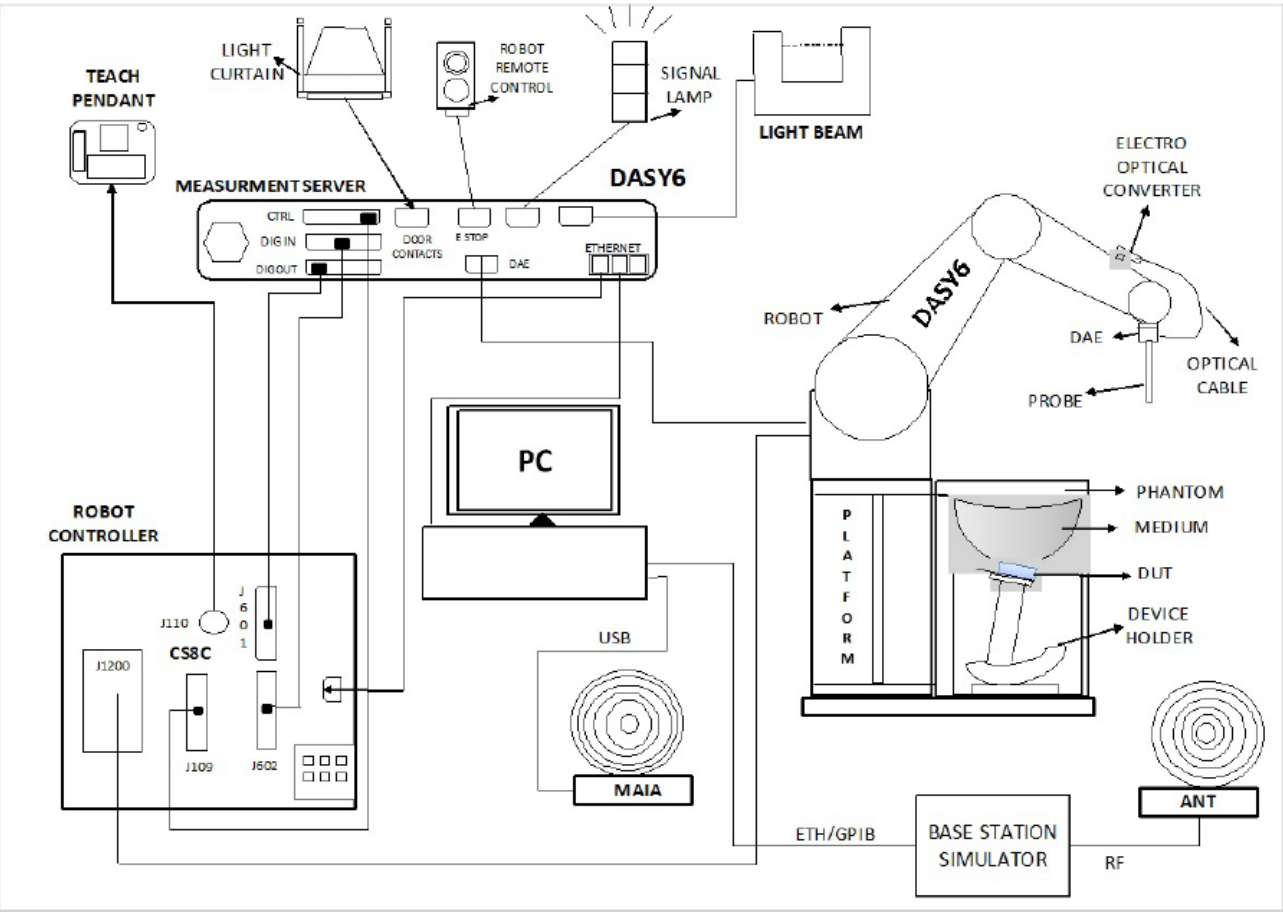
4.1. SAR Measurement System

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	Aglient	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	MY60160004	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	1-6-2024
Power Amplifier	EXODUS	AMP2027ADB	10002	1-6-2024
Directional Coupler	Aglient	772D	MY52180193	8-3-2023
Directional Coupler	H.P	778D	16133	8-3-2023
Directional Coupler	NARDA	4216-10	2836	8-3-2023
Directional Coupler	MINI-CIRCUITS	ZMDC-30-1+	SF569102123	8-3-2023
Low Pass Filter	FILTRON	L140012FL	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	1-5-2024
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
E-Field Probe	SPEAG	EX3DV4	7313	3-24-2024
E-Field Probe	SPEAG	EX3DV4	7330	1-24-2024
E-Field Probe	SPEAG	EX3DV4	7376	7-27-2023
E-Field Probe	SPEAG	EX3DV4	7645	11-15-2023
E-Field Probe	SPEAG	EX3DV4	7651	5-30-2024
E-Field Probe	SPEAG	EX3DV4	7646	3-23-2024
E-Field Probe	SPEAG	EX3DV4	3871	9-26-2023
Data Acquisition Electronics	SPEAG	DAE4	1591	3-22-2024
Data Acquisition Electronics	SPEAG	DAE4	1671	5-25-2024
Data Acquisition Electronics	SPEAG	DAE4	1667	4-24-2024
Data Acquisition Electronics	SPEAG	DAE4	1468	8-18-2023
Data Acquisition Electronics	SPEAG	DAE4	1668	4-26-2024
Data Acquisition Electronics	SPEAG	DAE4	912	11-16-2023
Data Acquisition Electronics	SPEAG	DAE4	911	3-21-2024
Data Acquisition Electronics	SPEAG	DAE3	479	10-6-2023
System Validation Dipole	SPEAG	D750V3	1122	2-24-2024
System Validation Dipole	SPEAG	D835V2	4d174	9-21-2023
System Validation Dipole	SPEAG	D1750V2	1125	11-30-2023
System Validation Dipole	SPEAG	D1900V2	5d190	11-16-2023

Test Equipment (Continued)

System Validation Dipole	SPEAG	D1900V2	5d199	3-25-2024
System Validation Dipole	SPEAG	D2450V2	960	3-24-2024
System Validation Dipole	SPEAG	D5GHzV2	1209	2-28-2024
System Validation Dipole	SPEAG	D3700V2	1036	5-19-2024
System Validation Dipole	SPEAG	D3500V2	1075	5-19-2024
System Validation Dipole	SPEAG	D3500V2	1121	4-20-2024
System Validation Dipole	SPEAG	D3900V2	1069	4-21-2024
System Validation Dipole	SPEAG	D1750V2	1180	9-21-2023
System Validation Dipole	SPEAG	D2300V2	1115	4-25-2024
System Validation Dipole	SPEAG	D2600V2	1178	4-25-2024
Thermometer	Lutron	MHB-382SD	AH.50215	1-9-2024
Thermometer	Lutron	MHB-382SD	AH.50213	1-11-2024
Thermometer	Lutron	MHB-382SD	AH.91463	1-11-2024
Thermometer	Lutron	MHB-382SD	AJ.45903	1-9-2024
Thermometer	Lutron	MHB-382SD	AJ.42446	8-9-2023
Thermometer	Lutron	MHB-382SD	AK.12102	8-9-2023
Thermometer	Lutron	MHB-382SD	AK.12103	8-9-2023
Thermometer	Lutron	MHB-382SD	AK.12121	8-9-2023
Thermometer	Lutron	MHB-382SD	AK.12123	1-9-2024
Thermometer	Lutron	MHB-382SD	AK.18789	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	150314	8-2-2023
Base Station Simulator	R & S	CMW500	162790	8-2-2023
Base Station Simulator	R & S	CMW500	169803	1-5-2024
Base Station Simulator	R & S	CMW500	169801	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	MY57510596	8-5-2023
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY59150850	1-9-2024
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY58120110	1-10-2024
Radio Communication Test Station	Anritsu	MT8000A	6272466165	9-8-2023
Radio Communication Analyzer	Anritsu	MT8821C	6161094351	11-29-2023

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
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Category 24) HSUPA (Category 6) DC-HSDPA (Category 24) 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 TDD Band 41 – Power Class 2/3 FDD Band 66 FDD Band 71 **Uplink intra-band-contiguous Carrier_Aggregation(2CC)** CA_5B/ 41C/ 66B/ 66C	QPSK 16QAM 64QAM 256QAM Rel. 16 Carrier Aggregation (2 Uplinks and 4 Downlinks)	100% (FDD) 63.3% (TDD) Power Class 3 43.3% (TDD) Power Class 2
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No		
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 2/3 TDD Band n77– Power Class 2/3 TDD Band n78	DFT-s-ODFM: ■ π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-ODFM: ■QPSK, 16QAM, 64QAM, 256QAM	100% (FDD Bands) 100% (TDD Bands)
Wi-Fi	2.4 GHz	802.11b, 802.11g 802.11n (HT20), 802.11ax	SISO : 98.7% (802.11b) MIMO : 98.9% (802.11b)
	5 GHz	802.11a 802.11n (HT20) & (HT40) 802.11ac (VHT20) & (VHT40) & (VHT80) 802.11ax (HE20) & (HE40) & (HE80)	SISO : 96.9% (802.11a), 94.9% (802.11ac (VHT80 MIMO 97.1% (802.11a) 91.1% (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	76.9% (DH5)

Notes

1. The Bluetooth protocol is considered source-based averaging. Bluetooth GFSK (DH5) was verified to have the highest duty cycle of 76.9% and was considered and used for SAR Testing.
2. Measured duty cycle plots are in Section.9.
3. This device supports Power Class 2(HPUE) and Power Class 3 for LTE Band 41 & NR Band n41 & NR Band n77
4. NR TDD Band n41 and n77/n78 has support SRS(0,1,2,3) modes.
5. This device supports LTE UL CA intra-band Contiguous.

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 3G/4G/5G NR Sub6 WWAN is compliance with FCC requirement. This SAR Char report shows SAR characterization of WWAN radios for 3G/4G/5G NR Sub6. Characterization is achieved by determining P_{limit} for 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)	
Total Uncertainty	**1.0 dB**
SAR_regulatory_limit	**1.6 W/kg**
SAR_design_target	**1.0 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
Standalone	0	1. free 2. Proximity sensor is not triggered due to triggering distance, when Device was touched to user's body or hands.	KDB 616217 D04
Standalone	1	1. Proximity sensor is triggered, when Device was touched to user's body or hands.	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; Main.1 Ant. 1. Standalone 1g SAR measured at 19, 22, 19 mm and 19 mm spacing for Rear, Top, Left and Right Main.2 Ant. 1. Standalone 1g SAR measured at 19, 19 mm and 19 mm spacing for Rear, Left and Bottom Sub.1 Ant. 1. Standalone 1g SAR measured at 19, 0, 19 mm and 19 mm spacing for Rear, Left, Bottom and Right Sub.2 Ant. & Sub.4 Ant. 1. Standalone 1g SAR measured at 19, 0, 19 mm and 0 mm spacing for Rear, Left, Bottom and Right Sub.3 Ant. 1. Standalone 1g SAR measured at 19, 22 mm and 19 mm spacing for Rear, Top and Right
RSI = 1	The worst-case SAR exposure is determined as maximum SAR normalized to the limit among; Main.1 Ant. 1. Standalone 1g SAR measured at 0 mm spacing for Rear, Top, Left and Right Main.2 Ant. 1. Standalone 1g SAR measured at 0 mm spacing for Rear, Left and Bottom Sub.1 Ant. 1. Standalone 1g SAR measured at 0 mm spacing for Rear, Left, Bottom and Right Sub.2 Ant. & Sub.4 Ant. 1. Standalone 1g SAR measured at 0 mm spacing for Rear, Left, Bottom and Right Sub.3 Ant. 1. Standalone 1g SAR measured at 0 mm spacing for Rear, Top and Right

Notes:

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

Main.1 Ant

P_{limit} = min{ P_{limit} corresponding to Standalone 1g SAR evaluation at 19(Rear), 22(Top). 19(Left) mm spacing,
And 19(Right)mm spacing.}

Main.2 Ant

P_{limit} = min{ P_{limit} corresponding to Standalone 1g SAR evaluation at 19(Rear), 19(Left). 19(Bottom) mm spacing.}

Sub.1 Ant

P_{limit} = min{ P_{limit} corresponding to Standalone 1g SAR evaluation at 19(Rear), 0(Left). 19(Bottom) mm spacing,
And 19(Right)mm spacing.}

Sub.2 Ant & Sub.4 Ant

P_{limit} = min{ P_{limit} corresponding to Standalone 1g SAR evaluation at 19(Rear), 0(Left). 19(Bottom) mm spacing,
And 0(Right)mm spacing.}

Sub.3 Ant

P_{limit} = min{ P_{limit} corresponding to Standalone 1g SAR evaluation at 19(Rear), 22(Top). 19(Right) mm spacing.}

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

Exposure condition		Standalone with Sensor Off	Standalone with Sensor On	Pmax (dBm)
Spatial-average		1g	1g	
Test distance (mm)		Refer to sec.6.3 in Part.0 report.		
RSI:		0	1	
RF Air Interface	Antenna	Plimit corresponding to 1.0 W/kg		
WCDMA 2	Main.1	25.91	13.50	23.50
WCDMA 4	Main.1	26.29	12.50	24.00
WCDMA 5	Main.1	24.99	16.50	23.50
LTE B5	Main.1	26.05	14.00	24.00
LTE B7	Main.1	28.00	12.00	24.00
LTE B7	Sub.2	27.96	9.50	23.00
LTE B12	Main.1	29.29	15.50	24.00
LTE B13	Main.1	26.12	15.50	24.00
LTE B14	Main.1	26.33	15.50	24.00
LTE B25(2)	Main.1	26.48	12.50	24.00
LTE B25(2)	Sub.2	27.64	10.00	23.00
LTE B26	Main.1	26.20	14.00	24.00
LTE B30	Main.1	28.10	12.50	22.00
LTE B41(PC3)	Main.1	29.34	12.00	22.00
LTE B41(PC2)	Main.1	33.13	10.40	22.40
LTE B66(4)	Main.1	25.99	12.00	23.50
LTE B66(4)	Sub.2	27.36	10.00	23.00
LTE B71	Main.1	32.22	19.00	24.00
NR Band n5	Main.1	26.37	14.00	24.00
NR Band n12	Main.1	29.02	15.50	24.00
NR Band n25(2)	Main.1	26.57	12.50	24.00
NR Band n30	Main.1	28.55	12.50	22.50
NR Band n66	Main.1	25.97	12.00	24.00
NR Band n71	Main.1	30.48	19.00	24.00
NR Band n41-(PC2/PC3)	Main.1	20.50 / 18.00	13.00	26.50 / 24.00
NR Band n41 SRS1-(PC2/PC3)	Sub.2	19.00 / 16.50	13.00	25.00 / 22.50
NR Band n41 SRS2-(PC2/PC3)	Sub.4	19.00 / 17.00	13.00	25.00 / 23.00
NR Band n41 SRS3-(PC2/PC3)	Sub.1	16.50	13.00	21.00 / 21.00
NR Band n77-(PC2/PC3)	Main.2	21.00 / 18.00	9.00	27.00 / 24.00
NR Band n77 SRS1-(PC2/PC3)	Sub.2	21.00 / 17.50	9.00	27.00 / 23.50
NR Band n77 SRS2-(PC2/PC3)	Sub.4	18.00	9.00	24.00 / 24.00
NR Band n77 SRS3-(PC2/PC3)	Sub.3	17.00 / 16.50	7.00	21.50 / 21.00
NR Band n78	Main.2	18.00	9.00	24.00
NR Band n78 SRS1	Sub.2	17.00	9.00	23.00
NR Band n78 SRS2	Sub.4	15.50	9.00	21.50
NR Band n78 SRS3	Sub.3	13.50	7.00	19.50

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 LTE TDD modulation schemes.
4. For NR FR1 TDD Bands, P_{limit} listed averaged power level, and P_{max} listed burst power level.
5. For PC2/PC3 of NR Band n41/n77, PC2 Plimit is higher than PC3 Plimit in RSI=0. So Plimit calculation is based on PC2's Plimit. So PC3' Plimit is always within SAR design target.
6. NR Band n78's Plimit is same or lower than NR Band n77's Plimit in All RSI's scenarios. Therefore, NR Band n77 was tested as a representative.

7. SAR Test results for P_{limit} calculations

Standalone exposure (RSI = 0 – Proximity Sensor Off)

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)
Standalone	0	WCDMA 2	Main.1	Rel 99	9400	19	Rear	23.42	0.535	26.14	25.91
						22	Top	23.42	0.564	25.91	
						19	Left	23.42	0.048	36.60	
						19	Right	23.42	0.044	37.00	
Standalone	0	WCDMA 4	Main.1	Rel 99	1413	19	Rear	23.76	0.402	27.72	26.29
						22	Top	23.76	0.559	26.29	
						19	Left	23.76	0.055	36.38	
						19	Right	23.76	0.062	35.86	
Standalone	0	WCDMA 5	Main.1	Rel 99	4183	19	Rear	23.95	0.787	24.99	24.99
						22	Top	23.95	0.629	25.96	
						19	Left	23.95	0.058	36.35	
						19	Right	23.95	0.034	38.64	
Standalone	0	LTE B5	Main.1	QPSK BW=10 RB 1/0	20525	19	Rear	24.17	0.648	26.05	26.05
						22	Top	24.17	0.645	26.07	
						19	Left	24.17	0.080	35.14	
						19	Right	24.17	0.027	39.94	
Standalone	0	LTE B7	Main.1	QPSK BW=20 RB 1/0	21350	19	Rear	24.71	0.469	28.00	28.00
						22	Top	24.71	0.409	28.59	
						19	Left	24.71	0.067	36.42	
						19	Right	24.71	0.005	47.55	
Standalone	0	LTE B7	Sub.2	QPSK BW=20 RB 1/0	20850	19	Rear	23.50	0.198	30.53	27.96
						0	Left	23.50	0.259	29.37	
						19	Bottom	23.50	0.358	27.96	
						0	Right	23.50	0.137	32.13	
Standalone	0	LTE B12	Main.1	QPSK BW=10 RB 1/0	23095	19	Rear	23.56	0.267	29.29	29.29
						22	Top	23.56	0.253	29.53	
						19	Left	23.56	0.021	40.34	
						19	Right	23.56	0.020	40.55	
Standalone	0	LTE B13	Main.1	QPSK BW=10 RB 1/0	23230	19	Rear	23.52	0.545	26.16	26.12
						22	Top	23.52	0.549	26.12	
						19	Left	23.52	0.040	37.50	
						19	Right	23.52	0.030	38.75	
Standalone	0	LTE B14	Main.1	QPSK BW=10 RB 1/0	23330	19	Rear	24.15	0.606	26.33	26.33
						22	Top	24.15	0.552	26.73	
						19	Left	24.15	0.049	37.25	
						19	Right	24.15	0.031	39.24	
Standalone	0	LTE B25(2)	Main.1	QPSK BW=20 RB 1/99	26140	19	Rear	24.05	0.501	27.05	26.48
						22	Top	24.05	0.571	26.48	
						19	Left	24.05	0.050	37.07	
						19	Right	24.05	0.029	39.44	
Standalone	0	LTE B25(2)	Sub.2	QPSK BW=20 RB 1/0	26365	19	Rear	23.71	0.141	32.22	27.64
						0	Left	23.71	0.405	27.64	
						19	Bottom	23.71	0.183	31.09	
						0	Right	23.71	0.268	29.43	

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.

Standalone exposure (RSI = 0 – Proximity Sensor Off) (Continued)

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)
Standalone	0	LTE B26	Main.1	QPSK BW=15 RB 1/0	26865	19	Rear	24.17	0.572	26.60	26.20
						22	Top	24.17	0.626	26.20	
						19	Left	24.17	0.060	36.41	
						19	Right	24.17	0.028	39.70	
Standalone	0	LTE B30	Main.1	QPSK BW=10 RB 1/25	27710	19	Rear	22.62	0.223	29.14	28.10
						22	Top	22.62	0.283	28.10	
						19	Left	22.62	0.026	38.52	
						19	Right	22.62	0.021	39.44	
Standalone	0	LTE B41(PC3)	Main.1	QPSK BW=20 RB 1/0	40620	19	Rear	22.72	0.218	29.34	29.34
						22	Top	22.72	0.212	29.46	
						19	Left	22.72	0.050	35.75	
						19	Right	22.72	0.005	45.42	
Standalone	0	LTE B41(PC2)	Main.1	QPSK BW=20 RB 1/0	40620	19	Rear	22.45	0.196	29.53	29.53
Standalone	0	LTE B66(4)	Main.1	QPSK BW=20 RB 1/0	132322	19	Rear	23.31	0.444	26.84	25.99
						22	Top	23.31	0.539	25.99	
						19	Left	23.31	0.066	35.14	
						19	Right	23.31	0.031	38.47	
Standalone	0	LTE B66(4)	Sub.2	QPSK BW=20 RB 50/0	132572	19	Rear	22.64	0.144	31.06	27.36
						0	Left	22.64	0.337	27.36	
						19	Bottom	22.64	0.198	29.67	
						0	Right	22.64	0.264	28.42	
Standalone	0	LTE B71	Main.1	QPSK BW=20 RB 1/0	133297	19	Rear	24.15	0.156	32.22	32.22
						22	Top	24.15	0.151	32.36	
						19	Left	24.15	0.024	40.29	
						19	Right	24.15	0.037	38.52	
Standalone	0	NR Band n5	Main.1	DFT-s OFDM QPSK BW=20 RB 1/1	167300	19	Rear	23.60	0.528	26.37	26.37
						22	Top	23.60	0.478	26.81	
						19	Left	23.60	0.052	36.46	
						19	Right	23.60	0.045	37.07	
Standalone	0	NR Band n12	Main.1	DFT-s OFDM QPSK BW=15 RB 1/77	141500	19	Rear	23.67	0.292	29.02	29.02
						22	Top	23.67	0.205	30.55	
						19	Left	23.67	0.025	39.78	
						19	Right	23.67	0.022	40.31	
Standalone	0	NR Band n25(2)	Main.1	DFT-s OFDM QPSK BW=40 RB 50/28	376500	19	Rear	24.01	0.476	27.23	26.57
						22	Top	24.01	0.554	26.57	
						19	Left	24.01	0.063	36.02	
						19	Right	24.01	0.001	54.01	
Standalone	0	NR Band n30	Main.1	DFT-s OFDM QPSK BW=10 RB 25/14	462000	19	Rear	22.20	0.210	28.98	28.55
						22	Top	22.20	0.232	28.55	
						19	Left	22.20	0.024	38.42	
						19	Right	22.20	0.018	39.74	
Standalone	0	NR Band n66	Main.1	DFT-s OFDM QPSK BW=40 RB 1/108	349000	19	Rear	23.69	0.588	26.00	25.97
						22	Top	23.69	0.591	25.97	
						19	Left	23.69	0.055	36.33	
						19	Right	23.69	0.058	36.07	

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.

Standalone exposure (RSI = 0 – Proximity Sensor Off) (Continued)

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)
Standalone	0	NR Band n71	Main.1	DFT-s OFDM QPSK BW=20 RB 1/53	136100	19	Rear	23.82	0.216	30.48	30.48
						22	Top	23.82	0.088	34.38	
						19	Left	23.82	0.014	42.45	
						19	Right	23.82	0.013	42.68	
Standalone	0	NR Band n41	Main.1	DFT-s OFDM QPSK BW=100 RB 1/137	518598	19	Rear	20.98	0.150	29.22	29.22
						22	Top	20.98	0.148	29.28	
						19	Left	20.98	0.031	36.07	
						19	Right	20.98	0.012	40.19	
Standalone	0	NR Band n41 - SRS1 -	Sub.2	SRS CW	518598	19	Rear	19.07	0.076	30.26	23.69
						0	Left	19.07	0.345	23.69	
						19	Bottom	19.07	0.118	28.35	
						0	Right	19.07	0.067	30.81	
Standalone	0	NR Band n41 - SRS2 -	Sub.4	SRS CW	518598	19	Rear	19.60	0.028	35.13	25.50
						0	Left	19.60	0.011	39.19	
						19	Bottom	19.60	0.039	33.69	
						0	Right	19.60	0.257	25.50	
Standalone	0	NR Band n41 - SRS3 -	Sub.1	SRS CW	518598	19	Rear	16.78	0.062	28.86	27.34
						0	Left	16.78	0.010	36.78	
						19	Bottom	16.78	0.064	28.72	
						19	Right	16.78	0.088	27.34	
Standalone	0	NR Band n77 (PC3/PC2)	Main.2	DFT-s OFDM QPSK BW=100 RB 1/1	662000	19	Rear	21.61	0.124	30.68	27.05
						19	Left	21.61	0.286	27.05	
						19	Bottom	21.61	0.122	30.75	
Standalone	0	NR Band n77 (PC3/PC2) - SRS1 -	Sub.2	SRS CW	662000	19	Rear	20.77	0.177	28.29	22.50
						0	Left	20.77	0.671	22.50	
						19	Bottom	20.77	0.162	28.67	
						0	Right	20.77	0.067	32.51	
Standalone	0	NR Band n77 (PC3/PC2) - SRS2 -	Sub.4	SRS CW	662000	19	Rear	18.94	0.097	29.07	20.48
						0	Left	18.94	0.224	25.44	
						19	Bottom	18.94	0.153	27.09	
						0	Right	18.94	0.702	20.48	
Standalone	0	NR Band n77 (PC3/PC2) - SRS3 -	Sub.3	SRS CW	662000	19	Rear	17.75	0.046	31.12	27.11
						22	Top	17.75	0.020	34.81	
						19	Right	17.75	0.116	27.11	

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.

Standalone exposure (RSI = 1 – Proximity Sensor On)

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)
Standalone	1	WCDMA 2	Main.1	Rel 99	9400	0	Rear	13.44	0.639	15.38	15.06
						0	Top	13.44	0.688	15.06	
						0	Left	13.44	0.066	25.24	
						0	Right	13.44	0.026	29.24	
Standalone	1	WCDMA 4	Main.1	Rel 99	1413	0	Rear	12.92	0.608	15.08	15.08
						0	Top	12.92	0.459	16.30	
						0	Left	12.92	0.049	25.99	
						0	Right	12.92	0.182	20.32	
Standalone	1	WCDMA 5	Main.1	Rel 99	4183	0	Rear	16.32	0.674	18.03	17.35
						0	Top	16.32	0.789	17.35	
						0	Left	16.32	0.037	30.69	
						0	Right	16.32	0.024	32.52	
Standalone	1	LTE B5	Main.1	QPSK BW=10 RB 1/0	20525	0	Rear	14.31	0.415	18.13	17.90
						0	Top	14.31	0.438	17.90	
						0	Left	14.31	0.036	28.76	
						0	Right	14.31	0.021	31.11	
Standalone	1	LTE B7	Main.1	QPSK BW=20 RB 1/0	21350	0	Rear	12.44	0.556	14.99	14.99
						0	Top	12.44	0.469	15.73	
						0	Left	12.44	0.045	25.95	
						0	Right	12.44	0.001	42.44	
Standalone	1	LTE B7	Sub.2	QPSK BW=20 RB 1/0	20850	0	Rear	10.00	0.545	12.64	12.64
						0	Left	23.50	0.259	29.37	
						0	Bottom	10.00	0.412	13.85	
						0	Right	23.50	0.137	32.13	
Standalone	1	LTE B12	Main.1	QPSK BW=10 RB 1/0	23095	0	Rear	16.15	0.479	19.35	19.17
						0	Top	16.15	0.499	19.17	
						0	Left	16.15	0.066	27.95	
						0	Right	16.15	0.035	30.71	
Standalone	1	LTE B13	Main.1	QPSK BW=10 RB 1/0	23230	0	Rear	15.26	0.532	18.00	18.00
						0	Top	15.26	0.515	18.14	
						0	Left	15.26	0.087	25.86	
						0	Right	15.26	0.036	29.70	
Standalone	1	LTE B14	Main.1	QPSK BW=10 RB 1/0	23330	0	Rear	15.16	0.449	18.64	18.64
						0	Top	15.16	0.418	18.95	
						0	Left	15.16	0.096	25.34	
						0	Right	15.16	0.039	29.25	
Standalone	1	LTE B25(2)	Main.1	QPSK BW=20 RB 50/50	26140	0	Rear	12.63	0.502	15.62	14.64
						0	Top	12.63	0.630	14.64	
						0	Left	12.63	0.052	25.48	
						0	Right	12.63	0.066	24.41	
Standalone	1	LTE B25(2)	Sub.2	QPSK BW=20 RB 50/0	26365	0	Rear	10.09	0.633	12.08	12.08
						0	Left	23.71	0.405	27.64	
						0	Bottom	10.09	0.475	13.32	
						0	Right	23.71	0.268	29.43	

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.

Standalone exposure (RSI = 1 – Proximity Sensor On) (Continued)

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)
Standalone	1	LTE B26	Main.1	QPSK BW=15 RB 1/0	26865	0	Rear	14.20	0.388	18.31	17.65
						0	Top	14.20	0.452	17.65	
						0	Left	14.20	0.039	28.27	
						0	Right	14.20	0.009	34.59	
Standalone	1	LTE B30	Main.1	QPSK BW=10 RB 25/25	27710	0	Rear	12.50	0.376	16.75	15.55
						0	Top	12.50	0.495	15.55	
						0	Left	12.50	0.031	27.63	
						0	Right	12.50	0.002	39.20	
Standalone	1	LTE B41(PC3)	Main.1	QPSK BW=20 RB 1/0	40620	0	Rear	12.25	0.453	15.69	15.69
						0	Top	12.25	0.352	16.78	
						0	Left	12.25	0.023	28.56	
						0	Right	12.25	0.001	42.25	
Standalone	1	LTE B41(PC2)	Main.1	QPSK BW=20 RB 1/0	40620	0	Rear	11.03	0.311	16.10	16.10
Standalone	1	LTE B66(4)	Main.1	QPSK BW=20 RB 50/24	132322	0	Rear	12.21	0.549	14.81	14.70
						0	Top	12.21	0.564	14.70	
						0	Left	12.21	0.057	24.69	
						0	Right	12.21	0.186	19.51	
Standalone	1	LTE B66(4)	Sub.2	QPSK BW=20 RB 50/0	132572	0	Rear	10.33	0.641	12.26	12.26
						0	Left	22.64	0.337	27.36	
						0	Bottom	10.33	0.394	14.38	
						0	Right	22.64	0.264	28.42	
Standalone	1	LTE B71	Main.1	QPSK BW=20 RB 1/0	133297	0	Rear	19.74	0.499	22.76	22.76
						0	Top	19.74	0.482	22.91	
						0	Left	19.74	0.047	33.02	
						0	Right	19.74	0.024	35.94	
Standalone	1	NR Band n5	Main.1	DFT-s OFDM QPSK BW=20 RB 1/1	167300	0	Rear	14.48	0.469	17.77	17.77
						0	Top	14.48	0.394	18.53	
						0	Left	14.48	0.034	29.14	
						0	Right	14.48	0.016	32.33	
Standalone	1	NR Band n12	Main.1	DFT-s OFDM QPSK BW=15 RB 1/77	141500	0	Rear	16.29	0.445	19.81	19.71
						0	Top	16.29	0.455	19.71	
						0	Left	16.29	0.026	32.09	
						0	Right	16.29	0.018	33.64	
Standalone	1	NR Band n25(2)	Main.1	DFT-s OFDM QPSK BW=40 RB 50/28	376500	0	Rear	12.77	0.512	15.68	14.95
						0	Top	12.77	0.606	14.95	
						0	Left	12.77	0.055	25.37	
						0	Right	12.77	0.037	27.12	
Standalone	1	NR Band n30	Main.1	DFT-s OFDM QPSK BW=10 RB 1/50	462000	0	Rear	12.98	0.412	16.83	15.08
						0	Top	12.98	0.616	15.08	
						0	Left	12.98	0.043	26.66	
						0	Right	12.98	0.007	34.84	
Standalone	1	NR Band n66	Main.1	DFT-s OFDM QPSK BW=40 RB 1/108	349000	0	Rear	12.25	0.528	15.02	14.92
						0	Top	12.25	0.541	14.92	
						0	Left	12.25	0.050	25.30	
						0	Right	12.25	0.085	22.94	

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.

Standalone exposure (RSI = 1 – Proximity Sensor On) (Continued)

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)
Standalone	1	NR Band n71	Main.1	DFT-s OFDM QPSK BW=20 RB 50/28	136100	0	Rear	19.45	0.461	22.81	22.81
						0	Top	19.45	0.357	23.92	
						0	Left	19.45	0.047	32.75	
						0	Right	19.45	0.032	34.38	
Standalone	1	NR Band n41	Main.1	DFT-s OFDM QPSK BW=100 RB 135/69	518598	0	Rear	13.82	0.778	14.91	14.91
						0	Top	13.82	0.546	16.45	
						0	Left	13.82	0.053	26.58	
						0	Right	13.82	0.008	34.79	
Standalone	1	NR Band n41 - SRS1 -	Sub.2	SRS CW	518598	0	Rear	13.43	0.594	15.69	13.64
						0	Left	19.07	0.345	23.69	
						0	Bottom	13.43	0.953	13.64	
						0	Right	19.07	0.067	30.81	
Standalone	1	NR Band n41 - SRS2 -	Sub.4	SRS CW	518598	0	Rear	13.10	0.473	16.35	16.35
						0	Left	19.60	0.011	39.19	
						0	Bottom	13.10	0.137	21.73	
						0	Right	19.60	0.257	25.50	
Standalone	1	NR Band n41 - SRS3 -	Sub.1	SRS CW	518598	0	Rear	13.18	0.985	13.25	13.25
						0	Left	16.78	0.010	36.78	
						0	Bottom	13.18	0.431	16.84	
						0	Right	13.18	0.945	13.43	
Standalone	1	NR Band n77 (PC3/PC2)	Main.2	DFT-s OFDM QPSK BW=100 RB 1/1	662000	0	Rear	9.58	0.309	14.68	11.89
						0	Left	9.58	0.587	11.89	
						0	Bottom	9.58	0.180	17.03	
Standalone	1	NR Band n77 (PC3/PC2) - SRS1 -	Sub.2	SRS CW	662000	0	Rear	9.66	0.264	15.44	14.44
						0	Left	20.77	0.671	22.50	
						0	Bottom	9.66	0.333	14.44	
						0	Right	20.77	0.067	32.51	
Standalone	1	NR Band n77 (PC3/PC2) - SRS2 -	Sub.4	SRS CW	633334	0	Rear	9.77	0.646	11.67	11.67
						0	Left	18.94	0.224	25.44	
						0	Bottom	9.77	0.641	11.70	
						0	Right	18.94	0.702	20.48	
Standalone	1	NR Band n77 (PC3/PC2) - SRS3 -	Sub.3	SRS CW	650000	0	Rear	7.63	0.381	11.82	9.88
						0	Top	7.63	0.179	15.10	
						0	Right	7.63	0.596	9.88	

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