TEST REPORT

Reference No.	:	WTD24X01019435W005
FCC ID	:	2AQRM-Q5
Applicant	:	Foxx Development Inc.
Address	:	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA
Manufacturer		The same as Applicant
Address		The same as Applicant
Product Name	:	5G MiFi
Model No.	:	Q5
Standards	:	FCC Part 2.1093 IEEE Std C95.1: 2019 IEEE Std C95.3: 2002 + Rev. 2008 IEC/IEEE 62209-1528 Ed. 1.0 (2020-10)
Date of Receipt sample	:	2024-03-07
Date of Test	:	2024-03-07 to 2024-04-17
Date of Issue	:	2024-05-10
Test Report Form No.	:	WTX_IEEE_1528W
Test Result	:	**Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,
Block 70 Bao'an District, Shenzhen, Guangdong, China

Tel.: +86-755-33663308 Fax.: +86-755-33663309 Email: sem@waltek.com.cn

Tested by:

Jack Sun

Jack Sun

Approved by:

Jason Su

Jason Su

TABLE OF CONTENTS

Report version

Version No.	Date of issue	Description
Rev.00	2024-05-10	Original
/	/	/

1. General Information

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT:	
Product Name:	5G MiFi
Brand Name:	/
Model No.:	Q5
Adding Model(s):	/
Rated Voltage:	Adapter DC5V; Battery DC3.85V
Battery Capacity:	/
Adapter Model	GQ15-050300-ZU Input: AC100-240v~50/60Hz 0.5A Output:DC5V3.0A
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT:	
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 30, 66, 71 TDD-LTE Band 38, 41, 48
UL CA:	CA_2C, CA_5B, CA_7C, CA_38C, CA_41C, CA_48C, CA_66B, CA_66C
Uplink Frequency:	FDD-LTE Band 2: Tx: 1850-1910MHz, FDD-LTE Band 4: Tx: 1710-1755MHz, FDD-LTE Band 5: Tx: 824-849MHz, FDD-LTE Band 7: Tx: 2500-2570MHz, FDD-LTE Band 12: Tx: 699-716MHz, FDD-LTE Band 13: Tx: 777-787MHz, FDD-LTE Band 14: Tx: 788~798MHz, FDD-LTE Band 17: Tx: 704-716MHz, FDD-LTE Band 25: Tx: 1850-1915MHz, FDD-LTE Band 26-1: Tx: 814-824MHz, FDD-LTE Band 26-2: Tx: 824-849MHz, FDD-LTE Band 30: Tx: 2305-2315MHz, TDD-LTE Band 38: Tx: 2570-2620MHz TDD-LTE Band 41: Tx: 2496-2690MHz TDD-LTE Band 48: Tx: 3550-3700MHz FDD-LTE Band 66: Tx: 1710-1780MHz, FDD-LTE Band 71: Tx: 663-698MHz,
Downlink Frequency:	FDD-LTE Band 2: Rx: 1930-1990MHz, FDD-LTE Band 4: Rx: 2110-2155MHz, FDD-LTE Band 5: Rx: 869-894MHz, FDD-LTE Band 7: Rx:2620-2690MHz, FDD-LTE Band 12: Rx: 729-746MHz, FDD-LTE Band 13: Rx: 746-756MHz, FDD-LTE Band 14: Rx: 758~768MHz, FDD-LTE Band 17: Rx: 734-746MHz, FDD-LTE Band 25: Rx: 1930-1995MHz, FDD-LTE Band 26-1: Rx: 859-869MHz, FDD-LTE Band 26-2: Rx: 869-894MHz, FDD-LTE Band 30: Rx: 2350-2360MHz, TDD-LTE Band 38: Rx: 2570-2620MHz TDD-LTE Band 41: Rx: 2496-2690MHz TDD-LTE Band 48: Rx: 3550-3700MHz FDD-LTE Band 66: Rx: 2110-2200MHz, FDD-LTE Band 71: Rx: 617-652MHz,
RF Output Power:	FDD-LTE Band 2: 23.45dBm

	FDD-LTE Band 4: 23.20dBm FDD-LTE Band 5: 22.81dBm FDD-LTE Band 7: 23.50dBm FDD-LTE Band 12: 22.50dBm FDD-LTE Band 13: 22.44dBm FDD-LTE Band 14: 22.51dBm FDD-LTE Band 17: 22.63dBm FDD-LTE Band 25: 23.45dBm FDD-LTE Band 26(814-824MHz): 22.55dBm FDD-LTE Band 26(824-849MHz): 22.81dBm FDD-LTE Band 30: 23.43dBm TDD-LTE Band 38: 23.71dBm TDD-LTE Band 41: 23.711dBm TDD-LTE Band 38_HPUE: 26.41dBm TDD-LTE Band 41_HPUE: 26.41dBm TDD-LTE Band 48: 22.83dBm FDD-LTE Band 66: 23.20dBm FDD-LTE Band 71: 22.45dBm
Max.RF Output Power(UL CA):	LTE UL CA_2C: 23.58dBm LTE UL CA_5B: 23.45dBm LTE UL CA_7C: 23.79dBm LTE UL CA_38C: 24.51dBm LTE UL CA_41C: 24.46dBm LTE UL CA_48C: 21.01dBm LTE UL CA_66B: 23.65dBm LTE UL CA_66C: 23.46dBm
Type of Modulation:	UL: QPSK, 16QAM, 64QAM, 256QAM DL: QPSK, 16QAM, 64QAM, 256QAM
Antenna Type:	FPC Antenna
Antenna Gain:	FDD-LTE Band 2: 2.8dBi, FDD-LTE Band 4: 1.5dBi, FDD-LTE Band 5: 2.1dBi, FDD-LTE Band 7: 3.7dBi, FDD-LTE Band 12: 0.8dBi, FDD-LTE Band 13: 0.8dBi, FDD-LTE Band 14: 0.8dBi, FDD-LTE Band 17: 0.8dBi FDD-LTE Band 25: 2.8dBi FDD-LTE Band 26(814-824MHz): 2.1dBi FDD-LTE Band 26(824-849MHz): 2.1dBi FDD-LTE Band 30: 4.1dBi TDD-LTE Band 38: 3.7dBi TDD-LTE Band 41: 3.7dBi

	TDD-LTE Band 48: 3.2dBi FDD-LTE Band 66: 2.8dBi FDD-LTE Band 71: 0.8dBi
5G NR	
Support Networks:	5G NR
SA Band:	n2; n5; n7, n12; n13; n14; n25; n26; n30; n38, n41; n48; n66; n71; n77; n78
NR UL MIMO:	n38; n41; n48; n77; n78
HPUE Band:	n38, n41, n77, n78 (SA & UL MIMO)
NSA Band:	n2A, n5A, n7A, n12A, n14A, n25, n30A, n38, n41A, n48, n66, n71, n77, n78
Frequency Range:	5G NR n2: Tx: 1850-1910MHz, Rx: 1930-1990MHz
	5G NR n5: Tx: 824-849MHz, Rx: 869-894MHz
	5G NR n7: Tx: 2500-2570 MHz; Rx: 2620- 2690 MHz
	5G NR n12: Tx: 699 -716 MHz; Rx: 729-746 MHz
	5G NR n13: Tx: 777 -787 MHz; Rx: 746-756 MHz
	5G NR n14: Tx: 788 -798 MHz; Rx: 758-768 MHz
	5G NR n25: Tx: 1850-1915MHz, Rx: 1930-1995MHz
	5G NR n26-1: Tx: 814-824MHz; Rx: 859-869MHz
	5G NR n26-1: Tx: 824-849 MHz; Rx: 869-894 MHz
	5G NR n30: Tx: 2305 -2315 MHz; Rx: 2350-2360 MHz
	5G NR n38: Tx:2570-2620 MHz; Rx:2570-2620 MHz
	5G NR n41: Tx: 2496-2690MHz, Rx: 2496-2690MHz
	5G NR n48: Tx: 3550-3700MHz, Rx: 3550-3700MHz
	5G NR n66: Tx: 1710-1780MHz, Rx: 2110-2200MHz
	5G NR n71: Tx: 663-698MHz, Rx: 617-652MHz
	5G NR n77: Tx: 3450-3550MHz, Rx: 3450-3550MHz,
	5G NR n77: Tx: 3700-3980MHz, Rx: 3700-3980MHz
	5G NR n78: Tx: 3300-3800MHz, Rx: 3300-3800MHz
Modulation Type:	DFT-s-OFDM: PI/2 BPSK/ QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
Max. RF Output Power:	5G NR n2: 24.03dBm, 5G NR n5: 23.91dBm, 5G NR n7: 24.78dBm, 5G NR n12: 23.54dBm, 5G NR n13: 22.76dBm, 5G NR n14: 23.66dBm, 5G NR n25: 23.26dBm, 5G NR n26(814-824MHz): 23.15dBm, 5G NR n26(824-849MHz): 23.91dBm, 5G NR n30: 23.73dBm, 5G NR n38: 24.76dBm,

	5G NR n41: 25.32dBm, 5G NR n48: 22.38dBm, 5G NR n66: 24.23dBm, 5G NR n71: 23.60dBm 5G NR n77_3450-3550MHz: 24.33dBm 5G NR n78_3450-3550MHz: 24.33dBm 5G NR n77_3700-3980MHz: 27.32dBm 5G NR n78_3700-3980MHz: 27.32dBm
Max. RF Output Power(UL MIMO):	5G NR n38_UL MIMO: 22.85dBm, 5G NR n41_UL MIMO: 23.93dBm, 5G NR n48_UL MIMO: 21.58dBm, 5G NR n77_3450-3550MHz_UL MIMO: 24.13dBm 5G NR n78_3450-3550MHz_UL MIMO: 24.13dBm 5G NR n77_3700-3980MHz_UL MIMO: 24.22dBm 5G NR n78_3700-3980MHz_UL MIMO: 24.22dBm
Max. RF Output Power(HPUE):	n38_HPUE: 26.37dBm, n41_HPUE: 27.83dBm, n77_3450-3550MHz_HPUE: 27.23dBm, n78_3450-3550MHz_HPUE: 27.23dBm, n38_UL MIMO_HPUE: 22.73dBm, n41_UL MIMO_HPUE_HPUE: 25.29dBm, n77_UL MIMO_3450-3550MHz_HPUE: 25.56dBm, n78_UL MIMO_3450-3550MHz_HPUE: 25.56dBm, n77_UL MIMO_3700-3980MHz_HPUE: 25.62dBm, n78_UL MIMO_3700-3980MHz_HPUE: 25.62dBm,
Max. RF Output Power(EN-DC):	n2_EN-DC: 24.01dBm, n5_EN-DC: 23.42dBm, n7_EN-DC: 24.28dBm, n12_EN-DC: 23.42dBm, n14_EN-DC: 23.53dBm, n25_EN-DC: 23.13dBm, n30_EN-DC: 23.96dBm, n38_EN-DC: 24.88dBm, n41_EN-DC: 25.44dBm, n48_EN-DC: 21.9dBm, n66_EN-DC: 23.89dBm, n71_EN-DC: 25.10dBm n77_3450-3550MHz_EN-DC: 24.85dBm n78_3450-3550MHz_EN-DC: 24.85dBm n77_3700-3980MHz_EN-DC: 24.25dBm n78_3700-3980MHz_EN-DC: 24.25dBm
Antenna Type:	FPC Antenna
Antenna Gain:	n2: 2.8dBi

	n5: 2.1dBi n7: 3.7dBi n12: 0.8dBi n13: 0.8dBi n14: 0.8dBi n25: 2.8dBi n26(814-824MHz): 2.1dBi n26(824-849MHz): 2.1dBi n30: 4.1dBi n38: 3.7dBi n41: 3.7dBi n48: 3.2dBi n66: 2.8dBi n71: 0.8dBi n77: 6.9dBi n78: 3.2dBi
WIFI(5GHz)	
Support Standards:	802.11a, 802.11n-HT20/40, 802.11ac-VHT20/40/80, 802.11ax-HE20/40/80
Frequency Range:	Band 1: 5180-5240MHz,Band 2: 5260-5320MHz, Band 3: 5500-5700MHz,Band 4: 5745-5825MHz
RF Output Power:	Antenna 0: 19.99dBm (Conducted) Antenna 1: 19.96dBm (Conducted)
Type of Modulation:	BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM
Type of Antenna:	FPC Antenna
Antenna Gain:	Antenna 0: 2.69dBi Antenna 1: 5.4dBi
WIFI(2.4GHz)	
Support Standards:	802.11b, 802.11g, 802.11n, 802.11ax
Frequency Range:	2412-2462MHz for 802.11b/g/n-HT20, 802.11ax-HE20 2422-2452MHz for 802.11n-HT40, 802.11ax-HE40
RF Output Power:	Antenna 0: 19.88dBm (Conducted) Antenna 1: 19.98dBm (Conducted)
Type of Modulation:	DBPSK/DQPSK/BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM
Quantity of Channels:	11 for 802.11b/g/n-HT20, 802.11ax-HE20 7 for 802.11n-HT40, 802.11ax-HE40
Channel Separation:	5MHz
Antenna Type:	FPC Antenna
Antenna Gain:	Antenna 0: 0.77dBi Antenna 1: -1.50dBi
Note: The Antenna Gain is provided by the customer and can affect the validity of results.	

1.2 Test Standards

The following report is accordance with FCC 47 CFR Part 2.1093, IEEE Std C95.1: 2019, IEEE Std C95.3: 2002 + Rev. 2008, IEC/IEEE 62209-1528 Ed. 1.0 (2020-10), KDB 447498 D01 v06, KDB 648474 D04 v01r03, KDB 248227 D01 v02r02, KDB 941225 D01 v03r01, KDB 941225 D05 v02r05 , and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

The objective is to determine compliance with FCC Part 2.1093 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02. The public notice KDB 447498 D01 v06 for Mobile and Portable Devices RF Exposure Procedure also.

1.4 Test Facility

Address of the test laboratory
Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990
Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010.Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A
The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. Has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

2. Summary of Test Results

The maximum results of Specific Absorption Rate (SAR) have found during testing are as follows:

Frequency Band	Body (10mm Gap)	SAR_{1g} Limit (W/kg)
	Maximum SAR_{1g} (W/kg)	
LTE	**1.188**	1.6
LTE UL CA	0.788	1.6
5G NR_SA	0.113	1.6
5G NR_UL MIMO	0.122	1.6
5G NR SA_HPUE	0.138	1.6
5G NR_EN DC	0.120	1.6
WLAN 5GHz	0.223	1.6
WLAN 2.4GHz	0.219	1.6
Simultaneous Transmission	**1.531**	1.6

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2.1093 and IEEE Std C95.1: 2019, and had been tested in accordance with the measurement methods and procedure specified in IEC/IEEE 62209-1528 Ed. 1.0 (2020-10) and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

3. Specific Absorption Rate (SAR)

3.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techiques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

3.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\mathbf{SAR} = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\mathbf{dm}}\right) = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\boldsymbol{\rho}\mathbf{dv}}\right)$$

SAR is expressed in units of Watts per kilogram (W/kg)
SAR measurement can be either related to the temperature elevation in tissue by

$$\mathbf{SAR} = \mathbf{C}\left(\frac{\boldsymbol{\delta}\mathbf{T}}{\boldsymbol{\delta}\mathbf{t}}\right)$$

Where: C is the specific heat capacity, δ T is the temperature rise and δ t is the exposure duration, or related to the
electrical field in the tissue by

$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}|\mathbf{E}|^2}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

4. SAR Measurement System

4.1 The Measurement System

Comosar is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The Comosar system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.

The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

4.2 Probe

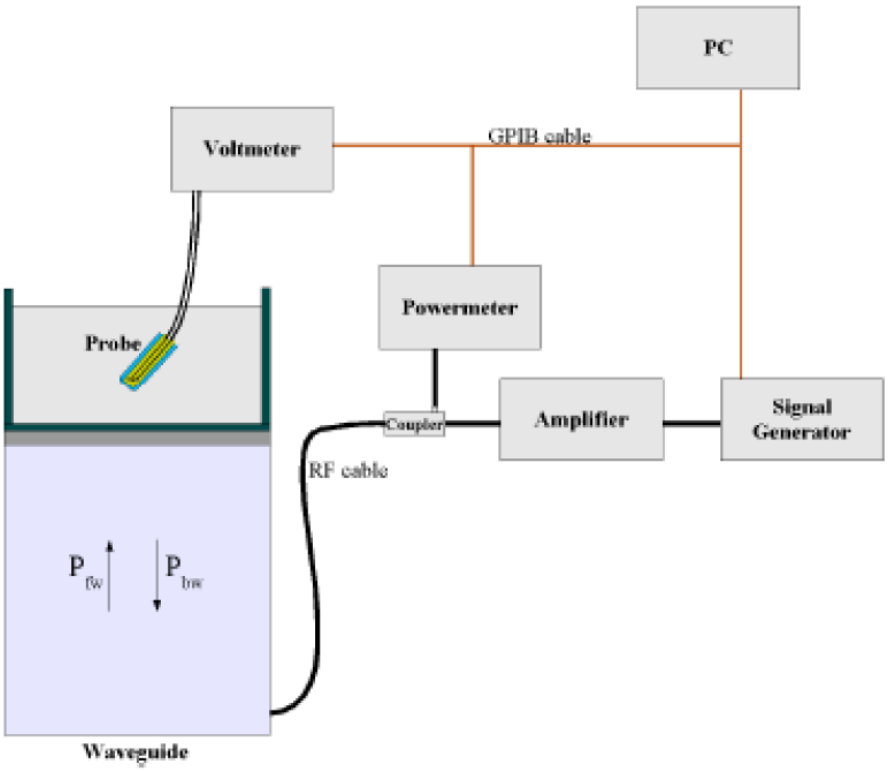
For the measurements the Specific Dosimetric E-Field Probe SSE2 SN 45/15 EPGO280 with following specifications is used

- Dynamic range: 0.01-100 W/kg
- Probe Length: 330 mm
- Length of Individual Dipoles: 4.5 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter : 5 mm

- Distance between dipoles / probe extremity: 2.7mm
- Probe linearity: ＜0.25 dB
- Axial Isotropy: ＜0.25 dB
- Spherical Isotropy: ＜0.50 dB
- Calibration range: 700 to 3000MHz for head & body simulating liquid.

Angle between probe axis (evaluation axis) and suface normal line:1ess than 30°

Probe calibration is realized, in compliance with EN 62209-1 and IEC/IEEE 62209-1528 Ed. 1.0 (2020-10) STD, with CALISAR, Antenna proprietary calibration system. The calibration is performed with the EN 62209-1 annexes technique using reference guide at the five frequencies.



$$SAR = \frac{4\left(P_{fw} - P_{bw}\right)}{ab\delta} \cos^2\left(\pi \frac{y}{a}\right) e^{-(2z/\delta)}$$

Where :

Pfw = Forward Power

Pbw = Backward Power

a and b =Waveguide dimensions

I = Skin depth

Keithley configuration:

Rate = Medium; Filter = ON; RDGS = 10; Filter type = Moving Average; Range auto after each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it.

The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N)=SAR(N)/Vlin(N)\ (N=1,2,3)$$

The linearised output voltage Vlin(N) is obtained from the displayed output voltage V(N) using

$$Vlin(N)=V(N)*(1+V(N)/DCP(N))\ (N=1,2,3)$$

where DCP is the diode compression point in mV.

4.3 Probe Calibration Process

Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm2) using an with CALISAR, Antenna proprietary calibration system.

Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1mW/cm2.

Temperature Assessment Procedure

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C\frac{\Delta T}{\Delta t}$$

Where:

Δt = exposure time (30 seconds),

C = heat capacity of tissue (brain or muscle),

ΔT = temperature increase due to RF exposure.

SAR is proportional to ΔT/Δt, the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

$$SAR = \frac{|E|^2 \cdot \sigma}{\rho}$$

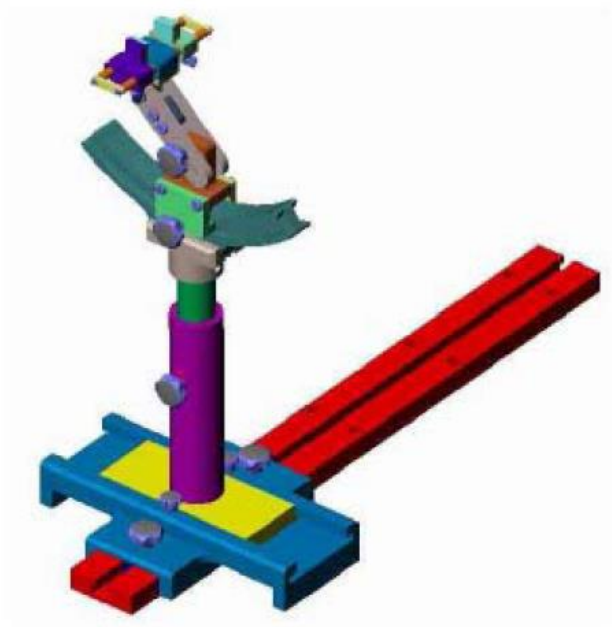
Where:
σ = simulated tissue conductivity,
ρ = Tissue density (1.25 g/cm3 for brain tissue)

4.4 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

4.5 Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1°.



System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

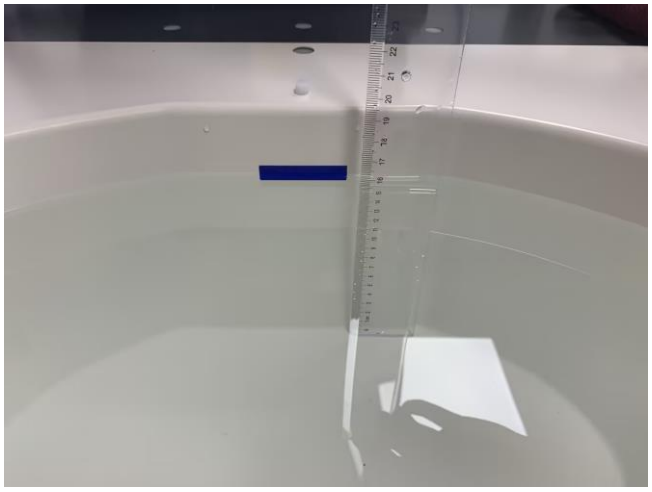
4.6 Test Equipment List

Fixed asset Number	Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
WTXE1053A1006	E-Field Probe	MVG	SSE2	SN 18/21 EPGO356	2023-07-07	2024-07-06
WTXE1053A1001-001	750MHz Dipole	MVG	SID750	SN 47/12 DIP 0G750-203	2023-08-20	2026-08-19
WTXE1053A1001-002	835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2023-08-20	2026-08-19
WTXE1053A1001-004	1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2023-08-20	2026-08-19
WTXE1053A1001-005	1900MHz Dipole	MVG	SID1900	SN 47/12 DIP 1G900-207	2023-08-20	2026-08-19
WTXE1053A1001-009	2300 MHz Dipole	MVG	SID2300	SN 47/12 DIP 2G300-209	2023-08-20	2026-08-19
WTXE1053A1001-007	2450MHz Dipole	MVG	SID2450	SN 13/15 DIP 2G450-364	2023-08-20	2026-08-19
WTXE1053A1006-002	2600MHz Dipole	MVG	SID2600	SN 28/21 DIP 2G600-590	2021-07-19	2024-07-18
WTXE1053A1006-004	3500MHz Dipole	MVG	SID3500	SN 28/21 DIP 3G500-592	2021-07-19	2024-07-18
WTXE1053A1006-005	3700MHz Dipole	MVG	SID3700	SN 28/21 DIP 3G700-593	2021-07-19	2024-07-18
WTXE1053A1006-006	3900MHz Dipole	MVG	SID3900	SN 28/21 DIP 3G900-594	2021-07-19	2024-07-18
WTXE1035A1009	5 GHz Dipole	MVG	SID5000	SN 02/21 DIP 5G000-543	2021-07-21	2024-07-20
WTXE1053A1001-010	Dielectric Probe	SATIMO	SCLMP	SN 47/12 OCPG49	2024-02-24	2025-02-23
WTXE1075A1003	Power meter	Keithley	3500	1232959	2024-02-24	2025-02-23
WTXE1075A1002	Power meter	Keithley	3500	1162591	2024-02-24	2025-02-23
WTXE1104A1003	EXG Analog Signal Generator	KEYSIGHT	N5173B	MY61252892	2024-02-24	2025-02-23
WTXE1022A1002	GSM Tester	Rohde & Schwarz	CMU200	114403	2024-02-27	2025-02-26
WTXE1041A1001	Communication Tester	Rohde & Schwarz	CMW500	100419	2024-02-24	2025-02-23
WTXE1036A1001	Network Analyzer	Rohde & Schwarz	ZVB 8	101353	2023-10-17	2024-10-16

5. Tissue Simulating Liquids

5.1 Composition of Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with SMTIMO, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. Please see the following photos for the liquid height.



Liquid Height for Body SAR

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	HEC (%)	Preventol (%)	DGBE (%)
Head/Body						
750	41.1	1.4	57.0	0.2	0.3	0
835	40.3	1.4	57.9	0.2	0.2	0
1700-1900	55.2	0.3	0	0	0	44.5
2450	55.0	0.1	0	0	0	44.9
2600	54.9	0.1	0	0	0	45.0
3500	71.6	1.3	10.9	0.7	0.7	14.8
3700	71.7	1.3	10.8	0.6	0.8	14.8
3900	71.7	1.3	10.8	0.6	0.8	14.8

Frequency (MHz)	Water (%)	Hexyl Carbitol (%)	Triton X-100 (%)
Head/Body			
5000-6000	65.52	17.24	17.24

5.2 Tissue Dielectric Parameters for Head and Body Phantoms

According to FCC KDBs, IEC/IEEE 62209-1528 Ed. 1.0 (2020-10) and CEI/IEC 62209 standards state that the system validation measurements must be performed using a reference dipole meeting the fore mentioned return loss and mechanical dimension requirements. The validation measurement must be performed against a liquid filled flat phantom, with the phantom constructed as outlined in the fore mentioned standards. Per the standards, the dipole shall be positioned below the bottom of the phantom, with the dipole length centered and parallel to the longest dimension of the flat phantom, with the top surface of the dipole at the described distance from the bottom surface of the phantom.

Target Frequency (MHz)	Head		Body	
	Conductivity (σ)	Permittivity (ε_r)	Conductivity (σ)	Permittivity (ε_r)
150	0.76	52.3	0.80	61.9
300	0.87	45.3	0.92	58.2
450	0.87	43.5	0.94	56.7
750	**0.89**	**41.9**	**0.96**	**55.5**
835	**0.90**	**41.5**	**0.97**	**55.2**
900	0.97	41.5	1.05	55.0
915	0.98	41.5	1.06	55.0
1450	1.20	40.5	1.30	54.0
1610	1.29	40.3	1.40	53.8
1800-2000	**1.40**	**40.0**	**1.52**	**53.3**
2100	1.49	39.8	1.62	53.2
2300	**1.67**	**39.5**	**1.81**	**52.9**
2450	**1.80**	**39.2**	**1.95**	**52.7**
2600	**1.96**	**39.0**	**2.16**	**52.5**
3000	2.40	38.5	2.73	52.0
3300	2.88	37.2	3.04	49.3
3500	**3.07**	**36.5**	**3.29**	**48.6**
3700	**3.35**	**35.2**	**3.62**	**47.1**
3900	**3.62**	**34.6**	**4.07**	**46.7**
4200	3.58	37.2	4.08	48.9
5200	**4.66**	**36.0**	**5.30**	**49.0**
5400	**4.86**	**35.8**	**5.53**	**48.7**
5600	**5.07**	**35.5**	**5.77**	**48.5**
5800	**5.27**	**35.3**	**6.00**	**48.2**

5.3 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using COMOSAR Dielectric Probe Kit and an Agilent Network Analyzer.

Calibration Result for Dielectric Parameters of Tissue Simulating Liquid

Head Tissue Simulating Liquid									
Freq. MHz.	Temp. (℃)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ε r)	Target (ε r)	Delta (%)		
750	22.5	0.86	0.89	-3.37	42.28	41.90	0.91	±5	2024-03-27
835	22.9	0.87	0.90	-3.33	42.26	41.50	1.83	±5	2024-03-25
1800	22.8	1.37	1.40	-2.14	39.54	40.00	-1.15	±5	2024-03-08
1900	22.8	1.37	1.40	-2.14	39.52	40.00	-1.20	±5	2024-03-12
2300	22.6	1.65	1.67	-1.20	39.12	39.5	-0.96	±5	2024-03-14
2450	22.5	1.76	1.80	-2.22	39.12	39.20	-0.20	±5	2024-04-12
2600	22.5	1.93	1.96	-1.53	38.87	39.0	-0.33	±5	2024-03-17
3500	22.9	3.04	3.07	-0.98	36.42	36.5	-0.22	±5	2024-03-20
3700	22.9	3.33	3.35	-0.60	35.12	35.2	-0.23	±5	2024-03-21
3900	22.9	3.65	3.62	0.83	34.27	34.6	-0.95	±5	2024-03-22
5200	22.6	4.69	4.66	0.64	36.75	36.0	2.08	±5	2024-04-16
5400	22.6	4.83	4.86	-0.62	36.63	35.8	2.32	±5	2024-04-16
5600	22.6	5.11	5.07	0.79	36.72	35.5	3.44	±5	2024-04-17
5800	22.6	5.19	5.27	-1.52	36.34	35.3	2.95	±5	2024-04-17

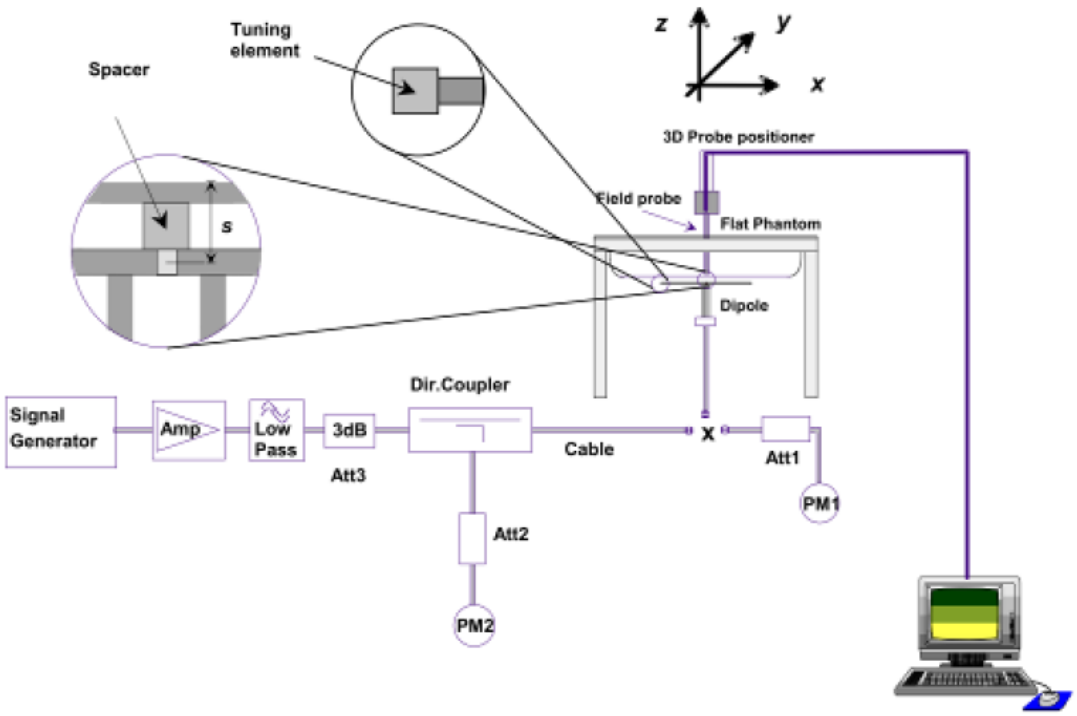
6. SAR Measurement Evaluation

6.1 Purpose of System Performance Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

6.2 System Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator at frequency 835MHz ,1800MHz, 1900MHz 2450MHz,2600MHz,and 5GHz. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom.



System Verification Setup Block Diagram

Setup Photo of Dipole Antenna

The output power on dipole port must be calibrated to 24 dBm(250 mW) before dipole is connected.

6.3 Validation Results

Comparing to the original SAR value provided by SATIMO, the validation data should be within its specification of 10 %. Table 6.1 shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion.

Frequency	Power	Targeted SAR_{1g}	Measured SAR_{1g}	Normalized SAR_{1g}	Tolerance	Date
MHz	(mw)	(W/kg)	(W/kg)	(W/kg)	(%)	
Head						
750	250	8.78	2.051	8.204	-6.56	2024-03-27
835	250	9.65	2.210	8.84	-8.39	2024-03-25
1800	250	38.76	9.624	38.496	-0.68	2024-03-08
1900	250	39.59	10.223	40.892	3.29	2024-03-12
2300	250	49.27	12.023	48.092	-2.39	2024-03-14
2450	250	54.31	13.747	54.988	1.25	2024-04-12
3500	250	68.86	16.854	67.416	-2.10	2024-03-17
3700	250	67.40	15.827	63.308	-6.07	2024-03-20
3900	250	67.42	15.499	61.996	-8.05	2024-03-21
2600	250	56.81	14.815	59.26	4.31	2024-03-22
5200	250	75.31	18.567	74.268	-1.38	2024-04-16

5400	250	79.56	18.979	75.916	-4.58	2024-04-16
5600	250	78.31	19.008	76.032	-2.91	2024-04-17
5800	250	78.05	18.087	72.348	-7.31	2024-04-17

Remark: Referring to IEC/IEEE 62209-1528 Ed. 1.0 (2020-10), the system check shall be performed at a test frequency that is within ±10% or ±100 MHz of the compliance test mid-band frequency, so the 1750 MHz system verification is made of 1800MHz Dipole.

Targeted and Measurement SAR

Please refer to Annex A for the plots of system performance check.

7. EUT Testing Position

7.1 Body Position

(a) To position the device parallel to the phantom surface with each side.
(b) To adjust the device parallel to the flat phantom.
(c) To adjust the distance between the device surface and the flat phantom to 10mm.

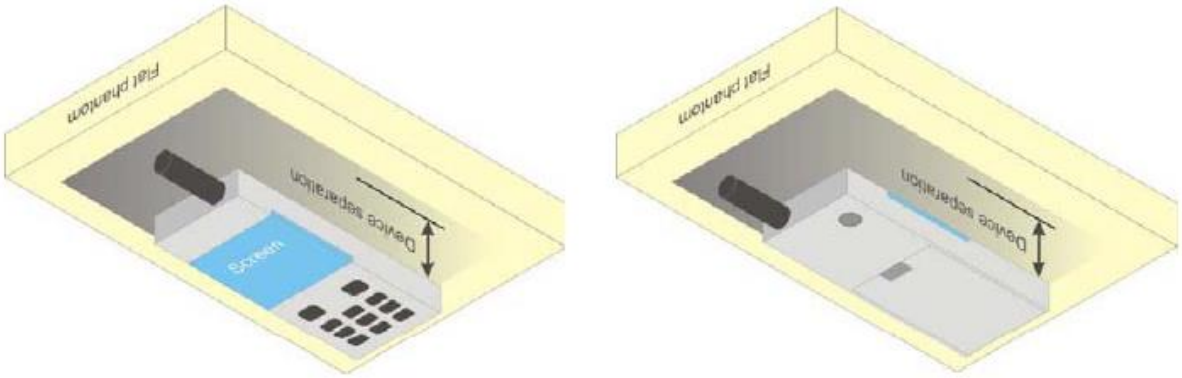
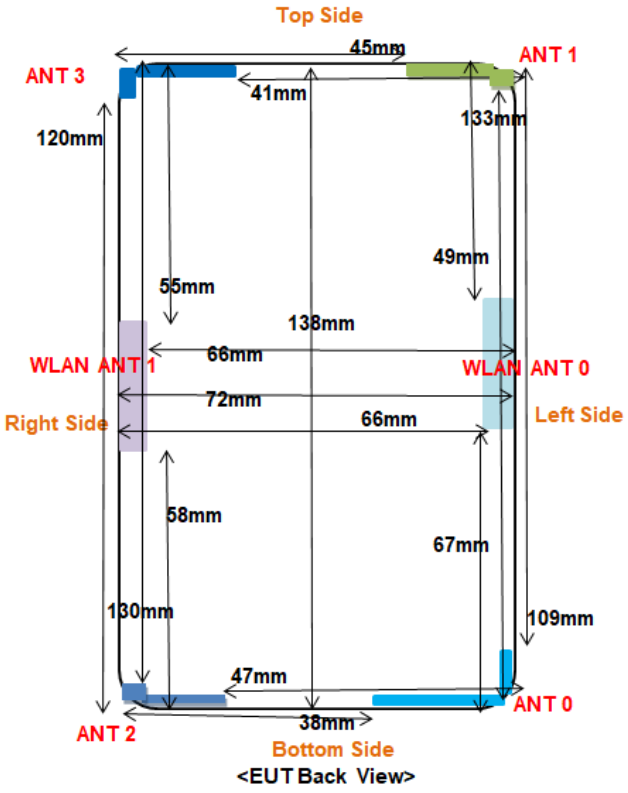


Illustration for Body Position

7.2 EUT Antenna Position



EUT Size: Long*Width*height =138mm*42mm*12mm

Block Diagram for EUT Antenna Position

Distance of EUT antenna-to-edge/surface(mm),						
Antennas	Back side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
ANT0	<25	<25	<25	38	109	<25
ANT3	<25	<25	41	<25	<25	120
WLAN 0	<25	<25	<25	66	49	67
WLAN 1	<25	<25	66	<25	55	58

7.3 EUT Testing Position

Head/Body mode SAR assessments are required for this device. This EUT was tested in different positions for different SAR test modes, more information as below:

Body SAR tests, Test distance: 10mm						
Antennas	**Front**	**Back**	**Left Side**	**Right Side**	**Top Side**	**Bottom Side**
ANT0	Yes	Yes	Yes	No	No	Yes
ANT3	Yes	Yes	No	Yes	Yes	No
WLAN 0	Yes	Yes	Yes	No	No	No
WLAN 1	Yes	Yes	No	Yes	No	No

Remark:

1. Referring to KDB 447498 D01v06, KDB 941225 D06 Hotspot Mode v02r01,When the overall length and width of a device is >9 cm x 5 cm (~3.5" x 2"), a test separation distance of 10 mm is required for hotspot mode SAR measurements. A test separation distance of 5 mm or less is required for smaller devices. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
2. ANT1, ANT2 Only supports receiver function.
3. ANT0: FDD-LTE Band 2, 4, 5, 12, 13, 14, 17, 25, 26, 66, 71; TDD-LTE Band 48
   UL CA: CA_2C, CA_5B, CA_66B, CA_66C
   5G NR: n2; n5; n12; n13; n14; n25; n26; n66; n71; n77; N78
   5G NR NSA: n2A, n5A, n12A, n14A, n25, n66, n71, n77, n78

ANT3: FDD-LTE Band 7, 30; TDD-LTE Band 38, 41;
UL CA: CA_7C, CA_38C, CA_41C,
5G NR: n7, n30; n38, n41;
5G NR UL MIMO: n38; n41; n77; n78;
5G NR HPUE: n38, n41, n77, n78 (SA & UL MIMO)
5G NR NSA: n7A, n30A, n38, n41A,

Note: *1). CA_2C, CA_5B, CA_7C, CA_38C, CA_41C,* CA_48C, *CA_66B, CA_66C only tested the worst mode;*

2). 5G NR NSA(n2A, n5A, n7A, n12A, n14A, n25, n30A, n38, n41A, n48, n66, n71, n77, n78) only tested the worst mode;

3). UL MIMO mode only support CP-OFDM.

Please refer to Annex D for the EUT test setup photos.

8. SAR Measurement Procedures

8.1 Measurement Procedures

The measurement procedures are as follows:
(a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the highest power channel.
(b) Keep EUT to radiate maximum output power or 100% factor (if applicable)
(c) Measure output power through RF cable and power meter.
(d) Place the EUT in the positions as Annex D demonstrates.
(e) Set scan area, grid size and other setting on the SATIMO software.
(f) Measure SAR results for the highest power channel on each testing position.
(g) Find out the largest SAR result on these testing positions of each band
(h) Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:
(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

8.2 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The SATIMO software includes all numerical procedures necessary to evaluate the spatial peak SAR value.
The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.
The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:
(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

8.3 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 5x5x7 points with step size 8, 8 and 5 mm for 300 MHz to 3 GHz, and 8x8x8 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

8.4 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing (step-size is 4, 4 and 2.5 mm). When all volume scan were completed, the software can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.5 SAR Averaged Methods

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10g and 1 g requires a very fine resolution in the three dimensional scanned data array.

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In SATIMO measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.

9. SAR Test Result

9.1 Conducted RF Output Power

Remark:

1. The LTE/ 5G NR Output power are provided by FCC ID: XMR2022RG520NNA.

Remark:

1. Per KDB941225 D05 v02r05, Start with the largest channel bandwidth then measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle, and lower edge of each required test channel. When the reported SAR is≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. 6 When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.
2. Per KDB941225 D05 v02r05, The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.
3. Per KDB941225 D05 v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations, and
the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB941225 D05 v02r05, For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in 5.2.1, 5.2.2, and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration
identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

WLAN(5.2GHz) -Antenna 0				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 36	5180	**19.99**	20.0
	CH 40	5200	19.98	20.0
	CH 48	5240	19.98	20.0
802.11n (HT20)	CH 36	5180	19.37	20.0
	CH 40	5200	19.41	20.0
	CH 48	5240	19.58	20.0
802.11n (HT40)	CH 38	5190	18.36	20.0
	CH 46	5230	18.60	20.0
802.11ac-VHT20	CH 36	5180	19.43	20.0
	CH 40	5200	19.42	20.0
	CH 48	5240	19.71	20.0
802.11ac-VHT40	CH 38	5190	18.37	20.0
	CH 46	5230	18.78	20.0
802.11ac-VHT80	CH42	5210	18.50	20.0
802.11ax-HE20	CH 36	5180	19.25	20.0
	CH 40	5200	19.30	20.0
	CH 48	5240	19.68	20.0
802.11ax-HE40	CH 38	5190	18.28	20.0
	CH 46	5230	18.51	20.0
802.11ax-HE80	CH42	5210	18.49	20.0

WLAN(5.3GHz) Antenna 0				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 52	5260	**18.92**	19.0
	CH 56	5280	18.91	19.0
	CH 64	5320	18.64	19.0
802.11n (HT20)	CH 52	5260	17.64	19.0
	CH 56	5280	17.61	19.0
	CH 64	5320	17.34	19.0
802.11n (HT40)	CH 54	5270	17.77	19.0
	CH62	5310	17.57	19.0
802.11ac-VHT20	CH 52	5260	17.68	19.0
	CH 56	5280	17.56	19.0
	CH 64	5320	17.30	19.0
802.11ac-VHT40	CH 54	5270	17.73	19.0
	CH 62	5310	17.66	19.0
802.11ac-VHT80	CH 58	5290	17.34	19.0
802.11ax-HE20	CH 52	5260	17.58	19.0
	CH 56	5280	17.61	19.0
	CH 64	5320	17.31	19.0
802.11ax-HE40	CH 54	5270	17.55	19.0
	CH 62	5310	17.42	19.0
802.11ax-HE80	CH 58	5290	17.32	19.0

WLAN(5.6GHz) -Antenna 0				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 100	5500	**17.99**	18.0
	CH 120	5600	17.67	18.0
	CH 140	5700	17.80	18.0
802.11n (HT20)	CH 100	5500	17.86	18.0
	CH 120	5600	17.69	18.0
	CH 140	5700	17.38	18.0
802.11n (HT40)	CH 102	5510	17.42	18.0
	CH118	5590	17.23	18.0
	CH134	5670	17.21	18.0
802.11ac-VHT20	CH 100	5500	17.87	18.0
	CH 120	5600	17.63	18.0
	CH 140	5700	17.36	18.0
802.11ac-VHT40	CH 102	5510	17.53	18.0
	CH118	5590	17.23	18.0
	CH134	5670	17.23	18.0
802.11ac-VHT80	CH106	5530	17.58	18.0
	CH122	5610	17.52	18.0
802.11ax-HE20	CH 100	5500	17.83	18.0
	CH 120	5600	17.65	18.0
	CH 140	5700	17.31	18.0
802.11ax-HE40	CH 102	5510	17.42	18.0
	CH118	5590	17.23	18.0
	CH134	5670	17.24	18.0
802.11ax-HE80	CH106	5530	17.69	18.0
	CH122	5610	17.59	18.0

WLAN(5.8GHz) Antenna 0				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 149	5745	19.76	20.0
	CH 157	5785	19.57	20.0
	CH 165	5825	**19.85**	20.0
802.11n (HT20)	CH 149	5745	19.29	20.0
	CH 157	5785	19.45	20.0
	CH 165	5825	19.66	20.0
802.11n (HT40)	CH 151	5755	18.50	20.0
	CH 159	5795	18.44	20.0
802.11ac-VHT20	CH 149	5745	19.33	20.0
	CH 157	5785	19.44	20.0
	CH 165	5825	19.67	20.0
802.11ac-VHT40	CH 151	5755	18.54	20.0
	CH 159	5795	18.43	20.0
802.11ac-VHT80	CH 155	5755	18.46	20.0
802.11ax-HE20	CH 149	5745	19.25	20.0
	CH 157	5785	19.41	20.0
	CH 165	5825	19.70	20.0
802.11ax-HE40	CH 151	5755	18.43	20.0
	CH 159	5795	18.36	20.0
802.11ax-HE80	CH 155	5755	18.47	20.0

WLAN(2.4GHz) Antenna 0					
Test Mode	**Data Rate**	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11b	1Mbps	CH 01	2412	19.84	20.0
		CH 06	2437	19.54	20.0
		CH 11	2462	**19.88**	20.0
802.11g	6Mbps	CH 01	2412	18.59	20.0
		CH 06	2437	18.55	20.0
		CH 11	2462	18.69	20.0
802.11n (20MHz)	MCS0	CH 01	2412	17.77	20.0
		CH 06	2437	17.59	20.0
		CH 11	2462	17.68	20.0
802.11ax-HE20	MCS0	CH 01	2412	17.78	20.0
		CH 06	2437	17.65	20.0
		CH 11	2462	17.79	20.0
802.11n (40MHz)	MCS0	CH 03	2422	17.52	20.0
		CH 06	2437	17.54	20.0
		CH 09	2452	17.52	20.0
802.11ax-HE40	MCS0	CH 03	2422	17.57	20.0
		CH 06	2437	17.54	20.0
		CH 09	2452	17.54	20.0

WLAN(5.2GHz) -Antenna 1				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 36	5180	19.41	20.0
	CH 40	5200	19.57	20.0
	CH 48	5240	**19.96**	20.0
802.11n (HT20)	CH 36	5180	19.09	20.0
	CH 40	5200	19.21	20.0
	CH 48	5240	19.71	20.0
802.11n (HT40)	CH 38	5190	18.52	20.0
	CH 46	5230	18.89	20.0
802.11ac-VHT20	CH 36	5180	19.13	20.0
	CH 40	5200	19.22	20.0
	CH 48	5240	19.72	20.0
802.11ac-VHT40	CH 38	5190	18.52	20.0
	CH 46	5230	18.92	20.0
802.11ac-VHT80	CH42	5210	18.60	20.0
802.11ax-HE20	CH 36	5180	19.08	20.0
	CH 40	5200	19.19	20.0
	CH 48	5240	19.62	20.0
802.11ax-HE40	CH 38	5190	18.42	20.0
	CH 46	5230	18.85	20.0
802.11ax-HE80	CH42	5210	18.75	20.0

WLAN(5.3GHz) Antenna 1				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 52	5260	18.71	19.0
	CH 56	5280	**18.90**	19.0
	CH 64	5320	18.83	19.0
802.11n (HT20)	CH 52	5260	17.29	19.0
	CH 56	5280	17.40	19.0
	CH 64	5320	17.52	19.0
802.11n (HT40)	CH 54	5270	17.47	19.0
	CH62	5310	17.66	19.0
802.11ac-VHT20	CH 52	5260	17.32	19.0
	CH 56	5280	17.35	19.0
	CH 64	5320	17.39	19.0

802.11ac-VHT40	CH 54	5270	17.47	19.0
	CH 62	5310	17.70	19.0
802.11ac-VHT80	CH 58	5290	17.30	19.0
802.11ax-HE20	CH 52	5260	17.25	19.0
	CH 56	5280	17.51	19.0
	CH 64	5320	17.44	19.0
802.11ax-HE40	CH 54	5270	17.28	19.0
	CH 62	5310	17.54	19.0
802.11ax-HE80	CH 58	5290	17.25	19.0

WLAN(5.6GHz)-Antenna 1				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 100	5500	**17.97**	18.0
	CH 120	5600	17.95	18.0
	CH 140	5700	17.35	18.0
802.11n (HT20)	CH 100	5500	17.76	18.0
	CH 120	5600	17.65	18.0
	CH 140	5700	17.09	18.0
802.11n (HT40)	CH 102	5510	17.51	18.0
	CH118	5590	17.54	18.0
	CH134	5670	17.41	18.0
802.11ac-VHT20	CH 100	5500	17.69	18.0
	CH 120	5600	17.60	18.0
	CH 140	5700	17.07	18.0
802.11ac-VHT40	CH 102	5510	17.49	18.0
	CH118	5590	17.54	18.0
	CH134	5670	17.40	18.0
802.11ac-VHT80	CH106	5530	17.23	18.0
	CH122	5610	17.54	18.0
802.11ax-HE20	CH 100	5500	17.45	18.0
	CH 120	5600	17.41	18.0
	CH 140	5700	17.03	18.0
802.11ax-HE40	CH 102	5510	17.36	18.0
	CH118	5590	17.54	18.0
	CH134	5670	17.28	18.0
802.11ax-HE80	CH106	5530	17.28	18.0
	CH122	5610	17.42	18.0

WLAN(5.8GHz) Antenna 1				
Test Mode	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 149	5745	19.33	20.0
	CH 157	5785	19.18	20.0
	CH 165	5825	19.52	20.0
802.11n (HT20)	CH 149	5745	19.31	20.0
	CH 157	5785	19.31	20.0
	CH 165	5825	**19.75**	20.0
802.11n (HT40)	CH 151	5755	18.65	20.0
	CH 159	5795	18.55	20.0
802.11ac-VHT20	CH 149	5745	19.38	20.0
	CH 157	5785	19.28	20.0
	CH 165	5825	19.63	20.0
802.11ac-VHT40	CH 151	5755	18.64	20.0
	CH 159	5795	18.56	20.0
802.11ac-VHT80	CH 155	5755	18.13	20.0
802.11ax-HE20	CH 149	5745	19.17	20.0
	CH 157	5785	19.14	20.0
	CH 165	5825	19.55	20.0
802.11ax-HE40	CH 151	5755	18.57	20.0
	CH 159	5795	18.41	20.0
802.11ax-HE80	CH 155	5755	18.20	20.0

WLAN(2.4GHz) Antenna 1					
Test Mode	**Data Rate**	**Channel**	**Frequency (MHz)**	**Conducted Power (dBm)**	**Tune-up power (dBm)**
802.11b	1Mbps	CH 01	2412	**19.98**	20.0
		CH 06	2437	19.51	20.0
		CH 11	2462	19.81	20.0
802.11g	6Mbps	CH 01	2412	18.57	20.0
		CH 06	2437	18.61	20.0
		CH 11	2462	18.64	20.0
802.11n (20MHz)	MCS0	CH 01	2412	17.85	20.0
		CH 06	2437	17.61	20.0
		CH 11	2462	17.61	20.0
802.11ax-HE20	MCS0	CH 01	2412	17.60	20.0
		CH 06	2437	17.54	20.0
		CH 11	2462	17.55	20.0
802.11n (40MHz)	MCS0	CH 03	2422	17.61	20.0
		CH 06	2437	17.77	20.0
		CH 09	2452	17.55	20.0
802.11ax-HE40	MCS0	CH 03	2422	17.78	20.0
		CH 06	2437	17.83	20.0
		CH 09	2452	17.73	20.0

Remark:

1. Per KDB 248227 D01 v02r02, for 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

2. Per KDB 248227 D01 v02r02, For 802.11b DSSS SAR measurements ,when the reported SAR of the highest measured maximum output power channel (see 3.1) for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

3 .For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is <= 1.2W/kg.

4. Per KDB 248227 D01 v02r02, When multiple channel bandwidth configurations in a frequency band have the same specified maximum output power, the initial test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected among the multiple configurations in a frequency band with the same specified maximum output power.

2) If multiple configurations have the same specified maximum output power and largest channel bandwidth, the lowest order modulation among the largest channel bandwidth configurations is selected.

3) If multiple configurations have the same specified maximum output power, largest channel bandwidth and lowest order modulation, the lowest data rate configuration among these configurations is selected.
4) When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n.

9.2 Test Results for Standalone SAR Test

Body SAR

LTE Band 2/25–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Back Side	1882.5	23.45	24.0	1.135	0.563	0.639
1.	QPSK 20MHz 1RB	Front Side	1882.5	23.45	24.0	1.135	0.714	**0.810**
	QPSK 20MHz 1RB	Right side	1882.5	23.45	24.0	1.135	0.326	0.370
	QPSK 20MHz 1RB	Bottom side	1882.5	23.45	24.0	1.135	0.350	0.397
	QPSK 20MHz 1RB	Front Side	1860.0	23.27	24.0	1.183	0.685	0.810
	QPSK 20MHz 1RB	Front Side	1905.0	23.41	24.0	1.146	0.673	0.771
	QPSK 20MHz 50%RB	Back Side	1882.5	23.45	24.0	1.135	0.541	0.614
	QPSK 20MHz 50%RB	Front Side	1882.5	23.45	24.0	1.135	0.683	0.775
	QPSK 20MHz 50%RB	Left side	1882.5	23.45	24.0	1.135	0.301	0.342
	QPSK 20MHz 50%RB	Bottom side	1882.5	23.45	24.0	1.135	0.337	0.382

Remark:

LTE Band 25 (1850-1915 MHz) overlaps the entire frequency range of LTE Band 2 (1850 -1910 MHz).Therefore, test data provided in this report covers Band 2 as well as Band 25.

LTE Band 4/66–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Side	1777.5	23.20	24.0	1.202	0.868	1.044
2.	QPSK 5MHz 1RB	Front Side	1777.5	23.20	24.0	1.202	0.988	**1.188**
	QPSK 5MHz 1RB	Left side	1777.5	23.20	24.0	1.202	0.685	0.824
	QPSK 5MHz 1RB	Bottom side	1777.5	23.20	24.0	1.202	0.729	0.876
	QPSK 5MHz 1RB	Back Side	1712.5	22.28	24.0	1.486	0.736	1.094
	QPSK 5MHz 1RB	Back Side	1745.0	23.06	24.0	1.242	0.828	1.028
	QPSK 5MHz 1RB	Front Side	1712.5	22.28	24.0	1.486	0.797	1.184
	QPSK 5MHz 1RB	Front Side	1745.0	23.06	24.0	1.242	0.844	1.048
	QPSK 5MHz 50%RB	Back Side	1777.5	23.20	24.0	1.202	0.847	1.018
	QPSK 5MHz 50%RB	Front Side	1777.5	23.20	24.0	1.202	0.972	1.169
	QPSK 5MHz 50%RB	Left side	1777.5	23.20	24.0	1.202	0.661	0.795
	QPSK 5MHz 50%RB	Bottom side	1777.5	23.20	24.0	1.202	0.703	0.845
	QPSK 5MHz 50%RB	Back Side	1712.5	22.28	24.0	1.486	0.709	1.054
	QPSK 5MHz 50%RB	Back Side	1745.0	23.06	24.0	1.242	0.801	0.995
	QPSK 5MHz 50%RB	Front Side	1712.5	22.28	24.0	1.486	0.769	1.143
	QPSK 5MHz 50%RB	Front Side	1745.0	23.06	24.0	1.242	0.825	1.024
	QPSK 20MHz 1RB	Back Side	1745.0	23.11	24.0	1.227	0.796	0.977
	QPSK 20MHz 1RB	Front Side	1745.0	23.11	24.0	1.227	0.954	1.171
	QPSK 20MHz 1RB	Left side	1745.0	23.11	24.0	1.227	0.493	0.605
	QPSK 20MHz 1RB	Bottom side	1745.0	23.11	24.0	1.227	0.560	0.687
	QPSK 20MHz 1RB	Back Side	1720.0	22.91	24.0	1.285	0.756	0.972
	QPSK 20MHz 1RB	Back Side	1770.0	22.12	24.0	1.542	0.708	1.092
	QPSK 20MHz 1RB	Front Side	1720.0	22.91	24.0	1.285	0.892	1.146
	QPSK 20MHz 1RB	Front Side	1770.0	22.12	24.0	1.542	0.768	1.184
	QPSK 20MHz 50%RB	Back Side	1745.0	23.11	24.0	1.227	0.776	0.952
	QPSK 20MHz 50%RB	Front Side	1745.0	23.11	24.0	1.227	0.924	1.134
	QPSK 20MHz 50%RB	Left side	1745.0	23.11	24.0	1.227	0.473	0.581
	QPSK 20MHz 50%RB	Bottom side	1745.0	23.11	24.0	1.227	0.538	0.660
	QPSK 20MHz 50%RB	Back Side	1720.0	22.91	24.0	1.285	0.727	0.934
	QPSK 20MHz 50%RB	Back Side	1770.0	22.12	24.0	1.542	0.698	1.076
	QPSK 20MHz 50%RB	Front Side	1720.0	22.91	24.0	1.285	0.879	1.130
	QPSK 20MHz 50%RB	Front Side	1770.0	22.12	24.0	1.542	0.752	1.159

Remark:

LTE Band 66 (1710-1780 MHz) overlaps the entire frequency range of LTE Band 4 (1710-1755 MHz). Therefore, test data provided in this report covers Band 4 as well as Band 66.

LTE Band 5/ LTE Band 26(824-849MHz)–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Side	846.5	22.81	24.0	1.315	0.379	0.498
3.	QPSK 5MHz 1RB	Front Side	846.5	22.81	24.0	1.315	0.402	**0.529**
	QPSK 5MHz 1RB	Left side	846.5	22.81	24.0	1.315	0.206	0.271
	QPSK 5MHz 1RB	Bottom side	846.5	22.81	24.0	1.315	0.172	0.226
	QPSK 5MHz 50%RB	Back Side	846.5	22.81	24.0	1.315	0.352	0.463
	QPSK 5MHz 50%RB	Front Side	846.5	22.81	24.0	1.315	0.384	0.505
	QPSK 5MHz 50%RB	Left side	846.5	22.81	24.0	1.315	0.186	0.245
	QPSK 5MHz 50%RB	Bottom side	846.5	22.81	24.0	1.315	0.164	0.216
	QPSK 10MHz 1RB	Back Side	836.50	22.78	24.0	1.324	0.351	0.465
	QPSK 10MHz 1RB	Front Side	836.50	22.78	24.0	1.324	0.384	0.509
	QPSK 10MHz 1RB	Left side	836.50	22.78	24.0	1.324	0.196	0.260
	QPSK 10MHz 1RB	Bottom side	836.50	22.78	24.0	1.324	0.165	0.219
	QPSK 10MHz 50%RB	Back Side	836.50	22.78	24.0	1.324	0.343	0.454
	QPSK 10MHz 50%RB	Front Side	836.50	22.78	24.0	1.324	0.372	0.493
	QPSK 10MHz 50%RB	Left side	836.50	22.78	24.0	1.324	0.175	0.232
	QPSK 10MHz 50%RB	Bottom side	836.50	22.78	24.0	1.324	0.157	0.208

Remark:

LTE Band 26 (814-849 MHz) overlaps the entire frequency range of LTE Band 5 (824-849MHz). Therefore, test data provided in this report covers Band 5 as well as Band 26.

LTE Band 7–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Back Side	2565.0	23.50	24.0	1.122	0.337	0.378
	QPSK 10MHz 1RB	Front Side	2565.0	23.50	24.0	1.122	0.423	0.475
	QPSK 10MHz 1RB	Right side	2565.0	23.50	24.0	1.122	0.234	0.263
	QPSK 10MHz 1RB	Top Side	2565.0	23.50	24.0	1.122	0.258	0.289
	QPSK 10MHz 50%RB	Back Side	2565.0	23.50	24.0	1.122	0.314	0.352
	QPSK 10MHz 50%RB	Front Side	2565.0	23.50	24.0	1.122	0.385	0.432
	QPSK 10MHz 50%RB	Right side	2565.0	23.50	24.0	1.122	0.211	0.237
	QPSK 10MHz 50%RB	Top Side	2565.0	23.50	24.0	1.122	0.238	0.267
	QPSK 20MHz 1RB	Back Side	2560.0	23.46	24.0	1.132	0.346	0.392
4.	QPSK 20MHz 1RB	Front Side	2560.0	23.46	24.0	1.132	0.431	**0.488**
	QPSK 20MHz 1RB	Right side	2560.0	23.46	24.0	1.132	0.239	0.271
	QPSK 20MHz 1RB	Top Side	2560.0	23.46	24.0	1.132	0.265	0.300
	QPSK 20MHz 50%RB	Back Side	2560.0	23.46	24.0	1.132	0.323	0.366
	QPSK 20MHz 50%RB	Front Side	2560.0	23.46	24.0	1.132	0.405	0.459
	QPSK 20MHz 50%RB	Right side	2560.0	23.46	24.0	1.132	0.218	0.247
	QPSK 20MHz 50%RB	Top Side	2560.0	23.46	24.0	1.132	0.247	0.280

LTE Band 12–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Back Side	711.0	22.50	24.0	1.413	0.331	0.468
5.	QPSK 10MHz 1RB	Front Side	711.0	22.50	24.0	1.413	0.350	**0.494**
	QPSK 10MHz 1RB	Left side	711.0	22.50	24.0	1.413	0.175	0.247
	QPSK 10MHz 1RB	Bottom side	711.0	22.50	24.0	1.413	0.186	0.263
	QPSK 10MHz 50%RB	Back Side	711.0	22.50	24.0	1.413	0.307	0.434
	QPSK 10MHz 50%RB	Front Side	711.0	22.50	24.0	1.413	0.332	0.469
	QPSK 10MHz 50%RB	Left side	711.0	22.50	24.0	1.413	0.159	0.225
	QPSK 10MHz 50%RB	Bottom side	711.0	22.50	24.0	1.413	0.161	0.227

LTE Band 13–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
6.	64QAM 5MHz 1RB	Back Side	779.5	22.44	24.0	1.432	0.394	**0.564**
	64QAM 5MHz 1RB	Front Side	779.5	22.44	24.0	1.432	0.336	0.481
	64QAM 5MHz 1RB	Left side	779.5	22.44	24.0	1.432	0.229	0.328
	64QAM 5MHz 1RB	Bottom side	779.5	22.44	24.0	1.432	0.188	0.269
	64QAM 5MHz 50%RB	Back Side	779.5	22.44	24.0	1.432	0.375	0.537
	64QAM 5MHz 50%RB	Front Side	779.5	22.44	24.0	1.432	0.318	0.455
	64QAM 5MHz 50%RB	Left side	779.5	22.44	24.0	1.432	0.205	0.294
	64QAM 5MHz 50%RB	Bottom side	779.5	22.44	24.0	1.432	0.167	0.239
	64QAM 10MHz 1RB	Back Side	782.0	21.16	24.0	1.923	0.286	0.550
	64QAM 10MHz 1RB	Front Side	782.0	21.16	24.0	1.923	0.257	0.494
	64QAM 10MHz 1RB	Left side	782.0	21.16	24.0	1.923	0.181	0.348
	64QAM 10MHz 1RB	Bottom side	782.0	21.16	24.0	1.923	0.133	0.256
	64QAM 10MHz 50%RB	Back Side	782.0	21.16	24.0	1.923	0.277	0.533
	64QAM 10MHz 50%RB	Front Side	782.0	21.16	24.0	1.923	0.244	0.469
	64QAM 10MHz 50%RB	Left side	782.0	21.16	24.0	1.923	0.143	0.275
	64QAM 10MHz 50%RB	Bottom side	782.0	21.16	24.0	1.923	0.114	0.219

LTE Band 14–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Back Side	793.0	22.51	24.0	1.409	0.327	0.461
7.	QPSK 10MHz 1RB	Front Side	793.0	22.51	24.0	1.409	0.349	**0.492**
	QPSK 10MHz 1RB	Left side	793.0	22.51	24.0	1.409	0.205	0.289
	QPSK 10MHz 1RB	Bottom side	793.0	22.51	24.0	1.409	0.166	0.234
	QPSK 10MHz 50%RB	Back Side	793.0	22.51	24.0	1.409	0.305	0.430
	QPSK 10MHz 50%RB	Front Side	793.0	22.51	24.0	1.409	0.328	0.462
	QPSK 10MHz 50%RB	Left side	793.0	22.51	24.0	1.409	0.183	0.258
	QPSK 10MHz 50%RB	Bottom side	793.0	22.51	24.0	1.409	0.147	0.207

LTE Band 17–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	16QAM 5MHz 1RB	Back Side	713.5	22.63	24.0	1.371	0.553	0.758
	16QAM 5MHz 1RB	Front Side	713.5	22.63	24.0	1.371	0.602	0.825
	16QAM 5MHz 1RB	Left side	713.5	22.63	24.0	1.371	0.199	0.273
	16QAM 5MHz 1RB	Bottom side	713.5	22.63	24.0	1.371	0.231	0.317
	16QAM 5MHz 50%RB	Back Side	713.5	22.63	24.0	1.371	0.527	0.722
	16QAM 5MHz 50%RB	Front Side	713.5	22.63	24.0	1.371	0.568	0.779
	16QAM 5MHz 50%RB	Left side	713.5	22.63	24.0	1.371	0.176	0.241
	16QAM 5MHz 50%RB	Bottom side	713.5	22.63	24.0	1.371	0.213	0.292
	16QAM 10MHz 1RB	Back Side	711.0	22.15	24.0	1.531	0.570	0.873
8.	16QAM 10MHz 1RB	Front Side	711.0	22.15	24.0	1.531	0.617	**0.945**
	16QAM 10MHz 1RB	Left side	711.0	22.15	24.0	1.531	0.207	0.317
	16QAM 10MHz 1RB	Bottom side	711.0	22.15	24.0	1.531	0.240	0.367
	16QAM 10MHz 50%RB	Back Side	711.0	22.15	24.0	1.531	0.554	0.848
	16QAM 10MHz 50%RB	Front Side	711.0	22.15	24.0	1.531	0.597	0.914
	16QAM 10MHz 50%RB	Left side	711.0	22.15	24.0	1.531	0.186	0.285
	16QAM 10MHz 50%RB	Bottom side	711.0	22.15	24.0	1.531	0.226	0.346

LTE Band 26(814-824MHz)–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Back Side	819.0	22.55	24.0	1.396	0.333	0.465
9.	QPSK 10MHz 1RB	Front Side	819.0	22.55	24.0	1.396	0.367	**0.512**
	QPSK 10MHz 1RB	Left side	819.0	22.55	24.0	1.396	0.216	0.302
	QPSK 10MHz 1RB	Bottom side	819.0	22.55	24.0	1.396	0.231	0.323
	QPSK 10MHz 50%RB	Back Side	819.0	22.55	24.0	1.396	0.308	0.430
	QPSK 10MHz 50%RB	Front Side	819.0	22.55	24.0	1.396	0.349	0.487
	QPSK 10MHz 50%RB	Left side	819.0	22.55	24.0	1.396	0.202	0.282
	QPSK 10MHz 50%RB	Bottom side	819.0	22.55	24.0	1.396	0.214	0.299

LTE Band 30–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Side	2312.5	23.43	24.0	1.140	0.336	0.383
10.	QPSK 5MHz 1RB	Front Side	2312.5	23.43	24.0	1.140	0.470	**0.536**
	QPSK 5MHz 1RB	Left side	2312.5	23.43	24.0	1.140	0.222	0.253
	QPSK 5MHz 1RB	Bottom side	2312.5	23.43	24.0	1.140	0.244	0.278
	QPSK 5MHz 50%RB	Back Side	2312.5	23.43	24.0	1.140	0.318	0.363
	QPSK 5MHz 50%RB	Front Side	2312.5	23.43	24.0	1.140	0.452	0.515
	QPSK 5MHz 50%RB	Left side	2312.5	23.43	24.0	1.140	0.206	0.235
	QPSK 5MHz 50%RB	Bottom side	2312.5	23.43	24.0	1.140	0.231	0.263
	QPSK 10MHz 1RB	Back Side	2310.0	20.81	24.0	2.084	0.227	0.473
	QPSK 10MHz 1RB	Front Side	2310.0	20.81	24.0	2.084	0.248	0.517
	QPSK 10MHz 1RB	Left side	2310.0	20.81	24.0	2.084	0.139	0.290
	QPSK 10MHz 1RB	Bottom side	2310.0	20.81	24.0	2.084	0.131	0.273
	QPSK 10MHz 50%RB	Back Side	2310.0	20.81	24.0	2.084	0.181	0.377
	QPSK 10MHz 50%RB	Front Side	2310.0	20.81	24.0	2.084	0.223	0.465
	QPSK 10MHz 50%RB	Left side	2310.0	20.81	24.0	2.084	0.108	0.225
	QPSK 10MHz 50%RB	Bottom side	2310.0	20.81	24.0	2.084	0.118	0.246

LTE Band 38/41–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	16QAM 10MHz 1RB	Back Side	2501.0	23.71	27.0	2.133	0.184	0.392
	16QAM 10MHz 1RB	Front Side	2501.0	23.71	27.0	2.133	0.207	0.442
	16QAM 10MHz 1RB	Right side	2501.0	23.71	27.0	2.133	0.116	0.247
	16QAM 10MHz 1RB	Top Side	2501.0	23.71	27.0	2.133	0.128	0.273
	16QAM 10MHz 50%RB	Back Side	2501.0	23.71	27.0	2.133	0.167	0.356
	16QAM 10MHz 50%RB	Front Side	2501.0	23.71	27.0	2.133	0.198	0.422
	16QAM 10MHz 50%RB	Right side	2501.0	23.71	27.0	2.133	0.103	0.220
	16QAM 10MHz 50%RB	Top Side	2501.0	23.71	27.0	2.133	0.112	0.239
	16QAM 20MHz 1RB	Back Side	2680.0	23.52	27.0	2.228	0.173	0.386
11.	16QAM 20MHz 1RB	Front Side	2680.0	23.52	27.0	2.228	0.202	**0.450**
	16QAM 20MHz 1RB	Right side	2680.0	23.52	27.0	2.228	0.110	0.245
	16QAM 20MHz 1RB	Top Side	2680.0	23.52	27.0	2.228	0.129	0.287
	16QAM 20MHz 50%RB	Back Side	2680.0	23.52	27.0	2.228	0.156	0.348
	16QAM 20MHz 50%RB	Front Side	2680.0	23.52	27.0	2.228	0.191	0.426
	16QAM 20MHz 50%RB	Right side	2680.0	23.52	27.0	2.228	0.102	0.227
	16QAM 20MHz 50%RB	Top Side	2680.0	23.52	27.0	2.228	0.113	0.252

Remark:

LTE Band 41 (2496~ 2690 MHz) overlaps the entire frequency range of LTE Band 38 (2570 ~ 2620 MHz).Therefore, test data provided in this report covers Band 38 as well as Band 41.

LTE Band 38/41_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Side	2687.5	26.41	27.0	1.146	0.352	0.403
	QPSK 5MHz 1RB	Front Side	2687.5	26.41	27.0	1.146	0.457	0.523
	QPSK 5MHz 1RB	Right side	2687.5	26.41	27.0	1.146	0.236	0.270
	QPSK 5MHz 1RB	Top Side	2687.5	26.41	27.0	1.146	0.259	0.297
	QPSK 5MHz 50%RB	Back Side	2687.5	26.41	27.0	1.146	0.321	0.368
	QPSK 5MHz 50%RB	Front Side	2687.5	26.41	27.0	1.146	0.402	0.460
	QPSK 5MHz 50%RB	Right side	2687.5	26.41	27.0	1.146	0.218	0.250
	QPSK 5MHz 50%RB	Top Side	2687.5	26.41	27.0	1.146	0.237	0.271
	QPSK 20MHz 1RB	Back Side	2593.0	26.33	27.0	1.167	0.361	0.421
12.	QPSK 20MHz 1RB	Front Side	2593.0	26.33	27.0	1.167	0.468	**0.546**
	QPSK 20MHz 1RB	Right side	2593.0	26.33	27.0	1.167	0.245	0.286
	QPSK 20MHz 1RB	Top Side	2593.0	26.33	27.0	1.167	0.273	0.319
	QPSK 20MHz 50%RB	Back Side	2593.0	26.33	27.0	1.167	0.334	0.390
	QPSK 20MHz 50%RB	Front Side	2593.0	26.33	27.0	1.167	0.416	0.485
	QPSK 20MHz 50%RB	Right side	2593.0	26.33	27.0	1.167	0.232	0.271
	QPSK 20MHz 50%RB	Top Side	2593.0	26.33	27.0	1.167	0.254	0.296

Remark:

LTE Band 41 (2496-2690MHz) overlaps the entire frequency range of LTE Band 38 (2570-2620MHz).Therefore, test data provided in this report covers Band 38 as well as Band 41.

LTE Band 48–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Side	3552.5	22.83	24.0	1.309	0.524	0.686
	QPSK 20MHz 1RB	Front Side	3552.5	22.83	24.0	1.309	0.627	0.821
	QPSK 20MHz 1RB	Left side	3552.5	22.83	24.0	1.309	0.318	0.416
	QPSK 20MHz 1RB	Bottom side	3552.5	22.83	24.0	1.309	0.342	0.448
	QPSK 20MHz 50%RB	Back Side	3552.5	22.83	24.0	1.309	0.493	0.645
	QPSK 20MHz 50%RB	Front Side	3552.5	22.83	24.0	1.309	0.604	0.791
	QPSK 20MHz 50%RB	Left side	3552.5	22.83	24.0	1.309	0.299	0.391
	QPSK 20MHz 50%RB	Bottom side	3552.5	22.83	24.0	1.309	0.315	0.412
	QPSK 5MHz 1RB	Back Side	3625.0	22.68	24.0	1.355	0.533	0.722
13.	QPSK 20MHz 1RB	Front Side	3625.0	22.68	24.0	1.355	0.644	**0.873**
	QPSK 20MHz 1RB	Left side	3625.0	22.68	24.0	1.355	0.325	0.440
	QPSK 20MHz 1RB	Bottom side	3625.0	22.68	24.0	1.355	0.356	0.482
	QPSK 20MHz 50%RB	Back Side	3625.0	22.68	24.0	1.355	0.502	0.680
	QPSK 20MHz 50%RB	Front Side	3625.0	22.68	24.0	1.355	0.619	0.839
	QPSK 20MHz 50%RB	Left side	3625.0	22.68	24.0	1.355	0.307	0.416
	QPSK 20MHz 50%RB	Bottom side	3625.0	22.68	24.0	1.355	0.339	0.459

LTE Band 71–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 5MHz 1RB	Back Side	665.5	22.45	24.0	1.429	0.304	0.434
	QPSK 5MHz 1RB	Front Side	665.5	22.45	24.0	1.429	0.342	0.489
	QPSK 5MHz 1RB	Left side	665.5	22.45	24.0	1.429	0.179	0.256
	QPSK 5MHz 1RB	Bottom side	665.5	22.45	24.0	1.429	0.165	0.236
	QPSK 5MHz 50%RB	Back Side	665.5	22.45	24.0	1.429	0.278	0.397
	QPSK 5MHz 50%RB	Front Side	665.5	22.45	24.0	1.429	0.321	0.459
	QPSK 5MHz 50%RB	Left side	665.5	22.45	24.0	1.429	0.169	0.241
	QPSK 5MHz 50%RB	Bottom side	665.5	22.45	24.0	1.429	0.144	0.206
	QPSK 20MHz 1RB	Back Side	683.0	22.44	24.0	1.432	0.311	0.445
14.	QPSK 20MHz 1RB	Front Side	683.0	22.44	24.0	1.432	0.355	**0.508**
	QPSK 20MHz 1RB	Left side	683.0	22.44	24.0	1.432	0.187	0.268
	QPSK 20MHz 1RB	Bottom side	683.0	22.44	24.0	1.432	0.171	0.245
	QPSK 20MHz 50%RB	Back Side	683.0	22.44	24.0	1.432	0.286	0.410
	QPSK 20MHz 50%RB	Front Side	683.0	22.44	24.0	1.432	0.334	0.478
	QPSK 20MHz 50%RB	Left side	683.0	22.44	24.0	1.432	0.172	0.246
	QPSK 20MHz 50%RB	Bottom side	683.0	22.44	24.0	1.432	0.153	0.219

LTE UL CA_2C–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 10MHz+20MHz 1RB	Back Side	1855.5+ 1869.9	23.58	24.0	1.102	0.354	0.390
15.	QPSK 10MHz+20MHz 1RB	Front Side	1855.5+ 1869.9	23.58	24.0	1.102	0.497	**0.547**
	QPSK 10MHz+20MHz 1RB	Left side	1855.5+ 1869.9	23.58	24.0	1.102	0.213	0.235
	QPSK 10MHz+20MHz 1RB	Bottom side	1855.5+ 1869.9	23.58	24.0	1.102	0.332	0.366
	QPSK 10MHz+20MHz 50%RB	Back Side	1855.5+ 1869.9	23.58	24.0	1.102	0.329	0.362
	QPSK 10MHz+20MHz 50%RB	Front Side	1855.5+ 1869.9	23.58	24.0	1.102	0.472	0.520
	QPSK 10MHz+20MHz 50%RB	Left side	1855.5+ 1869.9	23.58	24.0	1.102	0.196	0.216
	QPSK 10MHz+20MHz 50%RB	Bottom side	1855.5+ 1869.9	23.58	24.0	1.102	0.305	0.336
	QPSK 20MHz+20MHz 1RB	Back Side	1870.1+ 1889.9	23.36	24.0	1.159	0.332	0.385
	QPSK 20MHz+20MHz 1RB	Front Side	1870.1+ 1889.9	23.36	24.0	1.159	0.471	0.546
	QPSK 20MHz+20MHz 1RB	Left side	1870.1+ 1889.9	23.36	24.0	1.159	0.196	0.227
	QPSK 20MHz+20MHz 1RB	Bottom side	1870.1+ 1889.9	23.36	24.0	1.159	0.307	0.356
	QPSK 20MHz+20MHz 50%RB	Back Side	1870.1+ 1889.9	23.36	24.0	1.159	0.319	0.370
	QPSK 20MHz+20MHz 50%RB	Front Side	1870.1+ 1889.9	23.36	24.0	1.159	0.453	0.525
	QPSK 20MHz+20MHz 50%RB	Left side	1870.1+ 1889.9	23.36	24.0	1.159	0.174	0.202
	QPSK 20MHz+20MHz 50%RB	Bottom side	1870.1+ 1889.9	23.36	24.0	1.159	0.275	0.319

TE UL CA_5B–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 10MHz+5MHz 1RB	Back Side	834.0+841.2	23.45	24.0	1.135	0.236	0.268
16.	QPSK 10MHz+5MHz 1RB	Front Side	834.0+841.2	23.45	24.0	1.135	0.377	**0.428**
	QPSK 10MHz+5MHz 1RB	Left side	834.0+841.2	23.45	24.0	1.135	0.189	0.215
	QPSK 10MHz+5MHz 1RB	Bottom side	834.0+841.2	23.45	24.0	1.135	0.278	0.316
	QPSK 10MHz+5MHz 50%RB	Back Side	834.0+841.2	23.45	24.0	1.135	0.211	0.239
	QPSK 10MHz+5MHz 50%RB	Front Side	834.0+841.2	23.45	24.0	1.135	0.352	0.400
	QPSK 10MHz+5MHz 50%RB	Left side	834.0+841.2	23.45	24.0	1.135	0.173	0.196
	QPSK 10MHz+5MHz 50%RB	Bottom side	834.0+841.2	23.45	24.0	1.135	0.254	0.288
	QPSK 10MHz+10MHz 1RB	Back Side	834.1+844.0	23.44	24.0	1.138	0.218	0.248
	QPSK 10MHz+10MHz 1RB	Front Side	834.1+844.0	23.44	24.0	1.138	0.353	0.402
	QPSK 10MHz+10MHz 1RB	Left side	834.1+844.0	23.44	24.0	1.138	0.171	0.195
	QPSK 10MHz+10MHz 1RB	Bottom side	834.1+844.0	23.44	24.0	1.138	0.263	0.299
	QPSK 10MHz+10MHz 50%RB	Back Side	834.1+844.0	23.44	24.0	1.138	0.202	0.230
	QPSK 10MHz+10MHz 50%RB	Front Side	834.1+844.0	23.44	24.0	1.138	0.337	0.383
	QPSK 10MHz+10MHz 50%RB	Left side	834.1+844.0	23.44	24.0	1.138	0.151	0.172
	QPSK 10MHz+10MHz 50%RB	Bottom side	834.1+844.0	23.44	24.0	1.138	0.239	0.272

LTE UL CA_7C–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 20MHz+10MHz 1RB	Back Side	2550.1+ 2564.5	23.79	24.0	1.050	0.395	0.415
17.	QPSK 20MHz+10MHz 1RB	Front Side	2550.1+ 2564.5	23.79	24.0	1.050	0.548	**0.575**
	QPSK 20MHz+10MHz 1RB	Right side	2550.1+ 2564.5	23.79	24.0	1.050	0.299	0.314
	QPSK 20MHz+10MHz 1RB	Top Side	2550.1+ 2564.5	23.79	24.0	1.050	0.412	0.432
	QPSK 20MHz+10MHz 50%RB	Back Side	2550.1+ 2564.5	23.79	24.0	1.050	0.374	0.393
	QPSK 20MHz+10MHz 50%RB	Front Side	2550.1+ 2564.5	23.79	24.0	1.050	0.521	0.547
	QPSK 20MHz+10MHz 50%RB	Right side	2550.1+ 2564.5	23.79	24.0	1.050	0.273	0.287
	QPSK 20MHz+10MHz 50%RB	Top Side	2550.1+ 2564.5	23.79	24.0	1.050	0.396	0.416
	QPSK 20MHz+20MHz 1RB	Back Side	2540.2+ 2560.0	23.61	24.0	1.094	0.372	0.407
	QPSK 20MHz+20MHz 1RB	Front Side	2540.2+ 2560.0	23.61	24.0	1.094	0.526	0.575
	QPSK 20MHz+20MHz 1RB	Right side	2540.2+ 2560.0	23.61	24.0	1.094	0.273	0.299
	QPSK 20MHz+20MHz 1RB	Top Side	2540.2+ 2560.0	23.61	24.0	1.094	0.395	0.432
	QPSK 20MHz+20MHz 50%RB	Back Side	2540.2+ 2560.0	23.61	24.0	1.094	0.352	0.385
	QPSK 20MHz+20MHz 50%RB	Front Side	2540.2+ 2560.0	23.61	24.0	1.094	0.503	0.550
	QPSK 20MHz+20MHz 50%RB	Right side	2540.2+ 2560.0	23.61	24.0	1.094	0.253	0.277
	QPSK 20MHz+20MHz 50%RB	Top Side	2540.2+ 2560.0	23.61	24.0	1.094	0.374	0.409

LTE UL CA_38C–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 20MHz+20MHz 1RB	Back Side	2590.2+ 2610.0	24.51	27.0	1.774	0.172	0.305
18.	QPSK 20MHz+20MHz 1RB	Front Side	2590.2+ 2610.0	24.51	27.0	1.774	0.195	**0.346**
	QPSK 20MHz+20MHz 1RB	Right side	2590.2+ 2610.0	24.51	27.0	1.774	0.146	0.259
	QPSK 20MHz+20MHz 1RB	Top Side	2590.2+ 2610.0	24.51	27.0	1.774	0.163	0.289
	QPSK 20MHz+20MHz 50%RB	Back Side	2590.2+ 2610.0	24.51	27.0	1.774	0.160	0.284
	QPSK 20MHz+20MHz 50%RB	Front Side	2590.2+ 2610.0	24.51	27.0	1.774	0.172	0.305
	QPSK 20MHz+20MHz 50%RB	Right side	2590.2+ 2610.0	24.51	27.0	1.774	0.131	0.232
	QPSK 20MHz+20MHz 50%RB	Top Side	2590.2+ 2610.0	24.51	27.0	1.774	0.148	0.263

LTE UL CA_41C–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 20MHz+5MHz 1RB	Back Side	2675.0+2686.7	24.46	27.0	1.795	0.161	0.289
19.	QPSK 20MHz+5MHz 1RB	Front Side	2675.0+2686.7	24.46	27.0	1.795	0.173	**0.310**
	QPSK 20MHz+5MHz 1RB	Right side	2675.0+2686.7	24.46	27.0	1.795	0.145	0.260
	QPSK 20MHz+5MHz 1RB	Top Side	2675.0+2686.7	24.46	27.0	1.795	0.150	0.269
	QPSK 20MHz+5MHz 50%RB	Back Side	2675.0+2686.7	24.46	27.0	1.795	0.142	0.255
	QPSK 20MHz+5MHz 50%RB	Front Side	2675.0+2686.7	24.46	27.0	1.795	0.154	0.276
	QPSK 20MHz+5MHz 50%RB	Right side	2675.0+2686.7	24.46	27.0	1.795	0.121	0.217
	QPSK 20MHz+5MHz 50%RB	Top Side	2675.0+2686.7	24.46	27.0	1.795	0.134	0.240
	QPSK 20MHz+20MHz 1RB	Back Side	2506.0+2525.8	24.29	27.0	1.866	0.152	0.284
	QPSK 20MHz+20MHz 1RB	Front Side	2506.0+2525.8	24.29	27.0	1.866	0.164	0.306
	QPSK 20MHz+20MHz 1RB	Right side	2506.0+2525.8	24.29	27.0	1.866	0.137	0.256
	QPSK 20MHz+20MHz 1RB	Top Side	2506.0+2525.8	24.29	27.0	1.866	0.143	0.267
	QPSK 20MHz+20MHz 50%RB	Back Side	2506.0+2525.8	24.29	27.0	1.866	0.135	0.252
	QPSK 20MHz+20MHz 50%RB	Front Side	2506.0+2525.8	24.29	27.0	1.866	0.143	0.267
	QPSK 20MHz+20MHz 50%RB	Right side	2506.0+2525.8	24.29	27.0	1.866	0.117	0.218
	QPSK 20MHz+20MHz 50%RB	Top Side	2506.0+2525.8	24.29	27.0	1.866	0.122	0.228

LTE UL CA_48C–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	16QAM 5MHz+20MHz 1RB	Back Side	3678.3+3690.0	21.01	24.0	1.991	0.254	0.506
20.	16QAM 5MHz+20MHz 1RB	Front Side	3678.3+3690.0	21.01	24.0	1.991	0.396	**0.788**
	16QAM 5MHz+20MHz 1RB	Left side	3678.3+3690.0	21.01	24.0	1.991	0.312	0.621
	16QAM 5MHz+20MHz 1RB	Bottom side	3678.3+3690.0	21.01	24.0	1.991	0.345	0.687
	16QAM 5MHz+20MHz 50%RB	Back Side	3678.3+3690.0	21.01	24.0	1.991	0.231	0.460
	16QAM 5MHz+20MHz 50%RB	Front Side	3678.3+3690.0	21.01	24.0	1.991	0.372	0.741
	16QAM 5MHz+20MHz 50%RB	Left side	3678.3+3690.0	21.01	24.0	1.991	0.295	0.587
	16QAM 5MHz+20MHz 50%RB	Bottom side	3678.3+3690.0	21.01	24.0	1.991	0.323	0.643
	16QAM 20MHz+20MHz 1RB	Back Side	3670.2+3690.0	18.58	24.0	3.483	0.103	0.359
	16QAM 20MHz+20MHz 1RB	Front Side	3670.2+3690.0	18.58	24.0	3.483	0.222	0.773
	16QAM 20MHz+20MHz 1RB	Left side	3670.2+3690.0	18.58	24.0	3.483	0.171	0.596
	16QAM 20MHz+20MHz 1RB	Bottom side	3670.2+3690.0	18.58	24.0	3.483	0.186	0.648
	16QAM 20MHz+20MHz 50%RB	Back Side	3670.2+3690.0	18.58	24.0	3.483	0.097	0.338
	16QAM 20MHz+20MHz 50%RB	Front Side	3670.2+3690.0	18.58	24.0	3.483	0.203	0.707
	16QAM 20MHz+20MHz 50%RB	Left side	3670.2+3690.0	18.58	24.0	3.483	0.147	0.512
	16QAM 20MHz+20MHz 50%RB	Bottom side	3670.2+3690.0	18.58	24.0	3.483	0.145	0.505

LTE UL CA_66B–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 5MHz+15MHz 1RB	Back Side	1713.0+ 1722.3	23.65	24.0	1.084	0.411	0.445
21.	QPSK 5MHz+15MHz 1RB	Front Side	1713.0+ 1722.3	23.65	24.0	1.084	0.664	**0.720**
	QPSK 5MHz+15MHz 1RB	Left side	1713.0+ 1722.3	23.65	24.0	1.084	0.364	0.395
	QPSK 5MHz+15MHz 1RB	Bottom side	1713.0+ 1722.3	23.65	24.0	1.084	0.451	0.489
	QPSK 5MHz+15MHz 50%RB	Back Side	1713.0+ 1722.3	23.65	24.0	1.084	0.391	0.424
	QPSK 5MHz+15MHz 50%RB	Front Side	1713.0+ 1722.3	23.65	24.0	1.084	0.583	0.632
	QPSK 5MHz+15MHz 50%RB	Left side	1713.0+ 1722.3	23.65	24.0	1.084	0.314	0.340
	QPSK 5MHz+15MHz 50%RB	Bottom side	1713.0+ 1722.3	23.65	24.0	1.084	0.429	0.465

LTE UL CA_66C–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	QPSK 10MHz+20MHz 1RB	Back Side	1755.6+1770	23.46	24.0	1.132	0.436	0.494
22.	QPSK 10MHz+20MHz 1RB	Front Side	1755.6+1770	23.46	24.0	1.132	0.597	**0.676**
	QPSK 10MHz+20MHz 1RB	Left side	1755.6+1770	23.46	24.0	1.132	0.312	0.353
	QPSK 10MHz+20MHz 1RB	Bottom side	1755.6+1770	23.46	24.0	1.132	0.485	0.549
	QPSK 10MHz+20MHz 50%RB	Back Side	1755.6+1770	23.46	24.0	1.132	0.402	0.455
	QPSK 10MHz+20MHz 50%RB	Front Side	1755.6+1770	23.46	24.0	1.132	0.573	0.649
	QPSK 10MHz+20MHz 50%RB	Left side	1755.6+1770	23.46	24.0	1.132	0.296	0.335
	QPSK 10MHz+20MHz 50%RB	Bottom side	1755.6+1770	23.46	24.0	1.132	0.463	0.524
	QPSK 20MHz+20MHz 1RB	Back Side	1720.0+1739.8	23.31	24.0	1.172	0.419	0.491
	QPSK 20MHz+20MHz 1RB	Front Side	1720.0+1739.8	23.31	24.0	1.172	0.574	0.673
	QPSK 20MHz+20MHz 1RB	Left side	1720.0+1739.8	23.31	24.0	1.172	0.296	0.347
	QPSK 20MHz+20MHz 1RB	Bottom side	1720.0+1739.8	23.31	24.0	1.172	0.462	0.542
	QPSK 20MHz+20MHz 1RB	Back Side	1720.0+1739.8	23.31	24.0	1.172	0.385	0.451
	QPSK 20MHz+20MHz 1RB	Front Side	1720.0+1739.8	23.31	24.0	1.172	0.558	0.654
	QPSK 20MHz+20MHz 1RB	Left side	1720.0+1739.8	23.31	24.0	1.172	0.281	0.329
	QPSK 20MHz+20MHz 1RB	Bottom side	1720.0+1739.8	23.31	24.0	1.172	0.447	0.524

Remark:

All test modes (different modulation, different Bandwidth and different RB) are performed, but only the worst case is recorded in this report.

NR n2–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM QPSK 5MHz 1RB	Back Side	1912.5	24.03	25.0	1.250	0.015	0.019
	DFT-s-OFDM QPSK 5MHz 1RB	Front Side	1912.5	24.03	25.0	1.250	0.017	0.021
	DFT-s-OFDM QPSK 5MHz 1RB	Left side	1912.5	24.03	25.0	1.250	0.010	0.013
	DFT-s-OFDM QPSK 5MHz 1RB	Bottom side	1912.5	24.03	25.0	1.250	0.011	0.014
	DFT-s-OFDM QPSK 5MHz 50%RB	Back Side	1912.5	24.03	25.0	1.250	0.014	0.018
	DFT-s-OFDM QPSK 5MHz 50%RB	Front Side	1912.5	24.03	25.0	1.250	0.016	0.020
	DFT-s-OFDM QPSK 5MHz 50%RB	Left side	1912.5	24.03	25.0	1.250	0.009	0.011
	DFT-s-OFDM QPSK 5MHz 50%RB	Bottom side	1912.5	24.03	25.0	1.250	0.012	0.015
	DFT-s-OFDM QPSK 5MHz 1RB	Back Side	1905.0	23.99	25.0	1.262	0.016	0.020
23.	DFT-s-OFDM QPSK 20MHz 1RB	Front Side	1905.0	23.99	25.0	1.262	0.018	**0.023**
	DFT-s-OFDM QPSK 20MHz 1RB	Left side	1905.0	23.99	25.0	1.262	0.011	0.014
	DFT-s-OFDM QPSK 20MHz 1RB	Bottom side	1905.0	23.99	25.0	1.262	0.012	0.015
	DFT-s-OFDM QPSK 20MHz 50%RB	Back Side	1905.0	23.99	25.0	1.262	0.015	0.019
	DFT-s-OFDM QPSK 20MHz 50%RB	Front Side	1905.0	23.99	25.0	1.262	0.017	0.021
	DFT-s-OFDM QPSK 20MHz 50%RB	Left side	1905.0	23.99	25.0	1.262	0.010	0.013
	DFT-s-OFDM QPSK 20MHz 50%RB	Bottom side	1905.0	23.99	25.0	1.262	0.012	0.015

NR n5/ n26(824-849MHz)–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM 16QAM 20MHz 1RB	Back Side	836.0	23.91	25.0	1.285	0.004	0.005
24.	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Front Side	836.0	23.91	25.0	1.285	0.004	**0.005**
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Left side	836.0	23.91	25.0	1.285	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Bottom side	836.0	23.91	25.0	1.285	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Back Side	836.0	23.91	25.0	1.285	0.004	0.005
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Front Side	836.0	23.91	25.0	1.285	0.004	0.005
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Left side	836.0	23.91	25.0	1.285	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Bottom side	836.0	23.91	25.0	1.285	0.003	0.004

Remark:

5G NR n26 (814-849MHz) overlaps the entire frequency range of 5G NR n5(824-849MHz). Therefore, test data provided in this report covers n5 as well as n26.

NR n7–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM 16QAM 15MHz 1RB	Back Side	2507.5	24.78	28.0	2.099	0.045	0.094
	DFT-s-OFDM 16QAM 15MHz 1RB	Front Side	2507.5	24.78	28.0	2.099	0.051	0.107
	DFT-s-OFDM 16QAM 15MHz 1RB	Right Side	2507.5	24.78	28.0	2.099	0.036	0.076
	DFT-s-OFDM 16QAM 15MHz 1RB	Top Side	2507.5	24.78	28.0	2.099	0.032	0.067
	DFT-s-OFDM 16QAM 15MHz 50%RB	Back Side	2507.5	24.78	28.0	2.099	0.044	0.092
	DFT-s-OFDM 16QAM 15MHz 50%RB	Front Side	2507.5	24.78	28.0	2.099	0.050	0.105
	DFT-s-OFDM 16QAM 15MHz 50%RB	Right Side	2507.5	24.78	28.0	2.099	0.034	0.071
	DFT-s-OFDM 16QAM 15MHz 50%RB	Top Side	2507.5	24.78	28.0	2.099	0.030	0.063
	DFT-s-OFDM 16QAM 20MHz 1RB	Back Side	2535.0	24.70	28.0	2.138	0.047	0.100
25.	DFT-s-OFDM 16QAM 20MHz 1RB	Front Side	2535.0	24.70	28.0	2.138	0.053	**0.113**
	DFT-s-OFDM 16QAM 20MHz 1RB	Right Side	2535.0	24.70	28.0	2.138	0.038	0.081
	DFT-s-OFDM 16QAM 20MHz 1RB	Top Side	2535.0	24.70	28.0	2.138	0.034	0.073
	DFT-s-OFDM 16QAM 20MHz 50%RB	Back Side	2535.0	24.70	28.0	2.138	0.045	0.096
	DFT-s-OFDM 16QAM 20MHz 50%RB	Front Side	2535.0	24.70	28.0	2.138	0.051	0.109
	DFT-s-OFDM 16QAM 20MHz 50%RB	Right Side	2535.0	24.70	28.0	2.138	0.035	0.075
	DFT-s-OFDM 16QAM 20MHz 50%RB	Top Side	2535.0	24.70	28.0	2.138	0.031	0.066

NR n12–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM QPSK 15MHz 1RB	Back Side	708.5	23.54	25.0	1.400	0.005	0.007
26.	DFT-s-OFDM QPSK 15MHz 1RB	Front Side	708.5	23.54	25.0	1.400	0.006	**0.008**
	DFT-s-OFDM QPSK 15MHz 1RB	Left side	708.5	23.54	25.0	1.400	0.005	0.007
	DFT-s-OFDM QPSK 15MHz 1RB	Bottom side	708.5	23.54	25.0	1.400	0.005	0.007
	DFT-s-OFDM QPSK 15MHz 50%RB	Back Side	708.5	23.54	25.0	1.400	0.005	0.007
	DFT-s-OFDM QPSK 15MHz 50%RB	Front Side	708.5	23.54	25.0	1.400	0.006	0.008
	DFT-s-OFDM QPSK 15MHz 50%RB	Left side	708.5	23.54	25.0	1.400	0.005	0.007
	DFT-s-OFDM QPSK 15MHz 50%RB	Bottom side	708.5	23.54	25.0	1.400	0.004	0.006

NR n13–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM 16QAM 10MHz 1RB	Back Side	782.0	22.76	25.0	1.675	0.007	0.012
27.	DFT-s-OFDM 16QAM 10MHz 1RB	Front Side	782.0	22.76	25.0	1.675	0.008	**0.013**
	DFT-s-OFDM 16QAM 10MHz 1RB	Left side	782.0	22.76	25.0	1.675	0.005	0.008
	DFT-s-OFDM 16QAM 10MHz 1RB	Bottom side	782.0	22.76	25.0	1.675	0.006	0.010
	DFT-s-OFDM 16QAM 10MHz 50%RB	Back Side	782.0	22.76	25.0	1.675	0.007	0.012
	DFT-s-OFDM 16QAM 10MHz 50%RB	Front Side	782.0	22.76	25.0	1.675	0.008	0.013
	DFT-s-OFDM 16QAM 10MHz 50%RB	Left side	782.0	22.76	25.0	1.675	0.005	0.008
	DFT-s-OFDM 16QAM 10MHz 50%RB	Bottom side	782.0	22.76	25.0	1.675	0.005	0.008

NR n14–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM 16QAM 5MHz 1RB	Back Side	795.5	23.66	25.0	1.361	0.007	0.010
	DFT-s-OFDM 16QAM 5MHz 1RB	Front Side	795.5	23.66	25.0	1.361	0.008	0.011
	DFT-s-OFDM 16QAM 5MHz 1RB	Left side	795.5	23.66	25.0	1.361	0.006	0.008
	DFT-s-OFDM 16QAM 5MHz 1RB	Bottom side	795.5	23.66	25.0	1.361	0.005	0.007
	DFT-s-OFDM 16QAM 5MHz 50%RB	Back Side	795.5	23.66	25.0	1.361	0.006	0.008
	DFT-s-OFDM 16QAM 5MHz 50%RB	Front Side	795.5	23.66	25.0	1.361	0.008	0.011
	DFT-s-OFDM 16QAM 5MHz 50%RB	Left side	795.5	23.66	25.0	1.361	0.006	0.008
	DFT-s-OFDM 16QAM 5MHz 50%RB	Bottom side	795.5	23.66	25.0	1.361	0.006	0.008
	DFT-s-OFDM 16QAM 10MHz 1RB	Back Side	793	23.43	25.0	1.435	0.007	0.010
28.	DFT-s-OFDM 16QAM 10MHz 1RB	Front Side	793	23.43	25.0	1.435	0.008	**0.011**
	DFT-s-OFDM 16QAM 10MHz 1RB	Left side	793	23.43	25.0	1.435	0.006	0.009
	DFT-s-OFDM 16QAM 10MHz 1RB	Bottom side	793	23.43	25.0	1.435	0.007	0.0110
	DFT-s-OFDM 16QAM 10MHz 50%RB	Back Side	793	23.43	25.0	1.435	0.007	0.010
	DFT-s-OFDM 16QAM 10MHz 50%RB	Front Side	793	23.43	25.0	1.435	0.008	0.011
	DFT-s-OFDM 16QAM 10MHz 50%RB	Left side	793	23.43	25.0	1.435	0.006	0.009
	DFT-s-OFDM 16QAM 10MHz 50%RB	Bottom side	793	23.43	25.0	1.435	0.007	0.010

NR n25–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Back Side	1907.5	23.26	25.0	1.493	0.014	0.021
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Front Side	1907.5	23.26	25.0	1.493	0.016	0.024
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Left side	1907.5	23.26	25.0	1.493	0.010	0.015
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Bottom side	1907.5	23.26	25.0	1.493	0.012	0.018
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Back Side	1907.5	23.26	25.0	1.493	0.013	0.019
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Front Side	1907.5	23.26	25.0	1.493	0.016	0.024
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Left side	1907.5	23.26	25.0	1.493	0.009	0.013
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Bottom side	1907.5	23.26	25.0	1.493	0.010	0.015
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Back Side	1905.0	23.23	25.0	1.503	0.014	0.021
29.	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Front Side	1905.0	23.23	25.0	1.503	0.017	**0.026**
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Left side	1905.0	23.23	25.0	1.503	0.011	0.017
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Bottom side	1905.0	23.23	25.0	1.503	0.012	0.018
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Back Side	1905.0	23.23	25.0	1.503	0.013	0.020
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Front Side	1905.0	23.23	25.0	1.503	0.016	0.024
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Left side	1905.0	23.23	25.0	1.503	0.010	0.015
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Bottom side	1905.0	23.23	25.0	1.503	0.010	0.015

NR n26(814-824MHz)–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM QPSK 20MHz 1RB	Back Side	824.0	23.15	25.0	1.531	0.006	0.009
30.	DFT-s-OFDM QPSK 20MHz 1RB	Front Side	824.0	23.15	25.0	1.531	0.007	**0.011**
	DFT-s-OFDM QPSK 20MHz 1RB	Left side	824.0	23.15	25.0	1.531	0.004	0.006
	DFT-s-OFDM QPSK 20MHz 1RB	Bottom side	824.0	23.15	25.0	1.531	0.005	0.008
	DFT-s-OFDM QPSK 20MHz 50%RB	Back Side	824.0	23.15	25.0	1.531	0.006	0.009
	DFT-s-OFDM QPSK 20MHz 50%RB	Front Side	824.0	23.15	25.0	1.531	0.007	0.011
	DFT-s-OFDM QPSK 20MHz 50%RB	Left side	824.0	23.15	25.0	1.531	0.004	0.006
	DFT-s-OFDM QPSK 20MHz 50%RB	Bottom side	824.0	23.15	25.0	1.531	0.004	0.006

NR n30–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Back Side	2310.0	23.73	25.0	1.340	0.022	0.029
31.	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Front Side	2310.0	23.73	25.0	1.340	0.025	**0.033**
	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Left side	2310.0	23.73	25.0	1.340	0.019	0.025
	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Bottom side	2310.0	23.73	25.0	1.340	0.021	0.028
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Back Side	2310.0	23.73	25.0	1.340	0.021	0.028
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Front Side	2310.0	23.73	25.0	1.340	0.024	0.032
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Left side	2310.0	23.73	25.0	1.340	0.019	0.025
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Bottom side	2310.0	23.73	25.0	1.340	0.020	0.027

NR n38–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	CP OFDM 16QAM 20MHz 1RB	Back Side	2580.0	24.76	28.0	2.109	0.022	0.046
	CP OFDM 16QAM 20MHz 1RB	Front Side	2580.0	24.76	28.0	2.109	0.025	0.053
	CP OFDM 16QAM 20MHz 1RB	Right Side	2580.0	24.76	28.0	2.109	0.017	0.036
	CP OFDM 16QAM 20MHz 1RB	Top Side	2580.0	24.76	28.0	2.109	0.020	0.042
	CP OFDM 16QAM 20MHz 100MHz 50%RB	Back Side	2580.0	24.76	28.0	2.109	0.021	0.044
	CP OFDM 16QAM 20MHz 100MHz 50%RB	Front Side	2580.0	24.76	28.0	2.109	0.024	0.051
	CP OFDM 16QAM 20MHz 100MHz 50%RB	Right Side	2580.0	24.76	28.0	2.109	0.015	0.032
	CP OFDM 16QAM 20MHz 100MHz 50%RB	Top Side	2580.0	24.76	28.0	2.109	0.019	0.040
	CP OFDM 16QAM 40MHz 1RB	Back Side	2600.0	24.70	28.0	2.138	0.024	0.051
32.	CP OFDM 16QAM 40MHz 1RB	Front Side	2600.0	24.70	28.0	2.138	0.027	**0.058**
	CP OFDM 16QAM 40MHz 1RB	Right Side	2600.0	24.70	28.0	2.138	0.018	0.038
	CP OFDM 16QAM 40MHz 1RB	Top Side	2600.0	24.70	28.0	2.138	0.021	0.045
	CP OFDM 16QAM 40MHz 100MHz 50%RB	Back Side	2600.0	24.70	28.0	2.138	0.023	0.049
	CP OFDM 16QAM 40MHz 100MHz 50%RB	Front Side	2600.0	24.70	28.0	2.138	0.026	0.056
	CP OFDM 16QAM 40MHz 100MHz 50%RB	Right Side	2600.0	24.70	28.0	2.138	0.016	0.034
	CP OFDM 16QAM 40MHz 100MHz 50%RB	Top Side	2600.0	24.70	28.0	2.138	0.020	0.043

NR n41–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	CP OFDM QPSK 70MHz 1RB	Back Side	2655.0	25.32	28.0	1.854	0.020	0.037
	CP OFDM QPSK 70MHz 1RB	Front Side	2655.0	25.32	28.0	1.854	0.023	0.043
	CP OFDM QPSK 70MHz 1RB	Right Side	2655.0	25.32	28.0	1.854	0.012	0.022
	CP OFDM QPSK 70MHz 1RB	Top Side	2655.0	25.32	28.0	1.854	0.014	0.026
	CP OFDM QPSK 70MHz 100MHz 50%RB	Back Side	2655.0	25.32	28.0	1.854	0.018	0.033
	CP OFDM QPSK 70MHz 100MHz 50%RB	Front Side	2655.0	25.32	28.0	1.854	0.022	0.041
	CP OFDM QPSK 70MHz 100MHz 50%RB	Right Side	2655.0	25.32	28.0	1.854	0.011	0.020
	CP OFDM QPSK 70MHz 100MHz 50%RB	Top Side	2655.0	25.32	28.0	1.854	0.013	0.024
	CP OFDM QPSK 100MHz 1RB	Back Side	2640.0	24.50	28.0	2.239	0.021	0.047
33.	CP OFDM QPSK 100MHz 1RB	Front Side	2640.0	24.50	28.0	2.239	0.024	**0.054**
	CP OFDM QPSK 100MHz 1RB	Right Side	2640.0	24.50	28.0	2.239	0.014	0.031
	CP OFDM QPSK 100MHz 1RB	Top Side	2640.0	24.50	28.0	2.239	0.016	0.036
	CP OFDM QPSK 100MHz 100MHz 50%RB	Back Side	2640.0	24.50	28.0	2.239	0.020	0.045
	CP OFDM QPSK 100MHz 100MHz 50%RB	Front Side	2640.0	24.50	28.0	2.239	0.023	0.051
	CP OFDM QPSK 100MHz 100MHz 50%RB	Right Side	2640.0	24.50	28.0	2.239	0.012	0.027
	CP OFDM QPSK 100MHz 100MHz 50%RB	Top Side	2640.0	24.50	28.0	2.239	0.015	0.034

NR n48–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s OFDM QPSK 30MHz 1RB	Back Side	3565.02	22.38	25.0	1.828	0.016	0.029
	DFT-s OFDM QPSK 30MHz 1RB	Front Side	3565.02	22.38	25.0	1.828	0.021	0.038
	DFT-s OFDM QPSK 30MHz 1RB	Right Side	3565.02	22.38	25.0	1.828	0.013	0.024
	DFT-s OFDM QPSK 30MHz 1RB	Top Side	3565.02	22.38	25.0	1.828	0.011	0.020
	DFT-s OFDM QPSK 30MHz 50%RB	Back Side	3565.02	22.38	25.0	1.828	0.014	0.026
	DFT-s OFDM QPSK 30MHz 50%RB	Front Side	3565.02	22.38	25.0	1.828	0.020	0.037
	DFT-s OFDM QPSK 30MHz 50%RB	Right Side	3565.02	22.38	25.0	1.828	0.012	0.022
	DFT-s OFDM QPSK 30MHz 50%RB	Top Side	3565.02	22.38	25.0	1.828	0.010	0.018
	DFT-s OFDM QPSK 40MHz 1RB	Back Side	3570	21.55	25.0	2.213	0.017	0.038
34.	DFT-s OFDM QPSK 40MHz 1RB	Front Side	3570	21.55	25.0	2.213	0.022	**0.049**
	DFT-s OFDM QPSK 40MHz 1RB	Right Side	3570	21.55	25.0	2.213	0.014	0.031
	DFT-s OFDM QPSK 40MHz 1RB	Top Side	3570	21.55	25.0	2.213	0.011	0.024
	DFT-s OFDM QPSK 40MHz 50%RB	Back Side	3570	21.55	25.0	2.213	0.015	0.033
	DFT-s OFDM QPSK 40MHz 50%RB	Front Side	3570	21.55	25.0	2.213	0.020	0.044
	DFT-s OFDM QPSK 40MHz 50%RB	Right Side	3570	21.55	25.0	2.213	0.012	0.027
	DFT-s OFDM QPSK 40MHz 50%RB	Top Side	3570	21.55	25.0	2.213	0.011	0.024

NR n66–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM QPSK 15MHz 1RB	Back Side	1772.5	24.23	25.0	1.194	0.013	0.016
	DFT-s-OFDM QPSK 15MHz 1RB	Front Side	1772.5	24.23	25.0	1.194	0.016	0.019
	DFT-s-OFDM QPSK 15MHz 1RB	Left side	1772.5	24.23	25.0	1.194	0.010	0.012
	DFT-s-OFDM QPSK 15MHz 1RB	Bottom side	1772.5	24.23	25.0	1.194	0.012	0.014
	DFT-s-OFDM QPSK 15MHz 50%RB	Back Side	1772.5	24.23	25.0	1.194	0.011	0.013
	DFT-s-OFDM QPSK 15MHz 50%RB	Front Side	1772.5	24.23	25.0	1.194	0.015	0.018
	DFT-s-OFDM QPSK 15MHz 50%RB	Left side	1772.5	24.23	25.0	1.194	0.010	0.012
	DFT-s-OFDM QPSK 15MHz 50%RB	Bottom side	1772.5	24.23	25.0	1.194	0.011	0.013
	DFT-s-OFDM QPSK 40MHz 1RB	Back Side	1760.0	24.13	25.0	1.222	0.014	0.017
35.	DFT-s-OFDM QPSK 40MHz 1RB	Front Side	1760.0	24.13	25.0	1.222	0.017	**0.021**
	DFT-s-OFDM QPSK 40MHz 1RB	Left side	1760.0	24.13	25.0	1.222	0.011	0.013
	DFT-s-OFDM QPSK 40MHz 1RB	Bottom side	1760.0	24.13	25.0	1.222	0.013	0.016
	DFT-s-OFDM QPSK 40MHz 50%RB	Back Side	1760.0	24.13	25.0	1.222	0.013	0.016
	DFT-s-OFDM QPSK 40MHz 50%RB	Front Side	1760.0	24.13	25.0	1.222	0.016	0.020
	DFT-s-OFDM QPSK 40MHz 50%RB	Left side	1760.0	24.13	25.0	1.222	0.011	0.013
	DFT-s-OFDM QPSK 40MHz 50%RB	Bottom side	1760.0	24.13	25.0	1.222	0.012	0.015

NR n71–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM QPSK 20MHz 1RB	Back Side	688.0	23.60	25.0	1.380	0.018	0.025
36.	DFT-s-OFDM QPSK 20MHz 1RB	Front Side	688.0	23.60	25.0	1.380	0.020	**0.028**
	DFT-s-OFDM QPSK 20MHz 1RB	Left side	688.0	23.60	25.0	1.380	0.013	0.018
	DFT-s-OFDM QPSK 20MHz 1RB	Bottom side	688.0	23.60	25.0	1.380	0.011	0.015
	DFT-s-OFDM QPSK 20MHz 50%RB	Back Side	688.0	23.60	25.0	1.380	0.016	0.022
	DFT-s-OFDM QPSK 20MHz 50%RB	Front Side	688.0	23.60	25.0	1.380	0.019	0.026
	DFT-s-OFDM QPSK 20MHz 50%RB	Left side	688.0	23.60	25.0	1.380	0.011	0.015
	DFT-s-OFDM QPSK 20MHz 50%RB	Bottom side	688.0	23.60	25.0	1.380	0.010	0.014

NR n77/78_3450-3550MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode Modulation, Bandwidth, RB	Test Position	Frequency MHz	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	DFT-s-OFDM 64QAM 15MHz 1RB	Back Side	3457.50	24.33	28.0	2.328	0.011	0.026
	DFT-s-OFDM 64QAM 15MHz 1RB	Front Side	3457.50	24.33	28.0	2.328	0.013	0.030
	DFT-s-OFDM 64QAM 15MHz 1RB	Right Side	3457.50	24.33	28.0	2.328	0.008	0.019
	DFT-s-OFDM 64QAM 15MHz 1RB	Top Side	3457.50	24.33	28.0	2.328	0.007	0.016
	DFT-s-OFDM 64QAM 15MHz 50%RB	Back Side	3457.50	24.33	28.0	2.328	0.010	0.023
	DFT-s-OFDM 64QAM 15MHz 50%RB	Front Side	3457.50	24.33	28.0	2.328	0.013	0.030
	DFT-s-OFDM 64QAM 15MHz 50%RB	Right Side	3457.50	24.33	28.0	2.328	0.007	0.016
	DFT-s-OFDM 64QAM 15MHz 50%RB	Top Side	3457.50	24.33	28.0	2.328	0.007	0.016
	DFT-s-OFDM 64QAM 100MHz 1RB	Back Side	3500.01	23.48	28.0	2.831	0.021	0.059
37.	DFT-s-OFDM 64QAM 100MHz 1RB	Front Side	3500.01	23.48	28.0	2.831	0.024	**0.068**
	DFT-s-OFDM 64QAM 100MHz 1RB	Right Side	3500.01	23.48	28.0	2.831	0.016	0.045
	DFT-s-OFDM 64QAM 100MHz 1RB	Top Side	3500.01	23.48	28.0	2.831	0.017	0.048
	DFT-s-OFDM 64QAM 100MHz 50%RB	Back Side	3500.01	23.48	28.0	2.831	0.020	0.057
	DFT-s-OFDM 64QAM 100MHz 50%RB	Front Side	3500.01	23.48	28.0	2.831	0.023	0.065
	DFT-s-OFDM 64QAM 100MHz 50%RB	Right Side	3500.01	23.48	28.0	2.831	0.016	0.045
	DFT-s-OFDM 64QAM 100MHz 50%RB	Top Side	3500.01	23.48	28.0	2.831	0.016	0.045

NR n77/78_3700-3980MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM QPSK 30MHz 1RB	Back Side	3964.98	27.32	28.0	1.169	0.010	0.012
	DFT-s-OFDM QPSK 30MHz 1RB	Front Side	3964.98	27.32	28.0	1.169	0.012	0.014
	DFT-s-OFDM QPSK 30MHz 1RB	Right Side	3964.98	27.32	28.0	1.169	0.006	0.007
	DFT-s-OFDM QPSK 30MHz 1RB	Top Side	3964.98	27.32	28.0	1.169	0.007	0.008
	DFT-s-OFDM QPSK 30MHz 50%RB	Back Side	3964.98	27.32	28.0	1.169	0.009	0.011
	DFT-s-OFDM QPSK 30MHz 50%RB	Front Side	3964.98	27.32	28.0	1.169	0.011	0.013
	DFT-s-OFDM QPSK 30MHz 50%RB	Right Side	3964.98	27.32	28.0	1.169	0.006	0.007
	DFT-s-OFDM QPSK 30MHz 50%RB	Top Side	3964.98	27.32	28.0	1.169	0.007	0.008
	DFT-s-OFDM QPSK 100MHz 1RB	Back Side	3930.00	26.77	28.0	1.327	0.012	0.016
38.	DFT-s-OFDM QPSK 100MHz 1RB	Front Side	3930.00	26.77	28.0	1.327	0.015	**0.020**
	DFT-s-OFDM QPSK 100MHz 1RB	Right Side	3930.00	26.77	28.0	1.327	0.011	0.015
	DFT-s-OFDM QPSK 100MHz 1RB	Top Side	3930.00	26.77	28.0	1.327	0.009	0.012
	DFT-s-OFDM QPSK 100MHz 50%RB	Back Side	3930.00	26.77	28.0	1.327	0.011	0.015
	DFT-s-OFDM QPSK 100MHz 50%RB	Front Side	3930.00	26.77	28.0	1.327	0.014	0.019
	DFT-s-OFDM QPSK 100MHz 50%RB	Right Side	3930.00	26.77	28.0	1.327	0.010	0.013
	DFT-s-OFDM QPSK 100MHz 50%RB	Top Side	3930.00	26.77	28.0	1.327	0.009	0.012

Remark:

n77 (3300-4200 MHz) overlaps the entire frequency range of n78 (3300-3800 MHz), they have the same target power, and share the same transmission path. Therefore, test data provided in this report covers n78 as well as n77.

n38_UL MIMO–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	CP OFDM QPSK 40MHz 1RB	Back Side	2600.0	22.85	28.0	3.273	0.023	0.075
39.	CP OFDM QPSK 40MHz 1RB	Front Side	2600.0	22.85	28.0	3.273	0.029	**0.095**
	CP OFDM QPSK 40MHz 1RB	Right Side	2600.0	22.85	28.0	3.273	0.019	0.062
	CP OFDM QPSK 40MHz 1RB	Top Side	2600.0	22.85	28.0	3.273	0.021	0.069
	CP OFDM QPSK 40MHz 40MHz 50%RB	Back Side	2600.0	22.85	28.0	3.273	0.022	0.072
	CP OFDM QPSK 40MHz 40MHz 50%RB	Front Side	2600.0	22.85	28.0	3.273	0.027	0.088
	CP OFDM QPSK 40MHz 40MHz 50%RB	Right Side	2600.0	22.85	28.0	3.273	0.017	0.056
	CP OFDM QPSK 40MHz 40MHz 50%RB	Top Side	2600.0	22.85	28.0	3.273	0.020	0.065

n41_UL MIMO–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	CP OFDM 16QAM 40MHz 1RB	Back Side	2670.0	23.93	28.0	2.553	0.029	0.074
	CP OFDM 16QAM 40MHz 1RB	Front Side	2670.0	23.93	28.0	2.553	0.032	0.082
	CP OFDM 16QAM 40MHz 1RB	Right Side	2670.0	23.93	28.0	2.553	0.023	0.059
	CP OFDM 16QAM 40MHz 1RB	Top Side	2670.0	23.93	28.0	2.553	0.021	0.054
	CP OFDM 16QAM 40MHz 50%RB	Back Side	2670.0	23.93	28.0	2.553	0.028	0.071
	CP OFDM 16QAM 40MHz 50%RB	Front Side	2670.0	23.93	28.0	2.553	0.030	0.077
	CP OFDM 16QAM 40MHz 50%RB	Right Side	2670.0	23.93	28.0	2.553	0.021	0.054
	CP OFDM 16QAM 40MHz 50%RB	Top Side	2670.0	23.93	28.0	2.553	0.020	0.051
	CP OFDM 16QAM 100MHz 1RB	Back Side	2546.01	23.47	28.0	2.838	0.031	0.088
40.	CP OFDM 16QAM 100MHz 1RB	Front Side	2546.01	23.47	28.0	2.838	0.034	**0.096**
	CP OFDM 16QAM 100MHz 1RB	Right Side	2546.01	23.47	28.0	2.838	0.025	0.071
	CP OFDM 16QAM 100MHz 1RB	Top Side	2546.01	23.47	28.0	2.838	0.023	0.065
	CP OFDM 16QAM 100MHz 50%RB	Back Side	2546.01	23.47	28.0	2.838	0.030	0.085
	CP OFDM 16QAM 100MHz 50%RB	Front Side	2546.01	23.47	28.0	2.838	0.032	0.091
	CP OFDM 16QAM 100MHz 50%RB	Right Side	2546.01	23.47	28.0	2.838	0.023	0.065
	CP OFDM 16QAM 100MHz 50%RB	Top Side	2546.01	23.47	28.0	2.838	0.021	0.060

n48_UL MIMO–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	CP OFDM QPSK 10MHz 1RB	Back Side	3694.98	21.58	25.0	2.198	0.011	0.024
	CP OFDM QPSK 10MHz 1RB	Front Side	3694.98	21.58	25.0	2.198	0.016	0.035
	CP OFDM QPSK 10MHz 1RB	Right Side	3694.98	21.58	25.0	2.198	0.008	0.018
	CP OFDM QPSK 10MHz 1RB	Top Side	3694.98	21.58	25.0	2.198	0.007	0.015
	CP OFDM QPSK 10MHz 50%RB	Back Side	3694.98	21.58	25.0	2.198	0.010	0.022
	CP OFDM QPSK 10MHz 50%RB	Front Side	3694.98	21.58	25.0	2.198	0.014	0.031
	CP OFDM QPSK 10MHz 50%RB	Right Side	3694.98	21.58	25.0	2.198	0.008	0.018
	CP OFDM QPSK 10MHz 50%RB	Top Side	3694.98	21.58	25.0	2.198	0.006	0.013
	CP OFDM QPSK 40MHz 1RB	Back Side	3624.99	20.88	25.0	2.582	0.013	0.034
41.	CP OFDM QPSK 40MHz 1RB	Front Side	3624.99	20.88	25.0	2.582	0.017	**0.044**
	CP OFDM QPSK 40MHz 1RB	Right Side	3624.99	20.88	25.0	2.582	0.009	0.023
	CP OFDM QPSK 40MHz 1RB	Top Side	3624.99	20.88	25.0	2.582	0.007	0.018
	CP OFDM QPSK 40MHz 50%RB	Back Side	3624.99	20.88	25.0	2.582	0.012	0.031
	CP OFDM QPSK 40MHz 50%RB	Front Side	3624.99	20.88	25.0	2.582	0.016	0.041
	CP OFDM QPSK 40MHz 50%RB	Right Side	3624.99	20.88	25.0	2.582	0.009	0.023
	CP OFDM QPSK 40MHz 50%RB	Top Side	3624.99	20.88	25.0	2.582	0.006	0.015

n77/78_3450-3550MHz_UL MIMO–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	CP OFDM QPSK 30MHz 1RB	Back Side	3465.0	24.13	28.0	2.438	0.045	0.110
42.	CP OFDM QPSK 30MHz 1RB	Front Side	3465.0	24.13	28.0	2.438	0.050	**0.122**
	CP OFDM QPSK 30MHz 1RB	Right Side	3465.0	24.13	28.0	2.438	0.037	0.090
	CP OFDM QPSK 30MHz 1RB	Top Side	3465.0	24.13	28.0	2.438	0.032	0.078
	CP OFDM QPSK 30MHz 50%RB	Back Side	3465.0	24.13	28.0	2.438	0.043	0.105
	CP OFDM QPSK 30MHz 50%RB	Front Side	3465.0	24.13	28.0	2.438	0.047	0.115
	CP OFDM QPSK 30MHz 50%RB	Right Side	3465.0	24.13	28.0	2.438	0.035	0.085
	CP OFDM QPSK 30MHz 50%RB	Top Side	3465.0	24.13	28.0	2.438	0.031	0.076
	CP OFDM QPSK 100MHz 1RB	Back Side	3500.01	23.55	28.0	2.786	0.037	0.103
	CP OFDM QPSK 100MHz 1RB	Front Side	3500.01	23.55	28.0	2.786	0.042	0.117
	CP OFDM QPSK 100MHz 1RB	Right Side	3500.01	23.55	28.0	2.786	0.028	0.078
	CP OFDM QPSK 100MHz 1RB	Top Side	3500.01	23.55	28.0	2.786	0.024	0.067
	CP OFDM QPSK 100MHz 100MHz 50%RB	Back Side	3500.01	23.55	28.0	2.786	0.035	0.098
	CP OFDM QPSK 100MHz 100MHz 50%RB	Front Side	3500.01	23.55	28.0	2.786	0.040	0.111
	CP OFDM QPSK 100MHz 100MHz 50%RB	Right Side	3500.01	23.55	28.0	2.786	0.026	0.072
	CP OFDM QPSK 100MHz 100MHz 50%RB	Top Side	3500.01	23.55	28.0	2.786	0.022	0.061

n77/78_3700-3980MHz_UL MIMO–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	CP OFDM 16QAM 30MHz 1RB	Back Side	3964.98	24.22	28.0	2.388	0.016	0.038
	CP OFDM 16QAM 30MHz 1RB	Front Side	3964.98	24.22	28.0	2.388	0.019	0.045
	CP OFDM 16QAM 30MHz 1RB	Right Side	3964.98	24.22	28.0	2.388	0.011	0.026
	CP OFDM 16QAM 30MHz 1RB	Top Side	3964.98	24.22	28.0	2.388	0.012	0.029
	CP OFDM 16QAM 30MHz 50%RB	Back Side	3964.98	24.22	28.0	2.388	0.014	0.033
	CP OFDM 16QAM 30MHz 50%RB	Front Side	3964.98	24.22	28.0	2.388	0.018	0.043
	CP OFDM 16QAM 30MHz 50%RB	Right Side	3964.98	24.22	28.0	2.388	0.010	0.024
	CP OFDM 16QAM 30MHz 50%RB	Top Side	3964.98	24.22	28.0	2.388	0.012	0.029
	CP OFDM 16QAM 100MHz 1RB	Back Side	3930.0	23.72	28.0	2.679	0.014	0.038
43.	CP OFDM 16QAM 100MHz 1RB	Front Side	3930.0	23.72	28.0	2.679	0.018	**0.048**
	CP OFDM 16QAM 100MHz 1RB	Right Side	3930.0	23.72	28.0	2.679	0.009	0.024
	CP OFDM 16QAM 100MHz 1RB	Top Side	3930.0	23.72	28.0	2.679	0.011	0.029
	CP OFDM 16QAM 100MHz 50%RB	Back Side	3930.0	23.72	28.0	2.679	0.013	0.035
	CP OFDM 16QAM 100MHz 50%RB	Front Side	3930.0	23.72	28.0	2.679	0.017	0.046
	CP OFDM 16QAM 100MHz 50%RB	Right Side	3930.0	23.72	28.0	2.679	0.009	0.024
	CP OFDM 16QAM 100MHz 50%RB	Top Side	3930.0	23.72	28.0	2.679	0.010	0.027

Remark:

n77 (3300-4200 MHz) overlaps the entire frequency range of n78 (3300-3800 MHz), they have the same target power, and share the same transmission path. Therefore, test data provided in this report covers n78 as well as n77.

NR n38_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s OFDM 16QAM 40MHz 1RB	Back Side	2590.0	26.37	28.0	1.455	0.028	0.041
44.	DFT-s OFDM 16QAM 40MHz 1RB	Front Side	2590.0	26.37	28.0	1.455	0.032	**0.047**
	DFT-s OFDM 16QAM 40MHz 1RB	Right Side	2590.0	26.37	28.0	1.455	0.024	0.035
	DFT-s OFDM 16QAM 40MHz 1RB	Top Side	2590.0	26.37	28.0	1.455	0.021	0.031
	DFT-s OFDM 16QAM 40MHz 50%RB	Back Side	2590.0	26.37	28.0	1.455	0.026	0.038
	DFT-s OFDM 16QAM 40MHz 50%RB	Front Side	2590.0	26.37	28.0	1.455	0.031	0.045
	DFT-s OFDM 16QAM 40MHz 50%RB	Right Side	2590.0	26.37	28.0	1.455	0.022	0.032
	DFT-s OFDM 16QAM 40MHz 50%RB	Top Side	2590.0	26.37	28.0	1.455	0.019	0.028

NR n41_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s OFDM QPSK 40MHz 1RB	Back Side	2670.0	27.83	28.0	1.040	0.026	0.027
	DFT-s OFDM QPSK 40MHz 1RB	Front Side	2670.0	27.83	28.0	1.040	0.030	0.031
	DFT-s OFDM QPSK 40MHz 1RB	Right Side	2670.0	27.83	28.0	1.040	0.021	0.022
	DFT-s OFDM QPSK 40MHz 1RB	Top Side	2670.0	27.83	28.0	1.040	0.019	0.020
	DFT-s OFDM QPSK 40MHz 50%RB	Back Side	2670.0	27.83	28.0	1.040	0.025	0.026
	DFT-s OFDM QPSK 40MHz 50%RB	Front Side	2670.0	27.83	28.0	1.040	0.029	0.030
	DFT-s OFDM QPSK 40MHz 50%RB	Right Side	2670.0	27.83	28.0	1.040	0.020	0.021
	DFT-s OFDM QPSK 40MHz 50%RB	Top Side	2670.0	27.83	28.0	1.040	0.017	0.018
	DFT-s OFDM QPSK 100MHz 1RB	Back Side	2640.0	27.49	28.0	1.125	0.028	0.031
45.	DFT-s OFDM QPSK 100MHz 1RB	Front Side	2640.0	27.49	28.0	1.125	0.032	**0.036**
	DFT-s OFDM QPSK 100MHz 1RB	Right Side	2640.0	27.49	28.0	1.125	0.023	0.026
	DFT-s OFDM QPSK 100MHz 1RB	Top Side	2640.0	27.49	28.0	1.125	0.020	0.022
	DFT-s OFDM QPSK 100MHz 50%RB	Back Side	2640.0	27.49	28.0	1.125	0.026	0.029
	DFT-s OFDM QPSK 100MHz 50%RB	Front Side	2640.0	27.49	28.0	1.125	0.031	0.035
	DFT-s OFDM QPSK 100MHz 50%RB	Right Side	2640.0	27.49	28.0	1.125	0.021	0.024
	DFT-s OFDM QPSK 100MHz 50%RB	Top Side	2640.0	27.49	28.0	1.125	0.018	0.020

NR n77/78_3450-3550MHz_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s OFDM QPSK 15MHz 1RB	Back Side	3457.5	27.23	28.0	1.194	0.042	0.050
	DFT-s OFDM QPSK 15MHz 1RB	Front Side	3457.5	27.23	28.0	1.194	0.046	0.055
	DFT-s OFDM QPSK 15MHz 1RB	Right Side	3457.5	27.23	28.0	1.194	0.036	0.043
	DFT-s OFDM QPSK 15MHz 1RB	Top Side	3457.5	27.23	28.0	1.194	0.031	0.037
	DFT-s OFDM QPSK 15MHz 50%RB	Back Side	3457.5	27.23	28.0	1.194	0.040	0.048
	DFT-s OFDM QPSK 15MHz 50%RB	Front Side	3457.5	27.23	28.0	1.194	0.043	0.051
	DFT-s OFDM QPSK 15MHz 50%RB	Right Side	3457.5	27.23	28.0	1.194	0.033	0.039
	DFT-s OFDM QPSK 15MHz 50%RB	Top Side	3457.5	27.23	28.0	1.194	0.030	0.036
	DFT-s OFDM QPSK 100MHz 1RB	Back Side	3500.01	23.59	28.0	2.761	0.043	0.119
46.	DFT-s OFDM QPSK 100MHz 1RB	Front Side	3500.01	23.59	28.0	2.761	0.050	**0.138**
	DFT-s OFDM QPSK 100MHz 1RB	Right Side	3500.01	23.59	28.0	2.761	0.035	0.097
	DFT-s OFDM QPSK 100MHz 1RB	Top Side	3500.01	23.59	28.0	2.761	0.031	0.086
	DFT-s OFDM QPSK 100MHz 50%RB	Back Side	3500.01	23.59	28.0	2.761	0.041	0.113
	DFT-s OFDM QPSK 100MHz 50%RB	Front Side	3500.01	23.59	28.0	2.761	0.048	0.133
	DFT-s OFDM QPSK 100MHz 50%RB	Right Side	3500.01	23.59	28.0	2.761	0.033	0.091
	DFT-s OFDM QPSK 100MHz 50%RB	Top Side	3500.01	23.59	28.0	2.761	0.028	0.077

Remark:

n77 (3300-4200 MHz) overlaps the entire frequency range of n78 (3300-3800 MHz), they have the same target power, and share the same transmission path. Therefore, test data provided in this report covers n78 as well as n77.

n38_UL MIMO_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	CP OFDM QPSK 40MHz 1RB	Back Side	2600.0	22.73	28.0	3.365	0.029	0.098
47.	CP OFDM QPSK 40MHz 1RB	Front Side	2600.0	22.73	28.0	3.365	0.033	**0.111**
	CP OFDM QPSK 40MHz 1RB	Right Side	2600.0	22.73	28.0	3.365	0.025	0.084
	CP OFDM QPSK 40MHz 1RB	Top Side	2600.0	22.73	28.0	3.365	0.021	0.071
	CP OFDM QPSK 40MHz 40MHz 50%RB	Back Side	2600.0	22.73	28.0	3.365	0.028	0.094
	CP OFDM QPSK 40MHz 40MHz 50%RB	Front Side	2600.0	22.73	28.0	3.365	0.032	0.108
	CP OFDM QPSK 40MHz 40MHz 50%RB	Right Side	2600.0	22.73	28.0	3.365	0.023	0.077
	CP OFDM QPSK 40MHz 40MHz 50%RB	Top Side	2600.0	22.73	28.0	3.365	0.020	0.067

n41_UL MIMO_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	CP OFDM QPSK 40MHz 1RB	Back Side	2670.0	25.29	28.0	1.866	0.028	0.052
	CP OFDM QPSK 40MHz 1RB	Front Side	2670.0	25.29	28.0	1.866	0.031	0.058
	CP OFDM QPSK 40MHz 1RB	Right Side	2670.0	25.29	28.0	1.866	0.023	0.043
	CP OFDM QPSK 40MHz 1RB	Top Side	2670.0	25.29	28.0	1.866	0.024	0.045
	CP OFDM QPSK 40MHz 50%RB	Back Side	2670.0	25.29	28.0	1.866	0.027	0.050
	CP OFDM QPSK 40MHz 50%RB	Front Side	2670.0	25.29	28.0	1.866	0.029	0.054
	CP OFDM QPSK 40MHz 50%RB	Right Side	2670.0	25.29	28.0	1.866	0.021	0.039
	CP OFDM QPSK 40MHz 50%RB	Top Side	2670.0	25.29	28.0	1.866	0.022	0.041
	CP OFDM QPSK 100MHz 1RB	Back Side	2546.01	25.11	28.0	1.945	0.030	0.058
48.	CP OFDM QPSK 100MHz 1RB	Front Side	2546.01	25.11	28.0	1.945	0.033	**0.064**
	CP OFDM QPSK 100MHz 1RB	Right Side	2546.01	25.11	28.0	1.945	0.024	0.047
	CP OFDM QPSK 100MHz 1RB	Top Side	2546.01	25.11	28.0	1.945	0.026	0.051
	CP OFDM QPSK 100MHz 50%RB	Back Side	2546.01	25.11	28.0	1.945	0.028	0.054
	CP OFDM QPSK 100MHz 50%RB	Front Side	2546.01	25.11	28.0	1.945	0.031	0.060
	CP OFDM QPSK 100MHz 50%RB	Right Side	2546.01	25.11	28.0	1.945	0.023	0.045
	CP OFDM QPSK 100MHz 50%RB	Top Side	2546.01	25.11	28.0	1.945	0.024	0.047

n77/ n78_UL MIMO_3450-3550MHz_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	CP OFDM QPSK 30MHz 1RB	Back Side	3465.0	25.56	28.0	1.754	0.046	0.081
49.	CP OFDM QPSK 30MHz 1RB	Front Side	3465.0	25.56	28.0	1.754	0.052	**0.091**
	CP OFDM QPSK 30MHz 1RB	Right Side	3465.0	25.56	28.0	1.754	0.032	0.056
	CP OFDM QPSK 30MHz 1RB	Top Side	3465.0	25.56	28.0	1.754	0.034	0.060
	CP OFDM QPSK 30MHz 50%RB	Back Side	3465.0	25.56	28.0	1.754	0.045	0.079
	CP OFDM QPSK 30MHz 50%RB	Front Side	3465.0	25.56	28.0	1.754	0.050	0.088
	CP OFDM QPSK 30MHz 50%RB	Right Side	3465.0	25.56	28.0	1.754	0.029	0.051
	CP OFDM QPSK 30MHz 50%RB	Top Side	3465.0	25.56	28.0	1.754	0.031	0.054
	CP OFDM QPSK 100MHz 1RB	Back Side	3500.01	25.00	28.0	1.995	0.039	0.078
	CP OFDM QPSK 100MHz 1RB	Front Side	3500.01	25.00	28.0	1.995	0.044	0.088
	CP OFDM QPSK 100MHz 1RB	Right Side	3500.01	25.00	28.0	1.995	0.029	0.058
	CP OFDM QPSK 100MHz 1RB	Top Side	3500.01	25.00	28.0	1.995	0.031	0.062
	CP OFDM QPSK 100MHz 100MHz 50%RB	Back Side	3500.01	25.00	28.0	1.995	0.037	0.074
	CP OFDM QPSK 100MHz 100MHz 50%RB	Front Side	3500.01	25.00	28.0	1.995	0.041	0.082
	CP OFDM QPSK 100MHz 100MHz 50%RB	Right Side	3500.01	25.00	28.0	1.995	0.026	0.052
	CP OFDM QPSK 100MHz 100MHz 50%RB	Top Side	3500.01	25.00	28.0	1.995	0.028	0.056

n77/ n78_UL MIMO_3700-3980MHz_HPUE–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	CP OFDM QPSK 40MHz 1RB	Back Side	3960.0	25.62	28.0	1.730	0.041	0.071
	CP OFDM QPSK 40MHz 1RB	Front Side	3960.0	25.62	28.0	1.730	0.048	0.083
	CP OFDM QPSK 40MHz 1RB	Right Side	3960.0	25.62	28.0	1.730	0.032	0.055
	CP OFDM QPSK 40MHz 1RB	Top Side	3960.0	25.62	28.0	1.730	0.035	0.061
	CP OFDM QPSK 40MHz 50%RB	Back Side	3960.0	25.62	28.0	1.730	0.040	0.069
	CP OFDM QPSK 40MHz 50%RB	Front Side	3960.0	25.62	28.0	1.730	0.045	0.078
	CP OFDM QPSK 40MHz 50%RB	Right Side	3960.0	25.62	28.0	1.730	0.030	0.052
	CP OFDM QPSK 40MHz 50%RB	Top Side	3960.0	25.62	28.0	1.730	0.032	0.055
	CP OFDM QPSK 100MHz 1RB	Back Side	3930.0	24.96	28.0	2.014	0.039	0.079
50.	CP OFDM QPSK 100MHz 1RB	Front Side	3930.0	24.96	28.0	2.014	0.045	**0.091**
	CP OFDM QPSK 100MHz 1RB	Right Side	3930.0	24.96	28.0	2.014	0.025	0.050
	CP OFDM QPSK 100MHz 1RB	Top Side	3930.0	24.96	28.0	2.014	0.026	0.052
	CP OFDM QPSK 100MHz 50%RB	Back Side	3930.0	24.96	28.0	2.014	0.038	0.077
	CP OFDM QPSK 100MHz 50%RB	Front Side	3930.0	24.96	28.0	2.014	0.031	0.062
	CP OFDM QPSK 100MHz 50%RB	Right Side	3930.0	24.96	28.0	2.014	0.025	0.050
	CP OFDM QPSK 100MHz 50%RB	Top Side	3930.0	24.96	28.0	2.014	0.026	0.052

Remark:

n77 (3300-4200 MHz) overlaps the entire frequency range of n78 (3300-3800 MHz), they have the same target power, and share the same transmission path. Therefore, test data provided in this report covers n78 as well as n77.

Remark: UL MIMO mode only support CP-OFDM.

5G NR_EN-DC n2A–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM QPSK 15MHz 1RB	Back Side	1907.5	24.01	25.0	1.256	0.010	0.013
	DFT-s-OFDM QPSK 15MHz 1RB	Front Side	1907.5	24.01	25.0	1.256	0.012	0.015
	DFT-s-OFDM QPSK 15MHz 1RB	Left side	1907.5	24.01	25.0	1.256	0.006	0.008
	DFT-s-OFDM QPSK 15MHz 1RB	Bottom side	1907.5	24.01	25.0	1.256	0.007	0.009
	DFT-s-OFDM QPSK 15MHz 50%RB	Back Side	1907.5	24.01	25.0	1.256	0.010	0.013
	DFT-s-OFDM QPSK 15MHz 50%RB	Front Side	1907.5	24.01	25.0	1.256	0.011	0.014
	DFT-s-OFDM QPSK 15MHz 50%RB	Left side	1907.5	24.01	25.0	1.256	0.006	0.008
	DFT-s-OFDM QPSK 15MHz 50%RB	Bottom side	1907.5	24.01	25.0	1.256	0.005	0.006
	DFT-s-OFDM QPSK 20MHz 1RB	Back Side	1905.0	23.93	25.0	1.279	0.011	0.014
51.	DFT-s-OFDM QPSK 20MHz 1RB	Front Side	1905.0	23.93	25.0	1.279	0.013	**0.017**
	DFT-s-OFDM QPSK 20MHz 1RB	Left side	1905.0	23.93	25.0	1.279	0.006	0.008
	DFT-s-OFDM QPSK 20MHz 1RB	Bottom side	1905.0	23.93	25.0	1.279	0.007	0.009
	DFT-s-OFDM QPSK 20MHz 50%RB	Back Side	1905.0	23.93	25.0	1.279	0.011	0.014
	DFT-s-OFDM QPSK 20MHz 50%RB	Front Side	1905.0	23.93	25.0	1.279	0.013	0.017
	DFT-s-OFDM QPSK 20MHz 50%RB	Left side	1905.0	23.93	25.0	1.279	0.006	0.008
	DFT-s-OFDM QPSK 20MHz 50%RB	Bottom side	1905.0	23.93	25.0	1.279	0.006	0.008

5G NR_EN-DC n5A–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Back Side	836.5	23.42	25.0	1.439	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Front Side	836.5	23.42	25.0	1.439	0.004	0.006
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Left side	836.5	23.42	25.0	1.439	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 15MHz 1RB	Bottom side	836.5	23.42	25.0	1.439	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Back Side	836.5	23.42	25.0	1.439	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Front Side	836.5	23.42	25.0	1.439	0.004	0.006
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Left side	836.5	23.42	25.0	1.439	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 15MHz 50%RB	Bottom side	836.5	23.42	25.0	1.439	0.003	0.004
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Back Side	836.5	22.76	25.0	1.675	0.003	0.005
52.	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Front Side	836.5	22.76	25.0	1.675	0.004	**0.007**
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Left side	836.5	22.76	25.0	1.675	0.003	0.005
	DFT-s-OFDM PI/2 BPSK 20MHz 1RB	Bottom side	836.5	22.76	25.0	1.675	0.003	0.005
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Back Side	836.5	22.76	25.0	1.675	0.003	0.005
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Front Side	836.5	22.76	25.0	1.675	0.004	0.007
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Left side	836.5	22.76	25.0	1.675	0.003	0.005
	DFT-s-OFDM PI/2 BPSK 20MHz 50%RB	Bottom side	836.5	22.76	25.0	1.675	0.003	0.005

5G NR_EN-DC n7A–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s OFDM 16QAM 40MHz 1RB	Back Side	2535.0	24.28	28.0	2.355	0.047	0.111
53.	DFT-s OFDM 16QAM 40MHz 1RB	Front Side	2535.0	24.28	28.0	2.355	0.051	**0.120**
	DFT-s OFDM 16QAM 40MHz 1RB	Right side	2535.0	24.28	28.0	2.355	0.032	0.075
	DFT-s OFDM 16QAM 40MHz 1RB	Top side	2535.0	24.28	28.0	2.355	0.036	0.085
	DFT-s OFDM 16QAM 40MHz 50%RB	Back Side	2535.0	24.28	28.0	2.355	0.045	0.106
	DFT-s OFDM 16QAM 40MHz 50%RB	Front Side	2535.0	24.28	28.0	2.355	0.047	0.111
	DFT-s OFDM 16QAM 40MHz 50%RB	Right side	2535.0	24.28	28.0	2.355	0.031	0.073
	DFT-s OFDM 16QAM 40MHz 50%RB	Top side	2535.0	24.28	28.0	2.355	0.033	0.078

5G NR_EN-DC n12A–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s OFDM 16QAM 10MHz 1RB	Back Side	704.0	23.42	25.0	1.439	0.007	0.010
	DFT-s OFDM 16QAM 10MHz 1RB	Front Side	704.0	23.42	25.0	1.439	0.008	0.012
	DFT-s OFDM 16QAM 10MHz 1RB	Left side	704.0	23.42	25.0	1.439	0.005	0.007
	DFT-s OFDM 16QAM 10MHz 1RB	Bottom side	704.0	23.42	25.0	1.439	0.005	0.007
	DFT-s OFDM 16QAM 10MHz 50%RB	Back Side	704.0	23.42	25.0	1.439	0.006	0.009
	DFT-s OFDM 16QAM 10MHz 50%RB	Front Side	704.0	23.42	25.0	1.439	0.007	0.010
	DFT-s OFDM 16QAM 10MHz 50%RB	Left side	704.0	23.42	25.0	1.439	0.005	0.007
	DFT-s OFDM 16QAM 10MHz 50%RB	Bottom side	704.0	23.42	25.0	1.439	0.005	0.007
	DFT-s OFDM 16QAM 15MHz 1RB	Back Side	706.5	23.13	25.0	1.538	0.007	0.011
54.	DFT-s OFDM 16QAM 15MHz 1RB	Front Side	706.5	23.13	25.0	1.538	0.008	**0.012**
	DFT-s OFDM 16QAM 15MHz 1RB	Left side	706.5	23.13	25.0	1.538	0.005	0.008
	DFT-s OFDM 16QAM 15MHz 1RB	Bottom side	706.5	23.13	25.0	1.538	0.005	0.008
	DFT-s OFDM 16QAM 15MHz 50%RB	Back Side	706.5	23.13	25.0	1.538	0.006	0.009
	DFT-s OFDM 16QAM 15MHz 50%RB	Front Side	706.5	23.13	25.0	1.538	0.008	0.012
	DFT-s OFDM 16QAM 15MHz 50%RB	Left side	706.5	23.13	25.0	1.538	0.005	0.008
	DFT-s OFDM 16QAM 15MHz 50%RB	Bottom side	706.5	23.13	25.0	1.538	0.005	0.008

5G NR_EN-DC n14A–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM 16QAM 5MHz 1RB	Back Side	795.5	23.53	25.0	1.403	0.006	0.008
	DFT-s-OFDM 16QAM 5MHz 1RB	Front Side	795.5	23.53	25.0	1.403	0.007	0.010
	DFT-s-OFDM 16QAM 5MHz 1RB	Left side	795.5	23.53	25.0	1.403	0.005	0.007
	DFT-s-OFDM 16QAM 5MHz 1RB	Bottom side	795.5	23.53	25.0	1.403	0.005	0.007
	DFT-s-OFDM 16QAM 5MHz 50%RB	Back Side	795.5	23.53	25.0	1.403	0.005	0.007
	DFT-s-OFDM 16QAM 5MHz 50%RB	Front Side	795.5	23.53	25.0	1.403	0.007	0.010
	DFT-s-OFDM 16QAM 5MHz 50%RB	Left side	795.5	23.53	25.0	1.403	0.005	0.007
	DFT-s-OFDM 16QAM 5MHz 50%RB	Bottom side	795.5	23.53	25.0	1.403	0.004	0.006
	DFT-s-OFDM 16QAM 10MHz 1RB	Back Side	793	23.49	25.0	1.416	0.006	0.008
55.	DFT-s-OFDM 16QAM 10MHz 1RB	Front Side	793	23.49	25.0	1.416	0.007	**0.010**
	DFT-s-OFDM 16QAM 10MHz 1RB	Left side	793	23.49	25.0	1.416	0.005	0.007
	DFT-s-OFDM 16QAM 10MHz 1RB	Bottom side	793	23.49	25.0	1.416	0.005	0.007
	DFT-s-OFDM 16QAM 10MHz 50%RB	Back Side	793	23.49	25.0	1.416	0.005	0.007
	DFT-s-OFDM 16QAM 10MHz 50%RB	Front Side	793	23.49	25.0	1.416	0.007	0.010
	DFT-s-OFDM 16QAM 10MHz 50%RB	Left side	793	23.49	25.0	1.416	0.005	0.007
	DFT-s-OFDM 16QAM 10MHz 50%RB	Bottom side	793	23.49	25.0	1.416	0.005	0.007

5G NR_EN-DC n25–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM PI/2 BPSK 25MHz 1RB	Back Side	1902.5	23.13	25.0	1.538	0.013	0.020
	DFT-s-OFDM PI/2 BPSK 25MHz 1RB	Front Side	1902.5	23.13	25.0	1.538	0.016	0.025
	DFT-s-OFDM PI/2 BPSK 25MHz 1RB	Left side	1902.5	23.13	25.0	1.538	0.010	0.015
	DFT-s-OFDM PI/2 BPSK 25MHz 1RB	Bottom side	1902.5	23.13	25.0	1.538	0.009	0.014
	DFT-s-OFDM PI/2 BPSK 25MHz 50%RB	Back Side	1902.5	23.13	25.0	1.538	0.012	0.018
	DFT-s-OFDM PI/2 BPSK 25MHz 50%RB	Front Side	1902.5	23.13	25.0	1.538	0.015	0.023
	DFT-s-OFDM PI/2 BPSK 25MHz 50%RB	Left side	1902.5	23.13	25.0	1.538	0.010	0.015
	DFT-s-OFDM PI/2 BPSK 25MHz 50%RB	Bottom side	1902.5	23.13	25.0	1.538	0.008	0.012
	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Back Side	1870.0	22.89	25.0	1.626	0.015	0.024
56.	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Front Side	1870.0	22.89	25.0	1.626	0.017	**0.028**
	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Left side	1870.0	22.89	25.0	1.626	0.011	0.018
	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Bottom side	1870.0	22.89	25.0	1.626	0.009	0.015
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Back Side	1870.0	22.89	25.0	1.626	0.015	0.024
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Front Side	1870.0	22.89	25.0	1.626	0.016	0.026
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Left side	1870.0	22.89	25.0	1.626	0.010	0.016
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Bottom side	1870.0	22.89	25.0	1.626	0.009	0.015

5G NR_EN-DC n30A–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Back Side	2310.0	23.96	25.0	1.271	0.021	0.027
57.	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Front Side	2310.0	23.96	25.0	1.271	0.024	**0.030**
	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Right side	2310.0	23.96	25.0	1.271	0.015	0.019
	DFT-s-OFDM PI/2 BPSK 10MHz 1RB	Top side	2310.0	23.96	25.0	1.271	0.017	0.022
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Back Side	2310.0	23.96	25.0	1.271	0.020	0.025
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Front Side	2310.0	23.96	25.0	1.271	0.023	0.029
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Right side	2310.0	23.96	25.0	1.271	0.015	0.019
	DFT-s-OFDM PI/2 BPSK 10MHz 50%RB	Top side	2310.0	23.96	25.0	1.271	0.017	0.022

5G NR_EN-DC n38–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s-OFDM QPSK 30MHz 1RB	Back Side	2605.0	24.88	28.0	2.051	0.021	0.043
	DFT-s-OFDM QPSK 30MHz 1RB	Front Side	2605.0	24.88	28.0	2.051	0.026	0.053
	DFT-s-OFDM QPSK 30MHz 1RB	Right side	2605.0	24.88	28.0	2.051	0.018	0.037
	DFT-s-OFDM QPSK 30MHz 1RB	Top side	2605.0	24.88	28.0	2.051	0.014	0.029
	DFT-s-OFDM QPSK 30MHz 50%RB	Back Side	2605.0	24.88	28.0	2.051	0.020	0.041
	DFT-s-OFDM QPSK 30MHz 50%RB	Front Side	2605.0	24.88	28.0	2.051	0.024	0.049
	DFT-s-OFDM QPSK 30MHz 50%RB	Right side	2605.0	24.88	28.0	2.051	0.017	0.035
	DFT-s-OFDM QPSK 30MHz 50%RB	Top side	2605.0	24.88	28.0	2.051	0.014	0.029
	DFT-s-OFDM QPSK 40MHz 1RB	Back Side	2600.0	23.89	28.0	2.576	0.022	0.057
58.	DFT-s-OFDM QPSK 40MHz 1RB	Front Side	2600.0	23.89	28.0	2.576	0.027	**0.070**
	DFT-s-OFDM QPSK 40MHz 1RB	Right side	2600.0	23.89	28.0	2.576	0.019	0.049
	DFT-s-OFDM QPSK 40MHz 1RB	Top side	2600.0	23.89	28.0	2.576	0.015	0.039
	DFT-s-OFDM QPSK 40MHz 50%RB	Back Side	2600.0	23.89	28.0	2.576	0.021	0.054
	DFT-s-OFDM QPSK 40MHz 50%RB	Front Side	2600.0	23.89	28.0	2.576	0.025	0.064
	DFT-s-OFDM QPSK 40MHz 50%RB	Right side	2600.0	23.89	28.0	2.576	0.019	0.049
	DFT-s-OFDM QPSK 40MHz 50%RB	Top side	2600.0	23.89	28.0	2.576	0.014	0.036

5G NR_EN-DC n41–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s OFDM 16QAM 60MHz 1RB	Back Side	2526.0	25.44	28.0	1.803	0.019	0.034
	DFT-s OFDM 16QAM 60MHz 1RB	Front Side	2526.0	25.44	28.0	1.803	0.023	0.041
	DFT-s OFDM 16QAM 60MHz 1RB	Right side	2526.0	25.44	28.0	1.803	0.013	0.023
	DFT-s OFDM 16QAM 60MHz 1RB	Top side	2526.0	25.44	28.0	1.803	0.011	0.020
	DFT-s OFDM 16QAM 60MHz 50%RB	Back Side	2526.0	25.44	28.0	1.803	0.019	0.034
	DFT-s OFDM 16QAM 60MHz 50%RB	Front Side	2526.0	25.44	28.0	1.803	0.021	0.038
	DFT-s OFDM 16QAM 60MHz 50%RB	Right side	2526.0	25.44	28.0	1.803	0.013	0.023
	DFT-s OFDM 16QAM 60MHz 50%RB	Top side	2526.0	25.44	28.0	1.803	0.011	0.020
	DFT-s OFDM 16QAM 100MHz 1RB	Back Side	2640.0	24.07	28.0	2.472	0.021	0.052
59.	DFT-s OFDM 16QAM 100MHz 1RB	Front Side	2640.0	24.07	28.0	2.472	0.025	**0.062**
	DFT-s OFDM 16QAM 100MHz 1RB	Right side	2640.0	24.07	28.0	2.472	0.014	0.035
	DFT-s OFDM 16QAM 100MHz 1RB	Top side	2640.0	24.07	28.0	2.472	0.012	0.030
	DFT-s OFDM 16QAM 100MHz 50%RB	Back Side	2640.0	24.07	28.0	2.472	0.020	0.049
	DFT-s OFDM 16QAM 100MHz 50%RB	Front Side	2640.0	24.07	28.0	2.472	0.023	0.057
	DFT-s OFDM 16QAM 100MHz 50%RB	Right side	2640.0	24.07	28.0	2.472	0.014	0.035
	DFT-s OFDM 16QAM 100MHz 50%RB	Top side	2640.0	24.07	28.0	2.472	0.011	0.027

5G NR_EN-DC n48–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s OFDM 16QAM 10MHz 1RB	Back Side	3624.99	21.90	25.0	2.042	0.009	0.018
	DFT-s OFDM 16QAM 10MHz 1RB	Front Side	3624.99	21.90	25.0	2.042	0.012	0.025
	DFT-s OFDM 16QAM 10MHz 1RB	Right side	3624.99	21.90	25.0	2.042	0.009	0.018
	DFT-s OFDM 16QAM 10MHz 1RB	Top side	3624.99	21.90	25.0	2.042	0.008	0.016
	DFT-s OFDM 16QAM 10MHz 50%RB	Back Side	3624.99	21.90	25.0	2.042	0.008	0.016
	DFT-s OFDM 16QAM 10MHz 50%RB	Front Side	3624.99	21.90	25.0	2.042	0.010	0.020
	DFT-s OFDM 16QAM 10MHz 50%RB	Right side	3624.99	21.90	25.0	2.042	0.007	0.014
	DFT-s OFDM 16QAM 10MHz 50%RB	Top side	3624.99	21.90	25.0	2.042	0.006	0.012
	DFT-s OFDM 16QAM 40MHz 1RB	Back Side	3679.98	20.37	25.0	2.904	0.010	0.029
60.	DFT-s OFDM 16QAM 40MHz 1RB	Front Side	3679.98	20.37	25.0	2.904	0.014	**0.041**
	DFT-s OFDM 16QAM 40MHz 1RB	Right side	3679.98	20.37	25.0	2.904	0.009	0.026
	DFT-s OFDM 16QAM 40MHz 1RB	Top side	3679.98	20.37	25.0	2.904	0.008	0.023
	DFT-s OFDM 16QAM 40MHz 50%RB	Back Side	3679.98	20.37	25.0	2.904	0.009	0.026
	DFT-s OFDM 16QAM 40MHz 50%RB	Front Side	3679.98	20.37	25.0	2.904	0.012	0.035
	DFT-s OFDM 16QAM 40MHz 50%RB	Right side	3679.98	20.37	25.0	2.904	0.008	0.023
	DFT-s OFDM 16QAM 40MHz 50%RB	Top side	3679.98	20.37	25.0	2.904	0.007	0.020

5G NR_EN-DC n66–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Back Side	1760.0	23.89	25.0	1.291	0.015	0.019
61.	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Front Side	1760.0	23.89	25.0	1.291	0.018	**0.023**
	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Left side	1760.0	23.89	25.0	1.291	0.009	0.012
	DFT-s-OFDM PI/2 BPSK 40MHz 1RB	Bottom side	1760.0	23.89	25.0	1.291	0.010	0.013
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Back Side	1760.0	23.89	25.0	1.291	0.015	0.019
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Front Side	1760.0	23.89	25.0	1.291	0.017	0.022
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Left side	1760.0	23.89	25.0	1.291	0.009	0.012
	DFT-s-OFDM PI/2 BPSK 40MHz 50%RB	Bottom side	1760.0	23.89	25.0	1.291	0.010	0.013

5G NR_EN-DC n71–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s OFDM 16QAM 20MHz 1RB	Back Side	680.5	25.10	26.0	1.230	0.013	0.016
62.	DFT-s OFDM 16QAM 20MHz 1RB	Front Side	680.5	25.10	26.0	1.230	0.016	**0.020**
	DFT-s OFDM 16QAM 20MHz 1RB	Left side	680.5	25.10	26.0	1.230	0.010	0.012
	DFT-s OFDM 16QAM 20MHz 1RB	Bottom side	680.5	25.10	26.0	1.230	0.011	0.014
	DFT-s OFDM 16QAM 20MHz 50%RB	Back Side	680.5	25.10	26.0	1.230	0.013	0.016
	DFT-s OFDM 16QAM 20MHz 50%RB	Front Side	680.5	25.10	26.0	1.230	0.015	0.018
	DFT-s OFDM 16QAM 20MHz 50%RB	Left side	680.5	25.10	26.0	1.230	0.010	0.012
	DFT-s OFDM 16QAM 20MHz 50%RB	Bottom side	680.5	25.10	26.0	1.230	0.010	0.012

5G NR_EN-DC n77/78_3450-3550MHz–Body SAR Test (Gap: 10mm)								
Plot No.	**Mode**	**Test Position**	**Frequency**	**Output Power (dBm)**	**Rated Limit (dBm)**	**Scaling Factor**	**SAR 1g (W/kg)**	**Scaled SAR1g (W/kg)**
	Modulation, Bandwidth, RB		**MHz**					
	DFT-s-OFDM QPSK 30MHz 1RB	Back Side	3500.01	24.85	28.0	2.065	0.013	0.027
63.	DFT-s-OFDM QPSK 30MHz 1RB	Front Side	3500.01	24.85	28.0	2.065	0.016	**0.033**
	DFT-s-OFDM QPSK 30MHz 1RB	Right side	3500.01	24.85	28.0	2.065	0.009	0.019
	DFT-s-OFDM QPSK 30MHz 1RB	Top side	3500.01	24.85	28.0	2.065	0.009	0.019
	DFT-s-OFDM QPSK 20MHz 50%RB	Back Side	3500.01	24.85	28.0	2.065	0.013	0.027
	DFT-s-OFDM QPSK 20MHz 50%RB	Front Side	3500.01	24.85	28.0	2.065	0.015	0.031
	DFT-s-OFDM QPSK 20MHz 50%RB	Right side	3500.01	24.85	28.0	2.065	0.008	0.017
	DFT-s-OFDM QPSK 20MHz 50%RB	Top side	3500.01	24.85	28.0	2.065	0.009	0.019
	DFT-s-OFDM QPSK 100MHz 1RB	Back Side	3500.01	23.59	28.0	2.761	0.010	0.028
	DFT-s-OFDM QPSK 100MHz 1RB	Front Side	3500.01	23.59	28.0	2.761	0.011	0.030
	DFT-s-OFDM QPSK 100MHz 1RB	Right side	3500.01	23.59	28.0	2.761	0.008	0.022
	DFT-s-OFDM QPSK 100MHz 1RB	Top side	3500.01	23.59	28.0	2.761	0.007	0.019
	DFT-s-OFDM QPSK 100MHz 50%RB	Back Side	3500.01	23.59	28.0	2.761	0.009	0.025
	DFT-s-OFDM QPSK 100MHz 50%RB	Front Side	3500.01	23.59	28.0	2.761	0.011	0.030
	DFT-s-OFDM QPSK 100MHz 50%RB	Right side	3500.01	23.59	28.0	2.761	0.008	0.022
	DFT-s-OFDM QPSK 100MHz 50%RB	Top side	3500.01	23.59	28.0	2.761	0.007	0.019

5G NR_EN-DC n77/78_3700-3980MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR 1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	DFT-s OFDM 16QAM 15MHz 1RB	Back Side	3972.48	24.25	28.0	2.371	0.015	0.036
	DFT-s OFDM 16QAM 15MHz 1RB	Front Side	3972.48	24.25	28.0	2.371	0.018	0.043
	DFT-s OFDM 16QAM 15MHz 1RB	Right side	3972.48	24.25	28.0	2.371	0.010	0.024
	DFT-s OFDM 16QAM 15MHz 1RB	Top side	3972.48	24.25	28.0	2.371	0.009	0.021
	DFT-s OFDM 16QAM 15MHz 50%RB	Back Side	3972.48	24.25	28.0	2.371	0.014	0.033
	DFT-s OFDM 16QAM 15MHz 50%RB	Front Side	3972.48	24.25	28.0	2.371	0.017	0.040
	DFT-s OFDM 16QAM 15MHz 50%RB	Right side	3972.48	24.25	28.0	2.371	0.010	0.024
	DFT-s OFDM 16QAM 15MHz 50%RB	Top side	3972.48	24.25	28.0	2.371	0.009	0.021
	DFT-s OFDM 16QAM 100MHz 1RB	Back Side	3930.0	23.72	28.0	2.679	0.018	0.048
64.	DFT-s OFDM 16QAM 100MHz 1RB	Front Side	3930.0	23.72	28.0	2.679	0.020	**0.054**
	DFT-s OFDM 16QAM 100MHz 1RB	Right side	3930.0	23.72	28.0	2.679	0.012	0.032
	DFT-s OFDM 16QAM 100MHz 1RB	Top side	3930.0	23.72	28.0	2.679	0.013	0.035
	DFT-s OFDM 16QAM 100MHz 50%RB	Back Side	3930.0	23.72	28.0	2.679	0.017	0.046
	DFT-s OFDM 16QAM 100MHz 50%RB	Front Side	3930.0	23.72	28.0	2.679	0.019	0.051
	DFT-s OFDM 16QAM 100MHz 50%RB	Right side	3930.0	23.72	28.0	2.679	0.012	0.032
	DFT-s OFDM 16QAM 100MHz 50%RB	Top side	3930.0	23.72	28.0	2.679	0.013	0.035

Remark:

n77 (3300-4200 MHz) overlaps the entire frequency range of n78 (3300-3800 MHz), they have the same target power, and share the same transmission path. Therefore, test data provided in this report covers n78 as well as n77.

WLAN 5.2GHz _ANT0–Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
65.	802.11a	Back Side	CH 36	5180	19.99	20.0	1.002	0.192	**0.192**
	802.11a	Front Side	CH 36	5180	19.99	20.0	1.002	0.161	0.161
	802.11a	Left side	CH 36	5180	19.99	20.0	1.002	0.128	0.128

WLAN 5.3GHz_ANT0 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
66.	802.11a	Back Side	CH 52	5260	18.92	19.0	1.019	0.174	**0.177**
	802.11a	Front Side	CH 52	5260	18.92	19.0	1.019	0.149	0.152
	802.11a	Left side	CH 52	5260	18.92	19.0	1.019	0.121	0.123

WLAN 5.6GHz_ANT0 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
67.	802.11a	Back Side	100	5500	17.99	18.0	1.002	0.169	**0.169**
	802.11a	Front Side	100	5500	17.99	18.0	1.002	0.141	0.141
	802.11a	Left side	100	5500	17.99	18.0	1.002	0.112	0.112

WLAN 5.8GHz_ANT0 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
68.	802.11a	Back Side	165	5825	19.85	20.0	1.035	0.185	**0.192**
	802.11a	Front Side	165	5825	19.85	20.0	1.035	0.160	0.166
	802.11a	Left side	165	5825	19.85	20.0	1.035	0.131	0.136

WLAN 2.4GHz_ANT0 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
69.	802.11b	Back Side	CH 11	2462	19.88	20.0	1.028	0.174	**0.179**
	802.11b	Front Side	CH 11	2462	19.88	20.0	1.028	0.087	0.089
	802.11b	Left side	CH 11	2462	19.88	20.0	1.028	0.079	0.081

WLAN 5.2GHz _ANT1–Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
70.	802.11a	Back Side	48	5240	19.96	20.0	1.009	0.221	**0.223**
	802.11a	Front Side	48	5240	19.96	20.0	1.009	0.182	0.184
	802.11a	Right side	48	5240	19.96	20.0	1.009	0.136	0.137

WLAN 5.3GHz_ANT1 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
71.	802.11a	Back Side	CH 56	5280	18.90	19.0	1.023	0.193	**0.197**
	802.11a	Front Side	CH 56	5280	18.90	19.0	1.023	0.153	0.157
	802.11a	Right side	CH 56	5280	18.90	19.0	1.023	0.129	0.132

WLAN 5.6GHz_ANT1 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
72.	802.11a	Back Side	100	5500	17.97	18.0	1.007	0.170	**0.171**
	802.11a	Front Side	100	5500	17.97	18.0	1.007	0.145	0.146
	802.11a	Right side	100	5500	17.97	18.0	1.007	0.123	0.124

WLAN 5.8GHz_ANT1 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
73.	802.11n (HT20)	Back Side	165	5825	19.75	20.0	1.059	0.189	**0.200**
	802.11n (HT20)	Front Side	165	5825	19.75	20.0	1.059	0.143	0.151
	802.11n (HT20)	Right side	165	5825	19.75	20.0	1.059	0.135	0.143

WLAN 2.4GHz_ANT1 –Body SAR Test(10mm)									
Plot No.	Mode	Test Position	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
74.	802.11b	Back Side	CH 01	2412	19.98	20.0	1.005	0.218	**0.219**
	802.11b	Front Side	CH 01	2412	19.98	20.0	1.005	0.160	0.161
	802.11b	Right side	CH 01	2412	19.98	20.0	1.005	0.137	0.138

Repeated SAR

LTE Band 4/66–Body SAR Test (Gap: 10mm)							
Mode	Test Position	Frequency MHz	SAR1g (W/kg)	Repeated SAR		Ratio	
				1	2	1	2
QPSK 5MHz 1RB	Back Side	1777.5	0.868	0.835	/	1.040	/
QPSK 5MHz 1RB	Front Side	1777.5	0.988	0.953	/	1.037	/
QPSK 5MHz 1RB	Back Side	1745.0	0.828	0.802	/	1.032	/
QPSK 5MHz 1RB	Front Side	1745.0	0.844	0.827	/	1.021	/
QPSK 5MHz 50%RB	Back Side	1777.5	0.847	0.819	/	1.034	/
QPSK 5MHz 50%RB	Front Side	1777.5	0.972	0.951	/	1.022	/
QPSK 5MHz 50%RB	Back Side	1745.0	0.801	0.785	/	1.020	/
QPSK 5MHz 50%RB	Front Side	1745.0	0.825	0.793	/	1.040	/
QPSK 20MHz 1RB	Front Side	1745.0	0.954	0.924	/	1.032	/
QPSK 20MHz 1RB	Front Side	1720.0	0.892	0.867	/	1.029	/
QPSK 20MHz 50%RB	Front Side	1745.0	0.924	0.901	/	1.026	/
QPSK 20MHz 50%RB	Front Side	1720.0	0.879	0.852	/	1.032	/

Remark:

1. Per KDB 447498 D01 v06, if the highest output channel SAR for each exposure position ≤ 0.8 W/kg other channels SAR tests are not necessary.
2. Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 3) through 5) do not apply.
3. When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
4. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
5. Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

9.3 Simultaneous Multi-band Transmission SAR Analysis

List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Body SAR
1	LTE(Data) + WLAN0(2.4GHz/5GHz)(Data)+ WLAN1(2.4GHz/5GHz)(Data)	Yes
2	5G NR(Data) + WLAN0(2.4GHz/5GHz)(Data)+ WLAN1(2.4GHz/5GHz)(Data)	Yes

Remark:

1. LTE and NR share the same antenna, and cannot transmit simultaneously.
2. According to the KDB 447498 D01 v06, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm;
where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.
3. The maximum SAR summation is calculated based on the same configuration and test position.

Body SAR

WWAN and WLAN

	WWAN		WLAN(2.4GHz/ 5GHz)-ANT0	WLAN(2.4GHz/ 5GHz) –ANT1	Summed SAR (W/kg)
Position	Band	Scaled SAR (W/kg)	Scaled SAR (W/kg)	Scaled SAR (W/kg)	
Back	LTE	1.094	**0.192**	**0.221**	1.507
Front	LTE	**1.188**	0.161	0.182	**1.531**
Right side	LTE	0.370	--	0.138	0.508
Left side	LTE	0.824	0.131	--	0.955
Top side	LTE	0.319	--	--	0.319
Bottom side	LTE	0.876	--	--	0.876
Back	LTE UL CA	0.506	**0.192**	**0.221**	0.919
Front	LTE UL CA	**0.788**	0.161	0.182	1.131
Right side	LTE UL CA	0.314	--	0.138	0.452
Left side	LTE UL CA	0.621	0.131	--	0.752
Top side	LTE UL CA	0.432	--	--	0.432
Bottom side	LTE UL CA	0.687	--	--	0.687
Back	5G NR SA	0.100	**0.192**	**0.221**	0.513
Front	5G NR SA	**0.113**	0.161	0.182	0.456
Right side	5G NR SA	0.081	--	0.138	0.219
Left side	5G NR SA	0.025	0.131	--	0.156

Top side	5G NR SA	0.073	--	--	0.073
Bottom side	5G NR SA	0.028	--	--	0.028
Back	5G NR_UL MIMO	0.110	**0.192**	**0.221**	0.523
Front	5G NR_UL MIMO	**0.122**	0.161	0.182	0.465
Right side	5G NR_UL MIMO	0.090	--	0.138	0.228
Left side	5G NR_UL MIMO	--	0.131	--	0.131
Top side	5G NR_UL MIMO	0.078	--	--	0.078
Bottom side	5G NR_UL MIMO	--	--	--	0.523
Back	5G NR SA_HPUE	0.119	**0.192**	**0.221**	0.532
Front	5G NR SA_HPUE	**0.138**	0.161	0.182	0.481
Right side	5G NR SA_HPUE	0.097	--	0.138	0.235
Left side	5G NR SA_HPUE	--	0.131	--	0.131
Top side	5G NR SA_HPUE	0.086	--	--	0.086
Bottom side	5G NR SA_HPUE	--	--	--	0.532
Back	5G NR_EN DC	0.111	**0.192**	**0.221**	0.524
Front	5G NR_EN DC	**0.120**	0.161	0.182	0.463
Right side	5G NR_EN DC	0.075	--	0.138	0.213
Left side	5G NR_EN DC	0.018	0.131	--	0.149
Top side	5G NR_EN DC	0.085	--	--	0.085
Bottom side	5G NR_EN DC	0.015	--	--	0.015

10. Measurement Uncertainty

10.1 Uncertainty for SAR Test

Input quantity X_i (source of uncertainty)	**Ref.**	**Prob. Dist PDF_i**	**Unc. $a(x_i)$**	**Div. q_i**	**$u(x_i) = a(x_i)/q_i$**	**c_i (1 g; 10 g)**	**$u(y) = c_i \cdot u(x_i)$**	**v_i or v_{eff}**
Measurement System errors								
Probe calibration	8.4.1.1	N	7.00	2	3.5	1	3.5	∝
Probe calibration drift	8.4.1.2	R	0	√3	0	1	0	∝
Probe linearity and detection limit	8.4.1.3	R	5.00	√3	2.89	1	2.89	∝
Broadband signal	8.4.1.4	R	0	√3	0	1	0	∝
Probe isotropy	8.4.1.5	R	2.50	√3	1.44	1	1.44	∝
Other probe and data acquisition errors	8.4.1.6	N	0.02	1	0.02	1	0.02	∝
RF ambient and noise	8.4.1.7	N	0	1	0	1	0	∝
Probe positioning errors	8.4.1.8	N	1.40	1	1.40	2/™	0.70	
Data processing errors	8.4.1.9	N	0.05	1	0.05	1	0.05	∝
Phantom and device (DUT or validation antenna) errors								
Measurement of phantom conductivity(σ)	8.4.2.1	N	4.00	1	4.00	c_ε, c_σ	4.00	∝
Temperature effects (medium)	8.4.2.2	R	2.50	√3	1.44	c_ε, c_σ	1.44	∝
Shell permittivity	8.4.2.3	R	5.00	√3	2.88	See 8.4.2.3	2.88	∝
Distance between the radiating element of the DUT and the phantom medium	8.4.2.4	N	0.03	1	0.03	2	0.02	∝
Repeatability of positioning the DUT or source against the phantom	8.4.2.5	N	0.05	1	0.05	1	0.05	5
Device holder effects	8.4.2.6	N	5.00	1	5.00	1	5.00	
Effect of operating mode on probe sensitivity	8.4.2.7	R	0	√3	0	1	0	∝
Time-average SAR	8.4.2.8	R	0	√3	0	1	0	∝
Variation in SAR due to drift in output of DUT	8.4.2.9	N	5.00	1	5.00	1	5.00	
Validation antenna uncertainty (validation measurement only)	8.4.2.10	N	0	1	0	1	0	
Uncertainty in accepted power	8.4.2.11	N	0	1	0	1	0	

(validation measurement only)								
Corrections to the SAR result								
Phantom deviation from target (ε' ,σ)	8.4.3.1	N	0.05	1	0.05	1	0.05	
SAR scaling	8.4.3.2	R	2.00	$\sqrt{3}$	1.15	1	1.15	
Combined Standard Uncertainty		RSS			10.11		10.11	v_{eff}=
Expanded uncertainty, U		K=2			20.23		20.23	

Annex A. Plots of System Performance Check

Please refer to the Annex for SAR

Annex B. Plots of SAR Measurement

Please refer to the Annex for SAR

Annex C. EUT Photos

Please refer to the Annex for SAR

Annex D. Test Setup Photos

Please refer to the Annex for SAR

Annex E. Calibration Certificate

Please refer to the exhibit for the calibration certificate

******* END OF REPORT *******