

FCC SAR TEST REPORT

Application No.: XEWM2309000451RG
Applicant: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Manufacturer: Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Product Name: Mobile Phone
Model No.(EUT): CPH2599
Trade Mark: OPPO
FCC ID: R9C-CPH2599
Standards: FCC 47CFR §2.1093
Date of Receipt: 2023-09-18
Date of Test: 2023-09-18 to 2023-10-13(for report XEWM2309000451RG09)
Date of Issue: 2023-10-21(for report XEWM2309000451RG09)
2023-10-25(for report XEWM2309000451RG16)
Test Result: **PASS ***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:



Peter Tan

Regulatory Technical Manager

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REVISION HISTORY

Report Number	Revision	Description	Issue Date
XEWM2309000451RG16	01	Original	2023-10-25

Prepared By	Captain Zhou Captain Zhou
Reviewed by	Yuan Zhao Yuan Zhao





TEST SUMMARY

Frequency Band	Maximum Reported SAR(W/kg)			
	Head	Body-worn	Hotspot	Product specific 10g SAR
GSM850	0.32	0.14	0.23	/
GSM1900	0.71	0.26	0.82	/
WCDMA Band II	0.78	0.22	0.58	/
WCDMA Band IV	0.87	0.22	0.55	/
WCDMA Band V	0.38	0.15	0.26	/
LTE Band 2	0.76	0.27	0.68	/
LTE Band 4/66	1.11	0.29	0.52	/
LTE Band 5/26	0.41	0.16	0.28	/
LTE Band 7	0.87	0.34	0.62	/
LTE Band 12/17	0.18	0.14	0.21	/
LTE Band 13	0.35	0.13	0.21	/
LTE Band 38	1.05	0.39	0.77	/
LTE Band 41	1.18	0.41	1.08	/
NR Band n5	0.46	0.16	0.27	/
NR Band n7	1.13	0.35	0.61	/
NR Band n38	1.14	0.35	1.00	/
NR Band n41	0.92	0.37	1.13	/
NR Band n66	1.10	0.25	0.68	/
WI-FI (2.4GHz)	0.47	<0.10	0.17	/
WI-FI (5GHz)	0.66	0.27	1.00	1.44
BT	0.32	<0.10	<0.10	/
SAR Limited(W/kg)	1.6			4.0
Maximum Simultaneous Transmission SAR (W/kg)				
Scenario	Head	Body-worn	Hotspot	Product specific 10g SAR
Sum SAR	1.55	0.72	1.41	1.44
Sum SAR Limited	1.6			4.0

Note:

- 1) The Simultaneous transmission SAR is the same test position of the WWAN antenna + WiFi/BT antenna.
- 2) According to TCB workshop (Overlapping LTE Bands): SAR in LTE band 17 (frequency range: 704-716 MHz) is covered by LTE band 12 (frequency range: 699-716 MHz). SAR in LTE band 5 (frequency range: 824-849 MHz) are covered by LTE band 26 (frequency range: 814-849 MHz). SAR in LTE band 4 (frequency range: 1710~1755 MHz) are covered by LTE band 66 (frequency range: 1710~1780 MHz). Because the frequency range is similar, the maximum tuning limit is the same, and the channel bandwidth and other operating parameters for the smaller band is fully supported by the larger band.



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1 General Information

1.1 Details of Client

Applicant:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address:	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
Manufacturer:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address:	NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

1.2 Test Location

Company:	SGS-CSTC Standards Technical Services (XI 'AN) Co., Ltd.
Address:	1 / F, Unit D, Building 1, Kanghong Orange Science park, No.137 Keyuan 3rd Road, Fengdong New Town, Xi 'an, Shaanxi, China
Post code:	710086
Test Engineer :	Captain Zhou, Yuan Zhao



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1.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 4854.01)**

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0095

ISED#: 25613.

• **FCC –Designation Number: CN1337**

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Designation Number: CN1337.

Test Firm Registration Number: 917410



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1.4 General Description of EUT

Product Name:	Mobile Phone		
Model No.(EUT):	CPH2599		
Trade Mark:	OPPO		
Product Phase:	Identical Prototype		
Device Type:	portable device		
Exposure Category:	uncontrolled environment / general population		
IMEI:	865055060029897/865055060029855/865055060029673/865055060030754		
Hardware Version	11		
Software Version	ColosOS 14.0		
Antenna Type:	PIFA Antenna		
Device Operating Configurations:			
Modulation Mode:	GSM: GMSK, 8PSK; WCDMA: QPSK,16QAM LTE: QPSK,16QAM,64QAM 5G NR: DFT-s-OFDM (PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM), CP-OFDM (QPSK, 16QAM, 64QAM, 256QAM) WIFI: DSSS, OFDM , OFDMA; BT: GFSK, $\pi/4$ DQPSK,8DPSK		
NFC	Wireless Technology and Frequency Range		13.56MHz
	mode		ASK
Device Class:	B		
GPRS Multi-slots Class:	12	EGPRS Multi-slots Class:	12
HSDPA UE Category:	24	HSUPA UE Category	7
DC-HSDPA UE Category:	24		
Power Class:	4,tested with power level 5(GSM850)		
	1,tested with power level 0(GSM1900)		
	3, tested with power control “all 1”(WCDMA Band)		
	3, tested with power control Max Power(LTE Band)		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	GSM850	824 - 849	869 - 894
	GSM1900	1850 - 1910	1930 - 1990
	WCDMA Band II	1850 - 1910	1930 - 1990
	WCDMA Band IV	1710 - 1755	2110 - 2155
	WCDMA Band V	824 - 849	869 - 894
	LTE Band 2	1850 - 1910	1930 - 1990
	LTE Band 4	1710 - 1755	2110 - 2155
	LTE Band 5	824 - 849	869 - 894
	LTE Band 7	2500 - 2570	2620 - 2690
	LTE Band 12	699 - 716	729 - 746
	LTE Band 13	777 - 787	746 - 756
	LTE Band 17	704 - 716	734 - 746
	LTE Band 26	814 - 849	859 - 894
	LTE Band 38	2570 - 2620	2570 - 2620
	LTE Band 41	2496 - 2690	2496 - 2690
	LTE Band 66	1710 - 1780	2110-2180
	FR1 Band n5	824-849	869-894
	FR1 Band n7	2500-2570	2620-2690
	FR1 Band n38	2570-2620	2570-2620
	FR1 Band n41	2496-2690	2496-2690
	FR1 Band n66	1710-1780	2110-2180
	WIFI(2.4GHz)	2412 - 2462	2412 - 2462
	WIFI(5GHz)	5150 - 5250	5150 - 5250



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		5250 - 5350	5250 - 5350
		5470 - 5725	5470 - 5725
		5725 - 5850	5725 - 5850
	BT	2402 - 2480	2402 - 2480
	NFC	13.56	13.56
Battery Information 1:	Model:	BLPA15	
	Normal Voltage:	3.89V	
	Rated capacity:	4870mAh	
	Manufacturer	Dongguan NVT Technology Co., Ltd	
Battery Information 2 :	Model:	BLPA15	
	Normal Voltage:	3.89V	
	Rated capacity:	4870mAh	
	Manufacturer	Chongqing Cosmx Battery Co.,LTD	
Note: *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.			
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Remark:

This test report (Ref. No.: XEWM2309000451RG16) is based on the original test report (Ref. No.: XEWM2309000451RG09) which dated on 2023-10-21.

According to the declaration from the applicant, the models in this report and models in original report were identical, only difference as below:

1. Activate UL duty cycle detection mechanism through software.

Considering to the difference, pre-scan was performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore, in this report all test data were copied from to original report XEWM2309000451RG09.





1.4.1 DUT Antenna Locations (Back View)

The DUT Antenna Locations can be referred to Appendix F.

Note:

- 1) The test device is a smart phone. The overall diagonal dimension of this device is 173.95 mm. Per KDB 648474 D04, because the diagonal distance of this device is $\geq 160\text{mm}$, so it is a phablet.

According to the distance between NR/LTE/WCDMA/GSM&WIFI&BT antennas and the sides of the EUT we can draw the conclusion that:

Distance of the Antenna to the EUT surface/edge						
Mode	Front	Back	Left	Right	Top	Bottom
Ant0	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$
Ant1	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$
Ant3	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$
Ant4	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$
Ant5	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$> 25\text{mm}$	$> 25\text{mm}$
Ant2 5G WIFI CH0	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$> 25\text{mm}$
Ant9 2.4G WIFI CH0/5G WIFI CH1/BT	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$
Ant10 2.4G WIFI CH1	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$	$\leq 25\text{mm}$	$> 25\text{mm}$

Table 1 : Distance of the Antenna to the EUT surface/edge

Note:

- 1) When the antenna-to-edge distance is greater than 25mm, such position does not need to be tested.



1.4.2 Power reduction specification

This device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation

- 1) A fixed level power reduction is applied for some frequency bands when hotspot mode becomes active. When the hotspot is disabled, the power value will be recovered.
- 2) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions.
- 3) This device uses the receiver to indicate whether the user is making a voice call in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. A fixed level power reduction is applied for some frequency bands when the audio receiver is on.

The detailed power reduction information can be referred to Appendix E (Conducted RF Output Power).



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1.5 Test Specification

Identity	Document Title
FCC 47CFR §2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices
ANSI/IEEE C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.
IEEE 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
KDB 941225 D01	3G SAR Measurement Procedures v03r01
KDB 941225 D05	SAR for LTE Devices v02r05
KDB 941225 D05A	LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 941225 D06	Hotspot Mode SAR v02r01
KDB 248227 D01	SAR Guidance for IEEE 802.11 Wi-Fi SAR v02r02
KDB 648474 D04	Handset SAR v01r03
KDB 447498 D04	Interim General RF Exposure Guidance v01
KDB 865664 D01	SAR Measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02	RF Exposure Reporting v01r02
KDB 690783 D01	SAR Listings on Grants v01r03
KDB 616217 D04	SAR for laptop and tablets v01r02



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1.6 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain*Trunk)	1.60 mW/g	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Hands/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

Notes:

* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time

** The Spatial Average value of the SAR averaged over the whole body.

*** The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation.)



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2 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ambient noise is checked and found very low and in compliance with requirement of standards.	
Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

Table 2 : The Ambient Conditions



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3 SAR Measurements System Configuration

3.1 The SAR Measurement System

This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY5 professional system). A E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation $SAR = \sigma (|E|^2) / \rho$ where σ and ρ are the conductivity and mass density of the tissue-Simulate.

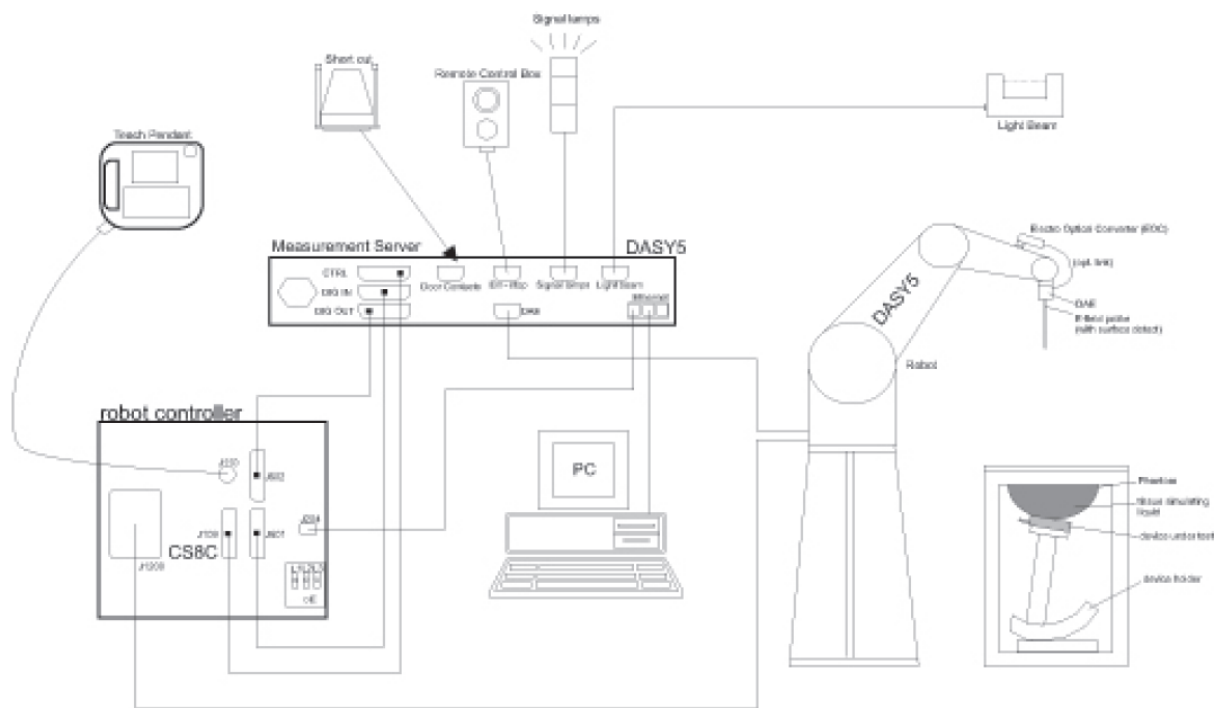
The DASY5 system for performing compliance tests consists of the following items:

A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software .An arm extension for accommodation the data acquisition electronics (DAE).

A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.

A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.



F-1. SAR Measurement System Configuration

- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 7.
- DASY5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing left-hand, right-hand and Body Worn usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing to validating the proper functioning of the system.

3.2 Isotropic E-field Probe EX3DV4

	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

3.3 Data Acquisition Electronics (DAE)

Model	DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV, 400mV)	
Input Offset Voltage	< 5μV (with auto zero)	
Input Bias Current	< 50 f A	
Dimensions	60 x 60 x 68 mm	

3.4 SAM Twin Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)	
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions (incl. Wooden Support)	Length: 1000 mm Width: 500 mm Height: adjustable feet	
Filling Volume	approx. 25 liters	
Wooden Support	SPEAG standard phantom table	

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.

Twin SAM V5.0 has the same shell geometry and is manufactured from the same material as Twin SAM V4.0, but has reinforced top structure.

3.5 ELI Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)	
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)	
Shell Thickness	2.0 ± 0.2 mm (bottom plate)	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	
Filling Volume	approx. 30 liters	
Wooden Support	SPEAG standard phantom table	

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.

ELI V5.0 has the same shell geometry and is manufactured from the same material as ELI4, but has reinforced top structure.

3.6 Device Holder for Transmitters



F-2. Device Holder for Transmitters

- The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation centres for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.
- The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon=3$ and loss tangent $\delta=0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

3.7 Measurement procedure

3.7.1 Scanning procedure

Step 1: Power reference measurement

The "reference" and "drift" measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure.

Step 2: Area scan

The SAR distribution at the exposed side of the head was measured at a distance of 4mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 15mm*15mm or 12mm*12mm or 10mm*10mm. Based on the area scan data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Zoom scan

Around this point, a volume of 30mm*30mm*30mm (fine resolution volume scan, zoom scan) was assessed by measuring 5x5x7 points ($\leq 2\text{GHz}$) and 7x7x7 points ($\geq 2\text{GHz}$). On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

The data at the surface was extrapolated, since the centre of the dipoles is 2.0mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. (This can be variable. Refer to the probe specification). The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The volume was integrated with the trapezoidal algorithm. One thousand points were interpolated to calculate the average. All neighbouring volumes were evaluated until no neighboring volume with a higher average value was found.

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std. 1528-2013.



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		$\leq 3 \text{ GHz}$	$> 3 \text{ GHz}$
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		$5 \pm 1 \text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$		$\leq 2 \text{ GHz}: \leq 15 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 12 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 12 \text{ mm}$ $4 - 6 \text{ GHz}: \leq 10 \text{ mm}$
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$		$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$	$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$3 - 4 \text{ GHz}: \leq 3 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$
Minimum zoom scan volume	x, y, z	$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.			
* When zoom scan is required and the <u>reported</u> SAR from the <u>area scan based 1-g SAR estimation</u> procedures of KDB 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.			

Step 4: Power reference measurement (drift)

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The indicated drift is mainly the variation of the DUT's output power and should vary max. $\pm 5 \%$



3.7.2 Data Storage

The DASY software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension "DAE". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated. The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [m W/g], [m W/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

3.7.3 Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Normi, ai0, ai1, ai2
	- Conversion factor	ConvFi
	- Diode compression point	Dcpi
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	ε
	- Density	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power.

The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf / dcpi$$

With V_i = compensated signal of channel i (i = x, y, z)

U_i = input signal of channel i (i = x, y, z)

cf = crest factor of exciting field (DASY parameter)

dcpi = diode compression point (DASY parameter)



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From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes:

$$E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$$

H-field probes:

$$H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2) / f$$

With V_i = compensated signal of channel i ($i = x, y, z$)

$Norm_i$ = sensor sensitivity of channel i ($i = x, y, z$)

[mV/(V/m)²] for E-field Probes

$ConvF$ = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot}^2 \cdot \sigma) / (\epsilon \cdot 1000)$$

with SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

σ = conductivity in [mho/m] or [Siemens/m]

ϵ = equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \text{ or } P_{pwe} = H_{tot}^2 \cdot 37.7$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm²

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m



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4 SAR measurement variability and uncertainty

4.1 SAR measurement variability

Per KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
 - 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
 - 3) 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 ($\sim 10\%$ from the 1-g SAR limit).
 - 4) 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 .
- The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

4.2 SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.



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5 Description of Test Position

5.1 Head Exposure Condition

5.1.1 SAM Phantom Shape

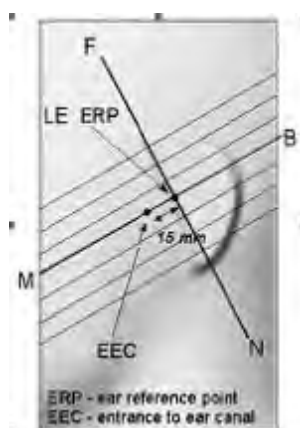


F-3. Front, back, and side views of SAM (model for the phantom shell). Full-head model is for illustration purposes only-procedures in this recommended practice are intended primarily for the phantom setup.

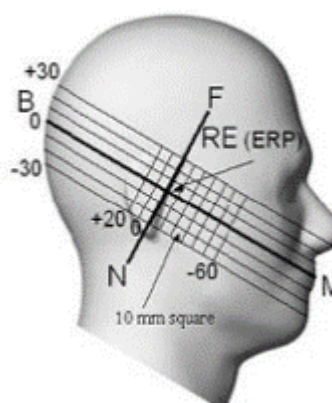
Note: The centre strip including the nose region has a different thickness tolerance.



F-4. Sagittally bisected phantom with extended perimeter (shown placed on its side as used for SAR measurements)

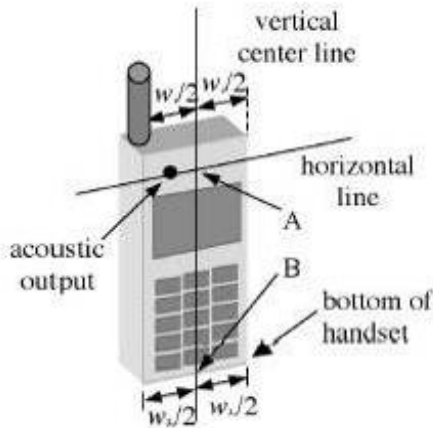


F-5. Close-up side view of phantom, showing the ear region, N-F and B-M lines, and seven cross-sectional plane locations

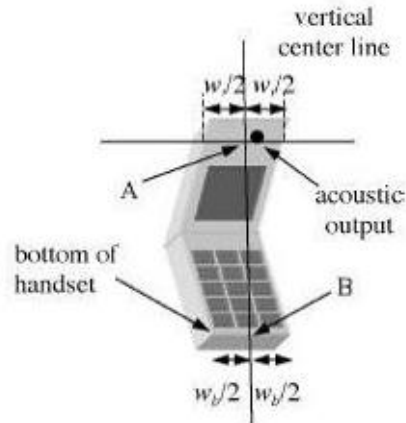


F-6. Side view of the phantom showing relevant markings and seven cross-sectional plane locations

5.1.2 EUT constructions



F-7. Handset vertical and horizontal reference lines—"fixed case"



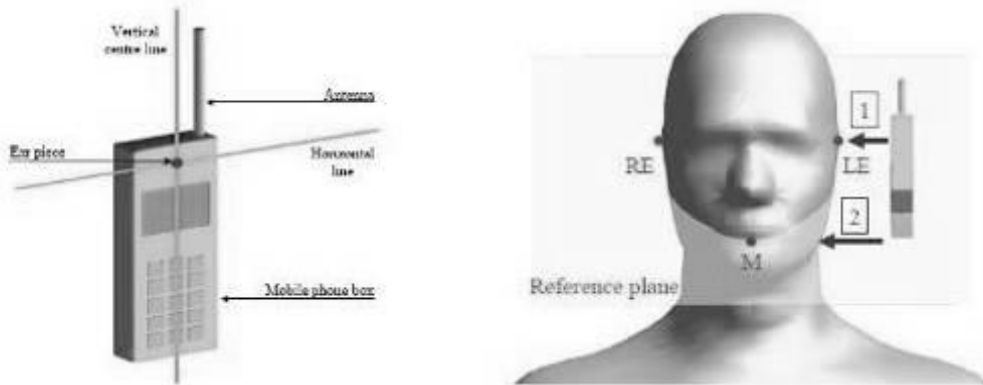
F-8. Handset vertical and horizontal reference lines—"clam-shell case"

5.1.3 Definition of the "cheek" position

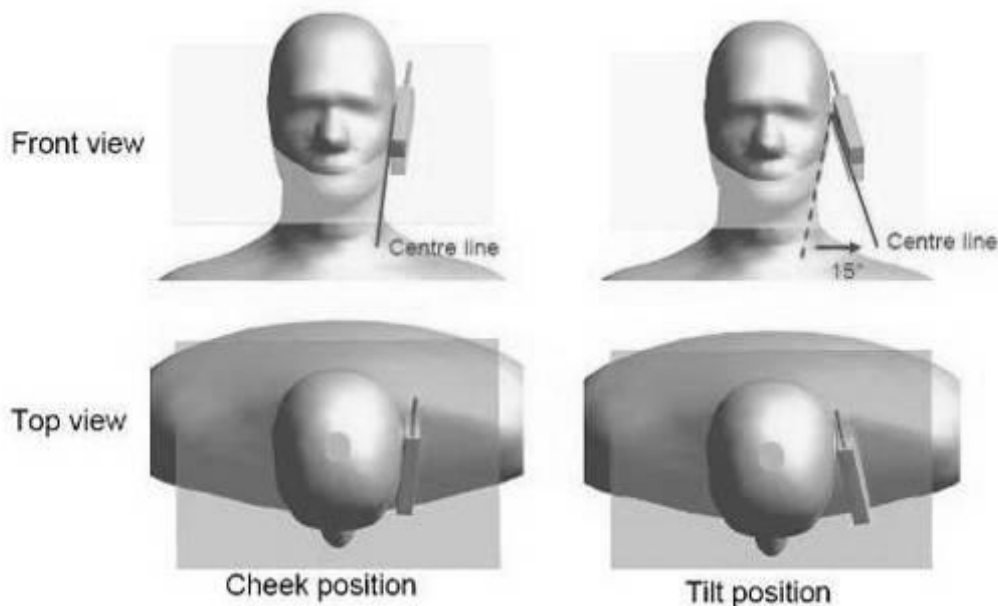
- Position the device with the vertical centre line of the body of the device and the horizontal line crossing the centre of the ear piece in a plane parallel to the sagittal plane of the phantom ("initial position"). While maintaining the device in this plane, align the vertical centre line with the reference plane containing the three ear and mouth reference points (M, RE and LE) and align the centre of the ear piece with the line RE-LE.
- Translate the mobile phone box towards the phantom with the ear piece aligned with the line LE-RE until telephone touches the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the box until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.

5.1.4 Definition of the “tilted” position

- Position the device in the “cheek” position described above;
- While maintaining the device in the reference plane described above and pivoting against the ear, move it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.



F-9. Definition of the reference lines and points, on the phone and on the phantom and initial position



F-10. “Cheek” and “tilt” positions of the mobile phone on the left side

5.2 Body Exposure Condition

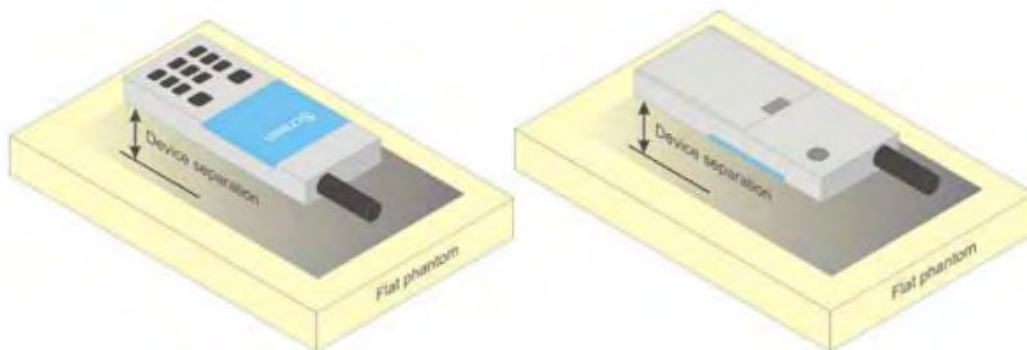
5.2.1 Body-worn accessory exposure conditions

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration. Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D04 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.



F-11. Test positions for body-worn devices

5.2.2 Wireless Router exposure conditions

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. For devices with form factors smaller than 9 cm x 5 cm, a test separation distance of 5 mm is required.

5.3 Extremity exposure conditions

Per FCC KDB 648474D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the device is marketed as "Phablet".

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at $\leq 25 \text{ mm}$ from that surface or edge, in direct contact with a flat phantom, for Product Specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.



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6 SAR System Verification Procedure

6.1 Tissue Simulate Liquid

6.1.1 Recipes for Tissue Simulate Liquid

The following tables give the recipes for tissue simulating liquids to be used in different frequency bands:

Ingredients (% by weight)	Frequency (MHz)				
	450	700-900	1800-2000	2300-2500	2500-2700
Water	38.56	40.30	55.24	55.00	54.92
Salt (NaCl)	3.95	1.38	0.31	0.2	0.23
Sucrose	56.32	57.90	0	0	0
HEC	0.98	0.24	0	0	0
Bactericide	0.19	0.18	0	0	0
Tween	0	0	44.45	44.80	44.85
Salt: 99+% Pure Sodium Chloride Sucrose: 98+% Pure Sucrose Water: De-ionized, 16 MΩ⁺ resistivity HEC: Hydroxyethyl Cellulose Tween: Polyoxyethylene (20) sorbitan monolaurate					
HSL5GHz is composed of the following ingredients: Water: 50-65% Mineral oil: 10-30% Emulsifiers: 8-25% Sodium salt: 0-1.5%					

Table 3 : Recipe of Tissue Simulate Liquid



6.1.2 Measurement for Tissue Simulate Liquid

The Conductivity (σ) and Permittivity (ρ) are listed in Table 2. For the SAR measurement given in this report. The temperature variation of the Tissue Simulate Liquids was $22 \pm 2^\circ\text{C}$.

Measurement for Tissue Simulate Liquid									
Tissue Type	Measured Frequency (MHz)	Target Tissue ($\pm 5\%$)		Measured Tissue		Deviation (Within $\pm 5\%$)		Liquid Temp. ($^\circ\text{C}$)	Test Date
		ϵ_r	$\sigma(\text{S/m})$	ϵ_r	$\sigma(\text{S/m})$	1-g(W/kg)	10-g(W/kg)		
750 Head	750	41.90	0.89	43.489	0.873	3.79%	-1.91%	22.8	2023/9/27
750 Head	750	41.90	0.89	43.434	0.873	3.66%	-1.91%	22.4	2023/9/28
835 Head	835	41.50	0.90	42.901	0.921	3.38%	2.33%	22.9	2023/9/19
835 Head	835	41.50	0.90	42.917	0.921	3.41%	2.33%	22.3	2023/9/20
835 Head	835	41.50	0.90	42.859	0.921	3.27%	2.33%	22.4	2023/10/2
1750 Head	1750	40.10	1.37	40.323	1.377	0.56%	0.51%	22.7	2023/9/21
1750 Head	1750	40.10	1.37	40.307	1.377	0.52%	0.51%	23.0	2023/9/22
1750 Head	1750	40.10	1.37	40.205	1.364	0.26%	-0.44%	21.9	2023/9/22
1750 Head	1750	40.10	1.37	40.309	1.374	0.52%	0.29%	22.2	2023/9/23
1750 Head	1750	40.10	1.37	40.325	1.372	0.56%	0.15%	22.0	2023/9/24
1750 Head	1750	40.10	1.37	40.297	1.375	0.49%	0.36%	21.3	2023/9/18
1950 Head	1950	40.00	1.40	40.074	1.419	0.18%	1.36%	21.5	2023/9/23
1950 Head	1950	40.00	1.40	40.059	1.419	0.15%	1.36%	23.5	2023/9/24
1950 Head	1950	40.00	1.40	40.098	1.418	0.24%	1.29%	23.5	2023/9/25
1950 Head	1950	40.00	1.40	40.062	1.421	0.15%	1.50%	21.3	2023/9/26
2450 Head	2450	39.20	1.80	38.465	1.814	-1.88%	0.78%	22.4	2023/10/3
2600 Head	2600	39.00	1.96	37.933	1.980	-2.74%	1.02%	22.5	2023/10/4
2600 Head	2600	39.00	1.96	37.886	1.978	-2.86%	0.92%	22.3	2023/10/5
2600 Head	2600	39.00	1.96	37.890	1.982	-2.85%	1.12%	22.5	2023/10/6
2600 Head	2600	39.00	1.96	37.902	1.978	-2.82%	0.92%	22.8	2023/10/7
2600 Head	2600	39.00	1.96	37.874	1.981	-2.89%	1.07%	22.4	2023/10/8
2600 Head	2600	39.00	1.96	37.914	1.981	-2.78%	1.07%	22.3	2023/10/9
2600 Head	2600	39.00	1.96	37.942	1.980	-2.71%	1.02%	22.9	2023/10/10
2600 Head	2600	39.00	1.96	37.917	1.980	-2.78%	1.02%	22.5	2023/10/11
2600 Head	2600	39.00	1.96	37.904	1.981	-2.81%	1.07%	22.7	2023/10/12
2600 Head	2600	39.00	1.96	37.931	1.982	-2.74%	1.12%	22.3	2023/10/13
5250 Head	5250	35.90	4.71	36.578	4.721	1.89%	0.23%	22.5	2023/9/29
5600 Head	5600	35.50	5.07	35.626	5.107	0.35%	0.73%	22.5	2023/9/29
5750 Head	5750	35.40	5.22	35.262	5.279	-0.39%	1.13%	22.5	2023/9/29
5250 Head	5250	35.90	4.71	36.011	4.721	0.31%	0.23%	22.5	2023/9/30
5600 Head	5600	35.50	5.07	35.059	5.107	-1.24%	0.73%	22.5	2023/9/30
5750 Head	5750	35.40	5.22	34.695	5.279	-1.99%	1.13%	22.5	2023/9/30
5250 Head	5250	35.90	4.71	36.011	4.767	0.31%	1.21%	22.5	2023/10/1
5600 Head	5600	35.50	5.07	35.059	5.157	-1.24%	1.72%	22.5	2023/10/1





5750 Head	5750	35.40	5.22	34.695	5.329	-1.99%	2.09%	22.5	2023/10/1
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Table 4 : Measurement result of Tissue electric parameters

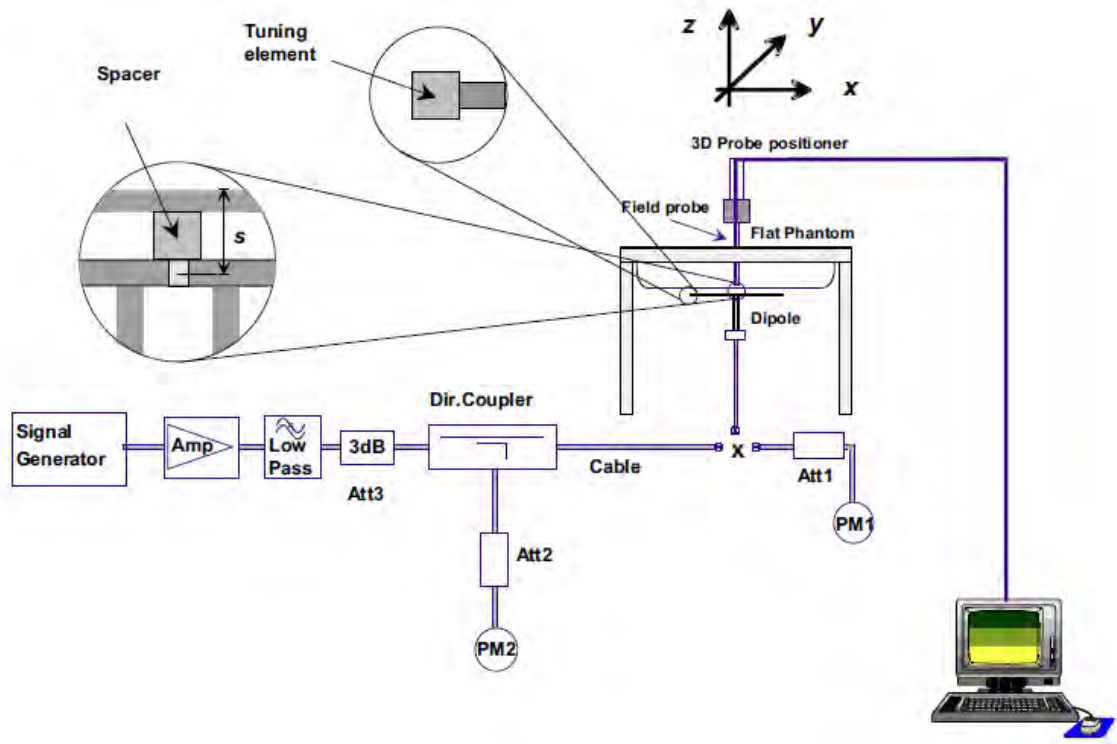


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6.2 SAR System Check

The microwave circuit arrangement for system Check is sketched in F-3. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR values. The tests were conducted on the same days as the measurement of the EUT. The obtained results from the system accuracy verification are displayed in the following table (A power level of 250mW (below 3GHz) or 100mW (3-6GHz) was input to the dipole antenna). During the tests, the ambient temperature of the laboratory was in the range $22\pm 2^{\circ}\text{C}$, the relative humidity was in the range 60% and the liquid depth above the ear reference points was above $15\pm 0.5\text{ cm}$ in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



F-12. the microwave circuit arrangement used for SAR system check



6.2.1 Justification for Extended SAR Dipole Calibrations

1) Referring to KDB865664 D01 requirements for dipole calibration, instead of the typical annual calibration recommended by measurement standards, longer calibration intervals of up to three years may be considered when it is demonstrated that the SAR target, impedance and return loss of a dipole have remain stable according to the following requirements. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.

- a) There is no physical damage on the dipole;
- b) System check with specific dipole is within 10% of calibrated value;
- c) Return-loss is within 10% of calibrated measurement;
- d) Impedance is within 5Ω from the previous measurement.

2) Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.



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6.2.2 Summary System Validation Result(s)

SAR System Validation Result(s)											
Validation Kit		Measured SAR 250mW	Measured SAR 250mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W)	Target SAR (normalized to 1W)	Deviation (Within $\pm 10\%$)		Liquid Temp. ($^{\circ}\text{C}$)	Test Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)	1- g(W/kg)	10- g(W/kg)		
D750V3	Head	2.12	1.40	8.48	5.60	8.40	5.52	0.95%	1.45%	22.8	2023/9/27
D750V3	Head	2.14	1.41	8.56	5.64	8.40	5.52	1.90%	2.17%	22.4	2023/9/28
D835V2	Head	2.52	1.66	10.08	6.64	9.60	6.16	5.00%	7.79%	22.9	2023/9/19
D835V2	Head	2.56	1.69	10.24	6.76	9.60	6.16	6.67%	9.74%	22.3	2023/9/20
D835V2	Head	2.30	1.52	9.20	6.08	9.60	6.16	-4.17%	-1.30%	22.4	2023/10/2
D1750V2	Head	9.21	4.99	36.84	19.96	37.00	19.30	-0.43%	3.42%	22.7	2023/9/21
D1750V2	Head	9.17	4.97	36.68	19.88	37.00	19.30	-0.86%	3.01%	23.0	2023/9/22
D1750V2	Head	9.18	4.96	36.72	19.84	37.00	19.30	-0.76%	2.80%	21.9	2023/9/22
D1750V2	Head	9.08	4.92	36.32	19.68	37.00	19.30	-1.84%	1.97%	22.2	2023/9/23
D1750V2	Head	8.93	4.83	35.72	19.32	37.00	19.30	-3.46%	0.10%	22.0	2023/9/24
D1750V2	Head	8.84	4.78	35.36	19.12	37.00	19.30	-4.43%	-0.93%	21.3	2023/9/18
D1950V3	Head	9.63	5.02	38.52	20.08	40.40	20.80	-4.65%	-3.46%	21.5	2023/9/23
D1950V3	Head	9.58	5.00	38.32	20.00	40.40	20.80	-5.15%	-3.85%	23.5	2023/9/24
D1950V3	Head	9.77	5.09	39.08	20.36	40.40	20.80	-3.27%	-2.12%	23.5	2023/9/25
D1950V3	Head	10.00	5.14	40.00	20.56	40.40	20.80	-0.99%	-1.15%	21.3	2023/9/26
D2450V2	Head	14.00	6.68	56.00	26.72	52.70	24.60	6.26%	8.62%	22.4	2023/10/3
D2600V2	Head	13.80	6.32	55.20	25.28	57.30	25.40	-3.66%	-0.47%	22.5	2023/10/4
D2600V2	Head	13.40	6.18	53.60	24.72	57.30	25.40	-6.46%	-2.68%	22.3	2023/10/5
D2600V2	Head	13.60	6.27	54.40	25.08	57.30	25.40	-5.06%	-1.26%	22.5	2023/10/6
D2600V2	Head	13.70	6.29	54.80	25.16	57.30	25.40	-4.36%	-0.94%	22.8	2023/10/7
D2600V2	Head	13.40	6.15	53.60	24.60	57.30	25.40	-6.46%	-3.15%	22.4	2023/10/8
D2600V2	Head	13.30	6.12	53.20	24.48	57.30	25.40	-7.16%	-3.62%	22.3	2023/10/9
D2600V2	Head	13.60	6.23	54.40	24.92	57.30	25.40	-5.06%	-1.89%	22.9	2023/10/10
D2600V2	Head	14.20	6.61	56.80	26.44	57.30	25.40	-0.87%	4.09%	22.5	2023/10/11
D2600V2	Head	14.90	6.93	59.60	27.72	57.30	25.40	4.01%	9.13%	22.7	2023/10/12





D2600V2	Head	14.40	6.70	57.60	26.80	57.30	25.40	0.52%	5.51%	22.3	2023/10/13
Validation Kit		Measured SAR 100mW	Measured SAR 100mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W)	Target SAR (normalized to 1W)	Deviation (Within ±10%)		Liquid Temp. (°C)	Test Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)	1-g(W/kg)	10-g(W/kg)		
D5GHzV2	Head(5.25GHz)	7.95	2.30	79.50	23.00	77.20	21.90	2.98%	5.02%	22.5	2023/9/29
	Head(5.6GHz)	8.69	2.48	86.90	24.80	81.10	22.80	7.15%	8.77%	22.5	2023/9/29
	Head(5.75GHz)	8.06	2.33	80.60	23.30	77.80	21.70	3.60%	7.37%	22.5	2023/9/29
D5GHzV2	Head(5.25GHz)	7.97	2.26	79.70	22.60	77.20	21.90	3.24%	3.20%	22.5	2023/9/30
	Head(5.6GHz)	8.63	2.43	86.30	24.30	81.10	22.80	6.41%	6.58%	22.5	2023/9/30
	Head(5.75GHz)	7.89	2.28	78.90	22.80	77.80	21.70	1.41%	5.07%	22.5	2023/9/30
D5GHzV2	Head(5.25GHz)	8.03	2.29	80.30	22.90	77.20	21.90	4.02%	4.57%	22.5	2023/10/1
	Head(5.6GHz)	8.77	2.47	87.70	24.70	81.10	22.80	8.14%	8.33%	22.5	2023/10/1
	Head(5.75GHz)	7.80	2.26	78.00	22.60	77.80	21.70	0.26%	4.15%	22.5	2023/10/1

Table 5 : SAR System Check Result

6.2.3 Detailed System Check Results

Please see the Appendix A



7 Test Configuration

7.1 3G SAR Test Reduction Procedure

According to KDB 941225D01, in the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as "otherwise" in the applicable procedures; SAR measurement is required for the secondary mode.

7.2 Operation Configurations

7.2.1 GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a base station by air link. Using CMW500 the power lever is set to "5" and "0" in SAR of GSM 850 and GSM 1900. The tests in the band of GSM 850 and GSM 1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink, and at most 4 timeslots in downlink, the maximum total timeslot is 5.

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.



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7.2.2 WCDMA Test Configuration

1) . Output Power Verification

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1's" for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) are required in the SAR report. All configurations that are not supported by the handset or cannot be measured due to technical or equipment limitations must be clearly identified.

2) . Head SAR

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure

3) . Body SAR

SAR for body configurations is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the handset, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

4) . HSDPA / HSUPA / DC-HSDPA

According to KDB 941225 D01v03, RMC 12.2kbps setting is used to evaluate SAR. If the maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA

a) HSDPA

HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) are set according to values indicated in the following table. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.



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Sub-test	β_c	Bd	$\beta_d(\text{SF})$	β_c/β_d	β_{hs}	CM(dB)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0	0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note1: ΔACK , ΔNACK and $\Delta\text{CQI} = 8$ $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector

Magnitude (EVM) with HS-DPCCH test in clause 5.13.1.A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, ΔACK and $\Delta\text{NACK} = 8$ ($A_{hs} = 30/15$) with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta\text{CQI} =$

7 ($A_{hs} = 24/15$) with $\beta_{hs} = 24/15 * \beta_c$.

Note3: $\text{CM} = 1$ for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI"s
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

Table 6 : settings of required H-Set 1 QPSK acc. to 3GPP 34.121



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HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	Maximum HS-DSCH Transport Block Bits/HS-DSCH TTI	Total Soft Channel Bits
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

Table 7 : HSDPA UE category

b) HSUPA

Due to inner loop power control requirements in HSUPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSUPA should be configured according to the values indicated below as well as other applicable procedures described in the WCDMA Handset and Release 5 HSUPA Data Device sections of 3G device.



Sub-test ¹	β_c ²	β_d ²	β_d (SF) ³	β_c/β_d ²	β_{hs} ¹	β_{hs} ²	β_{ad} ²	β_c (SF) ²	β_{ad} (code) ²	CM ² (dB) ²	MP R ² (dB) ²	AG ⁴ Inde ²	E-TFC I ²
1 ²	11/15 ⁽³⁾	15/15 ⁽³⁾	64 ²	11/15 ⁽³⁾	22/15 ²	209/225 ²	1039/225 ²	4 ²	1 ²	1.0 ²	0.0 ²	20 ²	75 ²
2 ²	6/15 ²	15/15 ²	64 ²	6/15 ²	12/15 ²	12/15 ²	94/75 ²	4 ²	1 ²	3.0 ²	2.0 ²	12 ²	67 ²
3 ²	15/15 ²	9/15 ²	64 ²	15/9 ²	30/15 ²	30/15 ²	$\beta_{ad1}:47/15$ $\beta_{ad2}:47/15$	4 ²	2 ²	2.0 ²	1.0 ²	15 ²	92 ²
4 ²	2/15 ²	15/15 ²	64 ²	2/15 ²	4/15 ²	2/15 ²	56/75 ²	4 ²	1 ²	3.0 ²	2.0 ²	17 ²	71 ²
5 ²	15/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64 ²	15/15 ⁽⁴⁾	30/15 ²	24/15 ²	134/15 ²	4 ²	1 ²	1.0 ²	0.0 ²	21 ²	81 ²
Note 1: ΔACK, $\Delta NACK$ and $\Delta CQI=8$ $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$ Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference² Note 3 : For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$² Note 4 : For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$² Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g² Note 6: β_{ad} can not be set directly; it is set by Absolute Grant Value.²													

Table 8 : Subtests for UMTS Release 6 HSUPA

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI(ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	10	2SF2&2SF	11484	5.76
	4	4	2	4	20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2SF	22996	?
	4	4	10	4	20000	?
NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM. (TS25.306-7.3.0).						

Table 9 : HSUPA UE category



c) DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a Second serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0.

A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

Table E.5.0: Levels for HSDPA connection setup

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13.

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK.

Parameter	Value
Nominal average inf. bit rate	60 kbit/s
Inter-TTI Distance	1 TTI's
Number of HARQ Processes	6 Processes
Information Bit Payload	120 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	960 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	3200 SMLs
Coding Rate	0.15
Number of Physical Channel Codes	1

Table 10 : settings of required H-Set 12 QPSK acc. to 3GPP 34.121

Note:

1. The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
2. Maximum number of transmission is limited to 1,i.e.,retransmission is not allowed. The redundancy and constellation version 0 shall be used.



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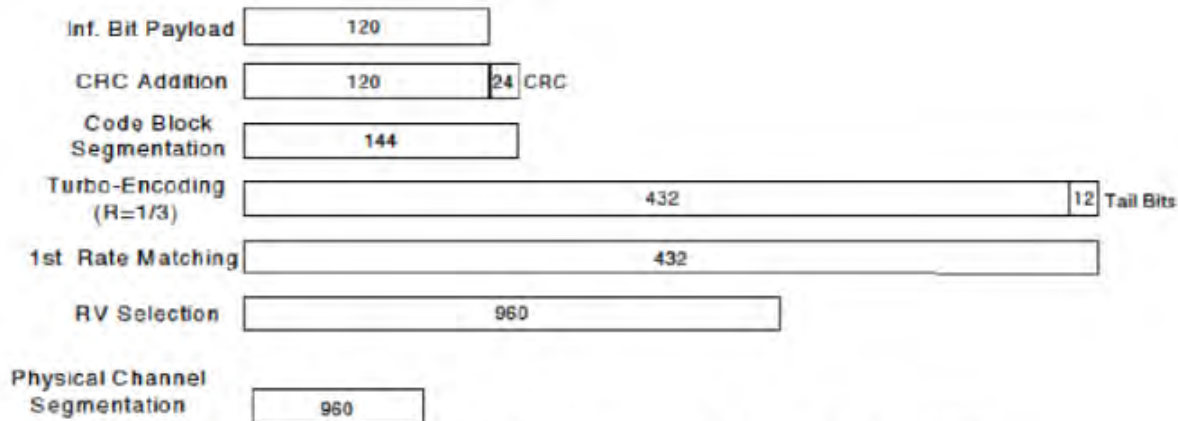


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest settings are illustrated below:

Sub-test ^o	β_c ^o	β_d ^o	β_d (SF) ^o	β_c/β_d ^o	$\beta_{hs}(1)$ ^o	CM(dB)(2) ^o	MPR (dB) ^o
1 ^o	2/15 ^o	15/15 ^o	64 ^o	2/15 ^o	4/15 ^o	0.0 ^o	0 ^o
2 ^o	12/15(3) ^o	15/15(3) ^o	64 ^o	12/15(3) ^o	24/15 ^o	1.0 ^o	0 ^o
3 ^o	15/15 ^o	8/15 ^o	64 ^o	15/8 ^o	30/15 ^o	1.5 ^o	0.5 ^o
4 ^o	15/15 ^o	4/15 ^o	64 ^o	15/4 ^o	30/15 ^o	1.5 ^o	0.5 ^o

Note 1: Δ ACK, Δ NACK and Δ CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$
 Note 2: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
 Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF0) to $\beta_c = 11/15$ and $\beta_d = 15/15$

Up commands are set continuously to set the UE to Max power.

Note:

1. The Dual Carriers transmission only applies to HSDPA physical channels
2. The Dual Carriers belong to the same Node and are on adjacent carriers.
3. The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
4. The Dual Carriers operate in the same frequency band.
5. The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
6. The device doesn't support carrier aggregation for it just can operate in Release 8.

d) HSPA+

SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode. Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105
Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with $\beta_{HS} = 30/15 * \beta_c$ Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1, 0). Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default. Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value. Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.											

7.2.3 WiFi Test Configuration

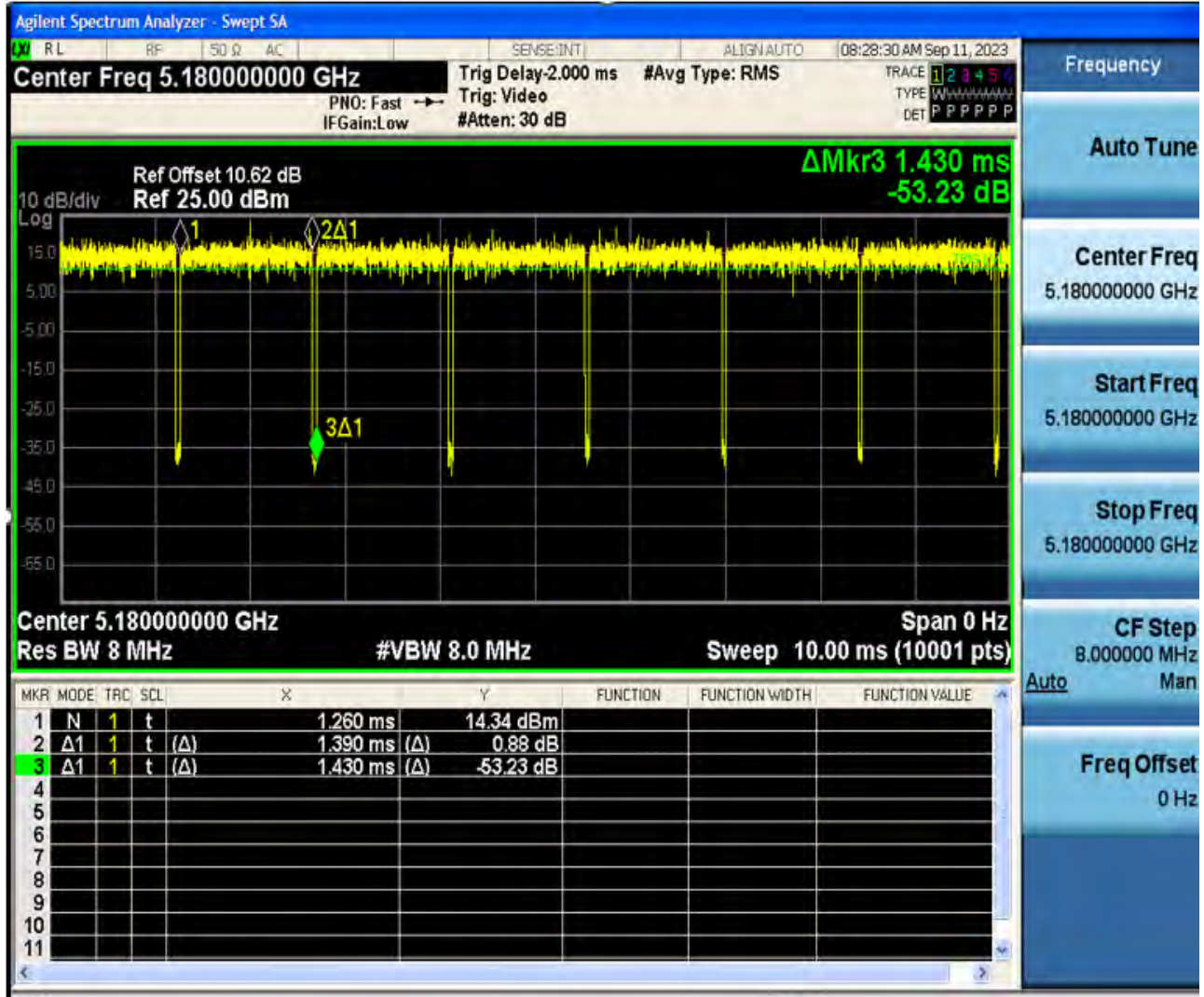
A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

7.2.3.1 Duty cycle

- 1) 2.4G WIFI 802.11b:
Duty cycle=99.64%



- 2) 5G WIFI 802.11a:
Duty cycle=97.20%



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7.2.3.2 Initial Test Position SAR Test Reduction Procedure

DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures. The initial test position procedure is described in the following:

- 1) . When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band. SAR is also not required for that exposure configuration in the subsequent test configuration(s).
- 2) . When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.
- 3) . For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. a) Additional power measurements may be required for this step, which should be limited to those necessary for identifying the subsequent highest output power channels.

7.2.3.3 Initial Test Configuration Procedures

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required. SAR test reduction for subsequent highest output test channels is determined according to *reported* SAR of the initial test configuration.

For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.

When the *reported* SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until *reported* SAR is ≤ 1.2 W/kg or all required channels are tested.

7.2.3.4 Subsequent Test Configuration Procedures

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. The initial test position procedure is applied to next to the ear, UMPC mini-tablet and hotspot mode configurations. When the same maximum output power is specified for multiple transmission modes, additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. The subsequent test configuration and SAR measurement procedures are described in the following.

- 1) . When SAR test exclusion provisions of KDB Publication 447498 are applicable and SAR measurement is not required for the initial test configuration, SAR is also not required for the next highest maximum output power transmission mode subsequent test configuration(s) in that frequency band or aggregated band and exposure configuration.



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- 2) . When the highest *reported* SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.
- 3) . The number of channels in the initial test configuration and subsequent test configuration can be different due to differences in channel bandwidth. When SAR measurement is required for a subsequent test configuration and the channel bandwidth is smaller than that in the initial test configuration, all channels in the subsequent test configuration that overlap with the larger bandwidth channel tested in the initial test configuration should be used to determine the highest maximum output power channel. This step requires additional power measurement to identify the highest maximum output power channel in the subsequent test configuration to determine SAR test reduction.
 - a) SAR should first be measured for the channel with highest measured output power in the subsequent test configuration.
 - b) SAR for subsequent highest measured maximum output power channels in the subsequent test configuration is required only when the *reported* SAR of the preceding higher maximum output power channel(s) in the subsequent test configuration is > 1.2 W/kg or until all required channels are tested. i) For channels with the same measured maximum output power, SAR should be measured using the channel closest to the center frequency of the larger channel bandwidth channel in the initial test configuration.
- 4) . SAR measurements for the remaining highest specified maximum output power OFDM transmission mode configurations that have not been tested in the initial test configuration (highest maximum output) or subsequent test configuration(s) (subsequent next highest maximum output power) is determined by recursively applying the subsequent test configuration procedures in this section to the remaining configurations according to the following:
 - a) replace "subsequent test configuration" with "next subsequent test configuration" (i.e., subsequent next highest specified maximum output power configuration)
 - b) replace "initial test configuration" with "all tested higher output power configurations"



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7.2.3.5 2.4 GHz SAR Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. 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. When SAR measurement is required for an OFDM configuration, the initial test configuration, subsequent test configuration and initial test position procedures are applied. The SAR test exclusion requirements for 802.11g/n OFDM configurations are described in following.

- **802.11b DSSS SAR Test Requirements**

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

- 1) . When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) . 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.

- **2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements**

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3, including sub-sections). SAR is not required for the following 2.4 GHz OFDM conditions.

- 1) . When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
- 2) . When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

- **SAR Test Requirements for OFDM configurations**

When SAR measurement is required for 802.11 g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

7.2.3.6 WiFi 5G SAR Test Procedures

7.2.3.6.1 U-NII-1 and U-NII-2A Bands

For devices that operate in only one of the U-NII-1 and U-NII-2A bands, the normally required SAR procedures for OFDM configurations are applied. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest *reported* SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, both bands are tested independently for SAR.
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest *reported* SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, both bands are tested independently for SAR.
- 3) The two U-NII bands may be aggregated to support a 160 MHz channel on channel number 50. Without additional testing, the maximum output power for this is limited to the lower of the maximum output power certified for the two bands. When SAR measurement is required for at least one of the bands and the highest *reported* SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is > 1.2 W/kg, SAR is required for the 160 MHz channel. This procedure does not apply to an aggregated band with maximum output higher than the standalone band(s); the aggregated band must be tested independently for SAR. SAR is not required when the 160 MHz channel is operating at a reduced maximum power and also qualifies for SAR test exclusion.

7.2.3.6.2 U-NII-2C and U-NII-3 Bands

The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. when Terminal Doppler Weather Radar (TDWR) restriction applies, all channels that operate at 5.60 – 5.65 GHz must be included to apply the SAR test reduction and measurement procedures.

When the same transmitter and antenna(s) are used for U-NII-2C band and U-NII-3 band or 5.8 GHz band of §15.247, the bands may be aggregated to enable additional channels with 20, 40 or 80 MHz bandwidth to span across the band gap, as illustrated in Appendix B. The maximum output power for the additional band gap channels is limited to the lower of those certified for the bands. Unless band gap channels are permanently disabled, they must be considered for SAR testing. The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. To maintain SAR measurement accuracy and to facilitate test reduction, the channels in U-NII-2C band above 5.65 GHz may be grouped with the 5.8 GHz channels in U-NII-3 or §15.247 band to enable two SAR probe calibration frequency points to cover the bands, including the band gap channels. When band gap channels are supported and the bands are not aggregated for SAR testing, band gap channels must be considered independently in each band according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.



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7.2.3.6.3 OFDM Transmission Mode SAR Test Configuration and Channel Selection Requirements

The initial test configuration for 5 GHz OFDM transmission modes is determined by the 802.11 configuration with the highest maximum output power specified for production units, including tune-up tolerance, in each standalone and aggregated frequency band. SAR for the initial test configuration is measured using the highest maximum output power channel determined by the default power measurement procedures. When multiple configurations in a frequency band have the same specified maximum output power, the initial test configuration is determined according to the following steps applied sequentially.

- 1) The largest channel bandwidth configuration is selected among the multiple configurations 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. After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following. These channel selection procedures apply to both the initial test configuration and subsequent test configuration(s), with respect to the default power measurement procedures or additional power measurements required for further SAR test reduction. The same procedures also apply to subsequent highest output power channel(s) selection.
 - The channel closest to mid-band frequency is selected for SAR measurement.
 - For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

7.2.3.6.4 SAR Test Requirements for OFDM configurations

When SAR measurement is required for 802.11 a/n/ac OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. When the same transmitter and antenna(s) are used for U-NII-1 and U-NII-2A bands, additional SAR test reduction applies. When band gap channels between U-NII-2C band and 5.8 GHz U-NII-3 or §15.247 band are supported, the highest maximum output power transmission mode configuration and maximum output power channel across the bands must be used to determine SAR test reduction, according to the initial test configuration and subsequent test configuration requirements. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.



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7.2.4 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The Radio Communication Analyzer was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

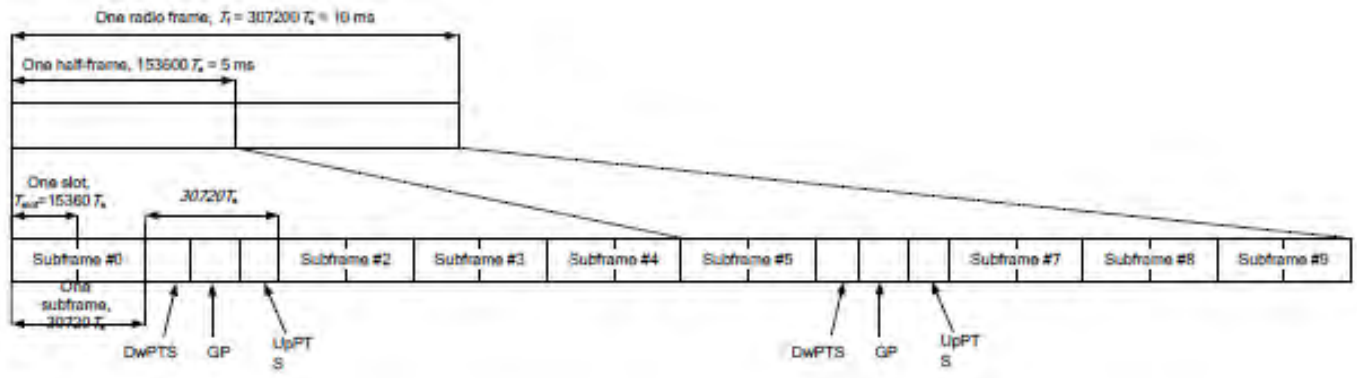
TDD LTE test consideration

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.

LTE TDD Band support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Frame structure type 2:



Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	6592.Ts	2192.Ts	2560.Ts	7680.Ts	2192.Ts	2560.Ts
1	19760.Ts			20480.Ts		
2	21952.Ts			23040.Ts		
3	24144.Ts			25600.Ts		
4	26336.Ts	4384.Ts	5120.Ts	7680.Ts	4384.Ts	5120.Ts
5	6592.Ts			20480.Ts		
6	19760.Ts			23040.Ts		
7	21952.Ts			25600.Ts		
8	24144.Ts			-	-	-
9	13168.Ts			-	-	-

Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Calculated Duty Cycle=[Extended cyclic prefix in uplink x (Ts) x # of S + # of U]/10ms

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33



A) Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

Modulation	Channel bandwidth/Transmission bandwidth						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	2
64QAM	> 5	> 4	> 8	> 12	> 16	> 18	3
256QAM	≥ 1						5

C) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for 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. 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) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

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 1) and 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) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections 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



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modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

F) LTE CA additional specification

The device supports intra-band contiguous and inter-band discontinuous uplink and downlink LTE Carrier Aggregation (CA). When carrier aggregation applies, implementation and measurement details for the following are necessary.

Intra-band carrier aggregation requirements for uplink.

Intra-band and inter-band carrier aggregation requirements for downlink.

The possible downlink and uplink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.101 V15.4.0. The conducted power measurement results of downlink and uplink LTE CA are provided in Appendix E (Conducted RF Output Power). The downlink LTE CA SAR test is not required since the maximum output power for downlink LTE CA was not more than 0.25dB higher than the maximum output power for without downlink LTE CA

Downlink LTE CA
CA_7B
CA_7C
CA_38C
CA_41C
CA_41A-41A
CA_7A-7A
CA_5A-66A
CA_7A-38A
CA_7A-66A
CA_2A-5A
CA_2A-7A
CA_4A-5A
CA_4A-7A
CA_5A-7A
CA_12A-66A
CA_66A-66A
CA_4A-4A
CA_26A-41A
CA_5A-38A
CA_2A-4A
CA_38A-66A
CA_26A-38A
CA_2A-66A
CA_2A-2A
CA_2A-7C



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CA_5A-66A-66A
CA_5A-7A-7A
CA_5A-7A-66A
CA_4A-7C
CA_7C-66A
CA_41D

Uplink LTE CA
7C
38C
41C

SAR test procedure for intra-band contiguous UL LTE CA is as below:

1) Maximum output power is measured for each UL CA configuration for the required test channels described in KDB 941225 D05

- UL PCC configuration is determined by the required test channel
- SCC and subsequent CCs are added alternatively to either side of the PCC or within the transmission band for channels at the ends of a frequency band.

2) SAR for UL CA is required in each exposure condition and frequency band combination

3) For this device, as the maximum output for Intra-band uplink LTE CA is $\leq$ standalone LTE mode (without CA),

- PCC is configured according to the highest standalone SAR configuration tested.
- SCC and subsequent CCs are configured according to procedures used for power measurement and parameters (BW, RB etc.) similar to that used for the PCC

4) When the reported SAR for UL CA configuration, described above, is > 1.2 W/kg, UL CA SAR is also required for all required test channels (PCC based)

5) UL CA SAR is also required for standalone SAR configurations > 1.2 W/kg when they are scaled to the UL CA power level.



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7.2.5 NR Band Test Configuration

1. NR Band n5/n7/n38/n41/n66 support SA mode and n5/n7/n38/n41/n66 support NSA mode. LTE+NR Band operations are possible only with LTE under EN-DC mode and the operations are possible as following table:

Band/Antenna		LTE Band 2			LTE Band 5		LTE Band 7			LTE Band 12		LTE Band 26		LTE Band 66		
		Ant 3	Ant 4	Ant 5	Ant 0	Ant 1	Ant 3	Ant 4	Ant 5	Ant 0	Ant 1	Ant 0	Ant 1	Ant 3	Ant 4	Ant 5
n5	Ant0						√	√	√					√	√	√
	Ant1						√	√	√					√	√	√
n7	Ant3		√	√	√	√									√	√
	Ant4	√		√	√	√								√		√
	Ant5	√	√		√	√								√	√	
n38	Ant3														√	√
	Ant4													√		√
	Ant5													√	√	
n41	Ant3											√	√		√	√
	Ant4											√	√	√		√
	Ant5											√	√	√	√	
n66	Ant3		√	√	√	√		√	√	√	√					
	Ant4	√		√	√	√	√		√	√	√					
	Ant5	√	√		√	√	√	√		√	√					

2. The general information supported by the NR band is as following table:

Band			n5	n7	n38	n41	n66
Modulation	DFT-s-OFDM	PI/2 BPSK	Yes	Yes	Yes	Yes	Yes
		QPSK	Yes	Yes	Yes	Yes	Yes
		16QAM	Yes	Yes	Yes	Yes	Yes
		64QAM	Yes	Yes	Yes	Yes	Yes
		256QAM	Yes	Yes	Yes	Yes	Yes
	CP-OFDM	QPSK	Yes	Yes	Yes	Yes	Yes
		16QAM	Yes	Yes	Yes	Yes	Yes
		64QAM	Yes	Yes	Yes	Yes	Yes
		256QAM	Yes	Yes	Yes	Yes	Yes
	Max Duty Cycle		100%	100%	100%	100%	100%



Band	SCS	Bandwidth												
		5MHz	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz	50MHz	60MHz	70MHz	80MHz	90MHz	100MHz
n5	15kHz	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	30kHz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
n7	15kHz	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A
	30kHz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
n38	15kHz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	30kHz	N/A	Yes	Yes	Yes	N/A	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A
n41	15kHz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	30kHz	N/A	N/A	N/A	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
n66	15kHz	Yes	Yes	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A	N/A	N/A
	30kHz	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:

- For DFT-OFDM and CP-OFDM output power measurement reduction, according to 3GPP 38.101 maximum power reduction for power class 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not $\frac{1}{2}$ dB higher than the same configuration in DFT-QPSK and the reported SAR for the DFT-QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
- For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class 3, for PI/2 BPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the PI/2 BPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth.
- SAR testing start with the largest SCS and largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
- 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
- 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 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.
- PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the



same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK/16QAM/64QAM/256QAM SAR testing are not required.

g. Smaller SCS/bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device

4. MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS 38.101-1 Section 6.2.2 under Table 6.2.2 -1.

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	PI/2 BPSK	≤ 3.5 ¹	≤ 1.2 ¹	≤ 0.2 ¹
		≤ 0.5 ²	≤ 0.5 ²	0 ²
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability powerBoosting-pi2BPSK and if the IE powerBoostPi2BPSK is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n41. The reference power of 0 dB MPR is 26dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n41 with Pi/2 BPSK modulation and if the IE powerBoostPi2BPSK is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n41.

5. For FDD NR Band operation does not have the fixed UL/DL frame structure, but during the transmitting/ receiving it can be operated in the slot structure of 100% UL duty cycle, we are proposing the conservative way to evaluate SAR at 100% duty cycle. For the purpose of test NR Band standalone SAR, and also test SAR level at 100% TX duty cycle.

6. For 5G NR Sub6GHz SISO Mode, SAR Test plan as below:

- 1) For 5G NR NSA mode with the same UL EN_DC combination but different DL EN_DC combinations, eg: EN-DC configuration: UL DC_7A_n5 (UL two bands) with DL DC_7C_n5 (DL two bands)



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a) The UL EN-DC configuration, including the Tx antenna configuration, RF path, the channel bandwidth and other operating parameters are the same.

b) The maximum output power, including tolerance, for the UL EN-DC configuration with DL two or more bands must be $\leq$ the same UL EN-DC configuration with DL two bands only to qualify for the SAR test exclusion.

7. For EN-DC SAR, as the existing SAR test system cannot test the multiple different frequency bands simultaneous Transmission SAR at the same time, we suggest that the conservative "max + max" multi-Tx and SAR scaling method can be used to evaluate the inter-band Uplink EN-DC SAR from standalone SAR test results of each LTE and NR EN-DC component band and the conservative "max + max" multi-Tx method to combine the scaled SAR value from each EN-DC component band as the inter-band Uplink EN-DC SAR. All Simultaneous Transmission Scenarios will be evaluated independently in the final SAR report.

8. When the reported SAR for and EN DC configuration is greater than 1.2 W/kg, EN DC SAR is also required for other NR based test channels.

9. EN DC SAR is also required for standalone NR configurations greater than 1.2 W/kg when scaled to the EN DC power level.



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7.2.6 UL duty cycle detection mechanism

The device supporting the UL duty cycle detection mechanism for LTE TDD & NR5G (including FR1 SA and FR1 ENDC), the rest RAT will not apply. The main purpose is to distinguish duty cycle of UL symbol and apply the relevant power levels accordingly. The main purpose is to provide enhanced user experience while meeting the SAR compliance for transmission scheduling.

SAR test Plan:

For each band, the SAR evaluation uses the highest specified time-averaged output power configuration.

(1) For 5G NR test, using factory test mode to perform SAR with the highest specified time-averaged output power configuration, and UL duty cycle =100%.

(2) For LTE TDD test, power class using uplink-downlink configuration 0 and special subframe configuration 7 for frame structure type to perform SAR with the highest specified time-averaged output power configuration, and UL duty cycle =63.3%.

LTE TDD duty cycle									
Band	Ant.	Power Level	UL duty cycle	Max UL duty cycle	Max UL duty cycle factor	P _{offset}	P _{cmx} (dBm)	P _{cmx} Frame-Averaged(dBm)	SAR test
LTE B38	Ant 3	State 1	0%< K1 ≤20%	11.67%	-9.33	5.00	23.80	14.47	No
			20%< K2≤ 30%	23.33%	-6.32	3.50	23.80	17.48	No
			30%< K3 ≤40%	31.67%	-4.99	2.00	23.80	18.81	No
			40%< K4 ≤50%	43.33%	-3.63	1.50	23.80	20.17	No
			50%< K5 ≤60%	53.33%	-2.73	0.50	23.30	20.57	No
			60%< K6 ≤63.3%	63.33%	-1.98	0.00	22.80	20.82	Yes
LTE B38	Ant 3	State 3/5	0%< K1 ≤20%	11.67%	-9.33	5.00	23.80	14.47	No
			20%< K2≤ 30%	23.33%	-6.32	3.50	23.80	17.48	No
			30%< K3 ≤40%	31.67%	-4.99	2.00	23.80	18.81	No
			40%< K4 ≤50%	43.33%	-3.63	1.50	23.80	20.17	No
			50%< K5 ≤60%	53.33%	-2.73	0.50	22.80	20.07	No
			60%< K6 ≤63.3%	63.33%	-1.98	0.00	22.30	20.32	Yes
LTE B38	Ant 3	State 2/4/6	0%< K1 ≤20%	11.67%	-9.33	5.00	23.80	14.47	No
			20%< K2≤ 30%	23.33%	-6.32	3.50	22.80	16.48	No
			30%< K3 ≤40%	31.67%	-4.99	2.00	21.30	16.31	No
			40%< K4 ≤50%	43.33%	-3.63	1.50	20.80	17.17	No
			50%< K5 ≤60%	53.33%	-2.73	0.50	19.80	17.07	No
			60%< K6 ≤63.3%	63.33%	-1.98	0.00	19.30	17.32	Yes
LTE B41 PC3	Ant 3	State 1	0%< K1 ≤20%	11.67%	-9.33	5.00	23.30	13.97	No
			20%< K2≤ 30%	23.33%	-6.32	3.50	23.30	16.98	No
			30%< K3 ≤40%	31.67%	-4.99	2.00	23.30	18.31	No
			40%< K4 ≤50%	43.33%	-3.63	1.50	23.30	19.67	No
			50%< K5 ≤60%	53.33%	-2.73	0.50	22.80	20.07	No
			60%< K6 ≤63.3%	63.33%	-1.98	0.00	22.30	20.32	Yes
LTE B41 PC3	Ant 3	State 3/5	0%< K1 ≤20%	11.67%	-9.33	5.00	23.30	13.97	No
			20%< K2≤ 30%	23.33%	-6.32	3.50	23.30	16.98	No



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			30% < K3 ≤ 40%	31.67%	-4.99	2.00	23.30	18.31	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	23.30	19.67	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	22.30	19.57	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	21.80	19.82	Yes
LTE B41 PC3	Ant 3	State 2/4/6	0% < K1 ≤ 20%	11.67%	-9.33	5.00	23.30	13.97	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	22.80	16.48	No
			30% < K3 ≤ 40%	31.67%	-4.99	2.00	21.30	16.31	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	20.80	17.17	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	19.80	17.07	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	19.30	17.32	Yes
LTE B38	Ant 4	State 1/3/5	0% < K1 ≤ 20%	11.67%	-9.33	5.00	24.30	14.97	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	24.30	17.98	No
			30% < K3 ≤ 40%	31.67%	-4.99	2.00	24.30	19.31	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	24.30	20.67	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	23.30	20.57	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	22.80	20.82	Yes
LTE B38	Ant 4	State 2/4/6	0% < K1 ≤ 20%	11.67%	-9.33	5.00	24.30	14.97	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	24.30	17.98	No
			30% < K3 ≤ 40%	31.67%	-4.99	2.00	24.30	19.31	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	24.30	20.67	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	24.30	21.57	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	24.30	22.32	Yes
LTE B41 PC3	Ant 4	State 1/3/5	0% < K1 ≤ 20%	11.67%	-9.33	5.00	23.80	14.47	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	23.80	17.48	No
			30% < K3 ≤ 40%	31.67%	-4.99	2.00	23.80	18.81	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	23.80	20.17	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	23.80	21.07	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	23.30	21.32	Yes
LTE B41 PC3	Ant 4	State 2/4/6	0% < K1 ≤ 20%	11.67%	-9.33	5.00	23.80	14.47	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	23.80	17.48	No
			30% < K3 ≤ 40%	31.67%	-4.99	2.00	23.80	18.81	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	23.80	20.17	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	23.80	21.07	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	23.80	21.82	Yes
LTE B38	Ant 5	State 1/2/3/4/5/6	0% < K1 ≤ 20%	11.67%	-9.33	5.00	22.80	13.47	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	22.80	16.48	No
			30% < K3 ≤ 40%	31.67%	-4.99	2.00	22.80	17.81	No
			40% < K4 ≤ 50%	43.33%	-3.63	1.50	22.80	19.17	No
			50% < K5 ≤ 60%	53.33%	-2.73	0.50	22.80	20.07	No
			60% < K6 ≤ 63.3%	63.33%	-1.98	0.00	22.80	20.82	Yes
LTE B41 PC3	Ant 5	State 1/2/3/4/5/6	0% < K1 ≤ 20%	11.67%	-9.33	5.00	22.30	12.97	No
			20% < K2 ≤ 30%	23.33%	-6.32	3.50	22.30	15.98	No



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			30%< K3 ≤40%	31.67%	-4.99	2.00	22.30	17.31	No
			40%< K4 ≤50%	43.33%	-3.63	1.50	22.30	18.67	No
			50%< K5 ≤60%	53.33%	-2.73	0.50	22.30	19.57	No
			60%< K6 ≤63.3%	63.33%	-1.98	0.00	22.30	20.32	Yes

SA NR TDD duty cycle									
Band	Ant.	Power Level	UL duty cycle	Max UL duty cycle	Max UL duty cycle factor	P _{offset}	P _{cm} ax (dBm)	P _{cm} ax Frame-Averaged(dBm)	SAR test
N38	Ant 3	State 1	0%≤ K1 ≤10%	10.00%	-10.00	10.00	23.70	13.70	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	23.70	16.71	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	23.70	18.47	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	23.70	19.72	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	23.70	20.69	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	22.70	20.48	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	22.20	20.65	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	21.20	20.23	No
N38	Ant 3	State 3/5	80%< K9 ≤100%	100.00%	0.00	0	20.70	20.70	Yes
			0%≤ K1 ≤10%	10.00%	-10.00	10.00	23.70	13.70	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	23.70	16.71	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	23.70	18.47	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	23.20	19.22	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	22.70	19.69	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	21.70	19.48	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	21.20	19.65	No
N38	Ant 3	State 2/4/6	70%< K8 ≤80%	80.00%	-0.97	0.50	20.20	19.23	No
			80%< K9 ≤100%	100.00%	0.00	0	19.70	19.70	Yes
			0%≤ K1 ≤10%	10.00%	-10.00	10.00	23.70	13.70	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	23.70	16.71	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	22.20	16.97	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	20.70	16.72	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	20.20	17.19	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	19.20	16.98	No
N41 PC2	Ant 3	State 1	60%< K7 ≤70%	70.00%	-1.55	1.50	18.70	17.15	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	17.70	16.73	No
			80%< K9 ≤100%	100.00%	0.00	0	17.20	17.20	Yes
			0%≤ K1 ≤10%	10.00%	-10.00	10.00	25.50	15.50	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	25.50	18.51	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	25.50	20.27	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.50	20.52	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.00	20.99	No
N41 PC2	Ant 3	State 3/5	50%< K6 ≤60%	60.00%	-2.22	2.00	23.00	20.78	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	22.50	20.95	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	21.50	20.53	No
			80%< K9 ≤100%	100.00%	0.00	0	21.00	21.00	Yes
			0%≤ K1 ≤10%	10.00%	-10.00	10.00	25.50	15.50	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	25.50	18.51	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	25.50	20.27	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.00	20.02	No
N41 PC2	Ant 3	State 3/5	40%< K5 ≤50%	50.00%	-3.01	3.00	23.50	20.49	No



			50%< K6 ≤60%	60.00%	-2.22	2.00	22.50	20.28	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	22.00	20.45	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	21.00	20.03	No
			80% <K9 ≤100%	100.00%	0.00	0	20.50	20.50	Yes
N41 PC2	Ant 3	State 2/4/6	0%≤ K1 ≤10%	10.00%	-10.00	10.00	25.50	15.50	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	23.00	16.01	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	21.50	16.27	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	20.00	16.02	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	19.50	16.49	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	18.50	16.28	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	18.00	16.45	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	17.00	16.03	No
			80% <K9 ≤100%	100.00%	0.00	0	16.50	16.50	Yes
N38	Ant 4	State 1/3/5	0%≤ K1 ≤10%	10.00%	-10.00	10.00	24.20	14.20	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	24.20	17.21	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	24.20	18.97	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.20	20.22	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.20	21.19	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	23.20	20.98	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	22.70	21.15	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	21.70	20.73	No
			80% <K9 ≤100%	100.00%	0.00	0	21.20	21.20	Yes
N38	Ant 4	State 2/4/6	0%≤ K1 ≤10%	10.00%	-10.00	10.00	24.20	14.20	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	24.20	17.21	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	24.20	18.97	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.20	20.22	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.20	21.19	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	24.20	21.98	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	24.20	22.65	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	24.20	23.23	No
			80% <K9 ≤100%	100.00%	0.00	0	24.20	24.20	Yes
N41 PC2	Ant 4	State 1/3/5	0%≤ K1 ≤10%	10.00%	-10.00	10.00	26.20	16.20	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	26.20	19.21	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	26.20	20.97	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	25.20	21.22	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.70	21.69	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	23.70	21.48	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	23.20	21.65	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	22.20	21.23	No
			80% <K9 ≤100%	100.00%	0.00	0	21.70	21.70	Yes
N41 PC2	Ant 4	State 2/4/6	0%≤ K1 ≤10%	10.00%	-10.00	10.00	26.20	16.20	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	26.20	19.21	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	26.20	20.97	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	26.20	22.22	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	26.20	23.19	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	26.20	23.98	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	26.20	24.65	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	26.20	25.23	No
			80% <K9 ≤100%	100.00%	0.00	0	26.20	26.20	Yes
N38	Ant 5	State 1/2/3/4/5	0%≤ K1 ≤10%	10.00%	-10.00	10.00	22.40	12.40	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	22.40	15.41	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	22.40	17.17	No



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			30%< K4 ≤40%	40.00%	-3.98	3.50	22.40	18.42	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	22.40	19.39	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	22.40	20.18	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	22.40	20.85	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	22.40	21.43	No
			80% <K9 ≤100%	100.00%	0.00	0	22.40	22.40	Yes
N41 PC2	Ant 5	State 1	0%≤ K1 ≤10%	10.00%	-10.00	10.00	24.30	14.30	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	24.30	17.31	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	24.30	19.07	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.30	20.32	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.30	21.29	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	24.30	22.08	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	24.30	22.75	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	23.30	22.33	No
			80% <K9 ≤100%	100.00%	0.00	0	22.80	22.80	Yes
N41 PC2	Ant 5	State 3/5	0%≤ K1 ≤10%	10.00%	-10.00	10.00	24.30	14.30	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	24.30	17.31	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	24.30	19.07	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.30	20.32	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.30	21.29	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	24.30	22.08	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	23.80	22.25	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	22.80	21.83	No
			80% <K9 ≤100%	100.00%	0.00	0	22.30	22.30	Yes
N41 PC2	Ant 5	State 2/4/6	0%≤ K1 ≤10%	10.00%	-10.00	10.00	24.30	14.30	No
			10%< K2 ≤20%	20.00%	-6.99	6.50	24.30	17.31	No
			20%< K3 ≤30%	30.00%	-5.23	5.00	24.30	19.07	No
			30%< K4 ≤40%	40.00%	-3.98	3.50	24.30	20.32	No
			40%< K5 ≤50%	50.00%	-3.01	3.00	24.30	21.29	No
			50%< K6 ≤60%	60.00%	-2.22	2.00	24.30	22.08	No
			60%< K7 ≤70%	70.00%	-1.55	1.50	24.30	22.75	No
			70%< K8 ≤80%	80.00%	-0.97	0.50	24.30	23.33	No
			80% <K9 ≤100%	100.00%	0.00	0	24.30	24.30	Yes



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8 Test Result

8.1 Measurement of RF conducted Power

The detailed conducted power can refer to Appendix E.

Note:

- 1) . For SAR the time based average power is relevant. The difference in between depends on the duty cycle of the TDMA signal:

No. of timeslots	1	2	3	4
Duty Cycle	1:8.3	1:4.15	1:2.77	1:2.075
Time based avg. power compared to slotted avg. power	-9.19	-6.18	-4.42	-3.17

- 2) . The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:

Frame-averaged power = 10 x log (Burst-averaged power mW x Slot used / 8

- 3) . When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used
- 4) . According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
- 5) . In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs.
- 6) . Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05.
- 7) . Conducted power measurement results of downlink LTE carrier aggregation are provided to quantify downlink only carrier aggregation SAR test exclusion per KDB 941225 D05A. Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive, therefore SAR evaluation with downlink carrier aggregation can be excluded.
- The possible downlink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.101 V15.4.0. The detailed conducted power measurement results of downlink LTE CA are provided in the SAR report per 3GPP TS 36.521-1 V14.4.0. According to KDB 941225 D05A, the downlink only carrier aggregation conditions for this device can be excluded from SAR testing.
- The conducted power measurement results of downlink LTE CA Conducted Power are as Appendix E conducted RF output power, so the downlink only carrier aggregation conditions for this device can be excluded from SAR testing
- 8) . For conducted power of WIFI must be measured at each transmit antenna port according to the DSSS and OFDM transmission configurations in each standalone and aggregated frequency band. For each transmission mode configuration, power must be measured for the highest and lowest channels; and at the mid-band channel(s) when there are at least 3 channels. For configurations with multiple mid-band channels, due to an even number of channels, both channels should be measured. Power measurement is required for the transmission mode configuration with the highest maximum output power specified for production units.
- 1) When the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured.



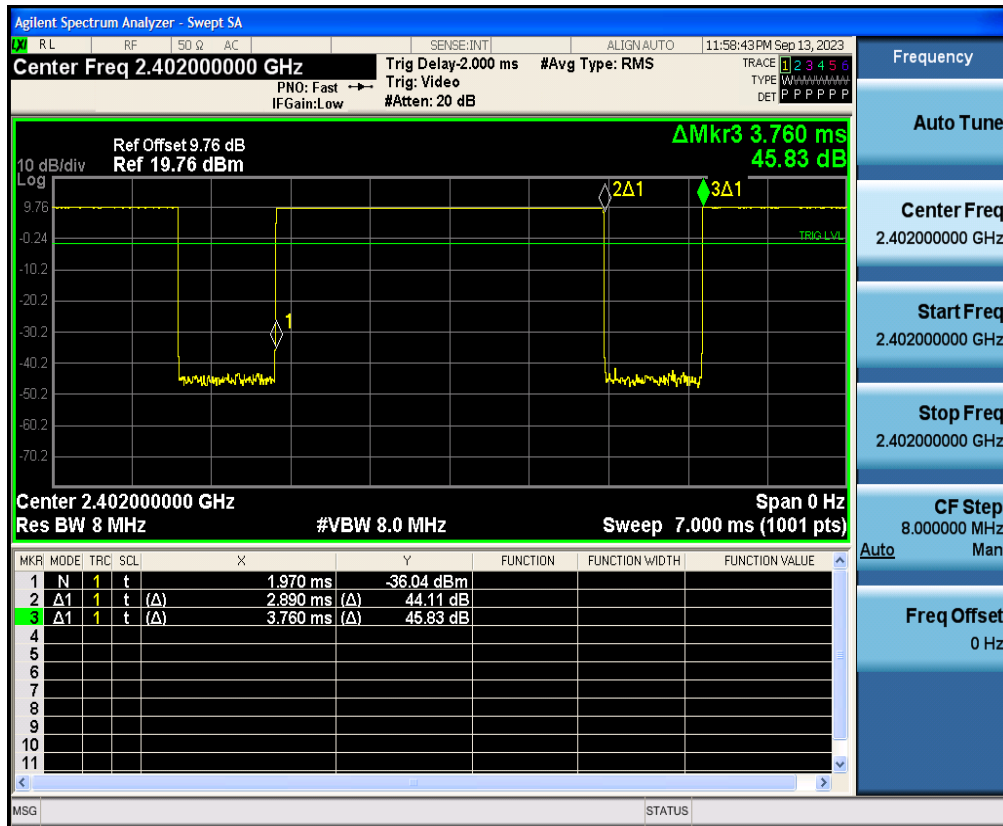
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- 2) When the same highest maximum output power is specified for multiple largest channel bandwidth configurations with the same lowest order modulation or lowest order modulation and lowest data rate, power measurement is required for all equivalent 802.11 configurations with the same maximum output power.
- 9) . The conducted power of BT is measured with RMS detector. BT DH5 Duty Cycle=2.89/3.76=76.86%



8.2 Measurement of SAR Data

Note:

- 1) The maximum Scaled SAR value is marked in bold. Graph results refer to Appendix B.
- 2) Per KDB447498 D04, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - $\leq 0.8 \text{ W/kg}$ for 1-g or 2.0 W/kg for 10-g respectively, when the transmission band is $\leq 100 \text{ MHz}$.
 - $\leq 0.6 \text{ W/kg}$ or 1.5 W/kg , for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
 - $\leq 0.4 \text{ W/kg}$ or 1.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\geq 200 \text{ MHz}$.

WiFi 2.4G:

- 1) When the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is $\leq 1.2 \text{ W/kg}$, SAR test for the other 802.11 modes are not required.

WiFi 5G:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is $\leq 1.2 \text{ W/kg}$, SAR is not required for U-NII-1 band for that configuration.
- 2) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.
- 3) When the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is $\leq 1.2 \text{ W/kg}$, SAR test for the other 802.11 modes are not required.



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8.2.1 SAR Result of GSM850

Ant 0 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	GPRS 4TS	190/836.6	1:2.075	0.105	-0.03	27.65	28.00	1.084	0.114	22.9
Left tilted	GPRS 4TS	190/836.6	1:2.075	0.049	0.05	27.65	28.00	1.084	0.053	22.9
Right cheek	GPRS 4TS	190/836.6	1:2.075	0.116	0.04	27.65	28.00	1.084	0.126	22.9
Right tilted	GPRS 4TS	190/836.6	1:2.075	0.057	-0.15	27.65	28.00	1.084	0.062	22.9
Body worn Test data(Separate 15mm) DSI1										
Front side	GPRS 4TS	190/836.6	1:2.075	0.109	0.10	27.65	28.00	1.084	0.118	22.9
Back side	GPRS 4TS	190/836.6	1:2.075	0.128	-0.07	27.65	28.00	1.084	0.139	22.9
Back side with Battery2	GPRS 4TS	190/836.6	1:2.075	0.124	-0.08	27.65	28.00	1.084	0.134	22.9
Hotspot Test data(Separate 10mm) DSI3										
Front side	GPRS 4TS	190/836.6	1:2.075	0.173	0.11	27.65	28.00	1.084	0.188	22.9
Back side	GPRS 4TS	190/836.6	1:2.075	0.213	-0.16	27.65	28.00	1.084	0.231	22.9
Back side with Battery2	GPRS 4TS	190/836.6	1:2.075	0.204	-0.03	27.65	28.00	1.084	0.221	22.9
Right side	GPRS 4TS	190/836.6	1:2.075	0.131	-0.02	27.65	28.00	1.084	0.142	22.9
Bottom side	GPRS 4TS	190/836.6	1:2.075	0.101	-0.12	27.65	28.00	1.084	0.109	22.9
Ant 1 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	GPRS 4TS	190/836.6	1:2.075	0.104	0.06	27.27	28.00	1.183	0.123	22.9
Left tilted	GPRS 4TS	190/836.6	1:2.075	0.092	0.04	27.27	28.00	1.183	0.108	22.9
Right cheek	GPRS 4TS	190/836.6	1:2.075	0.270	-0.02	27.27	28.00	1.183	0.319	22.9
Right cheek with Battery2	GPRS 4TS	190/836.6	1:2.075	0.251	-0.16	27.27	28.00	1.183	0.297	22.9
Right tilted	GPRS 4TS	190/836.6	1:2.075	0.239	0.01	27.27	28.00	1.183	0.283	22.9
Body worn Test data(Separate 15mm) DSI1										
Front side	GPRS 4TS	190/836.6	1:2.075	0.036	0.10	27.27	28.00	1.183	0.042	22.9
Back side	GPRS 4TS	190/836.6	1:2.075	0.071	0.16	27.27	28.00	1.183	0.084	22.9
Hotspot Test data(Separate 10mm) DSI3										
Front side	GPRS 4TS	190/836.6	1:2.075	0.062	0.18	27.27	28.00	1.183	0.073	22.9
Back side	GPRS 4TS	190/836.6	1:2.075	0.127	0.06	27.27	28.00	1.183	0.150	22.9
Left side	GPRS 4TS	190/836.6	1:2.075	0.036	0.02	27.27	28.00	1.183	0.043	22.9
Top side	GPRS 4TS	190/836.6	1:2.075	0.060	-0.04	27.27	28.00	1.183	0.071	22.9

Table 11: SAR of GSM850 for Head and Body.





8.2.2 SAR Result of GSM1900

Ant 3 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data DSI2										
Left cheek	GPRS 2TS	661/1880	1:4.15	0.247	-0.01	22.91	24.50	1.442	0.356	21.5
Left tilted	GPRS 2TS	661/1880	1:4.15	0.307	0.00	22.91	24.50	1.442	0.443	21.5
Right cheek	GPRS 2TS	661/1880	1:4.15	0.490	0.02	22.91	24.50	1.442	0.707	21.5
Right cheek with Battery2	GPRS 2TS	661/1880	1:4.15	0.485	0.01	22.91	24.50	1.442	0.699	21.5
Right tilted	GPRS 2TS	661/1880	1:4.15	0.458	0.00	22.91	24.50	1.442	0.660	21.5
Body worn Test data(Separate 15mm) DSI1										
Front side	GPRS 2TS	661/1880	1:4.15	0.113	0.06	27.22	28.00	1.197	0.135	21.5
Back side	GPRS 2TS	661/1880	1:4.15	0.193	-0.07	27.22	28.00	1.197	0.231	21.5
Hotspot Test data(Separate 10mm) DSI3										
Front side	GPRS 2TS	661/1880	1:4.15	0.226	0.06	27.22	28.00	1.197	0.270	21.5
Back side	GPRS 2TS	661/1880	1:4.15	0.352	-0.07	27.22	28.00	1.197	0.421	21.5
Left side	GPRS 2TS	661/1880	1:4.15	0.045	0.05	27.22	28.00	1.197	0.054	21.5
Top side	GPRS 2TS	661/1880	1:4.15	0.201	-0.19	27.22	28.00	1.197	0.241	21.5
Ant 4 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data DSI2										
Left cheek	GPRS 2TS	661/1880	1:4.15	0.078	0.13	27.85	28.50	1.161	0.090	21.5
Left tilted	GPRS 2TS	661/1880	1:4.15	0.061	0.02	27.85	28.50	1.161	0.070	21.5
Right cheek	GPRS 2TS	661/1880	1:4.15	0.084	-0.14	27.85	28.50	1.161	0.098	21.5
Right tilted	GPRS 2TS	661/1880	1:4.15	0.042	0.16	27.85	28.50	1.161	0.049	21.5
Body worn Test data(Separate 15mm) DSI1										
Front side	GPRS 2TS	661/1880	1:4.15	0.156	-0.11	27.85	28.50	1.161	0.181	21.5
Back side	GPRS 2TS	661/1880	1:4.15	0.229	-0.02	27.85	28.50	1.161	0.266	21.5
Back side with Battery2	GPRS 2TS	661/1880	1:4.15	0.218	0.08	27.85	28.50	1.161	0.253	21.5
Hotspot Test data(Separate 10mm) DSI3										
Front side	GPRS 2TS	661/1880	1:4.15	0.301	0.02	27.85	28.50	1.161	0.350	21.5
Back side	GPRS 2TS	661/1880	1:4.15	0.442	0.02	27.85	28.50	1.161	0.513	21.5
Left side	GPRS 2TS	661/1880	1:4.15	0.098	-0.01	27.85	28.50	1.161	0.114	21.5
Bottom side	GPRS 2TS	661/1880	1:4.15	0.705	-0.06	27.85	28.50	1.161	0.819	21.5
Bottom side with Battery2	GPRS 2TS	661/1880	1:4.15	0.611	-0.06	27.85	28.50	1.161	0.710	21.5
Bottom side	GPRS 2TS	512/1850.2	1:4.15	0.706	-0.08	27.88	28.50	1.153	0.814	21.5
Bottom side	GPRS 2TS	810/1909.8	1:4.15	0.678	-0.05	27.79	28.50	1.178	0.798	21.5
Ant 5 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data DSI2										
Left cheek	GPRS 2TS	661/1880	1:4.15	0.326	-0.01	26.21	27.00	1.199	0.391	21.5
Left tilted	GPRS 2TS	661/1880	1:4.15	0.084	-0.01	26.21	27.00	1.199	0.100	21.5
Right cheek	GPRS 2TS	661/1880	1:4.15	0.548	0.05	26.21	27.00	1.199	0.657	21.5
Right tilted	GPRS 2TS	661/1880	1:4.15	0.106	0.03	26.21	27.00	1.199	0.127	21.5
Body worn Test data(Separate 15mm) DSI1										
Front side	GPRS 2TS	661/1880	1:4.15	0.064	0.17	26.21	27.00	1.199	0.076	21.5
Back side	GPRS 2TS	661/1880	1:4.15	0.106	0.00	26.21	27.00	1.199	0.127	21.5
Hotspot Test data(Separate 10mm) DSI3										
Front side	GPRS 2TS	661/1880	1:4.15	0.148	0.19	26.21	27.00	1.199	0.178	21.5
Back side	GPRS 2TS	661/1880	1:4.15	0.258	-0.18	26.21	27.00	1.199	0.309	21.5
Left side	GPRS 2TS	661/1880	1:4.15	0.335	-0.05	26.21	27.00	1.199	0.402	21.5

Table 12: SAR of GSM1900 for Head and Body.



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8.2.3 SAR Result of WCDMA Band II

Ant 3 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	RMC	9400/1880	1:1	0.330	0.01	17.05	17.80	1.189	0.392	21.3
Left tilted	RMC	9400/1880	1:1	0.425	0.07	17.05	17.80	1.189	0.505	21.3
Right cheek	RMC	9400/1880	1:1	0.649	0.04	17.05	17.80	1.189	0.771	21.3
Right tilted	RMC	9400/1880	1:1	0.573	0.12	17.05	17.80	1.189	0.681	21.3
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	9400/1880	1:1	0.103	0.02	19.54	19.80	1.062	0.109	21.3
Back side	RMC	9400/1880	1:1	0.141	0.08	19.54	19.80	1.062	0.150	21.3
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	9400/1880	1:1	0.166	0.06	18.79	19.30	1.125	0.187	21.3
Back side	RMC	9400/1880	1:1	0.254	0.05	18.79	19.30	1.125	0.286	21.3
Left side	RMC	9400/1880	1:1	0.119	0.08	18.79	19.30	1.125	0.134	21.3
Top side	RMC	9400/1880	1:1	0.387	-0.16	18.79	19.30	1.125	0.435	21.3
Ant 4 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	RMC	9400/1880	1:1	0.053	0.09	24.35	24.80	1.109	0.058	21.3
Left tilted	RMC	9400/1880	1:1	0.049	0.05	24.35	24.80	1.109	0.054	21.3
Right cheek	RMC	9400/1880	1:1	0.074	0.03	24.35	24.80	1.109	0.082	21.3
Right tilted	RMC	9400/1880	1:1	0.037	-0.07	24.35	24.80	1.109	0.041	21.3
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	9400/1880	1:1	0.141	-0.03	20.54	20.80	1.062	0.150	21.3
Back side	RMC	9400/1880	1:1	0.211	0.03	20.54	20.80	1.062	0.224	21.3
Back side with Battery2	RMC	9400/1880	1:1	0.178	0.09	20.54	20.80	1.062	0.189	21.3
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	9400/1880	1:1	0.242	0.11	20.06	20.30	1.057	0.256	21.3
Back side	RMC	9400/1880	1:1	0.350	0.07	20.06	20.30	1.057	0.370	21.3
Left side	RMC	9400/1880	1:1	0.082	-0.03	20.06	20.30	1.057	0.086	21.3
Bottom side	RMC	9400/1880	1:1	0.548	-0.03	20.06	20.30	1.057	0.579	21.3
Bottom side with Battery2	RMC	9400/1880	1:1	0.479	-0.14	20.06	20.30	1.057	0.506	21.3
Ant 5 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	RMC	9400/1880	1:1	0.342	0.04	20.46	21.30	1.213	0.415	21.3
Left tilted	RMC	9400/1880	1:1	0.072	0.02	20.46	21.30	1.213	0.087	21.3
Right cheek	RMC	9400/1880	1:1	0.645	0.06	20.46	21.30	1.213	0.783	21.3
Right cheek with Battery2	RMC	9400/1880	1:1	0.644	0.03	20.46	21.30	1.213	0.781	21.3
Right tilted	RMC	9400/1880	1:1	0.108	-0.16	20.46	21.30	1.213	0.131	21.3
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	9400/1880	1:1	0.076	-0.04	20.36	21.30	1.242	0.094	21.3
Back side	RMC	9400/1880	1:1	0.113	-0.07	20.36	21.30	1.242	0.140	21.3
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	9400/1880	1:1	0.122	0.01	19.69	20.80	1.291	0.158	21.3
Back side	RMC	9400/1880	1:1	0.218	-0.17	19.69	20.80	1.291	0.281	21.3
Left side	RMC	9400/1880	1:1	0.357	-0.11	19.69	20.80	1.291	0.461	21.3

Table 13: SAR of WCDMA Band II for Head and Body.



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8.2.4 SAR Result of WCDMA Band IV

Ant 3 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data DSI2										
Left cheek	RMC	1412/1732.4	1:1	0.348	0.03	17.28	17.80	1.127	0.392	21.3
Left tilted	RMC	1412/1732.4	1:1	0.433	0.04	17.28	17.80	1.127	0.488	21.3
Right cheek	RMC	1412/1732.4	1:1	0.712	0.01	17.28	17.80	1.127	0.803	21.3
Right cheek	RMC	1312/1712.4	1:1	0.634	0.01	17.40	17.80	1.096	0.695	21.3
Right cheek	RMC	1513/1752.6	1:1	0.772	0.00	17.28	17.80	1.127	0.870	21.3
Right cheek with Battery2	RMC	1513/1752.6	1:1	0.747	-0.04	17.28	17.80	1.127	0.842	21.3
Right tilted	RMC	1412/1732.4	1:1	0.565	-0.02	17.28	17.80	1.127	0.637	21.3
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	1412/1732.4	1:1	0.131	0.05	20.25	20.80	1.135	0.149	21.3
Back side	RMC	1412/1732.4	1:1	0.197	0.19	20.25	20.80	1.135	0.224	21.3
Back side with Battery2	RMC	1412/1732.4	1:1	0.196	-0.02	20.25	20.80	1.135	0.222	21.3
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	1412/1732.4	1:1	0.197	0.12	19.47	20.30	1.211	0.238	21.3
Back side	RMC	1412/1732.4	1:1	0.292	0.17	19.47	20.30	1.211	0.353	21.3
Left side	RMC	1412/1732.4	1:1	0.094	-0.02	19.47	20.30	1.211	0.114	21.3
Top side	RMC	1412/1732.4	1:1	0.452	-0.15	19.47	20.30	1.211	0.547	21.3
Top side with Battery2	RMC	1412/1732.4	1:1	0.400	-0.08	19.47	20.30	1.211	0.484	21.3
Ant 4 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data DSI2										
Left cheek	RMC	1412/1732.4	1:1	0.041	0.04	24.29	24.80	1.125	0.046	21.3
Left tilted	RMC	1412/1732.4	1:1	0.039	0.13	24.29	24.80	1.125	0.044	21.3
Right cheek	RMC	1412/1732.4	1:1	0.055	0.03	24.29	24.80	1.125	0.062	21.3
Right tilted	RMC	1412/1732.4	1:1	0.022	0.06	24.29	24.80	1.125	0.024	21.3
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	1412/1732.4	1:1	0.129	0.09	20.92	21.30	1.091	0.141	21.3
Back side	RMC	1412/1732.4	1:1	0.180	0.07	20.92	21.30	1.091	0.196	21.3
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	1412/1732.4	1:1	0.220	0.01	20.34	20.80	1.112	0.245	21.3
Back side	RMC	1412/1732.4	1:1	0.310	0.08	20.34	20.80	1.112	0.345	21.3
Left side	RMC	1412/1732.4	1:1	0.089	-0.01	20.34	20.80	1.112	0.099	21.3
Bottom side	RMC	1412/1732.4	1:1	0.446	-0.04	20.34	20.80	1.112	0.496	21.3
Ant 5 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data DSI2										
Left cheek	RMC	1412/1732.4	1:1	0.213	0.14	22.96	23.80	1.213	0.258	21.3
Left tilted	RMC	1412/1732.4	1:1	0.039	0.17	22.96	23.80	1.213	0.047	21.3
Right cheek	RMC	1412/1732.4	1:1	0.366	0.09	22.96	23.80	1.213	0.444	21.3
Right tilted	RMC	1412/1732.4	1:1	0.073	0.02	22.96	23.80	1.213	0.088	21.3
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	1412/1732.4	1:1	0.051	0.04	22.37	23.30	1.239	0.063	21.3
Back side	RMC	1412/1732.4	1:1	0.086	0.07	22.37	23.30	1.239	0.107	21.3
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	1412/1732.4	1:1	0.072	0.01	21.78	22.80	1.265	0.091	21.3
Back side	RMC	1412/1732.4	1:1	0.140	0.17	21.78	22.80	1.265	0.177	21.3
Left side	RMC	1412/1732.4	1:1	0.214	-0.12	21.78	22.80	1.265	0.271	21.3

Table 14: SAR of WCDMA Band IV for Head and Body.



8.2.5 SAR Result of WCDMA Band V

Ant 0 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	RMC	4182/836.4	1:1	0.115	0.08	23.78	24.30	1.127	0.130	22.9
Left tilted	RMC	4182/836.4	1:1	0.055	0.05	23.78	24.30	1.127	0.062	22.9
Right cheek	RMC	4182/836.4	1:1	0.127	0.06	23.78	24.30	1.127	0.143	22.9
Right tilted	RMC	4182/836.4	1:1	0.066	0.01	23.78	24.30	1.127	0.074	22.9
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	4182/836.4	1:1	0.113	0.01	23.78	24.30	1.127	0.127	22.9
Back side	RMC	4182/836.4	1:1	0.134	-0.13	23.78	24.30	1.127	0.151	22.9
Back side with Battery2	RMC	4182/836.4	1:1	0.134	-0.02	23.78	24.30	1.127	0.151	22.9
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	4182/836.4	1:1	0.184	0.08	23.78	24.30	1.127	0.207	22.9
Back side	RMC	4182/836.4	1:1	0.231	-0.02	23.78	24.30	1.127	0.260	22.9
Back side with Battery2	RMC	4182/836.4	1:1	0.228	-0.03	23.78	24.30	1.127	0.257	22.9
Right side	RMC	4182/836.4	1:1	0.113	-0.16	23.78	24.30	1.127	0.127	22.9
Bottom side	RMC	4182/836.4	1:1	0.109	-0.02	23.78	24.30	1.127	0.123	22.9
Ant 1 Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data DSI2										
Left cheek	RMC	4182/836.4	1:1	0.140	0.04	24.37	24.80	1.104	0.155	22.9
Left tilted	RMC	4182/836.4	1:1	0.104	0.09	24.37	24.80	1.104	0.115	22.9
Right cheek	RMC	4182/836.4	1:1	0.341	0.03	24.37	24.80	1.104	0.376	22.9
Right cheek with Battery2	RMC	4182/836.4	1:1	0.320	0.03	24.37	24.80	1.104	0.353	22.9
Right tilted	RMC	4182/836.4	1:1	0.225	-0.01	24.37	24.80	1.104	0.248	22.9
Body worn Test data(Separate 15mm) DSI1										
Front side	RMC	4182/836.4	1:1	0.048	0.05	24.37	24.80	1.104	0.053	22.9
Back side	RMC	4182/836.4	1:1	0.092	0.16	24.37	24.80	1.104	0.101	22.9
Hotspot Test data(Separate 10mm) DSI3										
Front side	RMC	4182/836.4	1:1	0.073	0.08	24.37	24.80	1.104	0.080	22.9
Back side	RMC	4182/836.4	1:1	0.154	0.01	24.37	24.80	1.104	0.170	22.9
Left side	RMC	4182/836.4	1:1	0.046	-0.04	24.37	24.80	1.104	0.050	22.9
Top side	RMC	4182/836.4	1:1	0.080	-0.11	24.37	24.80	1.104	0.088	22.9

Table 15: SAR of WCDMA Band V for Head and Body.



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8.2.6 SAR Result of LTE Band 2

Ant 3 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 0	18900/1880	1:1	0.344	0.03	17.37	17.80	1.104	0.380	23.5
Left tilted	20	QPSK 1 0	18900/1880	1:1	0.420	0.02	17.37	17.80	1.104	0.464	23.5
Right cheek	20	QPSK 1 0	18900/1880	1:1	0.671	0.05	17.37	17.80	1.104	0.741	23.5
Right tilted	20	QPSK 1 0	18900/1880	1:1	0.577	-0.10	17.37	17.80	1.104	0.637	23.5
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 25	18900/1880	1:1	0.354	0.05	17.34	17.80	1.112	0.394	23.5
Left tilted	20	QPSK 50 25	18900/1880	1:1	0.424	-0.01	17.34	17.80	1.112	0.471	23.5
Right cheek	20	QPSK 50 25	18900/1880	1:1	0.682	0.02	17.34	17.80	1.112	0.758	23.5
Right cheek with Battery2	20	QPSK 50 25	18900/1880	1:1	0.628	0.04	17.34	17.80	1.112	0.698	23.5
Right tilted	20	QPSK 50 25	18900/1880	1:1	0.600	0.11	17.34	17.80	1.112	0.667	23.5
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 0	18900/1880	1:1	0.117	0.04	19.56	20.30	1.186	0.139	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.180	0.03	19.56	20.30	1.186	0.213	23.5
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	18900/1880	1:1	0.121	-0.02	19.56	20.30	1.186	0.143	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.184	0.03	19.56	20.30	1.186	0.218	23.5
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 0	18900/1880	1:1	0.208	0.02	18.93	19.80	1.222	0.254	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.235	0.10	18.93	19.80	1.222	0.287	23.5
Left side	20	QPSK 1 0	18900/1880	1:1	0.099	-0.02	18.93	19.80	1.222	0.121	23.5
Top side	20	QPSK 1 0	18900/1880	1:1	0.400	-0.01	18.93	19.80	1.222	0.489	23.5
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	18900/1880	1:1	0.213	0.13	18.97	19.80	1.211	0.258	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.238	0.13	18.97	19.80	1.211	0.288	23.5
Left side	20	QPSK 50 0	18900/1880	1:1	0.102	-0.02	18.97	19.80	1.211	0.123	23.5
Top side	20	QPSK 50 0	18900/1880	1:1	0.369	-0.08	18.97	19.80	1.211	0.447	23.5
Ant 4 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	18700/1860	1:1	0.112	0.02	23.84	24.30	1.112	0.125	23.5
Left tilted	20	QPSK 1 50	18700/1860	1:1	0.110	0.03	23.84	24.30	1.112	0.122	23.5
Right cheek	20	QPSK 1 50	18700/1860	1:1	0.151	0.03	23.84	24.30	1.112	0.168	23.5
Right tilted	20	QPSK 1 50	18700/1860	1:1	0.071	0.08	23.84	24.30	1.112	0.079	23.5
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 0	18700/1860	1:1	0.088	0.04	22.84	23.30	1.112	0.098	23.5
Left tilted	20	QPSK 50 0	18700/1860	1:1	0.089	-0.03	22.84	23.30	1.112	0.098	23.5
Right cheek	20	QPSK 50 0	18700/1860	1:1	0.118	0.06	22.84	23.30	1.112	0.131	23.5
Right tilted	20	QPSK 50 0	18700/1860	1:1	0.060	0.07	22.84	23.30	1.112	0.067	23.5
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 0	18900/1880	1:1	0.145	0.03	20.80	21.30	1.122	0.163	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.224	0.06	20.80	21.30	1.122	0.251	23.5
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	18900/1880	1:1	0.156	0.03	20.64	21.30	1.164	0.182	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.228	0.13	20.64	21.30	1.164	0.265	23.5
Back side with Battery2	20	QPSK 50 0	18900/1880	1:1	0.185	0.17	20.64	21.30	1.164	0.215	23.5
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 0	18900/1880	1:1	0.239	0.03	20.07	20.80	1.183	0.283	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.344	-0.06	20.07	20.80	1.183	0.407	23.5
Left side	20	QPSK 1 0	18900/1880	1:1	0.104	-0.04	20.07	20.80	1.183	0.123	23.5
Bottom side	20	QPSK 1 0	18900/1880	1:1	0.570	-0.07	20.07	20.80	1.183	0.674	23.5
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	18900/1880	1:1	0.241	-0.06	20.06	20.80	1.186	0.286	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.351	0.06	20.06	20.80	1.186	0.416	23.5



Left side	20	QPSK 50 0	18900/1880	1:1	0.107	-0.05	20.06	20.80	1.186	0.127	23.5
Bottom side	20	QPSK 50 0	18900/1880	1:1	0.569	-0.07	20.06	20.80	1.186	0.675	23.5
Bottom side with Battery2	20	QPSK 50 0	18900/1880	1:1	0.477	0.07	20.06	20.80	1.186	0.566	23.5
Ant 5 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 0	18700/1860	1:1	0.257	0.14	19.81	20.30	1.119	0.288	23.5
Left tilted	20	QPSK 1 0	18700/1860	1:1	0.065	0.01	19.81	20.30	1.119	0.073	23.5
Right cheek	20	QPSK 1 0	18700/1860	1:1	0.507	0.07	19.81	20.30	1.119	0.568	23.5
Right tilted	20	QPSK 1 0	18700/1860	1:1	0.077	0.01	19.81	20.30	1.119	0.087	23.5
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 0	18900/1880	1:1	0.305	0.01	19.80	20.30	1.122	0.342	23.5
Left tilted	20	QPSK 50 0	18900/1880	1:1	0.080	0.17	19.80	20.30	1.122	0.089	23.5
Right cheek	20	QPSK 50 0	18900/1880	1:1	0.603	0.07	19.80	20.30	1.122	0.677	23.5
Right tilted	20	QPSK 50 0	18900/1880	1:1	0.094	0.09	19.80	20.30	1.122	0.106	23.5
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 0	18700/1860	1:1	0.048	0.02	19.70	20.30	1.148	0.055	23.5
Back side	20	QPSK 1 0	18700/1860	1:1	0.090	-0.19	19.70	20.30	1.148	0.103	23.5
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 0	18900/1880	1:1	0.056	0.03	19.66	20.30	1.159	0.065	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.108	0.18	19.66	20.30	1.159	0.125	23.5
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 0	18700/1860	1:1	0.117	0.06	19.22	19.80	1.143	0.134	23.5
Back side	20	QPSK 1 0	18700/1860	1:1	0.188	-0.17	19.22	19.80	1.143	0.215	23.5
Left side	20	QPSK 1 0	18700/1860	1:1	0.299	-0.04	19.22	19.80	1.143	0.342	23.5
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 0	18900/1880	1:1	0.139	0.07	19.21	19.80	1.146	0.159	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.221	0.06	19.21	19.80	1.146	0.253	23.5
Left side	20	QPSK 50 0	18900/1880	1:1	0.346	-0.03	19.21	19.80	1.146	0.396	23.5
ENDC LTE Band 2 SAR Test Record											
Ant 3 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12*											
Left cheek	20	QPSK 1 0	18900/1880	1:1	0.344	0.03	17.17	15.80	0.729	0.251	23.5
Left tilted	20	QPSK 1 0	18900/1880	1:1	0.420	0.02	17.17	15.80	0.729	0.306	23.5
Right cheek	20	QPSK 1 0	18900/1880	1:1	0.671	0.05	17.17	15.80	0.729	0.489	23.5
Right tilted	20	QPSK 1 0	18900/1880	1:1	0.577	-0.10	17.17	15.80	0.729	0.421	23.5
Head Test Data (50%RB) DS12*											
Left cheek	20	QPSK 50 25	18900/1880	1:1	0.354	0.05	17.14	15.80	0.735	0.260	23.5
Left tilted	20	QPSK 50 25	18900/1880	1:1	0.424	-0.01	17.14	15.80	0.735	0.311	23.5
Right cheek	20	QPSK 50 25	18900/1880	1:1	0.682	0.02	17.14	15.80	0.735	0.501	23.5
Right tilted	20	QPSK 50 25	18900/1880	1:1	0.600	0.11	17.14	15.80	0.735	0.441	23.5
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	20	QPSK 1 0	18900/1880	1:1	0.117	0.04	19.56	17.80	0.667	0.078	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.180	0.03	19.56	17.80	0.667	0.120	23.5
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	20	QPSK 50 0	18900/1880	1:1	0.121	-0.02	19.56	17.80	0.667	0.081	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.184	0.03	19.56	17.80	0.667	0.123	23.5
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	20	QPSK 1 0	18900/1880	1:1	0.208	0.02	18.93	16.80	0.612	0.127	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.235	0.10	18.93	16.80	0.612	0.144	23.5
Left side	20	QPSK 1 0	18900/1880	1:1	0.099	-0.02	18.93	16.80	0.612	0.060	23.5
Top side	20	QPSK 1 0	18900/1880	1:1	0.400	-0.01	18.93	16.80	0.612	0.245	23.5
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	20	QPSK 50 0	18900/1880	1:1	0.213	0.13	18.97	16.80	0.607	0.129	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.238	0.13	18.97	16.80	0.607	0.144	23.5
Left side	20	QPSK 50 0	18900/1880	1:1	0.102	-0.02	18.97	16.80	0.607	0.062	23.5
Top side	20	QPSK 50 0	18900/1880	1:1	0.369	-0.08	18.97	16.80	0.607	0.224	23.5
Ant 4 Test Record											



Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12*											
Left cheek	20	QPSK 1 50	18700/1860	1:1	0.112	0.02	23.84	24.30	1.112	0.125	23.5
Left tilted	20	QPSK 1 50	18700/1860	1:1	0.110	0.03	23.84	24.30	1.112	0.122	23.5
Right cheek	20	QPSK 1 50	18700/1860	1:1	0.151	0.03	23.84	24.30	1.112	0.168	23.5
Right tilted	20	QPSK 1 50	18700/1860	1:1	0.071	0.08	23.84	24.30	1.112	0.079	23.5
Head Test Data (50%RB) DS12*											
Left cheek	20	QPSK 50 0	18700/1860	1:1	0.088	0.04	22.84	23.30	1.112	0.098	23.5
Left tilted	20	QPSK 50 0	18700/1860	1:1	0.089	-0.03	22.84	23.30	1.112	0.098	23.5
Right cheek	20	QPSK 50 0	18700/1860	1:1	0.118	0.06	22.84	23.30	1.112	0.131	23.5
Right tilted	20	QPSK 50 0	18700/1860	1:1	0.060	0.07	22.84	23.30	1.112	0.067	23.5
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	20	QPSK 1 0	18900/1880	1:1	0.145	0.03	20.80	18.80	0.631	0.091	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.224	0.06	20.80	18.80	0.631	0.141	23.5
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	20	QPSK 50 0	18900/1880	1:1	0.156	0.03	20.64	18.80	0.655	0.102	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.228	0.13	20.64	18.80	0.655	0.149	23.5
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	20	QPSK 1 0	18900/1880	1:1	0.239	0.03	20.07	17.80	0.593	0.142	23.5
Back side	20	QPSK 1 0	18900/1880	1:1	0.344	-0.06	20.07	17.80	0.593	0.204	23.5
Left side	20	QPSK 1 0	18900/1880	1:1	0.104	-0.04	20.07	17.80	0.593	0.062	23.5
Bottom side	20	QPSK 1 0	18900/1880	1:1	0.570	-0.07	20.07	17.80	0.593	0.338	23.5
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	20	QPSK 50 0	18900/1880	1:1	0.241	-0.06	20.06	17.80	0.594	0.143	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.351	0.06	20.06	17.80	0.594	0.209	23.5
Left side	20	QPSK 50 0	18900/1880	1:1	0.107	-0.05	20.06	17.80	0.594	0.064	23.5
Bottom side	20	QPSK 50 0	18900/1880	1:1	0.569	-0.07	20.06	17.80	0.594	0.338	23.5
Ant 5 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12*											
Left cheek	20	QPSK 1 0	18700/1860	1:1	0.257	0.14	19.81	18.80	0.793	0.204	23.5
Left tilted	20	QPSK 1 0	18700/1860	1:1	0.065	0.01	19.81	18.80	0.793	0.052	23.5
Right cheek	20	QPSK 1 0	18700/1860	1:1	0.507	0.07	19.81	18.80	0.793	0.402	23.5
Right tilted	20	QPSK 1 0	18700/1860	1:1	0.077	0.01	19.81	18.80	0.793	0.061	23.5
Head Test Data (50%RB) DS12*											
Left cheek	20	QPSK 50 0	18900/1880	1:1	0.305	0.01	19.80	18.80	0.794	0.242	23.5
Left tilted	20	QPSK 50 0	18900/1880	1:1	0.080	0.17	19.80	18.80	0.794	0.063	23.5
Right cheek	20	QPSK 50 0	18900/1880	1:1	0.603	0.07	19.80	18.80	0.794	0.479	23.5
Right tilted	20	QPSK 50 0	18900/1880	1:1	0.094	0.09	19.80	18.80	0.794	0.075	23.5
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	20	QPSK 1 0	18700/1860	1:1	0.048	0.02	19.70	17.80	0.646	0.031	23.5
Back side	20	QPSK 1 0	18700/1860	1:1	0.090	-0.19	19.70	17.80	0.646	0.058	23.5
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	20	QPSK 50 0	18900/1880	1:1	0.056	0.03	19.66	17.80	0.652	0.037	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.108	0.18	19.66	17.80	0.652	0.070	23.5
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	20	QPSK 1 0	18700/1860	1:1	0.117	0.06	19.22	16.80	0.573	0.067	23.5
Back side	20	QPSK 1 0	18700/1860	1:1	0.188	-0.17	19.22	16.80	0.573	0.108	23.5
Left side	20	QPSK 1 0	18700/1860	1:1	0.299	-0.04	19.22	16.80	0.573	0.171	23.5
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	20	QPSK 50 0	18900/1880	1:1	0.139	0.07	19.21	16.80	0.574	0.080	23.5
Back side	20	QPSK 50 0	18900/1880	1:1	0.221	0.06	19.21	16.80	0.574	0.127	23.5
Left side	20	QPSK 50 0	18900/1880	1:1	0.346	-0.03	19.21	16.80	0.574	0.199	23.5

Table 16: SAR of LTE Band 2 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.



8.2.7 SAR Result of LTE Band 7

Ant 3 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 0	21100/2535	1:1	0.450	-0.02	16.19	16.80	1.151	0.518	22.3
Left tilted	20	QPSK 1 0	21100/2535	1:1	0.575	0.00	16.19	16.80	1.151	0.662	22.3
Right cheek	20	QPSK 1 0	21100/2535	1:1	0.725	-0.15	16.19	16.80	1.151	0.834	22.3
Right cheek	20	QPSK 1 0	20850/2510	1:1	0.670	0.04	16.07	16.80	1.183	0.793	22.3
Right cheek	20	QPSK 1 0	21350/2560	1:1	0.736	0.01	16.09	16.80	1.178	0.867	22.3
Right cheek with Battery2	20	QPSK 1 0	21350/2560	1:1	0.649	-0.01	16.09	16.80	1.178	0.764	22.3
Right tilted	20	QPSK 1 0	21100/2535	1:1	0.606	-0.01	16.19	16.80	1.151	0.697	22.3
Right cheek	20	PCC 1 0 SCC 0 0	21350/2560 21152/2540.2	1:1	0.708	-0.04	15.55	16.30	1.189	0.841	22.3
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 0	21100/2535	1:1	0.487	0.03	16.18	16.80	1.153	0.562	22.3
Left tilted	20	QPSK 50 0	21100/2535	1:1	0.622	0.15	16.18	16.80	1.153	0.717	22.3
Right cheek	20	QPSK 50 0	21100/2535	1:1	0.723	0.04	16.18	16.80	1.153	0.834	22.3
Right cheek	20	QPSK 50 0	20850/2510	1:1	0.710	0.02	16.15	16.80	1.161	0.825	22.3
Right cheek	20	QPSK 50 0	21350/2560	1:1	0.715	0.02	16.14	16.80	1.164	0.832	22.3
Right tilted	20	QPSK 50 0	21100/2535	1:1	0.619	-0.03	16.18	16.80	1.153	0.714	22.3
Head Test Data (100%RB) DSI2											
Right cheek	20	QPSK 100 0	21100/2535	1:1	0.732	0.04	16.11	16.80	1.172	0.858	22.3
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 0	21100/2535	1:1	0.136	-0.04	19.10	19.80	1.175	0.160	22.3
Back side	20	QPSK 1 0	21100/2535	1:1	0.288	-0.02	19.10	19.80	1.175	0.338	22.3
Back side with Battery2	20	QPSK 1 0	21100/2535	1:1	0.222	-0.04	19.10	19.80	1.175	0.261	22.3
Back side	20	PCC 1 99 SCC 0 0	21100/2535 21298/2554.8	1:1	0.273	0.02	18.40	19.30	1.230	0.336	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	21100/2535	1:1	0.128	-0.05	19.09	19.80	1.178	0.151	22.3
Back side	20	QPSK 50 0	21100/2535	1:1	0.278	-0.03	19.09	19.80	1.178	0.327	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 0	21100/2535	1:1	0.098	0.05	18.62	19.30	1.169	0.114	22.3
Back side	20	QPSK 1 0	21100/2535	1:1	0.199	-0.05	18.62	19.30	1.169	0.233	22.3
Left side	20	QPSK 1 0	21100/2535	1:1	0.097	0.01	18.62	19.30	1.169	0.114	22.3
Top side	20	QPSK 1 0	21100/2535	1:1	0.462	-0.05	18.62	19.30	1.169	0.540	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	21100/2535	1:1	0.103	0.01	18.58	19.30	1.180	0.122	22.3
Back side	20	QPSK 50 0	21100/2535	1:1	0.207	0.06	18.58	19.30	1.180	0.244	22.3
Left side	20	QPSK 50 0	21100/2535	1:1	0.102	-0.02	18.58	19.30	1.180	0.120	22.3
Top side	20	QPSK 50 0	21100/2535	1:1	0.486	-0.03	18.58	19.30	1.180	0.574	22.3
Top side	20	PCC 1 99 SCC 0 0	21100/2535 21298/2554.8	1:1	0.447	-0.01	17.80	18.00	1.047	0.468	22.3
Ant 4 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 0	21100/2535	1:1	0.121	0.18	24.03	24.30	1.064	0.129	22.5
Left tilted	20	QPSK 1 0	21100/2535	1:1	0.054	0.09	24.03	24.30	1.064	0.057	22.5
Right cheek	20	QPSK 1 0	21100/2535	1:1	0.112	-0.03	24.03	24.30	1.064	0.119	22.5
Right tilted	20	QPSK 1 0	21100/2535	1:1	0.122	-0.04	24.03	24.30	1.064	0.130	22.5
Right tilted	20	PCC 1 99 SCC 0 0	21100/2535 21298/2554.8	1:1	0.108	-0.01	23.58	23.80	1.052	0.114	22.5
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 0	21100/2535	1:1	0.096	0.06	23.07	23.30	1.054	0.101	22.5
Left tilted	20	QPSK 50 0	21100/2535	1:1	0.042	0.09	23.07	23.30	1.054	0.044	22.5
Right cheek	20	QPSK 50 0	21100/2535	1:1	0.090	0.03	23.07	23.30	1.054	0.095	22.5
Right tilted	20	QPSK 50 0	21100/2535	1:1	0.092	0.07	23.07	23.30	1.054	0.097	22.5



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Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 0	21100/2535	1:1	0.126	0.02	20.58	20.80	1.052	0.133	22.5
Back side	20	QPSK 1 0	21100/2535	1:1	0.176	0.05	20.58	20.80	1.052	0.185	22.5
Back side	20	PCC 1 99	21100/2535	1:1	0.155	-0.06	19.73	20.30	1.140	0.177	22.5
		SCC 0 0	21298/2554.8								
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 0	20850/2510	1:1	0.108	-0.02	20.55	20.80	1.059	0.114	22.5
Back side	20	QPSK 50 0	20850/2510	1:1	0.136	0.07	20.55	20.80	1.059	0.144	22.5
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 0	21100/2535	1:1	0.169	0.08	19.81	20.30	1.119	0.189	22.5
Back side	20	QPSK 1 0	21100/2535	1:1	0.189	-0.19	19.81	20.30	1.119	0.212	22.5
Left side	20	QPSK 1 0	21100/2535	1:1	0.065	0.01	19.81	20.30	1.119	0.073	22.5
Bottom side	20	QPSK 1 0	21100/2535	1:1	0.402	-0.06	19.81	20.30	1.119	0.450	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 0	21350/2560	1:1	0.182	0.01	19.73	20.30	1.140	0.208	22.5
Back side	20	QPSK 50 0	21350/2560	1:1	0.220	0.11	19.73	20.30	1.140	0.251	22.5
Left side	20	QPSK 50 0	21350/2560	1:1	0.067	0.03	19.73	20.30	1.140	0.076	22.5
Bottom side	20	QPSK 50 0	21350/2560	1:1	0.544	-0.05	19.73	20.30	1.140	0.620	22.5
Bottom side with Battery2	20	QPSK 50 0	21350/2560	1:1	0.487	-0.13	19.73	20.30	1.140	0.555	22.5
Bottom side	20	PCC 1 0	21350/2560	1:1	0.419	-0.03	18.96	19.80	1.213	0.508	22.5
		SCC 0 0	21152/2540.2								
Ant 5 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 50	20850/2510	1:1	0.381	-0.07	22.50	22.80	1.072	0.408	22.8
Left tilted	20	QPSK 1 50	20850/2510	1:1	0.079	-0.10	22.50	22.80	1.072	0.084	22.8
Right cheek	20	QPSK 1 50	20850/2510	1:1	0.686	-0.07	22.50	22.80	1.072	0.735	22.8
Right tilted	20	QPSK 1 50	20850/2510	1:1	0.111	0.01	22.50	22.80	1.072	0.119	22.8
Right cheek	20	PCC 1 99	20850/2510	1:1	0.563	-0.12	22.13	22.30	1.040	0.585	22.8
		SCC 0 0	21048/2529.8								
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 25	21100/2535	1:1	0.270	-0.07	21.53	21.80	1.064	0.287	22.8
Left tilted	20	QPSK 50 25	21100/2535	1:1	0.048	0.11	21.53	21.80	1.064	0.051	22.8
Right cheek	20	QPSK 50 25	21100/2535	1:1	0.560	0.01	21.53	21.80	1.064	0.596	22.8
Right tilted	20	QPSK 50 25	21100/2535	1:1	0.084	-0.12	21.53	21.80	1.064	0.090	22.8
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 0	21100/2535	1:1	0.043	0.01	19.91	20.30	1.094	0.047	22.8
Back side	20	QPSK 1 0	21100/2535	1:1	0.049	-0.05	19.91	20.30	1.094	0.054	22.8
Back side	20	PCC 1 99	21100/2535	1:1	0.047	-0.04	19.22	19.80	1.143	0.053	22.8
		SCC 0 0	21298/2554.8								
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 0	21100/2535	1:1	0.042	-0.01	19.88	20.30	1.102	0.046	22.8
Back side	20	QPSK 50 0	21100/2535	1:1	0.050	0.02	19.88	20.30	1.102	0.055	22.8
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 0	21100/2535	1:1	0.050	-0.09	19.45	19.80	1.084	0.055	22.8
Back side	20	QPSK 1 0	21100/2535	1:1	0.115	0.03	19.45	19.80	1.084	0.125	22.8
Left side	20	QPSK 1 0	21100/2535	1:1	0.088	0.02	19.45	19.80	1.084	0.095	22.8
Back side	20	PCC 1 99	21100/2535	1:1	0.085	-0.03	19.00	19.30	1.072	0.091	22.8
		SCC 0 0	21298/2554.8								
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 0	21100/2535	1:1	0.062	-0.02	19.37	19.80	1.104	0.068	22.8
Back side	20	QPSK 50 0	21100/2535	1:1	0.112	-0.07	19.37	19.80	1.104	0.124	22.8
Left side	20	QPSK 50 0	21100/2535	1:1	0.088	0.04	19.37	19.80	1.104	0.097	22.8
Ant 3 Test Record For DC_7A_N5 (LTE B7)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DS12*											
Left cheek	20	QPSK 1 0	21100/2535	1:1	0.450	-0.02	16.19	16.30	1.026	0.462	22.3
Left tilted	20	QPSK 1 0	21100/2535	1:1	0.575	0.00	16.19	16.30	1.026	0.590	22.3



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Right cheek	20	QPSK 1 0	21100/2535	1:1	0.725	-0.15	16.19	16.30	1.026	0.744	22.3
Right cheek	20	QPSK 1 0	20850/2510	1:1	0.670	0.04	16.07	16.30	1.054	0.706	22.3
Right cheek	20	QPSK 1 0	21350/2560	1:1	0.736	0.01	16.09	16.30	1.050	0.772	22.3
Right tilted	20	QPSK 1 0	21100/2535	1:1	0.606	-0.01	16.19	16.30	1.026	0.622	22.3
Head Test Data (50%RB) DS12*											
Left cheek	20	QPSK 50 0	21100/2535	1:1	0.487	0.03	16.18	16.30	1.028	0.501	22.3
Left tilted	20	QPSK 50 0	21100/2535	1:1	0.622	0.15	16.18	16.30	1.028	0.639	22.3
Right cheek	20	QPSK 50 0	21100/2535	1:1	0.723	0.04	16.18	16.30	1.028	0.743	22.3
Right cheek	20	QPSK 50 0	20850/2510	1:1	0.710	0.02	16.15	16.30	1.035	0.735	22.3
Right cheek	20	QPSK 50 0	21350/2560	1:1	0.715	0.02	16.14	16.30	1.038	0.742	22.3
Right tilted	20	QPSK 50 0	21100/2535	1:1	0.619	-0.03	16.18	16.30	1.028	0.636	22.3
Head Test Data (100%RB) DS12*											
Right cheek	20	QPSK 100 0	21100/2535	1:1	0.732	0.04	16.11	16.30	1.045	0.765	22.3
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	20	QPSK 1 0	21100/2535	1:1	0.136	-0.04	19.10	18.30	0.832	0.113	22.3
Back side	20	QPSK 1 0	21100/2535	1:1	0.288	-0.02	19.10	18.30	0.832	0.240	22.3
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	20	QPSK 50 0	21100/2535	1:1	0.128	-0.05	19.09	18.30	0.834	0.107	22.3
Back side	20	QPSK 50 0	21100/2535	1:1	0.278	-0.03	19.09	18.30	0.834	0.232	22.3
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	20	QPSK 1 0	21100/2535	1:1	0.098	0.05	18.62	16.80	0.658	0.064	22.3
Back side	20	QPSK 1 0	21100/2535	1:1	0.199	-0.05	18.62	16.80	0.658	0.131	22.3
Left side	20	QPSK 1 0	21100/2535	1:1	0.097	0.01	18.62	16.80	0.658	0.064	22.3
Top side	20	QPSK 1 0	21100/2535	1:1	0.462	-0.05	18.62	16.80	0.658	0.304	22.3
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	20	QPSK 50 0	21100/2535	1:1	0.103	0.01	18.58	16.80	0.664	0.068	22.3
Back side	20	QPSK 50 0	21100/2535	1:1	0.207	0.06	18.58	16.80	0.664	0.137	22.3
Left side	20	QPSK 50 0	21100/2535	1:1	0.102	-0.02	18.58	16.80	0.664	0.068	22.3
Top side	20	QPSK 50 0	21100/2535	1:1	0.486	-0.03	18.58	16.80	0.664	0.323	22.3
Ant 4 Test Record For DC 7A N5 (LTE B7)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DS12*											
Left cheek	20	QPSK 1 0	21100/2535	1:1	0.121	0.18	24.03	24.30	1.064	0.129	22.5
Left tilted	20	QPSK 1 0	21100/2535	1:1	0.054	0.09	24.03	24.30	1.064	0.057	22.5
Right cheek	20	QPSK 1 0	21100/2535	1:1	0.112	-0.03	24.03	24.30	1.064	0.119	22.5
Right tilted	20	QPSK 1 0	21100/2535	1:1	0.122	-0.04	24.03	24.30	1.064	0.130	22.5
Head Test Data (50%RB) DS12*											
Left cheek	20	QPSK 50 0	21100/2535	1:1	0.096	0.06	23.07	23.30	1.054	0.101	22.5
Left tilted	20	QPSK 50 0	21100/2535	1:1	0.042	0.09	23.07	23.30	1.054	0.044	22.5
Right cheek	20	QPSK 50 0	21100/2535	1:1	0.090	0.03	23.07	23.30	1.054	0.095	22.5
Right tilted	20	QPSK 50 0	21100/2535	1:1	0.092	0.07	23.07	23.30	1.054	0.097	22.5
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	20	QPSK 1 0	21100/2535	1:1	0.126	0.02	20.58	19.30	0.745	0.094	22.5
Back side	20	QPSK 1 0	21100/2535	1:1	0.176	0.05	20.58	19.30	0.745	0.131	22.5
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	20	QPSK 50 0	20850/2510	1:1	0.108	-0.02	20.55	19.30	0.750	0.081	22.5
Back side	20	QPSK 50 0	20850/2510	1:1	0.136	0.07	20.55	19.30	0.750	0.102	22.5
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	20	QPSK 1 0	21100/2535	1:1	0.169	0.08	19.81	17.80	0.630	0.106	22.5
Back side	20	QPSK 1 0	21100/2535	1:1	0.189	-0.19	19.81	17.80	0.630	0.119	22.5
Left side	20	QPSK 1 0	21100/2535	1:1	0.065	0.01	19.81	17.80	0.630	0.041	22.5
Bottom side	20	QPSK 1 0	21100/2535	1:1	0.402	-0.06	19.81	17.80	0.630	0.253	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	20	QPSK 50 0	21350/2560	1:1	0.182	0.01	19.73	17.80	0.641	0.117	22.5
Back side	20	QPSK 50 0	21350/2560	1:1	0.220	0.11	19.73	17.80	0.641	0.141	22.5
Left side	20	QPSK 50 0	21350/2560	1:1	0.067	0.03	19.73	17.80	0.641	0.043	22.5
Bottom side	20	QPSK 50 0	21350/2560	1:1	0.544	-0.05	19.73	17.80	0.641	0.349	22.5



Ant 5 Test Record For DC_7A_N5 (LTE B7)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2*											
Left cheek	20	QPSK 1 50	20850/2510	1:1	0.381	-0.07	22.50	22.80	1.072	0.408	22.8
Left tilted	20	QPSK 1 50	20850/2510	1:1	0.079	-0.10	22.50	22.80	1.072	0.084	22.8
Right cheek	20	QPSK 1 50	20850/2510	1:1	0.686	-0.07	22.50	22.80	1.072	0.735	22.8
Right tilted	20	QPSK 1 50	20850/2510	1:1	0.111	0.01	22.50	22.80	1.072	0.119	22.8
Head Test Data (50%RB) DSI2*											
Left cheek	20	QPSK 50 25	21100/2535	1:1	0.270	-0.07	21.53	21.80	1.064	0.287	22.8
Left tilted	20	QPSK 50 25	21100/2535	1:1	0.048	0.11	21.53	21.80	1.064	0.051	22.8
Right cheek	20	QPSK 50 25	21100/2535	1:1	0.560	0.01	21.53	21.80	1.064	0.596	22.8
Right tilted	20	QPSK 50 25	21100/2535	1:1	0.084	-0.12	21.53	21.80	1.064	0.090	22.8
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	20	QPSK 1 0	21100/2535	1:1	0.043	0.01	19.91	18.80	0.774	0.033	22.8
Back side	20	QPSK 1 0	21100/2535	1:1	0.049	-0.05	19.91	18.80	0.774	0.038	22.8
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	20	QPSK 50 0	21100/2535	1:1	0.042	-0.01	19.88	18.80	0.780	0.033	22.8
Back side	20	QPSK 50 0	21100/2535	1:1	0.050	0.02	19.88	18.80	0.780	0.039	22.8
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	20	QPSK 1 0	21100/2535	1:1	0.050	-0.09	19.45	17.30	0.610	0.031	22.8
Back side	20	QPSK 1 0	21100/2535	1:1	0.115	0.03	19.45	17.30	0.610	0.070	22.8
Left side	20	QPSK 1 0	21100/2535	1:1	0.088	0.02	19.45	17.30	0.610	0.053	22.8
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	20	QPSK 50 0	21100/2535	1:1	0.062	-0.02	19.37	17.30	0.621	0.038	22.8
Back side	20	QPSK 50 0	21100/2535	1:1	0.112	-0.07	19.37	17.30	0.621	0.070	22.8
Left side	20	QPSK 50 0	21100/2535	1:1	0.088	0.04	19.37	17.30	0.621	0.054	22.8

Table 17: SAR of LTE Band 7 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.





8.2.8 SAR Result of LTE Band 7 (For DC_7A_N66)

Ant 3 Test Record For DC_7A_N66 (LTE B7)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 0	21100/2535	1:1	0.265	-0.11	13.55	14.50	1.245	0.330	22.5
Left tilted	20	QPSK 1 0	21100/2535	1:1	0.326	-0.08	13.55	14.50	1.245	0.406	22.5
Right cheek	20	QPSK 1 0	21100/2535	1:1	0.390	0.10	13.55	14.50	1.245	0.485	22.5
Right tilted	20	QPSK 1 0	21100/2535	1:1	0.400	-0.01	13.55	14.50	1.245	0.498	22.5
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 0	21100/2535	1:1	0.304	-0.04	13.54	14.50	1.247	0.379	22.5
Left tilted	20	QPSK 50 0	21100/2535	1:1	0.366	-0.04	13.54	14.50	1.247	0.457	22.5
Right cheek	20	QPSK 50 0	21100/2535	1:1	0.410	0.07	13.54	14.50	1.247	0.511	22.5
Right tilted	20	QPSK 50 0	21100/2535	1:1	0.407	0.02	13.54	14.50	1.247	0.508	22.5
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 50	21350/2560	1:1	0.060	-0.04	15.40	16.50	1.288	0.077	22.5
Back side	20	QPSK 1 50	21350/2560	1:1	0.118	-0.08	15.40	16.50	1.288	0.152	22.5
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 25	21350/2560	1:1	0.052	0.02	15.39	16.50	1.291	0.067	22.5
Back side	20	QPSK 50 25	21350/2560	1:1	0.112	0.09	15.39	16.50	1.291	0.145	22.5
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 50	21350/2560	1:1	0.082	-0.02	14.39	15.50	1.291	0.105	22.5
Back side	20	QPSK 1 50	21350/2560	1:1	0.172	0.01	14.39	15.50	1.291	0.222	22.5
Left side	20	QPSK 1 50	21350/2560	1:1	0.017	0.14	14.39	15.50	1.291	0.022	22.5
Top side	20	QPSK 1 50	21350/2560	1:1	0.200	0.13	14.39	15.50	1.291	0.258	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 50	21350/2560	1:1	0.086	-0.04	14.38	15.50	1.294	0.111	22.5
Back side	20	QPSK 50 50	21350/2560	1:1	0.182	-0.02	14.38	15.50	1.294	0.236	22.5
Left side	20	QPSK 50 50	21350/2560	1:1	0.017	-0.08	14.38	15.50	1.294	0.022	22.5
Top side	20	QPSK 50 50	21350/2560	1:1	0.202	-0.02	14.38	15.50	1.294	0.261	22.5
Ant 4 Test Record For DC_7A_N66 (LTE B7)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 50	21350/2560	1:1	0.124	-0.15	21.98	23.00	1.265	0.157	22.5
Left tilted	20	QPSK 1 50	21350/2560	1:1	0.047	0.09	21.98	23.00	1.265	0.060	22.5
Right cheek	20	QPSK 1 50	21350/2560	1:1	0.116	0.01	21.98	23.00	1.265	0.147	22.5
Right tilted	20	QPSK 1 50	21350/2560	1:1	0.086	-0.14	21.98	23.00	1.265	0.109	22.5
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 50	21350/2560	1:1	0.082	0.01	21.05	22.00	1.245	0.103	22.5
Left tilted	20	QPSK 50 50	21350/2560	1:1	0.030	0.12	21.05	22.00	1.245	0.037	22.5
Right cheek	20	QPSK 50 50	21350/2560	1:1	0.078	0.09	21.05	22.00	1.245	0.097	22.5
Right tilted	20	QPSK 50 50	21350/2560	1:1	0.064	0.01	21.05	22.00	1.245	0.079	22.5
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 50	21350/2560	1:1	0.044	0.02	15.96	17.00	1.271	0.056	22.5
Back side	20	QPSK 1 50	21350/2560	1:1	0.059	0.04	15.96	17.00	1.271	0.075	22.5
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 50	21350/2560	1:1	0.044	0.03	15.87	17.00	1.297	0.057	22.5
Back side	20	QPSK 50 50	21350/2560	1:1	0.058	0.01	15.87	17.00	1.297	0.075	22.5
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 50	21350/2560	1:1	0.049	0.07	14.91	16.00	1.285	0.063	22.5
Back side	20	QPSK 1 50	21350/2560	1:1	0.072	-0.02	14.91	16.00	1.285	0.092	22.5
Left side	20	QPSK 1 50	21350/2560	1:1	0.017	0.19	14.91	16.00	1.285	0.022	22.5
Bottom side	20	QPSK 1 50	21350/2560	1:1	0.122	-0.08	14.91	16.00	1.285	0.157	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 25	21350/2560	1:1	0.048	0.02	14.88	16.00	1.294	0.063	22.5
Back side	20	QPSK 50 25	21350/2560	1:1	0.071	-0.08	14.88	16.00	1.294	0.091	22.5
Left side	20	QPSK 50 25	21350/2560	1:1	0.017	0.01	14.88	16.00	1.294	0.022	22.5
Bottom side	20	QPSK 50 25	21350/2560	1:1	0.120	-0.06	14.88	16.00	1.294	0.155	22.5



Ant 5 Test Record For DC_7A_N66 (LTE B7)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 50	21350/2560	1:1	0.144	-0.04	19.91	21.30	1.377	0.198	22.5
Left tilted	20	QPSK 1 50	21350/2560	1:1	0.090	-0.02	19.91	21.30	1.377	0.124	22.5
Right cheek	20	QPSK 1 50	21350/2560	1:1	0.334	0.04	19.91	21.30	1.377	0.460	22.5
Right tilted	20	QPSK 1 50	21350/2560	1:1	0.128	-0.07	19.91	21.30	1.377	0.176	22.5
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 50	21350/2560	1:1	0.147	-0.04	19.90	21.30	1.380	0.203	22.5
Left tilted	20	QPSK 50 50	21350/2560	1:1	0.089	-0.02	19.90	21.30	1.380	0.122	22.5
Right cheek	20	QPSK 50 50	21350/2560	1:1	0.344	-0.02	19.90	21.30	1.380	0.475	22.5
Right tilted	20	QPSK 50 50	21350/2560	1:1	0.087	-0.13	19.90	21.30	1.380	0.120	22.5
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 50	21350/2560	1:1	0.025	0.03	16.50	17.80	1.349	0.034	22.5
Back side	20	QPSK 1 50	21350/2560	1:1	0.043	0.01	16.50	17.80	1.349	0.057	22.5
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 50	21350/2560	1:1	0.025	0.01	16.41	17.80	1.377	0.034	22.5
Back side	20	QPSK 50 50	21350/2560	1:1	0.040	0.01	16.41	17.80	1.377	0.055	22.5
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 50	21350/2560	1:1	0.031	0.03	15.22	16.80	1.439	0.044	22.5
Back side	20	QPSK 1 50	21350/2560	1:1	0.060	-0.04	15.22	16.80	1.439	0.086	22.5
Left side	20	QPSK 1 50	21350/2560	1:1	0.041	-0.02	15.22	16.80	1.439	0.060	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 25	21350/2560	1:1	0.033	0.06	15.33	16.80	1.403	0.047	22.5
Back side	20	QPSK 50 25	21350/2560	1:1	0.060	0.07	15.33	16.80	1.403	0.084	22.5
Left side	20	QPSK 50 25	21350/2560	1:1	0.042	0.03	15.33	16.80	1.403	0.059	22.5

Table 18: SAR of LTE Band 7 (For DC_7A_N66) for Head and Body.



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8.2.9 SAR Result of LTE Band 12

Ant 0 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	10	QPSK 1 25	23060/704	1:1	0.082	0.04	22.91	23.30	1.094	0.090	22.8
Left tilted	10	QPSK 1 25	23060/704	1:1	0.040	0.07	22.91	23.30	1.094	0.044	22.8
Right cheek	10	QPSK 1 25	23060/704	1:1	0.096	0.03	22.91	23.30	1.094	0.105	22.8
Right tilted	10	QPSK 1 25	23060/704	1:1	0.048	0.05	22.91	23.30	1.094	0.053	22.8
Head Test Data (50%RB) DSI2											
Left cheek	10	QPSK 25 0	23060/704	1:1	0.061	0.09	21.93	22.30	1.089	0.066	22.8
Left tilted	10	QPSK 25 0	23060/704	1:1	0.031	0.17	21.93	22.30	1.089	0.033	22.8
Right cheek	10	QPSK 25 0	23060/704	1:1	0.073	0.13	21.93	22.30	1.089	0.079	22.8
Right tilted	10	QPSK 25 0	23060/704	1:1	0.036	0.06	21.93	22.30	1.089	0.039	22.8
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	10	QPSK 1 25	23060/704	1:1	0.116	0.08	22.91	23.30	1.094	0.127	22.8
Back side	10	QPSK 1 25	23060/704	1:1	0.128	-0.04	22.91	23.30	1.094	0.140	22.8
Back side with Battery2	10	QPSK 1 25	23060/704	1:1	0.125	0.07	22.91	23.30	1.094	0.137	22.8
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	10	QPSK 25 0	23060/704	1:1	0.095	0.07	21.93	22.30	1.089	0.104	22.8
Back side	10	QPSK 25 0	23060/704	1:1	0.098	0.03	21.93	22.30	1.089	0.106	22.8
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	10	QPSK 1 25	23060/704	1:1	0.138	0.00	22.91	23.30	1.094	0.151	22.8
Back side	10	QPSK 1 25	23060/704	1:1	0.175	0.19	22.91	23.30	1.094	0.191	22.8
Right side	10	QPSK 1 25	23060/704	1:1	0.191	-0.11	22.91	23.30	1.094	0.209	22.8
Right side with Battery2	10	QPSK 1 25	23060/704	1:1	0.190	-0.04	22.91	23.30	1.094	0.208	22.8
Bottom side	10	QPSK 1 25	23060/704	1:1	0.051	-0.11	22.91	23.30	1.094	0.056	22.8
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	10	QPSK 25 0	23060/704	1:1	0.104	0.00	21.93	22.30	1.089	0.113	22.8
Back side	10	QPSK 25 0	23060/704	1:1	0.133	0.00	21.93	22.30	1.089	0.145	22.8
Right side	10	QPSK 25 0	23060/704	1:1	0.147	-0.10	21.93	22.30	1.089	0.160	22.8
Bottom side	10	QPSK 25 0	23060/704	1:1	0.050	-0.09	21.93	22.30	1.089	0.054	22.8
Ant 1 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	10	QPSK 1 0	23060/704	1:1	0.059	0.13	23.22	23.80	1.143	0.067	22.8
Left tilted	10	QPSK 1 0	23060/704	1:1	0.037	0.02	23.22	23.80	1.143	0.042	22.8
Right cheek	10	QPSK 1 0	23060/704	1:1	0.156	0.16	23.22	23.80	1.143	0.178	22.8
Right cheek with Battery2	10	QPSK 1 0	23060/704	1:1	0.149	0.01	23.22	23.80	1.143	0.170	22.8
Right tilted	10	QPSK 1 0	23060/704	1:1	0.113	0.03	23.22	23.80	1.143	0.129	22.8
Head Test Data (50%RB) DSI2											
Left cheek	10	QPSK 25 0	23060/704	1:1	0.049	-0.07	22.27	22.80	1.130	0.055	22.8
Left tilted	10	QPSK 25 0	23060/704	1:1	0.031	0.08	22.27	22.80	1.130	0.035	22.8
Right cheek	10	QPSK 25 0	23060/704	1:1	0.144	0.15	22.27	22.80	1.130	0.163	22.8
Right tilted	10	QPSK 25 0	23060/704	1:1	0.106	0.02	22.27	22.80	1.130	0.120	22.8
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	10	QPSK 1 0	23060/704	1:1	0.037	0.17	23.22	23.80	1.143	0.042	22.8
Back side	10	QPSK 1 0	23060/704	1:1	0.040	0.05	23.22	23.80	1.143	0.046	22.8
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	10	QPSK 25 0	23060/704	1:1	0.029	-0.01	22.27	22.80	1.130	0.033	22.8
Back side	10	QPSK 25 0	23060/704	1:1	0.034	-0.02	22.27	22.80	1.130	0.038	22.8
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	10	QPSK 1 0	23060/704	1:1	0.038	0.02	23.22	23.80	1.143	0.043	22.8
Back side	10	QPSK 1 0	23060/704	1:1	0.057	0.10	23.22	23.80	1.143	0.065	22.8
Left side	10	QPSK 1 0	23060/704	1:1	0.045	-0.15	23.22	23.80	1.143	0.052	22.8
Top side	10	QPSK 1 0	23060/704	1:1	0.022	-0.08	23.22	23.80	1.143	0.025	22.8



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Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	10	QPSK 25 0	23060/704	1:1	0.030	-0.03	22.27	22.80	1.130	0.034	22.8
Back side	10	QPSK 25 0	23060/704	1:1	0.048	0.11	22.27	22.80	1.130	0.054	22.8
Left side	10	QPSK 25 0	23060/704	1:1	0.037	-0.07	22.27	22.80	1.130	0.042	22.8
Top side	10	QPSK 25 0	23060/704	1:1	0.022	-0.04	22.27	22.80	1.130	0.025	22.8
ENDC LTE Band 12 SAR Test Record											
Ant 0 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2*											
Left cheek	10	QPSK 1 25	23060/704	1:1	0.082	0.04	22.91	23.30	1.094	0.090	22.8
Left tilted	10	QPSK 1 25	23060/704	1:1	0.040	0.07	22.91	23.30	1.094	0.044	22.8
Right cheek	10	QPSK 1 25	23060/704	1:1	0.096	0.03	22.91	23.30	1.094	0.105	22.7
Right tilted	10	QPSK 1 25	23060/704	1:1	0.048	0.05	22.91	23.30	1.094	0.053	22.7
Head Test Data (50%RB) DSI2*											
Left cheek	10	QPSK 25 0	23060/704	1:1	0.061	0.09	21.93	22.30	1.089	0.066	22.8
Left tilted	10	QPSK 25 0	23060/704	1:1	0.031	0.17	21.93	22.30	1.089	0.033	22.8
Right cheek	10	QPSK 25 0	23060/704	1:1	0.073	0.13	21.93	22.30	1.089	0.079	22.7
Right tilted	10	QPSK 25 0	23060/704	1:1	0.036	0.06	21.93	22.30	1.089	0.039	22.7
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	10	QPSK 1 25	23060/704	1:1	0.116	0.08	22.91	22.30	0.869	0.101	22.8
Back side	10	QPSK 1 25	23060/704	1:1	0.128	-0.04	22.91	22.30	0.869	0.111	22.8
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	10	QPSK 25 0	23060/704	1:1	0.095	0.07	21.93	22.30	1.089	0.104	22.8
Back side	10	QPSK 25 0	23060/704	1:1	0.098	0.03	21.93	22.30	1.089	0.106	22.8
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	10	QPSK 1 25	23060/704	1:1	0.138	0.00	22.91	21.30	0.690	0.095	22.5
Back side	10	QPSK 1 25	23060/704	1:1	0.175	0.19	22.91	21.30	0.690	0.121	22.5
Right side	10	QPSK 1 25	23060/704	1:1	0.191	-0.11	22.91	21.30	0.690	0.132	22.5
Bottom side	10	QPSK 1 25	23060/704	1:1	0.051	-0.11	22.91	21.30	0.690	0.035	22.5
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	10	QPSK 25 0	23060/704	1:1	0.104	0.00	21.93	21.30	0.865	0.090	22.5
Back side	10	QPSK 25 0	23060/704	1:1	0.133	0.00	21.93	21.30	0.865	0.115	22.5
Right side	10	QPSK 25 0	23060/704	1:1	0.147	-0.10	21.93	21.30	0.865	0.127	22.5
Bottom side	10	QPSK 25 0	23060/704	1:1	0.050	-0.09	21.93	21.30	0.865	0.043	22.5
Ant 1 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2*											
Left cheek	10	QPSK 1 0	23060/704	1:1	0.059	0.13	23.22	23.80	1.143	0.067	23.5
Left tilted	10	QPSK 1 0	23060/704	1:1	0.037	0.02	23.22	23.80	1.143	0.042	23.5
Right cheek	10	QPSK 1 0	23060/704	1:1	0.156	0.16	23.22	23.80	1.143	0.178	23.5
Right tilted	10	QPSK 1 0	23060/704	1:1	0.113	0.03	23.22	23.80	1.143	0.129	23.5
Head Test Data (50%RB) DSI2*											
Left cheek	10	QPSK 25 0	23060/704	1:1	0.049	-0.07	22.27	22.80	1.130	0.055	23.5
Left tilted	10	QPSK 25 0	23060/704	1:1	0.031	0.08	22.27	22.80	1.130	0.035	23.5
Right cheek	10	QPSK 25 0	23060/704	1:1	0.144	0.15	22.27	22.80	1.130	0.163	23.5
Right tilted	10	QPSK 25 0	23060/704	1:1	0.106	0.02	22.27	22.80	1.130	0.120	23.5
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	10	QPSK 1 0	23060/704	1:1	0.037	0.17	23.22	23.80	1.143	0.042	23.5
Back side	10	QPSK 1 0	23060/704	1:1	0.040	0.05	23.22	23.80	1.143	0.046	23.5
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	10	QPSK 25 0	23060/704	1:1	0.029	-0.01	22.27	22.80	1.130	0.033	23.5
Back side	10	QPSK 25 0	23060/704	1:1	0.034	-0.02	22.27	22.80	1.130	0.038	23.5
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	10	QPSK 1 0	23060/704	1:1	0.038	0.02	23.22	23.80	1.143	0.043	23.0
Back side	10	QPSK 1 0	23060/704	1:1	0.057	0.10	23.22	23.80	1.143	0.065	22.5
Left side	10	QPSK 1 0	23060/704	1:1	0.045	-0.15	23.22	23.80	1.143	0.052	22.5
Top side	10	QPSK 1 0	23060/704	1:1	0.022	-0.08	23.22	23.80	1.143	0.025	22.3





Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	10	QPSK 25 0	23060/704	1:1	0.030	-0.03	22.27	22.80	1.130	0.034	23.0
Back side	10	QPSK 25 0	23060/704	1:1	0.048	0.11	22.27	22.80	1.130	0.054	22.5
Left side	10	QPSK 25 0	23060/704	1:1	0.037	-0.07	22.27	22.80	1.130	0.042	22.5
Top side	10	QPSK 25 0	23060/704	1:1	0.022	-0.04	22.27	22.80	1.130	0.025	22.3

Table 19: SAR of LTE Band 12 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.



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8.2.10 SAR Result of LTE Band 13

Ant 0 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	10	QPSK 1 0	23230/782	1:1	0.091	0.02	22.93	23.30	1.089	0.099	22.4
Left tilted	10	QPSK 1 0	23230/782	1:1	0.045	0.07	22.93	23.30	1.089	0.049	22.4
Right cheek	10	QPSK 1 0	23230/782	1:1	0.111	0.01	22.93	23.30	1.089	0.121	22.4
Right tilted	10	QPSK 1 0	23230/782	1:1	0.056	0.02	22.93	23.30	1.089	0.061	22.4
Head Test Data (50%RB) DSI2											
Left cheek	10	QPSK 25 0	23230/782	1:1	0.070	0.06	21.92	22.30	1.091	0.077	22.4
Left tilted	10	QPSK 25 0	23230/782	1:1	0.035	0.04	21.92	22.30	1.091	0.039	22.4
Right cheek	10	QPSK 25 0	23230/782	1:1	0.088	0.02	21.92	22.30	1.091	0.096	22.4
Right tilted	10	QPSK 25 0	23230/782	1:1	0.043	0.05	21.92	22.30	1.091	0.047	22.4
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	10	QPSK 1 0	23230/782	1:1	0.119	0.03	22.93	23.30	1.089	0.130	22.4
Front side with Battery2	10	QPSK 1 0	23230/782	1:1	0.096	0.02	22.93	23.30	1.089	0.105	22.4
Back side	10	QPSK 1 0	23230/782	1:1	0.110	-0.06	22.93	23.30	1.089	0.120	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	10	QPSK 25 0	23230/782	1:1	0.094	-0.01	21.92	22.30	1.091	0.103	22.4
Back side	10	QPSK 25 0	23230/782	1:1	0.102	0.02	21.92	22.30	1.091	0.111	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	10	QPSK 1 0	23230/782	1:1	0.131	0.04	22.93	23.30	1.089	0.143	22.4
Back side	10	QPSK 1 0	23230/782	1:1	0.196	0.00	22.93	23.30	1.089	0.213	22.4
Back side with Battery2	10	QPSK 1 0	23230/782	1:1	0.192	0.18	22.93	23.30	1.089	0.209	22.4
Right side	10	QPSK 1 0	23230/782	1:1	0.103	0.00	22.93	23.30	1.089	0.112	22.4
Bottom side	10	QPSK 1 0	23230/782	1:1	0.067	-0.06	22.93	23.30	1.089	0.073	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	10	QPSK 25 0	23230/782	1:1	0.107	0.05	21.92	22.30	1.091	0.117	22.4
Back side	10	QPSK 25 0	23230/782	1:1	0.160	0.05	21.92	22.30	1.091	0.175	22.4
Right side	10	QPSK 25 0	23230/782	1:1	0.085	-0.01	21.92	22.30	1.091	0.092	22.4
Bottom side	10	QPSK 25 0	23230/782	1:1	0.065	-0.13	21.92	22.30	1.091	0.071	22.4



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Ant 1 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	10	QPSK 1 25	23230/782	1:1	0.125	0.01	23.27	23.80	1.130	0.141	22.4
Left tilted	10	QPSK 1 25	23230/782	1:1	0.085	0.01	23.27	23.80	1.130	0.096	22.4
Right cheek	10	QPSK 1 25	23230/782	1:1	0.312	0.04	23.27	23.80	1.130	0.352	22.4
Right cheek with Battery2	10	QPSK 1 25	23230/782	1:1	0.298	0.01	23.27	23.80	1.130	0.337	22.4
Right tilted	10	QPSK 1 25	23230/782	1:1	0.197	0.11	23.27	23.80	1.130	0.223	22.4
Head Test Data (50%RB) DSI2											
Left cheek	10	QPSK 25 25	23230/782	1:1	0.094	0.07	22.27	22.80	1.130	0.106	22.4
Left tilted	10	QPSK 25 25	23230/782	1:1	0.065	0.10	22.27	22.80	1.130	0.073	22.4
Right cheek	10	QPSK 25 25	23230/782	1:1	0.237	0.01	22.27	22.80	1.130	0.268	22.4
Right tilted	10	QPSK 25 25	23230/782	1:1	0.149	-0.02	22.27	22.80	1.130	0.168	22.4
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	10	QPSK 1 25	23230/782	1:1	0.036	0.04	23.27	23.80	1.130	0.040	22.4
Back side	10	QPSK 1 25	23230/782	1:1	0.078	0.01	23.27	23.80	1.130	0.088	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	10	QPSK 25 25	23230/782	1:1	0.027	0.09	22.27	22.80	1.130	0.030	22.4
Back side	10	QPSK 25 25	23230/782	1:1	0.061	0.01	22.27	22.80	1.130	0.068	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	10	QPSK 1 25	23230/782	1:1	0.074	0.09	23.27	23.80	1.130	0.084	22.4
Back side	10	QPSK 1 25	23230/782	1:1	0.138	0.03	23.27	23.80	1.130	0.156	22.4
Left side	10	QPSK 1 25	23230/782	1:1	0.046	-0.14	23.27	23.80	1.130	0.051	22.4
Top side	10	QPSK 1 25	23230/782	1:1	0.049	-0.11	23.27	23.80	1.130	0.055	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	10	QPSK 25 25	23230/782	1:1	0.056	0.11	22.27	22.80	1.130	0.063	22.4
Back side	10	QPSK 25 25	23230/782	1:1	0.106	0.04	22.27	22.80	1.130	0.120	22.4
Left side	10	QPSK 25 25	23230/782	1:1	0.034	-0.03	22.27	22.80	1.130	0.039	22.4
Top side	10	QPSK 25 25	23230/782	1:1	0.047	-0.15	22.27	22.80	1.130	0.053	22.4

Table 20: SAR of LTE Band 13 for Head and Body.



8.2.11 SAR Result of LTE Band 26

Ant 0 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	15	QPSK 1 0	26865/831.5	1:1	0.121	0.05	23.90	24.30	1.096	0.133	22.3
Left tilted	15	QPSK 1 0	26865/831.5	1:1	0.058	0.03	23.90	24.30	1.096	0.063	22.3
Right cheek	15	QPSK 1 0	26865/831.5	1:1	0.133	0.12	23.90	24.30	1.096	0.146	22.3
Right tilted	15	QPSK 1 0	26865/831.5	1:1	0.069	0.04	23.90	24.30	1.096	0.075	22.3
Head Test Data (50%RB) DSI2											
Left cheek	15	QPSK 36 0	26865/831.5	1:1	0.093	0.14	22.75	23.30	1.135	0.106	22.3
Left tilted	15	QPSK 36 0	26865/831.5	1:1	0.044	0.07	22.75	23.30	1.135	0.050	22.3
Right cheek	15	QPSK 36 0	26865/831.5	1:1	0.104	0.01	22.75	23.30	1.135	0.118	22.3
Right tilted	15	QPSK 36 0	26865/831.5	1:1	0.053	0.07	22.75	23.30	1.135	0.060	22.3
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	15	QPSK 1 0	26865/831.5	1:1	0.117	0.08	23.90	24.30	1.096	0.128	22.3
Back side	15	QPSK 1 0	26865/831.5	1:1	0.144	-0.08	23.90	24.30	1.096	0.158	22.3
Back side with Battery2	15	QPSK 1 0	26865/831.5	1:1	0.141	-0.01	23.90	24.30	1.096	0.155	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	15	QPSK 36 0	26865/831.5	1:1	0.092	-0.04	22.75	23.30	1.135	0.104	22.3
Back side	15	QPSK 36 0	26865/831.5	1:1	0.113	-0.05	22.75	23.30	1.135	0.128	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	15	QPSK 1 0	26865/831.5	1:1	0.171	0.04	23.90	24.30	1.096	0.187	22.3
Back side	15	QPSK 1 0	26865/831.5	1:1	0.256	-0.06	23.90	24.30	1.096	0.281	22.3
Back side with Battery2	15	QPSK 1 0	26865/831.5	1:1	0.243	-0.09	23.90	24.30	1.096	0.266	22.3
Right side	15	QPSK 1 0	26865/831.5	1:1	0.174	-0.14	23.90	24.30	1.096	0.191	22.3
Bottom side	15	QPSK 1 0	26865/831.5	1:1	0.094	-0.16	23.90	24.30	1.096	0.103	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	15	QPSK 36 0	26865/831.5	1:1	0.134	0.09	22.75	23.30	1.135	0.152	22.3
Back side	15	QPSK 36 0	26865/831.5	1:1	0.202	-0.06	22.75	23.30	1.135	0.229	22.3
Right side	15	QPSK 36 0	26865/831.5	1:1	0.134	-0.12	22.75	23.30	1.135	0.152	22.3
Bottom side	15	QPSK 36 0	26865/831.5	1:1	0.092	-0.13	22.75	23.30	1.135	0.104	22.3
Ant 1 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	15	QPSK 1 38	26865/831.5	1:1	0.153	-0.16	24.08	24.80	1.180	0.181	22.3
Left tilted	15	QPSK 1 38	26865/831.5	1:1	0.096	0.02	24.08	24.80	1.180	0.113	22.3
Right cheek	15	QPSK 1 38	26865/831.5	1:1	0.349	-0.04	24.08	24.80	1.180	0.412	22.3
Right cheek with Battery2	15	QPSK 1 38	26865/831.5	1:1	0.343	0.06	24.08	24.80	1.180	0.405	22.3
Right tilted	15	QPSK 1 38	26865/831.5	1:1	0.231	0.06	24.08	24.80	1.180	0.273	22.3
Head Test Data (50%RB) DSI2											
Left cheek	15	QPSK 36 18	26765/821.5	1:1	0.119	-0.16	23.05	23.80	1.189	0.141	22.3
Left tilted	15	QPSK 36 18	26765/821.5	1:1	0.075	0.02	23.05	23.80	1.189	0.089	22.3
Right cheek	15	QPSK 36 18	26765/821.5	1:1	0.283	0.11	23.05	23.80	1.189	0.336	22.3
Right tilted	15	QPSK 36 18	26765/821.5	1:1	0.182	0.07	23.05	23.80	1.189	0.216	22.3
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	15	QPSK 1 38	26865/831.5	1:1	0.046	0.03	24.08	24.80	1.180	0.054	22.3
Back side	15	QPSK 1 38	26865/831.5	1:1	0.092	-0.04	24.08	24.80	1.180	0.109	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	15	QPSK 36 18	26765/821.5	1:1	0.037	-0.05	23.05	23.80	1.189	0.044	22.3
Back side	15	QPSK 36 18	26765/821.5	1:1	0.074	-0.04	23.05	23.80	1.189	0.087	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	15	QPSK 1 38	26865/831.5	1:1	0.092	0.18	24.08	24.80	1.180	0.108	22.3
Back side	15	QPSK 1 38	26865/831.5	1:1	0.170	0.01	24.08	24.80	1.180	0.201	22.3
Left side	15	QPSK 1 38	26865/831.5	1:1	0.050	-0.10	24.08	24.80	1.180	0.059	22.3
Top side	15	QPSK 1 38	26865/831.5	1:1	0.061	-0.12	24.08	24.80	1.180	0.072	22.3



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 t (86-29) 6282 7885 sgs.china@sgs.com

Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	15	QPSK 36 18	26765/821.5	1:1	0.072	0.07	23.05	23.80	1.189	0.086	22.3
Back side	15	QPSK 36 18	26765/821.5	1:1	0.134	-0.01	23.05	23.80	1.189	0.159	22.3
Left side	15	QPSK 36 18	26765/821.5	1:1	0.040	-0.13	23.05	23.80	1.189	0.048	22.3
Top side	15	QPSK 36 18	26765/821.5	1:1	0.060	-0.07	23.05	23.80	1.189	0.071	22.3
ENDC LTE Band 26 SAR Test Record											
Ant 0 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	15	QPSK 1 0	26865/831.5	1:1	0.121	0.05	23.90	23.30	0.871	0.105	22.3
Left tilted	15	QPSK 1 0	26865/831.5	1:1	0.058	0.03	23.90	23.30	0.871	0.050	22.3
Right cheek	15	QPSK 1 0	26865/831.5	1:1	0.133	0.12	23.90	23.30	0.871	0.116	22.3
Right tilted	15	QPSK 1 0	26865/831.5	1:1	0.069	0.04	23.90	23.30	0.871	0.060	22.3
Head Test Data (50%RB) DSI2*											
Left cheek	15	QPSK 36 0	26865/831.5	1:1	0.093	0.14	22.75	22.30	0.902	0.084	22.3
Left tilted	15	QPSK 36 0	26865/831.5	1:1	0.044	0.07	22.75	22.30	0.902	0.040	22.3
Right cheek	15	QPSK 36 0	26865/831.5	1:1	0.104	0.01	22.75	22.30	0.902	0.094	22.3
Right tilted	15	QPSK 36 0	26865/831.5	1:1	0.053	0.07	22.75	22.30	0.902	0.048	22.3
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	15	QPSK 1 0	26865/831.5	1:1	0.117	0.08	23.90	21.30	0.550	0.064	22.3
Back side	15	QPSK 1 0	26865/831.5	1:1	0.144	-0.08	23.90	21.30	0.550	0.079	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	15	QPSK 36 0	26865/831.5	1:1	0.092	-0.04	22.75	21.30	0.716	0.066	22.3
Back side	15	QPSK 36 0	26865/831.5	1:1	0.113	-0.05	22.75	21.30	0.716	0.081	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	15	QPSK 1 0	26865/831.5	1:1	0.171	0.04	23.90	20.30	0.437	0.075	22.3
Back side	15	QPSK 1 0	26865/831.5	1:1	0.256	-0.06	23.90	20.30	0.437	0.112	22.3
Right side	15	QPSK 1 0	26865/831.5	1:1	0.174	-0.14	23.90	20.30	0.437	0.076	22.3
Bottom side	15	QPSK 1 0	26865/831.5	1:1	0.094	-0.16	23.90	20.30	0.437	0.041	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	15	QPSK 36 0	26865/831.5	1:1	0.134	0.09	22.75	20.30	0.569	0.076	22.3
Back side	15	QPSK 36 0	26865/831.5	1:1	0.202	-0.06	22.75	20.30	0.569	0.115	22.3
Right side	15	QPSK 36 0	26865/831.5	1:1	0.134	-0.12	22.75	20.30	0.569	0.076	22.3
Bottom side	15	QPSK 36 0	26865/831.5	1:1	0.092	-0.13	22.75	20.30	0.569	0.052	22.3
Ant 1 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	15	QPSK 1 38	26865/831.5	1:1	0.153	-0.16	24.08	23.30	0.836	0.128	22.3
Left tilted	15	QPSK 1 38	26865/831.5	1:1	0.096	0.02	24.08	23.30	0.836	0.080	22.3
Right cheek	15	QPSK 1 38	26865/831.5	1:1	0.349	-0.04	24.08	23.30	0.836	0.292	22.3
Right tilted	15	QPSK 1 38	26865/831.5	1:1	0.231	0.06	24.08	23.30	0.836	0.193	22.3
Head Test Data (50%RB) DSI2*											
Left cheek	15	QPSK 36 18	26765/821.5	1:1	0.119	-0.16	23.05	23.30	1.059	0.126	22.3
Left tilted	15	QPSK 36 18	26765/821.5	1:1	0.075	0.02	23.05	23.30	1.059	0.079	22.3
Right cheek	15	QPSK 36 18	26765/821.5	1:1	0.283	0.11	23.05	23.30	1.059	0.300	22.3
Right tilted	15	QPSK 36 18	26765/821.5	1:1	0.182	0.07	23.05	23.30	1.059	0.193	22.3
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	15	QPSK 1 38	26865/831.5	1:1	0.046	0.03	24.08	23.30	0.836	0.038	23.5
Back side	15	QPSK 1 38	26865/831.5	1:1	0.092	-0.04	24.08	23.30	0.836	0.077	23.5
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	15	QPSK 36 18	26765/821.5	1:1	0.037	-0.05	23.05	23.30	1.059	0.039	23.5
Back side	15	QPSK 36 18	26765/821.5	1:1	0.074	-0.04	23.05	23.30	1.059	0.078	23.5
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	15	QPSK 1 38	26865/831.5	1:1	0.092	0.18	24.08	22.30	0.664	0.061	22.3
Back side	15	QPSK 1 38	26865/831.5	1:1	0.170	0.01	24.08	22.30	0.664	0.113	22.3
Left side	15	QPSK 1 38	26865/831.5	1:1	0.050	-0.10	24.08	22.30	0.664	0.033	22.3
Top side	15	QPSK 1 38	26865/831.5	1:1	0.061	-0.12	24.08	22.30	0.664	0.041	22.3



Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	15	QPSK 36 18	26765/821.5	1:1	0.072	0.07	23.05	22.30	0.841	0.061	22.3
Back side	15	QPSK 36 18	26765/821.5	1:1	0.134	-0.01	23.05	22.30	0.841	0.113	22.3
Left side	15	QPSK 36 18	26765/821.5	1:1	0.040	-0.13	23.05	22.30	0.841	0.034	22.3
Top side	15	QPSK 36 18	26765/821.5	1:1	0.060	-0.07	23.05	22.30	0.841	0.050	22.3

Table 21 : SAR of LTE Band 26 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.



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8.2.12 SAR Result of LTE Band 38

Ant 3 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 0	38000/2595	1:1.58	0.528	-0.12	18.41	19.30	1.227	0.648	22.5
Left tilted	20	QPSK 1 0	38000/2595	1:1.58	0.539	0.03	18.41	19.30	1.227	0.662	22.5
Right cheek	20	QPSK 1 0	38000/2595	1:1.58	0.745	-0.07	18.41	19.30	1.227	0.914	22.5
Right cheek	20	QPSK 1 0	37850/2580	1:1.58	0.805	0.02	18.29	19.30	1.262	1.016	22.5
Right cheek	20	QPSK 1 0	38150/2610	1:1.58	0.822	0.02	18.27	19.30	1.268	1.042	22.5
Right tilted	20	QPSK 1 0	38000/2595	1:1.58	0.755	0.02	18.41	19.30	1.227	0.927	22.5
Right tilted	20	QPSK 1 0	37850/2580	1:1.58	0.684	-0.07	18.41	19.30	1.227	0.840	22.5
Right tilted	20	QPSK 1 0	38150/2610	1:1.58	0.772	0.15	18.41	19.30	1.227	0.948	22.5
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 0	38000/2595	1:1.58	0.566	0.03	18.40	19.30	1.230	0.696	22.5
Left tilted	20	QPSK 50 0	38000/2595	1:1.58	0.550	0.00	18.40	19.30	1.230	0.677	22.5
Right cheek	20	QPSK 50 0	38000/2595	1:1.58	0.842	0.03	18.40	19.30	1.230	1.036	22.5
Right cheek	20	QPSK 50 0	37850/2580	1:1.58	0.852	-0.04	18.40	19.30	1.230	1.048	22.5
Right cheek	20	QPSK 50 0	38150/2610	1:1.58	0.856	0.18	18.40	19.30	1.230	1.053	22.5
Right cheek-repeat	20	QPSK 50 0	38150/2610	1:1.58	0.813	0.10	18.40	19.30	1.230	1.000	22.5
Right cheek with Battery2	20	QPSK 50 0	38150/2610	1:1.58	0.841	0.03	18.40	19.30	1.230	1.035	22.5
Right cheek	20	PCC 1 0 SCC 0 0	38150/2610 37952/2590.2	1:1.58	0.710	0.08	17.34	18.80	1.400	0.994	22.5
Right tilted	20	QPSK 50 0	38000/2595	1:1.58	0.741	0.03	18.40	19.30	1.230	0.912	22.5
Right tilted	20	QPSK 50 0	37850/2580	1:1.58	0.707	0.10	18.40	19.30	1.230	0.870	22.5
Right tilted	20	QPSK 50 0	38150/2610	1:1.58	0.787	0.14	18.40	19.30	1.230	0.968	22.5
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 0	38000/2595	1:1.58	0.168	0.08	21.78	22.80	1.265	0.212	22.5
Back side	20	QPSK 1 0	38000/2595	1:1.58	0.303	-0.03	21.78	22.80	1.265	0.383	22.5
Back side	20	PCC 1 99 SCC 0 0	37901/2585.1 38099/2604.9	1:1.58	0.264	-0.13	20.85	22.30	1.396	0.369	22.5
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	38000/2595	1:1.58	0.142	-0.05	21.65	22.80	1.303	0.185	22.5
Back side	20	QPSK 50 0	38000/2595	1:1.58	0.298	-0.02	21.65	22.80	1.303	0.388	22.5
Back side with Battery2	20	QPSK 50 0	38000/2595	1:1.58	0.198	-0.01	21.65	22.80	1.303	0.258	22.5
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 0	38000/2595	1:1.58	0.253	-0.06	21.35	22.30	1.245	0.315	22.5
Back side	20	QPSK 1 0	38000/2595	1:1.58	0.450	0.01	21.35	22.30	1.245	0.560	22.5
Left side	20	QPSK 1 0	38000/2595	1:1.58	0.140	0.03	21.35	22.30	1.245	0.174	22.5
Top side	20	QPSK 1 0	38000/2595	1:1.58	0.547	0.07	21.35	22.30	1.245	0.681	22.5
Top side	20	PCC 1 99 SCC 0 0	37901/2585.1 38099/2604.9	1:1.58	0.461	-0.05	20.35	21.80	1.396	0.644	22.5
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	38000/2595	1:1.58	0.194	0.09	21.20	22.30	1.288	0.250	22.5
Back side	20	QPSK 50 0	38000/2595	1:1.58	0.395	-0.05	21.20	22.30	1.288	0.509	22.5
Left side	20	QPSK 50 0	38000/2595	1:1.58	0.126	0.06	21.20	22.30	1.288	0.162	22.5
Top side	20	QPSK 50 0	38000/2595	1:1.58	0.490	0.10	21.20	22.30	1.288	0.631	22.5
Ant 4 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	38000/2595	1:1.58	0.036	0.03	23.92	24.30	1.091	0.039	22.7
Left tilted	20	QPSK 1 50	38000/2595	1:1.58	0.034	0.01	23.92	24.30	1.091	0.037	22.7
Right cheek	20	QPSK 1 50	38000/2595	1:1.58	0.081	0.08	23.92	24.30	1.091	0.089	22.7
Right tilted	20	QPSK 1 50	38000/2595	1:1.58	0.084	0.03	23.92	24.30	1.091	0.092	22.7
Right tilted	20	PCC 1 99 SCC 0 0	37901/2585.1 38099/2604.9	1:1.58	0.066	0.04	23.45	23.80	1.084	0.072	22.7
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 0	38000/2595	1:1.58	0.027	0.04	22.45	23.30	1.216	0.032	22.7



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Left tilted	20	QPSK 50_0	38000/2595	1:1.58	0.020	0.07	22.45	23.30	1.216	0.024	22.7
Right cheek	20	QPSK 50_0	38000/2595	1:1.58	0.062	0.05	22.45	23.30	1.216	0.075	22.7
Right tilted	20	QPSK 50_0	38000/2595	1:1.58	0.059	0.03	22.45	23.30	1.216	0.072	22.7
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1_50	38150/2610	1:1.58	0.187	0.03	22.64	22.80	1.038	0.194	22.7
Back side	20	QPSK 1_50	38150/2610	1:1.58	0.265	-0.01	22.64	22.80	1.038	0.275	22.7
Back side	20	PCC 1_0	38150/2610	1:1.58	0.195	0.04	21.53	22.30	1.194	0.233	22.7
		SCC 0_0	37952/2590.2								
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50_0	38150/2610	1:1.58	0.167	0.03	22.63	22.80	1.040	0.174	22.7
Back side	20	QPSK 50_0	38150/2610	1:1.58	0.254	0.03	22.63	22.80	1.040	0.264	22.7
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1_50	38150/2610	1:1.58	0.295	0.05	22.64	22.80	1.038	0.306	22.7
Back side	20	QPSK 1_50	38150/2610	1:1.58	0.414	0.13	22.64	22.80	1.038	0.430	22.7
Left side	20	QPSK 1_50	38150/2610	1:1.58	0.055	0.09	22.64	22.80	1.038	0.057	22.7
Bottom side	20	QPSK 1_50	38150/2610	1:1.58	0.741	-0.09	22.64	22.80	1.038	0.769	22.7
Bottom side Battery2	20	QPSK 1_50	38150/2610	1:1.58	0.509	0.16	22.64	22.80	1.038	0.528	22.7
Bottom side	20	PCC 1_0	38150/2610	1:1.58	0.536	-0.07	21.53	22.30	1.194	0.640	22.7
		SCC 0_0	37952/2590.2								
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50_0	38150/2610	1:1.58	0.300	0.04	22.63	22.80	1.040	0.312	22.7
Back side	20	QPSK 50_0	38150/2610	1:1.58	0.407	0.18	22.63	22.80	1.040	0.423	22.7
Left side	20	QPSK 50_0	38150/2610	1:1.58	0.056	-0.01	22.63	22.80	1.040	0.058	22.7
Bottom side	20	QPSK 50_0	38150/2610	1:1.58	0.729	-0.02	22.63	22.80	1.040	0.758	22.7
Ant 5 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1_0	38000/2595	1:1.58	0.228	-0.08	22.02	22.80	1.197	0.273	22.3
Left tilted	20	QPSK 1_0	38000/2595	1:1.58	0.034	0.02	22.02	22.80	1.197	0.041	22.3
Right cheek	20	QPSK 1_0	38000/2595	1:1.58	0.304	-0.04	22.02	22.80	1.197	0.364	22.3
Right tilted	20	QPSK 1_0	38000/2595	1:1.58	0.072	0.04	22.02	22.80	1.197	0.086	22.3
Right cheek	20	PCC 1_99	37901/2585.1	1:1.58	0.229	-0.05	21.42	22.30	1.225	0.280	22.3
		SCC 0_0	38099/2604.9								
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50_0	38000/2595	1:1.58	0.178	-0.06	21.06	21.80	1.186	0.211	22.3
Left tilted	20	QPSK 50_0	38000/2595	1:1.58	0.026	0.01	21.06	21.80	1.186	0.031	22.3
Right cheek	20	QPSK 50_0	38000/2595	1:1.58	0.242	-0.03	21.06	21.80	1.186	0.287	22.3
Right tilted	20	QPSK 50_0	38000/2595	1:1.58	0.047	0.01	21.06	21.80	1.186	0.055	22.3
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1_0	38000/2595	1:1.58	0.043	0.00	22.02	22.80	1.197	0.051	22.3
Back side	20	QPSK 1_0	38000/2595	1:1.58	0.052	0.07	22.02	22.80	1.197	0.062	22.3
Back side	20	PCC 1_99	37901/2585.1	1:1.58	0.035	0.03	21.42	22.30	1.225	0.043	22.3
		SCC 0_0	38099/2604.9								
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50_0	38000/2595	1:1.58	0.032	0.06	21.06	21.80	1.186	0.038	22.3
Back side	20	QPSK 50_0	38000/2595	1:1.58	0.044	-0.01	21.06	21.80	1.186	0.052	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1_0	38000/2595	1:1.58	0.073	0.06	22.02	22.80	1.197	0.087	22.3
Back side	20	QPSK 1_0	38000/2595	1:1.58	0.108	-0.09	22.02	22.80	1.197	0.129	22.3
Left side	20	QPSK 1_0	38000/2595	1:1.58	0.104	-0.08	22.02	22.80	1.197	0.124	22.3
Back side	20	PCC 1_99	37901/2585.1	1:1.58	0.074	0.05	21.42	22.30	1.225	0.091	22.3
		SCC 0_0	38099/2604.9								
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50_0	38000/2595	1:1.58	0.068	0.01	21.06	21.80	1.186	0.081	22.3
Back side	20	QPSK 50_0	38000/2595	1:1.58	0.100	0.08	21.06	21.80	1.186	0.118	22.3
Left side	20	QPSK 50_0	38000/2595	1:1.58	0.084	0.07	21.06	21.80	1.186	0.100	22.3

Table 22: SAR of LTE Band 38 for Head and Body.



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Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Right cheek	38150/2610	0.856	0.813	1.05	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).						
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						
5) The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. The repeated measurement results must be clearly identified in the SAR report.						



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8.2.13 SAR Result of LTE Band 41

Ant 3 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 0	40185/2549.5	1:1.58	0.459	0.04	18.26	19.30	1.271	0.583	22.3
Left tilted	20	QPSK 1 0	40185/2549.5	1:1.58	0.612	-0.08	18.26	19.30	1.271	0.778	22.3
Left tilted	20	QPSK 1 0	39750/2506	1:1.58	0.506	0.01	18.13	19.30	1.309	0.662	22.3
Left tilted	20	QPSK 1 0	40620/2593	1:1.58	0.575	-0.06	18.08	19.30	1.324	0.761	22.3
Left tilted	20	QPSK 1 0	41055/2636.5	1:1.58	0.483	0.05	18.21	19.30	1.285	0.621	22.3
Left tilted	20	QPSK 1 0	41490/2680	1:1.58	0.455	0.02	18.11	19.30	1.315	0.598	22.3
Right cheek	20	QPSK 1 0	40185/2549.5	1:1.58	0.745	0.05	18.26	19.30	1.271	0.947	22.3
Right cheek	20	QPSK 1 0	39750/2506	1:1.58	0.658	0.07	18.13	19.30	1.309	0.861	22.3
Right cheek	20	QPSK 1 0	40620/2593	1:1.58	0.777	-0.03	18.08	19.30	1.324	1.029	22.3
Right cheek	20	QPSK 1 0	41055/2636.5	1:1.58	0.749	-0.05	18.21	19.30	1.285	0.963	22.3
Right cheek	20	QPSK 1 0	41490/2680	1:1.58	0.658	0.10	18.11	19.30	1.315	0.865	22.3
Right tilted	20	QPSK 1 0	40185/2549.5	1:1.58	0.739	-0.13	18.26	19.30	1.271	0.939	22.3
Right tilted	20	QPSK 1 0	39750/2506	1:1.58	0.638	0.01	18.13	19.30	1.309	0.835	22.3
Right tilted	20	QPSK 1 0	40620/2593	1:1.58	0.774	0.17	18.08	19.30	1.324	1.025	22.3
Right tilted	20	QPSK 1 0	41055/2636.5	1:1.58	0.774	-0.03	18.21	19.30	1.285	0.995	22.3
Right tilted	20	QPSK 1 0	41490/2680	1:1.58	0.718	-0.10	18.11	19.30	1.315	0.944	22.3
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 0	40185/2549.5	1:1.58	0.477	0.04	18.25	19.30	1.274	0.607	22.3
Left cheek	20	QPSK 50 0	39750/2506	1:1.58	0.532	-0.03	18.05	19.30	1.334	0.709	22.3
Left cheek	20	QPSK 50 0	40620/2593	1:1.58	0.547	-0.14	18.10	19.30	1.318	0.721	22.3
Left cheek	20	QPSK 50 0	41055/2636.5	1:1.58	0.491	-0.05	18.24	19.30	1.276	0.627	22.3
Left cheek	20	QPSK 50 0	41490/2680	1:1.58	0.432	-0.01	18.09	19.30	1.321	0.571	22.3
Left tilted	20	QPSK 50 0	40185/2549.5	1:1.58	0.619	-0.02	18.25	19.30	1.274	0.788	22.3
Left tilted	20	QPSK 50 0	39750/2506	1:1.58	0.566	0.03	18.05	19.30	1.334	0.755	22.3
Left tilted	20	QPSK 50 0	40620/2593	1:1.58	0.591	-0.02	18.10	19.30	1.318	0.779	22.3
Left tilted	20	QPSK 50 0	41055/2636.5	1:1.58	0.510	0.07	18.24	19.30	1.276	0.651	22.3
Left tilted	20	QPSK 50 0	41490/2680	1:1.58	0.491	0.01	18.09	19.30	1.321	0.649	22.3
Right cheek	20	QPSK 50 0	40185/2549.5	1:1.58	0.814	-0.10	18.25	19.30	1.274	1.037	22.3
Right cheek	20	QPSK 50 0	39750/2506	1:1.58	0.786	-0.10	18.05	19.30	1.334	1.048	22.3
Right cheek	20	QPSK 50 0	40620/2593	1:1.58	0.819	-0.12	18.10	19.30	1.318	1.080	22.3
Right cheek-repeat	20	QPSK 50_0	40620/2593	1:1.58	0.801	0.05	18.10	19.30	1.318	1.056	22.3
Right cheek	20	QPSK 50 0	41055/2636.5	1:1.58	0.763	0.08	18.24	19.30	1.276	0.974	22.3
Right cheek	20	QPSK 50 0	41490/2680	1:1.58	0.699	-0.06	18.09	19.30	1.321	0.924	22.3
Right tilted	20	QPSK 50 0	40185/2549.5	1:1.58	0.794	-0.03	18.25	19.30	1.274	1.011	22.3
Right tilted	20	QPSK 50 0	39750/2506	1:1.58	0.768	0.01	18.05	19.30	1.334	1.024	22.3
Right tilted	20	QPSK 50 0	40620/2593	1:1.58	0.828	-0.14	18.10	19.30	1.318	1.092	22.3
Right tilted-repeat	20	QPSK 50 0	40620/2593	1:1.58	0.801	0.05	18.10	19.30	1.318	1.056	22.3
Right tilted with Battery2	20	QPSK 50_0	40620/2593	1:1.58	0.808	0.02	18.10	19.30	1.318	1.065	22.3
Right tilted-HPUE	20	QPSK 50 0	40620/2593	1:2.31	0.971	-0.12	20.45	21.30	1.216	1.181	22.3
Right tilted	20	PCC 1 99	40620/2593	1:1.58	0.737	-0.09	17.66	19.30	1.459	1.075	22.3
Right tilted	20	SCC 0 0	40818/2612.8	1:1.58	0.697	-0.01	18.24	19.30	1.276	0.890	22.3
Right tilted	20	QPSK 50 0	41055/2636.5	1:1.58	0.697	-0.01	18.24	19.30	1.276	0.890	22.3
Right tilted	20	QPSK 50 0	41490/2680	1:1.58	0.725	-0.04	18.09	19.30	1.321	0.958	22.3
Head Test Data (100%RB) DS12											
Right cheek	20	QPSK 100 0	40620/2593	1:1.58	0.802	0.01	18.06	19.30	1.330	1.067	22.3
Right tilted	20	QPSK 100 0	40620/2593	1:1.58	0.744	-0.10	18.06	19.30	1.330	0.990	22.3
Left tilted	20	QPSK 100 0	40620/2593	1:1.58	0.561	-0.03	18.06	19.30	1.330	0.746	23.3



Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 0	40620/2593	1:1.58	0.168	0.08	21.83	22.30	1.114	0.187	22.3
Back side	20	QPSK 1 0	40620/2593	1:1.58	0.329	-0.01	21.83	22.30	1.114	0.367	22.3
Back side with Battery2	20	QPSK 1_0	40620/2593	1:1.58	0.268	-0.06	21.83	22.30	1.114	0.299	22.3
Back side-HPUE	20	QPSK 1 0	40620/2593	1:2.31	0.322	-0.04	23.30	24.30	1.259	0.405	22.3
Back side	20	PCC 1 99	40620/2593	1:1.58	0.206	-0.05	21.15	22.30	1.303	0.268	22.3
		SCC 0 0	40818/2612.8								22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 50	39750/2506	1:1.58	0.136	-0.05	21.54	22.30	1.191	0.162	22.3
Back side	20	QPSK 50 50	39750/2506	1:1.58	0.285	-0.12	21.54	22.30	1.191	0.340	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 99	40620/2593	1:1.58	0.253	-0.06	21.31	21.80	1.119	0.283	22.3
Back side	20	QPSK 1 99	40620/2593	1:1.58	0.449	-0.01	21.31	21.80	1.119	0.503	22.3
Left side	20	QPSK 1 99	40620/2593	1:1.58	0.140	-0.02	21.31	21.80	1.119	0.157	22.3
Top side	20	QPSK 1 99	40620/2593	1:1.58	0.524	0.05	21.31	21.80	1.119	0.587	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	41490/2680	1:1.58	0.209	-0.09	21.30	21.80	1.122	0.235	22.3
Back side	20	QPSK 50 0	41490/2680	1:1.58	0.426	-0.05	21.30	21.80	1.122	0.478	22.3
Left side	20	QPSK 50 0	41490/2680	1:1.58	0.135	-0.06	21.30	21.80	1.122	0.151	22.3
Top side	20	QPSK 50 0	41490/2680	1:1.58	0.530	0.10	21.30	21.80	1.122	0.595	22.3
Top side-HPUE	20	QPSK 50 0	41490/2680	1:2.31	0.605	-0.10	23.00	23.80	1.202	0.727	22.3
Top side-HPUE	20	QPSK 50 0	39750/2506	1:2.31	0.570	0.02	22.77	23.80	1.268	0.723	22.3
Top side-HPUE	20	QPSK 50 0	40185/2549.5	1:2.31	0.547	0.03	22.62	23.80	1.312	0.718	22.3
Top side-HPUE	20	QPSK 50 0	40620/2593	1:2.31	0.557	0.06	22.74	23.80	1.276	0.711	22.3
Top side-HPUE	20	QPSK 50 0	41055/2636.5	1:2.31	0.551	0.01	22.60	23.80	1.318	0.726	22.3
Top side	20	PCC 1 0	41490/2680	1:1.58	0.439	0.02	20.73	21.80	1.279	0.562	22.3
		SCC 0 0	41292/2660.2								22.3
Ant 4 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	40620/2593	1:1.58	0.036	-0.03	23.69	23.80	1.026	0.037	22.5
Left tilted	20	QPSK 1 50	40620/2593	1:1.58	0.015	-0.09	23.69	23.80	1.026	0.015	22.5
Right cheek	20	QPSK 1 50	40620/2593	1:1.58	0.081	0.08	23.69	23.80	1.026	0.083	22.5
Right tilted	20	QPSK 1 50	40620/2593	1:1.58	0.084	0.13	23.69	23.80	1.026	0.086	22.5
Right tilted - HPUE	20	QPSK 1_50	40620/2593	1:2.31	0.091	-0.03	25.46	25.80	1.081	0.099	22.5
Right tilted	20	PCC 1 99	40620/2593	1:1.58	0.054	0.03	23.52	23.80	1.067	0.058	22.5
		SCC 0 0	40818/2612.8								22.5
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 25	40620/2593	1:1.58	0.026	0.04	22.67	22.80	1.030	0.027	22.5
Left tilted	20	QPSK 50 25	40620/2593	1:1.58	0.020	0.07	22.67	22.80	1.030	0.021	22.5
Right cheek	20	QPSK 50 25	40620/2593	1:1.58	0.068	0.05	22.67	22.80	1.030	0.070	22.5
Right tilted	20	QPSK 50 25	40620/2593	1:1.58	0.057	-0.09	22.67	22.80	1.030	0.059	22.5
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 50	40620/2593	1:1.58	0.185	0.09	22.95	23.30	1.084	0.201	22.5
Back side	20	QPSK 1 50	40620/2593	1:1.58	0.295	0.01	22.95	23.30	1.084	0.320	22.5
Back side-HPUE	20	QPSK 1 50	40620/2593	1:2.31	0.307	-0.08	24.94	25.30	1.086	0.334	22.5
Back side	20	PCC 1 99	40620/2593	1:1.58	0.258	-0.06	22.82	23.30	1.117	0.288	22.5
		SCC 0 0	40818/2612.8								22.5
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	40620/2593	1:1.58	0.166	0.08	22.53	22.80	1.064	0.177	22.5
Back side	20	QPSK 50 0	40620/2593	1:1.58	0.265	-0.13	22.53	22.80	1.064	0.282	22.5



Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 50	40620/2593	1:1.58	0.341	0.02	22.95	23.30	1.084	0.370	22.5
Back side	20	QPSK 1 50	40620/2593	1:1.58	0.541	0.09	22.95	23.30	1.084	0.586	22.5
Left side	20	QPSK 1 50	40620/2593	1:1.58	0.085	0.04	22.95	23.30	1.084	0.092	22.5
Bottom side	20	QPSK 1 50	40620/2593	1:1.58	0.867	0.12	22.95	23.30	1.084	0.940	22.5
Bottom side	20	QPSK 1 50	39750/2506	1:1.58	0.832	0.02	22.63	23.30	1.167	0.971	22.5
Bottom side	20	QPSK 1 50	40185/2549.5	1:1.58	0.695	0.13	22.68	23.30	1.153	0.802	22.5
Bottom side	20	QPSK 1 50	41055/2636.5	1:1.58	0.894	0.13	22.80	23.30	1.122	1.003	22.5
Bottom side with Battery2	20	QPSK 1 50	41055/2636.5	1:1.58	0.853	-0.09	22.80	23.30	1.122	0.957	22.5
Bottom side-Repeat	20	QPSK 1 50	41055/2636.5	1:1.58	0.886	0.12	22.80	23.30	1.122	0.994	22.5
Bottom side	20	PCC 1 0 SCC 0 0	41055/2636.5 40857/2616.7	1:1.58	0.702	-0.18	22.51	23.30	1.199	0.842	22.5
Bottom side	20	QPSK 1 50	41490/2680	1:1.58	0.675	-0.05	22.56	23.30	1.186	0.800	22.5
Bottom side-HPUE	20	QPSK 1 50	41055/2636.5	1:2.31	0.978	0.09	24.88	25.30	1.102	1.077	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 0	40620/2593	1:1.58	0.229	0.02	22.53	22.80	1.064	0.244	22.5
Back side	20	QPSK 50 0	40620/2593	1:1.58	0.478	0.06	22.53	22.80	1.064	0.509	22.5
Left side	20	QPSK 50 0	40620/2593	1:1.58	0.082	-0.01	22.53	22.80	1.064	0.087	22.5
Bottom side	20	QPSK 50 0	40620/2593	1:1.58	0.794	0.15	22.53	22.80	1.064	0.845	22.5
Bottom side	20	QPSK 50 0	39750/2506	1:1.58	0.762	0.05	22.30	22.80	1.122	0.855	22.5
Bottom side	20	QPSK 50 0	40185/2549.5	1:1.58	0.788	0.10	22.35	22.80	1.109	0.874	22.5
Bottom side	20	QPSK 50 0	41055/2636.5	1:1.58	0.843	0.17	22.35	22.80	1.109	0.935	22.5
Bottom side	20	QPSK 50 0	41490/2680	1:1.58	0.652	-0.07	22.19	22.80	1.151	0.750	22.5
Hotspot Test data (Separate 10mm 100%RB) DS13											
Bottom side	20	QPSK 100 0	40620/2593	1:1.58	0.820	0.14	22.47	22.80	1.079	0.885	22.5
Ant 5 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 50	39750/2506	1:1.58	0.218	-0.08	22.06	22.30	1.057	0.230	22.8
Left tilted	20	QPSK 1 50	39750/2506	1:1.58	0.033	0.02	22.06	22.30	1.057	0.035	22.8
Right cheek	20	QPSK 1 50	39750/2506	1:1.58	0.291	-0.04	22.06	22.30	1.057	0.308	22.8
Right cheek	20	PCC 1 99 SCC 0 0	39750/2506 39948/2525.8	1:1.58	0.236	0.03	22.05	22.30	1.059	0.250	22.8
Right tilted	20	QPSK 1 50	39750/2506	1:1.58	0.069	-0.02	22.06	22.30	1.057	0.073	22.8
Right cheek-HPUE	20	QPSK 1 50	39750/2506	1:2.31	0.339	0.04	24.15	24.30	1.035	0.351	22.8
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 0	39750/2506	1:1.58	0.171	-0.06	21.04	21.30	1.062	0.182	22.8
Left tilted	20	QPSK 50 0	39750/2506	1:1.58	0.025	0.01	21.04	21.30	1.062	0.026	22.8
Right cheek	20	QPSK 50 0	39750/2506	1:1.58	0.231	-0.04	21.04	21.30	1.062	0.245	22.8
Right tilted	20	QPSK 50 0	39750/2506	1:1.58	0.045	0.01	21.04	21.30	1.062	0.047	22.8
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 50	39750/2506	1:1.58	0.042	-0.09	22.06	22.30	1.057	0.044	22.8
Back side	20	QPSK 1 50	39750/2506	1:1.58	0.051	-0.14	22.06	22.30	1.057	0.053	22.8
Back side	20	PCC 1 99 SCC 0 0	39750/2506 39948/2525.8	1:1.58	0.045	-0.02	22.05	22.30	1.059	0.048	22.8
Back side-HPUE	20	QPSK 1 50	39750/2506	1:2.31	0.061	-0.04	24.15	24.30	1.035	0.063	22.8
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 0	39750/2506	1:1.58	0.031	-0.02	21.04	21.30	1.062	0.033	22.8
Back side	20	QPSK 50 0	39750/2506	1:1.58	0.051	-0.01	21.04	21.30	1.062	0.054	22.8
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 50	39750/2506	1:1.58	0.071	0.02	22.06	22.30	1.057	0.075	22.8
Back side	20	QPSK 1 50	39750/2506	1:1.58	0.107	-0.19	22.06	22.30	1.057	0.113	22.8
Back side-HPUE	20	QPSK 1 50	39750/2506	1:2.31	0.125	-0.01	24.15	24.30	1.035	0.129	22.8
Left side	20	QPSK 1 50	39750/2506	1:1.58	0.103	-0.08	22.06	22.30	1.057	0.109	22.8
Back side	20	PCC 1 99 SCC 0 0	39750/2506 39948/2525.8	1:1.58	0.110	-0.06	22.05	22.30	1.059	0.117	22.8
Hotspot Test data (Separate 10mm 50%RB) DS13											





Front side	20	QPSK 50_0	39750/2506	1:1.58	0.066	-0.02	21.04	21.30	1.062	0.070	22.8
Back side	20	QPSK 50_0	39750/2506	1:1.58	0.099	-0.08	21.04	21.30	1.062	0.105	22.8
Left side	20	QPSK 50_0	39750/2506	1:1.58	0.082	-0.01	21.04	21.30	1.062	0.087	22.8

Table 23: SAR of LTE Band 41 for Head and Body.

Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Bottom side	41055/2636.5	0.894	0.886	1.01	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

5) The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. The repeated measurement results must be clearly identified in the SAR report.

General Note:

This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear.

Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes was $< 10\%$ and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

LTE Band 41 SAR testing with power class 2 at the highest power and available duty factor was additionally performed for the power class 3 configuration with the highest SAR for each exposure condition.

LTE Band 41(HPUE) Head Linearity Data:

Ant 3	Power Class 3	Power Class 2
Tune-up(dBm)	19.3	21.3
Measured power(dBm)	18.1	20.45
Measured SAR(W/kg)	0.828	0.971
Measured power(mw)	64.57	110.92
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	40.87	48.03
% deviation from expected linearity		-0.21%



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Ant 4	Power Class 3	Power Class 2
Tune-up(dBm)	23.8	25.8
Measured power(dBm)	23.69	25.46
Measured SAR(W/kg)	0.084	0.091
Measured power(mw)	233.88	351.56
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	148.05	152.23
% deviation from expected linearity		5.84%

Ant 5	Power Class 3	Power Class 2
Tune-up(dBm)	22.3	24.3
Measured power(dBm)	22.06	24.15
Measured SAR(W/kg)	0.291	0.339
Measured power(mw)	160.69	260.02
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	101.72	112.59
% deviation from expected linearity		5.25%

LTE Band 41(HPUE) Body worn Linearity Data

Ant 3	Power Class 3	Power Class 2
Tune-up(dBm)	22.3	24.3
Measured power(dBm)	21.83	23.3
Measured SAR(W/kg)	0.329	0.322
Measured power(mw)	152.41	213.80
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	96.47	92.57
% deviation from expected linearity		1.99%

Ant 4	Power Class 3	Power Class 2
Tune-up(dBm)	23.3	25.3
Measured power(dBm)	22.95	24.94
Measured SAR(W/kg)	0.295	0.307
Measured power(mw)	197.24	311.89
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	124.85	135.05
% deviation from expected linearity		-3.79%



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Ant 5	Power Class 3	Power Class 2
Tune-up(dBm)	22.3	24.3
Measured power(dBm)	22.06	24.15
Measured SAR(W/kg)	0.051	0.061
Measured power(mw)	160.69	260.02
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	101.72	112.59
% deviation from expected linearity		8.77%

LTE Band 41(HPUE) Hotspot Linearity Data

Ant 3	Power Class 3	Power Class 2
Tune-up(dBm)	21.8	23.8
Measured power(dBm)	21.04	23
Measured SAR(W/kg)	0.530	0.605
Measured power(mw)	127.06	199.53
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	80.43	86.39
% deviation from expected linearity		6.27%

Ant 4	Power Class 3	Power Class 2
Tune-up(dBm)	23.3	25.3
Measured power(dBm)	22.8	24.88
Measured SAR(W/kg)	0.894	0.978
Measured power(mw)	190.55	307.61
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	120.62	133.19
% deviation from expected linearity		-0.94%

Ant 5	Power Class 3	Power Class 2
Tune-up(dBm)	22.3	24.3
Measured power(dBm)	22.06	24.15
Measured SAR(W/kg)	0.107	0.125
Measured power(mw)	160.69	260.02
Duty Cycle	63.3%	43.3%
Frame Average power(mw)	101.72	112.59
% deviation from expected linearity		5.55%



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Wireless Laboratory

8.2.14 SAR Result of LTE Band 66

Ant 3 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 0	132322/1745	1:1	0.415	0.01	17.41	18.30	1.227	0.509	22.7
Left tilted	20	QPSK 1 0	132322/1745	1:1	0.459	-0.01	17.41	18.30	1.227	0.563	22.7
Right cheek	20	QPSK 1 0	132322/1745	1:1	0.812	0.03	17.41	18.30	1.227	0.997	22.7
Right cheek	20	QPSK 1 0	132072/1720	1:1	0.736	0.04	17.27	18.30	1.268	0.933	22.7
Right cheek	20	QPSK 1 0	132572/1770	1:1	0.876	0.04	17.26	18.30	1.271	1.113	22.7
Right cheek-repeat	20	QPSK 1 0	132572/1770	1:1	0.813	0.02	17.26	18.30	1.271	1.033	22.7
Right cheek with Battery2	20	QPSK 1 0	132572/1770	1:1	0.743	-0.05	17.26	18.30	1.271	0.944	22.7
Right tilted	20	QPSK 1 0	132322/1745	1:1	0.625	0.07	17.41	18.30	1.227	0.767	22.7
Right tilted	20	QPSK 1 0	132072/1720	1:1	0.630	-0.07	17.27	18.30	1.268	0.799	22.7
Right tilted	20	QPSK 1 0	132572/1770	1:1	0.768	0.02	17.26	18.30	1.271	0.976	22.7
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 0	132322/1745	1:1	0.409	-0.04	17.40	18.30	1.230	0.503	22.7
Left tilted	20	QPSK 50 0	132322/1745	1:1	0.471	-0.01	17.40	18.30	1.230	0.579	22.7
Right cheek	20	QPSK 50 0	132322/1745	1:1	0.806	0.05	17.40	18.30	1.230	0.992	22.7
Right cheek	20	QPSK 50 0	132072/1720	1:1	0.731	0.00	17.25	18.30	1.274	0.931	22.7
Right cheek	20	QPSK 50 0	132572/1770	1:1	0.867	0.02	17.23	18.30	1.279	1.109	22.7
Right tilted	20	QPSK 50 0	132322/1745	1:1	0.636	0.00	17.40	18.30	1.230	0.782	22.7
Right tilted	20	QPSK 50 0	132072/1720	1:1	0.684	0.01	17.25	18.30	1.274	0.871	22.7
Right tilted	20	QPSK 50 0	132572/1770	1:1	0.782	0.02	17.23	18.30	1.279	1.000	22.7
Head Test Data (100%RB) DS12											
Right cheek	20	QPSK 100 0	132322/1745	1:1	0.742	0.02	16.98	18.30	1.355	1.006	22.7
Right tilted	20	QPSK 100 0	132322/1745	1:1	0.702	-0.01	16.98	18.30	1.355	0.951	22.7
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 0	132322/1745	1:1	0.136	0.06	20.06	20.80	1.186	0.161	22.7
Back side	20	QPSK 1 0	132322/1745	1:1	0.235	-0.03	20.06	20.80	1.186	0.279	22.7
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	20	QPSK 50 0	132322/1745	1:1	0.139	0.08	19.97	20.80	1.211	0.168	22.7
Back side	20	QPSK 50 0	132322/1745	1:1	0.242	0.06	19.97	20.80	1.211	0.293	22.7
Back side with Battery2	20	QPSK 50 0	132322/1745	1:1	0.219	-0.04	19.97	20.80	1.211	0.265	22.7
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	20	QPSK 1 0	132322/1745	1:1	0.262	0.09	20.06	20.30	1.057	0.277	22.7
Back side	20	QPSK 1 0	132322/1745	1:1	0.259	0.10	20.06	20.30	1.057	0.274	22.7
Left side	20	QPSK 1 0	132322/1745	1:1	0.097	-0.15	20.06	20.30	1.057	0.103	22.7
Top side	20	QPSK 1 0	132322/1745	1:1	0.494	-0.03	20.06	20.30	1.057	0.522	22.7
Hotspot Test data (Separate 10mm 50%RB) DS13											
Front side	20	QPSK 50 0	132322/1745	1:1	0.273	0.08	19.97	20.30	1.079	0.295	22.7
Back side	20	QPSK 50 0	132322/1745	1:1	0.284	0.04	19.97	20.30	1.079	0.306	22.7
Left side	20	QPSK 50 0	132322/1745	1:1	0.105	-0.17	19.97	20.30	1.079	0.113	22.7
Top side	20	QPSK 50 0	132322/1745	1:1	0.485	-0.03	19.97	20.30	1.079	0.523	22.7
Top side with Battery2	20	QPSK 50 0	132322/1745	1:1	0.473	-0.11	19.97	20.30	1.079	0.510	22.7
Ant 4 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12											
Left cheek	20	QPSK 1 50	132072/1720	1:1	0.098	0.04	24.27	24.80	1.130	0.110	22.7
Left tilted	20	QPSK 1 50	132072/1720	1:1	0.092	0.06	24.27	24.80	1.130	0.104	22.7
Right cheek	20	QPSK 1 50	132072/1720	1:1	0.136	0.06	24.27	24.80	1.130	0.154	22.7
Right tilted	20	QPSK 1 50	132072/1720	1:1	0.053	0.13	24.27	24.80	1.130	0.059	22.7
Head Test Data (50%RB) DS12											
Left cheek	20	QPSK 50 25	132072/1720	1:1	0.076	0.04	23.32	23.80	1.117	0.085	22.7
Left tilted	20	QPSK 50 25	132072/1720	1:1	0.073	-0.01	23.32	23.80	1.117	0.082	22.7
Right cheek	20	QPSK 50 25	132072/1720	1:1	0.101	0.03	23.32	23.80	1.117	0.113	22.7
Right tilted	20	QPSK 50 25	132072/1720	1:1	0.044	-0.06	23.32	23.80	1.117	0.050	22.7
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	20	QPSK 1 0	132072/1720	1:1	0.113	0.07	20.74	21.30	1.138	0.129	22.7



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Back side	20	QPSK 1 0	132072/1720	1:1	0.176	0.03	20.74	21.30	1.138	0.200	22.7
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	132072/1720	1:1	0.117	0.07	20.69	21.30	1.151	0.135	22.7
Back side	20	QPSK 50 0	132072/1720	1:1	0.177	0.08	20.69	21.30	1.151	0.204	22.7
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 0	132072/1720	1:1	0.191	0.08	20.16	20.80	1.159	0.221	22.7
Back side	20	QPSK 1 0	132072/1720	1:1	0.263	0.05	20.16	20.80	1.159	0.305	22.7
Left side	20	QPSK 1 0	132072/1720	1:1	0.078	-0.04	20.16	20.80	1.159	0.090	22.7
Bottom side	20	QPSK 1 0	132072/1720	1:1	0.411	-0.04	20.16	20.80	1.159	0.476	22.7
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	132072/1720	1:1	0.194	0.07	20.12	20.80	1.169	0.227	22.7
Back side	20	QPSK 50 0	132072/1720	1:1	0.300	0.11	20.12	20.80	1.169	0.351	22.7
Left side	20	QPSK 50 0	132072/1720	1:1	0.076	-0.17	20.12	20.80	1.169	0.089	22.7
Bottom side	20	QPSK 50 0	132072/1720	1:1	0.412	-0.02	20.12	20.80	1.169	0.482	22.7
Ant 5 Test Record											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	132572/1770	1:1	0.320	0.18	22.69	23.30	1.151	0.368	23.0
Left tilted	20	QPSK 1 50	132572/1770	1:1	0.057	0.16	22.69	23.30	1.151	0.065	23.0
Right cheek	20	QPSK 1 50	132572/1770	1:1	0.606	0.08	22.69	23.30	1.151	0.697	23.0
Right tilted	20	QPSK 1 50	132572/1770	1:1	0.094	0.04	22.69	23.30	1.151	0.108	23.0
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 0	132572/1770	1:1	0.236	0.09	21.77	22.30	1.130	0.267	23.0
Left tilted	20	QPSK 50 0	132572/1770	1:1	0.042	0.06	21.77	22.30	1.130	0.047	23.0
Right cheek	20	QPSK 50 0	132572/1770	1:1	0.448	0.05	21.77	22.30	1.130	0.506	23.0
Right tilted	20	QPSK 50 0	132572/1770	1:1	0.072	0.09	21.77	22.30	1.130	0.081	23.0
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 0	132322/1745	1:1	0.038	0.02	21.18	21.80	1.153	0.044	23.0
Back side	20	QPSK 1 0	132322/1745	1:1	0.068	0.01	21.18	21.80	1.153	0.078	23.0
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 0	132322/1745	1:1	0.042	0.08	20.96	21.80	1.213	0.051	23.0
Back side	20	QPSK 50 0	132322/1745	1:1	0.072	0.06	20.96	21.80	1.213	0.088	23.0
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 0	132322/1745	1:1	0.077	0.04	20.70	21.30	1.148	0.088	23.0
Back side	20	QPSK 1 0	132322/1745	1:1	0.128	0.08	20.70	21.30	1.148	0.147	23.0
Left side	20	QPSK 1 0	132322/1745	1:1	0.160	-0.07	20.70	21.30	1.148	0.184	23.0
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 0	132322/1745	1:1	0.083	0.05	20.52	21.30	1.197	0.100	23.0
Back side	20	QPSK 50 0	132322/1745	1:1	0.136	0.04	20.52	21.30	1.197	0.163	23.0
Left side	20	QPSK 50 0	132322/1745	1:1	0.159	-0.12	20.52	21.30	1.197	0.190	23.0
Ant 3 Test Record For DC_66A_N5 (LTE B66)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	20	QPSK 1 0	132322/1745	1:1	0.415	0.01	17.41	16.30	0.774	0.321	22.7
Left tilted	20	QPSK 1 0	132322/1745	1:1	0.459	-0.01	17.41	16.30	0.774	0.355	22.7
Right cheek	20	QPSK 1 0	132322/1745	1:1	0.812	0.03	17.41	16.30	0.774	0.629	22.7
Right cheek	20	QPSK 1 0	132072/1720	1:1	0.736	0.04	17.27	16.30	0.800	0.589	22.7
Right cheek	20	QPSK 1 0	132572/1770	1:1	0.876	0.04	17.26	16.30	0.802	0.702	22.7
Right tilted	20	QPSK 1 0	132322/1745	1:1	0.625	0.07	17.41	16.30	0.774	0.484	22.7
Right tilted	20	QPSK 1 0	132072/1720	1:1	0.630	-0.07	17.27	16.30	0.800	0.504	22.7
Right tilted	20	QPSK 1 0	132572/1770	1:1	0.768	0.02	17.26	16.30	0.802	0.616	22.7
Head Test Data (50%RB) DSI2*											
Left cheek	20	QPSK 50 0	132322/1745	1:1	0.409	-0.04	17.40	16.30	0.776	0.317	22.7
Left tilted	20	QPSK 50 0	132322/1745	1:1	0.471	-0.01	17.40	16.30	0.776	0.366	22.7
Right cheek	20	QPSK 50 0	132322/1745	1:1	0.806	0.05	17.40	16.30	0.776	0.626	22.7
Right cheek	20	QPSK 50 0	132072/1720	1:1	0.731	0.00	17.25	16.30	0.804	0.587	22.7
Right cheek	20	QPSK 50 0	132572/1770	1:1	0.867	0.02	17.23	16.30	0.807	0.700	22.7
Right tilted	20	QPSK 50 0	132322/1745	1:1	0.636	0.00	17.40	16.30	0.776	0.494	22.7
Right tilted	20	QPSK 50 0	132072/1720	1:1	0.684	0.01	17.25	16.30	0.804	0.550	22.7



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Right tilted	20	QPSK 50 0	132572/1770	1:1	0.782	0.02	17.23	16.30	0.807	0.631	22.7
Head Test Data (100%RB) DSI2*											
Right cheek	20	QPSK 100 0	132322/1745	1:1	0.742	0.02	16.98	16.30	0.855	0.634	22.7
Right tilted	20	QPSK 100 0	132322/1745	1:1	0.702	-0.01	16.98	16.30	0.855	0.600	22.7
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	20	QPSK 1 0	132322/1745	1:1	0.136	0.06	20.06	19.30	0.839	0.114	22.7
Back side	20	QPSK 1 0	132322/1745	1:1	0.235	-0.03	20.06	19.30	0.839	0.197	22.7
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	20	QPSK 50 0	132322/1745	1:1	0.139	0.08	19.97	19.30	0.857	0.119	22.7
Back side	20	QPSK 50 0	132322/1745	1:1	0.242	0.06	19.97	19.30	0.857	0.207	22.7
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	20	QPSK 1 0	132322/1745	1:1	0.262	0.09	20.06	17.80	0.594	0.156	22.7
Back side	20	QPSK 1 0	132322/1745	1:1	0.259	0.10	20.06	17.80	0.594	0.154	22.7
Left side	20	QPSK 1 0	132322/1745	1:1	0.097	-0.15	20.06	17.80	0.594	0.058	22.7
Top side	20	QPSK 1 0	132322/1745	1:1	0.494	-0.03	20.06	17.80	0.594	0.294	22.7
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	20	QPSK 50 0	132322/1745	1:1	0.273	0.08	19.97	17.80	0.607	0.166	22.7
Back side	20	QPSK 50 0	132322/1745	1:1	0.284	0.04	19.97	17.80	0.607	0.172	22.7
Left side	20	QPSK 50 0	132322/1745	1:1	0.105	-0.17	19.97	17.80	0.607	0.064	22.7
Top side	20	QPSK 50 0	132322/1745	1:1	0.485	-0.03	19.97	17.80	0.607	0.294	22.7
Ant 4 Test Record For DC 66A N5 (LTE B66)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	20	QPSK 1 50	132072/1720	1:1	0.098	0.04	24.27	23.80	0.897	0.088	22.7
Left tilted	20	QPSK 1 50	132072/1720	1:1	0.092	0.06	24.27	23.80	0.897	0.083	22.7
Right cheek	20	QPSK 1 50	132072/1720	1:1	0.136	0.06	24.27	23.80	0.897	0.122	22.7
Right tilted	20	QPSK 1 50	132072/1720	1:1	0.053	0.13	24.27	23.80	0.897	0.047	22.7
Head Test Data (50%RB) DSI2*											
Left cheek	20	QPSK 50 25	132072/1720	1:1	0.076	0.04	23.32	22.80	0.887	0.068	22.7
Left tilted	20	QPSK 50 25	132072/1720	1:1	0.073	-0.01	23.32	22.80	0.887	0.065	22.7
Right cheek	20	QPSK 50 25	132072/1720	1:1	0.101	0.03	23.32	22.80	0.887	0.090	22.7
Right tilted	20	QPSK 50 25	132072/1720	1:1	0.044	-0.06	23.32	22.80	0.887	0.039	22.7
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	20	QPSK 1 0	132072/1720	1:1	0.113	0.07	20.74	18.80	0.640	0.072	22.7
Back side	20	QPSK 1 0	132072/1720	1:1	0.176	0.03	20.74	18.80	0.640	0.113	22.7
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	20	QPSK 50 0	132072/1720	1:1	0.117	0.07	20.69	18.80	0.647	0.076	22.7
Back side	20	QPSK 50 0	132072/1720	1:1	0.177	0.08	20.69	18.80	0.647	0.115	22.7
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	20	QPSK 1 0	132072/1720	1:1	0.191	0.08	20.16	17.30	0.518	0.099	22.7
Back side	20	QPSK 1 0	132072/1720	1:1	0.263	0.05	20.16	17.30	0.518	0.136	22.7
Left side	20	QPSK 1 0	132072/1720	1:1	0.078	-0.04	20.16	17.30	0.518	0.040	22.7
Bottom side	20	QPSK 1 0	132072/1720	1:1	0.411	-0.04	20.16	17.30	0.518	0.213	22.7
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	20	QPSK 50 0	132072/1720	1:1	0.194	0.07	20.12	17.30	0.522	0.101	22.7
Back side	20	QPSK 50 0	132072/1720	1:1	0.300	0.11	20.12	17.30	0.522	0.157	22.7
Left side	20	QPSK 50 0	132072/1720	1:1	0.076	-0.17	20.12	17.30	0.522	0.040	22.7
Bottom side	20	QPSK 50 0	132072/1720	1:1	0.412	-0.02	20.12	17.30	0.522	0.215	22.7
Ant 5 Test Record For DC 66A N5 (LTE B66)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	20	QPSK 1 50	132572/1770	1:1	0.320	0.18	22.69	23.30	1.151	0.368	23.0
Left tilted	20	QPSK 1 50	132572/1770	1:1	0.057	0.16	22.69	23.30	1.151	0.065	23.0
Right cheek	20	QPSK 1 50	132572/1770	1:1	0.606	0.08	22.69	23.30	1.151	0.697	23.0
Right tilted	20	QPSK 1 50	132572/1770	1:1	0.094	0.04	22.69	23.30	1.151	0.108	23.0
Head Test Data (50%RB) DSI2*											
Left cheek	20	QPSK 50 0	132572/1770	1:1	0.236	0.09	21.77	22.30	1.130	0.267	23.0
Left tilted	20	QPSK 50 0	132572/1770	1:1	0.042	0.06	21.77	22.30	1.130	0.047	23.0
Right cheek	20	QPSK 50 0	132572/1770	1:1	0.448	0.05	21.77	22.30	1.130	0.506	23.0



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Right tilted	20	QPSK 50_0	132572/1770	1:1	0.072	0.09	21.77	22.30	1.130	0.081	23.0
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	20	QPSK 1_0	132322/1745	1:1	0.038	0.02	21.18	20.30	0.817	0.031	23.0
Back side	20	QPSK 1_0	132322/1745	1:1	0.068	0.01	21.18	20.30	0.817	0.055	23.0
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	20	QPSK 50_0	132322/1745	1:1	0.042	0.08	20.96	20.30	0.859	0.036	23.0
Back side	20	QPSK 50_0	132322/1745	1:1	0.072	0.06	20.96	20.30	0.859	0.062	23.0
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	20	QPSK 1_0	132322/1745	1:1	0.077	0.04	20.70	19.30	0.724	0.056	23.0
Back side	20	QPSK 1_0	132322/1745	1:1	0.128	0.08	20.70	19.30	0.724	0.093	23.0
Left side	20	QPSK 1_0	132322/1745	1:1	0.160	-0.07	20.70	19.30	0.724	0.116	23.0
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	20	QPSK 50_0	132322/1745	1:1	0.083	0.05	20.52	19.30	0.755	0.063	23.0
Back side	20	QPSK 50_0	132322/1745	1:1	0.136	0.04	20.52	19.30	0.755	0.103	23.0
Left side	20	QPSK 50_0	132322/1745	1:1	0.159	-0.12	20.52	19.30	0.755	0.120	23.0

Table 24 : SAR of LTE Band 66 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.

Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Right cheek	132572/1770	0.876	0.813	1.08	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

5) The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. The repeated measurement results must be clearly identified in the SAR report.



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8.2.15 SAR Result of LTE Band 66 (For DC_66A_N7&38&41)

Ant 3 Test Record For DC_66A_N7&38&41 (LTE B66)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	132322/1745	1:1	0.242	0.03	15.88	16.30	1.102	0.267	21.9
Left tilted	20	QPSK 1 50	132322/1745	1:1	0.317	-0.04	15.88	16.30	1.102	0.349	21.9
Right cheek	20	QPSK 1 50	132322/1745	1:1	0.552	-0.04	15.88	16.30	1.102	0.608	21.9
Right tilted	20	QPSK 1 50	132322/1745	1:1	0.470	-0.02	15.88	16.30	1.102	0.518	21.9
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 25	132322/1745	1:1	0.238	0.01	15.81	16.30	1.119	0.266	21.9
Left tilted	20	QPSK 50 25	132322/1745	1:1	0.311	-0.02	15.81	16.30	1.119	0.348	21.9
Right cheek	20	QPSK 50 25	132322/1745	1:1	0.507	0.00	15.81	16.30	1.119	0.568	21.9
Right tilted	20	QPSK 50 25	132322/1745	1:1	0.447	0.02	15.81	16.30	1.119	0.500	21.9
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 50	132322/1745	1:1	0.082	0.04	17.66	18.30	1.159	0.095	21.9
Back side	20	QPSK 1 50	132322/1745	1:1	0.102	-0.02	17.66	18.30	1.159	0.118	21.9
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 25	132322/1745	1:1	0.081	0.02	17.66	18.30	1.159	0.094	21.9
Back side	20	QPSK 50 25	132322/1745	1:1	0.100	-0.01	17.66	18.30	1.159	0.116	21.9
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 50	132322/1745	1:1	0.109	0.09	16.80	17.30	1.122	0.122	21.9
Back side	20	QPSK 1 50	132322/1745	1:1	0.152	-0.09	16.80	17.30	1.122	0.171	21.9
Left side	20	QPSK 1 50	132322/1745	1:1	0.043	0.13	16.80	17.30	1.122	0.048	21.9
Top side	20	QPSK 1 50	132322/1745	1:1	0.224	0.09	16.80	17.30	1.122	0.251	21.9
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 25	132322/1745	1:1	0.104	0.08	16.78	17.30	1.127	0.117	21.9
Back side	20	QPSK 50 25	132322/1745	1:1	0.165	0.11	16.78	17.30	1.127	0.186	21.9
Left side	20	QPSK 50 25	132322/1745	1:1	0.041	0.19	16.78	17.30	1.127	0.046	21.9
Top side	20	QPSK 50 25	132322/1745	1:1	0.230	0.06	16.78	17.30	1.127	0.259	21.9
Ant 4 Test Record For DC_66A_N7&38&41 (LTE B66)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	132072/1720	1:1	0.066	-0.02	23.15	23.80	1.161	0.077	21.9
Left tilted	20	QPSK 1 50	132072/1720	1:1	0.045	0.15	23.15	23.80	1.161	0.053	21.9
Right cheek	20	QPSK 1 50	132072/1720	1:1	0.082	-0.03	23.15	23.80	1.161	0.095	21.9
Right tilted	20	QPSK 1 50	132072/1720	1:1	0.038	0.06	23.15	23.80	1.161	0.044	21.9
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 25	132072/1720	1:1	0.065	0.01	22.25	22.80	1.135	0.074	21.9
Left tilted	20	QPSK 50 25	132072/1720	1:1	0.044	0.05	22.25	22.80	1.135	0.050	21.9
Right cheek	20	QPSK 50 25	132072/1720	1:1	0.070	0.07	22.25	22.80	1.135	0.080	21.9
Right tilted	20	QPSK 50 25	132072/1720	1:1	0.029	0.04	22.25	22.80	1.135	0.033	21.9
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 50	132072/1720	1:1	0.057	-0.08	17.10	17.80	1.175	0.067	21.9
Back side	20	QPSK 1 50	132072/1720	1:1	0.068	0.05	17.10	17.80	1.175	0.079	21.9
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 25	132072/1720	1:1	0.056	-0.05	17.08	17.80	1.180	0.066	21.9
Back side	20	QPSK 50 25	132072/1720	1:1	0.066	0.03	17.08	17.80	1.180	0.078	21.9
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 50	132072/1720	1:1	0.076	0.04	16.10	16.80	1.175	0.090	21.9
Back side	20	QPSK 1 50	132072/1720	1:1	0.100	0.12	16.10	16.80	1.175	0.117	21.9
Left side	20	QPSK 1 50	132072/1720	1:1	0.034	0.01	16.10	16.80	1.175	0.040	21.9
Bottom side	20	QPSK 1 50	132072/1720	1:1	0.149	-0.02	16.10	16.80	1.175	0.175	21.9
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 25	132072/1720	1:1	0.074	0.02	16.00	16.80	1.202	0.089	21.9
Back side	20	QPSK 50 25	132072/1720	1:1	0.098	0.01	16.00	16.80	1.202	0.118	21.9
Left side	20	QPSK 50 25	132072/1720	1:1	0.033	0.09	16.00	16.80	1.202	0.040	21.9
Bottom side	20	QPSK 50 25	132072/1720	1:1	0.145	-0.04	16.00	16.80	1.202	0.174	21.9



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Ant 5 Test Record For DC_66A_N7&38&41 (LTE B66)											
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 50	132072/1720	1:1	0.135	0.05	21.95	23.30	1.365	0.184	21.9
Left tilted	20	QPSK 1 50	132072/1720	1:1	0.029	-0.04	21.95	23.30	1.365	0.039	21.9
Right cheek	20	QPSK 1 50	132072/1720	1:1	0.255	0.08	21.95	23.30	1.365	0.348	21.9
Right tilted	20	QPSK 1 50	132072/1720	1:1	0.051	0.09	21.95	23.30	1.365	0.069	21.9
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 25	132072/1720	1:1	0.115	0.08	20.98	22.30	1.355	0.156	21.9
Left tilted	20	QPSK 50 25	132072/1720	1:1	0.024	0.06	20.98	22.30	1.355	0.032	21.9
Right cheek	20	QPSK 50 25	132072/1720	1:1	0.229	0.02	20.98	22.30	1.355	0.310	21.9
Right tilted	20	QPSK 50 25	132072/1720	1:1	0.041	-0.07	20.98	22.30	1.355	0.056	21.9
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 50	132072/1720	1:1	0.014	0.02	18.03	19.30	1.340	0.018	21.9
Back side	20	QPSK 1 50	132072/1720	1:1	0.022	0.05	18.03	19.30	1.340	0.029	21.9
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 25	132072/1720	1:1	0.014	0.06	18.02	19.30	1.343	0.018	21.9
Back side	20	QPSK 50 25	132072/1720	1:1	0.022	0.06	18.02	19.30	1.343	0.029	21.9
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 50	132072/1720	1:1	0.020	0.01	17.04	18.30	1.337	0.027	21.9
Back side	20	QPSK 1 50	132072/1720	1:1	0.035	0.01	17.04	18.30	1.337	0.047	21.9
Left side	20	QPSK 1 50	132072/1720	1:1	0.049	0.02	17.04	18.30	1.337	0.065	21.9
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 25	132072/1720	1:1	0.020	0.01	17.03	18.30	1.340	0.027	21.9
Back side	20	QPSK 50 25	132072/1720	1:1	0.035	0.09	17.03	18.30	1.340	0.047	21.9
Left side	20	QPSK 50 25	132072/1720	1:1	0.048	0.01	17.03	18.30	1.340	0.065	21.9

Table 25: SAR of LTE Band 66 (For DC_66A_N7&38&41) for Head and Body.



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8.2.16 SAR Result of NR Band 5

Ant0 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 53	166800/834	100%	0.112	-0.15	23.16	24.20	1.271	0.142	22.4
Left tilted	20	QPSK 1 53	166800/834	100%	0.047	0.08	23.16	24.20	1.271	0.059	22.4
Right cheek	20	QPSK 1 53	166800/834	100%	0.114	0.03	23.16	24.20	1.271	0.145	22.4
Right tilted	20	QPSK 1 53	166800/834	100%	0.061	-0.07	23.16	24.20	1.271	0.078	22.4
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 28	166800/834	100%	0.104	0.03	23.25	24.20	1.245	0.129	22.4
Left tilted	20	QPSK 50 28	166800/834	100%	0.047	0.06	23.25	24.20	1.245	0.058	22.4
Right cheek	20	QPSK 50 28	166800/834	100%	0.118	0.09	23.25	24.20	1.245	0.147	22.4
Right tilted	20	QPSK 50 28	166800/834	100%	0.053	0.06	23.25	24.20	1.245	0.066	22.4
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 53	166800/834	100%	0.099	0.01	23.16	24.20	1.271	0.126	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.125	0.01	23.16	24.20	1.271	0.159	22.4
Back side with Battery2	20	QPSK 1_53	166800/834	100%	0.117	0.02	23.16	24.20	1.271	0.149	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 28	166800/834	100%	0.101	0.05	23.25	24.20	1.245	0.126	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.127	-0.03	23.25	24.20	1.245	0.158	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 53	166800/834	100%	0.163	0.05	23.16	24.20	1.271	0.207	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.209	-0.02	23.16	24.20	1.271	0.266	22.4
Right side	20	QPSK 1 53	166800/834	100%	0.126	-0.05	23.16	24.20	1.271	0.160	22.4
Bottom side	20	QPSK 1 53	166800/834	100%	0.100	-0.07	23.16	24.20	1.271	0.127	22.4
Back side with Battery2	20	QPSK 1_53	166800/834	100%	0.198	-0.03	23.16	24.20	1.271	0.252	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 28	166800/834	100%	0.167	0.15	23.25	24.20	1.245	0.208	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.213	-0.08	23.25	24.20	1.245	0.265	22.4
Right side	20	QPSK 50 28	166800/834	100%	0.129	-0.08	23.25	24.20	1.245	0.161	22.4
Bottom side	20	QPSK 50 28	166800/834	100%	0.101	-0.06	23.25	24.20	1.245	0.126	22.4
Ant1 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2											
Left cheek	20	QPSK 1 53	166800/834	100%	0.109	0.04	23.48	24.70	1.324	0.144	22.4
Left tilted	20	QPSK 1 53	166800/834	100%	0.101	-0.02	23.48	24.70	1.324	0.134	22.4
Right cheek	20	QPSK 1 53	166800/834	100%	0.340	-0.03	23.48	24.70	1.324	0.450	22.4
Right tilted	20	QPSK 1 53	166800/834	100%	0.256	0.05	23.48	24.70	1.324	0.339	22.4
Head Test Data (50%RB) DSI2											
Left cheek	20	QPSK 50 28	166800/834	100%	0.111	0.06	23.49	24.70	1.321	0.147	22.4
Left tilted	20	QPSK 50 28	166800/834	100%	0.104	0.05	23.49	24.70	1.321	0.137	22.4
Right cheek	20	QPSK 50 28	166800/834	100%	0.347	-0.01	23.49	24.70	1.321	0.458	22.4
Right tilted	20	QPSK 50 28	166800/834	100%	0.262	0.06	23.49	24.70	1.321	0.346	22.4
Right cheek with Battery2	20	QPSK 50_28	166800/834	100%	0.317	0.03	23.49	24.70	1.321	0.419	22.4
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	20	QPSK 1 53	166800/834	100%	0.040	0.01	23.48	24.70	1.324	0.053	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.082	0.08	23.48	24.70	1.324	0.108	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	20	QPSK 50 28	166800/834	100%	0.041	0.04	23.49	24.70	1.321	0.054	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.083	0.18	23.49	24.70	1.321	0.110	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	20	QPSK 1 53	166800/834	100%	0.066	0.04	23.48	24.70	1.324	0.088	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.150	-0.01	23.48	24.70	1.324	0.199	22.4
Left side	20	QPSK 1 53	166800/834	100%	0.062	-0.03	23.48	24.70	1.324	0.082	22.4



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Top side	20	QPSK 1 53	166800/834	100%	0.069	-0.05	23.48	24.70	1.324	0.092	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	20	QPSK 50 28	166800/834	100%	0.068	0.06	23.49	24.70	1.321	0.089	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.153	0.00	23.49	24.70	1.321	0.202	22.4
Left side	20	QPSK 50 28	166800/834	100%	0.063	-0.07	23.49	24.70	1.321	0.083	22.4
Top side	20	QPSK 50 28	166800/834	100%	0.071	-0.08	23.49	24.70	1.321	0.093	22.4
NSA N5											
Ant0 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2*											
Left cheek	20	QPSK 1 53	166800/834	100%	0.112	-0.15	23.16	24.20	1.271	0.142	22.4
Left tilted	20	QPSK 1 53	166800/834	100%	0.047	0.08	23.16	24.20	1.271	0.059	22.4
Right cheek	20	QPSK 1 53	166800/834	100%	0.114	0.03	23.16	24.20	1.271	0.145	22.4
Right tilted	20	QPSK 1 53	166800/834	100%	0.061	-0.07	23.16	24.20	1.271	0.078	22.4
Head Test Data (50%RB) DSI2*											
Left cheek	20	QPSK 50 28	166800/834	100%	0.104	0.03	23.25	24.20	1.245	0.129	22.4
Left tilted	20	QPSK 50 28	166800/834	100%	0.047	0.06	23.25	24.20	1.245	0.058	22.4
Right cheek	20	QPSK 50 28	166800/834	100%	0.118	0.09	23.25	24.20	1.245	0.147	22.4
Right tilted	20	QPSK 50 28	166800/834	100%	0.053	0.06	23.25	24.20	1.245	0.066	22.4
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	20	QPSK 1 53	166800/834	100%	0.099	0.01	23.16	23.20	1.009	0.100	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.125	0.01	23.16	23.20	1.009	0.126	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	20	QPSK 50 28	166800/834	100%	0.101	0.05	23.25	23.20	0.989	0.100	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.127	-0.03	23.25	23.20	0.989	0.126	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	20	QPSK 1 53	166800/834	100%	0.163	0.05	23.16	22.20	0.802	0.131	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.209	-0.02	23.16	22.20	0.802	0.168	22.4
Right side	20	QPSK 1 53	166800/834	100%	0.126	-0.05	23.16	22.20	0.802	0.101	22.4
Bottom side	20	QPSK 1 53	166800/834	100%	0.100	-0.07	23.16	22.20	0.802	0.080	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	20	QPSK 50 28	166800/834	100%	0.167	0.15	23.25	22.20	0.785	0.131	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.213	-0.08	23.25	22.20	0.785	0.167	22.4
Right side	20	QPSK 50 28	166800/834	100%	0.129	-0.08	23.25	22.20	0.785	0.101	22.4
Bottom side	20	QPSK 50 28	166800/834	100%	0.101	-0.06	23.25	22.20	0.785	0.079	22.4
Ant1 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2*											
Left cheek	20	QPSK 1 53	166800/834	100%	0.109	0.04	23.48	23.70	1.052	0.115	22.4
Left tilted	20	QPSK 1 53	166800/834	100%	0.101	-0.02	23.48	23.70	1.052	0.106	22.4
Right cheek	20	QPSK 1 53	166800/834	100%	0.340	-0.03	23.48	23.70	1.052	0.358	22.4
Right tilted	20	QPSK 1 53	166800/834	100%	0.256	0.05	23.48	23.70	1.052	0.269	22.4
Head Test Data (50%RB) DSI2*											
Left cheek	20	QPSK 50 28	166800/834	100%	0.111	0.06	23.49	23.70	1.050	0.116	22.4
Left tilted	20	QPSK 50 28	166800/834	100%	0.104	0.05	23.49	23.70	1.050	0.109	22.4
Right cheek	20	QPSK 50 28	166800/834	100%	0.347	-0.01	23.49	23.70	1.050	0.364	22.4
Right tilted	20	QPSK 50 28	166800/834	100%	0.262	0.06	23.49	23.70	1.050	0.275	22.4
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	20	QPSK 1 53	166800/834	100%	0.040	0.01	23.48	23.70	1.052	0.042	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.082	0.08	23.48	23.70	1.052	0.086	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	20	QPSK 50 28	166800/834	100%	0.041	0.04	23.49	23.70	1.050	0.043	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.083	0.18	23.49	23.70	1.050	0.088	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	20	QPSK 1 53	166800/834	100%	0.066	0.04	23.48	22.70	0.836	0.055	22.4
Back side	20	QPSK 1 53	166800/834	100%	0.150	-0.01	23.48	22.70	0.836	0.125	22.4
Left side	20	QPSK 1 53	166800/834	100%	0.062	-0.03	23.48	22.70	0.836	0.052	22.4
Top side	20	QPSK 1 53	166800/834	100%	0.069	-0.05	23.48	22.70	0.836	0.058	22.4



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Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	20	QPSK 50 28	166800/834	100%	0.068	0.06	23.49	22.70	0.834	0.056	22.4
Back side	20	QPSK 50 28	166800/834	100%	0.153	0.00	23.49	22.70	0.834	0.128	22.4
Left side	20	QPSK 50 28	166800/834	100%	0.063	-0.07	23.49	22.70	0.834	0.053	22.4
Top side	20	QPSK 50 28	166800/834	100%	0.071	-0.08	23.49	22.70	0.834	0.059	22.4

Table 26: SAR of NR Band 5 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.



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8.2.17 SAR Result of NR Band 7

Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 108	504000/2520	100%	0.479	0.07	16.05	17.20	1.303	0.624	22.4
Left tilted	40	QPSK 1 108	504000/2520	100%	0.582	0.05	16.05	17.20	1.303	0.758	22.4
Right cheek	40	QPSK 1 108	504000/2520	100%	0.678	0.05	16.05	17.20	1.303	0.884	22.4
Right cheek	40	QPSK 1 108	507000/2535	100%	0.859	0.02	16.03	17.20	1.309	1.125	22.4
Right cheek with Battery2	40	QPSK 1 108	507000/2535	100%	0.725	-0.04	16.03	17.20	1.309	0.949	22.4
Right cheek-Repeat	40	QPSK 1 108	507000/2535	100%	0.835	0.08	16.03	17.20	1.309	1.093	22.4
Right cheek	40	QPSK 1 108	510000/2550	100%	0.809	-0.06	16.03	17.20	1.309	1.059	22.4
Right tilted	40	QPSK 1 108	504000/2520	100%	0.690	-0.09	16.05	17.20	1.303	0.899	22.4
Right tilted	40	QPSK 1 108	507000/2535	100%	0.703	-0.07	16.03	17.20	1.309	0.920	22.4
Right tilted	40	QPSK 1 108	510000/2550	100%	0.668	0.04	16.03	17.20	1.309	0.875	22.4
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	507000/2535	100%	0.523	-0.03	16.09	17.20	1.291	0.675	22.4
Left tilted	40	QPSK 108 54	507000/2535	100%	0.595	0.07	16.09	17.20	1.291	0.768	22.4
Right cheek	40	QPSK 108 54	507000/2535	100%	0.755	0.00	16.09	17.20	1.291	0.975	22.4
Right cheek	40	QPSK 108 54	504000/2520	100%	0.799	-0.05	15.89	17.20	1.352	1.080	22.4
Right cheek	40	QPSK 108 54	510000/2550	100%	0.626	0.01	15.85	17.20	1.365	0.854	22.4
Right tilted	40	QPSK 108 54	507000/2535	100%	0.713	0.02	16.09	17.20	1.291	0.921	22.4
Right tilted	40	QPSK 108 54	504000/2520	100%	0.664	-0.09	15.89	17.20	1.352	0.898	22.4
Right tilted	40	QPSK 108 54	510000/2550	100%	0.687	0.05	15.85	17.20	1.365	0.937	22.4
Head Test Data (100%RB) DSI2											
Left tilted	40	QPSK 216 0	507000/2535	100%	0.580	-0.01	15.61	17.20	1.442	0.836	22.4
Right cheek	40	QPSK 216 0	507000/2535	100%	0.740	-0.01	15.61	17.20	1.442	1.067	22.4
Right tilted	40	QPSK 216 0	507000/2535	100%	0.688	0.00	15.61	17.20	1.442	0.992	22.4
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1 1	507000/2535	100%	0.130	0.09	18.75	20.20	1.396	0.182	22.4
Back side	40	QPSK 1 1	507000/2535	100%	0.247	0.07	18.75	20.20	1.396	0.345	22.4
Back side with Battery2	40	QPSK 1 1	507000/2535	100%	0.199	-0.09	18.75	20.20	1.396	0.278	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	507000/2535	100%	0.133	-0.01	19.19	20.20	1.262	0.168	22.4
Back side	40	QPSK 108 54	507000/2535	100%	0.250	0.07	19.19	20.20	1.262	0.315	22.4
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 1	507000/2535	100%	0.156	0.02	18.00	19.20	1.318	0.206	22.4
Back side	40	QPSK 1 1	507000/2535	100%	0.330	-0.04	18.00	19.20	1.318	0.435	22.4
Left side	40	QPSK 1 1	507000/2535	100%	0.164	-0.05	18.00	19.20	1.318	0.216	22.4
Top side	40	QPSK 1 1	507000/2535	100%	0.420	-0.01	18.00	19.20	1.318	0.554	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108 54	507000/2535	100%	0.156	-0.09	18.24	19.20	1.247	0.195	22.4
Back side	40	QPSK 108 54	507000/2535	100%	0.414	0.04	18.24	19.20	1.247	0.516	22.4
Left side	40	QPSK 108 54	507000/2535	100%	0.159	0.02	18.24	19.20	1.247	0.198	22.4
Top side	40	QPSK 108 54	507000/2535	100%	0.485	-0.04	18.24	19.20	1.247	0.605	22.4
Top side with Battery2	40	QPSK 108_54	507000/2535	100%	0.439	-0.06	18.24	19.20	1.247	0.548	22.4
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 108	510000/2550	100%	0.128	-0.12	23.57	24.20	1.156	0.148	22.3
Left tilted	40	QPSK 1 108	510000/2550	100%	0.049	-0.08	23.57	24.20	1.156	0.057	22.3
Right cheek	40	QPSK 1 108	510000/2550	100%	0.121	-0.03	23.57	24.20	1.156	0.140	22.3
Right tilted	40	QPSK 1 108	510000/2550	100%	0.096	-0.12	23.57	24.20	1.156	0.111	22.3
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	510000/2550	100%	0.127	0.01	23.72	24.20	1.117	0.142	22.3
Left tilted	40	QPSK 108 54	510000/2550	100%	0.038	0.09	23.72	24.20	1.117	0.042	22.3
Right cheek	40	QPSK 108 54	510000/2550	100%	0.122	-0.15	23.72	24.20	1.117	0.136	22.3
Right tilted	40	QPSK 108 54	510000/2550	100%	0.100	-0.02	23.72	24.20	1.117	0.112	22.3



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Body worn Test data (Separate 15mm 1RB) DSI 1											
Front side	40	QPSK 1 1	507000/2535	100%	0.068	-0.08	20.17	21.20	1.268	0.086	22.3
Back side	40	QPSK 1 1	507000/2535	100%	0.092	0.04	20.17	21.20	1.268	0.116	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	507000/2535	100%	0.077	0.04	20.64	21.20	1.138	0.088	22.3
Back side	40	QPSK 108 54	507000/2535	100%	0.109	0.07	20.64	21.20	1.138	0.124	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 108	504000/2520	100%	0.171	-0.07	19.67	20.70	1.268	0.217	22.3
Back side	40	QPSK 1 108	504000/2520	100%	0.222	-0.07	19.67	20.70	1.268	0.281	22.3
Left side	40	QPSK 1 108	504000/2520	100%	0.066	-0.05	19.67	20.70	1.268	0.083	22.3
Bottom side	40	QPSK 1 108	504000/2520	100%	0.374	-0.10	19.67	20.70	1.268	0.474	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI 3											
Front side	40	QPSK 108 54	507000/2535	100%	0.154	-0.05	20.21	20.70	1.119	0.172	22.3
Back side	40	QPSK 108 54	507000/2535	100%	0.224	-0.01	20.21	20.70	1.119	0.251	22.3
Left side	40	QPSK 108 54	507000/2535	100%	0.039	0.13	20.21	20.70	1.119	0.044	22.3
Bottom side	40	QPSK 108 54	507000/2535	100%	0.385	-0.07	20.21	20.70	1.119	0.431	22.3
Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 108	510000/2550	100%	0.169	-0.01	22.28	22.50	1.052	0.178	22.9
Left tilted	40	QPSK 1 108	510000/2550	100%	0.038	-0.07	22.28	22.50	1.052	0.040	22.9
Right cheek	40	QPSK 1 108	510000/2550	100%	0.395	-0.01	22.28	22.50	1.052	0.416	22.9
Right tilted	40	QPSK 1 108	510000/2550	100%	0.081	0.09	22.28	22.50	1.052	0.085	22.9
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	510000/2550	100%	0.196	-0.07	22.42	22.50	1.019	0.200	22.9
Left tilted	40	QPSK 108 54	510000/2550	100%	0.041	-0.01	22.42	22.50	1.019	0.041	22.9
Right cheek	40	QPSK 108 54	510000/2550	100%	0.461	-0.07	22.42	22.50	1.019	0.470	22.9
Right tilted	40	QPSK 108 54	510000/2550	100%	0.081	0.09	22.42	22.50	1.019	0.083	22.9
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1 1	507000/2535	100%	0.047	0.09	20.83	21.00	1.040	0.049	22.9
Back side	40	QPSK 1 1	507000/2535	100%	0.075	-0.06	20.83	21.00	1.040	0.078	22.9
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	507000/2535	100%	0.045	0.07	20.84	21.00	1.038	0.047	22.9
Back side	40	QPSK 108 54	507000/2535	100%	0.073	0.09	20.84	21.00	1.038	0.076	22.9
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 108	510000/2550	100%	0.073	-0.04	20.28	20.50	1.052	0.077	22.9
Back side	40	QPSK 1 108	510000/2550	100%	0.140	0.06	20.28	20.50	1.052	0.147	22.9
Left side	40	QPSK 1 108	510000/2550	100%	0.093	0.00	20.28	20.50	1.052	0.098	22.9
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108 54	507000/2535	100%	0.074	-0.08	20.29	20.50	1.050	0.078	22.9
Back side	40	QPSK 108 54	507000/2535	100%	0.144	-0.05	20.29	20.50	1.050	0.151	22.9
Left side	40	QPSK 108 54	507000/2535	100%	0.095	-0.01	20.29	20.50	1.050	0.100	22.9
NSA N7											
Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1 108	504000/2520	100%	0.479	0.07	16.05	15.20	0.822	0.394	22.4
Left tilted	40	QPSK 1 108	504000/2520	100%	0.582	0.05	16.05	15.20	0.822	0.479	22.4
Right cheek	40	QPSK 1 108	504000/2520	100%	0.678	0.05	16.05	15.20	0.822	0.557	22.4
Right cheek	40	QPSK 1 108	507000/2535	100%	0.859	0.02	16.03	15.20	0.826	0.710	22.4
Right cheek	40	QPSK 1 108	509000/2545	100%	0.826	-0.06	16.03	15.20	0.826	0.682	22.4
Right tilted	40	QPSK 1 108	504000/2520	100%	0.690	-0.09	16.05	15.20	0.822	0.567	22.4
Right tilted	40	QPSK 1 108	507000/2535	100%	0.703	-0.07	16.03	15.20	0.826	0.581	22.4
Right tilted	40	QPSK 1 108	510000/2550	100%	0.668	0.04	16.03	15.20	0.826	0.552	22.4
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108 54	507000/2535	100%	0.523	-0.03	16.09	15.20	0.815	0.426	22.4
Left tilted	40	QPSK 108 54	507000/2535	100%	0.595	0.07	16.09	15.20	0.815	0.485	22.4
Right cheek	40	QPSK 108 54	507000/2535	100%	0.755	0.00	16.09	15.20	0.815	0.615	22.4
Right cheek	40	QPSK 108 54	504000/2520	100%	0.799	-0.05	15.89	15.20	0.853	0.682	22.4



Right cheek	40	QPSK 108 54	510000/2550	100%	0.626	0.01	15.85	15.20	0.861	0.539	22.4
Right tilted	40	QPSK 108 54	507000/2535	100%	0.713	0.02	16.09	15.20	0.815	0.581	22.4
Right tilted	40	QPSK 108 54	504000/2520	100%	0.664	-0.09	15.89	15.20	0.853	0.566	22.4
Right tilted	40	QPSK 108 54	510000/2550	100%	0.687	0.05	15.85	15.20	0.861	0.592	22.4
Head Test Data (100%RB) DSI2*											
Right cheek	40	QPSK 216 0	507000/2535	100%	0.740	-0.01	15.61	15.20	0.910	0.673	22.4
Right tilted	40	QPSK 216 0	507000/2535	100%	0.688	0.00	15.61	15.20	0.910	0.626	22.4
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1 1	507000/2535	100%	0.130	0.09	18.75	17.70	0.785	0.102	22.4
Back side	40	QPSK 1 1	507000/2535	100%	0.247	0.07	18.75	17.70	0.785	0.194	22.4
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108 54	507000/2535	100%	0.133	-0.01	19.19	17.70	0.710	0.094	22.4
Back side	40	QPSK 108 54	507000/2535	100%	0.250	0.07	19.19	17.70	0.710	0.177	22.4
Hotspot Test Data (Separate 10mm 1RB) DSI3*											
Front side	40	QPSK 1 1	507000/2535	100%	0.156	0.02	18.00	16.20	0.661	0.103	22.4
Back side	40	QPSK 1 1	507000/2535	100%	0.330	-0.04	18.00	16.20	0.661	0.218	22.4
Left side	40	QPSK 1 1	507000/2535	100%	0.164	-0.05	18.00	16.20	0.661	0.108	22.4
Top side	40	QPSK 1 1	507000/2535	100%	0.420	-0.01	18.00	16.20	0.661	0.277	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	40	QPSK 108 54	507000/2535	100%	0.156	-0.09	18.24	16.20	0.625	0.098	22.4
Back side	40	QPSK 108 54	507000/2535	100%	0.414	0.04	18.24	16.20	0.625	0.259	22.4
Left side	40	QPSK 108 54	507000/2535	100%	0.159	0.02	18.24	16.20	0.625	0.099	22.4
Top side	40	QPSK 108 54	507000/2535	100%	0.485	-0.04	18.24	16.20	0.625	0.303	22.4
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1 108	510000/2550	100%	0.128	-0.12	23.57	24.20	1.156	0.148	22.3
Left tilted	40	QPSK 1 108	510000/2550	100%	0.049	-0.08	23.57	24.20	1.156	0.057	22.3
Right cheek	40	QPSK 1 108	510000/2550	100%	0.121	-0.03	23.57	24.20	1.156	0.140	22.3
Right tilted	40	QPSK 1 108	510000/2550	100%	0.096	-0.12	23.57	24.20	1.156	0.111	22.3
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108 54	510000/2550	100%	0.127	0.01	23.72	24.20	1.117	0.142	22.3
Left tilted	40	QPSK 108 54	510000/2550	100%	0.038	0.09	23.72	24.20	1.117	0.042	22.3
Right cheek	40	QPSK 108 54	510000/2550	100%	0.122	-0.15	23.72	24.20	1.117	0.136	22.3
Right tilted	40	QPSK 108 54	510000/2550	100%	0.100	-0.02	23.72	24.20	1.117	0.112	22.3
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1 1	507000/2535	100%	0.068	-0.08	20.17	18.70	0.713	0.048	22.3
Back side	40	QPSK 1 1	507000/2535	100%	0.092	0.04	20.17	18.70	0.713	0.065	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108 54	507000/2535	100%	0.077	0.04	20.64	18.70	0.640	0.049	22.3
Back side	40	QPSK 108 54	507000/2535	100%	0.109	0.07	20.64	18.70	0.640	0.070	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	40	QPSK 1 108	504000/2520	100%	0.171	-0.07	19.67	17.70	0.635	0.109	22.3
Back side	40	QPSK 1 108	504000/2520	100%	0.222	-0.07	19.67	17.70	0.635	0.141	22.3
Left side	40	QPSK 1 108	504000/2520	100%	0.066	-0.05	19.67	17.70	0.635	0.042	22.3
Bottom side	40	QPSK 1 108	504000/2520	100%	0.374	-0.10	19.67	17.70	0.635	0.238	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	40	QPSK 108 54	507000/2535	100%	0.154	-0.05	20.21	17.70	0.561	0.086	22.3
Back side	40	QPSK 108 54	507000/2535	100%	0.224	-0.01	20.21	17.70	0.561	0.126	22.3
Left side	40	QPSK 108 54	507000/2535	100%	0.039	0.13	20.21	17.70	0.561	0.022	22.3
Bottom side	40	QPSK 108 54	507000/2535	100%	0.385	-0.07	20.21	17.70	0.561	0.216	22.3



Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1 108	510000/2550	100%	0.169	-0.01	22.28	22.50	1.052	0.178	22.9
Left tilted	40	QPSK 1 108	510000/2550	100%	0.038	-0.07	22.28	22.50	1.052	0.040	22.9
Right cheek	40	QPSK 1 108	510000/2550	100%	0.395	-0.01	22.28	22.50	1.052	0.416	22.9
Right tilted	40	QPSK 1 108	510000/2550	100%	0.081	0.09	22.28	22.50	1.052	0.085	22.9
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108 54	510000/2550	100%	0.196	-0.07	22.42	22.50	1.019	0.200	22.9
Left tilted	40	QPSK 108 54	510000/2550	100%	0.041	-0.01	22.42	22.50	1.019	0.041	22.9
Right cheek	40	QPSK 108 54	510000/2550	100%	0.461	-0.07	22.42	22.50	1.019	0.470	22.9
Right tilted	40	QPSK 108 54	510000/2550	100%	0.081	0.09	22.42	22.50	1.019	0.083	22.9
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1 1	507000/2535	100%	0.047	0.09	20.83	18.50	0.585	0.028	22.9
Back side	40	QPSK 1 1	507000/2535	100%	0.075	-0.06	20.83	18.50	0.585	0.044	22.9
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108 54	507000/2535	100%	0.045	0.07	20.84	18.50	0.583	0.026	22.9
Back side	40	QPSK 108 54	507000/2535	100%	0.073	0.09	20.84	18.50	0.583	0.043	22.9
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	40	QPSK 1 108	509000/2545	100%	0.075	-0.04	20.28	17.50	0.527	0.040	22.9
Back side	40	QPSK 1 108	509000/2545	100%	0.145	0.06	20.28	17.50	0.527	0.076	22.9
Left side	40	QPSK 1 108	509000/2545	100%	0.096	0.00	20.28	17.50	0.527	0.051	22.9
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	40	QPSK 108 54	507000/2535	100%	0.074	-0.08	20.29	17.50	0.526	0.039	22.9
Back side	40	QPSK 108 54	507000/2535	100%	0.144	-0.05	20.29	17.50	0.526	0.076	22.9
Left side	40	QPSK 108 54	507000/2535	100%	0.095	-0.01	20.29	17.50	0.526	0.050	22.9

Table 27: SAR of NR Band 7 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.

Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Right cheek	507000/2535	0.859	0.835	1.03	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

5) The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. The repeated measurement results must be clearly identified in the SAR report.



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8.2.18 SAR Result of NR Band 38

Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 1	519000/2595	100%	0.396	0.03	15.79	17.20	1.384	0.548	22.5
Left tilted	40	QPSK 1 1	519000/2595	100%	0.505	0.02	15.79	17.20	1.384	0.699	22.5
Right cheek	40	QPSK 1 1	519000/2595	100%	0.742	-0.02	15.79	17.20	1.384	1.027	22.5
Right cheek	40	QPSK 1 1	518000/2590	100%	0.604	-0.09	15.71	17.20	1.409	0.851	22.5
Right cheek	40	QPSK 1 1	520000/2600	100%	0.618	-0.02	15.78	17.20	1.387	0.857	22.5
Right tilted	40	QPSK 1 1	519000/2595	100%	0.627	0.00	15.79	17.20	1.384	0.867	22.5
Right tilted	40	QPSK 1 1	518000/2590	100%	0.612	-0.06	15.71	17.20	1.409	0.862	22.5
Right tilted	40	QPSK 1 1	520000/2600	100%	0.610	-0.06	15.78	17.20	1.387	0.846	22.5
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	519000/2595	100%	0.436	0.02	16.08	17.20	1.294	0.564	22.5
Left tilted	40	QPSK 108 54	519000/2595	100%	0.520	0.06	16.08	17.20	1.294	0.673	22.5
Right cheek	40	QPSK 108 54	519000/2595	100%	0.671	0.03	16.08	17.20	1.294	0.868	22.5
Right cheek	40	QPSK 108 54	518000/2590	100%	0.847	0.13	15.90	17.20	1.349	1.143	22.5
Right cheek-Repeat	40	QPSK 108 54	518000/2590	100%	0.785	-0.01	15.90	17.20	1.349	1.059	22.5
Right cheek with Battery2	40	QPSK 108 54	518000/2590	100%	0.602	-0.03	15.90	17.20	1.349	0.812	22.5
Right cheek	40	QPSK 108 54	520000/2600	100%	0.794	0.06	15.98	17.20	1.324	1.052	22.5
Right tilted	40	QPSK 108 54	519000/2595	100%	0.700	-0.01	16.08	17.20	1.294	0.906	22.5
Right tilted	40	QPSK 108 54	518000/2590	100%	0.674	-0.18	15.90	17.20	1.349	0.909	22.5
Right tilted	40	QPSK 108 54	520000/2600	100%	0.684	-0.07	15.98	17.20	1.324	0.906	22.5
Head Test Data (100%RB) DSI2											
Right cheek	40	QPSK 216 0	519000/2595	100%	0.812	0.03	16.05	17.20	1.303	1.058	22.5
Right tilted	40	QPSK 216 0	519000/2595	100%	0.786	0.04	16.05	17.20	1.303	1.024	22.5
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1 1	519000/2595	100%	0.135	0.03	19.69	20.70	1.262	0.170	22.5
Back side	40	QPSK 1 1	519000/2595	100%	0.269	-0.01	19.69	20.70	1.262	0.339	22.5
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	519000/2595	100%	0.139	0.01	19.80	20.70	1.230	0.171	22.5
Back side	40	QPSK 108 54	519000/2595	100%	0.287	-0.14	19.80	20.70	1.230	0.353	22.5
Back side with Battery2	40	QPSK 108 54	519000/2595	100%	0.274	-0.05	19.80	20.70	1.230	0.337	22.5
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 1	519000/2595	100%	0.165	0.17	18.44	19.70	1.337	0.221	22.5
Back side	40	QPSK 1 1	519000/2595	100%	0.304	0.04	18.44	19.70	1.337	0.406	22.5
Left side	40	QPSK 1 1	519000/2595	100%	0.127	0.06	18.44	19.70	1.337	0.170	22.5
Top side	40	QPSK 1 1	519000/2595	100%	0.416	0.00	18.44	19.70	1.337	0.556	22.5
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108 54	519000/2595	100%	0.190	0.05	18.55	19.70	1.303	0.248	22.5
Back side	40	QPSK 108 54	519000/2595	100%	0.360	0.03	18.55	19.70	1.303	0.469	22.5
Left side	40	QPSK 108 54	519000/2595	100%	0.137	0.13	18.55	19.70	1.303	0.179	22.5
Top side	40	QPSK 108 54	519000/2595	100%	0.447	0.03	18.55	19.70	1.303	0.583	22.5
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 1	519000/2595	100%	0.120	0.02	23.19	24.20	1.262	0.151	22.7
Left tilted	40	QPSK 1 1	519000/2595	100%	0.065	0.03	23.19	24.20	1.262	0.082	22.7
Right cheek	40	QPSK 1 1	519000/2595	100%	0.121	0.18	23.19	24.20	1.262	0.153	22.7
Right tilted	40	QPSK 1 1	519000/2595	100%	0.116	0.04	23.19	24.20	1.262	0.146	22.7
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	519000/2595	100%	0.155	0.09	23.20	24.20	1.259	0.195	22.7
Left tilted	40	QPSK 108 54	519000/2595	100%	0.066	0.04	23.20	24.20	1.259	0.082	22.7
Right cheek	40	QPSK 108 54	519000/2595	100%	0.141	0.08	23.20	24.20	1.259	0.178	22.7
Right tilted	40	QPSK 108 54	519000/2595	100%	0.114	0.02	23.20	24.20	1.259	0.144	22.7
Body worn Test data (Separate 15mm 1RB) DSI1											



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Front side	40	QPSK 1 1	519000/2595	100%	0.116	0.08	20.10	21.20	1.288	0.149	22.7
Back side	40	QPSK 1 1	519000/2595	100%	0.183	0.09	20.10	21.20	1.288	0.236	22.7
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	519000/2595	100%	0.166	0.01	20.32	21.20	1.225	0.203	22.7
Back side	40	QPSK 108 54	519000/2595	100%	0.283	0.03	20.32	21.20	1.225	0.347	22.7
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 1	519000/2595	100%	0.203	0.11	20.10	21.20	1.288	0.262	22.7
Back side	40	QPSK 1 1	519000/2595	100%	0.312	0.09	20.10	21.20	1.288	0.402	22.7
Left side	40	QPSK 1 1	519000/2595	100%	0.032	0.01	20.10	21.20	1.288	0.042	22.7
Bottom side	40	QPSK 1 1	519000/2595	100%	0.459	-0.19	20.10	21.20	1.288	0.591	22.7
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108 54	519000/2595	100%	0.312	0.07	20.32	21.20	1.225	0.382	22.7
Back side	40	QPSK 108 54	519000/2595	100%	0.484	-0.09	20.32	21.20	1.225	0.593	22.7
Left side	40	QPSK 108 54	519000/2595	100%	0.041	0.12	20.32	21.20	1.225	0.050	22.7
Bottom side	40	QPSK 108 54	519000/2595	100%	0.818	-0.06	20.32	21.20	1.225	1.002	22.7
Bottom side-Repeat	40	QPSK 108 54	519000/2595	100%	0.789	0.03	20.32	21.20	1.225	0.966	22.7
Bottom side	40	QPSK 108 54	518000/2590	100%	0.674	-0.02	20.07	21.20	1.297	0.874	22.7
Bottom side	40	QPSK 108 54	520000/2600	100%	0.702	0.17	20.01	21.20	1.315	0.923	22.7
Bottom side with Battery2	40	QPSK 108 54	519000/2595	100%	0.706	0.03	20.32	21.20	1.225	0.865	22.7
Hotspot Test data (Separate 100mm 100%RB) DSI3											
Bottom side	40	QPSK 216 0	519000/2595	100%	0.678	0.04	19.77	21.20	1.390	0.942	22.7
Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 108	519000/2595	100%	0.155	-0.03	21.48	22.40	1.236	0.192	22.3
Left tilted	40	QPSK 1 108	519000/2595	100%	0.035	0.01	21.48	22.40	1.236	0.044	22.3
Right cheek	40	QPSK 1 108	519000/2595	100%	0.392	0.02	21.48	22.40	1.236	0.484	22.3
Right tilted	40	QPSK 1 108	519000/2595	100%	0.075	0.08	21.48	22.40	1.236	0.093	22.3
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	519000/2595	100%	0.224	0.08	21.58	22.40	1.208	0.271	22.3
Left tilted	40	QPSK 108 54	519000/2595	100%	0.045	-0.02	21.58	22.40	1.208	0.054	22.3
Right cheek	40	QPSK 108 54	519000/2595	100%	0.378	0.09	21.58	22.40	1.208	0.457	22.3
Right tilted	40	QPSK 108 54	519000/2595	100%	0.076	0.03	21.58	22.40	1.208	0.092	22.3
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1 108	519000/2595	100%	0.044	0.06	21.48	22.40	1.236	0.054	22.3
Back side	40	QPSK 1 108	519000/2595	100%	0.061	0.07	21.48	22.40	1.236	0.075	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	519000/2595	100%	0.051	0.02	21.58	22.40	1.208	0.061	22.3
Back side	40	QPSK 108 54	519000/2595	100%	0.065	0.09	21.58	22.40	1.208	0.078	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 108	519000/2595	100%	0.078	0.02	21.48	22.40	1.236	0.097	22.3
Back side	40	QPSK 1 108	519000/2595	100%	0.129	0.07	21.48	22.40	1.236	0.159	22.3
Left side	40	QPSK 1 108	519000/2595	100%	0.090	0.06	21.48	22.40	1.236	0.111	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108 54	519000/2595	100%	0.085	0.05	21.58	22.40	1.208	0.103	22.3
Back side	40	QPSK 108 54	519000/2595	100%	0.132	0.06	21.58	22.40	1.208	0.159	22.3
Left side	40	QPSK 108 54	519000/2595	100%	0.135	0.00	21.58	22.40	1.208	0.163	22.3
NSA N38											
Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1 1	519000/2595	100%	0.396	0.03	15.79	15.20	0.873	0.346	22.5
Left tilted	40	QPSK 1 1	519000/2595	100%	0.505	0.02	15.79	15.20	0.873	0.441	22.5
Right cheek	40	QPSK 1 1	519000/2595	100%	0.742	-0.02	15.79	15.20	0.873	0.648	22.5
Right cheek	40	QPSK 1 1	518000/2590	100%	0.604	-0.09	15.71	15.20	0.889	0.537	22.5
Right cheek	40	QPSK 1 1	520000/2600	100%	0.618	-0.02	15.78	15.20	0.875	0.541	22.5
Right tilted	40	QPSK 1 1	519000/2595	100%	0.627	0.00	15.79	15.20	0.873	0.547	22.5
Right tilted	40	QPSK 1 1	518000/2590	100%	0.612	-0.06	15.71	15.20	0.889	0.544	22.5



Right tilted	40	QPSK 1 1	520000/2600	100%	0.610	-0.06	15.78	15.20	0.875	0.534	22.5
Head Test Data (50%RB) DS12*											
Left cheek	40	QPSK 108 54	519000/2595	100%	0.436	0.02	16.08	15.20	0.817	0.356	22.5
Left tilted	40	QPSK 108 54	519000/2595	100%	0.520	0.06	16.08	15.20	0.817	0.425	22.5
Right cheek	40	QPSK 108 54	519000/2595	100%	0.671	0.03	16.08	15.20	0.817	0.548	22.5
Right cheek	40	QPSK 108 54	518000/2590	100%	0.847	0.13	15.90	15.20	0.851	0.721	22.5
Right cheek	40	QPSK 108 54	520000/2600	100%	0.794	0.06	15.98	15.20	0.836	0.663	22.5
Right tilted	40	QPSK 108 54	519000/2595	100%	0.700	-0.01	16.08	15.20	0.817	0.572	22.5
Right tilted	40	QPSK 108 54	518000/2590	100%	0.674	-0.18	15.90	15.20	0.851	0.574	22.5
Right tilted	40	QPSK 108 54	520000/2600	100%	0.684	-0.07	15.98	15.20	0.836	0.572	22.5
Head Test Data (100%RB) DS12*											
Right cheek	40	QPSK 270 0	519000/2595	100%	0.812	0.03	16.05	15.20	0.822	0.668	22.5
Right tilted	40	QPSK 270 0	519000/2595	100%	0.874	0.04	16.05	15.20	0.822	0.719	22.5
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	40	QPSK 1 1	519000/2595	100%	0.135	0.03	19.69	18.20	0.710	0.096	22.5
Back side	40	QPSK 1 1	519000/2595	100%	0.269	-0.01	19.69	18.20	0.710	0.191	22.5
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	40	QPSK 108 54	519000/2595	100%	0.139	0.01	19.80	18.20	0.692	0.096	22.5
Back side	40	QPSK 108 54	519000/2595	100%	0.287	-0.14	19.80	18.20	0.692	0.199	22.5
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	40	QPSK 1 1	519000/2595	100%	0.165	0.17	18.44	16.70	0.670	0.111	22.5
Back side	40	QPSK 1 1	519000/2595	100%	0.304	0.04	18.44	16.70	0.670	0.204	22.5
Left side	40	QPSK 1 1	519000/2595	100%	0.127	0.06	18.44	16.70	0.670	0.085	22.5
Top side	40	QPSK 1 1	519000/2595	100%	0.416	0.00	18.44	16.70	0.670	0.279	22.5
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	40	QPSK 108 54	519000/2595	100%	0.190	0.05	18.55	16.70	0.653	0.124	22.5
Back side	40	QPSK 108 54	519000/2595	100%	0.360	0.03	18.55	16.70	0.653	0.235	22.5
Left side	40	QPSK 108 54	519000/2595	100%	0.137	0.13	18.55	16.70	0.653	0.089	22.5
Top side	40	QPSK 108 54	519000/2595	100%	0.447	0.03	18.55	16.70	0.653	0.292	22.5
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12*											
Left cheek	40	QPSK 1 1	519000/2595	100%	0.120	0.02	23.19	24.20	1.262	0.151	22.7
Left tilted	40	QPSK 1 1	519000/2595	100%	0.065	0.03	23.19	24.20	1.262	0.082	22.7
Right cheek	40	QPSK 1 1	519000/2595	100%	0.121	0.18	23.19	24.20	1.262	0.153	22.7
Right tilted	40	QPSK 1 1	519000/2595	100%	0.116	0.04	23.19	24.20	1.262	0.146	22.7
Head Test Data (50%RB) DS12*											
Left cheek	40	QPSK 108 54	519000/2595	100%	0.155	0.09	23.20	24.20	1.259	0.195	22.7
Left tilted	40	QPSK 108 54	519000/2595	100%	0.066	0.04	23.20	24.20	1.259	0.082	22.7
Right cheek	40	QPSK 108 54	519000/2595	100%	0.141	0.08	23.20	24.20	1.259	0.178	22.7
Right tilted	40	QPSK 108 54	519000/2595	100%	0.114	0.02	23.20	24.20	1.259	0.144	22.7
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	40	QPSK 1 1	519000/2595	100%	0.116	0.08	20.10	19.20	0.813	0.094	22.7
Back side	40	QPSK 1 1	519000/2595	100%	0.183	0.09	20.10	19.20	0.813	0.149	22.7
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	40	QPSK 108 54	519000/2595	100%	0.166	0.01	20.32	19.20	0.773	0.128	22.7
Back side	40	QPSK 108 54	519000/2595	100%	0.283	0.03	20.32	19.20	0.773	0.219	22.7
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	40	QPSK 1 1	519000/2595	100%	0.203	0.11	20.10	18.20	0.646	0.131	22.7
Back side	40	QPSK 1 1	519000/2595	100%	0.312	0.09	20.10	18.20	0.646	0.201	22.7
Left side	40	QPSK 1 1	519000/2595	100%	0.032	0.01	20.10	18.20	0.646	0.021	22.7
Bottom side	40	QPSK 1 1	519000/2595	100%	0.459	-0.19	20.10	18.20	0.646	0.296	22.7
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	40	QPSK 108 54	519000/2595	100%	0.312	0.07	20.32	18.20	0.614	0.191	22.9
Back side	40	QPSK 108 54	519000/2595	100%	0.484	-0.09	20.32	18.20	0.614	0.297	22.9
Left side	40	QPSK 108 54	519000/2595	100%	0.041	0.12	20.32	18.20	0.614	0.025	22.9
Bottom side	40	QPSK 108 54	519000/2595	100%	0.818	-0.06	20.32	18.20	0.614	0.502	22.9
Bottom side	40	QPSK 108 54	518000/2590	100%	0.674	-0.02	20.07	18.20	0.650	0.438	22.9
Bottom side	40	QPSK 108 54	520000/2600	100%	0.702	0.17	20.01	18.20	0.659	0.463	22.9
Hotspot Test data (Separate 100mm 100%RB) DS13*											
Bottom side	40	QPSK 216 0	519000/2595	100%	0.678	0.04	19.77	18.20	0.697	0.472	22.9



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Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1 108	519000/2595	100%	0.155	-0.03	21.48	22.40	1.236	0.192	22.3
Left tilted	40	QPSK 1 108	519000/2595	100%	0.035	0.01	21.48	22.40	1.236	0.044	22.3
Right cheek	40	QPSK 1 108	519000/2595	100%	0.392	0.02	21.48	22.40	1.236	0.484	22.3
Right tilted	40	QPSK 1 108	519000/2595	100%	0.075	0.08	21.48	22.40	1.236	0.093	22.3
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108 54	519000/2595	100%	0.249	0.08	21.58	22.40	1.208	0.301	22.3
Left tilted	40	QPSK 108 54	519000/2595	100%	0.045	-0.02	21.58	22.40	1.208	0.054	22.3
Right cheek	40	QPSK 108 54	519000/2595	100%	0.378	0.09	21.58	22.40	1.208	0.457	22.3
Right tilted	40	QPSK 108 54	519000/2595	100%	0.076	0.03	21.58	22.40	1.208	0.092	22.3
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1 108	519000/2595	100%	0.044	0.06	21.48	22.40	1.236	0.054	22.3
Back side	40	QPSK 1 108	519000/2595	100%	0.061	0.07	21.48	22.40	1.236	0.075	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108 54	519000/2595	100%	0.051	0.02	21.58	22.40	1.208	0.061	22.3
Back side	40	QPSK 108 54	519000/2595	100%	0.065	0.09	21.58	22.40	1.208	0.078	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	40	QPSK 1 108	519000/2595	100%	0.078	0.02	21.48	22.40	1.236	0.097	22.3
Back side	40	QPSK 1 108	519000/2595	100%	0.129	0.07	21.48	22.40	1.236	0.159	22.3
Left side	40	QPSK 1 108	519000/2595	100%	0.090	0.06	21.48	22.40	1.236	0.111	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	40	QPSK 108 54	519000/2595	100%	0.085	0.05	21.58	22.40	1.208	0.103	22.3
Back side	40	QPSK 108 54	519000/2595	100%	0.132	0.06	21.58	22.40	1.208	0.159	22.3
Left side	40	QPSK 108 54	519000/2595	100%	0.135	0.00	21.58	22.40	1.208	0.163	22.3

Table 28: SAR of NR Band 38 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.

Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Right cheek	518000/2590	0.847	0.785	1.08	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).

3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

5) The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. The repeated measurement results must be clearly identified in the SAR report.



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8.2.19 SAR Result of NR Band 41

Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12											
Left cheek	100	QPSK 1 137	513900/2569.5	100%	0.468	-0.06	15.39	16.50	1.291	0.604	22.4
Left cheek	100	QPSK 1 1	509202/2546.01	100%	0.311	0.02	15.27	16.50	1.327	0.413	22.4
Left cheek	100	QPSK 1 1	518598/2592.99	100%	0.358	0.05	15.28	16.50	1.324	0.474	22.4
Left cheek	100	QPSK 1 137	523302/2616.51	100%	0.344	-0.04	15.36	16.50	1.300	0.447	22.4
Left cheek	100	QPSK 1 137	528000/2640	100%	0.401	0.04	15.38	16.50	1.294	0.519	22.4
Left tilted	100	QPSK 1 137	513900/2569.5	100%	0.524	0.03	15.39	16.50	1.291	0.677	22.4
Left tilted	100	QPSK 1 1	509202/2546.01	100%	0.381	0.05	15.27	16.50	1.327	0.506	22.4
Left tilted	100	QPSK 1 1	518598/2592.99	100%	0.392	0.13	15.28	16.50	1.324	0.519	22.4
Left tilted	100	QPSK 1 137	523302/2616.51	100%	0.398	0.02	15.36	16.50	1.300	0.517	22.4
Left tilted	100	QPSK 1 137	528000/2640	100%	0.415	-0.01	15.38	16.50	1.294	0.537	22.4
Right cheek	100	QPSK 1 137	513900/2569.5	100%	0.549	-0.12	15.39	16.50	1.291	0.709	22.4
Right cheek	100	QPSK 1 1	509202/2546.01	100%	0.499	-0.03	15.27	16.50	1.327	0.662	22.4
Right cheek	100	QPSK 1 1	518598/2592.99	100%	0.497	0.09	15.28	16.50	1.324	0.658	22.4
Right cheek	100	QPSK 1 137	523302/2616.51	100%	0.707	0.00	15.36	16.50	1.300	0.919	22.4
Right cheek with Battery2	100	QPSK 1 137	523302/2616.51	100%	0.569	-0.03	15.36	16.50	1.300	0.740	22.4
Right cheek	100	QPSK 1 137	528000/2640	100%	0.632	0.04	15.38	16.50	1.294	0.818	22.4
Right tilted	100	QPSK 1 137	513900/2569.5	100%	0.627	0.18	15.39	16.50	1.291	0.810	22.4
Right tilted	100	QPSK 1 1	509202/2546.01	100%	0.464	-0.01	15.27	16.50	1.327	0.616	22.4
Right tilted	100	QPSK 1 1	518598/2592.99	100%	0.467	-0.05	15.28	16.50	1.324	0.618	22.4
Right tilted	100	QPSK 1 137	523302/2616.51	100%	0.676	0.16	15.36	16.50	1.300	0.879	22.4
Right tilted	100	QPSK 1 137	528000/2640	100%	0.638	-0.02	15.38	16.50	1.294	0.826	22.4
Head Test Data (50%RB) DS12											
Left cheek	100	QPSK 135 69	518598/2592.99	100%	0.395	0.02	15.44	16.50	1.276	0.504	22.4
Left tilted	100	QPSK 135 69	518598/2592.99	100%	0.453	0.04	15.44	16.50	1.276	0.578	22.4
Right cheek	100	QPSK 135 69	518598/2592.99	100%	0.638	-0.14	15.44	16.50	1.276	0.814	22.4
Right cheek	100	QPSK 135 69	509202/2546.01	100%	0.632	0.04	15.31	16.50	1.315	0.831	22.4
Right cheek	100	QPSK 135 69	513900/2569.5	100%	0.595	-0.01	15.42	16.50	1.282	0.763	22.4
Right cheek	100	QPSK 135 69	523302/2616.51	100%	0.710	-0.01	15.39	16.50	1.291	0.917	22.4
Right cheek	100	QPSK 135 69	528000/2640	100%	0.561	-0.02	15.34	16.50	1.306	0.733	22.4
Right tilted	100	QPSK 135 69	518598/2592.99	100%	0.660	0.06	15.44	16.50	1.276	0.842	22.4
Right tilted	100	QPSK 135 69	509202/2546.01	100%	0.610	-0.09	15.31	16.50	1.315	0.802	22.4
Right tilted	100	QPSK 135 69	513900/2569.5	100%	0.612	-0.06	15.42	16.50	1.282	0.785	22.4
Right tilted	100	QPSK 135 69	523302/2616.51	100%	0.589	0.05	15.39	16.50	1.291	0.761	22.4
Right tilted	100	QPSK 135 69	528000/2640	100%	0.582	0.01	15.34	16.50	1.306	0.760	22.4
Right tilted	100	QPSK 1 137	528000/2640	100%	0.638	-0.02	15.18	16.50	1.355	0.865	22.4
Head Test Data (100%RB) DS12											
Left cheek	100	QPSK 270 0	513900/2569.5	100%	0.385	0.03	15.20	16.50	1.349	0.519	22.4
Left tilted	100	QPSK 270 0	513900/2569.5	100%	0.454	0.00	15.20	16.50	1.349	0.612	22.4
Right cheek	100	QPSK 270 0	513900/2569.5	100%	0.582	-0.02	15.20	16.50	1.349	0.785	22.4
Right tilted	100	QPSK 270 0	513900/2569.5	100%	0.585	-0.02	15.20	16.50	1.349	0.789	22.4
Body worn Test data (Separate 15mm 1RB) DS11											
Front side	100	QPSK 1 1	513900/2569.5	100%	0.114	-0.07	19.77	21.00	1.327	0.151	22.4
Back side	100	QPSK 1 1	513900/2569.5	100%	0.215	-0.02	19.77	21.00	1.327	0.285	22.4
Body worn Test data (Separate 15mm 50%RB) DS11											
Front side	100	QPSK 135 69	523302/2616.51	100%	0.152	-0.01	20.07	21.00	1.239	0.188	22.4
Back side	100	QPSK 135 69	523302/2616.51	100%	0.301	-0.05	20.07	21.00	1.239	0.373	22.4
Back side with Battery2	100	QPSK 135 69	523302/2616.51	100%	0.296	-0.07	20.07	21.00	1.239	0.367	22.4
Hotspot Test data (Separate 10mm 1RB) DS13											
Front side	100	QPSK 1 137	513900/2569.5	100%	0.278	-0.08	19.31	20.50	1.315	0.366	22.4
Back side	100	QPSK 1 137	513900/2569.5	100%	0.472	-0.01	19.31	20.50	1.315	0.621	22.4
Back side	100	QPSK 1 137	509202/2546.01	100%	0.467	0.16	19.18	20.50	1.355	0.633	22.4
Back side	100	QPSK 1 271	518598/2592.99	100%	0.483	-0.06	19.22	20.50	1.343	0.649	22.4
Back side	100	QPSK 1 137	523302/2616.51	100%	0.443	-0.02	19.25	20.50	1.334	0.591	22.4
Back side	100	QPSK 1 137	528000/2640	100%	0.410	-0.04	19.30	20.50	1.318	0.540	22.4
Left side	100	QPSK 1 137	513900/2569.5	100%	0.180	-0.06	19.31	20.50	1.315	0.237	22.4
Top side	100	QPSK 1 137	513900/2569.5	100%	0.473	0.06	19.31	20.50	1.315	0.622	22.4



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Top side	100	QPSK 1 137	509202/2546.01	100%	0.544	-0.02	19.18	20.50	1.355	0.737	22.4
Top side	100	QPSK 1 137	518598/2592.99	100%	0.560	0.09	19.15	20.50	1.365	0.764	22.4
Top side	100	QPSK 1 137	523302/2616.51	100%	0.535	-0.02	19.25	20.50	1.334	0.713	22.4
Top side	100	QPSK 1 137	528000/2640	100%	0.512	0.06	19.30	20.50	1.318	0.675	22.4
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	100	QPSK 135 69	528000/2640	100%	0.249	-0.12	19.66	20.50	1.213	0.302	22.4
Back side	100	QPSK 135 69	528000/2640	100%	0.375	-0.03	19.66	20.50	1.213	0.455	22.4
Left side	100	QPSK 135 69	528000/2640	100%	0.151	-0.07	19.66	20.50	1.213	0.183	22.4
Top side	100	QPSK 135 69	528000/2640	100%	0.523	0.04	19.66	20.50	1.213	0.635	22.4
Top side	100	QPSK 135 69	509202/2546.01	100%	0.551	-0.07	19.32	20.50	1.312	0.723	22.4
Top side	100	QPSK 135 69	513900/2569.5	100%	0.591	0.09	19.54	20.50	1.247	0.737	22.4
Top side	100	QPSK 135 69	518598/2592.99	100%	0.577	0.15	19.48	20.50	1.265	0.730	22.4
Top side	100	QPSK 135 69	523302/2616.51	100%	0.541	-0.07	19.53	20.50	1.250	0.676	22.4
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	100	QPSK 1 137	523302/2616.51	100%	0.239	-0.01	25.18	26.20	1.265	0.302	22.3
Left tilted	100	QPSK 1 137	523302/2616.51	100%	0.099	0.06	25.18	26.20	1.265	0.125	22.3
Right cheek	100	QPSK 1 137	523302/2616.51	100%	0.194	0.04	25.18	26.20	1.265	0.245	22.3
Right tilted	100	QPSK 1 137	523302/2616.51	100%	0.206	-0.06	25.18	26.20	1.265	0.261	22.3
Head Test Data (50%RB) DSI2											
Left cheek	100	QPSK 135 69	523302/2616.51	100%	0.208	0.01	25.25	26.20	1.245	0.259	22.3
Left tilted	100	QPSK 135 69	523302/2616.51	100%	0.073	0.05	25.25	26.20	1.245	0.090	22.3
Right cheek	100	QPSK 135 69	523302/2616.51	100%	0.188	0.04	25.25	26.20	1.245	0.234	22.3
Right tilted	100	QPSK 135 69	523302/2616.51	100%	0.198	-0.01	25.25	26.20	1.245	0.246	22.3
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	100	QPSK 1 137	523302/2616.51	100%	0.150	0.03	20.55	21.70	1.303	0.195	22.3
Back side	100	QPSK 1 137	523302/2616.51	100%	0.238	-0.01	20.55	21.70	1.303	0.310	22.3
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	100	QPSK 135 0	509202/2546.01	100%	0.156	-0.02	20.73	21.70	1.250	0.195	22.3
Back side	100	QPSK 135 0	509202/2546.01	100%	0.251	-0.11	20.73	21.70	1.250	0.314	22.3
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	100	QPSK 1 137	523302/2616.51	100%	0.367	-0.03	20.55	21.70	1.303	0.478	22.3
Back side	100	QPSK 1 137	523302/2616.51	100%	0.425	-0.05	20.55	21.70	1.303	0.554	22.3
Left side	100	QPSK 1 137	523302/2616.51	100%	0.087	0.02	20.55	21.70	1.303	0.114	22.3
Bottom side	100	QPSK 1 137	523302/2616.51	100%	0.602	-0.01	20.55	21.70	1.303	0.785	22.3
Bottom side	100	QPSK 1 137	509202/2546.01	100%	0.591	-0.11	20.48	21.70	1.324	0.783	22.3
Bottom side	100	QPSK 1 137	513900/2569.5	100%	0.618	0.05	20.47	21.70	1.327	0.820	22.3
Bottom side	100	QPSK 1 137	518598/2592.99	100%	0.859	0.03	20.51	21.70	1.315	1.130	22.3
Bottom side with Battery2	100	QPSK 1 137	518598/2592.99	100%	0.763	-0.02	20.51	21.70	1.315	1.004	22.3
Bottom side	100	QPSK 1 137	528000/2640	100%	0.773	-0.02	20.51	21.70	1.315	1.017	22.3
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	100	QPSK 135 69	523302/2616.51	100%	0.380	-0.01	20.73	21.70	1.250	0.475	22.3
Back side	100	QPSK 135 69	523302/2616.51	100%	0.445	-0.01	20.73	21.70	1.250	0.556	22.3
Left side	100	QPSK 135 69	523302/2616.51	100%	0.091	0.02	20.73	21.70	1.250	0.113	22.3
Bottom side	100	QPSK 135 69	523302/2616.51	100%	0.710	-0.02	20.73	21.70	1.250	0.888	22.3
Bottom side	100	QPSK 135 69	509202/2546.01	100%	0.483	-0.09	20.62	21.70	1.282	0.619	22.3
Bottom side	100	QPSK 135 69	513900/2569.5	100%	0.651	-0.06	20.64	21.70	1.276	0.831	22.3
Bottom side	100	QPSK 135 69	518598/2592.99	100%	0.881	0.03	20.66	21.70	1.271	1.119	22.3
Bottom side-Repeat	100	QPSK 135 69	518598/2592.99	100%	0.854	0.02	20.66	21.70	1.271	1.085	22.3
Bottom side	100	QPSK 135 69	528000/2640	100%	0.813	-0.05	20.67	21.70	1.268	1.031	22.3
Hotspot Test data (Separate 10mm 100%RB) DSI3											
Bottom side	100	QPSK 270 0	528000/2640	100%	0.773	-0.01	20.67	21.70	1.268	0.980	22.3
Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	100	QPSK 1 137	518598/2592.99	100%	0.243	-0.03	23.38	24.30	1.236	0.300	22.9
Left tilted	100	QPSK 1 137	518598/2592.99	100%	0.050	-0.04	23.38	24.30	1.236	0.061	22.9
Right cheek	100	QPSK 1 137	518598/2592.99	100%	0.468	0.02	23.38	24.30	1.236	0.578	22.9



Right tilted	100	QPSK 1 137	518598/2592.99	100%	0.115	-0.05	23.38	24.30	1.236	0.142	22.9
Head Test Data (50%RB) DSI2											
Left cheek	100	QPSK 135 69	518598/2592.99	100%	0.254	0.07	23.39	24.30	1.233	0.313	22.9
Left tilted	100	QPSK 135 69	518598/2592.99	100%	0.052	0.03	23.39	24.30	1.233	0.064	22.9
Right cheek	100	QPSK 135 69	518598/2592.99	100%	0.518	0.01	23.39	24.30	1.233	0.639	22.9
Right cheek	100	QPSK 135 69	509202/2546.01	100%	0.476	0.04	23.10	24.30	1.318	0.627	22.9
Right cheek	100	QPSK 135 69	513900/2569.5	100%	0.513	-0.18	23.35	24.30	1.245	0.638	22.9
Right cheek	100	QPSK 135 69	523302/2616.51	100%	0.487	-0.03	23.03	24.30	1.340	0.652	22.9
Right cheek	100	QPSK 135 69	528000/2640	100%	0.514	-0.09	22.93	24.30	1.371	0.705	22.9
Right tilted	100	QPSK 135 69	518598/2592.99	100%	0.120	-0.05	23.39	24.30	1.233	0.148	22.9
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	100	QPSK 1 137	509202/2546.01	100%	0.043	0.06	22.04	22.80	1.191	0.051	22.9
Back side	100	QPSK 1 137	509202/2546.01	100%	0.092	0.10	22.04	22.80	1.191	0.110	22.9
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	100	QPSK 135 69	509202/2546.01	100%	0.051	0.06	22.05	22.80	1.189	0.060	22.9
Back side	100	QPSK 135 69	509202/2546.01	100%	0.091	0.02	22.05	22.80	1.189	0.109	22.9
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	100	QPSK 1 137	509202/2546.01	100%	0.093	-0.01	21.61	22.30	1.172	0.109	22.9
Back side	100	QPSK 1 137	509202/2546.01	100%	0.208	-0.09	21.61	22.30	1.172	0.244	22.9
Left side	100	QPSK 1 137	509202/2546.01	100%	0.136	-0.16	21.61	22.30	1.172	0.159	22.9
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	100	QPSK 135 69	509202/2546.01	100%	0.097	-0.12	21.67	22.30	1.156	0.112	22.9
Back side	100	QPSK 135 69	509202/2546.01	100%	0.217	-0.01	21.67	22.30	1.156	0.251	22.9
Left side	100	QPSK 135 69	509202/2546.01	100%	0.155	0.02	21.67	22.30	1.156	0.179	22.9
NSA N41											
Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	100	QPSK 1 137	513900/2569.5	100%	0.468	-0.06	15.59	14.50	0.778	0.364	22.4
Left cheek	100	QPSK 1 1	509202/2546.01	100%	0.311	0.02	15.47	14.50	0.800	0.249	22.4
Left cheek	100	QPSK 1 1	518598/2592.99	100%	0.358	0.05	15.48	14.50	0.798	0.286	22.4
Left cheek	100	QPSK 1 137	523302/2616.51	100%	0.344	-0.04	15.56	14.50	0.783	0.269	22.4
Left cheek	100	QPSK 1 137	528000/2640	100%	0.401	0.04	15.58	14.50	0.780	0.313	22.4
Left tilted	100	QPSK 1 137	513900/2569.5	100%	0.524	0.03	15.59	14.50	0.778	0.408	22.4
Left tilted	100	QPSK 1 1	509202/2546.01	100%	0.381	0.05	15.47	14.50	0.800	0.305	22.4
Left tilted	100	QPSK 1 1	518598/2592.99	100%	0.392	0.13	15.48	14.50	0.798	0.313	22.4
Left tilted	100	QPSK 1 137	523302/2616.51	100%	0.398	0.02	15.56	14.50	0.783	0.312	22.4
Left tilted	100	QPSK 1 137	528000/2640	100%	0.415	-0.01	15.58	14.50	0.780	0.324	22.4
Right cheek	100	QPSK 1 137	513900/2569.5	100%	0.549	-0.12	15.59	14.50	0.778	0.427	22.4
Right cheek	100	QPSK 1 1	509202/2546.01	100%	0.499	-0.03	15.47	14.50	0.800	0.399	22.4
Right cheek	100	QPSK 1 1	518598/2592.99	100%	0.497	0.09	15.48	14.50	0.798	0.397	22.4
Right cheek	100	QPSK 1 137	523302/2616.51	100%	0.707	0.00	15.56	14.50	0.783	0.554	22.4
Right cheek	100	QPSK 1 137	528000/2640	100%	0.632	0.04	15.58	14.50	0.780	0.493	22.4
Right tilted	100	QPSK 1 137	513900/2569.5	100%	0.627	0.18	15.59	14.50	0.778	0.488	22.4
Right tilted	100	QPSK 1 1	509202/2546.01	100%	0.464	-0.01	15.47	14.50	0.800	0.371	22.4
Right tilted	100	QPSK 1 1	518598/2592.99	100%	0.467	-0.05	15.48	14.50	0.798	0.373	22.4
Right tilted	100	QPSK 1 137	523302/2616.51	100%	0.676	0.16	15.56	14.50	0.783	0.530	22.4
Right tilted	100	QPSK 1 137	528000/2640	100%	0.638	-0.02	15.58	14.50	0.780	0.498	22.4
Head Test Data (50%RB) DSI2*											
Left cheek	100	QPSK 135 69	518598/2592.99	100%	0.395	0.02	15.44	14.50	0.805	0.318	22.4
Left tilted	100	QPSK 135 69	518598/2592.99	100%	0.453	0.04	15.44	14.50	0.805	0.365	22.4
Right cheek	100	QPSK 135 69	518598/2592.99	100%	0.638	-0.14	15.44	14.50	0.805	0.514	22.4
Right cheek	100	QPSK 135 69	509202/2546.01	100%	0.632	0.04	15.31	14.50	0.830	0.524	22.4
Right cheek	100	QPSK 135 69	513900/2569.5	100%	0.595	-0.01	15.42	14.50	0.809	0.481	22.4
Right cheek	100	QPSK 135 69	523302/2616.51	100%	0.710	-0.01	15.39	14.50	0.815	0.578	22.4
Right cheek	100	QPSK 135 69	528000/2640	100%	0.561	-0.02	15.34	14.50	0.824	0.462	22.4
Right tilted	100	QPSK 135 69	518598/2592.99	100%	0.660	0.06	15.44	14.50	0.805	0.532	22.4
Right tilted	100	QPSK 135 69	509202/2546.01	100%	0.610	-0.09	15.31	14.50	0.830	0.506	22.4
Right tilted	100	QPSK 135 69	513900/2569.5	100%	0.612	-0.06	15.42	14.50	0.809	0.495	22.4
Right tilted	100	QPSK 135 69	523302/2616.51	100%	0.589	0.05	15.39	14.50	0.815	0.480	22.4
Right tilted	100	QPSK 135 69	528000/2640	100%	0.582	0.01	15.34	14.50	0.824	0.480	22.4



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Right tilted	100	QPSK 1 137	528000/2640	100%	0.638	-0.02	15.18	14.50	0.855	0.546	22.4
Head Test Data (100%RB) DS12*											
Left cheek	100	QPSK 270 0	513900/2569.5	100%	0.385	0.03	15.20	14.50	0.851	0.328	22.4
Left tilted	100	QPSK 270 0	513900/2569.5	100%	0.454	0.00	15.20	14.50	0.851	0.386	22.4
Right cheek	100	QPSK 270 0	513900/2569.5	100%	0.582	-0.02	15.20	14.50	0.851	0.495	22.4
Right tilted	100	QPSK 270 0	513900/2569.5	100%	0.585	-0.02	15.20	14.50	0.851	0.498	22.4
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	100	QPSK 1 1	513900/2569.5	100%	0.114	-0.07	19.77	16.50	0.471	0.054	22.4
Back side	100	QPSK 1 1	513900/2569.5	100%	0.215	-0.02	19.77	16.50	0.471	0.101	22.4
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	100	QPSK 135 69	523302/2616.51	100%	0.152	-0.01	20.07	16.50	0.440	0.067	22.4
Back side	100	QPSK 135 69	523302/2616.51	100%	0.301	-0.05	20.07	16.50	0.440	0.132	22.4
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	100	QPSK 1 137	513900/2569.5	100%	0.278	-0.08	19.31	15.50	0.416	0.116	22.4
Back side	100	QPSK 1 137	513900/2569.5	100%	0.472	-0.01	19.31	15.50	0.416	0.196	22.4
Back side	100	QPSK 1 137	509202/2546.01	100%	0.467	0.16	19.18	15.50	0.429	0.200	22.4
Back side	100	QPSK 1 271	518598/2592.99	100%	0.483	-0.06	19.22	15.50	0.425	0.205	22.4
Back side	100	QPSK 1 137	523302/2616.51	100%	0.443	-0.02	19.25	15.50	0.422	0.187	22.4
Back side	100	QPSK 1 137	528000/2640	100%	0.410	-0.04	19.30	15.50	0.417	0.171	22.4
Left side	100	QPSK 1 137	513900/2569.5	100%	0.180	-0.06	19.31	15.50	0.416	0.075	22.4
Top side	100	QPSK 1 137	513900/2569.5	100%	0.473	0.06	19.31	15.50	0.416	0.197	22.4
Top side	100	QPSK 1 137	509202/2546.01	100%	0.544	-0.02	19.18	15.50	0.429	0.233	22.4
Top side	100	QPSK 1 137	518598/2592.99	100%	0.560	0.09	19.15	15.50	0.432	0.242	22.4
Top side	100	QPSK 1 137	523302/2616.51	100%	0.535	-0.02	19.25	15.50	0.422	0.226	22.4
Top side	100	QPSK 1 137	528000/2640	100%	0.512	0.06	19.30	15.50	0.417	0.213	22.4
Hotspot Test data (Separate 10mm 50%RB) DS13*											
Front side	100	QPSK 135 69	528000/2640	100%	0.249	-0.12	19.66	15.50	0.384	0.096	22.4
Back side	100	QPSK 135 69	528000/2640	100%	0.375	-0.03	19.66	15.50	0.384	0.144	22.4
Left side	100	QPSK 135 69	528000/2640	100%	0.151	-0.07	19.66	15.50	0.384	0.058	22.4
Top side	100	QPSK 135 69	528000/2640	100%	0.523	0.04	19.66	15.50	0.384	0.201	22.4
Top side	100	QPSK 135 69	509202/2546.01	100%	0.551	-0.07	19.32	15.50	0.415	0.229	22.4
Top side	100	QPSK 135 69	513900/2569.5	100%	0.591	0.09	19.54	15.50	0.394	0.233	22.4
Top side	100	QPSK 135 69	518598/2592.99	100%	0.577	0.15	19.48	15.50	0.400	0.231	22.4
Top side	100	QPSK 135 69	523302/2616.51	100%	0.541	-0.07	19.53	15.50	0.395	0.214	22.4
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DS12*											
Left cheek	100	QPSK 1 137	523302/2616.51	100%	0.239	-0.01	25.18	24.20	0.798	0.191	22.3
Left tilted	100	QPSK 1 137	523302/2616.51	100%	0.099	0.06	25.18	24.20	0.798	0.079	22.3
Right cheek	100	QPSK 1 137	523302/2616.51	100%	0.194	0.04	25.18	24.20	0.798	0.155	22.3
Right tilted	100	QPSK 1 137	523302/2616.51	100%	0.206	-0.06	25.18	24.20	0.798	0.164	22.3
Head Test Data (50%RB) DS12*											
Left cheek	100	QPSK 135 69	523302/2616.51	100%	0.208	0.01	25.25	24.20	0.785	0.163	22.3
Left tilted	100	QPSK 135 69	523302/2616.51	100%	0.073	0.05	25.25	24.20	0.785	0.057	22.3
Right cheek	100	QPSK 135 69	523302/2616.51	100%	0.188	0.04	25.25	24.20	0.785	0.148	22.3
Right tilted	100	QPSK 135 69	523302/2616.51	100%	0.198	-0.01	25.25	24.20	0.785	0.155	22.3
Body worn Test data (Separate 15mm 1RB) DS11*											
Front side	100	QPSK 1 137	523302/2616.51	100%	0.150	0.03	20.55	17.70	0.519	0.078	22.3
Back side	100	QPSK 1 137	523302/2616.51	100%	0.238	-0.01	20.55	17.70	0.519	0.123	22.3
Body worn Test data (Separate 15mm 50%RB) DS11*											
Front side	100	QPSK 135 0	509202/2546.01	100%	0.156	-0.02	20.73	17.70	0.498	0.078	22.3
Back side	100	QPSK 135 0	509202/2546.01	100%	0.251	-0.11	20.73	17.70	0.498	0.125	22.3
Hotspot Test data (Separate 10mm 1RB) DS13*											
Front side	100	QPSK 1 137	523302/2616.51	100%	0.367	-0.03	20.55	16.20	0.367	0.135	22.3
Back side	100	QPSK 1 137	523302/2616.51	100%	0.425	-0.05	20.55	16.20	0.367	0.156	22.3
Left side	100	QPSK 1 137	523302/2616.51	100%	0.087	0.02	20.55	16.20	0.367	0.032	22.3
Bottom side	100	QPSK 1 137	523302/2616.51	100%	0.602	-0.01	20.55	16.20	0.367	0.221	22.3
Bottom side	100	QPSK 1 137	509202/2546.01	100%	0.591	-0.11	20.48	16.20	0.373	0.221	22.3
Bottom side	100	QPSK 1 137	513900/2569.5	100%	0.618	0.05	20.47	16.20	0.374	0.231	22.3
Bottom side	100	QPSK 1 137	518598/2592.99	100%	0.859	0.03	20.51	16.20	0.371	0.318	22.3
Bottom side	100	QPSK 1 137	528000/2640	100%	0.773	-0.02	20.51	16.20	0.371	0.287	22.3



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Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	100	QPSK 135 69	523302/2616.51	100%	0.380	-0.01	20.73	16.20	0.352	0.134	22.3
Back side	100	QPSK 135 69	523302/2616.51	100%	0.445	-0.01	20.73	16.20	0.352	0.157	22.3
Left side	100	QPSK 135 69	523302/2616.51	100%	0.091	0.02	20.73	16.20	0.352	0.032	22.3
Bottom side	100	QPSK 135 69	523302/2616.51	100%	0.710	-0.02	20.73	16.20	0.352	0.250	22.3
Bottom side	100	QPSK 135 69	509202/2546.01	100%	0.483	-0.09	20.62	16.20	0.361	0.175	22.3
Bottom side	100	QPSK 135 69	513900/2569.5	100%	0.651	-0.06	20.64	16.20	0.360	0.234	22.3
Bottom side	100	QPSK 135 69	518598/2592.99	100%	0.881	0.03	20.66	16.20	0.358	0.315	22.3
Bottom side	100	QPSK 135 69	528000/2640	100%	0.813	-0.05	20.67	16.20	0.357	0.290	22.3
Hotspot Test data (Separate 10mm 100%RB) DSI3*											
Bottom side	100	QPSK 270 0	528000/2640	100%	0.773	-0.01	20.67	16.20	0.357	0.276	22.3
Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	100	QPSK 1 137	518598/2592.99	100%	0.243	-0.03	23.38	21.30	0.619	0.151	22.9
Left tilted	100	QPSK 1 137	518598/2592.99	100%	0.050	-0.04	23.38	21.30	0.619	0.031	22.9
Right cheek	100	QPSK 1 137	518598/2592.99	100%	0.468	0.02	23.38	21.30	0.619	0.290	22.9
Right tilted	100	QPSK 1 137	518598/2592.99	100%	0.115	-0.05	23.38	21.30	0.619	0.071	22.9
Head Test Data (50%RB) DSI2*											
Left cheek	100	QPSK 135 69	518598/2592.99	100%	0.254	0.07	23.39	21.30	0.618	0.157	22.9
Left tilted	100	QPSK 135 69	518598/2592.99	100%	0.052	0.03	23.39	21.30	0.618	0.032	22.9
Right cheek	100	QPSK 135 69	518598/2592.99	100%	0.518	0.01	23.39	21.30	0.618	0.320	22.9
Right cheek	100	QPSK 135 69	509202/2546.01	100%	0.476	0.04	23.10	21.30	0.661	0.314	22.9
Right cheek	100	QPSK 135 69	513900/2569.5	100%	0.513	-0.18	23.35	21.30	0.624	0.320	22.9
Right cheek	100	QPSK 135 69	523302/2616.51	100%	0.487	-0.03	23.03	21.30	0.671	0.327	22.9
Right cheek	100	QPSK 135 69	528000/2640	100%	0.514	-0.09	22.93	21.30	0.687	0.353	22.9
Right tilted	100	QPSK 135 69	518598/2592.99	100%	0.120	-0.05	23.39	21.30	0.618	0.074	22.9
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	100	QPSK 1 137	509202/2546.01	100%	0.043	0.06	22.04	18.30	0.423	0.018	22.9
Back side	100	QPSK 1 137	509202/2546.01	100%	0.092	0.10	22.04	18.30	0.423	0.039	22.9
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	100	QPSK 135 69	509202/2546.01	100%	0.051	0.06	22.05	18.30	0.422	0.021	22.9
Back side	100	QPSK 135 69	509202/2546.01	100%	0.091	0.02	22.05	18.30	0.422	0.039	22.9
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	100	QPSK 1 137	509202/2546.01	100%	0.093	-0.01	21.61	17.30	0.371	0.035	22.9
Back side	100	QPSK 1 137	509202/2546.01	100%	0.208	-0.09	21.61	17.30	0.371	0.077	22.9
Left side	100	QPSK 1 137	509202/2546.01	100%	0.136	-0.16	21.61	17.30	0.371	0.050	22.9
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	100	QPSK 135 69	509202/2546.01	100%	0.097	-0.12	21.67	17.30	0.366	0.036	22.9
Back side	100	QPSK 135 69	509202/2546.01	100%	0.217	-0.01	21.67	17.30	0.366	0.079	22.9
Left side	100	QPSK 135 69	509202/2546.01	100%	0.155	0.02	21.67	17.30	0.366	0.057	22.9

Table 29: SAR of NR Band 41 for Head and Body.

Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.





8.2.20 SAR Result of NR Band 66

Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 108	349000/1745	100%	0.420	0.01	18.11	18.70	1.146	0.481	22.2
Left tilted	40	QPSK 1 108	349000/1745	100%	0.515	-0.02	18.11	18.70	1.146	0.590	22.2
Right cheek	40	QPSK 1 108	349000/1745	100%	0.833	0.08	18.11	18.70	1.146	0.954	22.2
Right cheek	40	QPSK 1 1	346000/1730	100%	0.710	-0.05	18.03	18.70	1.167	0.828	22.2
Right cheek	40	QPSK 1 108	352000/1760	100%	0.960	0.02	18.10	18.70	1.148	1.102	22.2
Right cheek-Repeat	40	QPSK 1 108	352000/1760	100%	0.926	0.01	18.10	18.70	1.148	1.063	22.2
Right cheek with Battery2	40	QPSK 1 108	352000/1760	100%	0.785	-0.03	18.10	18.70	1.148	0.901	22.2
Right tilted	40	QPSK 1 108	349000/1745	100%	0.908	0.03	18.11	18.70	1.146	1.040	22.2
Right tilted	40	QPSK 1 1	346000/1730	100%	0.616	0.01	18.03	18.70	1.167	0.719	22.2
Right tilted	40	QPSK 1 108	352000/1760	100%	0.764	0.05	18.10	18.70	1.148	0.877	22.2
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	349000/1745	100%	0.398	-0.01	18.04	18.70	1.164	0.463	22.2
Left tilted	40	QPSK 108 54	349000/1745	100%	0.466	-0.01	18.04	18.70	1.164	0.542	22.2
Right cheek	40	QPSK 108 54	349000/1745	100%	0.810	0.05	18.04	18.70	1.164	0.943	22.2
Right cheek	40	QPSK 108 54	346000/1730	100%	0.689	-0.01	17.93	18.70	1.194	0.823	22.2
Right cheek	40	QPSK 108 54	352000/1760	100%	0.943	0.05	18.04	18.70	1.164	1.098	22.2
Right tilted	40	QPSK 108 54	349000/1745	100%	0.883	0.02	18.04	18.70	1.164	1.028	22.2
Right tilted	40	QPSK 108 54	346000/1730	100%	0.597	0.02	17.93	18.70	1.194	0.713	22.2
Right tilted	40	QPSK 108 54	352000/1760	100%	0.753	0.04	18.04	18.70	1.164	0.877	22.2
Head Test Data 100%RB) DSI2											
Right cheek	40	QPSK 216 0	349000/1745	100%	0.801	0.08	17.87	18.70	1.211	0.970	22.2
Right tilted	40	QPSK 216 0	349000/1745	100%	0.873	0.03	17.87	18.70	1.211	1.057	22.2
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1 1	349000/1745	100%	0.157	0.03	20.87	21.70	1.211	0.190	22.2
Back side	40	QPSK 1 1	349000/1745	100%	0.207	0.02	20.87	21.70	1.211	0.251	22.2
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108 54	349000/1745	100%	0.161	0.13	21.10	21.70	1.148	0.185	22.2
Back side	40	QPSK 108 54	349000/1745	100%	0.212	0.01	21.10	21.70	1.148	0.243	22.2
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1 108	349000/1745	100%	0.279	0.14	20.40	21.20	1.202	0.335	22.2
Back side	40	QPSK 1 108	349000/1745	100%	0.407	0.06	20.40	21.20	1.202	0.489	22.2
Left side	40	QPSK 1 108	349000/1745	100%	0.117	-0.04	20.40	21.20	1.202	0.141	22.2
Top side	40	QPSK 1 108	349000/1745	100%	0.535	-0.05	20.40	21.20	1.202	0.643	22.2
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108 54	349000/1745	100%	0.276	0.04	20.64	21.20	1.138	0.314	22.2
Back side	40	QPSK 108 54	349000/1745	100%	0.333	0.12	20.64	21.20	1.138	0.379	22.2
Left side	40	QPSK 108 54	349000/1745	100%	0.122	-0.14	20.64	21.20	1.138	0.139	22.2
Top side	40	QPSK 108 54	349000/1745	100%	0.593	0.14	20.64	21.20	1.138	0.675	22.2
Top side with Battery2	40	QPSK 108 54	349000/1745	100%	0.458	0.05	20.64	21.20	1.138	0.521	22.2
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1 1	352000/1760	100%	0.107	0.02	24.23	25.00	1.194	0.128	22.2
Left tilted	40	QPSK 1 1	352000/1760	100%	0.090	-0.01	24.23	25.00	1.194	0.108	22.2
Right cheek	40	QPSK 1 1	352000/1760	100%	0.120	0.02	24.23	25.00	1.194	0.143	22.2
Right tilted	40	QPSK 1 1	352000/1760	100%	0.066	0.03	24.23	25.00	1.194	0.079	22.2
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108 54	352000/1760	100%	0.108	0.09	24.28	25.00	1.180	0.127	22.2
Left tilted	40	QPSK 108 54	352000/1760	100%	0.092	-0.12	24.28	25.00	1.180	0.108	22.2
Right cheek	40	QPSK 108 54	352000/1760	100%	0.137	0.03	24.28	25.00	1.180	0.162	22.2
Right tilted	40	QPSK 108 54	352000/1760	100%	0.067	0.04	24.28	25.00	1.180	0.080	22.2
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1 108	349000/1745	100%	0.137	0.03	20.18	21.50	1.355	0.186	22.2



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Back side	40	QPSK 1_108	349000/1745	100%	0.186	0.01	20.18	21.50	1.355	0.252	22.2
Back side with Battery2	40	QPSK 1_108	349000/1745	100%	0.150	-0.11	20.18	21.50	1.355	0.203	22.2
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108_54	349000/1745	100%	0.139	0.13	20.66	21.50	1.213	0.169	22.2
Back side	40	QPSK 108_54	349000/1745	100%	0.188	0.16	20.66	21.50	1.213	0.228	22.2
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1_108	349000/1745	100%	0.260	-0.07	19.78	21.00	1.324	0.344	22.2
Back side	40	QPSK 1_108	349000/1745	100%	0.325	0.05	19.78	21.00	1.324	0.430	22.2
Left side	40	QPSK 1_108	349000/1745	100%	0.048	-0.02	19.78	21.00	1.324	0.064	22.2
Bottom side	40	QPSK 1_108	349000/1745	100%	0.442	-0.03	19.78	21.00	1.324	0.585	22.2
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108_54	349000/1745	100%	0.269	-0.04	20.26	21.00	1.186	0.319	22.2
Back side	40	QPSK 108_54	349000/1745	100%	0.332	0.08	20.26	21.00	1.186	0.394	22.2
Left side	40	QPSK 108_54	349000/1745	100%	0.049	-0.03	20.26	21.00	1.186	0.058	22.2
Bottom side	40	QPSK 108_54	349000/1745	100%	0.446	-0.19	20.26	21.00	1.186	0.529	22.2
Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2											
Left cheek	40	QPSK 1_108	346000/1730	100%	0.239	0.01	23.00	23.80	1.202	0.287	22.0
Left tilted	40	QPSK 1_108	346000/1730	100%	0.437	0.06	23.00	23.80	1.202	0.525	22.0
Right cheek	40	QPSK 1_108	346000/1730	100%	0.467	0.03	23.00	23.80	1.202	0.561	22.0
Right tilted	40	QPSK 1_108	346000/1730	100%	0.076	0.01	23.00	23.80	1.202	0.092	22.0
Head Test Data (50%RB) DSI2											
Left cheek	40	QPSK 108_54	346000/1730	100%	0.252	0.19	23.00	23.80	1.202	0.303	22.0
Left tilted	40	QPSK 108_54	346000/1730	100%	0.046	0.16	23.00	23.80	1.202	0.055	22.0
Right cheek	40	QPSK 108_54	346000/1730	100%	0.501	0.07	23.00	23.80	1.202	0.602	22.0
Right tilted	40	QPSK 108_54	346000/1730	100%	0.079	0.08	23.00	23.80	1.202	0.095	22.0
Body worn Test data (Separate 15mm 1RB) DSI1											
Front side	40	QPSK 1_108	346000/1730	100%	0.050	-0.04	23.00	23.80	1.202	0.061	22.0
Back side	40	QPSK 1_108	346000/1730	100%	0.091	0.08	23.00	23.80	1.202	0.109	22.0
Body worn Test data (Separate 15mm 50%RB) DSI1											
Front side	40	QPSK 108_54	346000/1730	100%	0.053	-0.02	23.00	23.80	1.202	0.064	22.0
Back side	40	QPSK 108_54	346000/1730	100%	0.096	0.06	23.00	23.80	1.202	0.115	22.0
Hotspot Test data (Separate 10mm 1RB) DSI3											
Front side	40	QPSK 1_108	346000/1730	100%	0.112	0.02	23.00	23.80	1.202	0.135	22.0
Back side	40	QPSK 1_108	346000/1730	100%	0.197	-0.05	23.00	23.80	1.202	0.237	22.0
Left side	40	QPSK 1_108	346000/1730	100%	0.257	0.01	23.00	23.80	1.202	0.309	22.0
Hotspot Test data (Separate 10mm 50%RB) DSI3											
Front side	40	QPSK 108_54	346000/1730	100%	0.118	0.08	23.00	23.80	1.202	0.142	22.0
Back side	40	QPSK 108_54	346000/1730	100%	0.208	-0.02	23.00	23.80	1.202	0.250	22.0
Left side	40	QPSK 108_54	346000/1730	100%	0.271	-0.01	23.00	23.80	1.202	0.326	22.0
NSA N66											
Ant3 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1_108	349000/1745	100%	0.420	0.01	18.11	16.70	0.723	0.304	22.2
Left tilted	40	QPSK 1_108	349000/1745	100%	0.515	-0.02	18.11	16.70	0.723	0.372	22.2
Right cheek	40	QPSK 1_108	349000/1745	100%	0.833	0.08	18.11	16.70	0.723	0.602	22.2
Right cheek	40	QPSK 1_1	346000/1730	100%	0.710	-0.05	18.03	16.70	0.736	0.523	22.2
Right cheek	40	QPSK 1_108	352000/1760	100%	0.960	0.02	18.10	16.70	0.724	0.695	22.2
Right tilted	40	QPSK 1_108	349000/1745	100%	0.908	0.03	18.11	16.70	0.723	0.656	22.2
Right tilted	40	QPSK 1_1	346000/1730	100%	0.616	0.01	18.03	16.70	0.736	0.454	22.2
Right tilted	40	QPSK 1_108	352000/1760	100%	0.764	0.05	18.10	16.70	0.724	0.553	22.2
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108_54	349000/1745	100%	0.398	-0.01	18.04	16.70	0.735	0.292	22.2
Left tilted	40	QPSK 108_54	349000/1745	100%	0.466	-0.01	18.04	16.70	0.735	0.342	22.2
Right cheek	40	QPSK 108_54	349000/1745	100%	0.810	0.05	18.04	16.70	0.735	0.595	22.2



Right cheek	40	QPSK 108_54	346000/1730	100%	0.689	-0.01	17.93	16.70	0.753	0.519	22.2
Right cheek	40	QPSK 108_54	352000/1760	100%	0.943	0.05	18.04	16.70	0.735	0.693	22.2
Right tilted	40	QPSK 108_54	349000/1745	100%	0.883	0.02	18.04	16.70	0.735	0.649	22.2
Right tilted	40	QPSK 108_54	346000/1730	100%	0.597	0.02	17.93	16.70	0.753	0.450	22.2
Right tilted	40	QPSK 108_54	352000/1760	100%	0.753	0.04	18.04	16.70	0.735	0.553	22.2
Head Test Data (100%RB) DSI2*											
Right cheek	40	QPSK 216_0	349000/1745	100%	0.801	0.08	17.87	16.70	0.764	0.612	22.2
Right tilted	40	QPSK 216_0	349000/1745	100%	0.873	0.03	17.87	16.70	0.764	0.667	22.2
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1_1	349000/1745	100%	0.157	0.03	20.87	19.20	0.681	0.107	22.2
Back side	40	QPSK 1_1	349000/1745	100%	0.207	0.02	20.87	19.20	0.681	0.141	22.2
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108_54	349000/1745	100%	0.161	0.13	21.10	19.20	0.646	0.104	22.2
Back side	40	QPSK 108_54	349000/1745	100%	0.212	0.01	21.10	19.20	0.646	0.137	22.2
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	40	QPSK 1_108	349000/1745	100%	0.279	0.14	20.40	18.20	0.603	0.168	22.2
Back side	40	QPSK 1_108	349000/1745	100%	0.407	0.06	20.40	18.20	0.603	0.245	22.2
Left side	40	QPSK 1_108	349000/1745	100%	0.117	-0.04	20.40	18.20	0.603	0.070	22.2
Top side	40	QPSK 1_108	349000/1745	100%	0.535	-0.05	20.40	18.20	0.603	0.322	22.2
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	40	QPSK 108_54	349000/1745	100%	0.276	0.04	20.64	18.20	0.570	0.157	22.2
Back side	40	QPSK 108_54	349000/1745	100%	0.333	0.12	20.64	18.20	0.570	0.190	22.2
Left side	40	QPSK 108_54	349000/1745	100%	0.122	-0.14	20.64	18.20	0.570	0.070	22.2
Top side	40	QPSK 108_54	349000/1745	100%	0.593	0.14	20.64	18.20	0.570	0.338	22.2
Ant4 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1_1	352000/1760	100%	0.107	0.02	24.23	25.00	1.194	0.128	22.2
Left tilted	40	QPSK 1_1	352000/1760	100%	0.090	-0.01	24.23	25.00	1.194	0.108	22.2
Right cheek	40	QPSK 1_1	352000/1760	100%	0.120	0.02	24.23	25.00	1.194	0.143	22.2
Right tilted	40	QPSK 1_1	352000/1760	100%	0.066	0.03	24.23	25.00	1.194	0.079	22.2
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108_54	352000/1760	100%	0.108	0.09	24.28	25.00	1.180	0.127	22.2
Left tilted	40	QPSK 108_54	352000/1760	100%	0.092	-0.12	24.28	25.00	1.180	0.108	22.2
Right cheek	40	QPSK 108_54	352000/1760	100%	0.137	0.03	24.28	25.00	1.180	0.162	22.2
Right tilted	40	QPSK 108_54	352000/1760	100%	0.067	0.04	24.28	25.00	1.180	0.080	22.2
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1_108	349000/1745	100%	0.137	0.03	20.18	19.00	0.762	0.104	22.2
Back side	40	QPSK 1_108	349000/1745	100%	0.186	0.01	20.18	19.00	0.762	0.142	22.2
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108_54	349000/1745	100%	0.139	0.13	20.66	19.00	0.682	0.095	22.2
Back side	40	QPSK 108_54	349000/1745	100%	0.188	0.16	20.66	19.00	0.682	0.128	22.2
Hotspot Test data (Separate 10mm 1RB) DSI3*											
Front side	40	QPSK 1_108	349000/1745	100%	0.260	-0.07	19.78	18.00	0.664	0.173	22.2
Back side	40	QPSK 1_108	349000/1745	100%	0.325	0.05	19.78	18.00	0.664	0.216	22.2
Left side	40	QPSK 1_108	349000/1745	100%	0.048	-0.02	19.78	18.00	0.664	0.032	22.2
Bottom side	40	QPSK 1_108	349000/1745	100%	0.442	-0.03	19.78	18.00	0.664	0.293	22.2
Hotspot Test data (Separate 10mm 50%RB) DSI3*											
Front side	40	QPSK 108_54	349000/1745	100%	0.269	-0.04	20.26	18.00	0.594	0.160	22.2
Back side	40	QPSK 108_54	349000/1745	100%	0.332	0.08	20.26	18.00	0.594	0.197	22.2
Left side	40	QPSK 108_54	349000/1745	100%	0.049	-0.03	20.26	18.00	0.594	0.029	22.2
Bottom side	40	QPSK 108_54	349000/1745	100%	0.446	-0.19	20.26	18.00	0.594	0.265	22.2
Ant5 Test Record											
Test position	BW.	Modulation	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp. (°C)
Head Test Data (1RB) DSI2*											
Left cheek	40	QPSK 1_108	346000/1730	100%	0.239	0.01	23.00	22.80	0.955	0.228	22.0
Left tilted	40	QPSK 1_108	346000/1730	100%	0.437	0.06	23.00	22.80	0.955	0.417	22.0
Right cheek	40	QPSK 1_108	346000/1730	100%	0.467	0.03	23.00	22.80	0.955	0.446	22.0



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Right tilted	40	QPSK 1 108	346000/1730	100%	0.076	0.01	23.00	22.80	0.955	0.073	22.0
Head Test Data (50%RB) DSI2*											
Left cheek	40	QPSK 108 54	346000/1730	100%	0.252	0.19	23.00	22.80	0.955	0.241	22.0
Left tilted	40	QPSK 108 54	346000/1730	100%	0.046	0.16	23.00	22.80	0.955	0.044	22.0
Right cheek	40	QPSK 108 54	346000/1730	100%	0.501	0.07	23.00	22.80	0.955	0.478	22.0
Right tilted	40	QPSK 108 54	346000/1730	100%	0.079	0.08	23.00	22.80	0.955	0.076	22.0
Body worn Test data (Separate 15mm 1RB) DSI1*											
Front side	40	QPSK 1 108	346000/1730	100%	0.050	-0.04	23.00	21.80	0.759	0.038	22.0
Back side	40	QPSK 1 108	346000/1730	100%	0.091	0.08	23.00	21.80	0.759	0.069	22.0
Body worn Test data (Separate 15mm 50%RB) DSI1*											
Front side	40	QPSK 108 54	346000/1730	100%	0.053	-0.02	23.00	21.80	0.759	0.040	22.0
Back side	40	QPSK 108 54	346000/1730	100%	0.096	0.06	23.00	21.80	0.759	0.073	22.0
Hotspot Test data (Separate 10mm 1RB) DSI2*											
Front side	40	QPSK 1 108	346000/1730	100%	0.112	0.02	23.00	20.80	0.603	0.067	22.0
Back side	40	QPSK 1 108	346000/1730	100%	0.197	-0.05	23.00	20.80	0.603	0.119	22.0
Left side	40	QPSK 1 108	346000/1730	100%	0.257	0.01	23.00	20.80	0.603	0.155	22.0
Hotspot Test data (Separate 10mm 50%RB) DSI2*											
Front side	40	QPSK 108 54	346000/1730	100%	0.118	0.08	23.00	20.80	0.603	0.071	22.0
Back side	40	QPSK 108 54	346000/1730	100%	0.208	-0.02	23.00	20.80	0.603	0.125	22.0
Left side	40	QPSK 108 54	346000/1730	100%	0.271	-0.01	23.00	20.80	0.603	0.163	22.0

Table 30: SAR of NR Band 66 for Head and Body.

Test Position	Channel/ Frequency	Measured SAR (1g)	1 st Repeated	Ratio	2 nd Repeated	3 rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Right cheek	352000/1760	0.96	0.926	1.04	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

5) The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. The repeated measurement results must be clearly identified in the SAR report.



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8.2.21 SAR Result of WIFI 2.4G

Ant9 Test Record chain0											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data											
Left cheek	802.11b	6/2437	99.64%	1.004	0.367	0.17	13.44	14.00	1.138	0.419	22.4
Left tilted	802.11b	6/2437	99.64%	1.004	0.387	-0.16	13.44	14.00	1.138	0.442	22.4
Right cheek	802.11b	6/2437	99.64%	1.004	0.146	-0.07	13.44	14.00	1.138	0.167	22.4
Right tilted	802.11b	6/2437	99.64%	1.004	0.158	-0.07	13.44	14.00	1.138	0.180	22.4
Head Test Data Simultaneous transmission with WWAN*											
Left cheek	802.11b	6/2437	99.64%	1.004	0.367	0.17	13.44	12.00	0.718	0.264	22.4
Left tilted	802.11b	6/2437	99.64%	1.004	0.387	-0.16	13.44	12.00	0.718	0.279	22.4
Right cheek	802.11b	6/2437	99.64%	1.004	0.146	-0.07	13.44	12.00	0.718	0.105	22.4
Right tilted	802.11b	6/2437	99.64%	1.004	0.158	-0.07	13.44	12.00	0.718	0.114	22.4
Body worn Test data (Separate 15mm)											
Front side	802.11b	6/2437	99.64%	1.004	0.038	-0.06	13.44	14.00	1.138	0.043	22.4
Back side	802.11b	6/2437	99.64%	1.004	0.044	-0.02	13.44	14.00	1.138	0.050	22.4
Hotspot Test data (Separate 10mm)											
Front side	802.11b	6/2437	99.64%	1.004	0.068	-0.12	13.44	14.00	1.138	0.077	22.4
Back side	802.11b	6/2437	99.64%	1.004	0.075	0.06	13.44	14.00	1.138	0.085	22.4
Right side	802.11b	6/2437	99.64%	1.004	0.022	0.01	13.44	14.00	1.138	0.025	22.4
Top side	802.11b	6/2437	99.64%	1.004	0.081	0.03	13.44	14.00	1.138	0.092	22.4
Ant10 Test Record chain1											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data											
Left cheek	802.11b	6/2437	99.64%	1.004	0.054	-0.02	13.80	14.00	1.047	0.056	22.4
Left tilted	802.11b	6/2437	99.64%	1.004	0.026	-0.01	13.80	14.00	1.047	0.028	22.4
Right cheek	802.11b	6/2437	99.64%	1.004	0.225	0.09	13.80	14.00	1.047	0.236	22.4
Right tilted	802.11b	6/2437	99.64%	1.004	0.059	0.02	13.80	14.00	1.047	0.061	22.4
Body worn Test data (Separate 15mm)											
Front side	802.11b	6/2437	99.64%	1.004	0.021	-0.01	13.80	14.00	1.047	0.022	22.4
Back side	802.11b	6/2437	99.64%	1.004	0.042	-0.02	13.80	14.00	1.047	0.044	22.4
Hotspot Test data (Separate 10mm)											
Front side	802.11b	6/2437	99.64%	1.004	0.037	0.17	13.80	14.00	1.047	0.039	22.4
Back side	802.11b	6/2437	99.64%	1.004	0.073	0.04	13.80	14.00	1.047	0.077	22.4
Left side	802.11b	6/2437	99.64%	1.004	0.039	0.01	13.80	14.00	1.047	0.041	22.4
Top side	802.11b	6/2437	99.64%	1.004	0.012	0.07	13.80	14.00	1.047	0.012	22.4
MIMO Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data											
Left cheek	802.11b	6/2437	99.64%	1.004	0.427	0.08	16.63	17.00	1.089	0.467	22.4
Left tilted	802.11b	6/2437	99.64%	1.004	0.279	0.06	16.63	17.00	1.089	0.305	22.4
Right cheek	802.11b	6/2437	99.64%	1.004	0.258	0.03	16.63	17.00	1.089	0.282	22.4
Right tilted	802.11b	6/2437	99.64%	1.004	0.253	0.09	16.63	17.00	1.089	0.276	22.4
Body worn Test data (Separate 15mm)											
Front side	802.11b	6/2437	99.64%	1.004	0.063	-0.03	16.63	17.00	1.089	0.069	22.4
Back side	802.11b	6/2437	99.64%	1.004	0.070	-0.07	16.63	17.00	1.089	0.077	22.4
Hotspot Test data (Separate 10mm)											
Front side	802.11b	6/2437	99.64%	1.004	0.089	-0.04	16.63	17.00	1.089	0.098	22.4
Back side	802.11b	6/2437	99.64%	1.004	0.159	0.06	16.63	17.00	1.089	0.174	22.4
Left side	802.11b	6/2437	99.64%	1.004	0.055	-0.08	16.63	17.00	1.089	0.060	22.4
Right side	802.11b	6/2437	99.64%	1.004	0.021	-0.04	16.63	17.00	1.089	0.023	22.4
Top side	802.11b	6/2437	99.64%	1.004	0.126	0.05	16.63	17.00	1.089	0.138	22.4

Table 31: SAR of WIFI 2.4G for Head and Body.





Note: * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.

Mode	Tune-up (dBm)	Tune-up (mw)	Highest Reported SAR1-g(W/kg)	Adjusted SAR1-g(W/kg)	SAR test
Head					
802.11b	17.00	50.12	0.466	/	Yes
802.11g	21.00	125.89	/	1.171	No
802.11n 20M	21.00	125.89	/	1.171	No
Body worn Test data(Separate 15mm) DSI					
802.11b	17.00	50.12	0.077	/	Yes
802.11g	21.00	125.89	/	0.193	No
802.11n 20M	21.00	125.89	/	0.193	No
Hotspot Test data (Separate 10mm)					
802.11b	17.00	50.12	0.174	/	Yes
802.11g	21.00	125.89	/	0.437	No
802.11n 20M	21.00	125.89	/	0.437	No

Note:

1)Per KDB 248227 D01, for Body SAR test of WiFi 2.4G, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. As the 802.11b highest reported SAR is smaller than 1.2 W/kg , and the tune-up of the other 802.11 modes are not higher than 802.11b,therefore the adjusted SAR is ≤ 1.2 W/kg for other 802.11 modes, SAR test for the other 802.11 modes are not required.



8.2.22 SAR Result of WIFI 5G

Ant2 Test Record chain0											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data of U-NII-2A											
Left cheek	802.11a	52/5260	97.20%	1.029	0.145	0.07	10.63	11.10	1.114	0.166	22.5
Left tilted	802.11a	52/5260	97.20%	1.029	0.040	0.01	10.63	11.10	1.114	0.046	22.5
Right cheek	802.11a	52/5260	97.20%	1.029	0.100	0.03	10.63	11.10	1.114	0.115	22.5
Right tilted	802.11a	52/5260	97.20%	1.029	0.020	0.06	10.63	11.10	1.114	0.023	22.5
Head Test Data of U-NII-2C											
Left cheek	802.11a	104/5520	97.20%	1.029	0.281	0.09	10.40	11.10	1.175	0.340	22.5
Left tilted	802.11a	104/5520	97.20%	1.029	0.045	0.03	10.40	11.10	1.175	0.055	22.5
Right cheek	802.11a	104/5520	97.20%	1.029	0.131	0.03	10.40	11.10	1.175	0.158	22.5
Right tilted	802.11a	104/5520	97.20%	1.029	0.023	0.01	10.40	11.10	1.175	0.028	22.5
Head Test Data of U-NII-3											
Left cheek	802.11a	153/5765	97.20%	1.029	0.149	0.01	10.56	11.10	1.132	0.174	22.5
Left tilted	802.11a	153/5765	97.20%	1.029	0.052	0.04	10.56	11.10	1.132	0.061	22.5
Right cheek	802.11a	153/5765	97.20%	1.029	0.054	0.09	10.56	11.10	1.132	0.063	22.5
Right tilted	802.11a	153/5765	97.20%	1.029	0.012	0.05	10.56	11.10	1.132	0.014	22.5
Body worn Test data of U-NII-2A (Separate 15mm)											
Front side	802.11a	52/5260	97.20%	1.029	0.037	0.08	15.60	16.10	1.122	0.043	22.5
Back side	802.11a	52/5260	97.20%	1.029	0.099	0.07	15.60	16.10	1.122	0.114	22.5
Body worn Test data of U-NII-2C (Separate 15mm)											
Front side	802.11a	132/5560	97.20%	1.029	0.054	0.07	15.38	16.10	1.180	0.066	22.5
Back side	802.11a	132/5560	97.20%	1.029	0.111	0.04	15.38	16.10	1.180	0.135	22.5
Body worn Test data of U-NII-3 (Separate 15mm)											
Front side	802.11a	153/5765	97.20%	1.029	0.102	0.02	18.41	19.10	1.172	0.123	22.5
Back side	802.11a	153/5765	97.20%	1.029	0.156	0.08	18.41	19.10	1.172	0.188	22.5
Hotspot Test data of U-NII-1 (Separate 10mm)											
Front side	802.11a	48/5240	97.20%	1.029	0.094	0.04	15.59	16.10	1.125	0.109	22.5
Back side	802.11a	48/5240	97.20%	1.029	0.203	-0.09	15.59	16.10	1.125	0.235	22.5
Right side	802.11a	48/5240	97.20%	1.029	0.428	0.01	15.59	16.10	1.125	0.495	22.5
Hotspot Test data of U-NII-3 (Separate 10mm)											
Front side	802.11a	153/5765	97.20%	1.029	0.154	-0.06	18.41	19.10	1.172	0.186	22.5
Back side	802.11a	153/5765	97.20%	1.029	0.304	0.05	18.41	19.10	1.172	0.367	22.5
Right side	802.11a	153/5765	97.20%	1.029	0.660	0.02	18.41	19.10	1.172	0.796	22.5
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g (W/kg)	Liquid Temp.(°C)
Product specific 10gSAR Test data of U-NII-2A (Separate 0mm)											
Front side	802.11a	52/5260	97.20%	1.029	0.249	0.01	15.60	16.10	1.122	0.287	22.5
Back side	802.11a	52/5260	97.20%	1.029	0.281	0.05	15.60	16.10	1.122	0.324	22.5
Right side	802.11a	52/5260	97.20%	1.029	0.986	0.08	15.60	16.10	1.122	1.138	22.5
Product specific 10gSAR Test data of U-NII-2C (Separate 0mm)											
Front side	802.11a	132/5560	97.20%	1.029	0.254	0.01	15.38	16.10	1.180	0.308	22.5
Back side	802.11a	132/5560	97.20%	1.029	0.308	0.04	15.38	16.10	1.180	0.374	22.5
Right side	802.11a	132/5560	97.20%	1.029	0.945	0.06	15.38	16.10	1.180	1.148	22.5
Ant9 Test Record chain1											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data of U-NII-2A											
Left cheek	802.11a	52/5260	97.20%	1.029	0.494	0.05	9.98	11.10	1.294	0.658	22.5
Left tilted	802.11a	52/5260	97.20%	1.029	0.421	0.03	9.98	11.10	1.294	0.561	22.5
Right cheek	802.11a	52/5260	97.20%	1.029	0.204	0.06	9.98	11.10	1.294	0.272	22.5
Right tilted	802.11a	52/5260	97.20%	1.029	0.242	0.04	9.98	11.10	1.294	0.322	22.5
Head Test Data of U-NII-2C											
Left cheek	802.11a	108/5540	97.20%	1.029	0.419	0.02	10.27	11.10	1.211	0.522	22.5
Left tilted	802.11a	108/5540	97.20%	1.029	0.414	0.07	10.27	11.10	1.211	0.516	22.5



Right cheek	802.11a	108/5540	97.20%	1.029	0.184	0.03	10.27	11.10	1.211	0.229	22.5
Right tilted	802.11a	108/5540	97.20%	1.029	0.192	-0.11	10.27	11.10	1.211	0.239	22.5
Head Test Data of U-NII-3											
Left cheek	802.11a	157/5785	97.20%	1.029	0.329	-0.07	10.40	11.10	1.175	0.398	22.5
Left tilted	802.11a	157/5785	97.20%	1.029	0.322	0.05	10.40	11.10	1.175	0.389	22.5
Right cheek	802.11a	157/5785	97.20%	1.029	0.131	0.04	10.40	11.10	1.175	0.158	22.5
Right tilted	802.11a	157/5785	97.20%	1.029	0.145	0.03	10.40	11.10	1.175	0.175	22.5
Head Test Data of U-NII-2A Simultaneous transmission with WWAN*											
Left cheek	802.11a	52/5260	97.20%	1.029	0.494	0.05	9.98	8.10	0.649	0.330	22.5
Left tilted	802.11a	52/5260	97.20%	1.029	0.421	0.03	9.98	8.10	0.649	0.281	22.5
Right cheek	802.11a	52/5260	97.20%	1.029	0.204	0.06	9.98	8.10	0.649	0.136	22.5
Right tilted	802.11a	52/5260	97.20%	1.029	0.242	0.04	9.98	8.10	0.649	0.161	22.5
Head Test Data of U-NII-2C Simultaneous transmission with WWAN*											
Left cheek	802.11a	108/5540	97.20%	1.029	0.419	0.02	10.27	8.10	0.607	0.262	22.5
Left tilted	802.11a	108/5540	97.20%	1.029	0.414	0.07	10.27	8.10	0.607	0.258	22.5
Right cheek	802.11a	108/5540	97.20%	1.029	0.184	0.03	10.27	8.10	0.607	0.115	22.5
Right tilted	802.11a	108/5540	97.20%	1.029	0.192	-0.11	10.27	8.10	0.607	0.120	22.5
Head Test Data of U-NII-3 Simultaneous transmission with WWAN*											
Left cheek	802.11a	157/5785	97.20%	1.029	0.329	-0.07	10.40	8.10	0.589	0.199	22.5
Left tilted	802.11a	157/5785	97.20%	1.029	0.322	0.05	10.40	8.10	0.589	0.195	22.5
Right cheek	802.11a	157/5785	97.20%	1.029	0.131	0.04	10.40	8.10	0.589	0.079	22.5
Right tilted	802.11a	157/5785	97.20%	1.029	0.145	0.03	10.40	8.10	0.589	0.088	22.5
Body worn Test data of U-NII-2A (Separate 15mm)											
Front side	802.11a	52/5260	97.20%	1.029	0.136	0.08	15.02	16.10	1.282	0.179	22.5
Back side	802.11a	52/5260	97.20%	1.029	0.090	0.02	15.02	16.10	1.282	0.119	22.5
Body worn Test data of U-NII-2C (Separate 15mm)											
Front side	802.11a	108/5540	97.20%	1.029	0.115	0.03	15.27	16.10	1.211	0.143	22.5
Back side	802.11a	108/5540	97.20%	1.029	0.052	0.03	15.27	16.10	1.211	0.065	22.5
Body worn Test data of U-NII-3 (Separate 15mm)											
Front side	802.11a	157/5785	97.20%	1.029	0.198	0.01	18.32	19.10	1.197	0.244	22.5
Back side	802.11a	157/5785	97.20%	1.029	0.215	0.05	18.32	19.10	1.197	0.265	22.5
Hotspot Test data of U-NII-1 (Separate 10mm)											
Front side	802.11a	48/5240	97.20%	1.029	0.208	0.04	14.91	16.10	1.315	0.281	22.5
Back side	802.11a	48/5240	97.20%	1.029	0.166	0.03	14.91	16.10	1.315	0.225	22.5
Right side	802.11a	48/5240	97.20%	1.029	0.139	0.07	14.91	16.10	1.315	0.188	22.5
Top side	802.11a	48/5240	97.20%	1.029	0.264	0.01	14.91	16.10	1.315	0.357	22.5
Hotspot Test data of U-NII-3 (Separate 10mm)											
Front side	802.11a	157/5785	97.20%	1.029	0.319	0.03	18.32	19.10	1.197	0.393	22.5
Back side	802.11a	157/5785	97.20%	1.029	0.316	0.03	18.32	19.10	1.197	0.389	22.5
Right side	802.11a	157/5785	97.20%	1.029	0.068	-0.04	18.32	19.10	1.197	0.084	22.5
Top side	802.11a	157/5785	97.20%	1.029	0.395	-0.14	18.32	19.10	1.197	0.486	22.5
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g (W/kg)	Liquid Temp.(°C)
Product specific 10gSAR Test data of U-NII-2A (Separate 0mm)											
Front side	802.11a	52/5260	97.20%	1.029	0.630	0.03	15.02	16.10	1.282	0.831	22.5
Back side	802.11a	52/5260	97.20%	1.029	0.228	0.03	15.02	16.10	1.282	0.301	22.5
Right side	802.11a	52/5260	97.20%	1.029	0.416	0.09	15.02	16.10	1.282	0.549	22.5
Top side	802.11a	52/5260	97.20%	1.029	0.589	0.02	15.02	16.10	1.282	0.777	22.5
Product specific 10gSAR Test data of U-NII-2C (Separate 0mm)											
Front side	802.11a	108/5540	97.20%	1.029	0.690	0.03	15.27	16.10	1.211	0.859	22.5
Back side	802.11a	108/5540	97.20%	1.029	0.128	0.09	15.27	16.10	1.211	0.159	22.5
Right side	802.11a	108/5540	97.20%	1.029	0.274	0.06	15.27	16.10	1.211	0.341	22.5
Top side	802.11a	108/5540	97.20%	1.029	0.566	0.07	15.27	16.10	1.211	0.705	22.5
MIMO Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data of U-NII-2A											
Left cheek	802.11a	52/5260	97.20%	1.029	0.418	0.08	13.33	14.10	1.194	0.513	22.5
Left tilted	802.11a	52/5260	97.20%	1.029	0.412	0.01	13.33	14.10	1.194	0.506	22.5
Right cheek	802.11a	52/5260	97.20%	1.029	0.223	0.09	13.33	14.10	1.194	0.274	22.5



Right tilted	802.11a	52/5260	97.20%	1.029	0.265	0.01	13.33	14.10	1.194	0.326	22.5
Head Test Data of U-NII-2C											
Left cheek	802.11a	108/5540	97.20%	1.029	0.533	0.02	13.31	14.10	1.199	0.658	22.5
Left tilted	802.11a	108/5540	97.20%	1.029	0.503	0.07	13.31	14.10	1.199	0.621	22.5
Right cheek	802.11a	108/5540	97.20%	1.029	0.262	0.03	13.31	14.10	1.199	0.323	22.5
Right tilted	802.11a	108/5540	97.20%	1.029	0.271	0.17	13.31	14.10	1.199	0.334	22.5
Head Test Data of U-NII-3											
Left cheek	802.11a	157/5785	97.20%	1.029	0.396	0.06	13.48	14.10	1.153	0.470	22.5
Left tilted	802.11a	157/5785	97.20%	1.029	0.382	0.09	13.48	14.10	1.153	0.453	22.5
Right cheek	802.11a	157/5785	97.20%	1.029	0.152	0.08	13.48	14.10	1.153	0.180	22.5
Right tilted	802.11a	157/5785	97.20%	1.029	0.157	0.06	13.48	14.10	1.153	0.186	22.5
Head Test Data of U-NII-2A Simultaneous transmission with WWAN*											
Left cheek	802.11a	52/5260	97.20%	1.029	0.418	0.08	13.33	11.10	0.598	0.257	22.5
Left tilted	802.11a	52/5260	97.20%	1.029	0.412	0.01	13.33	11.10	0.598	0.254	22.5
Right cheek	802.11a	52/5260	97.20%	1.029	0.223	0.09	13.33	11.10	0.598	0.137	22.5
Right tilted	802.11a	52/5260	97.20%	1.029	0.265	0.01	13.33	11.10	0.598	0.163	22.5
Head Test Data of U-NII-2C Simultaneous transmission with WWAN*											
Left cheek	802.11a	108/5540	97.20%	1.029	0.533	0.02	13.31	11.10	0.601	0.330	22.5
Left tilted	802.11a	108/5540	97.20%	1.029	0.503	0.07	13.31	11.10	0.601	0.311	22.5
Right cheek	802.11a	108/5540	97.20%	1.029	0.262	0.03	13.31	11.10	0.601	0.162	22.5
Right tilted	802.11a	108/5540	97.20%	1.029	0.271	0.17	13.31	11.10	0.601	0.168	22.5
Head Test Data of U-NII-3 Simultaneous transmission with WWAN*											
Left cheek	802.11a	157/5785	97.20%	1.029	0.396	0.06	13.48	11.10	0.578	0.236	22.5
Left tilted	802.11a	157/5785	97.20%	1.029	0.382	0.09	13.48	11.10	0.578	0.227	22.5
Right cheek	802.11a	157/5785	97.20%	1.029	0.152	0.08	13.48	11.10	0.578	0.090	22.5
Right tilted	802.11a	157/5785	97.20%	1.029	0.157	0.06	13.48	11.10	0.578	0.093	22.5
Body worn Test data of U-NII-2A (Separate 15mm)											
Front side	802.11a	52/5260	97.20%	1.029	0.142	0.06	18.33	19.10	1.194	0.174	22.5
Back side	802.11a	52/5260	97.20%	1.029	0.116	0.05	18.33	19.10	1.194	0.142	22.5
Body worn Test data of U-NII-2C (Separate 15mm)											
Front side	802.11a	132/5660	97.20%	1.029	0.103	0.03	18.32	19.10	1.197	0.127	22.5
Back side	802.11a	132/5660	97.20%	1.029	0.122	-0.03	18.32	19.10	1.197	0.150	22.5
Body worn Test data of U-NII-3 (Separate 15mm)											
Front side	802.11a	157/5785	97.20%	1.029	0.182	0.06	21.37	22.10	1.183	0.222	22.5
Back side	802.11a	157/5785	97.20%	1.029	0.154	-0.06	21.37	22.10	1.183	0.187	22.5
Hotspot Test data of U-NII-1 (Separate 10mm)											
Front side	802.11a	48/5240	97.20%	1.029	0.252	0.09	18.27	19.10	1.211	0.314	22.5
Back side	802.11a	48/5240	97.20%	1.029	0.197	0.06	18.27	19.10	1.211	0.245	22.5
Right side	802.11a	48/5240	97.20%	1.029	0.427	0.09	18.27	19.10	1.211	0.532	22.5
Top side	802.11a	48/5240	97.20%	1.029	0.294	-0.06	18.27	19.10	1.211	0.366	22.5
Hotspot Test data of U-NII-3 (Separate 10mm)											
Front side	802.11a	157/5785	97.20%	1.029	0.361	0.03	21.37	22.10	1.183	0.439	22.5
Back side	802.11a	157/5785	97.20%	1.029	0.389	0.01	21.37	22.10	1.183	0.473	22.5
Right side	802.11a	157/5785	97.20%	1.029	0.803	0.05	21.37	22.10	1.183	0.977	22.5
Right side	802.11a	153/5765	97.20%	1.029	0.825	0.04	21.37	22.10	1.183	1.004	22.5
Top side	802.11a	157/5785	97.20%	1.029	0.465	-0.01	21.37	22.10	1.183	0.566	22.5
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g (W/kg)	Liquid Temp.(°C)
Product specific 10gSAR Test data of U-NII-2A (Separate 0mm)											
Front side	802.11a	52/5260	97.20%	1.029	0.666	-0.02	18.33	19.10	1.194	0.818	22.5
Back side	802.11a	52/5260	97.20%	1.029	0.298	0.04	18.33	19.10	1.194	0.366	22.5
Right side	802.11a	52/5260	97.20%	1.029	0.942	-0.03	18.33	19.10	1.194	1.157	22.5
Top side	802.11a	52/5260	97.20%	1.029	0.796	0.02	18.33	19.10	1.194	0.978	22.5
Product specific 10gSAR Test data of U-NII-2C (Separate 0mm)											
Front side	802.11a	132/5660	97.20%	1.029	0.600	0.02	18.32	19.10	1.197	0.739	22.5
Back side	802.11a	132/5660	97.20%	1.029	0.345	0.03	18.32	19.10	1.197	0.425	22.5
Right side	802.11a	132/5660	97.20%	1.029	1.170	0.05	18.32	19.10	1.197	1.441	22.5
Top side	802.11a	132/5660	97.20%	1.029	0.760	-0.06	18.32	19.10	1.197	0.936	22.5

Table 32: SAR of WIFI 5G for Head and Body and Product specific 10g SAR.

Note:



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Note:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration;
- 2) Per KDB248227D01, as the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR test for the other 802.11 modes are not required.
- 3) * The simultaneous transmission is reduced by XdB (the detailed power reduced can be referred to Conducted Power Appendix E), therefore, those SAR of simultaneous transmission mode are scaled based on standalone SAR results.



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8.2.1 SAR Result of BT

Bluetooth Ant9 SAR Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(°C)
Head Test Data											
Left cheek	DH5	39/2441	76.86%	1.301	0.248	-0.09	13.98	14.00	1.005	0.324	22.4
Left tilted	DH5	39/2441	76.86%	1.301	0.244	-0.06	13.98	14.00	1.005	0.319	22.4
Right cheek	DH5	39/2441	76.86%	1.301	0.119	-0.07	13.98	14.00	1.005	0.156	22.4
Right tilted	DH5	39/2441	76.86%	1.301	0.116	-0.04	13.98	14.00	1.005	0.152	22.4
Body worn Test data (Separate 15mm)											
Front side	DH5	39/2441	76.86%	1.301	0.023	-0.01	13.98	14.00	1.005	0.030	22.4
Back side	DH5	39/2441	76.86%	1.301	0.026	0.12	13.98	14.00	1.005	0.034	22.4
Hotspot Test data (Separate 10mm)											
Front side	DH5	39/2441	76.86%	1.301	0.051	-0.02	13.98	14.00	1.005	0.067	22.4
Back side	DH5	39/2441	76.86%	1.301	0.057	-0.07	13.98	14.00	1.005	0.075	22.4
Right side	DH5	39/2441	76.86%	1.301	0.014	-0.04	13.98	14.00	1.005	0.019	22.4
Top side	DH5	39/2441	76.86%	1.301	0.061	-0.12	13.98	14.00	1.005	0.079	22.4

Table 33: SAR of BT for Head and Body.



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8.3 Multiple Transmitter Evaluation

8.3.1 Simultaneous SAR test evaluation

• Simultaneous Transmission Possibilities

No.	Simultaneous Tx Combination	Head	Body-Worn	Hotspot	Product Specific 10-g (0mm)
1.	WWAN + WLAN 2.4GHz(chain 0)	Y	Y	Y	Y
2.	WWAN + WLAN 2.4GHz(chain 1)	Y	Y	Y	Y
3.	WWAN + WLAN 2.4GHz MIMO	Y	Y	Y	Y
4.	WWAN + WLAN 5GHz chain0	Y	Y	Y	Y
5.	WWAN + WLAN 5GHz chain1	Y	Y	Y	Y
6.	WWAN + WLAN 5GHz MIMO	Y	Y	Y	Y
7.	WWAN + BT	Y	Y	Y	Y
8.	WWAN + WLAN 5GHz chain0 + BT	Y	Y	Y	Y
9.	WWAN + WLAN 5GHz chain1 + BT	Y	Y	Y	Y
10.	WWAN + WLAN 5GHz MIMO + BT	Y	Y	Y	Y
11.	WWAN + WLAN 2.4GHz (chain 0) + WLAN 5GHz (chain 1)	Y	Y	Y	Y
12.	WLAN 5GHz(chain 1) + BT	Y	Y	Y	Y
13.	WLAN 5GHz(chain 1) + BT	Y	Y	Y	Y
14.	WLAN 2.4GHz (chain 0) + WLAN 5GHz (chain 1)	Y	Y	Y	Y
15.	WWAN + NFC	N	N	N	Y
16.	WWAN + WLAN 2.4GHz(chain 0)+NFC	N	N	N	Y
17.	WWAN + WLAN 2.4GHz(chain 1)+NFC	N	N	N	Y
18.	WWAN + WLAN 2.4GHz MIMO+NFC	N	N	N	Y
19.	WWAN + WLAN 5GHz chain0+NFC	N	N	N	Y
20.	WWAN + WLAN 5GHz chain1+NFC	N	N	N	Y
21.	WWAN + WLAN 5GHz MIMO+NFC	N	N	N	Y
22.	WWAN + BT+NFC	N	N	N	Y
23.	WWAN + WLAN 5GHz chain0 + BT+NFC	N	N	N	Y
24.	WWAN + WLAN 5GHz chain1 + BT+NFC	N	N	N	Y
25.	WWAN + WLAN 5GHz MIMO + BT +NFC	N	N	N	Y
26.	WWAN + WLAN 2.4GHz (chain 0) + WLAN 5GHz (chain 1) +NFC	N	N	N	Y
27.	WLAN 5GHz(chain 0) + BT +NFC	N	N	N	Y
28.	WLAN 5GHz(chain 1) + BT +NFC	N	N	N	Y
29.	WLAN 2.4GHz (chain 0) + WLAN 5GHz (chain 1) +NFC	N	N	N	Y

Note:

- 1) The device does not support DTM function.
- 2) NFC is different from the working scenario of WWAN/WIFI(Head/Body-worn/Hotspot) and does not participate in the simultaneous transmission.
- 3) The NFC test data can be referred to NFC SAR test report (Report NO.: SEWM2310000428RG01).
- 4) For WiFi 5G,U-NII-2A and U-NII-2C band does not support hotspot function.



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8.3.2 Simultaneous Transmission SAR Summation Scenario

ENDC_Head Standalone:

Exposure position	n5		LTE B7			Inter-band SAR
	Ant0	Ant1	Ant3	Ant4	Ant5	
Left Touch	0.142	0.147	0.398	0.129	0.289	0.545
Left Tilt	0.059	0.137	0.508	0.057	0.060	0.645
Right Touch	0.147	0.458	0.614	0.119	0.531	1.072
Right Tilt	0.078	0.346	0.505	0.130	0.084	0.851

Exposure position	n5		LTE B66			Inter-band SAR
	Ant0	Ant1	Ant3	Ant4	Ant5	
Left Touch	0.142	0.147	0.321	0.088	0.368	0.515
Left Tilt	0.059	0.137	0.366	0.083	0.065	0.503
Right Touch	0.147	0.458	0.702	0.122	0.697	1.160
Right Tilt	0.078	0.346	0.631	0.047	0.108	0.977

Exposure position	n7		LTE B2	Inter-band SAR
	Ant4	Ant5	Ant3	
Left Touch	0.148	0.200	0.260	0.460
Left Tilt	0.057	0.041	0.311	0.368
Right Touch	0.140	0.470	0.501	0.971
Right Tilt	0.112	0.085	0.441	0.553

Exposure position	n7		LTE B2	Inter-band SAR
	Ant3	Ant5	Ant4	
Left Touch	0.426	0.200	0.125	0.551
Left Tilt	0.485	0.041	0.122	0.607
Right Touch	0.710	0.470	0.168	0.878
Right Tilt	0.626	0.085	0.079	0.705

Exposure position	n7		LTE B2	Inter-band SAR
	Ant3	Ant4	Ant5	
Left Touch	0.426	0.148	0.242	0.668
Left Tilt	0.485	0.057	0.063	0.548
Right Touch	0.710	0.140	0.479	1.189
Right Tilt	0.626	0.112	0.075	0.701

Exposure position	n7			LTE B5		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Left Touch	0.426	0.148	0.200	0.105	0.128	0.554
Left Tilt	0.485	0.057	0.041	0.050	0.080	0.565
Right Touch	0.710	0.140	0.470	0.116	0.300	1.010
Right Tilt	0.626	0.112	0.085	0.060	0.193	0.819



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Exposure position	n7		LTE B66	Inter-band SAR
	Ant4	Ant5	Ant3	
Left Touch	0.148	0.200	0.267	0.467
Left Tilt	0.057	0.041	0.349	0.406
Right Touch	0.140	0.470	0.608	1.078
Right Tilt	0.112	0.085	0.518	0.630

Exposure position	n7		LTE B66	Inter-band SAR
	Ant3	Ant5	Ant4	
Left Touch	0.426	0.200	0.077	0.503
Left Tilt	0.485	0.041	0.053	0.538
Right Touch	0.710	0.470	0.095	0.805
Right Tilt	0.626	0.085	0.044	0.670

Exposure position	n7		LTE B66	Inter-band SAR
	Ant3	Ant4	Ant5	
Left Touch	0.426	0.148	0.184	0.610
Left Tilt	0.485	0.057	0.039	0.524
Right Touch	0.710	0.140	0.348	1.058
Right Tilt	0.626	0.112	0.069	0.695

Exposure position	n38		LTE B66	Inter-band SAR
	Ant4	Ant5	Ant3	
Left Touch	0.195	0.301	0.267	0.568
Left Tilt	0.082	0.054	0.349	0.431
Right Touch	0.178	0.484	0.608	1.092
Right Tilt	0.146	0.093	0.518	0.664

Exposure position	n38		LTE B66	Inter-band SAR
	Ant3	Ant5	Ant4	
Left Touch	0.356	0.301	0.077	0.433
Left Tilt	0.441	0.054	0.053	0.494
Right Touch	0.721	0.484	0.095	0.816
Right Tilt	0.719	0.093	0.044	0.763

Exposure position	n38		LTE B66	Inter-band SAR
	Ant3	Ant4	Ant5	
Left Touch	0.356	0.195	0.184	0.540
Left Tilt	0.441	0.082	0.039	0.480
Right Touch	0.721	0.178	0.348	1.069
Right Tilt	0.719	0.146	0.069	0.788

Exposure position	n41			LTE B26		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Left Touch	0.364	0.191	0.157	0.105	0.128	0.492



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Left Tilt	0.408	0.079	0.032	0.050	0.080	0.488
Right Touch	0.578	0.155	0.353	0.116	0.300	0.878
Right Tilt	0.546	0.164	0.074	0.060	0.193	0.739

Exposure position	n41		LTE B66	Inter-band SAR
	Ant4	Ant5	Ant3	
Left Touch	0.364	0.157	0.267	0.631
Left Tilt	0.408	0.032	0.349	0.757
Right Touch	0.578	0.353	0.608	1.186
Right Tilt	0.546	0.074	0.518	1.064

Exposure position	n41		LTE B66	Inter-band SAR
	Ant3	Ant5	Ant4	
Left Touch	0.364	0.157	0.077	0.441
Left Tilt	0.408	0.032	0.053	0.461
Right Touch	0.578	0.353	0.095	0.673
Right Tilt	0.546	0.074	0.044	0.590

Exposure position	n41		LTE B66	Inter-band SAR
	Ant3	Ant4	Ant5	
Left Touch	0.364	0.191	0.184	0.548
Left Tilt	0.408	0.079	0.039	0.447
Right Touch	0.578	0.155	0.348	0.926
Right Tilt	0.546	0.164	0.069	0.615

Exposure position	n66		LTE B2	Inter-band SAR
	Ant4	Ant5	Ant3	
Left Touch	0.128	0.241	0.260	0.501
Left Tilt	0.108	0.417	0.311	0.728
Right Touch	0.162	0.478	0.501	0.979
Right Tilt	0.080	0.076	0.441	0.521

Exposure position	n66		LTE B2	Inter-band SAR
	Ant3	Ant5	Ant4	
Left Touch	0.304	0.241	0.125	0.429
Left Tilt	0.372	0.417	0.122	0.539
Right Touch	0.695	0.478	0.168	0.863
Right Tilt	0.667	0.076	0.079	0.746

Exposure position	n66		LTE B2	Inter-band SAR
	Ant3	Ant4	Ant5	
Left Touch	0.304	0.128	0.242	0.546
Left Tilt	0.372	0.108	0.063	0.435
Right Touch	0.695	0.162	0.479	1.174
Right Tilt	0.667	0.080	0.075	0.742

Exposure position	n66	LTE B5	
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	Ant3	Ant4	Ant5	Ant0	Ant1	Inter-band SAR
Left Touch	0.304	0.128	0.241	0.105	0.128	0.432
Left Tilt	0.372	0.108	0.417	0.050	0.080	0.497
Right Touch	0.695	0.162	0.478	0.116	0.300	0.995
Right Tilt	0.667	0.080	0.076	0.060	0.193	0.860

Exposure position	n66		LTE B7		Inter-band SAR
	Ant4	Ant5	Ant3		
Left Touch	0.128	0.241	0.379		0.620
Left Tilt	0.108	0.417	0.457		0.874
Right Touch	0.162	0.478	0.511		0.989
Right Tilt	0.080	0.076	0.508		0.588

Exposure position	n66		LTE B7		Inter-band SAR
	Ant3	Ant5	Ant4		
Left Touch	0.304	0.241	0.157		0.461
Left Tilt	0.372	0.417	0.060		0.477
Right Touch	0.695	0.478	0.147		0.842
Right Tilt	0.667	0.076	0.109		0.776

Exposure position	n66		LTE B7		Inter-band SAR
	Ant3	Ant4	Ant5		
Left Touch	0.304	0.128	0.203		0.507
Left Tilt	0.372	0.108	0.124		0.496
Right Touch	0.695	0.162	0.475		1.170
Right Tilt	0.667	0.080	0.176		0.843

Exposure position	n66			LTE B12		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Left Touch	0.304	0.128	0.241	0.090	0.067	0.394
Left Tilt	0.372	0.108	0.417	0.044	0.042	0.461
Right Touch	0.695	0.162	0.478	0.105	0.178	0.873
Right Tilt	0.667	0.080	0.076	0.053	0.129	0.796

ENDC_Body-worn 15mm Standalone:

Exposure position	n5		LTE B7			Inter-band SAR
	Ant0	Ant1	Ant3	Ant4	Ant5	
Front side	0.126	0.054	0.090	0.075	0.026	0.216
Back side	0.159	0.110	0.190	0.104	0.031	0.349

Exposure position	n5		LTE B66			Inter-band SAR
	Ant0	Ant1	Ant3	Ant4	Ant5	
Front side	0.126	0.054	0.095	0.060	0.029	0.221
Back side	0.159	0.110	0.165	0.091	0.049	0.324

Exposure position	n7		LTE B2		Inter-band SAR
	Ant4	Ant5	Ant3		



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Front side	0.049	0.028	0.081	0.130
Back side	0.070	0.044	0.123	0.193

Exposure position	n7		LTE B2	Inter-band SAR
	Ant3	Ant5	Ant4	
Front side	0.102	0.028	0.102	0.204
Back side	0.194	0.044	0.149	0.343

Exposure position	n7		LTE B2	Inter-band SAR
	Ant3	Ant4	Ant5	
Front side	0.102	0.049	0.037	0.139
Back side	0.194	0.070	0.070	0.264

Exposure position	n7			LTE B5		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.102	0.049	0.028	0.066	0.039	0.168
Back side	0.194	0.070	0.044	0.081	0.078	0.275

Exposure position	n7		LTE B66	Inter-band SAR
	Ant4	Ant5	Ant3	
Front side	0.049	0.028	0.095	0.144
Back side	0.070	0.044	0.118	0.188

Exposure position	n7		LTE B66	Inter-band SAR
	Ant3	Ant5	Ant4	
Front side	0.102	0.028	0.067	0.169
Back side	0.194	0.044	0.079	0.273

Exposure position	n7		LTE B66	Inter-band SAR
	Ant3	Ant4	Ant5	
Front side	0.102	0.049	0.018	0.120
Back side	0.194	0.070	0.029	0.223

Exposure position	n38		LTE B66	Inter-band SAR
	Ant4	Ant5	Ant3	
Front side	0.128	0.061	0.095	0.223
Back side	0.219	0.078	0.118	0.337

Exposure position	n38		LTE B66	Inter-band SAR
	Ant3	Ant5	Ant4	
Front side	0.096	0.061	0.067	0.163
Back side	0.199	0.078	0.079	0.278

Exposure position	n38		LTE B66	Inter-band SAR
	Ant3	Ant4	Ant5	
Front side	0.096	0.128	0.018	0.146
Back side	0.199	0.219	0.029	0.248



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Exposure position	n41			LTE B26		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.067	0.078	0.021	0.066	0.039	0.144
Back side	0.132	0.125	0.039	0.081	0.078	0.213

Exposure position	n41		LTE B66	Inter-band SAR
	Ant4	Ant5	Ant3	
Front side	0.078	0.021	0.095	0.173
Back side	0.125	0.039	0.118	0.243

Exposure position	n41		LTE B66	Inter-band SAR
	Ant3	Ant5	Ant4	
Front side	0.067	0.021	0.067	0.134
Back side	0.132	0.039	0.079	0.211

Exposure position	n41		LTE B66	Inter-band SAR
	Ant3	Ant4	Ant5	
Front side	0.067	0.078	0.018	0.096
Back side	0.132	0.125	0.029	0.161

Exposure position	n66		LTE B2	Inter-band SAR
	Ant4	Ant5	Ant3	
Front side	0.104	0.040	0.081	0.185
Back side	0.142	0.073	0.123	0.265

Exposure position	n66		LTE B2	Inter-band SAR
	Ant3	Ant5	Ant4	
Front side	0.107	0.040	0.102	0.209
Back side	0.141	0.073	0.149	0.290

Exposure position	n66		LTE B2	Inter-band SAR
	Ant3	Ant4	Ant5	
Front side	0.107	0.104	0.037	0.144
Back side	0.141	0.142	0.070	0.212

Exposure position	n66			LTE B5		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.107	0.104	0.040	0.066	0.039	0.173
Back side	0.141	0.142	0.073	0.081	0.078	0.223

Exposure position	n66		LTE B7	Inter-band SAR
	Ant4	Ant5	Ant3	
Front side	0.104	0.040	0.077	0.181
Back side	0.142	0.073	0.152	0.294





Exposure position	n66		LTE B7	Inter-band SAR
	Ant3	Ant5	Ant4	
Front side	0.107	0.040	0.057	0.164
Back side	0.141	0.073	0.075	0.216

Exposure position	n66		LTE B7	Inter-band SAR
	Ant3	Ant4	Ant5	
Front side	0.107	0.104	0.034	0.141
Back side	0.141	0.142	0.057	0.199

Exposure position	n66			LTE B12		Inter-band SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.107	0.104	0.040	0.104	0.042	0.211
Back side	0.141	0.142	0.073	0.111	0.046	0.253

ENDC_Hotspot 10mm Standalone:

Exposure position	n5		LTE B7			MAX ENDC SAR
	Ant0	Ant1	Ant3	Ant4	Ant5	
Front side	0.208	0.089	0.068	0.117	0.038	0.325
Back side	0.266	0.202	0.137	0.141	0.070	0.407
Left side	/	0.083	0.068	0.043	0.054	0.151
Right side	0.161	/	/	/	/	0.161
Bottom side	0.127	/	/	0.349	/	0.476
Top side	/	0.093	0.323	/	/	0.416

Exposure position	n5		LTE B66			MAX ENDC SAR
	Ant0	Ant1	Ant3	Ant4	Ant5	
Front side	0.208	0.089	0.166	0.101	0.063	0.374
Back side	0.266	0.202	0.172	0.157	0.103	0.438
Left side	/	0.083	0.064	0.040	0.120	0.203
Right side	0.161	/	/	/	/	0.161
Bottom side	0.127	/	/	0.215	/	0.342
Top side	/	0.093	0.294	/	/	0.387

Exposure position	n7		LTE B2	MAX ENDC SAR
	Ant4	Ant5	Ant3	
Front side	0.109	0.040	0.129	0.238
Back side	0.141	0.076	0.144	0.285
Left side	0.042	0.051	0.062	0.113
Right side	/	/	/	0.000
Bottom side	0.238	/	/	0.238
Top side	/	/	0.245	0.245

Exposure position	n7		LTE B2	MAX ENDC SAR
	Ant3	Ant5	Ant4	
Front side	0.103	0.040	0.143	0.246
Back side	0.259	0.076	0.209	0.468
Left side	0.108	0.051	0.064	0.172
Right side	/	/	/	0.000
Bottom side	/	/	0.338	0.338
Top side	0.303	/	/	0.303



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Exposure position	n7		LTE B2	MAX ENDC SAR
	Ant3	Ant4	Ant5	
Front side	0.103	0.109	0.080	0.189
Back side	0.259	0.141	0.127	0.386
Left side	0.108	0.042	0.199	0.307
Right side	/	/	/	0.000
Bottom side	/	0.238	/	0.238
Top side	0.303	/	/	0.303

Exposure position	n7			LTE B5		MAX ENDC SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.103	0.109	0.040	0.076	0.061	0.185
Back side	0.259	0.141	0.076	0.115	0.113	0.374
Left side	0.108	0.042	0.051	/	0.034	0.142
Right side	/	/	/	0.076	/	0.076
Bottom side	/	0.238	/	0.052	/	0.290
Top side	0.303	/	/	/	0.050	0.353

Exposure position	n7		LTE B66	MAX ENDC SAR
	Ant4	Ant5	Ant3	
Front side	0.109	0.040	0.122	0.231
Back side	0.141	0.076	0.186	0.327
Left side	0.042	0.051	0.048	0.099
Right side	/	/	/	0.000
Bottom side	0.238	/	/	0.238
Top side	/	/	0.259	0.259

Exposure position	n7		LTE B66	MAX ENDC SAR
	Ant3	Ant5	Ant4	
Front side	0.103	0.040	0.090	0.193
Back side	0.259	0.076	0.118	0.377
Left side	0.108	0.051	0.040	0.148
Right side	/	/	/	0.000
Bottom side	/	/	0.175	0.175
Top side	0.303	/	/	0.303

Exposure position	n7		LTE B66	MAX ENDC SAR
	Ant3	Ant4	Ant5	
Front side	0.103	0.109	0.027	0.136
Back side	0.259	0.141	0.047	0.306
Left side	0.108	0.042	0.065	0.173
Right side	/	/	/	0.000
Bottom side	/	0.238	/	0.238
Top side	0.303	/	/	0.303

Exposure position	n38		LTE B66	MAX ENDC SAR
	Ant4	Ant5	Ant3	
Front side	0.191	0.103	0.122	0.313
Back side	0.297	0.159	0.186	0.483
Left side	0.025	0.163	0.048	0.211
Right side	/	/	/	0.000
Bottom side	0.502	/	/	0.502
Top side	/	/	0.259	0.259



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Exposure position	n38		LTE B66	MAX ENDC SAR
	Ant3	Ant5	Ant4	
Front side	0.195	0.103	0.090	0.285
Back side	0.082	0.159	0.118	0.277
Left side	0.178	0.163	0.040	0.218
Right side	/	/	/	0.000
Bottom side	/	/	0.175	0.175
Top side	0.292	/	/	0.292

Exposure position	n38		LTE B66	MAX ENDC SAR
	Ant3	Ant4	Ant5	
Front side	0.195	0.191	0.027	0.222
Back side	0.082	0.297	0.047	0.344
Left side	0.178	0.025	0.065	0.243
Right side	/	/	/	0.000
Bottom side	/	0.502	/	0.502
Top side	0.292	/	/	0.292

Exposure position	n41			LTE B26		MAX ENDC SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.116	0.135	0.036	0.076	0.061	0.211
Back side	0.205	0.157	0.079	0.115	0.113	0.320
Left side	0.075	0.032	0.057	/	0.034	0.109
Right side	/	/	/	0.076	/	0.076
Bottom side	/	0.318	/	0.052	/	0.370
Top side	0.242	/	/	/	0.050	0.292

Exposure position	n41		LTE B66	MAX ENDC SAR
	Ant4	Ant5	Ant3	
Front side	0.135	0.036	0.122	0.257
Back side	0.157	0.079	0.186	0.343
Left side	0.032	0.057	0.048	0.105
Right side	/	/	/	0.000
Bottom side	0.318	/	/	0.318
Top side	/	/	0.259	0.259

Exposure position	n41		LTE B66	MAX ENDC SAR
	Ant3	Ant5	Ant4	
Front side	0.116	0.036	0.090	0.206
Back side	0.205	0.079	0.118	0.323
Left side	0.075	0.057	0.040	0.115
Right side	/	/	/	0.000
Bottom side	/	/	0.175	0.175
Top side	0.242	/	/	0.242

Exposure position	n41		LTE B66	MAX ENDC SAR
	Ant3	Ant4	Ant5	
Front side	0.116	0.135	0.027	0.162
Back side	0.205	0.157	0.047	0.252
Left side	0.075	0.032	0.065	0.140
Right side	/	/	/	0.000
Bottom side	/	0.318	/	0.318
Top side	0.242	/	/	0.242



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Exposure position	n66		LTE B2	MAX ENDC SAR
	Ant4	Ant5	Ant3	
Front side	0.173	0.071	0.129	0.302
Back side	0.216	0.125	0.144	0.360
Left side	0.032	0.163	0.062	0.225
Right side	/	/	/	0.000
Bottom side	0.293	/	/	0.293
Top side	/	/	0.245	0.245

Exposure position	n66		LTE B2	MAX ENDC SAR
	Ant3	Ant5	Ant4	
Front side	0.168	0.071	0.143	0.311
Back side	0.245	0.125	0.209	0.454
Left side	0.070	0.163	0.064	0.227
Right side	/	/	/	0.000
Bottom side	/	/	0.338	0.338
Top side	0.338	/	/	0.338

Exposure position	n66		LTE B2	MAX ENDC SAR
	Ant3	Ant4	Ant5	
Front side	0.168	0.173	0.080	0.253
Back side	0.245	0.216	0.127	0.372
Left side	0.070	0.032	0.199	0.269
Right side	/	/	/	0.000
Bottom side	/	0.293	/	0.293
Top side	0.338	/	/	0.338

Exposure position	n66			LTE B5		MAX ENDC SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.168	0.173	0.071	0.076	0.061	0.249
Back side	0.245	0.216	0.125	0.115	0.113	0.360
Left side	0.070	0.032	0.163	/	0.034	0.197
Right side	/	/	/	0.076	/	0.076
Bottom side	/	0.293	/	0.052	/	0.345
Top side	0.338	/	/	/	0.050	0.388

Exposure position	n66		LTE B7	MAX ENDC SAR
	Ant4	Ant5	Ant3	
Front side	0.173	0.071	0.111	0.284
Back side	0.216	0.125	0.236	0.452
Left side	0.032	0.163	0.022	0.185
Right side	/	/	/	0.000
Bottom side	0.293	/	/	0.293
Top side	/	/	0.261	0.261

Exposure position	n66		LTE B7	MAX ENDC SAR
	Ant3	Ant5	Ant4	
Front side	0.168	0.071	0.063	0.231
Back side	0.245	0.125	0.092	0.337
Left side	0.070	0.163	0.022	0.185
Right side	/	/	/	0.000
Bottom side	/	/	0.157	0.157
Top side	0.338	/	/	0.338



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Exposure position	n66		LTE B7	MAX ENDC SAR
	Ant3	Ant4	Ant5	
Front side	0.168	0.173	0.047	0.220
Back side	0.245	0.216	0.086	0.331
Left side	0.070	0.032	0.060	0.130
Right side	/	/	/	0.000
Bottom side	/	0.293	/	0.293
Top side	0.338	/	/	0.338

Exposure position	n66			LTE B12		MAX ENDC SAR
	Ant3	Ant4	Ant5	Ant0	Ant1	
Front side	0.168	0.173	0.071	0.095	0.043	0.268
Back side	0.245	0.216	0.125	0.121	0.065	0.366
Left side	0.070	0.032	0.163	0.225	0.052	0.388
Right side	/	/	/	0.132	0.000	0.132
Bottom side	/	0.293	/	0.043	0.000	0.336
Top side	0.338	/	/	0.245	0.025	0.583



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8.3.3 Simultaneous Transmission SAR Summation Scenario

Head:

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant0	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM850	Left cheek	0.114	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.38	0.17	0.58	0.45	0.44	0.44	0.44	0.78	0.77	0.77	0.71	
	Left tilted	0.053	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.33	0.08	0.36	0.11	0.33	0.36	0.37	0.43	0.65	0.68	0.61	
	Right cheek	0.126	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.23	0.36	0.41	0.28	0.26	0.29	0.28	0.44	0.42	0.44	0.37	
	Right tilted	0.062	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.18	0.12	0.34	0.09	0.22	0.23	0.21	0.24	0.38	0.38	0.34	
WCDMA Band V	Left cheek	0.130	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.39	0.19	0.60	0.47	0.46	0.46	0.45	0.79	0.78	0.78	0.72	
	Left tilted	0.062	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.34	0.09	0.37	0.12	0.34	0.37	0.38	0.44	0.66	0.69	0.62	
	Right cheek	0.143	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.25	0.38	0.43	0.30	0.28	0.31	0.30	0.46	0.44	0.46	0.38	
	Right tilted	0.074	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.19	0.14	0.35	0.10	0.24	0.24	0.23	0.25	0.39	0.39	0.35	
LTE Band 12	Left cheek	0.090	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.35	0.15	0.56	0.43	0.42	0.42	0.41	0.75	0.74	0.74	0.68	
	Left tilted	0.044	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.32	0.07	0.35	0.11	0.33	0.36	0.36	0.42	0.64	0.67	0.60	
	Right cheek	0.105	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.21	0.34	0.39	0.26	0.24	0.27	0.26	0.42	0.40	0.42	0.35	
	Right tilted	0.053	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.17	0.11	0.33	0.08	0.21	0.22	0.21	0.23	0.37	0.37	0.33	
LTE Band 13	Left cheek	0.099	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.36	0.16	0.57	0.44	0.43	0.43	0.42	0.76	0.75	0.75	0.69	
	Left tilted	0.049	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.33	0.08	0.35	0.11	0.33	0.36	0.37	0.43	0.65	0.68	0.61	
	Right cheek	0.121	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.23	0.36	0.40	0.28	0.26	0.28	0.28	0.44	0.41	0.44	0.36	
	Right tilted	0.061	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.18	0.12	0.34	0.09	0.22	0.23	0.21	0.24	0.37	0.38	0.34	
LTE Band 26	Left cheek	0.133	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.40	0.19	0.60	0.47	0.46	0.46	0.46	0.80	0.79	0.79	0.73	
	Left tilted	0.063	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.34	0.09	0.37	0.12	0.34	0.37	0.38	0.44	0.66	0.69	0.62	
	Right cheek	0.146	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.25	0.38	0.43	0.30	0.28	0.31	0.30	0.46	0.44	0.46	0.39	
	Right tilted	0.075	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.19	0.14	0.35	0.10	0.24	0.24	0.23	0.26	0.39	0.40	0.35	
N5	Left cheek	0.142	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.41	0.20	0.61	0.48	0.47	0.47	0.47	0.81	0.80	0.80	0.74	
	Left tilted	0.059	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.34	0.09	0.36	0.12	0.34	0.37	0.38	0.44	0.66	0.69	0.62	
	Right cheek	0.147	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.25	0.38	0.43	0.31	0.28	0.31	0.30	0.46	0.44	0.47	0.39	
	Right tilted	0.078	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.19	0.14	0.35	0.11	0.24	0.25	0.23	0.26	0.39	0.40	0.35	

Test position	SARmax (W/kg)					Summed SAR			
	WiFi 2.4G Ant9(chain0)	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT				
	1	2	3	4	5	1+2	2+5	3+5	4+5
Left cheek	0.419	0.340	0.658	0.658	0.324	1.08	0.66	0.98	0.98
Left tilted	0.442	0.061	0.561	0.621	0.319	1.00	0.38	0.88	0.94
Right cheek	0.167	0.158	0.272	0.323	0.156	0.44	0.31	0.43	0.48
Right tilted	0.180	0.028	0.322	0.334	0.152	0.50	0.18	0.47	0.49



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Test position		SARmax (W/kg)								Summed SAR											
		Main Ant1	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8												
GSM850	Left cheek	0.123	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.39	0.18	0.59	0.46	0.45	0.45	0.79	0.78	0.78	0.72		
	Left tilted	0.108	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.39	0.14	0.41	0.17	0.39	0.42	0.43	0.49	0.71	0.74	0.67	
	Right cheek	0.319	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.42	0.56	0.60	0.48	0.46	0.48	0.48	0.63	0.61	0.64	0.56	
	Right tilted	0.283	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.40	0.34	0.56	0.31	0.44	0.45	0.44	0.46	0.60	0.60	0.56	
WCDMA Band V	Left cheek	0.155	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.42	0.21	0.62	0.50	0.49	0.49	0.48	0.82	0.81	0.81	0.75	
	Left tilted	0.115	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.39	0.14	0.42	0.18	0.40	0.43	0.43	0.50	0.72	0.75	0.68	
	Right cheek	0.376	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.48	0.61	0.66	0.53	0.51	0.54	0.53	0.69	0.67	0.69	0.62	
	Right tilted	0.248	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.36	0.31	0.52	0.28	0.41	0.42	0.40	0.43	0.56	0.57	0.52	
LTE Band 12	Left cheek	0.067	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.33	0.12	0.53	0.41	0.40	0.40	0.39	0.73	0.72	0.72	0.66	
	Left tilted	0.042	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.32	0.07	0.35	0.10	0.32	0.35	0.36	0.42	0.64	0.67	0.60	
	Right cheek	0.178	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.28	0.41	0.46	0.34	0.31	0.34	0.33	0.49	0.47	0.50	0.42	
	Right tilted	0.129	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.24	0.19	0.41	0.16	0.29	0.30	0.28	0.31	0.44	0.45	0.40	
LTE Band 13	Left cheek	0.141	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.41	0.20	0.61	0.48	0.47	0.47	0.47	0.81	0.80	0.80	0.74	
	Left tilted	0.096	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.38	0.12	0.40	0.16	0.38	0.41	0.42	0.48	0.70	0.73	0.66	
	Right cheek	0.352	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.46	0.59	0.63	0.51	0.49	0.51	0.51	0.67	0.64	0.67	0.59	
	Right tilted	0.223	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.34	0.28	0.50	0.25	0.38	0.39	0.38	0.40	0.54	0.54	0.50	
LTE Band 26	Left cheek	0.181	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.45	0.24	0.65	0.52	0.51	0.51	0.51	0.85	0.84	0.84	0.78	
	Left tilted	0.113	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.39	0.14	0.42	0.17	0.39	0.42	0.43	0.49	0.71	0.74	0.67	
	Right cheek	0.412	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.52	0.65	0.69	0.57	0.55	0.57	0.57	0.73	0.70	0.73	0.65	
	Right tilted	0.273	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.39	0.33	0.55	0.30	0.43	0.44	0.43	0.45	0.59	0.59	0.55	
N5	Left cheek	0.147	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.41	0.20	0.61	0.49	0.48	0.48	0.47	0.81	0.80	0.80	0.74	
	Left tilted	0.137	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.42	0.17	0.44	0.20	0.42	0.45	0.46	0.52	0.74	0.77	0.70	
	Right cheek	0.458	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.56	0.69	0.74	0.62	0.59	0.62	0.61	0.77	0.75	0.78	0.70	
	Right tilted	0.346	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.46	0.41	0.62	0.37	0.51	0.51	0.50	0.53	0.66	0.67	0.62	

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant3	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8												
GSM1900	Left cheek	0.356	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.62	0.41	0.82	0.70	0.69	0.69	0.68	1.02	1.01	1.01	0.95	
	Left tilted	0.443	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.72	0.47	0.75	0.50	0.72	0.75	0.76	0.82	1.04	1.07	1.00	
	Right cheek	0.707	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.81	0.94	0.99	0.87	0.84	0.87	0.86	1.02	1.00	1.03	0.95	
	Right tilted	0.660	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.77	0.72	0.94	0.69	0.82	0.83	0.81	0.84	0.97	0.98	0.94	
WCDMA Band II	Left cheek	0.392	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.66	0.45	0.86	0.73	0.72	0.72	0.72	1.06	1.05	1.05	0.99	
	Left tilted	0.505	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.78	0.53	0.81	0.57	0.79	0.82	0.82	0.89	1.11	1.14	1.07	
	Right cheek	0.771	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.88	1.01	1.05	0.93	0.91	0.93	0.93	1.09	1.06	1.09	1.01	
	Right tilted	0.681	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.80	0.74	0.96	0.71	0.84	0.85	0.83	0.86	0.99	1.00	0.96	
WCDMA Band IV	Left cheek	0.392	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.66	0.45	0.86	0.73	0.72	0.72	0.72	1.06	1.05	1.05	0.99	
	Left tilted	0.488	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.77	0.52	0.79	0.55	0.77	0.80	0.81	0.87	1.09	1.12	1.05	
	Right cheek	0.870	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.98	1.11	1.15	1.03	1.01	1.03	1.03	1.18	1.16	1.19	1.11	
	Right tilted	0.637	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.75	0.70	0.91	0.67	0.80	0.81	0.79	0.82	0.95	0.96	0.91	
LTE Band 2	Left cheek	0.394	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.66	0.45	0.86	0.73	0.72	0.72	0.72	1.06	1.05	1.05	0.99	
	Left tilted	0.471	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.75	0.50	0.78	0.53	0.75	0.78	0.79	0.85	1.07	1.10	1.03	
	Right cheek	0.758	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.86	0.99	1.04	0.92	0.89	0.92	0.91	1.07	1.05	1.08	1.00	
	Right tilted	0.667	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.78	0.73	0.94	0.70	0.83	0.84	0.82	0.85	0.98	0.99	0.94	
LTE Band 7	Left cheek	0.562	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.83	0.62	1.03	0.90	0.89	0.89	0.89	1.23	1.22	1.22	1.16	
	Left tilted	0.717	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.00	0.75	1.02	0.78	1.00	1.03	1.04	1.10	1.32	1.35	1.28	
	Right cheek	0.867	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.97	1.10	1.15	1.03	1.00	1.03	1.02	1.18	1.16	1.19	1.11	
	Right tilted	0.714	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.83	0.78	0.99	0.74	0.88	0.88	0.87	0.89	1.03	1.03	0.99	



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LTE Band 38	Left cheek	0.696	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.96	0.75	1.16	1.04	1.03	1.03	1.02	1.36	1.35	1.35	1.29
	Left tilted	0.677	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.96	0.71	0.98	0.74	0.96	0.99	1.00	1.06	1.28	1.31	1.24
	Right cheek	1.053	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.16	1.29	1.34	1.21	1.19	1.22	1.21	1.37	1.35	1.37	1.29
	Right tilted	0.968	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.08	1.03	1.24	1.00	1.13	1.14	1.12	1.15	1.28	1.29	1.24
LTE Band 41	Left cheek	0.721	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.99	0.78	1.19	1.06	1.05	1.05	1.05	1.39	1.38	1.38	1.32
	Left tilted	0.788	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.07	0.82	1.09	0.85	1.07	1.10	1.11	1.17	1.39	1.42	1.35
	Right cheek	1.080	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.19	1.32	1.36	1.24	1.22	1.24	1.24	1.39	1.37	1.40	1.32
	Right tilted	1.181	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.30	1.24	1.46	1.21	1.34	1.35	1.33	1.36	1.49	1.50	1.46
LTE Band 66	Left cheek	0.509	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.77	0.57	0.98	0.85	0.84	0.84	0.83	1.17	1.16	1.16	1.10
	Left tilted	0.579	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.86	0.61	0.88	0.64	0.86	0.89	0.90	0.96	1.18	1.21	1.14
	Right cheek	1.113	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.22	1.35	1.40	1.27	1.25	1.28	1.27	1.43	1.41	1.43	1.35
	Right tilted	1.000	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.11	1.06	1.28	1.03	1.16	1.17	1.15	1.18	1.31	1.32	1.28
N7	Left cheek	0.675	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.94	0.73	1.14	1.02	1.01	1.01	1.00	1.34	1.33	1.33	1.27
	Left tilted	0.768	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.05	0.80	1.07	0.83	1.05	1.08	1.09	1.15	1.37	1.40	1.33
	Right cheek	1.125	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.23	1.36	1.41	1.28	1.26	1.29	1.28	1.44	1.42	1.44	1.37
	Right tilted	0.992	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.11	1.05	1.27	1.02	1.15	1.16	1.14	1.17	1.31	1.31	1.27
N38	Left cheek	0.564	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.83	0.62	1.03	0.90	0.89	0.89	0.89	1.23	1.22	1.22	1.16
	Left tilted	0.699	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.98	0.73	1.00	0.76	0.98	1.01	1.02	1.08	1.30	1.33	1.26
	Right cheek	1.143	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.25	1.38	1.43	1.30	1.28	1.31	1.30	1.46	1.44	1.46	1.38
	Right tilted	1.024	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.14	1.09	1.30	1.05	1.19	1.19	1.18	1.20	1.34	1.34	1.30
N66	Left cheek	0.481	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.75	0.54	0.95	0.82	0.81	0.81	0.81	1.15	1.14	1.14	1.08
	Left tilted	0.590	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.87	0.62	0.90	0.65	0.87	0.90	0.91	0.97	1.19	1.22	1.15
	Right cheek	1.102	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.21	1.34	1.38	1.26	1.24	1.26	1.26	1.42	1.39	1.42	1.34
	Right tilted	1.057	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.17	1.12	1.33	1.09	1.22	1.23	1.21	1.24	1.37	1.38	1.33
N41	Left cheek	0.604	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.87	0.66	1.07	0.94	0.93	0.93	0.93	1.27	1.26	1.26	1.20
	Left tilted	0.677	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.96	0.71	0.98	0.74	0.96	0.99	1.00	1.06	1.28	1.31	1.24
	Right cheek	0.919	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.02	1.16	1.20	1.08	1.06	1.08	1.08	1.23	1.21	1.24	1.16
	Right tilted	0.879	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.99	0.94	1.16	0.91	1.04	1.05	1.03	1.06	1.19	1.20	1.15

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant4	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Left cheek	0.090	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.350	0.150	0.560	0.430	0.420	0.410	0.75	0.74	0.74	0.68		
	Left tilted	0.070	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.350	0.100	0.380	0.130	0.350	0.380	0.39	0.45	0.67	0.70	0.63	
	Right cheek	0.098	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.200	0.330	0.380	0.260	0.230	0.260	0.25	0.41	0.39	0.42	0.34	
	Right tilted	0.049	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.160	0.110	0.330	0.080	0.210	0.220	0.20	0.23	0.36	0.37	0.32	
WCDMA Band II	Left cheek	0.058	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.320	0.110	0.530	0.400	0.390	0.390	0.38	0.72	0.71	0.71	0.65	
	Left tilted	0.054	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.330	0.080	0.360	0.120	0.340	0.370	0.37	0.43	0.65	0.68	0.61	
	Right cheek	0.082	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.190	0.320	0.360	0.240	0.220	0.240	0.24	0.40	0.37	0.40	0.32	
	Right tilted	0.041	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.160	0.100	0.320	0.070	0.200	0.210	0.19	0.22	0.35	0.36	0.32	
WCDMA Band IV	Left cheek	0.046	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.310	0.100	0.510	0.390	0.380	0.380	0.37	0.71	0.70	0.70	0.64	
	Left tilted	0.044	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.320	0.070	0.350	0.110	0.330	0.360	0.36	0.42	0.64	0.67	0.60	
	Right cheek	0.062	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.170	0.300	0.340	0.220	0.200	0.220	0.22	0.38	0.35	0.38	0.30	
	Right tilted	0.024	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.140	0.090	0.300	0.050	0.190	0.190	0.18	0.20	0.34	0.34	0.30	
LTE Band 2	Left cheek	0.125	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.390	0.180	0.590	0.470	0.460	0.460	0.45	0.79	0.78	0.78	0.72	
	Left tilted	0.122	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.400	0.150	0.430	0.180	0.400	0.430	0.44	0.50	0.72	0.75	0.68	
	Right cheek	0.168	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.270	0.400	0.450	0.330	0.300	0.330	0.32	0.48	0.46	0.49	0.41	
	Right tilted	0.079	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.190	0.140	0.360	0.110	0.240	0.250	0.23	0.26	0.39	0.40	0.35	
LTE Band 7	Left cheek	0.129	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.390	0.190	0.600	0.470	0.460	0.460	0.45	0.79	0.78	0.78	0.72	
	Left tilted	0.057	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.340	0.090	0.360	0.120	0.340	0.370	0.38	0.44	0.66	0.69	0.62	
	Right cheek	0.119	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.220	0.360	0.400	0.280	0.260	0.280	0.28	0.43	0.41	0.44	0.36	
	Right tilted	0.130	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.240	0.190	0.410	0.160	0.290	0.300	0.28	0.31	0.44	0.45	0.41	
	Left cheek	0.039	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.300	0.100	0.510	0.380	0.370	0.370	0.36	0.70	0.69	0.69	0.63	



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LTE Band 38	Left tilted	0.037	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.320	0.070	0.340	0.100	0.320	0.350	0.36	0.42	0.64	0.67	0.60
	Right cheek	0.089	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.190	0.330	0.370	0.250	0.230	0.250	0.25	0.40	0.38	0.41	0.33
	Right tilted	0.092	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.210	0.150	0.370	0.120	0.250	0.260	0.24	0.27	0.41	0.41	0.37
LTE Band 41	Left cheek	0.037	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.300	0.090	0.500	0.380	0.370	0.370	0.36	0.70	0.69	0.69	0.63
	Left tilted	0.021	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.300	0.050	0.330	0.080	0.300	0.330	0.34	0.40	0.62	0.65	0.58
	Right cheek	0.083	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.190	0.320	0.370	0.240	0.220	0.250	0.24	0.40	0.38	0.40	0.32
LTE Band 66	Right tilted	0.099	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.210	0.160	0.380	0.130	0.260	0.270	0.25	0.28	0.41	0.42	0.37
	Left cheek	0.110	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.370	0.170	0.580	0.450	0.440	0.440	0.43	0.77	0.76	0.76	0.70
	Left tilted	0.104	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.380	0.130	0.410	0.170	0.390	0.420	0.42	0.48	0.70	0.73	0.66
N7	Right cheek	0.154	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.260	0.390	0.440	0.310	0.290	0.320	0.31	0.47	0.45	0.47	0.40
	Right tilted	0.059	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.170	0.120	0.340	0.090	0.220	0.230	0.21	0.24	0.37	0.38	0.33
	Left cheek	0.148	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.410	0.200	0.620	0.490	0.480	0.480	0.47	0.81	0.80	0.80	0.74
N38	Left tilted	0.057	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.340	0.090	0.360	0.120	0.340	0.370	0.38	0.44	0.66	0.69	0.62
	Right cheek	0.140	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.250	0.380	0.420	0.300	0.280	0.300	0.30	0.45	0.43	0.46	0.38
	Right tilted	0.112	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.230	0.170	0.390	0.140	0.270	0.280	0.26	0.29	0.43	0.43	0.39
N66	Left cheek	0.195	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.460	0.250	0.660	0.540	0.530	0.530	0.52	0.86	0.85	0.85	0.79
	Left tilted	0.082	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.360	0.110	0.390	0.140	0.360	0.390	0.40	0.46	0.68	0.71	0.64
	Right cheek	0.178	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.280	0.410	0.460	0.340	0.310	0.340	0.33	0.49	0.47	0.50	0.42
N41	Right tilted	0.146	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.260	0.210	0.420	0.170	0.310	0.310	0.30	0.33	0.46	0.47	0.42
	Left cheek	0.128	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.390	0.180	0.600	0.470	0.460	0.460	0.45	0.79	0.78	0.78	0.72
	Left tilted	0.108	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.390	0.140	0.410	0.170	0.390	0.420	0.43	0.49	0.71	0.74	0.67
N66	Right cheek	0.162	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.270	0.400	0.440	0.320	0.300	0.320	0.32	0.48	0.45	0.48	0.40
	Right tilted	0.080	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.190	0.140	0.360	0.110	0.240	0.250	0.23	0.26	0.39	0.40	0.36
	Left cheek	0.302	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.570	0.360	0.770	0.640	0.630	0.630	0.63	0.97	0.96	0.96	0.90
N41	Left tilted	0.125	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.400	0.150	0.430	0.190	0.410	0.440	0.44	0.51	0.73	0.76	0.69
	Right cheek	0.245	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.350	0.480	0.530	0.400	0.380	0.410	0.40	0.56	0.54	0.56	0.49
	Right tilted	0.261	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.380	0.320	0.540	0.290	0.420	0.430	0.41	0.44	0.57	0.58	0.54

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant5	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Left cheek	0.391	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.660	0.450	0.860	0.730	0.720	0.72	1.06	1.05	1.05	0.99		
	Left tilted	0.100	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.380	0.130	0.410	0.160	0.380	0.410	0.42	0.48	0.70	0.73	0.66	
	Right cheek	0.657	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.760	0.890	0.940	0.820	0.790	0.820	0.81	0.97	0.95	0.98	0.90	
	Right tilted	0.127	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.240	0.190	0.400	0.160	0.290	0.300	0.28	0.31	0.44	0.45	0.40	
WCDMA Band II	Left cheek	0.415	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.680	0.470	0.880	0.760	0.750	0.74	1.08	1.07	1.07	1.01		
	Left tilted	0.087	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.370	0.120	0.390	0.150	0.370	0.400	0.41	0.47	0.69	0.72	0.65	
	Right cheek	0.783	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.890	1.020	1.070	0.940	0.920	0.950	0.94	1.10	1.08	1.10	1.02	
	Right tilted	0.131	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.250	0.190	0.410	0.160	0.290	0.300	0.28	0.31	0.44	0.45	0.41	
WCDMA Band IV	Left cheek	0.258	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.520	0.310	0.730	0.600	0.590	0.590	0.58	0.92	0.91	0.91	0.85	
	Left tilted	0.047	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.330	0.080	0.350	0.110	0.330	0.360	0.37	0.43	0.65	0.68	0.61	
	Right cheek	0.444	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.550	0.680	0.730	0.600	0.580	0.610	0.60	0.76	0.74	0.76	0.69	
	Right tilted	0.088	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.200	0.150	0.360	0.120	0.250	0.260	0.24	0.27	0.40	0.41	0.36	
LTE Band 2	Left cheek	0.342	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.610	0.400	0.810	0.680	0.670	0.670	1.01	1.00	1.00	0.94		
	Left tilted	0.089	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.370	0.120	0.390	0.150	0.370	0.400	0.41	0.47	0.69	0.72	0.65	
	Right cheek	0.677	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.780	0.910	0.960	0.840	0.810	0.840	0.83	0.99	0.97	1.00	0.92	
	Right tilted	0.106	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.220	0.170	0.380	0.130	0.270	0.270	0.26	0.29	0.42	0.43	0.38	
LTE Band 7	Left cheek	0.408	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.670	0.460	0.880	0.750	0.740	0.740	1.07	1.06	1.06	1.00		
	Left tilted	0.084	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.360	0.110	0.390	0.150	0.370	0.400	0.40	0.46	0.68	0.71	0.64	
	Right cheek	0.735	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.840	0.970	1.020	0.890	0.870	0.900	0.89	1.05	1.03	1.05	0.98	
	Right tilted	0.119	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.230	0.180	0.400	0.150	0.280	0.290	0.27	0.30	0.43	0.44	0.39	
	Left cheek	0.039	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.300	0.100	0.510	0.380	0.370	0.36	0.70	0.69	0.69	0.63		



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LTE Band 38	Left tilted	0.037	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.320	0.07	0.340	0.100	0.32	0.35	0.36	0.42	0.64	0.67	0.60
	Right cheek	0.089	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.190	0.33	0.370	0.250	0.23	0.25	0.25	0.40	0.38	0.41	0.33
	Right tilted	0.092	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.210	0.15	0.370	0.120	0.25	0.26	0.24	0.27	0.41	0.41	0.37
LTE Band 41	Left cheek	0.230	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.490	0.290	0.700	0.570	0.56	0.56	0.55	0.89	0.88	0.88	0.82
	Left tilted	0.035	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.31	0.06	0.340	0.100	0.32	0.35	0.35	0.42	0.64	0.67	0.60
	Right cheek	0.351	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.460	0.590	0.630	0.510	0.490	0.51	0.51	0.67	0.64	0.67	0.59
LTE Band 66	Right tilted	0.073	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.190	0.130	0.350	0.100	0.23	0.24	0.23	0.25	0.39	0.39	0.35
	Left cheek	0.368	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.630	0.420	0.840	0.710	0.700	0.700	0.69	1.03	1.02	1.02	0.96
	Left tilted	0.065	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.340	0.090	0.370	0.130	0.350	0.380	0.38	0.45	0.67	0.70	0.63
N7	Right cheek	0.697	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.800	0.930	0.980	0.860	0.830	0.860	0.85	1.01	0.99	1.02	0.94
	Right tilted	0.108	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.220	0.170	0.380	0.140	0.270	0.280	0.26	0.29	0.42	0.43	0.38
	Left cheek	0.200	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.460	0.260	0.670	0.540	0.530	0.530	0.52	0.86	0.85	0.85	0.79
N38	Left tilted	0.041	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.320	0.070	0.350	0.100	0.320	0.350	0.36	0.42	0.64	0.67	0.60
	Right cheek	0.470	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.580	0.710	0.750	0.630	0.610	0.630	0.63	0.78	0.76	0.79	0.71
	Right tilted	0.085	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.200	0.150	0.360	0.110	0.250	0.250	0.24	0.27	0.40	0.41	0.36
N66	Left cheek	0.271	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.540	0.330	0.740	0.610	0.600	0.600	0.60	0.94	0.93	0.93	0.87
	Left tilted	0.082	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.360	0.110	0.390	0.140	0.360	0.390	0.40	0.46	0.68	0.71	0.64
	Right cheek	0.178	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.280	0.410	0.460	0.340	0.310	0.340	0.33	0.49	0.47	0.50	0.42
N41	Right tilted	0.146	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.260	0.210	0.420	0.170	0.310	0.310	0.30	0.33	0.46	0.47	0.42
	Left cheek	0.303	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.570	0.360	0.770	0.640	0.630	0.630	0.63	0.97	0.96	0.96	0.90
	Left tilted	0.525	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.800	0.550	0.830	0.590	0.810	0.840	0.84	0.91	1.13	1.16	1.09
N41	Right cheek	0.602	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.710	0.840	0.880	0.760	0.740	0.760	0.76	0.92	0.89	0.92	0.84
	Right tilted	0.095	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.210	0.160	0.370	0.120	0.260	0.260	0.25	0.28	0.41	0.42	0.37
	Left cheek	0.313	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.580	0.370	0.780	0.650	0.640	0.640	0.64	0.98	0.97	0.97	0.91
N41	Left tilted	0.064	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.340	0.090	0.370	0.130	0.350	0.380	0.38	0.44	0.66	0.69	0.62
	Right cheek	0.705	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.810	0.940	0.990	0.860	0.840	0.870	0.86	1.02	1.00	1.02	0.95
	Right tilted	0.148	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.260	0.210	0.420	0.180	0.310	0.320	0.30	0.33	0.46	0.47	0.42

Test position		SARmax (W/kg)								Summed SAR											
		Main	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
DC_7A_N5	Left cheek	0.648	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.91	0.70	1.12	0.99	0.98	0.98	0.97	1.31	1.30	1.30	1.24	
	Left tilted	0.776	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.06	0.80	1.08	0.84	1.06	1.09	1.10	1.16	1.38	1.41	1.34	
	Right cheek	1.230	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.34	1.47	1.51	1.39	1.37	1.39	1.39	1.54	1.52	1.55	1.47	
	Right tilted	0.982	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.10	1.04	1.26	1.01	1.14	1.15	1.13	1.16	1.30	1.30	1.26	
DC_66A_N5	Left cheek	0.515	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.78	0.57	0.98	0.86	0.85	0.85	0.84	1.18	1.17	1.17	1.11	
	Left tilted	0.503	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.78	0.53	0.81	0.56	0.78	0.81	0.82	0.88	1.10	1.13	1.06	
	Right cheek	1.160	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.27	1.40	1.44	1.32	1.30	1.32	1.32	1.47	1.45	1.48	1.40	
	Right tilted	0.977	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.09	1.04	1.25	1.01	1.14	1.15	1.13	1.16	1.29	1.30	1.25	
DC_2A_N7	Left cheek	0.668	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.93	0.72	1.14	1.01	1.00	1.00	0.99	1.33	1.32	1.32	1.26	
	Left tilted	0.607	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.89	0.64	0.91	0.67	0.89	0.92	0.93	0.99	1.21	1.24	1.17	
	Right cheek	1.189	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.29	1.43	1.47	1.35	1.33	1.35	1.35	1.50	1.48	1.51	1.43	
	Right tilted	0.705	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.82	0.77	0.98	0.73	0.87	0.87	0.86	0.89	1.02	1.03	0.98	
DC_5A_N7	Left cheek	0.554	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.82	0.61	1.02	0.89	0.88	0.88	0.88	1.22	1.21	1.21	1.15	
	Left tilted	0.565	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.84	0.59	0.87	0.63	0.85	0.88	0.88	0.95	1.17	1.20	1.13	
	Right cheek	1.010	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.12	1.25	1.29	1.17	1.15	1.17	1.17	1.32	1.30	1.33	1.25	
	Right tilted	0.819	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.93	0.88	1.10	0.85	0.98	0.99	0.97	1.00	1.13	1.14	1.09	
DC_66A_N7	Left cheek	0.610	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.87	0.67	1.08	0.95	0.94	0.94	0.93	1.27	1.26	1.26	1.20	
	Left tilted	0.538	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.82	0.57	0.84	0.60	0.82	0.85	0.86	0.92	1.14	1.17	1.10	
	Right cheek	1.078	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.18	1.31	1.36	1.24	1.21	1.24	1.23	1.39	1.37	1.40	1.32	
	Right tilted	0.695	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.81	0.76	0.97	0.72	0.86	0.86	0.85	0.88	1.01	1.02	0.97	
DC_66A_N38	Left cheek	0.568	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.83	0.62	1.04	0.91	0.90	0.90	0.89	1.23	1.22	1.22	1.16	
	Left tilted	0.494	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.77	0.52	0.80	0.56	0.78	0.81	0.81	0.87	1.09	1.12	1.05	
	Right cheek	1.092	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.20	1.33	1.37	1.21	1.23	1.25	1.25	1.41	1.38	1.41	1.33	
	Right tilted	0.788	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.90	0.85	1.06	0.82	0.95	0.96	0.94	0.97	1.10	1.11	1.06	



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DC_26A_N41	Left cheek	0.492	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.760	0.550	0.960	0.830	0.820	0.820	0.82	1.16	1.15	1.15	1.09
	Left tilted	0.488	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.770	0.520	0.790	0.550	0.770	0.800	0.81	0.87	1.09	1.12	1.05
	Right cheek	0.878	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.980	1.110	1.160	1.040	1.010	1.040	1.03	1.19	1.17	1.20	1.12
	Right tilted	0.739	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.850	0.800	1.020	0.770	0.900	0.910	0.89	0.92	1.05	1.06	1.01
DC_66A_N41	Left cheek	0.631	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.900	0.690	1.100	0.970	0.960	0.960	0.96	1.30	1.29	1.29	1.23
	Left tilted	0.757	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.040	0.790	1.060	0.820	1.040	1.070	1.08	1.14	1.36	1.39	1.32
	Right cheek	1.186	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.290	1.420	1.470	1.340	1.320	1.350	1.34	1.50	1.48	1.50	1.43
	Right tilted	1.064	0.114	0.061	0.276	0.028	0.161	0.168	0.152	1.180	1.130	1.340	1.090	1.230	1.230	1.22	1.24	1.38	1.38	1.34
DC_2A_N66	Left cheek	0.546	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.810	0.600	1.010	0.890	0.880	0.880	0.87	1.21	1.20	1.20	1.14
	Left tilted	0.728	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.010	0.760	1.030	0.790	1.010	1.040	1.05	1.11	1.33	1.36	1.29
	Right cheek	1.174	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.280	1.410	1.460	1.330	1.310	1.340	1.33	1.49	1.47	1.49	1.42
	Right tilted	0.746	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.860	0.810	1.020	0.770	0.910	0.910	0.90	0.93	1.06	1.07	1.02
DC_5A_N66	Left cheek	0.432	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.700	0.490	0.900	0.770	0.760	0.760	0.76	1.10	1.09	1.09	1.03
	Left tilted	0.497	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.780	0.530	0.800	0.560	0.780	0.810	0.82	0.88	1.10	1.13	1.06
	Right cheek	0.995	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.100	1.230	1.280	1.150	1.130	1.160	1.15	1.31	1.29	1.31	1.24
	Right tilted	0.860	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.970	0.920	1.140	0.890	1.020	1.030	1.01	1.04	1.17	1.18	1.14
DC_7A_N66	Left cheek	0.620	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.880	0.680	1.090	0.960	0.950	0.950	0.94	1.25	1.27	1.27	1.21
	Left tilted	0.874	0.279	0.028	0.305	0.061	0.281	0.311	0.319	1.150	0.900	1.180	0.940	1.160	1.190	1.19	1.28	1.47	1.50	1.43
	Right cheek	1.170	0.105	0.236	0.282	0.158	0.136	0.162	0.156	1.280	1.410	1.450	1.330	1.310	1.330	1.33	1.48	1.46	1.49	1.41
	Right tilted	0.843	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.960	0.900	1.120	0.870	1.000	1.010	1.00	1.02	1.16	1.16	1.12
DC_12A_N66	Left cheek	0.394	0.264	0.056	0.467	0.340	0.330	0.330	0.324	0.660	0.450	0.860	0.730	0.720	0.720	0.72	1.06	1.05	1.05	0.99
	Left tilted	0.461	0.279	0.028	0.305	0.061	0.281	0.311	0.319	0.740	0.490	0.770	0.520	0.740	0.770	0.78	0.84	1.06	1.09	1.02
	Right cheek	0.873	0.105	0.236	0.282	0.158	0.136	0.162	0.156	0.980	1.110	1.160	1.030	1.010	1.040	1.03	1.19	1.17	1.19	1.11
	Right tilted	0.796	0.114	0.061	0.276	0.028	0.161	0.168	0.152	0.910	0.860	1.070	0.820	0.960	0.960	0.95	0.98	1.11	1.12	1.07

Body_Worn:

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant0	WiFi 2.4G Ant9 (chain0)	WiFi 2.4G Ant10 (chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2 (chain0)	WiFi 5G Ant9 (chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM850	Front side	0.118	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.160	0.140	0.190	0.240	0.360	0.340	0.15	0.27	0.39	0.37	0.41	
	Back side	0.139	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.190	0.180	0.220	0.330	0.400	0.330	0.17	0.36	0.44	0.36	0.45	
WCDMA Band V	Front side	0.127	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.170	0.150	0.200	0.250	0.370	0.350	0.16	0.28	0.40	0.38	0.41	
	Back side	0.151	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.200	0.200	0.230	0.340	0.420	0.340	0.19	0.37	0.45	0.37	0.47	
LTE Band 12	Front side	0.143	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.190	0.170	0.210	0.270	0.390	0.370	0.17	0.30	0.42	0.40	0.43	
	Back side	0.218	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.270	0.260	0.300	0.410	0.480	0.410	0.25	0.44	0.52	0.44	0.53	
LTE Band 13	Front side	0.130	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.170	0.150	0.200	0.250	0.370	0.350	0.16	0.28	0.40	0.38	0.42	
	Back side	0.120	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.170	0.160	0.200	0.310	0.390	0.310	0.15	0.34	0.42	0.34	0.44	
LTE Band 26	Front side	0.128	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.170	0.150	0.200	0.250	0.370	0.350	0.16	0.28	0.40	0.38	0.42	
	Back side	0.158	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.210	0.200	0.240	0.350	0.420	0.350	0.19	0.38	0.46	0.38	0.47	
N5	Front side	0.126	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.170	0.150	0.200	0.250	0.370	0.350	0.16	0.28	0.40	0.38	0.41	
	Back side	0.159	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.210	0.200	0.240	0.350	0.420	0.350	0.19	0.38	0.46	0.38	0.47	

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant1	WiFi 2.4G Ant9 (chain0)	WiFi 2.4G Ant10 (chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2 (chain0)	WiFi 5G Ant9 (chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM850	Front side	0.042	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.09	0.06	0.11	0.17	0.29	0.26	0.07	0.20	0.32	0.29	0.33	
	Back side	0.084	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.13	0.13	0.16	0.27	0.35	0.27	0.12	0.31	0.38	0.31	0.40	



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WCDMA Band V	Front side	0.053	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.100	0.080	0.120	0.180	0.300	0.280	0.08	0.21	0.33	0.31	0.34
	Back side	0.101	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.150	0.150	0.180	0.290	0.370	0.290	0.14	0.32	0.40	0.32	0.42
LTE Band 12	Front side	0.042	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.090	0.060	0.110	0.170	0.290	0.260	0.07	0.20	0.32	0.29	0.33
	Back side	0.046	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.100	0.090	0.120	0.230	0.310	0.230	0.08	0.27	0.35	0.27	0.36
LTE Band 13	Front side	0.040	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.080	0.060	0.110	0.160	0.280	0.260	0.07	0.19	0.31	0.29	0.33
	Back side	0.088	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.140	0.130	0.170	0.280	0.350	0.280	0.12	0.31	0.39	0.31	0.40
LTE Band 26	Front side	0.054	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.100	0.080	0.120	0.180	0.300	0.280	0.08	0.21	0.33	0.31	0.34
	Back side	0.109	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.160	0.150	0.190	0.300	0.370	0.300	0.14	0.33	0.41	0.33	0.42
N5	Front side	0.054	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.100	0.080	0.120	0.180	0.300	0.280	0.08	0.21	0.33	0.31	0.34
	Back side	0.110	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.160	0.150	0.190	0.300	0.380	0.300	0.14	0.33	0.41	0.33	0.43

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant3	WiFi 2.4G Ant9 (chain0)	WiFi 2.4G Ant10 (chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2 (chain0)	WiFi 5G Ant9 (chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Front side	0.135	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.180	0.160	0.200	0.260	0.380	0.360	0.17	0.29	0.41	0.39	0.42	
	Back side	0.231	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.280	0.280	0.310	0.420	0.500	0.420	0.27	0.45	0.53	0.45	0.55	
WCDMA Band II	Front side	0.109	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.150	0.130	0.180	0.230	0.350	0.330	0.14	0.26	0.38	0.36	0.40	
	Back side	0.150	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.200	0.190	0.230	0.340	0.420	0.340	0.18	0.37	0.45	0.37	0.47	
WCDMA Band IV	Front side	0.149	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.190	0.170	0.220	0.270	0.390	0.370	0.18	0.30	0.42	0.40	0.44	
	Back side	0.224	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.270	0.270	0.300	0.410	0.490	0.410	0.26	0.45	0.52	0.45	0.54	
LTE Band 2	Front side	0.143	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.190	0.170	0.210	0.270	0.390	0.370	0.17	0.30	0.42	0.40	0.43	
	Back side	0.218	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.270	0.260	0.300	0.410	0.480	0.410	0.25	0.44	0.52	0.44	0.53	
LTE Band 7	Front side	0.160	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.200	0.180	0.230	0.280	0.400	0.380	0.19	0.31	0.43	0.41	0.45	
	Back side	0.338	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.390	0.380	0.420	0.530	0.600	0.530	0.37	0.56	0.64	0.56	0.65	
LTE Band 38	Front side	0.212	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.260	0.230	0.280	0.340	0.460	0.430	0.24	0.37	0.49	0.46	0.50	
	Back side	0.388	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.440	0.430	0.470	0.580	0.650	0.580	0.42	0.61	0.69	0.61	0.70	
LTE Band 41	Front side	0.187	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.230	0.210	0.260	0.310	0.430	0.410	0.22	0.34	0.46	0.44	0.47	
	Back side	0.405	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.460	0.450	0.480	0.590	0.670	0.590	0.44	0.63	0.70	0.63	0.72	
LTE Band 66	Front side	0.168	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.210	0.190	0.240	0.290	0.410	0.390	0.20	0.32	0.44	0.42	0.46	
	Back side	0.293	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.340	0.340	0.370	0.480	0.560	0.480	0.33	0.52	0.59	0.51	0.61	
N7	Front side	0.182	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.230	0.200	0.250	0.310	0.430	0.400	0.21	0.34	0.46	0.43	0.47	
	Back side	0.345	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.400	0.390	0.420	0.530	0.610	0.530	0.38	0.57	0.64	0.57	0.66	
N38	Front side	0.171	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.210	0.190	0.240	0.290	0.420	0.390	0.20	0.32	0.45	0.42	0.46	
	Back side	0.353	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.400	0.400	0.430	0.540	0.620	0.540	0.39	0.58	0.65	0.57	0.67	
N66	Front side	0.190	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.230	0.210	0.260	0.310	0.430	0.410	0.22	0.34	0.46	0.44	0.48	
	Back side	0.251	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.300	0.300	0.330	0.440	0.520	0.440	0.29	0.47	0.55	0.47	0.57	
N41	Front side	0.188	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.230	0.210	0.260	0.310	0.430	0.410	0.22	0.34	0.46	0.44	0.48	
	Back side	0.373	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.420	0.420	0.450	0.560	0.640	0.560	0.41	0.60	0.67	0.59	0.69	

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant4	WiFi 2.4G Ant9 (chain0)	WiFi 2.4G Ant10 (chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2 (chain0)	WiFi 5G Ant9 (chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Front side	0.181	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.220	0.200	0.250	0.300	0.430	0.400	0.21	0.33	0.46	0.43	0.47	
	Back side	0.266	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.320	0.310	0.340	0.450	0.530	0.450	0.30	0.49	0.57	0.49	0.58	
WCDMA Band II	Front side	0.150	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.190	0.170	0.220	0.270	0.390	0.370	0.18	0.30	0.42	0.40	0.44	
	Back side	0.224	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.270	0.270	0.300	0.410	0.490	0.410	0.26	0.45	0.52	0.45	0.54	
	Front side	0.141	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.180	0.160	0.210	0.260	0.390	0.360	0.17	0.29	0.42	0.39	0.43	





WCDMA Band IV	Back side	0.196	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.25	0.24	0.27	0.38	0.46	0.38	0.23	0.42	0.50	0.42	0.51
LTE Band 2	Front side	0.182	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.23	0.20	0.25	0.31	0.43	0.40	0.21	0.34	0.46	0.43	0.47
	Back side	0.265	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.32	0.31	0.34	0.45	0.53	0.45	0.30	0.49	0.56	0.49	0.58
LTE Band 7	Front side	0.133	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.18	0.16	0.20	0.26	0.38	0.36	0.16	0.29	0.41	0.39	0.42
	Back side	0.185	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.24	0.23	0.26	0.37	0.45	0.37	0.22	0.41	0.48	0.41	0.50
LTE Band 38	Front side	0.194	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.24	0.22	0.26	0.32	0.44	0.42	0.22	0.35	0.47	0.45	0.48
	Back side	0.275	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.33	0.32	0.35	0.46	0.54	0.46	0.31	0.50	0.57	0.50	0.59
LTE Band 41	Front side	0.201	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.24	0.22	0.27	0.32	0.45	0.42	0.23	0.35	0.48	0.45	0.49
	Back side	0.334	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.38	0.38	0.41	0.52	0.60	0.52	0.37	0.56	0.63	0.56	0.65
LTE Band 66	Front side	0.135	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.18	0.16	0.20	0.26	0.38	0.36	0.17	0.29	0.41	0.39	0.42
	Back side	0.204	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.25	0.25	0.28	0.39	0.47	0.39	0.24	0.43	0.50	0.43	0.52
N7	Front side	0.088	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.13	0.11	0.16	0.21	0.33	0.31	0.12	0.24	0.36	0.34	0.38
	Back side	0.124	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.17	0.17	0.20	0.31	0.39	0.31	0.16	0.35	0.42	0.35	0.44
N38	Front side	0.203	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.25	0.23	0.27	0.33	0.45	0.43	0.23	0.36	0.48	0.46	0.49
	Back side	0.347	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.40	0.39	0.42	0.54	0.61	0.53	0.38	0.57	0.65	0.57	0.66
N66	Front side	0.186	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.23	0.21	0.26	0.31	0.43	0.41	0.22	0.34	0.46	0.44	0.47
	Back side	0.252	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.30	0.30	0.33	0.44	0.52	0.44	0.29	0.47	0.55	0.47	0.57
N41	Front side	0.195	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.24	0.22	0.26	0.32	0.44	0.42	0.23	0.35	0.47	0.45	0.48
	Back side	0.314	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.36	0.36	0.39	0.50	0.58	0.50	0.35	0.54	0.61	0.54	0.63

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant5	WiFi 2.4G Ant9 (chain0)	WiFi 2.4G Ant10 (chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2 (chain0)	WiFi 5G Ant9 (chain1)	WiFi 5G MIMO	BT												
			1	2	3	4	5	6													
GSM1900	Front side	0.076	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.12	0.10	0.15	0.20	0.32	0.30	0.11	0.23	0.35	0.33	0.36	
	Back side	0.127	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.18	0.17	0.20	0.32	0.39	0.31	0.16	0.35	0.43	0.35	0.44	
WCDMA Band II	Front side	0.094	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.14	0.12	0.16	0.22	0.34	0.32	0.12	0.25	0.37	0.35	0.38	
	Back side	0.140	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.19	0.18	0.22	0.33	0.41	0.33	0.17	0.36	0.44	0.36	0.46	
WCDMA Band IV	Front side	0.063	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.11	0.09	0.13	0.19	0.31	0.29	0.09	0.22	0.34	0.32	0.35	
	Back side	0.107	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.16	0.15	0.18	0.30	0.37	0.29	0.14	0.33	0.41	0.33	0.42	
LTE Band 2	Front side	0.065	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.11	0.09	0.13	0.19	0.31	0.29	0.10	0.22	0.34	0.32	0.35	
	Back side	0.125	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.18	0.17	0.20	0.31	0.39	0.31	0.16	0.35	0.42	0.35	0.44	
LTE Band 7	Front side	0.047	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.09	0.07	0.12	0.17	0.29	0.27	0.08	0.20	0.32	0.30	0.33	
	Back side	0.055	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.11	0.10	0.13	0.24	0.32	0.24	0.09	0.28	0.35	0.28	0.37	
LTE Band 38	Front side	0.194	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.24	0.22	0.26	0.32	0.44	0.42	0.22	0.35	0.47	0.45	0.48	
	Back side	0.275	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.33	0.32	0.35	0.46	0.54	0.46	0.31	0.50	0.57	0.50	0.59	
LTE Band 41	Front side	0.044	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.09	0.07	0.11	0.17	0.29	0.27	0.07	0.20	0.32	0.30	0.33	
	Back side	0.063	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.11	0.11	0.14	0.25	0.33	0.25	0.10	0.29	0.36	0.28	0.38	
LTE Band 66	Front side	0.051	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.09	0.07	0.12	0.17	0.30	0.27	0.08	0.20	0.33	0.30	0.34	
	Back side	0.088	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.14	0.13	0.17	0.28	0.35	0.28	0.12	0.31	0.39	0.31	0.40	
N7	Front side	0.049	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.09	0.07	0.12	0.17	0.29	0.27	0.08	0.20	0.32	0.30	0.34	
	Back side	0.078	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.13	0.12	0.16	0.27	0.34	0.27	0.11	0.30	0.38	0.30	0.39	
N38	Front side	0.061	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.10	0.08	0.13	0.18	0.31	0.28	0.09	0.21	0.34	0.31	0.35	
	Back side	0.078	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.13	0.12	0.16	0.27	0.34	0.27	0.11	0.30	0.38	0.30	0.39	
N66	Front side	0.064	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.11	0.09	0.13	0.19	0.31	0.29	0.09	0.22	0.34	0.32	0.35	
	Back side	0.115	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.17	0.16	0.19	0.30	0.38	0.30	0.15	0.34	0.41	0.34	0.43	
N41	Front side	0.060	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.10	0.08	0.13	0.18	0.30	0.28	0.09	0.21	0.33	0.31	0.35	
	Back side	0.110	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.16	0.15	0.19	0.30	0.38	0.30	0.14	0.33	0.41	0.33	0.43	



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Test position		SARmax (W/kg)								Summed SAR										
		Main	WiFi 2.4G Ant9 (chain0)	WiFi 2.4G Ant10 (chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2 (chain0)	WiFi 5G Ant9 (chain1)	WiFi 5G MIMO	BT											
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6
DC_7A_N5	Front side	0.239	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.28	0.26	0.31	0.36	0.48	0.46	0.27	0.39	0.51	0.49	0.53
	Back side	0.399	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.45	0.44	0.48	0.59	0.66	0.59	0.43	0.62	0.70	0.62	0.71
DC_66A_N5	Front side	0.245	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.29	0.27	0.31	0.37	0.49	0.47	0.28	0.40	0.52	0.50	0.53
	Back side	0.366	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.42	0.41	0.44	0.55	0.63	0.55	0.40	0.59	0.67	0.59	0.68
DC_2A_N7	Front side	0.204	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.25	0.23	0.27	0.33	0.45	0.43	0.23	0.36	0.48	0.46	0.49
	Back side	0.343	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.39	0.39	0.42	0.53	0.61	0.53	0.38	0.57	0.64	0.56	0.66
DC_5A_N7	Front side	0.168	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.21	0.19	0.24	0.29	0.41	0.39	0.20	0.32	0.44	0.42	0.46
	Back side	0.275	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.33	0.32	0.35	0.46	0.54	0.46	0.31	0.50	0.57	0.50	0.59
DC_66A_N7	Front side	0.169	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.21	0.19	0.24	0.29	0.41	0.39	0.20	0.32	0.44	0.42	0.46
	Back side	0.273	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.32	0.32	0.35	0.46	0.54	0.46	0.31	0.50	0.57	0.49	0.59
DC_66A_N38	Front side	0.223	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.27	0.25	0.29	0.35	0.47	0.45	0.25	0.38	0.50	0.48	0.51
	Back side	0.337	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.39	0.38	0.41	0.53	0.60	0.52	0.37	0.56	0.64	0.56	0.65
DC_26A_N41	Front side	0.144	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.19	0.17	0.21	0.27	0.39	0.37	0.17	0.30	0.42	0.40	0.43
	Back side	0.213	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.26	0.26	0.29	0.40	0.48	0.40	0.25	0.44	0.51	0.43	0.53
DC_66A_N41	Front side	0.173	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.22	0.20	0.24	0.30	0.42	0.40	0.20	0.33	0.45	0.43	0.46
	Back side	0.243	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.29	0.29	0.32	0.43	0.51	0.43	0.28	0.47	0.54	0.46	0.56
DC_2A_N66	Front side	0.209	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.25	0.23	0.28	0.33	0.45	0.43	0.24	0.36	0.48	0.46	0.50
	Back side	0.290	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.34	0.33	0.37	0.48	0.56	0.48	0.32	0.51	0.59	0.51	0.61
DC_5A_N66	Front side	0.173	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.22	0.20	0.24	0.30	0.42	0.40	0.20	0.33	0.45	0.43	0.46
	Back side	0.223	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.27	0.27	0.30	0.41	0.49	0.41	0.26	0.45	0.52	0.44	0.54
DC_7A_N66	Front side	0.181	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.22	0.20	0.25	0.30	0.43	0.40	0.21	0.33	0.46	0.43	0.47
	Back side	0.294	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.34	0.34	0.37	0.48	0.56	0.48	0.33	0.52	0.59	0.52	0.61
DC_12A_N66	Front side	0.211	0.043	0.022	0.069	0.123	0.244	0.222	0.030	0.25	0.23	0.28	0.33	0.46	0.43	0.24	0.36	0.49	0.46	0.50
	Back side	0.253	0.050	0.044	0.077	0.188	0.265	0.187	0.034	0.30	0.30	0.33	0.44	0.52	0.44	0.29	0.48	0.55	0.47	0.57

Test position	SARmax (W/kg)					Summed SAR			
	WiFi 2.4G Ant9(chain0)	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT				
	1	2	3	4	5	1+2	2+5	3+5	4+5
Front side	0.043	0.123	0.244	0.222	0.030	0.29	0.15	0.27	0.25
Back side	0.050	0.188	0.265	0.187	0.034	0.32	0.22	0.30	0.22





Hotspot:

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant0	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8												
GSM850	Front side	0.188	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.27	0.23	0.29	0.37	0.58	0.63	0.26	0.44	0.65	0.69	0.66	
	Back side	0.231	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.32	0.31	0.41	0.60	0.62	0.70	0.31	0.67	0.70	0.78	0.71	
	Left side	/	/	0.041	0.060	/	/	/	/	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Right side	0.142	0.025	/	0.023	0.796	0.188	1.004	0.019	0.17	0.14	0.17	0.94	0.33	1.15	0.16	0.96	0.35	1.17	0.36	
	Bottom side	0.109	/	/	/	/	/	/	/	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
WCDMA Band V	Front side	0.207	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.28	0.25	0.31	0.39	0.60	0.65	0.27	0.46	0.67	0.71	0.68	
	Back side	0.260	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.35	0.34	0.43	0.63	0.65	0.73	0.34	0.70	0.72	0.81	0.73	
	Left side	/	/	0.041	0.060	/	/	/	/	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Right side	0.127	0.025	/	0.023	0.796	0.188	1.004	0.019	0.15	0.13	0.15	0.92	0.32	1.13	0.15	0.94	0.33	1.15	0.34	
	Bottom side	0.123	/	/	/	/	/	/	/	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
LTE Band 12	Front side	0.151	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.23	0.19	0.25	0.34	0.54	0.59	0.22	0.40	0.61	0.66	0.62	
	Back side	0.191	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.28	0.27	0.37	0.56	0.58	0.66	0.27	0.63	0.66	0.74	0.67	
	Left side	/	/	0.041	0.060	/	/	/	/	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Right side	0.209	0.025	/	0.023	0.796	0.188	1.004	0.019	0.23	0.21	0.23	1.01	0.40	1.21	0.23	1.02	0.42	1.23	0.42	
	Bottom side	0.056	/	/	/	/	/	/	/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
LTE Band 13	Front side	0.143	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.22	0.18	0.24	0.33	0.54	0.58	0.21	0.40	0.60	0.65	0.61	
	Back side	0.213	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.30	0.29	0.39	0.58	0.60	0.69	0.29	0.66	0.68	0.76	0.69	
	Left side	/	/	0.041	0.060	/	/	/	/	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Right side	0.112	0.025	/	0.023	0.796	0.188	1.004	0.019	0.14	0.11	0.14	0.91	0.30	1.12	0.13	0.93	0.32	1.14	0.33	
	Bottom side	0.073	/	/	/	/	/	/	/	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
LTE Band 26	Front side	0.187	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.26	0.23	0.29	0.37	0.58	0.63	0.25	0.44	0.65	0.69	0.66	
	Back side	0.281	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.37	0.36	0.46	0.65	0.67	0.75	0.36	0.72	0.75	0.83	0.76	
	Left side	/	/	0.041	0.060	/	/	/	/	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Right side	0.191	0.025	/	0.023	0.796	0.188	1.004	0.019	0.22	0.19	0.21	0.99	0.38	1.20	0.21	1.01	0.40	1.21	0.40	
	Bottom side	0.104	/	/	/	/	/	/	/	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
N5	Front side	0.208	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.29	0.25	0.31	0.39	0.60	0.65	0.28	0.46	0.67	0.71	0.68	
	Back side	0.266	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.35	0.34	0.44	0.63	0.66	0.74	0.34	0.71	0.73	0.81	0.74	
	Left side	/	/	0.041	0.060	/	/	/	/	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Right side	0.161	0.025	/	0.023	0.796	0.188	1.004	0.019	0.19	0.16	0.18	0.96	0.35	1.17	0.18	0.98	0.37	1.18	0.37	
	Bottom side	0.127	/	/	/	/	/	/	/	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant1	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8												
GSM850	Front side	0.073	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.15	0.11	0.17	0.26	0.47	0.51	0.14	0.33	0.53	0.58	0.54	
	Back side	0.150	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.24	0.23	0.32	0.52	0.54	0.62	0.23	0.59	0.61	0.70	0.62	
	Left side	0.043	/	0.041	0.060	/	/	/	/	0.04	0.08	0.10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	0.071	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.16	0.08	0.21	0.07	0.56	0.64	0.15	0.15	0.64	0.72	0.65	
WCDMA Band V	Front side	0.080	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.16	0.12	0.18	0.27	0.47	0.52	0.15	0.33	0.54	0.59	0.55	
	Back side	0.170	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.26	0.25	0.34	0.54	0.56	0.64	0.25	0.61	0.63	0.72	0.64	



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	Left side	0.050	/	0.041	0.060	/	/	/	/	0.05	0.09	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.088	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.18	0.10	0.23	0.09	0.57	0.65	0.17	0.17	0.65	0.73	0.67
LTE Band 12	Front side	0.043	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.12	0.08	0.14	0.23	0.44	0.48	0.11	0.30	0.50	0.55	0.51
	Back side	0.065	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.15	0.14	0.24	0.43	0.45	0.54	0.14	0.51	0.53	0.61	0.54
	Left side	0.052	/	0.041	0.060	/	/	/	/	0.05	0.09	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.025	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.12	0.04	0.16	0.03	0.51	0.59	0.10	0.10	0.59	0.67	0.60
LTE Band 13	Front side	0.084	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.16	0.12	0.18	0.27	0.48	0.52	0.15	0.34	0.54	0.59	0.55
	Back side	0.156	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.24	0.23	0.33	0.52	0.55	0.63	0.23	0.60	0.62	0.70	0.63
	Left side	0.051	/	0.041	0.060	/	/	/	/	0.05	0.09	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.055	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.15	0.07	0.19	0.06	0.54	0.62	0.13	0.13	0.62	0.70	0.63
LTE Band 26	Front side	0.108	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.19	0.15	0.21	0.29	0.50	0.55	0.18	0.36	0.57	0.61	0.58
	Back side	0.201	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.29	0.28	0.38	0.57	0.59	0.67	0.28	0.64	0.67	0.75	0.68
	Left side	0.059	/	0.041	0.060	/	/	/	/	0.06	0.10	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.072	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.16	0.08	0.21	0.07	0.56	0.64	0.15	0.15	0.64	0.72	0.65
N5	Front side	0.089	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.17	0.13	0.19	0.28	0.48	0.53	0.16	0.34	0.55	0.60	0.56
	Back side	0.202	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.29	0.28	0.38	0.57	0.59	0.68	0.28	0.64	0.67	0.75	0.68
	Left side	0.083	/	0.041	0.060	/	/	/	/	0.08	0.12	0.14	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.093	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.19	0.11	0.23	0.09	0.58	0.66	0.17	0.17	0.66	0.74	0.67

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant3	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Front side	0.270	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.35	0.31	0.37	0.46	0.66	0.71	0.34	0.52	0.73	0.78	0.74	
	Back side	0.421	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.51	0.50	0.60	0.79	0.81	0.89	0.50	0.86	0.89	0.97	0.90	
	Left side	0.054	/	0.041	0.060	/	/	/	/	0.05	0.10	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
WCDMA Band II	Top side	0.241	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.33	0.25	0.38	0.24	0.73	0.81	0.32	0.32	0.81	0.89	0.82	
	Front side	0.187	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.26	0.23	0.29	0.37	0.58	0.63	0.25	0.44	0.65	0.69	0.66	
	Back side	0.286	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.37	0.36	0.46	0.65	0.68	0.76	0.36	0.73	0.75	0.83	0.76	
	Left side	0.134	/	0.041	0.060	/	/	/	/	0.13	0.18	0.19	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21	
WCDMA Band IV	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	0.435	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.53	0.45	0.57	0.44	0.92	1.00	0.51	0.51	1.00	1.08	1.01	
	Front side	0.238	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.32	0.28	0.34	0.42	0.63	0.68	0.31	0.49	0.70	0.74	0.71	
	Back side	0.353	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.44	0.43	0.53	0.72	0.74	0.83	0.43	0.80	0.82	0.90	0.83	
	Left side	0.114	/	0.041	0.060	/	/	/	/	0.11	0.16	0.17	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
LTE Band 2	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	0.547	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.64	0.56	0.69	0.55	1.03	1.11	0.63	0.63	1.11	1.19	1.13	
	Front side	0.258	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.34	0.30	0.36	0.44	0.65	0.70	0.33	0.51	0.72	0.76	0.73	
	Back side	0.288	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.37	0.37	0.46	0.66	0.68	0.76	0.36	0.73	0.75	0.84	0.76	
LTE Band 2	Left side	0.123	/	0.041	0.060	/	/	/	/	0.12	0.16	0.18	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	



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	Top side	0.489	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.58	0.50	0.63	0.49	0.98	1.06	0.57	0.57	1.05	1.13	1.07
LTE Band 7	Front side	0.122	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.20	0.16	0.22	0.31	0.52	0.56	0.19	0.38	0.58	0.63	0.59
	Back side	0.244	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.33	0.32	0.42	0.61	0.63	0.72	0.32	0.69	0.71	0.79	0.72
	Left side	0.120	/	0.041	0.060	/	/	/	/	0.12	0.16	0.18	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTE Band 38	Top side	0.574	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.67	0.59	0.71	0.57	1.06	1.14	0.65	0.65	1.14	1.22	1.15
	Front side	0.315	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.39	0.35	0.41	0.50	0.71	0.75	0.38	0.57	0.78	0.82	0.79
	Back side	0.560	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.65	0.64	0.73	0.93	0.95	1.03	0.64	1.00	1.02	1.11	1.03
	Left side	0.174	/	0.041	0.060	/	/	/	/	0.17	0.22	0.23	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
LTE Band 41	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.681	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.77	0.69	0.82	0.68	1.17	1.25	0.76	0.76	1.25	1.33	1.26
	Front side	0.284	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.36	0.32	0.38	0.47	0.68	0.72	0.35	0.54	0.74	0.79	0.75
	Back side	0.507	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.59	0.58	0.68	0.87	0.90	0.98	0.58	0.95	0.97	1.06	0.98
	Left side	0.161	/	0.041	0.060	/	/	/	/	0.16	0.20	0.22	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
LTE Band 66	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.727	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.82	0.74	0.87	0.73	1.21	1.29	0.81	0.81	1.29	1.37	1.31
	Front side	0.295	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.37	0.33	0.39	0.48	0.69	0.73	0.36	0.55	0.76	0.80	0.77
	Back side	0.306	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.39	0.38	0.48	0.67	0.70	0.78	0.38	0.75	0.77	0.85	0.78
N7	Left side	0.113	/	0.041	0.060	/	/	/	/	0.11	0.15	0.17	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.523	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.62	0.54	0.66	0.52	1.01	1.09	0.60	0.60	1.09	1.17	1.10
	Front side	0.206	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.28	0.25	0.30	0.39	0.60	0.65	0.27	0.46	0.67	0.71	0.68
N38	Back side	0.516	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.60	0.59	0.69	0.88	0.91	0.99	0.59	0.96	0.98	1.06	0.99
	Left side	0.216	/	0.041	0.060	/	/	/	/	0.22	0.26	0.28	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.605	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.70	0.62	0.74	0.61	1.09	1.17	0.68	0.68	1.17	1.25	1.18
N66	Front side	0.248	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.33	0.29	0.35	0.43	0.64	0.69	0.32	0.50	0.71	0.75	0.72
	Back side	0.469	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.55	0.55	0.64	0.84	0.86	0.94	0.54	0.91	0.93	1.02	0.94
	Left side	0.179	/	0.041	0.060	/	/	/	/	0.18	0.22	0.24	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N41	Top side	0.583	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.68	0.60	0.72	0.58	1.07	1.15	0.66	0.66	1.15	1.23	1.16
	Front side	0.335	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.41	0.37	0.43	0.52	0.73	0.77	0.40	0.59	0.80	0.84	0.81
	Back side	0.489	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.57	0.57	0.66	0.86	0.88	0.96	0.56	0.93	0.95	1.04	0.96
	Left side	0.141	/	0.041	0.060	/	/	/	/	0.14	0.18	0.20	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
N41	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.675	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.77	0.69	0.81	0.68	1.16	1.24	0.75	0.75	1.24	1.32	1.25
	Front side	0.366	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.44	0.41	0.46	0.55	0.76	0.81	0.43	0.62	0.83	0.87	0.84
	Back side	0.649	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.73	0.73	0.82	1.02	1.04	1.12	0.72	1.09	1.11	1.20	1.12
	Left side	0.237	/	0.041	0.060	/	/	/	/	0.24	0.28	0.30	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
N41	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	0.764	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.86	0.78	0.90	0.76	1.25	1.33	0.84	0.84	1.33	1.41	1.34

Test position	SARmax (W/kg)								Summed SAR											
	Main Ant4	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
	1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Front side	0.350	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.43	0.39	0.45	0.54	0.74	0.79	0.42	0.60	0.81	0.86	0.82
	Back side	0.513	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.60	0.59	0.69	0.88	0.90	0.99	0.59	0.96	0.98	1.06	0.99



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	Left side	0.114	/	0.041	0.060	/	/	/	/	0.11	0.16	0.17	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	0.819	/	/	/	/	/	/	/	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.256	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.33	0.30	0.35	0.44	0.65	0.70	0.32	0.51	0.72	0.76	0.73
	Back side	0.370	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.46	0.45	0.54	0.74	0.76	0.84	0.45	0.81	0.83	0.92	0.84
WCDMA Band II	Left side	0.086	/	0.041	0.060	/	/	/	/	0.09	0.13	0.15	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	0.819	/	/	/	/	/	/	/	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.245	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.32	0.28	0.34	0.43	0.64	0.68	0.31	0.50	0.71	0.75	0.72
	Back side	0.345	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.43	0.42	0.52	0.71	0.73	0.82	0.42	0.79	0.81	0.89	0.82
WCDMA Band IV	Left side	0.099	/	0.041	0.060	/	/	/	/	0.10	0.14	0.16	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	0.496	/	/	/	/	/	/	/	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.286	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.36	0.33	0.38	0.47	0.68	0.73	0.35	0.54	0.75	0.79	0.76
	Back side	0.416	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.50	0.49	0.59	0.78	0.81	0.89	0.49	0.86	0.88	0.96	0.89
LTE Band 2	Left side	0.127	/	0.041	0.060	/	/	/	/	0.13	0.17	0.19	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	0.675	/	/	/	/	/	/	/	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.208	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.29	0.25	0.31	0.39	0.60	0.65	0.28	0.46	0.67	0.71	0.68
	Back side	0.251	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.34	0.33	0.43	0.62	0.64	0.72	0.33	0.69	0.72	0.80	0.73
LTE Band 7	Left side	0.076	/	0.041	0.060	/	/	/	/	0.08	0.12	0.14	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	0.620	/	/	/	/	/	/	/	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.312	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.39	0.35	0.41	0.50	0.71	0.75	0.38	0.57	0.77	0.82	0.78
	Back side	0.430	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.52	0.51	0.60	0.80	0.82	0.90	0.51	0.87	0.89	0.98	0.90
LTE Band 38	Left side	0.058	/	0.041	0.060	/	/	/	/	0.06	0.10	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	0.769	/	/	/	/	/	/	/	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.370	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.45	0.41	0.47	0.56	0.76	0.81	0.44	0.62	0.83	0.88	0.84
	Back side	0.586	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.67	0.66	0.76	0.95	0.98	1.06	0.66	1.03	1.05	1.13	1.06
LTE Band 41	Left side	0.092	/	0.041	0.060	/	/	/	/	0.09	0.13	0.15	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
	Right side	/	0.025	/	0.023	0.796	0.188	1.004	0.019	0.03	0.00	0.02	0.80	0.19	1.00	0.02	0.82	0.21	1.02	0.21
	Bottom side	1.077	/	/	/	/	/	/	/	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.227	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.30	0.27	0.33	0.41	0.62	0.67	0.29	0.48	0.69	0.73	0.70
	Back side	0.351	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.44	0.43	0.53	0.72	0.74	0.82	0.43	0.79	0.82	0.90	0.83
LTE Band 66	Left side	0.090	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.17	0.13	0.19	0.28	0.48	0.53	0.16	0.34	0.55	0.60	0.56
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.482	/	/	/	/	/	/	/	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
	Front side	0.217	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.29	0.26	0.32	0.40	0.61	0.66	0.28	0.47	0.68	0.72	0.69
	Back side	0.281	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.37	0.36	0.46	0.65	0.67	0.75	0.36	0.72	0.75	0.83	0.76
N7	Left side	0.083	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.16	0.12	0.18	0.27	0.48	0.52	0.15	0.34	0.54	0.59	0.55
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.474	/	/	/	/	/	/	/	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58



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N38	Front side	0.382	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.46	0.42	0.48	0.57	0.78	0.82	0.45	0.64	0.84	0.89	0.85
	Back side	0.593	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.68	0.67	0.77	0.96	0.98	1.07	0.67	1.04	1.06	1.14	1.07
	Left side	0.050	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.13	0.09	0.15	0.24	0.44	0.49	0.12	0.30	0.51	0.56	0.52
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	1.002	/	/	/	/	/	/	/	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
N66	Front side	0.344	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.42	0.38	0.44	0.53	0.74	0.78	0.41	0.60	0.80	0.85	0.81
	Back side	0.430	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.52	0.51	0.60	0.80	0.82	0.90	0.51	0.87	0.89	0.98	0.90
	Left side	0.064	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.14	0.10	0.16	0.25	0.46	0.50	0.13	0.32	0.52	0.57	0.53
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.585	/	/	/	/	/	/	/	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
N41	Front side	0.478	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.56	0.52	0.58	0.66	0.87	0.92	0.55	0.73	0.94	0.98	0.95
	Back side	0.556	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.64	0.63	0.73	0.92	0.95	1.03	0.63	1.00	1.02	1.10	1.03
	Left side	0.114	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.19	0.15	0.21	0.30	0.51	0.55	0.18	0.37	0.57	0.62	0.58
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	1.130	/	/	/	/	/	/	/	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58

Test position		SARmax (W/kg)								Summed SAR											
		Main Ant5	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
GSM1900	Front side	0.178	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.26	0.22	0.28	0.36	0.57	0.62	0.25	0.43	0.64	0.68	0.65	
	Back side	0.309	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.39	0.39	0.48	0.68	0.70	0.78	0.38	0.75	0.77	0.86	0.78	
	Left side	0.402	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.48	0.44	0.50	0.59	0.80	0.84	0.47	0.66	0.86	0.91	0.87	
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
WCDMA Band II	Front side	0.158	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.24	0.20	0.26	0.34	0.55	0.60	0.23	0.41	0.62	0.66	0.63	
	Back side	0.281	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.37	0.36	0.46	0.65	0.67	0.75	0.36	0.72	0.75	0.83	0.76	
	Left side	0.461	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.54	0.50	0.56	0.65	0.85	0.90	0.53	0.71	0.92	0.97	0.93	
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
WCDMA Band IV	Front side	0.091	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.17	0.13	0.19	0.28	0.48	0.53	0.16	0.34	0.55	0.60	0.56	
	Back side	0.177	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.26	0.25	0.35	0.54	0.57	0.65	0.25	0.62	0.64	0.73	0.65	
	Left side	0.271	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.35	0.31	0.37	0.46	0.66	0.71	0.34	0.52	0.73	0.78	0.74	
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
LTE Band 2	Front side	0.159	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.24	0.20	0.26	0.35	0.55	0.60	0.23	0.41	0.62	0.67	0.63	
	Back side	0.253	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.34	0.33	0.43	0.62	0.64	0.73	0.33	0.70	0.72	0.80	0.73	
	Left side	0.396	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.47	0.44	0.49	0.58	0.79	0.84	0.46	0.65	0.86	0.90	0.87	
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47	
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58	
LTE Band 7	Front side	0.068	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.15	0.11	0.17	0.25	0.46	0.51	0.14	0.32	0.53	0.57	0.54	
	Back side	0.125	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.21	0.20	0.30	0.49	0.51	0.60	0.20	0.57	0.59	0.67	0.60	
	Left side	0.097	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.17	0.14	0.20	0.28	0.49	0.54	0.16	0.35	0.56	0.60	0.57	
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47	



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	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
LTE Band 38	Front side	0.312	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.39	0.35	0.41	0.50	0.71	0.75	0.38	0.57	0.77	0.82	0.78
	Back side	0.430	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.52	0.51	0.60	0.80	0.82	0.90	0.51	0.87	0.89	0.98	0.90
	Left side	0.058	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.14	0.10	0.16	0.24	0.45	0.50	0.13	0.31	0.52	0.56	0.53
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
LTE Band 41	Front side	0.075	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.15	0.11	0.17	0.26	0.47	0.51	0.14	0.33	0.54	0.58	0.55
	Back side	0.129	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.21	0.21	0.30	0.50	0.52	0.60	0.20	0.57	0.59	0.68	0.60
	Left side	0.109	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.19	0.15	0.21	0.30	0.50	0.55	0.18	0.36	0.57	0.62	0.58
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
LTE Band 66	Front side	0.100	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.18	0.14	0.20	0.29	0.49	0.54	0.17	0.35	0.56	0.61	0.57
	Back side	0.163	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.25	0.24	0.34	0.53	0.55	0.64	0.24	0.61	0.63	0.71	0.64
	Left side	0.190	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.27	0.23	0.29	0.38	0.58	0.63	0.26	0.44	0.65	0.70	0.66
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
N7	Front side	0.078	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.16	0.12	0.18	0.26	0.47	0.52	0.15	0.33	0.54	0.58	0.55
	Back side	0.151	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.24	0.23	0.33	0.52	0.54	0.62	0.23	0.59	0.62	0.70	0.63
	Left side	0.100	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.18	0.14	0.20	0.29	0.49	0.54	0.17	0.35	0.56	0.61	0.57
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
N38	Front side	0.103	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.18	0.14	0.20	0.29	0.50	0.54	0.17	0.36	0.56	0.61	0.57
	Back side	0.159	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.24	0.24	0.33	0.53	0.55	0.63	0.23	0.60	0.62	0.71	0.63
	Left side	0.163	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.24	0.20	0.26	0.35	0.56	0.60	0.23	0.42	0.62	0.67	0.63
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
N66	Front side	0.142	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.22	0.18	0.24	0.33	0.54	0.58	0.21	0.40	0.60	0.65	0.61
	Back side	0.250	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.34	0.33	0.42	0.62	0.64	0.72	0.33	0.69	0.71	0.80	0.72
	Left side	0.326	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.40	0.37	0.42	0.51	0.72	0.77	0.39	0.58	0.79	0.83	0.80
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58
N41	Front side	0.112	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.19	0.15	0.21	0.30	0.51	0.55	0.18	0.37	0.57	0.62	0.58
	Back side	0.251	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.34	0.33	0.43	0.62	0.64	0.72	0.33	0.69	0.72	0.80	0.73
	Left side	0.179	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.26	0.22	0.28	0.37	0.57	0.62	0.25	0.43	0.64	0.69	0.65
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.09	0.08	0.17	0.37	0.39	0.47	0.08	0.44	0.46	0.55	0.47
	Bottom side	/	/	/	/	/	/	/	/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Top side	/	0.092	0.012	0.138	0.000	0.486	0.566	0.08	0.09	0.01	0.14	0.00	0.49	0.57	0.08	0.08	0.57	0.65	0.58

Test position		SARmax (W/kg)								Summed SAR											
		Main	WiFi 2.4G Ant9(chain0)	WiFi 2.4G Ant10(chain1)	WiFi 2.4G MIMO	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT												
		1	2	3	4	5	6	7	8	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+8	1+6+8	1+7+8	1+2+6	
DC_7A_N5	Front side	0.325	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.40	0.36	0.42	0.51	0.72	0.76	0.39	0.58	0.79	0.83	0.80	
	Back side	0.407	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.49	0.48	0.58	0.77	0.80	0.88	0.48	0.85	0.87	0.96	0.88	





	Left side	0.151	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.230	0.190	0.250	0.340	0.540	0.590	0.22	0.40	0.61	0.66	0.62
	Right side	0.161	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.250	0.240	0.340	0.530	0.550	0.630	0.24	0.60	0.63	0.71	0.64
	Bottom side	0.476	/	/	/	/	/	/	/	0.480	0.480	0.480	0.480	0.480	0.480	0.48	0.48	0.48	0.48	0.48
	Top side	0.416	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.510	0.430	0.550	0.420	0.900	0.980	0.50	0.50	0.98	1.06	0.99
DC_66A_N5	Front side	0.374	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.450	0.410	0.470	0.560	0.770	0.810	0.44	0.63	0.83	0.88	0.84
	Back side	0.438	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.520	0.520	0.610	0.810	0.830	0.910	0.51	0.88	0.90	0.99	0.91
	Left side	0.203	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.280	0.240	0.300	0.390	0.600	0.640	0.27	0.46	0.66	0.71	0.67
	Right side	0.161	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.250	0.240	0.340	0.530	0.550	0.630	0.24	0.60	0.63	0.71	0.64
	Bottom side	0.342	/	/	/	/	/	/	/	0.340	0.340	0.340	0.340	0.340	0.340	0.34	0.34	0.34	0.34	0.34
	Top side	0.387	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.480	0.400	0.530	0.390	0.870	0.950	0.47	0.47	0.95	1.03	0.97
DC_2A_N7	Front side	0.246	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.320	0.290	0.340	0.430	0.640	0.690	0.31	0.50	0.71	0.75	0.72
	Back side	0.468	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.550	0.550	0.640	0.840	0.860	0.940	0.54	0.91	0.93	1.02	0.94
	Left side	0.307	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.380	0.350	0.410	0.490	0.700	0.750	0.37	0.56	0.77	0.81	0.78
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.090	0.080	0.170	0.370	0.390	0.470	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.338	/	/	/	/	/	/	/	0.340	0.340	0.340	0.340	0.340	0.340	0.34	0.34	0.34	0.34	0.34
	Top side	0.303	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.400	0.320	0.440	0.300	0.790	0.870	0.38	0.38	0.87	0.95	0.88
DC_5A_N7	Front side	0.185	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.260	0.220	0.280	0.370	0.580	0.620	0.25	0.44	0.65	0.69	0.66
	Back side	0.374	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.460	0.450	0.550	0.740	0.760	0.850	0.45	0.82	0.84	0.92	0.85
	Left side	0.142	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.220	0.180	0.240	0.330	0.540	0.580	0.21	0.40	0.60	0.65	0.61
	Right side	0.076	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.160	0.150	0.250	0.440	0.470	0.550	0.15	0.52	0.54	0.62	0.55
	Bottom side	0.290	/	/	/	/	/	/	/	0.290	0.290	0.290	0.290	0.290	0.290	0.29	0.29	0.29	0.29	0.29
	Top side	0.353	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.450	0.370	0.490	0.350	0.840	0.920	0.43	0.43	0.92	1.00	0.93
DC_66A_N7	Front side	0.231	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.310	0.270	0.330	0.420	0.620	0.670	0.30	0.48	0.69	0.74	0.70
	Back side	0.377	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.460	0.450	0.550	0.740	0.770	0.850	0.45	0.82	0.84	0.93	0.85
	Left side	0.173	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.250	0.210	0.270	0.360	0.570	0.610	0.24	0.43	0.63	0.68	0.64
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.090	0.080	0.170	0.370	0.390	0.470	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.238	/	/	/	/	/	/	/	0.240	0.240	0.240	0.240	0.240	0.240	0.24	0.24	0.24	0.24	0.24
	Top side	0.303	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.400	0.320	0.440	0.300	0.790	0.870	0.38	0.38	0.87	0.95	0.88
DC_66A_N38	Front side	0.313	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.390	0.350	0.410	0.500	0.710	0.750	0.38	0.57	0.77	0.82	0.78
	Back side	0.483	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.570	0.560	0.660	0.850	0.870	0.960	0.56	0.93	0.95	1.03	0.96
	Left side	0.243	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.320	0.280	0.340	0.430	0.640	0.680	0.31	0.50	0.70	0.75	0.71
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.090	0.080	0.170	0.370	0.390	0.470	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.502	/	/	/	/	/	/	/	0.500	0.500	0.500	0.500	0.500	0.500	0.50	0.50	0.50	0.50	0.50
	Top side	0.292	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.380	0.300	0.430	0.290	0.780	0.860	0.37	0.37	0.86	0.94	0.87
DC_26A_N41	Front side	0.211	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.290	0.250	0.310	0.400	0.600	0.650	0.28	0.46	0.67	0.72	0.68
	Back side	0.320	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.410	0.400	0.490	0.690	0.710	0.790	0.40	0.76	0.78	0.87	0.79
	Left side	0.109	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.190	0.150	0.210	0.300	0.500	0.550	0.18	0.36	0.57	0.62	0.58
	Right side	0.076	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.160	0.150	0.250	0.440	0.470	0.550	0.15	0.52	0.54	0.62	0.55
	Bottom side	0.370	/	/	/	/	/	/	/	0.370	0.370	0.370	0.370	0.370	0.370	0.37	0.37	0.37	0.37	0.37
	Top side	0.292	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.380	0.300	0.430	0.290	0.780	0.860	0.37	0.37	0.86	0.94	0.87
DC_66A_N41	Front side	0.257	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.330	0.300	0.360	0.440	0.650	0.700	0.32	0.51	0.72	0.76	0.73
	Back side	0.343	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.430	0.420	0.520	0.710	0.730	0.820	0.42	0.79	0.81	0.89	0.82
	Left side	0.140	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.220	0.180	0.240	0.330	0.530	0.580	0.21	0.39	0.60	0.65	0.61
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.090	0.080	0.170	0.370	0.390	0.470	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.318	/	/	/	/	/	/	/	0.320	0.320	0.320	0.320	0.320	0.320	0.32	0.32	0.32	0.32	0.32
	Top side	0.259	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.350	0.270	0.400	0.260	0.750	0.830	0.34	0.34	0.82	0.90	0.84
DC_2A_N66	Front side	0.311	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.390	0.350	0.410	0.500	0.700	0.750	0.38	0.56	0.77	0.82	0.78
	Back side	0.454	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.540	0.530	0.630	0.820	0.840	0.930	0.53	0.90	0.92	1.00	0.93
	Left side	0.269	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.350	0.310	0.370	0.460	0.660	0.710	0.34	0.52	0.73	0.78	0.74
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.090	0.080	0.170	0.370	0.390	0.470	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.338	/	/	/	/	/	/	/	0.340	0.340	0.340	0.340	0.340	0.340	0.34	0.34	0.34	0.34	0.34
	Top side	0.338	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.430	0.350	0.480	0.340	0.820	0.900	0.42	0.42	0.90	0.98	0.92





DC_5A_N66	Front side	0.249	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.330	0.290	0.350	0.440	0.640	0.690	0.32	0.50	0.71	0.76	0.72
	Back side	0.360	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.450	0.440	0.530	0.730	0.750	0.830	0.44	0.80	0.82	0.91	0.83
	Left side	0.197	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.270	0.240	0.300	0.380	0.590	0.640	0.26	0.45	0.66	0.70	0.67
	Right side	0.076	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.160	0.150	0.250	0.440	0.470	0.550	0.15	0.52	0.54	0.62	0.55
	Bottom side	0.345	/	/	/	/	/	/	/	0.350	0.350	0.350	0.350	0.350	0.350	0.35	0.35	0.35	0.35	0.35
	Top side	0.388	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.480	0.400	0.530	0.390	0.870	0.950	0.47	0.47	0.95	1.03	0.97
DC_7A_N66	Front side	0.284	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.360	0.320	0.380	0.470	0.680	0.720	0.35	0.54	0.74	0.79	0.75
	Back side	0.452	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.540	0.530	0.630	0.820	0.840	0.930	0.53	0.89	0.92	1.00	0.93
	Left side	0.185	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.260	0.220	0.280	0.370	0.580	0.620	0.25	0.44	0.65	0.69	0.66
	Right side	/	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.090	0.080	0.170	0.370	0.390	0.470	0.08	0.44	0.46	0.55	0.47
	Bottom side	0.293	/	/	/	/	/	/	/	0.290	0.290	0.290	0.290	0.290	0.290	0.29	0.29	0.29	0.29	0.29
	Top side	0.338	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.430	0.350	0.480	0.340	0.820	0.900	0.42	0.42	0.90	0.98	0.92
DC_12A_N66	Front side	0.268	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.350	0.310	0.370	0.450	0.660	0.710	0.34	0.52	0.73	0.77	0.74
	Back side	0.366	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.450	0.440	0.540	0.730	0.760	0.840	0.44	0.81	0.83	0.91	0.84
	Left side	0.388	0.077	0.039	0.098	0.186	0.393	0.439	0.067	0.470	0.430	0.490	0.570	0.780	0.830	0.46	0.64	0.85	0.89	0.86
	Right side	0.132	0.085	0.077	0.174	0.367	0.389	0.473	0.075	0.220	0.210	0.310	0.500	0.520	0.610	0.21	0.57	0.60	0.68	0.61
	Bottom side	0.336	/	/	/	/	/	/	/	0.340	0.340	0.340	0.340	0.340	0.340	0.34	0.34	0.34	0.34	0.34
	Top side	0.583	0.092	0.012	0.138	0.000	0.486	0.566	0.079	0.680	0.600	0.720	0.580	1.070	1.150	0.66	0.66	1.15	1.23	1.16

Test position	SARmax (W/kg)					Summed SAR			
	WiFi 2.4G Ant9(chain0)	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	BT				
	1	2	3	4	5	1+2	2+5	3+5	4+5
Front side	0.077	0.186	0.393	0.439	0.07	0.26	0.25	0.46	0.51
Back side	0.085	0.367	0.389	0.473	0.08	0.45	0.44	0.46	0.55
Left side	/	/	/	/	/	0.00	0.00	0.00	0.00
Right side	0.025	0.796	0.188	1.004	0.02	0.82	0.82	0.21	1.02
Bottom side	/	/	/	/	/	0.00	0.00	0.00	0.00
Top side	0.092	/	0.486	0.566	0.08	0.09	0.08	0.57	0.65

Product specific 10g SAR:

Test position	SARmax (W/kg)				Summed SAR		
	WiFi 5G Ant2(chain0)	WiFi 5G Ant9(chain1)	WiFi 5G MIMO	NFC			
	1	2	3	4	1+4	2+4	3+4
Front side	0.308	0.859	0.818	0.001	0.31	0.86	0.82
Back side	0.374	0.301	0.425	0.009	0.38	0.31	0.43
Left side	/	/	/	0.001	0.00	0.00	0.00
Right side	1.148	0.549	1.441	0.001	1.15	0.55	1.44
Bottom side	/	/	/	0.001	0.00	0.00	0.00
Top side	/	0.777	0.978	0.001	0.00	0.78	0.98





9 Equipment list

Test Platform		SPEAG DASY5 Professional				
Description		SAR Test System (Frequency range 300MHz-6GHz)				
Software Reference		DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)				
Hardware Reference						
Equipment		Manufacturer	Model	Serial Number	Calibration Date	Due date of calibration
☒	Twin Phantom	SPEAG	SAM 7	1702	NCR	NCR
☒	Twin Phantom	SPEAG	SAM 8	1824	NCR	NCR
☒	DAE	SPEAG	DAE3	414	2023-01-30	2024-01-29
☒	DAE	SPEAG	DAE4	1327	2022-11-18	2023-11-17
☒	E-Field Probe	SPEAG	EX3DV4	3923	2023-02-28	2024-02-27
☒	E-Field Probe	SPEAG	EX3DV4	3962	2023-06-29	2024-06-28
☒	Validation Kits	SPEAG	D750V3	1214	2022-02-07	2025-02-06
☒	Validation Kits	SPEAG	D835V2	4d161	2023-08-25	2026-08-24
☒	Validation Kits	SPEAG	D1750V2	1038	2021-12-16	2024-12-15
☒	Validation Kits	SPEAG	D1950V3	1218	2023-05-04	2026-05-03
☒	Validation Kits	SPEAG	D2450V2	922	2023-08-28	2026-08-27
☒	Validation Kits	SPEAG	D2600V2	1187	2022-02-03	2025-02-02
☒	Validation Kits	SPEAG	D5GHzV2	1174	2023-08-23	2026-08-22
☒	Vector Network Analyzer and Vector Reflectometer	SPEAG	DAKS-VNA R140	21460031	2023-03-20	2024-03-19
☒	Dielectric parameter probes	SPEAG	DAKS-3.5	1148	2023-03-20	2024-03-19
☒	Universal Radio Communication Tester	R&S	CMW500	124587	2023-02-16	2024-02-15
☒	Radio Communication Analyze	Anritsu	MT8821C	6201588568	2022-11-07	2023-11-06
☒	RF Bi-Directional Coupler	QIJI	QJOR31015001	6606_SMA-50-1	NCR	NCR
☒	Signal Generator	R&S	SMR20	1001189	2023-08-30	2024-8-29
☒	Radio Communication Analyzer	Anritsu	MT8820C	6200951859	2022-10-26	2023-10-25
☒	Preamplifier	QIJI	YX28982103	20211121063175	NCR	NCR
☒	Power Meter	Agilent	E4419B	GB43318103	2023-05-15	2024-05-14
☒	Power Sensor	Agilent	E9031H	MY41495605	2023-05-15	2024-05-14
☒	Power Sensor	Agilent	E9031A	MY41496508	2023-05-15	2024-05-14



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☒	Coaxial low pass filter	Mini Circuits	VLF-3000+	15542	NCR	NCR
☒	Attenuator	Zhengchang Libo	3dB 8G	NA	NCR	NCR
☒	Temperature and humidity meter	MingGao	T809	NA	2023-09-04	2024-09-03

Note: All the equipments are within the valid period when the tests are performed.





10 Measurement Uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.



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11 Calibration certificate

Please see the Appendix C

12 Photographs

Please see the Appendix D



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Appendix A: Detailed System Check Results

Appendix B: Detailed Test Results

Appendix C: Calibration certificate

Appendix D: Photographs

Appendix E: Conducted RF Output Power

Appendix F: Antenna Locations

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