FCC SAR REPORT

Applicant: INFINIX MOBILITY LIMITED

Address of Applicant: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

Equipment Under Test (EUT)

Product Name: Mobile Phone

Model No.: X6832

Trade mark Infinix

FCC ID: 2AIZN-X6832

Applicable standards: FCC 47 CFR Part 2.1093

Date of Test: 02 Mar., 2023 ~ 14 Mar., 2023

Test Result: Maximum Reported 1-g SAR (W/kg)
Head: 1.176 Body: 0.797 Hotspot: 1.308

Authorized Signature:

Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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2 Version

Version No.	Date	Description
00	*23 Apr., 2023*	*Original*
01	*24 Apr., 2023*	*Updated on page 47*

Tested by: Jair Lin ***Date:*** *23 Apr., 2023*

Test Engineer

Reviewed by: Janet. Wei ***Date:*** *23 Apr., 2023*

Project Engineer

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4 SAR Results Summary

The maximum results of Specific Absorption Rate (SAR) found during test as bellows:
<Highest Reported standalone SAR Summary>

Exposure Position	Frequency Band	Reported 1-g SAR (W/kg)	Equipment Class	Highest Reported 1-g SAR (W/kg)
Head	GSM 850	1.176	PCE	1.176
	PCS 1900	1.052		
	WCDMA Band II	0.539		
	WCDMA Band IV	0.801		
	WCDMA Band V	0.541		
	LTE Band 2	0.266		
	LTE Band 5	0.818		
	LTE Band 7	0.765		
	LTE Band 12 & Band 17	0.251		
	LTE Band 41 & Band 38	0.341		
	LTE Band 66 & Band 4	0.238		
	NR n5	0.677		
	NR n7	0.541		
	NR n12	0.160		
	NR n41 &n38	0.493		
	NR n66	0.532		
	NR n77 (3450MHz~3550MHz) &n78 (3450MHz~3550MHz)	0.699		
	NRn77 (3700MHz~3980MHz) &n78 (3700MHz~3800MHz)	0.379		
	WLAN 2.4 GHz	0.102	DTS	
	WLAN 5.2 GHz	0.229	NII	
	WLAN 5.8 GHz	0.215		
	Bluetooth	0.020	DSS	
Body (10 mm Gap)	GSM 850	0.591	PCE	0.797
	PCS 1900	0.797		
	WCDMA Band II	0.199		
	WCDMA Band IV	0.277		
	WCDMA Band V	0.219		
	LTE Band 2	0.073		
	LTE Band 5	0.130		
	LTE Band 7	0.563		
	LTE Band 12 & Band 17	0.034		
	LTE Band 41 & Band 38	0.274		
	LTE Band 66 & Band 4	0.077		
	NR n5	0.250		
	NR n7	0.429		
	NR n12	0.067		
	NR n41 &n38	0.164		

	NR n66	0.162		
	NR n77 (3450MHz~3550MHz) &n78 (3450MHz~3550MHz)	0.236		
	NRn77 (3700MHz~3980MHz) &n78 (3700MHz~3800MHz)	0.237		
	WLAN 2.4 GHz	0.032	DTS	
	WLAN 5.2 GHz	0.205	NII	
	WLAN 5.8 GHz	0.139		
	Bluetooth	0.014	DSS	
Hotspot (10 mm Gap)	GSM 850	0.591	PCE	1.308
	PCS 1900	1.308		
	WCDMA Band II	0.264		
	WCDMA Band IV	0.340		
	WCDMA Band V	0.219		
	LTE Band 2	0.107		
	LTE Band 5	0.130		
	LTE Band 7	0.787		
	LTE Band 12 & Band 17	0.034		
	LTE Band 41 & Band 38	0.439		
	LTE Band 66 & Band 4	0.100		
	NR n5	0.250		
	NR n7	0.429		
	NR n12	0.067		
	NR n41 &n38	0.164		
	NR n66	0.229		
	NR n77 (3450MHz~3550MHz) &n78 (3450MHz~3550MHz)	0.236		
	NRn77 (3700MHz~3980MHz) &n78 (3700MHz~3800MHz)	0.237		
	WLAN 2.4 GHz	0.039	DTS	
	WLAN 5.2 GHz	0.275	NII	
	WLAN 5.8 GHz	0.139		
	Bluetooth	0.014	DSS	

<Highest Reported Product Specific 10g SAR Summary>

Exposure Position	Frequency Band	Reported 10-g SAR (W/kg)	Equipment Class	Highest Reported 10-g SAR (W/kg)
Extremity (0 mm Gap)	GSM 1900	2.945	PCE	2.945

<Highest Reported simultaneous SAR Summary>

Exposure Position	Frequency Band	Reported 1-g SAR (W/kg)	Equipment Class	Highest Reported Simultaneous Transmission 1-g SAR (W/kg)
Top	WWAN	1.308	PCE	1.513
	5.2GHz/802.11n40	0.196	NII	
	Bluetooth ANT7	0.009	DSS	
	NFC	0.000	DXX	

Note:

1. The highest simultaneous transmission is scalar summation of Reported standalone SAR per FCC KDB 690783 D01 v01r03, and scalar SAR summation of all possible simultaneous transmission scenarios are < 1.6W/kg.
2. This device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-2005, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013.
3. For FDD-LTE Band 17 is full covered by FDD-LTE Band 12, so only FDD-LTE Band 12 was tested.
4. For FDD-LTE Band 4 is full covered by FDD-LTE Band 66, so only FDD-LTE Band 66 was tested.
5. For TDD-LTE Band 38 is full covered by FDD-LTE Band 41, so only FDD-LTE Band 41 was tested.
6. For TDD-NR n38 is full covered by TDD-NR n41, so only TDD-NR n41 was tested.
7. For TDD-NR n78 is full covered by TDD-NR n77, so only TDD-NR n77 was tested.

5 General Information

5.1 Client Information

Applicant:	INFINIX MOBILITY LIMITED
Address of Applicant:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Manufacturer:	INFINIX MOBILITY LIMITED
Address of Manufacturer:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Factory:	SHENZHEN TECNO TECHNOLOGY CO.,LTD
Address of Factory:	101,Building 24,Waijing Industrial Park,Fumin Community,Fucheng Street,Longhua District,Shenzhen City,P.R.China

5.2 General Description of EUT

Product Name:	Mobile Phone			
Model No.:	X6832			
Category of device	Portable device			
Operation Frequency:	GSM :	GSM850: 824~849 MHz	PCS 1900: 1850~1910 MHz	
	WCDMA :	Band II: 1850~1910 MHz	Band V: 824~849 MHz	
		Band IV: 1710~1755 MHz		
	LTE :	Band 2 :1850MHz~1910MHz	Band 4 :1710MHz~1755MHz	
		Band 5 :824MHz~849MHz	Band 7: 2500MHz~2570MHz	
		Band 12: 699-716MHz	Band 17: 704MHz~716MHz	
		Band 38: 2570MHz~2620MHz	Band 41: 2496MHz~2690MHz	
		Band 66 :1710MHz~1780MHz		
	5G NR	n5: 824MHz~849MHz	n7: 2500MHz~2570MHz	
		n12: 699-716MHz	n38: 2570MHz~2620MHz	
		n41: 2496MHz~2690MHz	n66 :1710MHz~1780MHz	
		n77: 3450MHz~3550MHz	n77: 3700MHz~3980MHz	
		n78: 3450MHz~3550MHz	n78: 3700MHz~3800MHz	
	Wi-Fi:	2412MHz~2472MHz	5170MHz-5330MHz	
		5735MHz-5835MHz		
	Bluetooth: 2402 MHz ~ 2480 MHz			
	NFC : 13.56MHz			
Modulation technology:	GSM:	☒Voice(GMSK)	☒GPRS(GMSK)	☒EGPRS(GMSK, 8PSK)
	WCDMA:	☒RMC(QPSK)	☒HSUPA(QPSK)	☒HSDPA(QPSK,16QAM)
	LTE:	☒QPSK	☒16QAM	☒64QAM
	5G NR :	☒CP-OFDM(QPSK,16QAM,64QAM,256QAM)		
		☒DFT-s-OFDM(π/2 -BPSK,QPSK,16QAM,64QAM,256QAM)		
	Wi-Fi:	☒802.11b(DSSS)	☒802.11a/g/n/ac (OFDM)	
	Bluetooth:	☒BDR(GFSK)	☒EDR(π/4-DQPSK, 8DPSK)	☒LE(GFSK)
	NFC :	ASK		
	SA: NR n5, n7,n12, n38, n41,n66, n77, n78			
	NSA(EN-DC):			

	DC_5A_n7A, DC_5A_n41A, DC_41A_n41A, DC_2A_n78A, DC_5A_n78A, DC_38A_n78A, DC_41A_n78A, DC_66A_n78A, DC_5A_n77A, DC_7A_n77A, DC_41A_n77A, DC_66A_n77A, DC_7A_n78A, DC_7C_n78A, DC_7A_n78A, DC_41C_n78A, DC_41A_n78A, DC_7C_n77A, DC_7A_n77A, DC_41C_n77A, DC_41A_n77A, DC_41C_n41A, DC_41A_n41A (LTE Band 7C and Band 41C only supports downlink)	
Antenna Type:	Internal Antenna	
Antenna Gain:	GSM 850: -3.45dBi; PCS 1900: -1.00dBi WCDMA Band II: -1.00dBi; WCDMA Band V: -3.45dBi WCDMA Band IV: -1.20dBi LTE Band 2: -1.00dBi; LTE Band 4: -1.20dBi LTE Band 5: -3.45dBi; ANT 1:LTE Band 7: -0.38dBi ANT 2:LTE Band 7: -2.50dBi LTE Band 12: -4.65dBi , LTE Band 17: -4.65dBi ANT 1:LTE Band 38: -0.38dBi, LTE Band 41: -0.38dBi ANT 2:LTE Band 38: -2.50dBi, LTE Band 41: -2.50dBi LTE Band 66: -1.20dBi NR n5: -3.45dBi; NR n7: -0.38dBi NR n12: -4.65dBi; NR n38: -0.38dBi NR n41: -0.38dBi ; NR n66: -1.20dBi NR n77: -2.30dBi ; NR n78: -2.30dBi ANT5 Bluetooth: -2.20dBi, 2.4G Wi-Fi : -2.20dBi; ANT7 Bluetooth: -2.80dBi, 2.4G Wi-Fi : -2.80dBi; 5G Wi-Fi: -0.52 dBi	
(E)GPRS Class:	(E)GPRS Class: 12	
Dimensions (L*W*H):	168 mm (L)× 76 mm (W)× 9 mm (H)	
Accessories information:	Adapter: Model: U180XSA Input:100-240V AC,50/60Hz 0.6A Output: DC 5.0V, 2.4A OR 7.5V 2.4A 18.0W Max	Battery: Rechargeable Li-ion polymer Battery 3.87V/5850mAh Headset: Support headset

5.3 Maximum RF Output Power

ANT 1:

Mode	Average Power (dBm)	
	GSM 850	PCS 1900
GSM (Voice)	33.67	30.81
GPRS (1 TX Slot)	33.61	30.78
GPRS (2 TX Slots)	32.68	29.61
GPRS (3 TX Slots)	30.70	27.49
GPRS (4 TX Slots)	29.67	26.69
EGPRS (1 TX Slot)	27.66	26.67
EGPRS (2 TX Slots)	26.57	25.68
EGPRS (3 TX Slots)	24.44	23.41
EGPRS (4 TX Slots)	23.32	22.18

Mode	Average Power (dBm)		
	WCDMA Band II	WCDMA Band IV	WCDMA Band V
AMR 12.2 kbps	23.69	23.49	23.46
RMC 12.2 kbps	23.77	23.54	23.44
HSDPA Sub-test 1	22.77	22.57	22.63
HSDPA Sub-test 2	22.28	22.08	22.12
HSDPA Sub-test 3	22.29	22.11	22.17
HSDPA Sub-test 4	22.26	22.07	22.15
HSUPA Sub-test 1	20.70	20.53	20.60
HSUPA Sub-test 2	21.22	21.04	21.05
HSUPA Sub-test 3	21.72	21.54	21.58
HSUPA Sub-test 4	20.73	20.55	20.63
HSUPA Sub-test 5	22.74	22.55	22.63

Mode	Average Power (dBm)					
	LTE Band 2	LTE Band 5	LTE Band 7	LTE Band 12	LTE Band 41	LTE Band 66
BW/1.4 MHz	23.34	23.46	/	23.81	/	24.38
BW/3.0 MHz	23.40	23.34	/	23.75	/	24.29
BW/5.0 MHz	23.55	23.59	23.33	23.94	23.55	24.45
BW/10 MHz	23.46	23.42	23.23	23.77	23.41	24.30
BW/15 MHz	23.42	/	23.25	/	23.47	24.27
BW/20 MHz	23.47	/	23.34	/	23.38	24.38

Mode	Average Power (dBm)				
	NR n5	NR n7	NR n12	NR n41	NR n66
BW/10MHz	23.33	23.23	23.16	26.89	23.45
BW/15MHz	23.18	23.14	23.14	26.83	23.37
BW/20 MHz	23.18	23.17	/	26.91	23.41
BW/30MHz	/	/	/	26.90	/
BW/40MHz	/	/	/	26.89	23.36
BW/50MHz	/	/	/	26.91	/
BW/60MHz	/	/	/	26.98	/
BW/80MHz	/	/	/	27.00	/
BW/90MHz	/	/	/	26.89	/
BW/100MHz	/	/	/	26.87	/

Ant2:

Mode	Average Power (dBm)	
	LTE Band 7	LTE Band 41
BW/1.4 MHz	/	/
BW/3.0 MHz	/	/
BW/5.0 MHz	20.51	20.43
BW/10 MHz	20.44	20.35
BW/15 MHz	20.46	20.41
BW/20 MHz	20.56	20.30

Ant5:

WLAN 2.4 GHz Band Average Power (dBm)				
Mode/Band	b	g	n (HT-20)	n (HT-40)
WLAN 2.4GHz	17.11	14.01	14.12	13.92

WLAN 5.2 GHz Band Average Power (dBm)						
Mode/Band	a	ac 20	ac 40	ac 80	n 20	n 40
WLAN 5.2GHz	12.11	12.20	12.29	11.43	13.45	13.54

WLAN 5.8 GHz Band Average Power (dBm)						
Mode/Band	a	ac 20	ac 40	ac 80	n 20	n 40
WLAN 5.8GHz	13.91	13.65	12.44	11.58	13.72	14.16

Bluetooth Average Power (dBm)							
Mode/Band	1 Mbps (GFSK)	2 Mbps (π/4DQPSK)	3 Mbps (8DPSK)	BLE PHY 1M	BLE PHY 2M	BLE Coded PHY S=2	BLE Coded PHY S=2
Bluetooth	10.37	10.47	10.46	-2.73	-2.77	-2.72	-2.76

ANT6:

Mode	Average Power (dBm)	
	NR n77 3450-3550	NR n77 3700-3980
BW/10MHz	27.55	27.17
BW/15MHz	27.52	27.08
BW/20 MHz	27.60	27.11
BW/30MHz	27.59	27.11
BW/40MHz	27.54	27.15
BW/50MHz	27.57	27.18
BW/60MHz	27.51	27.15
BW/80MHz	27.47	27.08
BW/90MHz	27.34	26.99
BW/100MHz	27.29	27.03

Ant7:

WLAN 2.4 GHz Band Average Power (dBm)				
Mode/Band	b	g	n (HT-20)	n (HT-40)
WLAN 2.4GHz	16.70	13.53	13.54	13.53

Bluetooth Average Power (dBm)							
Mode/Band	1 Mbps (GFSK)	2 Mbps (π/4DQPSK)	3 Mbps (8DPSK)	BLE PHY 1M	BLE PHY 2M	BLE Coded PHY S=2	BLE Coded PHY S=2
Bluetooth	8.58	7.83	7.86	-6.84	-6.90	-6.83	-6.87

NFC Band Average Power (dBm)	
Mode/Band	ASK
NFC	-40.34

5.4 Environment of Test Site

Temperature:	18°C ~25 °C
Humidity:	35%~75% RH
Atmospheric Pressure:	1010 mbar

5.5 Test Sample Plan

Sample Number	Used for Test Items
3#	SAR
***Remark**: JianYan Testing Group Shenzhen Co., Ltd. is only responsible for the test project data of the above samples, and will keep the above samples for a month.*	

5.6 Test Location

JianYan Testing Group Shenzhen Co., Ltd.
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community,Xinqiao Street, Bao'an District, Shenzhen, Guangdong,People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

6 Introduction

6.1 Introduction

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

6.2 SAR Definition

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

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

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

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

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

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

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength. However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

7 RF Exposure Limits

7.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

7.2 Controlled Environment

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). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

7.3 RF Exposure Limits

SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT *General Population* (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT *Occupational* (W/kg) or (mW/g)
SPATIAL PEAK SAR Brain	1.6	8.0
SPATIAL AVERAGE SAR Whole Body	0.08	0.4
SPATIAL PEAK SAR Hands, Feet, Ankles, Wrists	4.0	20

Note:

1. 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.
2. The Spatial Average value of the SAR averaged over the whole body.
3. 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.

8 SAR Measurement System

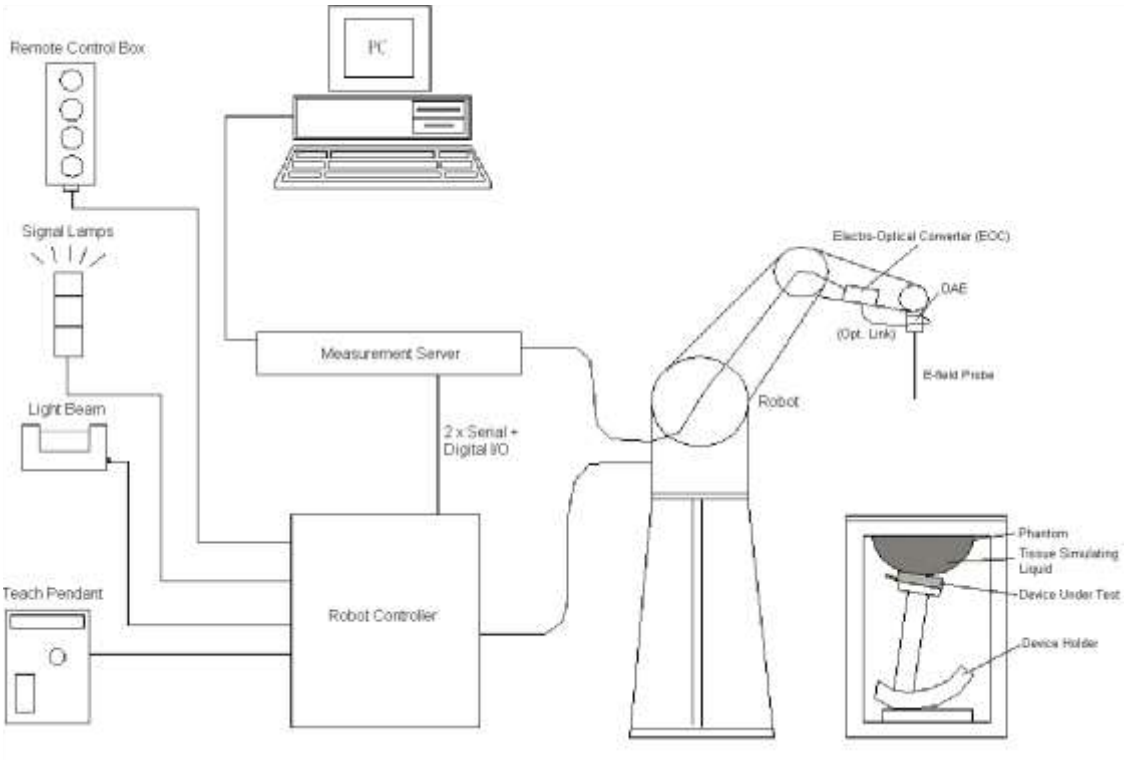

Fig. 8.1 SPEAG DASY System Configurations

The DASY system for performance compliance tests is illustrated above graphically. This system consists of the following items:

- A standard high precision 6-axis robot with controller, a teach pendant and software
- A data acquisition electronic (DAE) attached to the robot arm extension
- A dosimetric probe equipped with an optical surface detector system
- The electro-optical converter (EOC) performs the conversion between optical and electrical signals
- A measurement server performs the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the accuracy of the probe positioning
- A computer operating Windows XP
- DASY software
- Remove control with teach pendant and additional circuitry for robot safety such as warming lamps, etc.
- The SAM twin phantom
- A device holder
- Tissue simulating liquid
- Dipole for evaluating the proper functioning of the system

Component details are described in the following sub-sections.

8.1 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG). The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

- **E-Field Probe Specification**
  <EX3DV4 Probe>

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Frequency Directivity	10 MHz to 6 GHz; Linearity: ± 0.2 dB ± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 µW/g to 100 mW/g; Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 330 mm (Tip: 20mm) Tip diameter: 2.5 mm (Body: 12mm) Typical distance from probe tip to dipole centers: 1 mm

Fig. 8.2 Photo of E-Field Probe

- **E-Field Probe Calibration**
  Each probe needs to be calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy shall be evaluated and within ± 0.25 dB. The sensitivity parameters (Norm X, Norm Y and Norm Z), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested. The calibration data can be referred to appendix E of this report.

8.2 Data Acquisition Electronics (DAE)

The Data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock. The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Fig. 8.3 Photo of DAE

8.3 Robot

The SPEAG DASY system uses the high precision robots (DASY5: TX60L) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version (DASY5: CS8c) from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; nobelt drives)
- Jerk-free straight movements
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)

Fig. 8.4 Photo of Robot

8.4 Measurement Server

The measurement server is based on a PC/104 CPU board with CPU (DASY 5: 400MHz, Intel Celeron), chip-disk (DASY5: 128 MB), RAM (DASY5: 128 MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O board, which is directly connected to the PC/104 bus of the CPU board.
The measurement server performs all the real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operations.

Fig. 8.5 Photo of Server for DASY5

8.5 Light Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.
The repeatability of this process is better than0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.

Fig. 8.6 Photo of Light Beam

8.6 Phantom

<SAM Twin Phantom>

Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm	 **Fig. 8.7 Photo of SAM Twin Phantom**
Filling Volume **Dimensions**	Approx. 25 liters Length: 1000mm; Width: 500mm; Height: adjustable feet	
Measurement Areas	Left Head, Right Head, Flat phantom	

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

<ELI4 Phantom >

The ELI4 phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30MHz to 6 GHz. ELI4 is fully compatible with the latest draft of the standard IEC 62209-2 and all known tissue simulating liquids.
ELI4 has been optimized regarding its performance and can be integrated into a SPEAG standard phantom table. 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 can be used with the following tissue simulating liquids:

- Water-sugar based liquids can be left permanently in the phantom. Always cover the liquid if the system is not in use; otherwise the parameters will change due to water evaporation.
- DGBE based liquids should be used with care. As DGBE is a softener for most plastics, the liquid should be taken out of the phantom and the phantom should be dried when the system is not in use (desirable at least once a week).
- Do not use other organic solvents without previously testing the phantom resistiveness

Fig.8.8 Photo of ELI4 Phantom

8.7 Device Holder

<Device Holder for SAM Twin Phantom>

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.
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 center for both scales is the ear reference point (ERP).
Thus the device needs no repositioning when changing the angles.
The DASY device holder is constructed of low-low POM material having the following dielectric parameters: relative permittivity ε = 3 and loss tangent δ = 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.

Fig. 8.9 Photo of Device Holder

8.8 Data storage and Evaluation

- **Data Storage**

  The DASY software stores the assessed data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all the necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files. The post-processing software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verifications of the complete software setup even after the measurement and allows correction of erroneous parameter settings. For example, if a measurement has been performed with an incorrect crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be reevaluated.

  The measured data can be visualized or exported in different units or formats, depending on the selected probe type (e.g., [V/m], [mW/g]). Some of these units are not available in certain situations or give meaningless results, e.g., a SAR-output in a non-lose media, will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

- **Data Evaluation**

  The DASY post-processing software (SEMCAD) 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	$Norm_i$, a_{i0}, a_{i1}, a_{i2}
	- Conversion	$ConvF_i$
	- Diode compression point	dcp_i
Device Parameters:	- Frequency	f
	- Crest	cf
Media Parameters:	- Conductivity	σ
	- 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 multi-meter 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:

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

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)
dcp^i = diode compression point (DASY parameter)

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

E- Field Probes: $E_i = \sqrt{\frac{v_i}{Norm_i \cdot ConvF}}$

H-Field Probes: $H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1} f + a_{i2} f^2}{f}$

With V_i = compensated signal of channel i, (i = x, y, z)
$Norm_i$ = senor sensitivity of channel i, (i = x, y, z), μV/ $(V/m)^2$
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
Hi = magnetic field strength of channel i in A/m

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

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

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

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1000}$$

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)
ρ = equipment tissue density in g/cm^3

Note that the density is set to 1, to account for actual head tissue density rather than the density of the tissue simulating liquid.

8.9 Test Equipment List

Manufacturer	Equipment Description	Model	Management Number	Cal. Information	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	WXJ023	05.28.2020	05.27.2023
SPEAG	835MHz System Validation Kit	D835V2	WXJ023-1	06.08.2022	06.07.2025
SPEAG	1750MHz System Validation Kit	D1750V2	WXJ023-6	02.10.2021	02.09.2024
SPEAG	1900MHz System Validation Kit	D1900V2	WXJ023-2	06.07.2022	06.06.2025
SPEAG	2450MHz System Validation Kit	D2450V2	WXJ023-3	06.06.2022	06.05.2025
SPEAG	2600MHz System Validation Kit	D2600V2	WXJ023-4	10.28.2021	10.27.2024
SPEAG	3500MHz System Validation Kit	D3500V2	WXJ023-8	02.04.2021	02.03.2024
SPEAG	3700MHz System Validation Kit	D3700V2	WXJ023-9	02.04.2021	02.03.2024
SPEAG	3900MHz System Validation Kit	D3900V2	WXJ023-10	02.09.2021	02.08.2024
SPEAG	5GHz System Validation Kit	D5GHzV2	WXJ023-14	02.05.2021	02.04.2024
SPEAG	Data Acquisition Electronics	DAE4	WXJ021	06.06.2022	06.05.2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	WXJ022	01.03.2023	01.02.2024
SPEAG	DASY 52 Measurement Software	DASY 52	Version 52.10.4.1527	N.C.R	N.C.R
SPEAG	DASY 52 File Conversion Software	SEMCAD X	Version 14.6.14 (7483)	N.C.R	N.C.R
SPEAG	Phantom	Twin Phantom	WXG008-3	N.C.R	N.C.R
SPEAG	Phantom	ELI V5.0	WXG008-4	N.C.R	N.C.R
SPEAG	Phone Positioner	N/A	WXG008-5	N.C.R	N.C.R
Stäubli	Robot	TX60L	WXG008-2	N.C.R	N.C.R
KEYSIGHT	UXM 5G Wireless Test Platform	E7515B	WXJ008-6	10.17.2022	10.16.2023
Anritsu	Universal Radio Communication Analyzer	MT8820C	WXJ008-5	01.10.2023	01.09.2025
R&S	Universal Radio Communication Tester	CMU200	WXJ008-2	03.30.2022	03.29.2024
KEYSIGHT	Network Analyzer	E5071C	WXJ091	03.30.2022	03.29.2023
KEYSIGHT	EPM Series Power Meter	N1914A	WXJ075	06.29.2022	06.28.2023
KEYSIGHT	E-Series Power Sensor	E9300H	WXJ075-1	06.29.2022	06.28.2023
KEYSIGHT	E-Series Power Sensor	E9300H	WXJ075-2	06.29.2022	06.28.2023
KEYSIGHT	Signal Generator	N5173B	WXJ006-3	06.29.2022	06.28.2023
Huber Suhner	RF Cable	SUCOFLEX	WXG008-13	See Note 3	
Huber Suhner	RF Cable	SUCOFLEX	WXG008-14	See Note 3	
Huber Suhner	RF Cable	SUCOFLEX	WXG008-15	See Note 3	
Weinschel	Attenuator	23-3-34	WXG008-16	See Note 3	
Anritsu	Directional Coupler	MP654A	WXG008-17	See Note 3	
SPEAG	Dielectric Assessment Kit	3.5 Probe	WXG008-7	See Note 4	
SPEAG	DAK Measurement Software	DAK	Version: DAK 3.5	N.C.R	
TXC	Broadband Amplifier	BBA018000	WXG008-11	See Note 5	

Note:

1. The calibration certificate of DASY can be referred to appendix C of this report.
2. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
3. The Insertion Loss calibration of Dual Directional Coupler and Attenuator were characterized via the network analyzer and compensated during system check.
4. The dielectric probe kit was calibrated via the network analyzer, with the specified procedure (calibrated in pure water) and calibration kit (standard) short circuit, before the dielectric measurement. The specific procedure and calibration kit are provided by Speag.
5. In system check we need to monitor the level on the spectrum analyzer, and adjust the power amplifier level to have precise power level to the dipole; the measured SAR will be normalized to 1 W input power according to the ratio of 1 W to the input power to the dipole. For system check, the calibration of the power amplifier is deemed not critically

required for correct measurement; the spectrum analyzer is critical and we do have calibration for it

6. Attenuator insertion loss is calibrated by the network Analyzer, which the calibration is valid, before system check.
7. N.C.R means No Calibration Requirement.

9 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 9.1, for body SAR testing, the liquid height from the center of the flat phantom to liquid top surface is larger than 15 cm, which is shown in Fig. 9.2.

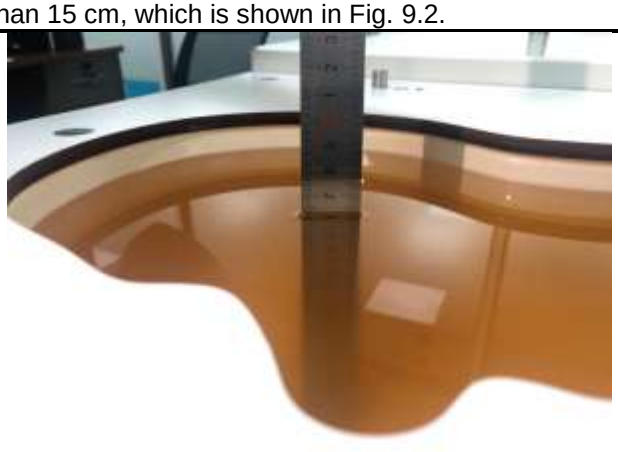

Fig. 9.1 Photo of Liquid Height for Head SAR

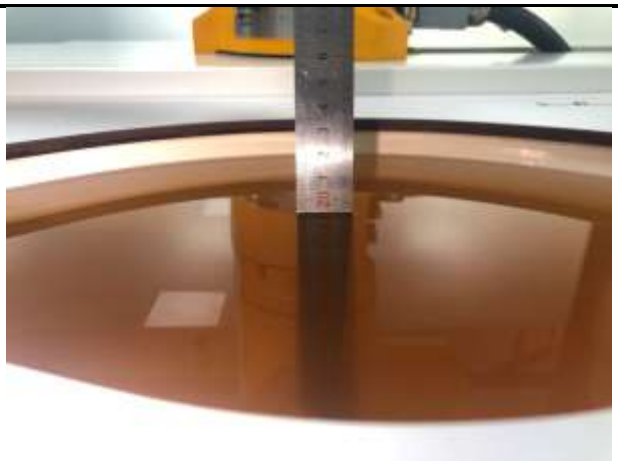

Fig. 9.2 Photo of Liquid Height for Body SAR

The relative permittivity and conductivity of the tissue material should be within ±5% of the values given in the table below recommended by the FCC OET 65 supplement C and RSS 102 Issue 5.

Target Frequency (MHz)	εr	σ(S/m)
150	52.3	0.76
300	45.3	0.87
450	43.5	0.87
835	41.5	0.90
900	41.5	0.97
915	41.5	0.98
1450	40.5	1.20
1610	40.3	1.29
1800-2000	40.0	1.40
2450	39.2	1.80
3000	38.5	2.40
5800	35.3	5.27

(εr = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)

The dielectric parameters of liquids were verified prior to the SAR evaluation using a Speag Dielectric Probe Kit and an Agilent Network Analyzer.
The following table shows the measuring results for simulating liquid.

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (εr)	Conductivity Target(σ)	Permittivity Target(εr)	Delta (σ)%	Delta (εr)%	Limit (%)	Date (mm/dd/yy)
750	22.4	0.89	40.91	0.89	41.90	0.00	-2.36	±5	03/02/2023
835	22.4	0.91	40.70	0.90	41.50	1.11	-1.93	±5	03/02/2023
1750	22.8	1.34	39.19	1.37	40.10	-2.19	-2.27	±5	03/06/2023
1900	22.8	1.36	39.45	1.40	40.00	-2.86	-1.37	±5	03/06/2023
2450	22.7	1.73	38.47	1.80	39.20	-3.89	-1.86	±5	03/08/2023
2600	22.7	1.89	38.47	1.96	39.00	-3.57	-1.36	±5	03/08/2023
3500	22.1	2.88	37.86	2.91	37.90	-1.03	-0.11	±5	03/11/2023
3700	22.1	3.06	37.56	3.12	37.70	-1.92	-0.37	±5	03/11/2023
3900	22.1	3.26	37.52	3.32	37.50	-1.81	0.05	±5	03/11/2023
5200	22.9	4.74	37.04	4.67	35.74	1.50	3.64	±5	03/14/2023
5800	22.9	5.43	36.04	5.27	35.30	3.04	2.10	±5	03/14/2023

10 SAR System Verification

Each DASY system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the DASY software, enable the user to conduct the system performance check and system validation. System validation kit includes a dipole, tripod holder to fix it underneath the flat phantom and a corresponding distance holder.

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

- **System Setup**

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:

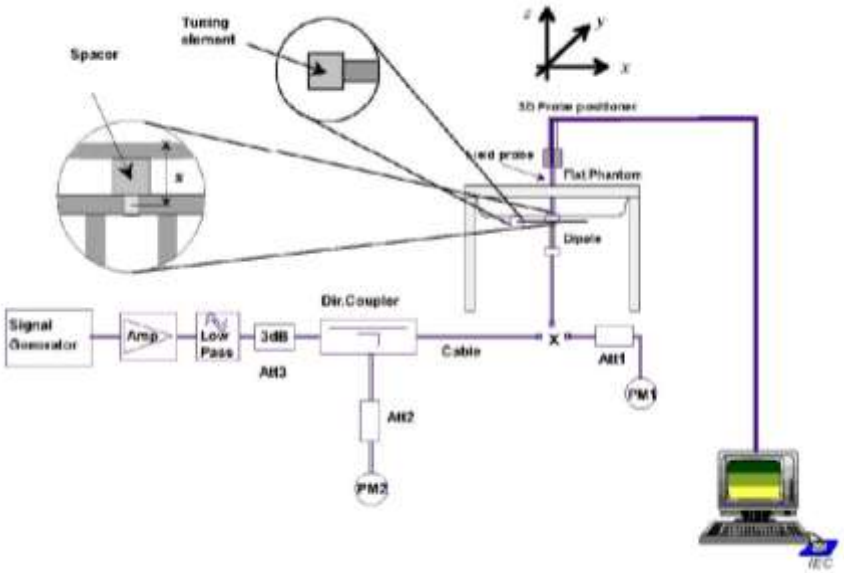

Fig.10.1 System Verification Setup Diagram

Fig.10.2 Photo of Dipole setup

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- **System Verification Results**
  Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10%. The table as below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix C of this report.

Date (mm/dd/yy)	Frequency (MHz)	Power fed onto dipole (mW)	Measured 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Target 1g SAR (W/kg)	Deviation (%)
03/02/2023	750	80	0.654	8.18	8.37	-2.27
03/02/2023	835	80	0.758	9.48	9.6	-1.25
03/06/2023	1750	40	1.480	37.00	36.4	1.65
03/06/2023	1900	40	1.610	40.25	39.9	0.88
03/08/2023	2450	40	2.140	53.50	53.4	0.19
03/08/2023	2600	40	2.210	55.25	55.3	-0.09
03/11/2023	3500	40	2.580	64.50	65.6	-1.68
03/11/2023	3700	40	2.680	67.00	66.1	1.36
03/11/2023	3900	40	2.750	68.75	69.9	-1.65
03/14/2023	5200	40	3.240	81.00	79.10	2.40
03/14/2023	5800	40	3.290	82.25	80.90	1.67

Date (mm/dd/yy)	Frequency (MHz)	Power fed onto dipole (mW)	Measured 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Target 10g SAR (W/kg)	Deviation (%)
03/06/2023	1900	40	0.842	21.05	20.80	1.20

11 EUT Testing Position

This EUT was tested in nine different positions. They are right cheek/right tilted/left cheek/left tilted for head, Front/Back/Left Side/Right Side/ Top Side of the EUT with phantom 10 mm gap, as illustrated below, please refer to Appendix B for the test setup photos.

11.1 Handset Reference Points

- The vertical centreline passes through two points on the front side of the handset – the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centreline and passes the center of the acoustic output. The horizontal line is also tangential to the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centreline is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.

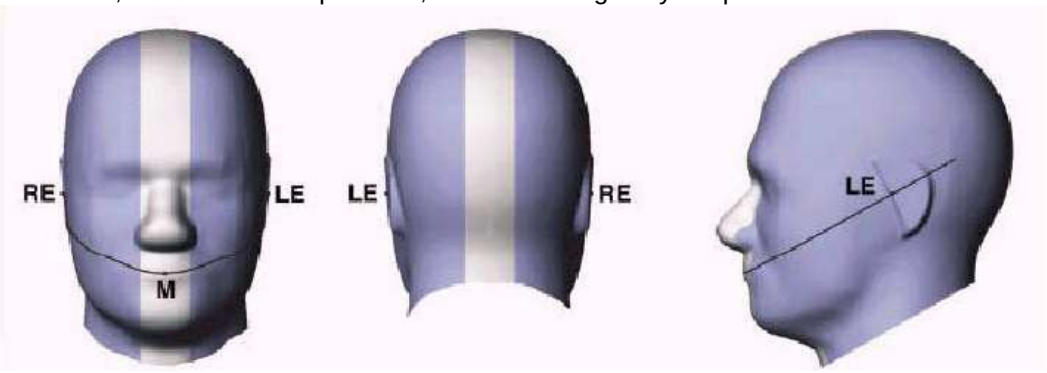

Fig.11.1 Illustration for Front, Back and Side of SAM Phantom

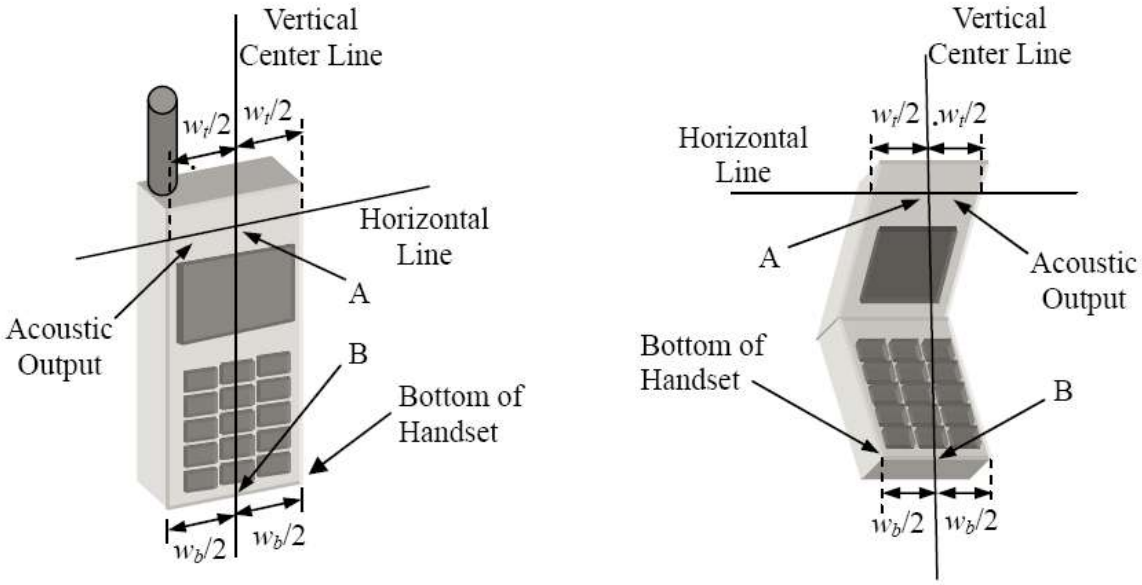

Fig. 11.2 Illustration for Handset Vertical and Horizontal Reference Lines

11.2 Positioning for Cheek / Touch

- To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost (see below figure)

Fig. 11.3 Illustration for Cheek Position

11.3 Positioning for Ear / 15º Tilt

- To position the device in the “cheek” position described above.
- While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see figure below).

Fig.11.4 Illustration for Tilted Position

11.4 SAR Evaluations near the Mouth/Jaw Regions of the SAM Phantom

Antennas located near the bottom of a phone may require SAR measurements around the mouth and jaw regions of the SAM head phantom. This typically applies to clam-shell style phones that are generally longer in the unfolded normal use positions or to certain older style long rectangular phones.

Under these circumstances, the following procedures apply, adopted from the FCC guidance on SAR handsets document FCC KDB Publication 648474 D04v01r03. The SAR required in these regions of SAM should be measured using a flat phantom. The phone should be positioned with a separation distance of 4 mm between the ear reference point (ERP) and the outer surface of the flat phantom shell. While maintaining this distance at the ERP location, the low (bottom) edge of the phone should be lowered from the phantom to establish the same separation distance between the peak SAR locations identified by the truncated partial SAR distribution measured with the SAM phantom. The distance from the peak SAR location to the phone is determined by the straight line passing perpendicularly through the phantom surface. When it is not feasible to maintain 4 mm separation at the ERP while also establishing the required separation at the peak SAR location, the top edge of the phone will be allowed to touch the phantom with a separation < 4 mm at the ERP. The phone should not be tilted to the left or right while placed in this inclined position to the flat phantom.

11.5 Body Worn Accessory Configurations

- To position the device parallel to the phantom surface with either keypad up or down.
- To adjust the device parallel to the flat phantom.
- To adjust the distance between the device surface and the flat phantom to 10 mm or holster surface and the flat phantom to 0 mm.

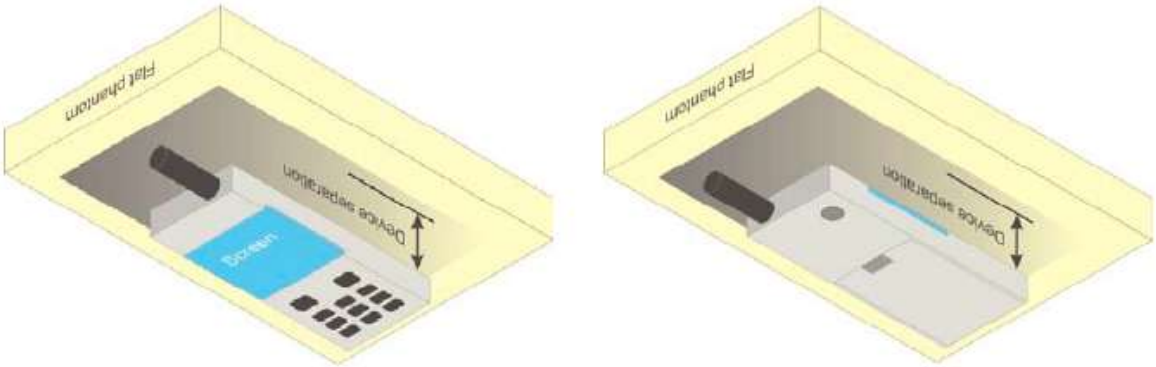

Fig.11.5 Illustration for Body Worn Position

11.6 Wireless Router (Hotspot) Configurations

Some battery-operated handsets have the capability to transmit and receive internet connectivity through simultaneous transmission of WIFI in conjunction with a separate licensed transmitter. The FCC has provided guidance in KDB Publication 941225 D06 where SAR test considerations for handsets (L x W ≥
9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device with antennas 2.5 cm or closer to the edge of the device, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. Therefore, SAR must be evaluated for each frequency transmission and mode separately and summed with the WIFI transmitter according to KDB 648474 publication procedures. The “Portable Hotspot” feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

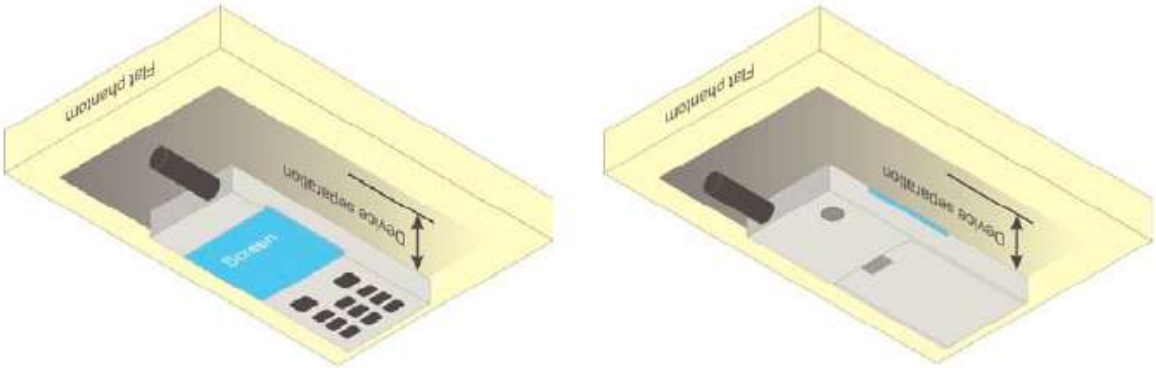

Fig.11.6 Illustration for Hotspot Position

12 Measurement Procedures

The measurement procedures are as below:

<Conducted power measurement>

- For WWAN power measurement, use base station simulator to configure EUT WWAN transition in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- Read the WWAN RF power level from the base station simulator.
- For WLAN/BT power measurement, use engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band.
- Connect EUT RF port through RF cable to the power meter or spectrum analyzer, and measure WLAN/BT output power.

<Conducted power measurement>

- Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
- Place the EUT in positions as Appendix B demonstrates.
- Set scan area, grid size and other setting on the DASY software.
- Measure SAR results for the highest power channel on each testing position.
- Find out the largest SAR result on these testing positions of each band.
- Measure SAR results for other channels in worst SAR testing position if the Reported SAR or highest power channel is larger than 0.8 W/kg.

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- Power reference measurement
- Area scan
- Zoom scan
- Power drift measurement

12.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a “cube” measurement. The measured volume must include the 1g and 10 g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- Extraction of the measured data (grid and values) from the Zoom Scan.
- Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters).
- Generation of a high-resolution mesh within the measured volume.
- Interpolation of all measured values form the measurement grid to the high-resolution grid
- Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- Calculation of the averaged SAR within masses of 1g and 10g.

12.2 Power Reference Measurement

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

12.3 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

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

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

12.4 Volume Scan Procedures

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

12.5 SAR Averaged Methods

In DASY, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1g and 10g cubes, the extrapolation distance should not be larger than 5 mm.

12.6 Power Drift Monitoring

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

13 Conducted RF Output Power

The detailed conducted power table can refer to JYTSZ-R14-2300014 Appendix D Conducted RF Output Power.

13.1 GSM 850 Conducted Power

Remark:

1. The frame-averaged power is linearly reported the maximum burst averaged power over 8 time slots. The calculated method are shown as below:
   The duty cycle "x" of different time slots as below:
   1 TX slot is 1/8, 2 TX slots is 2/8, 3 TX slots is 3/8 and 4 TX slots is 4/8
   Based on the calculation formula:
   Frame-averaged power = Burst averaged power + 10 1og (x)
   So,
   Frame-averaged power (1 TX slot) = Burst averaged power (1 TX slot)– 9.03
   Frame-averaged power (2 TX slots) = Burst averaged power (2 TX slots)– 6.02
   Frame-averaged power (3 TX slots) = Burst averaged power (3 TX slots)– 4.26
   Frame-averaged power (4 TX slots) = Burst averaged power (4 TX slots) – 3.01
2. CS1 coding scheme was used in GPRS conducted power measurements and SAR testing, MCS5 coding scheme was used in EGPRS conducted power measurements and SAR testing (if necessary).

Note:

1. For Head SAR testing, GSM Voice mode should be evaluated, therefore the EUT was set in GSM 850 Voice mode.
2. For Body worn SAR testing, GSM Voice, GPRS and EGPRS mode should be evaluated, therefore the EUT was set in GPRS 4 TX slots mode due to the highest frame-averaged power..
3. For Hotspot mode SAR testing, GPRS and EGPRS mode should be evaluated, therefore the EUT was set in GPRS 4 TX slots mode due to the highest frame-averaged power.
4. Per KDB447498 D04v01, the maximum output power channel is used for SAR testing and for further SAR test reduction.

13.2 GSM 1900 Conducted Power

Remark:

1. The frame-averaged power is linearly reported the maximum burst averaged power over 8 time slots. The calculated method are shown as below:
   The duty cycle "x" of different time slots as below:
   1 TX slot is 1/8, 2 TX slots is 2/8, 3 TX slots is 3/8 and 4 TX slots is 4/8
   Based on the calculation formula:
   Frame-averaged power = Burst averaged power + 10 1og (x)
   So,
   Frame-averaged power (1 TX slot) = Burst averaged power (1 TX slot)– 9.03
   Frame-averaged power (2 TX slots) = Burst averaged power (2 TX slots)– 6.02
   Frame-averaged power (3 TX slots) = Burst averaged power (3 TX slots)– 4.26
   Frame-averaged power (4 TX slots) = Burst averaged power (4 TX slots) – 3.01
2. CS1 coding scheme was used in GPRS conducted power measurements and SAR testing, MCS5 coding scheme was used in EGPRS conducted power measurements and SAR testing (if necessary).

Note:

1. For Head SAR testing, GSM Voice mode should be evaluated, therefore the EUT was set in GSM 1900 Voice mode.
2. For Body worn SAR testing, GSM Voice, GPRS and EGPRS mode should be evaluated, therefore the EUT was set in GPRS 4 TX slots mode due to the highest frame-averaged power..
3. For Hotspot mode SAR testing, GPRS and EGPRS mode should be evaluated, therefore the EUT was set in GPRS 4 TX slots mode due to the highest frame-averaged power.
4. Per KDB447498 D04v01, the maximum output power channel is used for SAR testing and for further SAR test reduction.

13.3 WCDMA Conducted Power

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification. A summary of these settings are illustrated below:

HSDPA Setup Configuration:

a. The EUT was connected to Base Station Rohde & Schwarz CMU200 referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set Gain Factors (β_c and β_d) and parameters were set according to each
   ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
   iii. Set RMC 12.2kbps + HSDPA mode.
   iv. Set Cell Power = -86 dBm
   v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
   vi. Select HSDPA Uplink Parameters
   vii. Set Delta ACK, Delta NACK and Delta CQI = 8
   viii. Set Ack-Nack Repetition Factor to 3
   ix. Set CQI Feedback Cycle (k) to 4 ms
   x. Set CQI Repetition Factor to 2
   xi. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

Table 1

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	CM (dB)(2)
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.
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 signaled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

HSDPA Sub-test setup configuration

HSUPA Setup Configuration:

a. The EUT was connected to Base Station Rohde & Schwarz CMU200 referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting * :
   i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
   ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
   iii. Set Cell Power = -86 dBm
   iv. Set Channel Type = 12.2k + HSPA
   v. Set UE Target Power
   vi. Power Ctrl Mode= Alternating bits
   vii. Set and observe the E-TFCI
   viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
d. The transmitted maximum output power was recorded.

Table 2

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (2) (dB)	MPR (dB)	AG (4) Index	E-TFCI
1	11/15 (3)	15/15 (3)	64	11/15 (3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}: 47/15 β_{ed2}: 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 (4)	15/15 (4)	64	15/15 (4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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 difference.
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 signaled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
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 signaled gain factors for the reference TFC (TF1, TF1) to β_c = 14/15 and β_d = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

HSUPA Sub-test setup configuration

Note:

1. Applying the subtest setup in Table C.11.1.3 of 3GPP TS 34.121-1
2. Per KDB 941225 D01, RMC 12.2kbps mode is used to evaluate SAR due the highest output power. If AMR 12.2 kbps power is < 0.25dB higher than RMC 12.2kbps, SAR tests with AMR 12.2 kbps can be excluded.
3. AMR, HSDPA RF power will not be larger than RMC 12.2kbps, detailed information is included in Tune-up Procure exhibit.

13.4 LTE Conducted Power

13.4.1 Largest channel bandwidth standalone SAR test requirements

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 among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.8 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.

QPSK with 50% RB allocation

The procedures required for 1 RB allocation in section 4.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.9

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 sections 4.2.1 and 4.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 4.2.1, 5.2.2 and 4.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

13.4.2 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 4.2 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 > ½ 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. The equivalent channel configuration for the RB allocation, RB offset and modulation etc. is determined for the smaller channel bandwidth according to the same number of RB allocated in the largest channel bandwidth. For example, 50 RB in 10 MHz channel bandwidth does not apply to 5 MHz channel bandwidth; therefore, this cannot be tested in the smaller channel bandwidth. However, 50% RB allocation in 10 MHz channel bandwidth is equivalent to 100% RB allocation in 5 MHz channel bandwidth; therefore, these are the equivalent configurations to be compared to determine the specific channel and configuration in the smaller channel bandwidth that need SAR testing.

13.3.3 TDD LTE configuration setup for SAR measurement

According to KDB 941225 D05v02r03 and April 2013 TCB workshop slides, SAR must be tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

- see 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- “special subframe S” contains both uplink and downlink transmissions and must be taken into consideration to determine the transmission duty factor
  - according to the worst case uplink and downlink cyclic prefix requirements for UpPTS to determine the highest SAR test duty factor

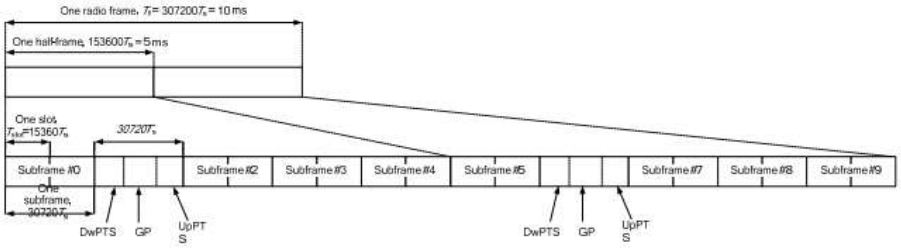

Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity)

Table 4.2-1: 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	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Per 3GPP 36.211 section 4.2, each radio frame of length T_f=37200·Ts = 10 ms consists of two half-frames of length 153600·Ts = 5ms each. Each half-frame consists of five subframes of length 30720 ·Ts = 1ms. So, the uplink duty factor in special subframe as below:

Special Subframe configuration	Normal cyclic prefix in downlink		Extended cyclic prefix in downlink	
	Duty factor of Uplink		Duty factor of Uplink	
	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	7.14%	8.33%	7.14%	8.33%
1	7.14%	8.33%	7.14%	8.33%
2	7.14%	8.33%	7.14%	8.33%
3	7.14%	8.33%	7.14%	8.33%
4	7.14%	8.33%	14.27%	16.67%
5	14.27%	16.67%	14.27%	16.67%
6	14.27%	16.67%	14.27%	16.67%
7	14.27%	16.67%	14.27%	16.67%
8	14.27%	16.67%	/	/
9	14.27%	16.67%	/	/

Table 4.2-2: 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

According to above table:

1. The highest duty factor is configuration 0;
2. The duty factor of uplink in one half-frame with normal cyclic prefix is: (3ms + 0.143ms)/5ms=62.86%;
3. The duty factor of uplink in one half-frame with extended cyclic prefix is: (3ms + 0.167ms)/5ms=63.34%;
4. For purpose to get the worst case SAR test duty factor, the duty factor of normal cyclic prefix in uplink scaled-up to the extended cyclic prefix in uplink, the scaling factor is 63.34%/62.86%=1.008, and the scaling factor will be taken into the final measured SAR.

13.5 NR Conducted Power

Note:

1. 5G NR n7/n38/n41/n77/n78 supports NSA; n5/n7/n12/n41/n66/n77 supports SA.
2. 5G NR n41/n77/n78 supports HPUE.
3. SAR testing start with the largest channel bandwidth and measure SAR for PI/2 BPSK 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.
4. 50% RB allocation for PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure.
5. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not 1/2 dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
6. Smaller bandwidth output power for each RB allocation configuration for this device will not 1/2 dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is less than 1.45 W/kg, smaller bandwidth SAR testing is no required for this device.

13.6 WLAN 2.4 GHz Band Conducted Power

Note:

7. SAR test of WLAN 2.4GHz is performed.
8. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
9. Per KDB 248227 D01v02r02, In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. 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.
10. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
11. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 100%, so the duty cycle factor is 1.

13.7 WLAN 5.2GHz Band Conducted Power

Note:

12. SAR test of WLAN 5.2GHz is performed.
13. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
14. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
15. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 100%, so the duty cycle factor is 1.

13.8 WLAN 5.8GHz Band Conducted Power

Note:

16. SAR test of WLAN 5.8GHz is performed.
17. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
18. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
19. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 100%, so the duty cycle factor is 1.

13.9 Bluetooth Conducted Power

Note:

20. SAR test of Bluetooth is performed and the mode with highest average power is selected for SAR testing.
21. Per KDB 447498 D04v01 section 2.1.2: 1-mW Test Exemption, SAR test for BLE is not required.
22. The output power of all data rate were pre-scan, just the worst case of all mode were shown in report.
23. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 100%, so the duty cycle factor is 1.

13.10 NFC Conducted Power

Note:

24. Per KDB 447498 D04v01 section 2.1.2: 1-mW Test Exemption, SAR test for NFC is not required.

14 Exposure Positions Consideration

14.1 EUT Antenna Locations

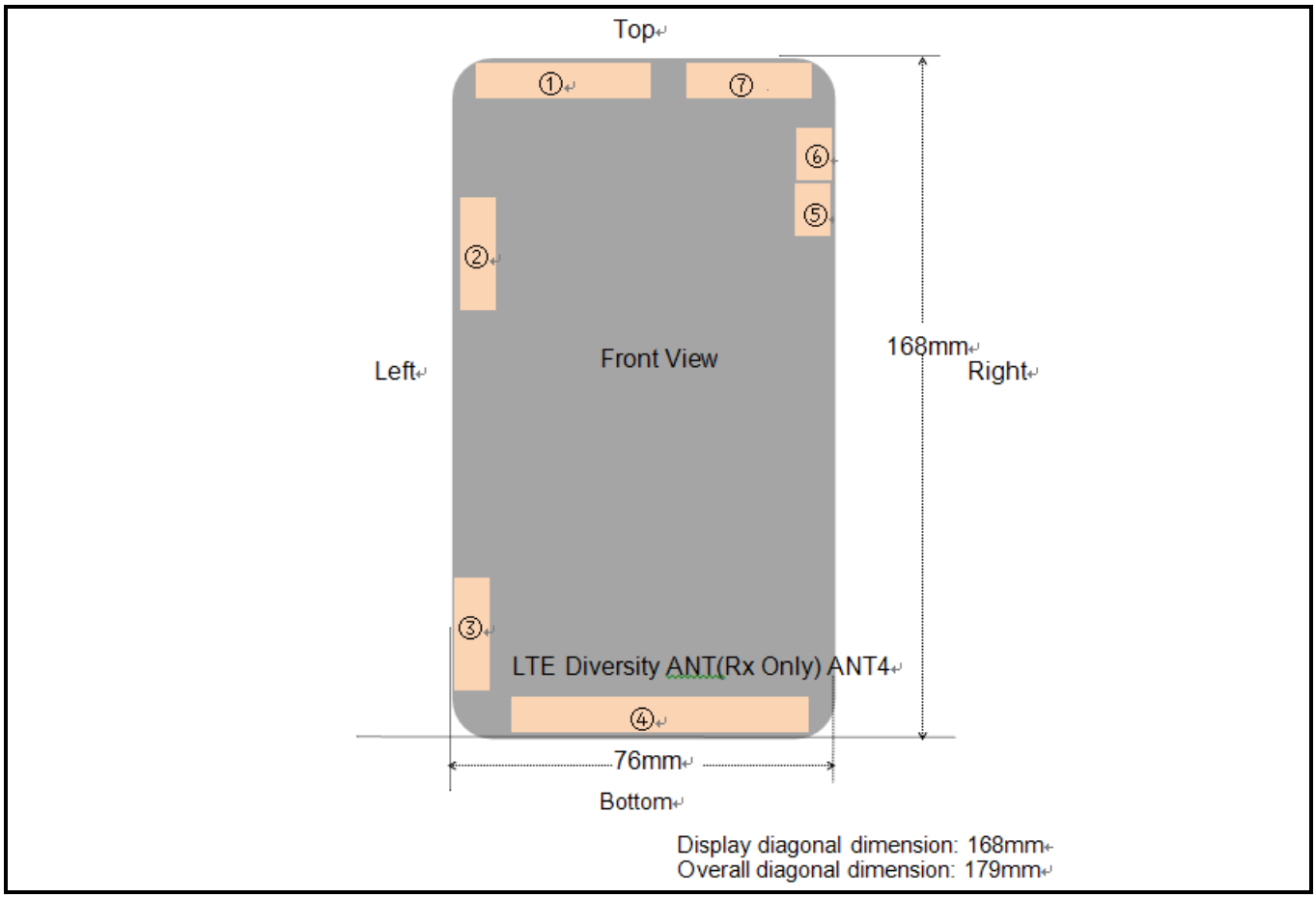

Fig.14.1 EUT Antenna Locations

Note:

① ANT 1: GSM&WCDMA&LTE&5G NR MAIN ANT(Tx)
② ANT 2: LTE B7/41 (Tx), 5G NR n77/78 Diversity ANT(Rx Only).
③ ANT 3: 5G NR n7/38/N41/N77/N78 Diversity ANT(Rx Only).
④ ANT 4: LTE Diversity ANT(Rx Only).
⑤ ANT 5: 2.4G&5GWIFI&BT ANT.
⑥ ANT 6: N77/78 PRX ANT.
⑦ ANT 7:GPS&2.4GWIFI&BT ANT

This antenna diagram is only used as a reference for the distance from the antenna to each edge. For the specific shape of the antenna, please refer to the physical photo.

14.2 Test Positions Consideration

Distance of Antennas to EUT edge/surface Test distance: 10mm						
Antennas	**Back**	**Front**	**Top Side**	**Bottom Side**	**Right Side**	**Left Side**
ANT1	<25mm	<25mm	<25mm	155mm	40mm	<25mm
ANT2	<25mm	<25mm	36mm	104mm	75mm	<25mm
ANT5	<25mm	<25mm	<25mm	128mm	<25mm	70mm
ANT6	<25mm	<25mm	<25mm	144mm	<25mm	70mm
ANT7	<25mm	<25mm	<25mm	162mm	<25mm	45mm

Test Positions Test distance: 10mm						
Antennas	**Back**	**Front**	**Top Side**	**Bottom Side**	**Right Side**	**Left Side**
ANT1	Yes	Yes	Yes	No	No	Yes
ANT2	Yes	Yes	No	No	No	Yes
ANT5	Yes	Yes	Yes	No	Yes	No
ANT6	Yes	Yes	Yes	No	Yes	No
ANT7	Yes	Yes	Yes	No	Yes	No

Note:

1. Head/Body-worn/Hotspot mode SAR assessments are required.
2. Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm * 5cm, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
3. Per KDB 447498 D04v01, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user, which is 0 mm for head SAR, 10 mm for hotspot SAR, and 10 mm for body-worn SAR.
4. Per KDB 648474 D04 v01r03, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg

15 SAR Test Results Summary

15.1 Standalone Head SAR Data

➢ GSM Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
1	GSM850/Voice	1	Right Cheek	190	836.6	33.67	-0.04	34.0	**1.090**	1.079	1.176
	GSM850/Voice	1	Right Tilted	190	836.6	33.67	-0.05	34.0	1.000	1.079	1.079
	GSM850/Voice	1	Left Cheek	190	836.6	33.67	0.09	34.0	0.708	1.079	0.764
	GSM850/Voice	1	Left Tilted	190	836.6	33.67	0.03	34.0	0.675	1.079	0.728
	GSM850/Voice	1	Right Cheek	128	824.2	33.66	0.09	34.0	1.000	1.081	1.081
	GSM850/Voice	1	Right Cheek	251	848.8	33.57	0.07	34.0	1.030	1.104	1.137
	GSM850/Voice	1	Right Tilted	128	824.2	33.66	0.08	34.0	0.945	1.081	1.022
	GSM850/Voice	1	Right Tilted	251	848.8	33.57	-0.02	34.0	0.977	1.104	1.079
	GSM850/Voice	**1**	**Right Cheek**	**190**	**836.6**	**33.67**	**0.03**	**34.0**	**1.060**	**1.079**	**1.144**
	PCS1900/Voice	1	Right Cheek	661	1880	30.81	-0.19	31.0	0.523	1.045	0.547
	PCS1900/Voice	1	Right Tilted	661	1880	30.81	0.06	31.0	0.777	1.045	0.812
	PCS1900/Voice	1	Left Cheek	661	1880	30.81	-0.05	31.0	0.398	1.045	0.416
	PCS1900/Voice	1	Left Tilted	661	1880	30.81	-0.11	31.0	0.467	1.045	0.488
2	PCS1900/Voice	1	Right Tilted	512	1850.2	30.54	0.04	31.0	**0.946**	1.112	1.052
	PCS1900/Voice	1	Right Tilted	810	1909.8	30.75	-0.01	31.0	0.783	1.059	0.829
	PCS1900/Voice	**1**	**Right Tilted**	**512**	**1850.2**	**30.54**	**0.12**	**31.0**	**0.934**	**1.112**	**1.039**
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ WCDMA Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band II/RMC	1	Right Cheek	9400	1880	23.77	-0.12	24.0	0.389	1.054	0.410
3	Band II/RMC	1	Right Tilted	9400	1880	23.77	0.09	24.0	**0.511**	1.054	0.539
	Band II/RMC	1	Left Cheek	9400	1880	23.77	0.01	24.0	0.285	1.054	0.300
	Band II/RMC	1	Left Tilted	9400	1880	23.77	0.05	24.0	0.356	1.054	0.375
	Band IV/RMC	1	Right Cheek	1513	1752.6	23.54	0.13	24.0	0.567	1.111	0.630
4	Band IV/RMC	1	Right Tilted	1513	1752.6	23.54	-0.06	24.0	**0.721**	1.111	0.801
	Band IV/RMC	1	Left Cheek	1513	1752.6	23.54	0.16	24.0	0.334	1.111	0.371
	Band IV/RMC	1	Left Tilted	1513	1752.6	23.54	-0.11	24.0	0.425	1.111	0.472
	Band IV/RMC	1	Right Tilted	1312	1712.4	23.43	0.07	24.0	0.677	1.14	0.772
	Band IV/RMC	1	Right Tilted	1413	1732.6	23.53	-0.03	24.0	0.689	1.114	0.768
5	Band V/RMC	1	Right Cheek	4183	836.6	23.44	0.02	23.5	**0.534**	1.014	0.541
	Band V/RMC	1	Right Tilted	4183	836.6	23.44	-0.14	23.5	0.517	1.014	0.524
	Band V/RMC	1	Left Cheek	4183	836.6	23.44	0.04	23.5	0.348	1.014	0.353
	Band V/RMC	1	Left Tilted	4183	836.6	23.44	0.03	23.5	0.304	1.014	0.308
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 2(20MHz) QPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band2/1RB#49	1	Right Cheek	18900	1880	23.47	0.03	24.5	0.167	1.268	0.212
6	Band2/1RB#49	1	Right Tilted	18900	1880	23.47	0.08	24.5	**0.210**	1.268	0.266
	Band2/1RB#49	1	Left Cheek	18900	1880	23.47	-0.18	24.5	0.085	1.268	0.108
	Band2/1RB#49	1	Left Tilted	18900	1880	23.47	-0.05	24.5	0.104	1.268	0.132
	Band2/50%RB#49	1	Right Cheek	18900	1880	22.45	-0.04	23.5	0.145	1.274	0.185
	Band2/50%RB#49	1	Right Tilted	18900	1880	22.45	0.08	23.5	0.186	1.274	0.237
	Band2/50%RB#49	1	Left Cheek	18900	1880	22.45	-0.12	23.5	0.077	1.274	0.098
	Band2/50%RB#49	1	Left Tilted	18900	1880	22.45	0.06	23.5	0.096	1.274	0.122
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 5(10MHz) QPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
7	Band5/1RB#24	1	Right Cheek	20450	829	23.42	0.10	24.0	**0.716**	1.143	0.818
	Band5/1RB#24	1	Right Tilted	20450	829	23.42	0.06	24.0	0.585	1.143	0.669
	Band5/1RB#24	1	Left Cheek	20450	829	23.42	-0.01	24.0	0.439	1.143	0.502
	Band5/1RB#24	1	Left Tilted	20450	829	23.42	-0.02	24.0	0.392	1.143	0.448
	Band5/1RB#24	1	Right Cheek	20525	836.5	23.37	-0.09	24.0	0.685	1.156	0.792
	Band5/1RB#49	1	Right Cheek	20600	844	23.27	0.11	24.0	0.648	1.183	0.767
	Band5/50%RB#0	1	Right Cheek	20525	836.5	22.43	0.05	22.5	0.689	1.016	0.700
	Band5/50%RB#0	1	Right Tilted	20525	836.5	22.43	-0.07	22.5	0.547	1.016	0.556
	Band5/50%RB#0	1	Left Cheek	20525	836.5	22.43	-0.05	22.5	0.415	1.016	0.422
	Band5/50%RB#0	1	Left Tilted	20525	836.5	22.43	-0.15	22.5	0.374	1.016	0.380
	Band5/100%RB#0	1	Right Cheek	20525	836.5	22.42	0.06	22.5	0.613	1.019	0.625
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 7(20MHz) QPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band7/1RB#49	1	Right Cheek	20850	2510	23.34	-0.18	23.5	0.191	1.038	0.198
	Band7/1RB#49	1	Right Tilted	20850	2510	23.34	-0.07	23.5	0.222	1.038	0.230
	Band7/1RB#49	1	Left Cheek	20850	2510	23.34	-0.01	23.5	0.091	1.038	0.094
	Band7/1RB#49	1	Left Tilted	20850	2510	23.34	-0.06	23.5	0.114	1.038	0.118
	Band7/50%RB#24	1	Right Cheek	20850	2510	22.21	0.12	22.5	0.182	1.069	0.195
	Band7/50%RB#24	1	Right Tilted	20850	2510	22.21	-0.14	22.5	0.203	1.069	0.217
	Band7/50%RB#24	1	Left Cheek	20850	2510	22.21	-0.13	22.5	0.083	1.069	0.089
	Band7/50%RB#24	1	Left Tilted	20850	2510	22.21	0.14	22.5	0.105	1.069	0.112
8	Band7/1RB#49	2	Right Cheek	20850	2510	20.56	0.14	21.0	**0.691**	1.107	0.765
	Band7/1RB#49	2	Right Tilted	20850	2510	20.56	-0.16	21.0	0.556	1.107	0.615
	Band7/1RB#49	2	Left Cheek	20850	2510	20.56	-0.17	21.0	0.384	1.107	0.425
	Band7/1RB#49	2	Left Tilted	20850	2510	20.56	-0.17	21.0	0.275	1.107	0.304
	Band7/50%RB#24	2	Right Cheek	20850	2510	19.43	-0.11	19.5	0.665	1.016	0.676
	Band7/50%RB#24	2	Right Tilted	20850	2510	19.43	0.20	19.5	0.531	1.016	0.539
	Band7/50%RB#24	2	Left Cheek	20850	2510	19.43	0.09	19.5	0.345	1.016	0.351
	Band7/50%RB#24	2	Left Tilted	20850	2510	19.43	-0.10	19.5	0.248	1.016	0.252
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 12(10MHz) QPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
9	Band12/1RB#99	1	Right Cheek	23060	704	23.77	0.02	24.0	**0.238**	1.054	0.251
	Band12/1RB#99	1	Right Tilted	23060	704	23.77	0.03	24.0	0.184	1.054	0.194
	Band12/1RB#99	1	Left Cheek	23060	704	23.77	-0.18	24.0	0.142	1.054	0.150
	Band12/1RB#99	1	Left Tilted	23060	704	23.77	0.10	24.0	0.108	1.054	0.114
	Band12/50%RB#0	1	Right Cheek	23130	711	22.77	-0.16	23.0	0.217	1.054	0.229
	Band12/50%RB#0	1	Right Tilted	23130	711	22.77	0.04	23.0	0.166	1.054	0.175
	Band12/50%RB#0	1	Left Cheek	23130	711	22.77	0.20	23.0	0.128	1.054	0.135
	Band12/50%RB#0	1	Left Tilted	23130	711	22.77	0.18	23.0	0.094	1.054	0.099
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ TDD-LTE Band41(20MHz) QPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	Band41/1RB#49	1	Right Cheek	40620	2593	23.38	0.02	24.0	0.115	1.153	1.008	0.134
	Band41/1RB#49	1	Right Tilted	40620	2593	23.38	-0.06	24.0	0.149	1.153	1.008	0.173
	Band41/1RB#49	1	Left Cheek	40620	2593	23.38	0.01	24.0	0.067	1.153	1.008	0.078
	Band41/1RB#49	1	Left Tilted	40620	2593	23.38	0.05	24.0	0.084	1.153	1.008	0.098
	Band41/50%RB#24	1	Right Cheek	40620	2593	22.34	0.19	22.5	0.102	1.038	1.008	0.107
	Band41/50%RB#24	1	Right Tilted	40620	2593	22.34	0.05	22.5	0.137	1.038	1.008	0.143
	Band41/50%RB#24	1	Left Cheek	40620	2593	22.34	-0.04	22.5	0.055	1.038	1.008	0.058
	Band41/50%RB#24	1	Left Tilted	40620	2593	22.34	-0.11	22.5	0.072	1.038	1.008	0.075
10	Band41/1RB#49	2	Right Cheek	41490	2680	20.30	0.08	20.5	**0.323**	1.047	1.008	0.341
	Band41/1RB#49	2	Right Tilted	41490	2680	20.30	0.11	20.5	0.256	1.047	1.008	0.270
	Band41/1RB#49	2	Left Cheek	41490	2680	20.30	0.11	20.5	0.178	1.047	1.008	0.188
	Band41/1RB#49	2	Left Tilted	41490	2680	20.30	-0.19	20.5	0.124	1.047	1.008	0.131
	Band41/50%RB#49	2	Right Cheek	41490	2680	19.30	0.12	19.5	0.315	1.047	1.008	0.332
	Band41/50%RB#49	2	Right Tilted	41490	2680	19.30	0.09	19.5	0.234	1.047	1.008	0.247
	Band41/50%RB#49	2	Left Cheek	41490	2680	19.30	0.10	19.5	0.151	1.047	1.008	0.159
	Band41/50%RB#49	2	Left Tilted	41490	2680	19.30	-0.06	19.5	0.105	1.047	1.008	0.111
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ FDD-LTE Band 66(20MHz) QPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band66/1RB#49	1	Right Cheek	132072	1720	24.38	0.17	24.5	0.197	1.028	0.203
11	Band66/1RB#49	1	Right Tilted	132072	1720	24.38	0.04	24.5	**0.232**	1.028	0.238
	Band66/1RB#49	1	Left Cheek	132072	1720	24.38	0.16	24.5	0.119	1.028	0.122
	Band66/1RB#49	1	Left Tilted	132072	1720	24.38	0.09	24.5	0.138	1.028	0.142
	Band66/50%RB#49	1	Right Cheek	132572	1770	23.35	-0.10	23.5	0.185	1.035	0.191
	Band66/50%RB#49	1	Right Tilted	132572	1770	23.35	0.16	23.5	0.214	1.035	0.221
	Band66/50%RB#49	1	Left Cheek	132572	1770	23.35	-0.03	23.5	0.104	1.035	0.108
	Band66/50%RB#49	1	Left Tilted	132572	1770	23.35	0.05	23.5	0.118	1.035	0.122
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ n5(20MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
12	NR n5 /1@49	1	Right Cheek	166800	834	23.00	0.01	23.5	**0.603**	1.122	0.677
	NR n5 /1@49	1	Right Tilted	166800	834	23.00	0.05	23.5	0.446	1.122	0.500
	NR n5 /1@49	1	Left Cheek	166800	834	23.00	0.08	23.5	0.385	1.122	0.432
	NR n5 /1@49	1	Left Tilted	166800	834	23.00	0.01	23.5	0.284	1.122	0.319
	NR n5 /25@12	1	Right Cheek	167300	836.5	23.17	0.06	23.5	0.580	1.079	0.626
	NR n5 /25@12	1	Right Tilted	167300	836.5	23.17	-0.12	23.5	0.417	1.079	0.450
	NR n5 /25@12	1	Left Cheek	167300	836.5	23.17	0.18	23.5	0.356	1.079	0.384
	NR n5 /25@12	1	Left Tilted	167300	836.5	23.17	-0.16	23.5	0.266	1.079	0.287
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n7(20MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n7/1@49	1	Right Cheek	512000	2560	23.05	-0.05	23.5	0.415	1.109	0.460
13	NR n7/1@49	1	Right Tilted	512000	2560	23.05	-0.02	23.5	**0.488**	1.109	0.541
	NR n7/1@49	1	Left Cheek	512000	2560	23.05	0.08	23.5	0.276	1.109	0.306
	NR n7/1@49	1	Left Tilted	512000	2560	23.05	0.11	23.5	0.314	1.109	0.348
	NR n7/25@12	1	Right Cheek	512000	2560	23.17	0.19	23.5	0.401	1.079	0.433
	NR n7/25@12	1	Right Tilted	512000	2560	23.17	-0.19	23.5	0.462	1.079	0.498
	NR n7/25@12	1	Left Cheek	512000	2560	23.17	0.11	23.5	0.255	1.079	0.275
	NR n7/25@12	1	Left Tilted	512000	2560	23.17	0.14	23.5	0.306	1.079	0.330
	NR n7/1@49 NSA	1	Right Cheek	512000	2560	20.05	0.15	20.5	0.328	1.109	0.364
	NR n7/1@49 NSA	1	Right Tilted	512000	2560	20.05	-0.13	20.5	0.386	1.109	0.428
	NR n7/1@49 NSA	1	Left Cheek	512000	2560	20.05	0.11	20.5	0.167	1.109	0.185
	NR n7/1@49 NSA	1	Left Tilted	512000	2560	20.05	-0.05	20.5	0.195	1.109	0.216
	NR n7/25@12 NSA	1	Right Cheek	507000	2535	20.11	-0.06	20.5	0.303	1.094	0.331
	NR n7/25@12 NSA	1	Right Tilted	507000	2535	20.11	0.17	20.5	0.352	1.094	0.385
	NR n7/25@12 NSA	1	Left Cheek	507000	2535	20.11	-0.11	20.5	0.148	1.094	0.162
	NR n7/25@12 NSA	1	Left Tilted	507000	2535	20.11	-0.05	20.5	0.181	1.094	0.198
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ n12(15MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
14	NR n12/1@1	1	Right Cheek	141700	708.5	23.14	-0.14	23.5	**0.147**	1.086	0.160
	NR n12/1@1	1	Right Tilted	141700	708.5	23.14	-0.11	23.5	0.124	1.086	0.135
	NR n12/1@1	1	Left Cheek	141700	708.5	23.14	-0.19	23.5	0.102	1.086	0.111
	NR n12/1@1	1	Left Tilted	141700	708.5	23.14	0.04	23.5	0.085	1.086	0.092
	NR n12/18@9	1	Right Cheek	141700	708.5	23.10	-0.07	23.5	0.139	1.096	0.152
	NR n12/18@9	1	Right Tilted	141700	708.5	23.10	0.06	23.5	0.114	1.096	0.125
	NR n12/18@9	1	Left Cheek	141700	708.5	23.10	0.12	23.5	0.097	1.096	0.106
	NR n12/18@9	1	Left Tilted	141700	708.5	23.10	0.03	23.5	0.080	1.096	0.088
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n41(100MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n41 /1@1	1	Right Cheek	518598	2592.99	25.96	0.07	26.0	0.257	1.009	0.259
	NR n41 /1@1	1	Right Tilted	518598	2592.99	25.96	0.08	26.0	0.280	1.009	0.283
	NR n41 /1@1	1	Left Cheek	518598	2592.99	25.96	0.04	26.0	0.102	1.009	0.103
	NR n41 /1@1	1	Left Tilted	518598	2592.99	25.96	-0.13	26.0	0.124	1.009	0.125
	NR n41 /135@67	1	Right Cheek	518598	2592.99	26.87	0.14	27.0	0.447	1.030	0.460
15	NR n41 /135@67	1	Right Tilted	518598	2592.99	26.87	0.02	27.0	**0.479**	1.030	0.493
	NR n41 /135@67	1	Left Cheek	518598	2592.99	26.87	0.11	27.0	0.232	1.030	0.239
	NR n41 /135@67	1	Left Tilted	518598	2592.99	26.87	-0.08	27.0	0.267	1.030	0.275
	NR n41 /1@1 NSA	1	Right Cheek	509202	2546.01	20.19	0.10	20.5	0.125	1.074	0.134
	NR n41 /1@1 NSA	1	Right Tilted	509202	2546.01	20.19	0.16	20.5	0.144	1.074	0.155
	NR n41 /1@1 NSA	1	Left Cheek	509202	2546.01	20.19	-0.12	20.5	0.047	1.074	0.050
	NR n41 /1@1 NSA	1	Left Tilted	509202	2546.01	20.19	-0.11	20.5	0.068	1.074	0.073
	NR n41 /135@67 NSA	1	Right Cheek	509202	2546.01	21.07	0.17	21.5	0.214	1.104	0.236
	NR n41 /135@67 NSA	1	Right Tilted	509202	2546.01	21.07	0.01	21.5	0.246	1.104	0.272
	NR n41 /135@67 NSA	1	Left Cheek	509202	2546.01	21.07	0.05	21.5	0.107	1.104	0.118
	NR n41 /135@67 NSA	1	Left Tilted	509202	2546.01	21.07	0.09	21.5	0.128	1.104	0.141
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n66(40MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n66 /1@1	1	Right Cheek	352000	1760	22.85	0.19	23.0	0.405	1.035	0.419
	NR n66 /1@1	1	Right Tilted	352000	1760	22.85	0.01	23.0	0.470	1.035	0.486
	NR n66 /1@1	1	Left Cheek	352000	1760	22.85	-0.03	23.0	0.264	1.035	0.273
	NR n66 /1@1	1	Left Tilted	352000	1760	22.85	0.06	23.0	0.298	1.035	0.308
	NR n66 /50@25	1	Right Cheek	346000	1730	23.36	0.11	23.5	0.434	1.033	0.448
16	NR n66 /50@25	1	Right Tilted	346000	1730	23.36	0.02	23.5	**0.515**	1.033	0.532
	NR n66 /50@25	1	Left Cheek	346000	1730	23.36	0.04	23.5	0.295	1.033	0.305
	NR n66 /50@25	1	Left Tilted	346000	1730	23.36	0.01	23.5	0.342	1.033	0.353
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n77(3450MHz~3550MHz) (100MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n77 /1@1	6	Right Cheek	633334	3500.01	26.48	-0.02	26.5	0.304	1.005	0.306
	NR n77 /1@1	6	Right Tilted	633334	3500.01	26.48	0.19	26.5	0.271	1.005	0.272
	NR n77 /1@1	6	Left Cheek	633334	3500.01	26.48	-0.08	26.5	0.455	1.005	0.457
	NR n77 /1@1	6	Left Tilted	633334	3500.01	26.48	0.13	26.5	0.386	1.005	0.388
	NR n77 /135@67	6	Right Cheek	633334	3500.01	27.29	-0.04	28.0	0.368	1.178	0.434
	NR n77 /135@67	6	Right Tilted	633334	3500.01	27.29	-0.12	28.0	0.315	1.178	0.371
17	NR n77 /135@67	6	Left Cheek	633334	3500.01	27.29	0.01	28.0	**0.593**	1.178	0.699
	NR n77 /135@67	6	Left Tilted	633334	3500.01	27.29	0.08	28.0	0.515	1.178	0.607
	NR n77 /1@1 NSA	6	Right Cheek	633334	3500.01	19.43	0.04	19.5	0.309	1.016	0.314
	NR n77 /1@1 NSA	6	Right Tilted	633334	3500.01	19.43	-0.03	19.5	0.258	1.016	0.262
	NR n77 /1@1 NSA	6	Left Cheek	633334	3500.01	19.43	-0.14	19.5	0.526	1.016	0.534
	NR n77 /1@1 NSA	6	Left Tilted	633334	3500.01	19.43	-0.13	19.5	0.443	1.016	0.450
	NR n77 /135@67 NSA	6	Right Cheek	633334	3500.01	20.39	0.20	21.0	0.324	1.151	0.373
	NR n77 /135@67 NSA	6	Right Tilted	633334	3500.01	20.39	0.00	21.0	0.279	1.151	0.321
	NR n77 /135@67 NSA	6	Left Cheek	633334	3500.01	20.39	0.05	21.0	0.541	1.151	0.623
	NR n77 /135@67 NSA	6	Left Tilted	633334	3500.01	20.39	0.01	21.0	0.471	1.151	0.542
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n77(3700MHz~3980MHz) (100MHz) DFT-BPSK Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n77 /1@271	6	Right Cheek	662000	3930	26.13	-0.18	26.5	0.149	1.089	0.162
	NR n77 /1@271	6	Right Tilted	662000	3930	26.13	0.02	26.5	0.175	1.089	0.191
	NR n77 /1@271	6	Left Cheek	662000	3930	26.13	-0.02	26.5	0.263	1.089	0.286
	NR n77 /1@271	6	Left Tilted	662000	3930	26.13	0.12	26.5	0.234	1.089	0.255
	NR n77 /135@67	6	Right Cheek	650000	3750	27.03	0.06	27.5	0.162	1.114	0.180
	NR n77 /135@67	6	Right Tilted	650000	3750	27.03	0.12	27.5	0.198	1.114	0.221
18	NR n77 /135@67	6	Left Cheek	650000	3750	27.03	-0.07	27.5	**0.355**	1.114	0.395
	NR n77 /135@67	6	Left Tilted	650000	3750	27.03	0.06	27.5	0.318	1.114	0.354
	NR n77 /1@1 NSA	6	Right Cheek	650000	3750	18.85	0.09	19.0	0.108	1.035	0.112
	NR n77 /1@1 NSA	6	Right Tilted	650000	3750	18.85	-0.02	19.0	0.142	1.035	0.147
	NR n77 /1@1 NSA	6	Left Cheek	650000	3750	18.85	0.14	19.0	0.227	1.035	0.235
	NR n77 /1@1 NSA	6	Left Tilted	650000	3750	18.85	0.14	19.0	0.195	1.035	0.202
	NR n77 /135@67 NSA	6	Right Cheek	650000	3750	19.81	-0.12	20.0	0.136	1.045	0.142
	NR n77 /135@67 NSA	6	Right Tilted	650000	3750	19.81	-0.20	20.0	0.171	1.045	0.179
	NR n77 /135@67 NSA	6	Left Cheek	650000	3750	19.81	0.19	20.0	0.323	1.045	0.338
	NR n77 /135@67 NSA	6	Left Tilted	650000	3750	19.81	0.18	20.0	0.283	1.045	0.296
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ WLAN 2.4 GHz Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	2.4GHz/802.11b	5	Right Cheek	11	2462	17.11	-0.02	17.5	0.030	1.094	1.000	0.033
	2.4GHz/802.11b	5	Right Tilted	11	2462	17.11	-0.13	17.5	0.012	1.094	1.000	0.013
	2.4GHz/802.11b	5	Left Cheek	11	2462	17.11	0.06	17.5	0.089	1.094	1.000	0.097
	2.4GHz/802.11b	5	Left Tilted	11	2462	17.11	0.00	17.5	0.031	1.094	1.000	0.034
	2.4GHz/802.11b	7	Right Cheek	11	2462	16.70	0.02	17.0	0.060	1.072	1.000	0.064
	2.4GHz/802.11b	7	Right Tilted	11	2462	16.70	-0.09	17.0	0.069	1.072	1.000	0.074
	2.4GHz/802.11b	7	Left Cheek	11	2462	16.70	0.05	17.0	0.080	1.072	1.000	0.086
19	2.4GHz/802.11b	7	Left Tilted	11	2462	16.70	0.01	17.0	**0.095**	1.072	1.000	0.102
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ WLAN 5.2 GHz Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	5.2GHz/802.11n40	5	Right Cheek	46	5230	13.54	0.07	14.0	0.061	1.112	1.000	0.068
	5.2GHz/802.11n40	5	Right Tilted	46	5230	13.54	0.03	14.0	0.028	1.112	1.000	0.031
20	5.2GHz/802.11n40	5	Left Cheek	46	5230	13.54	-0.08	14.0	**0.206**	1.112	1.000	0.229
	5.2GHz/802.11n40	5	Left Tilted	46	5230	13.54	0.17	14.0	0.094	1.112	1.000	0.105
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ WLAN 5.8 GHz Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	5.8GHz/802.11a	5	Right Cheek	157	5785	13.91	-0.08	14.5	0.055	1.146	1.000	0.063
	5.8GHz/802.11a	5	Right Tilted	157	5785	13.91	-0.06	14.5	0.025	1.146	1.000	0.029
21	5.8GHz/802.11a	5	Left Cheek	157	5785	13.91	-0.08	14.5	**0.199**	1.146	1.000	0.228
	5.8GHz/802.11a	5	Left Tilted	157	5785	13.91	0.13	14.5	0.087	1.146	1.000	0.100
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ Bluetooth Head SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	BT/π/4DQPSK	5	Right Cheek	78	2480	10.47	0.05	10.5	0.008	1.007	1.000	0.008
	BT/π/4DQPSK	5	Right Tilted	78	2480	10.47	-0.19	10.5	0.005	1.007	1.000	0.005
22	BT/π/4DQPSK	5	Left Cheek	78	2480	10.47	0.01	10.5	**0.020**	1.007	1.000	0.020
	BT/π/4DQPSK	5	Left Tilted	78	2480	10.47	0.16	10.5	0.011	1.007	1.000	0.011
	BT/GFSK	7	Right Cheek	78	2480	8.58	0.18	9.0	0.012	1.102	1.000	0.013
	BT/GFSK	7	Right Tilted	78	2480	8.58	0.01	9.0	0.013	1.102	1.000	0.014
	BT/GFSK	7	Left Cheek	78	2480	8.58	-0.18	9.0	0.015	1.102	1.000	0.017
	BT/GFSK	7	Left Tilted	78	2480	8.58	-0.16	9.0	0.017	1.102	1.000	0.019
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

Note:

1. Per KDB 447498 D04v01, for each exposure position, if the highest output power channel Reported SAR ≤ 0.8W/kg, other channels SAR testing is not necessary.
2. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8W/kg.
3. Per KDB 941225 D05v02r05, 100% RB allocation SAR measurement is not required when the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
4. Per KDB 248227 D01v02r02, for 802.11b DSSS , 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 in that exposure configuration.
5. Per KDB 248227 D01v02r02, OFDM SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg. Cuz the maximum output power specified for OFDM and DSSS are 28.18mW(14.5dBm) and 56.23mW(17.5dBm), the scaled SAR would be 0.102×(28.18/56.23)=0.051W/Kg<1.2 W/kg, therefore, SAR is not required for OFDM.
6. According to KDB 865664 D02v01r02, SAR plot is required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.

15.2 Standalone Body SAR

➢ GSM Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	GPRS850/4 slots	1	Front	190	836.6	29.67	0.02	30.0	0.298	1.079	0.322
23	GPRS850/4 slots	1	Back	190	836.6	29.67	-0.13	30.0	**0.548**	1.079	0.591
	GPRS1900/4 slots	1	Front	661	1880	26.69	0.07	27.0	0.452	1.074	0.485
24	GPRS1900/4 slots	1	Back	661	1880	26.69	0.10	27.0	**0.742**	1.074	0.797
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ WCDMA Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band II/RMC	1	Front	9400	1880	23.77	0.10	24.0	0.112	1.054	0.118
25	Band II/RMC	1	Back	9400	1880	23.77	-0.05	24.0	**0.189**	1.054	0.199
	Band IV/RMC	1	Front	1513	1752.6	23.54	0.02	24.0	0.157	1.112	0.175
26	Band IV/RMC	1	Back	1513	1752.6	23.54	0.03	24.0	**0.249**	1.112	0.277
	Band V/RMC	1	Front	4183	836.6	23.44	0.00	23.5	0.134	1.014	0.136
27	Band V/RMC	1	Back	4183	836.6	23.44	-0.03	23.5	**0.216**	1.014	0.219
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 2(20MHz) QPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band2/1RB#49	1	Front	18900	1880	23.47	-0.04	24.0	0.044	1.130	0.050
28	Band2/1RB#49	1	Back	18900	1880	23.47	0.08	24.0	**0.065**	1.130	0.073
	Band2/50%RB#49	1	Front	18900	1880	22.45	-0.03	22.5	0.039	1.012	0.039
	Band2/50%RB#49	1	Back	18900	1880	22.45	-0.12	22.5	0.058	1.012	0.059
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 5(10MHz) QPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band5/1RB#24	1	Front	20450	829	23.42	0.03	24.0	0.104	1.143	0.119
29	Band5/1RB#24	1	Back	20450	829	23.42	-0.03	24.0	**0.114**	1.143	0.130
	Band5/50%RB#0	1	Front	20525	836.5	22.43	0.19	22.5	0.097	1.016	0.099
	Band5/50%RB#0	1	Back	20525	836.5	22.43	-0.18	22.5	0.103	1.016	0.105
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 7(20MHz) QPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band7/1RB#49	1	Front	20850	2510	23.34	0.09	23.5	0.061	1.038	0.063
	Band7/1RB#49	1	Back	20850	2510	23.34	0.04	23.5	0.173	1.038	0.180
	Band7/50%RB#24	1	Front	20850	2510	22.21	0.12	22.5	0.055	1.069	0.059
	Band7/50%RB#24	1	Back	20850	2510	22.21	0.15	22.5	0.164	1.069	0.175
	Band7/1RB#49	2	Front	20850	2510	20.56	0.05	21.0	0.217	1.107	0.240
30	Band7/1RB#49	2	Back	20850	2510	20.56	-0.04	21.0	**0.509**	1.107	0.563
	Band7/50%RB#24	2	Front	20850	2510	19.43	0.08	19.5	0.202	1.016	0.205
	Band7/50%RB#24	2	Back	20850	2510	19.43	-0.12	19.5	0.478	1.016	0.486
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 12(10MHz) QPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band12/1RB#99	1	Front	23060	704	23.77	0.08	24.0	0.018	1.054	0.019
31	Band12/1RB#99	1	Back	23060	704	23.77	0.04	24.0	**0.033**	1.054	0.034
	Band12/50%RB#0	1	Front	23130	711	22.77	-0.03	23.0	0.016	1.054	0.017
	Band12/50%RB#0	1	Back	23130	711	22.77	0.18	23.0	0.029	1.054	0.031
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ TDD-LTE Band 41(20MHz) QPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	Band41/1RB#49	1	Front	40620	2593	23.38	0.15	24.0	0.052	1.153	1.008	0.060
	Band41/1RB#49	1	Back	40620	2593	23.38	-0.13	24.0	0.127	1.153	1.008	0.148
	Band41/50%RB#24	1	Front	40620	2593	22.34	-0.20	22.5	0.044	1.038	1.008	0.046
	Band41/50%RB#24	1	Back	40620	2593	22.34	-0.02	22.5	0.116	1.038	1.008	0.121
	Band41/1RB#49	2	Front	41490	2680	20.30	-0.01	20.5	0.098	1.047	1.008	0.103
32	Band41/1RB#49	2	Back	41490	2680	20.30	-0.08	20.5	**0.260**	1.047	1.008	0.274
	Band41/50%RB#49	2	Front	41490	2680	19.30	-0.14	19.5	0.086	1.047	1.008	0.091
	Band41/50%RB#49	2	Back	41490	2680	19.30	0.02	19.5	0.243	1.047	1.008	0.256
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ FDD-LTE Band 66(20MHz) QPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band66/1RB#49	1	Front	132072	1720	24.38	0.17	24.5	0.048	1.028	0.049
33	Band66/1RB#49	1	Back	132072	1720	24.38	-0.07	24.5	**0.075**	1.028	0.077
	Band66/50%RB#49	1	Front	132572	1770	23.35	-0.12	23.5	0.042	1.035	0.043
	Band66/50%RB#49	1	Back	132572	1770	23.35	0.16	23.5	0.068	1.035	0.070
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n5(20MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n5 /1@49	1	Front	166800	834	23.00	0.13	23.5	0.137	1.122	0.154
34	NR n5 /1@49	1	Back	166800	834	23.00	-0.06	23.5	**0.223**	1.122	0.250
	NR n5 /25@12	1	Front	167300	836.5	23.17	0.11	23.5	0.125	1.079	0.135
	NR n5 /25@12	1	Back	167300	836.5	23.17	-0.01	23.5	0.222	1.079	0.240
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n7(20MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n7/1@49	1	Front	512000	2560	23.05	-0.02	23.5	0.255	1.109	0.283
	NR n7/1@49	1	Back	512000	2560	23.05	-0.05	23.5	0.393	1.109	0.436
	NR n7/25@12	1	Front	512000	2560	23.17	0.15	23.5	0.267	1.079	0.288
35	NR n7/25@12	1	Back	512000	2560	23.17	0.05	23.5	**0.398**	1.079	0.429
	NR n7/1@49 NSA	1	Front	512000	2560	20.05	-0.11	20.5	0.175	1.109	0.194
	NR n7/1@49 NSA	1	Back	512000	2560	20.05	-0.08	20.5	0.266	1.109	0.295
	NR n7/25@12 NSA	1	Front	507000	2535	20.11	-0.03	20.5	0.182	1.094	0.199
	NR n7/25@12 NSA	1	Back	507000	2535	20.11	0.02	20.5	0.277	1.094	0.303
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n12(15MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n12/1@1	1	Front	141700	708.5	23.14	-0.12	23.5	0.041	1.086	0.045
36	NR n12/1@1	1	Back	141700	708.5	23.14	-0.05	23.5	**0.062**	1.086	0.067
	NR n12/18@9	1	Front	141700	708.5	23.10	0.01	23.5	0.034	1.096	0.037
	NR n12/18@9	1	Back	141700	708.5	23.10	0.11	23.5	0.055	1.096	0.060
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n41(100MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n41 /1@1	1	Front	518598	2592.99	25.96	0.17	26.0	0.112	1.009	0.113
37	NR n41 /1@1	1	Back	518598	2592.99	25.96	0.03	26.0	**0.163**	1.009	0.164
	NR n41 /135@67	1	Front	518598	2592.99	26.87	-0.17	27.0	0.103	1.030	0.106
	NR n41 /135@67	1	Back	518598	2592.99	26.87	0.08	27.0	0.157	1.030	0.162
	NR n41 /1@1 NSA	1	Front	509202	2546.01	20.19	-0.03	20.5	0.051	1.074	0.055
	NR n41 /1@1 NSA	1	Back	509202	2546.01	20.19	0.09	20.5	0.083	1.074	0.089
	NR n41 /135@67 NSA	1	Front	509202	2546.01	21.07	0.09	21.5	0.045	1.104	0.050
	NR n41 /135@67 NSA	1	Back	509202	2546.01	21.07	0.16	21.5	0.073	1.104	0.081
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n66(40MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n66 /1@1	1	Front	352000	1760	22.85	0.15	23.0	0.113	1.035	0.117
	NR n66 /1@1	1	Back	352000	1760	22.85	0.00	23.0	0.140	1.035	0.145
	NR n66 /50@25	1	Front	346000	1730	23.36	0.08	23.5	0.122	1.033	0.126
38	NR n66 /50@25	1	Back	346000	1730	23.36	0.01	23.5	**0.157**	1.033	0.162
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n77(3450MHz~3550MHz) (100MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n77 /1@1	6	Front	633334	3500.01	26.48	-0.08	26.5	0.141	1.005	0.142
39	NR n77 /1@1	6	Back	633334	3500.01	26.48	0.08	26.5	**0.235**	1.005	0.236
	NR n77 /135@67	6	Front	633334	3500.01	27.29	0.15	28.0	0.079	1.178	0.093
	NR n77 /135@67	6	Back	633334	3500.01	27.29	0.04	28.0	0.134	1.178	0.158
	NR n77 /1@1 NSA	6	Front	633334	3500.01	19.43	0.11	19.5	0.128	1.016	0.130
	NR n77 /1@1 NSA	6	Back	633334	3500.01	19.43	0.12	19.5	0.224	1.016	0.228
	NR n77 /135@67 NSA	6	Front	633334	3500.01	20.39	-0.05	21.0	0.062	1.151	0.071
	NR n77 /135@67 NSA	6	Back	633334	3500.01	20.39	0.03	21.0	0.115	1.151	0.132
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n77(3700MHz~3980MHz)(100MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n77 /1@271	6	Front	662000	3930	26.13	0.03	26.5	0.121	1.089	0.132
	NR n77 /1@271	6	Back	662000	3930	26.13	-0.07	26.5	0.202	1.089	0.220
	NR n77 /135@67	6	Front	650000	3750	27.03	0.10	27.5	0.125	1.114	0.139
40	NR n77 /135@67	6	Back	650000	3750	27.03	0.02	27.5	**0.213**	1.114	0.237
	NR n77 /1@1 NSA	6	Front	650000	3750	18.85	-0.13	19.0	0.112	1.035	0.116
	NR n77 /1@1 NSA	6	Back	650000	3750	18.85	-0.16	19.0	0.182	1.035	0.188
	NR n77 /135@67 NSA	6	Front	650000	3750	19.81	-0.01	20.0	0.121	1.045	0.126
	NR n77 /135@67 NSA	6	Back	650000	3750	19.81	-0.05	20.0	0.195	1.045	0.204
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ WLAN 2.4GHz Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	2.4GHz/802.11b	5	Front	11	2462	17.11	0.02	17.5	0.017	1.094	1.000	0.019
	2.4GHz/802.11b	5	Back	11	2462	17.11	0.00	17.5	0.028	1.094	1.000	0.031
	2.4GHz/802.11b	7	Front	11	2462	16.70	-0.01	17.0	0.016	1.072	1.000	0.017
41	2.4GHz/802.11b	7	Back	11	2462	16.70	0.09	17.0	**0.030**	1.072	1.000	0.032
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ WLAN 5.2GHz Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	5.2GHz/802.11n40	5	Front	46	5230	13.54	0.02	14.0	0.056	1.112	1.000	0.062
42	5.2GHz/802.11n40	5	Back	46	5230	13.54	-0.04	14.0	**0.184**	1.112	1.000	0.205
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ WLAN 5.8GHz Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	5.8GHz/802.11a	5	Front	157	5785	13.91	-0.03	14.5	0.042	1.146	1.000	0.048
43	5.8GHz/802.11a	5	Back	157	5785	13.91	-0.02	14.5	**0.129**	1.146	1.000	0.148
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ Bluetooth Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	BT/π/4DQPSK	5	Front	78	2480	10.47	0.03	10.5	0.005	1.007	1.000	0.005
44	BT/π/4DQPSK	5	Back	78	2480	10.47	0.05	10.5	**0.014**	1.007	1.000	0.014
	BT/GFSK	7	Front	78	2480	8.58	0.07	9.0	0.004	1.102	1.000	0.004
	BT/GFSK	7	Back	78	2480	8.58	0.03	9.0	0.011	1.102	1.000	0.012
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

Note:

1. Body-worn SAR testing was performed at 10mm separation, and this distance is determined by the handset manufacturer that there will be body-worn accessories that users may acquire at the time of equipment certification, to enable users to purchase aftermarket body-worn accessories with the required minimum separation.
2. Per KDB 941225 D06v02r01, when the same wireless modes and device transmission configurations are required for testing body-worn accessories and hotspot mode, it is not necessary to test body-worn accessory SAR for the same device orientation if the test separation distance for hotspot mode is more conservative than that used for body-worn accessories.
3. Per KDB 648474 D04v01r03, when the Reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
4. The WLAN SAR perform the front and back position, due considered the simultaneous SAR for body-worn.
5. Per KDB 447498 D04v01, for each exposure position, if the highest output channel Reported SAR ≤0.8W/kg, other channels SAR testing is not necessary.
6. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥0.8W/kg.
7. Per KDB 941225 D05v02r05, 100% RB allocation SAR measurement is not required when the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
8. According to KDB 865664 D02v01r02, SAR plot is required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.
9. Highlight part of test data means repeated test.

15.3 Body SAR in Hotspot Mode

➢ GSM Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	GPRS850/4 slots	1	Front	190	836.6	29.67	0.02	30.0	0.298	1.079	0.322
23	GPRS850/4 slots	1	Back	190	836.6	29.67	-0.13	30.0	**0.548**	1.079	0.591
	GPRS850/4 slots	1	Left	190	836.6	29.67	-0.05	30.0	0.216	1.079	0.233
	GPRS850/4 slots	1	Top	190	836.6	29.67	0.14	30.0	0.255	1.079	0.275
	GPRS1900/4 slots	1	Front	661	1880	26.69	0.07	27.0	0.452	1.074	0.485
	GPRS1900/4 slots	1	Back	661	1880	26.69	0.10	27.0	0.742	1.074	0.797
	GPRS1900/4 slots	1	Left	661	1880	26.69	0.12	27.0	0.168	1.074	0.180
	GPRS1900/4 slots	1	Top	661	1880	26.69	0.00	27.0	1.030	1.074	1.106
45	GPRS1900/4 slots	1	Top	512	1850.2	26.59	-0.01	27.0	**1.190**	1.099	1.308
	GPRS1900/4 slots	1	Top	810	1909.8	26.65	0.00	27.0	1.080	1.084	1.171
	GPRS1900/4 slots	**1**	**Top**	**512**	**1850.2**	**26.59**	**-0.03**	**27.0**	**1.150**	**1.099**	**1.264**
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ WCDMA Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band II/RMC	1	Front	9400	1880	23.77	0.10	24.0	0.112	1.054	0.118
	Band II/RMC	1	Back	9400	1880	23.77	-0.05	24.0	0.189	1.054	0.199
	Band II/RMC	1	Left	9400	1880	23.77	-0.17	24.0	0.089	1.054	0.094
46	Band II/RMC	1	Top	9400	1880	23.77	-0.08	24.0	**0.250**	1.054	0.264
	Band IV/RMC	1	Front	1513	1752.6	23.54	0.02	24.0	0.157	1.112	0.175
	Band IV/RMC	1	Back	1513	1752.6	23.54	0.03	24.0	0.249	1.112	0.277
	Band IV/RMC	1	Left	1513	1752.6	23.54	-0.16	24.0	0.098	1.112	0.109
47	Band IV/RMC	1	Top	1513	1752.6	23.54	-0.05	24.0	**0.306**	1.112	0.340
	Band V/RMC	1	Front	4183	836.6	23.44	0.00	23.5	0.134	1.014	0.136
27	Band V/RMC	1	Back	4183	836.6	23.44	-0.03	23.5	**0.216**	1.014	0.219
	Band V/RMC	1	Left	4183	836.6	23.44	0.01	23.5	0.092	1.014	0.093
	Band V/RMC	1	Top	4183	836.6	23.44	-0.17	23.5	0.108	1.014	0.110
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 2(20MHz) QPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band2/1RB#49	1	Front	18900	1880	23.47	-0.04	24.0	0.044	1.130	0.050
	Band2/1RB#49	1	Back	18900	1880	23.47	0.08	24.0	0.065	1.130	0.073
	Band2/1RB#49	1	Left	18900	1880	23.47	-0.15	24.0	0.014	1.130	0.016
48	Band2/1RB#49	1	Top	18900	1880	23.47	0.00	24.0	**0.095**	1.130	0.107
	Band2/50%RB#49	1	Front	18900	1880	22.45	-0.03	22.5	0.039	1.012	0.039
	Band2/50%RB#49	1	Back	18900	1880	22.45	-0.12	22.5	0.058	1.012	0.059
	Band2/50%RB#49	1	Left	18900	1880	22.45	-0.04	22.5	0.011	1.012	0.011
	Band2/50%RB#49	1	Top	18900	1880	22.45	0.14	22.5	0.089	1.012	0.090
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 5(10MHz) QPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band5/1RB#24	1	Front	20450	829	23.42	0.03	24.0	0.104	1.143	0.119
29	Band5/1RB#24	1	Back	20450	829	23.42	-0.03	24.0	**0.114**	1.143	0.130
	Band5/1RB#24	1	Left	20450	829	23.42	0.04	24.0	0.073	1.143	0.083
	Band5/1RB#24	1	Top	20450	829	23.42	-0.05	24.0	0.087	1.143	0.099
	Band5/50%RB#0	1	Front	20525	836.5	22.43	0.19	22.5	0.097	1.016	0.099
	Band5/50%RB#0	1	Back	20525	836.5	22.43	-0.18	22.5	0.103	1.016	0.105
	Band5/50%RB#0	1	Left	20525	836.5	22.43	-0.07	22.5	0.068	1.016	0.069
	Band5/50%RB#0	1	Top	20525	836.5	22.43	0.15	22.5	0.081	1.016	0.082
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 7(20MHz) QPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band7/1RB#49	1	Front	20850	2510	23.34	0.09	23.5	0.061	1.038	0.063
	Band7/1RB#49	1	Back	20850	2510	23.34	0.04	23.5	0.173	1.038	0.180
	Band7/1RB#49	1	Left	20850	2510	23.34	0.12	23.5	0.028	1.038	0.029
	Band7/1RB#49	1	Top	20850	2510	23.34	-0.16	23.5	0.225	1.038	0.234
	Band7/50%RB#24	1	Front	20850	2510	22.21	0.12	22.5	0.055	1.069	0.059
	Band7/50%RB#24	1	Back	20850	2510	22.21	0.15	22.5	0.164	1.069	0.175
	Band7/50%RB#24	1	Left	20850	2510	22.21	-0.13	22.5	0.022	1.069	0.024
	Band7/50%RB#24	1	Top	20850	2510	22.21	-0.05	22.5	0.198	1.069	0.212
	Band7/1RB#49	2	Front	20850	2510	20.56	0.05	21.0	0.217	1.107	0.240
	Band7/1RB#49	2	Back	20850	2510	20.56	-0.04	21.0	0.509	1.107	0.563
49	Band7/1RB#49	2	Left	20850	2510	20.56	0.02	21.0	**0.711**	1.107	0.787
	Band7/50%RB#24	2	Front	20850	2510	19.43	0.08	19.5	0.202	1.016	0.205
	Band7/50%RB#24	2	Back	20850	2510	19.43	-0.12	19.5	0.478	1.016	0.486
	Band7/50%RB#24	2	Left	20850	2510	19.43	-0.17	19.5	0.682	1.016	0.693
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ FDD-LTE Band 12(10MHz) QPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band12/1RB#99	1	Front	23060	704	23.77	0.08	24.0	0.018	1.054	0.019
31	Band12/1RB#99	1	Back	23060	704	23.77	0.04	24.0	**0.033**	1.054	0.034
	Band12/1RB#99	1	Left	23060	704	23.77	-0.10	24.0	0.011	1.054	0.012
	Band12/1RB#99	1	Top	23060	704	23.77	0.06	24.0	0.015	1.054	0.016
	Band12/50%RB#0	1	Front	23130	711	22.77	-0.03	23.0	0.016	1.054	0.017
	Band12/50%RB#0	1	Back	23130	711	22.77	0.18	23.0	0.029	1.054	0.031
	Band12/50%RB#0	1	Left	23130	711	22.77	0.07	23.0	0.009	1.054	0.009
	Band12/50%RB#0	1	Top	23130	711	22.77	0.17	23.0	0.013	1.054	0.014
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ TDD-LTE Band 41(20MHz) QPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	Band41/1RB#49	1	Front	40620	2593	23.38	0.15	24.0	0.052	1.153	1.008	0.060
	Band41/1RB#49	1	Back	40620	2593	23.38	-0.13	24.0	0.127	1.153	1.008	0.148
	Band41/1RB#49	1	Left	40620	2593	23.38	0.10	24.0	0.017	1.153	1.008	0.020
	Band41/1RB#49	1	Top	40620	2593	23.38	0.08	24.0	0.047	1.153	1.008	0.055
	Band41/50%RB#24	1	Front	40620	2593	22.34	-0.20	22.5	0.044	1.038	1.008	0.046
	Band41/50%RB#24	1	Back	40620	2593	22.34	-0.02	22.5	0.116	1.038	1.008	0.121
	Band41/50%RB#24	1	Left	40620	2593	22.34	0.08	22.5	0.013	1.038	1.008	0.014
	Band41/50%RB#24	1	Top	40620	2593	22.34	-0.06	22.5	0.040	1.038	1.008	0.042
	Band41/1RB#49	2	Front	41490	2680	20.30	-0.01	20.5	0.098	1.047	1.008	0.103
	Band41/1RB#49	2	Back	41490	2680	20.30	-0.08	20.5	0.260	1.047	1.008	0.274
50	Band41/1RB#49	2	Left	41490	2680	20.30	-0.02	20.5	**0.416**	1.047	1.008	0.439
	Band41/50%RB#49	2	Front	41490	2680	19.30	-0.14	19.5	0.086	1.047	1.008	0.091
	Band41/50%RB#49	2	Back	41490	2680	19.30	0.02	19.5	0.243	1.047	1.008	0.256
	Band41/50%RB#49	2	Left	41490	2680	19.30	-0.03	19.5	0.402	1.047	1.008	0.424
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ FDD-LTE Band 66(20MHz) QPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	Band66/1RB#49	1	Front	132072	1720	24.38	0.17	24.5	0.048	1.028	0.049
	Band66/1RB#49	1	Back	132072	1720	24.38	-0.07	24.5	0.075	1.028	0.077
	Band66/1RB#49	1	Left	132072	1720	24.38	-0.03	24.5	0.019	1.028	0.020
51	Band66/1RB#49	1	Top	132072	1720	24.38	-0.04	24.5	**0.097**	1.028	0.100
	Band66/50%RB#49	1	Front	132572	1770	23.35	-0.12	23.5	0.042	1.035	0.043
	Band66/50%RB#49	1	Back	132572	1770	23.35	0.16	23.5	0.068	1.035	0.070
	Band66/50%RB#49	1	Left	132572	1770	23.35	0.19	23.5	0.015	1.035	0.016
	Band66/50%RB#49	1	Top	132572	1770	23.35	0.15	23.5	0.088	1.035	0.091
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n5(20MHz) DFT-BPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n5 /1@49	1	Front	166800	834	23.00	0.13	23.5	0.137	1.122	0.154
34	NR n5 /1@49	1	Back	166800	834	23.00	-0.06	23.5	**0.223**	1.122	0.250
	NR n5 /1@49	1	Left	166800	834	23.00	-0.12	23.5	0.037	1.122	0.042
	NR n5 /1@49	1	Top	166800	834	23.00	0.11	23.5	0.098	1.122	0.110
	NR n5 /25@12	1	Front	167300	836.5	23.17	0.11	23.5	0.125	1.079	0.135
	NR n5 /25@12	1	Back	167300	836.5	23.17	-0.01	23.5	0.222	1.079	0.240
	NR n5 /25@12	1	Left	167300	836.5	23.17	0.16	23.5	0.033	1.079	0.036
	NR n5 /25@12	1	Top	167300	836.5	23.17	-0.13	23.5	0.089	1.079	0.096
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n7(20MHz) DFT-BPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n7/1@49	1	Front	512000	2560	23.05	-0.02	23.5	0.255	1.109	0.283
	NR n7/1@49	1	Back	512000	2560	23.05	-0.05	23.5	0.393	1.109	0.436
	NR n7/1@49	1	Left	512000	2560	23.05	0.04	23.5	0.045	1.109	0.050
	NR n7/1@49	1	Top	512000	2560	23.05	0.08	23.5	0.358	1.109	0.397
	NR n7/25@12	1	Front	512000	2560	23.17	0.15	23.5	0.267	1.079	0.288
35	NR n7/25@12	1	Back	512000	2560	23.17	0.05	23.5	**0.398**	1.079	0.429
	NR n7/25@12	1	Left	512000	2560	23.17	-0.13	23.5	0.057	1.079	0.062
	NR n7/25@12	1	Top	512000	2560	23.17	-0.04	23.5	0.371	1.079	0.400
	NR n7/1@49 NSA	1	Front	512000	2560	20.05	-0.11	20.5	0.175	1.109	0.194
	NR n7/1@49 NSA	1	Back	512000	2560	20.05	-0.08	20.5	0.266	1.109	0.295
	NR n7/1@49 NSA	1	Left	512000	2560	20.05	0.05	20.5	0.043	1.109	0.048
	NR n7/1@49 NSA	1	Top	512000	2560	20.05	0.13	20.5	0.245	1.109	0.272
	NR n7/25@12 NSA	1	Front	507000	2535	20.11	-0.03	20.5	0.182	1.094	0.199
	NR n7/25@12 NSA	1	Back	507000	2535	20.11	0.02	20.5	0.277	1.094	0.303
	NR n7/25@12 NSA	1	Left	507000	2535	20.11	0.11	20.5	0.048	1.094	0.053
	NR n7/25@12 NSA	1	Top	507000	2535	20.11	0.09	20.5	0.256	1.094	0.280
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n12(15MHz) DFT-BPSK Body SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n12/1@1	1	Front	141700	708.5	23.14	-0.12	23.5	0.041	1.086	0.045
36	NR n12/1@1	1	Back	141700	708.5	23.14	-0.05	23.5	**0.062**	1.086	0.067
	NR n12/1@1	1	Left	141700	708.5	23.14	0.16	23.5	0.012	1.086	0.013
	NR n12/1@1	1	Top	141700	708.5	23.14	0.15	23.5	0.033	1.086	0.036
	NR n12/18@9	1	Front	141700	708.5	23.10	0.01	23.5	0.034	1.096	0.037
	NR n12/18@9	1	Back	141700	708.5	23.10	0.11	23.5	0.055	1.096	0.060
	NR n12/18@9	1	Left	141700	708.5	23.10	0.08	23.5	0.010	1.096	0.011
	NR n12/18@9	1	Top	141700	708.5	23.10	0.04	23.5	0.028	1.096	0.031
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n41(100MHz) DFT-BPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n41 /1@1	1	Front	518598	2592.99	25.96	0.17	26.0	0.112	1.009	0.113
37	NR n41 /1@1	1	Back	518598	2592.99	25.96	0.03	26.0	**0.163**	1.009	0.164
	NR n41 /1@1	1	Left	518598	2592.99	25.96	-0.04	26.0	0.068	1.009	0.069
	NR n41 /1@1	1	Top	518598	2592.99	25.96	0.05	26.0	0.134	1.009	0.135
	NR n41 /135@67	1	Front	518598	2592.99	26.87	-0.17	27.0	0.103	1.030	0.106
	NR n41 /135@67	1	Back	518598	2592.99	26.87	0.08	27.0	0.157	1.030	0.162
	NR n41 /135@67	1	Left	518598	2592.99	26.87	-0.07	27.0	0.057	1.030	0.059
	NR n41 /135@67	1	Top	518598	2592.99	26.87	-0.13	27.0	0.119	1.030	0.123
	NR n41 /1@1 NSA	1	Front	509202	2546.01	20.19	-0.03	20.5	0.051	1.074	0.055
	NR n41 /1@1 NSA	1	Back	509202	2546.01	20.19	0.09	20.5	0.083	1.074	0.089
	NR n41 /1@1 NSA	1	Left	509202	2546.01	20.19	0.10	20.5	0.024	1.074	0.026
	NR n41 /1@1 NSA	1	Top	509202	2546.01	20.19	-0.15	20.5	0.058	1.074	0.062
	NR n41 /135@67 NSA	1	Front	509202	2546.01	21.07	0.09	21.5	0.045	1.104	0.050
	NR n41 /135@67 NSA	1	Back	509202	2546.01	21.07	0.16	21.5	0.073	1.104	0.081
	NR n41 /135@67 NSA	1	Left	509202	2546.01	21.07	-0.15	21.5	0.021	1.104	0.023
	NR n41 /135@67 NSA	1	Top	509202	2546.01	21.07	-0.18	21.5	0.050	1.104	0.055
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n66(40MHz) DFT-BPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n66 /1@1	1	Front	352000	1760	22.85	0.15	23.0	0.113	1.035	0.117
	NR n66 /1@1	1	Back	352000	1760	22.85	0.00	23.0	0.140	1.035	0.145
	NR n66 /1@1	1	Left	352000	1760	22.85	0.09	23.0	0.026	1.035	0.027
	NR n66 /1@1	1	Top	352000	1760	22.85	0.12	23.0	0.181	1.035	0.187
	NR n66 /50@25	1	Front	346000	1730	23.36	0.08	23.5	0.122	1.033	0.126
	NR n66 /50@25	1	Back	346000	1730	23.36	0.01	23.5	0.157	1.033	0.162
	NR n66 /50@25	1	Left	346000	1730	23.36	-0.16	23.5	0.029	1.033	0.030
52	NR n66 /50@25	1	Top	346000	1730	23.36	0.07	23.5	**0.222**	1.033	0.229
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n77(3450MHz~3550MHz) (100MHz) DFT-BPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n77 /1@1	6	Front	633334	3500.01	26.48	-0.08	26.5	0.141	1.005	0.142
39	NR n77 /1@1	6	Back	633334	3500.01	26.48	0.08	26.5	**0.235**	1.005	0.236
	NR n77 /1@1	6	Right	633334	3500.01	26.48	-0.01	26.5	0.037	1.005	0.037
	NR n77 /1@1	6	Top	633334	3500.01	26.48	-0.11	26.5	0.072	1.005	0.072
	NR n77 /135@67	6	Front	633334	3500.01	27.29	0.15	28.0	0.079	1.178	0.093
	NR n77 /135@67	6	Back	633334	3500.01	27.29	0.04	28.0	0.134	1.178	0.158
	NR n77 /135@67	6	Right	633334	3500.01	27.29	0.18	28.0	0.021	1.178	0.025
	NR n77 /135@67	6	Top	633334	3500.01	27.29	0.03	28.0	0.048	1.178	0.057
	NR n77 /1@1 NSA	6	Front	633334	3500.01	19.43	0.11	19.5	0.128	1.016	0.130
	NR n77 /1@1 NSA	6	Back	633334	3500.01	19.43	0.12	19.5	0.224	1.016	0.228
	NR n77 /1@1 NSA	6	Right	633334	3500.01	19.43	-0.08	19.5	0.031	1.016	0.031
	NR n77 /1@1 NSA	6	Top	633334	3500.01	19.43	-0.17	19.5	0.064	1.016	0.065
	NR n77 /135@67 NSA	6	Front	633334	3500.01	20.39	-0.05	21.0	0.062	1.151	0.071
	NR n77 /135@67 NSA	6	Back	633334	3500.01	20.39	0.03	21.0	0.115	1.151	0.132
	NR n77 /135@67 NSA	6	Right	633334	3500.01	20.39	-0.05	21.0	0.016	1.151	0.018
	NR n77 /135@67 NSA	6	Top	633334	3500.01	20.39	-0.06	21.0	0.036	1.151	0.041
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ NR n77(3700MHz~3980MHz)(100MHz) DFT-BPSK Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)
	NR n77 /1@271	6	Front	662000	3930	26.13	0.03	26.5	0.121	1.089	0.132
	NR n77 /1@271	6	Back	662000	3930	26.13	-0.07	26.5	0.202	1.089	0.220
	NR n77 /1@271	6	Right	662000	3930	26.13	0.05	26.5	0.033	1.089	0.036
	NR n77 /1@271	6	Top	662000	3930	26.13	-0.15	26.5	0.063	1.089	0.069
	NR n77 /135@67	6	Front	650000	3750	27.03	0.10	27.5	0.125	1.114	0.139
40	NR n77 /135@67	6	Back	650000	3750	27.03	0.02	27.5	**0.213**	1.114	0.237
	NR n77 /135@67	6	Right	650000	3750	27.03	-0.16	27.5	0.037	1.114	0.041
	NR n77 /135@67	6	Top	650000	3750	27.03	0.15	27.5	0.068	1.114	0.076
	NR n77 /1@1 NSA	6	Front	650000	3750	18.85	-0.13	19.0	0.112	1.035	0.116
	NR n77 /1@1 NSA	6	Back	650000	3750	18.85	-0.16	19.0	0.182	1.035	0.188
	NR n77 /1@1 NSA	6	Right	650000	3750	18.85	-0.17	19.0	0.021	1.035	0.022
	NR n77 /1@1 NSA	6	Top	650000	3750	18.85	0.20	19.0	0.053	1.035	0.055
	NR n77 /135@67 NSA	6	Front	650000	3750	19.81	-0.01	20.0	0.121	1.045	0.126
	NR n77 /135@67 NSA	6	Back	650000	3750	19.81	-0.05	20.0	0.195	1.045	0.204
	NR n77 /135@67 NSA	6	Right	650000	3750	19.81	0.11	20.0	0.026	1.045	0.027
	NR n77 /135@67 NSA	6	Top	650000	3750	19.81	0.13	20.0	0.059	1.045	0.062
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**					

➢ WLAN 2.4GHz Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	2.4GHz/802.11b	5	Front	11	2462	17.11	0.02	17.5	0.017	1.094	1.000	0.019
	2.4GHz/802.11b	5	Back	11	2462	17.11	0.00	17.5	0.028	1.094	1.000	0.031
	2.4GHz/802.11b	5	Right	11	2462	17.11	-0.04	17.5	0.023	1.094	1.000	0.025
	2.4GHz/802.11b	5	Top	11	2462	17.11	-0.08	17.5	0.012	1.094	1.000	0.013
	2.4GHz/802.11b	7	Front	11	2462	16.70	-0.01	17.0	0.016	1.072	1.000	0.017
	2.4GHz/802.11b	7	Back	11	2462	16.70	0.09	17.0	0.030	1.072	1.000	0.032
	2.4GHz/802.11b	7	Right	11	2462	16.70	-0.19	17.0	0.012	1.072	1.000	0.013
53	2.4GHz/802.11b	7	Top	11	2462	16.70	-0.01	17.0	**0.036**	1.072	1.000	0.039
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ WLAN 5.2GHz Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	5.2GHz/802.11n40	5	Front	46	5230	13.54	0.02	14.0	0.056	1.112	1.000	0.062
	5.2GHz/802.11n40	5	Back	46	5230	13.54	-0.04	14.0	0.184	1.112	1.000	0.205
54	5.2GHz/802.11n40	5	Right	46	5230	13.54	-0.05	14.0	**0.247**	1.112	1.000	0.275
	5.2GHz/802.11n40	5	Top	46	5230	13.54	-0.18	14.0	0.176	1.112	1.000	0.196
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ WLAN 5.8GHz Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	5.8GHz/802.11a	5	Front	157	5785	13.91	-0.03	14.5	0.042	1.146	1.000	0.048
43	5.8GHz/802.11a	5	Back	157	5785	13.91	-0.02	14.5	**0.129**	1.146	1.000	0.148
	5.8GHz/802.11a	5	Right	157	5785	13.91	-0.04	14.5	0.122	1.146	1.000	0.140
	5.8GHz/802.11a	5	Top	157	5785	13.91	0.01	14.5	0.115	1.146	1.000	0.132
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

➢ Bluetooth Body SAR in Hotspot mode

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Power Drift (dB)	Tune-Up Limit (dBm)	Meas. SAR_{1g} (W/kg)	Scaling Factor	D.C Factor	Reported SAR_{1g} (W/kg)
	BT/π/4DQPSK	5	Front	78	2480	10.47	0.03	10.5	0.005	1.007	1.000	0.005
44	BT/π/4DQPSK	5	Back	78	2480	10.47	0.05	10.5	**0.014**	1.007	1.000	0.014
	BT/π/4DQPSK	5	Right	78	2480	10.47	-0.11	10.5	0.003	1.007	1.000	0.003
	BT/π/4DQPSK	5	Top	78	2480	10.47	0.05	10.5	0.001	1.007	1.000	0.001
	BT/GFSK	7	Front	78	2480	8.58	0.07	9.0	0.004	1.102	1.000	0.004
	BT/GFSK	7	Back	78	2480	8.58	0.03	9.0	0.011	1.102	1.000	0.012
	BT/GFSK	7	Right	78	2480	8.58	-0.12	9.0	0.003	1.102	1.000	0.003
	BT/GFSK	7	Top	78	2480	8.58	-0.02	9.0	0.008	1.102	1.000	0.009
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**1.6 W/kg (mW/g) Averaged over 1g**						

Note:

1. Per KDB 447498 D04v01, for each exposure position, if the highest output channel Reported SAR ≤0.8W/kg, other channels SAR testing is not necessary.
2. Additional WLAN SAR testing was performed for simultaneous transmission analysis.
3. For Hotspot SAR testing, per KDB 941225 D06v02r01, for EUT dimension ≥ 9cm*5cm, the test distance is 10mm. SAR must be measured for all surfaces and sides with a transmitting antenna located within 2.5cm from that surface or edge.
4. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA output power is < 0.25dB higher than RMC 12.2kbps, or Reported SAR with RMC 12.2kbps setting is ≤ 1.2W/kg, HSDPA SAR evaluation can be excluded.
5. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥0.8W/kg.
6. Per KDB 648474 D04v01r03, when the Reported SAR for a body-worn accessory measured without a headset connected to the handset is > 1.2 W/kg, SAR testing with a headset connected to the handset is required.
7. Per KDB 941225 D05v02r05, 100% RB allocation SAR measurement is not required when 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.
8. According to KDB 865664 D02v01r02, SAR plot is required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination.
9. Highlight part of test data means repeated test.

15.4 Product specific 10g SAR

➢ GSM SAR extremity SAR

Plot No.	Band/Mode	ANT	Test Position	CH.	Freq. (MHz)	Ave. Power (dBm)	Variation (%)	Tune-Up Limit (dBm)	Meas. SAR_{10g} (W/kg)	Scaling Factor	Reported SAR_{10g} (W/kg)
55	GPRS1900/4 slots	1	Top	512	1850.2	26.59	-0.05	27.0	2.680	1.099	2.945
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**4.0 W/kg (mW/g) Averaged over 10g**					

Note:

1. For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension> 16.0 cm. Per KDB648474 D04v01r03, When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR> 1.2W/kg.

15.5 Repeated SAR measurement

Band/ Mode	Test Position	CH.	Freq. (MHz)	Measured SAR (W/kg)				
				Original	1st Repeated		2nd Repeated	
					Value	Ratio	Value	Ratio
GSM850/Voice	Right Cheek	190	836.6	1.090	1.060	1.03	/	/
PCS1900/Voice	Right Tilted	512	1850.2	0.946	0.934	1.01	/	/
GPRS1900/4 slots	Top	512	1850.2	1.190	1.150	1.03	/	/
ANSI / IEEE C95.1 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population				**1.6 W/kg (mW/g) Averaged over 1g**				

Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8 W/kg
2. Per KDB 865664 D01v01r04, if the ratio of *original* and *repeated* is ≤ 1.2 and the measured SAR <1.45 W/kg, only one repeated measurement is required.

15.6 Multi-Band Simultaneous Transmission Considerations

➢ **Simultaneous Transmission Capabilities**

According to FCC KDB Publication 447498 D04v01, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown in below Figure and are color-coded to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.

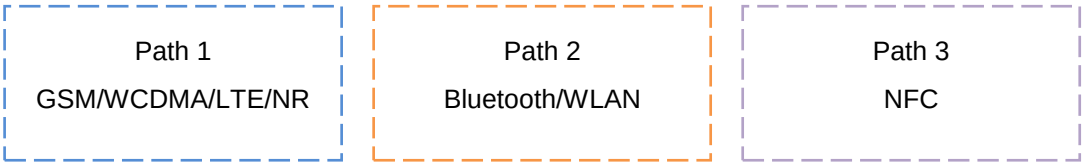

Fig.15.1 Simultaneous Transmission Paths

➢ **Simultaneous Transmission Procedures**

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 447498 D04v01, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤ 1.6 W/kg. When standalone SAR is not required to be measured, per FCC KDB 447498 D04v01 Appendix E, E.1), the following equation must be used to estimate the standalone 1g SAR for simultaneous transmission assessment involving that transmitter.

$$SAR_{est} = 1.6 \cdot P_{ant} / P_{th} \text{ [W/kg]}.$$

Mode	Max. Power (dBm)	Max. Power (mW)	Exposure Position	Head	Body	Hotspot
NFC	-40.34	0.000092	Estimated SAR (W/kg)	0.000	0.000	0.000

Note:

1. Per KDB 447498 D04v01 section 2.1.2: 1-mW Test Exemption, P_{th} =1mW.

➢ **Multi-Band simultaneous Transmission Consideration**

	Position	Applicable Combination
Simultaneous Transmission Consideration	Head	WWAN (Voice) + WLAN 2.4 GHz/5.2GHz/5.8GHz+NFC
		WWAN (Voice) + Bluetooth + NFC
		WWAN (Voice) + WLAN 5.2GHz/5.8GHz+Bluetooth+NFC
	Body	WWAN (Data) + WLAN 2.4 GHz/5.2GHz/5.8GHz+NFC
		WWAN (Data) + Bluetooth + NFC
		WWAN (Data) + WLAN 5.2GHz/5.8GHz+Bluetooth+NFC
	Hotspot	WWAN (Data) + WLAN 2.4 GHz/5.2GHz/5.8GHz+NFC
		WWAN (Data) + Bluetooth + NFC
		WWAN (Data) + WLAN 5.2GHz/5.8GHz+Bluetooth+NFC

Note:

1. WLAN 2.4GHz Band ANT5, WLAN 5.2GHz Band, WLAN 5.8GHz Band and Bluetooth ANT5 share the same antenna, and cannot transmit simultaneously.
2. WLAN 2.4GHz Band ANT7 and Bluetooth ANT7 share the same antenna, and cannot transmit simultaneously.
3. WLAN 2.4GHz Band , WLAN 5.2GHz Band, WLAN 5.8GHz cannot transmit simultaneously.
4. GSM/WCDMA/LTE shares the same antenna, and cannot transmit simultaneously.
5. Per KDB 447498 D04v01 section 2.1.2: 1-mW Test Exemption, SAR simultaneous transmission consideration for NFC is not required.
6. The Report SAR summation is calculated based on the same configuration and test position.
7. Per KDB 447498 D04v01, simultaneous transmission SAR is compliant if,
   i. Scalar SAR summation < 1.6 W/kg.
   ii. SPLSR = $(SAR_1 + SAR_2)^{1.5}$ / (*min. separation distance, mm*), and the peak separation distance is determined

from the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the zoom scan If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary

iii. Simultaneously transmission SAR measurement, and the Reported multi-band SAR < 1.6 W/kg

15.7 SAR Simultaneous Transmission Analysis

➢ **Simultaneous Transmission**

Position		Standalone SAR_{1g} (W/kg)		Σ SAR_{1g} (W/kg)
		LTE Band 5	NR n7	Max EN-DC
Head	Right Cheek	0.818	0.460	1.278
	Right Tilted	0.669	0.541	1.210
	Left Cheek	0.502	0.306	0.808
	Left Tilted	0.448	0.348	0.796
Body- worn	Front	0.119	0.288	0.407
	Back	0.130	0.429	0.559
Hotspot	Front	0.119	0.288	0.407
	Back	0.130	0.429	0.559
	Left	0.083	0.062	0.145
	Right	/	/	/
	Top	0.099	0.400	0.499
	Bottom	/	/	/

Position		Standalone SAR_{1g} (W/kg)			Σ SAR_{1g} (W/kg)
		LTE Band 5	LTE Band 41 (ANT 2)	NR n41	Max EN-DC
Head	Right Cheek	0.818	0.341	0.460	1.278
	Right Tilted	0.669	0.270	0.493	1.162
	Left Cheek	0.502	0.188	0.239	0.741
	Left Tilted	0.448	0.131	0.275	0.723
Body- worn	Front	0.119	0.103	0.113	0.232
	Back	0.130	0.274	0.164	0.438
Hotspot	Front	0.119	0.103	0.113	0.232
	Back	0.130	0.274	0.164	0.438
	Left	0.083	0.439	0.069	0.508
	Right	/	/	/	/
	Top	0.099	0.069	0.135	0.234
	Bottom	/	/	/	/

Position		Standalone SAR_{1g} (W/kg)						Σ SAR_{1g} (W/kg)
		LTE Band 2	LTE Band 5	LTE Band 7 (ANT 2)	LTE Band 41 (ANT 2)	LTE Band 66	NR n77(n78)	Max EN-DC
Head	Right Cheek	0.212	0.818	0.765	0.341	0.180	0.434	1.252
	Right Tilted	0.266	0.669	0.615	0.270	0.213	0.371	1.040
	Left Cheek	0.108	0.502	0.425	0.188	0.109	0.699	1.201
	Left Tilted	0.132	0.448	0.304	0.131	0.126	0.607	1.055
Body- worn	Front	0.050	0.119	0.240	0.103	0.049	0.142	0.382
	Back	0.073	0.130	0.563	0.274	0.077	0.237	0.800
Hotspot	Front	0.050	0.119	0.240	0.103	0.049	0.142	0.382
	Back	0.073	0.130	0.563	0.274	0.077	0.237	0.800
	Left	0.016	0.083	0.787	0.439	0.020	/	0.787
	Right	/	/	/	/	/	0.041	0.041
	Top	0.107	0.099	0.151	0.069	0.100	0.076	0.227
	Bottom	/	/	/	/	/	/	/

Position		Max Standalone SAR_{1g} (W/kg)						Σ SAR_{1g} (W/kg)			
		1	2	3	4	5	6	1+2+6	1+3+5+6	1+4+6	1+5+6
		MAX WWAN	2.4G MAX	5G ANT	BT ANT5	BT ANT7	NFC				
Head	Right Cheek	1.278	0.064	0.068	0.008	0.013	0.000	1.342	1.359	1.286	1.291
	Right Tilted	1.210	0.074	0.031	0.005	0.014	0.000	1.284	1.255	1.215	1.224
	Left Cheek	1.201	0.097	0.229	0.020	0.017	0.000	1.298	1.447	1.221	1.218
	Left Tilted	1.055	0.102	0.105	0.011	0.019	0.000	1.157	1.179	1.066	1.074
Body-worn	Front	0.485	0.019	0.062	0.005	0.004	0.000	0.504	0.551	0.490	0.489
	Back	0.800	0.032	0.205	0.014	0.012	0.000	0.832	1.017	0.814	0.812
Hotspot	Front	0.485	0.019	0.062	0.005	0.004	0.000	0.504	0.551	0.490	0.489
	Back	0.800	0.032	0.205	0.014	0.012	0.000	0.832	1.017	0.814	0.812
	Left	0.787	/	/	/	/	0.000	0.787	0.787	0.787	0.787
	Right	0.041	0.025	0.275	0.003	0.003	0.000	0.066	0.319	0.044	0.044
	Top	1.308	0.039	0.196	0.001	0.009	0.000	1.347	**1.513**	1.309	1.317
	Bottom	/	/	/	/	/	0.000	/	/	/	/

➢ **Simultaneous Transmission Conclusion**

The above numerical summed SAR results for all the case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D04v01.

15.8 Measurement Uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04, 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.

15.9 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Industry Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested. Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

16 Reference

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[2]. ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3]. IEEE Std. 1528-2013, “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, September2013

[4]. SPEAG DASY52 System Handbook

[5]. FCC KDB 248227 D01 v02r02, “SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS”, October 2015

[6]. FCC KDB 447498 D04 v01, “RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES”, November 2021

[7]. FCC KDB 648474 D04 v01r03, “SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS”, October 2015

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[9]. FCC KDB 941225 D05 v02r05, “SAR EVALUATION CONSIDERATIONS FOR LTE DEVICES”, Dec 2015

[10]. FCC KDB 941225 D06 v02r01, " SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES", October 2015

[11]. FCC KDB 865664 D01 v01r04, “SAR MEASUREMENT REQUIREMENTS FOR 100 MHz TO 6 GHz”, August 2015

Appendix A: Plots of SAR System Check

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Dipole 750 MHz; Type: D750V3; Serial: SN:1118

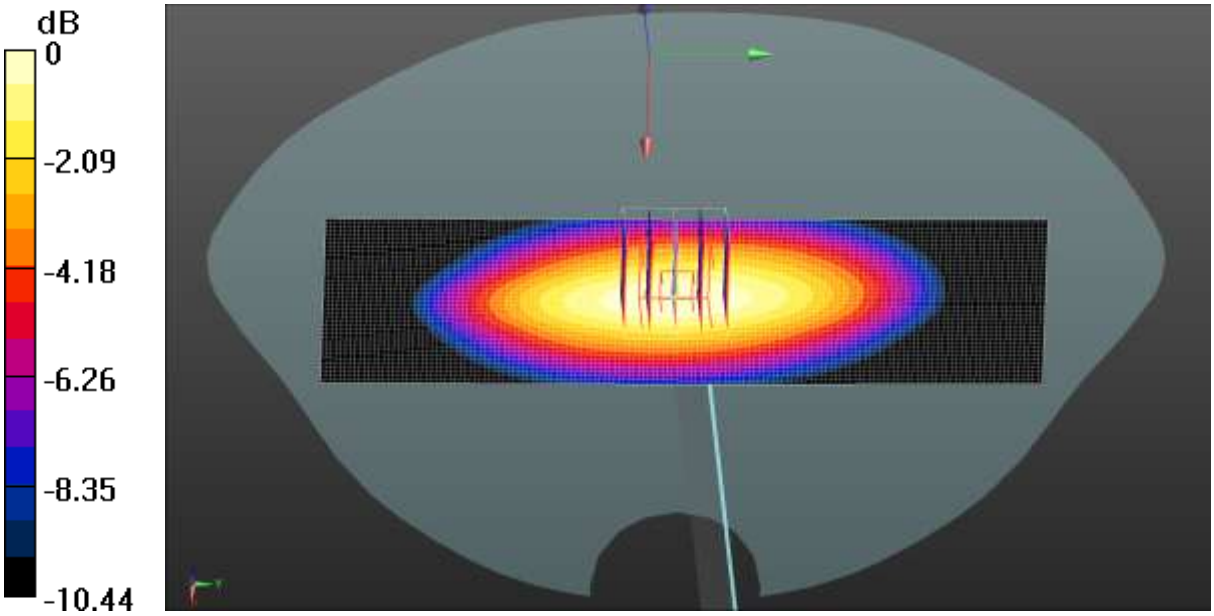
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.888 S/m; ε_r = 40.914; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(10.2, 10.2, 10.2) @ 750 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency750 MHz Head Tissue/d=15mm, Pin=80 mW, dist=1.4mm (EX-Probe)/Area Scan (41x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.949 W/kg

System Performance Check at Frequency750 MHz Head Tissue/d=15mm, Pin=80 mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.85 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.654 W/kg; SAR(10 g) = 0.431 W/kg
Smallest distance from peaks to all points 3 dB below = 17.6 mm
Ratio of SAR at M2 to SAR at M1 = 66%
Maximum value of SAR (measured) = 0.913 W/kg



0 dB = 0.913 W/kg = -0.40 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Dipole 835 MHz; Type: D835V2; Serial: SN:4D154

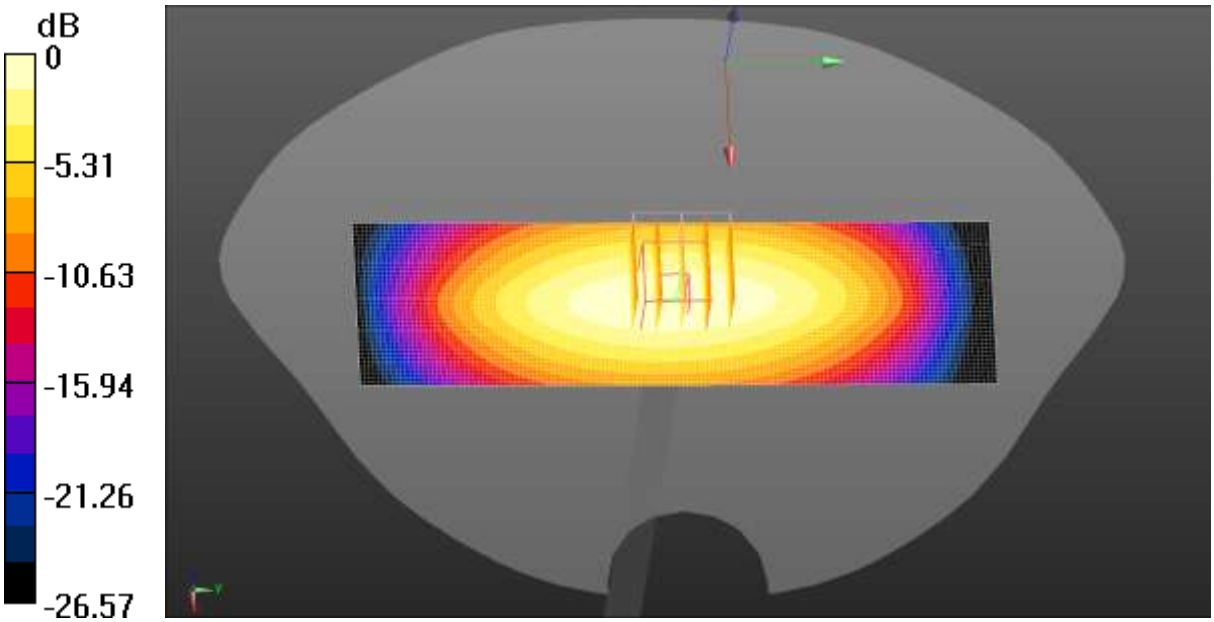
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.913 S/m; ε_r = 40.697; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 835 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency 835 MHz Head Tissue/d=15mm, Pin=80 mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.23 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.758 W/kg; SAR(10 g) = 0.488 W/kg
Smallest distance from peaks to all points 3 dB below = 17.6 mm
Ratio of SAR at M2 to SAR at M1 = 64.4%
Maximum value of SAR (measured) = 0.992 W/kg

System Performance Check at Frequency 835 MHz Head Tissue/d=15mm, Pin=80 mW, dist=1.4mm (EX-Probe)/Area Scan (41x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.985 W/kg



0 dB = 0.985 W/kg = -0.66 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: SN:1177

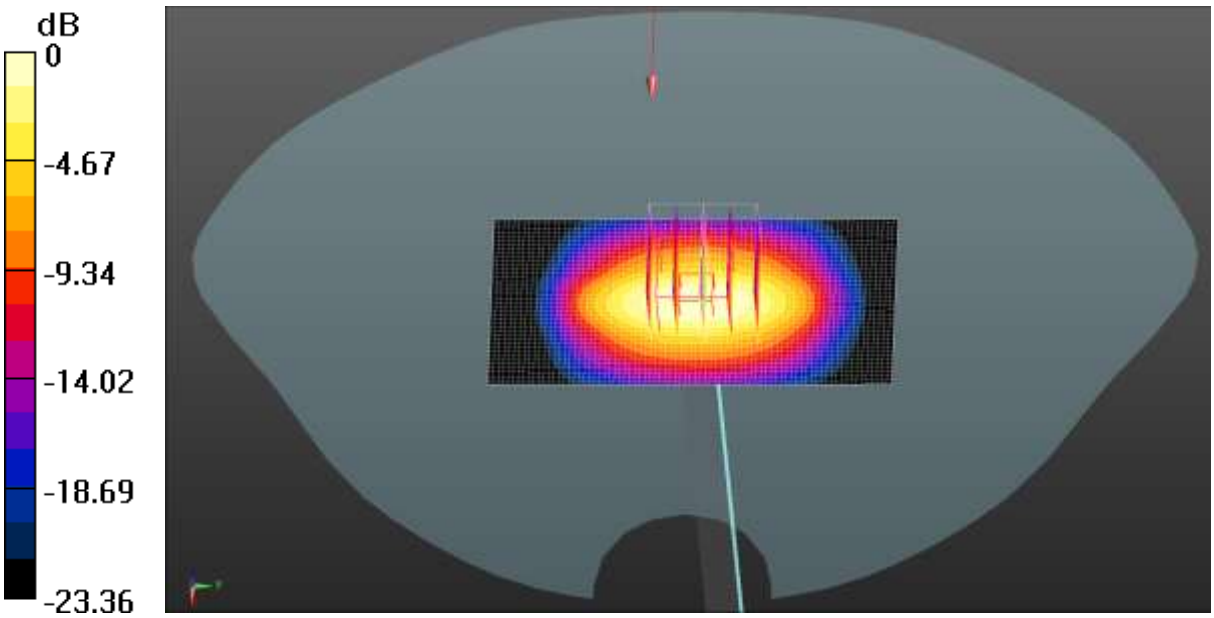
Communication System: UID 0, CW (0); Frequency: 1750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; σ = 1.337 S/m; ε_r = 39.194; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1750 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency1750 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.16 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.58 W/kg
SAR(1 g) = 1.48 W/kg; SAR(10 g) = 0.761 W/kg
Smallest distance from peaks to all points 3 dB below = 10.1 mm
Ratio of SAR at M2 to SAR at M1 = 53.6%
Maximum value of SAR (measured) = 2.03 W/kg

System Performance Check at Frequency1750 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.12 W/kg



0 dB = 2.12 W/kg = 3.26 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN:5d175

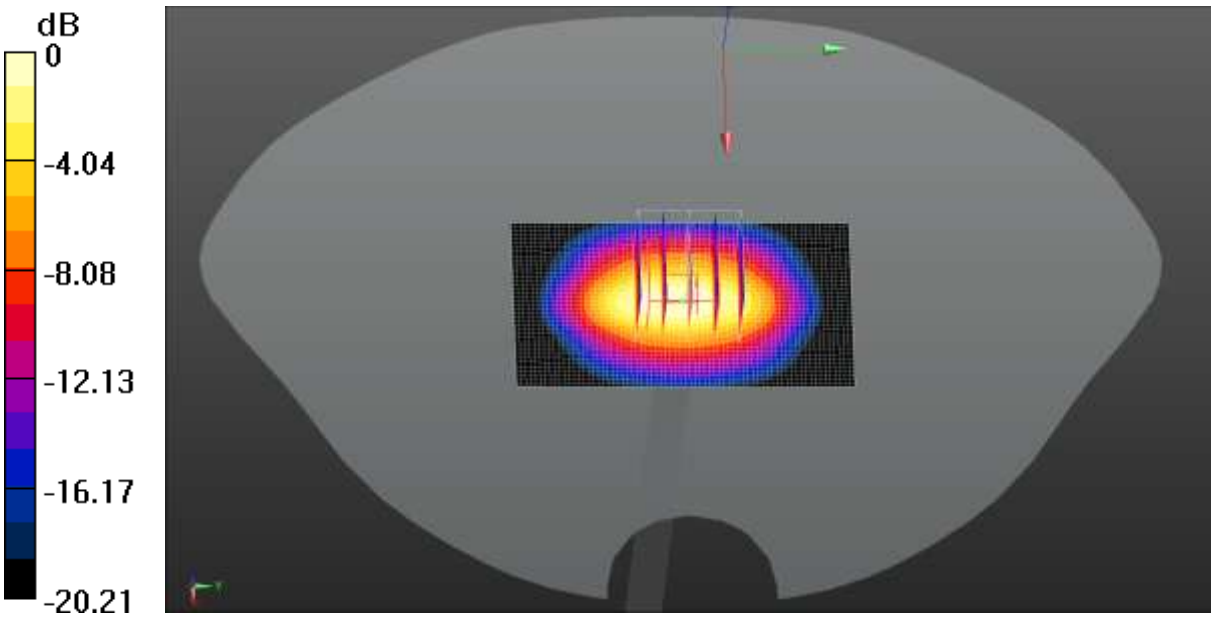
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.360 S/m; ε_r = 39.454; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1900 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency1900 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.62 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 3.16 W/kg
SAR(1 g) = 1.61 W/kg; SAR(10 g) = 0.842 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 52.3%
Maximum value of SAR (measured) = 2.58 W/kg

System Performance Check at Frequency1900 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.76 W/kg



0 dB = 2.76 W/kg = 4.41 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: SN:910

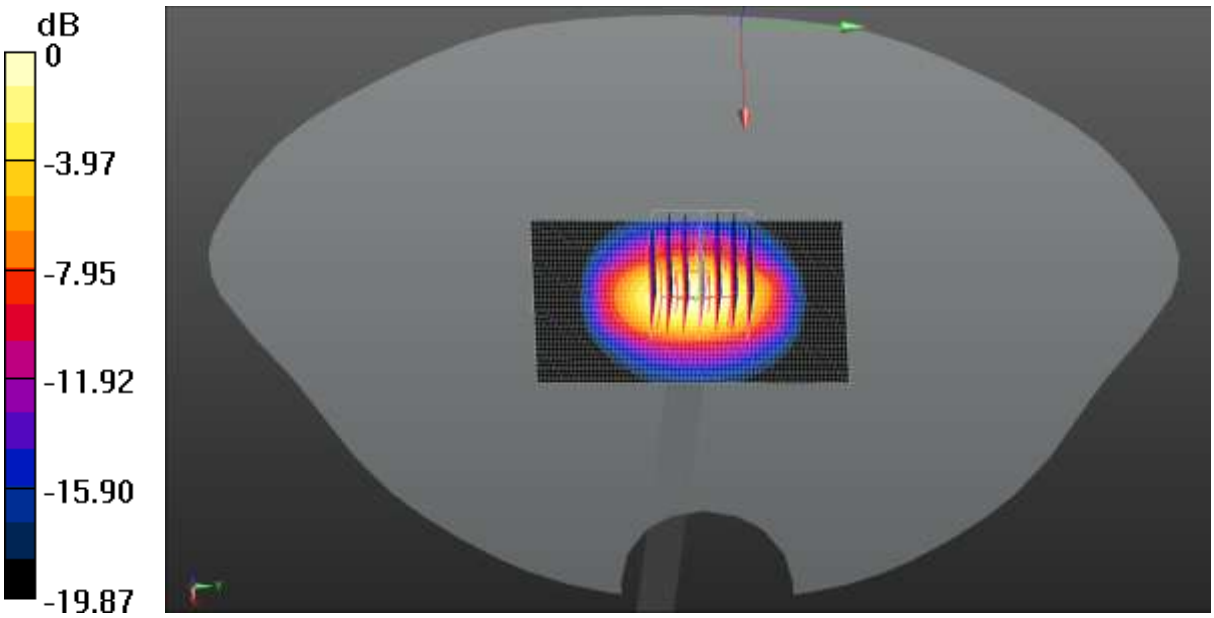
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.725 S/m; ε_r = 38.465; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2450 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency2450 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.04 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 4.32 W/kg
SAR(1 g) = 2.14 W/kg; SAR(10 g) = 0.973 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 45.5%
Maximum value of SAR (measured) = 3.41 W/kg

System Performance Check at Frequency2450 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 3.54 W/kg



0 dB = 3.54 W/kg = 5.49 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: SN:1114

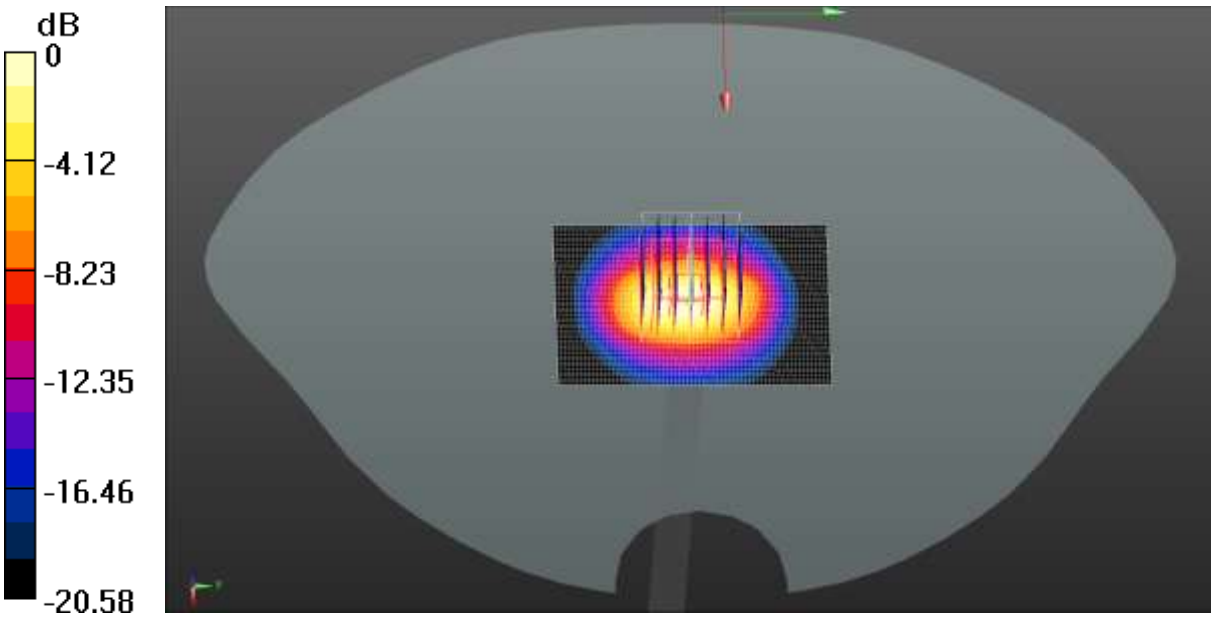
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.887 S/m; ε_r = 38.465; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.35, 7.35, 7.35) @ 2600 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency2600 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.12 W/kg

System Performance Check at Frequency2600 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 45.04 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 4.92 W/kg
SAR(1 g) = 2.21 W/kg; SAR(10 g) = 0.950 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 43.0%
Maximum value of SAR (measured) = 3.95 W/kg



0 dB = 3.95 W/kg = 5.97 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Dipole 3500 MHz; Type: D3500V2; Serial: SN:1118

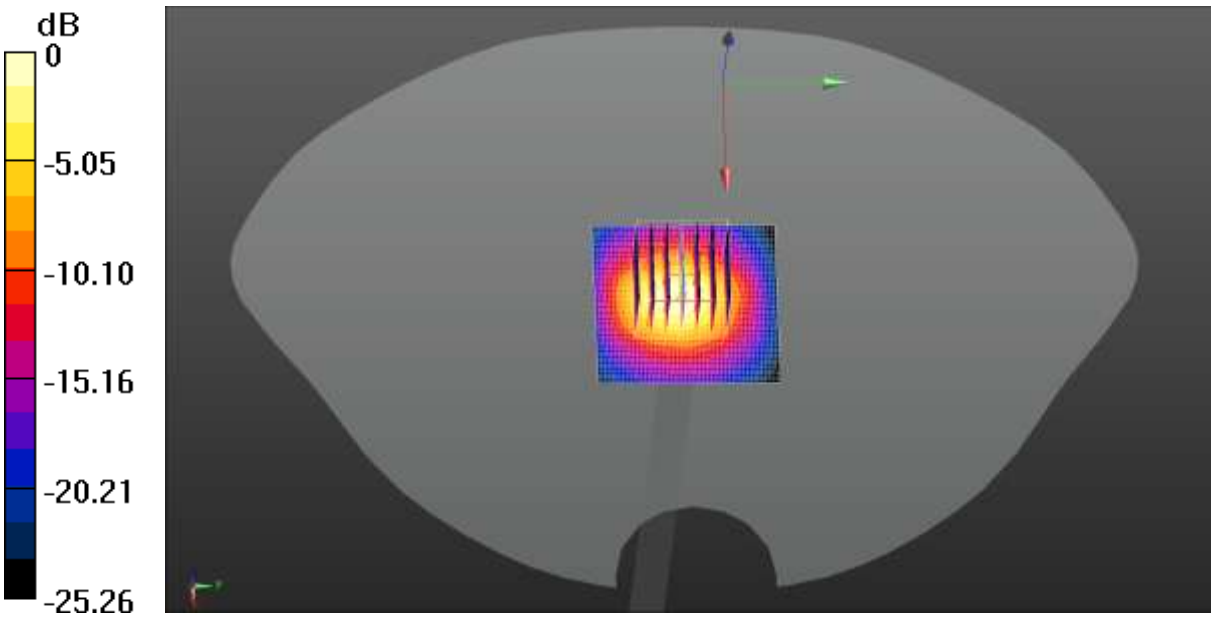
Communication System: UID 0, CW (0); Frequency: 3500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3500 MHz; σ = 2.879 S/m; ε_r = 37.859; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.02, 7.02, 7.02) @ 3500 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency3500 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.04 W/kg

System Performance Check at Frequency3500 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 41.81 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 6.82 W/kg
SAR(1 g) = 2.58 W/kg; SAR(10 g) = 0.994 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 38.5%
Maximum value of SAR (measured) = 5.04 W/kg



0 dB = 5.04 W/kg = 7.02 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Dipole 3700 MHz; Type: D3700V2; Serial: SN:1089

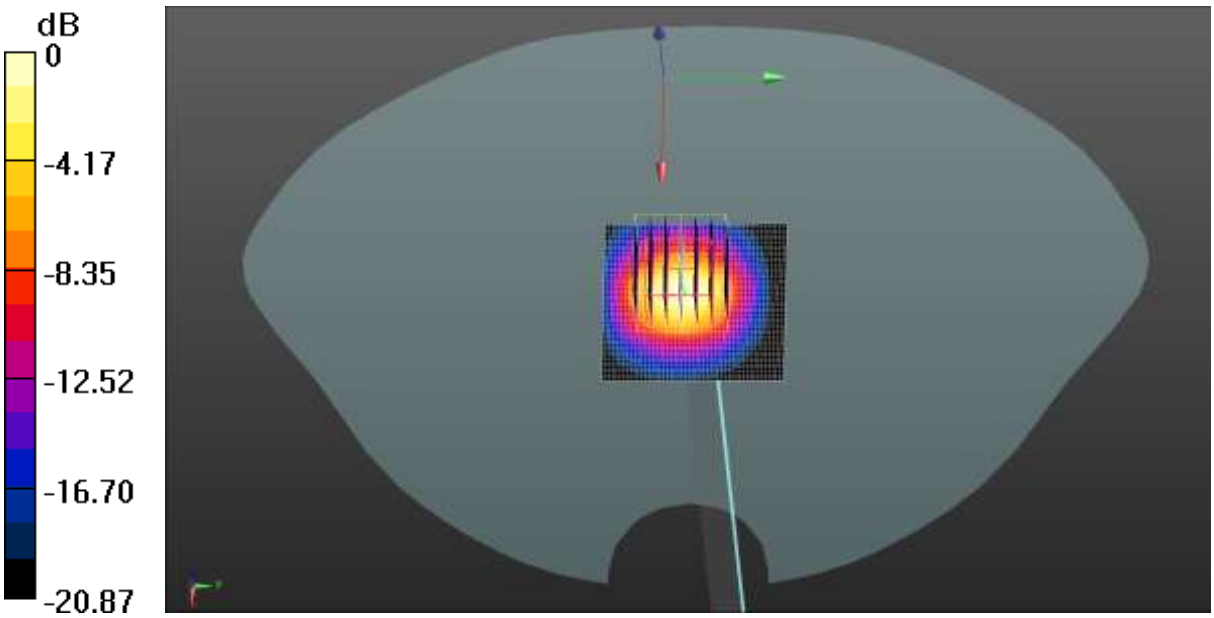
Communication System: UID 0, CW (0); Frequency: 3700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3700 MHz; σ = 3.061 S/m; ε_r = 37.561; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(6.75, 6.75, 6.75) @ 3700 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency3700 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.34 W/kg

System Performance Check at Frequency3700 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 39.06 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 7.41 W/kg
SAR(1 g) = 2.68 W/kg; SAR(10 g) = 0.929 W/kg
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 34.7%
Maximum value of SAR (measured) = 5.45 W/kg



0 dB = 5.45 W/kg = 7.36 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Dipole 3900 MHz; Type: D3900V2; Serial: SN:1064

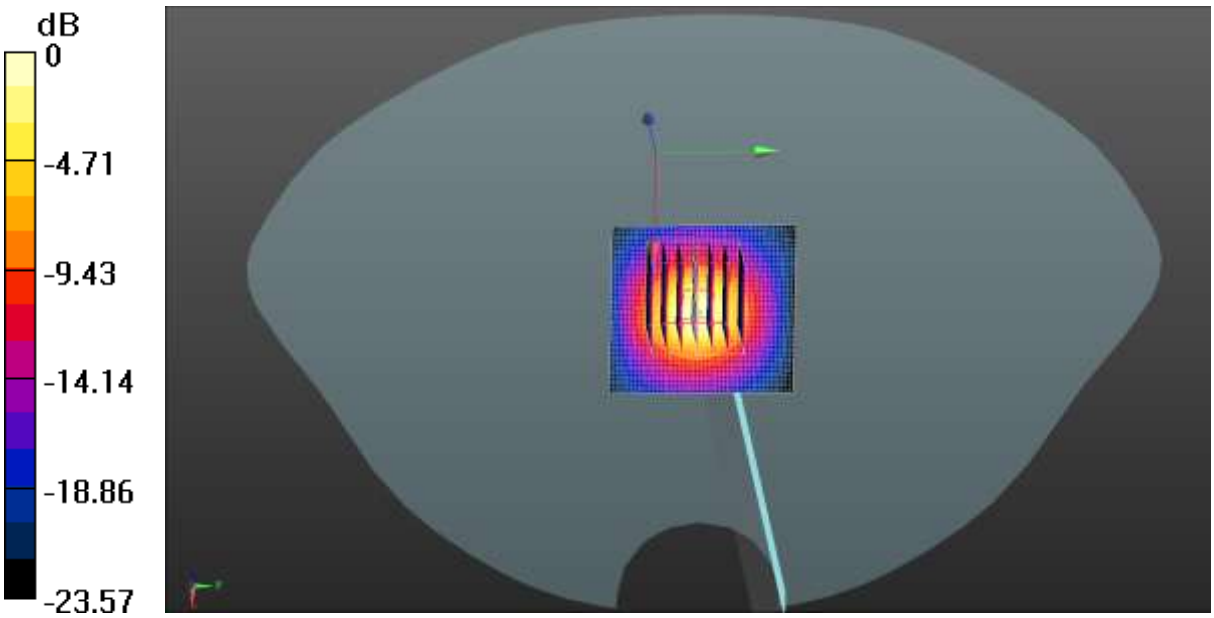
Communication System: UID 0, CW (0); Frequency: 3900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3900 MHz; σ = 3.257 S/m; ε_r = 37.520; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN3924; ConvF(6.62, 6.62, 6.62) @ 3900 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency3900 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 44.17 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 7.72 W/kg
SAR(1 g) = 2.75 W/kg; SAR(10 g) = 0.947 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 34.4%
Maximum value of SAR (measured) = 5.63 W/kg

System Performance Check at Frequency3900 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.78 W/kg



0 dB = 5.78 W/kg = 7.62 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: SN:1182

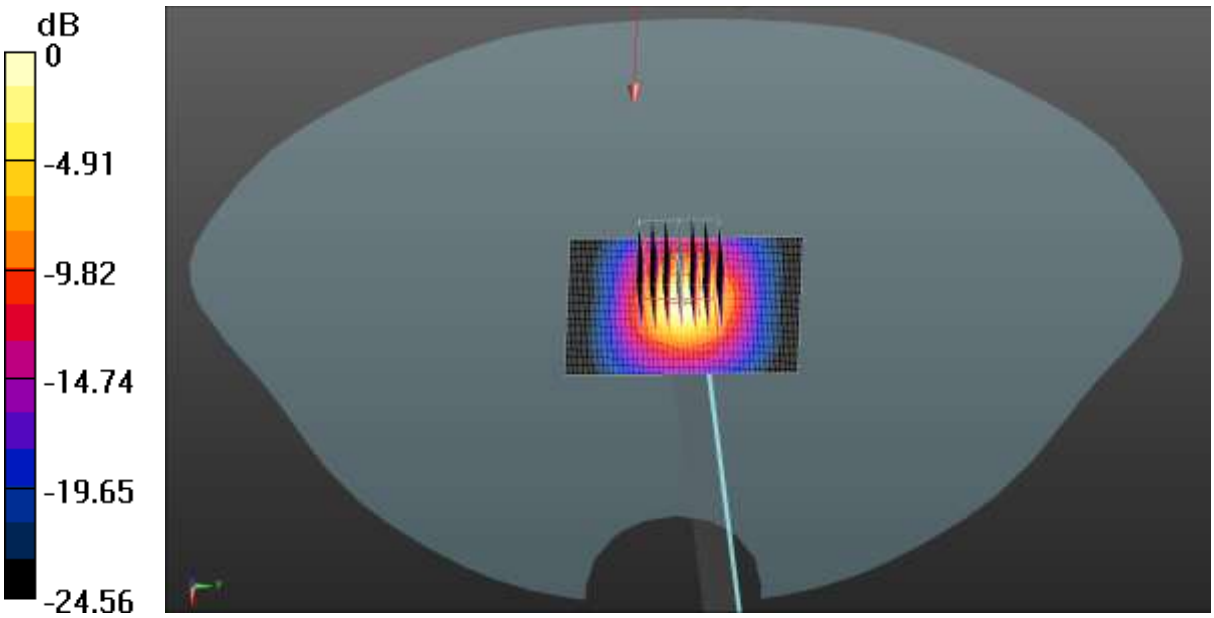
Communication System: UID 0, CW (0); Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.745 S/m; ε_r = 37.040; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(5.41, 5.41, 5.41) @ 5200 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency5200 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 8.22 W/kg

System Performance Check at Frequency5200 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 44.98 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 12.35 W/kg
SAR(1 g) = 3.24 W/kg; SAR(10 g) = 0.913 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 28.1%
Maximum value of SAR (measured) = 7.63 W/kg



0 dB = 7.63 W/kg = 8.83 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: SN:1182

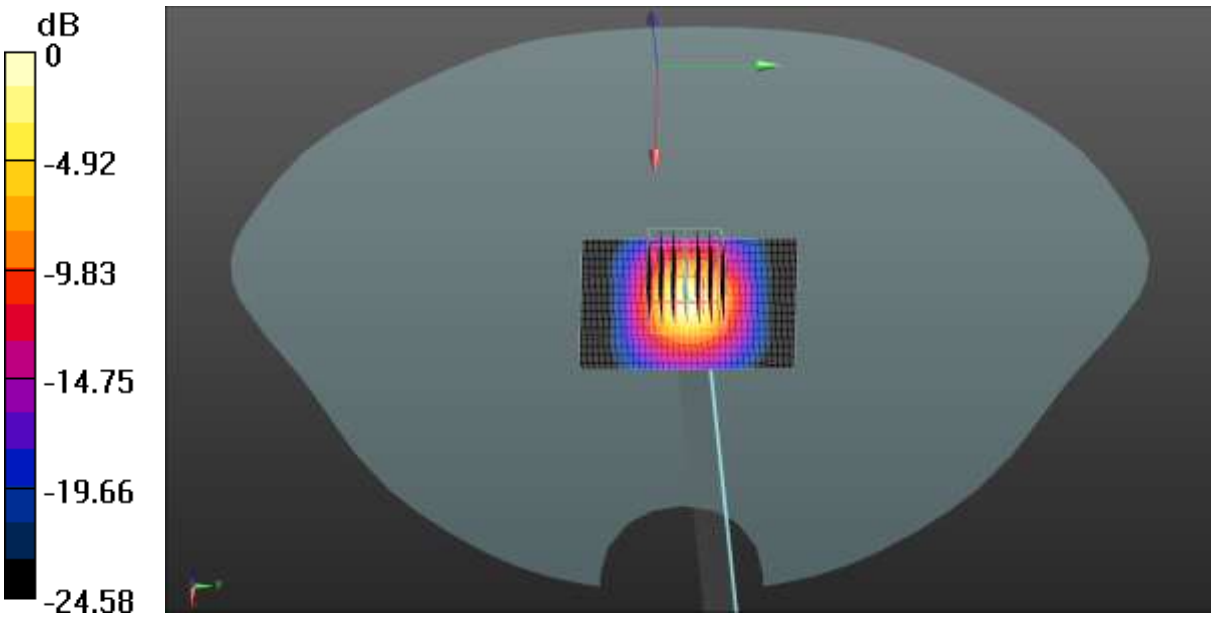
Communication System: UID 0, CW (0); Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.430 S/m; ε_r = 36.044; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(4.9, 4.9, 4.9) @ 5800 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check at Frequency5800 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 42.83 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 14.7 W/kg
SAR(1 g) = 3.29 W/kg; SAR(10 g) = 0.936 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 17.6%
Maximum value of SAR (measured) = 8.21 W/kg

System Performance Check at Frequency5800 MHz Head Tissue/d=10mm, Pin=40 mW, dist=1.4mm (EX-Probe)/Area Scan (51x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 8.68 W/kg



0 dB = 8.68 W/kg = 9.39 dBW/kg

Appendix B: Plots of SAR Test Data

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

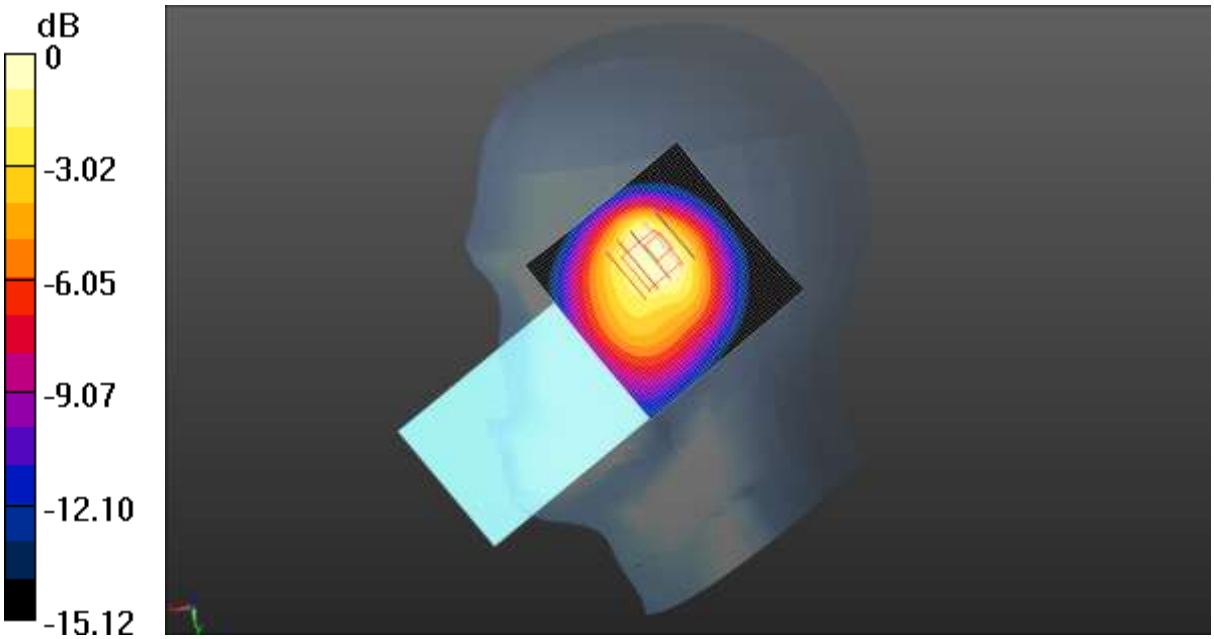
Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 836.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GSM 850 Right Cheek/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.71 W/kg

GSM 850 Right Cheek/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.41 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.22 W/kg
SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.697 W/kg
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 58.4%
Maximum value of SAR (measured) = 1.54 W/kg



0 dB = 1.54 W/kg = 1.88 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

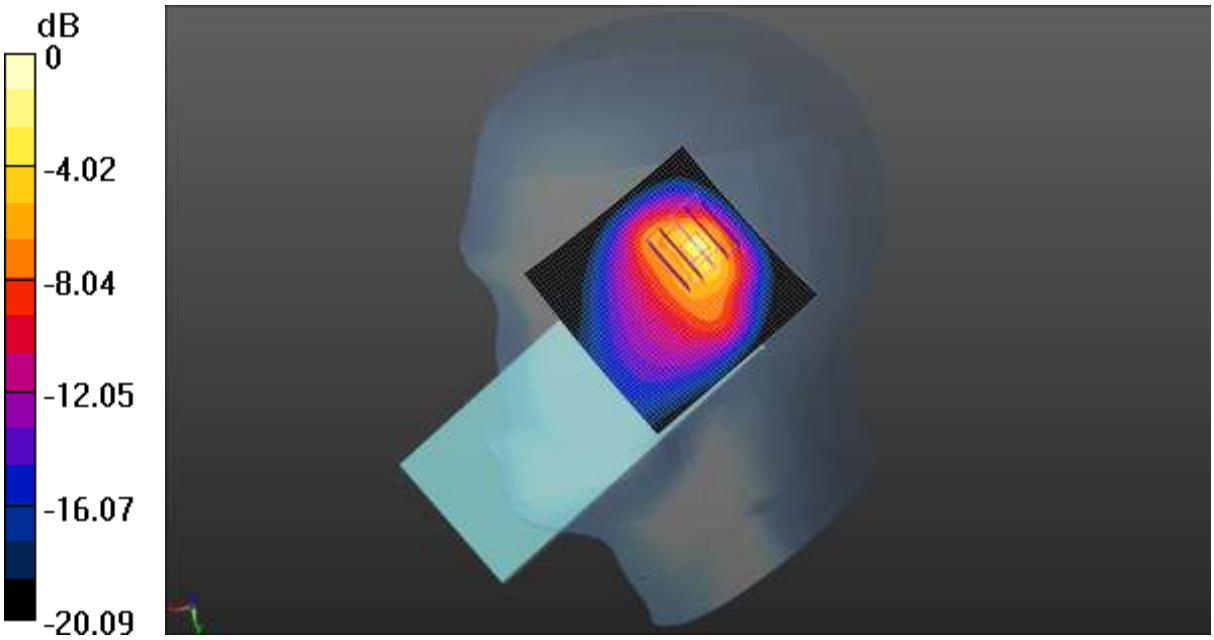
Communication System: UID 0, GSM (0); Frequency: 1850.2 MHz;Duty Cycle: 1:8.30042
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.334 S/m; ε_r = 39.051; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1850.2 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GSM 1900 Right Tilted/Low Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.05 W/kg

GSM 1900 Right Tilted/Low Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.33 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 0.946 W/kg; SAR(10 g) = 0.439 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 47.8%
Maximum value of SAR (measured) = 1.69 W/kg



0 dB = 1.69 W/kg = 2.28 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

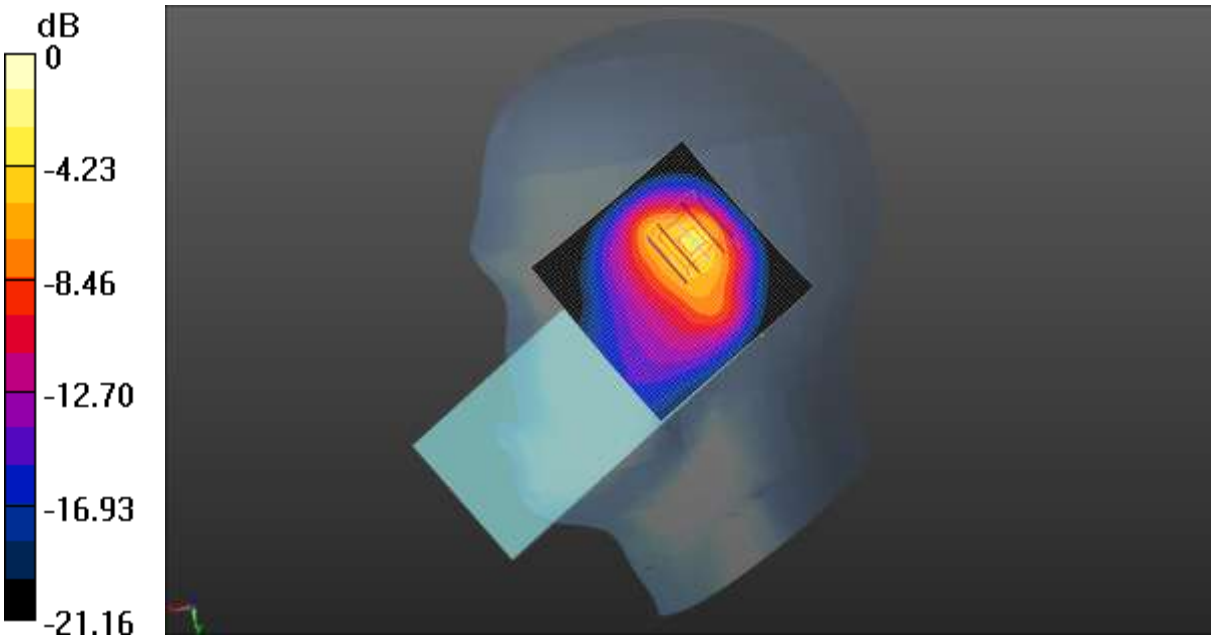
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 1900 Right Tilted/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.444 W/kg

WCDMA 1900 Right Tilted/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.08 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.235 W/kg
Smallest distance from peaks to all points 3 dB below = 6.6 mm
Ratio of SAR at M2 to SAR at M1 = 48.9%
Maximum value of SAR (measured) = 0.910 W/kg



0 dB = 0.910 W/kg = -0.41 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

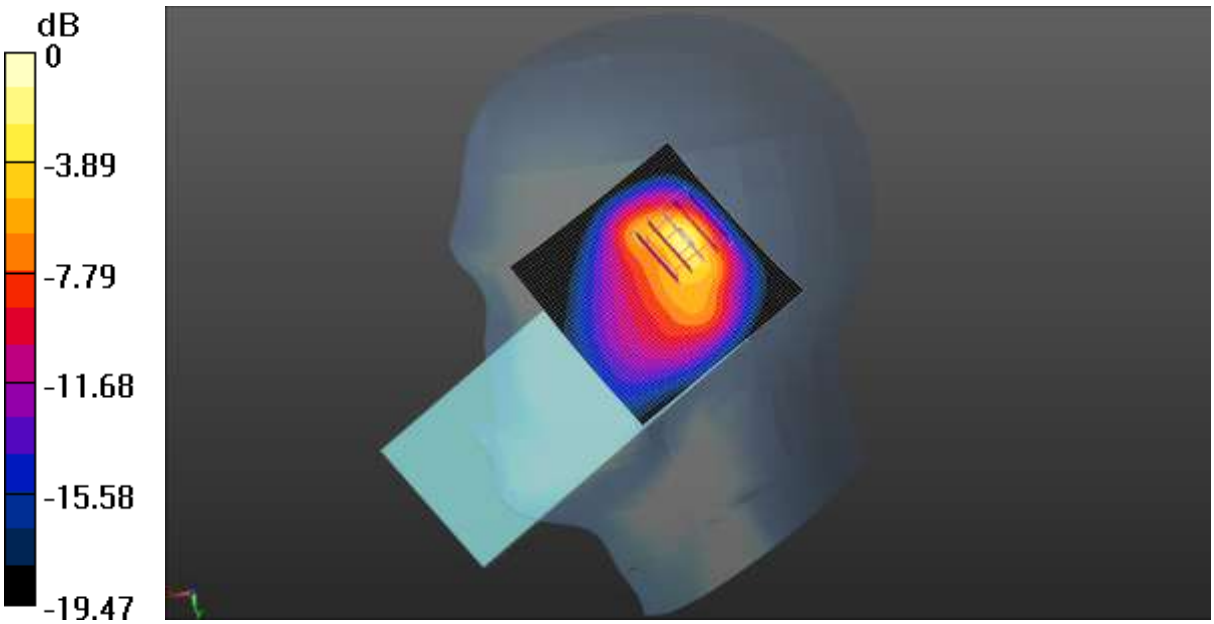
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.331 S/m; ε_r = 39.223; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1752.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 1700 Right Tilted/High Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.799 W/kg

WCDMA 1700 Right Tilted/High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.70 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.721 W/kg; SAR(10 g) = 0.341 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 53%
Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

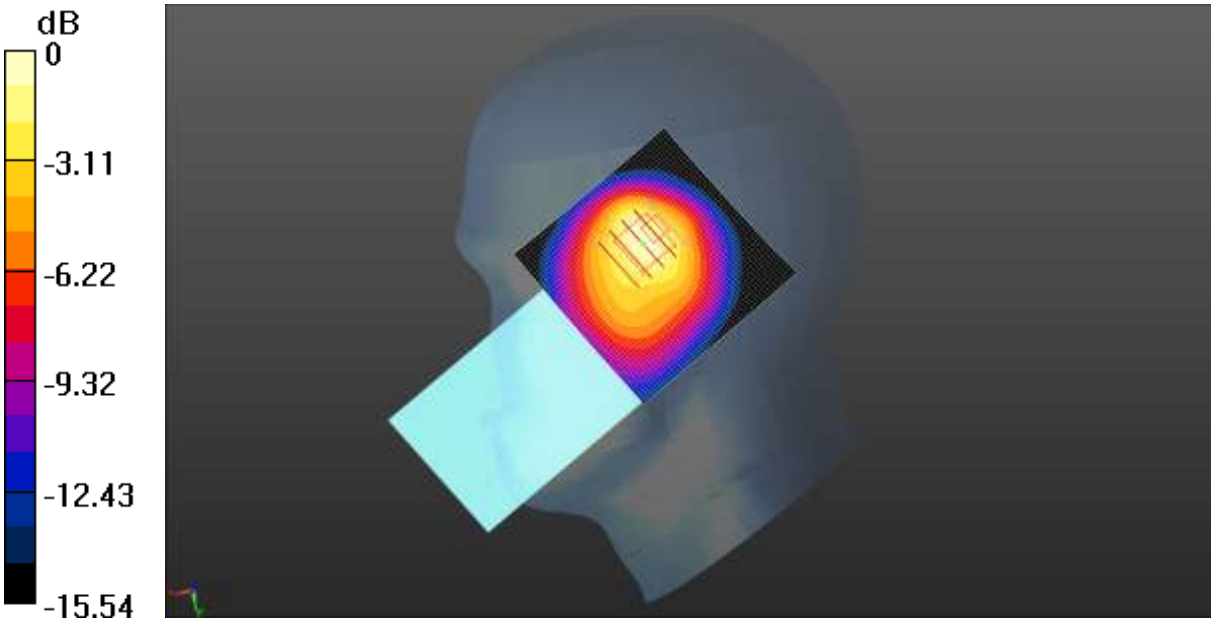
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 836.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 850 Right Cheek/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.786 W/kg

WCDMA 850 Right Cheek/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.37 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.341 W/kg
Smallest distance from peaks to all points 3 dB below = 20.1 mm
Ratio of SAR at M2 to SAR at M1 = 38.1%
Maximum value of SAR (measured) = 0.884 W/kg



0 dB = 0.884 W/kg = -0.54 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

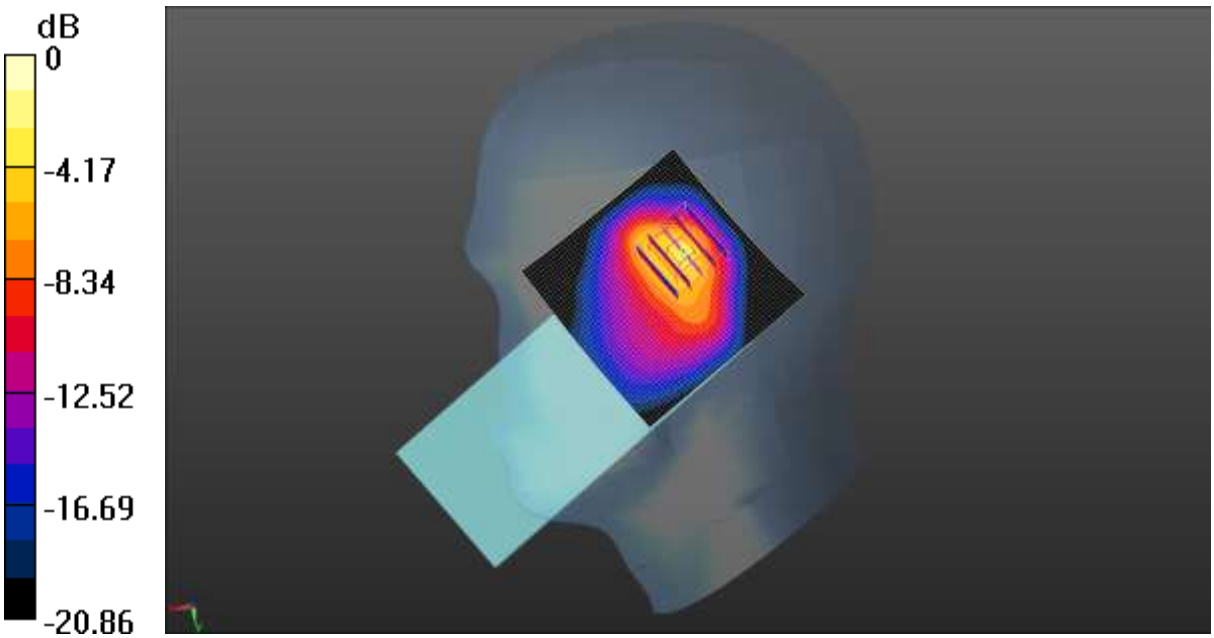
- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 2 1RB(20MHz) Right Tilted/Middle Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.165 W/kg

LTE Band 2 1RB(20MHz) Right Tilted/Middle Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.06 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.447 W/kg
SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.095 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 48.3%
Maximum value of SAR (measured) = 0.367 W/kg



0 dB = 0.367 W/kg = -4.35 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 829 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 829 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

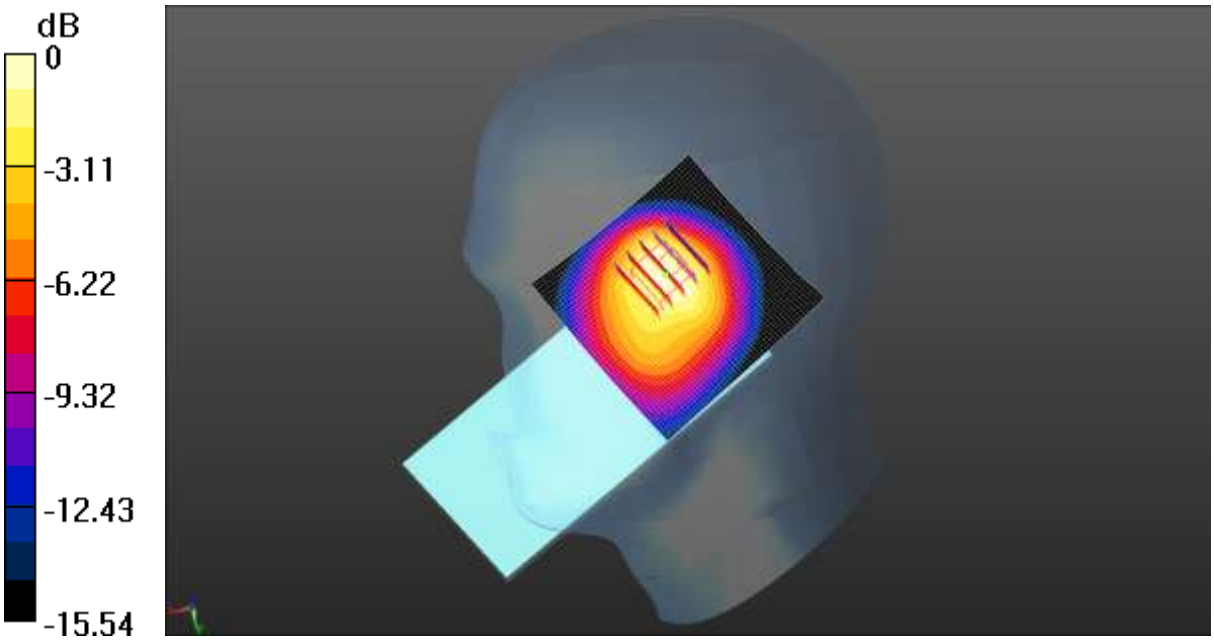
- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 829 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 1RB(10MHz) Right Cheek/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.15 W/kg

LTE Band 5 1RB(10MHz) Right Cheek/Low Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.94 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.716 W/kg; SAR(10 g) = 0.449 W/kg
Smallest distance from peaks to all points 3 dB below = 10.3 mm
Ratio of SAR at M2 to SAR at M1 = 56.4%
Maximum value of SAR (measured) = 1.04 W/kg



0 dB = 1.04 W/kg = 0.17 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.804 S/m; ε_r = 38.371; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

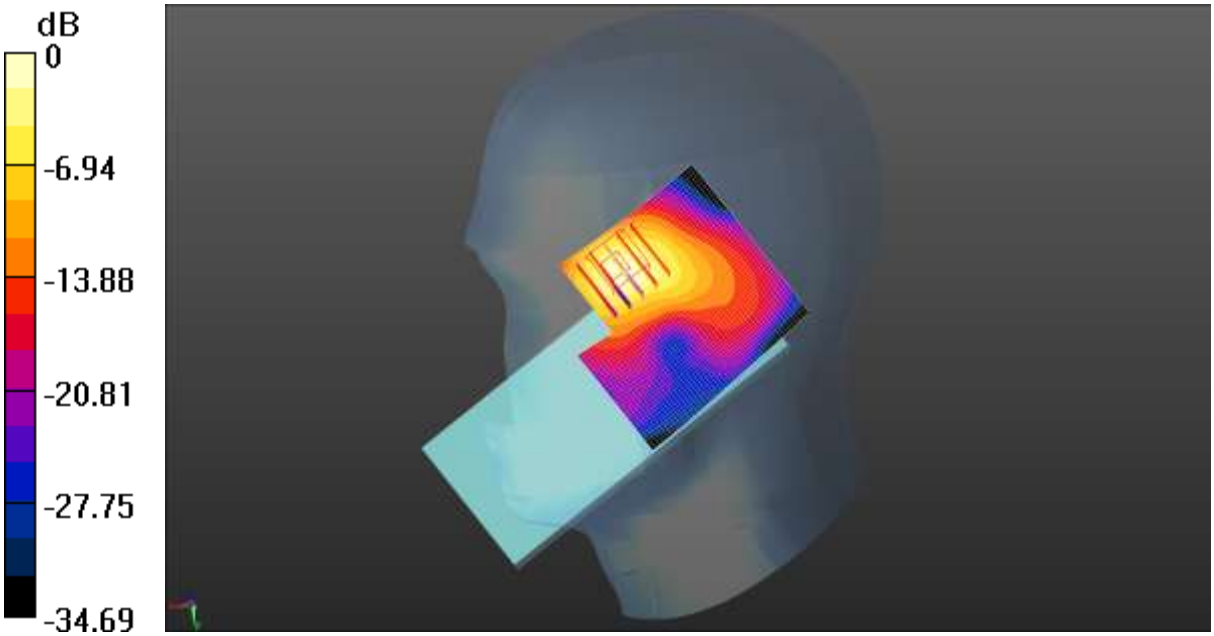
- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2510 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 7 1RB(20MHz) Right Cheek/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.11 W/kg

LTE Band 7 1RB(20MHz) Right Cheek/Low Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.051 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.691 W/kg; SAR(10 g) = 0.279 W/kg
Smallest distance from peaks to all points 3 dB below = 6.6 mm
Ratio of SAR at M2 to SAR at M1 = 54.7%
Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 704 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 704 MHz; σ = 0.876 S/m; ε_r = 41.225; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

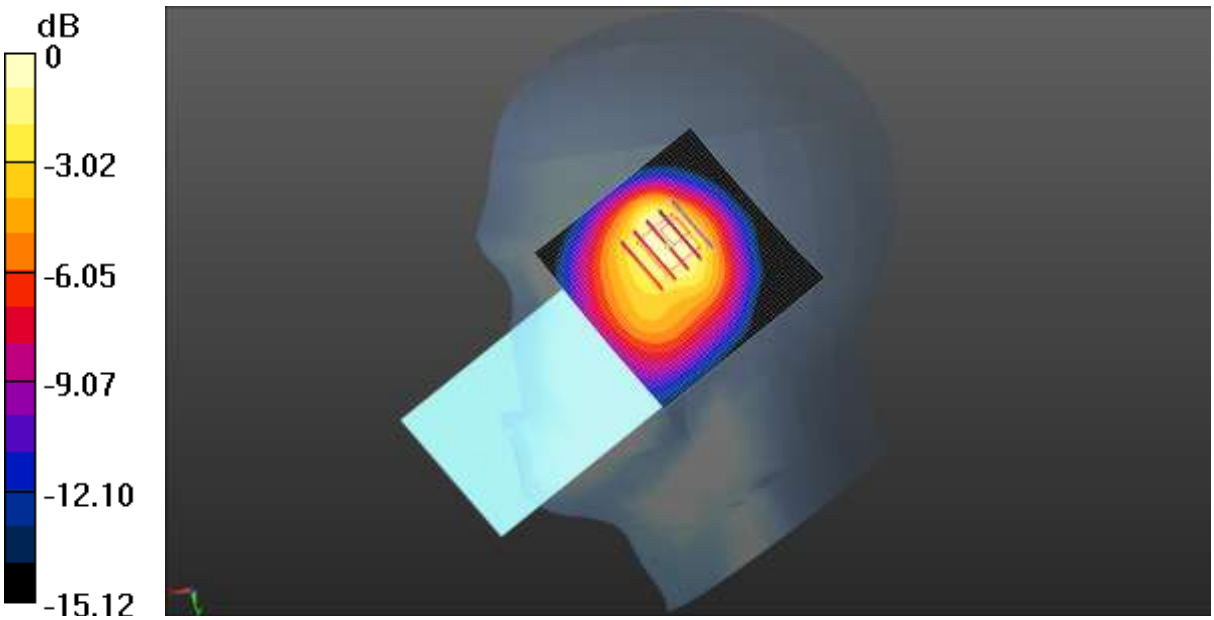
- Probe: EX3DV4 - SN3924; ConvF(10.2, 10.2, 10.2) @ 704 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 1RB(10MHz) Right Cheek/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.366 W/kg

LTE Band 12 1RB(10MHz) Right Cheek/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.49 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.546 W/kg
SAR(1 g) = 0.238 W/kg; SAR(10 g) = 0.146 W/kg
Smallest distance from peaks to all points 3 dB below = 11.6 mm
Ratio of SAR at M2 to SAR at M1 = 36.8%
Maximum value of SAR (measured) = 0.357 W/kg



0 dB = 0.357 W/kg = -4.47 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-TDD(USA) 20MHz 1RB QPSK (0); Frequency: 2680 MHz;Duty Cycle: 1:1.59956
Medium parameters used: f = 2680 MHz; σ = 1.987 S/m; ε_r = 38.33; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

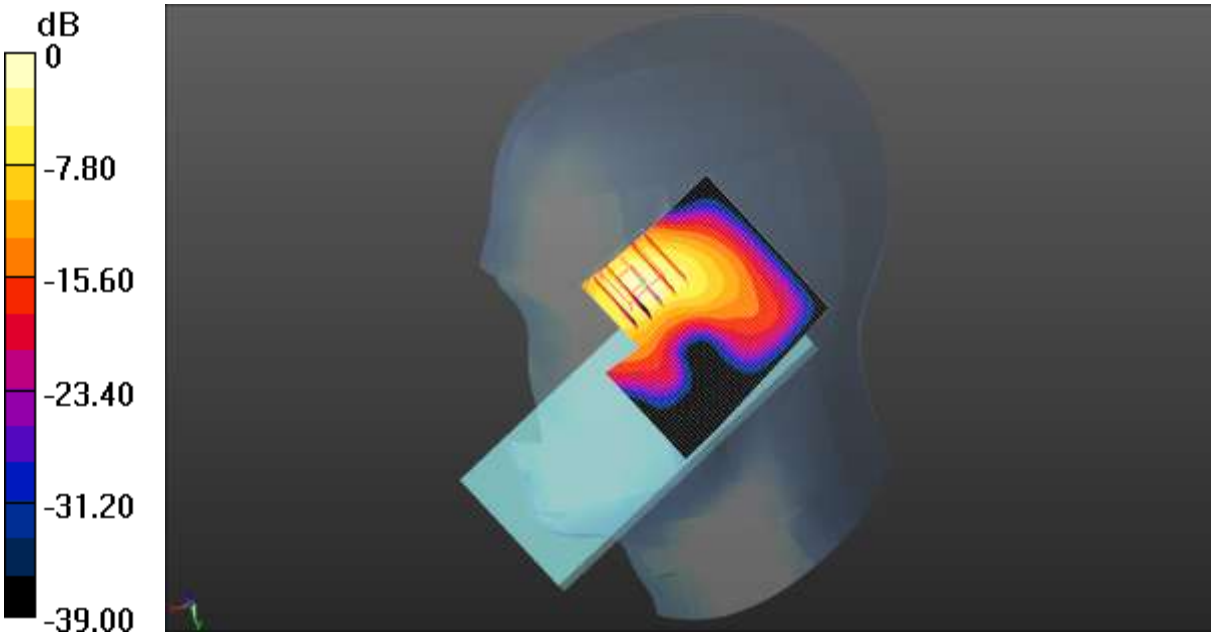
- Probe: EX3DV4 - SN3924; ConvF(7.35, 7.35, 7.35) @ 2680 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 1RB(20MHz) Right Cheek/High Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.366 W/kg

LTE Band 41 1RB(20MHz) Right Cheek/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.349 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.781 W/kg
SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.120 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 38.3%
Maximum value of SAR (measured) = 0.446 W/kg



0 dB = 0.446 W/kg = -3.51 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.324 S/m; ε_r = 39.247; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

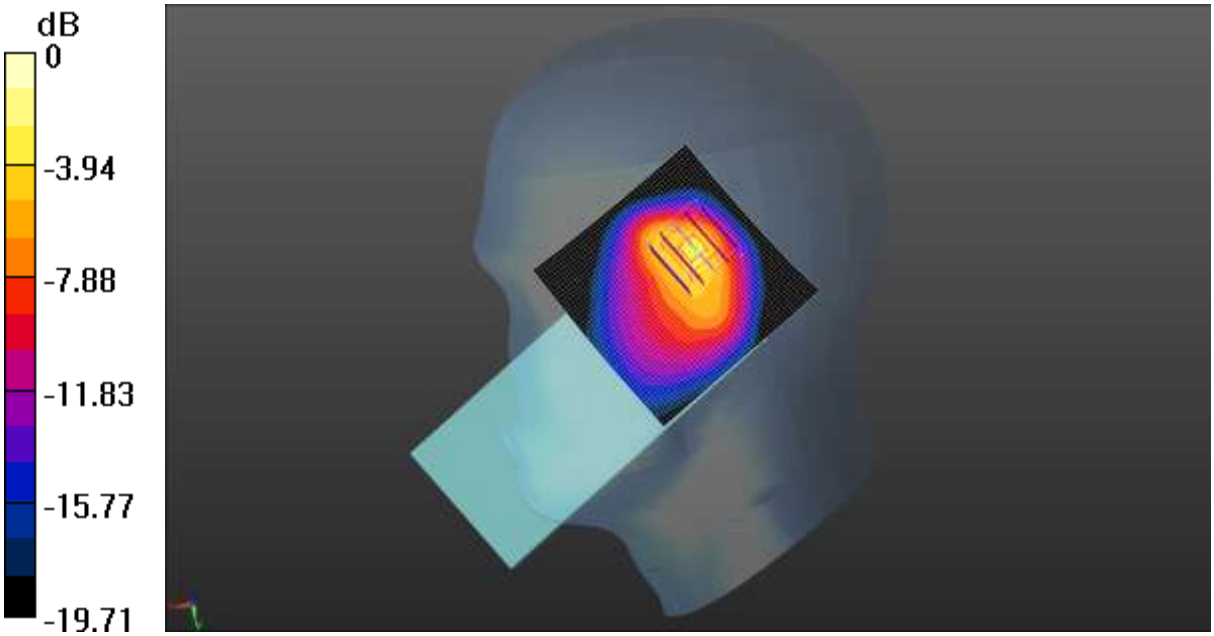
- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1720 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 1RB(20MHz) Right Tilted/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.190 W/kg

LTE Band 66 1RB(20MHz) Right Tilted/Low Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.64 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.480 W/kg
SAR(1 g) = 0.232 W/kg; SAR(10 g) = 0.109 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 49.7%
Maximum value of SAR (measured) = 0.399 W/kg



0 dB = 0.399 W/kg = -3.99 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 834 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 834 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

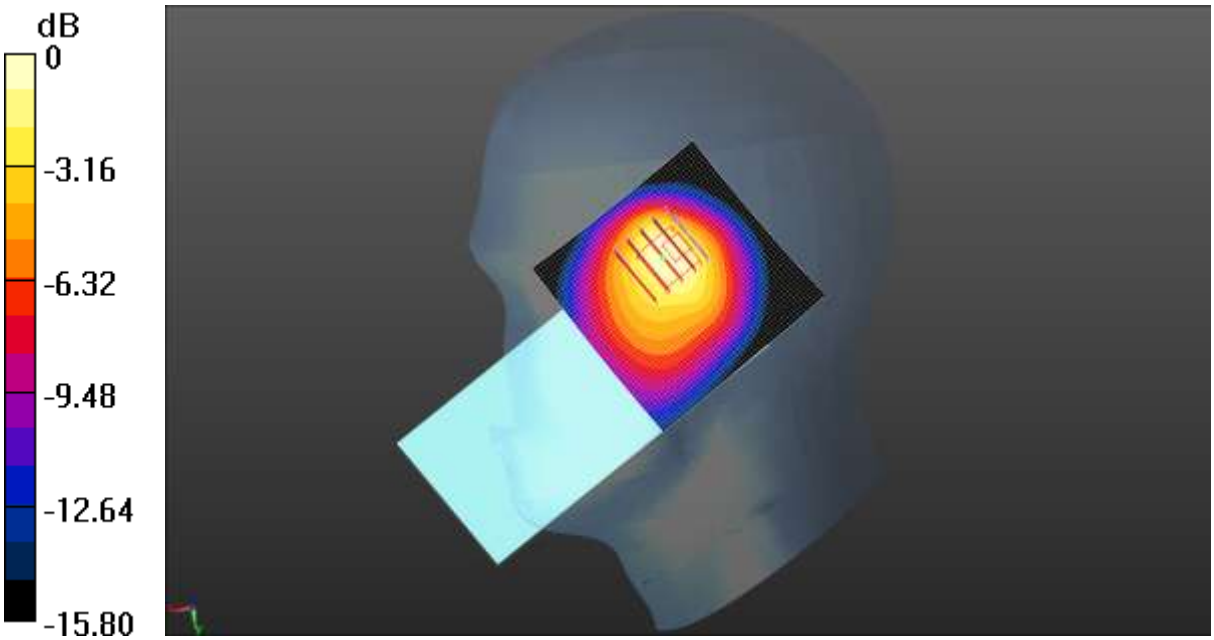
- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 834 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n5 1RB(20MHz) Right Cheek/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.885 W/kg

NR n5 1RB(20MHz) Right Cheek/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.64 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.374 W/kg
Smallest distance from peaks to all points 3 dB below = 12.9 mm
Ratio of SAR at M2 to SAR at M1 = 41.1%
Maximum value of SAR (measured) = 0.950 W/kg



0 dB = 0.950 W/kg = -0.22 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2560 MHz; σ = 1.825 S/m; ε_r = 38.574; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

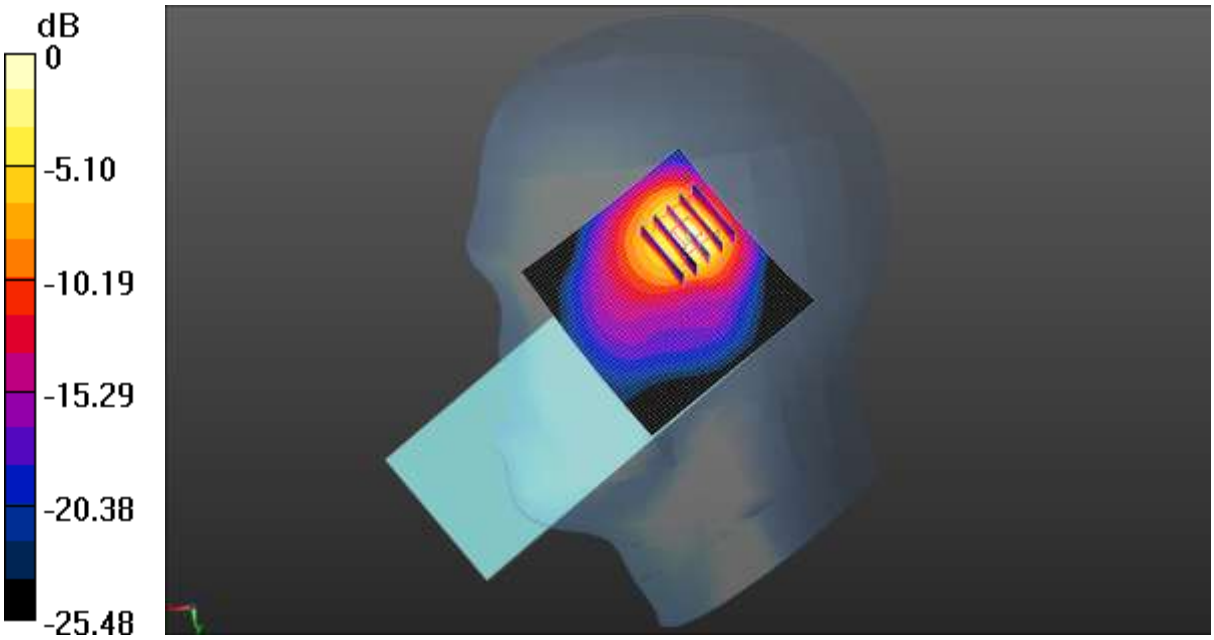
- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2560 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n7 1RB(20MHz) Right Tilted/High Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.853 W/kg

NR n7 1RB(20MHz) Right Tilted/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.640 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.204 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 40.9%
Maximum value of SAR (measured) = 0.856 W/kg



0 dB = 0.856 W/kg = -0.68 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 708.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 708.5 MHz; σ = 0.876 S/m; ε_r = 41.225; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

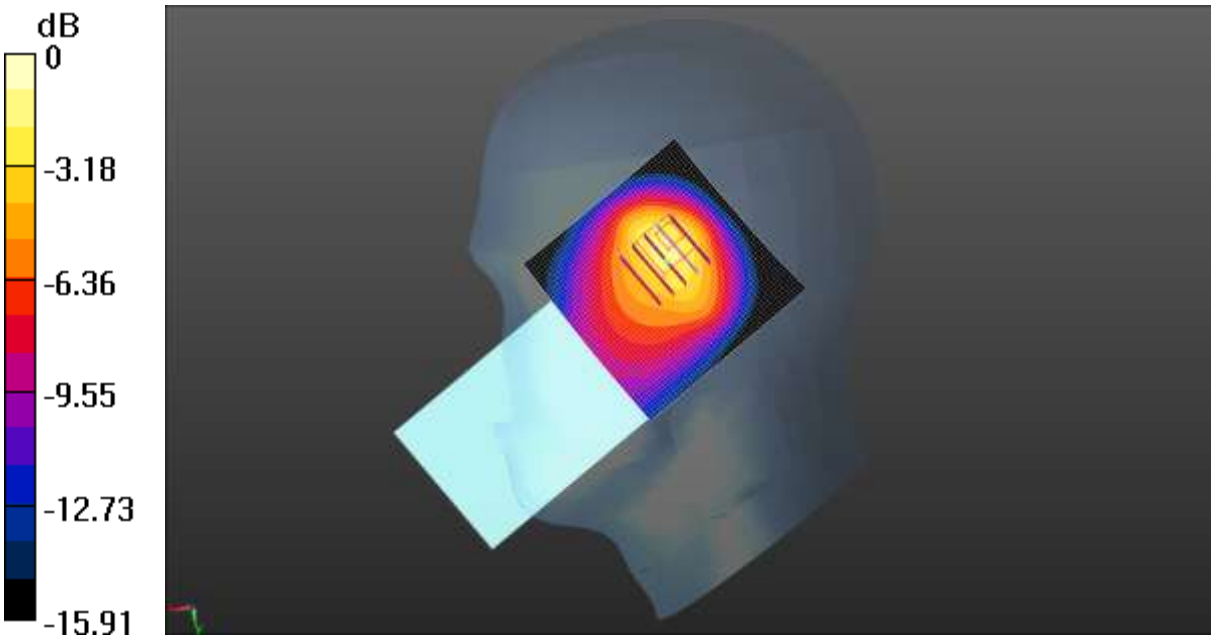
- Probe: EX3DV4 - SN3924; ConvF(10.2, 10.2, 10.2) @ 708.5 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n12 1RB(15MHz) Right Cheek/High Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.160 W/kg

NR n12 1RB(15MHz) Right Cheek/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.41 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.375 W/kg
SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.079 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 39.4%
Maximum value of SAR (measured) = 0.243 W/kg



0 dB = 0.243 W/kg = -6.14 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.833 S/m; ε_r = 38.561; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

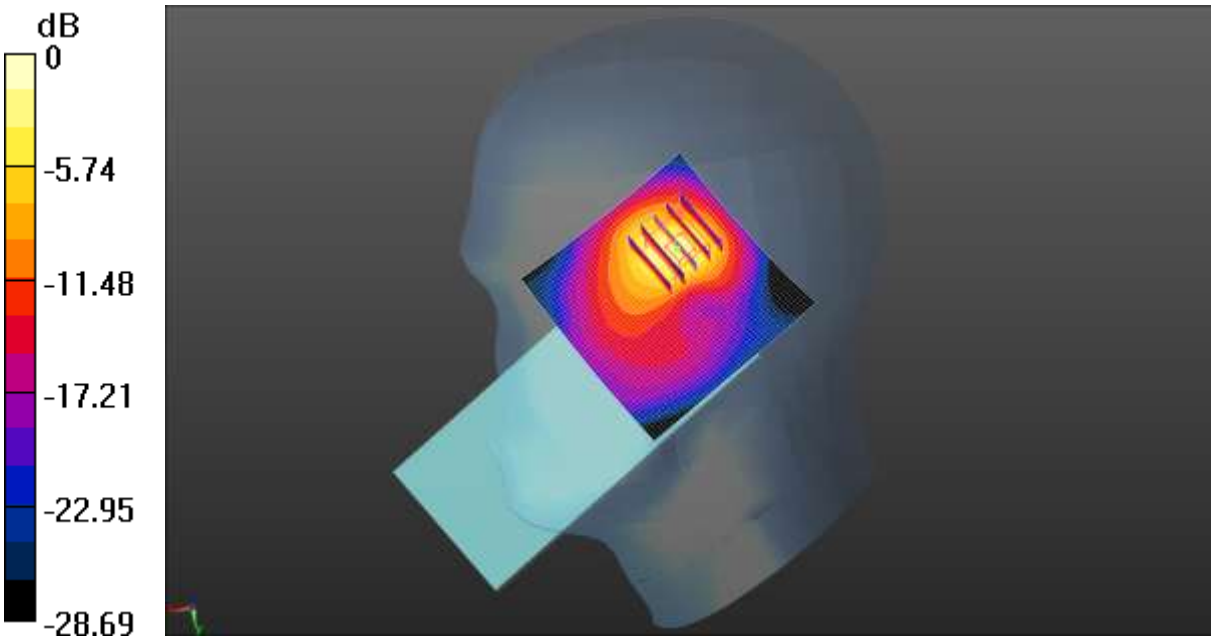
- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2592.99 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n41 50%RB(100MHz) Right Tilted/Middle Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.521 W/kg

NR n41 50%RB(100MHz) Right Tilted/Middle Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.426 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.201 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 40.3%
Maximum value of SAR (measured) = 0.873 W/kg



0 dB = 0.873 W/kg = -0.59 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 1730 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1730 MHz; σ = 1.336 S/m; ε_r = 39.201; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

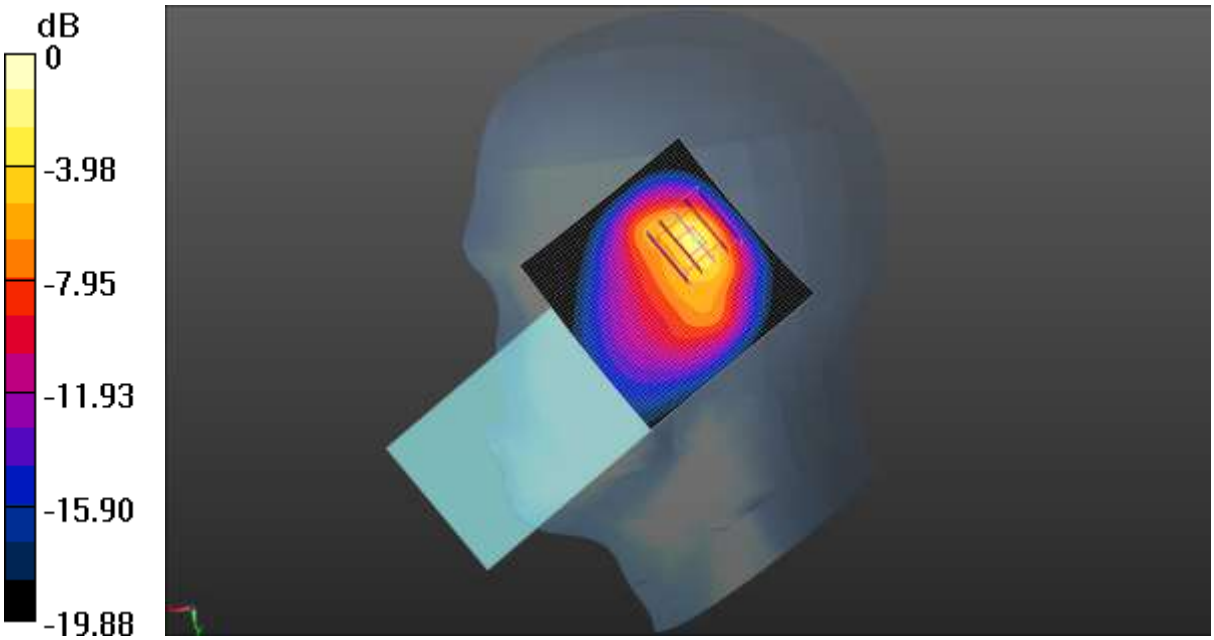
- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1730 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n66 50%RB(40MHz) Right Tilted/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.587 W/kg

NR n66 50%RB(40MHz) Right Tilted/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.34 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.515 W/kg; SAR(10 g) = 0.244 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 51.7%
Maximum value of SAR (measured) = 0.827 W/kg



0 dB = 0.827 W/kg = -0.82 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

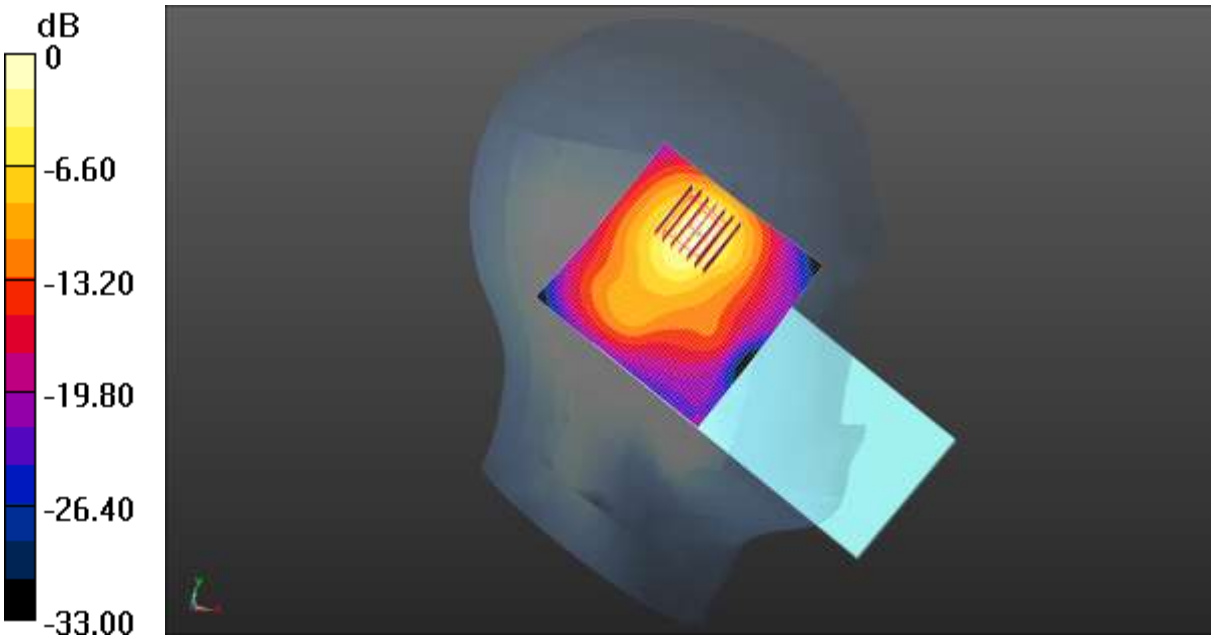
Communication System: UID 0, NR (0); Frequency: 3500.01 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 2.879 S/m; ε_r = 37.859; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.02, 7.02, 7.02) @ 3500.01 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n77(3500) 50%RB(100MHz) Left Cheek/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.23 W/kg

NR n77(3500) 50%RB(100MHz) Left Cheek/Middle Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 8.233 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.54 W/kg
SAR(1 g) = 0.593 W/kg; SAR(10 g) = 0.252 W/kg
Smallest distance from peaks to all points 3 dB below = 7.8 mm
Ratio of SAR at M2 to SAR at M1 = 37.2%
Maximum value of SAR (measured) = 1.14 W/kg



0 dB = 1.14 W/kg = 0.57 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

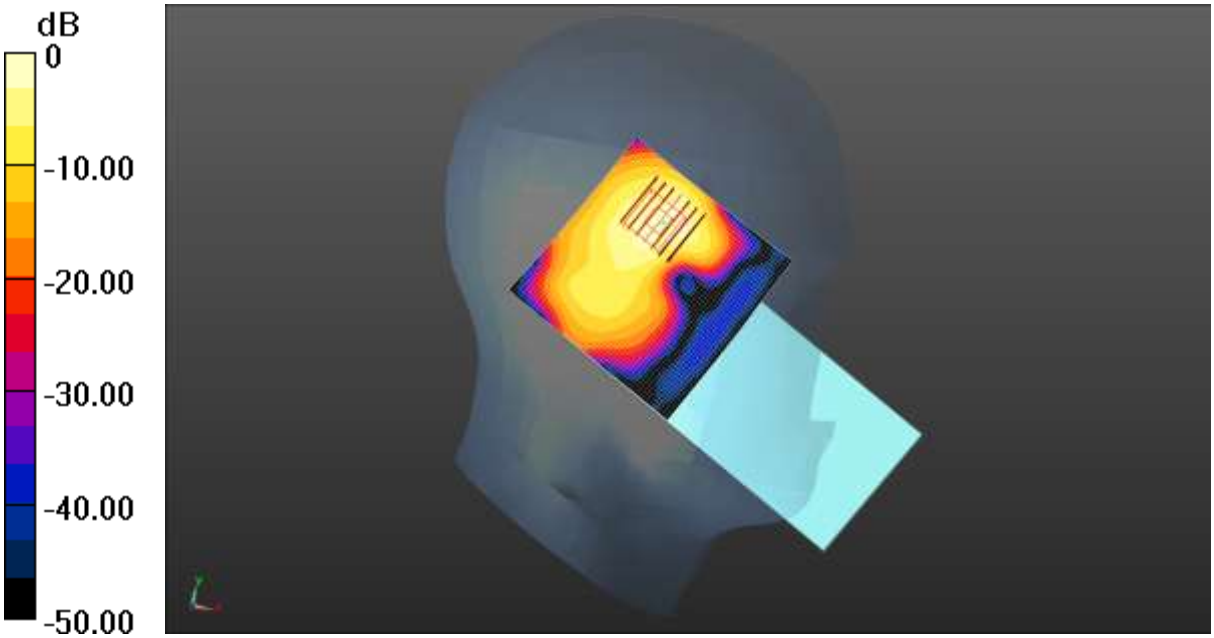
Communication System: UID 0, NR (0); Frequency: 3750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3750 MHz; σ = 3.197 S/m; ε_r = 37.365; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(6.62, 6.62, 6.62) @ 3750 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n77(3840) 50%RB(100MHz) Left Cheek/Low Channel/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.752 W/kg

NR n77(3840) 50%RB(100MHz) Left Cheek/Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 7.303 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.881 W/kg
SAR(1 g) = 0.340 W/kg; SAR(10 g) = 0.136 W/kg
Smallest distance from peaks to all points 3 dB below = 8.1 mm
Ratio of SAR at M2 to SAR at M1 = 36.4%
Maximum value of SAR (measured) = 0.647 W/kg



0 dB = 0.647 W/kg = -1.89 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

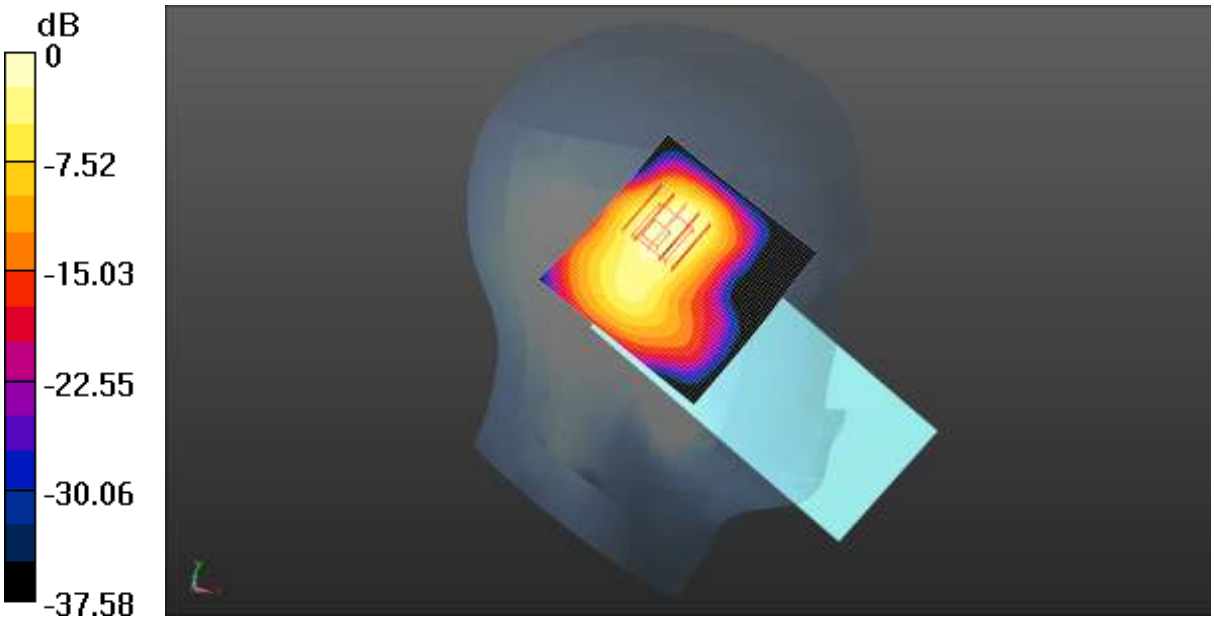
Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);
Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.719 S/m; ε_r = 38.491; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2462 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2.4GWIFI Left Tilted/High Channel/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.159 W/kg

2.4GWIFI Left Tilted/High Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.681 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.275 W/kg
SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.037 W/kg
Smallest distance from peaks to all points 3 dB below = 5.1 mm
Ratio of SAR at M2 to SAR at M1 = 41.4%
Maximum value of SAR (measured) = 0.134 W/kg



0 dB = 0.134 W/kg = -8.73 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

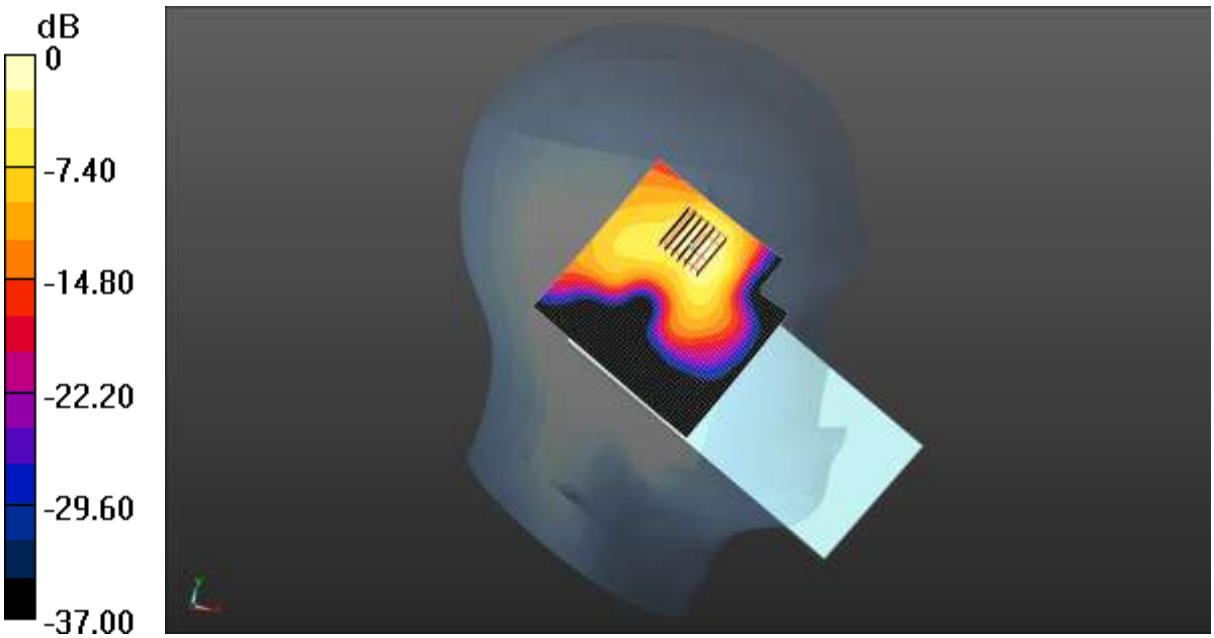
Communication System: UID 0, IEEE 802.11n40 WiFi 5GHz (0); Frequency: 5230 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5230 MHz; σ = 4.745 S/m; ε_r = 37.04; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(5.41, 5.41, 5.41) @ 5230 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5.2GWIFI Left Cheek/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.375 W/kg

5.2GWIFI Left Cheek/Middle Channel/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.444 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.712 W/kg
SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.065 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 22.3%
Maximum value of SAR (measured) = 0.473 W/kg



0 dB = 0.473 W/kg = -3.25 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

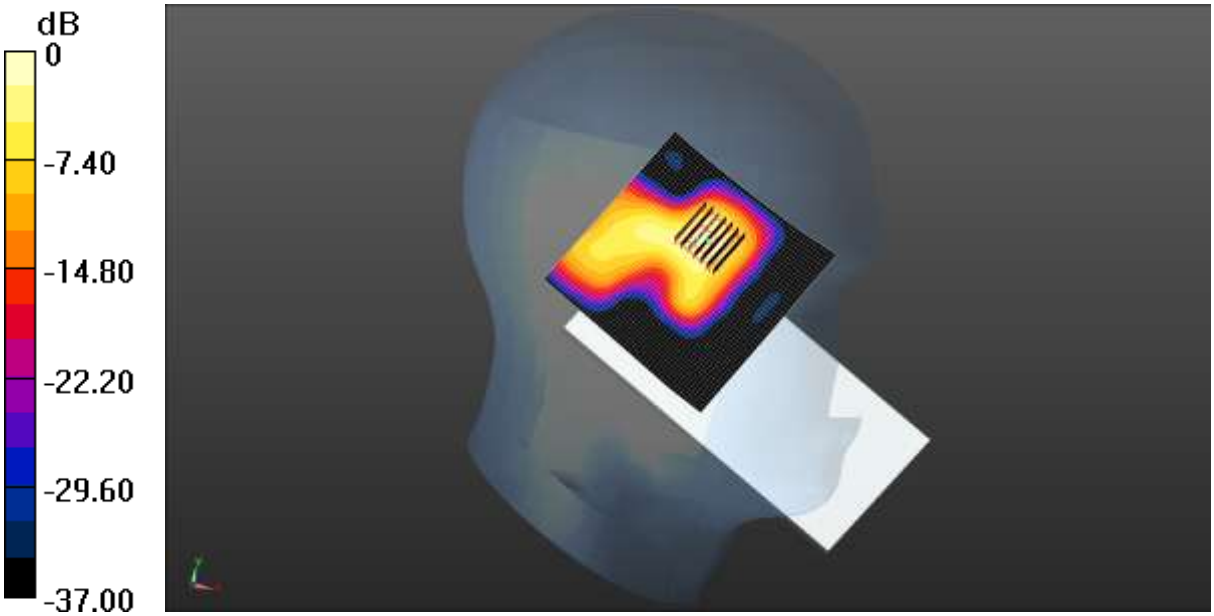
Communication System: UID 0, IEEE 802.11a WiFi 5GHz (0); Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.409 S/m; ε_r = 36.056; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(4.9, 4.9, 4.9) @ 5785 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5.8GWIFI Left Cheek/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.480 W/kg

5.8GWIFI Left Cheek/Middle Channel/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.776 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.794 W/kg
SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.057 W/kg
Smallest distance from peaks to all points 3 dB below = 7.6 mm
Ratio of SAR at M2 to SAR at M1 = 15.7%
Maximum value of SAR (measured) = 0.524 W/kg



0 dB = 0.524 W/kg = -2.81 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

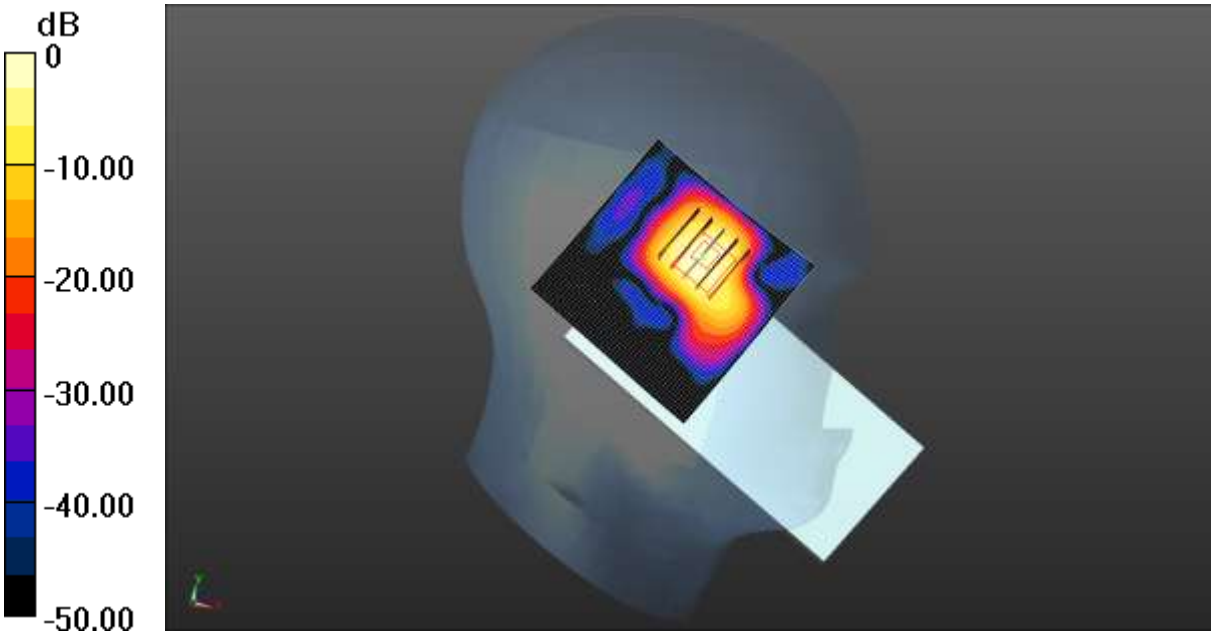
Communication System: UID 0, Bluetooth (0); Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.784 S/m; ε_r = 38.424; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2480 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bluetooth Left Cheek/High Channel/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0594 W/kg

Bluetooth Left Cheek/High Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.3470 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.0480 W/kg
SAR(1 g) = 0.020 W/kg; SAR(10 g) = 0.00705 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 35.4%
Maximum value of SAR (measured) = 0.0340 W/kg



0 dB = 0.0340 W/kg = -14.69 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

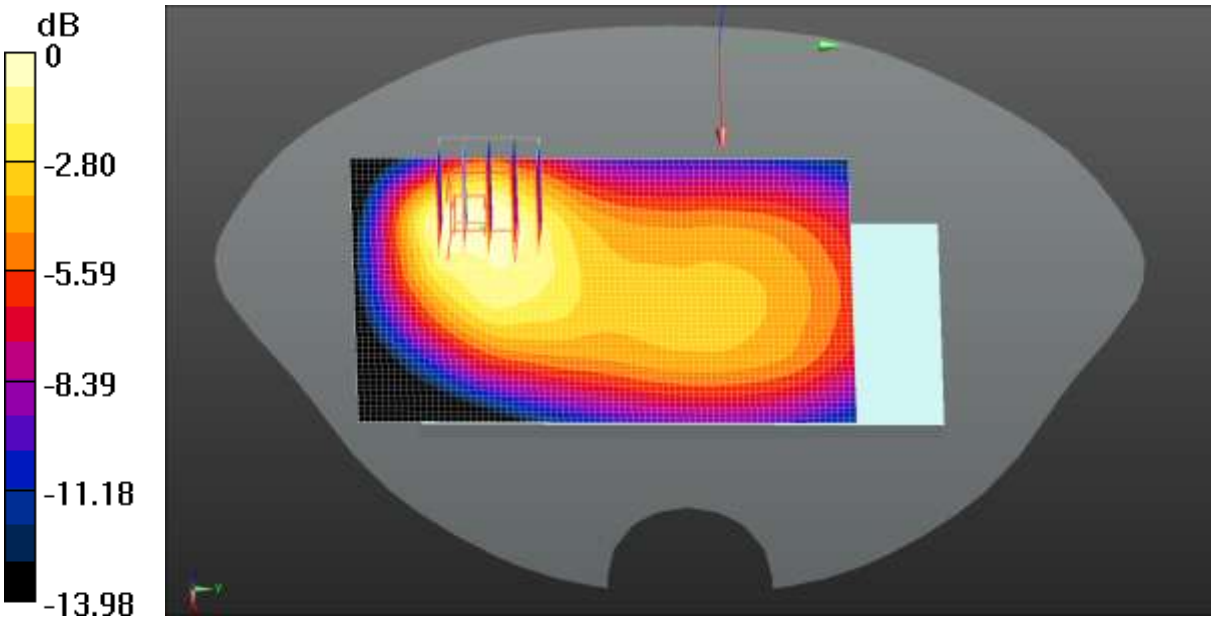
Communication System: UID 0, GPRS(4 Slots) (0); Frequency: 836.6 MHz;Duty Cycle: 1:1.99986
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 836.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GPRS 850 4Slots Body Back/Middle Channel/Area Scan (51x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.889 W/kg

GPRS 850 4Slots Body Back/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.67 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.976 W/kg
SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.348 W/kg
Smallest distance from peaks to all points 3 dB below = 13.8 mm
Ratio of SAR at M2 to SAR at M1 = 57.4%
Maximum value of SAR (measured) = 0.785 W/kg



0 dB = 0.785 W/kg = -1.05 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, GPRS(4 Slots) (0); Frequency: 1880 MHz;Duty Cycle: 1:1.99986
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

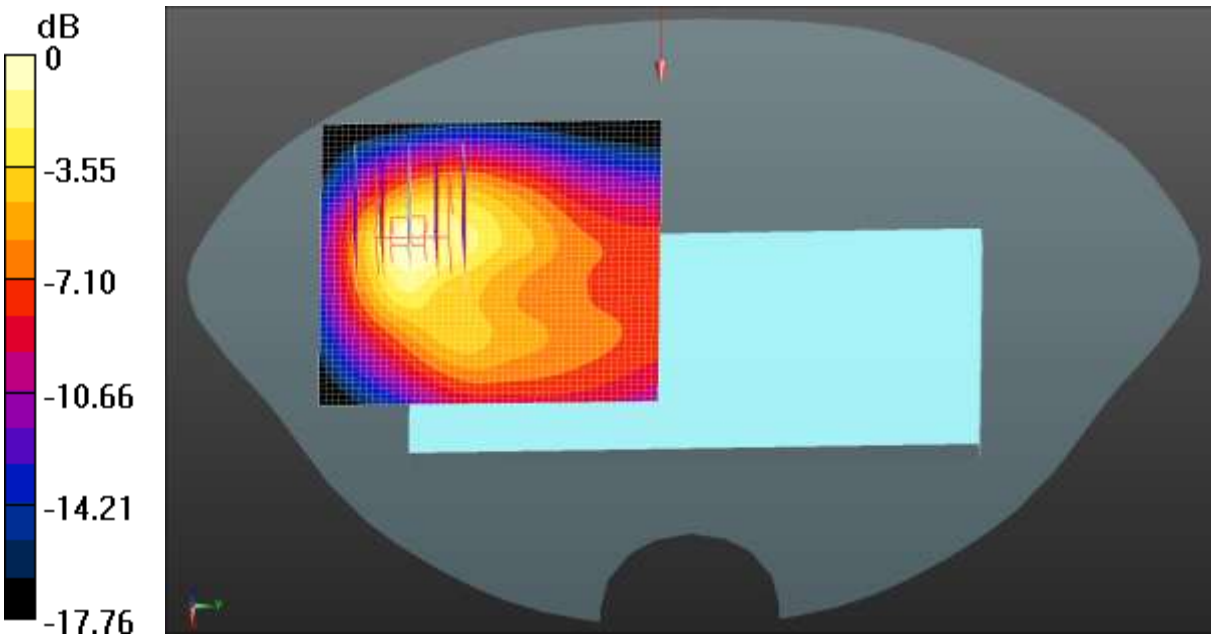
- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GPRS 1900 4Slots Body Back/Middle Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

GPRS 1900 4Slots Body Back/Middle Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.85 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.742 W/kg; SAR(10 g) = 0.399 W/kg
Smallest distance from peaks to all points 3 dB below = 11.5 mm
Ratio of SAR at M2 to SAR at M1 = 53.8%
Maximum value of SAR (measured) = 1.15 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

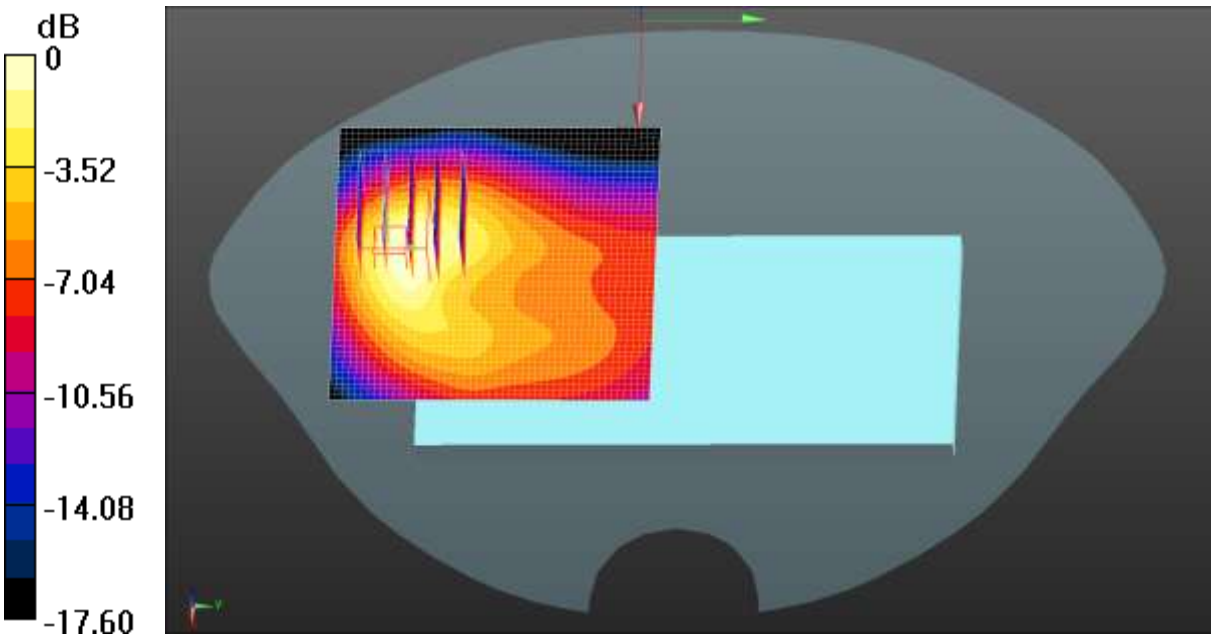
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 1900 Body Back/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.324 W/kg

WCDMA 1900 Body Back/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.806 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.352 W/kg
SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.102 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 55.5%
Maximum value of SAR (measured) = 0.281 W/kg



0 dB = 0.281 W/kg = -5.51 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

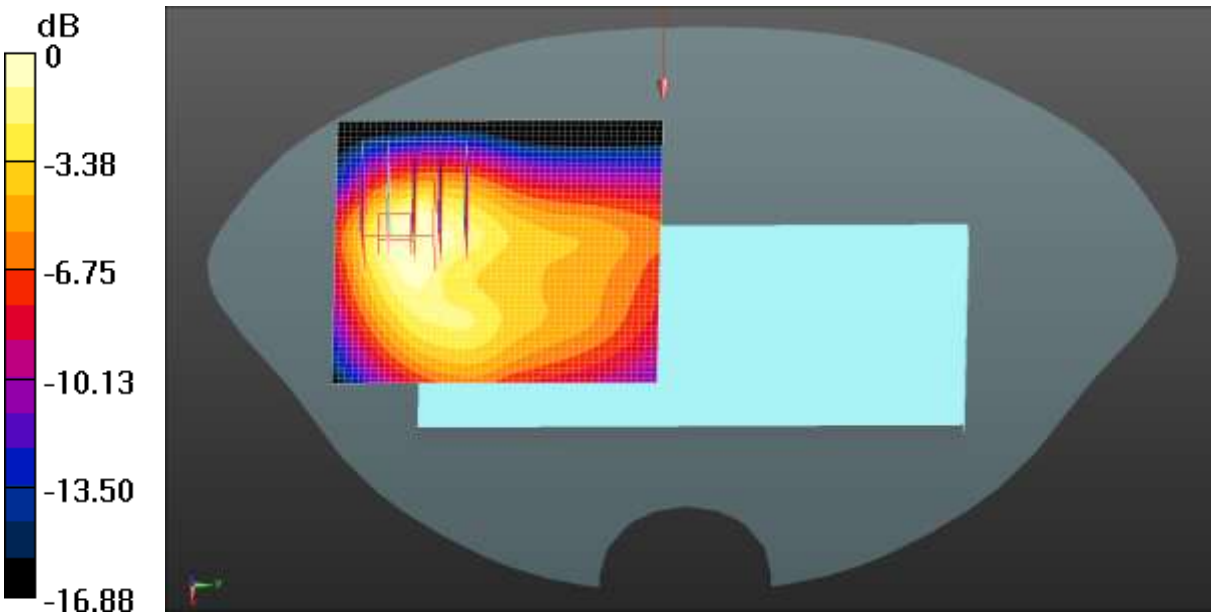
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.338 S/m; ε_r = 39.19; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1752.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 1700 Body Back/High Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.439 W/kg

WCDMA 1700 Body Back/High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.250 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.458 W/kg
SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.139 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 55.8%
Maximum value of SAR (measured) = 0.367 W/kg



0 dB = 0.367 W/kg = -4.35 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

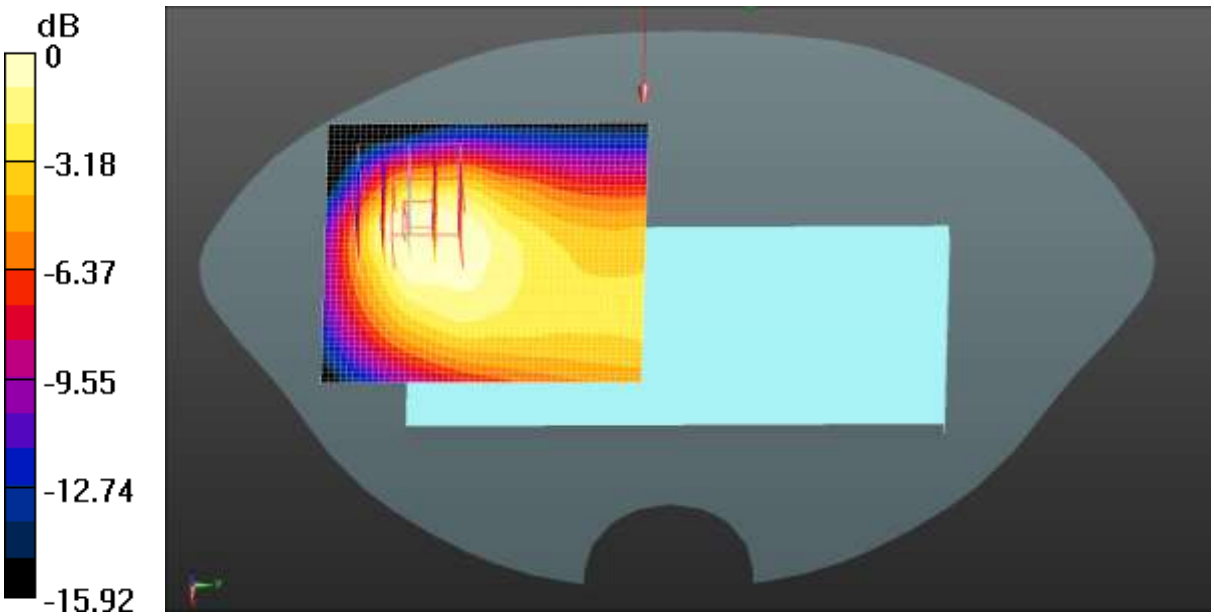
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 836.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 850 Body Back/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.397 W/kg

WCDMA 850 Body Back/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.37 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.393 W/kg
SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.136 W/kg
Smallest distance from peaks to all points 3 dB below = 13.6 mm
Ratio of SAR at M2 to SAR at M1 = 57.7%
Maximum value of SAR (measured) = 0.304 W/kg



0 dB = 0.304 W/kg = -5.17 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

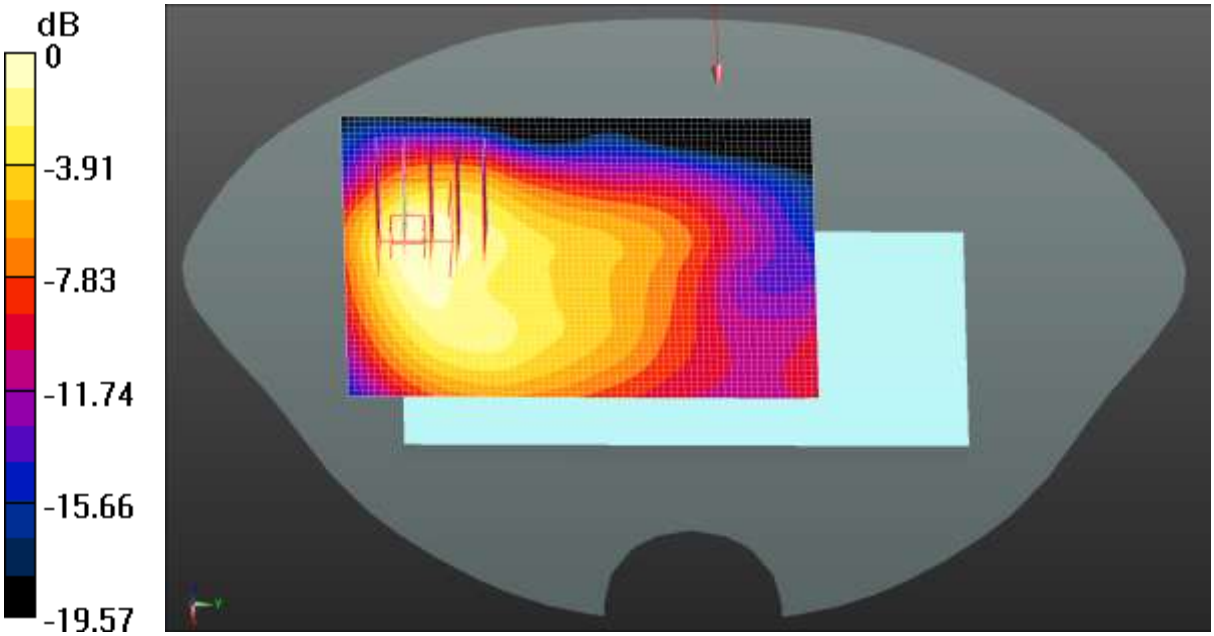
- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 2 1RB(20MHz) Body Back/Middle Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0874 W/kg

LTE Band 2 1RB(20MHz) Body Back/Middle Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.191 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.124 W/kg
SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.035 W/kg
Smallest distance from peaks to all points 3 dB below = 11.3 mm
Ratio of SAR at M2 to SAR at M1 = 53.6%
Maximum value of SAR (measured) = 0.0997 W/kg



0 dB = 0.0997 W/kg = -10.01 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 829 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 829 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

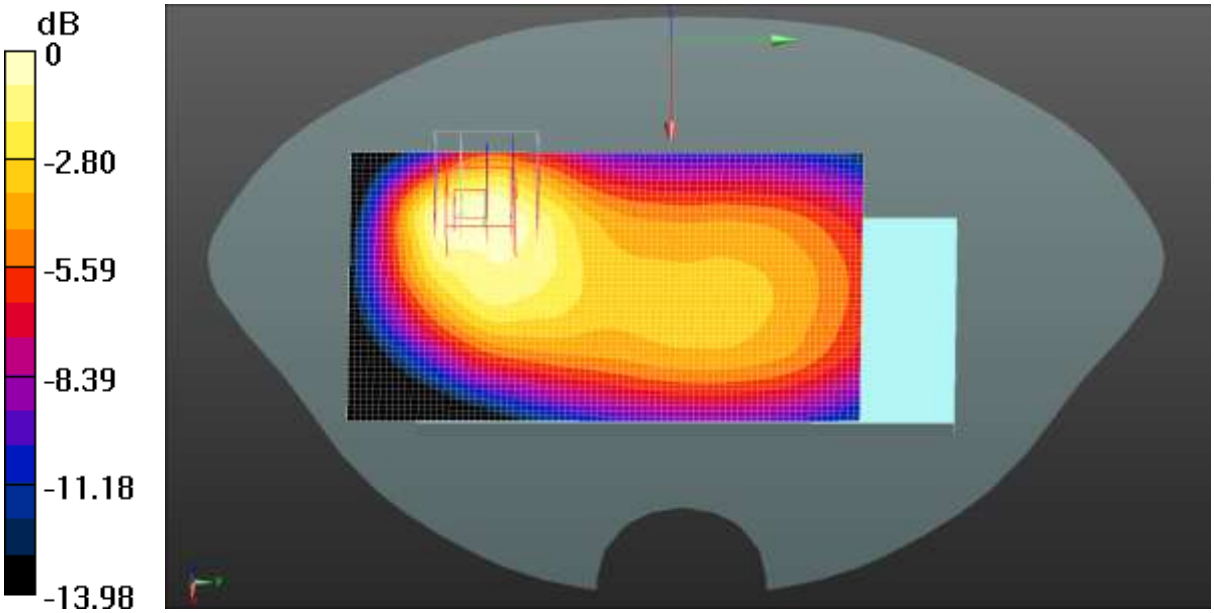
- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 829 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 5 1RB(10MHz) Body Back/Low Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.190 W/kg

LTE Band 5 1RB(10MHz) Body Back/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.74 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.204 W/kg
SAR(1 g) = 0.114 W/kg; SAR(10 g) = 0.073 W/kg
Smallest distance from peaks to all points 3 dB below = 13.6 mm
Ratio of SAR at M2 to SAR at M1 = 58.8%
Maximum value of SAR (measured) = 0.159 W/kg



0 dB = 0.159 W/kg = -7.99 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.804 S/m; ε_r = 38.371; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

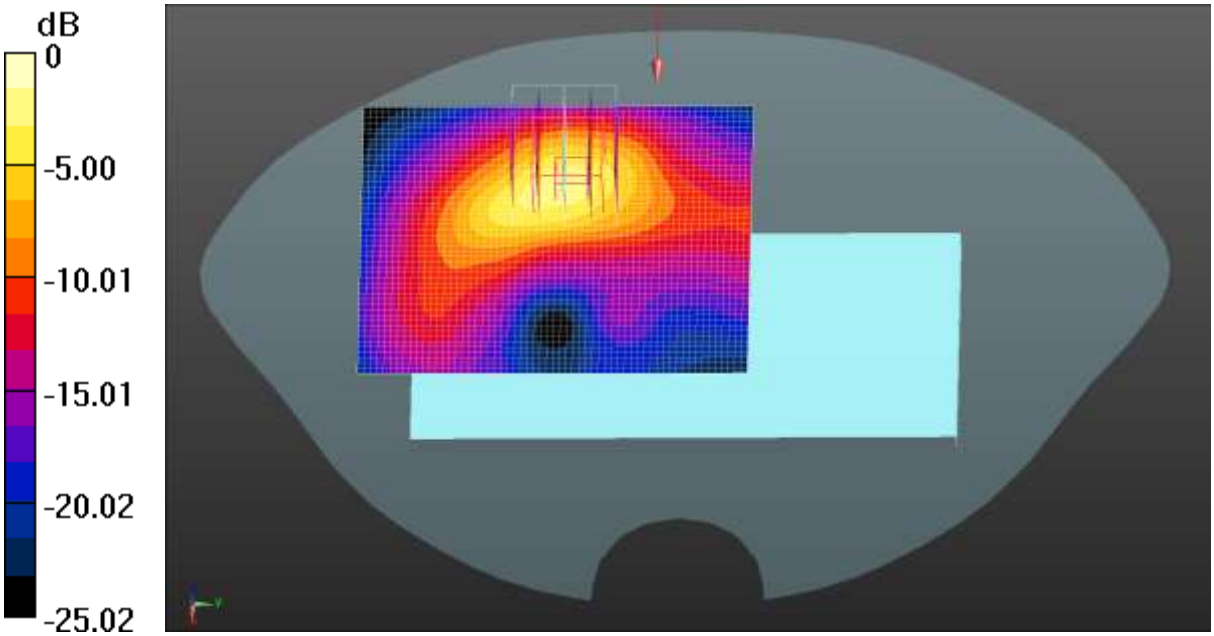
- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2510 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 7 1RB(20MHz) Body Back/Low Channel/Area Scan (51x61x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.510 W/kg

LTE Band 7 1RB(20MHz) Body Back/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.479 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.224 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 50.3%
Maximum value of SAR (measured) = 0.839 W/kg



0 dB = 0.839 W/kg = -0.76 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 704 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 704 MHz; σ = 0.876 S/m; ε_r = 41.225; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

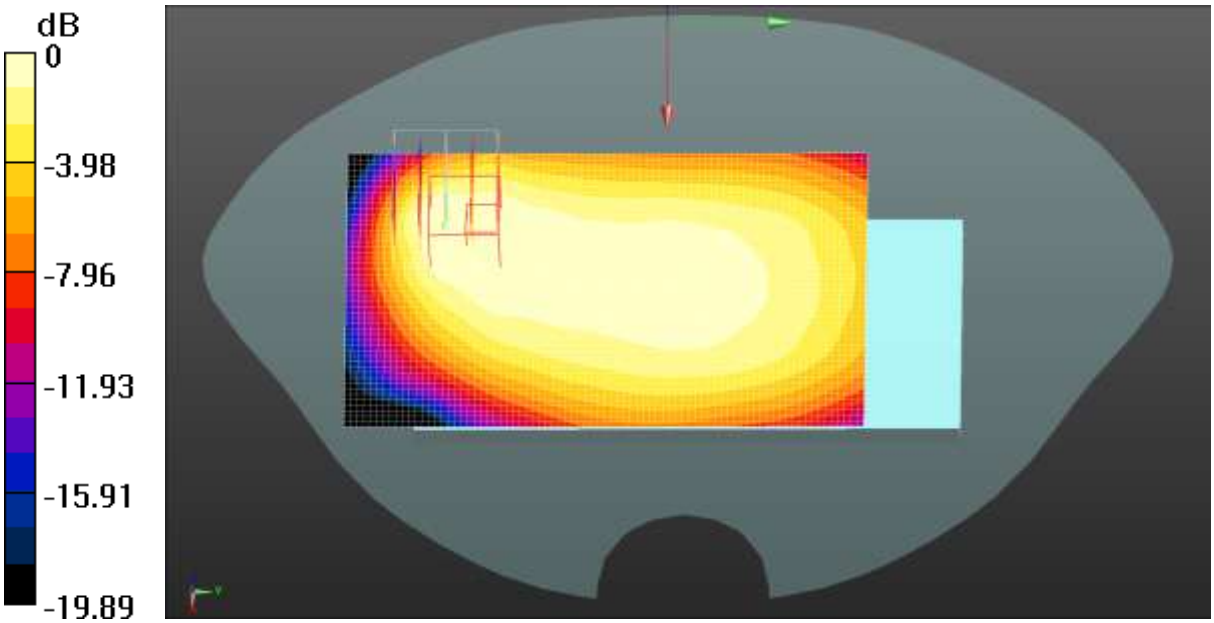
- Probe: EX3DV4 - SN3924; ConvF(10.2, 10.2, 10.2) @ 704 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 12 1RB(10MHz) Body Back/Low Channel/Area Scan (51x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0544 W/kg

LTE Band 12 1RB(10MHz) Body Back/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.883 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.0590 W/kg
SAR(1 g) = 0.033 W/kg; SAR(10 g) = 0.021 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 52.9%
Maximum value of SAR (measured) = 0.0462 W/kg



0 dB = 0.0462 W/kg = -13.35 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-TDD(USA) 20MHz 1RB QPSK (0); Frequency: 2680 MHz;Duty Cycle: 1:1.59956
Medium parameters used: f = 2680 MHz; σ = 1.987 S/m; ε_r = 38.33; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

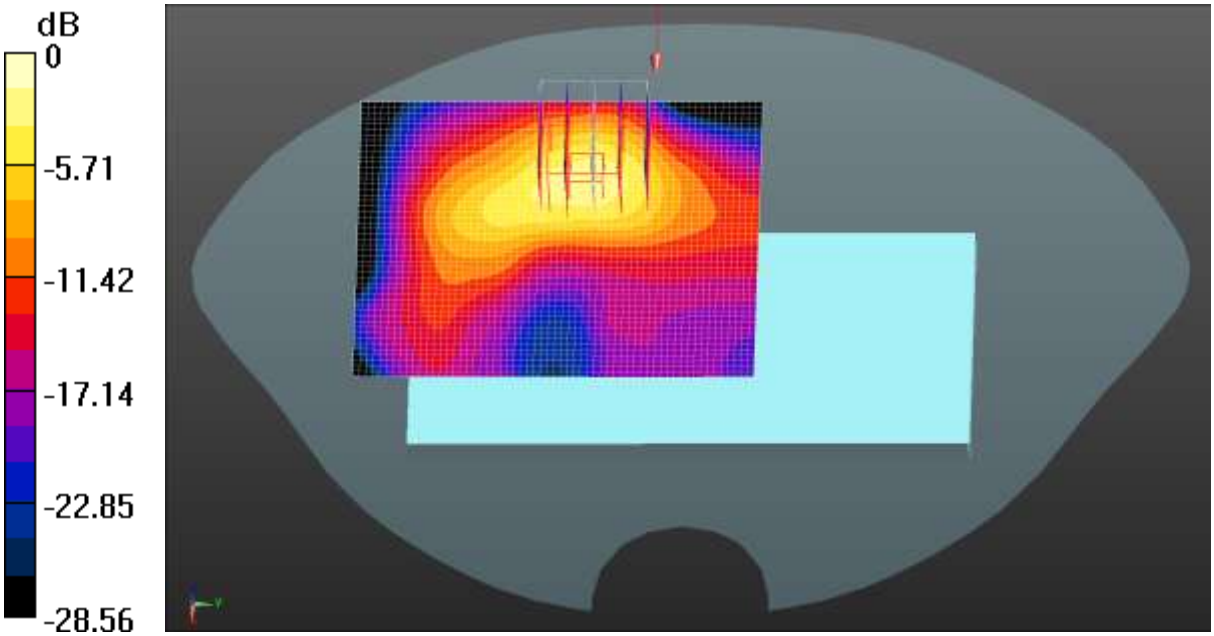
- Probe: EX3DV4 - SN3924; ConvF(7.35, 7.35, 7.35) @ 2680 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 1RB(20MHz) Body Back/High Channel/Area Scan (51x61x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.257 W/kg

LTE Band 41 1RB(20MHz) Body Back/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.059 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.572 W/kg
SAR(1 g) = 0.260 W/kg; SAR(10 g) = 0.111 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 48.3%
Maximum value of SAR (measured) = 0.435 W/kg



0 dB = 0.435 W/kg = -3.62 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.324 S/m; ε_r = 39.247; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

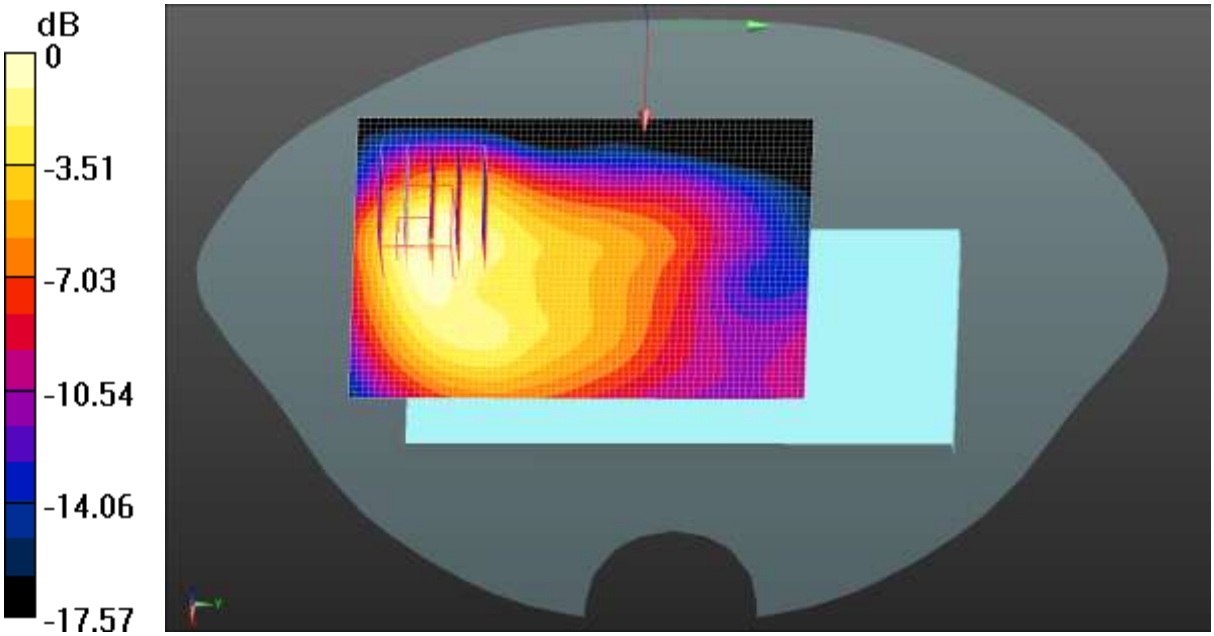
- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1720 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 1RB(20MHz) Body Back/Low Channel/Area Scan (51x71x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.131 W/kg

LTE Band 66 1RB(20MHz) Body Back/Low Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.530 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.042 W/kg
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 55.4%
Maximum value of SAR (measured) = 0.111 W/kg



0 dB = 0.111 W/kg = -9.55 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

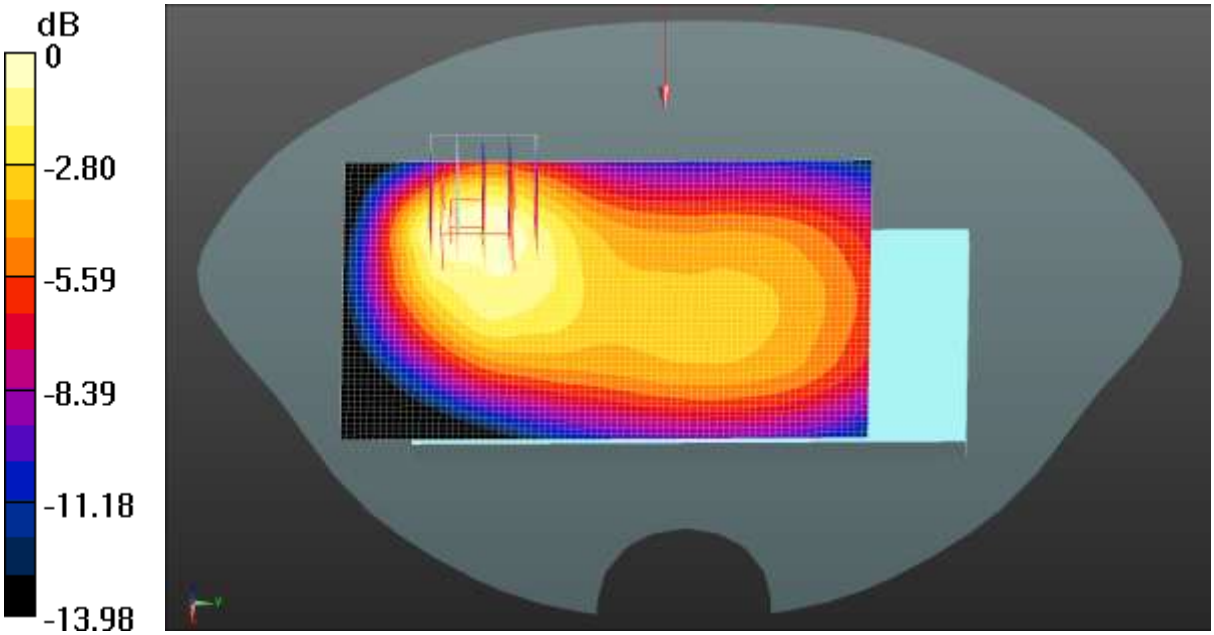
Communication System: UID 0, NR (0); Frequency: 834 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 834 MHz; σ = 0.915 S/m; ε_r = 40.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(9.8, 9.8, 9.8) @ 834 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n5 1RB(20MHz) Body Back/Low Channel/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.356 W/kg

NR n5 1RB(20MHz) Body Back/Low Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.65 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.403 W/kg
SAR(1 g) = 0.223 W/kg; SAR(10 g) = 0.141 W/kg
Smallest distance from peaks to all points 3 dB below = 13.8 mm
Ratio of SAR at M2 to SAR at M1 = 58.2%
Maximum value of SAR (measured) = 0.316 W/kg



0 dB = 0.316 W/kg = -5.00 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2560 MHz; σ = 1.825 S/m; ε_r = 38.574; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

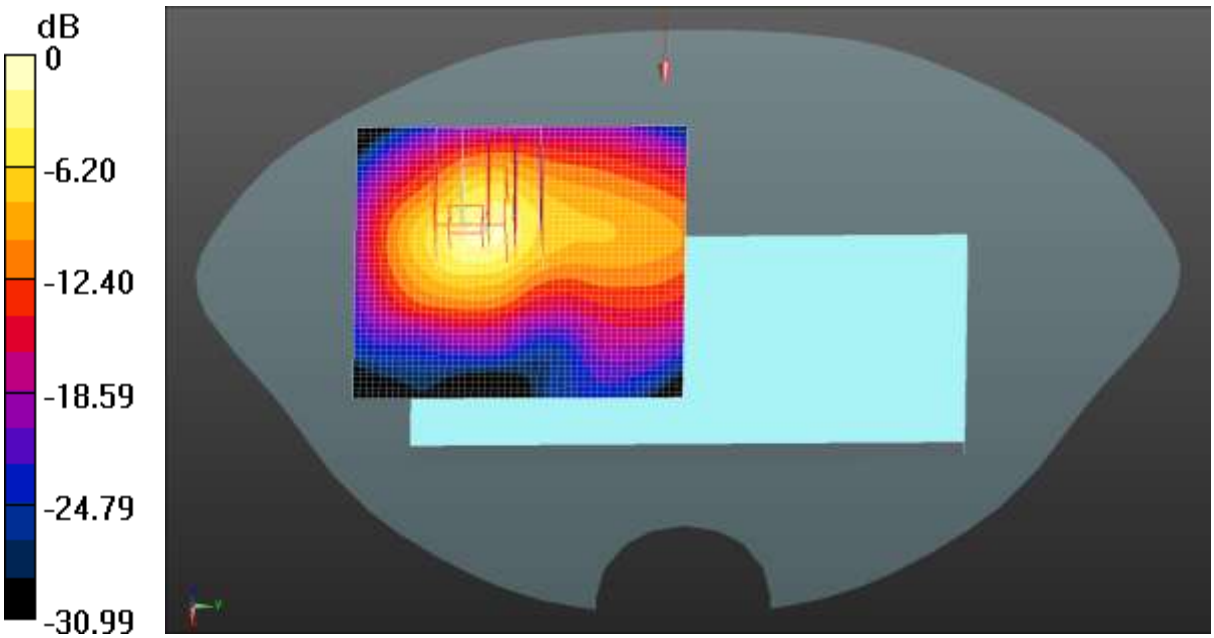
- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2560 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n7 50%RB(20MHz) Body Back/High Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.484 W/kg

NR n7 50%RB(20MHz) Body Back/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.713 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.884 W/kg
SAR(1 g) = 0.398 W/kg; SAR(10 g) = 0.170 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 47.7%
Maximum value of SAR (measured) = 0.664 W/kg



0 dB = 0.664 W/kg = -1.78 dBW/kg

Test Laboratory: JYTSZ Date: 03.02.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 708.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 708.5 MHz; σ = 0.876 S/m; ε_r = 41.225; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

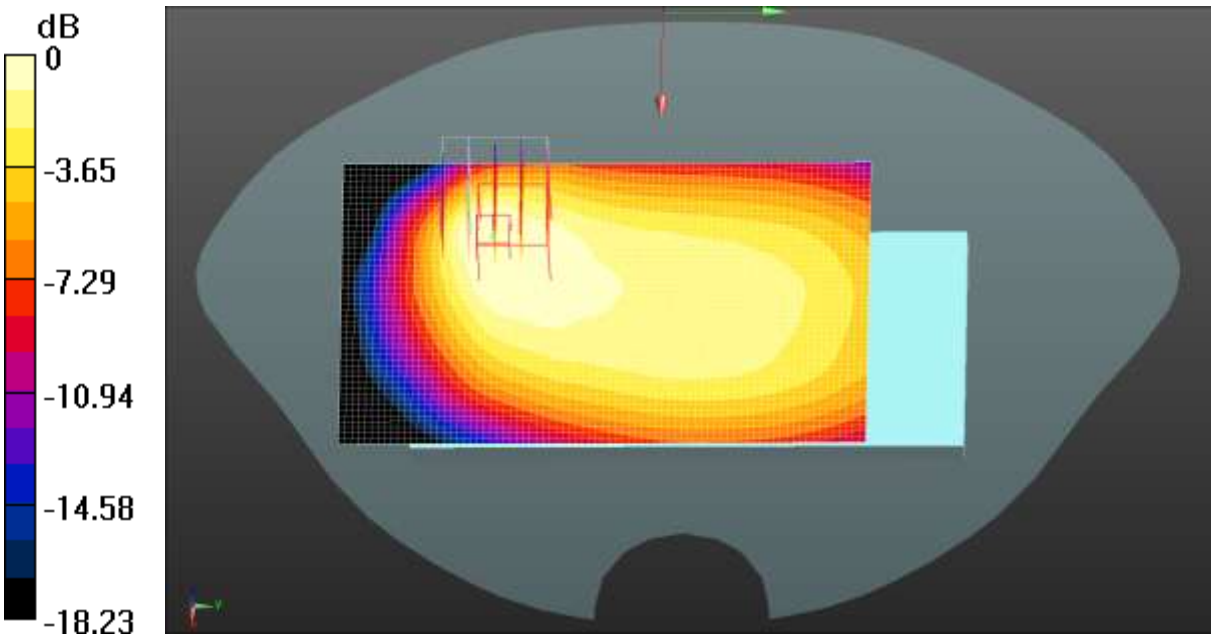
- Probe: EX3DV4 - SN3924; ConvF(10.2, 10.2, 10.2) @ 708.5 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n12 1RB(15MHz) Body Back/High Channel/Area Scan (51x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.120 W/kg

NR n12 1RB(15MHz) Body Back/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.730 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.122 W/kg
SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.041 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 47.7%
Maximum value of SAR (measured) = 0.0897 W/kg



0 dB = 0.0897 W/kg = -10.47 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.872 S/m; ε_r = 38.476; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

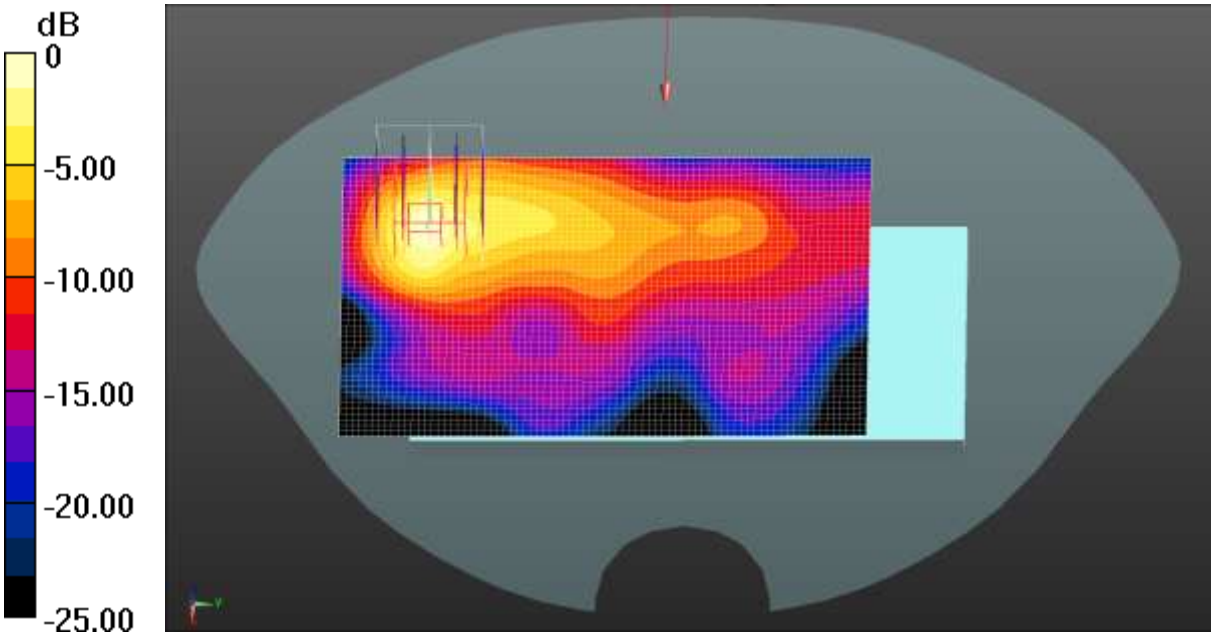
- Probe: EX3DV4 - SN3924; ConvF(7.35, 7.35, 7.35) @ 2592.99 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n41 1RB(100MHz) Body Back/Middle Channel/Area Scan (51x81x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.249 W/kg

NR n41 1RB(100MHz) Body Back/Middle Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.930 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.367 W/kg
SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.071 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 44.5%
Maximum value of SAR (measured) = 0.284 W/kg



0 dB = 0.284 W/kg = -5.47 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 1730 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1730 MHz; σ = 1.336 S/m; ε_r = 39.201; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

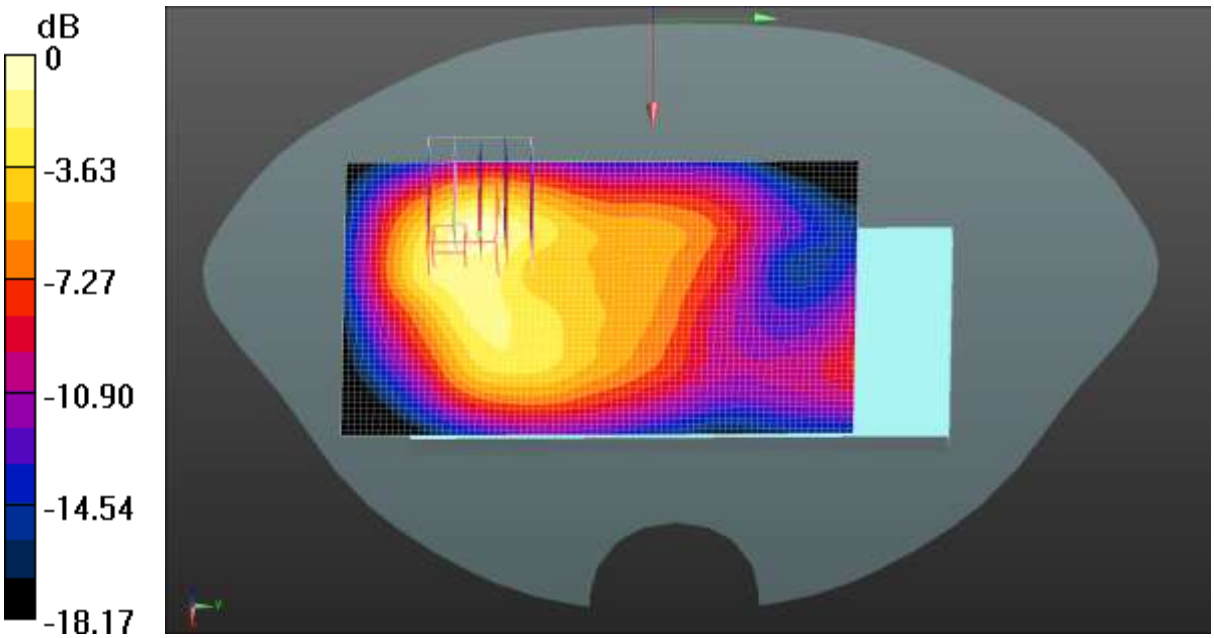
- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1730 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n66 50%RB(40MHz) Body Back/Low Channel/Area Scan (51x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.223 W/kg

NR n66 50%RB(40MHz) Body Back/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.073 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.288 W/kg
SAR(1 g) = 0.157 W/kg; SAR(10 g) = 0.085 W/kg
Smallest distance from peaks to all points 3 dB below = 13.8 mm
Ratio of SAR at M2 to SAR at M1 = 54.2%
Maximum value of SAR (measured) = 0.237 W/kg



0 dB = 0.237 W/kg = -6.25 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 3500.01 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 3500.01 MHz; σ = 2.879 S/m; ε_r = 37.859; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

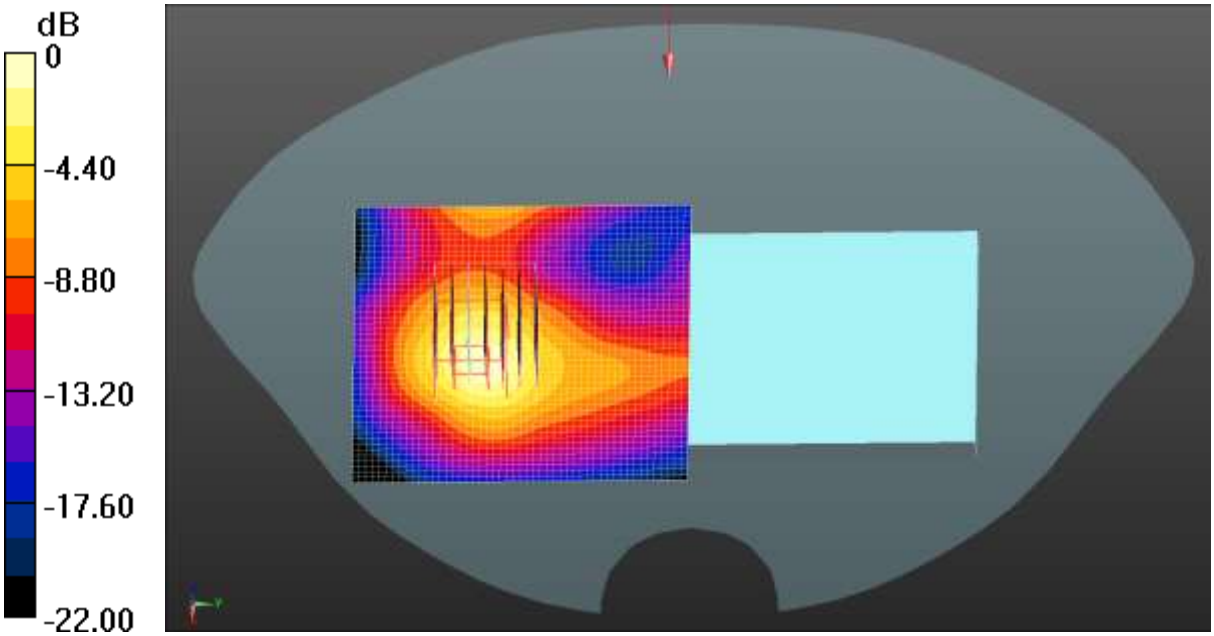
- Probe: EX3DV4 - SN3924; ConvF(7.02, 7.02, 7.02) @ 3500.01 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n77(3500) 1RB(100MHz) Body Back/Middle Channel/Area Scan (51x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.390 W/kg

NR n77(3500) 1RB(100MHz) Body Back/Middle Channel/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 3.140 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.615 W/kg
SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.098 W/kg
Smallest distance from peaks to all points 3 dB below = 10.2 mm
Ratio of SAR at M2 to SAR at M1 = 37%
Maximum value of SAR (measured) = 0.450 W/kg



0 dB = 0.450 W/kg = -3.47 dBW/kg

Test Laboratory: JYTSZ Date: 03.11.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

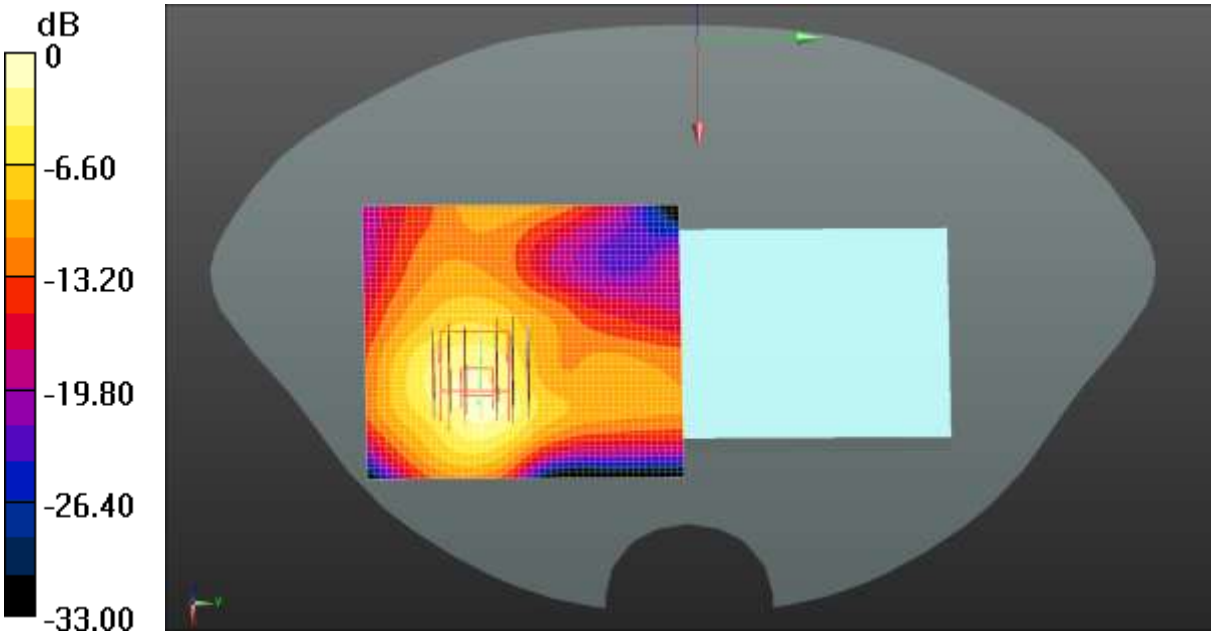
Communication System: UID 0, NR (0); Frequency: 3750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 3750 MHz; σ = 3.197 S/m; ε_r = 37.365; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(6.62, 6.62, 6.62) @ 3750 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n77(3840) 50%RB(100MHz) Body Back/Low Channel/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.310 W/kg

NR n77(3840) 50%RB(100MHz) Body Back/Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=4mm
Reference Value = 1.539 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.564 W/kg
SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.083 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 34.5%
Maximum value of SAR (measured) = 0.398 W/kg



0 dB = 0.398 W/kg = -4.00 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

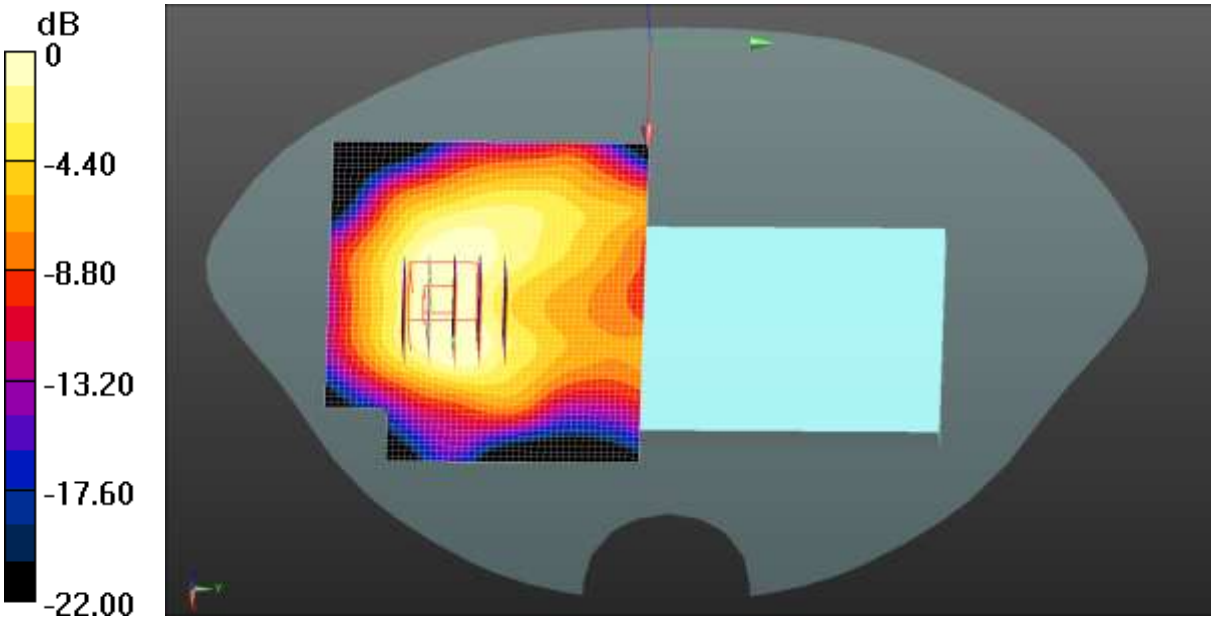
Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);
Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.755 S/m; ε_r = 38.446; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2462 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2.4GWIFI Body Back/High Channel/Area Scan (61x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0565 W/kg

2.4GWIFI Body Back/High Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.556 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.0620 W/kg
SAR(1 g) = 0.030 W/kg; SAR(10 g) = 0.016 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 50.2%
Maximum value of SAR (measured) = 0.0478 W/kg



0 dB = 0.0478 W/kg = -13.21 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

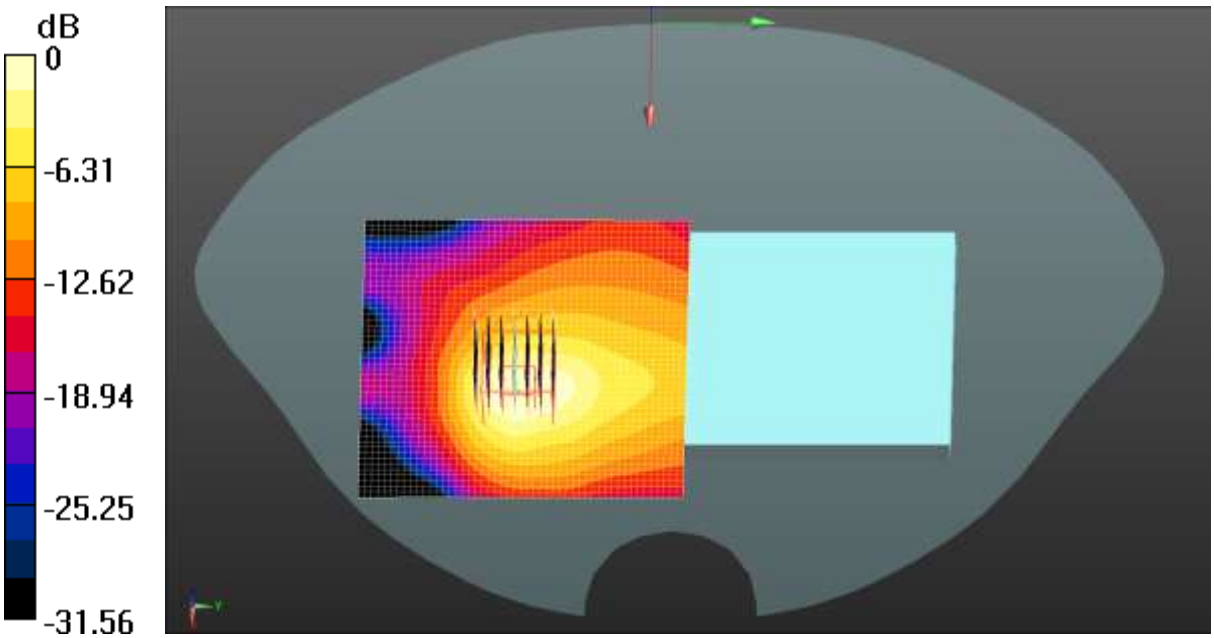
Communication System: UID 0, IEEE 802.11n40 WiFi 5GHz (0); Frequency: 5230 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5230 MHz; σ = 4.727 S/m; ε_r = 37.081; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(5.41, 5.41, 5.41) @ 5230 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5.2GWIFI Body Back/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.443 W/kg

5.2GWIFI Body Back/Middle Channel/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.573 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.616 W/kg
SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.069 W/kg
Smallest distance from peaks to all points 3 dB below = 12 mm
Ratio of SAR at M2 to SAR at M1 = 21.8%
Maximum value of SAR (measured) = 0.404 W/kg



0 dB = 0.404 W/kg = -3.94 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

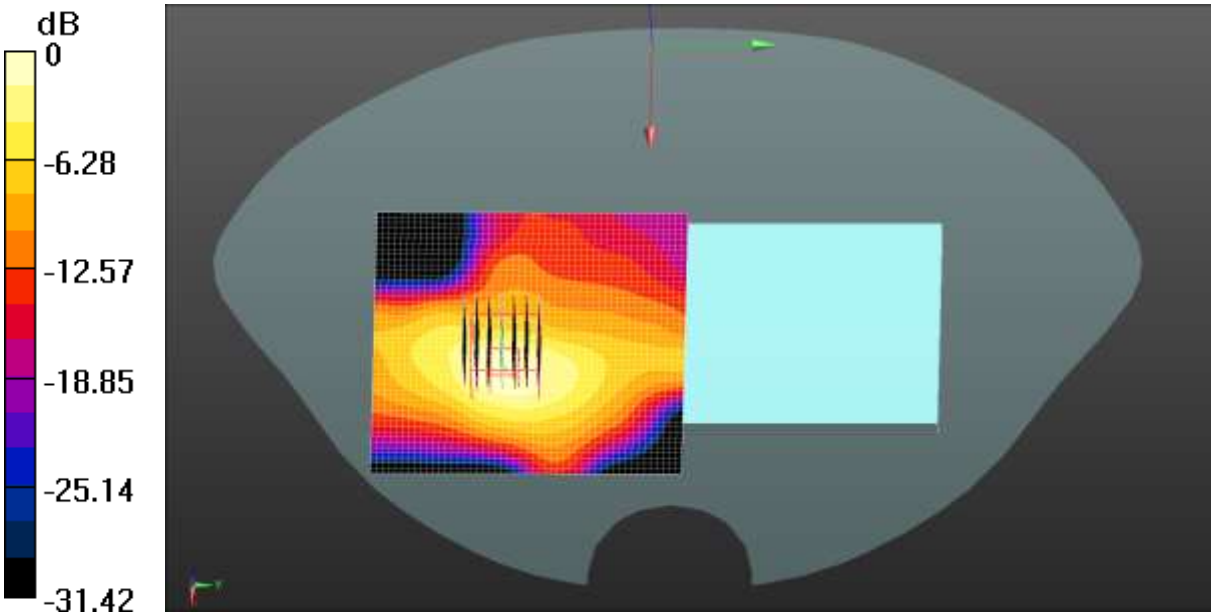
Communication System: UID 0, IEEE 802.11a WiFi 5GHz (0); Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.409 S/m; ε_r = 36.056; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(4.9, 4.9, 4.9) @ 5785 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5.8GWIFI Body Back/Middle Channel/Area Scan (51x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.313 W/kg

5.8GWIFI Body Back/Middle Channel/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 1.898 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.046 W/kg
Smallest distance from peaks to all points 3 dB below = 10.5 mm
Ratio of SAR at M2 to SAR at M1 = 14.5%
Maximum value of SAR (measured) = 0.317 W/kg



0 dB = 0.317 W/kg = -4.99 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

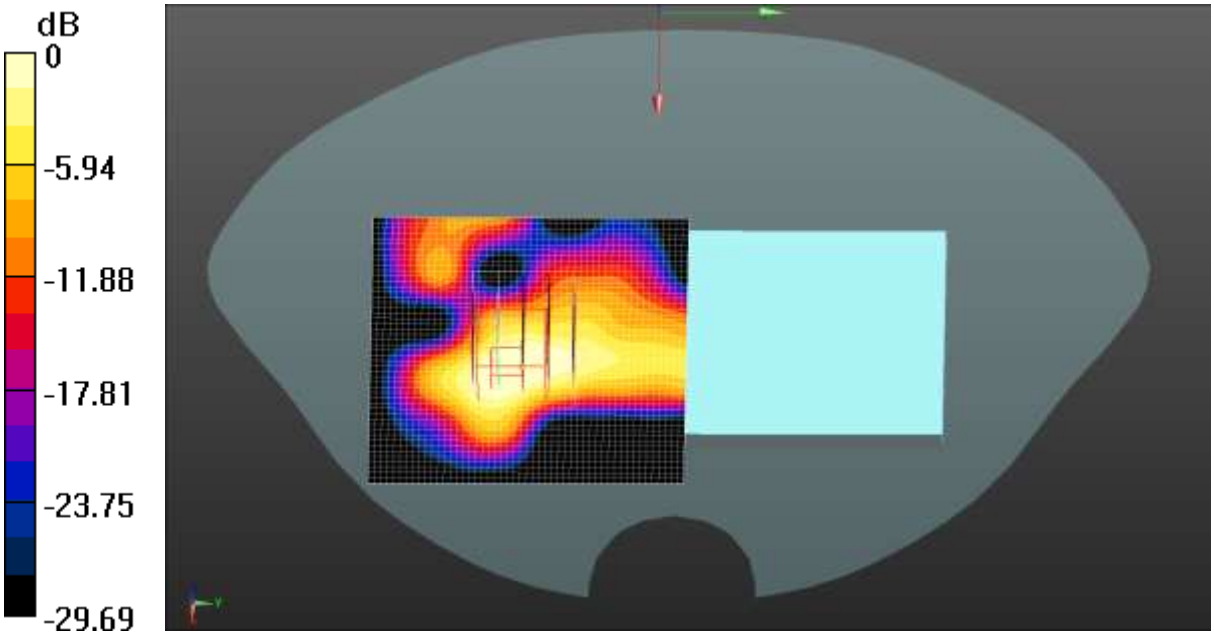
Communication System: UID 0, Bluetooth (0); Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.784 S/m; ε_r = 38.424; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2480 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bluetooth Body Back/High Channel/Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0289 W/kg

Bluetooth Body Back/High Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.9180 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.0270 W/kg
SAR(1 g) = 0.014 W/kg; SAR(10 g) = 0.0054 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 46.9%
Maximum value of SAR (measured) = 0.0210 W/kg



0 dB = 0.0210 W/kg = -16.78 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

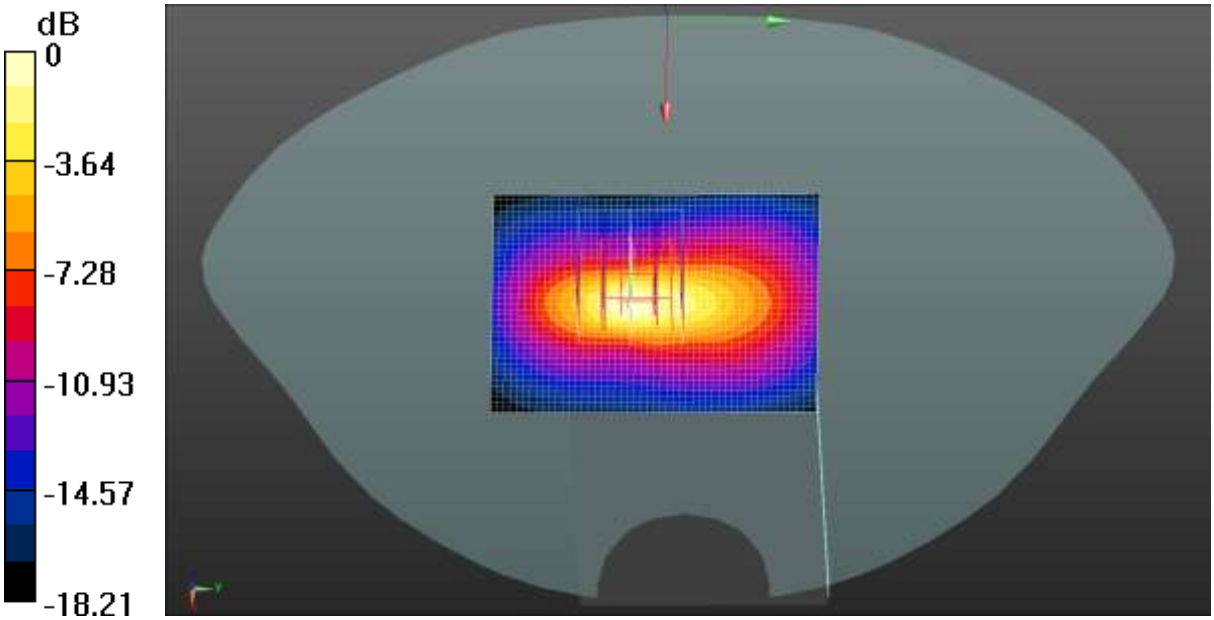
Communication System: UID 0, GPRS(4 Slots) (0); Frequency: 1850.2 MHz;Duty Cycle: 1:1.99986
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.334 S/m; ε_r = 39.051; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1850.2 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GPRS 1900 4Slots Body Top/Low Channel/Area Scan (41x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.88 W/kg

GPRS 1900 4Slots Body Top/Low Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.18 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.35 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.592 W/kg
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 53.2%
Maximum value of SAR (measured) = 1.92 W/kg



0 dB = 1.92 W/kg = 2.83 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

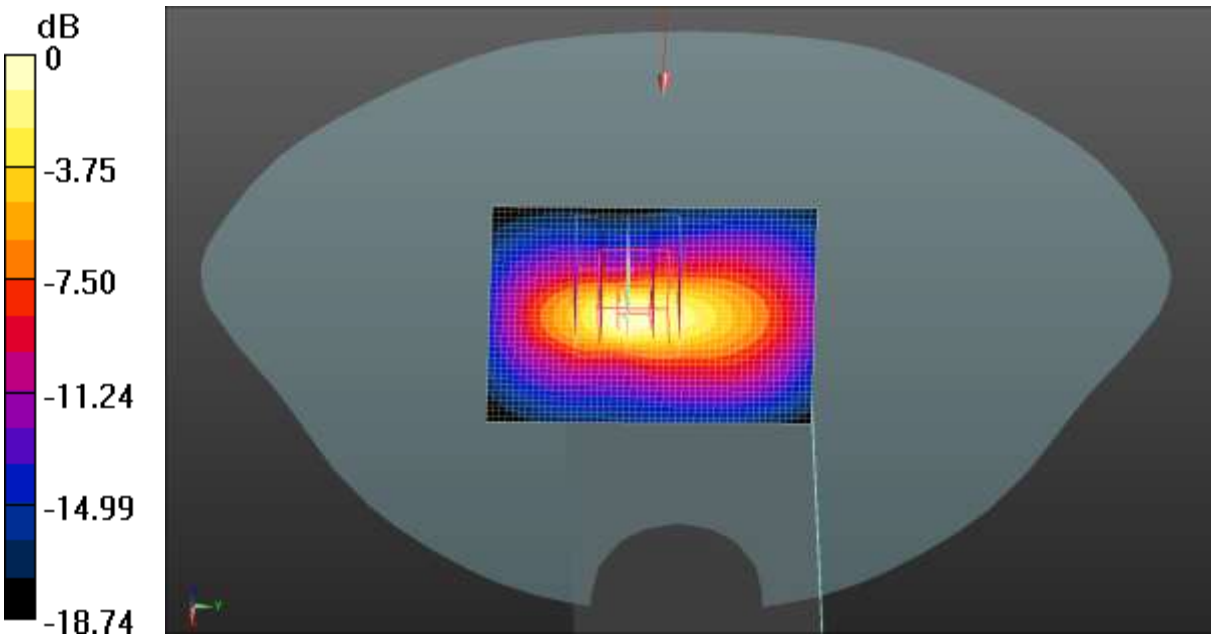
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 1900 Body Top/Middle Channel/Area Scan (41x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.409 W/kg

WCDMA 1900 Body Top/Middle Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.13 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.495 W/kg
SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.123 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 53%
Maximum value of SAR (measured) = 0.401 W/kg



0 dB = 0.401 W/kg = -3.97 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

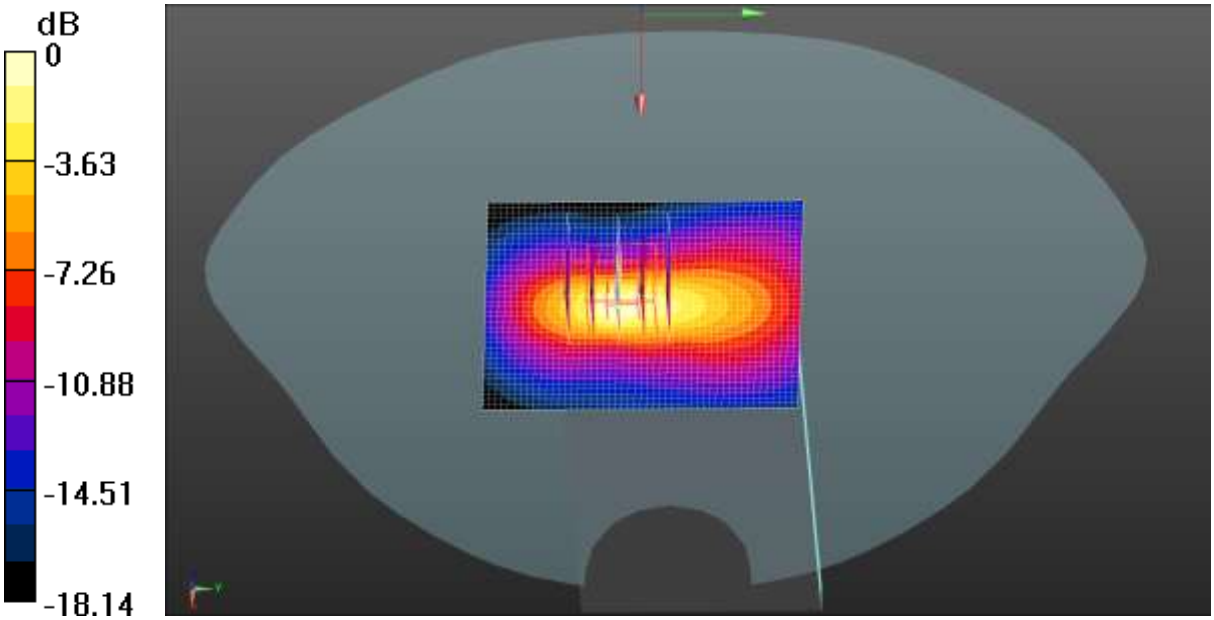
Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.338 S/m; ε_r = 39.19; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1752.6 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

WCDMA 1700 Body Top/High Channel/Area Scan (41x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.494 W/kg

WCDMA 1700 Body Top/High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.48 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.606 W/kg
SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.152 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 52.6%
Maximum value of SAR (measured) = 0.494 W/kg



0 dB = 0.494 W/kg = -3.06 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.349 S/m; ε_r = 39.486; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

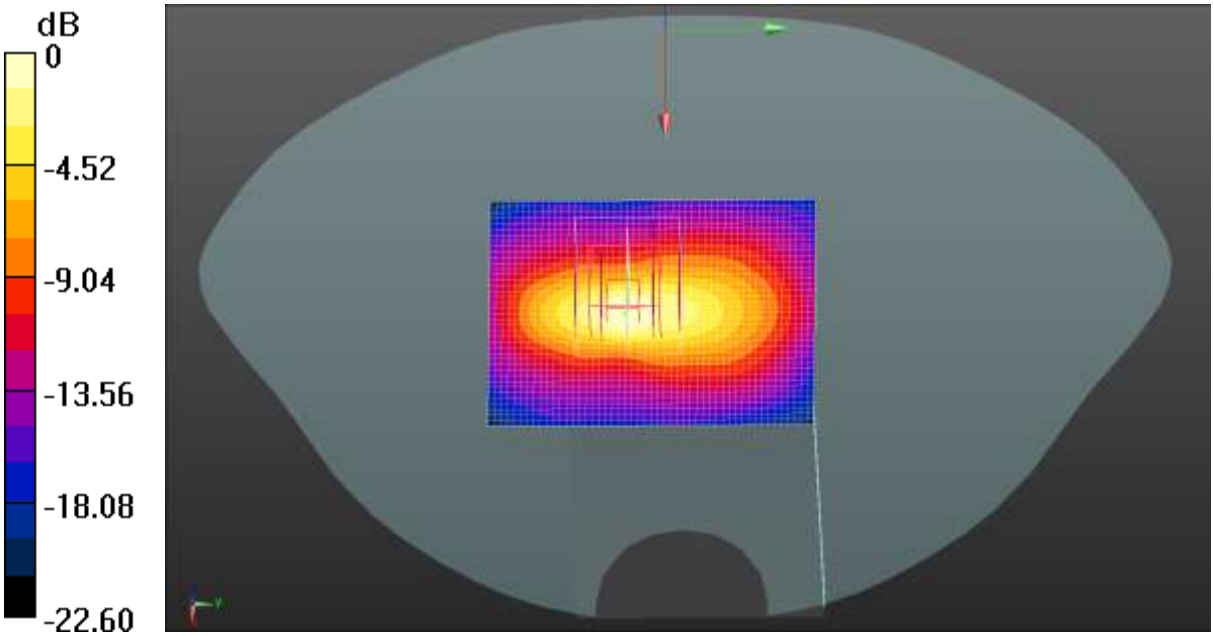
- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1880 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 2 1RB(20MHz) Body Top/Middle Channel/Area Scan (41x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.159 W/kg

LTE Band 2 1RB(20MHz) Body Top/Middle Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.414 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.187 W/kg
SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.046 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 52.5%
Maximum value of SAR (measured) = 0.153 W/kg



0 dB = 0.153 W/kg = -8.15 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.804 S/m; ε_r = 38.371; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

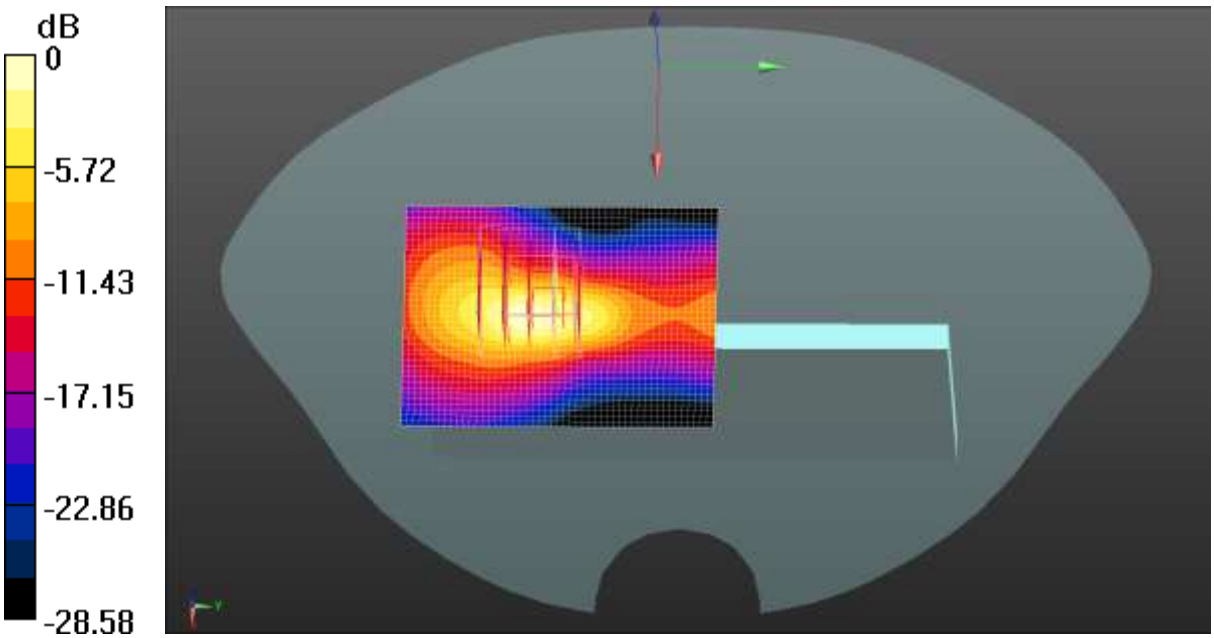
- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2510 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 7 1RB(20MHz) Body Left/Low Channel/Area Scan (41x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

LTE Band 7 1RB(20MHz) Body Left/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.401 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.711 W/kg; SAR(10 g) = 0.300 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 47%
Maximum value of SAR (measured) = 1.25 W/kg



0 dB = 1.25 W/kg = 0.97 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-TDD(USA) 20MHz 1RB QPSK (0); Frequency: 2680 MHz;Duty Cycle: 1:1.59956
Medium parameters used: f = 2680 MHz; σ = 1.987 S/m; ε_r = 38.33; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

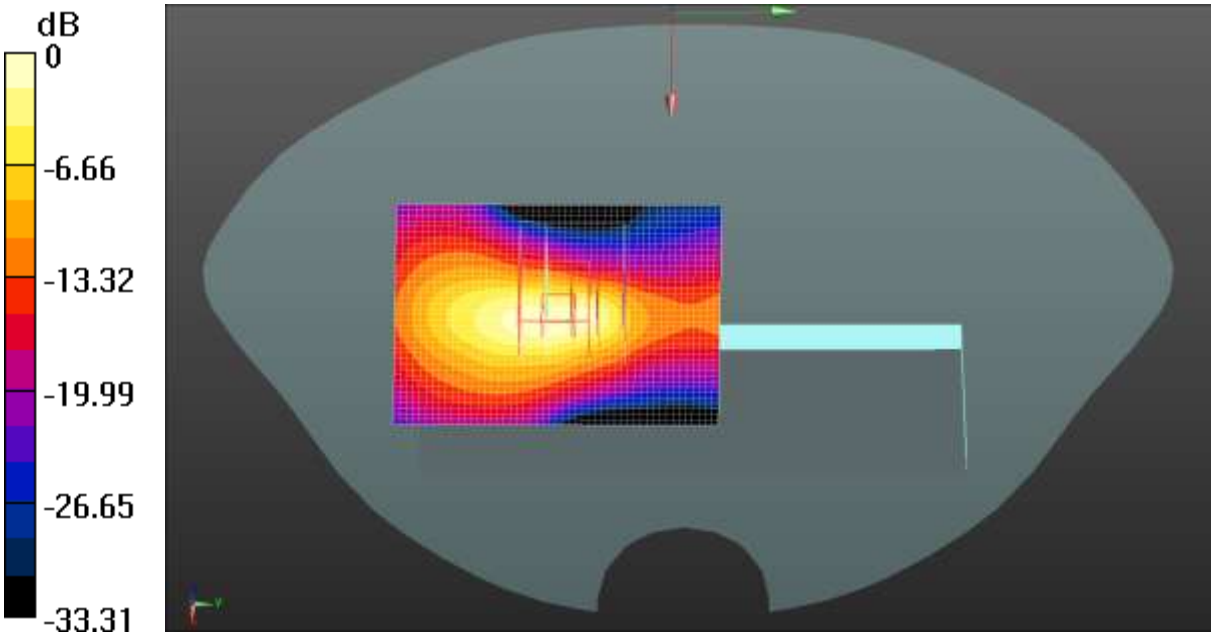
- Probe: EX3DV4 - SN3924; ConvF(7.35, 7.35, 7.35) @ 2680 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 41 1RB(20MHz) Body Left/High Channel/Area Scan (41x51x1):

Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.585 W/kg

LTE Band 41 1RB(20MHz) Body Left/High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.631 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.971 W/kg
SAR(1 g) = 0.416 W/kg; SAR(10 g) = 0.169 W/kg
Smallest distance from peaks to all points 3 dB below = 6.6 mm
Ratio of SAR at M2 to SAR at M1 = 46.3%
Maximum value of SAR (measured) = 0.688 W/kg



0 dB = 0.688 W/kg = -1.62 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, LTE-Fdd(USA) 1RB QPSK (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.324 S/m; ε_r = 39.247; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

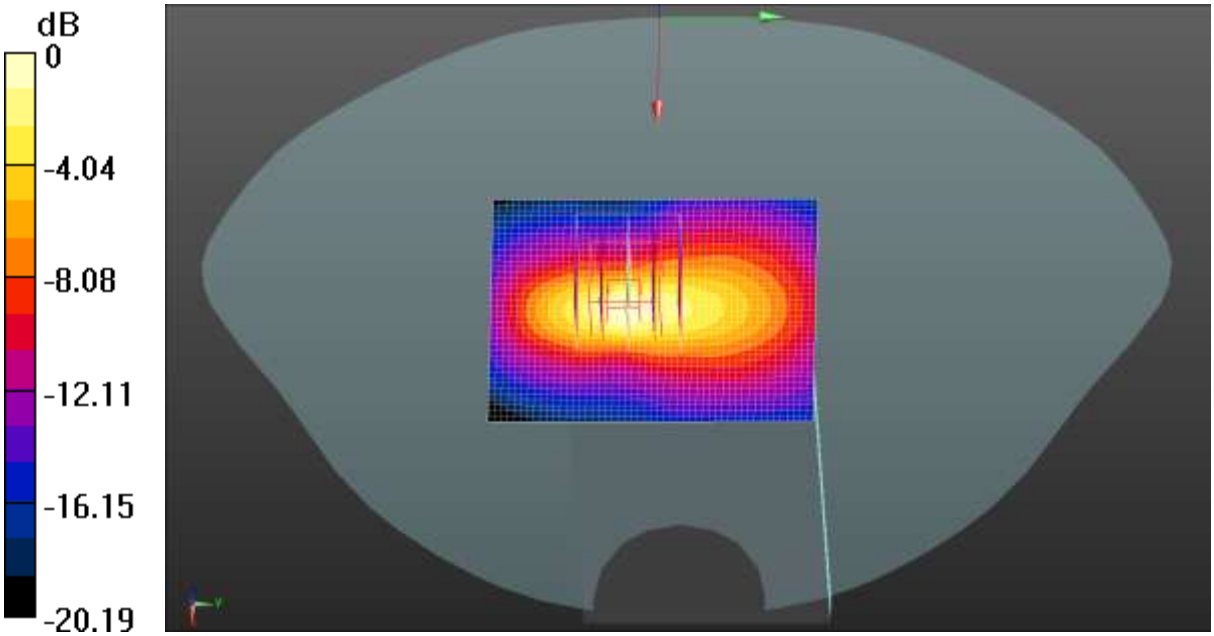
- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1720 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

LTE Band 66 1RB(20MHz) Body Top/Middle Channel/Area Scan (41x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.158 W/kg

LTE Band 66 1RB(20MHz) Body Top/Middle Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.419 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.189 W/kg
SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.048 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 52.6%
Maximum value of SAR (measured) = 0.156 W/kg



0 dB = 0.156 W/kg = -8.07 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, NR (0); Frequency: 1730 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1730 MHz; σ = 1.33 S/m; ε_r = 39.228; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

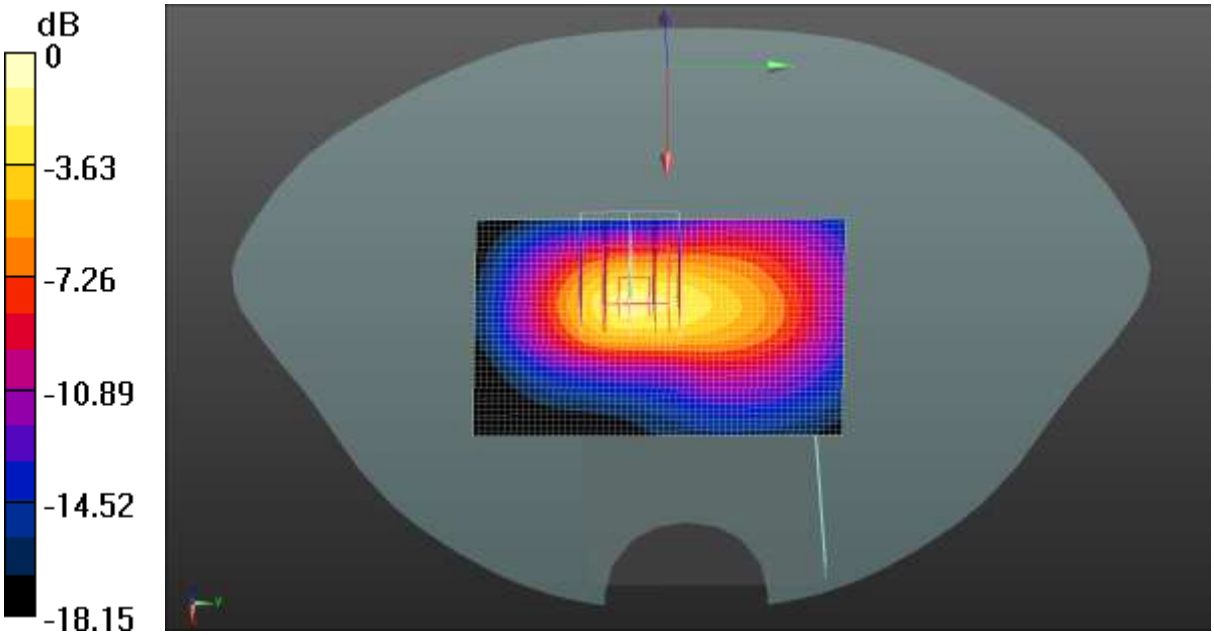
- Probe: EX3DV4 - SN3924; ConvF(8.38, 8.38, 8.38) @ 1730 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

NR n66 50%RB(40MHz) Body Top/Low Channel/Area Scan (41x61x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.230 W/kg

NR n66 50%RB(40MHz) Body Top/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.45 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.437 W/kg
SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.111 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 53.2%
Maximum value of SAR (measured) = 0.349 W/kg



0 dB = 0.349 W/kg = -4.57 dBW/kg

Test Laboratory: JYTSZ Date: 03.08.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

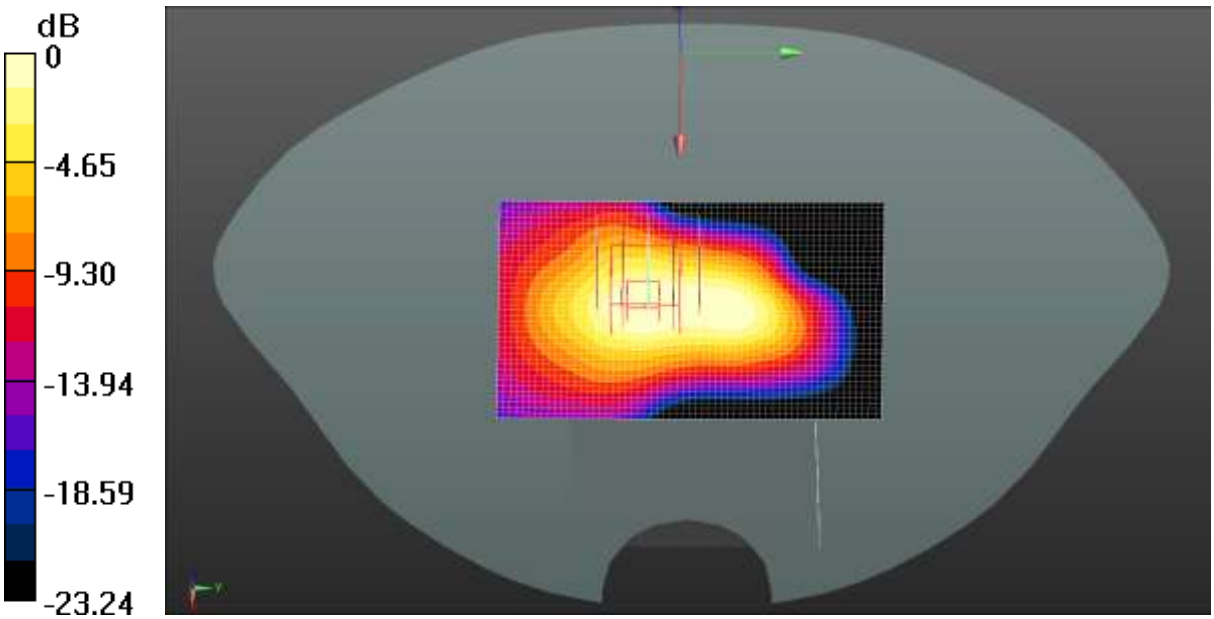
Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);
Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.755 S/m; ε_r = 38.446; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(7.6, 7.6, 7.6) @ 2462 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

2.4GWIFI Body Top/High Channel/Area Scan (41x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm.
Maximum value of SAR (interpolated) = 0.0633 W/kg

2.4GWIFI Body Top/High Channel/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.275 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.0710 W/kg
SAR(1 g) = 0.036 W/kg; SAR(10 g) = 0.018 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 51.1%
Maximum value of SAR (measured) = 0.0567 W/kg



0 dB = 0.0567 W/kg = -12.46 dBW/kg

Test Laboratory: JYTSZ Date: 03.14.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

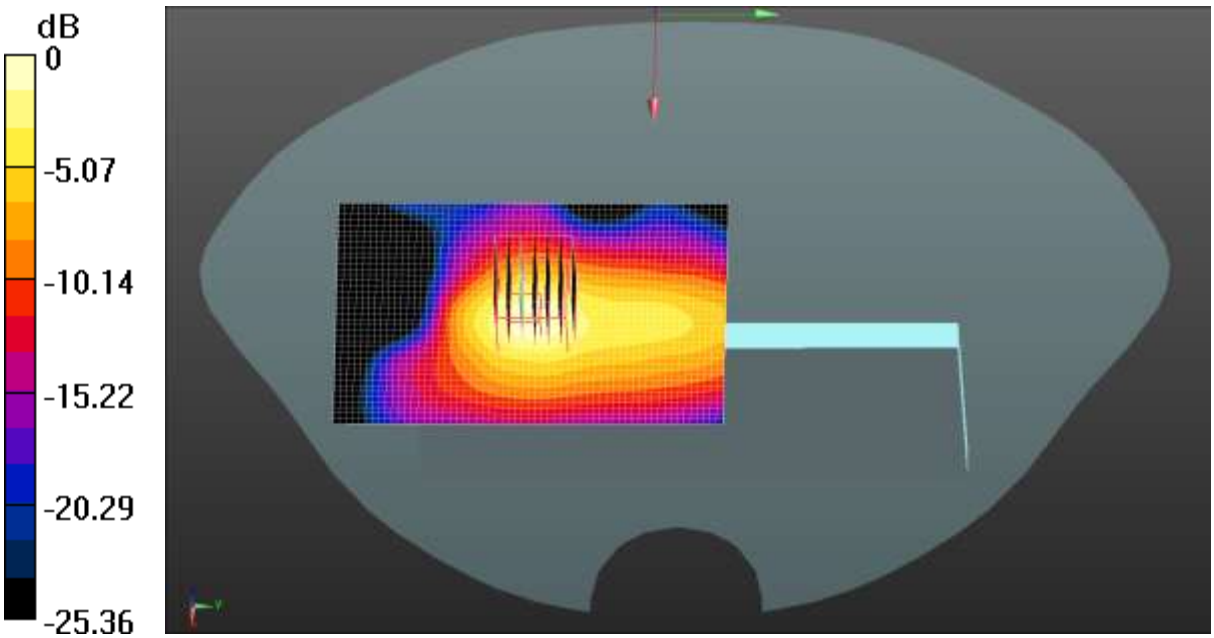
Communication System: UID 0, IEEE 802.11n40 WiFi 5GHz (0); Frequency: 5230 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5230 MHz; σ = 4.727 S/m; ε_r = 37.081; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3924; ConvF(5.41, 5.41, 5.41) @ 5230 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

5.2GWIFI Body Right/Middle Channel/Area Scan (41x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.548 W/kg

5.2GWIFI Body Right/Middle Channel/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 6.430 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.785 W/kg
SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.089 W/kg
Smallest distance from peaks to all points 3 dB below = 10.4 mm
Ratio of SAR at M2 to SAR at M1 = 22.1%
Maximum value of SAR (measured) = 0.560 W/kg



0 dB = 0.560 W/kg = -2.52 dBW/kg

Test Laboratory: JYTSZ Date: 03.06.2023

DUT: Mobile Phone; Type: X6832; Serial: 3#

Communication System: UID 0, GPRS(4 Slots) (0); Frequency: 1850.2 MHz;Duty Cycle: 1:1.99986
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.334 S/m; ε_r = 39.051; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

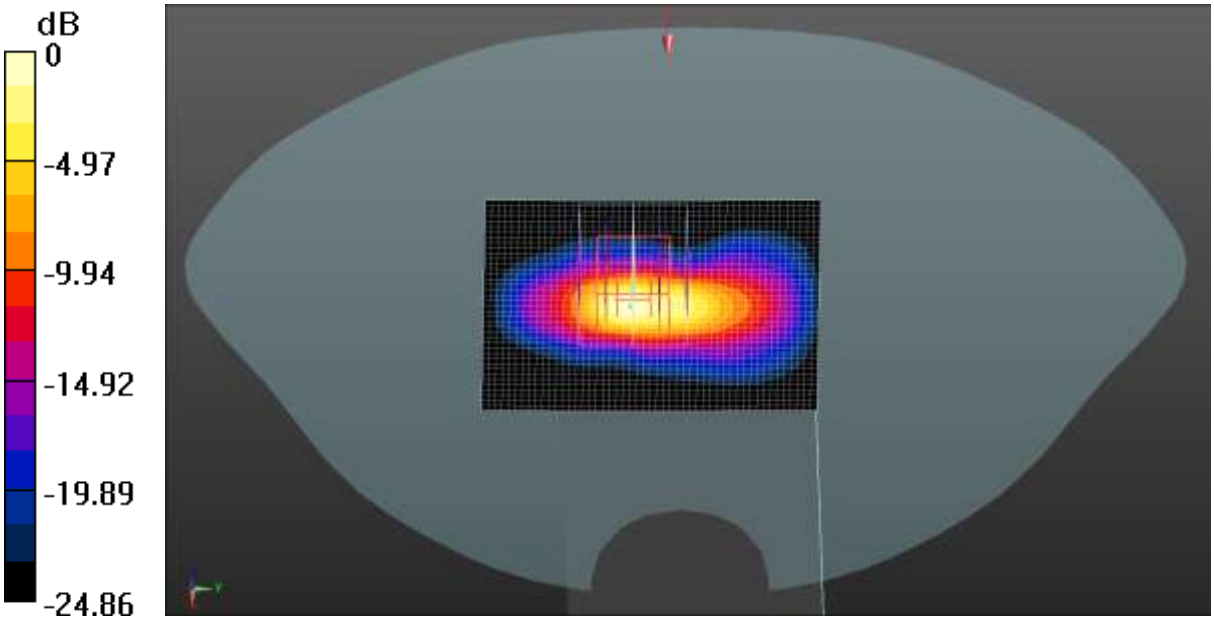
- Probe: EX3DV4 - SN3924; ConvF(8.05, 8.05, 8.05) @ 1850.2 MHz; Calibrated: 01.03.2023
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1373; Calibrated: 06.06.2022
- Phantom: SAM 5.0; Type: QD000P40CD; Serial: TP:1765
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

GPRS 1900 4Slots Extremity Top/Low Channel/Area Scan (41x51x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 14.9 W/kg

GPRS 1900 4Slots Extremity Top/Low Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 88.75 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 19.9 W/kg
SAR(1 g) = 6.98 W/kg; SAR(10 g) = 2.68 W/kg
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 34.6%
Maximum value of SAR (measured) = 16.0 W/kg



0 dB = 16.0 W/kg = 12.04 dBW/kg

------End of Report------