BS EN 50360:2017
BS EN 50566:2017
BS EN 50663:2017
BS EN 62479:2010

SAR EVALUATION REPORT

For

Shenzhen Huafurui Technology Co., Ltd.

Unit 1401 & 1402, 14/F, Jinqi Zhigu Mansion (No.4 Building of Chongwen Garden), Crossing of the Liuxian Street and Tangling Road, Taoyuan Street, Nanshan District, Shenzhen, P.R. China

Tested Model: P50

Report Type:	**Product Type:**
Original Report	Smartphone

Report Number: SZ1220118-02706E-20B

Report Date: 2022-03-07

Reviewed By: Brave Lu, SAR Engineer

Test Laboratory: Bay Area Compliance Laboratories Corp. (Dongguan)
No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China
Tel: +86-769-86858888
Fax: +86-769-86858891
www.baclcorp.com.cn

Attestation of Test Results				
EUT Information	**EUT Description**	Smartphone		
	Tested Model	P50		
	Serial Number	SZ1220118-02706E-SA-S1		
	Test Date	2022-02-14 ~ 2022-02-19		
MODE		**Max. SAR Level(s) Reported(W/kg)**		**Limit (W/kg)**
Head Mode	**GSM 900**	10g Head SAR	0.230	**2.0**
	DCS 1800	10g Head SAR	0.122	
	WCDMA Band 1	10g Head SAR	0.136	
	WCDMA Band 8	10g Head SAR	0.215	
	LTE Band 1	10g Head SAR	0.164	
	LTE Band 3	10g Head SAR	0.184	
	LTE Band 7	10g Head SAR	0.191	
	LTE Band 8	10g Head SAR	0.148	
	LTE Band 20	10g Head SAR	0.114	
	Wi-Fi 2.4G	10g Head SAR	**0.554**	
	Wi-Fi 5.2G	10g Head SAR	0.168	
	Wi-Fi 5.8G	10g Head SAR	0.203	
	Bluetooth	10g Head SAR	0.016	
Body Worn Mode	**GSM 900**	10g Body SAR	0.533	
	DCS 1800	10g Body SAR	0.901	
	WCDMA Band 1	10g Body SAR	1.353	
	WCDMA Band 8	10g Body SAR	0.367	
	LTE Band 1	10g Body SAR	1.22	
	LTE Band 3	10g Body SAR	**1.395**	
	LTE Band 7	10g Body SAR	1.118	
	LTE Band 8	10g Body SAR	0.198	
	LTE Band 20	10g Body SAR	0.165	
	Wi-Fi 2.4G	10g Body SAR	0.261	
	Wi-Fi 5.2G	10g Body SAR	0.112	
	Wi-Fi 5.8G	10g Body SAR	0.165	
	Bluetooth	10g Body SAR	0.039	
Handheld Mode	**GSM 900**	10g Extremity SAR	1.807	**4.0**
	DCS 1800	10g Extremity SAR	1.705	
	WCDMA Band 1	10g Extremity SAR	2.304	
	WCDMA Band 8	10g Extremity SAR	1.038	
	LTE Band 1	10g Extremity SAR	2.83	
	LTE Band 3	10g Extremity SAR	2.646	
	LTE Band 7	10g Extremity SAR	**3.627**	
	LTE Band 8	10g Extremity SAR	0.933	
	LTE Band 20	10g Extremity SAR	0.411	
	Wi-Fi 2.4G	10g Extremity SAR	0.327	
	Wi-Fi 5.2G	10g Extremity SAR	0.333	
	Wi-Fi 5.8G	10g Extremity SAR	0.336	
	Bluetooth	10g Extremity SAR	0.05	
Applicable Standards	**BS EN50360: 2017** Product standard to demonstrate the compliance of wireless communication devices, with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 300 MHz to 6 GHz: devices used next to the ear			

	BS EN50566: 2017 Product standard to demonstrate the compliance of wireless communication devices with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 30 MHz to 6 GHz: hand-held and body mounted devices in close proximity to the human body
	BS EN62209-1:2016 Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz)
	BS EN62209-2:2010 Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body(frequency range of 30 MHz to 6 GHz)
	BS EN 62479:2010 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)
	BS EN 50663:2017 Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)
	REDCA Technical Guidance Note 20 SAR Testing and Assessment Guidance
	IEEE1528:2013 Draft Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.
Statement of Compliance: This wireless device has been shown to be capable of compliance for localized specific absorption rate (SAR) for General Population/Uncontrolled Exposure limits specified in **Council Recommendation 1999/519/EC** and has been tested in accordance with the measurement procedures specified in BS EN62209-1:2016 & BS EN62209-2:2010. **The results and statements contained in this report pertain only to the device(s) evaluated.**	

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	SZ1220118-02706E-20B	Original Report	2022-03-07

EUT DESCRIPTION

This report has been prepared on behalf of ***Shenzhen Huafurui Technology Co., Ltd.*** and their product ***Smartphone***, Model: ***P50*** or the EUT (Equipment under Test) as referred to in the rest of this report.

All measurement and test data in this report was gathered from production sample serial number: SZ1220118-02706E-SA-S1(Assigned by BACL). The EUT was received on 2022-01-18.

Technical Specification

Device Type:	Portable
Exposure Category:	Population / Uncontrolled
Antenna Type(s):	Internal Antenna
DTM Type:	Class B
Multi-slot Class:	GPRS(Class 12), EDGE(Class 12)
Body-Worn Accessories:	Headset
Face-Head Accessories:	None
Operation Mode:	GSM Voice, GPRS/EDGE Data,WCDMA , LTE, Wi-Fi and Bluetooth
Frequency Band:	E-GSM 900: 880-915 MHz(TX); 925-960 MHz(RX)
	DCS 1800: 1710-1785 MHz(TX); 1805-1880 MHz(RX)
	WCDMA Band 1: 1920-1980MHz(TX); 2110-2170MHz(RX)
	WCDMA Band 8: 880-915 MHz(TX); 925-960 MHz(RX)
	LTE Band 1: 1920-1980MHz(TX); 2110-2170MHz(RX)
	LTE Band 3: 1710-1785MHz(TX) ; 1805-1880MHz(RX)
	LTE Band 7: 2500-2570MHz(TX) ; 2620-2690MHz(RX)
	LTE Band 8: 880-915 MHz(TX); 925-960 MHz(RX)
	LTE Band 20: 832-862 MHz(TX); 791-821 MHz(RX)
	Wi-Fi 2.4G: 2412-2472 MHz/2422-2462 MHz
	Wi-Fi 5.2G: 5180-5240 MHz/5190-5230 MHz/5210 MHz
	Wi-Fi 5.8G: 5745-5825 MHz/5755-5795 MHz/5775 MHz
	Bluetooth: 2402-2480 MHz
Conducted RF Power:	GSM 900:33.13 dBm, DCS 1800:30.01 dBm
	WCDMA Band 1:23.06 dBm, WCDMA Band 8: 23.47 dBm
	LTE Band 1: 23.63 dBm, LTE Band 3: 24.4 dBm
	LTE Band 7: 22.85 dBm, LTE Band 8: 24.44 dBm
	LTE Band 20: 24.15 dBm
	Wi-Fi 2.4G: 12.59 dBm, Wi-Fi 5.2G: 8.38 dBm
	Wi-Fi 5.8G: 9.18 dBm
	Bluetooth(BDR/EDR): 7.76 dBm, BLE: 0.89 dBm
Power Source:	3.85 V_{DC} Rechargeable Battery
Normal Operation:	Handheld, Head and Body Worn

REFERENCE, STANDARDS, AND GUIDELINES

CE:

The order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 2 mW/g as recommended by BS EN62209-1 for an uncontrolled environment. According to the Standard, the device should be evaluated at maximum output power (radiated from the antenna) under "worst-case" conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices. The limit below which the exposure to RF is considered safe by regulatory bodies in Europe is 2 mW/g average over 10 gram of tissue mass.

The test configurations were laid out on a specially designed test fixture to ensure the reproducibility of measurements. Each configuration was scanned for SAR. Analysis of each scan was carried out to characterize the above effects in the device.

SAR Limits

CE Limit

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 10 g of tissue)	**2.0**	10
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	**4.0**	20.0

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

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

General Population/Uncontrolled environments Spatial Peak limit 2 W/kg (CE) for 10g SAR and limit 4.0W/kg(Handheld) for 10g Extremity SAR applied to the EUT.

FACILITIES

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

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

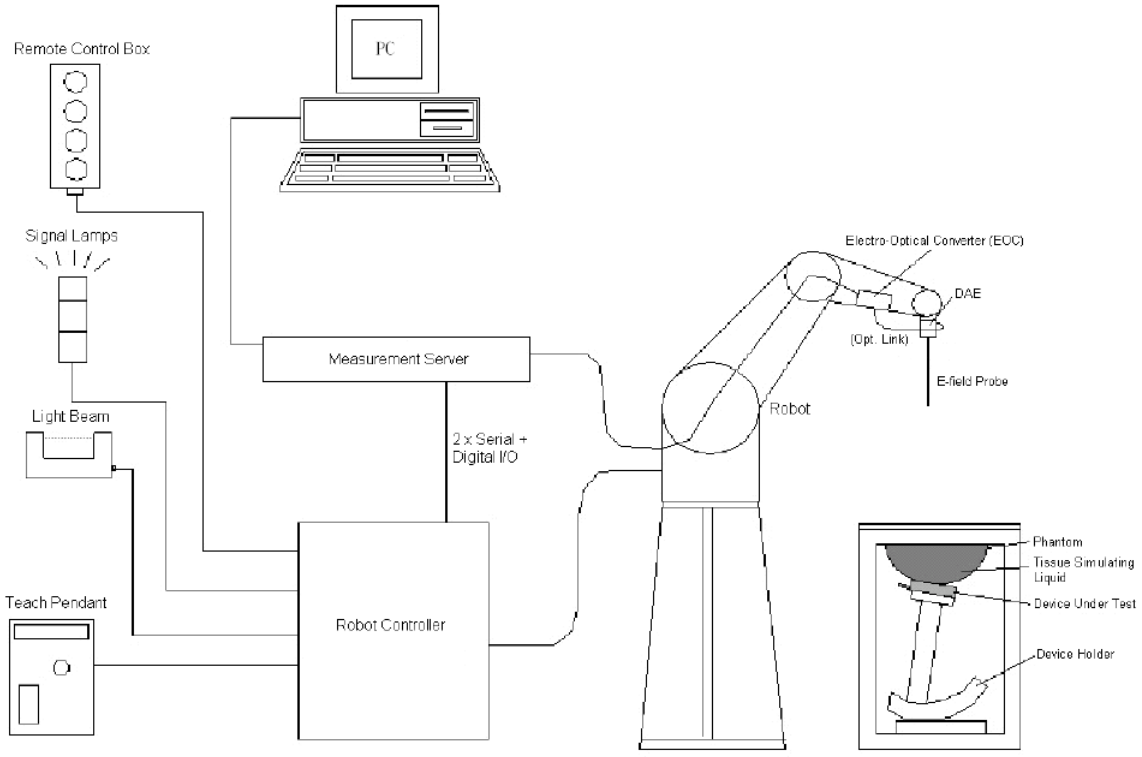
☒ SAR Lab 1	☐ SAR Lab 2

DESCRIPTION OF TEST SYSTEM

These measurements were performed with the automated near-field scanning system DASY5 from SchMiddle Channel & Partner Engineering AG (SPEAG) which is the Fifth generation of the system shown in the figure hereinafter:

DASY5 System Description

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



- A standard high precision 6-axis robot (Staubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal application, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 professional operating system and the DASY52 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

DASY5 Measurement Server

The DASY5 measurement server is based on a PC/104 CPU board with a 400MHz Intel ULV Celeron, 128MB chip-disk and 128MB RAM. The necessary circuits for communication with the DAE4 (or DAE3) electronics box, as well as the 16 bit AD-converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized point out, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.

Data Acquisition Electronics

The data acquisition electronics (DAE4) consist 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 with a 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 mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of both the DAE4 as well as of the DAE3 box is 200MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

EX3DV4 E-Field Probes

Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

Calibration Frequency Points for EX3DV4 E-Field Probes SN: 7329 Calibrated: 2021/12/31

Calibration Frequency Point(MHz)	Frequency Range(MHz)		Conversion Factor		
	From	To	X	Y	Z
750 Head	650	850	10.06	10.06	10.06
900 Head	850	1000	9.68	9.68	9.68
1450 Head	1350	1550	8.64	8.64	8.64
1750 Head	1650	1850	8.23	8.23	8.23
1900 Head	1850	2000	8.00	8.00	8.00
2100 Head	2000	2200	7.90	7.90	7.90
2300 Head	2200	2400	7.73	7.73	7.73
2450 Head	2400	2550	7.42	7.42	7.42
2600 Head	2550	2700	7.15	7.15	7.15
5200 Head	5090	5250	5.49	5.49	5.49
5300 Head	5250	5410	5.20	5.20	5.20
5600 Head	5490	5700	4.77	4.77	4.77
5800 Head	5700	5910	4.75	4.75	4.75

SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region, where shell thickness increases to 6 mm). The phantom has three measurement areas:
Left – side of head phantom
Right – side of head phantom
Flat phantom

The phantom table for the DASY systems
have the size of 100 x 50 x 85 cm (L x W x H).
The phantom table for the compact DASY systems based on the RX60L robot have the size of 100 x 75 x 91 cm (L x W x H); these tables are reinforced for mounting of the robot onto the table.
Relocation of this table is simplified because of the fork lift cut outs at the bottom.
The bottom plate contains three pairs of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. Only one device holder is necessary if two phantoms are used (e.g., for different liquids)

A white cover is provided to cover the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. Free space scans of devices on top of this phantom cover are possible. Three reference marks are provided on the phantom counter. These reference marks are used to teach the absolute phantom position relative to the robot.

Robots

The DASY5 system uses the high precision industrial robots TX90XL from Staubli SA (France). The TX robot family is the successor of the well known RX robot family and offers the same features important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchrony motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)

The above mentioned robots are controlled by the Staubli CS8c robot controllers. All information regarding the use and maintenance of the robot arm and the robot controller is contained on the CDs delivered along with the robot. Paper manuals are available upon request direct from Staubli.

Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 15mm 2 step integral, with 1.5mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

Zoom Scan (Cube Scan Averaging)

The averaging zoom scan volume utilized in the DASY5 software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1g cube is 10mm,with the side length of the 10g cube is 21.5mm.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 7 x7 x 7 (5mmx5mmx5mm) providing a volume of 30 mm in the X & Y & Z axis.

Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the BS EN62209-1:2016 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters recommended in BS EN62209-2:2010.

BS EN62209-1:2016 Recommended Tissue Dielectric Parameters

Frequency (MHz)	Head Tissue	
	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

BS EN62209-2:2010 Recommended Body Tissue Dielectric Parameters

Frequency (MHz)	Body Tissue	
	εr	σ (S/m)
450	43.5	0.87
835	41.5	0.90
900	41.5	0.97
1800	40.0	1.40
1900	40.0	1.40
2450	39.2	1.80
4000	37.4	3.43
5000	36.2	4.45

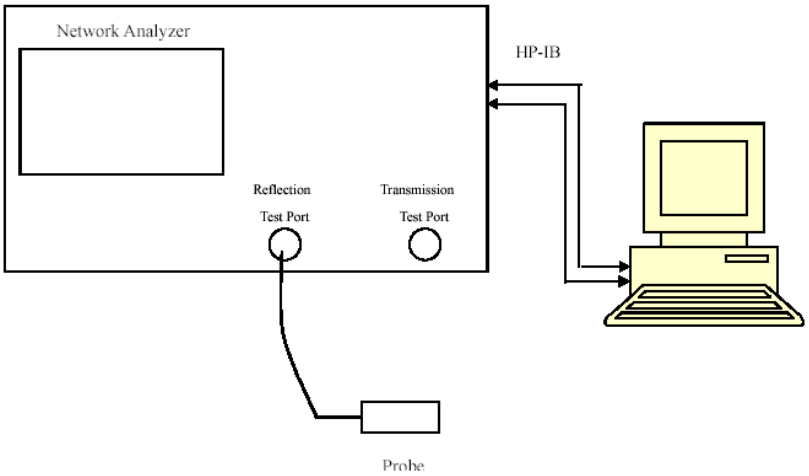
EQUIPMENT LIST AND CALIBRATION

Equipments List & Calibration Information

Equipment	Model	S/N	Calibration Date	Calibration Due Date
DASY5 Test Software	DASY52.10	N/A	NCR	NCR
DASY5 Measurement Server	DASY5 4.5.12	1470	NCR	NCR
Data Acquisition Electronics	DAE4	772	2021/12/29	2022/12/28
E-Field Probe	EX3DV4	7329	2021/12/31	2022/12/30
Mounting Device	MD4HHTV5	SD 000 H01 KA	NCR	NCR
Twin SAM	Twin SAM V5.0	1874	NCR	NCR
Dipole, 750 MHz	D750V3	1167	2019/11/20	2022/11/19
Dipole, 900 MHz	D900V2	1d183	2021/8/27	2024/8/26
Dipole, 1750 MHz	D1750V2	1141	2021/6/29	2024/6/28
Dipole, 1900 MHz	D1900V2	543	2019/10/15	2022/10/14
Dipole, 2450 MHz	D2450V2	971	2021/6/28	2024/6/27
Dipole, 2600 MHz	D2600V2	1132	2019/11/19	2022/11/18
Dipole,5GHz	D5GHzV2	1246	2019/11/19	2022/11/18
Simulated Tissue 750 MHz Head and Body	TS-750-HB	2010075001	Each Time	/
Simulated Tissue 900 MHz Head and Body	TS-900-HB	2003090001	Each Time	/
Simulated Tissue 1750 MHz Head and Body	TS-1750-HB	2009175001	Each Time	/
Simulated Tissue 1900 MHz Head and Body	TS-1900-HB	2009190001	Each Time	/
Simulated Tissue 2450 MHz Head and Body	TS-2450HB	2009245001	Each Time	/
Simulated Tissue 2600 MHz Head and Body	TS-2600-HB	2010260001	Each Time	/
Simulated Tissue 5250 MHz Head and Body	TS-5250-HB	2001525001	Each Time	/
Simulated Tissue 5800 MHz Head and Body	TS-5800-HB	2001580001	Each Time	/
Network Analyzer	8753C	3033A02857	2021/10/26	2022/10/25
Dielectric assessment kit	1253	SM DAK 040 CA	NCR	NCR
synthesized signal generator	8665B	3438a00584	2021/9/12	2022/9/11
Power Meter	E4419B	MY45103907	2021/9/12	2022/9/11
Power Amplifier	ZVA-183-S+	5969001149	NCR	NCR
Directional Coupler	441493	520Z	NCR	NCR
Attenuator	20dB, 100W	LN749	NCR	NCR
Attenuator	6dB, 150W	2754	NCR	NCR
Wireless communication tester	E5515C	MY48367501	2021/10/08	2022/10/07
R&S, universal Radio Communication Tester	CMU200	106891	2021/10/08	2022/10/07
Wideband Radio Communication Tester	CMW500	110479	2021/10/26	2022/10/25

SAR MEASUREMENT SYSTEM VERIFICATION

Liquid Verification



Liquid Verification Setup Block Diagram

Liquid Verification Results

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$	
750	750 MHz Head and Body	41.832	0.871	41.94	0.89	-0.26	-2.13	±5
842	750 MHz Head and Body	41.684	0.884	41.5	0.91	0.44	-2.86	±5
847	750 MHz Head and Body	41.656	0.896	41.5	0.91	0.38	-1.54	±5

**Liquid Verification above was performed on 2022/02/14.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$	
852	900 MHz Head and Body	41.575	0.903	41.5	0.92	0.18	-1.85	±5
880.2	900 MHz Head and Body	41.413	0.918	41.5	0.95	-0.21	-3.37	±5
882.4	900 MHz Head and Body	41.394	0.922	41.5	0.95	-0.26	-2.95	±5
885	900 MHz Head and Body	41.366	0.931	41.5	0.95	-0.32	-2	±5
897.5	900 MHz Head and Body	41.261	0.947	41.5	0.97	-0.58	-2.37	±5
897.6	900 MHz Head and Body	41.254	0.953	41.5	0.97	-0.59	-1.75	±5
900	900 MHz Head and Body	41.209	0.964	41.5	0.97	-0.7	-0.62	±5
902	900 MHz Head and Body	41.204	0.973	41.5	0.97	-0.71	0.31	±5
910	900 MHz Head and Body	41.132	0.986	41.5	0.98	-0.89	0.61	±5
912.4	900 MHz Head and Body	41.118	0.992	41.5	0.98	-0.92	1.22	±5
914.8	900 MHz Head and Body	41.113	1.002	41.5	0.98	-0.93	2.24	±5

**Liquid Verification above was performed on 2022/02/15.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ(S/m)	Δ ε_r	Δ σ	
1710.4	1750MHz Head and Body	40.398	1.326	40.14	1.35	0.64	-1.78	±5
1720	1750MHz Head and Body	40.336	1.332	40.13	1.35	0.51	-1.33	±5
1747.5	1750MHz Head and Body	40.287	1.359	40.08	1.37	0.52	-0.8	±5
1747.8	1750MHz Head and Body	40.244	1.366	40.08	1.37	0.41	-0.29	±5
1750	1750MHz Head and Body	40.229	1.378	40.08	1.37	0.37	0.58	±5
1775	1750MHz Head and Body	40.19	1.384	40.04	1.39	0.37	-0.43	±5
1784.6	1750MHz Head and Body	40.057	1.396	40.02	1.39	0.09	0.43	±5

**Liquid Verification above was performed on 2022/02/16.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ(S/m)	Δ ε_r	Δ σ	
1900	1900MHz Head and Body	39.982	1.401	40	1.4	-0.05	0.07	±5
1922.6	1900MHz Head and Body	39.946	1.409	40	1.4	-0.14	0.64	±5
1930	1900MHz Head and Body	39.92	1.414	40	1.4	-0.2	1	±5
1950	1900MHz Head and Body	39.754	1.418	40	1.4	-0.62	1.29	±5
1970	1900MHz Head and Body	39.714	1.427	40	1.4	-0.72	1.93	±5
1977.4	1900MHz Head and Body	39.635	1.435	40	1.4	-0.91	2.5	±5

**Liquid Verification above was performed on 2022/02/17.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	Δ ε_r	Δ σ	
2402	2450MHz Head and Body	39.501	1.762	39.29	1.76	0.54	0.11	±5
2412	2450MHz Head and Body	39.495	1.772	39.27	1.77	0.57	0.11	±5
2441	2450MHz Head and Body	39.448	1.781	39.22	1.79	0.58	-0.5	±5
2442	2450MHz Head and Body	39.417	1.787	39.21	1.79	0.53	-0.17	±5
2450	2450MHz Head and Body	39.369	1.798	39.2	1.8	0.43	-0.11	±5
2472	2450MHz Head and Body	39.348	1.814	39.17	1.82	0.45	-0.33	±5
2480	2450MHz Head and Body	39.17	1.833	39.16	1.83	0.03	0.16	±5
2510	2450MHz Head and Body	39.144	1.881	39.12	1.87	0.06	0.59	±5
2535	2450MHz Head and Body	39.137	1.896	39.09	1.89	0.12	0.32	±5

**Liquid Verification above was performed on 2022/02/18.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	Δ ε_r	Δ σ	
2560	2600MHz Head and Body	39.102	1.915	39.06	1.92	0.11	-0.26	±5
2600	2600MHz Head and Body	39.008	1.986	39.01	1.96	-0.01	1.33	±5

**Liquid Verification above was performed on 2022/02/18.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	Δ ε_r	Δ σ	
5180	5250MHz Head and Body	36.295	4.644	36.01	4.63	0.79	0.3	±5
5200	5250MHz Head and Body	36.114	4.676	35.99	4.66	0.34	0.34	±5
5240	5250MHz Head and Body	35.951	4.721	35.94	4.7	0.03	0.45	±5
5250	5250MHz Head and Body	35.662	4.743	35.93	4.71	-0.75	0.7	±5

**Liquid Verification above was performed on 2022/02/19.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta(%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	Δ ε_r	Δ σ	
5745	5800MHz Head and Body	35.598	5.181	35.36	5.21	0.67	-0.56	±5
5785	5800MHz Head and Body	35.29	5.282	35.32	5.25	-0.08	0.61	±5
5800	5800MHz Head and Body	35.024	5.294	35.3	5.27	-0.78	0.46	±5
5825	5800MHz Head and Body	34.988	5.317	35.27	5.3	-0.8	0.32	±5

**Liquid Verification above was performed on 2022/02/19.*

System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ±10%. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

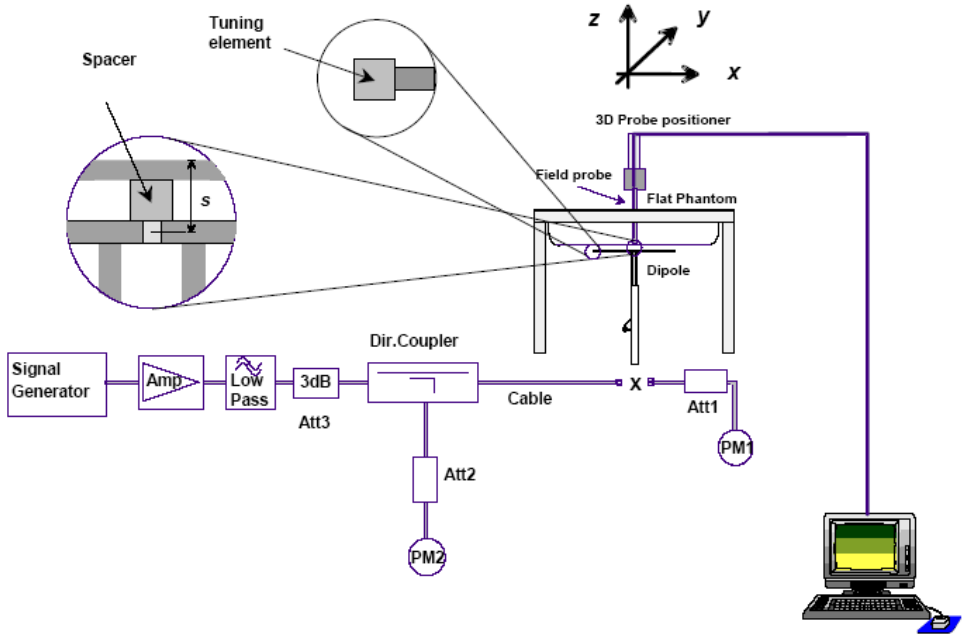
The spacing distances in the **System Verification Setup Block Diagram** is given by the following:

a) s = 15 mm ± 0,2 mm for 300 MHz ≤ f ≤ 1 000 MHz;

b) s = 10 mm ± 0,2 mm for 1 000 MHz < f ≤ 3 000 MHz;

c) s = 10 mm ± 0,2 mm for 3 000 MHz < f ≤ 6 000 MHz.

System Verification Setup Block Diagram



System Accuracy Check Results

Date	Frequency Band	Liquid Type	Input Power (mW)	Measured SAR (W/kg)		Normalized to 1W (W/kg)	Target Value (W/kg)	Delta (%)	Tolerance (%)
2022/02/14	750 MHz	Head and Body	100	10g	0.572	5.72	5.61	1.96	±10
2022/02/15	900 MHz	Head and Body	100	10g	0.709	7.09	6.96	1.87	±10
2022/02/16	1750 MHz	Head and Body	100	10g	1.93	19.3	18.7	3.21	±10
2022/02/17	1900 MHz	Head and Body	100	10g	2.01	20.1	20.6	-2.43	±10
2022/02/18	2450 MHz	Head and Body	100	10g	2.33	23.3	24.2	-3.72	±10
2022/02/18	2600 MHz	Head and Body	100	10g	2.53	25.3	24.4	3.69	±10
2022/02/19	5250 MHz	Head and Body	100	10g	2.19	21.9	21.3	2.82	±10
2022/02/19	5800 MHz	Head and Body	100	10g	2.12	21.2	22.0	-3.64	±10

*The SAR values above are normalized to 1 Watt forward power.

BS EN62209-1:2016 recommended reference value for Head Tissue

Frequency (MHz)	1 g SAR (W/Kg)	10 g SAR (W/Kg)	Local SAR at surface (above feed point)	Local SAR at surface (y=2cm offset from feed point)
300	3.0	2.0	4.4	2.1
450	4.9	3.3	7.2	3.2
835	9.5	6.2	14.1	4.9
900	10.8	6.9	16.4	5.4
1450	29.0	16.0	50.2	6.5
1800	38.1	19.8	69.5	6.8
1900	39.7	20.5	72.1	6.6
2000	41.1	21.1	74.6	6.5
2450	52.4	24.0	104.2	7.7
3000	63.8	25.7	140.2	9.5

BS EN62209-2:2010 recommended reference value for Body Tissue

Frequency (MHz)	1 g SAR (W/Kg)	10 g SAR (W/Kg)	Local SAR at surface (above feed point)	Local SAR at surface (y=2cm offset from feed point)
300	2.85	1.94	4.14	2.00
450	4.58	3.06	6.75	2.98
835	9.56	6.22	14.6	4.90
900	10.9	6.99	16.4	5.40
1450	29.0	16.0	50.2	6.50
1800	38.4	20.1	69.5	6.80
1900	39.7	20.5	72.1	6.60
2000	41.1	21.1	74.6	6.50
2450	52.4	24.0	104	7.70
3000	63.8	25.7	140	9.50

SAR SYSTEM VALIDATION DATA

System Performance 750 MHz

DUT: D750V3; Type: 750 MHz; Serial: 1167

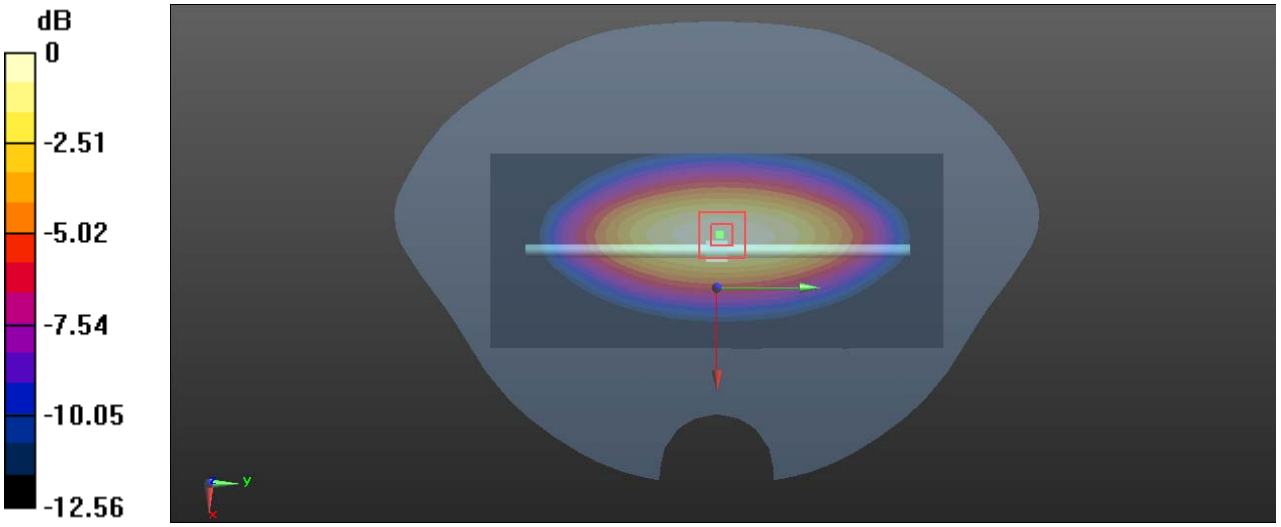
Communication System: CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.871 S/m; ε_r = 41.832; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(10.06, 10.06, 10.06) @ 750 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (61x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.07 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.40 W/kg
SAR(1 g) = 0.881 W/kg; SAR(10 g) = 0.572 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

System Performance 900MHz

DUT: D900V2; Type: 900 MHz; Serial: 1d183

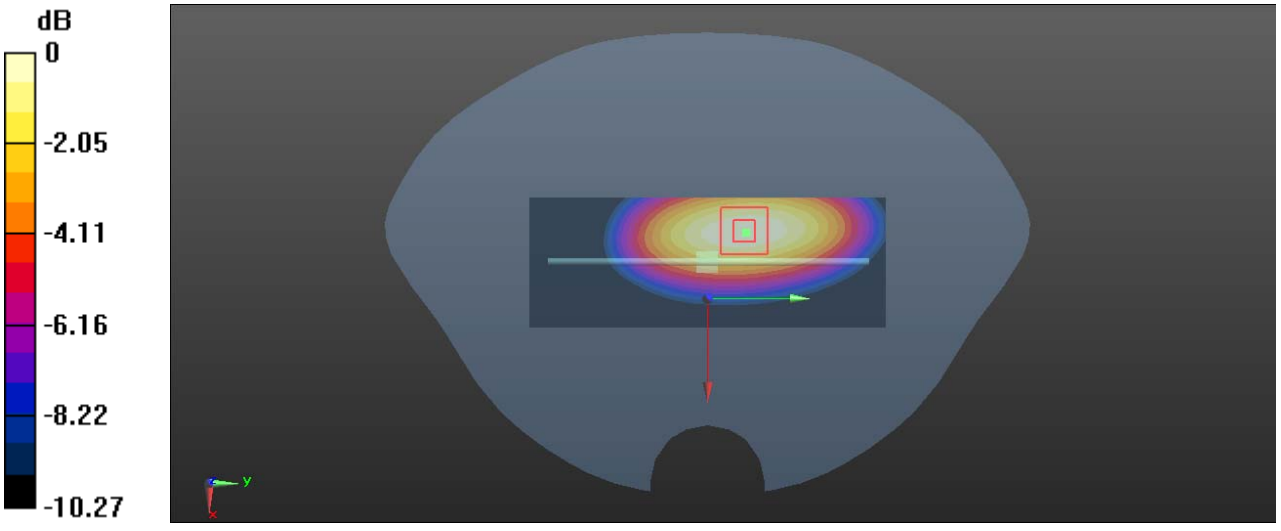
Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz; σ = 0.964 S/m; ε_r = 41.209; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 900 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (41x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.21 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.36 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.75 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.709 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

System Performance 1750MHz

DUT: D1750V2; Type: 1750 MHz; Serial: 1141

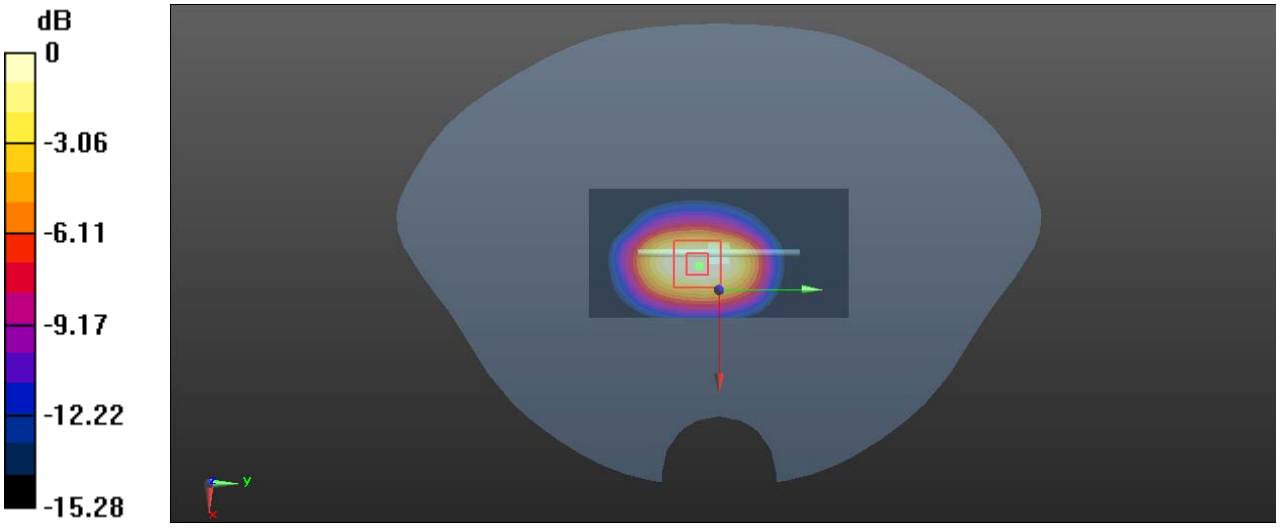
Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1750 MHz; σ = 1.378 S/m; ε_r = 40.229; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1750 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.41 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.82 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 6.13 W/kg
SAR(1 g) = 3.56 W/kg; SAR(10 g) = 1.93 W/kg
Maximum value of SAR (measured) = 3.91 W/kg



0 dB = 3.91 W/kg = 5.92 dBW/kg

System Performance 1900 MHz

DUT: D1900V2; Type: 1900 MHz; Serial: 543

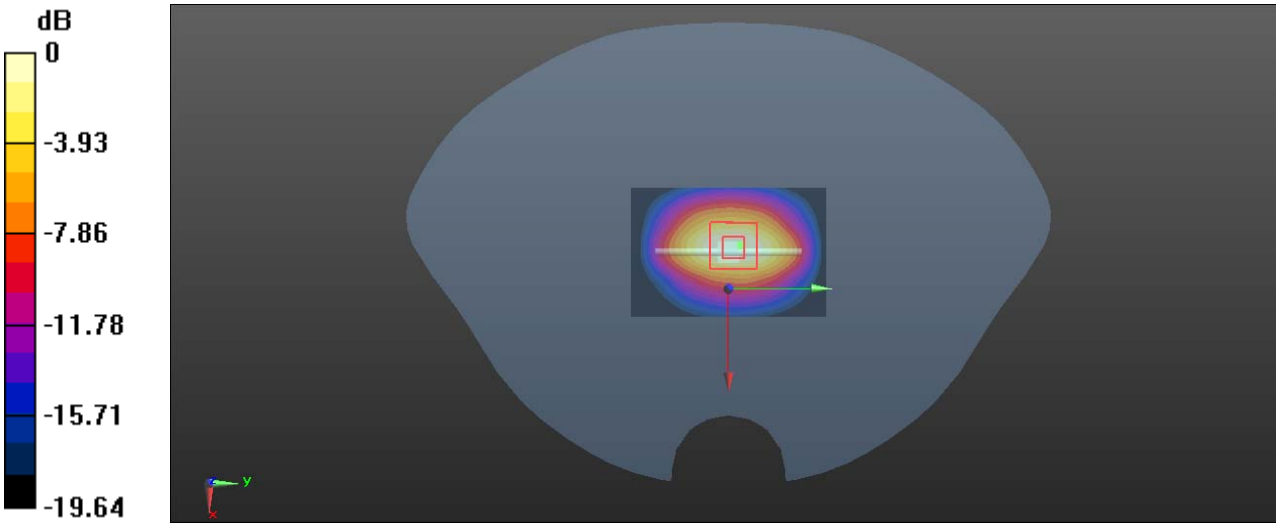
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.401 S/m; ε_r = 39.982; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1900 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 5.97 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 52.52 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 6.74 W/kg
SAR(1 g) = 3.69 W/kg; SAR(10 g) = 2.01 W/kg
Maximum value of SAR (measured) = 5.56 W/kg



0 dB = 5.56 W/kg = 7.45 dBW/kg

System Performance 2450MHz

DUT: D2450V2; Type: 2450 MHz; Serial: 971

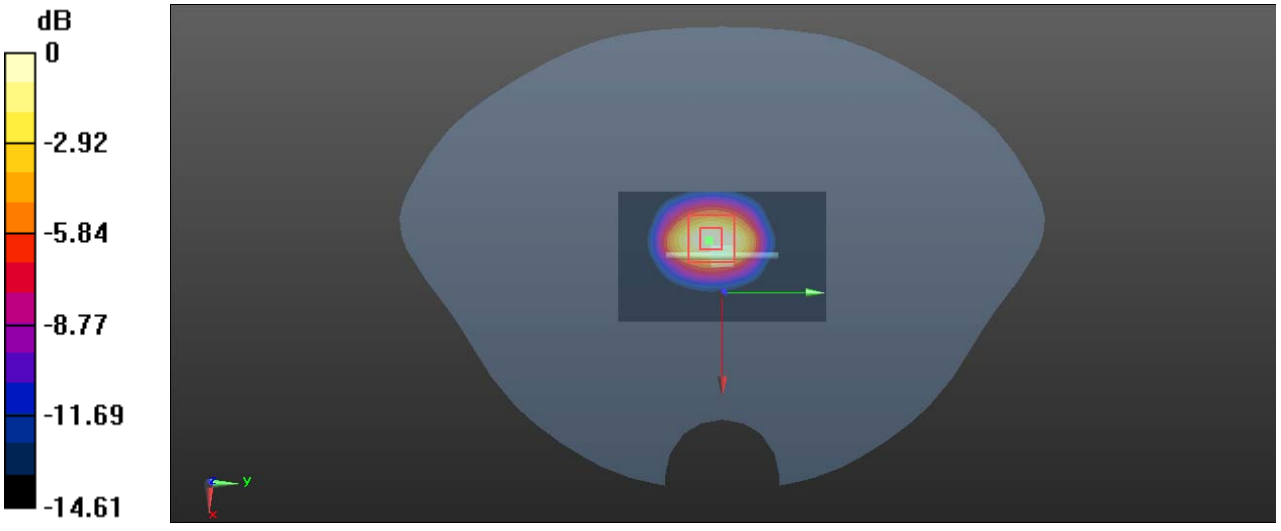
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.798 S/m; ε_r = 39.369; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2450 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 8.78 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.72 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 10.2 W/kg
SAR(1 g) = 5.14 W/kg; SAR(10 g) = 2.33 W/kg
Maximum value of SAR (measured) = 8.27 W/kg



0 dB = 8.27 W/kg = 9.18 dBW/kg

System Performance 2600MHz

DUT: D2600V2; Type: 2600 MHz; Serial: 1132

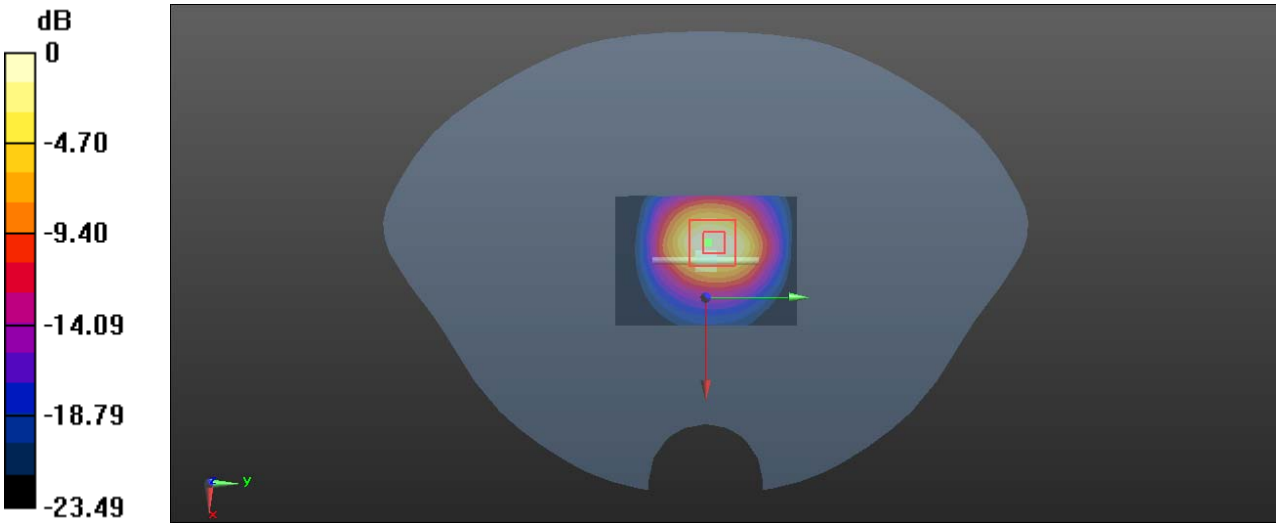
Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.986 S/m; ε_r = 39.008; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.15, 7.15, 7.15) @ 2600 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (51x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 10.6 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.16 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 12.9 W/kg
SAR(1 g) = 5.78 W/kg; SAR(10 g) = 2.53 W/kg
Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 10.1 W/kg = 10.04 dBW/kg

System Performance 5250 MHz

DUT: Dipole D5GHzV2; Type: 5250 MHz; Serial: SN:1246

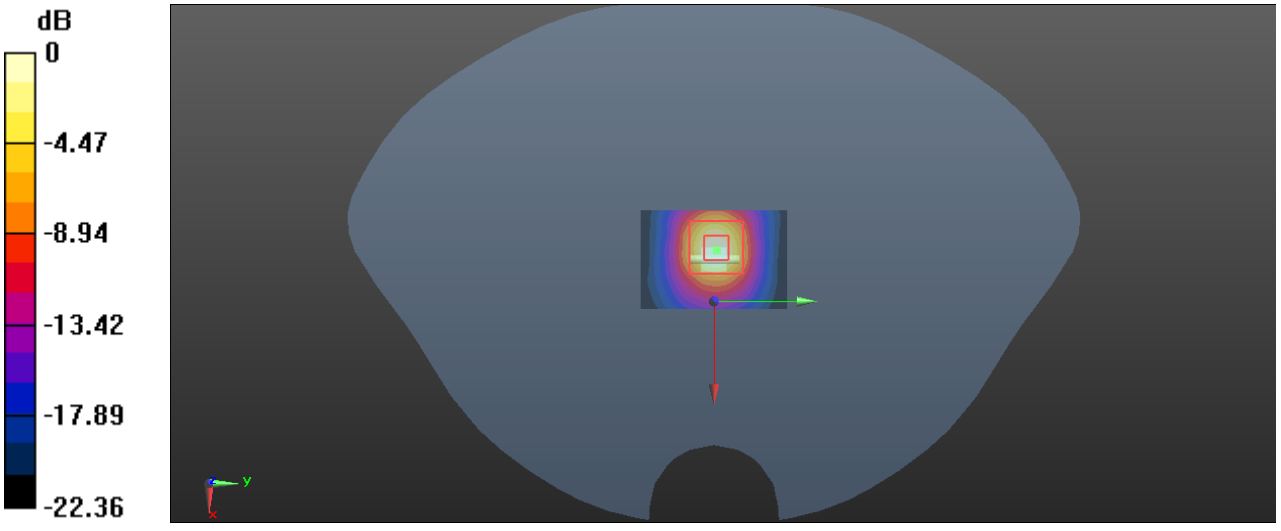
Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.743 S/m; ε_r = 35.662; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(5.49, 5.49, 5.49) @ 5250 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (41x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 19.3 W/kg

Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 39.51 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 28.8 W/kg
SAR(1 g) = 7.54 W/kg; SAR(10 g) = 2.19 W/kg
Maximum value of SAR (measured) = 18.4 W/kg



0 dB = 18.4 W/kg = 12.65 dBW/kg

System Performance 5800 MHz

DUT: Dipole D5GHzV2; Type: 5800 MHz; Serial: SN:1246

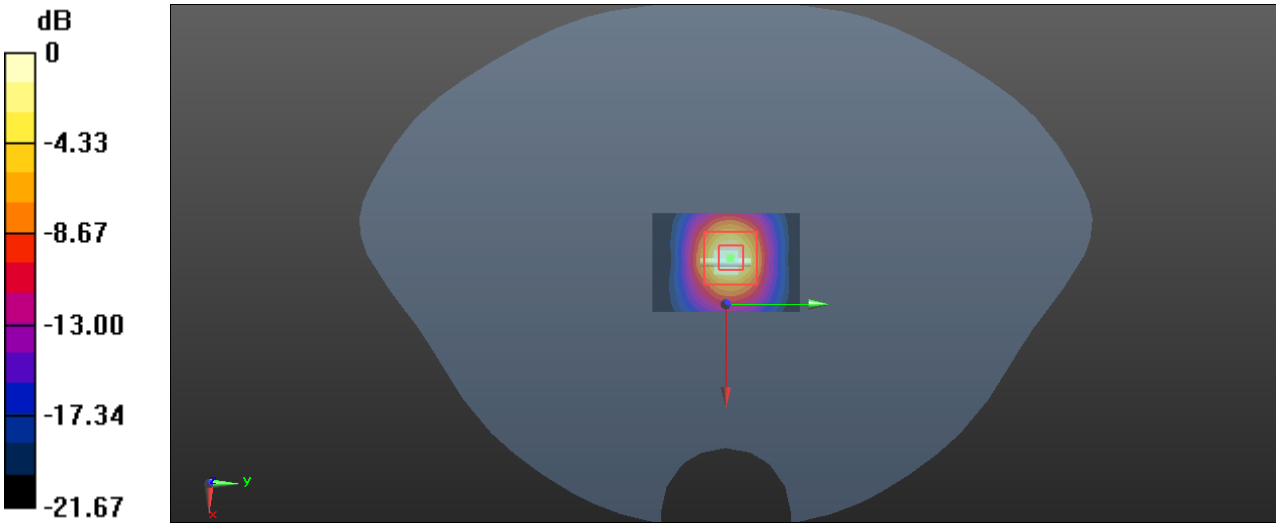
Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.294 S/m; ε_r = 35.024; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.75, 4.75, 4.75) @ 5800 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (41x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 21.0 W/kg

Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 39.09 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 33.4 W/kg
SAR(1 g) = 7.55 W/kg; SAR(10 g) = 2.12 W/kg
Maximum value of SAR (measured) = 19.6 W/kg



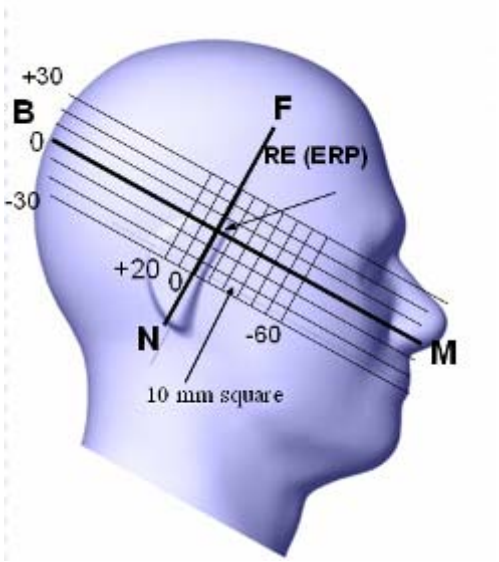
0 dB = 19.6 W/kg = 12.92 dBW/kg

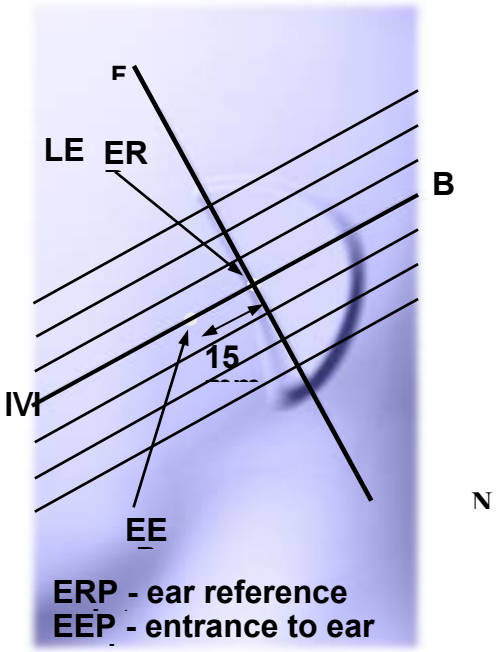
EUT TEST STRATEGY AND METHODOLOGY

Test Positions for Device Operating Next to a Person's Ear

This category includes most wireless handsets with fixed, retractable or internal antennas located toward the top half of the device, with or without a foldout, sliding or similar keypad cover. The handset should have its earpiece located within the upper ¼ of the device, either along the centerline or off-centered, as perceived by its users. This type of handset should be positioned in a normal operating position with the "test device reference point" located along the "vertical centerline" on the front of the device aligned to the "ear reference point". The "test device reference point" should be located at the same level as the center of the earpiece region. The "vertical centerline" should bisect the front surface of the handset at its top and bottom edges. A "ear reference point" is located on the outer surface of the head phantom on each ear spacer. It is located 1.5 cm above the center of the ear canal entrance in the "phantom reference plane" defined by the three lines joining the center of each "ear reference point" (left and right) and the tip of the mouth.

A handset should be initially positioned with the earpiece region pressed against the ear spacer of a head phantom. For the SCC-34/SC-2 head phantom, the device should be positioned parallel to the "N-F" line defined along the base of the ear spacer that contains the "ear reference point". For interim head phantoms, the device should be positioned parallel to the cheek for maximum RF energy coupling. The "test device reference point" is aligned to the "ear reference point" on the head phantom and the "vertical centerline" is aligned to the "phantom reference plane". This is called the "initial ear position". While maintaining these three alignments, the body of the handset is gradually adjusted to each of the following positions for evaluating SAR:





Cheek/Touch Position

The device is brought toward the mouth of the head phantom by pivoting against the "ear reference point" or along the "N-F" line for the SCC-34/SC-2 head phantom.

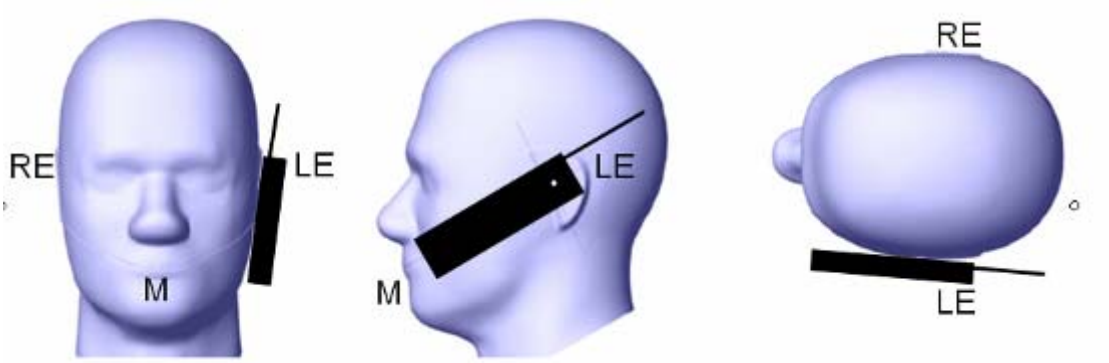
This test position is established:

When any point on the display, keypad or mouthpiece portions of the handset is in contact with the phantom.

(or) When any portion of a foldout, sliding or similar keypad cover opened to its intended self-adjusting normal use position is in contact with the cheek or mouth of the phantom.

For existing head phantoms – when the handset loses contact with the phantom at the pivoting point, rotation should continue until the device touches the cheek of the phantom or breaks its last contact from the ear spacer.

Cheek /Touch Position



Ear/Tilt Position

With the handset aligned in the "Cheek/Touch Position":

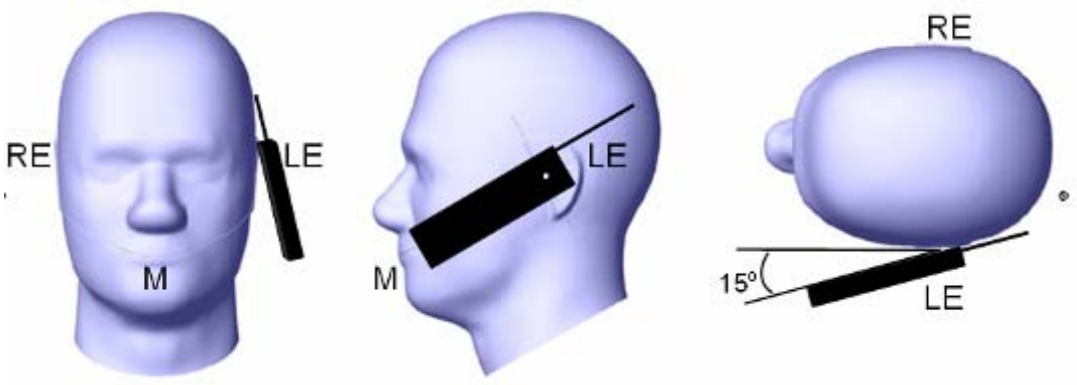
1) If the earpiece of the handset is not in full contact with the phantom's ear spacer (in the "Cheek/Touch position") and the peak SAR location for the "Cheek/Touch" position is located at the ear spacer region or corresponds to the earpiece region of the handset, the device should be returned to the "initial ear position" by rotating it away from the mouth until the earpiece is in full contact with the ear spacer.

2) (otherwise) The handset should be moved (translated) away from the cheek perpendicular to the line passes through both "ear reference points" (note: one of these ear reference points may not physically exist on a split head model) for approximate 2-3 cm. While it is in this position, the device handset is tilted away from the mouth with respect to the "test device reference point" until the inside angle between the vertical centerline on the front surface of the phone and the horizontal line passing through the ear reference point is by 15 80°. After the tilt, it is then moved (translated) back toward the head perpendicular to the line passes through both "ear reference points" until the device touches the phantom or the ear spacer. If the antenna touches the head first, the positioning process should be repeated with a tilt angle less than 15° so that the device and its antenna would touch the phantom simultaneously. This test position may require a device holder or positioner to achieve the translation and tilting with acceptable positioning repeatability.

If a device is also designed to transmit with its keypad cover closed for operating in the head position, such positions should also be considered in the SAR evaluation. The device should be tested on the left and right side of the head phantom in the "Cheek/Touch" and "Ear/Tilt" positions. When applicable, each configuration should be tested with the antenna in its fully extended and fully retracted positions. These test configurations should be tested at the high, Middle Channeldle and low frequency channels of each operating mode; for example, AMPS, CDMA, and TDMA. If the SAR measured at the Middle Channeldle channel for each test configuration (left, right, Cheek/Touch, Tilt/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

If the transmission band of the test device is less than 10 MHz, testing at the high and low frequency channels is optional.

Ear /Tilt 15° Position



Test positions for body-worn and other configurations

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. When multiple accessories that do not contain metallic components are supplied with the device, the device may be tested with only the accessory that dictates the closest spacing to the body. When multiple accessories that contain metallic components are supplied with the device, the device must be tested with each accessory that contains a unique metallic component. If multiple accessories share an identical metallic component (e.g., the same metallic belt-clip used with different holsters with no other metallic components), only the accessory that dictates the closest spacing to the body must be tested.

Body-worn accessories may not always be supplied or available as options for some devices that are intended to be authorized for body-worn use. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances. Other separation distances may be used, but they should not exceed 2.5 cm. In these cases, the device may use body-worn accessories that provide a separation distance greater than that tested for the device provided however that the accessory contains no metallic components.

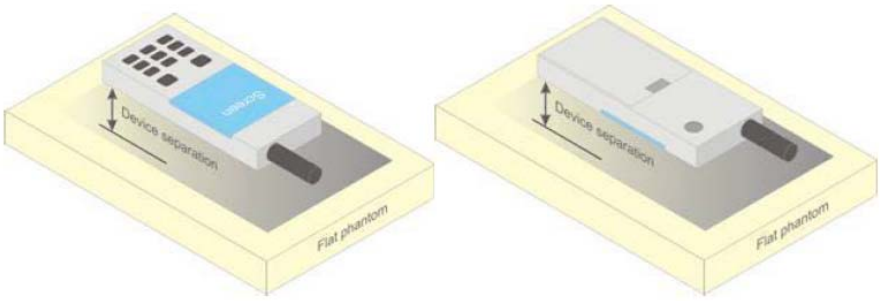


Figure 5 – Test positions for body-worn devices

Test Distance for SAR Evaluation

For Handheld mode(10g Extremity SAR) the EUT(Equipment Under Test) is set directly against the phantom, the test distance is 0mm;
For Body Worn mode the EUT is set 5mm away from the phantom, the test distance is 5mm

SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop. The SAR at this point is measured at the start of the test and then again at the end of the testing.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the head or radiating structures of the EUT, the horizontal grid spacing was 15 mm x 15 mm, and the SAR distribution was determined by integrated grid of 1.5mm x 1.5mm. Based on these data, the area of the maximum absorption was determined by spline interpolation. The first Area Scan covers the entire dimension of the EUT to ensure that the hotspot was correctly identified.

Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7x 7 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

1) The data at the surface were extrapolated, since the center of the dipoles is 1.2 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

2) The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one dimensional splines with the “Not a knot"-condition (in x, y and z-directions). The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the averages.

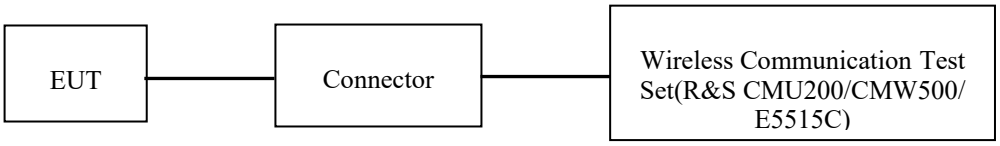
All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

CONDUCTED OUTPUT POWER MEASUREMENT

Test Procedure

The RF output of the transmitter was connected to the input of the Wireless Communication Test Set through Connector.



GSM/WCDMA/LTE

Maximum Target Output Power

Max Target Power(dBm)			
Mode/Band	Channel		
	Low	Middle	High
GSM 900	33.2	33.2	33.2
GSM 900 GPRS 1 TX Slot	33.1	33.1	33.1
GSM 900 GPRS 2 TX Slot	32.2	32.2	32.2
GSM 900 GPRS 3 TX Slot	30.4	30.4	30.4
GSM 900 GPRS 4 TX Slot	29.1	29.1	29.1
GSM 900 EDGE 1 TX Slot	27	27	27
GSM 900 EDGE 2 TX Slot	25	25	25
GSM 900 EDGE 3 TX Slot	22.7	22.7	22.7
GSM 900 EDGE 4 TX Slot	21.5	21.5	21.5
DCS 1800	30.1	30.1	30.1
DCS 1800 GPRS 1 TX Slot	30.1	30.1	30.1
DCS 1800 GPRS 2 TX Slot	29	29	29
DCS 1800 GPRS 3 TX Slot	26.9	26.9	26.9
DCS 1800 GPRS 4 TX Slot	26	26	26
DCS 1800 EDGE 1 TX Slot	27.2	27.2	27.2
DCS 1800 EDGE 2 TX Slot	26.1	26.1	26.1
DCS 1800 EDGE 3 TX Slot	23.8	23.8	23.8
DCS 1800 EDGE 4 TX Slot	23	23	23
WCDMA Band 1	23.2	23.2	23.2
HSDPA	20.9	20.9	20.9
HSUPA	21.8	21.8	21.8
HSPA+	21.8	21.8	21.8
WCDMA Band 8	23.6	23.6	23.6
HSDPA	21.5	21.5	21.5
HSUPA	22.5	22.5	22.5
HSPA+	22.2	22.2	22.2
LTE Band 1	23.7	23.7	23.7
LTE Band 3	24.5	24.5	24.5

Max Target Power(dBm)			
Mode/Band	Channel		
	Low	Middle	High
LTE Band 7	22.9	22.9	22.9
LTE Band 8	24.5	24.5	24.5
LTE Band 20	24.2	24.2	24.2
Wi-Fi 2.4G(802.11b)	14.1	14.1	14.1
Wi-Fi 2.4G (802.11g)	12.2	12.2	12.2
Wi-Fi 2.4G (802.11n ht20)	12.3	12.3	12.3
Wi-Fi 2.4G (802.11n ht40)	11.1	11.1	11.1
Wi-Fi 5.2G (802.11a)	9.9	9.9	9.9
Wi-Fi 5.2G (802.11n ht20)	9.7	9.7	9.7
Wi-Fi 5.2G (802.11n ht40)	9.8	/	9.8
Wi-Fi 5.2G (802.11ac20)	9.9	9.9	9.9
Wi-Fi 5.2G (802.11ac40)	9.6	/	9.6
Wi-Fi 5.2G (802.11ac80)	/	9.7	/
Wi-Fi 5.8G (802.11a)	10.7	10.7	10.7
Wi-Fi 5.8G (802.11n ht20)	10.5	10.5	10.5
Wi-Fi 5.8G (802.11n ht40)	9.8	/	9.8
Wi-Fi 5.8G (802.11ac20)	10.6	10.6	10.6
Wi-Fi 5.8G (802.11ac40)	9.9	/	9.9
Wi-Fi 5.8G (802.11ac80)	/	9.7	/
Bluetooth BDR/EDR	9.5	9.5	9.5
Bluetooth LE	2.5	2.5	2.5

Test Results:

GSM

Mode	Channel No.	Frequency (MHz)	RF Output Power (dBm)
GSM900	975	880.2	**33.13**
	60	902.0	32.78
	124	914.8	32.72
DCS1800	513	1710.4	29.94
	700	1747.8	**30.01**
	884	1784.6	30.00

GPRS

Mode	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM900	975	880.2	32.97	32.05	30.31	29.03
	60	902.0	32.69	31.78	30.11	28.85
	124	914.8	32.66	31.63	29.99	28.64
DCS1800	513	1710.4	29.73	28.78	26.83	25.52
	700	1747.8	30.01	28.86	26.84	25.85
	884	1784.6	29.72	28.75	26.75	25.65

EDGE

Mode	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM900	975	880.2	26.88	24.94	22.56	21.44
	60	902.0	26.44	24.60	22.15	20.83
	124	914.8	26.25	24.24	21.89	20.49
DCS1800	513	1710.4	26.28	25.41	23.29	22.31
	700	1747.8	27.10	25.66	23.68	22.65
	884	1784.6	27.07	25.96	23.74	22.89

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.25 dB	-3 dB
Crest Factor	8	4	2.66	2

The time based average power for GPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM900	975	880.2	23.97	26.05	**26.06**	26.03
	60	902.0	23.69	25.78	25.86	25.85
	124	914.8	23.66	25.63	25.74	25.64
DCS1800	513	1710.4	20.73	22.78	22.58	22.52
	700	1747.8	21.01	**22.86**	22.59	22.85
	884	1784.6	20.72	22.75	22.5	22.65

The time based average power for EDGE

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM900	975	880.2	17.88	18.94	18.31	18.44
	60	902.0	17.44	18.6	17.9	17.83
	124	914.8	17.25	18.24	17.64	17.49
DCS1800	513	1710.4	17.28	19.41	19.04	19.31
	700	1747.8	18.1	19.66	19.43	19.65
	884	1784.6	18.07	19.96	19.49	19.89

Note:
1.For GSM voice, 1 timeslot has been activated with power level 5 (900 MHz band) and 0 (1800 MHz band).
2.For GPRS 1, 2, 3 and 4 timeslots has been activated separately with power control level 3(900 MHz band) and 3(1800 MHz band).

WCDMA

Band	Test Mode	3GPP Sub Test	RF Output Power (dBm)		
			Low Channel	Middle Channel	High Channel
WCDMA Band 1	Rel 99	1	22.94	**23.06**	23.06
	HSDPA	1	20.59	20.42	20.53
		2	20.61	20.76	20.63
		3	20.79	20.61	20.64
		4	20.54	20.49	20.62
	HSUPA	1	21.73	21.70	21.85
		2	21.70	21.38	21.77
		3	21.56	21.69	21.67
		4	21.54	21.60	21.55
		5	21.47	21.60	21.54
	HSPA+	1	21.54	21.65	21.55
WCDMA Band 8	Rel 99	1	23.38	**23.47**	23.44
	HSDPA	1	20.98	21.40	20.56
		2	20.66	21.37	20.67
		3	20.55	21.33	20.76
		4	20.60	21.33	20.68
	HSUPA	1	22.43	22.10	22.17
		2	22.13	22.11	22.01
		3	22.21	21.99	21.99
		4	22.21	22.12	22.27
		5	22.40	22.04	21.93
	HSPA+	1	21.97	21.85	22.05

Note:

1.The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model 1.

2. The powers above were tested at the antenna port.

LTE:

Test Band	Test Bandwidth	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
Band 1	5M	1#0	0	0	**23.63**	23.39	23.51
		12#0	1	1	22.18	22.18	22.25
		25#0	1	1	23.02	22.99	22.89
	20M	1#0	0	0	23.41	23.52	23.48
		50#0	1	1	23.14	23.13	23.09
		100#0	1	1	22.86	22.85	22.9
Band 3	1.4M	1#0	0	0	**24.4**	24.35	23.94
		3#0	1	1	24.13	24.01	23.83
		6#0	1	1	23.86	23.66	23.51
	5M	1#0	0	0	24.14	24.12	23.89
		12#0	1	1	23.83	23.98	23.77
		25#0	1	1	23.58	23.9	23.67
	20M	1#0	0	0	23.89	24.06	24.14
		50#0	1	1	23.54	23.64	23.5
		100#0	1	1	23.28	23.28	23.17
Band 7	5M	1#0	0	0	22.69	22.63	**22.85**
		12#0	1	1	22.55	22.37	22.49
		25#0	1	1	22.37	22.25	22.45
	20M	1#0	0	0	22.83	22.79	22.75
		50#0	1	1	22.44	22.43	22.37
		100#0	1	1	22.08	22.23	22.06
Band 8	1.4M	1#0	0	0	24.2	24.25	24.22
		3#0	1	1	24.14	24.01	23.96
		6#0	1	1	23.86	22.77	22.78
	5M	1#0	0	0	24.13	24.38	**24.44**
		12#0	1	1	23.99	24.23	24.2
		25#0	1	1	23.59	24.04	24
	10M	1#0	0	0	24.26	24.24	24.4
		25#0	1	1	23.94	23.98	24.22
		50#0	1	1	23.82	23.85	24.06
Band 20	5M	1#0	0	0	23.64	**24.15**	23.86
		12#0	1	1	23.47	23.67	23.53
		25#0	1	1	23.26	23.64	23.39
	20M	1#0	0	0	24.13	24.05	23.94
		50#0	1	1	23.67	23.69	23.72
		100#0	1	1	23.36	23.54	23.39

Note:

1.The CMW500 Wideband Radio Communication tester is used for LTE output power measurements and SAR testing. Closed loop power control is used to keep the radio transmitters the max output power during the test.

2. The powers above were tested at the antenna port.

Wi-Fi 2.4G:

Mode	Frequency (MHz)	Data Rate	ERIP (dBm)
802.11b	2412	1Mbps	13.68
	2442		**13.97**
	2472		13.76
802.11g	2412	6Mbps	11.14
	2442		12.12
	2472		11.01
802.11n ht20	2412	MCS0	11.52
	2442		12.25
	2472		10.96
802.11n Ht40	2422	MCS0	10.99
	2442		10.26
	2462		10.36

Wi-Fi 5.2G:

Mode	Frequency (MHz)	Data Rate	ERIP (dBm)
802.11a	5180	6Mbps	9.72
	5200		9.69
	5240		**9.76**
802.11n20	5180	MCS0	9.61
	5200		9.46
	5240		9.32
802.11n40	5190	MCS0	9.66
	5230		9.60
802.11ac20	5180	MCS0	9.73
	5200		9.61
	5240		9.45
802.11ac40	5190	MCS0	9.34
	5230		9.52
802.11ac80	5210	MCS0	9.62

Wi-Fi 5.8G:

Mode	Frequency (MHz)	Data Rate	ERIP (dBm)
802.11a	5745	6Mbps	10.51
	5785		10.42
	5825		**10.56**
802.11n20	5745	MCS0	9.83
	5785		10.18
	5825		10.37
802.11n40	5755	MCS0	9.61
	5795		9.65
802.11ac20	5745	MCS0	9.69
	5785		10.20
	5825		10.44
802.11ac40	5755	MCS0	9.77
	5795		9.74
802.11ac80	5775	MCS0	9.61

Bluetooth:

Mode	Frequency (MHz)	ERIP (dBm)
BDR(GFSK)	2402	**9.14**
	2441	8.35
	2480	8.60
EDR(π/4-DQPSK)	2402	7.16
	2441	5.71
	2480	6.22
EDR(8DPSK)	2402	7.45
	2441	7.15
	2480	6.12
BLE(1Mbps)	2402	1.96
	2440	2.17
	2480	1.91
BLE(2Mbps)	2402	2.09
	2440	**2.27**
	2480	2.00

Note: The antenna gain is 1.38 dBi which was added into the EIRP.

Note:

The output power above is ERIP power. and the ERIP power was used for calculating.

SAR MEASUREMENT RESULTS

This page summarizes the results of the performed dosimetric evaluation.

Test Results:

Environmental Conditions:

Temperature:	21.5-22.4℃	21.3-22.2℃	21.6-22.8℃
Relative Humidity:	42 %	43 %	39 %
ATM Pressure:	101.3 kPa	101.4 kPa	101.1 kPa
Test Date:	2022/02/14	2022/02/15	2022/02/16
Temperature:	21.2-22.6℃	21.4-22.7℃	21.7-22.5℃
Relative Humidity:	40 %	50 %	37 %
ATM Pressure:	100.9 kPa	101 kPa	101.2 kPa
Test Date:	2022/02/17	2022/02/18	2022/02/19

Testing was performed by Anne Zhang, Wen Wang, Mark Dong.

EGSM 900:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	880.2	GSM	/	/	/	/	/	/	/
	902.0	GSM	32.78	33.2	1.102	0.209	0.23	2	1#
	914.8	GSM	/	/	/	/	/	/	/
Head Left Tilt	880.2	GSM	/	/	/	/	/	/	/
	902.0	GSM	32.78	33.2	1.102	0.131	0.144	2	/
	914.8	GSM	/	/	/	/	/	/	/
Head Right Cheek	880.2	GSM	/	/	/	/	/	/	/
	902.0	GSM	32.78	33.2	1.102	0.124	0.137	2	/
	914.8	GSM	/	/	/	/	/	/	/
Head Right Tilt	880.2	GSM	/	/	/	/	/	/	/
	902.0	GSM	32.78	33.2	1.102	0.089	0.098	2	/
	914.8	GSM	/	/	/	/	/	/	/
Body Worn Back (5mm)	880.2	GSM	/	/	/	/	/	/	/
	902.0	GSM	32.78	33.2	1.102	0.377	0.415	2	/
	914.8	GSM	/	/	/	/	/	/	/
Body Back (5mm)	880.2	GPRS	30.31	30.4	1.021	0.492	0.502	2	/
	902.0	GPRS	30.11	30.4	1.069	0.499	0.533	2	2#
	914.8	GPRS	29.99	30.4	1.099	0.483	0.531	2	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	880.2	GPRS	30.31	30.4	1.021	1.64	1.674	4	/
	902.0	GPRS	30.11	30.4	1.069	1.69	1.807	4	3#
	914.8	GPRS	29.99	30.4	1.099	1.57	1.725	4	/
Handheld Left (0mm)	880.2	GPRS	/	/	/	/	/	/	/
	902.0	GPRS	30.11	30.4	1.069	0.876	0.936	4	/
	914.8	GPRS	/	/	/	/	/	/	/
Handheld Right (0mm)	880.2	GPRS	/	/	/	/	/	/	/
	902.0	GPRS	30.11	30.4	1.069	0.724	0.774	4	/
	914.8	GPRS	/	/	/	/	/	/	/
Handheld Bottom (0mm)	880.2	GPRS	/	/	/	/	/	/	/
	902.0	GPRS	30.11	30.4	1.069	0.683	0.73	4	/
	914.8	GPRS	/	/	/	/	/	/	/

Note:
1. When the 10-g SAR is less than half of the limit, testing for low and high channel is optional.
2. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 2DL+3UL is the worst case.
3. The EUT transmit and receive through the same GSM antenna while testing SAR

DCS 1800

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	1710.4	GSM	/	/	/	/	/	/	/
	1747.8	GSM	/	/	/	/	/	/	/
	1784.6	GSM	30	30.1	1.023	0.119	0.122	2	4#
Head Left Tilt	1710.4	GSM	/	/	/	/	/	/	/
	1747.8	GSM	30.01	30.1	1.021	0.073	0.075	2	/
	1784.6	GSM	/	/	/	/	/	/	/
Head Right Cheek	1710.4	GSM	/	/	/	/	/	/	/
	1747.8	GSM	30.01	30.1	1.021	0.078	0.08	2	/
	1784.6	GSM	/	/	/	/	/	/	/
Head Right Tilt	1710.4	GSM	/	/	/	/	/	/	/
	1747.8	GSM	30.01	30.1	1.021	0.054	0.055	2	/
	1784.6	GSM	/	/	/	/	/	/	/
Body Worn Back (5mm)	1710.4	GSM	/	/	/	/	/	/	/
	1747.8	GSM	30.01	30.1	1.021	0.476	0.486	2	/
	1784.6	GSM	/	/	/	/	/	/	/
Body Back (5mm)	1710.4	GPRS	28.78	29	1.052	0.842	0.886	2	/
	1747.8	GPRS	28.86	29	1.033	0.846	0.874	2	/
	1784.6	GPRS	28.75	29	1.059	0.851	0.901	2	5#

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	1710.4	GPRS	28.78	29	1.052	1.48	1.557	4	/
	1747.8	GPRS	28.86	29	1.033	1.53	1.58	4	/
	1784.6	GPRS	28.75	29	1.059	1.61	1.705	4	6#
Handheld Left (0mm)	1710.4	GPRS	/	/	/	/	/	/	/
	1747.8	GPRS	28.86	29	1.033	0.943	0.974	4	/
	1784.6	GPRS	/	/	/	/	/	/	/
Handheld Right (0mm)	1710.4	GPRS	/	/	/	/	/	/	/
	1747.8	GPRS	28.86	29	1.033	0.789	0.815	4	/
	1784.6	GPRS	/	/	/	/	/	/	/
Handheld Bottom (0mm)	1710.4	GPRS	/	/	/	/	/	/	/
	1747.8	GPRS	28.86	29	1.033	0.863	0.891	4	/
	1784.6	GPRS	/	/	/	/	/	/	/

Note:
1. When the 10-g SAR is less than half of the limit, testing for low and high channel is optional.
2. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 3DL+2UL is the worst case.
3. The EUT transmit and receive through the same GSM antenna while testing SAR

WCDMA Band 1:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	/	/	/	/	/	/	/
	1977.4	RMC	23.06	23.2	1.033	0.132	0.136	2	7#
Head Left Tilt	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	23.06	23.2	1.033	0.106	0.109	2	/
	1977.4	RMC	/	/	/	/	/	/	/
Head Right Cheek	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	23.06	23.2	1.033	0.104	0.107	2	/
	1977.4	RMC	/	/	/	/	/	/	/
Head Right Tilt	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	23.06	23.2	1.033	0.086	0.089	2	/
	1977.4	RMC	/	/	/	/	/	/	/
Body Back (5mm)	1922.6	RMC	22.94	23.2	1.062	1.18	1.253	2	/
	1950	RMC	23.06	23.2	1.033	1.26	1.302	2	/
	1977.4	RMC	23.06	23.2	1.033	1.31	1.353	2	8#

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	1922.6	RMC	22.94	23.2	1.062	2.09	2.22	4	/
	1950	RMC	23.06	23.2	1.033	2.18	2.252	4	/
	1977.4	RMC	23.06	23.2	1.033	2.23	2.304	4	9#
Handheld Left (0mm)	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	23.06	23.2	1.033	1.36	1.405	4	/
	1977.4	RMC	/	/	/	/	/	/	/
Handheld Right (0mm)	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	23.06	23.2	1.033	1.19	1.229	4	/
	1977.4	RMC	/	/	/	/	/	/	/
Handheld Bottom (0mm)	1922.6	RMC	/	/	/	/	/	/	/
	1950	RMC	23.06	23.2	1.033	1.41	1.457	4	/
	1977.4	RMC	/	/	/	/	/	/	/

Note:
1. When the 10-g SAR is less than half of the limit, testing for low and high channel is optional.
2. The default test configuration is to measure SA R with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC(reference measurement Channel) Configured in Test Loop Mode.

WCDMA Band 8:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	23.47	23.6	1.03	0.175	0.18	2	/
	912.4	RMC	/	/	/	/	/	/	/
Head Left Tilt	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	23.47	23.6	1.03	0.114	0.117	2	/
	912.4	RMC	/	/	/	/	/	/	/
Head Right Cheek	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	/	/	/	/	/	/	/
	912.4	RMC	23.44	23.6	1.038	0.207	0.215	2	10#
Head Right Tilt	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	23.47	23.6	1.03	0.136	0.14	2	/
	912.4	RMC	/	/	/	/	/	/	/
Body Back (5mm)	882.6	RMC	23.38	23.6	1.052	0.339	0.357	2	/
	897.6	RMC	23.47	23.6	1.03	0.347	0.357	2	/
	912.4	RMC	23.44	23.6	1.038	0.354	0.367	2	11#

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	882.6	RMC	23.38	23.6	1.052	0.971	1.021	4	/
	897.6	RMC	23.47	23.6	1.03	0.986	1.016	4	/
	912.4	RMC	23.44	23.6	1.038	1	1.038	4	12#
Handheld Left (0mm)	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	23.47	23.6	1.03	0.762	0.785	4	/
	912.4	RMC	/	/	/	/	/	/	/
Handheld Right (0mm)	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	23.47	23.6	1.03	0.584	0.602	4	/
	912.4	RMC	/	/	/	/	/	/	/
Handheld Bottom (0mm)	882.6	RMC	/	/	/	/	/	/	/
	897.6	RMC	23.47	23.6	1.03	0.676	0.696	4	/
	912.4	RMC	/	/	/	/	/	/	/

Note:
1. When the 10-g SAR is less than half of the limit, testing for low and high channel is optional.
2. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC(reference measurement Channel) Configured in Test Loop Mode.

LTE Band 1:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	/	/	/	/	/	/
	1970	QPSK	20	1RB	23.48	23.7	1.052	0.156	0.164	**13#**
Head Left Tilt	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	0.109	0.114	/
	1970	QPSK	20	1RB	/	/	/	/	/	/
Head Right Cheek	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	0.143	0.149	/
	1970	QPSK	20	1RB	/	/	/	/	/	/
Head Right Tilt	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	0.094	0.098	/
	1970	QPSK	20	1RB	/	/	/	/	/	/
Body Back (5mm)	1930	QPSK	20	1RB	23.41	23.7	1.069	1.02	1.09	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	1.12	1.167	/
	1970	QPSK	20	1RB	23.48	23.7	1.052	1.16	1.22	14#
	1970	QPSK	20	50%RB	23.09	23.7	1.151	0.912	1.05	/
	1970	QPSK	20	100%RB	22.9	23.7	1.202	0.763	0.917	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Handheld Back (0mm)	1930	QPSK	20	1RB	23.41	23.7	1.069	2.57	2.747	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	2.63	2.74	/
	1970	QPSK	20	1RB	23.48	23.7	1.052	2.69	2.83	**15#**
	1970	QPSK	20	50%RB	23.09	23.7	1.151	1.96	2.256	/
	1970	QPSK	20	100%RB	22.9	23.7	1.202	1.43	1.719	/
Handheld Left (0mm)	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	1.14	1.188	/
	1970	QPSK	20	1RB	/	/	/	/	/	/
Handheld Right (0mm)	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	0.863	0.899	/
	1970	QPSK	20	1RB	/	/	/	/	/	/
Handheld Bottom (0mm)	1930	QPSK	20	1RB	/	/	/	/	/	/
	1950	QPSK	20	1RB	23.52	23.7	1.042	0.765	0.797	/
	1970	QPSK	20	1RB	/	/	/	/	/	/

LTE Band 3:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Head Right Cheek	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	0.166	0.184	**16#**
	1775	QPSK	20	1RB	/	/	/	/	/	/
Head Right Tilt	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	0.103	0.114	/
	1775	QPSK	20	1RB	/	/	/	/	/	/
Head Left Cheek	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	0.124	0.137	/
	1775	QPSK	20	1RB	/	/	/	/	/	/
Head Left Tilt	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	0.082	0.091	/
	1775	QPSK	20	1RB	/	/	/	/	/	/
Body Back (5mm)	1720	QPSK	20	1RB	23.89	24.5	1.151	1.14	1.312	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	1.26	1.395	**17#**
	1775	QPSK	20	1RB	24.14	24.5	1.086	1.21	1.314	/
	1747.5	QPSK	20	50%RB	23.64	24.5	1.219	0.932	1.136	/
	1747.5	QPSK	20	100%RB	23.28	24.5	1.324	0.769	1.018	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Handheld Back (0mm)	1720	QPSK	20	1RB	23.89	24.5	1.151	2.21	2.544	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	2.39	2.646	**18#**
	1775	QPSK	20	1RB	24.14	24.5	1.086	2.34	2.541	/
	1747.5	QPSK	20	50%RB	23.64	24.5	1.219	1.84	2.243	/
	1747.5	QPSK	20	100%RB	23.28	24.5	1.324	1.15	1.523	/
Handheld Left (0mm)	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	1.36	1.506	/
	1775	QPSK	20	1RB	/	/	/	/	/	/
Handheld Right (0mm)	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	0.964	1.067	/
	1775	QPSK	20	1RB	/	/	/	/	/	/
Handheld Bottom (0mm)	1720	QPSK	20	1RB	/	/	/	/	/	/
	1747.5	QPSK	20	1RB	24.06	24.5	1.107	0.891	0.986	/
	1775	QPSK	20	1RB	/	/	/	/	/	/

LTE Band 7:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	2510	QPSK	20	1RB	22.83	22.9	1.016	0.188	0.191	**19#**
	2535	QPSK	20	1RB	/	/	/	/	/	/
	2560	QPSK	20	1RB	/	/	/	/	/	/
Head Left Tilt	2510	QPSK	20	1RB	/	/	/	/	/	/
	2535	QPSK	20	1RB	22.79	22.9	1.026	0.127	0.13	/
	2560	QPSK	20	1RB	/	/	/	/	/	/
Head Right Cheek	2510	QPSK	20	1RB	/	/	/	/	/	/
	2535	QPSK	20	1RB	22.79	22.9	1.026	0.116	0.119	/
	2560	QPSK	20	1RB	/	/	/	/	/	/
Head Right Tilt	2510	QPSK	20	1RB	/	/	/	/	/	/
	2535	QPSK	20	1RB	22.79	22.9	1.026	0.086	0.088	/
	2560	QPSK	20	1RB	/	/	/	/	/	/
Body Back (5mm)	2510	QPSK	20	1RB	22.83	22.9	1.016	1.1	1.118	**20#**
	2535	QPSK	20	1RB	22.79	22.9	1.026	1.03	1.057	/
	2560	QPSK	20	1RB	22.75	22.9	1.035	0.994	1.029	/
	2510	QPSK	20	50%RB	22.44	22.9	1.112	0.863	0.96	/
	2510	QPSK	20	100%RB	22.08	22.9	1.208	0.762	0.92	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Handheld Back (0mm)	2510	QPSK	20	1RB	22.83	22.9	1.016	3.57	3.627	**21#**
	2535	QPSK	20	1RB	22.79	22.9	1.026	3.51	3.601	/
	2560	QPSK	20	1RB	22.75	22.9	1.035	3.44	3.56	/
	2510	QPSK	20	50%RB	22.44	22.9	1.112	3.03	3.369	/
	2510	QPSK	20	100%RB	22.08	22.9	1.208	2.42	2.923	/
Handheld Left (0mm)	2510	QPSK	20	1RB	/	/	/	/	/	/
	2535	QPSK	20	1RB	22.79	22.9	1.026	1.92	1.97	/
	2560	QPSK	20	1RB	/	/	/	/	/	/
Handheld Right (0mm)	2510	QPSK	20	1RB	/	/	/	/	/	/
	2535	QPSK	20	1RB	22.79	22.9	1.026	1.84	1.888	/
	2560	QPSK	20	1RB	/	/	/	/	/	/
Handheld Bottom (0mm)	2510	QPSK	20	1RB	/	/	/	/	/	/
	2535	QPSK	20	1RB	22.79	22.9	1.026	1.73	1.775	/
	2560	QPSK	20	1RB	/	/	/	/	/	/

LTE Band 8:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.116	0.123	/
	910	QPSK	10	1RB	/	/	/	/	/	/
Head Left Tilt	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.081	0.086	/
	910	QPSK	10	1RB	/	/	/	/	/	/
Head Right Cheek	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.139	0.148	22#
	910	QPSK	10	1RB	/	/	/	/	/	/
Head Right Tilt	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.097	0.103	/
	910	QPSK	10	1RB	/	/	/	/	/	/
Body Back (5mm)	885	QPSK	10	1RB	24.26	24.5	1.057	0.181	0.191	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.186	0.198	23#
	910	QPSK	10	1RB	24.4	24.5	1.023	0.172	0.176	/
	897.5	QPSK	10	50%RB	23.98	24.5	1.127	0.116	0.131	/
	897.5	QPSK	10	100%RB	23.85	24.5	1.161	0.084	0.098	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Handheld Back (0mm)	885	QPSK	10	1RB	24.26	24.5	1.057	0.864	0.913	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.879	0.933	24#
	910	QPSK	10	1RB	24.4	24.5	1.023	0.871	0.891	/
	897.5	QPSK	10	50%RB	23.98	24.5	1.127	0.704	0.793	/
	897.5	QPSK	10	100%RB	23.85	24.5	1.161	0.617	0.716	/
Handheld Left (0mm)	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.437	0.464	/
	910	QPSK	10	1RB	/	/	/	/	/	/
Handheld Right (0mm)	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.409	0.434	/
	910	QPSK	10	1RB	/	/	/	/	/	/
Handheld Bottom (0mm)	885	QPSK	10	1RB	/	/	/	/	/	/
	897.5	QPSK	10	1RB	24.24	24.5	1.062	0.516	0.548	/
	910	QPSK	10	1RB	/	/	/	/	/	/

LTE Band 20:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Head Left Cheek	842	QPSK	20	1RB	24.13	24.2	1.016	0.112	0.114	25#
	847	QPSK	20	1RB	/	/	/	/	/	/
	852	QPSK	20	1RB	/	/	/	/	/	/
Head Left Tilt	842	QPSK	20	1RB	/	/	/	/	/	/
	847	QPSK	20	1RB	24.05	24.2	1.035	0.088	0.091	/
	852	QPSK	20	1RB	/	/	/	/	/	/
Head Right Cheek	842	QPSK	20	1RB	/	/	/	/	/	/
	847	QPSK	20	1RB	24.05	24.2	1.035	0.102	0.106	/
	852	QPSK	20	1RB	/	/	/	/	/	/
Head Right Tilt	842	QPSK	20	1RB	/	/	/	/	/	/
	847	QPSK	20	1RB	24.05	24.2	1.035	0.073	0.076	/
	852	QPSK	20	1RB	/	/	/	/	/	/
Body Back (5mm)	842	QPSK	20	1RB	24.13	24.2	1.016	0.162	0.165	**26#**
	847	QPSK	20	1RB	24.05	24.2	1.035	0.154	0.159	/
	852	QPSK	20	1RB	23.94	24.2	1.062	0.149	0.158	/
	842	QPSK	20	50%RB	23.67	24.2	1.13	0.113	0.128	/
	842	QPSK	20	100%RB	23.36	24.2	1.213	0.091	0.11	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Handheld Back (0mm)	842	QPSK	20	1RB	24.13	24.2	1.016	0.405	0.411	27#
	847	QPSK	20	1RB	24.05	24.2	1.035	0.392	0.406	/
	852	QPSK	20	1RB	23.94	24.2	1.062	0.381	0.405	/
	842	QPSK	20	50%RB	23.67	24.2	1.13	0.345	0.39	/
	842	QPSK	20	100%RB	23.36	24.2	1.213	0.294	0.357	/
Handheld Left (0mm)	842	QPSK	20	1RB	/	/	/	/	/	/
	847	QPSK	20	1RB	24.05	24.2	1.035	0.261	0.27	/
	852	QPSK	20	1RB	/	/	/	/	/	/
Handheld Right (0mm)	842	QPSK	20	1RB	/	/	/	/	/	/
	847	QPSK	20	1RB	24.05	24.2	1.035	0.197	0.204	/
	852	QPSK	20	1RB	/	/	/	/	/	/
Handheld Bottom (0mm)	842	QPSK	20	1RB	/	/	/	/	/	/
	847	QPSK	20	1RB	24.05	24.2	1.035	0.216	0.224	/
	852	QPSK	20	1RB	/	/	/	/	/	/

Note:
1. When the 10-g SAR is less than half of the limit, testing for low and high channel is optional.
2. The CMW500 Wideband Radio Communication tester is used for LTE output power measurements and SAR testing. Closed loop power control is used to keep the radio transmitters the max output power during the test.
3. All SAR data are tested start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation. According to the worst case, SAR data for QPSK with 50% and 100% RB allocation are tested.

Wi-Fi 2.4G:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	2412	802.11b	13.68	14.1	1.102	0.501	0.552	2	/
	2442	802.11b	13.97	14.1	1.03	0.538	0.554	2	**28#**
	2472	802.11b	13.76	14.1	1.081	0.512	0.553	2	/
Head Left Tilt	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.346	0.356	2	/
	2472	802.11b	/	/	/	/	/	/	/
Head Right Cheek	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.249	0.256	2	/
	2472	802.11b	/	/	/	/	/	/	/
Head Right Tilt	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.135	0.139	2	/
	2472	802.11b	/	/	/	/	/	/	/
Body Back (5mm)	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.253	0.261	2	**29#**
	2472	802.11b	/	/	/	/	/	/	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	2412	802.11b	13.68	14.1	1.102	0.281	0.31	4	/
	2442	802.11b	13.97	14.1	1.03	0.317	0.327	4	30#
	2472	802.11b	13.76	14.1	1.081	0.294	0.318	4	/
Handheld Left (0mm)	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.116	0.119	4	/
	2472	802.11b	/	/	/	/	/	/	/
Handheld Right (0mm)	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.213	0.219	4	/
	2472	802.11b	/	/	/	/	/	/	/
Handheld Top (0mm)	2412	802.11b	/	/	/	/	/	/	/
	2442	802.11b	13.97	14.1	1.03	0.286	0.295	4	/
	2472	802.11b	/	/	/	/	/	/	/

Note:
1. When the 10-g SAR is less than half of the limit, testing for low and high channel is optional.
2. For 802.11b mode power is the largest mode of 802.11b/g/n, 802.11 b mode is selected to test.

Wi-Fi 5.2G:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.137	0.144	2	/
	5240	802.11a	/	/	/	/	/	/	/
Head Left Tilt	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.114	0.12	2	/
	5240	802.11a	/	/	/	/	/	/	/
Head Right Cheek	5180	802.11a	9.72	9.9	1.042	0.154	0.16	2	/
	5200	802.11a	9.69	9.9	1.05	0.16	0.168	2	31#
	5240	802.11a	9.76	9.9	1.033	0.151	0.156	2	/
Head Right Tilt	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.122	0.128	2	/
	5240	802.11a	/	/	/	/	/	/	/
Body Back (5mm)	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.107	0.112	2	**32#**
	5240	802.11a	/	/	/	/	/	/	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	5180	802.11a	9.72	9.9	1.042	0.302	0.315	4	/
	5200	802.11a	9.69	9.9	1.05	0.317	0.333	4	33#
	5240	802.11a	9.76	9.9	1.033	0.311	0.321	4	/
Handheld Left (0mm)	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.189	0.198	4	/
	5240	802.11a	/	/	/	/	/	/	/
Handheld Right (0mm)	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.167	0.175	4	/
	5240	802.11a	/	/	/	/	/	/	/
Handheld Top (0mm)	5180	802.11a	/	/	/	/	/	/	/
	5200	802.11a	9.69	9.9	1.05	0.287	0.301	4	/
	5240	802.11a	/	/	/	/	/	/	/

Wi-Fi 5.8G:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.109	0.116	2	/
	5825	802.11a	/	/	/	/	/	/	/
Head Left Tilt	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.073	0.078	2	/
	5825	802.11a	/	/	/	/	/	/	/
Head Right Cheek	5745	802.11a	10.51	10.7	1.045	0.186	0.194	2	/
	5785	802.11a	10.42	10.7	1.067	0.19	0.203	2	34#
	5825	802.11a	10.56	10.7	1.033	0.182	0.188	2	/
Head Right Tilt	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.124	0.132	2	/
	5825	802.11a	/	/	/	/	/	/	/
Body Back (5mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.155	0.165	2	**35#**
	5825	802.11a	/	/	/	/	/	/	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	5745	802.11a	10.51	10.7	1.045	0.306	0.32	4	/
	5785	802.11a	10.42	10.7	1.067	0.315	0.336	4	36#
	5825	802.11a	10.56	10.7	1.033	0.299	0.309	4	/
Handheld Left (0mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.245	0.261	4	/
	5825	802.11a	/	/	/	/	/	/	/
Handheld Right (0mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.094	0.1	4	/
	5825	802.11a	/	/	/	/	/	/	/
Handheld Top (0mm)	5745	802.11a	/	/	/	/	/	/	/
	5785	802.11a	10.42	10.7	1.067	0.297	0.317	4	/
	5825	802.11a	/	/	/	/	/	/	/

Note:
1. When the SAR value is less than half of the limit, testing for other channels are optional.
2. For 802.11a mode power is the largest mode of 802.11a/n20/n40/ac20/ac40/ac80, 802.11a mode is selected to test.

Bluetooth:

Head and Body Worn Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Head Left Cheek	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	8.35	9.5	1.303	<0.01	0.01	2	/
	2480	GFSK	/	/	/	/	/	/	/
Head Left Tilt	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	8.35	9.5	1.303	<0.01	0.01	2	/
	2480	GFSK	/	/	/	/	/	/	/
Head Right Cheek	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	8.35	9.5	1.303	0.012	0.016	2	37#
	2480	GFSK	/	/	/	/	/	/	/
Head Right Tilt	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	8.35	9.5	1.303	<0.01	0.01	2	/
	2480	GFSK	/	/	/	/	/	/	/
Body Back (5mm)	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	8.35	9.5	1.303	0.03	0.039	2	**38#**
	2480	GFSK	/	/	/	/	/	/	/

Handheld Mode

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	10g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Limit	Plot
Handheld Back (0mm)	2402	GFSK	9.14	9.5	1.086	0.034	0.037	4	/
	2441	GFSK	8.35	9.5	1.303	0.038	0.05	4	39#
	2480	GFSK	8.6	9.5	1.23	0.031	0.038	4	/
Handheld Left (0mm)	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	9.14	9.5	1.086	0.018	0.02	4	/
	2480	GFSK	/	/	/	/	/	/	/
Handheld Right (0mm)	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	9.14	9.5	1.086	<0.01	0.01	4	/
	2480	GFSK	/	/	/	/	/	/	/
Handheld Top (0mm)	2402	GFSK	/	/	/	/	/	/	/
	2441	GFSK	9.14	9.5	1.086	0.023	0.025	4	/
	2480	GFSK	/	/	/	/	/	/	/

Note:
1. When the SAR value is less than half of the limit, testing for other channels are optional.
2. GFSK mode power is the largest mode of GFSK/π/4-DQPSK/8DPSK, GFSK mode is selected to test.

SAR SIMULTANEOUS TRANSMISSION DESCRIPTION

Simultaneous Transmission:

Description of Simultaneous Transmit Capabilities	
Transmitter Combination	**Simultaneous?**
WWAN(GSM/WCDMA/LTE) + WiFi 2.4G/5.G	√
WWAN(GSM/WCDMA/LTE) + Bluetooth	√
WiFi 2.4G/5G + Bluetooth	×

Test reduction evaluation

Head and Body Worn Mode

Mode	Simultaneous Transmitting	ERIP (dBm)	ERIP (mW)	Maximum WWAN SAR(W/kg)	$P_{th,m}$ (mW)	$P_{available}$ (mW)	Test Reduction?
Wi-Fi 2.4G	WWAN + WiFi 2.4G	14.1	25.7	1.395	20	6.05	NO
Wi-Fi 5.2G	WWAN + WiFi 5.2G	9.9	9.8	1.395	20	6.05	NO
Wi-Fi 5.8G	WWAN + WiFi 5.8G	10.7	11.7	1.395	20	6.05	NO
Bluetooth	WWAN + Bluetooth	9.5	8.9	1.395	20	6.05	NO

Simultaneous Transmission Consideration Detail

Transmitter Combination	Position	Maximum SAR(W/kg)		ΣSAR < 2.0 W/kg
		SAR1	SAR2	
WWAN(WCDMA&LTE) + WLAN 2.4G/5G	Head	0.23	0.554	**0.784**
	Body	1.395	0.261	**1.656**
WWAN(GSM/WCDMA/LTE) + Bluetooth	Head	0.23	0.016	0.246
	Body	1.395	0.039	1.434

Conclusion:

Sum of SAR: **ΣSAR ≤ 2.0 W/kg** therefore simultaneous transmission SAR result is **Compliance**.

Handheld Mode

Mode	Simultaneous Transmitting	ERIP (dBm)	ERIP (mW)	Maximum WWAN SAR(W/kg)	$P_{th,m}$ (mW)	$P_{available}$ (mW)	Test Reduction?
Wi-Fi 2.4G	WWAN + WiFi 2.4G	14.1	25.7	3.627	40	3.73	NO
Wi-Fi 5.2G	WWAN + WiFi 5.2G	9.9	9.8	3.627	40	3.73	NO
Wi-Fi 5.8G	WWAN + WiFi 5.8G	10.7	11.7	3.627	40	3.73	NO
Bluetooth	WWAN + Bluetooth	9.5	8.9	3.627	40	3.73	NO

Simultaneous Transmission Consideration Detail

Transmitter Combination	Position	Maximum SAR(W/kg)		ΣSAR < 4.0 W/kg
		SAR1	SAR2	
WWAN(WCDMA&LTE) + WLAN 2.4G/5G	Handheld	3.627	0.336	**3.963**
WWAN(GSM/WCDMA/LTE) + Bluetooth	Handheld	3.627	0.05	3.677

Conclusion:

Sum of SAR: **ΣSAR ≤ 4.0 W/kg** therefore simultaneous transmission SAR result is **Compliance**.

Note:

1. Wi-Fi Band and Bluetooth share the same antenna and cannot transmit simultaneously.
2. GSM/WCDMA/LTE share the same antenna and cannot transmit simultaneously.
3. The Test exclusion Threshold $P_{th,m}$ follow the **BS EN 50663:2017**
4. According to **BS EN 62209-2:2010 Annex K**, the threshold power level available to the secondary transmitter ($P_{available}$) is to calculate it from the measured peak spatial-average SAR of the primary transmitter (SAR_1) according to the equation: $P_{available}=P_{th,m} \times (SAR_{lim} - SAR_1)/SAR_{lim}$. If the output power of the secondary transmitter is less than $P_{available}$, SAR measurement for the secondary transmitter is not necessary.

SAR Plots

Plot 1#: GSM 900 Mid_Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

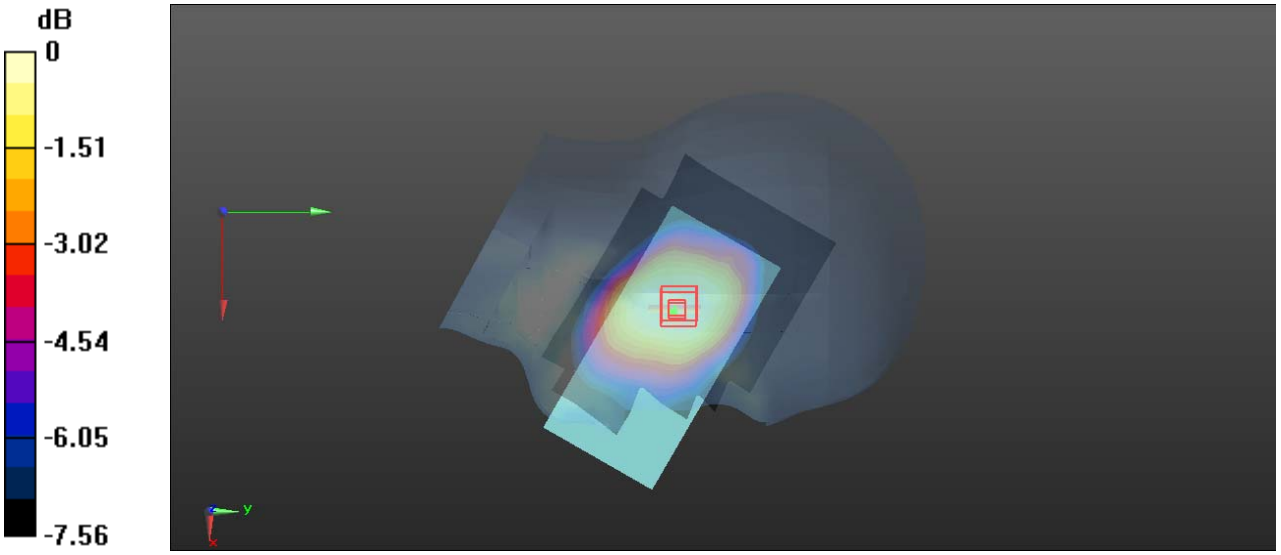
Communication System: Generic GSM; Frequency: 902 MHz;Duty Cycle: 1:8
Medium parameters used: f = 902 MHz; σ = 0.973 S/m; ε_r = 41.204; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 902 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.314 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.971 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.328 W/kg
SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.209 W/kg
Maximum value of SAR (measured) = 0.308 W/kg



0 dB = 0.308 W/kg = -5.11 dBW/kg

Plot 2#: GSM 900 Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

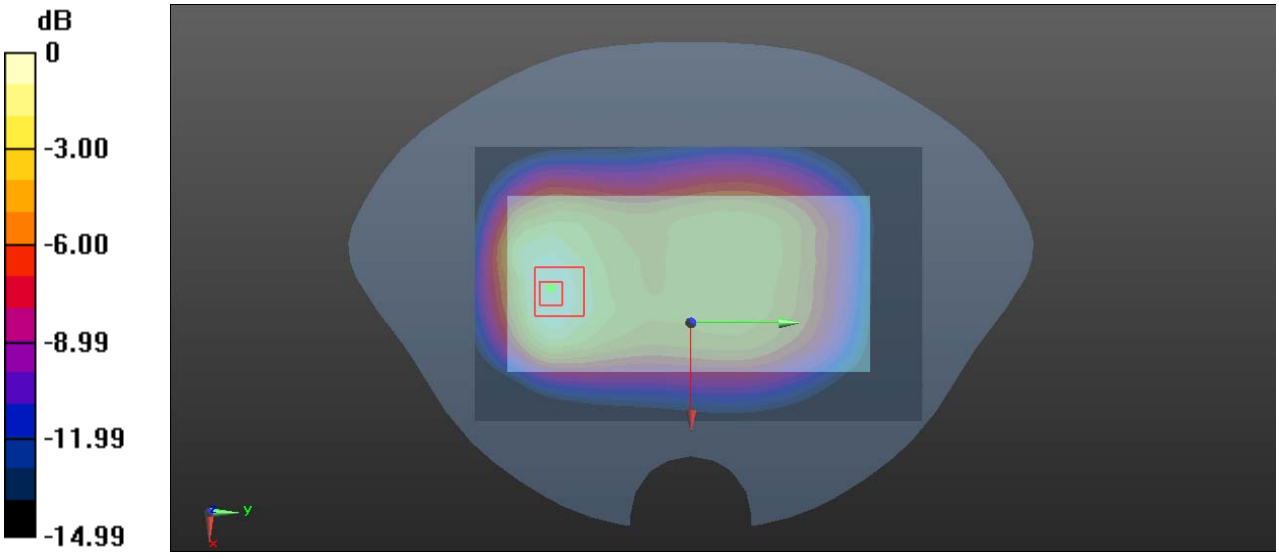
Communication System: Generic GPRS-3 slots; Frequency: 902 MHz;Duty Cycle: 1:2.66
Medium parameters used: f = 902 MHz; σ = 0.973 S/m; ε_r = 41.204; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 902 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.12 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 0.803 W/kg; SAR(10 g) = 0.499 W/kg
Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg = 0.37 dBW/kg

Plot 3#: GSM 900 Mid_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

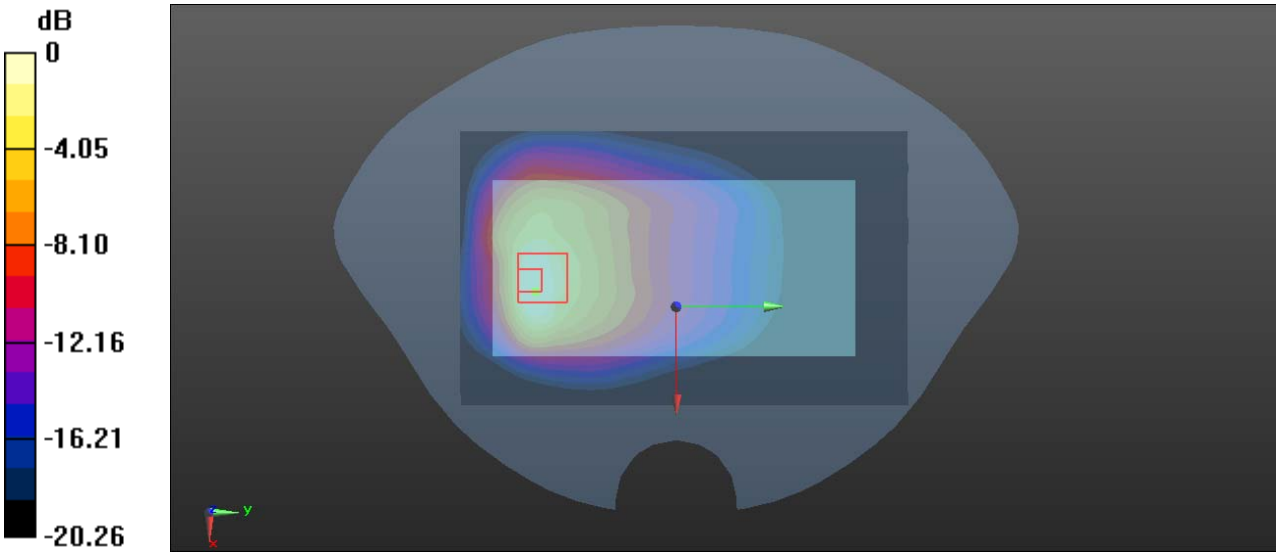
Communication System: Generic GPRS-3 slots; Frequency: 902 MHz;Duty Cycle: 1:2.66
Medium parameters used: f = 902 MHz; σ = 0.973 S/m; ε_r = 41.204; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 902 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.30 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.36 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 8.76 W/kg
SAR(1 g) = 3.08 W/kg; SAR(10 g) = 1.69 W/kg
Maximum value of SAR (measured) = 5.13 W/kg



0 dB = 5.13 W/kg = 7.10 dBW/kg

Plot 4#: DCS 1800 High_Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

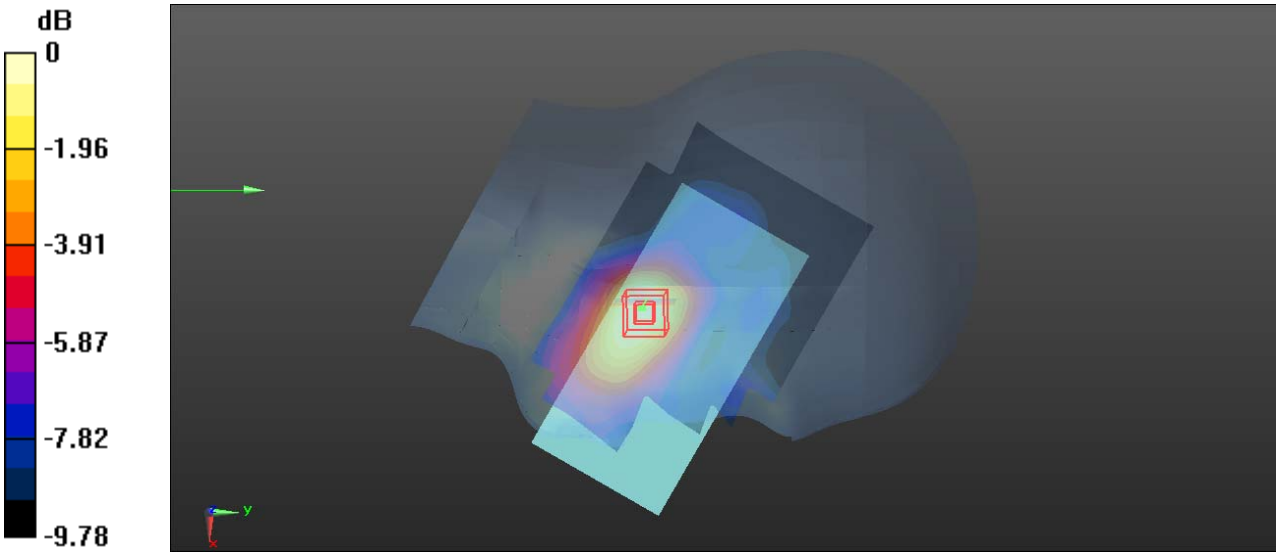
Communication System: Generic GSM; Frequency: 1784.6 MHz;Duty Cycle: 1:8
Medium parameters used: f = 1784.6 MHz; σ = 1.396 S/m; ε_r = 40.057; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1784.6 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.274 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.414 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.282 W/kg
SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.119 W/kg
Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -6.13 dBW/kg

Plot 5#: DCS 1800 High_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

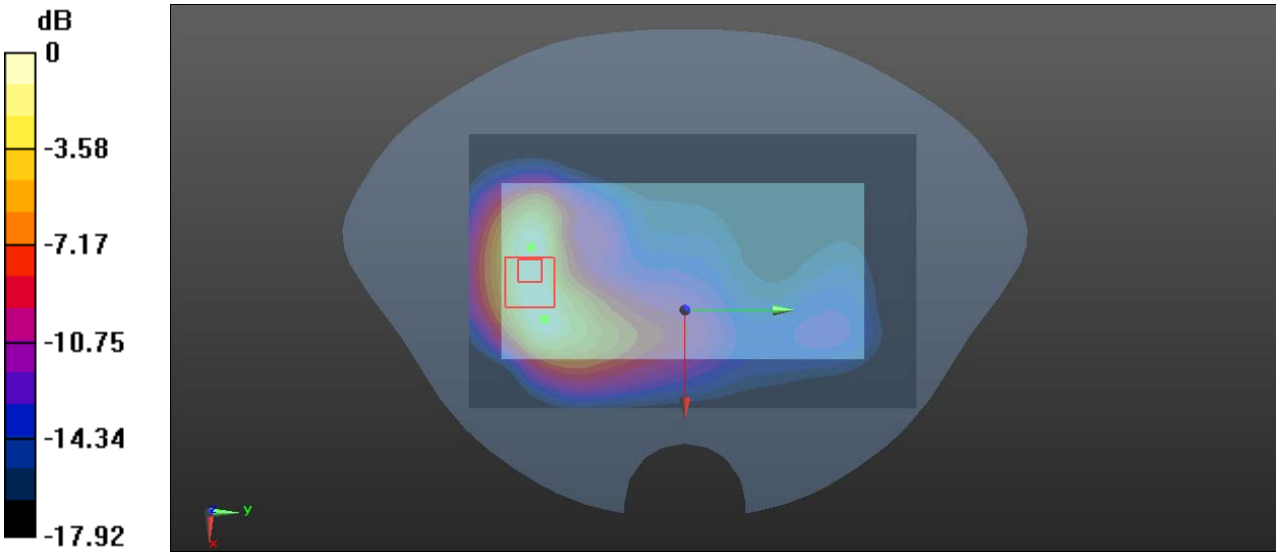
Communication System: Generic GPRS-2 slots; Frequency: 1784.6 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1784.6 MHz; σ = 1.396 S/m; ε_r = 40.057; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1784.6 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.63 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.045 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 1.55 W/kg; SAR(10 g) = 0.851 W/kg
Maximum value of SAR (measured) = 2.65 W/kg



0 dB = 2.65 W/kg = 4.23 dBW/kg

Plot 6#: DCS 1800 High_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

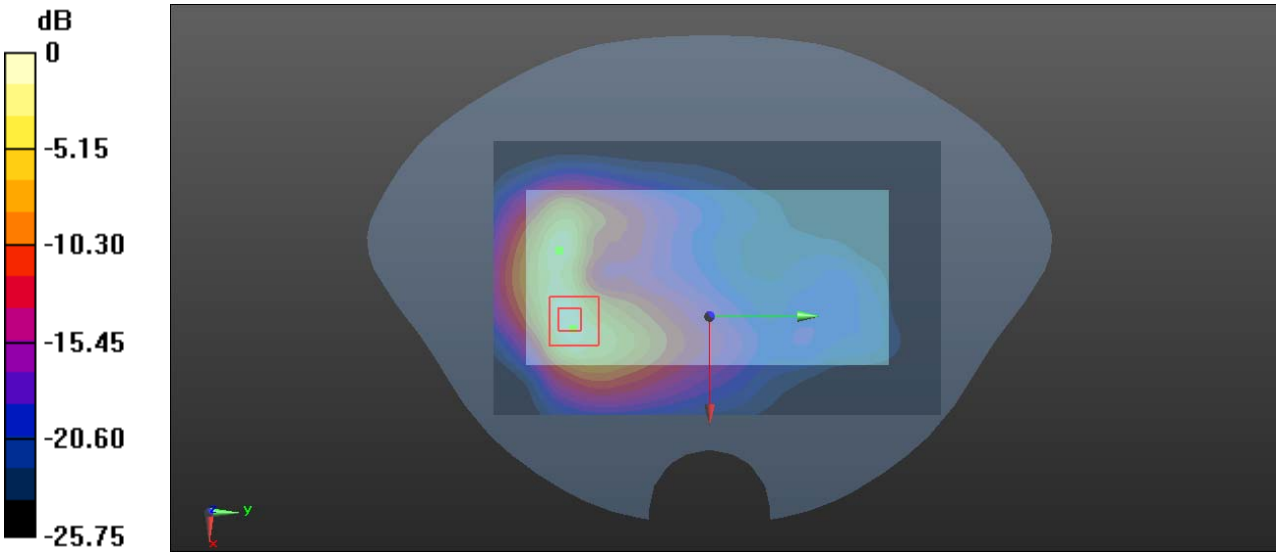
Communication System: Generic GPRS-2 slots; Frequency: 1784.6 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1784.6 MHz; σ = 1.396 S/m; ε_r = 40.057; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1784.6 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.15 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.112 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 11.4 W/kg
SAR(1 g) = 3.8 W/kg; SAR(10 g) = 1.61 W/kg
Maximum value of SAR (measured) = 8.00 W/kg



0 dB = 8.00 W/kg = 9.03 dBW/kg

Plot 7#: WCDMA Band 1 High_ Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

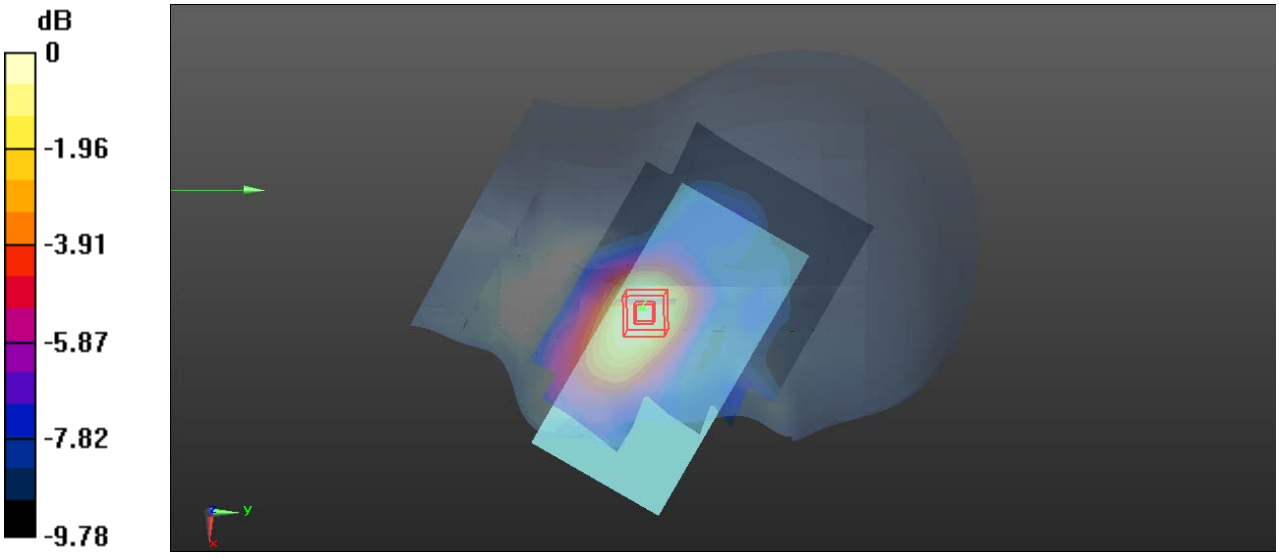
Communication System: WCDMA; Frequency: 1977.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1977.4 MHz; σ = 1.435 S/m; ε_r = 39.635; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1977.4 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.274 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.414 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.282 W/kg
SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.132 W/kg
Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -6.13 dBW/kg

Plot 8#: WCDMA Band 1 High_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

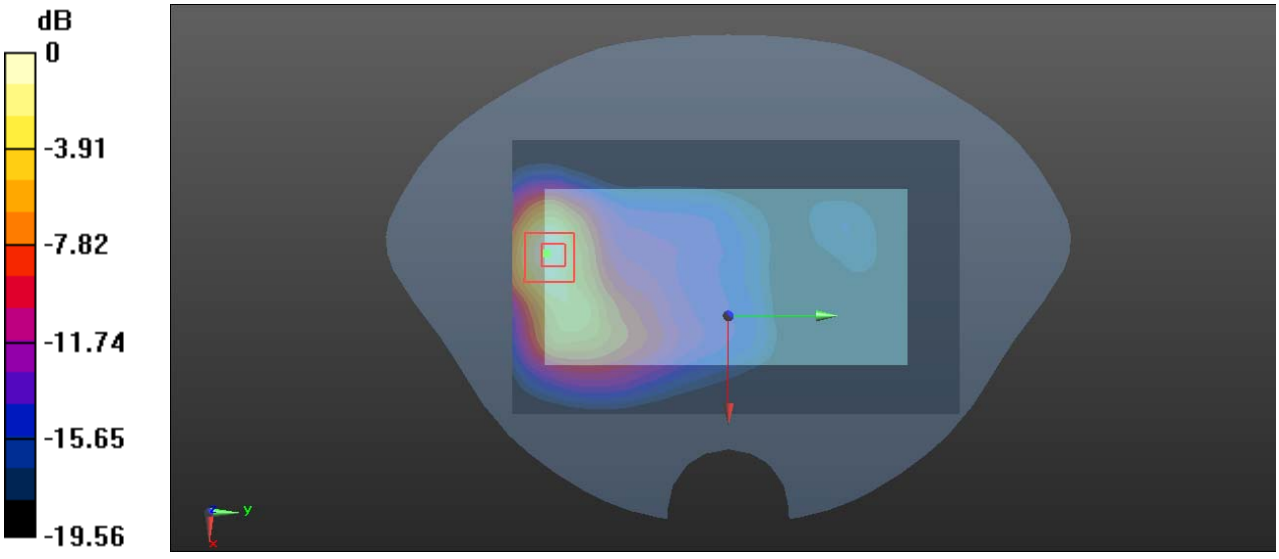
Communication System: WCDMA; Frequency: 1977.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1977.4 MHz; σ = 1.435 S/m; ε_r = 39.635; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1977.4 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.21 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.508 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 5.69 W/kg
SAR(1 g) = 2.74 W/kg; SAR(10 g) = 1.31 W/kg
Maximum value of SAR (measured) = 4.23 W/kg



0 dB = 4.23 W/kg = 6.26 dBW/kg

Plot 9#: WCDMA Band 1 High_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

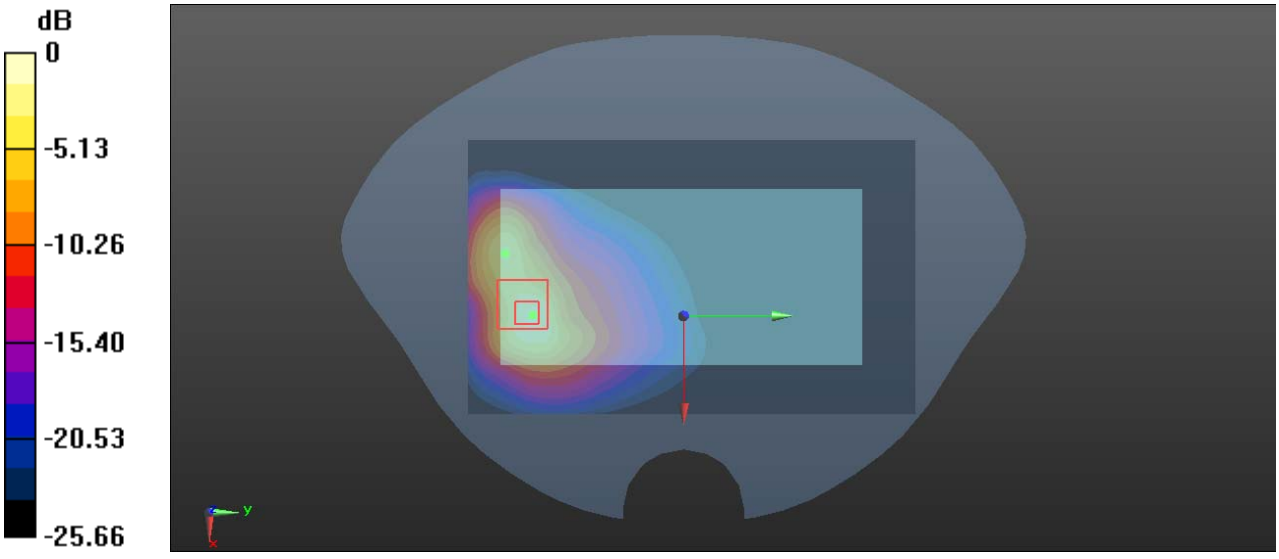
Communication System: WCDMA; Frequency: 1977.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1977.4 MHz; σ = 1.435 S/m; ε_r = 39.635; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1977.4 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 9.88 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.562 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 22.4 W/kg
SAR(1 g) = 5.89 W/kg; SAR(10 g) = 2.23 W/kg
Maximum value of SAR (measured) = 13.7 W/kg



0 dB = 13.7 W/kg = 11.37 dBW/kg

Plot 10#: WCDMA Band 8 High_Head Right Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

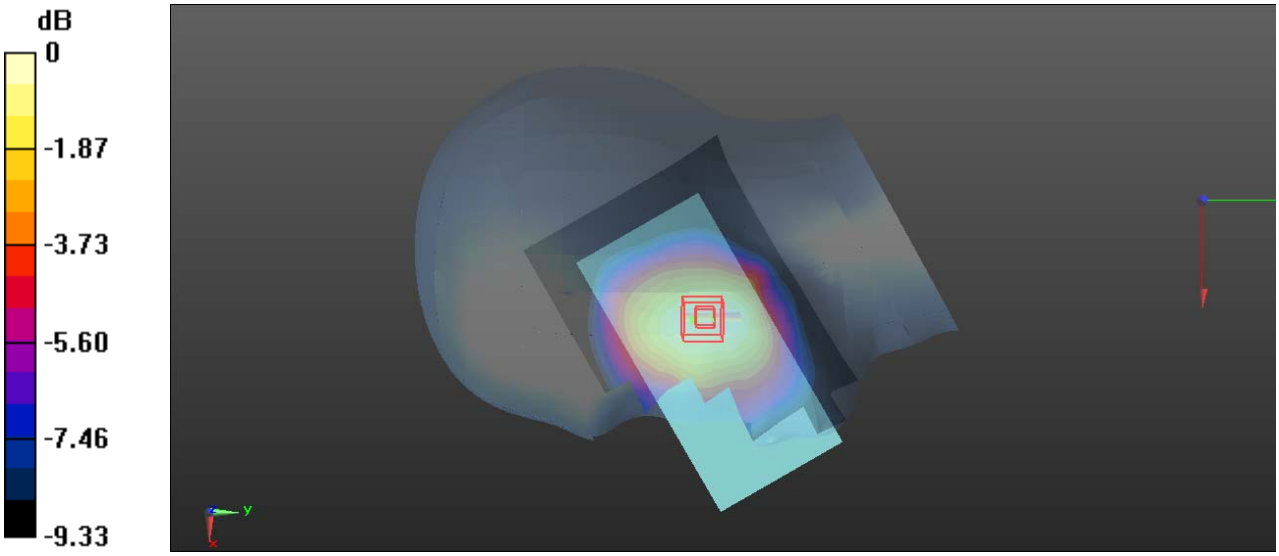
Communication System: WCDMA; Frequency: 912.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 912.4 MHz; σ = 0.992 S/m; ε_r = 41.118; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 912.4 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.333 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.120 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.372 W/kg
SAR(1 g) = 0.276 W/kg; SAR(10 g) = 0.207 W/kg
Maximum value of SAR (measured) = 0.330 W/kg



0 dB = 0.330 W/kg = -4.81 dBW/kg

Plot 11#: WCDMA Band 8 High_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

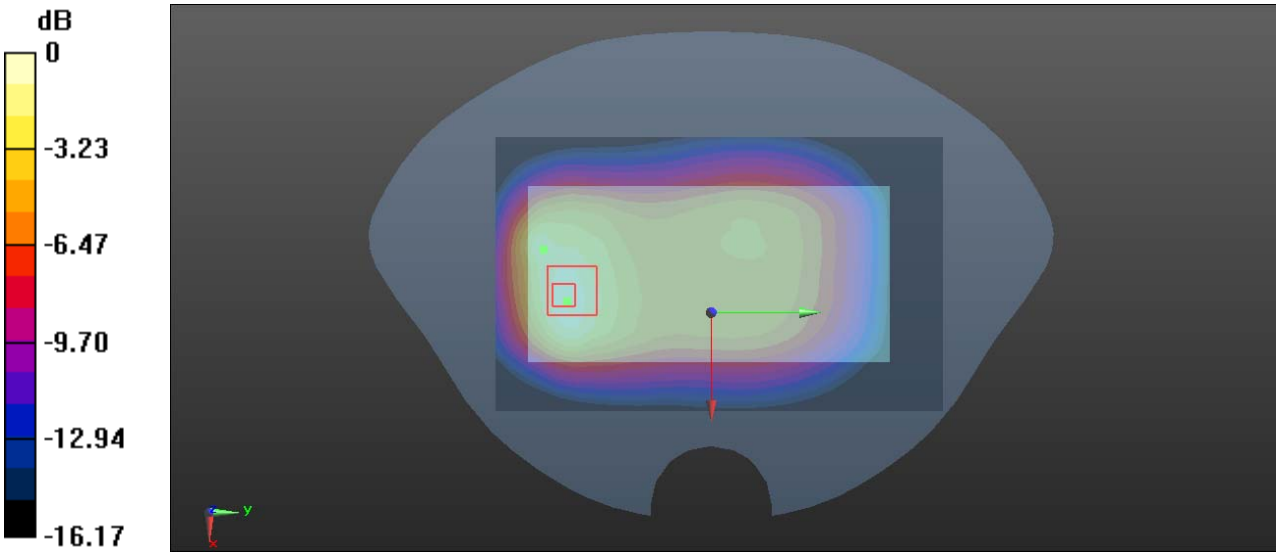
Communication System: WCDMA; Frequency: 912.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 912.4 MHz; σ = 0.992 S/m; ε_r = 41.118; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 912.4 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.810 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.78 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.14 W/kg
SAR(1 g) = 0.576 W/kg; SAR(10 g) = 0.354 W/kg
Maximum value of SAR (measured) = 0.840 W/kg



0 dB = 0.840 W/kg = -0.76 dBW/kg

Plot 12#: WCDMA Band 8 High_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

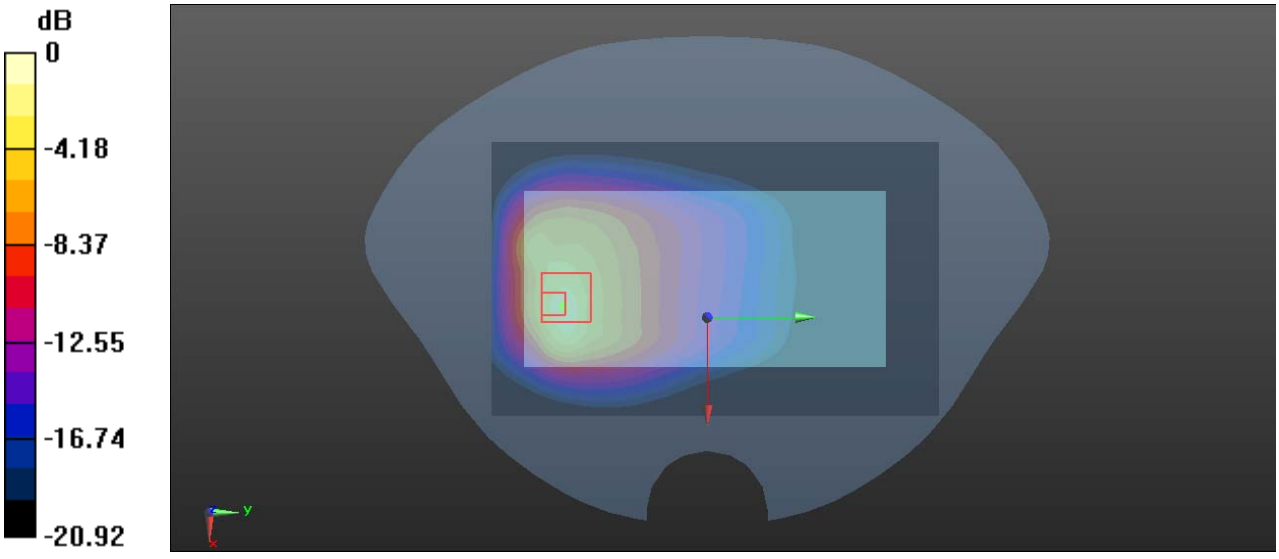
Communication System: WCDMA; Frequency: 912.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 912.4 MHz; σ = 0.992 S/m; ε_r = 41.118; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 912.4 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.69 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.19 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.57 W/kg
SAR(1 g) = 1.92 W/kg; SAR(10 g) = 1 W/kg
Maximum value of SAR (measured) = 4.13 W/kg



0 dB = 4.13 W/kg = 6.16 dBW/kg

Plot 13#: LTE Band 1 1RB High_ Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

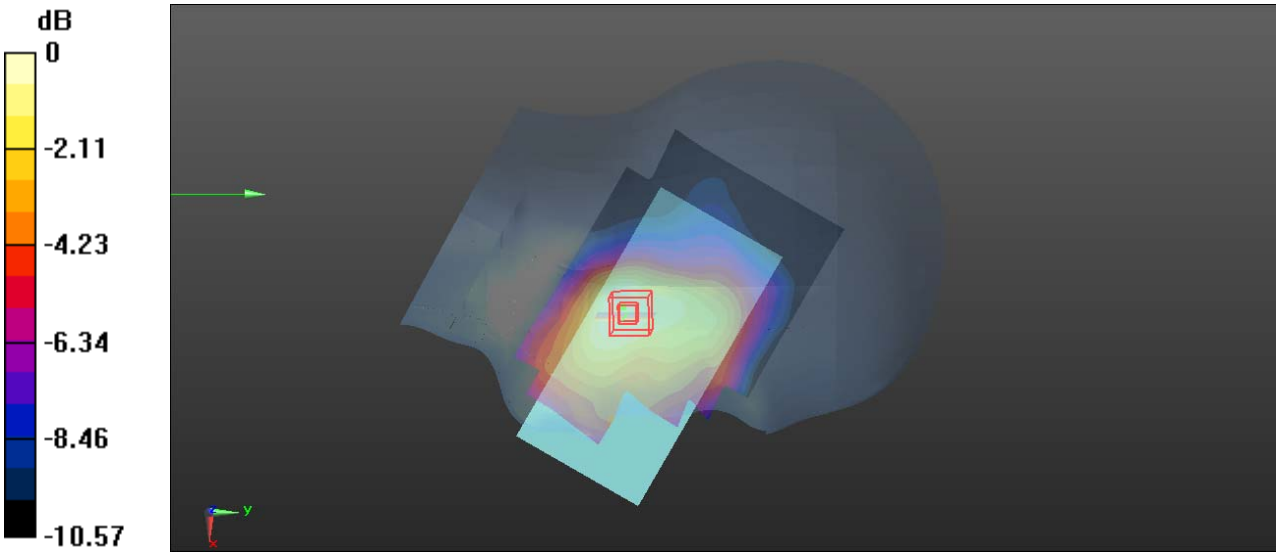
Communication System: Generic FDD-LTE; Frequency: 1970 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1970 MHz; σ = 1.427 S/m; ε_r = 39.714; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1970 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.353 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.289 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.383 W/kg
SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.156 W/kg
Maximum value of SAR (measured) = 0.322 W/kg



0 dB = 0.322 W/kg = -4.92 dBW/kg

Plot 14#: LTE Band 1 1RB High_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

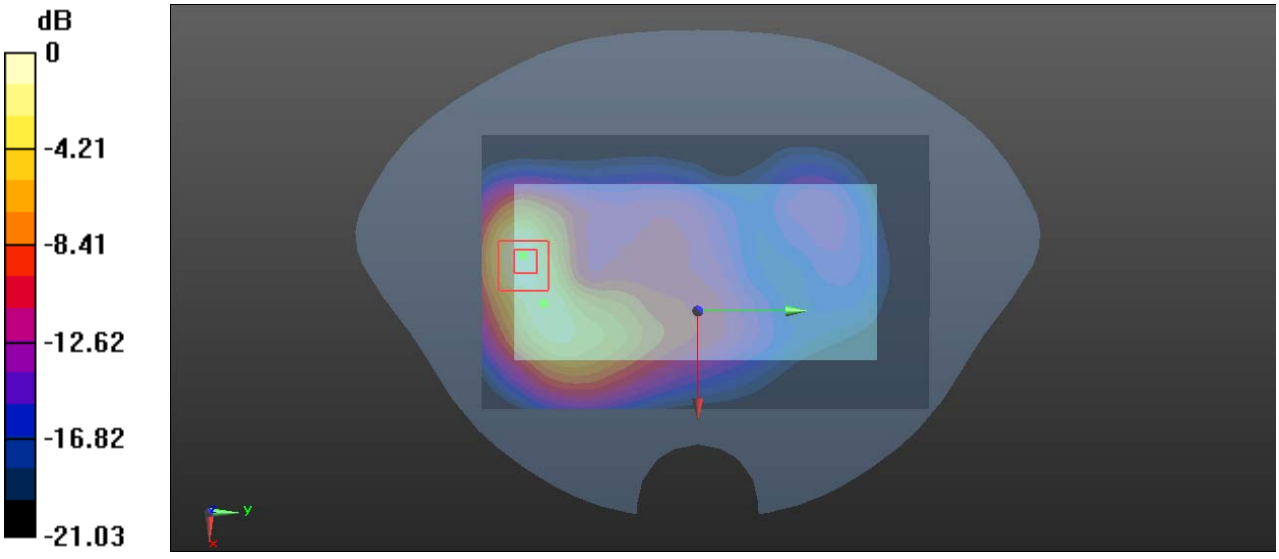
Communication System: Generic FDD-LTE; Frequency: 1970 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1970 MHz; σ = 1.427 S/m; ε_r = 39.714; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1970 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.32 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.68 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 4.84 W/kg
SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.16 W/kg
Maximum value of SAR (measured) = 3.80 W/kg



0 dB = 3.80 W/kg = 5.80 dBW/kg

Plot 15#: LTE Band 1 1RB High_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

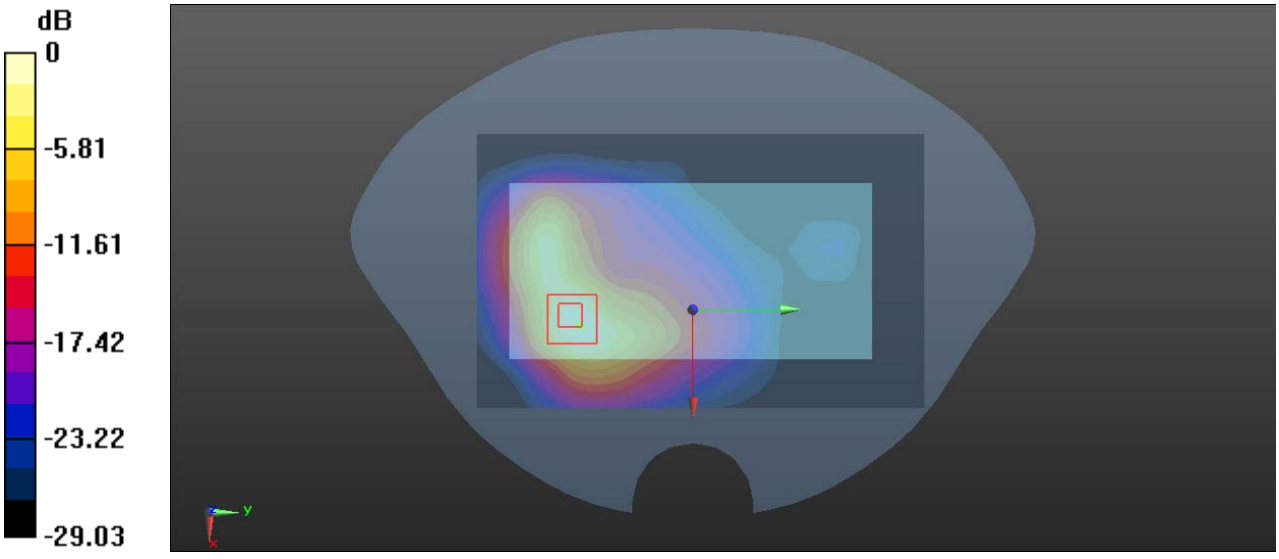
Communication System: Generic FDD-LTE; Frequency: 1970 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1970 MHz; σ = 1.427 S/m; ε_r = 39.714; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8, 8, 8) @ 1970 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 13.2 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.26 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 22.8 W/kg
SAR(1 g) = 6.72 W/kg; SAR(10 g) = 2.69 W/kg
Maximum value of SAR (measured) = 12.8 W/kg



0 dB = 12.8 W/kg = 11.07 dBW/kg

Plot 16#: LTE Band 3 1RB Mid_Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

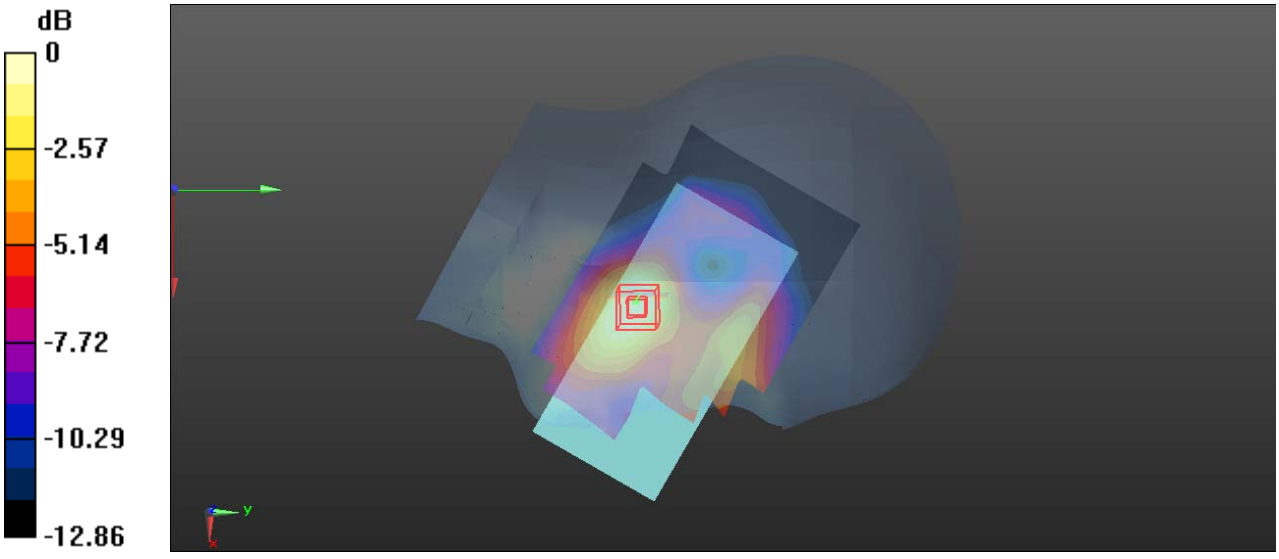
Communication System: Generic FDD-LTE; Frequency: 1747.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1747.5 MHz; σ = 1.359 S/m; ε_r = 40.287; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1747.5 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.384 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.968 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.417 W/kg
SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.166 W/kg
Maximum value of SAR (measured) = 0.354 W/kg



0 dB = 0.354 W/kg = -4.51 dBW/kg

Plot 17#: LTE Band 3 1RB Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

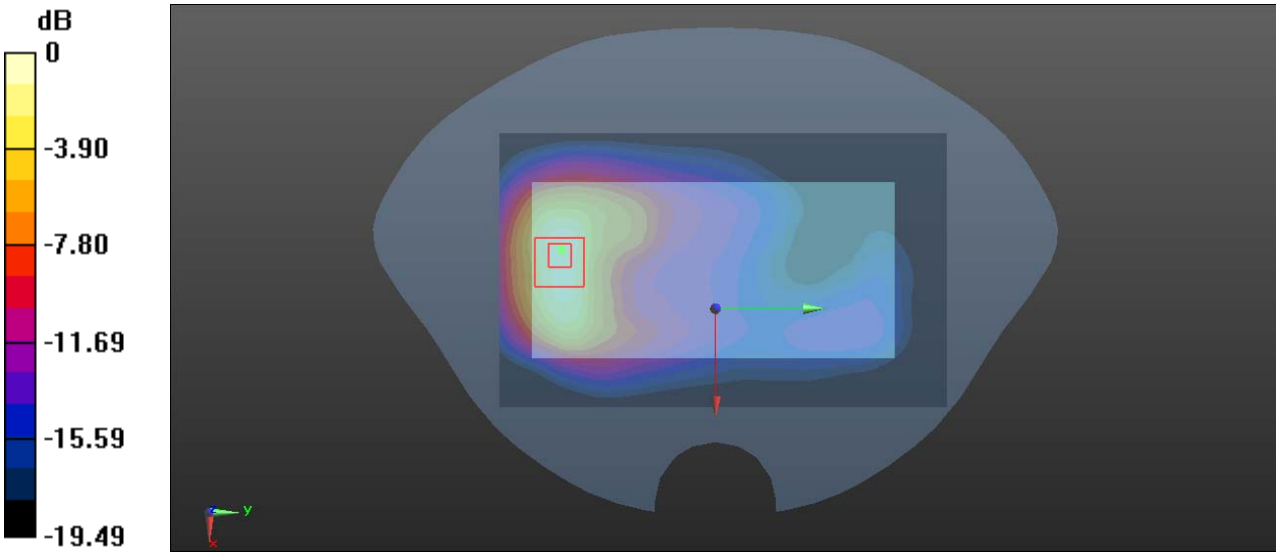
Communication System: Generic FDD-LTE; Frequency: 1747.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1747.5 MHz; σ = 1.359 S/m; ε_r = 40.287; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1747.5 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.64 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.87 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 4.93 W/kg
SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.26 W/kg
Maximum value of SAR (measured) = 3.94 W/kg



0 dB = 3.94 W/kg = 5.95 dBW/kg

Plot 18#: LTE Band 3 1RB Mid_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

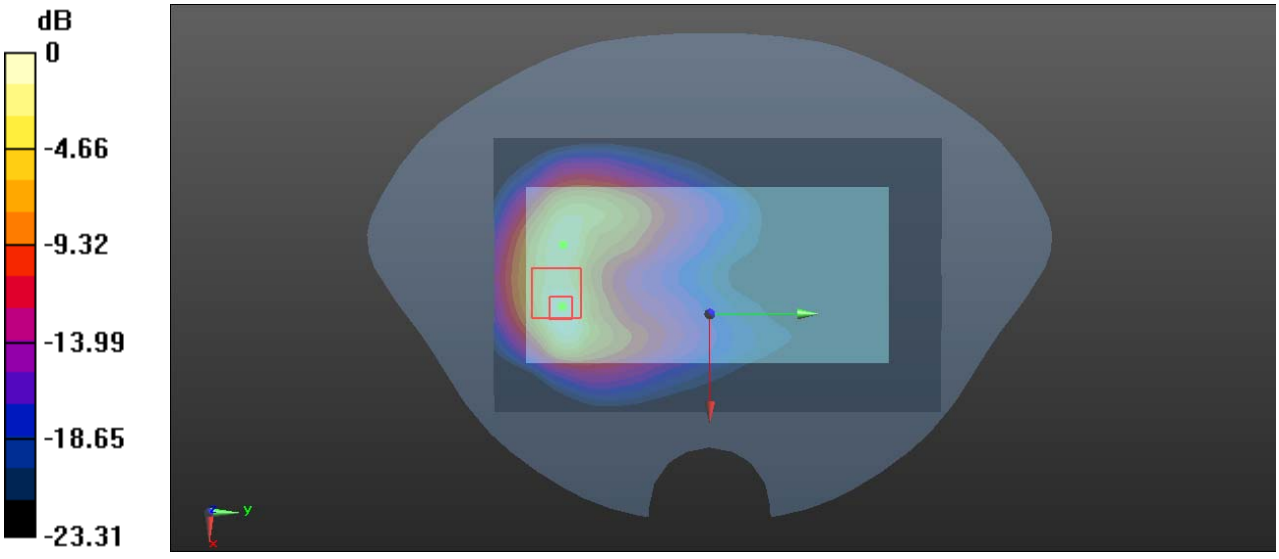
Communication System: Generic FDD-LTE; Frequency: 1747.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1747.5 MHz; σ = 1.359 S/m; ε_r = 40.287; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(8.23, 8.23, 8.23) @ 1747.5 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 11.5 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.477 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 15.4 W/kg
SAR(1 g) = 5.29 W/kg; SAR(10 g) = 2.39 W/kg
Maximum value of SAR (measured) = 11.1 W/kg



0 dB = 11.1 W/kg = 10.45 dBW/kg

Plot 19#: LTE Band 7 1RB Low_ Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

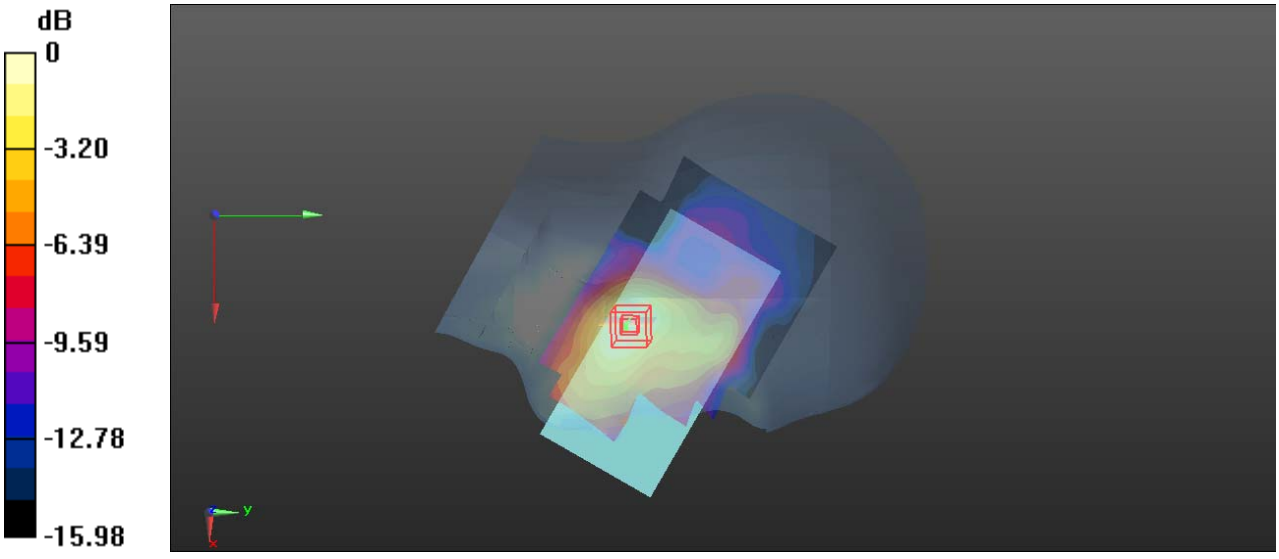
Communication System: Generic FDD-LTE; Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.881 S/m; ε_r = 39.144; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2510 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.544 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.773 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.649 W/kg
SAR(1 g) = 0.340 W/kg; SAR(10 g) = 0.188 W/kg
Maximum value of SAR (measured) = 0.520 W/kg



0 dB = 0.520 W/kg = -2.84 dBW/kg

Plot 20#: LTE Band 7 1RB Low_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

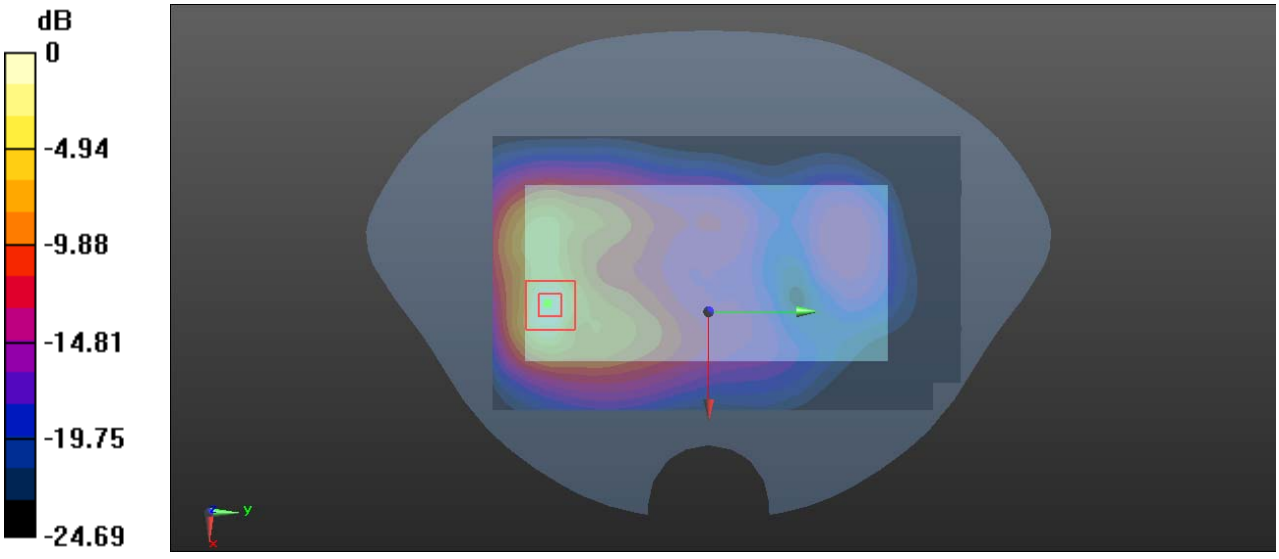
Communication System: Generic FDD-LTE; Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.881 S/m; ε_r = 39.144; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2510 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.41 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.754 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 7.33 W/kg
SAR(1 g) = 2.73 W/kg; SAR(10 g) = 1.1 W/kg
Maximum value of SAR (measured) = 5.42 W/kg



0 dB = 5.42 W/kg = 7.34 dBW/kg

Plot 21#: LTE Band 7 1RB Low_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

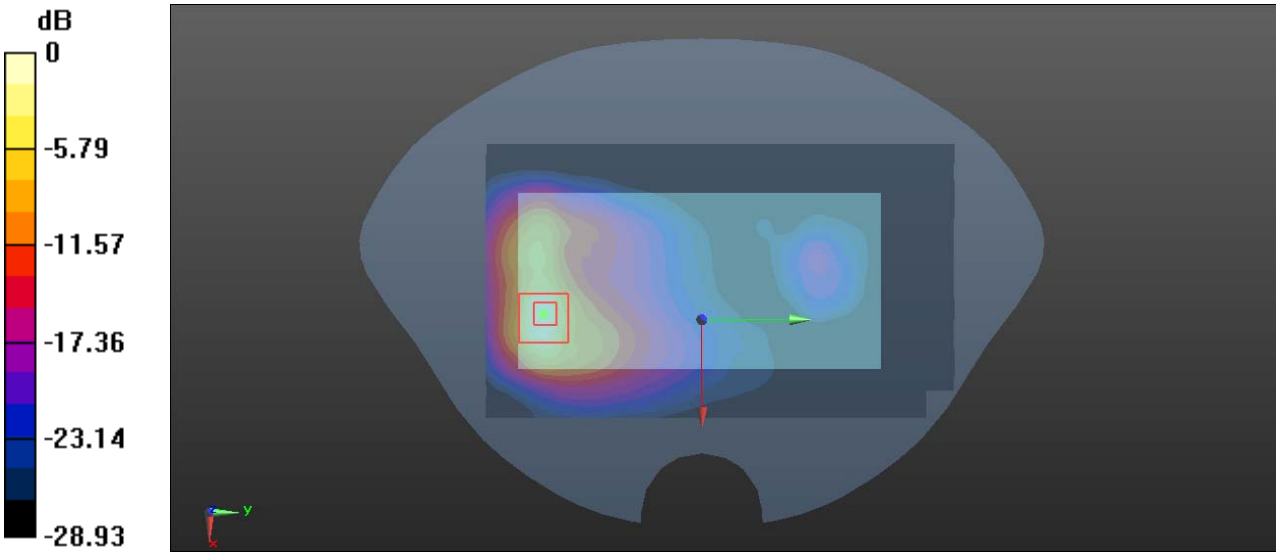
Communication System: Generic FDD-LTE; Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.881 S/m; ε_r = 39.144; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2510 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 20.0 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.561 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 29.4 W/kg
SAR(1 g) = 9.68 W/kg; SAR(10 g) = 3.57 W/kg
Maximum value of SAR (measured) = 20.1 W/kg



0 dB = 20.1 W/kg = 13.03 dBW/kg

Plot 22#: LTE Band 8 1RB Mid_Head Right Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

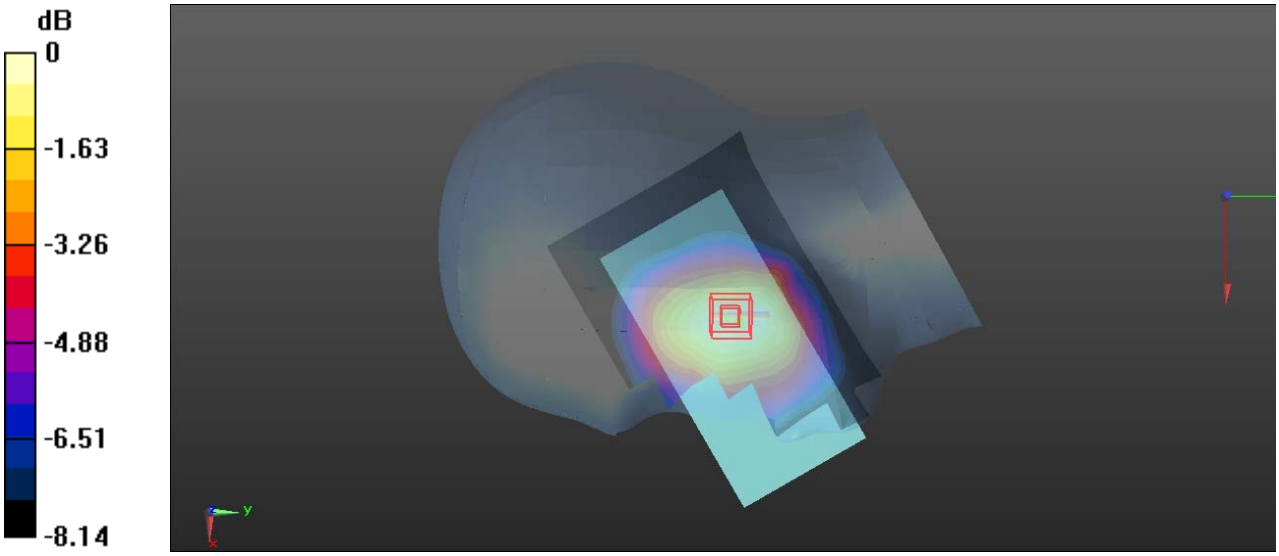
Communication System: Generic FDD-LTE; Frequency: 897.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 897.5 MHz; σ = 0.947 S/m; ε_r = 41.261; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 897.5 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.212 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.548 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.238 W/kg
SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.139 W/kg
Maximum value of SAR (measured) = 0.213 W/kg



0 dB = 0.213 W/kg = -6.72 dBW/kg

Plot 23#: LTE Band 8 1RB Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

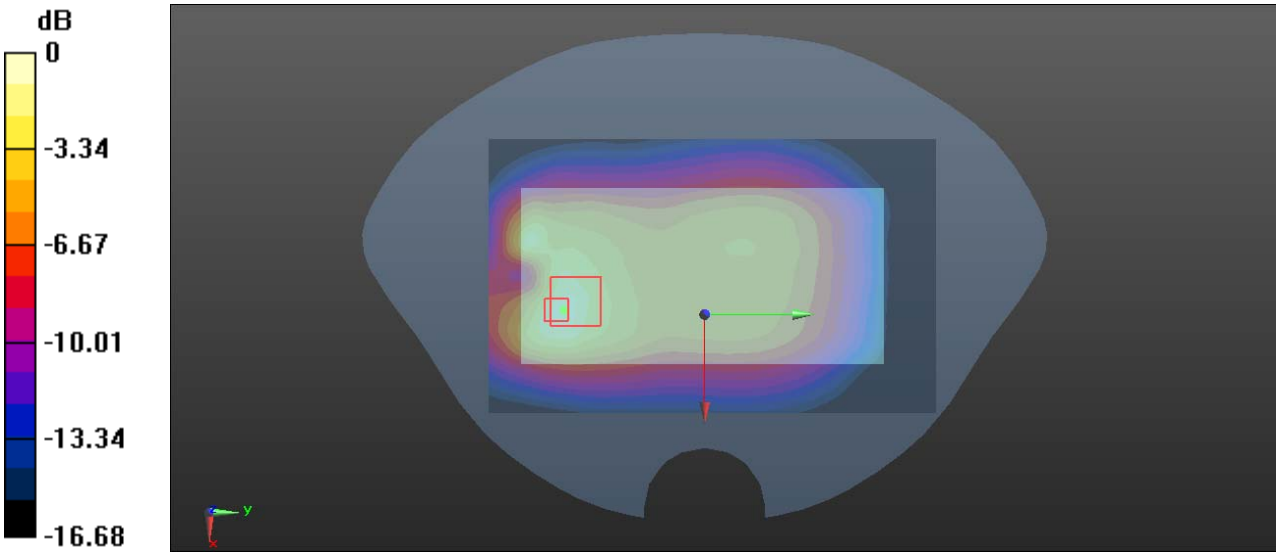
Communication System: Generic FDD-LTE; Frequency: 897.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 897.5 MHz; σ = 0.947 S/m; ε_r = 41.261; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 897.5 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.499 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.24 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.826 W/kg
SAR(1 g) = 0.303 W/kg; SAR(10 g) = 0.186 W/kg
Maximum value of SAR (measured) = 0.560 W/kg



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

Plot 24#: LTE Band 8 1RB Mid_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

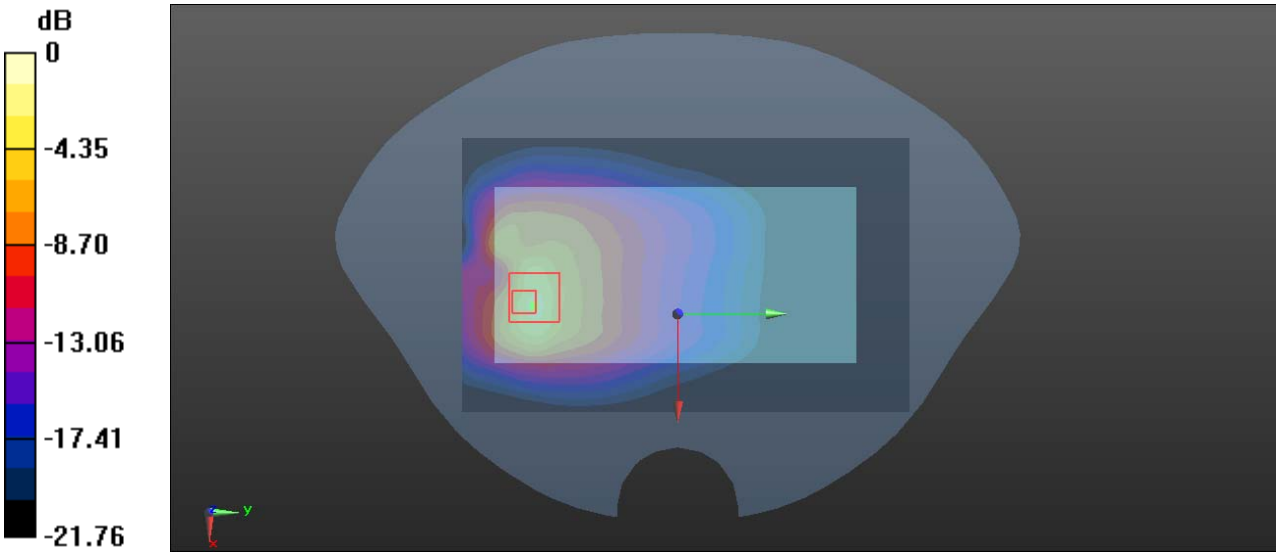
Communication System: Generic FDD-LTE; Frequency: 897.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 897.5 MHz; σ = 0.947 S/m; ε_r = 41.261; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(9.68, 9.68, 9.68) @ 897.5 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.49 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.06 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 7.74 W/kg
SAR(1 g) = 1.87 W/kg; SAR(10 g) = 0.879 W/kg
Maximum value of SAR (measured) = 4.38 W/kg



0 dB = 4.38 W/kg = 6.41 dBW/kg

Plot 25#: LTE Band 20 1RB Low_ Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

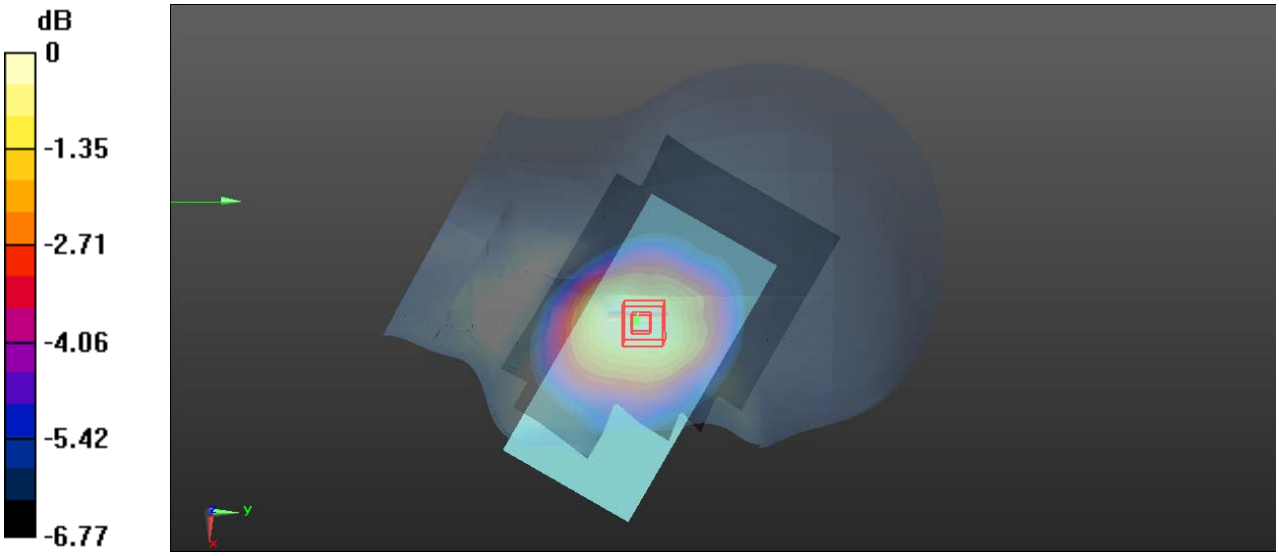
Communication System: Generic FDD-LTE; Frequency: 842 MHz;Duty Cycle: 1:1
Medium parameters used: f = 842 MHz; σ = 0.884 S/m; ε_r = 41.684; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(10.06, 10.06, 10.06) @ 842 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.174 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.419 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.179 W/kg
SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.112 W/kg
Maximum value of SAR (measured) = 0.167 W/kg



0 dB = 0.167 W/kg = -7.77 dBW/kg

Plot 26#: LTE Band 20 1RB Low_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

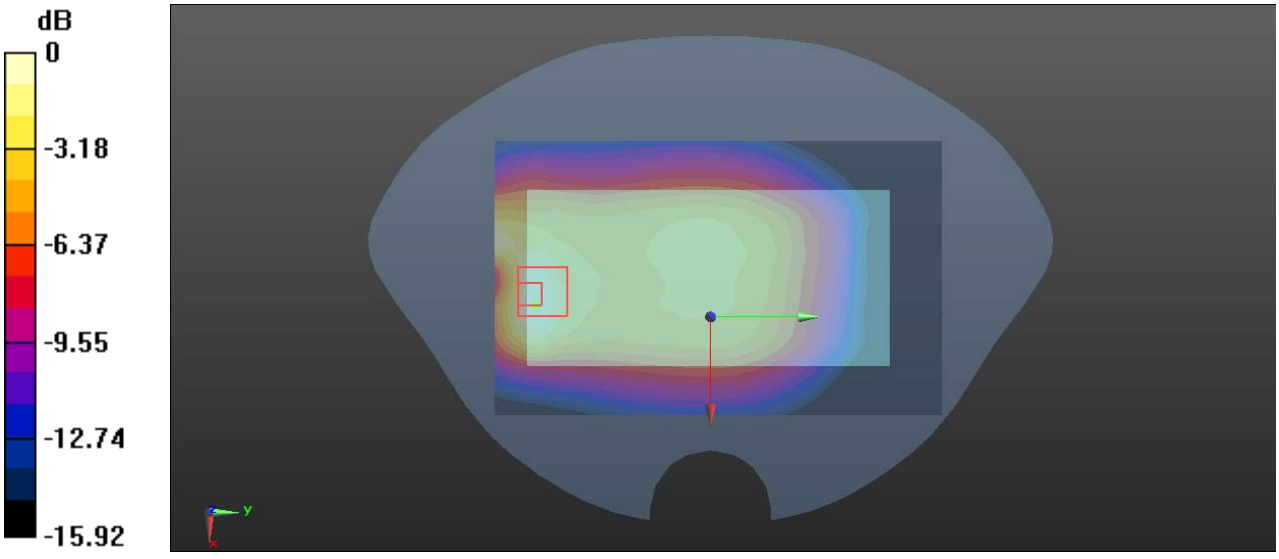
Communication System: Generic FDD-LTE; Frequency: 842 MHz;Duty Cycle: 1:1
Medium parameters used: f = 842 MHz; σ = 0.884 S/m; ε_r = 41.684; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(10.06, 10.06, 10.06) @ 842 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.431 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.33 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.596 W/kg
SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.162 W/kg
Maximum value of SAR (measured) = 0.410 W/kg



0 dB = 0.410 W/kg = -3.87 dBW/kg

Plot 27#: LTE Band 20 1RB Low_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

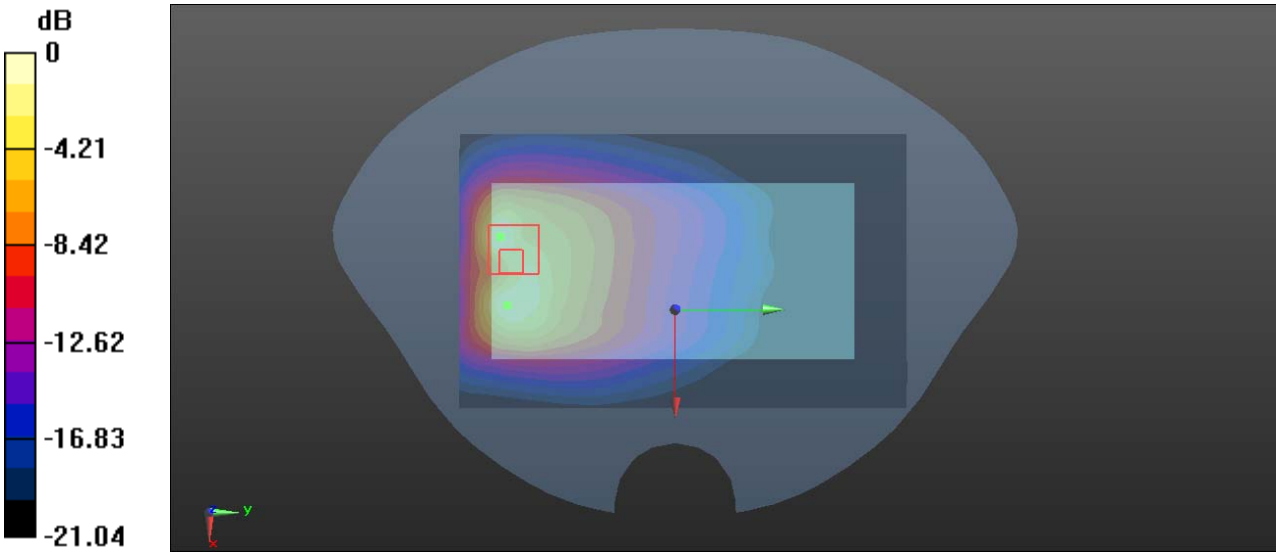
Communication System: Generic FDD-LTE; Frequency: 842 MHz;Duty Cycle: 1:1
Medium parameters used: f = 842 MHz; σ = 0.884 S/m; ε_r = 41.684; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(10.06, 10.06, 10.06) @ 842 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.47 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.04 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 2.68 W/kg
SAR(1 g) = 0.861 W/kg; SAR(10 g) = 0.405 W/kg
Maximum value of SAR (measured) = 1.89 W/kg



0 dB = 1.89 W/kg = 2.76 dBW/kg

Plot 28#: 2.4G WiFi Mode B Mid_Head Left Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

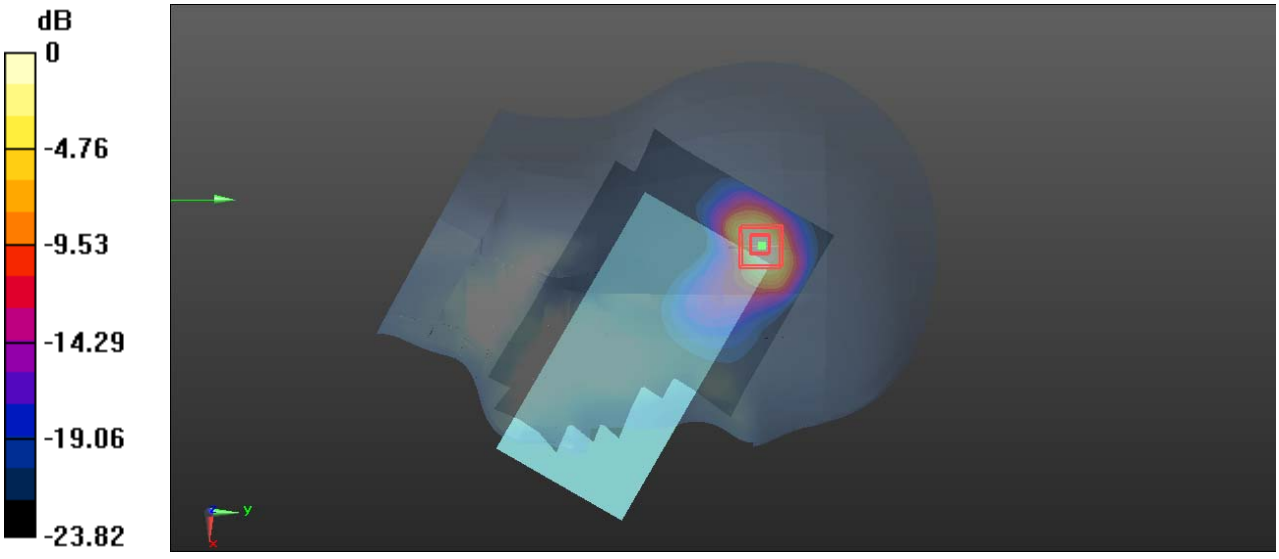
Communication System: CW; Frequency: 2442 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2442 MHz; σ = 1.787 S/m; ε_r = 39.417; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2442 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 3.04 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.909 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.538 W/kg
Maximum value of SAR (measured) = 2.83 W/kg



0 dB = 2.83 W/kg = 4.52 dBW/kg

Plot 29#: 2.4G WiFi Mode B Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

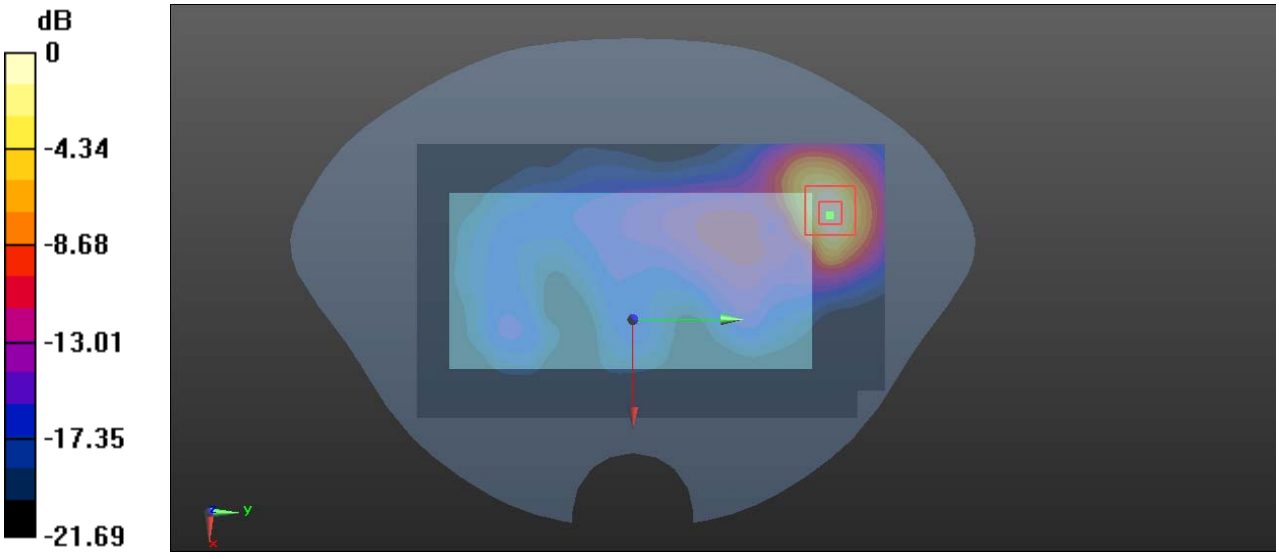
Communication System: CW; Frequency: 2442 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2442 MHz; σ = 1.787 S/m; ε_r = 39.417; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2442 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.40 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.079 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 0.582 W/kg; SAR(10 g) = 0.253 W/kg
Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

Plot 30#: 2.4G WiFi Mode B Mid_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

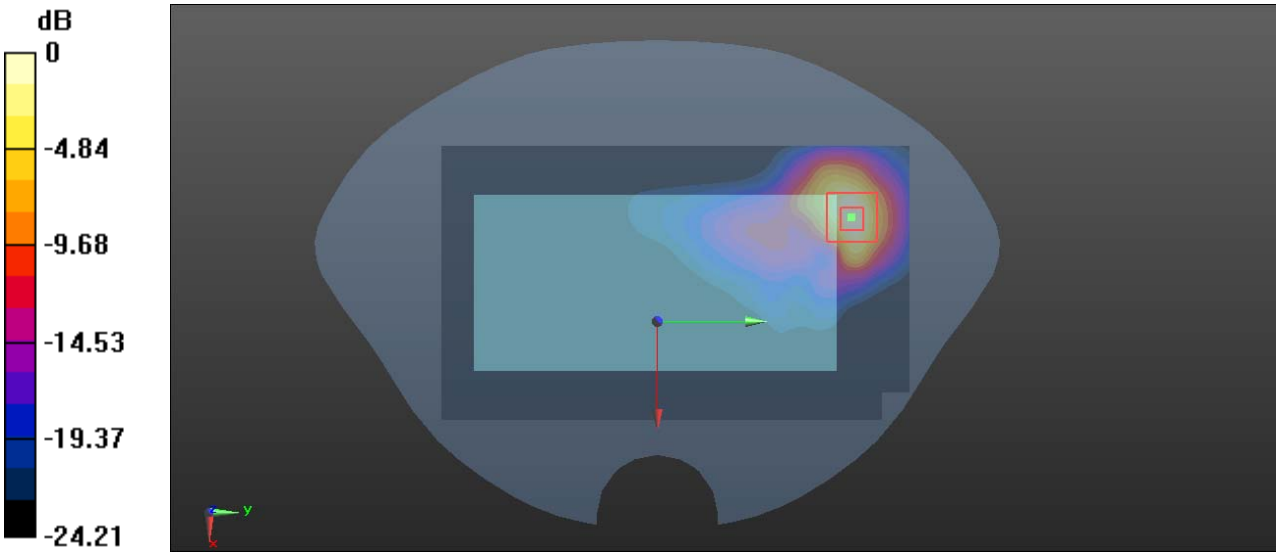
Communication System: CW; Frequency: 2442 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2442 MHz; σ = 1.787 S/m; ε_r = 39.417; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2442 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 3.30 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.469 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 4.01 W/kg
SAR(1 g) = 0.791 W/kg; SAR(10 g) = 0.317 W/kg
Maximum value of SAR (measured) = 3.16 W/kg



0 dB = 3.16 W/kg = 5.00 dBW/kg

Plot 31#: 5.2G WiFi Mode A Mid_ Head Right Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

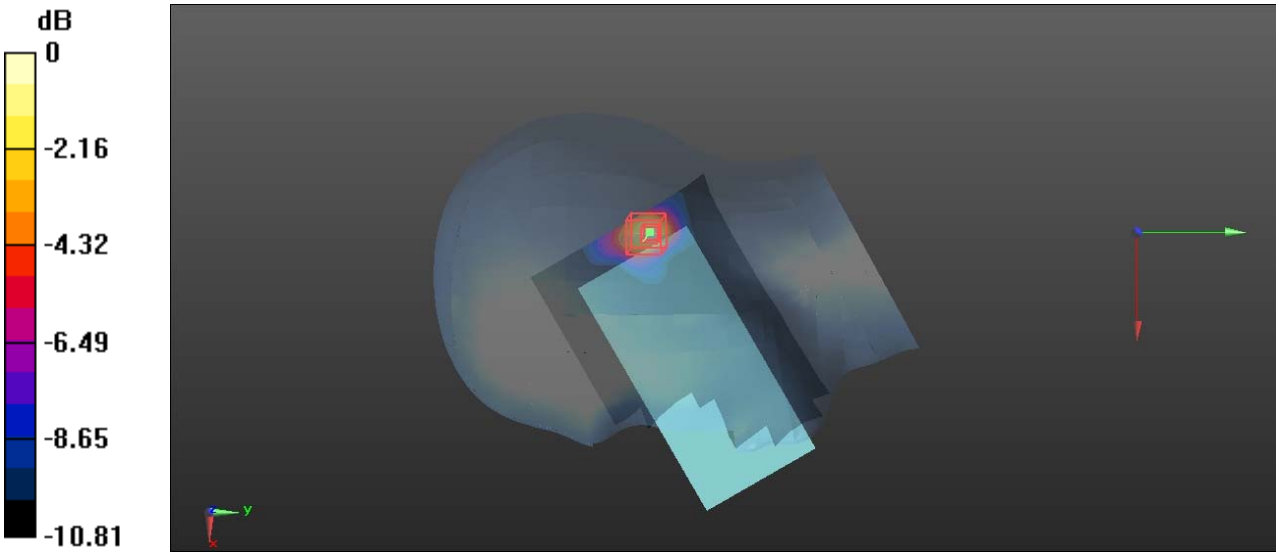
Communication System: 5.2G WiFi; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.676 S/m; ε_r = 36.114; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(5.49, 5.49, 5.49) @ 5200 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (121x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.661 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 5.148 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.993 W/kg
SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.160 W/kg
Maximum value of SAR (measured) = 0.668 W/kg



0 dB = 0.668 W/kg = -1.75 dBW/kg

Plot 32#: 5.2G WiFi Mode A Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

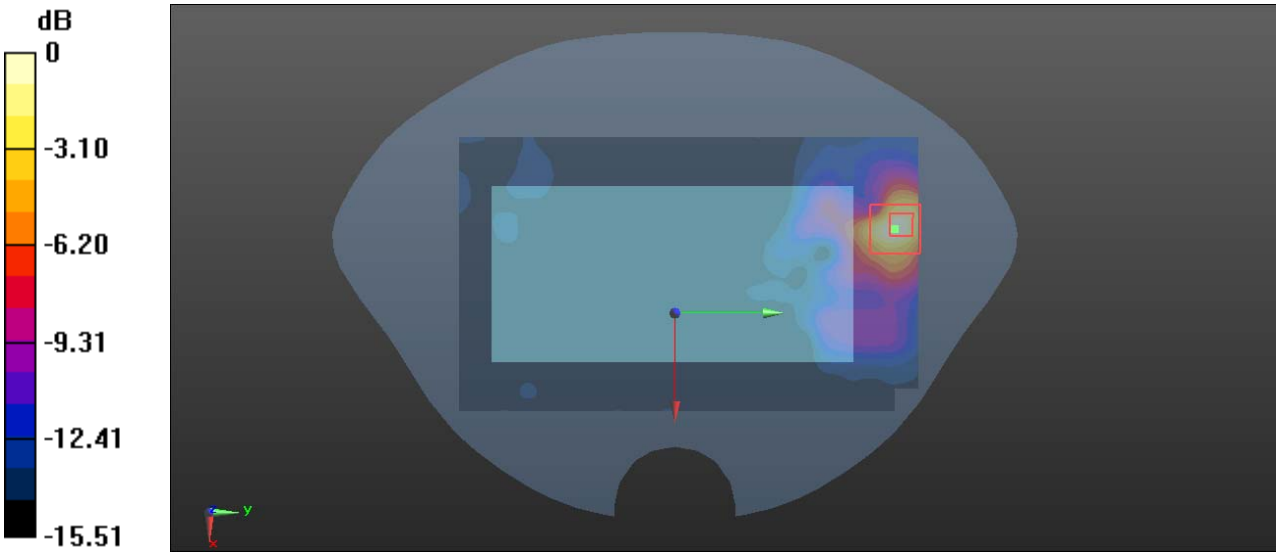
Communication System: 5.2G WiFi; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.676 S/m; ε_r = 36.114; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(5.49, 5.49, 5.49) @ 5200 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (121x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.626 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 2.353 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.294 W/kg; SAR(10 g) = 0.107 W/kg
Maximum value of SAR (measured) = 0.646 W/kg



0 dB = 0.646 W/kg = -1.90 dBW/kg

Plot 33#: 5.2G WiFi Mode A Mid_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

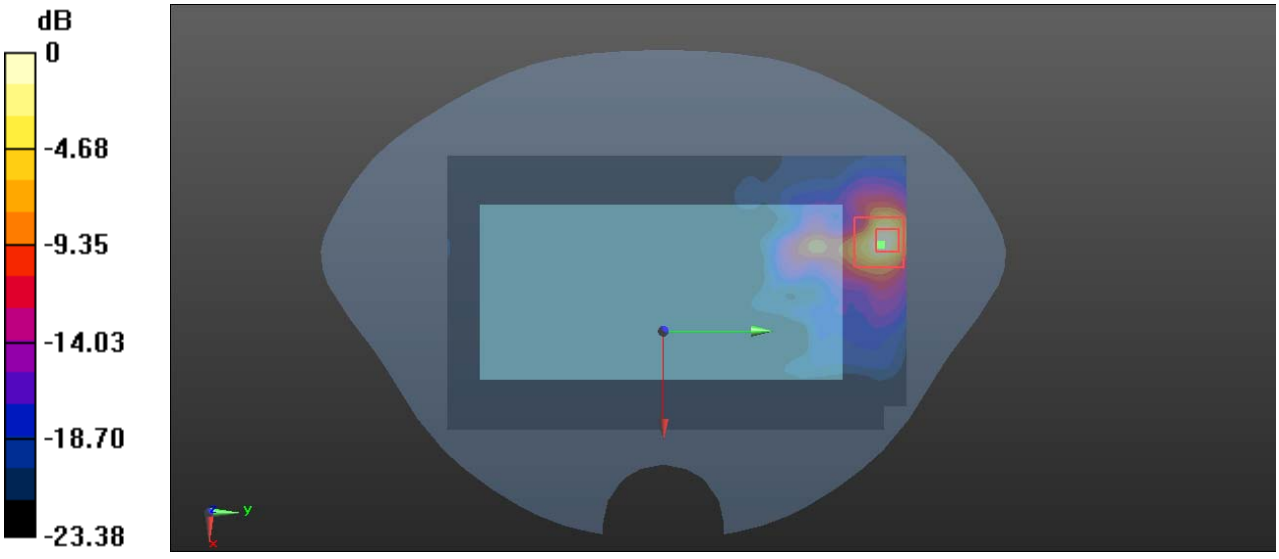
Communication System: 5.2G WiFi; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.676 S/m; ε_r = 36.114; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(5.49, 5.49, 5.49) @ 5200 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (121x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 3.78 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 1.965 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 7.78 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.317 W/kg
Maximum value of SAR (measured) = 3.60 W/kg



0 dB = 3.60 W/kg = 5.56 dBW/kg

Plot 34#: 5.8G WiFi Mode A Mid_Head Right Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

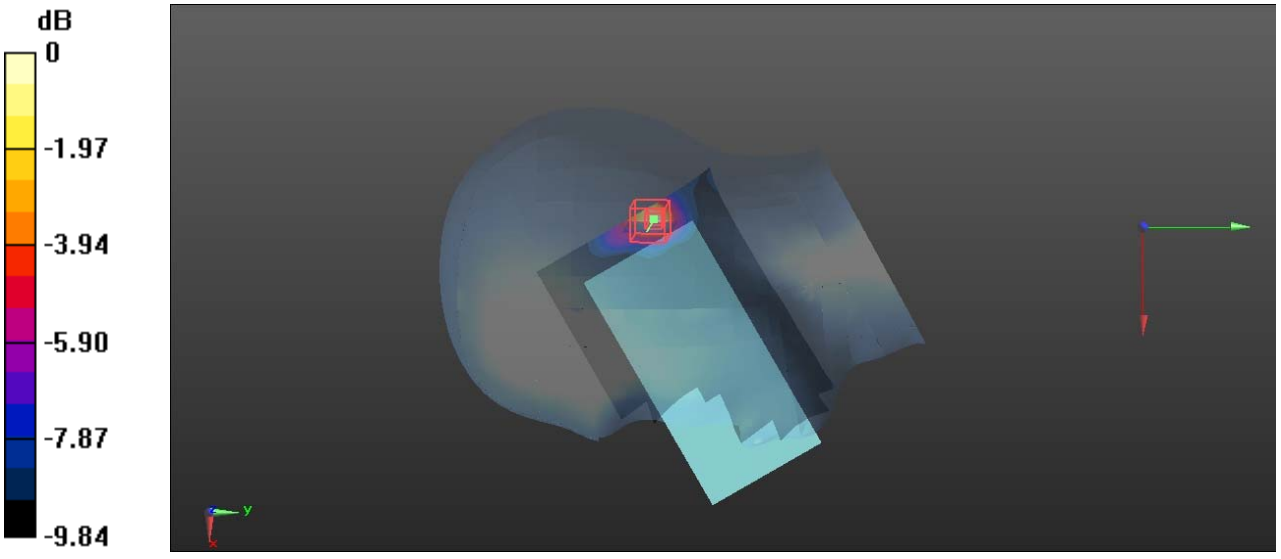
Communication System: 5.8G Wi-Fi; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5785 MHz; σ = 5.282 S/m; ε_r = 35.29; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.75, 4.75, 4.75) @ 5785 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (121x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.764 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 4.251 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.368 W/kg; SAR(10 g) = 0.190 W/kg
Maximum value of SAR (measured) = 0.735 W/kg



0 dB = 0.735 W/kg = -1.34 dBW/kg

Plot 35#: 5.8G WiFi Mode A Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

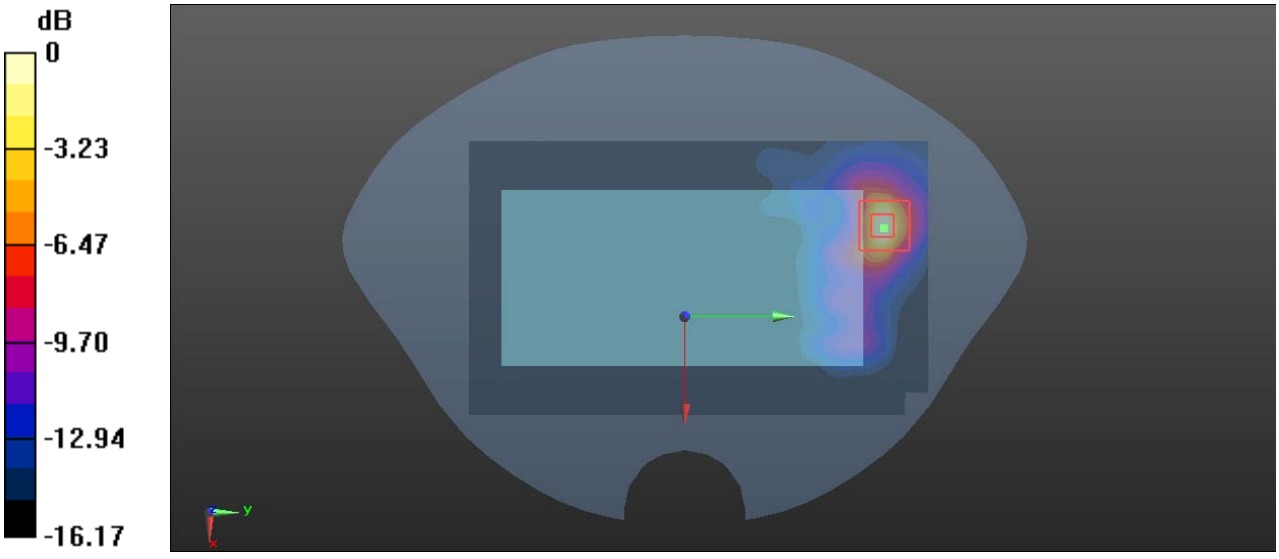
Communication System: 5.8G Wi-Fi; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5785 MHz; σ = 5.282 S/m; ε_r = 35.29; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.75, 4.75, 4.75) @ 5785 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (121x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 2.606 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 2.28 W/kg
SAR(1 g) = 0.473 W/kg; SAR(10 g) = 0.155 W/kg
Maximum value of SAR (measured) = 1.13 W/kg



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

Plot 36#: 5.8G WiFi Mode A Mid_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

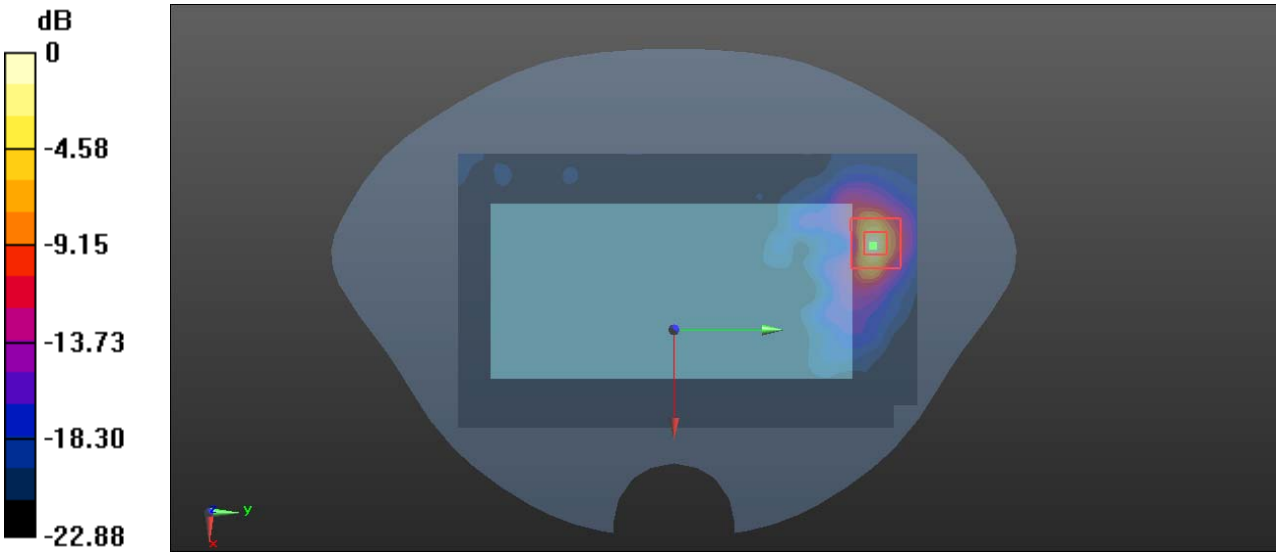
Communication System: 5.8G Wi-Fi; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5785 MHz; σ = 5.282 S/m; ε_r = 35.29; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(4.75, 4.75, 4.75) @ 5785 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (121x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 4.59 W/kg

Zoom Scan (7x7x16)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm
Reference Value = 2.261 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 9.12 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.315 W/kg
Maximum value of SAR (measured) = 4.81 W/kg



0 dB = 4.81 W/kg = 6.82 dBW/kg

Plot 37#:BT_Mid_Head Right Cheek

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

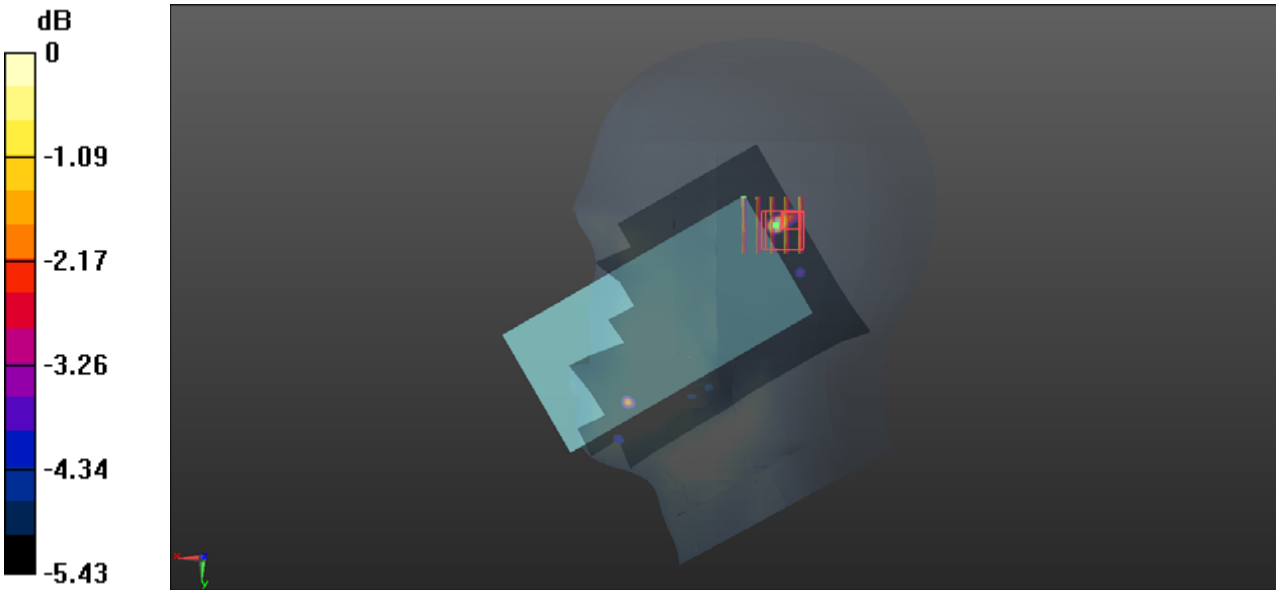
Communication System: Bluetooth(GFSK); Frequency: 2441 MHz;Duty Cycle: 1:1.3
Medium parameters used: f = 2441 MHz; σ = 1.781 S/m; ε_r = 39.448; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2441 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0334 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.581 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.0360 W/kg
SAR(1 g) = 0.019 W/kg; SAR(10 g) = 0.012 W/kg
Maximum value of SAR (measured) = 0.0210 W/kg



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

Plot 38#:BT_Mid_Body Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

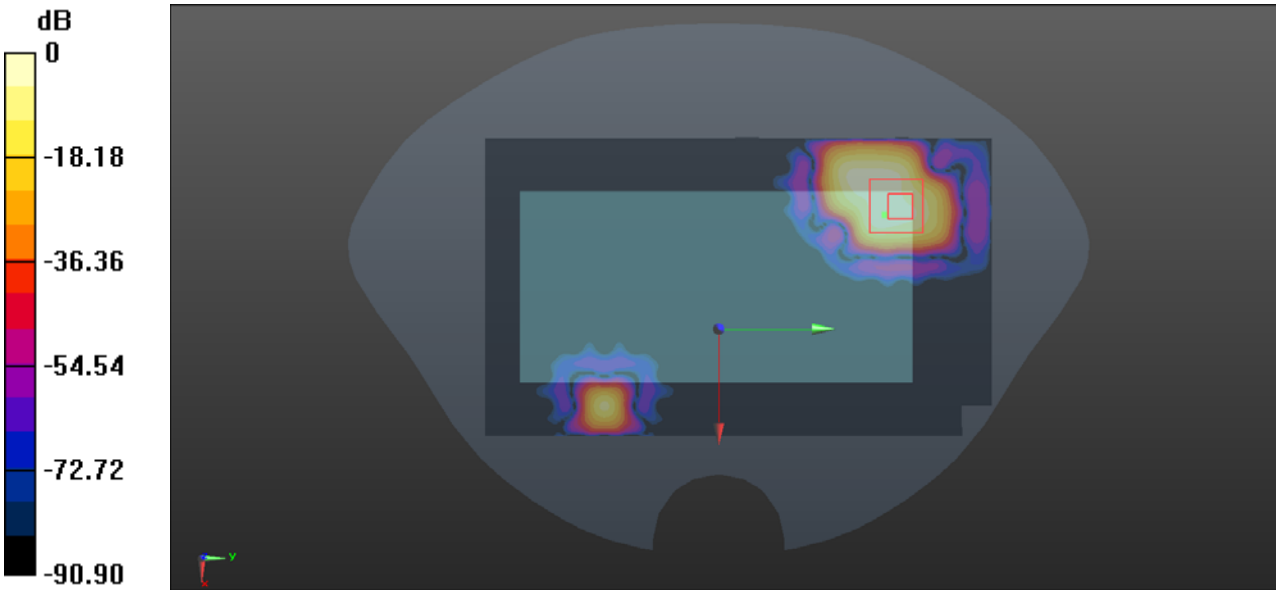
Communication System: Bluetooth(GFSK); Frequency: 2441 MHz;Duty Cycle: 1:1.3
Medium parameters used: f = 2441 MHz; σ = 1.781 S/m; ε_r = 39.448; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2441 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.121 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.187 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.130 W/kg
SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.030 W/kg
Maximum value of SAR (measured) = 0.0980 W/kg



0 dB = 0.0980 W/kg = -10.09 dBW/kg

Plot 39#:BT_ Handheld Back

DUT: Smartphone; Type: P50; Serial: SZ1220118-02706E-SA-S1

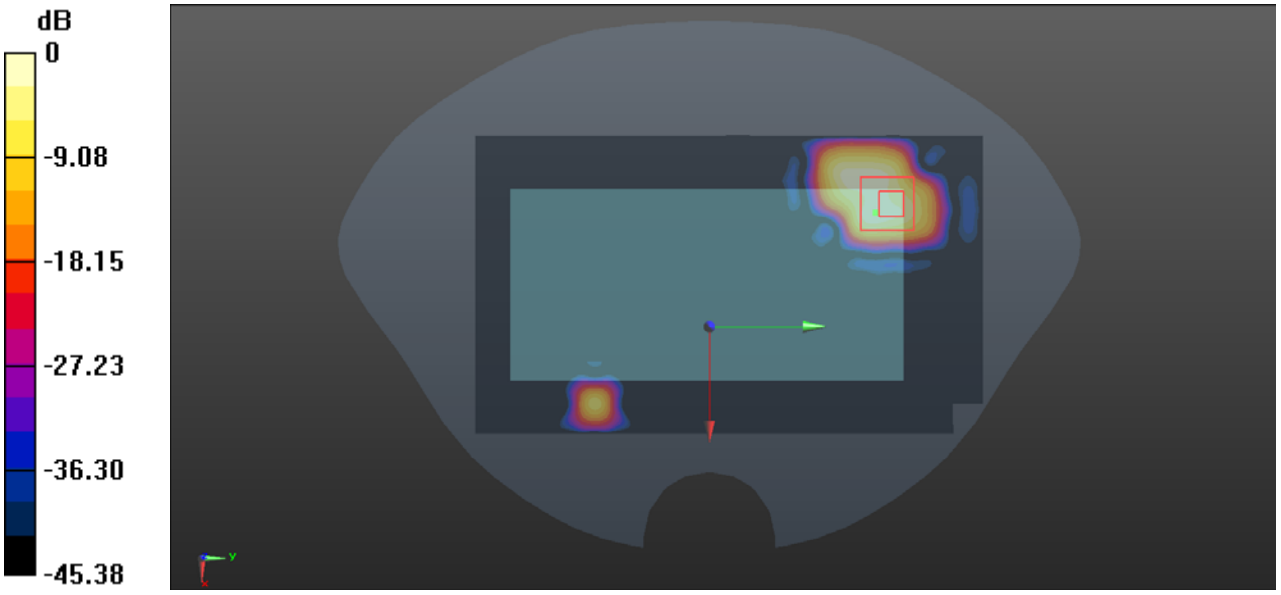
Communication System: Bluetooth(GFSK); Frequency: 2441 MHz;Duty Cycle: 1:1.3
Medium parameters used: f = 2441 MHz; σ = 1.781 S/m; ε_r = 39.448; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7329; ConvF(7.42, 7.42, 7.42) @ 2441 MHz; Calibrated: 2021/12/31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn772; Calibrated: 2021/12/29
- Phantom: SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Area Scan (101x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.330 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.970 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.361 W/kg
SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.038 W/kg
Maximum value of SAR (measured) = 0.323 W/kg



0 dB = 0.323 W/kg = -4.91 dBW/kg

APPENDIX A MEASUREMENT UNCERTAINTY

The uncertainty budget has been determined for the measurement system and is given in the following Table.

Measurement uncertainty evaluation for IEC62209-1 SAR test

Source of uncertainty	Tolerance/ uncertainty ± %	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty ± %, (1 g)	Standard uncertainty ± %, (10 g)
Measurement system							
Probe calibration	6.55	N	1	1	1	6.6	6.6
Axial Isotropy	4.7	R	√3	1	1	2.7	2.7
Hemispherical Isotropy	9.6	R	√3	0	0	0.0	0.0
Boundary effect	1.0	R	√3	1	1	0.6	0.6
Linearity	4.7	R	√3	1	1	2.7	2.7
Detection limits	1.0	R	√3	1	1	0.6	0.6
Readout electronics	0.3	N	1	1	1	0.3	0.3
Response time	0.0	R	√3	1	1	0.0	0.0
Integration time	0.0	R	√3	1	1	0.0	0.0
RF ambient conditions – noise	1.0	R	√3	1	1	0.6	0.6
RF ambient conditions–reflections	1.0	R	√3	1	1	0.6	0.6
Probe positioner mech. Restrictions	0.8	R	√3	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.7	R	√3	1	1	3.9	3.9
Post-processing	2.0	R	√3	1	1	1.2	1.2
Test sample related							
Test sample positioning	2.8	N	1	1	1	2.8	2.8
Device holder uncertainty	6.3	N	1	1	1	6.3	6.3
Drift of output power	5.0	R	√3	1	1	2.9	2.9
Phantom and set-up							
Phantom uncertainty (shape and thickness tolerances)	4.0	R	√3	1	1	2.3	2.3
Liquid conductivity target)	5.0	R	√3	0.64	0.43	1.8	1.2
Liquid conductivity meas.)	2.5	N	1	0.64	0.43	1.6	1.1
Liquid permittivity target)	5.0	R	√3	0.6	0.49	1.7	1.4
Liquid permittivity meas.)	2.5	N	1	0.6	0.49	1.5	1.2
Combined standard uncertainty		RSS				12.2	12.0
Expanded uncertainty 95 % confidence interval)						24.3	23.9

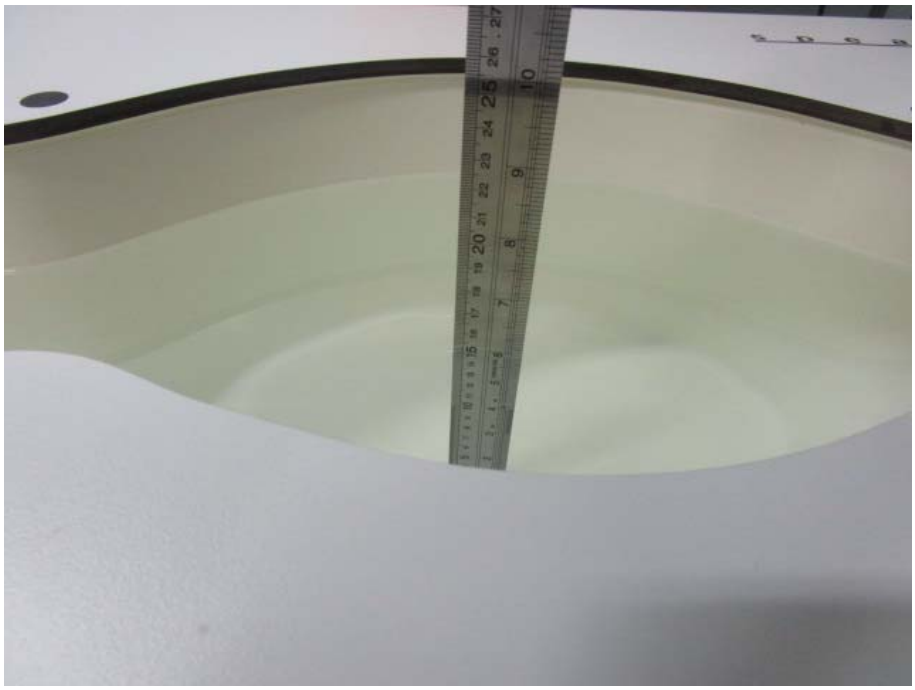
Measurement uncertainty evaluation for IEC62209-2 SAR test

Source of uncertainty	Tolerance/ uncertainty ± %	Probability distribution	Divisor	ci (1 g)	ci (10 g)	Standard uncertainty ± %, (1 g)	Standard uncertainty ± %, (10 g)
Measurement system							
Probe calibration	6.55	N	1	1	1	6.6	6.6
Axial Isotropy	4.7	R	√3	1	1	2.7	2.7
Hemispherical Isotropy	9.6	R	√3	0	0	0.0	0.0
Linearity	4.7	R	√3	1	1	2.7	2.7
Modulation Response	0.0	R	√3	1	1	0.0	0.0
Detection limits	1.0	R	√3	1	1	0.6	0.6
Boundary effect	1.0	R	√3	1	1	0.6	0.6
Readout electronics	0.3	N	1	1	1	0.3	0.3
Response time	0.0	R	√3	1	1	0.0	0.0
Integration time	0.0	R	√3	1	1	0.0	0.0
RF ambient conditions – noise	1.0	R	√3	1	1	0.6	0.6
RF ambient conditions–reflections	1.0	R	√3	1	1	0.6	0.6
Probe positioner mech. Restrictions	0.8	R	√3	1	1	0.5	0.5
Probe positioning with respect to phantom shell	6.7	R	√3	1	1	3.9	3.9
Post-processing	2.0	R	√3	1	1	1.2	1.2
Test sample related							
Device holder Uncertainty	6.3	N	1	1	1	6.3	6.3
Test sample positioning	2.8	N	1	1	1	2.8	2.8
Power scaling	4.5	R	√3	1	1	2.6	2.6
Drift of output power	5.0	R	√3	1	1	2.9	2.9
Phantom and set-up							
Phantom uncertainty (shape and thickness tolerances)	4.0	R	√3	1	1	2.3	2.3
Algorithm for correcting SAR for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.1	0.9
Liquid conductivity (meas.)	2.5	N	1	0.64	0.43	1.6	1.1
Liquid permittivity (meas.)	2.5	N	1	0.6	0.49	1.5	1.2
Temp. unc. - Conductivity	1.7	R	√3	0.78	0.71	0.8	0.7
Temp. unc. - Permittivity	0.3	R	√3	0.23	0.26	0.0	0.0
Combined standard uncertainty		RSS				12.2	12.1
Expanded uncertainty 95 % confidence interval)						24.5	24.2

APPENDIX B EUT TEST POSITION PHOTOS

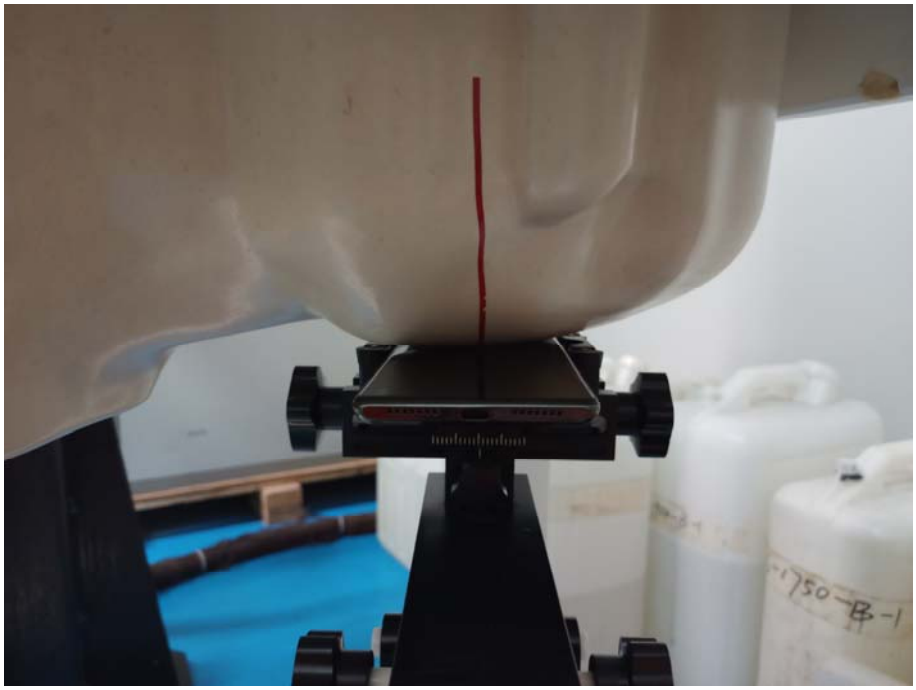
Liquid depth ≥ 15cm

SAM (30deg probe tilt) with CRP v5.0_20150321; Type: QD000P40CD; Serial: TP:1874



Body (Worn) Back Setup Photo(5mm)

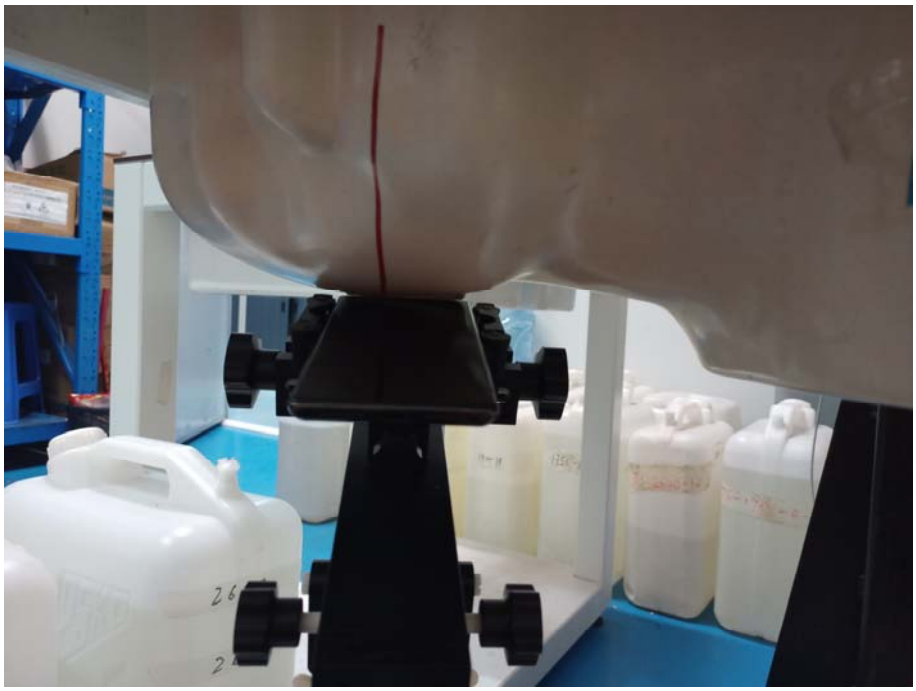
Head Left Cheek Setup Photo



Head Left Tilt Setup Photo

Head Right Cheek Setup Photo

Head Right Tilt Setup Photo



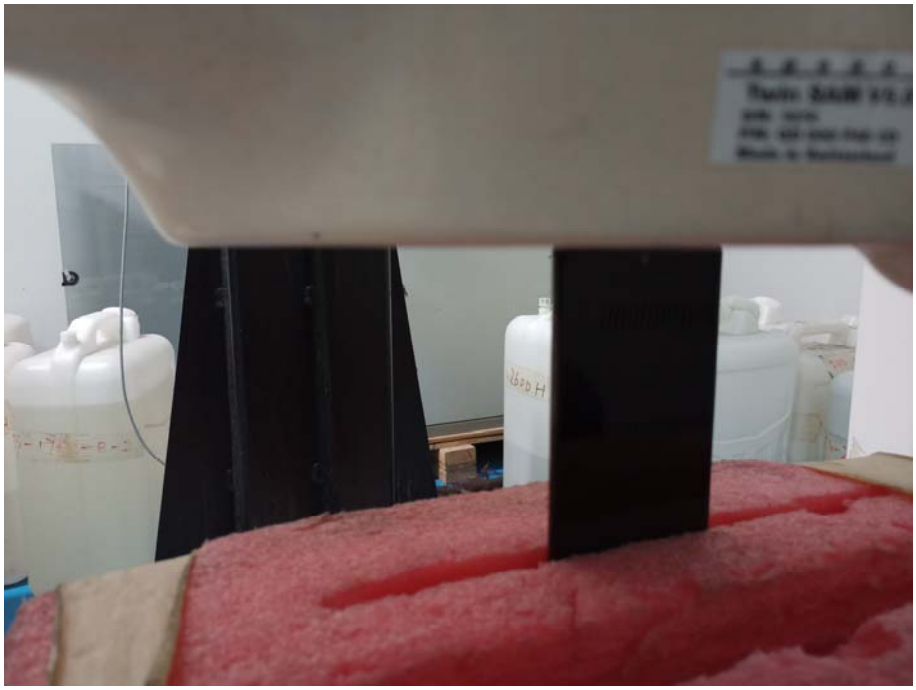
Handheld Back Setup Photo(0mm)

Handheld Left Setup Photo(0mm)

Handheld Right Setup Photo(0mm)

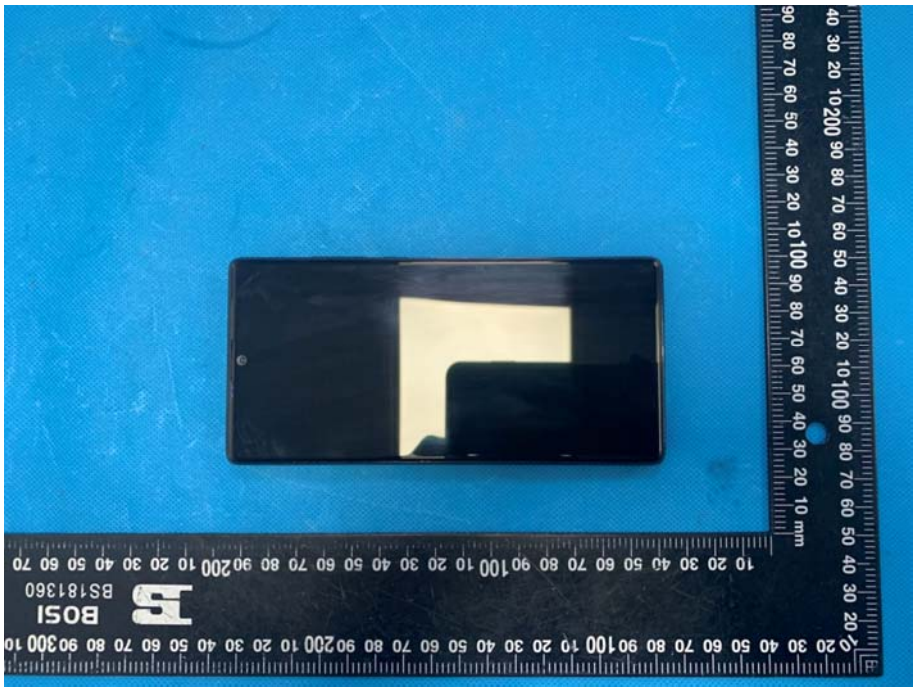
Handheld Bottom Setup Photo(0mm)

Handheld Top Setup Photo(0mm)



APPENDIX C EUT PHOTOS

EUT – Front View



EUT –Back View

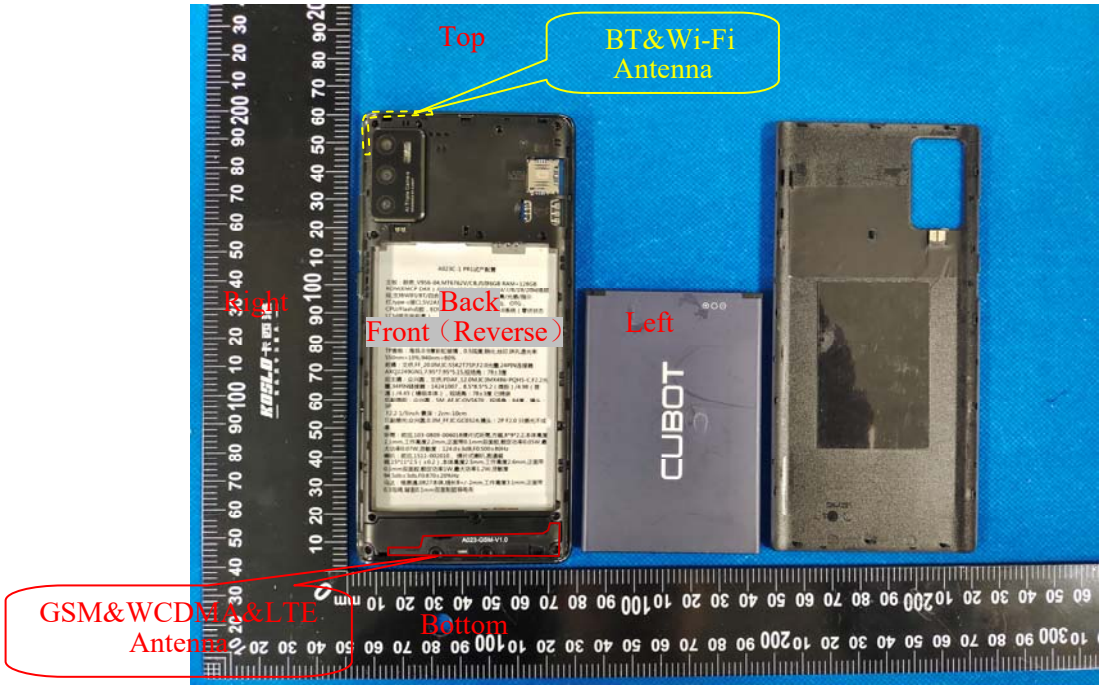
EUT – Side View-1

EUT – Side View-2

EUT – Side View-3

EUT – Side View-4

EUT –Antenna View



APPENDIX D CALIBRATION CERTIFICATES

Please Refer to the Attachment.

Declarations

1. BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "△". Customer model name, addresses, names, trademarks etc. are not considered data.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
3. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
5. This report cannot be reproduced except in full, without prior written approval of the Company.
6. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
7. This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk "★".

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