



SAR MEASUREMENT REPORT

FCC ID: HLEHT730BTNFL

Applicant: Unitech Electronics Co., Ltd.

Application Type: Certification

Product: Handheld Data Terminal

Model No.: HT730

Brand Name: unitech

FCC Classification: PCS Licensed Transmitter held to ear (PCE)
Digital Transmission System (DTS)
Unlicensed National Information Infrastructure (UNII)

FCC Rule Part(s): FCC 47 CFR Part 2.1093

Test Procedure(s): IEEE 1528:2013, IEEE C95.1- 2005

Test Date: February 20 ~ 28, 2021

Reviewed By:

(Kevin Guo)

Approved By:

(Robin Wu)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in IEEE1528, KDB 447498 and KDB 865664. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2102RSU038-U1	Rev. 01	Original Report	04-13-2021	

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1.1. Applicant

5F, No. 136, Lane 235, Pao-Chiao Rd., Hsin-Tien Dist., New Taipei City, Taiwan

Unitech Electronics Co., Ltd.

5F, No. 136, Lane 235, Pao-Chiao Rd., Hsin-Tien Dist., New Taipei City, Taiwan

☒	Test Site – MRT Suzhou Laboratory
	Laboratory Location (Suzhou – Wuzhong) D8 Building, No.2 Tian’edang Rd., Wuzhong Economic Development Zone, Suzhou, China
	Laboratory Location (Suzhou – SIP) 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China
	Laboratory Accreditations
	A2LA: 3628.01 FCC: CN1166 VCCI: R-20025, G-20034, C-20020, T-20020
	CNAS: L10551 ISED: CN0001
☐	Test Site – MRT Shenzhen Laboratory
	Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China
	Laboratory Accreditations
	A2LA: 3628.02 FCC: CN1284
☐	Test Site – MRT Taiwan Laboratory
	Laboratory Location (Taiwan) No. 38, Fuxing 2 nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
	Laboratory Accreditations
	TAF: L3261-190725 FCC: 291082, TW3261
☐	

2. Product Information

2.1. General Description

Product Name	Handheld Data Terminal
Model No.	HT730
Brand Name	unitech
WCDMA Operation Band (s)	Band 2/5
LTE Operation Band (s)	FDD Band 2/4/5/7/17, TDD Band 41
Wi-Fi Specification	802.11a/b/g/n/ac
EUT Type	Portable Device
Exposure Category	General Population/Uncontrolled Exposure

Note: There are two types of keyboard on this product, the only difference is the number of buttons. This report only evaluated the product with more buttons.

2.2. Product Specification Subjective to this Report

3GPP Specification	
IMEI Code	IEMI 1: 351739420003160 IEMI 2: 351739420004713
Frequency Range	WCDMA Band 2: 1850 ~ 1910 MHz WCDMA Band 5: 824 ~ 849 MHz LTE Band 2: 1850 ~ 1910 MHz LTE Band 4: 1710 ~ 1755 MHz LTE Band 5: 824 ~ 849 MHz LTE Band 7: 2500 ~ 2570 MHz LTE Band 17: 704 ~ 716 MHz LTE Band 41: 2555 ~ 2655 MHz
Type of Modulation	WCDMA: BPSK LTE: QPSK, 16QAM
Product Category	LTE: Category 4
SIM	Dual SIM card is supported

Wi-Fi Specification	
Frequency Range	<u>For 2.4GHz Wi-Fi</u> 802.11b/g/n-HT20: 2412 ~ 2462 MHz 802.11n-HT40: 2422 ~ 2452 MHz <u>For 5GHz Wi-Fi</u> 802.11a /n-HT20/ac-VHT20: 5180~5240 MHz, 5260~5320 MHz, 5500~5720 MHz, 5745~5825 MHz 802.11n-HT40/ac-VHT40: 5190~5230 MHz, 5270~5310 MHz, 5510~5710 MHz, 5755~5795 MHz 802.11ac-VWHT80: 5210 MHz, 5290 MHz, 5530~5690 MHz, 5775 MHz
Channel Number	<u>For 2.4GHz Wi-Fi</u> 802.11b/g/n-HT20: 11 802.11n-HT40: 7 <u>For 5GHz Wi-Fi</u> 802.11a/n-HT20/ac-VHT20: 25 802.11n-HT40/ac-VHT40: 12 802.11ac-VHT80: 6
Type of Modulation	802.11b: DSSS 802.11a/g/n/ac: OFDM
Data Rate	802.11b: 1/2/5.5/11Mbps 802.11a/g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps
Bluetooth Specification	
Frequency Range	2400MHz~ 2483.5MHz
Channel Number	For Bluetooth: 79 For BT-LE: 40
Channel Spacing	For Bluetooth: 1MHz For BT-LE: 2MHz
Type of Modulation	1Mbps (GFSK), 2Mbps (Pi/4 DQPSK), 3Mbps (8DPSK)

2.3. Description of Available Antennas

Operating Condition	WCDMA/LTE (1Tx, 1Rx) 802.11b/g/n for 2.4GHz Wi-Fi (2Tx, 2Rx) 802.11a/n/ac for 5GHz Wi-Fi (2Tx, 2Rx) Bluetooth BR/EDR/LE (1Tx, 1Rx)
Antenna Type	FPCB Antenna
Simultaneously Transmitting Scenarios	WLAN transmit simultaneously WWAN transmit simultaneously with WLAN WWAN transmit simultaneously with Bluetooth

2.4. Ancillary Equipment

Ancillary Equipment 1	Adapter
Model No.	S018BYU1200150
Input	100-240V ~ 50/60Hz, 600mA
Output	5V/9V/12V=3A/2A/1.5A
Ancillary Equipment 2	Battery
Model No.	1400-900061G
Capacity	6700mAh
Rated Voltage	DC 3.63V

3. Summary of Test Result

3.1. Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	IEEE 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
3	IEEE C95.1-2005	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
4	KDB 447498 D01 v06	General RF Exposure Guidance
5	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	KDB 865664 D02 v01r02	RF Exposure Reporting
7	KDB 941225 D01v03r01	3G SAR Measurement Procedures
8	KDB 941225 D05v02r05	SAR Evaluation Considerations for LTE Devices
9	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitter

3.2. Environment Condition

Ambient Temperature	20.5°C~24.0°C
Temperature of Simulant	20.0°C~23.5°C
Relative Humidity	38%RH ~55%RH

3.3. RF Exposure Limits

Human Exposure	Basic restrictions for electric, magnetic and electromagnetic fields. (Unit in mW/g or W/kg)
Spatial Peak SAR ¹ (Head and Body)	1.60
Spatial Average SAR ² (Whole Body)	0.08
Spatial Peak SAR ³ (Arms and Legs)	4.00

Notes:

1. The Spatial Peak value of the SAR averaged over any 1gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over appropriate averaging time.

3.4. Test Result Summary

Worst SAR List

Highest Reported SAR		Head 1g SAR (W/kg)	Body 1g SAR (W/kg)	Extremity 10g SAR (W/kg)
WCDMA Band 2		0.01	0.05	0.16
WCDMA Band 5		0.16	0.22	0.32
LTE Band 2		0.01	0.05	0.23
LTE Band 4		0.04	0.21	0.18
LTE Band 5		0.20	0.35	0.74
LTE Band 7		0.06	1.39	1.09
LTE Band 17		0.23	0.20	0.90
LTE Band 41		0.01	0.56	0.56
Ant 0	DTS Band Wi-Fi	0.06	0.28	0.43
	U-NII-1 Band Wi-Fi	0.43	1.04	1.02
	U-NII-2C Band Wi-Fi	0.68	0.55	0.73
	U-NII-3 Band Wi-Fi	0.47	0.43	0.71
Ant 1	DTS Band Wi-Fi	0.19	0.10	0.37
	U-NII-1 Band Wi-Fi	0.42	0.80	0.81
	U-NII-2C Band Wi-Fi	0.27	0.98	0.61
	U-NII-3 Band Wi-Fi	0.11	0.86	0.59

Highest Simultaneous SAR

Exposure Condition	Simultaneously Transmitting Scenarios	Highest Simultaneous SAR
Head 1g SAR (W/kg)	LTE Band 17 + U-NII-2C Band Wi-Fi	1.16
Body 1g SAR (W/kg)	LTE Band 7 + Bluetooth	1.56
Extremity 10g SAR (W/kg)	LTE Band 7 + U-NII-1 Band Wi-Fi	2.23

4. Specific Absorption Rate (SAR)

4.1. Introduction

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

4.2. Definition

The SAR in the tissue-equivalent liquid can be determined by the rate of temperature increase or by E-field measurements, according to Formulas (1) or (2):

$$SAR = \frac{\sigma E^2}{\rho} \quad (1)$$

$$SAR = c_h \left. \frac{dT}{dt} \right|_{t=0} \quad (2)$$

where

- SAR is the specific absorption rate in W/kg;
- E is the rms value of the electric field strength in the tissue medium in V/m;
- σ is the electrical conductivity of the tissue medium in S/m;
- ρ is the mass density of the tissue medium in kg/m³;
- c_h is the specific heat capacity of the tissue medium in J/(kg K);

$\left. \frac{dT}{dt} \right|_{t=0}$ is the initial time derivative of temperature in the tissue medium in K/s.

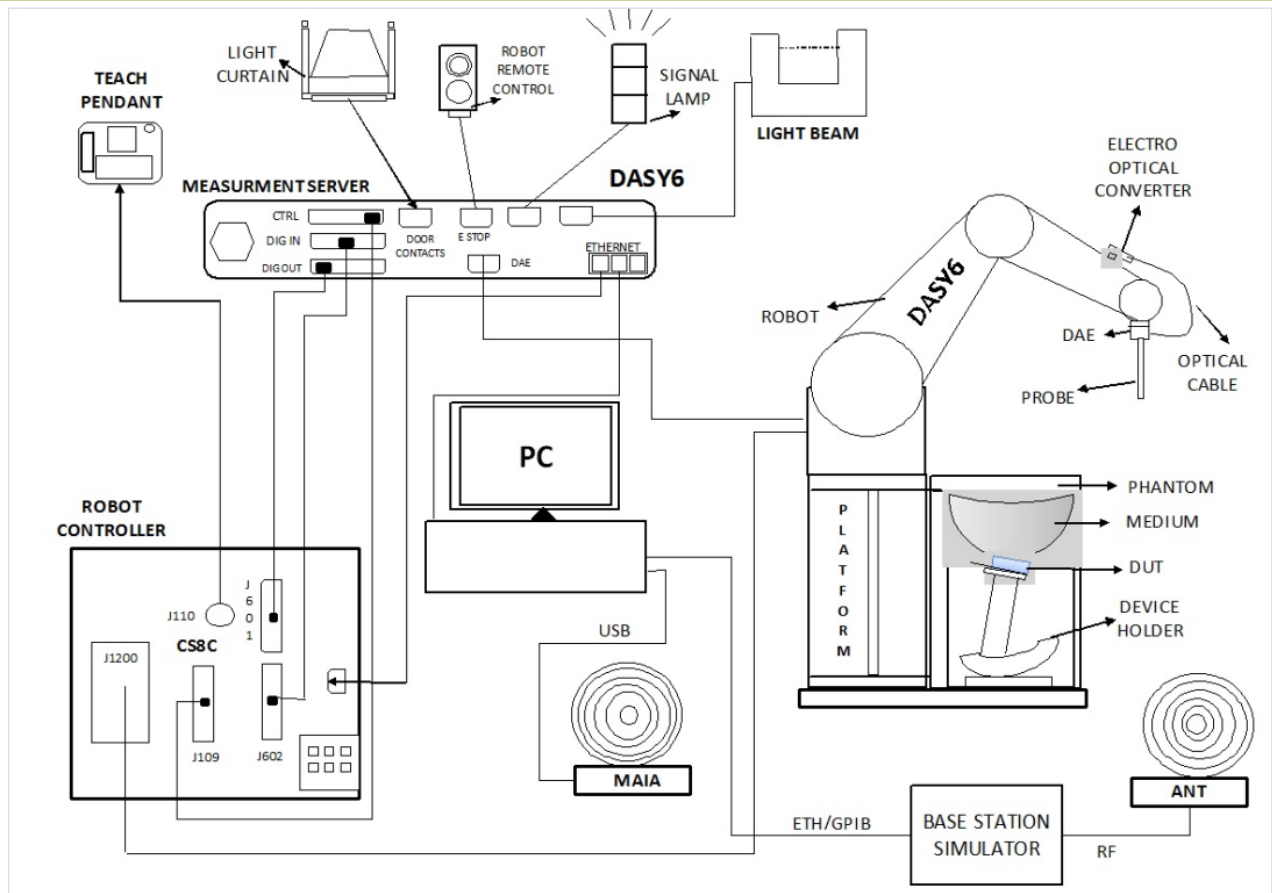
5. DASY6 Measurement System

5.1. Introduction

DASY6 is the latest generation of the Dosimetric Assessment System optimized for specific absorption rate (SAR) measurements, SAR compliance. DASY6 builds on the power of our industry - leading dosimetric and near-field evaluation system, DASY52. Running on a significantly more robust platform and a more powerful measurement server, DASY6 offers much faster scanning with no sacrifice of measurement precision. All hardware and software are fully compatible with DASY52. The new system seamlessly integrates two software solutions, the novel cDASY V6.6 - optimized for SAR compliance testing to significantly reduce SAR assessment costs - and the widely used DASY V5.2 for generalized near-field evaluations with maximized flexibility.

5.2. DASY6 Measurement System Diagram

The DASY6 system in cDASY6/DASY5 V5.2 SAR Configuration is shown below:



The System consist of the following components:

DASY6 Measurement Server, Data Acquisition Electronics (DAE), Probes, Light-Beam Unit, Phantoms, Media, Device Holder for SAM-Twin Phantom, Laptop Extension Kit to Mounting Device, Robot System Platform & Pedestal, Verification of the Parameters with the Dielectric Assessment Kit (DAK), Modulation and Interference Analyzer (MAIA), Omni-Directional Ultra-Wideband Antenna (ANT), cDASY6 software, DASY5 NEO software and SEMCAD data evaluation software.

5.3. System Components Details

DASY6 Platforms MP6E-TX60L

MP6E-TX60L platform is a compact cost-effective platform based on TX60L. It consists of:

- a stable non-metallic platform for the TX60L robot
- a frame for two standard-size phantoms (1.0×0.5 m)
- a frame for one half-size phantom (0.5×0.5 m)

It includes two easily moveable trolleys for the phone and tablet/computer positioner and two platforms for positioning dipoles and other antennas.



Material The beams consist of a composite of wood and epoxy (permittivity of 3.3 and loss tangent of <0.07)

Size The footprint of the platform is 1590 mm $\times$ 1060 mm.

Robots -TX60L

The MRT DASY6 system uses the high-precision industrial robots TX60L from Staubli SA (France). The TX robot family - the successor of the well-known RX robot family - continues to offer the features important for DASY6 applications:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance-free as all gears are direct drive, no belt drives)
- Jerk-free straight movements (brushless synchron motors, no stepper motors)
- Low extremely low frequency (ELF) interference (motor control fields are shielded by the closed metallic construction)



The 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 provided on CDs delivered with the robot. Paper manuals are available directly from Staubli upon request.



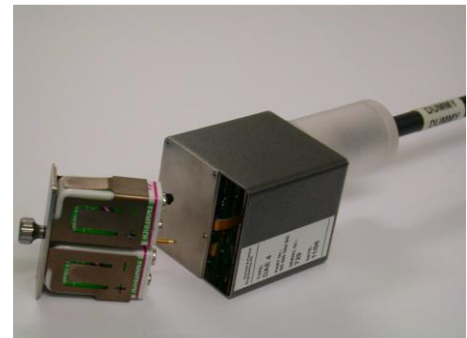
DASY6 Measurement Server

The DASY6 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 electronics box, as well as the 16-bit AD converter system for optical detection and digital I/O interface are contained on the DASY6 I/O board, which is directly connected to the PC/104 bus of the CPU board. The measurement server performs all real-time data evaluations of field measurements and surface detection, controls robot movements, and handles safety operations.



Data Acquisition Electronics (DAE)

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.



Probes

E-Field Probe(EX3DV4)

The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. SPEAG conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528, EN 62209-1, IEC 62209, etc.) under ISO 17025.

Construction:

Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)

Frequency: 4 MHz ~ 10 GHz

Linearity: ± 0.2 dB (30 MHz ~ 10 GHz)

Directivity:

± 0.1 dB in TSL (rotation around probe axis)

± 0.3 dB in TSL (rotation normal to probe axis)

Dynamic Range: 10 μ W/g to 100 mW/g; Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)

Dimensions:

Overall length: 337 mm (Tip: 20 mm)

Tip diameter: 2.5 mm (Body: 12 mm)

Typical distance from probe tip to dipole centers: 1 mm

Applications:

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 than 30%.



MSTV1 (Mother Scan Teaching V1) Electronics & TP6V2 (Teaching Probe 6V2) Probe

MSTV1 (Mother Scan Teaching V1) electronics together with the TP6V2 (Teaching Probe 6V2) probe is used for mother scan of DASY6 system. This probe uses a 3D Renishaw LP2 sensor which ensures accurate detection of any shape and a measurement repeatability of 8 μ m.



Light-Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm, as well as the probe length and the horizontal probe offset, are measured. The software then corrects all movements within the measurement jobs, such that the robot coordinates are valid for the probe tip.



The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.

Phantoms

SAM-Twin Phantom

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

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

Material Vinyl ester, fiberglass reinforced (VE-GF)

Liquid Compatibility The phantom shell is compatible with SPEAG tissue simulating liquids (sugar and oil based). Use of other liquids may render the phantom warranty void (see note or consult SPEAG support).

Shell Thickness 2 ± 0.2 mm (6 ± 0.2 mm at ear point)

Dimensions Length: 1000 mm
(incl. Wooden Width: 500 mm
Support) Height: adjustable feet

Filling Volume approx. 25 liters

Support DASY6: standard-size platform slot
DASY52 stand-alone: SPEAG standard phantom table

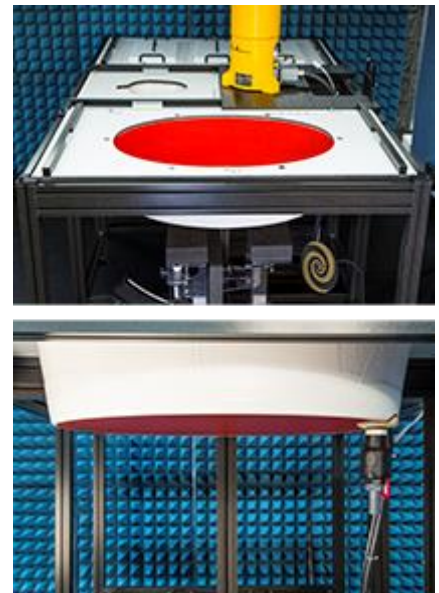


ELI phantom

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

ELI V5.0 and higher has the same shell geometry and is manufactured from the same material as ELI V4.0, but has reinforced top structure. ELI V6.0, released in August 2014, has the same shell geometry as ELI V4.0 but offers increased longterm stability.

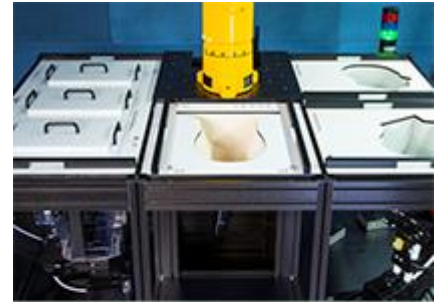
Material	Vinyl ester, fiberglass reinforced (VE-GF)
Liquid Compatibility	The phantom shell is compatible with SPEAG tissue simulating liquids (sugar and oil based). Use of other liquids may render the phantom warranty void (see note or consult SPEAG support).
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm Minor axis: 400 mm
Filling Volume	approx. 30 liters
Support	DASY6: standard-size platform slot DASY52 stand-alone: SPEAG standard phantom table



SAM Face Down Phantom

The SAM Face Down Phantom V10 allows assessment of the exposure of the face and in particular the eyes for handheld devices operated in front of the face. e.g., video phones, cameras, organizers, etc. It is manufactured from high precision injection molded polypropylene. The Mounting Device for Transmitters including extensions kit can be used to position the device.

Material	Epoxy based
Liquid Compatibility	The phantom shell is compatible with SPEAG tissue simulating liquids (sugar and oil based). Use of other liquids may render the phantom warranty void (see note or consult SPEAG support).
Shell Thickness	2 ± 0.2 mm (6 mm at ear point)
Head Shape	Standard compatible SAM head.



SAM Head Stand Phantom

The SAM Head Stand Phantom V10 allows assessment of the exposure of the top-head or around-the-head wireless accessories, e.g., head-belts, etc. It is manufactured from high precision injection molded polypropylene. The Mounting Device for Transmitters including extensions kit can be used to position the device.

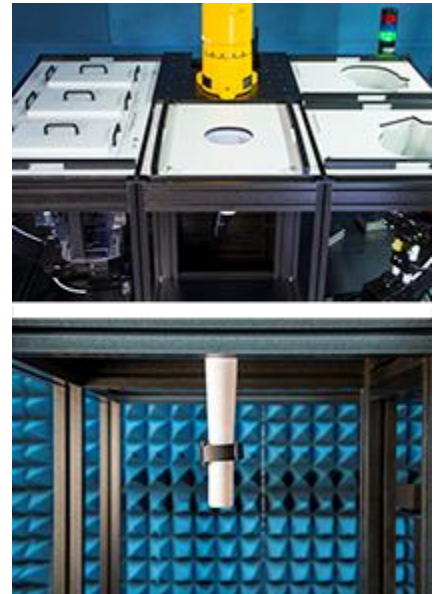
Material	Epoxy based
Liquid Compatibility	The phantom shell is compatible with SPEAG tissue simulating liquids (sugar and oil based). Use of other liquids may render the phantom warranty void (see note or consult SPEAG support).
Shell Thickness	2 ± 0.2 mm (6 mm at ear point)
Head Shape	Standard compatible SAM head.



Wrist Phantom

The Wrist Phantom V10 is shape-compatible with the CTIA approved OTA GFPC-V1 and optimized for SAR evaluation of watches and other wireless hand accessories.

Material	Epoxy based
Liquid Compatibility	The phantom shell is compatible with SPEAG tissue simulating liquids (sugar and oil based). Use of other liquids may render the phantom warranty void (see note or consult SPEAG support).
Shell Thickness	Shell Thickness
Wrist Shape	Design compatible with CTIA forearm.



Device Holder for SAM-Twin Phantom

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of $\pm 0.5\text{mm}$ would produce uncertainty in the SAR of $\pm 20\%$. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions at which the devices must be measured are defined by the standards.

MD4HHTV5 - Mounting Device for Hand-Held Transmitters

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat).

Material: Polyoxymethylene (POM)



MDA4WTV5 - Mounting Device Adaptor for Ultra Wide Transmitters

An upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.

Material: Polyoxymethylene (POM)



MDA4SPV6 - Mounting Device Adaptor for Smart Phones

The solid low-density MDA4SPV6 adaptor assuring no impact on the DUT radiation performance and is conform with any DUT design and shape.

Material: ROHACELL



MD4LAPV5 - Mounting Device for Laptops and other Body-Worn Transmitters

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device (Body-Worn) enables testing of transmitter devices according to IEC 62209-2 specifications. The device holder can be locked for positioning at a flat phantom section.

Material: Polyoxymethylene (POM), PET-G, Foam



MDA4LAP - Mounting Device Adaptor for Laptops

A simple but effective and easy-to-use extension for the Mounting Device; facilitates testing of larger devices (e.g., laptops, cameras, etc.) according to IEC 62209-2; lightweight and fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin SAM as well as ELI and other Flat Phantoms.

Material: Polyoxymethylene (POM), PET-G, Foam



Modulation and Interference Analyzer(MAIA)

MAIA is a hardware interface used to evaluate the modulation and audio interference characteristics of RF signals in the frequency range 698 - 6000 MHz. DASY6 evaluates the time-domain and frequency domain properties of the uplink signal transmitted by the DUT during SAR measurement with MAIA. MAIA uses USB powered active electronics to identify the modulation of the DUT. It can be operated over the air interface using the built-in ultra-broadband planar log spiral antenna (698 - 6000 MHz) or in conducted mode using the coaxial SMA 50 Ohm connector (300 - 6000 MHz).

To prevent damage in conducted mode due to high peak power, an external RF attenuator may be mounted. The LED on the MAIA hardware also indicates whether it is connected.



DAK-3.5 (200MHz – 20GHz)

This precision dielectric measurement system is designed to cover the 200MHz – 20GHz frequency range with a single open-ended coaxial dielectric probe. The system uses advanced algorithms and novel hardware to measure the dielectric properties of liquids, solids, and semi-solids over a broad range of parameters. The measurement method is fast and non-destructive to the material under test.



Evaluation of reference liquids over a broad frequency range for specific absorption rate (SAR) measurements, in accordance with IEC 62209, IEEE 1528, and several federal regulations.

Evaluating Software: DAK software version 2.0

MRT simulating liquid

Product	Test Frequency (MHz)	Main Ingredients
HSL450	400 – 500	Water, Sucrose, NaCl
MSL450	400 – 500	Water, Sucrose, NaCl

Speag Broad-Band simulating liquid

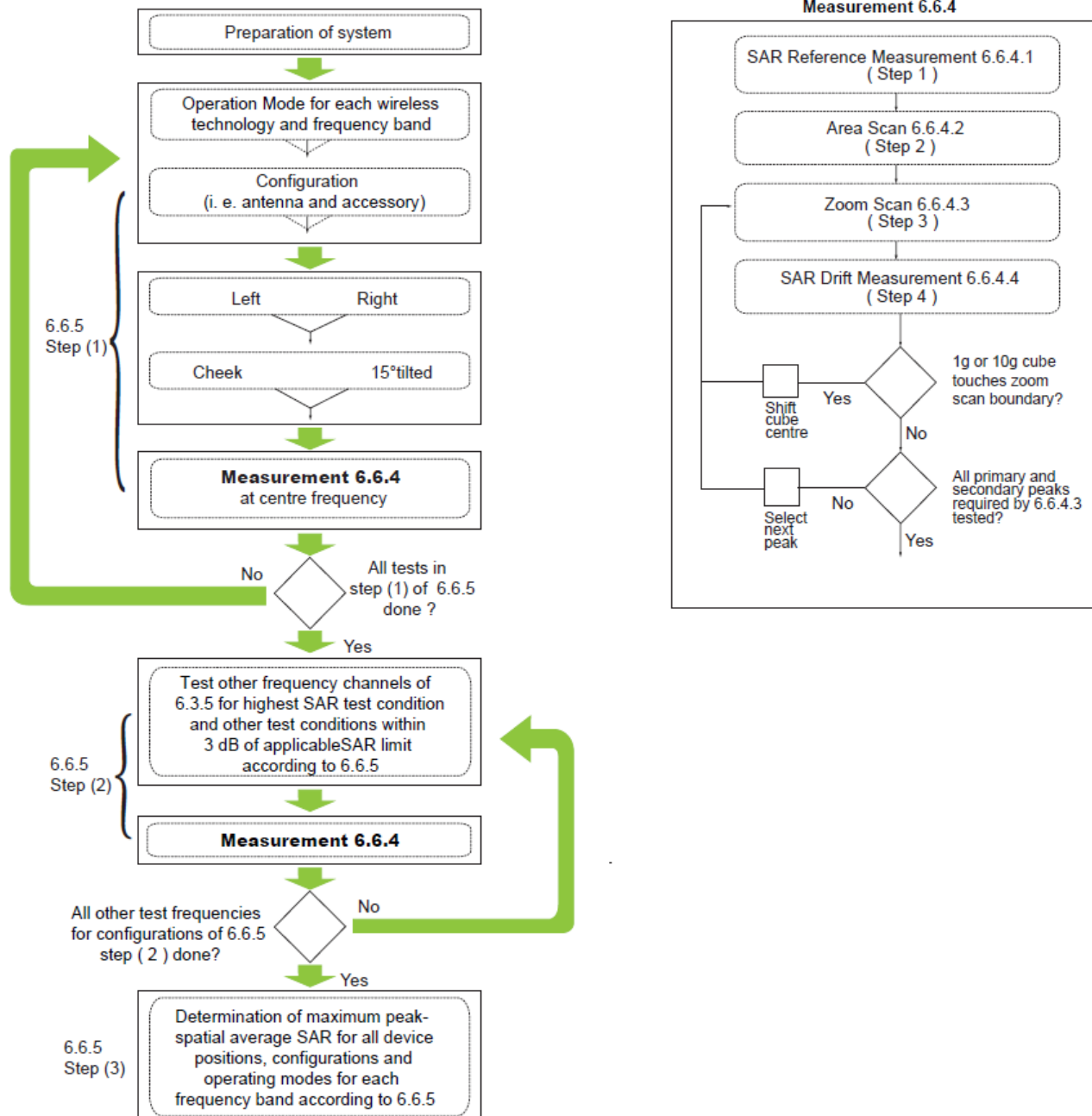
Product	Test Frequency (MHz)	Main Ingredients
HBBL600-10000V6	600 – 10000	Water, Oil
MBBL600-6000V6	600 – 6000	Water, Oil

6. The SAR Measurement Procedure

6.1. Measurement Process Diagram

General Procedure

For IEEE1528-2013 Head SAR



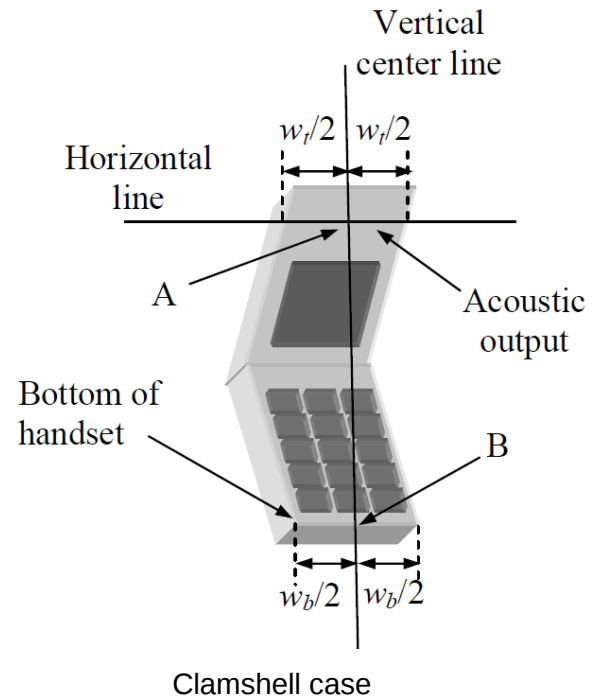
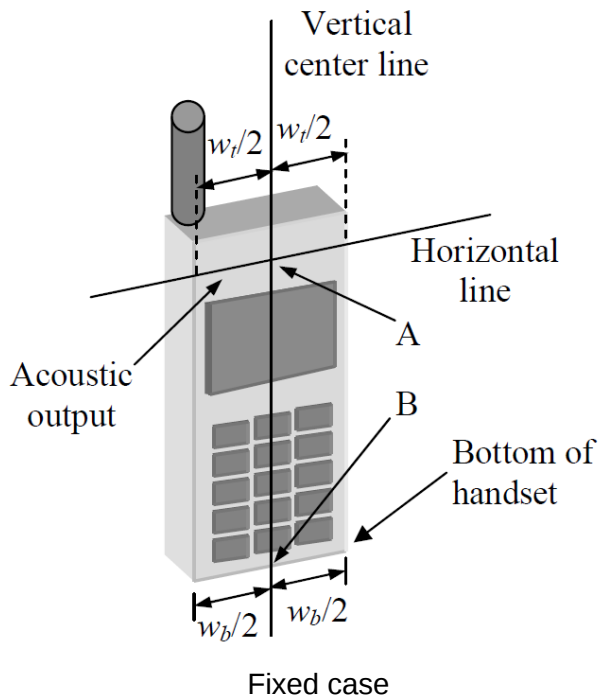
For Body SAR

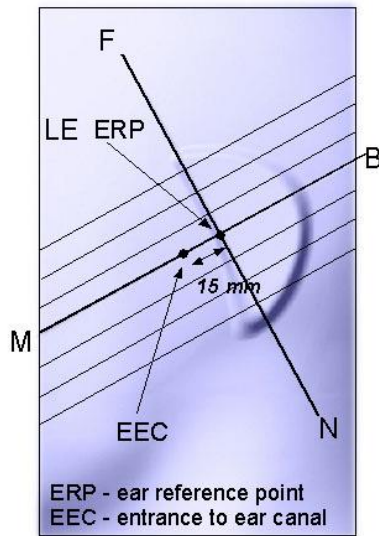
SAR scan procedures described in section 2.7 of KDB 865664 D01 v01r04 should be applied to body SAR test.

6.2. Test Position Definition

■ Head SAR Test Position

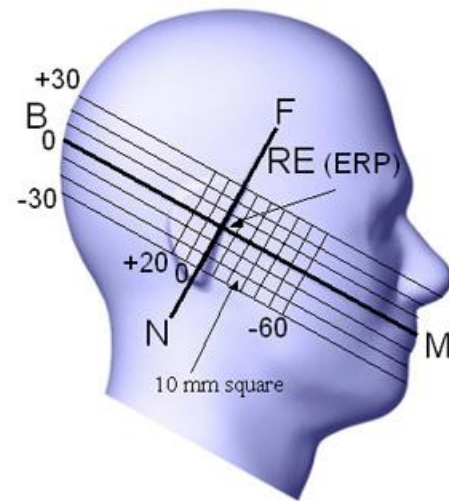
Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width w_t of the handset at the level of the acoustic output [point A in Fixed case and Clamshell case], and the midpoint of the width w_b at the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output [see Fixed case]. The horizontal line is also tangential to the face of the handset at point A. The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset [see Clamshell case], especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets, the vertical centerline passes through point A but not the tip edge of the phone.





Key

- B Direction of B-M line back endpoint
- F Direction of N-F line front endpoint
- N Direction of N-F line neck endpoint
- M Mouth reference point
- LE Left ear reference point (ERP)



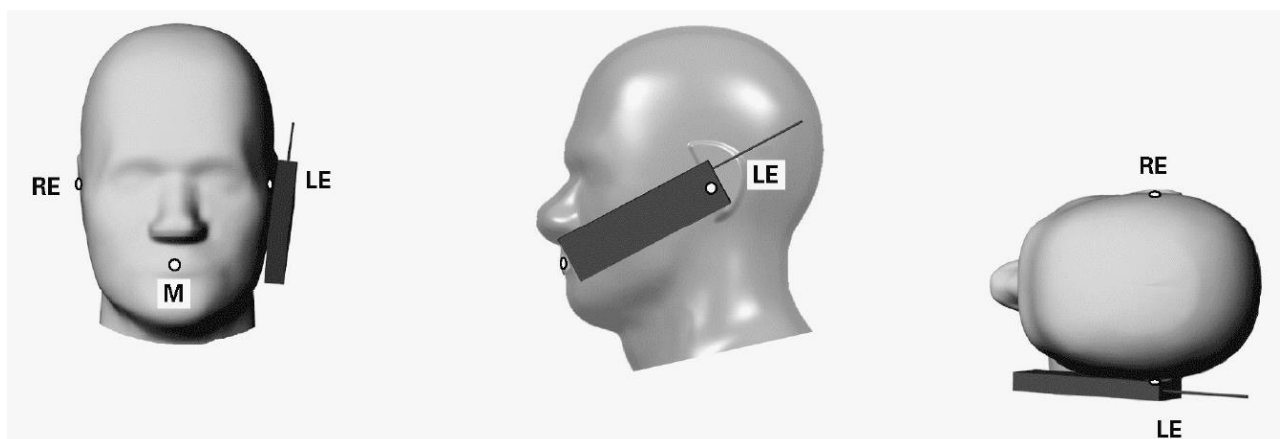
Key

- B Line B-M back endpoint
- M Line B-M front endpoint
- N Line N-F neck endpoint
- F Line N-F front endpoint
- RE Right ear reference point (ERP)

Cheek Position

The cheek position has the following characteristics, based on the geometrical lines described above:

- The N-F line (see above) is in the plane defined by the handset vertical centerline and horizontal line
- Handset touches the pinna
- The handset vertical centerline is aligned with the Reference Plane.



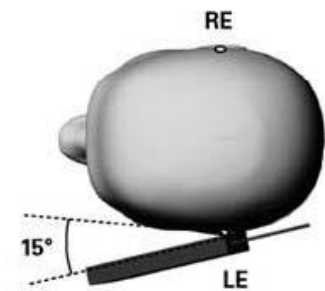
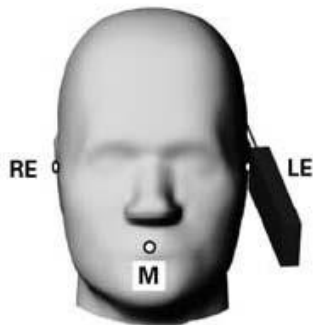
Key

- M Mouth reference point
- LE Left ear reference point
- RE Right ear reference point

Tilt Position

The tilt position is established as follows:

- Repeat the steps to place the device in the cheek position.
- While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15° .
- Rotate the handset around the horizontal line by 15° .
- While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset shall be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point on the handset is in contact with the phantom, e.g., the antenna with the back of the head.



Key

- | | |
|----|---------------------------|
| M | Mouth reference point |
| LE | Left ear reference point |
| RE | Right ear reference point |

■ Body SAR Test Position

For body-worn accessory, hotspot mode and other exposure conditions to human body should be conducted pursuant to the test position requirements of SAR KDBs for certain product.

6.3. Test Procedure

Step 1 Setup a Connection

First, engineer should record the conducted power before the test. Then establish a call in handset at the maximum power level with a base station simulator via air interface, or make the EUT establish transmission by itself in testing band. Place the EUT to certain test position.

Step 2 Power Reference Measurements

To measure the local E-field value at a fixed location which value will be taken as a reference value for calculating a possible power drift.

Step 3 Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASYS software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

Area Scan Parameters extracted from KDB 865664 D01v01r04

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 mm ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2)$ mm ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 - 3 GHz: ≤ 12 mm	3 - 4 GHz: ≤ 12 mm 4 - 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.		

Step 4 Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan Parameters extracted from KDB 865664 D01 v01r04

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx _{Zoom} , Δy _{Zoom}			≤ 2 GHz: ≤ 8 mm 2 - 3 GHz: ≤ 5 mm*	3 - 4 GHz: ≤ 5 mm* 4 - 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz _{Zoom} (n)		≤ 5 mm	3 - 4 GHz: ≤ 4 mm 4 - 5 GHz: ≤ 3 mm 5 - 6 GHz: ≤ 2 mm
	graded grid	Δz _{Zoom} (1): between 1 st two points closest to phantom surface	≤ 4 mm	3 - 4 GHz: ≤ 3 mm 4 - 5 GHz: ≤ 2.5 mm 5 - 6 GHz: ≤ 2 mm
		Δz _{Zoom} (n>1): between subsequent points	≤ 1.5·Δz _{Zoom} (n-1) mm	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3-4 GHz: ≥ 28 mm 4-5 GHz: ≥ 25 mm 5-6 GHz: ≥ 22 mm
Note: * When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

Step 5 Power Drift Measurements

Repetition of the E-field measurement at the fixed location mentioned in Step 1 to make sure the two results differ by less than ± 0.2 dB.

Step 6 Test Data

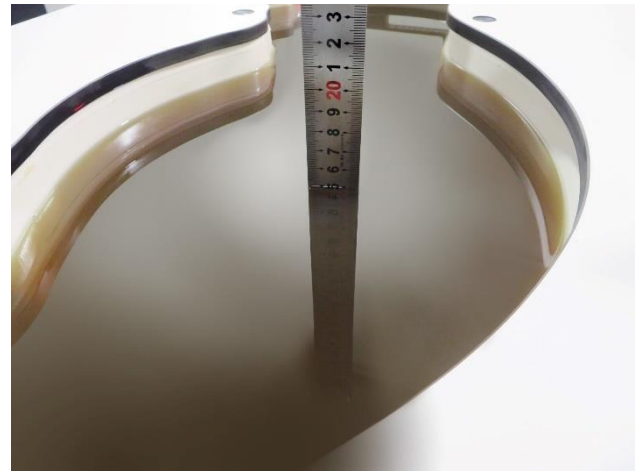
After the test, SAR test data should be exported by SEMCAD.

7. System Verificaiton

7.1. Tissue Check

- Refer to KDB 865664 D01 v01r04, the depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm with $\leq \pm 0.5$ cm variation for SAR measurements ≤ 3 GHz and ≥ 10.0 cm with $\leq \pm 0.5$ cm variation for measurements > 3 GHz.

15cm Depth Head Tissue



■ Dielectric properties of the head tissue-equivalent liquid

Frequency MHz	Relative Permittivity ϵ_r	Conductivity (σ) S/m
300	45.3	0.87
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
<i>1 450</i>	<i>40.5</i>	<i>1.20</i>
<i>1 500</i>	<i>40.4</i>	<i>1.23</i>
<i>1 640</i>	<i>40.2</i>	<i>1.31</i>
<i>1 750</i>	<i>40.1</i>	<i>1.37</i>
1 800	40.0	1.40
1 900	40.0	1.40
2 000	40.0	1.40
<i>2 100</i>	<i>39.8</i>	<i>1.49</i>
<i>2 300</i>	<i>39.5</i>	<i>1.67</i>
2 450	39.2	1.80
<i>2 600</i>	<i>39.0</i>	<i>1.96</i>
3 000	38.5	2.40
<i>3 500</i>	<i>37.9</i>	<i>2.91</i>
<i>4 000</i>	<i>37.4</i>	<i>3.43</i>
<i>4 500</i>	<i>36.8</i>	<i>3.94</i>
<i>5 000</i>	<i>36.2</i>	<i>4.45</i>
<i>5 200</i>	<i>36.0</i>	<i>4.66</i>
<i>5 400</i>	<i>35.8</i>	<i>4.86</i>
<i>5 600</i>	<i>35.5</i>	<i>5.07</i>
<i>5 800</i>	<i>35.3</i>	<i>5.27</i>
<i>6 000</i>	<i>35.1</i>	<i>5.48</i>

Note: For convenience, permittivity and conductivity values at those frequencies which are not part of the original data provided by Drossos et al. [33] or the extension to 5800MHz are provided (i.e. the values shown in italics). These values were linearly interpolated between the values in this table that are immediately above and below these values, except the values at 6000MHz that were linearly extrapolated from the values at 3000MHz and 5800MHz.

■ Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using DASY6 Dielectric Assessment Kit and keysight PNA-L Network Analyzer N5234B.

Tissue parameter for Head								
Freq. (MHz)	Perm.	Cond.	Target Perm.	Target Cond.	Deviation Perm. %	Deviation Cond. %	Tissue Temperature	Test Date
750	42.85	0.87	41.94	0.89	2.17	-2.25	22.5°C	2021.02.22
850	42.52	0.91	41.50	0.92	2.46	-1.09	22.5°C	2021.02.23
1750	40.93	1.31	40.08	1.37	2.12	-4.38	22.5°C	2021.02.21
1900	40.72	1.40	40.00	1.40	1.80	0.00	22.5°C	2021.02.20
2450	39.98	1.80	39.20	1.80	1.99	0.00	22.5°C	2021.02.24
2450	39.70	1.79	39.20	1.80	1.28	-0.56	22.5°C	2021.02.26
2600	39.71	1.92	39.01	1.96	1.79	-2.04	22.5°C	2021.02.25
5250	34.69	4.49	35.93	4.71	-3.45	-4.67	22.5°C	2021.02.27
5600	34.05	4.87	35.53	5.07	-4.17	-3.94	22.5°C	2021.02.28
5750	33.79	5.03	35.36	5.22	-4.44	-3.64	22.5°C	2021.02.28

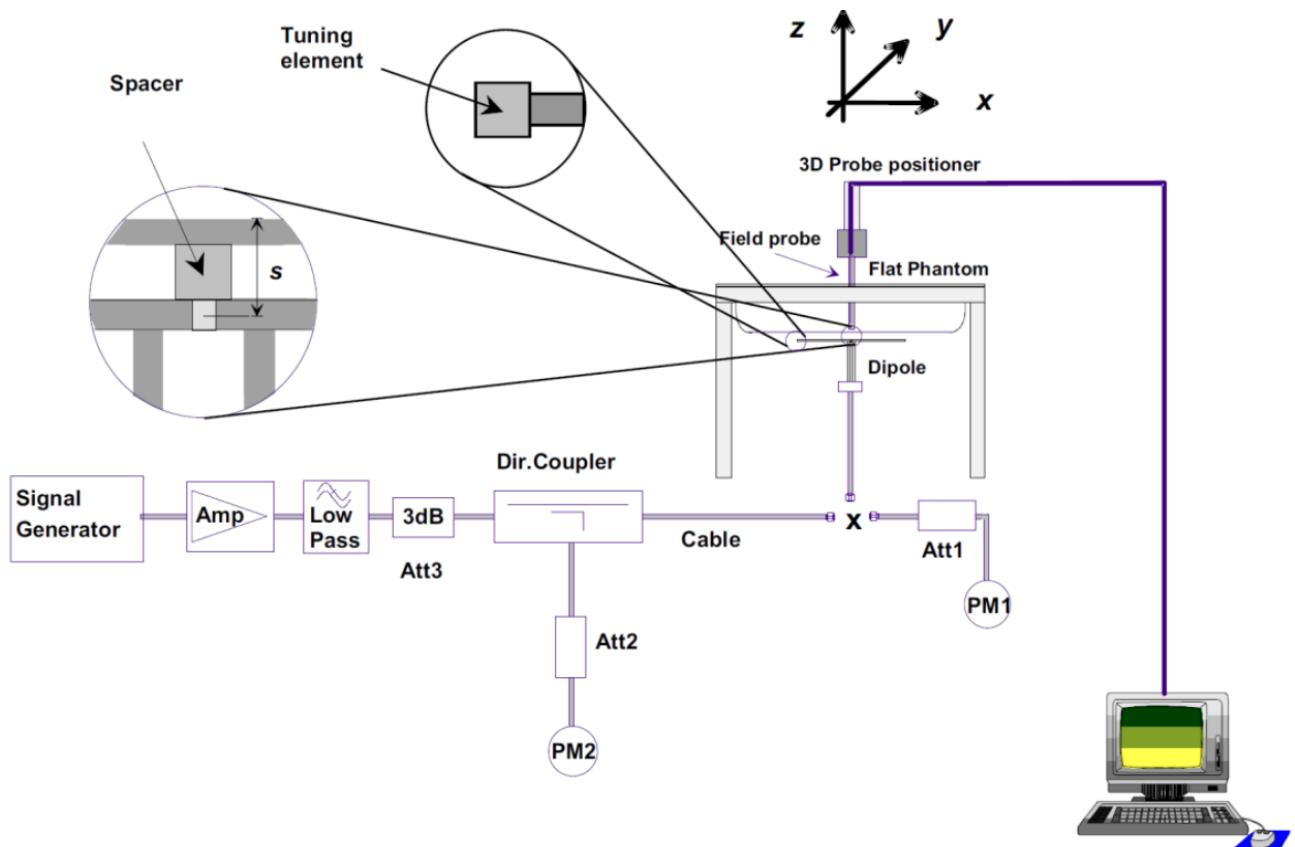
Note: The $\pm 5\%$ deviation of tissue parameter is recommended.

7.2. System Check

■ Purpose

The purpose of the system check is to verify that the system operates within its specifications at the device test frequencies. System check verifies the measurement repeatability of a SAR system before compliance testing and is not a validation of all system specifications. The latter is not required for testing a device but is mandatory before the system is deployed.

■ System Performance Check Setup Diagram



■ System Check Procedure

The system check procedure is a complete 1g and 10g peak spatial-average SAR measurement using a source having a previously determined system check target value. The measured 1g and 10g SAR are normalized to the target input power of the specific source and compared to their respective target values.

A description of the different measurement tasks to be performed is given below, together with the information that can be deduced from their results:

a. The Power Reference Measurement and Power Drift Measurement are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the amplifier output power. If it is too high (above ± 0.1 dB), the system check should be repeated; some amplifiers have very high drift during warm-up. A stable amplifier gives drift results in the DASY6 system below ± 0.02 dB.

b. The second step is optional. For probes with integrated optical surface detection sensor this step must be conducted, otherwise the step can be skipped. The Surface Check tests the optical surface detection system of the DASY6 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above ± 0.1 mm). In that case it is better to abort the system check and stir the liquid.

c. The Area Scan measures the SAR above the dipole on a plane parallel to the surface. It is used to locate the approximate location of the peak SAR. The proposed scan uses large grid spacing for faster measurement; due to the symmetric field, the peak detection is reliable. If a finer graphic is desired, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result.

d. The Zoom Scan measures the field in a volume around the peak SAR value assessed in the previous Area Scan.

If the system check gives reasonable results, the SAR peak, 1 g and 10 g spatial average SAR values normalized to 1 W dipole input power give reference data for comparisons. The next sections analyze the expected uncertainties of these values, as well as additional checks for further information or troubleshooting.

■ Result of System Performance Check

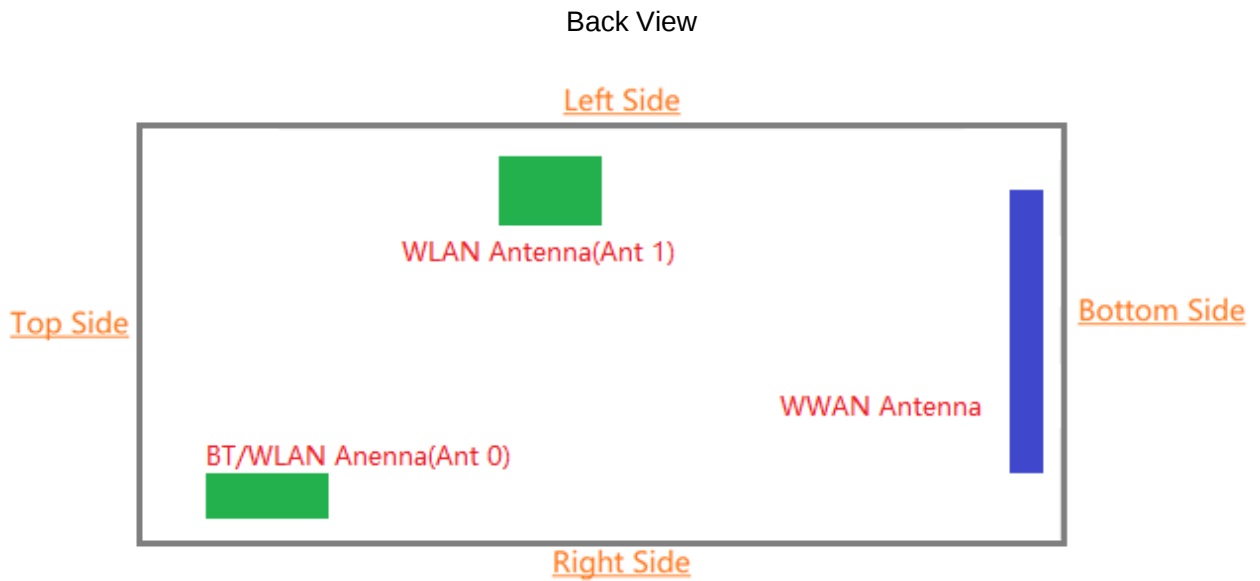
System check for Head								
Freq. (MHz)	1g SAR (W/kg)	10g SAR (W/kg)	Target 1g SAR (W/kg)	Target 10g SAR (W/kg)	Deviation 1g SAR (%)	Deviation 10g SAR (%)	Tissue Temp.	Test Date
750	8.52	5.52	8.20	5.38	3.90	2.60	22.5°C	2021.02.22
850	9.48	6.12	9.72	6.26	-2.47	-2.24	22.5°C	2021.02.23
1750	36.20	19.40	36.60	19.30	-1.09	0.52	22.5°C	2021.02.21
1900	41.20	21.56	40.00	21.10	3.00	2.18	22.5°C	2021.02.20
2450	54.40	25.64	52.10	24.40	4.41	5.08	22.5°C	2021.02.24
2450	53.20	25.04	52.10	24.40	2.11	2.62	22.5°C	2021.02.26
2600	56.00	25.44	55.90	25.10	0.18	1.35	22.5°C	2021.02.25
5250	81.10	23.30	81.70	23.30	-0.73	0.00	22.5°C	2021.02.27
5600	82.00	23.30	85.40	24.30	-3.98	-4.12	22.5°C	2021.02.28
5750	76.50	21.80	79.10	22.50	-3.29	-3.11	22.5°C	2021.02.28

Note:

1. The $\pm 10\%$ deviation of system check result is required.
2. System check value listed above has been harmonized to 1W.

8. Analysis and Results

8.1. Antenna Location



WWAN Antenna Distance to Surfaces/Edges (mm)					
Front side	Back side	Left side	Right side	Top side	Bottom side
5	12	6	6	185	3

Ant 0 Antenna Distance to Surfaces/Edges (mm)					
Front side	Back side	Left side	Right side	Top side	Bottom side
10	5	6	55	11	142

Ant 1 Antenna Distance to Surfaces/Edges (mm)					
Front side	Back side	Left side	Right side	Top side	Bottom side
10	5	48	6	59	118

Note: The display diagonal dimension of EUT is 101mm and overall diagonal dimension of EUT is 202mm.

8.2. Conducted Power

■ WCDMA

Band	Mode		CH.	Freq. (MHz)	Average Power (dBm)	Max. Tune-up Power (dBm)
Band 2	12.2kbps RMC		9262	1852.4	22.95	23.5
			9400	1880	22.77	23.0
			9538	1907.6	22.73	23.0
	HSDPA	SUB-TEST 1	9262	1852.4	22.93	23.5
			9400	1880	22.75	23.0
			9538	1907.6	22.71	23.0
		SUB-TEST 2	9262	1852.4	22.90	23.5
			9400	1880	22.72	23.0
			9538	1907.6	22.70	23.0
		SUB-TEST 3	9262	1852.4	22.42	23.0
			9400	1880	22.25	22.5
			9538	1907.6	22.28	22.5
		SUB-TEST 4	9262	1852.4	22.38	22.5
			9400	1880	22.21	22.5
			9538	1907.6	22.19	22.5
	HSUPA	SUB-TEST 1	9262	1852.4	22.94	23.5
			9400	1880	22.75	23.0
			9538	1907.6	22.71	23.0
		SUB-TEST 2	9262	1852.4	20.89	21.5
			9400	1880	20.71	21.0
			9538	1907.6	20.68	21.0
		SUB-TEST 3	9262	1852.4	21.91	22.5
			9400	1880	21.73	22.0
			9538	1907.6	21.68	22.0
		SUB-TEST 4	9262	1852.4	20.84	21.0
			9400	1880	20.67	21.0
			9538	1907.6	20.66	21.0
		SUB-TEST 5	9262	1852.4	22.91	23.5
			9400	1880	22.73	23.0
			9538	1907.6	22.69	23.0

Band	Mode		CH.	Freq. (MHz)	Average Power (dBm)	Max. Tune-up Power (dBm)
Band 5	12.2kbps RMC		4132	826.4	23.12	23.5
			4183	836.6	23.27	23.5
			4233	846.6	23.27	23.5
	HSDPA	SUB-TEST 1	4132	826.4	23.09	23.5
			4183	836.6	23.25	23.5
			4233	846.6	23.22	23.5
		SUB-TEST 2	4132	826.4	23.07	23.5
			4183	836.6	23.21	23.5
			4233	846.6	23.20	23.5
		SUB-TEST 3	4132	826.4	22.66	23.0
			4183	836.6	22.71	23.0
			4233	846.6	22.74	23.0
		SUB-TEST 4	4132	826.4	22.63	23.0
			4183	836.6	22.68	23.0
			4233	846.6	22.72	23.0
	HSUPA	SUB-TEST 1	4132	826.4	23.10	23.5
			4183	836.6	23.24	23.5
			4233	846.6	23.23	23.5
		SUB-TEST 2	4132	826.4	21.11	21.5
			4183	836.6	21.21	21.5
			4233	846.6	21.22	21.5
		SUB-TEST 3	4132	826.4	22.14	22.5
			4183	836.6	22.22	22.5
			4233	846.6	22.21	22.5
		SUB-TEST 4	4132	826.4	21.09	21.5
			4183	836.6	21.18	21.5
			4233	846.6	21.20	21.5
		SUB-TEST 5	4132	826.4	23.08	23.5
			4183	836.6	23.21	23.5
			4233	846.6	23.20	23.5

LTE Band 2

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
20	1	0	18700	1860	23.55	24.0	22.68	23.0
			18900	1880	23.56	24.0	22.70	23.0
			19100	1900	23.76	24.0	23.64	24.0
		49	18700	1860	23.52	24.0	22.67	23.0
			18900	1880	23.49	24.0	22.68	23.0
			19100	1900	23.72	24.0	23.61	24.0
		99	18700	1860	23.47	24.0	22.64	23.0
			18900	1880	23.43	24.0	22.68	23.0
			19100	1900	23.70	24.0	23.59	24.0
	50	0	18700	1860	22.51	23.0	22.01	22.5
			18900	1880	22.50	23.0	22.04	22.5
			19100	1900	22.47	23.0	22.83	23.0
		24	18700	1860	22.56	23.0	22.05	22.5
			18900	1880	22.49	23.0	22.03	22.5
			19100	1900	22.47	23.0	22.82	23.0
		49	18700	1860	22.58	23.0	22.03	22.5
			18900	1880	22.47	23.0	22.06	22.5
			19100	1900	22.43	23.0	22.80	23.0
	100	0	18700	1860	22.44	23.0	21.63	22.0
			18900	1880	22.40	23.0	21.84	22.0
			19100	1900	22.46	23.0	22.37	22.5

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
15	1	0	18675	1857.5	23.42	24.0	22.72	23.0
			18900	1880	23.50	24.0	22.82	23.0
			19125	1902.5	23.62	24.0	23.07	23.5
		36	18675	1857.5	23.40	24.0	22.74	23.0
			18900	1880	23.48	24.0	22.81	23.0
			19125	1902.5	23.58	24.0	23.05	23.5
		74	18675	1857.5	23.39	24.0	22.72	23.0
			18900	1880	23.45	24.0	22.79	23.0
			19125	1902.5	23.57	24.0	23.02	23.5
	36	0	18675	1857.5	22.40	23.0	22.15	22.5
			18900	1880	22.42	23.0	22.23	22.5
			19125	1902.5	22.54	23.0	22.50	23.0
		18	18675	1857.5	22.45	23.0	22.14	22.5
			18900	1880	22.43	23.0	22.25	22.5
			19125	1902.5	22.49	23.0	22.47	23.0
		37	18675	1857.5	22.43	23.0	22.11	22.5
			18900	1880	22.40	23.0	22.20	22.5
			19125	1902.5	22.48	23.0	22.45	23.0
	75	0	18675	1857.5	22.45	23.0	21.74	22.0
			18900	1880	22.41	23.0	21.95	22.5
			19125	1902.5	22.57	23.0	22.03	22.5

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
10	1	0	18650	1855	23.46	24.0	22.79	23.0
			18900	1880	23.48	24.0	22.88	23.0
			19150	1905	23.61	24.0	22.78	23.0
		25	18650	1855	23.43	24.0	22.79	23.0
			18900	1880	23.46	24.0	22.85	23.0
			19150	1905	23.59	24.0	22.77	23.0
		49	18650	1855	23.42	24.0	22.78	23.0
			18900	1880	23.42	24.0	22.86	23.0
			19150	1905	23.54	24.0	22.76	23.0
	25	0	18650	1855	22.38	22.5	22.18	22.5
			18900	1880	22.43	23.0	22.17	22.5
			19150	1905	22.51	23.0	22.17	22.5
		12	18650	1855	22.53	23.0	22.16	22.5
			18900	1880	22.43	23.0	22.14	22.5
			19150	1905	22.53	23.0	22.15	22.5
		25	18650	1855	22.51	23.0	22.13	22.5
			18900	1880	22.41	23.0	22.12	22.5
			19150	1905	22.51	23.0	22.10	22.5
	50	0	18650	1855	22.43	23.0	21.86	22.0
			18900	1880	22.42	23.0	21.94	22.5
			19150	1905	22.52	23.0	21.77	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
5	1	0	18625	1852.5	23.45	24.0	22.88	23.0
			18900	1880	23.50	24.0	22.99	23.5
			19175	1907.5	23.49	24.0	22.94	23.5
		12	18625	1852.5	23.42	24.0	22.86	23.0
			18900	1880	23.47	24.0	22.99	23.5
			19175	1907.5	23.46	24.0	22.92	23.5
		24	18625	1852.5	23.41	24.0	22.87	23.0
			18900	1880	23.45	24.0	22.98	23.5
			19175	1907.5	23.42	24.0	22.89	23.5
	12	0	18625	1852.5	22.41	23.0	22.24	22.5
			18900	1880	22.36	22.5	22.28	22.5
			19175	1907.5	22.47	23.0	22.26	22.5
		6	18625	1852.5	23.40	24.0	22.23	22.5
			18900	1880	22.32	22.5	22.25	22.5
			19175	1907.5	22.42	23.0	22.27	22.5
		13	18625	1852.5	23.40	24.0	22.19	22.5
			18900	1880	22.34	22.5	22.17	22.5
			19175	1907.5	22.40	23.0	22.23	22.5
	25	0	18625	1852.5	22.40	23.0	21.98	22.5
			18900	1880	22.45	23.0	21.97	22.5
			19175	1907.5	22.43	23.0	21.85	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
3	1	0	18615	1851.5	23.31	23.5	22.68	23.0
			18900	1880	23.34	23.5	22.70	23.0
			19185	1908.5	23.45	24.0	22.78	23.0
		7	18615	1851.5	23.25	23.5	22.63	23.0
			18900	1880	23.34	23.5	22.69	23.0
			19185	1908.5	23.45	24.0	22.75	23.0
		14	18615	1851.5	23.12	23.5	22.63	23.0
			18900	1880	23.31	23.5	22.67	23.0
			19185	1908.5	23.43	24.0	22.72	23.0
	8	0	18615	1851.5	22.42	23.0	21.97	22.5
			18900	1880	22.44	23.0	22.15	22.5
			19185	1908.5	22.52	23.0	22.21	22.5
		4	18615	1851.5	22.43	23.0	21.95	22.5
			18900	1880	22.42	23.0	22.14	22.5
			19185	1908.5	22.48	23.0	22.19	22.5
		7	18615	1851.5	22.38	22.5	21.63	22.0
			18900	1880	22.39	23.0	22.12	22.5
			19185	1908.5	22.46	23.0	22.15	22.5
	15	0	18615	1851.5	22.41	23.0	21.33	21.5
			18900	1880	22.45	23.0	21.99	22.5
			19185	1908.5	22.44	23.0	21.80	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
1.4	1	0	18607	1850.7	23.39	24.0	22.73	23.0
			18900	1880	23.36	23.5	22.75	23.0
			19193	1909.3	23.56	24.0	22.70	23.0
		2	18607	1850.7	23.32	23.5	22.71	23.0
			18900	1880	23.34	23.5	22.73	23.0
			19193	1909.3	23.55	24.0	22.68	23.0
		5	18607	1850.7	23.27	23.5	22.70	23.0
			18900	1880	23.33	23.5	22.72	23.0
			19193	1909.3	23.54	24.0	22.65	23.0
	3	0	18607	1850.7	23.39	24.0	21.86	22.0
			18900	1880	23.38	23.5	22.25	22.5
			19193	1909.3	23.23	23.5	22.19	22.5
		2	18607	1850.7	23.31	23.5	21.85	22.0
			18900	1880	23.32	23.5	22.23	22.5
			19193	1909.3	23.23	23.5	22.18	22.5
		3	18607	1850.7	23.28	23.5	21.82	22.0
			18900	1880	23.30	23.5	22.22	22.5
			19193	1909.3	23.21	23.5	22.14	22.5
	6	0	18607	1850.7	22.32	22.5	21.54	22.0
			18900	1880	22.38	22.5	22.01	22.5
			19193	1909.3	22.23	22.5	21.86	22.0

LTE Band 4

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
20	1	0	20050	1720	23.60	24.0	22.91	23.5
			20175	1732.5	23.56	24.0	22.88	23.0
			20300	1745	23.55	24.0	22.77	23.0
		49	20050	1720	23.55	24.0	22.89	23.5
			20175	1732.5	23.58	24.0	22.83	23.0
			20300	1745	23.53	24.0	22.75	23.0
		99	20050	1720	23.53	24.0	22.98	23.5
			20175	1732.5	23.53	24.0	22.85	23.0
			20300	1745	23.54	24.0	22.76	23.0
	50	0	20050	1720	22.58	23.0	22.39	23.0
			20175	1732.5	22.57	23.0	22.41	23.0
			20300	1745	22.56	23.0	22.35	22.5
		24	20050	1720	22.55	23.0	22.36	22.5
			20175	1732.5	22.53	23.0	22.37	22.5
			20300	1745	22.49	23.0	22.31	22.5
		49	20050	1720	22.57	23.0	22.35	22.5
			20175	1732.5	22.51	23.0	22.34	22.5
			20300	1745	22.42	23.0	22.29	22.5
	100	0	20050	1720	22.51	23.0	21.92	22.5
			20175	1732.5	22.50	23.0	21.76	22.0
			20300	1745	22.52	23.0	21.68	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
15	1	0	20025	1717.5	23.52	24.0	23.05	23.5
			20175	1732.5	23.43	24.0	22.86	23.0
			20325	1747.5	23.40	24.0	22.86	23.0
		36	20025	1717.5	23.51	24.0	23.04	23.5
			20175	1732.5	23.40	24.0	22.85	23.0
			20325	1747.5	23.37	23.5	22.84	23.0
		74	20025	1717.5	23.49	24.0	23.05	23.5
			20175	1732.5	23.38	23.5	22.85	23.0
			20325	1747.5	23.36	23.5	22.83	23.0
	36	0	20025	1717.5	22.60	23.0	22.45	23.0
			20175	1732.5	22.58	23.0	22.22	22.5
			20325	1747.5	22.53	23.0	22.42	23.0
		18	20025	1717.5	22.58	23.0	22.42	23.0
			20175	1732.5	22.52	23.0	22.18	22.5
			20325	1747.5	22.40	23.0	22.38	22.5
		37	20025	1717.5	22.54	23.0	22.40	23.0
			20175	1732.5	22.47	23.0	22.16	22.5
			20325	1747.5	22.37	22.5	22.35	22.5
	75	0	20025	1717.5	22.48	23.0	22.03	22.5
			20175	1732.5	22.57	23.0	21.73	22.0
			20325	1747.5	22.43	23.0	21.81	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
10	1	0	20000	1715	23.63	24.0	23.26	23.5
			20175	1732.5	23.57	24.0	22.90	23.5
			20350	1750	23.53	24.0	22.98	23.5
		25	20000	1715	23.60	24.0	23.25	23.5
			20175	1732.5	23.56	24.0	22.88	23.0
			20350	1750	23.54	24.0	22.96	23.5
		49	20000	1715	23.59	24.0	23.23	23.5
			20175	1732.5	23.53	24.0	22.89	23.5
			20350	1750	23.53	24.0	22.98	23.5
	25	0	20000	1715	22.57	23.0	22.32	22.5
			20175	1732.5	22.53	23.0	22.26	22.5
			20350	1750	22.58	23.0	22.42	23.0
		12	20000	1715	22.54	23.0	22.28	22.5
			20175	1732.5	22.47	23.0	22.23	22.5
			20350	1750	22.46	23.0	22.35	22.5
		25	20000	1715	22.53	23.0	22.25	22.5
			20175	1732.5	22.45	23.0	22.26	22.5
			20350	1750	22.42	23.0	22.33	22.5
	50	0	20000	1715	22.64	23.0	22.17	22.5
			20175	1732.5	22.53	23.0	21.85	22.0
			20350	1750	22.63	23.0	21.92	22.5

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
5	1	0	19975	1712.5	23.54	24.0	23.21	23.5
			20175	1732.5	23.52	24.0	23.03	23.5
			20375	1752.5	23.57	24.0	23.13	23.5
		12	19975	1712.5	23.54	24.0	23.17	23.5
			20175	1732.5	23.52	24.0	23.01	23.5
			20375	1752.5	23.55	24.0	23.11	23.5
		24	19975	1712.5	23.52	24.0	23.17	23.5
			20175	1732.5	23.48	24.0	22.98	23.5
			20375	1752.5	23.53	24.0	23.10	23.5
	12	0	19975	1712.5	22.61	23.0	22.37	22.5
			20175	1732.5	22.54	23.0	22.36	22.5
			20375	1752.5	22.53	23.0	22.46	23.0
		6	19975	1712.5	22.53	23.0	22.33	22.5
			20175	1732.5	22.50	23.0	22.31	22.5
			20375	1752.5	22.45	23.0	22.42	23.0
		13	19975	1712.5	22.55	23.0	22.31	22.5
			20175	1732.5	22.49	23.0	22.30	22.5
			20375	1752.5	22.42	23.0	22.39	23.0
	25	0	19975	1712.5	22.63	23.0	22.24	22.5
			20175	1732.5	22.51	23.0	22.05	22.5
			20375	1752.5	22.58	23.0	22.08	22.5

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
3	1	0	19965	1711.5	23.44	24.0	22.99	23.5
			20175	1732.5	23.47	24.0	22.81	23.0
			20385	1753.5	23.51	24.0	22.89	23.5
		7	19965	1711.5	23.45	24.0	22.96	23.5
			20175	1732.5	23.44	24.0	22.81	23.0
			20385	1753.5	23.50	24.0	22.89	23.5
		14	19965	1711.5	23.45	24.0	22.97	23.5
			20175	1732.5	23.46	24.0	22.79	23.0
			20385	1753.5	23.48	24.0	22.86	23.0
	8	0	19965	1711.5	22.59	23.0	22.53	23.0
			20175	1732.5	22.53	23.0	22.28	22.5
			20385	1753.5	22.55	23.0	22.40	23.0
		4	19965	1711.5	22.58	23.0	22.51	23.0
			20175	1732.5	22.52	23.0	22.26	22.5
			20385	1753.5	22.49	23.0	22.38	22.5
		7	19965	1711.5	22.59	23.0	22.48	23.0
			20175	1732.5	22.53	23.0	22.19	22.5
			20385	1753.5	22.47	23.0	22.37	22.5
	15	0	19965	1711.5	22.63	23.0	21.95	22.5
			20175	1732.5	22.57	23.0	21.90	22.5
			20385	1753.5	22.63	23.0	21.76	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
1.4	1	0	19957	1710.7	23.53	24.0	23.20	23.5
			20175	1732.5	23.45	24.0	22.92	23.5
			20393	1754.3	23.48	24.0	22.91	23.5
		2	19957	1710.7	23.54	24.0	23.18	23.5
			20175	1732.5	23.44	24.0	22.90	23.5
			20393	1754.3	23.46	24.0	22.90	23.5
		5	19957	1710.7	23.51	24.0	23.15	23.5
			20175	1732.5	23.41	24.0	22.89	23.5
			20393	1754.3	23.45	24.0	22.87	23.0
	3	0	19957	1710.7	23.68	24.0	22.96	23.5
			20175	1732.5	23.53	24.0	22.71	23.0
			20393	1754.3	23.51	24.0	22.74	23.0
		2	19957	1710.7	23.67	24.0	22.94	23.5
			20175	1732.5	23.52	24.0	22.68	23.0
			20393	1754.3	23.45	24.0	22.70	23.0
		3	19957	1710.7	23.65	24.0	22.91	23.5
			20175	1732.5	23.52	24.0	22.66	23.0
			20393	1754.3	23.42	24.0	22.62	23.0
	6	0	19957	1710.7	22.45	23.0	22.25	22.5
			20175	1732.5	22.44	23.0	21.94	22.5
			20393	1754.3	22.51	23.0	21.85	22.0

■ LTE Band 5

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
10	1	0	20450	829	24.01	24.5	23.48	24.0
			20525	836.5	24.00	24.5	23.45	24.0
			20600	844	23.97	24.5	23.44	24.0
		25	20450	829	23.00	23.5	22.93	23.5
			20525	836.5	22.97	23.5	22.88	23.0
			20600	844	22.95	23.5	22.84	23.0
		49	20450	829	23.15	23.5	22.35	22.5
			20525	836.5	24.12	24.5	23.62	24.0
			20600	844	24.11	24.5	23.58	24.0
	25	0	20450	829	24.12	24.5	23.56	24.0
			20525	836.5	23.10	23.5	22.86	23.0
			20600	844	23.11	23.5	22.83	23.0
		12	20450	829	23.10	23.5	22.82	23.0
			20525	836.5	23.04	23.5	22.48	23.0
			20600	844	23.86	24.0	23.30	23.5
		25	20450	829	23.85	24.0	23.27	23.5
			20525	836.5	23.85	24.0	23.25	23.5
			20600	844	22.88	23.0	22.80	23.0
	50	0	20450	829	22.86	23.0	22.77	23.0
			20525	836.5	22.85	23.0	22.75	23.0
			20600	844	22.87	23.0	22.58	23.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
5	1	0	20425	826.5	24.01	24.5	23.66	24.0
			20525	836.5	24.00	24.5	23.65	24.0
			20625	846.5	23.98	24.5	23.61	24.0
		12	20425	826.5	22.96	23.5	22.81	23.0
			20525	836.5	22.95	23.5	22.79	23.0
			20625	846.5	22.93	23.5	22.76	23.0
		24	20425	826.5	23.04	23.5	22.69	23.0
			20525	836.5	24.03	24.5	23.67	24.0
			20625	846.5	24.01	24.5	23.65	24.0
	12	0	20425	826.5	24.01	24.5	23.62	24.0
			20525	836.5	23.11	23.5	23.02	23.5
			20625	846.5	23.09	23.5	22.98	23.5
		6	20425	826.5	23.06	23.5	22.97	23.5
			20525	836.5	23.07	23.5	22.59	23.0
			20625	846.5	24.06	24.5	23.50	24.0
		13	20425	826.5	24.05	24.5	23.50	24.0
			20525	836.5	24.02	24.5	23.48	24.0
			20625	846.5	22.92	23.5	22.75	23.0
	25	0	20425	826.5	22.93	23.5	22.74	23.0
			20525	836.5	22.91	23.5	22.71	23.0
			20625	846.5	22.94	23.5	22.73	23.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
3	1	0	20415	825.5	23.98	24.5	23.41	24.0
			20525	836.5	23.96	24.5	23.38	23.5
			20635	847.5	23.96	24.5	23.36	23.5
		7	20415	825.5	23.01	23.5	22.85	23.0
			20525	836.5	22.98	23.5	22.83	23.0
			20635	847.5	22.96	23.5	22.80	23.0
		14	20415	825.5	22.99	23.5	22.78	23.0
			20525	836.5	24.01	24.5	23.44	24.0
			20635	847.5	23.99	24.5	23.39	24.0
	8	0	20415	825.5	24.01	24.5	23.36	23.5
			20525	836.5	23.05	23.5	22.90	23.5
			20635	847.5	23.04	23.5	22.86	23.0
		4	20415	825.5	23.03	23.5	22.84	23.0
			20525	836.5	22.98	23.5	22.55	23.0
			20635	847.5	23.89	24.5	23.22	23.5
		7	20415	825.5	23.87	24.0	23.20	23.5
			20525	836.5	23.87	24.0	23.19	23.5
			20635	847.5	22.90	23.5	22.83	23.0
	15	0	20415	825.5	22.90	23.5	22.81	23.0
			20525	836.5	22.91	23.5	22.78	23.0
			20635	847.5	22.93	23.5	22.87	23.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
1.4	1	0	20407	824.7	23.93	24.5	23.48	24.0
			20525	836.5	23.92	24.5	23.47	24.0
			20643	848.3	23.90	24.5	23.42	24.0
		2	20407	824.7	23.92	24.5	22.75	23.0
			20525	836.5	23.88	24.0	22.73	23.0
			20643	848.3	23.87	24.0	22.70	23.0
		5	20407	824.7	22.99	23.5	22.61	23.0
			20525	836.5	23.91	24.5	23.49	24.0
			20643	848.3	23.91	24.5	23.44	24.0
	3	0	20407	824.7	23.90	24.5	23.42	24.0
			20525	836.5	23.98	24.5	23.31	23.5
			20643	848.3	23.97	24.5	23.28	23.5
		2	20407	824.7	23.95	24.5	23.16	23.5
			20525	836.5	22.91	23.5	22.72	23.0
			20643	848.3	23.83	24.0	23.20	23.5
		3	20407	824.7	23.83	24.0	23.17	23.5
			20525	836.5	23.83	24.0	23.15	23.5
			20643	848.3	23.84	24.0	22.96	23.5
	6	0	20407	824.7	23.82	24.0	22.94	23.5
			20525	836.5	23.83	24.0	22.91	23.5
			20643	848.3	22.85	23.0	22.76	23.0

LTE Band 7

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
20	1	0	20850	2510	20.77	21.0	19.84	20.0
			21100	2535	20.76	21.0	19.77	20.0
			21350	2560	20.56	21.0	19.55	20.0
		49	20850	2510	20.76	21.0	19.81	20.0
			21100	2535	20.75	21.0	19.77	20.0
			21350	2560	20.55	21.0	19.54	20.0
		99	20850	2510	20.74	21.0	19.79	20.0
			21100	2535	20.73	21.0	19.76	20.0
			21350	2560	20.53	21.0	19.52	20.0
	50	0	20850	2510	19.41	20.0	18.83	19.0
			21100	2535	19.37	19.5	18.88	19.0
			21350	2560	19.34	19.5	18.79	19.0
		24	20850	2510	19.40	20.0	18.81	19.0
			21100	2535	19.35	19.5	18.85	19.0
			21350	2560	19.32	19.5	18.77	19.0
		49	20850	2510	19.40	20.0	18.80	19.0
			21100	2535	19.31	19.5	18.84	19.0
			21350	2560	19.27	19.5	18.77	19.0
	100	0	20850	2510	19.38	19.5	18.80	19.0
			21100	2535	19.22	19.5	18.87	19.0
			21350	2560	19.30	19.5	18.78	19.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
15	1	0	20825	2507.5	20.67	21.0	19.84	20.0
			21100	2535	20.40	21.0	19.76	20.0
			21375	2562.5	20.45	21.0	19.69	20.0
		36	20825	2507.5	20.68	21.0	19.83	20.0
			21100	2535	20.39	21.0	19.77	20.0
			21375	2562.5	20.45	21.0	19.69	20.0
		74	20825	2507.5	20.67	21.0	19.84	20.0
			21100	2535	20.36	20.5	19.76	20.0
			21375	2562.5	20.44	21.0	19.69	20.0
	36	0	20825	2507.5	19.44	20.0	19.35	19.5
			21100	2535	19.39	20.0	18.73	19.0
			21375	2562.5	19.27	19.5	18.68	19.0
		18	20825	2507.5	19.42	20.0	19.36	19.5
			21100	2535	19.36	19.5	18.73	19.0
			21375	2562.5	19.26	19.5	18.67	19.0
		37	20825	2507.5	19.39	20.0	19.28	19.5
			21100	2535	19.34	19.5	18.72	19.0
			21375	2562.5	19.24	19.5	18.65	19.0
	75	0	20825	2507.5	19.31	19.5	18.85	19.0
			21100	2535	19.33	19.5	18.70	19.0
			21375	2562.5	19.30	19.5	18.64	19.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
10	1	0	20800	2505	20.73	21.0	19.90	20.5
			21100	2535	20.30	20.5	19.58	20.0
			21400	2565	20.34	20.5	19.83	20.0
		25	20800	2505	20.72	21.0	19.90	20.5
			21100	2535	20.28	20.5	19.56	20.0
			21400	2565	20.32	20.5	19.82	20.0
		49	20800	2505	20.71	21.0	19.89	20.5
			21100	2535	20.27	20.5	19.56	20.0
			21400	2565	20.31	20.5	19.81	20.0
	25	0	20800	2505	19.52	20.0	18.84	19.0
			21100	2535	19.18	19.5	18.63	19.0
			21400	2565	19.26	19.5	18.72	19.0
		12	20800	2505	19.51	20.0	18.82	19.0
			21100	2535	19.15	19.5	18.61	19.0
			21400	2565	19.23	19.5	18.73	19.0
		25	20800	2505	19.50	20.0	18.79	19.0
			21100	2535	19.14	19.5	18.58	19.0
			21400	2565	19.19	19.5	18.69	19.0
	50	0	20800	2505	19.40	20.0	18.81	19.0
			21100	2535	19.26	19.5	18.61	19.0
			21400	2565	19.28	19.5	18.70	19.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
5	1	0	20775	2502.5	20.75	21.0	20.04	20.5
			21100	2535	20.35	20.5	19.77	20.0
			21425	2567.5	20.35	20.5	19.68	20.0
		12	20775	2502.5	20.75	21.0	20.02	20.5
			21100	2535	20.34	20.5	19.74	20.0
			21425	2567.5	20.34	20.5	19.65	20.0
		24	20775	2502.5	20.73	21.0	20.01	20.5
			21100	2535	20.32	20.5	19.75	20.0
			21425	2567.5	20.34	20.5	19.67	20.0
	12	0	20775	2502.5	19.49	20.0	19.42	20.0
			21100	2535	19.20	19.5	18.46	19.0
			21425	2567.5	19.35	19.5	18.66	19.0
		6	20775	2502.5	19.46	20.0	19.38	19.5
			21100	2535	19.17	19.5	18.44	19.0
			21425	2567.5	19.31	19.5	18.63	19.0
		13	20775	2502.5	19.44	20.0	19.35	19.5
			21100	2535	19.16	19.5	18.45	19.0
			21425	2567.5	19.29	19.5	18.61	19.0
	25	0	20775	2502.5	19.50	20.0	18.88	19.0
			21100	2535	19.19	19.5	18.46	19.0
			21425	2567.5	19.30	19.5	18.64	19.0

LTE Band 17

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
10	1	0	23780	709	24.19	24.5	23.54	24.0
			23790	710	23.05	23.5	23.68	24.0
			23800	711	24.19	24.5	23.56	24.0
		25	23780	709	24.18	24.5	23.51	24.0
			23790	710	23.05	23.5	23.66	24.0
			23800	711	24.17	24.5	23.55	24.0
		49	23780	709	24.15	24.5	23.50	24.0
			23790	710	23.02	23.5	23.63	24.0
			23800	711	24.15	24.5	23.53	24.0
	25	0	23780	709	23.14	23.5	22.31	22.5
			23790	710	24.18	24.5	23.27	23.5
			23800	711	23.10	23.5	22.29	22.5
		12	23780	709	23.11	23.5	22.28	22.5
			23790	710	24.17	24.5	23.23	23.5
			23800	711	23.06	23.5	22.27	22.5
		25	23780	709	23.06	23.5	22.25	22.5
			23790	710	24.15	24.5	23.14	23.5
			23800	711	23.04	23.5	22.20	22.5
	50	0	23780	709	23.13	23.5	22.26	22.5
			23790	710	23.13	23.5	22.54	23.0
			23800	711	23.14	23.5	22.37	22.5

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
5	1	0	23755	706.5	24.12	24.5	23.76	24.0
			23790	710	24.13	24.5	23.70	24.0
			23825	713.5	24.16	24.5	23.29	23.5
		12	23755	706.5	24.10	24.5	23.74	24.0
			23790	710	24.11	24.5	23.68	24.0
			23825	713.5	24.16	24.5	23.26	23.5
		24	23755	706.5	24.09	24.5	23.73	24.0
			23790	710	24.08	24.5	23.69	24.0
			23825	713.5	24.14	24.5	23.26	23.5
	12	0	23755	706.5	23.18	23.5	22.58	23.0
			23790	710	23.12	23.5	22.52	23.0
			23825	713.5	23.09	23.5	23.02	23.5
		6	23755	706.5	23.12	23.5	22.52	23.0
			23790	710	23.09	23.5	22.48	23.0
			23825	713.5	23.04	23.5	22.97	23.5
		13	23755	706.5	23.09	23.5	22.47	23.0
			23790	710	23.10	23.5	22.49	23.0
			23825	713.5	23.01	23.5	22.96	23.5
	25	0	23755	706.5	23.14	23.5	22.48	23.0
			23790	710	23.05	23.5	22.47	23.0
			23825	713.5	23.04	23.5	22.83	23.0

■ LTE Band 41

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
20	1	0	40340	2565	23.56	24.0	22.86	23.0
			40740	2605	23.51	24.0	22.85	23.0
			41140	2645	23.62	24.0	22.99	23.5
		49	40340	2565	23.55	24.0	22.85	23.0
			40740	2605	23.53	24.0	22.85	23.0
			41140	2645	23.61	24.0	22.99	23.5
		99	40340	2565	23.54	24.0	22.86	23.0
			40740	2605	23.51	24.0	22.86	23.0
			41140	2645	23.60	24.0	22.98	23.5
	50	0	40340	2565	22.49	23.0	21.81	22.0
			40740	2605	22.38	22.5	21.82	22.0
			41140	2645	22.66	23.0	22.06	22.5
		24	40340	2565	22.48	23.0	21.77	22.0
			40740	2605	22.35	22.5	21.80	22.0
			41140	2645	22.65	23.0	22.04	22.5
		49	40340	2565	22.47	23.0	21.75	22.0
			40740	2605	22.36	22.5	21.77	22.0
			41140	2645	22.66	23.0	22.05	22.5
	100	0	40340	2565	22.55	23.0	21.76	22.0
			40740	2605	22.49	23.0	21.78	22.0
			41140	2645	22.65	23.0	22.01	22.5

///BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
15	1	0	40315	2562.5	23.51	24.0	22.84	23.0
			40740	2605	23.41	24.0	22.86	23.0
			41165	2647.5	23.58	24.0	22.92	23.5
		36	40315	2562.5	23.50	24.0	22.84	23.0
			40740	2605	23.42	24.0	22.85	23.0
			41165	2647.5	23.55	24.0	22.93	23.5
		74	40315	2562.5	23.48	24.0	22.83	23.0
			40740	2605	23.41	24.0	22.85	23.0
			41165	2647.5	23.57	24.0	22.92	23.5
	36	0	40315	2562.5	22.49	23.0	21.82	22.0
			40740	2605	22.39	23.0	21.78	22.0
			41165	2647.5	22.65	23.0	21.81	22.0
		18	40315	2562.5	22.47	23.0	21.80	22.0
			40740	2605	22.38	22.5	21.77	22.0
			41165	2647.5	22.66	23.0	21.78	22.0
		37	40315	2562.5	22.48	23.0	21.79	22.0
			40740	2605	22.38	22.5	21.74	22.0
			41165	2647.5	22.67	23.0	21.77	22.0
	75	0	40315	2562.5	22.51	23.0	21.75	22.0
			40740	2605	22.38	22.5	21.69	22.0
			41165	2647.5	22.62	23.0	21.73	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
10	1	0	40290	2560	23.53	24.0	22.87	23.0
			40740	2605	23.53	24.0	22.96	23.5
			41190	2650	23.66	24.0	23.08	23.5
		25	40290	2560	23.52	24.0	22.88	23.0
			40740	2605	23.52	24.0	22.00	22.5
			41190	2650	23.65	24.0	23.07	23.5
		49	40290	2560	23.52	24.0	22.86	23.0
			40740	2605	23.52	24.0	22.01	22.5
			41190	2650	23.64	24.0	23.05	23.5
	25	0	40290	2560	22.50	23.0	21.83	22.0
			40740	2605	22.56	23.0	21.89	22.5
			41190	2650	22.79	23.0	21.85	22.0
		12	40290	2560	22.50	23.0	21.80	22.0
			40740	2605	22.57	23.0	21.89	22.5
			41190	2650	22.80	23.0	21.84	22.0
		25	40290	2560	22.51	23.0	21.78	22.0
			40740	2605	22.53	23.0	21.86	22.0
			41190	2650	22.78	23.0	21.82	22.0
	50	0	40290	2560	22.53	23.0	21.76	22.0
			40740	2605	22.58	23.0	21.85	22.0
			41190	2650	22.79	23.0	21.83	22.0

BW (MHz)	RB Size	RB Offset	CH.	Freq. (MHz)	QPSK		16-QAM	
					Average Power (dBm)	Max. Tune- up Power (dBm)	Average Power (dBm)	Max. Tune- up Power (dBm)
5	1	0	40265	2557.5	23.64	24.0	23.04	23.5
			40740	2605	23.58	24.0	23.18	23.5
			41215	2652.5	23.82	24.0	23.34	23.5
		12	40265	2557.5	23.65	24.0	23.08	23.5
			40740	2605	23.56	24.0	23.17	23.5
			41215	2652.5	23.83	24.0	23.32	23.5
		24	40265	2557.5	23.63	24.0	23.05	23.5
			40740	2605	23.58	24.0	23.18	23.5
			41215	2652.5	23.82	24.0	23.33	23.5
	12	0	40265	2557.5	22.48	23.0	22.01	22.5
			40740	2605	22.56	23.0	22.15	22.5
			41215	2652.5	22.80	23.0	22.30	22.5
		6	40265	2557.5	22.46	23.0	21.98	22.5
			40740	2605	22.56	23.0	22.14	22.5
			41215	2652.5	22.78	23.0	22.31	22.5
		13	40265	2557.5	22.46	23.0	21.96	22.5
			40740	2605	22.55	23.0	22.11	22.5
			41215	2652.5	22.79	23.0	22.28	22.5
	25	0	40265	2557.5	22.49	23.0	21.84	22.0
			40740	2605	22.60	23.0	22.13	22.5
			41215	2652.5	22.74	23.0	22.27	22.5

■ DTS Band Wi-Fi

Mode	CH.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 0 Max. Tune-up Power (dBm)	Ant 1 Average Power (dBm)	Ant 1 Max. Tune-up Power (dBm)	Total Average Power (dBm)	Total Max. Tune-up Power (dBm)	Duty Cycle %
b	1	2412	13.56	14.0	13.89	14.5	16.74	17.3	99.00
	6	2437	14.08	14.5	14.08	14.5	17.09	17.5	
	11	2462	13.99	14.5	13.95	14.5	16.98	17.5	
g	1	2412	12.81	13.0	12.03	12.5	15.45	15.8	99.00
	6	2437	13.46	14.0	13.13	13.5	16.31	16.8	
	11	2462	13.14	13.5	12.74	13.0	15.95	16.3	
n-HT20	1	2412	12.51	13.0	11.86	12.0	15.21	15.5	97.00
	6	2437	11.56	12.0	11.65	12.0	14.62	15.0	
	11	2462	11.64	12.0	12.21	12.5	14.94	15.3	
n-HT40	3	2422	10.97	11.5	10.50	11.0	13.75	14.3	91.00
	6	2437	11.27	11.5	10.89	11.5	14.09	14.5	
	9	2452	11.08	11.5	10.62	11.0	13.87	14.3	

■ U-NII-1 Band Wi-Fi

Mode	CH.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 0 Max. Tune-up Power (dBm)	Ant 1 Average Power (dBm)	Ant 1 Max. Tune-up Power (dBm)	Total Average Power (dBm)	Total Max. Tune-up Power (dBm)	Duty Cycle %
a	36	5180	13.46	14.0	13.34	13.5	16.41	16.8	99.00
	44	5220	13.13	13.5	13.35	13.5	16.25	16.5	
	48	5240	12.93	13.5	13.37	13.5	16.17	16.5	
n-HT20	36	5180	12.34	12.5	12.06	12.5	15.21	15.5	97.00
	44	5220	12.51	13.0	12.19	12.5	15.36	15.8	
	48	5240	12.17	12.5	12.21	12.5	15.20	15.5	
n-HT40	38	5190	11.93	12.5	11.99	12.5	14.97	15.5	93.00
	46	5230	11.63	12.0	12.17	12.5	14.92	15.3	
ac- VHT20	36	5180	12.27	12.5	11.79	12.0	15.04	15.3	85.00
	44	5220	12.56	13.0	11.67	12.0	15.15	15.5	
	48	5240	12.28	12.5	11.86	12.0	15.08	15.3	
ac- VHT40	38	5190	11.78	12.0	11.91	12.5	14.86	15.3	77.00
	46	5230	11.49	12.0	11.70	12.0	14.61	15.0	
ac- VHT80	42	5210	11.14	11.5	11.16	11.5	14.16	14.5	93.00

■ U-NII-2A Band Wi-Fi

Mode	CH.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 0 Max. Tune-up Power (dBm)	Ant 1 Average Power (dBm)	Ant 1 Max. Tune-up Power (dBm)	Total Average Power (dBm)	Total Max. Tune-up Power (dBm)	Duty Cycle %
a	52	5260	13.23	13.5	13.22	13.5	16.24	16.5	99.00
	60	5300	13.40	13.5	13.36	13.5	16.39	16.5	
	64	5320	13.39	13.5	13.28	13.5	16.35	16.5	
n-HT20	52	5260	12.00	12.5	12.17	12.5	15.10	15.5	97.00
	60	5300	12.38	12.5	12.27	12.5	15.34	15.5	
	64	5320	12.16	12.5	12.23	12.5	15.21	15.5	
n-HT40	54	5270	12.44	13.0	12.12	12.5	15.30	15.8	93.00
	62	5310	11.07	11.5	11.31	11.5	14.21	14.5	
ac- VHT20	52	5260	12.14	12.5	11.95	12.5	15.05	15.5	85.00
	60	5300	12.39	13.0	12.26	12.5	15.33	15.8	
	64	5320	12.21	12.5	11.83	12.0	15.03	15.3	
ac- VHT40	54	5270	12.22	12.5	11.89	12.5	15.07	15.5	77.00
	62	5310	10.90	11.5	10.45	11.0	13.69	14.3	
ac- VHT80	58	5290	9.52	10.0	9.64	10.0	12.59	13.0	93.00

U-NII-2C Band Wi-Fi

Mode	CH.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 0 Max. Tune-up Power (dBm)	Ant 1 Average Power (dBm)	Ant 1 Max. Tune-up Power (dBm)	Total Average Power (dBm)	Total Max. Tune-up Power (dBm)	Duty Cycle %
a	100	5500	13.01	13.5	13.54	14.0	16.30	16.8	99.00
	120	5600	13.15	13.5	13.24	13.5	16.21	16.5	
	140	5700	13.26	13.5	13.08	13.5	16.18	16.5	
	142	5720	13.25	13.5	13.14	13.5	16.21	16.5	
n-HT20	100	5500	11.98	12.5	12.00	12.5	15.00	15.5	97.00
	120	5600	12.34	12.5	12.41	13.0	15.39	15.8	
	140	5700	12.41	13.0	12.39	12.5	15.41	15.8	
	144	5720	12.26	12.5	12.68	13.0	15.49	15.8	
n-HT40	102	5510	12.02	12.5	11.75	12.0	14.90	15.3	93.00
	118	5590	12.00	12.5	12.08	12.5	15.05	15.5	
	134	5670	12.18	12.5	12.48	13.0	15.35	15.8	
	142	5710	12.54	13.0	12.39	12.5	15.48	15.8	
ac- VHT20	100	5500	12.09	12.5	11.58	12.0	14.85	15.3	85.00
	120	5600	12.15	12.5	11.80	12.0	14.99	15.3	
	140	5700	11.95	12.5	12.01	12.5	14.99	15.5	
	144	5720	11.97	12.5	12.20	12.5	15.09	15.5	
ac- VHT40	102	5510	11.90	12.5	11.67	12.0	14.80	15.3	77.00
	118	5590	11.80	12.0	11.95	12.5	14.89	15.3	
	134	5670	11.94	12.5	12.21	12.5	15.09	15.5	
	142	5710	12.19	12.5	12.00	12.5	15.11	15.5	
ac- VHT80	106	5530	11.17	11.5	11.61	12.0	14.40	14.8	93.00
	122	5610	11.38	11.5	11.54	12.0	14.47	14.8	
	138	5690	11.15	11.5	11.66	12.0	14.42	14.8	

■ U-NII-3 Band Wi-Fi

Mode	CH.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 0 Max. Tune-up Power (dBm)	Ant 1 Average Power (dBm)	Ant 1 Max. Tune-up Power (dBm)	Total Average Power (dBm)	Total Max. Tune-up Power (dBm)	Duty Cycle %
a	149	5745	13.36	13.5	13.29	13.5	16.34	16.5	99.00
	157	5785	13.27	13.5	13.46	14.0	16.38	16.8	
	165	5825	13.32	13.5	13.24	13.5	16.29	16.5	
n-HT20	149	5745	12.34	12.5	12.44	13.0	15.40	15.8	97.00
	157	5785	12.07	12.5	12.46	13.0	15.28	15.8	
	165	5825	12.32	12.5	12.21	12.5	15.28	15.5	
n-HT40	151	5755	12.10	12.5	12.14	12.5	15.13	15.5	93.00
	159	5795	12.57	13.0	12.47	13.0	15.53	16.0	
ac- VHT20	149	5745	11.87	12.0	12.33	12.5	15.11	15.3	85.00
	157	5785	11.60	12.0	12.30	12.5	14.97	15.3	
	165	5825	11.71	12.0	12.04	12.5	14.89	15.3	
ac- VHT40	151	5755	11.77	12.0	11.84	12.0	14.82	15.0	77.00
	159	5795	12.10	12.5	12.31	12.5	15.22	15.5	
ac- VHT80	155	5775	11.15	11.5	11.24	11.5	14.20	14.5	93.00

Bluetooth

Mode	CH.	Freq. (MHz)	Average Power (dBm)	Max. Tune-up Power (dBm)
DH5	0	2402	8.44	9.0
	39	2441	7.78	8.0
	78	2480	8.68	9.0
2DH5	0	2402	6.23	6.5
	39	2441	5.65	6.0
	78	2480	6.57	7.0
3DH5	0	2402	6.17	6.5
	39	2441	5.43	6.0
	78	2480	6.55	7.0
BLE 1M	0	2402	4.95 ^{*1}	5.5
	19	2440	3.78 ^{*1}	4.0
	39	2480	5.50 ^{*1}	6.0
BLE 2M	0	2402	4.75 ^{*1}	5.0
	19	2440	4.05 ^{*1}	4.5
	39	2480	5.64 ^{*1}	6.0

Note: BLE use peak power to evaluate SAR for more conservative result.

8.3. SAR Exclusion Analysis

Per FCC KDB 447498 D01v06, the SAR exclusion threshold for distances < 50 mm is defined by the following equation:

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Distance (mm)}} \times \sqrt{\text{Frequency (GHz)}} \leq 3.0, \text{ for head and body SAR;}$$

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Distance (mm)}} \times \sqrt{\text{Frequency (GHz)}} \leq 7.5, \text{ for Extremity SAR.}$$

For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

- 1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm) * (f(MHz)/150)]} mW, for 100 MHz to 1500 MHz
- 2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)*10]} mW, for > 1500 MHz and ≤ 6 GHz

■ Head

Required Configurations of SAR Test					
Test Band		Left Cheek	Left Tilt	Right Cheek	Right Tilt
WCDMA	Band 2	Yes	Yes	Yes	Yes
	Band 5	Yes	Yes	Yes	Yes
LTE	Band 2	Yes	Yes	Yes	Yes
	Band 4	Yes	Yes	Yes	Yes
	Band 5	Yes	Yes	Yes	Yes
	Band 7	Yes	Yes	Yes	Yes
	Band 17	Yes	Yes	Yes	Yes
	Band 41	Yes	Yes	Yes	Yes
DTS		Yes	Yes	Yes	Yes
U-NII-1		Yes	Yes	Yes	Yes
U-NII-2A		Yes	Yes	Yes	Yes
U-NII-2C		Yes	Yes	Yes	Yes
U-NII-3		Yes	Yes	Yes	Yes
Bluetooth		No	No	No	No

Body

Required Configurations of SAR Test							
Test Band		Front side	Back side	Left side	Right side	Top side	Bottom side
WCDMA	Band 2	Yes	Yes	N/A	N/A	N/A	N/A
	Band 5	Yes	Yes	N/A	N/A	N/A	N/A
LTE	Band 2	Yes	Yes	N/A	N/A	N/A	N/A
	Band 4	Yes	Yes	N/A	N/A	N/A	N/A
	Band 5	Yes	Yes	N/A	N/A	N/A	N/A
	Band 7	Yes	Yes	N/A	N/A	N/A	N/A
	Band 17	Yes	Yes	N/A	N/A	N/A	N/A
	Band 41	Yes	Yes	N/A	N/A	N/A	N/A
DTS		Yes	Yes	N/A	N/A	N/A	N/A
U-NII-1		Yes	Yes	N/A	N/A	N/A	N/A
U-NII-2A		Yes	Yes	N/A	N/A	N/A	N/A
U-NII-2C		Yes	Yes	N/A	N/A	N/A	N/A
U-NII-3		Yes	Yes	N/A	N/A	N/A	N/A
Bluetooth		No	No	No	No	No	No

Extremity

Required Configurations of SAR Test							
Test Band		Front side	Back side	Left side	Right side	Top side	Bottom side
WCDMA	Band 2	Yes	Yes	Yes	Yes	Yes	Yes
	Band 5	Yes	Yes	Yes	Yes	Yes	Yes
LTE	Band 2	Yes	Yes	Yes	Yes	Yes	Yes
	Band 4	Yes	Yes	Yes	Yes	Yes	Yes
	Band 5	Yes	Yes	Yes	Yes	Yes	Yes
	Band 7	Yes	Yes	Yes	Yes	Yes	Yes
	Band 17	Yes	Yes	Yes	Yes	Yes	Yes
	Band 41	Yes	Yes	Yes	Yes	Yes	Yes
DTS		Yes	Yes	Yes	Yes	Yes	Yes
U-NII-1		Yes	Yes	Yes	Yes	Yes	Yes
U-NII-2A		Yes	Yes	Yes	Yes	Yes	Yes
U-NII-2C		Yes	Yes	Yes	Yes	Yes	Yes
U-NII-3		Yes	Yes	Yes	Yes	Yes	Yes
Bluetooth		No	No	No	No	No	No

8.4. SAR Test Results

General note:

1. For LTE mode, start with the largest channel bandwidth then measure SAR for QPSK with 1 and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle, and lower edge of each required test channel.
2. For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations, and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
3. For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.
4. For the other channel bandwidths used by the device in a frequency band, SAR is required only when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration, or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.
5. According to April 2015 TCB workshop, SAR test exclusion can be applied for testing overlapping LTE bands if:
 - a) The maximum output power, including tolerance, for the smaller band must be $\leq$ the larger band
 - b) The channel bandwidth and other operating parameters for the smaller band is fully supported by the larger band.
6. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, 802.11g/n OFDM SAR is not required, per KDB248227 D01 v02r02 section 5.2.2 b).
7. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following, per KDB248227 D01 v02r02 section 5.3.1:
 - a) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
 - b) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the

two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

8. When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n, per KDB248227 D01 v02r02 section 5.3.2.
9. When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration, per KDB248227 D01 v02r02 section 5.3.4 b).
10. When the original highest measured SAR is ≥ 0.80 W/kg, only one repeated measurement is required, if the measured SAR value of the initial repeated measurement is < 1.45 W/kg with $\leq 20\%$ variation, per KDB 865664 D01 v01r04 section 2.8.1.
11. Per KDB 447498 D01 v06 section 4.4.3 a), testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.

■ Head

WCDMA											
Band	Mode	CH.	Freq. (MHz)	Head Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
Band 2	12.2kbps RMC	9262	1852.4	Left Cheek	0	22.95	23.5	1.14	0.01	0.01	
				Left Tilt	0	22.95	23.5	1.14	0.01	0.01	
				Right Cheek	0	22.95	23.5	1.14	0.01	0.01	1
				Right Cheek *	0	22.95	23.5	1.14	0.01	0.01	
				Right Tilt	0	22.95	23.5	1.14	0.01	0.01	
Band 4	12.2kbps RMC	4183	836.6	Left Cheek	0	23.27	23.5	1.05	0.15	0.16	
				Left Tilt	0	23.27	23.5	1.05	0.08	0.08	
				Right Cheek	0	23.27	23.5	1.05	0.15	0.16	2
				Right Cheek *	0	23.27	23.5	1.05	0.15	0.16	
				Right Tilt	0	23.27	23.5	1.05	0.10	0.11	

Note: “ * ”, SAR worst case retest with SIM 2 Slot.

LTE												
Band	BW (MHz)	RB Set	CH.	Freq. (MHz)	Head Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune-up Power (dBm)	Scaling Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
Band 2	20	1RB_OS0	19100	1900	Left Cheek	0	23.76	24.0	1.06	0.01	0.01	
					Left Tilt	0	23.76	24.0	1.06	0.01	0.01	
					Right Cheek	0	23.76	24.0	1.06	0.01	0.01	
					Right Tilt	0	23.76	24.0	1.06	0.01	0.01	
		50RB_OS49	18700	1860	Left Cheek	0	22.58	23.0	1.10	0.01	0.01	
					Left Tilt	0	22.58	23.0	1.10	0.01	0.01	
					Right Cheek	0	22.58	23.0	1.10	0.01	0.01	3
					Right Cheek *	0	22.58	23.0	1.10	0.01	0.01	
					Right Tilt	0	22.58	23.0	1.10	0.01	0.01	
Band 4	20	1RB_OS0	20050	1720	Left Cheek	0	23.60	24.0	1.10	0.03	0.03	
					Left Tilt	0	23.60	24.0	1.10	0.02	0.02	
					Right Cheek	0	23.60	24.0	1.10	0.04	0.04	4
					Right Cheek *	0	23.60	24.0	1.10	0.04	0.04	
					Right Tilt	0	23.60	24.0	1.10	0.01	0.01	
		50RB_OS0	20050	1720	Left Cheek	0	22.58	23.0	1.10	0.02	0.02	
					Left Tilt	0	22.58	23.0	1.10	0.01	0.01	
					Right Cheek	0	22.58	23.0	1.10	0.03	0.03	
					Right Tilt	0	22.58	23.0	1.10	0.01	0.01	
Band 5	10	1RB_OS49	20525	836.5	Left Cheek	0	24.12	24.5	1.09	0.17	0.19	
					Left Tilt	0	24.12	24.5	1.09	0.08	0.09	
					Right Cheek	0	24.12	24.5	1.09	0.18	0.20	
					Right Cheek *	0	24.12	24.5	1.09	0.18	0.20	5
					Right Tilt	0	24.12	24.5	1.09	0.09	0.10	
		25RB_OS0	20450	829	Left Cheek	0	24.12	24.5	1.09	0.11	0.12	
					Left Tilt	0	24.12	24.5	1.09	0.06	0.07	
					Right Cheek	0	24.12	24.5	1.09	0.12	0.13	
					Right Tilt	0	24.12	24.5	1.09	0.06	0.07	

<Continue>

Band 7	20	1RB_ OS0	20850	2510	Left Cheek	0	20.77	21.0	1.05	0.05	0.05	
					Left Tilt	0	20.77	21.0	1.05	0.01	0.01	
					Right Cheek	0	20.77	21.0	1.05	0.03	0.03	
					Right Tilt	0	20.77	21.0	1.05	0.02	0.02	
		50RB_ OS0	20850	2510	Left Cheek	0	19.41	20.0	1.15	0.05	0.06	6
					Left Cheek *	0	19.41	20.0	1.15	0.05	0.06	
					Left Tilt	0	19.41	20.0	1.15	0.01	0.01	
					Right Cheek	0	19.41	20.0	1.15	0.03	0.03	
					Right Tilt	0	19.41	20.0	1.15	0.02	0.02	
					Left Cheek	0	24.19	24.5	1.07	0.20	0.21	
					Left Tilt	0	24.19	24.5	1.07	0.09	0.10	
					Right Cheek	0	24.19	24.5	1.07	0.21	0.23	7
					Right Cheek *	0	24.19	24.5	1.07	0.21	0.23	
Band 17	10	1RB_ OS0	23800	711	Right Tilt	0	24.19	24.5	1.07	0.09	0.10	
					Left Cheek	0	24.18	24.5	1.08	0.16	0.17	
					Left Tilt	0	24.18	24.5	1.08	0.07	0.08	
					Right Cheek	0	24.18	24.5	1.08	0.18	0.19	
					Right Tilt	0	24.18	24.5	1.08	0.08	0.09	
		25RB_ OS0	23790	710	Left Cheek	0	23.62	24.0	1.09	0.01	0.01	8
					Left Cheek *	0	23.62	24.0	1.09	0.01	0.01	
					Left Tilt	0	23.62	24.0	1.09	0.01	0.01	
					Right Cheek	0	23.62	24.0	1.09	0.01	0.01	
					Right Tilt	0	23.62	24.0	1.09	0.01	0.01	
Band 41	20	1RB_ OS0	41140	2645	Left Cheek	0	22.66	23.0	1.08	0.01	0.01	
					Left Tilt	0	22.66	23.0	1.08	0.01	0.01	
					Right Cheek	0	22.66	23.0	1.08	0.01	0.01	
					Right Tilt	0	22.66	23.0	1.08	0.01	0.01	
					Left Cheek	0	22.66	23.0	1.08	0.01	0.01	
		50RB_ OS0	41140	2645	Left Tilt	0	22.66	23.0	1.08	0.01	0.01	
					Right Cheek	0	22.66	23.0	1.08	0.01	0.01	
					Right Tilt	0	22.66	23.0	1.08	0.01	0.01	

Note: “ * ”, SAR worst case retest with SIM 2 Slot.

Wi-Fi - Ant 0													
Band	Mode	CH.	Freq. (MHz)	Head Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Duty Cycle %	Duty Cycle Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
DTS	b	6	2437	Left Cheek	0	14.08	14.5	1.10	99.00	1.01	0.05	0.06	9
				Left Tilt	0	14.08	14.5	1.10	99.00	1.01	0.03	0.03	
				Right Cheek	0	14.08	14.5	1.10	99.00	1.01	0.02	0.02	
				Right Tilt	0	14.08	14.5	1.10	99.00	1.01	0.01	0.01	
U-NII-1	a	36	5180	Left Cheek	0	13.46	14.0	1.13	99.00	1.01	0.38	0.43	10
				Left Tilt	0	13.46	14.0	1.13	99.00	1.01	0.20	0.23	
				Right Cheek	0	13.46	14.0	1.13	99.00	1.01	0.24	0.27	
				Right Tilt	0	13.46	14.0	1.13	99.00	1.01	0.17	0.19	
U-NII-2C	a	100	5500	Left Cheek	0	13.01	13.5	1.12	99.00	1.01	0.60	0.68	11
				Left Tilt	0	13.01	13.5	1.12	99.00	1.01	0.39	0.44	
				Right Cheek	0	13.01	13.5	1.12	99.00	1.01	0.43	0.49	
				Right Tilt	0	13.01	13.5	1.12	99.00	1.01	0.42	0.47	
U-NII-3	a	157	5785	Left Cheek	0	13.27	13.5	1.05	99.00	1.01	0.44	0.47	12
				Left Tilt	0	13.27	13.5	1.05	99.00	1.01	0.38	0.40	
				Right Cheek	0	13.27	13.5	1.05	99.00	1.01	0.29	0.31	
				Right Tilt	0	13.27	13.5	1.05	99.00	1.01	0.31	0.33	

Wi-Fi - Ant 1

Band	Mode	CH.	Freq. (MHz)	Head Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Duty Cycle %	Duty Cycle Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
DTS	b	6	2437	Left Cheek	0	14.08	14.5	1.10	99.00	1.01	0.17	0.19	13
				Left Tilt	0	14.08	14.5	1.10	99.00	1.01	0.02	0.02	
				Right Cheek	0	14.08	14.5	1.10	99.00	1.01	0.09	0.10	
				Right Tilt	0	14.08	14.5	1.10	99.00	1.01	0.01	0.01	
U-NII-1	a	36	5180	Left Cheek	0	13.34	13.5	1.04	99.00	1.01	0.40	0.42	14
				Left Tilt	0	13.34	13.5	1.04	99.00	1.01	0.09	0.09	
				Right Cheek	0	13.34	13.5	1.04	99.00	1.01	0.17	0.18	
				Right Tilt	0	13.34	13.5	1.04	99.00	1.01	0.08	0.08	
U-NII-2C	a	100	5500	Left Cheek	0	13.54	14.0	1.11	99.00	1.01	0.24	0.27	15
				Left Tilt	0	13.54	14.0	1.11	99.00	1.01	0.11	0.12	
				Right Cheek	0	13.54	14.0	1.11	99.00	1.01	0.14	0.16	
				Right Tilt	0	13.54	14.0	1.11	99.00	1.01	0.06	0.07	
U-NII-3	a	157	5785	Left Cheek	0	13.46	14.0	1.13	99.00	1.01	0.10	0.11	16
				Left Tilt	0	13.46	14.0	1.13	99.00	1.01	0.05	0.06	
				Right Cheek	0	13.46	14.0	1.13	99.00	1.01	0.05	0.06	
				Right Tilt	0	13.46	14.0	1.13	99.00	1.01	0.04	0.05	

■ Body

WCDMA											
Band	Mode	CH.	Freq. (MHz)	Body Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
Band 2	12.2kbps RMC	9262	1852.4	Front	5	22.95	23.5	1.14	0.04	0.05	17
				Front *	5	22.95	23.5	1.14	0.04	0.05	
				Back	5	22.95	23.5	1.14	0.02	0.02	
Band 4	12.2kbps RMC	4183	836.6	Front	5	23.27	23.5	1.05	0.18	0.19	
				Back	5	23.27	23.5	1.05	0.21	0.22	18
				Back *	5	23.27	23.5	1.05	0.21	0.22	

Note: “ * ”, SAR worst case retest with SIM 2 Slot.

LTE												
Band	BW (MHz)	RB Set	CH.	Freq. (MHz)	Body Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
Band 2	20	1RB_ OS0	19100	1900	Front	5	23.76	24.0	1.06	0.04	0.04	
					Front *	5	23.76	24.0	1.06	0.05	0.05	19
					Back	5	23.76	24.0	1.06	0.02	0.02	
		50RB_ OS49	18700	1860	Front	5	22.58	23.0	1.10	0.03	0.03	
					Back	5	22.58	23.0	1.10	0.02	0.02	
Band 4	20	1RB_ OS0	20050	1720	Front	5	23.60	24.0	1.10	0.19	0.21	20
					Front *	5	23.60	24.0	1.10	0.19	0.21	
					Back	5	23.60	24.0	1.10	0.10	0.11	
		50RB_ OS0	20050	1720	Front	5	22.58	23.0	1.10	0.15	0.17	
					Back	5	22.58	23.0	1.10	0.08	0.09	
Band 5	10	1RB_ OS49	20525	836.5	Front	5	24.12	24.5	1.09	0.23	0.25	
					Back	5	24.12	24.5	1.09	0.32	0.35	21
					Back *	5	24.12	24.5	1.09	0.25	0.27	
		25RB_ OS0	20450	829	Front	5	24.12	24.5	1.09	0.16	0.17	
					Back	5	24.12	24.5	1.09	0.26	0.28	
Band 7	20	1RB_ OS0	20850	2510	Front	5	20.77	21.0	1.05	0.39	0.41	
					Back	5	20.77	21.0	1.05	1.23	1.30	
			21100	2535	Back	5	20.76	21.0	1.06	1.00	1.06	
					Back	5	20.56	21.0	1.11	0.94	1.04	
		50RB_ OS0	20850	2510	Front	5	19.41	20.0	1.15	0.36	0.41	
					Back	5	19.41	20.0	1.15	1.21	1.39	22
					Back *	5	19.41	20.0	1.15	1.20	1.37	
					Back(repeat)	5	19.41	20.0	1.15	1.21	1.39	
			21100	2535	Back	5	19.37	19.5	1.03	0.98	1.01	
			21350	2560	Back	5	19.34	19.5	1.04	0.90	0.93	
		100RB_ OS0	20850	2510	Back	5	19.38	19.5	1.03	1.10	1.13	
Band 17	10	1RB_ OS0	23800	711	Front	5	24.19	24.5	1.07	0.19	0.20	23
					Front *	5	24.19	24.5	1.07	0.18	0.19	
					Back	5	24.19	24.5	1.07	0.17	0.18	
		25RB_ OS0	23790	710	Front	5	24.18	24.5	1.08	0.16	0.17	
					Back	5	24.18	24.5	1.08	0.14	0.15	

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Band 41	20	1RB_ OS0	41140	2645	Front	5	23.62	24.0	1.09	0.05	0.05	
					Back	5	23.62	24.0	1.09	0.51	0.56	
					Back *	5	23.62	24.0	1.09	0.51	0.56	24
		50RB_ OS0	41140	2645	Front	5	22.66	23.0	1.08	0.08	0.09	
					Back	5	22.66	23.0	1.08	0.41	0.44	

Note: “ * ”, SAR worst case retest with SIM 2 Slot.

Wi-Fi - Ant 0													
Band	Mode	CH.	Freq. (MHz)	Body Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune-up Power (dBm)	Scaling Factor	Duty Cycle %	Duty Cycle Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
DTS	b	6	2437	Front	5	14.08	14.5	1.10	99.00	1.01	0.04	0.04	
				Back	5	14.08	14.5	1.10	99.00	1.01	0.25	0.28	25
U-NII-1	a	36	5180	Front	5	13.46	14.0	1.13	99.00	1.01	0.23	0.26	
				Back	5	13.46	14.0	1.13	99.00	1.01	0.91	1.04	26
U-NII-2C	a	100	5500	Front	5	13.01	13.5	1.12	99.00	1.01	0.24	0.27	
				Back	5	13.01	13.5	1.12	99.00	1.01	0.49	0.55	27
U-NII-3	a	157	5785	Front	5	13.27	13.5	1.05	99.00	1.01	0.21	0.22	
				Back	5	13.27	13.5	1.05	99.00	1.01	0.40	0.43	28

Wi-Fi - Ant 1													
Band	Mode	CH.	Freq. (MHz)	Body Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune-up Power (dBm)	Scaling Factor	Duty Cycle %	Duty Cycle Factor	Meas. SAR-1g (W/kg)	Reported SAR-1g (W/kg)	SAR Plot #
DTS	b	6	2437	Front	5	14.08	14.5	1.10	99.00	1.01	0.09	0.10	29
				Back	5	14.08	14.5	1.10	99.00	1.01	0.04	0.04	
U-NII-1	a	36	5180	Front	5	13.34	13.5	1.04	99.00	1.01	0.21	0.22	
				Back	5	13.34	13.5	1.04	99.00	1.01	0.76	0.80	30
U-NII-2C	a	100	5500	Front	5	13.54	14.0	1.11	99.00	1.01	0.11	0.12	
				Back	5	13.54	14.0	1.11	99.00	1.01	0.87	0.98	31
U-NII-3	a	157	5785	Front	5	13.46	14.0	1.13	99.00	1.01	0.07	0.08	
				Back	5	13.46	14.0	1.13	99.00	1.01	0.75	0.86	32

Extremity

WCDMA											
Band	Mode	CH.	Freq. (MHz)	Extremity Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Meas. SAR-10g (W/kg)	Reported SAR-10g (W/kg)	SAR Plot #
Band 2	12.2kbps RMC	9262	1852.4	Front	0	22.95	23.5	1.14	0.04	0.05	
				Back	0	22.95	23.5	1.14	0.02	0.02	
				Left	0	22.95	23.5	1.14	0.01	0.01	
				Right	0	22.95	23.5	1.14	0.02	0.02	
				Top	0	22.95	23.5	1.14	0.01	0.01	
				Bottom	0	22.95	23.5	1.14	0.14	0.16	33
				Bottom *	0	22.95	23.5	1.14	0.13	0.15	
Band 4	12.2kbps RMC	4183	836.6	Front	0	23.27	23.5	1.05	0.20	0.21	
				Back	0	23.27	23.5	1.05	0.30	0.32	34
				Back *	0	23.27	23.5	1.05	0.27	0.28	
				Left	0	23.27	23.5	1.05	0.17	0.18	
				Right	0	23.27	23.5	1.05	0.15	0.16	
				Top	0	23.27	23.5	1.05	0.01	0.01	
				Bottom	0	23.27	23.5	1.05	0.01	0.01	

Note: “ * ”, SAR worst case retest with SIM 2 Slot.

LTE												
Band	BW (MHz)	RB Set	CH.	Freq. (MHz)	Extremity Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune- up Power (dBm)	Scaling Factor	Meas. SAR-10g (W/kg)	Reported SAR-10g (W/kg)	SAR Plot #
Band 2	20	1RB_ OS0	19100	1900	Front	0	23.76	24.0	1.06	0.04	0.04	
					Back	0	23.76	24.0	1.06	0.02	0.02	
					Left	0	23.76	24.0	1.06	0.02	0.02	
					Right	0	23.76	24.0	1.06	0.01	0.01	
					Top	0	23.76	24.0	1.06	0.01	0.01	
					Bottom	0	23.76	24.0	1.06	0.22	0.23	35
					Bottom *	0	23.76	24.0	1.06	0.13	0.14	
		50RB_ OS49	18700	1860	Front	0	22.58	23.0	1.10	0.03	0.03	
					Back	0	22.58	23.0	1.10	0.02	0.02	
					Left	0	22.58	23.0	1.10	0.01	0.01	
					Right	0	22.58	23.0	1.10	0.02	0.02	
					Top	0	22.58	23.0	1.10	0.01	0.01	
					Bottom	0	22.58	23.0	1.10	0.16	0.18	
Band 4	20	1RB_ OS0	20050	1720	Front	0	23.60	24.0	1.10	0.16	0.18	36
					Front *	0	23.60	24.0	1.10	0.16	0.18	
					Back	0	23.60	24.0	1.10	0.08	0.09	
					Left	0	23.60	24.0	1.10	0.06	0.07	
					Right	0	23.60	24.0	1.10	0.07	0.08	
					Top	0	23.60	24.0	1.10	0.01	0.01	
					Bottom	0	23.60	24.0	1.10	0.08	0.09	
		50RB_ OS0	20050	1720	Front	0	22.58	23.0	1.10	0.14	0.15	
					Back	0	22.58	23.0	1.10	0.07	0.08	
					Left	0	22.58	23.0	1.10	0.05	0.06	
					Right	0	22.58	23.0	1.10	0.04	0.04	
					Top	0	22.58	23.0	1.10	0.01	0.01	
					Bottom	0	22.58	23.0	1.10	0.06	0.07	

<Continue>

Band 5	10	1RB_ OS49	20525	836.5	Front	0	24.12	24.5	1.09	0.22	0.24	
					Back	0	24.12	24.5	1.09	0.31	0.34	
					Left	0	24.12	24.5	1.09	0.23	0.25	
					Right	0	24.12	24.5	1.09	0.15	0.16	
					Top	0	24.12	24.5	1.09	0.01	0.01	
					Bottom	0	24.12	24.5	1.09	0.65	0.71	
					Bottom *	0	24.12	24.5	1.09	0.68	0.74	37
		25RB_ OS0	20450	829	Front	0	24.12	24.5	1.09	0.17	0.19	
					Back	0	24.12	24.5	1.09	0.26	0.28	
					Left	0	24.12	24.5	1.09	0.16	0.17	
					Right	0	24.12	24.5	1.09	0.13	0.14	
					Top	0	24.12	24.5	1.09	0.01	0.01	
					Bottom	0	24.12	24.5	1.09	0.59	0.64	
Band 7	20	1RB_ OS0	20850	2510	Front	0	20.77	21.0	1.05	0.32	0.34	
					Back	0	20.77	21.0	1.05	1.03	1.09	38
					Back *	0	20.77	21.0	1.05	1.01	1.06	
					Left	0	20.77	21.0	1.05	0.48	0.51	
					Right	0	20.77	21.0	1.05	0.17	0.18	
					Top	0	20.77	21.0	1.05	0.01	0.01	
					Bottom	0	20.77	21.0	1.05	0.14	0.15	
		50RB_ OS0	20850	2510	Front	0	19.41	20.0	1.15	0.23	0.26	
					Back	0	19.41	20.0	1.15	0.79	0.90	
					Left	0	19.41	20.0	1.15	0.37	0.42	
					Right	0	19.41	20.0	1.15	0.12	0.14	
					Top	0	19.41	20.0	1.15	0.01	0.01	
					Bottom	0	19.41	20.0	1.15	0.12	0.14	

<Continue>

Band 17	10	1RB_ OS0	23800	711	Front	0	24.19	24.5	1.07	0.32	0.34	
					Back	0	24.19	24.5	1.07	0.27	0.29	
					Left	0	24.19	24.5	1.07	0.21	0.23	
					Right	0	24.19	24.5	1.07	0.23	0.25	
					Top	0	24.19	24.5	1.07	0.01	0.01	
					Bottom	0	24.19	24.5	1.07	0.84	0.90	39
					Bottom *	0	24.19	24.5	1.07	0.80	0.86	
		25RB_ OS0	23790	710	Front	0	24.18	24.5	1.08	0.26	0.28	
					Back	0	24.18	24.5	1.08	0.23	0.25	
					Left	0	24.18	24.5	1.08	0.18	0.19	
					Right	0	24.18	24.5	1.08	0.18	0.19	
					Top	0	24.18	24.5	1.08	0.01	0.01	
					Bottom	0	24.18	24.5	1.08	0.69	0.74	
Band 41	20	1RB_ OS0	41140	2645	Front	0	23.62	24.0	1.09	0.12	0.13	
					Back	0	23.62	24.0	1.09	0.47	0.51	
					Back *	0	23.62	24.0	1.09	0.51	0.56	40
					Left	0	23.62	24.0	1.09	0.19	0.21	
					Right	0	23.62	24.0	1.09	0.07	0.08	
					Top	0	23.62	24.0	1.09	0.01	0.01	
					Bottom	0	23.62	24.0	1.09	0.05	0.05	
		50RB_ OS0	41140	2645	Front	0	22.66	23.0	1.08	0.09	0.10	
					Back	0	22.66	23.0	1.08	0.39	0.42	
					Left	0	22.66	23.0	1.08	0.15	0.16	
					Right	0	22.66	23.0	1.08	0.06	0.06	
					Top	0	22.66	23.0	1.08	0.01	0.01	
					Bottom	0	22.66	23.0	1.08	0.04	0.04	

Note: “ * ”, SAR worst case retest with SIM 2 Slot.

Wi-Fi - Ant 0													
Band	Mode	CH.	Freq. (MHz)	Extremity Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune-up Power (dBm)	Scaling Factor	Duty Cycle %	Duty Cycle Factor	Meas. SAR-10g (W/kg)	Reported SAR-10g (W/kg)	SAR Plot #
DTS	b	6	2437	Front	0	14.08	14.5	1.10	99.00	1.01	0.04	0.04	
				Back	0	14.08	14.5	1.10	99.00	1.01	0.17	0.19	
				Left	0	14.08	14.5	1.10	99.00	1.01	0.26	0.29	
				Right	0	14.08	14.5	1.10	99.00	1.01	0.39	0.43	41
				Top	0	14.08	14.5	1.10	99.00	1.01	0.05	0.06	
				Bottom	0	14.08	14.5	1.10	99.00	1.01	0.01	0.01	
U-NII-1	a	36	5180	Front	0	13.46	14.00	1.13	99.00	1.01	0.16	0.18	
				Back	0	13.46	14.00	1.13	99.00	1.01	0.53	0.61	
				Left	0	13.46	14.00	1.13	99.00	1.01	0.09	0.10	
				Right	0	13.46	14.00	1.13	99.00	1.01	0.89	1.02	42
				Top	0	13.46	14.00	1.13	99.00	1.01	0.13	0.15	
				Bottom	0	13.46	14.00	1.13	99.00	1.01	0.01	0.01	
U-NII-2C	a	100	5500	Front	0	13.01	13.5	1.12	99.00	1.01	0.26	0.29	
				Back	0	13.01	13.5	1.12	99.00	1.01	0.28	0.32	
				Left	0	13.01	13.5	1.12	99.00	1.01	0.05	0.06	
				Right	0	13.01	13.5	1.12	99.00	1.01	0.65	0.73	43
				Top	0	13.01	13.5	1.12	99.00	1.01	0.15	0.17	
				Bottom	0	13.01	13.5	1.12	99.00	1.01	0.01	0.01	
U-NII-3	a	157	5785	Front	0	13.27	13.5	1.05	99.00	1.01	0.20	0.21	
				Back	0	13.27	13.5	1.05	99.00	1.01	0.16	0.17	
				Left	0	13.27	13.5	1.05	99.00	1.01	0.03	0.03	
				Right	0	13.27	13.5	1.05	99.00	1.01	0.67	0.71	44
				Top	0	13.27	13.5	1.05	99.00	1.01	0.12	0.13	
				Bottom	0	13.27	13.5	1.05	99.00	1.01	0.01	0.01	

Wi-Fi - Ant 1													
Band	Mode	CH.	Freq. (MHz)	Extremity Position	Dist. (mm)	Cond. Power (dBm)	Max. Tune-up Power (dBm)	Scaling Factor	Duty Cycle %	Duty Cycle Factor	Meas. SAR-10g (W/kg)	Reported SAR-10g (W/kg)	SAR Plot #
DTS	b	6	2437	Front	0	14.08	14.5	1.10	99.00	1.01	0.12	0.13	
				Back	0	14.08	14.5	1.10	99.00	1.01	0.04	0.04	
				Left	0	14.08	14.5	1.10	99.00	1.01	0.33	0.37	45
				Right	0	14.08	14.5	1.10	99.00	1.01	0.03	0.03	
				Top	0	14.08	14.5	1.10	99.00	1.01	0.02	0.02	
				Bottom	0	14.08	14.5	1.10	99.00	1.01	0.01	0.01	
U-NII-1	a	36	5180	Front	0	13.34	13.5	1.04	99.00	1.01	0.13	0.14	
				Back	0	13.34	13.5	1.04	99.00	1.01	0.51	0.53	
				Left	0	13.34	13.5	1.04	99.00	1.01	0.77	0.81	46
				Right	0	13.34	13.5	1.04	99.00	1.01	0.10	0.10	
				Top	0	13.34	13.5	1.04	99.00	1.01	0.18	0.19	
				Bottom	0	13.34	13.5	1.04	99.00	1.01	0.01	0.01	
U-NII-2C	a	100	5500	Front	0	13.54	14.0	1.11	99.00	1.01	0.08	0.09	
				Back	0	13.54	14.0	1.11	99.00	1.01	0.36	0.40	
				Left	0	13.54	14.0	1.11	99.00	1.01	0.54	0.61	47
				Right	0	13.54	14.0	1.11	99.00	1.01	0.04	0.04	
				Top	0	13.54	14.0	1.11	99.00	1.01	0.10	0.11	
				Bottom	0	13.54	14.0	1.11	99.00	1.01	0.01	0.01	
U-NII-3	a	157	5785	Front	0	13.46	14.0	1.13	99.00	1.01	0.06	0.07	
				Back	0	13.46	14.0	1.13	99.00	1.01	0.38	0.43	
				Left	0	13.46	14.0	1.13	99.00	1.01	0.52	0.59	48
				Right	0	13.46	14.0	1.13	99.00	1.01	0.04	0.05	
				Top	0	13.46	14.0	1.13	99.00	1.01	0.06	0.07	
				Bottom	0	13.46	14.0	1.13	99.00	1.01	0.01	0.01	

8.5. Estimated SAR Calculation

Per FCC KDB 447498 D01v06 section 4.3.2 b) 1), when an antenna qualifies for the standalone SAR test exclusion of 4.3.1 and also transmits simultaneously with other antennas, the standalone SAR value was estimated according to the following formula to result in substantially conservative SAR values of $\leq 0.4\text{W/kg}$ for test separation distance $\leq 50\text{mm}$ to determine the simultaneous transmission SAR test exclusion criteria:

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5} * \frac{(\text{Max Power of channel, mW})}{\text{Min. Separation, mm}}, \text{ for 1-g SAR}$$

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{18.75} * \frac{(\text{Max Power of channel, mW})}{\text{Min. Separation, mm}}, \text{ for 10-g SAR}$$

When the test separation distance is $> 50\text{ mm}$, estimated 1g-SAR 0.4W/kg /10g-SAR 1.0W/kg is used for simultaneous evaluation.

■ Head

Test Mode	Freq. (MHz)	Head Position	Ant-to-User Distance	Tune-up Power (dBm)	Tune-up Power (mW)	Estimated SAR (W/kg)
Bluetooth	2480	Left Cheek	10	9.0	7.9	0.17
	2480	Left Tilt	10	9.0	7.9	0.17
	2480	Right Cheek	10	9.0	7.9	0.17
	2480	Right Tilt	10	9.0	7.9	0.17

Note: Antenna to User distance = Antenna to out-surface of EUT distance + Out-surface of EUT to User distance

■ Body

Test Mode	Freq. (MHz)	Body Position	Ant-to-User Distance	Tune-up Power (dBm)	Tune-up Power (mW)	Estimated SAR (W/kg)
Bluetooth	2480	Front	15	9.0	7.9	0.11
	2480	Back	10	9.0	7.9	0.17

Note: Antenna to User distance = Antenna to out-surface of EUT distance + Out-surface of EUT to User distance

Extremity

Test Mode	Freq. (MHz)	Extremity Position	Ant-to-User Distance	Tune-up Power (dBm)	Tune-up Power (mW)	Estimated SAR (W/kg)
Bluetooth	2480	Front	10	9.0	7.9	0.07
	2480	Back	5	9.0	7.9	0.13
	2480	Left	6	9.0	7.9	0.11
	2480	Right	55	9.0	7.9	1.0
	2440	Top	11	9.0	7.9	0.06
	2440	Bottom	142	9.0	7.9	1.0

Note: Antenna to User distance = Antenna to out-surface of EUT distance + Out-surface of EUT to User distance

9. Simultaneous Transmission Analysis

■ Head

Test Position	Standalone SAR(W/kg)				Summed SAR(W/kg)	
	1	2	3	4	1+2+3	1+4
	WWAN	Ant 0 Wi-Fi	Ant 1 Wi-Fi	Ant 0 BT		
Left Cheek	0.21	0.68	0.27	0.17	1.16	0.38
Left Tilt	0.10	0.44	0.12	0.17	0.66	0.27
Right Cheek	0.23	0.49	0.16	0.17	0.88	0.40
Right Tilt	0.10	0.47	0.07	0.17	0.64	0.27

■ Body

Test Position	Standalone SAR(W/kg)				Summed SAR(W/kg)	
	1	2	3	4	1+2+3	1+4
	WWAN	Ant 0 Wi-Fi	Ant 1 Wi-Fi	Ant 0 BT		
Front	0.41	0.26	0.22	0.11	0.89	0.52
Back	1.39	1.04	0.80	0.17	3.23 ^{Note}	1.56

Note: When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The ratio is determined by $(SAR1 + SAR2)^{1.5}/R_i$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion. When 10-g SAR applies, the ratio must be ≤ 0.10 .

Test Position	Standalone SAR(W/kg)			Summed SAR(W/kg)								
	1	2	3	1+2	Dist. (mm)	SPL SR	2+3	Dist. (mm)	SPL SR	1+3	Dist. (mm)	SPL SR
	WWAN	Ant 0 Wi-Fi	Ant 1 Wi-Fi									
Back	1.39	1.04	0.80	2.43	166.76	0.02	1.84	62.97	0.04	2.19	104.23	0.03

Extremity

Test Position	Standalone SAR(W/kg)				Summed SAR(W/kg)	
	1	2	3	4	1+2+3	1+4
	WWAN	Ant 0 Wi-Fi	Ant 1 Wi-Fi	Ant 0 BT		
Front	0.34	0.29	0.09	0.07	0.72	0.41
Back	1.09	0.61	0.53	0.13	2.23	1.22
Left	0.51	0.10	0.81	0.11	1.42	0.62
Right	0.25	1.02	0.10	1.0	1.37	1.25
Top	0.01	0.15	0.19	0.06	0.35	0.07
Bottom	0.90	0.01	0.01	1.0	0.92	1.90

The above numerical summed SAR results for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06.

10. Test Equipment Used

SR3 - SAR					
Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Stäubli Robot TX60L	Stäubli	TX60L	MRTSUE06412	only once	only once
Robot Controller	Stäubli	CS8C	MRTSUE06412	only once	only once
SAM Twin Phantom	Speag	QD 000 P41 AA	MRTSUE06419	N/A	N/A
DAK	Speag	DAK-3.5	MRTSUE06435	N/A	N/A
Dipole Validation Kits	Speag	D750V3	MRTSUE06426	3 year	2021/05/17
Dipole Validation Kits	Speag	D850V2	MRTSUE06427	3 year	2021/05/22
Dipole Validation Kits	Speag	D1750V2	MRTSUE06428	3 year	2021/05/14
Dipole Validation Kits	Speag	D1900V2	MRTSUE06429	3 year	2021/05/13
Dipole Validation Kits	Speag	D2450V2	MRTSUE06430	3 year	2021/05/08
Dipole Validation Kits	Speag	D2600V2	MRTSUE06431	3 year	2021/05/15
Dipole Validation Kits	Speag	D5GHzV2	MRTSUE06434	3 year	2022/04/15
DAE4	Speag	SD 000 D04 BN	MRTSUE06414	1 year	2021/05/05
E-Field Probe	Speag	EX3DV4	MRTSUE06438	1 year	2021/05/19
Network Analyzer	Keysight	N5234B	MRTSUE06454	1 year	2021/07/02
Directional Coupler	Agilent	778D	MRTSUE06083	1 year	2022/03/24
Directional Coupler	Agilent	87301D OPT 292	MRTSUE06082	1 year	2022/03/24
Signal Generator	Keysight	N5183B	MRTSUE06197	1 year	2021/04/14
Power Sensor	Keysight	U2021XA	MRTSUE06447	1 year	2021/06/11
Thermohygrometer	Testo	622	MRTSUE06361	1 year	2021/05/12

Software	Version	Function
DASY NEO	52.10.4.1527	SAR Test Software

11. Measurement Uncertainty

DASY5 Uncertainty Budget, according to IEEE 1528 (0.3 - 3 GHz range)								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) v _{eff}
Measurement System								
Probe Calibration	±6.0 %	N	1	1	1	±6.0 %	±6.0 %	∞
Axial Isotropy	±4.7 %	R	$\sqrt{3}$	0.7	0.7	±1.9 %	±1.9 %	∞
Hemispherical Isotropy	±9.6 %	R	$\sqrt{3}$	0.7	0.7	±3.9 %	±3.9 %	∞
Boundary Effects	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Linearity	±4.7 %	R	$\sqrt{3}$	1	1	±2.7 %	±2.7 %	∞
System Detection Limits	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Modulation Response	±2.4 %	R	$\sqrt{3}$	1	1	±1.4 %	±1.4 %	∞
Readout Electronics	±0.3 %	N	1	1	1	±0.3 %	±0.3 %	∞
Response Time	±0.8 %	R	$\sqrt{3}$	1	1	±0.5 %	±0.5 %	∞
Integration Time	±2.6 %	R	$\sqrt{3}$	1	1	±1.5 %	±1.5 %	∞
RF Ambient Noise	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
RF Ambient Reflections	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Probe Positioner	±0.02 %	R	$\sqrt{3}$	1	1	±0.0 %	±0.0 %	∞
Probe Positioning	±0.4 %	R	$\sqrt{3}$	1	1	±0.2 %	±0.2 %	∞
Max. SAR Eval.	±2.0 %	R	$\sqrt{3}$	1	1	±1.2 %	±1.2 %	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9 %	±2.9 %	145
Device Holder	±3.6%	N	1	1	1	±3.6 %	±3.6 %	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9 %	±2.9 %	∞
Power Scaling	±0%	R	$\sqrt{3}$	1	1	±0.0 %	±0.0 %	∞
Phantom and Setup								
Phantom Uncertainty	±6.1%	R	$\sqrt{3}$	1	1	±3.5 %	±3.5 %	∞
SAR correction	±1.9%	N	1	1	0.84	±1.9 %	±1.6 %	∞
Liquid Cond. (mea.) ^{DAK}	±2.5%	N	1	0.78	0.71	±2.0 %	±1.8 %	∞
Liquid Perm. (mea.) ^{DAK}	±2.5%	N	1	0.23	0.26	±0.6 %	±0.7 %	∞
Temp. unc. – Conductivity	±3.4%	R	$\sqrt{3}$	0.78	0.71	±1.5 %	±1.4 %	∞
Temp. unc. – Permittivity	±0.4%	R	$\sqrt{3}$	0.23	0.26	±0.1 %	±0.1 %	∞
Combined Std. Uncertainty						±11.3%	±11.2%	459
Expanded STD Uncertainty						±22.6%	±22.4%	

DASY5 Uncertainty Budget, according to IEEE 1528 (3 - 6 GHz range)								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (10g)	Std. Unc. (10g)	(vi) v _{eff}
Measurement System								
Probe Calibration	±6.55 %	N	1	1	1	±6.55 %	±6.55 %	∞
Axial Isotropy	±4.7 %	R	$\sqrt{3}$	0.7	0.7	±1.9 %	±1.9 %	∞
Hemispherical Isotropy	±9.6 %	R	$\sqrt{3}$	0.7	0.7	±3.9 %	±3.9 %	∞
Boundary Effects	±2.0 %	R	$\sqrt{3}$	1	1	±1.2 %	±1.2 %	∞
Linearity	±4.7 %	R	$\sqrt{3}$	1	1	±2.7 %	±2.7 %	∞
System Detection Limits	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Modulation Response	±2.4 %	R	$\sqrt{3}$	1	1	±1.4 %	±1.4 %	∞
Readout Electronics	±0.3 %	N	1	1	1	±0.3 %	±0.3 %	∞
Response Time	±0.8 %	R	$\sqrt{3}$	1	1	±0.5 %	±0.5 %	∞
Integration Time	±2.6 %	R	$\sqrt{3}$	1	1	±1.5 %	±1.5 %	∞
RF Ambient Noise	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
RF Ambient Reflections	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Probe Positioner	±0.04 %	R	$\sqrt{3}$	1	1	±0.0 %	±0.0 %	∞
Probe Positioning	±0.8 %	R	$\sqrt{3}$	1	1	±0.5 %	±0.5 %	∞
Max. SAR Eval.	±4.0 %	R	$\sqrt{3}$	1	1	±2.3 %	±2.3 %	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9 %	±2.9 %	145
Device Holder	±3.6%	N	1	1	1	±3.6 %	±3.6 %	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9 %	±2.9 %	∞
Power Scaling	±0%	R	$\sqrt{3}$	1	1	±0.0 %	±0.0 %	∞
Phantom and Setup								
Phantom Uncertainty	±6.6%	R	$\sqrt{3}$	1	1	±3.8 %	±3.8 %	∞
SAR correction	±1.9%	N	1	1	0.84	±1.9 %	±1.6 %	∞
Liquid Cond. (mea.) ^{DAK}	±2.5%	N	1	0.78	0.71	±2.0 %	±1.8 %	∞
Liquid Perm. (mea.) ^{DAK}	±2.5%	N	1	0.23	0.26	±0.6 %	±0.7 %	∞
Temp. unc. – Conductivity	±3.4%	R	$\sqrt{3}$	0.78	0.71	±1.5 %	±1.4 %	∞
Temp. unc. – Permittivity	±0.4%	R	$\sqrt{3}$	0.23	0.26	±0.1 %	±0.1 %	∞
Combined Std. Uncertainty						±11.9%	±11.8%	569
Expanded STD Uncertainty						±23.8%	±23.6%	

Annex A - System Check Result

Test Date: 02/22/2021

SystemPerformanceCheck-SAM1-D750HSL

DUT: Dipole 750 MHz D750V3; Type: D750V3

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 42.85$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.41, 10.41, 10.41) @ 750 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

configuration/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (5x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 3.15 W/kg

configuration/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$; Reference Value = 58.99 V/m; Power Drift = -0.05 dB

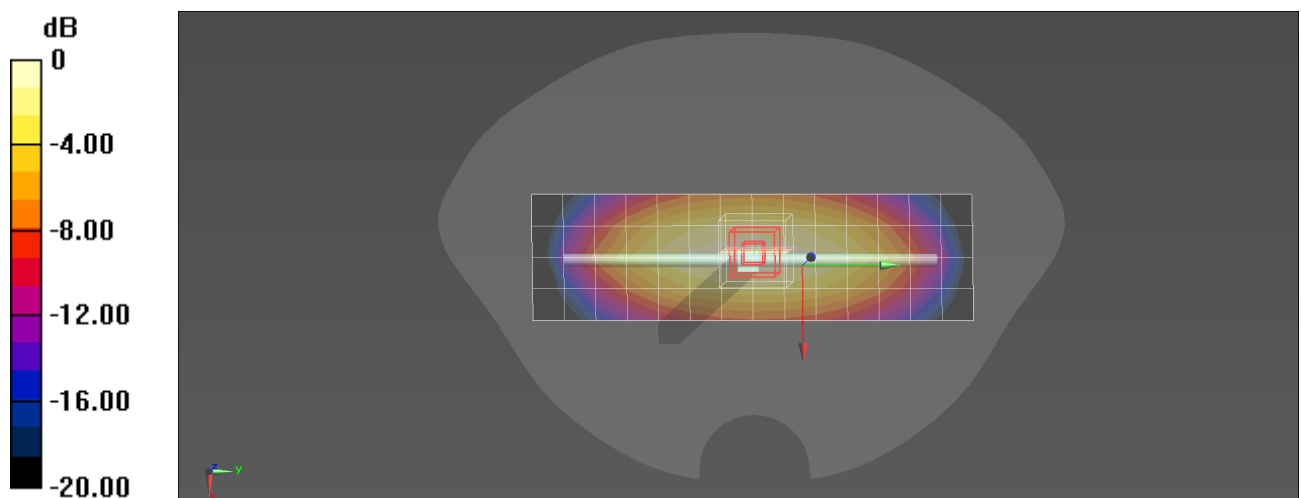
Peak SAR (extrapolated) = 3.42 W/kg

SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.38 W/kg

Smallest distance from peaks to all points 3 dB below = 16.3 mm

Ratio of SAR at M2 to SAR at M1 = 62.2%

Maximum value of SAR (measured) = 2.97 W/kg



0 dB = 2.97 W/kg = 4.73 dBW/kg

Test Date: 02/23/2021

SystemPerformanceCheck-SAM1-D850HSL

DUT: Dipole 850 MHz D850V2; Type: D850V2

Communication System: CW; Frequency: 850 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 850 \text{ MHz}$; $\sigma = 0.91 \text{ S/m}$; $\epsilon_r = 42.52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 850 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

configuration/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (6x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 3.22 W/kg

configuration/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$; Reference Value = 56.94 V/m ; Power Drift = -0.04 dB

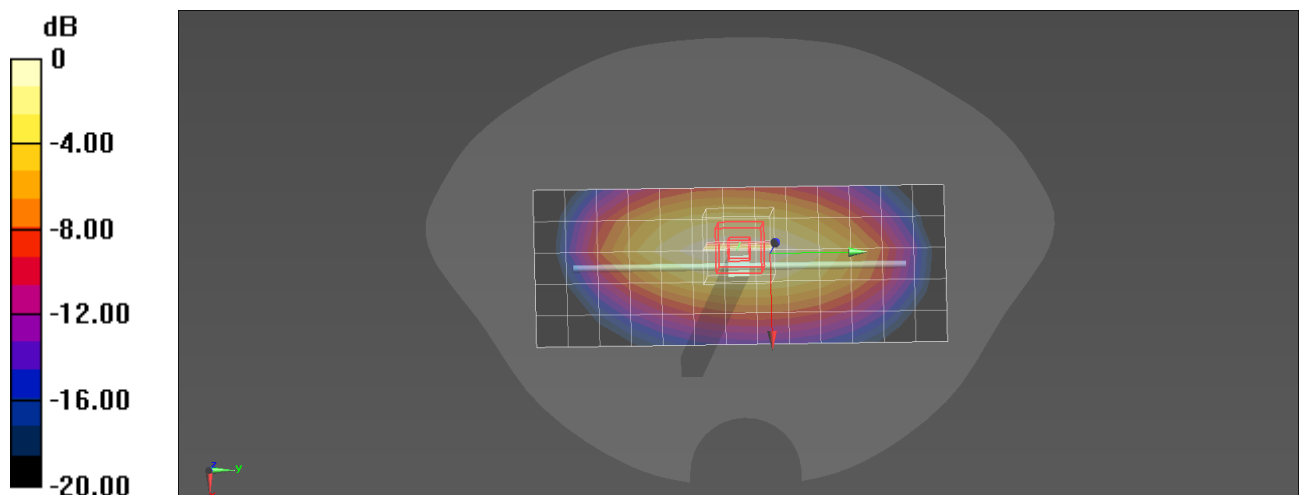
Peak SAR (extrapolated) = 3.77 W/kg

SAR(1 g) = 2.37 W/kg ; SAR(10 g) = 1.53 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 63%

Maximum value of SAR (measured) = 3.27 W/kg



0 dB = 3.27 W/kg = 5.15 dBW/kg

Test Date: 02/21/2021

SystemPerformanceCheck-SAM1-D1750HSL

DUT: Dipole 1750 MHz D1750V2; Type: D1750V2

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750 \text{ MHz}$; $\sigma = 1.31 \text{ S/m}$; $\epsilon_r = 40.93$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.5, 8.5, 8.5) @ 1750 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/d=10mm, Pin=250 mW, dist=1.4mm (EX-Probe) 2/Area Scan (6x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 12.9 W/kg

Configuration/d=10mm, Pin=250 mW, dist=1.4mm (EX-Probe) 2/Zoom Scan (7x7x7) (5x5x7)/Cube

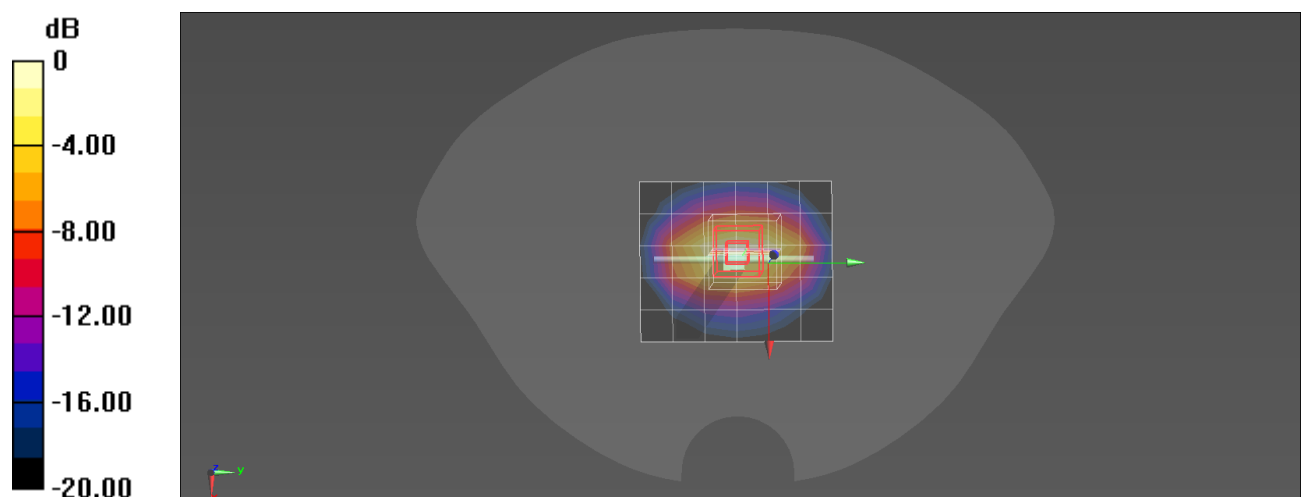
0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$; Reference Value = 103.0 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 9.05 W/kg; SAR(10 g) = 4.85 W/kg

Smallest distance from peaks to all points 3 dB below = 9.7 mm

Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg = 11.40 dBW/kg

Test Date: 02/20/2021

SystemPerformanceCheck-SAM1-D1900HSL

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.4 \text{ S/m}$; $\epsilon_r = 40.72$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1900 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

configuration/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (6x11x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 15.1 W/kg

configuration/d=15mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$; Reference Value = 101.9 V/m; Power Drift = 0.05 dB

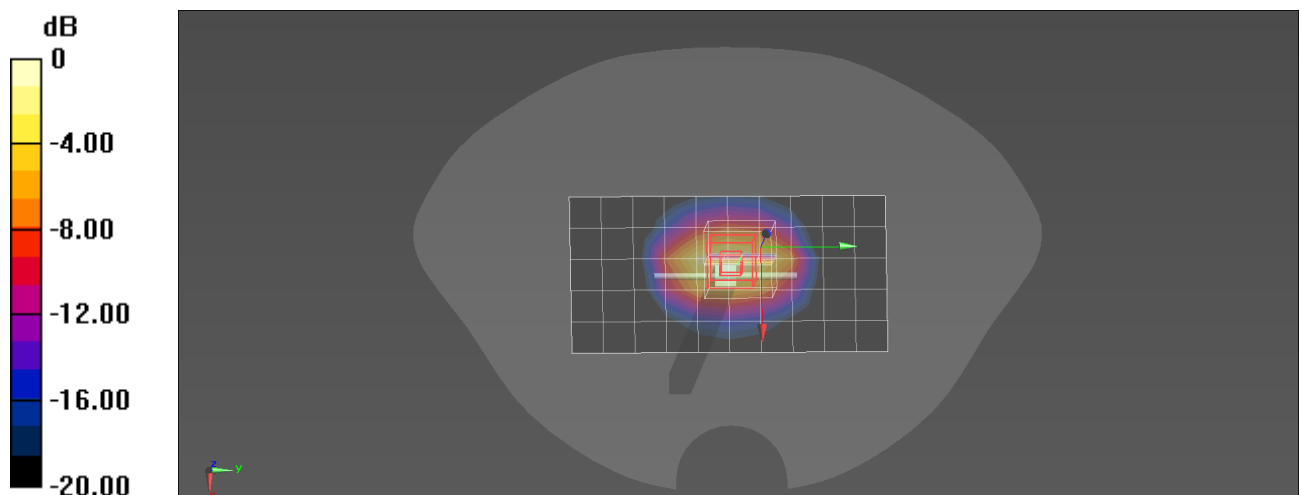
Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.39 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 53.7%

Maximum value of SAR (measured) = 15.8 W/kg



0 dB = 15.8 W/kg = 11.99 dBW/kg

Test Date: 02/24/2021

SystemPerformanceCheck-SAM1-D2450HSL

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.8 \text{ S/m}$; $\epsilon_r = 39.98$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2450 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

configuration/d=10mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (7x9x1): Measurement grid:

dx=12mm, dy=12mm; Maximum value of SAR (measured) = 19.6 W/kg

configuration/d=10mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 102.1 V/m; Power Drift = 0.03 dB

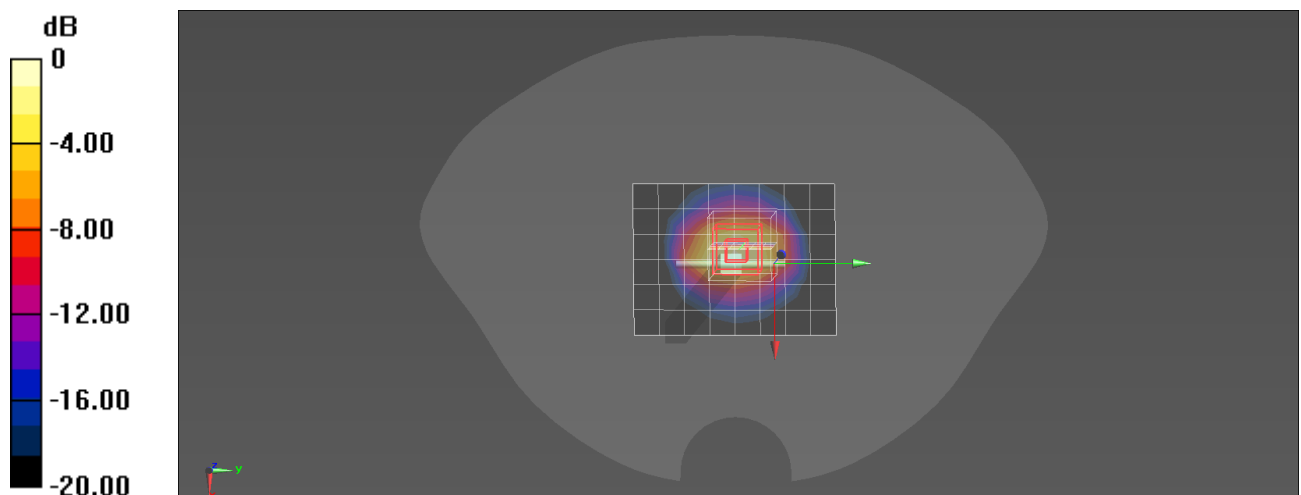
Peak SAR (extrapolated) = 27.6 W/kg

SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.41 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 50%

Maximum value of SAR (measured) = 22.4 W/kg



0 dB = 22.4 W/kg = 13.50 dBW/kg

Test Date: 02/26/2021

SystemPerformanceCheck-SAM1-D2450HSL

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.79 \text{ S/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2450 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

configuration/d=10mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (7x9x1): Measurement grid:

dx=12mm, dy=12mm; Maximum value of SAR (measured) = 21.9 W/kg

configuration/d=10mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 109.0 V/m; Power Drift = -0.01 dB

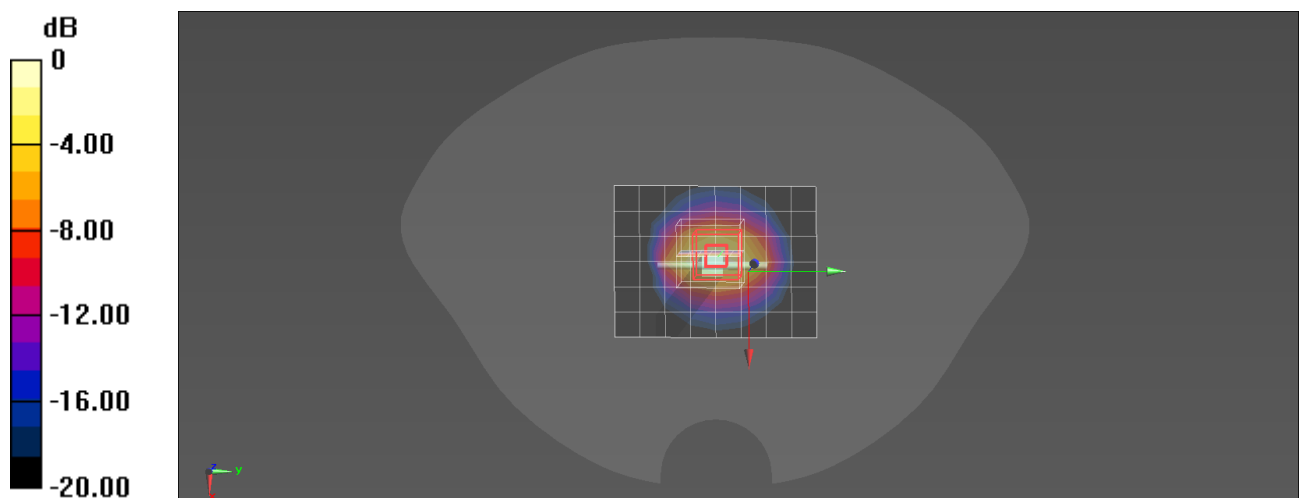
Peak SAR (extrapolated) = 26.9 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.26 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 50.1%

Maximum value of SAR (measured) = 21.8 W/kg



0 dB = 21.8 W/kg = 13.38 dBW/kg

Test Date: 02/25/2021

SystemPerformanceCheck-SAM1-D2600HSL

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 1.92 \text{ S/m}$; $\epsilon_r = 39.71$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.41, 7.41, 7.41) @ 2600 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

configuration/d=10mm, Pin=250mW, dist=1.4mm (EX-Probe)/Area Scan (7x9x1): Measurement grid:

dx=12mm, dy=12mm; Maximum value of SAR (measured) = 22.2 W/kg

configuration/d=10mm, Pin=250mW, dist=1.4mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 104.5 V/m; Power Drift = 0.07 dB

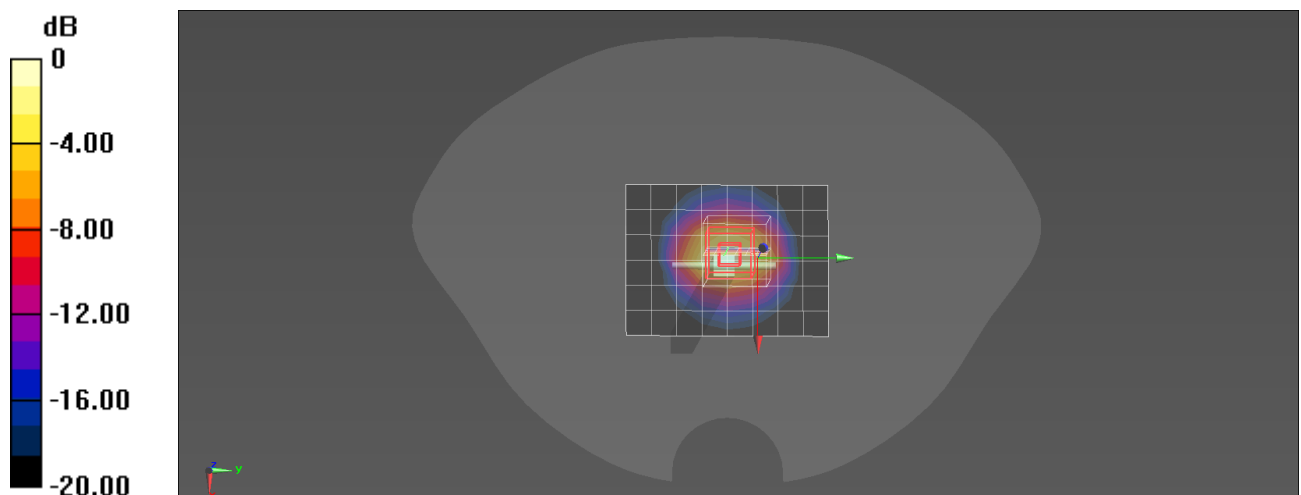
Peak SAR (extrapolated) = 29.4 W/kg

SAR(1 g) = 14 W/kg; SAR(10 g) = 6.36 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 48.1%

Maximum value of SAR (measured) = 23.4 W/kg



0 dB = 23.4 W/kg = 13.69 dBW/kg

Test Date: 02/27/2021

SystemPerformanceCheck-SAM1-D5250HSL

DUT: Dipole D5GHzV2; Type: D5GHzV2

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.49$ S/m; $\epsilon_r = 34.69$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5250 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/d=10mm, Pin=100 mW, dist=1.4mm (EX-Probe)/Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 16.9 W/kg

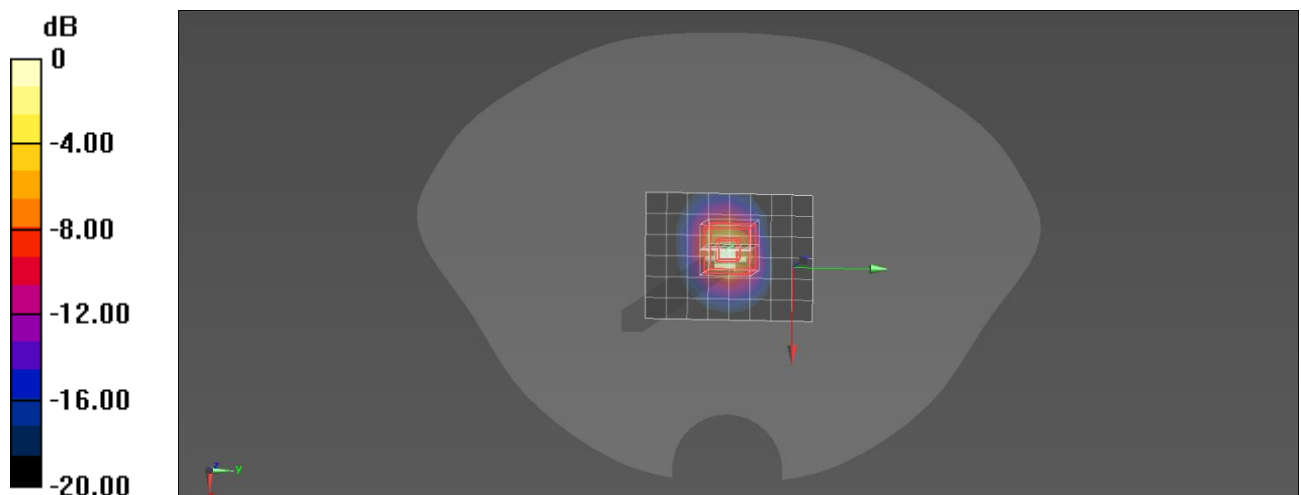
Configuration/d=10mm, Pin=100 mW, dist=1.4mm (EX-Probe)/Zoom Scan (8x8x8) (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 60.32 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 31.2 W/kg

SAR(1 g) = 8.11 W/kg; SAR(10 g) = 2.33 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 65.9%

Maximum value of SAR (measured) = 19.8 W/kg



0 dB = 19.8 W/kg = 12.97 dBW/kg

Test Date: 02/28/2021

SystemPerformanceCheck-SAM1-D5600HSL

DUT: Dipole D5GHzV2; Type: D5GHzV2

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.87$ S/m; $\epsilon_r = 34.05$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5600 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/d=10mm, Pin=100mW, dist=1.4mm (EX-Probe)/Area Scan (7x9x1): Measurement grid:

dx=10mm, dy=10mm; Maximum value of SAR (measured) = 16.4 W/kg

Configuration/d=10mm, Pin=100mW, dist=1.4mm (EX-Probe)/Zoom Scan (8x8x8) (8x8x7)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 56.66 V/m; Power Drift = 0.04 dB

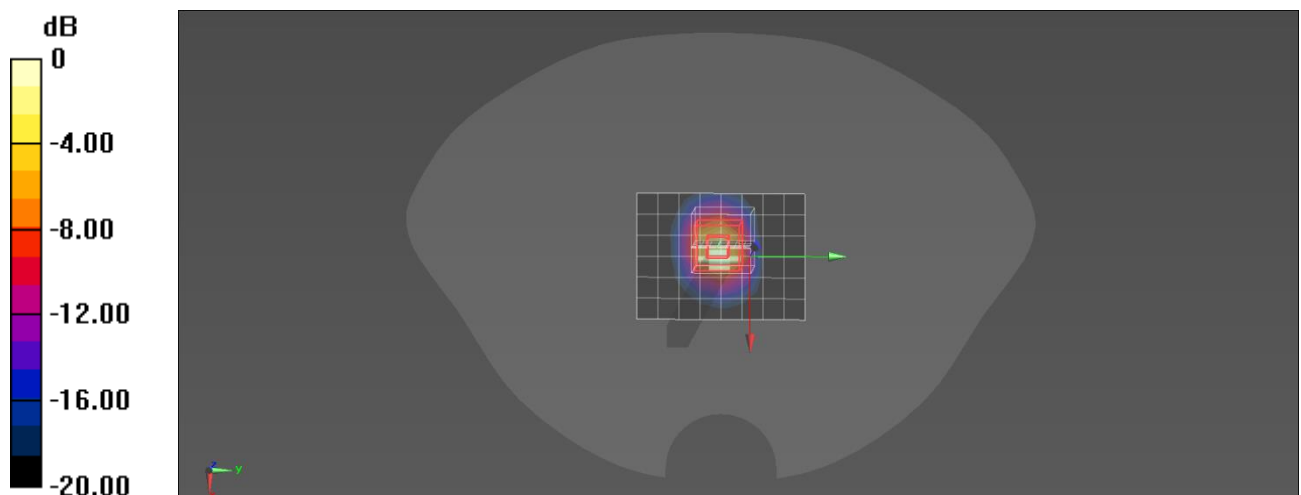
Peak SAR (extrapolated) = 34.1 W/kg

SAR(1 g) = 8.2 W/kg; SAR(10 g) = 2.33 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.7%

Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 21.1 W/kg = 13.24 dBW/kg

Test Date: 02/28/2021

SystemPerformanceCheck-SAM1-D5750HSL

DUT: Dipole D5GHzV2; Type: D5GHzV2

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750 \text{ MHz}$; $\sigma = 5.03 \text{ S/m}$; $\epsilon_r = 33.79$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5750 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/d=10mm, Pin=100 mW, dist=1.4mm (EX-Probe)/Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 15.3 W/kg

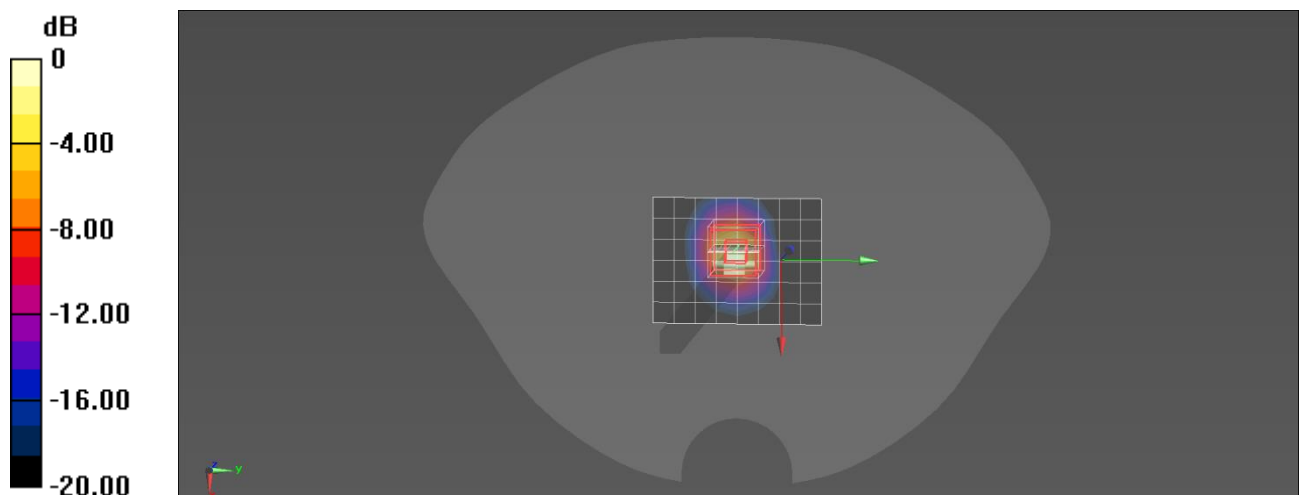
Configuration/d=10mm, Pin=100 mW, dist=1.4mm (EX-Probe)/Zoom Scan (8x8x8) (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 53.93 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 32.4 W/kg

SAR(1 g) = 7.65 W/kg; SAR(10 g) = 2.18 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 62.9%

Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg = 12.94 dBW/kg

Annex B - Test Data Plots

Plot 1#

Test Date: 02/20/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: WCDMA Band 2 Low Right Cheek

Communication System: WCDMA; Frequency: 1852.4 MHz

Medium parameters used: $f = 1852.4$ MHz; $\sigma = 1.37$ S/m; $\epsilon_r = 40.79$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1852.4 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/WCDMA Band 2 Low Right Cheek/Area Scan (8x17x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.00959 W/kg

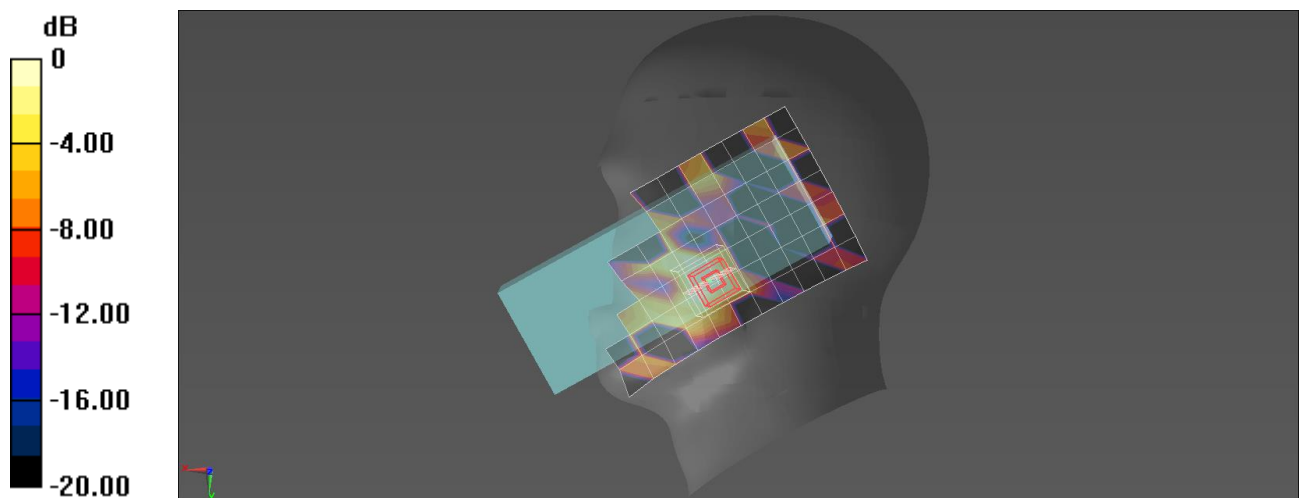
Configuration/WCDMA Band 2 Low Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 1.212 V/m; Power Drift =0.15 dB
Peak SAR (extrapolated) = 0.0110 W/kg

SAR(1 g) = 0.00422 W/kg; SAR(10 g) = 0.00144 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 37.5%

Maximum value of SAR (measured) = 0.00761 W/kg



0 dB = 0.00761 W/kg = -21.19 dBW/kg

Plot 2#

Test Date: 02/23/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: WCDMA Band 5 Mid Right Cheek

Communication System: WCDMA; Frequency: 836.6 MHz

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.56$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 836.6 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/WCDMA Band 5 Mid Right Cheek/Area Scan (8x17x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.175 W/kg

Configuration/WCDMA Band 5 Mid Right Cheek/Zoom Scan (6x6x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm; Reference Value = 5.331 V/m; Power Drift = 0.15 dB

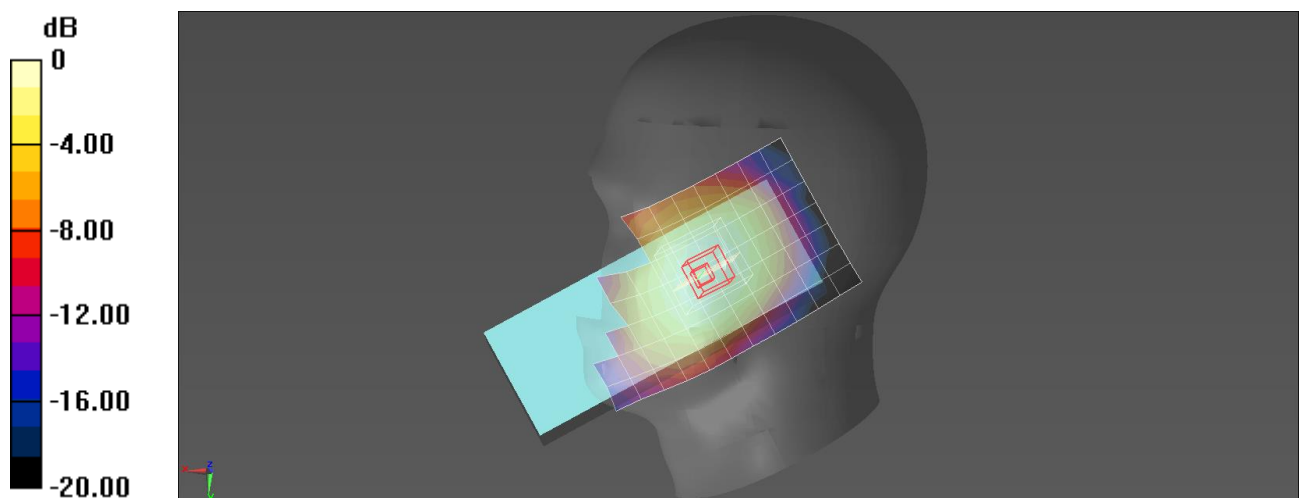
Peak SAR (extrapolated) = 0.200 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.117 W/kg

Smallest distance from peaks to all points 3 dB below = 25.4 mm

Ratio of SAR at M2 to SAR at M1 = 77.2%

Maximum value of SAR (measured) = 0.183 W/kg



0 dB = 0.183 W/kg = -7.38 dBW/kg

Plot 3#

Test Date: 02/20/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: LTE Band 2 Low QPSK_20M_50RB_OS49 Right Cheek**

Communication System: LTE; Frequency: 1860 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.78$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1860 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 2 Low QPSK_20M_50RB_OS49 Right Cheek/Area Scan (8x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.00566 W/kg

Configuration/LTE Band 2 Low QPSK_20M_50RB_OS49 Right Cheek/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 0.925 V/m; Power Drift = 0.14 dB

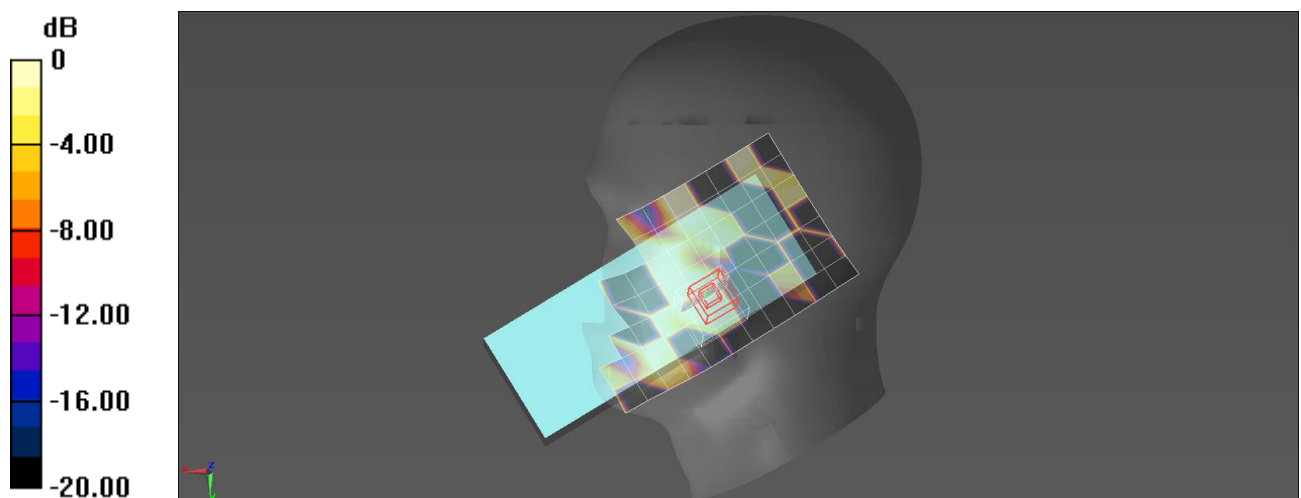
Peak SAR (extrapolated) = 0.00397 W/kg

SAR(1 g) = 0.000576 W/kg; SAR(10 g) = 8.79e-005 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 38.1%

Maximum value of SAR (measured) = 0.00277 W/kg



0 dB = 0.00277 W/kg = -25.58 dBW/kg

Plot 4#

Test Date: 02/21/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 4 Low QPSK_20M_1RB_OS0 Right Cheek

Communication System: LTE; Frequency: 1720 MHz

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.98$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.5, 8.5, 8.5) @ 1720 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 4 Low QPSK_20M_1RB_OS0 Right Cheek/Area Scan (8x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.0557 W/kg

Configuration/LTE Band 4 Low QPSK_20M_1RB_OS0 Right Cheek/Zoom Scan (5x5x7)/Cube 0:

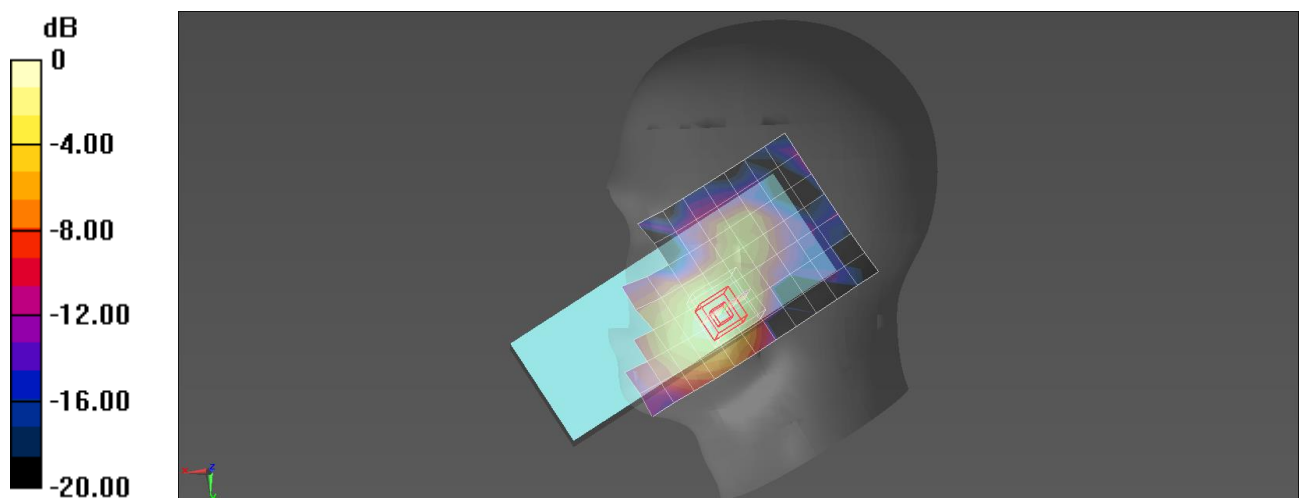
Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 1.156 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.0640 W/kg

SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.024 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 63.7%

Maximum value of SAR (measured) = 0.0543 W/kg



0 dB = 0.0543 W/kg = -12.65 dBW/kg

Plot 5#

Test Date: 02/23/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 5 Mid QPSK_10M_1RB_OS49 Right Cheek

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.56$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 836.5 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Right Cheek/Area Scan (8x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.206 W/kg

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Right Cheek/Zoom Scan (6x6x7)/Cube 0:

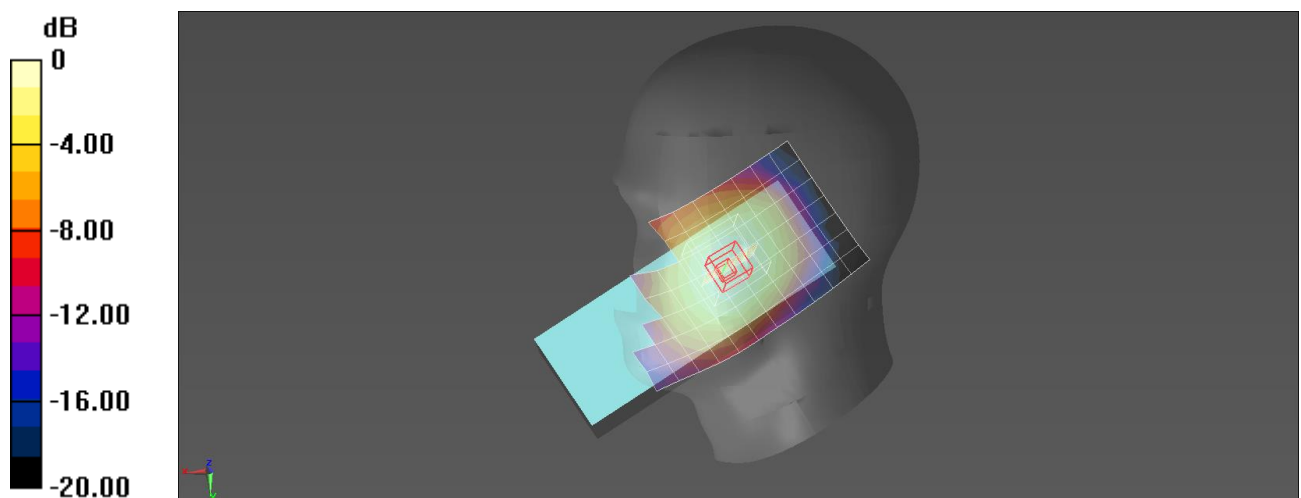
Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 5.480 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.238 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.141 W/kg

Smallest distance from peaks to all points 3 dB below = 26.6 mm

Ratio of SAR at M2 to SAR at M1 = 77.9%

Maximum value of SAR (measured) = 0.219 W/kg



0 dB = 0.219 W/kg = -6.60 dBW/kg

Plot 6#

Test Date: 02/24/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 7 Low QPSK_20M_50RB_OS0 Left Cheek

Communication System: LTE; Frequency: 2510 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.84$ S/m; $\epsilon_r = 39.86$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2510 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 7 Low QPSK_20M_50RB_OS0 Left Cheek/Area Scan (10x20x1):

Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.0747 W/kg

Configuration/LTE Band 7 Low QPSK_20M_50RB_OS0 Left Cheek/Zoom Scan (7x7x7)/Cube 0:

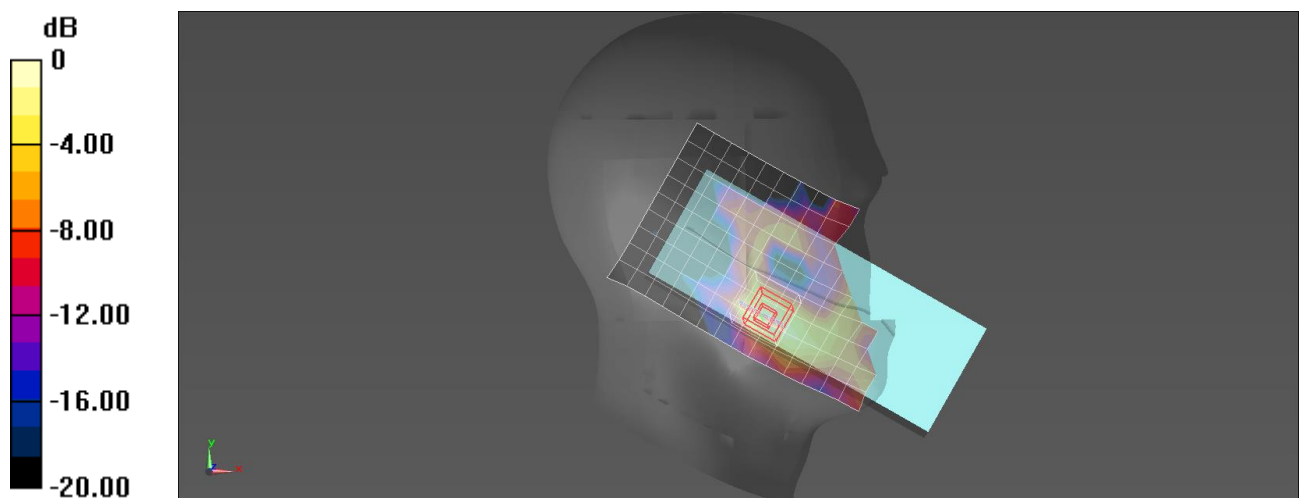
Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 0.738 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.100 W/kg

SAR(1 g) = 0.046 W/kg; SAR(10 g) = 0.022 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 47.4%

Maximum value of SAR (measured) = 0.0770 W/kg



0 dB = 0.0770 W/kg = -11.14 dBW/kg

Plot 7#

Test Date: 02/22/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 17 High QPSK_10M_1RB_OS0 Right Cheek

Communication System: LTE; Frequency: 711 MHz

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.86 \text{ S/m}$; $\epsilon_r = 42.99$; $\rho = 1000 \text{ kg/m}^3$; Tissue Temp (celsius)-22.5°C; Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.41, 10.41, 10.41) @ 711 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Right Cheek/Area Scan (8x17x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 0.248 W/kg

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Right Cheek/Zoom Scan (5x5x7)/Cube 0:

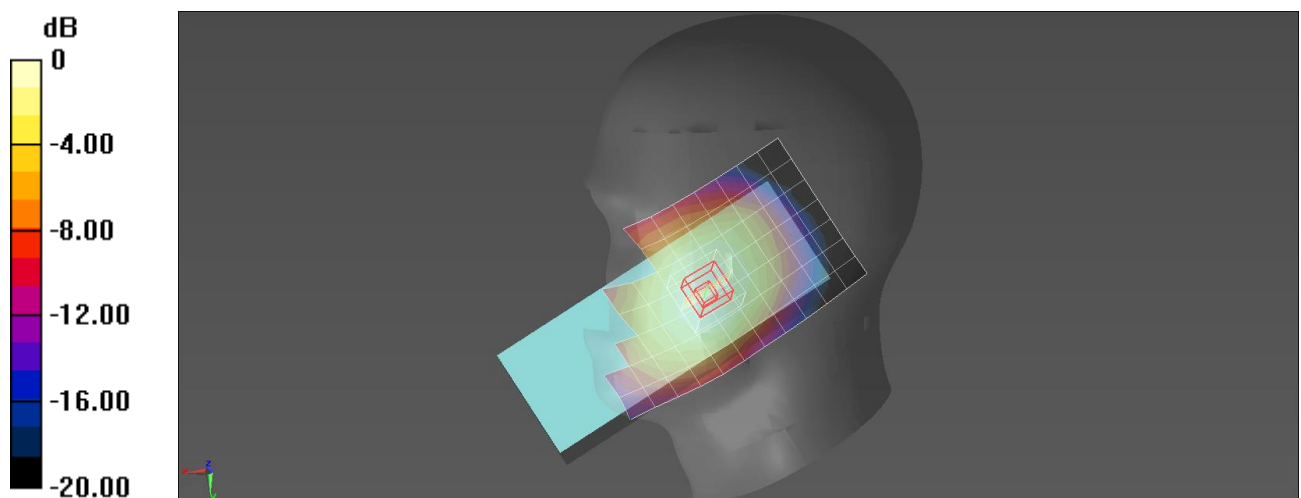
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$; Reference Value = 4.938 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.267 W/kg

SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.158 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 78.6%

Maximum value of SAR (measured) = 0.247 W/kg



0 dB = 0.247 W/kg = -6.07 dBW/kg

Plot 8#

Test Date: 02/25/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 41 High QPSK_20M_1RB_OS0 Left Cheek

Communication System: LTE; Frequency: 2645 MHz

Medium parameters used: $f = 2645$ MHz; $\sigma = 1.96$ S/m; $\epsilon_r = 39.62$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.41, 7.41, 7.41) @ 2645 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 41 High QPSK_20M_1RB_OS0 Left Cheek/Area Scan (10x20x1):

Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.0214 W/kg

Configuration/LTE Band 41 High QPSK_20M_1RB_OS0 Left Cheek/Zoom Scan (7x7x7)/Cube 0:

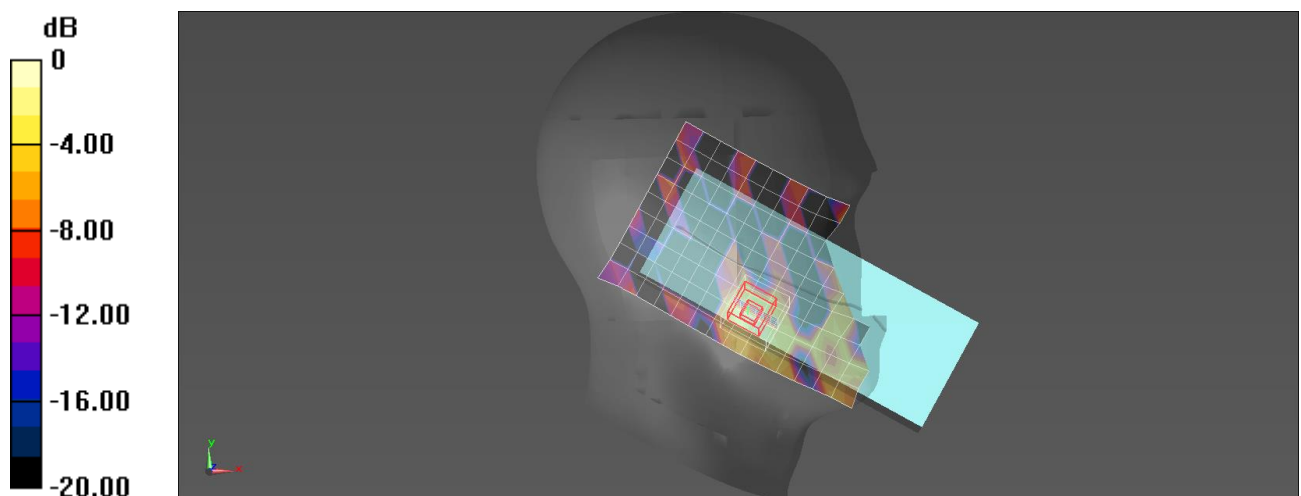
Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 0.883 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.0460 W/kg

SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00457 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 39.7%

Maximum value of SAR (measured) = 0.0225 W/kg



0 dB = 0.0225 W/kg = -16.48 dBW/kg

Plot 9#

Test Date: 02/24/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11b 2437MHz Left Cheek**

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2437 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11b 2437MHz Left Cheek/Area Scan (10x20x1): Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.235 W/kg**Configuration/802.11b 2437MHz Left Cheek/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 1.573 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.084 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 53%

Maximum value of SAR (measured) = 0.258 W/kg

Configuration/802.11b 2437MHz Left Cheek/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 1.573 V/m; Power Drift = -0.12 dB

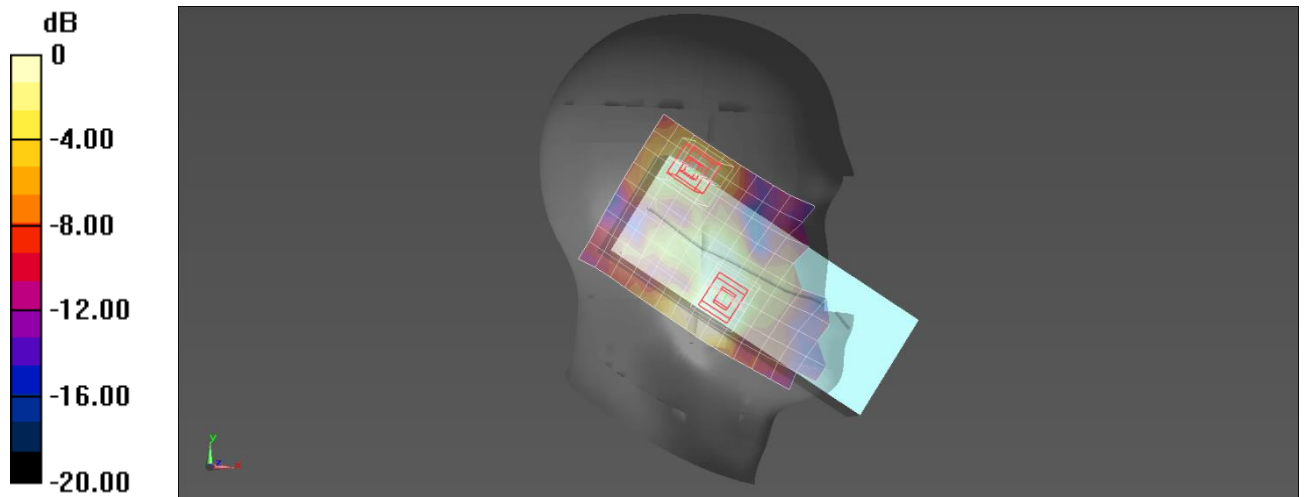
Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.054 W/kg; SAR(10 g) = 0.027 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 0.0872 W/kg



0 dB = 0.0872 W/kg = -10.59 dBW/kg

Plot 10#

Test Date: 02/27/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5180MHz Left Cheek**

Communication System: 802.11a; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.42$ S/m; $\epsilon_r = 34.82$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5180 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5180MHz Left Cheek/Area Scan (13x23x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.789 W/kg**Configuration/802.11a 5180MHz Left Cheek/Zoom Scan (8x8x8)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 7.371 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 5.21 W/kg

SAR(1 g) = 0.400 W/kg; SAR(10 g) = 0.113 W/kg

Smallest distance from peaks to all points 3 dB below = 4.4 mm

Ratio of SAR at M2 to SAR at M1 = 70.4%

Maximum value of SAR (measured) = 0.927 W/kg

Configuration/802.11a 5180MHz Left Cheek/Zoom Scan (8x8x8)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 7.371 V/m; Power Drift = -0.05 dB

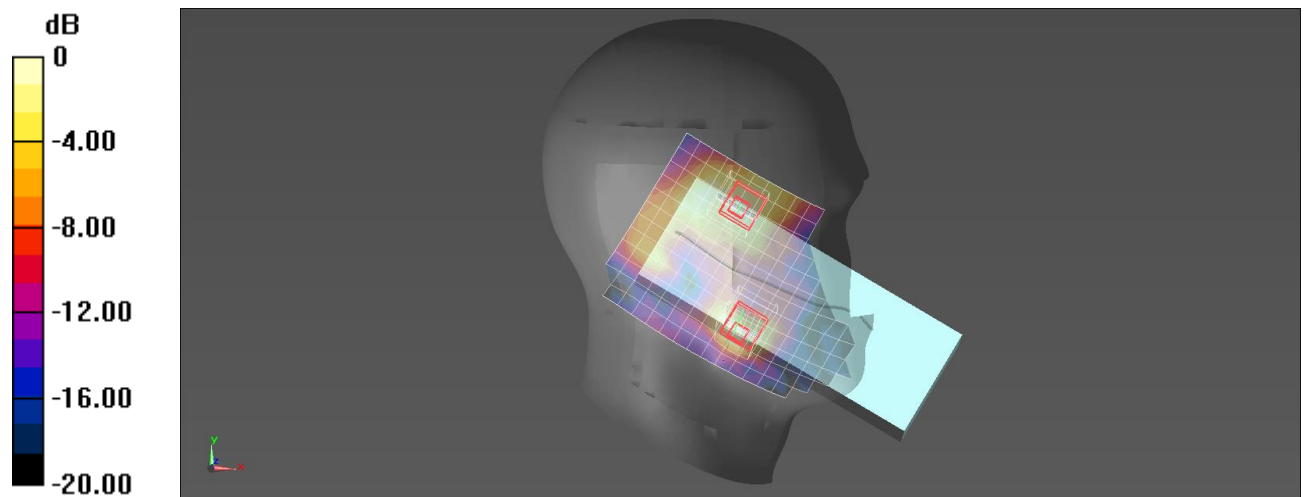
Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.144 W/kg

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 66.6%

Maximum value of SAR (measured) = 0.841 W/kg



0 dB = 0.841 W/kg = -0.75 dBW/kg

Plot 11#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5500MHz Left Cheek**

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.75$ S/m; $\epsilon_r = 34.23$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5500 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5500MHz Left Cheek/Area Scan (13x23x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.983 W/kg**Configuration/802.11a 5500MHz Left Cheek/Zoom Scan (8x8x8)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.925 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.176 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 65.8%

Maximum value of SAR (measured) = 1.48 W/kg

Configuration/802.11a 5500MHz Left Cheek/Zoom Scan (8x8x8)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.925 V/m; Power Drift = 0.14 dB

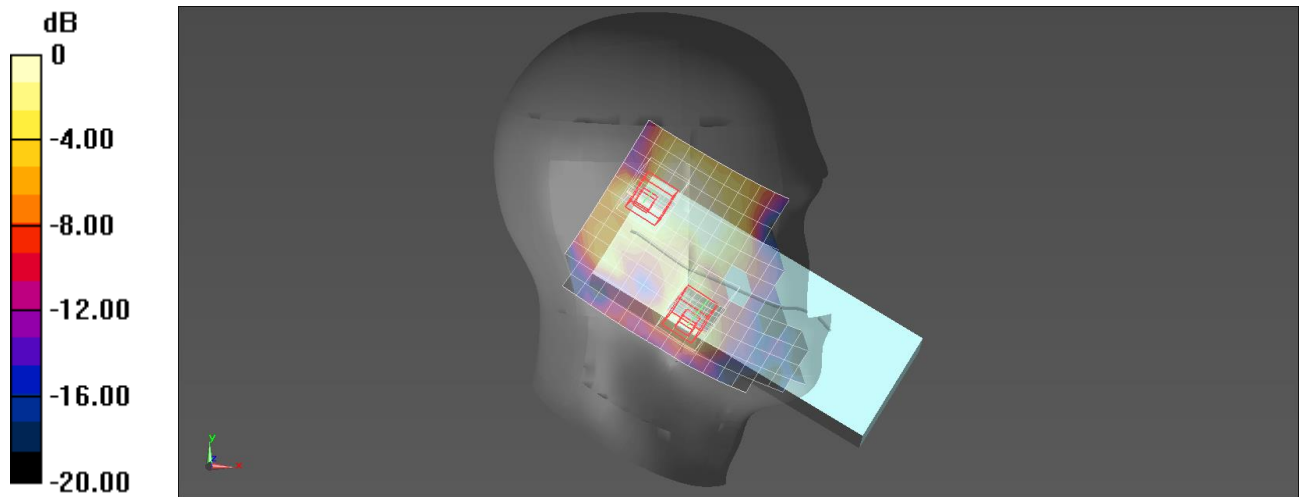
Peak SAR (extrapolated) = 0.884 W/kg

SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.079 W/kg

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 65.9%

Maximum value of SAR (measured) = 0.577 W/kg



0 dB = 0.577 W/kg = -2.39 dBW/kg

Plot 12#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5785MHz Left Cheek**

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.08$ S/m; $\epsilon_r = 33.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5785 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5785MHz Left Cheek/Area Scan (13x23x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.995 W/kg**Configuration/802.11a 5785MHz Left Cheek/Zoom Scan (8x8x8)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.235 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.128 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%

Maximum value of SAR (measured) = 1.15 W/kg

Configuration/802.11a 5785MHz Left Cheek/Zoom Scan (8x8x8)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.235 V/m; Power Drift = 0.17 dB

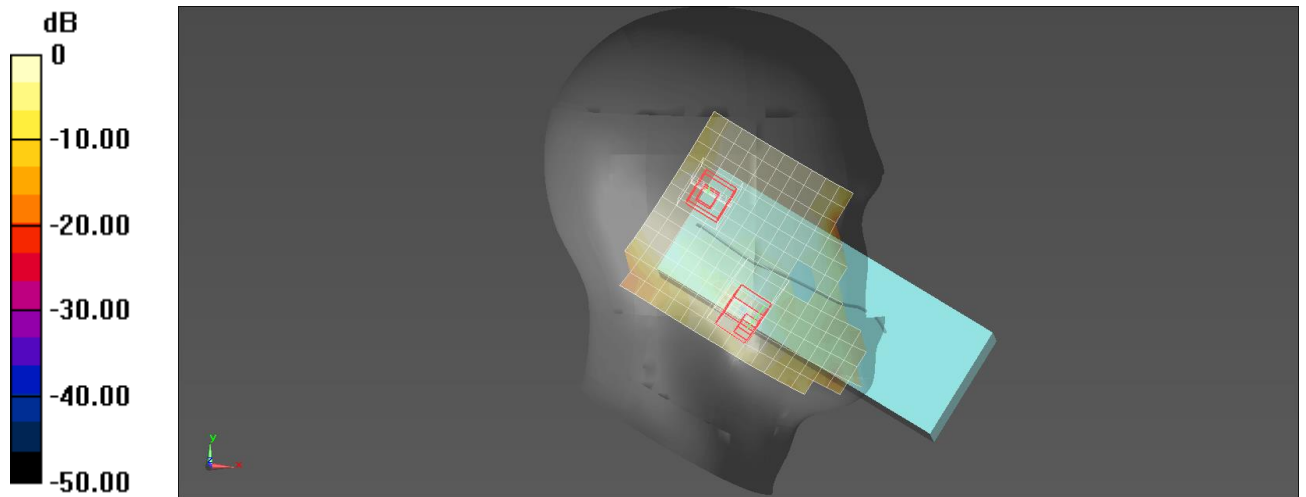
Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.031 W/kg

Smallest distance from peaks to all points 3 dB below = 5.9 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 0.261 W/kg



0 dB = 0.261 W/kg = -5.83 dBW/kg

Plot 13#

Test Date: 02/26/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11b 2437MHz Left Cheek**

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2437 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11b 2437MHz Left Cheek/Area Scan (10x20x1): Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.235 W/kg**Configuration/802.11b 2437MHz Left Cheek/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 1.573 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.084 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 53%

Maximum value of SAR (measured) = 0.258 W/kg

Configuration/802.11b 2437MHz Left Cheek/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 1.573 V/m; Power Drift = -0.12 dB

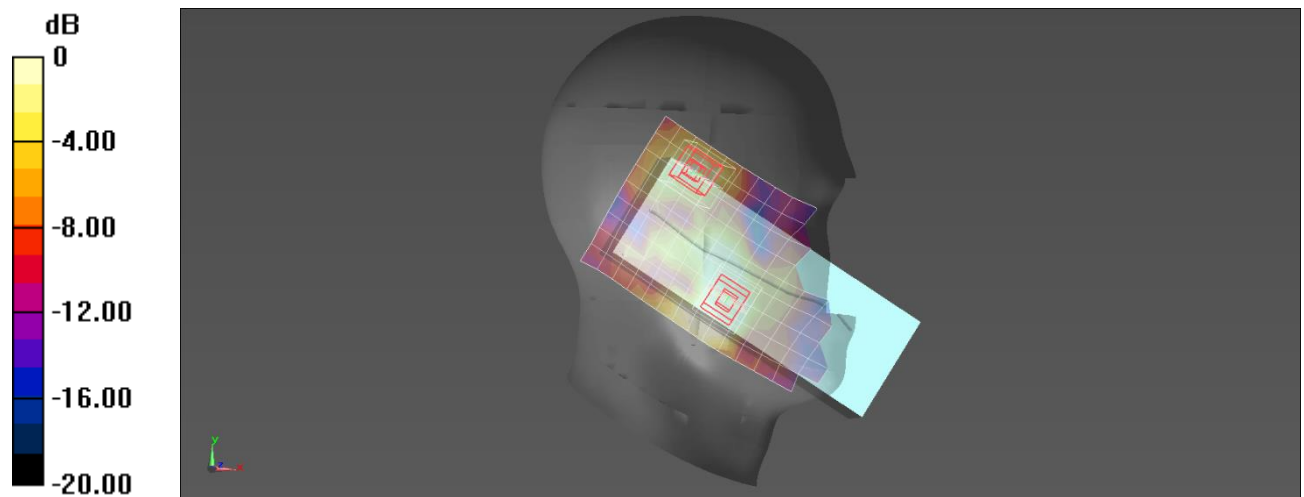
Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.054 W/kg; SAR(10 g) = 0.027 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 0.0872 W/kg



0 dB = 0.0872 W/kg = -10.59 dBW/kg

Plot 14#

Test Date: 02/27/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5180MHz Left Cheek**

Communication System: 802.11a; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.42$ S/m; $\epsilon_r = 34.82$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5180 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5180MHz Left Cheek/Area Scan (13x23x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.789 W/kg**Configuration/802.11a 5180MHz Left Cheek/Zoom Scan (8x8x8)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 7.371 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 5.21 W/kg

SAR(1 g) = 0.400 W/kg; SAR(10 g) = 0.113 W/kg

Smallest distance from peaks to all points 3 dB below = 4.4 mm

Ratio of SAR at M2 to SAR at M1 = 70.4%

Maximum value of SAR (measured) = 0.927 W/kg

Configuration/802.11a 5180MHz Left Cheek/Zoom Scan (8x8x8)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 7.371 V/m; Power Drift = -0.05 dB

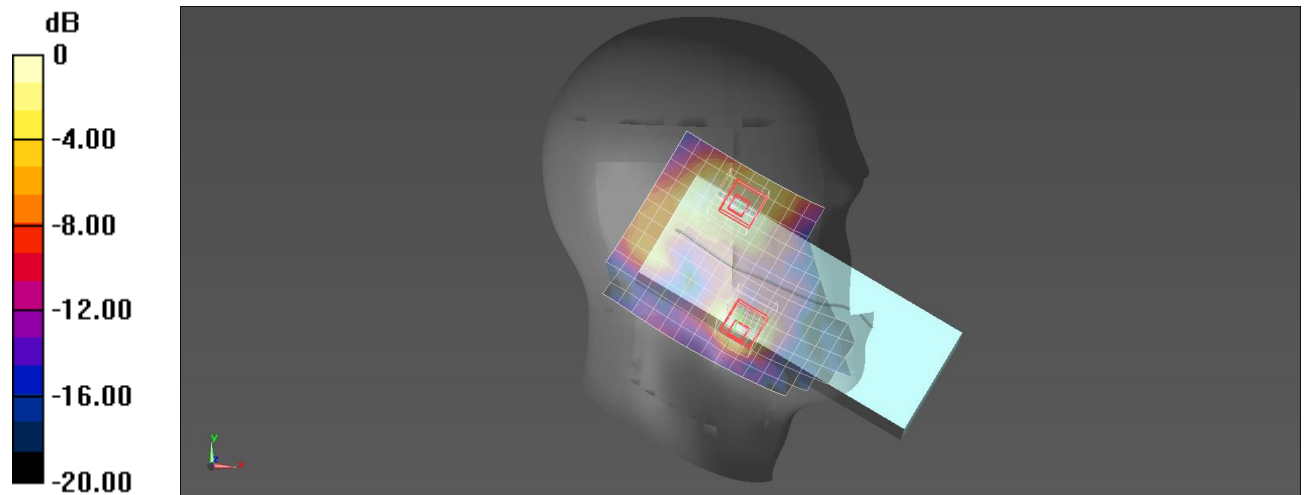
Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.144 W/kg

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 66.6%

Maximum value of SAR (measured) = 0.841 W/kg



0 dB = 0.841 W/kg = -0.75 dBW/kg

Plot 15#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5500MHz Left Cheek**

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.75$ S/m; $\epsilon_r = 34.23$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5500 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5500MHz Left Cheek/Area Scan (13x23x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.983 W/kg**Configuration/802.11a 5500MHz Left Cheek/Zoom Scan (8x8x8)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.925 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.176 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 65.8%

Maximum value of SAR (measured) = 1.48 W/kg

Configuration/802.11a 5500MHz Left Cheek/Zoom Scan (8x8x8)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.925 V/m; Power Drift = 0.14 dB

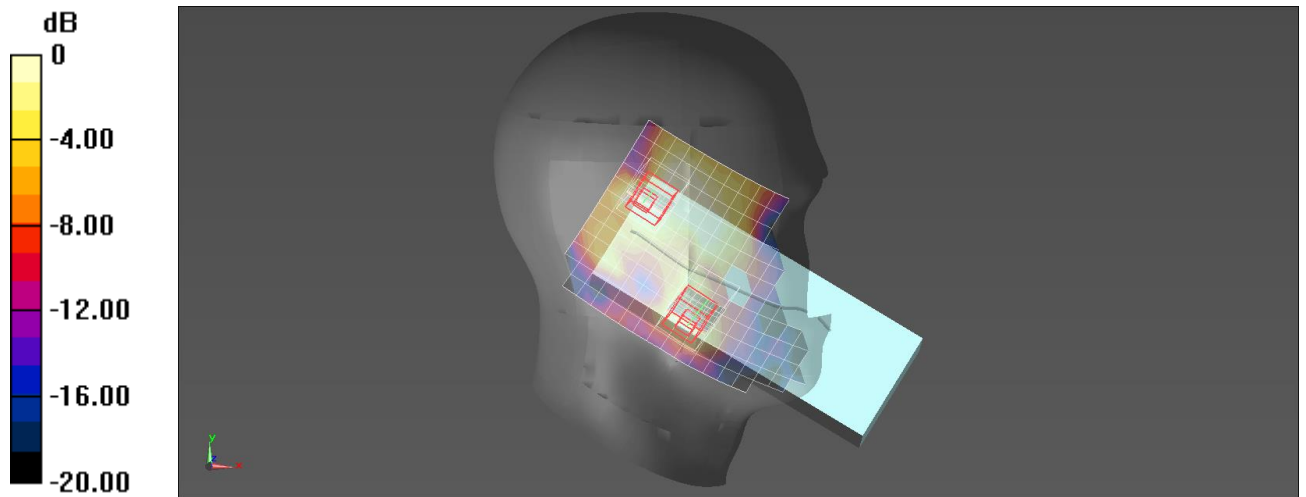
Peak SAR (extrapolated) = 0.884 W/kg

SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.079 W/kg

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 65.9%

Maximum value of SAR (measured) = 0.577 W/kg



0 dB = 0.577 W/kg = -2.39 dBW/kg

Plot 16#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5785MHz Left Cheek**

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.08 \text{ S/m}$; $\epsilon_r = 33.73$; $\rho = 1000 \text{ kg/m}^3$; Tissue Temp (celsius)-22.5°C; Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5785 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5785MHz Left Cheek/Area Scan (13x23x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$; Maximum value of SAR (measured) = 0.995 W/kg**Configuration/802.11a 5785MHz Left Cheek/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Reference Value = 5.235 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.128 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%

Maximum value of SAR (measured) = 1.15 W/kg

Configuration/802.11a 5785MHz Left Cheek/Zoom Scan (8x8x8)/Cube 1: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Reference Value = 5.235 V/m; Power Drift = 0.17 dB

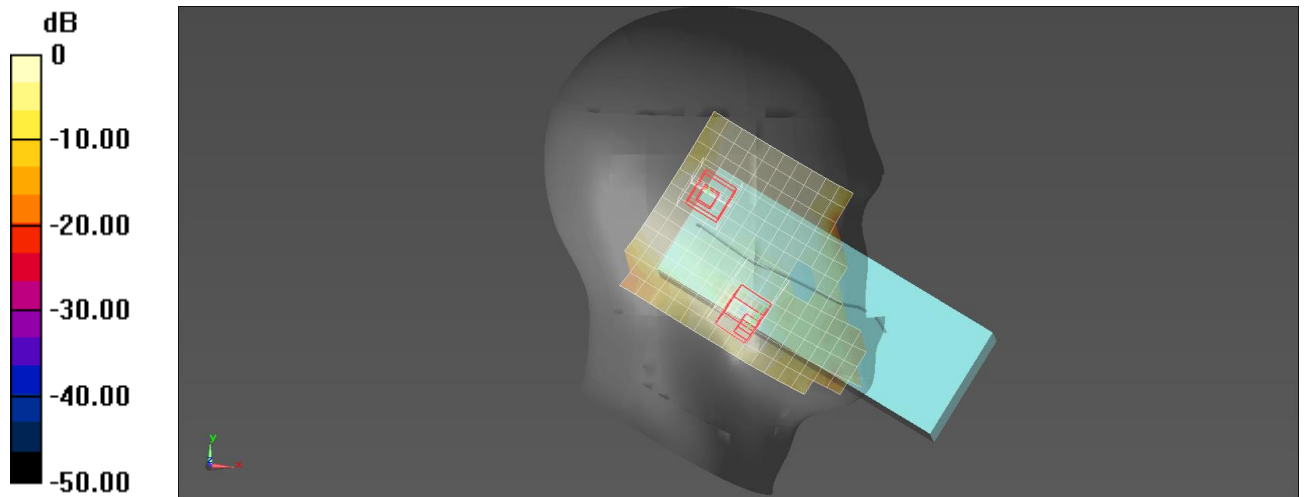
Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.031 W/kg

Smallest distance from peaks to all points 3 dB below = 5.9 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 0.261 W/kg



0 dB = 0.261 W/kg = -5.83 dBW/kg

Plot 17#

Test Date: 02/20/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: WCDMA Band 2 Low Body Front

Communication System: WCDMA; Frequency: 1852.4 MHz

Medium parameters used: $f = 1852.4$ MHz; $\sigma = 1.37$ S/m; $\epsilon_r = 40.79$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1852.4 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/WCDMA Band 2 Low Body Front/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.0479 W/kg

Configuration/WCDMA Band 2 Low Body Front/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 5.406 V/m; Power Drift = -0.16 dB

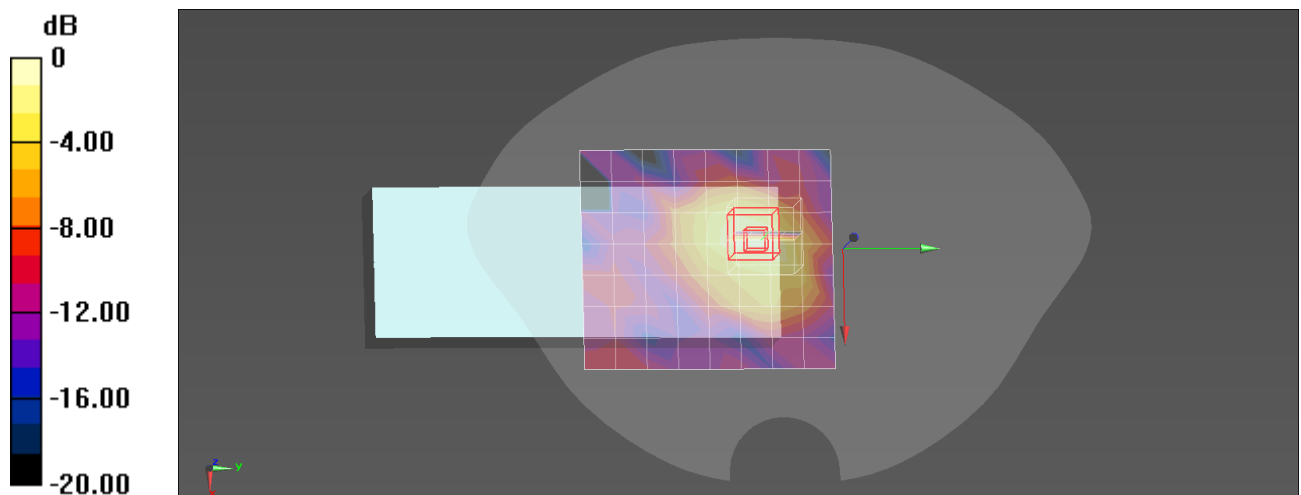
Peak SAR (extrapolated) = 0.0670 W/kg

SAR(1 g) = 0.036 W/kg; SAR(10 g) = 0.019 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 0.0557 W/kg



0 dB = 0.0557 W/kg = -12.54 dBW/kg

Plot 18#

Test Date: 02/23/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: WCDMA Band 5 Mid Body Back

Communication System: WCDMA; Frequency: 836.6 MHz

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.56$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 836.6 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/WCDMA Band 5 Mid Body Back/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.244 W/kg

Configuration/WCDMA Band 5 Mid Body Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm; Reference Value = 11.30 V/m; Power Drift = 0.08 dB

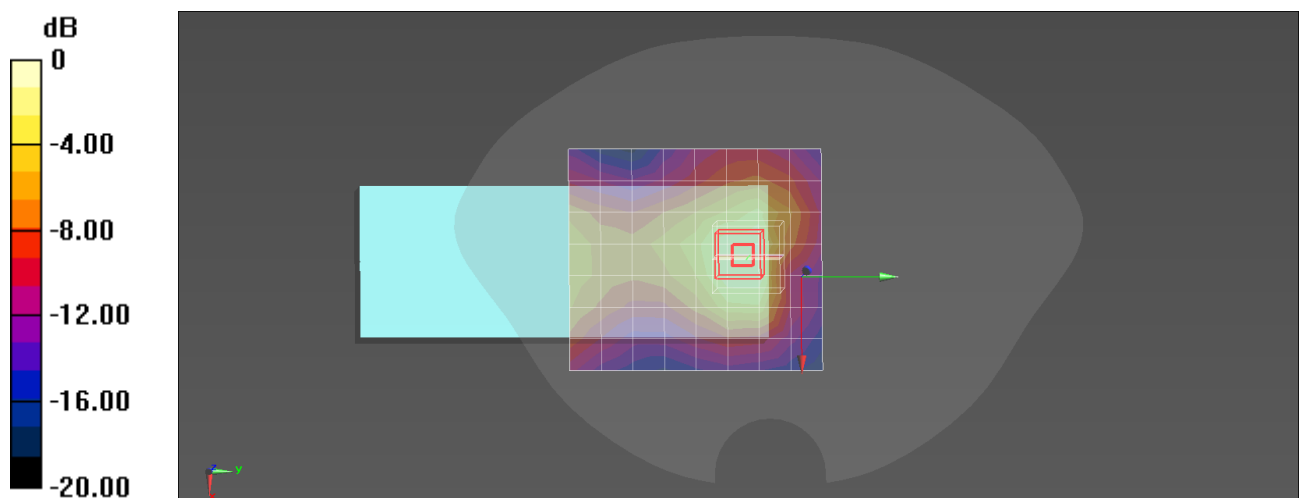
Peak SAR (extrapolated) = 0.403 W/kg

SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.122 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.5%

Maximum value of SAR (measured) = 0.321 W/kg



0 dB = 0.321 W/kg = -4.93 dBW/kg

Plot 19#

Test Date: 02/20/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 2 High QPSK_20M_1RB_OS0 Body Front

Communication System: LTE; Frequency: 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.72$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1900 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 2 High QPSK_20M_1RB_OS0 Body Front/Area Scan (8x9x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.0659 W/kg

Configuration/LTE Band 2 High QPSK_20M_1RB_OS0 Body Front/Zoom Scan (5x5x7)/Cube 0:

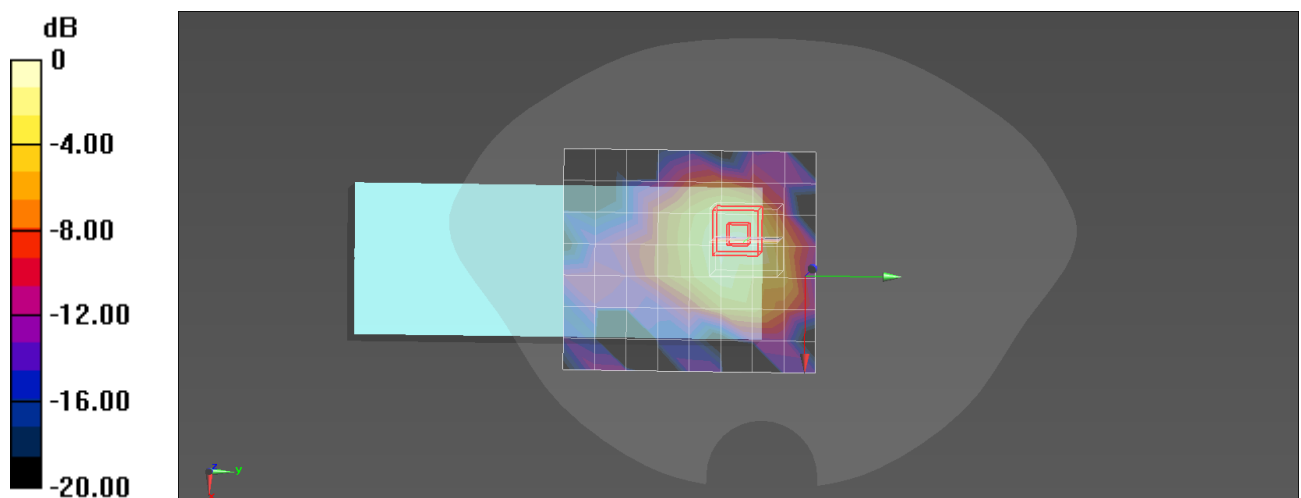
Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 5.368 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.0930 W/kg

SAR(1 g) = 0.049 W/kg; SAR(10 g) = 0.026 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 51.1%

Maximum value of SAR (measured) = 0.0756 W/kg



0 dB = 0.0756 W/kg = -11.21 dBW/kg

Plot 20#

Test Date: 02/21/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 4 Low QPSK_20M_1RB_OS0 Body Front

Communication System: LTE; Frequency: 1720 MHz

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.98$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.5, 8.5, 8.5) @ 1720 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 4 Low QPSK_20M_1RB_OS0 Body Front/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.244 W/kg

Configuration/LTE Band 4 Low QPSK_20M_1RB_OS0 Body Front/Zoom Scan (5x5x7)/Cube 0:

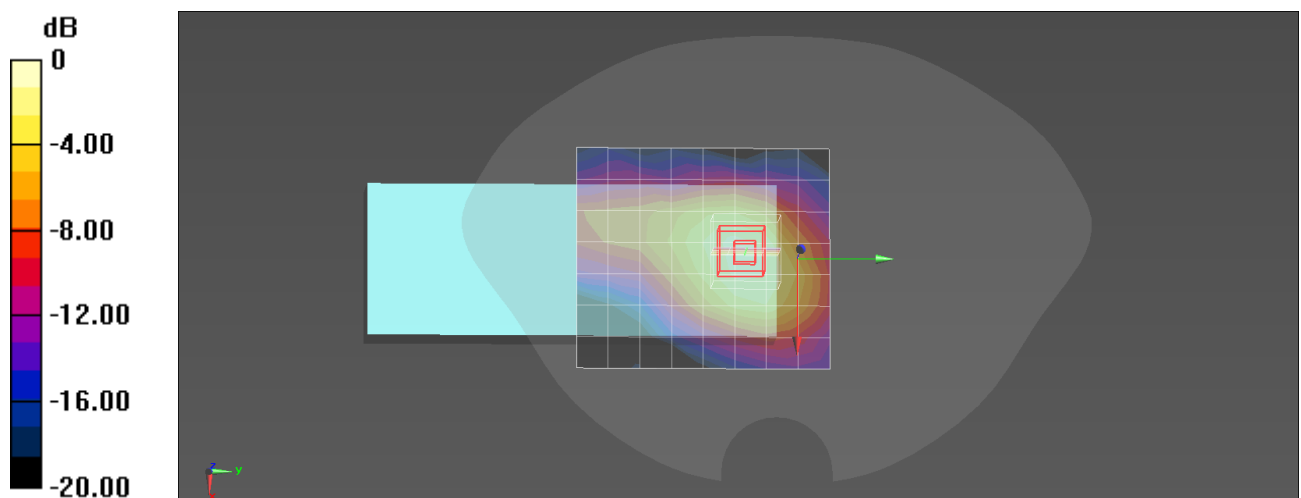
Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 10.66 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.193 W/kg; SAR(10 g) = 0.114 W/kg

Smallest distance from peaks to all points 3 dB below = 16 mm

Ratio of SAR at M2 to SAR at M1 = 60.2%

Maximum value of SAR (measured) = 0.275 W/kg



0 dB = 0.275 W/kg = -5.61 dBW/kg

Plot 21#

Test Date: 02/23/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 5 Mid QPSK_10M_1RB_OS49 Body Back

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.56$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 836.5 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Body Back/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.322 W/kg

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Body Back/Zoom Scan (5x5x7)/Cube 0:

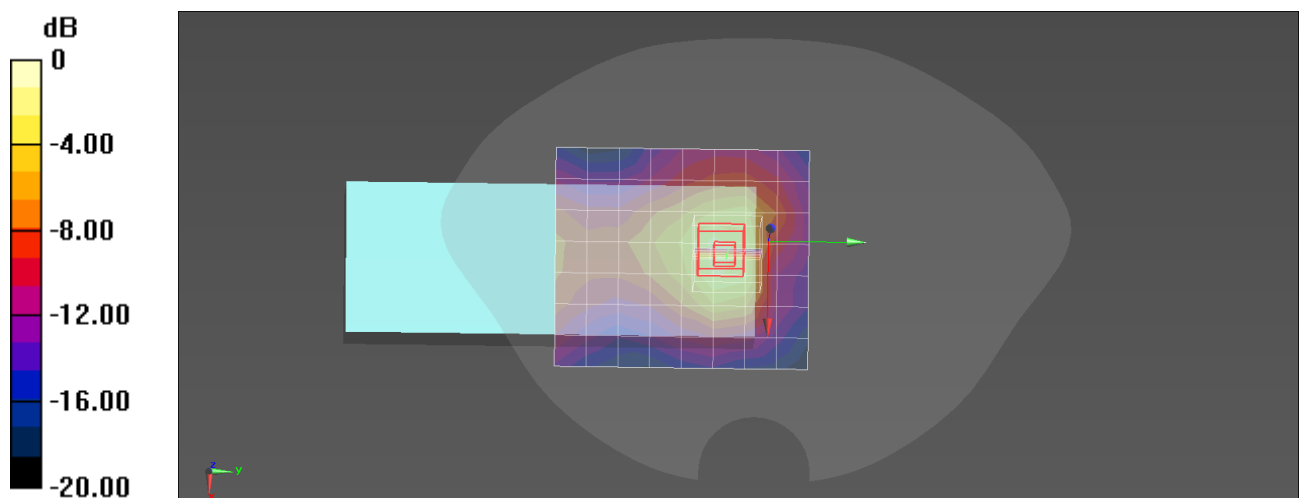
Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 10.64 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.653 W/kg

SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.179 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 48.6%

Maximum value of SAR (measured) = 0.509 W/kg



0 dB = 0.509 W/kg = -2.93 dBW/kg

Plot 22#

Test Date: 02/24/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 7 Low QPSK_20M_50RB_OS0 Body Back

Communication System: LTE; Frequency: 2510 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.84$ S/m; $\epsilon_r = 39.86$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2510 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 7 Low QPSK_20M_50RB_OS0 Body Back/Area Scan (10x11x1):

Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 1.90 W/kg

Configuration/LTE Band 7 Low QPSK_20M_50RB_OS0 Body Back/Zoom Scan (7x7x7)/Cube 0:

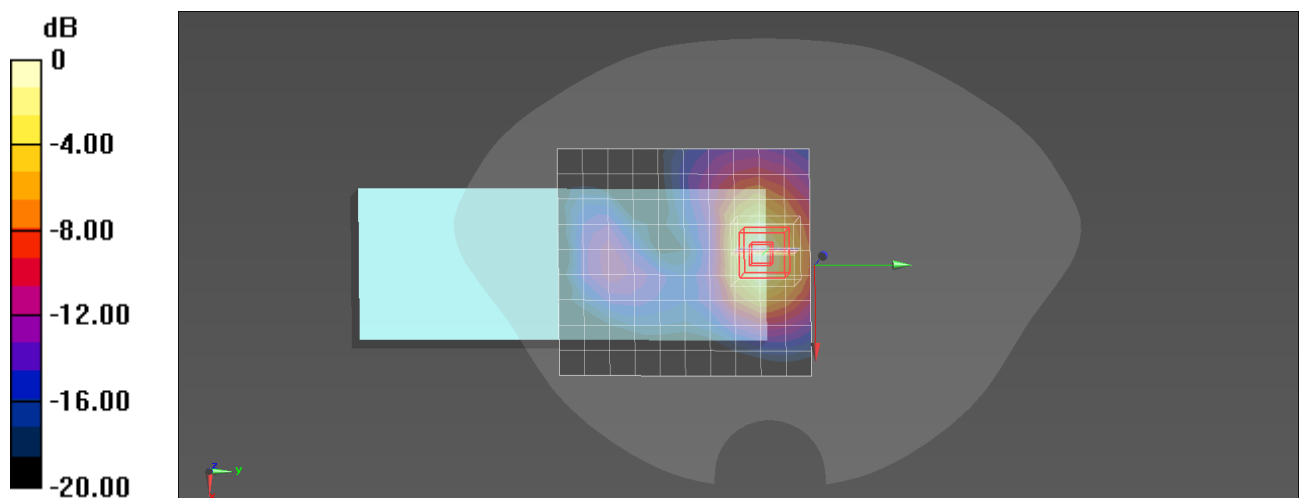
Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 28.72 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.601 W/kg

Smallest distance from peaks to all points 3 dB below = 10 mm

Ratio of SAR at M2 to SAR at M1 = 53.1%

Maximum value of SAR (measured) = 1.88 W/kg



0 dB = 1.88 W/kg = 2.74 dBW/kg

Plot 23#

Test Date: 02/22/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 17 High QPSK_10M_1RB_OS0 Body Front

Communication System: LTE; Frequency: 711 MHz

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.86 \text{ S/m}$; $\epsilon_r = 42.99$; $\rho = 1000 \text{ kg/m}^3$; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.41, 10.41, 10.41) @ 711 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Body Front/Area Scan (8x10x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 0.242 W/kg

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Body Front/Zoom Scan (5x5x7)/Cube 0:

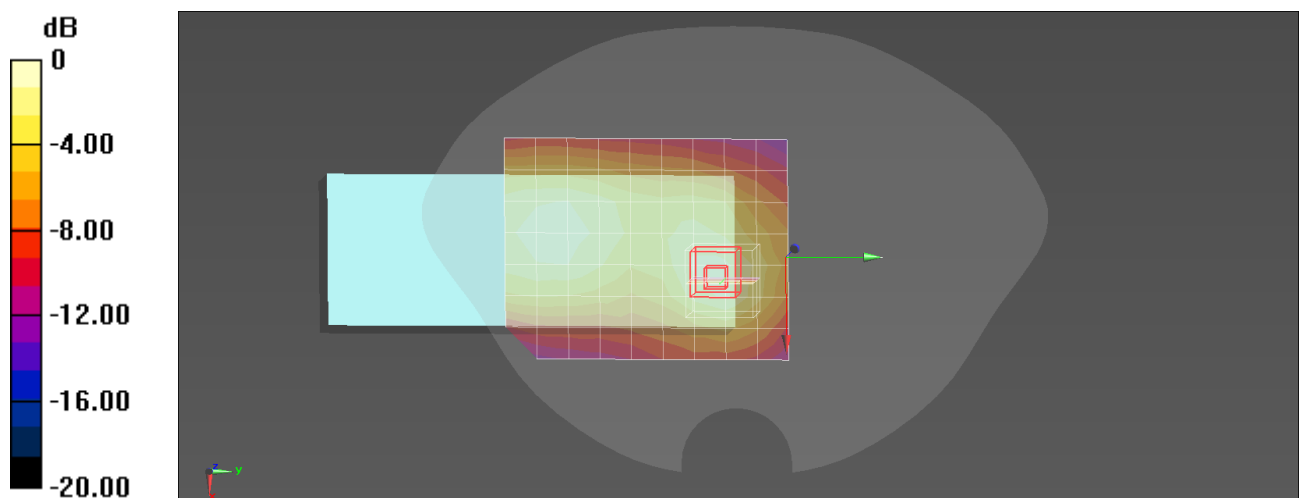
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$; Reference Value = 12.48 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.357 W/kg

SAR(1 g) = 0.186 W/kg; SAR(10 g) = 0.109 W/kg

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 52.5%

Maximum value of SAR (measured) = 0.283 W/kg



0 dB = 0.283 W/kg = -5.48 dBW/kg

Plot 24#

Test Date: 02/25/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 41 High QPSK_20M_1RB_OS0 Body Back

Communication System: LTE; Frequency: 2645 MHz

Medium parameters used: $f = 2645$ MHz; $\sigma = 1.96$ S/m; $\epsilon_r = 39.62$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.41, 7.41, 7.41) @ 2645 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 41 High QPSK_20M_1RB_OS0 Body Back/Area Scan (10x11x1):

Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.790 W/kg

Configuration/LTE Band 41 High QPSK_20M_1RB_OS0 Body Back/Zoom Scan (7x7x7)/Cube 0:

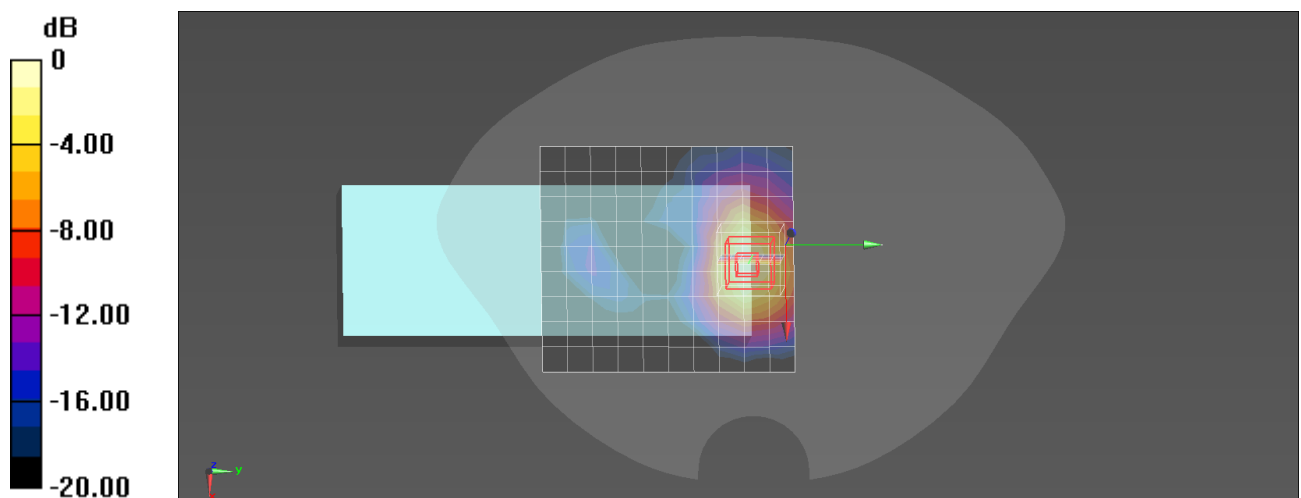
Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 19.08 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.247 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 52.3%

Maximum value of SAR (measured) = 0.801 W/kg



0 dB = 0.801 W/kg = -0.96 dBW/kg

Plot 25#

Test Date: 02/26/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11b 2437MHz Body Back**

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2437 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11b 2437MHz Body Back/Area Scan (10x12x1): Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.378 W/kg**Configuration/802.11b 2437MHz Body Back/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 4.114 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.520 W/kg

SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.121 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.5%

Maximum value of SAR (measured) = 0.418 W/kg

Configuration/802.11b 2437MHz Body Back/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 4.114 V/m; Power Drift = 0.13 dB

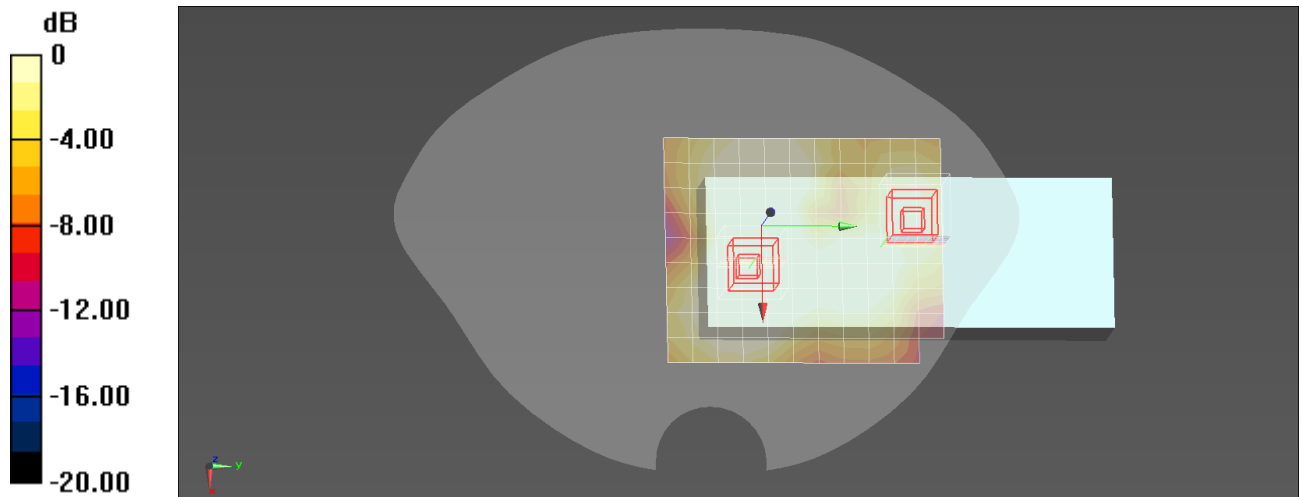
Peak SAR (extrapolated) = 0.0750 W/kg

SAR(1 g) = 0.038 W/kg; SAR(10 g) = 0.020 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 50.6%

Maximum value of SAR (measured) = 0.0625 W/kg



0 dB = 0.0625 W/kg = -12.04 dBW/kg

Plot 26#

Test Date: 02/27/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5180MHz Body Back**

Communication System: 802.11a; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.42$ S/m; $\epsilon_r = 34.82$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5180 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5180MHz Body Back/Area Scan (11x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.90 W/kg**Configuration/802.11a 5180MHz Body Back/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 3.693 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.03 W/kg

SAR(1 g) = 0.907 W/kg; SAR(10 g) = 0.357 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 66.9%

Maximum value of SAR (measured) = 1.96 W/kg

Configuration/802.11a 5180MHz Body Back/Zoom Scan (9x9x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 3.693 V/m; Power Drift = 0.03 dB

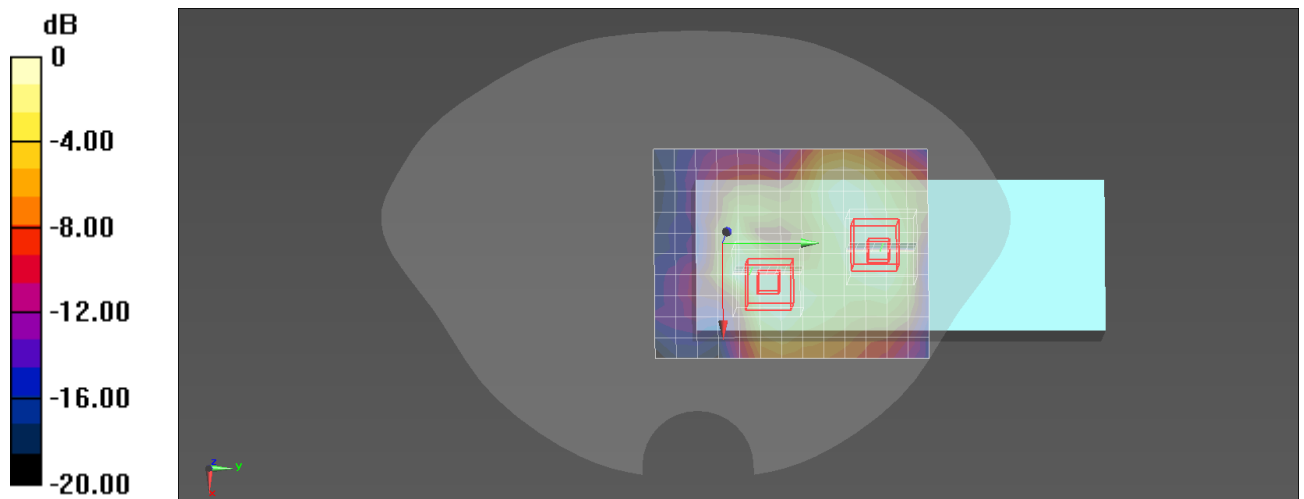
Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.321 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 68.2%

Maximum value of SAR (measured) = 1.55 W/kg



0 dB = 1.55 W/kg = 1.90 dBW/kg

Plot 27#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5500MHz Body Back**

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.75$ S/m; $\epsilon_r = 34.23$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5500 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5500MHz Body Back/Area Scan (12x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.85 W/kg**Configuration/802.11a 5500MHz Body Back/Zoom Scan (8x8x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 6.493 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.78 W/kg

SAR(1 g) = 0.872 W/kg; SAR(10 g) = 0.361 W/kg

Smallest distance from peaks to all points 3 dB below = 12.9 mm

Ratio of SAR at M2 to SAR at M1 = 67%

Maximum value of SAR (measured) = 1.83 W/kg

Configuration/802.11a 5500MHz Body Back/Zoom Scan (8x8x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 6.493 V/m; Power Drift = -0.05 dB

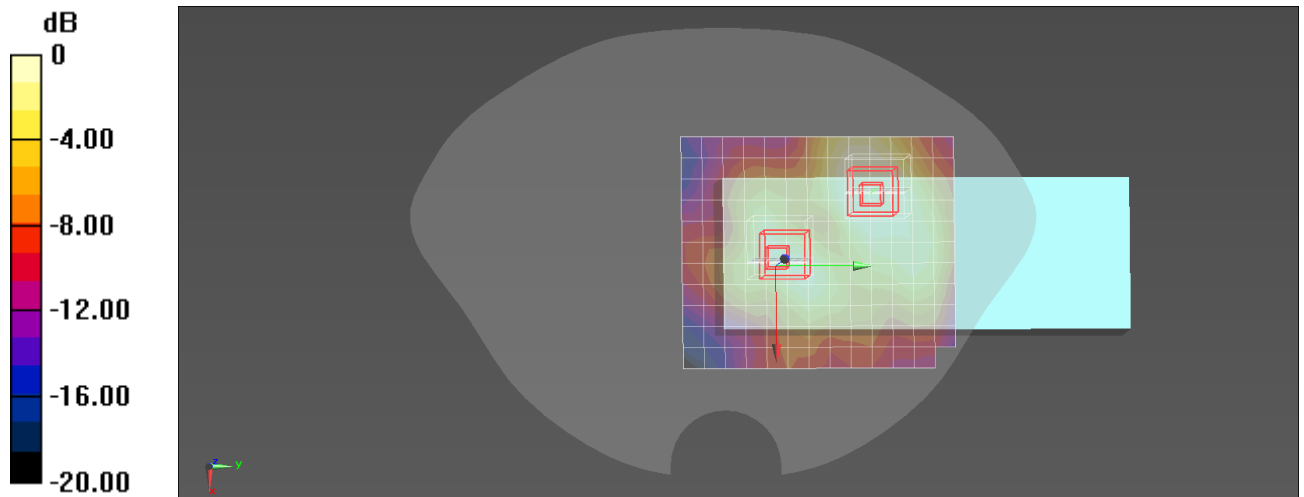
Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.197 W/kg

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 64.5%

Maximum value of SAR (measured) = 1.09 W/kg



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

Plot 28#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5785MHz Body Back**

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.08$ S/m; $\epsilon_r = 33.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5785 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5785MHz Body Back/Area Scan (12x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.66 W/kg**Configuration/802.11a 5785MHz Body Back/Zoom Scan (8x8x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.175 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 2.68 W/kg

SAR(1 g) = 0.749 W/kg; SAR(10 g) = 0.291 W/kg

Smallest distance from peaks to all points 3 dB below = 11.6 mm

Ratio of SAR at M2 to SAR at M1 = 64.3%

Maximum value of SAR (measured) = 1.68 W/kg

Configuration/802.11a 5785MHz Body Back/Zoom Scan (8x8x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.175 V/m; Power Drift = -0.13 dB

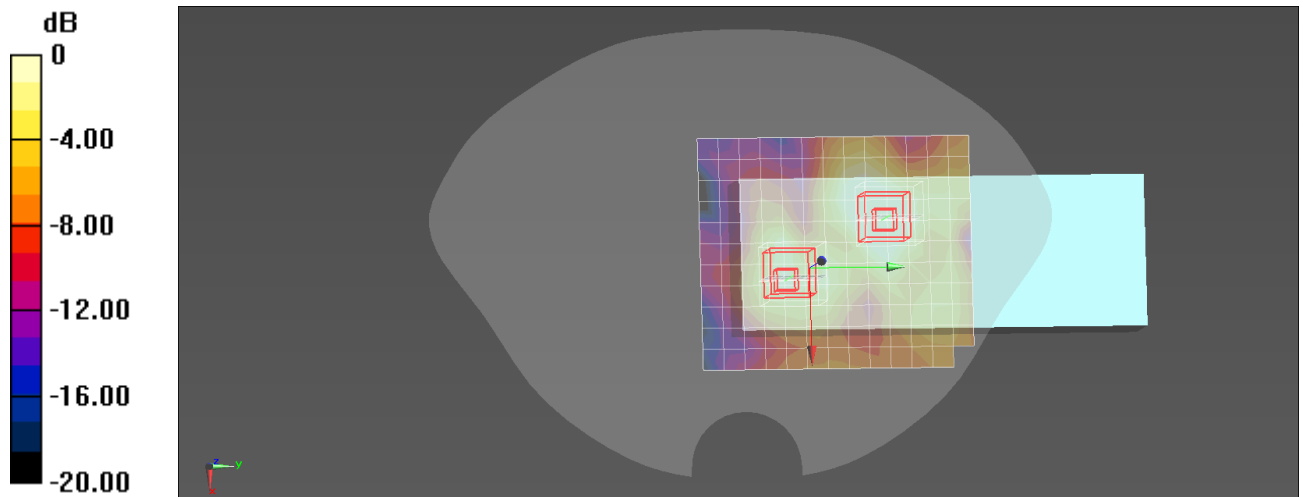
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.402 W/kg; SAR(10 g) = 0.139 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 62.6%

Maximum value of SAR (measured) = 1.00 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg

Plot 29#

Test Date: 02/26/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11b 2437MHz Body Front**

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2437 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11b 2437MHz Body Front/Area Scan (10x12x1): Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 0.130 W/kg**Configuration/802.11b 2437MHz Body Front/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 1.337 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.170 W/kg

SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.045 W/kg

Smallest distance from peaks to all points 3 dB below = 12.6 mm

Ratio of SAR at M2 to SAR at M1 = 54.3%

Maximum value of SAR (measured) = 0.141 W/kg

Configuration/802.11b 2437MHz Body Front/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 1.337 V/m; Power Drift = 0.10 dB

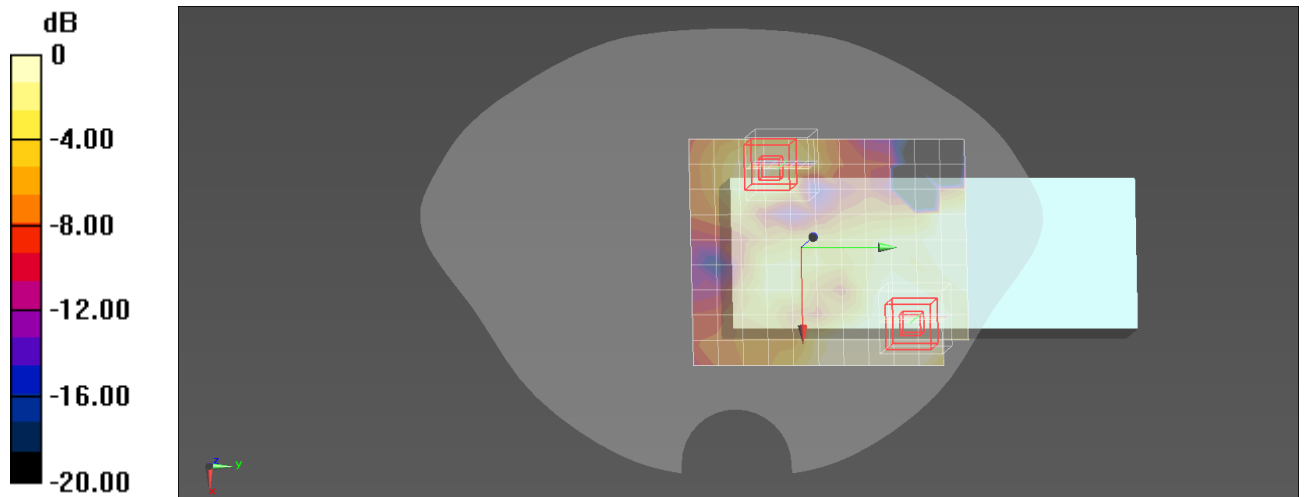
Peak SAR (extrapolated) = 0.0710 W/kg

SAR(1 g) = 0.035 W/kg; SAR(10 g) = 0.018 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 46.2%.

Maximum value of SAR (measured) = 0.0566 W/kg



0 dB = 0.0566 W/kg = -12.47 dBW/kg

Plot 30#

Test Date: 02/27/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5180MHz Body Back**

Communication System: 802.11a; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.42$ S/m; $\epsilon_r = 34.82$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5180 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5180MHz Body Back/Area Scan (11x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.90 W/kg**Configuration/802.11a 5180MHz Body Back/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 3.693 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.03 W/kg

SAR(1 g) = 0.907 W/kg; SAR(10 g) = 0.357 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 66.9%

Maximum value of SAR (measured) = 1.96 W/kg

Configuration/802.11a 5180MHz Body Back/Zoom Scan (9x9x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 3.693 V/m; Power Drift = 0.03 dB

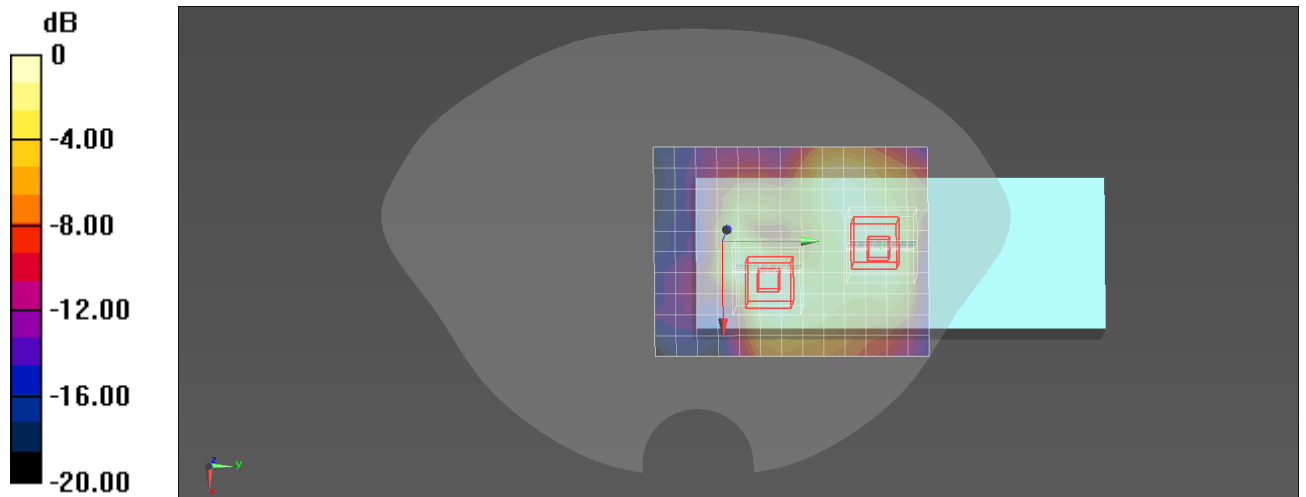
Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.321 W/kg

Smallest distance from peaks to all points 3 dB below = 12.8 mm

Ratio of SAR at M2 to SAR at M1 = 68.2%

Maximum value of SAR (measured) = 1.55 W/kg



0 dB = 1.55 W/kg = 1.90 dBW/kg

Plot 31#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5500MHz Body Back**

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.75$ S/m; $\epsilon_r = 34.23$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5500 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5500MHz Body Back/Area Scan (12x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.85 W/kg**Configuration/802.11a 5500MHz Body Back/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 6.493 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.78 W/kg**SAR(1 g) = 0.872 W/kg; SAR(10 g) = 0.361 W/kg**

Smallest distance from peaks to all points 3 dB below = 12.9 mm

Ratio of SAR at M2 to SAR at M1 = 67%

Maximum value of SAR (measured) = 1.83 W/kg

Configuration/802.11a 5500MHz Body Back/Zoom Scan (8x8x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 6.493 V/m; Power Drift = -0.05 dB

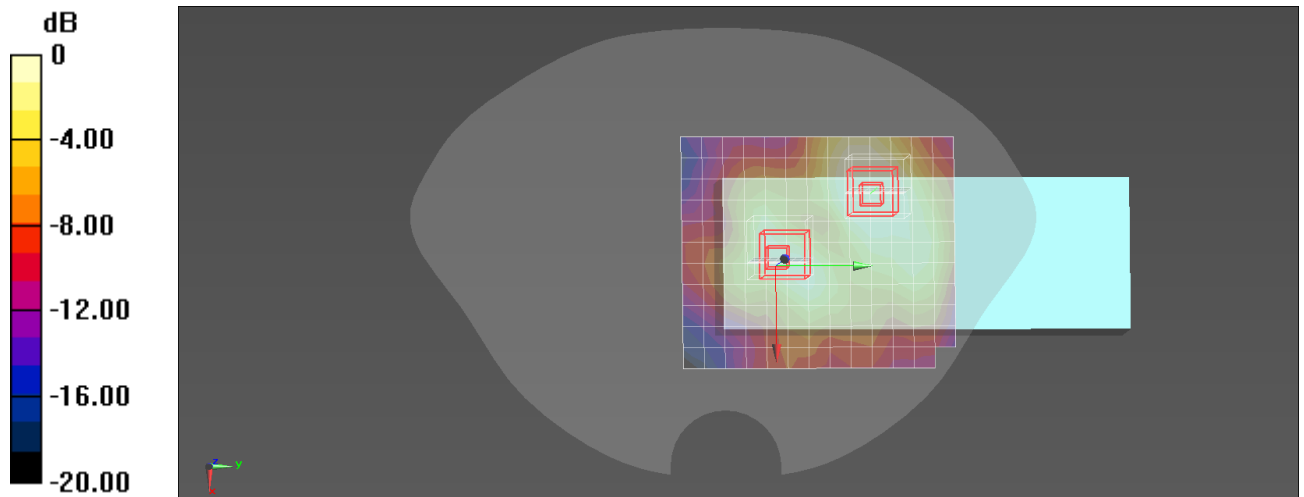
Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.197 W/kg

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 64.5%

Maximum value of SAR (measured) = 1.09 W/kg



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

Plot 32#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5785MHz Body Back**

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.08$ S/m; $\epsilon_r = 33.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5785 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5785MHz Body Back/Area Scan (12x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.66 W/kg**Configuration/802.11a 5785MHz Body Back/Zoom Scan (8x8x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.175 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 2.68 W/kg

SAR(1 g) = 0.749 W/kg; SAR(10 g) = 0.291 W/kg

Smallest distance from peaks to all points 3 dB below = 11.6 mm

Ratio of SAR at M2 to SAR at M1 = 64.3%

Maximum value of SAR (measured) = 1.68 W/kg

Configuration/802.11a 5785MHz Body Back/Zoom Scan (8x8x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 5.175 V/m; Power Drift = -0.13 dB

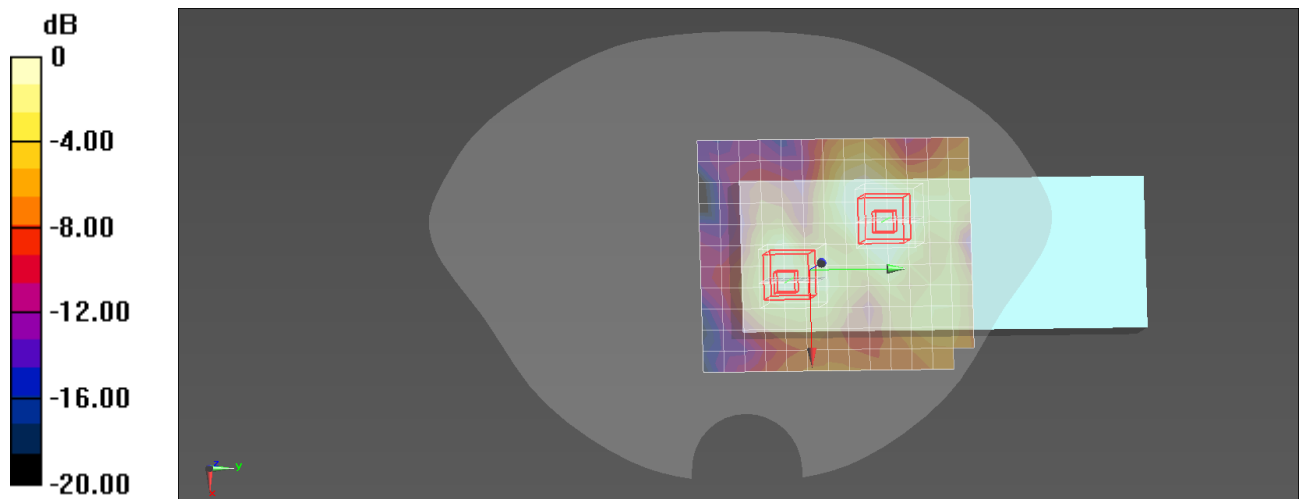
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.402 W/kg; SAR(10 g) = 0.139 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 62.6%

Maximum value of SAR (measured) = 1.00 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg

Plot 33#

Test Date: 02/20/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: WCDMA Band 2 Low Extremity Bottom

Communication System: WCDMA; Frequency: 1852.4 MHz

Medium parameters used: $f = 1852.4$ MHz; $\sigma = 1.37$ S/m; $\epsilon_r = 40.79$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1852.4 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/WCDMA Band 2 Low Extremity Bottom/Area Scan (9x6x1): Measurement grid:

dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.318 W/kg

Configuration/WCDMA Band 2 Low Extremity Bottom/Zoom Scan (5x5x7)/Cube 0: Measurement

grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 9.128 V/m; Power Drift = 0.06 dB

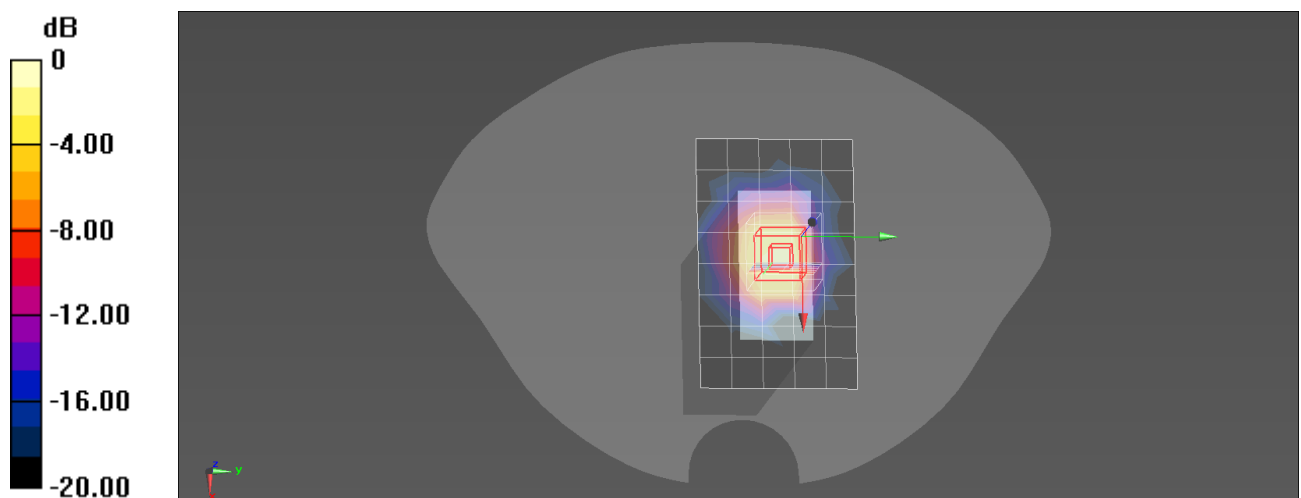
Peak SAR (extrapolated) = 0.662 W/kg

SAR(1 g) = 0.267 W/kg; SAR(10 g) = 0.141 W/kg

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 39.7%

Maximum value of SAR (measured) = 0.452 W/kg



0 dB = 0.452 W/kg = -3.45 dBW/kg

Plot 34#

Test Date: 02/23/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: WCDMA Band 5 Mid Extremity Back

Communication System: WCDMA; Frequency: 836.6 MHz

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.56$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 836.6 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/WCDMA Band 5 Mid Extremity Back/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.775 W/kg

Configuration/WCDMA Band 5 Mid Extremity Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm; Reference Value = 14.45 V/m; Power Drift = 0.07 dB

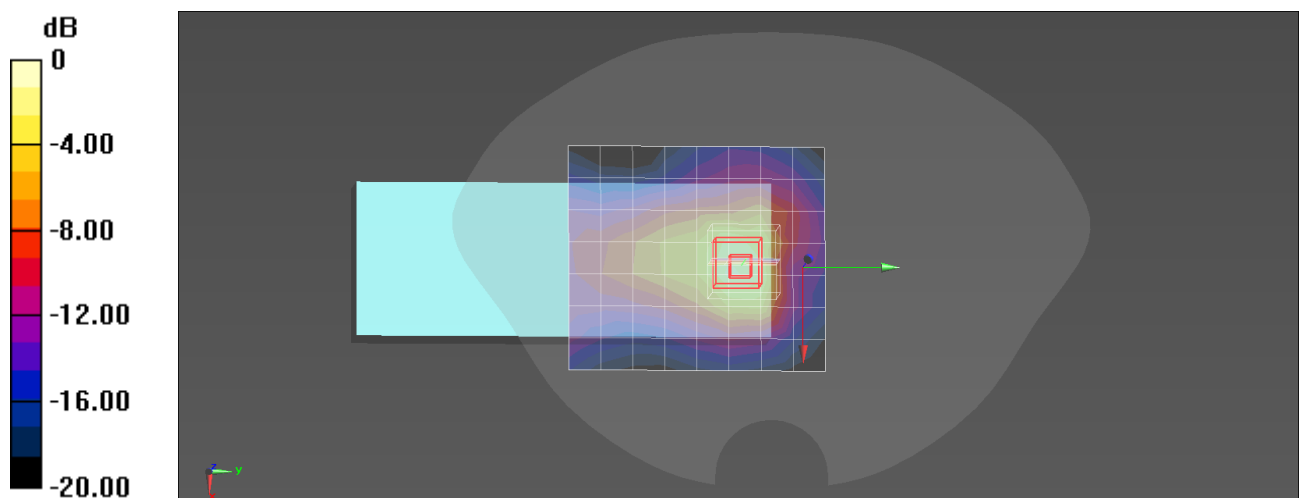
Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.567 W/kg; SAR(10 g) = 0.299 W/kg

Smallest distance from peaks to all points 3 dB below = 9.7 mm

Ratio of SAR at M2 to SAR at M1 = 45.1%

Maximum value of SAR (measured) = 0.943 W/kg



0 dB = 0.943 W/kg = -0.25 dBW/kg

Plot 35#

Test Date: 02/20/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 2 High QPSK_20M_1RB_OS0 Extremity Bottom

Communication System: LTE; Frequency: 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.72$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.1, 8.1, 8.1) @ 1900 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 2 High QPSK_20M_1RB_OS0 Extremity Bottom/Area Scan (9x6x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.639 W/kg

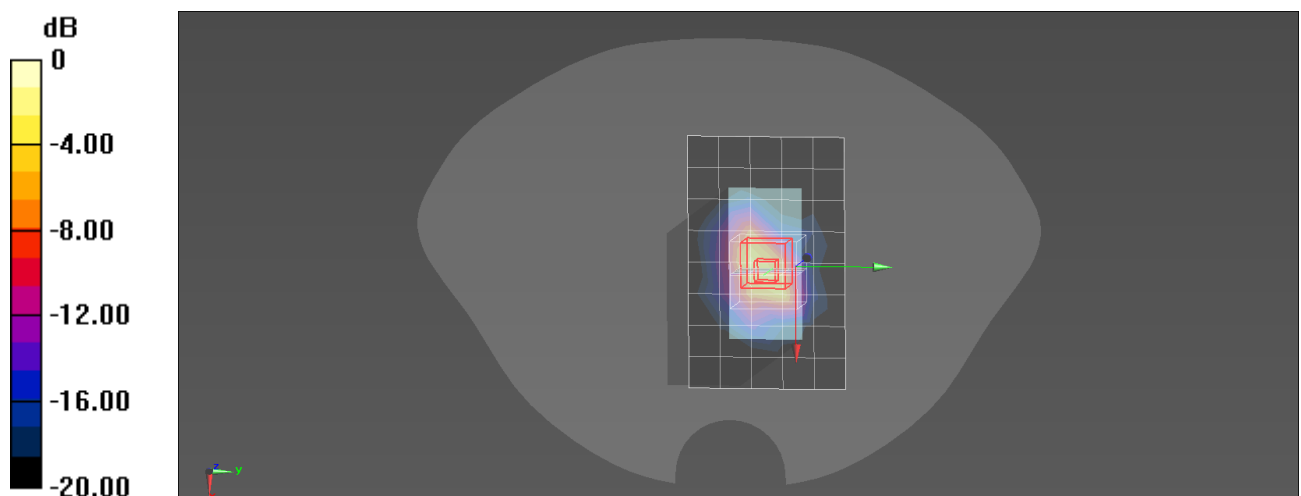
Configuration/LTE Band 2 High QPSK_20M_1RB_OS0 Extremity Bottom/Zoom Scan (5x5x7)/Cube
0: Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 9.763 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.221 W/kg

Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 31.5%

Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

Plot 36#

Test Date: 02/21/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 4 Low QPSK_20M_1RB_OS0 Extremity Front

Communication System: LTE; Frequency: 1720 MHz

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.98$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(8.5, 8.5, 8.5) @ 1720 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 4 Low QPSK_20M_1RB_OS0 Extremity Front/Area Scan (8x9x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.400 W/kg

Configuration/LTE Band 4 Low QPSK_20M_1RB_OS0 Extremity Front/Zoom Scan (6x6x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 14.71 V/m; Power Drift = -0.02 dB

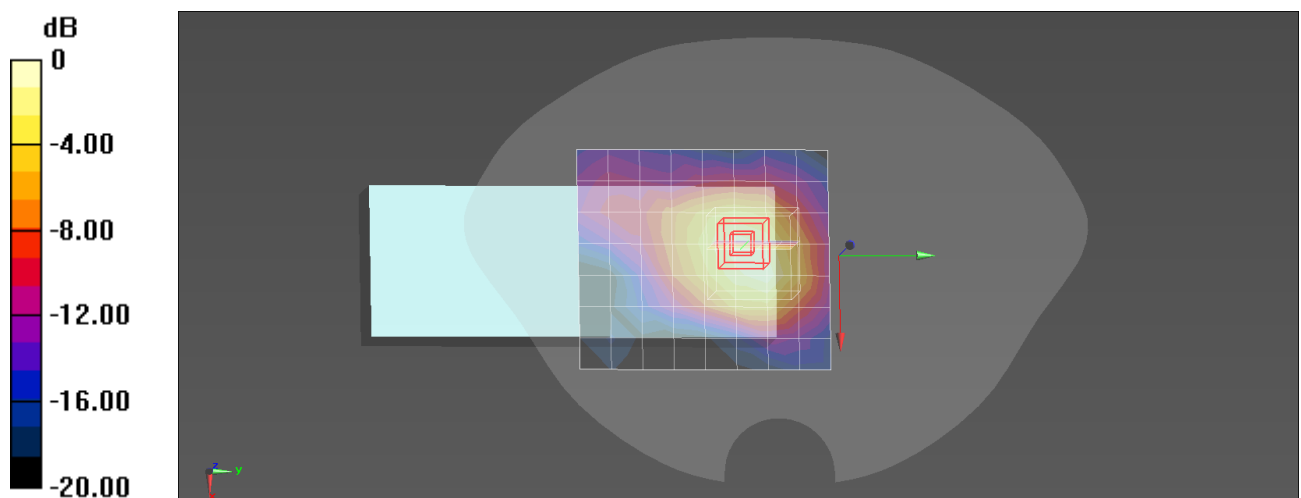
Peak SAR (extrapolated) = 0.507 W/kg

SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.161 W/kg

Smallest distance from peaks to all points 3 dB below = 15.1 mm

Ratio of SAR at M2 to SAR at M1 = 56.1%

Maximum value of SAR (measured) = 0.423 W/kg



0 dB = 0.423 W/kg = -3.74 dBW/kg

Plot 37#

Test Date: 02/23/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: LTE Band 5 Mid QPSK_10M_1RB_OS49 Extremity Bottom**

Communication System: LTE; Frequency: 836.5 MHz

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.56$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.04, 10.04, 10.04) @ 836.5 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Extremity Bottom/Area Scan (9x6x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 2.07 W/kg

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Extremity Bottom/Zoom Scan (5x5x7)/Cube**0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 27.79 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 3.33 W/kg**SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.678 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 41.2%

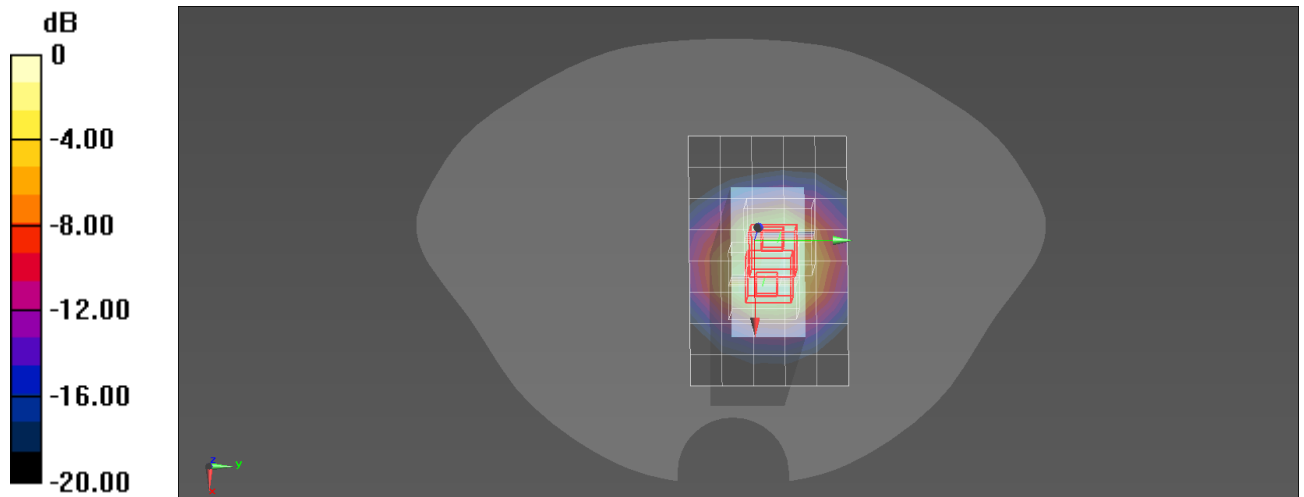
Maximum value of SAR (measured) = 2.51 W/kg

Configuration/LTE Band 5 Mid QPSK_10M_1RB_OS49 Extremity Bottom/Zoom Scan (5x5x7)/Cube**1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 27.79 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 3.38 W/kg**SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.554 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 30.1%

Maximum value of SAR (measured) = 1.98 W/kg



0 dB = 1.98 W/kg = 2.97 dBW/kg

Plot 38#

Test Date: 02/24/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 7 Low QPSK_20M_1RB_OS0 Extremity Back

Communication System: LTE; Frequency: 2510 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.84$ S/m; $\epsilon_r = 39.86$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2510 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 7 Low QPSK_20M_1RB_OS0 Extremity Back/Area Scan (10x11x1):

Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 3.45 W/kg

Configuration/LTE Band 7 Low QPSK_20M_1RB_OS0 Extremity Back/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 38.99 V/m; Power Drift = 0.18 dB

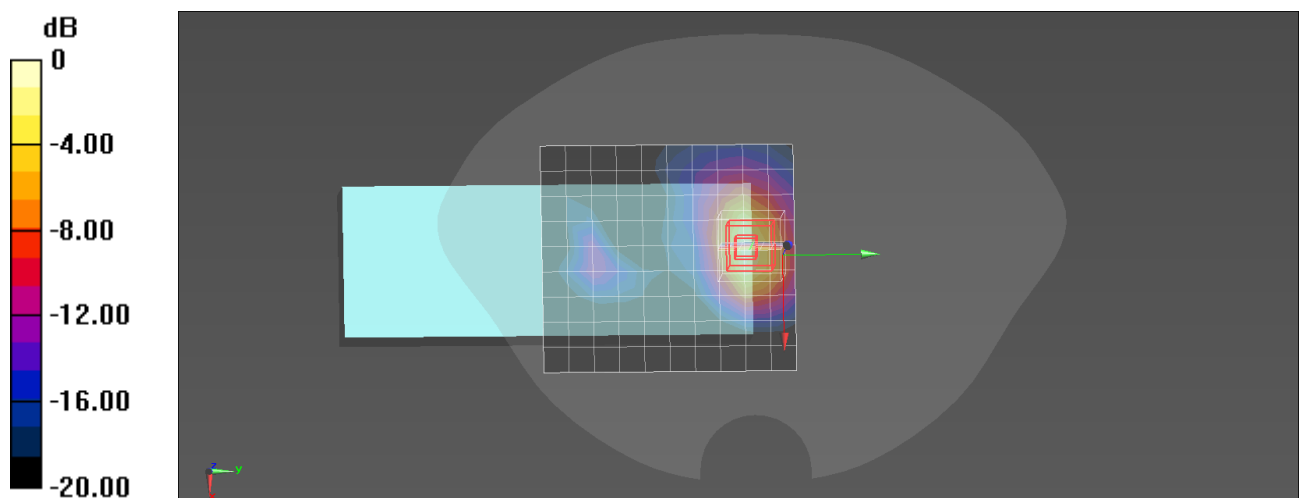
Peak SAR (extrapolated) = 4.59 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.03 W/kg

Smallest distance from peaks to all points 3 dB below = 7.3 mm

Ratio of SAR at M2 to SAR at M1 = 53.5%

Maximum value of SAR (measured) = 3.56 W/kg



0 dB = 3.56 W/kg = 5.51 dBW/kg

Plot 39#

Test Date: 02/22/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: LTE Band 17 High QPSK_10M_1RB_OS0 Extremity Bottom**

Communication System: LTE; Frequency: 711 MHz

Medium parameters used: $f = 711$ MHz; $\sigma = 0.86$ S/m; $\epsilon_r = 42.99$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(10.41, 10.41, 10.41) @ 711 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Extremity Bottom/Area Scan (9x6x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 2.51 W/kg

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Extremity Bottom/Zoom Scan**(7x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 30.97 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 6.48 W/kg

SAR(1 g) = 1.65 W/kg; SAR(10 g) = 0.839 W/kg

Smallest distance from peaks to all points 3 dB below = 9.5 mm

Ratio of SAR at M2 to SAR at M1 = 35.5%

Maximum value of SAR (measured) = 3.55 W/kg

Configuration/LTE Band 17 High QPSK_10M_1RB_OS0 Extremity Bottom/Zoom Scan**(7x6x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm; Reference Value = 30.97 V/m; Power Drift = -0.10 dB

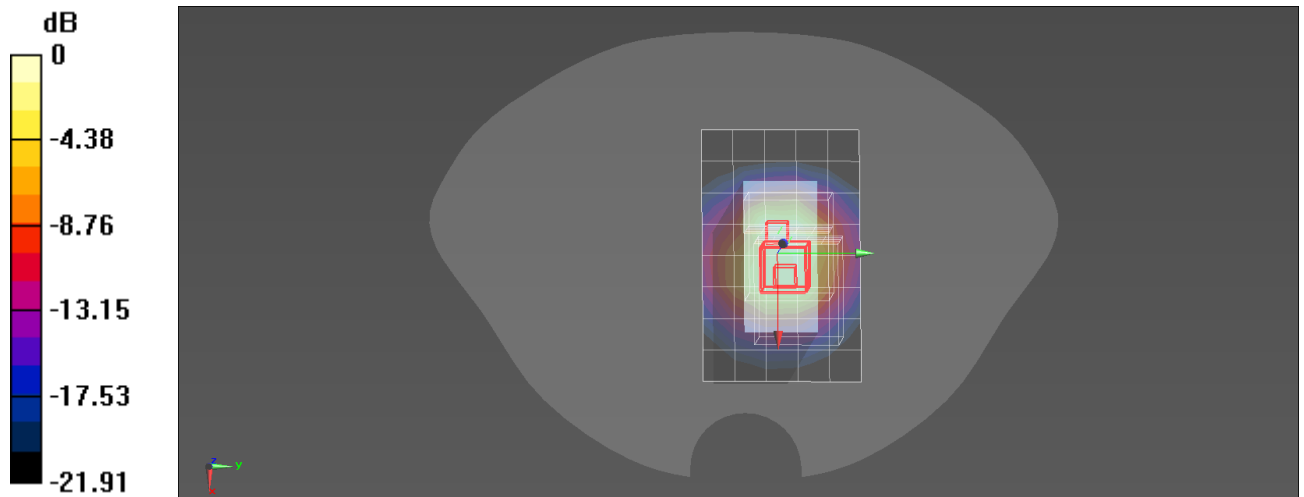
Peak SAR (extrapolated) = 5.00 W/kg

SAR(1 g) = 1.65 W/kg; SAR(10 g) = 0.840 W/kg

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 37.4%

Maximum value of SAR (measured) = 3.07 W/kg



0 dB = 3.07 W/kg = 4.87 dBW/kg

Plot 40#

Test Date: 02/25/2021

DUT: Handheld Data Terminal; Type: HT730
Procedure Name: LTE Band 41 High QPSK_20M_1RB_OS0 Extremity Back

Communication System: LTE; Frequency: 2645 MHz

Medium parameters used: $f = 2645$ MHz; $\sigma = 1.96$ S/m; $\epsilon_r = 39.62$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.41, 7.41, 7.41) @ 2645 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/LTE Band 41 High QPSK_20M_1RB_OS0 Extremity Back/Area Scan (10x11x1):

Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 1.74 W/kg

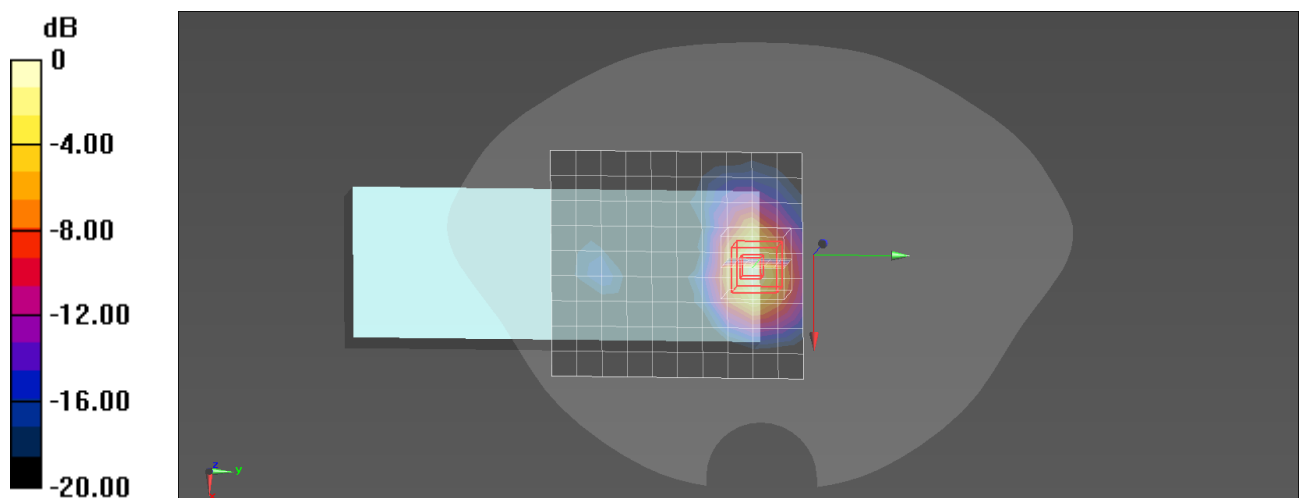
Configuration/LTE Band 41 High QPSK_20M_1RB_OS0 Extremity Back/Zoom Scan (7x7x7)/Cube
0: Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 26.92 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.27 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.506 W/kg

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 52.9%

Maximum value of SAR (measured) = 1.83 W/kg



0 dB = 1.83 W/kg = 2.62 dBW/kg

Plot 41#

Test Date: 02/26/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11b 2437MHz Extremity Right**

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2437 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11b 2437MHz Extremity Right/Area Scan (7x12x1): Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 1.84 W/kg**Configuration/802.11b 2437MHz Extremity Right/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 8.267 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.40 W/kg

SAR(1 g) = 1 W/kg; SAR(10 g) = 0.385 W/kg

Smallest distance from peaks to all points 3 dB below = 5.8 mm

Ratio of SAR at M2 to SAR at M1 = 44.8%

Maximum value of SAR (measured) = 1.86 W/kg

Configuration/802.11b 2437MHz Extremity Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 8.267 V/m; Power Drift = 0.01 dB

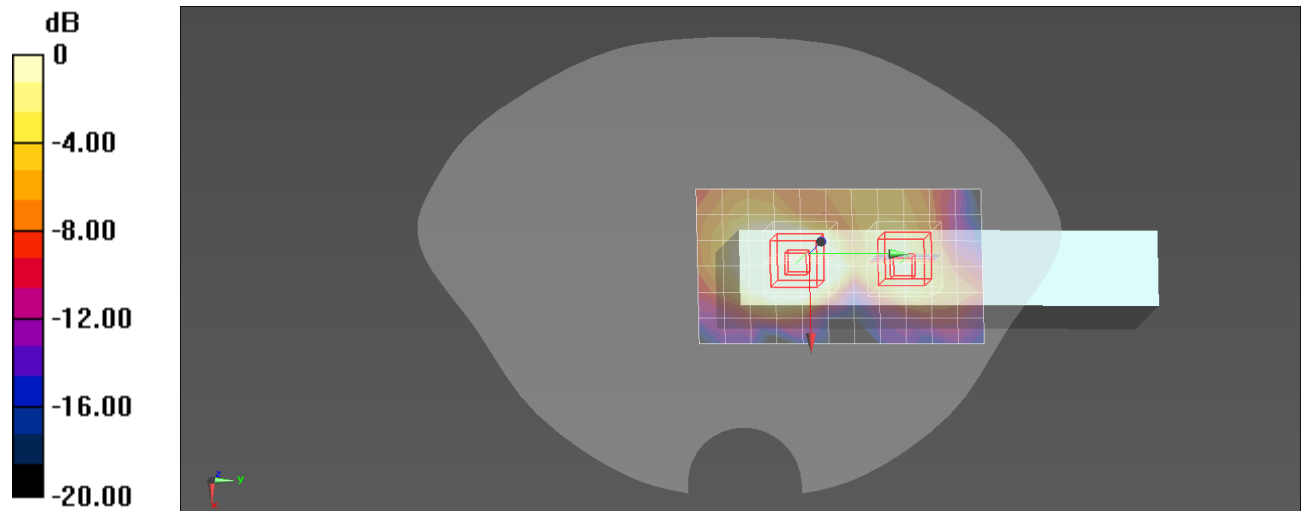
Peak SAR (extrapolated) = 0.138 W/kg

SAR(1 g) = 0.070 W/kg; SAR(10 g) = 0.032 W/kg

Smallest distance from peaks to all points 3 dB below = 9.9 mm

Ratio of SAR at M2 to SAR at M1 = 54.6%

Maximum value of SAR (measured) = 0.109 W/kg



0 dB = 0.109 W/kg = -9.63 dBW/kg

Plot 42#

Test Date: 02/27/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5180MHz Extremity Right**

Communication System: 802.11a; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.42$ S/m; $\epsilon_r = 34.82$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5180 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5180MHz Extremity Right/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 6.39 W/kg**Configuration/802.11a 5180MHz Extremity Right/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 9.939 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 11.8 W/kg

SAR(1 g) = 3.04 W/kg; SAR(10 g) = 0.885 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 64.9%

Maximum value of SAR (measured) = 7.29 W/kg

Configuration/802.11a 5180MHz Extremity Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 9.939 V/m; Power Drift = -0.16 dB

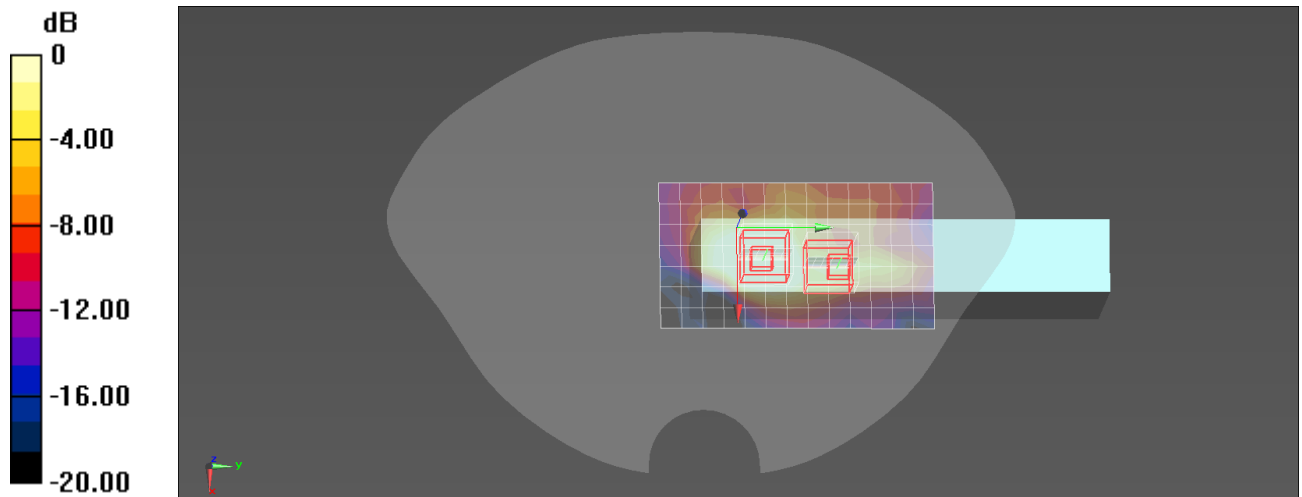
Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.357 W/kg; SAR(10 g) = 0.100 W/kg

Smallest distance from peaks to all points 3 dB below = 5.3 mm

Ratio of SAR at M2 to SAR at M1 = 66.6%

Maximum value of SAR (measured) = 0.896 W/kg



0 dB = 0.896 W/kg = -0.48 dBW/kg

Plot 43#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5500MHz Extremity Right**

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.75$ S/m; $\epsilon_r = 34.23$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5500 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5500MHz Extremity Right/Area Scan (7x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 3.79 W/kg**Configuration/802.11a 5500MHz Extremity Right/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 9.943 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 8.89 W/kg

SAR(1 g) = 2.21 W/kg; SAR(10 g) = 0.647 W/kg

Smallest distance from peaks to all points 3 dB below = 6.6 mm

Ratio of SAR at M2 to SAR at M1 = 64.1%

Maximum value of SAR (measured) = 5.52 W/kg

Configuration/802.11a 5500MHz Extremity Right/Zoom Scan (9x9x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 9.943 V/m; Power Drift = -0.17 dB

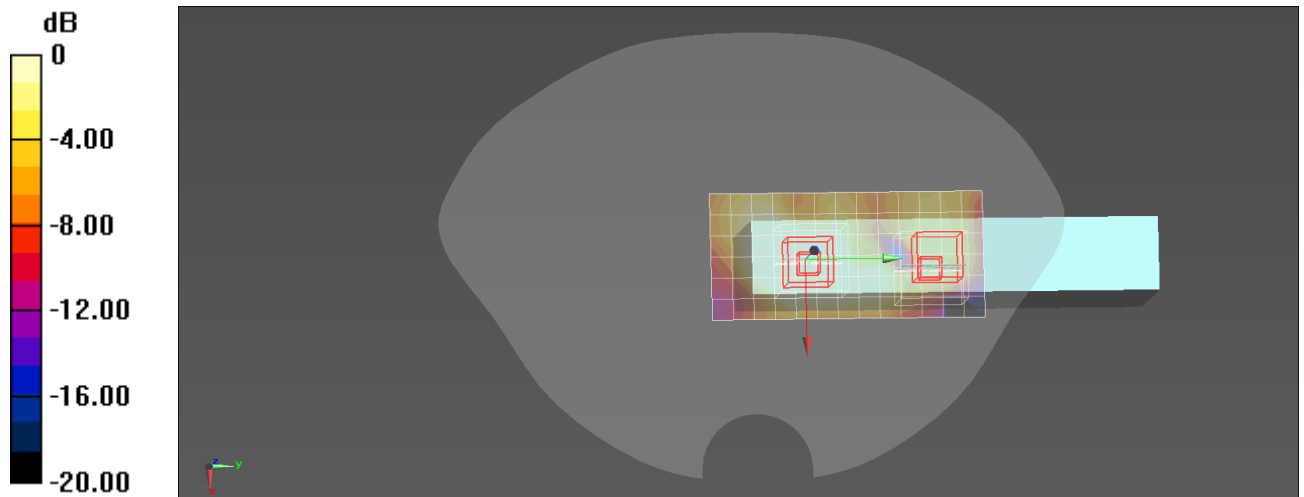
Peak SAR (extrapolated) = 0.622 W/kg

SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.043 W/kg

Smallest distance from peaks to all points 3 dB below = 6.8 mm

Ratio of SAR at M2 to SAR at M1 = 61.5%

Maximum value of SAR (measured) = 0.395 W/kg



0 dB = 0.395 W/kg = -4.03 dBW/kg

Plot 44#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5785MHz Extremity Right**

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.08 \text{ S/m}$; $\epsilon_r = 33.73$; $\rho = 1000 \text{ kg/m}^3$; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5785 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5785MHz Extremity Right/Area Scan (7x14x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$; Maximum value of SAR (measured) = 5.31 W/kg**Configuration/802.11a 5785MHz Extremity Right/Zoom Scan (9x9x7)/Cube 0:** Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Reference Value = 4.355 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 8.92 W/kg

SAR(1 g) = 2.21 W/kg; SAR(10 g) = 0.670 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 62.9%

Maximum value of SAR (measured) = 5.41 W/kg

Configuration/802.11a 5785MHz Extremity Right/Zoom Scan (9x9x7)/Cube 1: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$; Reference Value = 4.355 V/m; Power Drift = 0.19 dB

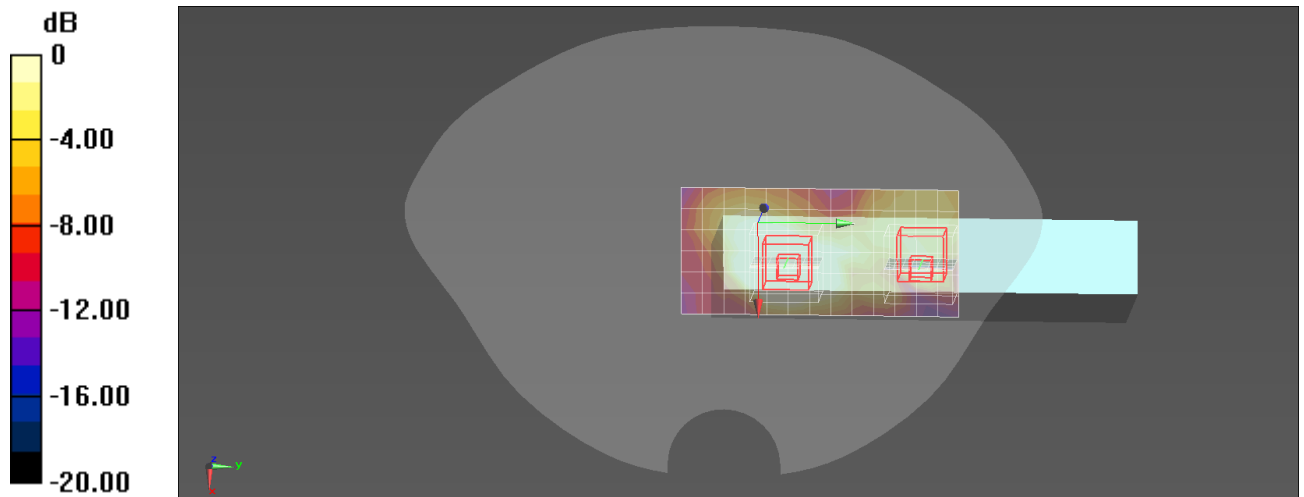
Peak SAR (extrapolated) = 0.613 W/kg

SAR(1 g) = 0.137 W/kg; SAR(10 g) = 0.043 W/kg

Smallest distance from peaks to all points 3 dB below = 4.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.3%

Maximum value of SAR (measured) = 0.390 W/kg



0 dB = 0.390 W/kg = -4.09 dBW/kg

Plot 45#

Test Date: 02/26/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11b 2437MHz Extremity Left**

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(7.6, 7.6, 7.6) @ 2437 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (30deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11b 2437MHz Extremity Left/Area Scan (7x12x1): Measurement grid: dx=12mm, dy=12mm; Maximum value of SAR (measured) = 1.21 W/kg**Configuration/802.11b 2437MHz Extremity Left/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 5.603 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 0.774 W/kg; SAR(10 g) = 0.329 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 47.2%

Maximum value of SAR (measured) = 1.34 W/kg

Configuration/802.11b 2437MHz Extremity Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm; Reference Value = 5.603 V/m; Power Drift = -0.06 dB

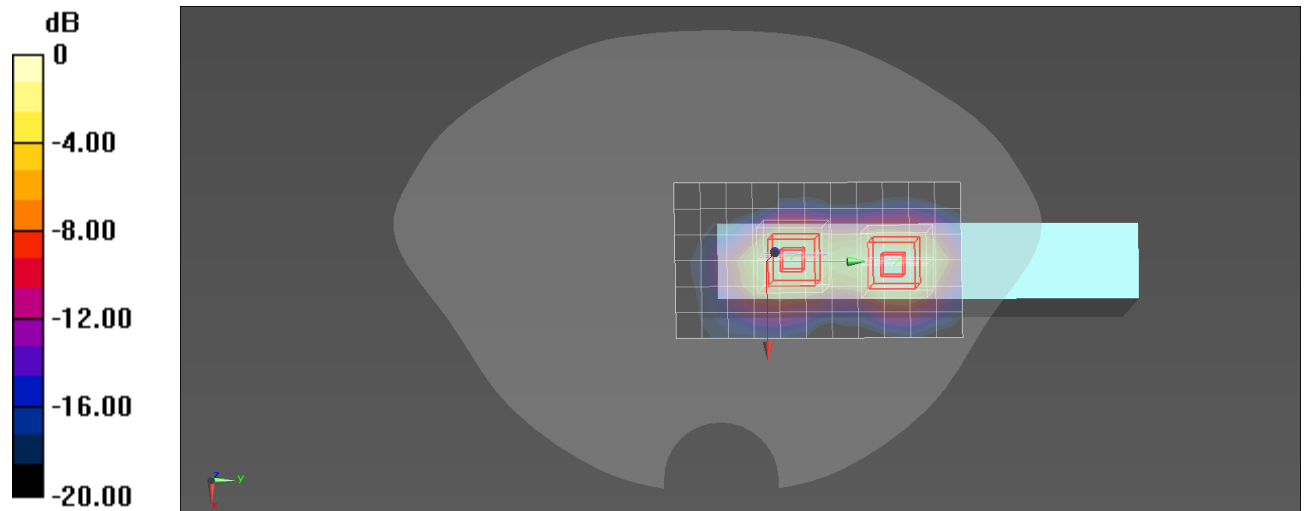
Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.556 W/kg; SAR(10 g) = 0.256 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 51.6%

Maximum value of SAR (measured) = 0.919 W/kg



0 dB = 0.919 W/kg = -0.37 dBW/kg

Plot 46#

Test Date: 02/27/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5180MHz Extremity Left**

Communication System: 802.11a; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.42$ S/m; $\epsilon_r = 34.82$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(5.15, 5.15, 5.15) @ 5180 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5180MHz Extremity Left/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 4.06 W/kg**Configuration/802.11a 5180MHz Extremity Left/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 8.249 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 6.80 W/kg

SAR(1 g) = 2.01 W/kg; SAR(10 g) = 0.772 W/kg

Smallest distance from peaks to all points 3 dB below = 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.7%

Maximum value of SAR (measured) = 4.39 W/kg

Configuration/802.11a 5180MHz Extremity Left/Zoom Scan (9x9x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 8.249 V/m; Power Drift = 0.09 dB

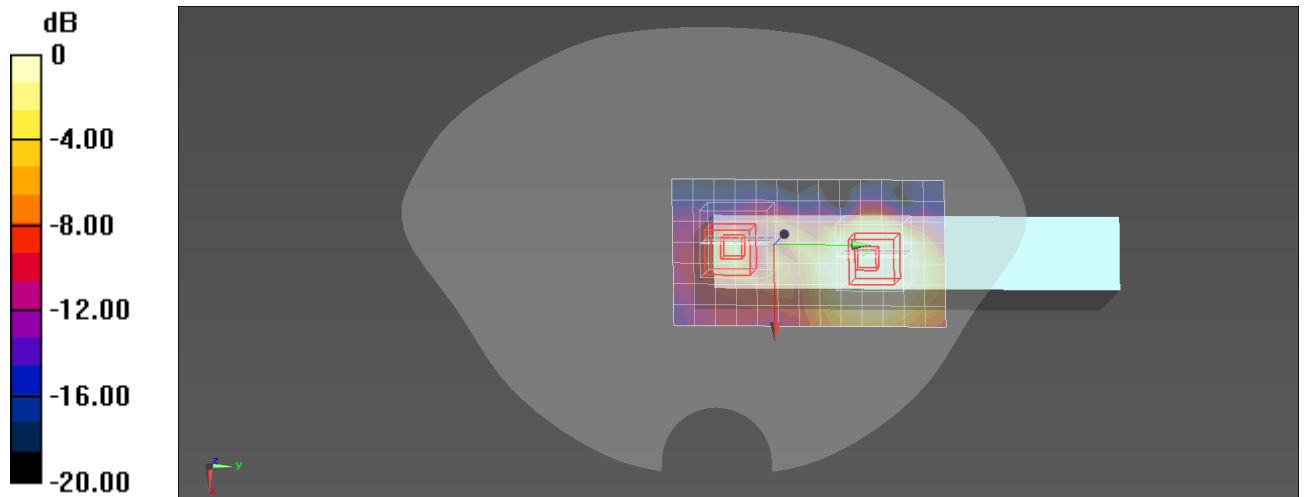
Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 0.406 W/kg; SAR(10 g) = 0.093 W/kg

Smallest distance from peaks to all points 3 dB below = 4.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.4%

Maximum value of SAR (measured) = 1.05 W/kg



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

Plot 47#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5500MHz Extremity Left**

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.75$ S/m; $\epsilon_r = 34.23$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.77, 4.77, 4.77) @ 5500 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5500MHz Extremity Left/Area Scan (7x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 3.20 W/kg**Configuration/802.11a 5500MHz Extremity Left/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 3.919 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 5.75 W/kg

SAR(1 g) = 1.51 W/kg; SAR(10 g) = 0.544 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 64.1%

Maximum value of SAR (measured) = 3.53 W/kg

Configuration/802.11a 5500MHz Extremity Left/Zoom Scan (9x9x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 3.919 V/m; Power Drift = -0.08 dB

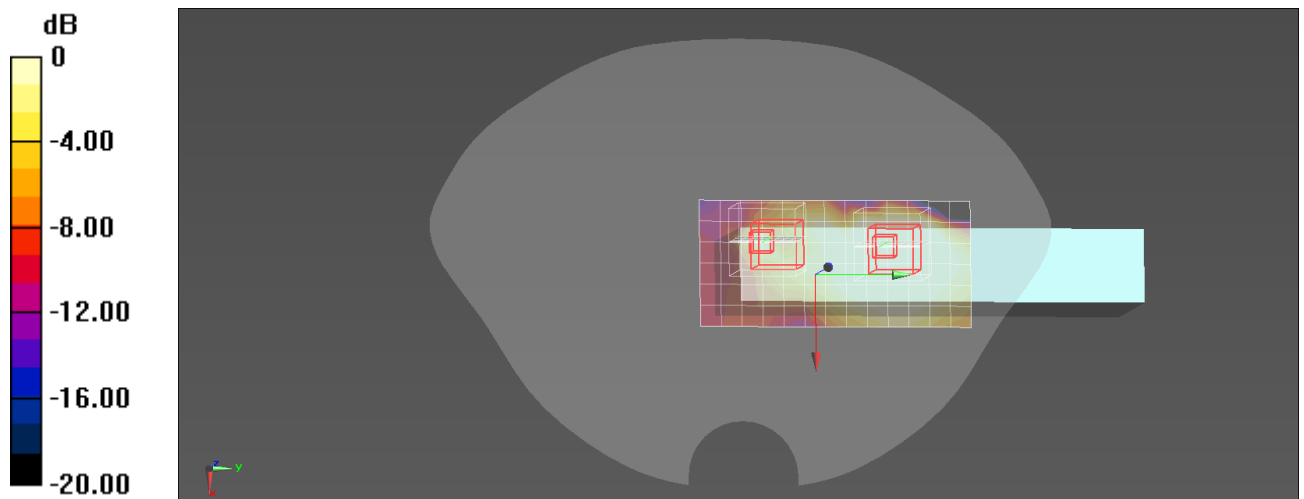
Peak SAR (extrapolated) = 0.884 W/kg

SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.048 W/kg

Smallest distance from peaks to all points 3 dB below = 5.4 mm

Ratio of SAR at M2 to SAR at M1 = 62.8%

Maximum value of SAR (measured) = 0.567 W/kg



0 dB = 0.567 W/kg = -2.46 dBW/kg

Plot 48#

Test Date: 02/28/2021

DUT: Handheld Data Terminal; Type: HT730**Procedure Name: 802.11a 5785MHz Extremity Left**

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.08$ S/m; $\epsilon_r = 33.73$; $\rho = 1000$ kg/m³; Tissue Temp (celsius)-22.5°C; Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7524; ConvF(4.84, 4.84, 4.84) @ 5785 MHz; Calibrated: 5/20/2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1552; Calibrated: 5/6/2020
- Phantom: Twin-SAM V8.0 (20deg probe tilt); Type: QD 000 P41 AA; Serial: 1967
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Configuration/802.11a 5785MHz Extremity Left/Area Scan (7x14x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 3.04 W/kg**Configuration/802.11a 5785MHz Extremity Left/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 4.811 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 5.31 W/kg

SAR(1 g) = 1.38 W/kg; SAR(10 g) = 0.515 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63%

Maximum value of SAR (measured) = 3.21 W/kg

Configuration/802.11a 5785MHz Extremity Left/Zoom Scan (9x9x7)/Cube 1: Measurement grid:

dx=4mm, dy=4mm, dz=1.4mm; Reference Value = 4.811 V/m; Power Drift = 0.17 dB

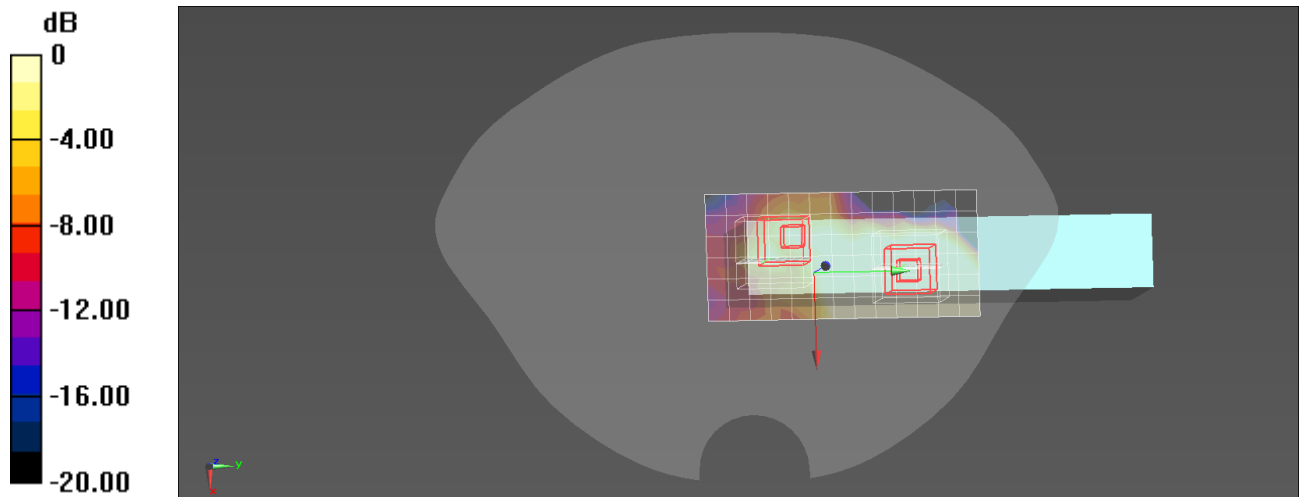
Peak SAR (extrapolated) = 0.568 W/kg

SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.034 W/kg

Smallest distance from peaks to all points 3 dB below = 5.4 mm

Ratio of SAR at M2 to SAR at M1 = 58.9%

Maximum value of SAR (measured) = 0.349 W/kg



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

Annex C - SAR Test Setup Photos

Please refer to document "2102RSU038-UT".

Annex D - EUT External Photos

Please refer to document "2102RSU038-UE".

Annex E - Equipment Calibration Report

Please refer to document “Annex E - Equipment Calibration Report.pdf”.

The End
