SAR Test Report

Report No.	:	**SFBEDW-WTW-P21010159**
Applicant	:	**Hon Lin Technology Co., Ltd.**
Address	:	**11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.**
Product	:	**5G WWAN Module**
FCC ID	:	**2AQ68T99W175-D3**
Brand	:	**FOXCONN**
Model No.	:	**T99W175**
Standards	:	**FCC 47 CFR Part 2 (2.1093), IEEE C95.1:1992, IEEE Std 1528:2013** **KDB 865664 D01 v01r04, KDB 865664 D02 v01r02** **KDB 248227 D01 v02r02, KDB 447498 D01 v06, KDB 616217 D04 v01r02, KDB 941225 D01 v03r01,** **KDB 941225 D05 v02r05, KDB 941225 D05A v01r02, KDB 941225 D06 v02r01**
Sample Received Date	:	**Jan. 07, 2021**
Date of Testing	:	**Mar. 12, 2021 ~ Mar. 27, 2021**
Lab Address	:	**No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan**
Test Location	:	**No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City, Taiwan**

CERTIFICATION: The above equipment have been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch–Lin Kou Laboratories**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by TAF or any government agencies.

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Approved By : Gordon Lin

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FCC Accredited No.: TW0003

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Release Control Record

Report No.	Reason for Change	Date Issued
SFBEDW-WTW-P21010159	Initial release	Apr. 19, 2021

1. Summary of Maximum SAR Value

Equipment Class	Mode	Highest SAR_{1g} Body Tested at 0 mm (W/kg)	
		Tablet Mode	Laptop Mode
PCB	WCDMA II	0.62	0.65
	WCDMA IV	0.72	0.65
	WCDMA V	0.76	0.59
	LTE 2	0.34	0.39
	LTE 4	0.31	0.38
	LTE 5	0.30	0.35
	LTE 7	0.54	0.38
	LTE 12	0.47	0.35
	LTE 13	0.27	0.39
	LTE 14	0.28	0.37
	LTE 17	0.41	0.37
	LTE 25	0.34	0.39
	LTE 26	0.36	0.33
	LTE 30	0.50	0.37
	LTE 38	0.67	0.45
	LTE 41	0.61	0.36
	LTE 42	0.19	0.54
	LTE 48	0.23	0.38
	LTE 66	0.58	0.38
	5G NR-n2	0.47	0.39
	5G NR-n5	0.28	0.27
	5G NR-n7	0.65	0.39
	5G NR-n12	0.32	0.19
	5G NR-n41	0.53	0.29
	5G NR-n66	0.50	0.19
DTS	2.4G WLAN	0.67	0.61
NII	5.3G WLAN	0.79	0.66
	5.6G WLAN	0.95(IC) 1.14(FCC)	0.66(IC) 0.65(FCC)
	5.8G WLAN	1.17	0.65
DSS	Bluetooth	0.08	0.16

Highest Simultaneous Transmission SAR	Highest SAR_{1g} Body (W/kg)	
	Tablet Mode	Laptop Mode
	1.49	1.59

Note:

1. The SAR criteria **(Head & Body: SAR-1g 1.6 W/kg, and Extremity: SAR-10g 4.0 W/kg)** for general population/uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.

2. Description of Equipment Under Test

EUT Type	5G WWAN Module
FCC ID	2AQ68T99W175-D3
Brand Name	FOXCONN
Model Name	T99W175
EUT Configurations	Sample 1：EUT with WLAN Ant. Speed and WWAN Ant. Speed Sample 2：EUT with WLAN Ant. HB and WWAN Ant. Speed Sample 3：EUT with WLAN Ant. Speed and WWAN Ant. WNC Sample 4：EUT with WLAN Ant. HB and WWAN Ant. WNC
Tx Frequency Bands (Unit: MHz)	WCDMA Band II : 1852.4 ~ 1907.6 WCDMA Band IV : 1712.4 ~ 1752.6 WCDMA Band V : 826.4 ~ 846.6 LTE Band 2 : 1850.7 ~ 1909.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 4 : 1710.7 ~ 1754.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 5 : 824.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M) LTE Band 7 : 2502.5 ~ 2567.5 (BW: 5M, 10M, 15M, 20M) LTE Band 12 : 699.7 ~ 715.3 (BW: 1.4M, 3M, 5M, 10M) LTE Band 13 : 779.5 ~ 784.5 (BW: 5M, 10M) LTE Band 14 : 790.5 ~ 795.5 (BW: 5M, 10M) LTE Band 17 : 706.5 ~ 713.5 (BW: 5M, 10M) LTE Band 25 : 1850.7 ~ 1914.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 26 : 814.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M, 15M) LTE Band 30 : 2307.5 ~ 2312.5 (BW: 5M, 10M) LTE Band 38 : 2572.5 ~ 2617.5 (BW: 5M, 10M, 15M, 20M) LTE Band 41 : 2498.5 ~ 2687.5 (BW: 5M, 10M, 15M, 20M) LTE Band 42 : 3550 ~ 3600 (BW: 5M, 10M, 15M, 20M) LTE Band 48 : 3550 ~ 3700 (BW: 5M, 10M, 15M, 20M) LTE Band 66 : 1710.7 ~ 1779.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) 5G NR Band 2 : 1850.7 ~ 1909.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) 5G NR Band 5 : 824.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M) 5G NR Band 7 : 2502.5 ~ 2567.5 (BW: 5M, 10M, 15M, 20M) 5G NR Band 12 : 699.7 ~ 715.3 (BW: 1.4M, 3M, 5M, 10M) 5G NR Band 41 : 2498.5 ~ 2687.5 (BW: 5M, 10M, 15M, 20M) 5G NR Band 66 : 1710.7 ~ 1779.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) WLAN : 2412 ~ 2472, 5180 ~ 5320, 5500 ~ 5720, 5745 ~ 5825 Bluetooth : 2402 ~ 2480
Uplink Modulations	WCDMA : QPSK 5G NR / LTE : QPSK, 16QAM, 64QAM, 256QAM 802.11b : DSSS 802.11a/g/n/ac : OFDM 802.11ax : OFDMA Bluetooth : GFSK, π/4-DQPSK, 8DPSK NFC : ASK
5G NR FR1 SCS	15 /30 kHz
EN-DC Uplink Combinations	5A-n2A, 12A-n2A, 13A-n2A, 48A-n2A, 2A-n5A, 7A-n5A, 48A-n5A, 66A-n5A, 5A-n7A, 12A-n7A, 2A-n12A, 66A-n12A, 2A-n41A, 25A-n41A, 26A-n41A, 66A-n41A, 5A-n66A, 12A-n66A, 13A-n66A, 48A-n66A
Maximum Tune-up Conducted Power (Unit: dBm)	Please refer to section 4.6.1 of this report
Antenna Type	Refer to Note as below
EUT Stage	Mass Product

Note:

1. The EUT is authorized for use in specific End-product. Please refer to below for more details.

Product	Brand	Model
Portable Computer	DELL	P142G

2. The WLAN/BT module (Brand: Intel® Wi-Fi 6 AX210, Model: AX210D2W, FCC ID: E2KAX210D2) was installed in the specific End-product.
3. The antenna information is listed as below.

<WWAN_Main>

Vendor	Ant. Type	Parts Number	Antenna Gain													
			WCDMA II / LTE 2 / 5GNR-n2	WCDMA IV / LTE 4	WCDMA V / LTE 5 / 5GNR-n5	LTE 7	LTE 12 / 5GNR-n12	LTE 13	LTE 14	LTE 17	LTE 25	LTE 26	LTE 30	LTE 38	LTE 41	LTE 66 / 5GNR-n66
Laptop Mode																
Speed	PIFA	F-0G-FH-6115-004-00 (DC33002G75L)	-0.93	0.79	0.92	0.94	-0.81	0.97	0.95	-0.81	-0.93	0.92	-0.66	0.94	0.94	0.79
WNC	PIFA	81ELAW15.G37 (DC33002HQ1L)	-0.96	-2.57	-2.26	0.82	-4.56	-3.61	-2.94	-4.56	-0.96	-2.26	-0.42	0.86	0.86	-0.96
Tablet Mode																
Speed	PIFA	F-0G-FH-6115-004-00 (DC33002G75L)	-0.97	-1.76	-8.26	0.67	-8.86	-5.21	-5.67	-8.86	-0.97	-8.26	-1.37	-0.92	0.67	-0.79
WNC	PIFA	81ELAW15.G37 (DC33002HQ1L)	-5.33	-5.16	-6.13	-5.16	-10.01	-8.63	-8.01	-10.08	-4.97	-6.13	-4.75	-5.07	-4.76	-4.37

<WWAN_MIMO2>

Vendor	Ant. Type	Parts Number	Antenna Gain					
			LTE 2 / 5GNR-n2	LTE 7 / 5GNR-n7	LTE 41	LTE 42	LTE 48	LTE 66 / 5GNR-n66
Laptop Mode								
Speed	PIFA	F-0G-FH-6115-004-00 (DC33002G75L)	-2.18	0.94	0.94	-1.87	-1.92	0.63
WNC	PIFA	81ELAW15.G37 (DC33002HQ1L)	-3.54	-4.12	-3.85	-0.44	-0.44	-4.63
Tablet Mode								
Speed	PIFA	F-0G-FH-6115-004-00 (DC33002G75L)	-4.57	-0.02	-0.02	-3.23	-3.1	-7.1
WNC	PIFA	81ELAW15.G37 (DC33002HQ1L)	-5.24	-4.65	-4.15	-6.77	-5.15	-6.78

<WLAN>

Antenna information				Peak gain w/ cable loss (dBi)			
Vendor	**Type**	**Antenna Part number (Main)**	**Antenna Part number (Aux.)**	**2.4GHz** 2400-2500MHz	**5.2GHz** 5150-5350MHz	**5.5GHz** 5470-5725MHz	**5.8GHz** 5725-5850MHz
Laptop Mode							
Speed	PIFA	F-0G-FH-6115-003-00 (DC33002G72L) F-0G-FH-6115-006-00 DC33002G78L	F-0G-FH-6115-003-00 (DC33002G72L) F-0G-FH-6115-006-00 DC33002G78L	-1.28	0.19	0.94	1.61
Hong-BO Co., Ltd.	PIFA	260-24351 DC33002HO2L 260-24350 DC33002HO1L	260-24351 DC33002HO2L 260-24350 DC33002HO1L	-2.93	-1.85	-1.37	-1.37
Tablet Mode							
Speed	PIFA	F-0G-FH-6115-003-00 (DC33002G72L) F-0G-FH-6115-006-00 DC33002G78L	F-0G-FH-6115-003-00 (DC33002G72L) F-0G-FH-6115-006-00 DC33002G78L	-2.60	1.83	1.90	1.93
Hong-BO Co., Ltd.	PIFA	260-24351 DC33002HO2L 260-24350 DC33002HO1L	260-24351 DC33002HO2L 260-24350 DC33002HO1L	-2.52	1.78	1.47	-0.07

4. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
5. The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

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.

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

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

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

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

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

3.2 SPEAG DASY6 System

DASY6 system consists of high precision robot, probe alignment sensor, phantom, robot controller, controlled measurement server and near-field probe. The robot includes six axes that can move to the precision position of the DASY6 software defined. The DASY6 software can define the area that is detected by the probe. The robot is connected to controlled box. Controlled measurement server is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement and surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion form the optical into digital electric signal of the DAE and transfers data to the PC.

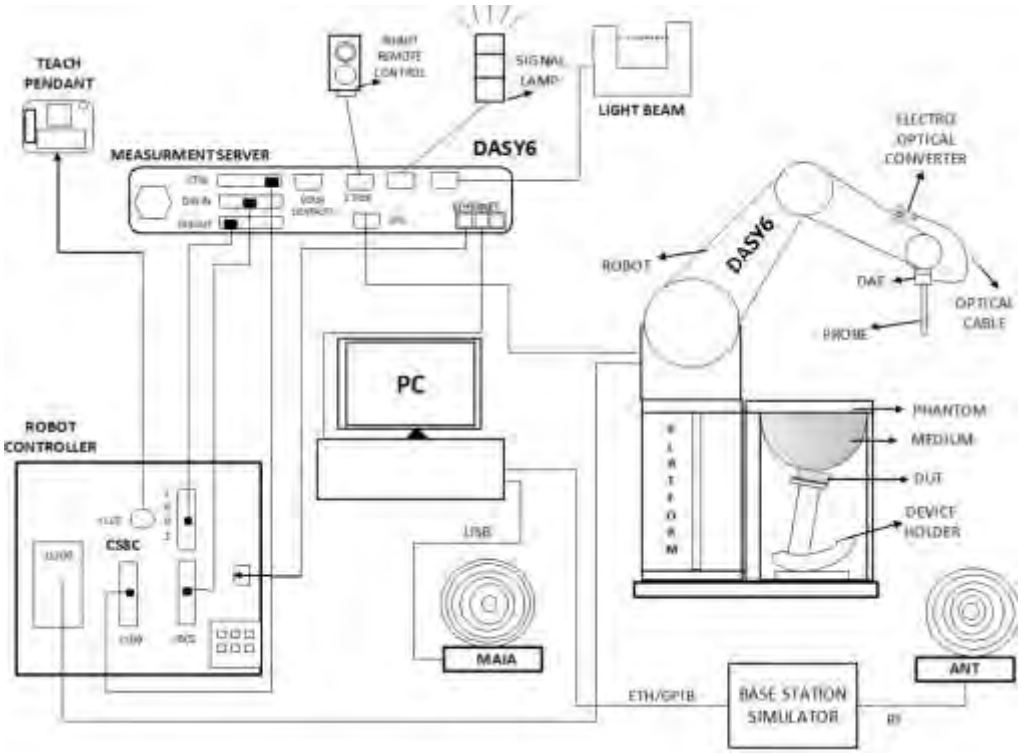


Fig-3.1 SPEAG DASY6 System Setup

3.2.1 Robot

The DASY6 system uses the high precision robots from Stäubli SA (France). For the 6-axis controller system, the robot controller version of CS8c from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability ±0.035 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

Fig-3.2 SPEAG DASY6 System

3.2.2 Probes

The SAR measurement is conducted with the dosimetric probe. 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.

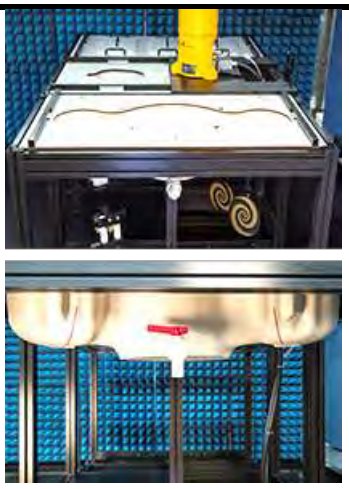
Model	EX3DV4
Construction	Symmetrical design with triangular core. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).
Frequency	4 MHz to 10 GHz Linearity: ± 0.2 dB
Directivity	± 0.1 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm

3.2.3 Data Acquisition Electronics (DAE)

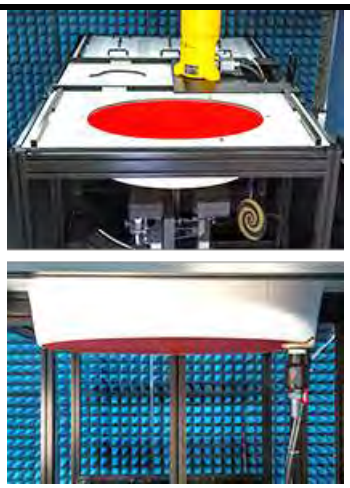
Model	DAE3, DAE4
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV, 400mV)
Input Offset Voltage	< 5µV (with auto zero)
Input Bias Current	< 50 fA
Dimensions	60 x 60 x 68 mm

3.2.4 Phantoms

Model	SAM-Twin Phantom
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE Std 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.
Material	Vinylester, fiberglass reinforced (VE-GF)
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)
Dimensions	Length: 1000 mm Width: 500 mm Height: adjustable feet
Filling Volume	approx. 25 liters



Model	ELI
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices. 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.
Material	Vinylester, fiberglass reinforced (VE-GF)
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm Minor axis: 400 mm
Filling Volume	approx. 30 liters



3.2.5 Device Holder

Model	MD4HHTV5 - Mounting Device for Hand-Held Transmitters
Construction	In combination with the Twin SAM 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)

Model	MDA4WTV5 - Mounting Device Adaptor for Ultra Wide Transmitters
Construction	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)

Model	MDA4SPV6 - Mounting Device Adaptor for Smart Phones
Construction	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

Model	MD4LAPV5 - Mounting Device for Laptops and other Body-Worn Transmitters	
Construction	In combination with the Twin SAM 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	

3.2.6 System Validation Dipoles

Model	D-Serial	
Construction	Symmetrical dipole with l/4 balun. Enables measurement of feed point impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.	
Frequency	750 MHz to 5800 MHz	
Return Loss	> 20 dB	
Power Capability	> 100 W (f < 1GHz), > 40 W (f > 1GHz)	

3.2.7 Power Source

Model	Powersource1	
Signal Type	Continuous Wave	
Operating Frequencies	600 MHz to 5850 MHz	
Output Power	-5.0 dBm to +17.0 dBm	
Power Supply	5V DC, via USB jack	
Power Consumption	<3 W	
Applications	System performance check and validation with a CW signal.	

3.2.8 Tissue Simulating Liquids

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 10 % are listed in Table-3.1.

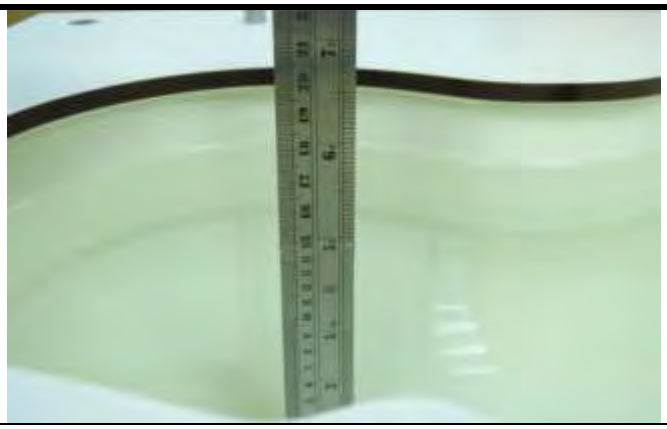


Photo of Liquid Height for Head Position

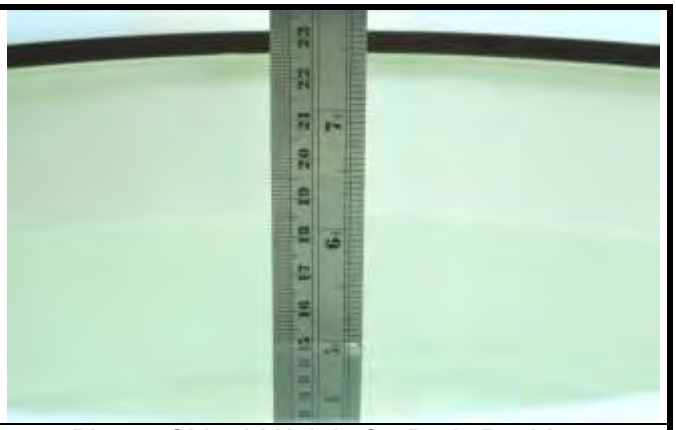


Photo of Liquid Height for Body Position

Table-3.1 Targets of Tissue Simulating Liquid

Frequency (MHz)	Target Permittivity	Range of ±10 %	Target Conductivity	Range of ±10 %
450	43.5	39.2 ~ 47.9	0.87	0.78 ~ 0.96
750	41.9	37.7 ~ 46.1	0.89	0.80 ~ 0.98
835	41.5	37.4 ~ 45.7	0.90	0.81 ~ 0.99
900	41.5	37.4 ~ 45.7	0.97	0.87 ~ 1.07
1450	40.5	36.5 ~ 44.6	1.20	1.08 ~ 1.32
1500	40.4	36.4 ~ 44.4	1.23	1.11 ~ 1.35
1640	40.2	36.2 ~ 44.2	1.31	1.18 ~ 1.44
1750	40.1	36.1 ~ 44.1	1.37	1.23 ~ 1.51
1800	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
1900	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
2000	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
2100	39.8	35.8 ~ 43.8	1.49	1.34 ~ 1.64
2300	39.5	35.6 ~ 43.5	1.67	1.50 ~ 1.84
2450	39.2	35.3 ~ 43.1	1.80	1.62 ~ 1.98
2600	39.0	35.1 ~ 42.9	1.96	1.76 ~ 2.16
3000	38.5	34.7 ~ 42.4	2.40	2.16 ~ 2.64
3500	37.9	34.1 ~ 41.7	2.91	2.62 ~ 3.20
4000	37.4	33.7 ~ 41.1	3.43	3.09 ~ 3.77
4500	36.8	33.1 ~ 40.5	3.94	3.55 ~ 4.33
5000	36.2	32.6 ~ 39.8	4.45	4.01 ~ 4.90
5200	36.0	32.4 ~ 39.6	4.66	4.19 ~ 5.13
5400	35.8	32.2 ~ 39.4	4.86	4.37 ~ 5.35
5600	35.5	32.0 ~ 39.1	5.07	4.56 ~ 5.58
5800	35.3	31.8 ~ 38.8	5.27	4.74 ~ 5.80
6000	35.1	31.6 ~ 38.6	5.48	4.93 ~ 6.03

The dielectric properties of the tissue simulating liquids are defined in IEC 62209-1 and IEC 62209-2. The dielectric properties of the tissue simulating liquids were verified prior to the SAR evaluation using a dielectric assessment kit and a network analyzer.

Since the range of ±10 % of the required target values is used to measure relative permittivity and conductivity, the SAR correction procedure is applied to correct measured SAR for the deviations in permittivity and conductivity. Only positive correction has been used to scale up the measured SAR, and SAR result would not be corrected if the correction △SAR has a negative sign.

The following table gives the recipes for tissue simulating liquids.

Table-3.2 Recipes of Tissue Simulating Liquid

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
H750	0.2	-	0.2	1.5	56.0	-	42.1	-
H835	0.2	-	0.2	1.5	57.0	-	41.1	-
H900	0.2	-	0.2	1.4	58.0	-	40.2	-
H1450	-	43.3	-	0.6	-	-	56.1	-
H1640	-	45.8	-	0.5	-	-	53.7	-
H1750	-	47.0	-	0.4	-	-	52.6	-
H1800	-	44.5	-	0.3	-	-	55.2	-
H1900	-	44.5	-	0.2	-	-	55.3	-
H2000	-	44.5	-	0.1	-	-	55.4	-
H2300	-	44.9	-	0.1	-	-	55.0	-
H2450	-	45.0	-	0.1	-	-	54.9	-
H2600	-	45.1	-	0.1	-	-	54.8	-
H3500	-	8.0	-	0.2	-	20.0	71.8	-
H5G	-	-	-	-	-	17.2	65.5	17.3

3.3 SAR System Verification

The system check verifies that the system operates within its specifications. It is performed daily or before every SAR measurement. The system check uses normal SAR measurements in the flat section of the phantom with a matched dipole at a specified distance. The system verification setup is shown as below.

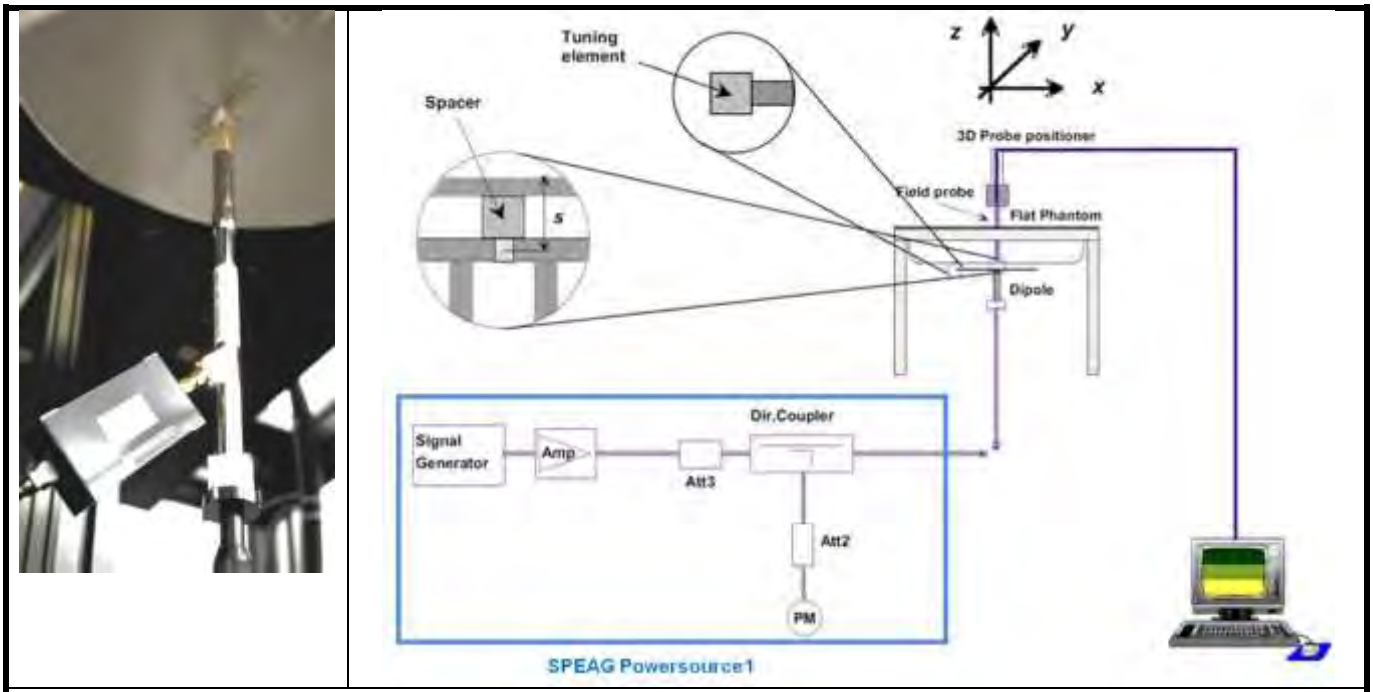


Fig-3.3 System Verification Setup

The SPEAG Powersource1 is a portable and very stable RF source providing a continuous wave (CW) signal. It is designed for conducting SAR system checks and SAR system validation of DASY and is compatible with IEC 62209-1, IEC 62209-2 and IEEE Std 1528 standards. The Powersource1 has been calibrated by SPEAG's ISO/IEC 17025-accredited calibration center. When using Powersource1, the setup can be simplified, as shown in Fig-3.3. The signal purity is warranted by design. Since the Powersource1 is calibrated, no additional equipment is needed and the Powersource1 can directly be connected to the SMA connector of the dipole without a cable as all separate components (signal generator, amplifier, coupler and power meter) are built into the unit.

The validation dipole is placed beneath the flat phantom with the specific spacer in place. The distance spacer is touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The Powersource1 is adjusted for the desired forward power of 17 dBm at the dipole connector and the RF output power would be turned on. After system check testing, the SAR result will be normalized to 1W forward input power and compared with the reference SAR value derived from validation dipole certificate report. The deviation of system check should be within 10 %.

3.4 SAR Measurement Procedure

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

(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

The SAR measurement procedures for each of test conditions are as follows:

(a) Make EUT to transmit maximum output power
(b) Measure conducted output power through RF cable
(c) Place the EUT in the specific position of phantom
(d) Perform SAR testing steps on the DASY system
(e) Record the SAR value

3.4.1 Area Scan and Zoom Scan Procedure

First area scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an area scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, zoom scan is required. The zoom scan is performed around the highest E-field value to determine the averaged SAR-distribution.

Measure the local SAR at a test point at 1.4 mm of the inner surface of the phantom recommended by SEPAG. The area scan (two-dimensional SAR distribution) is performed cover at least an area larger than the projection of the EUT or antenna. The measurement resolution and spatial resolution for interpolation shall be chosen to allow identification of the local peak locations to within one-half of the linear dimension of the corresponding side of the zoom scan volume. Following table provides the measurement parameters required for the area scan.

Parameter	$f \leqq 3$ GHz	3 GHz < $f \leqq 6$ GHz
Maximum distance from closest measurement point to phantom surface	5 ± 1	$\delta \ln(2)/2$ ±0.5
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

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks. Additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g. 1 W/kg for 1.6 W/kg, 1 g limit; or 1.26 W/kg for 2 W/kg, 10 g limit).

The zoom scan (three-dimensional SAR distribution) is performed at the local maxima locations identified in previous area scan procedure. The zoom scan volume must be larger than the required minimum dimensions. When graded grids are used, which only applies in the direction normal to the phantom surface, the initial grid separation closest to the phantom surface and subsequent graded grid increment ratios must satisfy the required protocols. The 1-g SAR averaging volume must be fully contained within the zoom scan measurement volume boundaries; otherwise, the measurement must be repeated by shifting or expanding the zoom scan volume. The similar requirements also apply to 10-g SAR measurements. Following table provides the measurement parameters required for the zoom scan.

Parameter		$f \leqq 3$ GHz	3 GHz < $f \leqq 6$ 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:* $\Delta z_{Zoom}(n)$	≦5 mm	3 – 4 GHz: ≦4 mm 4 – 5 GHz: ≦3 mm 5 – 6 GHz: ≦2 mm
	graded grids: $\Delta z_{Zoom}(1)$	≦4 mm	3 – 4 GHz: ≦3.0 mm 4 – 5 GHz: ≦2.5 mm 5 – 6 GHz: ≦2.0 mm
	$\Delta z_{Zoom}(n>1)$	≦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

Per IEC 62209-2 AMD1, the successively higher resolution zoom scan is required if the zoom scan measured as defined above complies with both of the following criteria, or if the peak spatial-average SAR is below 0.1 W/kg, no additional measurements are needed:

(1) The smallest horizontal distance from the local SAR peaks to all points 3 dB below the SAR peak shall be larger than the horizontal grid steps in both x and y directions (Δx, Δy). This shall be checked for the measured zoom scan plane conformal to the phantom at the distance zM1.

(2) The ratio of the SAR at the second measured point (M2) to the SAR at the closest measured point (M1) at the x-y location of the measured maximum SAR value shall be at least 30 %.

If one or both of the above criteria are not met, the zoom scan measurement shall be repeated using a finer resolution. New horizontal and vertical grid steps shall be determined from the measured SAR distribution so that the above criteria are met. Compliance with the above two criteria shall be demonstrated for the new measured zoom scan.

3.4.2 Volume Scan Procedure

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

3.4.3 Power Drift Monitoring

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

3.4.4 Spatial Peak SAR Evaluation

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

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

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

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

3.4.5 SAR Averaged Methods

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

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

4. SAR Measurement Evaluation

4.1 EUT Configuration and Setting

<Considerations Related to Proximity Sensor>

The device supports WWAN, WLAN, and Bluetooth capabilities. It is designed with a proximity sensor which can trigger power reduction for WCDMA、LTE and 5G-NR on Rear Face, Left Side, Top Side, and Bottom of EUT for SAR compliance. Only Bluetooth have no power reduction. The power levels for all wireless technologies and the power reduction please refer to section 4.6 of this report.

Proximity Sensor Triggering Distances (KDB 616217 D04 §6.2)

The proximity sensor triggering distance was determined per KDB 616217 for rear face and applicable edge. Summary for power verification per distance was tabulated in the below table.

<Tablet>

Output Power Verification in dBm for EUT Rear Face											
Distance (mm)	18	19	20	21	22	23	24	25	26	27	28
WCDMA II	14.1	13.9	14.2	14.4	14.4	14.4	24.4	24.0	24.4	24.0	24.0
WCDMA IV	14.9	15.4	14.9	14.9	15.4	15.0	24.4	24.0	23.9	24.3	24.3
WCDMA V	19.6	19.5	19.5	19.4	19.6	19.7	24.1	24.0	23.9	24.3	24.4
LTE 2	11.0	10.9	11.0	10.8	10.9	11.1	23.3	23.2	23.3	23.0	23.5
LTE 4	10.5	10.3	10.3	10.0	10.1	10.3	23.3	23.1	23.0	23.2	23.2
LTE 5	15.5	15.2	15.2	15.2	15.7	15.3	23.7	23.6	23.5	23.8	23.5
LTE 7	7.9	8.2	7.9	7.9	8.2	7.8	23.7	23.5	23.9	23.9	23.6
LTE 12	15.7	16.2	16.1	15.8	16.2	15.8	23.7	23.4	23.4	23.7	23.5
LTE 13	15.5	15.6	15.6	15.6	15.3	15.5	23.5	23.3	23.5	23.7	23.4
LTE 14	16.4	16.0	16.1	16.1	16.1	16.1	23.7	23.4	23.7	23.4	23.7
LTE 17	15.3	15.4	15.8	15.3	15.5	15.7	23.2	23.0	23.0	23.4	23.4
LTE 25	11.2	11.3	11.2	11.1	11.4	11.4	23.5	23.1	23.3	23.4	23.3
LTE 26	16.3	16.5	16.1	16.1	16.1	16.3	23.8	24.0	24.1	24.0	23.7
LTE 30	11.5	11.7	11.8	11.6	11.8	11.9	22.2	22.6	22.4	22.2	22.4
LTE 38	11.9	12.0	11.7	11.9	12.0	11.9	23.4	23.7	23.6	23.4	23.5
LTE 41	10.6	10.6	10.8	10.7	10.7	10.6	23.8	23.7	23.6	23.8	23.9
LTE 66	10.9	10.6	10.5	10.4	10.8	10.8	23.7	23.5	23.8	23.3	23.5
5GNR-n2	13.2	12.8	13.1	13.2	13.1	12.9	23.8	23.7	23.7	23.5	23.8
5GNR-n5	15.2	15.5	15.2	15.1	15.3	15.2	23.5	23.4	23.8	23.8	23.6
5GNR-n12	14.6	14.3	14.5	14.3	14.5	14.8	23.3	23.4	23.1	23.5	23.3
5GNR-n66	12.9	13.0	12.8	12.8	12.8	12.5	23.6	23.6	24.0	23.6	23.9

Output Power Verification in dBm for EUT Bottom Side											
Distance (mm)	18	19	20	21	22	23	24	25	26	27	28
WCDMA II	13.9	14.2	14.0	14.3	14.3	14.4	24.3	23.9	24.4	24.1	24.0
WCDMA IV	15.3	15.1	15.0	15.2	15.1	15.1	23.9	24.1	24.2	24.0	24.0
WCDMA V	19.6	19.6	19.8	19.5	19.4	19.8	24.4	24.4	24.2	23.9	24.2
LTE 2	10.9	10.7	10.8	11.1	10.8	10.6	23.4	23.0	23.4	23.5	23.1
LTE 4	10.3	10.4	10.5	10.1	10.3	10.4	22.9	23.0	23.2	23.3	23.2
LTE 5	15.5	15.5	15.2	15.4	15.7	15.2	24.0	24.0	23.9	24.0	23.6
LTE 7	7.9	7.8	8.0	8.0	8.1	7.9	23.4	23.4	23.9	23.9	23.9
LTE 12	16.0	16.1	15.8	15.7	16.0	15.8	23.4	23.7	23.7	23.8	23.3
LTE 13	15.5	15.5	15.6	15.3	15.8	15.6	23.3	23.7	23.3	23.5	23.5
LTE 14	16.4	15.9	16.2	16.1	15.9	16.3	23.3	23.3	23.4	23.3	23.3
LTE 17	15.4	15.7	15.6	15.8	15.8	15.4	23.1	22.9	23.0	23.2	23.4
LTE 25	11.0	11.1	11.5	11.2	11.5	11.3	23.5	23.3	23.3	23.2	23.4
LTE 26	16.0	16.2	16.1	16.0	16.3	16.4	23.8	23.6	23.9	24.1	24.1
LTE 30	11.7	11.7	11.8	11.5	11.8	12.0	22.6	22.2	22.7	22.2	22.7
LTE 38	11.6	11.6	11.8	11.7	12.0	11.7	23.7	23.4	23.3	23.4	23.8
LTE 41	10.8	10.6	10.5	10.8	11.0	10.8	23.6	23.5	23.9	24.0	23.9
LTE 66	10.8	10.6	10.5	10.6	10.5	10.9	23.6	23.6	23.6	23.7	23.8
5GNR-n2	12.9	13.1	13.3	13.1	12.9	13.3	23.8	23.8	23.6	23.7	23.5
5GNR-n5	15.0	15.4	15.0	15.3	15.3	15.4	23.3	23.3	23.6	23.3	23.6
5GNR-n12	14.7	14.5	14.7	14.6	14.4	14.6	23.1	23.4	23.0	23.0	23.5
5GNR-n66	12.9	12.5	12.8	12.8	12.9	12.5	23.8	23.8	23.6	23.9	23.9

Output Power Verification in dBm for EUT Rear Face											
Distance (mm)	18	19	20	21	22	23	24	25	26	27	28
LTE 2	13.4	13.9	13.9	13.9	13.7	13.6	20.2	20.2	20.1	20.4	20.1
LTE 7	10.6	10.4	10.7	10.7	10.8	10.9	20.2	20.0	20.1	19.8	19.9
LTE 42	7.5	7.5	7.8	7.7	7.6	7.6	15.0	15.1	15.3	15.2	15.3
LTE 48	8.0	8.1	8.1	8.3	8.0	8.3	16.0	16.0	15.6	15.8	15.5
LTE 66	14.2	13.8	13.9	14.0	14.3	14.2	20.5	20.7	21.0	20.9	20.9
5GNR-n2	13.2	13.0	13.1	13.4	13.0	13.3	19.6	19.9	19.8	19.4	19.4
5GNR-n7	11.8	11.8	12.0	11.7	11.6	11.9	19.6	20.0	19.5	19.8	19.8
5GNR-n41	11.9	11.5	11.8	11.7	12.0	11.8	20.9	20.6	20.6	20.6	20.7
5GNR-n66	12.7	12.4	12.7	12.9	12.9	12.7	18.8	18.9	18.6	18.4	18.9

Output Power Verification in dBm for EUT Left Side											
Distance (mm)	18	19	20	21	22	23	24	25	26	27	28
LTE 2	13.5	13.6	13.9	13.6	13.5	13.7	20.5	20.6	20.5	20.6	20.5
LTE 7	10.8	10.9	10.4	10.7	10.8	10.6	19.9	20.1	20.1	20.1	19.9
LTE 42	8.0	7.9	7.7	7.5	7.6	7.6	15.2	15.1	15.2	15.3	15.1
LTE 48	8.0	8.0	8.3	7.8	8.0	8.3	15.8	15.7	15.7	15.9	15.6
LTE 66	14.3	14.2	14.2	14.3	14.2	13.9	20.6	20.6	21.0	20.5	20.6
5GNR-n2	13.2	13.1	13.0	13.3	13.4	13.2	19.7	19.9	19.4	19.7	19.6
5GNR-n7	12.0	11.7	11.8	11.7	11.7	11.7	19.9	19.6	19.7	19.9	19.6
5GNR-n41	12.0	11.8	11.9	11.9	11.6	11.5	20.8	20.6	20.6	20.9	20.6
5GNR-n66	12.4	12.8	12.4	12.5	12.7	12.7	18.6	18.4	18.5	18.5	18.4

Output Power Verification in dBm for EUT Top Side											
Distance (mm)	18	19	20	21	22	23	24	25	26	27	28
LTE 2	13.5	13.4	13.5	13.9	13.6	13.5	20.4	20.2	20.5	20.4	20.5
LTE 7	10.4	10.8	10.8	10.4	10.7	10.9	20.2	20.2	19.8	20.3	19.9
LTE 42	7.8	7.5	7.5	7.6	7.5	7.5	15.1	15.4	15.4	15.3	15.4
LTE 48	7.8	7.8	8.0	8.1	7.8	7.9	15.6	15.8	15.7	15.9	15.6
LTE 66	14.2	14.0	14.2	13.8	14.1	14.2	20.6	20.8	20.8	20.9	20.9
5GNR-n2	13.3	13.4	13.5	13.5	13.1	13.2	19.7	19.7	19.8	19.6	19.4
5GNR-n7	11.6	11.7	11.5	11.9	12.0	11.7	19.9	19.6	19.5	19.7	20.0
5GNR-n41	12.0	11.5	11.6	11.9	12.0	11.5	20.7	20.8	21.0	20.8	21.0
5GNR-n66	12.5	12.4	12.9	12.7	12.5	12.5	18.6	18.8	18.8	18.4	18.6

Output Power Verification in dBm for EUT Top Side									
Distance (mm)	N/A	0	1	2	3	4	5	6	7
WLAN 2.4G	17.6	17.6	17.65	17.8	18.47	18.47	18.48	18.48	18.49
WLAN 5.2G	16.27	16.27	16.3	16.3	16.89	16.87	16.88	16.92	16.92
WLAN 5.3G	16.07	16.11	16.17	16.32	16.89	16.89	16.91	16.88	16.91
WLAN 5.6G	13	13.2	13.1	13.3	13.86	13.86	13.92	13.93	13.95
WLAN 5.8G	13	13	13.2	13.3	13.87	13.9	13.97	13.95	13.96

<Laptop>

Output Power Verification in dBm for EUT Bottom											
Distance (mm)	13	14	15	16	17	18	19	20	21	22	23
WCDMA II	16.2	16.3	16.0	16.0	16.3	16.3	24.0	24.1	24.0	24.4	24.2
WCDMA IV	17.5	17.5	17.4	17.3	17.2	17.5	24.3	24.2	24.4	24.0	24.2
WCDMA V	20.9	20.4	20.5	20.8	20.9	20.9	24.0	24.4	24.4	24.1	24.0
LTE 2	12.6	12.6	12.1	12.5	12.1	12.3	23.1	23.0	23.5	23.3	23.1
LTE 4	12.3	12.0	12.1	12.4	12.4	12.4	23.0	23.1	23.3	23.2	22.9
LTE 5	17.0	17.0	17.3	17.4	17.4	17.4	23.9	23.5	23.5	24.0	23.7
LTE 7	8.7	8.7	8.9	9.0	8.8	8.9	23.6	23.6	23.5	23.8	23.6
LTE 12	17.4	17.7	17.4	17.7	17.8	17.3	23.4	23.8	23.5	23.3	23.8
LTE 13	16.6	16.8	16.5	16.8	16.6	16.7	23.5	23.3	23.8	23.8	23.4
LTE 14	16.7	16.9	16.5	16.5	16.6	16.6	23.7	23.6	23.6	23.6	23.6
LTE 17	17.8	17.3	17.3	17.6	17.5	17.4	22.9	22.9	23.1	23.0	23.2
LTE 25	12.6	12.2	12.6	12.2	12.2	12.1	23.1	23.6	23.3	23.6	23.1
LTE 26	17.4	17.2	17.3	17.3	17.5	17.3	24.0	23.8	23.8	24.0	24.1
LTE 30	13.0	13.1	13.3	12.9	13.0	12.9	22.6	22.6	22.6	22.4	22.2
LTE 38	12.5	12.6	12.4	12.5	12.5	12.1	23.6	23.6	23.3	23.7	23.3
LTE 41	11.1	11.2	11.2	11.2	11.2	11.0	23.8	23.7	23.6	23.9	23.5
LTE 66	13.1	13.0	13.0	13.0	13.5	13.5	23.8	23.6	23.7	23.4	23.4
5GNR-n2	15.1	14.8	15.3	14.9	15.1	14.8	3.9	3.6	3.6	3.9	3.8
5GNR-n5	17.2	17.4	17.3	17.1	17.1	17.2	23.5	23.3	23.4	23.6	23.7
5GNR-n12	15.9	16.3	16.1	16.2	15.9	16.3	23.2	23.4	23.5	23.3	23.5
5GNR-n66	11.7	11.5	11.6	11.7	11.9	11.8	23.6	23.9	23.8	23.9	23.9

Output Power Verification in dBm for EUT Bottom											
Distance (mm)	6	7	8	9	10	11	12	13	14	15	16
LTE 2	13.9	13.6	13.5	13.6	13.7	13.4	23.3	23.4	23.6	23.4	23.6
LTE 7	11.2	11.0	11.5	11.2	11.0	11.4	23.9	23.4	23.8	23.6	23.9
LTE 42	10.1	10.4	10.0	10.2	10.4	10.2	23.6	23.8	24.0	24.0	23.6
LTE 48	9.8	9.5	9.4	9.5	9.8	9.6	21.6	21.7	21.9	21.7	21.9
LTE 66	12.5	12.3	12.4	12.4	12.8	12.5	23.6	23.4	23.3	23.7	23.7
5GNR-n2	15.2	14.9	14.9	14.8	15.2	15.1	23.9	23.7	23.8	23.5	23.6
5GNR-n7	15.3	15.3	15.0	15.3	15.0	15.0	23.8	23.5	23.5	23.8	24.0
5GNR-n41	9.5	9.7	9.8	9.5	9.9	9.4	25.6	25.7	25.5	25.5	25.3
5GNR-n66	11.8	11.6	11.9	11.7	11.8	11.6	23.7	23.7	23.5	23.7	23.6

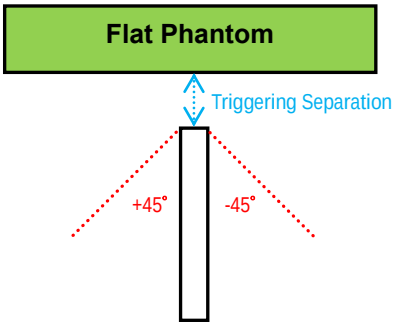
Output Power Verification in dBm for EUT Bottom											
Distance (mm)	5	6	7	8	9	10	11	12	13	14	15
WLAN 2.4G	12.2	12.1	17.6	17.6	17.65	17.8	18.47	18.47	18.48	18.48	18.49
WLAN 5.2G	10.9	10.9	16.27	16.27	16.3	16.3	16.89	16.87	16.88	16.92	16.92
WLAN 5.3G	10.7	10.9	16.07	16.11	16.17	16.32	16.89	16.89	16.91	16.88	16.91
WLAN 5.6G	9.7	9.3	13	13.2	13.1	13.3	13.86	13.86	13.92	13.93	13.95
WLAN 5.8G	8.6	8.8	13	13	13.2	13.3	13.87	13.9	13.97	13.95	13.96

Proximity Sensor Coverage (KDB 616217 D04 §6.3)

Since the proximity sensor is collocated with antenna in one component, the procedure for proximity sensor coverage is not required.

Proximity Sensor Tilt Angle Influences (KDB 616217 D04 §6.4)

The proximity sensor tilt angle influence was determined per KDB 616217 for applicable edge. Summary for proximity sensor tilt angle influence is shown in below.



<WWAN-Tablet>

Orientation	Separation Distance (mm)	Tilt Angle										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
Bottom Edge	16	On	On	On	On	On	On	On	On	On	On	On
Rear Face	22	On	On	On	On	On	On	On	On	On	On	On

<WLAN-Tablet>

Orientation	Separation Distance (mm)	Tilt Angle										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
Top Edge	2	On	On	On	On	On	On	On	On	On	On	On

Summary for Proximity Sensor Triggering Test

According to the procedures noticed in KDB 616217 D04, the proximity sensor of triggering distance is 22 mm for EUT Rear Face, 7 mm for EUT Left Side, 6 mm for EUT WWAN Ant Top Side, 2 mm for EUT WLAN Ant Top Side, and 16 mm for Bottom Side. The separation distance of 6 mm determined by the smallest triggering distance on Top Side is used to access the tilt angle influence and the sensor does not release during ±45 degree. Therefore, the smallest separation distance for tilt angle influence is 6 mm for the Top Side. The conservation triggering distances based on the separation distance for the sensor trigger triggered as EUT with power reduction at 0 mm, and EUT without power reduction of WWAN Ant at 22 mm for EUT Rear Face, 7 mm for EUT Left Side, 6 mm for EUT WWAN Ant Top Side, 2 mm for EUT WLAN Ant Top Side and 16 mm for Bottom Side were used to test SAR.

The power reduction is depends on the proximity sensor input. For a steady SAR test, the power reduction was enabled or disabled manually by engineering software during SAR testing.

<Connections between EUT and System Simulator>

For WWAN SAR testing, the EUT was linked and controlled by base station emulator. Communication between the EUT and the emulator was established by air link. The distance between the EUT and the communicating antenna of the emulator is larger than 50 cm and the output power radiated from the emulator antenna is at least 30 dB smaller than the output power of EUT. The EUT was set from the emulator to radiate maximum output power during SAR testing.

<Considerations Related to WCDMA for Setup and Testing>

Release 5 HSDPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA.HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH / HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors(β_c, β_d), and HS-DPCCH power offset parameters (Δ_{ACK}, Δ_{NACK}, Δ_{CQI}) are set according to values indicated in below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS}(1)(2)	CM(3) (dB)	MPR (3) (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{HS} =30/15*β_c.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with β_{HS} =30/15*β_c, and Δ_{CQI}=24/15 with β_{HS} =24/15*β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{HS}/β_c =24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d= 15/15.

Release 6 HSUPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode. Otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing. Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in below.

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS}(1)	β_{ec}	β_{ed}(4)(5)	β_{ed} (SF)	β_{ed} (Codes)	CM(2) (dB)	MPR(2)(6) (dB)	AG(5) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed}1: 47/15 β_{ed}2: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{HS} =30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{HS} =5/15*β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{HS}/β_c =24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.
Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

DC-HSDPA SAR Guidance

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

<Considerations Related to LTE for Setup and Testing>

This device contains LTE transmitter which follows 3GPP standards, is category 3, supports both QPSK and 16QAM modulations, and supported LTE band and channel bandwidth is listed in below. The output power was tested per 3GPP TS 36.521-1 maximum transmit procedures for both QPSK and 16QAM modulation. The results please refer to section 4.6 of this report.

EUT Supported LTE Band and Channel Bandwidth						
LTE Band	**BW 1.4 MHz**	**BW 3 MHz**	**BW 5 MHz**	**BW 10 MHz**	**BW 15 MHz**	**BW 20 MHz**
2	**V**	**V**	**V**	**V**	**V**	**V**
4	**V**	**V**	**V**	**V**	**V**	**V**
5	**V**	**V**	**V**	**V**		
7			**V**	**V**	**V**	**V**
12	**V**	**V**	**V**	**V**		
13			**V**	**V**		
14			**V**	**V**		
17			**V**	**V**		
25	**V**	**V**	**V**	**V**	**V**	**V**
26	**V**	**V**	**V**	**V**	**V**	
30			**V**	**V**		
38			**V**	**V**	**V**	**V**
41			**V**	**V**	**V**	**V**
42			**V**	**V**	**V**	**V**
48			**V**	**V**	**V**	**V**
66	**V**	**V**	**V**	**V**	**V**	**V**

The LTE maximum power reduction (MPR) in accordance with 3GPP TS 36.101 is active all times during LTE operation. The allowed MPR for the maximum output power is specified in below.

Modulation	Channel Bandwidth / RB Configurations						LTE MPR Setting (dB)
	BW 1.4 MHz	BW 3 MHz	BW 5 MHz	BW 10 MHz	BW 15 MHz	BW 20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16QAM	<= 5	<= 4	<= 8	<= 12	<= 16	<= 18	1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64QAM	<= 5	<= 4	<= 8	<= 12	<= 16	<= 18	2
64QAM	> 5	> 4	> 8	> 12	> 16	> 18	3
256QAM	>= 1						5

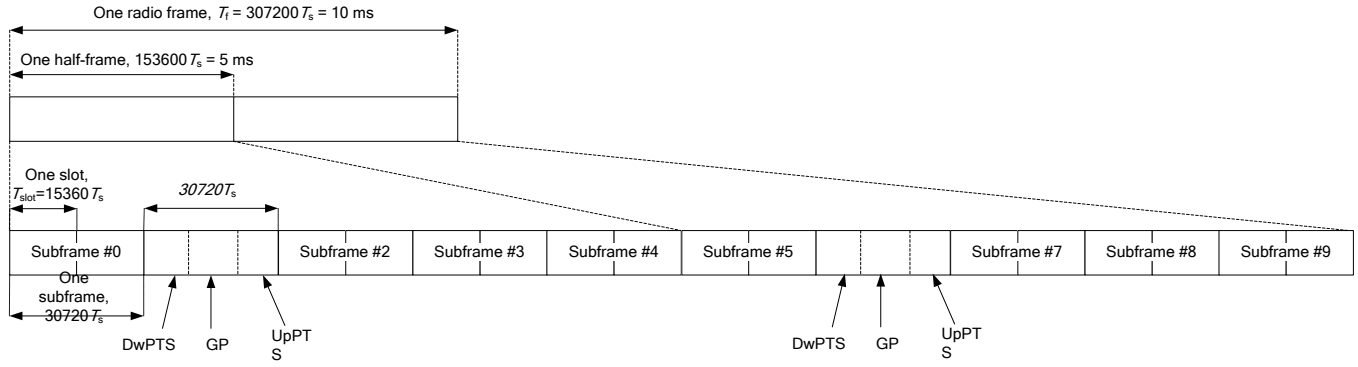
Note: MPR is according to the standard and implemented in the circuit (mandatory).

In addition, the device is compliant with additional maximum power reduction (A-MPR) requirements defined in 3GPP TS 36.101 section 6.2.4 that was disabled for all FCC compliance testing.

During LTE SAR testing, the related parameters of operating band, channel bandwidth, uplink channel number, modulation type, and RB was set in base station simulator. When the EUT has registered and communicated to base station simulator, the simulator set to make EUT transmitting the maximum radiated power.

TDD-LTE Setup Configurations

According to KDB 941225 D05, SAR testing for TDD-LTE device must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD-LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be referred to below.



3GPP TS 36.211 Figure 4.2-1: Frame Structure Type 2

Special Subframe Configuration	Normal Cyclic Prefix in Downlink			Extended Cyclic Prefix in Downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink
0	6592 • Ts	2192 • Ts	2560 • Ts	7680 • Ts	2192 • Ts	2560 • Ts
1	19760 • Ts			20480 • Ts		
2	21952 • Ts			23040 • Ts		
3	24144 • Ts			25600 • Ts		
4	26336 • Ts			7680 • Ts	4384 • Ts	5120 • Ts
5	6592 • Ts	4384 • Ts	5120 • Ts	20480 • Ts		
6	19760 • Ts			23040 • Ts		
7	21952 • Ts			12800 • Ts		
8	24144 • Ts			-	-	-
9	13168 • Ts			-	-	-

3GPP TS 36.211 Table 4.2-1: Configuration of Special Subframe

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-Point Periodicity	Subframe Number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

3GPP TS 36.211 Table 4.2-2: Uplink-Downlink Configurations

The variety of different TD-LTE uplink-downlink configurations allows a network operator to allocate the network's capacity between uplink and downlink traffic to meet the needs of the network. The uplink duty cycle of these seven configurations can readily be computed and shown in below.

UL-DL Configuration	0	1	2	3	4	5	6
Highest Duty-Cycle	63.33%	43.33%	23.33%	31.67%	21.67%	11.67%	53.33%

Considering the highest transmission duty cycle, TDD-LTE was tested using Uplink-Downlink Configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 7 using extended cyclic prefix uplink. Therefore, SAR testing for TDD-LTE was performed at the maximum output power with highest transmission duty cycle of 63.33%.

LTE Downlink Carrier Aggregation(CA) Setup Configurations

LTE Carrier Aggregation (CA) was defined in 3GPP release 10 and higher. The LTE device in CA mode has one Primary Component Carrier (PCC) and one or more Secondary Component Carriers (SCC). PCC acts as the anchor carrier and can optionally cross-schedule data transmission on SCC. The RRC connection is only handled by one cell, the PCC for downlink and uplink communications. After making a data connection to the PCC, the LTE device adds the SCC on the downlink only. All uplink communications and acknowledgements remain identical to release 8 specifications on the PCC. The combinations of downlink carrier aggregation supported by this device are listed in below.

LTE Uplink Carrier Aggregation (CA) Setup Configurations

The maximum output power for uplink intra-band contiguous CA specified in Table 6.2.2A-1 of 3GPP TS 36.101 is the same as single carrier specified in Table 6.2.2-1 of 3GPP TS 36.101. In Table 6.2.3A-1 of 3GPP TS 36.101, the MPR (maximum power reduction) for several dB is allowed due to modulation and contiguously aggregated transmit bandwidth configuration. All the RF parameters in this device have followed above 3GPP criteria.

Refer to Appendix F.

<Considerations Related to WLAN for Setup and Testing>

In general, various vendor specific external test software and chipset based internal test modes are typically used for SAR measurement. These chipset based test mode utilities are generally hardware and manufacturer dependent, and often include substantial flexibility to reconfigure or reprogram a device. A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement. The test frequencies established using test mode must correspond to the actual channel frequencies. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. In addition, a periodic transmission duty factor is required for current generation SAR systems to measure SAR correctly. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

According to KDB 248227 D01,this device has installed WLAN engineering testing software which can provide continuous transmitting RF signal. During WLAN SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

Initial Test Configuration

An initial test configuration is determined for OFDM transmission modes in 2.4 GHz and 5 GHz bands according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Subsequent Test Configuration

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. Additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. When the highest reported SAR for the initial test configuration 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.

SAR Test Configuration and Channel Selection

When multiple channel bandwidth configurations in a frequency band have the same specified maximum output power, the initial test configuration is using largest channel bandwidth, lowest order modulation, lowest data rate, and lowest order 802.11 mode (i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n).After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following.

1) The channel closest to mid-band frequency is selected for SAR measurement.

2) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

Test Reduction for U-NII-1 (5.2 GHz) and U-NII-2A (5.3 GHz) Bands

For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following.

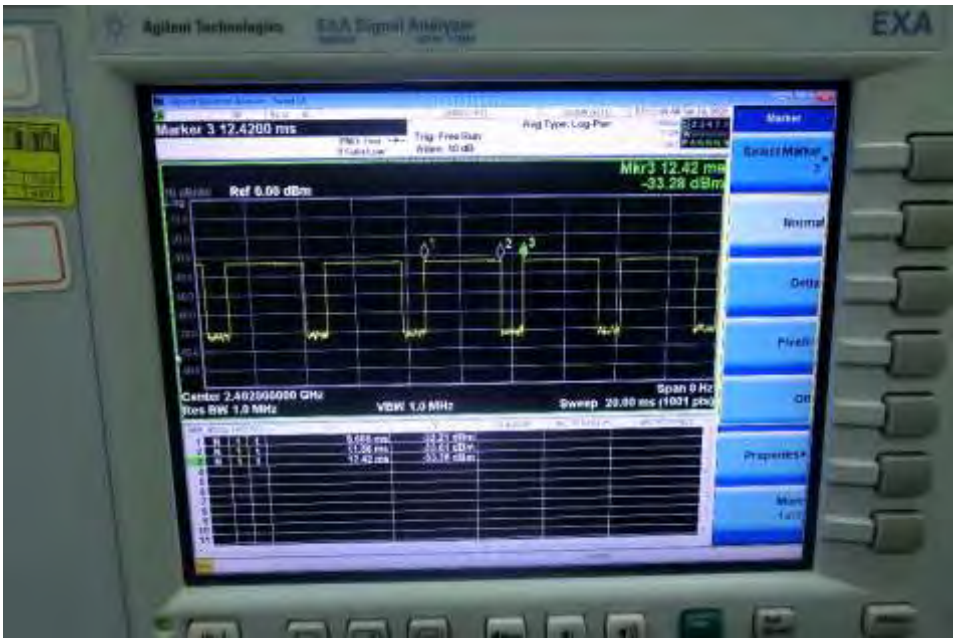
1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition).

2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

<Considerations Related to Bluetooth for Setup and Testing>

This device has installed Bluetooth engineering testing software which can provide continuous transmitting RF signal. During Bluetooth SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

The Bluetooth call box has been used during SAR measurement and the EUT was set to DH5 mode at the maximum output power. Its duty factor was calculated as below and the measured SAR for Bluetooth would be scaled to the 100% transmission duty factor to determine compliance.



Time-domain plot for Bluetooth transmission signal

The duty factor of Bluetooth signal has been calculated as following.
Duty Factor = Pulse Width / Total Period = (11.56-8.665) / (12.42-8.665) = 77.10 %

4.2 EUT Testing Position

4.2.1 Body Exposure Conditions

For full-size tablet, according to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

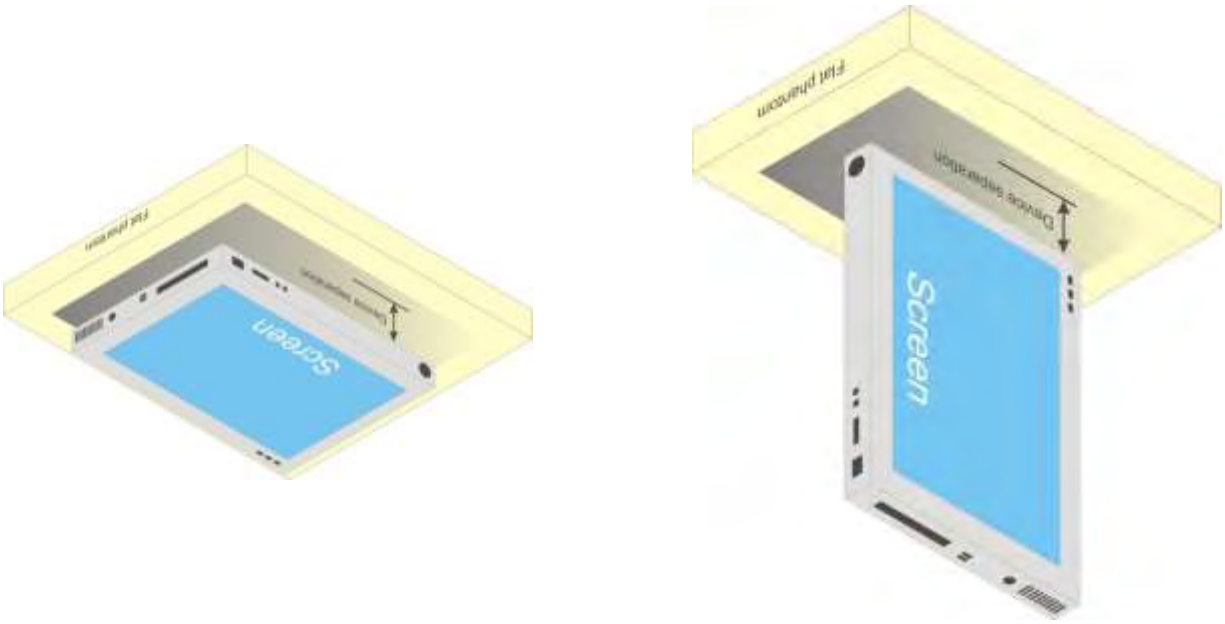


Fig-4.1 Illustration for Tablet Setup

For laptop PC, according to KDB 616217 D04, SAR evaluation is required for the bottom surface of the keyboard. This EUT was tested in the base of EUT directly against the flat phantom. The required minimum test separation distance for incorporating transmitters and antennas into laptop computer display is determined with the display screen opened at an angle of 90° to the keyboard compartment.

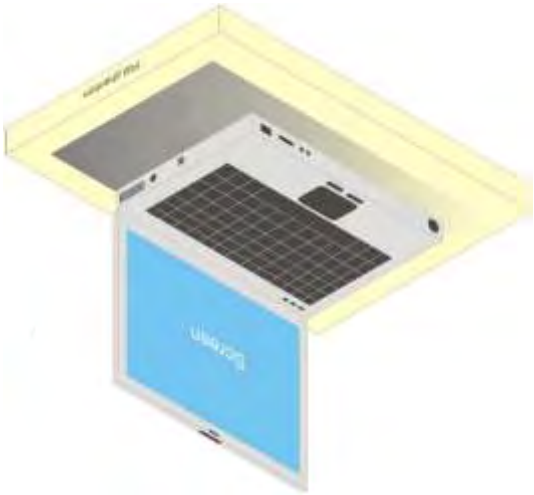


Fig-4.2 Illustration for LaptopSetup

4.3 Tissue Verification

The measuring results for tissue simulating liquid are shown as below.

Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
S01	1900	23.4	1.459	38.542	1.4	40	4.21	-3.65	Mar. 18, 2021
S02	1750	23	1.318	39.352	1.37	40.1	-3.80	-1.87	Mar. 26, 2021
S03	835	23.4	0.904	40.649	0.9	41.5	0.44	-2.05	Mar. 17, 2021
S04	1900	23.4	1.459	38.542	1.4	40	4.21	-3.65	Mar. 18, 2021
S05	1900	23.7	1.459	38.859	1.4	40	4.21	-2.85	Mar. 22, 2021
S06	1750	23.4	1.329	39.118	1.37	40.1	-2.99	-2.45	Mar. 17, 2021
S07	835	23.4	0.904	40.649	0.9	41.5	0.44	-2.05	Mar. 17, 2021
S08	2600	23.4	2.046	38.525	1.96	39	4.39	-1.22	Mar. 20, 2021
S09	2600	23.6	2.032	37.484	1.96	39	3.67	-3.89	Mar. 21, 2021
S10	750	23.4	0.902	42.202	0.89	41.9	1.35	0.72	Mar. 18, 2021
S11	750	23.4	0.902	42.202	0.89	41.9	1.35	0.72	Mar. 18, 2021
S12	750	23.4	0.902	42.202	0.89	41.9	1.35	0.72	Mar. 18, 2021
S13	750	23.4	0.902	42.202	0.89	41.9	1.35	0.72	Mar. 18, 2021
S14	1900	23.4	1.459	38.542	1.4	40	4.21	-3.65	Mar. 18, 2021
S15	835	23.4	0.904	40.649	0.9	41.5	0.44	-2.05	Mar. 17, 2021
S16	2300	23.4	1.743	38.81	1.67	39.5	4.37	-1.75	Mar. 17, 2021
S17	2600	23.4	2.046	38.525	1.96	39	4.39	-1.22	Mar. 20, 2021
S18	2600	23.4	2.046	38.525	1.96	39	4.39	-1.22	Mar. 20, 2021
S19	3500	23.6	2.861	38.786	2.91	37.9	-1.68	2.34	Mar. 21, 2021
S20_a	3500	23.6	2.861	38.786	2.91	37.9	-1.68	2.34	Mar. 21, 2021
S20_b	3700	23.6	3.049	38.443	3.12	37.7	-2.28	1.97	Mar. 21, 2021
S21	1750	23.4	1.329	39.118	1.37	40.1	-2.99	-2.45	Mar. 17, 2021
S22	1750	23.7	1.322	39.444	1.37	40.1	-3.50	-1.64	Mar. 22, 2021
S23	1900	23.7	1.459	38.859	1.4	40	4.21	-2.85	Mar. 22, 2021
S24	1900	23.7	1.459	38.859	1.4	40	4.21	-2.85	Mar. 22, 2021
S25	835	23	0.927	41.963	0.9	41.5	3.00	1.12	Mar. 23, 2021
S26	2600	23.2	2.011	37.87	1.96	39	2.60	-2.90	Mar. 24, 2021
S27	750	23	0.891	41.003	0.89	41.9	0.11	-2.14	Mar. 23, 2021
S28	2600	23.2	2.011	37.87	1.96	39	2.60	-2.90	Mar. 24, 2021
S29	1750	23	1.328	41.494	1.37	40.1	-3.07	3.48	Mar. 23, 2021
S30	1750	23.2	1.319	39.296	1.37	40.1	-3.72	-2.00	Mar. 24, 2021
S31	2450	23.2	1.869	39.083	1.8	39.2	3.83	-0.30	Mar. 12, 2021
S32	5250	23.2	4.76	35.003	4.71	35.9	1.06	-2.50	Mar. 12, 2021
S33	5600	23	4.992	36.98	5.07	35.5	-1.54	4.17	Mar. 27, 2021
S34	5750	23	5.249	36.271	5.22	35.4	0.56	2.46	Mar. 26, 2021
S35	2450	23.2	1.869	39.083	1.8	39.2	3.83	-0.30	Mar. 12, 2021
S36	1900	23.1	1.458	39.592	1.4	40	4.14	-1.02	Mar. 16, 2021
S37	1750	23.1	1.322	38.793	1.37	40.1	-3.50	-3.26	Mar. 14, 2021
S38	835	23.1	0.901	42.932	0.9	41.5	0.11	3.45	Mar. 16, 2021
S39	1900	23.1	1.641	38.22	1.4	40	17.21	-4.45	Mar. 14, 2021
S40	1900	23.1	1.458	39.592	1.4	40	4.14	-1.02	Mar. 16, 2021
S41	1750	23.1	1.322	38.793	1.37	40.1	-3.50	-3.26	Mar. 14, 2021
S42	835	23.2	0.913	42.832	0.9	41.5	1.44	3.21	Mar. 15, 2021
S43	2600	23.2	2.035	38.251	1.96	39	3.83	-1.92	Mar. 15, 2021
S44	2600	23.1	2.028	37.803	1.96	39	3.47	-3.07	Mar. 16, 2021
S45	750	23.2	0.89	42.416	0.89	41.9	0.00	1.23	Mar. 15, 2021
S46	750	23.2	0.89	42.416	0.89	41.9	0.00	1.23	Mar. 15, 2021
S47	750	23.2	0.89	42.416	0.89	41.9	0.00	1.23	Mar. 15, 2021
S48	750	23.2	0.89	42.416	0.89	41.9	0.00	1.23	Mar. 15, 2021
S49	1900	23.1	1.641	38.22	1.4	40	17.21	-4.45	Mar. 14, 2021
S50	835	23.2	0.913	42.832	0.9	41.5	1.44	3.21	Mar. 15, 2021

Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
S51	2300	23.2	1.718	39.247	1.67	39.5	2.87	-0.64	Mar. 15, 2021
S52	2600	23.1	2.028	37.803	1.96	39	3.47	-4.92	Mar. 16, 2021
S53	2600	23.1	2.028	37.803	1.96	39	3.47	-4.92	Mar. 16, 2021
S54	3500	23.2	2.962	37.276	2.91	37.9	1.79	-1.65	Mar. 15, 2021
S55_a	3500	23.2	2.962	37.276	2.91	37.9	1.79	-1.65	Mar. 15, 2021
S55_b	3700	23.2	3.112	37.091	3.12	37.7	-0.26	-1.62	Mar. 15, 2021
S56	1750	23.1	1.322	38.793	1.37	40.1	-3.50	-3.26	Mar. 14, 2021
S57	1750	23.1	1.328	40.136	1.37	40.1	-3.07	0.09	Mar. 16, 2021
S58	1900	23.1	1.641	38.22	1.4	40	17.21	-4.45	Mar. 14, 2021
S59	1900	23.1	1.461	39.14	1.4	40	4.36	-2.15	Mar. 13, 2021
S60	835	23.3	0.908	42.279	0.9	41.5	0.89	1.88	Mar. 15, 2021
S61	2600	23.1	2.041	37.147	1.96	39	4.13	-4.75	Mar. 13, 2021
S62	750	23.3	0.89	43.335	0.89	41.9	0.00	3.42	Mar. 15, 2021
S63	2600	23.1	2.041	37.147	1.96	39	4.13	-4.75	Mar. 13, 2021
S64	1750	23.1	1.322	38.793	1.37	40.1	-3.50	-3.26	Mar. 14, 2021
S65	1750	23.1	1.332	39.648	1.37	40.1	-2.77	-1.13	Mar. 13, 2021
S66	2450	23.4	1.857	38.837	1.8	39.2	3.17	-0.93	Mar. 19, 2021
S67	5250	23.4	4.787	37.294	4.71	35.9	1.63	3.88	Mar. 19, 2021
S68	5600	23.4	5.132	36.728	5.07	35.5	1.22	3.46	Mar. 19, 2021
S69	5750	23.4	5.276	36.327	5.22	35.4	1.07	2.62	Mar. 19, 2021
S70	2450	23.4	1.857	38.837	1.8	39.2	3.17	-0.93	Mar. 19, 2021

Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
T01	1852.4	23.4	1.419	38.712	1.400	40.000	1.36	-3.22	Mar. 18, 2021
T01	1880	23.4	1.442	38.617	1.400	40.000	3.00	-3.46	Mar. 18, 2021
T01	1907.6	23.4	1.465	38.513	1.400	40.000	4.67	-3.72	Mar. 18, 2021
T02	1712.4	23	1.286	39.528	1.349	40.139	-4.73	-1.43	Mar. 26, 2021
T02	1732.6	23	1.305	39.438	1.361	40.106	-4.05	-1.65	Mar. 26, 2021
T02	1752.6	23	1.321	39.341	1.373	40.074	-3.59	-1.89	Mar. 26, 2021
T03	826.4	23.4	0.896	40.771	0.907	41.587	-1.59	-1.99	Mar. 17, 2021
T03	836.4	23.4	0.905	40.635	0.911	41.551	-0.55	-2.32	Mar. 17, 2021
T03	846.6	23.4	0.914	40.510	0.915	41.511	-0.65	-2.39	Mar. 17, 2021
T04	1860	23.4	1.426	38.683	1.400	40.000	1.85	-3.29	Mar. 18, 2021
T04	1880	23.4	1.442	38.617	1.400	40.000	3.03	-3.46	Mar. 18, 2021
T04	1900	23.4	1.459	38.542	1.400	40.000	4.21	-3.65	Mar. 18, 2021
T05	1860	23.7	1.424	39.012	1.400	40.000	1.71	-2.47	Mar. 22, 2021
T05	1880	23.7	1.441	38.937	1.400	40.000	2.91	-2.66	Mar. 22, 2021
T05	1900	23.7	1.459	38.859	1.400	40.000	4.23	-2.85	Mar. 22, 2021
T06	1720	23.4	1.302	39.249	1.354	40.126	-3.56	-2.12	Mar. 17, 2021
T06	1732.5	23.4	1.314	39.188	1.361	40.106	-3.41	-2.27	Mar. 17, 2021
T06	1745	23.4	1.325	39.135	1.368	40.087	-3.28	-2.41	Mar. 17, 2021
T07	829	23.4	0.898	40.736	0.908	41.576	-1.31	-2.08	Mar. 17, 2021
T07	836.5	23.4	0.905	40.633	0.911	41.547	-0.54	-2.09	Mar. 17, 2021
T07	844	23.4	0.912	40.544	0.914	41.522	0.22	-2.30	Mar. 17, 2021
T08	2510	23.4	1.932	38.877	1.865	39.124	3.29	-0.57	Mar. 20, 2021
T08	2535	23.4	1.939	38.652	1.892	39.093	2.58	-1.15	Mar. 20, 2021
T08	2560	23.4	1.975	38.489	1.920	39.060	2.89	-1.56	Mar. 20, 2021
T09	2510	23.6	1.937	37.803	1.865	39.124	3.60	-3.32	Mar. 21, 2021
T09	2535	23.6	1.960	37.707	1.892	39.093	3.73	-3.56	Mar. 21, 2021
T09	2560	23.6	1.987	37.614	1.920	39.060	3.49	-3.80	Mar. 21, 2021
T10	704	23.4	0.851	43.084	0.890	42.181	-4.38	2.09	Mar. 18, 2021
T10	707.5	23.4	0.901	43.022	0.890	42.160	1.22	1.95	Mar. 18, 2021
T10	711	23.4	0.858	42.870	0.890	42.144	-3.64	1.83	Mar. 18, 2021

Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
T11	782	23.4	0.931	42.311	0.896	41.775	3.44	1.22	Mar. 18, 2021
T12	793	23.4	0.939	42.218	0.897	41.718	4.33	1.24	Mar. 18, 2021
T13	709	23.4	0.855	42.929	0.890	42.155	-3.88	1.73	Mar. 18, 2021
T13	710	23.4	0.857	42.898	0.890	42.149	-3.75	1.90	Mar. 18, 2021
T13	711	23.4	0.858	42.870	0.890	42.144	-3.60	1.83	Mar. 18, 2021
T14	1860	23.4	1.426	38.683	1.400	40.000	1.85	-3.29	Mar. 18, 2021
T14	1882.5	23.4	1.444	38.611	1.400	40.000	3.14	-3.47	Mar. 18, 2021
T14	1905	23.4	1.462	38.524	1.400	40.000	4.46	-3.69	Mar. 18, 2021
T15	821.5	23.4	0.891	40.835	0.906	41.602	-2.08	-1.84	Mar. 17, 2021
T15	831.5	23.4	0.901	40.699	0.909	41.566	-1.04	-2.17	Mar. 17, 2021
T15	841.5	23.4	0.910	40.573	0.913	41.529	0.00	-2.23	Mar. 17, 2021
T16	2310	23.4	1.753	38.777	1.676	39.449	4.35	-1.58	Mar. 17, 2021
T17	2580	23.4	2.015	38.484	1.942	39.035	3.89	-1.32	Mar. 20, 2021
T17	2595	23.4	2.040	38.517	1.958	39.015	4.06	-1.24	Mar. 20, 2021
T17	2610	23.4	2.052	38.527	1.975	38.996	4.17	-1.21	Mar. 20, 2021
T18	2506	23.4	1.931	38.899	1.861	39.129	3.82	-0.51	Mar. 20, 2021
T18	2510	23.4	1.932	38.877	1.865	39.124	3.29	-0.57	Mar. 20, 2021
T18	2549.5	23.4	1.958	38.531	1.909	39.073	2.51	-1.46	Mar. 20, 2021
T18	2593	23.4	2.037	38.514	1.955	39.019	4.47	-1.25	Mar. 20, 2021
T18	2636.5	23.4	2.053	38.364	2.003	38.963	2.66	-1.63	Mar. 20, 2021
T18	2680	23.4	2.108	38.061	2.051	38.907	2.85	-2.16	Mar. 20, 2021
T19	3560	23.6	2.920	38.676	2.974	37.860	-1.67	2.05	Mar. 21, 2021
T19	3575	23.6	2.935	38.665	2.989	37.843	-1.84	2.29	Mar. 21, 2021
T19	3590	23.6	2.946	38.642	3.005	37.826	-1.81	2.23	Mar. 21, 2021
T20	3560	23.6	2.920	38.676	2.974	37.860	-1.67	2.05	Mar. 21, 2021
T20	3603	23.6	2.958	38.608	3.018	37.811	-2.06	2.14	Mar. 21, 2021
T20	3647	23.6	3.001	38.525	3.063	37.761	-1.93	1.92	Mar. 21, 2021
T20	3690	23.6	3.041	38.463	3.107	37.711	-2.22	2.02	Mar. 21, 2021
T21	1720	23.4	1.302	39.249	1.354	40.126	-3.56	-2.12	Mar. 17, 2021
T21	1745	23.4	1.325	39.135	1.368	40.087	-3.28	-2.41	Mar. 17, 2021
T21	1770	23.4	1.346	39.043	1.383	40.047	-2.44	-2.39	Mar. 17, 2021
T22	1720	23.7	1.296	39.551	1.354	40.126	-4.00	-1.37	Mar. 22, 2021
T22	1745	23.7	1.318	39.460	1.368	40.087	-3.77	-1.60	Mar. 22, 2021
T22	1770	23.7	1.340	39.353	1.383	40.047	-2.88	-1.62	Mar. 22, 2021
T23	1860	23.7	1.424	39.012	1.400	40.000	1.71	-2.47	Mar. 22, 2021
T23	1880	23.7	1.441	38.937	1.400	40.000	2.91	-2.66	Mar. 22, 2021
T23	1900	23.7	1.459	38.859	1.400	40.000	4.23	-2.85	Mar. 22, 2021
T24	1860	23.7	1.424	39.012	1.400	40.000	1.75	-2.47	Mar. 22, 2021
T24	1880	23.7	1.441	38.937	1.400	40.000	2.91	-2.66	Mar. 22, 2021
T24	1900	23.7	1.459	38.859	1.400	40.000	4.21	-2.85	Mar. 22, 2021
T25	834	23	0.926	41.972	0.910	41.558	1.78	0.89	Mar. 23, 2021
T25	836.5	23	0.929	41.945	0.911	41.547	2.05	1.07	Mar. 23, 2021
T25	839	23	0.931	41.915	0.912	41.540	2.32	1.00	Mar. 23, 2021
T26	2510	23.2	1.916	38.202	1.865	39.124	2.46	-2.30	Mar. 24, 2021
T26	2535	23.2	1.941	38.105	1.892	39.093	2.70	-2.55	Mar. 24, 2021
T26	2560	23.2	1.967	38.024	1.920	39.060	2.47	-2.75	Mar. 24, 2021
T27	706.5	23	0.851	41.572	0.890	42.165	-4.38	-1.49	Mar. 23, 2021
T27	707.5	23	0.934	40.387	0.890	42.160	4.93	-4.30	Mar. 23, 2021
T27	708.5	23	0.860	41.577	0.890	42.155	-3.33	-1.48	Mar. 23, 2021
T27	1720	23	1.300	41.628	1.354	40.126	-3.72	3.81	Mar. 23, 2021
T27	1745	23	1.324	41.521	1.368	40.087	-3.34	3.54	Mar. 23, 2021
T27	1770	23	1.344	41.392	1.383	40.047	-2.61	3.48	Mar. 23, 2021
T28	2546.01	23.2	1.953	38.074	1.905	39.078	2.78	-2.62	Mar. 24, 2021
T28	2569.5	23.2	1.977	37.987	1.931	39.047	2.43	-2.60	Mar. 24, 2021
T28	2592.99	23.2	2.003	37.897	1.955	39.019	2.72	-2.83	Mar. 24, 2021
T28	2616.51	23.2	2.030	37.821	1.981	38.989	2.52	-3.02	Mar. 24, 2021
T28	2640	23.2	2.053	37.737	2.007	38.958	2.14	-3.24	Mar. 24, 2021
T30	1720	23.2	1.294	39.356	1.354	40.126	-4.17	-1.85	Mar. 24, 2021
T30	1745	23.2	1.315	39.310	1.368	40.087	-4.00	-1.97	Mar. 24, 2021
T30	1770	23.2	1.333	39.241	1.383	40.047	-3.44	-1.90	Mar. 24, 2021

Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
T31	2412	23.2	1.827	39.240	1.766	39.268	3.21	-0.15	Mar. 12, 2021
T31	2437	23.2	1.853	39.127	1.788	39.225	3.53	-0.19	Mar. 12, 2021
T31	2462	23.2	1.883	39.056	1.813	39.185	4.01	-0.37	Mar. 12, 2021
T31	2467	23.2	1.888	39.047	1.817	39.180	3.73	-0.39	Mar. 12, 2021
T31	2472	23.2	1.893	39.037	1.824	39.172	4.01	-0.42	Mar. 12, 2021
T32	5250	23.2	4.760	35.003	4.710	35.950	1.07	-2.77	Mar. 12, 2021
T33	5530	23.2	4.913	37.076	4.997	35.610	-1.73	4.14	Mar. 27, 2021
T33	5570	23.2	4.958	36.998	5.039	35.550	-1.63	3.93	Mar. 27, 2021
T33	5690	23.2	5.091	36.829	5.160	35.410	-1.34	4.04	Mar. 27, 2021
T34	5775	23	5.274	36.250	5.245	35.330	0.45	2.69	Mar. 26, 2021
T35	2402	23.2	1.818	39.278	1.757	39.285	3.29	-0.05	Mar. 12, 2021
T35	2441	23.2	1.858	39.112	1.791	39.218	3.78	-0.23	Mar. 12, 2021
T35	2480	23.2	1.901	39.017	1.833	39.162	3.88	-0.47	Mar. 12, 2021
T36	1852.4	23.1	1.418	39.743	1.400	40.000	1.25	-0.64	Mar. 16, 2021
T36	1880	23.1	1.441	39.646	1.400	40.000	2.91	-0.89	Mar. 16, 2021
T36	1907.6	23.1	1.465	39.572	1.400	40.000	4.62	-1.07	Mar. 16, 2021
T37	1712.4	23.1	1.288	38.934	1.349	40.139	-4.57	-2.91	Mar. 14, 2021
T37	1732.6	23.1	1.306	38.856	1.361	40.106	-3.95	-3.10	Mar. 14, 2021
T37	1752.6	23.1	1.325	38.784	1.373	40.074	-3.28	-3.28	Mar. 14, 2021
T38	826.4	23.2	0.893	43.029	0.907	41.587	-1.83	3.43	Mar. 16, 2021
T38	836.4	23.2	0.903	42.919	0.911	41.551	-0.82	3.17	Mar. 16, 2021
T38	846.6	23.2	0.912	42.804	0.915	41.511	-0.85	3.14	Mar. 16, 2021
T39	1860	23.1	1.426	38.361	1.400	40.000	1.84	-4.10	Mar. 14, 2021
T39	1880	23.1	1.443	38.290	1.400	40.000	3.07	-4.28	Mar. 14, 2021
T39	1900	23.1	1.461	38.220	1.400	40.000	4.35	-4.45	Mar. 14, 2021
T40	1860	23.1	1.424	39.708	1.400	40.000	1.73	-0.73	Mar. 16, 2021
T40	1880	23.1	1.441	39.646	1.400	40.000	2.91	-0.89	Mar. 16, 2021
T40	1900	23.1	1.458	39.592	1.400	40.000	4.12	-1.02	Mar. 16, 2021
T41	1720	23.1	1.295	38.904	1.354	40.126	-4.10	-2.98	Mar. 14, 2021
T41	1732.5	23.1	1.306	38.857	1.361	40.106	-3.99	-3.10	Mar. 14, 2021
T41	1745	23.1	1.318	38.809	1.368	40.087	-3.82	-3.22	Mar. 14, 2021
T42	829	23.2	0.907	42.907	0.908	41.576	-0.35	3.14	Mar. 15, 2021
T42	836.5	23.2	0.914	42.815	0.911	41.547	0.47	3.17	Mar. 15, 2021
T42	844	23.2	0.922	42.726	0.914	41.522	1.32	2.95	Mar. 15, 2021
T43	2510	23.2	1.934	38.543	1.865	39.124	3.40	-1.42	Mar. 15, 2021
T43	2535	23.2	1.960	38.401	1.892	39.093	3.72	-1.79	Mar. 15, 2021
T43	2560	23.2	1.994	38.328	1.920	39.060	3.86	-1.97	Mar. 15, 2021
T44	2510	23.1	1.934	38.100	1.865	39.124	3.42	-2.56	Mar. 16, 2021
T44	2535	23.1	1.960	38.036	1.892	39.093	3.69	-2.72	Mar. 16, 2021
T44	2560	23.1	1.986	37.933	1.920	39.060	3.46	-2.98	Mar. 16, 2021
T45	704	23.2	0.846	43.020	0.890	42.181	-4.94	1.94	Mar. 15, 2021
T45	707.5	23.2	0.874	43.140	0.890	42.160	-1.81	2.23	Mar. 15, 2021
T45	711	23.2	0.853	42.927	0.890	42.144	-4.21	1.96	Mar. 15, 2021
T46	782	23.2	0.919	41.986	0.896	41.775	2.11	0.44	Mar. 15, 2021
T47	793	23.2	0.929	41.840	0.897	41.718	3.22	0.34	Mar. 15, 2021
T48	709	23.2	0.851	42.952	0.890	42.155	-4.38	1.78	Mar. 15, 2021
T48	710	23.2	0.852	42.950	0.890	42.149	-4.32	2.02	Mar. 15, 2021
T48	711	23.2	0.853	42.927	0.890	42.144	-4.21	1.96	Mar. 15, 2021
T49	1860	23.1	1.426	38.361	1.400	40.000	1.84	-4.10	Mar. 14, 2021
T49	1882.5	23.1	1.445	38.285	1.400	40.000	3.21	-4.29	Mar. 14, 2021
T49	1905	23.1	1.465	38.200	1.400	40.000	4.67	-4.50	Mar. 14, 2021
T51	2310	23.2	1.728	39.198	1.676	39.449	2.84	-0.51	Mar. 15, 2021
T52	2580	23.1	2.007	37.871	1.942	39.035	3.45	-2.90	Mar. 16, 2021
T52	2595	23.1	2.023	37.818	1.958	39.015	3.21	-3.03	Mar. 16, 2021
T52	2610	23.1	2.040	37.771	1.975	38.996	3.54	-3.15	Mar. 16, 2021
T53	2506	23.1	1.930	38.111	1.861	39.129	3.78	-2.53	Mar. 16, 2021
T53	2510	23.1	1.934	38.100	1.865	39.124	3.42	-2.56	Mar. 16, 2021
T53	2549.5	23.1	1.976	37.967	1.909	39.073	3.46	-2.90	Mar. 16, 2021
T53	2593	23.1	2.021	37.825	1.955	39.019	3.62	-3.01	Mar. 16, 2021
T53	2636.5	23.1	2.068	37.697	2.003	38.963	3.38	-3.34	Mar. 16, 2021
T53	2680	23.1	2.115	37.520	2.051	38.907	3.15	-3.55	Mar. 16, 2021

Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Target Conductivity (σ)	Target Permittivity (ε_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
T54	3560	23.2	3.017	37.175	2.974	37.860	1.60	-1.91	Mar. 15, 2021
T54	3575	23.2	3.027	37.185	2.989	37.843	1.23	-1.63	Mar. 15, 2021
T54	3590	23.2	3.031	37.182	3.005	37.826	1.04	-1.63	Mar. 15, 2021
T55	3560	23.2	3.017	37.175	2.974	37.860	1.60	-1.91	Mar. 15, 2021
T55	3603	23.2	3.036	37.166	3.018	37.811	0.53	-1.68	Mar. 15, 2021
T55	3647	23.2	3.076	37.060	3.063	37.761	0.52	-1.96	Mar. 15, 2021
T55	3690	23.2	3.109	37.089	3.107	37.711	-0.02	-1.62	Mar. 15, 2021
T56	1720	23.1	1.295	38.904	1.354	40.126	-4.10	-2.98	Mar. 14, 2021
T56	1745	23.1	1.318	38.809	1.368	40.087	-3.82	-3.22	Mar. 14, 2021
T56	1770	23.1	1.340	38.731	1.383	40.047	-2.89	-3.17	Mar. 14, 2021
T57	1720	23.1	1.301	40.267	1.354	40.126	-3.62	0.42	Mar. 16, 2021
T57	1745	23.1	1.323	40.154	1.368	40.087	-3.43	0.14	Mar. 16, 2021
T57	1770	23.1	1.346	40.073	1.383	40.047	-2.50	0.18	Mar. 16, 2021
T58	1860	23.1	1.426	38.361	1.400	40.000	1.84	-4.10	Mar. 14, 2021
T58	1880	23.1	1.443	38.290	1.400	40.000	3.07	-4.28	Mar. 14, 2021
T58	1900	23.1	1.461	38.220	1.400	40.000	4.35	-4.45	Mar. 14, 2021
T59	1860	23.1	1.431	39.262	1.400	40.000	2.22	-1.85	Mar. 13, 2021
T59	1880	23.1	1.446	39.208	1.400	40.000	3.32	-1.98	Mar. 13, 2021
T59	1900	23.1	1.461	39.140	1.400	40.000	4.36	-2.15	Mar. 13, 2021
T60	834	23.3	0.907	42.291	0.910	41.558	-0.28	1.66	Mar. 15, 2021
T60	836.5	23.3	0.910	42.259	0.911	41.547	-0.04	1.83	Mar. 15, 2021
T60	839	23.3	0.912	42.226	0.912	41.540	0.22	1.75	Mar. 15, 2021
T61	2510	23.1	1.955	37.449	1.865	39.124	4.56	-4.22	Mar. 13, 2021
T61	2535	23.1	1.981	37.441	1.892	39.093	4.82	-4.24	Mar. 13, 2021
T61	2560	23.1	1.998	37.352	1.920	39.060	4.08	-4.47	Mar. 13, 2021
T62	706.5	23.3	0.850	43.940	0.890	42.165	-4.49	4.12	Mar. 15, 2021
T62	707.5	23.3	0.934	42.819	0.890	42.160	4.94	1.47	Mar. 15, 2021
T62	708.5	23.3	0.847	44.259	0.890	42.155	-4.83	4.88	Mar. 15, 2021
T63	2546.01	23.1	1.988	37.406	1.905	39.078	4.64	-4.33	Mar. 13, 2021
T63	2569.5	23.1	2.007	37.300	1.931	39.047	3.99	-4.36	Mar. 13, 2021
T63	2592.99	23.1	2.032	37.178	1.955	39.019	4.21	-4.67	Mar. 13, 2021
T63	2616.51	23.1	2.063	37.073	1.981	38.989	4.17	-4.94	Mar. 13, 2021
T63	2640	23.1	2.097	37.078	2.007	38.958	4.34	-4.93	Mar. 13, 2021
T64	1720	23.1	1.304	38.866	1.359	40.111	-4.14	-3.08	Mar. 14, 2021
T64	1745	23.1	1.318	38.809	1.368	40.087	-3.82	-3.22	Mar. 14, 2021
T64	1770	23.1	1.332	38.759	1.377	40.063	-3.49	-3.34	Mar. 14, 2021
T65	1720	23.1	1.306	39.748	1.354	40.126	-3.29	-0.88	Mar. 13, 2021
T65	1745	23.1	1.328	39.664	1.368	40.087	-3.06	-1.09	Mar. 13, 2021
T65	1770	23.1	1.348	39.600	1.383	40.047	-2.30	-1.00	Mar. 13, 2021
T66	2412	23.4	1.818	38.975	1.766	39.268	2.74	-0.83	Mar. 19, 2021
T66	2437	23.4	1.843	38.877	1.788	39.225	2.97	-0.82	Mar. 19, 2021
T66	2462	23.4	1.870	38.793	1.813	39.185	3.32	-1.04	Mar. 19, 2021
T66	2467	23.4	1.875	38.776	1.817	39.180	3.03	-1.08	Mar. 19, 2021
T66	2472	23.4	1.880	38.757	1.824	39.172	3.30	-1.13	Mar. 19, 2021
T67	5250	23.4	4.787	37.294	4.710	35.950	1.63	3.60	Mar. 19, 2021
T68	5530	23.4	5.039	36.617	4.997	35.610	0.78	2.86	Mar. 19, 2021
T68	5690	23.4	5.254	36.552	5.160	35.410	1.82	3.25	Mar. 19, 2021
T69	5775	23.4	5.338	36.319	5.245	35.330	1.67	2.89	Mar. 19, 2021
T70	2402	23.4	1.801	39.097	1.757	39.285	2.33	-0.52	Mar. 19, 2021
T70	2441	23.4	1.848	38.862	1.791	39.218	3.24	-0.86	Mar. 19, 2021
T70	2480	23.4	1.888	38.728	1.833	39.162	3.18	-1.20	Mar. 19, 2021

Note:

The dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within ±10 % of the target values. Liquid temperature during the SAR testing has kept within ±2 ℃.

4.4 System Validation

The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.

Plot No.	Test Date	Probe S/N	Calibration Point	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Validation for CW			Validation for Modulation		
						Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR
S01	Mar. 18, 2021	7554	1900	1.459	38.542	Pass	Pass	Pass	N/A	N/A	N/A
S02	Mar. 26, 2021	7554	1750	1.318	39.352	Pass	Pass	Pass	N/A	N/A	N/A
S03	Mar. 17, 2021	7554	835	0.904	40.649	Pass	Pass	Pass	N/A	N/A	N/A
S04	Mar. 18, 2021	7554	1900	1.459	38.542	Pass	Pass	Pass	N/A	N/A	N/A
S05	Mar. 22, 2021	7554	1900	1.459	38.859	Pass	Pass	Pass	N/A	N/A	N/A
S06	Mar. 17, 2021	7554	1750	1.329	39.118	Pass	Pass	Pass	N/A	N/A	N/A
S07	Mar. 17, 2021	7554	835	0.904	40.649	Pass	Pass	Pass	N/A	N/A	N/A
S08	Mar. 20, 2021	7554	2600	2.046	38.525	Pass	Pass	Pass	N/A	N/A	N/A
S09	Mar. 21, 2021	7554	2600	2.032	37.484	Pass	Pass	Pass	N/A	N/A	N/A
S10	Mar. 18, 2021	7554	750	0.902	42.202	Pass	Pass	Pass	N/A	N/A	N/A
S11	Mar. 18, 2021	7554	750	0.902	42.202	Pass	Pass	Pass	N/A	N/A	N/A
S12	Mar. 18, 2021	7554	750	0.902	42.202	Pass	Pass	Pass	N/A	N/A	N/A
S13	Mar. 18, 2021	7554	750	0.902	42.202	Pass	Pass	Pass	N/A	N/A	N/A
S14	Mar. 18, 2021	7554	1900	1.459	38.542	Pass	Pass	Pass	N/A	N/A	N/A
S15	Mar. 17, 2021	7554	835	0.904	40.649	Pass	Pass	Pass	N/A	N/A	N/A
S16	Mar. 17, 2021	7554	2300	1.743	38.81	Pass	Pass	Pass	N/A	N/A	N/A
S17	Mar. 20, 2021	7554	2600	2.046	38.525	Pass	Pass	Pass	N/A	N/A	N/A
S18	Mar. 20, 2021	7554	2600	2.046	38.525	Pass	Pass	Pass	N/A	N/A	N/A
S19	Mar. 21, 2021	7554	3500	2.861	38.786	Pass	Pass	Pass	N/A	N/A	N/A
S20_a	Mar. 21, 2021	7554	3500	2.861	38.786	Pass	Pass	Pass	N/A	N/A	N/A
S20_b	Mar. 21, 2021	7554	3700	3.049	38.443	Pass	Pass	Pass	N/A	N/A	N/A
S21	Mar. 17, 2021	7554	1750	1.329	39.118	Pass	Pass	Pass	N/A	N/A	N/A
S22	Mar. 22, 2021	7554	1750	1.322	39.444	Pass	Pass	Pass	N/A	N/A	N/A
S23	Mar. 22, 2021	7554	1900	1.459	38.859	Pass	Pass	Pass	N/A	N/A	N/A
S24	Mar. 22, 2021	7554	1900	1.459	38.859	Pass	Pass	Pass	N/A	N/A	N/A
S25	Mar. 23, 2021	7554	835	0.927	41.963	Pass	Pass	Pass	N/A	N/A	N/A
S26	Mar. 24, 2021	7554	2600	2.011	37.87	Pass	Pass	Pass	N/A	N/A	N/A
S27	Mar. 23, 2021	7554	750	0.891	41.003	Pass	Pass	Pass	N/A	N/A	N/A
S28	Mar. 24, 2021	7554	2600	2.011	37.87	Pass	Pass	Pass	N/A	N/A	N/A
S29	Mar. 23, 2021	7554	1750	1.328	41.494	Pass	Pass	Pass	N/A	N/A	N/A
S30	Mar. 24, 2021	7554	1750	1.319	39.296	Pass	Pass	Pass	N/A	N/A	N/A
S31	Mar. 12, 2021	7554	2450	1.869	39.083	Pass	Pass	Pass	OFDM	N/A	Pass
S32	Mar. 12, 2021	7554	5250	4.76	35.003	Pass	Pass	Pass	OFDM	N/A	Pass
S33	Mar. 27, 2021	7554	5600	4.992	36.98	Pass	Pass	Pass	OFDM	N/A	Pass
S34	Mar. 26, 2021	7554	5750	5.249	36.271	Pass	Pass	Pass	OFDM	N/A	Pass
S35	Mar. 12, 2021	7554	2450	1.869	39.083	Pass	Pass	Pass	OFDM	N/A	Pass
S36	Mar. 16, 2021	7554	1900	1.458	39.592	Pass	Pass	Pass	N/A	N/A	N/A
S37	Mar. 14, 2021	7555	1750	1.322	38.793	Pass	Pass	Pass	N/A	N/A	N/A
S38	Mar. 16, 2021	7554	835	0.901	42.932	Pass	Pass	Pass	N/A	N/A	N/A
S39	Mar. 14, 2021	7555	1900	1.641	38.22	Pass	Pass	Pass	N/A	N/A	N/A
S40	Mar. 16, 2021	7554	1900	1.458	39.592	Pass	Pass	Pass	N/A	N/A	N/A

Plot No.	Test Date	Probe S/N	Calibration Point	Measured Conductivity (σ)	Measured Permittivity (ε_r)	Validation for CW			Validation for Modulation		
						Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR
S41	Mar. 14, 2021	7555	1750	1.322	38.793	Pass	Pass	Pass	N/A	N/A	N/A
S42	Mar. 15, 2021	7554	835	0.913	42.832	Pass	Pass	Pass	N/A	N/A	N/A
S43	Mar. 15, 2021	7554	2600	2.035	38.251	Pass	Pass	Pass	N/A	N/A	N/A
S44	Mar. 16, 2021	7554	2600	2.028	37.803	Pass	Pass	Pass	N/A	N/A	N/A
S45	Mar. 15, 2021	7554	750	0.89	42.416	Pass	Pass	Pass	N/A	N/A	N/A
S46	Mar. 15, 2021	7554	750	0.89	42.416	Pass	Pass	Pass	N/A	N/A	N/A
S47	Mar. 15, 2021	7554	750	0.89	42.416	Pass	Pass	Pass	N/A	N/A	N/A
S48	Mar. 15, 2021	7554	750	0.89	42.416	Pass	Pass	Pass	N/A	N/A	N/A
S49	Mar. 14, 2021	7555	1900	1.641	38.22	Pass	Pass	Pass	N/A	N/A	N/A
S50	Mar. 15, 2021	7554	835	0.913	42.832	Pass	Pass	Pass	N/A	N/A	N/A
S51	Mar. 15, 2021	7554	2300	1.718	39.247	Pass	Pass	Pass	N/A	N/A	N/A
S52	Mar. 16, 2021	7554	2600	2.028	37.803	Pass	Pass	Pass	N/A	N/A	N/A
S53	Mar. 16, 2021	7554	2600	2.028	37.803	Pass	Pass	Pass	N/A	N/A	N/A
S54	Mar. 15, 2021	7554	3500	2.962	37.276	Pass	Pass	Pass	N/A	N/A	N/A
S55_a	Mar. 15, 2021	7554	3500	2.962	37.276	Pass	Pass	Pass	N/A	N/A	N/A
S55_b	Mar. 15, 2021	7554	3700	3.112	37.091	Pass	Pass	Pass	N/A	N/A	N/A
S56	Mar. 14, 2021	7555	1750	1.322	38.793	Pass	Pass	Pass	N/A	N/A	N/A
S57	Mar. 16, 2021	7554	1750	1.328	40.136	Pass	Pass	Pass	N/A	N/A	N/A
S58	Mar. 14, 2021	7555	1900	1.641	38.22	Pass	Pass	Pass	N/A	N/A	N/A
S59	Mar. 13, 2021	7554	1900	1.461	39.14	Pass	Pass	Pass	N/A	N/A	N/A
S60	Mar. 15, 2021	7555	835	0.908	42.279	Pass	Pass	Pass	N/A	N/A	N/A
S61	Mar. 13, 2021	7554	2600	2.041	37.147	Pass	Pass	Pass	N/A	N/A	N/A
S62	Mar. 15, 2021	7555	750	0.89	43.335	Pass	Pass	Pass	N/A	N/A	N/A
S63	Mar. 13, 2021	7554	2600	2.041	37.147	Pass	Pass	Pass	N/A	N/A	N/A
S64	Mar. 14, 2021	7555	1750	1.322	38.793	Pass	Pass	Pass	N/A	N/A	N/A
S65	Mar. 13, 2021	7554	1750	1.332	39.648	Pass	Pass	Pass	N/A	N/A	N/A
S66	Mar. 19, 2021	7554	2450	1.857	38.837	Pass	Pass	Pass	OFDM	N/A	Pass
S67	Mar. 19, 2021	7554	5250	4.787	37.294	Pass	Pass	Pass	OFDM	N/A	Pass
S68	Mar. 19, 2021	7554	5600	5.132	36.728	Pass	Pass	Pass	OFDM	N/A	Pass
S69	Mar. 19, 2021	7554	5750	5.276	36.327	Pass	Pass	Pass	OFDM	N/A	Pass
S70	Mar. 19, 2021	7554	2450	1.857	38.837	Pass	Pass	Pass	OFDM	N/A	Pass

4.5 System Verification

The measuring result for system verification is tabulated as below.

Plot No.	Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
S01	Mar. 18, 2021	1900	40.40	2.02	40.40	0.00	5d036	7554	1590
S02	Mar. 26, 2021	1750	36.00	1.82	36.40	1.11	1055	7554	1590
S03	Mar. 17, 2021	835	9.52	0.45	9.00	-5.46	4d121	7554	1590
S04	Mar. 18, 2021	1900	40.40	2.02	40.40	0.00	5d036	7554	1590
S05	Mar. 22, 2021	1900	40.40	2.03	40.60	0.50	5d036	7554	1590
S06	Mar. 17, 2021	1750	36.00	1.81	36.20	0.56	1055	7554	1590
S07	Mar. 17, 2021	835	9.52	0.45	9.00	-5.46	4d121	7554	1590
S08	Mar. 20, 2021	2600	55.50	3.01	60.20	8.47	1020	7554	1590
S09	Mar. 21, 2021	2600	55.50	3.03	60.60	9.19	1020	7554	1590
S10	Mar. 18, 2021	750	8.48	0.408	8.16	-3.77	1013	7554	1590
S11	Mar. 18, 2021	750	8.48	0.408	8.16	-3.77	1013	7554	1590
S12	Mar. 18, 2021	750	8.48	0.408	8.16	-3.77	1013	7554	1590
S13	Mar. 18, 2021	750	8.48	0.408	8.16	-3.77	1013	7554	1590
S14	Mar. 18, 2021	1900	40.40	2.02	40.40	0.00	5d036	7554	1590
S15	Mar. 17, 2021	835	9.52	0.45	9.00	-5.46	4d121	7554	1590
S16	Mar. 17, 2021	2300	48.80	2.58	51.60	5.74	1004	7554	1590
S17	Mar. 20, 2021	2600	55.50	3.01	60.20	8.47	1020	7554	1590
S18	Mar. 20, 2021	2600	55.50	3.01	60.20	8.47	1020	7554	1590
S19	Mar. 21, 2021	3500	67.40	3.61	72.20	7.12	1007	7554	1590
S20_a	Mar. 21, 2021	3500	67.40	3.61	72.20	7.12	1007	7554	1590
S20_b	Mar. 21, 2021	3700	66.50	3.52	70.40	5.86	1074	7554	1590
S21	Mar. 17, 2021	1750	36.00	1.81	36.20	0.56	1055	7554	1590
S22	Mar. 22, 2021	1750	36.00	1.82	36.40	1.11	1055	7554	1590
S23	Mar. 22, 2021	1900	40.40	2.03	40.60	0.50	5d036	7554	1590
S24	Mar. 22, 2021	1900	40.40	2.03	40.60	0.50	5d036	7554	1590
S25	Mar. 23, 2021	835	9.52	0.492	9.84	3.36	4d121	7554	1590
S26	Mar. 24, 2021	2600	55.50	3.02	60.40	8.83	1020	7554	1590
S27	Mar. 23, 2021	750	8.48	0.414	8.28	-2.36	1013	7554	1590
S28	Mar. 24, 2021	2600	55.50	3.02	60.40	8.83	1020	7554	1590
S29	Mar. 23, 2021	1750	36.00	1.84	36.80	2.22	1055	7554	1590
S30	Mar. 24, 2021	1750	36.00	1.81	36.20	0.56	1055	7554	1590
S31	Mar. 12, 2021	2450	51.60	2.7	54.00	4.65	737	7554	1590
S32	Mar. 12, 2021	5250	77.50	4.25	85.00	9.68	1145	7554	1590
S33	Mar. 27, 2021	5600	80.30	4.15	83.00	3.36	1145	7554	1590
S34	Mar. 26, 2021	5750	77.50	4.08	81.60	5.29	1145	7554	1590
S35	Mar. 12, 2021	2450	51.60	2.7	54.00	4.65	737	7554	1590
S36	Mar. 16, 2021	1900	40.40	1.94	38.80	-3.96	5d036	7554	1590
S37	Mar. 14, 2021	1750	36.00	1.78	35.60	-1.11	1055	7555	1589
S38	Mar. 16, 2021	835	9.52	0.490	9.80	2.94	4d121	7554	1590
S39	Mar. 14, 2021	1900	40.40	2.08	41.60	2.97	5d036	7555	1589
S40	Mar. 16, 2021	1900	40.40	1.94	38.80	-3.96	5d036	7554	1590

Plot No.	Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
S41	Mar. 14, 2021	1750	36.00	1.78	35.60	-1.11	1055	7555	1589
S42	Mar. 15, 2021	835	9.52	0.492	9.84	3.36	4d121	7554	1590
S43	Mar. 15, 2021	2600	55.50	3	60.00	8.11	1020	7554	1590
S44	Mar. 16, 2021	2600	55.50	2.99	59.80	7.75	1020	7554	1590
S45	Mar. 15, 2021	750	8.48	0.417	8.34	-1.65	1013	7554	1590
S46	Mar. 15, 2021	750	8.48	0.417	8.34	-1.65	1013	7554	1590
S47	Mar. 15, 2021	750	8.48	0.417	8.34	-1.65	1013	7554	1590
S48	Mar. 15, 2021	750	8.48	0.417	8.34	-1.65	1013	7554	1590
S49	Mar. 14, 2021	1900	40.40	2.08	41.60	2.97	5d036	7555	1589
S50	Mar. 15, 2021	835	9.52	0.492	9.84	3.36	4d121	7554	1590
S51	Mar. 15, 2021	2300	48.80	2.53	50.60	3.69	1004	7554	1590
S52	Mar. 16, 2021	2600	55.50	2.99	59.80	7.75	1020	7554	1590
S53	Mar. 16, 2021	2600	55.50	2.99	59.80	7.75	1020	7554	1590
S54	Mar. 15, 2021	3500	67.40	3.38	67.60	0.30	1007	7554	1590
S55_a	Mar. 15, 2021	3500	67.40	3.38	67.60	0.30	1007	7554	1590
S55_b	Mar. 15, 2021	3700	66.50	3.39	67.80	1.95	1074	7554	1590
S56	Mar. 14, 2021	1750	36.00	1.78	35.60	-1.11	1055	7555	1589
S57	Mar. 16, 2021	1750	36.00	1.8	36.00	0.00	1055	7554	1590
S58	Mar. 14, 2021	1900	40.40	2.08	41.60	2.97	5d036	7555	1589
S59	Mar. 13, 2021	1900	40.40	1.98	39.60	-1.98	5d036	7554	1590
S60	Mar. 15, 2021	835	9.52	0.455	9.10	-4.41	4d121	7555	1589
S61	Mar. 13, 2021	2600	55.50	2.99	59.80	7.75	1020	7554	1590
S62	Mar. 15, 2021	750	8.48	0.407	8.14	-4.01	1013	7555	1589
S63	Mar. 13, 2021	2600	55.50	2.99	59.80	7.75	1020	7554	1590
S64	Mar. 14, 2021	1750	36.00	1.78	35.60	-1.11	1055	7555	1589
S65	Mar. 13, 2021	1750	36.00	1.66	33.20	-7.78	1055	7554	1590
S66	Mar. 19, 2021	2450	51.60	2.68	53.60	3.88	737	7554	1590
S67	Mar. 19, 2021	5250	77.50	4.23	84.60	9.16	1145	7554	1590
S68	Mar. 19, 2021	5600	80.30	4.33	86.60	7.85	1145	7554	1590
S69	Mar. 19, 2021	5750	77.50	4.11	82.20	6.06	1145	7554	1590
S70	Mar. 19, 2021	2450	51.60	2.68	53.60	3.88	737	7554	1590

Note:

Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Appendix A of this report.

4.6 Maximum Output Power

4.6.1 Maximum Target Conducted Power

Refer to Appendix E.

4.6.2 Measured Conducted Power Result

Refer to Appendix F.

4.7 SAR Testing Results

4.7.1 SAR Test Reduction Considerations

<KDB 447498 D01, General RF Exposure Guidance>

Testing of other required channels within the operating mode of a frequency band is not required when the reported SAR for the mid-band or highest output power channel is:

(1) ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz

(2) ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz

(3) ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

When SAR is not measured at the maximum power level allowed for production units, the measured SAR will be scaled to the maximum tune-up tolerance limit to determine compliance. The scaling factor for the tune-up power is defined as maximum tune-up limit (mW) / measured conducted power (mW). The reported SAR would be calculated by measured SAR x tune-up power scaling factor.

The SAR has been measured with highest transmission duty factor supported by the test mode tools for WLAN and/or Bluetooth. When the transmission duty factor could not achieve 100%, the reported SAR will be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up power. The scaling factor for the duty factor is defined as 100% / transmission duty cycle (%). The reported SAR would be calculated by measured SAR x tune-up power scaling factor x duty cycle scaling factor.

<KDB 941225 D01, 3G SAR Measurement Procedures>

The mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ 1/4 dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

<KDB 941225 D05, SAR Evaluation Considerations for LTE Devices>

(1) QPSK with 1 RB and 50% RB allocation

Start with the largest channel bandwidth and measure SAR, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

(2) QPSK with 100% RB allocation

SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

(3) Higher order modulations

SAR is required only when the highest maximum output power for the configuration in the higher order modulation is >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) Other channel bandwidth

SAR is required when the highest maximum output power of the smaller channel bandwidth is >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.

<Power Confirmation for SAR Test Exclusion for LTE Downlink CA>

According to KDB 941225 D05A, the uplink maximum output power below was measured with downlink CA active on the channel with highest measured maximum output power when downlink CA is inactive. The downlink SCC channel was paired with the uplink channel as normal operation. For intra-band contiguous CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing per section 5.4.1A of 3GPP TS36.521. For intra-band non-contiguous CA, the downlink channel spacing between the component carriers was set to maximum separation from PCC and remain fully within the downlink transmission band. For Inter-band CA, the SCC downlink channel was set to near the middle of its transmission band.

Power Measurements for Inter-Band Downlink CA

Refer to Appendix F.

Summary for SAR Test Exclusion for LTE Downlink CA

Per power confirmation results in above, the uplink maximum output power with downlink CA active remains within the specified tune-up tolerance and not more than 0.25 dB higher than the maximum output power with downlink CA inactive. According to KDB 941225 D05A, the SAR test exclusion applies to LTE downlink CA operation.

<KDB 248227 D01, SAR Guidance for Wi-Fi Transmitters>

(1) For handsets operating next to ear, hotspot mode or mini-tablet configurations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When the reported SAR of initial test position is <= 0.4 W/kg, SAR testing for remaining test positions is not required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is <= 0.8 W/kg or all test positions are measured.

(2) For WLAN 2.4 GHz, the highest measured maximum output power channel for DSSS was selected for SAR measurement. When the reported SAR is <= 0.8 W/kg, no further SAR testing is required. Otherwise, SAR is evaluated at the next highest measured output power channel. When any reported SAR is >1.2 W/kg, SAR is required for the third channel. For OFDM modes (802.11g/n),SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is <= 1.2 W/kg.

(3) For WLAN 5GHz, the initial test configuration was selected according to the transmission mode with the highest maximum output power. When the reported SAR of initial test configuration is > 0.8 W/kg, SAR is required for the subsequent highest measured output power channel until the reported SAR result is <=1.2 W/kg or all required channels are measured. For other transmission modes, SAR is not required when the highest reported SAR for initial test configuration is adjusted by the ratio of subsequent test configuration to initial test configuration specified maximum output power and it is <= 1.2 W/kg.

(4) For WLAN MIMO mode, the power-based standalone SAR test exclusion or the sum of SAR provision in KDB 447498to determine simultaneous transmission SAR test exclusion should be applied. Otherwise, SAR for MIMO mode will be measured with all applicable antennas transmitting simultaneously at the specified maximum output power of MIMO operation.

4.7.2 SAR Results for Body Exposure Condition

Tablet Mode

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WCDMA II	RMC12.2K	Rear Face	22	9538	1	Ant 0	w/o	24.50	24.40	1.02	0.04	0.088	0.09
	WCDMA II	RMC12.2K	Left Side	0	9538	1	Ant 0	w/o	24.50	24.40	1.02	-0.17	0.051	0.05
	WCDMA II	RMC12.2K	Right Side	0	9538	1	Ant 0	w/o	24.50	24.40	1.02	-0.09	0.060	0.06
	WCDMA II	RMC12.2K	Top Side	0	9538	1	Ant 0	w/o	24.50	24.40	1.02	0	<0.001	0.00
	WCDMA II	RMC12.2K	Bottom Side	16	9538	1	Ant 0	w/o	24.50	24.40	1.02	0	<0.001	0.00
	WCDMA II	RMC12.2K	Rear Face	0	9538	1	Ant 0	w/	14.50	14.36	1.03	-0.15	0.557	0.57
	WCDMA II	RMC12.2K	Bottom Side	0	9538	1	Ant 0	w/	14.50	14.36	1.03	-0.01	0.077	0.08
	WCDMA II	RMC12.2K	Rear Face	0	9262	1	Ant 0	w/	14.50	14.35	1.04	0.11	0.524	0.54
1	WCDMA II	RMC12.2K	Rear Face	0	9400	1	Ant 0	w/	14.50	14.33	1.04	-0.11	0.598	**0.62**
	WCDMA II	RMC12.2K	Rear Face	0	9400	2	Ant 0	w/	14.50	14.33	1.04	0.13	0.588	0.61
	WCDMA II	RMC12.2K	Rear Face	0	9400	3	Ant 0	w/	14.50	14.33	1.04	0.12	0.585	0.61
	WCDMA II	RMC12.2K	Rear Face	0	9400	4	Ant 0	w/	14.50	14.33	1.04	0.15	0.573	0.60
	WCDMA IV	RMC12.2K	Rear Face	22	1413	1	Ant 0	w/o	24.50	24.37	1.03	0.13	0.126	0.13
	WCDMA IV	RMC12.2K	Left Side	0	1413	1	Ant 0	w/o	24.50	24.37	1.03	-0.02	0.064	0.07
	WCDMA IV	RMC12.2K	Right Side	0	1413	1	Ant 0	w/o	24.50	24.37	1.03	0.05	0.296	0.30
	WCDMA IV	RMC12.2K	Top Side	0	1413	1	Ant 0	w/o	24.50	24.37	1.03	0	<0.001	0.00
	WCDMA IV	RMC12.2K	Bottom Side	16	1413	1	Ant 0	w/o	24.50	24.37	1.03	0.11	0.094	0.10
	WCDMA IV	RMC12.2K	Rear Face	0	1413	1	Ant 0	w/	15.50	15.42	1.02	0.15	0.456	0.47
	WCDMA IV	RMC12.2K	Bottom Side	0	1413	1	Ant 0	w/	15.50	15.42	1.02	-0.02	0.053	0.05
	WCDMA IV	RMC12.2K	Rear Face	0	1312	1	Ant 0	w/	15.50	15.34	1.04	0.02	0.384	0.40
2	WCDMA IV	RMC12.2K	Rear Face	0	1513	1	Ant 0	w/	15.50	15.38	1.03	-0.05	0.701	**0.72**
	WCDMA IV	RMC12.2K	Rear Face	0	1513	2	Ant 0	w/	15.50	15.38	1.03	-0.06	0.683	0.70
	WCDMA IV	RMC12.2K	Rear Face	0	1513	3	Ant 0	w/	15.50	15.38	1.03	0.12	0.673	0.69
	WCDMA IV	RMC12.2K	Rear Face	0	1513	4	Ant 0	w/	15.50	15.38	1.03	0.15	0.652	0.67
	WCDMA V	RMC12.2K	Rear Face	22	4233	1	Ant 0	w/o	24.50	24.42	1.02	-0.06	0.075	0.08
	WCDMA V	RMC12.2K	Left Side	0	4233	1	Ant 0	w/o	24.50	24.42	1.02	0	<0.001	0.00
	WCDMA V	RMC12.2K	Right Side	0	4233	1	Ant 0	w/o	24.50	24.42	1.02	0	<0.001	0.00
	WCDMA V	RMC12.2K	Top Side	0	4233	1	Ant 0	w/o	24.50	24.42	1.02	0	<0.001	0.00
	WCDMA V	RMC12.2K	Bottom Side	16	4233	1	Ant 0	w/o	24.50	24.42	1.02	-0.01	0.128	0.13
	WCDMA V	RMC12.2K	Rear Face	0	4132	1	Ant 0	w/	20.00	19.90	1.02	-0.1	0.709	0.72
	WCDMA V	RMC12.2K	Bottom Side	0	4132	1	Ant 0	w/	20.00	19.90	1.02	0.19	0.356	0.36
	WCDMA V	RMC12.2K	Rear Face	0	4182	1	Ant 0	w/	20.00	19.61	1.09	-0.18	0.689	0.75
3	WCDMA V	RMC12.2K	Rear Face	0	4233	1	Ant 0	w/	20.00	19.71	1.07	-0.16	0.712	**0.76**
	WCDMA V	RMC12.2K	Rear Face	0	4233	2	Ant 0	w/	20.00	19.71	1.07	-0.15	0.699	0.75
	WCDMA V	RMC12.2K	Rear Face	0	4233	3	Ant 0	w/	20.00	19.71	1.07	-0.14	0.671	0.72
	WCDMA V	RMC12.2K	Rear Face	0	4233	4	Ant 0	w/	20.00	19.71	1.07	-0.11	0.656	0.70

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 2	QPSK20M	Rear Face	22	18700	1	0	1	Ant 0	w/o	24.00	23.54	1.11	-0.09	0.100	0.11
	LTE 2	QPSK20M	Left Side	0	18700	1	0	1	Ant 0	w/o	24.00	23.54	1.11	0.12	0.087	0.10
	LTE 2	QPSK20M	Right Side	0	18700	1	0	1	Ant 0	w/o	24.00	23.54	1.11	0.19	0.085	0.09
	LTE 2	QPSK20M	Top Side	0	18700	1	0	1	Ant 0	w/o	24.00	23.54	1.11	0	0	0.00
	LTE 2	QPSK20M	Bottom Side	16	18700	1	0	1	Ant 0	w/o	24.00	23.54	1.11	0.13	0.092	0.10
	LTE 2	QPSK20M	Rear Face	22	18700	50	0	1	Ant 0	w/o	23.00	22.43	1.14	0.12	0.066	0.08
	LTE 2	QPSK20M	Left Side	0	18700	50	0	1	Ant 0	w/o	23.00	22.43	1.14	0	0	0.00
	LTE 2	QPSK20M	Right Side	0	18700	50	0	1	Ant 0	w/o	23.00	22.43	1.14	0.13	0.068	0.08
	LTE 2	QPSK20M	Top Side	0	18700	50	0	1	Ant 0	w/o	23.00	22.43	1.14	0	0	0.00
	LTE 2	QPSK20M	Bottom Side	16	18700	50	0	1	Ant 0	w/o	23.00	22.43	1.14	0.02	0.058	0.07
	LTE 2	QPSK20M	Rear Face	0	18700	1	0	1	Ant 0	w/	11.50	11.06	1.11	-0.08	0.280	0.31
	LTE 2	QPSK20M	Bottom Side	0	18700	1	0	1	Ant 0	w/	11.50	11.06	1.11	-0.17	0.058	0.06
	LTE 2	QPSK20M	Rear Face	0	18700	50	0	1	Ant 0	w/	11.50	11.04	1.11	0.18	0.245	0.27
	LTE 2	QPSK20M	Bottom Side	0	18700	50	0	1	Ant 0	w/	11.50	11.04	1.11	0.14	0.054	0.06
	LTE 2	QPSK20M	Rear Face	0	18900	1	0	1	Ant 0	w/	11.50	11.01	1.12	0.05	0.267	0.30
4	LTE 2	QPSK20M	Rear Face	0	19100	1	0	1	Ant 0	w/	11.50	10.97	1.13	-0.17	0.300	**0.34**
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	2	Ant 0	w/	11.50	10.97	1.13	-0.15	0.285	0.32
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	3	Ant 0	w/	11.50	10.97	1.13	0.04	0.280	0.32
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	4	Ant 0	w/	11.50	10.97	1.13	0.1	0.271	0.31
	LTE 2	QPSK20M	Rear Face	22	18700	1	0	1	Ant 2	w/o	21.00	20.62	1.09	0	<0.001	0.00
5	LTE 2	QPSK20M	Left Side	7	18700	1	0	1	Ant 2	w/o	21.00	20.62	1.09	0.16	0.169	**0.18**
	LTE 2	QPSK20M	Right Side	0	18700	1	0	1	Ant 2	w/o	21.00	20.62	1.09	0	<0.001	0.00
	LTE 2	QPSK20M	Top Side	6	18700	1	0	1	Ant 2	w/o	21.00	20.62	1.09	0	<0.001	0.00
	LTE 2	QPSK20M	Bottom Side	0	18700	1	0	1	Ant 2	w/o	21.00	20.62	1.09	0	<0.001	0.00
	LTE 2	QPSK20M	Rear Face	22	18700	50	0	1	Ant 2	w/o	21.00	19.49	1.42	0	<0.001	0.00
	LTE 2	QPSK20M	Left Side	7	18700	50	0	1	Ant 2	w/o	21.00	19.49	1.42	0.17	0.124	0.18
	LTE 2	QPSK20M	Right Side	0	18700	50	0	1	Ant 2	w/o	21.00	19.49	1.42	0	<0.001	0.00
	LTE 2	QPSK20M	Top Side	6	18700	50	0	1	Ant 2	w/o	21.00	19.49	1.42	0	<0.001	0.00
	LTE 2	QPSK20M	Bottom Side	0	18700	50	0	1	Ant 2	w/o	21.00	19.49	1.42	0	<0.001	0.00
	LTE 2	QPSK20M	Rear Face	0	18700	1	0	1	Ant 2	w/	14.00	13.87	1.03	0	<0.001	0.00
	LTE 2	QPSK20M	Left Side	0	18700	1	0	1	Ant 2	w/	14.00	13.87	1.03	0.13	0.102	0.11
	LTE 2	QPSK20M	Top Side	0	18700	1	0	1	Ant 2	w/	14.00	13.87	1.03	0	<0.001	0.00
	LTE 2	QPSK20M	Rear Face	0	18700	50	0	1	Ant 2	w/	14.00	13.70	1.07	0	<0.001	0.00
	LTE 2	QPSK20M	Left Side	0	18700	50	0	1	Ant 2	w/	14.00	13.70	1.07	0.17	0.095	0.10
	LTE 2	QPSK20M	Top Side	0	18700	50	0	1	Ant 2	w/	14.00	13.70	1.07	0	<0.001	0.00
	LTE 2	QPSK20M	Left Side	7	18900	1	0	1	Ant 2	w/o	21.00	20.45	1.14	0.19	0.135	0.15
	LTE 2	QPSK20M	Left Side	7	19100	1	0	1	Ant 2	w/o	21.00	20.56	1.11	-0.05	0.130	0.14
	LTE 2	QPSK20M	Left Side	7	18700	1	0	2	Ant 2	w/o	21.00	20.62	1.09	-0.09	0.147	0.16
	LTE 2	QPSK20M	Left Side	7	18700	1	0	3	Ant 2	w/o	21.00	20.62	1.09	-0.13	0.142	0.15
	LTE 2	QPSK20M	Left Side	7	18700	1	0	4	Ant 2	w/o	21.00	20.62	1.09	-0.11	0.129	0.14
	LTE 4	QPSK20M	Rear Face	22	20175	1	0	1	Ant 0	w/o	24.00	23.39	1.15	0.17	0.120	0.14
	LTE 4	QPSK20M	Left Side	0	20175	1	0	1	Ant 0	w/o	24.00	23.39	1.15	-0.14	0.060	0.07
	LTE 4	QPSK20M	Right Side	0	20175	1	0	1	Ant 0	w/o	24.00	23.39	1.15	0.04	0.242	0.28
	LTE 4	QPSK20M	Top Side	0	20175	1	0	1	Ant 0	w/o	24.00	23.39	1.15	0	<0.001	0.00
	LTE 4	QPSK20M	Bottom Side	16	20175	1	0	1	Ant 0	w/o	24.00	23.39	1.15	-0.1	0.115	0.13
	LTE 4	QPSK20M	Rear Face	22	20175	50	0	1	Ant 0	w/o	23.00	22.33	1.17	-0.07	0.103	0.12
	LTE 4	QPSK20M	Left Side	0	20175	50	0	1	Ant 0	w/o	23.00	22.33	1.17	0.05	0.063	0.07
	LTE 4	QPSK20M	Right Side	0	20175	50	0	1	Ant 0	w/o	23.00	22.33	1.17	-0.11	0.152	0.18
	LTE 4	QPSK20M	Top Side	0	20175	50	0	1	Ant 0	w/o	23.00	22.33	1.17	0	<0.001	0.00
	LTE 4	QPSK20M	Bottom Side	16	20175	50	0	1	Ant 0	w/o	23.00	22.33	1.17	0.02	0.108	0.13
	LTE 4	QPSK20M	Rear Face	0	20175	1	0	1	Ant 0	w/	11.00	10.51	1.12	0.09	0.265	0.30
	LTE 4	QPSK20M	Bottom Side	0	20175	1	0	1	Ant 0	w/	11.00	10.51	1.12	0	<0.001	0.00
	LTE 4	QPSK20M	Rear Face	0	20175	50	0	1	Ant 0	w/	11.00	10.48	1.13	0.05	0.253	0.29
	LTE 4	QPSK20M	Bottom Side	0	20175	50	0	1	Ant 0	w/	11.00	10.48	1.13	0	<0.001	0.00
6	LTE 4	QPSK20M	Rear Face	0	20050	1	0	1	Ant 0	w/	11.00	10.42	1.14	-0.17	0.276	**0.31**
	LTE 4	QPSK20M	Rear Face	0	20300	1	0	1	Ant 0	w/	11.00	10.38	1.15	-0.12	0.241	0.28
	LTE 4	QPSK20M	Rear Face	0	20050	1	0	2	Ant 0	w/	11.00	10.42	1.14	-0.15	0.266	0.30
	LTE 4	QPSK20M	Rear Face	0	20050	1	0	3	Ant 0	w/	11.00	10.42	1.14	-0.15	0.260	0.30
	LTE 4	QPSK20M	Rear Face	0	20050	1	0	4	Ant 0	w/	11.00	10.42	1.14	-0.17	0.251	0.29

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 5	QPSK10M	Rear Face	22	20450	1	0	1	Ant 0	w/o	24.50	24.04	1.11	0.05	0.053	0.06
	LTE 5	QPSK10M	Left Side	0	20450	1	0	1	Ant 0	w/o	24.50	24.04	1.11	0	<0.001	0.00
	LTE 5	QPSK10M	Right Side	0	20450	1	0	1	Ant 0	w/o	24.50	24.04	1.11	0	<0.001	0.00
	LTE 5	QPSK10M	Top Side	0	20450	1	0	1	Ant 0	w/o	24.50	24.04	1.11	0	<0.001	0.00
	LTE 5	QPSK10M	Bottom Side	16	20450	1	0	1	Ant 0	w/o	24.50	24.04	1.11	-0.19	0.065	0.07
	LTE 5	QPSK10M	Rear Face	22	20450	25	0	1	Ant 0	w/o	23.50	23.15	1.08	0.02	0.048	0.05
	LTE 5	QPSK10M	Left Side	0	20450	25	0	1	Ant 0	w/o	23.50	23.15	1.08	0	<0.001	0.00
	LTE 5	QPSK10M	Right Side	0	20450	25	0	1	Ant 0	w/o	23.50	23.15	1.08	0	<0.001	0.00
	LTE 5	QPSK10M	Top Side	0	20450	25	0	1	Ant 0	w/o	23.50	23.15	1.08	0	<0.001	0.00
	LTE 5	QPSK10M	Bottom Side	16	20450	25	0	1	Ant 0	w/o	23.50	23.15	1.08	-0.07	0.088	0.10
	LTE 5	QPSK10M	Rear Face	0	20450	1	0	1	Ant 0	w/	16.00	15.74	1.06	-0.17	0.262	0.28
	LTE 5	QPSK10M	Bottom Side	0	20450	1	0	1	Ant 0	w/	16.00	15.74	1.06	-0.11	0.151	0.16
	LTE 5	QPSK10M	Rear Face	0	20450	25	0	1	Ant 0	w/	16.00	15.71	1.07	0.11	0.239	0.26
	LTE 5	QPSK10M	Bottom Side	0	20450	25	0	1	Ant 0	w/	16.00	15.71	1.07	0.02	0.133	0.14
	LTE 5	QPSK10M	Rear Face	0	20525	1	0	1	Ant 0	w/	16.00	15.71	1.07	-0.02	0.266	0.28
7	LTE 5	QPSK10M	Rear Face	0	20600	1	0	1	Ant 0	w/	16.00	15.63	1.09	-0.11	0.279	**0.30**
	LTE 5	QPSK10M	Rear Face	0	20600	1	0	2	Ant 0	w/	16.00	15.63	1.09	-0.15	0.258	0.28
	LTE 5	QPSK10M	Rear Face	0	20600	1	0	3	Ant 0	w/	16.00	15.63	1.09	0.18	0.266	0.29
	LTE 5	QPSK10M	Rear Face	0	20600	1	0	4	Ant 0	w/	16.00	15.63	1.09	0.15	0.261	0.28
	LTE 5	QPSK10M	Rear Face	0	PCC : 20450 SCC: 20549	PCC : 1 SCC : 1	PCC : 49 SCC : 0	1	Ant 0	w/	16.00	15.61	1.09	0.03	0.255	0.28
	LTE 7	QPSK20M	Rear Face	22	20850	1	0	1	Ant 0	w/o	24.00	23.86	1.03	-0.02	0.293	0.30
	LTE 7	QPSK20M	Left Side	0	20850	1	0	1	Ant 0	w/o	24.00	23.86	1.03	0.08	0.372	0.38
	LTE 7	QPSK20M	Right Side	0	20850	1	0	1	Ant 0	w/o	24.00	23.86	1.03	0.19	0.062	0.06
	LTE 7	QPSK20M	Top Side	0	20850	1	0	1	Ant 0	w/o	24.00	23.86	1.03	0	<0.001	0.00
8	LTE 7	QPSK20M	Bottom Side	16	20850	1	0	1	Ant 0	w/o	24.00	23.86	1.03	-0.06	0.524	**0.54**
	LTE 7	QPSK20M	Rear Face	22	20850	50	0	1	Ant 0	w/o	23.00	22.94	1.01	0.03	0.263	0.27
	LTE 7	QPSK20M	Left Side	0	20850	50	0	1	Ant 0	w/o	23.00	22.94	1.01	0.12	0.386	0.39
	LTE 7	QPSK20M	Right Side	0	20850	50	0	1	Ant 0	w/o	23.00	22.94	1.01	0.13	0.196	0.20
	LTE 7	QPSK20M	Top Side	0	20850	50	0	1	Ant 0	w/o	23.00	22.94	1.01	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	16	20850	50	0	1	Ant 0	w/o	23.00	22.94	1.01	0.12	0.494	0.50
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	1	Ant 0	w/	8.50	8.25	1.06	-0.17	0.261	0.28
	LTE 7	QPSK20M	Bottom Side	0	21100	1	0	1	Ant 0	w/	8.50	8.25	1.06	0.05	0.206	0.22
	LTE 7	QPSK20M	Rear Face	0	21100	50	0	1	Ant 0	w/	8.50	8.23	1.06	-0.17	0.224	0.24
	LTE 7	QPSK20M	Bottom Side	0	21100	50	0	1	Ant 0	w/	8.50	8.23	1.06	-0.18	0.193	0.20
	LTE 7	QPSK20M	Bottom Side	16	21100	1	0	1	Ant 0	w/o	24.00	23.81	1.04	0.19	0.481	0.50
	LTE 7	QPSK20M	Bottom Side	16	21350	1	0	1	Ant 0	w/o	24.00	23.84	1.04	-0.03	0.483	0.50
	LTE 7	QPSK20M	Bottom Side	16	20850	1	0	2	Ant 0	w/o	24.00	23.86	1.03	-0.03	0.518	0.53
	LTE 7	QPSK20M	Bottom Side	16	20850	1	0	3	Ant 0	w/o	24.00	23.86	1.03	0.03	0.355	0.37
	LTE 7	QPSK20M	Bottom Side	16	20850	1	0	4	Ant 0	w/o	24.00	23.86	1.03	0.05	0.346	0.36
	LTE 7	QPSK20M	Bottom Side	16	PCC : 20850 SCC : 21048	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/o	24.00	23.69	1.07	0.13	0.498	0.53
	LTE 7	QPSK20M	Rear Face	22	21350	1	0	1	Ant 2	w/o	20.50	20.32	1.04	0	<0.001	0.00
9	LTE 7	QPSK20M	Left Side	7	21350	1	0	1	Ant 2	w/o	20.50	20.32	1.04	0.18	0.366	**0.38**
	LTE 7	QPSK20M	Right Side	0	21350	1	0	1	Ant 2	w/o	20.50	20.32	1.04	0	<0.001	0.00
	LTE 7	QPSK20M	Top Side	6	21350	1	0	1	Ant 2	w/o	20.50	20.32	1.04	0.18	0.123	0.13
	LTE 7	QPSK20M	Bottom Side	0	21350	1	0	1	Ant 2	w/o	20.50	20.32	1.04	0	<0.001	0.00
	LTE 7	QPSK20M	Rear Face	22	21350	50	0	1	Ant 2	w/o	20.50	20.24	1.06	0	<0.001	0.00
	LTE 7	QPSK20M	Left Side	7	21350	50	0	1	Ant 2	w/o	20.50	20.24	1.06	-0.15	0.360	0.38
	LTE 7	QPSK20M	Right Side	0	21350	50	0	1	Ant 2	w/o	20.50	20.24	1.06	0	<0.001	0.00
	LTE 7	QPSK20M	Top Side	6	21350	50	0	1	Ant 2	w/o	20.50	20.24	1.06	0.17	0.118	0.13
	LTE 7	QPSK20M	Bottom Side	0	21350	50	0	1	Ant 2	w/o	20.50	20.24	1.06	0	<0.001	0.00
	LTE 7	QPSK20M	Rear Face	0	20850	1	0	1	Ant 2	w/	11.00	10.89	1.03	0	<0.001	0.00
	LTE 7	QPSK20M	Left Side	0	20850	1	0	1	Ant 2	w/	11.00	10.89	1.03	0.13	0.144	0.15
	LTE 7	QPSK20M	Top Side	0	20850	1	0	1	Ant 2	w/	11.00	10.89	1.03	0.08	0.048	0.05
	LTE 7	QPSK20M	Rear Face	0	20850	50	0	1	Ant 2	w/	11.00	10.83	1.04	0	<0.001	0.00
	LTE 7	QPSK20M	Left Side	0	20850	50	0	1	Ant 2	w/	11.00	10.83	1.04	0.03	0.139	0.14
	LTE 7	QPSK20M	Top Side	0	20850	50	0	1	Ant 2	w/	11.00	10.83	1.04	0.15	0.044	0.05
	LTE 7	QPSK20M	Left Side	7	20850	1	0	1	Ant 2	w/o	20.50	20.20	1.07	-0.16	0.342	0.37
	LTE 7	QPSK20M	Left Side	7	21100	1	0	1	Ant 2	w/o	20.50	20.25	1.06	-0.05	0.338	0.36
	LTE 7	QPSK20M	Left Side	7	21350	1	0	2	Ant 2	w/o	20.50	20.32	1.04	0.15	0.354	0.37
	LTE 7	QPSK20M	Left Side	7	21350	1	0	3	Ant 2	w/o	20.50	20.32	1.04	-0.06	0.292	0.30
	LTE 7	QPSK20M	Left Side	7	21350	1	0	4	Ant 2	w/o	20.50	20.32	1.04	-0.08	0.273	0.28
	LTE 7	QPSK20M	Left Side	7	PCC : 20850 SCC : 21048	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 2	w/o	20.50	20.31	1.04	0.13	0.334	0.35

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 12	QPSK10M	Rear Face	22	23060	1	0	1	Ant 0	w/o	24.50	23.79	1.18	-0.05	0.072	0.08
	LTE 12	QPSK10M	Left Side	0	23060	1	0	1	Ant 0	w/o	24.50	23.79	1.18	0	<0.001	0.00
	LTE 12	QPSK10M	Right Side	0	23060	1	0	1	Ant 0	w/o	24.50	23.79	1.18	0.07	0.095	0.11
	LTE 12	QPSK10M	Top Side	0	23060	1	0	1	Ant 0	w/o	24.50	23.79	1.18	0	<0.001	0.00
	LTE 12	QPSK10M	Bottom Side	16	23060	1	0	1	Ant 0	w/o	24.50	23.79	1.18	-0.04	0.049	0.06
	LTE 12	QPSK10M	Rear Face	22	23060	25	0	1	Ant 0	w/o	23.50	22.85	1.16	0.19	0.061	0.07
	LTE 12	QPSK10M	Left Side	0	23060	25	0	1	Ant 0	w/o	23.50	22.85	1.16	0	<0.001	0.00
	LTE 12	QPSK10M	Right Side	0	23060	25	0	1	Ant 0	w/o	23.50	22.85	1.16	-0.05	0.085	0.10
	LTE 12	QPSK10M	Top Side	0	23060	25	0	1	Ant 0	w/o	23.50	22.85	1.16	0.03	0.00116	0.00
	LTE 12	QPSK10M	Bottom Side	16	23060	25	0	1	Ant 0	w/o	23.50	22.85	1.16	-0.05	0.043	0.05
10	LTE 12	QPSK10M	Rear Face	0	23060	1	0	1	Ant 0	w/	16.50	16.18	1.08	-0.18	0.433	**0.47**
	LTE 12	QPSK10M	Bottom Side	0	23060	1	0	1	Ant 0	w/	16.50	16.18	1.08	0.06	0.234	0.25
	LTE 12	QPSK10M	Rear Face	0	23060	25	0	1	Ant 0	w/	16.50	16.16	1.08	0.01	0.386	0.42
	LTE 12	QPSK10M	Bottom Side	0	23060	25	0	1	Ant 0	w/	16.50	16.16	1.08	-0.15	0.227	0.25
	LTE 12	QPSK10M	Rear Face	0	23095	1	0	1	Ant 0	w/	16.50	16.05	1.11	-0.07	0.392	0.44
	LTE 12	QPSK10M	Rear Face	0	23130	1	0	1	Ant 0	w/	16.50	16.14	1.09	0.05	0.379	0.41
	LTE 12	QPSK10M	Rear Face	0	23060	1	0	2	Ant 0	w/	16.50	16.18	1.08	-0.2	0.413	0.45
	LTE 12	QPSK10M	Rear Face	0	23060	1	0	3	Ant 0	w/	16.50	16.18	1.08	-0.05	0.362	0.39
	LTE 12	QPSK10M	Rear Face	0	23060	1	0	4	Ant 0	w/	16.50	16.18	1.08	-0.07	0.333	0.36
	LTE 13	QPSK10M	Rear Face	22	23230	1	0	1	Ant 0	w/o	24.50	23.83	1.17	-0.13	0.060	0.07
	LTE 13	QPSK10M	Left Side	0	23230	1	0	1	Ant 0	w/o	24.50	23.83	1.17	0	<0.001	0.00
	LTE 13	QPSK10M	Right Side	0	23230	1	0	1	Ant 0	w/o	24.50	23.83	1.17	0	<0.001	0.00
	LTE 13	QPSK10M	Top Side	0	23230	1	0	1	Ant 0	w/o	24.50	23.83	1.17	0	<0.001	0.00
	LTE 13	QPSK10M	Bottom Side	16	23230	1	0	1	Ant 0	w/o	24.50	23.83	1.17	0.08	0.047	0.05
	LTE 13	QPSK10M	Rear Face	22	23230	25	0	1	Ant 0	w/o	23.50	22.93	1.14	0	<0.001	0.00
	LTE 13	QPSK10M	Left Side	0	23230	25	0	1	Ant 0	w/o	23.50	22.93	1.14	0	<0.001	0.00
	LTE 13	QPSK10M	Right Side	0	23230	25	0	1	Ant 0	w/o	23.50	22.93	1.14	0	<0.001	0.00
	LTE 13	QPSK10M	Top Side	0	23230	25	0	1	Ant 0	w/o	23.50	22.93	1.14	0	<0.001	0.00
	LTE 13	QPSK10M	Bottom Side	16	23230	25	0	1	Ant 0	w/o	23.50	22.93	1.14	0	<0.001	0.00
11	LTE 13	QPSK10M	Rear Face	0	23230	1	0	1	Ant 0	w/	16.00	15.84	1.04	-0.13	0.255	**0.27**
	LTE 13	QPSK10M	Bottom Side	0	23230	1	0	1	Ant 0	w/	16.00	15.84	1.04	0.06	0.137	0.14
	LTE 13	QPSK10M	Rear Face	0	23230	25	0	1	Ant 0	w/	16.00	15.81	1.04	-0.14	0.240	0.25
	LTE 13	QPSK10M	Bottom Side	0	23230	25	0	1	Ant 0	w/	16.00	15.81	1.04	-0.07	0.127	0.13
	LTE 13	QPSK10M	Rear Face	0	23230	1	0	2	Ant 0	w/	16.00	15.84	1.04	-0.15	0.243	0.25
	LTE 13	QPSK10M	Rear Face	0	23230	1	0	3	Ant 0	w/	16.00	15.84	1.04	-0.04	0.231	0.24
	LTE 13	QPSK10M	Rear Face	0	23230	1	0	4	Ant 0	w/	16.00	15.84	1.04	-0.06	0.222	0.23
	LTE 14	QPSK10M	Rear Face	22	23330	1	0	1	Ant 0	w/o	24.50	23.82	1.17	0.01	0.050	0.06
	LTE 14	QPSK10M	Left Side	0	23330	1	0	1	Ant 0	w/o	24.50	23.82	1.17	0	<0.001	0.00
	LTE 14	QPSK10M	Right Side	0	23330	1	0	1	Ant 0	w/o	24.50	23.82	1.17	0	<0.001	0.00
	LTE 14	QPSK10M	Top Side	0	23330	1	0	1	Ant 0	w/o	24.50	23.82	1.17	0	<0.001	0.00
	LTE 14	QPSK10M	Bottom Side	16	23330	1	0	1	Ant 0	w/o	24.50	23.82	1.17	0	<0.001	0.00
	LTE 14	QPSK10M	Rear Face	22	23330	25	0	1	Ant 0	w/o	23.50	22.97	1.13	0	<0.001	0.00
	LTE 14	QPSK10M	Left Side	0	23330	25	0	1	Ant 0	w/o	23.50	22.97	1.13	0	<0.001	0.00
	LTE 14	QPSK10M	Right Side	0	23330	25	0	1	Ant 0	w/o	23.50	22.97	1.13	0	<0.001	0.00
	LTE 14	QPSK10M	Top Side	0	23330	25	0	1	Ant 0	w/o	23.50	22.97	1.13	0	<0.001	0.00
	LTE 14	QPSK10M	Bottom Side	16	23330	25	0	1	Ant 0	w/o	23.50	22.97	1.13	0	<0.001	0.00
12	LTE 14	QPSK10M	Rear Face	0	23330	1	0	1	Ant 0	w/	16.50	16.40	1.02	-0.18	0.271	**0.28**
	LTE 14	QPSK10M	Bottom Side	0	23330	1	0	1	Ant 0	w/	16.50	16.40	1.02	-0.14	0.152	0.16
	LTE 14	QPSK10M	Rear Face	0	23330	25	0	1	Ant 0	w/	16.50	16.25	1.06	-0.19	0.258	0.27
	LTE 14	QPSK10M	Bottom Side	0	23330	25	0	1	Ant 0	w/	16.50	16.25	1.06	0.16	0.134	0.14
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	2	Ant 0	w/	16.50	16.40	1.02	-0.15	0.261	0.27
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	3	Ant 0	w/	16.50	16.40	1.02	-0.06	0.233	0.24
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	4	Ant 0	w/	16.50	16.40	1.02	-0.08	0.229	0.23

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 17	QPSK10M	Rear Face	22	23780	1	0	1	Ant 0	w/o	24.50	23.44	1.28	0.12	0.078	0.10
	LTE 17	QPSK10M	Left Side	0	23780	1	0	1	Ant 0	w/o	24.50	23.44	1.28	0.19	<0.001	0.00
	LTE 17	QPSK10M	Right Side	0	23780	1	0	1	Ant 0	w/o	24.50	23.44	1.28	-0.15	0.109	0.14
	LTE 17	QPSK10M	Top Side	0	23780	1	0	1	Ant 0	w/o	24.50	23.44	1.28	0.07	<0.001	0.00
	LTE 17	QPSK10M	Bottom Side	16	23780	1	0	1	Ant 0	w/o	24.50	23.44	1.28	-0.09	0.053	0.07
	LTE 17	QPSK10M	Rear Face	22	23780	25	0	1	Ant 0	w/o	23.50	22.49	1.26	0.1	0.064	0.08
	LTE 17	QPSK10M	Left Side	0	23780	25	0	1	Ant 0	w/o	23.50	22.49	1.26	-0.18	<0.001	0.00
	LTE 17	QPSK10M	Right Side	0	23780	25	0	1	Ant 0	w/o	23.50	22.49	1.26	-0.1	0.102	0.13
	LTE 17	QPSK10M	Top Side	0	23780	25	0	1	Ant 0	w/o	23.50	22.49	1.26	-0.07	<0.001	0.00
	LTE 17	QPSK10M	Bottom Side	16	23780	25	0	1	Ant 0	w/o	23.50	22.49	1.26	-0.1	0.059	0.07
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	1	Ant 0	w/	16.00	15.82	1.04	0.17	0.378	0.39
	LTE 17	QPSK10M	Bottom Side	0	23780	1	0	1	Ant 0	w/	16.00	15.82	1.04	-0.12	0.235	0.24
	LTE 17	QPSK10M	Rear Face	0	23780	25	0	1	Ant 0	w/	16.00	15.70	1.07	-0.01	0.363	0.39
	LTE 17	QPSK10M	Bottom Side	0	23780	25	0	1	Ant 0	w/	16.00	15.70	1.07	-0.19	0.219	0.23
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	1	Ant 0	w/	16.00	15.66	1.08	-0.16	0.377	0.41
13	LTE 17	QPSK10M	Rear Face	0	23800	1	0	1	Ant 0	w/	16.00	15.70	1.07	-0.13	0.385	**0.41**
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	2	Ant 0	w/	16.00	15.70	1.07	-0.15	0.377	0.40
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	3	Ant 0	w/	16.00	15.70	1.07	0.18	0.343	0.37
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	4	Ant 0	w/	16.00	15.70	1.07	0.18	0.333	0.36
	LTE 25	QPSK20M	Rear Face	22	26140	1	0	1	Ant 0	w/o	24.00	23.59	1.10	-0.04	0.098	0.11
	LTE 25	QPSK20M	Left Side	0	26140	1	0	1	Ant 0	w/o	24.00	23.59	1.10	-0.15	0.115	0.13
	LTE 25	QPSK20M	Right Side	0	26140	1	0	1	Ant 0	w/o	24.00	23.59	1.10	0.05	0.05	0.06
	LTE 25	QPSK20M	Top Side	0	26140	1	0	1	Ant 0	w/o	24.00	23.59	1.10	0	<0.001	0.00
	LTE 25	QPSK20M	Bottom Side	16	26140	1	0	1	Ant 0	w/o	24.00	23.59	1.10	0.13	0.056	0.06
	LTE 25	QPSK20M	Rear Face	22	26140	50	0	1	Ant 0	w/o	23.00	22.61	1.09	-0.03	0.076	0.08
	LTE 25	QPSK20M	Left Side	0	26140	50	0	1	Ant 0	w/o	23.00	22.61	1.09	-0.11	0.054	0.06
	LTE 25	QPSK20M	Right Side	0	26140	50	0	1	Ant 0	w/o	23.00	22.61	1.09	-0.09	0.056	0.06
	LTE 25	QPSK20M	Top Side	0	26140	50	0	1	Ant 0	w/o	23.00	22.61	1.09	0	<0.001	0.00
	LTE 25	QPSK20M	Bottom Side	16	26140	50	0	1	Ant 0	w/o	23.00	22.61	1.09	0	<0.001	0.00
14	LTE 25	QPSK20M	Rear Face	0	26365	1	0	1	Ant 0	w/	11.50	11.50	1.00	-0.17	0.335	**0.34**
	LTE 25	QPSK20M	Bottom Side	0	26365	1	0	1	Ant 0	w/	11.50	11.50	1.00	0.18	0.058	0.06
	LTE 25	QPSK20M	Rear Face	0	26365	50	0	1	Ant 0	w/	11.50	11.48	1.00	0.14	0.316	0.32
	LTE 25	QPSK20M	Bottom Side	0	26365	50	0	1	Ant 0	w/	11.50	11.48	1.00	-0.17	0.037	0.04
	LTE 25	QPSK20M	Rear Face	0	26140	1	0	1	Ant 0	w/	11.50	11.38	1.03	0.19	0.281	0.29
	LTE 25	QPSK20M	Rear Face	0	26590	1	0	1	Ant 0	w/	11.50	11.41	1.02	-0.1	0.328	0.33
	LTE 25	QPSK20M	Rear Face	0	26365	1	0	2	Ant 0	w/	11.50	11.50	1.00	-0.15	0.325	0.33
	LTE 25	QPSK20M	Rear Face	0	26365	1	0	3	Ant 0	w/	11.50	11.50	1.00	0.06	0.272	0.27
	LTE 25	QPSK20M	Rear Face	0	26365	1	0	4	Ant 0	w/	11.50	11.50	1.00	0.08	0.263	0.26
	LTE 26	QPSK15M	Rear Face	22	26865	1	0	1	Ant 0	w/o	24.50	24.06	1.11	0.05	0.066	0.07
	LTE 26	QPSK15M	Left Side	0	26865	1	0	1	Ant 0	w/o	24.50	24.06	1.11	0	<0.001	0.00
	LTE 26	QPSK15M	Right Side	0	26865	1	0	1	Ant 0	w/o	24.50	24.06	1.11	0	<0.001	0.00
	LTE 26	QPSK15M	Top Side	0	26865	1	0	1	Ant 0	w/o	24.50	24.06	1.11	0	<0.001	0.00
	LTE 26	QPSK15M	Bottom Side	16	26865	1	0	1	Ant 0	w/o	24.50	24.06	1.11	-0.09	0.064	0.07
	LTE 26	QPSK15M	Rear Face	22	26865	36	0	1	Ant 0	w/o	23.50	23.06	1.11	-0.03	0.053	0.06
	LTE 26	QPSK15M	Left Side	0	26865	36	0	1	Ant 0	w/o	23.50	23.06	1.11	0	<0.001	0.00
	LTE 26	QPSK15M	Right Side	0	26865	36	0	1	Ant 0	w/o	23.50	23.06	1.11	0	<0.001	0.00
	LTE 26	QPSK15M	Top Side	0	26865	36	0	1	Ant 0	w/o	23.50	23.06	1.11	0	<0.001	0.00
	LTE 26	QPSK15M	Bottom Side	16	26865	36	0	1	Ant 0	w/o	23.50	23.06	1.11	0	<0.001	0.00
15	LTE 26	QPSK15M	Rear Face	0	26965	1	0	1	Ant 0	w/	16.50	16.50	1.00	-0.14	0.362	**0.36**
	LTE 26	QPSK15M	Bottom Side	0	26965	1	0	1	Ant 0	w/	16.50	16.50	1.00	-0.05	0.190	0.19
	LTE 26	QPSK15M	Rear Face	0	26965	36	0	1	Ant 0	w/	16.50	16.40	1.02	-0.12	0.338	0.34
	LTE 26	QPSK15M	Bottom Side	0	26965	36	0	1	Ant 0	w/	16.50	16.40	1.02	0.06	0.183	0.19
	LTE 26	QPSK15M	Rear Face	0	26765	1	0	1	Ant 0	w/	16.50	16.41	1.02	0.07	0.322	0.33
	LTE 26	QPSK15M	Rear Face	0	26865	1	0	1	Ant 0	w/	16.50	16.47	1.01	-0.05	0.327	0.33
	LTE 26	QPSK15M	Rear Face	0	26965	1	0	2	Ant 0	w/	16.50	16.50	1.00	-0.16	0.353	0.35
	LTE 26	QPSK15M	Rear Face	0	26965	1	0	3	Ant 0	w/	16.50	16.50	1.00	0.09	0.306	0.31
	LTE 26	QPSK15M	Rear Face	0	26965	1	0	4	Ant 0	w/	16.50	16.50	1.00	0.12	0.293	0.29

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 30	QPSK10M	Rear Face	22	27710	1	0	1	Ant 0	w/o	23.00	22.72	1.07	0.05	0.106	0.11
	LTE 30	QPSK10M	Left Side	0	27710	1	0	1	Ant 0	w/o	23.00	22.72	1.07	-0.07	0.278	0.30
	LTE 30	QPSK10M	Right Side	0	27710	1	0	1	Ant 0	w/o	23.00	22.72	1.07	-0.09	0.218	0.23
	LTE 30	QPSK10M	Top Side	0	27710	1	0	1	Ant 0	w/o	23.00	22.72	1.07	0.01	<0.001	0.00
	LTE 30	QPSK10M	Bottom Side	16	27710	1	0	1	Ant 0	w/o	23.00	22.72	1.07	-0.06	0.098	0.10
	LTE 30	QPSK10M	Rear Face	22	27710	25	0	1	Ant 0	w/o	22.00	21.70	1.07	-0.09	0.083	0.09
	LTE 30	QPSK10M	Left Side	0	27710	25	0	1	Ant 0	w/o	22.00	21.70	1.07	-0.08	0.212	0.23
	LTE 30	QPSK10M	Right Side	0	27710	25	0	1	Ant 0	w/o	22.00	21.70	1.07	0.09	0.214	0.23
	LTE 30	QPSK10M	Top Side	0	27710	25	0	1	Ant 0	w/o	22.00	21.70	1.07	0.04	<0.001	0.00
	LTE 30	QPSK10M	Bottom Side	16	27710	25	0	1	Ant 0	w/o	22.00	21.70	1.07	-0.13	0.082	0.09
16	LTE 30	QPSK10M	Rear Face	0	27710	1	0	1	Ant 0	w/	12.00	11.99	1.00	-0.19	0.497	**0.50**
	LTE 30	QPSK10M	Bottom Side	0	27710	1	0	1	Ant 0	w/	12.00	11.99	1.00	-0.08	0.062	0.06
	LTE 30	QPSK10M	Rear Face	0	27710	25	0	1	Ant 0	w/	12.00	11.90	1.02	-0.03	0.444	0.45
	LTE 30	QPSK10M	Bottom Side	0	27710	25	0	1	Ant 0	w/	12.00	11.90	1.02	-0.11	0.049	0.05
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	2	Ant 0	w/	12.00	11.99	1.00	-0.15	0.473	0.47
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	3	Ant 0	w/	12.00	11.99	1.00	-0.16	0.418	0.42
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	4	Ant 0	w/	12.00	11.99	1.00	-0.11	0.401	0.40
	LTE 38	QPSK20M	Rear Face	22	37850	1	0	1	Ant 0	w/o	24.00	23.84	1.04	0.09	0.326	0.34
	LTE 38	QPSK20M	Left Side	0	37850	1	0	1	Ant 0	w/o	24.00	23.84	1.04	-0.13	0.076	0.08
	LTE 38	QPSK20M	Right Side	0	37850	1	0	1	Ant 0	w/o	24.00	23.84	1.04	-0.06	0.086	0.09
	LTE 38	QPSK20M	Top Side	0	37850	1	0	1	Ant 0	w/o	24.00	23.84	1.04	0	<0.001	0.00
17	LTE 38	QPSK20M	Bottom Side	16	37850	1	0	1	Ant 0	w/o	24.00	23.84	1.04	-0.15	0.648	**0.67**
	LTE 38	QPSK20M	Rear Face	22	37850	50	0	1	Ant 0	w/o	23.00	22.89	1.03	-0.15	0.241	0.25
	LTE 38	QPSK20M	Left Side	0	37850	50	0	1	Ant 0	w/o	23.00	22.89	1.03	0	<0.001	0.00
	LTE 38	QPSK20M	Right Side	0	37850	50	0	1	Ant 0	w/o	23.00	22.89	1.03	0.17	0.076	0.08
	LTE 38	QPSK20M	Top Side	0	37850	50	0	1	Ant 0	w/o	23.00	22.89	1.03	0	<0.001	0.00
	LTE 38	QPSK20M	Bottom Side	16	37850	50	0	1	Ant 0	w/o	23.00	22.89	1.03	0	0.524	0.54
	LTE 38	QPSK20M	Rear Face	0	37850	1	0	1	Ant 0	w/	12.00	11.99	1.00	0.04	0.581	0.58
	LTE 38	QPSK20M	Bottom Side	0	37850	1	0	1	Ant 0	w/	12.00	11.99	1.00	-0.18	0.491	0.49
	LTE 38	QPSK20M	Rear Face	0	37850	50	0	1	Ant 0	w/	12.00	11.86	1.03	-0.15	0.544	0.56
	LTE 38	QPSK20M	Bottom Side	0	37850	50	0	1	Ant 0	w/	12.00	11.86	1.03	0.06	0.465	0.48
	LTE 38	QPSK20M	Bottom Side	16	38000	1	0	1	Ant 0	w/o	24.00	23.65	1.08	-0.08	0.619	0.67
	LTE 38	QPSK20M	Bottom Side	16	38150	1	0	1	Ant 0	w/o	24.00	23.57	1.10	0.12	0.545	0.60
	LTE 38	QPSK20M	Bottom Side	16	37850	1	0	2	Ant 0	w/o	24.00	23.84	1.04	-0.13	0.633	0.66
	LTE 38	QPSK20M	Bottom Side	16	37850	1	0	3	Ant 0	w/o	24.00	23.84	1.04	0.09	0.592	0.62
	LTE 38	QPSK20M	Bottom Side	16	37850	1	0	4	Ant 0	w/o	24.00	23.84	1.04	0.07	0.587	0.61
	LTE 38	QPSK20M	Bottom Side	16	PCC : 37850 SCC : 38048	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/o	24.00	23.61	1.09	0.03	0.611	0.67
	LTE 41	QPSK20M	Rear Face	22	40620	1	0	1	Ant 0	w/o	24.00	23.99	1.00	0.06	0.246	0.25
	LTE 41	QPSK20M	Left Side	0	40620	1	0	1	Ant 0	w/o	24.00	23.99	1.00	0.19	0.071	0.07
	LTE 41	QPSK20M	Right Side	0	40620	1	0	1	Ant 0	w/o	24.00	23.99	1.00	0.02	0.075	0.08
	LTE 41	QPSK20M	Top Side	0	40620	1	0	1	Ant 0	w/o	24.00	23.99	1.00	0	<0.001	0.00
	LTE 41	QPSK20M	Bottom Side	16	40620	1	0	1	Ant 0	w/o	24.00	23.99	1.00	0.13	0.549	0.55
	LTE 41	QPSK20M	Rear Face	22	40620	50	0	1	Ant 0	w/o	23.00	23.07	0.98	-0.06	0.202	0.20
	LTE 41	QPSK20M	Left Side	0	40620	50	0	1	Ant 0	w/o	23.00	23.07	0.98	0	<0.001	0.00
	LTE 41	QPSK20M	Right Side	0	40620	50	0	1	Ant 0	w/o	23.00	23.07	0.98	0	<0.001	0.00
	LTE 41	QPSK20M	Top Side	0	40620	50	0	1	Ant 0	w/o	23.00	23.07	0.98	0	<0.001	0.00
	LTE 41	QPSK20M	Bottom Side	16	40620	50	0	1	Ant 0	w/o	23.00	23.07	0.98	-0.04	0.426	0.42
	LTE 41	QPSK20M	Rear Face	0	39750	1	0	1	Ant 0	w/	11.00	11.00	1.00	0.03	0.256	0.26
	LTE 41	QPSK20M	Bottom Side	0	39750	1	0	1	Ant 0	w/	11.00	11.00	1.00	-0.16	0.176	0.18
	LTE 41	QPSK20M	Rear Face	0	39750	50	0	1	Ant 0	w/	11.00	10.96	1.01	-0.12	0.244	0.25
	LTE 41	QPSK20M	Bottom Side	0	39750	50	0	1	Ant 0	w/	11.00	10.96	1.01	0.01	0.183	0.18
	LTE 41	QPSK20M	Bottom Side	16	39790	1	0	1	Ant 0	w/o	24.00	23.98	1.00	0.01	0.306	0.31
	LTE 41	QPSK20M	Bottom Side	16	39750	1	0	1	Ant 0	w/o	24.00	23.96	1.01	-0.06	0.271	0.27
18	LTE 41	QPSK20M	Bottom Side	16	40185	1	0	1	Ant 0	w/o	24.00	23.90	1.02	-0.09	0.597	**0.61**
	LTE 41	QPSK20M	Bottom Side	16	41055	1	0	1	Ant 0	w/o	24.00	23.65	1.08	0.08	0.291	0.31
	LTE 41	QPSK20M	Bottom Side	16	41490	1	0	1	Ant 0	w/o	24.00	23.54	1.11	0.03	0.097	0.11
	LTE 41	QPSK20M	Bottom Side	16	40185	1	0	2	Ant 0	w/o	24.00	23.90	1.02	-0.05	0.577	0.59
	LTE 41	QPSK20M	Bottom Side	16	40185	1	0	3	Ant 0	w/o	24.00	23.90	1.02	0.12	0.537	0.55
	LTE 41	QPSK20M	Bottom Side	16	40185	1	0	4	Ant 0	w/o	24.00	23.90	1.02	0.15	0.523	0.53
	LTE 41	QPSK20M	Bottom Side	16	PCC : 39750 SCC : 39948	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/o	24.00	23.83	1.04	-0.09	0.573	0.60

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 42	QPSK20M	Rear Face	22	43190	1	0	1	Ant 2	w/o	15.50	15.48	1.00	0	<0.001	0.00
	LTE 42	QPSK20M	Left Side	7	43190	1	0	1	Ant 2	w/o	15.50	15.48	1.00	0.12	0.165	0.17
	LTE 42	QPSK20M	Right Side	0	43190	1	0	1	Ant 2	w/o	15.50	15.48	1.00	0	<0.001	0.00
	LTE 42	QPSK20M	Top Side	6	43190	1	0	1	Ant 2	w/o	15.50	15.48	1.00	0	<0.001	0.00
	LTE 42	QPSK20M	Bottom Side	0	43190	1	0	1	Ant 2	w/o	15.50	15.48	1.00	0	<0.001	0.00
	LTE 42	QPSK20M	Rear Face	22	43190	50	0	1	Ant 2	w/o	15.50	15.42	1.02	0	<0.001	0.00
	LTE 42	QPSK20M	Left Side	7	43190	50	0	1	Ant 2	w/o	15.50	15.42	1.02	0.08	0.125	0.13
	LTE 42	QPSK20M	Right Side	0	43190	50	0	1	Ant 2	w/o	15.50	15.42	1.02	0	<0.001	0.00
	LTE 42	QPSK20M	Top Side	6	43190	50	0	1	Ant 2	w/o	15.50	15.42	1.02	0	<0.001	0.00
	LTE 42	QPSK20M	Bottom Side	0	43190	50	0	1	Ant 2	w/o	15.50	15.42	1.02	0	<0.001	0.00
	LTE 42	QPSK20M	Rear Face	0	43190	1	0	1	Ant 2	w/	8.00	7.97	1.01	0.03	0.029	0.03
	LTE 42	QPSK20M	Left Side	0	43190	1	0	1	Ant 2	w/	8.00	7.97	1.01	0.06	0.179	0.18
	LTE 42	QPSK20M	Top Side	0	43190	1	0	1	Ant 2	w/	8.00	7.97	1.01	0	<0.001	0.00
	LTE 42	QPSK20M	Rear Face	0	43190	50	0	1	Ant 2	w/	8.00	7.94	1.01	0.14	0.023	0.02
	LTE 42	QPSK20M	Left Side	0	43190	50	0	1	Ant 2	w/	8.00	7.94	1.01	-0.13	0.173	0.17
	LTE 42	QPSK20M	Top Side	0	43190	50	0	1	Ant 2	w/	8.00	7.94	1.01	0	<0.001	0.00
19	LTE 42	QPSK20M	Left Side	0	43340	1	0	1	Ant 2	w/	8.00	7.95	1.01	0.07	0.19	**0.19**
	LTE 42	QPSK20M	Left Side	0	43490	1	0	1	Ant 2	w/	8.00	7.96	1.01	-0.15	0.181	0.18
	LTE 42	QPSK20M	Left Side	0	43340	1	0	2	Ant 2	w/	8.00	7.95	1.01	0.05	0.182	0.18
	LTE 42	QPSK20M	Left Side	0	43340	1	0	3	Ant 2	w/	8.00	7.95	1.01	-0.06	0.172	0.17
	LTE 42	QPSK20M	Left Side	0	43340	1	0	4	Ant 2	w/	8.00	7.95	1.01	-0.08	0.166	0.17
	LTE 48	QPSK20M	Rear Face	22	55340	1	0	1	Ant 2	w/o	16.00	15.96	1.01	0	<0.001	0.00
	LTE 48	QPSK20M	Left Side	7	55340	1	0	1	Ant 2	w/o	16.00	15.96	1.01	-0.03	0.132	0.13
	LTE 48	QPSK20M	Right Side	0	55340	1	0	1	Ant 2	w/o	16.00	15.96	1.01	0	<0.001	0.00
	LTE 48	QPSK20M	Top Side	6	55340	1	0	1	Ant 2	w/o	16.00	15.96	1.01	0	<0.001	0.00
	LTE 48	QPSK20M	Bottom Side	0	55340	1	0	1	Ant 2	w/o	16.00	15.96	1.01	0	<0.001	0.00
	LTE 48	QPSK20M	Rear Face	22	55340	50	0	1	Ant 2	w/o	16.00	15.92	1.02	0	<0.001	0.00
	LTE 48	QPSK20M	Left Side	7	55340	50	0	1	Ant 2	w/o	16.00	15.92	1.02	0.05	0.125	0.13
	LTE 48	QPSK20M	Right Side	0	55340	50	0	1	Ant 2	w/o	16.00	15.92	1.02	0	<0.001	0.00
	LTE 48	QPSK20M	Top Side	6	55340	50	0	1	Ant 2	w/o	16.00	15.92	1.02	0	<0.001	0.00
	LTE 48	QPSK20M	Bottom Side	0	55340	50	0	1	Ant 2	w/o	16.00	15.92	1.02	0	<0.001	0.00
	LTE 48	QPSK20M	Rear Face	0	56640	1	0	1	Ant 2	w/	8.50	8.34	1.04	0.15	0.021	0.02
20	LTE 48	QPSK20M	Left Side	0	56640	1	0	1	Ant 2	w/	8.50	8.34	1.04	0.02	0.217	**0.23**
	LTE 48	QPSK20M	Top Side	0	56640	1	0	1	Ant 2	w/	8.50	8.34	1.04	0	<0.001	0.00
	LTE 48	QPSK20M	Rear Face	0	56640	50	0	1	Ant 2	w/	8.50	8.27	1.05	0	<0.001	0.00
	LTE 48	QPSK20M	Left Side	0	56640	50	0	1	Ant 2	w/	8.50	8.27	1.05	-0.01	0.163	0.17
	LTE 48	QPSK20M	Top Side	0	56640	50	0	1	Ant 2	w/	8.50	8.27	1.05	0	<0.001	0.00
	LTE 48	QPSK20M	Left Side	0	55340	1	0	1	Ant 2	w/	8.50	8.07	1.10	-0.13	0.168	0.18
	LTE 48	QPSK20M	Left Side	0	55780	1	0	1	Ant 2	w/	8.50	8.15	1.08	-0.01	0.172	0.19
	LTE 48	QPSK20M	Left Side	0	56210	1	0	1	Ant 2	w/	8.50	8.27	1.05	-0.05	0.173	0.18
	LTE 48	QPSK20M	Left Side	0	56640	1	0	2	Ant 2	w/	8.50	8.34	1.04	0.06	0.213	0.22
	LTE 48	QPSK20M	Left Side	0	56640	1	0	3	Ant 2	w/	8.50	8.34	1.04	0.1	0.15	0.16
	LTE 48	QPSK20M	Left Side	0	56640	1	0	4	Ant 2	w/	8.50	8.34	1.04	0.16	0.08	0.08
	LTE 48	QPSK20M	Left Side	0	PCC : 56442 SCC : 56640	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 2	w/	8.50	8.11	1.09	-0.08	0.203	0.22
	LTE 66	QPSK20M	Rear Face	22	132322	1	0	1	Ant 0	w/o	24.00	23.80	1.05	-0.16	0.130	0.14
	LTE 66	QPSK20M	Left Side	0	132322	1	0	1	Ant 0	w/o	24.00	23.80	1.05	0.13	0.053	0.06
	LTE 66	QPSK20M	Right Side	0	132322	1	0	1	Ant 0	w/o	24.00	23.80	1.05	-0.09	0.232	0.24
	LTE 66	QPSK20M	Top Side	0	132322	1	0	1	Ant 0	w/o	24.00	23.80	1.05	-0.06	0.065	0.07
	LTE 66	QPSK20M	Bottom Side	16	132322	1	0	1	Ant 0	w/o	24.00	23.80	1.05	0.1	0.084	0.09
	LTE 66	QPSK20M	Rear Face	22	132322	50	0	1	Ant 0	w/o	23.00	22.66	1.08	-0.15	0.098	0.11
	LTE 66	QPSK20M	Left Side	0	132322	50	0	1	Ant 0	w/o	23.00	22.66	1.08	0	<0.001	0.00
	LTE 66	QPSK20M	Right Side	0	132322	50	0	1	Ant 0	w/o	23.00	22.66	1.08	-0.11	0.139	0.15
	LTE 66	QPSK20M	Top Side	0	132322	50	0	1	Ant 0	w/o	23.00	22.66	1.08	0	<0.001	0.00
	LTE 66	QPSK20M	Bottom Side	16	132322	50	0	1	Ant 0	w/o	23.00	22.66	1.08	0.01	0.060	0.06
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	1	Ant 0	w/	11.00	10.90	1.02	-0.01	0.286	0.29
	LTE 66	QPSK20M	Bottom Side	0	132322	1	0	1	Ant 0	w/	11.00	10.90	1.02	-0.07	0.070	0.07
	LTE 66	QPSK20M	Rear Face	0	132322	50	0	1	Ant 0	w/	11.00	10.86	1.03	-0.04	0.274	0.28
	LTE 66	QPSK20M	Bottom Side	0	132322	50	0	1	Ant 0	w/	11.00	10.86	1.03	0.19	0.062	0.06
21	LTE 66	QPSK20M	Rear Face	0	132072	1	0	1	Ant 0	w/	11.00	10.86	1.03	-0.17	0.313	**0.32**
	LTE 66	QPSK20M	Rear Face	0	132572	1	0	1	Ant 0	w/	11.00	10.80	1.05	0.09	0.255	0.27
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	2	Ant 0	w/	11.00	10.86	1.03	-0.18	0.301	0.31
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	3	Ant 0	w/	11.00	10.86	1.03	0.08	0.286	0.29
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	4	Ant 0	w/	11.00	10.86	1.03	0.09	0.271	0.28
	LTE 66	QPSK20M	Left Side	0	PCC : 132072 SCC : 132270	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/	11.00	10.76	1.06	-0.05	0.295	0.31

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 66	QPSK20M	Rear Face	22	132072	1	0	1	Ant 2	w/o	21.00	21.00	1.00	0	<0.001	0.00
	LTE 66	QPSK20M	Left Side	7	132072	1	0	1	Ant 2	w/o	21.00	21.00	1.00	-0.09	0.344	0.34
	LTE 66	QPSK20M	Right Side	0	132072	1	0	1	Ant 2	w/o	21.00	21.00	1.00	0	<0.001	0.00
	LTE 66	QPSK20M	Top Side	6	132072	1	0	1	Ant 2	w/o	21.00	21.00	1.00	-0.18	0.220	0.22
	LTE 66	QPSK20M	Bottom Side	0	132072	1	0	1	Ant 2	w/o	21.00	21.00	1.00	0	<0.001	0.00
	LTE 66	QPSK20M	Rear Face	22	132072	50	0	1	Ant 2	w/o	21.00	20.90	1.02	0	<0.001	0.00
	LTE 66	QPSK20M	Left Side	7	132072	50	0	1	Ant 2	w/o	21.00	20.90	1.02	0.14	0.326	0.33
	LTE 66	QPSK20M	Right Side	0	132072	50	0	1	Ant 2	w/o	21.00	20.90	1.02	0	<0.001	0.00
	LTE 66	QPSK20M	Top Side	6	132072	50	0	1	Ant 2	w/o	21.00	20.90	1.02	0.03	0.165	0.17
	LTE 66	QPSK20M	Bottom Side	0	132072	50	0	1	Ant 2	w/o	21.00	20.90	1.02	0	<0.001	0.00
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	1	Ant 2	w/	14.50	14.32	1.04	-0.17	0.075	0.08
22	LTE 66	QPSK20M	Left Side	0	132072	1	0	1	Ant 2	w/	14.50	14.32	1.04	0.17	0.555	**0.58**
	LTE 66	QPSK20M	Top Side	0	132072	1	0	1	Ant 2	w/	14.50	14.32	1.04	0	<0.001	0.00
	LTE 66	QPSK20M	Rear Face	0	132072	50	0	1	Ant 2	w/	14.50	14.28	1.05	0.15	0.065	0.07
	LTE 66	QPSK20M	Left Side	0	132072	50	0	1	Ant 2	w/	14.50	14.28	1.05	0.18	0.500	0.53
	LTE 66	QPSK20M	Top Side	0	132072	50	0	1	Ant 2	w/	14.50	14.28	1.05	0	<0.001	0.00
	LTE 66	QPSK20M	Left Side	0	132322	1	0	1	Ant 2	w/	14.50	14.12	1.09	-0.09	0.532	0.58
	LTE 66	QPSK20M	Left Side	0	132572	1	0	1	Ant 2	w/	14.50	14.21	1.07	-0.04	0.5	0.54
	LTE 66	QPSK20M	Left Side	0	132072	1	0	2	Ant 2	w/	14.50	14.32	1.04	0.18	0.543	0.56
	LTE 66	QPSK20M	Left Side	0	132072	1	0	3	Ant 2	w/	14.50	14.32	1.04	-0.05	0.521	0.54
	LTE 66	QPSK20M	Left Side	0	132072	1	0	4	Ant 2	w/	14.50	14.32	1.04	-0.06	0.501	0.52
	LTE 66	QPSK20M	Left Side	0	PCC : 132072 SCC : 132270	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/	14.50	14.28	1.05	-0.05	0.531	0.56

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	22	372000	1	1	1	Ant 0	w/o	24.00	23.89	1.03	0.08	0.076	0.08
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	372000	1	1	1	Ant 0	w/o	24.00	23.89	1.03	-0.04	0.067	0.07
	5GNR-n2	DFT-S_15 KHz QPSK20M	Right Side	0	372000	1	1	1	Ant 0	w/o	24.00	23.89	1.03	0.06	0.056	0.06
	5GNR-n2	DFT-S_15 KHz QPSK20M	Top Side	0	372000	1	1	1	Ant 0	w/o	24.00	23.89	1.03	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Bottom Side	16	372000	1	1	1	Ant 0	w/o	24.00	23.89	1.03	-0.15	0.053	0.05
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	22	372000	50	25	1	Ant 0	w/o	24.00	23.83	1.04	-0.14	0.065	0.07
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	372000	50	25	1	Ant 0	w/o	24.00	23.83	1.04	0.04	0.064	0.07
	5GNR-n2	DFT-S_15 KHz QPSK20M	Right Side	0	372000	50	25	1	Ant 0	w/o	24.00	23.83	1.04	0.04	0.048	0.05
	5GNR-n2	DFT-S_15 KHz QPSK20M	Top Side	0	372000	50	25	1	Ant 0	w/o	24.00	23.83	1.04	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Bottom Side	16	372000	50	25	1	Ant 0	w/o	24.00	23.83	1.04	-0.12	0.051	0.05
23	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	372000	1	1	1	Ant 0	w/	13.50	13.29	1.05	0.11	0.391	**0.41**
	5GNR-n2	DFT-S_15 KHz QPSK20M	Bottom Side	0	372000	1	1	1	Ant 0	w/	13.50	13.29	1.05	0.14	0.071	0.07
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	372000	50	25	1	Ant 0	w/	13.50	13.12	1.09	-0.03	0.306	0.33
	5GNR-n2	DFT-S_15 KHz QPSK20M	Bottom Side	0	372000	50	25	1	Ant 0	w/	13.50	13.12	1.09	0.16	0.067	0.07
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	376000	1	1	1	Ant 0	w/	13.50	13.16	1.08	0.01	0.308	0.33
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	380000	1	1	1	Ant 0	w/	13.50	13.15	1.08	0.15	0.306	0.33
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	372000	1	1	2	Ant 0	w/	13.50	13.29	1.05	0.15	0.374	0.39
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	372000	1	1	3	Ant 0	w/	13.50	13.29	1.05	0.18	0.377	0.40
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	372000	1	1	4	Ant 0	w/	13.50	13.29	1.05	0.17	0.369	0.39

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	22	376000	1	1	1	Ant 2	w/o	20.00	19.93	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	7	376000	1	1	1	Ant 2	w/o	20.00	19.93	1.02	0.11	0.295	0.30
	5GNR-n2	DFT-S_15 KHz QPSK20M	Right Side	0	376000	1	1	1	Ant 2	w/o	20.00	19.93	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Top Side	6	376000	1	1	1	Ant 2	w/o	20.00	19.93	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Bottom Side	0	376000	1	1	1	Ant 2	w/o	20.00	19.93	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	22	376000	50	25	1	Ant 2	w/o	20.00	19.90	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	7	376000	50	25	1	Ant 2	w/o	20.00	19.90	1.02	-0.18	0.275	0.28
	5GNR-n2	DFT-S_15 KHz QPSK20M	Right Side	0	376000	50	25	1	Ant 2	w/o	20.00	19.90	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Top Side	6	376000	50	25	1	Ant 2	w/o	20.00	19.90	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Bottom Side	0	376000	50	25	1	Ant 2	w/o	20.00	19.90	1.02	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	380000	1	1	1	Ant 2	w/	13.50	13.47	1.01	0.15	0.069	0.07
24	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	380000	1	1	1	Ant 2	w/	13.50	13.47	1.01	0.15	0.461	**0.47**
	5GNR-n2	DFT-S_15 KHz QPSK20M	Top Side	0	380000	1	1	1	Ant 2	w/	13.50	13.47	1.01	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Rear Face	0	380000	50	25	1	Ant 2	w/	13.50	13.30	1.05	0.18	0.058	0.06
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	380000	50	25	1	Ant 2	w/	13.50	13.30	1.05	-0.18	0.420	0.44
	5GNR-n2	DFT-S_15 KHz QPSK20M	Top Side	0	380000	50	25	1	Ant 2	w/	13.50	13.30	1.05	0	<0.001	0.00
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	372000	1	1	1	Ant 2	w/	13.50	13.38	1.03	-0.1	0.451	0.46
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	376000	1	1	1	Ant 2	w/	13.50	13.41	1.02	-0.14	0.425	0.43
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	380000	1	1	2	Ant 2	w/	13.50	13.47	1.01	0.12	0.453	0.46
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	380000	1	1	3	Ant 2	w/	13.50	13.47	1.01	-0.03	0.447	0.45
	5GNR-n2	DFT-S_15 KHz QPSK20M	Left Side	0	380000	1	1	4	Ant 2	w/	13.50	13.47	1.01	-0.08	0.429	0.43

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	22	166800	1	1	1	Ant 0	w/o	24.00	23.79	1.05	0.01	0.059	0.06
	5GNR-n5	DFT-S_15 KHz QPSK20M	Left Side	0	166800	1	1	1	Ant 0	w/o	24.00	23.79	1.05	0	<0.001	0.00
	5GNR-n5	DFT-S_15 KHz QPSK20M	Right Side	0	166800	1	1	1	Ant 0	w/o	24.00	23.79	1.05	0	<0.001	0.00
	5GNR-n5	DFT-S_15 KHz QPSK20M	Top Side	0	166800	1	1	1	Ant 0	w/o	24.00	23.79	1.05	0	<0.001	0.00
	5GNR-n5	DFT-S_15 KHz QPSK20M	Bottom Side	16	166800	1	1	1	Ant 0	w/o	24.00	23.79	1.05	0.05	0.055	0.06
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	22	166800	50	25	1	Ant 0	w/o	24.00	23.77	1.05	0.04	0.049	0.05
	5GNR-n5	DFT-S_15 KHz QPSK20M	Left Side	0	166800	50	25	1	Ant 0	w/o	24.00	23.77	1.05	0	<0.001	0.00
	5GNR-n5	DFT-S_15 KHz QPSK20M	Right Side	0	166800	50	25	1	Ant 0	w/o	24.00	23.77	1.05	0	<0.001	0.00
	5GNR-n5	DFT-S_15 KHz QPSK20M	Top Side	0	166800	50	25	1	Ant 0	w/o	24.00	23.77	1.05	0	<0.001	0.00
	5GNR-n5	DFT-S_15 KHz QPSK20M	Bottom Side	16	166800	50	25	1	Ant 0	w/o	24.00	23.77	1.05	-0.06	0.052	0.05
25	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	167300	1	1	1	Ant 0	w/	15.50	15.47	1.01	-0.16	0.278	**0.28**
	5GNR-n5	DFT-S_15 KHz QPSK20M	Bottom Side	0	167300	1	1	1	Ant 0	w/	15.50	15.47	1.01	-0.17	0.133	0.13
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	167300	50	25	1	Ant 0	w/	15.50	15.30	1.05	-0.19	0.258	0.27
	5GNR-n5	DFT-S_15 KHz QPSK20M	Bottom Side	0	167300	50	25	1	Ant 0	w/	15.50	15.30	1.05	-0.18	0.125	0.13
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	166800	1	1	1	Ant 0	w/	15.50	15.41	1.02	0.16	0.262	0.27
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	167800	1	1	1	Ant 0	w/	15.50	15.44	1.01	-0.12	0.258	0.26
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	167300	1	1	2	Ant 0	w/	15.50	15.47	1.01	-0.13	0.255	0.26
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	167300	1	1	3	Ant 0	w/	15.50	15.47	1.01	0.14	0.228	0.23
	5GNR-n5	DFT-S_15 KHz QPSK20M	Rear Face	0	167300	1	1	4	Ant 0	w/	15.50	15.47	1.01	0.13	0.219	0.22

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Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n7	DFT-S_15 KHz QPSK20M	Rear Face	22	507000	1	1	1	Ant 2	w/o	20.00	20.00	1.00	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	7	507000	1	1	1	Ant 2	w/o	20.00	20.00	1.00	0.02	0.487	0.49
	5GNR-n7	DFT-S_15 KHz QPSK20M	Right Side	0	507000	1	1	1	Ant 2	w/o	20.00	20.00	1.00	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Top Side	6	507000	1	1	1	Ant 2	w/o	20.00	20.00	1.00	0.01	0.192	0.19
	5GNR-n7	DFT-S_15 KHz QPSK20M	Bottom Side	0	507000	1	1	1	Ant 2	w/o	20.00	20.00	1.00	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Rear Face	22	507000	50	25	1	Ant 2	w/o	20.00	19.88	1.03	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	7	507000	50	25	1	Ant 2	w/o	20.00	19.88	1.03	-0.19	0.478	0.49
	5GNR-n7	DFT-S_15 KHz QPSK20M	Right Side	0	507000	50	25	1	Ant 2	w/o	20.00	19.88	1.03	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Top Side	6	507000	50	25	1	Ant 2	w/o	20.00	19.88	1.03	0.04	0.183	0.19
	5GNR-n7	DFT-S_15 KHz QPSK20M	Bottom Side	0	507000	50	25	1	Ant 2	w/o	20.00	19.88	1.03	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Rear Face	0	512000	1	1	1	Ant 2	w/	12.00	12.00	1.00	0	<0.001	0.00
26	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	512000	1	1	1	Ant 2	w/	12.00	12.00	1.00	0.14	0.653	**0.65**
	5GNR-n7	DFT-S_15 KHz QPSK20M	Top Side	0	512000	1	1	1	Ant 2	w/	12.00	12.00	1.00	0.18	0.196	0.20
	5GNR-n7	DFT-S_15 KHz QPSK20M	Rear Face	0	512000	50	25	1	Ant 2	w/	12.00	11.90	1.02	0	<0.001	0.00
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	512000	50	25	1	Ant 2	w/	12.00	11.90	1.02	-0.01	0.609	0.62
	5GNR-n7	DFT-S_15 KHz QPSK20M	Top Side	0	512000	50	25	1	Ant 2	w/	12.00	11.90	1.02	0.09	0.183	0.19
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	502000	1	1	1	Ant 2	w/	12.00	11.93	1.02	-0.07	0.565	0.58
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	507000	1	1	1	Ant 2	w/	12.00	11.97	1.01	0.04	0.581	0.59
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	512000	1	1	2	Ant 2	w/	12.00	12.00	1.00	0.16	0.641	0.64
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	512000	1	1	3	Ant 2	w/	12.00	12.00	1.00	-0.12	0.598	0.60
	5GNR-n7	DFT-S_15 KHz QPSK20M	Left Side	0	512000	1	1	4	Ant 2	w/	12.00	12.00	1.00	-0.15	0.581	0.58

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	22	141500	1	1	1	Ant 0	w/o	24.00	23.46	1.13	-0.16	0.074	0.08
	5GNR-n12	DFT-S_15 KHz QPSK15M	Left Side	0	141500	1	1	1	Ant 0	w/o	24.00	23.46	1.13	0	<0.001	0.00
	5GNR-n12	DFT-S_15 KHz QPSK15M	Right Side	0	141500	1	1	1	Ant 0	w/o	24.00	23.46	1.13	-0.06	0.174	0.20
	5GNR-n12	DFT-S_15 KHz QPSK15M	Top Side	0	141500	1	1	1	Ant 0	w/o	24.00	23.46	1.13	0	<0.001	0.00
	5GNR-n12	DFT-S_15 KHz QPSK15M	Bottom Side	16	141500	1	1	1	Ant 0	w/o	24.00	23.46	1.13	0	<0.001	0.00
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	22	141500	36	18	1	Ant 0	w/o	24.00	23.29	1.18	0.12	0.066	0.08
	5GNR-n12	DFT-S_15 KHz QPSK15M	Left Side	0	141500	36	18	1	Ant 0	w/o	24.00	23.29	1.18	0	<0.001	0.00
	5GNR-n12	DFT-S_15 KHz QPSK15M	Right Side	0	141500	36	18	1	Ant 0	w/o	24.00	23.29	1.18	-0.12	0.169	0.20
	5GNR-n12	DFT-S_15 KHz QPSK15M	Top Side	0	141500	36	18	1	Ant 0	w/o	24.00	23.29	1.18	0	<0.001	0.00
	5GNR-n12	DFT-S_15 KHz QPSK15M	Bottom Side	16	141500	36	18	1	Ant 0	w/o	24.00	23.29	1.18	0	<0.001	0.00
27	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141300	1	1	1	Ant 0	w/	15.00	14.81	1.04	-0.08	0.312	**0.32**
	5GNR-n12	DFT-S_15 KHz QPSK15M	Bottom Side	0	141300	1	1	1	Ant 0	w/	15.00	14.81	1.04	-0.02	0.148	0.15
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141300	36	18	1	Ant 0	w/	15.00	14.64	1.09	-0.04	0.293	0.32
	5GNR-n12	DFT-S_15 KHz QPSK15M	Bottom Side	0	141300	36	18	1	Ant 0	w/	15.00	14.64	1.09	-0.01	0.134	0.15
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141500	1	1	1	Ant 0	w/	15.00	14.78	1.05	0.07	0.275	0.29
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141700	1	1	1	Ant 0	w/	15.00	14.75	1.06	0.17	0.265	0.28
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141300	1	1	2	Ant 0	w/	15.00	14.81	1.04	-0.03	0.288	0.30
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141300	1	1	3	Ant 0	w/	15.00	14.81	1.04	-0.07	0.301	0.31
	5GNR-n12	DFT-S_15 KHz QPSK15M	Rear Face	0	141300	1	1	4	Ant 0	w/	15.00	14.81	1.04	-0.08	0.255	0.27

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n41	DFT-S_30K Hz QPSK100M	Rear Face	22	513900	1	1	1	Ant 2	w/o	21.00	20.99	1.00	0	<0.001	0.00
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	7	513900	1	1	1	Ant 2	w/o	21.00	20.99	1.00	0.02	0.404	0.40
	5GNR-n41	DFT-S_30K Hz QPSK100M	Right Side	0	513900	1	1	1	Ant 2	w/o	21.00	20.99	1.00	0	<0.001	0.00
	5GNR-n41	DFT-S_30K Hz QPSK100M	Top Side	6	513900	1	1	1	Ant 2	w/o	21.00	20.99	1.00	0.14	0.165	0.17
	5GNR-n41	DFT-S_30K Hz QPSK100M	Bottom Side	0	513900	1	1	1	Ant 2	w/o	21.00	20.99	1.00	0	<0.001	0.00
	5GNR-n41	DFT-S_30K Hz QPSK100M	Rear Face	22	513900	135	67	1	Ant 2	w/o	21.00	20.94	1.01	0	<0.001	0.00
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	7	513900	135	67	1	Ant 2	w/o	21.00	20.94	1.01	0.17	0.334	0.34
	5GNR-n41	DFT-S_30K Hz QPSK100M	Right Side	0	513900	135	67	1	Ant 2	w/o	21.00	20.94	1.01	0	<0.001	0.00
	5GNR-n41	DFT-S_30K Hz QPSK100M	Top Side	6	513900	135	67	1	Ant 2	w/o	21.00	20.94	1.01	-0.15	0.155	0.16
	5GNR-n41	DFT-S_30K Hz QPSK100M	Bottom Side	0	513900	135	67	1	Ant 2	w/o	21.00	20.94	1.01	0	<0.001	0.00
	5GNR-n41	DFT-S_30K Hz QPSK100M	Rear Face	0	518598	1	1	1	Ant 2	w/	12.00	11.96	1.01	-0.14	0.036	0.04
28	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	518598	1	1	1	Ant 2	w/	12.00	11.96	1.01	0.06	0.527	**0.53**
	5GNR-n41	DFT-S_30K Hz QPSK100M	Top Side	0	518598	1	1	1	Ant 2	w/	12.00	11.96	1.01	-0.19	0.128	0.13
	5GNR-n41	DFT-S_30K Hz QPSK100M	Rear Face	0	518598	135	67	1	Ant 2	w/	12.00	11.89	1.03	0.18	0.029	0.03
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	518598	135	67	1	Ant 2	w/	12.00	11.89	1.03	-0.12	0.512	0.53
	5GNR-n41	DFT-S_30K Hz QPSK100M	Top Side	0	518598	135	67	1	Ant 2	w/	12.00	11.89	1.03	-0.12	0.120	0.12
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	509202	1	1	1	Ant 2	w/	12.00	11.85	1.04	-0.04	0.513	0.53
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	513900	1	1	1	Ant 2	w/	12.00	11.89	1.03	-0.09	0.496	0.51
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	523299	1	1	1	Ant 2	w/	12.00	11.92	1.02	-0.11	0.512	0.52
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	528000	1	1	1	Ant 2	w/	12.00	11.90	1.02	0.19	0.523	0.53
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	518598	1	1	2	Ant 2	w/	12.00	11.96	1.01	0.08	0.513	0.52
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	518598	1	1	3	Ant 2	w/	12.00	11.96	1.01	0.11	0.513	0.52
	5GNR-n41	DFT-S_30K Hz QPSK100M	Left Side	0	518598	1	1	4	Ant 2	w/	12.00	11.96	1.01	0.15	0.507	0.51

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	22	349000	1	1	1	Ant 0	w/o	24.00	24.00	1.00	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	1	1	1	Ant 0	w/o	24.00	24.00	1.00	-0.03	0.084	0.08
	5GNR-n66	DFT-S_15K Hz QPSK20M	Right Side	0	349000	1	1	1	Ant 0	w/o	24.00	24.00	1.00	-0.18	0.361	0.36
	5GNR-n66	DFT-S_15K Hz QPSK20M	Top Side	0	349000	1	1	1	Ant 0	w/o	24.00	24.00	1.00	-0.11	0.047	0.05
	5GNR-n66	DFT-S_15K Hz QPSK20M	Bottom Side	16	349000	1	1	1	Ant 0	w/o	24.00	24.00	1.00	0.05	0.112	0.11
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	22	349000	50	25	1	Ant 0	w/o	24.00	23.88	1.03	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	50	25	1	Ant 0	w/o	24.00	23.88	1.03	0.07	0.078	0.08
	5GNR-n66	DFT-S_15K Hz QPSK20M	Right Side	0	349000	50	25	1	Ant 0	w/o	24.00	23.88	1.03	0.02	0.351	0.36
	5GNR-n66	DFT-S_15K Hz QPSK20M	Top Side	0	349000	50	25	1	Ant 0	w/o	24.00	23.88	1.03	0.19	0.044	0.05
	5GNR-n66	DFT-S_15K Hz QPSK20M	Bottom Side	16	349000	50	25	1	Ant 0	w/o	24.00	23.88	1.03	-0.08	0.089	0.09
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	349000	1	1	1	Ant 0	w/	13.00	12.98	1.00	0.04	0.381	0.38
	5GNR-n66	DFT-S_15K Hz QPSK20M	Bottom Side	0	349000	1	1	1	Ant 0	w/	13.00	12.98	1.00	0.08	0.062	0.06
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	349000	50	25	1	Ant 0	w/	13.00	12.84	1.04	0.12	0.368	0.38
	5GNR-n66	DFT-S_15K Hz QPSK20M	Bottom Side	0	349000	50	25	1	Ant 0	w/	13.00	12.84	1.04	-0.02	0.057	0.06
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	344000	1	1	1	Ant 0	w/	13.00	12.93	1.02	0.04	0.367	0.37
29	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	354000	1	1	1	Ant 0	w/	13.00	11.90	1.29	0.01	0.389	**0.50**
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	354000	1	1	2	Ant 0	w/	13.00	11.90	1.29	0.05	0.374	0.48
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	354000	1	1	3	Ant 0	w/	13.00	11.90	1.29	0.04	0.371	0.48
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	354000	1	1	4	Ant 0	w/	13.00	11.90	1.29	0.1	0.365	0.47

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	22	349000	1	1	1	Ant 2	w/o	19.00	18.88	1.03	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	7	349000	1	1	1	Ant 2	w/o	19.00	18.88	1.03	-0.09	0.222	0.23
	5GNR-n66	DFT-S_15K Hz QPSK20M	Right Side	0	349000	1	1	1	Ant 2	w/o	19.00	18.88	1.03	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Top Side	6	349000	1	1	1	Ant 2	w/o	19.00	18.88	1.03	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Bottom Side	0	349000	1	1	1	Ant 2	w/o	19.00	18.88	1.03	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	22	349000	50	25	1	Ant 2	w/o	19.00	18.70	1.07	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	7	349000	50	25	1	Ant 2	w/o	19.00	18.70	1.07	0.15	0.213	0.23
	5GNR-n66	DFT-S_15K Hz QPSK20M	Right Side	0	349000	50	25	1	Ant 2	w/o	19.00	18.70	1.07	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Top Side	6	349000	50	25	1	Ant 2	w/o	19.00	18.70	1.07	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Bottom Side	0	349000	50	25	1	Ant 2	w/o	19.00	18.70	1.07	0	<0.001	0.00
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	349000	1	1	1	Ant 2	w/	13.00	12.85	1.04	-0.03	0.056	0.06
30	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	1	1	1	Ant 2	w/	13.00	12.85	1.04	0.08	0.364	**0.38**
	5GNR-n66	DFT-S_15K Hz QPSK20M	Top Side	0	349000	1	1	1	Ant 2	w/	13.00	12.85	1.04	0.12	0.048	0.05
	5GNR-n66	DFT-S_15K Hz QPSK20M	Rear Face	0	349000	50	25	1	Ant 2	w/	13.00	12.70	1.07	0.09	0.051	0.05
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	50	25	1	Ant 2	w/	13.00	12.70	1.07	-0.07	0.041	0.04
	5GNR-n66	DFT-S_15K Hz QPSK20M	Top Side	0	349000	50	25	1	Ant 2	w/	13.00	12.70	1.07	-0.16	0.045	0.05
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	344000	1	1	1	Ant 2	w/	13.00	12.81	1.04	-0.16	0.341	0.35
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	354000	1	1	1	Ant 2	w/	13.00	12.77	1.05	-0.02	0.311	0.33
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	1	1	2	Ant 2	w/	13.00	12.85	1.04	0.1	0.353	0.37
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	1	1	3	Ant 2	w/	13.00	12.85	1.04	0.17	0.304	0.32
	5GNR-n66	DFT-S_15K Hz QPSK20M	Left Side	0	349000	1	1	4	Ant 2	w/	13.00	12.85	1.04	0.16	0.289	0.30

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WLAN2.4G	802.11b	Rear Face	0	1	1	Ant 0	w/o	99.30	1.01	18.50	18.49	1.00	0.02	0.093	0.09
	WLAN2.4G	802.11b	Left Side	0	1	1	Ant 0	w/o	99.30	1.01	18.50	18.49	1.00	0.16	0.137	0.14
	WLAN2.4G	802.11b	Right Side	0	1	1	Ant 0	w/o	99.30	1.01	18.50	18.49	1.00	0.02	0.094	0.09
	WLAN2.4G	802.11b	Top Side	2	1	1	Ant 0	w/o	99.30	1.01	18.50	18.49	1.00	0.11	0.377	0.38
	WLAN2.4G	802.11b	Bottom Side	0	1	1	Ant 0	w/o	99.30	1.01	18.50	18.49	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Rear Face	0	1	1	Ant 1	w/o	100.00	1.00	18.50	18.48	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Left Side	0	1	1	Ant 1	w/o	100.00	1.00	18.50	18.48	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Right Side	0	1	1	Ant 1	w/o	100.00	1.00	18.50	18.48	1.00	0.02	0.090	0.09
	WLAN2.4G	802.11b	Top Side	2	1	1	Ant 1	w/o	100.00	1.00	18.50	18.48	1.00	0.11	0.171	0.17
	WLAN2.4G	802.11b	Bottom Side	0	1	1	Ant 1	w/o	100.00	1.00	18.50	18.48	1.00	0	<0.001	0.00
	WLAN2.4G	802.11n HT40	Rear Face	0	3	1	Ant 0+1	w/o	100.00	1.00	21.50	21.40	1.02	0.06	0.102	0.10
	WLAN2.4G	802.11n HT40	Left Side	0	3	1	Ant 0+1	w/o	100.00	1.00	21.50	21.40	1.02	0.14	0.193	0.20
	WLAN2.4G	802.11n HT40	Right Side	0	3	1	Ant 0+1	w/o	100.00	1.00	21.50	21.40	1.02	0.17	0.109	0.11
	WLAN2.4G	802.11n HT40	Top Side	2	3	1	Ant 0+1	w/o	100.00	1.00	21.50	21.40	1.02	0.03	0.454	0.46
	WLAN2.4G	802.11n HT40	Bottom Side	0	3	1	Ant 0+1	w/o	100.00	1.00	21.50	21.40	1.02	0	<0.001	0.00
	WLAN2.4G	802.11b	Top Side	0	1	1	Ant 0	w/	99.30	1.01	18.00	17.95	1.01	0.02	0.623	0.64
	WLAN2.4G	802.11b	Top Side	0	1	1	Ant 1	w/	100.00	1.00	18.00	17.92	1.02	-0.16	0.380	0.39
31	WLAN2.4G	802.11n HT40	Top Side	0	3	1	Ant 0+1	w/	100.00	1.00	21.00	20.91	1.02	0.02	0.653	**0.67**
	WLAN2.4G	802.11n HT40	Top Side	0	6	1	Ant 0+1	w/	100.00	1.00	21.00	20.82	1.04	0.05	0.559	0.58
	WLAN2.4G	802.11n HT40	Top Side	0	9	1	Ant 0+1	w/	100.00	1.00	21.00	20.88	1.03	-0.11	0.624	0.64
	WLAN2.4G	802.11n HT40	Top Side	0	10	1	Ant 0+1	w/	100.00	1.00	21.00	20.87	1.03	0.02	0.403	0.42
	WLAN2.4G	802.11n HT40	Top Side	0	11	1	Ant 0+1	w/	100.00	1.00	21.00	20.86	1.03	0.01	0.120	0.12
	WLAN2.4G	802.11n HT40	Top Side	0	3	2	Ant 0+1	w/	100.00	1.00	21.00	20.91	1.02	0.05	0.580	0.59
	WLAN2.4G	802.11n HT40	Top Side	0	3	3	Ant 0+1	w/	100.00	1.00	21.00	20.91	1.02	0.16	0.630	0.64
	WLAN2.4G	802.11n HT40	Top Side	0	3	4	Ant 0+1	w/	100.00	1.00	21.00	20.91	1.02	0.18	0.644	0.66
	WLAN5.3G	802.11ac VHT160	Rear Face	0	50	1	Ant 0	w/o	97.50	1.03	17.00	16.82	1.04	0.16	0.139	0.15
	WLAN5.3G	802.11ac VHT160	Left Side	0	50	1	Ant 0	w/o	97.50	1.03	17.00	16.82	1.04	0.02	0.168	0.18
	WLAN5.3G	802.11ac VHT160	Right Side	0	50	1	Ant 0	w/o	97.50	1.03	17.00	16.82	1.04	-0.16	0.042	0.04
	WLAN5.3G	802.11ac VHT160	Top Side	2	50	1	Ant 0	w/o	97.50	1.03	17.00	16.82	1.04	0.02	0.341	0.37
	WLAN5.3G	802.11ac VHT160	Bottom Side	0	50	1	Ant 0	w/o	97.50	1.03	17.00	16.82	1.04	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Rear Face	0	50	1	Ant 1	w/o	99.40	1.01	17.00	16.98	1.00	0.02	0.14	0.14
	WLAN5.3G	802.11ac VHT160	Left Side	0	50	1	Ant 1	w/o	99.40	1.01	17.00	16.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Right Side	0	50	1	Ant 1	w/o	99.40	1.01	17.00	16.98	1.00	0.02	0.076	0.08
	WLAN5.3G	802.11ac VHT160	Top Side	2	50	1	Ant 1	w/o	99.40	1.01	17.00	16.98	1.00	-0.17	0.331	0.33
	WLAN5.3G	802.11ac VHT160	Bottom Side	0	50	1	Ant 1	w/o	99.40	1.01	17.00	16.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Rear Face	0	50	1	Ant 0+1	w/o	99.40	1.01	20.00	18.15	1.53	0.05	0.131	0.20
	WLAN5.3G	802.11ac VHT160	Left Side	0	50	1	Ant 0+1	w/o	99.40	1.01	20.00	18.15	1.53	0.17	0.133	0.21
	WLAN5.3G	802.11ac VHT160	Right Side	0	50	1	Ant 0+1	w/o	99.40	1.01	20.00	18.15	1.53	0.02	0.103	0.16
	WLAN5.3G	802.11ac VHT160	Top Side	2	50	1	Ant 0+1	w/o	99.40	1.01	20.00	18.15	1.53	-0.15	0.395	0.61
	WLAN5.3G	802.11ac VHT160	Bottom Side	0	50	1	Ant 0+1	w/o	99.40	1.01	20.00	18.15	1.53	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Top Side	0	50	1	Ant 0	w/	97.50	1.03	16.50	16.47	1.01	0.02	0.35	0.36
	WLAN5.3G	802.11ac VHT160	Top Side	0	50	1	Ant 1	w/	99.40	1.01	16.50	16.40	1.02	0.01	0.415	0.43
32	WLAN5.3G	802.11ac VHT160	Top Side	0	50	1	Ant 0+1	w/	99.40	1.01	19.50	17.77	1.49	0.06	0.524	**0.79**
	WLAN5.3G	802.11ac VHT160	Top Side	0	50	2	Ant 0+1	w/	99.40	1.01	19.50	17.77	1.49	0.08	0.502	0.76
	WLAN5.3G	802.11ac VHT160	Top Side	0	50	3	Ant 0+1	w/	99.40	1.01	19.50	17.77	1.49	0.03	0.513	0.77
	WLAN5.3G	802.11ac VHT160	Top Side	0	50	4	Ant 0+1	w/	99.40	1.01	19.50	17.77	1.49	0.06	0.510	0.77

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	1	Ant 0	w/o	97.50	1.03	14.00	13.41	1.15	0.04	0.279	0.33
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	1	Ant 0	w/o	97.50	1.03	14.00	13.41	1.15	0.07	0.074	0.09
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	1	Ant 0	w/o	97.50	1.03	14.00	13.41	1.15	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Top Side	2	114	1	Ant 0	w/o	97.50	1.03	14.00	13.41	1.15	0.09	0.585	0.69
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	1	Ant 0	w/o	97.50	1.03	14.00	13.41	1.15	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	1	Ant 1	w/o	99.40	1.01	14.00	13.44	1.14	-0.16	0.321	0.37
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	1	Ant 1	w/o	99.40	1.01	14.00	13.44	1.14	0.13	0.103	0.12
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	1	Ant 1	w/o	99.40	1.01	14.00	13.44	1.14	-0.02	0.123	0.14
	WLAN5.6G	802.11ac VHT160	Top Side	2	114	1	Ant 1	w/o	99.40	1.01	14.00	13.44	1.14	-0.12	0.643	0.74
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	1	Ant 1	w/o	99.40	1.01	14.00	13.44	1.14	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	1	Ant 0+1	w/o	99.40	1.01	17.00	16.55	1.11	0.02	0.319	0.36
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	1	Ant 0+1	w/o	99.40	1.01	17.00	16.55	1.11	0.09	0.151	0.17
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	1	Ant 0+1	w/o	99.40	1.01	17.00	16.55	1.11	-0.06	0.142	0.16
	WLAN5.6G	802.11ac VHT160	Top Side	2	114	1	Ant 0+1	w/o	99.40	1.01	17.00	16.55	1.11	-0.05	0.913	1.02
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	1	Ant 0+1	w/o	99.40	1.01	17.00	16.55	1.11	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 0	w/	97.50	1.03	13.50	13.41	1.02	-0.18	0.734	0.77
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 1	w/	99.40	1.01	13.50	13.44	1.01	-0.03	0.887	0.90
33	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 0+1	w/	99.40	1.01	16.50	16.39	1.03	-0.02	1.10	**1.14**
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	2	Ant 0+1	w/	99.40	1.01	16.50	16.39	1.03	-0.05	0.987	1.03
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	3	Ant 0+1	w/	99.40	1.01	16.50	16.39	1.03	0.07	1.09	1.13
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	3	Ant 0+1	w/	99.40	1.01	16.50	16.39	1.03	0.07	1.01	1.05
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	4	Ant 0+1	w/	99.40	1.01	16.50	16.39	1.03	0.08	0.986	1.03

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	1	Ant 0	w/o	97.80	1.02	14.00	13.94	1.01	0.11	0.341	0.35
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	1	Ant 0	w/o	97.80	1.02	14.00	13.94	1.01	-0.07	0.211	0.22
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	1	Ant 0	w/o	97.80	1.02	14.00	13.94	1.01	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Top Side	2	155	1	Ant 0	w/o	97.80	1.02	14.00	13.94	1.01	0.09	0.585	0.60
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	1	Ant 0	w/o	97.80	1.02	14.00	13.94	1.01	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	1	Ant 1	w/o	97.80	1.02	14.00	13.97	1.01	0.11	0.581	0.60
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	1	Ant 1	w/o	97.80	1.02	14.00	13.97	1.01	0.03	0.185	0.19
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	1	Ant 1	w/o	97.80	1.02	14.00	13.97	1.01	-0.1	0.256	0.26
	WLAN5.8G	802.11ac VHT80	Top Side	2	155	1	Ant 1	w/o	97.80	1.02	14.00	13.97	1.01	0.14	0.938	0.97
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	1	Ant 1	w/o	97.80	1.02	14.00	13.97	1.01	0.17	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	1	Ant 0+1	w/o	97.80	1.02	17.00	16.93	1.02	0.13	0.385	0.40
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	1	Ant 0+1	w/o	97.80	1.02	17.00	16.93	1.02	0.13	0.219	0.23
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	1	Ant 0+1	w/o	97.80	1.02	17.00	16.93	1.02	0.16	0.202	0.21
	WLAN5.8G	802.11ac VHT80	Top Side	2	155	1	Ant 0+1	w/o	97.80	1.02	17.00	16.93	1.02	-0.07	0.939	0.98
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	1	Ant 0+1	w/o	97.80	1.02	17.00	16.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	1	Ant 0	w/	97.80	1.02	13.50	13.42	1.02	0.19	0.866	0.90
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	1	Ant 1	w/	97.80	1.02	13.50	13.37	1.03	0.04	1.03	1.08
34	WLAN5.8G	802.11ac VHT80	Top Side	0	155	1	Ant 0+1	w/	97.80	1.02	16.50	16.42	1.02	-0.18	1.12	**1.17**
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	2	Ant 0+1	w/	97.80	1.02	16.50	16.42	1.02	-0.15	0.950	0.99
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	3	Ant 0+1	w/	97.80	1.02	16.50	16.42	1.02	0.06	1.08	1.12
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	3	Ant 0+1	w/	97.80	1.02	16.50	16.42	1.02	0.06	1.06	1.10
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	4	Ant 0+1	w/	97.80	1.02	16.50	16.42	1.02	0.08	1.02	1.06
	BT	BDR	Rear Face	0	0	1	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0	<0.001	0.00
	BT	BDR	Left Side	0	0	1	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0	<0.001	0.00
	BT	BDR	Right Side	0	0	1	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0	<0.001	0.00
35	BT	BDR	Top Side	0	0	1	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0.11	0.055	**0.08**
	BT	BDR	Bottom Side	0	0	1	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0	<0.001	0.00
	BT	BDR	Top Side	0	39	1	Ant 1	w/o	77.10	1.30	11.50	10.64	1.22	0.03	0.038	0.06
	BT	BDR	Top Side	0	78	1	Ant 1	w/o	77.10	1.30	11.50	10.64	1.22	0	<0.001	0.00
	BT	BDR	Top Side	0	0	2	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0.08	0.043	0.06
	BT	BDR	Top Side	0	0	3	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0.15	0.047	0.07
	BT	BDR	Top Side	0	0	4	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0.18	0.041	0.06

Note: The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

Laptop Mode

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WCDMA II	RMC12.2K	Bottom	0	9538	1	Ant 0	w/	16.50	16.38	1.03	-0.13	0.583	0.60
	WCDMA II	RMC12.2K	Bottom	0	9262	1	Ant 0	w/	16.50	16.32	1.04	0.06	0.505	0.53
36	WCDMA II	RMC12.2K	Bottom	0	9400	1	Ant 0	w/	16.50	16.35	1.04	0.05	0.628	**0.65**
	WCDMA II	RMC12.2K	Bottom	0	9400	2	Ant 0	w/	16.50	16.35	1.04	0.06	0.583	0.61
	WCDMA II	RMC12.2K	Bottom	0	9400	3	Ant 0	w/	16.50	16.35	1.04	-0.08	0.521	0.54
	WCDMA II	RMC12.2K	Bottom	0	9400	4	Ant 0	w/	16.50	16.35	1.04	-0.09	0.485	0.50
	WCDMA IV	RMC12.2K	Bottom	0	1413	1	Ant 0	w/	17.50	17.46	1.01	0.03	0.612	0.62
37	WCDMA IV	RMC12.2K	Bottom	0	1312	1	Ant 0	w/	17.50	17.39	1.03	-0.06	0.630	**0.65**
	WCDMA IV	RMC12.2K	Bottom	0	1513	1	Ant 0	w/	17.50	17.34	1.04	-0.18	0.581	0.60
	WCDMA IV	RMC12.2K	Bottom	0	1312	2	Ant 0	w/	17.50	17.39	1.03	-0.08	0.577	0.59
	WCDMA IV	RMC12.2K	Bottom	0	1312	3	Ant 0	w/	17.50	17.39	1.03	-0.19	0.485	0.50
	WCDMA IV	RMC12.2K	Bottom	0	1312	4	Ant 0	w/	17.50	17.39	1.03	-0.16	0.433	0.45
	WCDMA V	RMC12.2K	Bottom	0	4132	1	Ant 0	w/	21.00	20.87	1.03	-0.01	0.521	0.54
38	WCDMA V	RMC12.2K	Bottom	0	4182	1	Ant 0	w/	21.00	20.60	1.10	-0.09	0.537	**0.59**
	WCDMA V	RMC12.2K	Bottom	0	4233	1	Ant 0	w/	21.00	20.71	1.07	0.06	0.494	0.53
	WCDMA V	RMC12.2K	Bottom	0	4182	2	Ant 0	w/	21.00	20.60	1.10	-0.08	0.513	0.56
	WCDMA V	RMC12.2K	Bottom	0	4182	3	Ant 0	w/	21.00	20.60	1.10	-0.17	0.413	0.45
	WCDMA V	RMC12.2K	Bottom	0	4182	4	Ant 0	w/	21.00	20.60	1.10	-0.19	0.396	0.44

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 2	QPSK20M	Bottom	0	18700	1	0	1	Ant 0	w/	13.00	12.59	1.10	-0.05	0.301	0.33
	LTE 2	QPSK20M	Bottom	0	18700	50	0	1	Ant 0	w/	13.00	12.56	1.11	-0.14	0.294	0.33
	LTE 2	QPSK20M	Bottom	0	18900	1	0	1	Ant 0	w/	13.00	12.54	1.11	-0.08	0.324	0.36
39	LTE 2	QPSK20M	Bottom	0	19100	1	0	1	Ant 0	w/	13.00	12.52	1.12	0.01	0.345	**0.39**
	LTE 2	QPSK20M	Bottom	0	19100	1	0	2	Ant 0	w/	13.00	12.52	1.12	0.03	0.331	0.37
	LTE 2	QPSK20M	Bottom	0	19100	1	0	3	Ant 0	w/	13.00	12.52	1.12	-0.02	0.285	0.32
	LTE 2	QPSK20M	Bottom	0	19100	1	0	4	Ant 0	w/	13.00	12.52	1.12	-0.06	0.273	0.31
	LTE 2	QPSK20M	Bottom	0	18700	1	0	1	Ant 2	w/	14.00	13.87	1.03	-0.06	0.267	0.28
	LTE 2	QPSK20M	Bottom	0	18700	50	0	1	Ant 2	w/	14.00	13.70	1.07	0.04	0.256	0.27
	LTE 2	QPSK20M	Bottom	0	18900	1	0	1	Ant 2	w/	14.00	13.72	1.07	-0.11	0.296	0.32
40	LTE 2	QPSK20M	Bottom	0	19100	1	0	1	Ant 2	w/	14.00	13.84	1.04	0.04	0.319	**0.33**
	LTE 2	QPSK20M	Bottom	0	19100	1	0	2	Ant 2	w/	14.00	13.84	1.04	0.06	0.304	0.32
	LTE 2	QPSK20M	Bottom	0	19100	1	0	3	Ant 2	w/	14.00	13.84	1.04	0.03	0.293	0.30
	LTE 2	QPSK20M	Bottom	0	19100	1	0	4	Ant 2	w/	14.00	13.84	1.04	0.06	0.281	0.29
	LTE 4	QPSK20M	Bottom	0	20175	1	0	1	Ant 0	w/	13.00	12.53	1.11	-0.11	0.326	0.36
	LTE 4	QPSK20M	Bottom	0	20175	50	0	1	Ant 0	w/	13.00	12.51	1.12	-0.07	0.319	0.36
41	LTE 4	QPSK20M	Bottom	0	20050	1	0	1	Ant 0	w/	13.00	12.42	1.14	-0.05	0.336	**0.38**
	LTE 4	QPSK20M	Bottom	0	20300	1	0	1	Ant 0	w/	13.00	12.42	1.14	0.13	0.306	0.35
	LTE 4	QPSK20M	Bottom	0	20050	1	0	2	Ant 0	w/	13.00	12.42	1.14	-0.08	0.322	0.37
	LTE 4	QPSK20M	Bottom	0	20050	1	0	3	Ant 0	w/	13.00	12.42	1.14	-0.08	0.252	0.29
	LTE 4	QPSK20M	Bottom	0	20050	1	0	4	Ant 0	w/	13.00	12.42	1.14	-0.05	0.241	0.27
	LTE 5	QPSK10M	Bottom	0	20450	1	0	1	Ant 0	w/	17.50	17.39	1.03	0.07	0.303	0.31
	LTE 5	QPSK10M	Bottom	0	20450	25	0	1	Ant 0	w/	17.50	17.35	1.04	-0.13	0.294	0.31
	LTE 5	QPSK10M	Bottom	0	20525	1	0	1	Ant 0	w/	17.50	17.37	1.03	-0.14	0.311	0.32
42	LTE 5	QPSK10M	Bottom	0	20600	1	0	1	Ant 0	w/	17.50	17.27	1.05	-0.17	0.329	**0.35**
	LTE 5	QPSK10M	Bottom	0	20600	1	0	2	Ant 0	w/	17.50	17.27	1.05	-0.15	0.313	0.33
	LTE 5	QPSK10M	Bottom	0	20600	1	0	3	Ant 0	w/	17.50	17.27	1.05	-0.15	0.261	0.27
	LTE 5	QPSK10M	Bottom	0	20600	1	0	4	Ant 0	w/	17.50	17.27	1.05	-0.18	0.253	0.27
	LTE 5	QPSK10M	Bottom	0	PCC : 20450 SCC : 20549	PCC : 1 SCC : 1	PCC : 49 SCC : 0	1	Ant 0	w/	17.50	17.21	1.07	-0.03	0.318	0.34
43	LTE 7	QPSK20M	Bottom	0	21100	1	0	1	Ant 0	w/	9.50	9.24	1.06	0.02	0.355	**0.38**
	LTE 7	QPSK20M	Bottom	0	21100	50	0	1	Ant 0	w/	9.50	9.20	1.07	0.12	0.346	0.37
	LTE 7	QPSK20M	Bottom	0	20850	1	0	1	Ant 0	w/	9.50	9.20	1.07	0.04	0.302	0.32
	LTE 7	QPSK20M	Bottom	0	21350	1	0	1	Ant 0	w/	9.50	9.15	1.08	-0.1	0.345	0.37
	LTE 7	QPSK20M	Bottom	0	21100	1	0	2	Ant 0	w/	9.50	9.24	1.06	0.05	0.343	0.36
	LTE 7	QPSK20M	Bottom	0	21100	1	0	3	Ant 0	w/	9.50	9.24	1.06	0.06	0.201	0.21
	LTE 7	QPSK20M	Bottom	0	21100	1	0	4	Ant 0	w/	9.50	9.24	1.06	0.09	0.185	0.20
	LTE 7	QPSK20M	Bottom	0	PCC : 20850 SCC : 21048	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/	9.50	9.10	1.10	-0.08	0.331	0.36
44	LTE 7	QPSK20M	Bottom	0	21350	1	0	1	Ant 2	w/	11.50	11.48	1.00	0.19	0.346	**0.35**
	LTE 7	QPSK20M	Bottom	0	21350	50	0	1	Ant 2	w/	11.50	11.45	1.01	0.17	0.332	0.34
	LTE 7	QPSK20M	Bottom	0	20850	1	0	1	Ant 2	w/	11.50	11.40	1.02	0.09	0.272	0.28
	LTE 7	QPSK20M	Bottom	0	21100	1	0	1	Ant 2	w/	11.50	11.44	1.01	0.17	0.322	0.33
	LTE 7	QPSK20M	Bottom	0	21350	1	0	2	Ant 2	w/	11.50	11.48	1.00	0.15	0.331	0.33
	LTE 7	QPSK20M	Bottom	0	21350	1	0	3	Ant 2	w/	11.50	11.48	1.00	0.02	0.328	0.33
	LTE 7	QPSK20M	Bottom	0	21350	1	0	4	Ant 2	w/	11.50	11.48	1.00	0.06	0.314	0.31
	LTE 7	QPSK20M	Bottom	0	PCC : 20850 SCC : 21048	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 2	w/	11.50	11.35	1.04	-0.08	0.333	0.35

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
45	LTE 12	QPSK10M	Bottom	0	23060	1	0	1	Ant 0	w/	18.00	17.84	1.04	-0.15	0.341	**0.35**
	LTE 12	QPSK10M	Bottom	0	23060	25	0	1	Ant 0	w/	18.00	17.82	1.04	-0.14	0.329	0.34
	LTE 12	QPSK10M	Bottom	0	23095	1	0	1	Ant 0	w/	18.00	17.81	1.04	0.15	0.318	0.33
	LTE 12	QPSK10M	Bottom	0	23130	1	0	1	Ant 0	w/	18.00	17.70	1.07	-0.03	0.311	0.33
	LTE 12	QPSK10M	Bottom	0	23060	1	0	2	Ant 0	w/	18.00	17.84	1.04	-0.18	0.328	0.34
	LTE 12	QPSK10M	Bottom	0	23060	1	0	3	Ant 0	w/	18.00	17.84	1.04	0.19	0.263	0.27
	LTE 12	QPSK10M	Bottom	0	23060	1	0	4	Ant 0	w/	18.00	17.84	1.04	0.16	0.251	0.26
46	LTE 13	QPSK10M	Bottom	0	23230	1	0	1	Ant 0	w/	17.50	16.94	1.14	-0.15	0.342	**0.39**
	LTE 13	QPSK10M	Bottom	0	23230	25	0	1	Ant 0	w/	17.50	16.90	1.15	-0.03	0.330	0.38
	LTE 13	QPSK10M	Bottom	0	23230	1	0	2	Ant 0	w/	17.50	16.94	1.14	-0.18	0.331	0.38
	LTE 13	QPSK10M	Bottom	0	23230	1	0	3	Ant 0	w/	17.50	16.94	1.14	0.04	0.325	0.37
	LTE 13	QPSK10M	Bottom	0	23230	1	0	4	Ant 0	w/	17.50	16.94	1.14	0.05	0.314	0.36
47	LTE 14	QPSK10M	Bottom	0	23330	1	0	1	Ant 0	w/	17.50	16.86	1.16	-0.16	0.316	**0.37**
	LTE 14	QPSK10M	Bottom	0	23330	25	0	1	Ant 0	w/	17.50	16.83	1.17	0.01	0.299	0.35
	LTE 14	QPSK10M	Bottom	0	23330	1	0	2	Ant 0	w/	17.50	16.86	1.16	-0.18	0.288	0.33
	LTE 14	QPSK10M	Bottom	0	23330	1	0	3	Ant 0	w/	17.50	16.86	1.16	0.09	0.290	0.34
	LTE 14	QPSK10M	Bottom	0	23330	1	0	4	Ant 0	w/	17.50	16.86	1.16	0.08	0.278	0.32
48	LTE 17	QPSK10M	Bottom	0	23780	1	0	1	Ant 0	w/	18.00	17.79	1.05	-0.1	0.355	**0.37**
	LTE 17	QPSK10M	Bottom	0	23780	25	0	1	Ant 0	w/	18.00	17.75	1.06	-0.19	0.344	0.36
	LTE 17	QPSK10M	Bottom	0	23790	1	0	1	Ant 0	w/	18.00	17.69	1.07	0.06	0.337	0.36
	LTE 17	QPSK10M	Bottom	0	23800	1	0	1	Ant 0	w/	18.00	17.66	1.08	-0.11	0.341	0.37
	LTE 17	QPSK10M	Bottom	0	23780	1	0	2	Ant 0	w/	18.00	17.79	1.05	-0.16	0.340	0.36
	LTE 17	QPSK10M	Bottom	0	23780	1	0	3	Ant 0	w/	18.00	17.79	1.05	0.05	0.296	0.31
	LTE 17	QPSK10M	Bottom	0	23780	1	0	4	Ant 0	w/	18.00	17.79	1.05	0.08	0.278	0.29
	LTE 25	QPSK20M	Bottom	0	26140	1	0	1	Ant 0	w/	13.00	12.56	1.11	-0.05	0.307	0.34
	LTE 25	QPSK20M	Bottom	0	26140	50	0	1	Ant 0	w/	13.00	12.54	1.11	0.07	0.298	0.33
	LTE 25	QPSK20M	Bottom	0	26365	1	0	1	Ant 0	w/	13.00	12.54	1.11	-0.13	0.335	0.37
49	LTE 25	QPSK20M	Bottom	0	26590	1	0	1	Ant 0	w/	13.00	12.51	1.12	-0.06	0.344	**0.39**
	LTE 25	QPSK20M	Bottom	0	26590	1	0	2	Ant 0	w/	13.00	12.51	1.12	-0.08	0.327	0.37
	LTE 25	QPSK20M	Bottom	0	26590	1	0	3	Ant 0	w/	13.00	12.51	1.12	0.02	0.251	0.28
	LTE 25	QPSK20M	Bottom	0	26590	1	0	4	Ant 0	w/	13.00	12.51	1.12	0.08	0.235	0.26
	LTE 26	QPSK15M	Bottom	0	26865	1	0	1	Ant 0	w/	18.00	17.66	1.08	0.02	0.291	0.31
	LTE 26	QPSK15M	Bottom	0	26865	36	0	1	Ant 0	w/	18.00	17.64	1.09	-0.03	0.277	0.30
	LTE 26	QPSK15M	Bottom	0	26765	1	0	1	Ant 0	w/	18.00	17.64	1.09	-0.16	0.271	0.30
50	LTE 26	QPSK15M	Bottom	0	26965	1	0	1	Ant 0	w/	18.00	17.57	1.10	-0.07	0.296	**0.33**
	LTE 26	QPSK15M	Bottom	0	26965	1	0	2	Ant 0	w/	18.00	17.57	1.10	-0.08	0.283	0.31
	LTE 26	QPSK15M	Bottom	0	26965	1	0	3	Ant 0	w/	18.00	17.57	1.10	0.15	0.218	0.24
	LTE 26	QPSK15M	Bottom	0	26965	1	0	4	Ant 0	w/	18.00	17.57	1.10	0.18	0.201	0.22
51	LTE 30	QPSK10M	Bottom	0	27710	1	0	1	Ant 0	w/	13.50	13.37	1.03	-0.05	0.362	**0.37**
	LTE 30	QPSK10M	Bottom	0	27710	25	0	1	Ant 0	w/	13.50	13.33	1.04	0.06	0.349	0.36
	LTE 30	QPSK10M	Bottom	0	27710	1	0	2	Ant 0	w/	13.50	13.37	1.03	-0.08	0.347	0.36
	LTE 30	QPSK10M	Bottom	0	27710	1	0	3	Ant 0	w/	13.50	13.37	1.03	0.12	0.271	0.28
	LTE 30	QPSK10M	Bottom	0	27710	1	0	4	Ant 0	w/	13.50	13.37	1.03	0.15	0.266	0.27
52	LTE 38	QPSK20M	Bottom	0	37850	1	0	1	Ant 0	w/	13.00	12.61	1.09	0.13	0.410	**0.45**
	LTE 38	QPSK20M	Bottom	0	37850	50	0	1	Ant 0	w/	13.00	12.59	1.10	-0.16	0.403	0.44
	LTE 38	QPSK20M	Bottom	0	38000	1	0	1	Ant 0	w/	13.00	12.49	1.12	-0.01	0.377	0.42
	LTE 38	QPSK20M	Bottom	0	38150	1	0	1	Ant 0	w/	13.00	12.37	1.16	-0.06	0.343	0.40
	LTE 38	QPSK20M	Bottom	0	37850	1	0	2	Ant 0	w/	13.00	12.61	1.09	0.16	0.384	0.42
	LTE 38	QPSK20M	Bottom	0	37850	1	0	3	Ant 0	w/	13.00	12.61	1.09	0.07	0.311	0.34
	LTE 38	QPSK20M	Bottom	0	37850	1	0	4	Ant 0	w/	13.00	12.61	1.09	0.06	0.298	0.32
	LTE 38	QPSK20M	Bottom	0	PCC : 37850 SCC : 38048	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/	13.00	12.48	1.13	-0.09	0.386	0.44
	LTE 41	QPSK20M	Bottom	0	40620	1	0	1	Ant 0	w/	11.50	11.28	1.05	0.08	0.284	0.30
	LTE 41	QPSK20M	Bottom	0	40620	50	0	1	Ant 0	w/	11.50	11.25	1.06	0.01	0.272	0.29
	LTE 41	QPSK20M	Bottom	0	39790	1	0	1	Ant 0	w/	11.50	11.23	1.06	0.12	0.277	0.29
	LTE 41	QPSK20M	Bottom	0	39750	1	0	1	Ant 0	w/	11.50	11.26	1.06	-0.08	0.268	0.28
53	LTE 41	QPSK20M	Bottom	0	40185	1	0	1	Ant 0	w/	11.50	11.09	1.10	0.09	0.330	**0.36**
	LTE 41	QPSK20M	Bottom	0	41055	1	0	1	Ant 0	w/	11.50	11.16	1.08	-0.03	0.184	0.20
	LTE 41	QPSK20M	Bottom	0	41490	1	0	1	Ant 0	w/	11.50	11.10	1.10	0.14	0.093	0.10
	LTE 41	QPSK20M	Bottom	0	40185	1	0	2	Ant 0	w/	11.50	11.09	1.10	0.06	0.325	0.36
	LTE 41	QPSK20M	Bottom	0	40185	1	0	3	Ant 0	w/	11.50	11.09	1.10	0.06	0.249	0.27
	LTE 41	QPSK20M	Bottom	0	40185	1	0	4	Ant 0	w/	11.50	11.09	1.10	0.03	0.232	0.26
	LTE 41	QPSK20M	Bottom	0	PCC : 39750 SCC : 39948	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/	11.50	11.18	1.08	-0.02	0.321	0.35

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
54	LTE 42	QPSK20M	Bottom	0	43190	1	0	1	Ant 2	w/	10.50	10.48	1.00	0.05	0.542	**0.54**
	LTE 42	QPSK20M	Bottom	0	43190	50	0	1	Ant 2	w/	10.50	10.45	1.01	0.07	0.528	0.53
	LTE 42	QPSK20M	Bottom	0	43340	1	0	1	Ant 2	w/	10.50	10.45	1.01	-0.11	0.535	0.54
	LTE 42	QPSK20M	Bottom	0	43490	1	0	1	Ant 2	w/	10.50	10.47	1.01	0.05	0.505	0.51
	LTE 42	QPSK20M	Bottom	0	43190	1	0	2	Ant 2	w/	10.50	10.48	1.00	0.06	0.532	0.53
	LTE 42	QPSK20M	Bottom	0	43190	1	0	3	Ant 2	w/	10.50	10.48	1.00	0.15	0.530	0.53
	LTE 42	QPSK20M	Bottom	0	43190	1	0	4	Ant 2	w/	10.50	10.48	1.00	0.16	0.513	0.51
	LTE 48	QPSK20M	Bottom	0	56210	1	0	1	Ant 2	w/	10.00	9.90	1.02	0.17	0.326	0.33
	LTE 48	QPSK20M	Bottom	0	56210	50	0	1	Ant 2	w/	10.00	9.82	1.04	-0.06	0.321	0.33
55	LTE 48	QPSK20M	Bottom	0	55340	1	0	1	Ant 2	w/	10.00	9.51	1.12	0.05	0.336	**0.38**
	LTE 48	QPSK20M	Bottom	0	55780	1	0	1	Ant 2	w/	10.00	9.61	1.09	0.13	0.324	0.35
	LTE 48	QPSK20M	Bottom	0	56640	1	0	1	Ant 2	w/	10.00	9.71	1.07	0.06	0.143	0.15
	LTE 48	QPSK20M	Bottom	0	55340	1	0	2	Ant 2	w/	10.00	9.51	1.12	0.06	0.321	0.36
	LTE 48	QPSK20M	Bottom	0	55340	1	0	3	Ant 2	w/	10.00	9.51	1.12	0.01	0.323	0.36
	LTE 48	QPSK20M	Bottom	0	55340	1	0	4	Ant 2	w/	10.00	9.51	1.12	0.06	0.310	0.35
	LTE 48	QPSK20M	Bottom	0	PCC : 55891 SCC : 56089	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 2	w/	10.00	9.65	1.08	-0.07	0.321	0.35
56	LTE 66	QPSK20M	Bottom	0	132322	1	0	1	Ant 0	w/	13.50	13.49	1.00	-0.06	0.375	**0.38**
	LTE 66	QPSK20M	Bottom	0	132322	50	0	1	Ant 0	w/	13.50	13.45	1.01	0.16	0.357	0.36
	LTE 66	QPSK20M	Bottom	0	132072	1	0	1	Ant 0	w/	13.50	13.30	1.05	-0.19	0.346	0.36
	LTE 66	QPSK20M	Bottom	0	132572	1	0	1	Ant 0	w/	13.50	13.32	1.04	-0.08	0.261	0.27
	LTE 66	QPSK20M	Bottom	0	132322	1	0	2	Ant 0	w/	13.50	13.49	1.00	-0.08	0.363	0.36
	LTE 66	QPSK20M	Bottom	0	132322	1	0	3	Ant 0	w/	13.50	13.49	1.00	-0.05	0.361	0.36
	LTE 66	QPSK20M	Bottom	0	132322	1	0	4	Ant 0	w/	13.50	13.49	1.00	-0.08	0.355	0.36
	LTE 66	QPSK20M	Bottom	0	PCC : 132323 SCC : 132521	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 0	w/	13.50	13.27	1.05	0.06	0.352	0.37
57	LTE 66	QPSK20M	Bottom	0	132072	1	0	1	Ant 2	w/	14.00	12.78	1.32	0.15	0.217	**0.29**
	LTE 66	QPSK20M	Bottom	0	132072	50	0	1	Ant 2	w/	14.00	12.65	1.36	0.02	0.204	0.28
	LTE 66	QPSK20M	Bottom	0	132322	1	0	1	Ant 2	w/	14.00	12.74	1.34	0.13	0.183	0.25
	LTE 66	QPSK20M	Bottom	0	132572	1	0	1	Ant 2	w/	14.00	12.64	1.37	0.03	0.173	0.24
	LTE 66	QPSK20M	Bottom	0	132072	1	0	2	Ant 2	w/	14.00	12.78	1.32	0.15	0.202	0.27
	LTE 66	QPSK20M	Bottom	0	132072	1	0	3	Ant 2	w/	14.00	12.78	1.32	0.15	0.183	0.24
	LTE 66	QPSK20M	Bottom	0	132072	1	0	4	Ant 2	w/	14.00	12.78	1.32	0.12	0.171	0.23
	LTE 66	QPSK20M	Bottom	0	PCC : 132323 SCC : 132521	PCC : 1 SCC : 1	PCC : 99 SCC : 0	1	Ant 2	w/	14.00	12.69	1.35	0.06	0.193	0.26

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	1	1	1	Ant 0	w/	15.50	15.27	1.05	0.13	0.321	0.34
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	50	25	1	Ant 0	w/	15.50	15.08	1.10	0.14	0.307	0.34
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	376000	1	1	1	Ant 0	w/	15.50	15.14	1.09	0.08	0.336	0.37
58	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	1	Ant 0	w/	15.50	15.25	1.06	-0.02	0.364	**0.39**
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	2	Ant 0	w/	15.50	15.25	1.06	-0.06	0.352	0.37
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	3	Ant 0	w/	15.50	15.25	1.06	-0.01	0.298	0.32
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	4	Ant 0	w/	15.50	15.25	1.06	-0.09	0.277	0.29
59	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	1	Ant 2	w/	15.50	15.29	1.05	-0.02	0.355	**0.37**
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	50	25	1	Ant 2	w/	15.50	15.23	1.06	0.02	0.331	0.35
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	1	1	1	Ant 2	w/	15.50	15.20	1.07	-0.15	0.344	0.37
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	376000	1	1	1	Ant 2	w/	15.50	15.24	1.06	0.02	0.347	0.37
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	2	Ant 2	w/	15.50	15.29	1.05	-0.06	0.343	0.36
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	3	Ant 2	w/	15.50	15.29	1.05	0.11	0.344	0.36
	5GNR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	4	Ant 2	w/	15.50	15.29	1.05	0.15	0.333	0.35

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167300	1	1	1	Ant 0	w/	17.50	17.44	1.01	0.17	0.257	0.26
	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167300	50	25	1	Ant 0	w/	17.50	17.30	1.05	-0.01	0.249	0.26
60	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	166800	1	1	1	Ant 0	w/	17.50	17.41	1.02	-0.05	0.268	**0.27**
	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167800	1	1	1	Ant 0	w/	17.50	17.37	1.03	-0.08	0.262	0.27
	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	166800	1	1	2	Ant 0	w/	17.50	17.41	1.02	-0.06	0.251	0.26
	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	166800	1	1	3	Ant 0	w/	17.50	17.41	1.02	-0.13	0.253	0.26
	5GNR-n5	DFT-S_15KHz QPSK20M	Bottom	0	166800	1	1	4	Ant 0	w/	17.50	17.41	1.02	-0.18	0.243	0.25
61	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	512000	1	1	1	Ant 2	w/	12.00	12.00	1.00	-0.13	0.387	**0.39**
	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	512000	50	25	1	Ant 2	w/	12.00	11.90	1.02	0.15	0.376	0.38
	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	502000	1	1	1	Ant 2	w/	12.00	11.93	1.02	0.06	0.31	0.32
	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	507000	1	1	1	Ant 2	w/	12.00	11.97	1.01	-0.16	0.364	0.37
	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	512000	1	1	2	Ant 2	w/	12.00	12.00	1.00	-0.08	0.369	0.37
	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	512000	1	1	3	Ant 2	w/	12.00	12.00	1.00	0.11	0.339	0.34
	5GNR-n7	DFT-S_15KHz QPSK20M	Bottom	0	512000	1	1	4	Ant 2	w/	12.00	12.00	1.00	0.12	0.328	0.33
62	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141300	1	1	1	Ant 0	w/	16.50	16.27	1.05	-0.07	0.184	**0.19**
	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141300	36	18	1	Ant 0	w/	16.50	16.05	1.11	-0.11	0.173	0.19
	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141500	1	1	1	Ant 0	w/	16.50	16.24	1.06	0.05	0.175	0.19
	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141700	1	1	1	Ant 0	w/	16.50	16.20	1.07	-0.01	0.178	0.19
	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141300	1	1	2	Ant 0	w/	16.50	16.27	1.05	-0.09	0.167	0.18
	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141300	1	1	3	Ant 0	w/	16.50	16.27	1.05	-0.03	0.161	0.17
	5GNR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141300	1	1	4	Ant 0	w/	16.50	16.27	1.05	-0.06	0.152	0.16
63	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	528000	1	1	1	Ant 2	w/	10.00	9.91	1.02	0.13	0.282	**0.29**
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	528000	135	67	1	Ant 2	w/	10.00	9.55	1.11	0.02	0.25	0.28
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	509202	1	1	1	Ant 2	w/	10.00	9.89	1.03	-0.13	0.128	0.13
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	513900	1	1	1	Ant 2	w/	10.00	9.90	1.02	0.05	0.211	0.22
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	518598	1	1	1	Ant 2	w/	10.00	9.74	1.06	-0.11	0.221	0.23
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	523299	1	1	1	Ant 2	w/	10.00	9.86	1.03	0.05	0.214	0.22
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	528000	1	1	2	Ant 2	w/	10.00	9.91	1.02	0.11	0.271	0.28
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	528000	1	1	3	Ant 2	w/	10.00	9.91	1.02	0.11	0.257	0.26
	5GNR-n41	DFT-S_30KHz QPSK100M	Bottom	0	528000	1	1	4	Ant 2	w/	10.00	9.91	1.02	0.09	0.248	0.25

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB#	RB Offset	Sample	Tx Antenna	P-Sensor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	349000	1	1	1	Ant 0	w/	12.00	11.99	1.00	0.16	0.152	0.15
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	349000	50	25	1	Ant 0	w/	12.00	11.86	1.03	-0.07	0.145	0.15
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	344000	1	1	1	Ant 0	w/	12.00	11.96	1.01	0.04	0.151	0.15
64	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	354000	1	1	1	Ant 0	w/	12.00	11.91	1.02	-0.07	0.185	**0.19**
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	354000	1	1	2	Ant 0	w/	12.00	11.91	1.02	-0.09	0.173	0.18
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	354000	1	1	3	Ant 0	w/	12.00	11.91	1.02	0.09	0.147	0.15
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	354000	1	1	4	Ant 0	w/	12.00	11.91	1.02	0.08	0.132	0.13
65	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	344000	1	1	1	Ant 2	w/	12.00	11.88	1.03	-0.13	0.15	**0.15**
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	344000	50	25	1	Ant 2	w/	12.00	11.70	1.07	0.02	0.143	0.15
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	349000	1	1	1	Ant 2	w/	12.00	11.80	1.05	-0.16	0.136	0.14
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	354000	1	1	1	Ant 2	w/	12.00	11.76	1.06	0.02	0.130	0.14
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	344000	1	1	2	Ant 2	w/	12.00	11.88	1.03	-0.16	0.138	0.14
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	344000	1	1	3	Ant 2	w/	12.00	11.88	1.03	0.11	0.146	0.15
	5GNR-n66	DFT-S_15KHz QPSK20M	Bottom	0	344000	1	1	4	Ant 2	w/	12.00	11.88	1.03	0.15	0.132	0.14

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WLAN2.4G	802.11b	Bottom	0	1	1	Ant 0	w/	99.30	1.01	13.00	12.99	1.00	0.02	0.541	0.55
66	WLAN2.4G	802.11b	Bottom	0	1	1	Ant 1	w/	100.00	1.00	13.00	12.99	1.00	-0.09	0.606	**0.61**
	WLAN2.4G	802.11n HT40	Bottom	0	3	1	Ant 0+1	w/	0.00	1.00	16.00	15.88	1.03	0.12	0.581	0.60
	WLAN2.4G	802.11b	Bottom	0	6	1	Ant 1	w/	100.00	1.00	13.00	12.92	1.02	0.19	0.516	0.53
	WLAN2.4G	802.11b	Bottom	0	11	1	Ant 1	w/	100.00	1.00	13.00	12.91	1.02	-0.07	0.427	0.44
	WLAN2.4G	802.11b	Bottom	0	12	1	Ant 1	w/	100.00	1.00	13.00	12.95	1.01	0.13	0.396	0.40
	WLAN2.4G	802.11b	Bottom	0	13	1	Ant 1	w/	100.00	1.00	13.00	12.88	1.03	0.08	0.378	0.39
	WLAN2.4G	802.11b	Bottom	0	1	2	Ant 1	w/	100.00	1.00	13.00	12.99	1.00	-0.06	0.588	0.59
	WLAN2.4G	802.11b	Bottom	0	1	3	Ant 1	w/	100.00	1.00	13.00	12.99	1.00	-0.14	0.532	0.53
	WLAN2.4G	802.11b	Bottom	0	1	4	Ant 1	w/	100.00	1.00	13.00	12.99	1.00	-0.18	0.520	0.52
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 0	w/	97.50	1.03	11.00	10.94	1.01	0.01	0.392	0.41
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 1	w/	99.40	1.01	11.00	10.94	1.01	0.06	0.457	0.47
67	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 0+1	w/	99.40	1.01	14.00	13.87	1.03	-0.04	0.636	**0.66**
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	2	Ant 0+1	w/	99.40	1.01	14.00	13.87	1.03	-0.06	0.617	0.64
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	3	Ant 0+1	w/	99.40	1.01	14.00	13.87	1.03	0.12	0.563	0.59
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	4	Ant 0+1	w/	99.40	1.01	14.00	13.87	1.03	0.18	0.552	0.57
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	1	Ant 0	w/	97.50	1.03	10.00	9.99	1.00	0.12	0.427	0.44
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	1	Ant 1	w/	99.40	1.01	10.00	9.97	1.01	-0.09	0.435	0.44
68	WLAN5.6G	802.11ac VHT160	Bottom	0	114	1	Ant 0+1	w/	99.40	1.01	13.00	12.77	1.05	0.03	0.611	0.65
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	2	Ant 0+1	w/	99.40	1.01	13.00	12.77	1.05	0.05	0.595	0.63
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	3	Ant 0+1	w/	99.40	1.01	13.00	12.77	1.05	0.05	0.551	0.58
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	4	Ant 0+1	w/	99.40	1.01	13.00	12.77	1.05	0.08	0.543	0.58

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Tx Antenna	P-Sensor	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 0	w/	97.80	1.02	9.00	8.92	1.02	0.14	0.601	0.63
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 1	w/	97.80	1.02	9.00	8.96	1.01	0.12	0.537	0.55
69	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 0+1	w/	97.80	1.02	12.00	11.89	1.03	0.08	0.615	**0.65**
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	2	Ant 0+1	w/	97.80	1.02	12.00	11.89	1.03	0.08	0.603	0.63
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	3	Ant 0+1	w/	97.80	1.02	12.00	11.89	1.03	0.13	0.587	0.62
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	4	Ant 0+1	w/	97.80	1.02	12.00	11.89	1.03	0.12	0.577	0.61
70	BT	BDR	Bottom	0	0	1	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0.07	0.108	**0.16**
	BT	BDR	Bottom	0	39	1	Ant 1	w/o	77.10	1.30	11.50	10.65	1.22	0.05	0.077	0.12
	BT	BDR	Bottom	0	78	1	Ant 1	w/o	77.10	1.30	11.50	10.64	1.22	0.03	0.032	0.05
	BT	BDR	Bottom	0	0	2	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	0.08	0.096	0.14
	BT	BDR	Bottom	0	0	3	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	-0.09	0.086	0.13
	BT	BDR	Bottom	0	0	4	Ant 1	w/o	77.10	1.30	11.50	10.84	1.16	-0.18	0.075	0.11

4.7.3 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10, the highest SAR configuration for either head or body tissue-equivalent medium maybe used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is >= 0.80 W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20, or when the original or repeated measurement is >= 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20, and the original, first or second repeated measurement is >= 1.5 W/kg, perform a third repeated measurement.

Band	Mode	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio	2nd Repeated SAR-1g (W/kg)	L/S Ratio	3rd Repeated SAR-1g (W/kg)	L/S Ratio
WLAN5.6G	802.11ac VHT160	Top Side	114	1.1	1.01	1.09	N/A	N/A	N/A	N/A
WLAN5.6G	802.11ac VHT80	Top Side	106	0.916	0.895	1.02	N/A	N/A	N/A	N/A
WLAN5.8G	802.11ac VHT80	Top Side	155	1.12	1.06	1.06	N/A	N/A	N/A	N/A

4.7.4 Simultaneous Multi-band Transmission Evaluation

<Possibilities of Simultaneous Transmission>

The simultaneous transmission possibilities for this device are listed as below.

Simultaneous TX Combination	Capable Transmit Configurations	Body Exposure Condition
1	WWAN + WLAN2.4G_Ant0	Yes
2	WWAN + WLAN2.4G_Ant1	Yes
3	WWAN + WLAN5G_Ant0	Yes
4	WWAN + WLAN5G_Ant1	Yes
5	WWAN + BT_Ant1	Yes
6	WWAN + WLAN2.4G_Ant0+BT_Ant1	Yes
7	WWAN + WLAN5G_Ant0+BT_Ant1	Yes
8	WWAN + WLAN2.4G_Ant0+1	Yes
9	WWAN + WLAN5G_Ant0+1	Yes
10	WWAN + WLAN5G_Ant0+1+BT_Ant1	Yes

Note:

1. The WLAN 2.4G and WLAN 5G cannot transmit simultaneously.
2. Combination 1 is covered by Combination 6.
3. Combination 3 is covered by Combination 7.
5. Combination 5 is covered by Combination 10.
6. Combination 9 is covered by Combination10.

<SAR Summation Analysis>

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR_{1g} of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit(SAR_{1g} 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR_{1g} is greater than the SAR limit (SAR_{1g} 1.6 W/kg), SAR test exclusion is determined by the SPLSR.

Refer to Appendix G

Test Engineer：Evan Chan, and Zeke Wang

5. Calibration of Test Equipment

Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D750V3	1013	Aug. 13, 2020	1 Year
System Validation Dipole	SPEAG	D835V2	4d121	Aug. 13, 2020	1 Year
System Validation Dipole	SPEAG	D1750V2	1055	Aug. 14, 2020	1 Year
System Validation Dipole	SPEAG	D1900V2	5d036	Jan. 22, 2021	1 Year
System Validation Dipole	SPEAG	D2300V2	1004	Jan. 22, 2021	1 Year
System Validation Dipole	SPEAG	D2450V2	737	Aug. 13, 2020	1 Year
System Validation Dipole	SPEAG	D2600V2	1020	Aug. 13, 2020	1 Year
System Validation Dipole	SPEAG	D3500V2	1007	Jan. 20, 2021	1 Year
System Validation Dipole	SPEAG	D3700V2	1074	May 04, 2020	1 Year
System Validation Dipole	SPEAG	D5GHzV2	1145	Nov. 09, 2020	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7554	Sep. 28, 2020	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7555	Sep. 28, 2020	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1589	Sep. 15, 2020	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1590	Sep. 15, 2020	1 Year
Universal Radio Communication Tester	Anritsu	MT8821C	6201381727	Jun. 11, 2020	1 Year
Universal Radio Communication Tester	Anritsu	MT8821C	6201502978	Jul. 09, 2020	1 Year
Spectrum Analyzer	Anritsu	MS2720T	1513085	May. 28, 2020	1 Year
Power Meter	Anritsu	ML2495A	1218009	Jun. 24, 2020	1 Year
Universal Wireless Test Set	Anritsu	MT8870A/MU887000A	6201699387	Sep. 28, 2020	1 Year
Thermometer	YFE	YF-160A	150601220	May 25, 2020	1 Year
Dielectric Assessment Kit	SPEAG	DAKS-3.5	1092	May 26, 2020	1 Year
Powersource1	SPEAG	SE_UMS_160BA	4010	Aug. 13, 2020	1 Year

6. Measurement Uncertainty

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Axial Isotropy	4.7	Rectangular	√3	√0.5	√0.5	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	√0.5	√0.5	3.9	3.9	∞
Boundary Effect	1.0	Rectangular	√3	1	1	0.6	0.6	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.02	Rectangular	√3	1	1	0.01	0.01	∞
Probe Positioning with Respect to Phantom	0.4	Rectangular	√3	1	1	0.2	0.2	∞
Post-processing	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Test Sample Related								
Test Sample Positioning	2.82 / 1.60	Normal	1	1	1	2.8	1.6	35
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	5.7	Rectangular	√3	1	1	3.3	3.3	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 10.9 %	± 10.7 %	
Expanded Uncertainty (K=2)						**± 21.8 %**	**± 21.4 %**	

Head SAR Uncertainty Budget for Frequency Range of 300 MHz to 3 GHz

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.55	Normal	1	1	1	6.55	6.55	∞
Axial Isotropy	4.7	Rectangular	√3	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	0.7	0.7	3.9	3.9	∞
Boundary Effect	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.04	Rectangular	√3	1	1	0.02	0.02	∞
Probe Positioning with Respect to Phantom	0.8	Rectangular	√3	1	1	0.5	0.5	∞
Post-processing	4.0	Rectangular	√3	1	1	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	2.82 / 1.60	Normal	1	1	1	2.8	1.6	35
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	6.2	Rectangular	√3	1	1	3.6	3.6	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 11.6 %	± 11.3 %	
Expanded Uncertainty (K=2)						**± 23.2 %**	**± 22.6 %**	

Head SAR Uncertainty Budget for Frequency Range of 3 GHz to 6 GHz

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Axial Isotropy	4.7	Rectangular	√3	√0.5	√0.5	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	√0.5	√0.5	3.9	3.9	∞
Boundary Effect	1.0	Rectangular	√3	1	1	0.6	0.6	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.02	Rectangular	√3	1	1	0.01	0.01	∞
Probe Positioning with Respect to Phantom	0.4	Rectangular	√3	1	1	0.2	0.2	∞
Post-processing	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Test Sample Related								
Test Sample Positioning	3.68 / 1.73	Normal	1	1	1	3.7	1.7	29
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	7.2	Rectangular	√3	1	1	4.2	4.2	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 11.5 %	± 11.0 %	
Expanded Uncertainty (K=2)						**± 23.0 %**	**± 22.0 %**	

Body SAR Uncertainty Budget for Frequency Range of 300 MHz to 3 GHz

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.55	Normal	1	1	1	6.55	6.55	∞
Axial Isotropy	4.7	Rectangular	√3	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	0.7	0.7	3.9	3.9	∞
Boundary Effect	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.04	Rectangular	√3	1	1	0.02	0.02	∞
Probe Positioning with Respect to Phantom	0.8	Rectangular	√3	1	1	0.5	0.5	∞
Post-processing	4.0	Rectangular	√3	1	1	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	3.68 / 1.73	Normal	1	1	1	3.7	1.7	29
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	7.6	Rectangular	√3	1	1	4.4	4.4	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 12.1 %	± 11.6 %	
Expanded Uncertainty (K=2)						**± 24.2 %**	**± 23.2 %**	

Body SAR Uncertainty Budget for Frequency Range of 3 GHz to 6 GHz

7. Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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Web Site: https://ee.bureauveritas.com.tw/BVInternet/Default

The road map of all our labs can be found in our web site also.

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Appendix A. SAR Plots of System Verification

The plots for system verification with largest deviation for each SAR system combination are shown as follows.

S01 System Check_H1900_210318

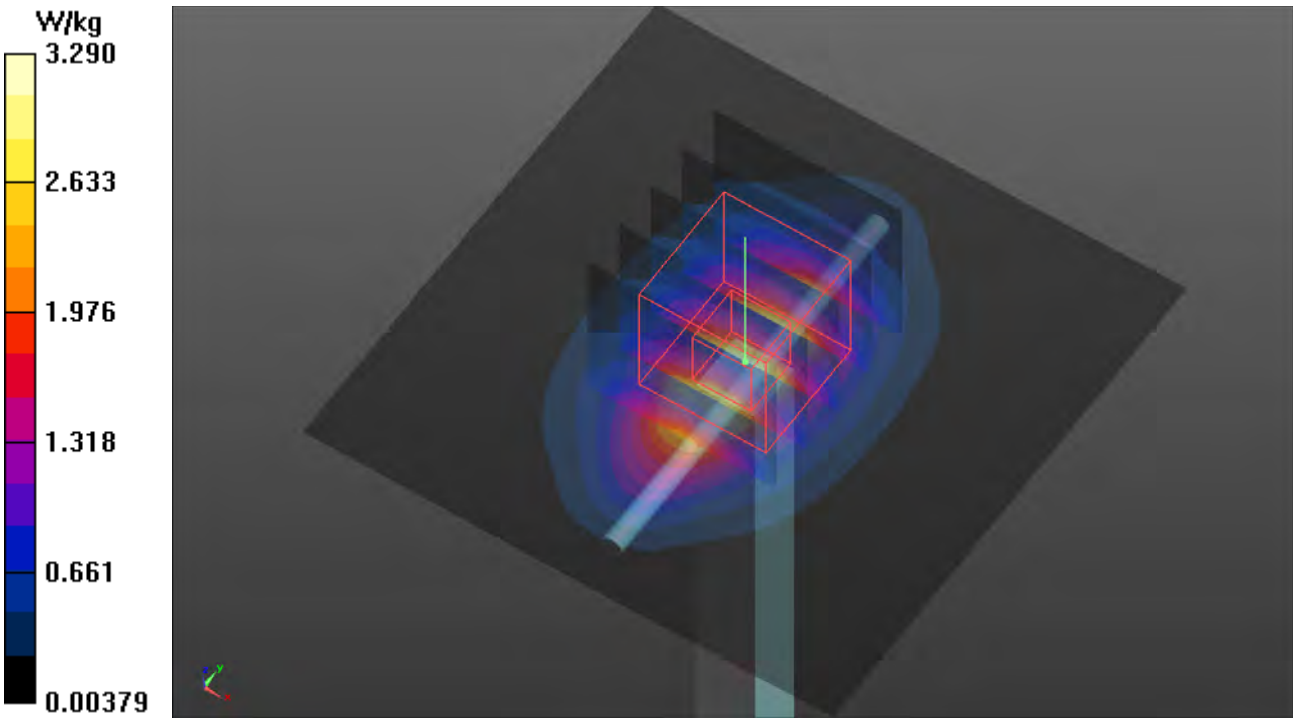
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0318 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.542; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.29 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.14 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.97 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.06 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.31 W/kg



S02 System Check_H1750_210326

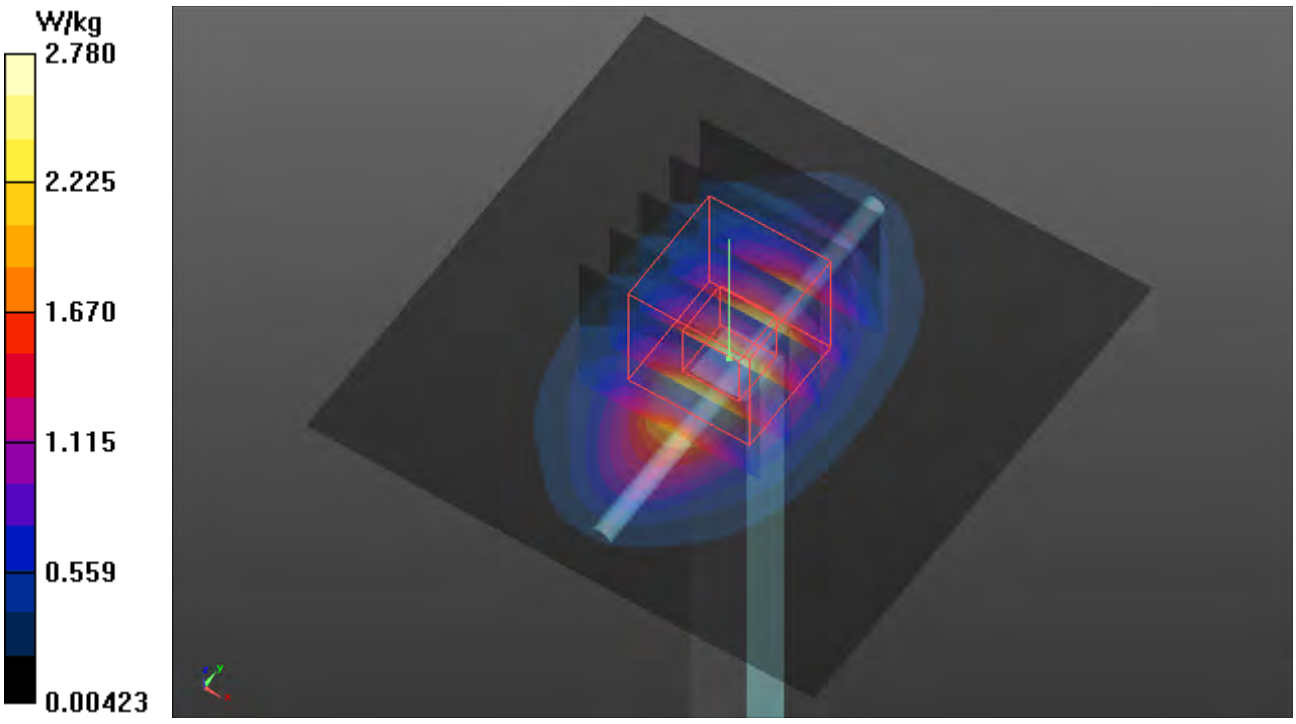
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0326 Medium parameters used: f = 1750 MHz; σ = 1.318 S/m; ε_r = 39.352; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.78 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.63 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 3.29 W/kg
SAR(1 g) = 1.82 W/kg; SAR(10 g) = 0.963 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.76 W/kg



S03 System Check_H835_210317

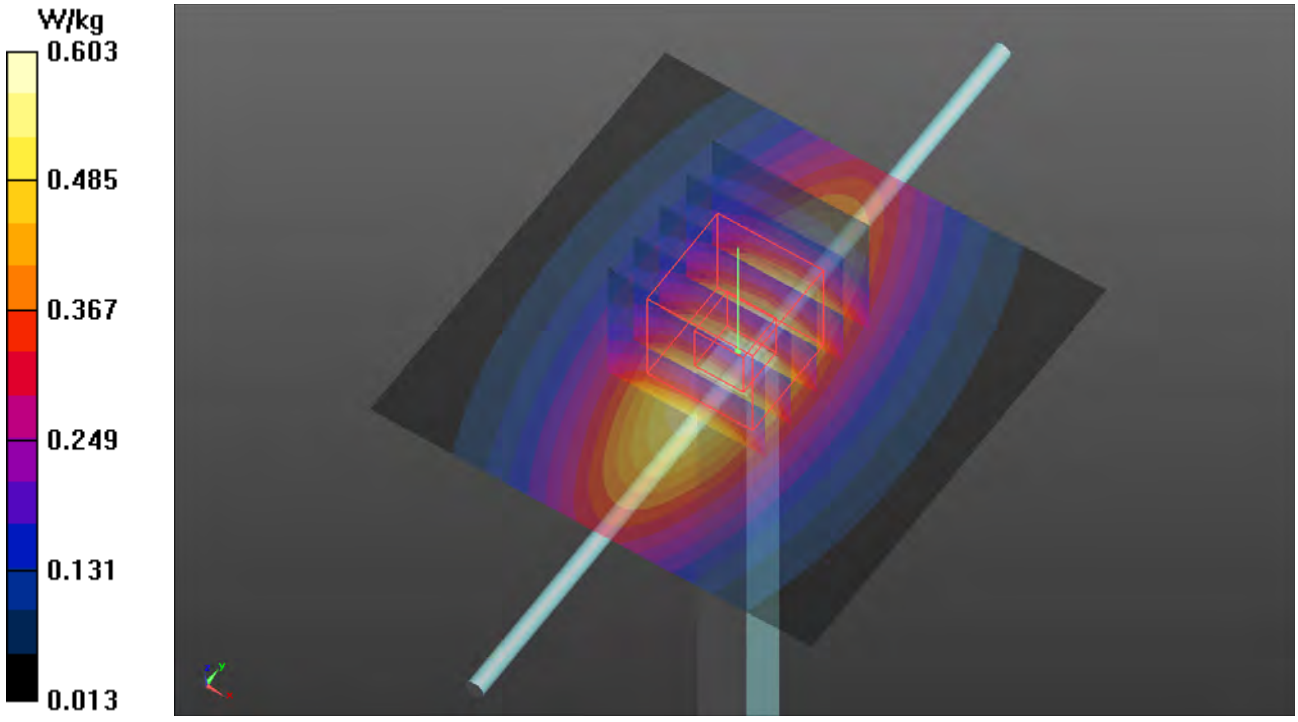
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0317 Medium parameters used: f = 835 MHz; σ = 0.904 S/m; ε_r = 40.649; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.603 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.17 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.686 W/kg
SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.294 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.605 W/kg



S04 System Check_H1900_210318

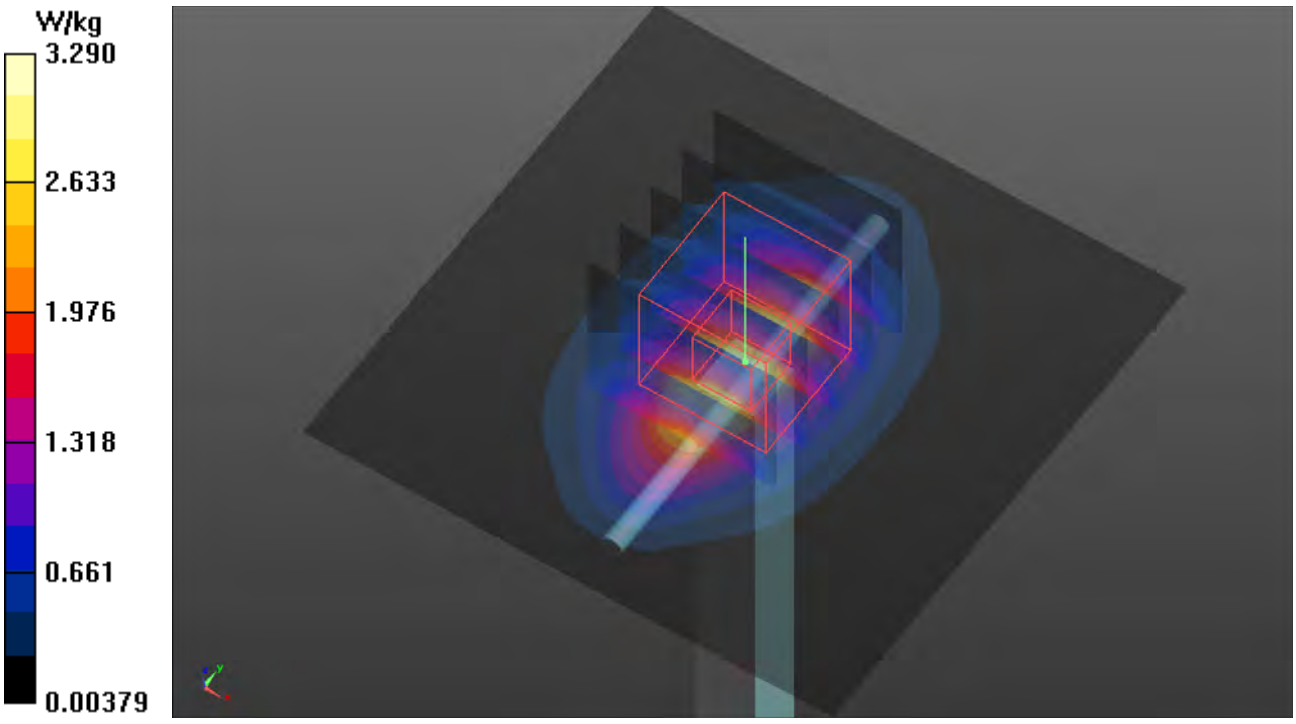
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0318 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.542; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.29 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.14 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.97 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.06 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.31 W/kg



S05 System Check_H1900_210322

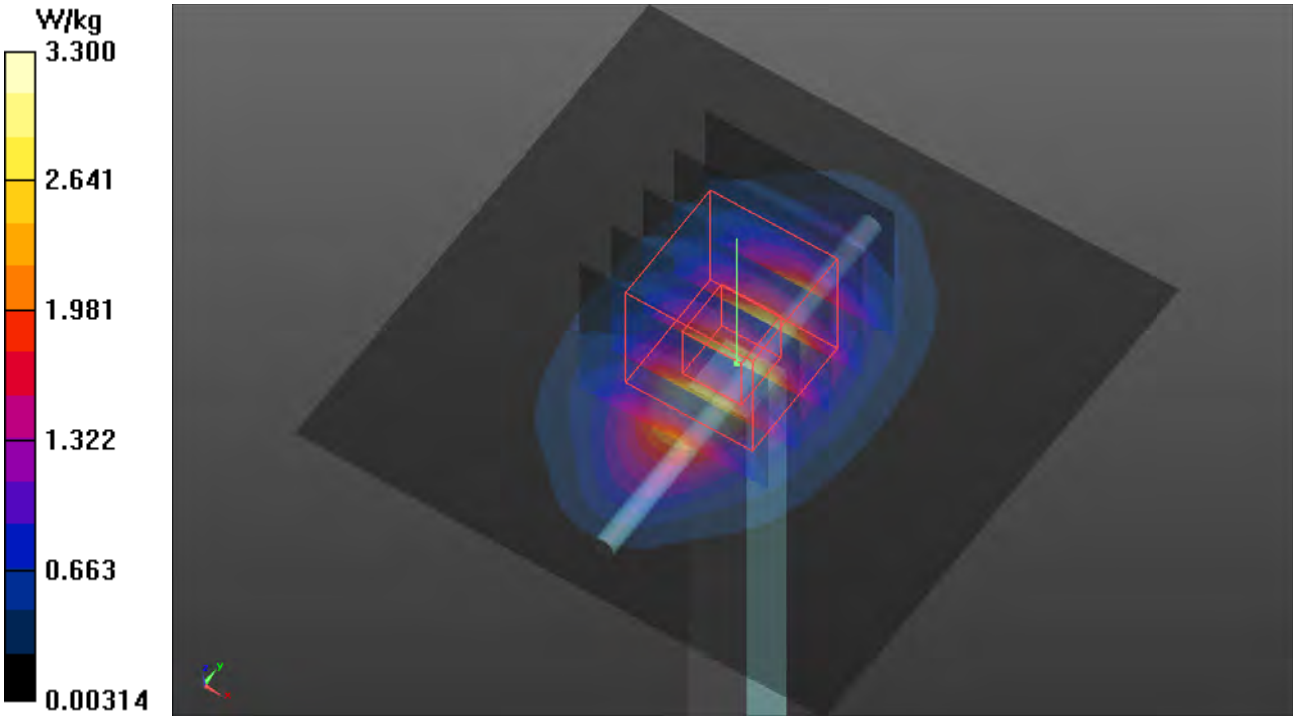
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0322 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.859; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.30 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.13 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.94 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.07 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.29 W/kg



S06 System Check_H1750_210317

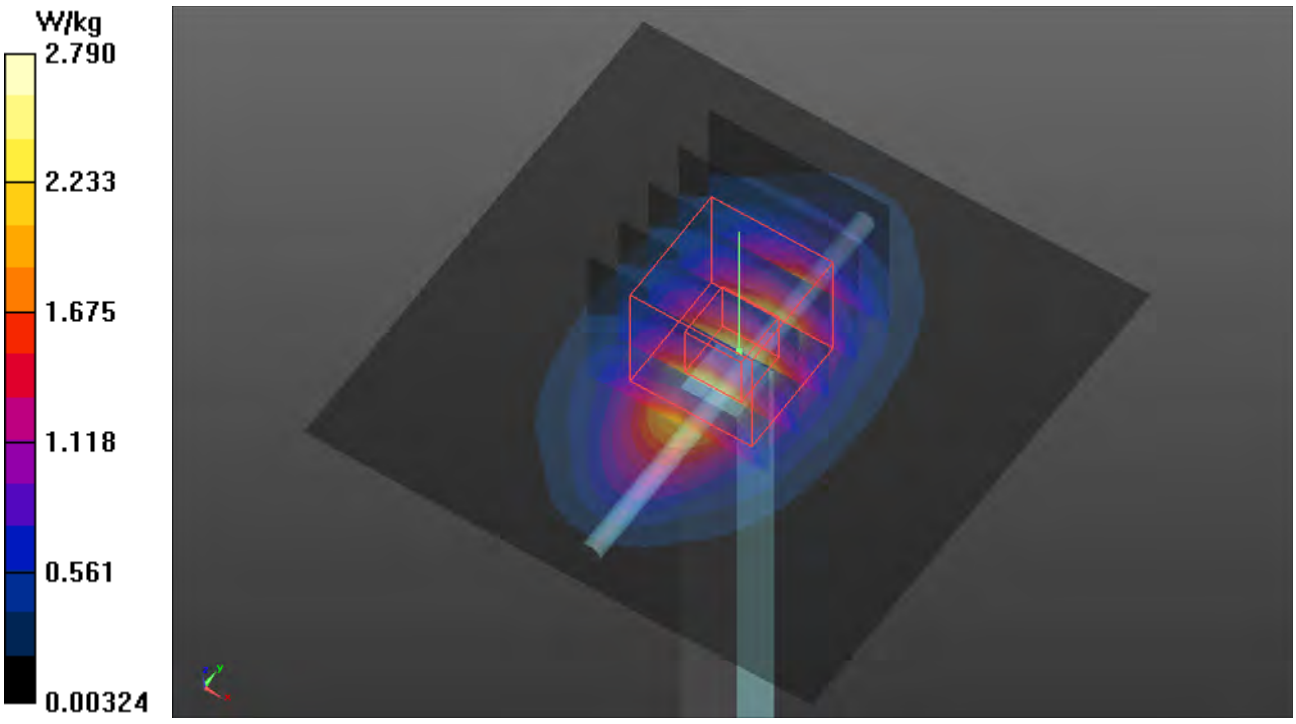
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0317 Medium parameters used: f = 1750 MHz; σ = 1.329 S/m; ε_r = 39.118; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.79 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.30 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 1.81 W/kg; SAR(10 g) = 0.959 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.76 W/kg



S07 System Check_H835_210317

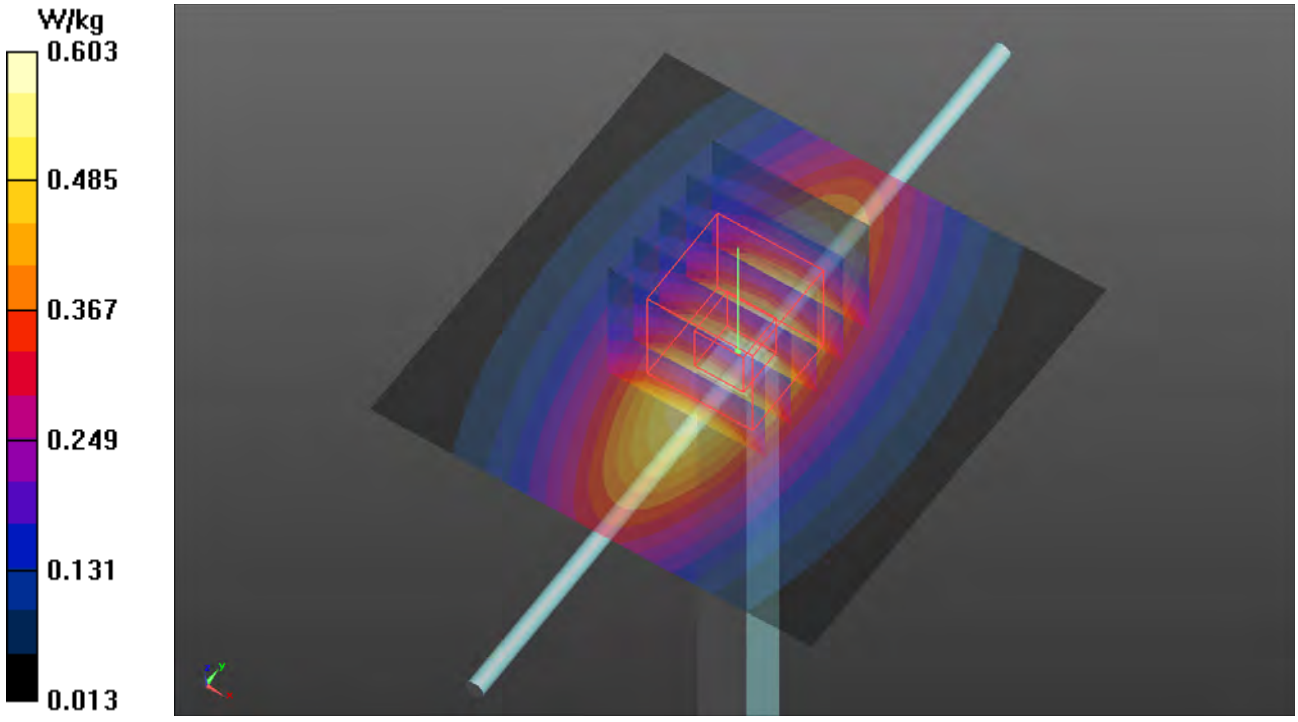
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0317 Medium parameters used: f = 835 MHz; σ = 0.904 S/m; ε_r = 40.649; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.603 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.17 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.686 W/kg
SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.294 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.605 W/kg



S08 System Check_H2600_210320

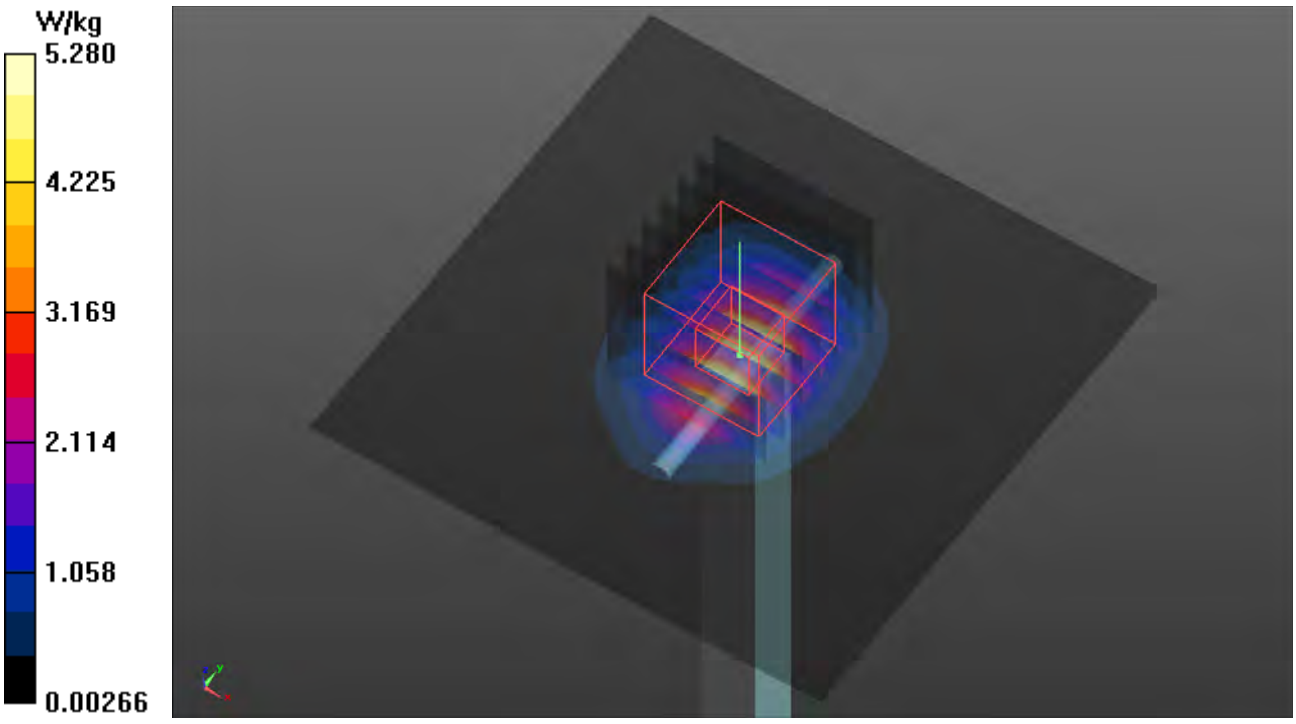
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0320 Medium parameters used: f = 2600 MHz; σ = 2.046 S/m; ε_r = 38.525; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.28 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.51 W/kg
SAR(1 g) = 3.01 W/kg; SAR(10 g) = 1.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.26 W/kg



S09 System Check_H2600_210321

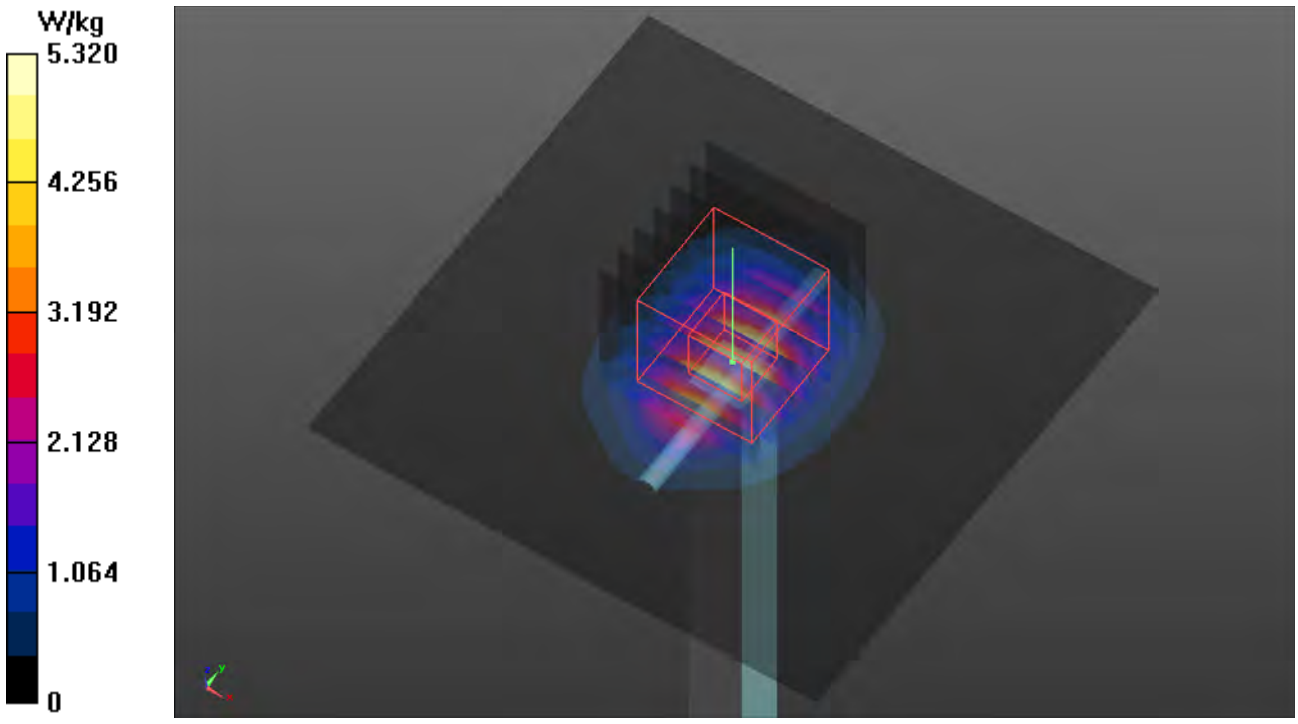
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0321 Medium parameters used: f = 2600 MHz; σ = 2.032 S/m; ε_r = 37.484; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.32 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.36 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.56 W/kg
SAR(1 g) = 3.03 W/kg; SAR(10 g) = 1.38 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.30 W/kg



S10 System Check_H750_210318

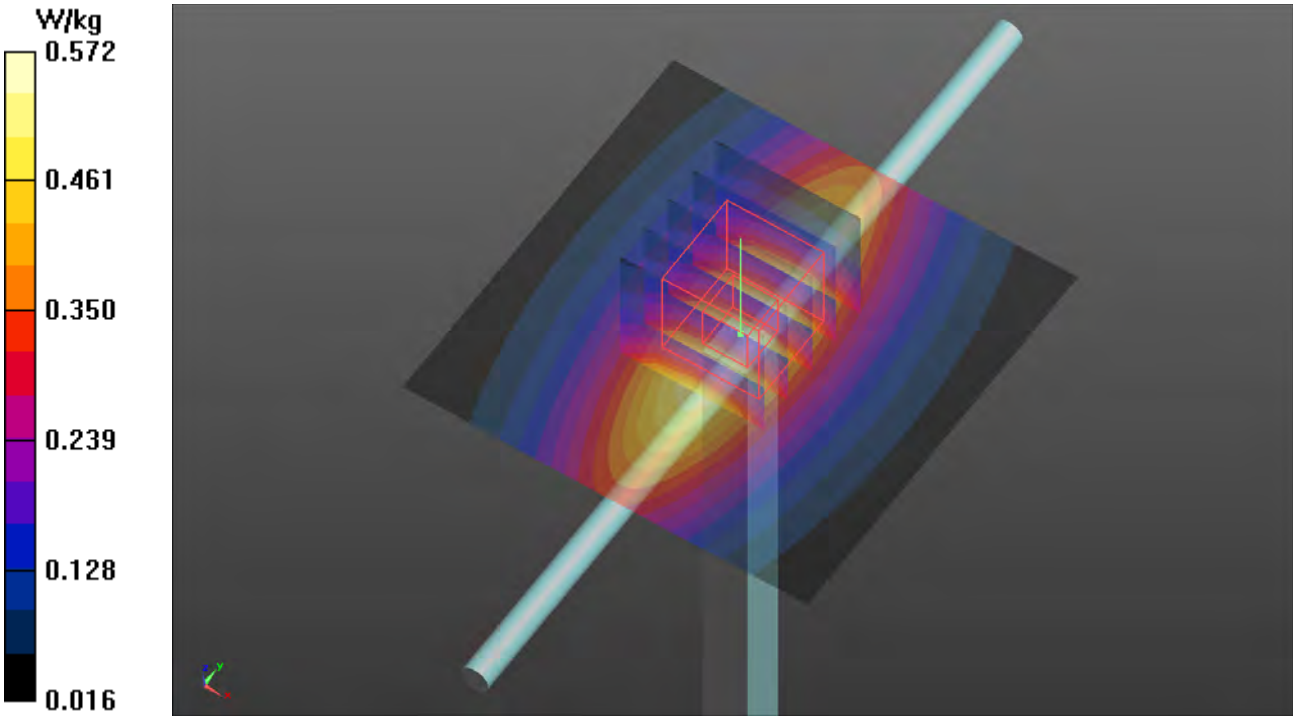
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0318 Medium parameters used: f = 750 MHz; σ = 0.902 S/m; ε_r = 42.202; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.572 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.08 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.625 W/kg
SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.269 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.553 W/kg



S11 System Check_H750_210318

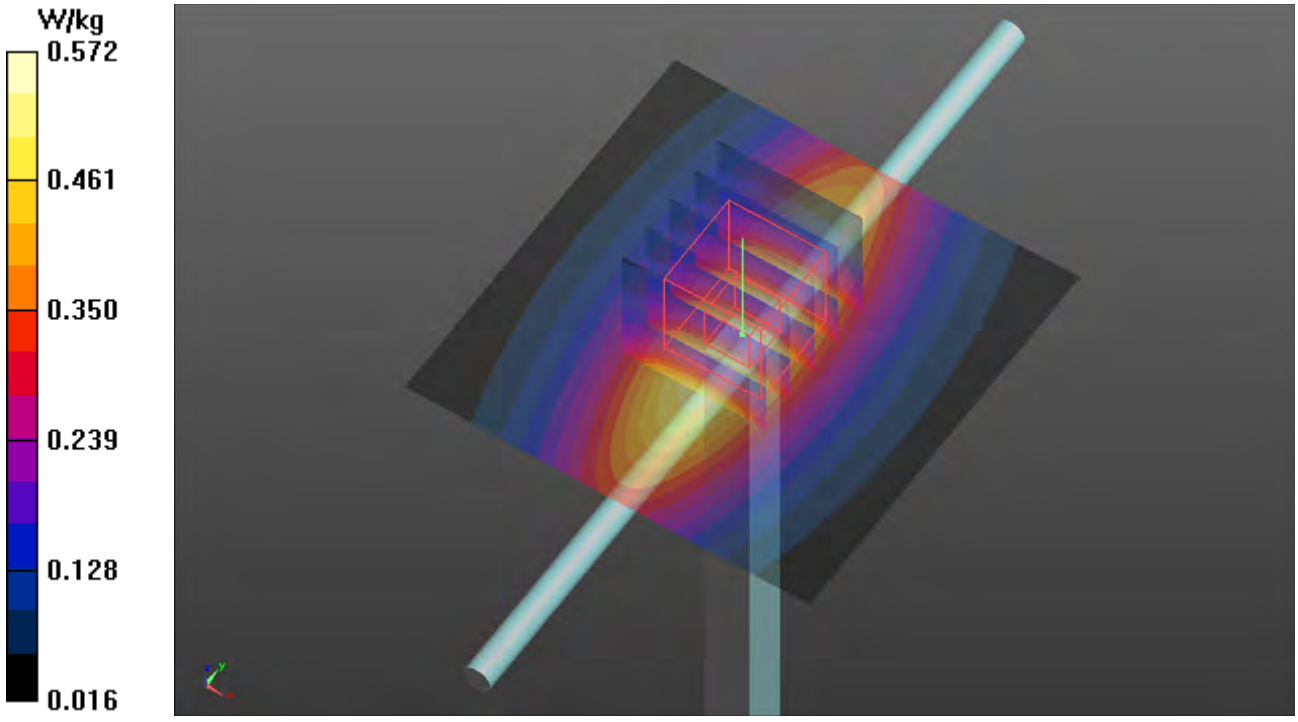
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0318 Medium parameters used: f = 750 MHz; σ = 0.902 S/m; ε_r = 42.202; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.572 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.08 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.625 W/kg
SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.269 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.553 W/kg



S12 System Check_H750_210318

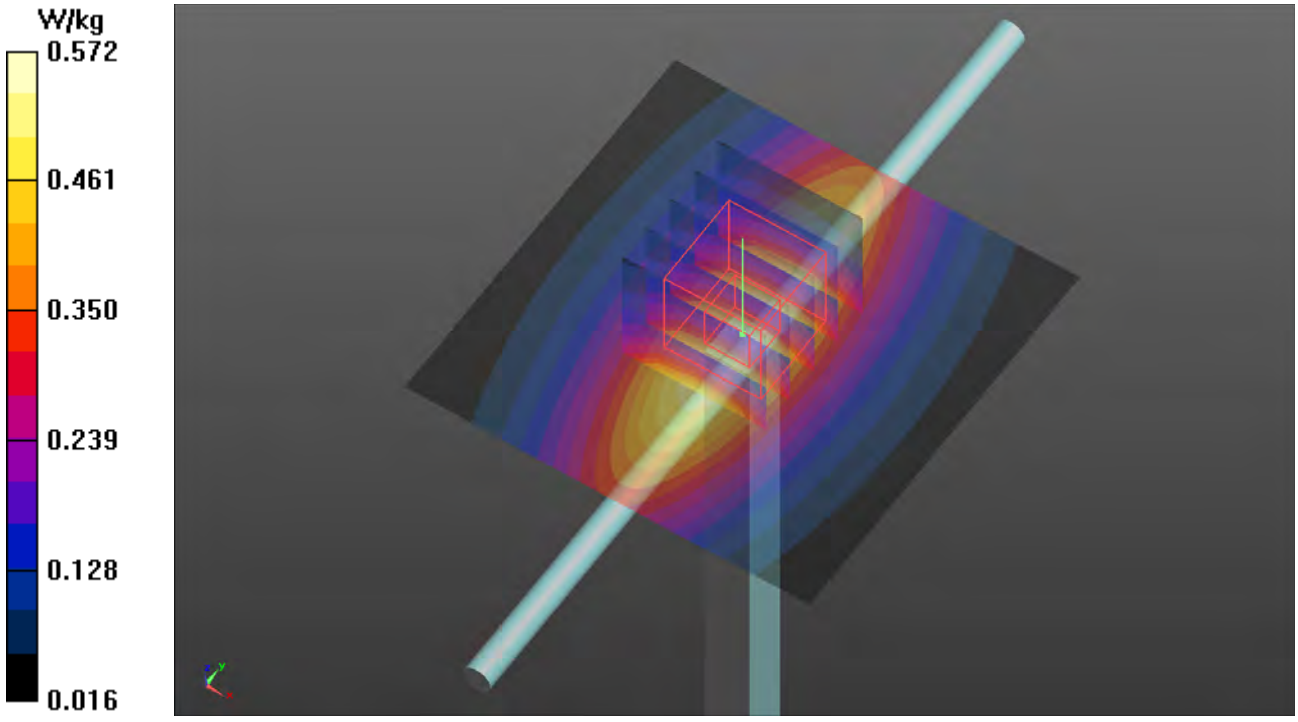
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0318 Medium parameters used: f = 750 MHz; σ = 0.902 S/m; ε_r = 42.202; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.572 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.08 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.625 W/kg
SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.269 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.553 W/kg



S13 System Check_H750_210318

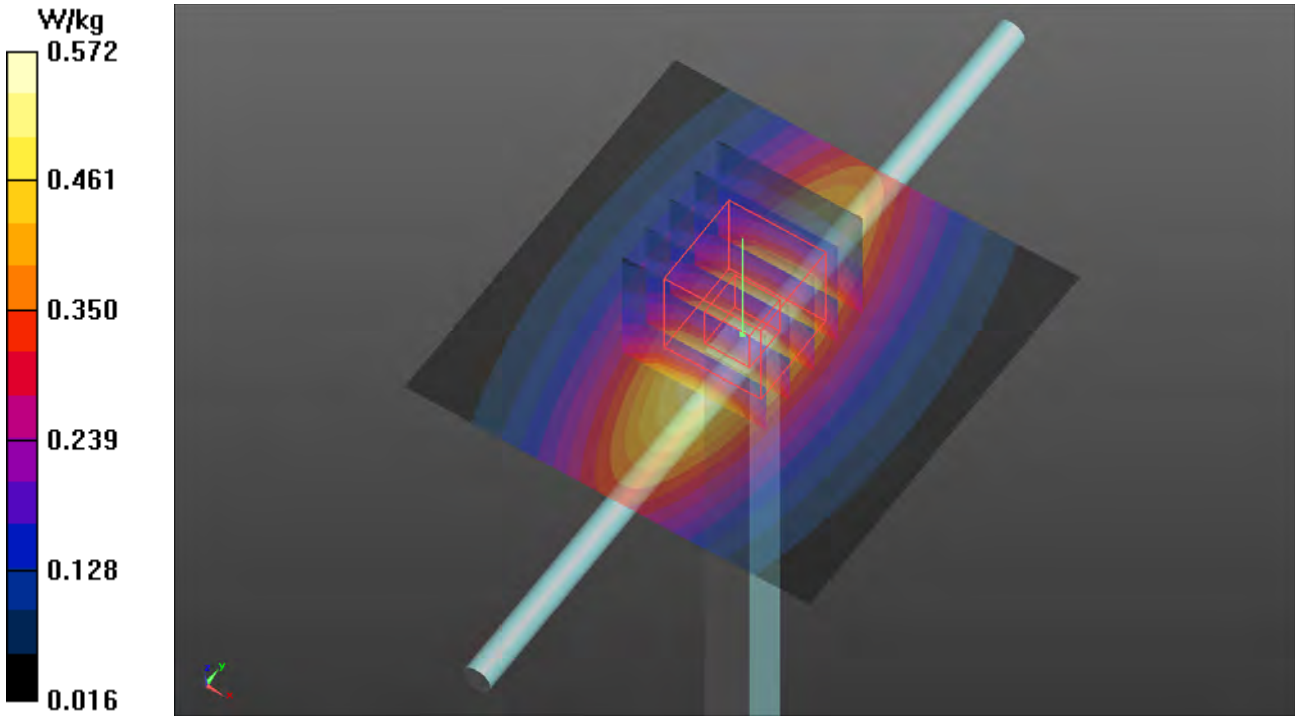
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0318 Medium parameters used: f = 750 MHz; σ = 0.902 S/m; ε_r = 42.202; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.572 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.08 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.625 W/kg
SAR(1 g) = 0.408 W/kg; SAR(10 g) = 0.269 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.553 W/kg



S14 System Check_H1900_210318

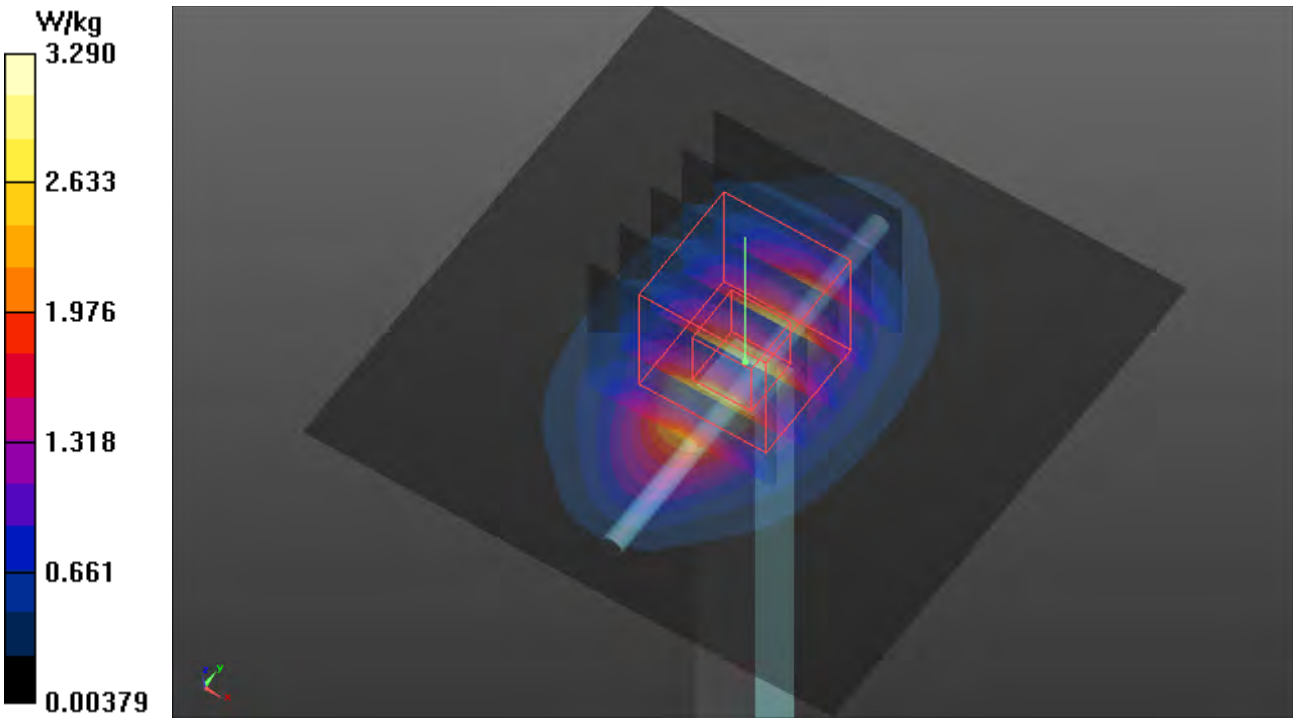
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0318 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.542; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.29 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.14 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.97 W/kg
SAR(1 g) = 2.02 W/kg; SAR(10 g) = 1.06 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.31 W/kg



S15 System Check_H835_210317

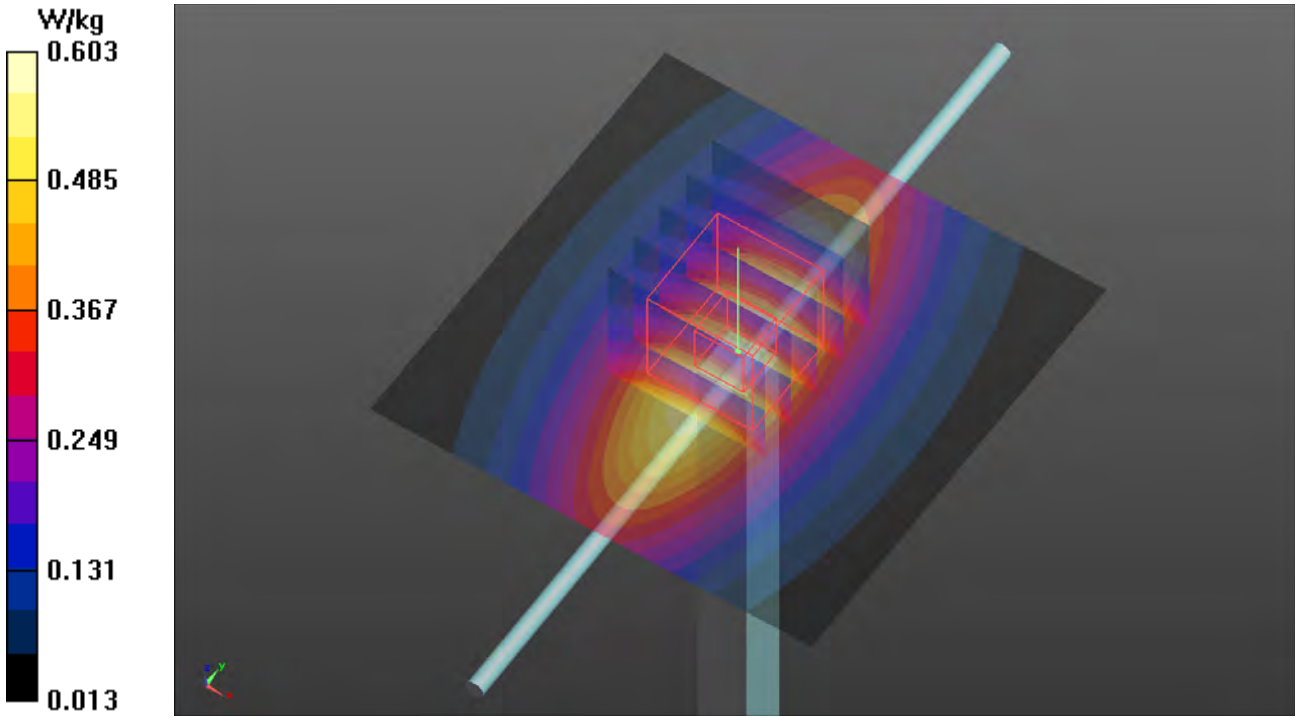
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0317 Medium parameters used: f = 835 MHz; σ = 0.904 S/m; ε_r = 40.649; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.603 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.17 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.686 W/kg
SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.294 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.605 W/kg



S16 System Check_H2300_210317

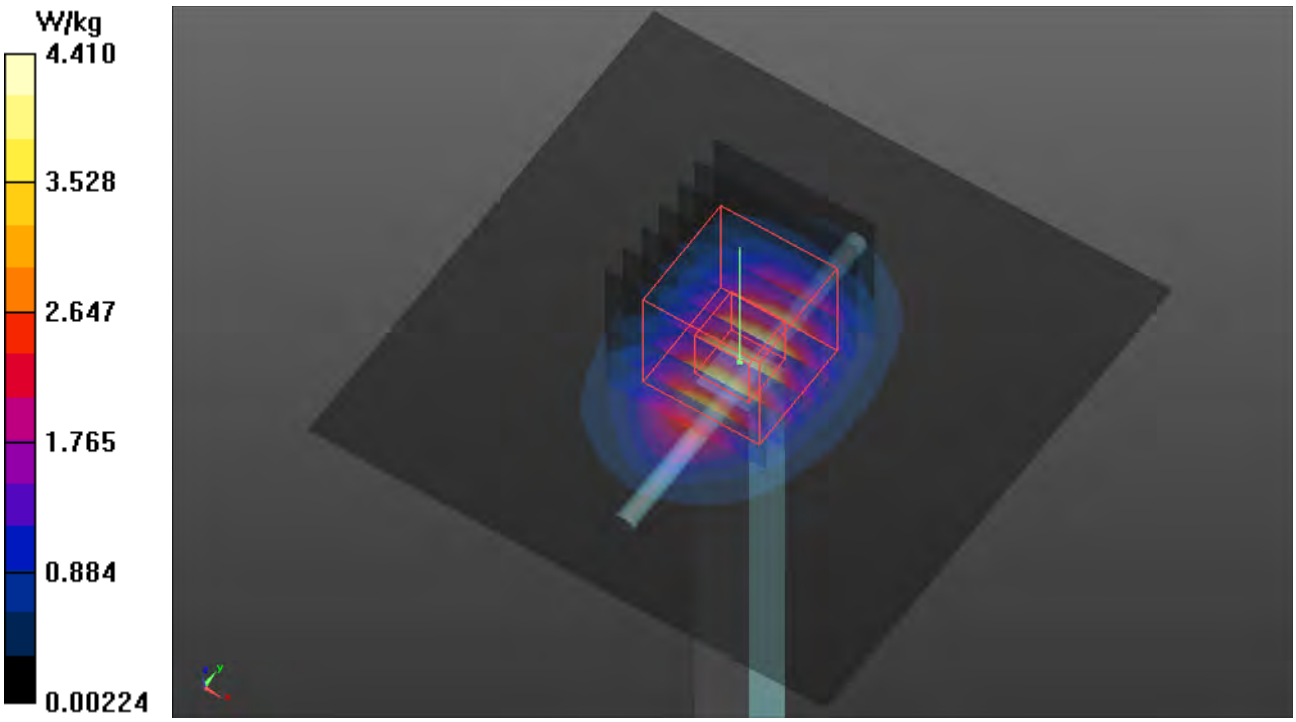
DUT: Dipole 2300 MHz; Type: D2300V2; SN:1004

Communication System: UID 0, CW; Frequency: 2300 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0317 Medium parameters used: f = 2300 MHz; σ = 1.743 S/m; ε_r = 38.81; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.62, 7.62, 7.62) @ 2300 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.41 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.95 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 5.48 W/kg
SAR(1 g) = 2.58 W/kg; SAR(10 g) = 1.24 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.43 W/kg



S17 System Check_H2600_210320

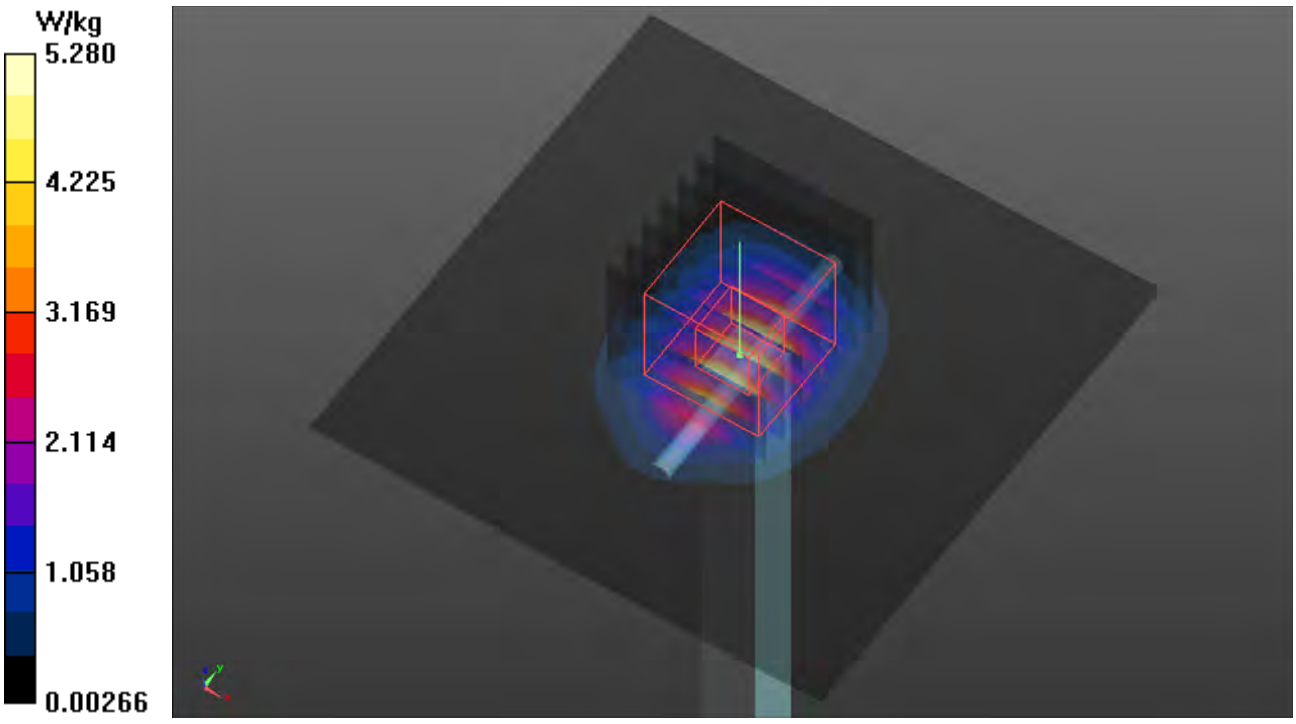
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0320 Medium parameters used: f = 2600 MHz; σ = 2.046 S/m; ε_r = 38.525; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.28 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.51 W/kg
SAR(1 g) = 3.01 W/kg; SAR(10 g) = 1.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.26 W/kg



S18 System Check_H2600_210320

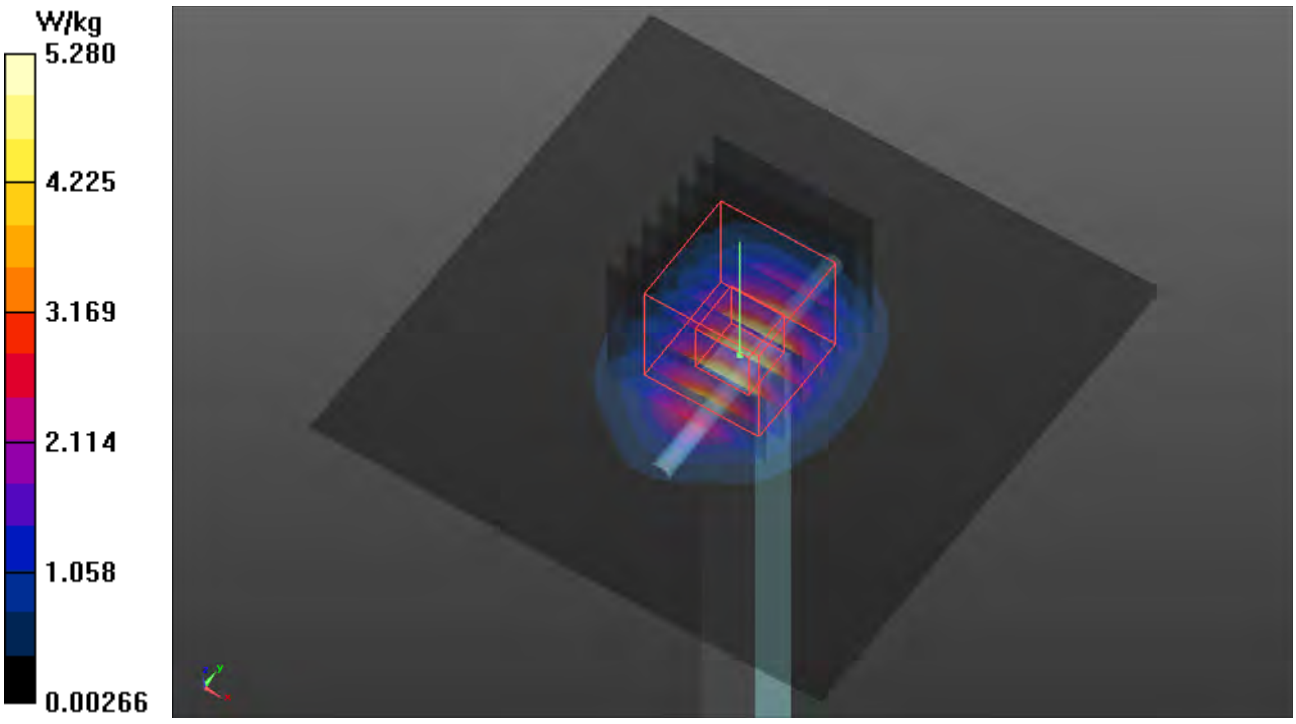
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0320 Medium parameters used: f = 2600 MHz; σ = 2.046 S/m; ε_r = 38.525; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.28 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.51 W/kg
SAR(1 g) = 3.01 W/kg; SAR(10 g) = 1.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.26 W/kg



S19 System Check_H3500_210321

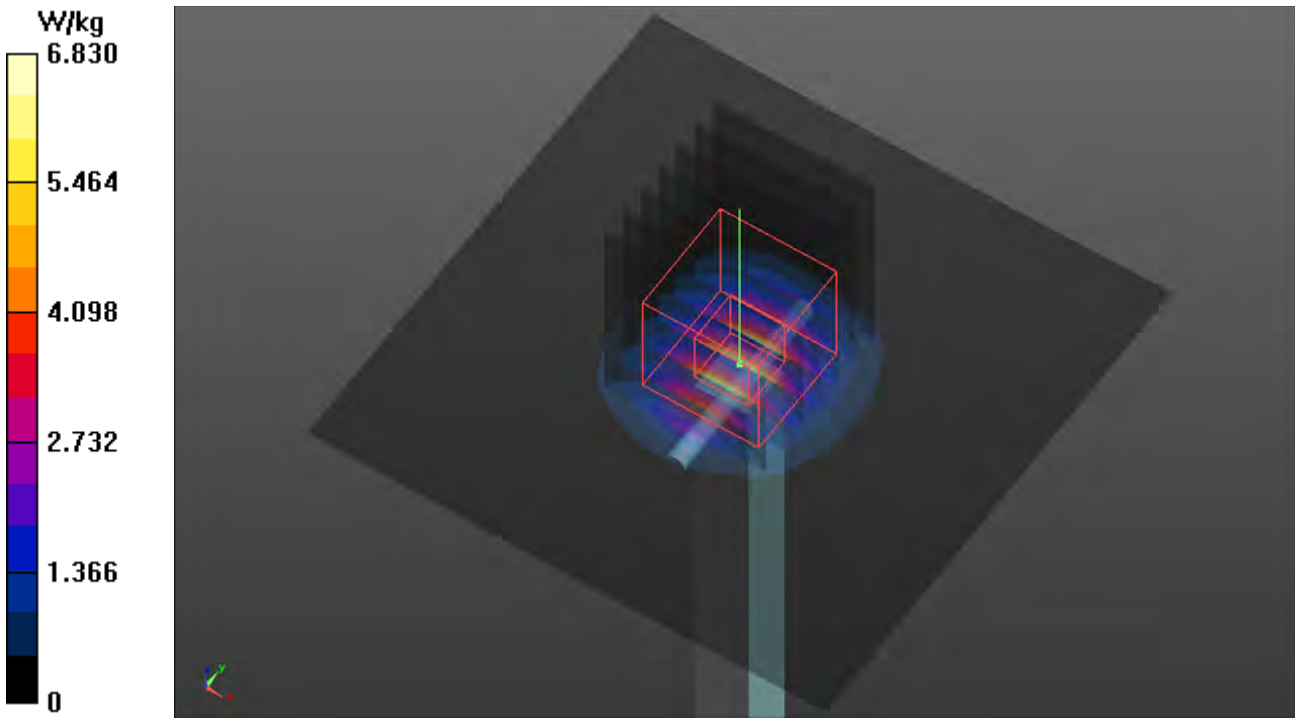
DUT: Dipole 3500 MHz; Type:D3500V2; SN: 1007

Communication System: UID 0, CW; Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: H34T38N1_0321 Medium parameters used: f = 3500 MHz; σ = 2.861 S/m; ε_r = 38.786; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3500 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.83 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 51.64 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 9.09 W/kg
SAR(1 g) = 3.61 W/kg; SAR(10 g) = 1.39 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.83 W/kg



S20_a System Check_H3500_210321

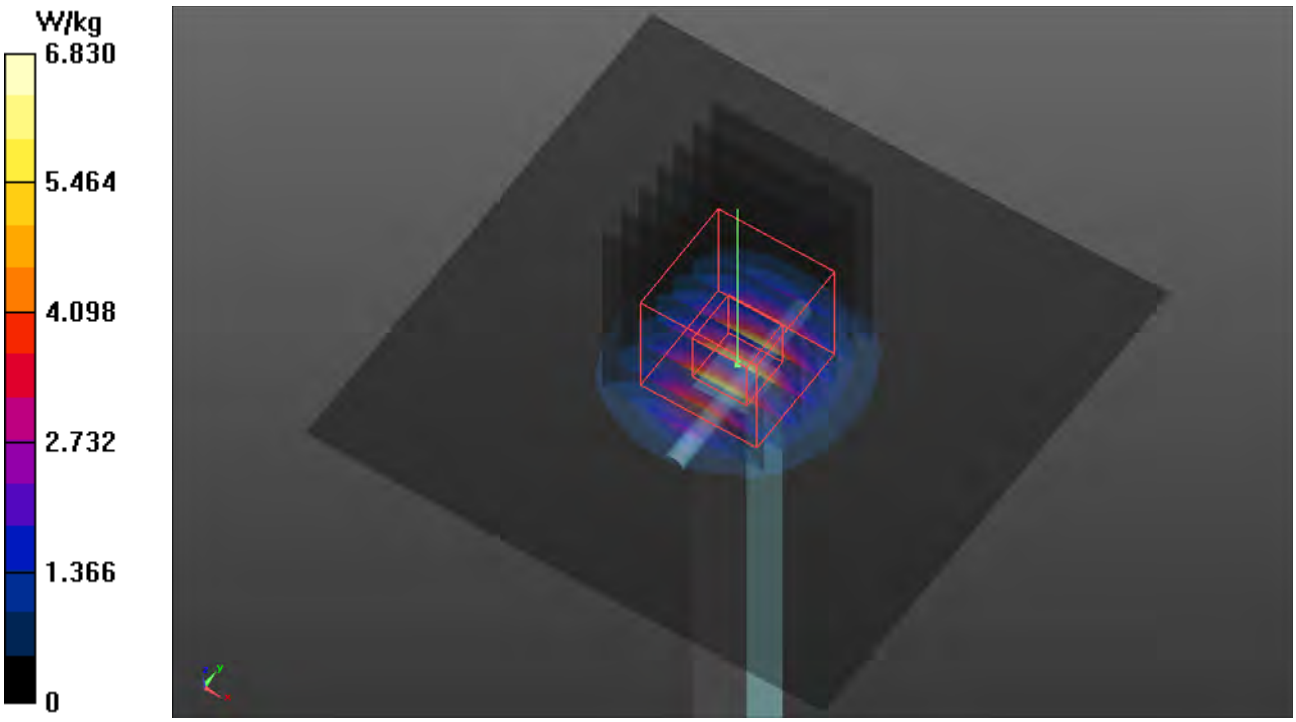
DUT: Dipole 3500 MHz; Type:D3500V2; SN: 1007

Communication System: UID 0, CW; Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: H34T38N1_0321 Medium parameters used: f = 3500 MHz; σ = 2.861 S/m; ε_r = 38.786; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3500 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.83 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 51.64 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 9.09 W/kg
SAR(1 g) = 3.61 W/kg; SAR(10 g) = 1.39 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.83 W/kg



S20_b System Check_H3700_210321

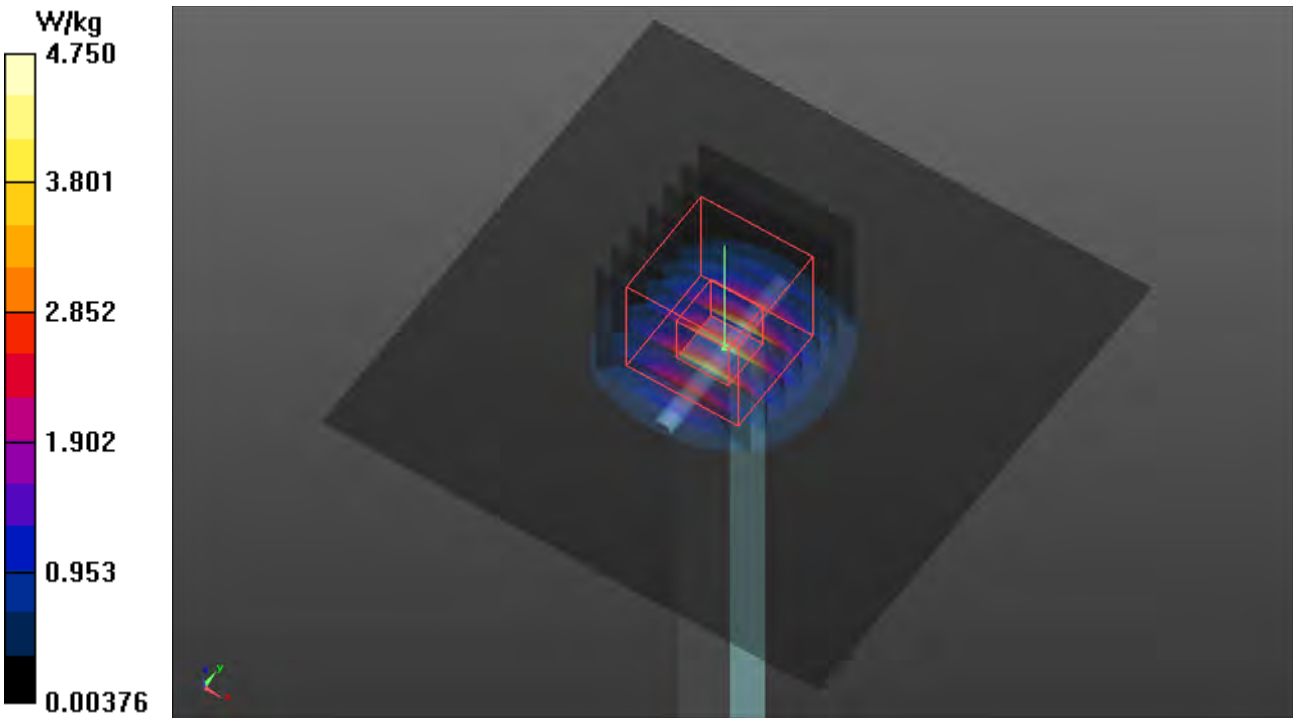
DUT: Dipole 3700 MHz; Type:D3700V2; SN: 1074

Communication System: UID 0, CW; Frequency: 3700 MHz;Duty Cycle: 1:1
Medium: H34T38N1_0321 Medium parameters used: f = 3700 MHz; σ = 3.049 S/m; ε_r = 38.443; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.67, 6.67, 6.67) @ 3700 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.75 W/kg

Pin=50mW/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 40.75 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 6.75 W/kg
SAR(1 g) = 3.52 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.93 W/kg



S21 System Check_H1750_210317

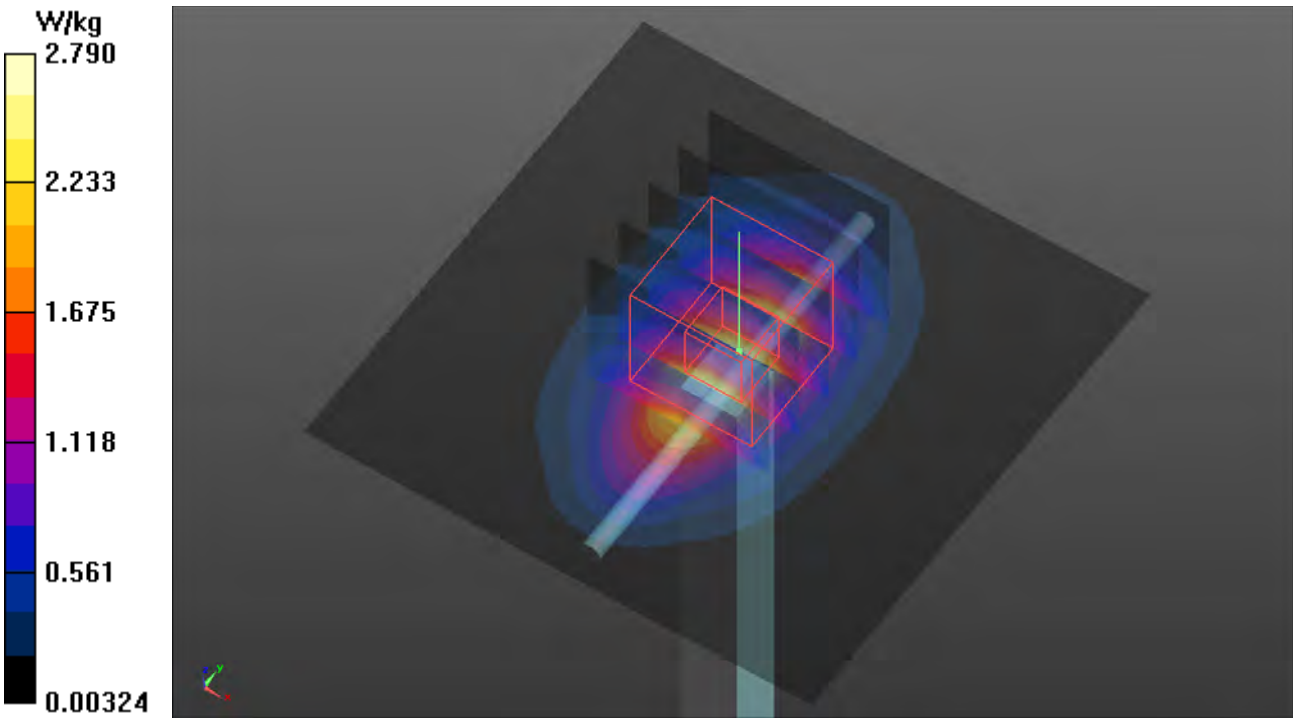
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0317 Medium parameters used: f = 1750 MHz; σ = 1.329 S/m; ε_r = 39.118; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.79 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.30 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 1.81 W/kg; SAR(10 g) = 0.959 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.76 W/kg



S22 System Check_H1750_210322

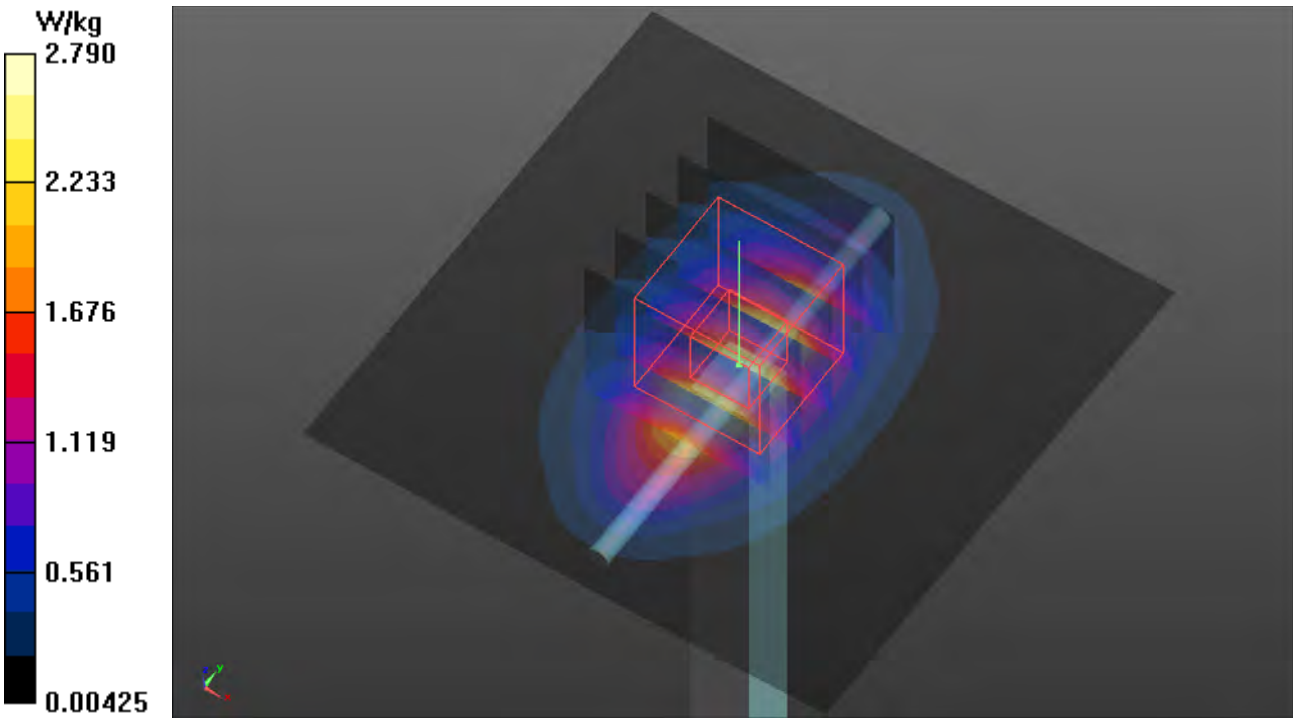
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0322 Medium parameters used: f = 1750 MHz; σ = 1.322 S/m; ε_r = 39.444; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.79 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.63 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 1.82 W/kg; SAR(10 g) = 0.965 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.77 W/kg



S23 System Check_H1900_210322

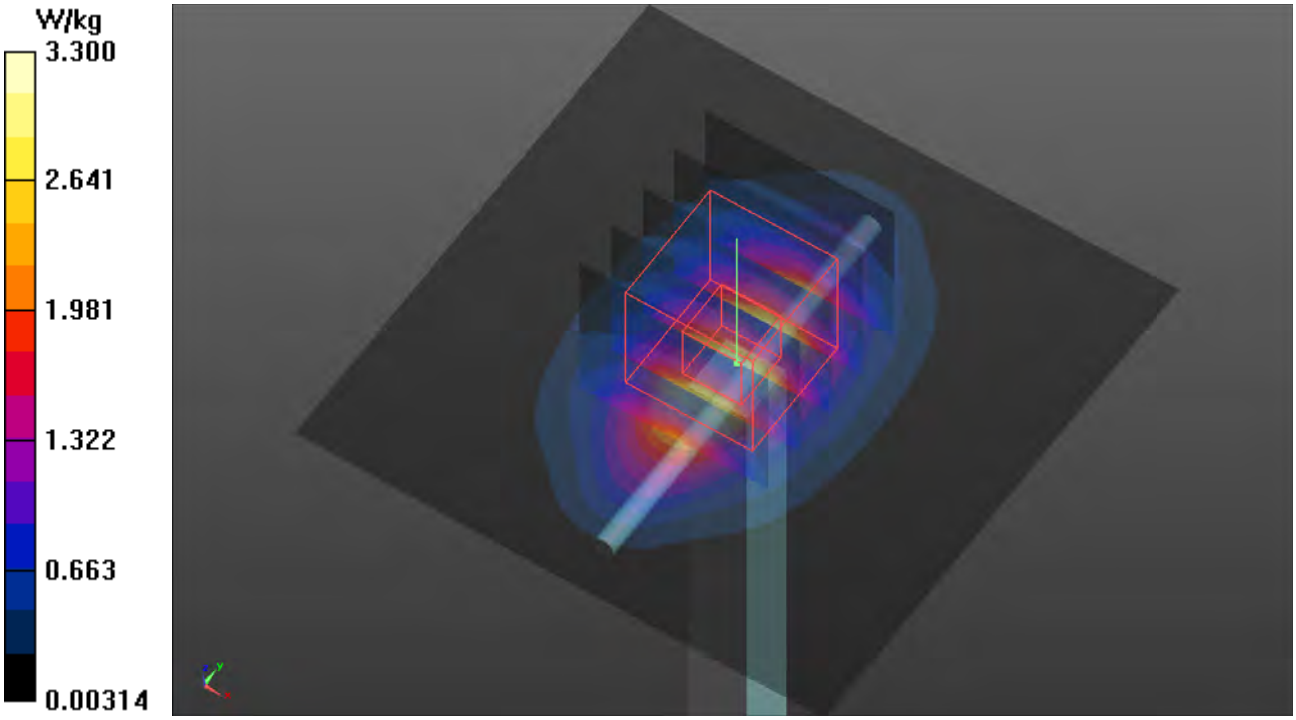
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0322 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.859; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.30 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.13 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.94 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.07 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.29 W/kg



S24 System Check_H1900_210322

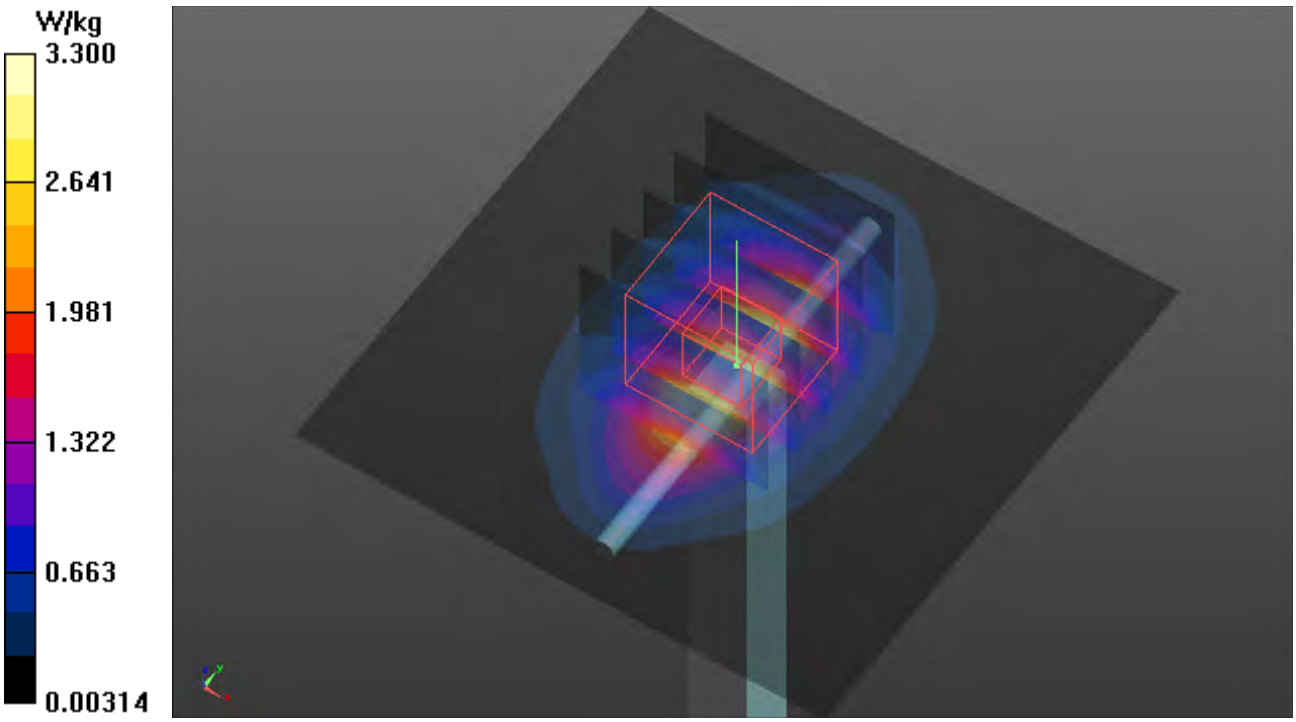
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0322 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.859; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.30 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.13 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.94 W/kg
SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.07 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.29 W/kg



S25 System Check_H835_210323

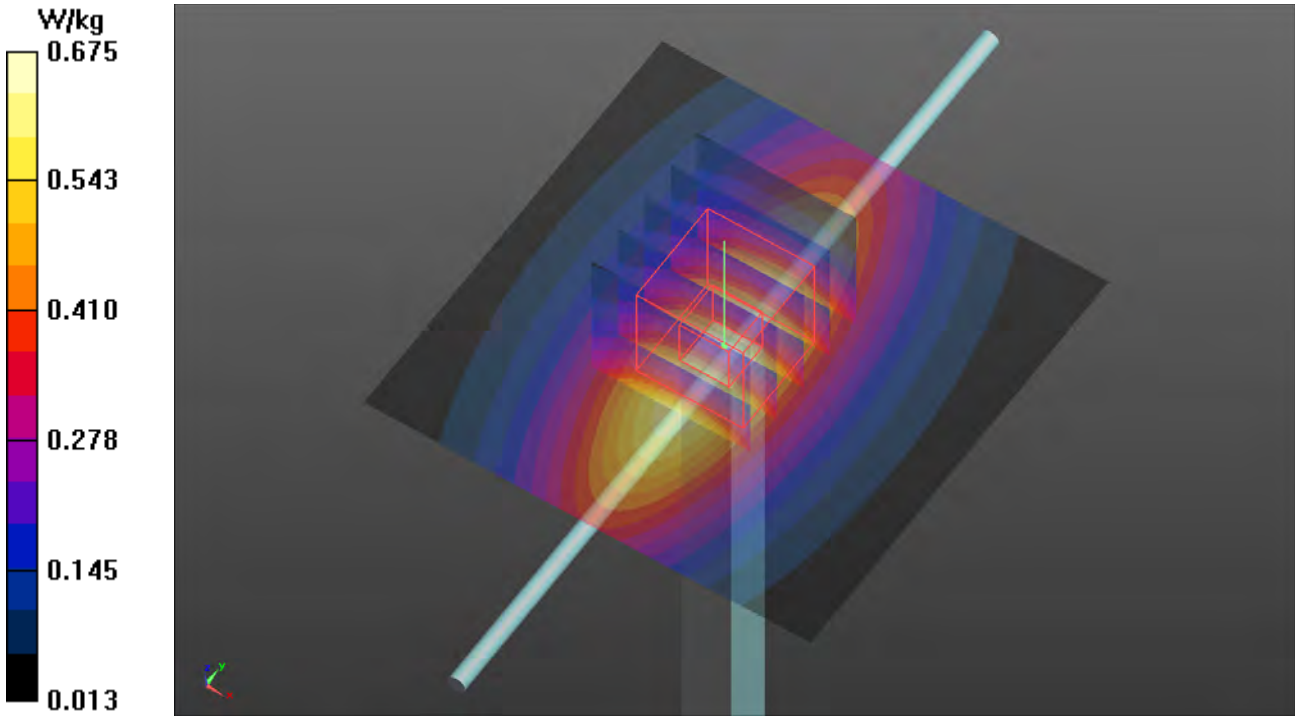
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0323 Medium parameters used: f = 835 MHz; σ = 0.927 S/m; ε_r = 41.963; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.675 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.14 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.770 W/kg
SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.321 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.678 W/kg



S26 System Check_H2600_210324

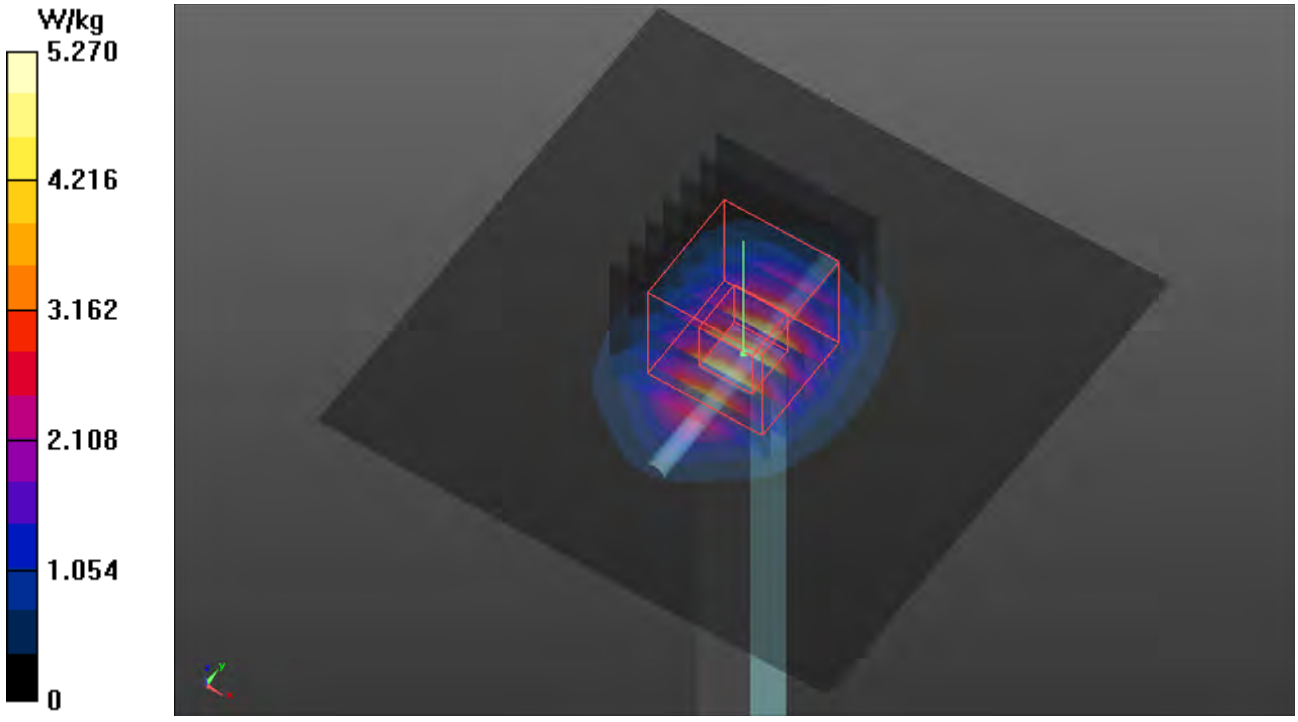
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0324 Medium parameters used: f = 2600 MHz; σ = 2.011 S/m; ε_r = 37.87; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.27 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.36 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.50 W/kg
SAR(1 g) = 3.02 W/kg; SAR(10 g) = 1.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.25 W/kg



S27 System Check_H750_210323

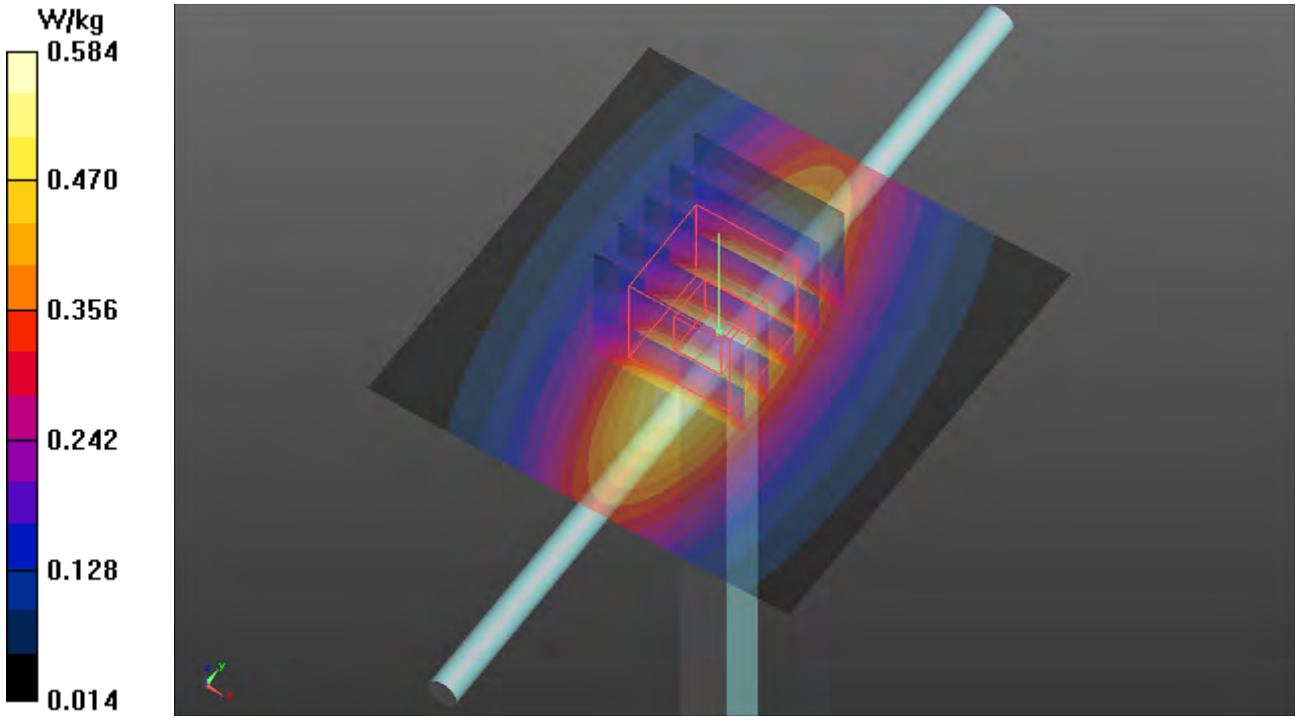
DUT: Dipole 750 MHz; Type: D750V2; SN: 1013

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0323 Medium parameters used: f = 750 MHz; σ = 0.891 S/m; ε_r = 41.003; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.584 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.57 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.637 W/kg
SAR(1 g) = 0.414 W/kg; SAR(10 g) = 0.274 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.559 W/kg



S28 System Check_H2600_210324

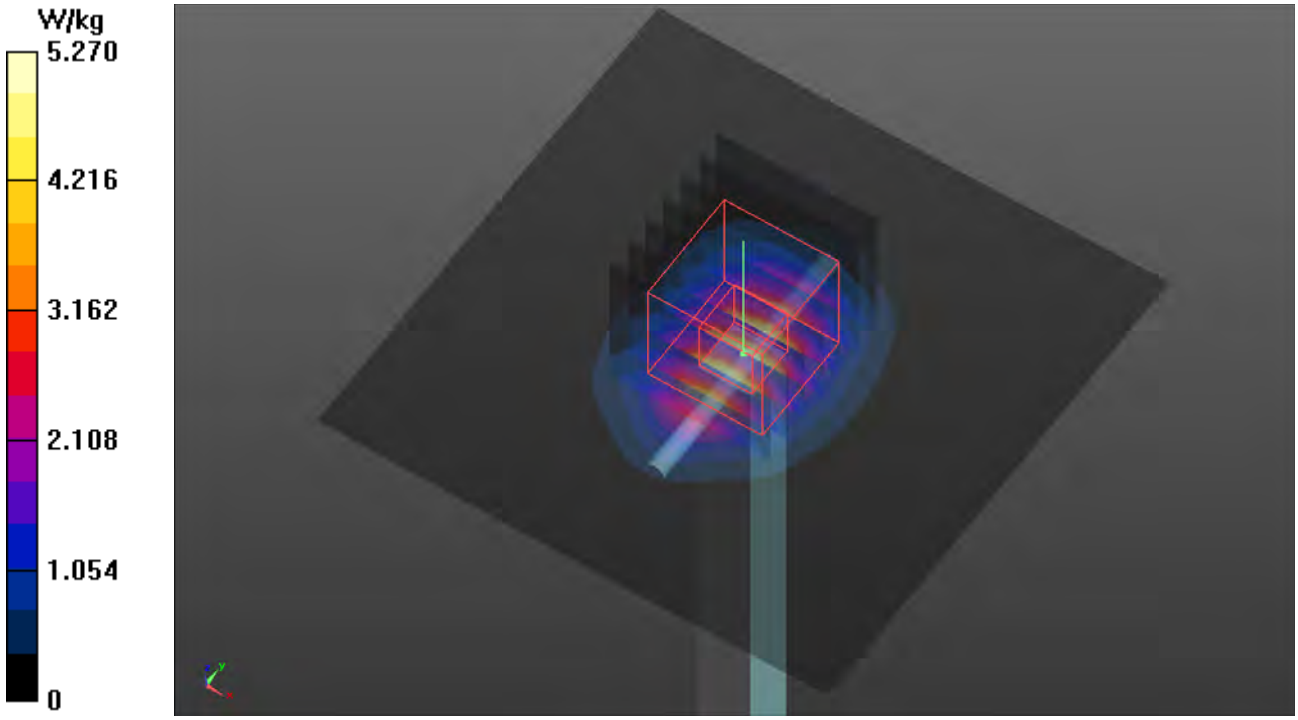
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0324 Medium parameters used: f = 2600 MHz; σ = 2.011 S/m; ε_r = 37.87; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.27 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.36 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.50 W/kg
SAR(1 g) = 3.02 W/kg; SAR(10 g) = 1.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.25 W/kg



S29 System Check_H1750_210323

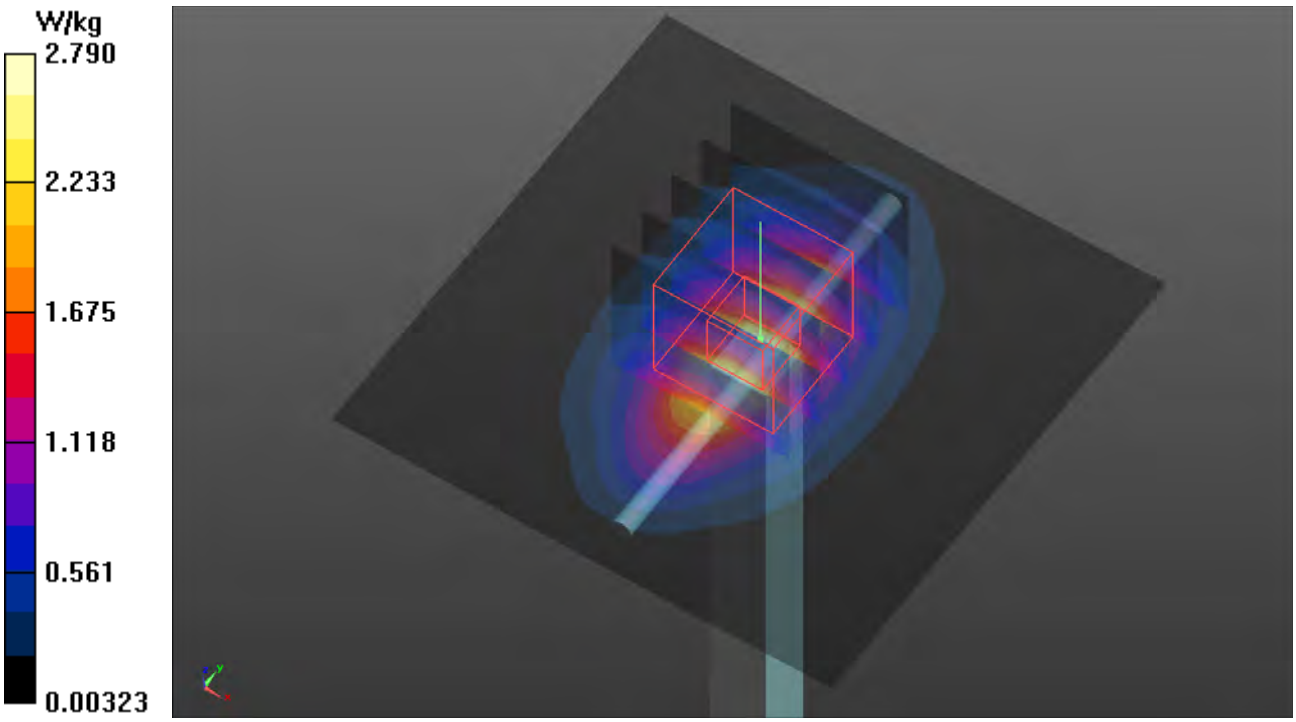
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N3_0323 Medium parameters used: f = 1750 MHz; σ = 1.328 S/m; ε_r = 41.494; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.79 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.30 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.29 W/kg
SAR(1 g) = 1.84 W/kg; SAR(10 g) = 0.966 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.76 W/kg



S30 System Check_H1750_210324

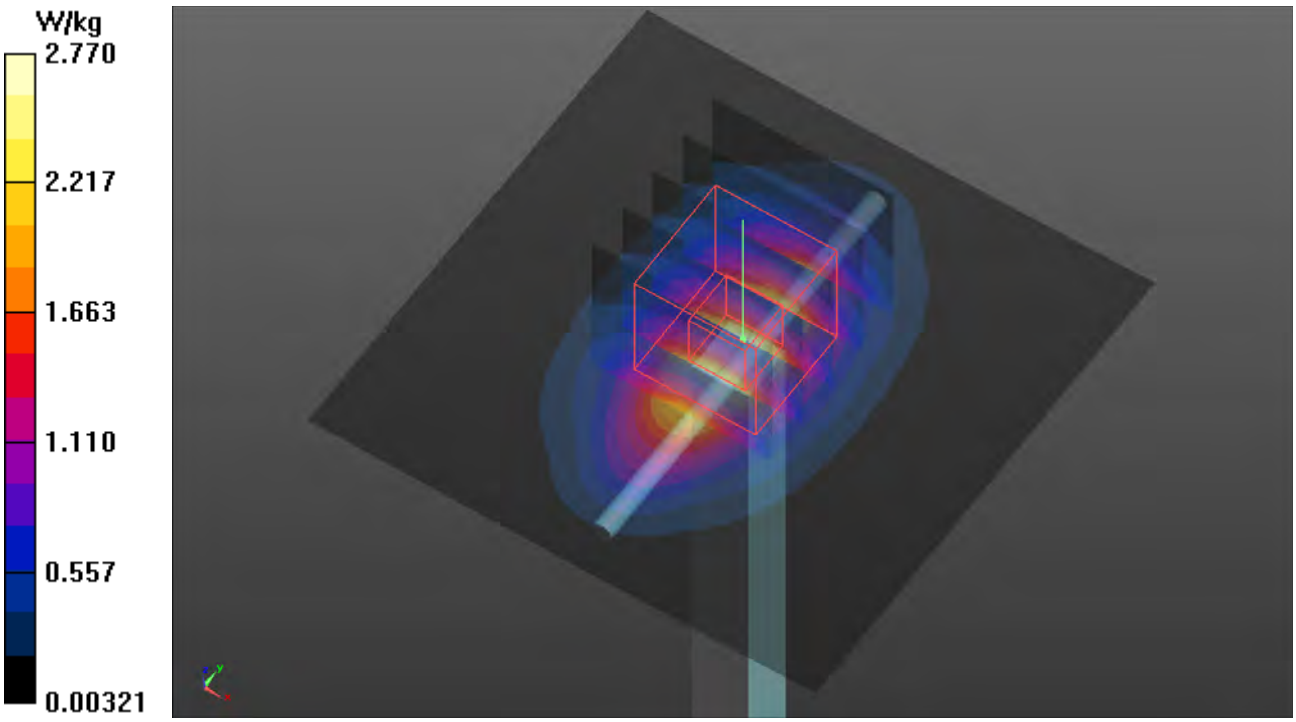
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0324 Medium parameters used: f = 1750 MHz; σ = 1.319 S/m; ε_r = 39.296; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.77 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.30 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.27 W/kg
SAR(1 g) = 1.81 W/kg; SAR(10 g) = 0.955 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.74 W/kg



S31 System Check_H2450_210312

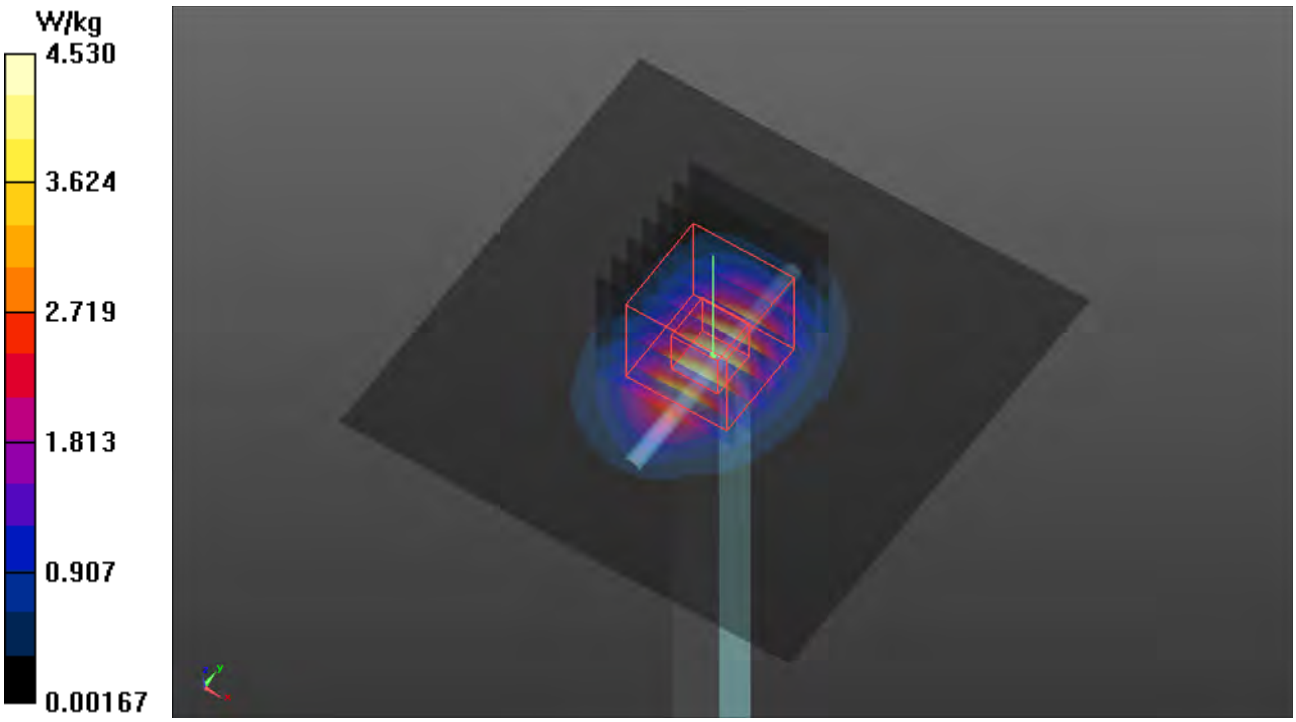
DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0312 Medium parameters used (interpolated): f = 2450 MHz; σ = 1.869 S/m; ε_r = 39.083; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2450 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.53 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.24 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 5.68 W/kg
SAR(1 g) = 2.7 W/kg; SAR(10 g) = 1.27 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.60 W/kg



S32 System Check_H5250_210312

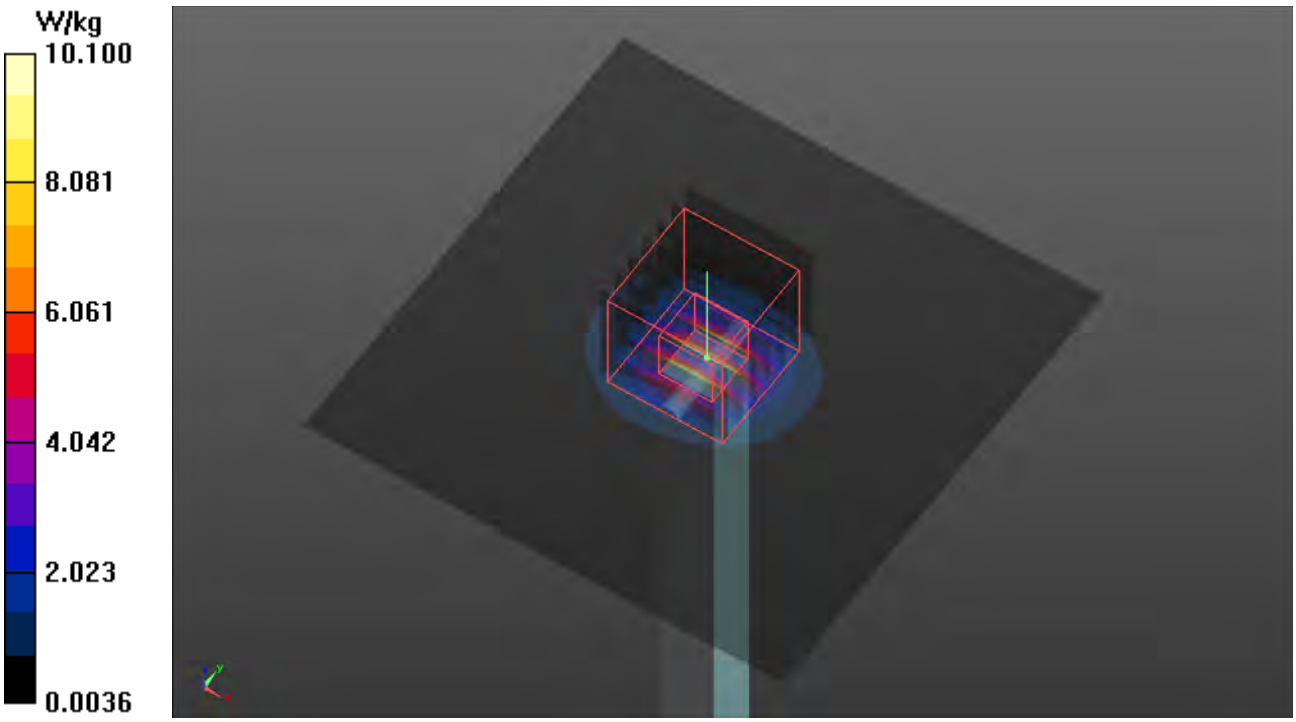
DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1145

Communication System: UID 0, CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: H34T60N1_0312 Medium parameters used (interpolated): f = 5250 MHz; σ = 4.76 S/m; ε_r = 35.003; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(5.12, 5.12, 5.12) @ 5250 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.1 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.57 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 17.0 W/kg
SAR(1 g) = 4.25 W/kg; SAR(10 g) = 1.22 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.7 W/kg



S33 System Check_H5600_210327

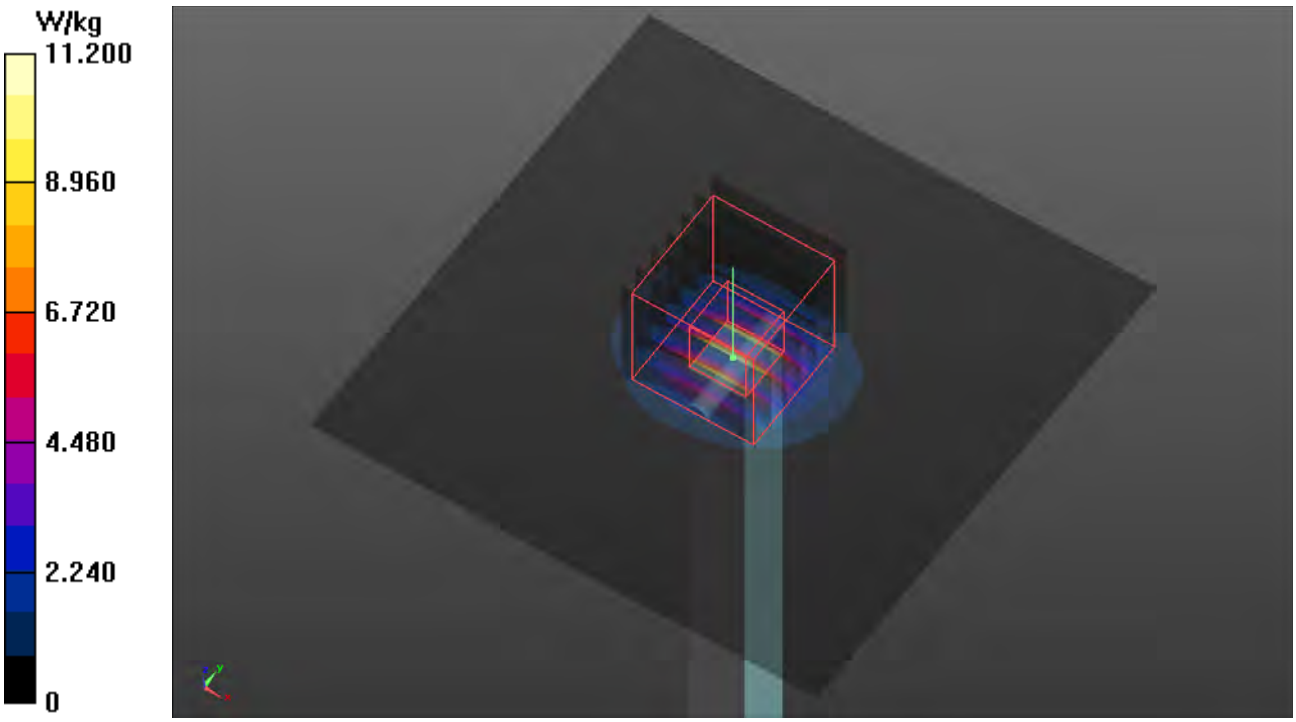
DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1145

Communication System: UID 0, CW; Frequency: 5600 MHz;Duty Cycle: 1:1
Medium: H34T60N1_0327 Medium parameters used: f = 5600 MHz; σ = 4.992 S/m; ε_r = 36.98; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.65, 4.65, 4.65) @ 5600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 11.2 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 53.89 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 20.1 W/kg
SAR(1 g) = 4.15 W/kg; SAR(10 g) = 1.01 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 11.9 W/kg



S34 System Check_H5750_210326

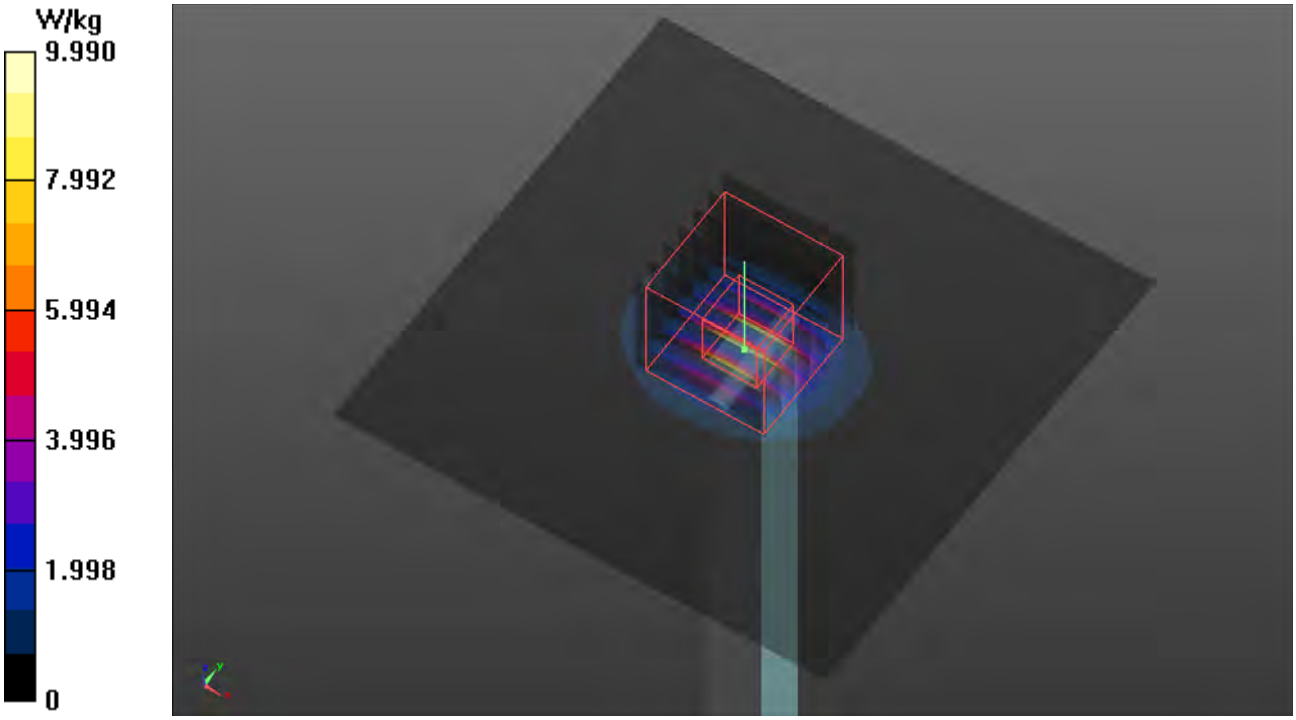
DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: H34T60N1_0326 Medium parameters used: f = 5750 MHz; σ = 5.249 S/m; ε_r = 36.271; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.8, 4.8, 4.8) @ 5750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.99 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.01 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 18.5 W/kg
SAR(1 g) = 4.08 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.7 W/kg



S35 System Check_H2450_210312

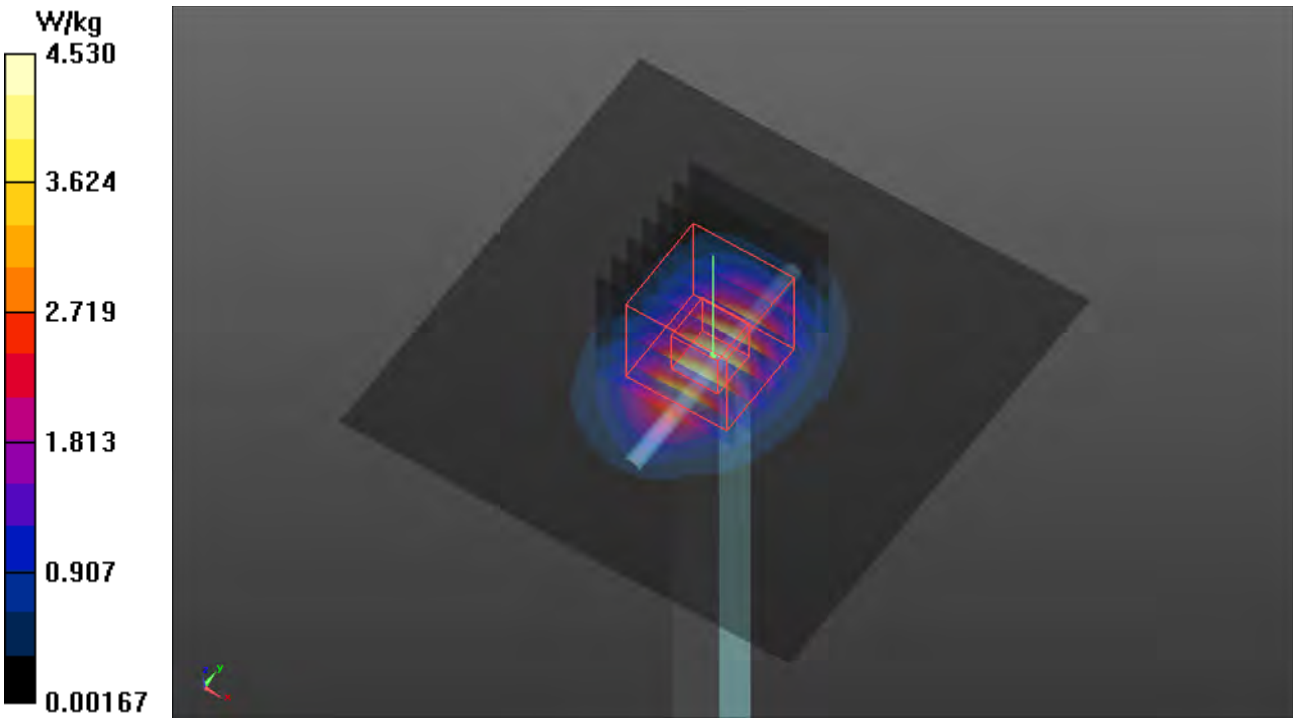
DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0312 Medium parameters used (interpolated): f = 2450 MHz; σ = 1.869 S/m; ε_r = 39.083; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2450 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.53 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.24 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 5.68 W/kg
SAR(1 g) = 2.7 W/kg; SAR(10 g) = 1.27 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.60 W/kg



S36 System Check_H1900_210316

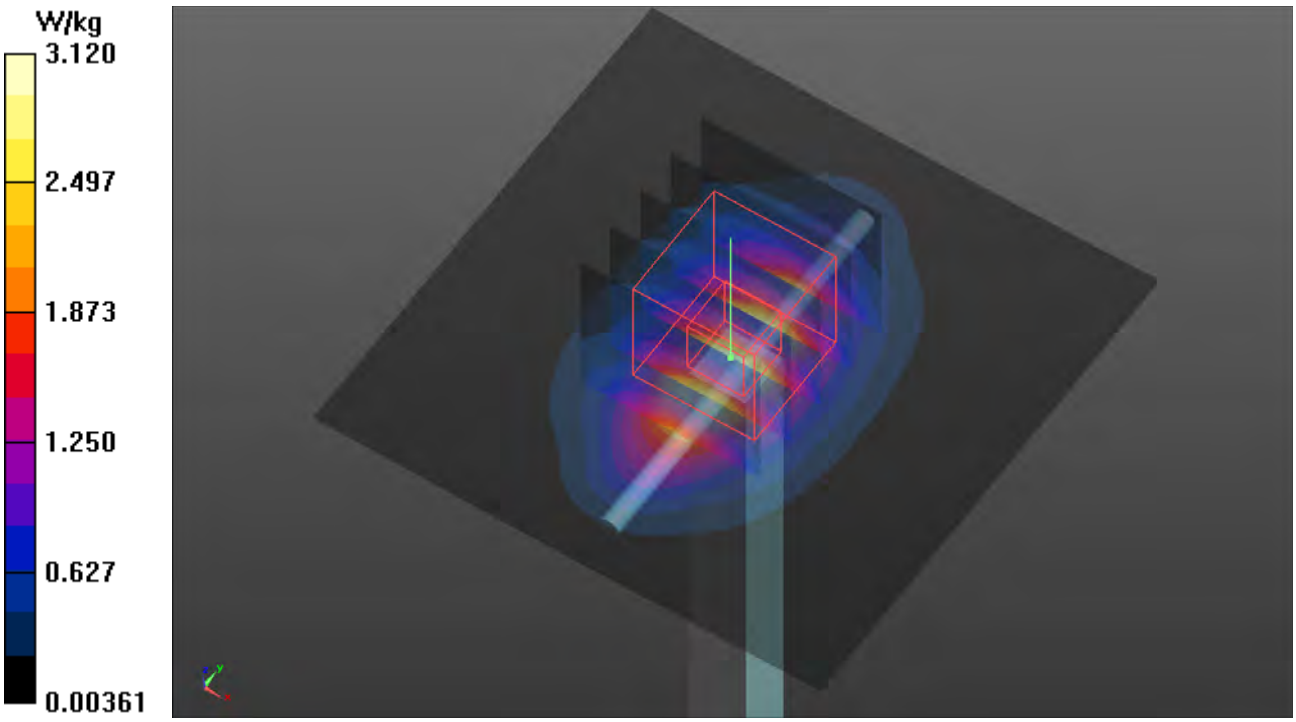
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0316 Medium parameters used: f = 1900 MHz; σ = 1.458 S/m; ε_r = 39.592; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.12 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.75 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 3.76 W/kg
SAR(1 g) = 1.94 W/kg; SAR(10 g) = 1.02 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.14 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S37 System Check_H1750_210314

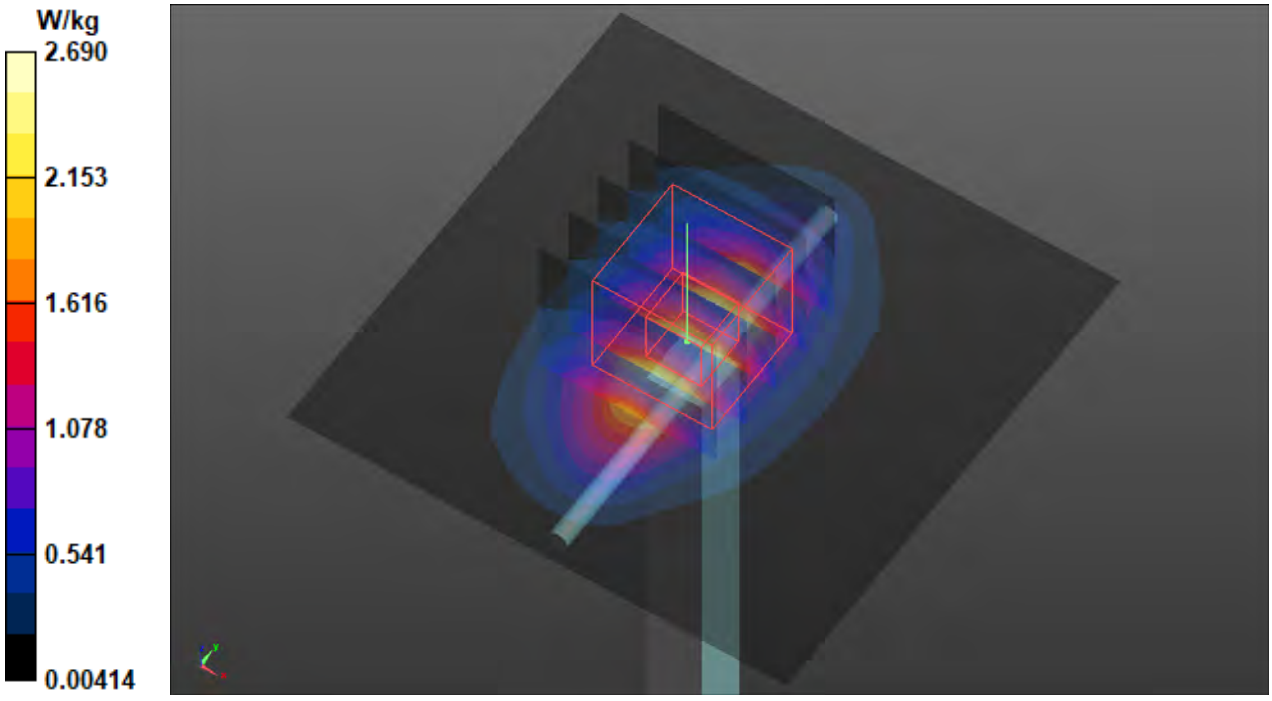
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1750 MHz; σ = 1.322 S/m; ε_r = 38.793; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.69 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.75 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.19 W/kg
SAR(1 g) = 1.78 W/kg; SAR(10 g) = 0.941 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.70 W/kg



S38 System Check_H835_210316

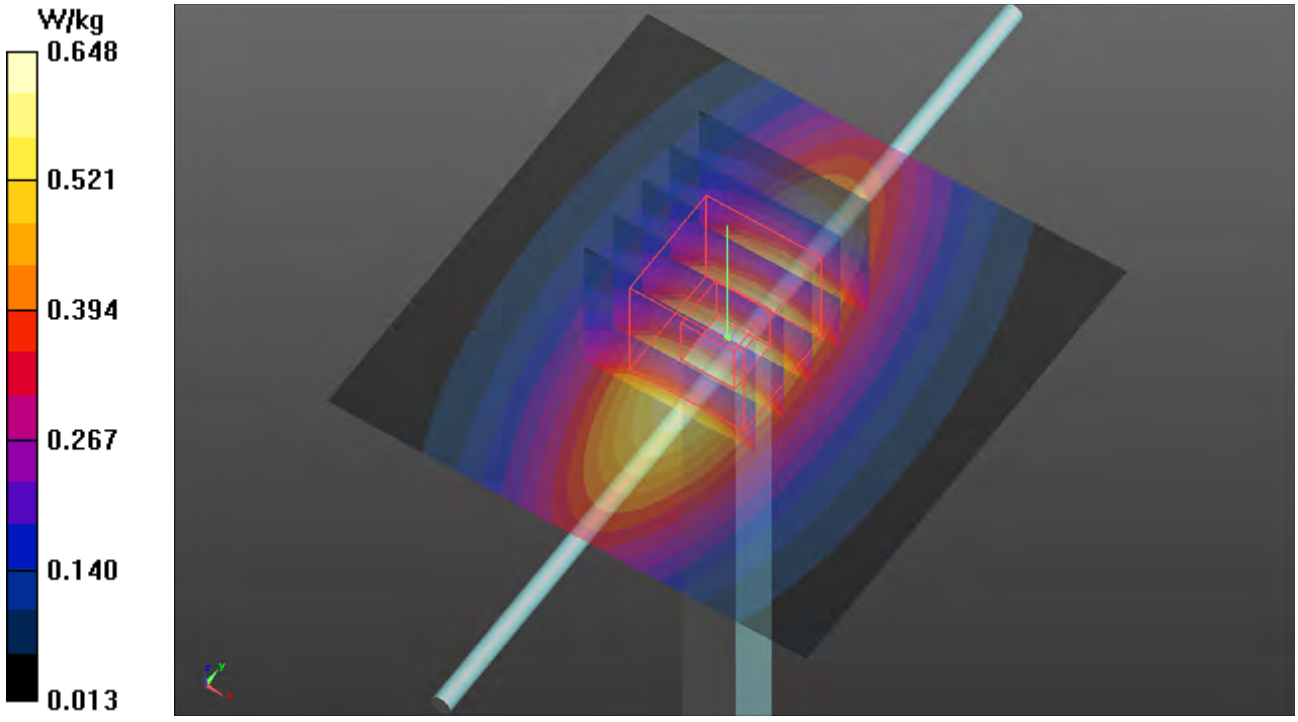
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0316 Medium parameters used: f = 835 MHz; σ = 0.901 S/m; ε_r = 42.932; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.648 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.11 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.741 W/kg
SAR(1 g) = 0.490 W/kg; SAR(10 g) = 0.318 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.651 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S39 System Check_H1900_210314

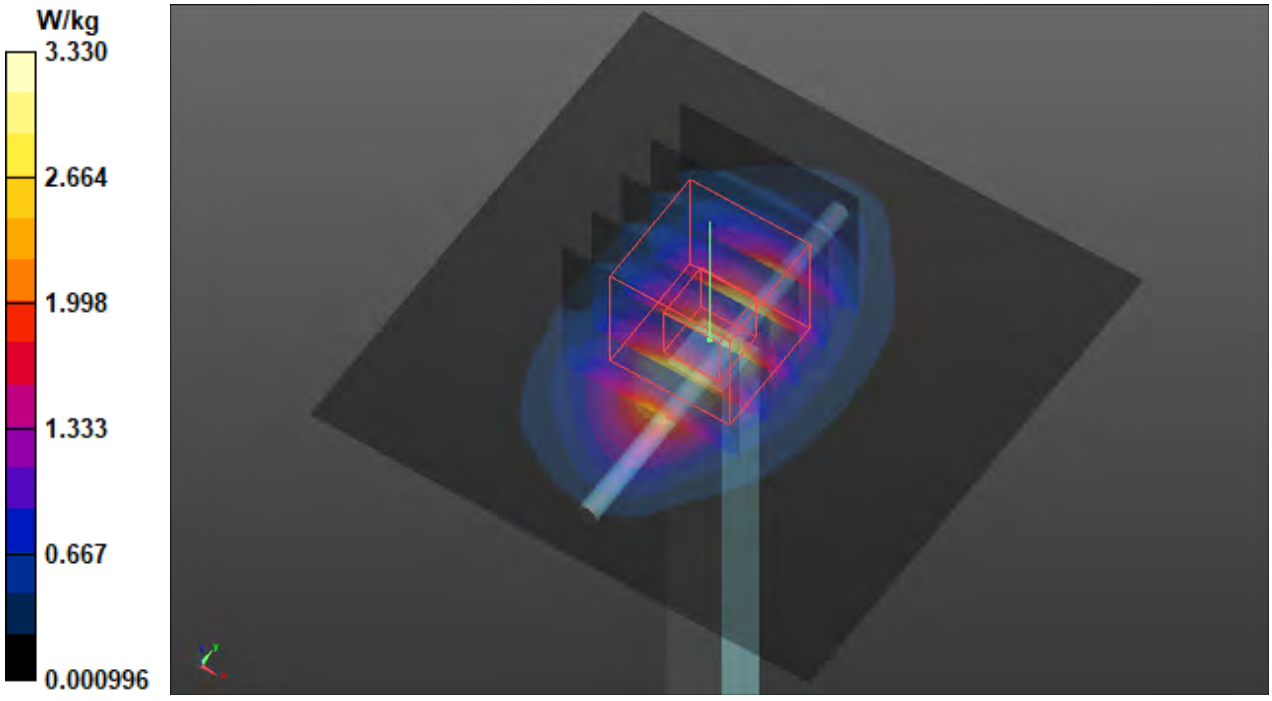
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 38.22; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.33 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.10 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.13 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.43 W/kg



S40 System Check_H1900_210316

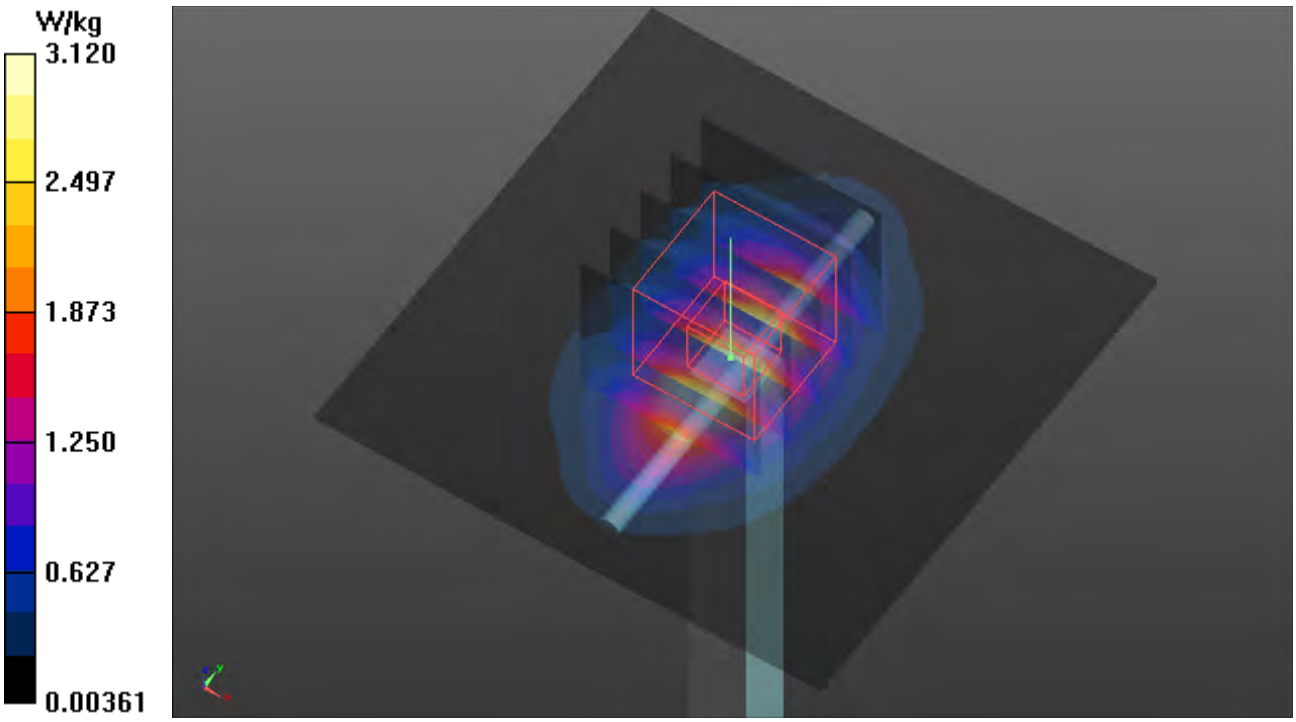
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0316 Medium parameters used: f = 1900 MHz; σ = 1.458 S/m; ε_r = 39.592; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.12 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 47.75 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 3.76 W/kg
SAR(1 g) = 1.94 W/kg; SAR(10 g) = 1.02 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.14 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S41 System Check_H1750_210314

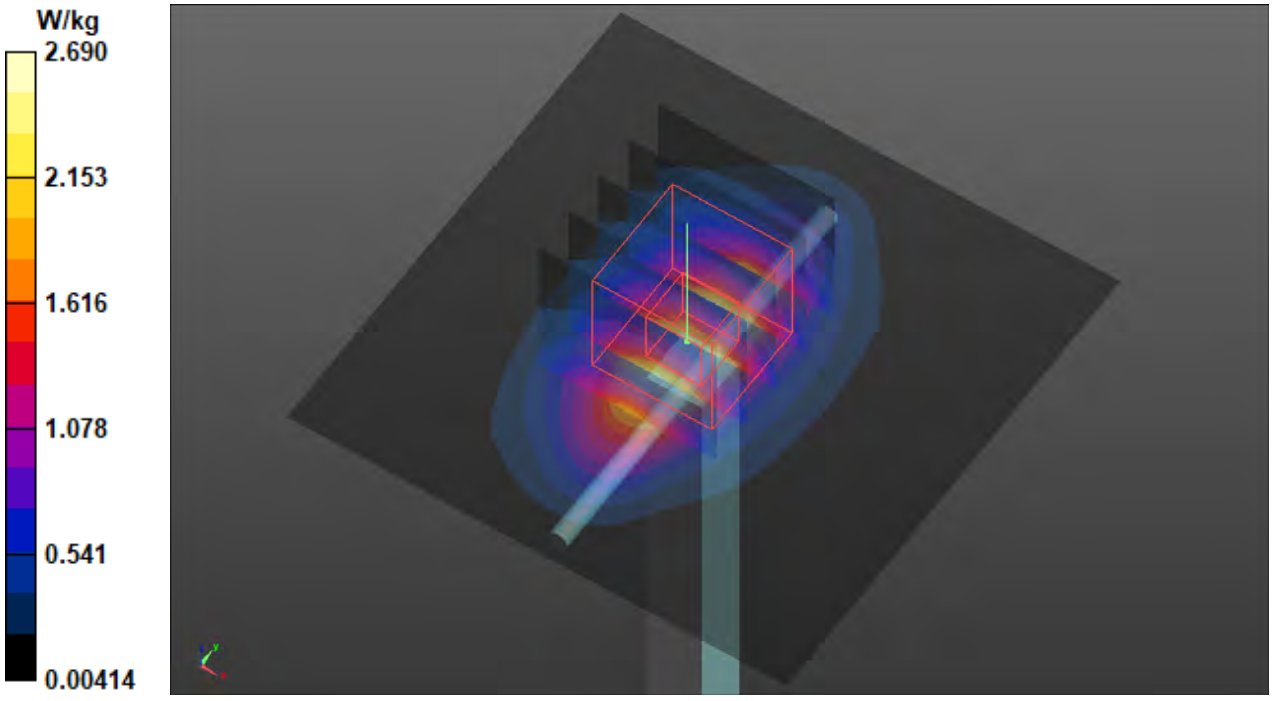
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1750 MHz; σ = 1.322 S/m; ε_r = 38.793; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.69 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.75 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.19 W/kg
SAR(1 g) = 1.78 W/kg; SAR(10 g) = 0.941 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.70 W/kg



S42 System Check_H835_210315

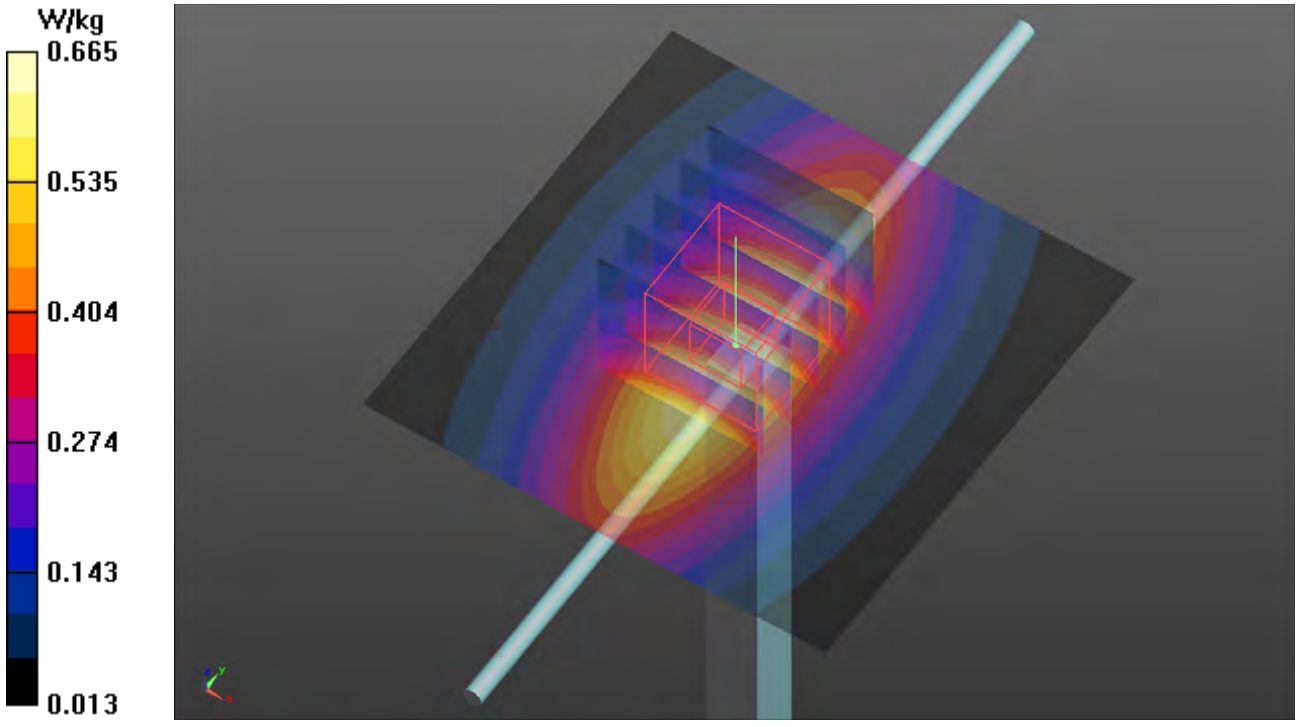
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0315 Medium parameters used: f = 835 MHz; σ = 0.913 S/m; ε_r = 42.832; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.665 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.14 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.758 W/kg
SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.320 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.667 W/kg



S43 System Check_H2600_210315

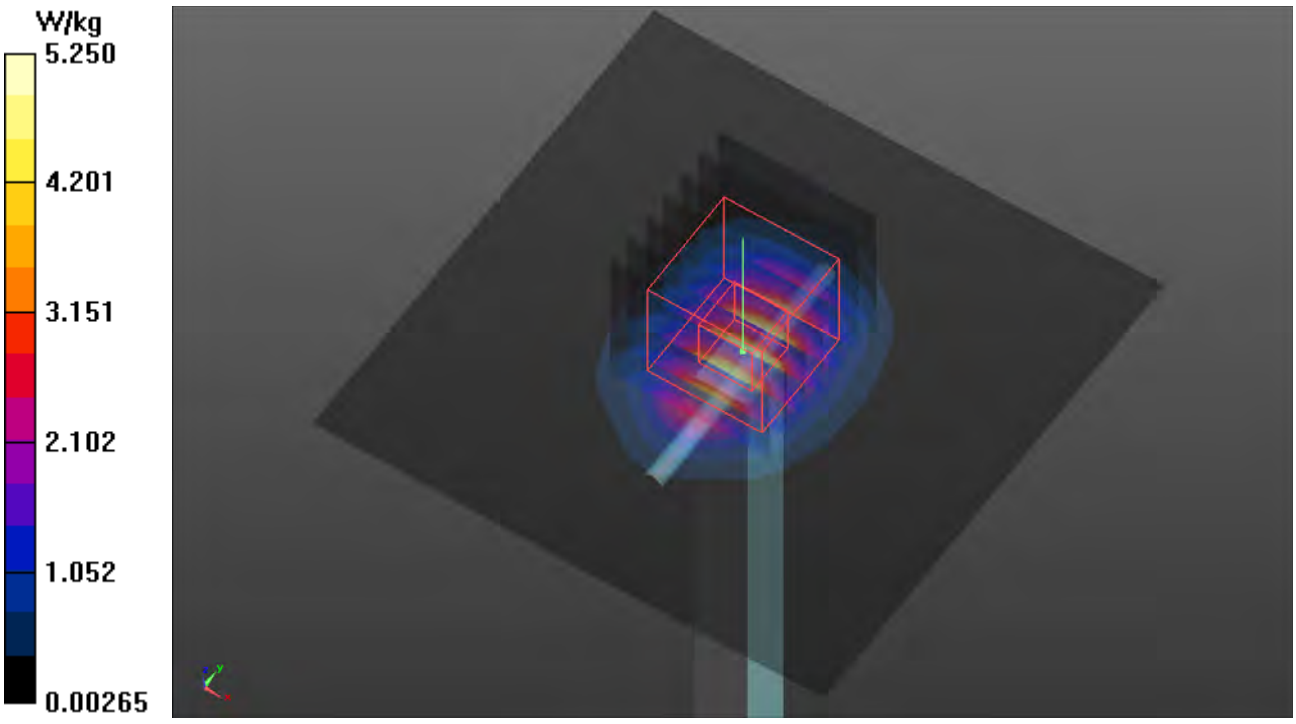
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0315 Medium parameters used: f = 2600 MHz; σ = 2.035 S/m; ε_r = 38.251; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.25 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.48 W/kg
SAR(1 g) = 3 W/kg; SAR(10 g) = 1.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.24 W/kg



S44 System Check_H2600_210316

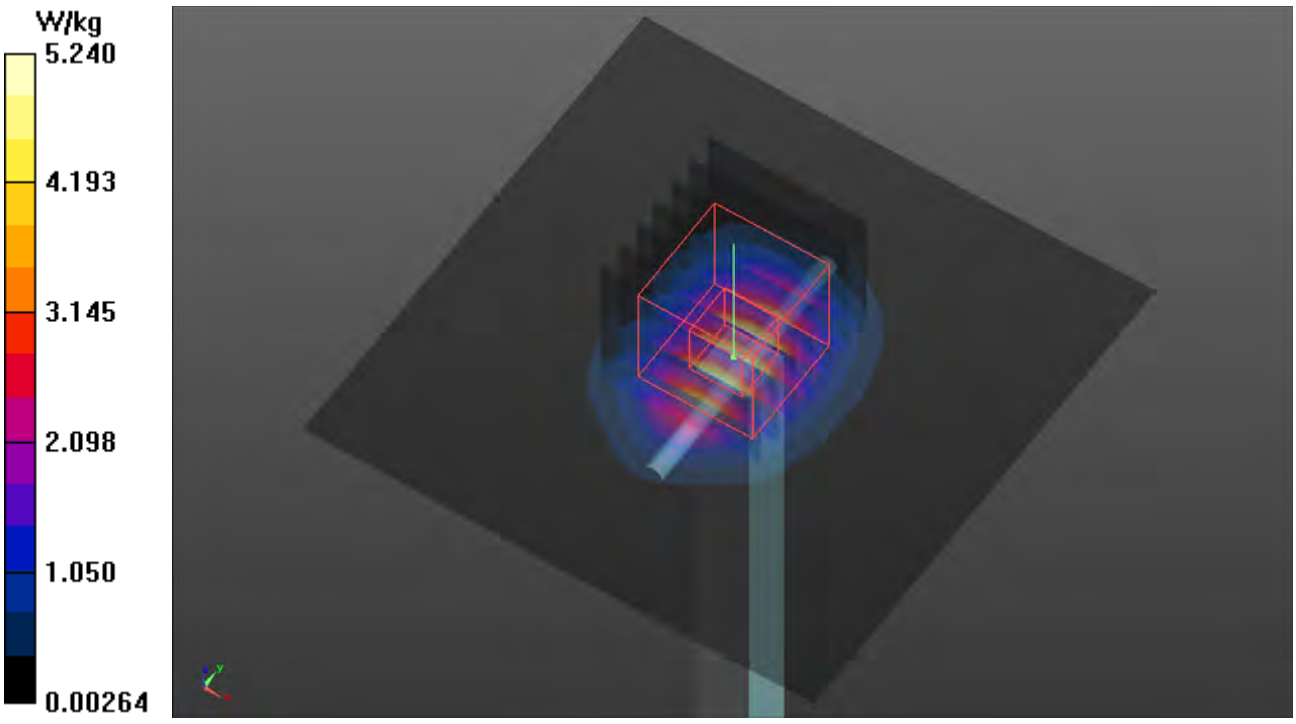
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0316 Medium parameters used: f = 2600 MHz; σ = 2.028 S/m; ε_r = 37.803; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.24 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.46 W/kg
SAR(1 g) = 2.99 W/kg; SAR(10 g) = 1.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.22 W/kg



S45 System Check_H750_210315

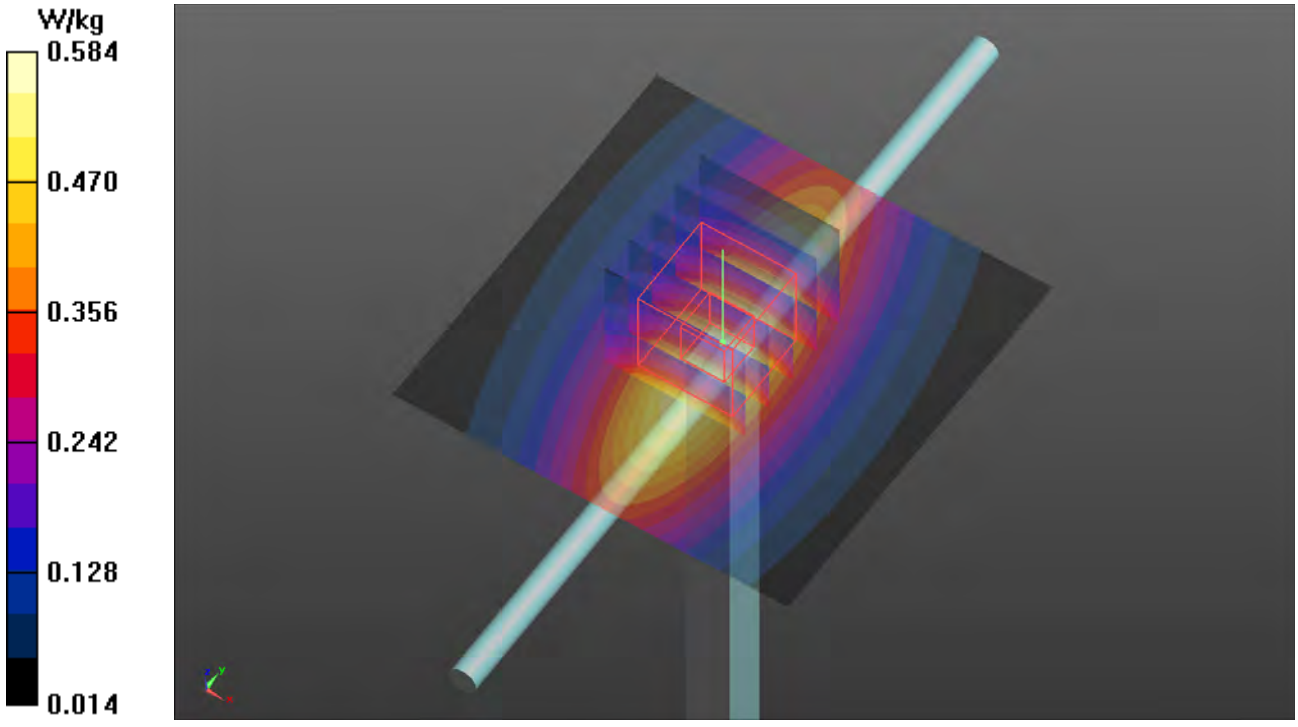
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0315 Medium parameters used: f = 750 MHz; σ = 0.89 S/m; ε_r = 42.416; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.584 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.57 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.636 W/kg
SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.275 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.558 W/kg



S46 System Check_H750_210315

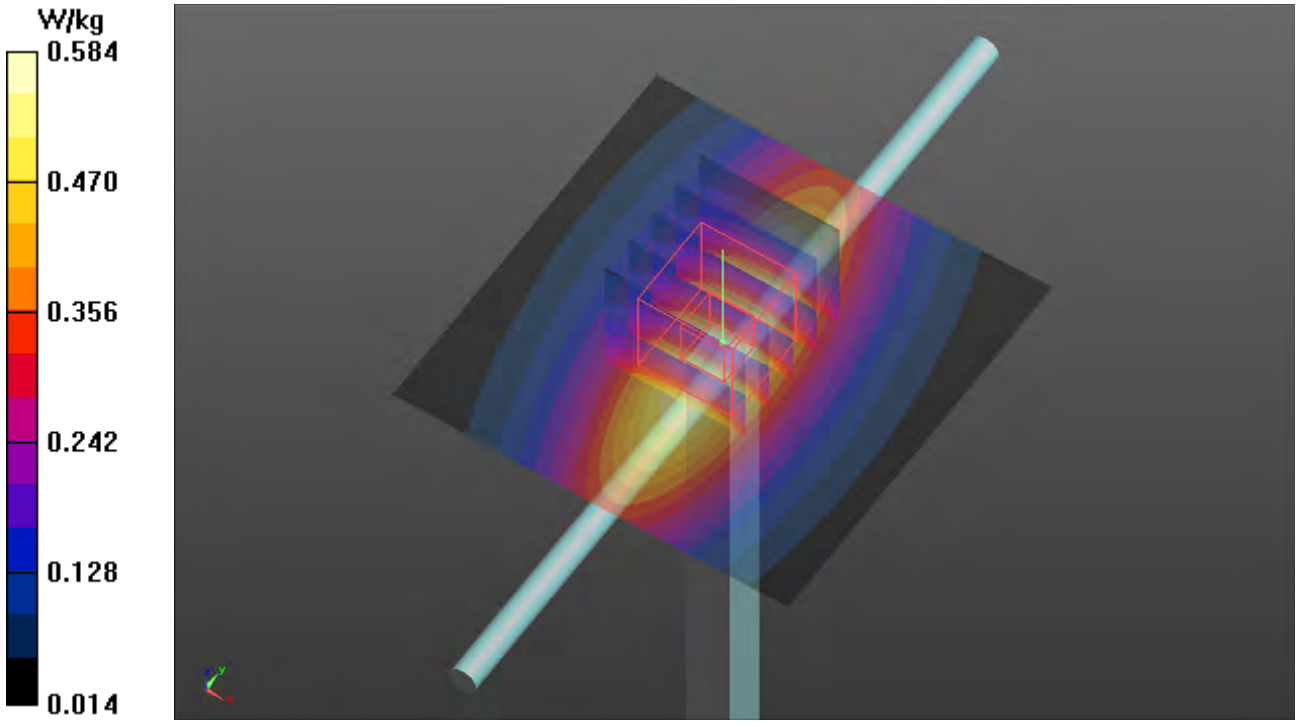
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0315 Medium parameters used: f = 750 MHz; σ = 0.89 S/m; ε_r = 42.416; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.584 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.57 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.636 W/kg
SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.275 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.558 W/kg



S47 System Check_H750_210315

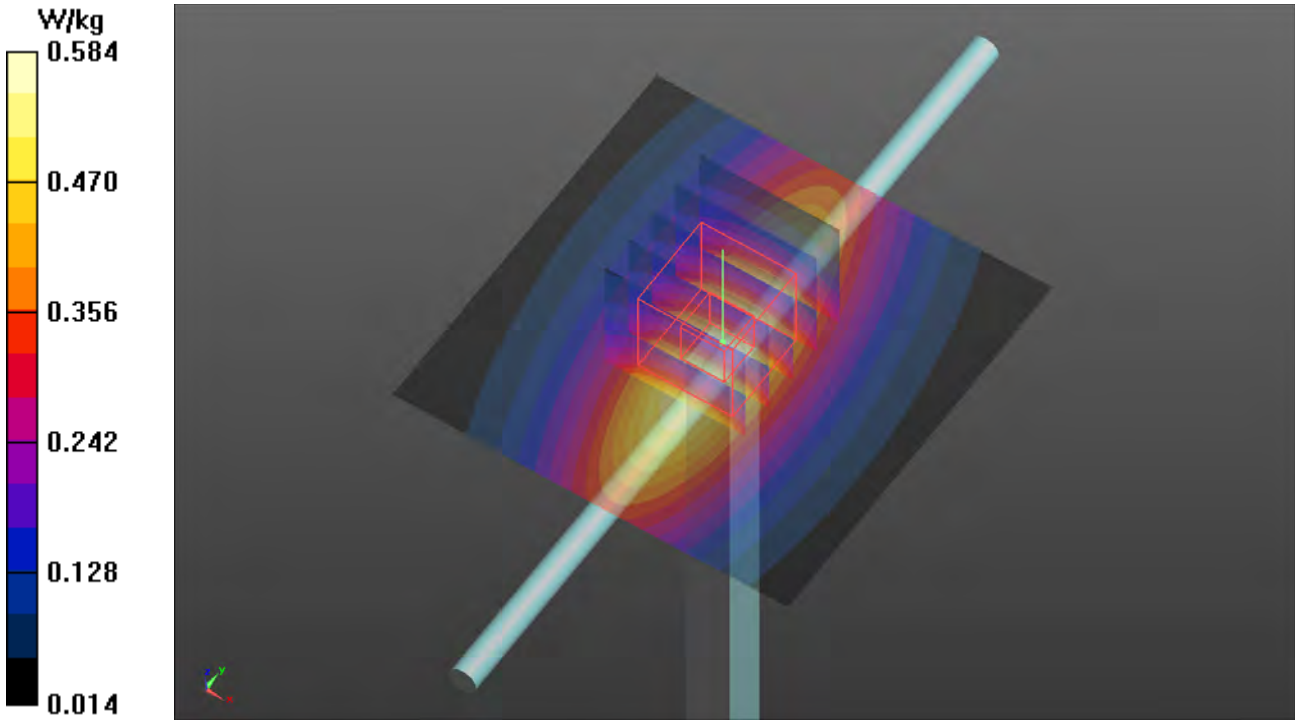
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0315 Medium parameters used: f = 750 MHz; σ = 0.89 S/m; ε_r = 42.416; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.584 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.57 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.636 W/kg
SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.275 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.558 W/kg



S48 System Check_H750_210315

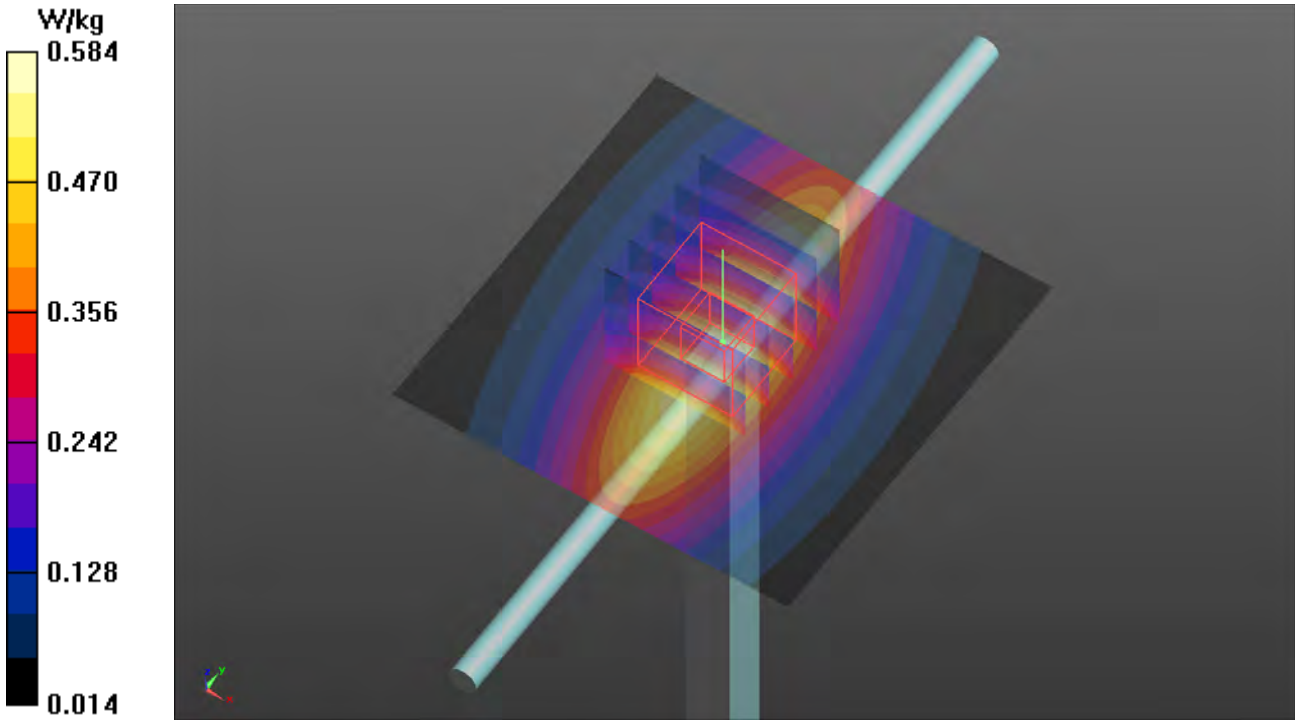
DUT: Dipole 750 MHz D750V3

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0315 Medium parameters used: f = 750 MHz; σ = 0.89 S/m; ε_r = 42.416; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.584 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.57 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.636 W/kg
SAR(1 g) = 0.417 W/kg; SAR(10 g) = 0.275 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.558 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S49 System Check_H1900_210314

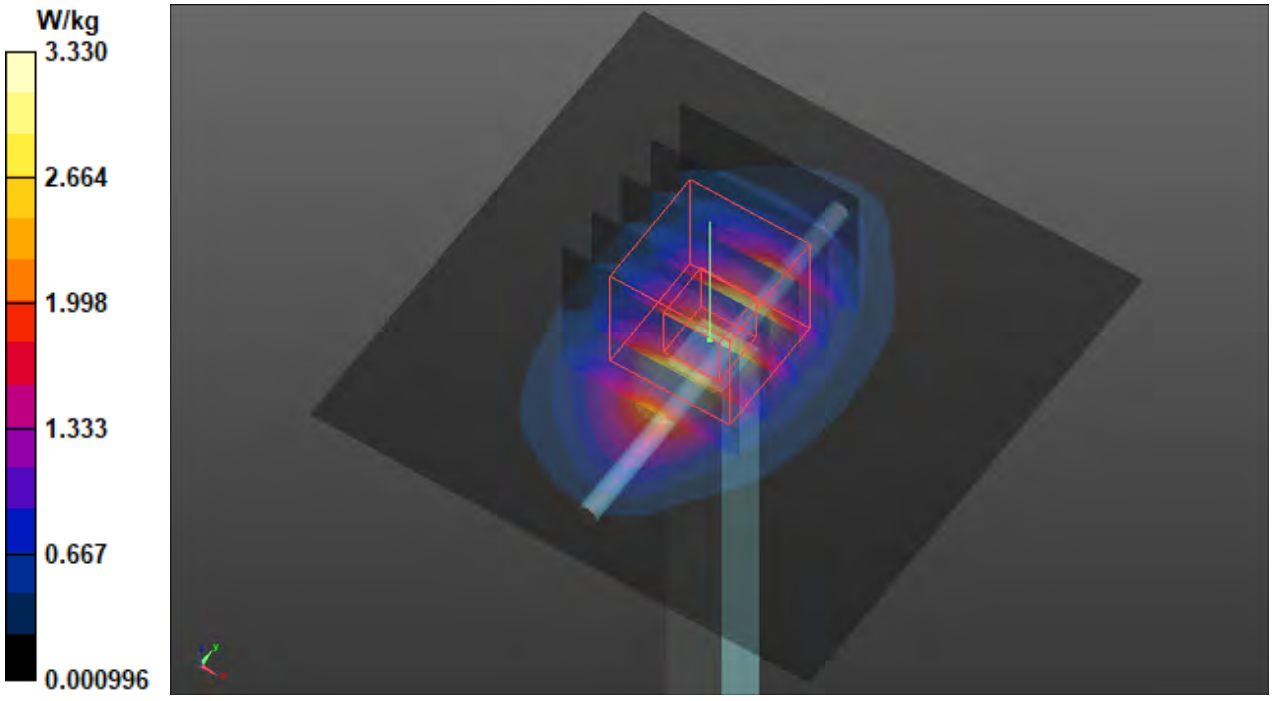
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 38.22; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.33 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.10 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.13 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.43 W/kg



S50 System Check_H835_210315

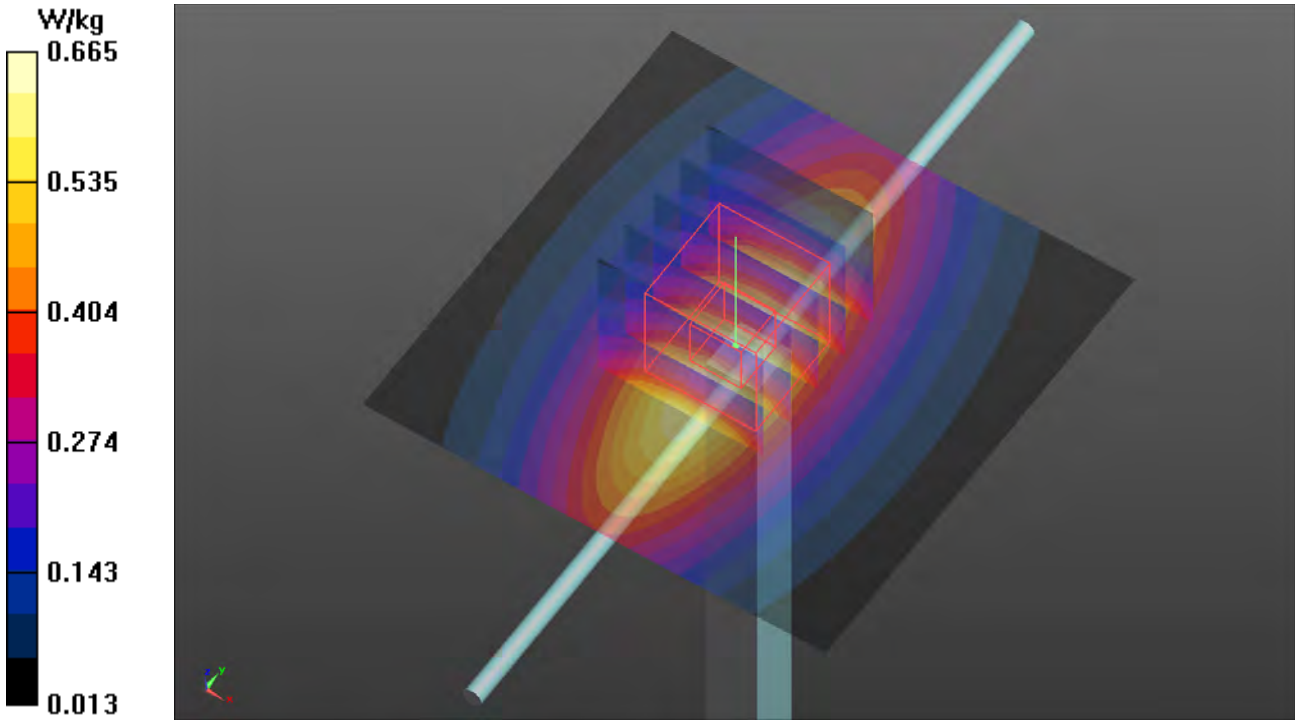
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0315 Medium parameters used: f = 835 MHz; σ = 0.913 S/m; ε_r = 42.832; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.665 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.14 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.758 W/kg
SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.320 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.667 W/kg



S51 System Check_H2300_210315

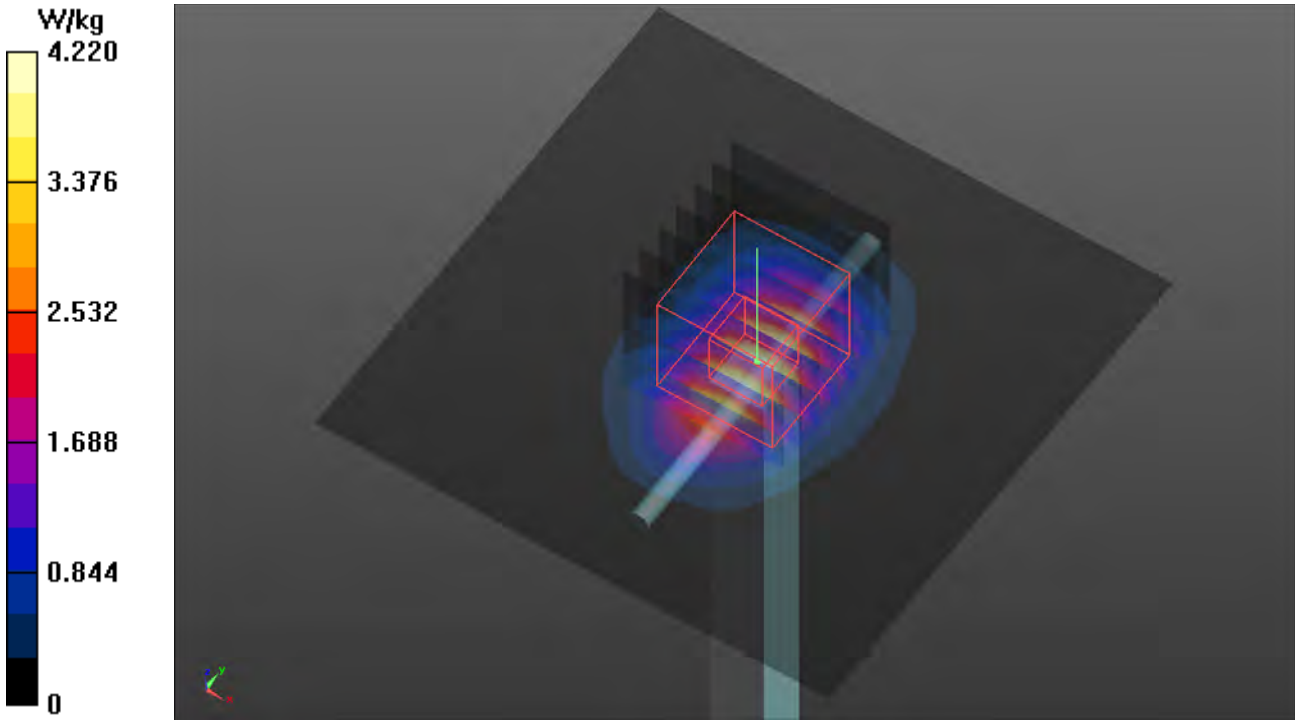
DUT: Dipole 2300 MHz; Type: D2300V2; SN:1004

Communication System: UID 0, CW; Frequency: 2300 MHz;Duty Cycle: 1:1
Medium: H19T27N3_0315 Medium parameters used: f = 2300 MHz; σ = 1.718 S/m; ε_r = 39.247; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.62, 7.62, 7.62) @ 2300 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.22 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.79 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 5.31 W/kg
SAR(1 g) = 2.53 W/kg; SAR(10 g) = 1.21 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.28 W/kg



S52 System Check_H2600_210316

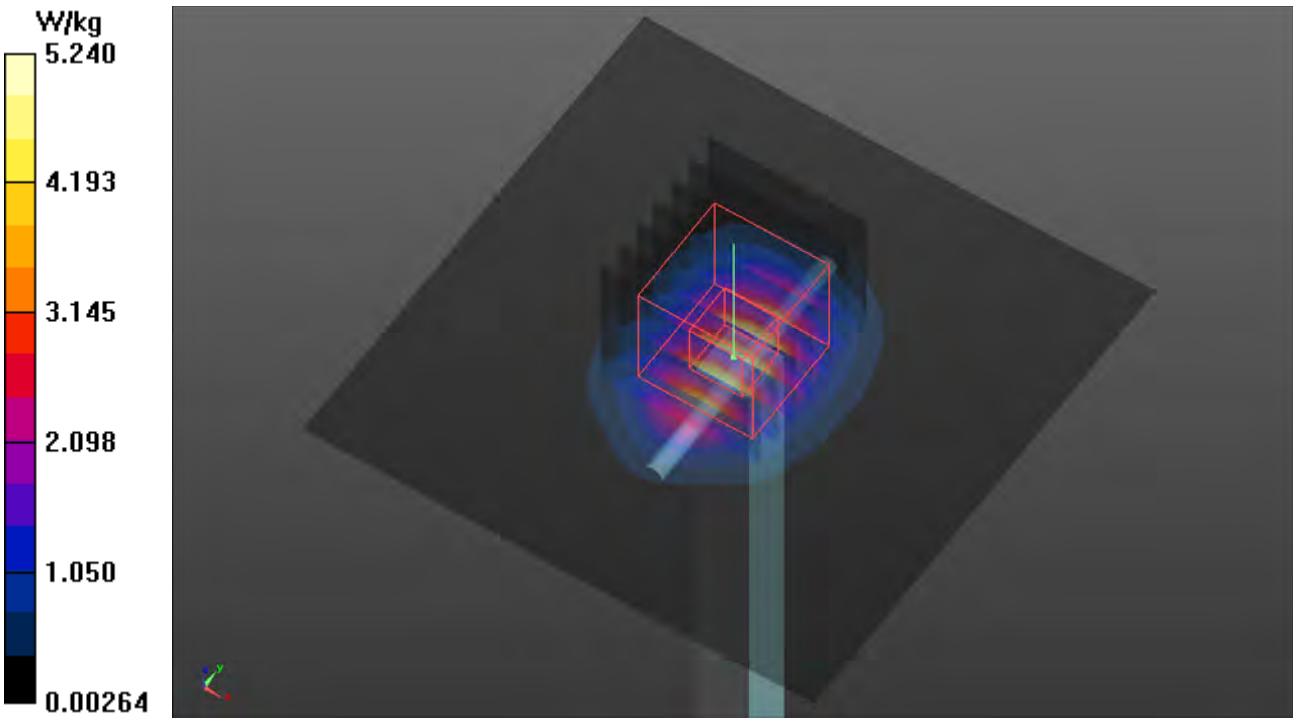
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0316 Medium parameters used: f = 2600 MHz; σ = 2.028 S/m; ε_r = 37.803; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.24 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.46 W/kg
SAR(1 g) = 2.99 W/kg; SAR(10 g) = 1.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.22 W/kg



S53 System Check_H2600_210316

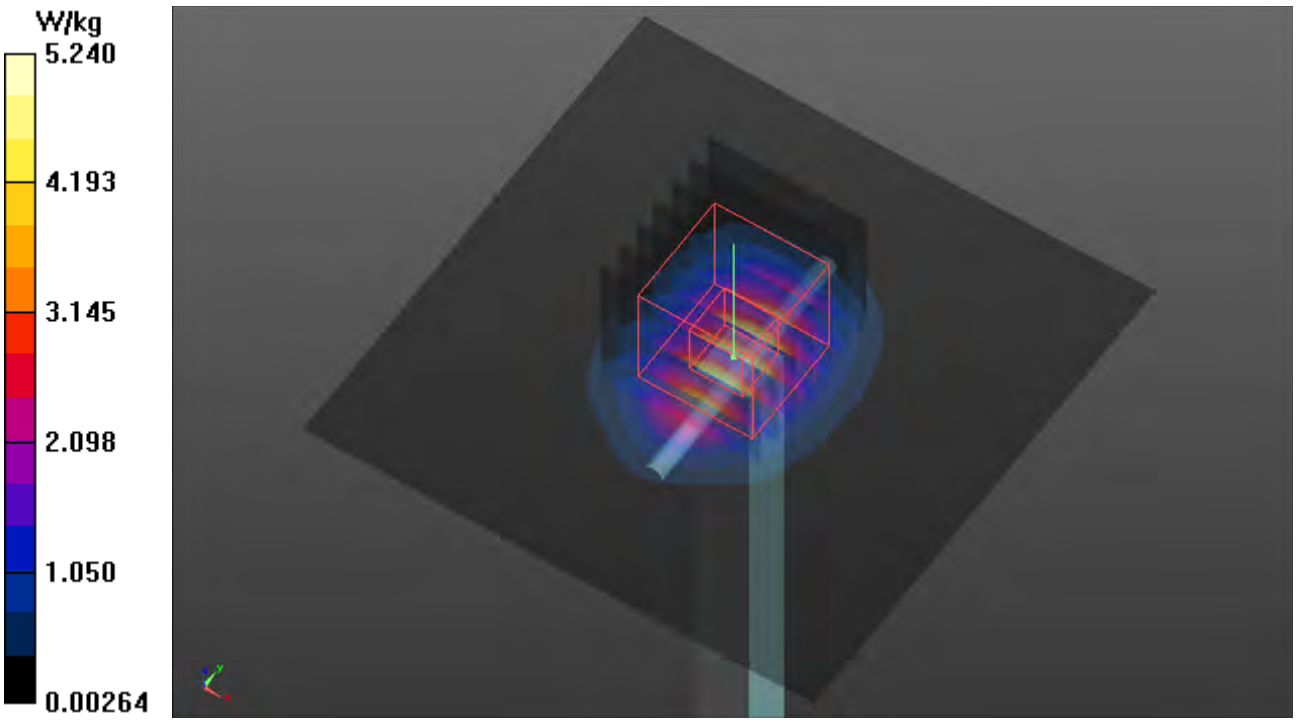
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0316 Medium parameters used: f = 2600 MHz; σ = 2.028 S/m; ε_r = 37.803; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.24 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.46 W/kg
SAR(1 g) = 2.99 W/kg; SAR(10 g) = 1.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.22 W/kg



S54 System Check_H3500_210315

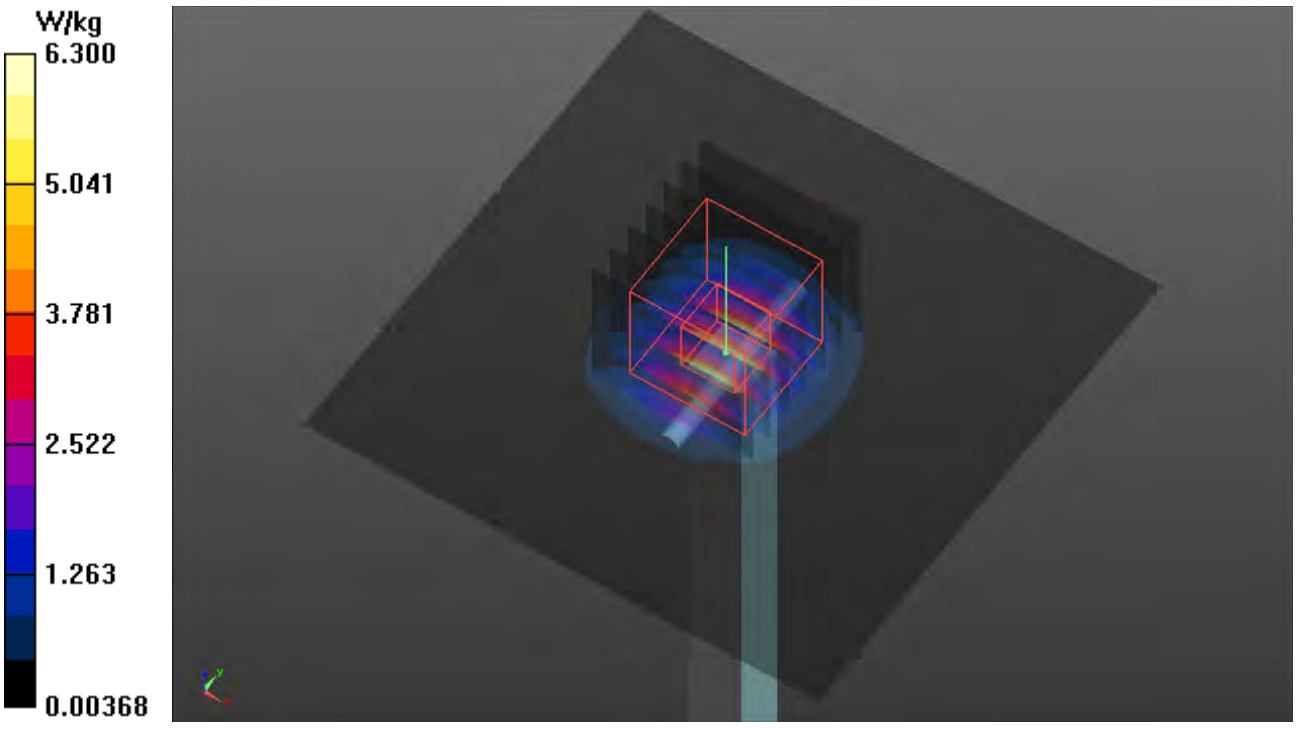
DUT: Dipole 3500 MHz; Type:D3500V2; SN: 1007

Communication System: UID 0, CW; Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: H34T38N1_0315 Medium parameters used: f = 3500 MHz; σ = 2.962 S/m; ε_r = 37.276; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3500 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.30 W/kg

Pin=50mW/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 49.06 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 8.41 W/kg
SAR(1 g) = 3.38 W/kg; SAR(10 g) = 1.32 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.43 W/kg



S55_a System Check_H3500_210315

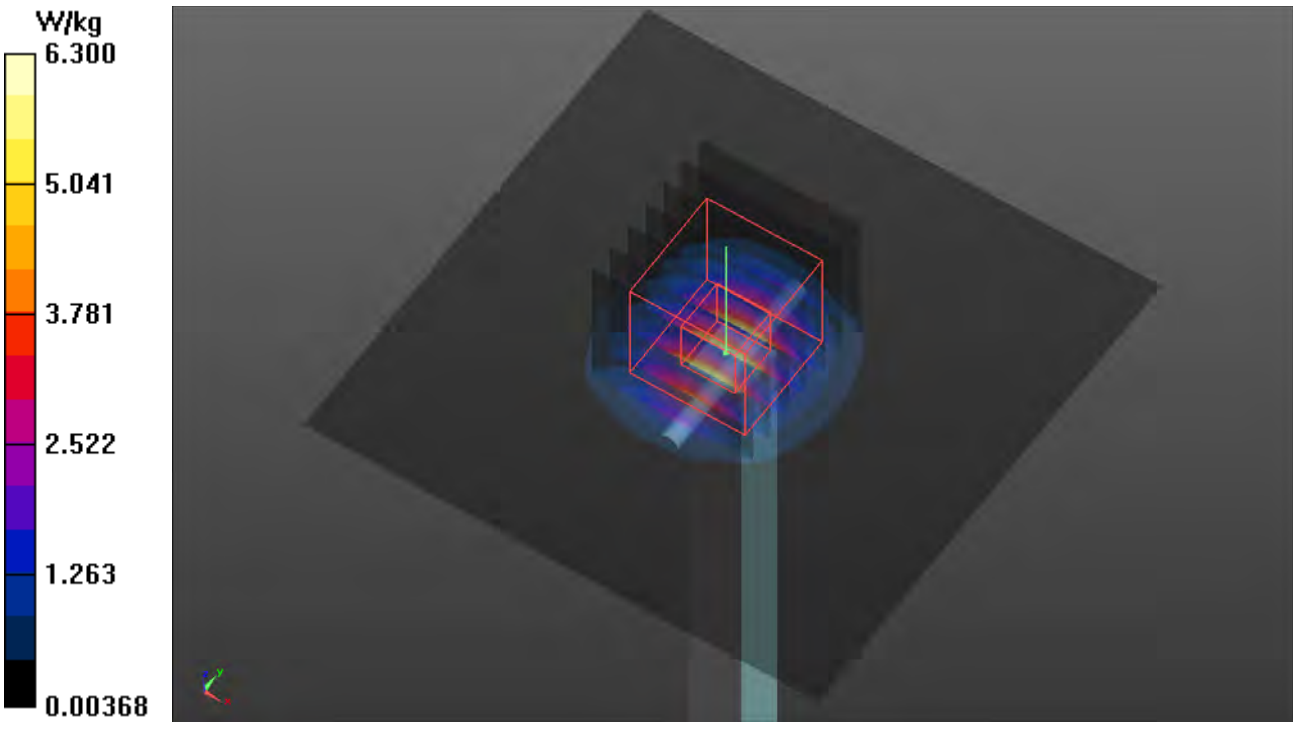
DUT: Dipole 3500 MHz; Type:D3500V2; SN: 1007

Communication System: UID 0, CW; Frequency: 3500 MHz;Duty Cycle: 1:1
Medium: H34T38N1_0315 Medium parameters used: f = 3500 MHz; σ = 2.962 S/m; ε_r = 37.276; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3500 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.30 W/kg

Pin=50mW/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 49.06 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 8.41 W/kg
SAR(1 g) = 3.38 W/kg; SAR(10 g) = 1.32 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.43 W/kg



S55_b System Check_H3700_210315

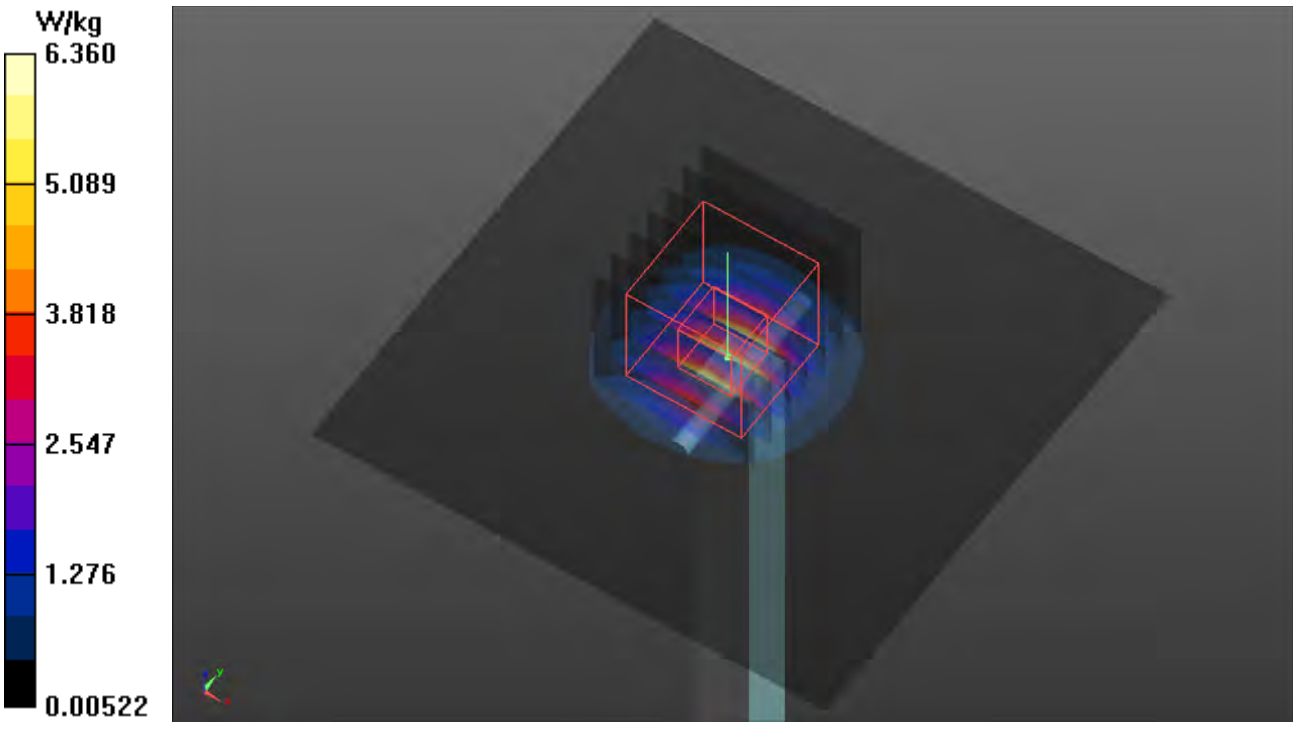
DUT: Dipole 3700 MHz D3700V2

Communication System: UID 0, CW; Frequency: 3700 MHz;Duty Cycle: 1:1
Medium: H34T38N1_0315 Medium parameters used: f = 3700 MHz; σ = 3.112 S/m; ε_r = 37.091; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.67, 6.67, 6.67) @ 3700 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.36 W/kg

Pin=50mW/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 47.59 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 8.72 W/kg
SAR(1 g) = 3.39 W/kg; SAR(10 g) = 1.28 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.60 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S56 System Check_H1750_210314

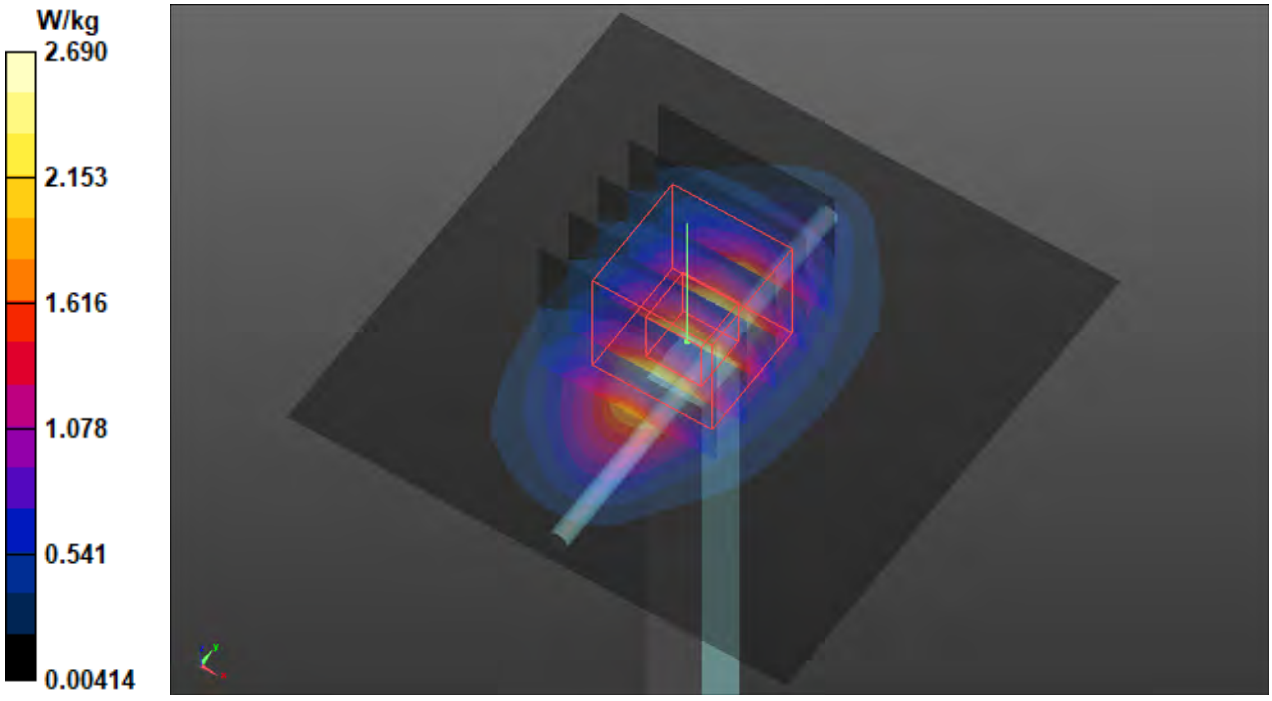
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1750 MHz; σ = 1.322 S/m; ε_r = 38.793; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.69 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.75 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.19 W/kg
SAR(1 g) = 1.78 W/kg; SAR(10 g) = 0.941 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.70 W/kg



S57 System Check_H1750_210316

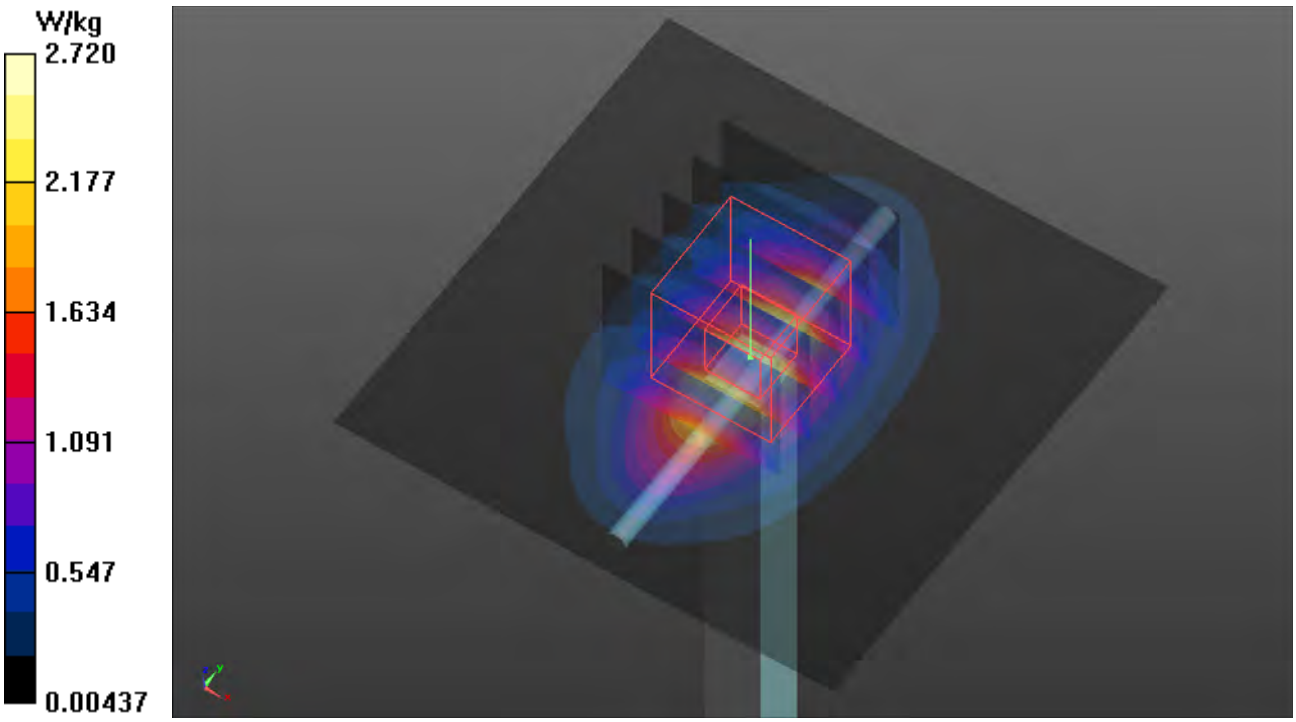
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0316 Medium parameters used: f = 1750 MHz; σ = 1.328 S/m; ε_r = 40.136; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.72 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.80 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.27 W/kg
SAR(1 g) = 1.8 W/kg; SAR(10 g) = 0.942 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.75 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S58 System Check_H1900_210314

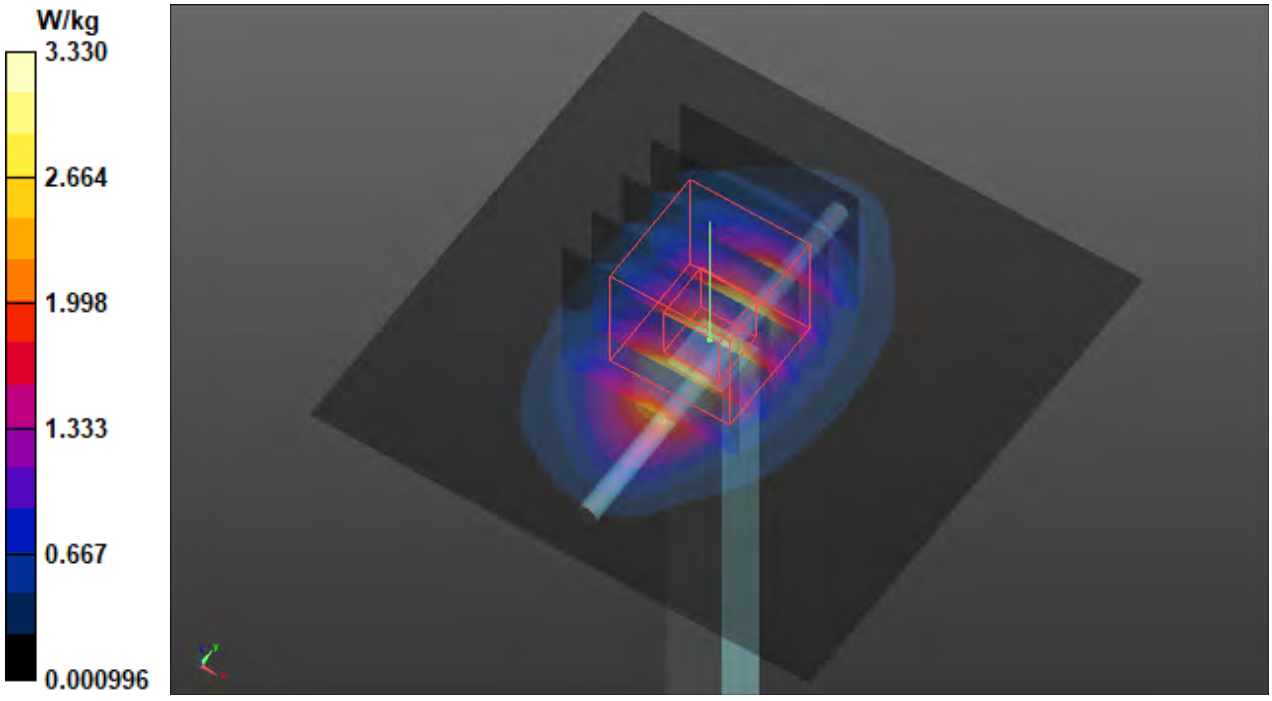
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 38.22; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.33 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.10 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.13 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.43 W/kg



S59 System Check_H1900_210313

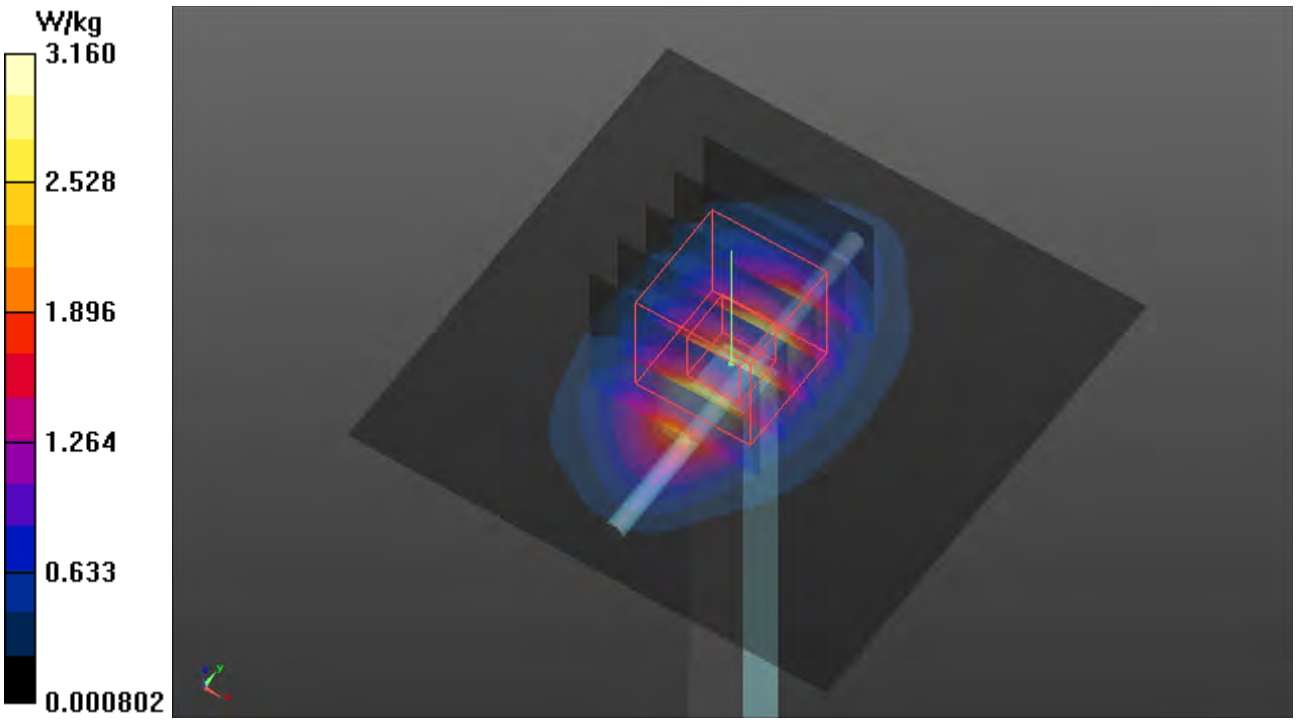
DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0313 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 39.14; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.16 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.80 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 3.93 W/kg
SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.26 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/15

S60 System Check_H835_210315

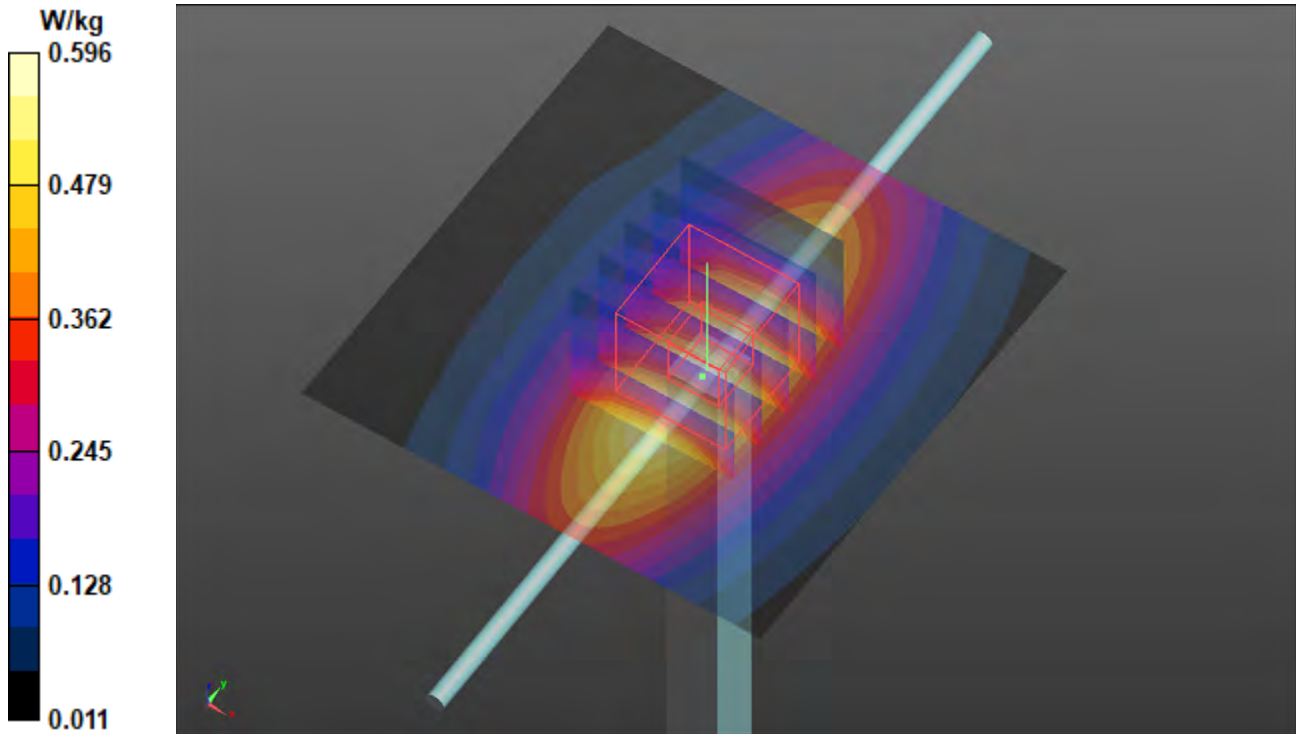
DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: H07T10N1_0315 Medium parameters used: f = 835 MHz; σ = 0.908 S/m; ε_r = 42.279; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(9.69, 9.69, 9.69) @ 835 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.596 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.77 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.684 W/kg
SAR(1 g) = 0.455 W/kg; SAR(10 g) = 0.297 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.608 W/kg



S61 System Check_H2600_210313

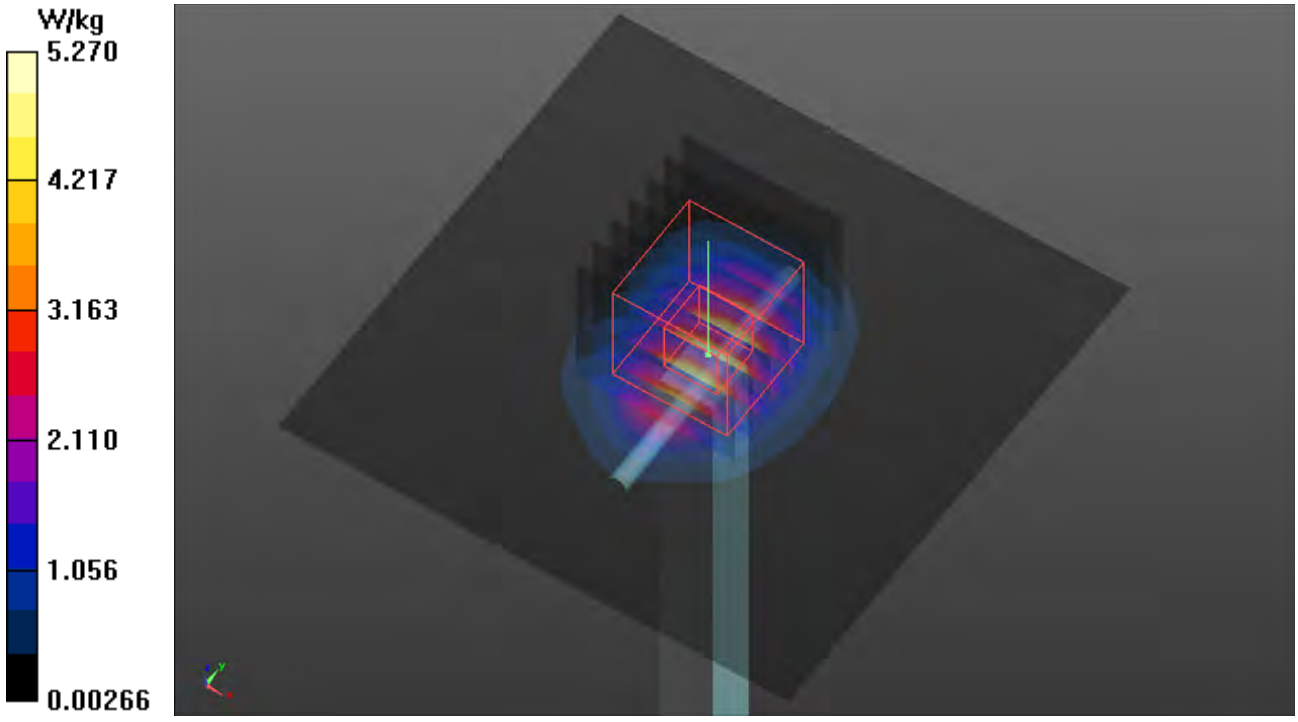
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0313 Medium parameters used: f = 2600 MHz; σ = 2.041 S/m; ε_r = 37.147; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.27 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.50 W/kg
SAR(1 g) = 2.99 W/kg; SAR(10 g) = 1.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.25 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/15

S62 System Check_H750_210315

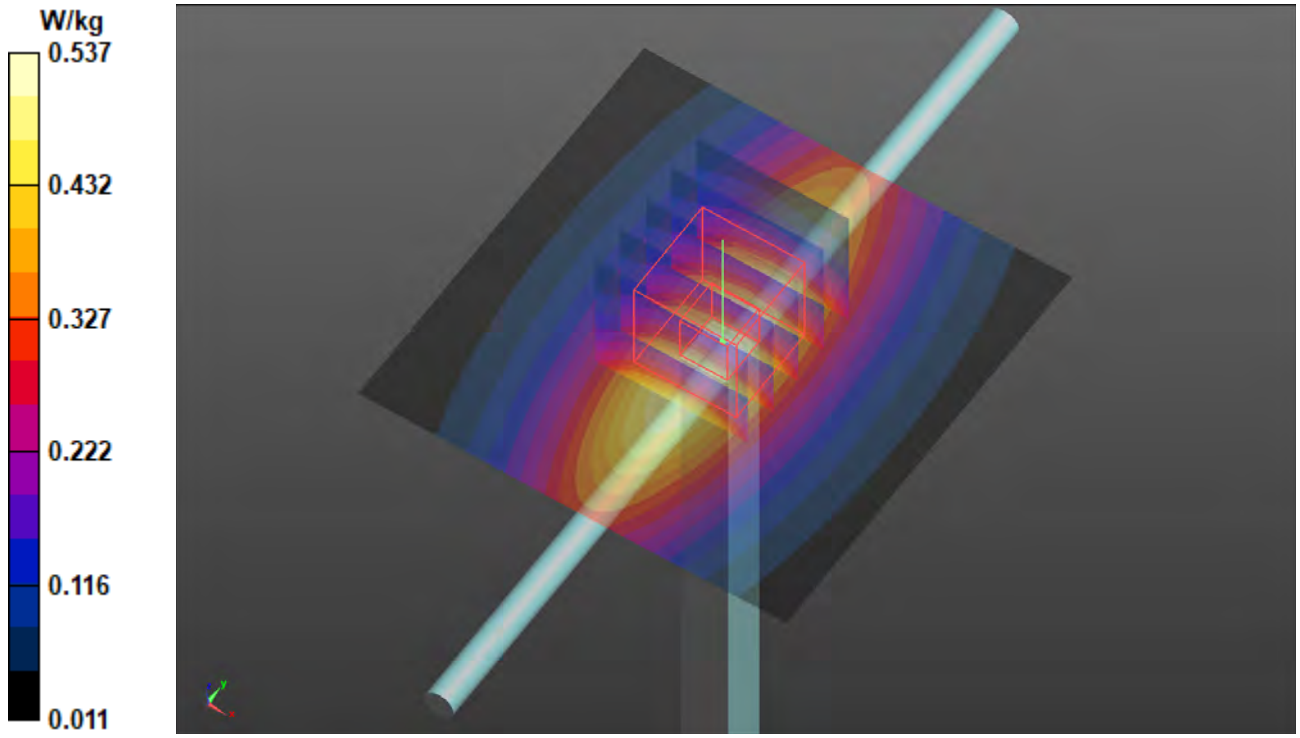
DUT: Dipole 750 MHz; Type: D750V3; SN: 1013

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: H06T09N1_0315 Medium parameters used: f = 750 MHz; σ = 0.89 S/m; ε_r = 43.335; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(10, 10, 10) @ 750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.537 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.45 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.613 W/kg
SAR(1 g) = 0.407 W/kg; SAR(10 g) = 0.266 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.542 W/kg



S63 System Check_H2600_210313

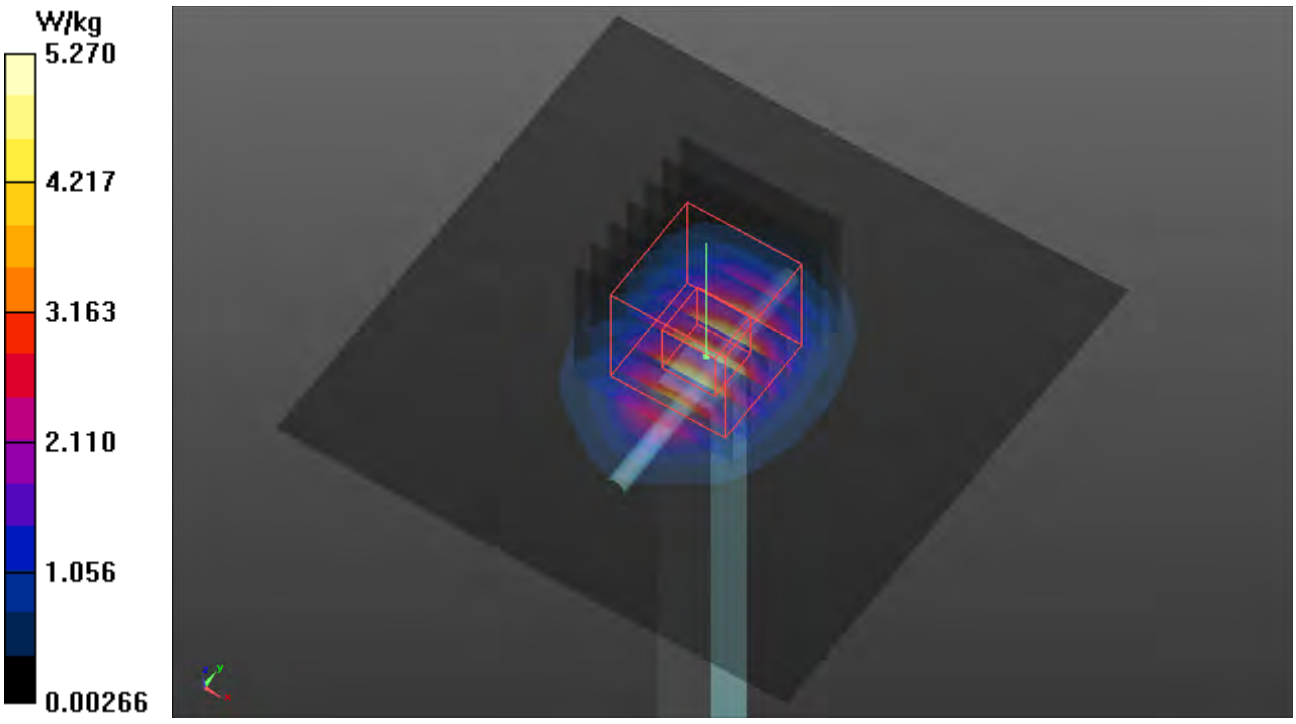
DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0313 Medium parameters used: f = 2600 MHz; σ = 2.041 S/m; ε_r = 37.147; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 5.27 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.05 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 6.50 W/kg
SAR(1 g) = 2.99 W/kg; SAR(10 g) = 1.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.25 W/kg



Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab Date: 2021/03/14

S64 System Check_H1750_210314

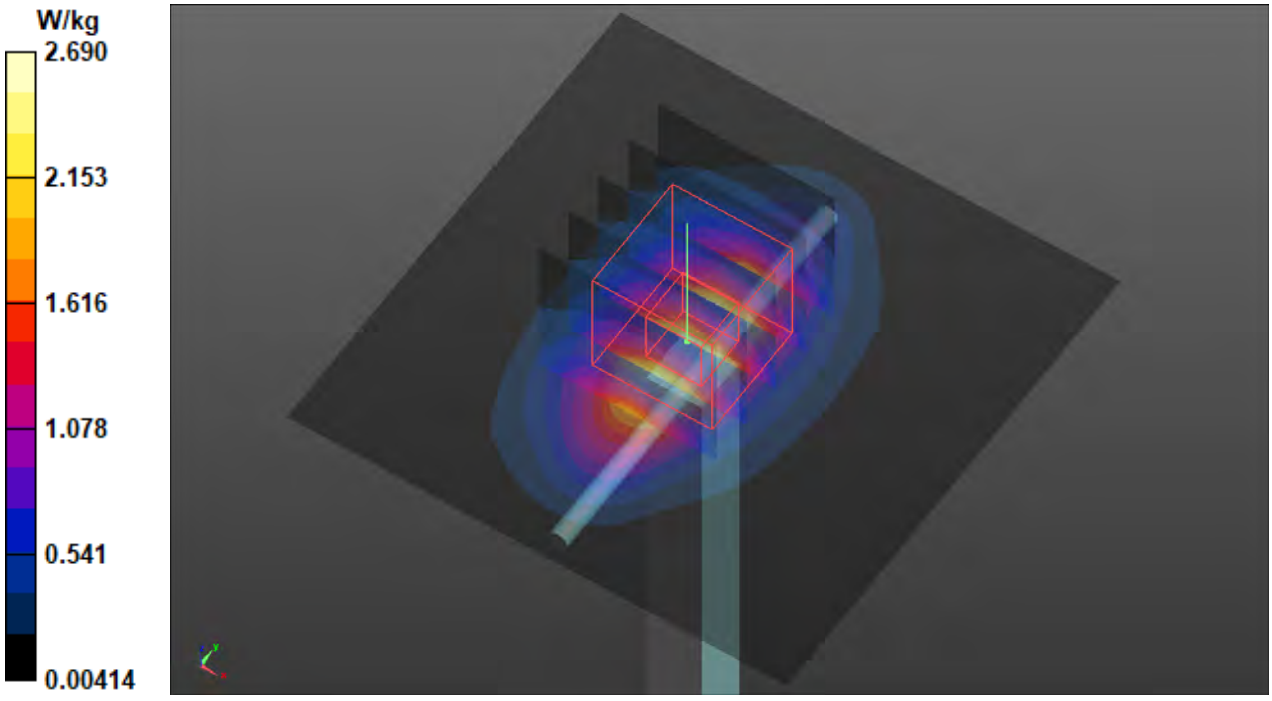
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0314 Medium parameters used: f = 1750 MHz; σ = 1.322 S/m; ε_r = 38.793; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.69 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.75 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 3.19 W/kg
SAR(1 g) = 1.78 W/kg; SAR(10 g) = 0.941 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.70 W/kg



S65 System Check_H1750_210313

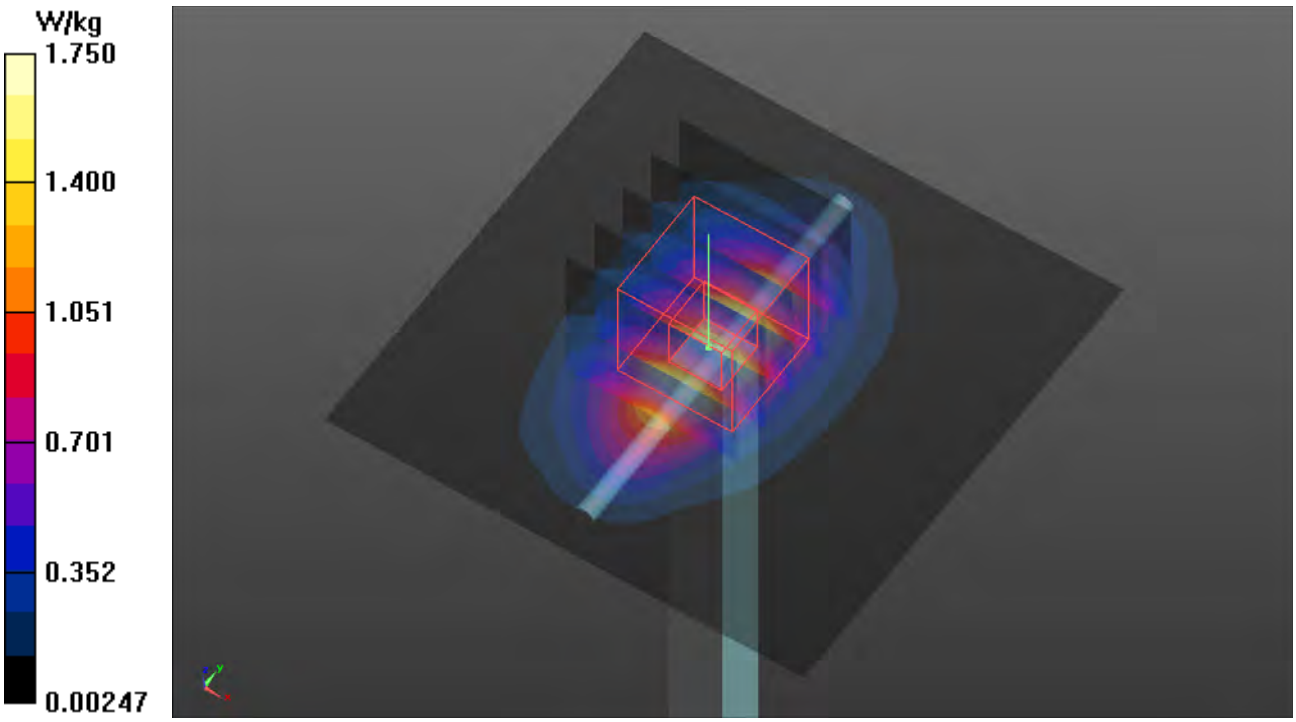
DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: H16T20N1_0313 Medium parameters used: f = 1750 MHz; σ = 1.332 S/m; ε_r = 39.648; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.75 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 36.84 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 2.08 W/kg
SAR(1 g) = 1.66 W/kg; SAR(10 g) = 1.04 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.76 W/kg



S66 System Check_H2450_210319

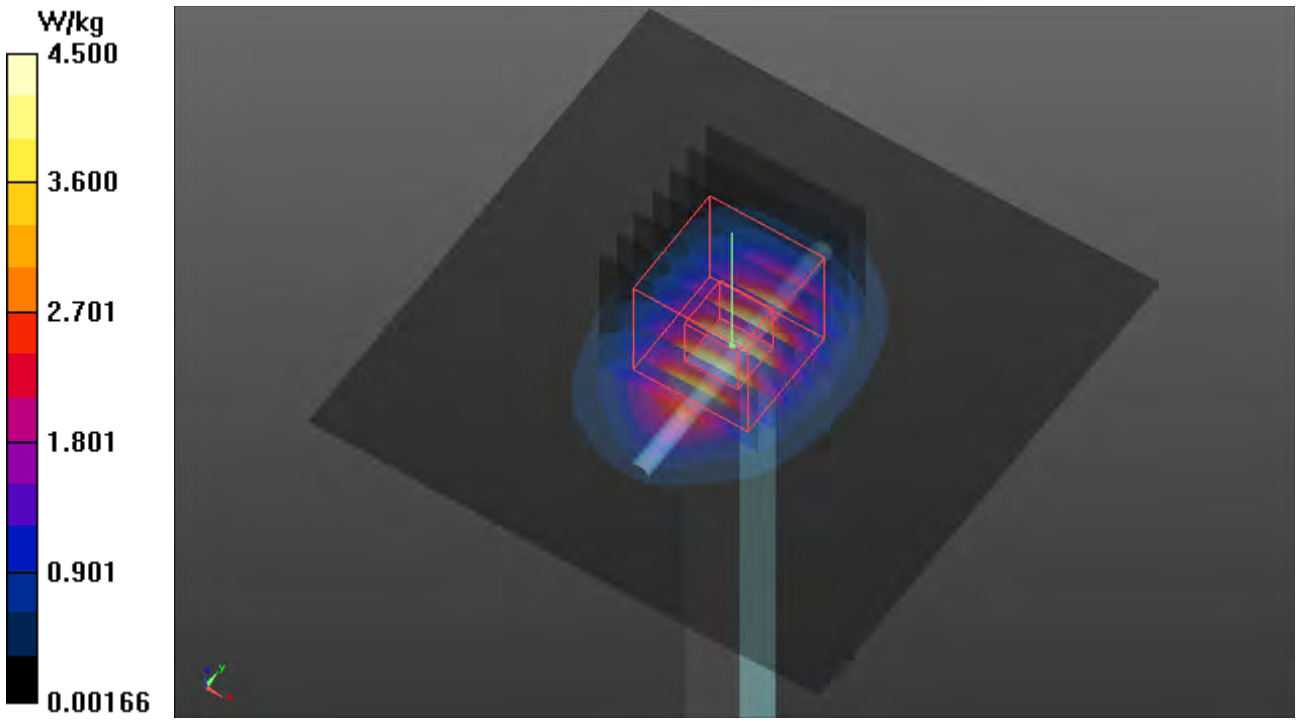
DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0319 Medium parameters used (interpolated): f = 2450 MHz; σ = 1.857 S/m; ε_r = 38.837; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2450 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.50 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.24 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 5.64 W/kg
SAR(1 g) = 2.68 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.57 W/kg



S67 System Check_H5250_210319

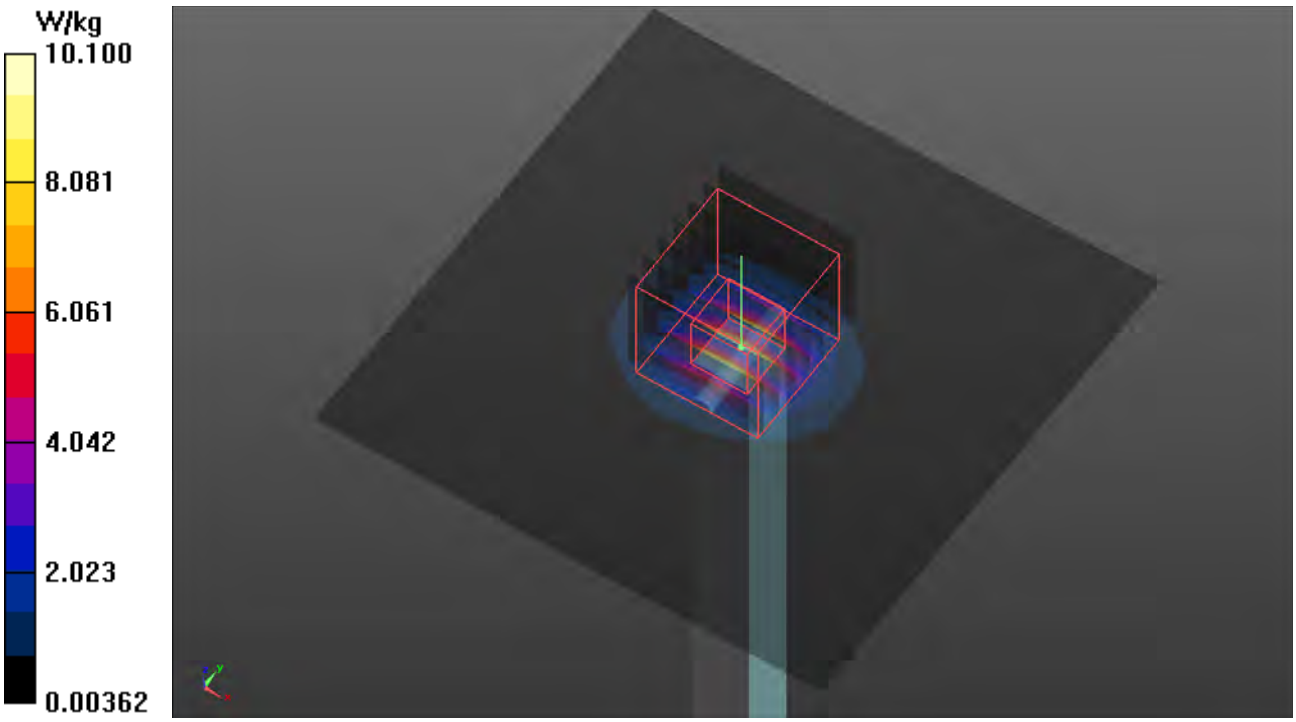
DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1145

Communication System: UID 0, CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: H34T60N1_0319 Medium parameters used (interpolated): f = 5250 MHz; σ = 4.787 S/m; ε_r = 37.294; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(5.12, 5.12, 5.12) @ 5250 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.1 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 52.57 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 17.0 W/kg
SAR(1 g) = 4.23 W/kg; SAR(10 g) = 1.15 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.8 W/kg



S68 System Check_H5600_210319

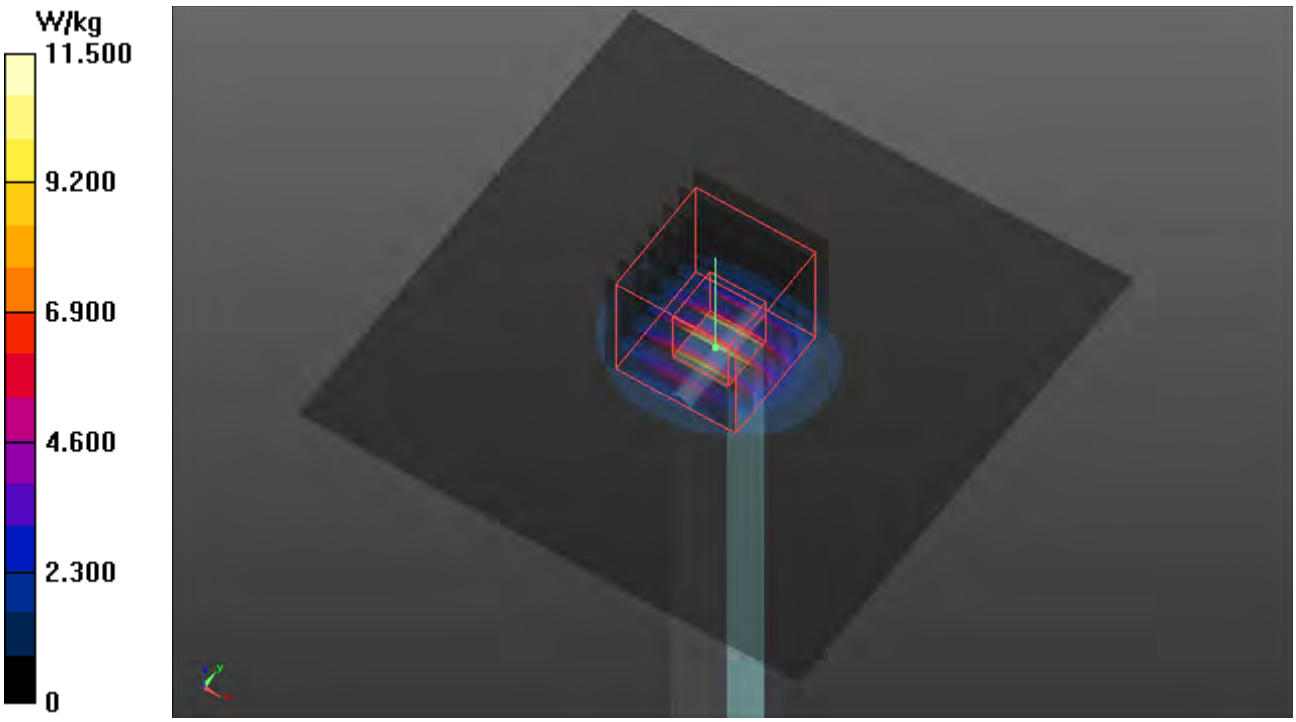
DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1145

Communication System: UID 0, CW; Frequency: 5600 MHz;Duty Cycle: 1:1
Medium: H34T60N1_0319 Medium parameters used: f = 5600 MHz; σ = 5.132 S/m; ε_r = 36.728; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.65, 4.65, 4.65) @ 5600 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 11.5 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 53.89 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 20.7 W/kg
SAR(1 g) = 4.33 W/kg; SAR(10 g) = 1.05 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 12.3 W/kg



S69 System Check_H5750_210319

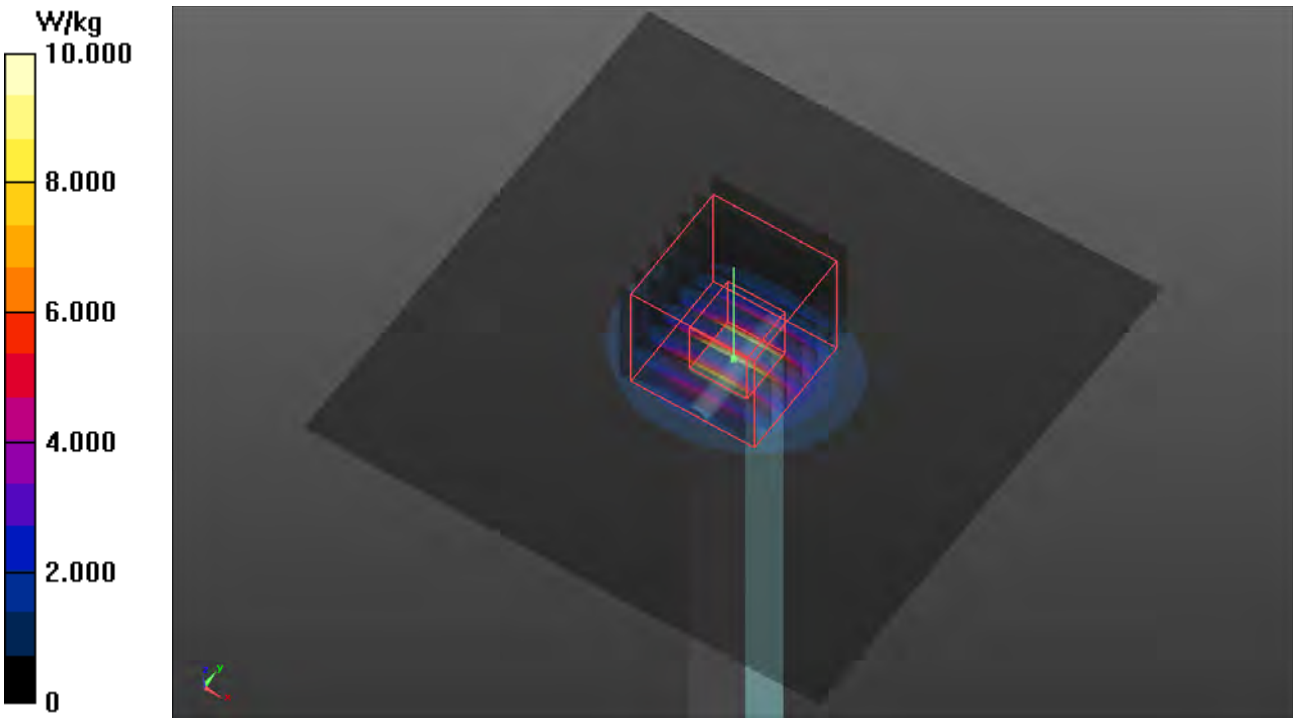
DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1145

Communication System: UID 0, CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: H34T60N1_0319 Medium parameters used: f = 5750 MHz; σ = 5.276 S/m; ε_r = 36.327; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.8, 4.8, 4.8) @ 5750 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.0 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.01 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 18.6 W/kg
SAR(1 g) = 4.11 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.7 W/kg



S70 System Check_H2450_210319

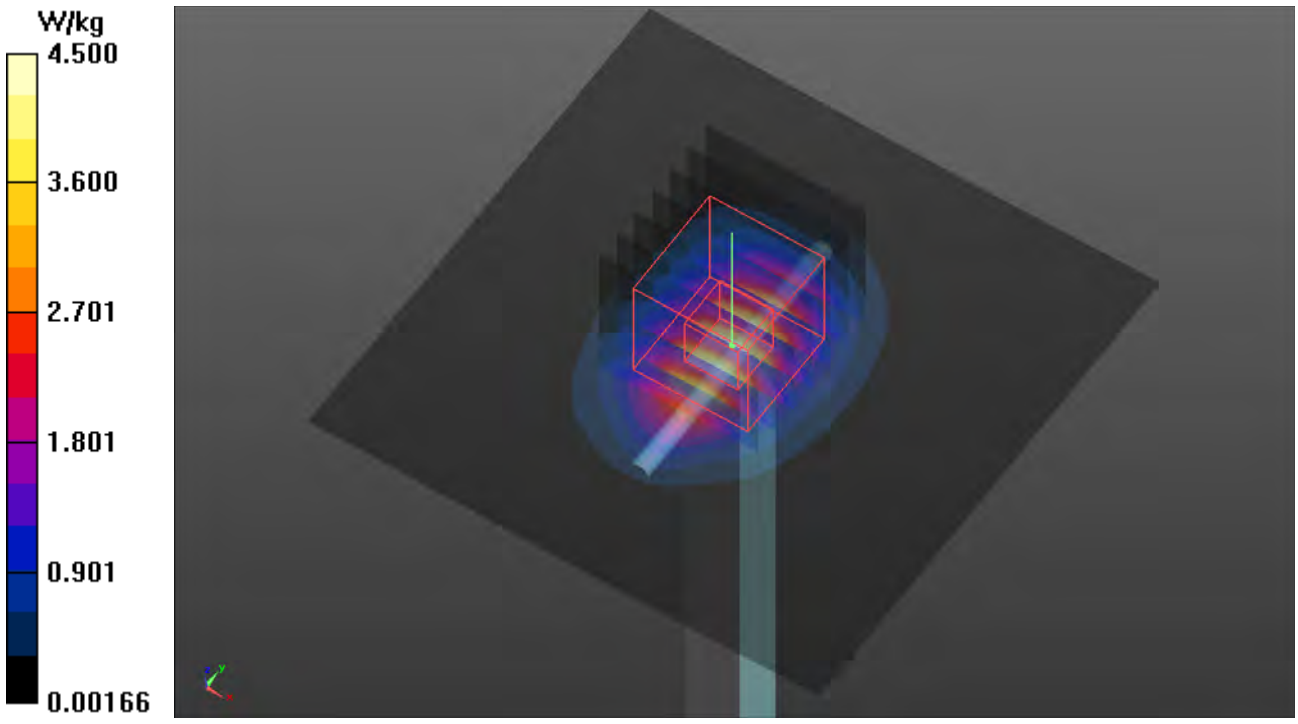
DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0319 Medium parameters used (interpolated): f = 2450 MHz; σ = 1.857 S/m; ε_r = 38.837; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2450 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.50 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.24 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 5.64 W/kg
SAR(1 g) = 2.68 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.57 W/kg



Appendix B. SAR Plots of SAR Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination, and measured SAR > 1.5 W/kg are shown as follows.

P01 WCDMA II_RMC12.2K_Rear Face_0mm_Ch9400_Sample1_Ant 0_P-Sensor_w

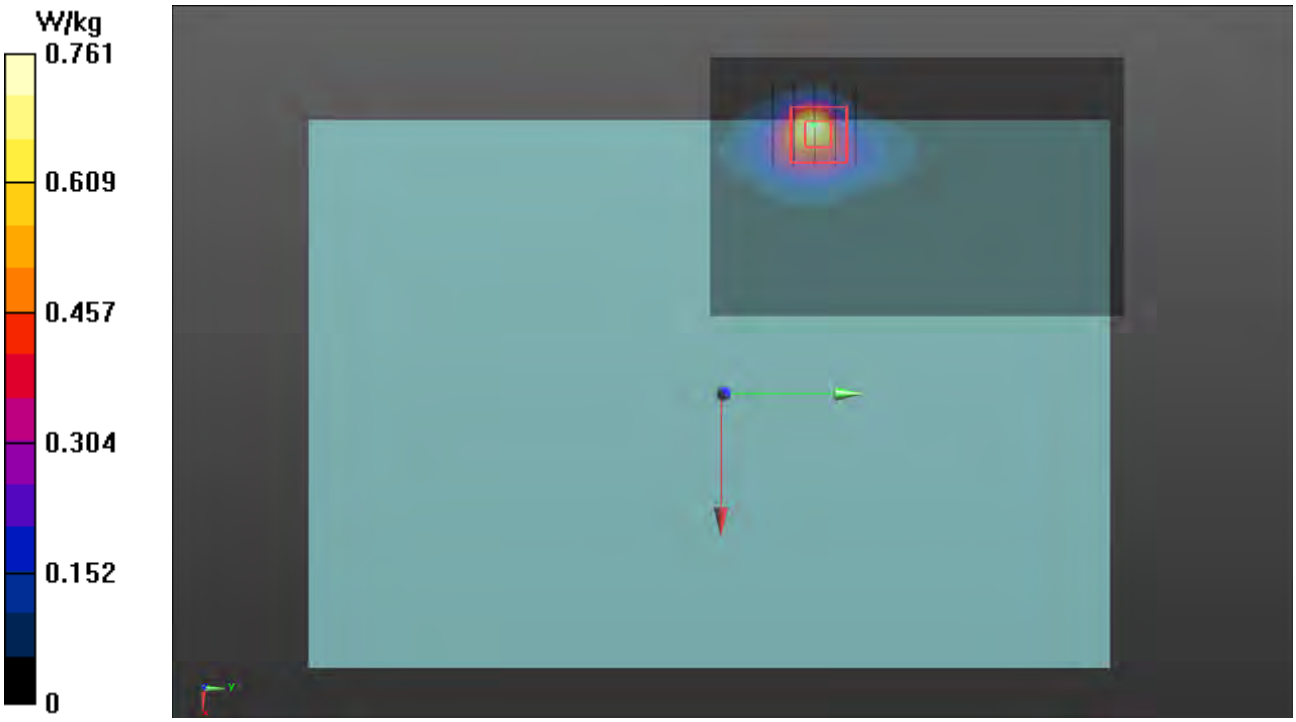
DUT: P21010159

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz;Duty Cycle: 1:1.95
Medium: H16T20N1_0318 Medium parameters used: f = 1880 MHz; σ = 1.442 S/m; ε_r = 38.617; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1880 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.761 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.03 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 0.598 W/kg; SAR(10 g) = 0.231 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 39.7%
Maximum value of SAR (measured) = 1.02 W/kg



P02 WCDMA IV_RMC12.2K_Rear Face_0mm_Ch1513_Sample1_Ant 0_P-Sensor_w

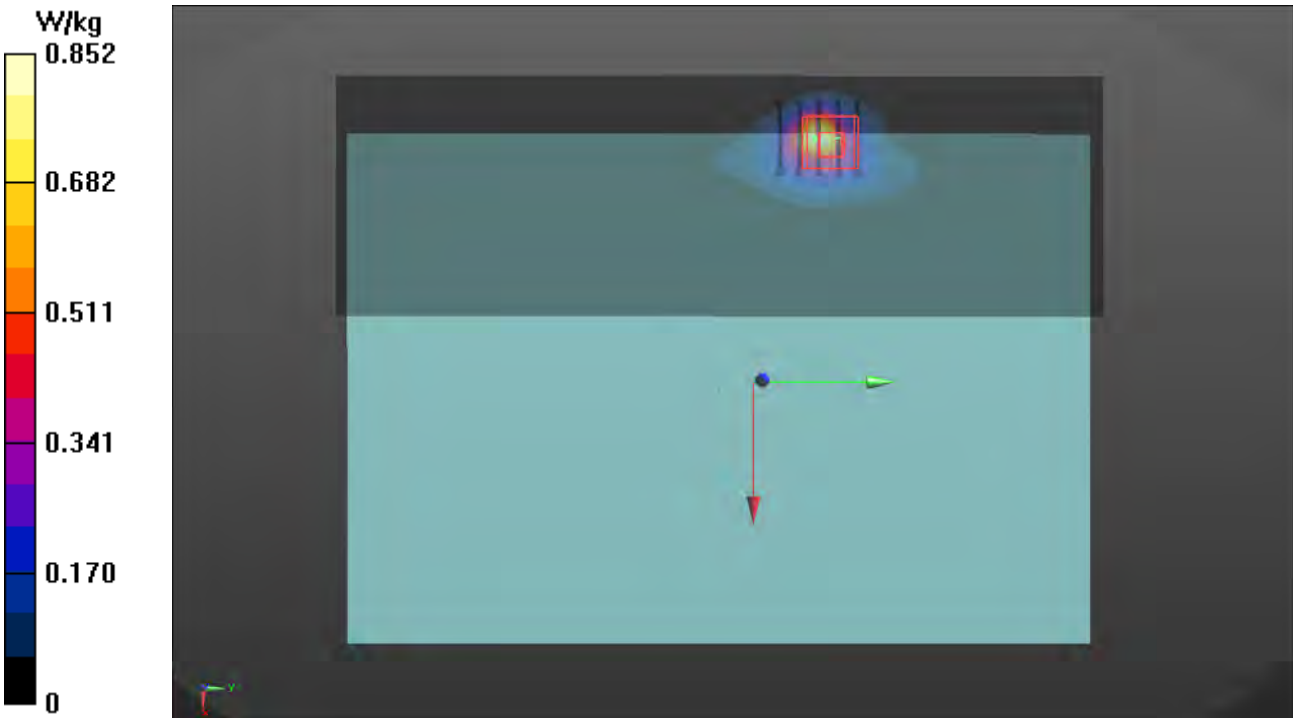
DUT: P21010159

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1752.6 MHz;Duty Cycle: 1:1.95
Medium: H16T20N1_0326 Medium parameters used: f = 1753 MHz; σ = 1.321 S/m; ε_r = 39.341; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1752.6 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.852 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.04 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.18 W/kg
SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.266 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 41.5%
Maximum value of SAR (measured) = 1.35 W/kg



P03 WCDMA V_RMC12.2K_Rear Face_0mm_Ch4233_Sample1_Ant 0_P-Sensor_w

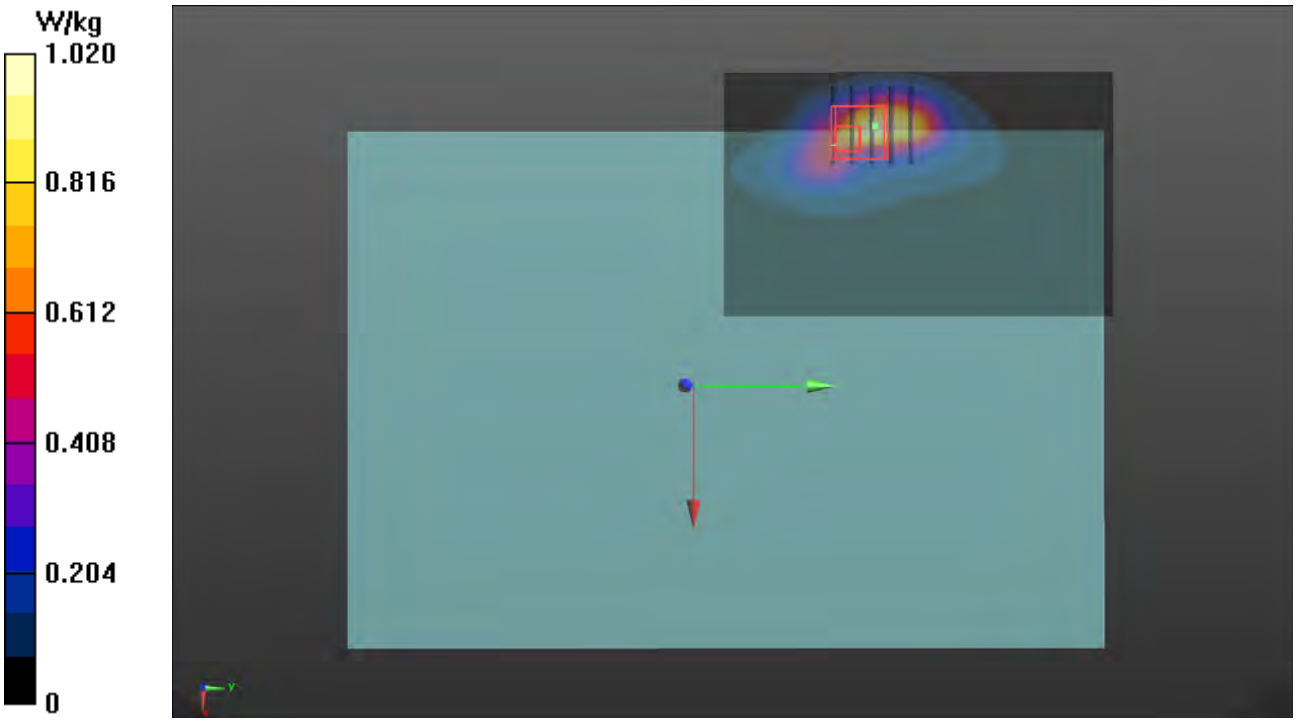
DUT: P21010159

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 846.6 MHz;Duty Cycle: 1:1.95
Medium: H07T10N1_0317 Medium parameters used: f = 847 MHz; σ = 0.914 S/m; ε_r = 40.51; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 846.6 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.65 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.88 W/kg
SAR(1 g) = 0.712 W/kg; SAR(10 g) = 0.341 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 40.4%
Maximum value of SAR (measured) = 1.41 W/kg



P04 LTE 2_QPSK20M_Rear Face_0mm_Ch19100_1RB_OS0_Sample1_Ant 0_P-Sensor_w

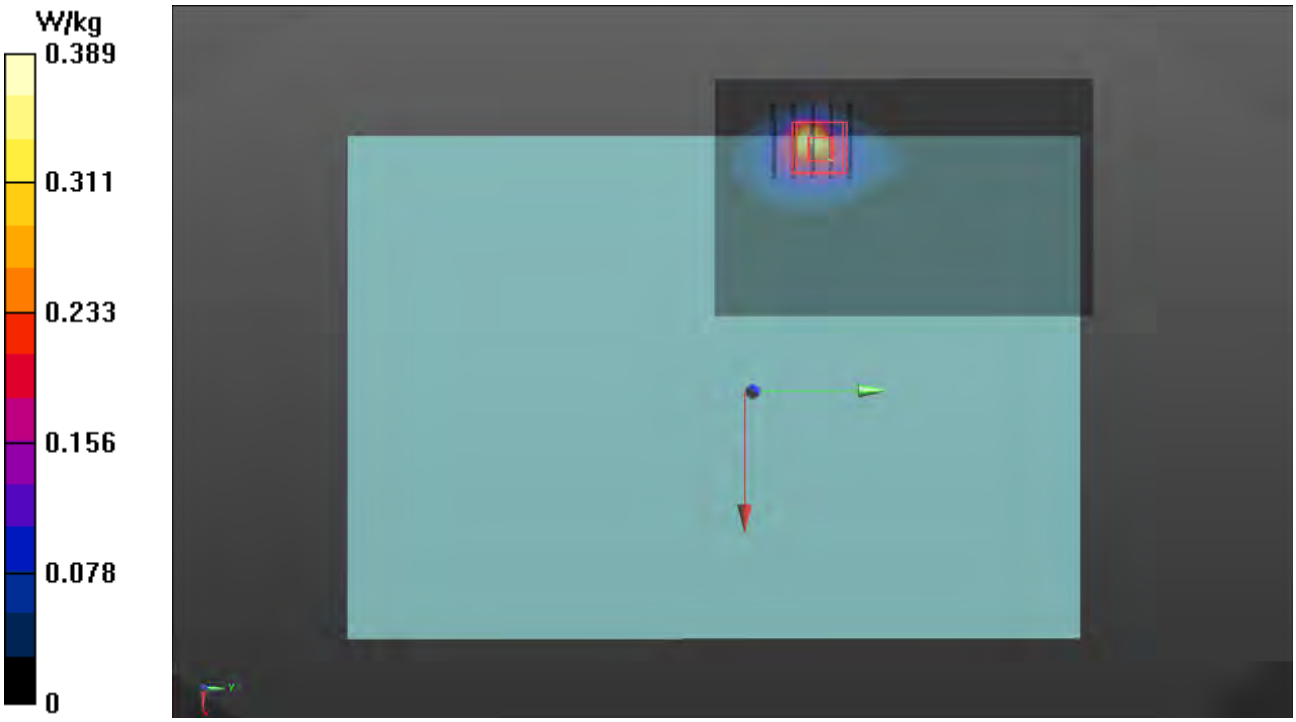
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1900 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0318 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.542; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.389 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.60 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.884 W/kg
SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.116 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 36.5%
Maximum value of SAR (measured) = 0.487 W/kg



P05 LTE 2_QPSK20M_Left Side_7mm_Ch18700_1RB_OS0_Sample1_Ant 2_P-Sensor_w_o

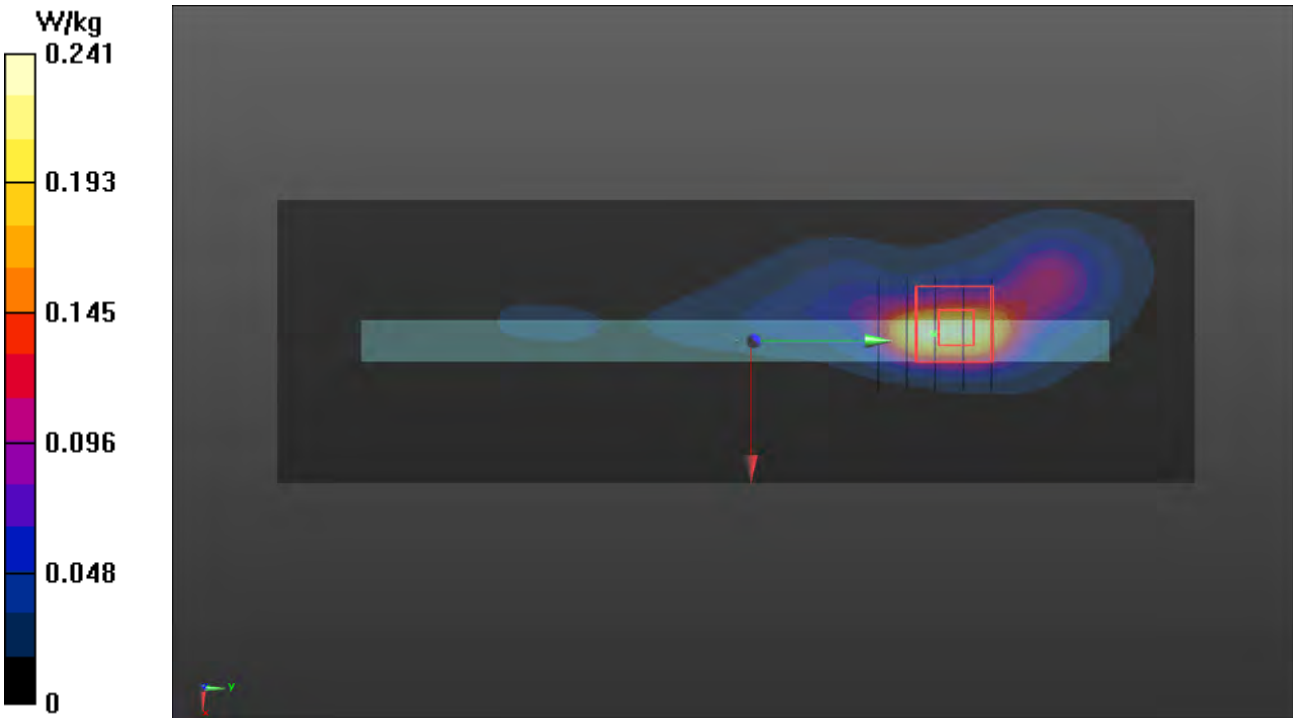
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1860 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0322 Medium parameters used: f = 1860 MHz; σ = 1.424 S/m; ε_r = 39.012; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1860 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.241 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.44 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.402 W/kg
SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.074 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 41.6%
Maximum value of SAR (measured) = 0.317 W/kg



P06 LTE 4_QPSK20M_Rear Face_0mm_Ch20050_1RB_OS0_Sample1_Ant 0_P-Sensor_w

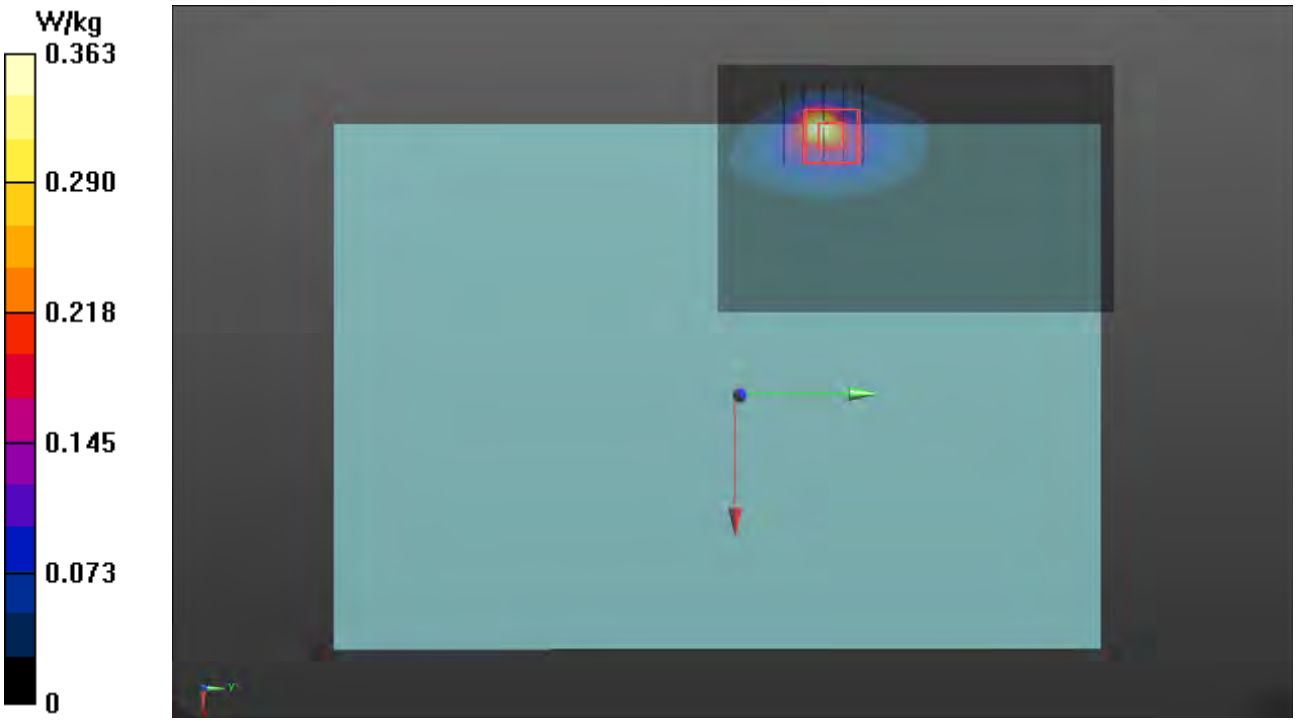
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1720 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0317 Medium parameters used: f = 1720 MHz; σ = 1.302 S/m; ε_r = 39.249; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1720 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.363 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.51 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.716 W/kg
SAR(1 g) = 0.276 W/kg; SAR(10 g) = 0.111 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 38.8%
Maximum value of SAR (measured) = 0.449 W/kg



P07 LTE 5_QPSK10M_Rear Face_0mm_Ch20600_1RB_OS0_Sample1_Ant 0_P-Sensor_w

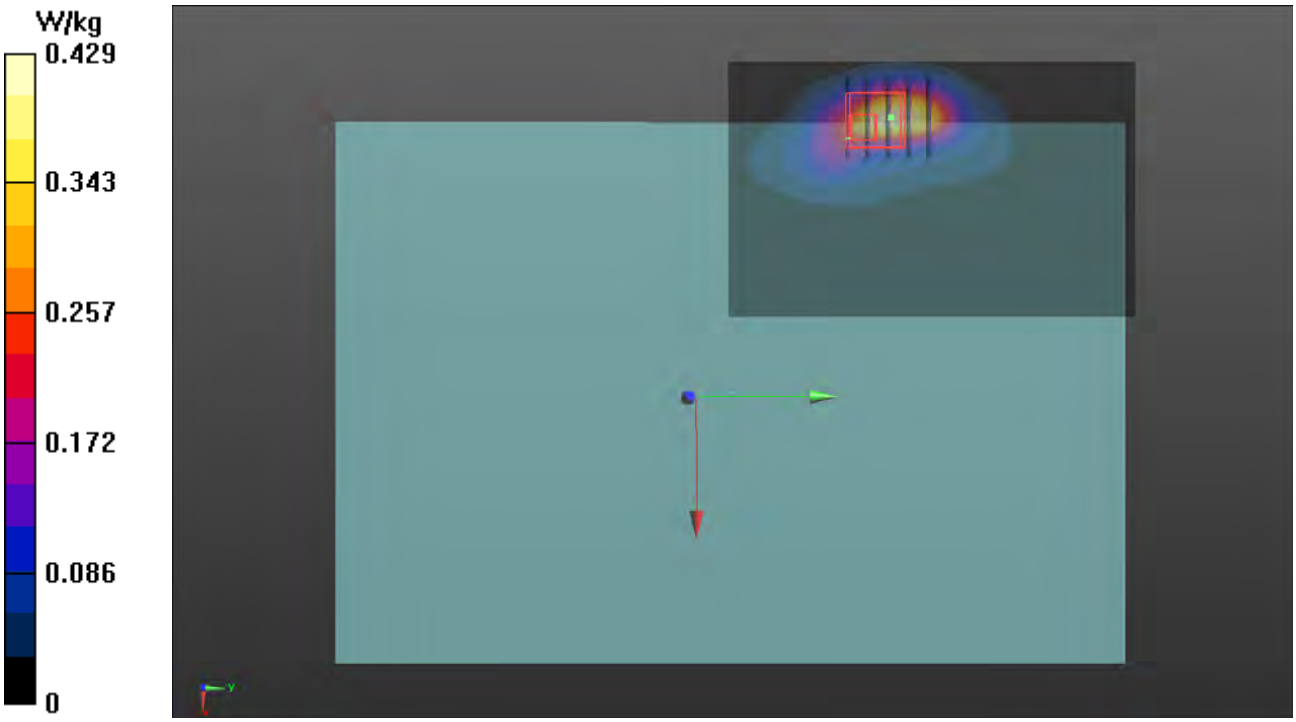
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 844 MHz;Duty Cycle: 1:3.74
Medium: H07T10N1_0317 Medium parameters used: f = 844 MHz; σ = 0.912 S/m; ε_r = 40.544; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 844 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.429 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.89 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.738 W/kg
SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.133 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 40.1%
Maximum value of SAR (measured) = 0.544 W/kg



P08 LTE 7_QPSK20M_Bottom Side_16mm_Ch20850_1RB_OS0_Sample1_Ant 0_P-Sensor_w_o

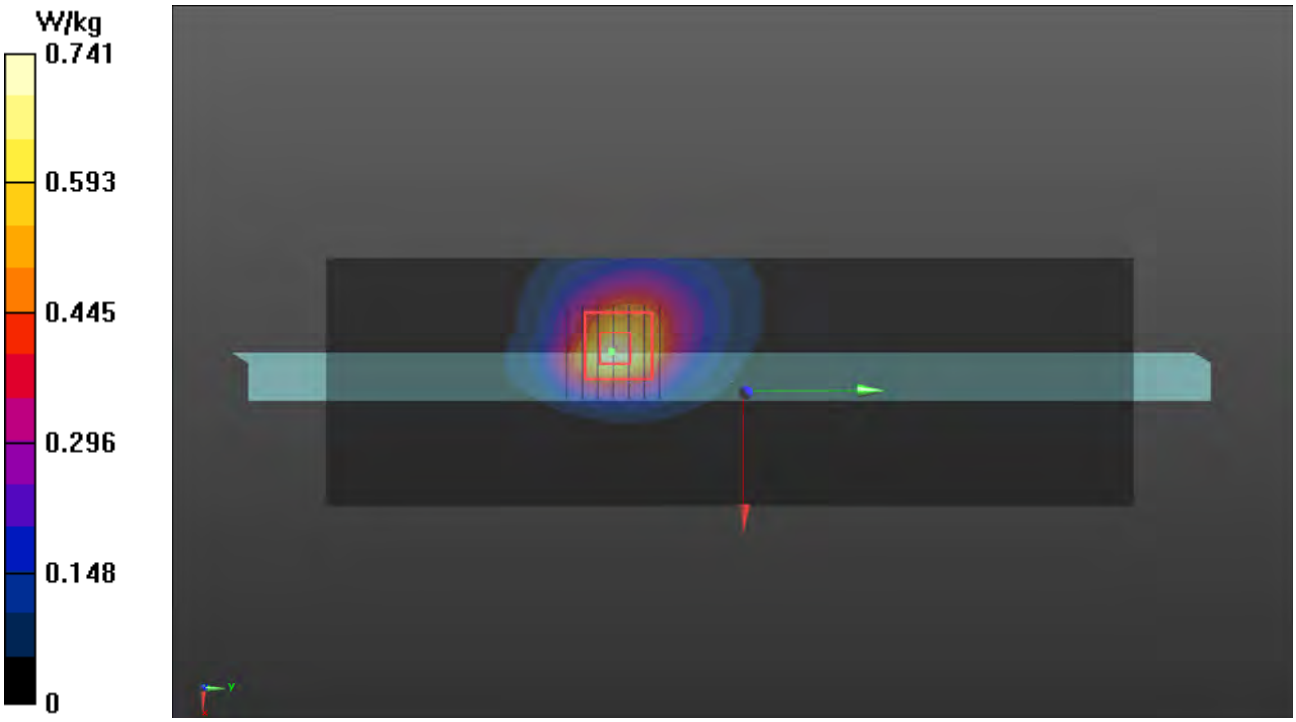
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2510 MHz;Duty Cycle: 1:3.74
Medium: H19T27N3_0320 Medium parameters used: f = 2510 MHz; σ = 1.932 S/m; ε_r = 38.877; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2510 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.741 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.42 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.524 W/kg; SAR(10 g) = 0.267 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10.2 mm
Ratio of SAR at M2 to SAR at M1 = 52.9%
Maximum value of SAR (measured) = 0.837 W/kg



P09 LTE 7_QPSK20M_Left Side_7mm_Ch21350_1RB_OS0_Sample1_Ant 2_P-Sensor_w_o

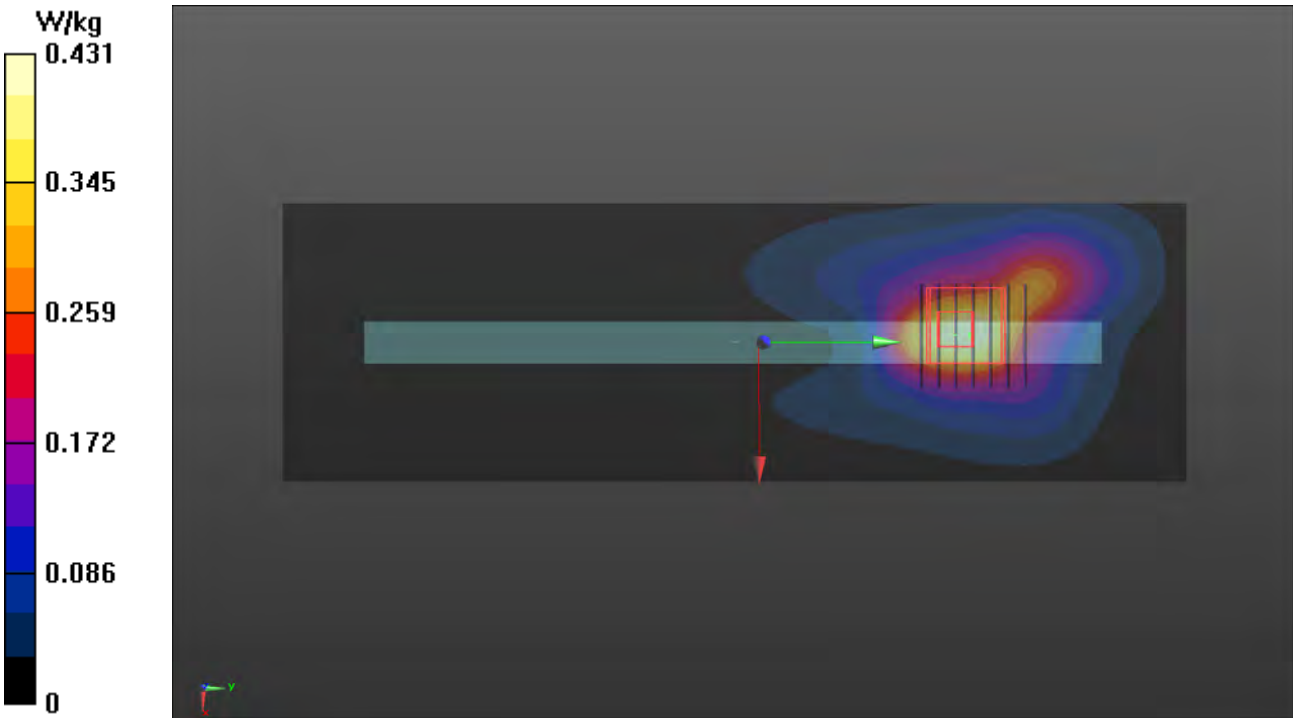
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2560 MHz;Duty Cycle: 1:3.74
Medium: H19T27N1_0321 Medium parameters used: f = 2560 MHz; σ = 1.987 S/m; ε_r = 37.614; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2560 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.431 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.19 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.806 W/kg
SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.171 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 48%
Maximum value of SAR (measured) = 0.624 W/kg



P10 LTE 12_QPSK10M_Rear Face_0mm_Ch23060_1RB_OS0_Sample1_Ant 0_P-Sensor_w

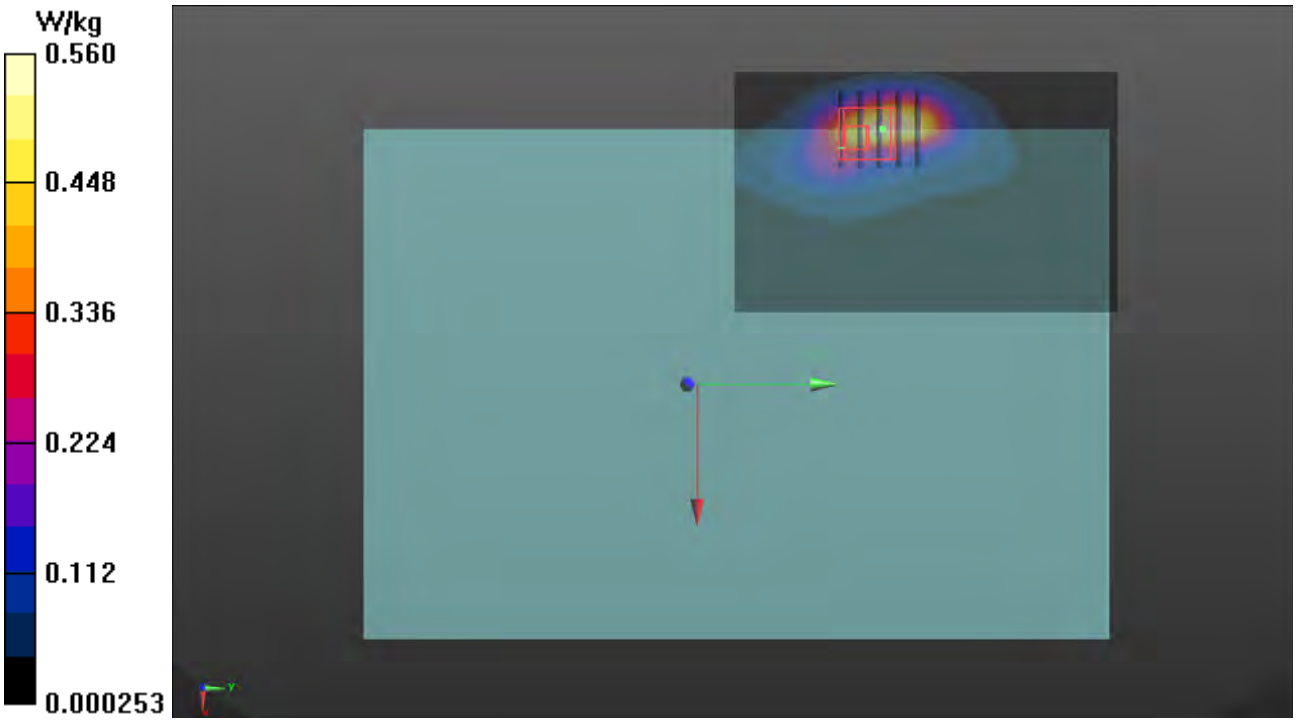
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 704 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0318 Medium parameters used: f = 704 MHz; σ = 0.851 S/m; ε_r = 43.084; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 704 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.560 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.87 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.433 W/kg; SAR(10 g) = 0.196 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 38.9%
Maximum value of SAR (measured) = 0.763 W/kg



P11 LTE 13_QPSK10M_Rear Face_0mm_Ch23230_1RB_OS0_Sample1_Ant 0_P-Sensor_w

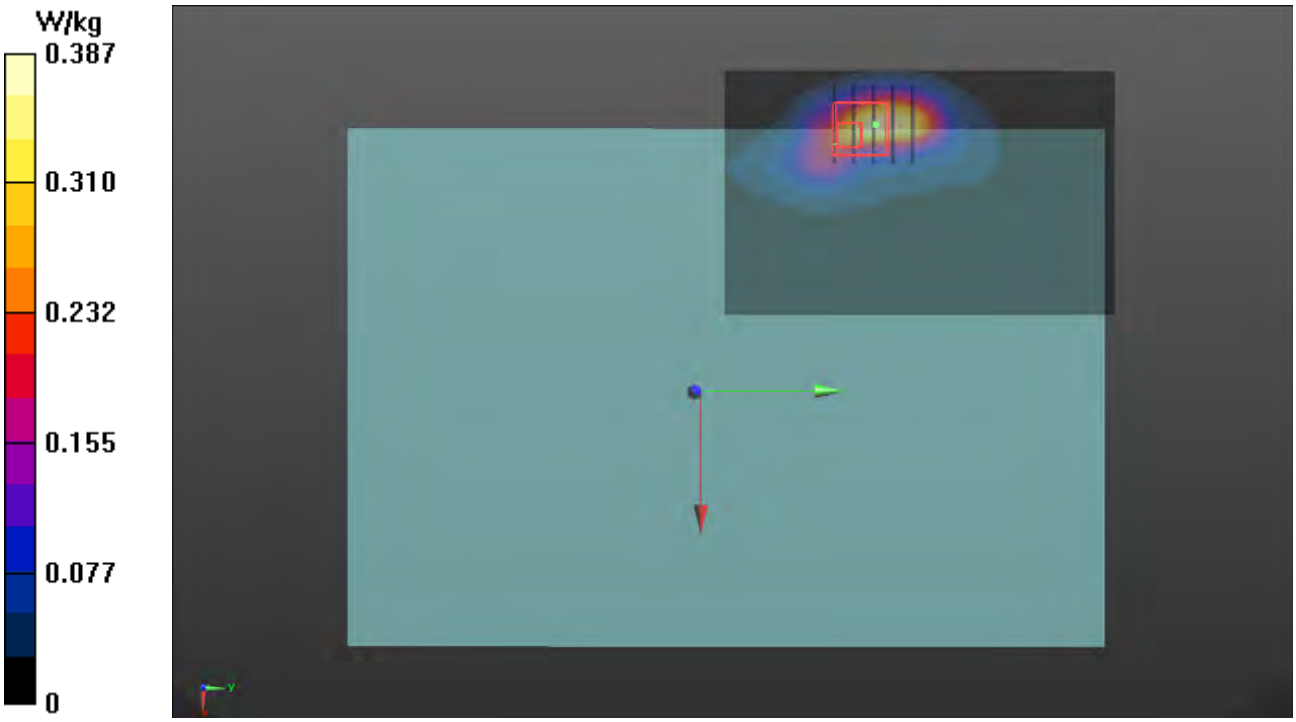
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 782 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0318 Medium parameters used: f = 782 MHz; σ = 0.931 S/m; ε_r = 42.311; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 782 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.387 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.74 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.681 W/kg
SAR(1 g) = 0.255 W/kg; SAR(10 g) = 0.122 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 40.9%
Maximum value of SAR (measured) = 0.513 W/kg



P12 LTE 14_QPSK10M_Rear Face_0mm_Ch23330_1RB_OS0_Sample1_Ant 0_P-Sensor_w

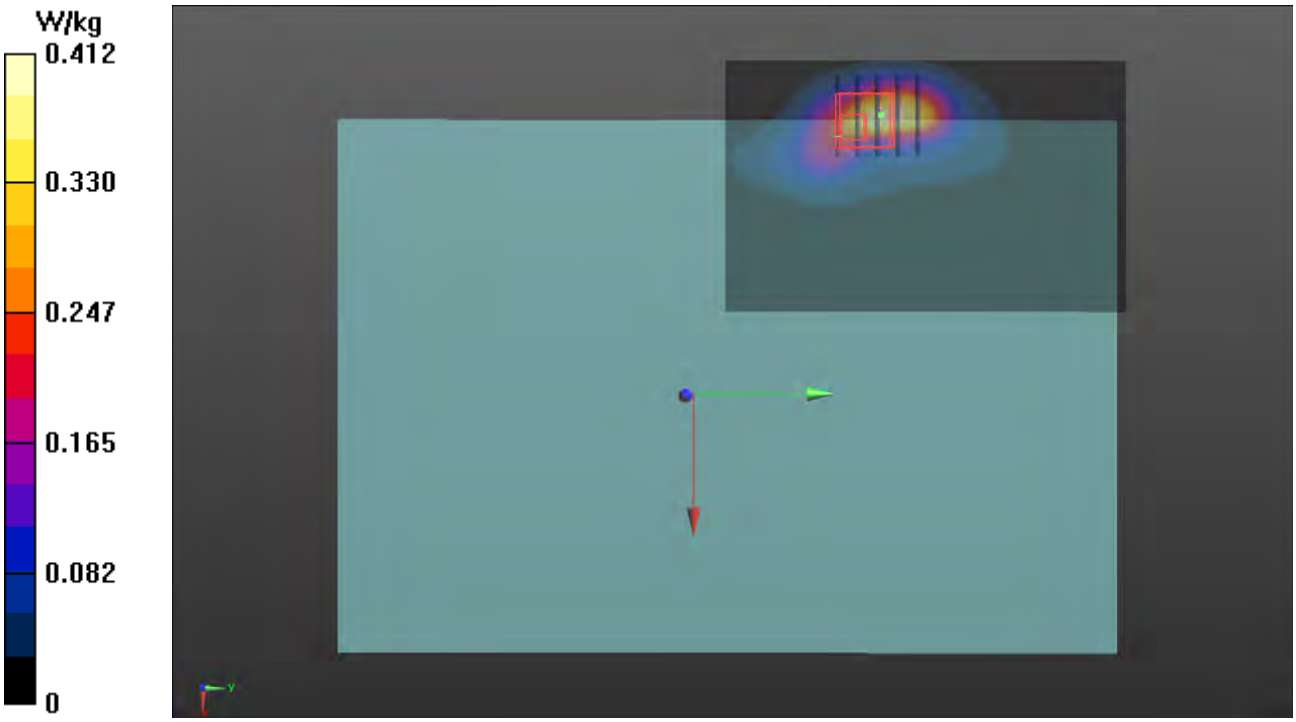
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 793 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0318 Medium parameters used: f = 793 MHz; σ = 0.939 S/m; ε_r = 42.218; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 793 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.412 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.33 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.733 W/kg
SAR(1 g) = 0.271 W/kg; SAR(10 g) = 0.130 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 40.5%
Maximum value of SAR (measured) = 0.551 W/kg



P13 LTE 17_QPSK10M_Rear Face_0mm_Ch23800_1RB_OS0_Sample1_Ant 0_P-Sensor_w

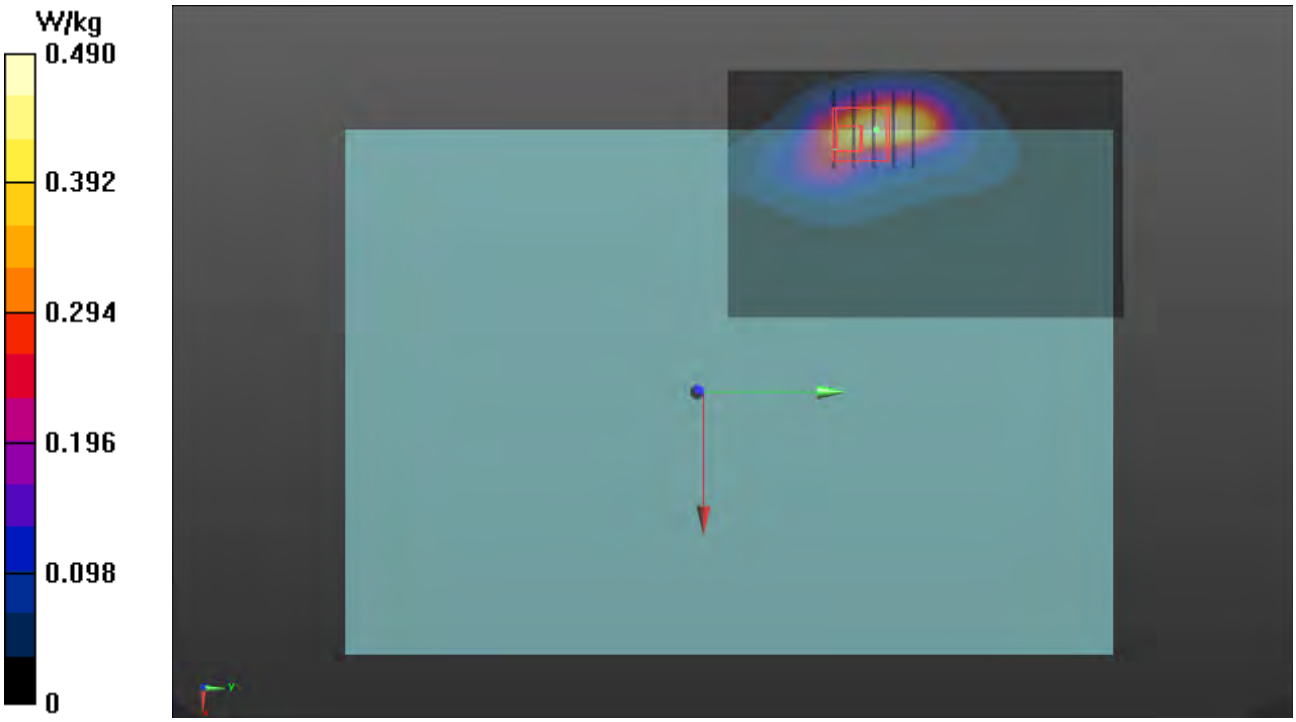
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 711 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0318 Medium parameters used: f = 711 MHz; σ = 0.858 S/m; ε_r = 42.87; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 711 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.490 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.96 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.176 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 38.8%
Maximum value of SAR (measured) = 0.700 W/kg



P14 LTE 25_QPSK20M_Rear Face_0mm_Ch26365_1RB_OS0_Sample1_Ant 0_P-Sensor_w

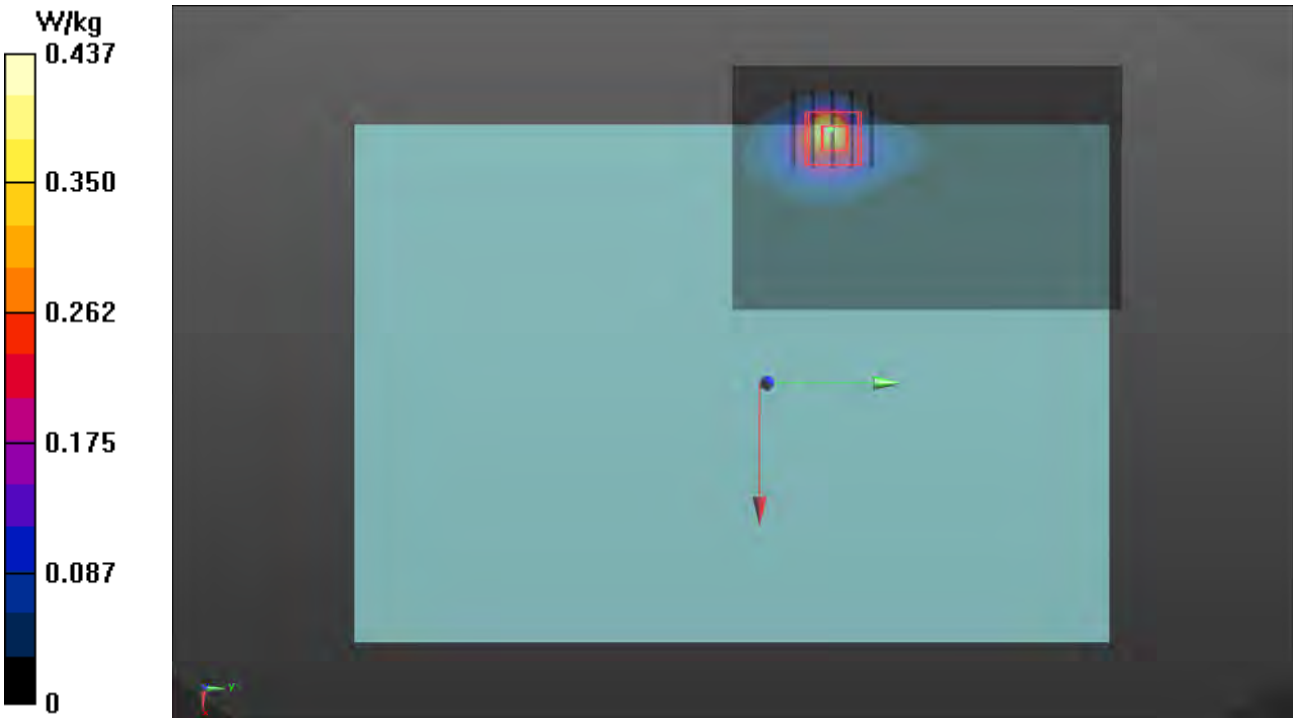
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1882.5 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0318 Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.444 S/m;
ε_r = 38.611; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1882.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.437 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.95 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.946 W/kg
SAR(1 g) = 0.335 W/kg; SAR(10 g) = 0.130 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 39.3%
Maximum value of SAR (measured) = 0.592 W/kg



P15 LTE 26_QPSK15M_Rear Face_0mm_Ch26965_1RB_OS0_Sample1_Ant 0_P-Sensor_w

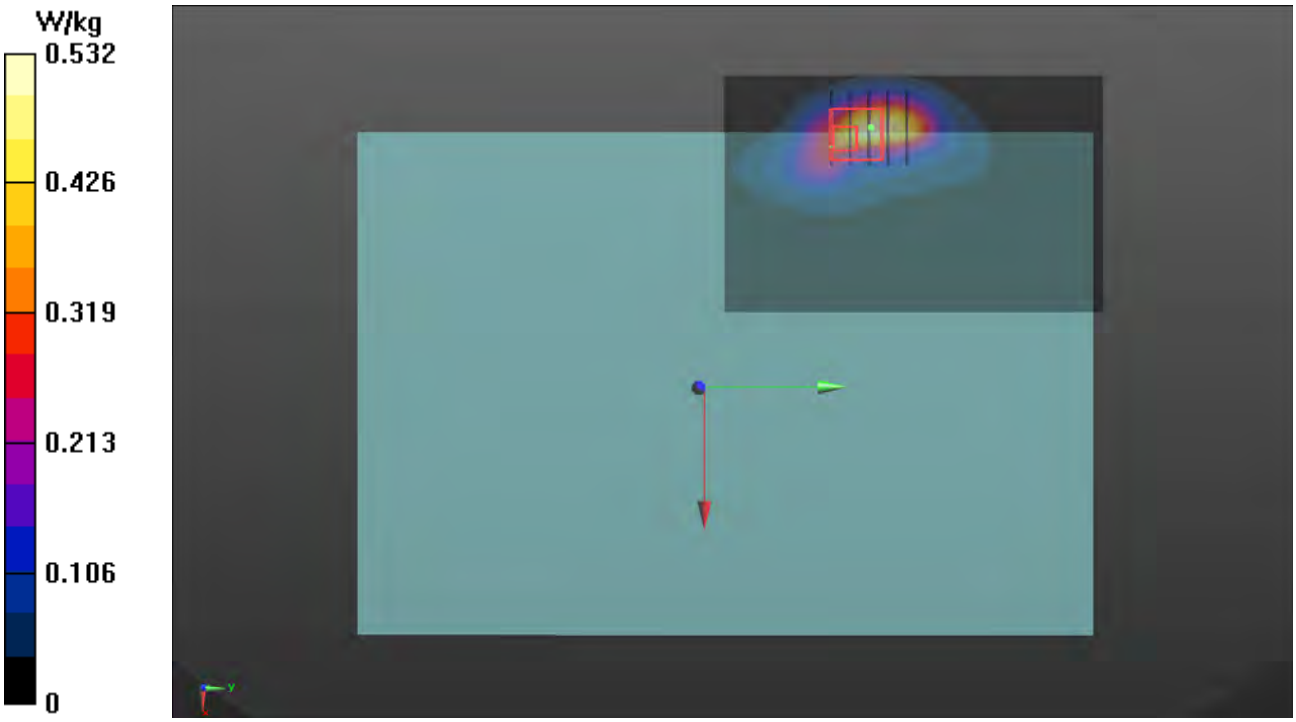
DUT: P21010159

Communication System: UID 10181 - CAE, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);
Frequency: 841.5 MHz;Duty Cycle: 1:3.74
Medium: H07T10N1_0317 Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.91 S/m; ε_r = 40.573; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 841.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.532 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.52 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.965 W/kg
SAR(1 g) = 0.362 W/kg; SAR(10 g) = 0.173 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 39.8%
Maximum value of SAR (measured) = 0.722 W/kg



P16 LTE 30_QPSK10M_Rear Face_0mm_Ch27710_1RB_OS0_Sample1_Ant 0_P-Sensor_w

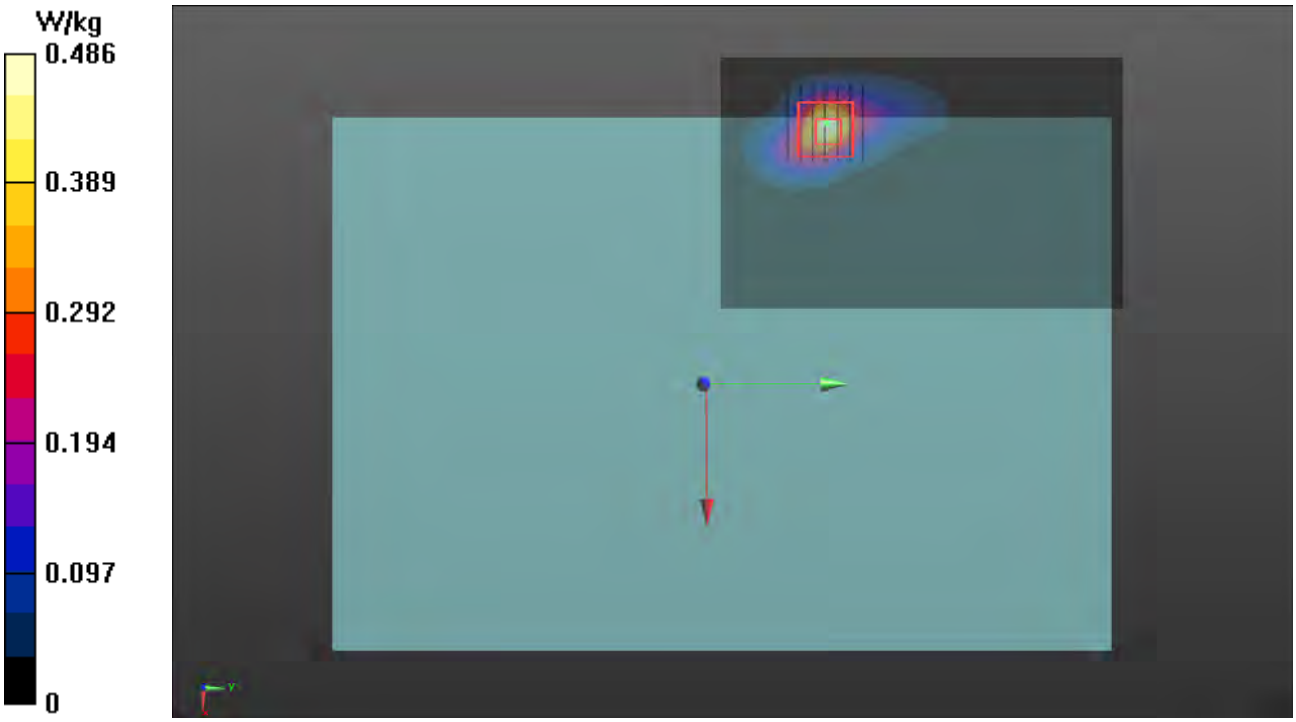
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 2310 MHz;Duty Cycle: 1:3.74
Medium: H19T27N1_0317 Medium parameters used: f = 2310 MHz; σ = 1.753 S/m; ε_r = 38.777; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.62, 7.62, 7.62) @ 2310 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x141x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.486 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.50 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.178 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 35.8%
Maximum value of SAR (measured) = 1.05 W/kg



P17 LTE 38_QPSK20M_Bottom Side_16mm_Ch37850_1RB_OS0_Sample1_Ant 0_P-Sensor_w_o

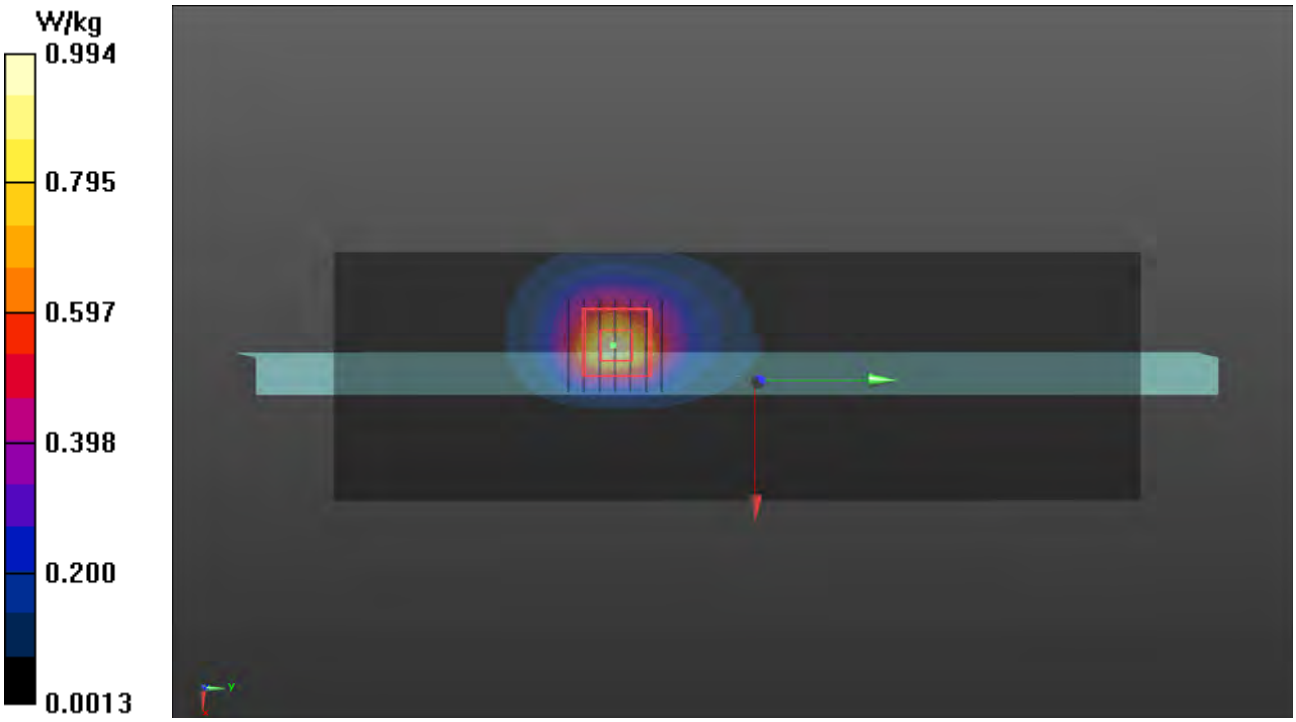
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2580 MHz;Duty Cycle: 1:8.33
Medium: H19T27N3_0320 Medium parameters used: f = 2580 MHz; σ = 2.015 S/m; ε_r = 38.484; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2580 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.994 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.39 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.315 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 51.8%
Maximum value of SAR (measured) = 1.06 W/kg



P18 LTE 41_QPSK20M_Bottom Side_16mm_Ch40185_1RB_OS0_Sample1_Ant 0_P-Sensor_w_o

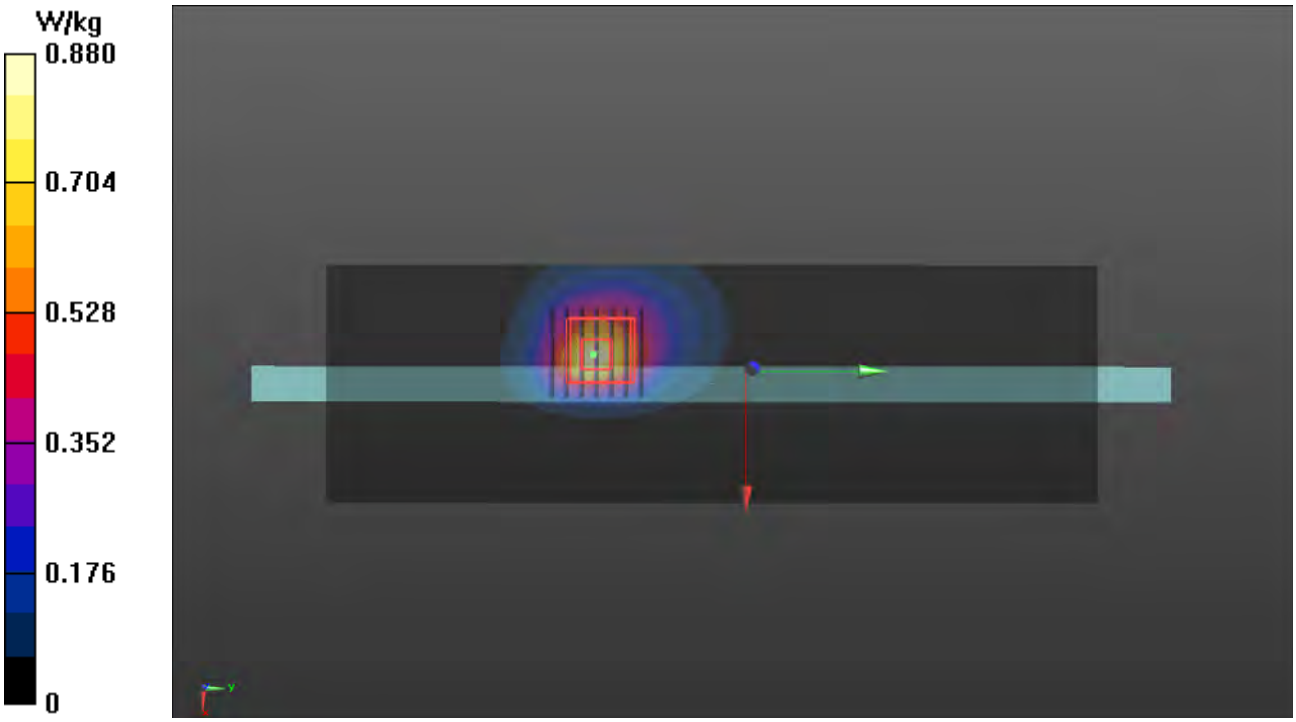
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2549.5 MHz;Duty Cycle: 1:8.33
Medium: H19T27N3_0320 Medium parameters used: f = 2550 MHz; σ = 1.958 S/m; ε_r = 38.531; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2549.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.880 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.87 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.597 W/kg; SAR(10 g) = 0.293 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 52%
Maximum value of SAR (measured) = 0.967 W/kg



P19 LTE 42_QPSK20M_Left Side_0mm_Ch43340_1RB_OS0_Sample1_Ant 2_P-Sensor_w

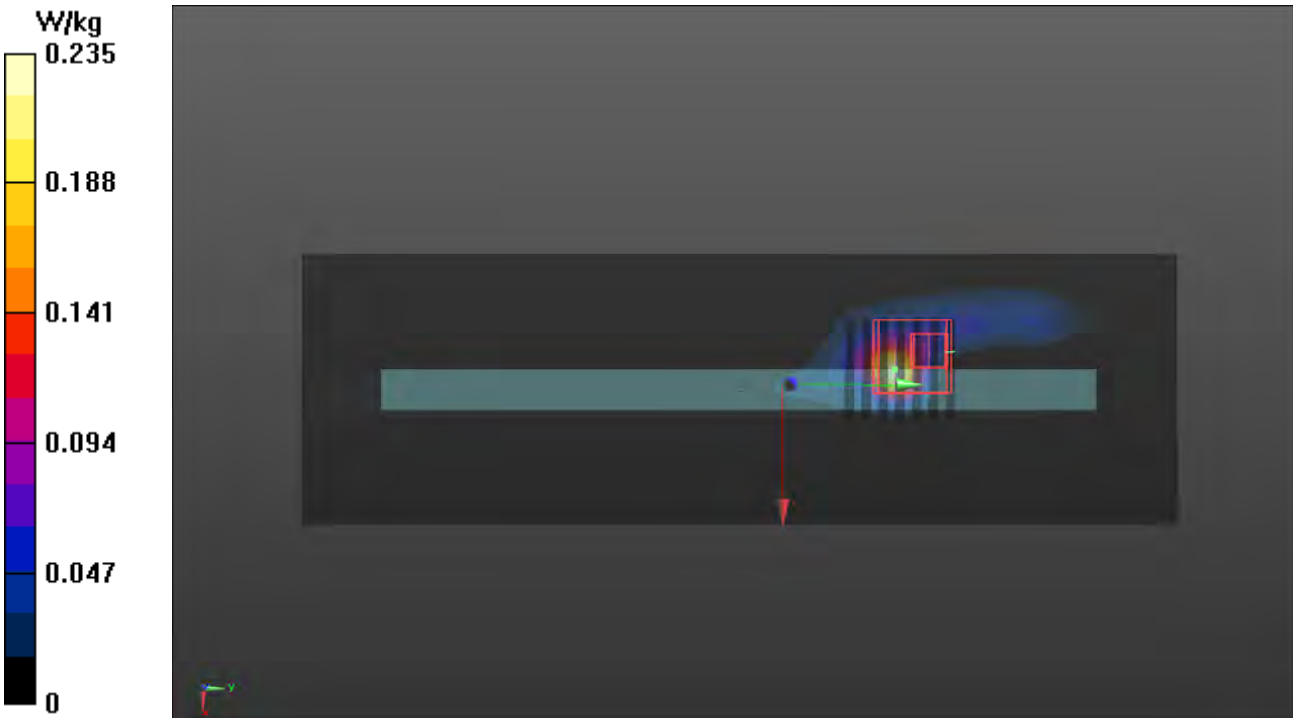
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 3575 MHz;Duty Cycle: 1:8.33
Medium: H34T38N1_0321 Medium parameters used: f = 3575 MHz; σ = 2.935 S/m; ε_r = 38.665; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3575 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.235 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 7.299 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.845 W/kg
SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.062 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 55.9%
Maximum value of SAR (measured) = 0.573 W/kg



P20 LTE 48_QPSK20M_Left Side_0mm_Ch56640_1RB_OS0_Sample1_Ant 2_P-Sensor_w

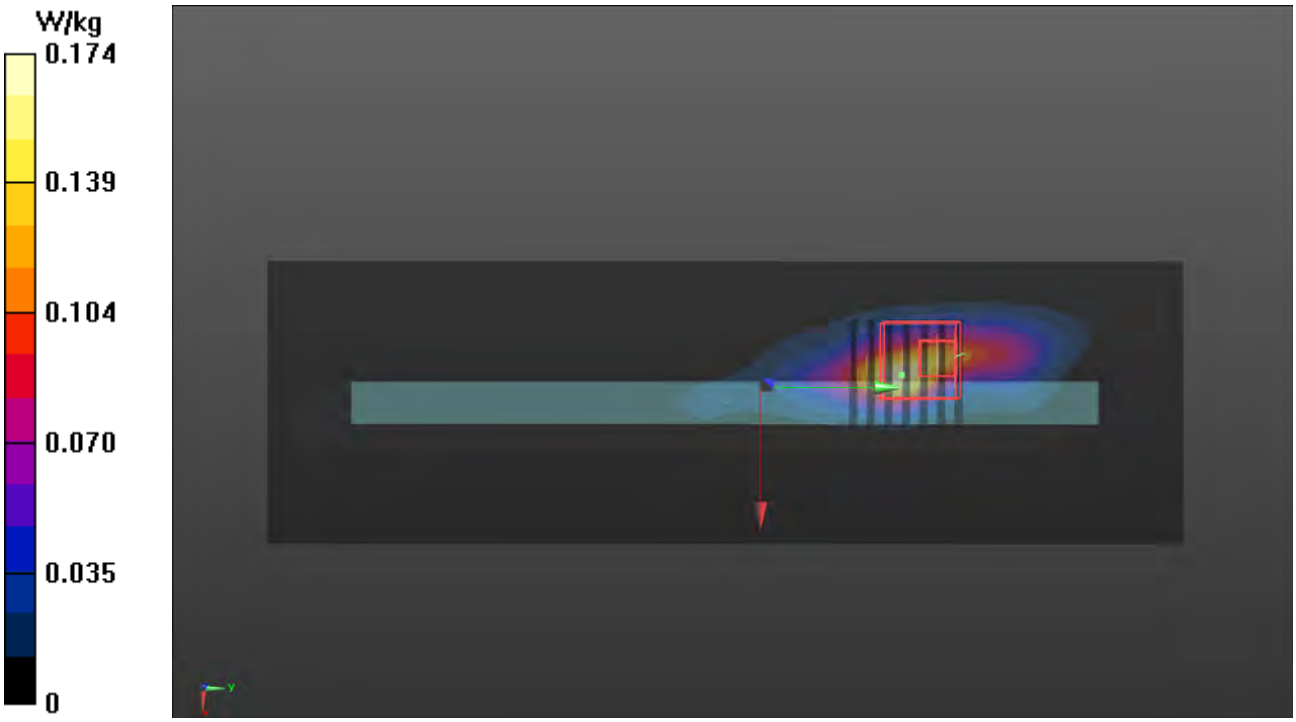
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 3690 MHz;Duty Cycle: 1:8.33
Medium: H34T38N1_0321 Medium parameters used (interpolated): f = 3690 MHz; σ = 3.041 S/m;
ε_r = 38.463; ρ = 1000 kg/m^3
Ambient Temperature：23.9 ℃ ； Liquid Temperature：23.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.67, 6.67, 6.67) @ 3690 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.174 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 5.479 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.057 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.2 mm
Ratio of SAR at M2 to SAR at M1 = 56.2%
Maximum value of SAR (measured) = 0.651 W/kg



P21 LTE 66_QPSK20M_Rear Face_0mm_Ch132072_1RB_OS0_Sample1_Ant 0_P-Sensor_w

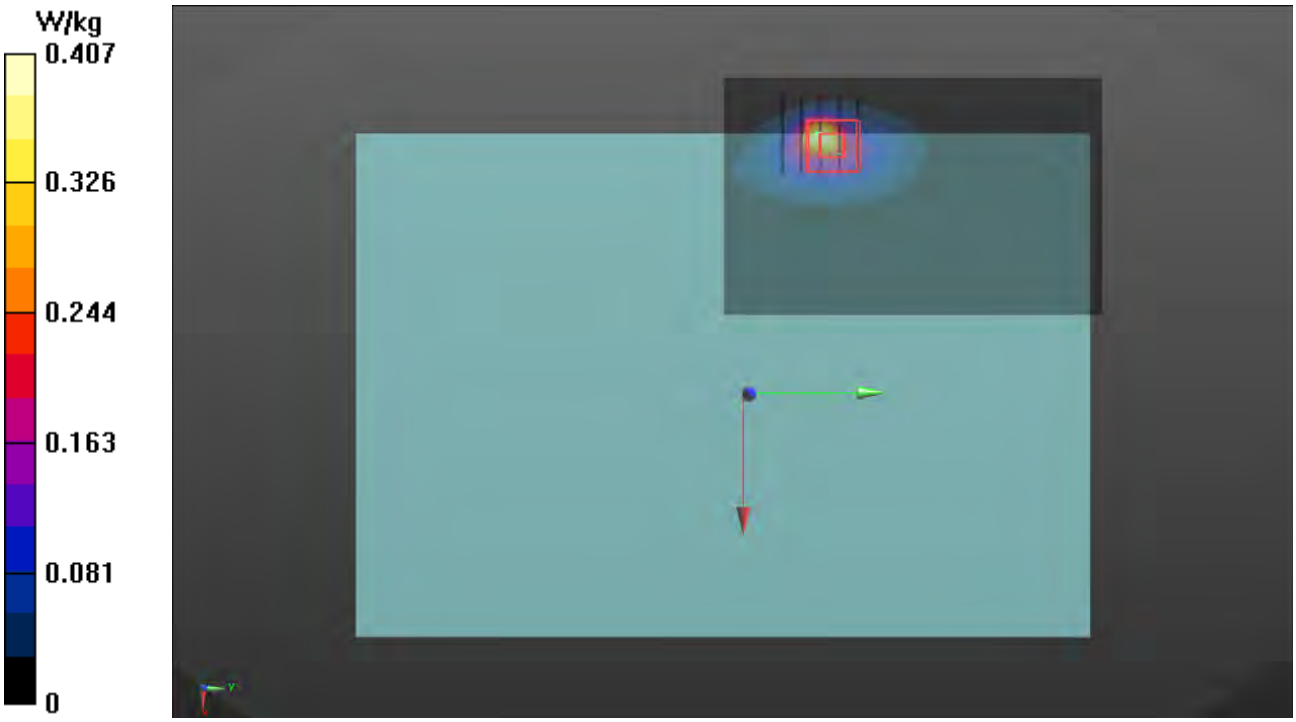
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1720 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0317 Medium parameters used: f = 1720 MHz; σ = 1.302 S/m; ε_r = 39.249; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1720 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.407 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.37 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.816 W/kg
SAR(1 g) = 0.313 W/kg; SAR(10 g) = 0.125 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 38.8%
Maximum value of SAR (measured) = 0.523 W/kg



P22 LTE 66_QPSK20M_Left Side_0mm_Ch132072_1RB_OS0_Sample1_Ant 2_P-Sensor_w

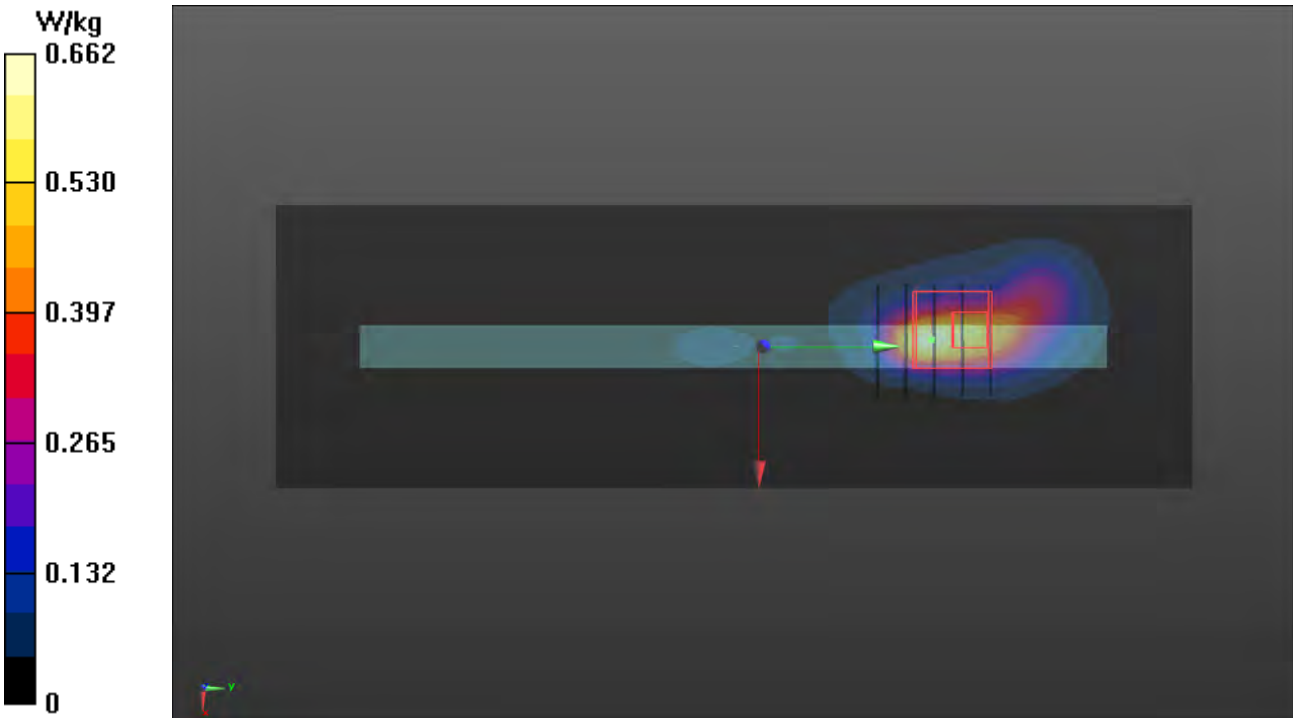
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1720 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0322 Medium parameters used: f = 1720 MHz; σ = 1.296 S/m; ε_r = 39.551; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1720 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.662 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.26 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.57 W/kg
SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.218 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.2 mm
Ratio of SAR at M2 to SAR at M1 = 39.7%
Maximum value of SAR (measured) = 1.23 W/kg



P23 5GNR-n2_DFT-S_15KHz QPSK20M_Rear Face_0mm_Ch372000_1RB_OS1_Sample1_Ant 0_P-Sensor_w

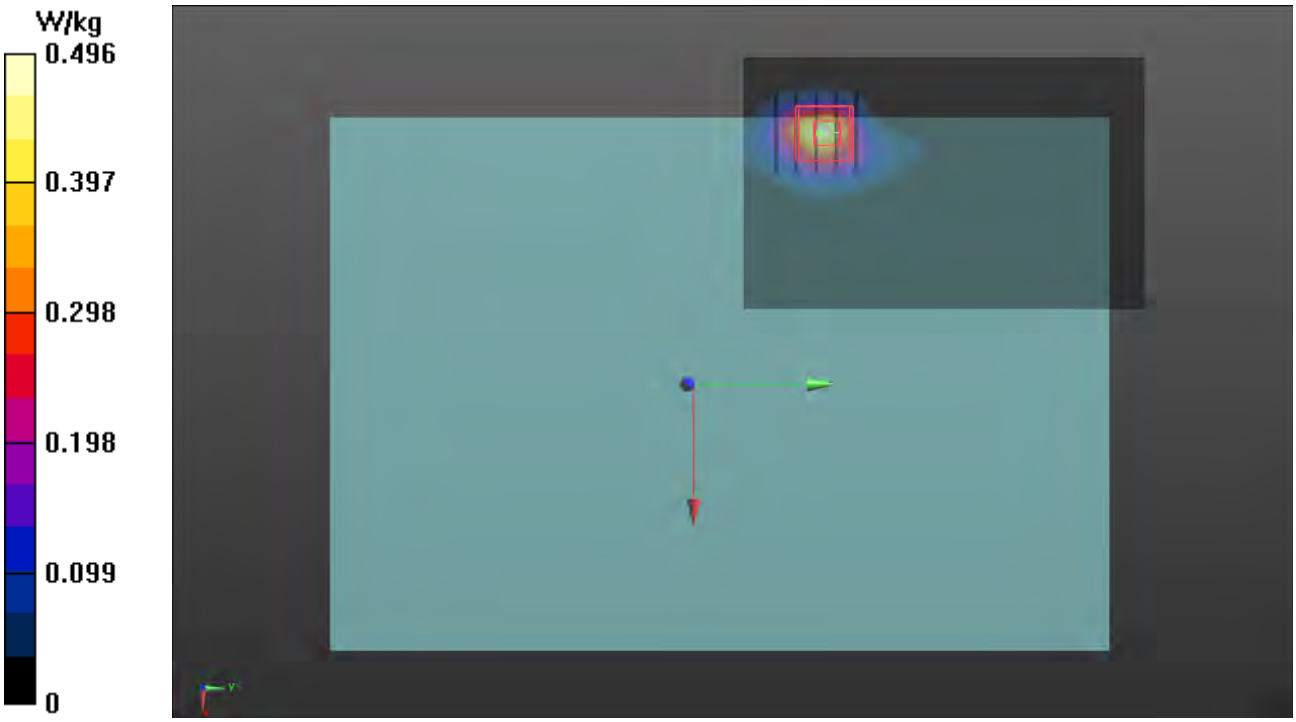
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1860 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0322 Medium parameters used: f = 1860 MHz; σ = 1.424 S/m; ε_r = 39.012; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1860 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.496 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.78 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.157 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 40.3%
Maximum value of SAR (measured) = 0.694 W/kg



P24 5GNR-n2_DFT-S_15KHz QPSK20M_Left Side_0mm_Ch380000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

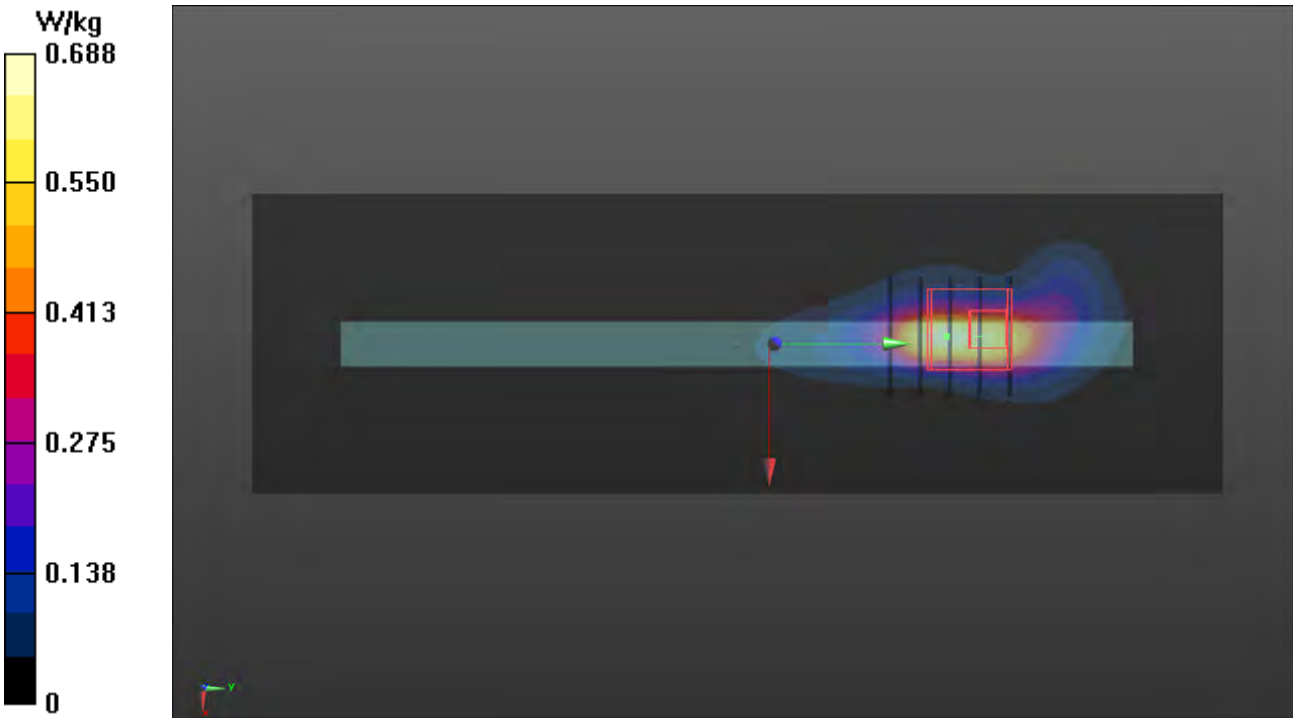
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1900 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0322 Medium parameters used: f = 1900 MHz; σ = 1.459 S/m; ε_r = 38.859; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃ ； Liquid Temperature：23.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.688 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.07 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.184 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 35.8%
Maximum value of SAR (measured) = 1.07 W/kg



P25 5GNR-n5_DFT-S_15KHz QPSK20M_Rear Face_0mm_Ch167300_1RB_OS1_Sample1_Ant 0_P-Sensor_w

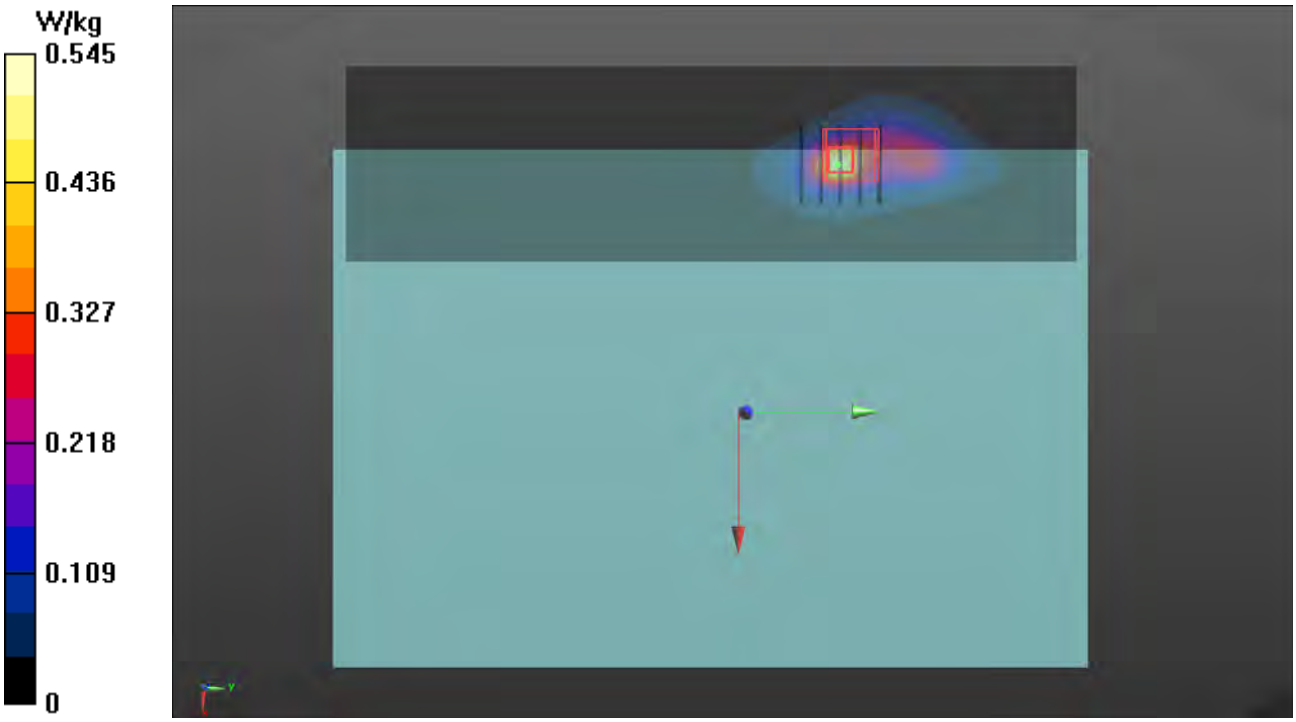
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 836.5 MHz;Duty Cycle: 1:3.56
Medium: H07T10N1_0323 Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.929 S/m; ε_r = 41.945; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 836.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.545 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.95 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.683 W/kg
SAR(1 g) = 0.278 W/kg; SAR(10 g) = 0.132 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 41%
Maximum value of SAR (measured) = 0.522 W/kg



P26 5GNR-n7_DFT-S_15KHz QPSK20M_Left Side_0mm_Ch512000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

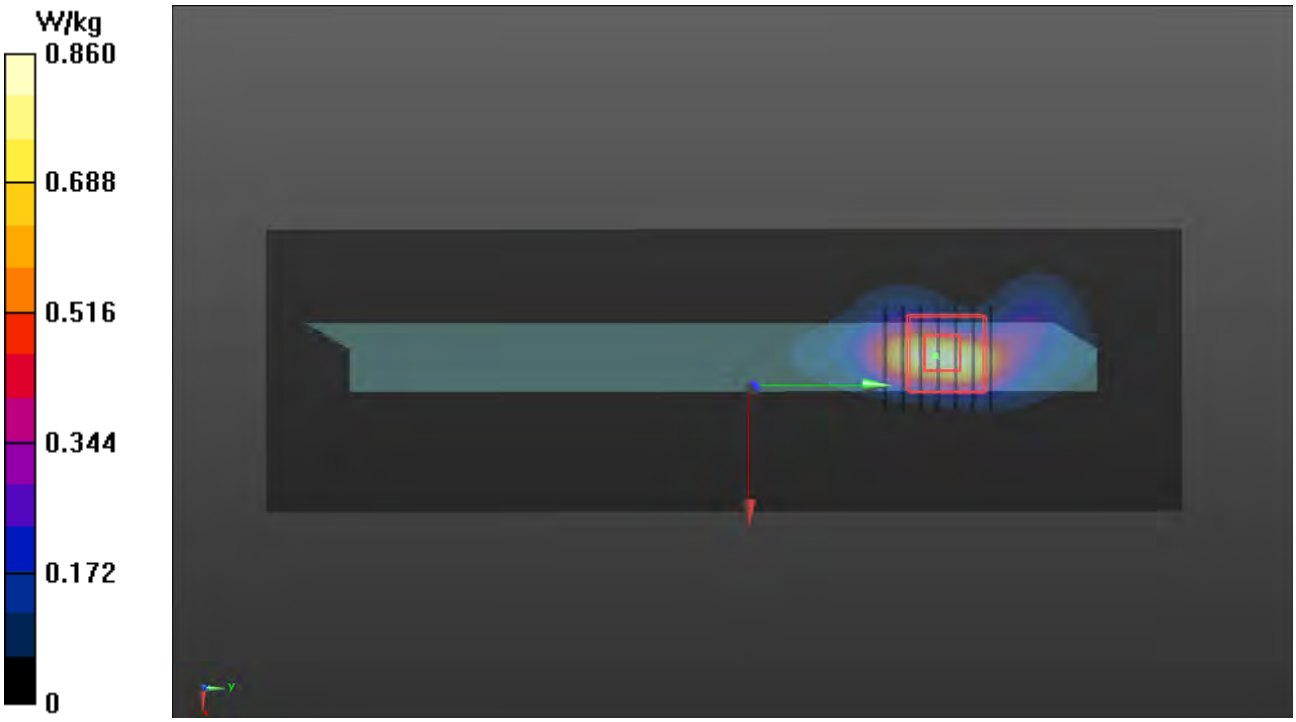
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 2560 MHz;Duty Cycle: 1:3.56
Medium: H19T27N1_0324 Medium parameters used: f = 2560 MHz; σ = 1.967 S/m; ε_r = 38.024; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2560 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.860 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.89 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.53 W/kg
SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.250 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 46.9%
Maximum value of SAR (measured) = 1.13 W/kg



P27 5GNR-n12_DFT-S_15KHz QPSK15M_Rear Face_0mm_Ch141300_1RB_OS1_Sample1_Ant 0_P-Sensor_w

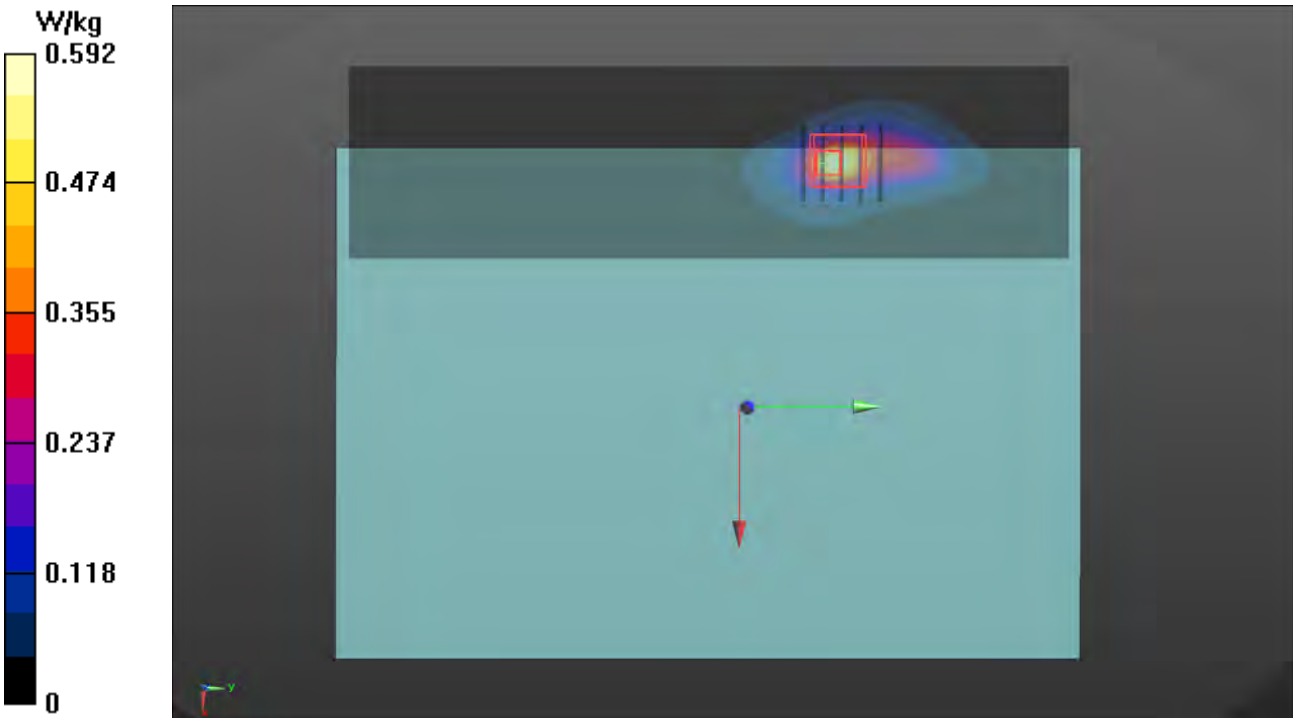
DUT: P21010159

Communication System: UID 10930 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz); Frequency: 706.5 MHz;Duty Cycle: 1:3.56
Medium: H06T09N1_0323 Medium parameters used (interpolated): f = 706.5 MHz; σ = 0.851 S/m; ε_r = 41.572; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 706.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.592 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.68 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.750 W/kg
SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.148 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 40.8%
Maximum value of SAR (measured) = 0.535 W/kg



P28 5GNR-n41_DFT-S_30KHz QPSK100M_Left Side_0mm_Ch518598_1RB_OS1_Sample1_Ant 2_P-Sensor_w

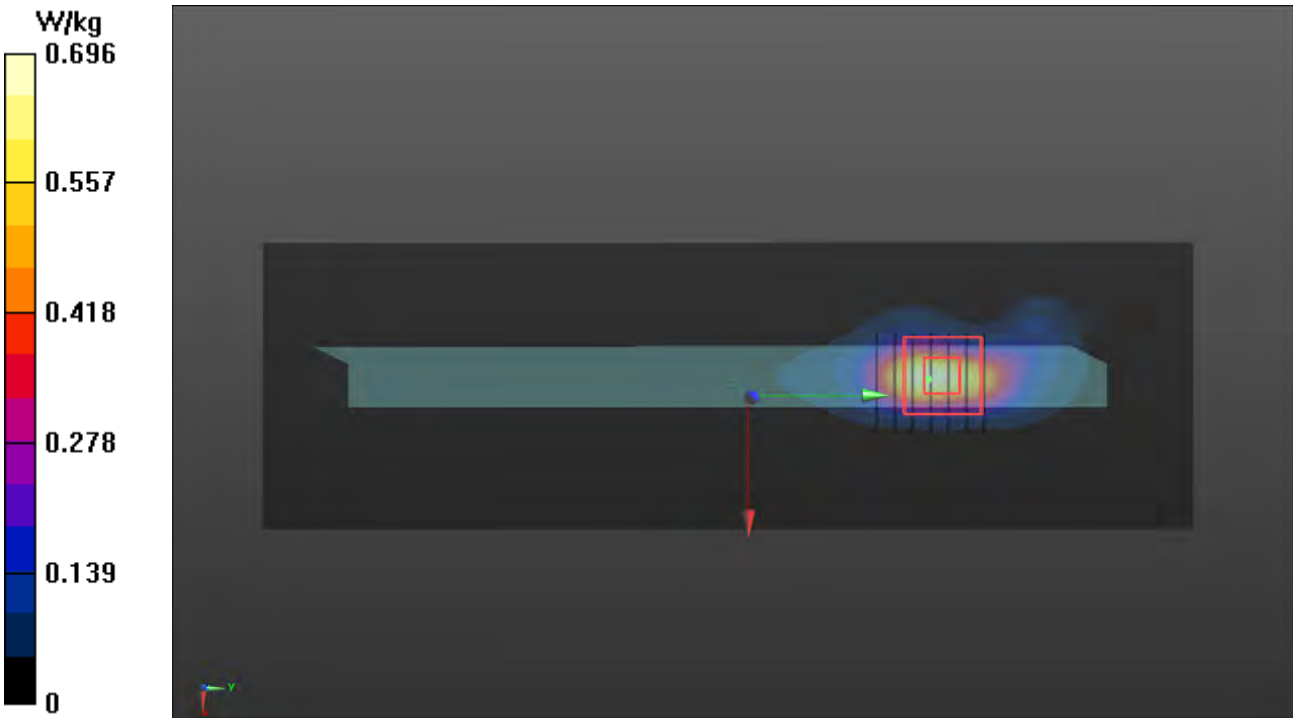
DUT: P21010159

Communication System: UID 10866 - AAD, 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz); Frequency: 2592.99 MHz;Duty Cycle: 1:3.70
Medium: H19T27N1_0324 Medium parameters used (interpolated): f = 2592.99 MHz; σ = 2.003 S/m; ε_r = 37.897; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2592.99 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.696 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.87 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.527 W/kg; SAR(10 g) = 0.202 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.2 mm
Ratio of SAR at M2 to SAR at M1 = 45.8%
Maximum value of SAR (measured) = 0.900 W/kg



P29 5GNR-n66_DFT-S_15KHz QPSK20M_Rear Face_0mm_Ch354000_1RB_OS1_Sample1_Ant 0_P-Sensor_w

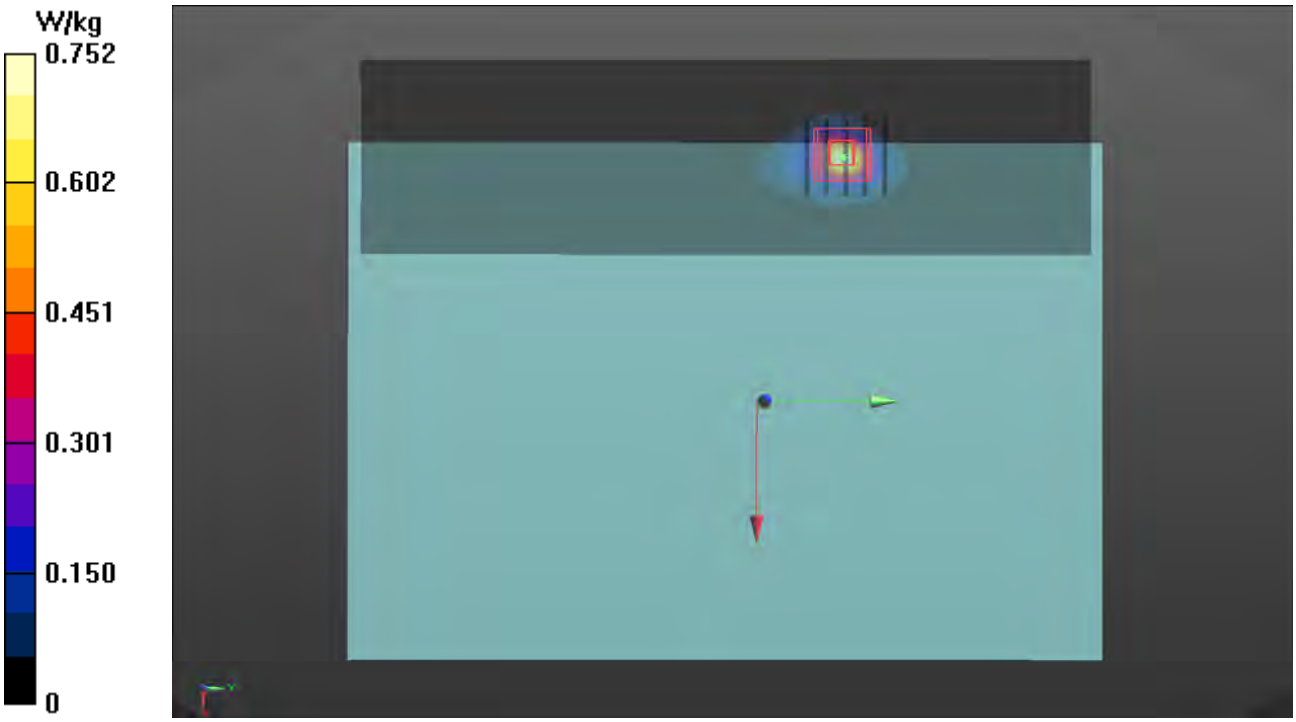
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1770 MHz;Duty Cycle: 1:3.56
Medium: H16T20N3_0323 Medium parameters used: f = 1770 MHz; σ = 1.344 S/m; ε_r = 41.392; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1770 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.752 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.15 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.00 W/kg
SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.154 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.8 mm
Ratio of SAR at M2 to SAR at M1 = 38.1%
Maximum value of SAR (measured) = 0.755 W/kg



P30 5GNR-n66_DFT-S_15KHz QPSK20M_Left Side_0mm_Ch349000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

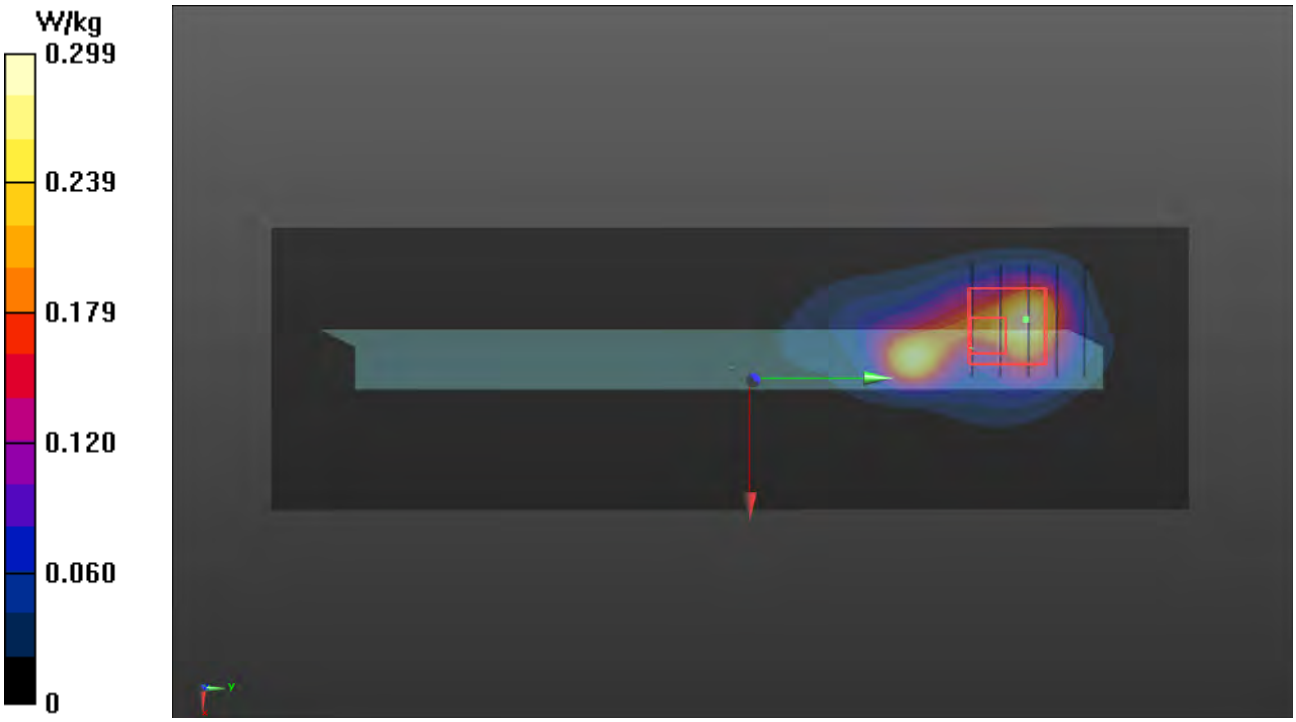
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1745 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0324 Medium parameters used (interpolated): f = 1745 MHz; σ = 1.315 S/m; ε_r = 39.31; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1745 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.299 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.83 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.151 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.8 mm
Ratio of SAR at M2 to SAR at M1 = 31.5%
Maximum value of SAR (measured) = 0.829 W/kg



P31 WLAN2.4G_802.11n HT40_Top Side_0mm_Ch1_Sample1_Ant 0+1_P-Sensor_w

DUT: P21010159

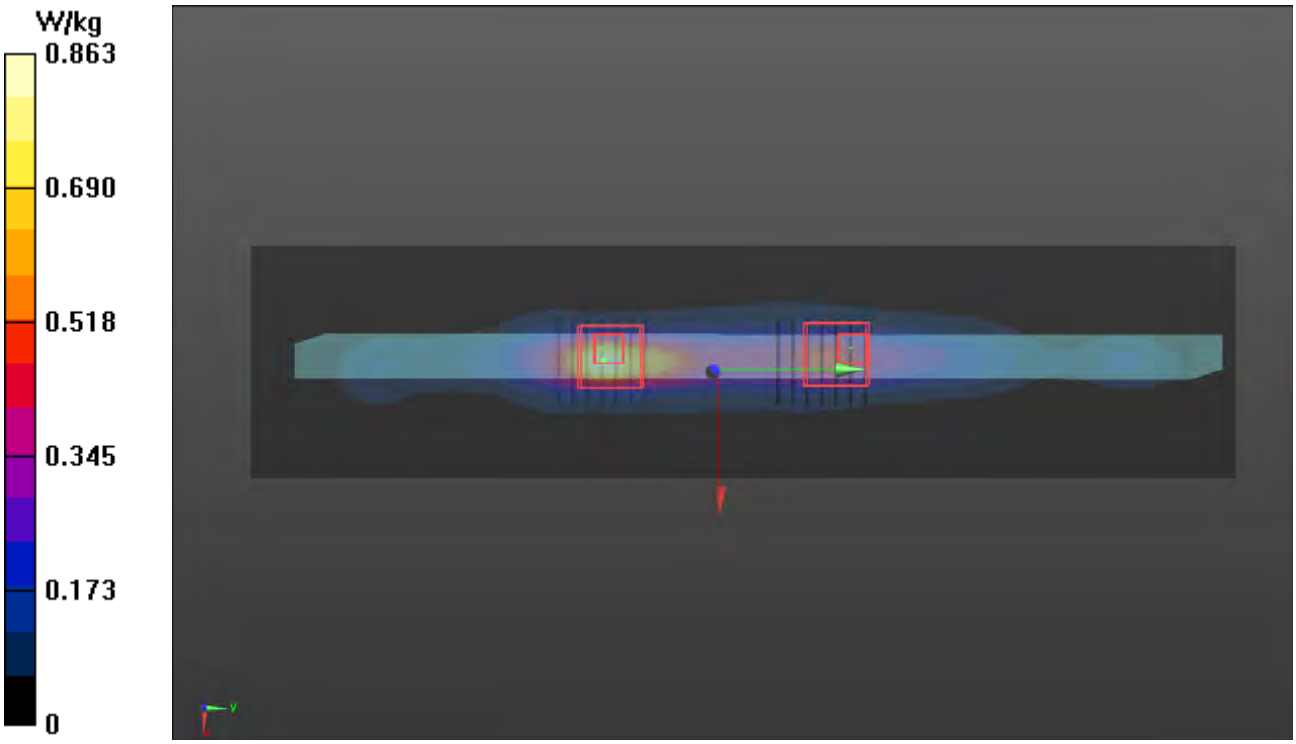
Communication System: UID 10591 - AAC, IEEE 802.11n (HT Mixed, 20MHz, MCS0);
Frequency: 2412 MHz;Duty Cycle: 1:1.01
Medium: H19T27N1_0312 Medium parameters used: f = 2412 MHz; σ = 1.827 S/m; ε_r = 39.24; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2412 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x291x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.863 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.45 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.269 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 43.7%
Maximum value of SAR (measured) = 1.17 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.45 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.897 W/kg
SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.170 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 49.1%
Maximum value of SAR (measured) = 0.653 W/kg


W/kg
0.863
0.690
0.518
0.345
0.173
0

P32 WLAN5.3G_802.11ac VHT160_Top Side_0mm_Ch50_Sample1_Ant 0+1_P-Sensor_w

DUT: P21010159

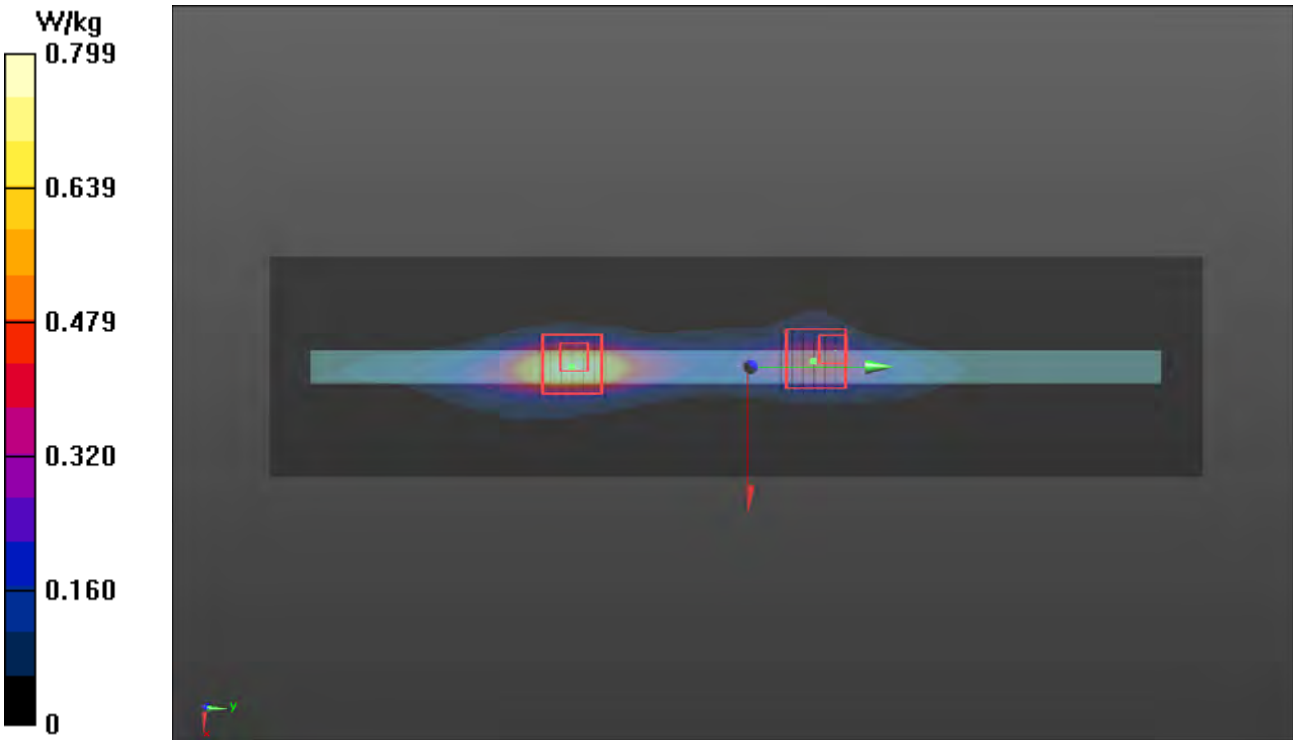
Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5250 MHz;Duty Cycle: 1:1.01
Medium: H34T60N1_0312 Medium parameters used (interpolated): f = 5250 MHz; σ = 4.76 S/m; ε_r = 35.003; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(5.12, 5.12, 5.12) @ 5250 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x341x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.799 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 13.76 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.18 W/kg
SAR(1 g) = 0.524 W/kg; SAR(10 g) = 0.193 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 68%
Maximum value of SAR (measured) = 1.42 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 13.76 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.36 W/kg
SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.123 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 4.1 mm
Ratio of SAR at M2 to SAR at M1 = 66.2%
Maximum value of SAR (measured) = 1.35 W/kg


W/kg
0.799
0.639
0.479
0.320
0.160
0

P33 WLAN5.6G_802.11ac VHT80_Top Side_0mm_Ch106_Sample1_Ant 0+1_P-Sensor_w

DUT: P21010159

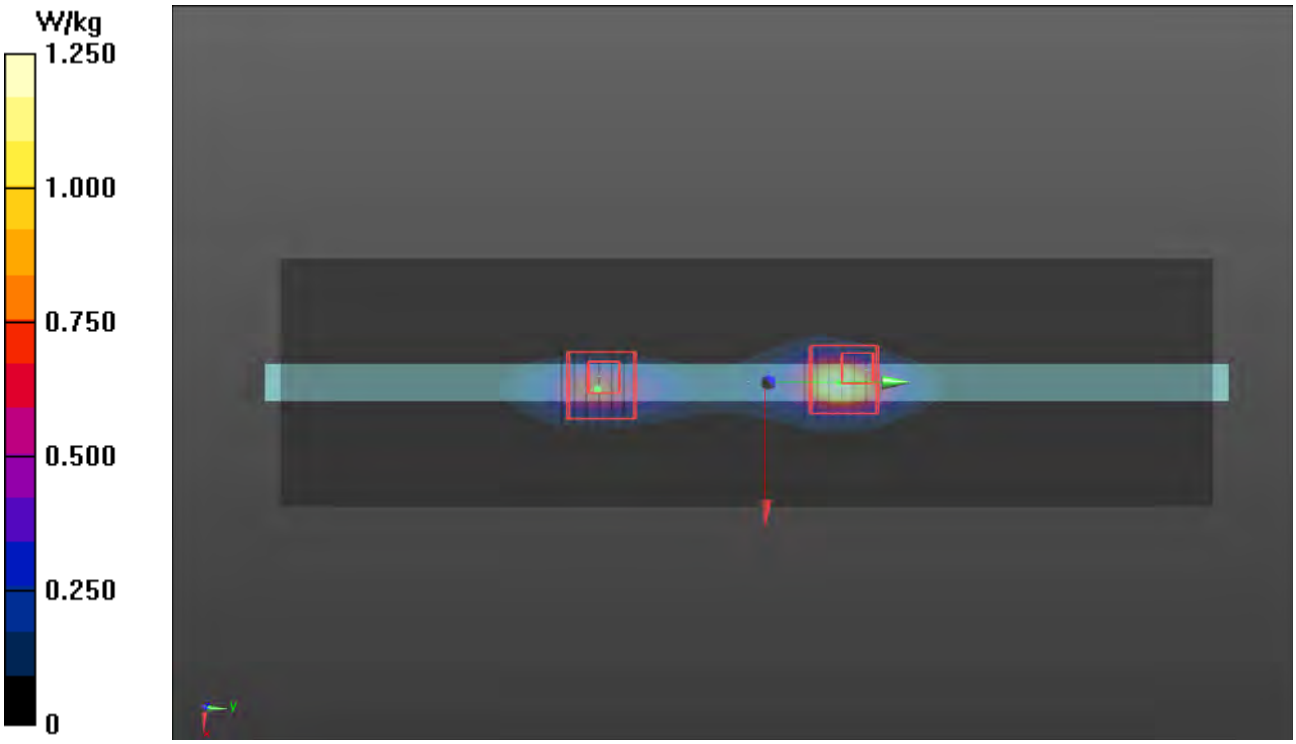
Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5530 MHz;Duty Cycle: 1:1.02
Medium: H34T60N1_0327 Medium parameters used (interpolated): f = 5530 MHz; σ = 4.913 S/m; ε_r = 37.076; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.0 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.65, 4.65, 4.65) @ 5530 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.25 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 17.32 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.92 W/kg
SAR(1 g) = 0.916 W/kg; SAR(10 g) = 0.231 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 4.9 mm
Ratio of SAR at M2 to SAR at M1 = 64.5%
Maximum value of SAR (measured) = 2.27 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 17.32 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.099 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.9 mm
Ratio of SAR at M2 to SAR at M1 = 64.6%
Maximum value of SAR (measured) = 0.791 W/kg


W/kg
1.250
1.000
0.750
0.500
0.250
0

P34 WLAN5.8G_802.11ac VHT80_Top Side_0mm_Ch155_Sample1_Ant 0+1_P-Sensor_w

DUT: P21010159

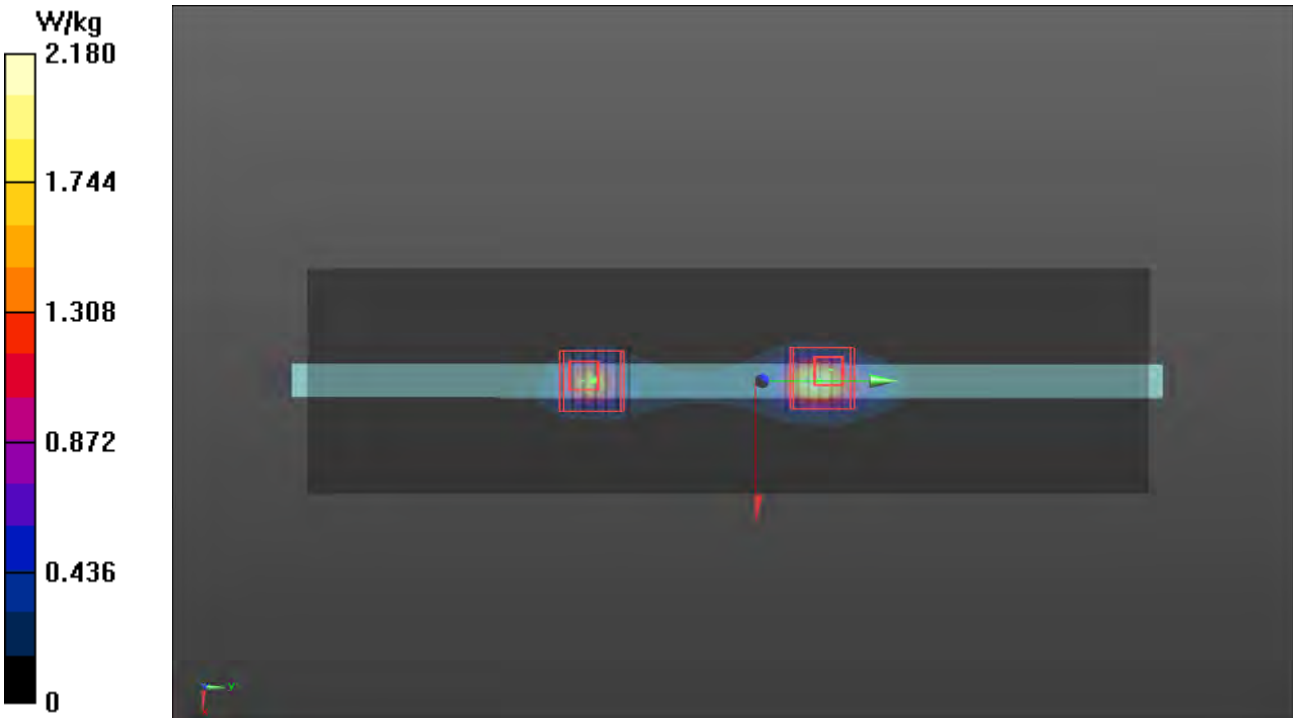
Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5775 MHz;Duty Cycle: 1:1.02
Medium: H34T60N1_0326 Medium parameters used: f = 5775 MHz; σ = 5.274 S/m; ε_r = 36.25; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.8, 4.8, 4.8) @ 5775 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.18 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 22.29 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 5.37 W/kg
SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.329 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 63.5%
Maximum value of SAR (measured) = 3.29 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 22.29 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 2.93 W/kg
SAR(1 g) = 0.693 W/kg; SAR(10 g) = 0.193 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.1 mm
Ratio of SAR at M2 to SAR at M1 = 62.3%
Maximum value of SAR (measured) = 1.69 W/kg


W/kg
2.180
1.744
1.308
0.872
0.436
0

P35 BT_BDR_Top Side_0mm_Ch0_Sample1_Ant 1_P-Sensor_w_o

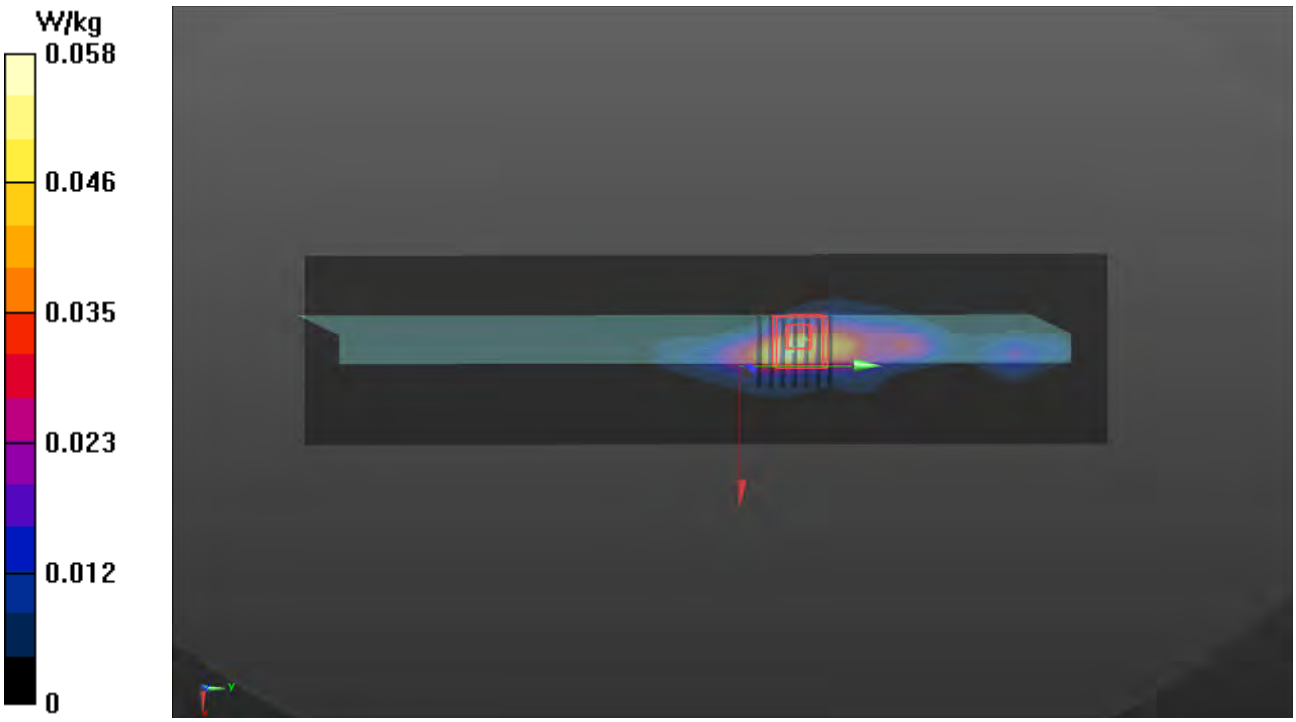
DUT: P21010159

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2402 MHz;Duty Cycle: 1:1.3
Medium: H19T27N1_0312 Medium parameters used: f = 2402 MHz; σ = 1.816 S/m; ε_r = 39.317; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2402 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x291x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0579 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.534 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.021 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.2 mm
Ratio of SAR at M2 to SAR at M1 = 47.9%
Maximum value of SAR (measured) = 0.0949 W/kg



P36 WCDMA II_RMC12.2K_Bottom_0mm_Ch9400_Sample1_Ant 0_P-Sensor_w

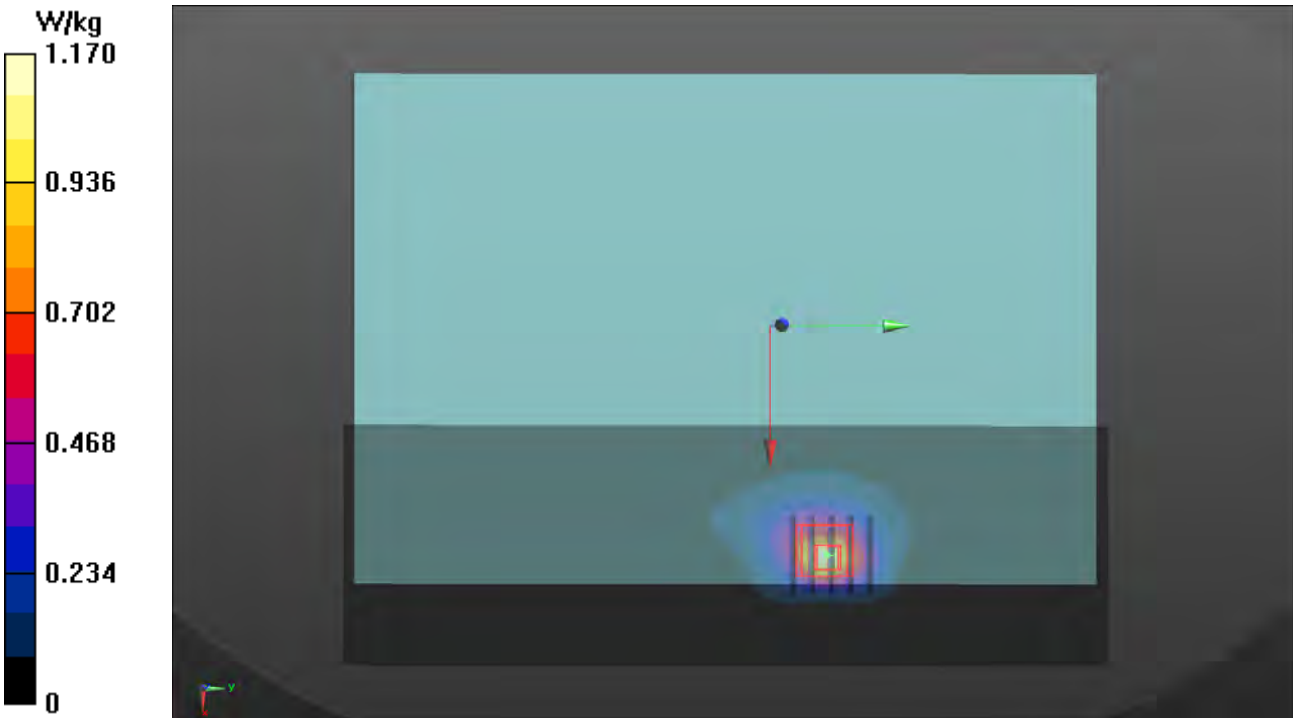
DUT: P21010159

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz;Duty Cycle: 1:1.95
Medium: H16T20N1_0315 Medium parameters used: f = 1880 MHz; σ = 1.441 S/m; ε_r = 39.646; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1880 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.53 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.628 W/kg; SAR(10 g) = 0.287 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 49.5%
Maximum value of SAR (measured) = 1.11 W/kg



P37 WCDMA IV_RMC12.2K_Bottom_0mm_Ch1312_Sample1_Ant 0_P-Sensor_w

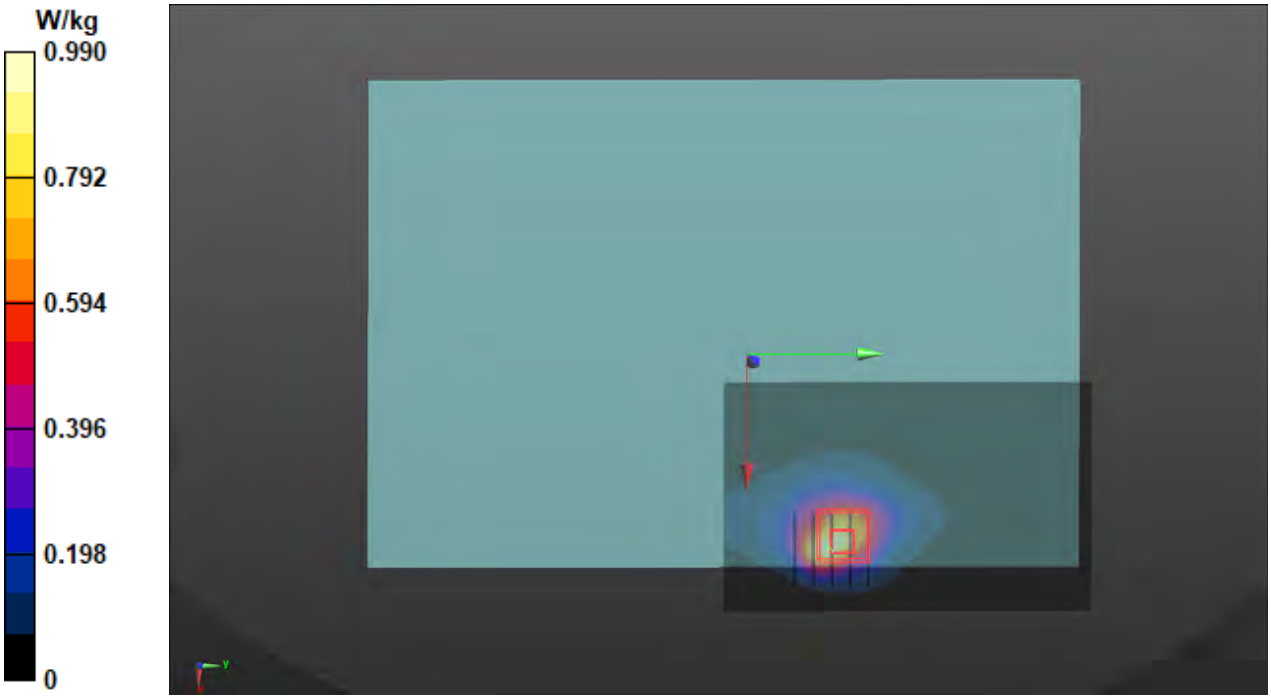
DUT: P21010159

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1712.4 MHz;Duty Cycle: 1:1.95
Medium: H16T20N1_0314 Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.288 S/m; ε_r = 38.934; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1712.4 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.990 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.78 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.630 W/kg; SAR(10 g) = 0.226 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 43.7%
Maximum value of SAR (measured) = 1.21 W/kg



P38 WCDMA V_RMC12.2K_Bottom_0mm_Ch4182_Sample1_Ant 0_P-Sensor_w

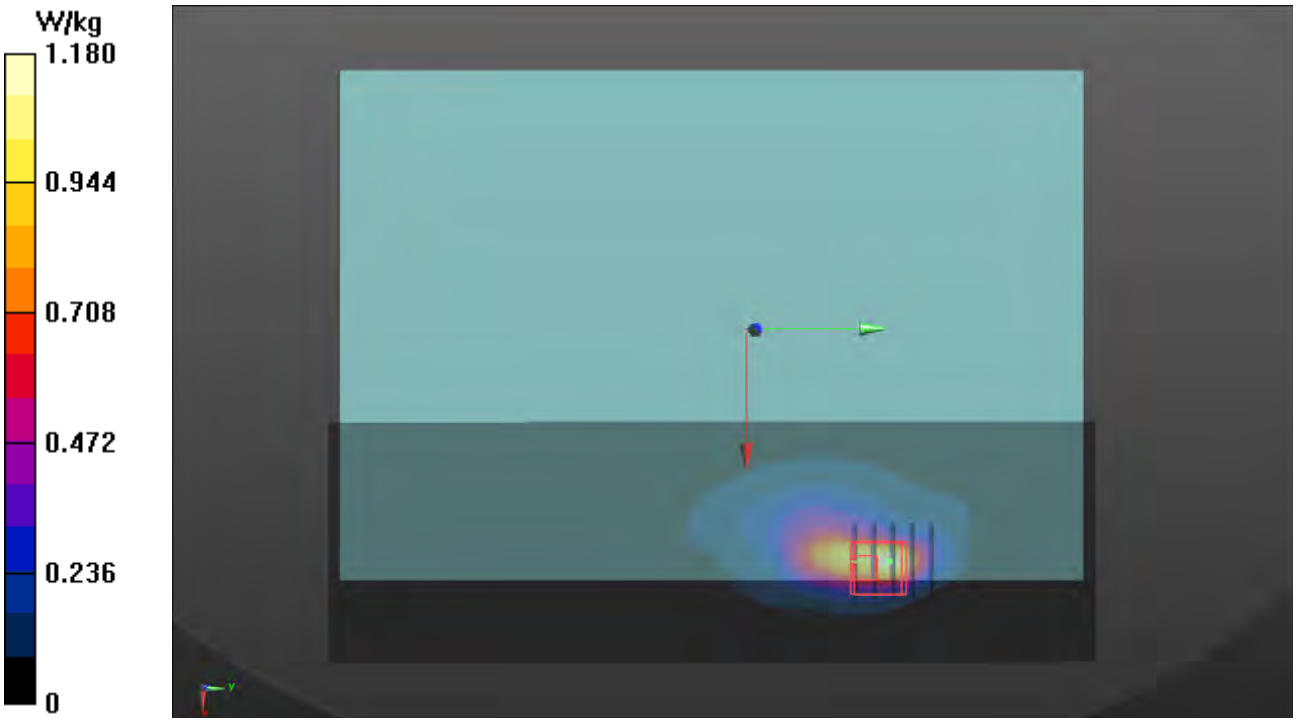
DUT: P21010159

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.4 MHz;Duty Cycle: 1:1.95
Medium: H07T10N1_0316 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.903 S/m; ε_r = 42.919; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 836.4 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 34.27 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.537 W/kg; SAR(10 g) = 0.274 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 52.9%
Maximum value of SAR (measured) = 0.895 W/kg



P39 LTE 2_QPSK20M_Bottom_0mm_Ch19100_1RB_OS0_Sample1_Ant 0_P-Sensor_w

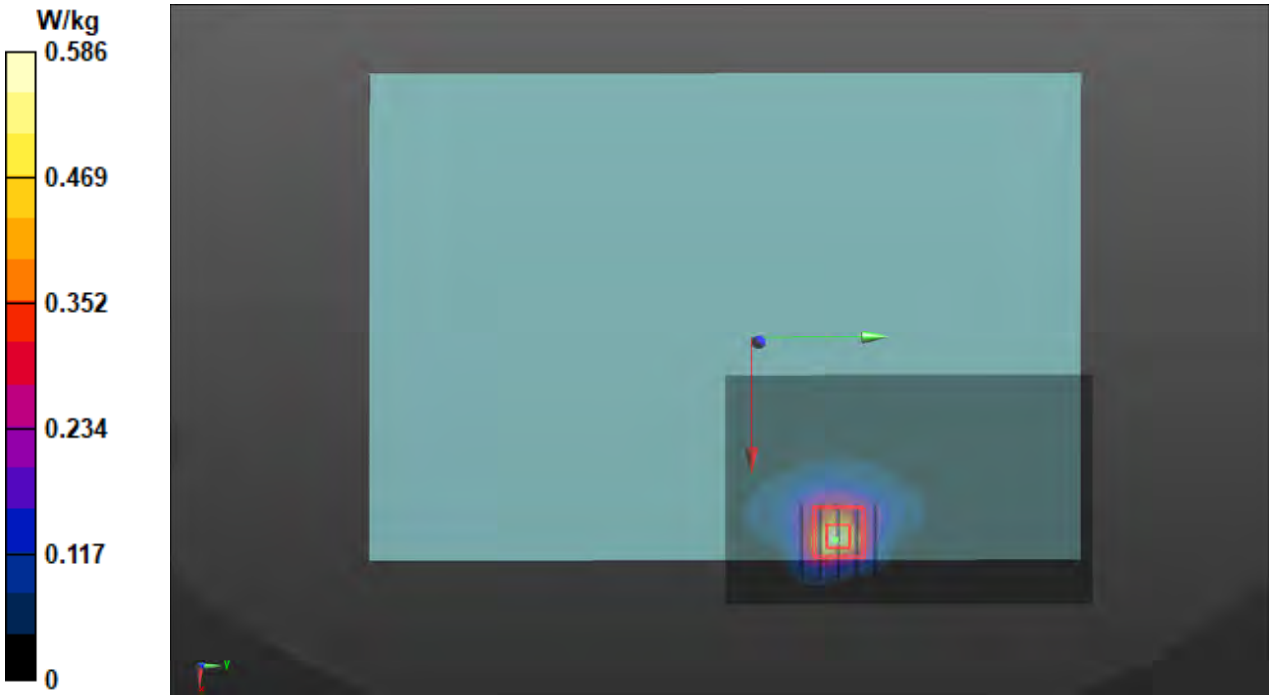
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1900 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0314 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 38.22; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.586 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.75 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.806 W/kg
SAR(1 g) = 0.345 W/kg; SAR(10 g) = 0.168 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10.1 mm
Ratio of SAR at M2 to SAR at M1 = 44.2%
Maximum value of SAR (measured) = 0.627 W/kg



P40 LTE 2_QPSK20M_Bottom_0mm_Ch19100_1RB_OS0_Sample1_Ant 2_P-Sensor_w

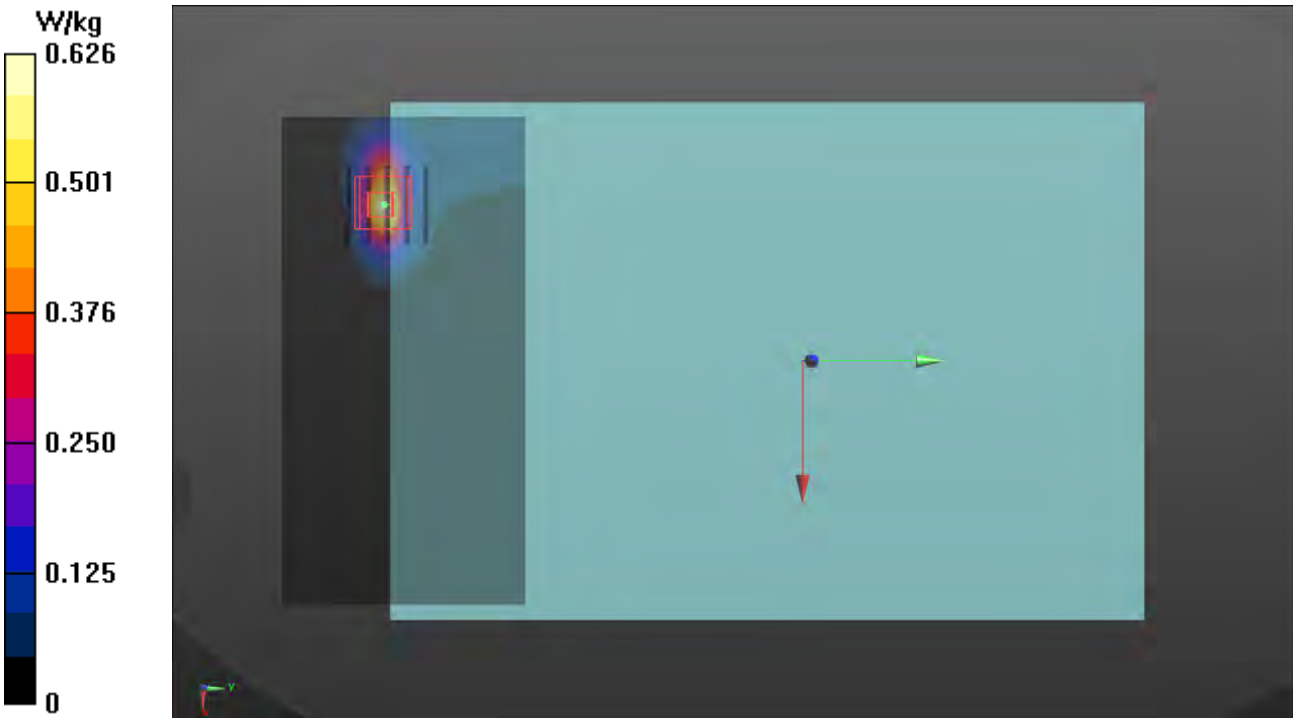
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1900 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0316 Medium parameters used: f = 1900 MHz; σ = 1.458 S/m; ε_r = 39.592; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (141x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.626 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.47 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.732 W/kg
SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.146 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 44.1%
Maximum value of SAR (measured) = 0.576 W/kg



P41 LTE 4_QPSK20M_Bottom_0mm_Ch20050_1RB_OS0_Sample1_Ant 0_P-Sensor_w

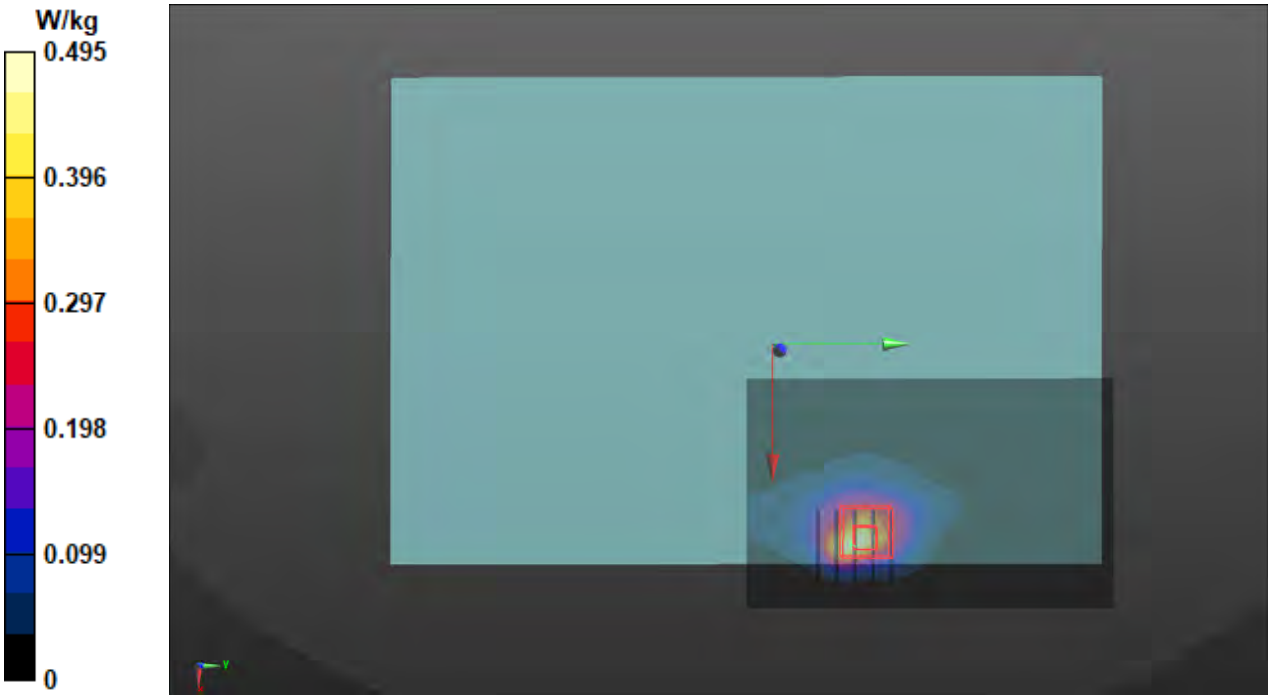
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1720 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0314 Medium parameters used: f = 1720 MHz; σ = 1.295 S/m; ε_r = 38.904; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1720 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.495 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.91 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.731 W/kg
SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.162 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 43.5%
Maximum value of SAR (measured) = 0.524 W/kg



P42 LTE 5_QPSK10M_Bottom_0mm_Ch20600_1RB_OS0_Sample1_Ant 0_P-Sensor_w

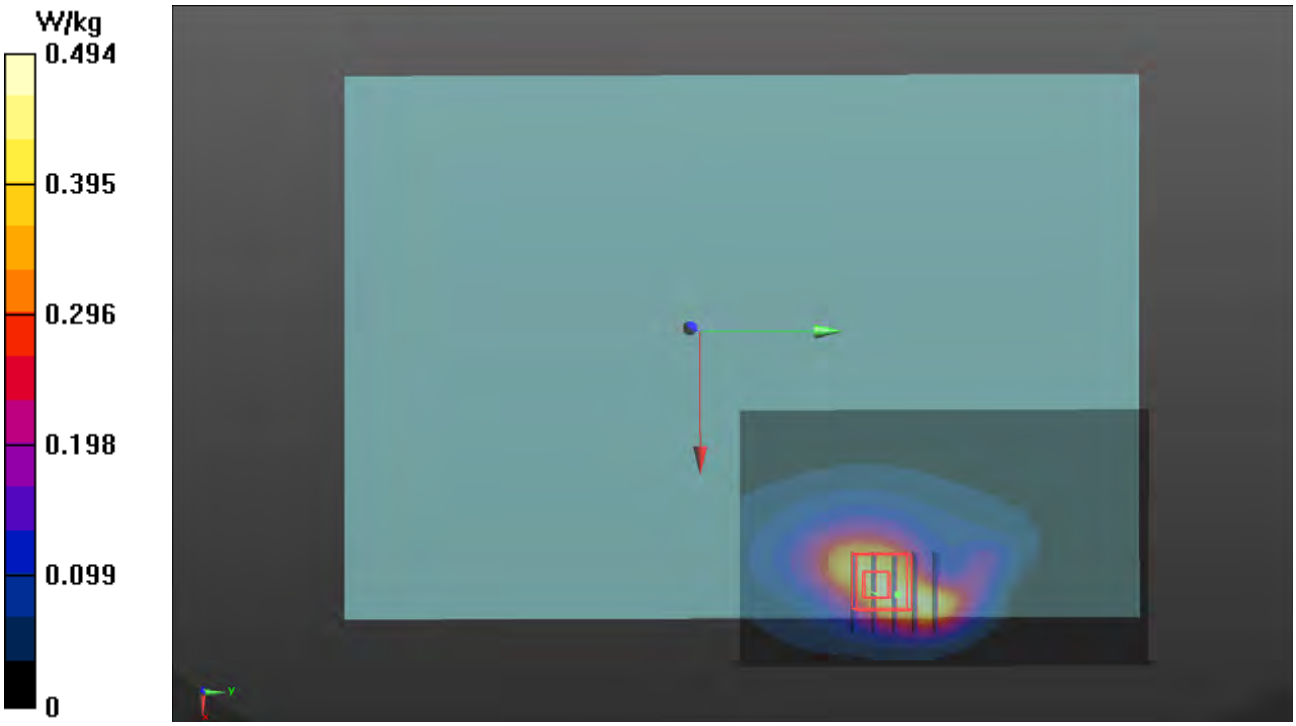
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 844 MHz;Duty Cycle: 1:3.74
Medium: H07T10N1_0315 Medium parameters used: f = 844 MHz; σ = 0.922 S/m; ε_r = 42.726; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 844 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.494 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.19 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.861 W/kg
SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.125 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.9%
Maximum value of SAR (measured) = 0.662 W/kg



P43 LTE 7_QPSK20M_Bottom_0mm_Ch21100_1RB_OS0_Sample1_Ant 0_P-Sensor_w

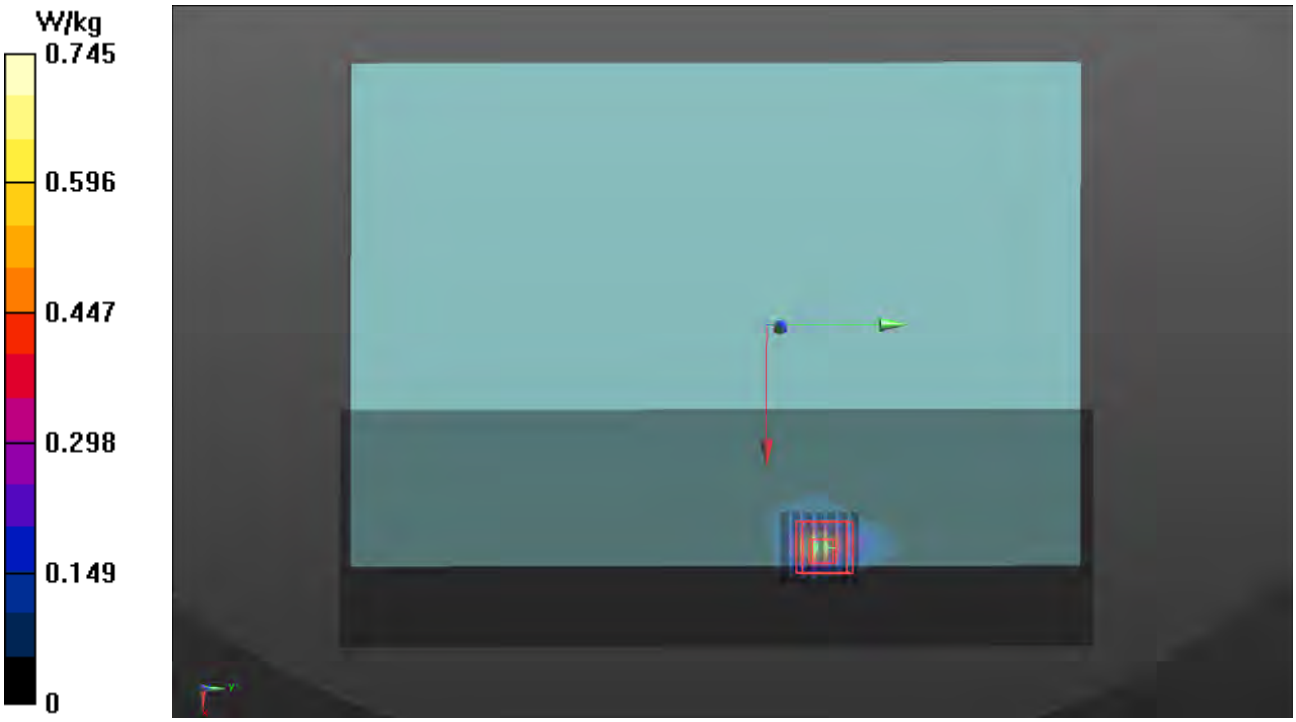
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2535 MHz;Duty Cycle: 1:3.74
Medium: H19T27N3_0315 Medium parameters used (interpolated): f = 2535 MHz; σ = 1.96 S/m; ε_r = 38.401; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2535 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x271x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.745 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.05 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.956 W/kg
SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.131 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 42%
Maximum value of SAR (measured) = 0.672 W/kg



P44 LTE 7_QPSK20M_Bottom_0mm_Ch21350_1RB_OS0_Sample1_Ant 2_P-Sensor_w

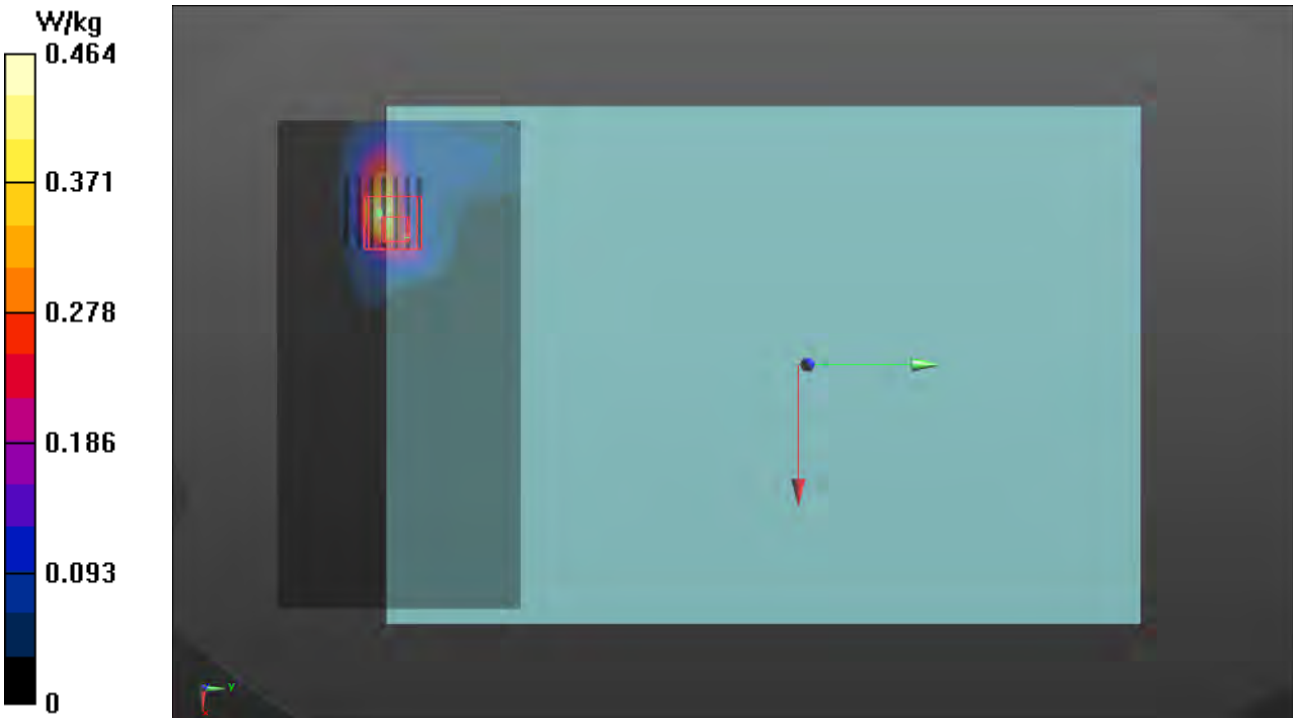
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2560 MHz;Duty Cycle: 1:3.74
Medium: H19T27N1_0316 Medium parameters used: f = 2560 MHz; σ = 1.986 S/m; ε_r = 37.933; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2560 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (171x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.464 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.29 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.346 W/kg; SAR(10 g) = 0.103 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.5 mm
Ratio of SAR at M2 to SAR at M1 = 33.1%
Maximum value of SAR (measured) = 0.913 W/kg



P45 LTE 12_QPSK10M_Bottom_0mm_Ch23060_1RB_OS0_Sample1_Ant 0_P-Sensor_w

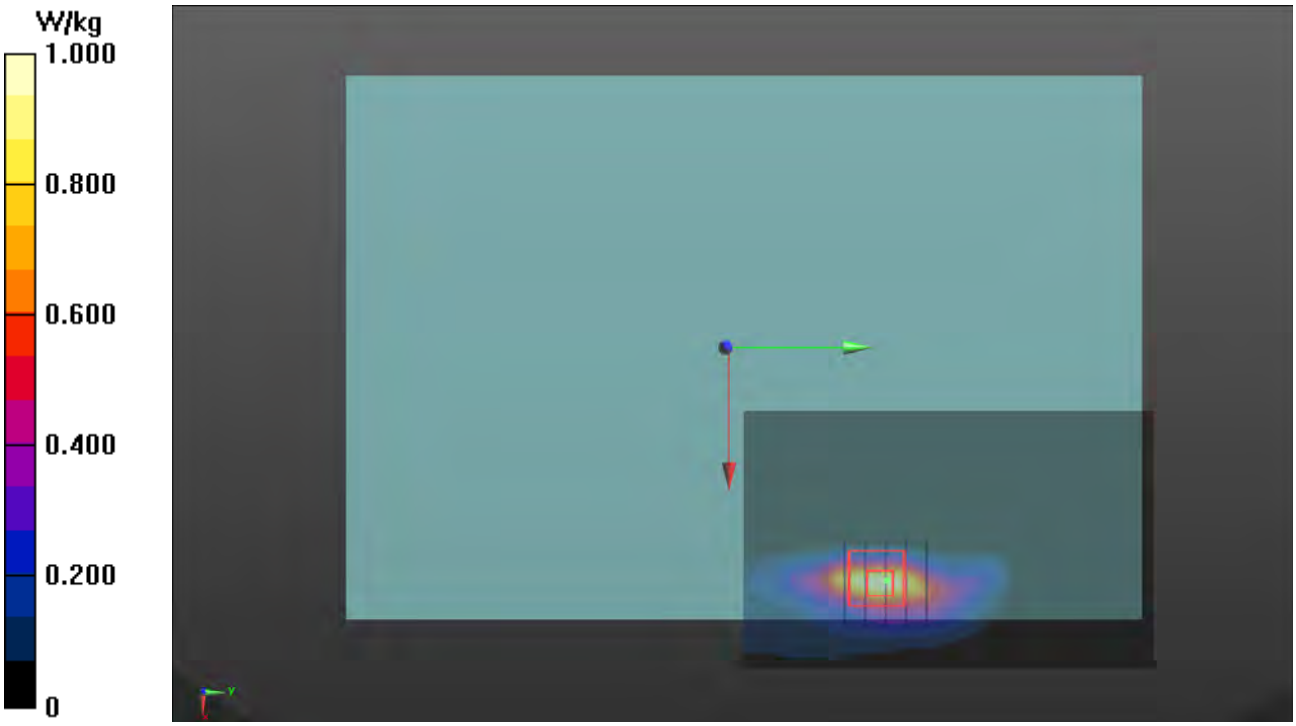
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 704 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0315 Medium parameters used: f = 704 MHz; σ = 0.846 S/m; ε_r = 43.02; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 704 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.00 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.61 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.196 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 53.8%
Maximum value of SAR (measured) = 0.769 W/kg



P46 LTE 13_QPSK10M_Bottom_0mm_Ch23230_1RB_OS0_Sample1_Ant 0_P-Sensor_w

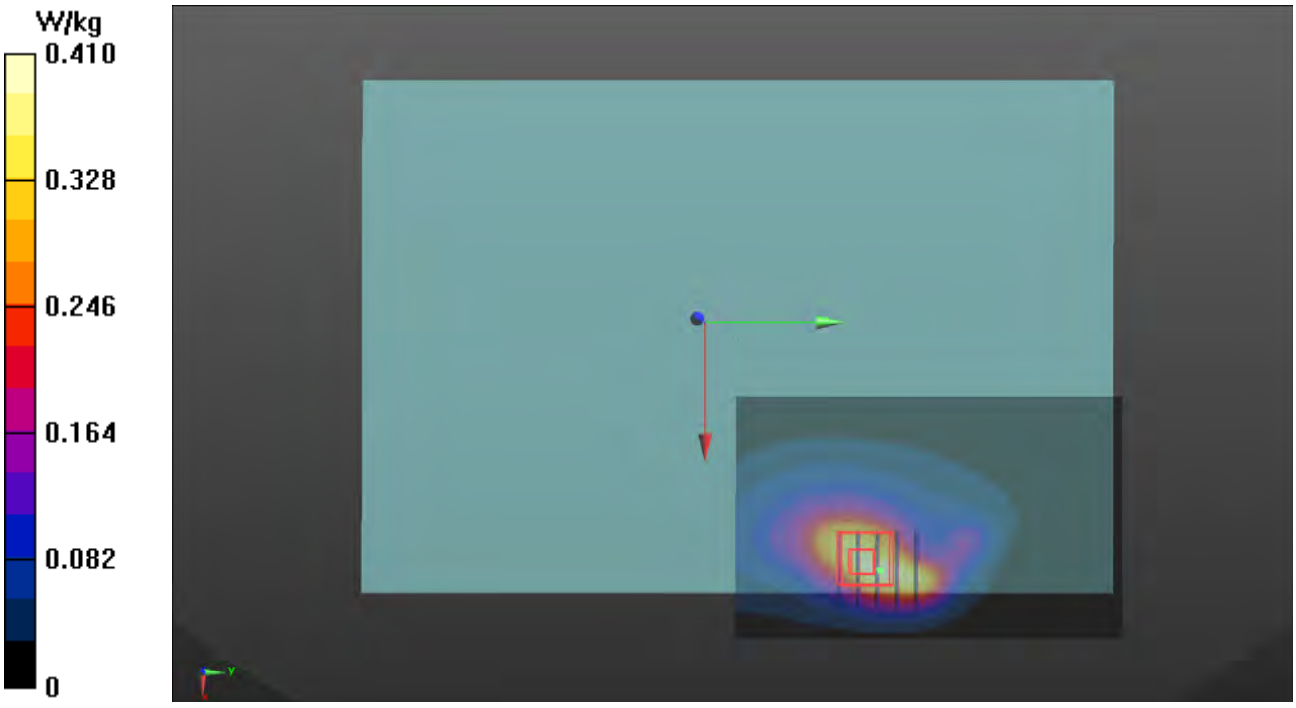
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 782 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0315 Medium parameters used: f = 782 MHz; σ = 0.919 S/m; ε_r = 41.986; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 782 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.410 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.69 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.692 W/kg
SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.183 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.9%
Maximum value of SAR (measured) = 0.530 W/kg



P47 LTE 14_QPSK10M_Bottom_0mm_Ch23330_1RB_OS0_Sample1_Ant 0_P-Sensor_w

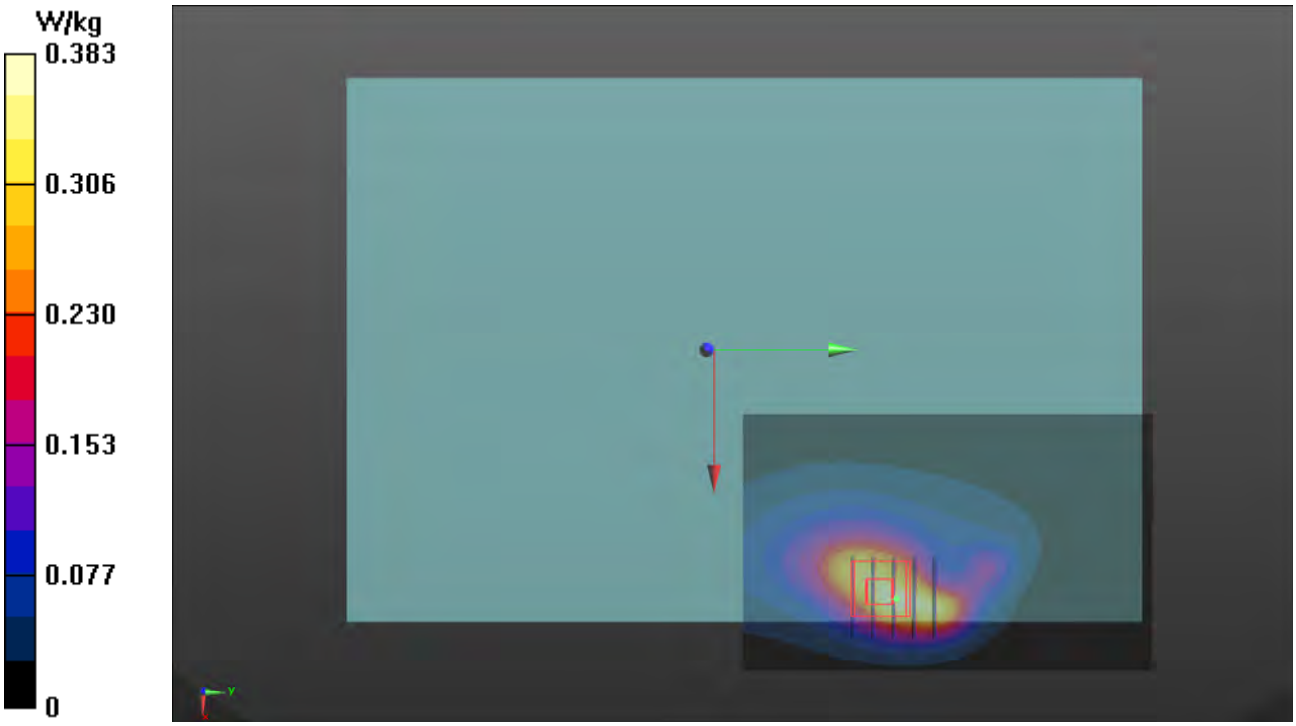
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 793 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0315 Medium parameters used: f = 793 MHz; σ = 0.929 S/m; ε_r = 41.84; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 793 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.383 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.72 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.662 W/kg
SAR(1 g) = 0.316 W/kg; SAR(10 g) = 0.168 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 49.6%
Maximum value of SAR (measured) = 0.503 W/kg



P48 LTE 17_QPSK10M_Bottom_0mm_Ch23780_1RB_OS0_Sample1_Ant 0_P-Sensor_w

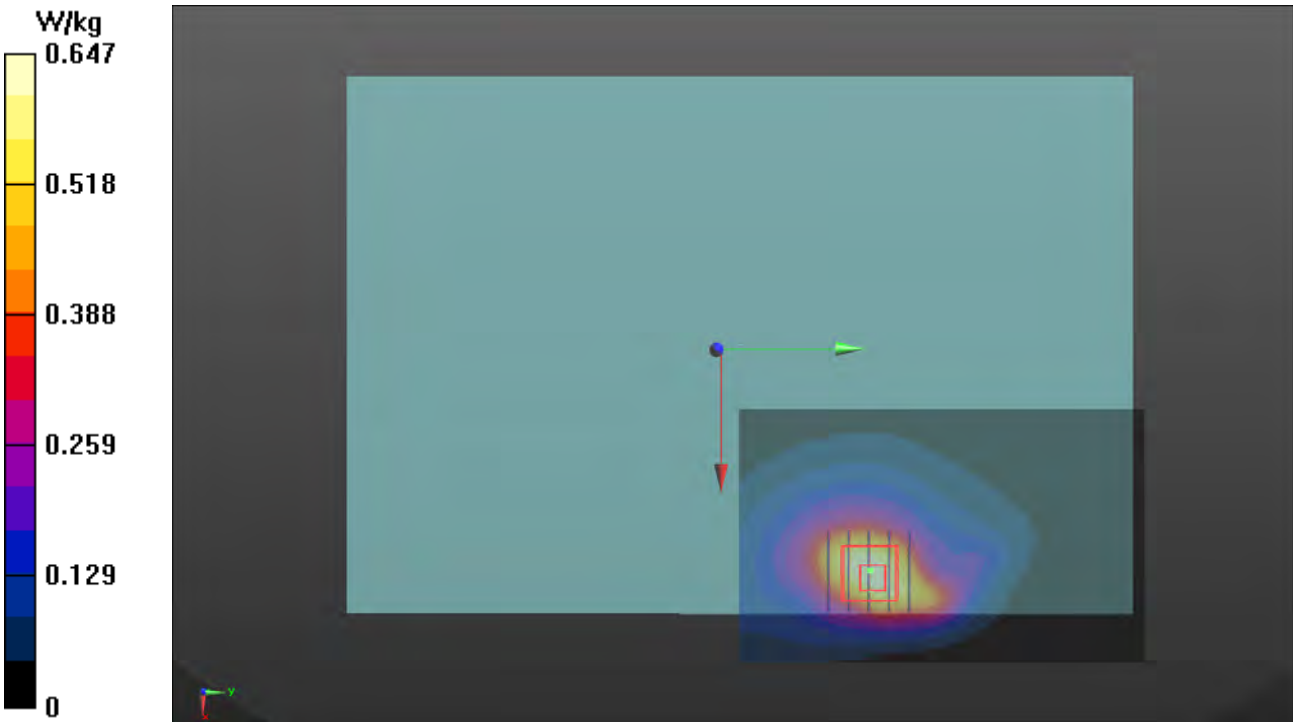
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 709 MHz;Duty Cycle: 1:3.74
Medium: H06T09N1_0315 Medium parameters used: f = 709 MHz; σ = 0.851 S/m; ε_r = 42.952; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.39, 10.39, 10.39) @ 709 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.647 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.86 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.188 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.7 mm
Ratio of SAR at M2 to SAR at M1 = 50.6%
Maximum value of SAR (measured) = 0.827 W/kg



P49 LTE 25_QPSK20M_Bottom_0mm_Ch26590_1RB_OS0_Sample1_Ant 0_P-Sensor_w

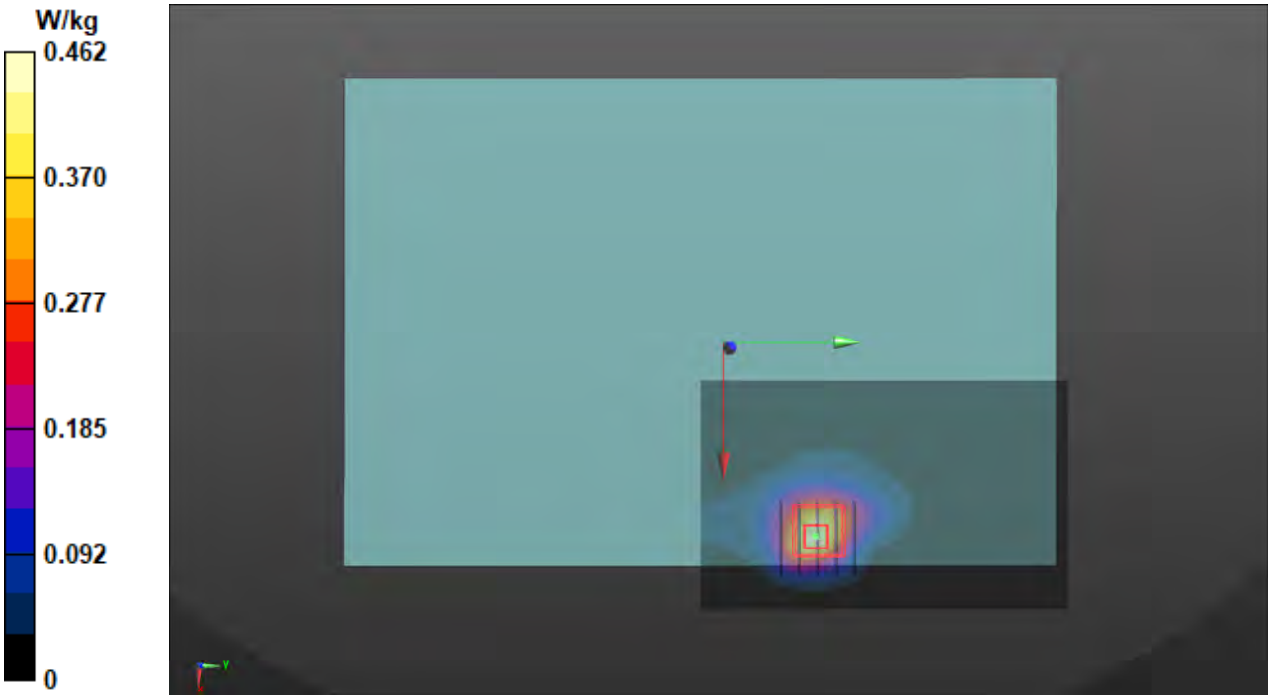
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1905 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0314 Medium parameters used (interpolated): f = 1905 MHz; σ = 1.465 S/m; ε_r = 38.2; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1905 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.462 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.14 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.756 W/kg
SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.169 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 48.6%
Maximum value of SAR (measured) = 0.592 W/kg



P50 LTE 26_QPSK15M_Bottom_0mm_Ch26965_1RB_OS0_Sample1_Ant 0_P-Sensor_w

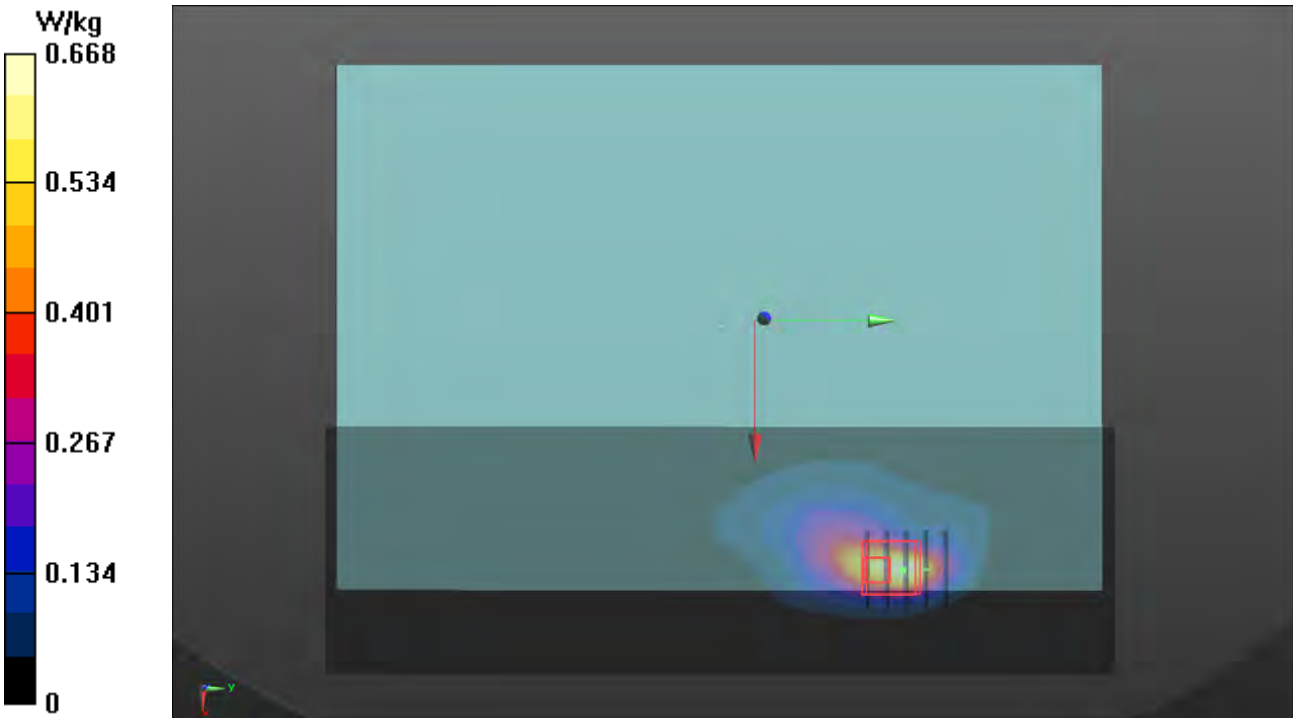
DUT: P21010159

Communication System: UID 10181 - CAE, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);
Frequency: 841.5 MHz;Duty Cycle: 1:3.74
Medium: H07T10N1_0315 Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.919 S/m;
ε_r = 42.755; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(10.05, 10.05, 10.05) @ 841.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.668 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.33 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.673 W/kg
SAR(1 g) = 0.296 W/kg; SAR(10 g) = 0.148 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9.1 mm
Ratio of SAR at M2 to SAR at M1 = 38.7%
Maximum value of SAR (measured) = 0.528 W/kg



P51 LTE 30_QPSK10M_Bottom_0mm_Ch27710_1RB_OS0_Sample1_Ant 0_P-Sensor_w

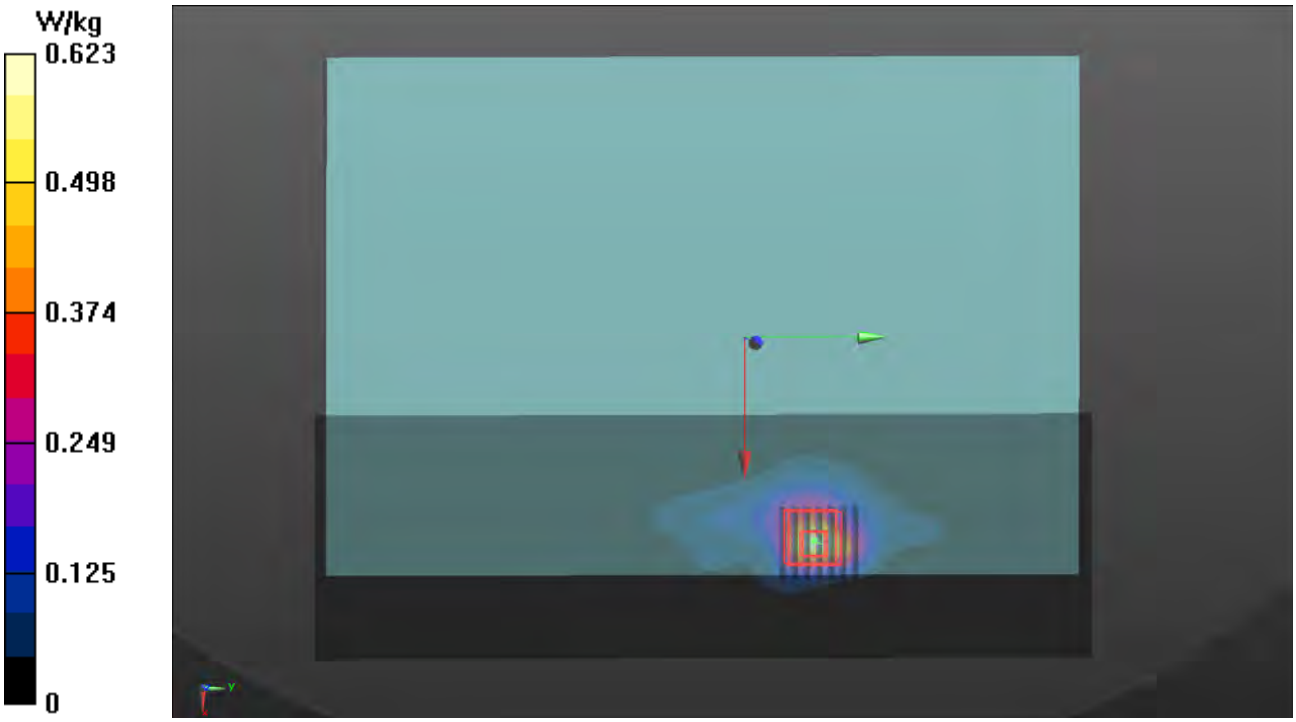
DUT: P21010159

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 2310 MHz;Duty Cycle: 1:3.74
Medium: H19T27N3_0315 Medium parameters used: f = 2310 MHz; σ = 1.728 S/m; ε_r = 39.198; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.62, 7.62, 7.62) @ 2310 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x271x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.623 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.97 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.885 W/kg
SAR(1 g) = 0.362 W/kg; SAR(10 g) = 0.169 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7 mm
Ratio of SAR at M2 to SAR at M1 = 42.5%
Maximum value of SAR (measured) = 0.650 W/kg



P52 LTE 38_QPSK20M_Bottom_0mm_Ch37850_1RB_OS0_Sample1_Ant 0_P-Sensor_w

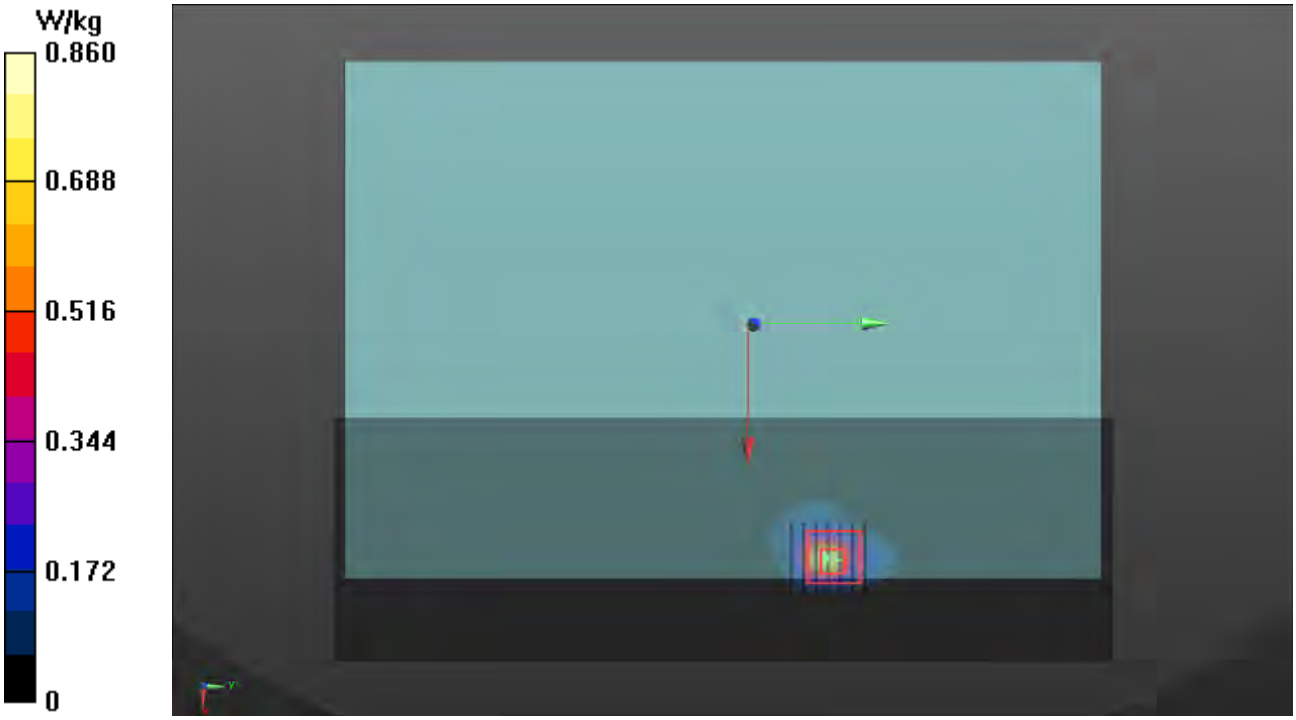
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2580 MHz;Duty Cycle: 1:8.33
Medium: H19T27N1_0316 Medium parameters used: f = 2580 MHz; σ = 2.007 S/m; ε_r = 37.871; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2580 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x271x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.860 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.65 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.156 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.789 W/kg



P53 LTE 41_QPSK20M_Bottom_0mm_Ch40185_1RB_OS0_Sample1_Ant 0_P-Sensor_w

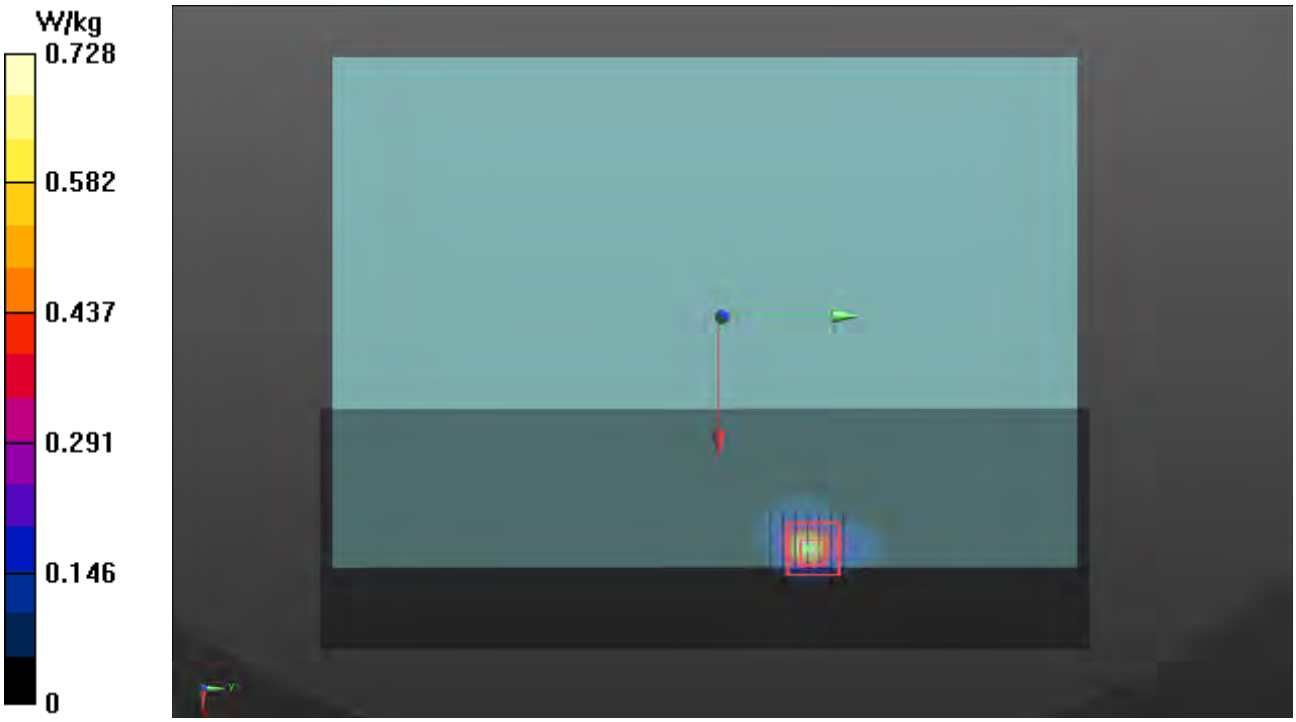
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2549.5 MHz;Duty Cycle: 1:8.33
Medium: H19T27N1_0316 Medium parameters used: f = 2550 MHz; σ = 1.976 S/m; ε_r = 37.967; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2549.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x271x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.728 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.56 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.896 W/kg
SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.123 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 41.3%
Maximum value of SAR (measured) = 0.623 W/kg



P54 LTE 42_QPSK20M_Bottom_0mm_Ch43190_1RB_OS0_Sample1_Ant 2_P-Sensor_w

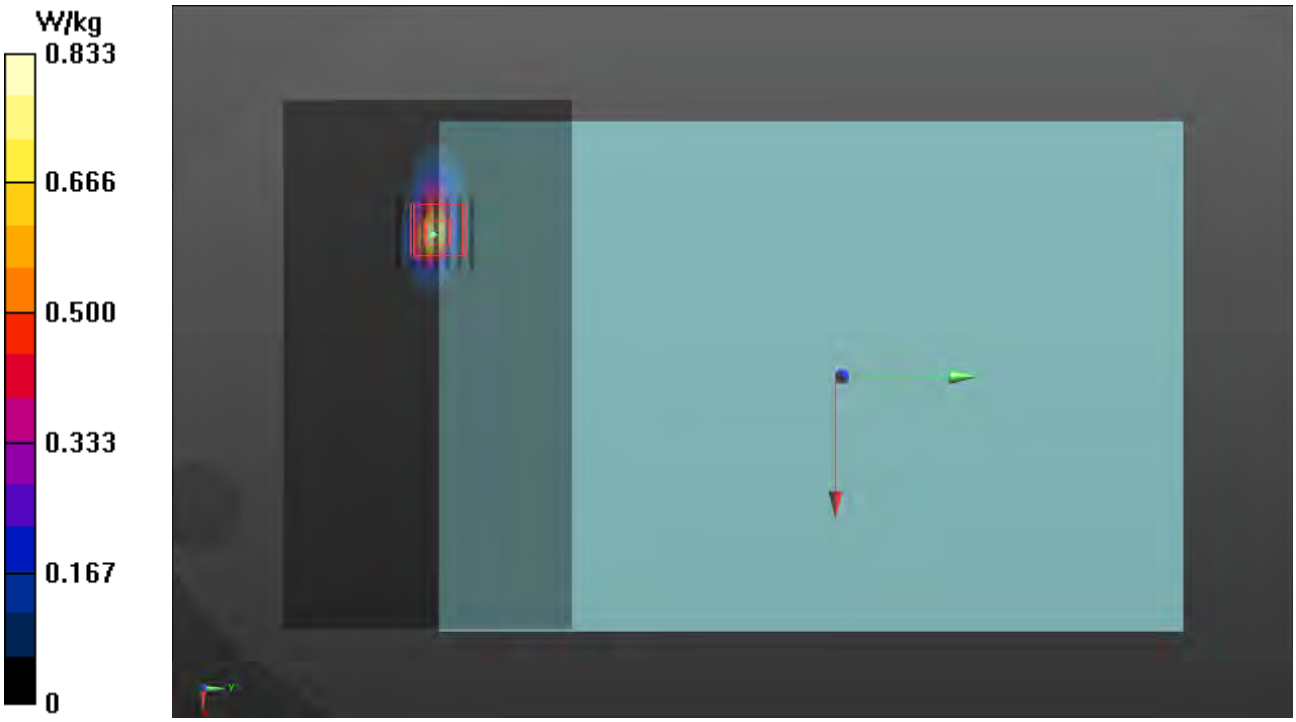
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 3560 MHz;Duty Cycle: 1:8.33
Medium: H34T38N1_0315 Medium parameters used: f = 3560 MHz; σ = 3.017 S/m; ε_r = 37.175; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3560 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (191x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.833 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 16.23 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 0.542 W/kg; SAR(10 g) = 0.171 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 59.8%
Maximum value of SAR (measured) = 1.08 W/kg



P55 LTE 48_QPSK20M_Bottom_0mm_Ch55340_1RB_OS0_Sample1_Ant 2_P-Sensor_w

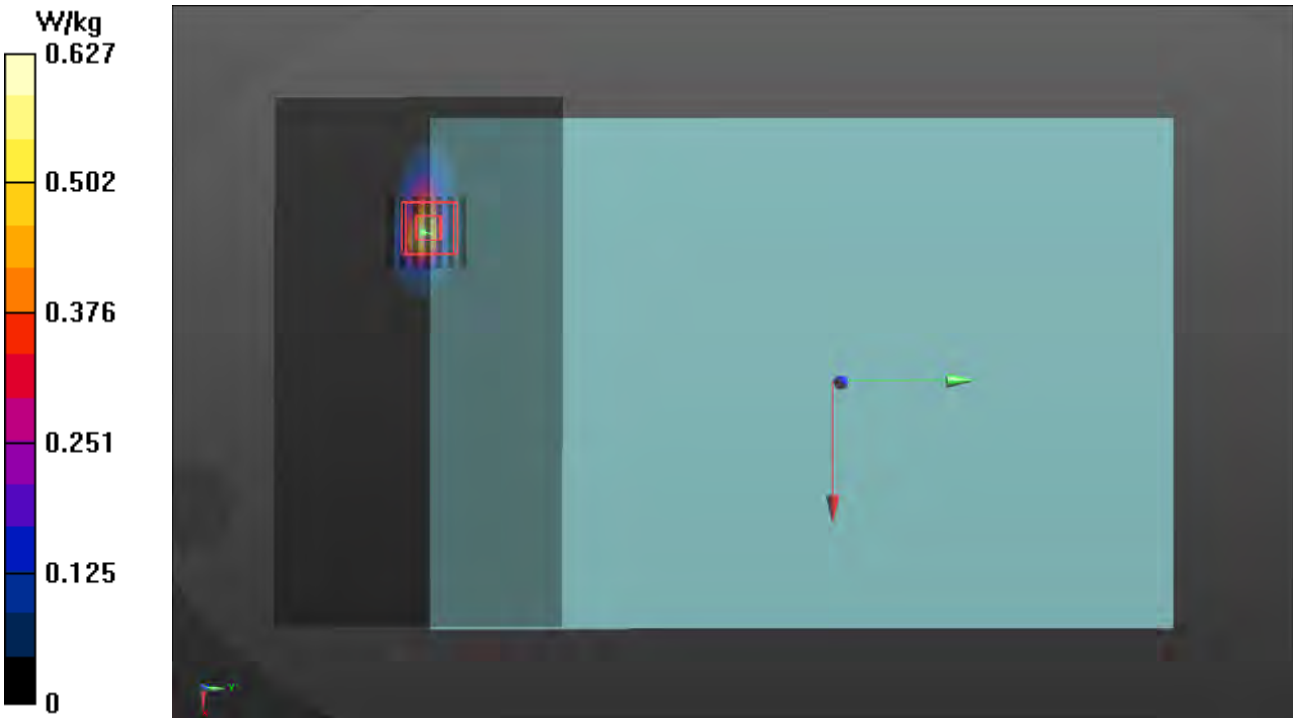
DUT: P21010159

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 3560 MHz;Duty Cycle: 1:8.33
Medium: H34T38N1_0315 Medium parameters used: f = 3560 MHz; σ = 3.017 S/m; ε_r = 37.175; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃ ； Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(6.87, 6.87, 6.87) @ 3560 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (191x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.627 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm
Reference Value = 14.64 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.101 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 59.8%
Maximum value of SAR (measured) = 0.870 W/kg



P56 LTE 66_QPSK20M_Bottom_0mm_Ch132322_1RB_OS0_Sample1_Ant 0_P-Sensor_w

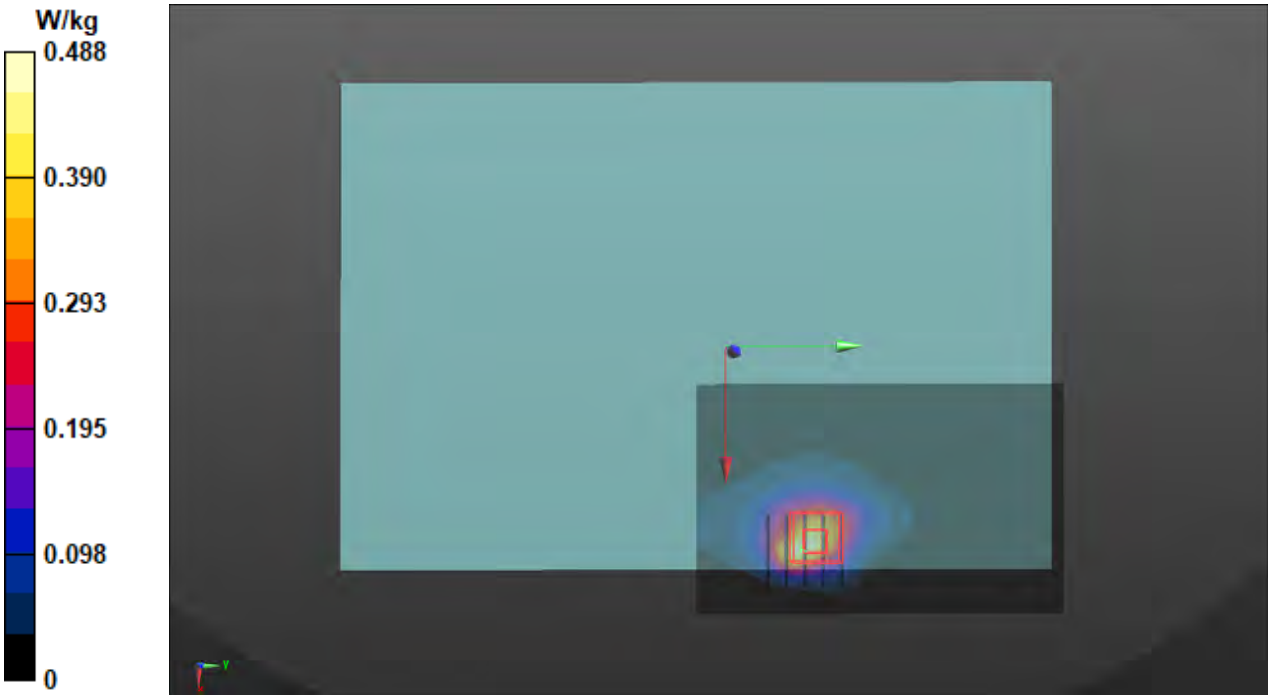
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1745 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0314 Medium parameters used (interpolated): f = 1745 MHz; σ = 1.318 S/m; ε_r = 38.809; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1745 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.488 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.81 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.821 W/kg
SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.180 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 43.5%
Maximum value of SAR (measured) = 0.581 W/kg



P57 LTE 66_QPSK20M_Bottom_0mm_Ch132072_1RB_OS0_Sample1_Ant 2_P-Sensor_w

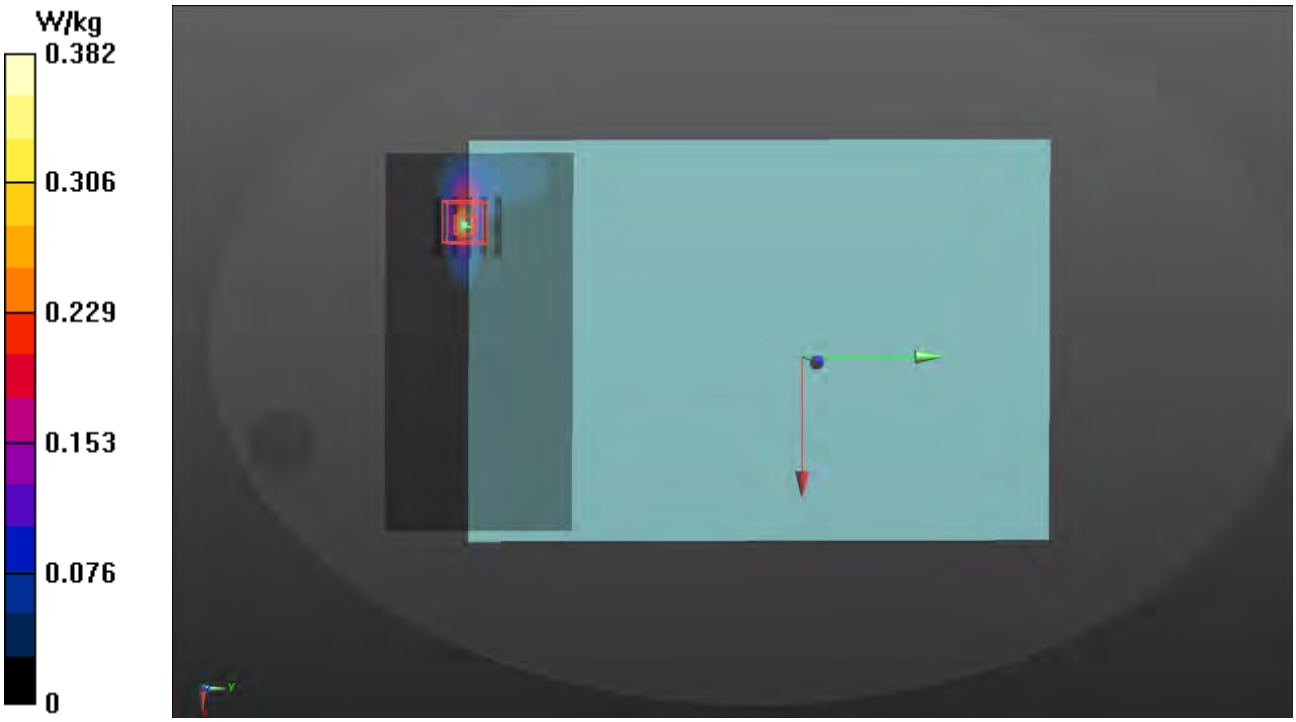
DUT: P21010159

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1720 MHz;Duty Cycle: 1:3.74
Medium: H16T20N1_0316 Medium parameters used: f = 1720 MHz; σ = 1.301 S/m; ε_r = 40.267; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1720 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (141x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.382 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.92 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.455 W/kg
SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.095 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 47.7%
Maximum value of SAR (measured) = 0.374 W/kg



P58 5GNR-n2_DFT-S_15KHz QPSK20M_Bottom_0mm_Ch380000_1RB_OS1_Sample1_Ant 0_P-Sensor_w

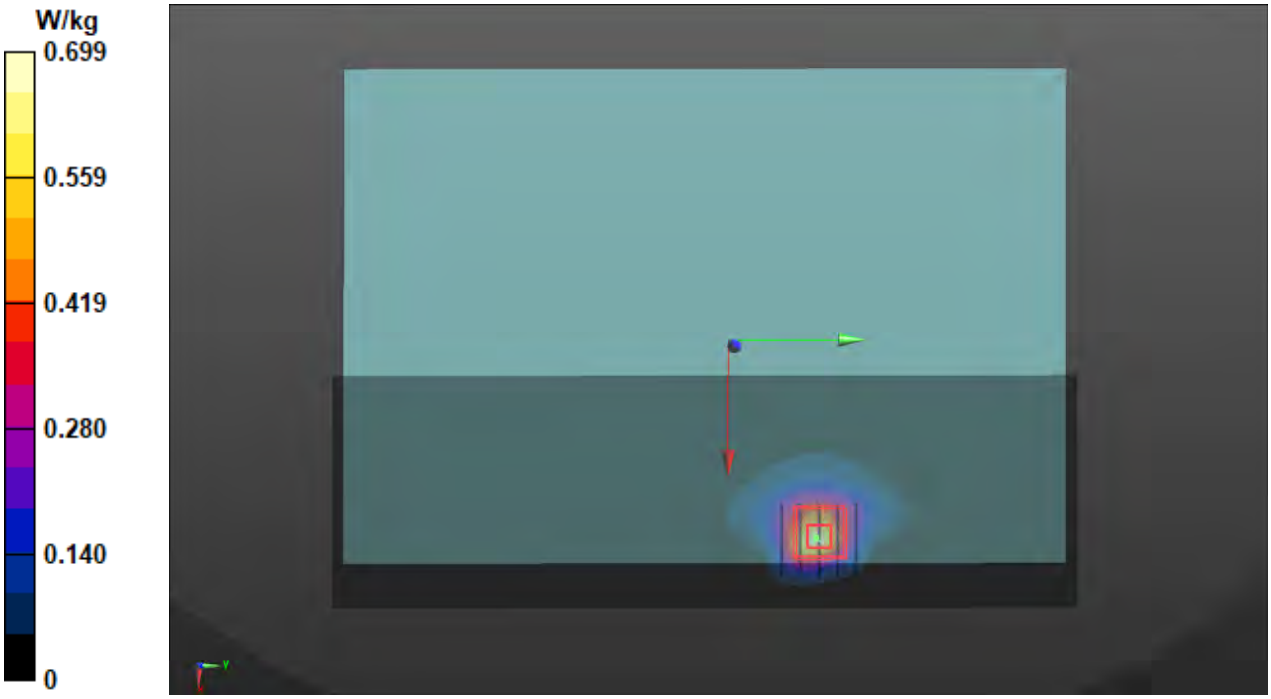
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1900 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0314 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 38.22; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.699 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.69 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.921 W/kg
SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.154 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 10.1 mm
Ratio of SAR at M2 to SAR at M1 = 46.4%
Maximum value of SAR (measured) = 0.730 W/kg



P59 5GNR-n2_DFT-S_15KHz QPSK20M_Bottom_0mm_Ch380000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

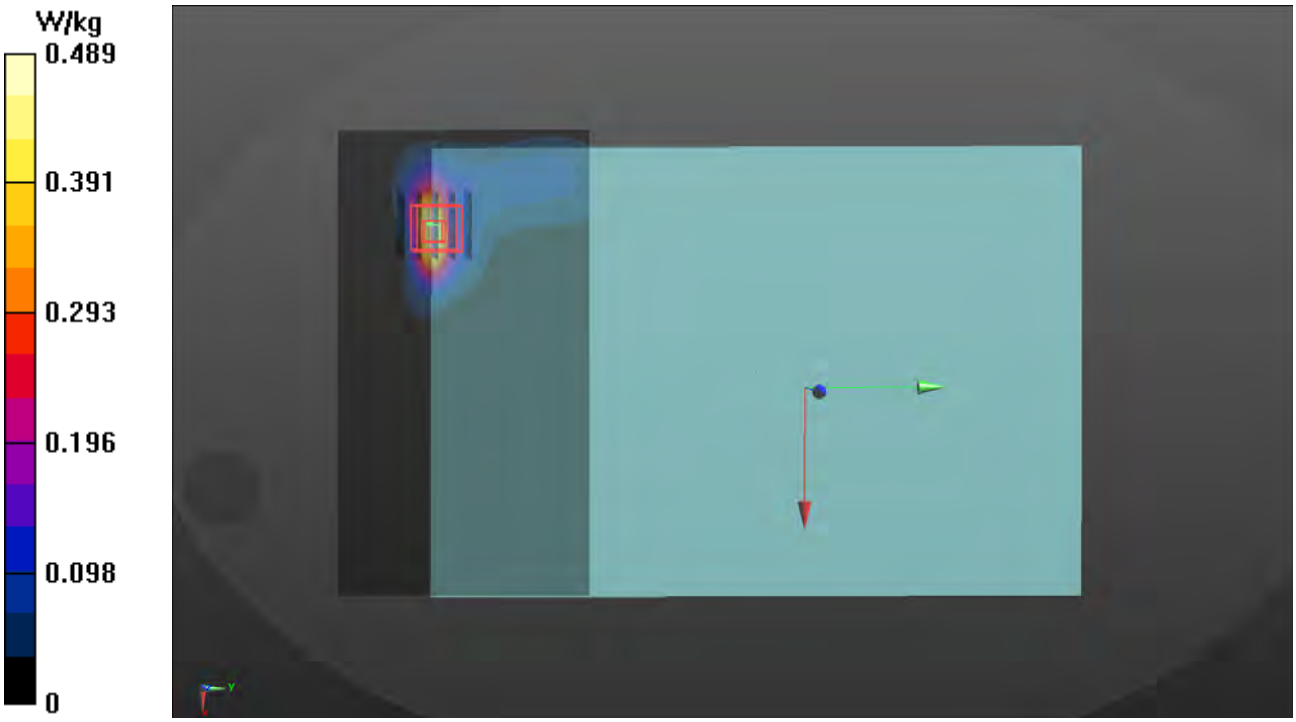
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1900 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0313 Medium parameters used: f = 1900 MHz; σ = 1.461 S/m; ε_r = 39.14; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.26, 8.26, 8.26) @ 1900 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (151x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.489 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.93 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.805 W/kg
SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.167 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 47.5%
Maximum value of SAR (measured) = 0.616 W/kg



P60 5GNR-n5_DFT-S_15KHz QPSK20M_Bottom_0mm_Ch166800_1RB_OS1_Sample1_Ant 0_P-Sensor_w

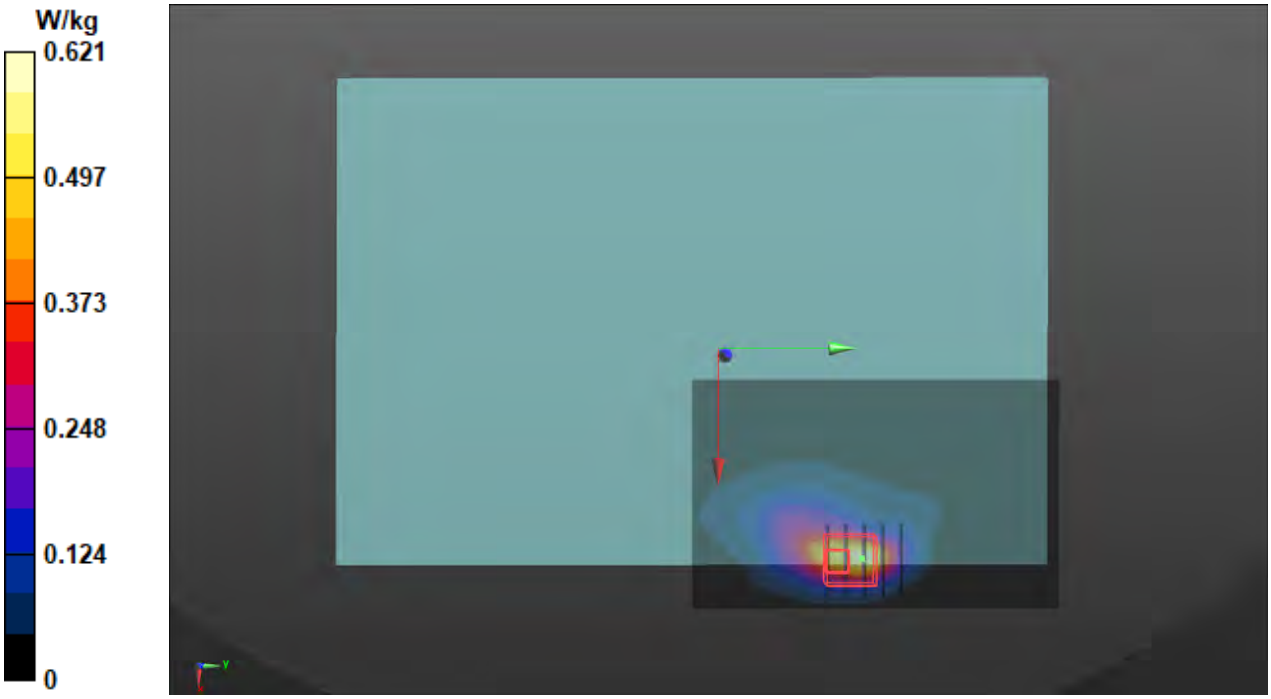
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 834 MHz;Duty Cycle: 1:3.56
Medium: H07T10N1_0315 Medium parameters used: f = 834 MHz; σ = 0.907 S/m; ε_r = 42.291; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(9.69, 9.69, 9.69) @ 834 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.621 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.77 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.637 W/kg
SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.133 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 39.8%
Maximum value of SAR (measured) = 0.484 W/kg



P61 5GNR-n7_DFT-S_15KHz QPSK20M_Bottom_0mm_Ch512000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

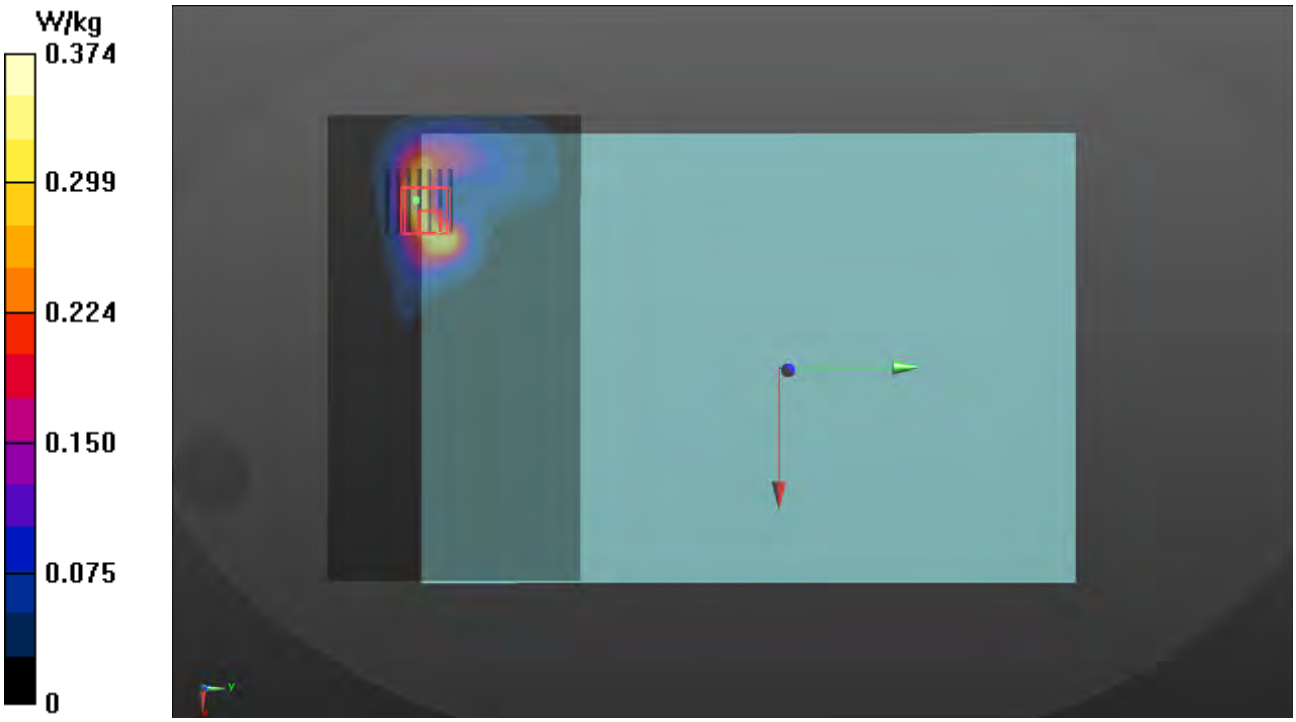
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 2560 MHz;Duty Cycle: 1:3.56
Medium: H19T27N1_0313 Medium parameters used: f = 2560 MHz; σ = 1.998 S/m; ε_r = 37.352; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2560 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (191x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.374 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.78 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.387 W/kg; SAR(10 g) = 0.139 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 32.9%
Maximum value of SAR (measured) = 0.904 W/kg



P62 5GNR-n12_DFT-S_15KHz QPSK15M_Bottom_0mm_Ch141300_1RB_OS1_Sample1_Ant 0_P-Sensor_w

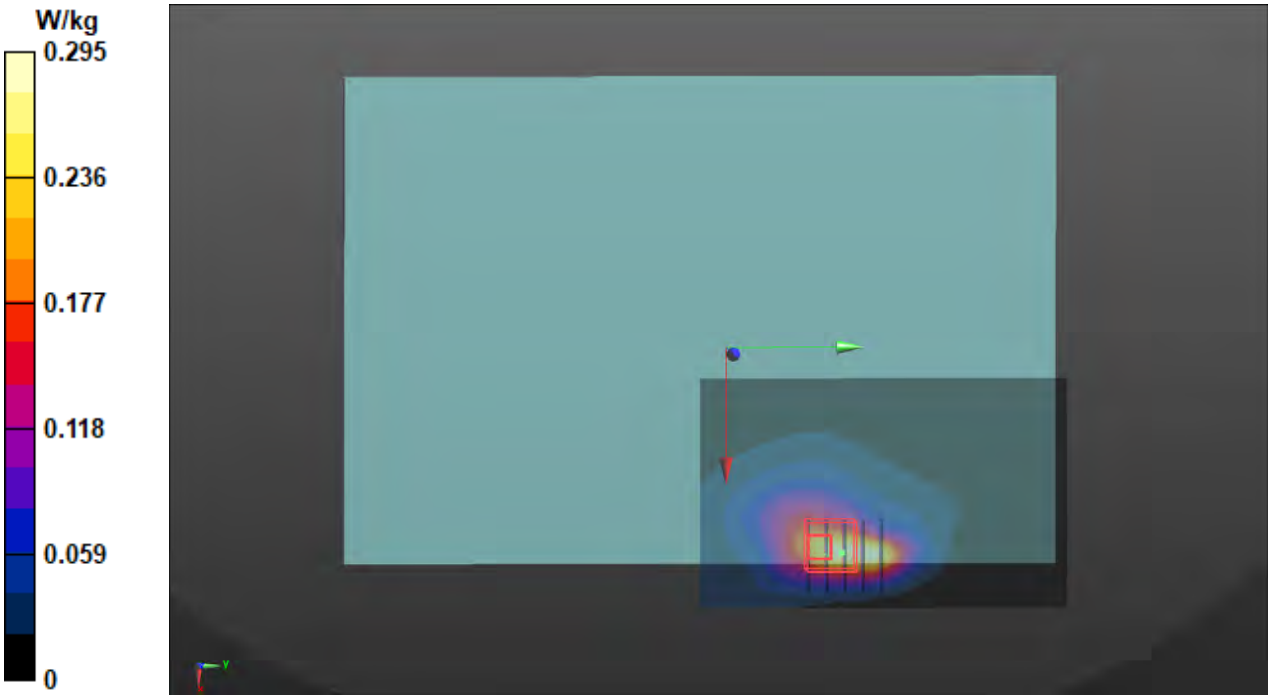
DUT: P21010159

Communication System: UID 10930 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz); Frequency: 706.5 MHz;Duty Cycle: 1:3.56
Medium: H06T09N1_0315 Medium parameters used (interpolated): f = 706.5 MHz; σ = 0.85 S/m; ε_r = 43.94; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature：23.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(10, 10, 10) @ 706.5 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.295 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.94 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.364 W/kg
SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.096 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 47.5%
Maximum value of SAR (measured) = 0.288 W/kg



P63 5GNR-n41_DFT-S_30KHz QPSK100M_Bottom_0mm_Ch528000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

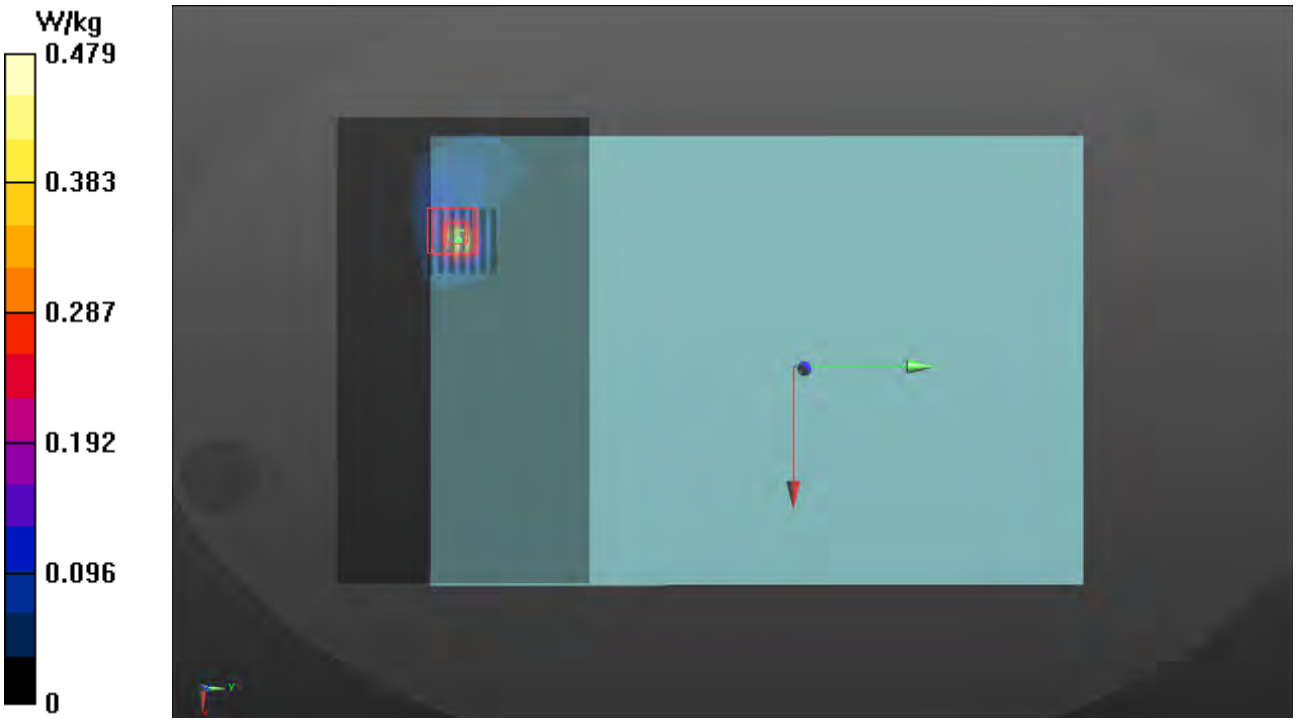
DUT: P21010159

Communication System: UID 10902 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz); Frequency: 2640 MHz;Duty Cycle: 1:3.7
Medium: H19T27N1_0313 Medium parameters used: f = 2640 MHz; σ = 2.097 S/m; ε_r = 37.078; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.28, 7.28, 7.28) @ 2640 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (191x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.479 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.55 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.962 W/kg
SAR(1 g) = 0.282 W/kg; SAR(10 g) = 0.098 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.2 mm
Ratio of SAR at M2 to SAR at M1 = 33.6%
Maximum value of SAR (measured) = 0.614 W/kg



P64 5GNR-n66_DFT-S_15KHz QPSK20M_Bottom_0mm_Ch354000_1RB_OS1_Sample1_Ant 0_P-Sensor_w

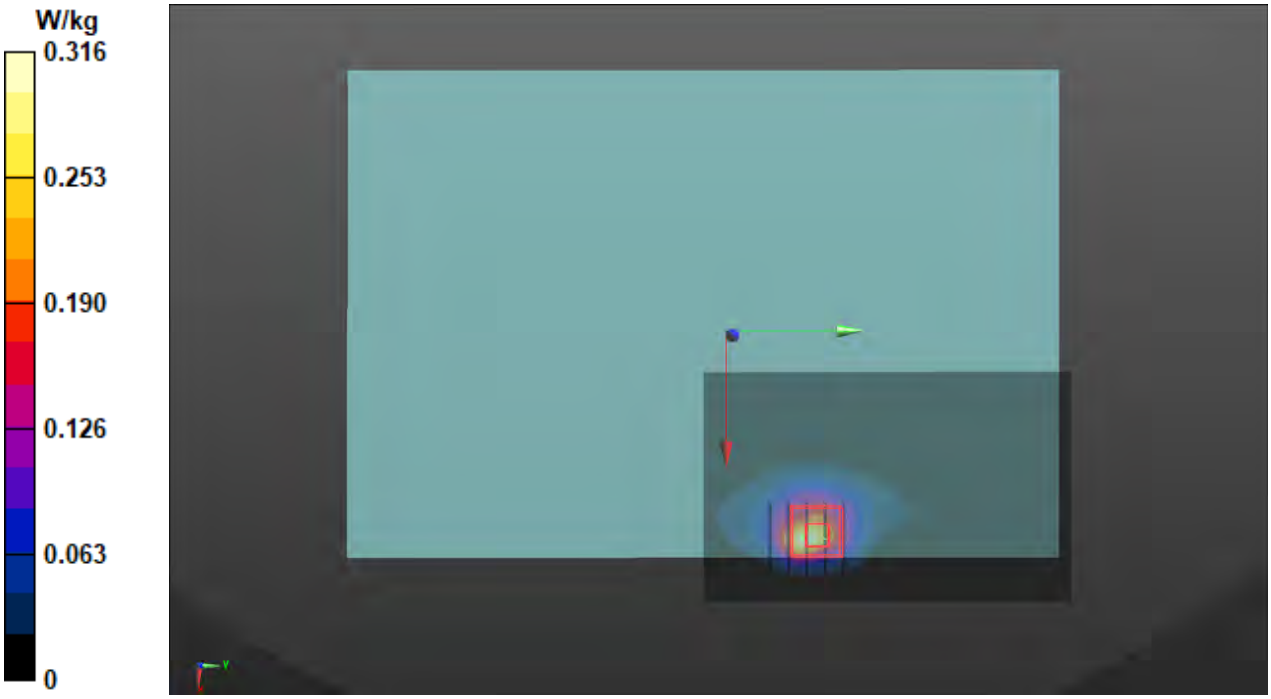
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1770 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0314 Medium parameters used: f = 1770 MHz; σ = 1.34 S/m; ε_r = 38.731; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(8.6, 8.6, 8.6) @ 1770 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.316 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.61 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.408 W/kg
SAR(1 g) = 0.185 W/kg; SAR(10 g) = 0.089 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 45.4%
Maximum value of SAR (measured) = 0.310 W/kg



P65 5GNR-n66_DFT-S_15KHz QPSK20M_Bottom_0mm_Ch344000_1RB_OS1_Sample1_Ant 2_P-Sensor_w

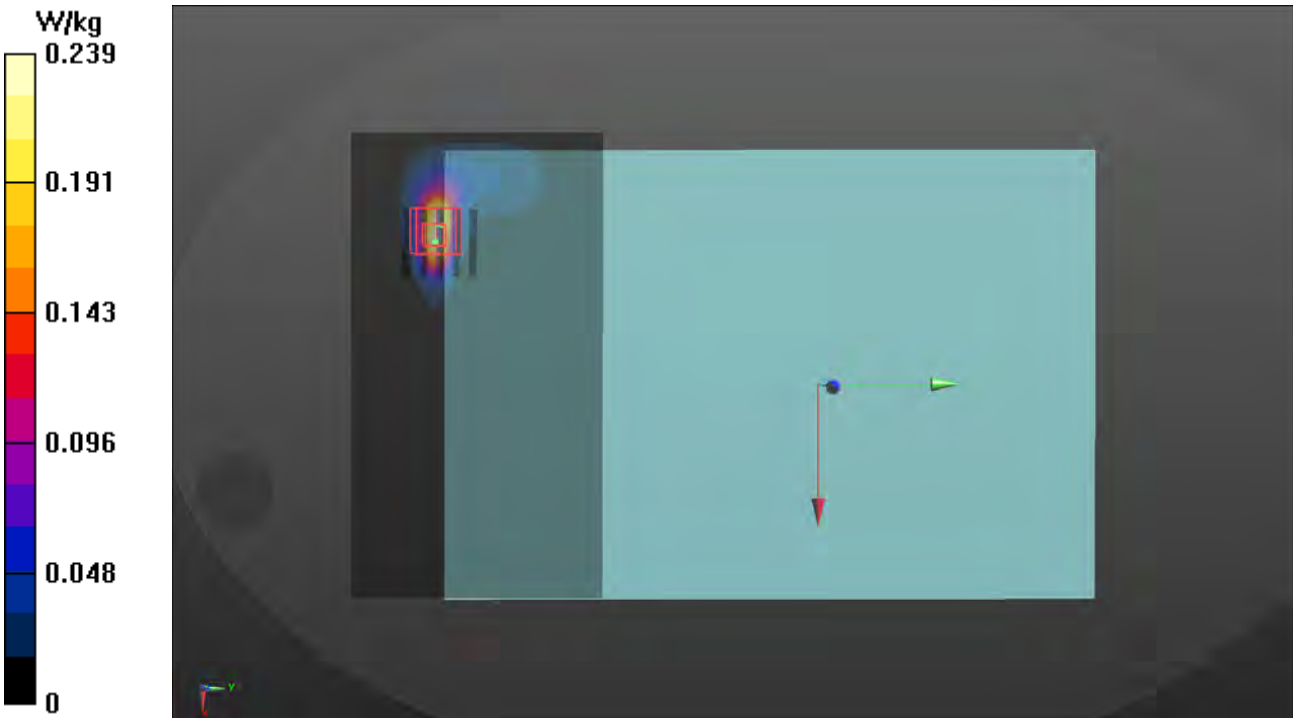
DUT: P21010159

Communication System: UID 10931 - AAB, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz); Frequency: 1720 MHz;Duty Cycle: 1:3.56
Medium: H16T20N1_0313 Medium parameters used: f = 1720 MHz; σ = 1.306 S/m; ε_r = 39.748; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃ ； Liquid Temperature：23.1 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(8.58, 8.58, 8.58) @ 1720 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (151x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.239 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.54 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.308 W/kg
SAR(1 g) = 0.150 W/kg; SAR(10 g) = 0.068 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.6 mm
Ratio of SAR at M2 to SAR at M1 = 48.2%
Maximum value of SAR (measured) = 0.246 W/kg



P66 WLAN2.4G_802.11b_Bottom_0mm_Ch1_Sample1_Ant 1_P-Sensor_w

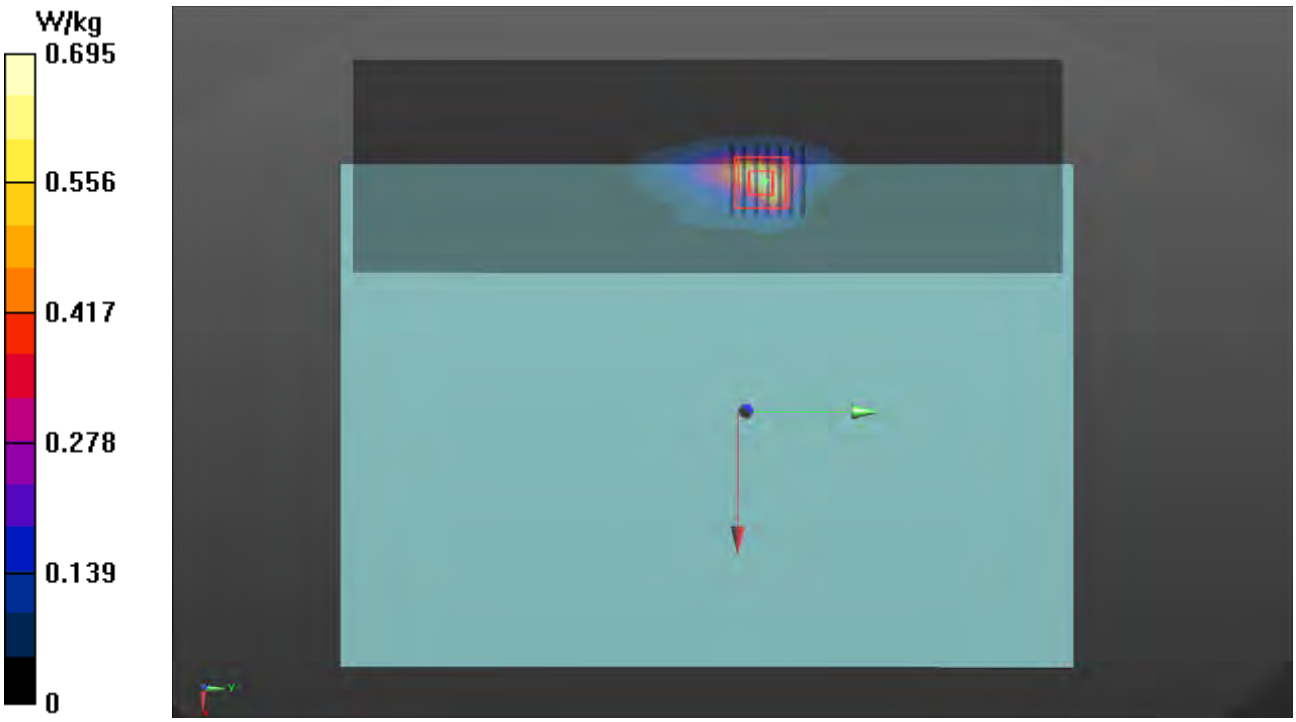
DUT: P21010159

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps);
Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0319 Medium parameters used: f = 2412 MHz; σ = 1.818 S/m; ε_r = 38.975; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2412 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x251x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.695 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.83 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.27 W/kg
SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.125 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.1 mm
Ratio of SAR at M2 to SAR at M1 = 39.1%
Maximum value of SAR (measured) = 1.64 W/kg



P67 WLAN5.3G_802.11ac VHT160_Bottom_0mm_Ch50_Sample1_Ant 0+1_P-Sensor_w

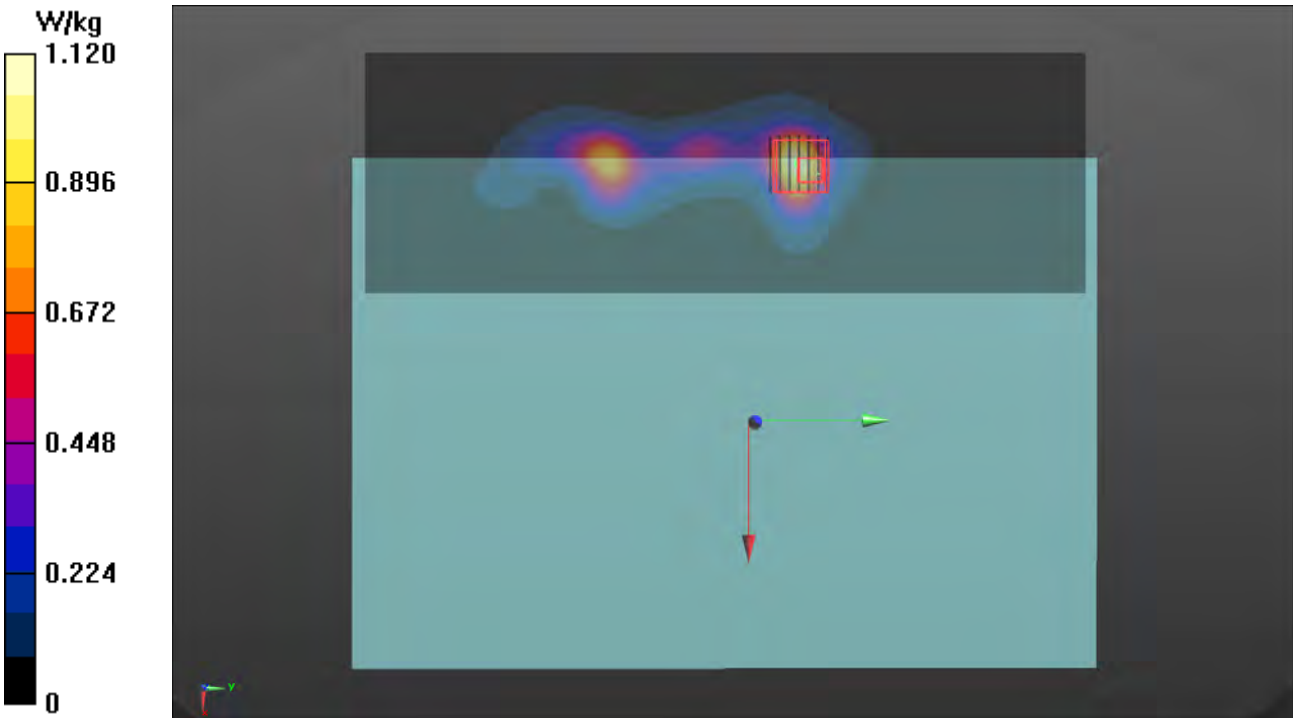
DUT: P21010159

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5250 MHz;Duty Cycle: 1:1.01
Medium: H34T60N1_0319 Medium parameters used (interpolated): f = 5250 MHz; σ = 4.787 S/m; ε_r = 37.294; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(5.12, 5.12, 5.12) @ 5250 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.12 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 15.93 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.45 W/kg
SAR(1 g) = 0.636 W/kg; SAR(10 g) = 0.235 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 64.5%
Maximum value of SAR (measured) = 1.54 W/kg



P68 WLAN5.6G_802.11ac VHT80_Bottom_0mm_Ch138_Sample1_Ant 0+1_P-Sensor_w

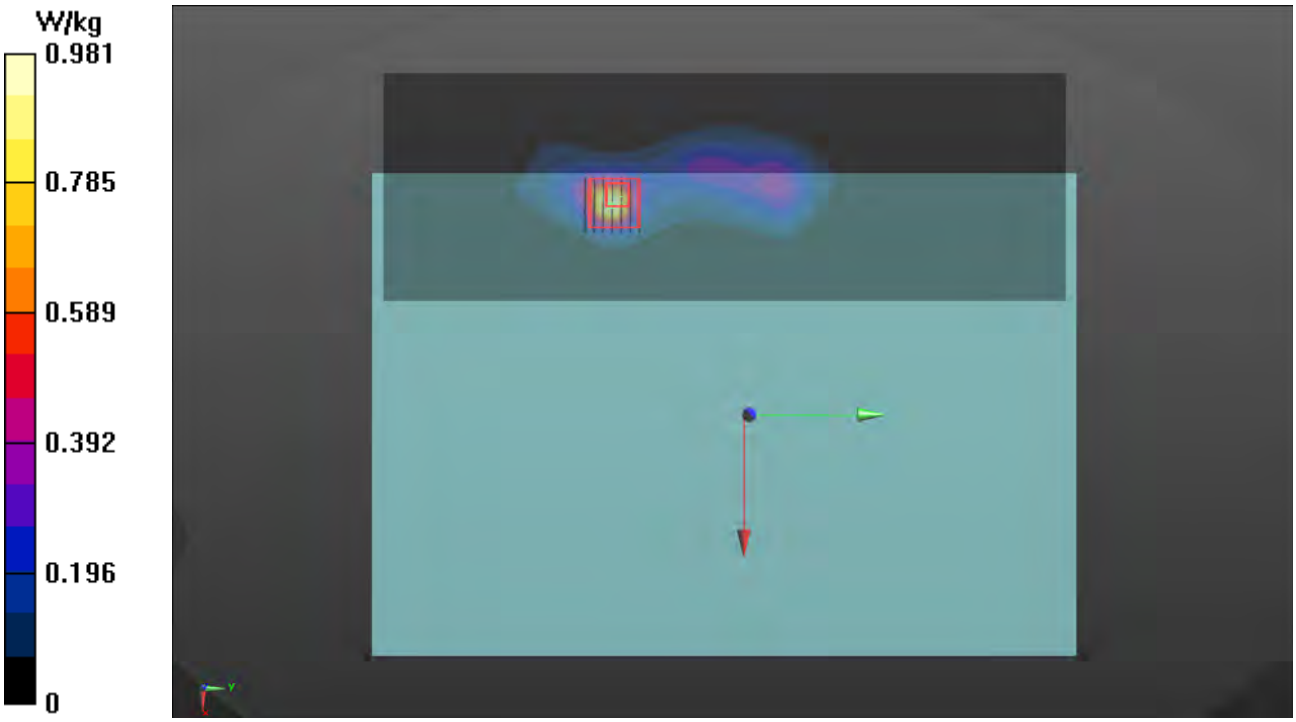
DUT: P21010159

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5690 MHz;Duty Cycle: 1:1.02
Medium: H34T60N1_0319 Medium parameters used (interpolated): f = 5690 MHz; σ = 5.254 S/m; ε_r = 36.552; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.8, 4.8, 4.8) @ 5690 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.981 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 14.80 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 4.08 W/kg
SAR(1 g) = 0.620 W/kg; SAR(10 g) = 0.065 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 62.9%
Maximum value of SAR (measured) = 2.44 W/kg



P69 WLAN5.8G_802.11ac VHT80_Bottom_0mm_Ch155_Sample1_Ant 0+1_P-Sensor_w

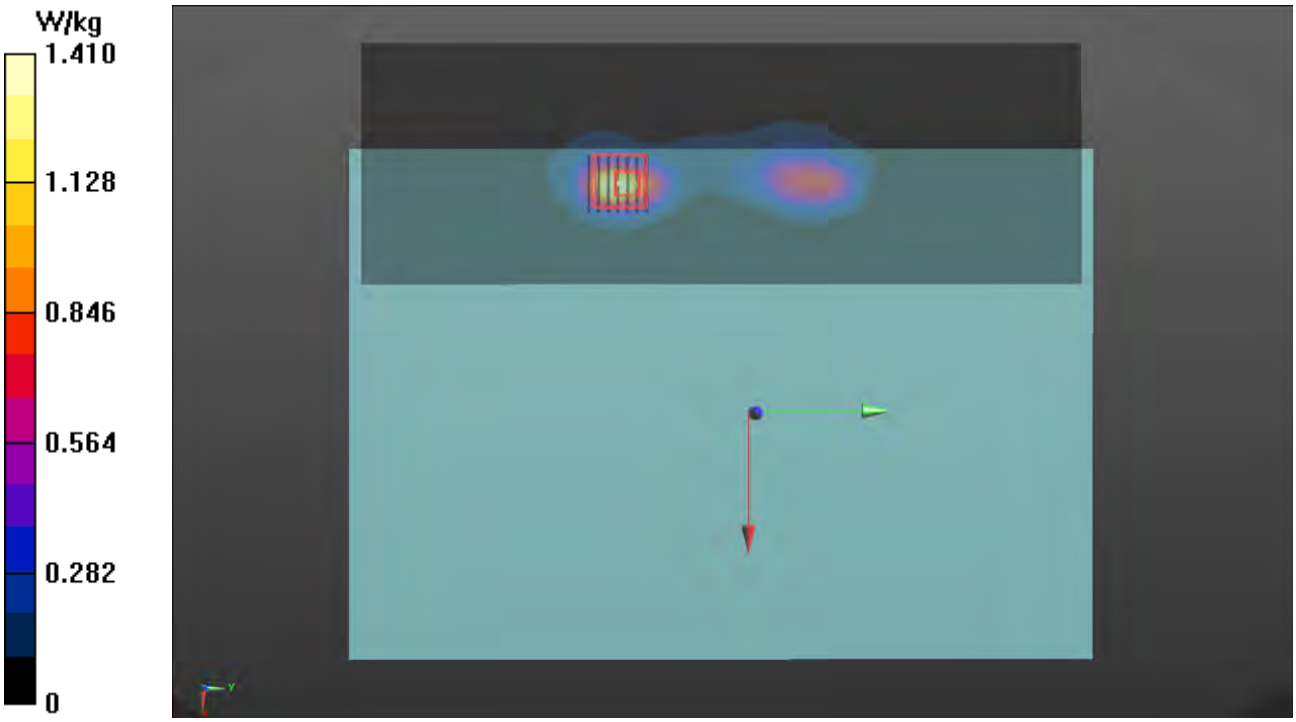
DUT: P21010159

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5775 MHz;Duty Cycle: 1:1.02
Medium: H34T60N1_0319 Medium parameters used: f = 5775 MHz; σ = 5.338 S/m; ε_r = 36.319; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(4.8, 4.8, 4.8) @ 5775 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.41 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 16.67 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.33 W/kg
SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.062 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 59.4%
Maximum value of SAR (measured) = 2.38 W/kg



P70 BT_BDR_Bottom_0mm_Ch0_Sample1_Ant 1_P-Sensor_w_o

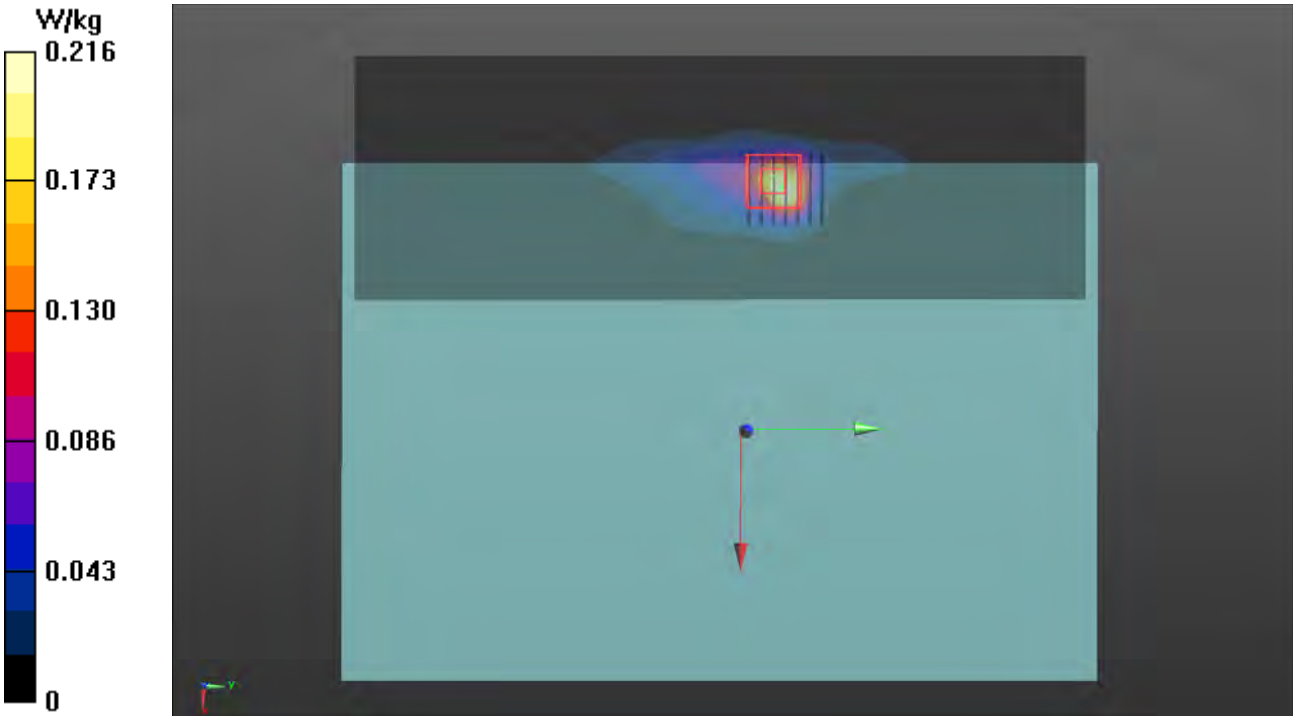
DUT: P21010159

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2402 MHz;Duty Cycle: 1:1.30
Medium: H19T27N1_0319 Medium parameters used: f = 2402 MHz; σ = 1.801 S/m; ε_r = 39.097; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃ ； Liquid Temperature：23.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2402 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2020/09/15
- Phantom: ELI Phantom_1043_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x251x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.216 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.11 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.015 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 40%
Maximum value of SAR (measured) = 0.681 W/kg



Appendix C. Calibration Certificate for Probe and Dipole

The SPEAG calibration certificates are shown as follows.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client B.V. ADT (Auden)

Certificate No: D750V3-1013_Aug20

CALIBRATION CERTIFICATE

Object: D750V3 - SN:1013

Calibration procedure(s): QA CAL-05.v11
Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date: August 13, 2020

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: BH9394 (20k)	31-Mar-20 (No. 217-03106)	Apr-21
Type-N mismatch combination	SN: 310982 / 06327	31-Mar-20 (No. 217-03104)	Apr-21
Reference Probe EX3DV4	SN: 7349	29-Jun-20 (No. EX3-7349_Jun20)	Jun-21
DAE4	SN: 601	27-Dec-19 (No. DAE4-601_Dec19)	Dec-20

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Feb-19)	In house check: Oct-20
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-18)	In house check: Oct-20
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-18)	In house check: Oct-20
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

	Name	Function	Signature
Calibrated by:	Jeffrey Katzman	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: August 14, 2020

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	42.4 ± 6 %	0.91 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.15 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**8.48 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**5.53 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	53.0 Ω - 0.8 jΩ
Return Loss	- 30.5 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.036 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG

DASY5 Validation Report for Head TSL

Date: 13.08.2020

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1013

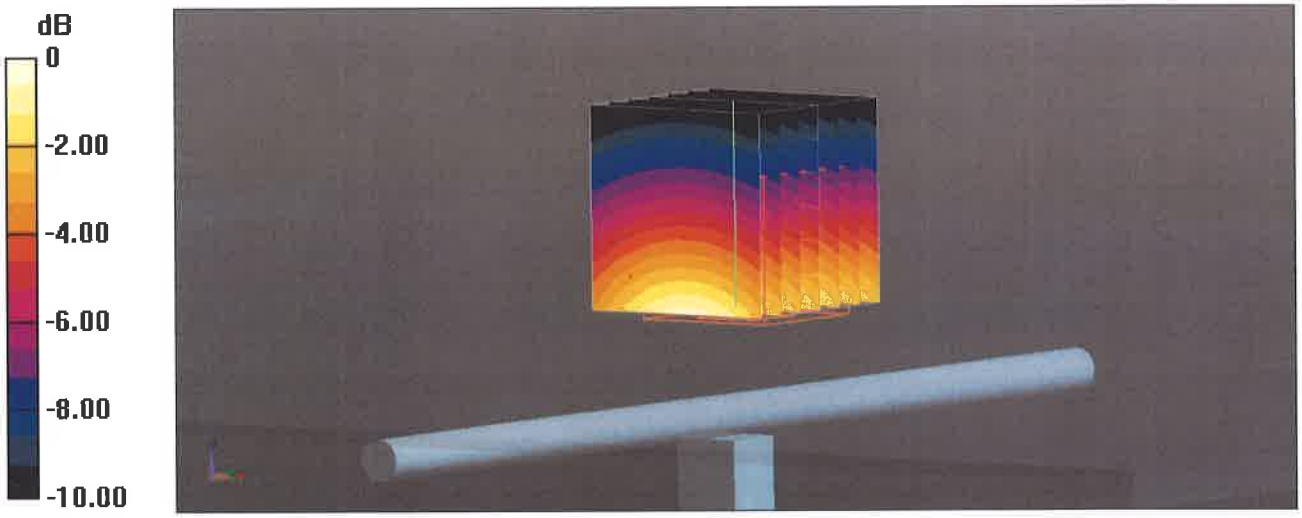
Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; σ = 0.91 S/m; ε_r = 42.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(9.97, 9.97, 9.97) @ 750 MHz; Calibrated: 29.06.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.12.2019
- Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 59.14 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 3.22 W/kg
SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.4 W/kg
Smallest distance from peaks to all points 3 dB below = 17 mm
Ratio of SAR at M2 to SAR at M1 = 66.8%
Maximum value of SAR (measured) = 2.83 W/kg



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

Impedance Measurement Plot for Head TSL