Plot 48 LTE Band 25 1RB Left Cheek High

Date: 3/31/2016

Communication System: LTE Band 25; Frequency: 1905 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1905 MHz; σ = 1.42 mho/m; $ε_r$ = 40.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.96, 7.96, 7.96); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Left Cheek High/Area Scan (61x111x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.782 mW/g

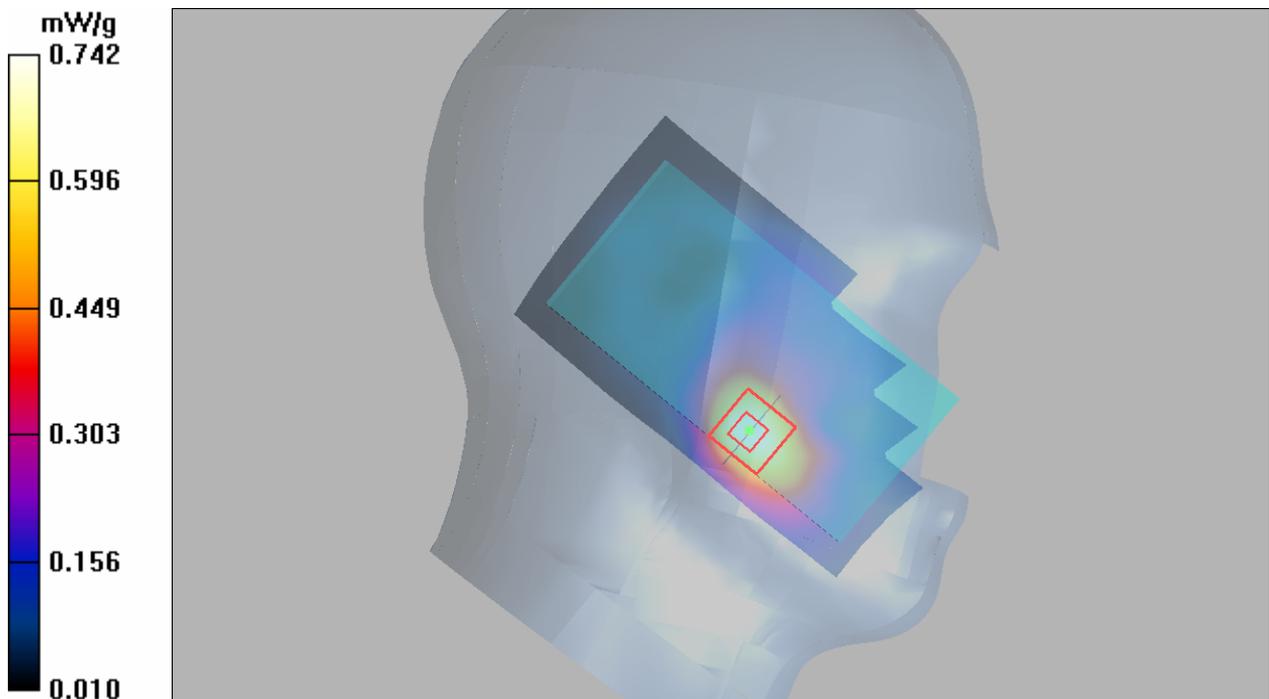**Left Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.90 V/m; Power Drift = 0.199 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.671 mW/g; SAR(10 g) = 0.395 mW/g

Maximum value of SAR (measured) = 0.742 mW/g

Plot 49 LTE Band 25 1RB Back Side High (Distance 10mm)

Date: 3/31/2016

Communication System: UID 0, LTE Band 25; Frequency: 1905 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1905 MHz; σ = 1.518 S/m; $ε_r$ = 52.559; ρ = 1000 kg/m³

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.42, 7.42, 7.42); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Back Side High/Area Scan (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.881 W/kg

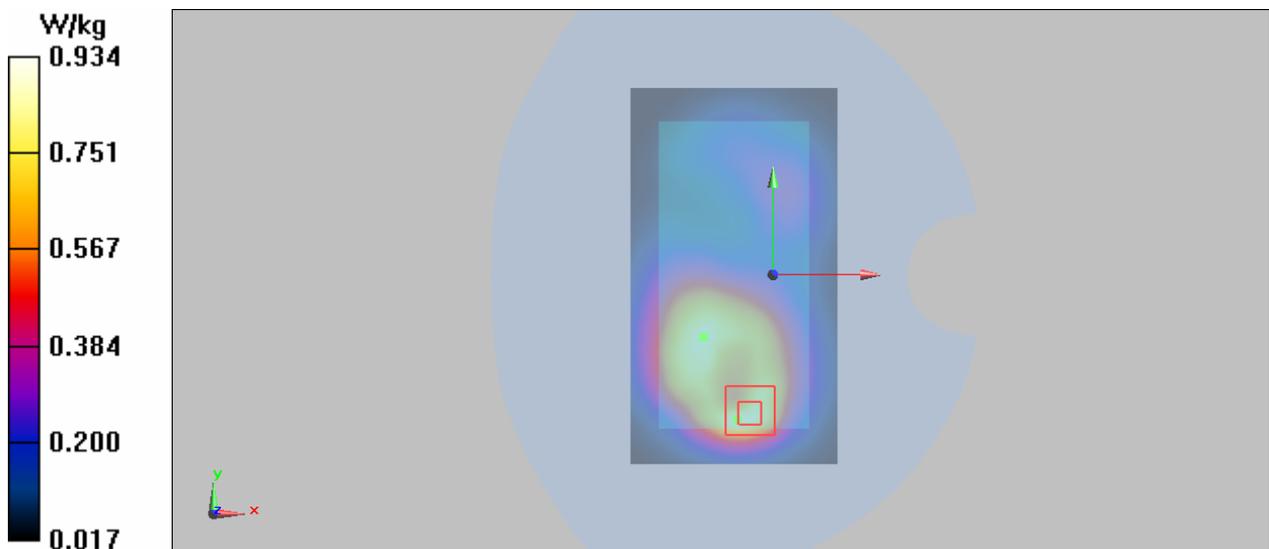**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.68 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.498 W/kg

Maximum value of SAR (measured) = 0.934 W/kg

Plot 50 LTE Band 25 1RB Bottom Side Middle (Distance 10mm)

Date: 3/31/2016

Communication System: LTE Band 25; Frequency: 1882.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.5 mho/m; $ε_r$ = 52.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.42, 7.42, 7.42); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Bottom Side Middle/Area Scan (51x91x1): Measurement grid: dx=1.000mm, dy=1.000mm

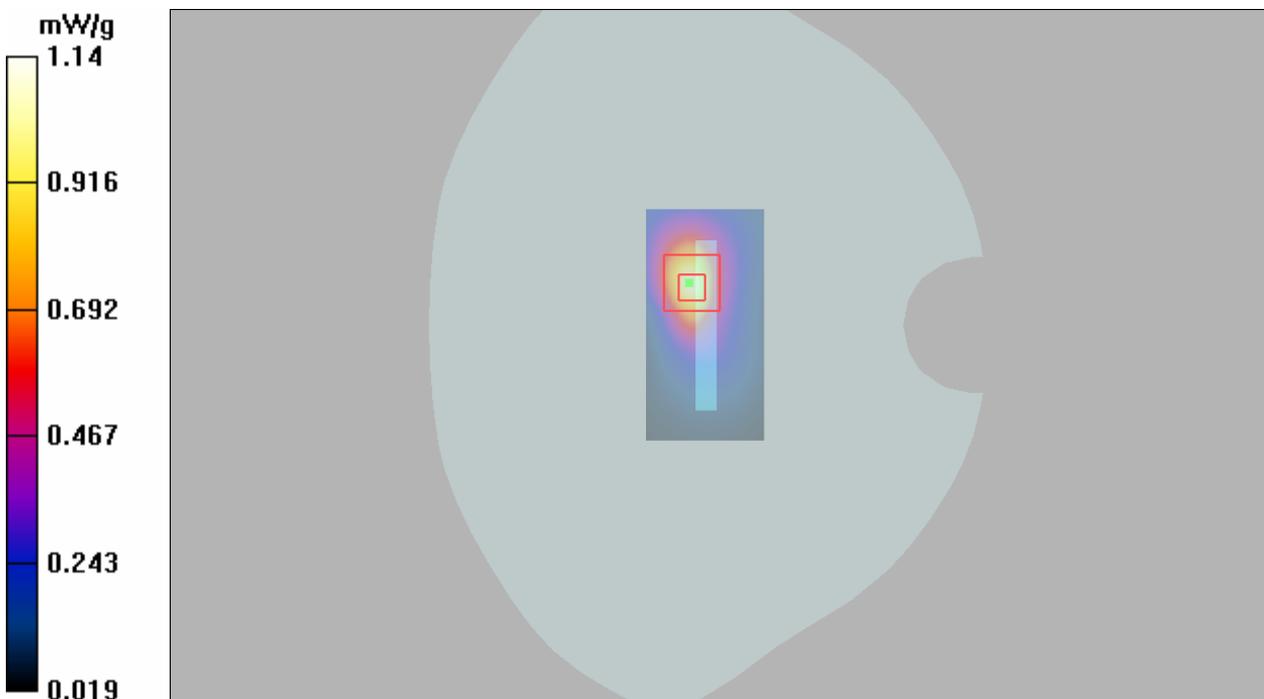Maximum value of SAR (interpolated) = 1.10 mW/g

Bottom Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.2 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.533 mW/g

Maximum value of SAR (measured) = 1.14 mW/g

Plot 51 LTE Band 26 1RB Left Cheek Low

Date: 3/27/2016

Communication System: LTE Band 26; Frequency: 822.5 MHz;Duty Cycle: 1:1

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Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.925 mho/m; ε_r = 42; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.35, 9.35, 9.35); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 11; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Left Cheek Low/Area Scan (61x111x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.665 mW/g

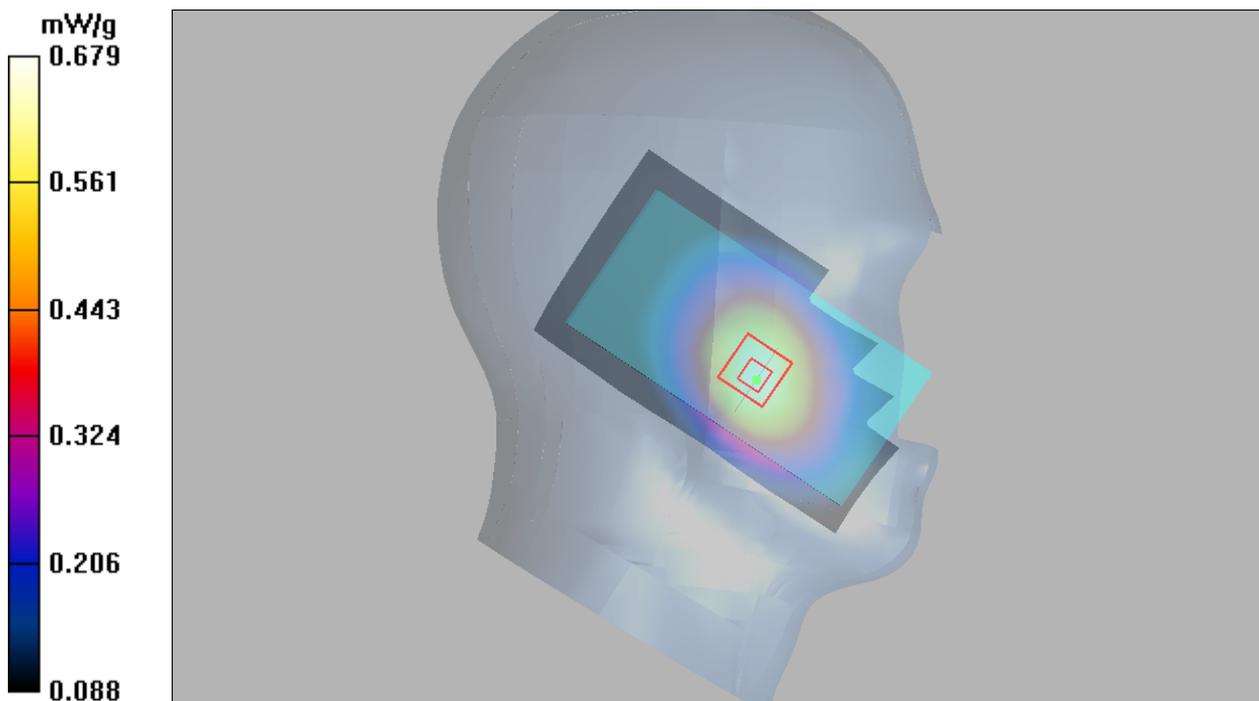**Left Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.90 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.783 W/kg

SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.492 mW/g

Maximum value of SAR (measured) = 0.679 mW/g

Plot 52 LTE Band 26 1RB Back Side Low (Distance 10mm)

Date: 3/27/2016

Communication System: LTE Band 26; Frequency: 822.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.953 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.42, 9.42, 9.42); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 11; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Back Side Low/Area Scan (61x111x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.676 mW/g

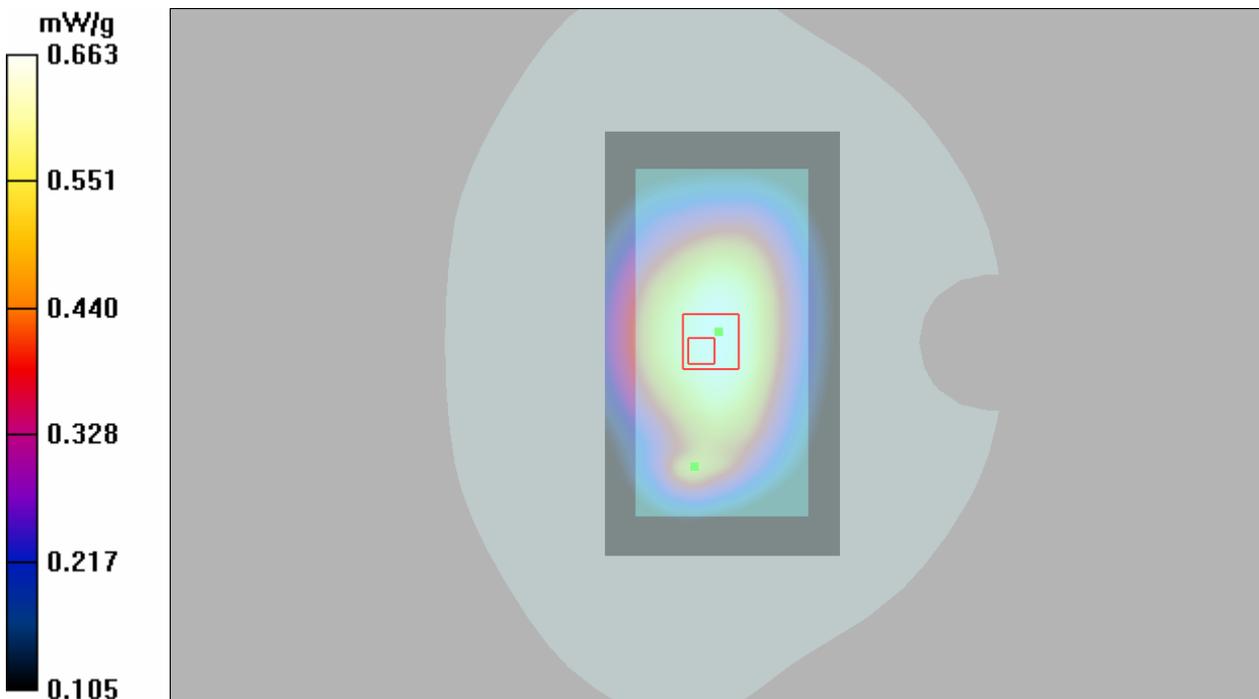**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.2 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.772 W/kg

SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.485 mW/g

Maximum value of SAR (measured) = 0.663 mW/g

Plot 53 LTE Band 41 1RB Left Cheek High

Date: 4/1/2016

Communication System: LTE Band 41; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2680 MHz; σ = 2.1 mho/m; ε_r = 37.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.18, 7.18, 7.18); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Left Cheek High/Area Scan (61x111x1): Measurement grid: dx=1.500mm, dy=1.500mm

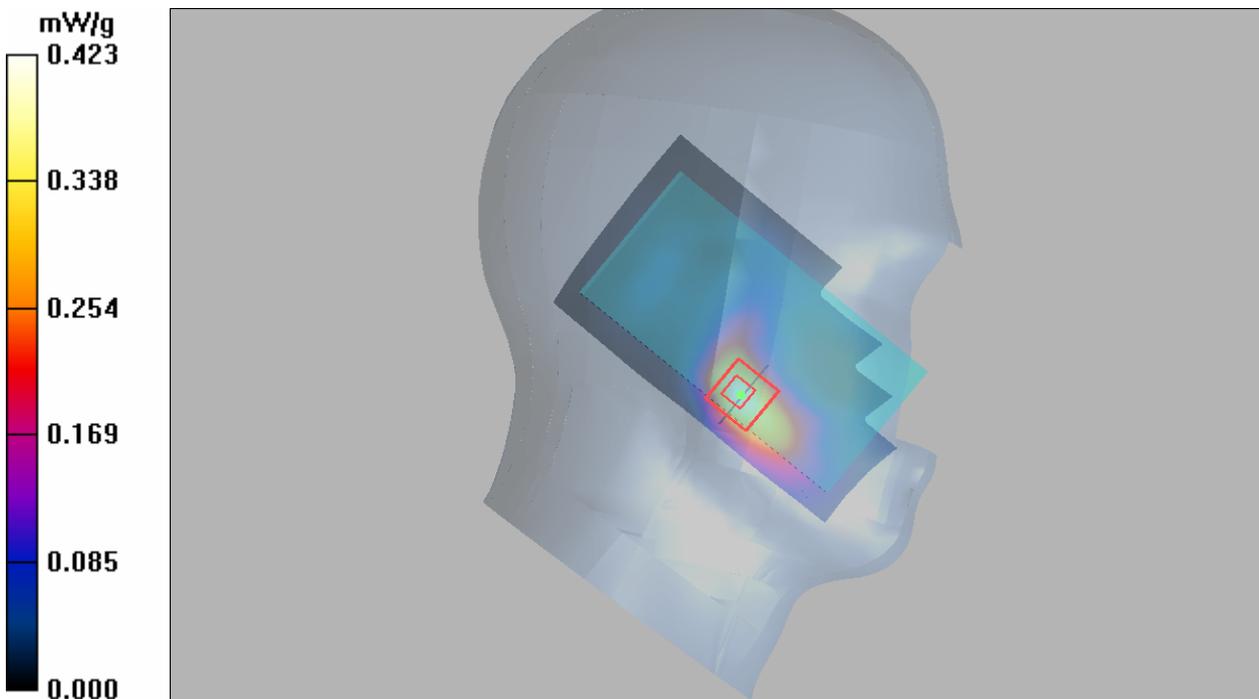Maximum value of SAR (interpolated) = 0.425 mW/g

Left Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.47 V/m; Power Drift = 0.074 dB

Peak SAR (extrapolated) = 0.748 W/kg

SAR(1 g) = 0.381 mW/g; SAR(10 g) = 0.193 mW/g

Maximum value of SAR (measured) = 0.423 mW/g

Plot 54 LTE Band 41 1RB Back Side High (Distance 10mm)

Date: 4/1/2016

Communication System: LTE Band 41; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2680 MHz; σ = 2.34 mho/m; ε_r = 51.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(6.95, 6.95, 6.95); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Back Side High/Area Scan (61x111x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.491 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.02 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.485 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 0.546 mW/g

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Plot 55 802.11b Right Cheek Middle

Date: 4/1/2016

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.79 S/m; $ε_r$ = 38.666; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.39, 7.39, 7.39); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 2; Type: SAM;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Right Cheek Middle/Area Scan (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0207 W/kg

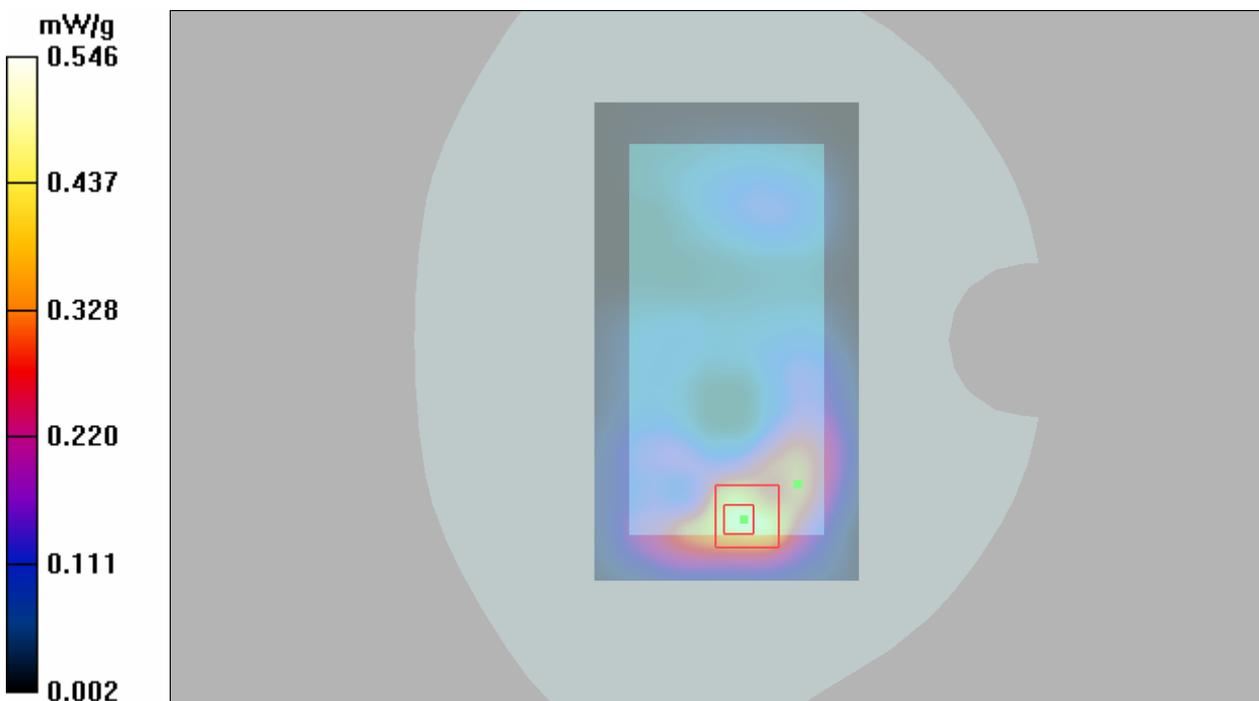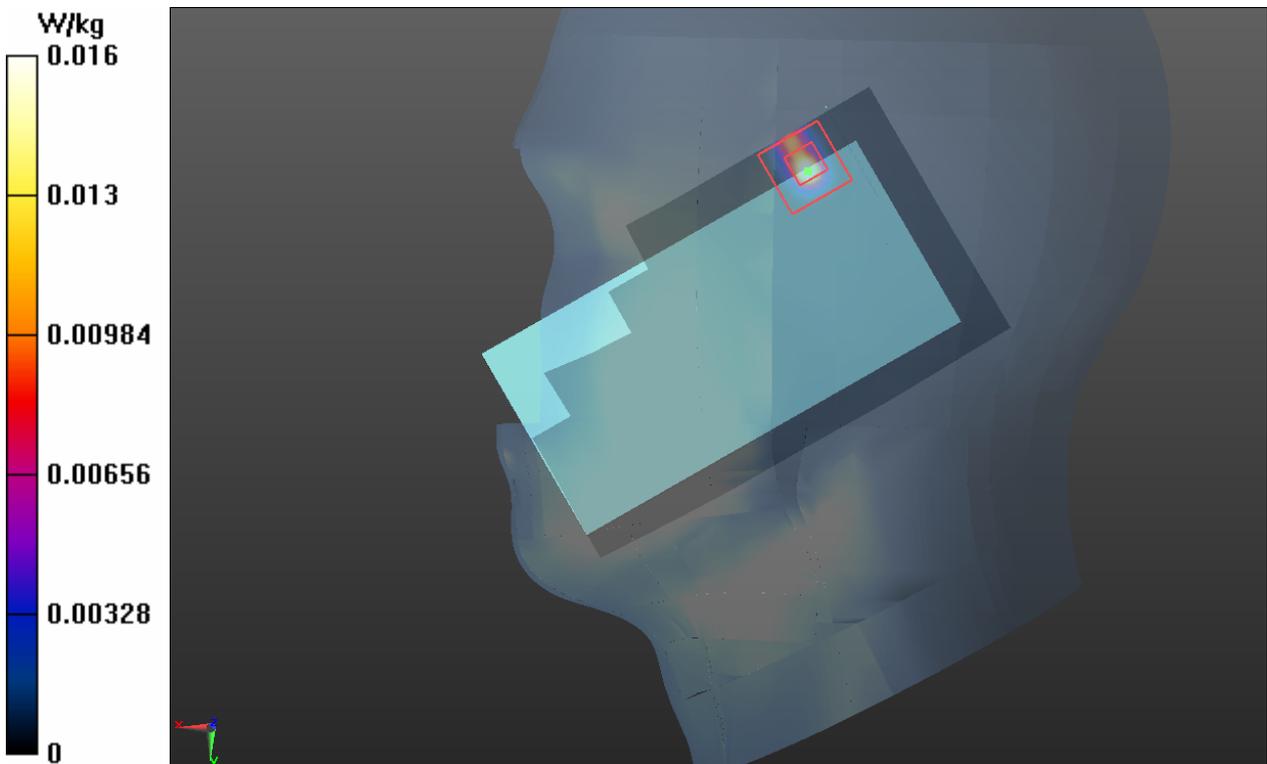**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.0420 W/kg

SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.006 W/kg

Maximum value of SAR (measured) = 0.0164 W/kg

Plot 56 802.11b Back Side Middle (Distance 10mm)

Date: 4/1/2016

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.963 S/m; ε_r = 52.54; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.22, 7.22, 7.22); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 2; Type: SAM;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Back Side Middle/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0127 W/kg

Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.5770 V/m; Power Drift =0.055 dB

Peak SAR (extrapolated) = 0.0770 W/kg

SAR(1 g) = 0.020 W/kg; SAR(10 g) = 0.00487 W/kg

Maximum value of SAR (measured) = 0.0183 W/kg

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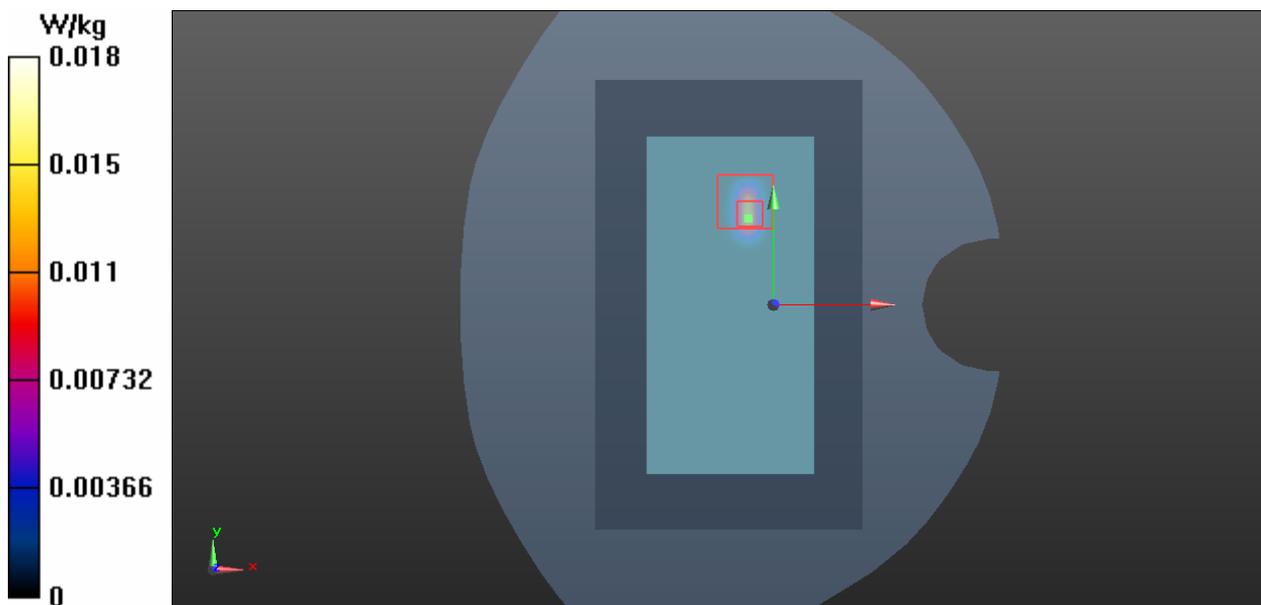
Plot 57 802.11b Left Edge Middle (Distance 10mm)

Date: 4/1/2016

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.963 S/m; ε_r = 52.54; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.22, 7.22, 7.22); Calibrated: 12/10/2015;

Electronics: DAE4 Sn871; Calibrated: 11/17/2015

Phantom: SAM 2; Type: SAM;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Left Side Middle/Area Scan (51x 181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0188 W/kg

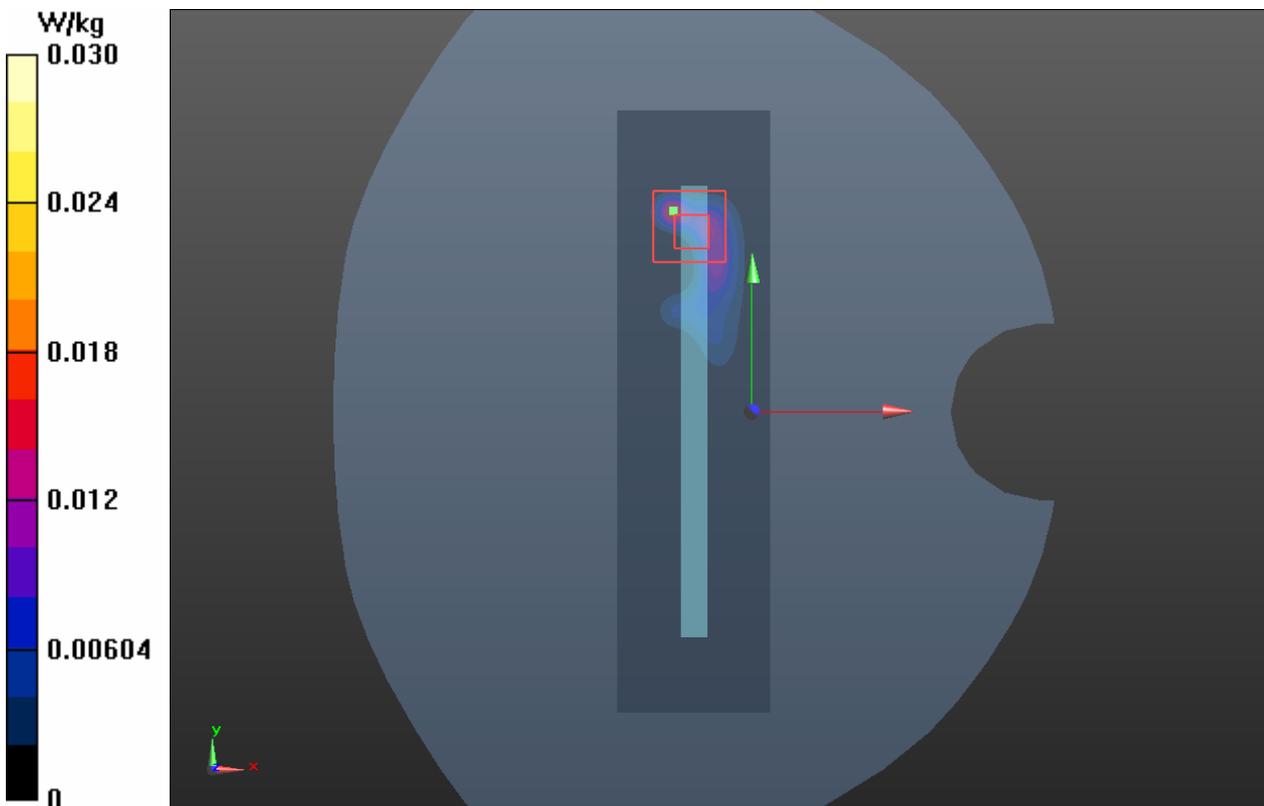**Left Side Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.7800 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 0.0550 W/kg

SAR(1 g) = 0.032 W/kg; SAR(10 g) = 0.00772 W/kg

Maximum value of SAR (measured) = 0.0302 W/kg

ANNEX D: Probe Calibration Certificate

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CALIBRATION LABORATORY

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ilac-MRA   CNAS

CALIBRATION
No. L0570

Client	TA(Shanghai)	Certificate No: Z15-97193

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:3677
Calibration Procedure(s)	FD-Z11-2-004-01 Calibration Procedures for Dosimetric E-field Probes
Calibration date:	December 10, 2015

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$(22\pm3)^\circ C$ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards		ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter	NRP2	101919	01-Jul-15 (CTTL, No.J15X04256)	Jun-16
Power sensor	NRP-Z91	101547	01-Jul-15 (CTTL, No.J15X04256)	Jun-16
Power sensor	NRP-Z91	101548	01-Jul-15 (CTTL, No.J15X04256)	Jun-16
Reference10dBAttenuator		18N50W-10dB	13-Mar-14(TMC,No.JZ14-1103)	Mar-16
Reference20dBAttenuator		18N50W-20dB	13-Mar-14(TMC,No.JZ14-1104)	Mar-16
Reference Probe EX3DV4		SN 7307	27-Feb-15(SPEAG,No.EX3-7307_Feb15)	Feb-16
DAE4		SN 771	27-Jan-15(SPEAG, No.DAE4-771_Jan15)	Jan -16
Secondary Standards		ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGeneratorMG3700A		6201052605	01-Jul-15 (CTTL, No.J15X04255)	Jun-16
Network Analyzer E5071C		MY46110673	03-Feb-15 (CTTL, No.J15X00728)	Feb-16

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Qi Dianyuan	SAR Project Leader	
Approved by:	Lu Bingsong	Deputy Director of the laboratory	

Issued: December 11, 2015

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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i θ=0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

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, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300MHz to 3GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization θ=0 (f≤900MHz in TEM-cell; f＞1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below ConvF).
- *NORM(f)x,y,z = NORMx,y,z* frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- *Ax,y,z; Bx,y,z; Cx,y,z;VRx,y,z:*A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f≤800MHz) and inside waveguide using analytical field distributions based on power measurements for f >800MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from±50MHz to±100MHz.
- *Spherical isotropy (3D deviation from isotropy):* in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset:* The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle:* The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

Certificate No: Z15-97193   Page 2 of 11

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Probe EX3DV4

SN: 3677

Calibrated: December 10, 2015

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

Certificate No: Z15-97193   Page 3 of 11

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DASY/EASY – Parameters of Probe: EX3DV4 – SN: 3677

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm(µV/(V/m)²) A	0.40	0.46	0.40	±10.8%
DCP(mV) B	100.6	103.2	101.6	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√µV	C	D dB	VR mV	Unc E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	172.8	±2.1%
		Y	0.0	0.0	1.0		187.6	
		Z	0.0	0.0	1.0		171.1	

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%.

A The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Page 5 and Page 6).
B Numerical linearization parameter: uncertainty not required.
E Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

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DASY/EASY – Parameters of Probe: EX3DV4 – SN: 3677

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz][C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unct. (k=2)
750	41.9	0.89	9.69	9.69	9.69	0.13	1.00	±12%
850	41.5	0.92	9.35	9.35	9.35	0.14	1.23	±12%
1750	40.1	1.37	7.98	7.98	7.98	0.17	1.21	±12%
1900	40.0	1.40	7.96	7.96	7.96	0.13	1.52	±12%
2300	39.5	1.67	7.60	7.60	7.60	0.44	0.74	±12%
2450	39.2	1.80	7.39	7.39	7.39	0.51	0.72	±12%
2600	39.0	1.96	7.18	7.18	7.18	0.27	1.20	±12%
5200	36.0	4.66	5.58	5.58	5.58	0.38	1.25	±13%
5300	35.9	4.76	5.34	5.34	5.34	0.37	1.23	±13%
5600	35.5	5.07	4.85	4.85	4.85	0.40	1.10	±13%
5800	35.3	5.27	4.81	4.81	4.81	0.40	1.32	±13%

[C] Frequency validity of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] At frequency below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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DASY/EASY – Parameters of Probe: EX3DV4 – SN: 3677

Calibration Parameter Determined in Body Tissue Simulating Media

f [MHz][C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unct. (k=2)
750	55.5	0.96	9.71	9.71	9.71	0.20	1.00	±12%
850	55.2	0.99	9.42	9.42	9.42	0.15	1.52	±12%
1750	53.4	1.49	7.65	7.65	7.65	0.15	1.52	±12%
1900	53.3	1.52	7.42	7.42	7.42	0.15	1.42	±12%
2300	52.9	1.81	7.39	7.39	7.39	0.42	0.85	±12%
2450	52.7	1.95	7.22	7.22	7.22	0.29	1.27	±12%
2600	52.5	2.16	6.95	6.95	6.95	0.32	1.07	±12%
5200	49.0	5.30	4.93	4.93	4.93	0.40	1.30	±13%
5300	48.9	5.42	4.69	4.69	4.69	0.40	1.20	±13%
5600	48.5	5.77	4.18	4.18	4.18	0.42	1.30	±13%
5800	48.2	6.00	4.23	4.23	4.23	0.42	1.20	±13%

[C] Frequency validity of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
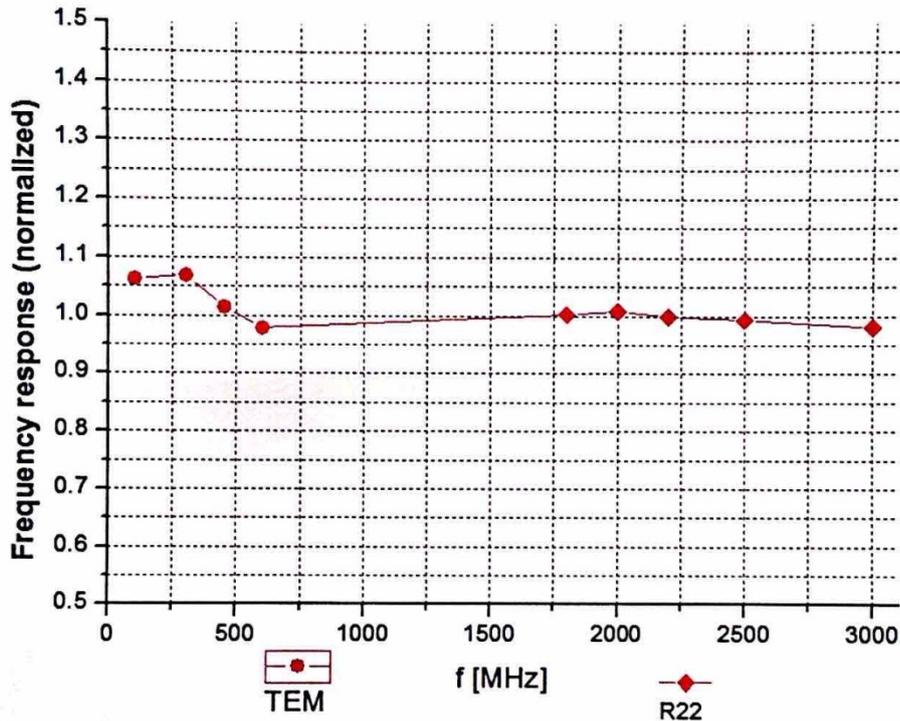[F] At frequency below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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Frequency Response of E-Field
(TEM-Cell: ifi110 EXX, Waveguide: R22)
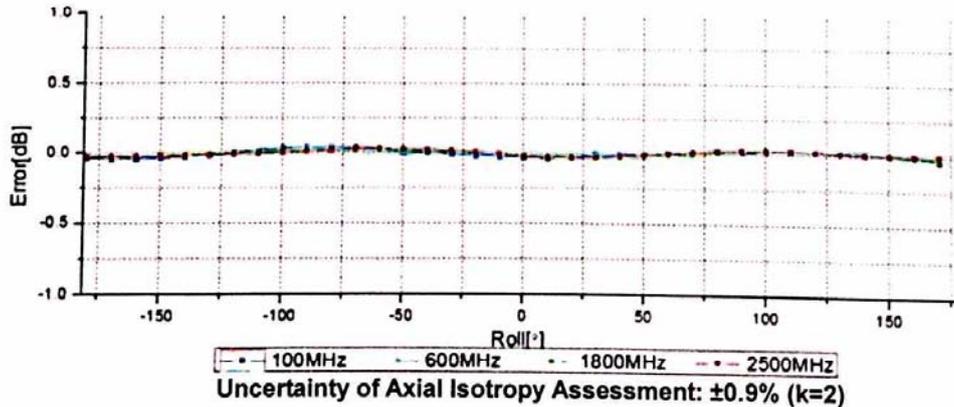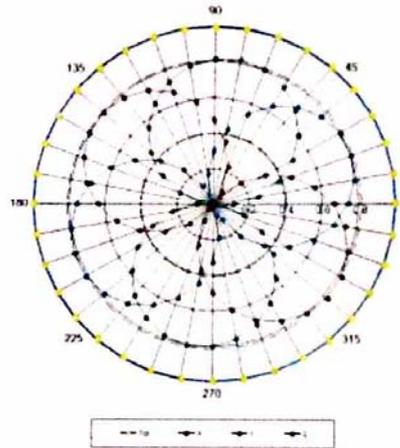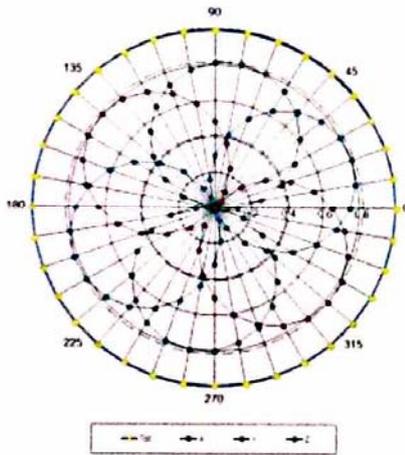
Uncertainty of Frequency Response of E-field: ±7.5% (k=2)

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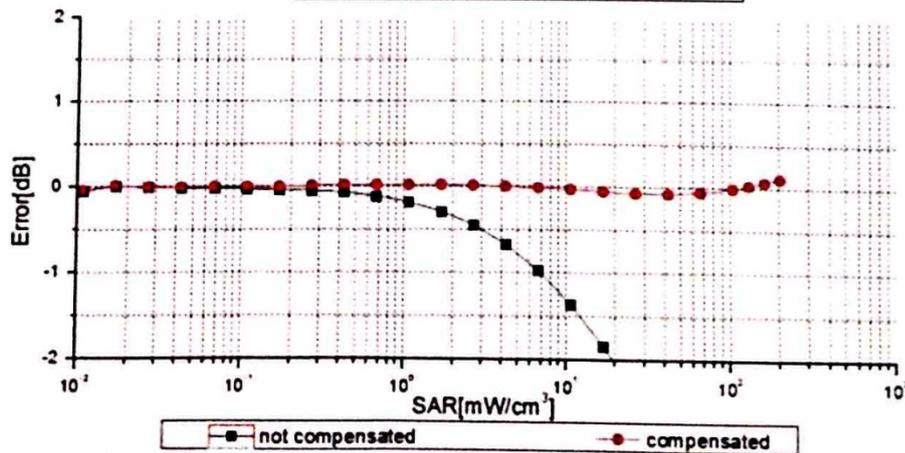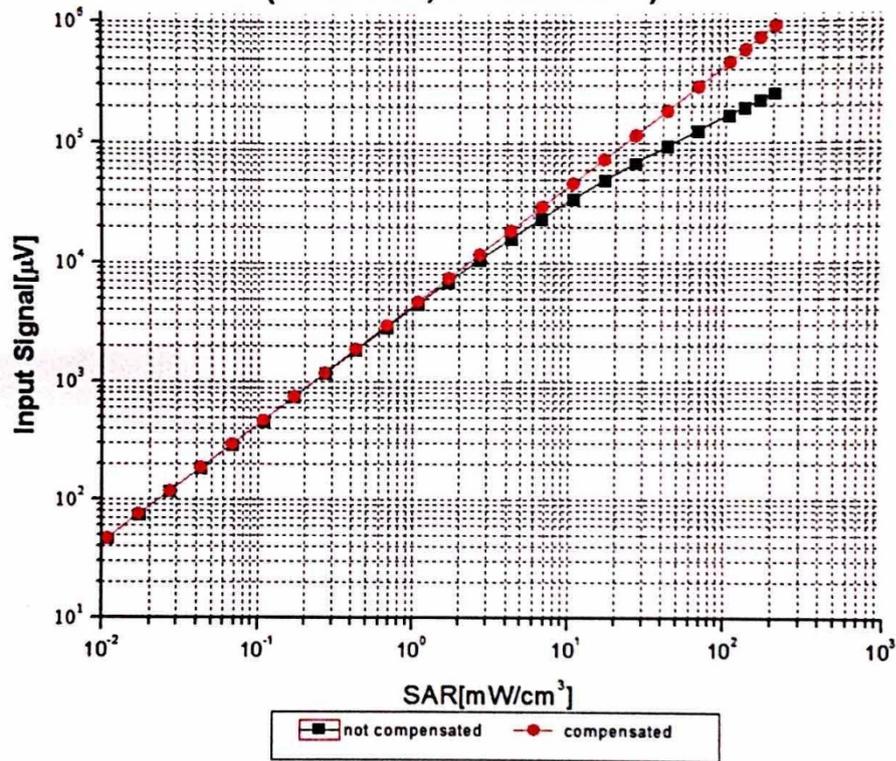In Collaboration with
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Receiving Pattern (Φ), θ=0°

f=600 MHz, TEM   f=1800 MHz, R22

Uncertainty of Axial Isotropy Assessment: ±0.9% (k=2)

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Dynamic Range f(SAR$_{head}$)
(TEM cell, f = 900 MHz)

Uncertainty of Linearity Assessment: ±0.9% (k=2)

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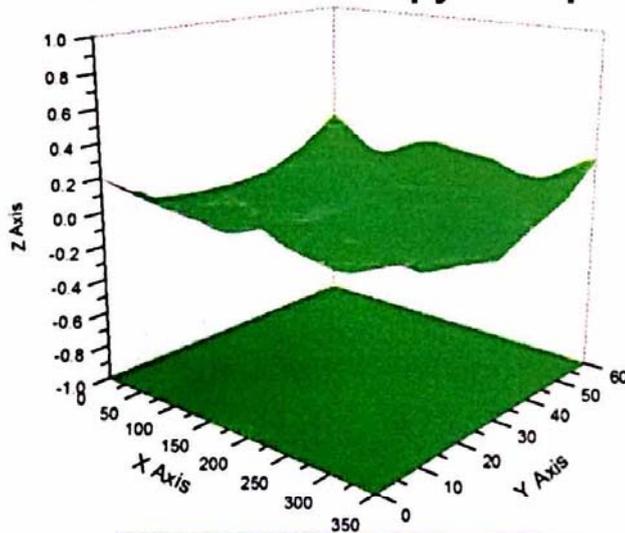
Conversion Factor Assessment

f=850 MHz, WGLS R9(H_convF)   f=1750 MHz, WGLS R22(H_convF)
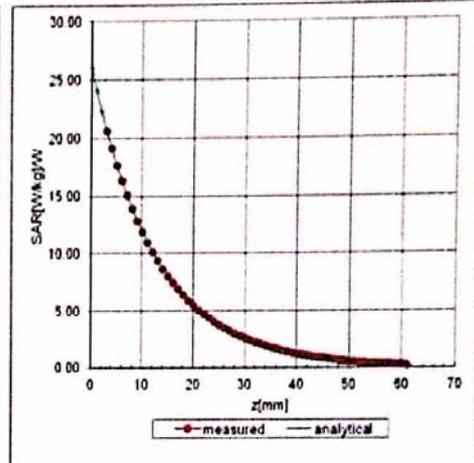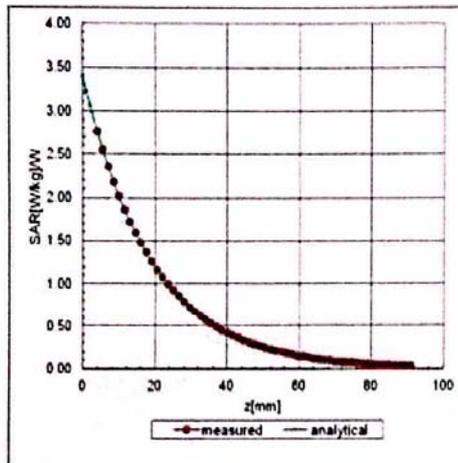
Deviation from Isotropy in Liquid

Uncertainty of Spherical Isotropy Assessment: ±2.8% (K=2)

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