

1900 Left Tilt High

Date/Time: 2009-7-17 17:18:09

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt High/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.234 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.83 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.121 mW/g

Maximum value of SAR (measured) = 0.214 mW/g

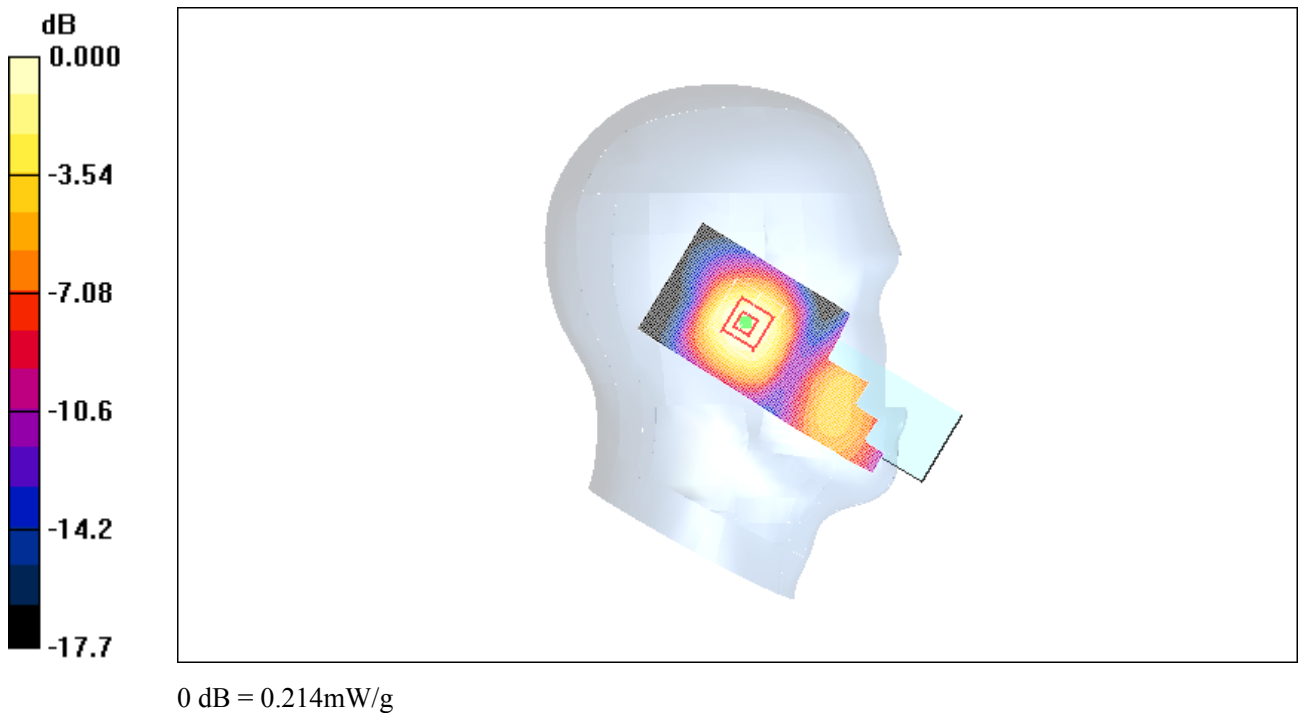


Fig.20 1900 MHz CH810

1900 Left Tilt Middle

Date/Time: 2009-7-17 16:53:31

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.242 mW/g

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

Reference Value = 5.98 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 0.307 W/kg

SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.125 mW/g

Maximum value of SAR (measured) = 0.220 mW/g

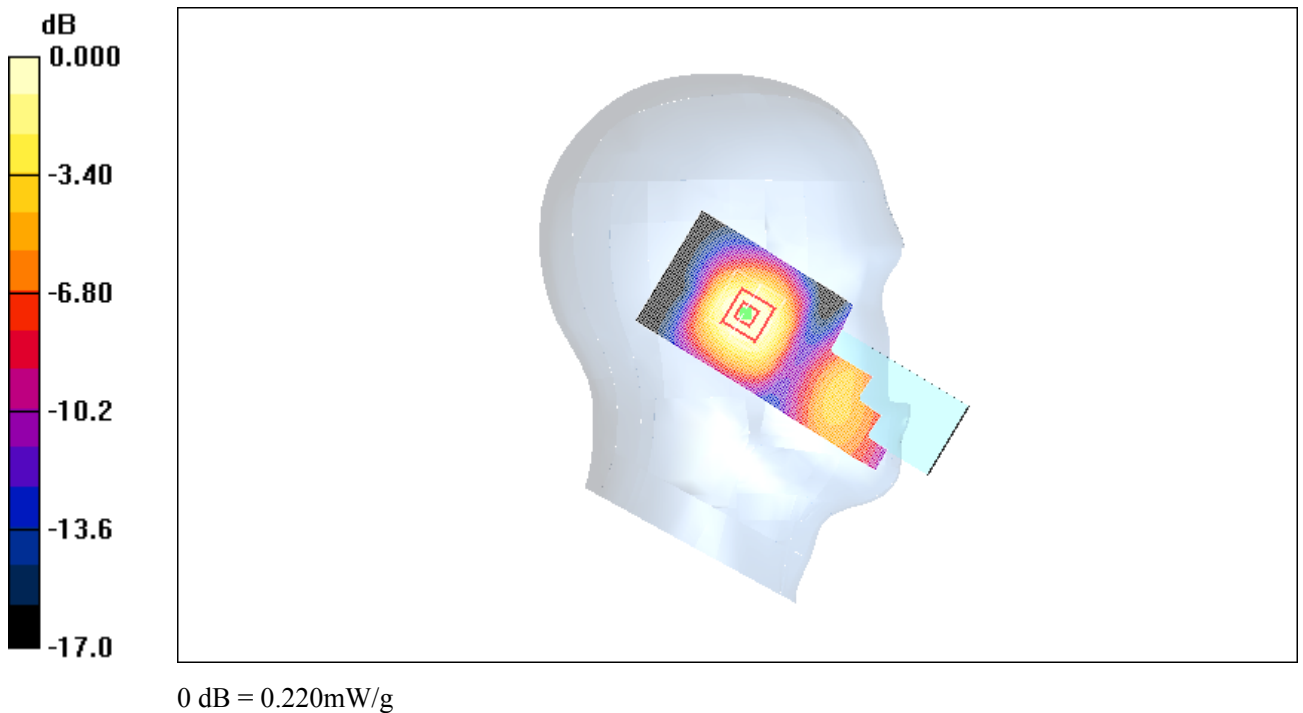


Fig. 21 1900 MHz CH661

1900 Left Tilt Low

Date/Time: 2009-7-17 16:32:02

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Low/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.222 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.92 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.283 W/kg

SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.203 mW/g

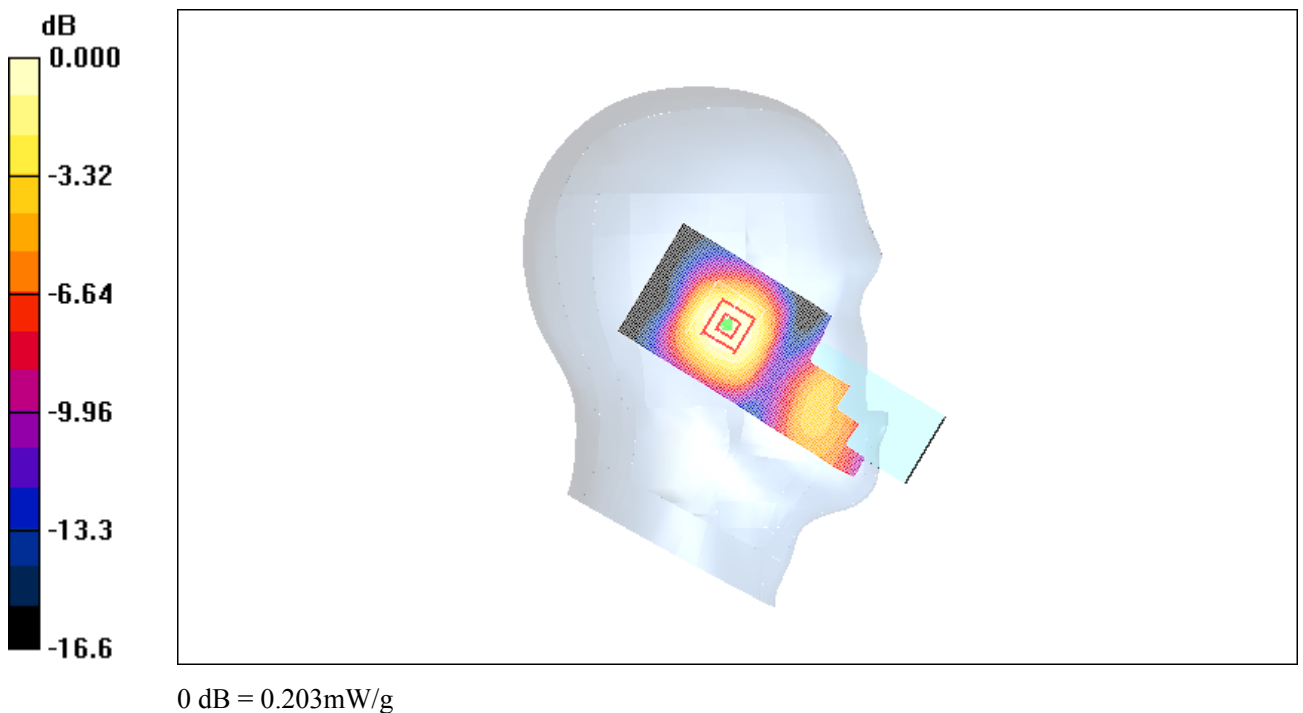


Fig. 22 1900 MHz CH512

1900 Right Cheek High

Date/Time: 2009-7-17 17:34:09

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (51x131x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (interpolated) = 0.643 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.66 V/m; Power Drift = -0.154 dB

Peak SAR (extrapolated) = 0.824 W/kg

SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.348 mW/g

Maximum value of SAR (measured) = 0.587 mW/g

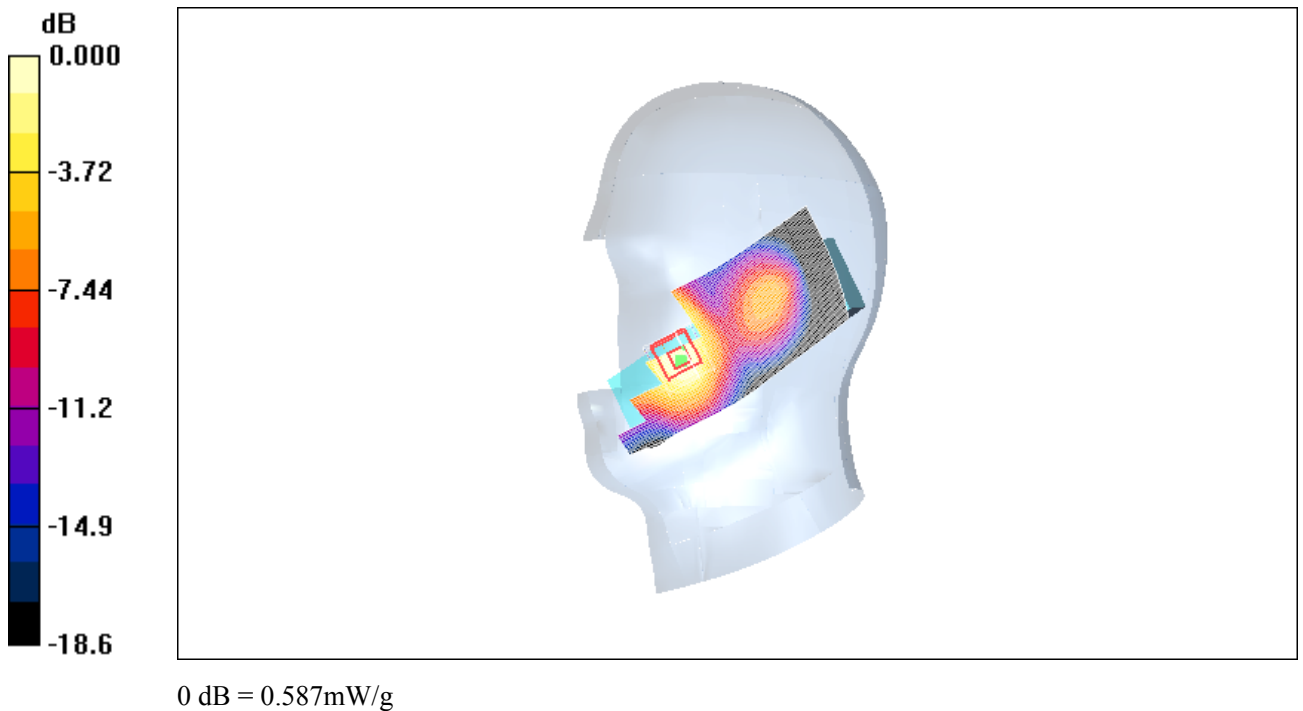


Fig. 23 1900 MHz CH810

1900 Right Cheek Middle

Date/Time: 2009-7-17 17:47:27

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.673 mW/g

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

Reference Value = 3.95 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.881 W/kg

SAR(1 g) = 0.624 mW/g; SAR(10 g) = 0.378 mW/g

Maximum value of SAR (measured) = 0.666 mW/g

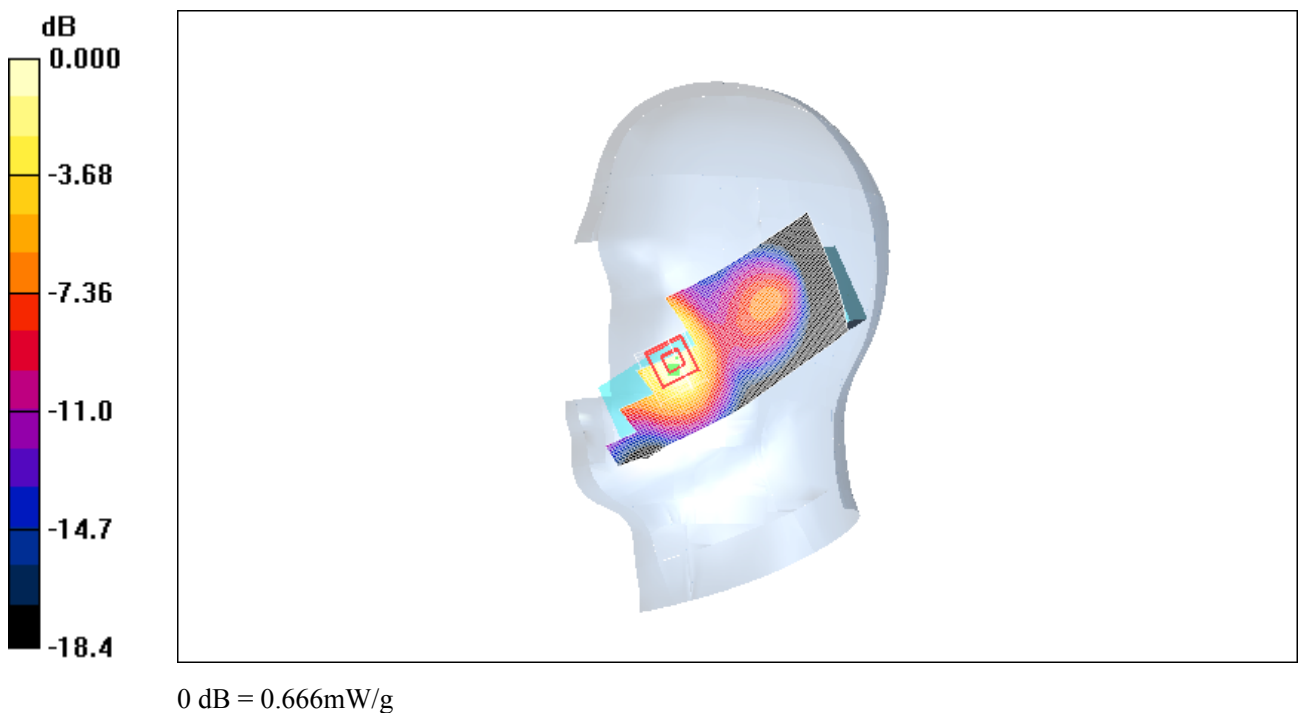


Fig. 24 1900 MHz CH661

1900 Right Cheek Low

Date/Time: 2009-7-22 18:04:36

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.639 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.87 V/m; Power Drift = -0.192 dB

Peak SAR (extrapolated) = 0.840 W/kg

SAR(1 g) = 0.573 mW/g; SAR(10 g) = 0.349 mW/g

Maximum value of SAR (measured) = 0.590 mW/g

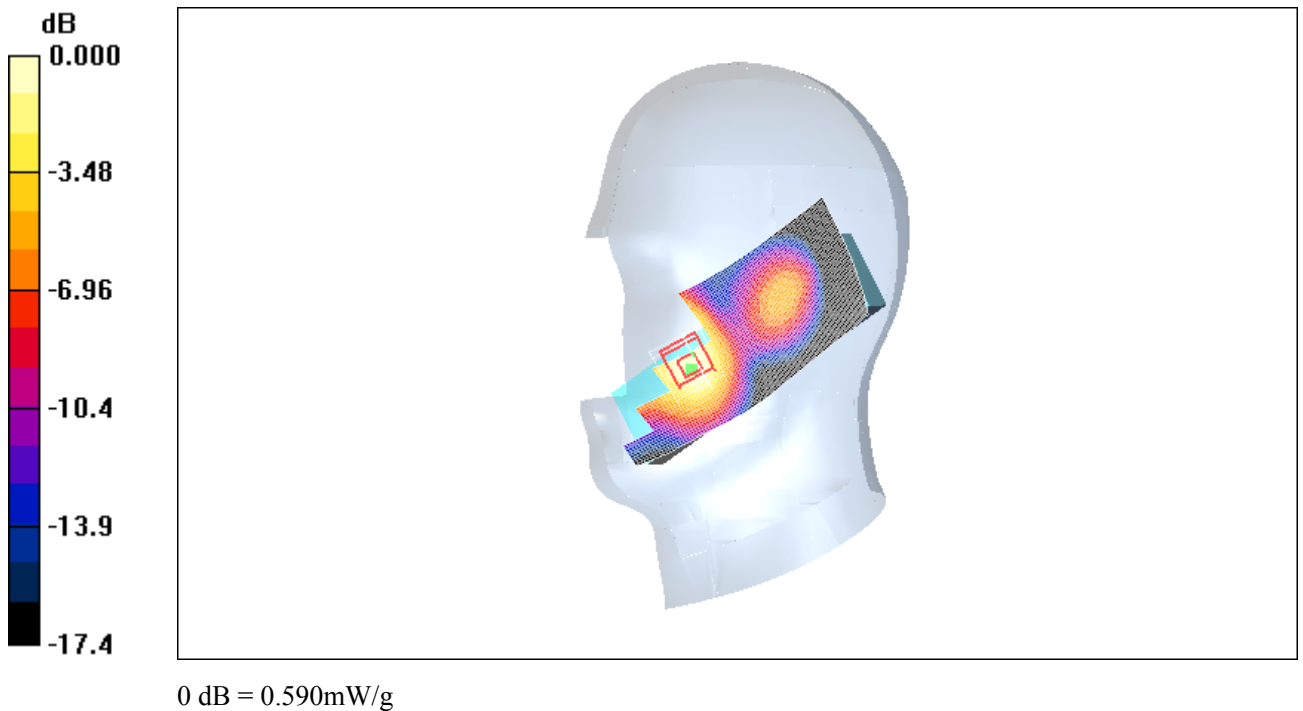


Fig. 25 1900 MHz CH512

1900 Right Tilt High

Date/Time: 2009-7-17 15:33:41

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt High/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.241 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.28 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.126 mW/g

Maximum value of SAR (measured) = 0.212 mW/g

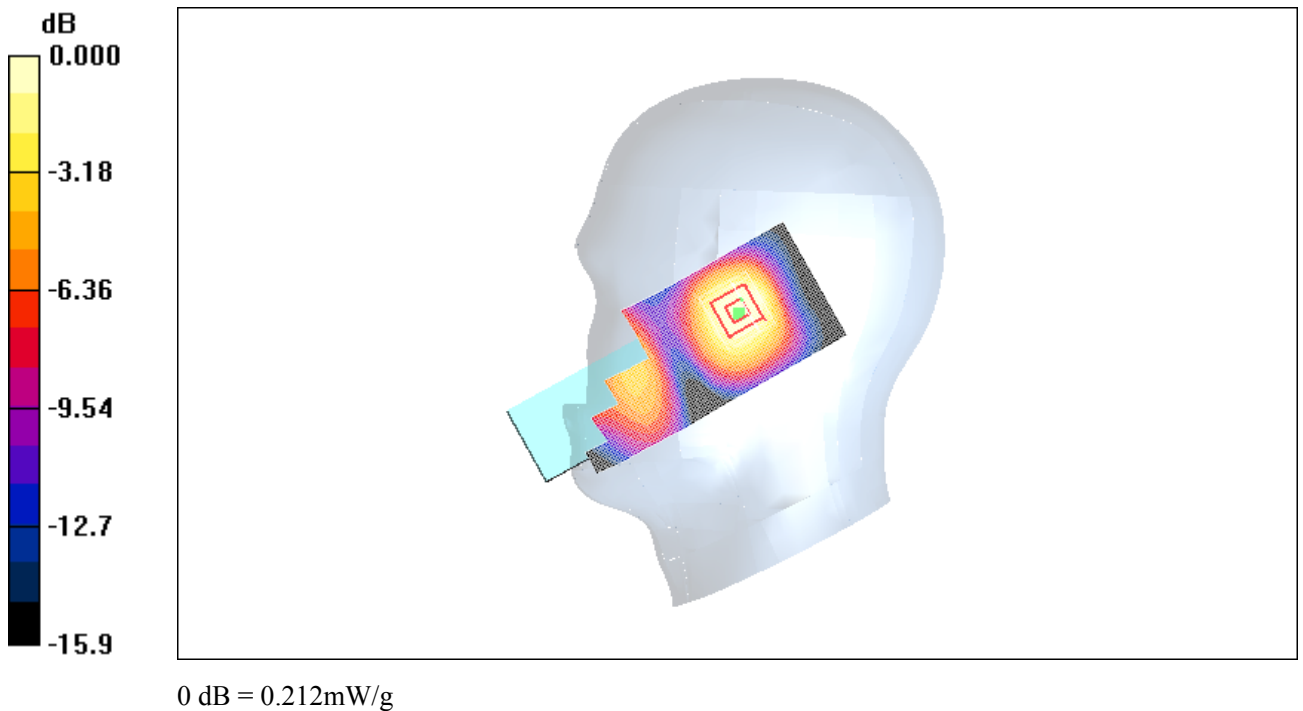


Fig. 26 1900 MHz CH810

1900 Right Tilt Middle

Date/Time: 2009-7-17 15:19:48

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.256 mW/g

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

Reference Value = 7.63 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 0.345 W/kg

SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.135 mW/g

Maximum value of SAR (measured) = 0.225 mW/g

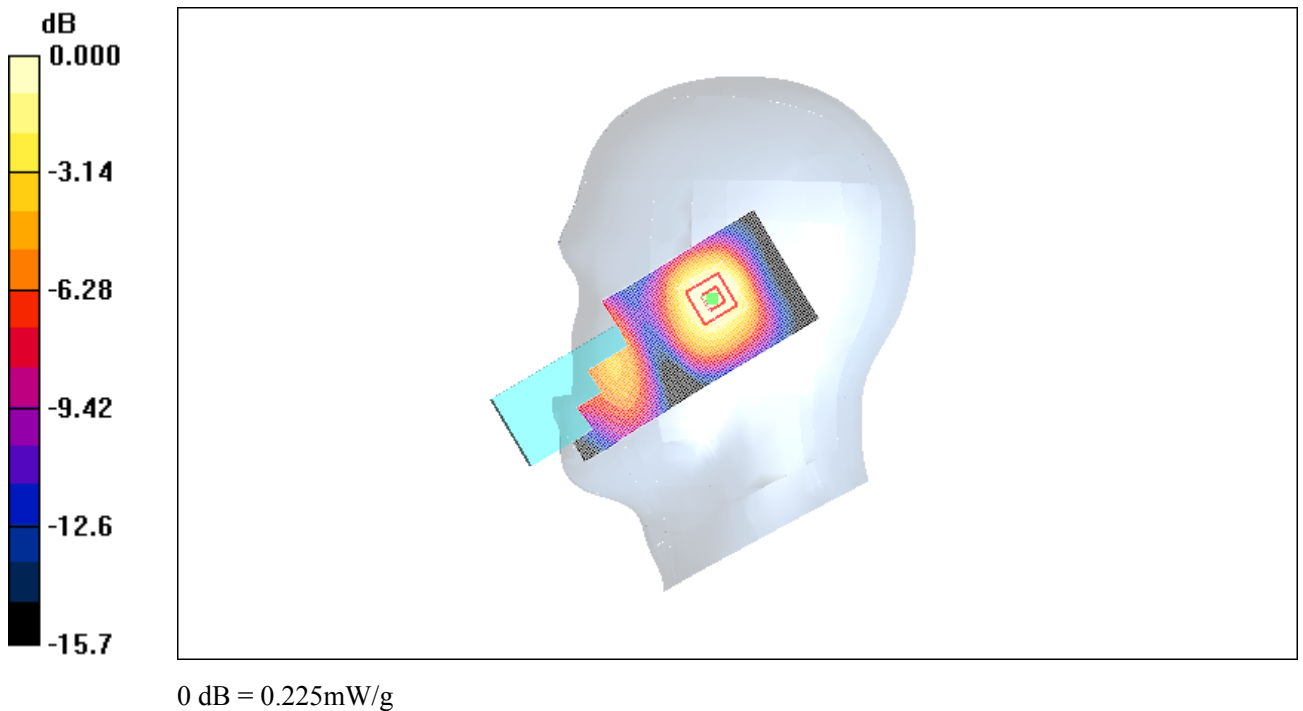


Fig.27 1900 MHz CH661

1900 Right Tilt Low

Date/Time: 2009-7-17 15:07:17

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Low/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.262 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.71 V/m; Power Drift = 0.162 dB

Peak SAR (extrapolated) = 0.348 W/kg

SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.139 mW/g

Maximum value of SAR (measured) = 0.233 mW/g

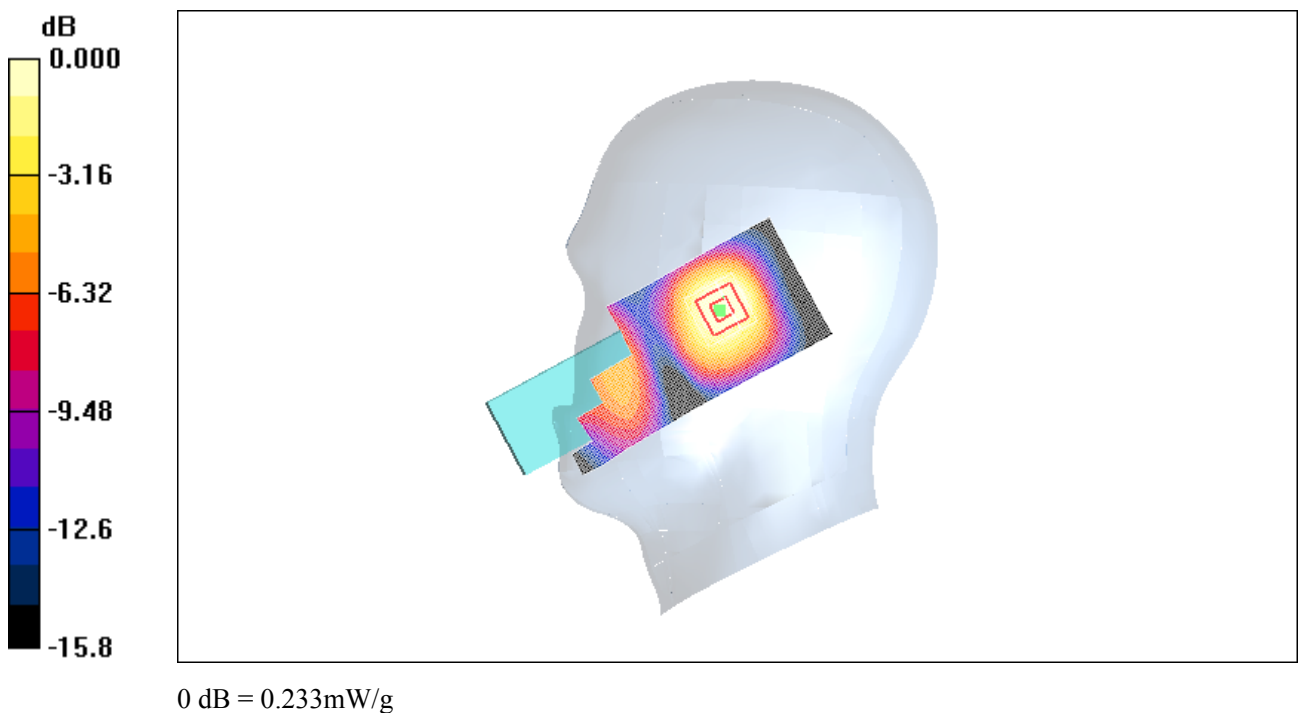


Fig.28 1900 MHz CH512

1900 Body Towards Ground High With GPRS

Date/Time: 2009-7-17 9:57:27

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Towards Ground High/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.471 mW/g

Towards Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = -0.075 dB

Peak SAR (extrapolated) = 0.664 W/kg

SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.271 mW/g

Maximum value of SAR (measured) = 0.461 mW/g

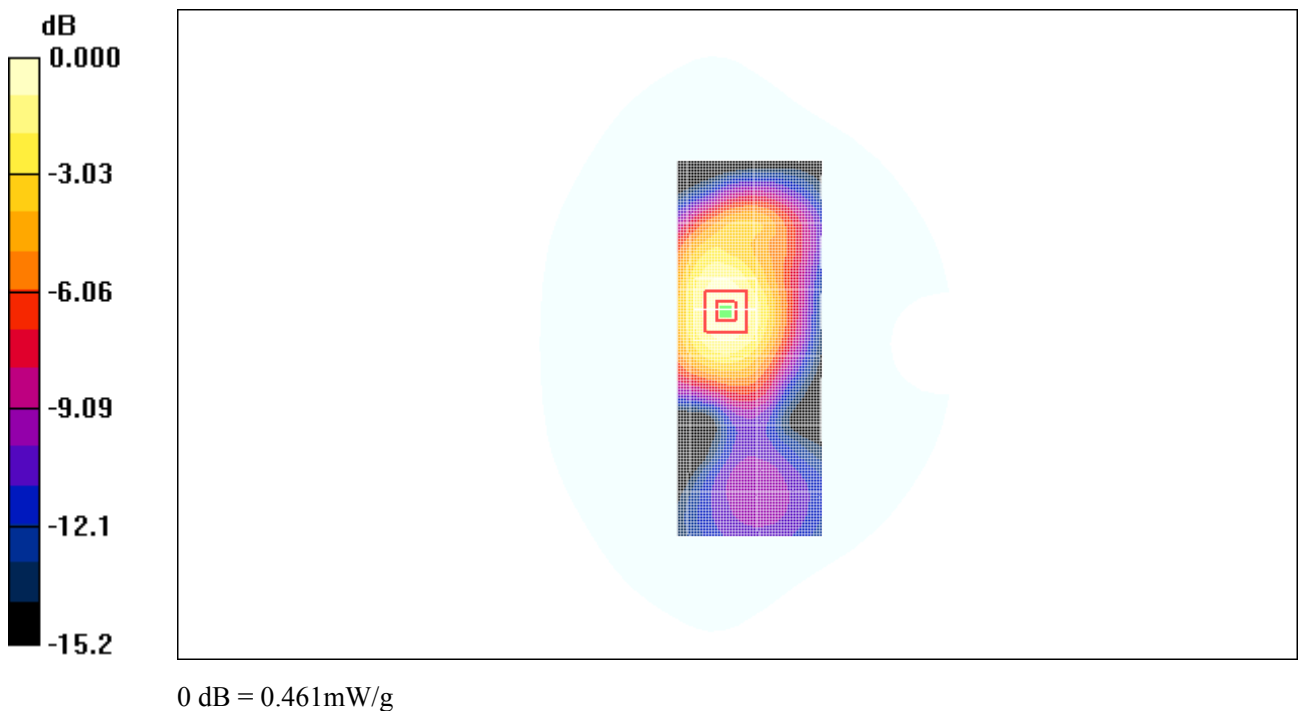


Fig. 29-1 1900 MHz CH810

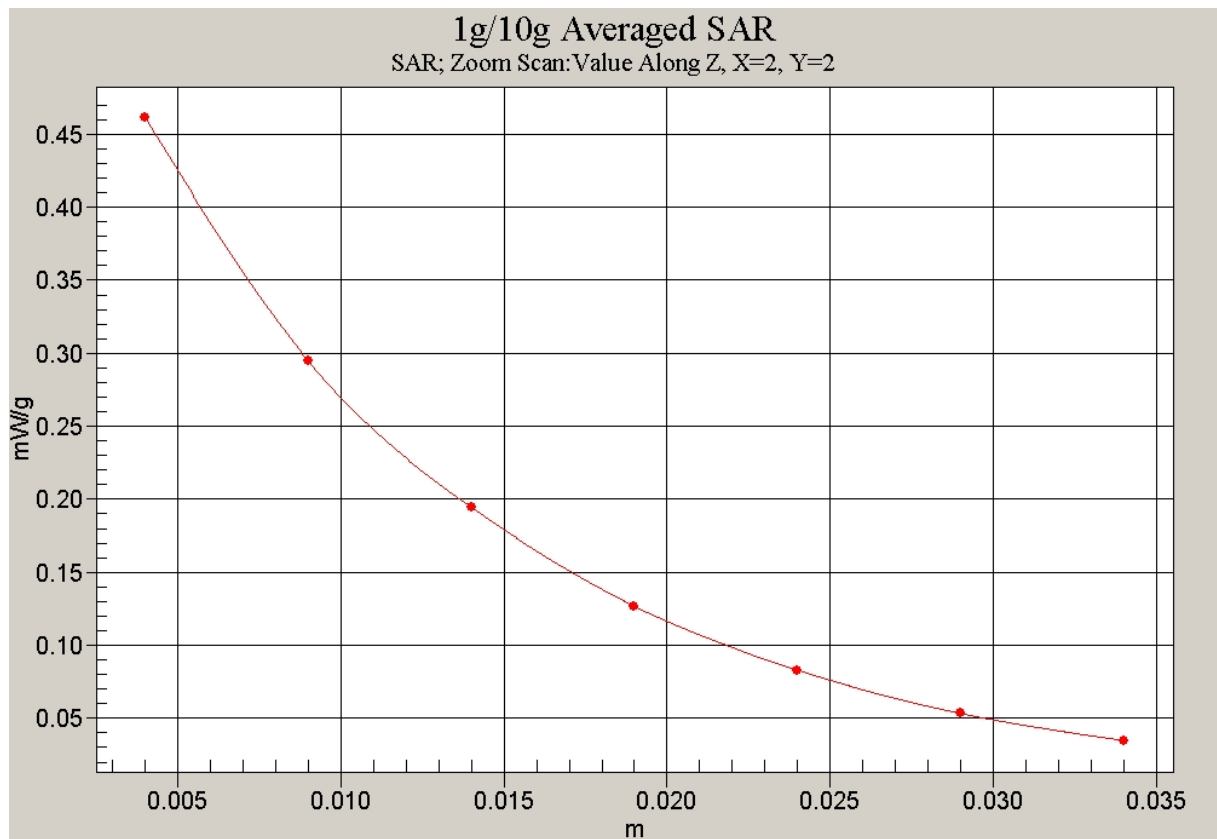


Fig. 29-2 Z-Scan at power reference point (1900 MHz CH810)

1900 Body Towards Ground Middle With GPRS

Date/Time: 2009-7-17 10:25:39

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Towards Ground Middle/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.418 mW/g

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

Reference Value = 13.5 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.586 W/kg

SAR(1 g) = 0.386 mW/g; SAR(10 g) = 0.246 mW/g

Maximum value of SAR (measured) = 0.413 mW/g

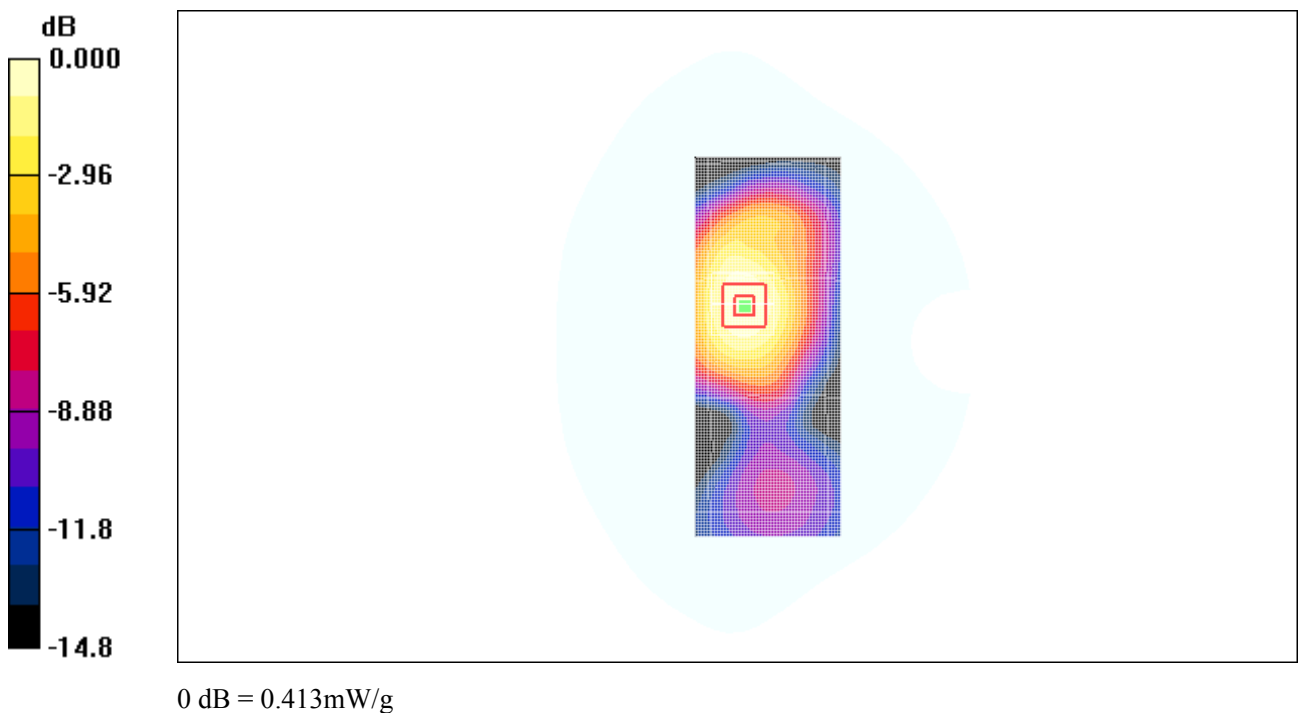


Fig. 30 1900 MHz CH661

1900 Body Towards Ground Low With GPRS

Date/Time: 2009-7-17 10:40:04

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Towards Ground Low/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.385 mW/g

Towards Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.1 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.226 mW/g

Maximum value of SAR (measured) = 0.381 mW/g

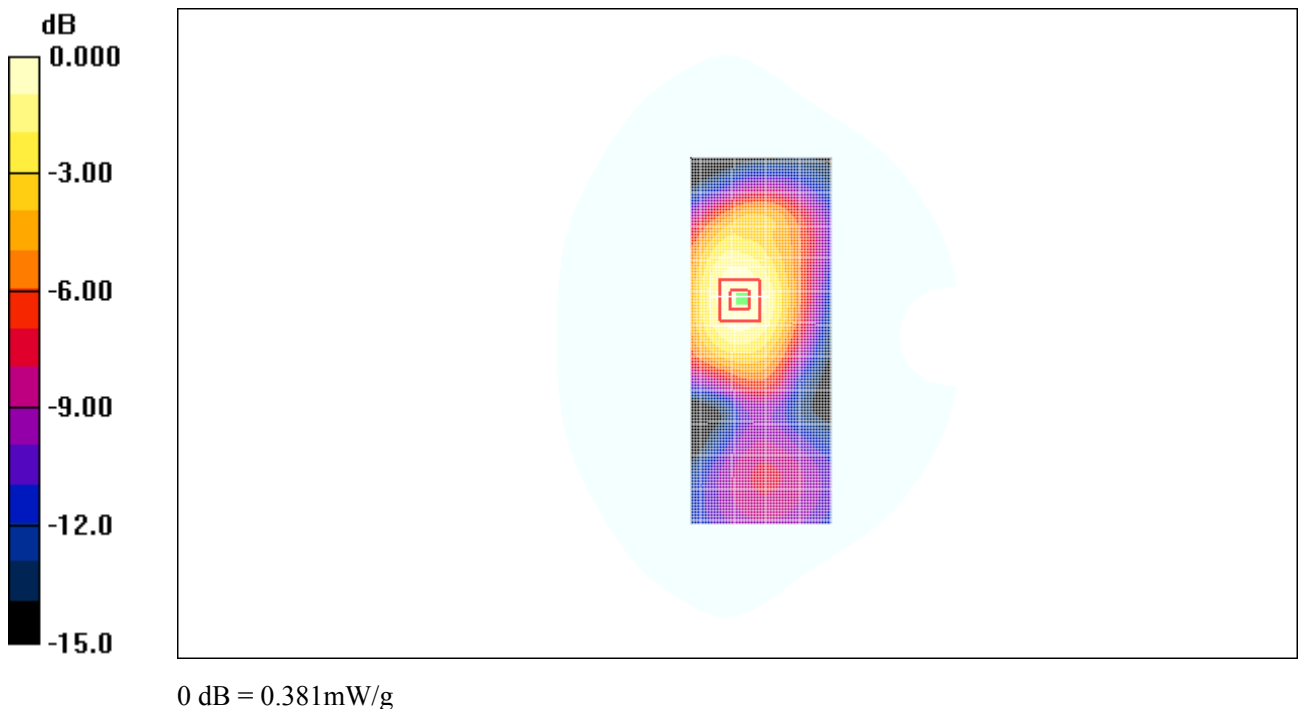


Fig. 31 1900 MHz CH512

1900 Body Towards Ground High with Headset

Date/Time: 2009-7-17 10:57:12

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz new Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Towards Ground High/Area Scan (51x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.255 mW/g

Towards Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.77 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.150 mW/g

Maximum value of SAR (measured) = 0.254 mW/g

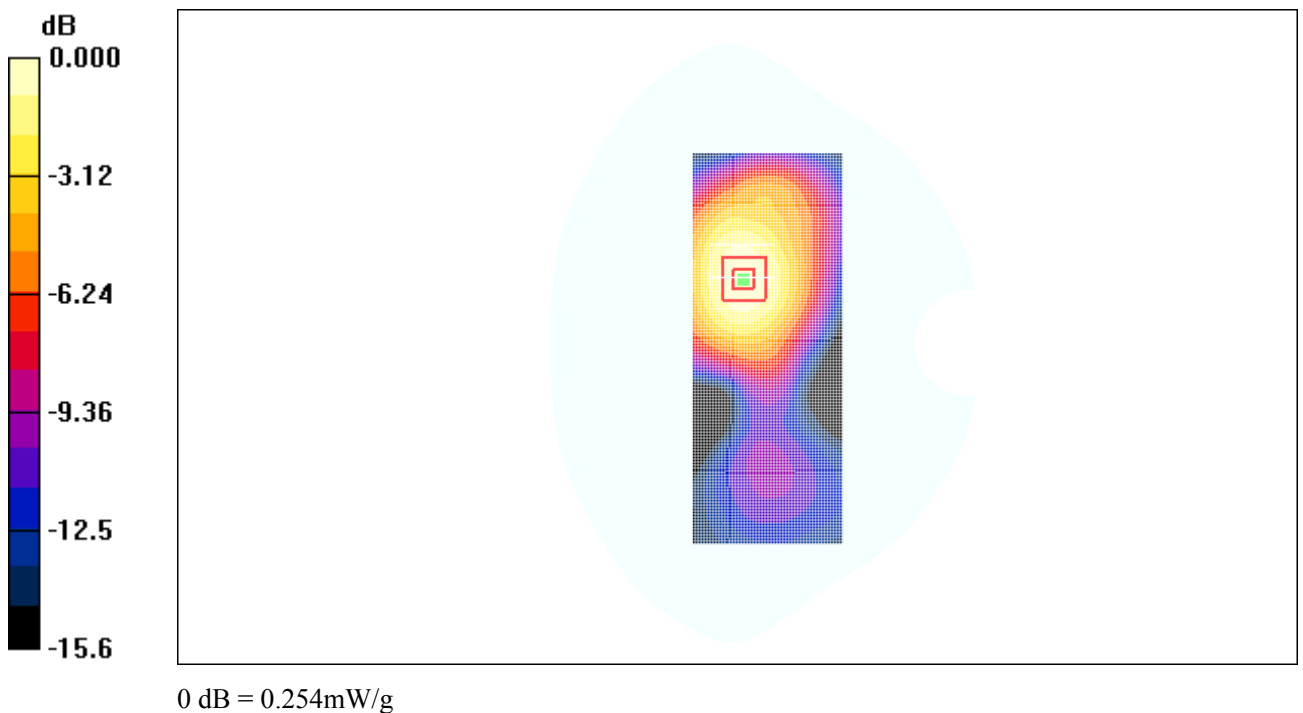


Fig. 32 1900 MHz CH512

ANNEX D SYSTEM VALIDATION RESULTS

835MHz

Date/Time: 2009-7-21 7:52:22

Electronics: DAE4 Sn771

Medium: Head 835

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.90 \text{ mho/m}$; $\epsilon_r = 40.4$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

835MHz/Area Scan (101x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 2.68 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.8 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.50 mW/g ; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 2.69 mW/g

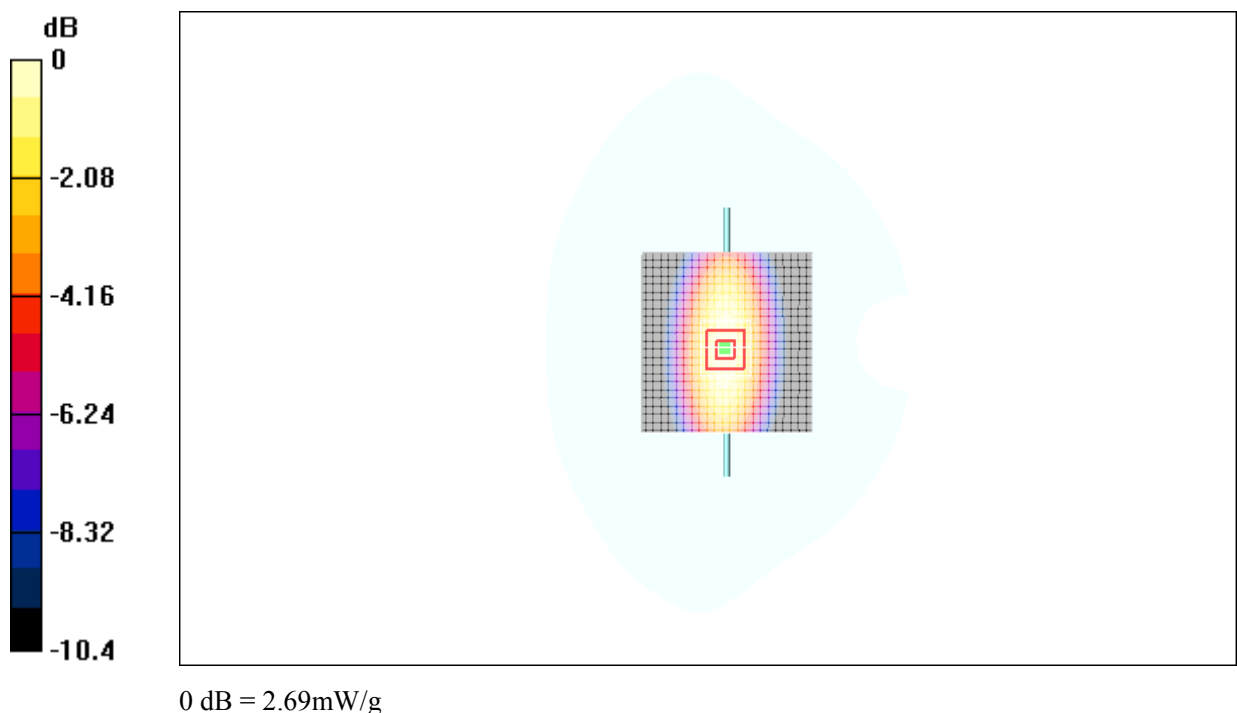


Fig.33 validation 835MHz 250mW

1900MHz

Date/Time: 2009-7-17 7:48:12

Electronics: DAE4 Sn771

Medium: Head 1900

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

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

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

System Validation/Area Scan (101x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 11.2 mW/g

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 92.1 V/m ; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.91 mW/g ; SAR(10 g) = 5.27 mW/g

Maximum value of SAR (measured) = 11.3 mW/g

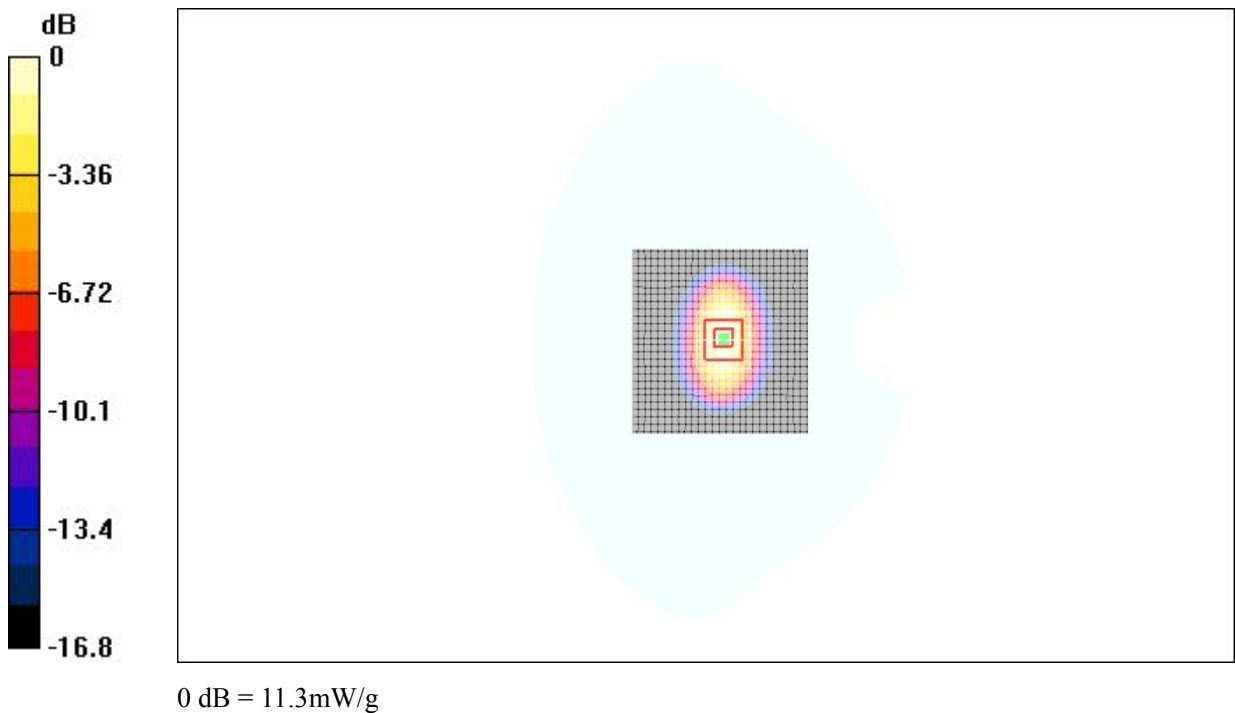


Fig.34 validation 1900MHz 250mW

ANNEX E PROBE CALIBRATION CERTIFICATE

**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 108**

Client **TMC China**

Certificate No: **ES3DV3-3149_Oct08**

CALIBRATION CERTIFICATE

Object	ES3DV3-SN: 3149
Calibration procedure(s)	QA CAL-01.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	October 1, 2008
Condition of the calibrated item	In Tolerance

This calibration certify 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 at an environment temperature (22±3)°C and humidity<70%

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Data (Calibrated by, Certification NO.)	Scheduled Calibration
Power meter E4419B	GB41293874	6-May-08 (METAS, NO. 251-00388)	May-09
Power sensor E4412A	MY41495277	6-May-08 (METAS, NO. 251-00388)	May-09
Reference 3 dB Attenuator	SN:S5054 (3c)	11-Aug-08 (METAS, NO. 251-00403)	Aug-09
Reference 20 dB Attenuator	SN:S5086 (20b)	4-May-08 (METAS, NO. 251-00389)	May-09
Reference 30 dB Attenuator	SN:S5129 (30b)	11-Aug-08 (METAS, NO. 251-00404)	Aug-09
DAE4	SN:617	11-Jun-08 (SPEAG, NO.DAE4-907_Jun08)	Jun-09
Reference Probe ES3DV2	SN: 3013	13-Jan-08 (SPEAG, NO. ES3-3013_Jan08)	Jan-09

Secondary Standards	ID#	Check Data (in house)	Scheduled Calibration
RF generator HP8648C	US3642U01700	4-Aug-99(SPEAG, in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01(SPEAG, in house check Nov-07)	In house check: Nov-09

Calibrated by:	Katja Pokovic	Technical Manager	
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Approved by:	Niels Kuster	Quality Manager	
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Issued: October 1, 2008

This calibration certificate shall not be reported except in full without written approval of the laboratory.

Certificate No: **ES3DV3-3149_Oct08**

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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 108**

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
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.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- 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 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}:** Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(*f*)_{x,y,z} = NORM_{x,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*.
- DCP_{x,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.
- ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,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 ± 50 MHz to ± 100 MHz.
- 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.

ES3DV3 SN: 3149

October 1, 2008

Probe ES3DV3

SN: 3149

Manufactured: June 12, 2007

Calibrated: October 1, 2008

Calibrated for DASY4 System

ES3DV3 SN: 3149

October 1, 2008

DASY – Parameters of Probe: ES3DV3 SN:3149

Sensitivity in Free Space^A

Diode Compression^B

NormX	1.14±10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$	DCP X	94mV
NormY	1.23±10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$	DCP Y	95mV
NormZ	1.29±10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$	DCP Z	91mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8

Boundary Effect

TSL 900MHz Typical SAR gradient: 5% per mm

Sensor Center to Phantom Surface Distance		3.0 mm	4.0 mm
SARbe[%]	Without Correction Algorithm	3.8	1.6
SARbe[%]	With Correction Algorithm	0.8	0.7

TSL 1810MHz Typical SAR gradient: 10% per mm

Sensor Center to Phantom Surface Distance		3.0 mm	4.0 mm
SARbe[%]	Without Correction Algorithm	6.8	3.6
SARbe[%]	With Correction Algorithm	0.4	0.2

Sensor Offset

Probe Tip to Sensor Center 2.0 mm

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 NormX,Y,Z do not affect the E^2 -field uncertainty inside TSL (see Page 8).

^B Numerical linearization parameter: uncertainty not required.