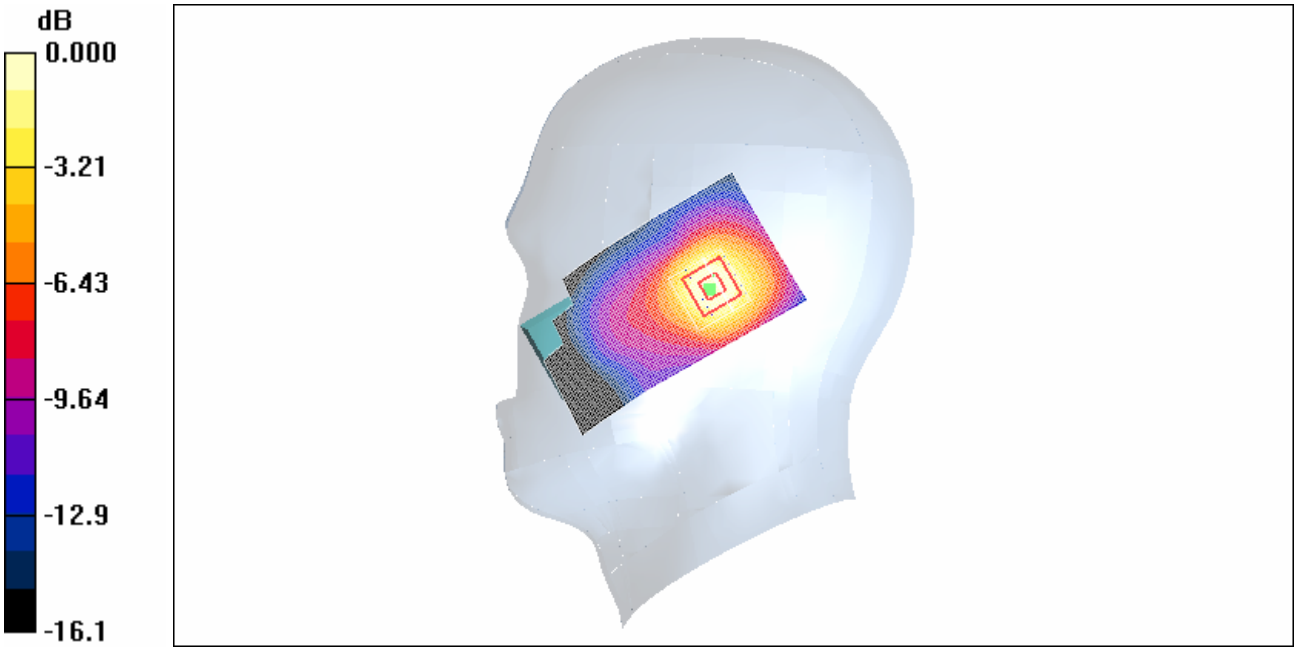
CDMA 1900 Right Tilt Low
Date/Time: 2007-11-2 11:06:43
Electronics: DAE4 Sn777
Medium: Head 1900 MHz
Medium parameters used (interpolated): f = 1851.25 MHz; σ = 1.33 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Tilt Low/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.471 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.6 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 0.696 W/kg
SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.236 mW/g
Maximum value of SAR (measured) = 0.431 mW/g



0 dB = 0.431mW/g

Fig.59 CDMA 1900 MHz CH25

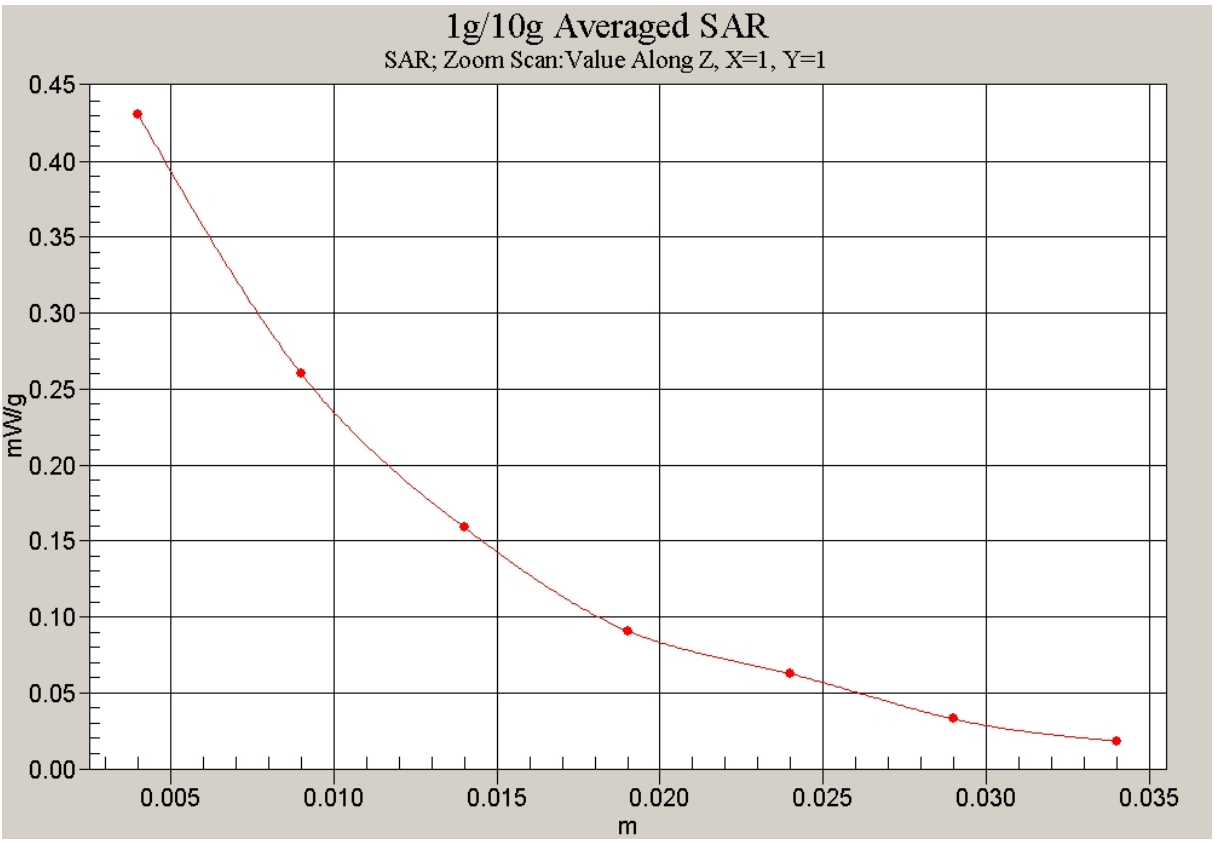
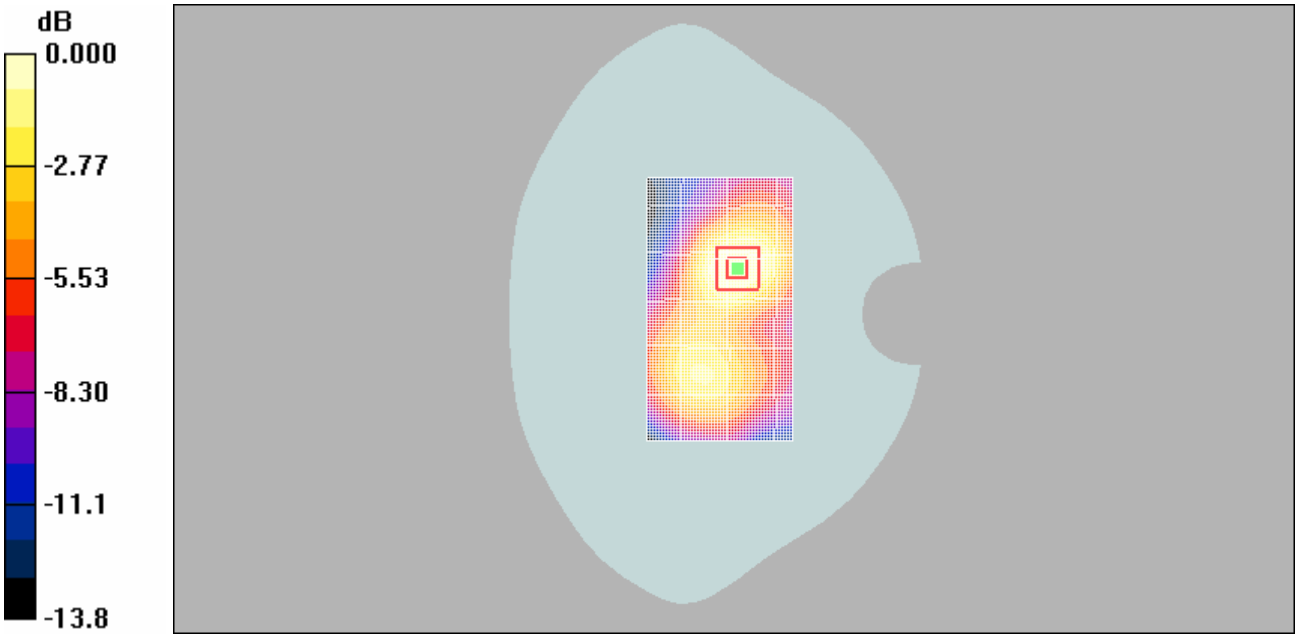


Fig. 60 Z-Scan at power reference point (CDMA 1900 MHz CH25)

CDMA 1900 Body Towards Phantom High
Date/Time: 2007-11-2 13:04:58
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.5 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Toward Phantom High/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.203 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.73 V/m; Power Drift = -0.200 dB
Peak SAR (extrapolated) = 0.293 W/kg
SAR(1 g) = 0.177 mW/g; SAR(10 g) = 0.107 mW/g
Maximum value of SAR (measured) = 0.176 mW/g



0 dB = 0.176mW/g

Fig. 61 CDMA 1900 MHz CH1175

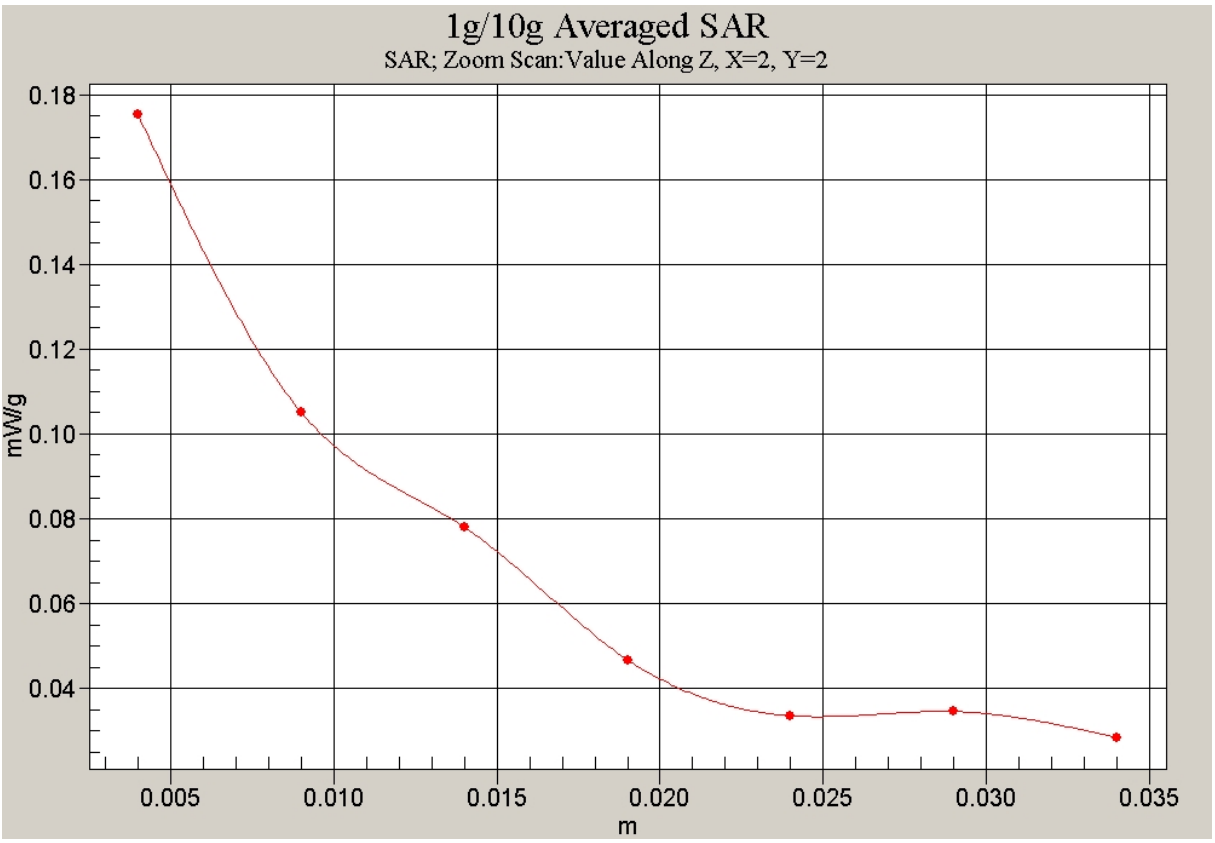


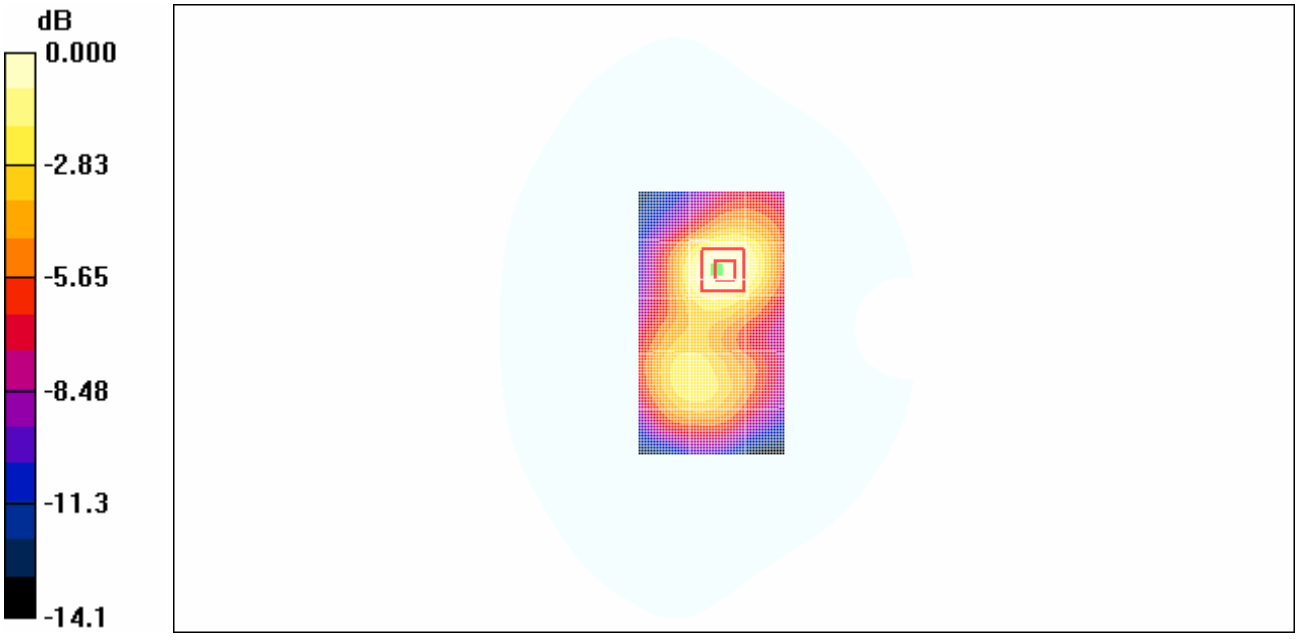
Fig. 62 Z-Scan at power reference point (CDMA 1900 MHz CH1175)

CDMA 1900 Body Towards Phantom Middle

Date/Time: 2007-11-2 13:40:39
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Toward Phantom Middle/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.213 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.59 V/m; Power Drift = -0.175 dB
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.110 mW/g
Maximum value of SAR (measured) = 0.188 mW/g



0 dB = 0.188mW/g

Fig. 63 CDMA 1900 MHz CH600

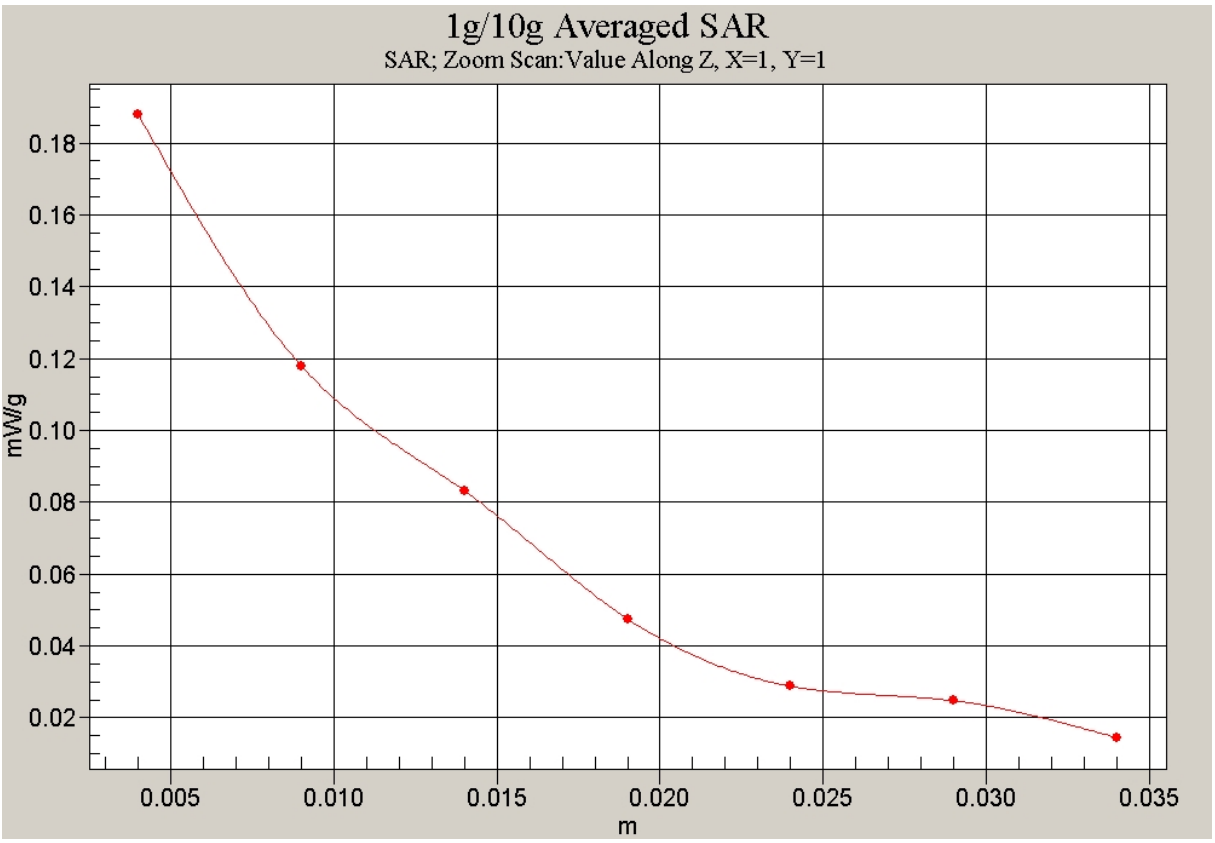
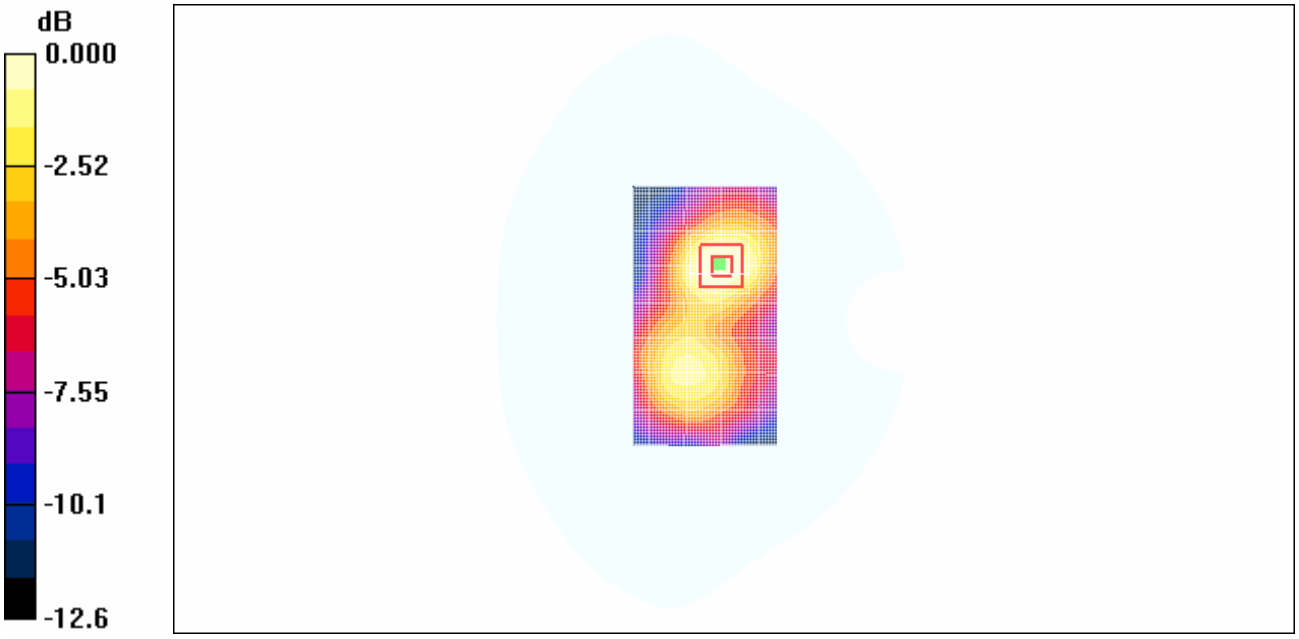


Fig. 64 Z-Scan at power reference point (CDMA 1900 MHz CH600)

CDMA 1900 Body Towards Phantom Low
Date/Time: 2007-11-2 14:08:18
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used (interpolated): f = 1851.25 MHz; σ = 1.45 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Toward Phantom Low/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.108 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.71 V/m; Power Drift = -0.194 dB
Peak SAR (extrapolated) = 0.124 W/kg
SAR(1 g) = 0.092 mW/g; SAR(10 g) = 0.058 mW/g
Maximum value of SAR (measured) = 0.097 mW/g



0 dB = 0.097mW/g

Fig. 65 CDMA 1900 MHz CH25

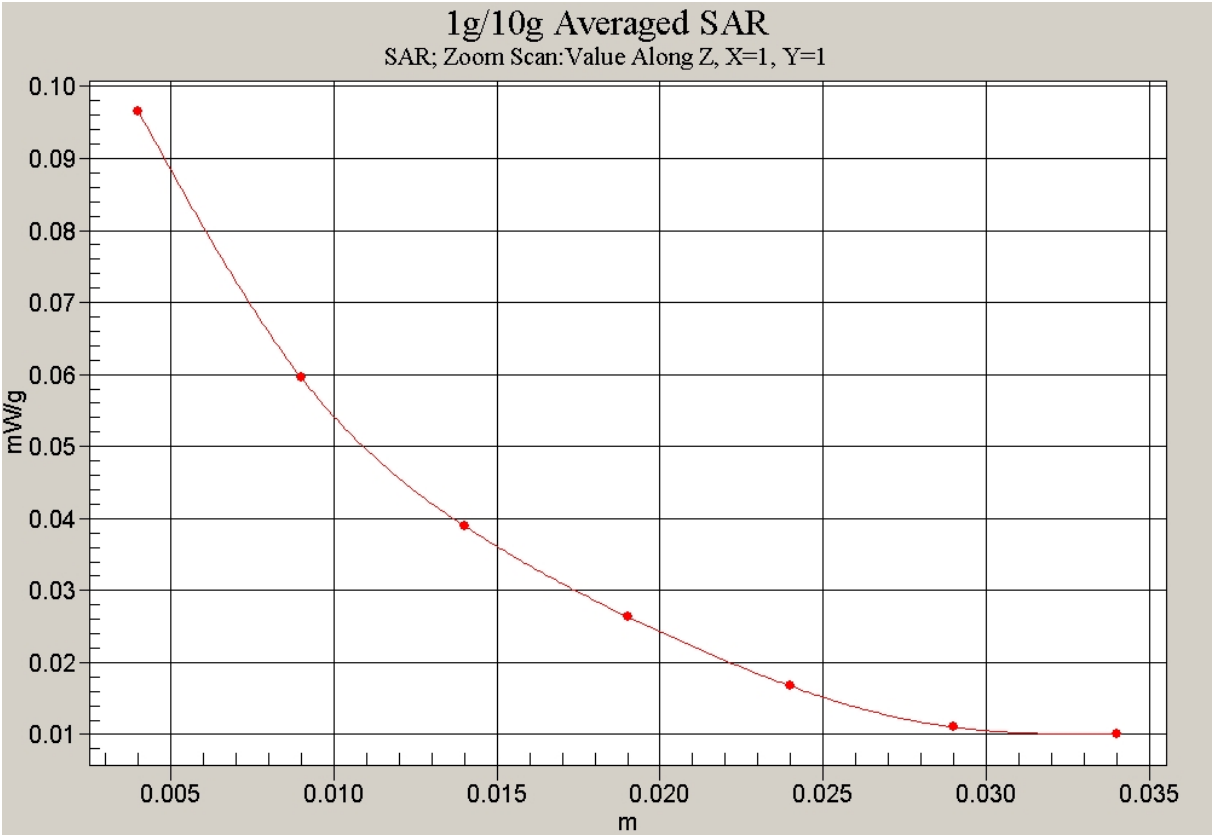


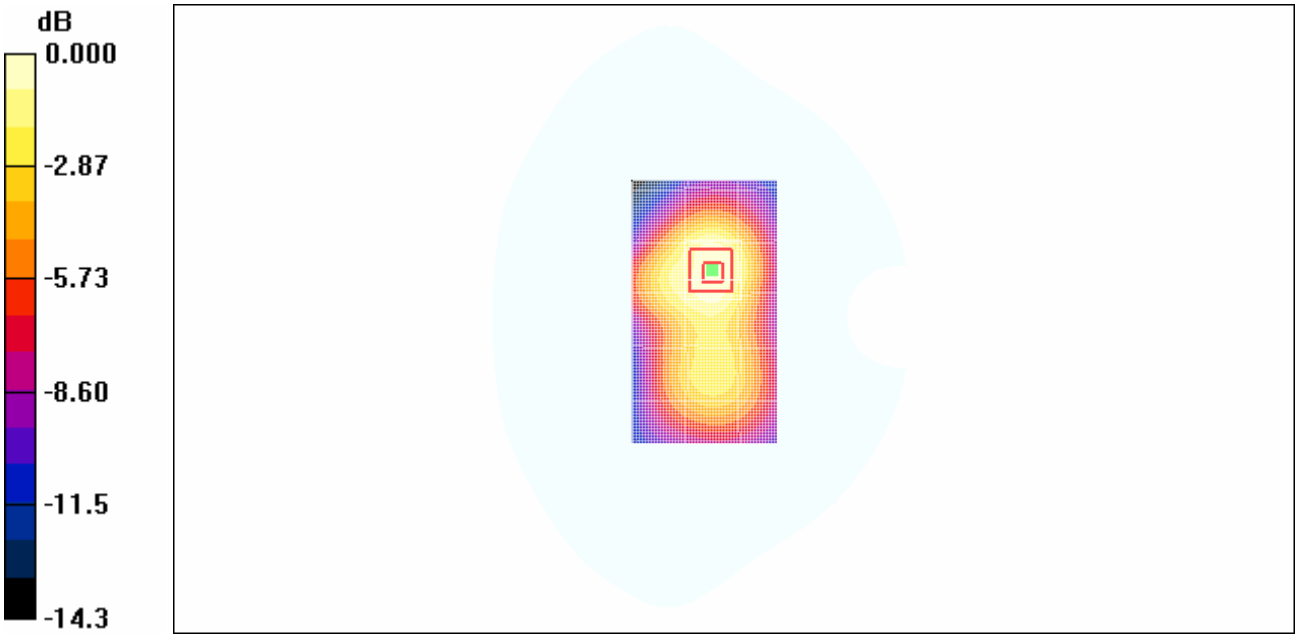
Fig. 66 Z-Scan at power reference point (CDMA 1900 MHz CH25)

CDMA 1900 Body Towards Ground High

Date/Time: 2007-11-2 12:19:03
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.5 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Toward Ground High/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.407 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = -0.097 dB
Peak SAR (extrapolated) = 0.639 W/kg
SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.217 mW/g
Maximum value of SAR (measured) = 0.379 mW/g



0 dB = 0.379mW/g

Fig. 67 CDMA 1900 MHz CH1175

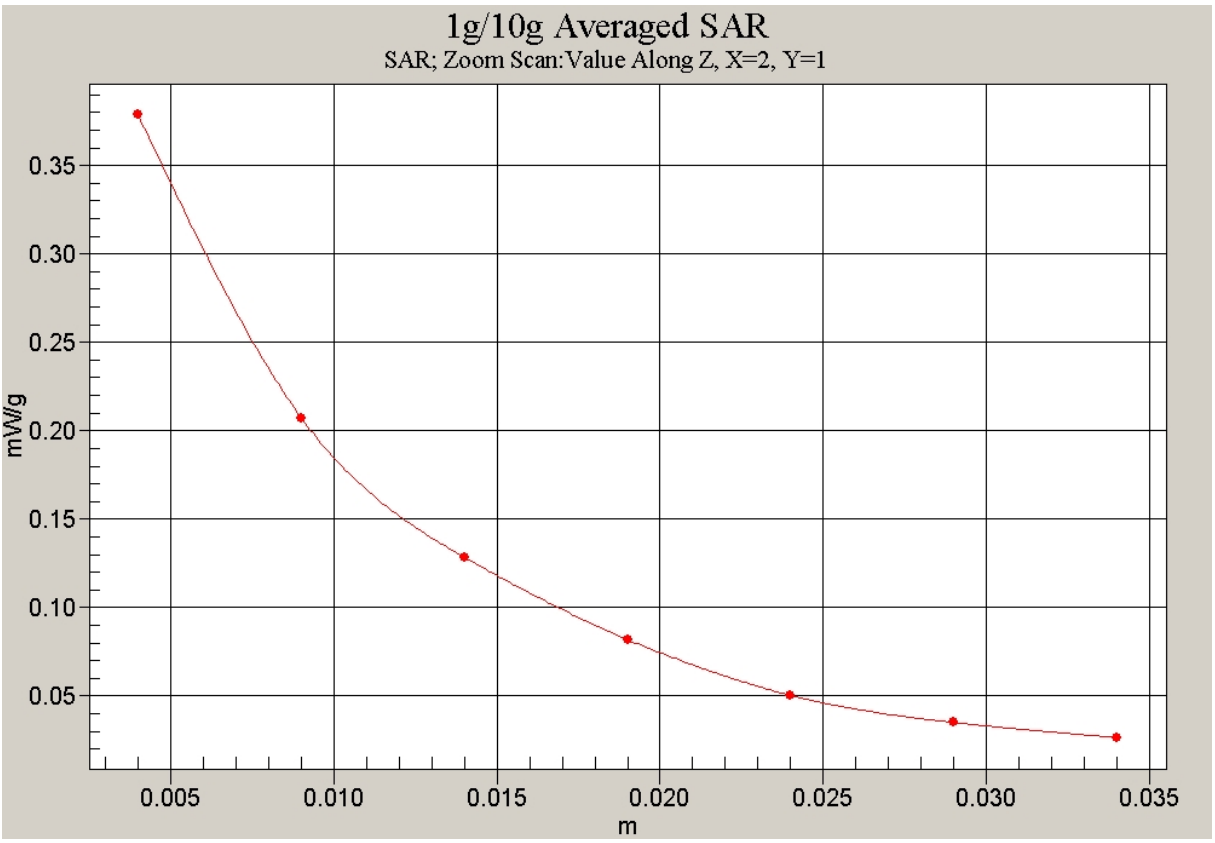


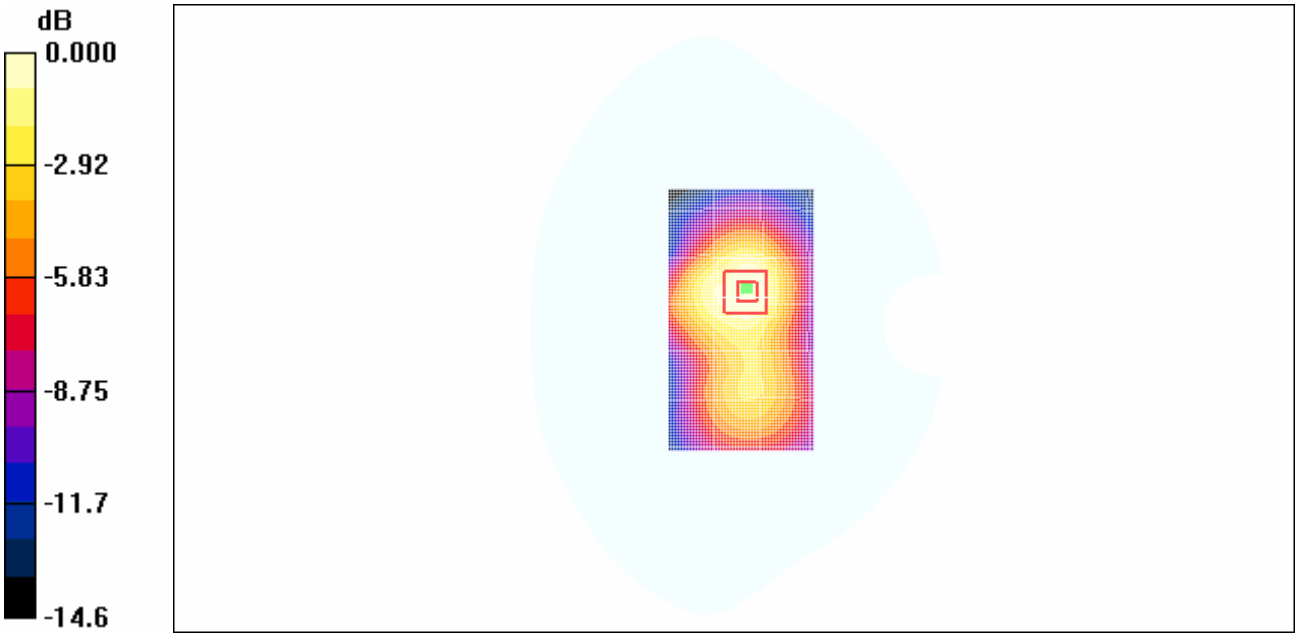
Fig. 68 Z-Scan at power reference point (CDMA 1900 MHz CH1175)

CDMA 1900 Body Towards Ground Middle

Date/Time: 2007-11-2 12:33:06
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Toward Ground Middle/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.490 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 0.752 W/kg
SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.252 mW/g
Maximum value of SAR (measured) = 0.442 mW/g



0 dB = 0.442mW/g

Fig. 69 CDMA 1900 MHz CH600

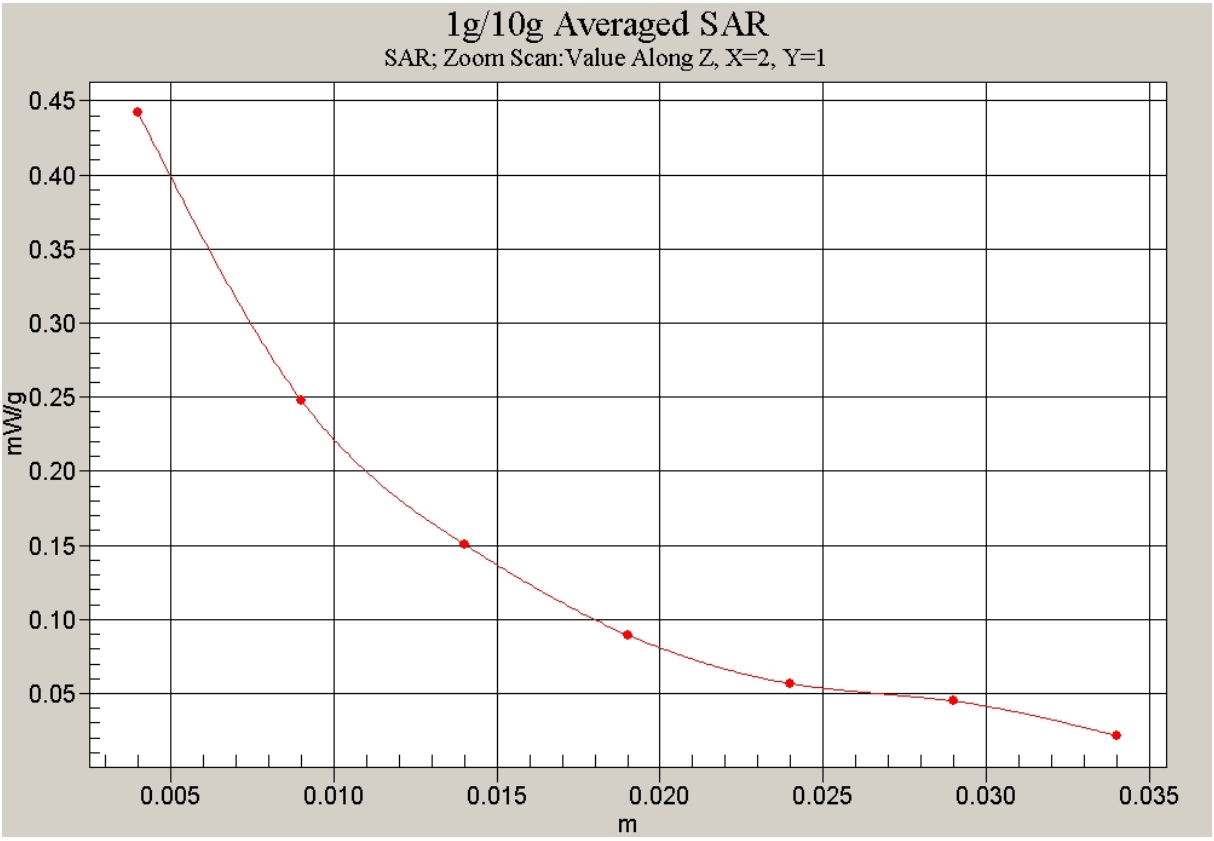
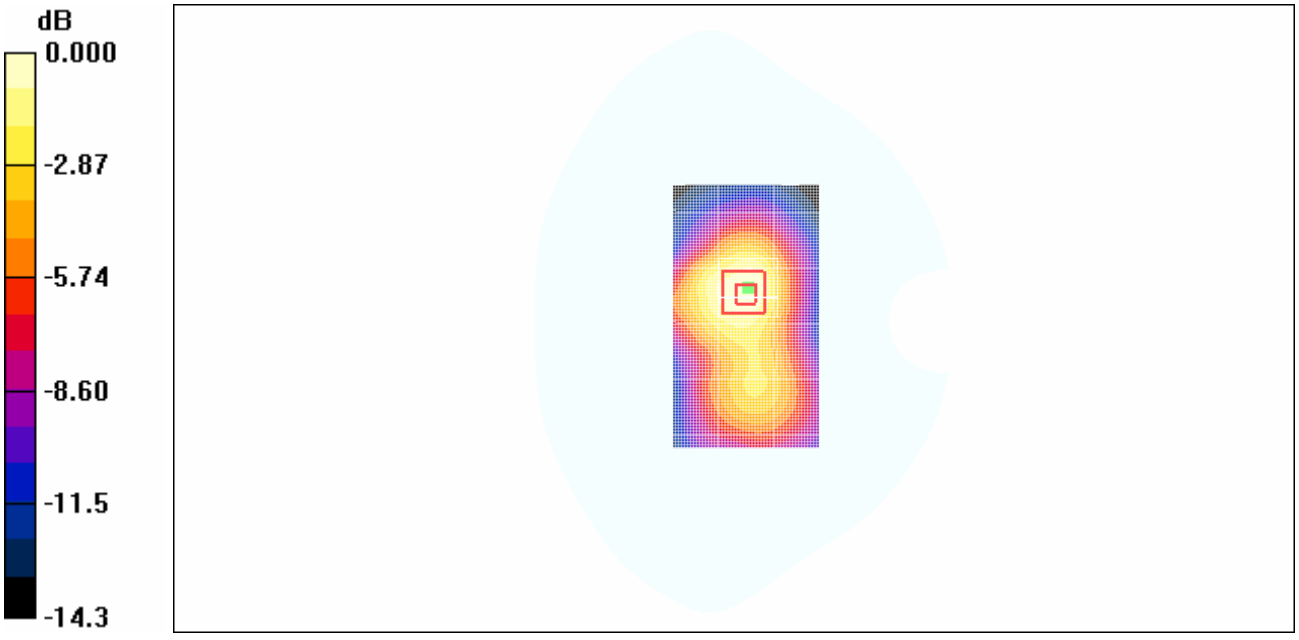


Fig. 70 Z-Scan at power reference point (CDMA 1900 MHz CH600)

CDMA 1900 Body Towards Ground Low
Date/Time: 2007-11-2 12:49:45
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used (interpolated): f = 1851.25 MHz; σ = 1.45 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

Toward Ground Low/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.362 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.4 V/m; Power Drift = -0.117 dB
Peak SAR (extrapolated) = 0.586 W/kg
SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.193 mW/g
Maximum value of SAR (measured) = 0.352 mW/g



0 dB = 0.352mW/g

Fig. 71 CDMA 1900 MHz CH25

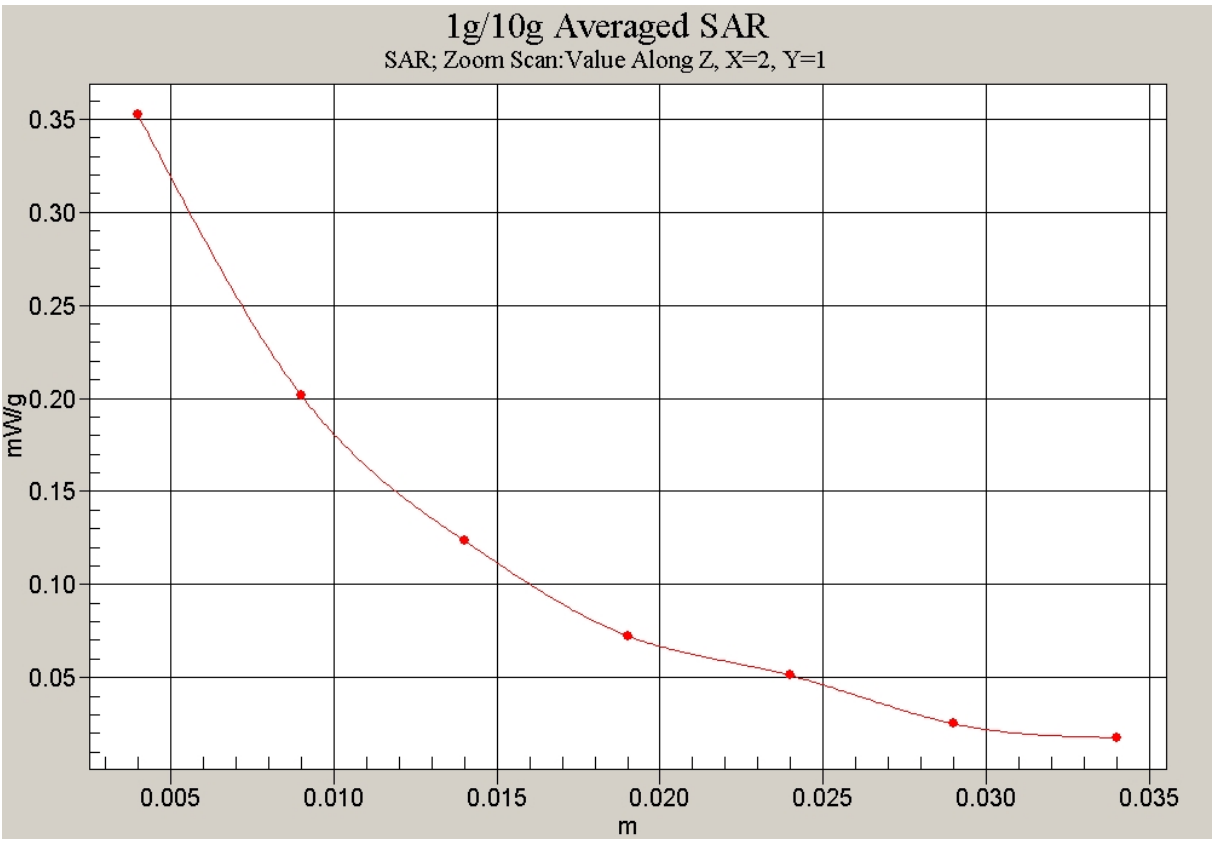


Fig. 72 Z-Scan at power reference point (CDMA 1900 MHz CH25)

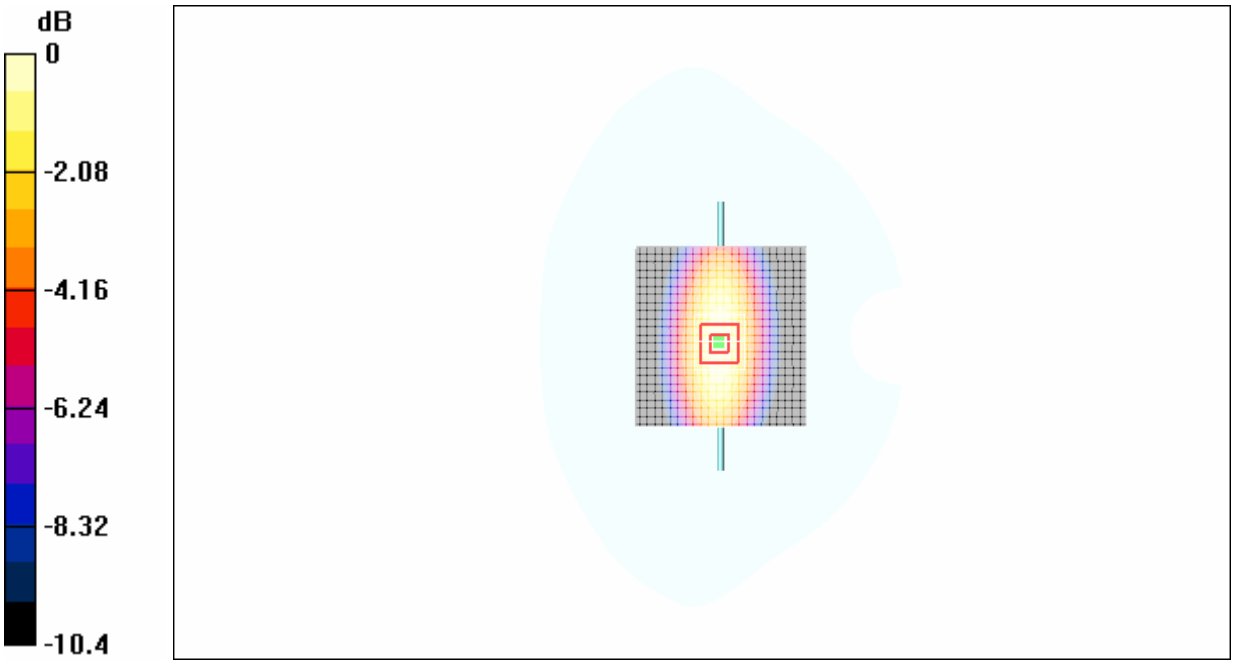
ANNEX D: SYSTEM VALIDATION RESULTS

835MHzDAE777Probe1736

Date/Time: 2007-11-3 07:24:44
Electronics: DAE4 Sn777
Medium: 835 Head
Medium parameters used (interpolated): f = 835 MHz; σ = 0.90 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.3°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.51, 6.51, 6.51)

835MHz/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.68 mW/g

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



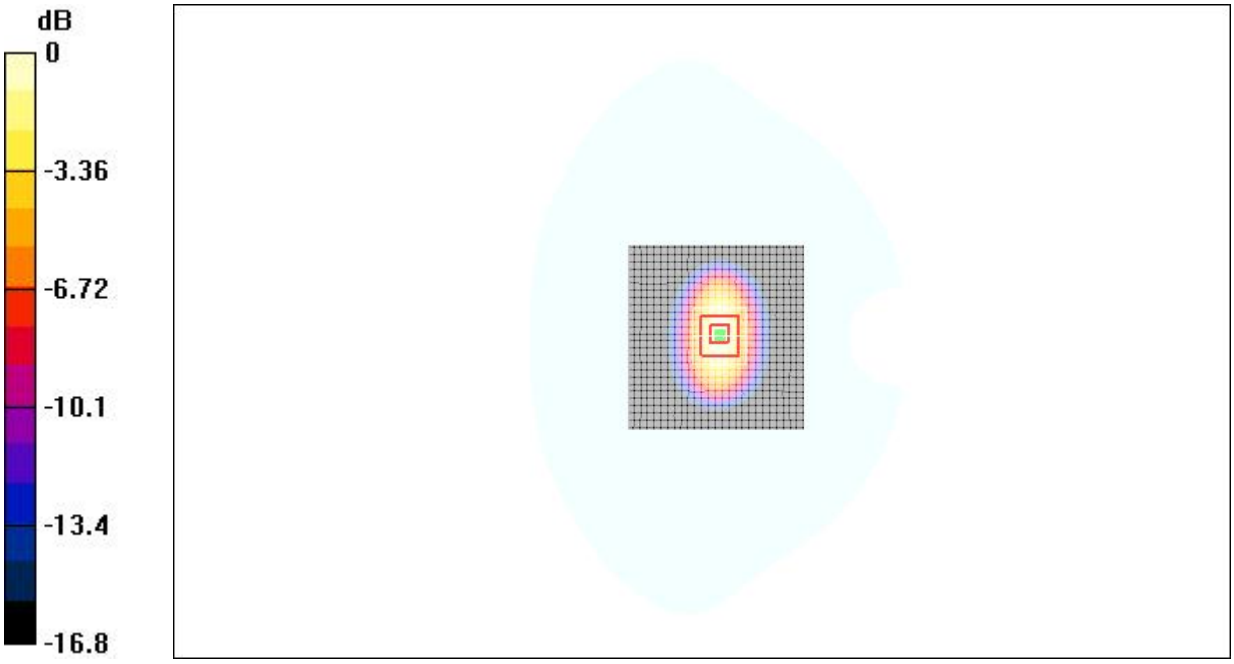
0 dB = 2.69mW/g

Fig.73 validation 835MHz 250mW

1900MHzDAE777Probe1736
Date/Time: 2007-11-2 07:36:35
Electronics: DAE4 Sn777
Medium: Head 1900 MHz
Medium parameters used (interpolated): f = 1900MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

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

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



0 dB = 11.3mW/g

Fig.74 validation 1900MHz 250mW

ANNEX E： PROBE CALIBRATION CERTIFICATE

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Swizerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accreditation No.: **SCS 108**

Accredited by the Swiss Federal Office of metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client TMC China

Certificate No: ET3DV6-1736_Dec06

CALIBRATION CERTIFICATE

Object	**ET3DV6-SN: 1736**
Calibration procedure(s)	**QA CAL-01.v5** **Calibration procedure for dosimetric E-field probes**
Calibration date:	**December 1, 2006**
Condition of the calibrated item	**In Tolerance**

This calibration certify documents the traceability to national standards, which realize the physical units of measurements(SI).
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	GB341293874	22-May-06 (METAS, NO. 251-00466)	May-07
Power sensor E4412A	MY41495277	22-May-06 (METAS, NO. 251-00466)	May-07
Power sensor E4412A	MY41498087	22-May-06 (METAS, NO. 251-00466)	May-07
Reference 20 dB Attenuator	SN:S5086 (20b)	22-May-06 (METAS, NO. 251-00467)	May-07
Reference Probe ES3DV2	SN:S5086 (20b)	22-May-06 (METAS, NO. 251-00467)	May-07
DAE4	SN:3013	13-Jan-06 (SPEAG, NO. ES3-3013_Jan06)	Jan-07
Reference Probe ES3DV2	SN: 907	11-Jun-06 (SPEAG, NO.DAE4-907_Jun06)	Jun-07

Secondary Standards	ID#	Check Data (in house)	Scheduled Calibration
RF generator HP8648C	US3642U01700	4-Dec-05(SPEAG, in house check Dec-03)	In house check: Dec-09
Network Analyzer HP 8753E	US37390585	10-Nov-05(SPEAG, NO. DAE4-901_Nov-04)	In house check: Nov-09

	Name	Function	Signature
Calibrated by:	Nico Vetterli	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Director	

Issued: December 1, 2006

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

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 Federal Office of Metrology and Accreditation
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
NORMx,y,z	sensitivity in free space
ConF	sensitivity in TSL / NORMx,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:

a) 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
b) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 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.
- *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 *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 ± 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.

Probe ET3DV6

SN: 1736

Manufactured: September 27, 2002
Last calibrated: November 25, 2005
Recalibrated: December 1, 2006

Calibrated for DASY System

DASY - Parameters of Probe: ET3DV6 SN:1736

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.97** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**93** mV
NormY	**1.75** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**93** mV
NormZ	**1.97** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**93** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	9.6	5.0
SAR_{be} [%]	With Correction Algorithm	0.1	0.3

TSL **1810 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	13.2	8.8
SAR_{be} [%]	With Correction Algorithm	0.6	0.1

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm