MOTOROLA

ACCREDITED

CGISS EME Test Laboratory
8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322

S.A.R. EME Compliance Test Report
Part 3 of 3

Attention:	FCC
Date of Report:	October 29, 2003
Report Revision:	Rev. A
Manufacturer:	Motorola China
Product Description:	1.0 Watt fixed antenna UHF/RBR/ 4 channel; 300mW 2.4GHz cordless phone; w/ display; Fixed antenna
FCC ID:	**AZ489FT4863**
Device Model:	HCUE1112A

Test Period:	9/10/03-10/03/03
EME Technician:	Clint Miller (EME Technician)
EME Engineer:	Stephen Whalen (Sr. EME Engineer)
Author:	Michael Sailsman (Global EME Regulatory Affairs Liaison)

Note: Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 2.0 of this report.

Signature on File — 10/29/03

Ken Enger
Senior Resource Manager, Laboratory Director, CGISS EME Lab

Date Approved

APPENDIX C

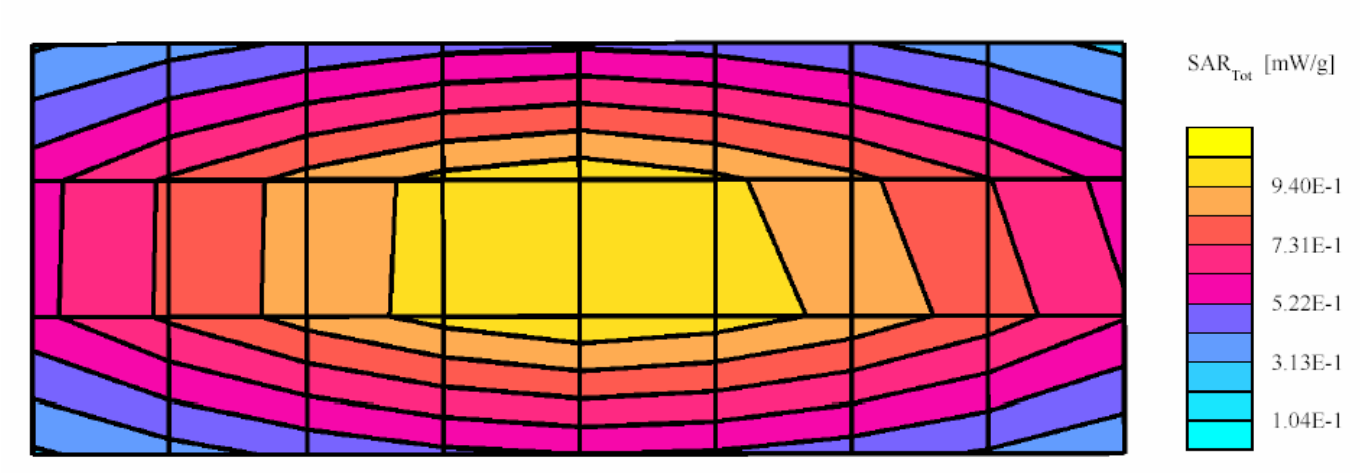
Dipole System Performance Check Results

Dipole validations at the head from SPEAG are provided herein. The CGISS EME lab validated the dipole to the applicable IEEE system performance targets. Within the same day system validation was performed using FCC body tissue parameters to generate the system performance target values for body at the applicable frequency. The results of the CGISS EME system performance validation are provided in this appendix.

SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 9/10/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030910-04
TX Freq: 450 MHz
Sim Tissue Temp: 21.4 (Celsius)
Start Power; 250mW

SAR target at 1W is 4.41 mW/g (1g avg, including drift)
SAR target at 1W is 2.93 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.58 mW/g (1g avg). Percent from target (including drift) is 3.88%
SAR calculated at 1W is 3.03 mW/g (10g avg). Percent from target (including drift) is 3.55%

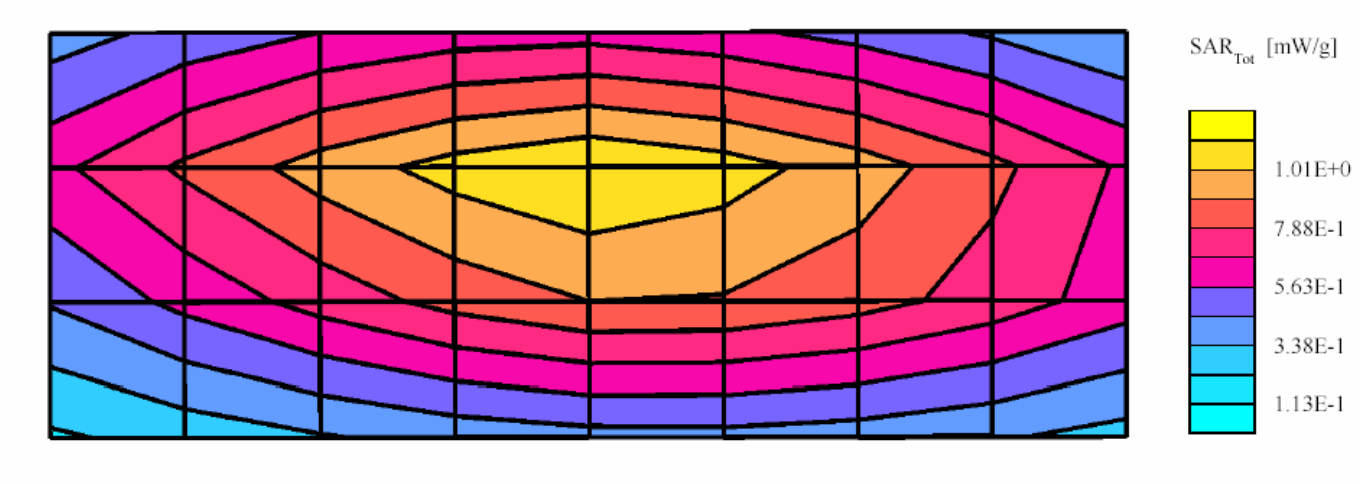
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.60,7.60,7.60); Crest factor: 1.0; FCC Body 450 MHz: σ= 0.91 mho/m ε_r = 55.1 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.76 mW/g ± 0.04 dB, SAR (1g): 1.14 mW/g ± 0.03 dB, SAR (10g): 0.755 mW/g ± 0.03 dB, (Worst-case extrapolation) Penetration depth: 12.9 (11.5, 14.7) [mm]
Power drift: -0.02 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 9/11/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030911-01
TX Freq: 450 MHz
Sim Tissue Temp: 20.9 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 4.41 mW/g (1g avg, including drift)
SAR target at 1W is 2.93 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.55 mW/g (1g avg). Percent from target (including drift) is 3.20 %
SAR calculated at 1W is 3.02 mW/g (10g avg). Percent from target (including drift) is 2.96 %

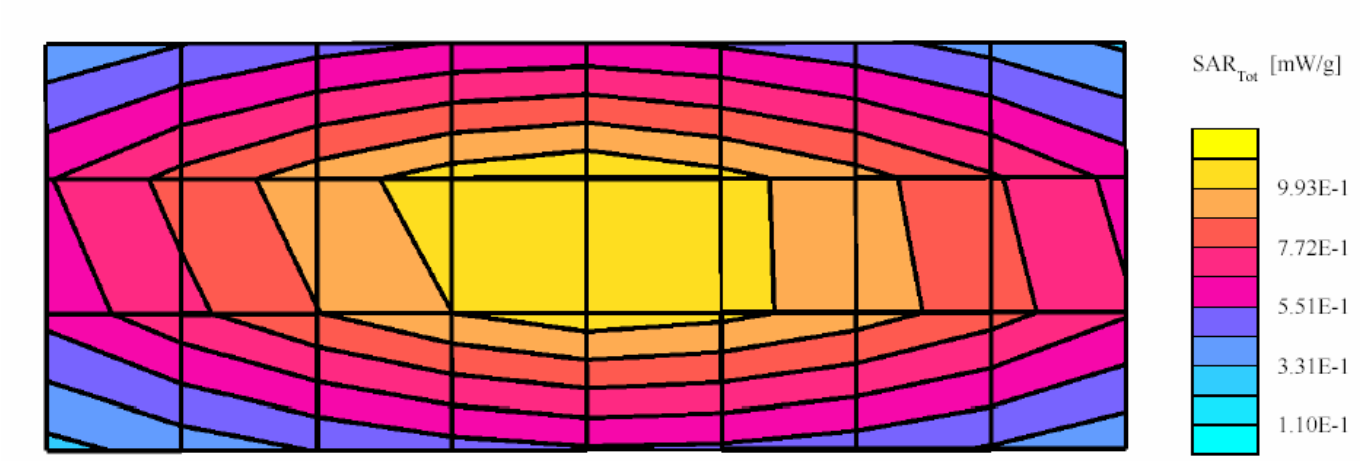
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.60,7.60,7.60); Crest factor: 1.0; FCC Body 450 MHz: σ= 0.90 mho/m ε_r = 54.9 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.73 mW/g ± 0.04 dB, SAR (1g): 1.13 mW/g ± 0.05 dB, SAR (10g): 0.749 mW/g ± 0.05 dB, (Worst-case extrapolation) Penetration depth: 13.1 (11.7, 14.9) [mm]
Power drift: -0.03 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 9/11/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030911-09
TX Freq: 450 MHz
Sim Tissue Temp: 21.0 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 4.63 mW/g (1g avg, including drift)
SAR target at 1W is 3.06 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.78 mW/g (1g avg). Percent from target (including drift) is 3.28 %
SAR calculated at 1W is 3.14 mW/g (10g avg). Percent from target (including drift) is 2.56 %

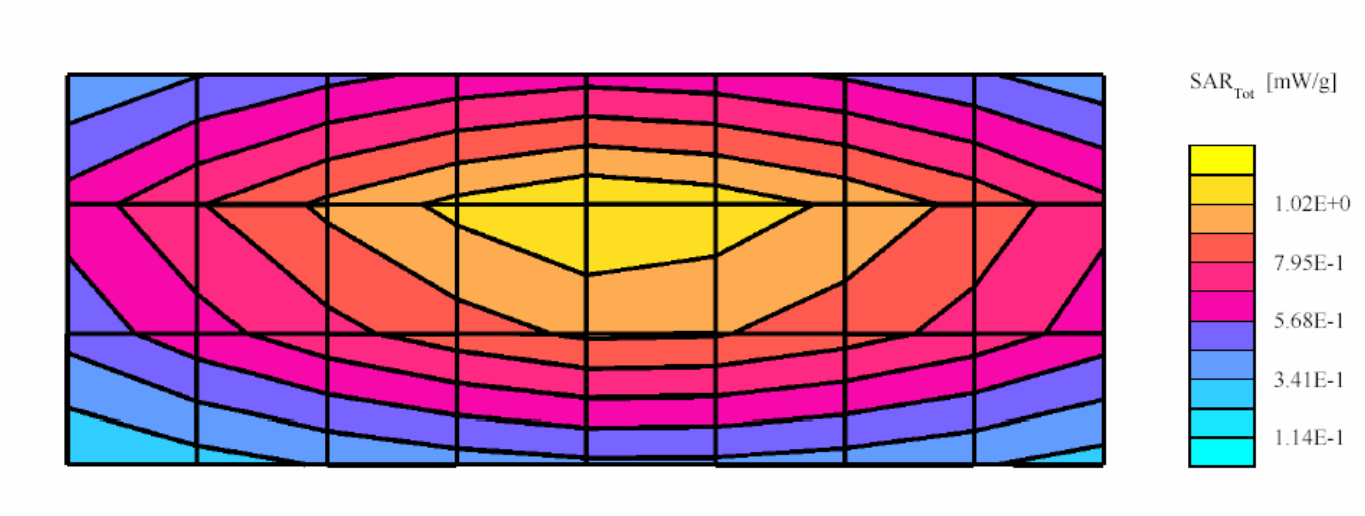
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.50,7.50,7.50); Crest factor: 1.0; IEEE Head 450MHz: σ= 0.86 mho/m ε_r = 43.8 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.85 mW/g ± 0.04 dB, SAR (1g): 1.19 mW/g ± 0.04 dB, SAR (10g): 0.781 mW/g ± 0.03 dB, (Worst-case extrapolation) Penetration depth: 12.5 (11.2, 14.3) [mm]
Power drift: -0.02 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 9/12/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030912-01
TX Freq: 450 MHz
Sim Tissue Temp: 21.1 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 4.41 mW/g (1g avg, including drift)
SAR target at 1W is 2.93 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.62 mW/g (1g avg). Percent from target (including drift) is 4.79%
SAR calculated at 1W is 3.08 mW/g (10g avg). Percent from target (including drift) is 5.19%

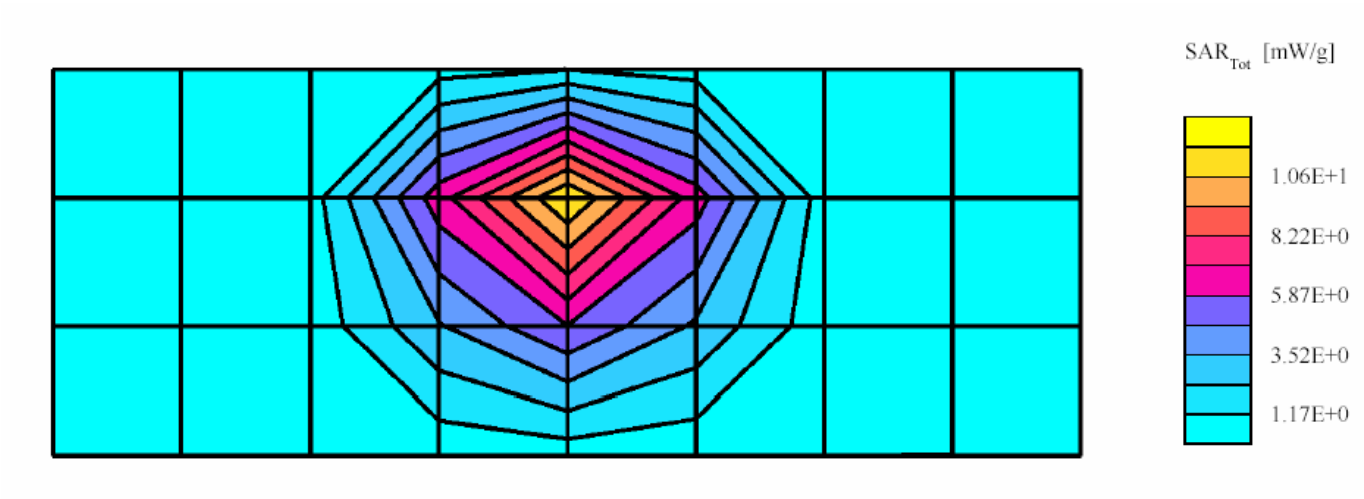
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.60,7.60,7.60); Crest factor: 1.0; FCC Body 450 MHz: σ= 0.92 mho/m ε_r = 55.9 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.77 mW/g ± 0.03 dB, SAR (1g): 1.15 mW/g ± 0.03 dB, SAR (10g): 0.767 mW/g ± 0.03 dB, (Worst-case extrapolation) Penetration depth: 13.1 (11.7, 14.9) [mm]
Power drift: -0.02 dB



SPEAG 2450 MHz Dipole D2450V2; SN-704; Test Date: 9/15/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030915-01
TX Freq: 2450 MHz
Sim Tissue Temp: 21.7 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 51.32 mW/g (1g avg, including drift)
SAR target at 1W is 23.73 mW/g (10g avg, including drift)
SAR calculated at 1W is 50.33 mW/g (1g avg). Percent from target (including drift) is 1.92 %
SAR calculated at 1W is 23.62 mW/g (10g avg). Percent from target (including drift) is 0.46 %

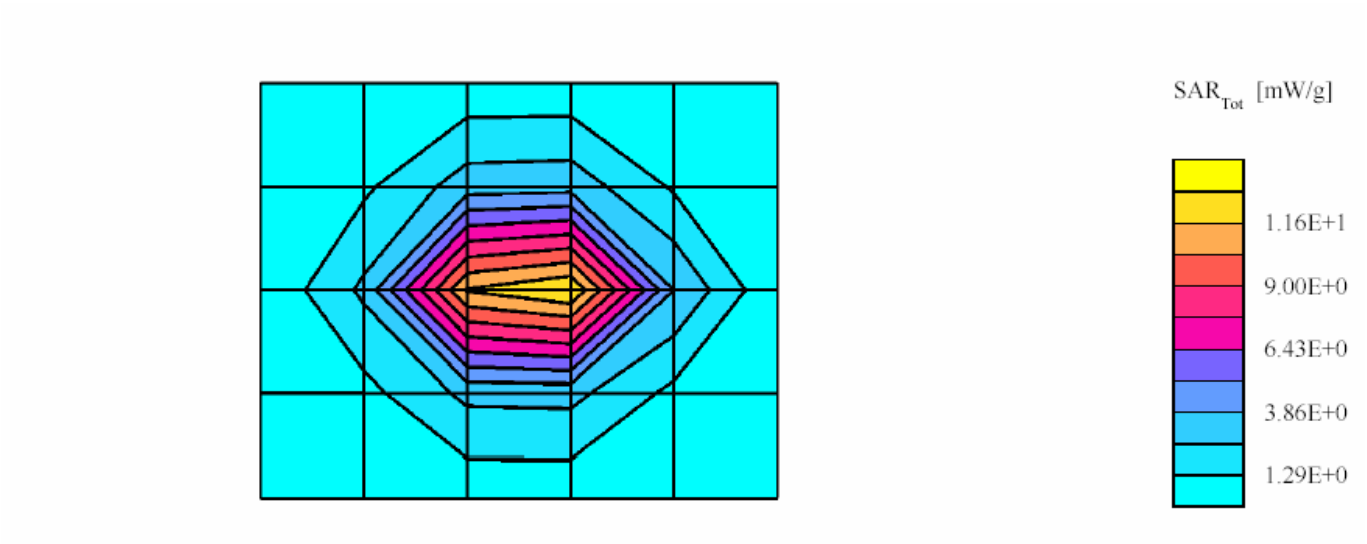
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(4.80,4.80,4.80); Crest factor: 1.0; FCC Body 2450MHz: σ= 2.04 mho/m ε_r = 56.1 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 25.4 mW/g ± 0.08 dB, SAR (1g): 12.7 mW/g ± 0.00 dB, SAR (10g): 5.96 mW/g ± 0.08 dB, (Worst-case extrapolation) Penetration depth: 7.7 (7.4, 8.6) [mm]
Power drift: 0.04 dB



SPEAG 2450 MHz Dipole D2450V2; SN-704; Test Date: 9/16/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030916-01
TX Freq: 2450 MHz
Sim Tissue Temp: 21.7 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 52.64 mW/g (1g avg, including drift)
SAR target at 1W is 24.07 mW/g (10g avg, including drift)
SAR calculated at 1W is 54.03 mW/g (1g avg). Percent from target (including drift) is 2.64%
SAR calculated at 1W is 25.11 mW/g (10g avg). Percent from target (including drift) is 1.87 %

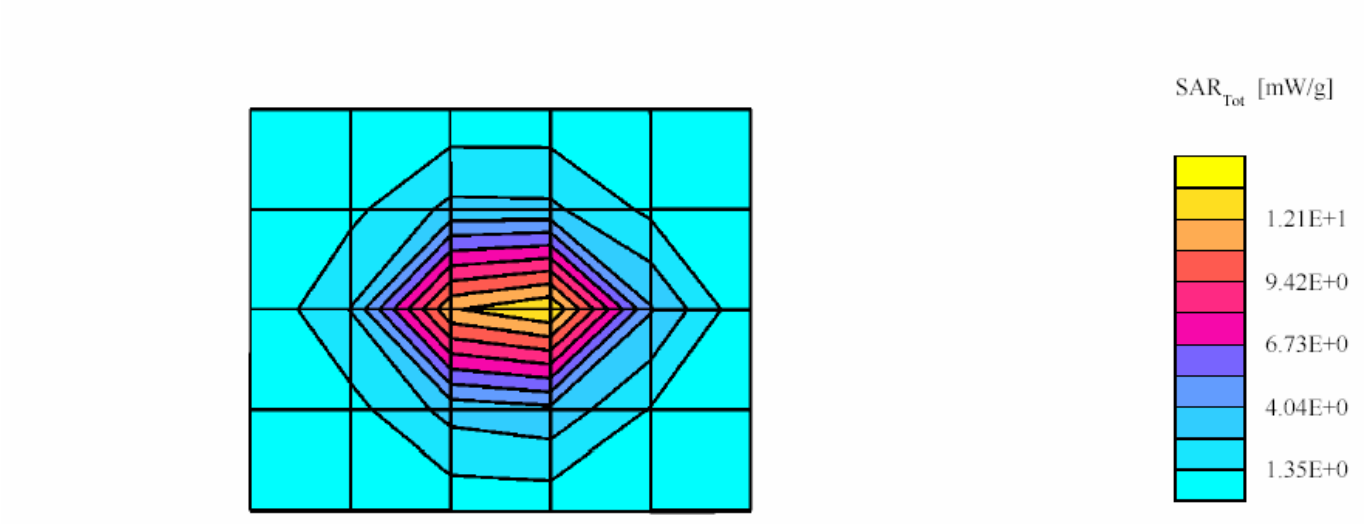
SAM - Expanded; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(5.00,5.00,5.00); Crest factor: 1.0; IEEE Head 2450MHz: σ = 1.86 mho/m ε_r = 39.5 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 27.6 mW/g ± 0.02 dB, SAR (1g): 13.6 mW/g ± 0.01 dB, SAR (10g): 6.32 mW/g ± 0.04 dB, (Worst-case extrapolation) Penetration depth: 6.8 (6.6, 7.4) [mm]
Power drift: 0.03 dB



SPEAG 2450 MHz Dipole D2450V2; SN-704; Test Date: 9/17/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030917-01
TX Freq: 2450 MHz
Sim Tissue Temp: 21.7 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 52.64 mW/g (1g avg, including drift)
SAR target at 1W is 24.07 mW/g (10g avg, including drift)
SAR calculated at 1W is 57.06 mW/g (1g avg). Percent from target (including drift) is 2.64%
SAR calculated at 1W is 26.44 mW/g (10g avg). Percent from target (including drift) is 4.32%

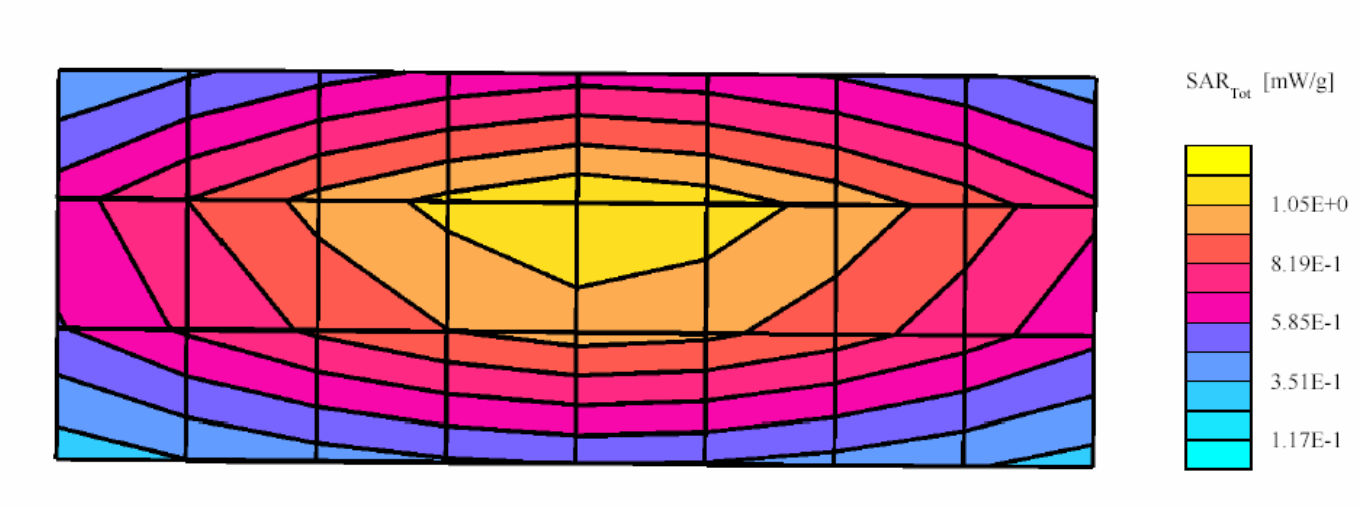
SAM - Expanded; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(5.00,5.00,5.00); Crest factor: 1.0; IEEE Head 2450MHz: σ= 1.83 mho/m ε_r = 39.3 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 28.7 mW/g ± 0.00 dB, SAR (1g): 14.2 mW/g ± 0.02 dB, SAR (10g): 6.58 mW/g ± 0.04 dB, (Worst-case extrapolation) Penetration depth: 6.9 (6.7, 7.6) [mm]
Power drift: -0.02 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 9/17/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030917-12
TX Freq: 450 MHz
Sim Tissue Temp: 21.0 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 4.63 mW/g (1g avg, including drift)
SAR target at 1W is 3.06 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.86 mW/g (1g avg). Percent from target (including drift) is 4.96 %
SAR calculated at 1W is 3.20 mW/g (10g avg). Percent from target (including drift) is 4.50 %

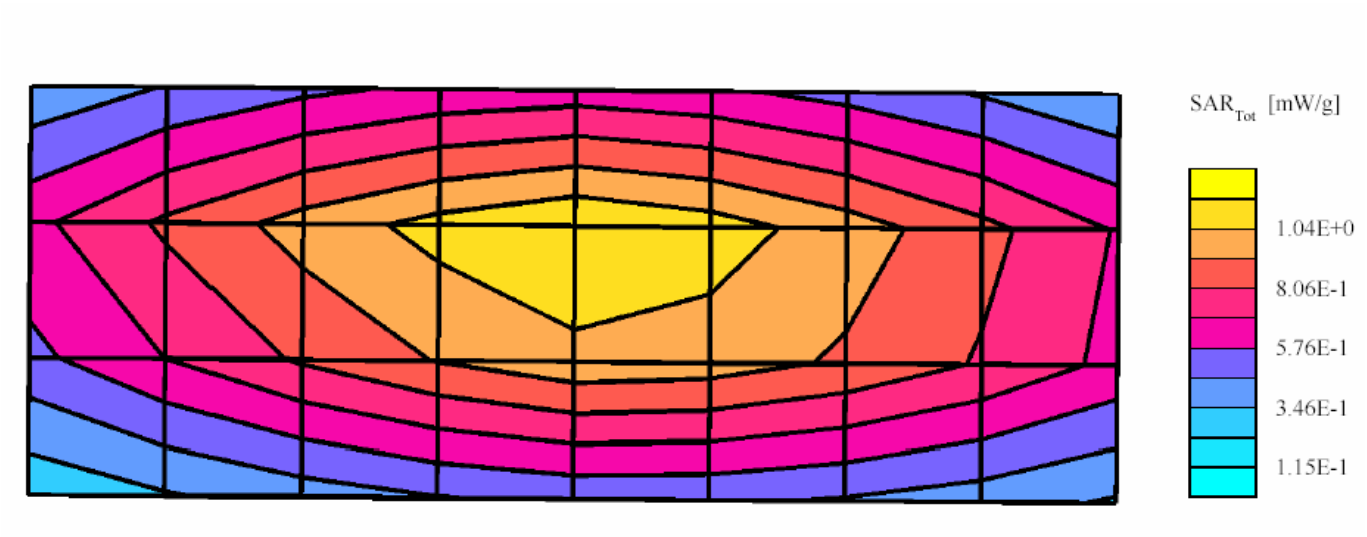
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.50,7.50,7.50); Crest factor: 1.0; IEEE Head 450MHz: σ= 0.88 mho/m ε_r = 44.2 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003 Cubes (2): Peak: 1.86 mW/g ± 0.01 dB, SAR (1g): 1.19 mW/g ± 0.02 dB, SAR (10g): 0.783 mW/g ± 0.02 dB, (Worst-case extrapolation) Penetration depth: 12.5 (11.1, 14.2) [mm]
Power drift: -0.09 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 9/18/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-030918-01
TX Freq: 450 MHz
Sim Tissue Temp: 21.5 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 4.63 mW/g (1g avg, including drift)
SAR target at 1W is 3.06 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.80 mW/g (1g avg). Percent from target (including drift) is 3.76 %
SAR calculated at 1W is 3.16 mW/g (10g avg). Percent from target (including drift) is 3.17 %

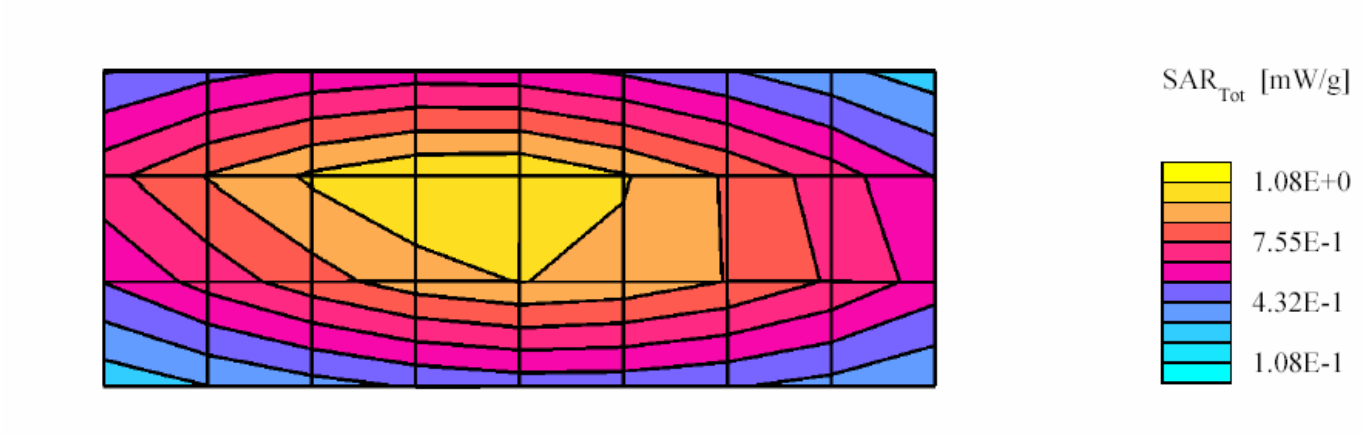
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.50,7.50,7.50); Crest factor: 1.0; IEEE Head 450MHz: σ= 0.87 mho/m ε_r = 43.8 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.85 mW/g ± 0.04 dB, SAR (1g): 1.19 mW/g ± 0.03 dB, SAR (10g): 0.782 mW/g ± 0.03 dB, (Worst-case extrapolation) Penetration depth: 12.5 (11.1, 14.2) [mm]
Power drift: -0.04 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 10/01/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-031001-01
TX Freq: 450 MHz
Sim Tissue Temp: 20.6 (Celsius)
Start Power; 250mW

Target:
SAR target at 1W is 4.41 mW/g (1g avg, including drift)
SAR target at 1W is 2.93 mW/g (10g avg, including drift)
SAR calculated at 1W 4.53 is mW/g (1g avg). Percent from target (including drift) is 2.73 %
SAR calculated at 1W 3.01 is mW/g (10g avg). Percent from target (including drift) is 2.63 %

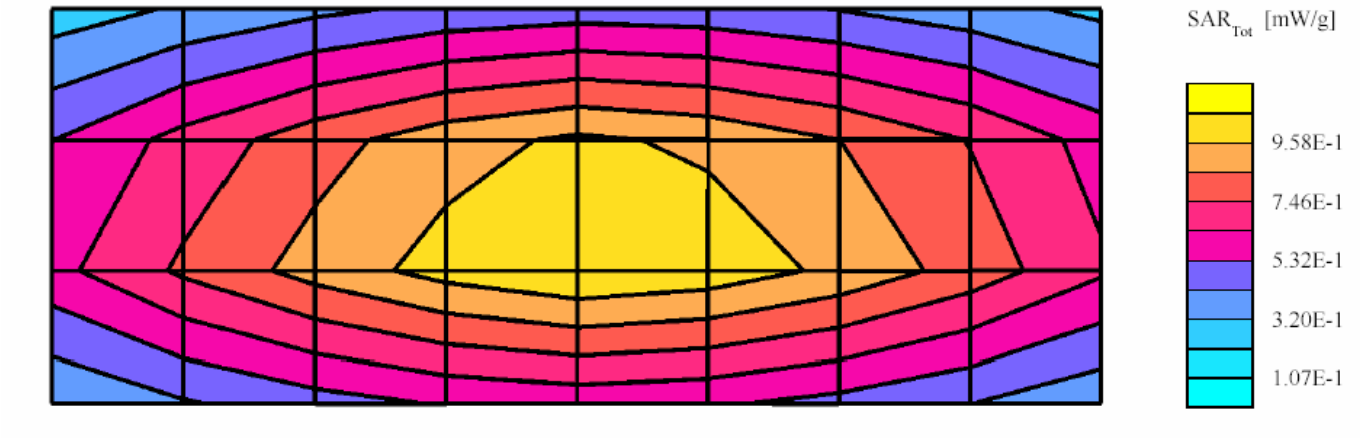
Flat Phantom; Section; Position: Probe: ET3DV6 - SN1384(Cal Date 05-15-2003); ConvF(7.60,7.60,7.60); Probe cal date: 15/05/03; Crest factor: 1.0; FCC Body 450 MHz: σ = 0.92 mho/m ε_r = 54.4 ρ= 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003 Cubes (2): SAR (1g): 1.13 mW/g ± 0.03 dB, SAR (10g): 0.750 mW/g ± 0.02 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0; Max at 57.0, 25.5, 4.7
Power drift: -0.01 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 10/02/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-031002-01
TX Freq: 450 MHz
Sim Tissue Temp: 21.0 (Celsius)
Start Power; 250mW

SAR target at 1W is 4.41 mW/g (1g avg, including drift)
SAR target at 1W is 2.93 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.49 mW/g (1g avg). Percent from target (including drift) is 1.79%
SAR calculated at 1W is 2.96 mW/g (10g avg). Percent from target (including drift) is 1.14%

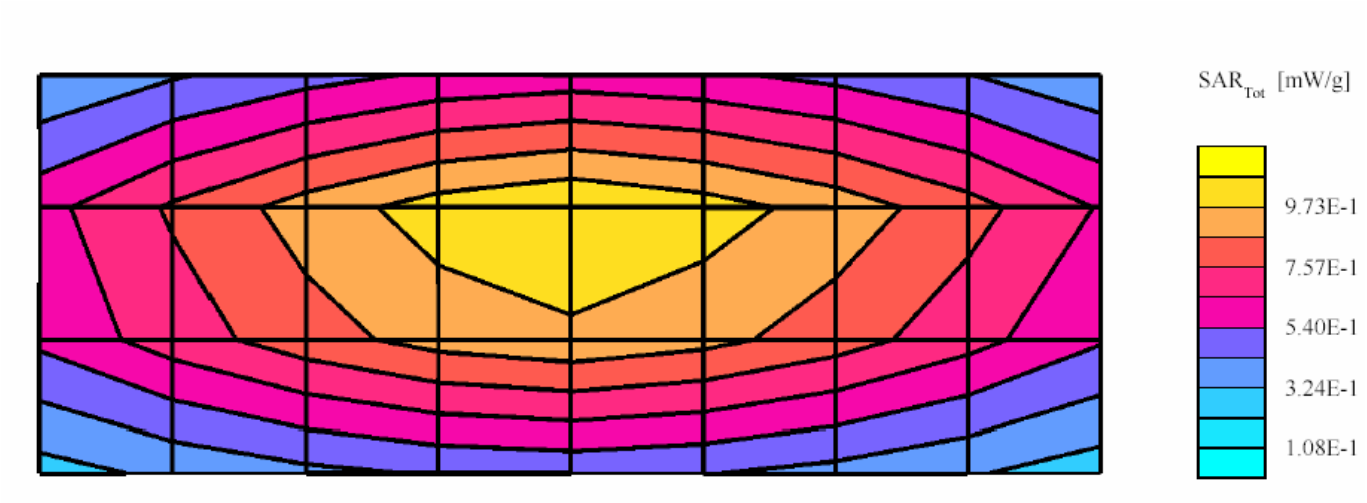
Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.60,7.60,7.60); Crest factor: 1.0; FCC Body 450 MHz: óσ = 0.92 mho/m ε_r = 54.2 ρ = 1.00 g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.75 mW/g ± 0.03 dB, SAR (1g): 1.13 mW/g ± 0.03 dB, SAR (10g): 0.746 mW/g ± 0.03 dB, (Worst-case extrapolation) Penetration depth: 12.7 (11.4, 14.4) [mm]
Power drift: 0.03 dB



SPEAG 450 MHz Dipole D450V2; SN-1001; Test Date: 10/03/03
Motorola CGISS EME Lab
Run #: Sys Perf-R1-031003-01
TX Freq: 450 MHz
Sim Tissue Temp: 21.8 (Celsius)
Start Power; 250mW

SAR target at 1W is 4.41 mW/g (1g avg, including drift)
SAR target at 1W is 2.93 mW/g (10g avg, including drift)
SAR calculated at 1W is 4.50 mW/g (1g avg). Percent from target (including drift) is 2.06%
SAR calculated at 1W is 2.98 mW/g (10g avg). Percent from target (including drift) is 1.76%

Flat Phantom; Probe: ET3DV6 - SN1384(Cal Date 05-15-2003);Probe Cal Date: 15/05/03ConvF(7.60,7.60,7.60); Crest factor: 1.0; FCC Body 450 MHz: $\sigma = 0.91$ mho/m $\varepsilon_r = 54.4$ $\rho = 1.00$ g/cm3; DAE3: SN363-V1 DAE Cal Date: 05/13/2003
Cubes (2): Peak: 1.73 mW/g ± 0.02 dB, SAR (1g): 1.12 mW/g ± 0.02 dB, SAR (10g): 0.742 mW/g ± 0.03 dB, (Worst-case extrapolation) Penetration depth: 12.9 (11.5, 14.6) [mm]
Power drift: -0.02 dB



SYSTEM VALIDATION

Date:	1/16/2003	Frequency (MHz):	450
Lab Location:	CGISS	Mixture Type:	IEEE Head
Robot System:	CGISS 3	Ambient Temp.(°C):	22.4, (Humid: 45.0%)
Probe Serial #:	ET3DV6-1393	Tissue Temp.(°C):	21.2
DAE Serial #:	406		

Tissue Characteristics

Permitivity:	43.3	Phantom Type/SN:	80302002B/S6
Conductivity:	0.87	Distance (mm):	15 (tissue/dipole cnt)

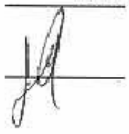
Reference Source:	D450V2 (Dipole)
Reference SN:	1001

Power to Dipole:	250 mW
Power Output (radio):	mW

Target SAR Value: (normalized to 1.0 W)	4.9 mW/g,	3.3 mW/g (10g avg.)
Measured SAR Value:	1.16 mW/g,	0.767 mW/g (10g avg.)
Power Drift:	0.01 dB	
Measured SAR Value: (normalized to 1.0 W, including drift)	4.63 mW/g,	3.06 mW/g (10g avg.)

Percent Difference From Target (MUST be within System Uncertainty): 5.52 % (1g ave)
7.24 % (10g ave)

Test performed by: J. Fortier Initial:



SYSTEM PERFORMANCE CHECK TARGET SAR

Date:	1/16/2003	Frequency (MHz):	450
Lab Location:	CGISS	Mixture Type:	IEEE Head
Robot System:	CGISS 3	Ambient Temp.(°C):	22.4, (Humid: 45.0%)
Probe Serial #:	ET3DV6-1393	Tissue Temp.(°C):	21.2
DAE Serial #:	406		

Tissue Characteristics

Permitivity:	43.3	Phantom Type/SN:	80302002B/S6
Conductivity:	0.87	Distance (mm):	15 (tissue/dipole cnt)

Reference Source:	D450V2	(Dipole)
Reference SN:	1001	

Power to Dipole: 250 mW

Measured SAR Value:	1.16 mW/g,	0.767 mW/g (10g avg.)
Power Drift:	0.01 dB	

New Target/Measured SAR Value: (normalized to 1.0 W, including drift)	4.63 mW/g,	3.06 mW/g (10g avg.)

Test performed by: J. Fortier Initial:

Dipole D450V2 SN1001; Test date:01/16/03

Run #: Sys Val_R3_030116-05
Model #: D450V2
Robot: CGISS-3
TX Freq: 450 MHz
Start Power; 250mW
DAE3: SN:406

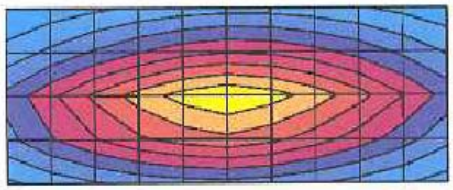
Phantom #:8030200ZB/S6
SN: 1001
Tester: J. Fortier
Sim Tissue Temp: 21.2 (Celsius)

DAE Cal Date: 11/11/02

- Comments-

Target at 1W is 4.9 mW/g (1g)

SAR calculated is 4.63 mW/g, Percent from IEEE-1528 target (including drift) for 1g is 5.5%
Flat; Probe: ET3DV6 - SN1393 SPEAG; ConvF(8.00,8.00,8.00); Crest factor: 1.0; IEEE Head 450 MHz: σ = 0.87 mho/m ε_r = 43.3 ρ = 1.00 g/cm^3
Cubes (2): Peak: 1.78 mW/g ± 0.04 dB, SAR (1g): 1.16 mW/g ± 0.05 dB, SAR (10g): 0.767 mW/g ± 0.05 dB, (Worst-case extrapolation)
Penetration depth: 12.8 (11.4, 14.5) [mm]
Powerdrift: 0.01 dB



Motorola CGISS EME Lab

SYSTEM PERFORMANCE CHECK TARGET SAR

Date:	1/16/2003	Frequency (MHz):	450
Lab Location:	CGISS	Mixture Type:	FCC Body
Robot System:	CGISS 3	Ambient Temp.(°C):	22.6, (Humid: 45%)
Probe Serial #:	ET3DV6-1393	Tissue Temp.(°C):	21.5
DAE Serial #:	406		

Tissue Characteristics

Permitivity:	55.4	Phantom Type/SN:	80302002C/S7
Conductivity:	0.92	Distance (mm):	15 (tissue/dipole cnt)

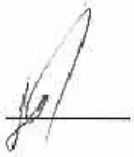
Reference Source:	D450V2 (Dipole)
Reference SN:	1001

Power to Dipole: 250 mW

Measured SAR Value:	1.1 mW/g,	0.732 mW/g (10g avg.)
Power Drift:	-0.01 dB	

New Target/Measured
SAR Value: 4.41 mW/g, 2.93 mW/g (10g avg.)
(normalized to 1.0 W, including drift)

Test performed by: J. Fortier Initial:



Dipole D450V2 SN1001; Test date:01/16/03

Run #: Sys Val_R3_030116-06
Model #: D450V2
Robot: CGISS-3
TX Freq: 450 MHz
Start Power; 250mW
DAE3: SN:406

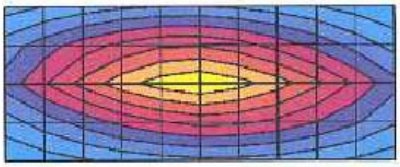
Phantom #:80302002C/S7
SN: 1001
Tester: J. Fortier
Sim Tissue Temp: 21.5 (Celsius)

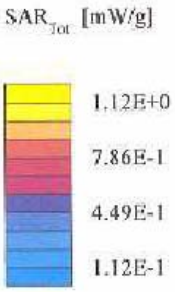
DAE Cal Date: 11/11/02

- Comments-

Target at 1W is 4.41 mW/g (1g), 2.93 mW/g (10g)

Flat; Probe: ET3DV6 - SN1393 SPEAG; ConvF(8.20,8.20,8.20); Crest factor: 1.0; FCC Body 450: σ = 0.92 mho/m ε_r = 55.4 ρ = 1.00 g/cm^3
Cubes (2): Peak: 1.69 mW/g ± 0.07 dB, SAR (1g): 1.10 mW/g ± 0.07 dB, SAR (10g): 0.732 mW/g ± 0.06 dB, (Worst-case extrapolation)
Penetration depth: 13.2 (11.7, 15.0) [mm]
Powerdrift: -0.01 dB





Motorola CGISS EME Lab

SYSTEM VALIDATION

Date:	09/06/2003	Frequency (MHz):	2450
Lab Location:	CGISS	Mixture Type:	2450-IEEE Head
Robot System:	CGISS-2	Ambient Temp.(°C):	22.9
Probe Serial #:	1383	Tissue Temp.(°C):	21.0
DAE Serial #:	DAE3V1 SN406		

Tissue Characteristics		Phantom Type/SN:	VAL30242005A
Permitivity:	38.0	Distance (mm):	10
Conductivity:	1.85		

Reference Source: Dipole (Dipole/Handset)
Reference SN: 704

Power to Dipole: 250 mW
Power Output (radio): _____ mW

Target SAR Value: 52.4 mW/g, 24.0 mW/g (10g avg.)
(Normalized to 1.0 W)

Measured SAR Value: 13.10 mW/g, 5.99 mW/g (10g avg.)
Power Drift: -0.02 dB

Measured SAR Value: 52.64 mW/g, 24.07 mW/g (10g avg.)
(normalized to 1.0 W,
with drift compensation)

Percent Difference From Target (must be within System Uncertainty): + 0.46 % (1g avg)
+ 0.29 % (10g avg)

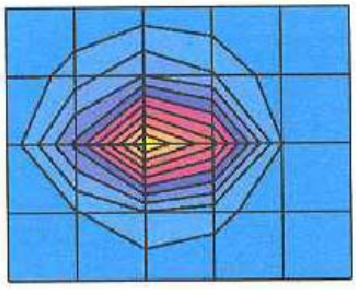
Test performed by: Dave Hopper Initial: WOH

SPEAG DIPOLE D2450V2 ; Test date:09/06/03

Run #: Sys VAL R2-030906-01
Model#: D2450V2
Robot#: CGISS-2
Tx Freq: 2450MHz
Start power: 250mW

Phantom #: VAL30242005A/S12
SN:704
DAE: DAE3V1SN406 (11/11/02)
Tester: Dave Hopper
Simulated tissue temp: 21.0 C

IEEE Targets:
52.4 mW/g for 1g SAR, 24.0 mW/g for 10g SAR.
SAR calculated 1g is 52.64 mW/g percent from target (including drift) is 0.46 %
SAR Calculated 10g is 24.07 mW/g Percent from target (including drift) is 0.29 %
Flat; Probe: ET3DV6 - SN1383 (Cal Date 26 February 2003); ConvF(5.00,5.00,5.00); Crest factor: 1.0; IEEE
HEAD 2450MHz: $\sigma = 1.85$ mho/m $\varepsilon_r = 38.0$ $\rho = 1.00$ g/cm^3
Cubes (2): Peak: 27.2 mW/g ± 0.00 dB, SAR (1g): 13.1 mW/g ± 0.00 dB, SAR (10g): 5.99 mW/g ± 0.01 dB, (Worst-case extrapolation)
Penetration depth: 6.5 (6.3, 7.1) [mm]
Powerdrift: -0.02 dB



Motorola CGISS EME Lab

SYSTEM PERFORMANCE CHECK TARGET SAR

Date:	09/06/2003	Frequency (MHz):	2450
Lab Location:	CGISS	Mixture Type:	2450-FCC Body
Robot System:	CGISS-2	Ambient Temp.(°C):	22.9
Probe Serial #:	1383	Tissue Temp.(°C):	22.0
DAE Serial #:	DAE3V1 SN406		

Tissue Characteristics		Phantom Type/SN:	40302002A/S10
Permitivity:	53.6	Distance (mm):	10
Conductivity:	2.04		

Reference Source:	Dipole (Dipole)
Reference SN:	704
Power to Dipole:	250 mW

Measured SAR Value:	12.80 mW/g,	5.92 mW/g (10g avg.)
Power Drift:	-0.01 dB	

New Target/Measured SAR Value: (Normalized to 1.0 W, with drift compensation)	51.32 mW/g,	23.73 mW/g (10g avg.)

Test performed by: Dave Hopper Initial: WDH

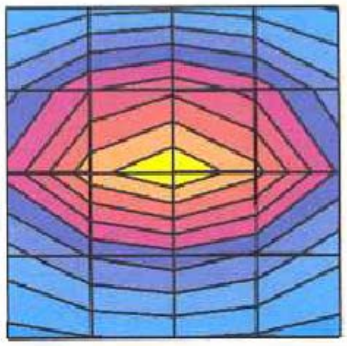
SPEAG DIPOLE D2450V2 ; Test Date: 09/06/03

Run #: Sys Perf R2-030906-04
Model#: D2450V2
Robot#: CGISS-2
Tx Freq: 2450MHz
Start power: 250mW

Phantom #:40302002A/S10
SN:704
DAE: DAE3V1SN406 (11/11/02)
Tester: Dave Hopper
Simulated tissue temp: 22.0 C

New Targets:
51.32 mW/g for 1g SAR, 23.73 mW/g for 10g SAR.

Flat Phantom; Section;
Probe: ET3DV6 - SN1383 (Cal Date 26 February 2003); ConvF(4.70,4.70,4.70); Probe cal date: 26/02/03;
Crest factor: 1.0; FCC BODY 2450MHz: σ = 2.04 mho/m ε_r = 53.6 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 12.8 mW/g ± 0.00 dB, SAR (10g): 5.92 mW/g ± 0.00 dB, (Worst-case extrapolation)



Motorola CGISS EME Lab

APPENDIX D
Calibration Certificates

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

Client **Motorola CGISS**

CALIBRATION CERTIFICATE

Object(s)	ET3DV6 - SN:1384
Calibration procedure(s)	QA CAL-01.v2 Calibration procedure for dosimetric E-field probes
Calibration date:	May 15, 2003
Condition of the calibrated item	In Tolerance (according to the specific calibration document)

This calibration statement documents traceability of M&TE used in the calibration procedures and conformity of the procedures with the ISO/IEC 17025 international standard.

All calibrations have been conducted in the closed laboratory facility: environment temperature 22 +/- 2 degrees Celsius and humidity < 75%.

Calibration Equipment used (M&TE critical for calibration)

Model Type	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
RF generator HP 8684C	US3642U01700	4-Aug-99 (SPEAG, in house check Aug-02)	In house check: Aug-05
Power sensor E4412A	MY41495277	2-Apr-03 (METAS, No 252-0250)	Apr-04
Power sensor HP 8481A	MY41092180	18-Sep-02 (Agilent, No. 20020918)	Sep-03
Power meter EPM E4419B	GB41293874	2-Apr-03 (METAS, No 252-0250)	Apr-04
Network Analyzer HP 8753E	US38432426	3-May-00 (Agilent, No. 8702K064602)	In house check: May 03
Fluke Process Calibrator Type 702	SN: 6295803	3-Sep-01 (ELCAL, No.2360)	Sep-03

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

Date issued: May 15, 2003

This calibration certificate is issued as an intermediate solution until the accreditation process (based on ISO/IEC 17025 International Standard) for Calibration Laboratory of Schmid & Partner Engineering AG is completed.

DASY - Parameters of Probe: ET3DV6 SN:1384

Sensitivity in Free Space

Diode Compression

NormX	1.76 $\mu V/(V/m)^2$	DCP X	92	mV
NormY	1.72 $\mu V/(V/m)^2$	DCP Y	92	mV
NormZ	1.89 $\mu V/(V/m)^2$	DCP Z	92	mV

Sensitivity in Tissue Simulating Liquid

Head 900 MHz ε_r = 41.5 ± 5% σ = 0.97 ± 5% mho/m

Valid for f=800-1000 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X	6.6 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	6.6 ± 9.5% (k=2)	Alpha	0.45
ConvF Z	6.6 ± 9.5% (k=2)	Depth	2.42

Head 1800 MHz ε_r = 40.0 ± 5% σ = 1.40 ± 5% mho/m

Valid for f=1710-1910 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X	5.4 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	5.4 ± 9.5% (k=2)	Alpha	0.55
ConvF Z	5.4 ± 9.5% (k=2)	Depth	2.56

Boundary Effect

Head 900 MHz Typical SAR gradient: 5 % per mm

Probe Tip to Boundary		1 mm	2 mm
SAR_{be} [%]	Without Correction Algorithm	11.4	6.3
SAR_{be} [%]	With Correction Algorithm	0.4	0.7

Head 1800 MHz Typical SAR gradient: 10 % per mm

Probe Tip to Boundary		1 mm	2 mm
SAR_{be} [%]	Without Correction Algorithm	14.7	9.5
SAR_{be} [%]	With Correction Algorithm	0.1	0.0

Sensor Offset

Probe Tip to Sensor Center	2.7	mm
Optical Surface Detection	1.5 ± 0.2	mm

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info@speag.com, http://www.speag.com

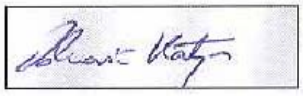
Additional Conversion Factors

for Dosimetric E-Field Probe

Type:	**ET3DV6**
Serial Number:	**1384**
Place of Assessment:	**Zurich**
Date of Assessment:	**May 19, 2003**
Probe Calibration Date:	**May 15, 2003**

Schmid & Partner Engineering AG hereby certifies that conversion factor(s) of this probe have been evaluated on the date indicated above. The assessment was performed using the FDTD numerical code SEMCAD of Schmid & Partner Engineering AG. Since the evaluation is coupled with measured conversion factors, it has to be recalculated yearly, i.e., following the re-calibration schedule of the probe. The uncertainty of the numerical assessment is based on the extrapolation from measured value at 900 MHz or at 1800 MHz.

Assessed by:



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info@speag.com, http://www.speag.com

Dosimetric E-Field Probe ET3DV6 SN:1384

Conversion factor (± standard deviation)

150 MHz	ConvF	**8.2± 8%**	ε_r = 61.9 σ = 0.80 mho/m (body tissue)
236 MHz	ConvF	**8.1 ± 8%**	ε_r = 59.8 σ = 0.87 mho/m (body tissue)
300 MHz	ConvF	**7.9 ± 8%**	ε_r = 58.2 σ = 0.92 mho/m (body tissue)
350 MHz	ConvF	**7.9 ± 8%**	ε_r = 57.7 σ = 0.93 mho/m (body tissue)
450 MHz	ConvF	**7.6 ± 8%**	ε_r = 56.7 σ = 0.94 mho/m (body tissue)
784 MHz	ConvF	**6.6 ± 8%**	ε_r = 55.4 σ = 0.97 mho/m (body tissue)
1450 MHz	ConvF	**5.5 ± 8%**	ε_r = 54.0 σ = 1.30 mho/m (body tissue)

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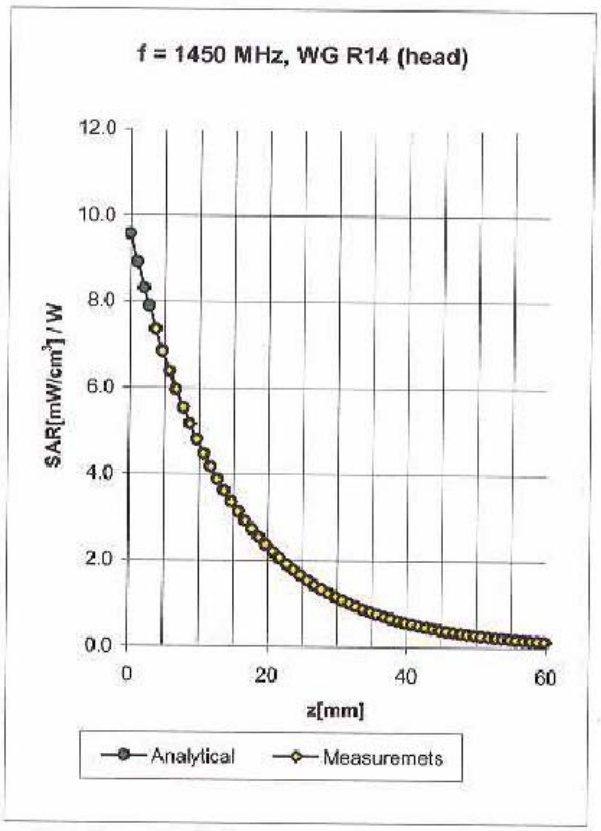
info@speag.com, http://www.speag.com

Dosimetric E-Field Probe ET3DV6 SN:1384

Conversion factor (± standard deviation)

150 MHz	ConvF	**9.1 ± 8%**	ε_r = **52.3** σ = **0.76 mho/m** (head tissue)
236 MHz	ConvF	**8.3 ± 8%**	ε_r = **48.3** σ = **0.82 mho/m** (head tissue)
300 MHz	ConvF	**7.8 ± 8%**	ε_r = **45.3** σ = **0.87 mho/m** (head tissue)
350 MHz	ConvF	**7.8 ± 8%**	ε_r = **44.7** σ = **0.87 mho/m** (head tissue)
400 MHz	ConvF	**7.5 ± 8%**	ε_r = **44.4** σ = **0.87 mho/m** (head tissue - CENELEC)
450 MHz	ConvF	**7.5 ± 8%**	ε_r = **43.5** σ = **0.87 mho/m** (head tissue)
784 MHz	ConvF	**6.8 ± 8%**	ε_r = **41.8** σ = **0.90 mho/m** (head tissue)

Conversion Factor Assessment

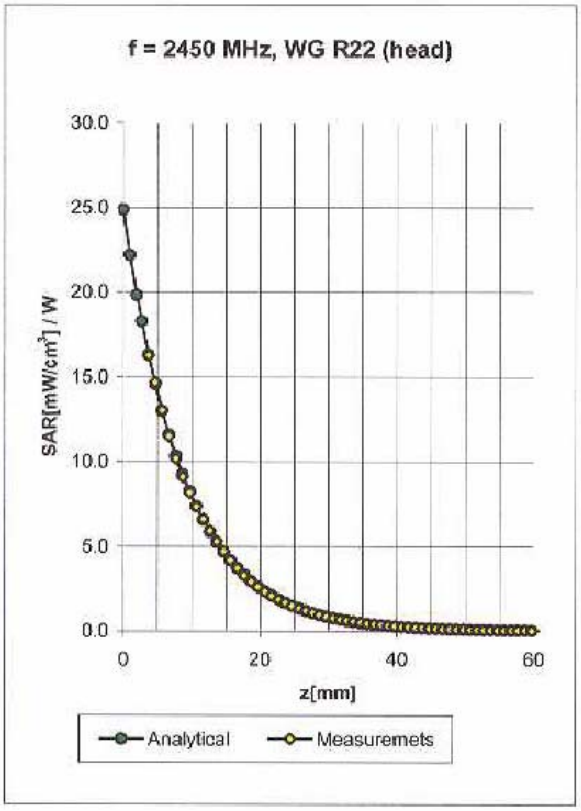


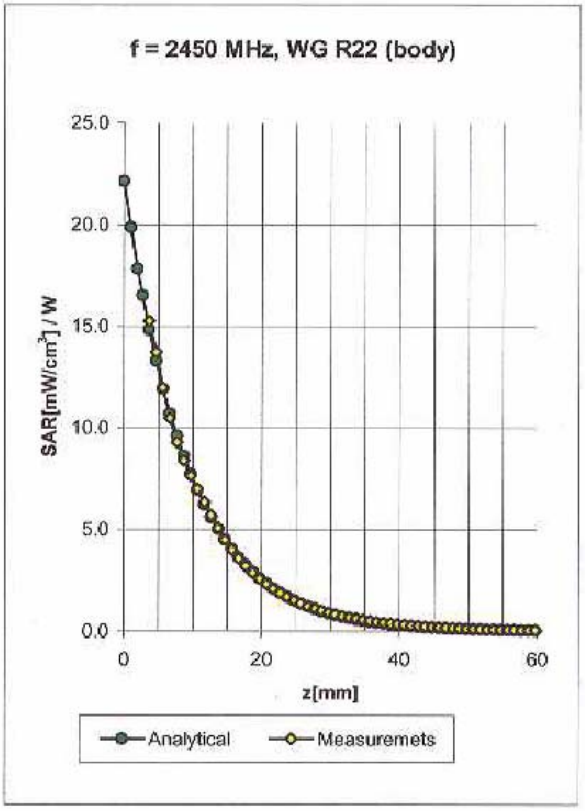
Head	1450	MHz	ε_r = 40.5 ± 5%	σ = 1.20 ± 5% mho/m

Valid for f=1400-1500 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X	5.9 ± 8.9% (k=2)	Boundary effect:	
ConvF Y	5.9 ± 8.9% (k=2)	Alpha	0.53
ConvF Z	5.9 ± 8.9% (k=2)	Depth	2.61

Conversion Factor Assessment





Head	2450	MHz	ε_r = 39.2 ± 5%	σ = 1.80 ± 5% mho/m

Valid for f=2400-2500 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

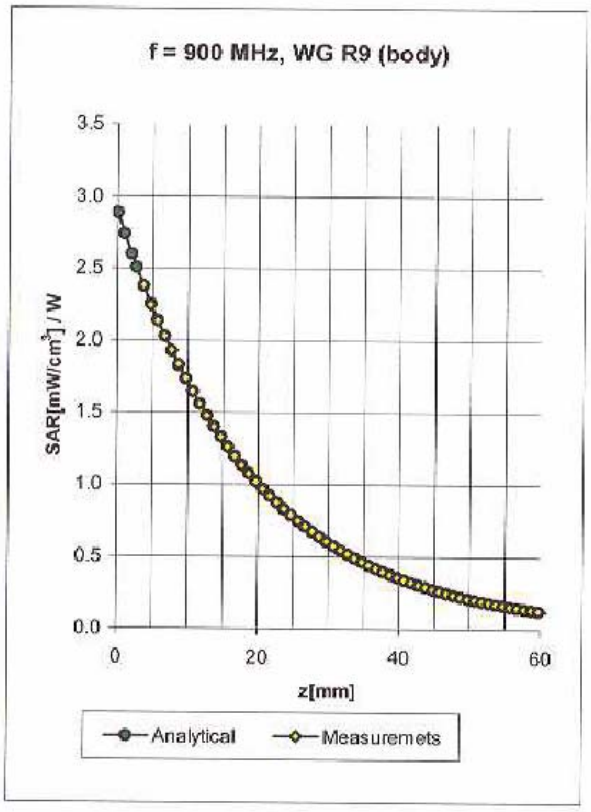
ConvF X	5.0 ±8.9% (k=2)	Boundary effect:	
ConvF Y	5.0 ±8.9% (k=2)	Alpha	**1.20**
ConvF Z	5.0 ±8.9% (k=2)	Depth	**1.70**

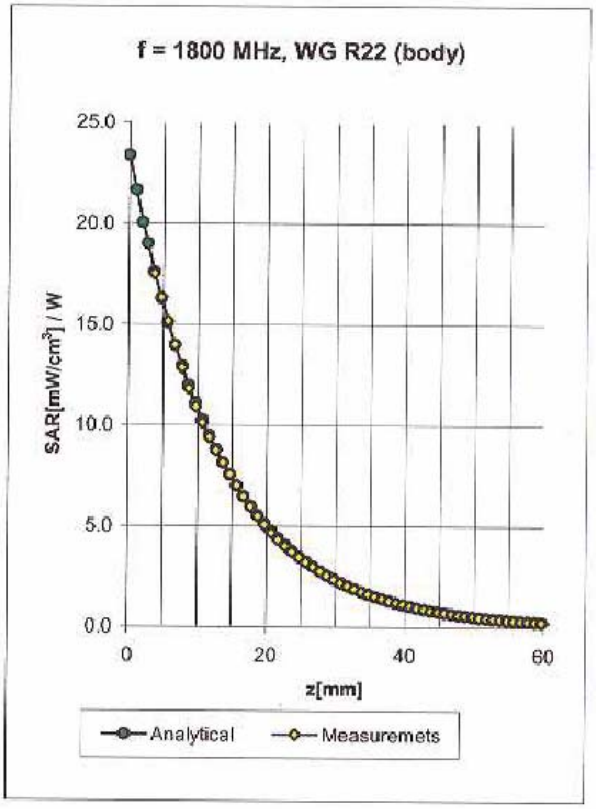
Body	2450	MHz	ε_r = 52.7 ± 5%	σ = 1.95 ± 5% mho/m

Valid for f=2400-2500 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	4.8 ±8.9% (k=2)	Boundary effect:	
ConvF Y	4.8 ±8.9% (k=2)	Alpha	**2.00**
ConvF Z	4.8 ±8.9% (k=2)	Depth	**1.25**

Conversion Factor Assessment





Body 900 MHz ε_r = 55.0 ± 5% σ = 1.05 ± 5% mho/m

Valid for f=800-1000 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

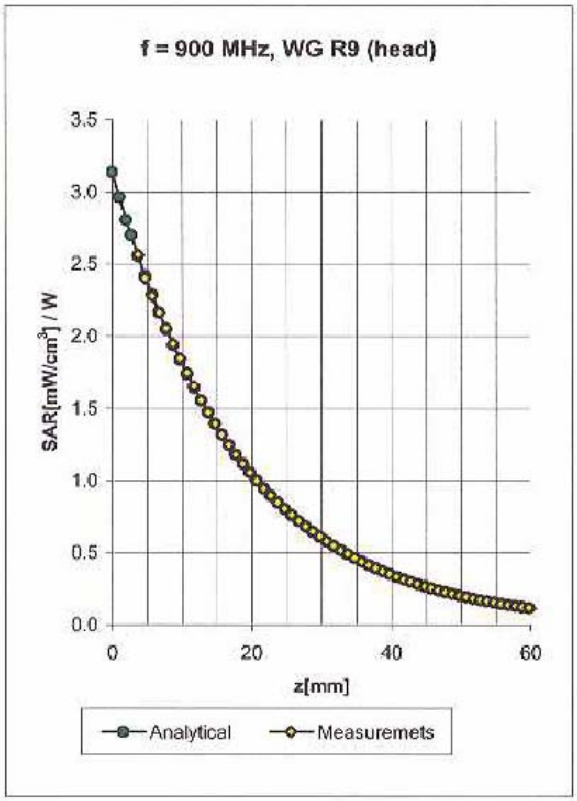
ConvF X	6.5 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	6.5 ± 9.5% (k=2)	Alpha	**0.44**
ConvF Z	6.5 ± 9.5% (k=2)	Depth	**2.51**

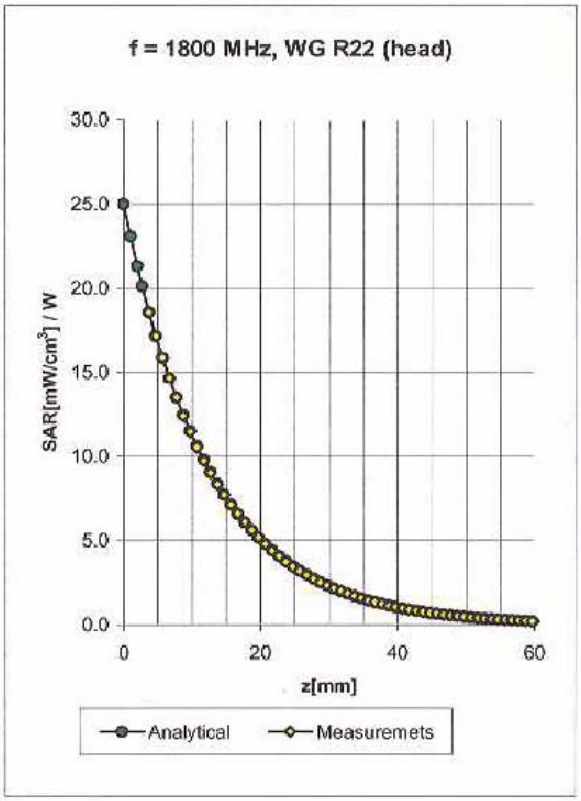
Body 1800 MHz ε_r = 53.3 ± 5% σ = 1.52 ± 5% mho/m

Valid for f=1710-1910 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	5.0 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	5.0 ± 9.5% (k=2)	Alpha	**0.64**
ConvF Z	5.0 ± 9.5% (k=2)	Depth	**2.49**

Conversion Factor Assessment





Head 900 MHz ε_r = 41.5 ± 5% σ = 0.97 ± 5% mho/m

Valid for f=800-1000 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

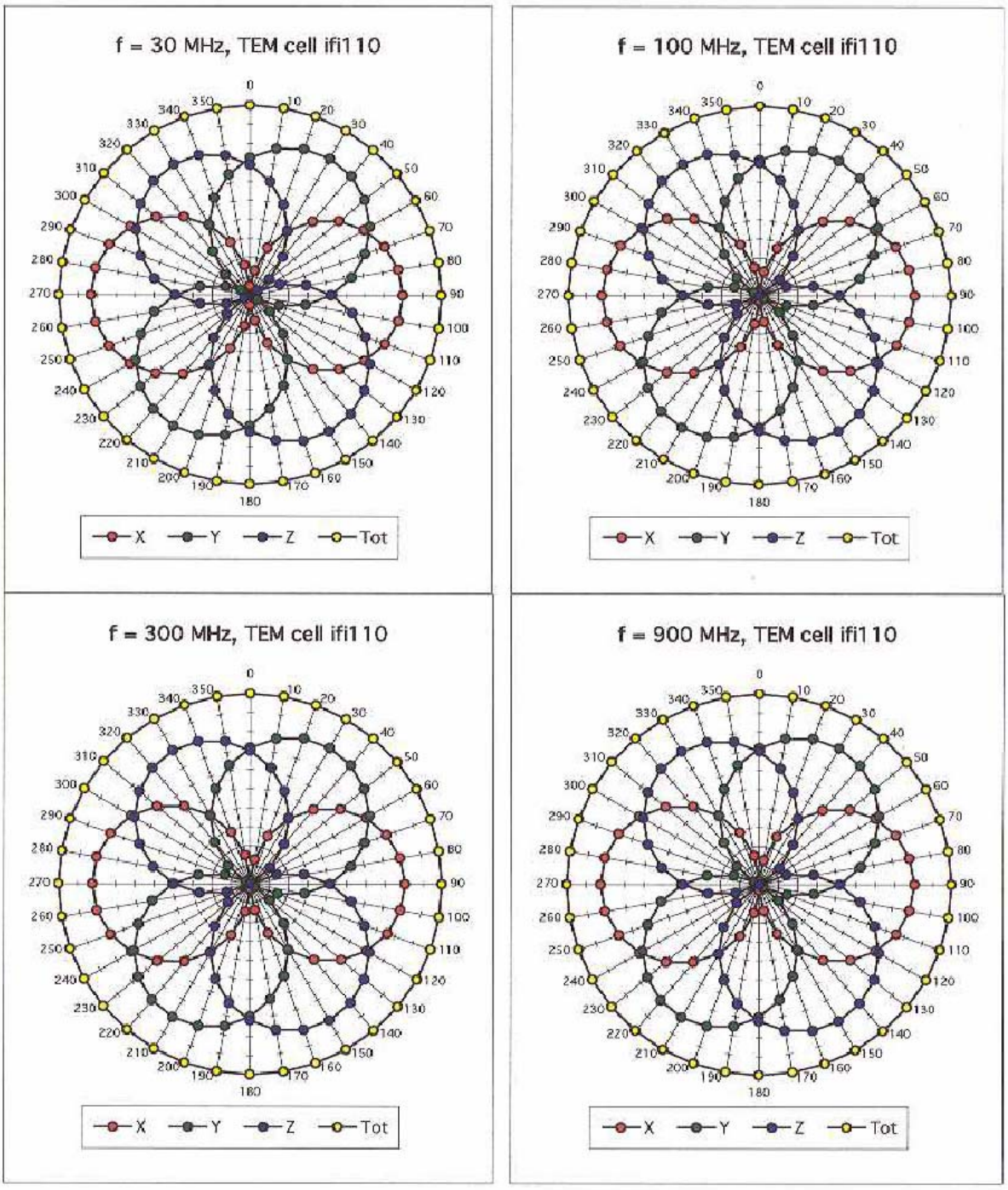
ConvF X	6.6 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	6.6 ± 9.5% (k=2)	Alpha	**0.45**
ConvF Z	6.6 ± 9.5% (k=2)	Depth	**2.42**

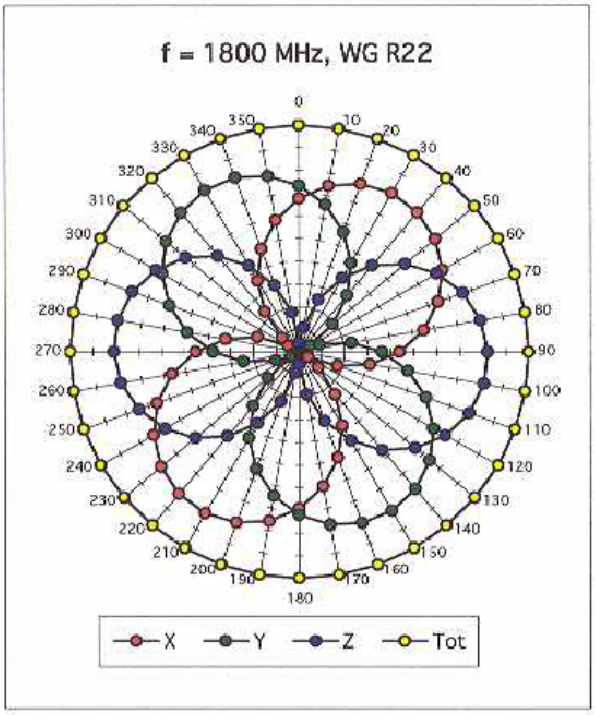
Head 1800 MHz ε_r = 40.0 ± 5% σ = 1.40 ± 5% mho/m

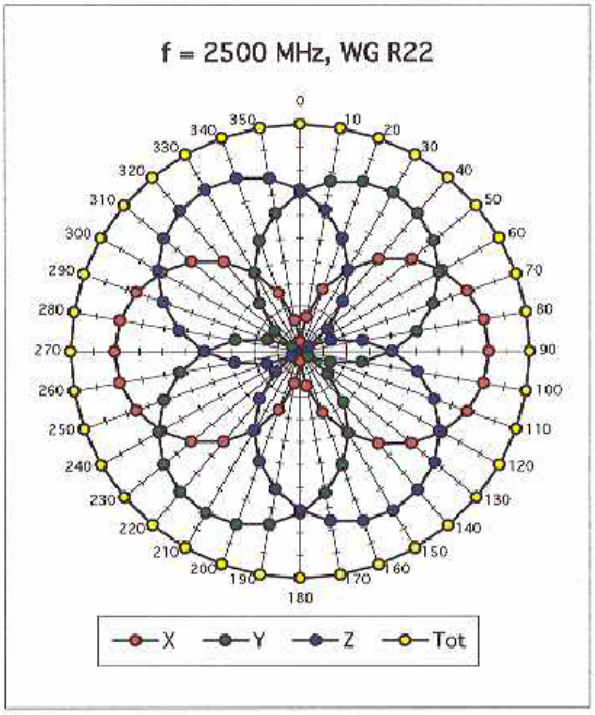
Valid for f=1710-1910 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X	5.4 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	5.4 ± 9.5% (k=2)	Alpha	**0.55**
ConvF Z	5.4 ± 9.5% (k=2)	Depth	**2.56**

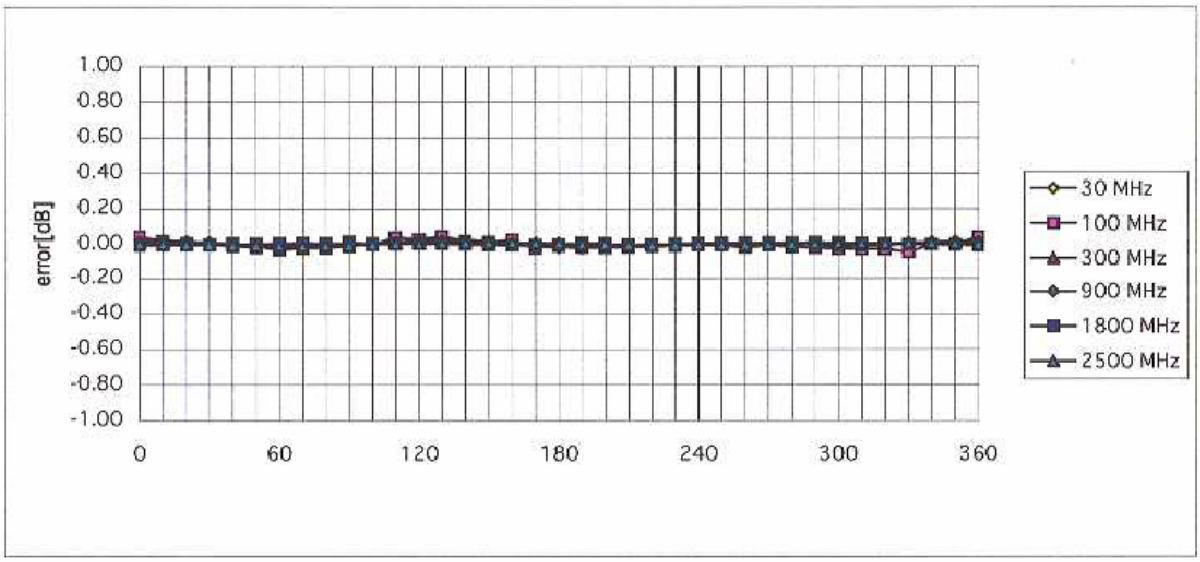
Receiving Pattern (ϕ), θ = 0°





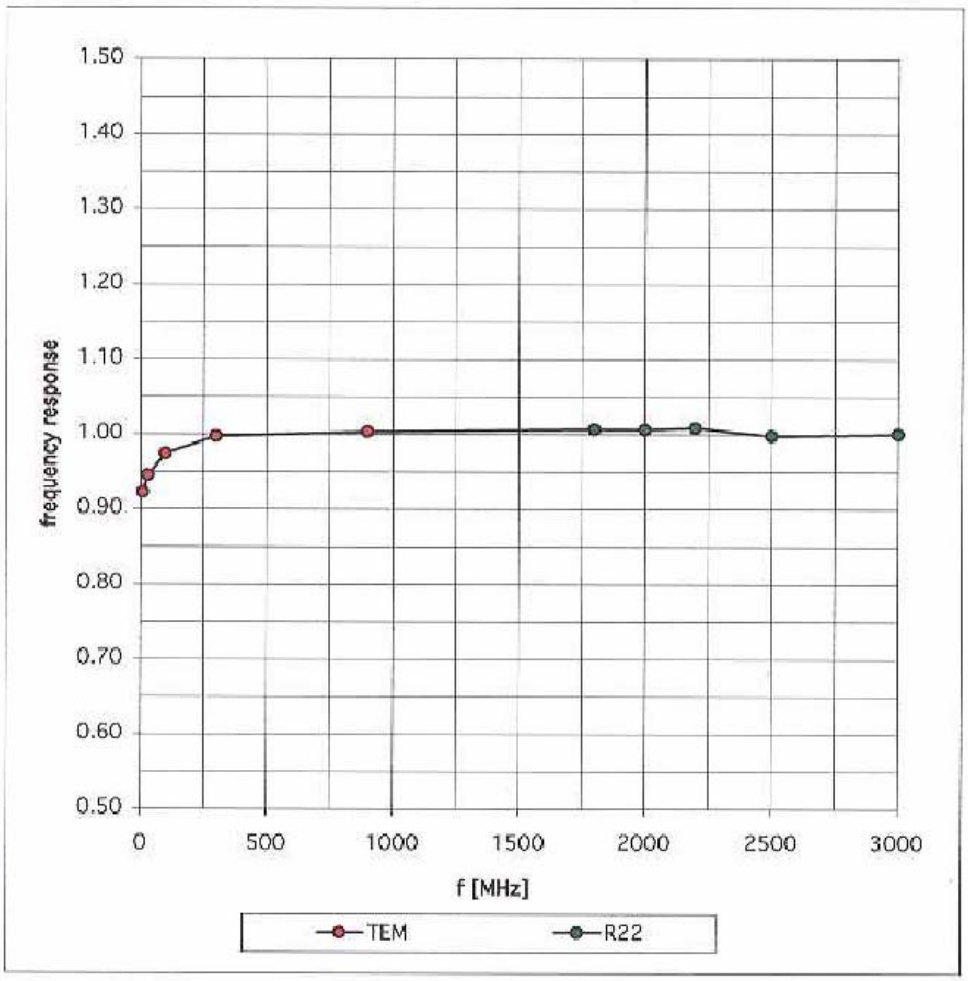


Isotropy Error (ϕ), θ = 0°



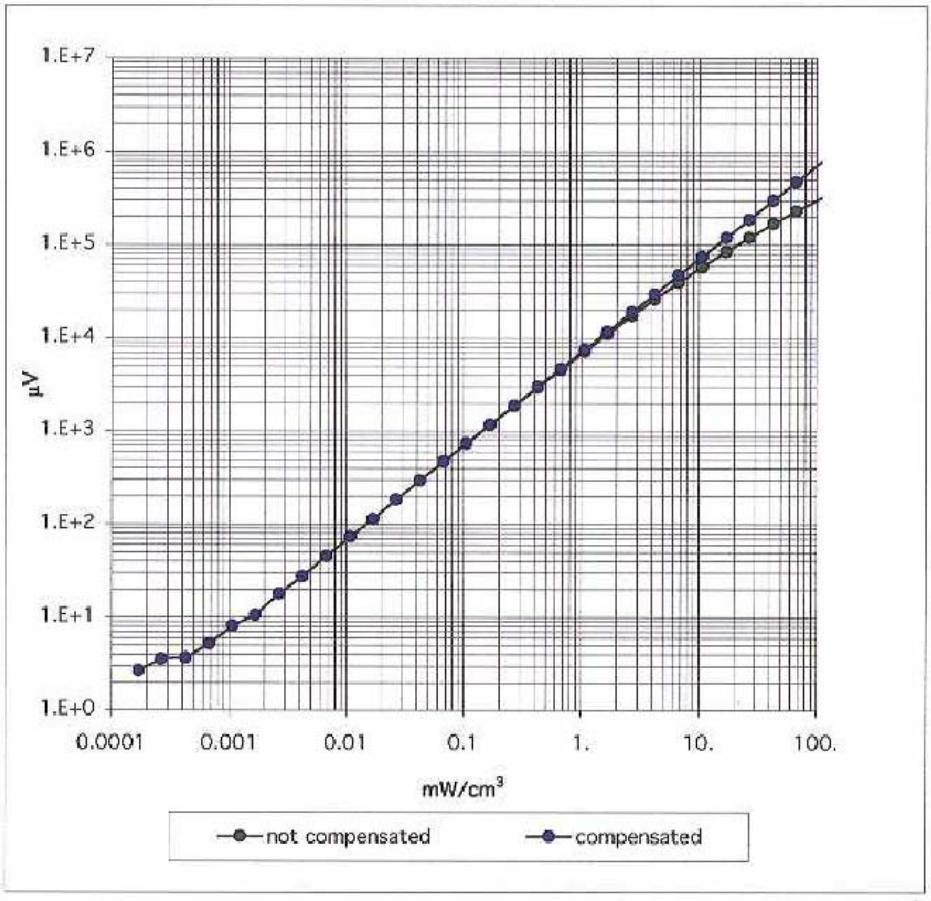
Frequency Response of E-Field

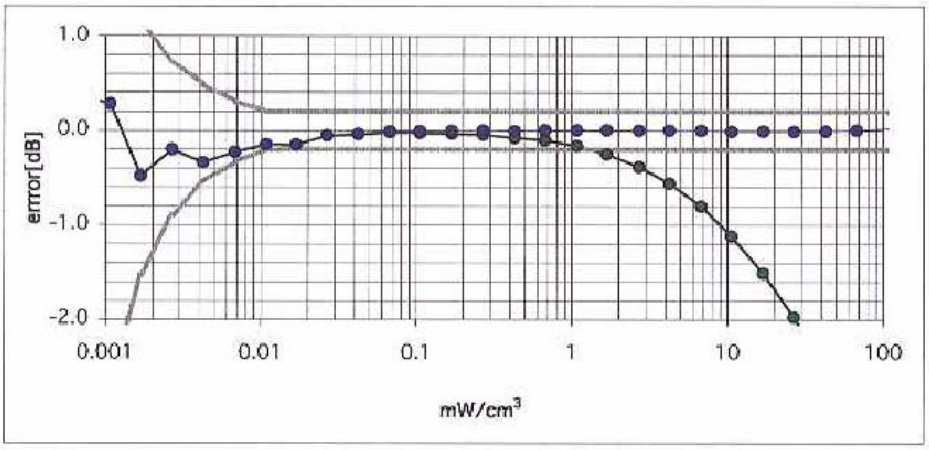
(TEM-Cell:ifi110, Waveguide R22)



Dynamic Range f(SAR_{brain})

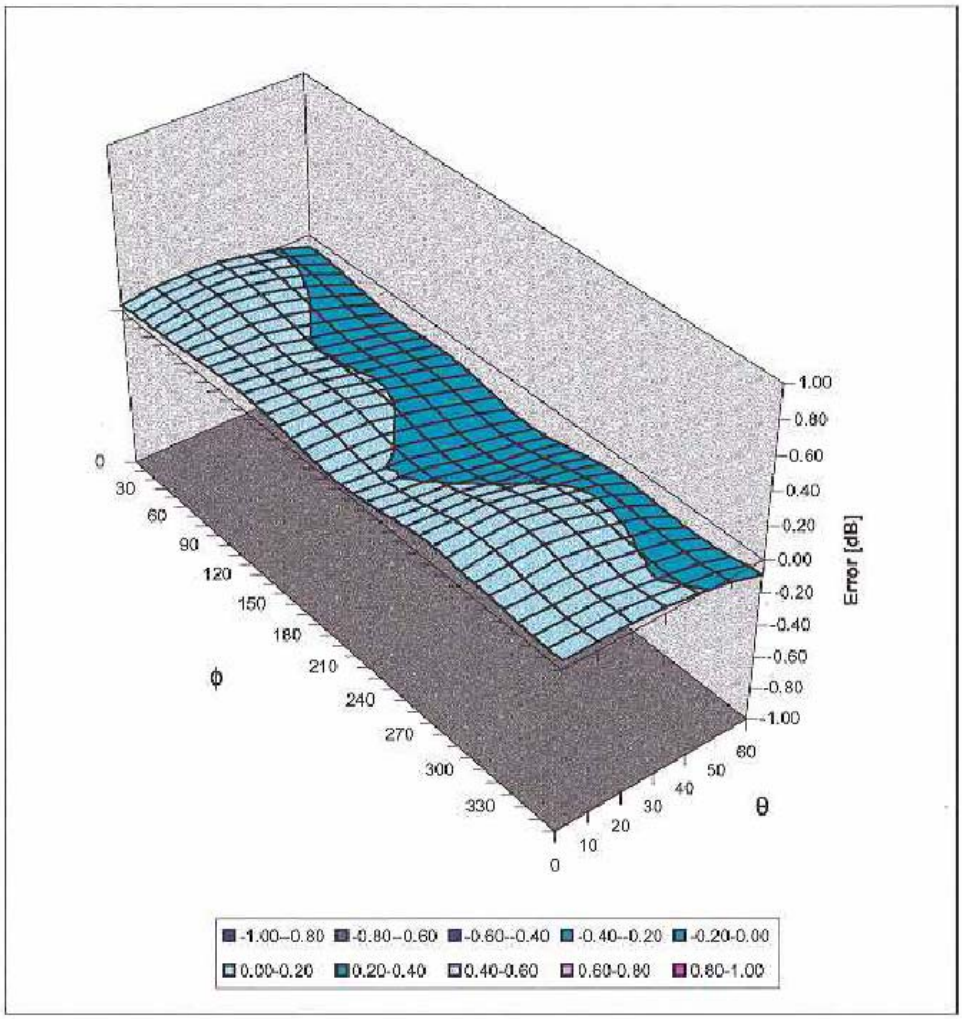
(Waveguide R22)





Deviation from Isotropy in HSL

Error (θ,φ), f = 900 MHz



Schmid & Partner
Engineering AG

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Calibration Certificate

450 MHz System Validation Dipole

Type:	**D450V2**
Serial Number:	**1001**
Place of Calibration:	**Zurich**
Date of Calibration:	**April 5, 2002**
Calibration Interval:	**24 months**

Schmid & Partner Engineering AG hereby certifies, that this device has been calibrated on the date indicated above. The calibration was performed in accordance with specifications and procedures of Schmid & Partner Engineering AG.

Wherever applicable, the standards used in the calibration process are traceable to international standards. In all other cases the standards of the Laboratory for EMF and Microwave Electronics at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland have been applied.

Calibrated by:	Jelisavčić Katja
Approved by:	

1. Measurement Conditions

The measurements were performed in the flat phantom filled with head simulating liquid of the following electrical parameters at 450 MHz:

Relative Dielectricity	**44.5**	± 5%
Conductivity	**0.86 mho/m**	± 5%

The DASY3 System (Software version 3.1d) with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 7.2 at 450 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom and the dipole was oriented parallel to the longer side of the phantom. The standard measuring distance was 15mm from dipole center to the liquid surface including the 6mm thick phantom shell. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 20mm was aligned with the dipole. The 5x5x7 fine cube was chosen for cube integration. Probe isotropy errors were cancelled by measuring the SAR with normal and 90° turned probe orientations and averaging.
The dipole input power (forward power) was 389 mW ± 3 %. The results are normalized to 1W input power.

2. SAR Measurement

Standard SAR-measurements were performed with the phantom according to the measurement conditions described in section 1. The results have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values are:

averaged over 1 cm^3 (1 g) of tissue:	**4.77 mW/g** (Advanced Extrapolation)
averaged over 10 cm^3 (10 g) of tissue:	**3.17 mW/g** (Advanced Extrapolation)

Advanced extrapolation has been applied to the measured SAR values to compensate for the probe boundary effect (see DASY User Manual for details).

Note: If the liquid parameters for validation are slightly different from the ones used for initial calibration, the SAR-values will be different as well.

3. Dipole Impedance and Return Loss

The impedance was measured at the SMA-connector with a network analyzer and numerically transformed to the dipole feedpoint. The transformation parameters from the SMA-connector to the dipole feedpoint are:

Electrical delay:	**1.342 ns**	(one direction)
Transmission factor:	**0.997**	(voltage transmission, one direction)

The dipole was positioned at the flat phantom sections according to section 1 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 450 MHz:	Re{Z} = **57.9 Ω**
	Im {Z} = **-6.0 Ω**
Return Loss at 450 MHz	**-20.8 dB**

4. Handling

Do not apply excessive force to the dipole arms, because they might bend. Bending of the dipole arms stresses the soldered connections near the feedpoint leading to a damage of the dipole.

5. Design

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.

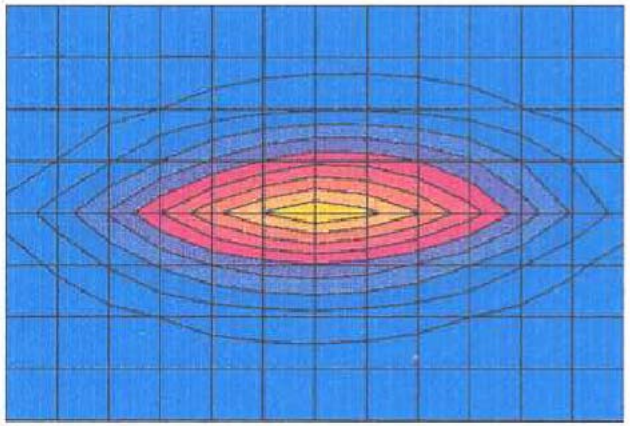
6. Power Test

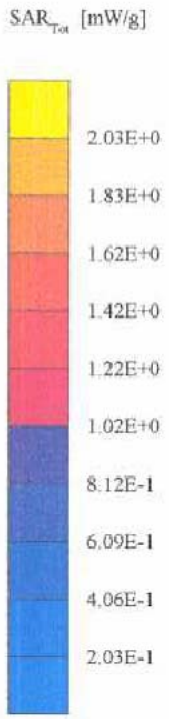
After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

03/27/02

Validation Dipole D450V2 SN:1001, d = 15 mm

Frequency: 450 MHz; Antenna Input Power: 388 [mW]
Phantom Name: Calibration, Grid Spacing: Dx = 20.0, Dy = 20.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(7.20,7.20,7.20); Crest factor: 1.0; Head 450 MHz: σ = 0.86 mho/m ε_r = 44.5 ρ = 1.00 g/cm^3
Cubes (2): Peak: 2.81 mW/g ± 0.03 dB, SAR (1g): 1.85 mW/g ± 0.03 dB, SAR (10g): 1.23 mW/g ± 0.03 dB , (Advanced extrapolation)
Penetration depth: 13.1 (12.0, 14.4) [mm]





Schmid & Partner Engineering AG, Zurich, Switzerland

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

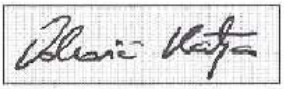
Calibration Certificate

2450 MHz System Validation Dipole

Type:	D2450V2
Serial Number:	704
Place of Calibration:	Zurich
Date of Calibration:	December 12, 2002
Calibration Interval:	24 months

Schmid & Partner Engineering AG hereby certifies, that this device has been calibrated on the date indicated above. The calibration was performed in accordance with specifications and procedures of Schmid & Partner Engineering AG.

Wherever applicable, the standards used in the calibration process are traceable to international standards. In all other cases the standards of the Laboratory for EMF and Microwave Electronics at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland have been applied.

Calibrated by:	
Approved by:	

1. Measurement Conditions

The measurements were performed in the flat section of the SAM twin phantom filled with head simulating solution of the following electrical parameters at 2450 MHz:

Relative permitivity	**38.0**	± 5%
Conductivity	**1.87 mho/m**	± 10%

The DASY4 System with a dosimetric E-field probe ET3DV6 (SN:1507, conversion factor 5.0 at 2450 MHz) was used for the measurements.

The dipole feedpoint was positioned below the center marking and oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10mm from dipole center to the solution surface. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15 mm was aligned with the dipole. The 7x7x7 fine cube was chosen for cube integration.
The dipole input power (forward power) was 250mW ± 3 %. The results are normalized to 1W input power.

2 SAR Measurement

Standard SAR-measurements were performed according to the measurement conditions described in section 1. The results (see figure supplied) have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values measured with the dosimetric probe ET3DV6 SN:1507 are:

averaged over 1 cm^3 (1 g) of tissue:	**55.2 mW/g**
averaged over 10 cm^3 (10 g) of tissue:	**24.6 mW/g**

3. Dipole impedance and return loss

The impedance was measured at the SMA-connector with a network analyzer and numerically transformed to the dipole feedpoint. The transformation parameters from the SMA-connector to the dipole feedpoint are:

Electrical delay:	**1.151 ns**	(one direction)
Transmission factor:	**0.997**	(voltage transmission, one direction)

The dipole was positioned at the flat phantom sections according to section 1 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 2450 MHz:	Re{Z} = **52.5** Ω
	Im {Z} = **2.8** Ω
Return Loss at 2450 MHz	**- 28.6 dB**

4. Handling

Do not apply excessive force to the dipole arms, because they might bend. Bending of the dipole arms stresses the soldered connections near the feedpoint leading to a damage of the dipole.

5. Design

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.

Small end caps have been added to the dipole arms in order to improve matching when loaded according to the position as explained in Section 1. The SAR data are not affected by this change. The overall dipole length was not affected.

6. Power Test

After long term use with 40W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

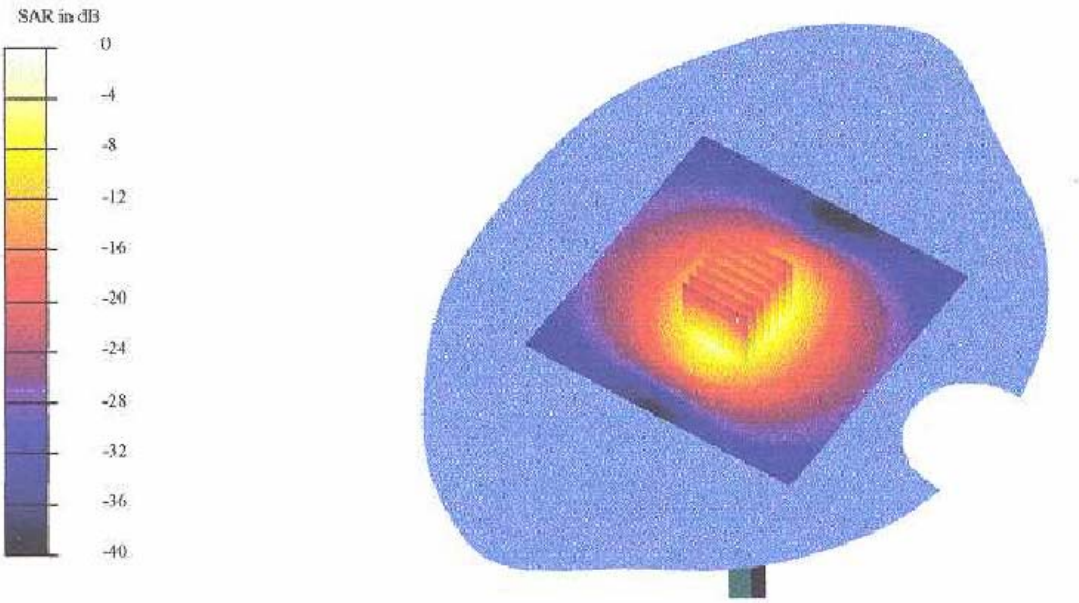
Test Laboratory: SPEAG, Zurich, Switzerland
File Name: SN704_SN1507_HSL2450_121202.da4

DUT: Dipole 2450 MHz Type & Serial Number: D2450V2 - SN704
Program: Dipole Calibration; Pin = 250 mW; d = 10 mm

Communication System: CW-2450; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL 2450 MHz (σ = 1.87 mho/m, ε = 38.03, ρ = 1000 kg/m3)
Phantom section: FlatSection

DASY4 Configuration:
- Probe: ET3DV6 - SN1507; ConvF(5, 5, 5); Calibrated: 1/24/2002
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 - SN410; Calibrated: 7/18/2002
- Phantom: SAM 4.0 - TP:1006
- Software: DASY4, V4.0 Build 51

Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm
Reference Value = 95.1 V/m
Peak SAR = 29.9 mW/g
SAR(1 g) = 13.8 mW/g; SAR(10 g) = 6.16 mW/g
Power Drift = 0.002 dB



APPENDIX E
Illustration of Body-Worn Accessories

The purpose of this appendix is to illustrate the body-worn carry accessories for FCC ID: AZ489FT4863. The sample that was used in the following photos represents the product used to obtain the results presented herein and was used in this section to demonstrate the different body-worn accessories.

Figure 1.
Belt clip model HCLN4019A
Back View

Figure 2.
Belt clip model HCLN4019A
Side View

Figure 3.
Belt clip model HCLN4019A
Front View

Appendix F
Accessories and options test status and separation distances

The following table summarizes the body spacing distance provided by each of the body-worn accessories:

Carry Case Model	Tested ?	Separation distance between device and phantom surface. (mm)	Comments
HCLN4019A	Yes	37-44	NA
Audio Acc. Model	**Tested ?**	**Separation distance between device and phantom surface. (mm)**	**Comments**
HMN9026B	Yes	NA	NA
HMN9039B	Yes	NA	NA
HMN9038A	Yes	NA	NA
HMN9025B	Yes	NA	NA
NTN9159C	Yes	NA	NA
HCLE4105A	Yes	NA	NA
HCSN4001A	Yes	NA	NA
Additional attachments	**Tested ?**	**Separation distance between device and phantom surface. (mm)**	**Comments**
1564200W18	Yes	NA	AAA battery tray. Tested with offered AAA battery