Probe ET3DV6

SN:1560

Manufactured:	December 1, 2000
Calibrated:	February 20, 2001

Calibrated for System DASY3

DASY3 - Parameters of Probe: ET3DV6 SN:1560

Sensitivity in Free Space

NormX	**1.48** $\mu V/(V/m)^2$
NormY	**1.51** $\mu V/(V/m)^2$
NormZ	**1.43** $\mu V/(V/m)^2$

Diode Compression

DCP X	**98** mV
DCP Y	**98** mV
DCP Z	**98** mV

Sensitivity in Tissue Simulating Liquid

Head **450 MHz** e_r **= 43.5 ± 5%** s **= 0.87 ± 10% mho/m**

ConvF X	**7.17**	extrapolated	Boundary effect:	
ConvF Y	**7.17**	extrapolated	Alpha	**0.25**
ConvF Z	**7.17**	extrapolated	Depth	**3.21**

Head **900 MHz** e_r **= 42 ± 5%** s **= 0.97 ± 10% mho/m**

ConvF X	**6.59**	± 7% (k=2)	Boundary effect:	
ConvF Y	**6.59**	± 7% (k=2)	Alpha	**0.32**
ConvF Z	**6.59**	± 7% (k=2)	Depth	**2.93**

Head **1500 MHz** e_r **= 40.4 ± 5%** s **= 1.23 ± 10% mho/m**

ConvF X	**5.82**	interpolated	Boundary effect:	
ConvF Y	**5.82**	interpolated	Alpha	**0.41**
ConvF Z	**5.82**	interpolated	Depth	**2.55**

Head **1800 MHz** e_r **= 40 ± 5%** s **= 1.40 ± 10% mho/m**

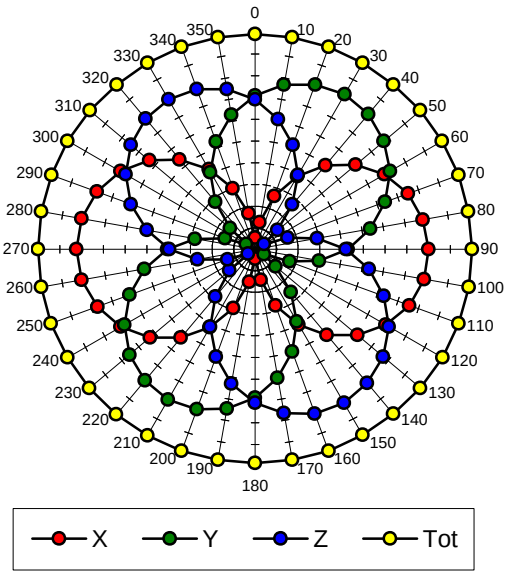
ConvF X	**5.43**	± 7% (k=2)	Boundary effect:	
ConvF Y	**5.43**	± 7% (k=2)	Alpha	**0.46**
ConvF Z	**5.43**	± 7% (k=2)	Depth	**2.36**

Sensor Offset

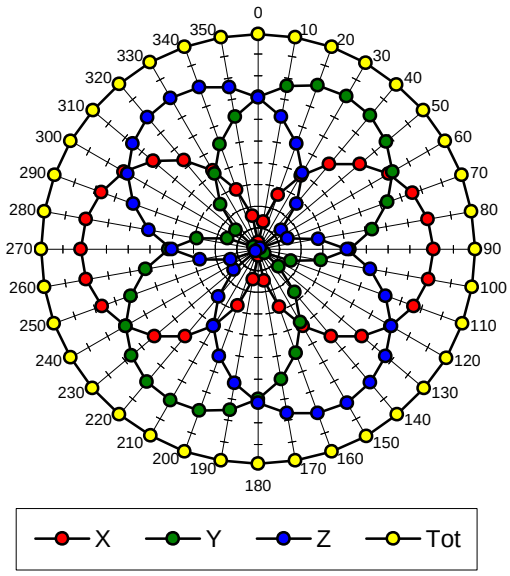
Probe Tip to Sensor Center	**2.7**	mm
Optical Surface Detection	**2.0 ± 0.2**	mm

Receiving Pattern (f), q = 0°

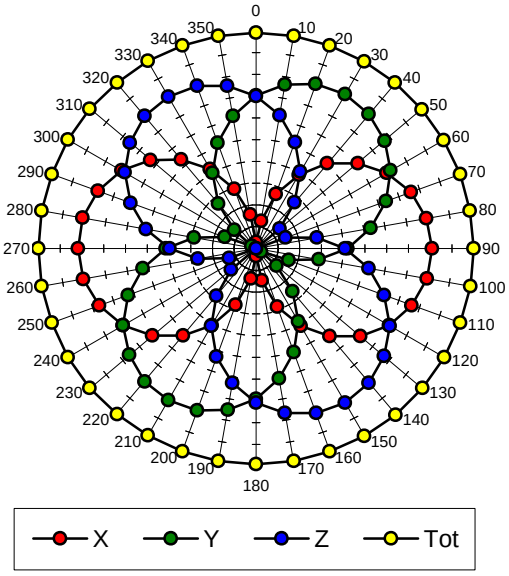
f = 30 MHz, TEM cell ifi110



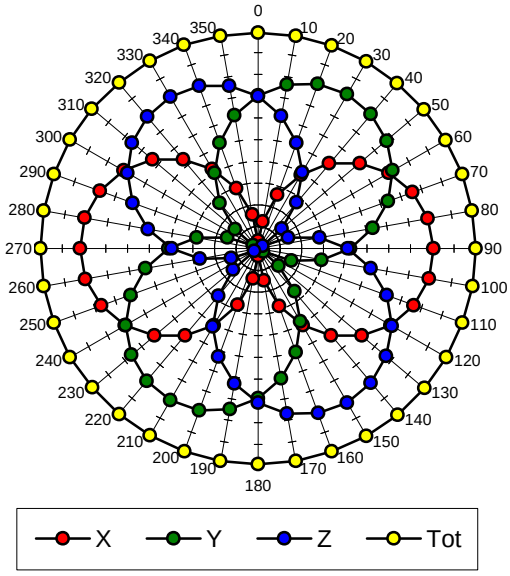
f = 100 MHz, TEM cell ifi110



f = 300 MHz, TEM cell ifi110



f = 900 MHz, TEM cell ifi110



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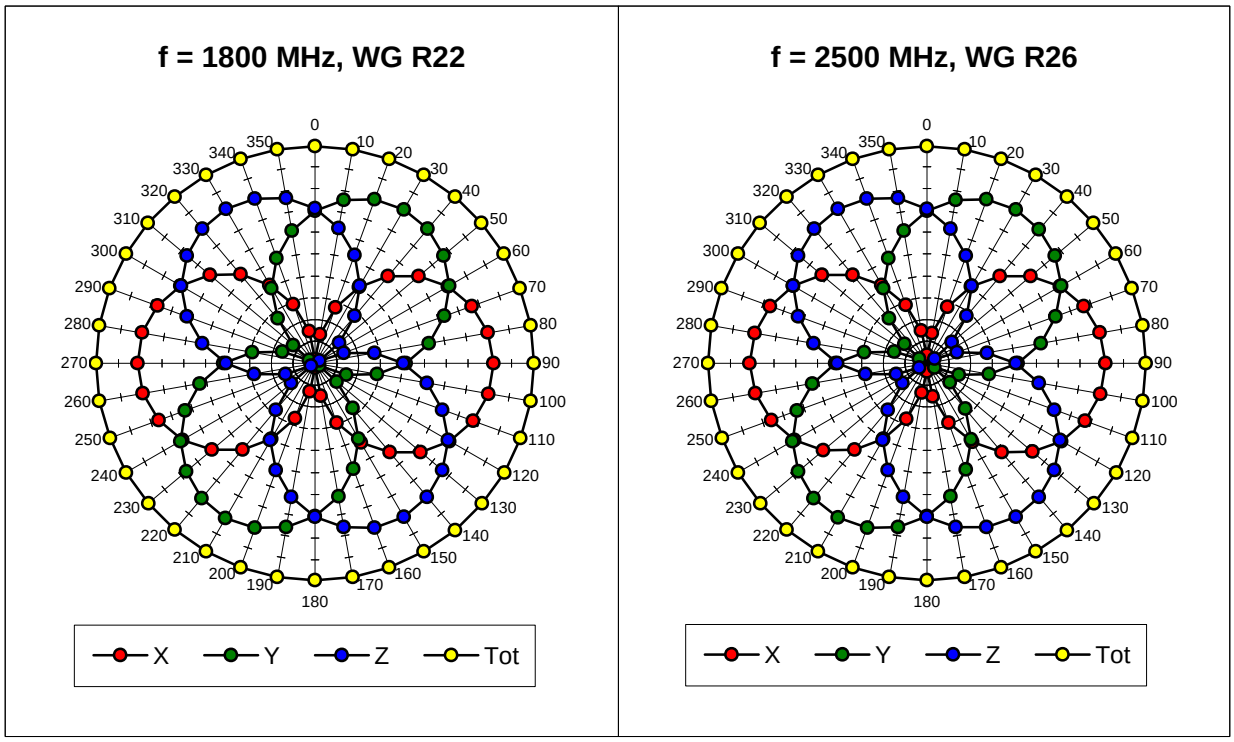
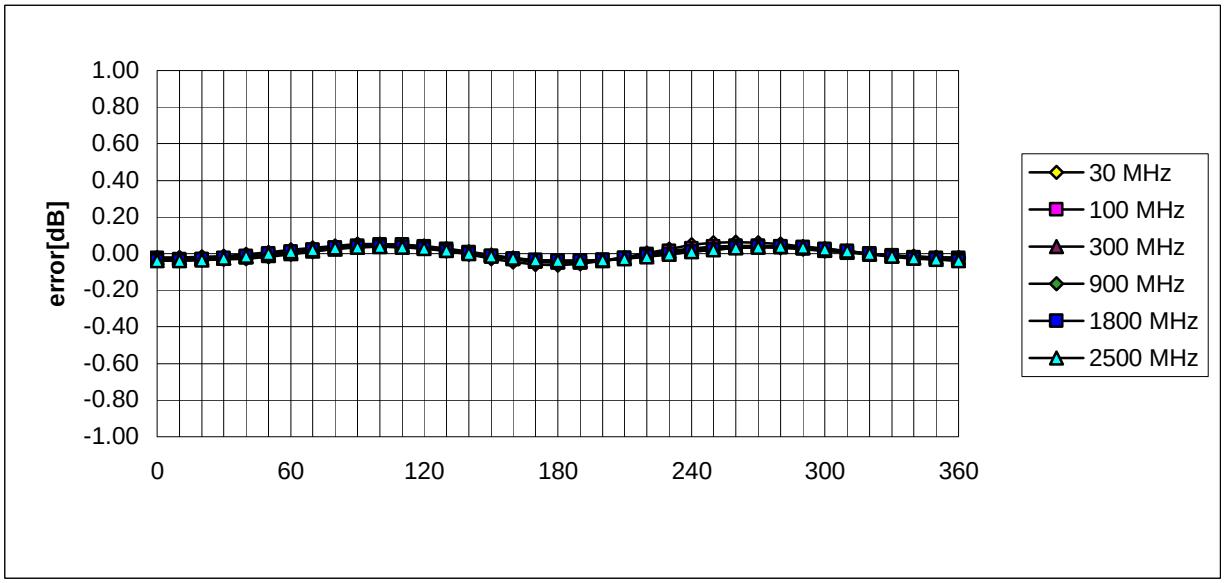
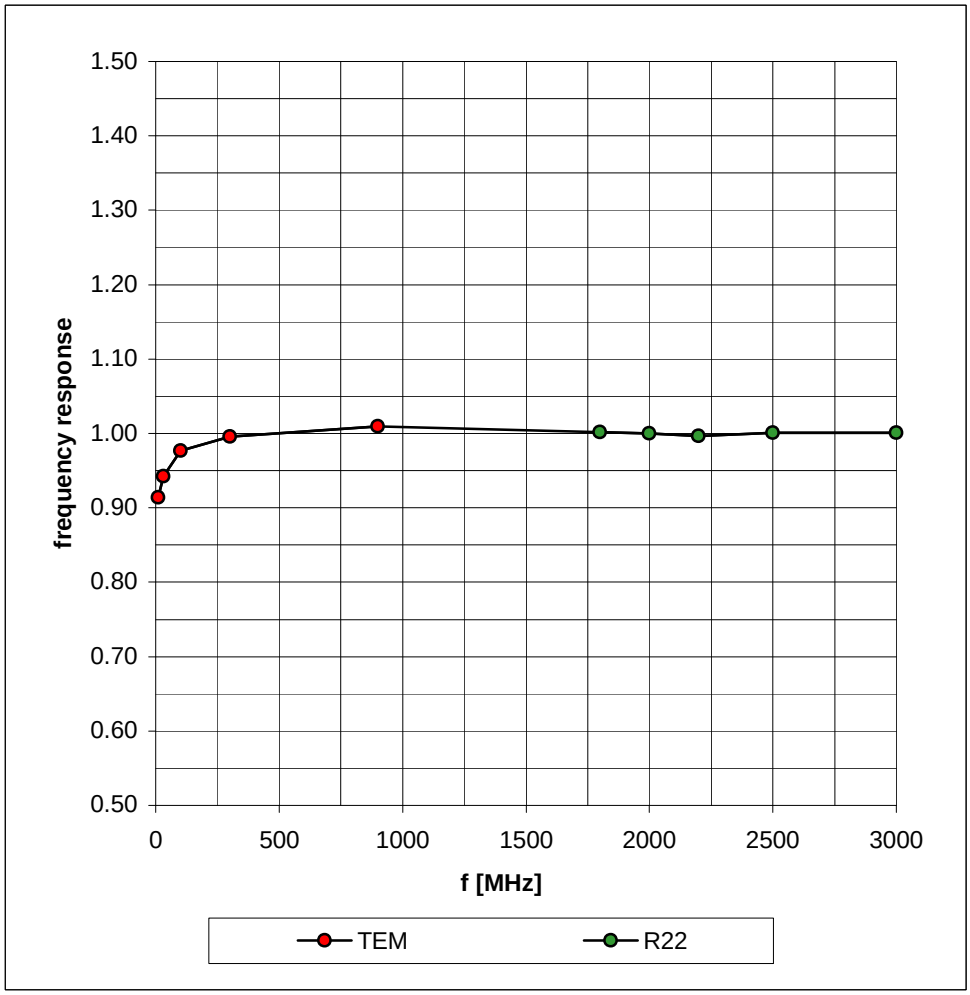


Isotropy Error (f), q = 0°



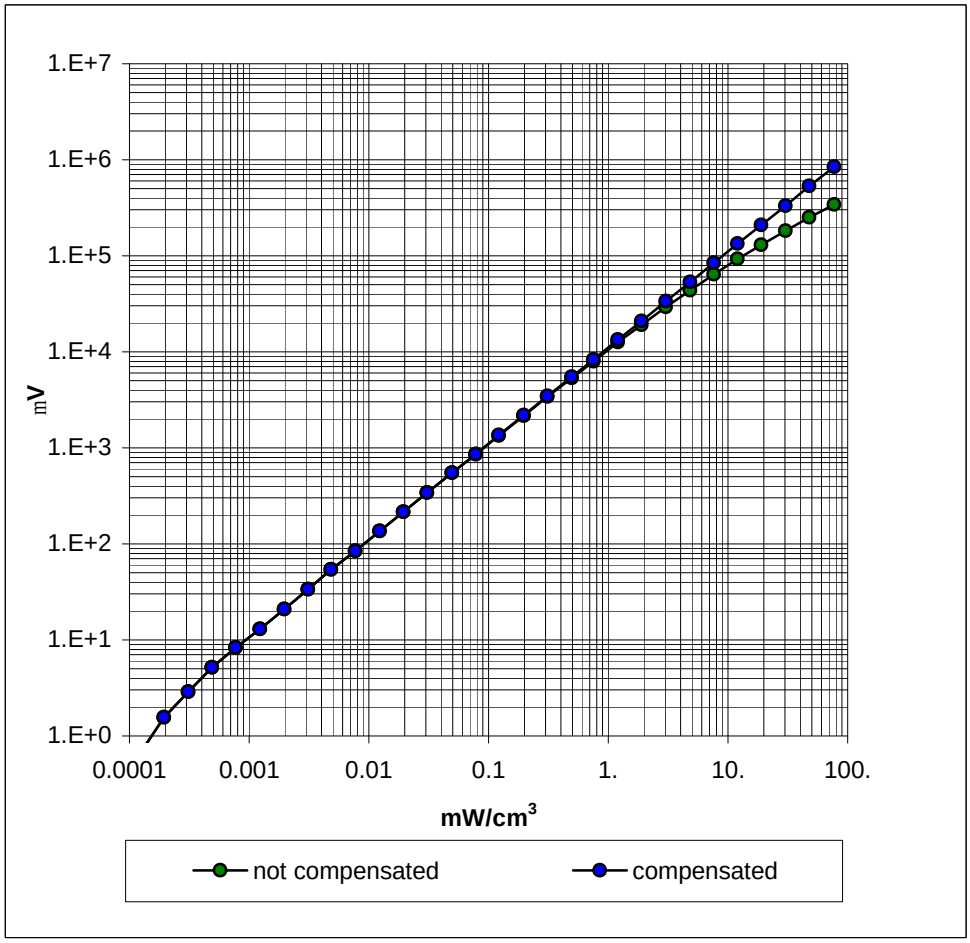
Frequency Response of E-Field

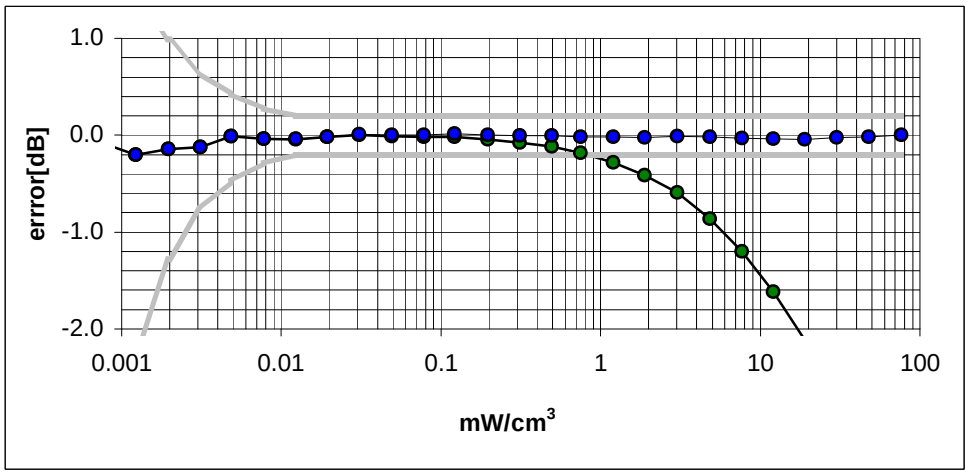
(TEM-Cell:ifi110, Waveguide R22)



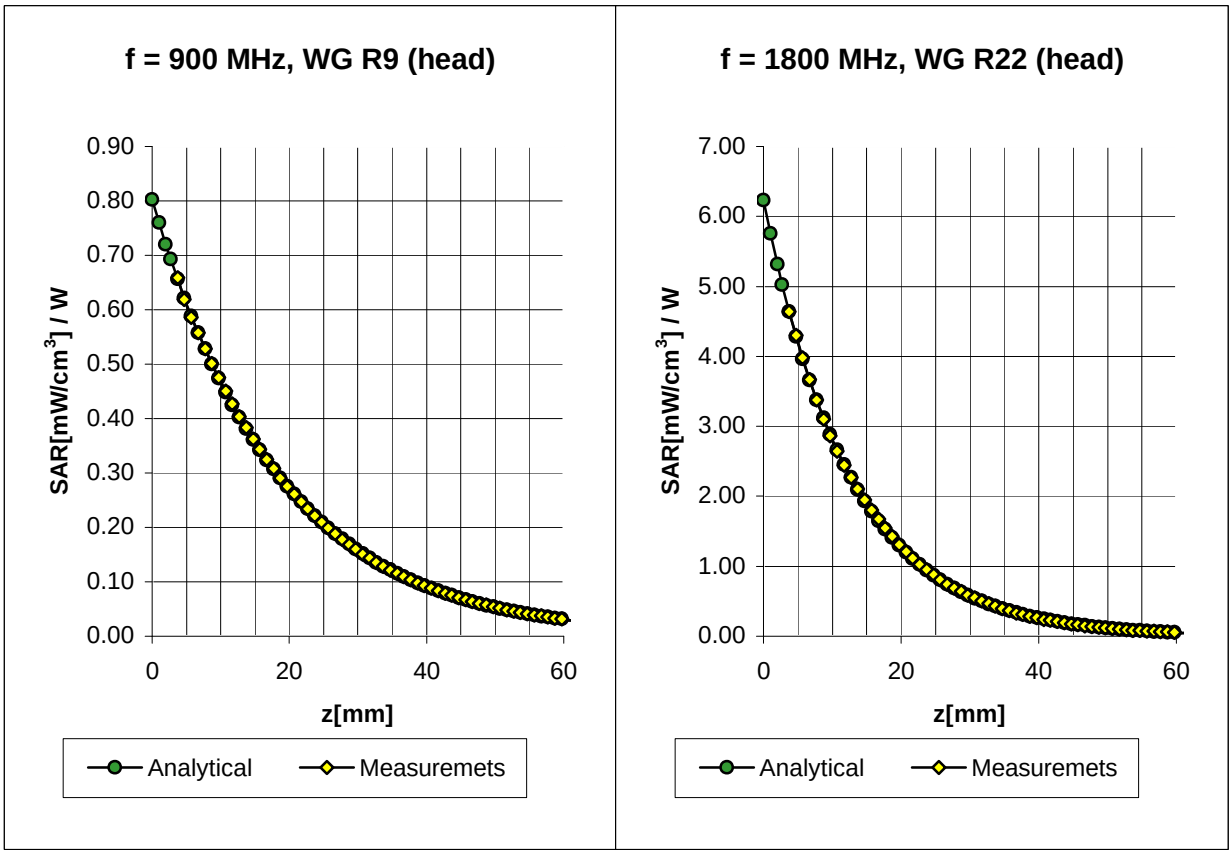
Dynamic Range f(SAR_{brain})

(TEM-Cell:ifi110)





Conversion Factor Assessment



Head **900 MHz** e_r **= 42 ± 5%** s **= 0.97 ± 10% mho/m**

ConvF X	**6.59** ± 7% (k=2)	Boundary effect:	
ConvF Y	**6.59** ± 7% (k=2)	Alpha	**0.32**
ConvF Z	**6.59** ± 7% (k=2)	Depth	**2.93**

Head **1800 MHz** e_r **= 40 ± 5%** s **= 1.40 ± 10% mho/m**

ConvF X	**5.43** ± 7% (k=2)	Boundary effect:	
ConvF Y	**5.43** ± 7% (k=2)	Alpha	**0.46**
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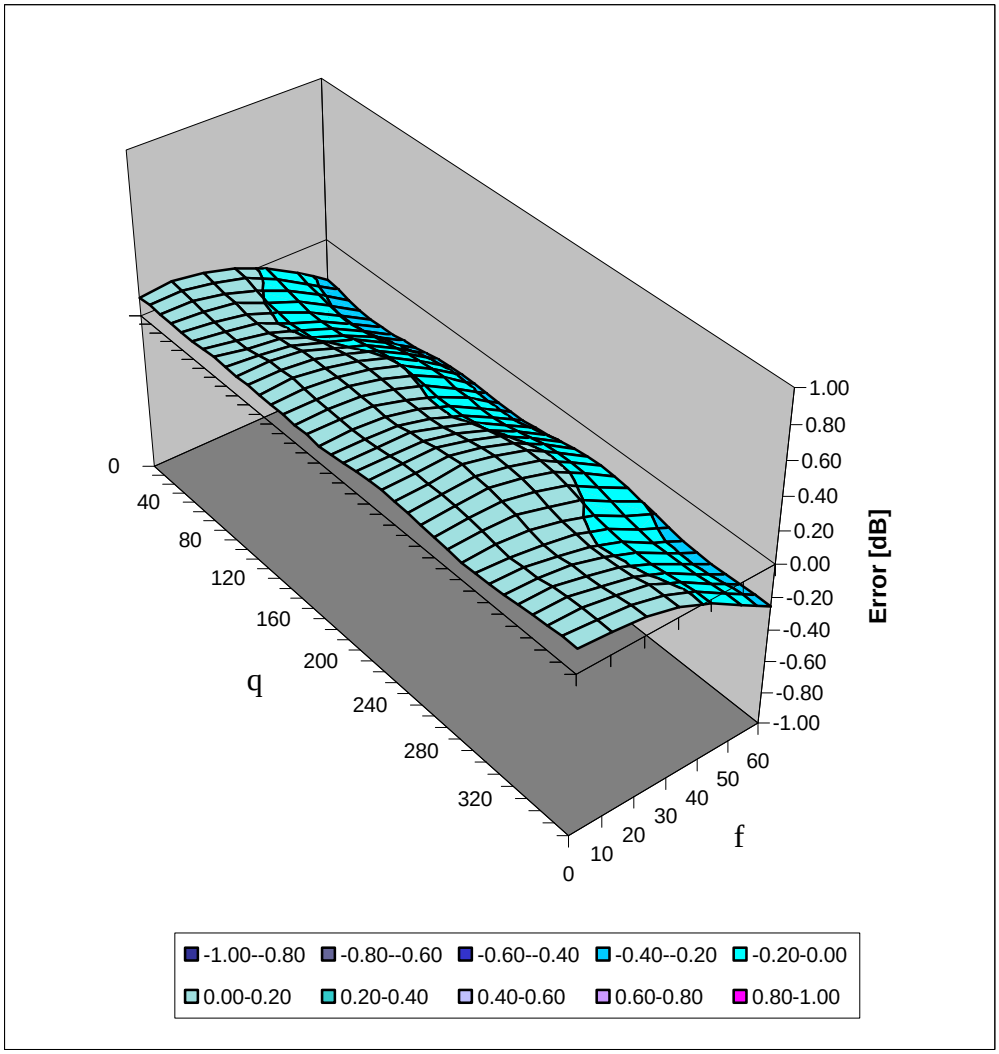
Deviation from Isotropy in HSL

Error (q, f), f = 900 MHz



Schmid & Partner
Engineering AG

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

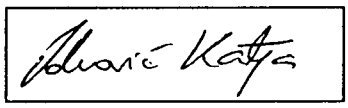
Additional Conversion Factors

for Dosimetric E-Field Probe

Type:	**ET3DV6**
Serial Number:	**1560**
Place of Assessment:	**Zurich**
Date of Assessment:	**Feb. 22, 2001**
Probe Calibration Date:	**Feb. 20, 2001**

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.

Approved by:



Dosimetric E-Field Probe ET3DV6 SN:1560

Conversion factor (± standard deviation)

450 MHz	ConvF	**7.65 ± 15%**	ε_r = **57.5 +/- 5%** σ = **0.83 +/- 5% mho/m** (muscle tissue)
835 MHz	ConvF	**6.78 ± 10%**	ε_r = **41.5 +/- 5%** σ = **0.90 +/- 5% mho/m** (brain tissue)
835 MHz	ConvF	**6.52 ± 10%**	ε_r = **56.2 +/- 5%** σ = **0.95 +/- 5% mho/m** (muscle tissue)
1900 MHz	ConvF	**5.16 ± 10%**	ε_r = **40.0 +/- 5%** σ = **1.40 +/- 5% mho/m** (brain tissue)
1900 MHz	ConvF	**4.70 ± 10%**	ε_r = **54.2 +/- 5%** σ = **1.50 +/- 5% mho/m** (muscle tissue)
2450 MHz	ConvF	**4.37 ± 15%**	ε_r = **39.2 +/- 5%** σ = **1.80 +/- 5% mho/m** (brain tissue)
2450 MHz	ConvF	**4.30 ± 15%**	ε_r = **52.2 +/- 5%** σ = **2.85 +/- 5% mho/m** (muscle tissue)