

Appendix 2

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PROBE ET3DV4 SN: 1105

Probe ET3DV4

SN:1105

Manufactured: May 1995
Recalibrated: July 1999

Calibrated for System DASY2

DASY2 - Parameters of Probe: ET3DV4 SN:1105**Sensitivity in Free Space**

NormX	1.51 $\mu\text{V}/(\text{V}/\text{m})^2$
NormY	1.57 $\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	1.4 $\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression

DCP X	41000 μV
DCP Y	41000 μV
DCP Z	41000 μV

Sensitivity in Tissue Simulating Liquid

450 MHz ConvF X	6.50	extrapolated
ConvF Y	6.50	extrapolated
ConvF Z	6.50	extrapolated
Alpha	0.86	
Depth	1.28	

$\epsilon_r =$	48 $\pm$ 5%
$\sigma =$	0.50 $\pm$ 10% mho/m
(brain tissue simulating liquid)	

900 MHz ConvF X	5.99	$\pm$ 10%
ConvF Y	5.99	$\pm$ 10%
ConvF Z	5.99	$\pm$ 10%
Alpha	0.75	
Depth	1.62	

$\epsilon_r =$	42.5 $\pm$ 5%
$\sigma =$	0.86 $\pm$ 10% mho/m
(brain tissue simulating liquid)	

1500 MHz ConvF X	5.31	interpolated
ConvF Y	5.31	interpolated
ConvF Z	5.31	interpolated
Alpha	0.61	
Depth	2.08	

$\epsilon_r =$	41 $\pm$ 5%
$\sigma =$	1.32 $\pm$ 10% mho/m
(brain tissue simulating liquid)	

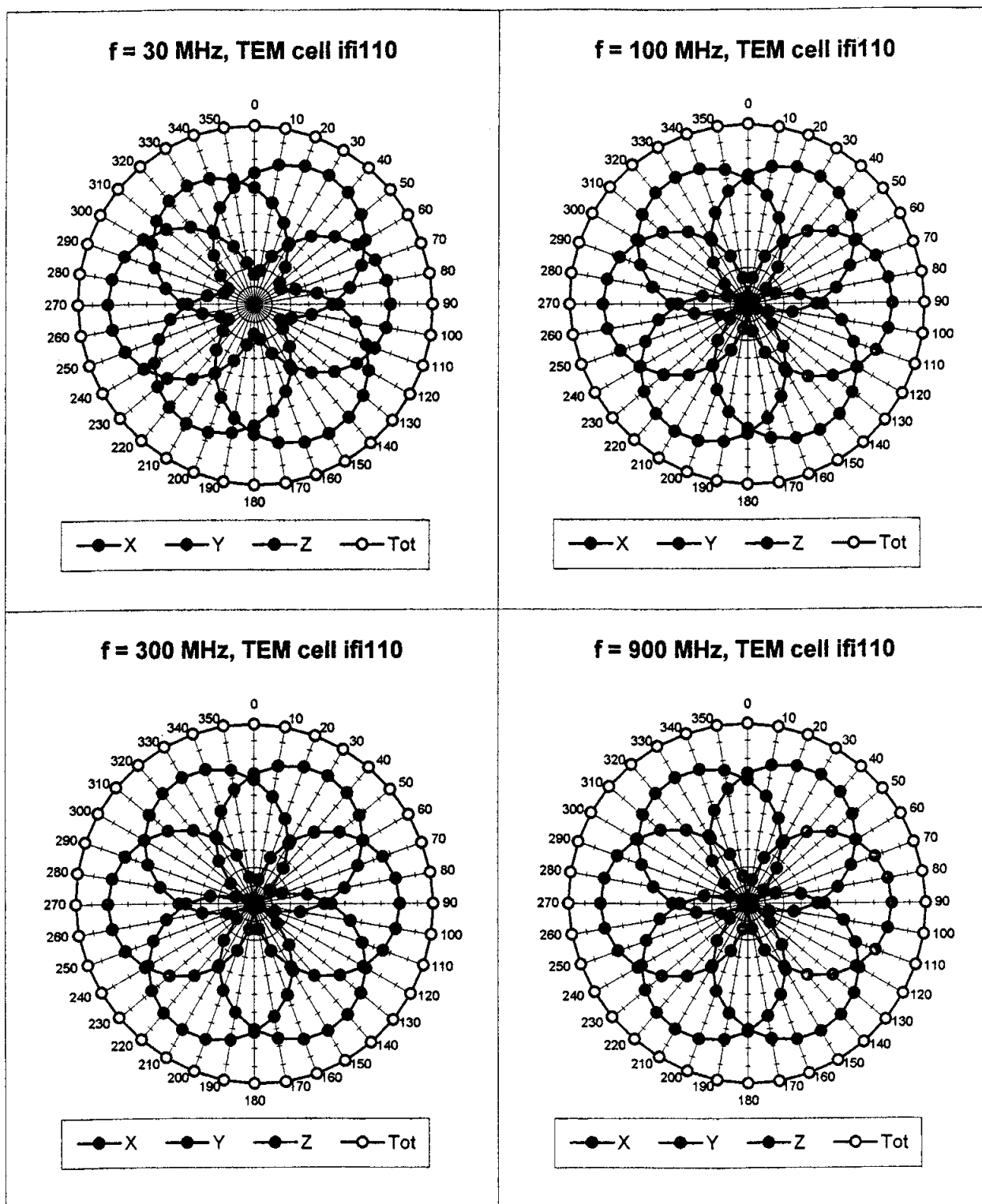
1800 MHz ConvF X	4.97	$\pm$ 10%
ConvF Y	4.97	$\pm$ 10%
ConvF Z	4.97	$\pm$ 10%
Alpha	0.54	
Depth	2.31	

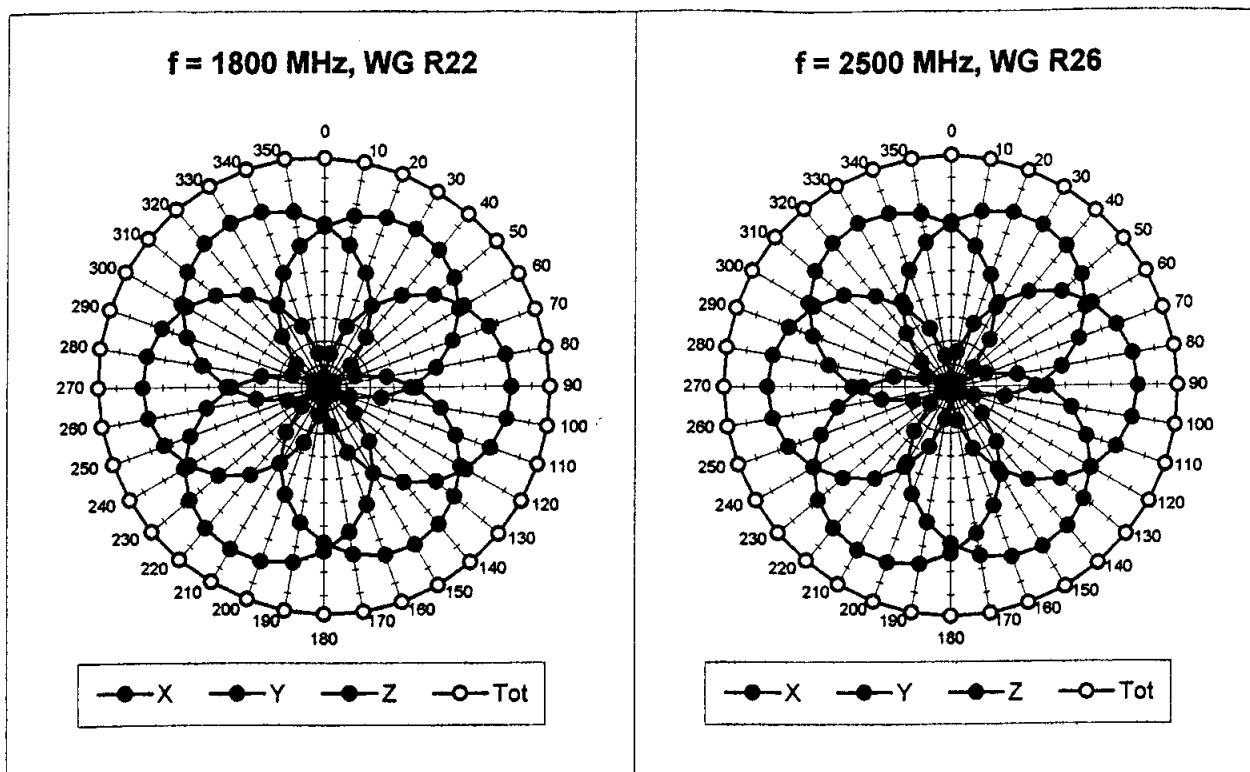
$\epsilon_r =$	41 $\pm$ 5%
$\sigma =$	1.69 $\pm$ 10% mho/m
(brain tissue simulating liquid)	

Sensor Offset

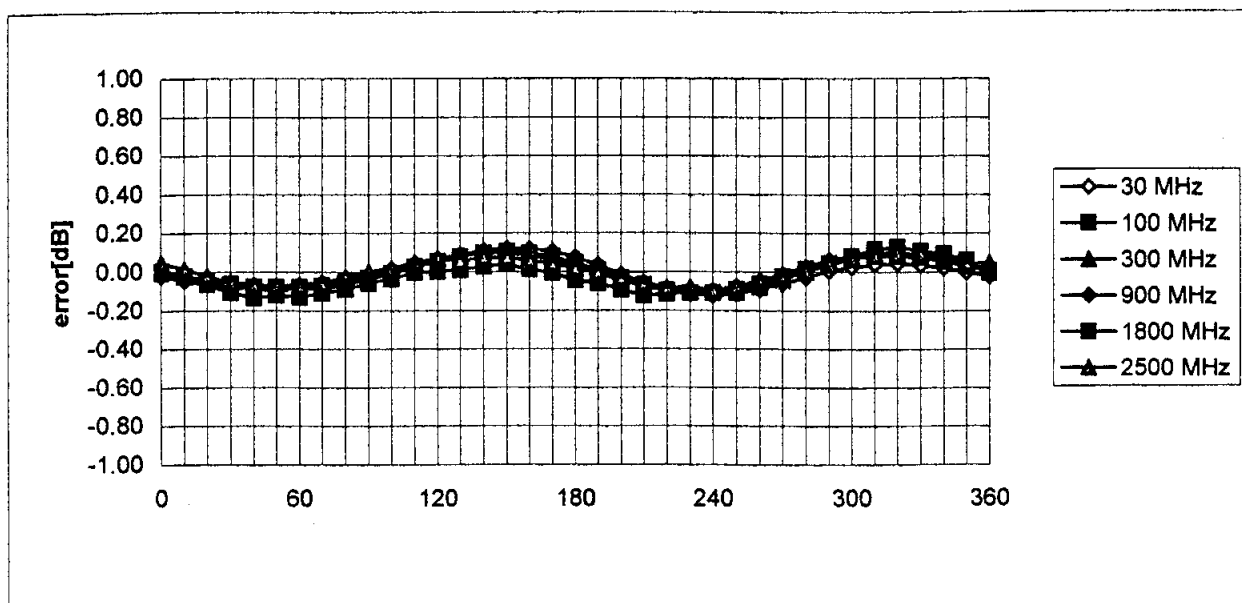
Probe Tip to Sensor Center	2.7	mm
Surface to Probe Tip	1 $\pm$ 0.2	mm

Receiving Pattern (ϕ), $\theta = 0^\circ$



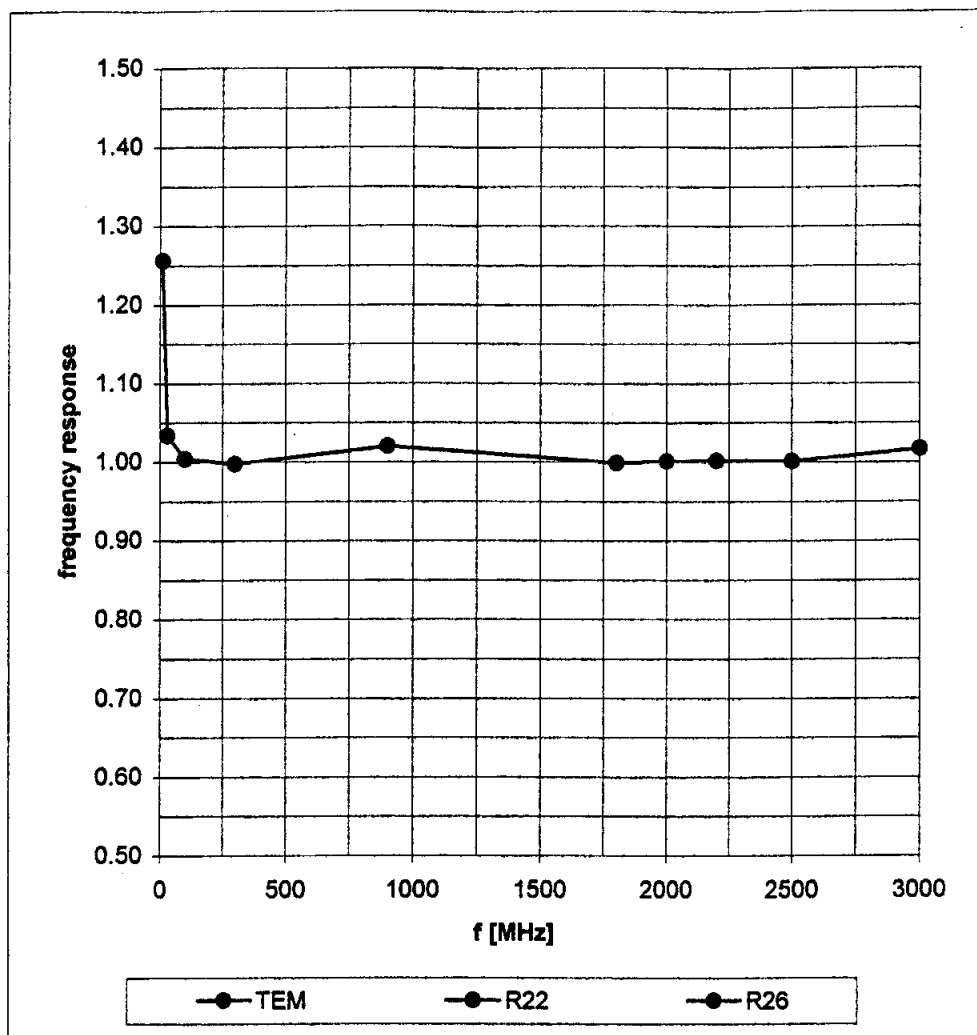


Isotropy Error (ϕ), $\theta = 0^\circ$

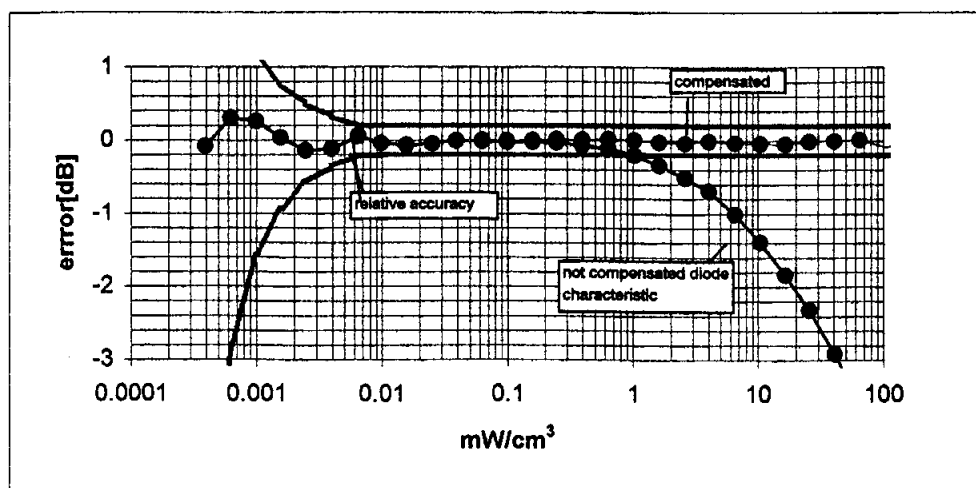
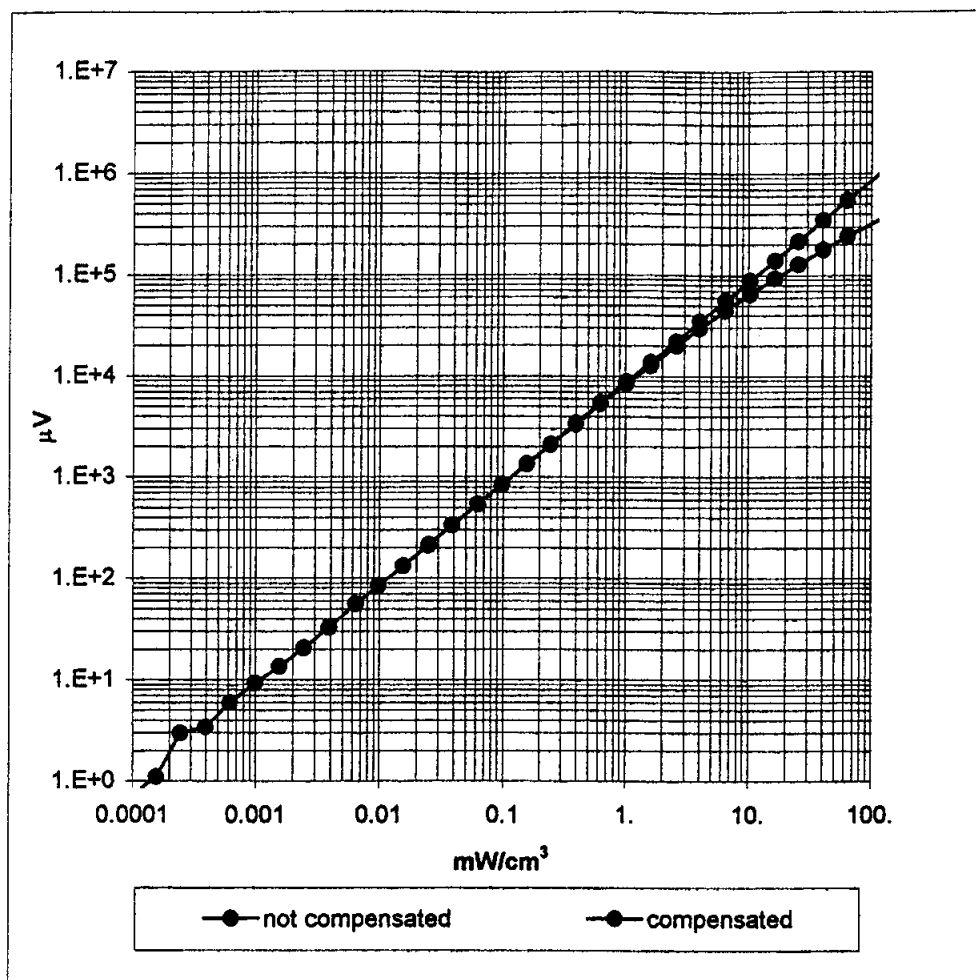


Frequency Response of E-Field

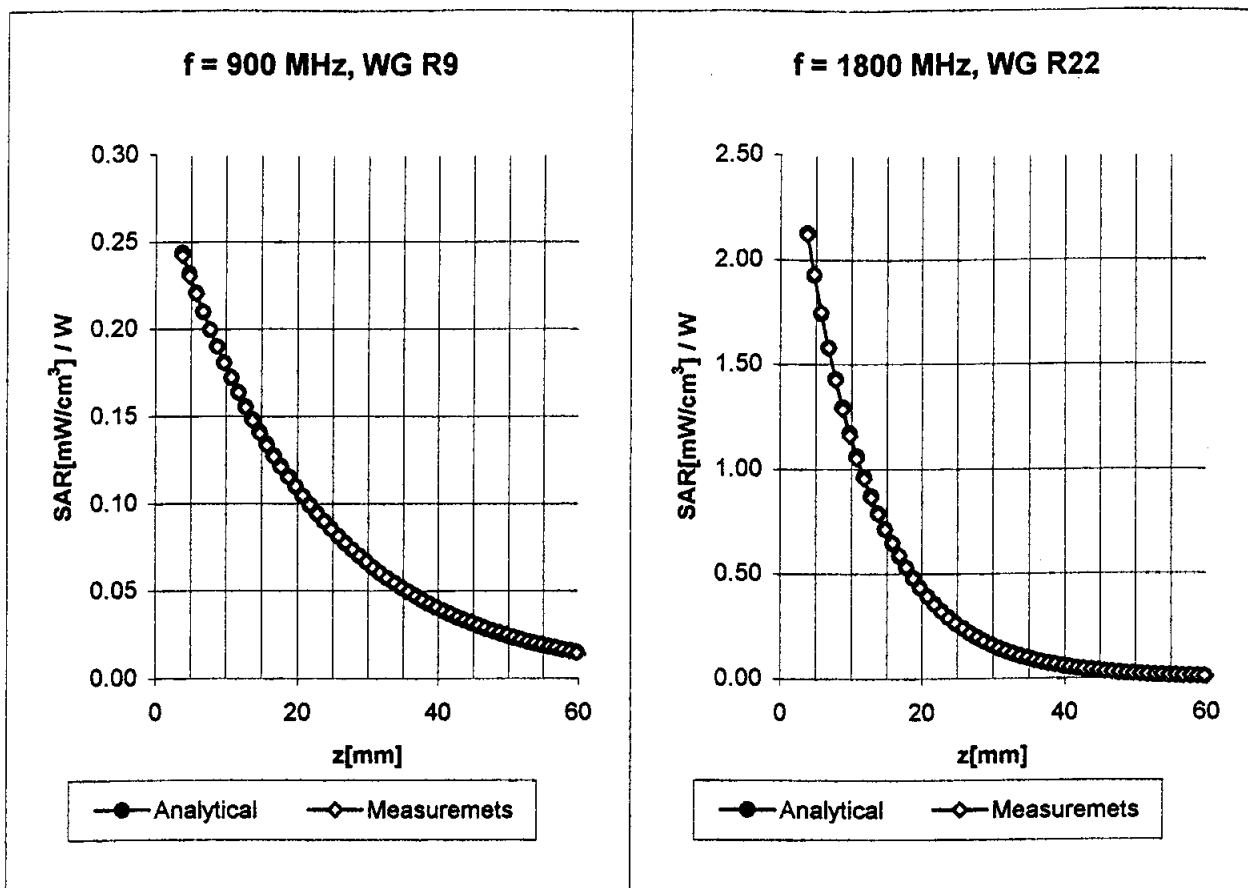
(TEM-Cell:ifi110, Waveguide R22, R26)



Dynamic Range $f(\text{SAR}_{\text{brain}})$ (TEM-Cell:ifi110)

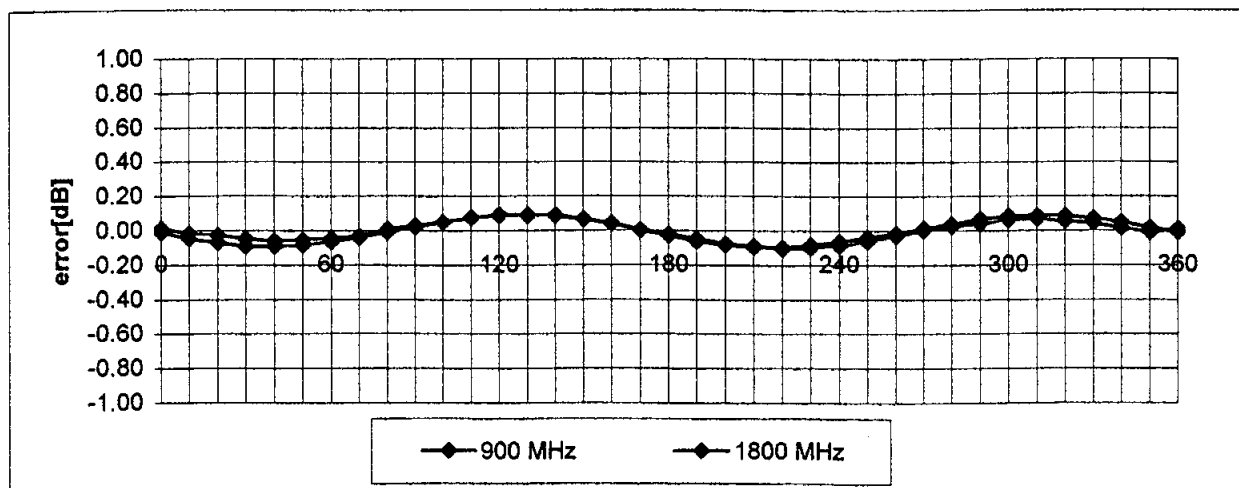


Conversion Factor Assessment



Receiving Pattern (ϕ)

(in brain tissue, z = 5 mm)



Calibration Certificate

Dosimetric E-Field Probe

Type:

ET3DV4

Serial Number:

1105

Place of Calibration:

Zurich

Date of Calibration:

July 14, 1999

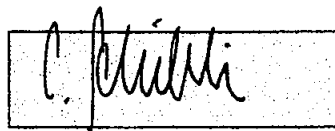
Calibration Interval:

12 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:

