

ATTACHMENT O – PROBE CALIBRATION DATA

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 $\mu\text{V}/(\text{V}/\text{m})^2$
NormY	1.51 $\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	1.43 $\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression

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

Sensitivity in Tissue Simulating Liquid

Head **450 MHz** $\epsilon_r = 43.5 \pm 5\%$ $S = 0.87 \pm 10\%$ 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** $\epsilon_r = 42 \pm 5\%$ $S = 0.97 \pm 10\%$ mho/m

ConvF X	6.59 $\pm 7\%$ (k=2)	Boundary effect:
ConvF Y	6.59 $\pm 7\%$ (k=2)	Alpha 0.32
ConvF Z	6.59 $\pm 7\%$ (k=2)	Depth 2.93

Head **1500 MHz** $\epsilon_r = 40.4 \pm 5\%$ $S = 1.23 \pm 10\%$ 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** $\epsilon_r = 40 \pm 5\%$ $S = 1.40 \pm 10\%$ mho/m

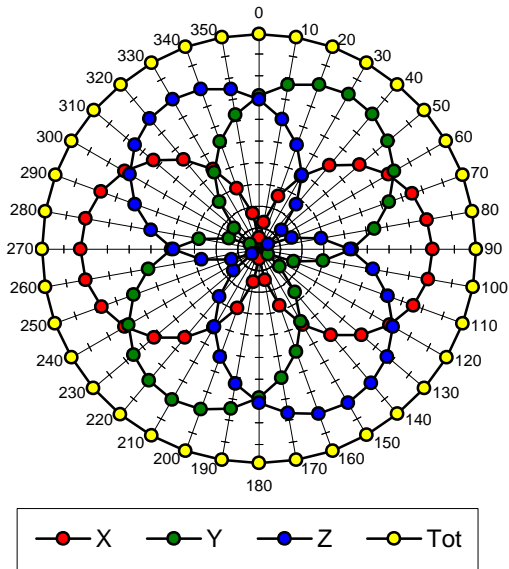
ConvF X	5.43 $\pm 7\%$ (k=2)	Boundary effect:
ConvF Y	5.43 $\pm 7\%$ (k=2)	Alpha 0.46
ConvF Z	5.43 $\pm 7\%$ (k=2)	Depth 2.36

Sensor Offset

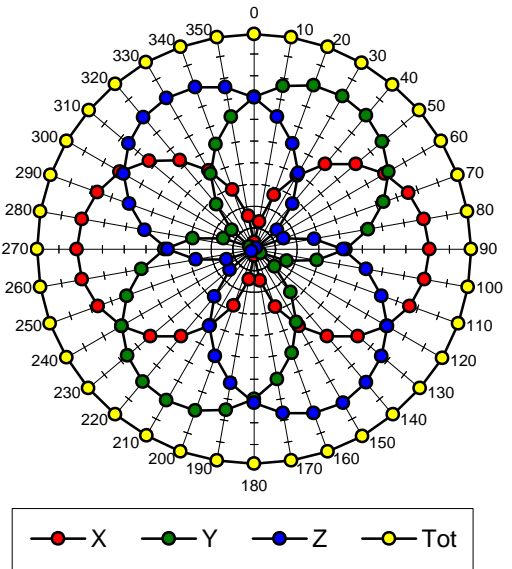
Probe Tip to Sensor Center	2.7	mm
Optical Surface Detection	2.0 \pm 0.2	mm

Receiving Pattern (f), q = 0°

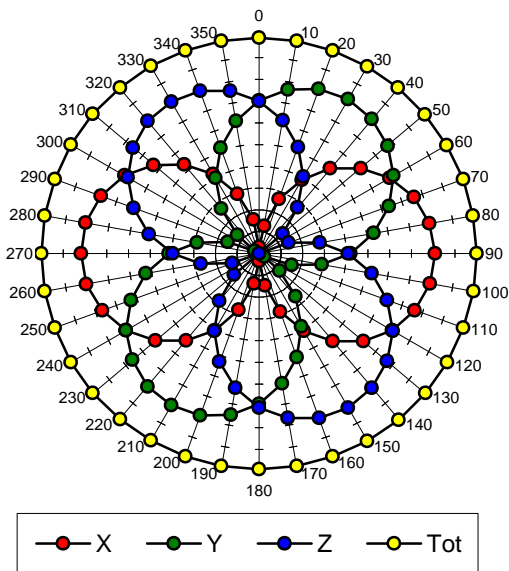
f = 30 MHz, TEM cell ifi110



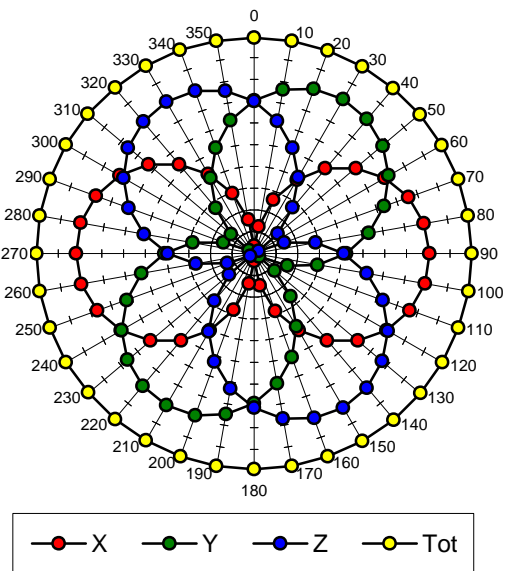
f = 100 MHz, TEM cell ifi110

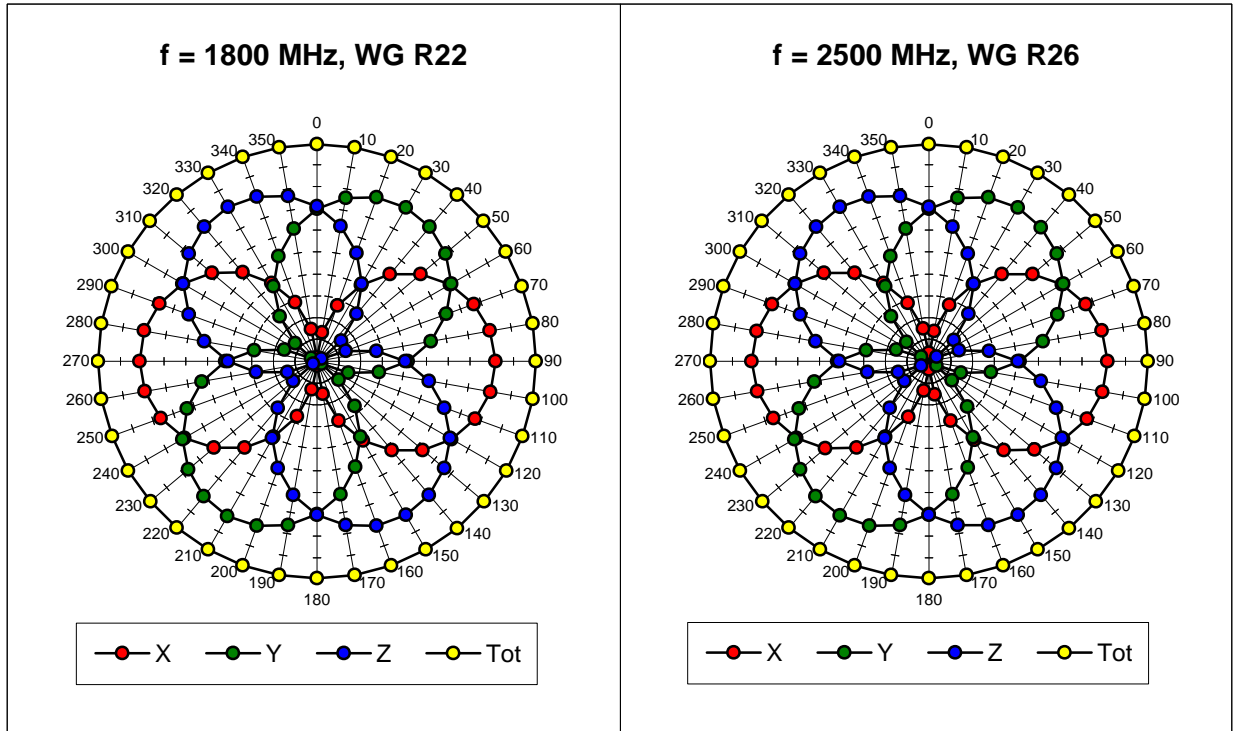


f = 300 MHz, TEM cell ifi110

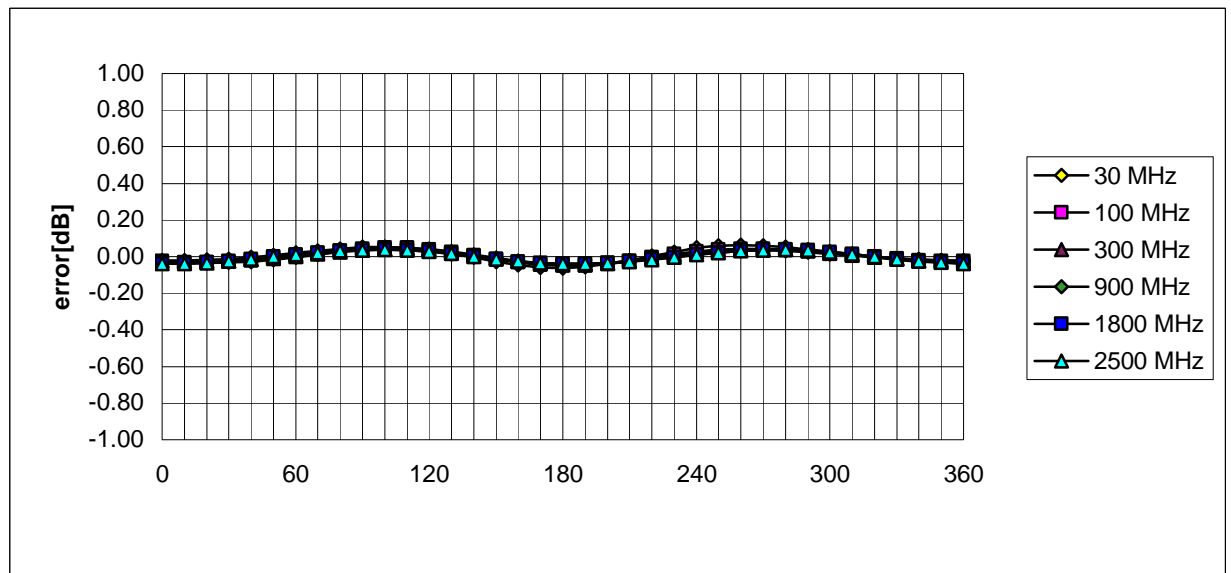


f = 900 MHz, TEM cell ifi110



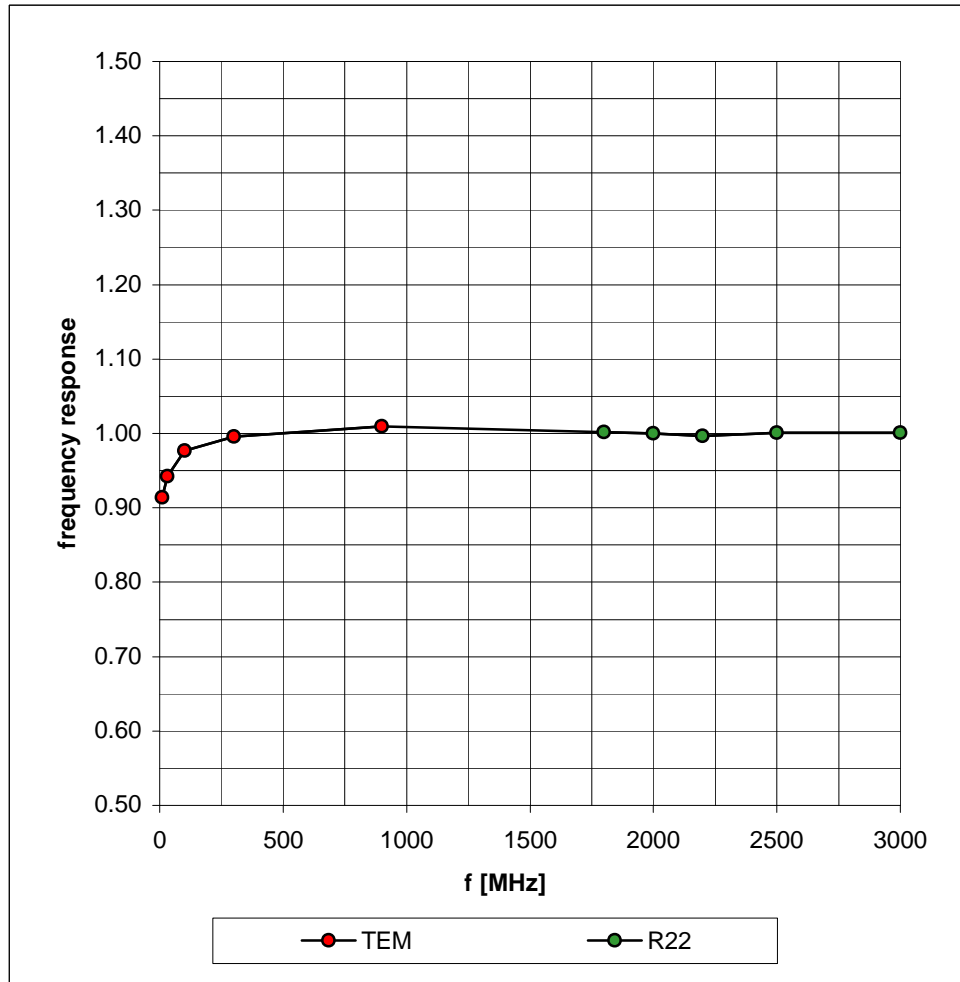


Isotropy Error (f), q = 0°

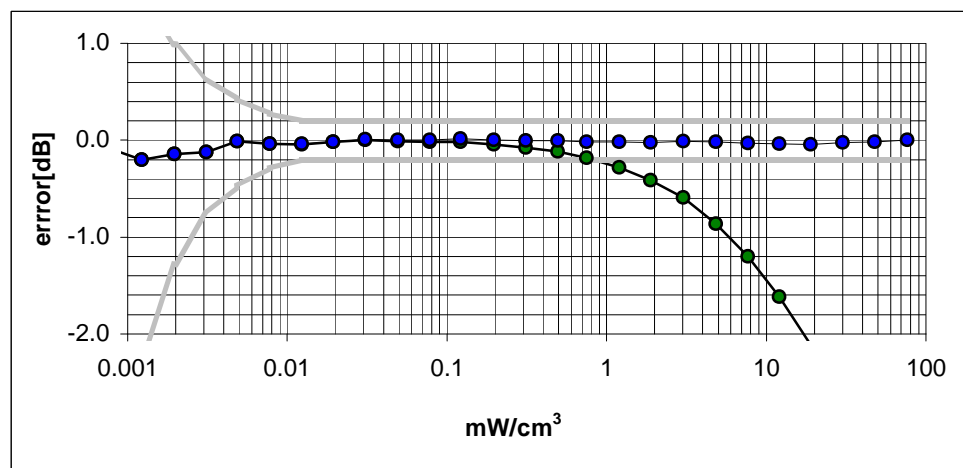
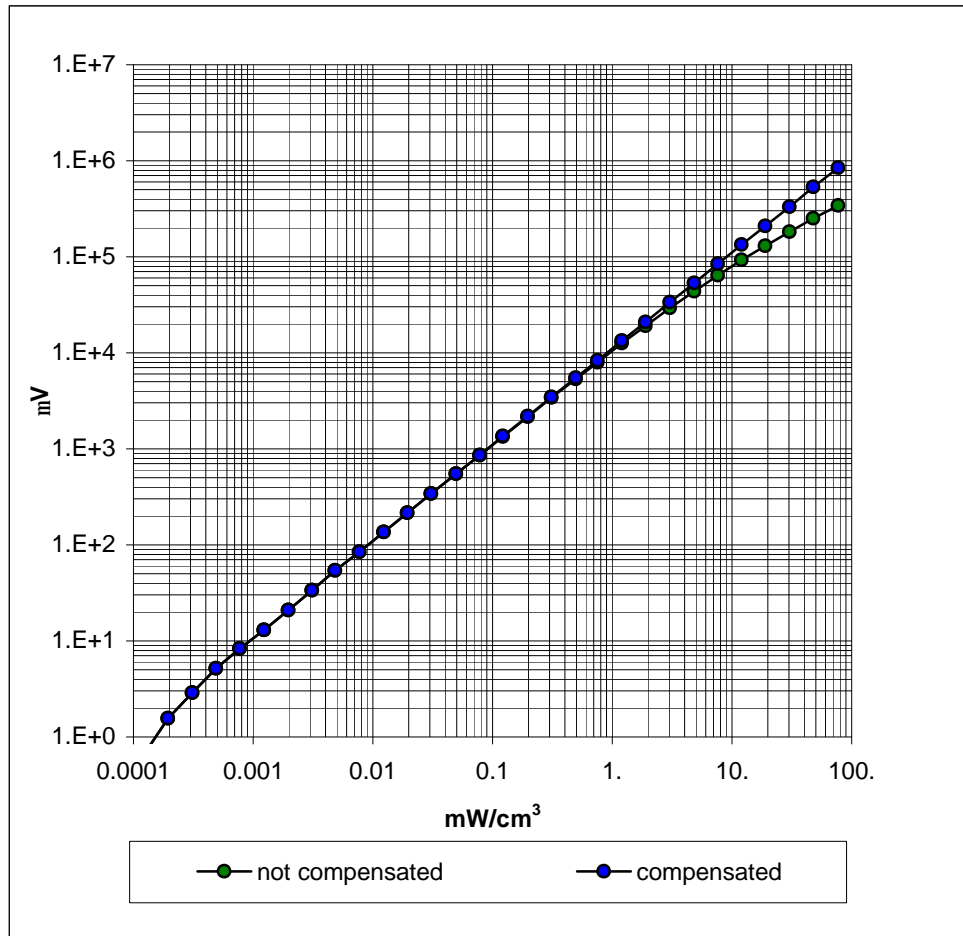


Frequency Response of E-Field

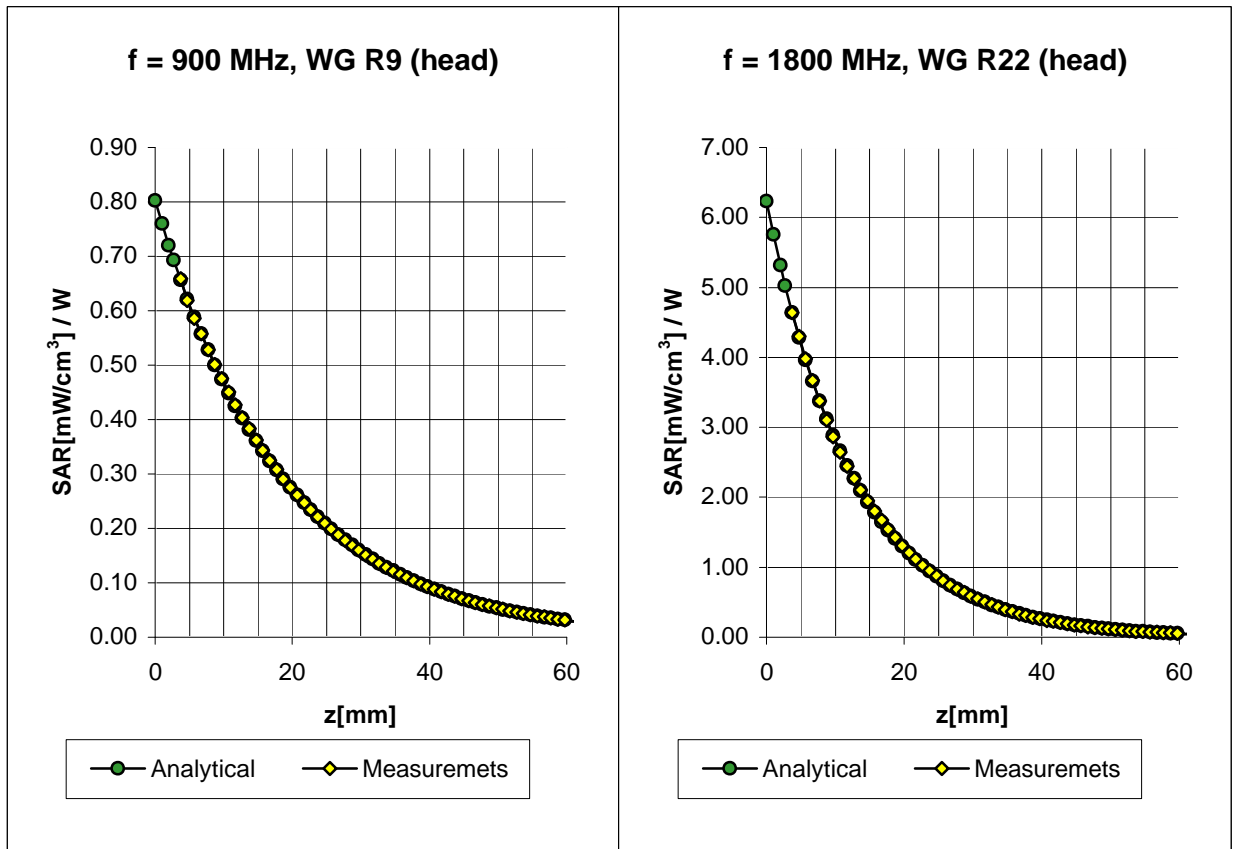
(TEM-Cell:ifi110, Waveguide R22)



Dynamic Range f(SAR_{brain}) (TEM-Cell:ifi110)



Conversion Factor Assessment



Head	900 MHz	$\epsilon_r = 42 \pm 5\%$	$S = 0.97 \pm 10\% \text{ mho/m}$
	ConvF X	6.59 $\pm 7\%$ (k=2)	Boundary effect:
	ConvF Y	6.59 $\pm 7\%$ (k=2)	Alpha 0.32
	ConvF Z	6.59 $\pm 7\%$ (k=2)	Depth 2.93

Head	1800 MHz	$\epsilon_r = 40 \pm 5\%$	$S = 1.40 \pm 10\% \text{ mho/m}$
	ConvF X	5.43 $\pm 7\%$ (k=2)	Boundary effect:
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Deviation from Isotropy in HSL

Error (q,f), f = 900 MHz

