

Probe ET3DV6

SN:1618

Manufactured:	January 25, 2002
Last calibration:	March 24, 2003
Repaired:	September 26, 2003
Recalibrated:	October 10, 2003

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

DASY - Parameters of Probe: ET3DV6 SN:1618

Sensitivity in Free Space		Diode Compression	
NormX	1.59 $\mu\text{V}/(\text{V}/\text{m})^2$	DCP X	95 mV
NormY	1.77 $\mu\text{V}/(\text{V}/\text{m})^2$	DCP Y	95 mV
NormZ	1.85 $\mu\text{V}/(\text{V}/\text{m})^2$	DCP Z	95 mV

Sensitivity in Tissue Simulating Liquid			
Head	900 MHz	$\epsilon_r = 41.5 \pm 5\%$	$\sigma = 0.97 \pm 5\%$ mho/m
Valid for f=800-1000 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X			
	ConvF X	6.9 $\pm 9.5\%$ (k=2)	Boundary effect:
	ConvF Y	6.9 $\pm 9.5\%$ (k=2)	Alpha
	ConvF Z	6.9 $\pm 9.5\%$ (k=2)	Depth

Head	1800 MHz	$\epsilon_r = 40.0 \pm 5\%$	$\sigma = 1.40 \pm 5\%$ mho/m
Valid for f=1710-1910 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X			
	ConvF X	5.3 $\pm 9.5\%$ (k=2)	Boundary effect:
	ConvF Y	5.3 $\pm 9.5\%$ (k=2)	Alpha
	ConvF Z	5.3 $\pm 9.5\%$ (k=2)	Depth

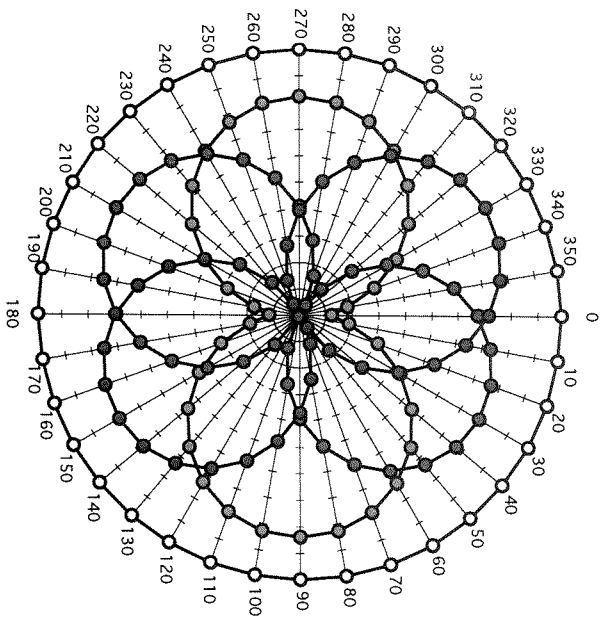
Boundary Effect			
Head	900 MHz	Typical SAR gradient: 5 % per mm	
Probe Tip to Boundary			
	SAR _{be} [%]	Without Correction Algorithm	1 mm
			2 mm
	SAR _{be} [%]	With Correction Algorithm	11.1
			7.0
	SAR _{be} [%]	With Correction Algorithm	0.7
			0.7

Head	1800 MHz	Typical SAR gradient: 10 % per mm	
Probe Tip to Boundary			
	SAR _{be} [%]	Without Correction Algorithm	1 mm
			2 mm
	SAR _{be} [%]	With Correction Algorithm	13.3
			9.3
	SAR _{be} [%]	With Correction Algorithm	0.2
			0.2

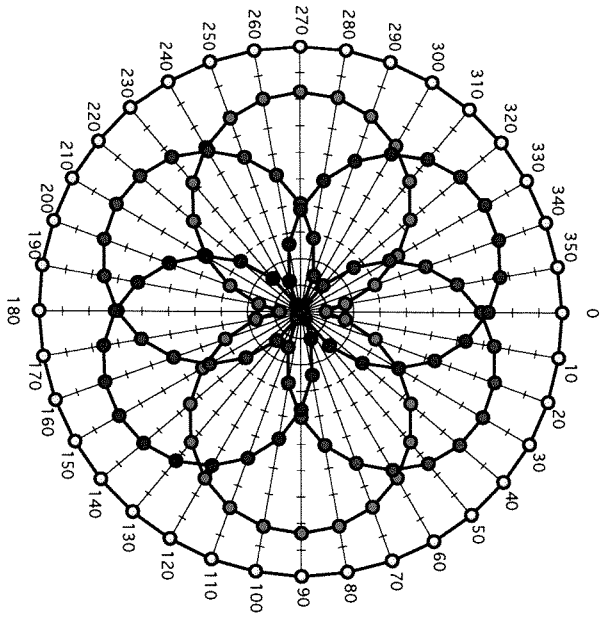
Sensor Offset			
Probe Tip to Sensor Center			
		2.7	mm
Optical Surface Detection			
		1.6 ± 0.2	mm

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

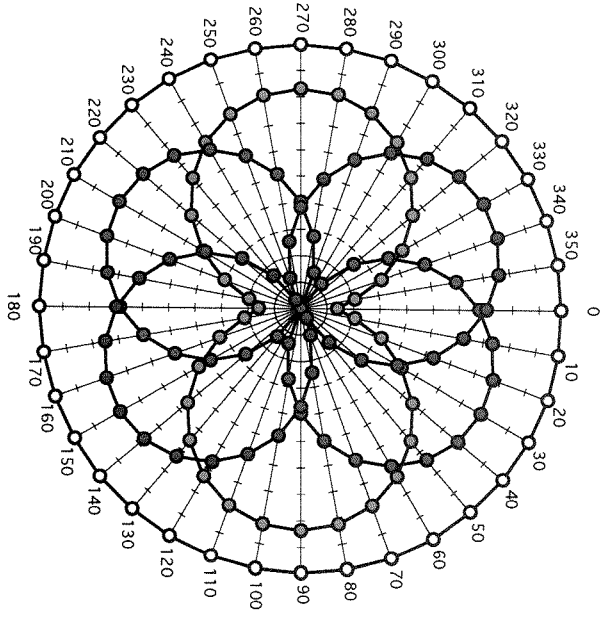
$f = 30 \text{ MHz}$, TEM cell if11 10



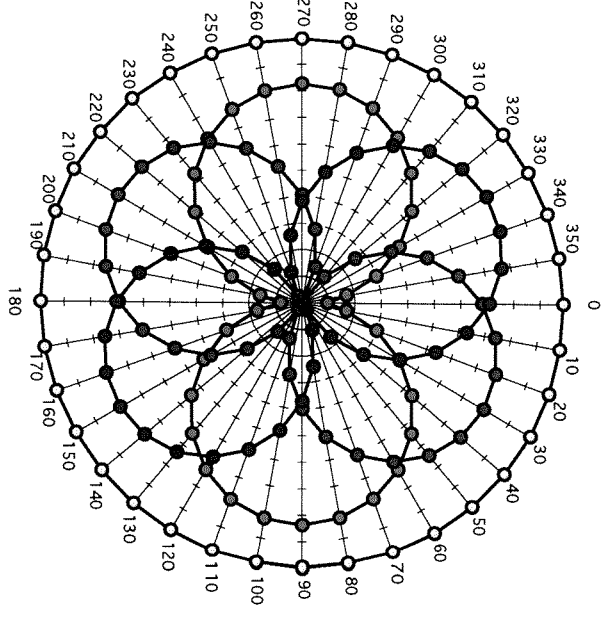
$f = 300 \text{ MHz}$, TEM cell if11 10

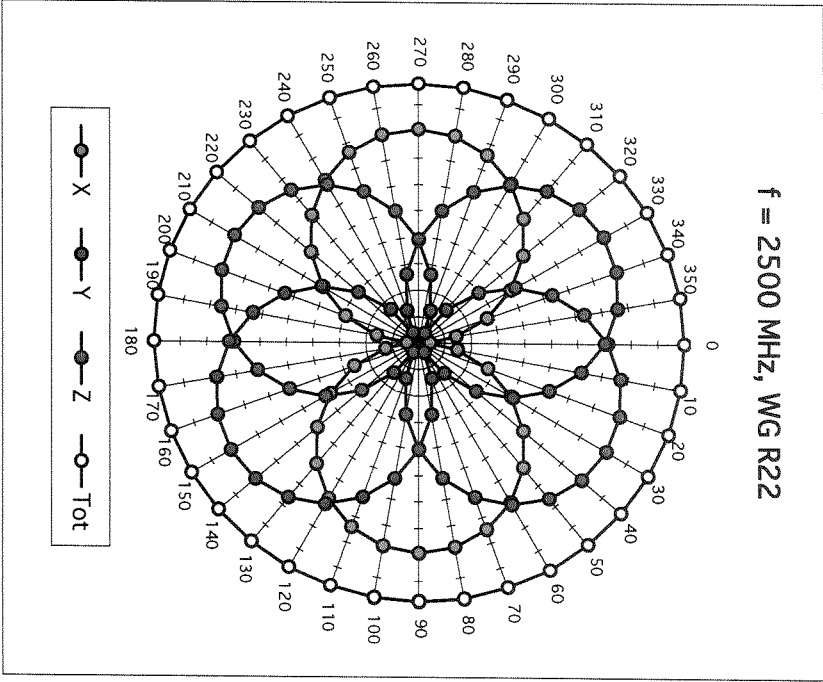
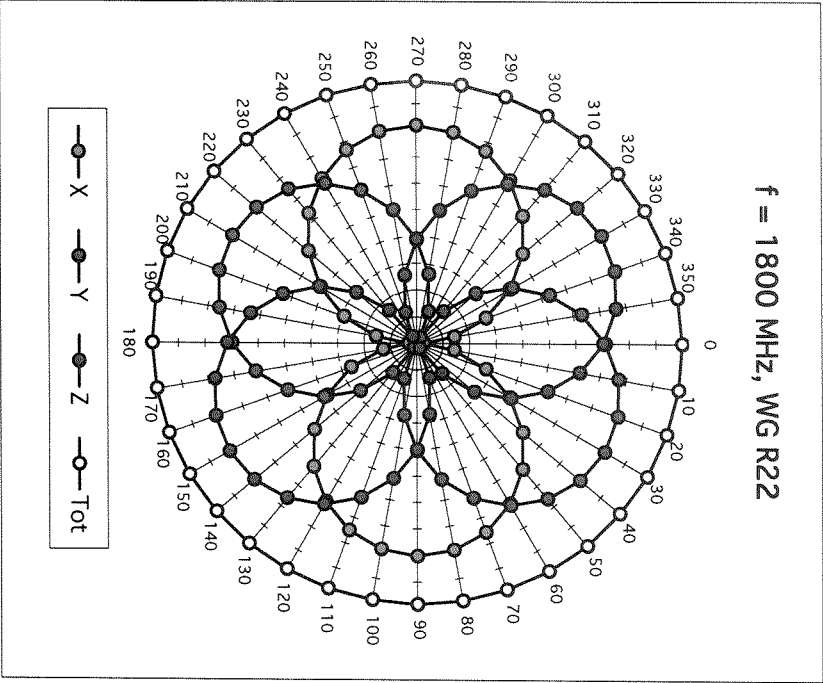


$f = 100 \text{ MHz}$, TEM cell if11 10

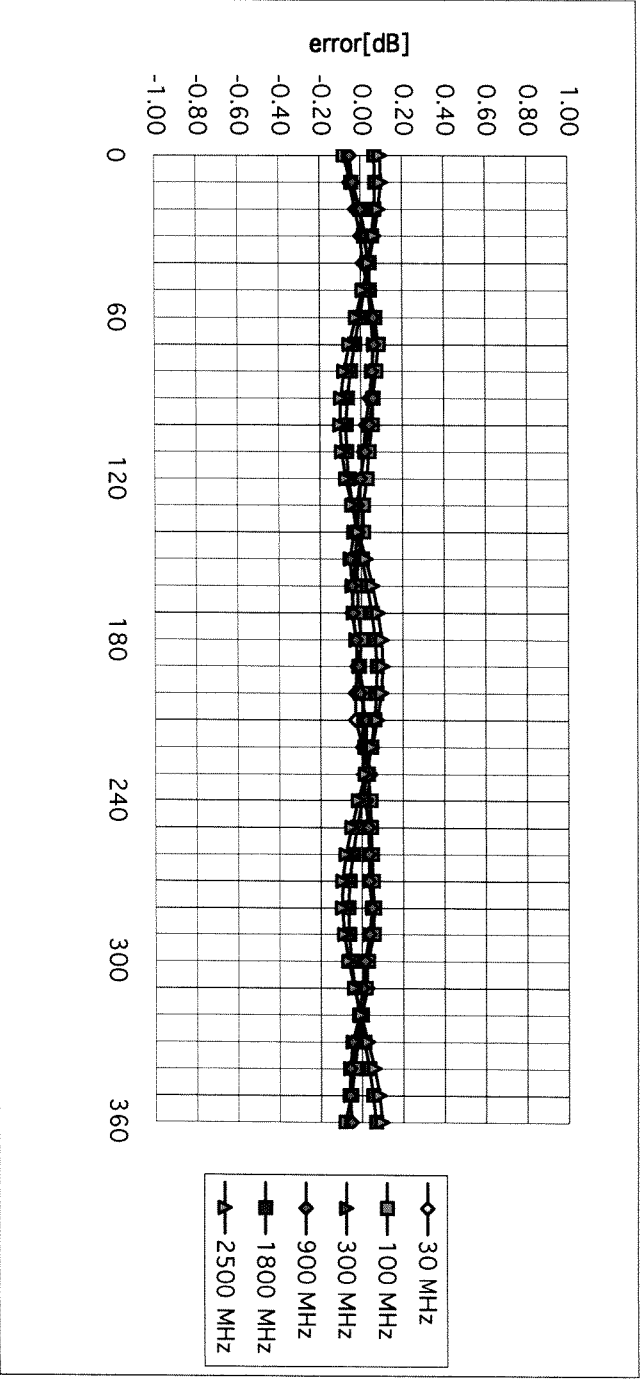


$f = 900 \text{ MHz}$, TEM cell if11 10



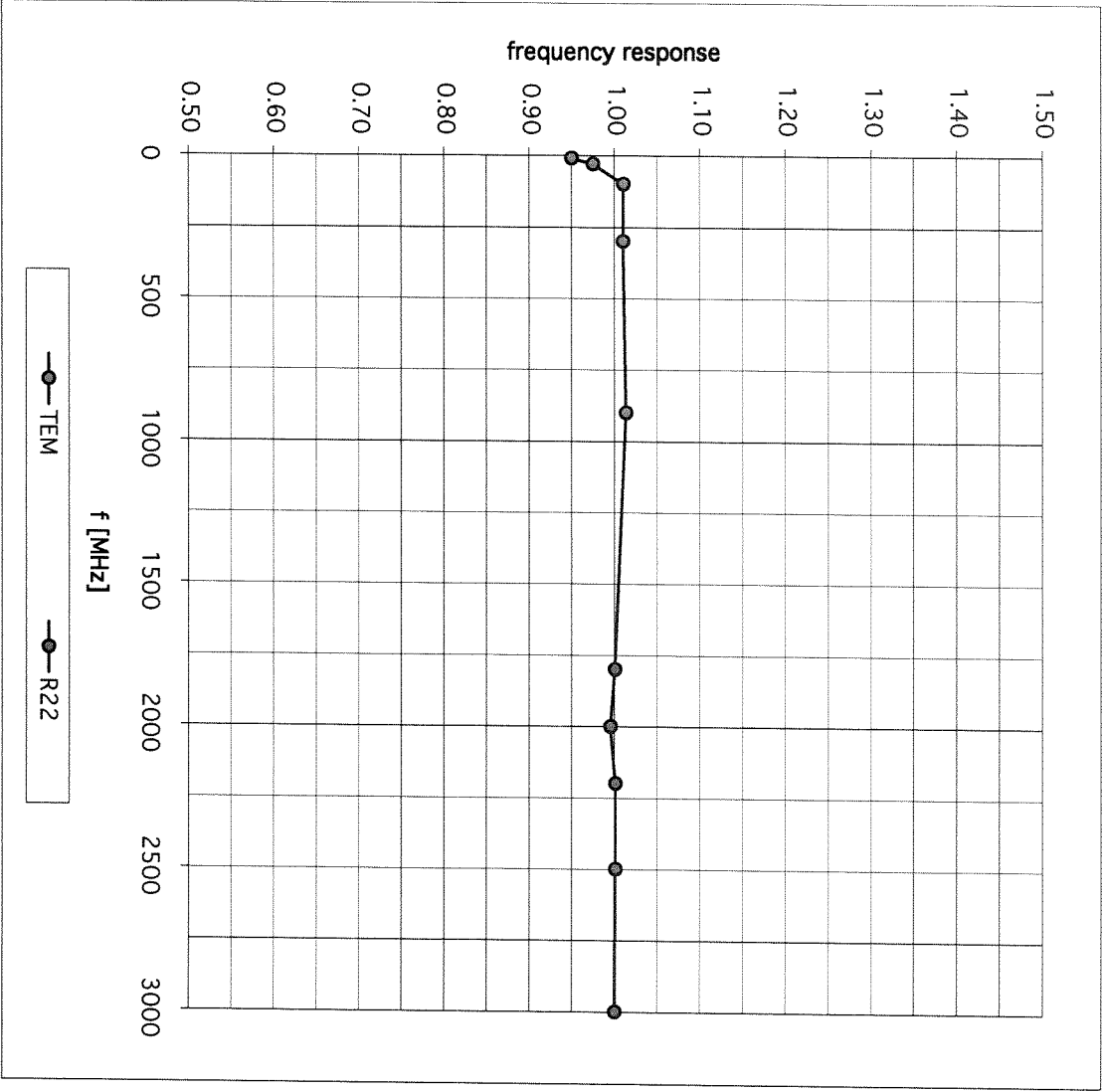


Isotropy Error (ϕ), $\theta = 0^\circ$

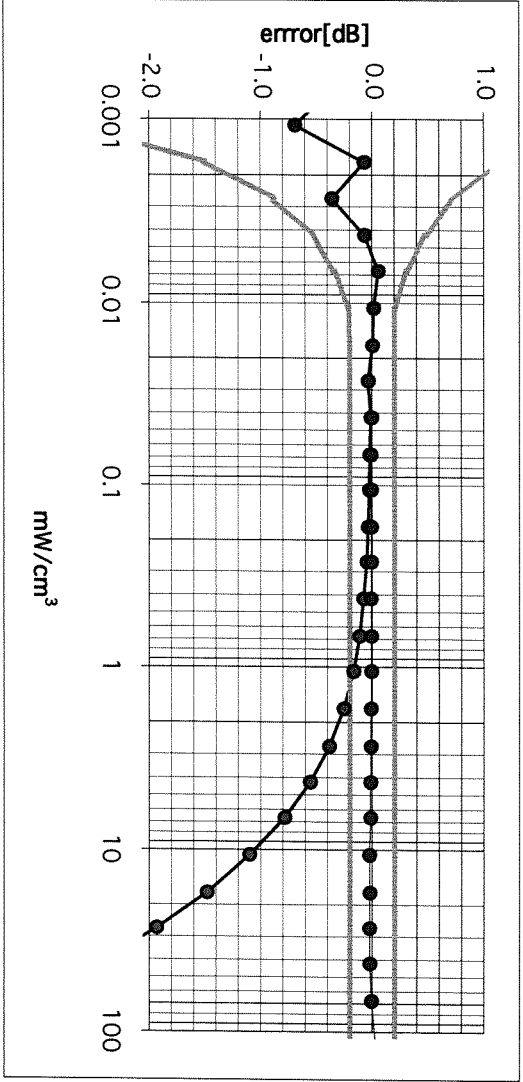
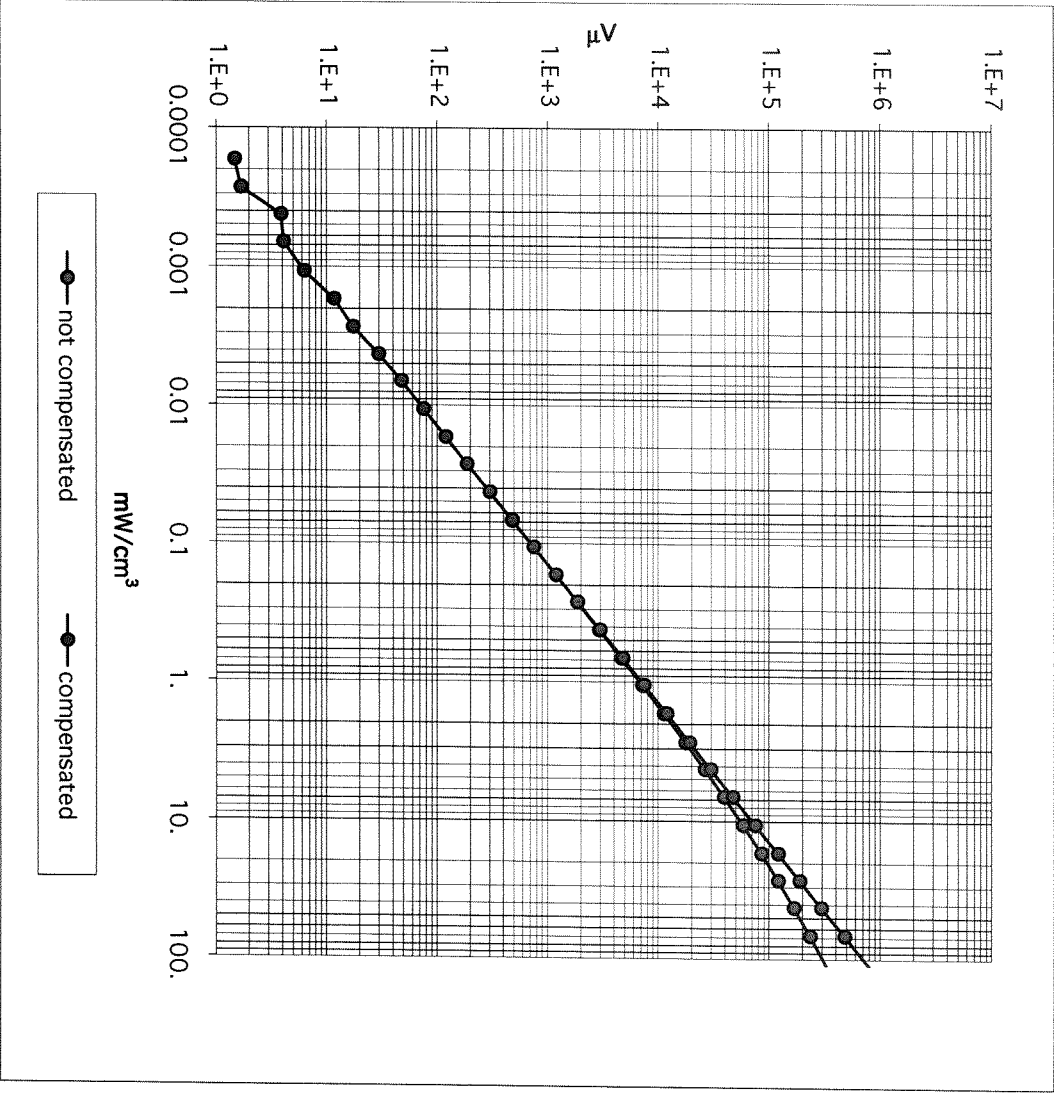


Frequency Response of E-Field

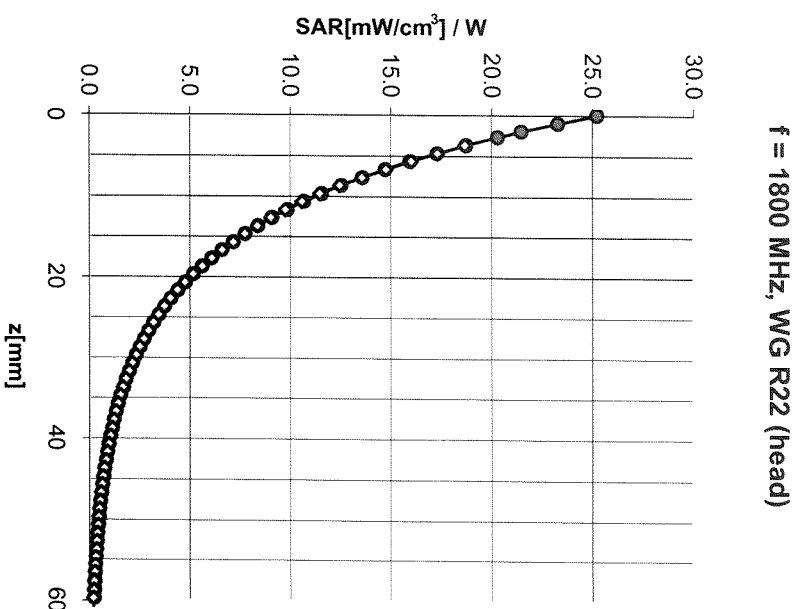
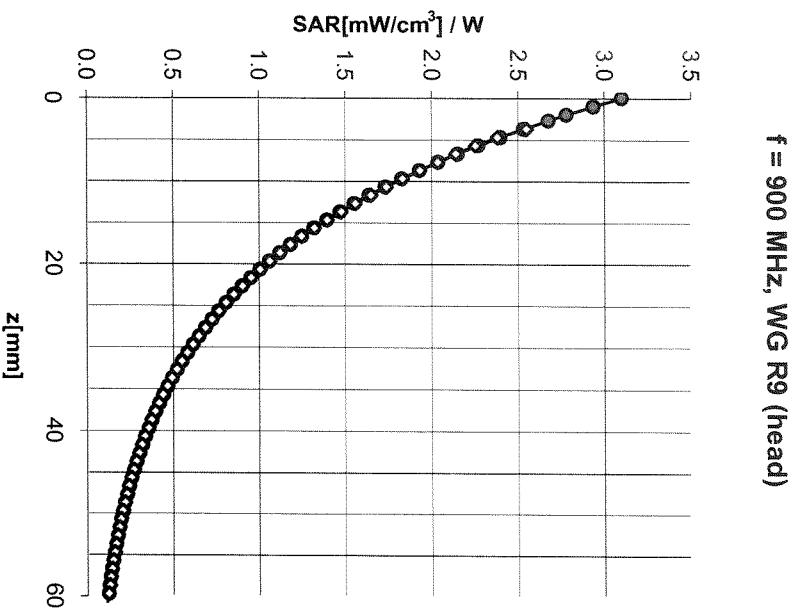
(TEM-Cell:iff110, Waveguide R22)



Dynamic Range f(SARhead) (Waveguide R22)



Conversion Factor Assessment



Head 900 MHz $\epsilon_r = 41.5 \pm 5\%$ $\sigma = 0.97 \pm 5\%$ mho/m

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

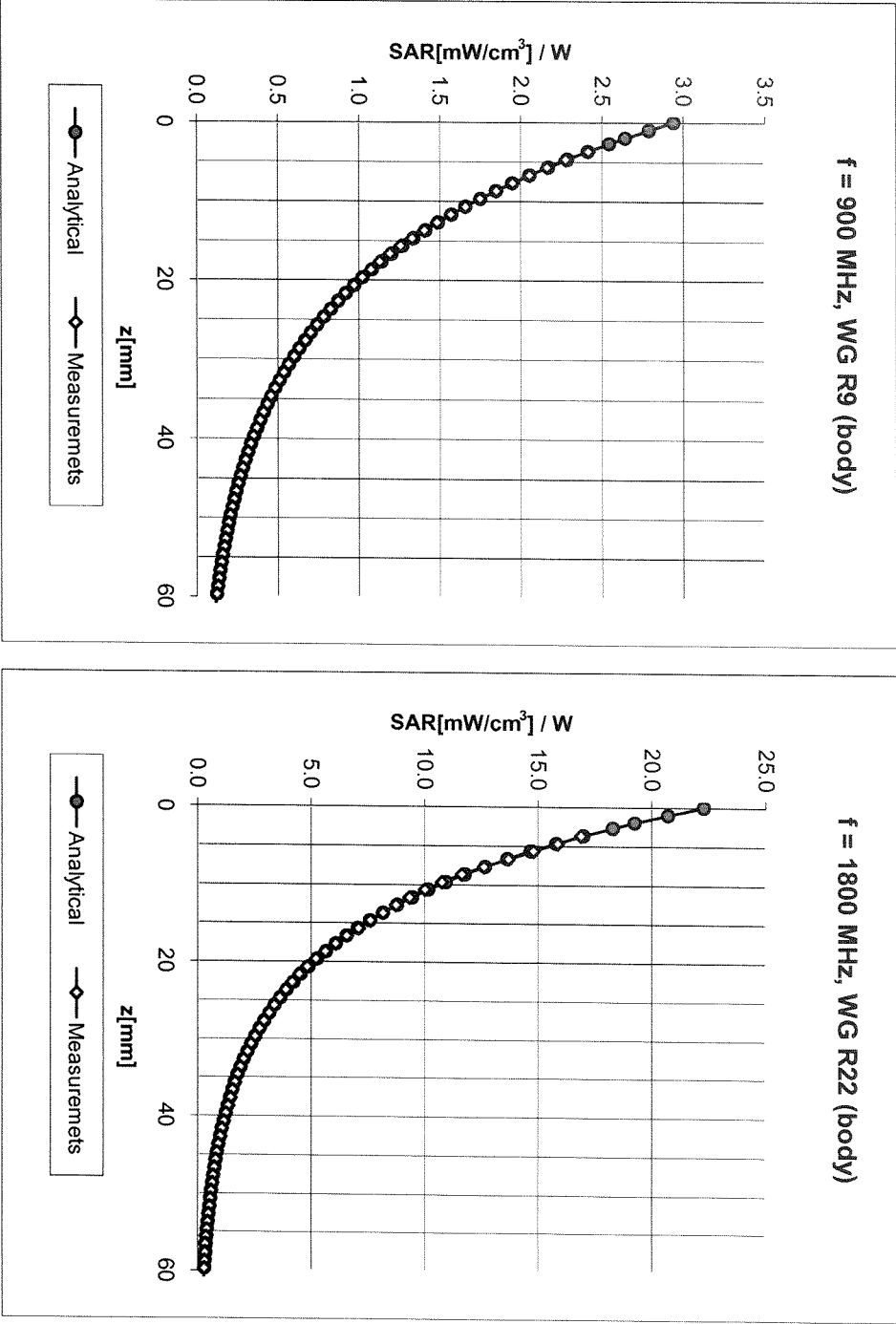
ConvF X	6.9 ± 9.5% (k=2)	Boundary effect:
ConvF Y	6.9 ± 9.5% (k=2)	Alpha
ConvF Z	6.9 ± 9.5% (k=2)	Depth
		3.72

Head 1800 MHz $\epsilon_r = 40.0 \pm 5\%$ $\sigma = 1.40 \pm 5\%$ mho/m

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

ConvF X	5.3 ± 9.5% (k=2)	Boundary effect:
ConvF Y	5.3 ± 9.5% (k=2)	Alpha
ConvF Z	5.3 ± 9.5% (k=2)	Depth
		2.81

Conversion Factor Assessment



Body 900 MHz $\epsilon_r = 55.0 \pm 5\%$ $\sigma = 1.05 \pm 5\%$ mho/m

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

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

Body 1800 MHz $\epsilon_r = 53.3 \pm 5\%$ $\sigma = 1.52 \pm 5\%$ mho/m

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

ConvF X	4.9 ± 9.5% (k=2)	Boundary effect:
ConvF Y	4.9 ± 9.5% (k=2)	Alpha
ConvF Z	4.9 ± 9.5% (k=2)	Depth

Deviation from Isotropy in HSL

Error (θ, ϕ), $f = 900$ MHz

