

Ericsson Communication, Model No: GC75

Date of Test: July 28 & 30, 2001

APPENDIX B - E-Field Probe Calibration Data

See attached.

**Schmid & Partner
Engineering AG**

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

Calibration Certificate

Dosimetric E-Field Probe

Type:

ET3DV5

Serial Number:

1333

Place of Calibration:

Zurich

Date of Calibration:

April 23, 2001

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:

Nicolas Meriana

Approved by:

Ilmaris Katja

**Schmid & Partner
Engineering AG**

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

Probe ET3DV5

SN:1333

Manufactured:	December 20, 1997
Last calibration:	April 10, 2000
Recalibrated:	April 23, 2001

Calibrated for System DASY3

ET3DV5 SN:1333

DASY3 - Parameters of Probe: ET3DV5 SN:1333

Sensitivity in Free Space

NormX	2.37 $\mu\text{V}/(\text{V}/\text{m})^2$
NormY	2.38 $\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	2.33 $\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression

DCP X	100 mV
DCP Y	100 mV
DCP Z	100 mV

Sensitivity in Tissue Simulating Liquid

Head 450 MHz $\epsilon_r = 43.5 \pm 5\%$ $\sigma = 0.87 \pm 10\% \text{ mho/m}$

ConvF X	6.25 extrapolated	Boundary effect:	
ConvF Y	6.25 extrapolated	Alpha	0.19
ConvF Z	6.25 extrapolated	Depth	3.06

Head 900 MHz $\epsilon_r = 42 \pm 5\%$ $\sigma = 0.97 \pm 10\% \text{ mho/m}$

ConvF X	5.83 $\pm 7\%$ (k=2)	Boundary effect:	
ConvF Y	5.83 $\pm 7\%$ (k=2)	Alpha	0.38
ConvF Z	5.83 $\pm 7\%$ (k=2)	Depth	2.70

Brain 1500 MHz $\epsilon_r = 41 \pm 5\%$ $\sigma = 1.32 \pm 10\% \text{ mho/m}$

ConvF X	5.27 interpolated	Boundary effect:	
ConvF Y	5.27 interpolated	Alpha	0.63
ConvF Z	5.27 interpolated	Depth	2.23

Brain 1800 MHz $\epsilon_r = 41 \pm 5\%$ $\sigma = 1.69 \pm 10\% \text{ mho/m}$

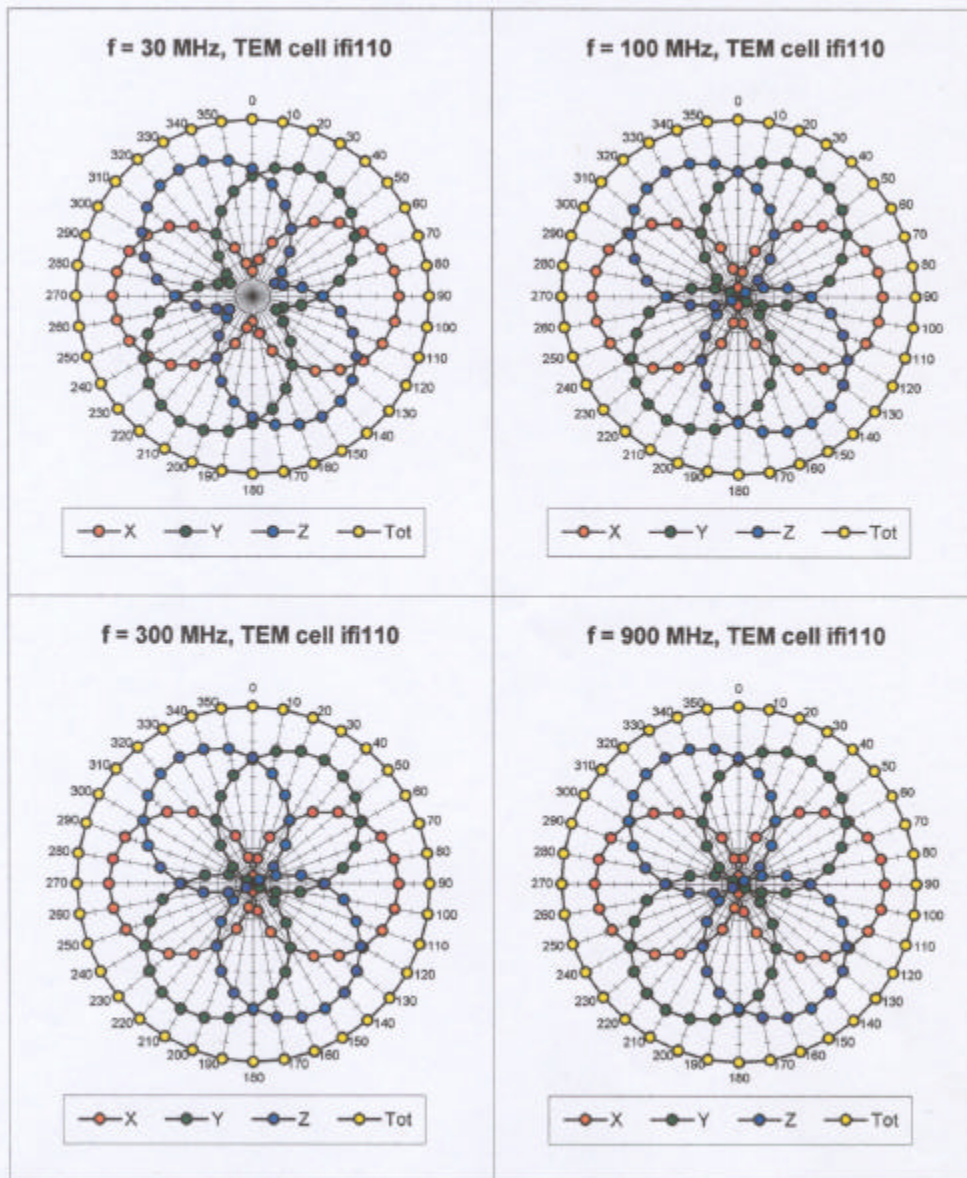
ConvF X	4.99 $\pm 7\%$ (k=2)	Boundary effect:	
ConvF Y	4.99 $\pm 7\%$ (k=2)	Alpha	0.75
ConvF Z	4.99 $\pm 7\%$ (k=2)	Depth	1.99

Sensor Offset

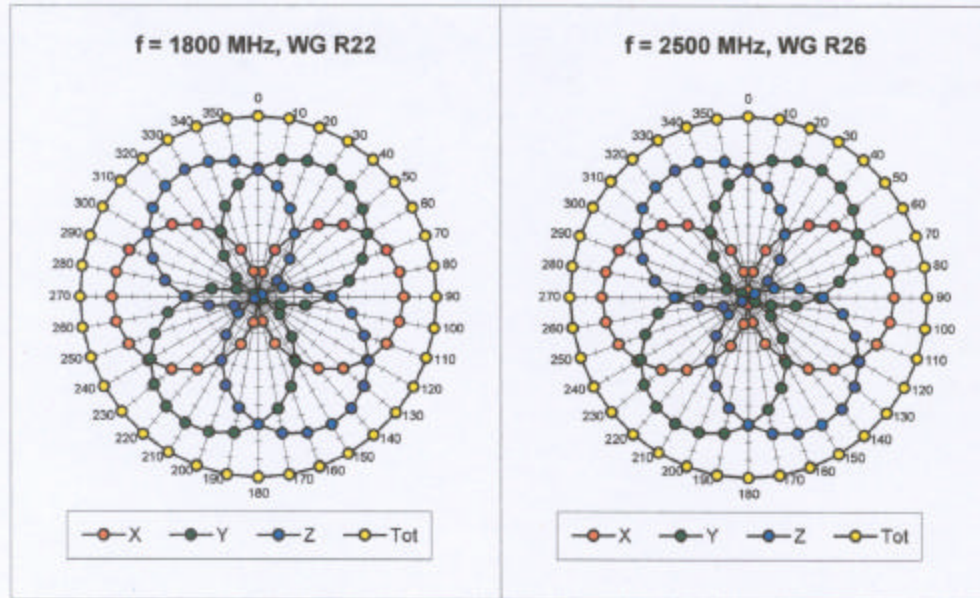
Probe Tip to Sensor Center	2.7	mm
Optical Surface Detection	1.6 \pm 0.2	mm

ET3DV5 SN:1333

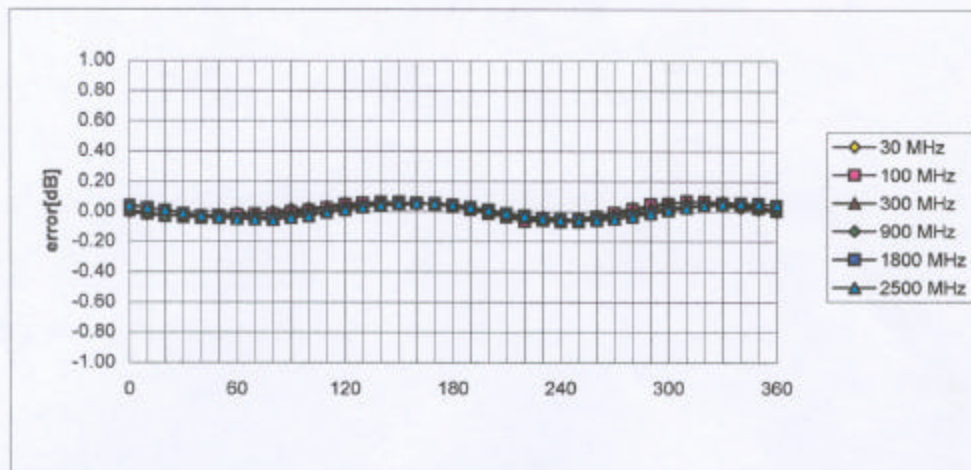
Receiving Pattern (ϕ), $\theta = 0^\circ$



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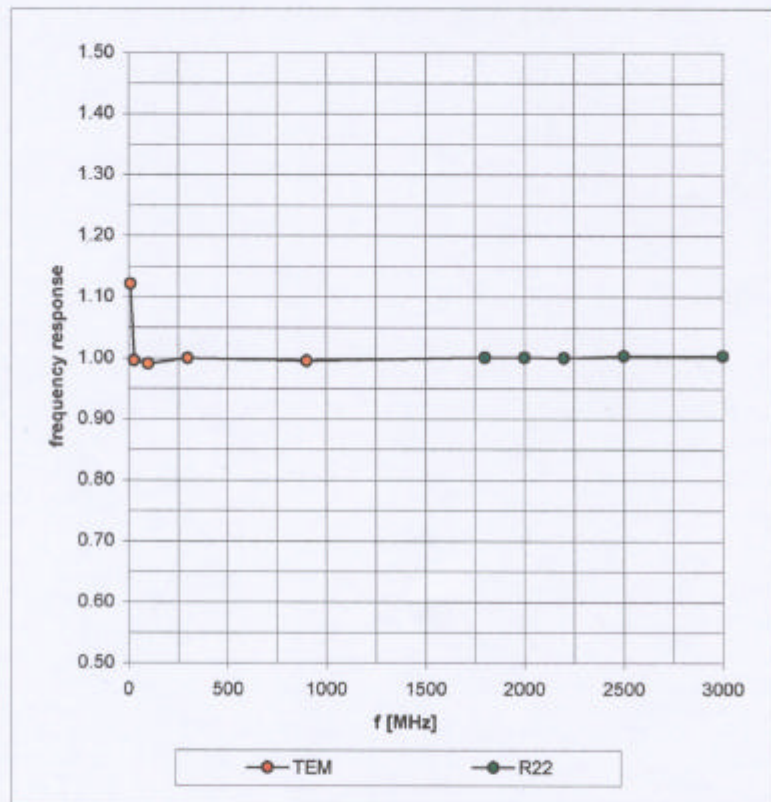
Isotropy Error (ϕ), $\theta = 0^\circ$



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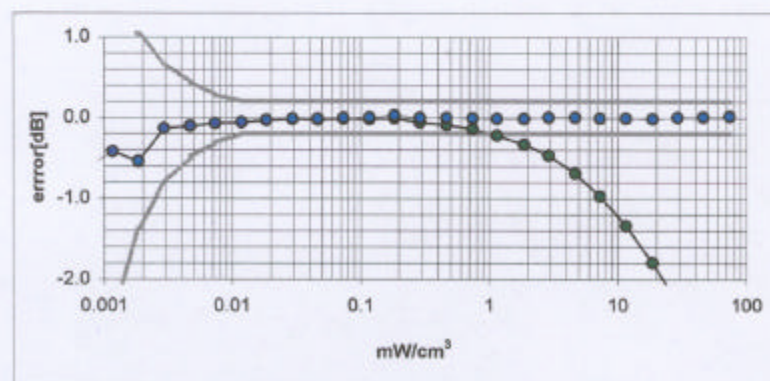
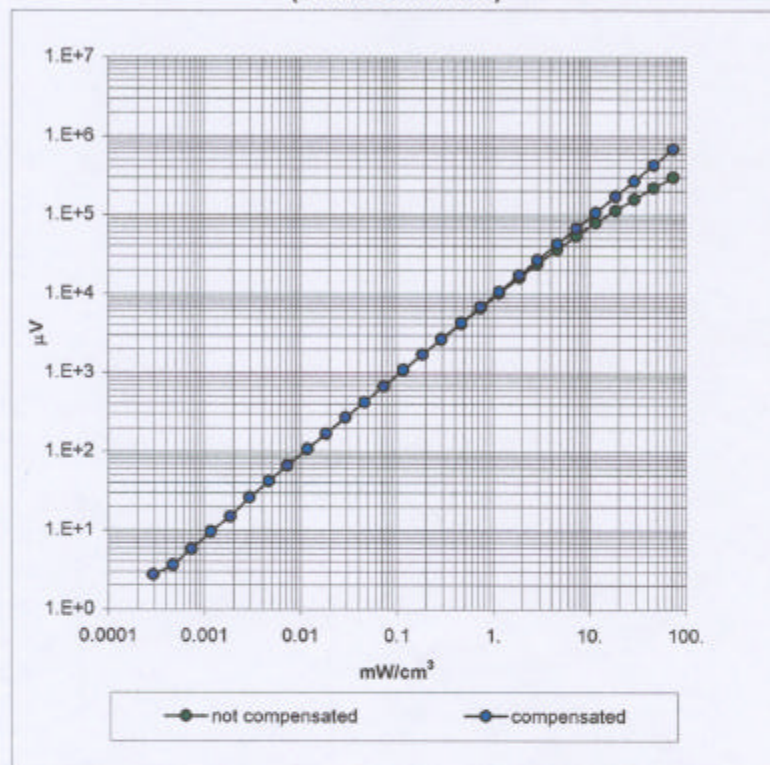
Frequency Response of E-Field

(TEM-Cell:ifi110, Waveguide R22)



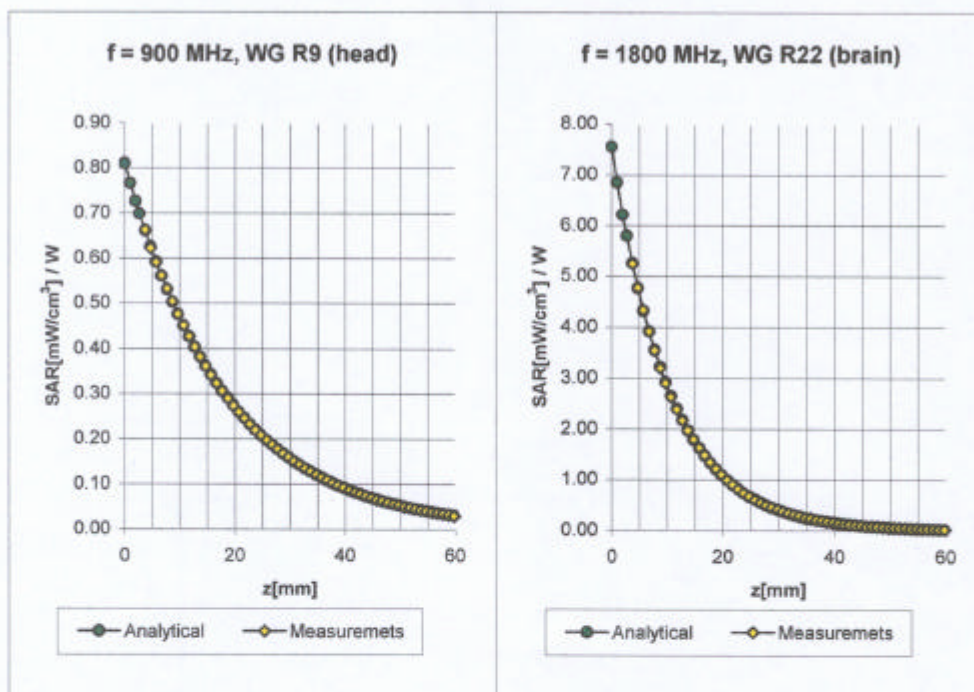
ET3DV5 SN:1333

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



ET3DV5 SN:1333

Conversion Factor Assessment



Head	900 MHz	$\epsilon_r = 42 \pm 5\%$	$\sigma = 0.97 \pm 10\% \text{ mho/m}$
	ConvF X	5.83 $\pm 7\%$ (k=2)	Boundary effect:
	ConvF Y	5.83 $\pm 7\%$ (k=2)	Alpha 0.38
	ConvF Z	5.83 $\pm 7\%$ (k=2)	Depth 2.70
Brain	1800 MHz	$\epsilon_r = 41 \pm 5\%$	$\sigma = 1.69 \pm 10\% \text{ mho/m}$
	ConvF X	4.99 $\pm 7\%$ (k=2)	Boundary effect:
	ConvF Y	4.99 $\pm 7\%$ (k=2)	Alpha 0.75
	ConvF Z	4.99 $\pm 7\%$ (k=2)	Depth 1.99