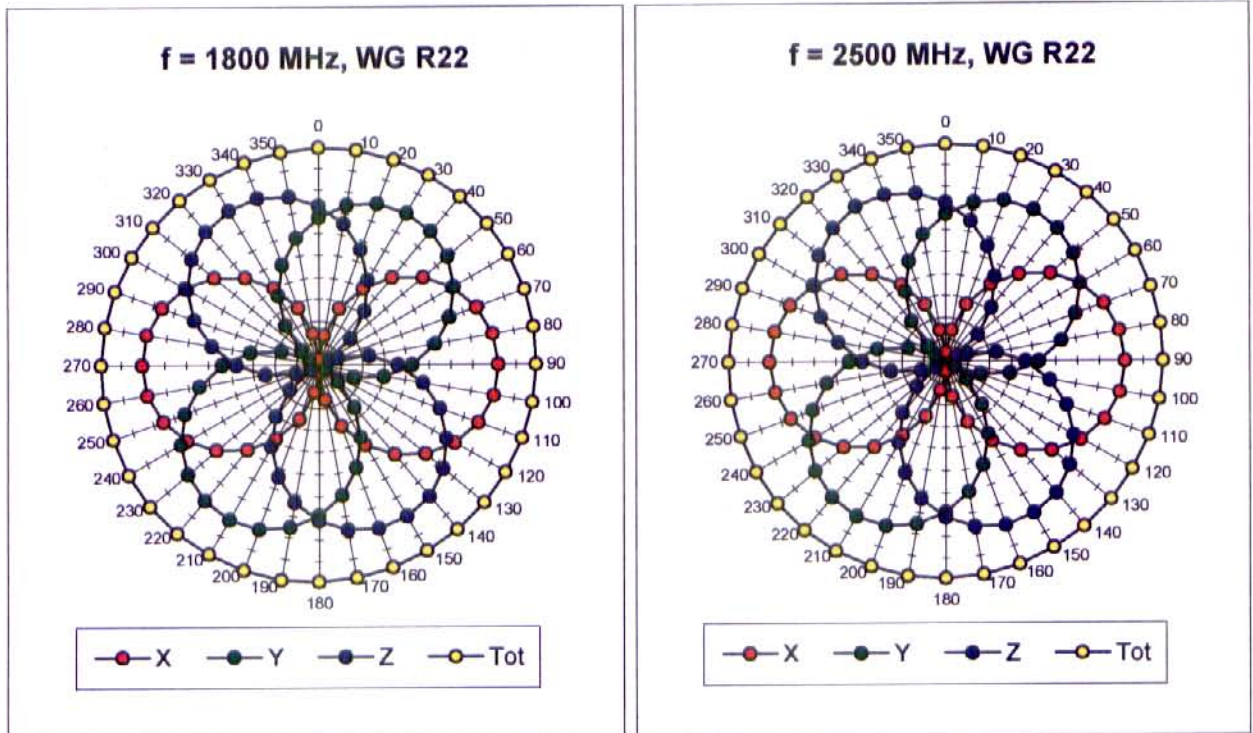
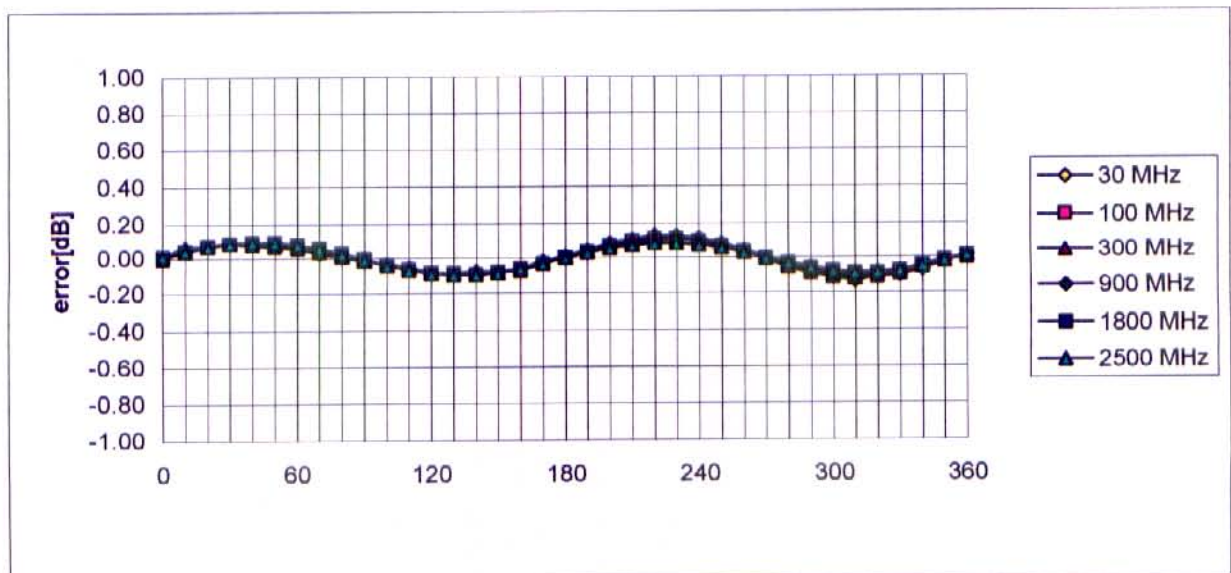


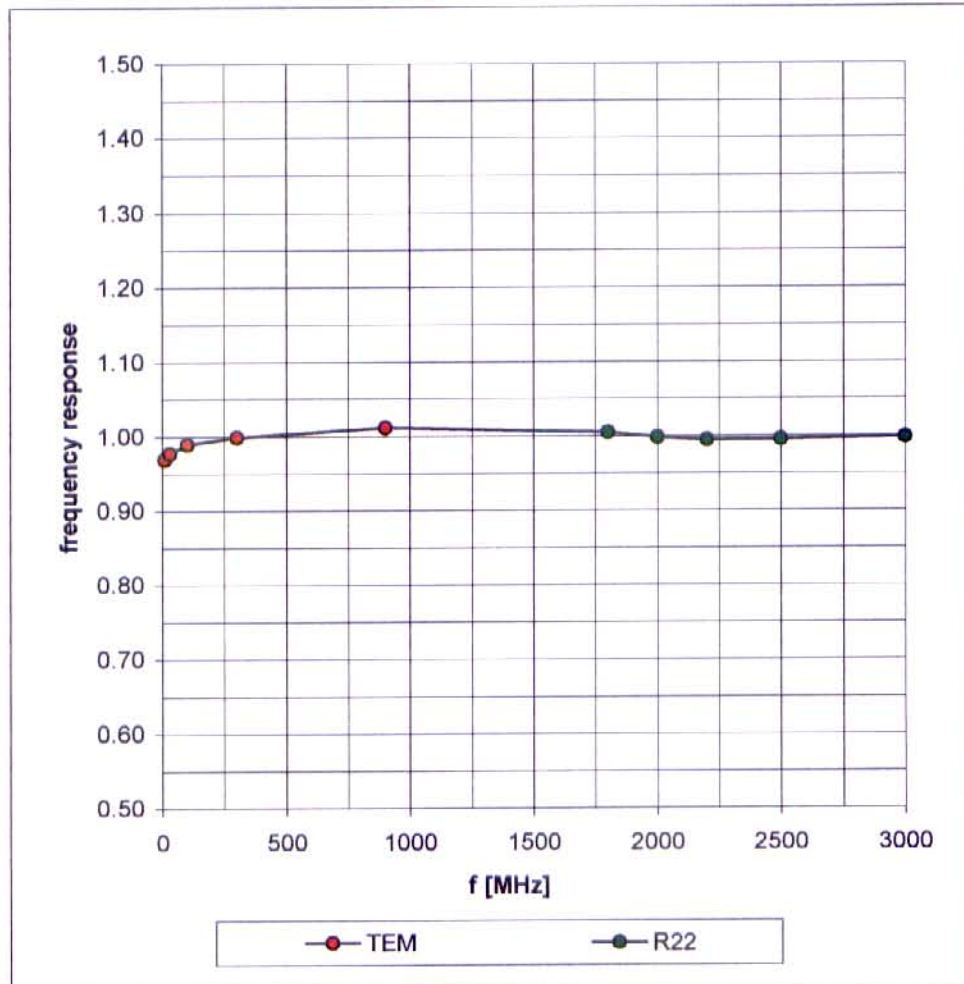


Isotropy Error (ϕ), $\theta = 0^\circ$

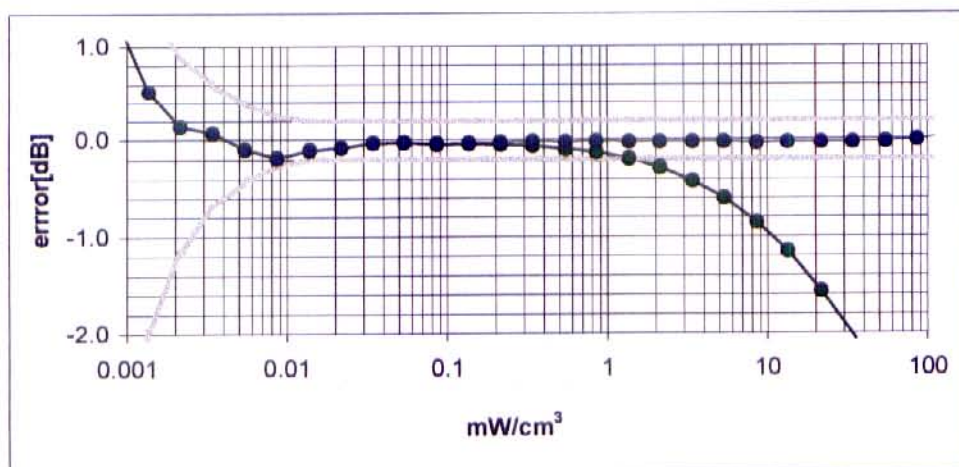
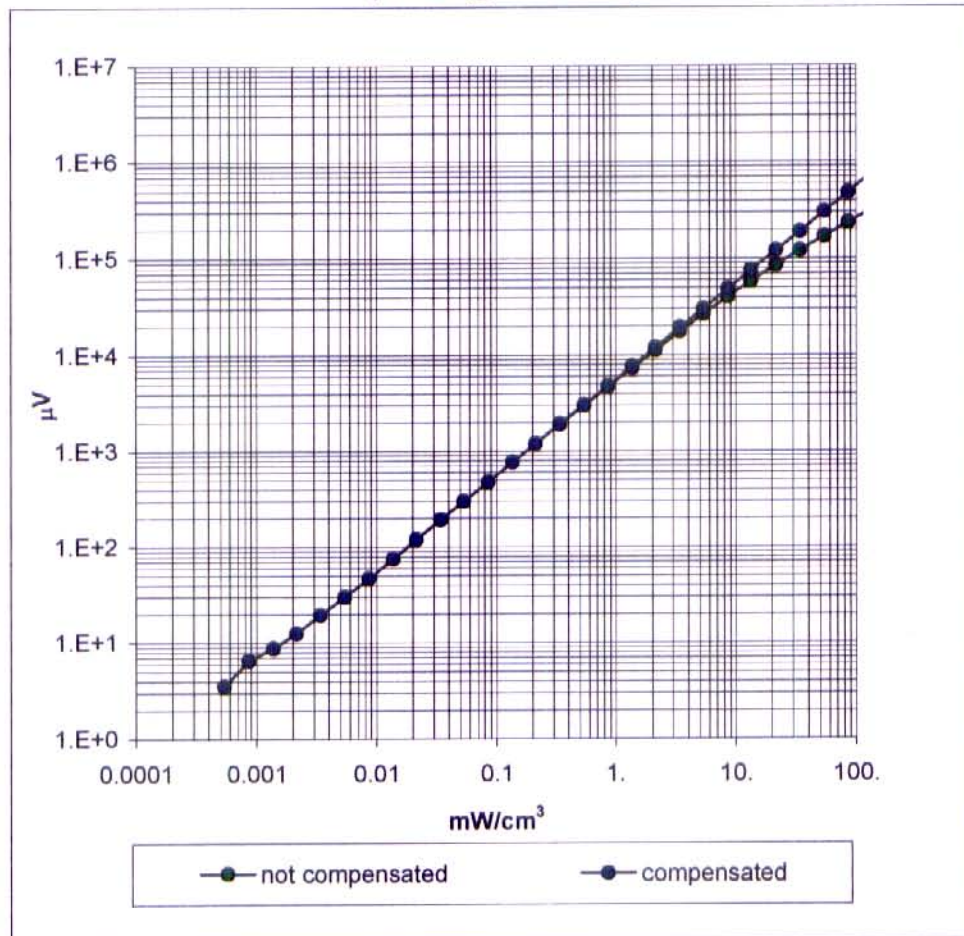


Frequency Response of E-Field

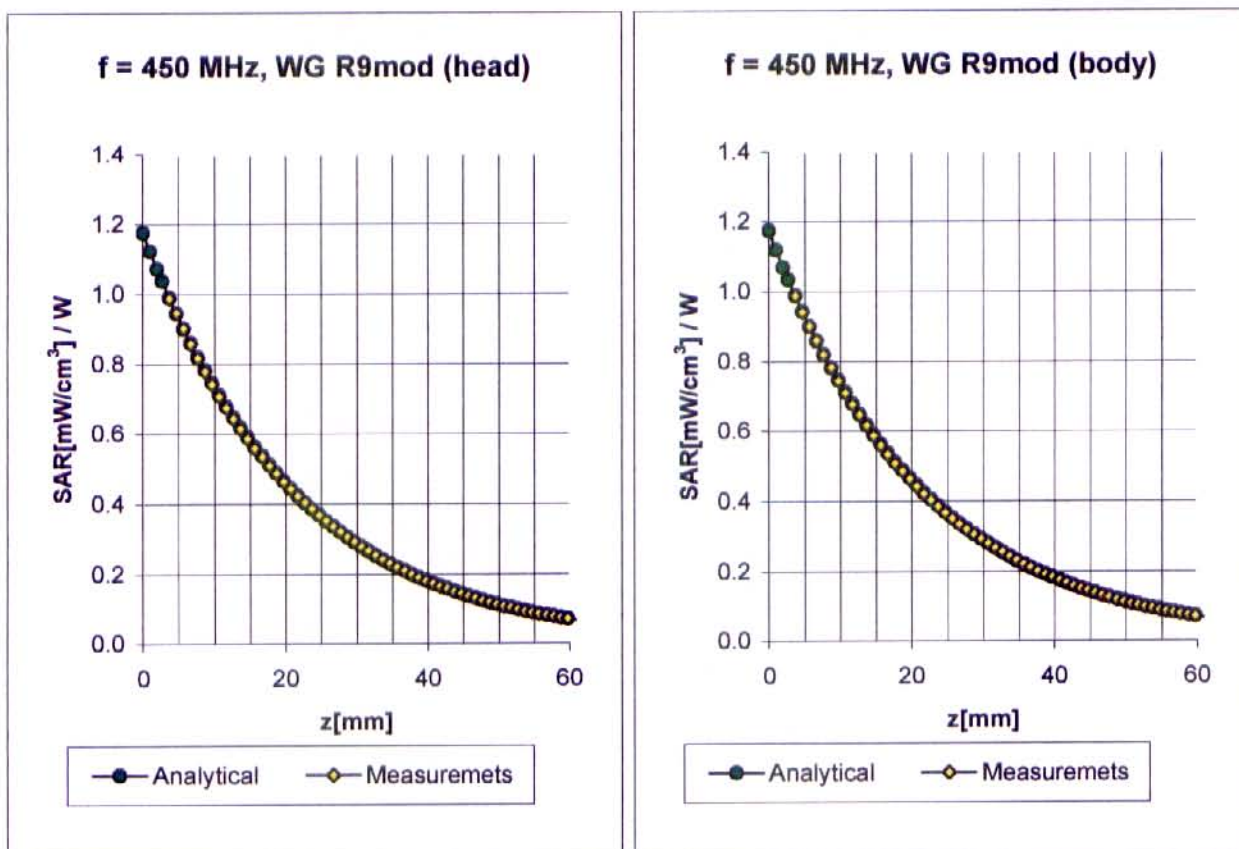
(TEM-Cell:ifi110, Waveguide R22)



Dynamic Range f(SAR_{brain}) (Waveguide R22)



Conversion Factor Assessment



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

Valid for f=400-500 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

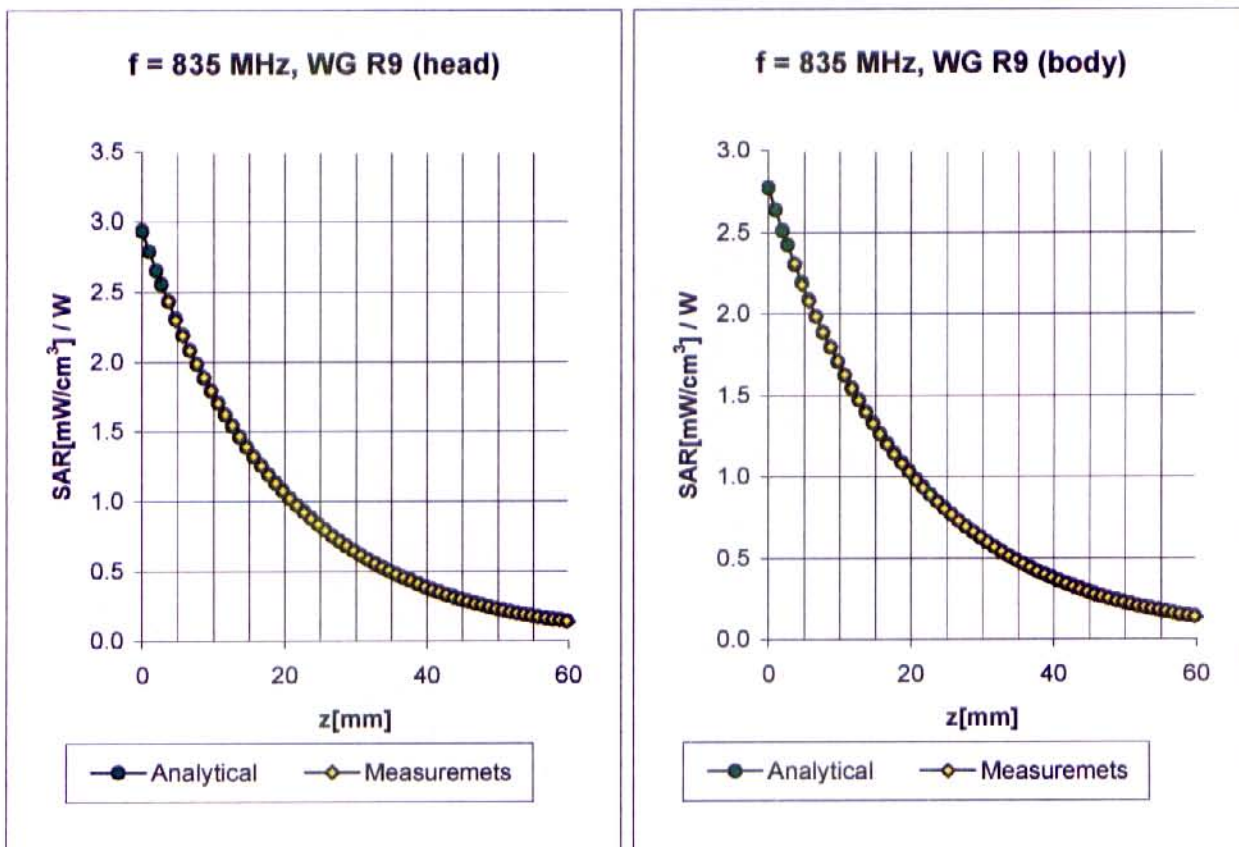
ConvF X	7.0 $\pm 15.5\%$ (k=2)	Boundary effect:
ConvF Y	7.0 $\pm 15.5\%$ (k=2)	Alpha 1.14
ConvF Z	7.0 $\pm 15.5\%$ (k=2)	Depth 1.31

Body **450 MHz** $\epsilon_r = 56.7 \pm 5\%$ $\sigma = 0.94 \pm 5\% \text{ mho/m}$

Valid for f=400-500 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	6.6 $\pm 15.5\%$ (k=2)	Boundary effect:
ConvF Y	6.6 $\pm 15.5\%$ (k=2)	Alpha 0.53
ConvF Z	6.6 $\pm 15.5\%$ (k=2)	Depth 2.02

Conversion Factor Assessment



Head **835 MHz** $\epsilon_r = 41.5 \pm 5\%$ $\sigma = 0.90 \pm 5\% \text{ mho/m}$

Valid for f=793-877 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

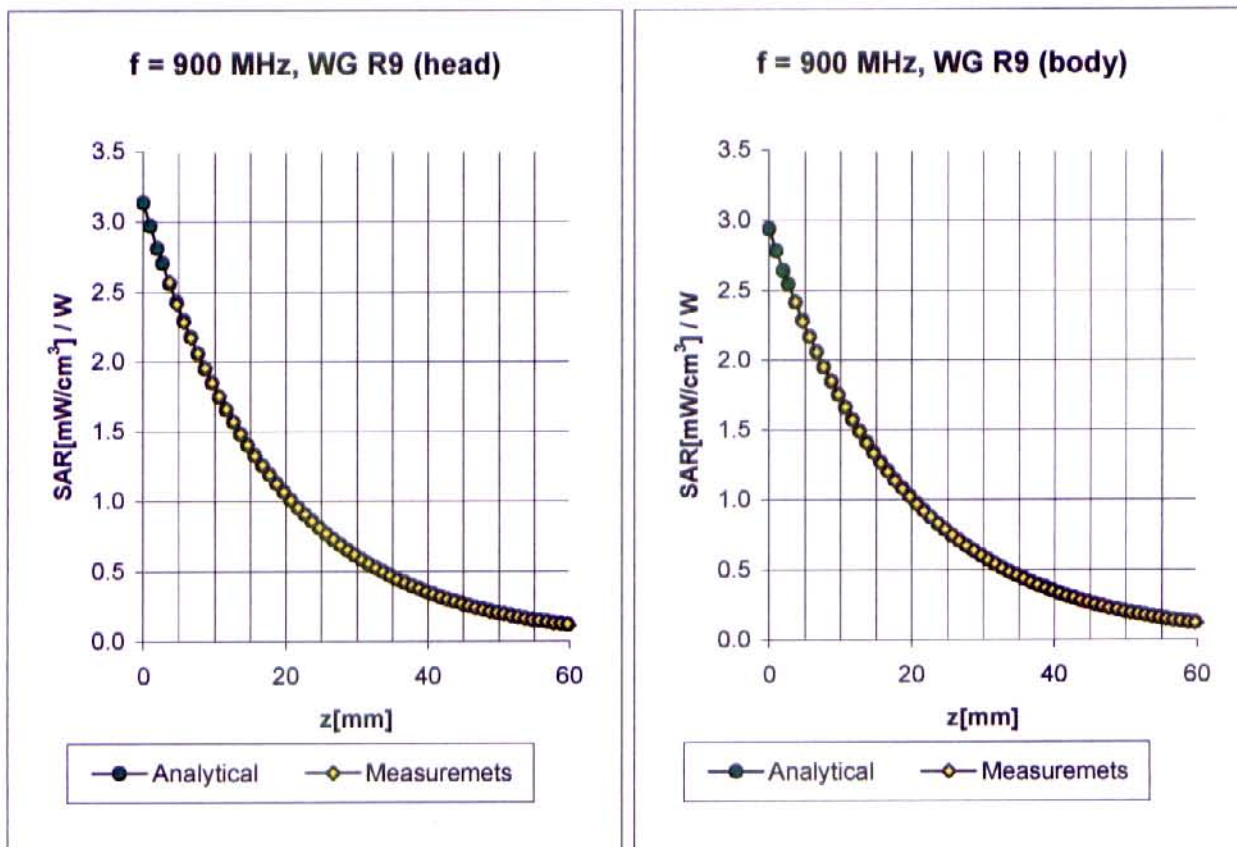
ConvF X	6.8 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	6.8 $\pm 9.5\%$ (k=2)	Alpha 0.33
ConvF Z	6.8 $\pm 9.5\%$ (k=2)	Depth 2.62

Body **835 MHz** $\epsilon_r = 55.2 \pm 5\%$ $\sigma = 0.97 \pm 5\% \text{ mho/m}$

Valid for f=793-877 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	6.6 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	6.6 $\pm 9.5\%$ (k=2)	Alpha 0.38
ConvF Z	6.6 $\pm 9.5\%$ (k=2)	Depth 2.46

Conversion Factor Assessment



Head **900 MHz** $\epsilon_r =$ **41.4** $\sigma = 0.97 \pm 5\% \text{ mho/m}$

Valid for f=855-945 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

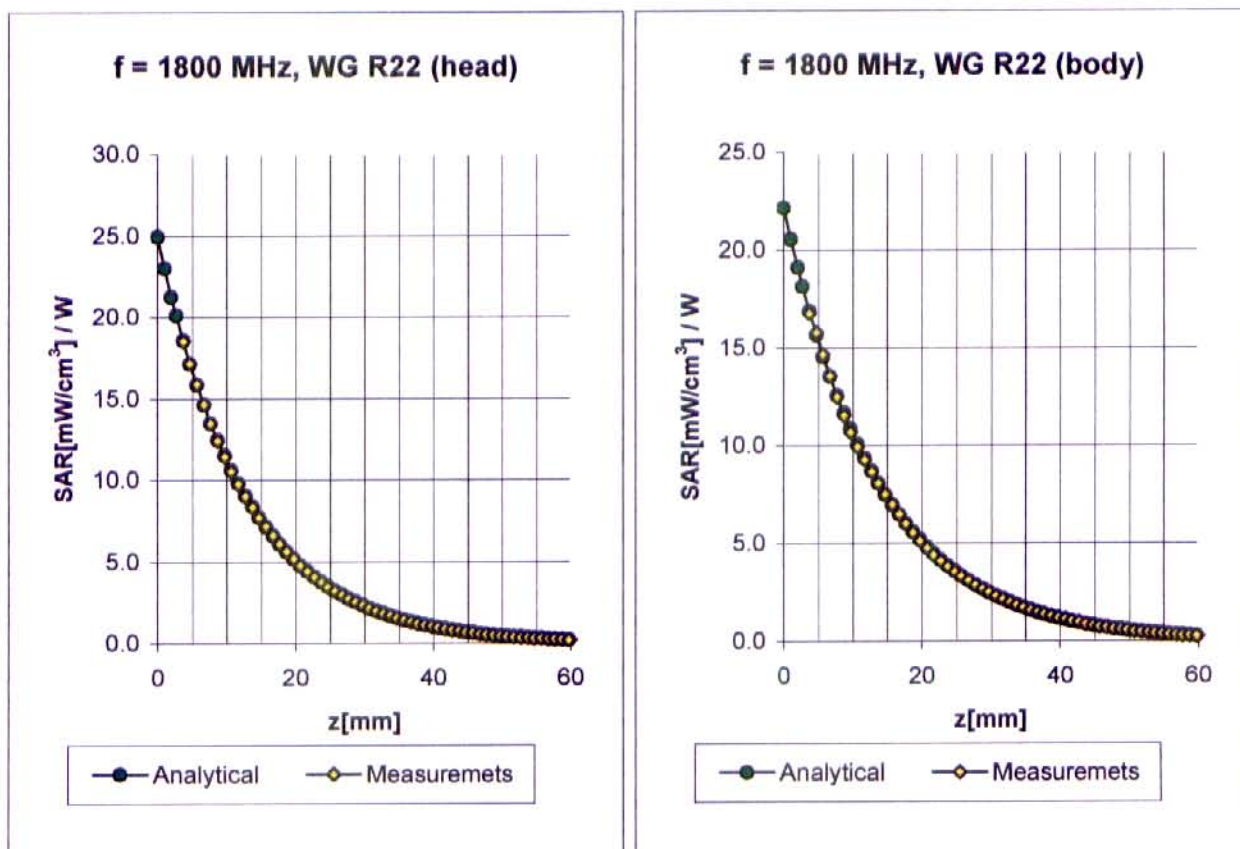
ConvF X	6.6 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	6.6 $\pm 9.5\%$ (k=2)	Alpha 0.30
ConvF Z	6.6 $\pm 9.5\%$ (k=2)	Depth 2.82

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

Valid for f=855-945 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	6.3 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	6.3 $\pm 9.5\%$ (k=2)	Alpha 0.37
ConvF Z	6.3 $\pm 9.5\%$ (k=2)	Depth 2.44

Conversion Factor Assessment



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

Valid for f=1710-1890 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

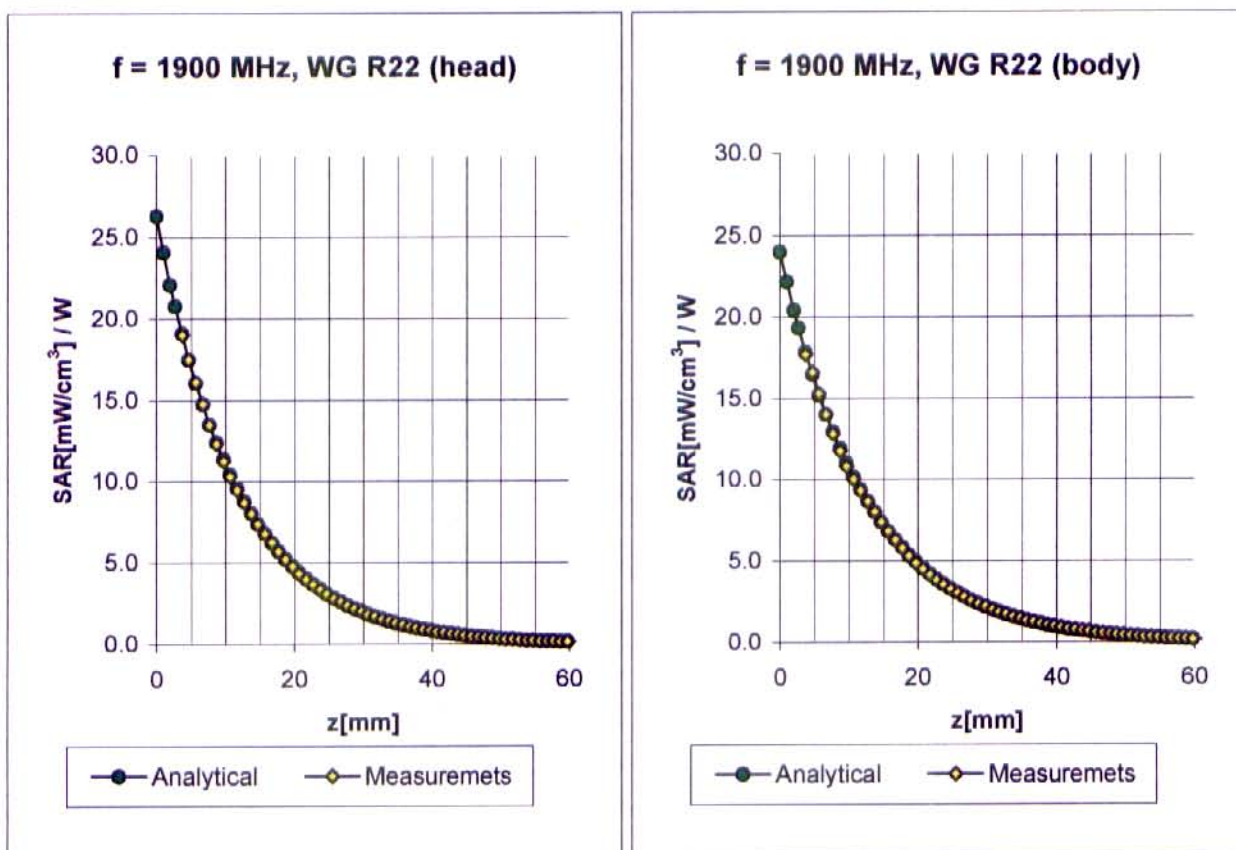
ConvF X	5.3 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	5.3 $\pm 9.5\%$ (k=2)	Alpha 0.46
ConvF Z	5.3 $\pm 9.5\%$ (k=2)	Depth 2.62

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

Valid for f=1710-1890 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	4.9 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	4.9 $\pm 9.5\%$ (k=2)	Alpha 0.54
ConvF Z	4.9 $\pm 9.5\%$ (k=2)	Depth 2.64

Conversion Factor Assessment



Head **1900 MHz** $\epsilon_r = 40.0 \pm 5\%$ $\sigma = 1.40 \pm 5\% \text{ mho/m}$

Valid for f=1805-1995 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

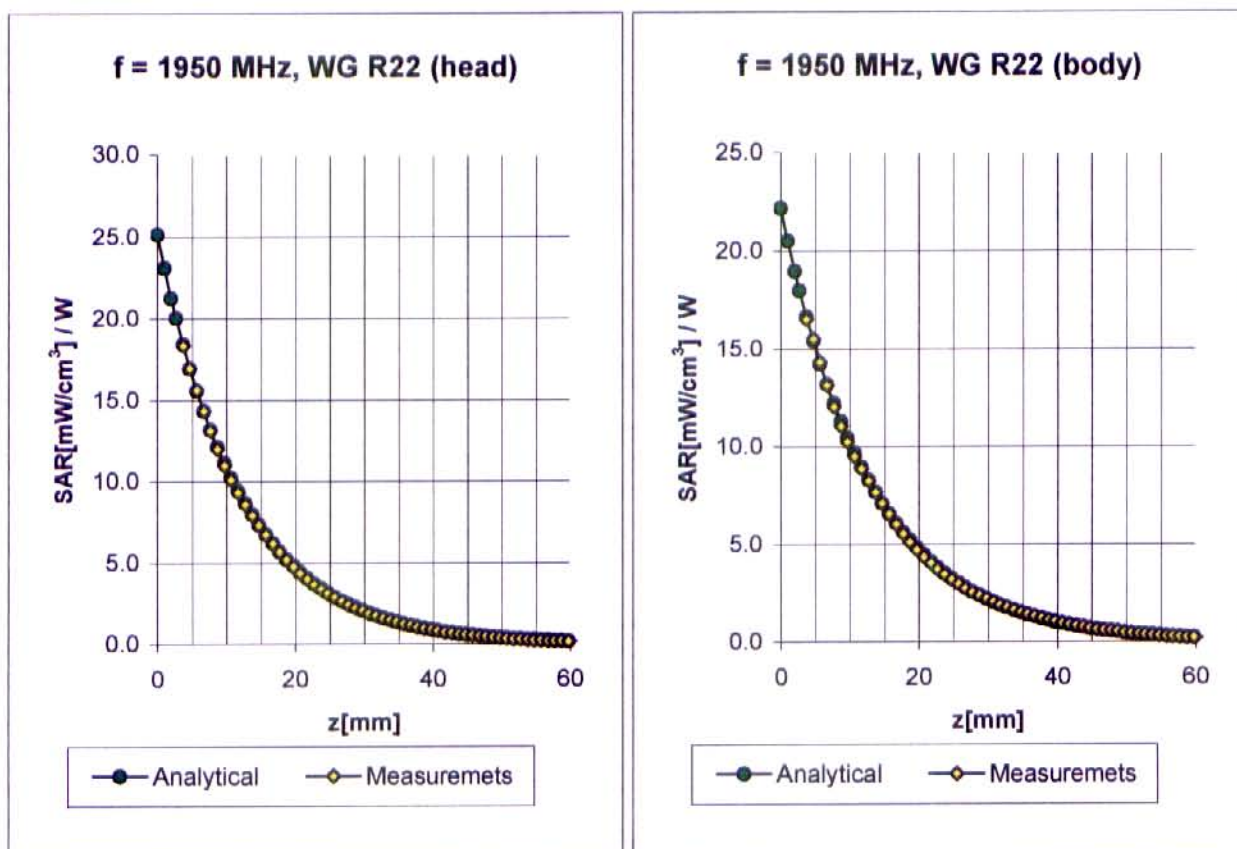
ConvF X	5.2 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	5.2 $\pm 9.5\%$ (k=2)	Alpha 0.52
ConvF Z	5.2 $\pm 9.5\%$ (k=2)	Depth 2.67

Body **1900 MHz** $\epsilon_r = 53.3 \pm 5\%$ $\sigma = 1.52 \pm 5\% \text{ mho/m}$

Valid for f=1805-1995 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	4.7 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	4.7 $\pm 9.5\%$ (k=2)	Alpha 0.64
ConvF Z	4.7 $\pm 9.5\%$ (k=2)	Depth 2.45

Conversion Factor Assessment



Head **1950 MHz** $\epsilon_r = 40.0 \pm 5\%$ $\sigma = 1.40 \pm 5\% \text{ mho/m}$

Valid for f=1853-2048 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X	5.2 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	5.2 $\pm 9.5\%$ (k=2)	Alpha 0.51
ConvF Z	5.2 $\pm 9.5\%$ (k=2)	Depth 2.59

Body **1950 MHz** $\epsilon_r = 53.3 \pm 5\%$ $\sigma = 1.52 \pm 5\% \text{ mho/m}$

Valid for f=1853-2048 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X	4.6 $\pm 9.5\%$ (k=2)	Boundary effect:
ConvF Y	4.6 $\pm 9.5\%$ (k=2)	Alpha 0.65
ConvF Z	4.6 $\pm 9.5\%$ (k=2)	Depth 2.34

Deviation from Isotropy in HSL

Error ($\theta\phi$), $f = 900$ MHz

