

f (MHz)	Description	Dielectric Parameters		Temp (°C)
		ϵ_r	σ (S/m)	
835	Measured 06/05/03	56.4	0.94	22
	Recommended Values	55.2	0.97	20-26
1880	Measured 06/05/03	52.6	1.55	22
	Recommended Values	53.3	1.52	20-26

Recommended values are adopted from OET Bulletin 65 (97-01) Supplement C (01-01).

4.3 Phantoms

"SAM v4.0" phantom", manufactured by SPEAG, was used during the measurement. It has fiberglass shell integrated in a wooden table. The shape of the shell corresponds to the phantom defined by SCC34-SC2. It enables the dosimetric



evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

The thickness of phantom shell is 2 mm except for the ear, where an integrated ear spacer provides a 6 mm spacing from the tissue boundary. Manufacturer reports tolerance in shell thickness to be ± 0.1 mm.

4.4 Isotropic E-Field Probe ET3DV6

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces