

4.8 Calibration and validation procedures

The probes are calibrated annually by the manufacturer. The tissue simulating liquids are measured using a HP 85070A dielectric probe kit. The SAR measurements were validated using a dipole antenna placed under the flat section of the generic twin phantom. A power level of 250 mW supplied to the dipole antenna was used for the validation. The results are normalised to 1 W input power. The power level was controlled during validation, using a directional coupler and a power meter.

Liquid	Date	Frequency [MHz]	Description	SAR averaged over 1g [mW/g]	Dielectric Parameters	
					ϵ_r	σ [S/m]
Head	01/17/02	1800	Measured	40.8	39.3	1.38
			Reference	37.4	40.7	1.35
	01/18/02	1800	Measured	40.4	39.3	1.38
			Reference	37.4	40.7	1.35
Body	01/21/02	1800	Measured	40.8	53.3	1.47
			Reference	40.8	53.5	1.45
	01/22/02	1800	Measured	41.2	53.3	1.47
			Reference	40.8	53.5	1.45