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1800MHz, 1900MHz Dipole Antenna comparison Validation



Tissue Verification

Table 1.1 Simulated Tissue Verification

MEASURED TISSUE PARAMETERS					
Date(s)	02/10/03	1900MHz Brain		1900MHz Muscle	
Liquid Temperature(°C)	23.0	Target	Measured	Target	Measured
Dielectric Constant: ϵ		40.00	40.20	53.30	53.67
Conductivity: σ		1.400	1.39	1.520	1.52

Test System Validation

Prior to assessment, the system is verified to the $\pm 10\%$ of the specifications at 835MHz and 1900MHz by using the system validation kit(s). (Graphic Plots Attached)

Table 1.2 System Validation

SYSTEM DIPOLE VALIDATION TARGET & MEASURED					
A	System Validation Kit: D1800V2, S/N: 2d047	1900MHz Brain	Targeted SAR _{1g} (mW/g) 9.925	Measured SAR _{1g} (mW/g) 9.98	Deviation(%) 0.5
B	System Validation Kit: D1900V2,S/N: 5d017	1900MHz Brain	Targeted SAR _{1g} (mW/g) 9.925	Measured SAR _{1g} (mW/g) 10.3	Deviation(%) 3.7

* Case A : Use 1800MHz Dipole Antenna, 1900MHz Head Tissue.

* Case B : Use 1900MHz Dipole Antenna, 1900MHz Head Tissue.

reviewed by
D.M.JUNG (Manager)

Test Setup Photo

