



MOTOROLA

DIPOLE SAR VALIDATION CERTIFICATE

Frequency:

450

MHz

Dipole Serial Number:

450-001

Simulated Tissue:

head

Date of Validation:

August 17, 2001

Validation Interval:

12 months

Motorola Florida Research Laboratory hereby certifies, that the System Validation was performed on the date indicated above. The System Validation was performed in accordance with specifications and procedures of Motorola Florida Research Laboratory.

Calibrated by:

J. Patrick Oliver

Approved by:

C. K. Chou

Purpose:

To provide a method to check the validity of the SAR measurement system prior to testing

Tissue Simulate:

Name:

Head 450

Targets for tissue characteristics:

Dielectric Constant:

43.5

+/- 5%

Conductivity:

0.87 S/m

+/- 5%

Measurement values:

Dielectric Constant:

43.2

Conductivity:

0.84

Validation setup:

Set up for the validation using constant forward power as shown in Figure 1. The total distance from the mixture to the top of the dipole tips is 16 mm.

Use 1.0 for the density of the simulated tissue.

Target for SAR validation:

The target is specified in terms of peak SAR averaged over 1 cm³ (1 gram) of tissue.

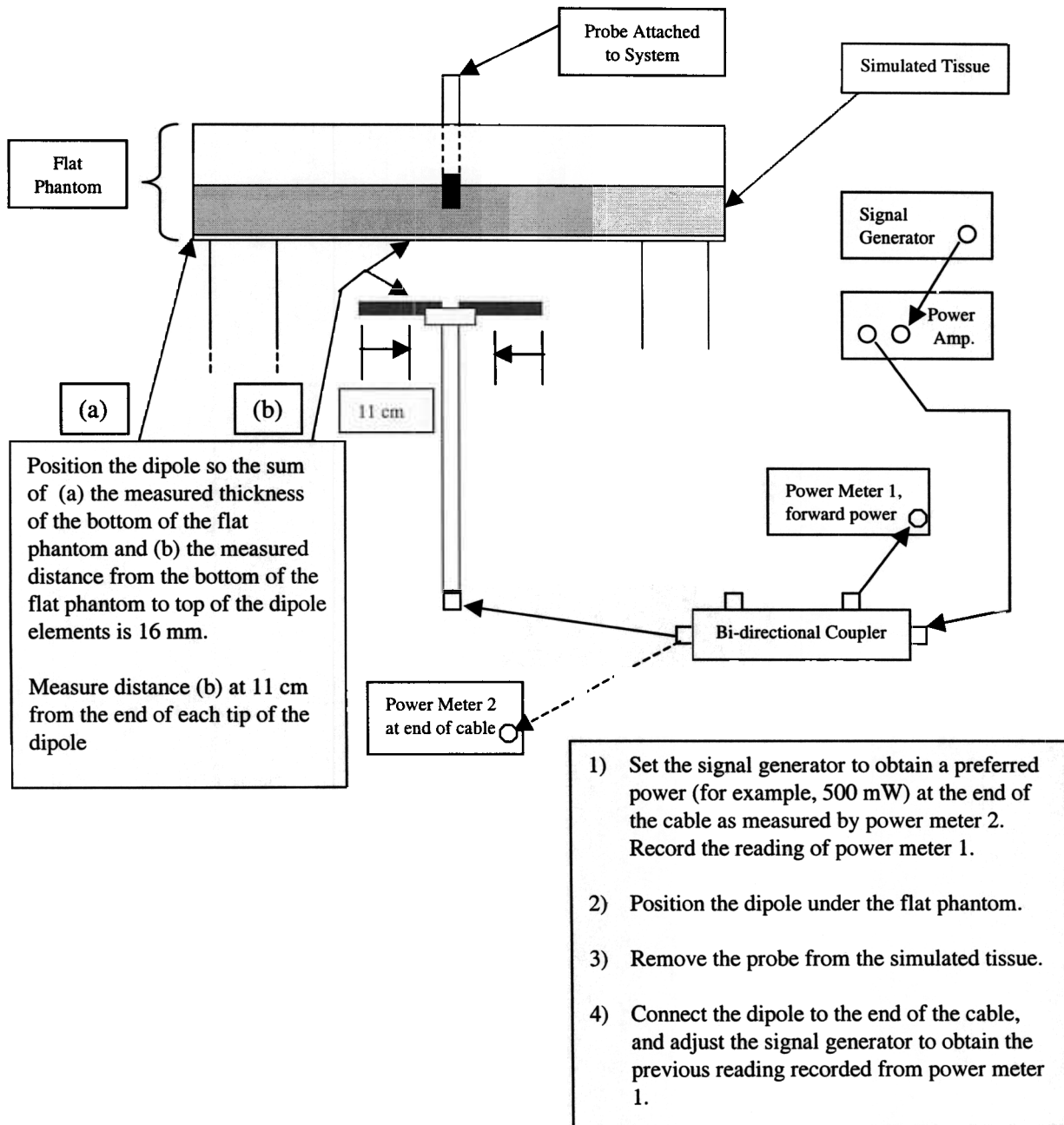
The target is normalized to 1 watt based on a constant forward input power of 500 mW.

Peak SAR, at 1 watt, averaged over 1 cm³ (1 gram) of tissue:

4.3 mW/g

+/- 10%

Figure 1. Flat Phantom System Validation Setup





MOTOROLA

DIPOLE SAR VALIDATION CERTIFICATE

Frequency:

450

MHz

Dipole Serial Number:

450-001

Simulated Tissue:

body

Date of Validation:

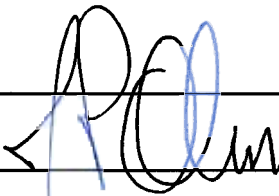
August 16, 2001

Validation Interval:

12 months

Motorola Florida Research Laboratory hereby certifies, that the System Validation was performed on the date indicated above. The System Validation was performed in accordance with specifications and procedures of Motorola Florida Research Laboratory.

Calibrated by:


J. Patrick Oliver

Approved by:



C. K. Chou

Purpose:

To provide a method to check the validity of the SAR measurement system prior to testing

Tissue Simulate:

Name:

Body 450

Targets for tissue characteristics:

Dielectric Constant:

56.7

+/- 5%

Conductivity:

0.94 S/m

+/- 5%

Measurement values:

Dielectric Constant:

57.4

Conductivity:

0.92

Validation setup:

Set up for the validation using constant forward power as shown in Figure 1. The total distance from the simulated tissue to the top of the dipole elements is 16 mm.

Use 1.0 for the density of the simulated tissue.

Target for SAR validation:

The target is specified in terms of peak SAR averaged over 1 cm³ (1 gram) of tissue.

The target is normalized to 1 watt based on a constant forward input power of 500 mW.

Peak SAR, at 1 watt, averaged over 1 cm³ (1 gram) of tissue:

4.4 mW/g

+/- 10%

Figure 1. Flat Phantom System Validation Setup

