

# **Appendix A**

## **SAR System Validation Data**

*of*

*Product Name*

**Notebook Personal Computer**

*Model*

**A790**

## 1 835 MHz System Validation Data

Report Date : 24-Oct-2006  
Measurement Date : 24-Oct-2006

### Product Data

Device Name : Dipole-835  
Serial No. : Validation  
Type : Dipole  
Model : Standard  
Frequency : 835.00 MHz  
Max. Transmit Pwr : 1 W  
Drift Time : 0 min(s)  
Length : 161 mm  
Width : 3.6 mm  
Depth : 89.8 mm  
Antenna Type : Internal  
Power Drift-Start : 10.371 W/kg  
Power Drift-Finish: 10.225 W/kg  
Power Drift (%) : -1.404

### Phantom Data

Name : APREL-Uni  
Type : Uni-Phantom  
Size (mm) : 280 x 280 x 200  
Location : Center

### Tissue Data

Type : HEAD  
Serial No. : 835HEAD  
Frequency : 835.00 MHz  
Last Calib. Date : 24-Oct-2006  
Temperature : 23.60 °C  
Ambient Temp. : 23.80 °C  
Humidity : 56.00 RH%  
Epsilon : 43.09 F/m  
Sigma : 0.92 S/m  
Density : 1000.00 kg/cu. m

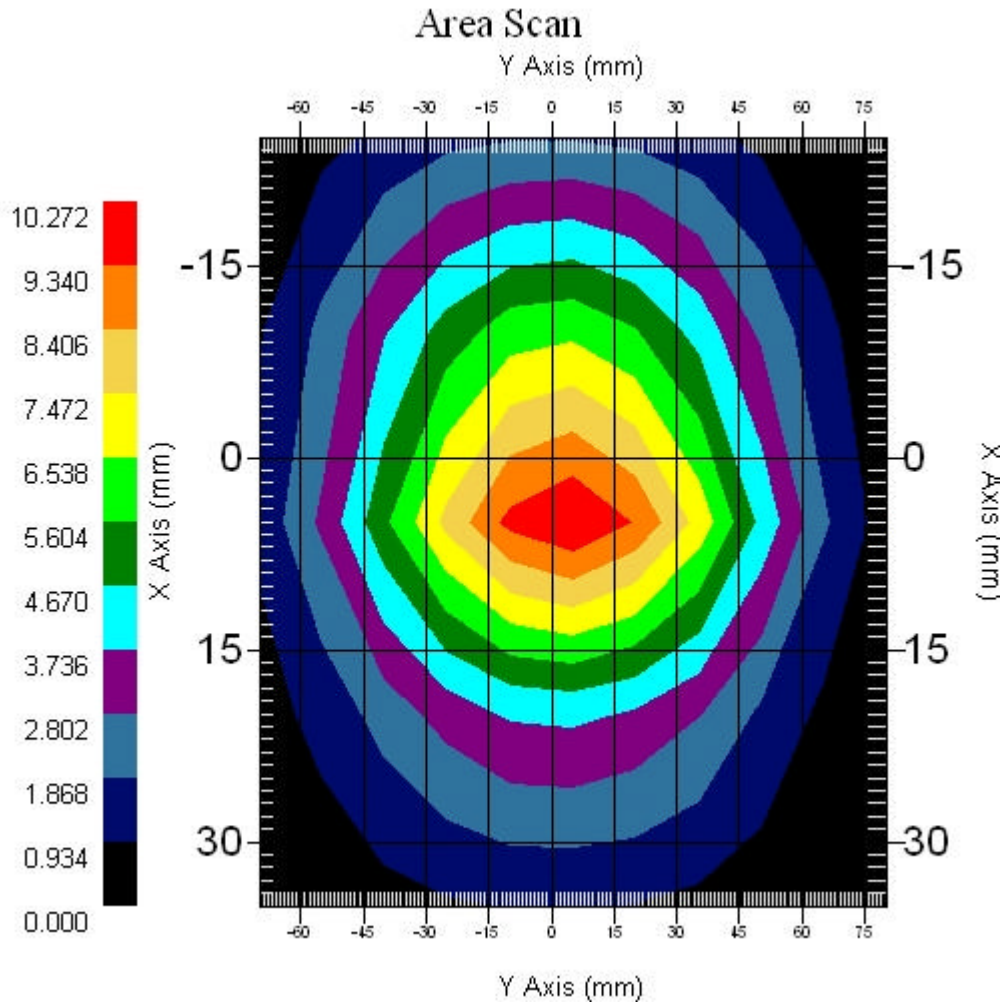
### Probe Data

Name : E-field Probe  
Model : ALS-E-020  
Type : E-Field Triangle  
Serial No. : 266  
Last Calib. Date : 22-Jun-2006  
Frequency : 835.00 MHz  
Duty Cycle Factor: 1  
Conversion Factor: 6.6  
Probe Sensitivity: 1.20 1.20 1.20  $\mu\text{V}/(\text{V}/\text{m})^2$   
Compression Point: 95.00 mV  
Offset : 1.56 mm

### Measurement Data

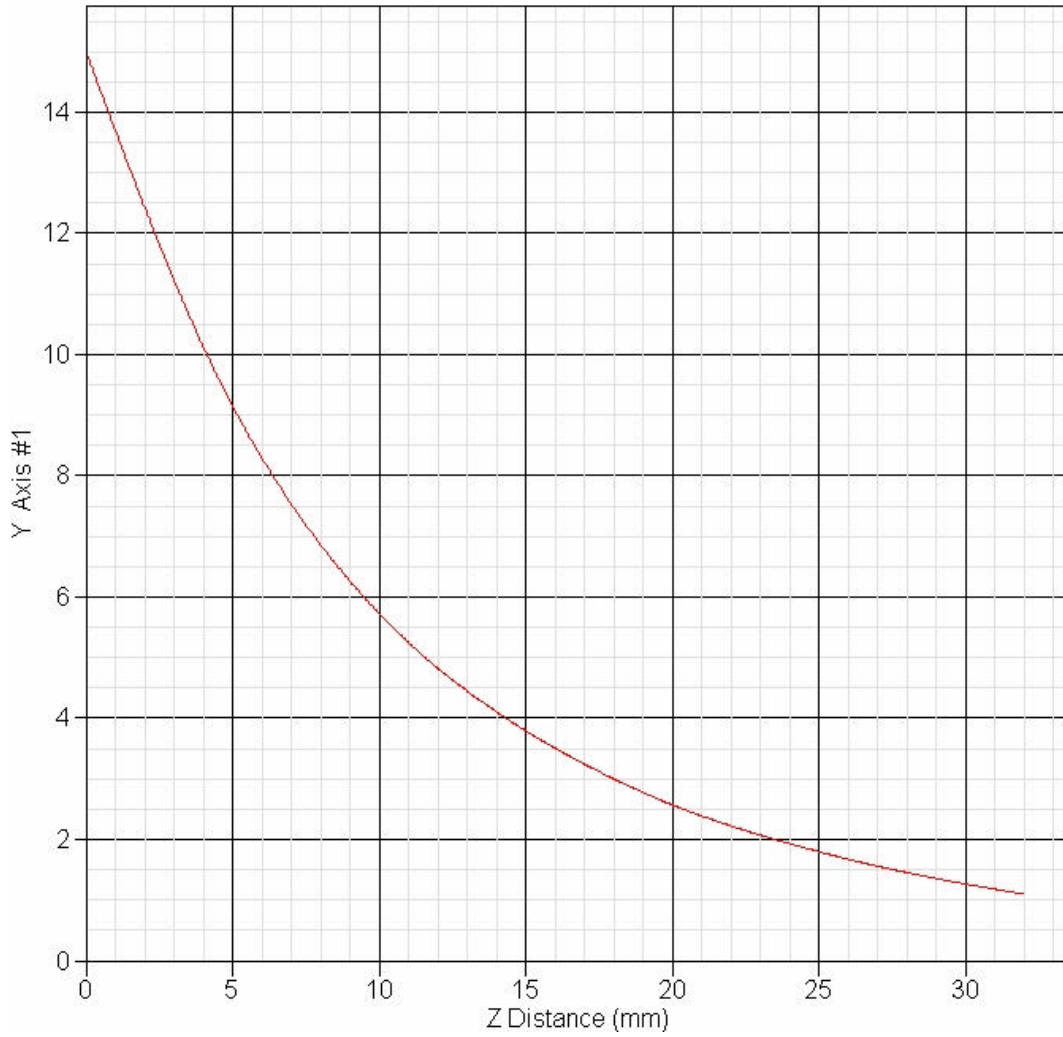
Crest Factor : 1  
Tissue Temp. : 23.60 °C  
Ambient Temp. : 23.80 °C  
Area Scan : 5x11x1 : Measurement x=15mm, y=15mm, z=4mm  
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Channel : Mid - 835MHz



1 gram SAR value : 9.387 W/kg  
10 gram SAR value : 5.701 W/kg  
Area Scan Peak SAR : 10.272 W/kg  
Zoom Scan Peak SAR : 15.013 W/kg

SAR-Z Axis  
at Hotspot x:5.30 y:2.80



## 2 1900 MHz System Validation Data

Report Date : 24-Oct-2006  
Measurement Date : 24-Oct-2006

### Product Data

Device Name : Dipole-1900  
Serial No. : Validation  
Type : Dipole  
Model : Standard  
Frequency : 1900.00 MHz  
Max. Transmit Pwr : 1 W  
Drift Time : 0 min(s)  
Length : 68 mm  
Width : 3.6 mm  
Depth : 39.5 mm  
Antenna Type : Internal  
Power Drift-Start : 45.471 W/kg  
Power Drift-Finish: 44.438 W/kg  
Power Drift (%) : -2.272

### Phantom Data

Name : APREL-Uni  
Type : Uni-Phantom  
Size (mm) : 280 x 280 x 200  
Location : Center

### Tissue Data

Type : HEAD  
Serial No. : 1900HEAD  
Frequency : 1900.00 MHz  
Last Calib. Date : 24-Oct-2006  
Temperature : 23.60 °C  
Ambient Temp. : 23.80 °C  
Humidity : 56.00 RH%  
Epsilon : 40.50 F/m  
Sigma : 1.41 S/m  
Density : 1000.00 kg/cu. m

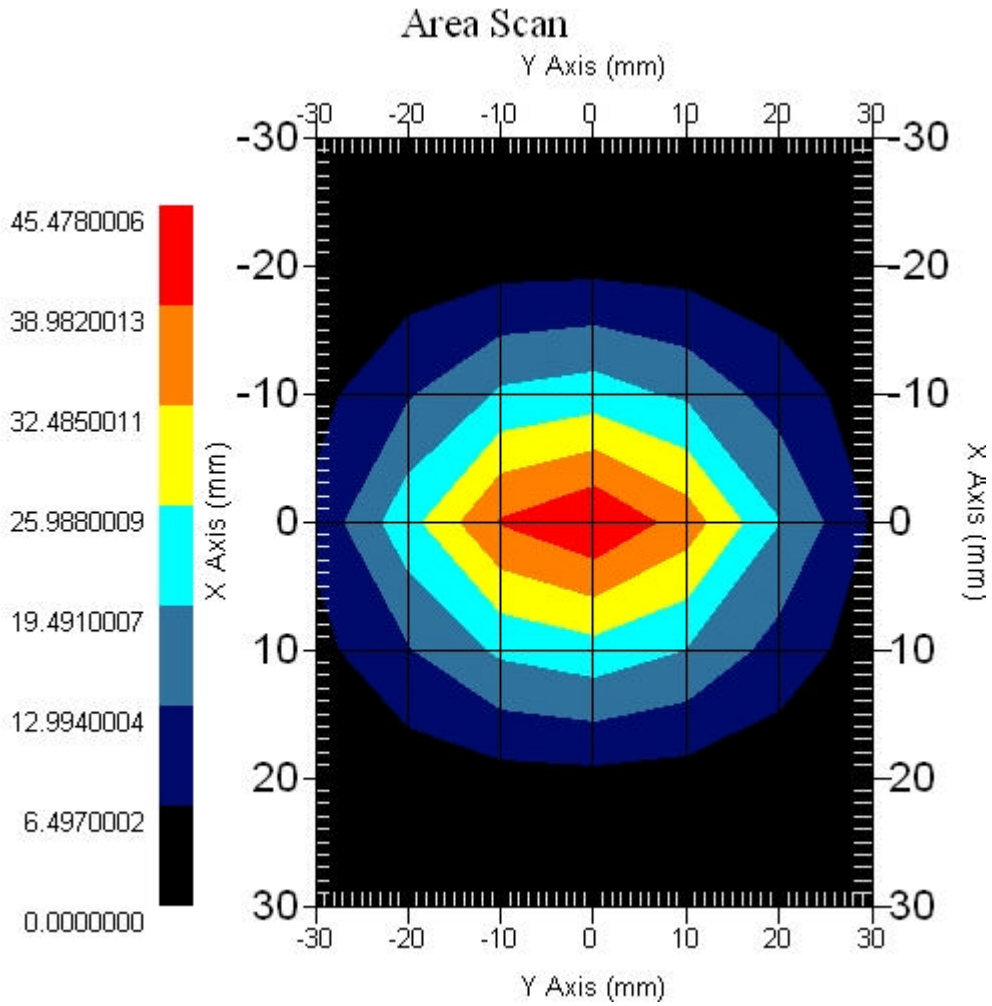
### Probe Data

Name : E-field Probe  
Model : ALS-E-020  
Type : E-Field Triangle  
Serial No. : 266  
Last Calib. Date : 22-Jun-2006  
Frequency : 1900.00 MHz  
Duty Cycle Factor: 1  
Conversion Factor: 5.22  
Probe Sensitivity: 1.20 1.20 1.20  $\mu\text{V}/(\text{V}/\text{m})^2$   
Compression Point: 95.00 mV  
Offset : 1.56 mm

### Measurement Data

Crest Factor : 1  
Tissue Temp. : 23.60 °C  
Ambient Temp. : 23.80 °C  
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm  
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Channel : Mid - 1900MHz



1 gram SAR value : 38.703 W/kg  
10 gram SAR value : 19.256 W/kg  
Area Scan Peak SAR : 45.478 W/kg  
Zoom Scan Peak SAR : 74.365 W/kg

SAR-Z Axis  
at Hotspot x:0.30 y:-2.20

