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## Exhibit 11: SAR Test Report of Portable Cellular Phone FCC ID: PXITR-G0702 model: T306

**Date of test:** October 14-17, 2002  
**Date of Report:** October 21, 2002

**Laboratory:** SAR Testing Laboratory  
 Sony Ericsson Mobile Communications, Inc.  
 7001 Development Drive, P.O. Box 13969,  
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**Tested by:** William Stewart  
 Development Engineer, Antenna Development Group  
 Dulce Altabella  
 Staff Engineer, Antenna Development Group

**Test Responsible:** Dulce Altabella  
 Staff Engineer, Antenna Development Group

**Accreditation:** This laboratory is accredited to ISO/IEC 17025-1999 to perform the following electromagnetic exposure tests:



Specific Absorption Rate (SAR)  
 Dielectric parameters  
 RF power measurement

On the following types of products:  
 Wireless communications devices.  
 A2LA certificate #1650-01

**Statement of Compliance:** Sony Ericsson Mobile Communications, Inc declares under its sole responsibility that portable cellular telephone FCC ID PXITR-G0702 model T306 to which this declaration relates, is in conformity with the appropriate General Population/Uncontrolled RF exposure standards, recommendations and guidelines (FCC 47 CFR §2.1093). It also declares that the product was tested in accordance with the appropriate measurement standards, guidelines and recommended practices. Any deviations from these standards, guidelines and recommended practices are noted below:

(none)

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This test report shall not be reproduced except in full, without written approval of the laboratory.

The results and statements contained herein relate only to the items tested. The names of individuals involved may be mentioned only in connection with the statements or results from this report.

Sony Ericsson Mobile Communications encourages all feedback, both positive and negative, on this test report.



|                                                                             |               |                             |                                                           |
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## 1. Introduction



|                                                                             |               |                             |                                                        |
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The Sony Ericsson SAR Laboratory has performed measurements of the maximum potential exposure to the user of portable cellular phone FCC ID PXITR-G0702 model T306. The Specific Absorption Rate (SAR) of this product was measured. The applicable RF safety guidelines and the SAR measurement specifications used for the test are described in [1,2,4].

## 2. Description of the Device Under Test

### 2.1 Antenna description

|                      |                                     |         |
|----------------------|-------------------------------------|---------|
| <b>Type</b>          | Internal antenna                    |         |
| <b>Location</b>      | Inside the back cover, near the top |         |
| <b>Dimensions</b>    | Width                               | 30.5 mm |
|                      | Length                              | 17.0 mm |
| <b>Configuration</b> | Patch antenna                       |         |

### 2.2 Device description

|                                                      |                                   |               |
|------------------------------------------------------|-----------------------------------|---------------|
| <b>FCC ID Number / Device Model</b>                  | PXITR-G0702 / T306                |               |
| <b>Serial number</b>                                 | A6101TS3YX and A6101TS49L         |               |
| <b>Mode(s) of Operation</b>                          | GSM 800                           | GSM 1900      |
| <b>Modulation Mode(s)</b>                            | TDMA                              | TDMA          |
| <b>Target Value for Maximum Output Power Setting</b> | 29 dBm                            | 30 dBm        |
| <b>Factory Tolerance Window in Power Setting</b>     | -2.0/+1.0 dB                      | ± 1.0 dB      |
| <b>Duty Cycle</b>                                    | 1/8                               | 1/8           |
| <b>Transmitting Frequency Rang(s)</b>                | 824-849 MHz                       | 1850-1910 MHz |
| <b>Production Unit or Identical Prototype</b>        | Identical Prototype               |               |
| <b>Device Category</b>                               | Portable                          |               |
| <b>RF Exposure Limits</b>                            | General Population / Uncontrolled |               |

## 3. Test Equipment Used

### 3.1 Dosimetric System

The Sony Ericsson SAR Laboratory utilizes a Dosimetric Assessment System (Dasy3™ v3.1d) manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The overall RSS uncertainty of the measurement system is ±10.59% (K=1) with an expanded uncertainty of ±21.17% (K=2). The measurement uncertainty budget is given in Appendix 5. The list of calibrated equipment used for the measurements is shown in the following table.



|                                                                             |               |                                                             |
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| Description                     | Serial Number | Cal Due Date |
|---------------------------------|---------------|--------------|
| DASY3 DAE V1                    | 416           | 05-Dec-2002  |
| DASY3 DAE V1                    | 432           | 14-Jun-2003  |
| E-Field Probe ETDV6             | 1539          | 26-Jul-2003  |
| E-Field Probe ETDV6             | 1587          | 20-Jun-2003  |
| Dipole Validation Kit, DV835V2  | 428           | 06-Mar-2003  |
| S.A.M. Phantom used for 835MHz  | 1030/1020     |              |
| Dipole Validation Kit, DV1900V2 | 537           | 06-Mar-2003  |
| S.A.M. Phantom used for 1900MHz | 1031/1023     |              |

### 3.2 Additional Equipment

| Description                   | Serial Number | Cal Due Date |
|-------------------------------|---------------|--------------|
| Signal Generator HP8648C      | 3537A01598    | 09-Sep-2003  |
| Power Meter 437B              | 3125U113481   | 21-May-2003  |
| Power Meter 437B              | 3110A05257    | 21-May-2003  |
| Power Sensor - 8482H          | MY41090240    | 08-May-2003  |
| Power Sensor - 8482H          | MY41090241    | 08-May-2003  |
| Network Analyzer HP8752C      | 3410A3105     | 23-Aug-2003  |
| Dielectric Probe Kit HP85070B | US33020390    | 02-May-2003  |
| Digital Thermometer 61220-601 | 350078        | 25-Sep-2003  |
| Digital Thermometer 61220-601 | 21117674      | 02-Nov-2002  |
| Thermometer Probe 61220-604   | 99172351      | 25-Sep-2003  |
| Thermometer Probe 61220-604   | 21117824      | 02-Nov-2002  |
| Anritsu MT8801B               | MB12477       | 01-Apr-2003  |
| Power Amplifier 5S1G4         | 19290         | 02-Sep-2003  |

## 4. Electrical parameters of the tissue simulating liquid

Prior to conducting SAR measurements, the relative permittivity,  $\epsilon_r$ , and the conductivity,  $\sigma$ , of the tissue simulating liquids were measured with the dielectric probe kit. These values, along with the temperature of the simulated tissue are shown in the table below. A mass density of  $\rho=1\text{g/cm}^3$  was entered into the system in all the cases. It can be seen that the measured parameters are within tolerance of the recommended limits [1,2]. During the tests, the ambient temperature of the laboratory was in the range 22.1-23.1°C, the relative humidity was 38.8- 46.6%, and the liquid depth above the ear reference points was more than 150 mm for all the cases. It is seen that the measured parameters are satisfactory for compliance testing.



|                                                                             |               |                             |                                                        |
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| f<br>(MHz) | Tissue type | Limits / Measured   | Dielectric Parameters |         |                            |
|------------|-------------|---------------------|-----------------------|---------|----------------------------|
|            |             |                     | $\epsilon_r$          | s (S/m) | Simulated Tissue Temp (°C) |
| 835        | Head        | Measured, 14-Oct-02 | 42.18                 | 0.89    | 21.9                       |
|            |             | Measured, 15-Oct-02 | 42.11                 | 0.89    | 21.7                       |
|            |             | Measured, 16-Oct-02 | 42.85                 | 0.89    | 22.6                       |
|            |             | Recommended Limits  | 41.50                 | 0.90    | 20-25                      |
|            | Body        | Measured, 15-Oct-02 | 55.88                 | 0.98    | 22.0                       |
|            |             | Measured, 17-Oct-02 | 55.53                 | 0.98    | 22.1                       |
|            |             | Recommended Limits  | 55.20                 | 0.97    | 20-25                      |
| 1900       | Head        | Measured, 14-Oct-02 | 40.00                 | 1.46    | 21.7                       |
|            |             | Measured, 16 Oct-02 | 39.81                 | 1.46    | 22.6                       |
|            |             | Recommended Limits  | 40.00                 | 1.40    | 20-25                      |
|            | Body        | Measured, 15-Oct-02 | 52.59                 | 1.55    | 21.8                       |
|            |             | Measured, 17-Oct-02 | 52.61                 | 1.55    | 22.5                       |
|            |             | Recommended Limits  | 53.30                 | 1.52    | 20-25                      |

The list of ingredients and the percent composition used for the simulated tissue are indicated in the table below.

| Ingredient | 800MHz<br>Head | 800MHz<br>Body | 1900MHz<br>Head | 1900MHz<br>Body |
|------------|----------------|----------------|-----------------|-----------------|
|            |                |                |                 |                 |
| Sugar      | 57.99%         | 56.00%         | --              | --              |
| DGBE       | --             | --             | 44.92%          | 30.82%          |
| Water      | 39.72%         | 41.76%         | 54.90%          | 68.89%          |
| Salt       | 1.18%          | 0.76%          | 0.18%           | 0.29%           |
| HEC        | 0.92%          | 1.21%          | --              | --              |
| Bact.      | 0.19%          | 0.27%          | --              | --              |

## 5. System Accuracy Verification

A system accuracy verification of the DASY3 was performed using the measurement equipment listed in Section 3.1. The daily system accuracy verification occurs within the flat section of the SAM phantom.

A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values [1,2,3]. These tests were done at 835 MHz and/or 1900MHz. These frequencies are within 100MHz of the mid-band frequency of the test device, according to [1,2]. The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed in the table below (SAR values are normalized to 1W forward power delivered to the dipole). During the tests, the ambient temperature of the laboratory was in the range 21.6-22.3 °C, the relative humidity was in the range 38.7 - 41.8%, and the liquid depth above the ear reference points was above 150 mm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values. The SAR distributions are shown in Appendix 1. Z-Axis scans showing the SAR penetration are also included in Appendix 1.

Daily, prior to conducting tests, measurements were made with the RF sources powered off to determine the system



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noise level. The highest system noise was 0.0022 W/kg, which is below the recommended limit in [1].

| f<br>(MHz) | Tissue<br>Type | Description                   | SAR (W/kg), 1g / 10g | Dielectric<br>Parameters |           | Tissue<br>Temp (°C) |
|------------|----------------|-------------------------------|----------------------|--------------------------|-----------|---------------------|
|            |                |                               |                      | $\epsilon_r$             | $s$ (S/m) |                     |
| 835        | Head           | <b>Measured</b> , 14-Oct-2002 | 9.39 / 6.10          | 42.18                    | 0.89      | 21.8                |
|            |                | <b>Measured</b> , 15-Oct-2002 | 9.59 / 6.24          | 42.11                    | 0.89      | 21.9                |
|            |                | <b>Measured</b> , 16-Oct-2002 | 9.64 / 6.28          | 42.85                    | 0.89      | 22.6                |
|            |                | <b>Recommended Limits</b>     | 9.5 / 6.2            | 41.50                    | 0.90      | 20-25               |
|            | Body           | <b>Measured</b> , 15-Oct-2002 | 10.07 / 6.61         | 55.88                    | 0.98      | 21.5                |
|            |                | <b>Measured</b> , 17-Oct-2002 | 9.99 / 6.54          | 55.53                    | 0.98      | 21.9                |
|            |                | <b>Recommended Limits</b>     | 9.90 / 6.46          | 55.20                    | 0.97      | 20-25               |
| 1900       | Head           | <b>Measured</b> , 14-Oct-2002 | 42.16 / 21.98        | 40.00                    | 1.46      | 21.5                |
|            |                | <b>Measured</b> , 16-Oct-2002 | 42.28 / 22.10        | 39.81                    | 1.46      | 22.3                |
|            |                | <b>Recommended Limits</b>     | 39.7 / 20.5          | 40.00                    | 1.40      | 20-25               |
|            | Body           | <b>Measured</b> , 15-Oct-2002 | 42.59 / 22.55        | 52.59                    | 1.55      | 21.5                |
|            |                | <b>Measured</b> , 17-Oct-2002 | 43.10 / 22.86        | 52.61                    | 1.55      | 22.5                |
|            |                | <b>Recommended Limits</b>     | 40.50 / 20.89        | 53.30                    | 1.52      | 20-25               |

## 6. Test Results

The test sample was operated in a test mode that allows control of the transmitter without the need to place actual phone calls. For the purposes of this test the unit is commanded to test mode and set to the proper channel, transmitter power level and transmit mode of operation. The phone was tested in the configurations stipulated in [1,2]. The phone was positioned into these configurations using the positioner supplied with the DASY 3.1d SAR measurement system.

The Cellular Phone FCC ID PXITR-G0702 model T306 has the following battery options:

Model #1 - DPY901365 700mAh Battery

This battery was used for SAR testing. The phone was placed in the SAR measurement system with a fully charged battery.

### 6.1 Head Adjacent Test Results

The SAR results shown in tables 1 through 4 are maximum SAR values averaged over 1 gram and 10 grams of phantom tissue. Also shown are the measured conducted output powers, the temperature of the test facility during the test, the temperature of the simulated tissue, the measured drift, and the extrapolated SAR.

The extrapolated SAR corresponds to the measured SAR scaled to the maximum conducted output power.

The humidity and ambient temperature of the test facility were in the ranges 38.7-43.6 % and 21.6-22.3 °C, respectively. The SAR measurements were performed using the SAM phantoms listed in section 3.1.

The test conditions indicated as bold numbers in the following table are included in Appendix 2. All other test conditions measured lower SAR values than those included.



|                                                                             |               |                             |                                                        |
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| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Left Head (Cheek Position)   |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | 0.34 /<br>0.24               | 0.03       | 0.36 / 0.25                      | 22.1              | 21.0                  |
|          | 189 / 837             | 29.8                                         | 0.63 /<br>0.44               | -0.05      | 0.66 / 0.46                      | 22.1              | 20.7                  |
|          | 251 / 849             | 29.8                                         | <b>0.71 /<br/>0.50</b>       | -0.05      | <b>0.75 / 0.53</b>               | 22.0              | 20.7                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.25 /<br>0.15               | -0.19      | 0.26 / 0.16                      | 22.3              | 20.9                  |
|          | 660/1880              | 30.74                                        | 0.26 /<br>0.16               | -0.09      | 0.28 / 0.18                      | 22.0              | 20.8                  |
|          | 810/1910              | 30.75                                        | <b>0.28 /<br/>0.17</b>       | -0.14      | <b>0.29 / 0.18</b>               | 21.9              | 20.8                  |

**Table 1: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the left head in the Cheek Position.**

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Right head (Cheek Position)  |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | 0.36 / 0.25                  | -0.01      | 0.38 / 0.26                      | 22.2              | 21.6                  |
|          | 189 / 837             | 29.8                                         | 0.59 / 0.41                  | -0.14      | 0.62 / 0.43                      | 22.0              | 21.2                  |
|          | 251 / 849             | 29.8                                         | <b>0.68 / 0.48</b>           | 0.06       | <b>0.71 / 0.50</b>               | 21.6              | 21.1                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.28 / 0.17                  | -0.03      | 0.30 / 0.18                      | 22.2              | 21.4                  |
|          | 660/1880              | 30.74                                        | 0.31 / 0.19                  | -0.13      | 0.33 / 0.20                      | 22.0              | 21.3                  |
|          | 810/1910              | 30.75                                        | <b>0.32 / 0.19</b>           | 0.00       | <b>0.34 / 0.21</b>               | 22.2              | 21.1                  |

**Table 2: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the right head in the Cheek Position.**

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Left Head (15° Tilt Position) |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|-------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g  | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | 0.15 / 0.11                   | 0.12       | 0.16 / 0.12                      | 21.8              | 21.1                  |
|          | 189 / 837             | 29.8                                         | 0.28 / 0.20                   | -0.08      | 0.29 / 0.21                      | 22.1              | 20.7                  |
|          | 251 / 849             | 29.8                                         | <b>0.33 / 0.24</b>            | -0.05      | <b>0.35 / 0.25</b>               | 22.2              | 20.7                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.22 / 0.13                   | -0.09      | 0.24 / 0.14                      | 22.3              | 20.9                  |
|          | 660/1880              | 30.74                                        | 0.28 / 0.16                   | -0.14      | 0.30 / 0.17                      | 22.0              | 20.9                  |

<sup>1</sup> Output power was measured at Sony Ericsson by personnel outside the scope and control of the SAR testing laboratory.



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| Left Head (15° Tilt Position) |          |       |                    |       |                    |      |      |
|-------------------------------|----------|-------|--------------------|-------|--------------------|------|------|
|                               | 810/1910 | 30.75 | <b>0.30 / 0.17</b> | -0.19 | <b>0.32 / 0.17</b> | 22.1 | 20.8 |

**Table 3: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the left head in the 15° Tilt Position.**

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Right Head (15° Tilt Position) |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|--------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g   | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | 0.17 / 0.12                    | -0.10      | 0.18 / 0.13                      | 22.2              | 21.1                  |
|          | 189 / 837             | 29.8                                         | 0.27 / 0.19                    | -0.06      | 0.28 / 0.19                      | 21.9              | 21.0                  |
|          | 251 / 849             | 29.8                                         | <b>0.32 / 0.23</b>             | 0.13       | <b>0.34 / 0.24</b>               | 22.2              | 21.1                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.27 / 0.16                    | -0.00      | 0.29 / 0.17                      | 22.1              | 21.3                  |
|          | 660/1880              | 30.74                                        | 0.33 / 0.19                    | -0.12      | 0.35 / 0.20                      | 22.2              | 21.3                  |
|          | 810/1910              | 30.75                                        | <b>0.34 / 0.20</b>             | -0.07      | <b>0.37 / 0.21</b>               | 22.3              | 21.1                  |

**Table 4: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the right head in the 15° Tilt Position.**

## 6.2 Body-Worn Test Results

The SAR results shown in table 5-8 are the maximum SAR values averaged over 1gram and 10 grams of phantom tissue. Also shown are the measured conducted output powers, the temperature of the test facility during the test, the temperature of the simulated tissue after the test, the measured drift and the extrapolated SAR.

The extrapolated SAR corresponds to the measured SAR scaled to the maximum conducted output power.

The humidity and ambient temperature of the test facility were in the ranges 39.7-42.7% and 22.2-23°C, respectively.

A “flat” phantom was used for the body-worn tests. This “flat” phantom corresponds to the flat portion of the SAM phantom.

The tissue stimulant depth above the ear canal was verified to be above 150mm in all the measurements. The same device holder described in section 6 was used for positioning the phone. The cellular phone was tested with a headset connected to the device for all body-worn SAR measurements.

There are two Body-Worn Accessories available for this phone:

A Plastic case with Belt Clip: Model #ICT-14

A Leather case with Belt Clip: Model # ICE-25

A full data set output of two test conditions with the highest SAR values from the Dasy™ measurement system is included as appendix 3. The test conditions included are indicated as bold numbers in the following table. All other test conditions measured lower SAR values than those included.



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
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| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Body Worn<br>Carry Accessory: ICT-14 (Back of phone facing body) |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|------------------------------------------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g                                     | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | <b>0.27 / 0.19</b>                                               | -0.05      | <b>0.28 / 0.20</b>               | 23.4              | 21.3                  |
|          | 189 / 837             | 29.8                                         | 0.21 / 0.15                                                      | 0.00       | 0.22 / 0.16                      | 22.5              | 21.3                  |
|          | 251 / 849             | 29.8                                         | 0.15 / 0.11                                                      | -0.05      | 0.16 / 0.12                      | 22.9              | 21.2                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.29 / 0.18                                                      | -0.11      | 0.31 / 0.19                      | 22.1              | 20.9                  |
|          | 660/1880              | 30.74                                        | 0.31 / 0.19                                                      | -0.13      | 0.32 / 0.20                      | 22.1              | 21.0                  |
|          | 810/1910              | 30.75                                        | <b>0.37 / 0.23</b>                                               | -0.08      | <b>0.39 / 0.24</b>               | 22.1              | 20.7                  |

**Table 5: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the body with carry accessory ICE-14. Back of the phone facing the flat phantom.**

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Body Worn<br>Carry Accessory: ICT-14 (Font of phone facing body) |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|------------------------------------------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g                                     | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | 0.11 / 0.08                                                      | -0.09      | 0.12 / 0.08                      | 23.2              | 21.2                  |
|          | 189 / 837             | 29.8                                         | 0.17 / 0.12                                                      | -0.15      | 0.17 / 0.12                      | 22.9              | 21.2                  |
|          | 251 / 849             | 29.8                                         | 0.10 / 0.07                                                      | -0.12      | 0.10 / 0.72                      | 23.1              | 21.1                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.06 / 0.04                                                      | -0.13      | 0.06 / 0.04                      | 22.8              | 20.7                  |
|          | 660/1880              | 30.74                                        | 0.06 / 0.04                                                      | -0.15      | 0.07 / 0.04                      | 23.2              | 20.7                  |
|          | 810/1910              | 30.75                                        | 0.08 / 0.05                                                      | -0.12      | 0.08 / 0.05                      | 23.0              | 20.7                  |

**Table 6: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the body with carry accessory ICE-14. Front of the phone facing the flat phantom.**

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Body Worn<br>Carry Accessory: ICE-25 (Back of phone facing body) |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|------------------------------------------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g                                     | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | <b>0.30 / 0.22</b>                                               | 0.03       | <b>0.32 / 0.23</b>               | 23.7              | 21.4                  |
|          | 189 / 837             | 29.8                                         | 0.23 / 0.16                                                      | -0.01      | 0.24 / 0.16                      | 23.8              | 21.4                  |
|          | 251 / 849             | 29.8                                         | 0.17 / 0.12                                                      | 0.06       | 0.18 / 0.12                      | 24.0              | 21.5                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.45 / 0.27                                                      | -0.13      | 0.48 / 0.28                      | 22.2              | 21.9                  |
|          | 660/1880              | 30.74                                        | <b>0.58 / 0.35</b>                                               | -0.12      | <b>0.61 / 0.37</b>               | 23.1              | 21.7                  |
|          | 810/1910              | 30.75                                        | 0.41 / 0.24                                                      | -0.16      | 0.43 / 0.25                      | 22.6              | 21.6                  |



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

**Table 7: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the body with carry accessory ICE-25. Back of the phone facing the flat phantom.**

| f (MHz)  | Channel/<br>frequency | Conducted Output<br>Power (dBm) <sup>1</sup> | Body Worn<br>Carry Accessory: ICE-25 (Front of phone facing body) |            |                                  |                   |                       |
|----------|-----------------------|----------------------------------------------|-------------------------------------------------------------------|------------|----------------------------------|-------------------|-----------------------|
|          |                       |                                              | Measured<br>(W/kg)<br>1g/10g                                      | Drift (dB) | Extrapolated<br>(W/kg)<br>1g/10g | Amb. Temp<br>(°C) | Simulate<br>Temp (°C) |
| 800 GSM  | 128 / 824             | 29.7                                         | 0.30 / 0.19                                                       | -0.05      | 0.32 / 0.20                      | 23.6              | 21.4                  |
|          | 189 / 837             | 29.8                                         | 0.23 / 0.14                                                       | 0.00       | 0.24 / 0.15                      | 23.8              | 21.5                  |
|          | 251 / 849             | 29.8                                         | 0.13 / 0.08                                                       | 0.02       | 0.14 / 0.08                      | 24.2              | 21.6                  |
| 1900 GSM | 512 / 1850            | 30.87                                        | 0.09 / 0.06                                                       | -0.14      | 0.10 / 0.07                      | 22.5              | 21.5                  |
|          | 660/1880              | 30.74                                        | 0.12 / 0.07                                                       | -0.08      | 0.12 / 0.08                      | 22.7              | 21.5                  |
|          | 810/1910              | 30.75                                        | 0.11 / 0.07                                                       | -0.01      | 0.12 / 0.07                      | 22.8              | 21.4                  |

**Table 8: SAR measurement results for the portable cellular telephone FCC ID PXITR-G0702 model T306 at maximum output power. Measured against the body with carry accessory ICE-25. Front of the phone facing the flat phantom.**

## References

- [1] FCC, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions," Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97-01).
- [2] IEEE, "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques," Std 1528-200X, Draft 6.5 – August 20, 2001.
- [3] D. Altabella, "SAR Measurement Specification of Wireless Handsets," Sony Ericsson internal document EUS/CV/R-01:1061/REP, February 2002.
- [4] CENELEC, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz – 3 GHz)," European Standard EN 50361, July 2001.



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|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
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## Appendix 1

### SAR distribution comparison for the system accuracy verification



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## Dipole 835 MHz

SAM 1030 (R); Flat

Probe: ET3DV6 - SN1539; ConvF(6.10,6.10,6.10); Crest factor: 1.0; Head 835 MHz:  $\sigma = 0.89 \text{ mho/m}$ ,  $\epsilon_r = 42.2$ ,  $\rho = 1.00 \text{ g/cm}^3$   
 Cubes (2): Peak:  $1.44 \text{ mW/g} \pm 0.01 \text{ dB}$ , SAR (1g):  $0.946 \text{ mW/g} \pm 0.02 \text{ dB}$ , SAR (10g):  $0.615 \text{ mW/g} \pm 0.03 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 12.5 (11.9, 13.3) [mm]

Powerdrift: 0.07 dB

Pin: before 100.0mW after 100.8mW

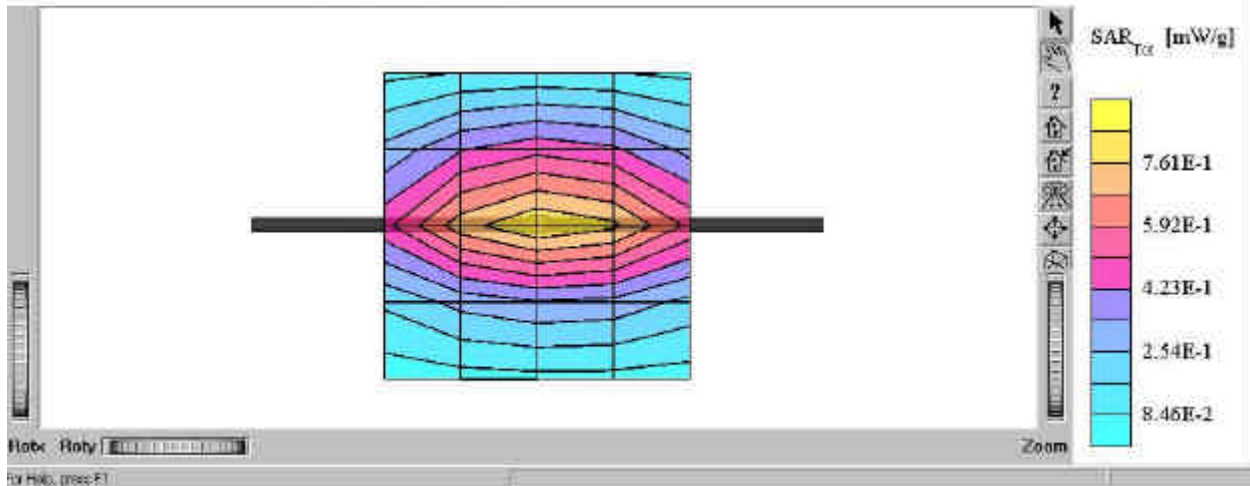
3.4mm surface detect/teflon caps on dipole.

Humidity:44.0

Ambient Temp:22.5

Simulant Temp:21.8

File name: Validation\_835HEAD\_428\_1030\_14Oct02\_T01, Date: 10/14/02



**835 MHz SAR distribution of validation dipole antenna from system performance check on October 14, 2002. Using head tissue.**



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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## Dipole 835 MHz

SAM 1030 (R); Flat

Probe: ET3DV6 - SN1539; ConvF(6.10,6.10,6.10); Crest factor: 1.0; Head 835 MHz:  $\sigma = 0.89 \text{ mho/m}$ ,  $\epsilon_r = 42.1$ ,  $\rho = 1.00 \text{ g/cm}^3$ Cubes (2): Peak:  $1.45 \text{ mW/g} \pm 0.07 \text{ dB}$ , SAR (1g):  $0.957 \text{ mW/g} \pm 0.08 \text{ dB}$ , SAR (10g):  $0.623 \text{ mW/g} \pm 0.08 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 12.6 (11.9, 13.5) [mm]

Powerdrift: 0.02 dB

Pin: before 100.0mW after 99.8mW

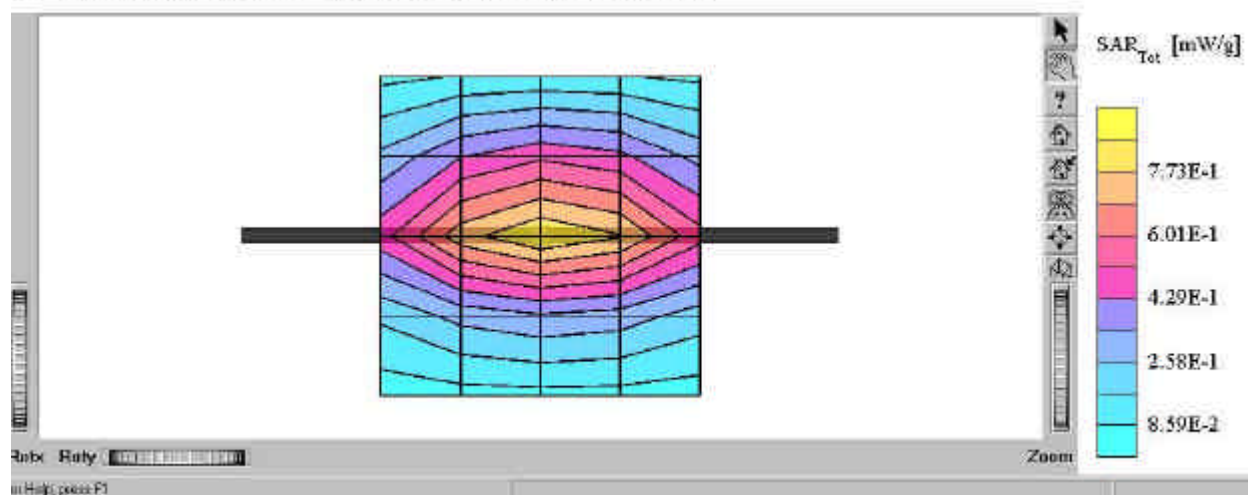
3.4mm surface detect/teflon caps on dipole

Humidity: 38.7

Ambient Temp: 22.1

Simulant Temp: 21.9

File name: Validation\_835HEAD\_428\_1030\_15Oct02\_T01, Date: 10/15/02



**835 MHz SAR distribution of validation dipole antenna from system performance check on October 15, 2002. Using head tissue.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

### Dipole 835 MHz

SAM 1030 (R); Flat

Probe: ET3DV6 · SNI539; ConvF(6.10,6.10,6.10); Crest factor: 1.0; Head 835 MHz:  $\sigma = 0.89 \text{ mho/m}$ ,  $\epsilon_r = 42.9$ ,  $\rho = 1.00 \text{ g/cm}^3$   
 Cubes (2): Peak:  $1.46 \text{ mW/g} \pm 0.10 \text{ dB}$ , SAR (1g):  $0.964 \text{ mW/g} \pm 0.10 \text{ dB}$ , SAR (10g):  $0.628 \text{ mW/g} \pm 0.10 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 12.6 (12.0, 13.5) [mm]

Powerdrift: -0.00 dB

Pin: before 100.0mW after 100.0mW

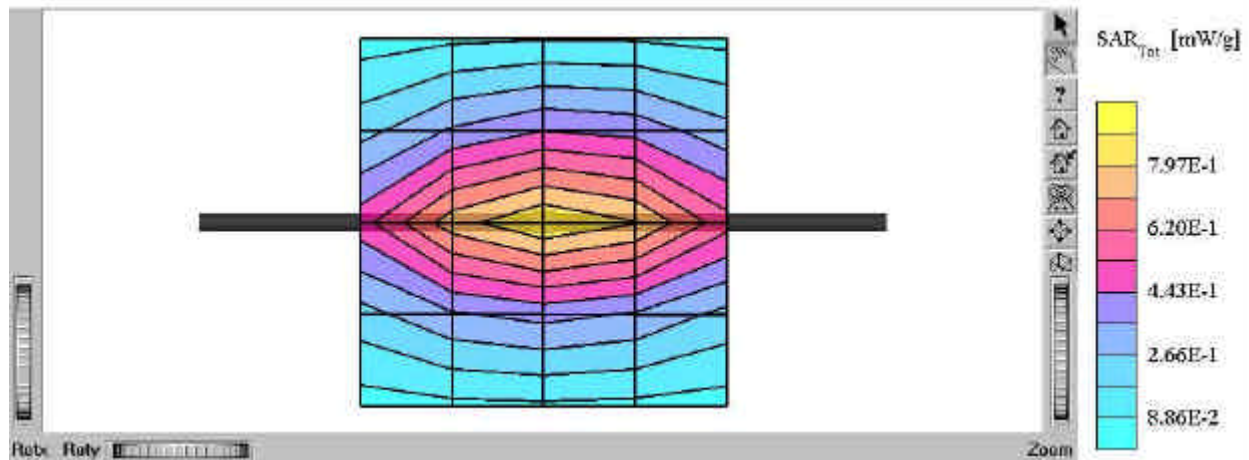
3.4mm surface detect/lesion caps on dipole

Humidity: 45.2

Ambient Temp: 22.7

Simulant Temp: 22.6

File name: Validation\_835HEAD\_428\_1030\_16Oct02\_T01, Date: 10/16/02



**835 MHz SAR distribution of validation dipole antenna from system performance check on October 16, 2002. Using head tissue.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## Dipole 1900 MHz

SAM 1031(R); Flat

Probe: ET3DV6 · SN1587; ConvF(5.20,5.20,5.20); Crest factor: 1.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$   
 Cubes (2): Peak:  $7.59 \text{ mW/g} \pm 0.06 \text{ dB}$ , SAR (1g):  $4.22 \text{ mW/g} \pm 0.06 \text{ dB}$ , SAR (10g):  $2.20 \text{ mW/g} \pm 0.06 \text{ dB}$ . (Worst-case extrapolation)

Penetration depth: 8.3 (8.1, 8.6) [mm]

Powerdrift: 0.02 dB

Pin: before 100.0 mW after 100.1mW

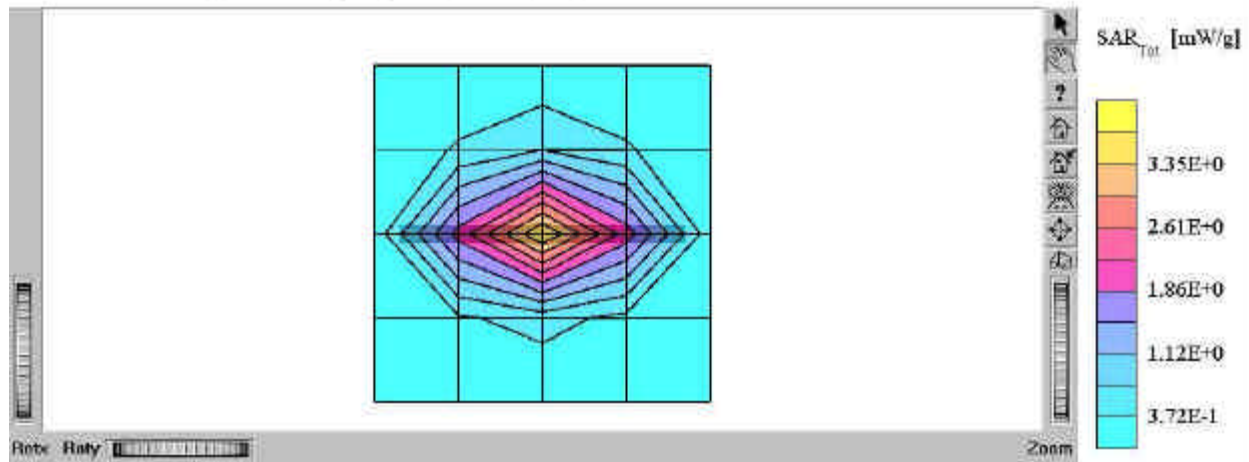
3.4mm surface detect/teflon caps on dipole

Humidity:44.0

Ambient Temp:22.2

Simulant Temp:21.5

File name: Validation\_1900HEAD\_537\_1031\_14Oct02\_T01, Date: 10/14/02



**1900 MHz SAR distribution of validation dipole antenna from system performance check on October 14, 2002. Using head tissue.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

### Dipole 1900 MHz

SAM 1031(R) Phantom; Flat Section; Position: (90°, 90°); Frequency: 1900 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20, 5.20, 5.20); Crest factor: 1.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 39.8$ ,  $\rho = 1.00 \text{ g/cm}^3$

Cubes (2): SAR (1g):  $4.19 \text{ mW/g} \pm 0.06 \text{ dB}$ , SAR (10g):  $2.19 \text{ mW/g} \pm 0.05 \text{ dB}$ , (Worst-case extrapolation)

Coarse:  $D_x = 20.0$ ,  $D_y = 20.0$ ,  $D_z = 10.0$

Powerdrift: -0.02 dB

Pin: before 100.0mW after 99.1mW

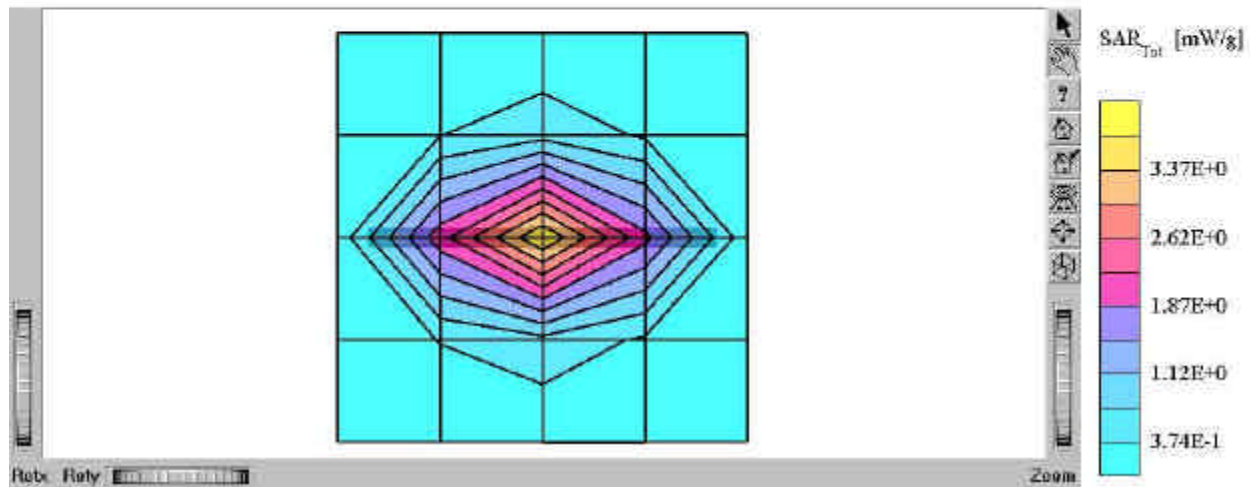
3.4mm surface detect/teflon caps on dipole

Humidity: 44.0

Ambient Temp: 22.7

Simulant Temp: 22.3

File name: Validation\_1900HEAD\_537\_1031\_16Oct02\_T01, Date: 10/16/02



1900 MHz SAR distribution of validation dipole antenna from system performance check on October 16, 2002. Using head tissue.



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## Dipole 835 MHz

SAM 1020(L); Flat

Probe: ET3DV6 - SN1587; ConvF(6.50,6.50,6.50); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.98 \text{ mho/m}$ ,  $\epsilon_r = 55.9$ ,  $\rho = 1.00 \text{ g/cm}^3$ Cubes (2): Peak:  $1.49 \text{ mW/g} \pm 0.05 \text{ dB}$ , SAR (1g):  $0.997 \text{ mW/g} \pm 0.06 \text{ dB}$ , SAR (10g):  $0.654 \text{ mW/g} \pm 0.06 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 13.2 (12.6, 14.1) [mm]

Powerdrift: -0.03 dB

Pin: before 100.0 mW after 99.0mW

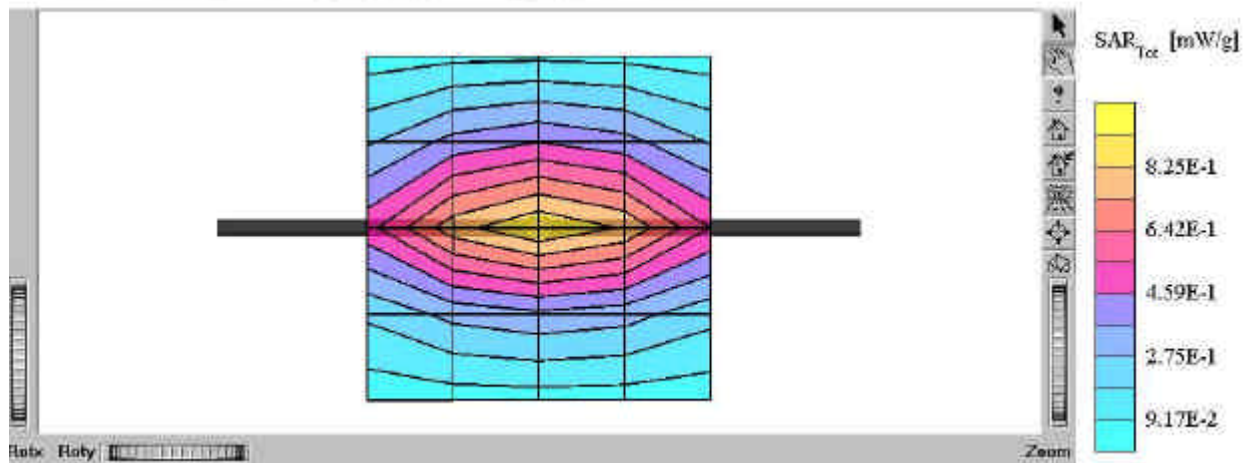
3.4mm surface detect/teflon caps on dipole

Humidity: 42.7

Ambient Temp: 22.2

Simulant Temp: 21.5

File name: Validation\_835BODY\_428\_1020\_15Oct02\_T01, Date: 10/15/02



835 MHz SAR distribution of validation dipole antenna from system performance check on October 15, 2002. Using muscle tissue.



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

### Dipole 835 MHz

SAM 1020(L), Flat

Probe: ET3DV6 - SN1587; ConvF(6.50,6.50,6.50); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.98 \text{ mho/m}$ ,  $\epsilon_r = 55.5$ ,  $\rho = 1.00 \text{ g/cm}^3$   
Cubes (2): Peak:  $1.49 \text{ mW/g} \pm 0.05 \text{ dB}$ , SAR (1g):  $0.997 \text{ mW/g} \pm 0.05 \text{ dB}$ , SAR (10g):  $0.653 \text{ mW/g} \pm 0.05 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 13.2 (12.5, 14.1) [mm]

Powerdrift: -0.01 dB

Pin: before 100.0mW after 99.8mW

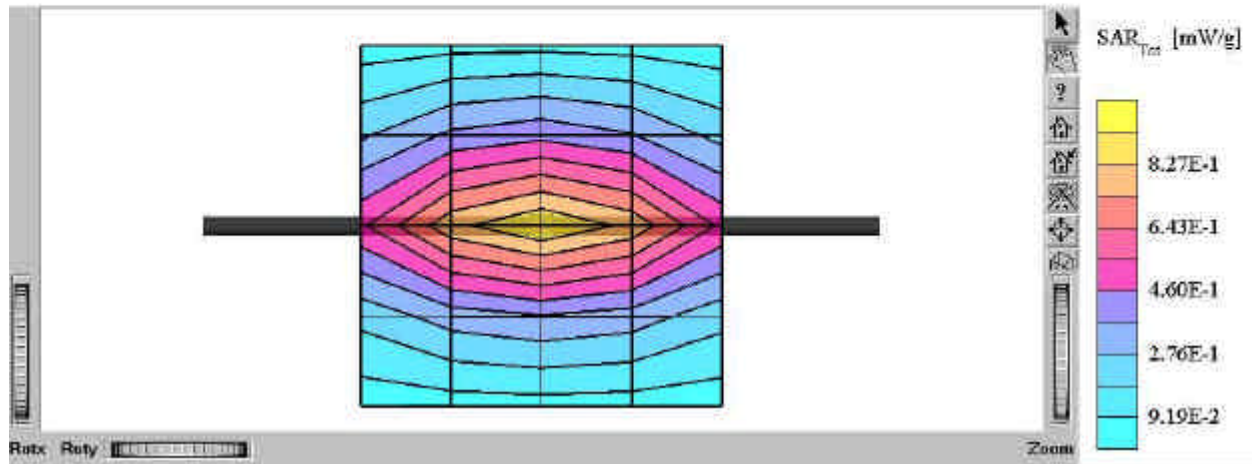
3.4mm surface detect/teflon caps on dipole

Humidity: 39.5

Ambient Temp: 22.9

Simulant Temp: 21.9

File name: Validation\_835BODY\_428\_1020\_17Oct02\_T01, Date: 10/17/02



**835 MHz SAR distribution of validation dipole antenna from system performance check on October 17, 2002. Using muscle tissue.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

### Dipole 1900 MHz

SAM 1023 (L); Flat

Probe: ET3DV6 • SN1539; ConvF(4.50,4.50,4.50); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.55 \text{ mho/m}$ ,  $\epsilon_r = 52.6$ ,  $\rho = 1.00 \text{ g/cm}^3$   
 Cubes (2): Peak:  $7.48 \text{ mW/g} \pm 0.03 \text{ dB}$ , SAR (1g):  $4.25 \text{ mW/g} \pm 0.06 \text{ dB}$ , SAR (10g):  $2.25 \text{ mW/g} \pm 0.09 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 9.1 (8.9, 9.7) [mm]

Powerdrift: -0.02 dB

Pin: before 100.0mW after 99.8mW

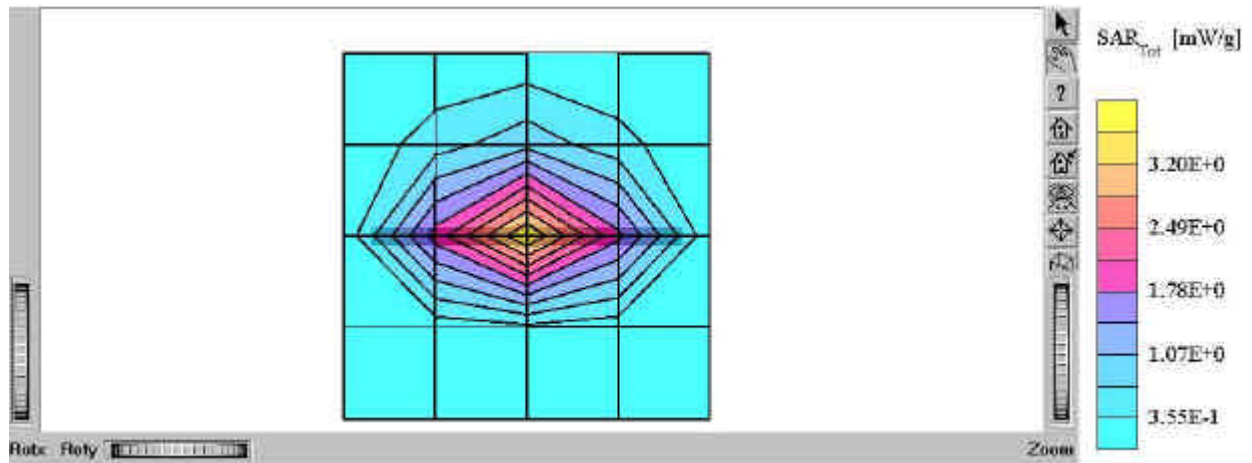
3.4mm surface detect/teflon caps on dipole

Humidity: 39.9

Ambient Temp: 21.4

Simulant Temp: 21.5

File name: Validation\_1900BODY\_537\_1023\_15Oct02\_T01, Date: 10/15/02



1900 MHz SAR distribution of validation dipole antenna from system performance check on October 15, 2002. Using muscle tissue.



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

### Dipole 1900 MHz

SAM 1023 (L); Flat

Probe: ET3DV6 - SN1539; ConvF(4.50,4.50,4.50); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.55 \text{ mho/m}$ ,  $\epsilon_r = 52.6$ ,  $\rho = 1.00 \text{ g/cm}^3$   
Cubes (2): Peak:  $7.57 \text{ mW/g} \pm 0.06 \text{ dB}$ , SAR (1g):  $4.28 \text{ mW/g} \pm 0.09 \text{ dB}$ , SAR (10g):  $2.27 \text{ mW/g} \pm 0.10 \text{ dB}$ , (Worst-case extrapolation)

Penetration depth: 9.0 (8.8, 9.6) [mm]

Powerdrift: -0.05 dB

Pin: before 100.0mW after 99.3mW

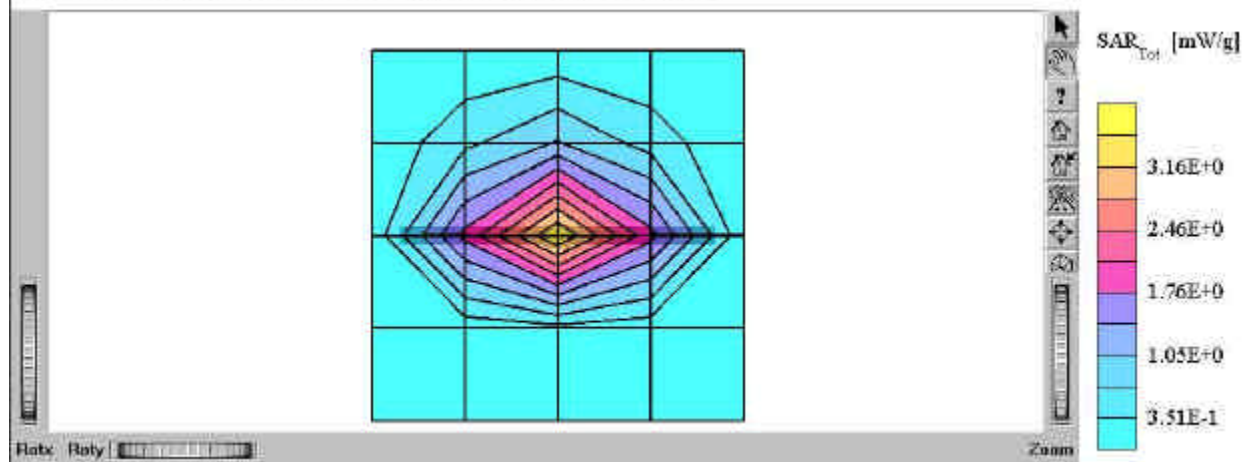
3.4mm surface detect/teflon caps on dipole

Humidity: 39.6

Ambient Temp: 22.8

Simulant Temp: 22.5

File name: Validation\_1900BODY\_537\_1023\_17Oct02\_T01, Date: 10/17/02



1900 MHz SAR distribution of validation dipole antenna from system performance check on October 17, 2002. Using muscle tissue.



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|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## Appendix 2

### SAR distribution plots for Phantom Head Adjacent Use



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## REPORT

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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom, Left Hand Section, Position: (91°, 61°), Frequency: 849 MHz

Probe: ET3DV6 - SN1539; ConvF(6.10,6.10,6.10); Crest factor: 8.0; Head 835 MHz:  $\sigma = 0.89$  mho/m  $\epsilon_r = 42.2$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.712 mW/g, SAR (10g): 0.302 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.05 dB

SN:A6101TS3YX

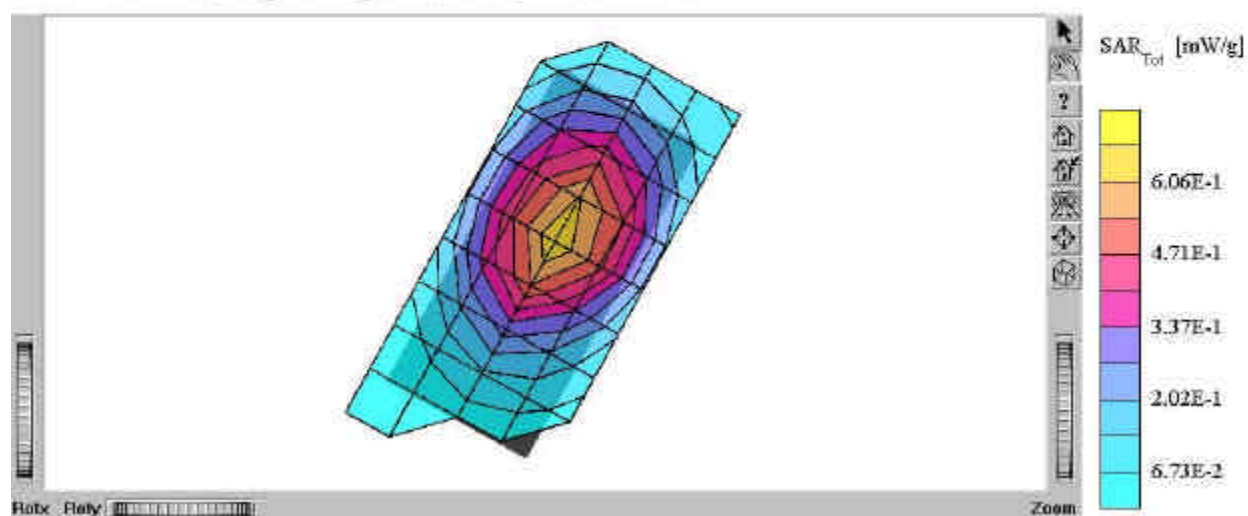
Battery:BKB 193 162 (BST-22)

Humidity:41.0

Ambient Temp:22.0

Simulant Temp:20.7

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_LC01, Date: 10/14/02



Distribution of maximum SAR in 800 GSM band. Measured against the left hand side of the head in the “Cheek” position.



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom, Left Hand Section; Position: (91°, 61°); Frequency: 849 MHz

Probe: ET3DV6 - SN1539; ConvF(6.10,6.10,6.10); Crest factor: 8.0; Head 835 MHz:  $\sigma = 0.89 \text{ mho/m}$ ,  $\epsilon_r = 42.2$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.712 mW/g, SAR (10g): 0.502 mW/g. (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS3YX

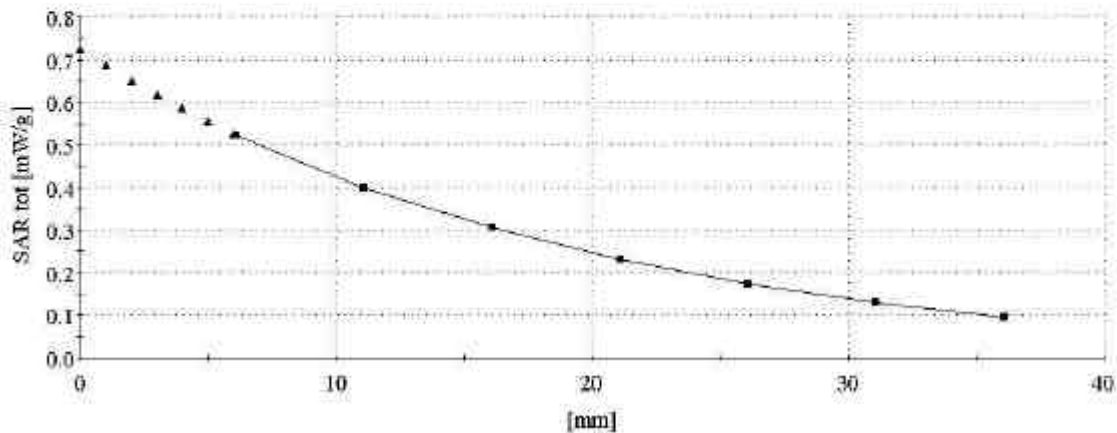
Battery:BKB 193 162 (BST-22)

Humidity:41.0

Ambient Temp:22.0

Simulant Temp:20.7

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_LC01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the left hand side of the head in the “cheek” position.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom; Right Hand Section; Position: (91°, 299°); Frequency: 849 MHz

Probe: ET3DV6 • SN1539; ConvF(6.10,6.10,6.10); Crest factor: 8.0; Head 835 MHz:  $\sigma = 0.89$  mho/m  $\epsilon_t = 42.2$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.682 mW/g, SAR (10g): 0.478 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: 0.06 dB

SN:A6101TS3YX

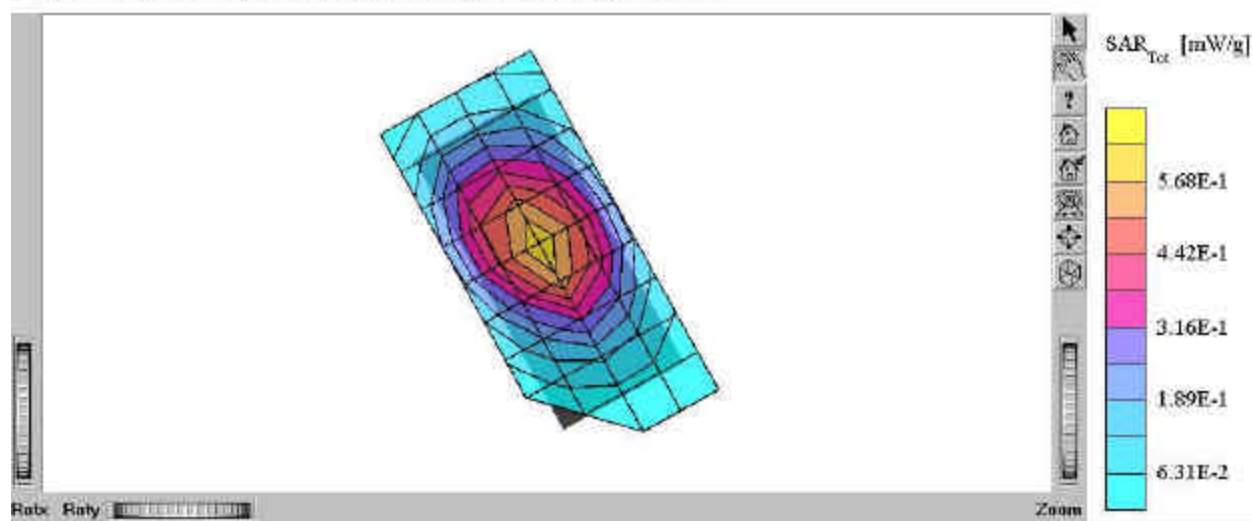
Battery: BKB 193 162 (BST-22)

Humidity: 41.3

Ambient Temp: 21.6

Simulant Temp: 21.1

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_RC01, Date: 10/14/02



Distribution of maximum SAR in 800 GSM band. Measured against the right hand side of the head in the “Cheek” position.



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom; Right Hand Section; Position: (91°, 299°); Frequency: 849 MHz

Probe: ET3DV6 - SN1539; ConvF(6.10, 6.10, 6.10); Crest factor: 3.0; Head 835 MHz:  $\sigma = 0.89$  mho/m  $\epsilon_r = 42.2$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7; SAR (1g): 0.682 mW/g, SAR (10g): 0.478 mW/g, (Worst-case extrapolation)

Cube 5x5x7; Dx = 3.0, Dy = 3.0, Dz = 5.0

SN:A6101TS3YX

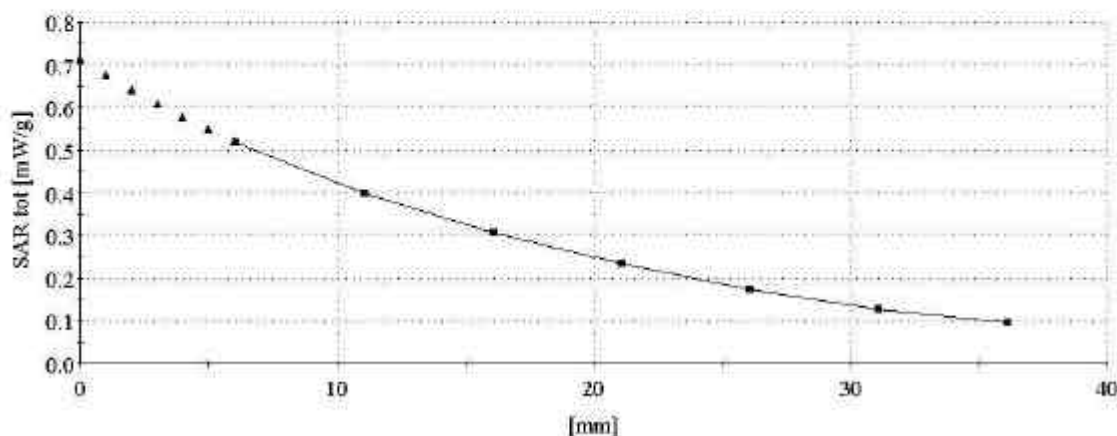
Battery: BKB 193 162 (BST-22)

Humidity: 41.3

Ambient Temp: 21.6

Simulant Temp: 21.1

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_RC01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the right hand side of the head in the “cheek” position.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

**T306**

SAM 1030 (R) Phantom; Left Hand Section; Position: (105°, 61°); Frequency: 849 MHz

Probe: ET3DV6 - SN1539; ConvF(6.10,6.10,6.10); Crest factor: 8.0; Head 835 MHz:  $\sigma = 0.89 \text{ mho/m}$ ,  $\epsilon_r = 42.2$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7; SAR (1g): 0.330 mW/g, SAR (10g): 0.236 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.05 dB

SN:A6101TS3YX

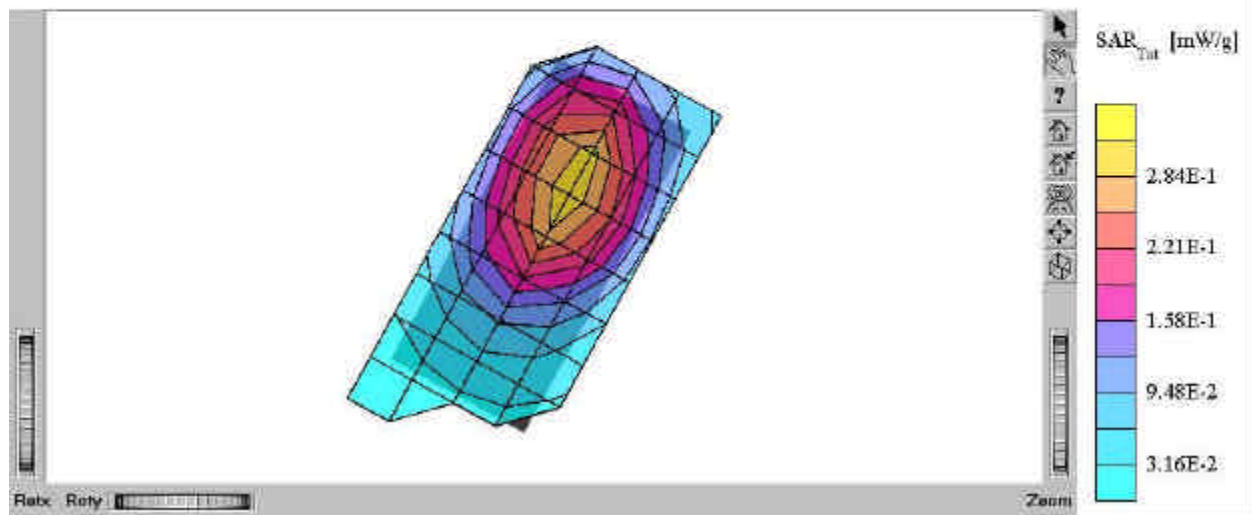
Battery:BKB 193 162 (BST-22)

Humidity:40.5

Ambient Temp:22.2

Simulant Temp:20.7

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_LT01, Date: 10/14/02



**Distribution of maximum SAR in 800 GSM band. Measured against the left hand side of the head in the “tilt” position.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom; Left Hand Section; Position: (106°, 61°); Frequency: 849 MHz

Probe: ET3DV6 - SN1539; ConvF(6.10,6.10,6.10); Crest factor: 8.0; Head 835 MHz:  $\sigma = 0.89$  mho/m,  $\epsilon_r = 42.2$ ,  $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.330 mW/g, SAR (10g): 0.236 mW/g. (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS3YX

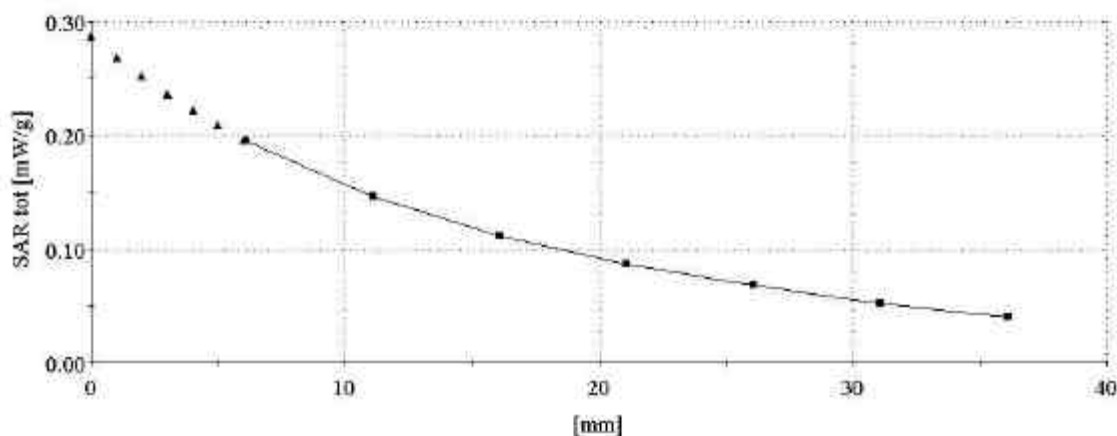
Battery:BKB 193 162 (BST-22)

Humidity:40.5

Ambient Temp:22.2

Simulant Temp:20.7

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_LT01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the left hand side of the head in the “tilt” position.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom; Right Hand Section; Position: (106°, 299°); Frequency: 849 MHz

Probe: ET3DV6 • SN1539; ConvF(6.10,6.10,6.10); Crest factor: 3.0; Head 835 MHz:  $\sigma = 0.89$  mho/m  $\epsilon_r = 42.2$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.322 mW/g, SAR (10g): 0.229 mW/g (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: 0.13 dB

SN:A6101TS3YX

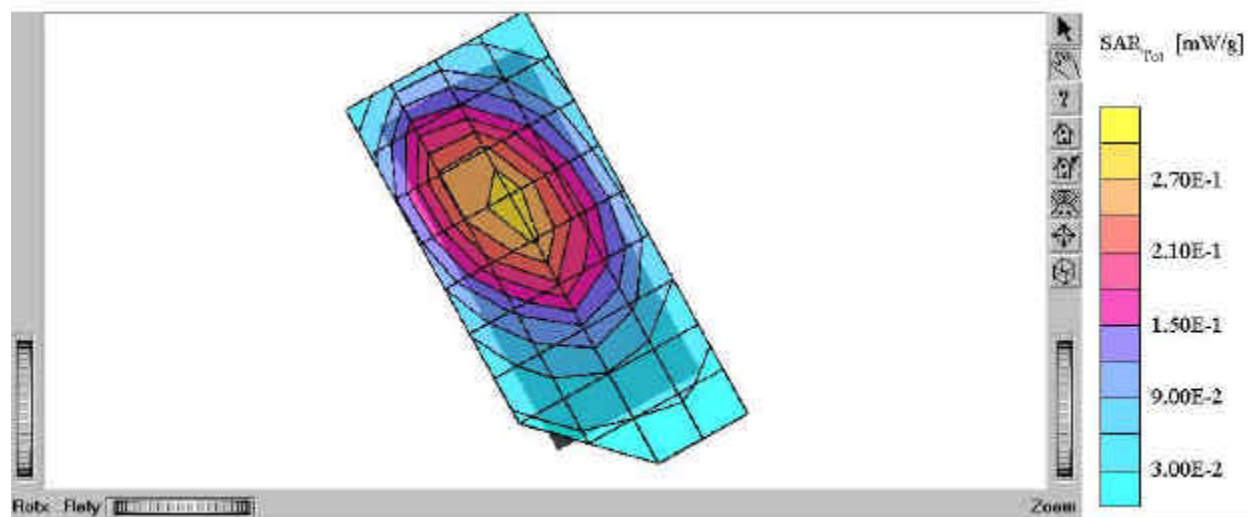
Battery:BKB 193 162 (BST-22)

Humidity:40.3

Ambient Temp:22.2

Simulant Temp:21.1

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH251\_RT01, Date: 10/14/02



**Distribution of maximum SAR in 800 GSM band. Measured against the right hand side of the head in the “tilt” position.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1030 (R) Phantom, Right Hand Section, Position: (106°, 299°), Frequency: 849 MHz

Probe: ET3DV6 - SN1539; ConvF(6.10.6.10.6.10); Crest factor: 8.0; Head 835 MHz:  $\sigma = 0.89 \text{ mho/m}$ ,  $\epsilon_r = 42.2$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.322 mW/g, SAR (10g): 0.229 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS3YX

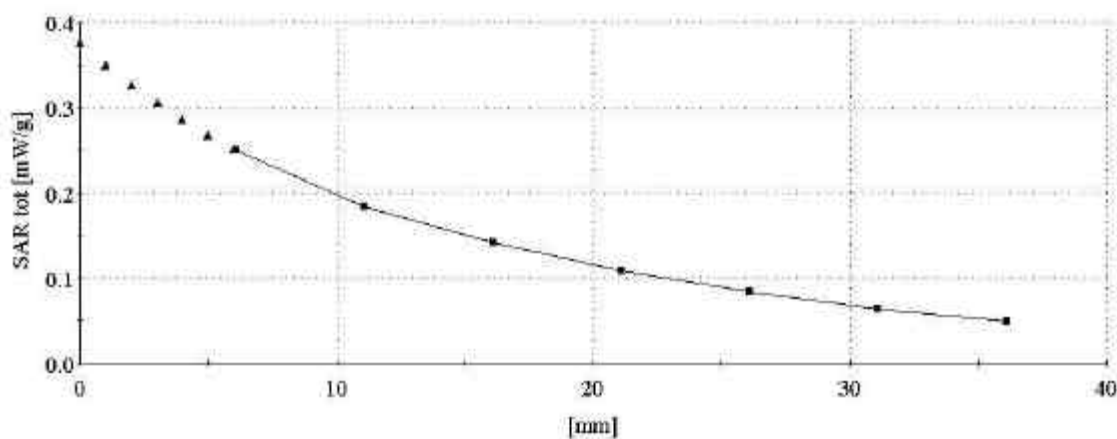
Battery:BKB 193 162 (BST-22)

Humidity:40.3

Ambient Temp:22.2

Simulant Temp:21.1

File name: 14Oct02\_T306\_GSM800\_S3YX\_CH2S1\_RT01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the right hand side of the head in the “tilt” position.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

**T306**

SAM 1031(R) Phantom; Left Hand Section; Position: (91°,61°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46$  mho/m  $\epsilon_r = 40.0$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7; SAR (1g): 0.278 mW/g, SAR (10g): 0.166 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0; Dy = 15.0; Dz = 10.0

Powerdrift: -0.14 dB

SN:A6101TS49L

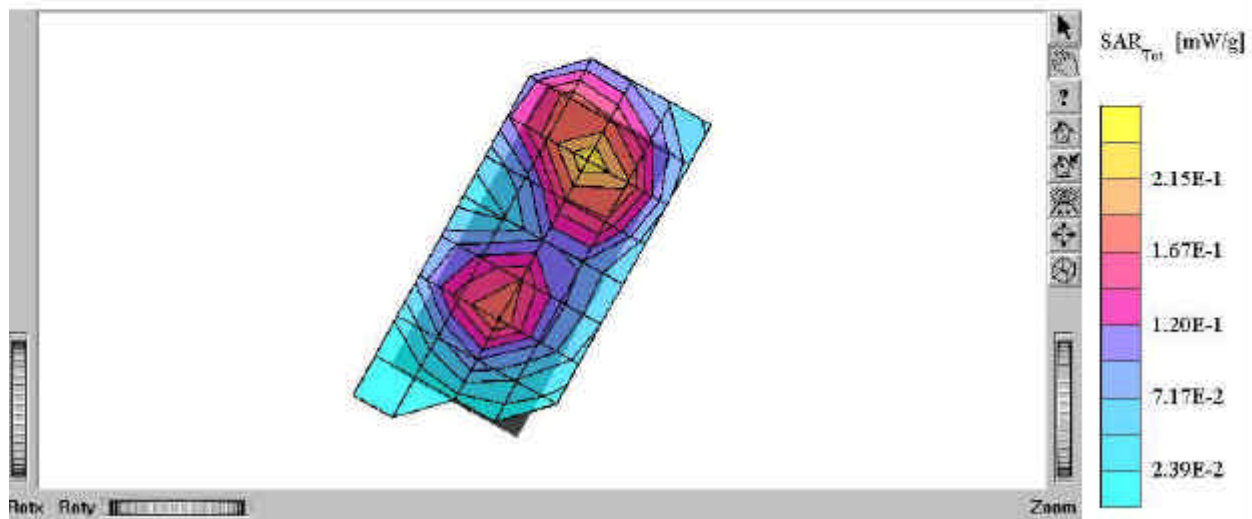
Battery:BKB 193 162 (BST-22)

Humidity:38.7

Ambient Temp:21.9

Simulant Temp:20.8

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_LC01, Date: 10/14/02



Distribution of maximum SAR in 1900 GSM band. Measured against the left hand side of the head in the “cheek” position.



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1031(R) Phantom; Left Hand Section; Position: (91°, 61°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7; SAR (1g): 0.278 mW/g, SAR (10g): 0.166 mW/g, (Worst-case extrapolation)

Cube 5x5x7; Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS49L

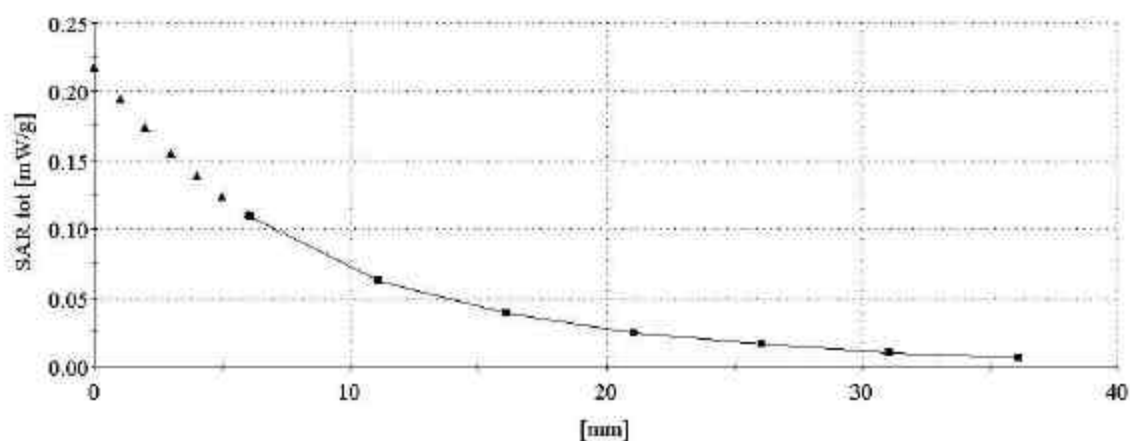
Battery:BKB 193 162 (BST-22)

Humidity:38.7

Ambient Temp:21.9

Simulant Temp:20.8

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_LC01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the left hand side of the head in the “cheek” position.**



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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1031(R) Phantom; Right Hand Section; Position: (91°, 299°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20, 5.20, 5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46$  mho/m  $\epsilon_r = 40.0$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.321 mW/g, SAR (10g): 0.188 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: 0.00 dB

SN:A6101TS49L

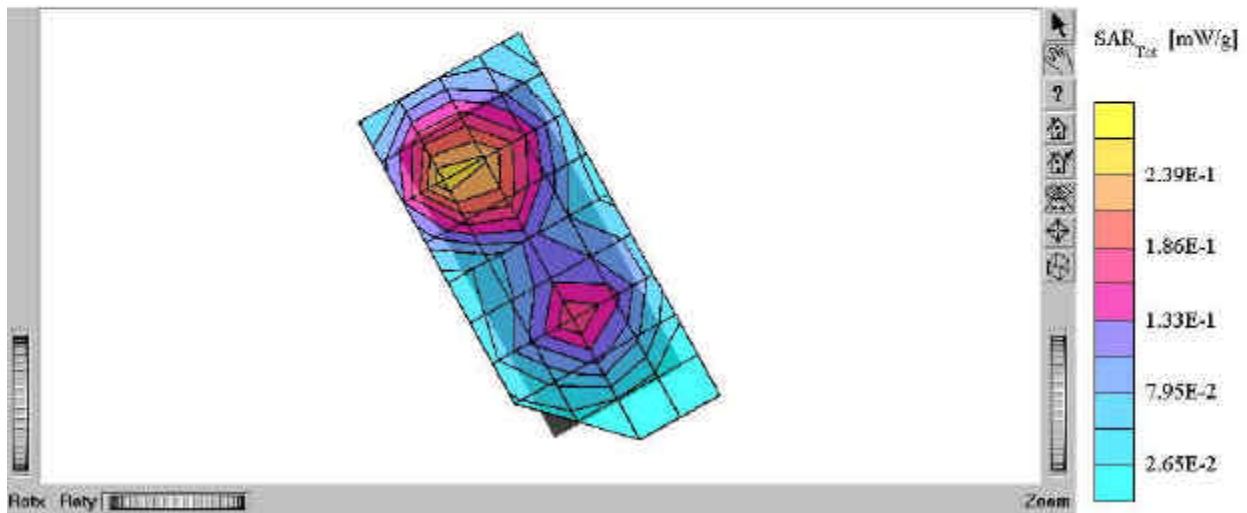
Battery: BKB 193 162 (BST-22)

Humidity: 40.7

Ambient Temp: 22.2

Simulant Temp: 21.1

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_RC01, Date: 10/14/02



Distribution of maximum SAR in 1900 GSM band. Measured against the right hand side of the head in the “cheek” position.



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## REPORT

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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1031(R) Phantom; Right Hand Section; Position: (91°, 299°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20, 5.20, 5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.321 mW/g, SAR (10g): 0.185 mW/g. (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS49L

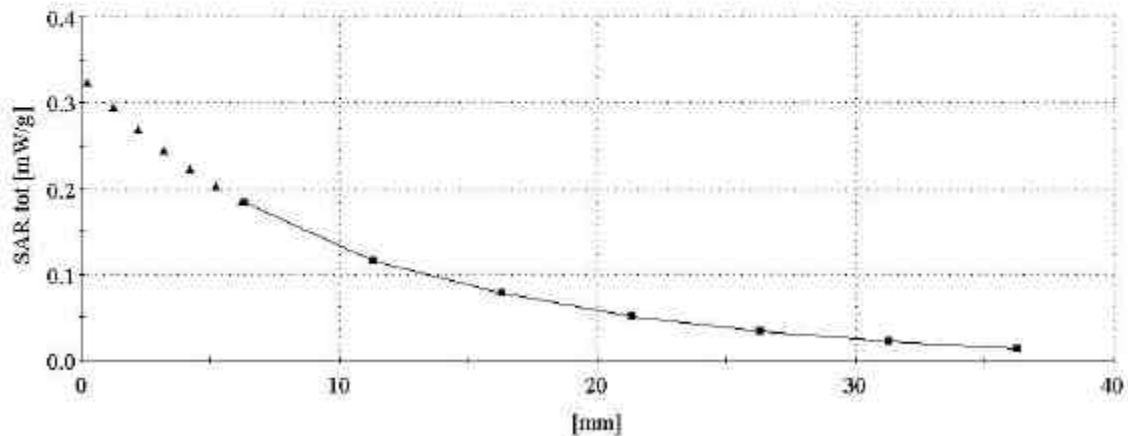
Battery: BKB 193 162 (BST-22)

Humidity: 40.7

Ambient Temp: 22.2

Simulant Temp: 21.1

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_RC01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the right hand side of the head in the “cheek” position.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1031(R) Phantom; Left Hand Section; Position: (106°, 61°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20, 5.20, 5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.298 mW/g, SAR (10g): 0.174 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.19 dB

SN:A6101TS49L

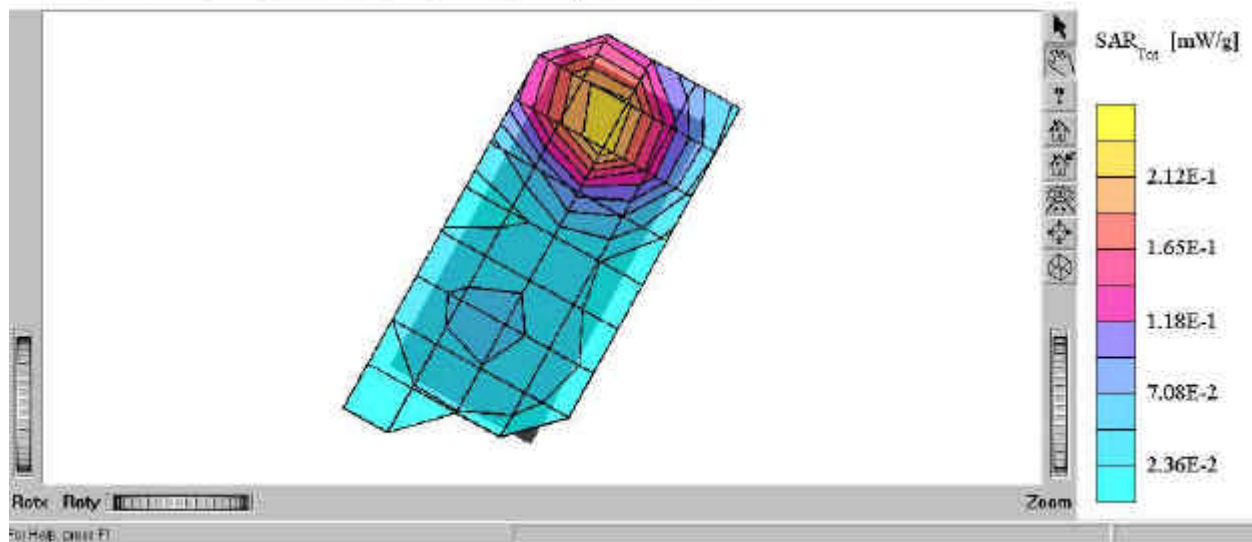
Battery:BKB 193 162 (BST-22)

Humidity:40.5

Ambient Temp:22.1

Simulant Temp:20.8

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_LT01, Date: 10/14/02



**Distribution of maximum SAR in 1900 GSM band. Measured against the right hand side of the head in the “tilt” position.**



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## REPORT

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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM1031(R) Phantom; Left Hand Section; Position: (106°, 61°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.298 mW/g, SAR (10g): 0.174 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A610ITS49L

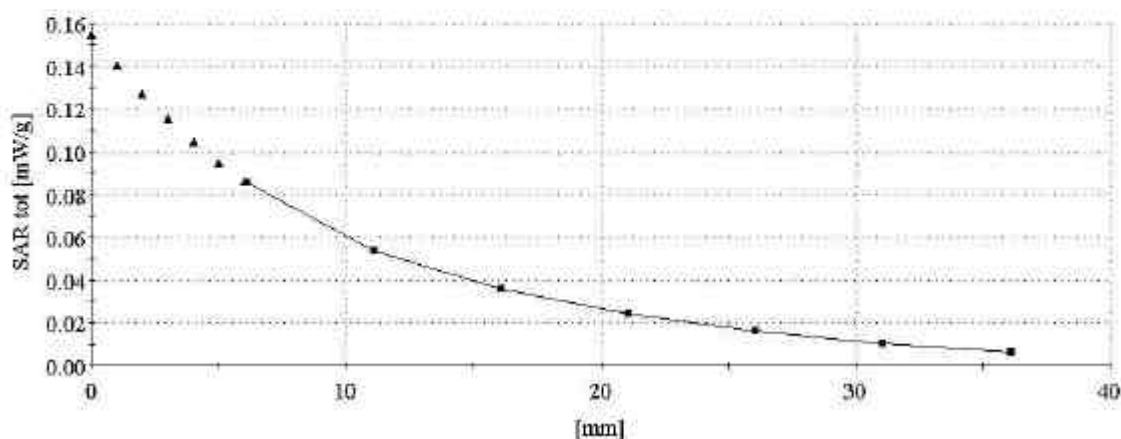
Battery:BKB 193 162 (BST-22)

Humidity:40.5

Ambient Temp:22.1

Simulant Temp:20.8

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_LT01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the left hand side of the head in the “tilt” position.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1031(R) Phantom; Right Hand Section; Position: (106°, 299°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7; SAR (1g): 0.345 mW/g, SAR (10g): 0.199 mW/g. (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.07 dB

SN:A6101TS49L

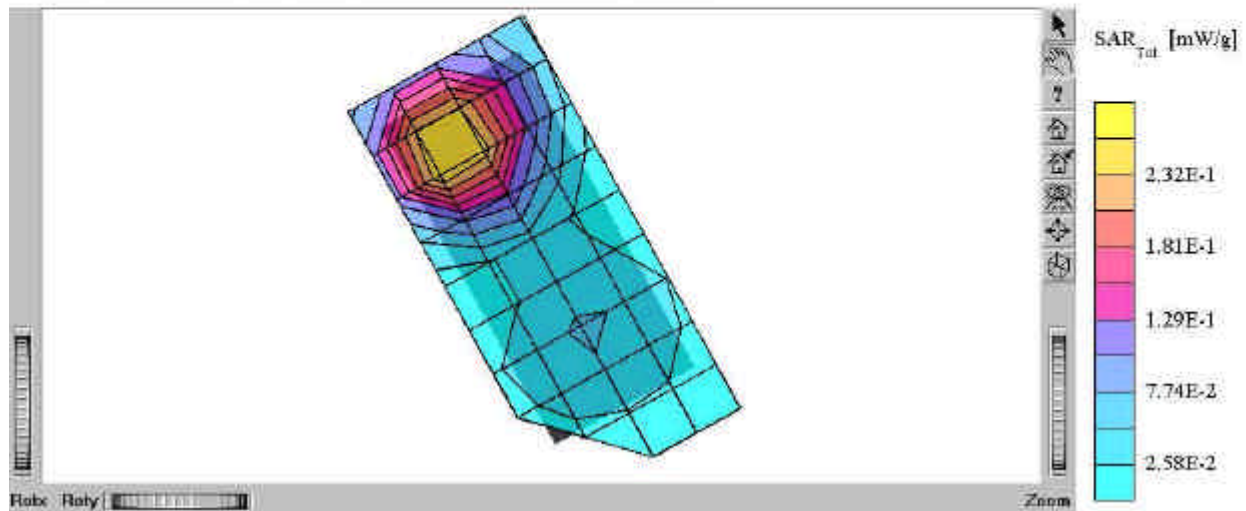
Battery:BKB 193 162 (BST-22)

Humidity:40.3

Ambient Temp:22.3

Simulant Temp:21.1

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_RT01, Date: 10/14/02



Distribution of maximum SAR in 1900 GSM band. Measured against the right hand side of the head in the “tilt” position.



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1031(R) Phantom, Right Hand Section, Position: (106°, 299°), Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 8.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$ ,  $\epsilon_r = 40.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.345 mW/g, SAR (10g): 0.199 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SNA6101TS49L

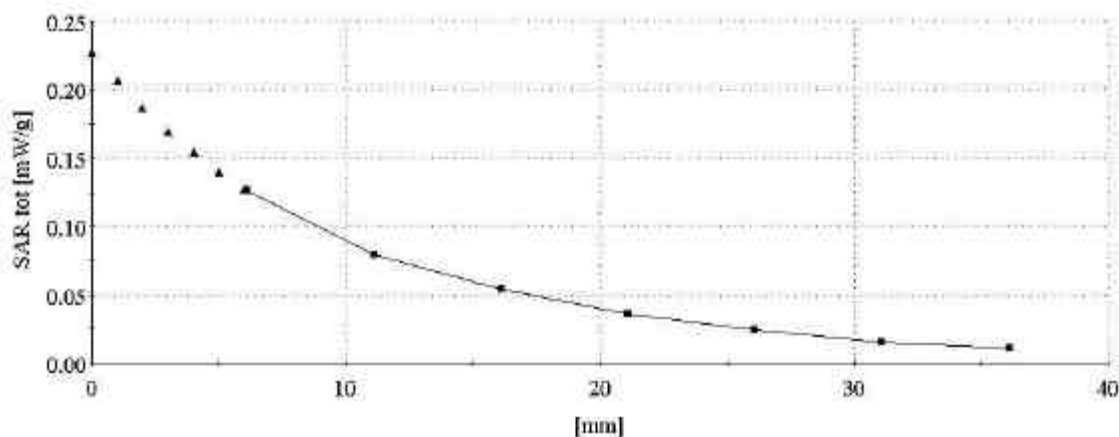
Battery:BKB 193 162 (BST-22)

Humidity:40.3

Ambient Temp:22.3

Simulant Temp:21.1

File name: 14Oct02\_T306\_GSM1900\_S49L\_CH810\_RT01, Date: 10/14/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the right hand side of the head in the “tilt” position.**



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REPORT

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|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

### Appendix 3

#### SAR distribution plots for Body Worn Configuration



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

**T306**

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1587; ConvF(6.50,6.50,6.50); Crest factor: 8.0; Body 835 MHz:  $\sigma = 0.98$  mho/m  $\epsilon_r = 55.9$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7; SAR (1g): 0.272 mW/g, SAR (10g): 0.192 mW/g, (Worst-case extrapolation)

Coarse Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.05 dB

SN:A6101TS3YX

Battery: BKB 193 162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

Holster: KRY 10402 R2A (ICT-14)

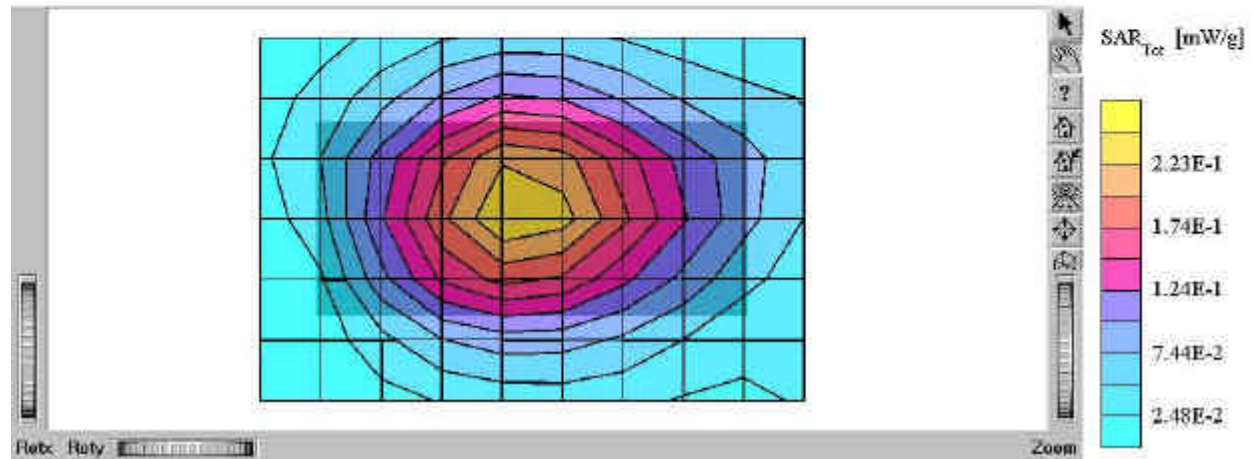
Humidity: 39.9

Ambient Temp: 23.4

Simulant Temp: 21.3

Rear of phone facing body

File name: 15Oct02\_T306\_GSM800\_S3YX\_CH128\_BB01, Date: 10/15/02



**Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using carry ICT-14 and hands free accessory RLF 501 25/04.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 824 MHz

Probe: ET3DV6 · SN1587; ConvF(6.50,6.50,6.50); Crest factor: 8.0; Body 835 MHz;  $\sigma = 0.98$  mho/m  $\epsilon_r = 55.9$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.272 mW/g, SAR (10g): 0.192 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS3YX

Battery: BKB 193 162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

Holster: KRY 10402 R2A (ICT-14)

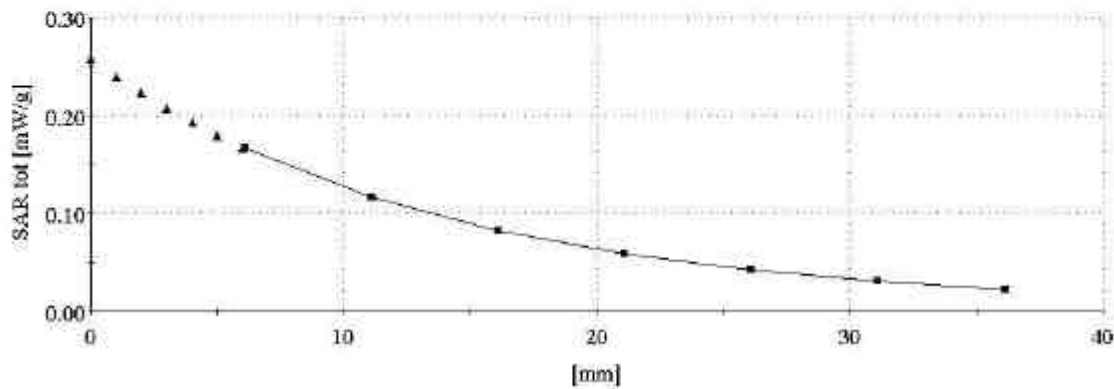
Humidity: 39.9

Ambient Temp: 23.4

Simulant Temp: 21.3

Rear of phone facing body

File name: 15Oct02\_T306\_GSM800\_S3YX\_CHI28\_BB01, Date: 10/15/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while phone is against the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1023 (L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1539; ConvF(4.50,4.50,4.50); Crest factor: 8.0; Body 1900 MHz:  $\sigma = 1.55 \text{ mho/m}$ ,  $\epsilon_r = 52.6$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.367 mW/g, SAR (10g): 0.226 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.08 dB

SN:A6101TS49L

Battery: BKE 193 1162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

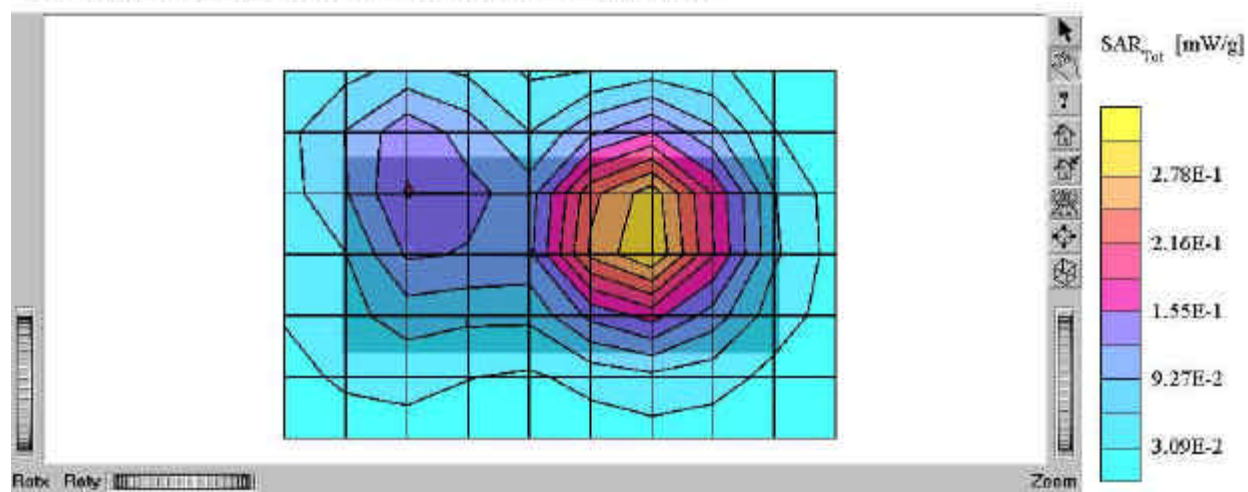
Holster: KRY 10402 R2A (ICT-14)

Humidity: 42.7

Ambient Temp: 22.1

Simulant Temp: 20.7

File name: 15Oct02\_T306\_GSM1900\_S49L\_CH810\_BB01, Date: 10/15/02



**Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using carry ICT-14 and hands free accessory RLF 501 25/04.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1023 (L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1539; ConvF(4.50, 4.50, 4.50); Crest factor: 8.0; Body 1900 MHz:  $\sigma = 1.55 \text{ mho/m}$ ,  $\epsilon_r = 52.6$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.367 mW/g, SAR (10g): 0.226 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN: A6101TS49L

Battery: BKB 193 1162 (BST-22)

Hands free: RLF 501 25/04 (HPF-14)

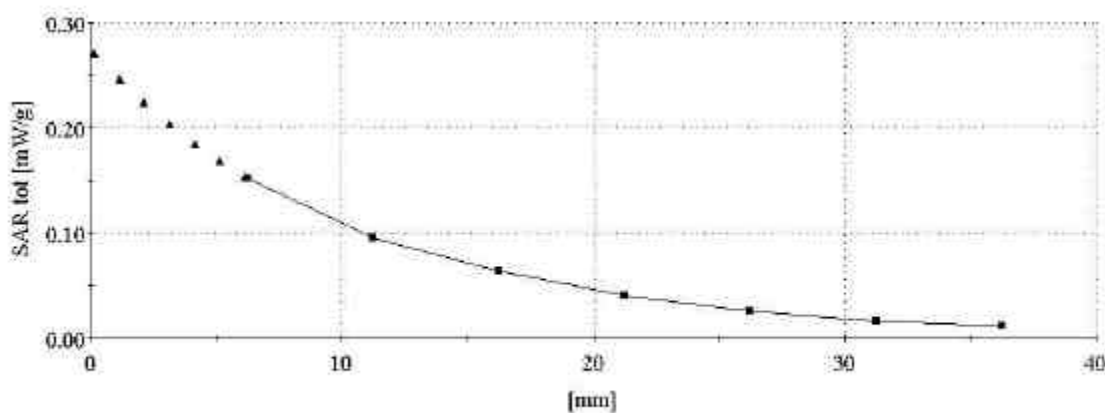
Holster: KRY 10402 R2A (ICT-14)

Humidity: 42.7

Ambient Temp: 22.1

Simulant Temp: 20.7

File name: 15Oct02\_T306\_GSM1900\_S49L\_CHB10\_BB01, Date: 10/15/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while phone is against the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04.**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 824 MHz

Probe: ET3DV6 · SN1587; ConvF(6.50,6.50,6.50); Crest factor: 8.0; Body 835 MHz:  $\sigma = 0.98$  mho/m  $\epsilon_r = 55.5$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.305 mW/g, SAR (10g): 0.218 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: 0.03 dB

SN:A6101TS3YX

Battery: BKB 193 162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

Holster: (ICE-25)

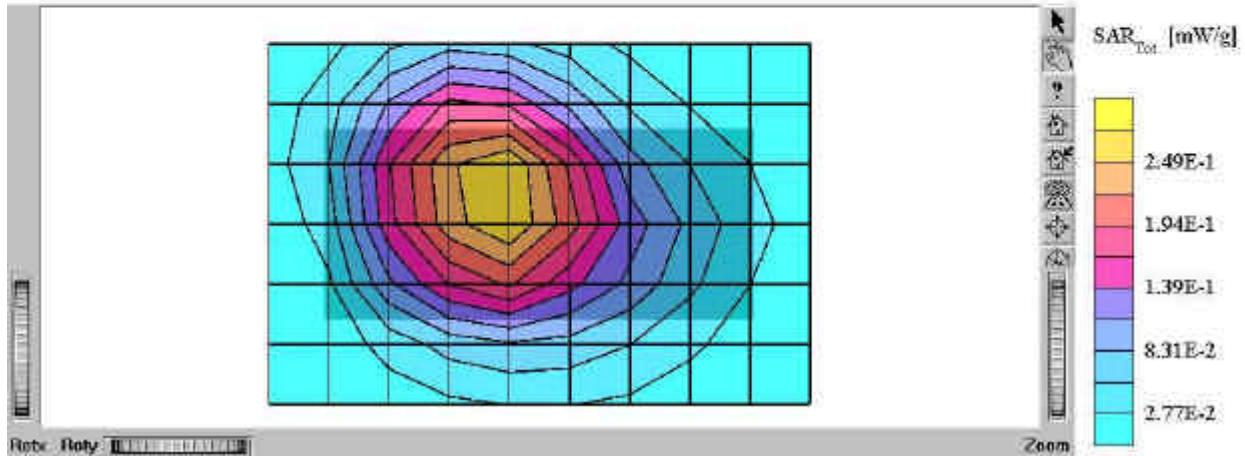
Humidity: 40.2

Ambient Temp: 23.7

Simulant Temp: 21.4

Rear of phone facing body

File name: 17Oct02\_T306\_GSM800\_S3YX\_CH128\_BB01, Date: 10/17/02



Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using carry ICE-25 and hands free accessory RLF 501 25/04.



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1587; ConvF(6.50,6.50,6.50); Crest factor: 8.0; Body 835 MHz:  $\sigma = 0.98$  mho/m  $\epsilon_r = 55.5$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7; SAR (1g): 0.305 mW/g, SAR (10g): 0.218 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A610ITS3YX

Battery: BKB 193 162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

Holster: (ICE-25)

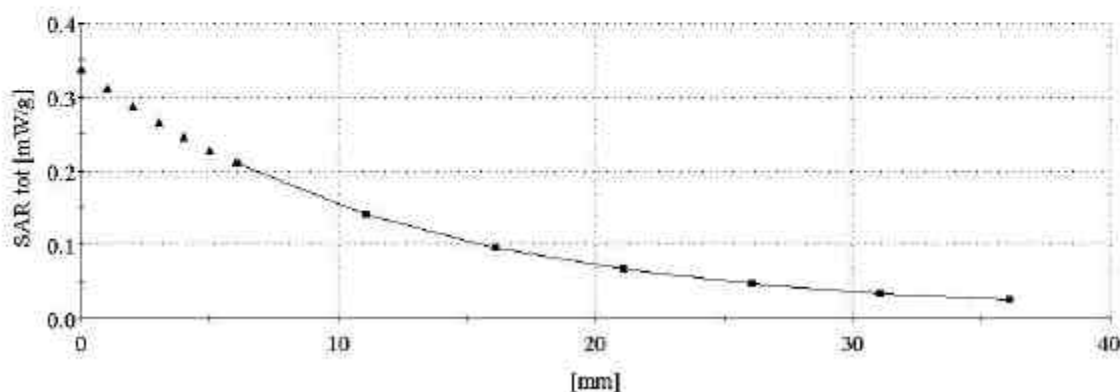
Humidity: 40.2

Ambient Temp: 23.7

Simulant Temp: 21.4

Rear of phone facing body

File name: 17Oct02\_T306\_GSM800\_S3YX\_CH128\_BB01, Date: 10/17/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04.**



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

**T306**

SAM 1023 (L) Phantom; Flat Section; Position: (90°,270°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1539; ConvF(4.50,4.50,4.50); Crest factor: 8.0; Body 1900 MHz:  $\sigma = 1.55 \text{ mho/m}$ ,  $\epsilon_r = 52.6$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7; SAR (1g): 0.577 mW/g, SAR (10g): 0.349 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.12 dB

SN:A6101TS49L

Battery: BKB 193 162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

Holster: (ICE-25)

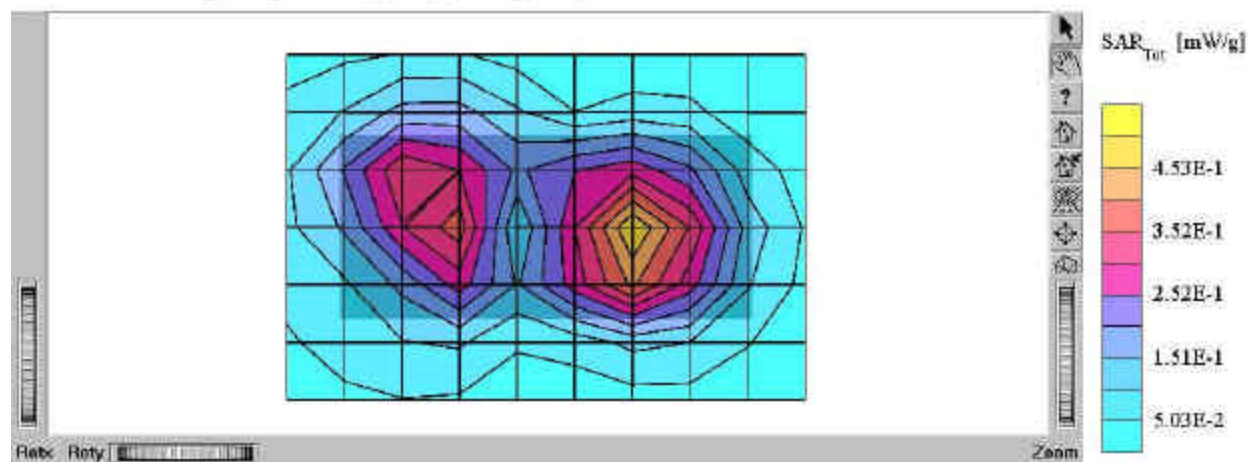
Humidity:39.4

Ambient Temp:23.1

Simulant Temp:21.7

Rear of phone facing body

File name: 17Oct02\_T306\_GSM1900\_S49L\_CH660\_BB01, Date: 10/17/02



Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using carry ICE-25 and hands free accessory RLF 501 25/04.



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## T306

SAM 1023 (L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1539; ConvF(4.50,4.50,4.50); Crest factor: 8.0; Body 1900 MHz:  $\sigma = 1.55 \text{ mho/m}$ ,  $\epsilon_r = 52.6$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.577 mW/g, SAR (10g): 0.349 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:A6101TS49L

Battery: BKB 193 162 (BST-22)

Hands free: RLF 501 25/04 (HPE-14)

Holster: (ICE-25)

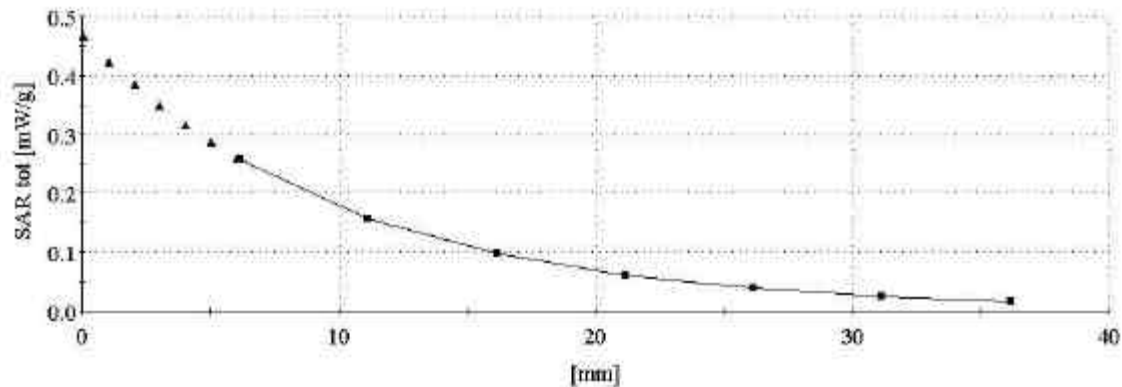
Humidity: 39.4

Ambient Temp: 23.1

Simulant Temp: 21.7

Rear of phone facing body

File name: 17Oct02\_T306\_GSM1900\_S49L\_CH660\_BB01, Date: 10/17/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04.**



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|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

## Appendix 4

### Probe Calibration Certificate



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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

ET3DV6 SN:1539

July 26, 2002

**DASY3 - Parameters of Probe: ET3DV6 SN:1539****Sensitivity in Free Space****Diode Compression**

|       |                                          |       |    |    |
|-------|------------------------------------------|-------|----|----|
| NormX | 1.32 $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP X | 92 | mV |
| NormY | 1.23 $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP Y | 92 | mV |
| NormZ | 1.34 $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP Z | 92 | mV |

**Sensitivity in Tissue Simulating Liquid**

|         |                       |                             |                                       |
|---------|-----------------------|-----------------------------|---------------------------------------|
| Head    | 835 MHz               | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.90 \pm 5\% \text{ mho/m}$ |
| Head    | 900 MHz               | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
| ConvF X | 6.1 $\pm 9.5\%$ (k=2) | Boundary effect:            |                                       |
| ConvF Y | 6.1 $\pm 9.5\%$ (k=2) | Alpha                       | 0.46                                  |
| ConvF Z | 6.1 $\pm 9.5\%$ (k=2) | Depth                       | 2.27                                  |
| Head    | 1900 MHz              | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
| Head    | 1800 MHz              | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
| ConvF X | 4.9 $\pm 9.5\%$ (k=2) | Boundary effect:            |                                       |
| ConvF Y | 4.9 $\pm 9.5\%$ (k=2) | Alpha                       | 0.66                                  |
| ConvF Z | 4.9 $\pm 9.5\%$ (k=2) | Depth                       | 2.13                                  |

**Boundary Effect**

|                        |                              |                                   |      |  |
|------------------------|------------------------------|-----------------------------------|------|--|
| Head                   | 835 MHz                      | Typical SAR gradient: 5 % per mm  |      |  |
| Probe Tip to Boundary  |                              | 1 mm                              | 2 mm |  |
| SAR <sub>avg</sub> [%] | Without Correction Algorithm | 10.4                              | 5.7  |  |
| SAR <sub>avg</sub> [%] | With Correction Algorithm    | 0.4                               | 0.4  |  |
| Head                   | 1900 MHz                     | Typical SAR gradient: 10 % per mm |      |  |
| Probe Tip to Boundary  |                              | 1 mm                              | 2 mm |  |
| SAR <sub>avg</sub> [%] | Without Correction Algorithm | 12.9                              | 8.1  |  |
| SAR <sub>avg</sub> [%] | With Correction Algorithm    | 0.2                               | 0.3  |  |

**Sensor Offset**

|                            |               |    |
|----------------------------|---------------|----|
| Probe Tip to Sensor Center | 2.7           | mm |
| Optical Surface Detection  | 1.5 $\pm$ 0.2 | mm |



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## REPORT

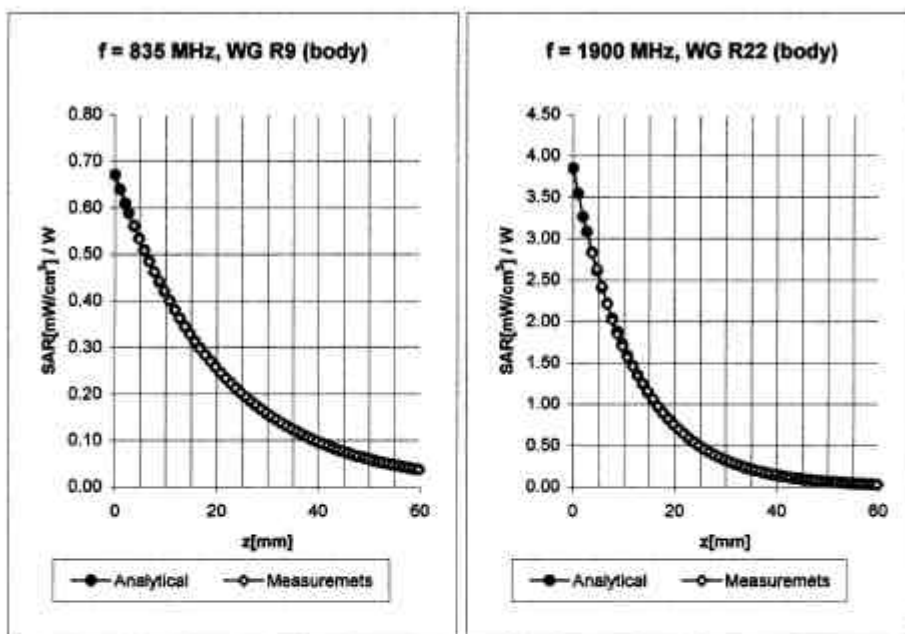
49(67)

|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

ET3DV6 SN:1539

July 26, 2002

## Conversion Factor Assessment



|      |          |                             |                               |
|------|----------|-----------------------------|-------------------------------|
| Body | 835 MHz  | $\epsilon_r = 55.2 \pm 5\%$ | $\sigma = 0.97 \pm 5\%$ mho/m |
| Body | 900 MHz  | $\epsilon_r = 55.0 \pm 5\%$ | $\sigma = 1.05 \pm 5\%$ mho/m |
|      | ConvF X  | $6.1 \pm 9.5\%$ (k=2)       | Boundary effect:              |
|      | ConvF Y  | $6.1 \pm 9.5\%$ (k=2)       | Alpha 0.47                    |
|      | ConvF Z  | $6.1 \pm 9.5\%$ (k=2)       | Depth 2.24                    |
| Body | 1900 MHz | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\%$ mho/m |
| Body | 1800 MHz | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\%$ mho/m |
|      | ConvF X  | $4.5 \pm 9.5\%$ (k=2)       | Boundary effect:              |
|      | ConvF Y  | $4.5 \pm 9.5\%$ (k=2)       | Alpha 0.81                    |
|      | ConvF Z  | $4.5 \pm 9.5\%$ (k=2)       | Depth 1.98                    |



Sony Ericsson

REPORT

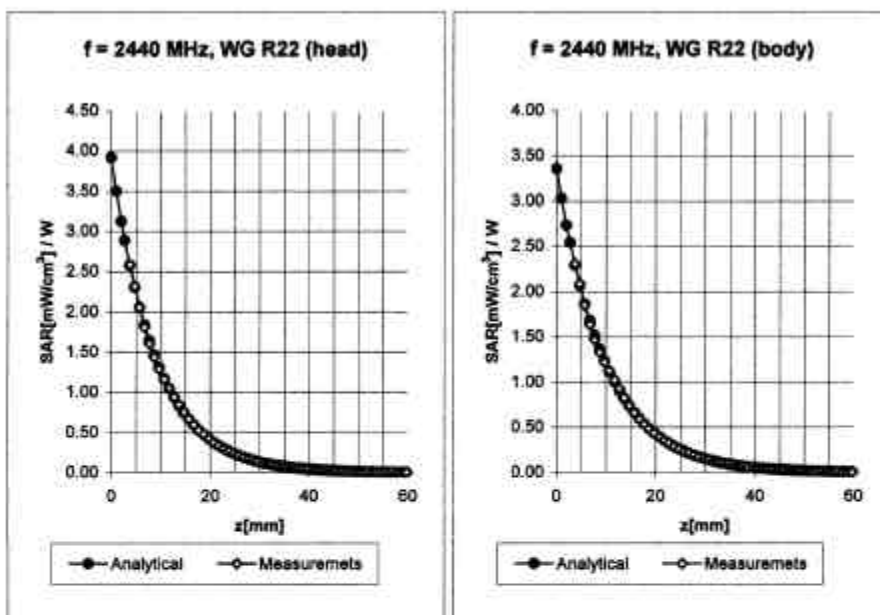
50(67)

|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

ET3DV6 SN:1539

July 26, 2002

### Conversion Factor Assessment



**Head**      **2440 MHz**       $\epsilon_r = 39.2 \pm 5\%$        $\sigma = 1.80 \pm 5\% \text{ mho/m}$

ConvF X      **4.7**  $\pm 8.9\%$  (k=2)      Boundary effect:

ConvF Y      **4.7**  $\pm 8.9\%$  (k=2)      Alpha      **1.00**

ConvF Z      **4.7**  $\pm 8.9\%$  (k=2)      Depth      **1.73**

**Body**      **2440 MHz**       $\epsilon_r = 52.7 \pm 5\%$        $\sigma = 1.95 \pm 5\% \text{ mho/m}$

ConvF X      **4.1**  $\pm 8.9\%$  (k=2)      Boundary effect:

ConvF Y      **4.1**  $\pm 8.9\%$  (k=2)      Alpha      **1.00**

ConvF Z      **4.1**  $\pm 8.9\%$  (k=2)      Depth      **1.90**



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
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ET3DV6 SN:1587

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**DASY3 - Parameters of Probe: ET3DV6 SN:1587****Sensitivity in Free Space****Diode Compression**

|       |                                          |       |    |    |
|-------|------------------------------------------|-------|----|----|
| NormX | 2.02 $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP X | 97 | mV |
| NormY | 1.89 $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP Y | 97 | mV |
| NormZ | 1.76 $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP Z | 97 | mV |

**Sensitivity in Tissue Simulating Liquid**

|         |                       |                             |                                       |
|---------|-----------------------|-----------------------------|---------------------------------------|
| Head    | 835 MHz               | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.90 \pm 5\% \text{ mho/m}$ |
| Head    | 900 MHz               | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
| ConvF X | 6.8 $\pm 9.5\%$ (k=2) | Boundary effect:            |                                       |
| ConvF Y | 6.8 $\pm 9.5\%$ (k=2) | Alpha                       | 0.40                                  |
| ConvF Z | 6.8 $\pm 9.5\%$ (k=2) | Depth                       | 2.18                                  |
| Head    | 1900 MHz              | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
| Head    | 1800 MHz              | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
| ConvF X | 5.2 $\pm 9.5\%$ (k=2) | Boundary effect:            |                                       |
| ConvF Y | 5.2 $\pm 9.5\%$ (k=2) | Alpha                       | 0.49                                  |
| ConvF Z | 5.2 $\pm 9.5\%$ (k=2) | Depth                       | 2.40                                  |

**Boundary Effect**

|                        |                              |                                   |      |
|------------------------|------------------------------|-----------------------------------|------|
| Head                   | 835 MHz                      | Typical SAR gradient: 5 % per mm  |      |
| Probe Tip to Boundary  |                              | 1 mm                              | 2 mm |
| SAR <sub>iso</sub> [%] | Without Correction Algorithm | 8.1                               | 4.4  |
| SAR <sub>iso</sub> [%] | With Correction Algorithm    | 0.2                               | 0.4  |
| Head                   | 1900 MHz                     | Typical SAR gradient: 10 % per mm |      |
| Probe Tip to Boundary  |                              | 1 mm                              | 2 mm |
| SAR <sub>iso</sub> [%] | Without Correction Algorithm | 11.4                              | 7.8  |
| SAR <sub>iso</sub> [%] | With Correction Algorithm    | 0.3                               | 0.4  |

**Sensor Offset**

|                            |               |    |
|----------------------------|---------------|----|
| Probe Tip to Sensor Center | 2.7           | mm |
| Optical Surface Detection  | 1.6 $\pm 0.2$ | mm |

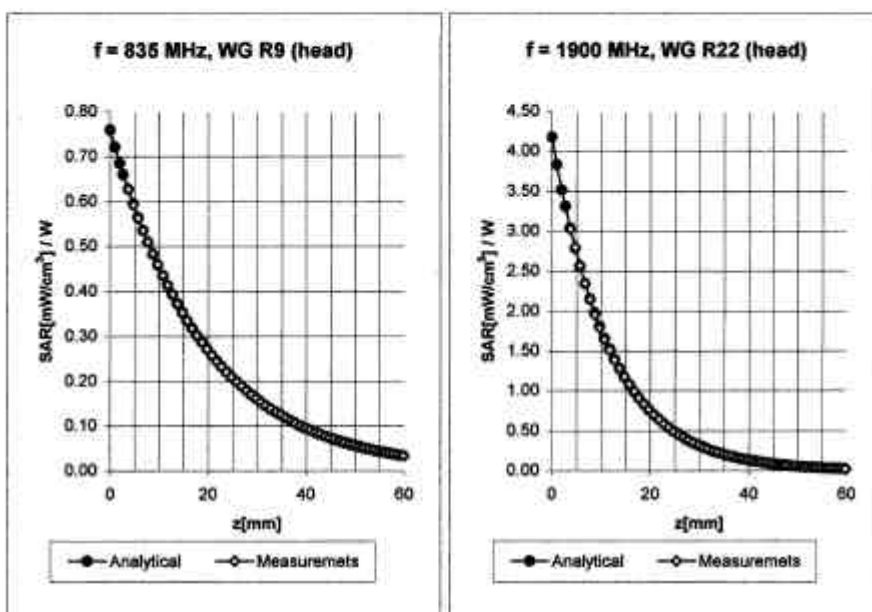


|                                                                             |               |                             |                                                           |
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June 20, 2002

### Conversion Factor Assessment



|      |          |                             |                                       |      |
|------|----------|-----------------------------|---------------------------------------|------|
| Head | 835 MHz  | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.90 \pm 5\% \text{ mho/m}$ |      |
| Head | 900 MHz  | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |      |
|      | ConvF X  | $6.8 \pm 9.5\% (k=2)$       | Boundary effect:                      |      |
|      | ConvF Y  | $6.8 \pm 9.5\% (k=2)$       | Alpha                                 | 0.40 |
|      | ConvF Z  | $6.8 \pm 9.5\% (k=2)$       | Depth                                 | 2.18 |
| Head | 1900 MHz | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |      |
| Head | 1800 MHz | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |      |
|      | ConvF X  | $5.2 \pm 9.5\% (k=2)$       | Boundary effect:                      |      |
|      | ConvF Y  | $5.2 \pm 9.5\% (k=2)$       | Alpha                                 | 0.49 |
|      | ConvF Z  | $5.2 \pm 9.5\% (k=2)$       | Depth                                 | 2.40 |



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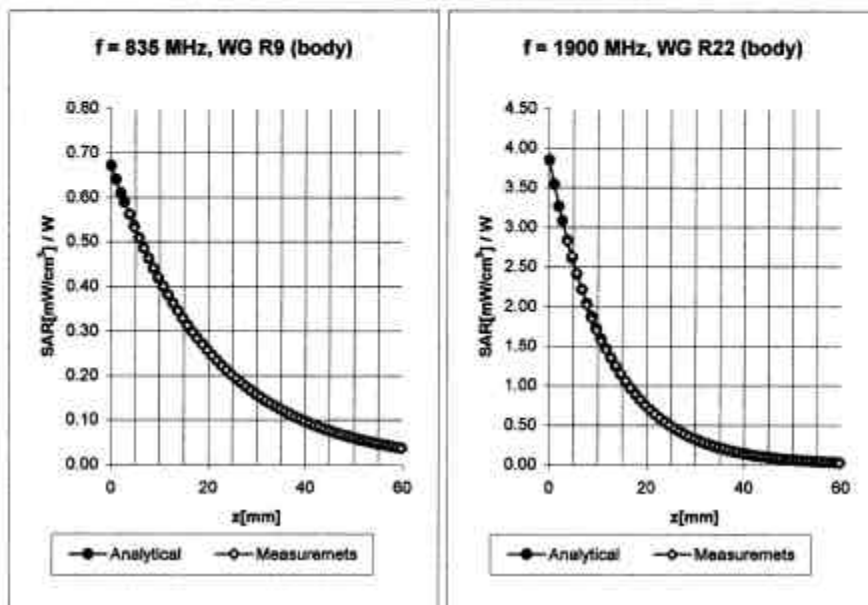
53(67)

|                                                                             |               |                             |                                                        |
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### Conversion Factor Assessment



|      |          |                             |                                       |
|------|----------|-----------------------------|---------------------------------------|
| Body | 835 MHz  | $\epsilon_r = 55.2 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
| Body | 900 MHz  | $\epsilon_r = 55.0 \pm 5\%$ | $\sigma = 1.05 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | $6.5 \pm 9.5\% (k=2)$       | Boundary effect:                      |
|      | ConvF Y  | $6.5 \pm 9.5\% (k=2)$       | Alpha 0.37                            |
|      | ConvF Z  | $6.5 \pm 9.5\% (k=2)$       | Depth 2.38                            |
| Body | 1900 MHz | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
| Body | 1800 MHz | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | $4.9 \pm 9.5\% (k=2)$       | Boundary effect:                      |
|      | ConvF Y  | $4.9 \pm 9.5\% (k=2)$       | Alpha 0.68                            |
|      | ConvF Z  | $4.9 \pm 9.5\% (k=2)$       | Depth 2.09                            |



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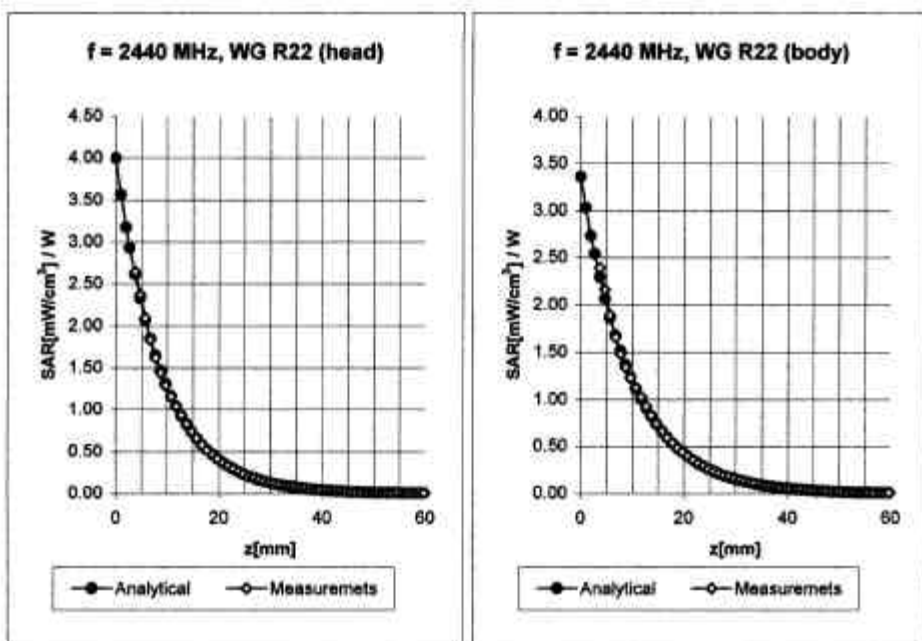
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|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
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## Conversion Factor Assessment



|             |                       |                             |                                        |
|-------------|-----------------------|-----------------------------|----------------------------------------|
| <b>Head</b> | <b>2440 MHz</b>       | $\epsilon_r = 39.2 \pm 5\%$ | $\sigma = 1.80 \pm 10\% \text{ mho/m}$ |
| ConvF X     | $5.0 \pm 8.9\% (k=2)$ | Boundary effect:            |                                        |
| ConvF Y     | $5.0 \pm 8.9\% (k=2)$ | Alpha                       | <b>1.00</b>                            |
| ConvF Z     | $5.0 \pm 8.9\% (k=2)$ | Depth                       | <b>1.63</b>                            |

|             |                       |                             |                                        |
|-------------|-----------------------|-----------------------------|----------------------------------------|
| <b>Body</b> | <b>2440 MHz</b>       | $\epsilon_r = 52.7 \pm 5\%$ | $\sigma = 1.95 \pm 10\% \text{ mho/m}$ |
| ConvF X     | $4.3 \pm 8.9\% (k=2)$ | Boundary effect:            |                                        |
| ConvF Y     | $4.3 \pm 8.9\% (k=2)$ | Alpha                       | <b>1.00</b>                            |
| ConvF Z     | $4.3 \pm 8.9\% (k=2)$ | Depth                       | <b>1.59</b>                            |



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|                                                                             |               |                             |                                                           |
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## Appendix 5

### Measurement Uncertainty Budget



|                                                                             |               |                             |                                                        |
|-----------------------------------------------------------------------------|---------------|-----------------------------|--------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                        |
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**Table 1. Uncertainty Budget for System Performance Check (Dipole & flat phantom)**

| a                                                                                              | b        | c          | d           | e = f(d,k) | f                    | g                     | h =<br>c x f / e        | i =<br>c x g / e         | k              |
|------------------------------------------------------------------------------------------------|----------|------------|-------------|------------|----------------------|-----------------------|-------------------------|--------------------------|----------------|
| Uncertainty Component                                                                          | Sec.     | Tol. (± %) | Prob. Dist. | Div.       | c <sub>i</sub> (1-g) | c <sub>i</sub> (10-g) | 1-g u <sub>i</sub> (±%) | 10-g u <sub>i</sub> (±%) | v <sub>i</sub> |
| <b>Measurement System</b>                                                                      |          |            |             |            |                      |                       |                         |                          |                |
| Probe Calibration (k=1)                                                                        | E.2.1    | 4.8        | N           | 1          | 1                    | 1                     | 4.8                     | 4.8                      | ∞              |
| Axial Isotropy                                                                                 | E.2.2    | 4.7        | R           | 1.73       | 0.707                | 0.707                 | 1.9                     | 1.9                      | ∞              |
| Hemispherical Isotropy                                                                         | E.2.2    | 9.6        | R           | 1.73       | 0.707                | 0.707                 | 3.9                     | 3.9                      | ∞              |
| Boundary Effect                                                                                | E.2.3    | 8.3        | R           | 1.73       | 1                    | 1                     | 4.8                     | 4.8                      | ∞              |
| Linearity                                                                                      | E.2.4    | 4.7        | R           | 1.73       | 1                    | 1                     | 2.7                     | 2.7                      | ∞              |
| System Detection Limits                                                                        | E.2.5    | 1.0        | R           | 1.73       | 1                    | 1                     | 0.6                     | 0.6                      | ∞              |
| Readout Electronics                                                                            | E.2.6    | 1.0        | N           | 1          | 1                    | 1                     | 1.0                     | 1.0                      | ∞              |
| Response Time                                                                                  | E.2.7    | 0.0        | R           | 1.73       | 1                    | 1                     | 0.0                     | 0.0                      | ∞              |
| Integration Time                                                                               | E.2.8    | 0.0        | R           | 1.73       | 1                    | 1                     | 0.0                     | 0.0                      | ∞              |
| RF Ambient Conditions                                                                          | E.6.1    | 3.0        | R           | 1.73       | 1                    | 1                     | 1.7                     | 1.7                      | ∞              |
| Probe Positioner Mechanical Tolerance (corresponds to the mechanical constraints of the robot) | E.6.2    | 0.4        | R           | 1.73       | 1                    | 1                     | 0.2                     | 0.2                      | ∞              |
| Probe Positioning with respect to Phantom Shell                                                | E.6.3    | 2.9        | R           | 1.73       | 1                    | 1                     | 1.7                     | 1.7                      | ∞              |
| Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation                | E.5      | 3.9        | R           | 1.73       | 1                    | 1                     | 2.3                     | 2.3                      | ∞              |
| <b>Dipole</b>                                                                                  |          |            |             |            |                      |                       |                         |                          |                |
| Dipole Axis to Liquid Distance                                                                 | 8, E.4.2 | 1.0        | R           | 1.73       | 1                    | 1                     | 0.6                     | 0.6                      | ∞              |
| Input Power and SAR Drift Measurement                                                          | 8, 6.6.2 | 5.0        | R           | 1.73       | 1                    | 1                     | 2.9                     | 2.9                      | ∞              |
| <b>Phantom and Tissue Parameters</b>                                                           |          |            |             |            |                      |                       |                         |                          |                |
| Phantom Uncertainty - shell thickness tolerance                                                | E.3.1    | 4.0        | R           | 1.73       | 1                    | 1                     | 2.3                     | 2.3                      | ∞              |
| Liquid Conductivity - deviation from target values (5)                                         | E.3.2    | 4.2        | R           | 1.73       | 0.64                 | 0.43                  | 1.55                    | 1.04                     | ∞              |
| Liquid Conductivity - measurement uncertainty (6)                                              | E.3.3    | 6.20       | R           | 1.73       | 0.64                 | 0.43                  | 2.29                    | 1.54                     | ∞              |
| Liquid Permittivity - deviation from target values (5)                                         | E.3.2    | 3.3        | R           | 1.73       | 0.6                  | 0.49                  | 1.14                    | 0.93                     | ∞              |
| Liquid Permittivity - measurement uncertainty (6)                                              | E.3.3    | 6.08       | R           | 1.73       | 0.6                  | 0.49                  | 2.11                    | 1.72                     | ∞              |
| <b>Combined Standard Uncertainty</b>                                                           |          |            | RSS         |            |                      |                       | 10.59                   | 10.29                    |                |
| <b>Expanded Uncertainty</b><br>(95% CONFIDENCE LEVEL)                                          |          |            |             |            |                      |                       | 21.17                   | 20.59                    |                |



|                                                                             |               |                             |                                                        |
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| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702 (T306)\XHIBIT11\getDoc.doc |

**Table 2. Uncertainty Budget for the Device Under Test**

| <i>a</i>                                                                                      | <i>b</i> | <i>c</i>      | <i>d</i>       | <i>e = f(d,k)</i> | <i>f</i>                      | <i>g</i>                       | <i>h =<br/>c × f / e</i>            | <i>i =<br/>c × g / e</i>             | <i>k</i>             |
|-----------------------------------------------------------------------------------------------|----------|---------------|----------------|-------------------|-------------------------------|--------------------------------|-------------------------------------|--------------------------------------|----------------------|
| Uncertainty Component                                                                         | Sec.     | Tol.<br>(± %) | Prob.<br>Dist. | Div.              | <i>c<sub>i</sub></i><br>(1-g) | <i>c<sub>i</sub></i><br>(10-g) | 1-g<br><i>u<sub>i</sub></i><br>(±%) | 10-g<br><i>u<sub>i</sub></i><br>(±%) | <i>v<sub>i</sub></i> |
| <b>Measurement System</b>                                                                     |          |               |                |                   |                               |                                |                                     |                                      |                      |
| Probe Calibration ( <i>k</i> =1)                                                              | E.2.1    | 4.8           | N              | 1                 | 1                             | 1                              | 4.8                                 | 4.8                                  | ∞                    |
| Axial Isotropy                                                                                | E.2.2    | 4.7           | R              | 1.73              | 0.707                         | 0.707                          | 1.9                                 | 1.9                                  | ∞                    |
| Hemispherical Isotropy                                                                        | E.2.2    | 9.6           | R              | 1.73              | 0.707                         | 0.707                          | 3.9                                 | 3.9                                  | ∞                    |
| Boundary Effect                                                                               | E.2.3    | 8.3           | R              | 1.73              | 1                             | 1                              | 4.8                                 | 4.8                                  | ∞                    |
| Linearity                                                                                     | E.2.4    | 4.7           | R              | 1.73              | 1                             | 1                              | 2.7                                 | 2.7                                  | ∞                    |
| System Detection Limits                                                                       | E.2.5    | 1.0           | R              | 1.73              | 1                             | 1                              | 0.6                                 | 0.6                                  | ∞                    |
| Readout Electronics                                                                           | E.2.6    | 1.0           | N              | 1                 | 1                             | 1                              | 1.0                                 | 1.0                                  | ∞                    |
| Response Time                                                                                 | E.2.7    | 0.8           | R              | 1.73              | 1                             | 1                              | 0.5                                 | 0.5                                  | ∞                    |
| Integration Time                                                                              | E.2.8    | 1.4           | R              | 1.73              | 1                             | 1                              | 0.8                                 | 0.8                                  | ∞                    |
| RF Ambient Conditions                                                                         | E.6.1    | 3.0           | R              | 1.73              | 1                             | 1                              | 1.7                                 | 1.7                                  | ∞                    |
| Probe Positioner Mechanical Tolerance (corresponds to the mechanical constrains of the robot) | E.6.2    | 0.4           | R              | 1.73              | 1                             | 1                              | 0.2                                 | 0.2                                  | ∞                    |
| Probe Positioning with respect to Phantom Shell                                               | E.6.3    | 2.9           | R              | 1.73              | 1                             | 1                              | 1.7                                 | 1.7                                  | ∞                    |
| Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation               | E.5      | 3.9           | R              | 1.73              | 1                             | 1                              | 2.3                                 | 2.3                                  | ∞                    |
| <b>Test sample Related</b>                                                                    |          |               |                |                   |                               |                                |                                     |                                      |                      |
| Test Sample Positioning                                                                       | E.4.2    | 1.2           | N              | 1                 | 1                             | 1                              | 1.2                                 | 1.2                                  | 4                    |
| Device Holder Uncertainty                                                                     | E.4.1    | 1.2           | R              | 1.73              | 1                             | 1                              | 0.7                                 | 0.7                                  | 4                    |
| Output Power Variation - SAR drift measurement (4)                                            | 6.6.2    | 5.0           | R              | 1.73              | 1                             | 1                              | 2.9                                 | 2.9                                  | ∞                    |
| <b>Phantom and Tissue Parameters</b>                                                          |          |               |                |                   |                               |                                |                                     |                                      |                      |
| Phantom Uncertainty (shape and thickness tolerances)                                          | E.3.1    | 4.0           | R              | 1.73              | 1                             | 1                              | 2.3                                 | 2.3                                  | ∞                    |
| Liquid Conductivity - deviation from target values (5)                                        | E.3.2    | 4.2           | R              | 1.73              | 0.64                          | 0.43                           | 1.6                                 | 1.0                                  | ∞                    |
| Liquid Conductivity - measurement uncertainty (6)                                             | E.3.3    | 6.20          | R              | 1.73              | 0.64                          | 0.43                           | 2.3                                 | 1.5                                  | ∞                    |
| Liquid Permittivity - deviation from target values (5)                                        | E.3.2    | 3.3           | R              | 1.73              | 0.6                           | 0.49                           | 1.1                                 | 0.9                                  | ∞                    |
| Liquid Permittivity - measurement uncertainty (6)                                             | E.3.3    | 6.08          | R              | 1.73              | 0.6                           | 0.49                           | 2.1                                 | 1.7                                  | ∞                    |
| <b>Combined Standard Uncertainty</b>                                                          |          |               | RSS            |                   |                               |                                | 10.71                               | 10.40                                |                      |
| <b>Expanded Uncertainty</b>                                                                   |          |               | K=2            |                   |                               |                                | 21.41                               | 20.80                                |                      |



|                                                                             |               |                             |                                                        |
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|                        |  |  |  |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|--|--|
| (95% CONFIDENCE LEVEL) |  |  |  |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|--|--|

Table 3a. Values for  $e'$ 

| Uncertainty Component                | Tolerance ( $\pm\%$ ) | Probability Distribution | Divisor | $c_i$ | Standard Uncertainty ( $\pm\%$ ) | $v_i$ or $v_{eff}$ |
|--------------------------------------|-----------------------|--------------------------|---------|-------|----------------------------------|--------------------|
| Repeatability (n repeats)            | 0.97                  | N                        | 1       | 1     | 0.97                             | 4                  |
| Network analyzer uncertainty sources | 8.38                  | R                        | 1.73    | 1     | 4.83                             | $\infty$           |
| Dielectric Error Sources             | 5.93                  | R                        | 1.73    | 1     | 3.42                             | $\infty$           |
| <b>Combined standard uncertainty</b> |                       |                          |         |       | 6.08                             |                    |

Table 3b. Values for  $s$ 

| Uncertainty Component                | Tolerance ( $\pm\%$ ) | Probability Distribution | Divisor | $c_i$ | Standard Uncertainty ( $\pm\%$ ) | $v_i$ or $v_{eff}$ |
|--------------------------------------|-----------------------|--------------------------|---------|-------|----------------------------------|--------------------|
| Repeatability (n repeats)            | 1.85                  | N                        | 1       | 1     | 1.85                             | 4                  |
| Network analyzer uncertainty sources | 8.38                  | R                        | 1.73    | 1     | 4.83                             | $\infty$           |
| Dielectric Error Sources             | 5.93                  | R                        | 1.73    | 1     | 3.42                             | $\infty$           |
| <b>Combined standard uncertainty</b> |                       |                          |         |       | 6.20                             |                    |



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## Appendix 6

### Photographs of the device under test



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|                                                                             |               |                             |                                                           |
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Front view of device



Back view of device



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|                                                                             |               |                             |                                                           |
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**Side view of device**



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|                                                                             |               |                             |                                                           |
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**Front, back, and side views of carry accessory model ICT-14.**



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|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

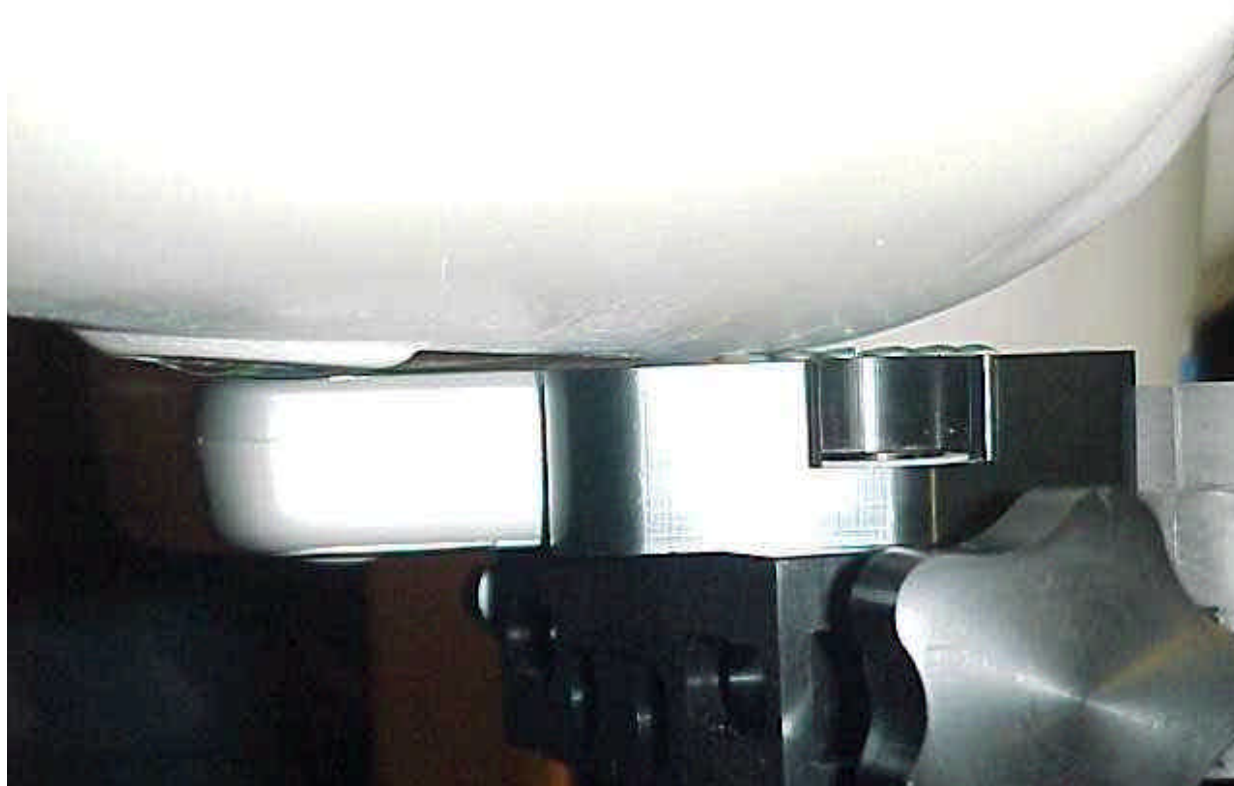


Front, back, and side views of carry accessory model ICE-25.

## Position of Device on Phantom



|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |



**Position of device against head phantom using the “cheek” position**



65(67)

|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

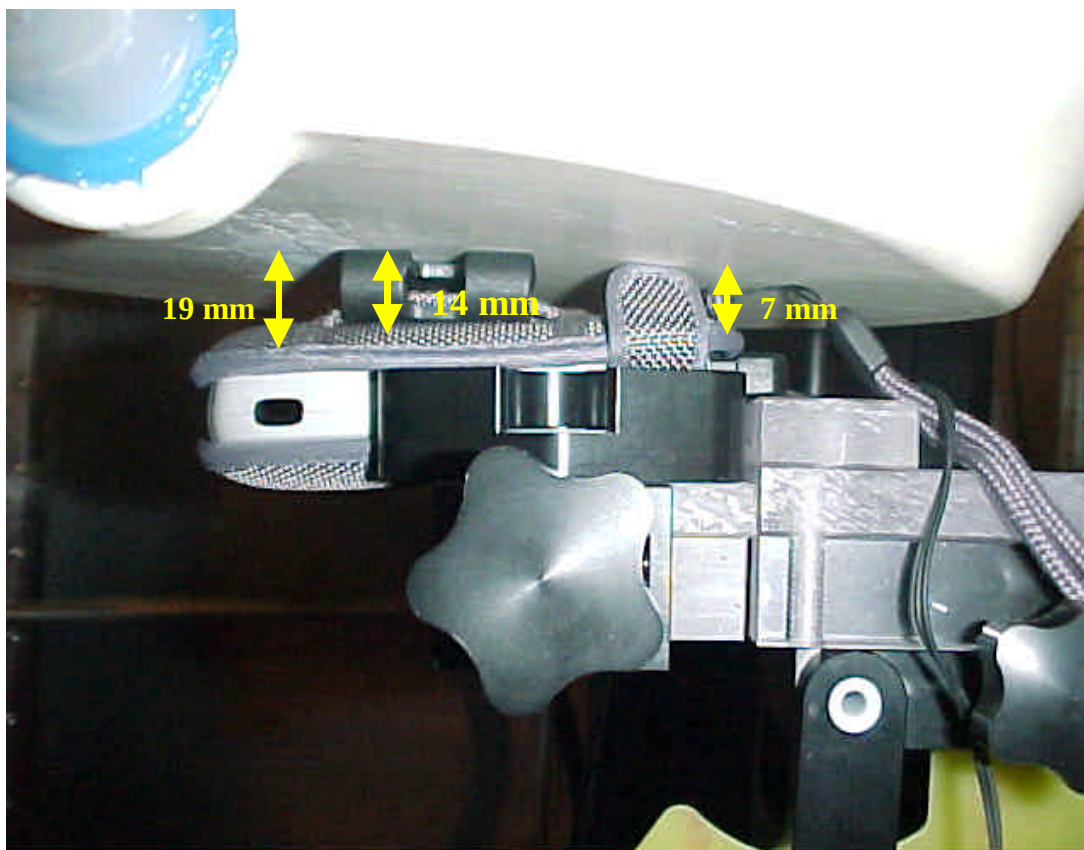


**Position of device against head phantom using the “tilt” position**



66(67)

|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |

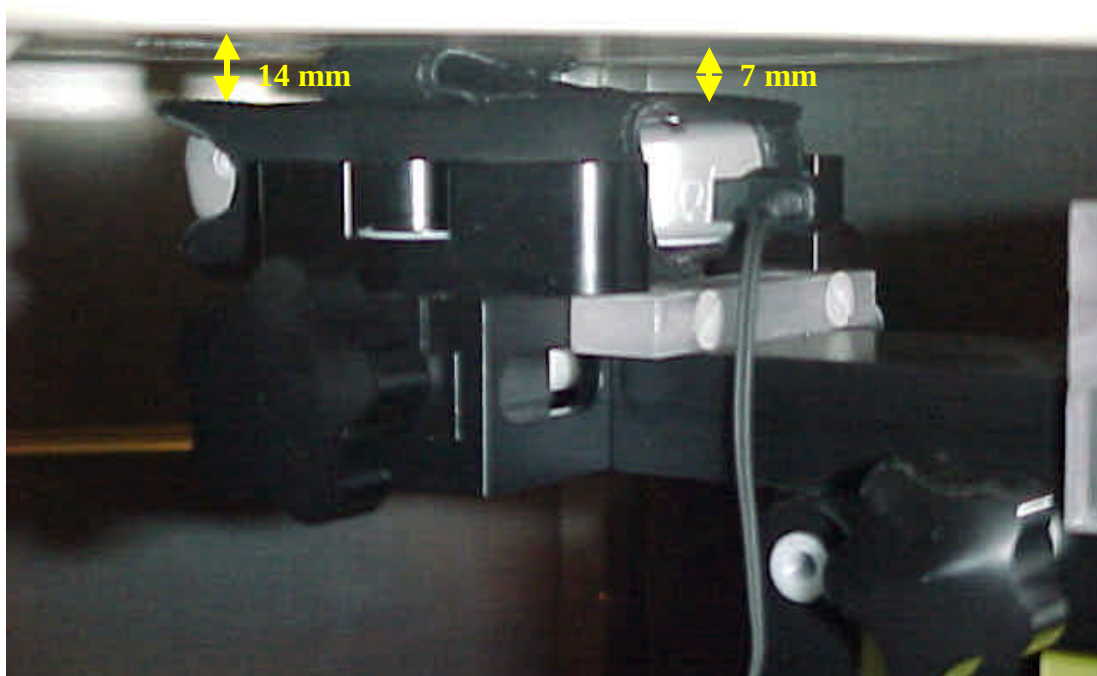


**Position of device against flat phantom using carry accessory ICT-14 with hands free accessory RLF 501 25/04**



67(67)

|                                                                             |               |                             |                                                           |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-----------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/D-02:0344/REP |                                                           |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | B                           | U:\FCC Submittals\Fcc_G0702<br>(T306)\XHIBIT11\getDoc.doc |



**Position of device against flat phantom using carry accessory ICE-25 with hands free  
accessory RLF 501 25/04**