

**Model PMUF1105A**  
**EME Response to Q4 of FCC Correspondence 22631**

**Test procedures:**

The “worst case” configurations were repeated for each body position. Two sets of measurements were performed at the face and the abdomen. The first measurement recreated the same conditions as was reported to the FCC. For the second measurement a “shortened” test was performed as requested. See the table and S.A.R. scans below for detailed results.

**Summary of data:**

|                                                                   | Battery  | Carry Acc            | Run time<br>(min) | Init Pwr<br>(W) | End Pwr<br>(W) | Meas SAR<br>(1g) | SAR<br>calculated<br>with power<br>slump | SAR with<br>50% duty<br>cycle |
|-------------------------------------------------------------------|----------|----------------------|-------------------|-----------------|----------------|------------------|------------------------------------------|-------------------------------|
| <b>Abdomen</b>                                                    |          |                      |                   |                 |                |                  |                                          |                               |
| 1                                                                 | HNN9013B | HLN6602A<br>Chest Pk | 31                | 2.99            | 2.68           | 9.48             | 10.58                                    | <b>5.29</b>                   |
| 2                                                                 | HNN9013B | HLN6602A<br>Chest Pk | 6                 | 2.98            | 2.83           | 10.8             | NA                                       | <b>5.40</b>                   |
| <b>Highest results originally reported to the FCC for abdomen</b> |          |                      |                   |                 |                |                  |                                          |                               |
| 3                                                                 | HNN9013B | HLN6602A<br>Chest Pk |                   | 2.99            | 2.71           | 9.64             | 10.64                                    | 5.32                          |
| <b>Face</b>                                                       |          |                      |                   |                 |                |                  |                                          |                               |
| 4                                                                 | HNN9012A | None                 | 31                | 3.11            | 2.75           | 2.55             | 2.86                                     | <b>1.44</b>                   |
| 5                                                                 | HNN9012A | None                 | 6                 | 3.07            | 2.85           | 2.67             | NA                                       | <b>1.34</b>                   |
| <b>Highest results originally reported to the FCC for face</b>    |          |                      |                   |                 |                |                  |                                          |                               |
| 6                                                                 | HNN9012A | None                 |                   | 3.11            | 2.78           | 2.76             | 3.09                                     | 1.54                          |

**Conclusion:**

The results at the abdomen reflect a 2.0 % delta between the “shortened” measurement results and the “complete” calculated S.A.R. results. The results at the face reflect a 7.5 % delta between the “shortened” measurement results and the “complete” calculated S.A.R. results.

## **S.A.R. Results Scans**

**HT1250LS 700MHz; Test Date: 04/22/02**

**Motorola CGISS EME Laboratory**

Run #: Ab\_R1\_020422-02

Model #: PMUF1105A SN: WQCWB03X

TX Freq: 794 MHz

Tissue Temp: 21.3 (Celsius)

- Accessories -

Antenna: NAF5083A 1/2wave Battery Kit: HNN9013B

Chest Pack HLN6602A Audio: None

- Comments-

**Time of scan 31 min.**

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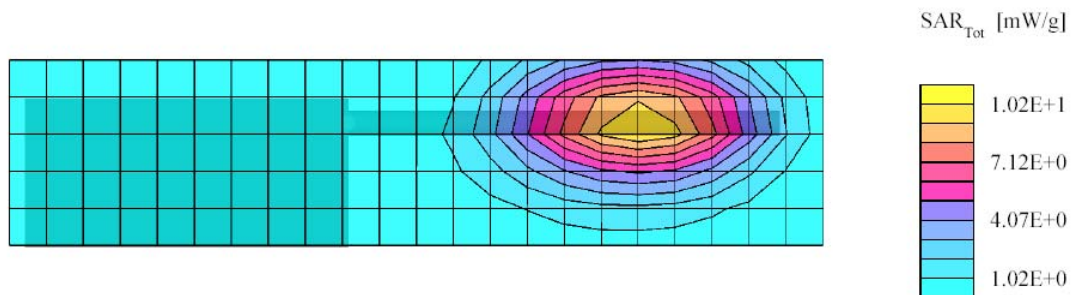
Flat Phantom Phantom; Device Section; Position: (90°,0°);

Probe: ET3DV6 - SN1547; ConvF(6.30,6.30,6.30); Probe cal date: 11/16/01; Crest factor: 1.0; FCC

Body\_770MHz:  $\sigma = 0.94$  mho/m  $\epsilon = 53.2$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Cube 7x7x7: SAR (1g): 9.48 mW/g, SAR (10g): 6.48 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0; Max at 256.5, 49.5, 4.0



**HT1250LS 700MHz; Test Date: 04/22/02**

**Motorola CGISS EME Laboratory**

Run #: Ab\_R1\_020422-02

Model #: PMUF1105A SN: WQCWB03X

TX Freq: 794 MHz

Tissue Temp: 21.3 (Celsius)

- Accessories -

Antenna: NAF5083A 1/2wave Battery Kit: HNN9013B

Chest Pack HLN6602A Audio: None

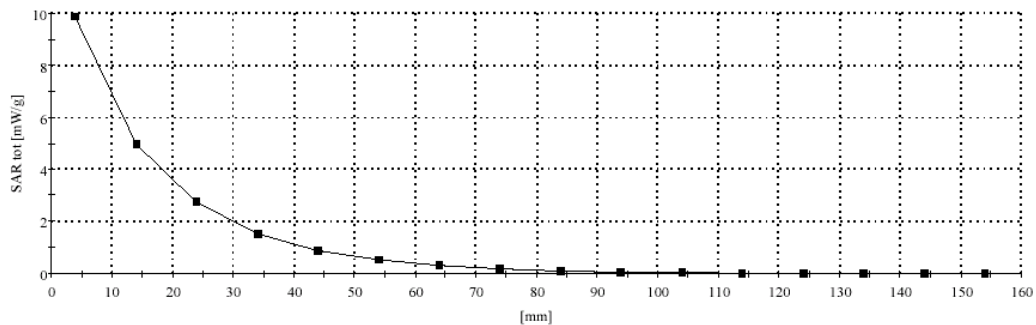
- Comments-

Flat Phantom; Section; Position: ; Frequency: 746 MHz

Probe: ET3DV6 - SN1547; ConvF(6.30,6.30,6.30); Crest factor: 1.0; FCC Body\_770MHz:  $\sigma = 0.94$  mho/m

$\epsilon = 53.2$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 10.0,



**HT1250LS 700MHz; Test Date: 04/22/02**

**Motorola CGISS EME Laboratory**

Run #: Ab\_R1\_020422-03

Model #: PMUF1105A SN: WQCWB03X

TX Freq: 794 MHz

Tissue Temp: 21.3 (Celsius)

- Accessories -

Antenna: NAF5083A 1/2wave Battery Kit: HNN9013B

Chest Pack HLN6602A Audio: None

- Comments-

**Time of scan 6 min. (cube only)**

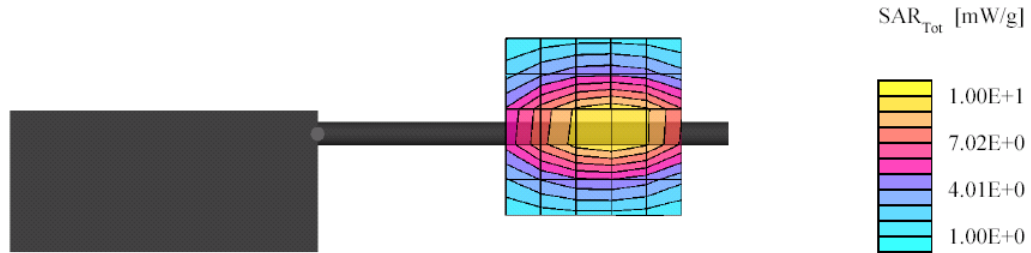
Flat Phantom Phantom; Device Section; Position: (90°,0°);

Probe: ET3DV6 - SN1547; ConvF(6.30,6.30,6.30); Probe cal date: 11/16/01; Crest factor: 1.0; FCC

Body\_770MHz:  $\sigma = 0.94$  mho/m  $\epsilon = 53.2$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Cube 5x5x7: SAR (1g): 10.8 mW/g, SAR (10g): 7.45 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0; Max at 45.0, 37.5, 4.0



**HT1250LS 700MHz; Test Date: 04/23/02**

**Motorola CGISS EME Laboratory**

Run #: Face\_R1\_020423-02

Model #: PMUF1105A SN: WQCWB03X

TX Freq: 794 MHz

Tissue Temp: 22.1 (Celsius)

- Accessories -

Antenna: NAF5083A 1/2wave Battery Kit: HNN9012A

Carry: None Audio: None

- Comments-

**Time of scan 31 min.**

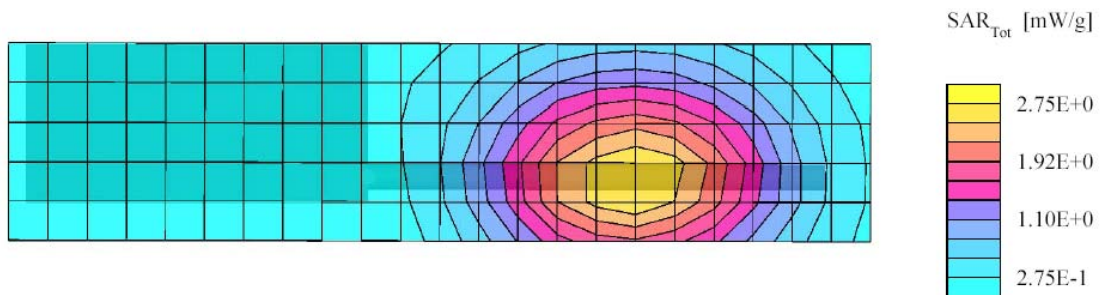
Flat Phantom Phantom; Device Section; Position: (90°,0°);

Probe: ET3DV6 - SN1547; ConvF(6.40,6.40,6.40); Probe cal date: 11/16/01; Crest factor: 1.0; IEEE

Head\_770 MHz:  $\sigma = 0.85$  mho/m  $\epsilon = 43.8$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Cube 7x7x7: SAR (1g): 2.55 mW/g, SAR (10g): 1.82 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0; Max at 240.0, 22.5, 4.0



**HT1250LS 700MHz; Test Date: 04/23/02**

**Motorola CGISS EME Laboratory**

Run #: Face\_R1\_020423-02

Model #: PMUF1105A SN: WQCWB03X

TX Freq: 794 MHz

Tissue Temp: 22.1 (Celsius)

- Accessories -

Antenna: NAF5083A 1/2wave Battery Kit: HNN9012A

Carry: None Audio: None

- Comments-

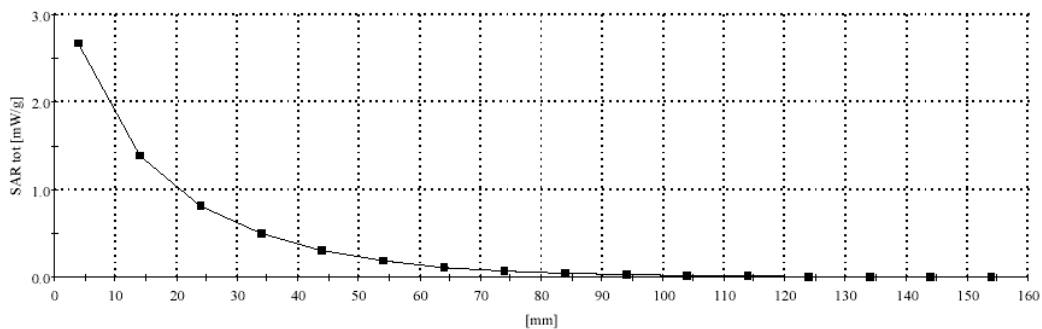
**Time of scan 31 min**

Flat Phantom Phantom; Section; Position; Frequency: 776 MHz

Probe: ET3DV6 - SN1547; ConvF(6.40,6.40,6.40); Crest factor: 1.0; IEEE Head\_770 MHz:  $\sigma = 0.85$

mho/m  $\epsilon = 43.8$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 10.0,



**HT1250LS 700MHz; Test Date: 04/23/02**

**Motorola CGISS EME Laboratory**

Run #: Face\_R1\_020423-03

Model #: PMUF1105A SN: WQCWB03X

TX Freq: 794 MHz

Tissue Temp: 22.1 (Celsius)

- Accessories -

Antenna: NAF5083A 1/2wave Battery Kit: HNN9012A

Carry: None Audio: None

- Comments -

**Time of scan 6 min. (cube only)**

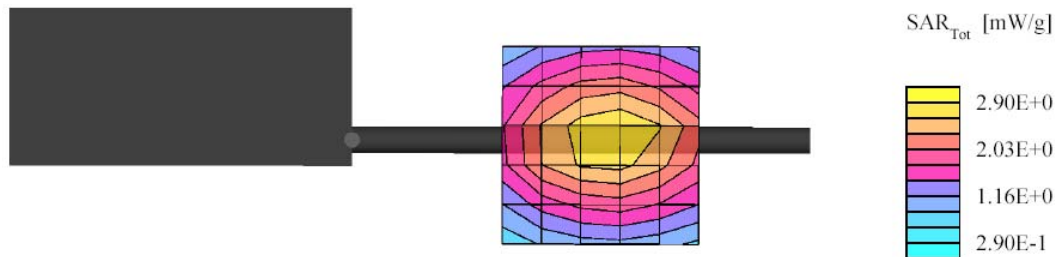
Flat Phantom Phantom; Device Section; Position: (90°,0°);

Probe: ET3DV6 - SN1547; ConvF(6.40,6.40,6.40); Probe cal date: 11/16/01; Crest factor: 1.0; IEEE

Head\_770 MHz:  $\sigma = 0.85$  mho/m  $\epsilon = 43.8$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Cubes (2): SAR (1g): 2.67 mW/g  $\pm 0.00$  dB, SAR (10g): 1.90 mW/g  $\pm 0.02$  dB, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0; Max at 43.5, 40.5, 4.0



## **System Performance Check Scans**

## SPEAG Dipole 835MHz. Test Date:04/22/02

Run #: Sys Perf\_R1\_020422-01

Model #: D835V2 SN: 427

TX Freq: 835 MHz

Tissue Temp: 21.3 (Celsius)

Start Power; 250mW

### - Comments-

Target at 1W is 10.82

Flat Phantom; Device

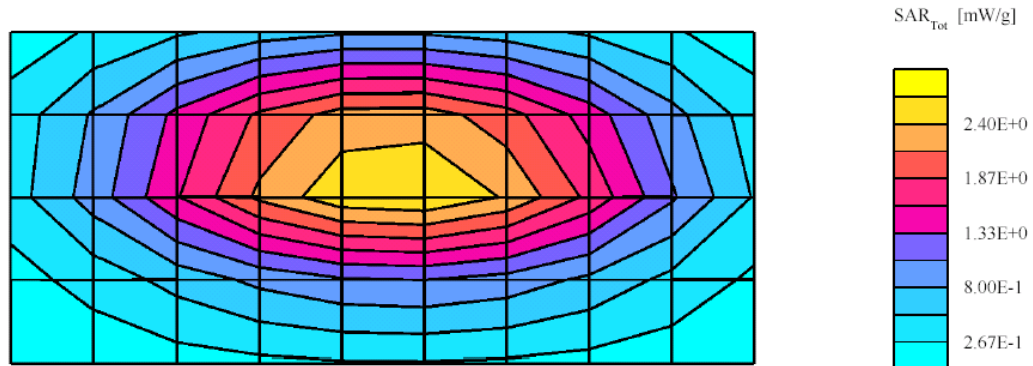
Probe: ET3DV6 - SN1547; Probe Cal Date: 11/16/01 ConvF(6.20,6.20,6.20); Crest factor: 1.0; FCC

Body\_835 MHz:  $\sigma = 1.00$  mho/m  $\epsilon = 52.5$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: 401-V1 DAE Cal Date: 10/15/01

Cube 7x7x7: Peak: 4.31 mW/g, SAR (1g): 2.72 mW/g, SAR (10g): 1.74 mW/g, (Worst-case extrapolation)

Penetration depth: 12.3 (10.9, 14.2) [mm]

Power drift: -0.01 dB



## SPEAG Dipole 835MHz. Test Date:04/23/02

Run #: Sys Perf\_R1\_020423-01

Model #: D835V2 SN: 427

TX Freq: 835 MHz

Tissue Temp: 22.1 (Celsius)

Start Power; 250mW

- Comments-

Target at 1W is 9.74

Flat Phantom; Device

Probe: ET3DV6 - SN1547; Probe Cal Date: 11/16/01 ConvF(6.40,6.40,6.40); Crest factor: 1.0; IEEE

Head\_835 MHz:  $\sigma = 0.90$  mho/m  $\epsilon = 42.8$   $\rho = 1.00$  g/cm<sup>3</sup>; DAE3: SN401-V1 DAE Cal Date: 10/15/01

Cube 7x7x7: Peak: 3.96 mW/g, SAR (1g): 2.43 mW/g, SAR (10g): 1.55 mW/g, (Worst-case extrapolation)

Penetration depth: 11.9 (10.5, 13.9) [mm]

Power drift: 0.01 dB

