

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 (min)	Init Pwr (W)	End Pwr (W)	Meas SAR (1g)	SAR calculated with power slump	SAR with 50% duty cycle
Abdomen								
1	HNN9013B	HLN6602A Chest Pk	31	2.99	2.68	9.48	10.58	5.29
2	HNN9013B	HLN6602A Chest Pk	6	2.98	2.83	10.8	NA	5.40
Highest results originally reported to the FCC for abdomen								
3	HNN9013B	HLN6602A Chest Pk		2.99	2.71	9.64	10.64	5.32
Face								
4	HNN9012A	None	31	3.11	2.75	2.55	2.86	1.44
5	HNN9012A	None	6	3.07	2.85	2.67	NA	1.34
Highest results originally reported to the FCC for face								
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.

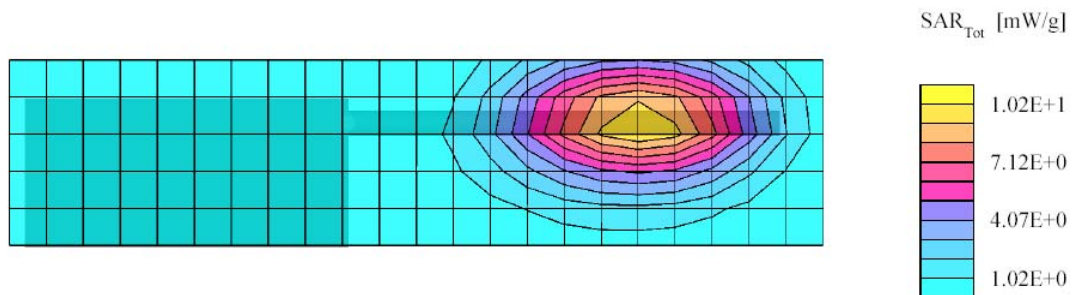
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Flat Phantom Phantom; Device Section; Position: (90°,0°);

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/cm³; 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

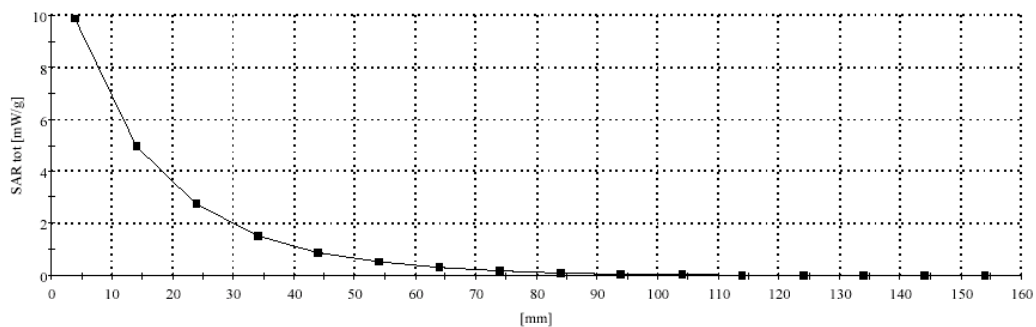
- Comments-

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/cm³; 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)

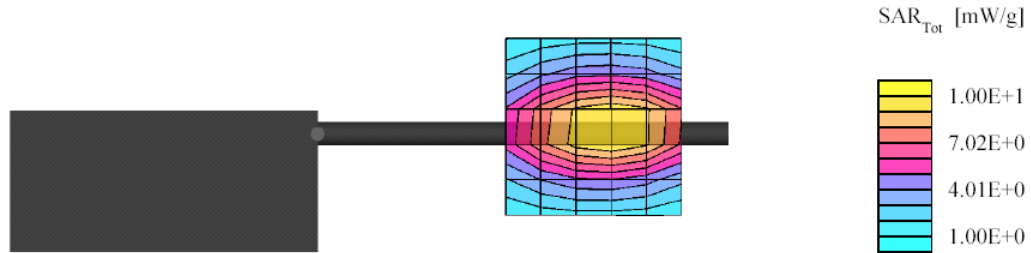
Flat Phantom Phantom; Device Section; Position: (90°,0°);

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/cm³; 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.

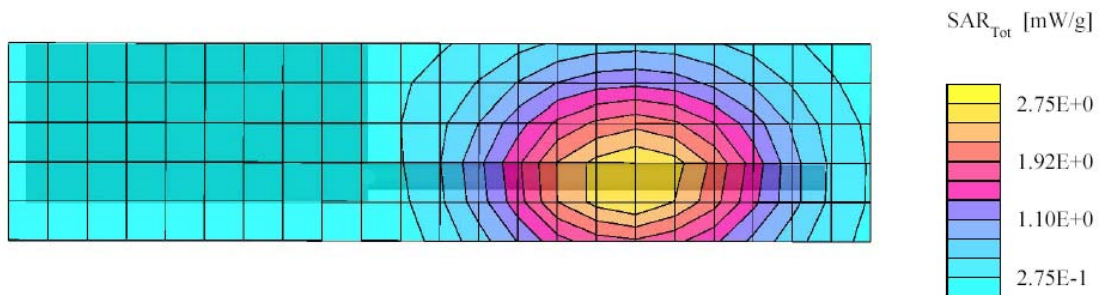
Flat Phantom Phantom; Device Section; Position: (90°,0°);

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/cm³; 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-

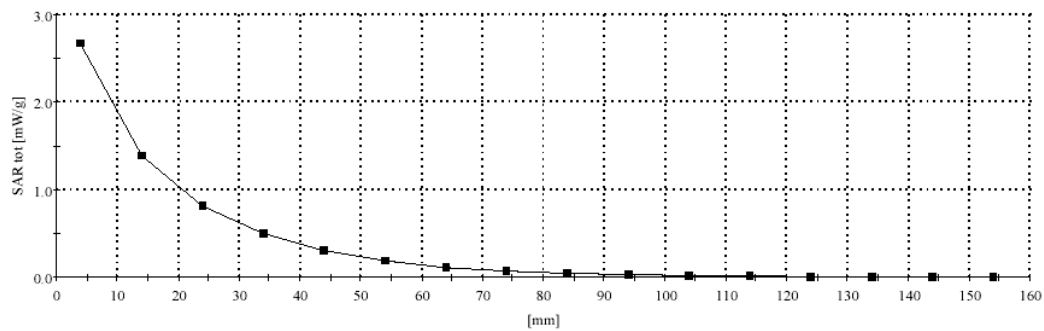
Time of scan 31 min

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/cm³; 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)

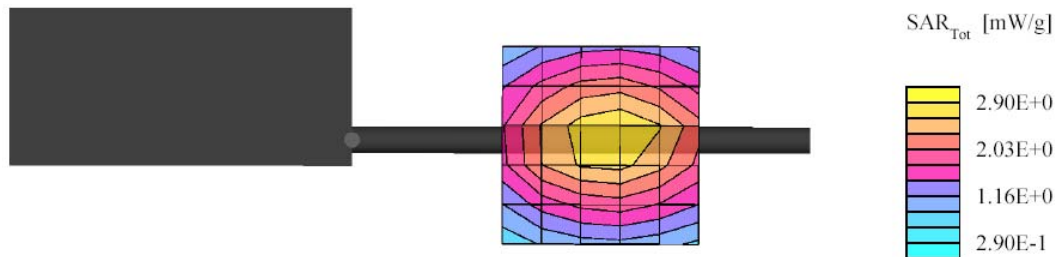
Flat Phantom Phantom; Device Section; Position: (90°,0°);

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/cm³; DAE3: 401-V1 DAE Cal Date: 10/15/01

Cubes (2): SAR (1g): 2.67 mW/g ± 0.00 dB, SAR (10g): 1.90 mW/g ± 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

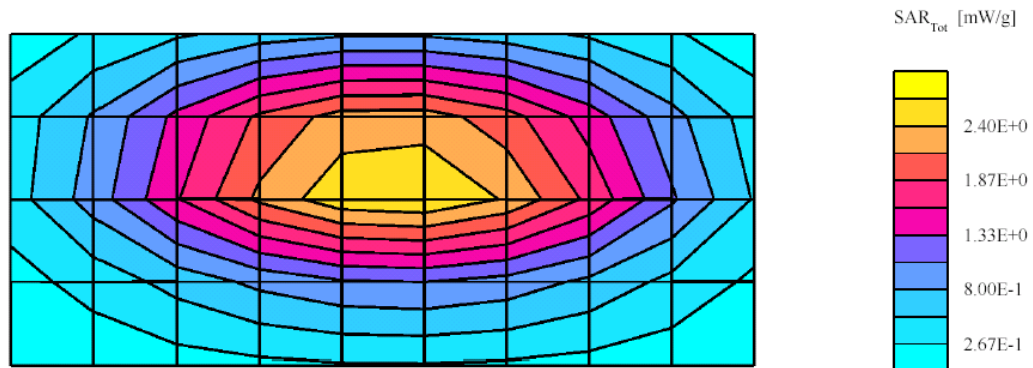
Probe: ET3DV6 - SN1547; Probe Cal Date: 11/16/01 ConvF(6.20,6.20,6.20); Crest factor: 1.0; FCC

Body_835 MHz: $\sigma = 1.00$ mho/m $\epsilon = 52.5$ $\rho = 1.00$ g/cm³; 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/cm³; 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

