



**MOTOROLA**

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Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56EG1)

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## Summary of FCC request for additional information

There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56EG1). The requested information is addressed below in the same numbering sequence received.

3. The PCS right touch SAR data was taken on 9/1/04, however, there is no validation data for that date, nor do the tissue parameters match those values listed in the Table on p.4 of the SAR report. Please address.

**Response:** The tissue parameter data and the validation data were not entered into the appropriate tables. Attached here are the corrected tables. The validation scans are attached below in the Supplement to Appendix 1.

### 4 Electrical parameters of the tissue simulating liquid

| f<br>(MHz) | Tissue<br>type | Limits / Measured    | Dielectric Parameters |                |              |
|------------|----------------|----------------------|-----------------------|----------------|--------------|
|            |                |                      | $\epsilon_r$          | $\sigma$ (S/m) | Temp<br>(°C) |
| 835        | Head           | Measured, 08/30/2004 | 41.6                  | 0.91           | 20.3         |
|            |                | Recommended Limits   | 41.5 ±5%              | 0.90 ±5%       | 18-25        |
|            | Body           | Measured, 08/30/2004 | 55.1                  | 0.97           | 20.3         |
|            |                | Recommended Limits   | 55.2 ±5%              | 0.97 ±5%       | 18-25        |
| 1880       | Head           | Measured, 08/31/2004 | 39.8                  | 1.47           | 20.3         |
|            |                | Measured, 09/01/2004 | 39.5                  | 1.47           | 20.5         |
|            |                | Recommended Limits   | 40.0 ±5%              | 1.40 ±5%       | 18-25        |
|            | Body           | Measured, 08/31/2004 | 53.0                  | 1.58           | 20.2         |
|            |                | Recommended Limits   | 53.3 ±5%              | 1.52 ±5%       | 18-25        |

### 5 System Accuracy Verification

| f<br>(MHz) | Description          | SAR<br>(W/kg),<br>1gram | Dielectric Parameters |                | Ambient<br>Temp<br>(°C) | Tissue<br>Temp<br>(°C) |
|------------|----------------------|-------------------------|-----------------------|----------------|-------------------------|------------------------|
|            |                      |                         | $\epsilon_r$          | $\sigma$ (S/m) |                         |                        |
| 900        | Measured, 08/30/2004 | 11.5                    | 40.8                  | 0.97           | 19.0                    | 20.6                   |
|            | Recommended Limits   | 11.4                    | 41.5 ±5%              | 0.97 ±5%       | 18-25                   | 18-25                  |
| 1800       | Measured, 08/31/2004 | 39.4                    | 40.1                  | 1.38           | 21.0                    | 20.4                   |
|            | Measured, 09/01/2004 | 38.96                   | 39.9                  | 1.38           | 21.0                    | 20.4                   |
|            | Recommended Limits   | 40.7                    | 40.0 ±5%              | 1.4 ±5%        | 18-25                   | 18-25                  |

**Supplement to Appendix 1 of the Original Report**  
**SAR distribution comparison for the system accuracy verification**

# Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 276tr

PM1 Power = 201mW

Sim.Temp@meas=20.66°C Sim.Temp@SPC = 20.4°C Room Temp @ SPC = 21°C

R8 Glycol TP-1138 SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz

Probe: ET3DV6R - SN1501 - Validation4; ConvF(4.79,4.79,4.79); Crest factor: 1.0; 1800 MHz VALIDATION:  $\sigma = 1.38$  mho/m  $\epsilon_r = 39.9$   $\rho = 1.00$  g/cm<sup>3</sup>

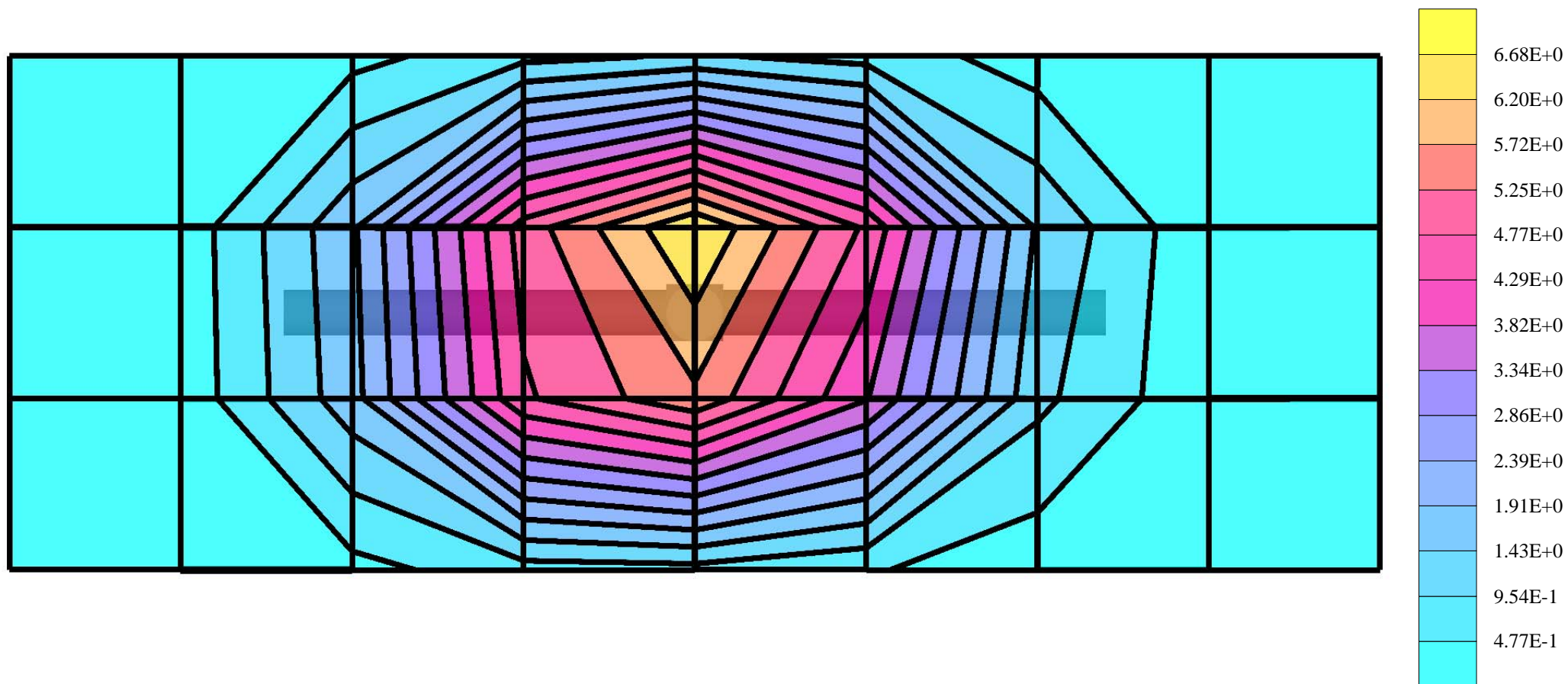
Cubes (2): SAR (1g): 7.83 mW/g  $\pm$  0.04 dB, SAR (10g): 4.14 mW/g  $\pm$  0.04 dB, (Worst-case extrapolation)

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

Penetration depth: 8.4 (8.1, 9.1) [mm]

Powerdrift: 0.06 dB

SAR<sub>Tot</sub> [mW/g]



# Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 276tr

PM1 Power = 201mW

Sim.Temp@meas=20.66°C Sim.Temp@SPC = 20.4°C Room Temp @ SPC = 21°C

R8 Glycol TP-1138 SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 1800 MHz

Probe: ET3DV6R - SN1501 - Validation4; ConvF(4.79,4.79,4.79); Crest factor: 1.0; 1800 MHz VALIDATION:  $\sigma = 1.38$  mho/m  $\epsilon_r = 39.9$   $\rho = 1.00$  g/cm<sup>3</sup>

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Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0

Penetration depth: 8.3 (8.0, 9.1) [mm]

