



MOTOROLA

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Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56DR1)

Prepared by:

Firass Badaruzzaman

Motorola Personal Communications Sector Product Safety Laboratory

Libertyville, Illinois

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 IHDT56DR1). The requested information is addressed below in the same numbering sequence received.

1. The measured SAR values were not listed on the data plot sheets for the 900 MHz Validation tests ran on 10/17/03 and 11/09/03. Please submit new data plot sheets for these tests that list the measured SAR values.

Response: Please look at appendix 1 for the corrected plots.

2. Was the embedded Bluetooth transmitter active during the SAR testing?

Response: The portable unit was SAR tested by placing a regular call with Blue tooth enabled and disabled

3. There appears to be a typo in Table 1, p. 8: the right head touch measured SAR should be 1.34, per the data sheet. Please confirm. This might be the highest SAR level measured, and so would be placed on the grant.

Response: There were a few typos in table 1. The corrected values have been highlighted blue in the table below. Hence the highest SAR level for Part 22. Head is 1.40 W/kg and for Part 24 Head is 1.40 W/kg.

| <i>f</i> (MHz) | Description | Conducted Output Power (dBm) | Check Position SAR, 1g | | | | | | | |
|-------------------|-------------|------------------------------|------------------------|------------|---------------------|-----------|-------------------|------------|---------------------|-----------|
| | | | <i>Left Head</i> | | | | <i>Right Head</i> | | | |
| | | | Measured (W/kg) | Drift (dB) | Extrapolated (W/kg) | Temp (°C) | Measured (W/kg) | Drift (dB) | Extrapolated (W/kg) | Temp (°C) |
| 850MHz | Channel 128 | 32.98 | 1.03 | -0.11 | 1.06 | 20 | 0.882 | -0.69 | 1.03 | 20 |
| | Channel 190 | 32.96 | 1.15 | -0.10 | 1.18 | 19.9 | 1.07 | 0.05 | 1.07 | 20 |
| | Channel 251 | 32.97 | 1.20 | -0.28 | 1.28 | 20 | 1.34 | -0.18 | 1.40 | 19.9 |
| 1900MHz | Channel 512 | 29.99 | 1.05 | -0.22 | 1.10 | 20.1 | 1.16 | -0.22 | 1.22 | 20.2 |
| | Channel 661 | 30.00 | 1.18 | -0.20 | 1.24 | 20.2 | 1.24 | -0.29 | 1.33 | 20 |
| | Channel 810 | 30.00 | 1.19 | -0.18 | 1.24 | 20.1 | 1.29 | -0.37 | 1.40 | 20.2 |

4. Please correct the following typos:

(a) Per the System Performance Test results, the recommended limit for the 900 MHz Validation test listed on p.6 should be 11.6.

(b) Per the data sheet, the 900 MHz Validation test result for the test performed on 10/11/03 listed on p.6 should be 11.04.

Response: There were a few typos in the System Validation table. The corrected table is provided below:

| <i>f</i> (MHz) | Description | SAR (W/kg), 1gram | Dielectric Parameters | | Ambient Temp (°C) | Tissue Temp (°C) |
|-------------------|---------------------------|-------------------------|--------------------------|----------------|-------------------------|------------------------|
| | | | ϵ_r | σ (S/m) | | |
| 900 | Measured, 11-Oct-03 | 11.04 | 40.40 | 0.96 | 20 | 20.7 |
| | Measured, 17-Oct-03 | 11.15 | 40.70 | 0.96 | 21 | 20.1 |
| | Measured, 9-Nov-03 | 11.32 | 40.70 | 0.97 | 21 | 20.7 |
| | Recommended Limits | 11.60 | 41.5 ±5% | 0.97 ±5% | 15-30 | 15-30 |
| 1800 | Measured, 11-Oct-03 | 40.80 | 40.40 | 1.37 | 20 | 20 |
| | Measured, 12-Oct-03 | 39.84 | 38.70 | 1.36 | 20 | 20.1 |
| | Measured, 18-Oct-03 | 40.48 | 39.20 | 1.35 | 20 | 19.5 |
| | Measured, 11-Nov-03 | 42.57 | 38.20 | 1.38 | 20 | 20.4 |
| | Recommended Limits | 39.70 | 40.0 ±5% | 1.4 ±5% | 15-30 | 15-30 |

Appendix 1 (Requested SAR Plots)

Dipole 900 MHz

900 MHz System Performance Check / Dipole Sn# 78 / Forward Power = 251mW / Acceptable Temp Range is 18-25°C Room Temp at time of measurement = 21C. Simulant Temp at time of measurement = 20.1C

R# 2 TP-1106 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz

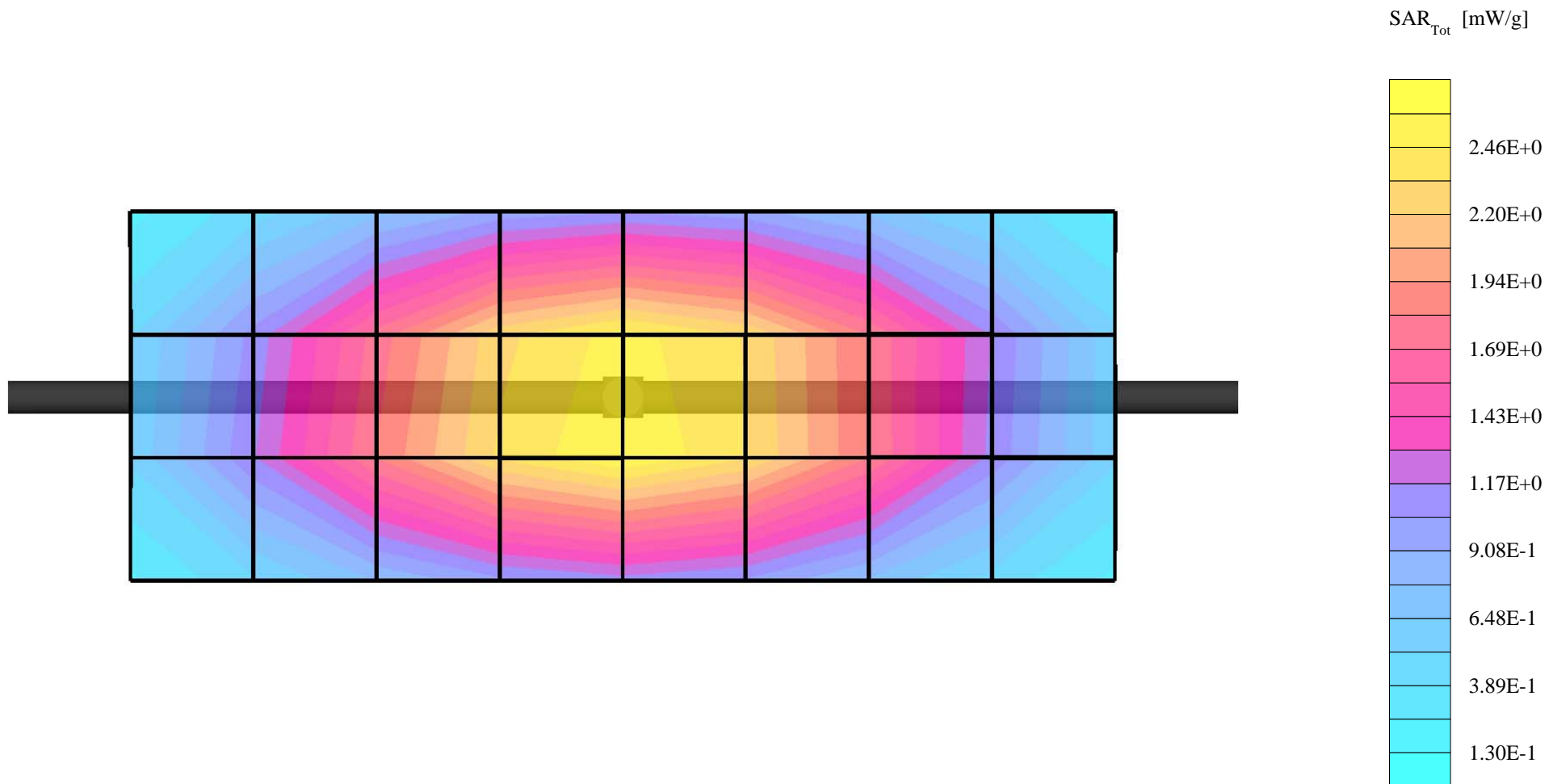
Probe: ET3DV6 - SN1522 - Validation2; ConvF(4.70,4.70,4.70); Crest factor: 1.0; 900 MHz VALIDATION: $\sigma = 0.96$ mho/m $\epsilon_r = 40.7$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 4.43 mW/g ± 0.10 dB, SAR (1g): 2.80 mW/g ± 0.09 dB, SAR (10g): 1.78 mW/g ± 0.08 dB, (Worst-case extrapolation)

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

Penetration depth: 11.5 (10.6, 12.6) [mm]

Powerdrift: -0.03 dB



Dipole 900 MHz

900 MHz System Performance Check / Dipole Sn# 078 / Forward Power = 250mW / Acceptable Temp Range is 18-25°C Room Temp at time of measurement = 21 C Simulant Temp at time of measurement =20.7 C

R# 2 TP-1106 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz

Probe: ET3DV6 - SN1522 - Validation2; ConvF(4.70,4.70,4.70); Crest factor: 1.0; 900 MHz VALIDATION: $\sigma = 0.97$ mho/m $\epsilon_r = 40.7$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 4.48 mW/g ± 0.03 dB, SAR (1g): 2.83 mW/g ± 0.03 dB, SAR (10g): 1.79 mW/g ± 0.03 dB, (Worst-case extrapolation)

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

Penetration depth: 11.5 (10.6, 12.6) [mm]

Powerdrift: 0.00 dB

