



MOTOROLA

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Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56DP1)

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Summary of FCC request for additional information

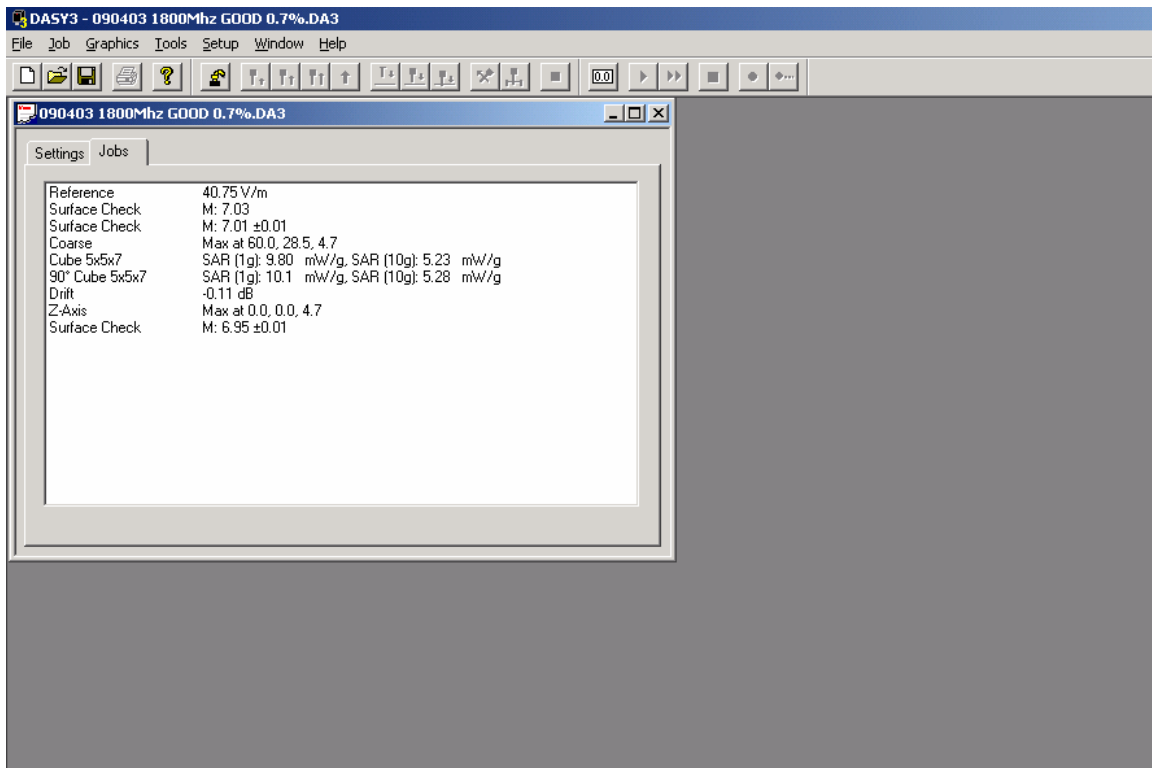
There was a request for additional information regarding Motorola's SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56DP1). The requested information is addressed below in the same numbering sequence received.

2. The 900 MHz validation plots taken on 9/4/03 do not list the actual SAR values. Please resubmit with the values included.

Response: Please look at appendix 1.

3. The z-axis plot for the 1800 MHz validation test does not list the actual SAR value. Please resubmit with the value included.

Response: A screen capture of the DASY job used for the SAR system validation is shown below. It can be seen that the sequence of the system validation test has a "reference" and "drift" before the z-axis measurement. In this particular plot the "drift" and the z-axis plot are performed at a certain location above the validation dipole known as the reference location. Since the z-axis plot along with the "drift" is performed at the reference location and not at the last evaluated point in the cube, these locations are different, hence the magnitude shown on the z-axis plots are different. The actual SAR validation numbers (1 gm and 10 gm) are not affected.



4. Please submit the SAR plots, worst case, for the following configurations:

- AMPS right head touch
- AMPS right head tilt
- CDMA left head tilt
- AMPS body belt clip rotated 90 degrees
- AMPS body leather pouch

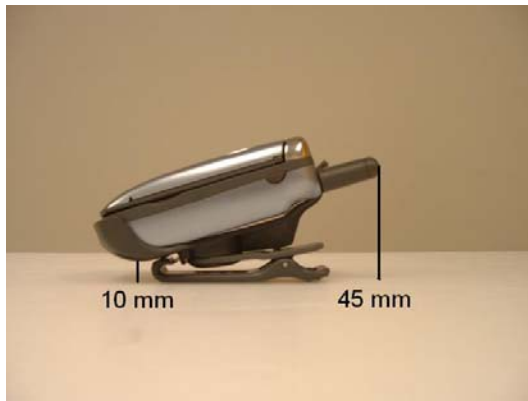
Response: Please look at appendix 1 for the requested plots.

5. Please correct the typo on p.8 of the SAR report: conversion factors for 835 MHz and 1900 MHz are reversed.

Response: Please look at the corrected table below:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ET3DV6	SN1521	835	6.30	8 of 9
		1900	4.70	8 of 9

6. Please submit photos of the body-worn accessories showing the separation distance that they provide from the body.



Appendix 1
Requested SAR Plots

Dipole 900 MHz

900 MHz Dipole Validation / Dipole Sn# 096 / Forward Power = 248mW / Acceptable Temp Range is 18-25°C Room Temp at time of measurement = 20.0°C. Simulant Temp at time of measurement = 20.7°C

R4 TP-1131 SUGAR sam expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz

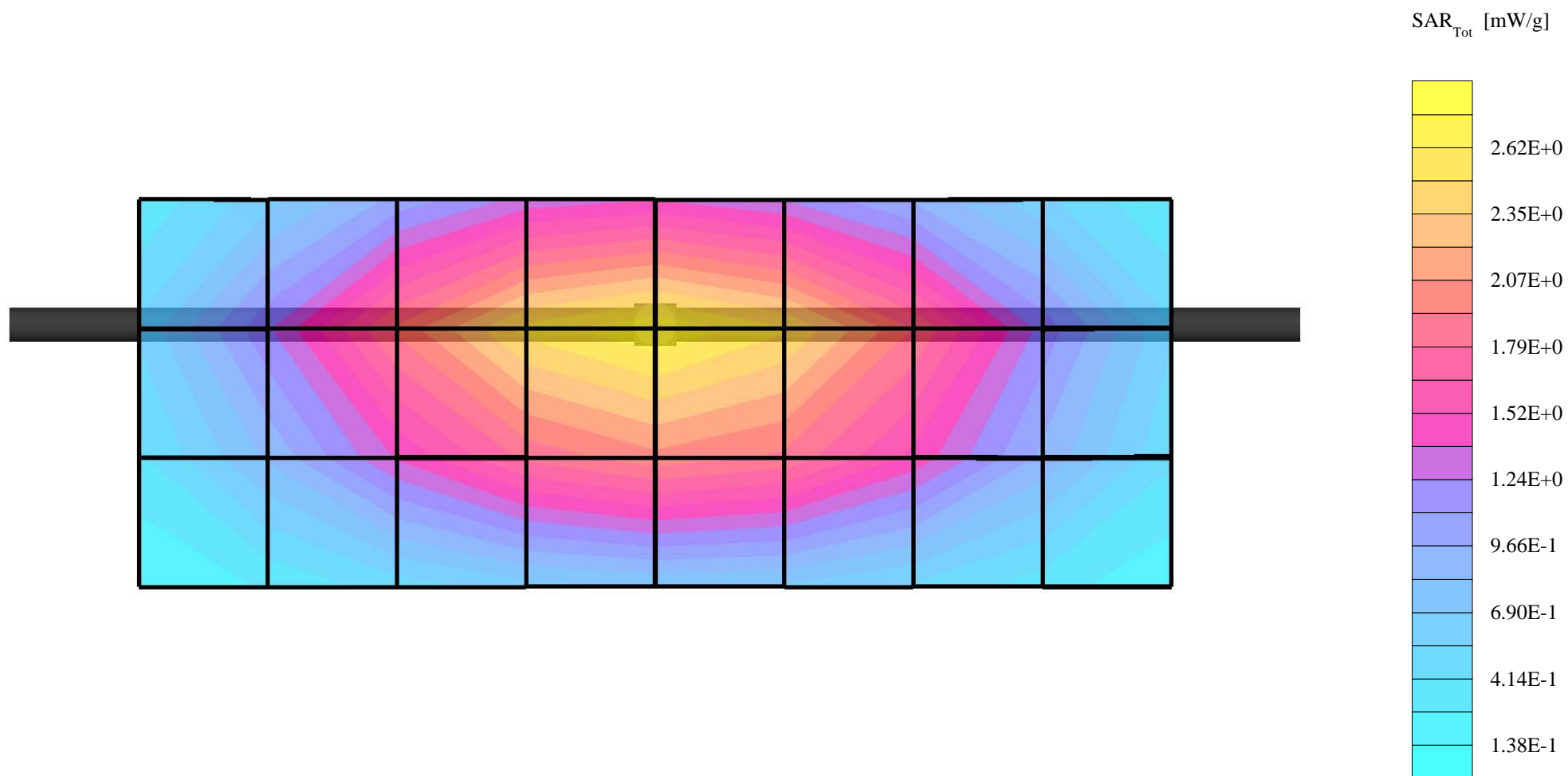
Probe: ET3DV6 - SN1521 - Validation.2; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 900 MHz VALIDATION: $\sigma = 0.94$ mho/m $\epsilon_r = 40.1$ $\rho = 1.00$ g/cm³

Cubes (2): SAR (1g): 2.76 mW/g ± 0.04 dB, SAR (10g): 1.75 mW/g ± 0.04 dB, (Worst-case extrapolation)

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

Penetration depth: 11.7 (10.9, 12.9) [mm]

Powerdrift: -0.00 dB



Serial# 3DF0C03F

Ch# 991 Pwr Step: ALWAYS UP / Antenna Position: FIXED / Battery Model #: SNN5705B / DEVICE POSITION: CHEEK

R4 TP-1131 SUGAR sam expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 824 MHz

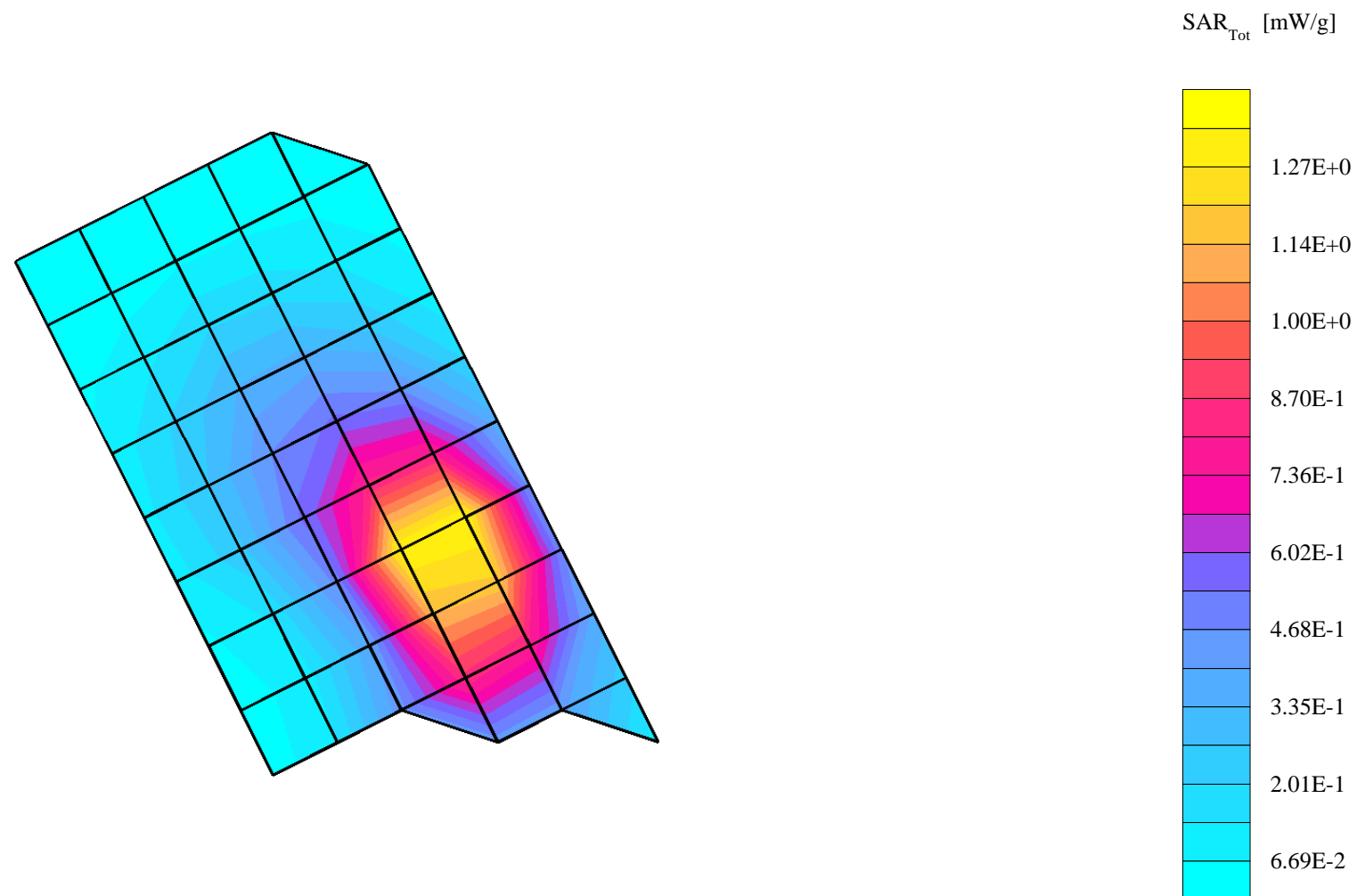
Probe: ET3DV6 - SN1521 - IEEE Head; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\epsilon_r = 41.3$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 1.46 mW/g, SAR (10g): 0.907 mW/g, (Worst-case extrapolation)

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

Penetration depth: 12.0 (10.8, 13.6) [mm]

Powerdrift: -0.19 dB



Serial# 3DF0C03F

Ch# 384 Pwr Step: ALWAYS UP / Antenna Position: FIXED / Battery Model #: SNN5705B / DEVICE POSITION:TILT

R4 TP-1131 SUGAR sam expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz

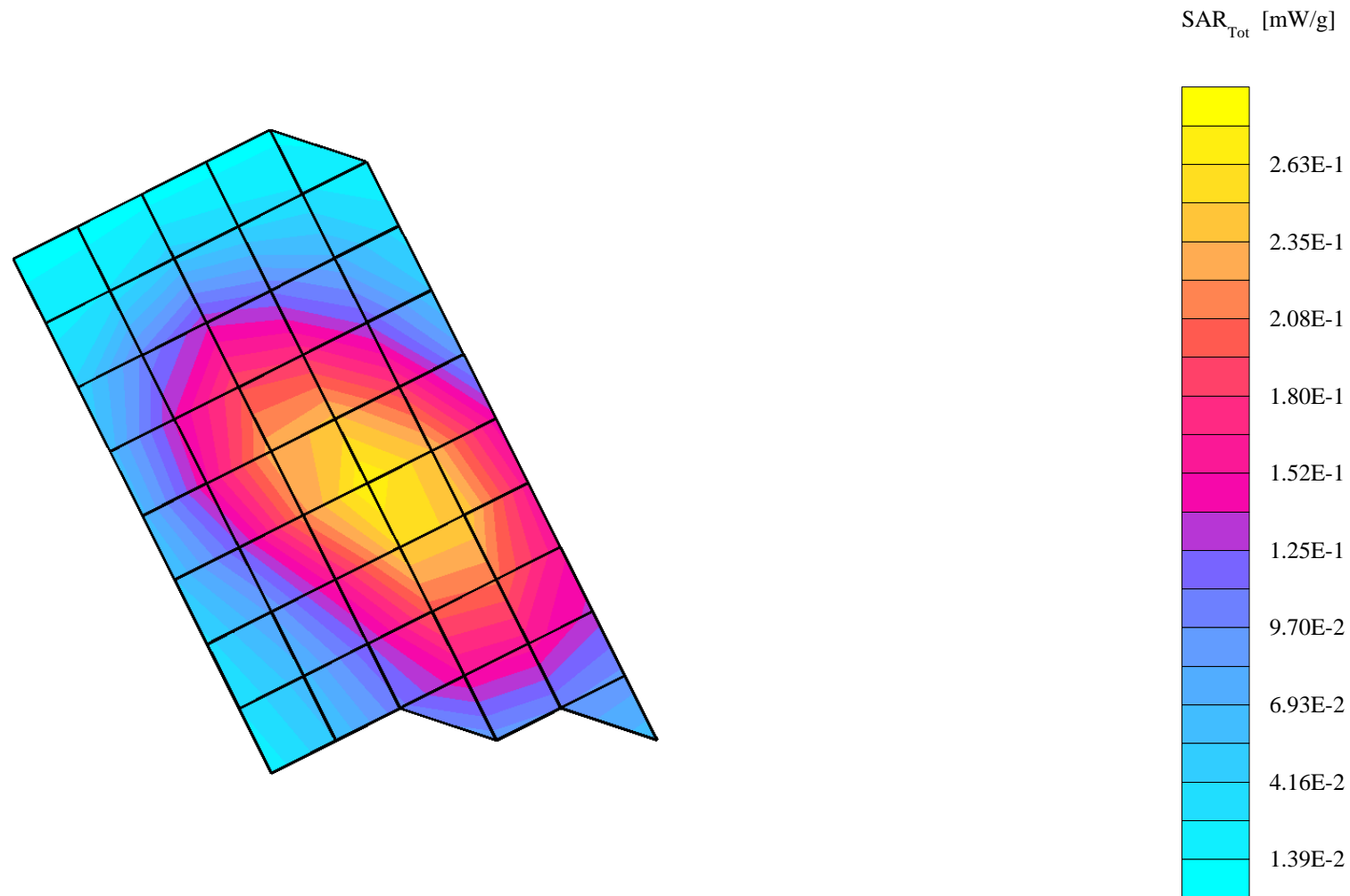
Probe: ET3DV6 - SN1521 - IEEE Head; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\epsilon_r = 41.3$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.282 mW/g, SAR (10g): 0.203 mW/g, (Worst-case extrapolation)

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

Penetration depth: 18.9 (17.7, 19.9) [mm]

Powerdrift: -0.12 dB



Serial# 3DF0C03F

Ch# 384 Pwr Step: ALWAYS UP / Antenna Position: FIXED / Battery Model #: SNN5705B / DEVICE POSITION: TILT

R4 TP-1131 SUGAR sam expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz

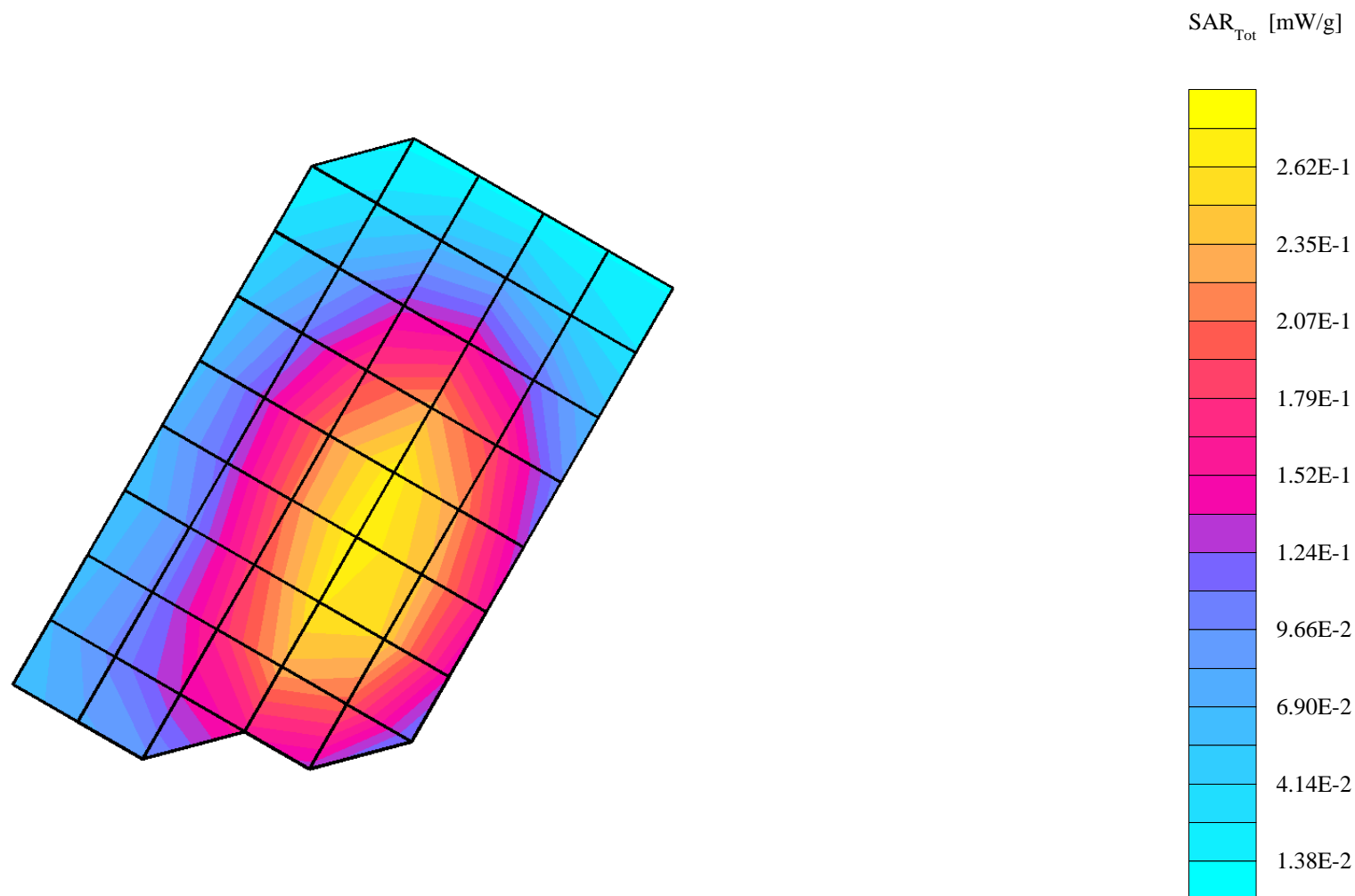
Probe: ET3DV6 - SN1521 - IEEE Head; ConvF(6.40,6.40,6.40); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\epsilon_r = 41.3$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.290 mW/g, SAR (10g): 0.215 mW/g, (Worst-case extrapolation)

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

Penetration depth: 19.9 (18.7, 21.0) [mm]

Powerdrift: 0.17 dB



Serial# 3DF0C03F

Ch# 384 Pwr Step: 2 (OTA) / Antenna Position: FIXED/ Battery Model #: SNN5705B / Accessory Model # = rotating holster (SYN0375A)+90*

R4 - Amy Twin Phantom Rev.4 (22Aug02) Phantom; section 1 Section; Position: (0°,0°); Frequency: 837 MHz

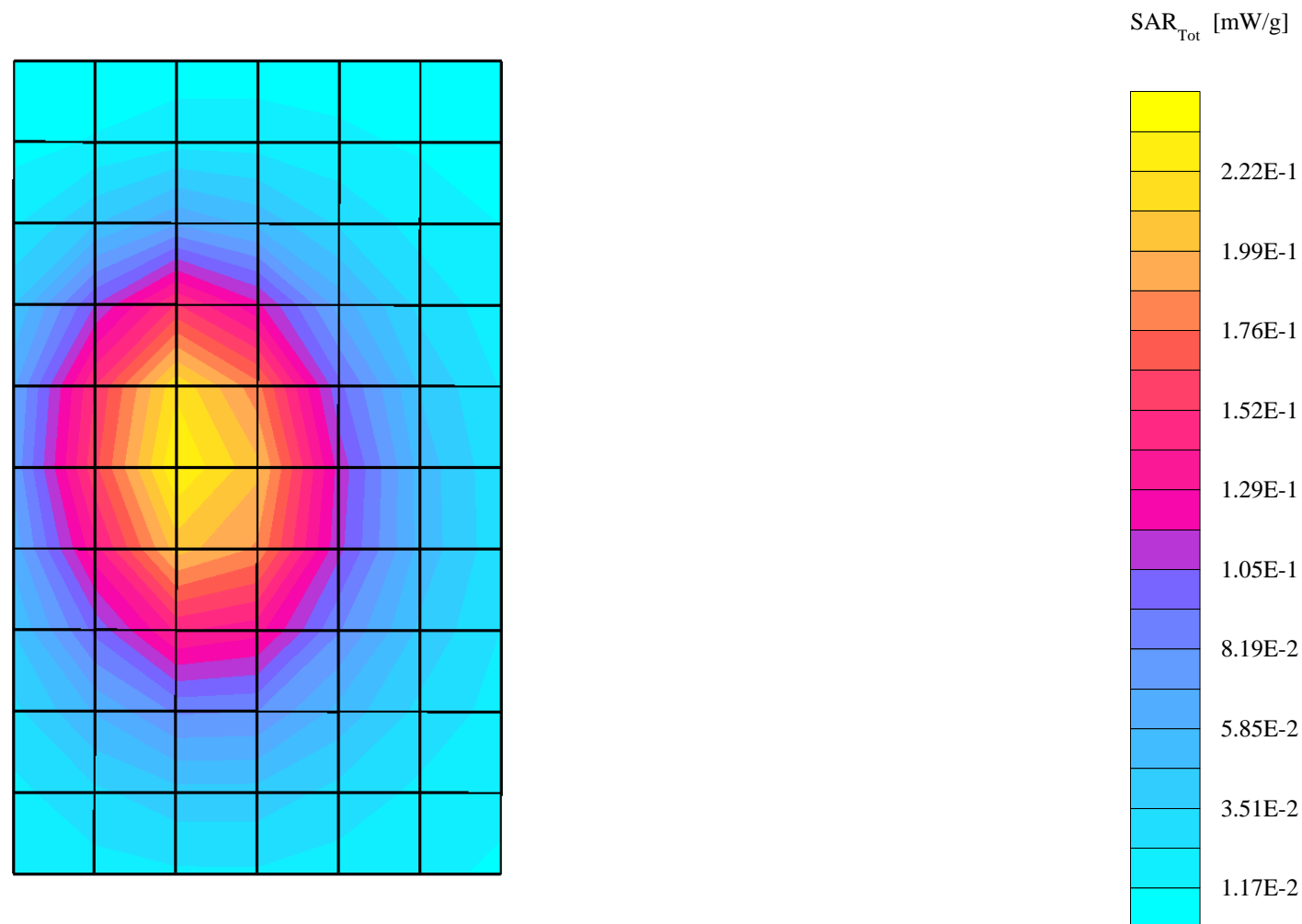
Probe: ET3DV6 - SN1521 - FCC Body; ConvF(6.30,6.30,6.30); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.97$ mho/m $\epsilon_r = 55.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.231 mW/g, SAR (10g): 0.162 mW/g, (Worst-case extrapolation)

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

Penetration depth: 15.6 (14.5, 16.9) [mm]

Powerdrift: -0.22 dB



Serial# 3DF0C03F

Ch# 384 Pwr Step: 2 (OTA) / Antenna Position: FIXED / Battery Model #: SNN5705B / Accessory Model #: leather holster (SYN8875A)

R4 - Amy Twin Phantom Rev.4 (22Aug02) Phantom; section 1 Section; Position: (0°,0°); Frequency: 837 MHz

Probe: ET3DV6 - SN1521 - FCC Body; ConvF(6.30,6.30,6.30); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.97$ mho/m $\epsilon_r = 55.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.135 mW/g, SAR (10g): 0.0959 mW/g, (Worst-case extrapolation)

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

Penetration depth: 15.9 (14.4, 17.7) [mm]

Powerdrift: -0.14 dB

