



MOTOROLA

October 23, 2003

Supplement to SAR Test Report – (Class II) for Motorola portable cellular phone (FCC ID IHDT6DT1)

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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 IHDT6DT1). The requested information is addressed below in the same numbering sequence received.

1. While the measured values appear to be correct, the 835 MHz conductivity target values listed on p.5 appear to be incorrect (wrong standard or typos). Please correct.

Response: There was a typing error in the original report. The corrected table is below:

f (MHz)	Description	SAR (W/kg), 1gram	Dielectric Parameters		Ambient Temp (°C)	Tissue Temp (°C)
			ϵ_r	σ (S/m)		
835	Measured, 09/29/2003	10.0	41.2	0.89	20	19.8
	Recommended Limits	10.1	41.5+/-5%	.90 +/- 5%	n/a	n/a
	Measured, 10/01/2003	10.0	41.7	0.91	20	19.8
	Recommended Limits	10.1	41.5+/-5%	.90 +/- 5%	n/a	n/a
1800	Measured, 09/29/2003	42.2	38.6	1.39	20	19.7
	Recommended Limits	39.7	40+/- 5%	1.4 +/- 5%	n/a	n/a
	Measured, 09/30/2003	40.8	39.1	1.37	20	19.1
	Recommended Limits	39.7	40+/- 5%	1.4 +/- 5%	n/a	n/a

2. Please correct the typo on the 1800 MHz validation test date on page 5 (09/03/2003 should be 09/30/2003).

Response: Please look at the above response.

3. Please provide the following data plots: left head touch for both cellular and PCS; left head tilt for cellular; right head tilt for PCS.

Response: Please look at appendix 1 of the supplement.

4. There appears to be a typo on the value for the 850 MHz body dielectric constant (epsilon) listed in the Table on p.4, as it does not match the value on the corresponding data page. Please correct.

Response: The simulate is measured twice on the same day having an interval of approximately ten hours. Therefore the first data plot in appendix 3 of the original SAR report has the conductivity value from the first measurement and the second data plot contains the conductivity value from second measurement of the simulate. In the original SAR report, only the highest measured conductivity value was reported for that particular day.

Appendix 1
Requested SAR Plots

SN# LV305T0028

Ch#128 / Pwr Step: 05 / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): CHEEK

R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 824 MHz

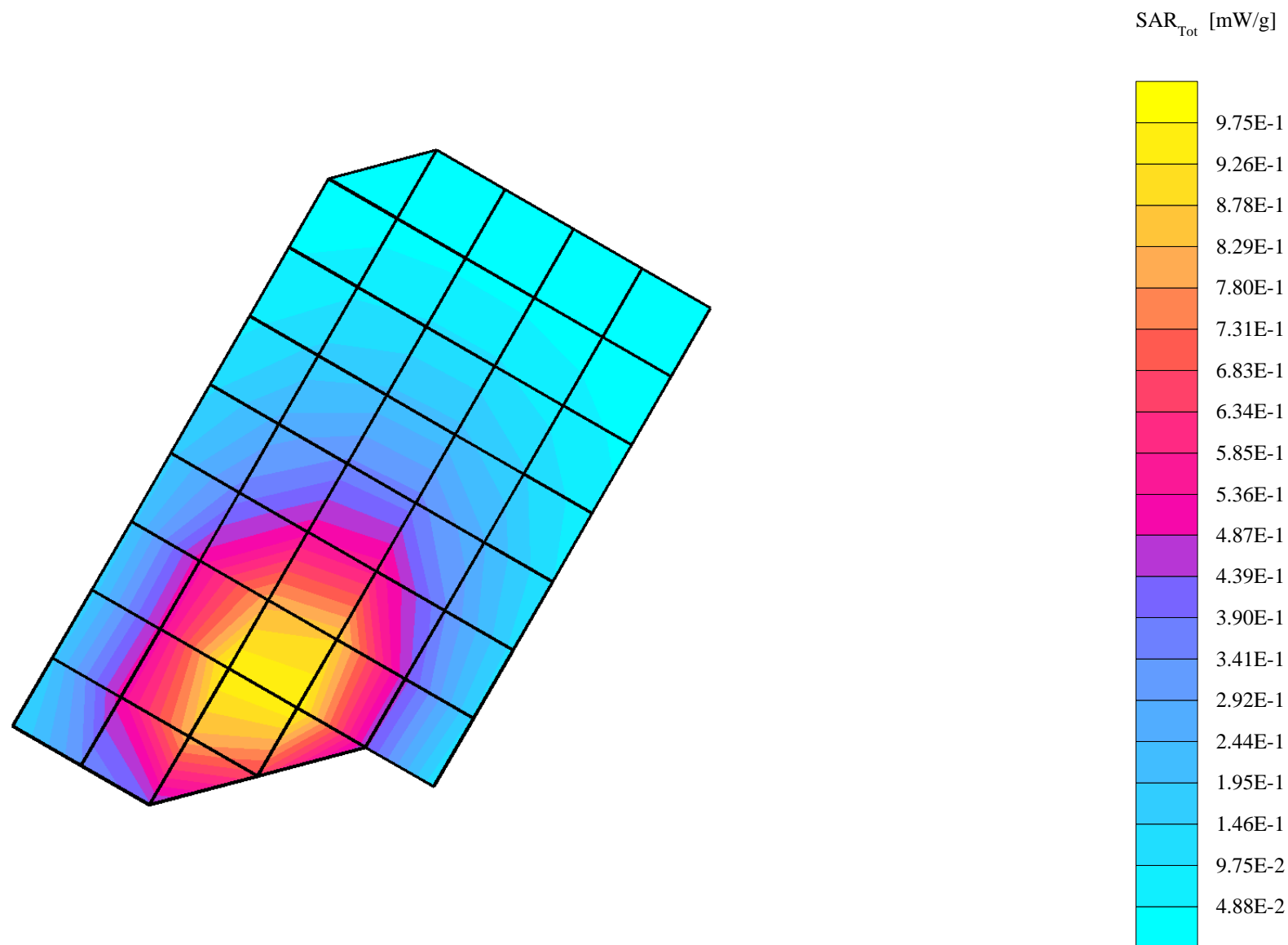
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 8.0; 835 MHz Head & Body: $\sigma = 0.89$ mho/m $\epsilon_r = 41.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 1.06 mW/g, SAR (10g): 0.727 mW/g, (Worst-case extrapolation)

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

Penetration depth: 15.5 (13.5, 17.9) [mm]

Powerdrift: -0.13 dB



SN# LV305T0028

Ch#190 / Pwr Step: 05 / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): CHEEK

R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz

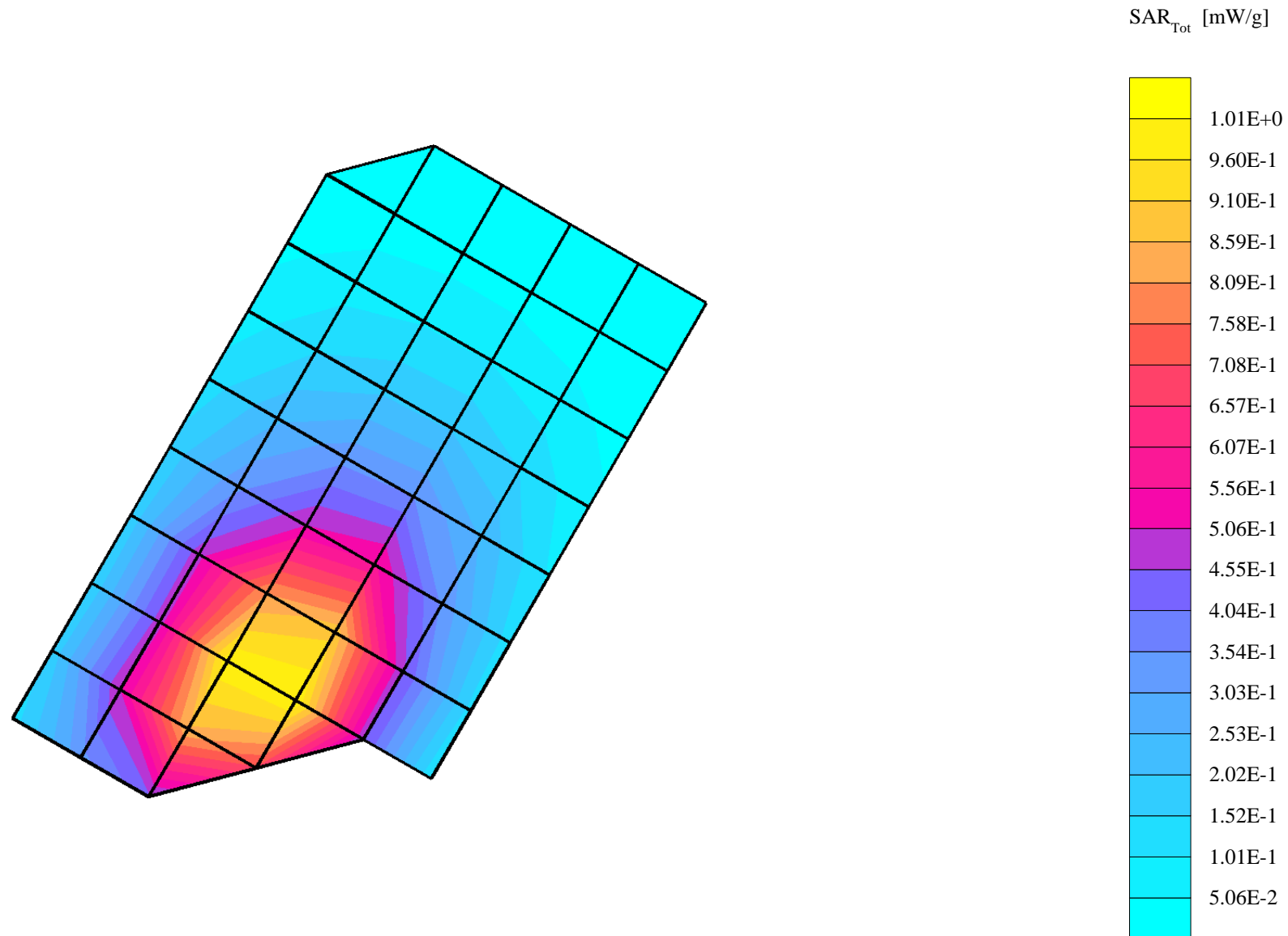
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 8.0; 835 MHz Head & Body: $\sigma = 0.89$ mho/m $\epsilon_r = 41.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 1.09 mW/g, SAR (10g): 0.740 mW/g, (Worst-case extrapolation)

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

Penetration depth: 15.6 (13.5, 18.1) [mm]

Powerdrift: -0.17 dB



SN# LV305T0028

Ch#251 / Pwr Step: 05 / Antenna Position: FIXED/ Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): CHEEK

R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 849 MHz

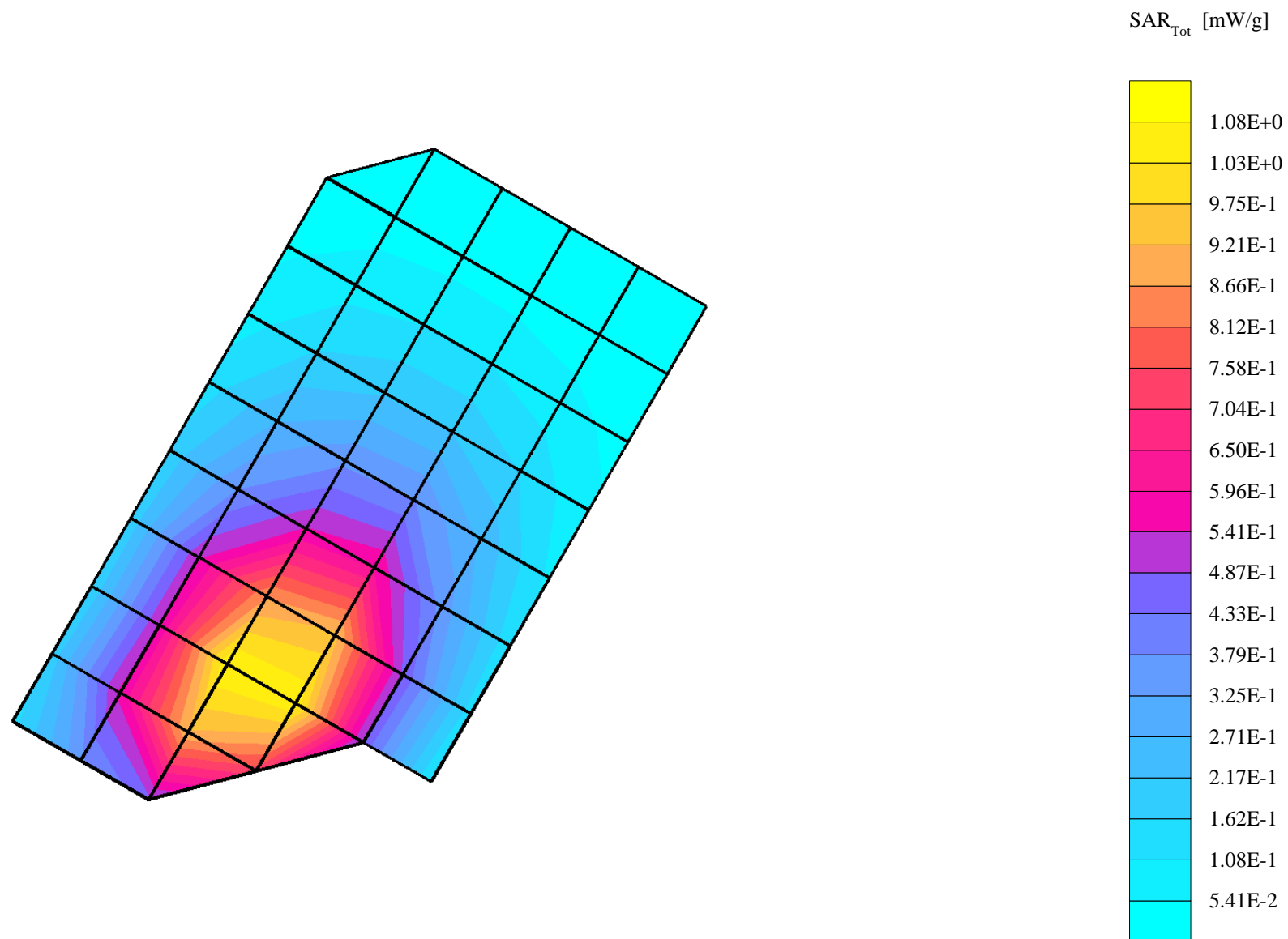
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 8.0; 835 MHz Head & Body: $\sigma = 0.89$ mho/m $\epsilon_r = 41.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 1.17 mW/g, SAR (10g): 0.793 mW/g, (Worst-case extrapolation)

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

Penetration depth: 15.2 (13.4, 17.4) [mm]

Powerdrift: -0.13 dB



SN# LV305T0028

Ch# 661 / Pwr Step: 0 OTA / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): CHEEK

R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz

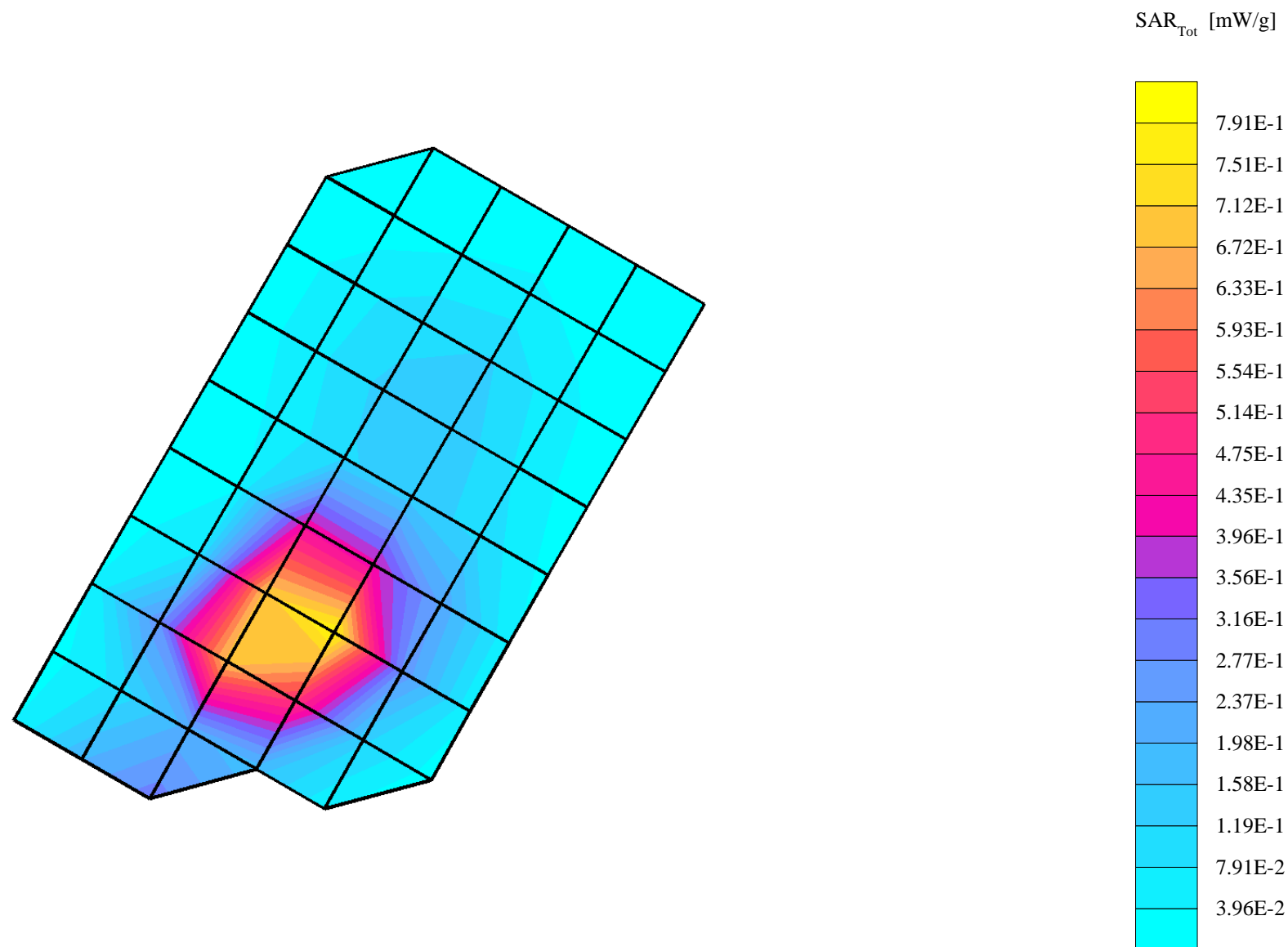
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 8.0; 1880 MHz Head & Body: $\sigma = 1.47$ mho/m $\epsilon_r = 38.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.961 mW/g, SAR (10g): 0.509 mW/g, (Worst-case extrapolation)

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

Penetration depth: 9.7 (9.0, 10.8) [mm]

Powerdrift: 0.10 dB



SN# LV305T0028

Ch# 810 / Pwr Step: 0 OTA / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): CHEEK

R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1910 MHz

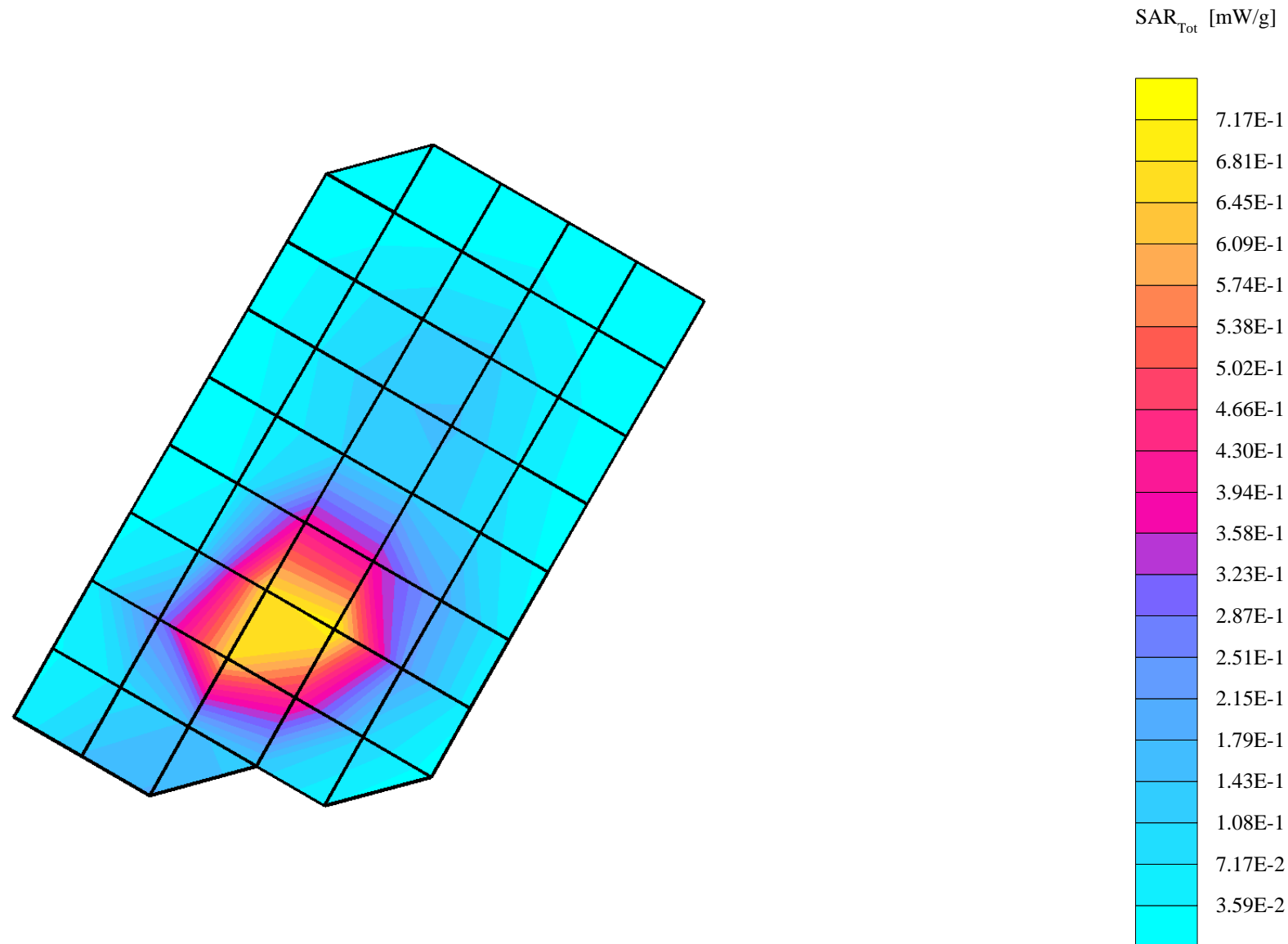
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 8.0; 1880 MHz Head & Body: $\sigma = 1.47$ mho/m $\epsilon_r = 38.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.893 mW/g, SAR (10g): 0.462 mW/g, (Worst-case extrapolation)

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

Penetration depth: 9.1 (8.5, 10.1) [mm]

Powerdrift: 0.13 dB



SN# LV305T0028

Ch# 512 / Pwr Step: 0 OTA / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): CHEEK

R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1850 MHz

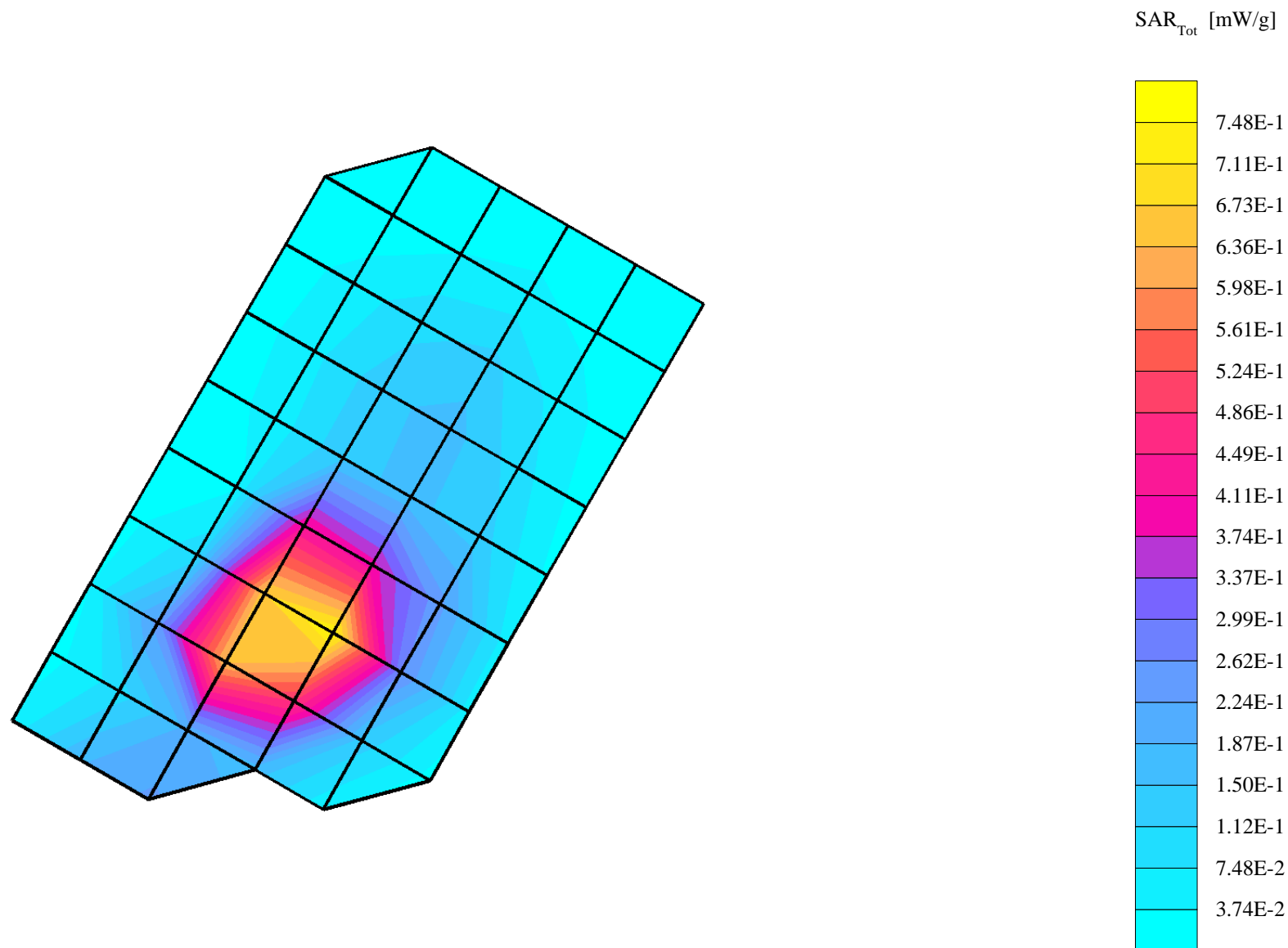
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 8.0; 1880 MHz Head & Body: $\sigma = 1.47$ mho/m $\epsilon_r = 38.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.917 mW/g, SAR (10g): 0.483 mW/g, (Worst-case extrapolation)

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

Penetration depth: 9.7 (9.0, 10.6) [mm]

Powerdrift: 0.12 dB



SN# LV305T0028

Ch# 810 / Pwr Step:0 / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): TILTED

R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1910 MHz

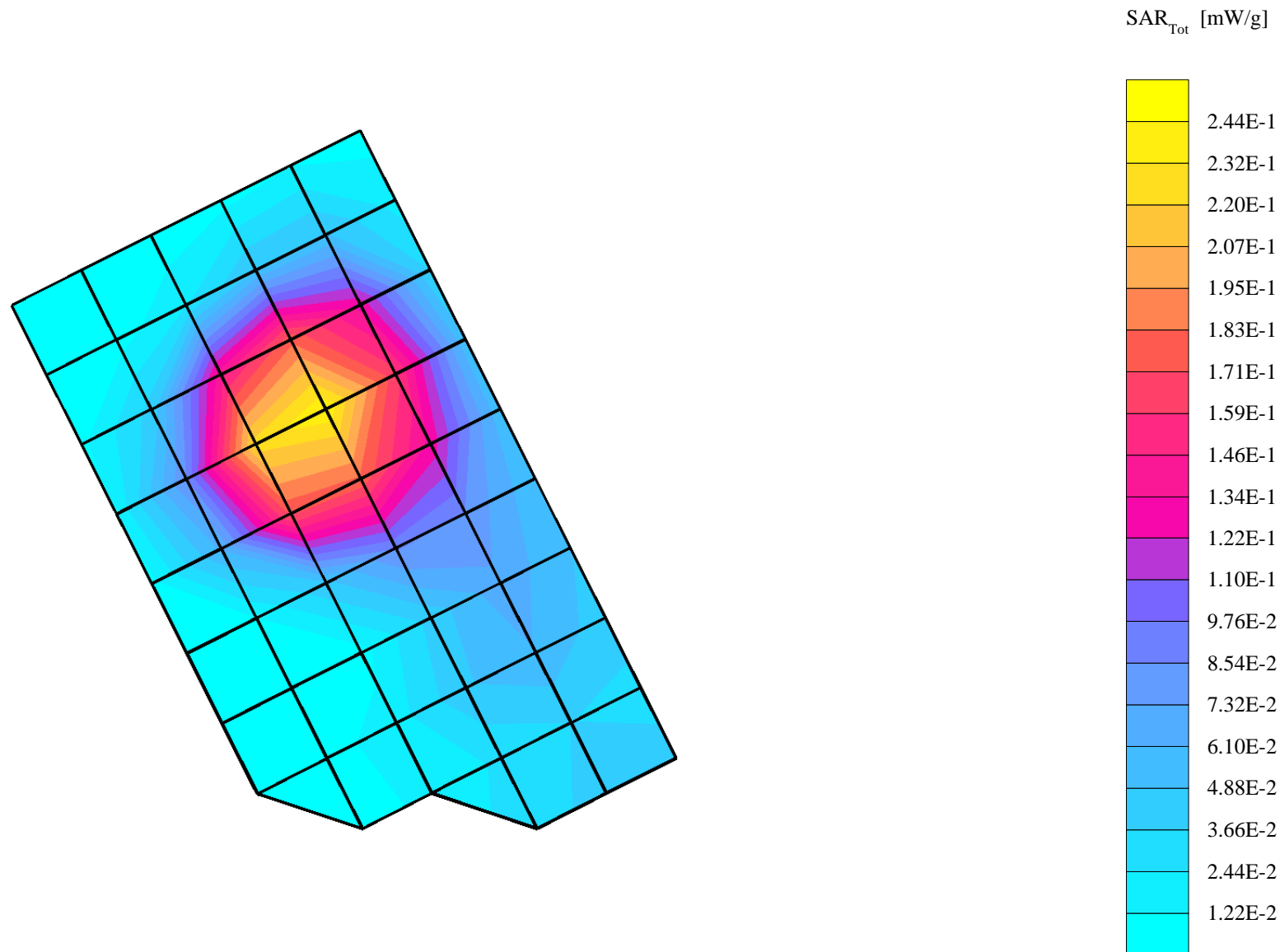
Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 8.0; 1880 MHz Head & Body: $\sigma = 1.46$ mho/m $\epsilon_r = 38.7$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.253 mW/g, SAR (10g): 0.155 mW/g, (Worst-case extrapolation)

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

Penetration depth: 11.3 (10.5, 12.3) [mm]

Powerdrift: 0.12 dB



SN# LV305T0028

Ch#190 / Pwr Step: 05 / Antenna Position: FIXED / Battery Model #: SNN5704A / DEVICE POSITION (cheek or rotated): TILT

R1 TP-1005 SAM Expanded Sugar (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz

Probe: ET3DV6R - SN1506 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 8.0; 835 MHz Head & Body: $\sigma = 0.89$ mho/m $\epsilon_r = 41.2$ $\rho = 1.00$ g/cm³

Cube 7x7x7: SAR (1g): 0.301 mW/g, SAR (10g): 0.224 mW/g, (Worst-case extrapolation)

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

Penetration depth: 18.7 (17.1, 20.4) [mm]

Powerdrift: -0.02 dB

