

DASY4 Validation Report for Head TSL

Date/Time: 09.03.2005 15:20:45

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d002

Communication System: CW-1900; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL 1900 MHz;

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507; ConvF(4.96, 4.96, 4.96); Calibrated: 26.10.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 07.01.2005
- Phantom: Flat Phantom 5.0; Type: QD000P50AA; Serial: 1001;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Pin = 250 mW; d = 10 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.4 mW/g

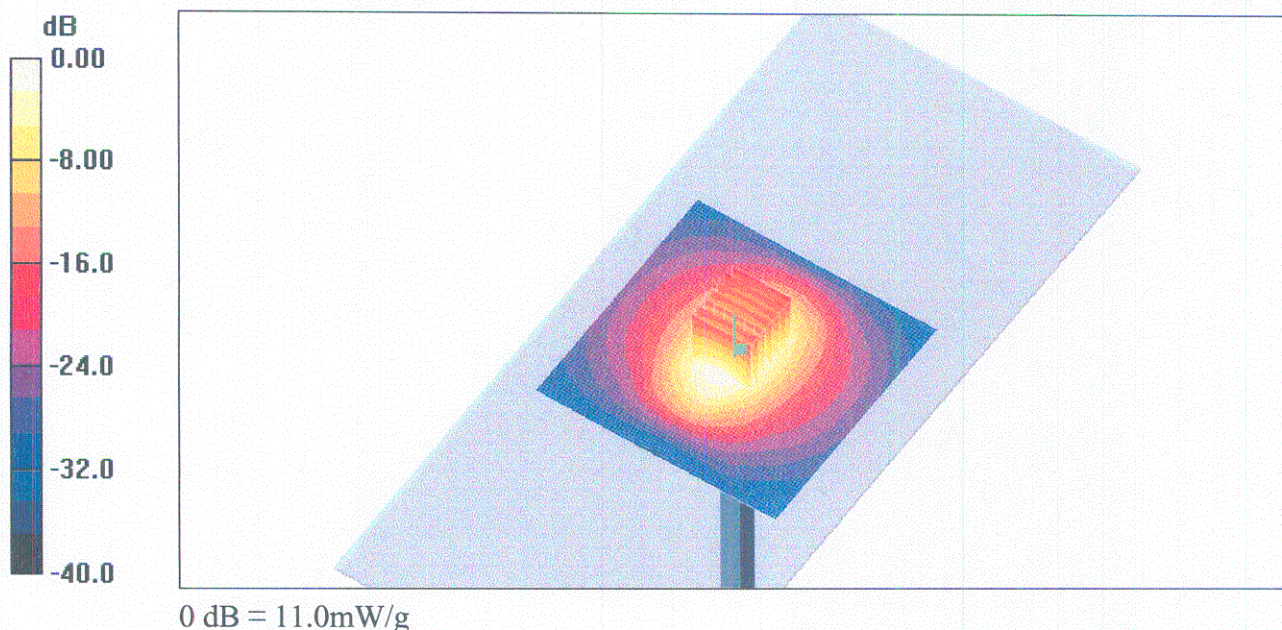
Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.4 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.81 mW/g; SAR(10 g) = 5.15 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



DASY4 Validation Report for Body TSL

Date/Time: 15.03.2005 15:20:32

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d002

Communication System: CW-1900; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL 1900 MHz;

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507; ConvF(4.43, 4.43, 4.43); Calibrated: 26.10.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 07.01.2005
- Phantom: Flat Phantom 5.0; Type: QD000P50AA; Serial: 1001;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Pin = 250 mW; d = 10 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.4 mW/g

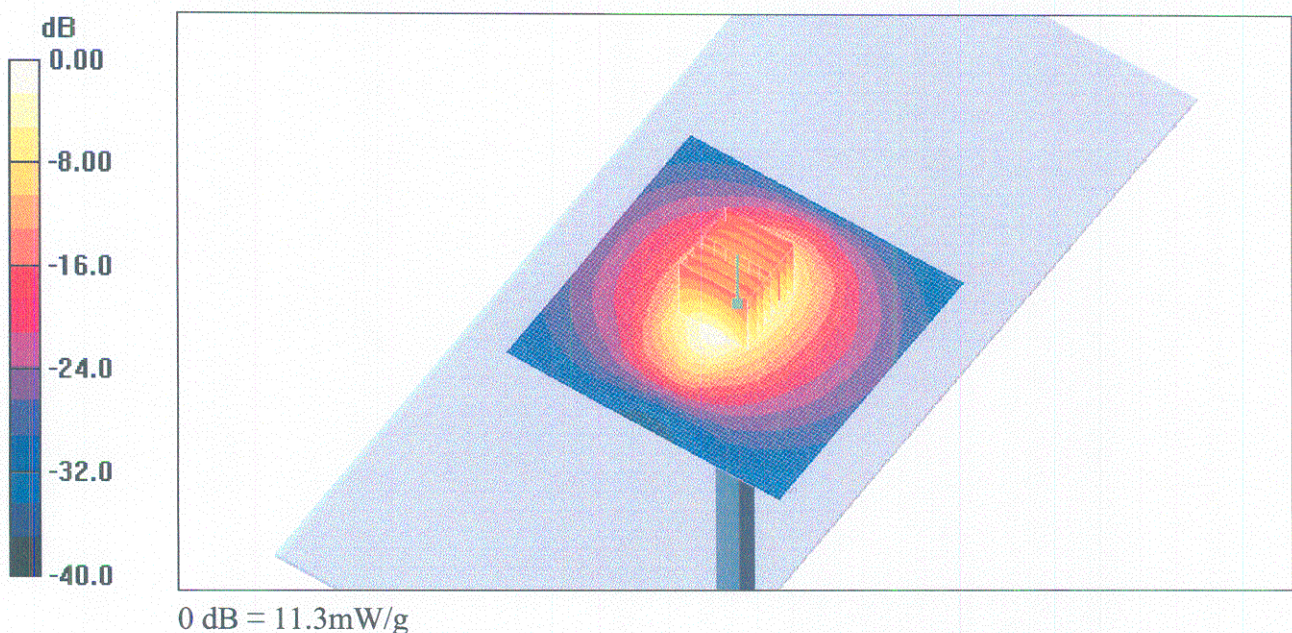
Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.3 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 16.8 W/kg

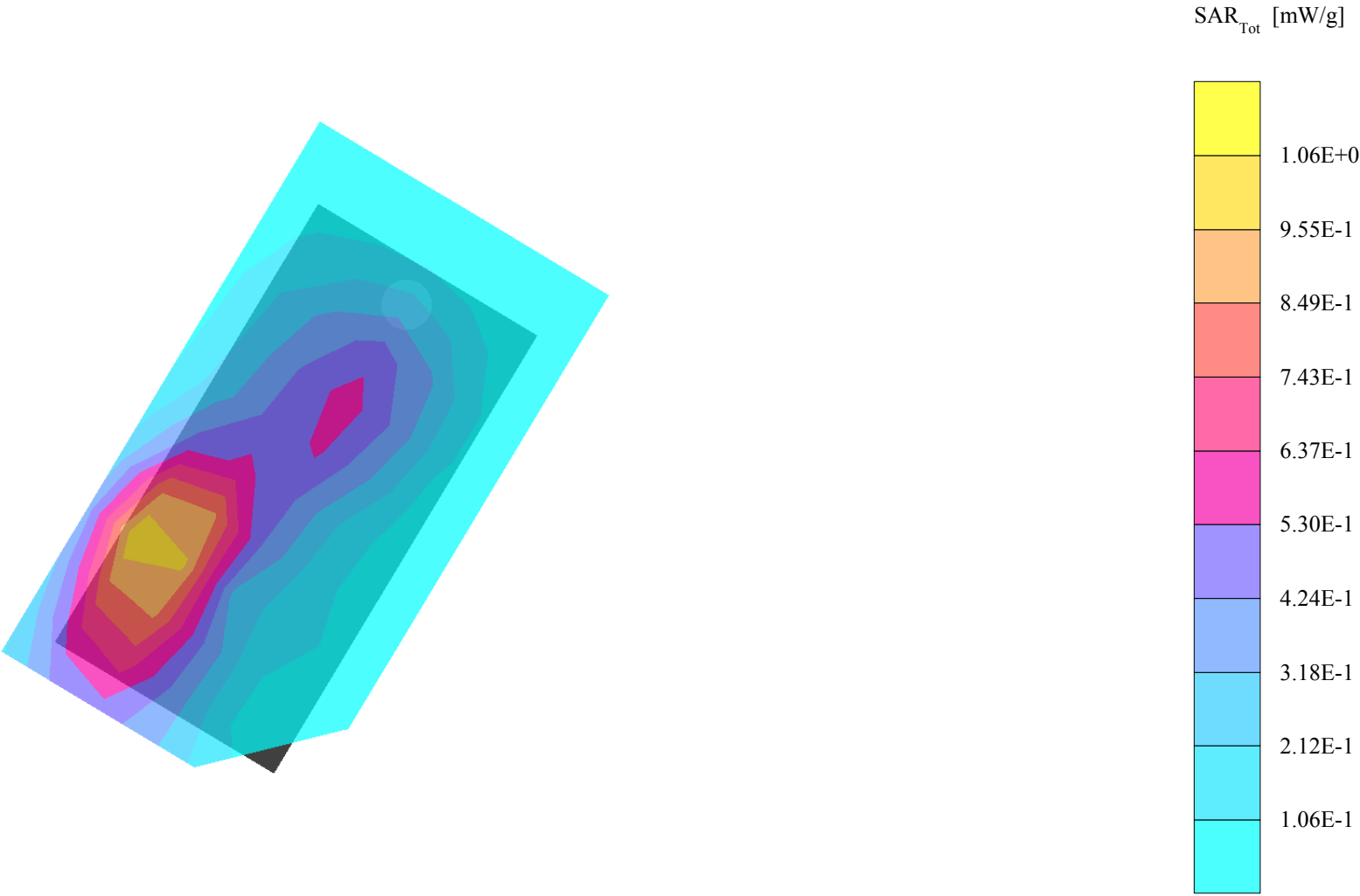
SAR(1 g) = 9.91 mW/g; SAR(10 g) = 5.23 mW/g

Maximum value of SAR (measured) = 11.3 mW/g



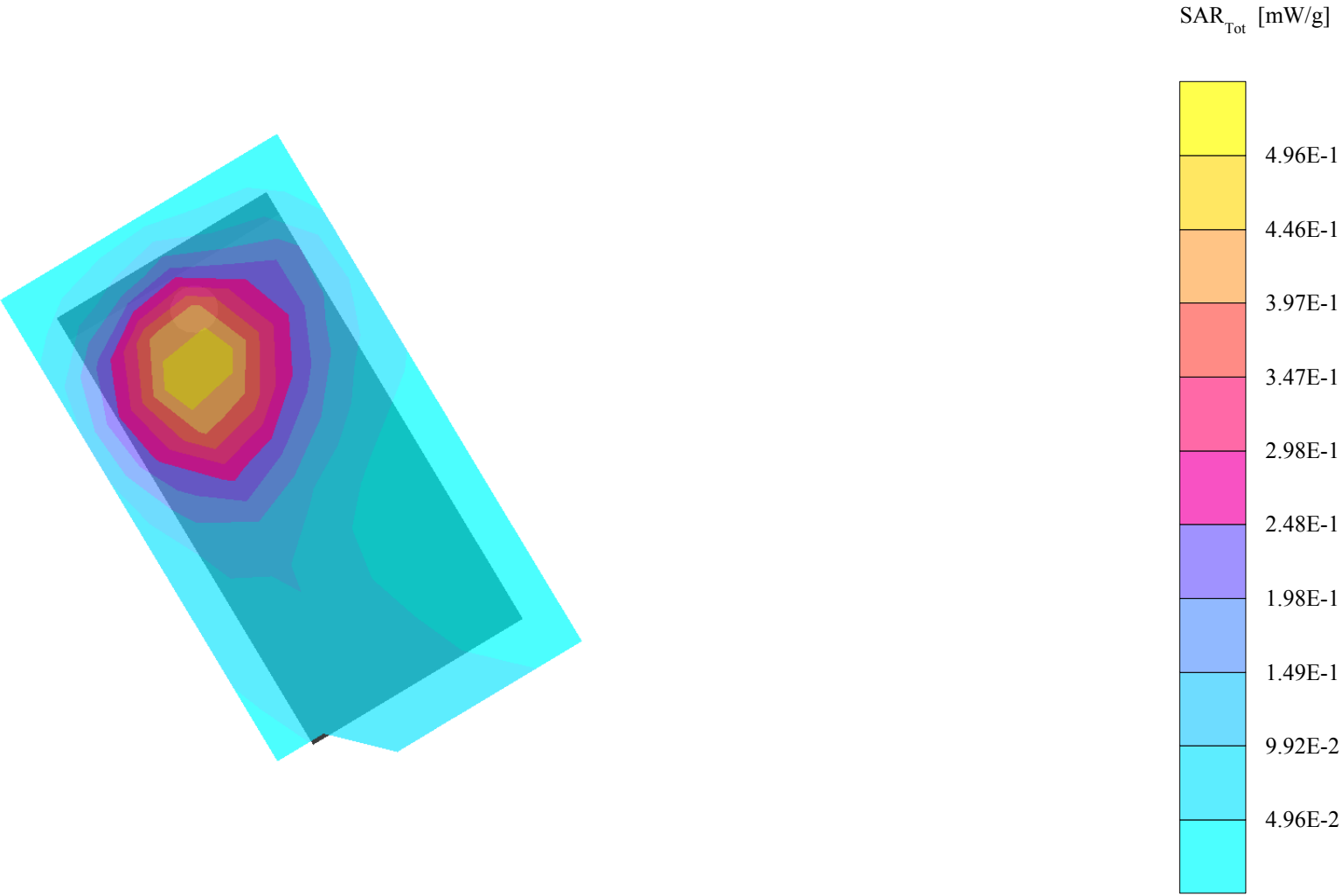
PY7A1022031

SAM 4 Phantom; Left Hand Section; Position: (90°,59°); Frequency: 1910 MHz
Probe: ET3DV6 - SN1585; ConvF(5.03,5.03,5.03); Crest factor: 8.3; Head 1900MHz: $\sigma = 1.46 \text{ mho/m}$ $\epsilon_r = 38.3$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.02 mW/g, SAR (10g): 0.531 mW/g, (Worst-case extrapolation)
Coarse: Dx = 11.0, Dy = 11.0, Dz = 11.0
Powerdrift: -0.08 dB
PY7A1022031;S/N:CB5018R2X0/FP1;Frequevcy 1910MHz(ch810), Left Hand Side,
Cheek(70°) Phone Position, meas. Power=30.4dBm, Nom.Power=30.5dBm;
ambien temprature 22(c-degree)and humidity 25%,Date:051209



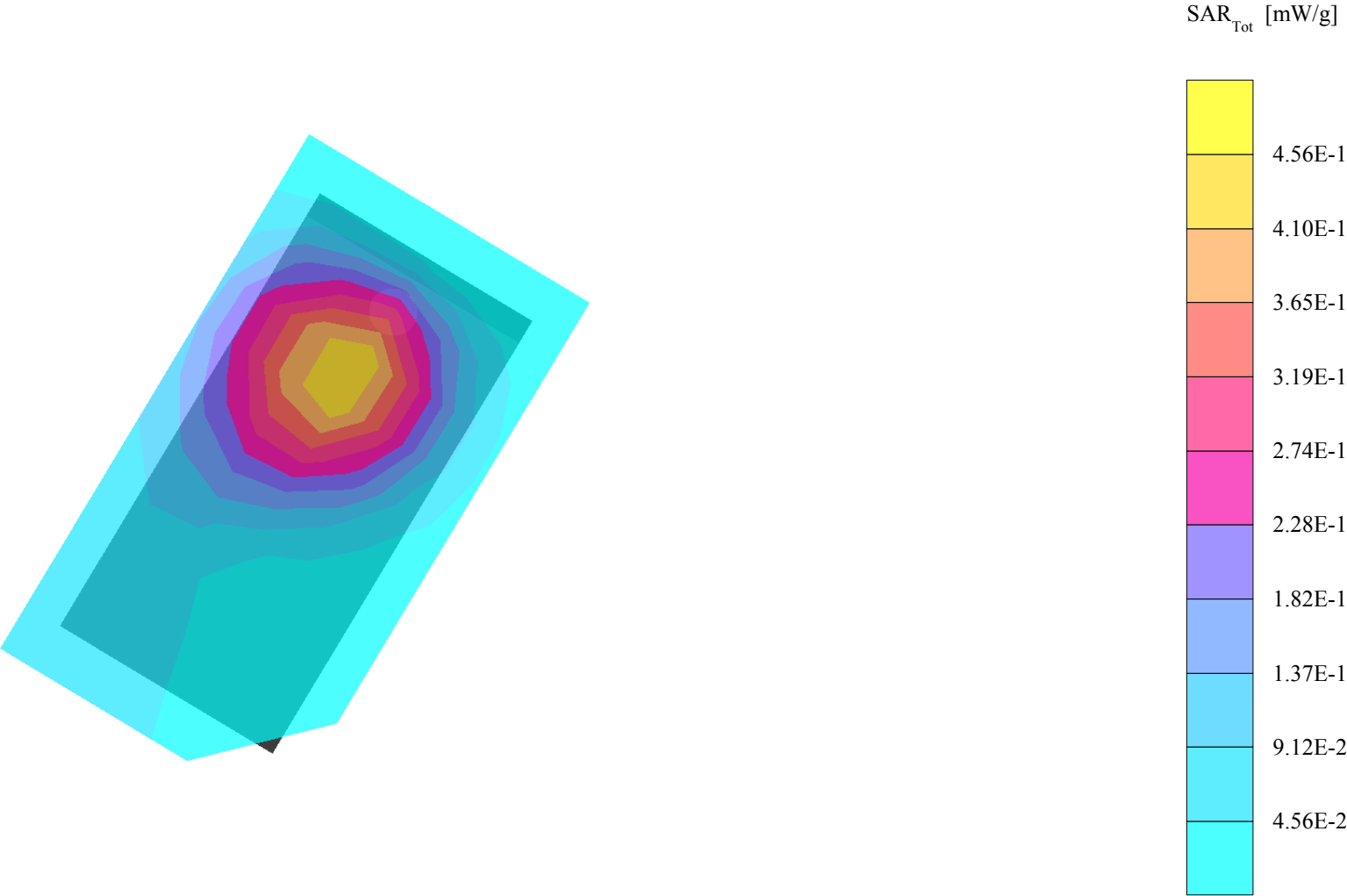
PY7A1022031

SAM 4 Phantom; Righ Hand Section; Position: (105°,301°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1585; ConvF(5.03,5.03,5.03); Crest factor: 8.3; Head 1900MHz: $\sigma = 1.46 \text{ mho/m}$ $\epsilon_r = 38.3$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.477 mW/g, SAR (10g): 0.275 mW/g, (Worst-case extrapolation)
Coarse: Dx = 11.0, Dy = 11.0, Dz = 10.0
Powerdrift: -0.04 dB
PY7A1022031;S/N:CB5018R2X0/FP1;Frequevcy 1880MHz(ch661), Right Hand Side,
Tilt(85°) Phone Position, meas. Power=30.5dBm, Nom.Power=30.5dBm;
ambien temprature 22(c-degree)and humidity 25%,Date:051208



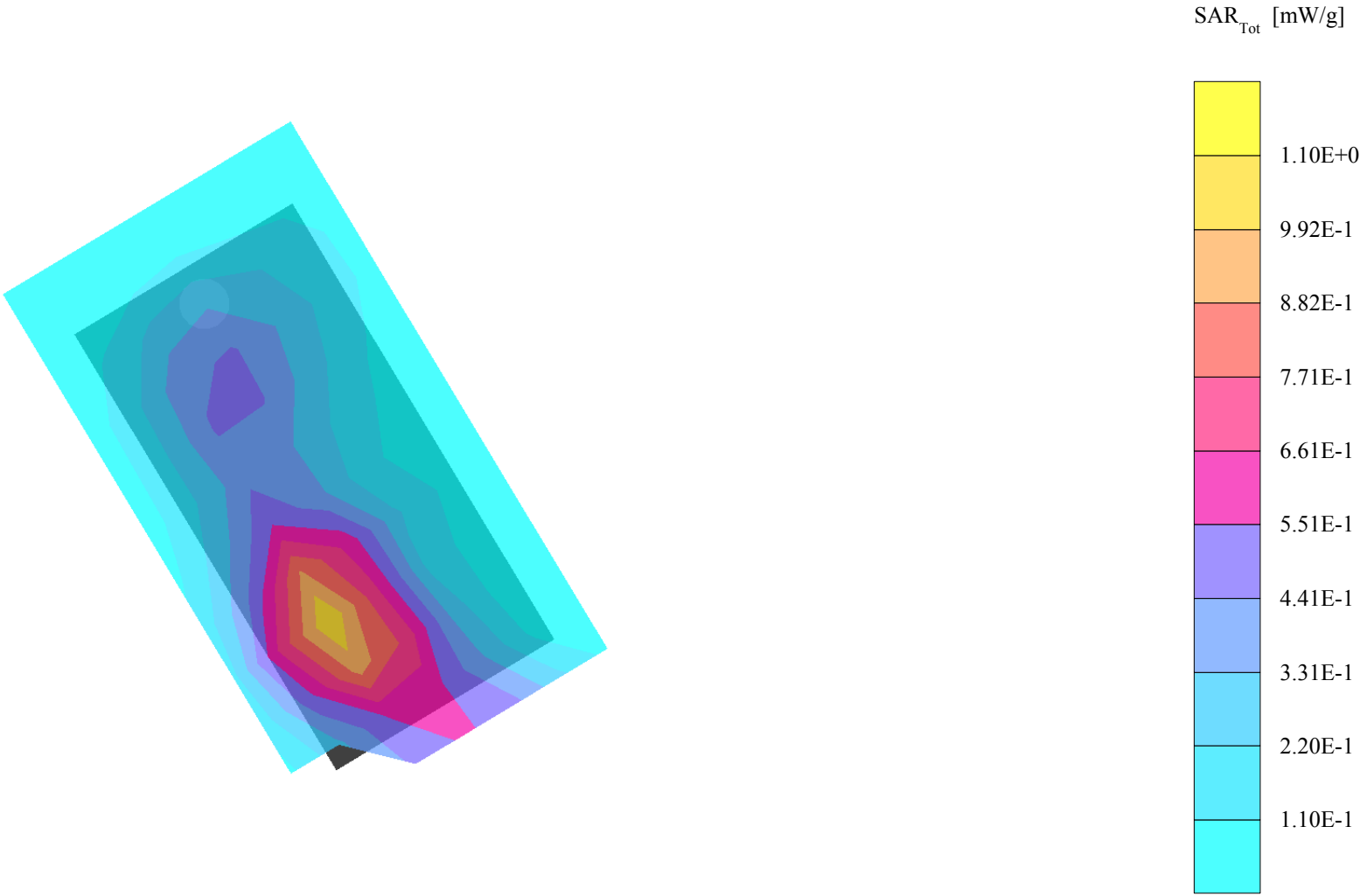
PY7A1022031

SAM 4 Phantom; Left Hand Section; Position: (105°,59°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1585; ConvF(5.03,5.03,5.03); Crest factor: 8.3; Head 1900MHz: $\sigma = 1.46 \text{ mho/m}$ $\epsilon_r = 38.3$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.435 mW/g, SAR (10g): 0.254 mW/g, (Worst-case extrapolation)
Coarse: Dx = 11.0, Dy = 11.0, Dz = 11.0
Powerdrift: -0.06 dB
PY7A1022031;S/N:CB5018R2X0/FP1;Frequevcy 1880MHz(ch661), Right Hand Side,
Tilt(85°) Phone Position, meas. Power=30.5dBm, Nom.Power=30.5dBm;
ambien temprature 22(c-degree)and humidity 25%,Date:051208



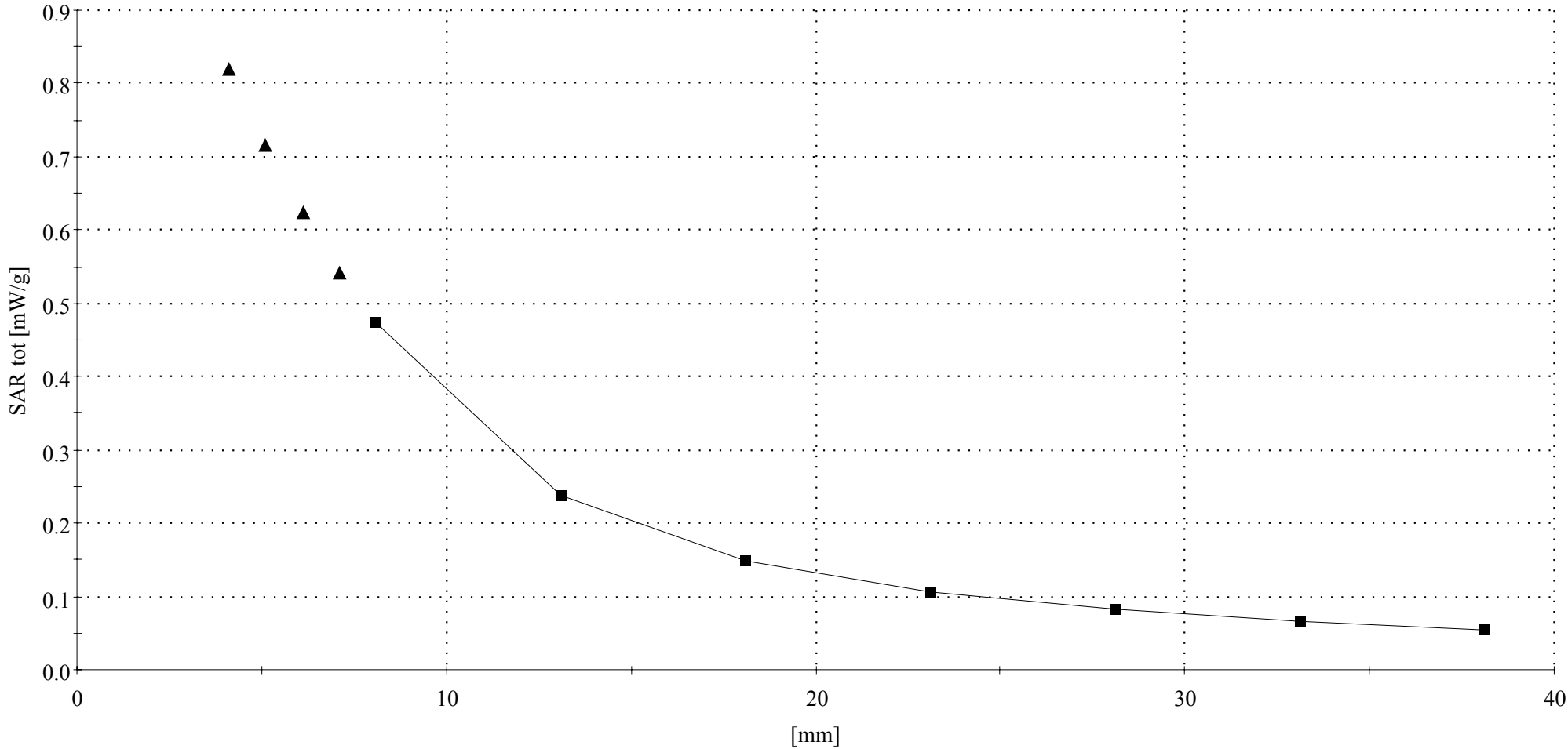
PY7A1022031

SAM 4 Phantom; Righ Hand Section; Position: (90°,301°); Frequency: 1910 MHz
Probe: ET3DV6 - SN1585; ConvF(5.03,5.03,5.03); Crest factor: 8.3; Head 1900MHz: $\sigma = 1.46$ mho/m $\epsilon_r = 38.3$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 1.02 mW/g, SAR (10g): 0.535 mW/g, (Worst-case extrapolation)
Coarse: Dx = 11.0, Dy = 11.0, Dz = 10.0
Powerdrift: -0.08 dB
PY7A1022031;S/N:CB5018R2X0/FP1;Frequevcy 1910MHz(ch810), Right Hand Side,
Cheek(70°) Phone Position, meas. Power=30.4dBm, Nom.Power=30.5dBm;
ambien temprature 22(c-degree)and humidity 25%,Date:051208



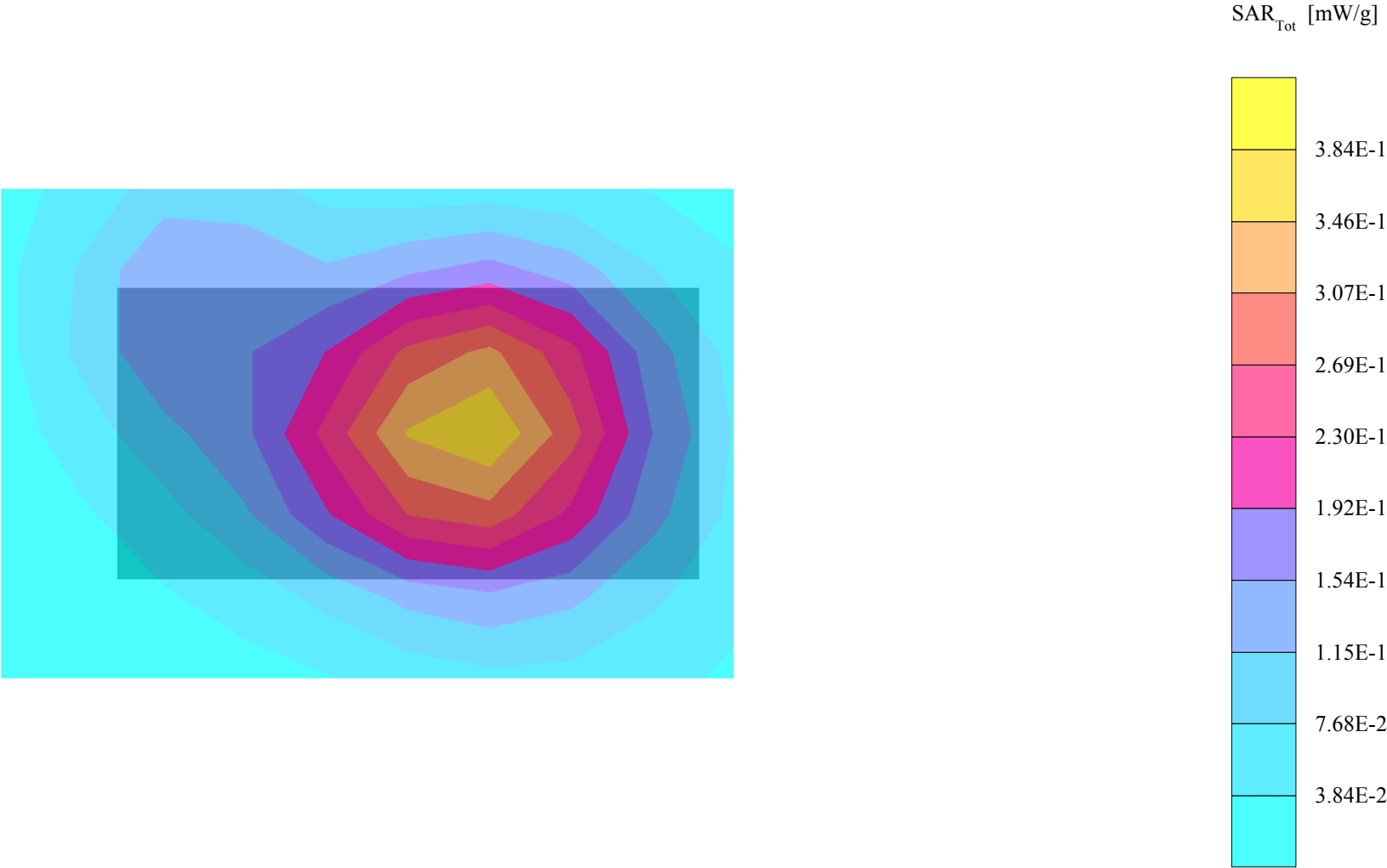
PY7A1022031

SAM 4 Phantom; Left Hand Section; Position: (90°,59°); Frequency: 1910 MHz
Probe: ET3DV6 - SN1585; ConvF(5.03,5.03,5.03); Crest factor: 8.3; Head 1900MHz: $\sigma = 1.46 \text{ mho/m}$ $\epsilon_r = 38.3$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 1.02 mW/g, SAR (10g): 0.531 mW/g, (Worst-case extrapolation)
Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0



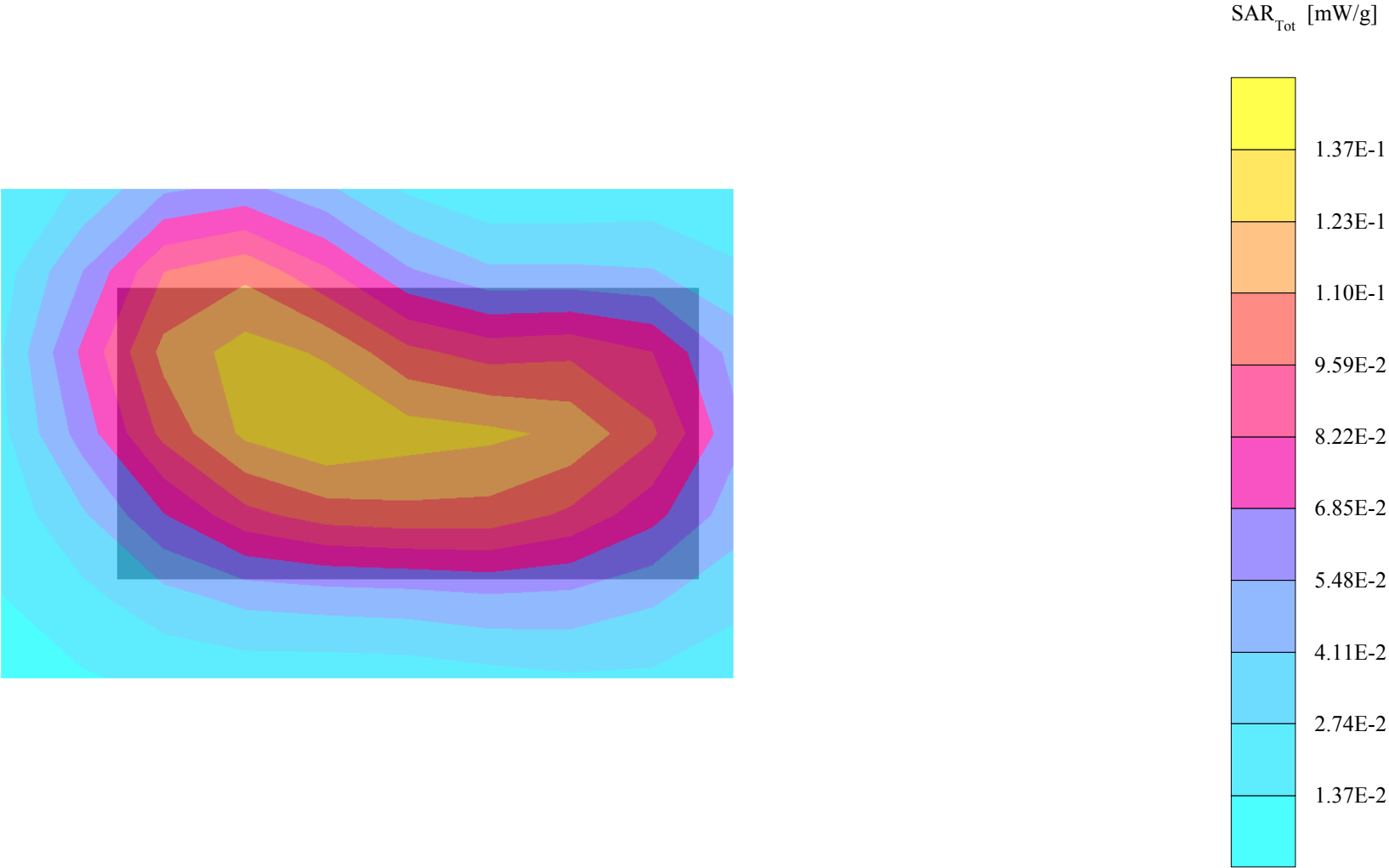
PY7A1022031

SAM 4 Phantom; Flat Section; Position: (270°,90°); Frequency: 1850 MHz
Probe: ET3DV6 - SN1585; ConvF(4.62,4.62,4.62); Crest factor: 4.0; Muscle 1900: $\sigma = 1.55$ mho/m $\epsilon_r = 51.4$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.356 mW/g, SAR (10g): 0.222 mW/g, (Worst-case extrapolation)
Coarse: Dx = 14.0, Dy = 14.0, Dz = 10.0
Powerdrift: -0.20 dB
PY7A1022031;S/N:CB5018R2X0/FP1,Frequevcy 1850MHz(ch512),Front Phone + 15mm distance from
flat section of phantomPosition, meas. Power=30,5dBm, Nom.Power=30,5dBm;ambien
temprature 22(c-degree)and humidity 25%;. Date:051212;GPRS Measurement



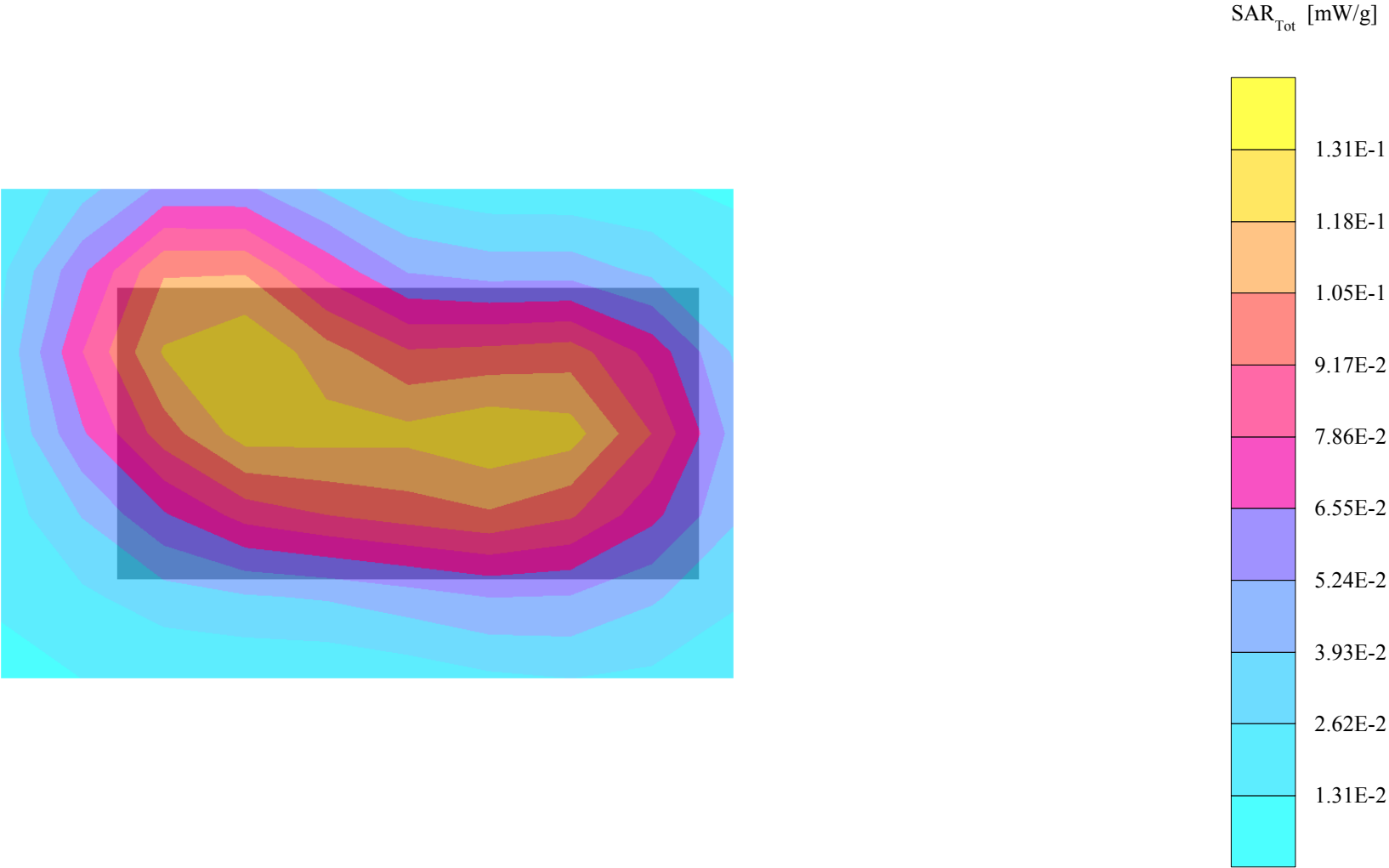
PY7A1022031

SAM 4 Phantom; Flat Section; Position: (270°,90°); Frequency: 1910 MHz
Probe: ET3DV6 - SN1585; ConvF(4.62,4.62,4.62); Crest factor: 8.3; Muscle 1900: $\sigma = 1.55$ mho/m $\epsilon_r = 51.4$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.128 mW/g, SAR (10g): 0.0796 mW/g, (Worst-case extrapolation)
Coarse: Dx = 14.0, Dy = 14.0, Dz = 10.0
Powerdrift: 0.01 dB
Mulan;S/N:CB5018R2X0/FP1,Frequevcy 1910MHz(ch810),Back Phone + 15mm distance from
flat section of phantomPosition, meas. Power=30,4dBm, Nom.Power=30,5dBm;ambien
temprature 22(c-degree)and humidity 25%;. Date:051212; Blue tooth



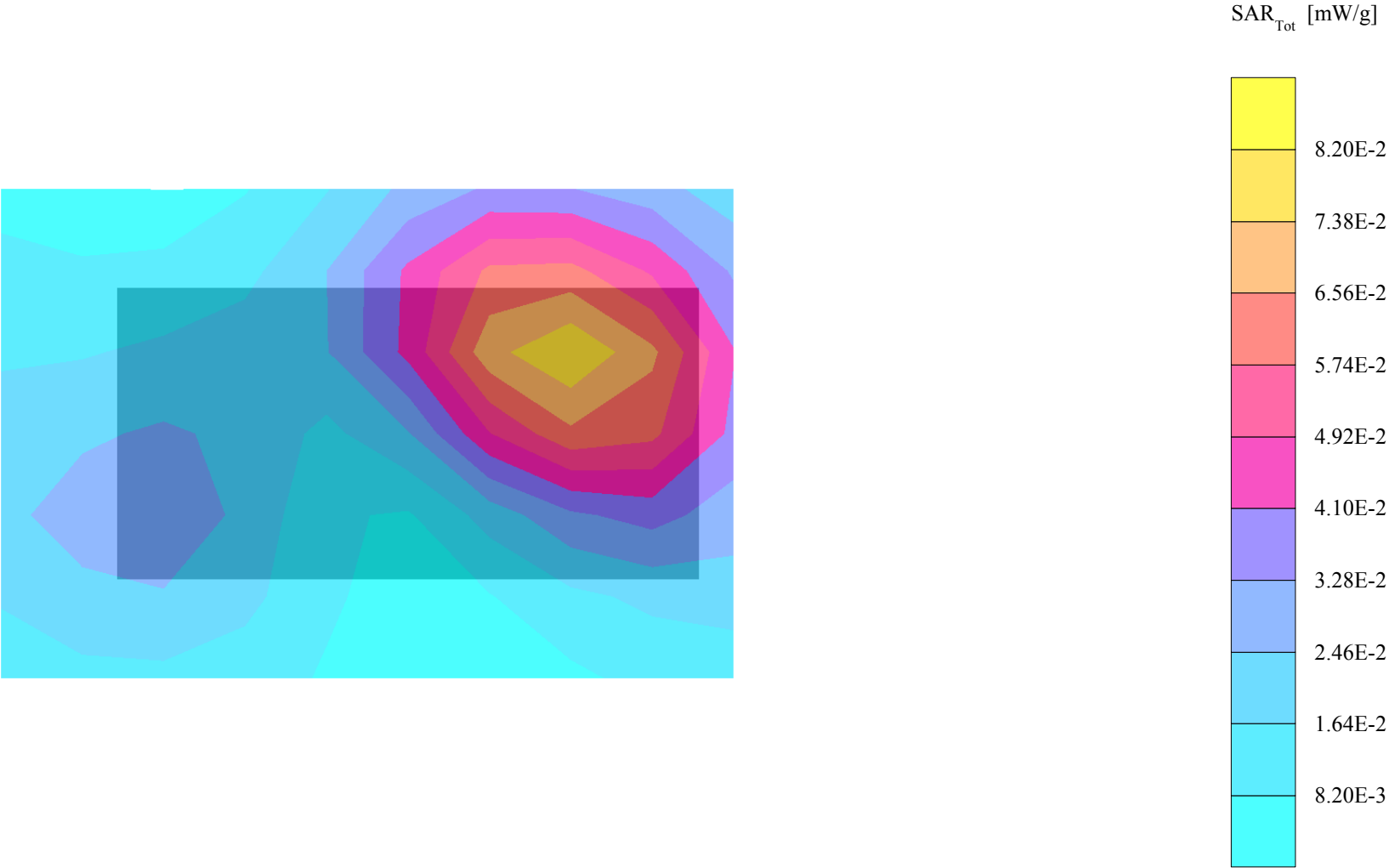
PY7A1022031

SAM 4 Phantom; Flat Section; Position: (270°,90°); Frequency: 1850 MHz
Probe: ET3DV6 - SN1585; ConvF(4.62,4.62,4.62); Crest factor: 8.3; Muscle 1900: $\sigma = 1.55$ mho/m $\epsilon_r = 51.4$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.122 mW/g, SAR (10g): 0.0760 mW/g, (Worst-case extrapolation)
Coarse: Dx = 14.0, Dy = 14.0, Dz = 10.0
Powerdrift: -0.01 dB
Mulan;S/N:CB5018R2X0,FP1,Frequevcy 1850MHz(ch512),Back Phone + 15mm distance from
flat section of phantomPosition, meas. Power=30,5dBm, Nom.Power=30,5dBm;ambien
temprature 22(c-degree)and humidity 25%;. Date:051212



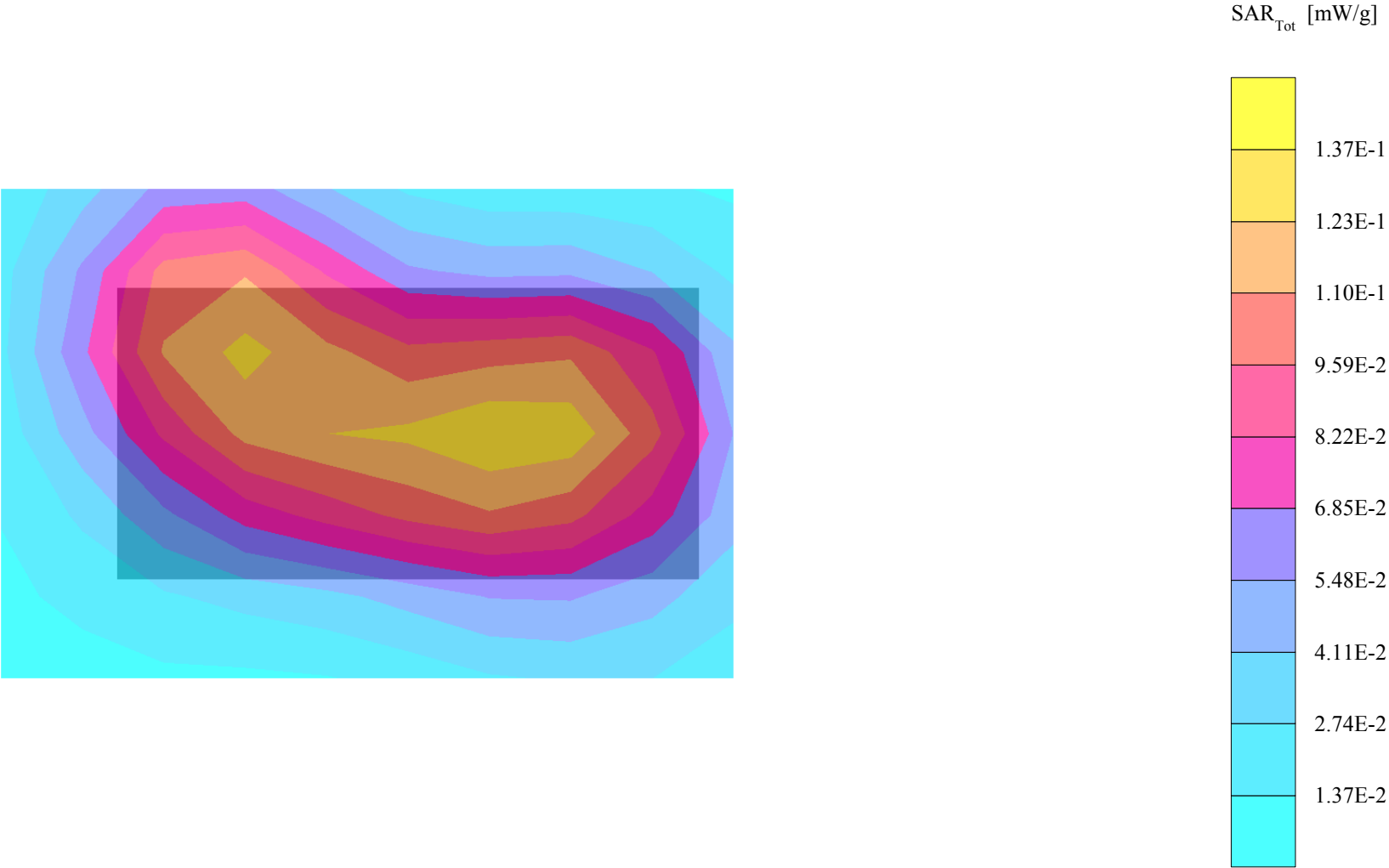
PY7A1022031

SAM 4 Phantom; Flat Section; Position: (270°,90°); Frequency: 1850 MHz
Probe: ET3DV6 - SN1585; ConvF(4.62,4.62,4.62); Crest factor: 8.3; Muscle 1900: $\sigma = 1.55$ mho/m $\epsilon_r = 51.4$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.0755 mW/g, SAR (10g): 0.0467 mW/g, (Worst-case extrapolation)
Coarse: Dx = 14.0, Dy = 14.0, Dz = 10.0
Powerdrift: 0.11 dB
PY7A1022031;S/N:CB5018R2X0/FP1,Frequevcy 1850MHz(ch512),Front Phone + 15mm distance from
flat section of phantomPosition, meas. Power=30,5dBm, Nom.Power=30,5dBm;ambien
temprature 22(c-degree)and humidity 25%;. Date:051212



PY7A1022031

SAM 4 Phantom; Flat Section; Position: (270°,90°); Frequency: 1850 MHz
Probe: ET3DV6 - SN1585; ConvF(4.62,4.62,4.62); Crest factor: 8.3; Muscle 1900: $\sigma = 1.55$ mho/m $\epsilon_r = 51.4$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.128 mW/g, SAR (10g): 0.0815 mW/g, (Worst-case extrapolation)
Coarse: Dx = 14.0, Dy = 14.0, Dz = 10.0
Powerdrift: -0.03 dB
Mulan;S/N:CB5018R2X0,FP1,Frequevcy 1850MHz(ch512),Back Phone + 15mm distance from
flat section of phantomPosition, meas. Power=30,5dBm, Nom.Power=30,5dBm;ambien
temprature 22(c-degree)and humidity 25%;. Date:051212;Hand Free



PY7A1022031

SAM 4 Phantom; Flat Section; Position: (270°,90°); Frequency: 1910 MHz
Probe: ET3DV6 - SN1585; ConvF(4.62,4.62,4.62); Crest factor: 8.3; Muscle 1900: $\sigma = 1.55$ mho/m $\epsilon_r = 51.4$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 0.128 mW/g, SAR (10g): 0.0796 mW/g, (Worst-case extrapolation)
Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

