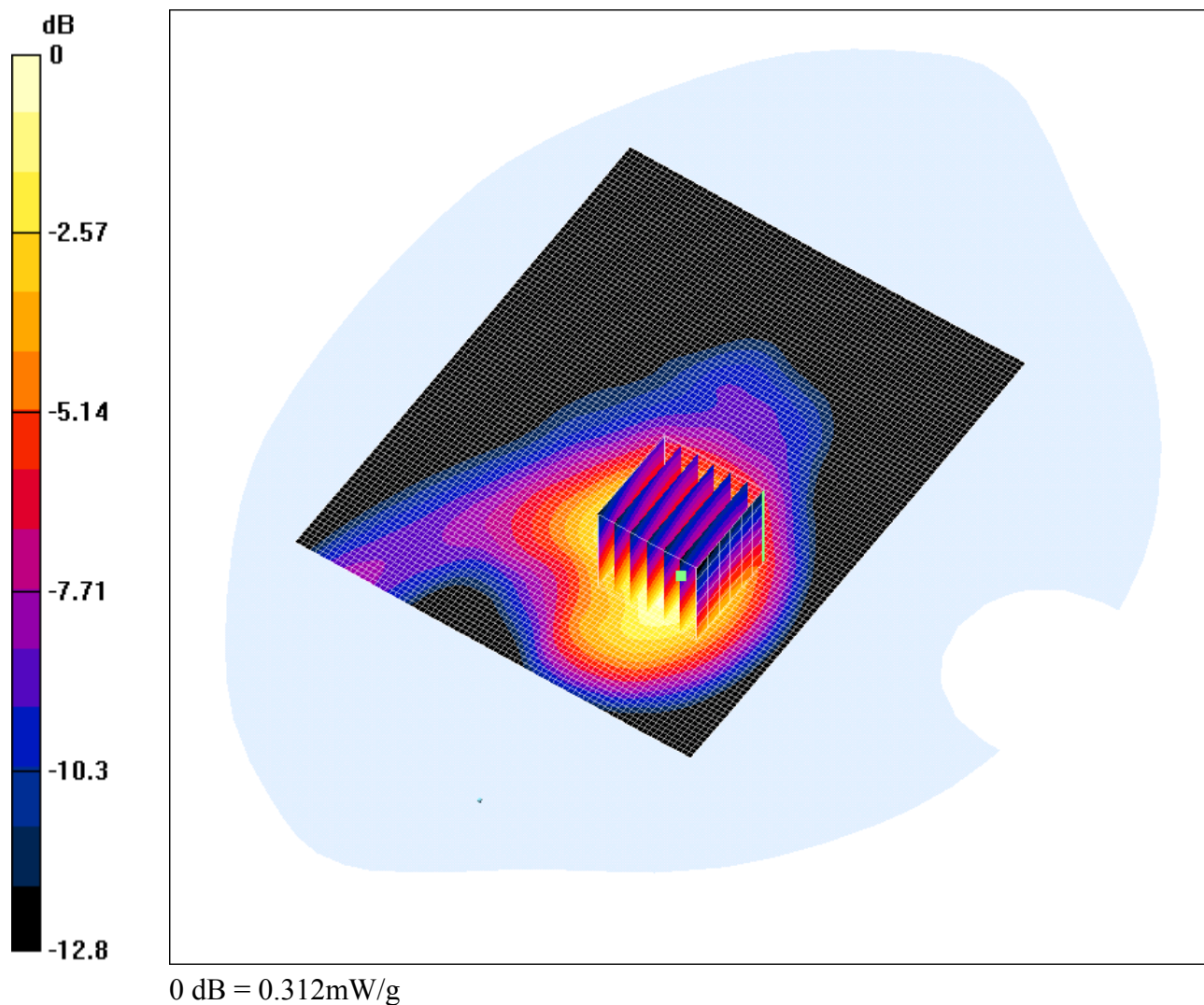


Date: 14/12/03

45446/JD06/012

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 850MHz MSL ($\sigma = 0.925849$ mho/m, $\epsilon_r = 53.3367$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.3, 6.3, 6.3); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Rear of Handset in Case with Clip on Hook and PHF (18mm Distance)/Area Scan (101x81x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Reference Value = 11.5 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 0.31 mW/g

Rear of Handset in Case with Clip on Hook and PHF (18mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.452 W/kg

SAR(1 g) = 0.289 mW/g ; SAR(10 g) = 0.18 mW/g

Reference Value = 11.5 V/m

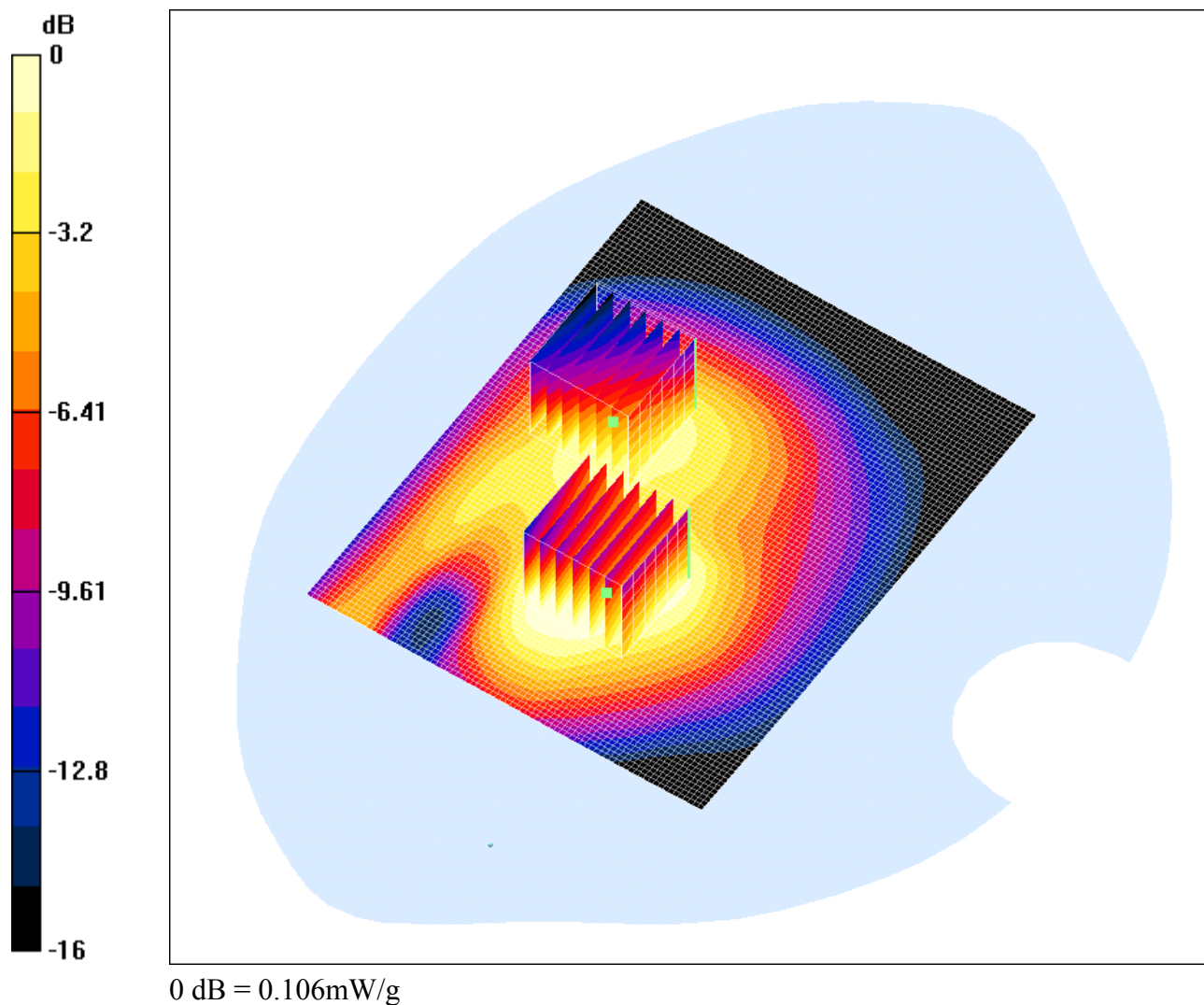
Power Drift = -0.05 dB

Maximum value of SAR = 0.312 mW/g

Date: 14/12/03

45446/JD06/011

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 850MHz MSL ($\sigma = 0.925849$ mho/m, $\epsilon_r = 53.3367$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.3, 6.3, 6.3); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Display of Handset in Case with Clip in Pouch and PHF (15mm Distance)/Area Scan (101x81x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Reference Value = 6.59 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.117 mW/g

Display of Handset in Case with Clip in Pouch and PHF (15mm Distance)/Zoom Scan (7x7x7)

(7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.154 W/kg

SAR(1 g) = 0.109 mW/g ; SAR(10 g) = 0.0718 mW/g

Reference Value = 6.59 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.117 mW/g

Display of Handset in Case with Clip in Pouch and PHF (15mm Distance)/Zoom Scan (7x7x7)

(7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.324 W/kg

SAR(1 g) = 0.101 mW/g ; SAR(10 g) = 0.0543 mW/g

Reference Value = 6.59 V/m

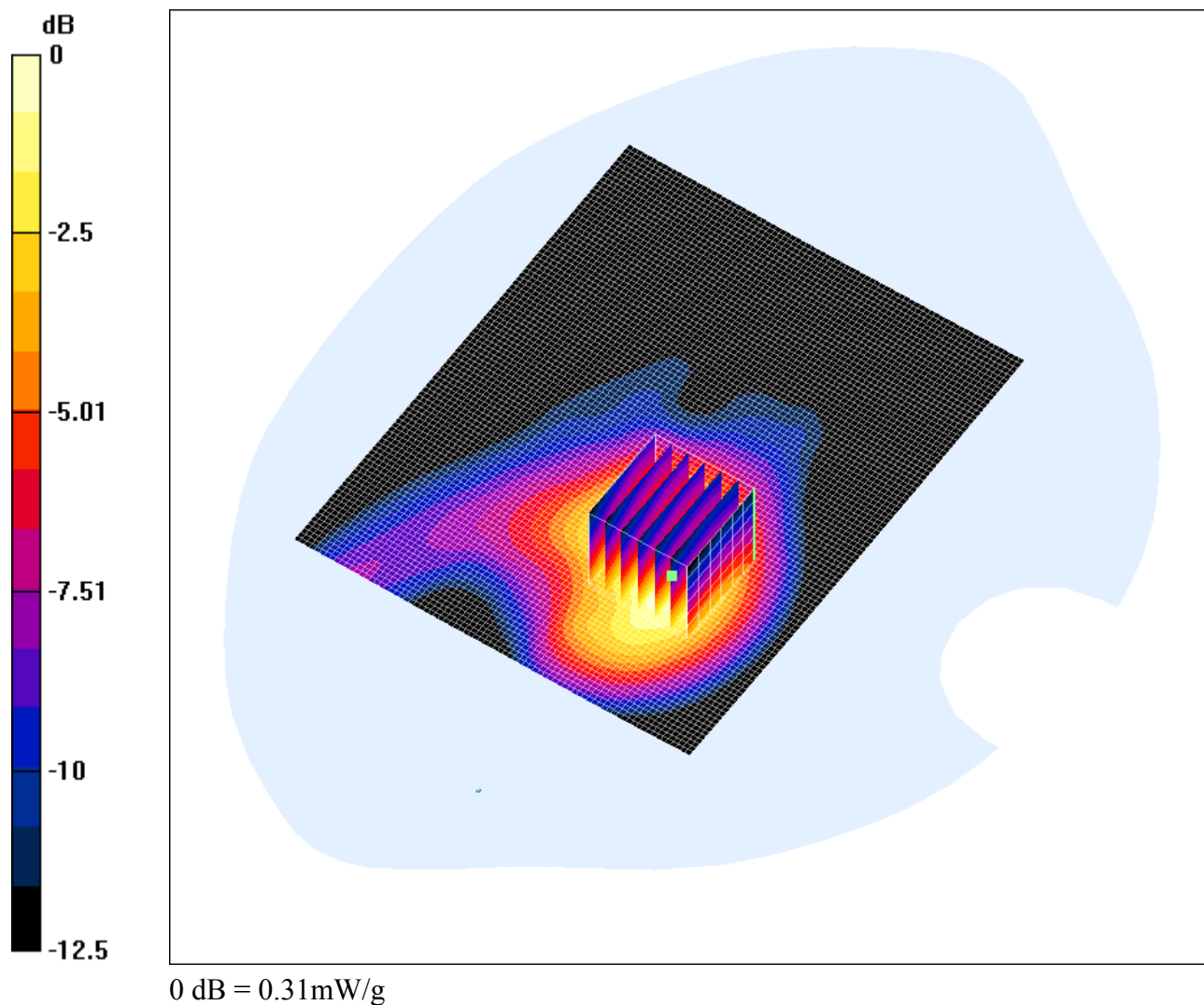
Power Drift = -0.04 dB

Maximum value of SAR = 0.106 mW/g

Date: 14/12/03

45446/JD06/010

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 850MHz MSL ($\sigma = 0.925849$ mho/m, $\epsilon_r = 53.3367$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.3, 6.3, 6.3); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Rear of Handset in Case with Clip in Pouch and PHF (15mm Distance)/Area Scan (101x81x1):

Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Reference Value = 10.6 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 0.309 mW/g

**Rear of Handset in Case with Clip in Pouch and PHF (15mm Distance)/Zoom Scan (7x7x7)
(7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.438 W/kg

SAR(1 g) = 0.285 mW/g ; SAR(10 g) = 0.177 mW/g

Reference Value = 10.6 V/m

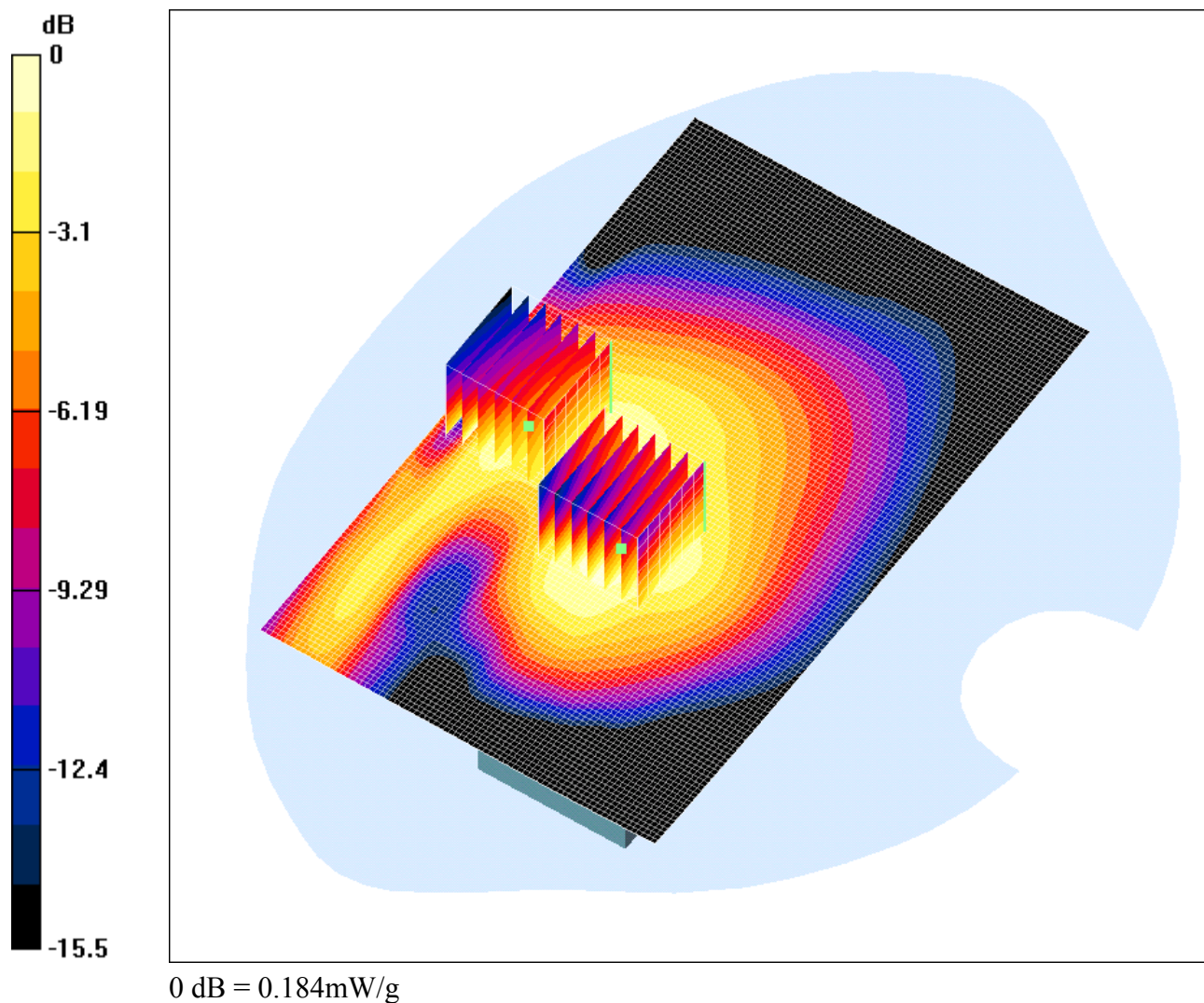
Power Drift = -0.02 dB

Maximum value of SAR = 0.31 mW/g

Date: 13/12/03

45446/JD006/009

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 850MHz MSL ($\sigma = 0.925849$ mho/m, $\epsilon_r = 53.3367$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.3, 6.3, 6.3); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Display of Handset Facing Phantom With PHF (15mm Distance)/Area Scan (131x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Reference Value = 10.2 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.161 mW/g

Display of Handset Facing Phantom With PHF (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.217 W/kg

SAR(1 g) = 0.151 mW/g ; SAR(10 g) = 0.1 mW/g

Reference Value = 10.2 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.161 mW/g

Display of Handset Facing Phantom With PHF (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.46 W/kg

SAR(1 g) = 0.159 mW/g ; SAR(10 g) = 0.0895 mW/g

Reference Value = 10.2 V/m

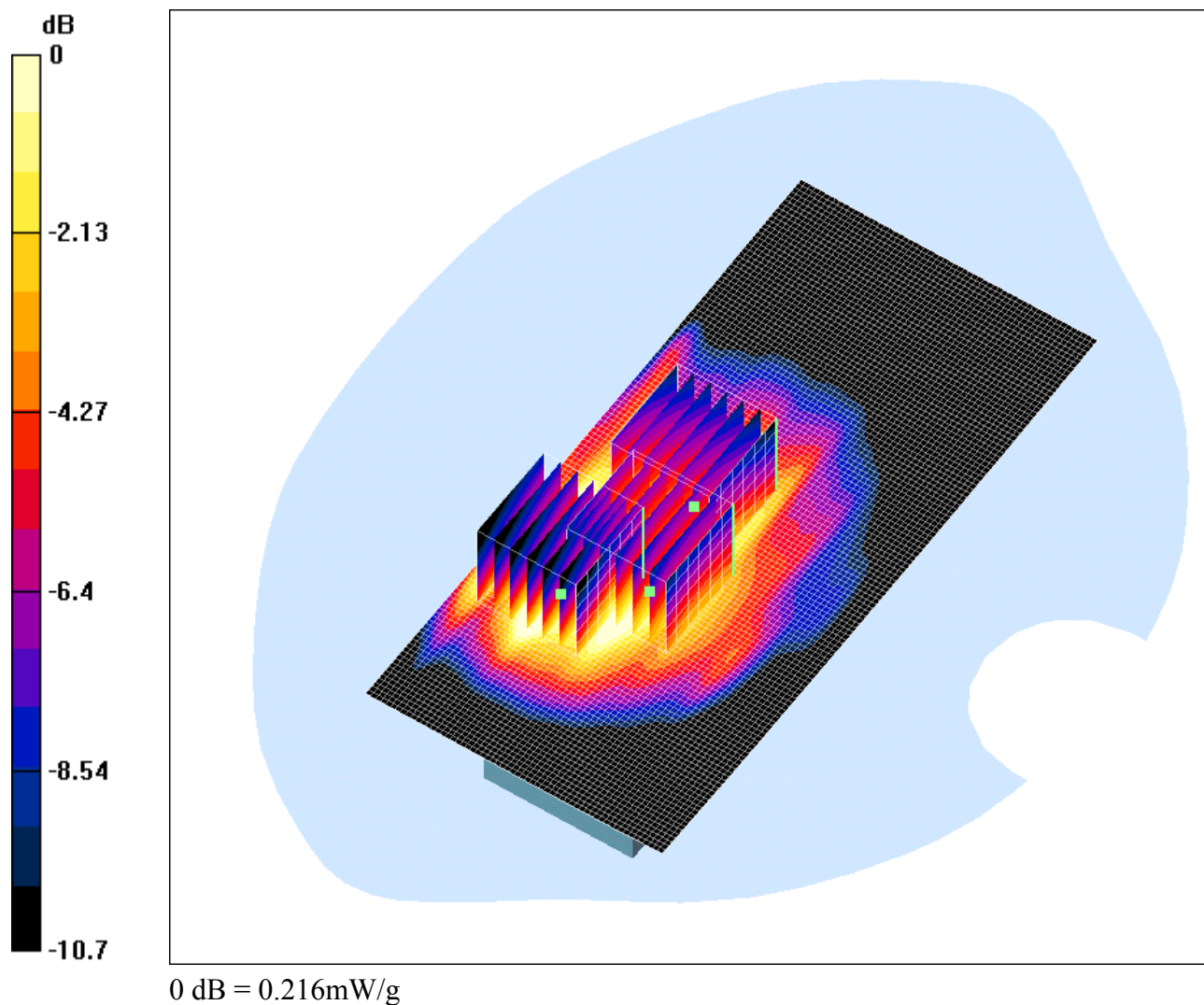
Power Drift = -0.1 dB

Maximum value of SAR = 0.184 mW/g

Date: 13/12/03

45446/JD06/008

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 850MHz MSL ($\sigma = 0.925849$ mho/m, $\epsilon_r = 53.3367$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.3, 6.3, 6.3); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Display of Handset Facing Phantom (15mm Distance)/Area Scan (131x61x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Reference Value = 11.9 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.435 mW/g

Display of Handset Facing Phantom (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.326 W/kg

SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.149 mW/g

Reference Value = 11.9 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.254 mW/g

Display of Handset Facing Phantom (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.321 W/kg

SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.156 mW/g

Reference Value = 11.9 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.25 mW/g

Display of Handset Facing Phantom (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 2:

Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.255 W/kg

SAR(1 g) = 0.19 mW/g; SAR(10 g) = 0.128 mW/g

Reference Value = 11.9 V/m

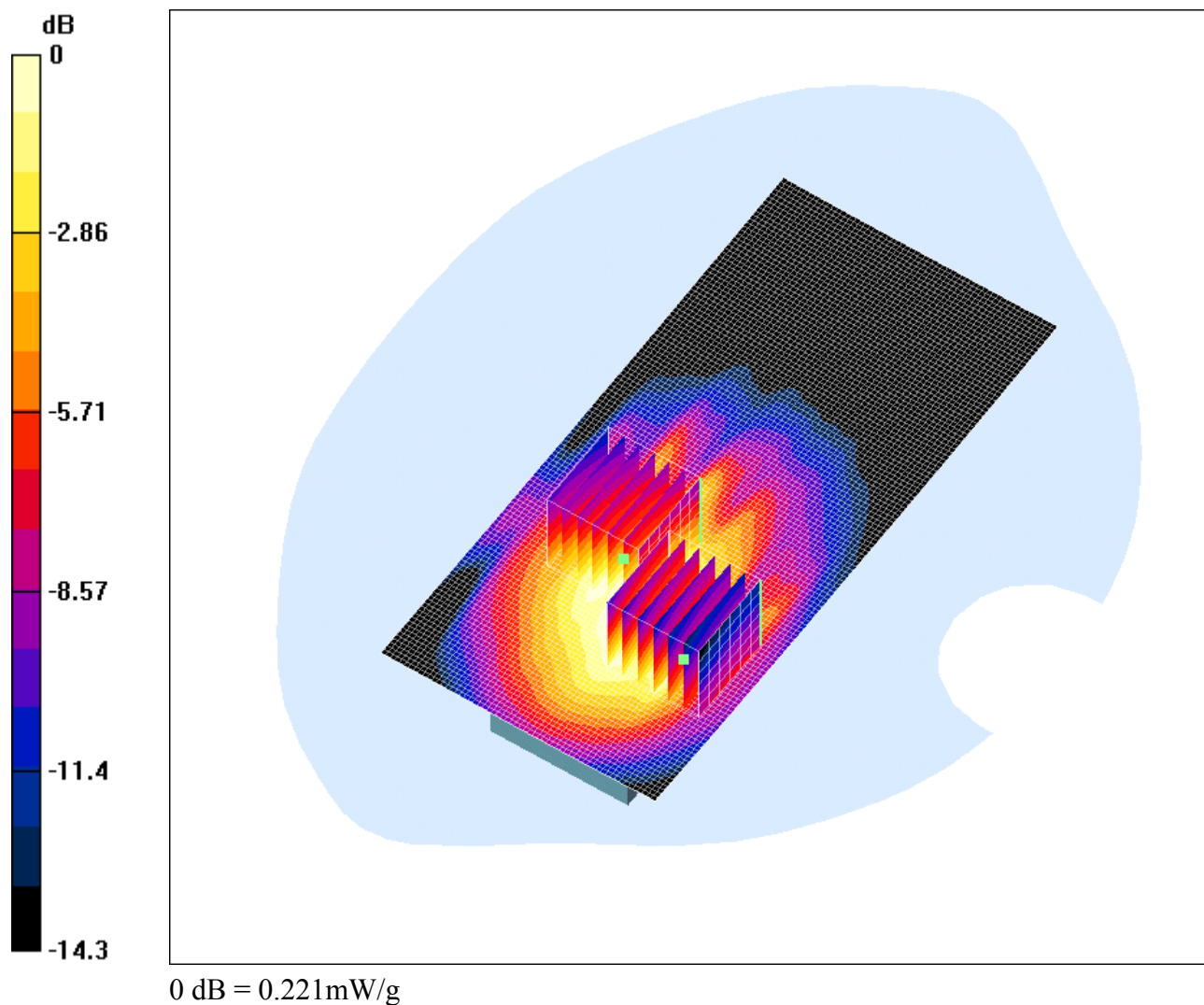
Power Drift = -0.04 dB

Maximum value of SAR = 0.216 mW/g

Date: 13/12/03

45446/JD06/007

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 850MHz MSL ($\sigma = 0.925849$ mho/m, $\epsilon_r = 53.3367$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.3, 6.3, 6.3); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Rear of Handset Facing Phantom (15mm Distance)/Area Scan (131x61x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Reference Value = 8.08 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.268 mW/g

Rear of Handset Facing Phantom (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.289 W/kg

SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.125 mW/g

Reference Value = 8.08 V/m

Power Drift = 0.02 dB

Maximum value of SAR = 0.225 mW/g

Rear of Handset Facing Phantom (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.106 mW/g

Reference Value = 8.08 V/m

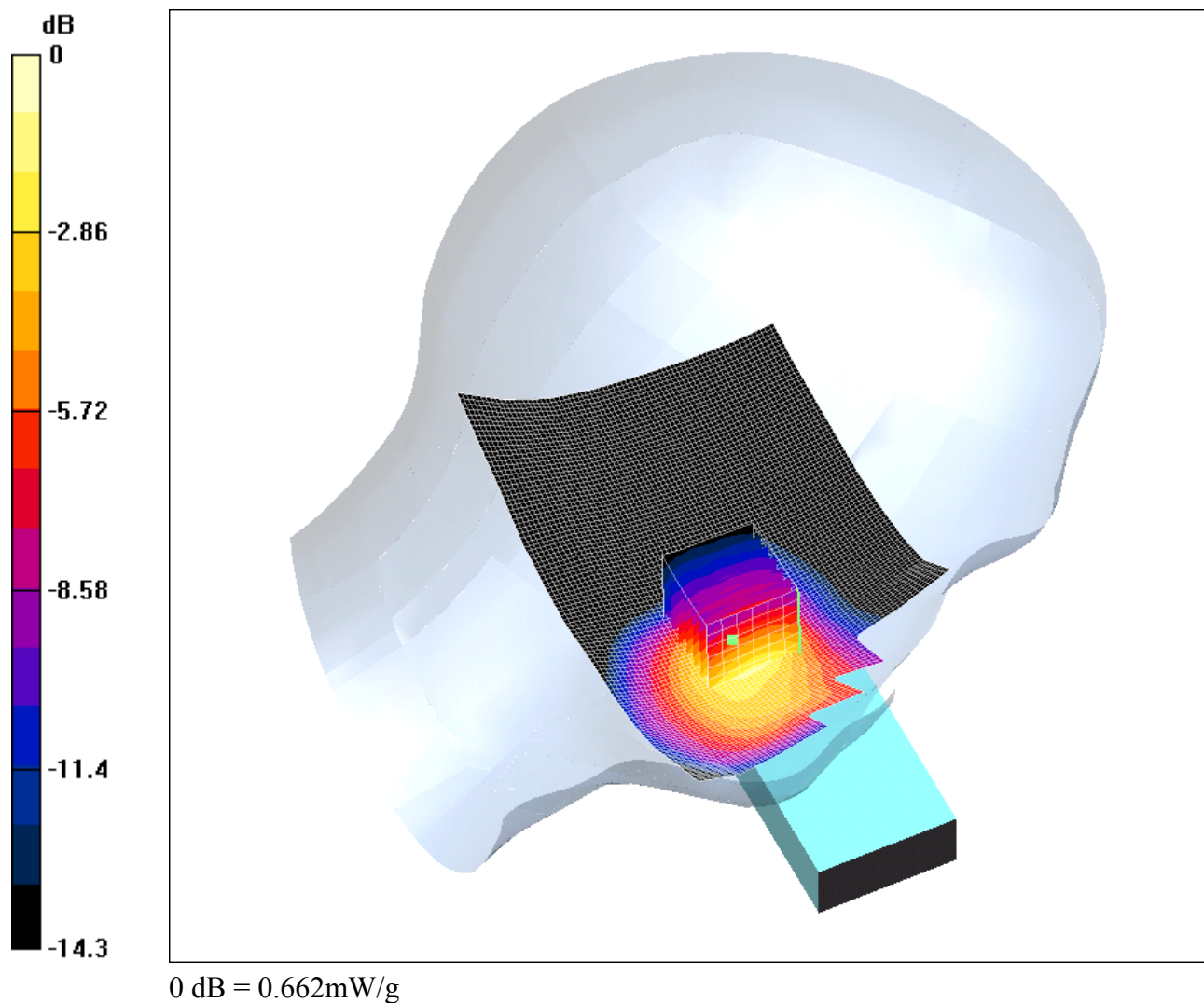
Power Drift = 0.02 dB

Maximum value of SAR = 0.221 mW/g

Date: 13/12/03

45446/JD06/006

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: 900MHz HSL ($\sigma = 0.886287$ mho/m, $\epsilon_r = 41.7172$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.4, 6.4, 64); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Touch position - High/Area Scan 2 (71x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2.21 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 0.598 mW/g

Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.338 mW/g

Reference Value = 2.21 V/m

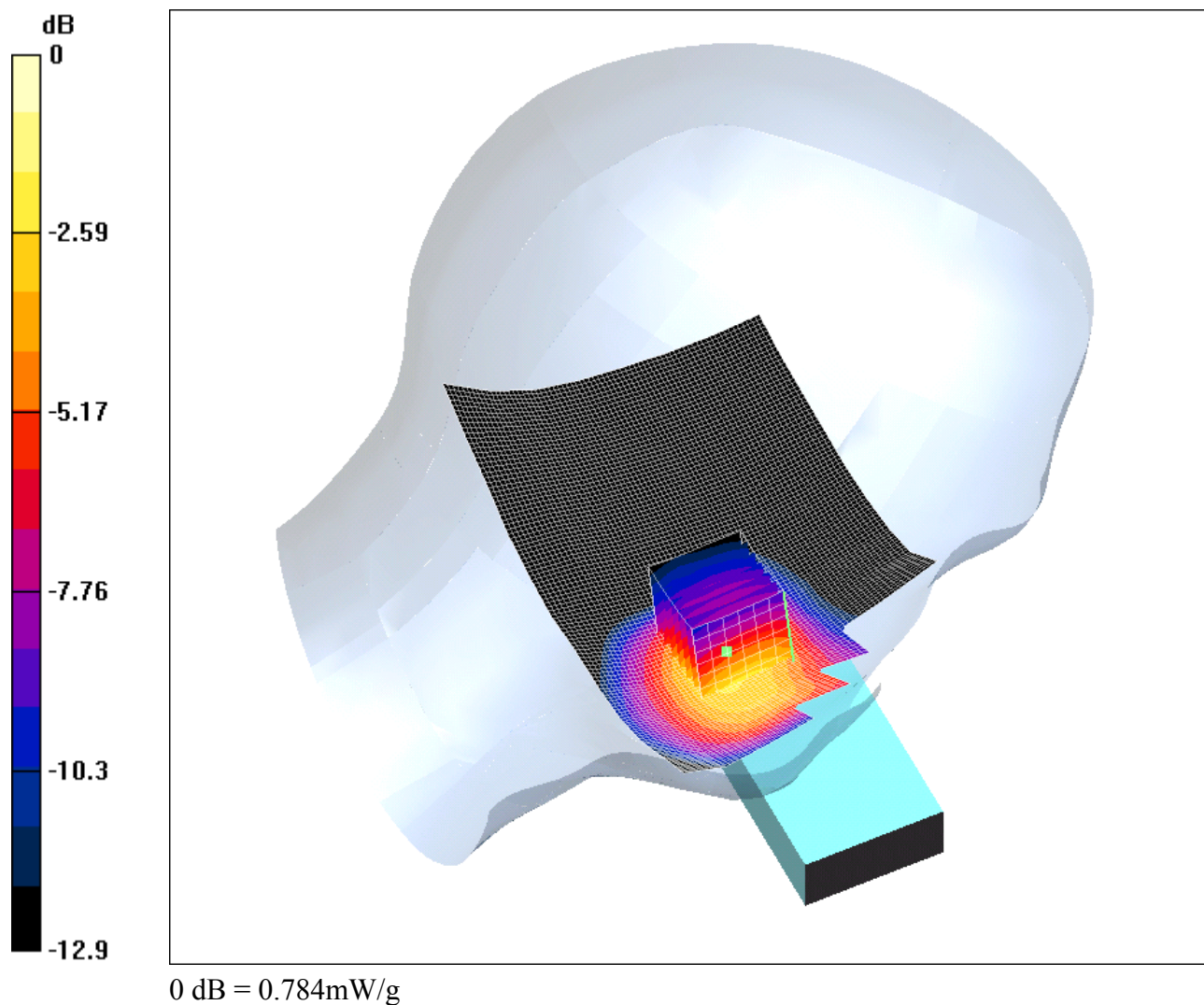
Power Drift = -0.06 dB

Maximum value of SAR = 0.662 mW/g

Date: 13/12/03

45446/JD06/005

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: 900MHz HSL ($\sigma = 0.865016$ mho/m, $\epsilon_r = 41.9324$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.4, 6.4, 64); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Touch position - Low/Area Scan 2 (71x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2.17 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 0.704 mW/g

Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.736 mW/g; SAR(10 g) = 0.407 mW/g

Reference Value = 2.17 V/m

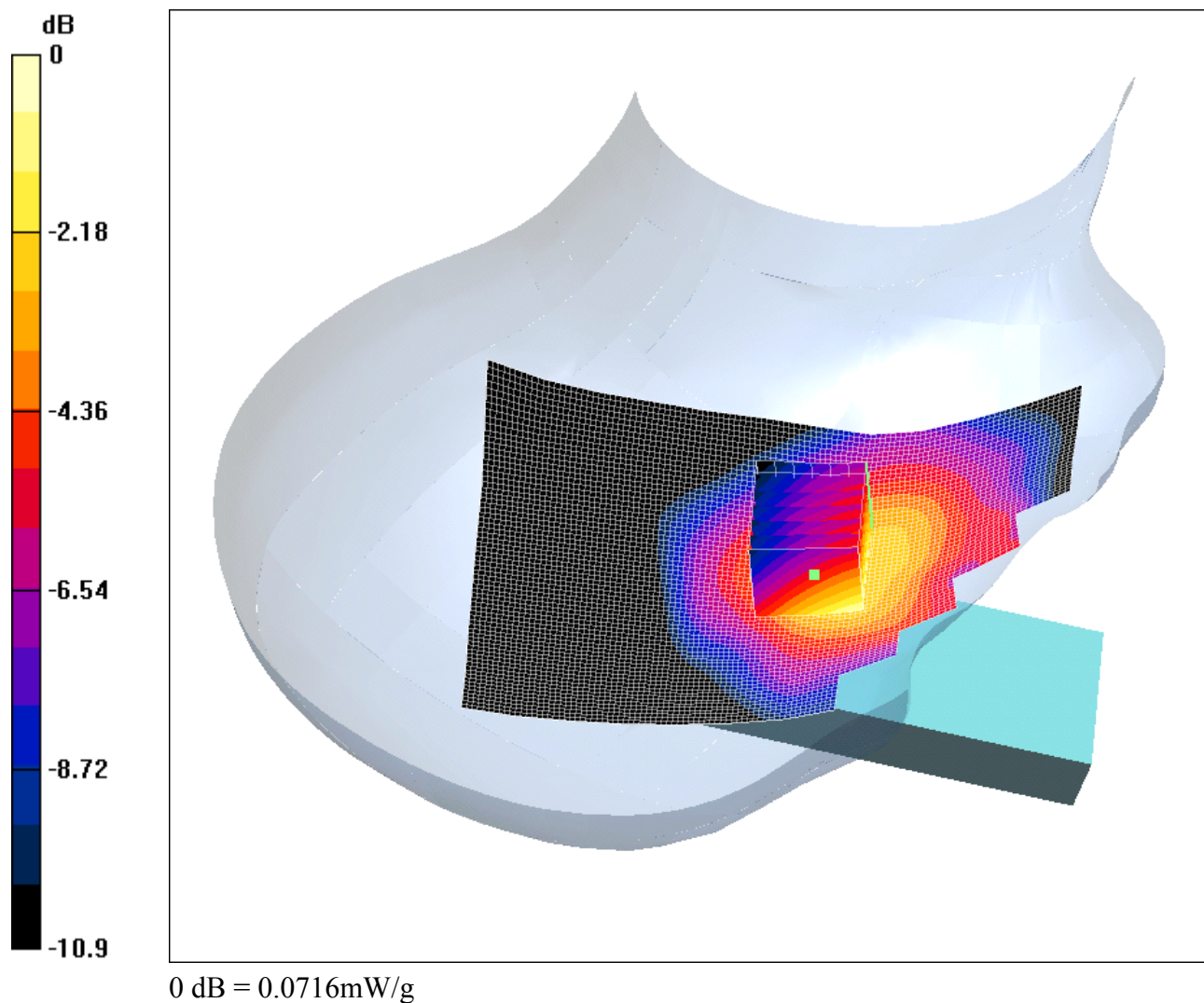
Power Drift = 0.2 dB

Maximum value of SAR = 0.784 mW/g

Date: 13/12/03

45446/JD06/004

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 900MHz HSL ($\sigma = 0.886287$ mho/m, $\epsilon_r = 41.7172$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.4, 6.4, 64); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Tilt position - Middle/Area Scan 2 (71x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.32 V/m

Power Drift = 0.07 dB

Maximum value of SAR = 0.0483 mW/g

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.0961 W/kg

SAR(1 g) = 0.0612 mW/g; SAR(10 g) = 0.039 mW/g

Reference Value = 1.32 V/m

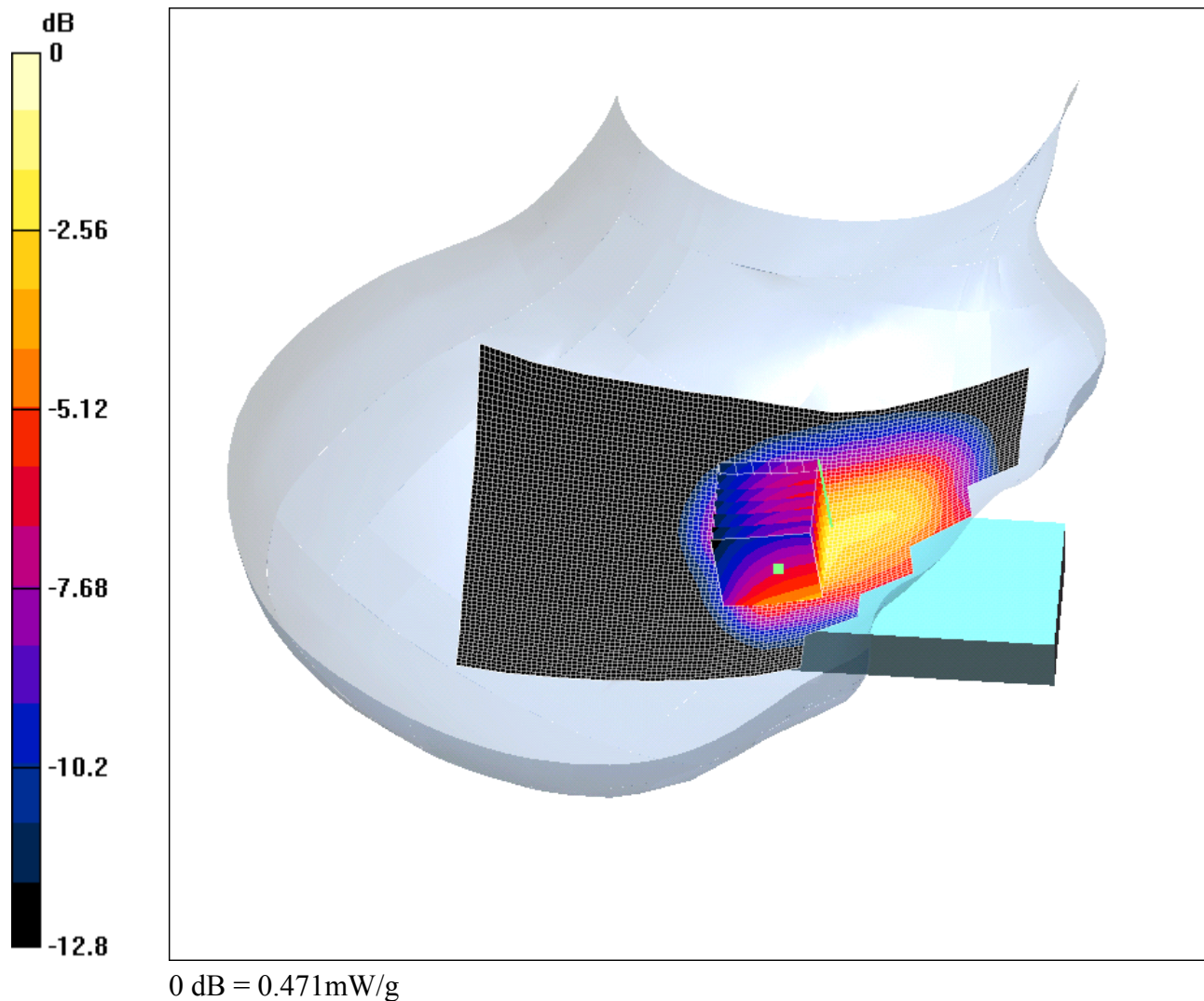
Power Drift = 0.07 dB

Maximum value of SAR = 0.0716 mW/g

Date: 13/12/03

45446/JD06/003

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 900MHz HSL ($\sigma = 0.886287$ mho/m, $\epsilon_r = 41.7172$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.4, 6.4, 64); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Touch position - Middle/Area Scan 2 (71x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.86 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 0.479 mW/g

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.846 W/kg

SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.256 mW/g

Reference Value = 1.86 V/m

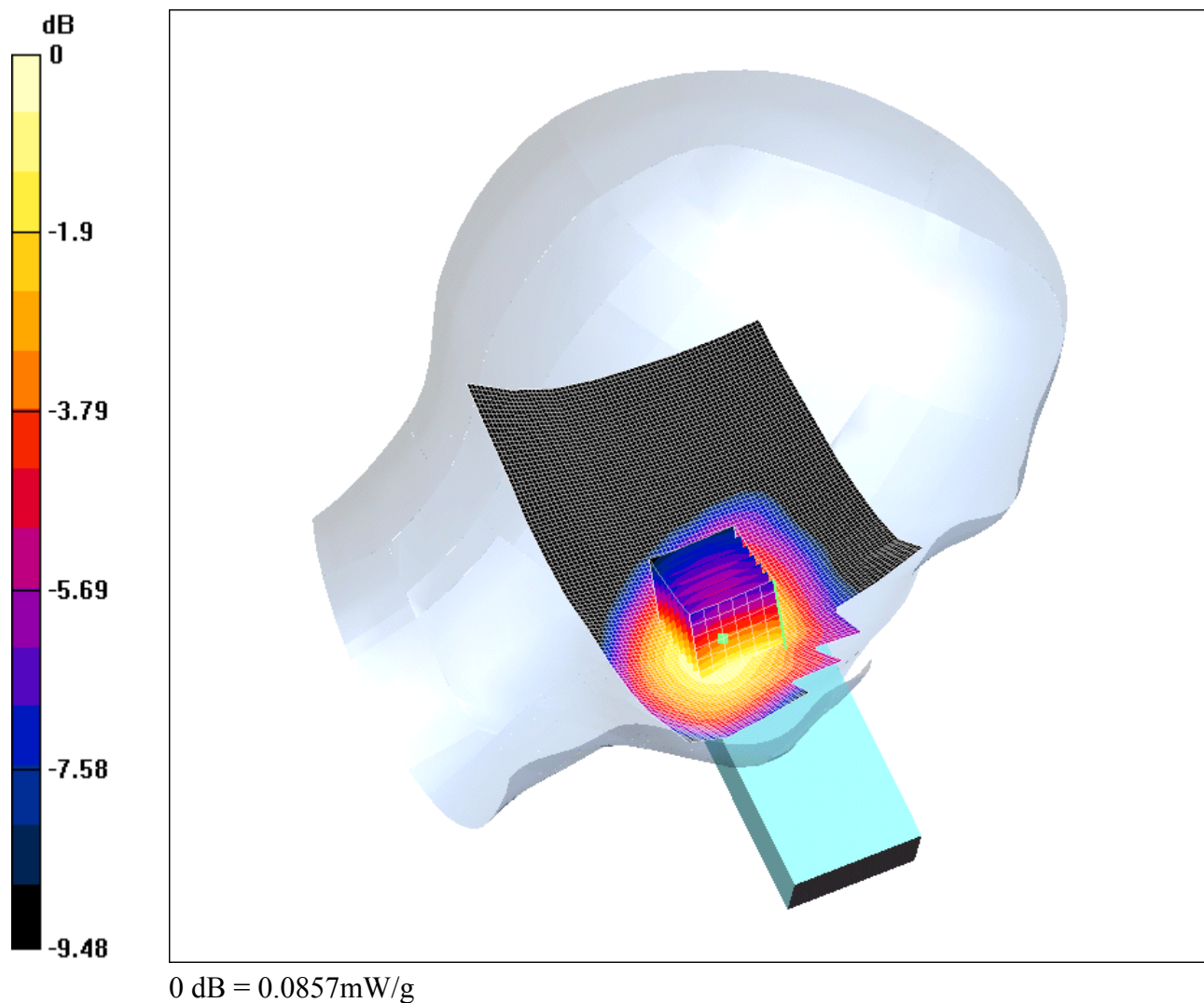
Power Drift = 0.2 dB

Maximum value of SAR = 0.471 mW/g

Date: 13/12/03

45446/JD06/002

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 900MHz HSL ($\sigma = 0.886287$ mho/m, $\epsilon_r = 41.7172$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.4, 6.4, 64); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Tilt position - Middle/Area Scan 2 (71x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.52 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 0.0807 mW/g

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.106 W/kg

SAR(1 g) = 0.0816 mW/g; SAR(10 g) = 0.0598 mW/g

Reference Value = 1.52 V/m

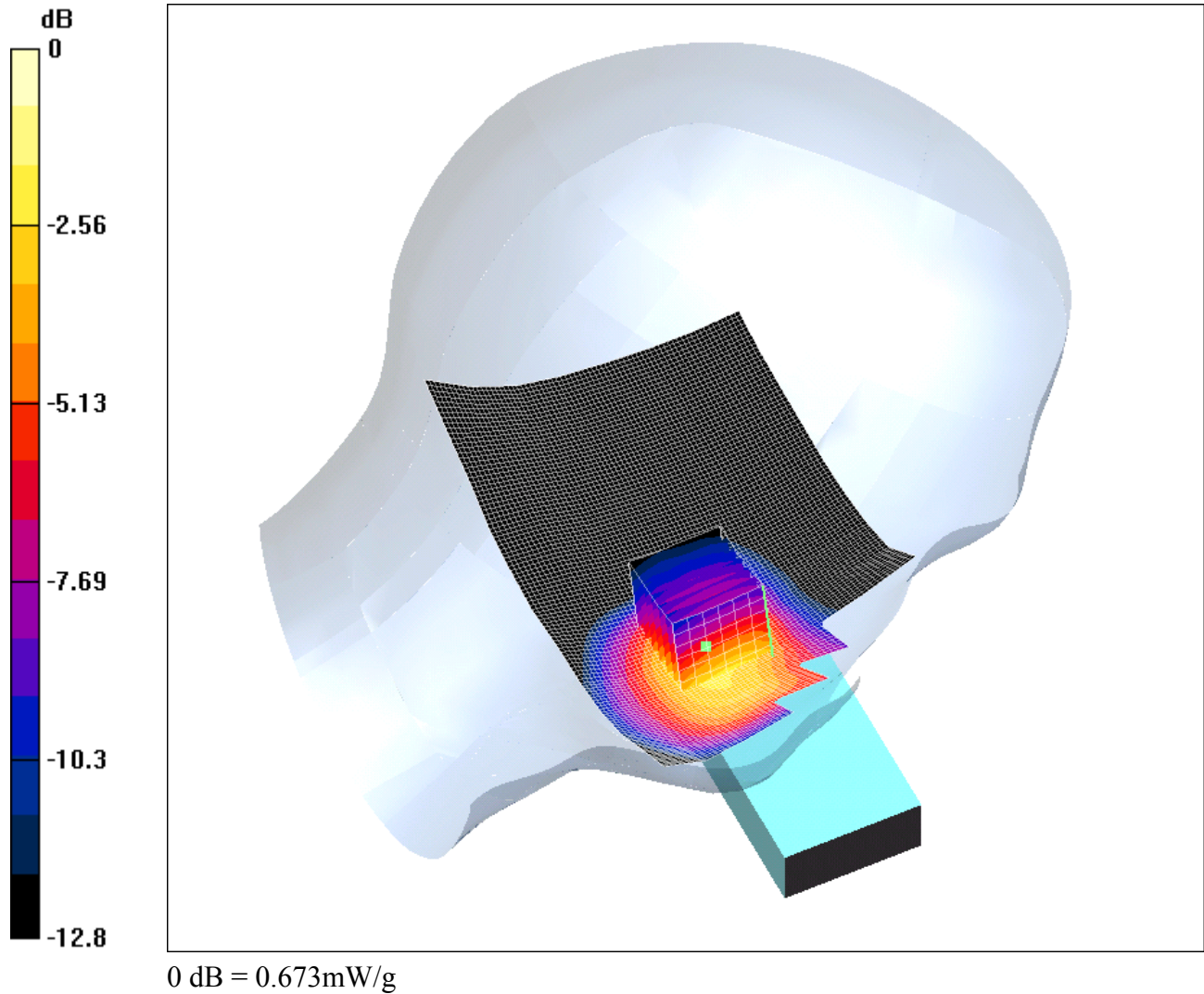
Power Drift = 0.3 dB

Maximum value of SAR = 0.0857 mW/g

Date: 13/12/03

45446/JD06/001

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455

Communication System: 850 MHz; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: 900MHz HSL ($\sigma = 0.886287$ mho/m, $\epsilon_r = 41.7172$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(6.4, 6.4, 64); Calibrated: 29/07/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 19/05/2003
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Touch position - Middle/Area Scan 2 (71x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.617 mW/g

Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.634 mW/g; SAR(10 g) = 0.356 mW/g

Reference Value = 2 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.673 mW/g