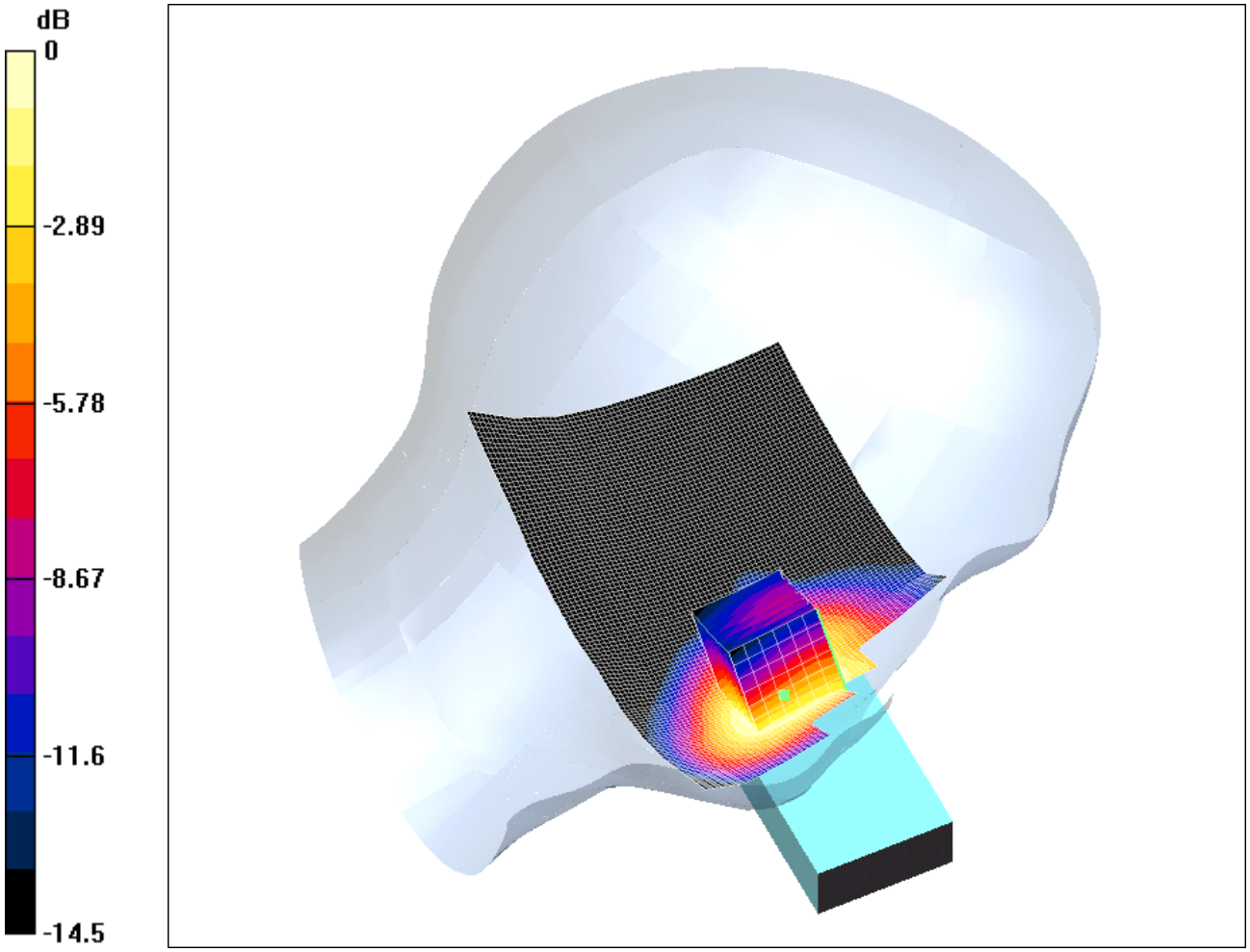
Date: 15/12/03

45446/JD06/023

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.562mW/g

Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: 1900MHz HSL (σ = 1.39448 mho/m, ε_r = 39.9494, ρ = 1000 kg/m^3)
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1528; ConvF(5, 5, 5); 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 = 1.68 V/m
Power Drift = -0.003 dB
Maximum value of SAR = 0.588 mW/g

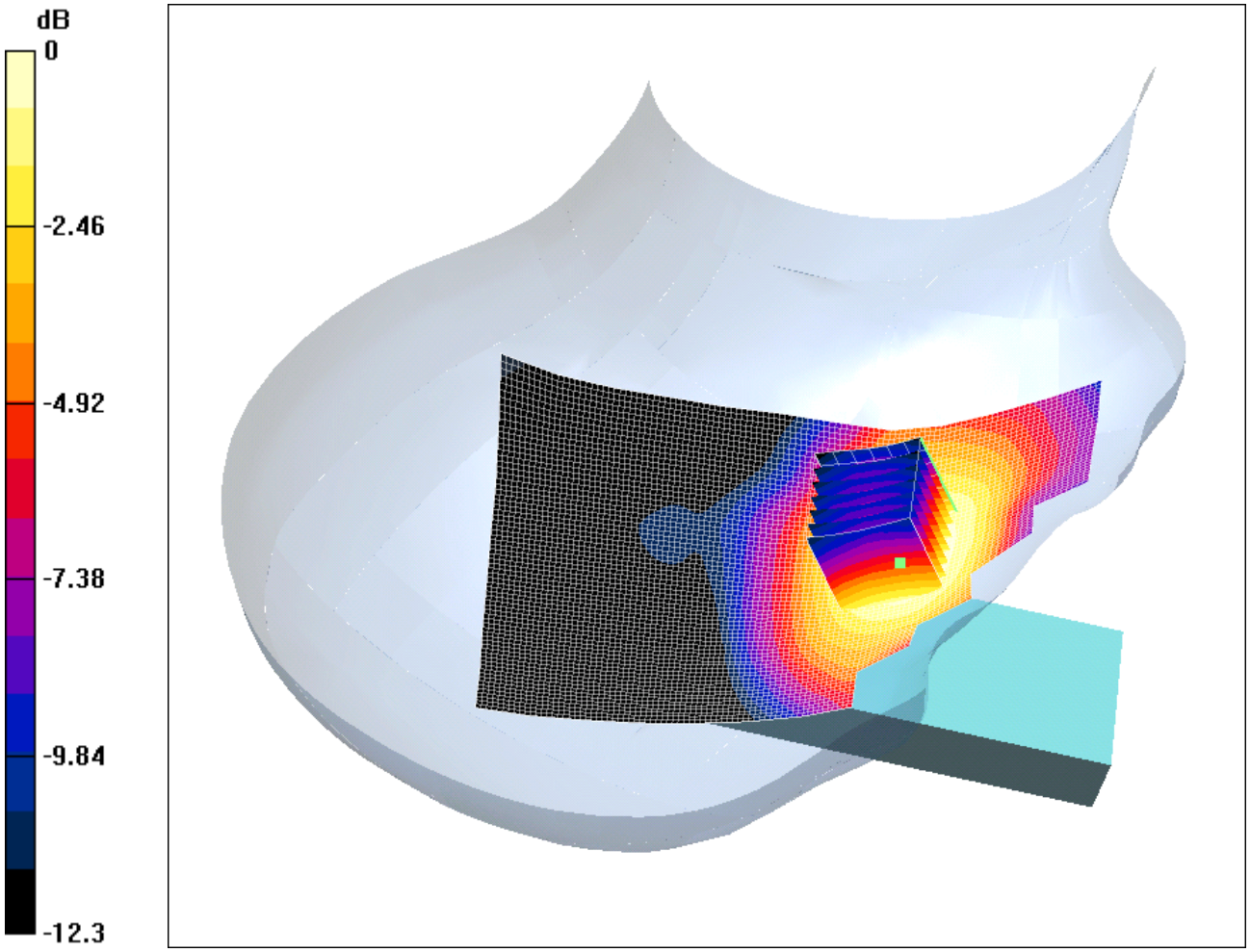
Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.732 W/kg
SAR(1 g) = 0.523 mW/g; SAR(10 g) = 0.341 mW/g
Reference Value = 1.68 V/m
Power Drift = -0.003 dB
Maximum value of SAR = 0.562 mW/g

Date: 15/12/03

45446/JD06/022

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.0899mW/g

Communication System: DCS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:8.3
Medium: 1900MHz HSL (σ = 1.41613 mho/m, ε_r = 39.8763, ρ = 1000 kg/m^3)
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1528; ConvF(5, 5, 5); 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 = 1.95 V/m
Power Drift = 0.04 dB
Maximum value of SAR = 0.0897 mW/g

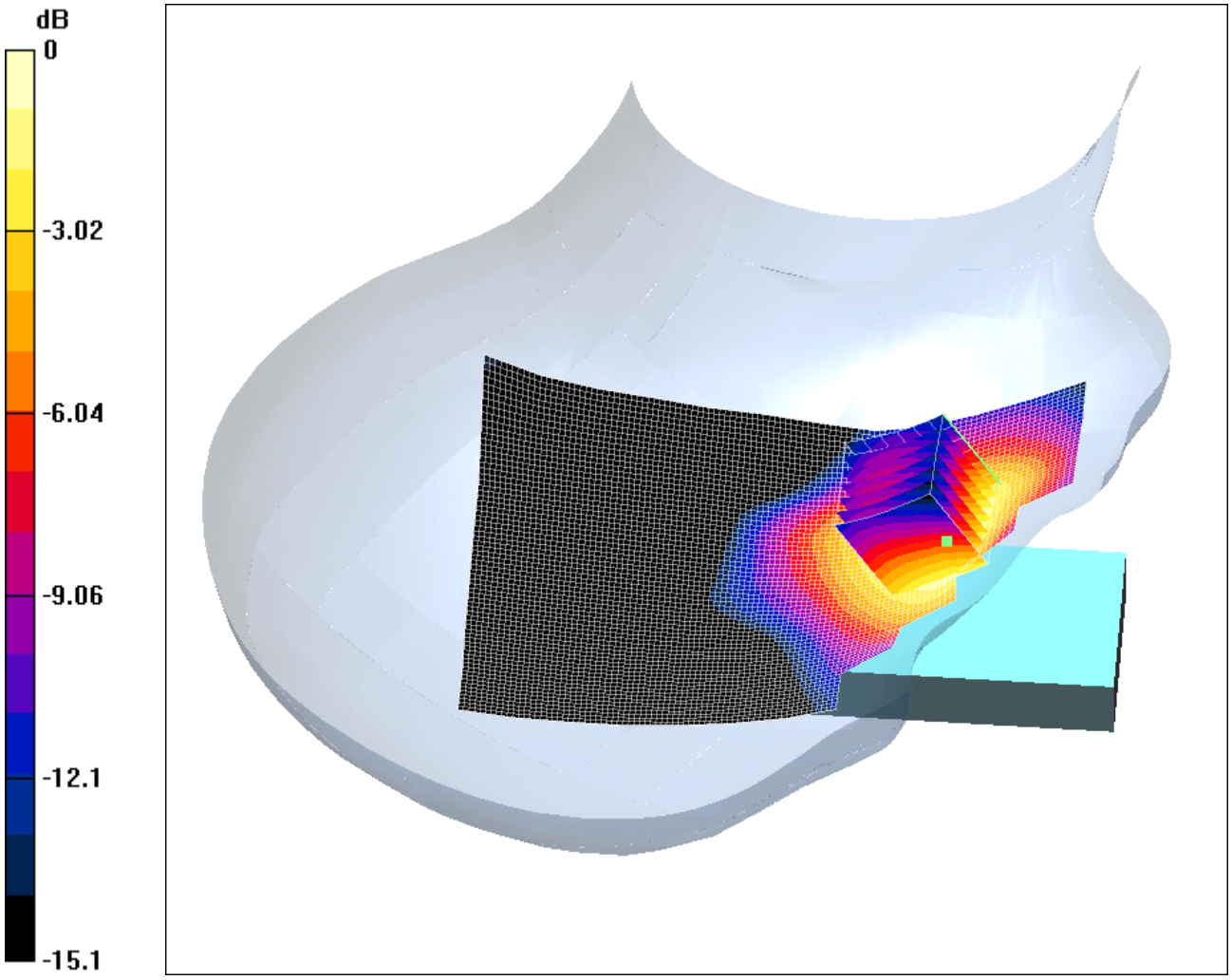
Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.118 W/kg
SAR(1 g) = 0.084 mW/g; SAR(10 g) = 0.0555 mW/g
Reference Value = 1.95 V/m
Power Drift = 0.04 dB
Maximum value of SAR = 0.0899 mW/g

Date: 15/12/03

45446/JD06/21

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.488mW/g

Communication System: DCS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:8.3
Medium: 1900MHz HSL (σ = 1.41613 mho/m, ε_r = 39.8763, ρ = 1000 kg/m^3)
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1528; ConvF(5, 5, 5); 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 = 2.08 V/m
Power Drift = -0.03 dB
Maximum value of SAR = 0.501 mW/g

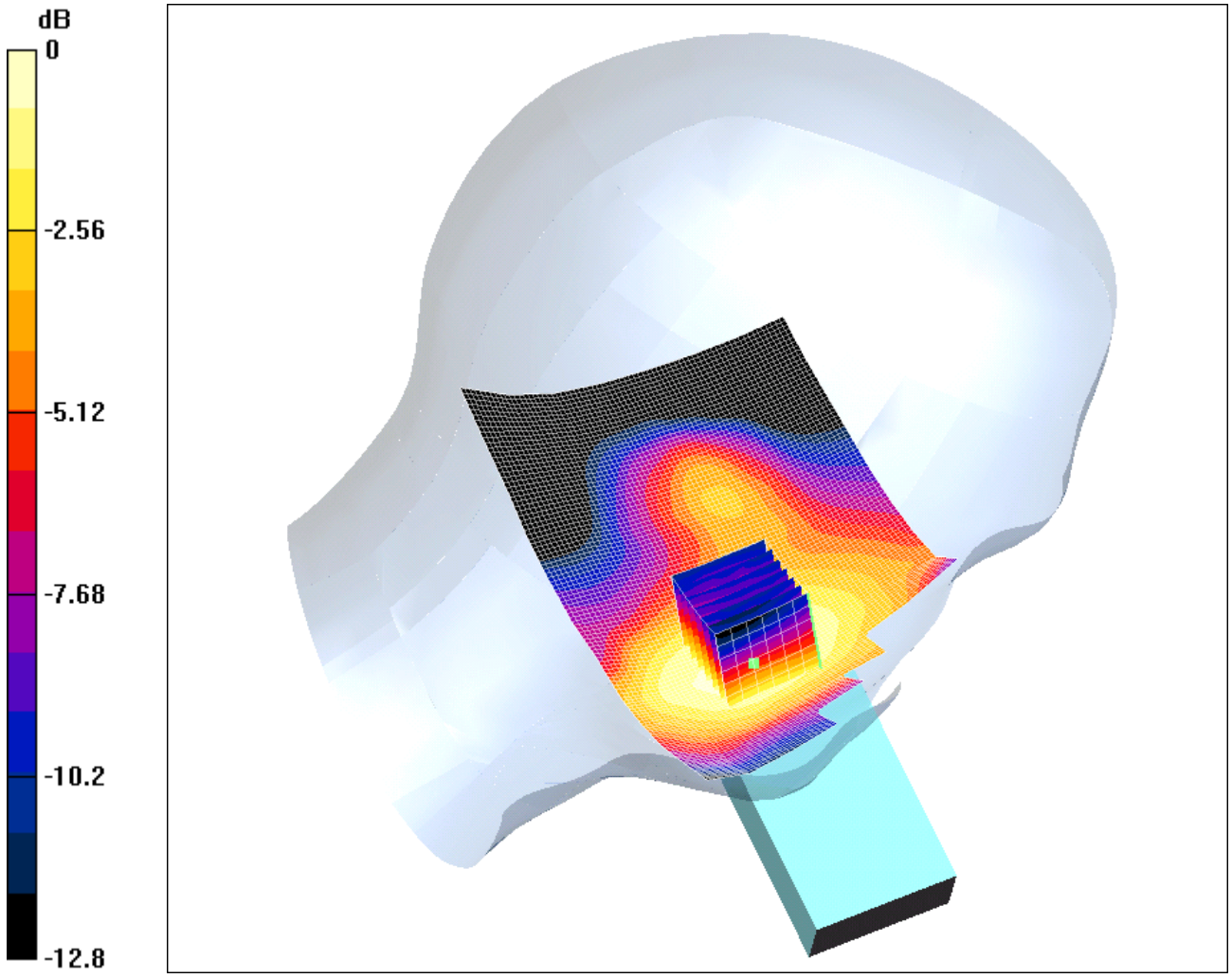
Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.616 W/kg
SAR(1 g) = 0.455 mW/g; SAR(10 g) = 0.283 mW/g
Reference Value = 2.08 V/m
Power Drift = -0.03 dB
Maximum value of SAR = 0.488 mW/g

Date: 15/12/03

45446/JD06/020

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.0639mW/g

Communication System: DCS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:8.3
Medium: 1900MHz HSL (σ = 1.41613 mho/m, ε_r = 39.8763, ρ = 1000 kg/m^3)
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1528; ConvF(5, 5, 5); 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 = 4.21 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.0611 mW/g

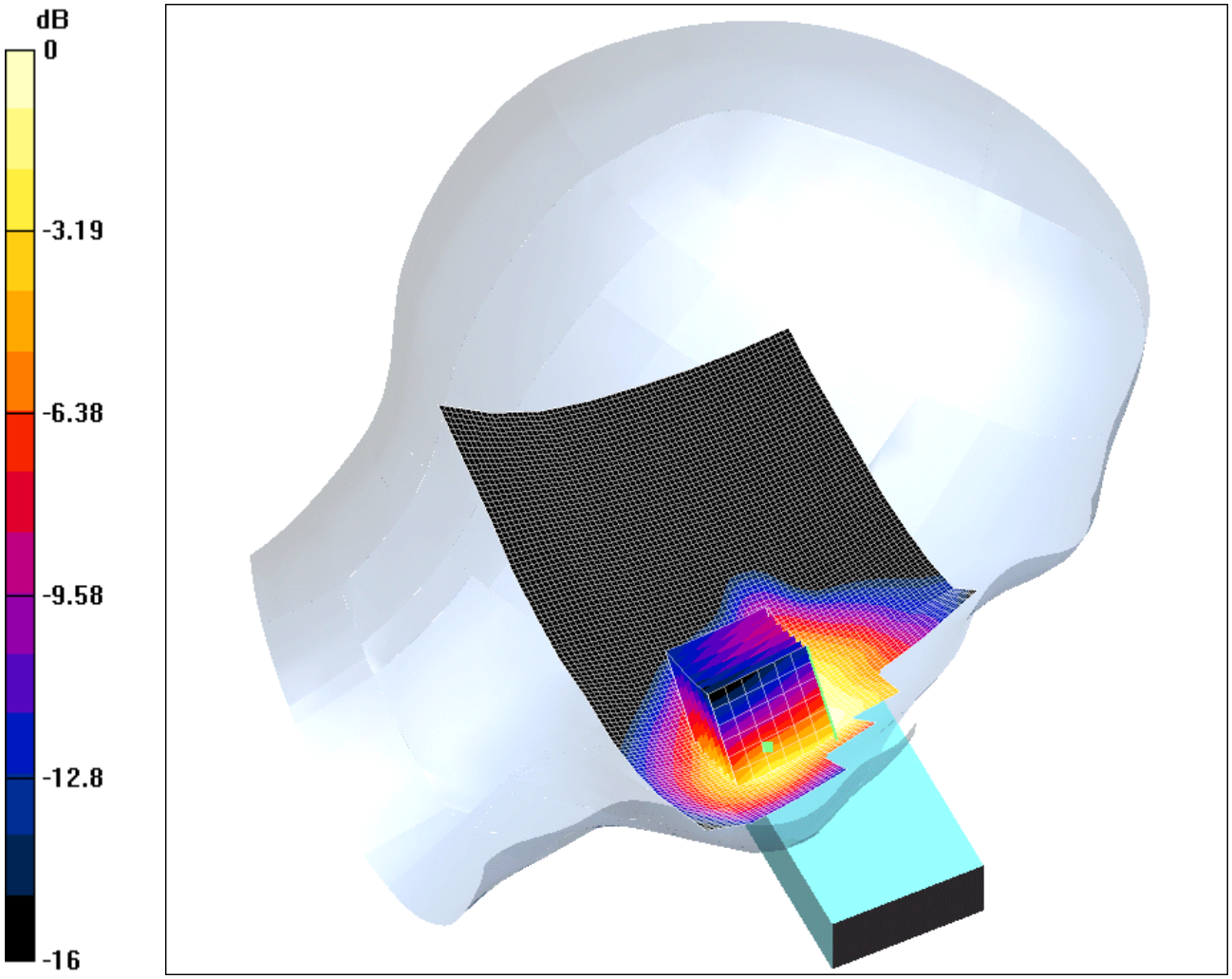
Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.0837 W/kg
SAR(1 g) = 0.0589 mW/g; SAR(10 g) = 0.0388 mW/g
Reference Value = 4.21 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.0639 mW/g

Date: 15/12/03

45446/JD06/019

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.648mW/g

Communication System: DCS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:8.3
Medium: 1900MHz HSL (σ = 1.41613 mho/m, ε_r = 39.8763, ρ = 1000 kg/m^3)
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1528; ConvF(5, 5, 5); 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 = 2.04 V/m
Power Drift = -0.03 dB
Maximum value of SAR = 0.667 mW/g

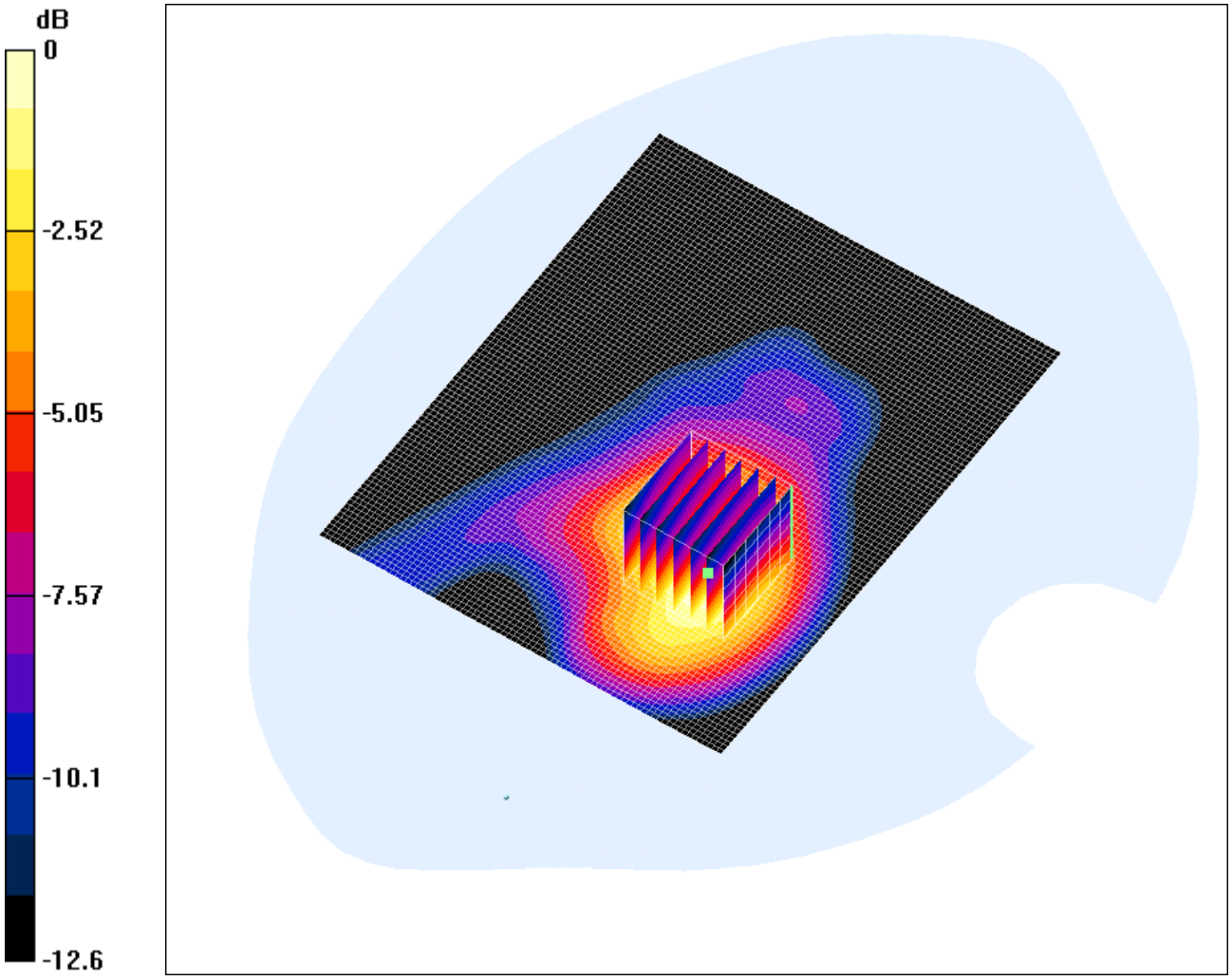
Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.892 W/kg
SAR(1 g) = 0.602 mW/g; SAR(10 g) = 0.379 mW/g
Reference Value = 2.04 V/m
Power Drift = -0.03 dB
Maximum value of SAR = 0.648 mW/g

Date: 14/12/03

45446/JD06/018

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.339mW/g

Communication System: 850 MHz; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: 850MHz MSL (σ = 0.934511 mho/m, ε_r = 53.2597, ρ = 1000 kg/m^3)
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) High/Area Scan (101x81x1):
Measurement grid: dx=15mm, dy=15mm
Reference Value = 11.7 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.347 mW/g

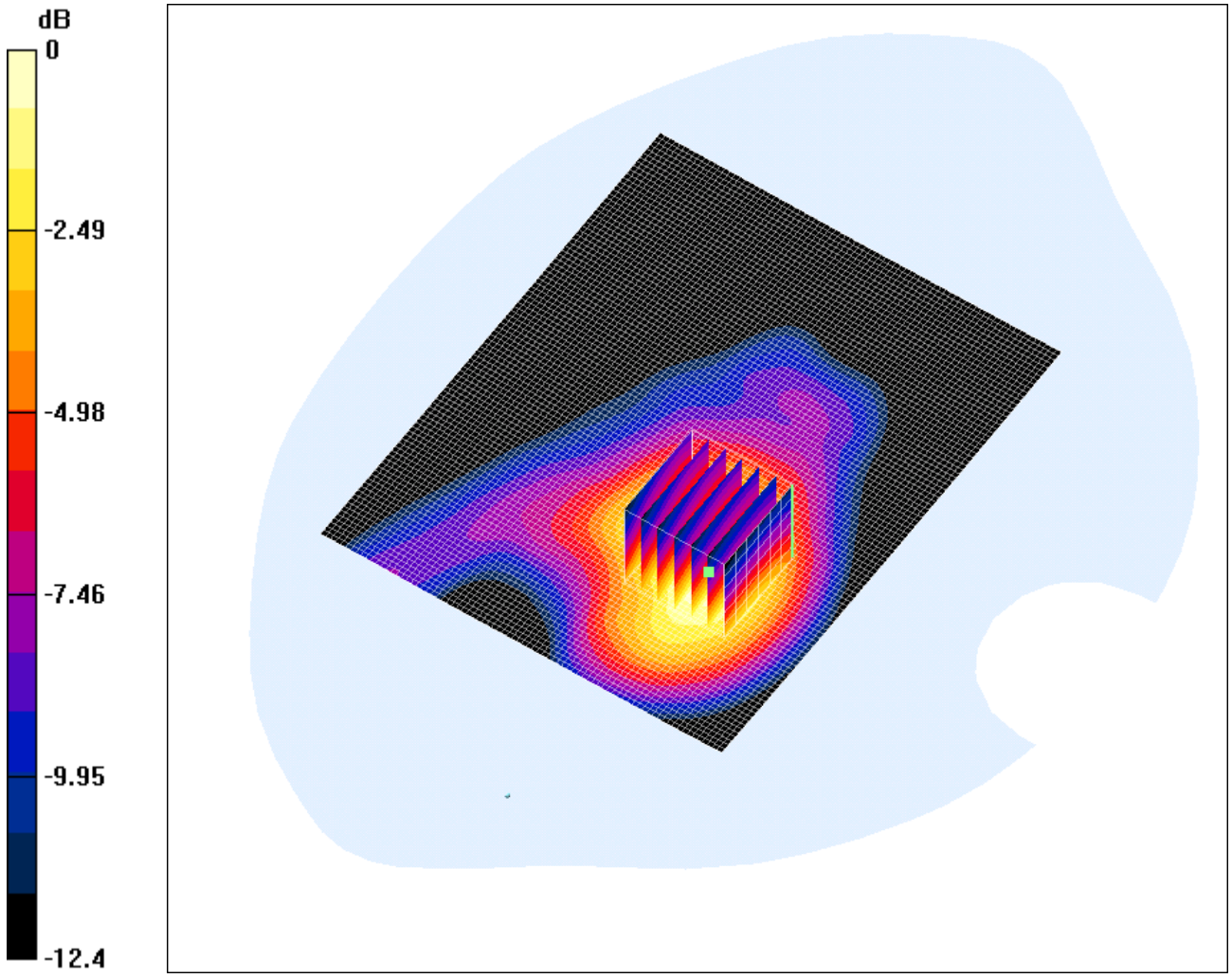
Rear of Handset in Case with Clip on Hook and PHF (18mm Distance) High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.477 W/kg
SAR(1 g) = 0.31 mW/g; SAR(10 g) = 0.195 mW/g
Reference Value = 11.7 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.339 mW/g

Date: 14/12/03

45446/JD06/017

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.375mW/g

Communication System: 850 MHz; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: 850MHz MSL (σ = 0.905096 mho/m, ε_r = 53.5423, ρ = 1000 kg/m^3)
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) Low/Area Scan (101x81x1):
Measurement grid: dx=15mm, dy=15mm
Reference Value = 12.9 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.373 mW/g

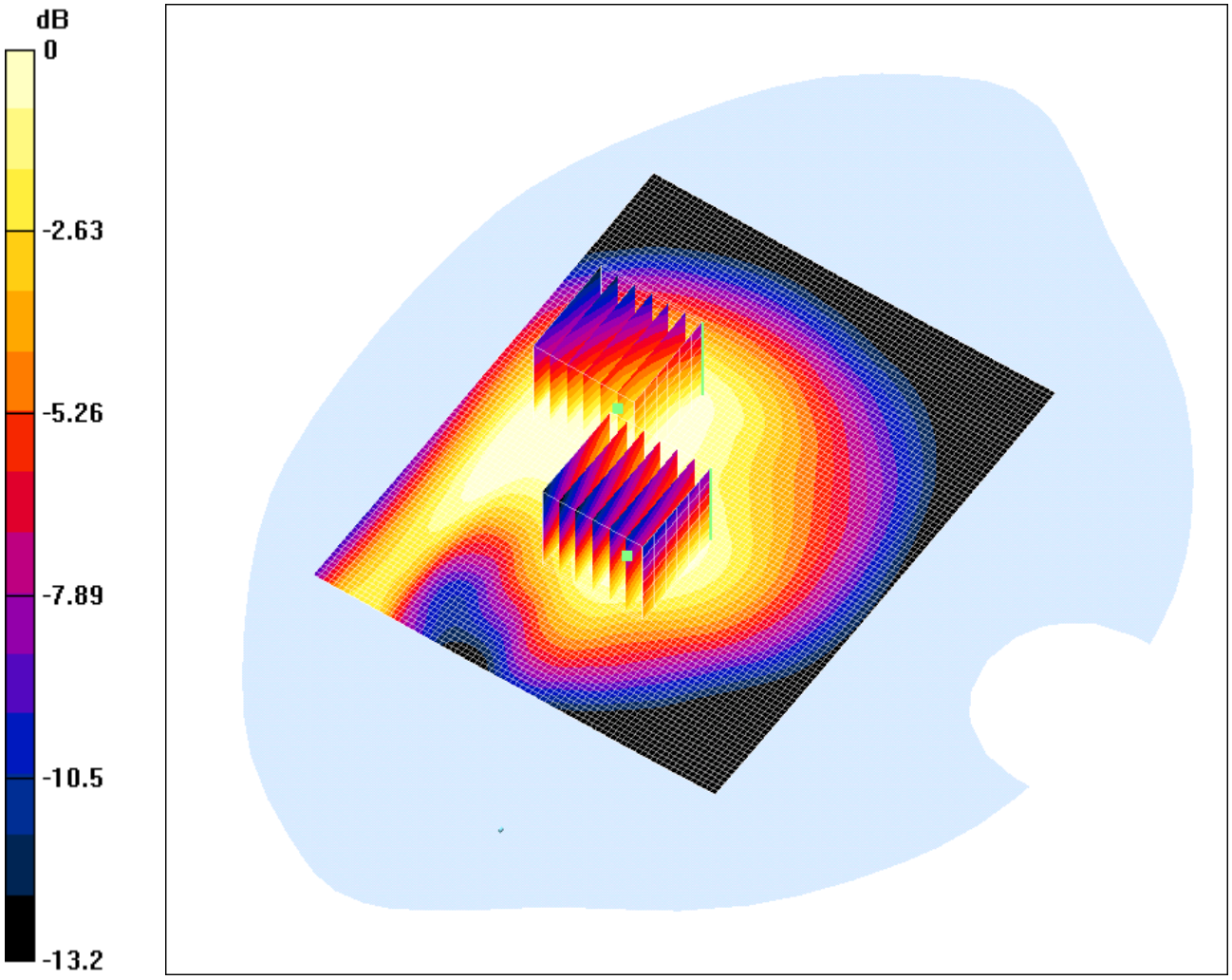
Rear of Handset in Case with Clip on Hook and PHF (18mm Distance) Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.527 W/kg
SAR(1 g) = 0.347 mW/g; SAR(10 g) = 0.219 mW/g
Reference Value = 12.9 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.375 mW/g

Date: 14/12/03

45446/JD06/016

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.0772mW/g

Communication System: 850 MHz; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: 850MHz MSL (σ = 0.925849 mho/m, ε_r = 53.3367, ρ = 1000 kg/m^3)
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 Closed Handset with PHF (15mm Distance)/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 7.52 V/m
Power Drift = -0.04 dB
Maximum value of SAR = 0.096 mW/g

Display of Closed Handset with PHF (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.302 W/kg
SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.0633 mW/g
Reference Value = 7.52 V/m
Power Drift = -0.04 dB
Maximum value of SAR = 0.118 mW/g

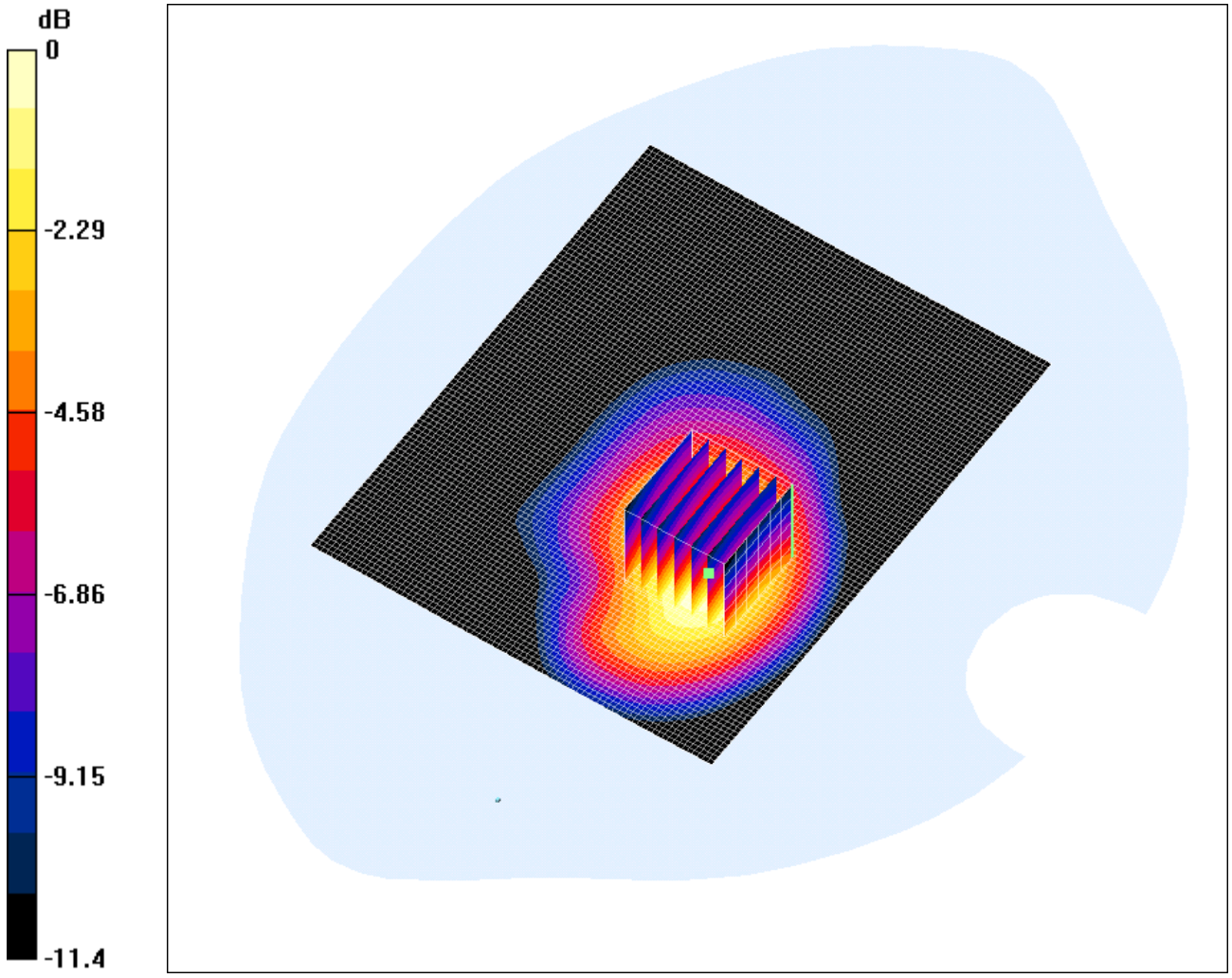
Display of Closed Handset with PHF (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.103 W/kg
SAR(1 g) = 0.0724 mW/g; SAR(10 g) = 0.0484 mW/g
Reference Value = 7.52 V/m
Power Drift = -0.04 dB
Maximum value of SAR = 0.0772 mW/g

Date: 14/12/03

45446/JD06/015

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.179mW/g

Communication System: 850 MHz; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: 850MHz MSL (σ = 0.925849 mho/m, ε_r = 53.3367, ρ = 1000 kg/m^3)
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 Closed Handset with PHF (15mm Distance)/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 10.5 V/m
Power Drift = -0.08 dB
Maximum value of SAR = 0.181 mW/g

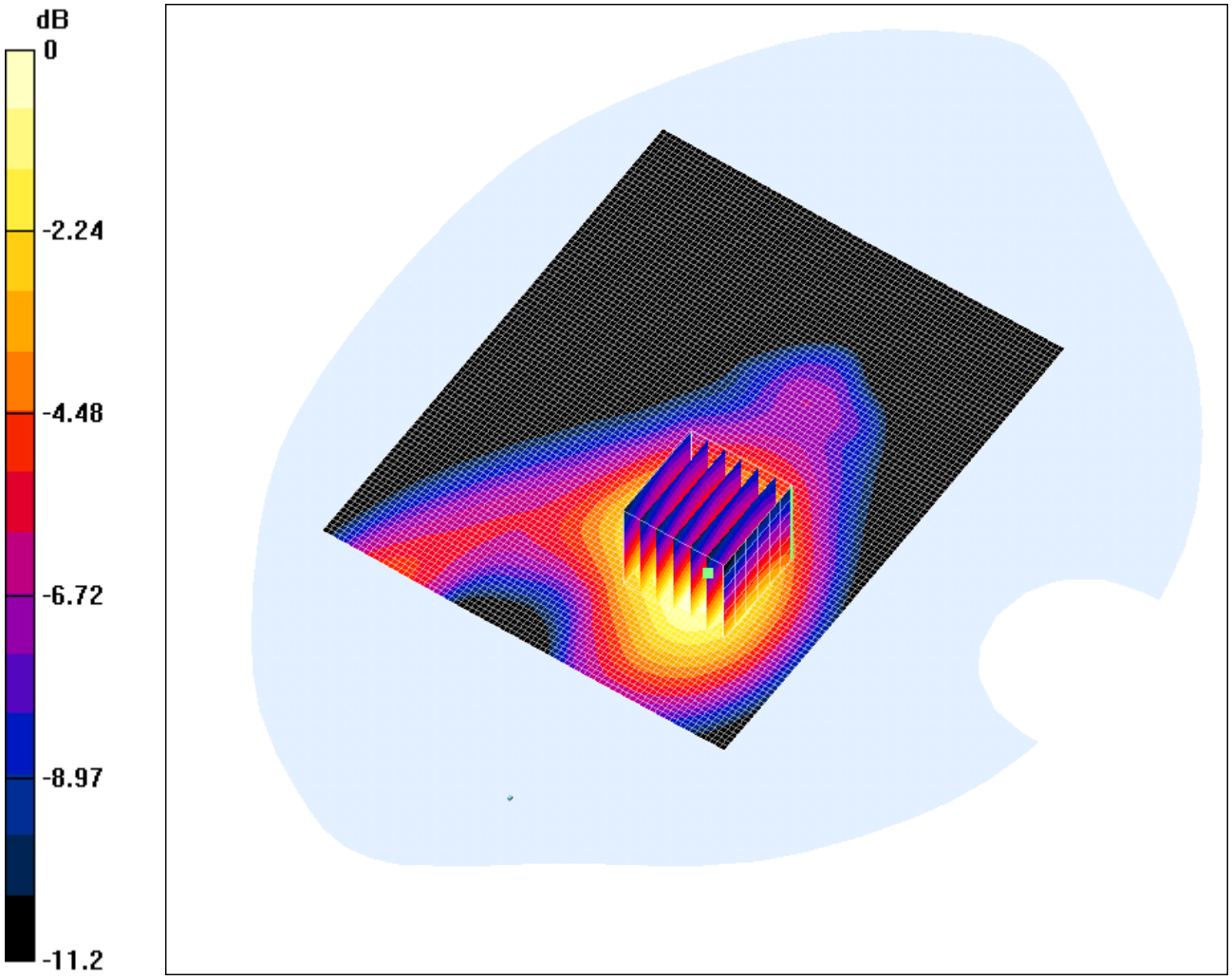
Rear of Closed Handset with PHF (15mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.24 W/kg
SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.109 mW/g
Reference Value = 10.5 V/m
Power Drift = -0.08 dB
Maximum value of SAR = 0.179 mW/g

Date: 14/12/03

45446/JD014

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.142mW/g

Communication System: 850 MHz; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: 850MHz MSL (σ = 0.925849 mho/m, ε_r = 53.3367, ρ = 1000 kg/m^3)
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, Accessory Strap and PHF (20mm Distance)/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 7.83 V/m
Power Drift = -0.09 dB
Maximum value of SAR = 0.143 mW/g

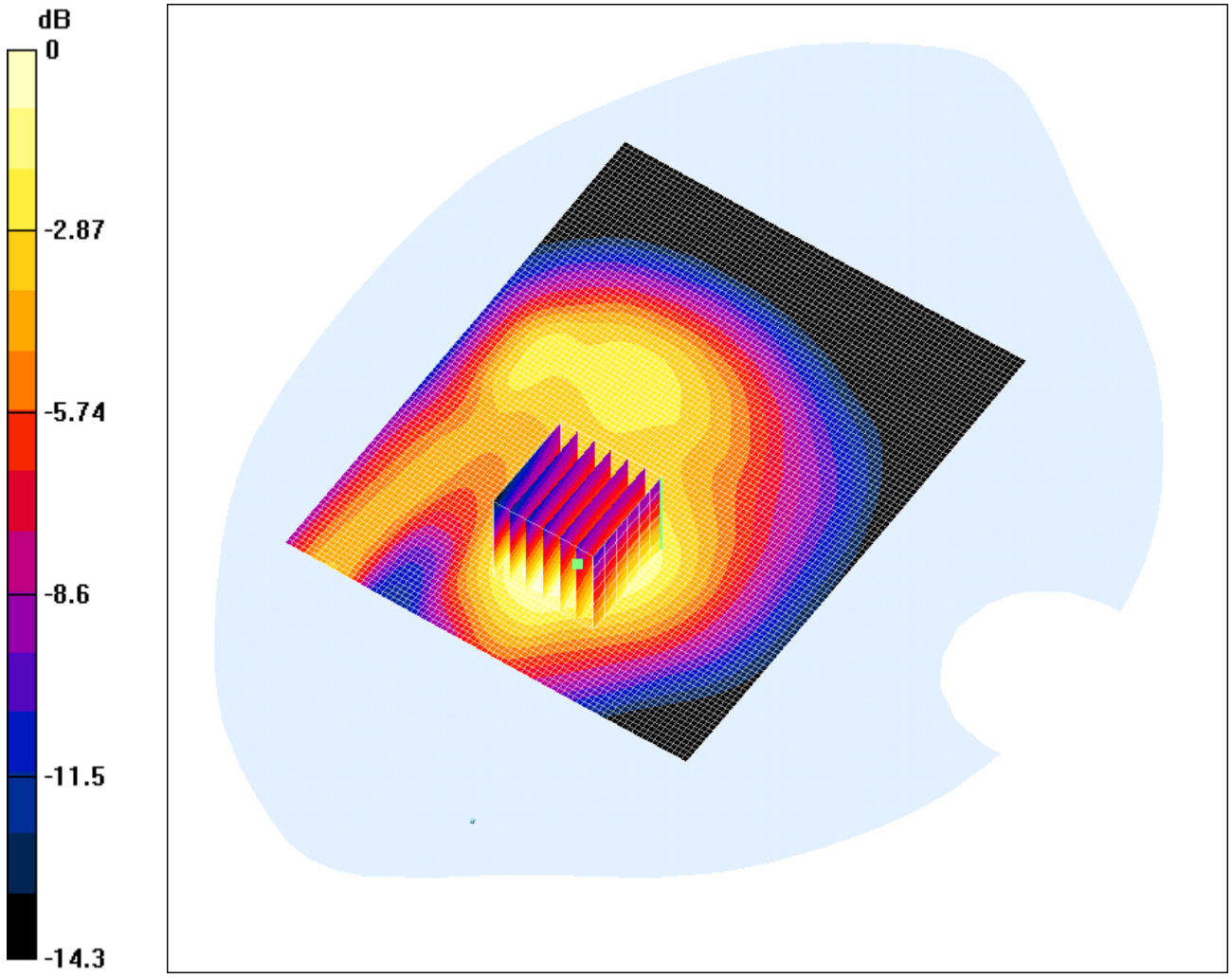
Rear of Handset in Case with Clip on Hook, Accessory Strap and PHF (20mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.192 W/kg
SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.0881 mW/g
Reference Value = 7.83 V/m
Power Drift = -0.09 dB
Maximum value of SAR = 0.142 mW/g

Date: 14/12/03

45446/06/013

Test Laboratory: RADIO FREQUENCY INVESTIGATION LTD.

DUT: S551; Type: S551; Serial: 004400252898455



0 dB = 0.122mW/g

Communication System: 850 MHz; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: 850MHz MSL (σ = 0.925849 mho/m, ε_r = 53.3367, ρ = 1000 kg/m^3)
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 on Hook and PHF (25mm Distance)/Area Scan (101x81x1):
Measurement grid: dx=15mm, dy=15mm
Reference Value = 7.07 V/m
Power Drift = -0.07 dB
Maximum value of SAR = 0.122 mW/g

Display of Handset in Case with Clip on Hook and PHF (25mm Distance)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.158 W/kg
SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.0743 mW/g
Reference Value = 7.07 V/m
Power Drift = -0.07 dB
Maximum value of SAR = 0.122 mW/g