DIGITAL EMC CO., LTD

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464

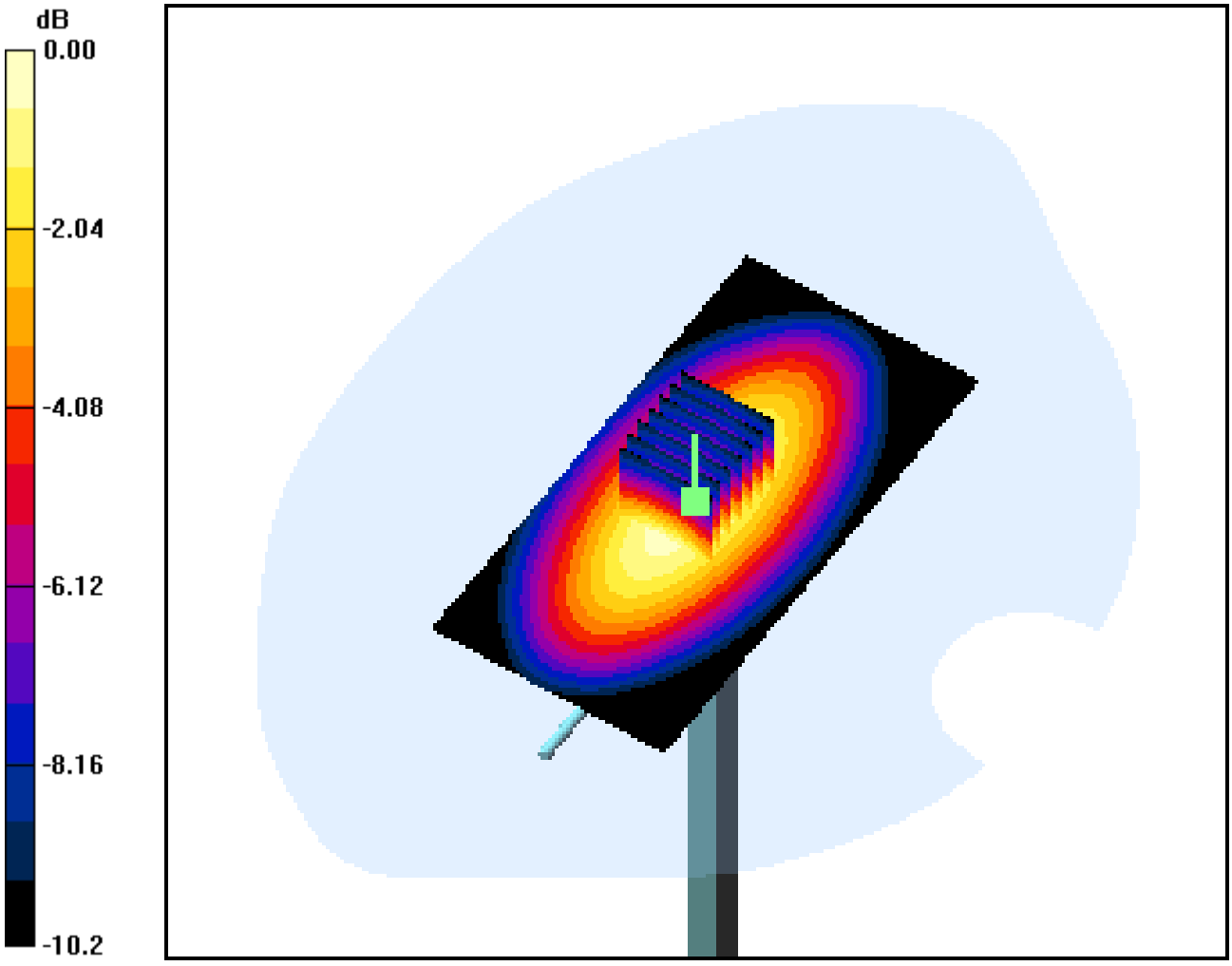
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.893 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp: 20.0

Dipole Validation

Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = -0.019 dB
Peak SAR (extrapolated) = 3.16 W/kg
SAR(1 g) = 2.26 mW/g; SAR(10 g) = 1.51 mW/g



0 dB = 2.45mW/g

DIGITAL EMC CO., LTD

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

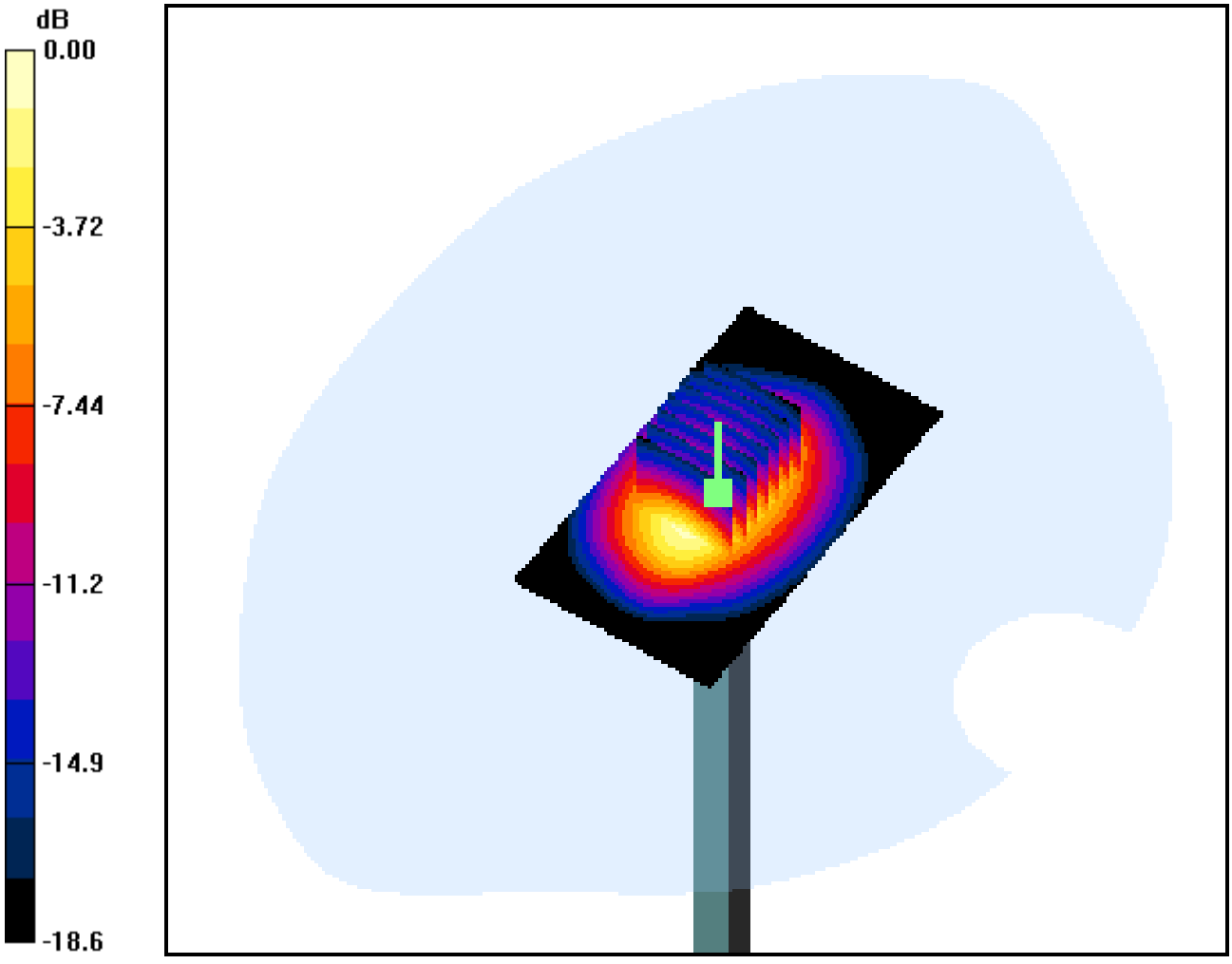
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.39 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp: 21.0

Dipole Validation

Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = -0.037 dB
Peak SAR (extrapolated) = 19.5 W/kg
SAR(1 g) = 10.6 mW/g; SAR(10 g) = 5.38 mW/g



0 dB = 11.9mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

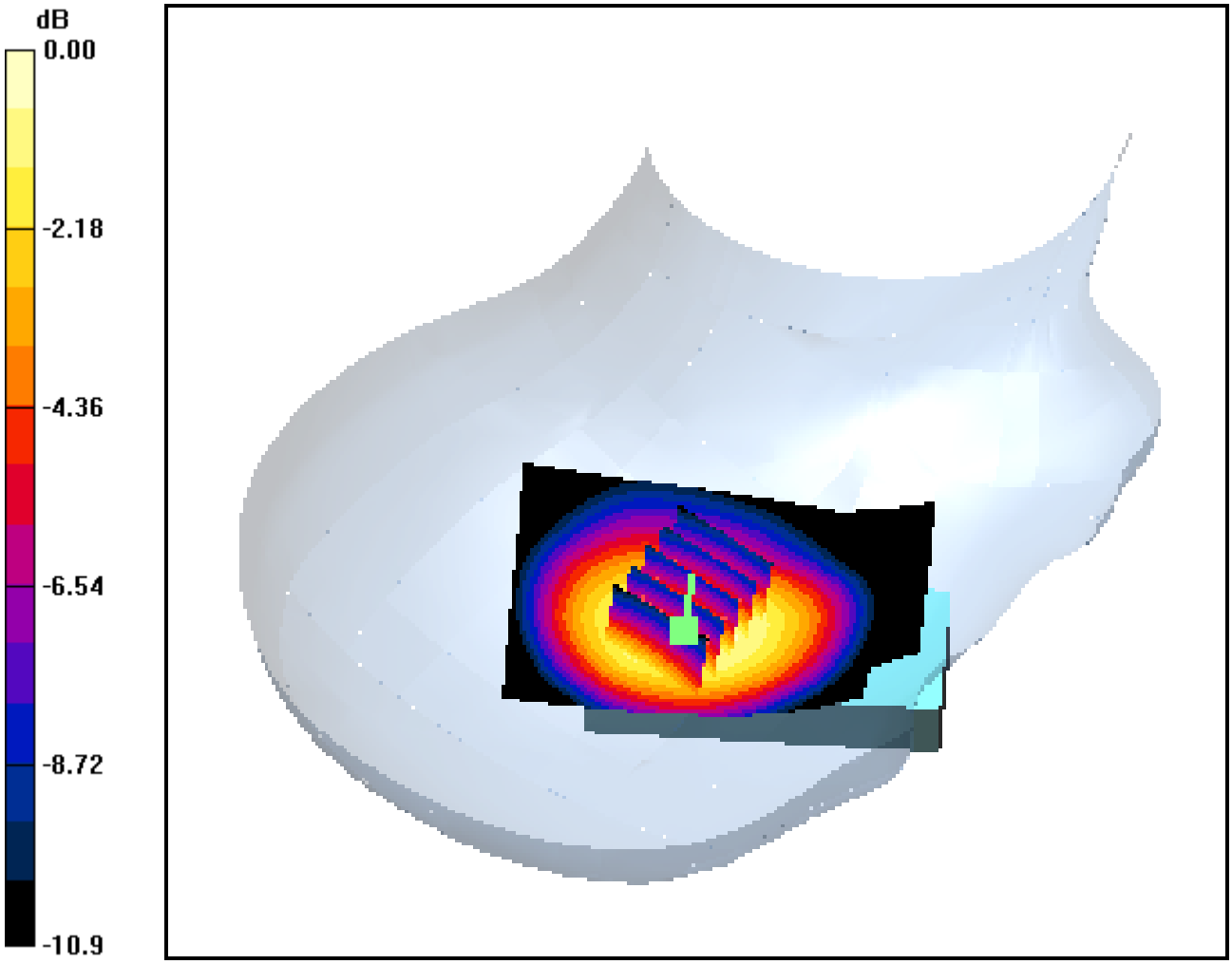
Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.883 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Right Touch GSM Ch.128, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.022 dB
Peak SAR (extrapolated) = 0.960 W/kg
SAR(1 g) = 0.682 mW/g; SAR(10 g) = 0.462 mW/g



0 dB = 0.724mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

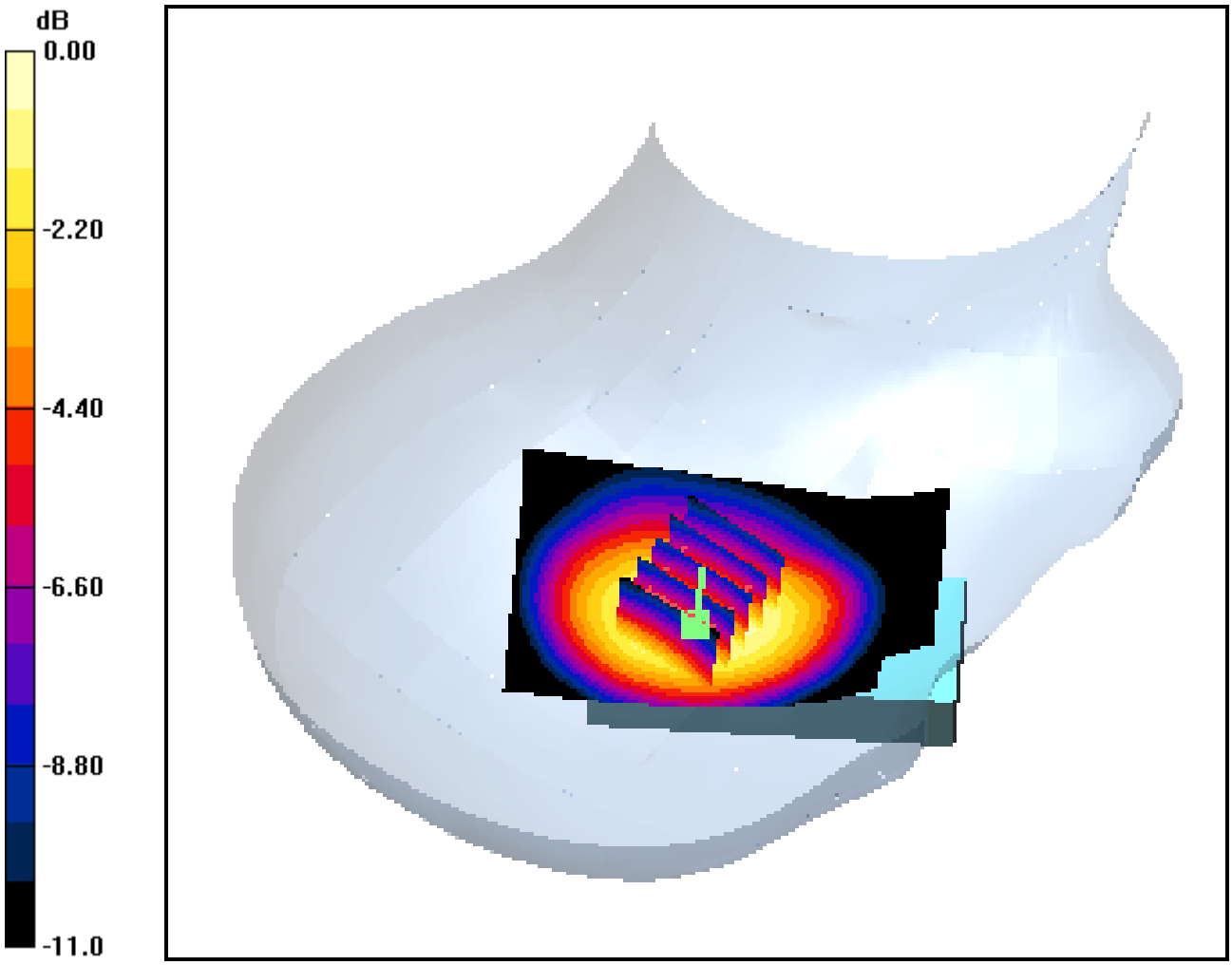
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.896 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Right Touch GSM Ch.190, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.054 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.842 mW/g; SAR(10 g) = 0.569 mW/g



0 dB = 0.893mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

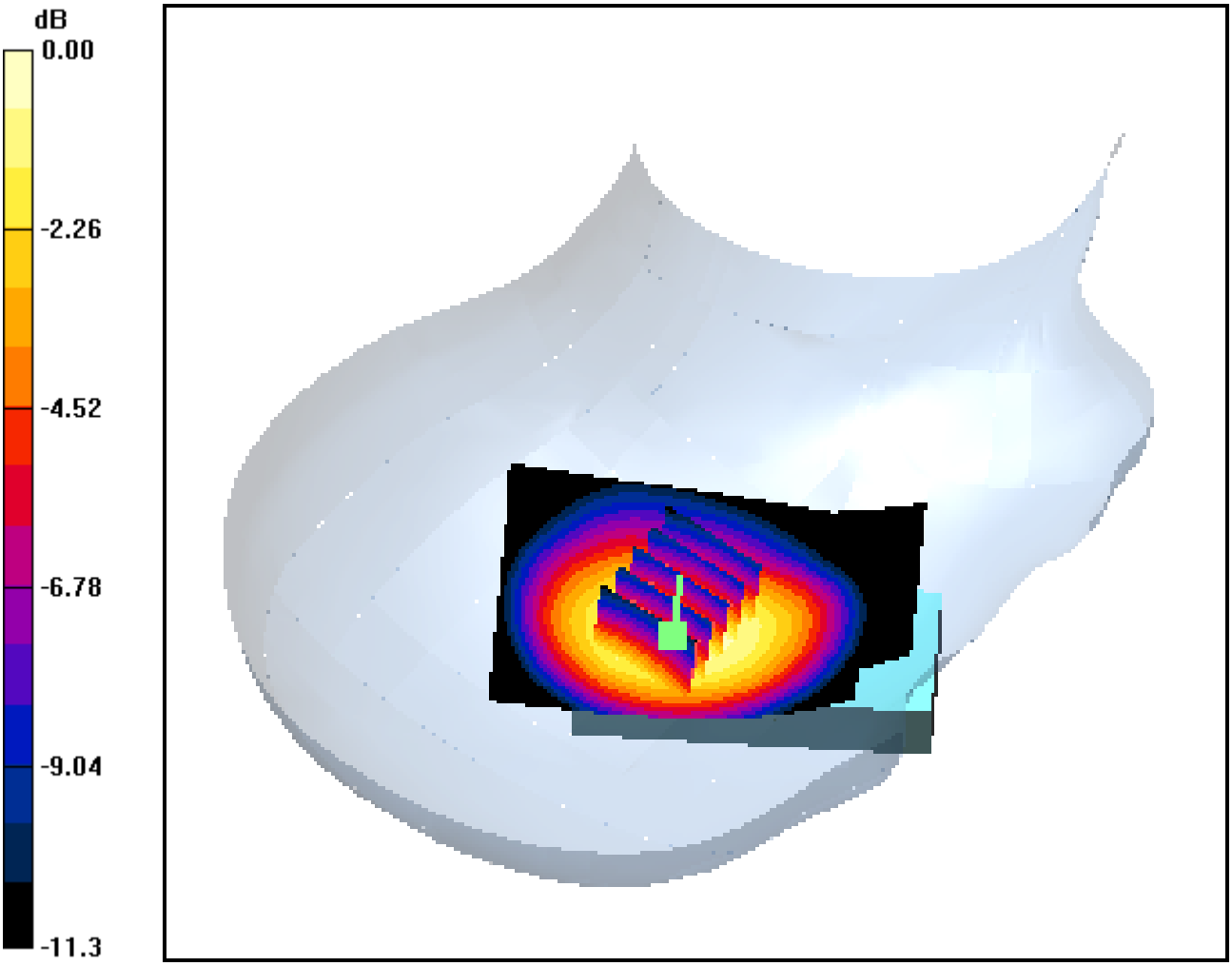
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Right Touch GSM Ch.251, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.140 dB
Peak SAR (extrapolated) = 1.54 W/kg
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.736 mW/g



0 dB = 1.16mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

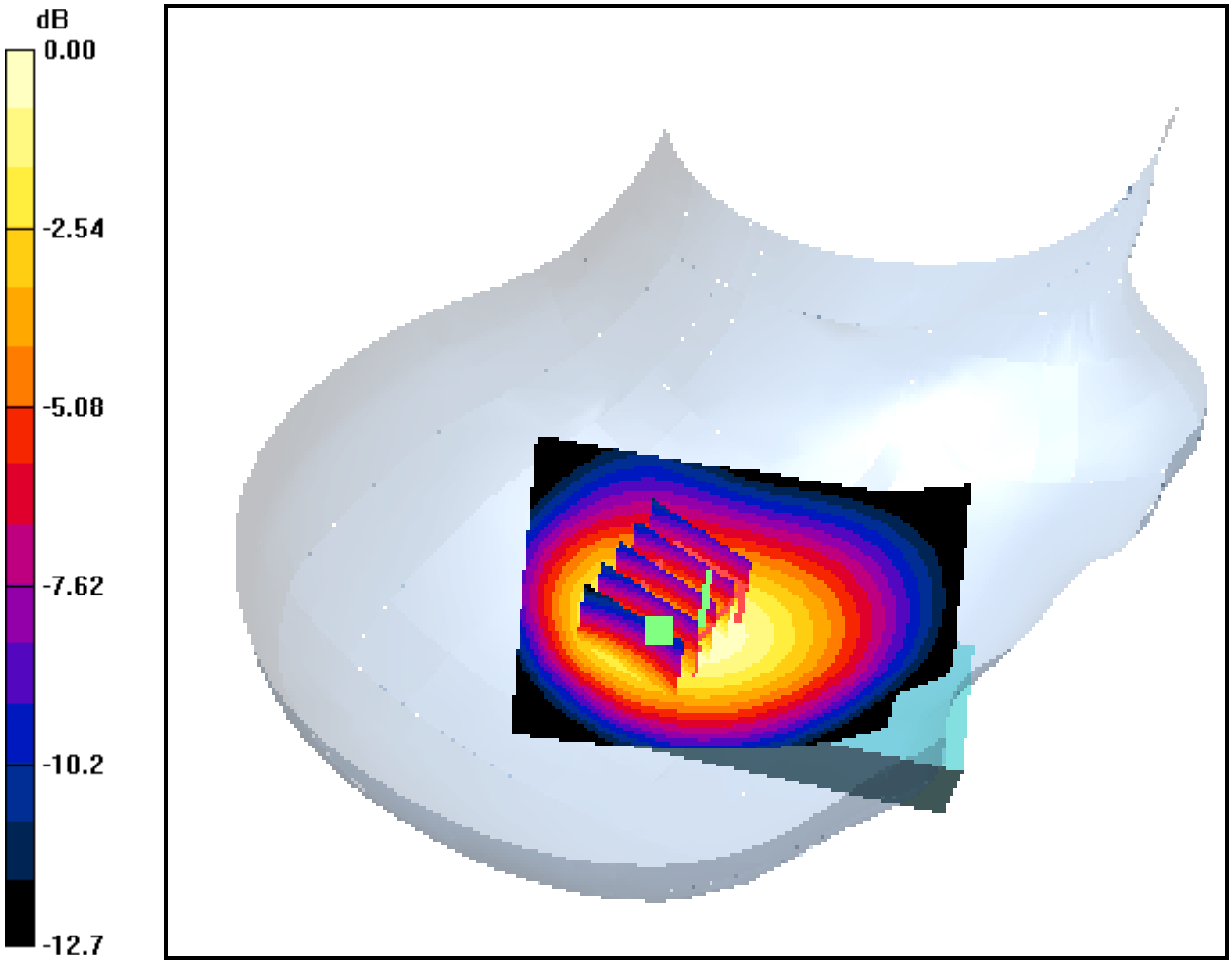
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.896 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Right Tilt GSM Ch.190, Ant Intenna, Standard Battery

Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.086 dB
Peak SAR (extrapolated) = 0.603 W/kg
SAR(1 g) = 0.432 mW/g; SAR(10 g) = 0.293 mW/g



0 dB = 0.451mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

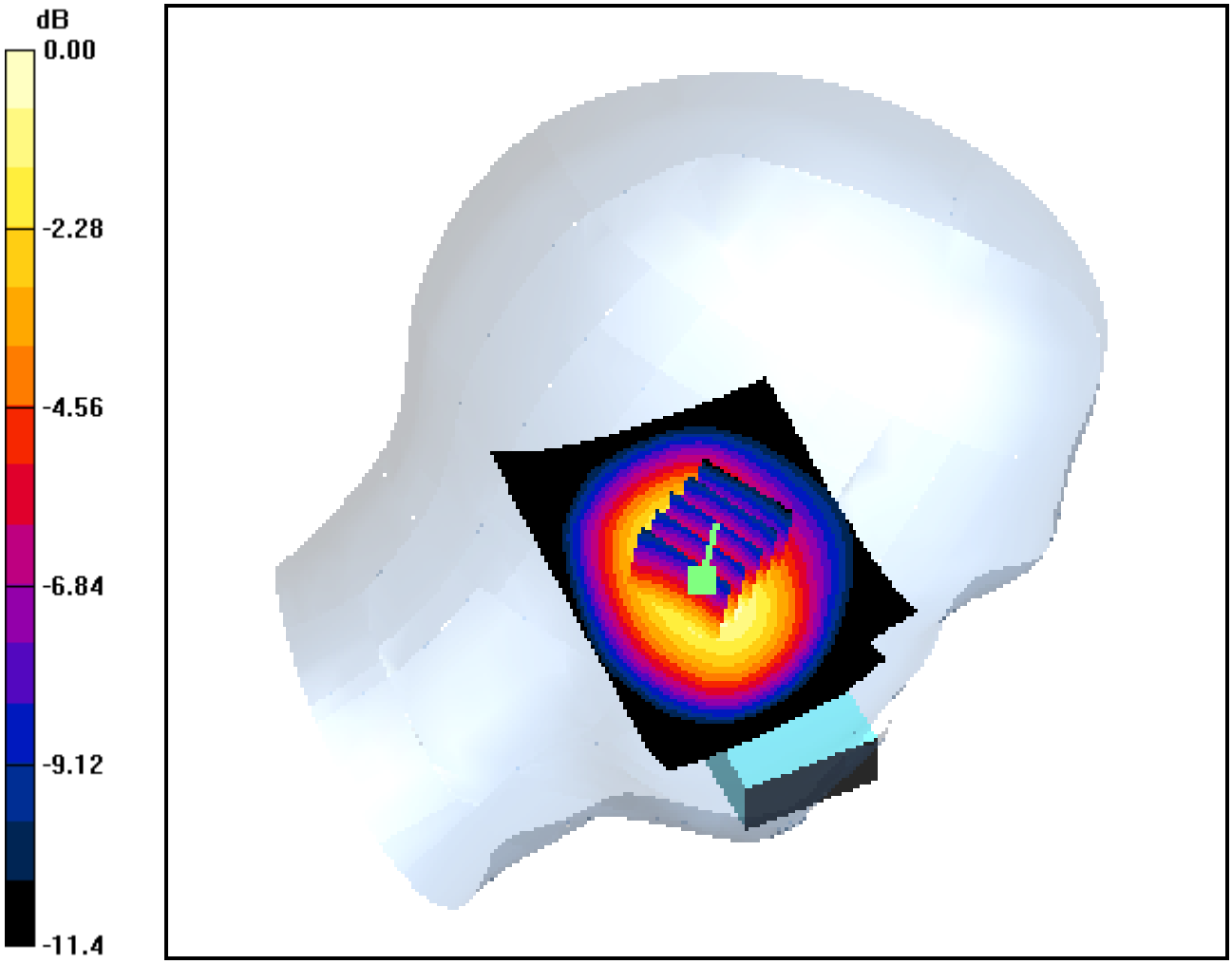
Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.883 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Left Touch GSM Ch.128, Ant Intenna, Standard Battery

Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.070 dB
Peak SAR (extrapolated) = 0.988 W/kg
SAR(1 g) = 0.669 mW/g; SAR(10 g) = 0.443 mW/g



0 dB = 0.716mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

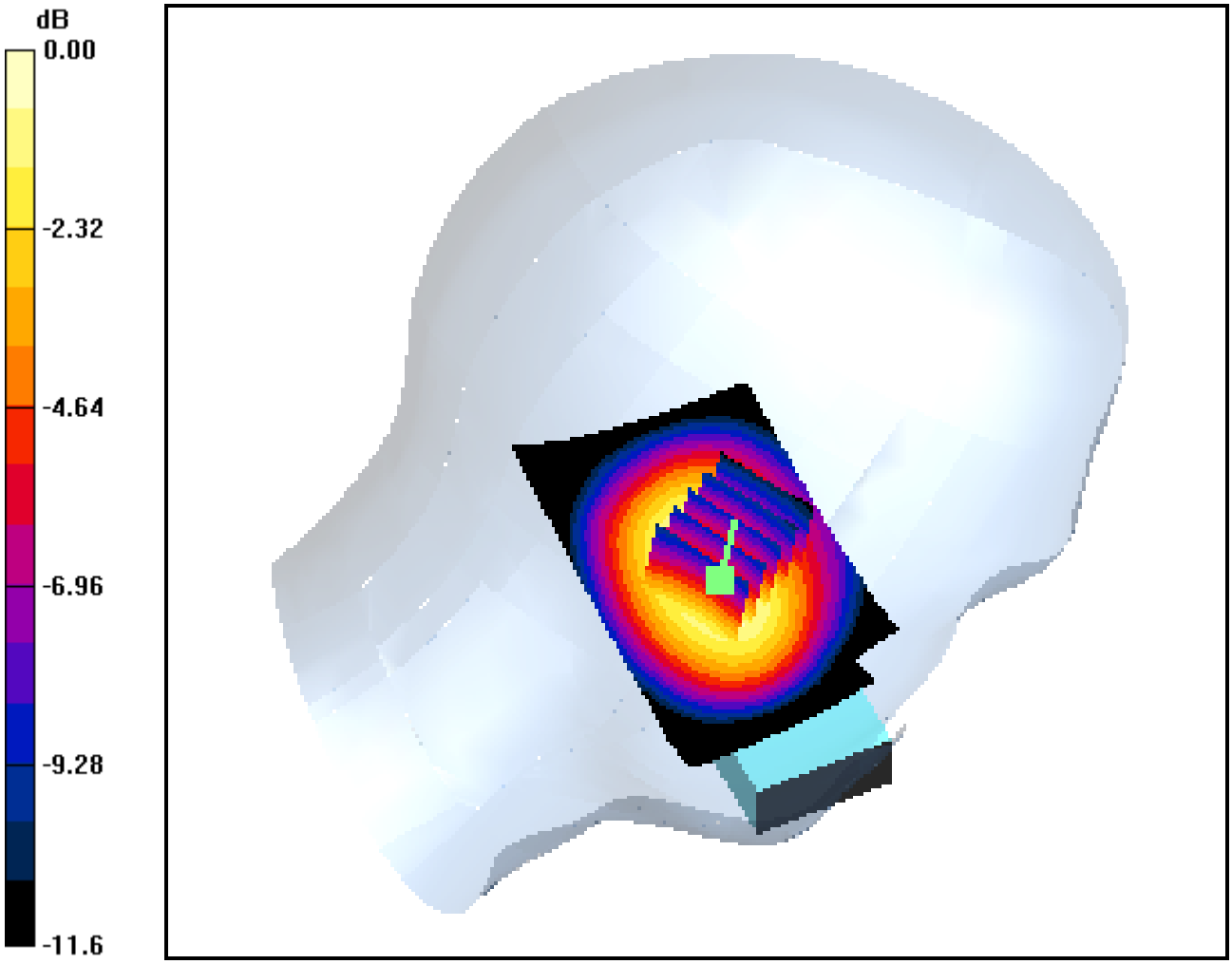
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.896 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Left Touch GSM Ch.190, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.029 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.814 mW/g; SAR(10 g) = 0.537 mW/g



0 dB = 0.862mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

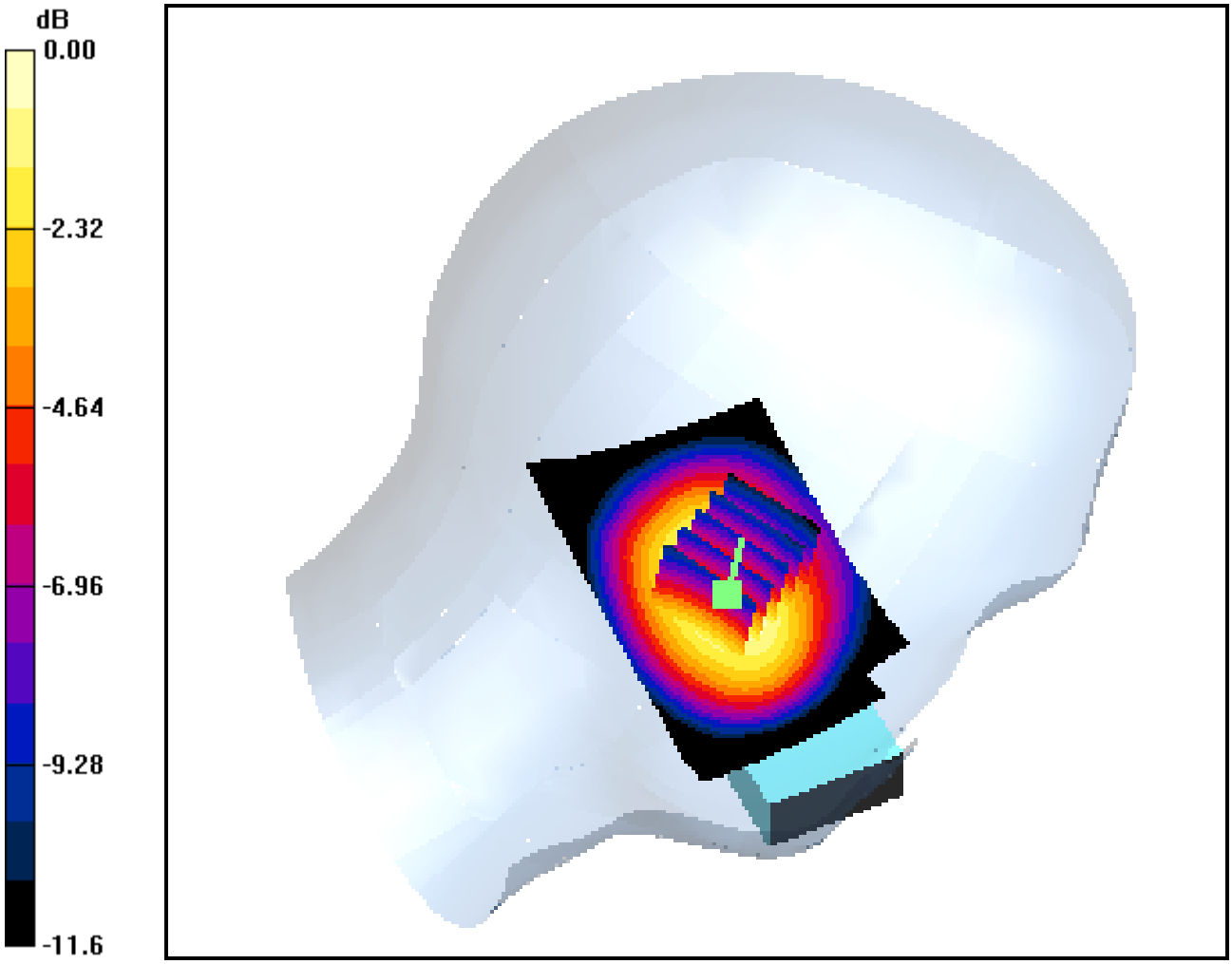
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz; σ = 0.907 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Left Touch GSM Ch.251, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.068 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.976 mW/g; SAR(10 g) = 0.644 mW/g



0 dB = 1.05mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

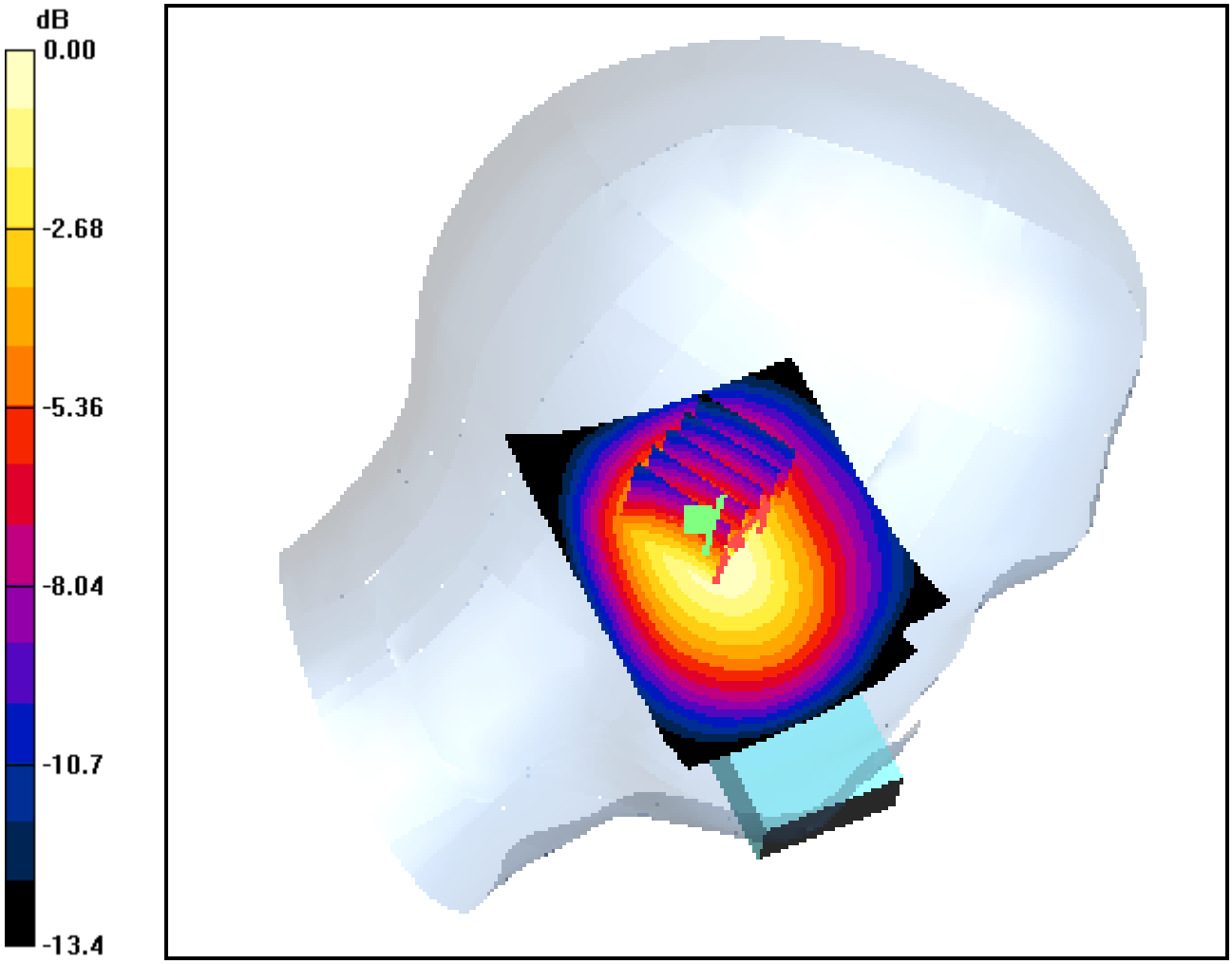
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.896 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.51, 6.51, 6.51); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp:20.0

Left Tilt GSM Ch.190, Ant Intenna, Standard Battery

Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.089 dB
Peak SAR (extrapolated) = 0.689 W/kg
SAR(1 g) = 0.475 mW/g; SAR(10 g) = 0.314 mW/g



0 dB = 0.500mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

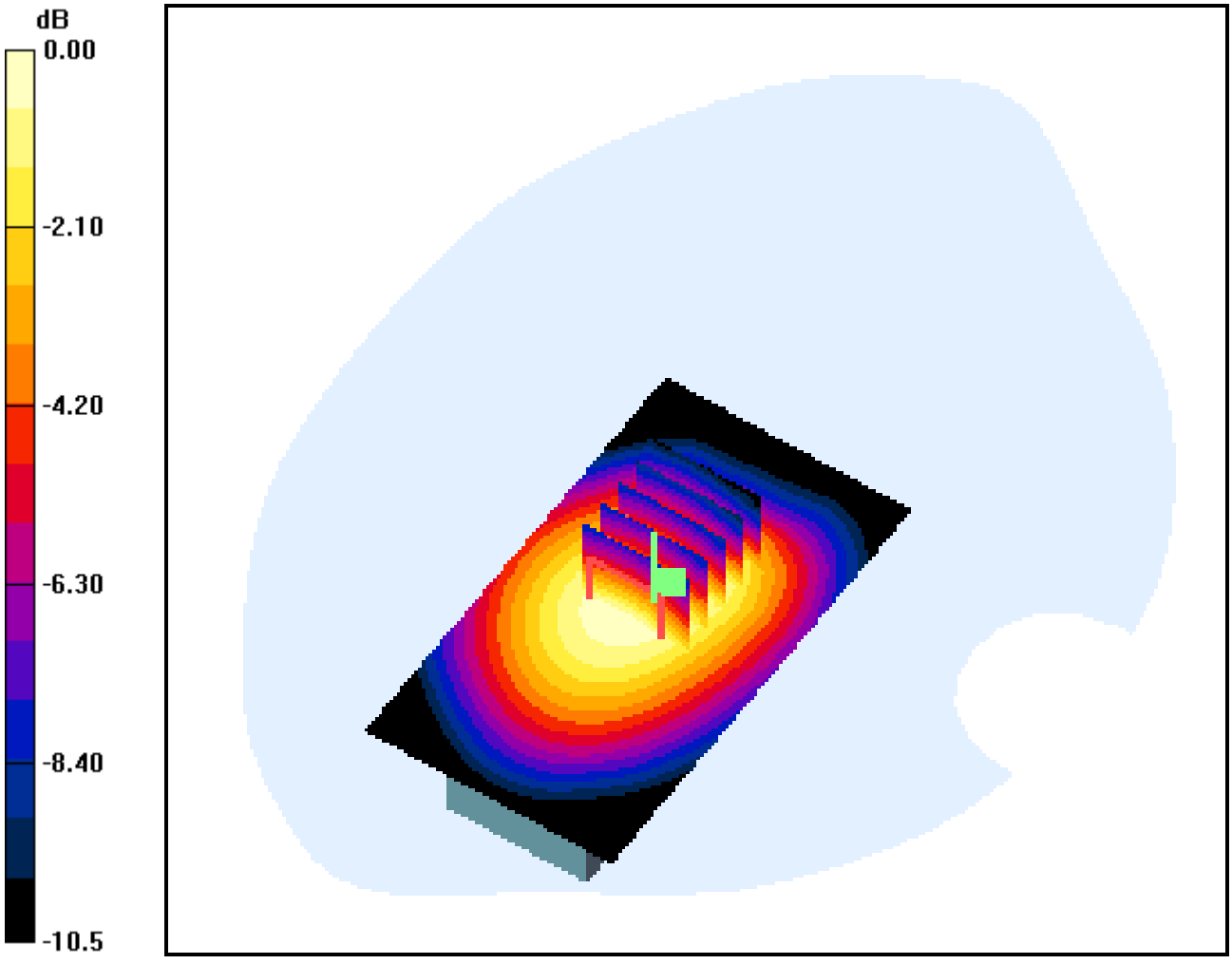
Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.993 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.39, 6.39, 6.39); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp: 20.0

1.5cm from Body, GSM Ch.128, Ant Intenna, Standard Battery

Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.134 dB
Peak SAR (extrapolated) = 0.400 W/kg
SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.223 mW/g



0 dB = 0.328mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

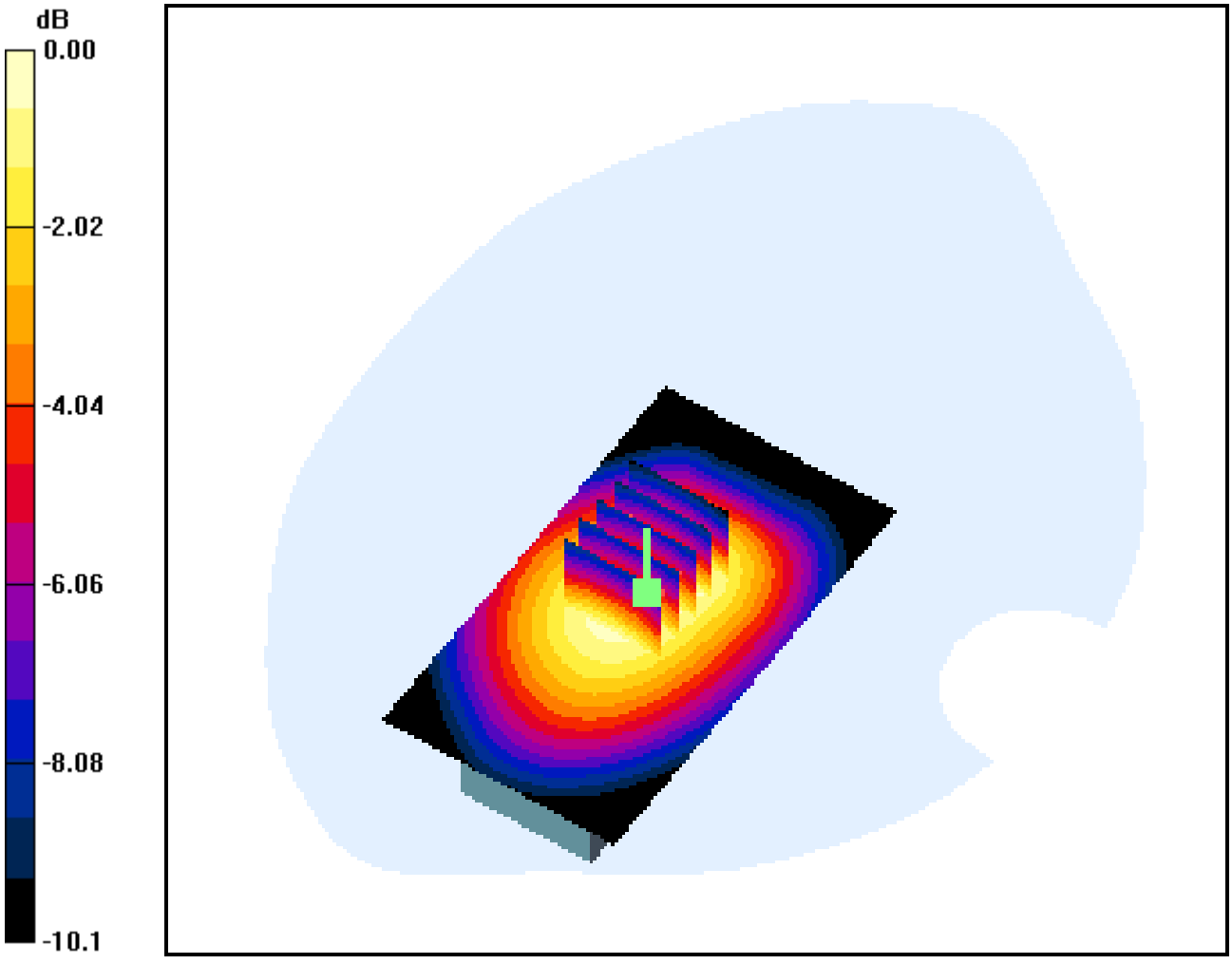
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 1 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.39, 6.39, 6.39); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp: 20.0

1.5cm from Body, GSM Ch.190, Ant Intenna, Standard Battery

Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.092 dB
Peak SAR (extrapolated) = 0.513 W/kg
SAR(1 g) = 0.385 mW/g; SAR(10 g) = 0.272 mW/g



0 dB = 0.410mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

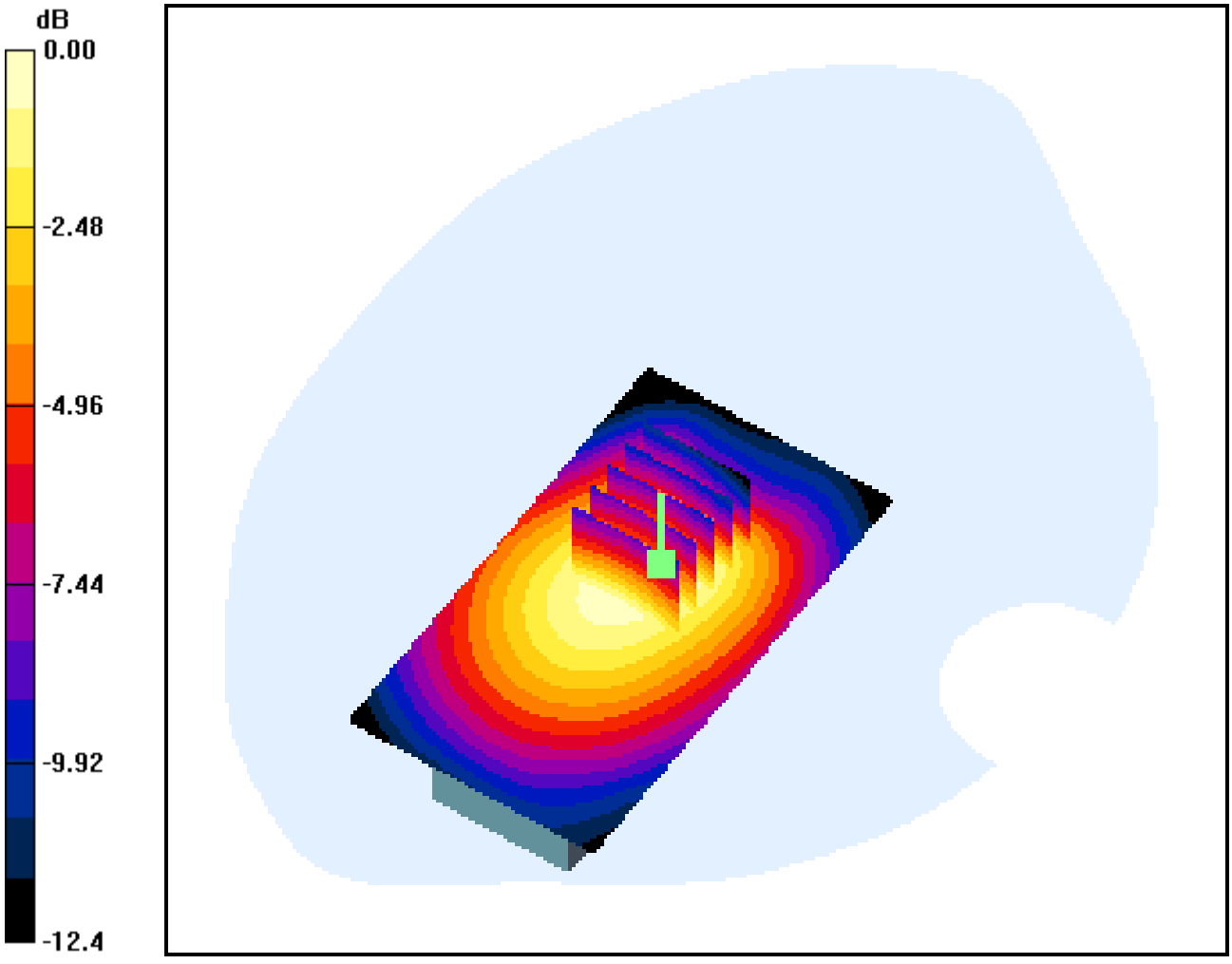
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz; σ = 1.02 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(6.39, 6.39, 6.39); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-27; Ambient Temp: 21.0; Tissue Temp: 20.0

1.5cm from Body, GSM Ch.251, Ant Intenna, Standard Battery

Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.042 dB
Peak SAR (extrapolated) = 0.548 W/kg
SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.250 mW/g



0 dB = 0.387mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

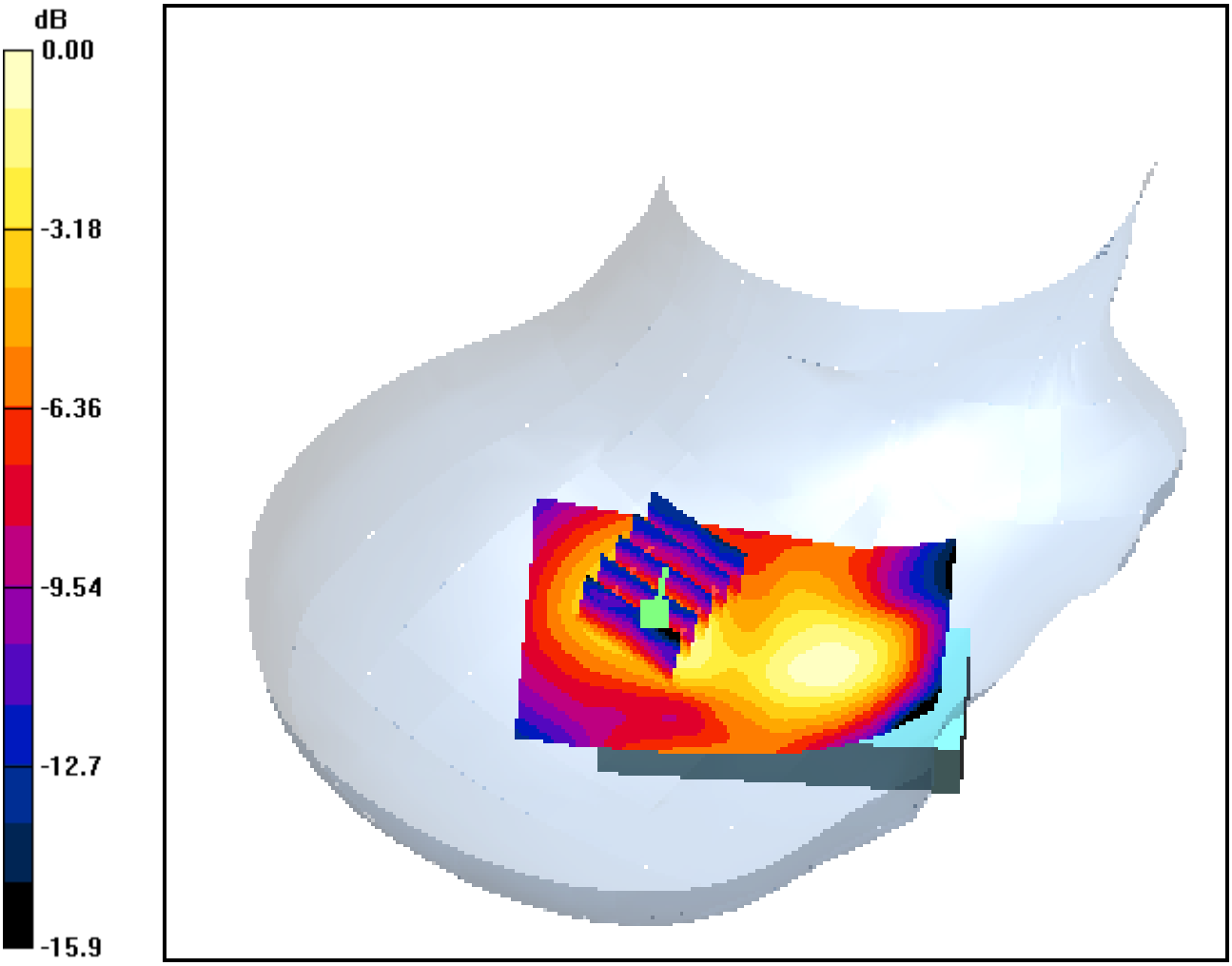
Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.34 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Right Touch PCS Ch.512, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.043 dB
Peak SAR (extrapolated) = 0.440 W/kg
SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.149 mW/g



0 dB = 0.286mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

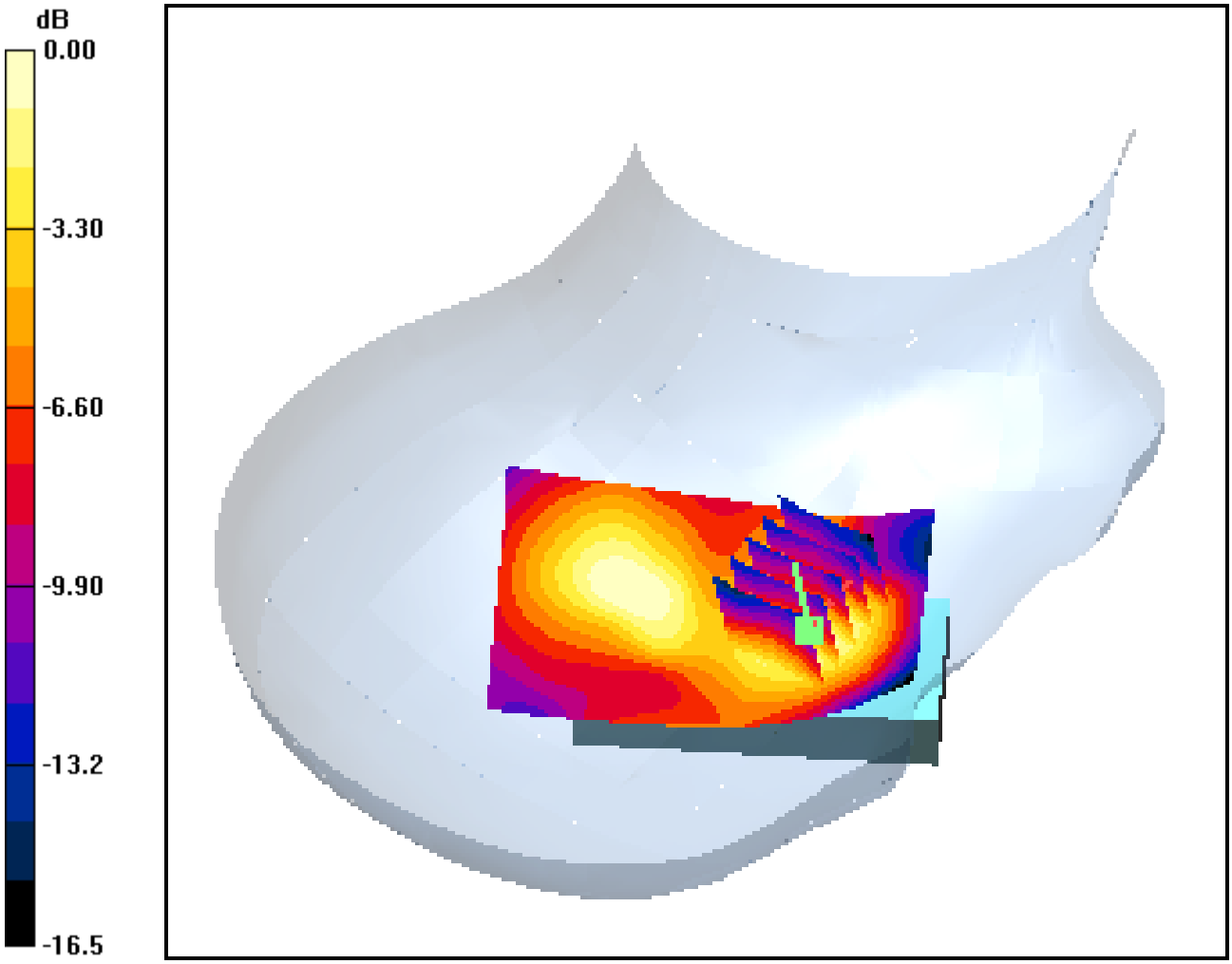
Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Right Touch PCS Ch.661, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.082 dB
Peak SAR (extrapolated) = 0.318 W/kg
SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.138 mW/g



0 dB = 0.253mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

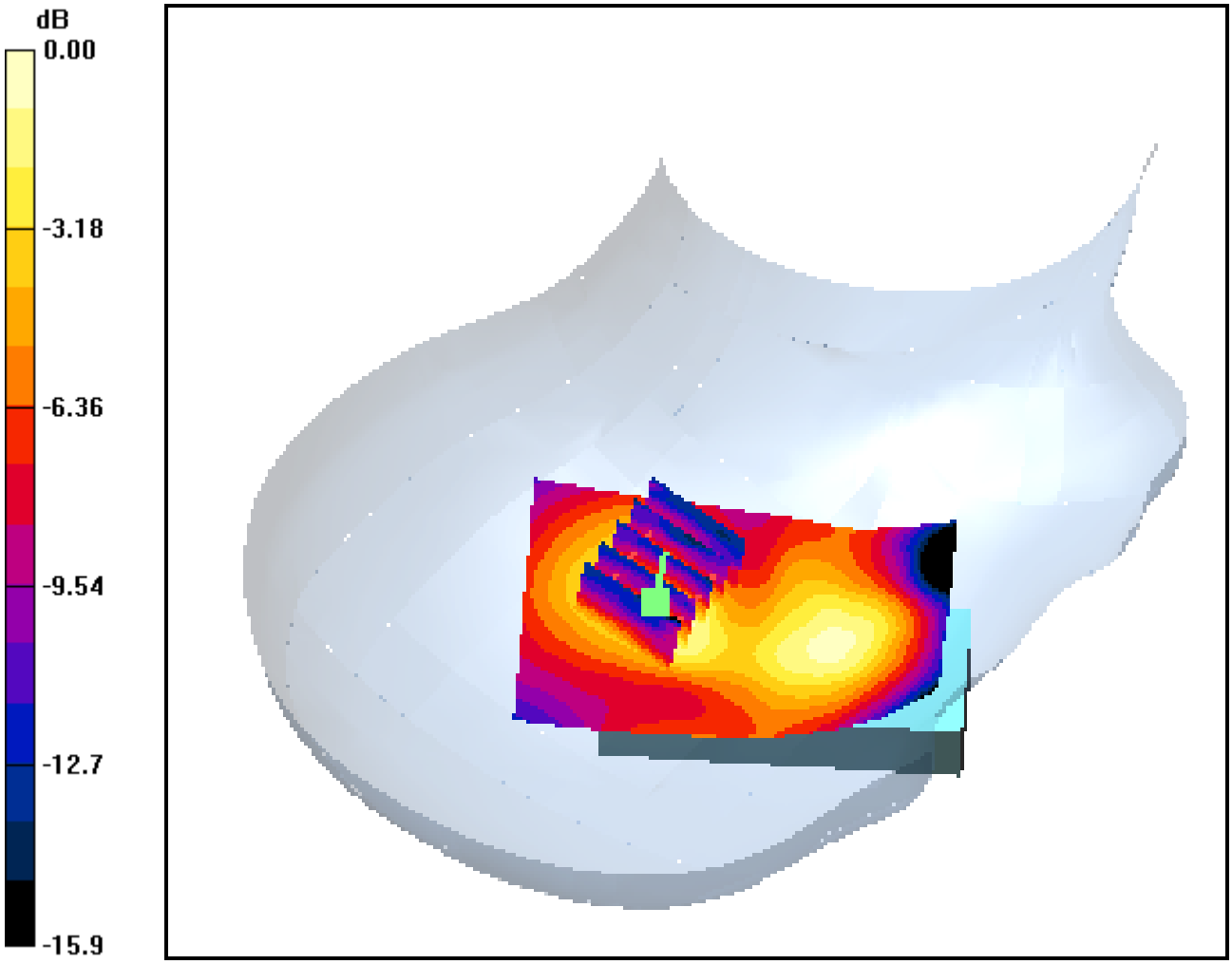
Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Right Touch PCS Ch.810, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.076 dB
Peak SAR (extrapolated) = 0.318 W/kg
SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.108 mW/g



0 dB = 0.210mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

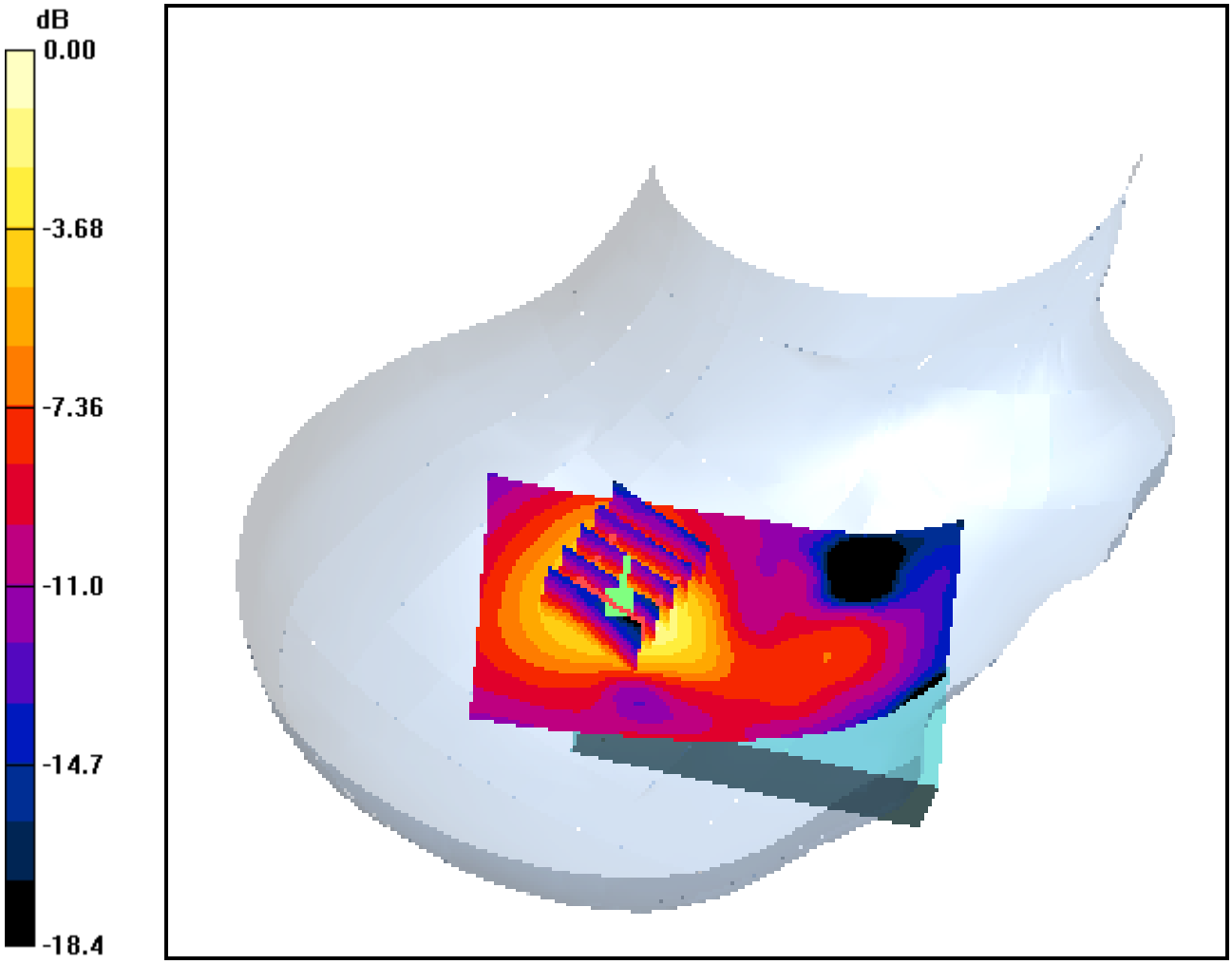
Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Right Tilt PCS Ch.661, Ant Intenna, Standard Battery

Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.020 dB
Peak SAR (extrapolated) = 0.375 W/kg
SAR(1 g) = 0.214 mW/g; SAR(10 g) = 0.116 mW/g



0 dB = 0.239mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

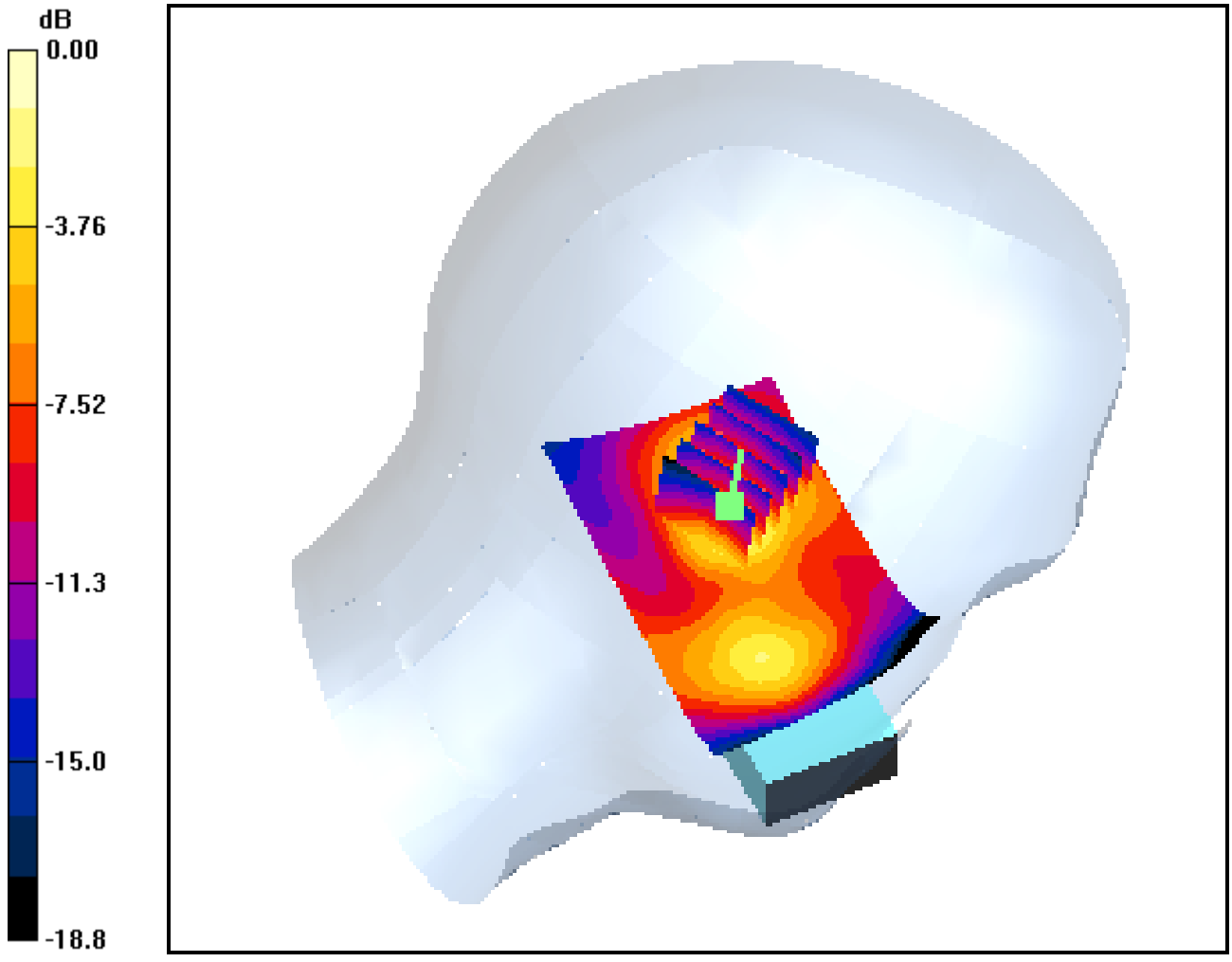
Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.34 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Left Touch PCS Ch.512, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.160 dB
Peak SAR (extrapolated) = 0.697 W/kg
SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.208 mW/g



0 dB = 0.438mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

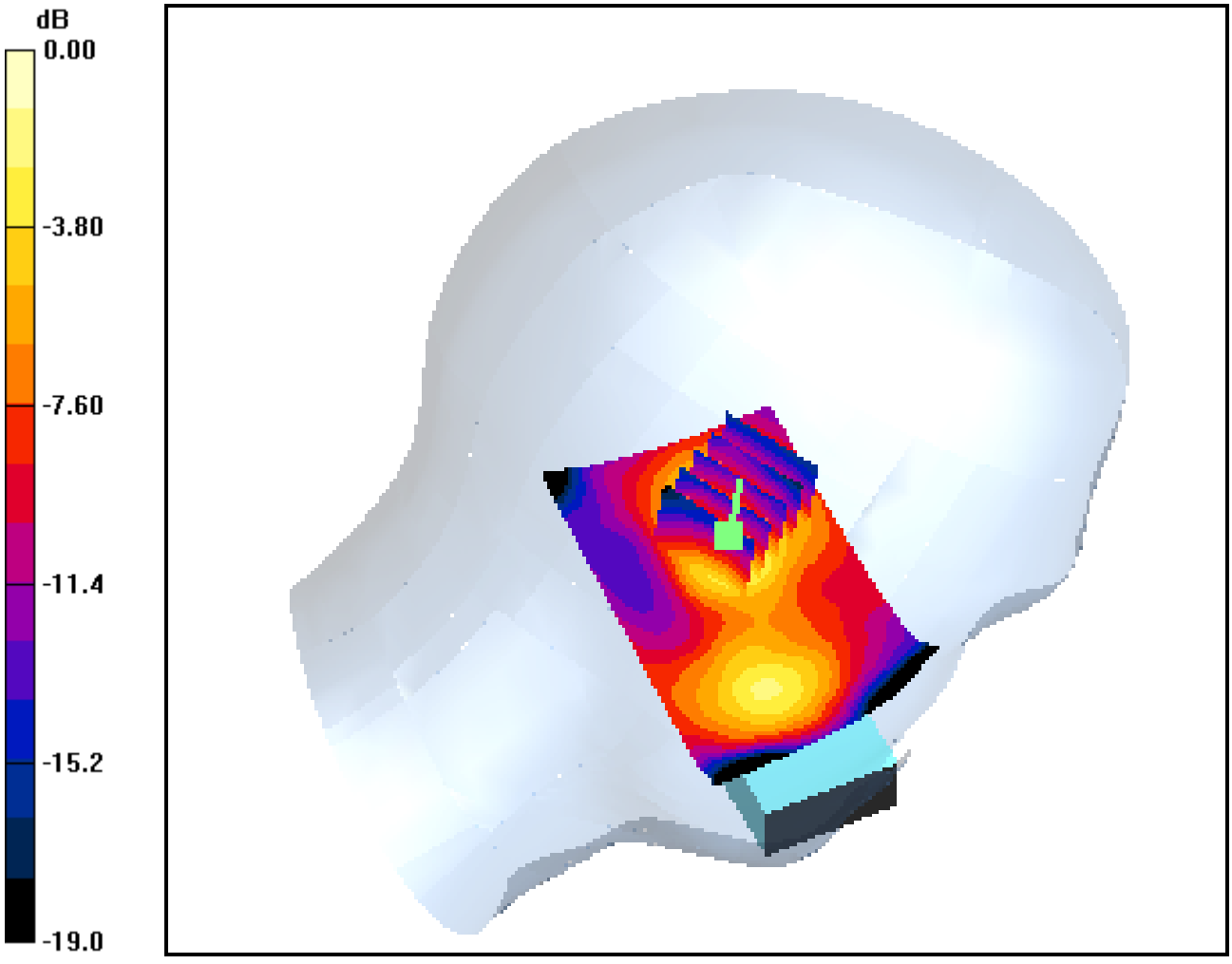
Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Left Touch PCS Ch.661, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.082 dB
Peak SAR (extrapolated) = 0.606 W/kg
SAR(1 g) = 0.338 mW/g; SAR(10 g) = 0.179 mW/g



0 dB = 0.378mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

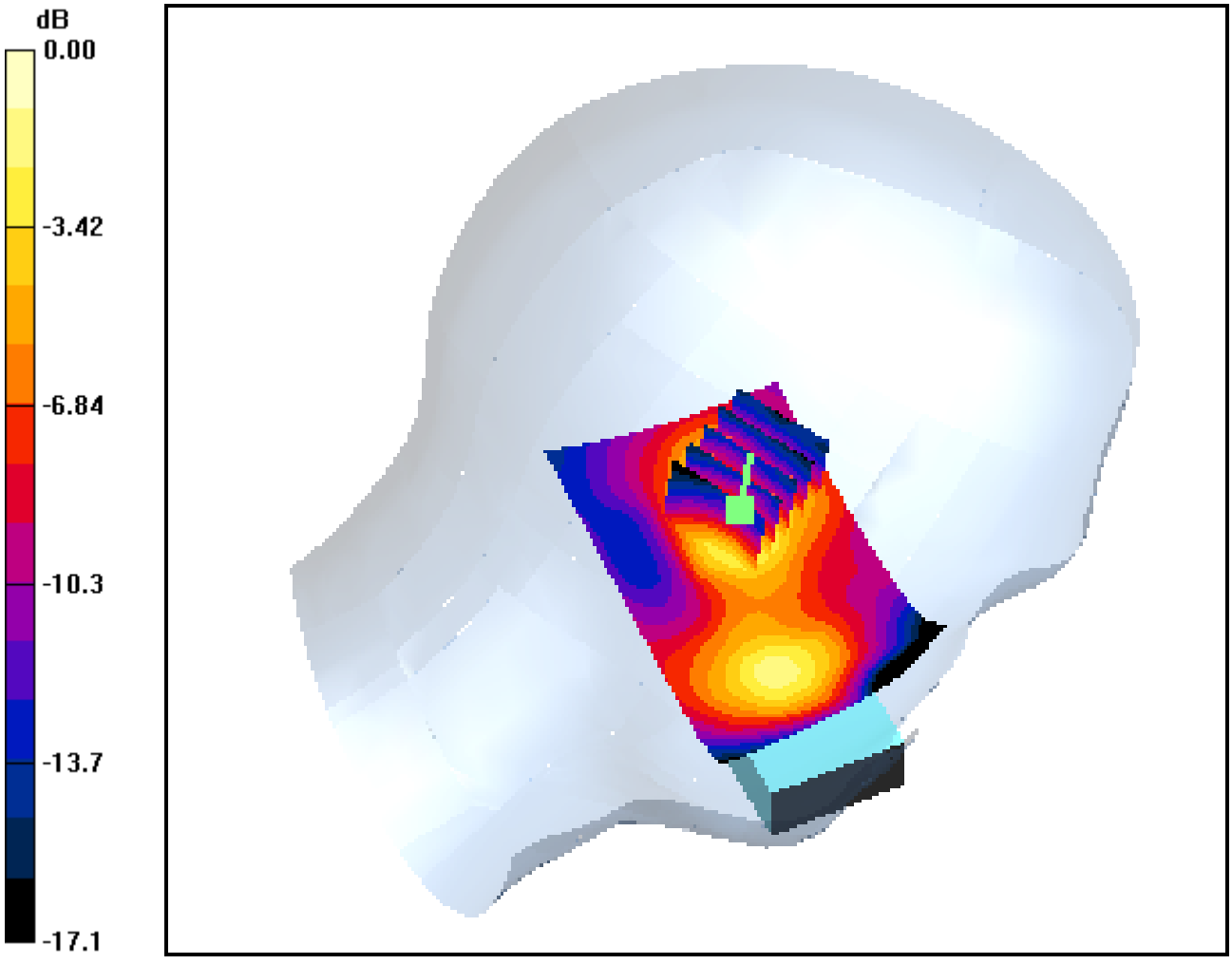
Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Left Touch PCS Ch.810, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.543 W/kg
SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.156 mW/g



0 dB = 0.332mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

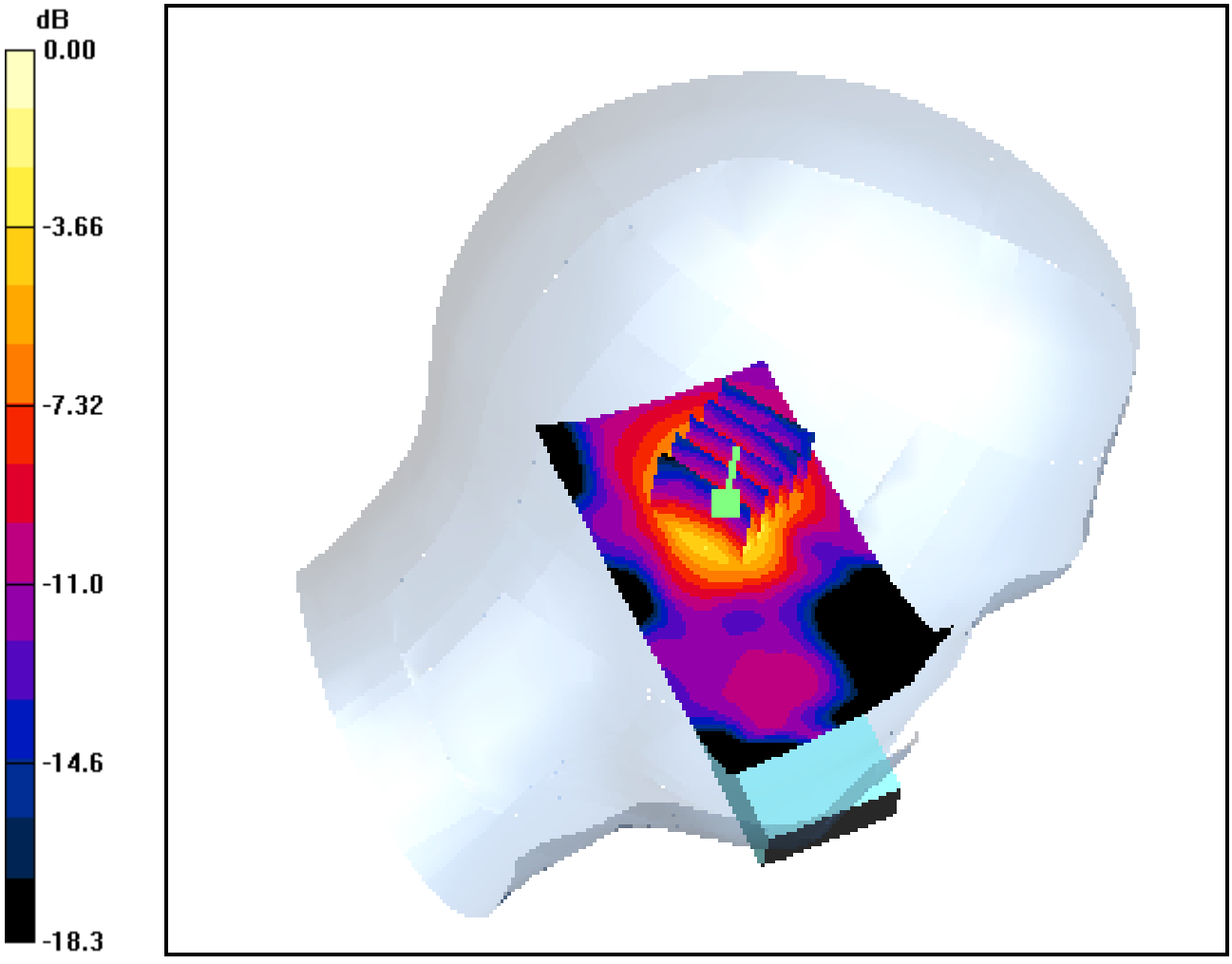
Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(5.27, 5.27, 5.27); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp:21.0

Left Tilt PCS Ch.512, Ant Intenna, Standard Battery

Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.070 dB
Peak SAR (extrapolated) = 0.619 W/kg
SAR(1 g) = 0.343 mW/g; SAR(10 g) = 0.180 mW/g



0 dB = 0.387mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

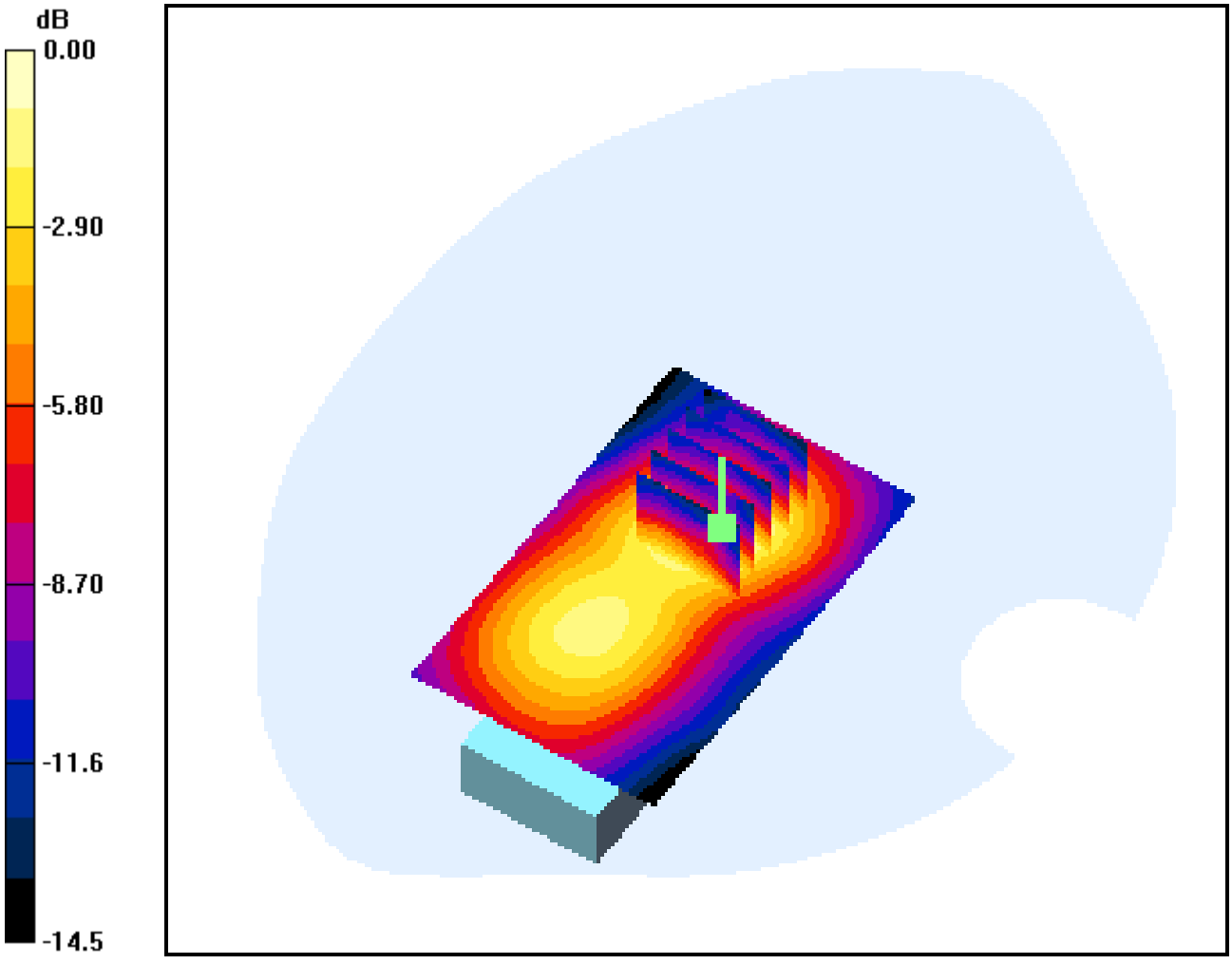
Communication System: PCS1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.53 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp: 21.0

1.5cm from Body, PCS Ch.512, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.773 W/kg
SAR(1 g) = 0.475 mW/g; SAR(10 g) = 0.279 mW/g



0 dB = 0.528mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

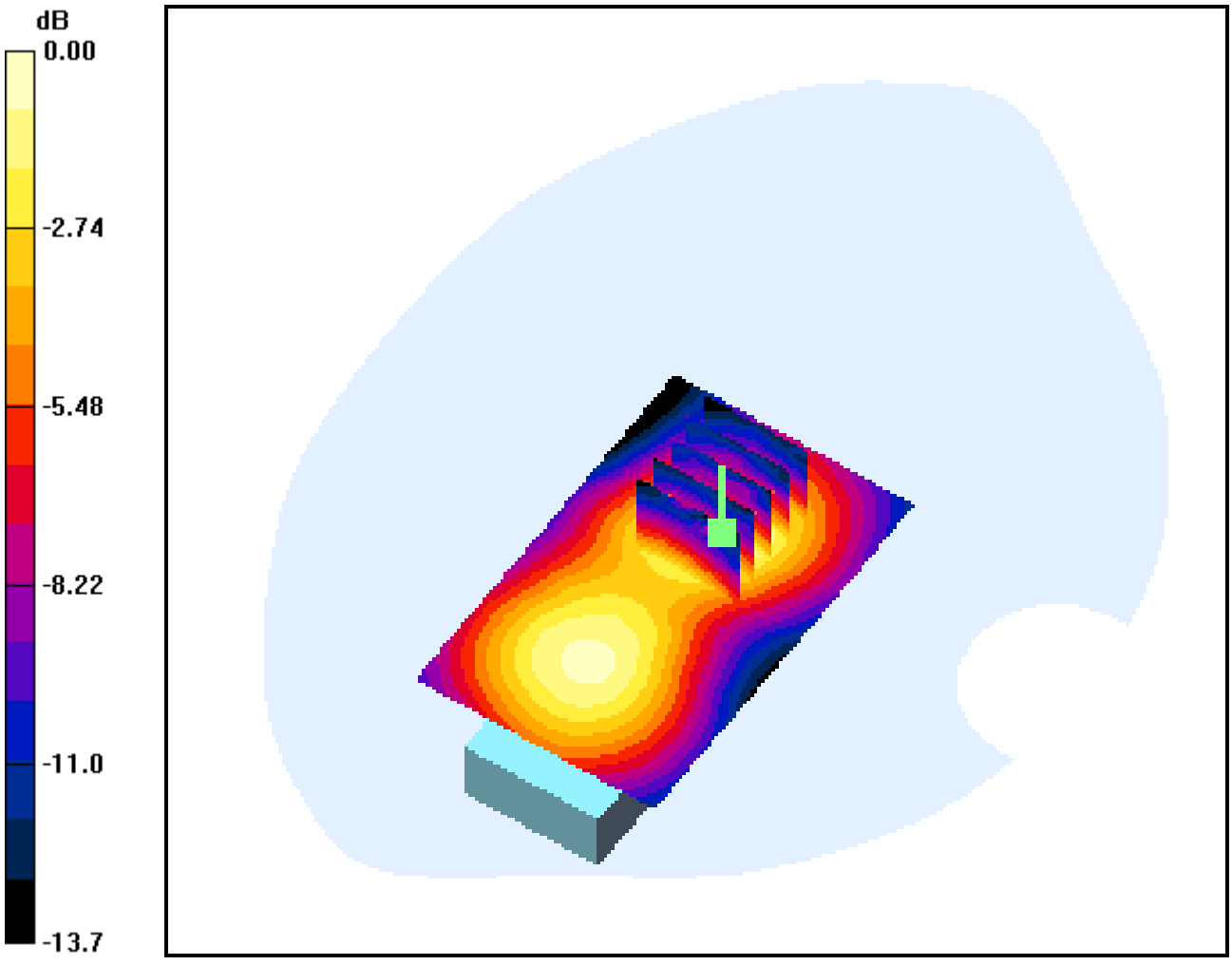
Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.56 mho/m; ε_r = 53; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp: 21.0

1.5cm from Body, PCS Ch.661, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.669 W/kg
SAR(1 g) = 0.391 mW/g; SAR(10 g) = 0.227 mW/g



0 dB = 0.434mW/g

DIGITAL EMC CO., LTD

DUT: REX451; Type: Bar Type

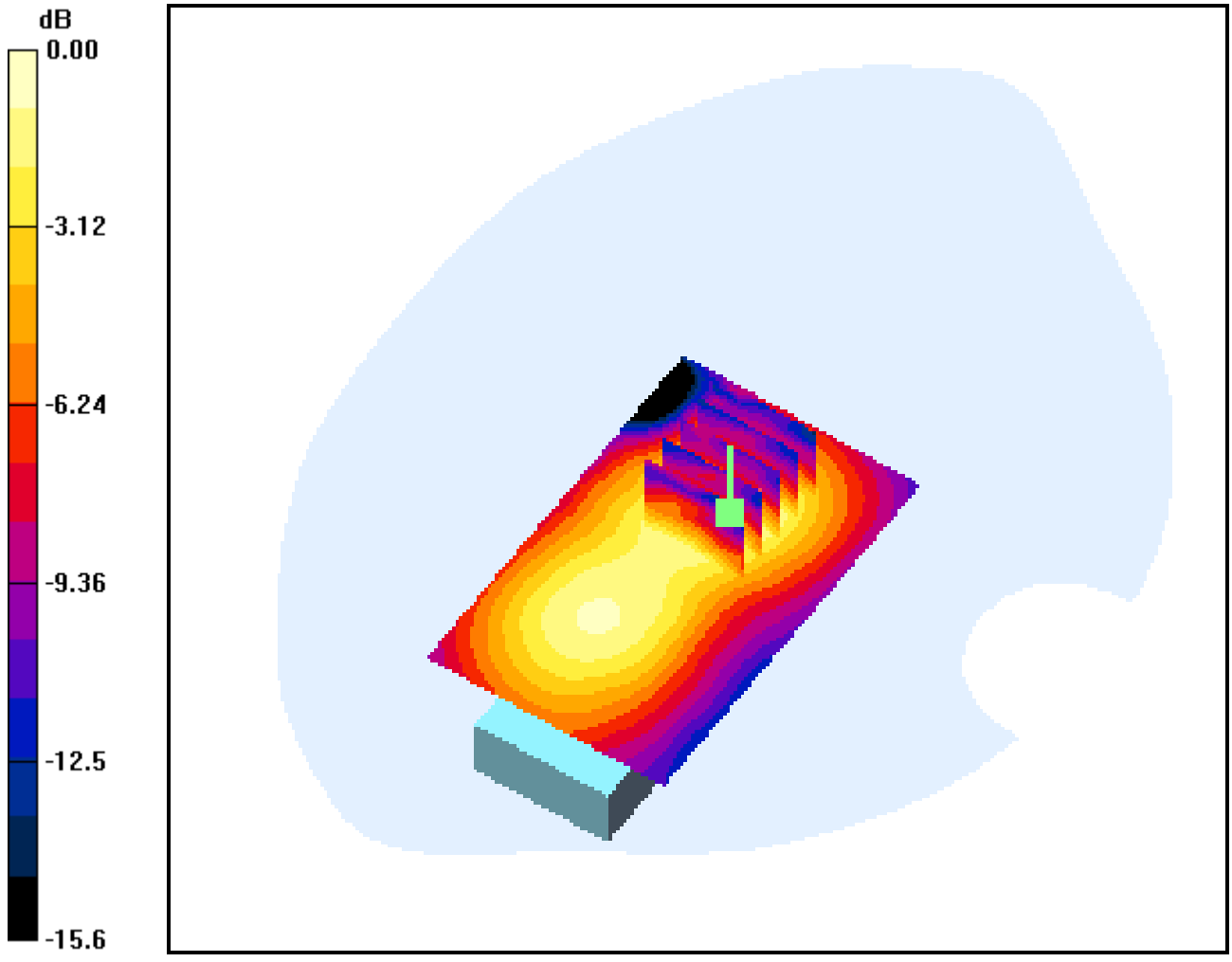
Communication System: PCS1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz; σ = 1.59 mho/m; ε_r = 53; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1703; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-03-24; Electronics: DAE3 Sn520
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Test Date: 2006-02-24; Ambient Temp: 22.0; Tissue Temp: 21.0

1.5cm from Body, PCS Ch.810, Ant Intenna, Standard Battery

Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.013 dB
Peak SAR (extrapolated) = 0.534 W/kg
SAR(1 g) = 0.320 mW/g; SAR(10 g) = 0.190 mW/g



0 dB = 0.354mW/g

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
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Accredited by the Swiss Federal Office of Metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client **Digital EMC (Dymstec)**

Certificate No: ET3-1703_Mar05

CALIBRATION CERTIFICATE

Object	ET3DV6 - SN:1703
Calibration procedure(s)	QA CAL-01.v5 and QA CAL-12.v4 Calibration procedure for dosimetric E-field probes
Calibration date:	March 24, 2005
Condition of the calibrated item	In Tolerance

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	5-May-04 (METAS, No. 251-00388)	May-05
Power sensor E4412A	MY41495277	5-May-04 (METAS, No. 251-00388)	May-05
Reference 3 dB Attenuator	SN: S5054 (3c)	10-Aug-04 (METAS, No. 251-00403)	Aug-05
Reference 20 dB Attenuator	SN: S5086 (20b)	3-May-04 (METAS, No. 251-00389)	May-05
Reference 30 dB Attenuator	SN: S5129 (30b)	10-Aug-04 (METAS, No. 251-00404)	Aug-05
Reference Probe ES3DV2	SN: 3013	7-Jan-05 (SPEAG, No. ES3-3013_Jan05)	Jan-06
DAE4	SN: 617	19-Jan-05 (SPEAG, No. DAE4-617_Jan05)	Jan-06

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092180	18-Sep-02 (SPEAG, in house check Oct-03)	In house check: Oct 05
RF generator HP 8648C	US3642U01700	4-Aug-99 (SPEAG, in house check Dec-03)	In house check: Dec-05
Network Analyzer HP 8753E	US37390585	18-Oct-01 (SPEAG, in house check Nov-04)	In house check: Nov 05

	Name	Function	Signature
Calibrated by:	Nico Vetterli	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: March 24, 2005

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe ET3DV6

SN:1703

Manufactured:	July 3, 2002
Last calibrated:	February 7, 2003
Recalibrated:	March 24, 2005

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

DASY - Parameters of Probe: ET3DV6 SN:1703

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.72** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**92** mV
NormY	**1.74** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**92** mV
NormZ	**1.71** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**92** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	8.6	4.4
SAR_{be} [%]	With Correction Algorithm	0.0	0.2

TSL **1810 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	13.6	9.5
SAR_{be} [%]	With Correction Algorithm	0.5	0.2

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

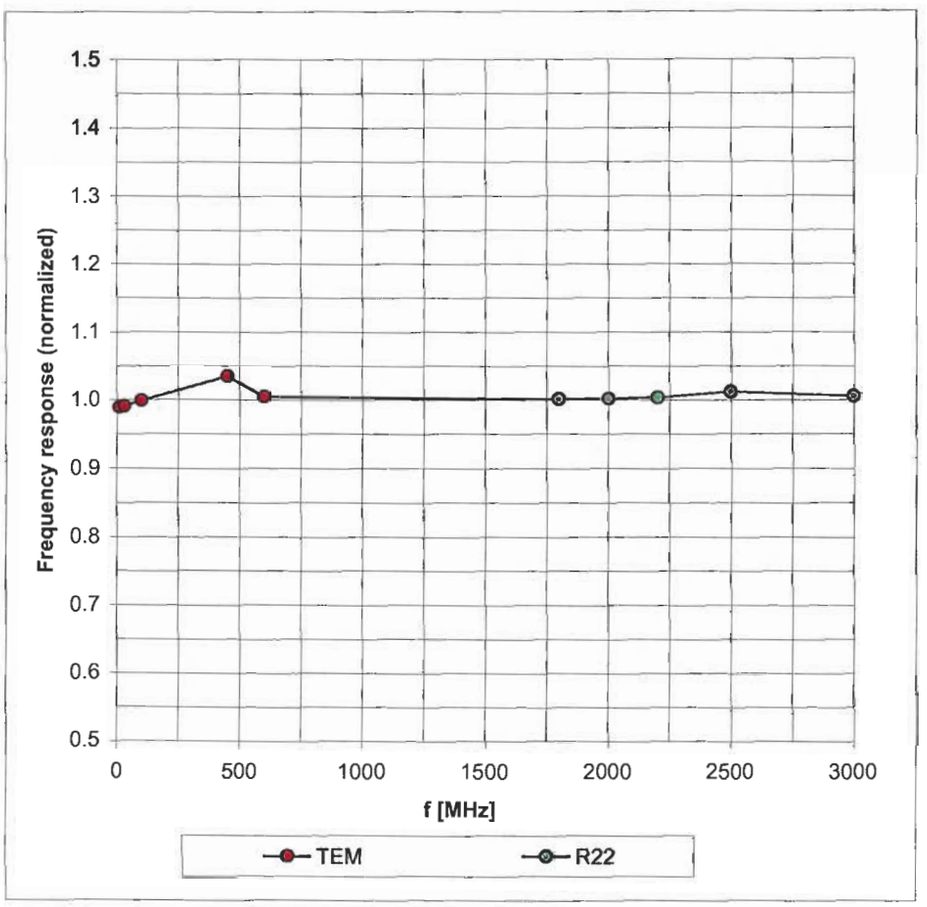
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

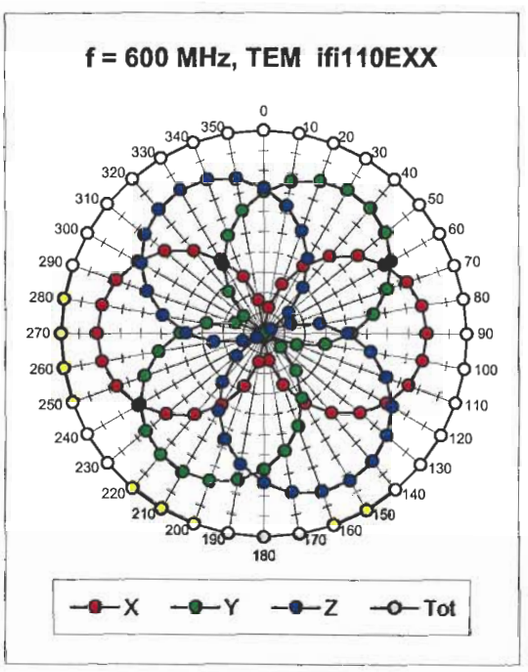
Frequency Response of E-Field

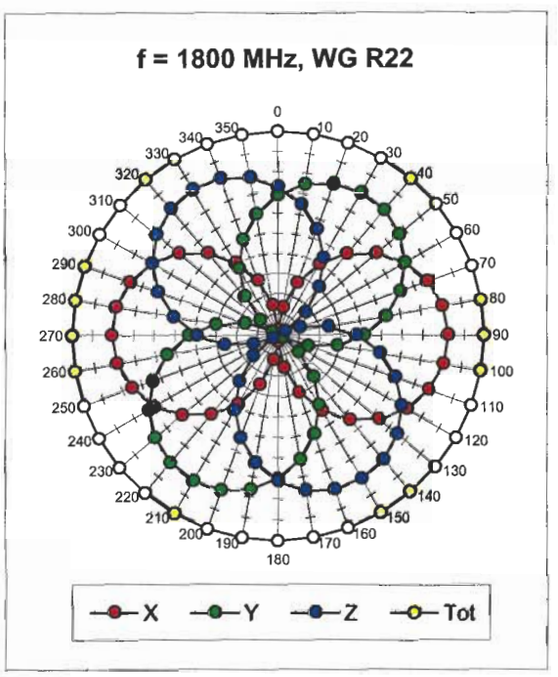
(TEM-Cell:ifi110 EXX, Waveguide: R22)

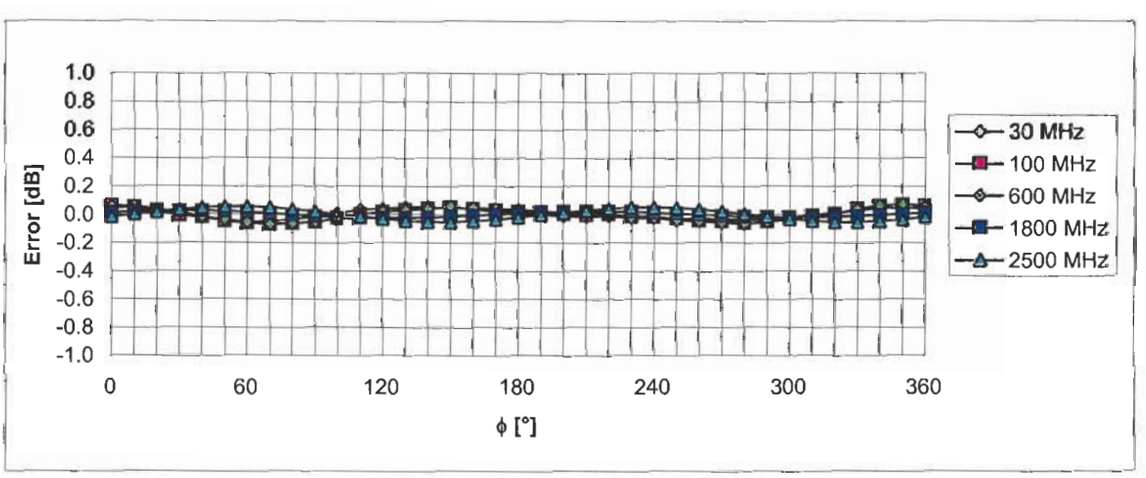


Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

Receiving Pattern (ϕ), ϑ = 0°



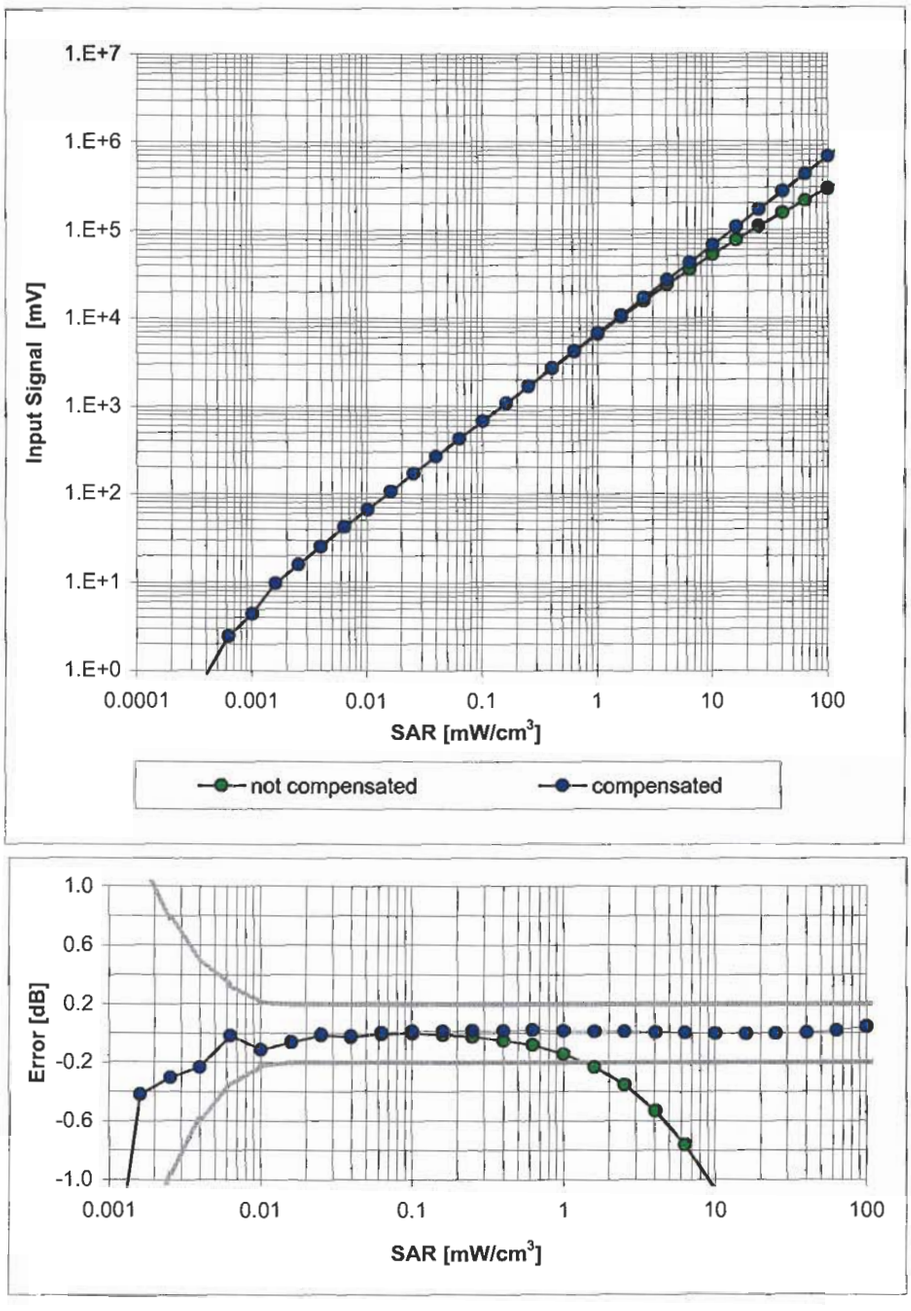




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

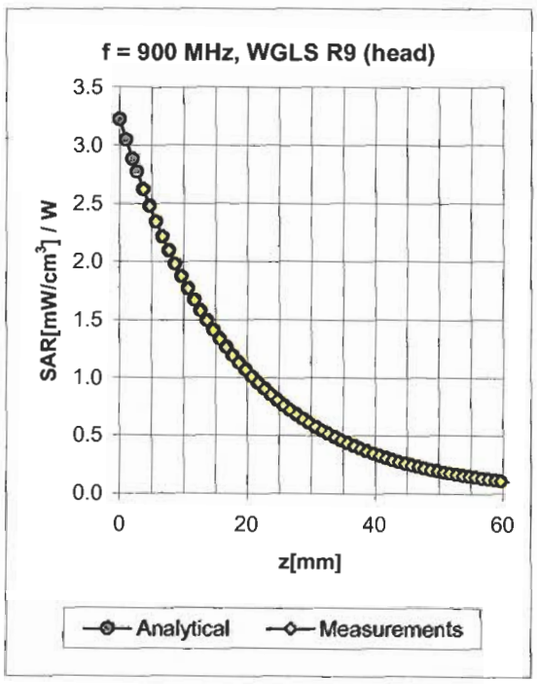
Dynamic Range f(SAR_{head})

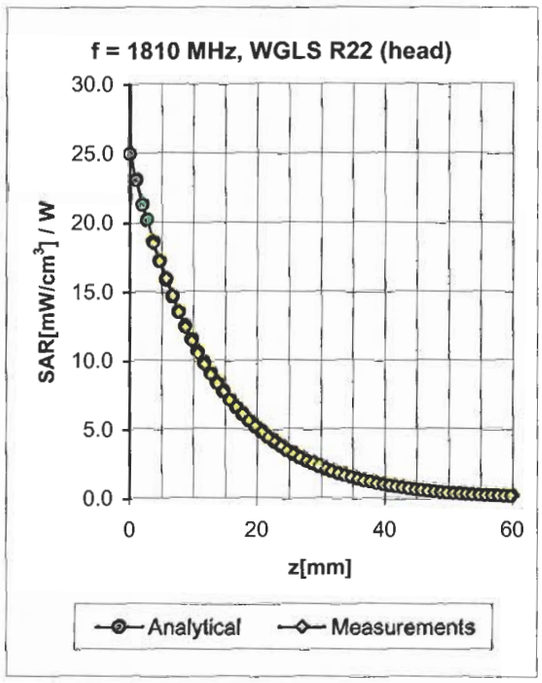
(Waveguide R22, f = 1800 MHz)



Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



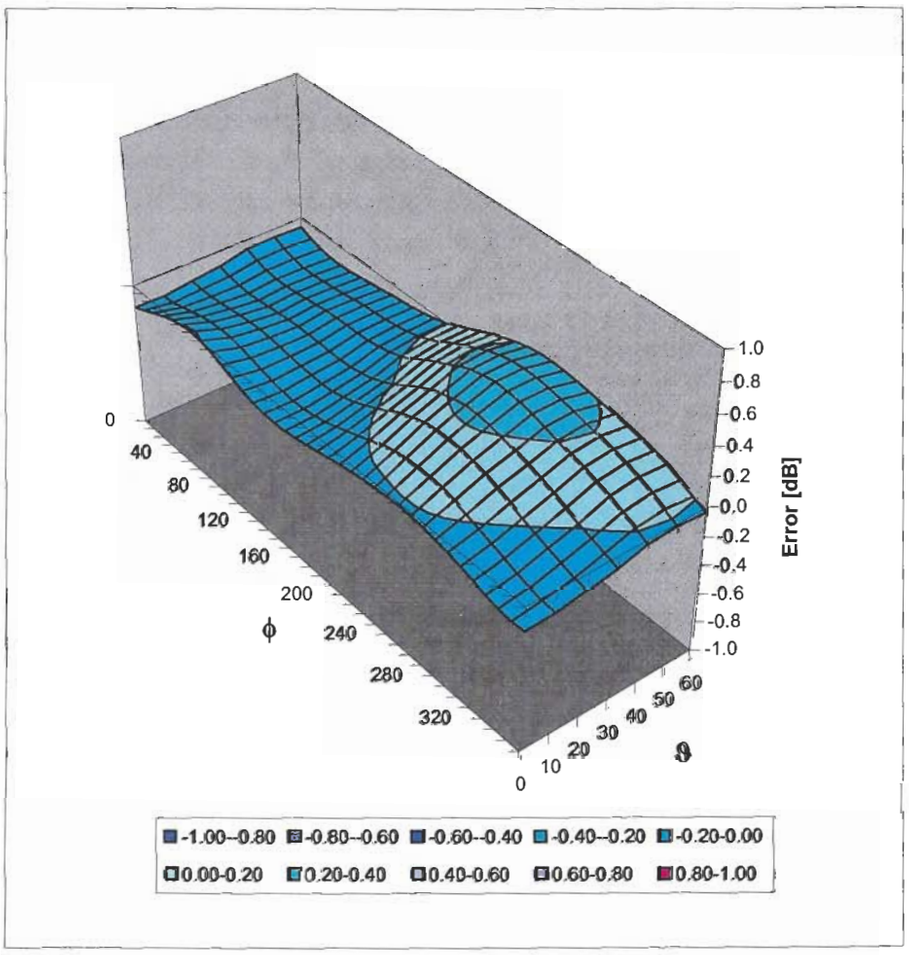


f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
450	± 50 / ± 100	Head	43.5 ± 5%	0.87 ± 5%	0.08	1.15	7.66 ± 13.3% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.64	1.76	6.51 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.52	2.61	5.27 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.58	2.43	4.66 ± 11.8% (k=2)
450	± 50 / ± 100	Body	56.7 ± 5%	0.94 ± 5%	0.04	1.40	7.38 ± 13.3% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.56	1.96	6.39 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.50	2.98	4.81 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.58	2.31	4.27 ± 11.8% (k=2)

[C] **The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.**

Deviation from Isotropy in HSL

Error (ϕ, ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)