SAR Test Plots

GPRS850_2TS_SideC_Low

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 824.2 MHz;Duty Cycle: 1:4.15
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.921 mho/m; $ε_r$ = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Low_C/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.530 mW/g

GPRS_Low_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
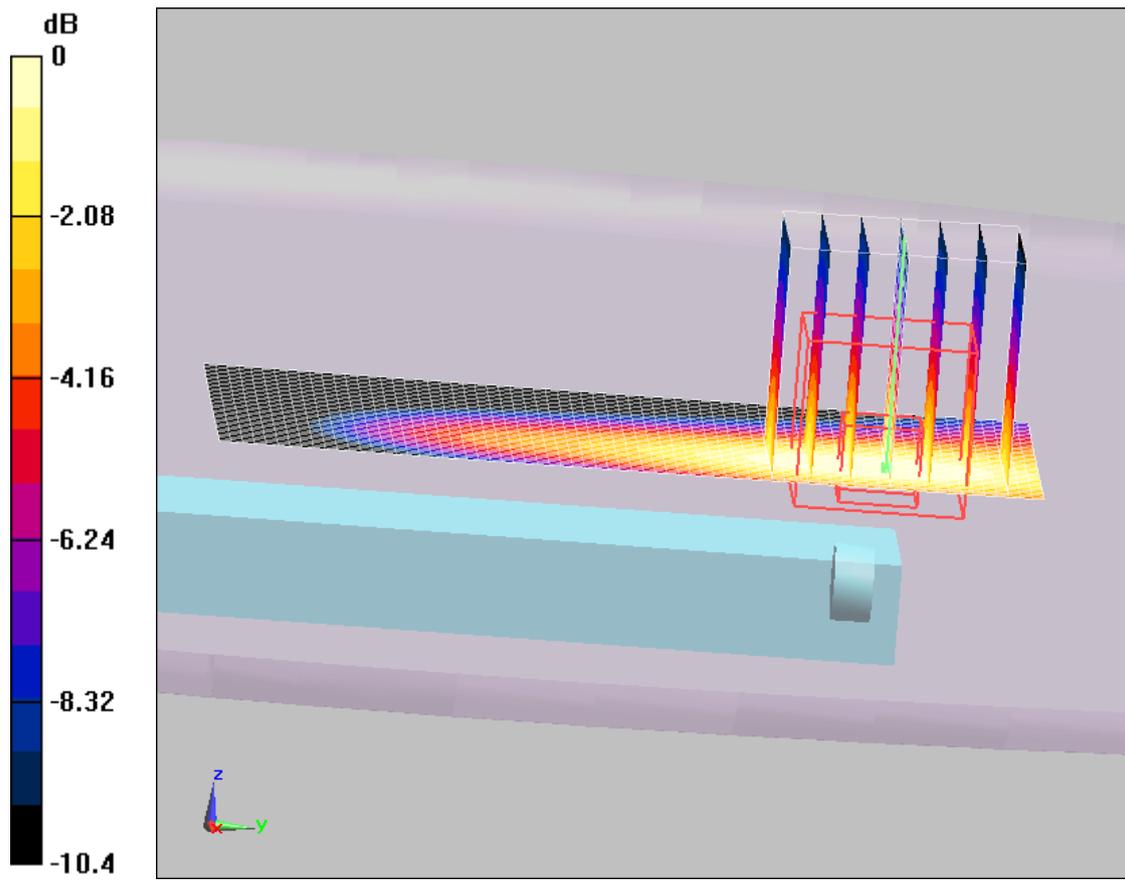Reference Value = 13.4 V/m; Power Drift = -0.361 dB
Peak SAR (extrapolated) = 0.742 W/kg
SAR(1 g) = 0.466 mW/g; SAR(10 g) = 0.295 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.505 mW/g

0 dB = 0.505mW/g

GPRS850_2TS_SideA_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_A/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
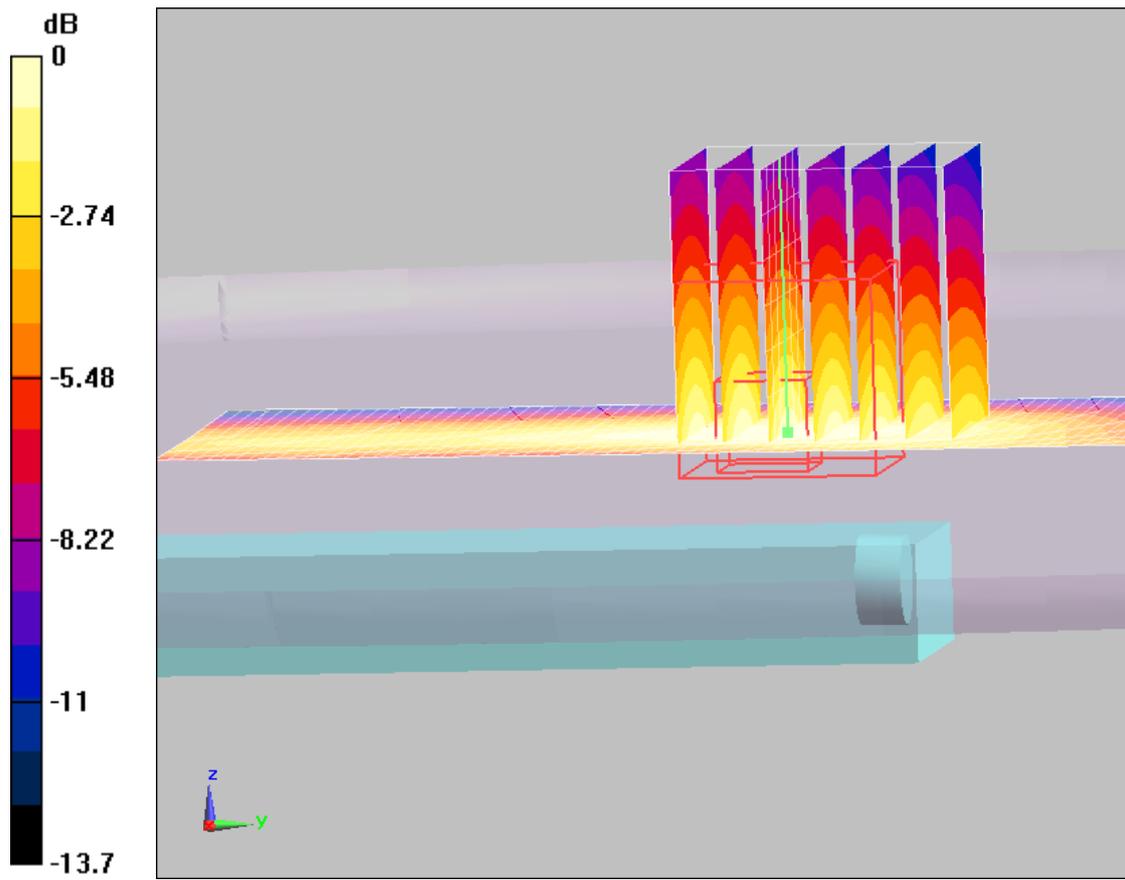Reference Value = 15.8 V/m; Power Drift = 0.071 dB
Peak SAR (extrapolated) = 0.400 W/kg
SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.181 mW/g

Maximum value of SAR (measured) = 0.295 mW/g

GPRS_Mid_A/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.298 mW/g

0 dB = 0.298mW/g

GPRS850_2TS_SideB_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_B/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
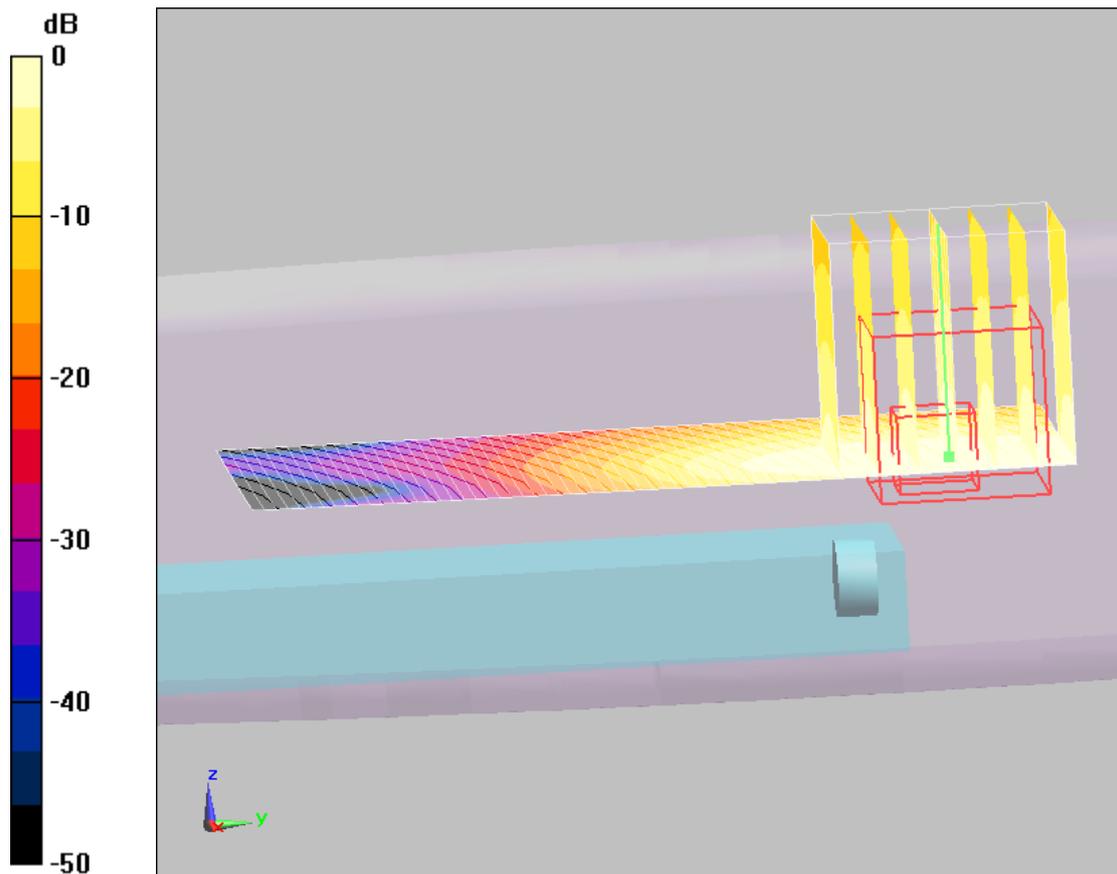Reference Value = 21.8 V/m; Power Drift = -0.194 dB
Peak SAR (extrapolated) = 0.810 W/kg
SAR(1 g) = 0.547 mW/g; SAR(10 g) = 0.360 mW/g
Maximum value of SAR (measured) = 0.590 mW/g

GPRS_Mid_B/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.615 mW/g

0 dB = 0.615mW/g

GPRS850_2TS_SideC_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

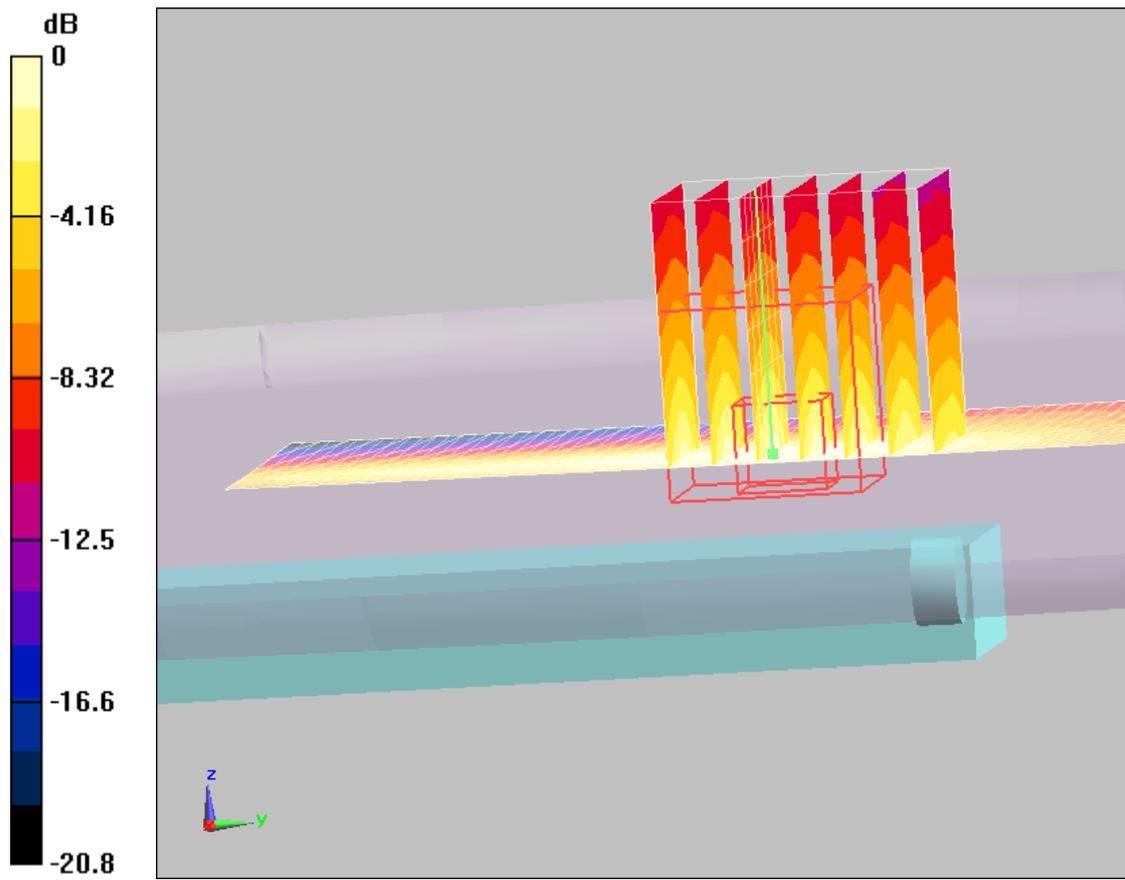Reference Value = 27.8 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.419 mW/g

Maximum value of SAR (measured) = 0.826 mW/g

GPRS_Mid_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.822 mW/g

0 dB = 0.822mW/g

GPRS850_2TS_SideD_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_D/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm

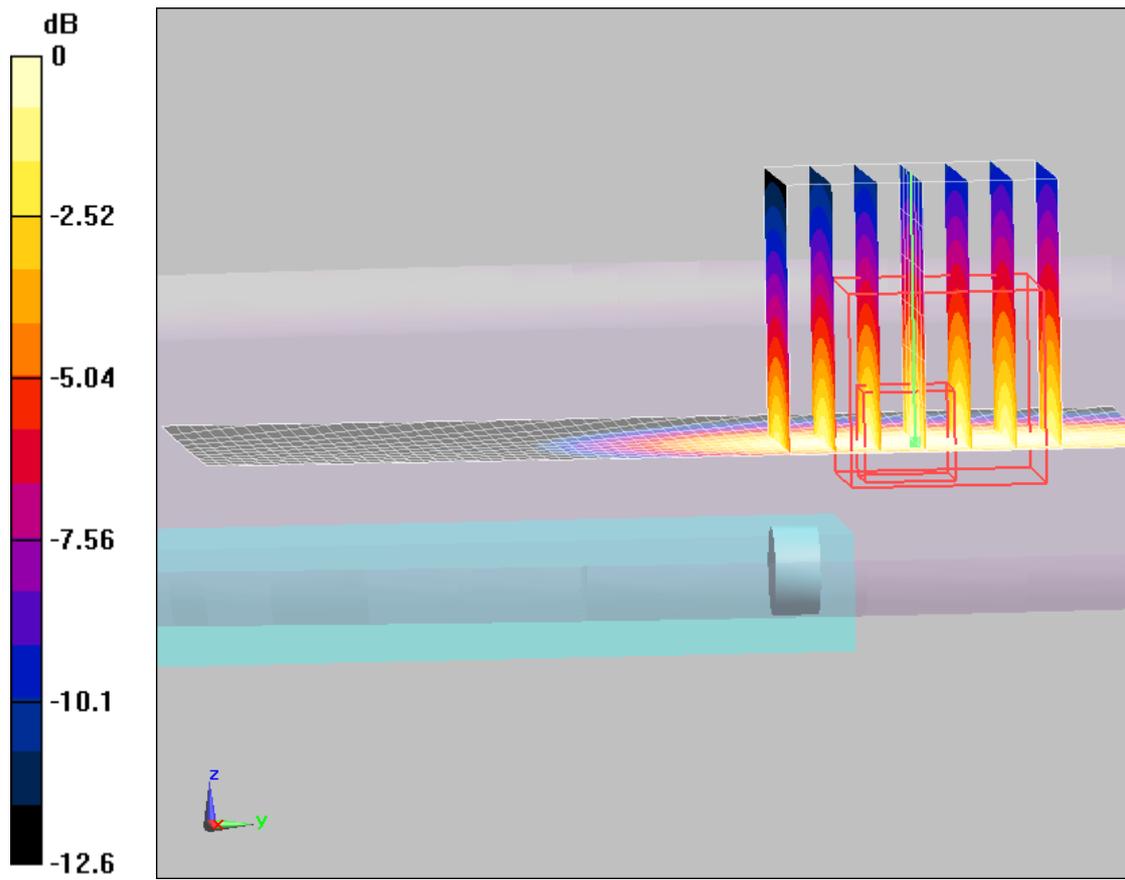Maximum value of SAR (interpolated) = 0.494 mW/g

GPRS_Mid_D/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 0.710 W/kg

SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.276 mW/g

Maximum value of SAR (measured) = 0.479 mW/g

0 dB = 0.479mW/g

GPRS850_2TS_SideE_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_E/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
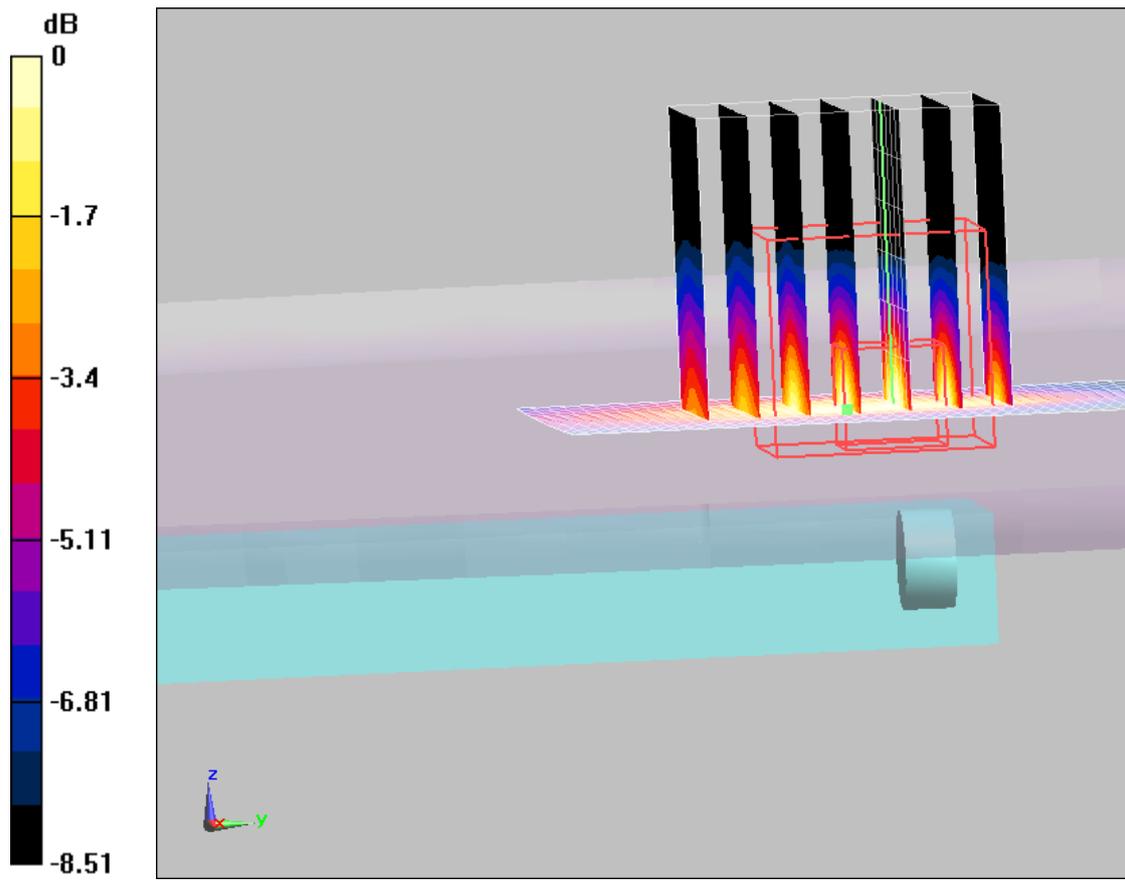Reference Value = 11.9 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.341 W/kg
SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.054 mW/g
Maximum value of SAR (measured) = 0.135 mW/g

GPRS_Mid_E/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.103 mW/g

0 dB = 0.103mW/g

GPRS850_2TS_SideF_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_F/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
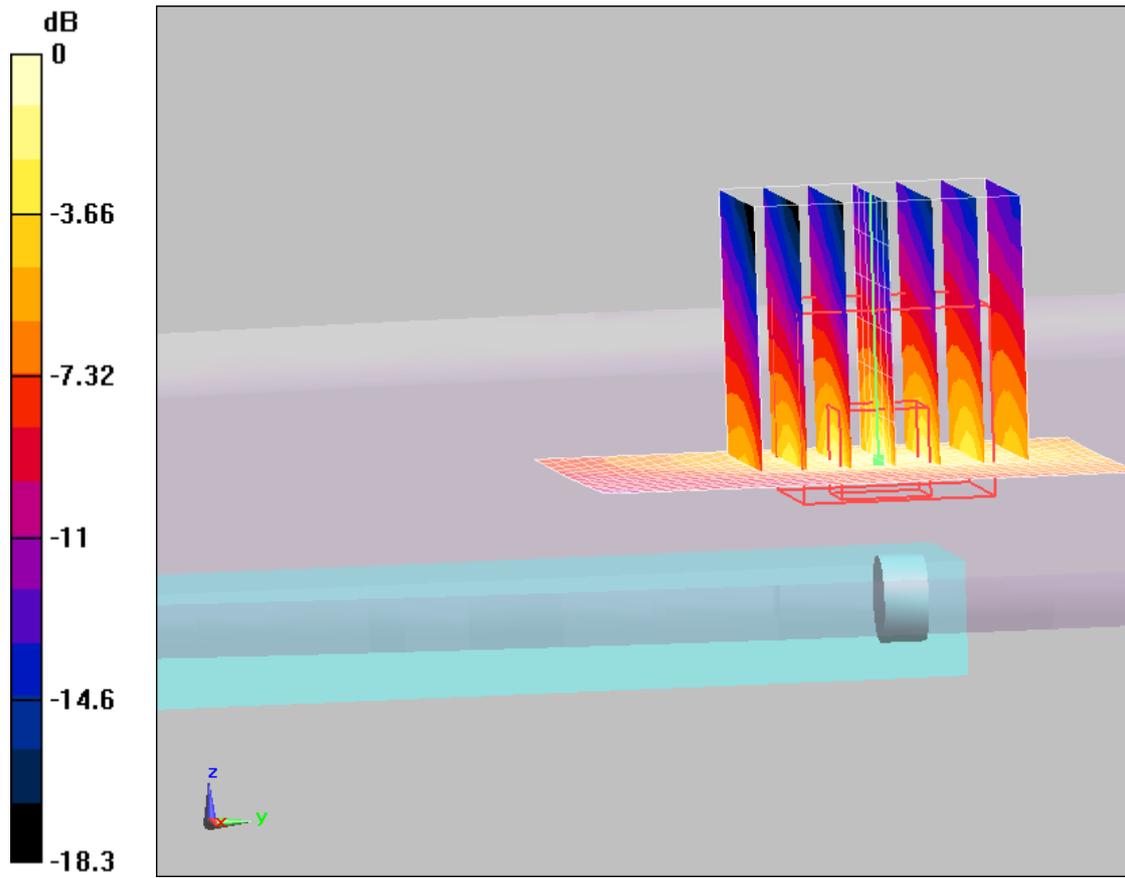Maximum value of SAR (interpolated) = 0.056 mW/g

GPRS_Mid_F/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.42 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 0.208 W/kg
SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.083 mW/g

0 dB = 0.083mW/g

GPRS850_2TS_SideG_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_G/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
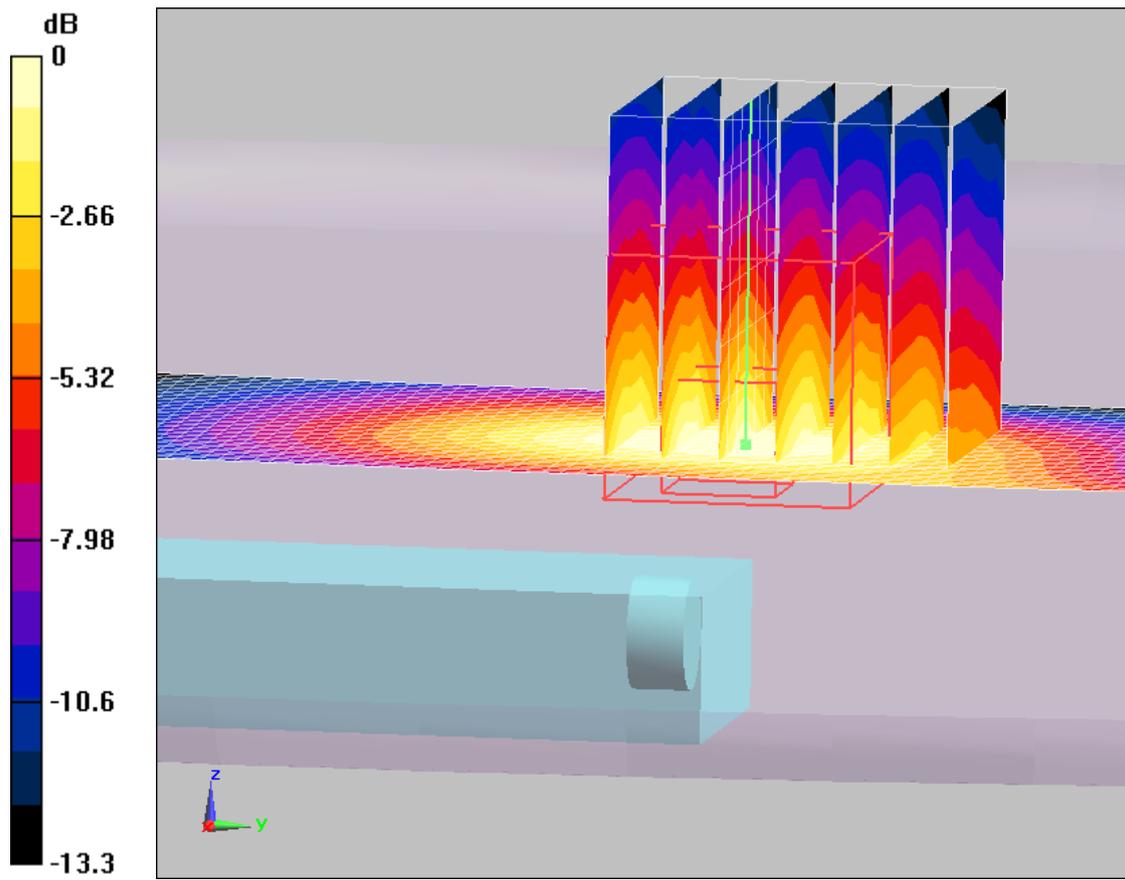Maximum value of SAR (interpolated) = 0.219 mW/g

GPRS_Mid_G/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.259 dB
Peak SAR (extrapolated) = 0.323 W/kg
SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.202 mW/g

0 dB = 0.202mW/g

GPRS850_2TS_SideC_High

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 2TS; Frequency: 848.8 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 849 MHz; σ = 0.939 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_High_C/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
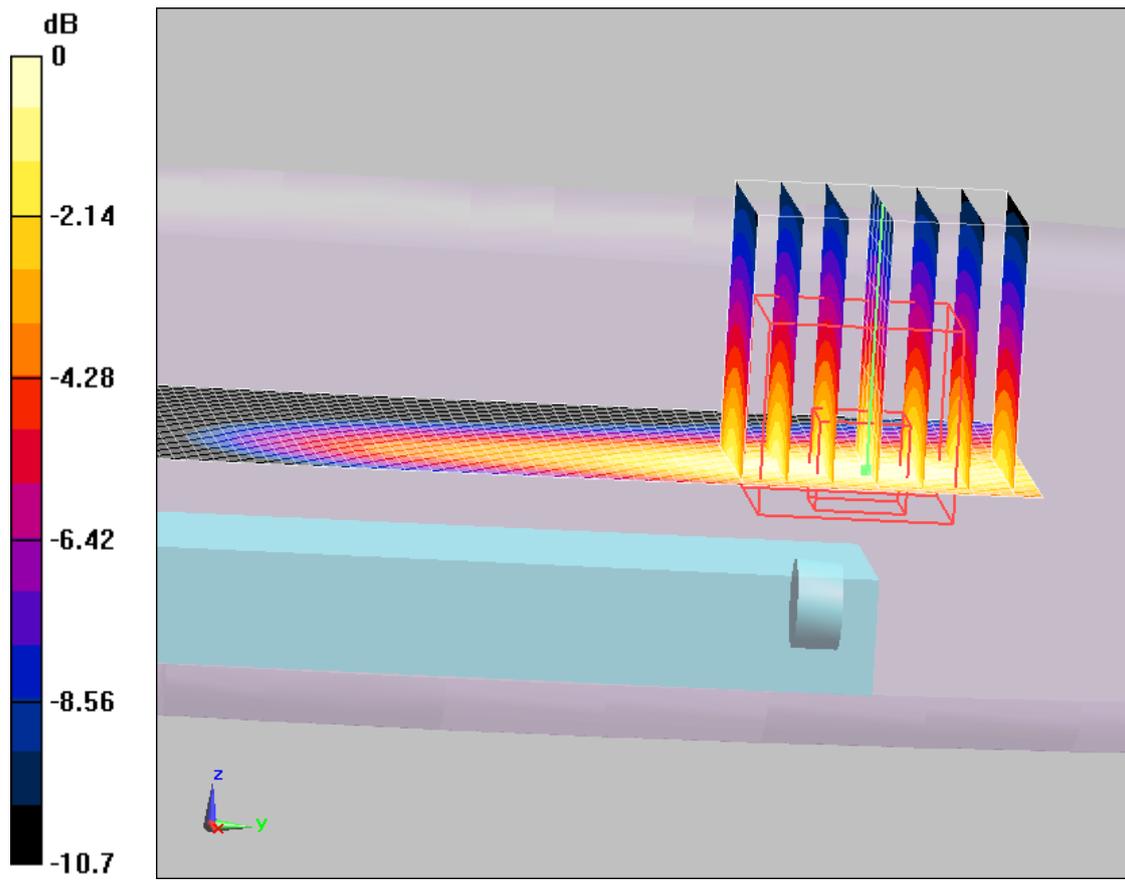Maximum value of SAR (interpolated) = 0.483 mW/g

GPRS_High_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 0.728 W/kg
SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.282 mW/g
Maximum value of SAR (measured) = 0.492 mW/g

0 dB = 0.492mW/g

EGPRS850_4TS_SideC_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS850 4TS; Frequency: 836.6 MHz;Duty Cycle: 1:2

Medium parameters used: f = 837 MHz; σ = 0.93 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

EGPRS_Mid_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

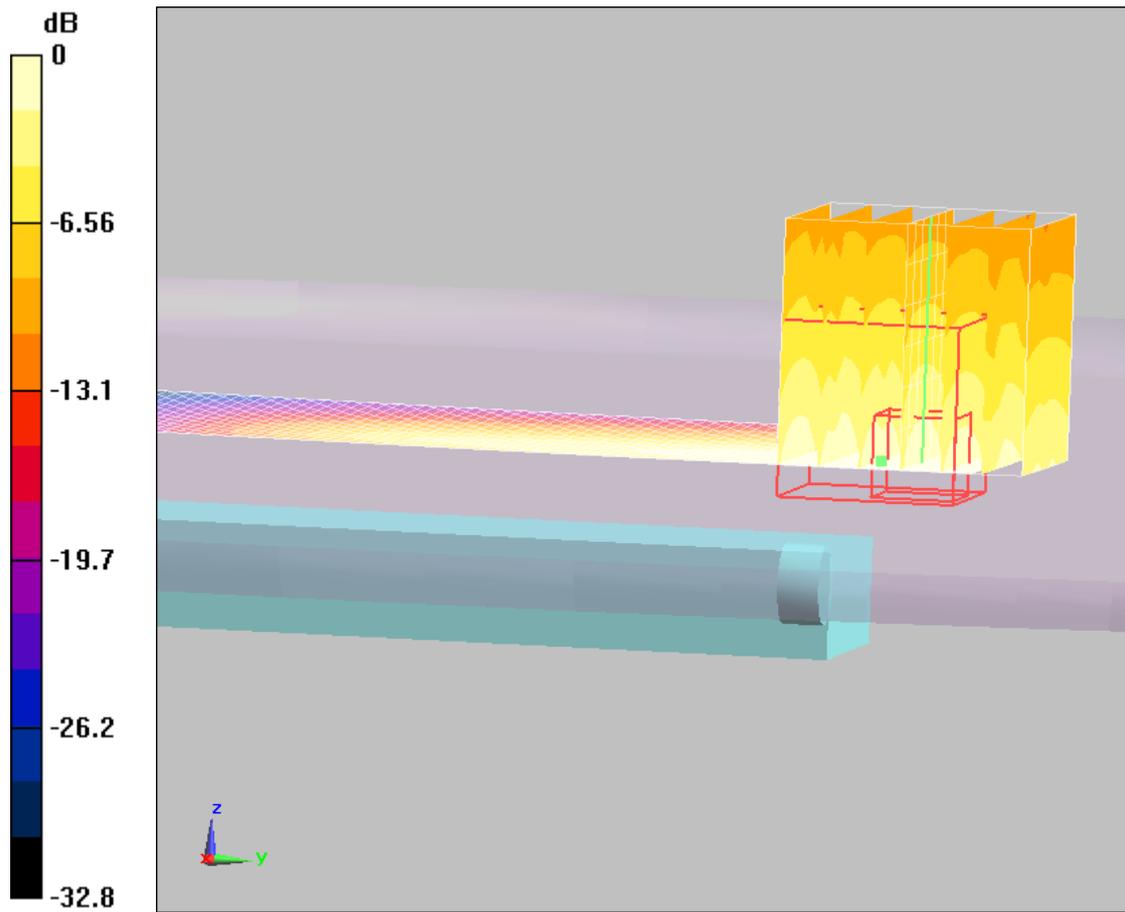Reference Value = 16.2 V/m; Power Drift = 0.101 dB

Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.258 mW/g

Maximum value of SAR (measured) = 0.444 mW/g

EGPRS_Mid_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.451 mW/g

0 dB = 0.451mW/g

GPRS1900_2TS_SideB_Low

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; $ε_r$ = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Low_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.429 mW/g

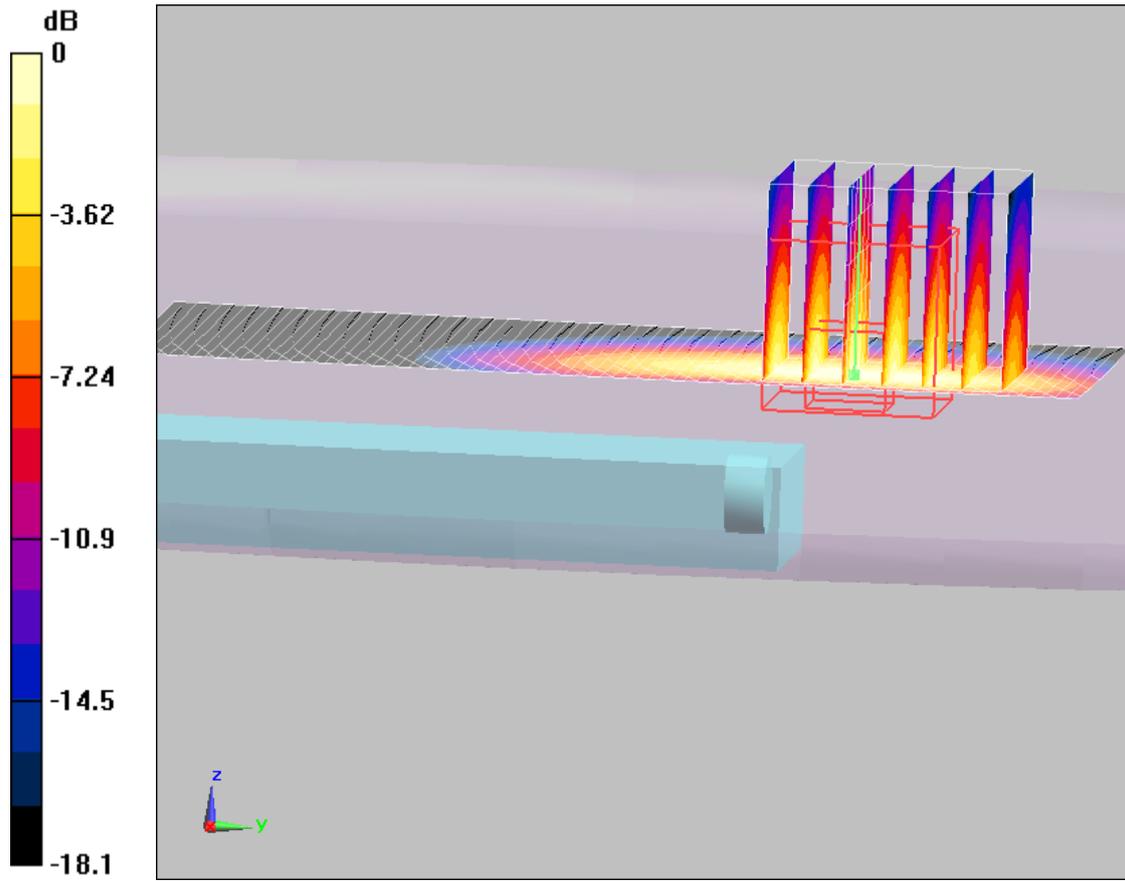**GPRS_Low_B/Zoom Scan (7x7x6)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.8 V/m; Power Drift = 0.174 dB
Peak SAR (extrapolated) = 0.624 W/kg
SAR(1 g) = 0.358 mW/g; SAR(10 g) = 0.183 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.406 mW/g

0 dB = 0.406mW/g

GPRS1900_2TS_SideA_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_A/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
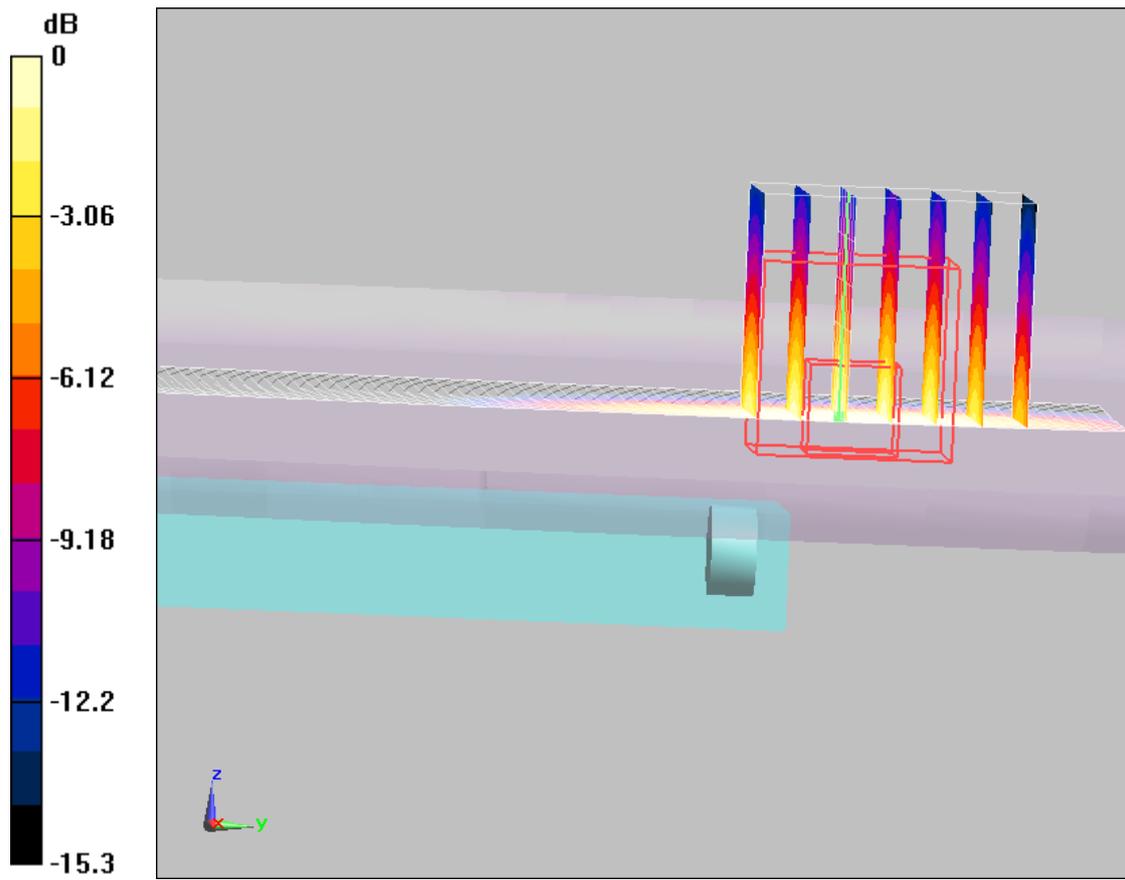Maximum value of SAR (interpolated) = 0.352 mW/g

GPRS_Mid_A/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = -0.067 dB
Peak SAR (extrapolated) = 0.500 W/kg
SAR(1 g) = 0.314 mW/g; SAR(10 g) = 0.180 mW/g
Maximum value of SAR (measured) = 0.347 mW/g

0 dB = 0.347mW/g

GPRS1900_2TS_SideB_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
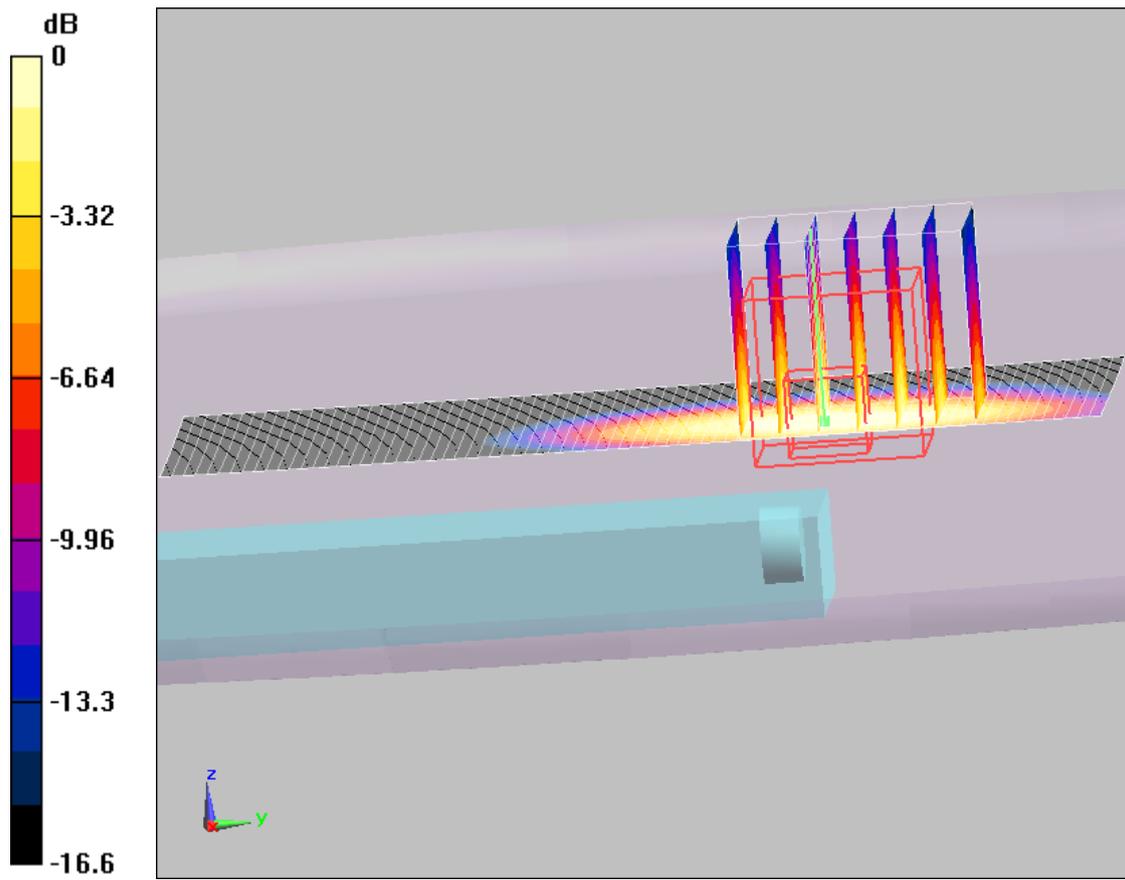Maximum value of SAR (interpolated) = 0.517 mW/g

GPRS_Mid_B/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.6 V/m; Power Drift = -0.359 dB
Peak SAR (extrapolated) = 0.715 W/kg
SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.235 mW/g
Maximum value of SAR (measured) = 0.489 mW/g

0 dB = 0.489mW/g

GPRS1900_2TS_SideC_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_C/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

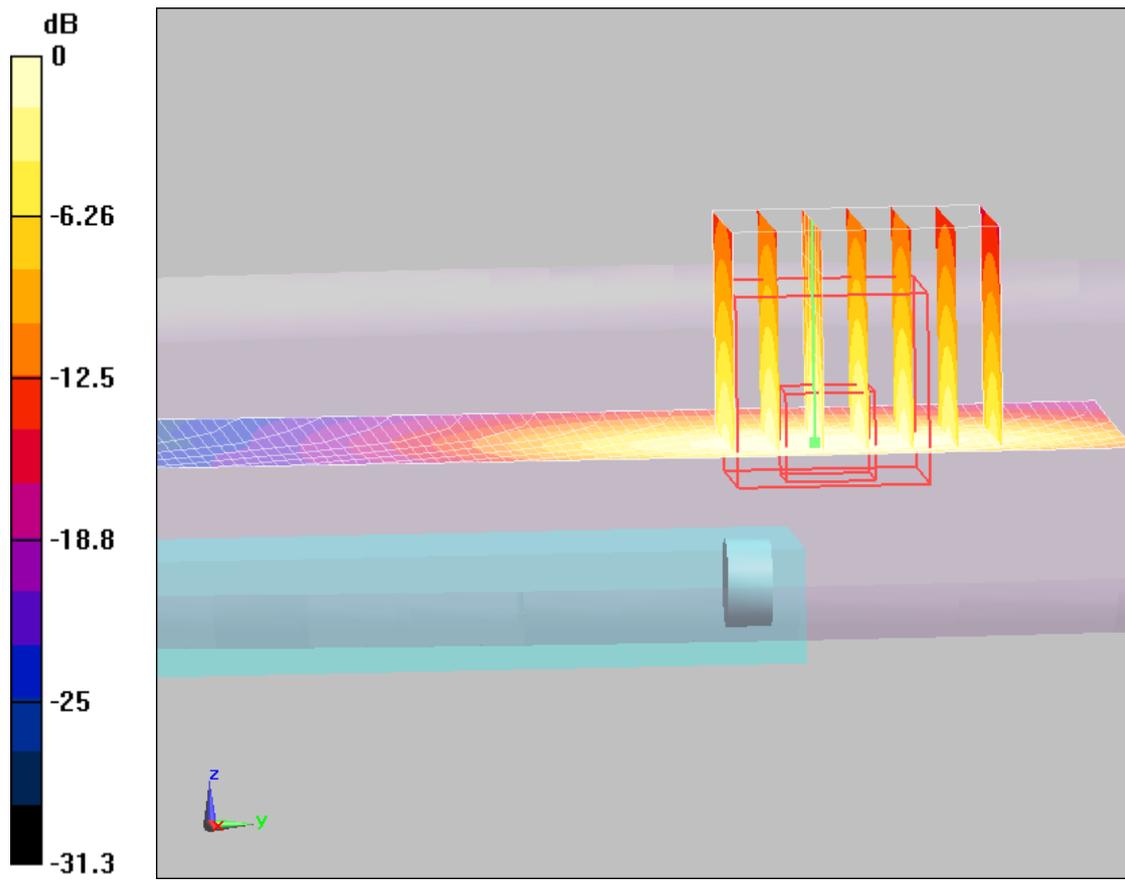Reference Value = 12.9 V/m; Power Drift = 0.393 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.222 mW/g

Maximum value of SAR (measured) = 0.442 mW/g

GPRS_Mid_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.446 mW/g

0 dB = 0.446mW/g

GPRS1900_2TS_SideD_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_D/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
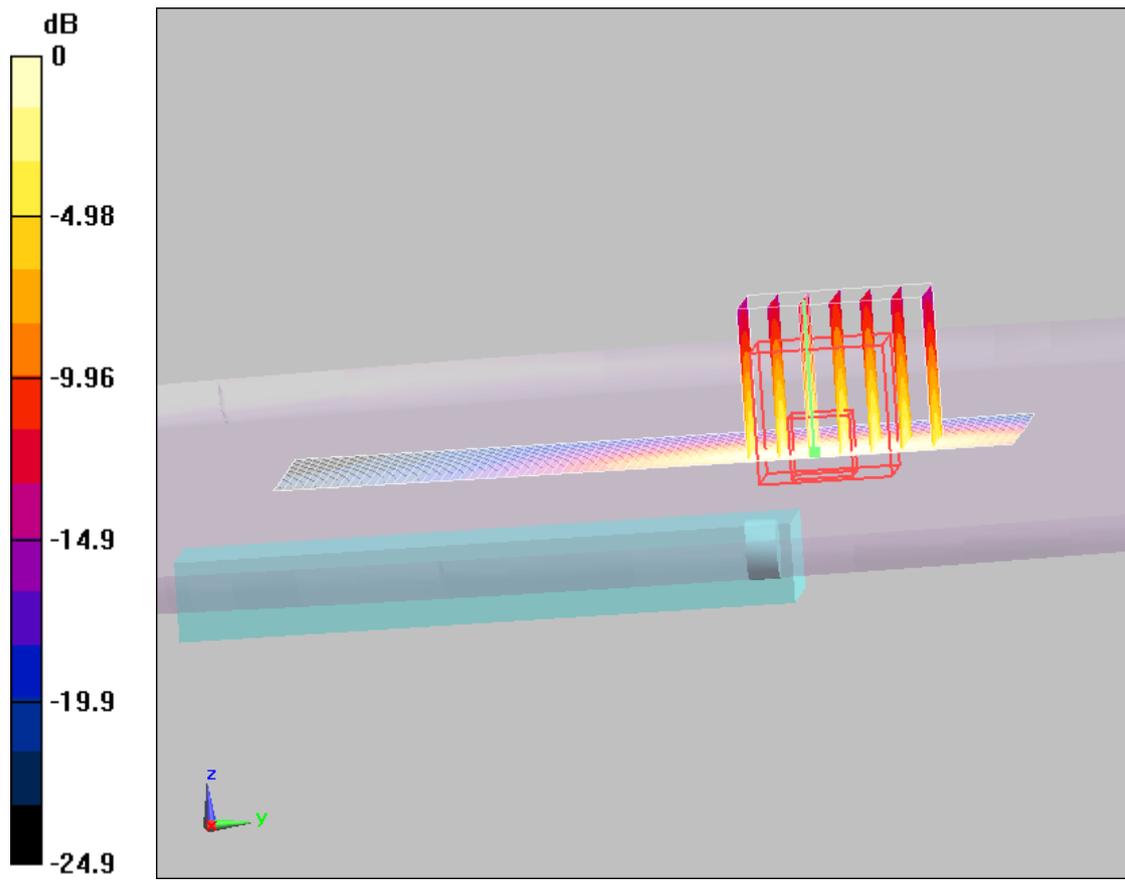Reference Value = 9.57 V/m; Power Drift = 0.083 dB
Peak SAR (extrapolated) = 0.410 W/kg
SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.119 mW/g
Maximum value of SAR (measured) = 0.256 mW/g

GPRS_Mid_D/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.257 mW/g

0 dB = 0.257mW/g

GPRS1900_2TS_SideE_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; $ε_r$ = 52.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_E/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
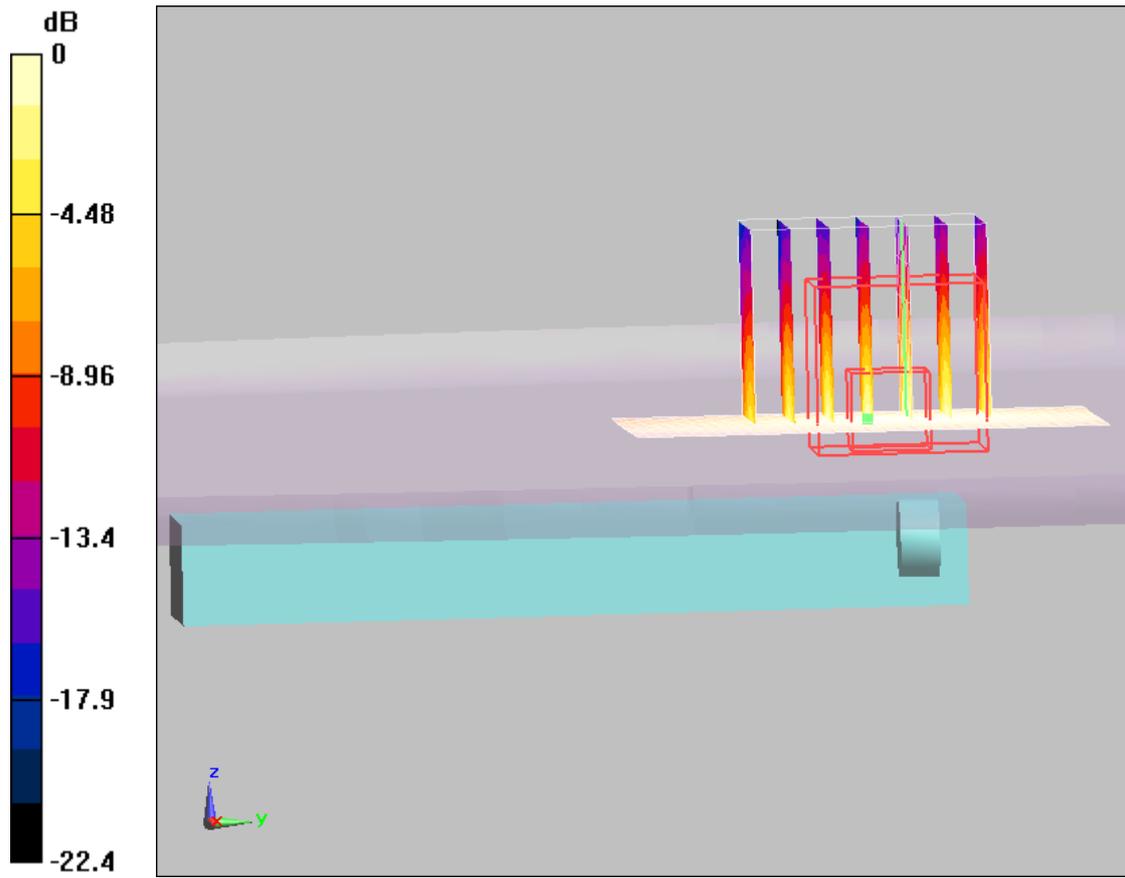
Maximum value of SAR (interpolated) = 0.056 mW/g

GPRS_Mid_E/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.98 V/m; Power Drift = 0.491 dB

Peak SAR (extrapolated) = 0.105 W/kg

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.057 mW/g

0 dB = 0.057mW/g

GPRS1900_2TS_SideF_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_F/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
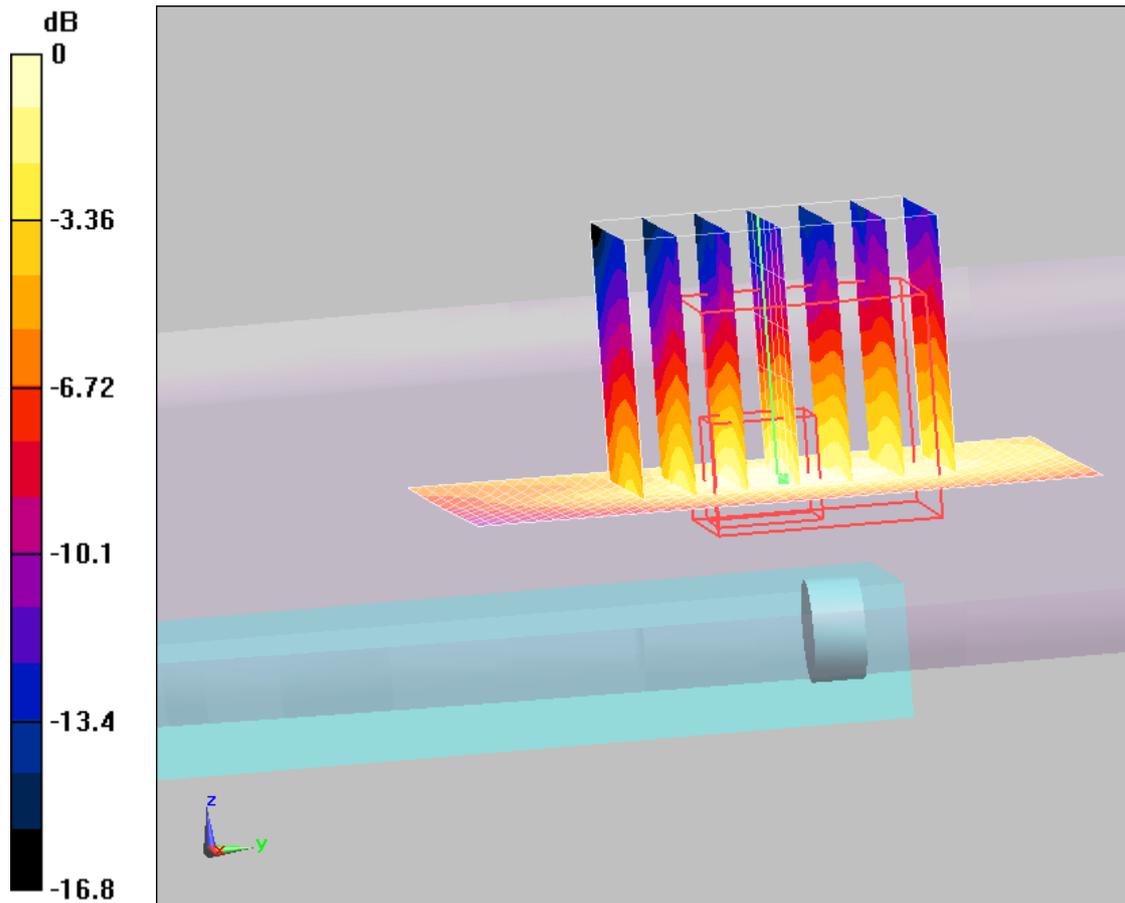Maximum value of SAR (interpolated) = 0.051 mW/g

GPRS_Mid_F/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.81 V/m; Power Drift = 0.151 dB
Peak SAR (extrapolated) = 0.095 W/kg
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.050 mW/g

0 dB = 0.050mW/g

GPRS1900_2TS_SideG_Middle

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1880 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_Mid_G/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

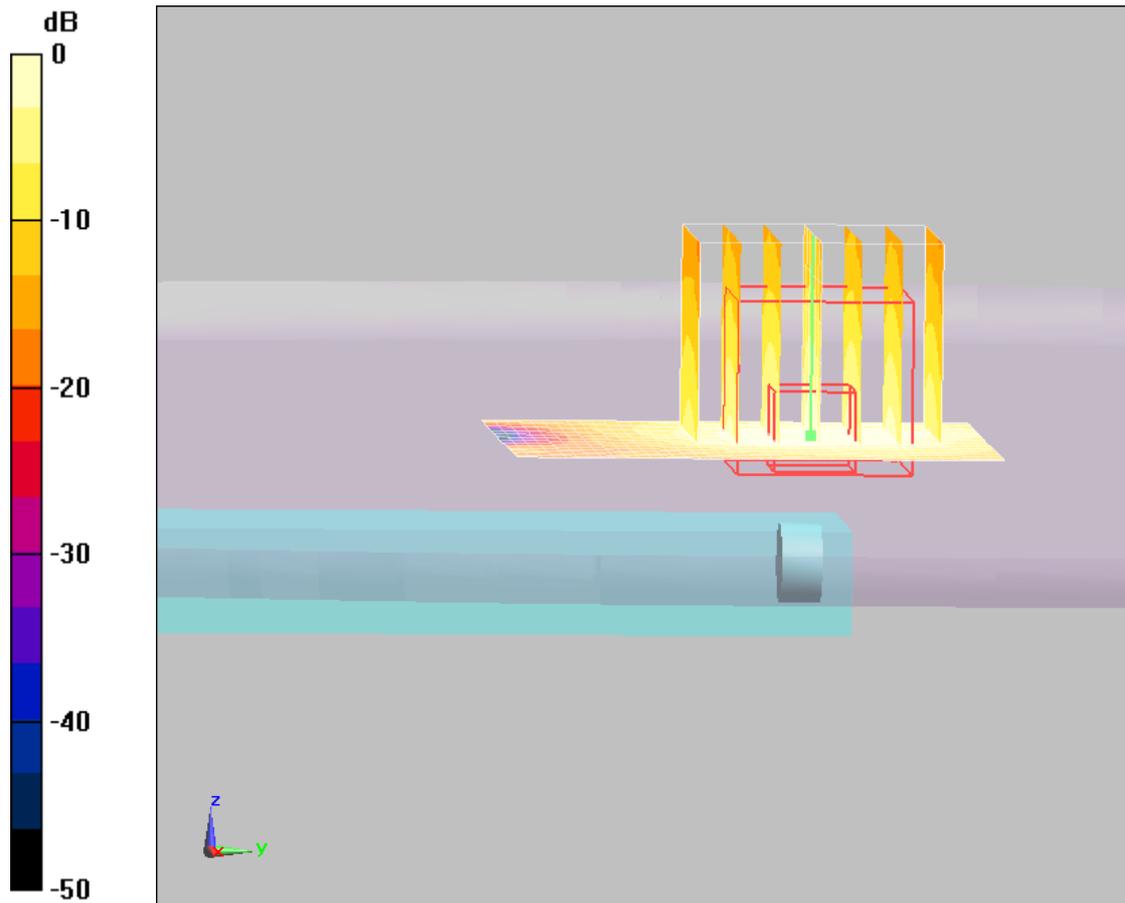Reference Value = 5.5 V/m; Power Drift = 0.279 dB

Peak SAR (extrapolated) = 0.119 W/kg

SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.030 mW/g

Maximum value of SAR (measured) = 0.071 mW/g

GPRS_Mid_G/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.070 mW/g

0 dB = 0.070mW/g

GPRS1900_2TS_SideB_High

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1909.8 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1910 MHz; σ = 1.58 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

GPRS_High_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
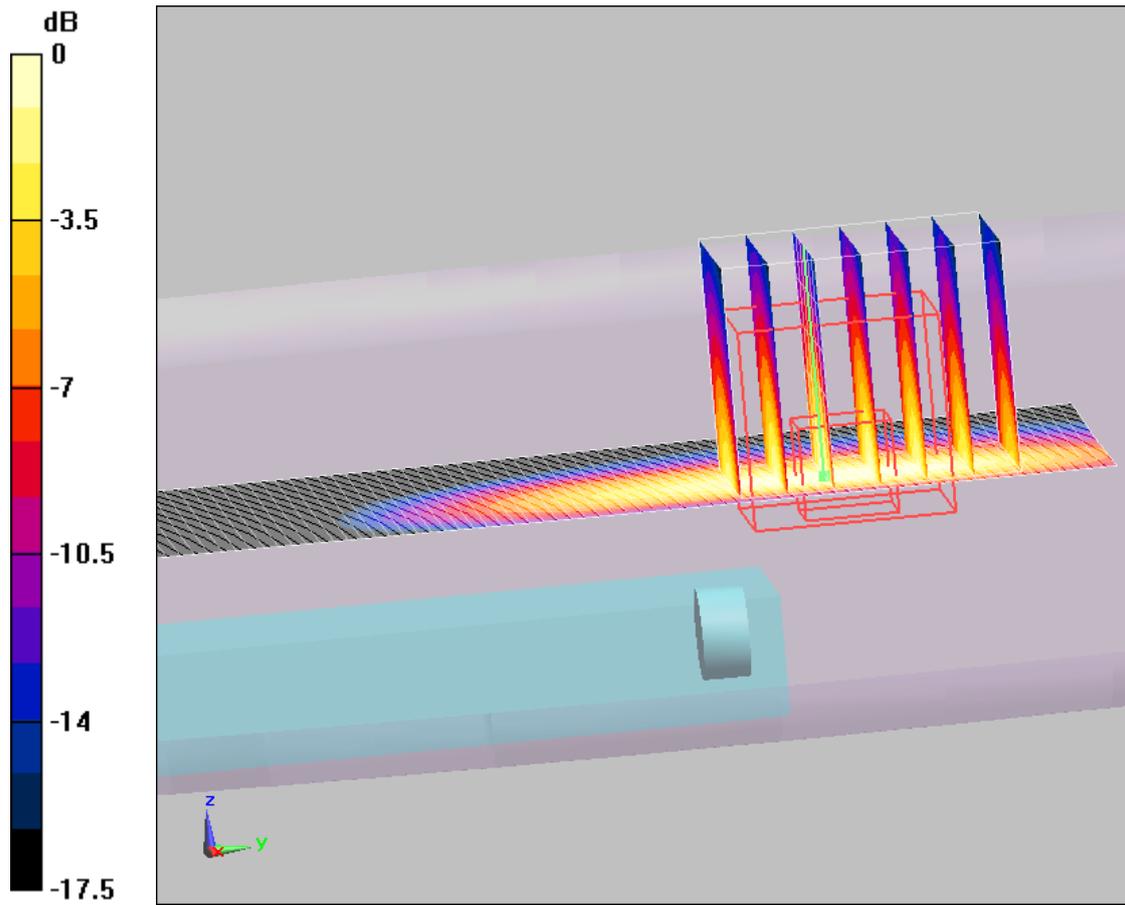Maximum value of SAR (interpolated) = 0.569 mW/g

GPRS_High_B/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = 0.121 dB
Peak SAR (extrapolated) = 0.871 W/kg
SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.241 mW/g
Maximum value of SAR (measured) = 0.545 mW/g

0 dB = 0.545mW/g

EGPRS1900_2TS_SideB_High

DUT: USB Modem MF659; Type: MF659; Serial: --

Communication System: (E)GPRS1900 2TS; Frequency: 1909.8 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1910 MHz; σ = 1.58 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

EGPRS_High_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
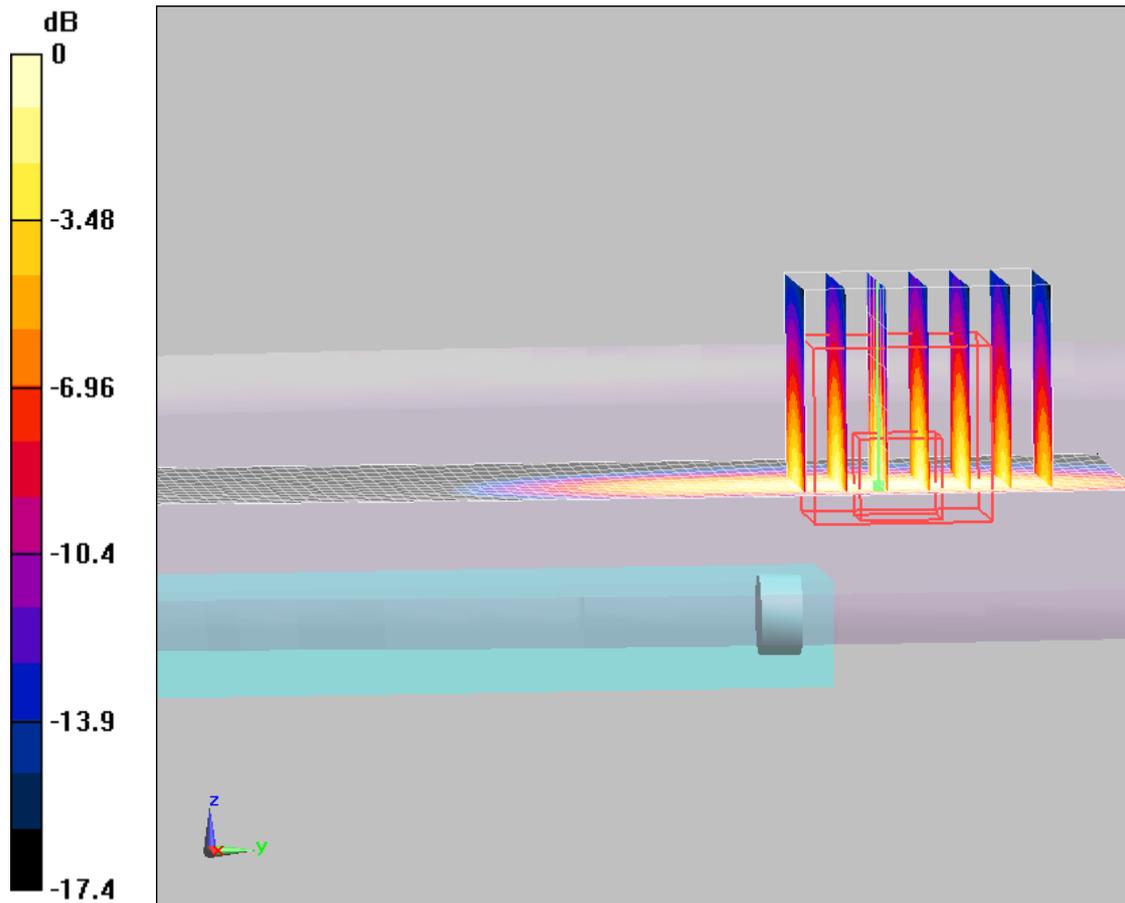Maximum value of SAR (interpolated) = 0.583 mW/g

EGPRS_High_B/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = 0.113 dB
Peak SAR (extrapolated) = 0.896 W/kg
SAR(1 g) = 0.488 mW/g; SAR(10 g) = 0.243 mW/g
Maximum value of SAR (measured) = 0.553 mW/g

0 dB = 0.553mW/g

WCDMA_FDD2_RMC_SideB_Low

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Low_B/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.1 V/m; Power Drift = 0.340 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.716 mW/g; SAR(10 g) = 0.375 mW/g

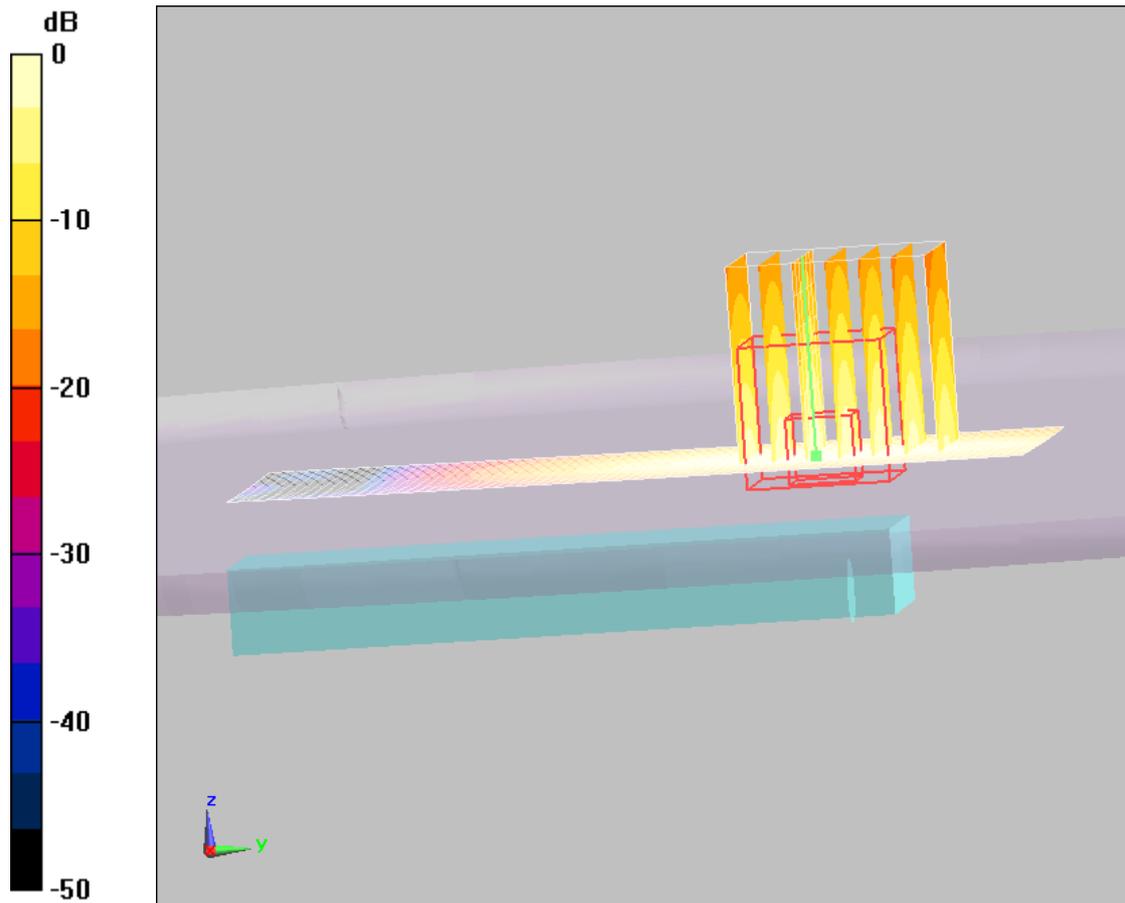Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.800 mW/g

MF659_FDD2_Low_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.817 mW/g

0 dB = 0.817mW/g

WCDMA_FDD2_RMC_SideA_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_A/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.247 dB
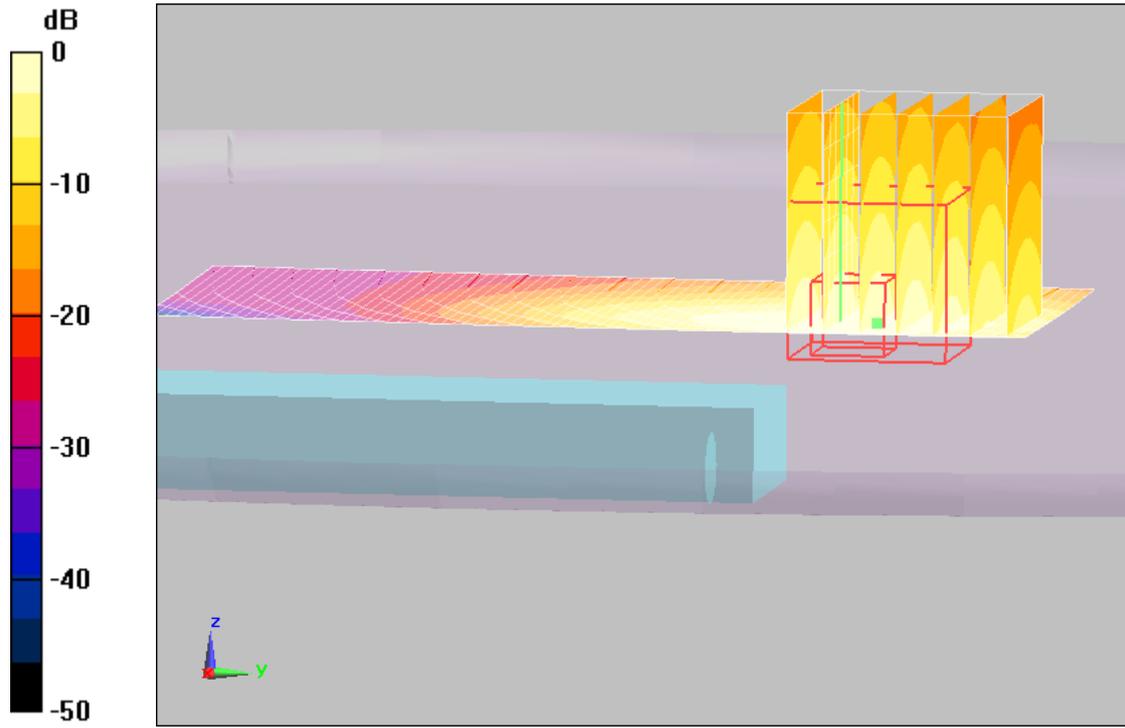Peak SAR (extrapolated) = 0.686 W/kg
SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.240 mW/g

Maximum value of SAR (measured) = 0.473 mW/g

MF659_FDD2_Mid_A/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.504 mW/g

0 dB = 0.504mW/g

WCDMA_FDD2_RMC_SideB_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_B/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.2 V/m; Power Drift = 0.139 dB
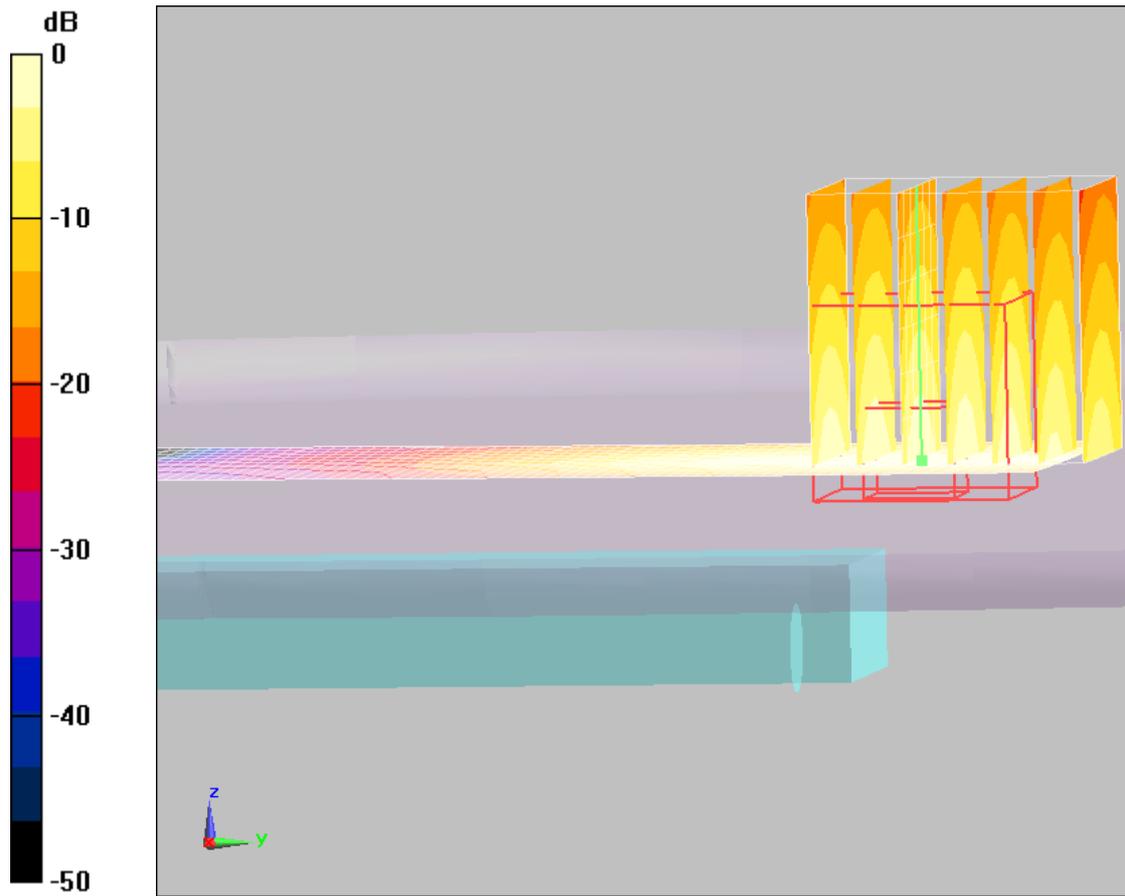Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.701 mW/g; SAR(10 g) = 0.362 mW/g

Maximum value of SAR (measured) = 0.780 mW/g

MF659_FDD2_Mid_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.776 mW/g

0 dB = 0.776mW/g

WCDMA_FDD2_RMC_SideC_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.199 dB
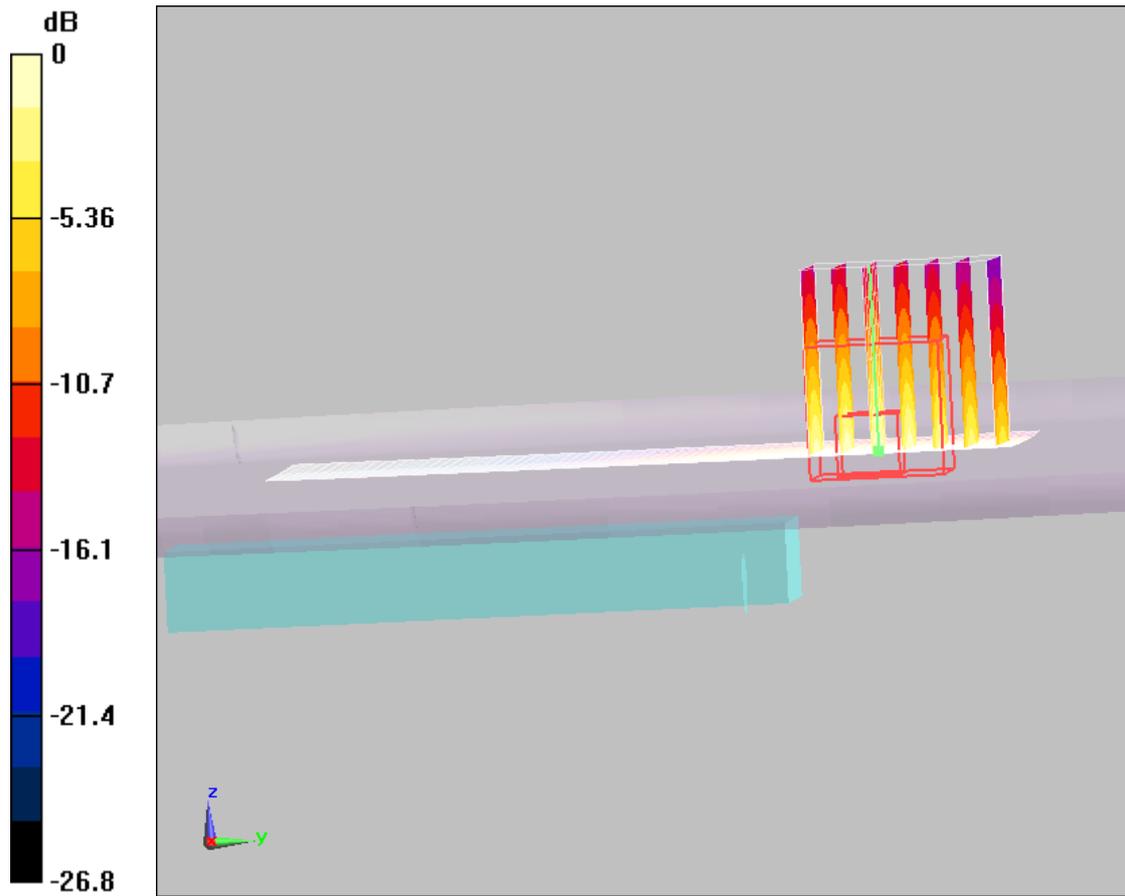Peak SAR (extrapolated) = 0.792 W/kg
SAR(1 g) = 0.474 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.529 mW/g

MF659_FDD2_Mid_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.542 mW/g

0 dB = 0.542mW/g

WCDMA_FDD2_RMC_SideD_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_D/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.4 V/m; Power Drift = -0.078 dB
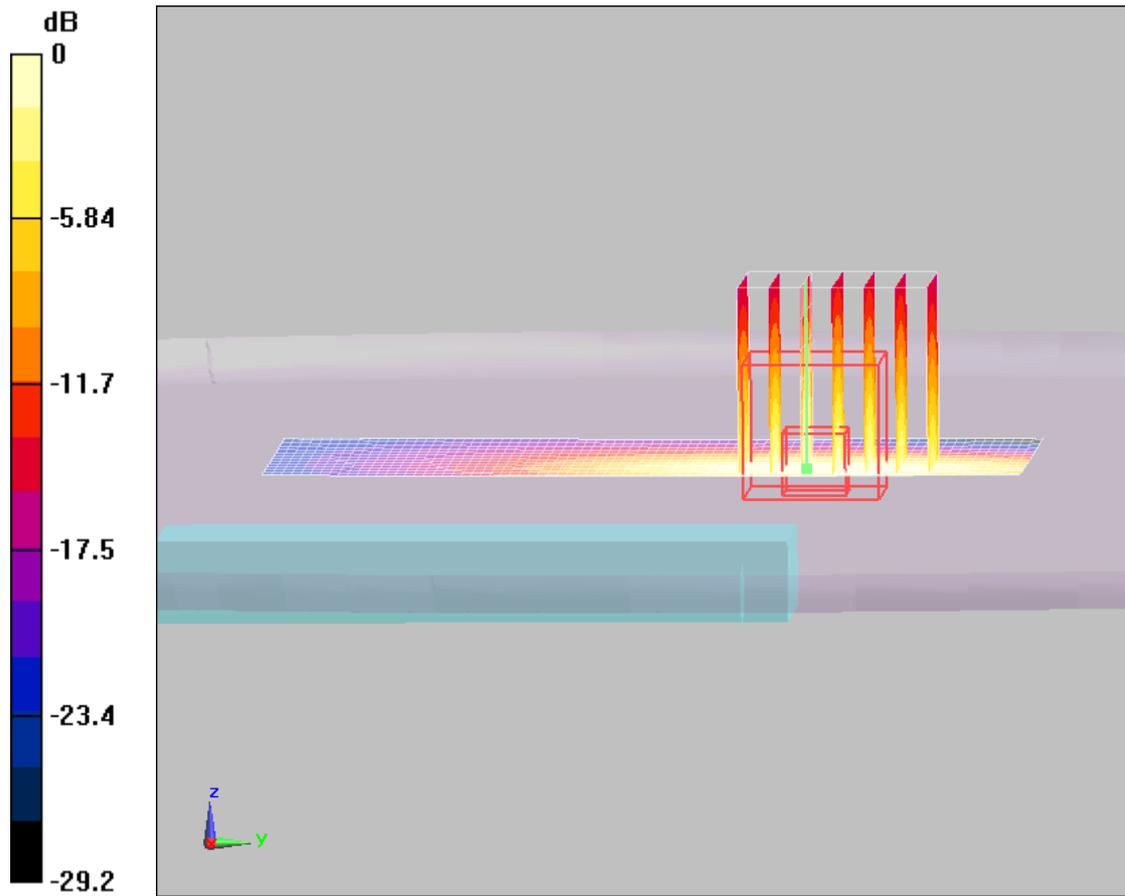Peak SAR (extrapolated) = 0.760 W/kg
SAR(1 g) = 0.438 mW/g; SAR(10 g) = 0.234 mW/g
Maximum value of SAR (measured) = 0.494 mW/g

MF659_FDD2_Mid_D/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.500 mW/g

0 dB = 0.500mW/g

WCDMA_FDD2_RMC_SideE_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_E/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.096 mW/g

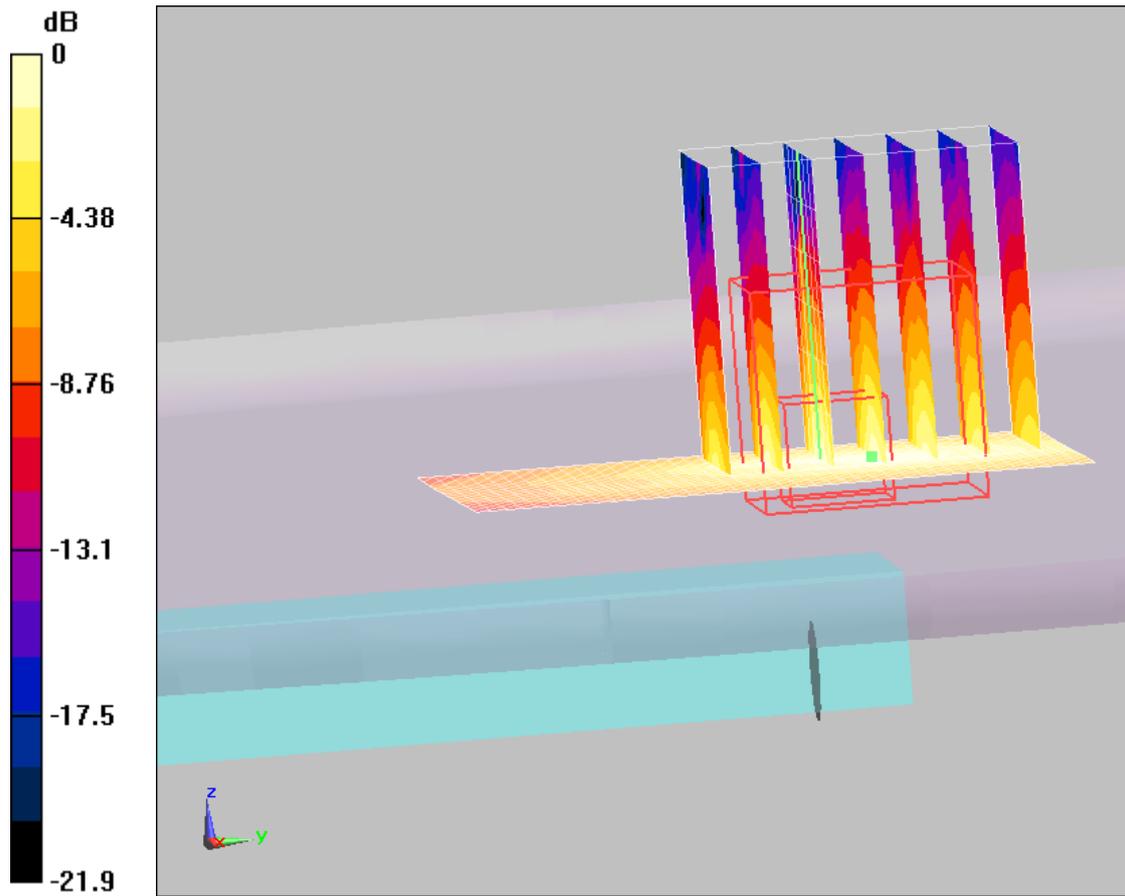**MF659_FDD2_Mid_E/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.95 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.198 W/kg

SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.050 mW/g

Maximum value of SAR (measured) = 0.117 mW/g

0 dB = 0.117mW/g

WCDMA_FDD2_RMC_SideF_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_F/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.091 mW/g

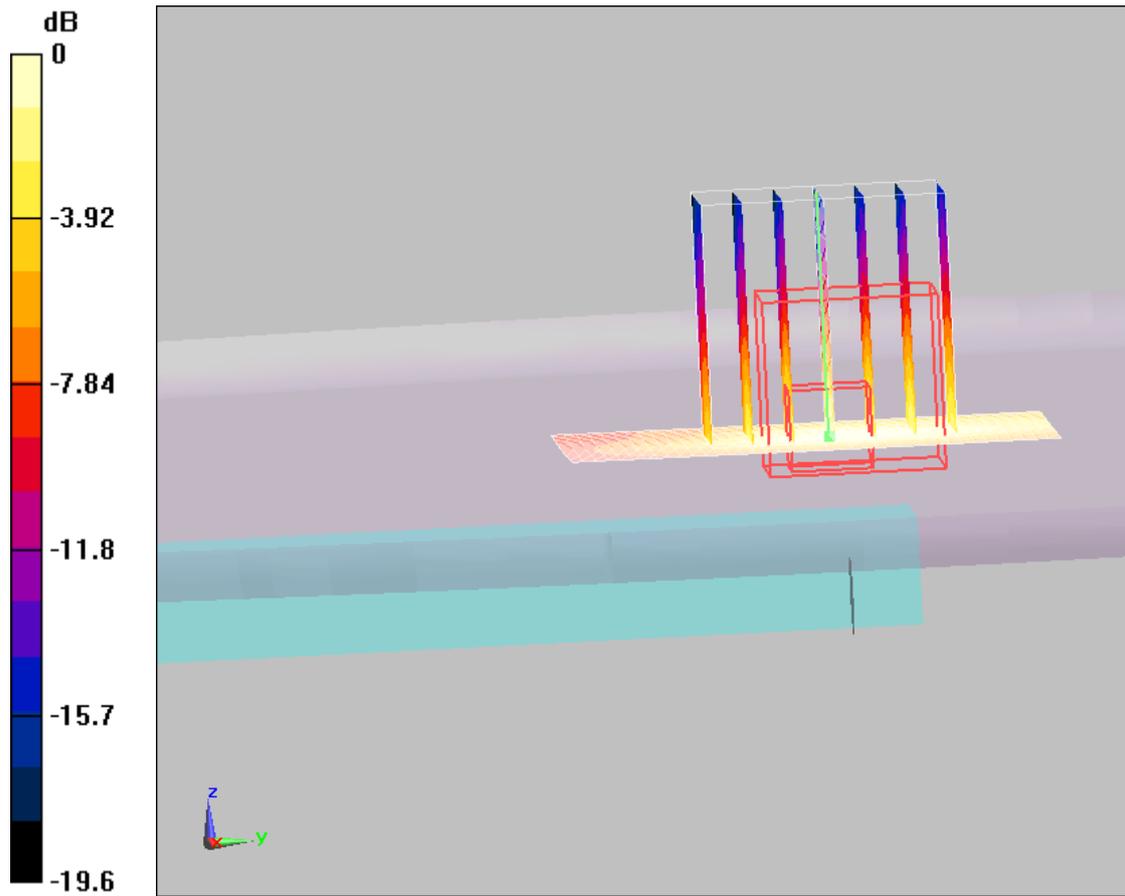**MF659_FDD2_Mid_F/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.35 V/m; Power Drift = -0.329 dB
Peak SAR (extrapolated) = 0.159 W/kg
SAR(1 g) = 0.080 mW/g; SAR(10 g) = 0.042 mW/g
Maximum value of SAR (measured) = 0.088 mW/g

0 dB = 0.088mW/g

WCDMA_FDD2_RMC_SideG_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_Mid_G/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.01 V/m; Power Drift = 0.161 dB
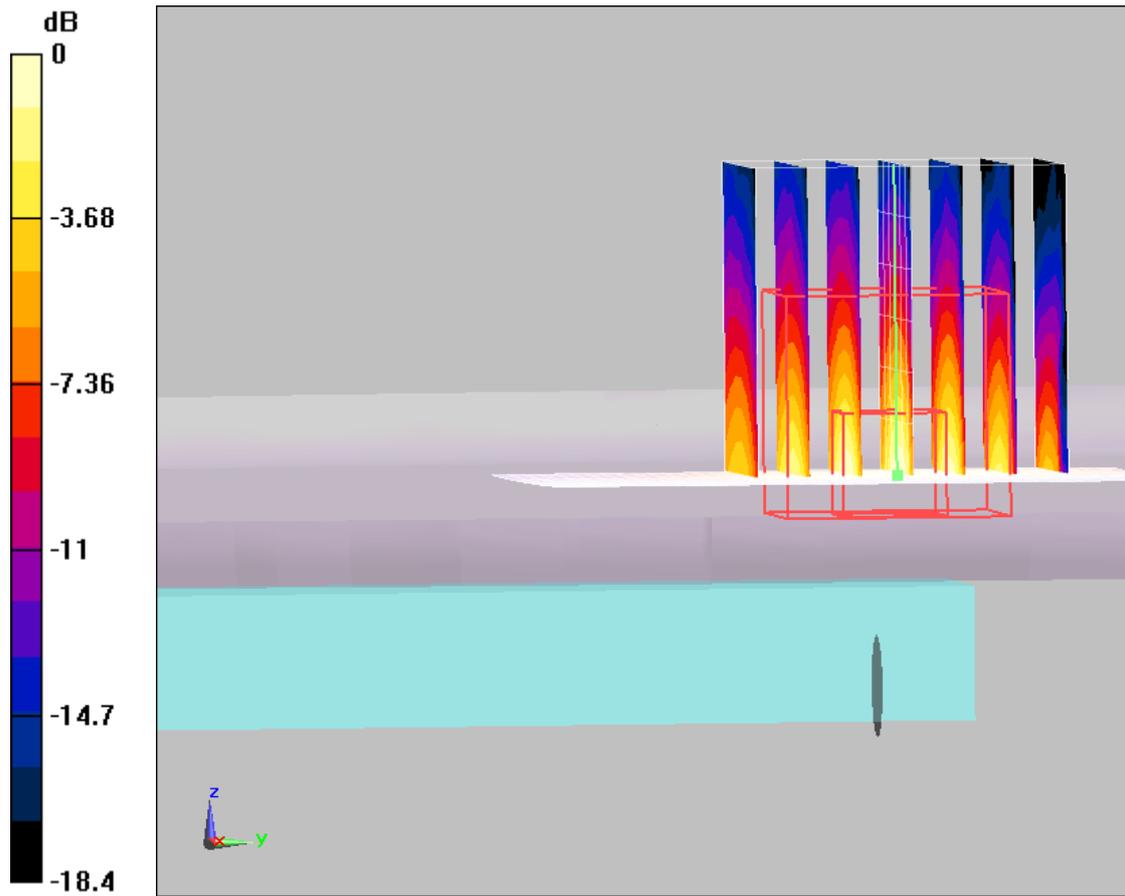Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.048 mW/g
Maximum value of SAR (measured) = 0.114 mW/g

MF659_FDD2_Mid_G/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.106 mW/g

0 dB = 0.106mW/g

WCDMA_FDD2_RMC_SideB_High

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.56 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.58, 4.58, 4.58); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD2_High_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.629 mW/g

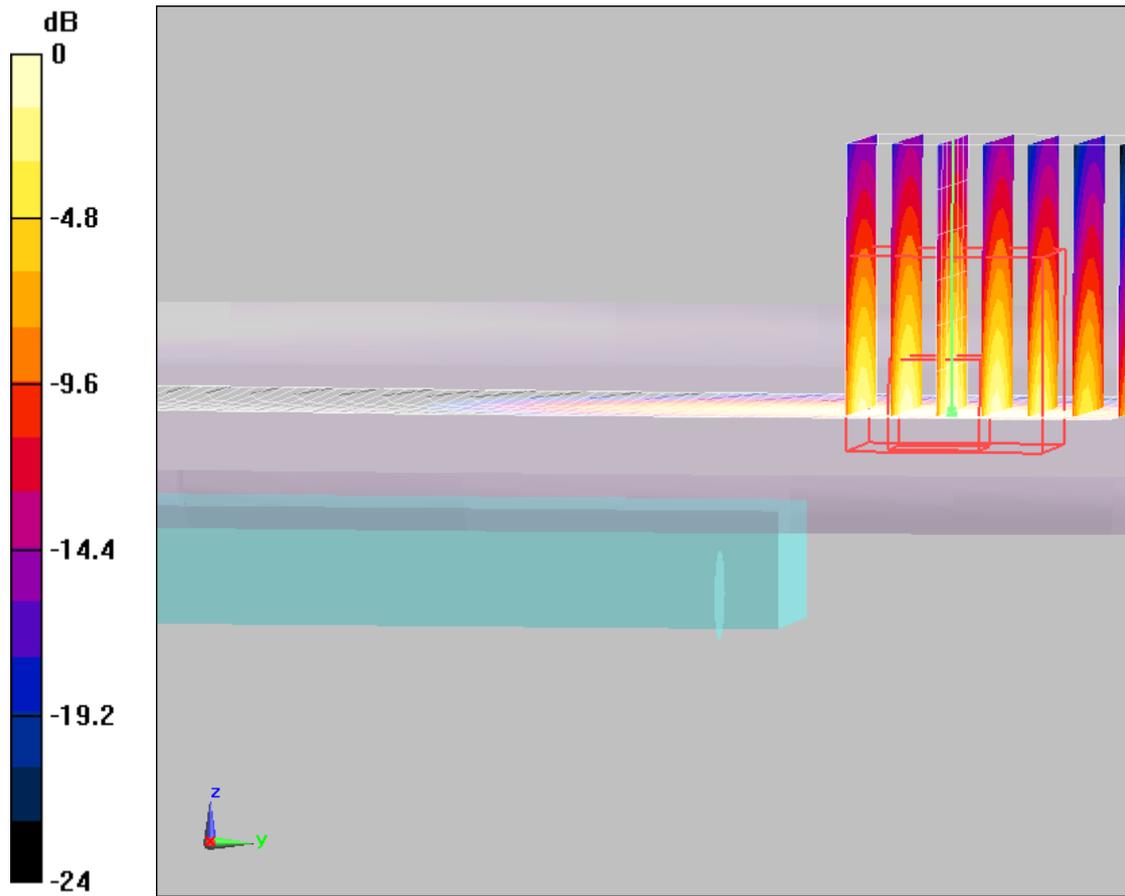**MF659_FDD2_High_B/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = 0.286 dB
Peak SAR (extrapolated) = 0.888 W/kg
SAR(1 g) = 0.513 mW/g; SAR(10 g) = 0.254 mW/g

Maximum value of SAR (measured) = 0.588 mW/g

0 dB = 0.588mW/g

WCDMA_FDD4_RMC_SideC_Low

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.37 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Low_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.9 V/m; Power Drift = 0.020 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.880 mW/g; SAR(10 g) = 0.499 mW/g

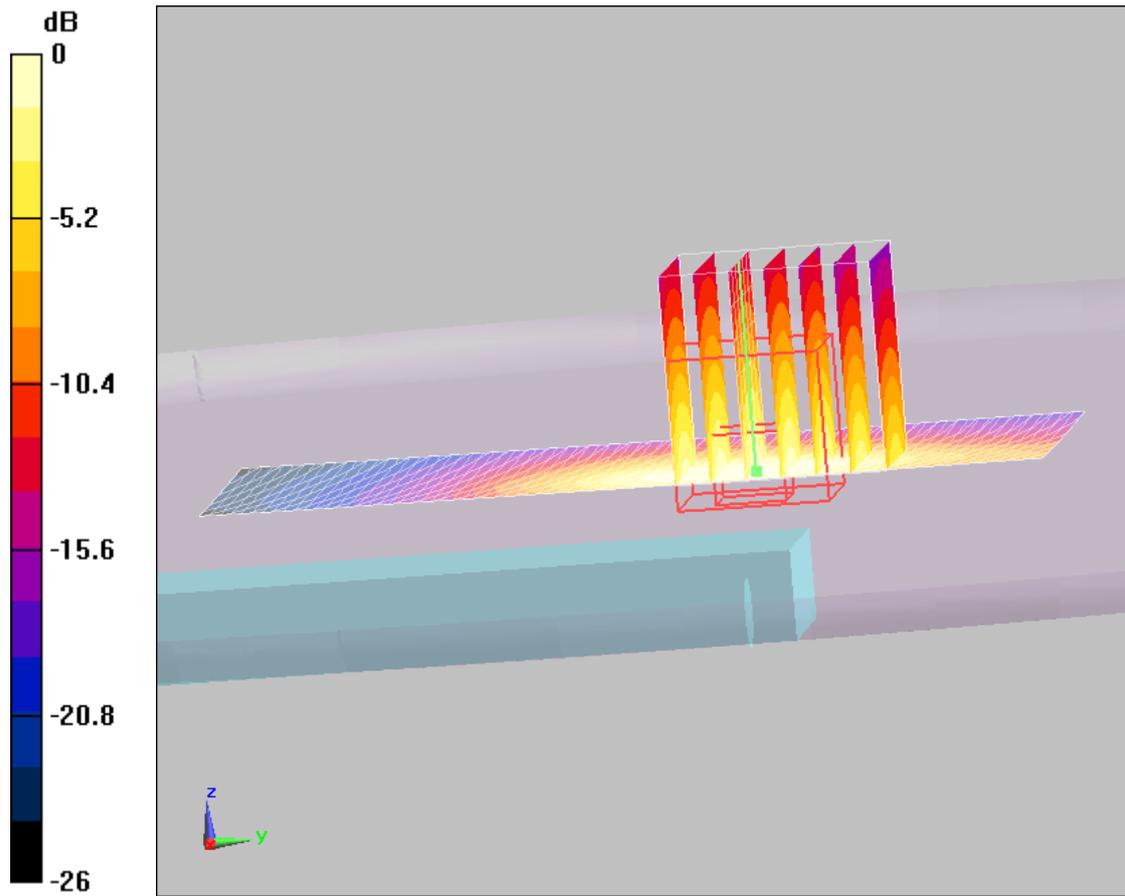Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.976 mW/g

MF659_FDD4_Low_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.996 mW/g

0 dB = 0.996mW/g

WCDMA_FDD4_RMC_SideA_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_A/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.141 dB
Peak SAR (extrapolated) = 0.658 W/kg
SAR(1 g) = 0.416 mW/g; SAR(10 g) = 0.244 mW/g

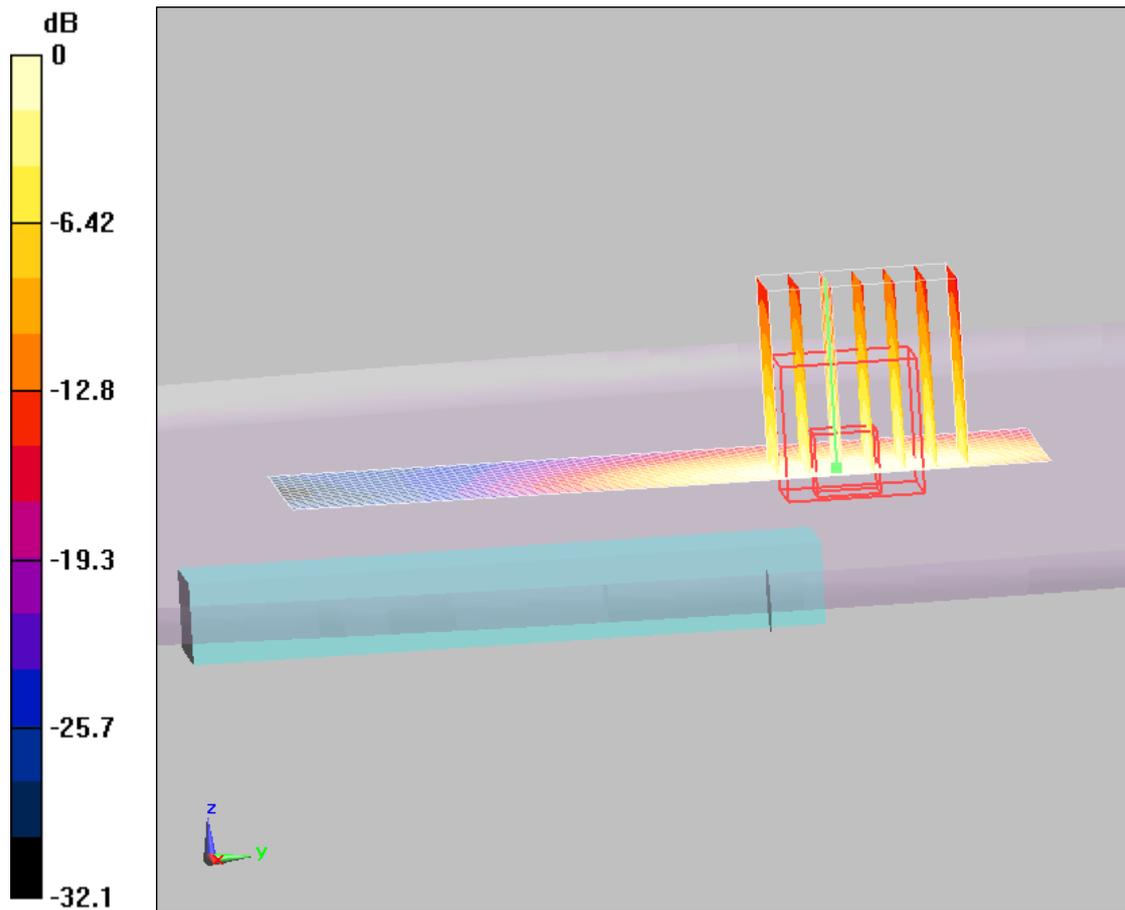Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.454 mW/g

MF659_FDD4_Mid_A/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.468 mW/g

0 dB = 0.468mW/g

WCDMA_FDD4_RMC_SideB_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_B/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.1 V/m; Power Drift = 0.048 dB
Peak SAR (extrapolated) = 0.936 W/kg
SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.309 mW/g

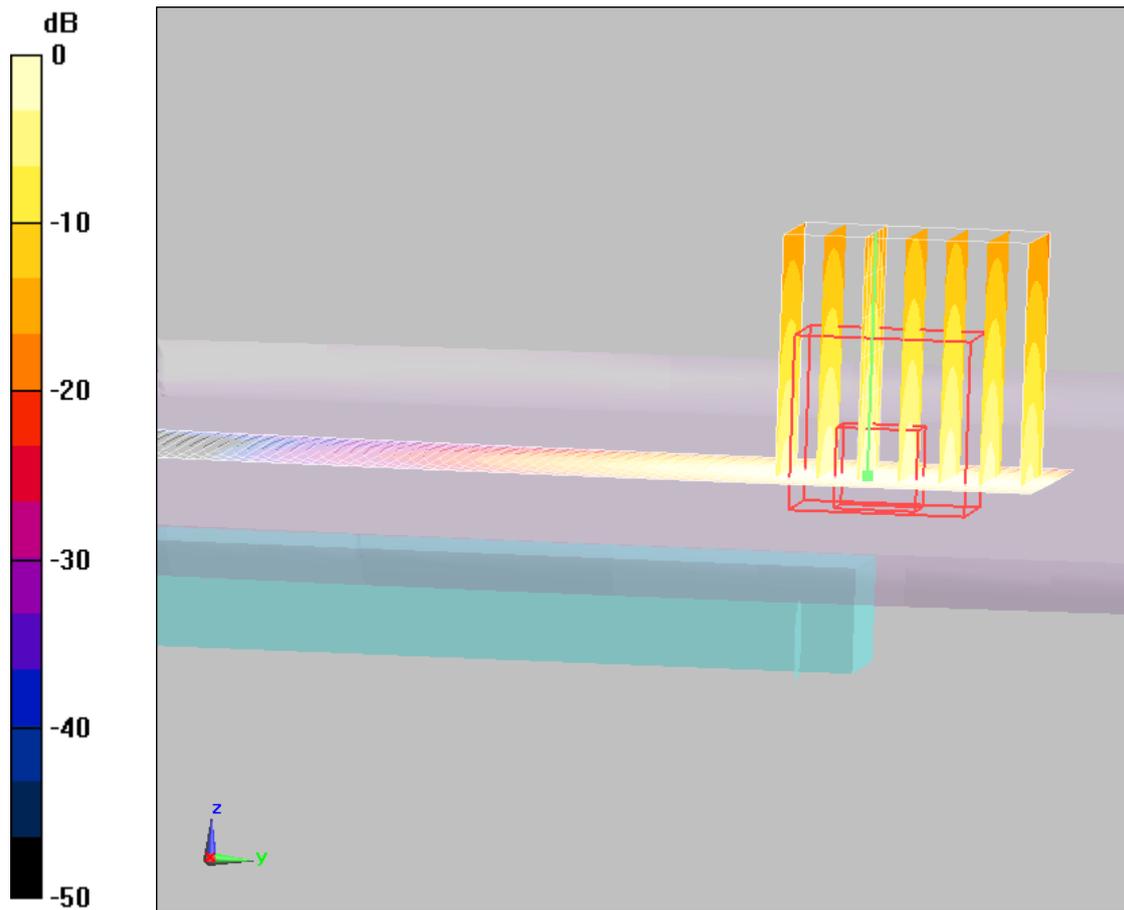Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.625 mW/g

MF659_FDD4_Mid_B/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.675 mW/g

0 dB = 0.675mW/g

WCDMA_FDD4_RMC_SideC_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = 0.221 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.424 mW/g

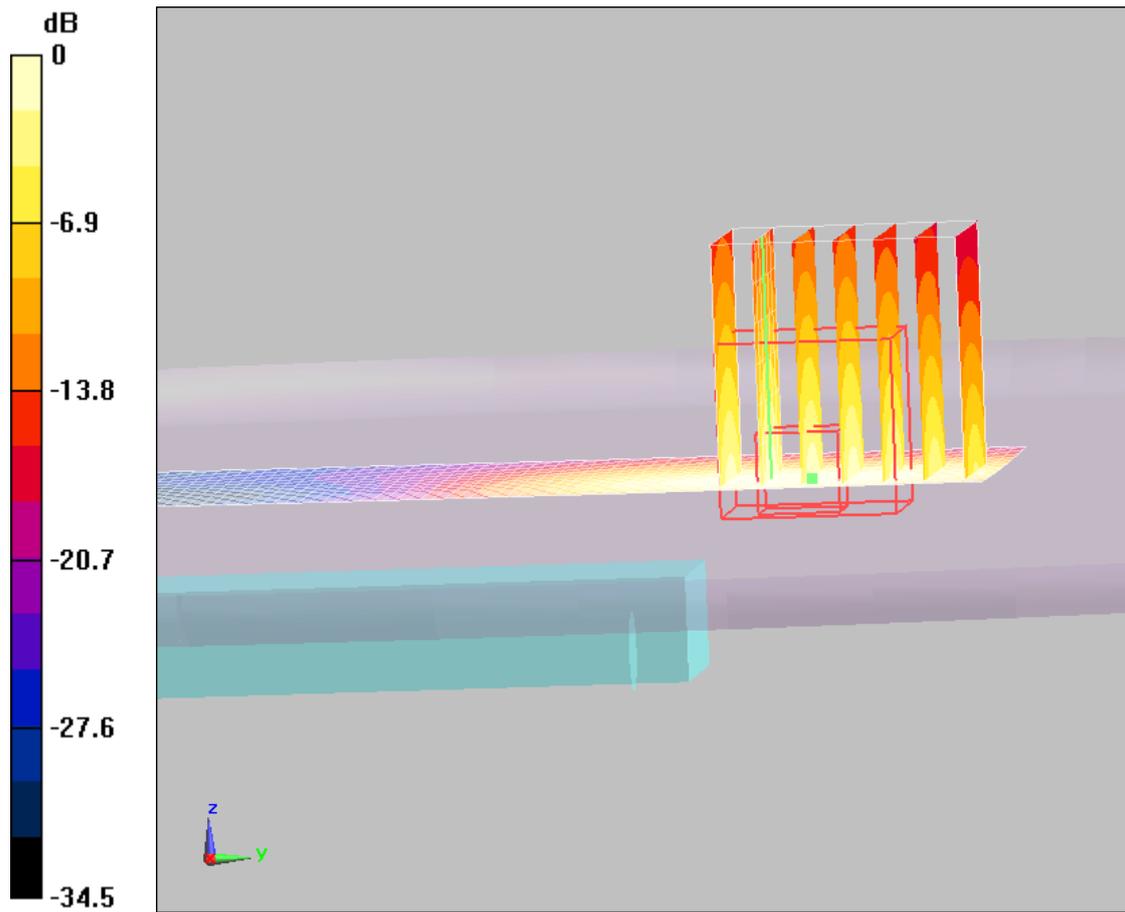Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.857 mW/g

MF659_FDD4_Mid_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.917 mW/g

0 dB = 0.917mW/g

WCDMA_FDD4_RMC_SideD_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_D/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.7 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.172 mW/g

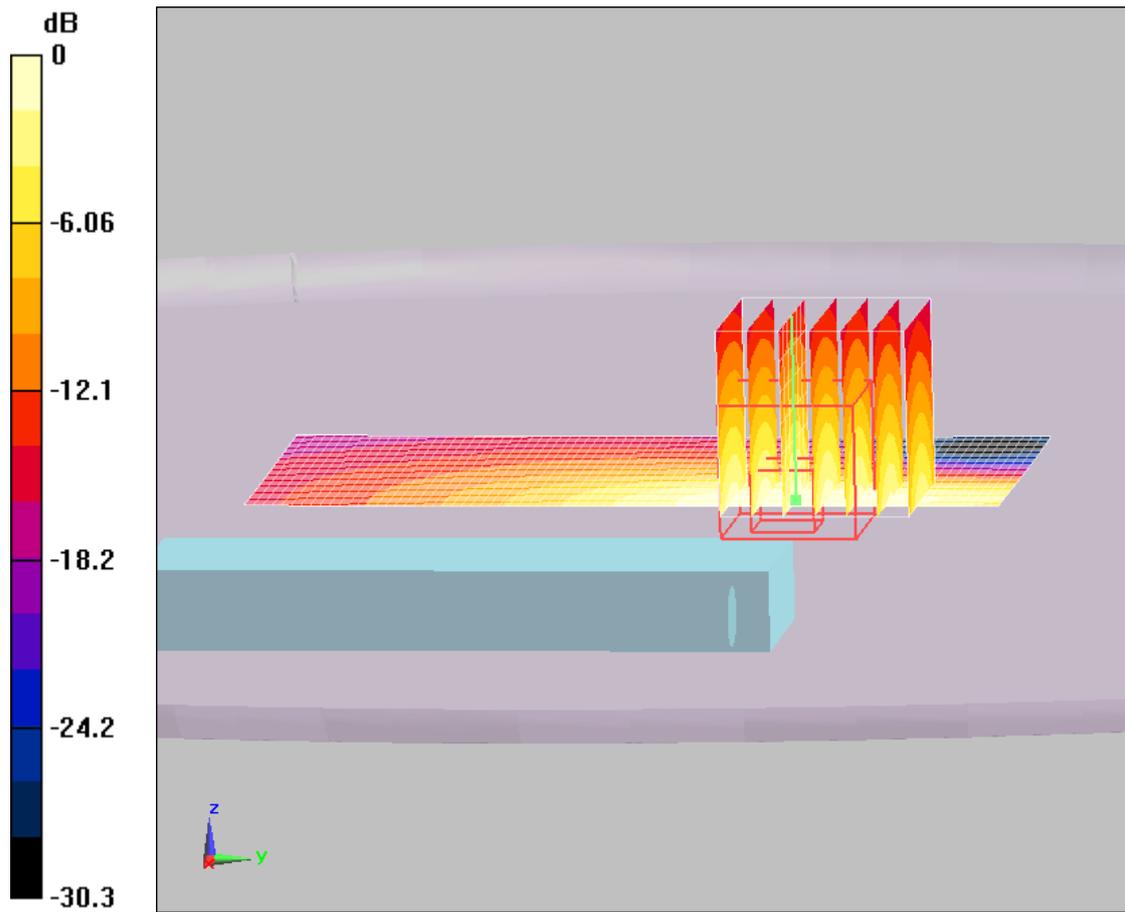Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.344 mW/g

MF659_FDD4_Mid_D/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.359 mW/g

0 dB = 0.359mW/g

WCDMA_FDD4_RMC_SideE_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_E/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.308 mW/g

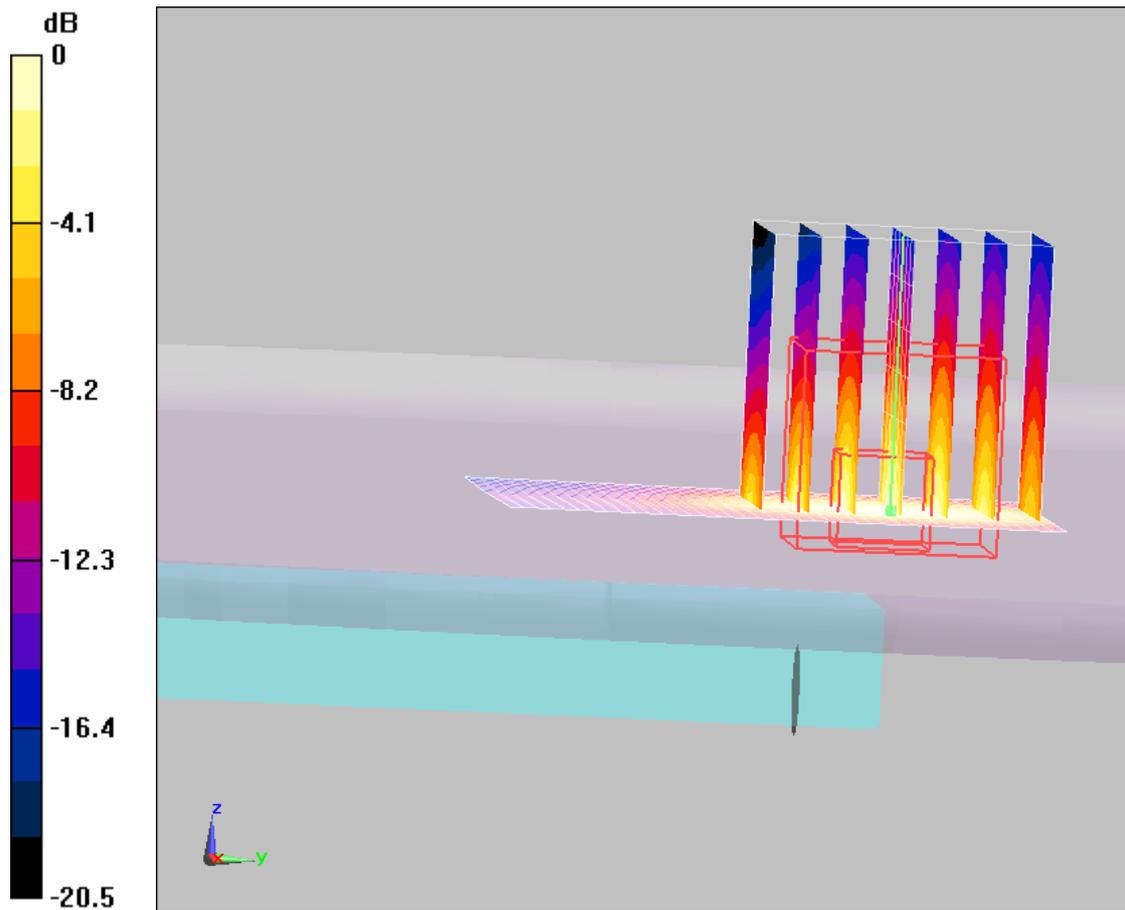**MF659_FDD4_Mid_E/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.54 V/m; Power Drift = -0.185 dB
Peak SAR (extrapolated) = 0.544 W/kg
SAR(1 g) = 0.276 mW/g; SAR(10 g) = 0.135 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.313 mW/g

0 dB = 0.313mW/g

WCDMA_FDD4_RMC_SideF_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_F/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.133 mW/g

MF659_FDD4_Mid_F/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
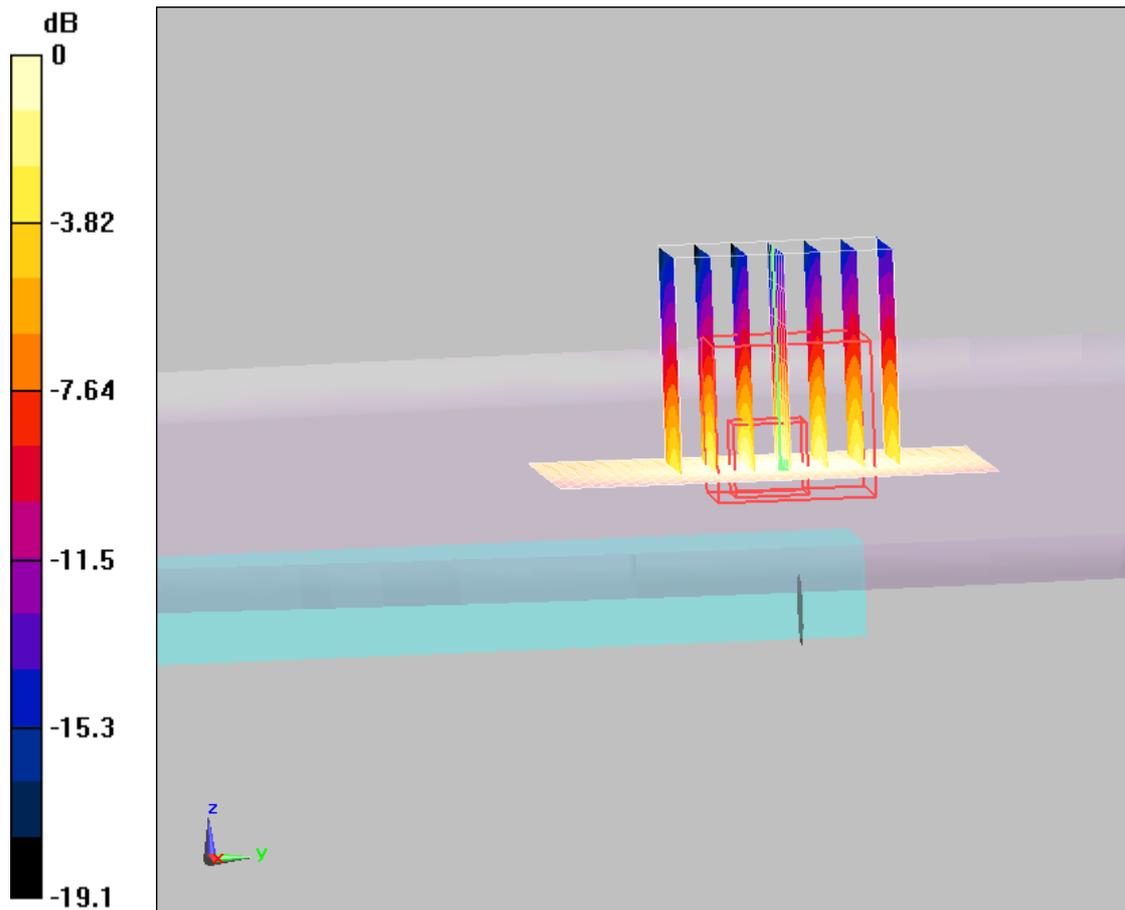Reference Value = 10.5 V/m; Power Drift = 0.00332 dB
Peak SAR (extrapolated) = 0.278 W/kg
SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.066 mW/g

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.141 mW/g

0 dB = 0.141mW/g

WCDMA_FDD4_RMC_SideG_Middle

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.38 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_Mid_G/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.37 V/m; Power Drift = 0.120 dB
Peak SAR (extrapolated) = 0.137 W/kg
SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.034 mW/g

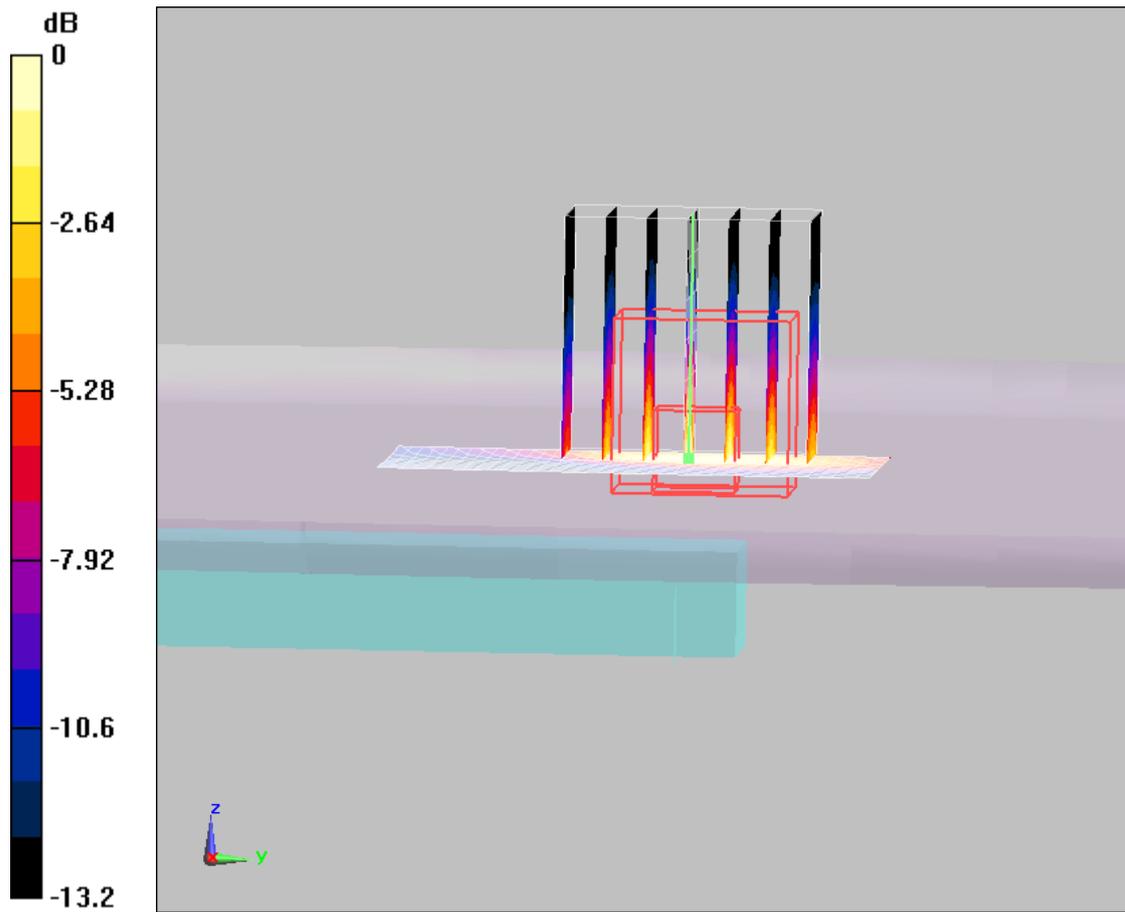Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.080 mW/g

MF659_FDD4_Mid_G/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.080 mW/g

0 dB = 0.080mW/g

WCDMA_FDD4_RMC_SideC_High

DUT: MF659; Type: --; Serial: --

Communication System: W-CDMA Band4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1753 MHz; σ = 1.41 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(4.81, 4.81, 4.81); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

MF659_FDD4_High_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.7 V/m; Power Drift = -0.092 dB
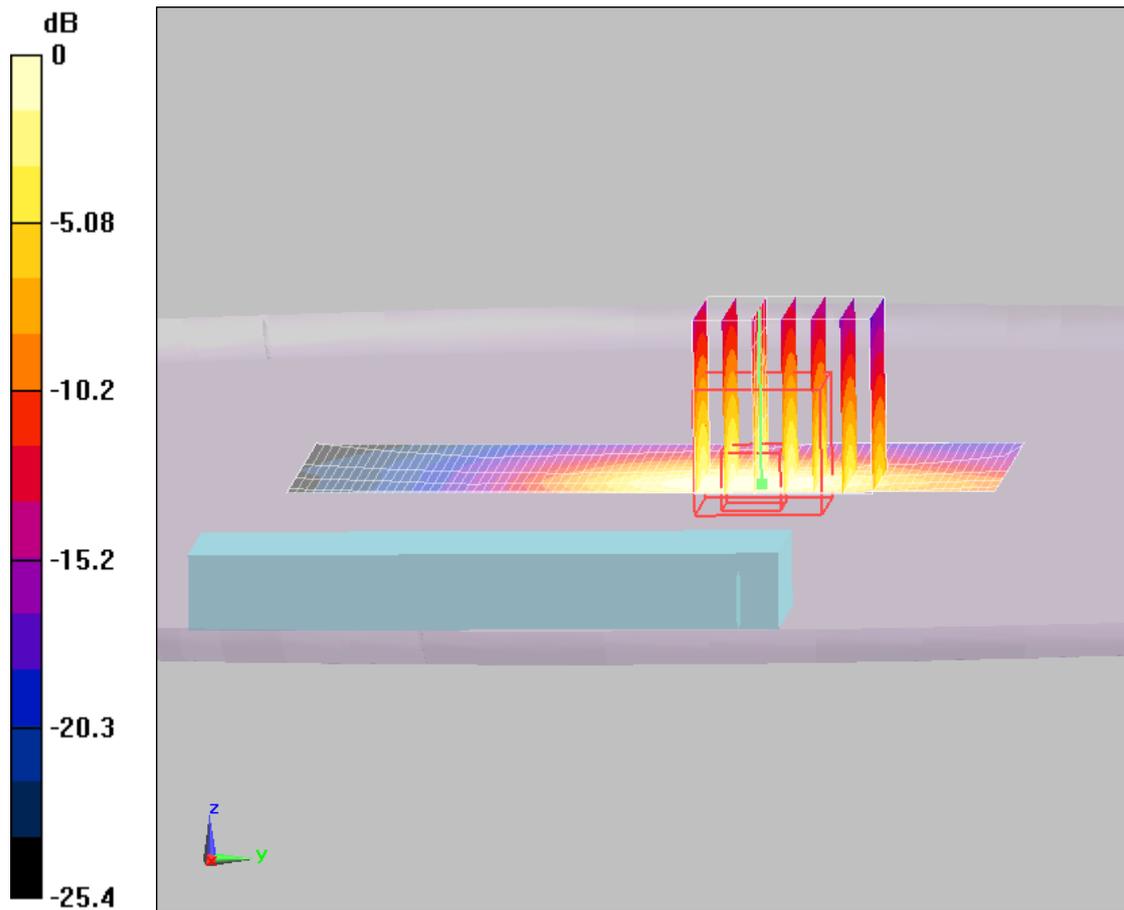
Peak SAR (extrapolated) = 1.5 W/kg

SAR(1 g) = 0.892 mW/g; SAR(10 g) = 0.496 mW/g

Maximum value of SAR (measured) = 0.994 mW/g

MF659_FDD4_High_C/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.01 mW/g

0 dB = 1.01mW/g

WCDMA_FDD5_RMC_SideB_Low

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.955 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Low_B/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.3 V/m; Power Drift = 0.062 dB
Peak SAR (extrapolated) = 0.734 W/kg
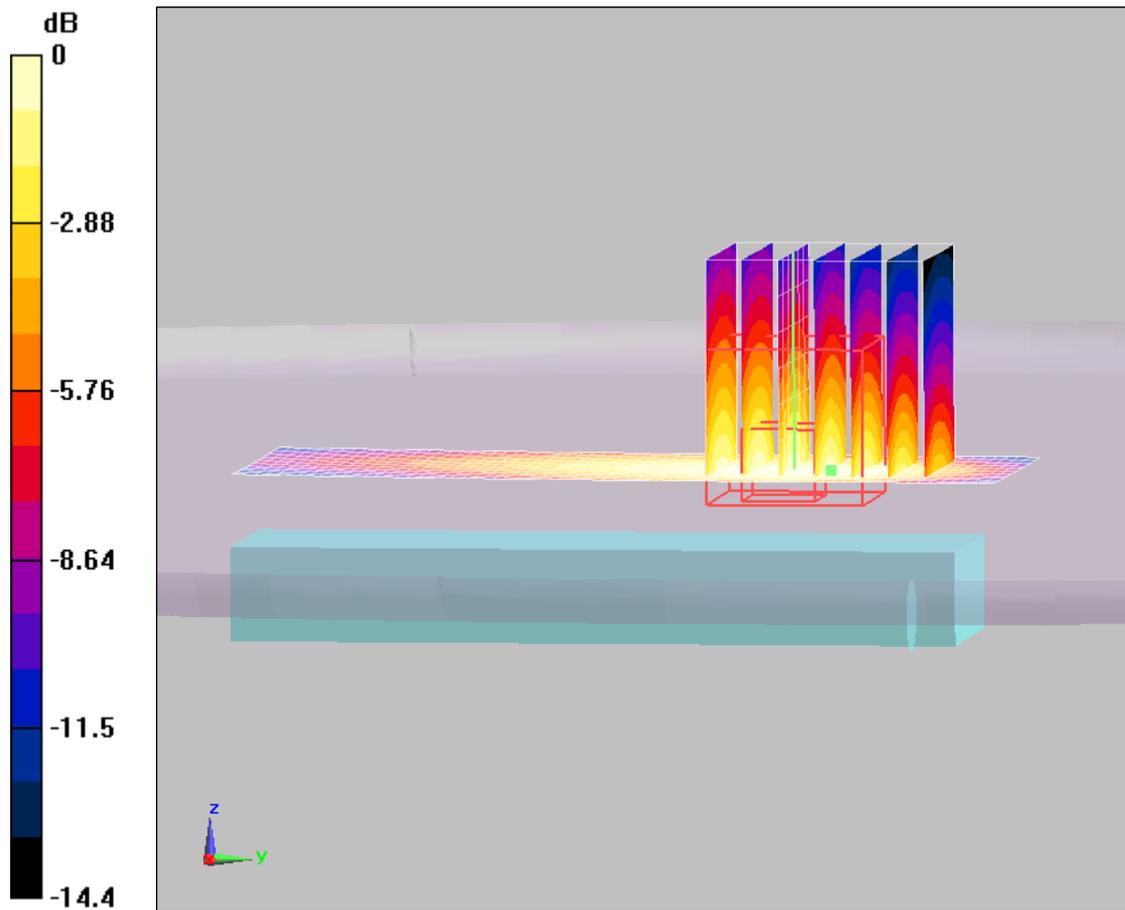**SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.300 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.528 mW/g

WFDD5_Low_B/Area Scan (31x71x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.525 mW/g

0 dB = 0.525mW/g

WCDMA_FDD5_RMC_SideA_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; ε_r = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_A/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
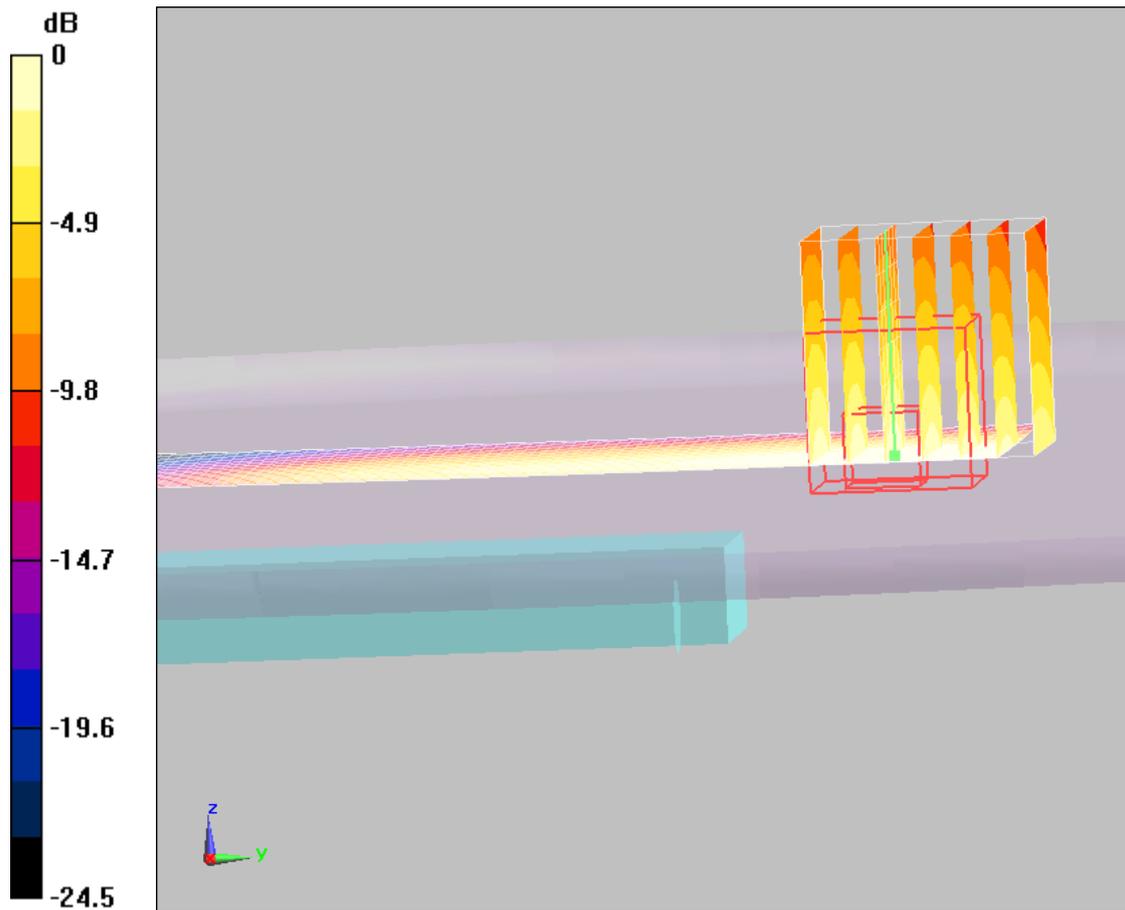Reference Value = 12.3 V/m; Power Drift = -0.248 dB
Peak SAR (extrapolated) = 0.291 W/kg
SAR(1 g) = 0.199 mW/g; SAR(10 g) = 0.133 mW/g

Maximum value of SAR (measured) = 0.215 mW/g

WFDD5_Mid_A/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.221 mW/g

0 dB = 0.221mW/g

WCDMA_FDD5_RMC_SideB_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; $ε_r$ = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_B/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
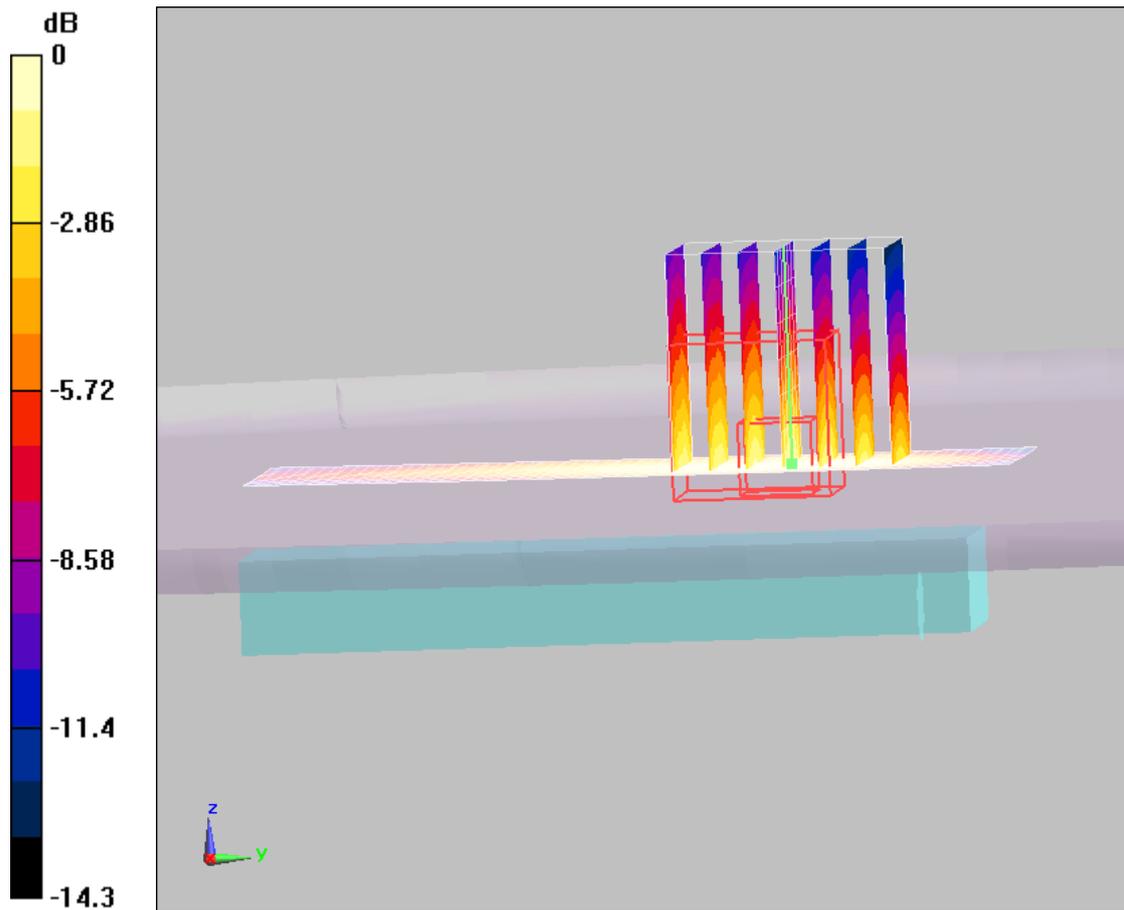Reference Value = 22.6 V/m; Power Drift = -0.00606 dB
Peak SAR (extrapolated) = 0.747 W/kg
SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.335 mW/g

Maximum value of SAR (measured) = 0.551 mW/g

WFDD5_Mid_B/Area Scan (31x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.639 mW/g

0 dB = 0.639mW/g

WCDMA_FDD5_RMC_SideC_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; ε_r = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_C/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
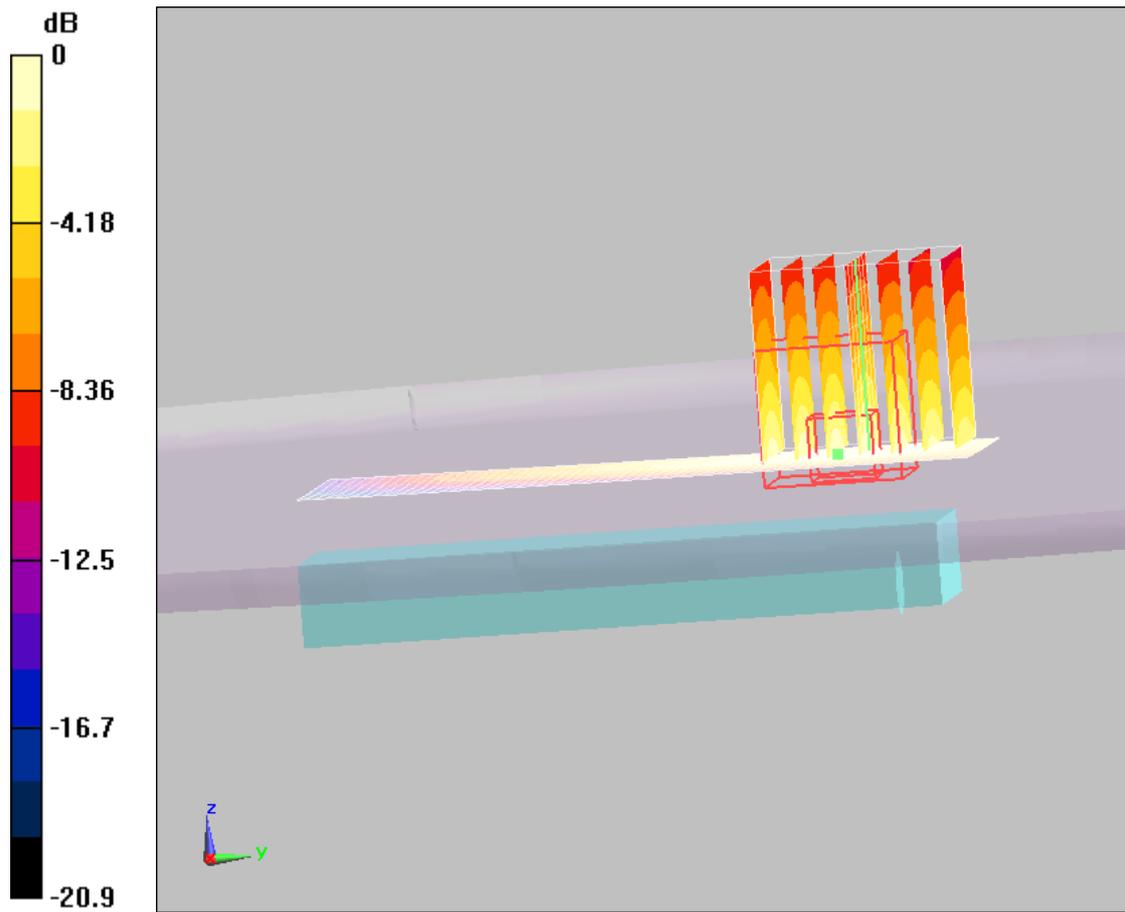Reference Value = 20.5 V/m; Power Drift = 0.227 dB
Peak SAR (extrapolated) = 0.664 W/kg
SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.272 mW/g

Maximum value of SAR (measured) = 0.459 mW/g

WFDD5_Mid_C/Area Scan (31x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.454 mW/g

0 dB = 0.454mW/g

WCDMA_FDD5_RMC_SideD_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; ε_r = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_D/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
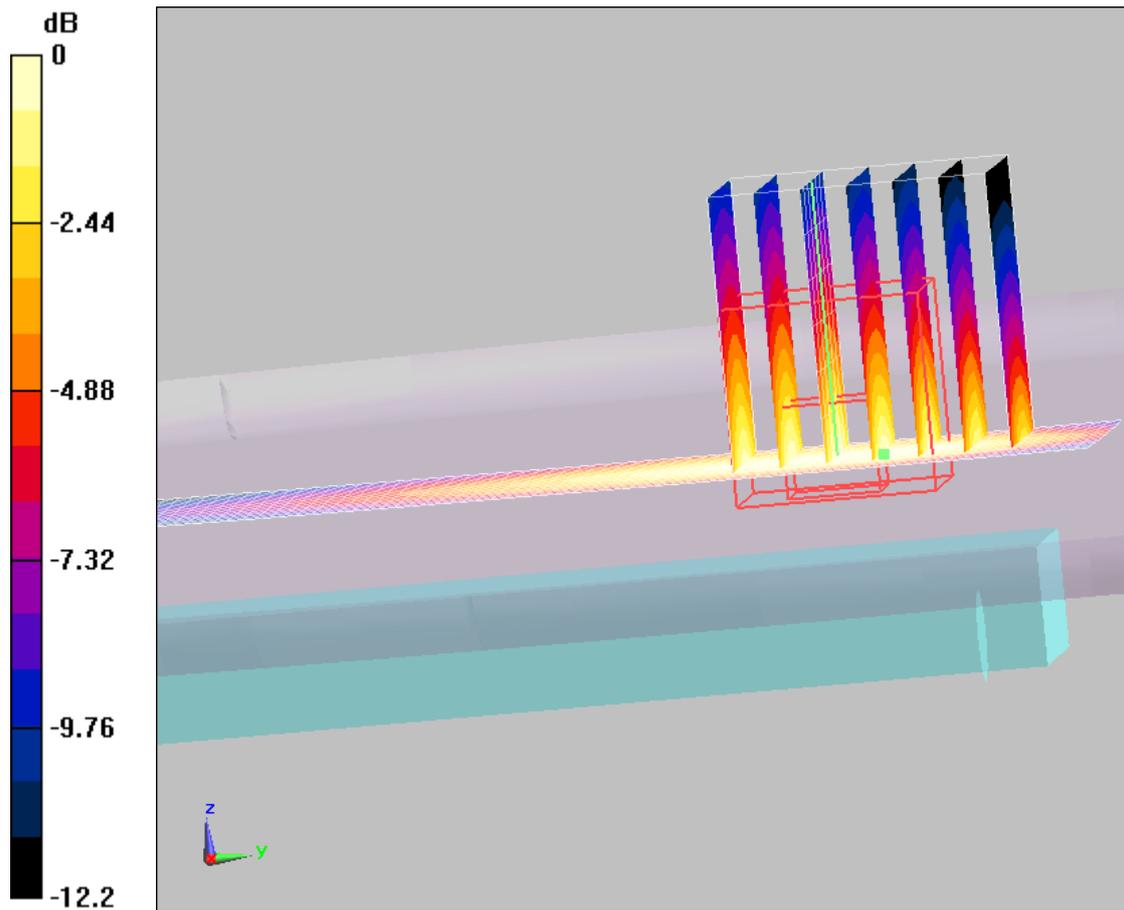Reference Value = 18.7 V/m; Power Drift = 0.198 dB
Peak SAR (extrapolated) = 0.589 W/kg
SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 0.402 mW/g

WFDD5_Mid_D/Area Scan (31x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.405 mW/g

0 dB = 0.405mW/g

WCDMA_FDD5_RMC_SideE_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; ε_r = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_E/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
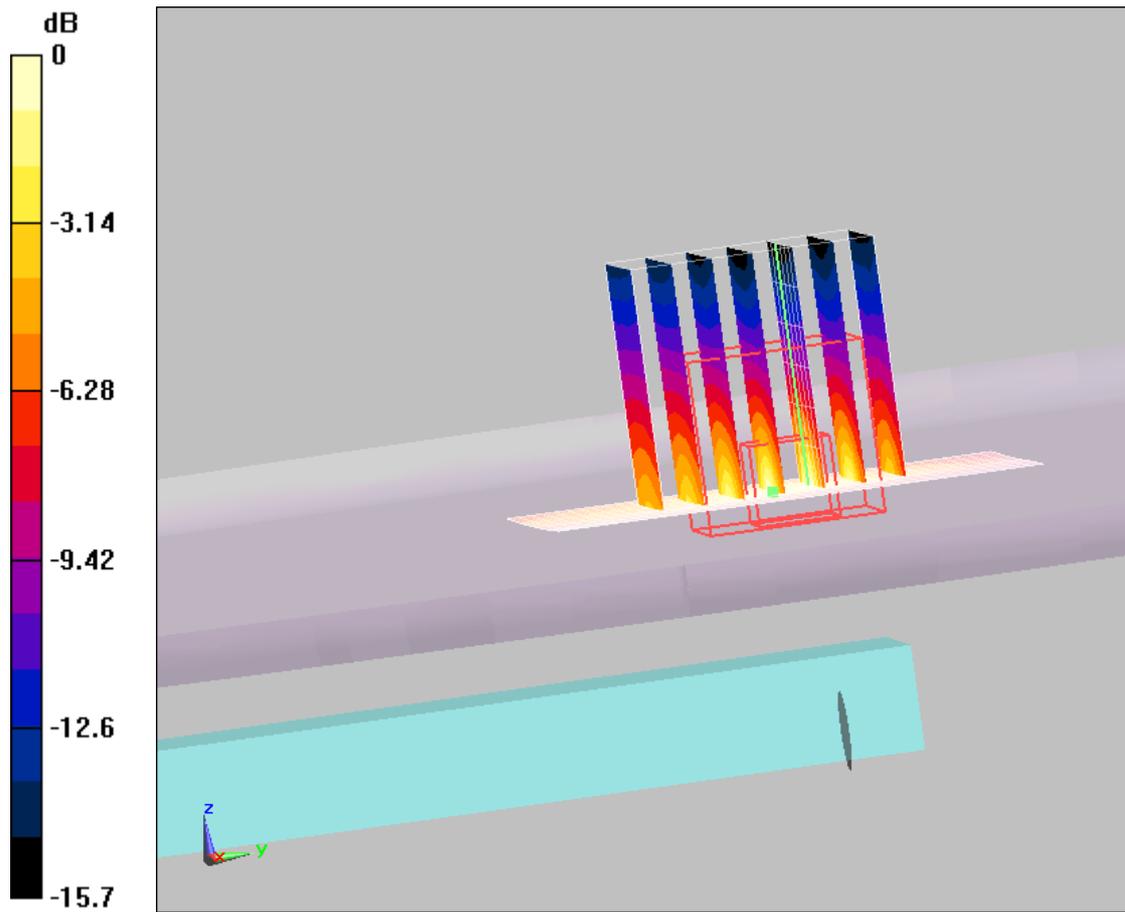Maximum value of SAR (interpolated) = 0.097 mW/g

WFDD5_Mid_E/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = -0.204 dB
Peak SAR (extrapolated) = 0.331 W/kg
SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.052 mW/g
Maximum value of SAR (measured) = 0.131 mW/g

0 dB = 0.131mW/g

WCDMA_FDD5_RMC_SideF_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; ε_r = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_F/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
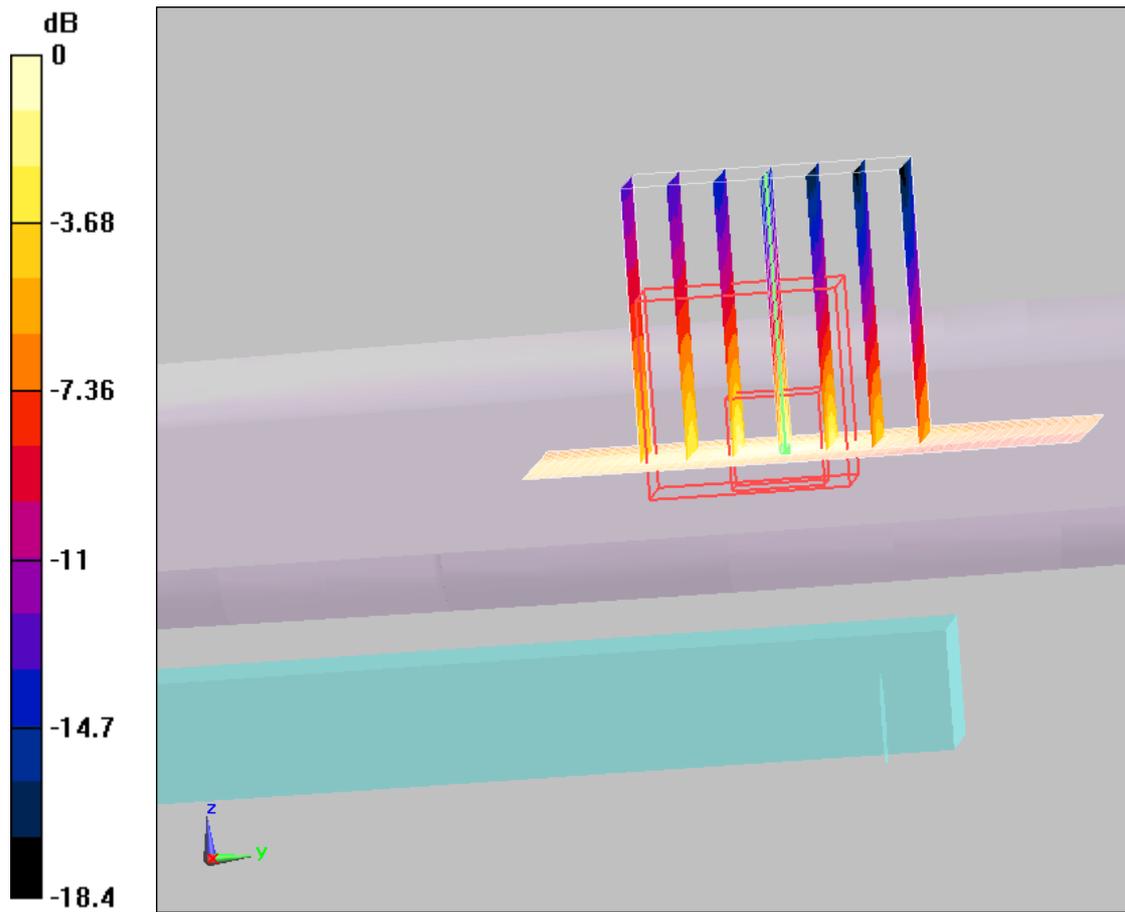Maximum value of SAR (interpolated) = 0.053 mW/g

WFDD5_Mid_F/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.98 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 0.161 W/kg
SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.026 mW/g
Maximum value of SAR (measured) = 0.063 mW/g

0 dB = 0.063mW/g

Test Laboratory: CTTL

WCDMA_FDD5_RMC_SideG_Middle

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.956 mho/m; ε_r = 56.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_Mid_G/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
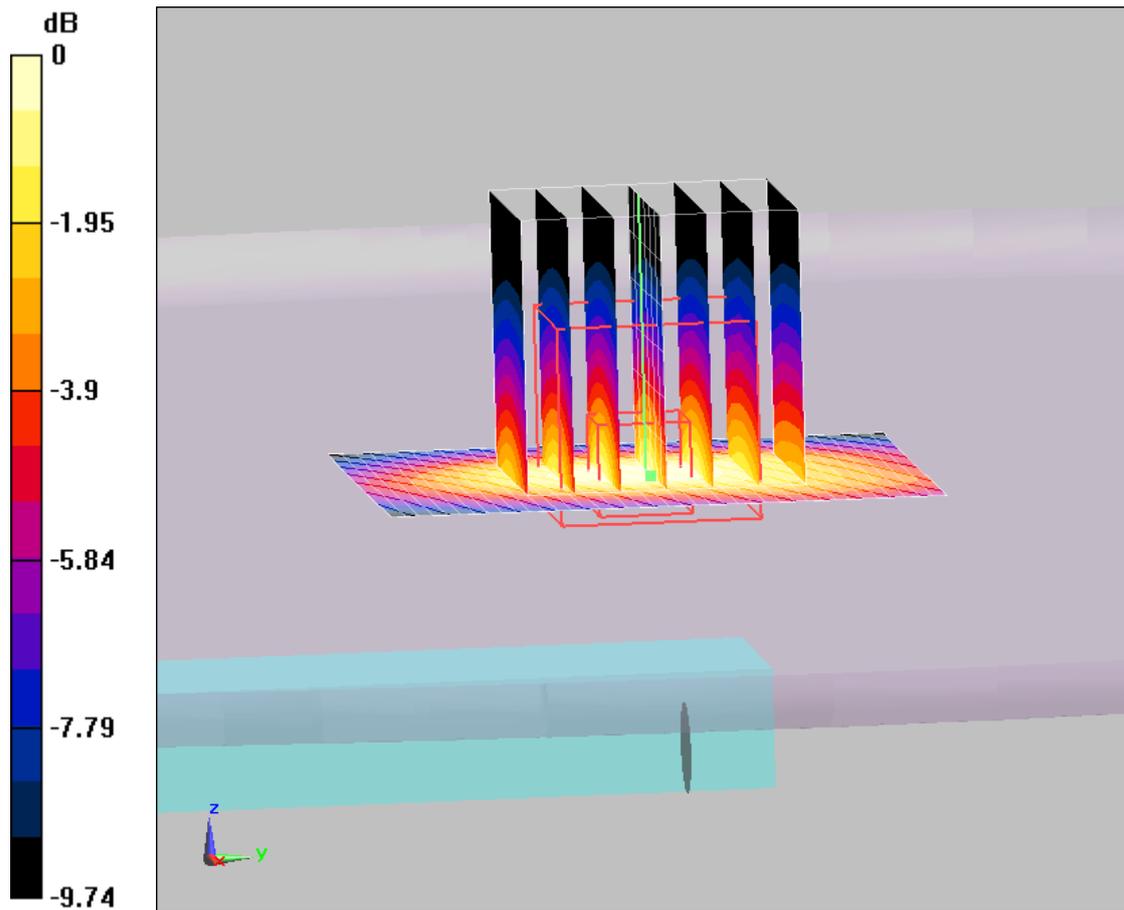Reference Value = 18.3 V/m; Power Drift = -0.115 dB
Peak SAR (extrapolated) = 0.419 W/kg
SAR(1 g) = 0.244 mW/g; SAR(10 g) = 0.144 mW/g
Maximum value of SAR (measured) = 0.263 mW/g

WFDD5_Mid_G/Area Scan (41x41x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.282 mW/g

0 dB = 0.282mW/g

WCDMA_FDD5_RMC_SideB_High

DUT: MF659; Type: --; Serial: --

Communication System: WCDMA-FDDV; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 0.972 mho/m; $ε_r$ = 56.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY4 Configuration:

- Probe: ES3DV3 - SN3158; ConvF(5.93, 5.93, 5.93); Calibrated: 2010-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn549; Calibrated: 2010-5-20
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: xxxx
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

WFDD5_High_B/Area Scan (31x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.637 mW/g

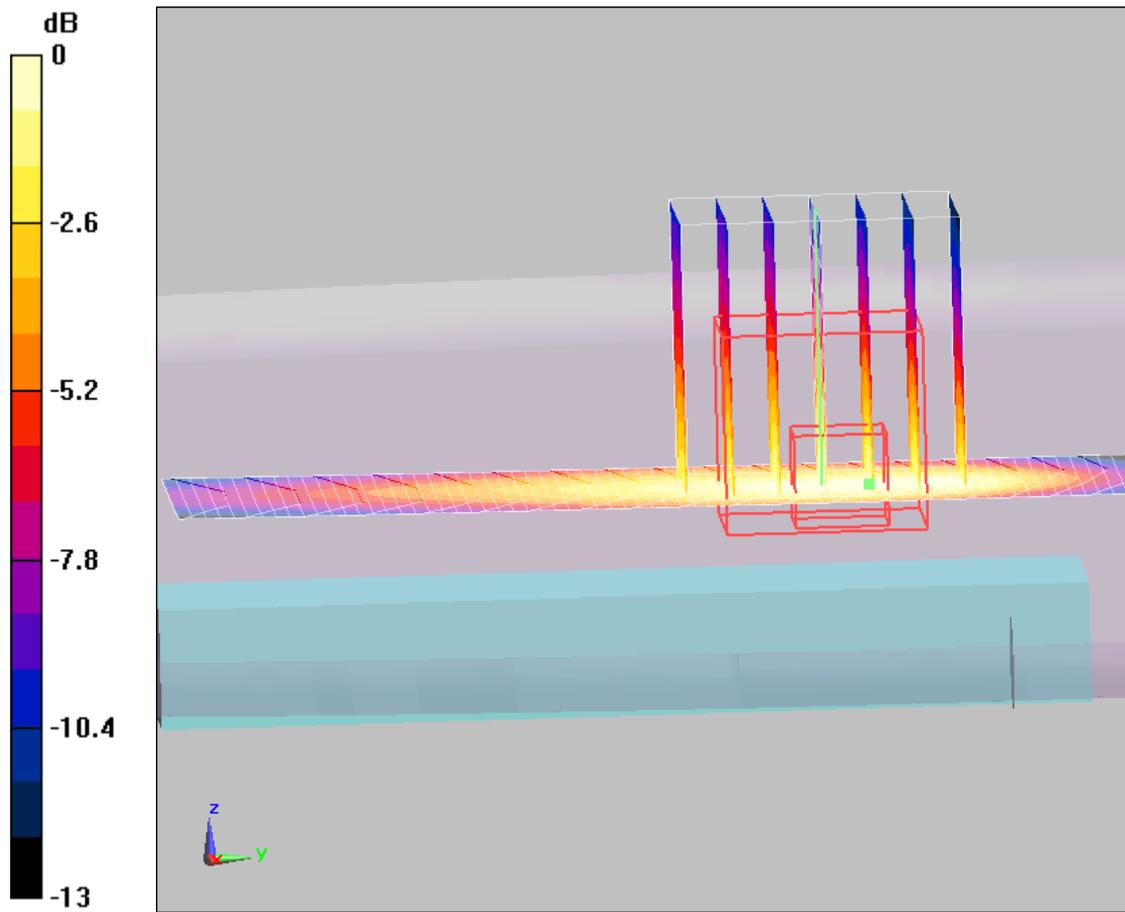**WFDD5_High_B/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22 V/m; Power Drift = 0.084 dB
Peak SAR (extrapolated) = 0.922 W/kg
SAR(1 g) = 0.604 mW/g; SAR(10 g) = 0.378 mW/g
Maximum value of SAR (measured) = 0.663 mW/g

0 dB = 0.663mW/g