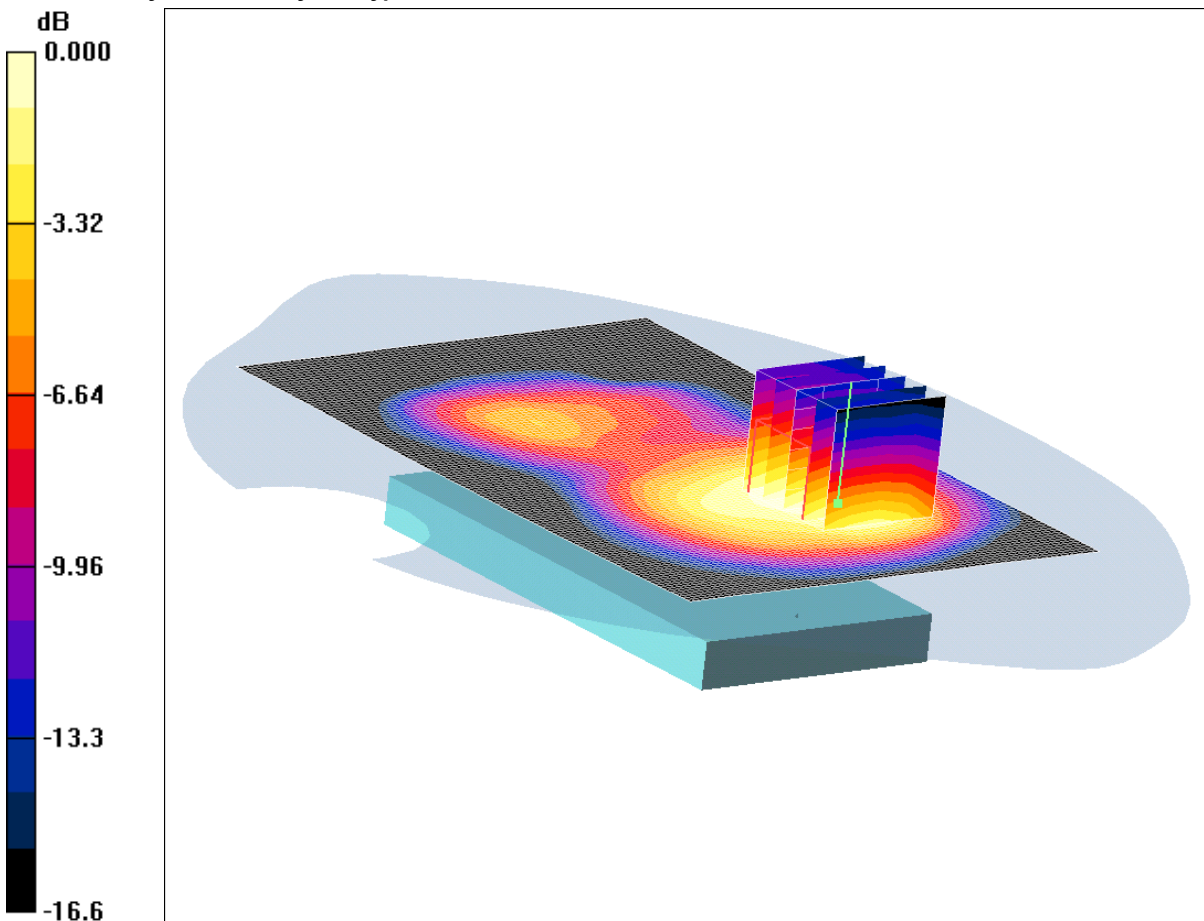


SCN/85119JD02/040: Rear of EUT Facing Phantom GPRS CH810

Date 02/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.02mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1909.8$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

Rear of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.9 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 1.46 W/kg

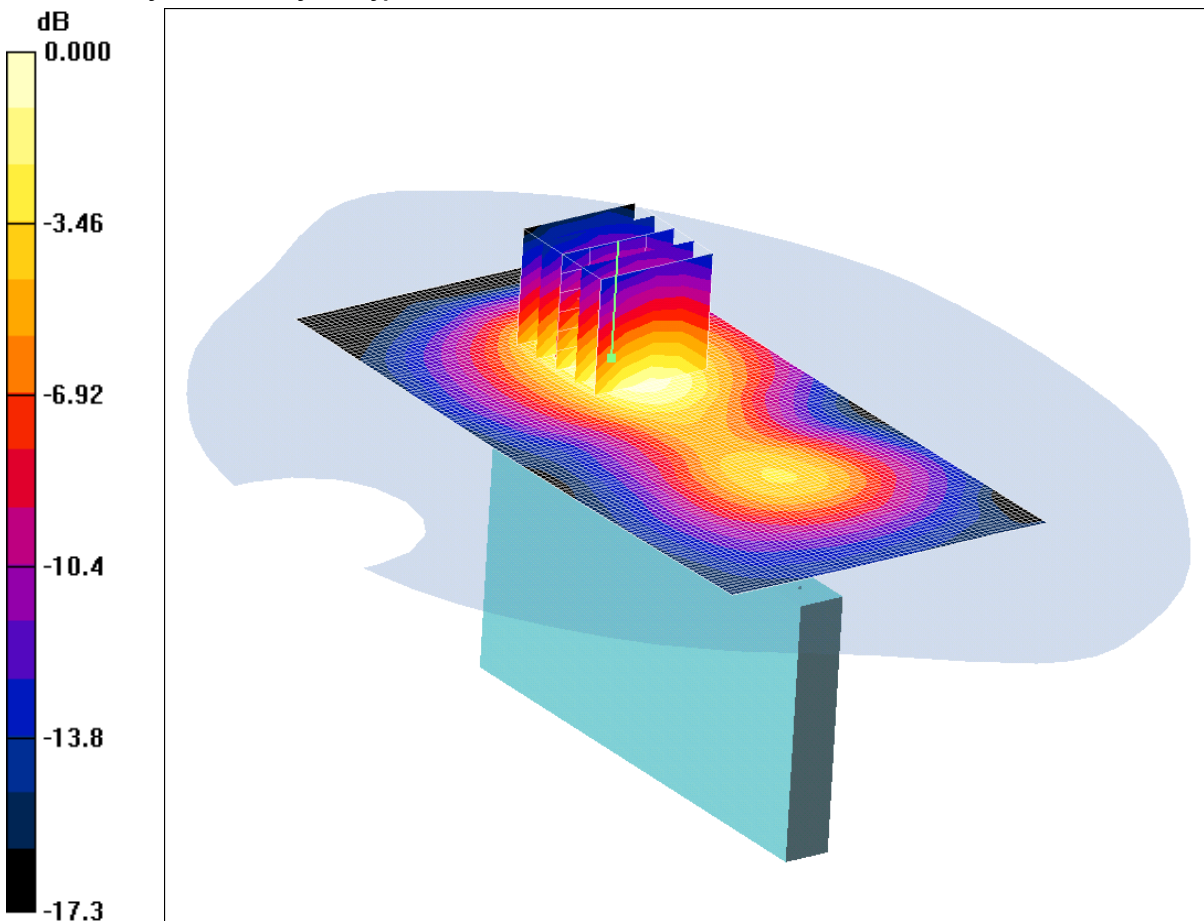
SAR(1 g) = 0.955 mW/g; SAR(10 g) = 0.592 mW/g

Maximum value of SAR (measured) = 1.02 mW/g

SCN/85119JD02/041: Left Hand Side of EUT Facing Phantom GPRS CH661

Date 02/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.609mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Left Hand Side of EUT Facing Phantom - Middle/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.622 mW/g

Left Hand Side of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = -0.177 dB

Peak SAR (extrapolated) = 0.877 W/kg

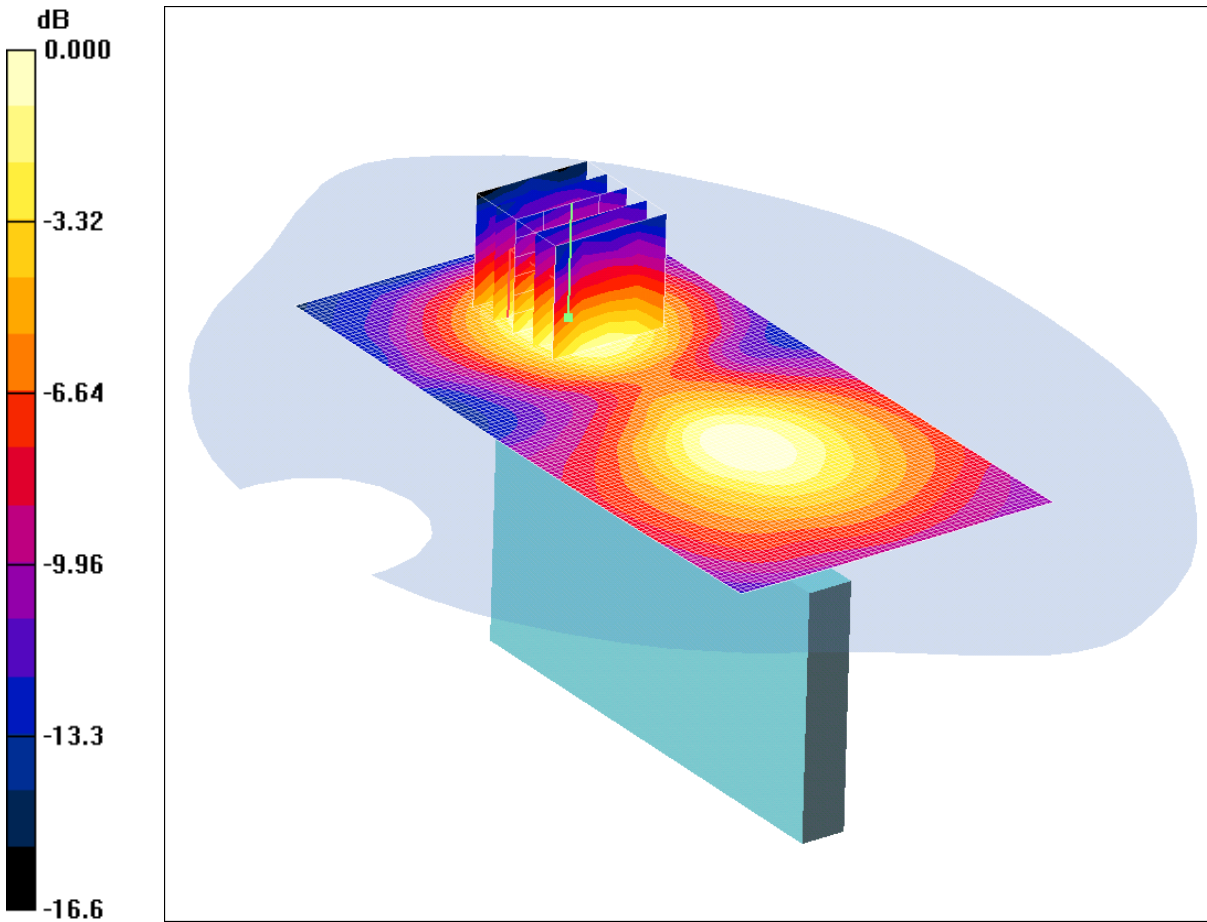
SAR(1 g) = 0.556 mW/g; SAR(10 g) = 0.331 mW/g

Maximum value of SAR (measured) = 0.609 mW/g

SCN/85119JD02/042: Right Hand Side of EUT Facing Phantom GPRS CH661

Date 02/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.268mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Right Hand Side of EUT Facing Phantom - Middle/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.285 mW/g

Right Hand Side of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.74 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.385 W/kg

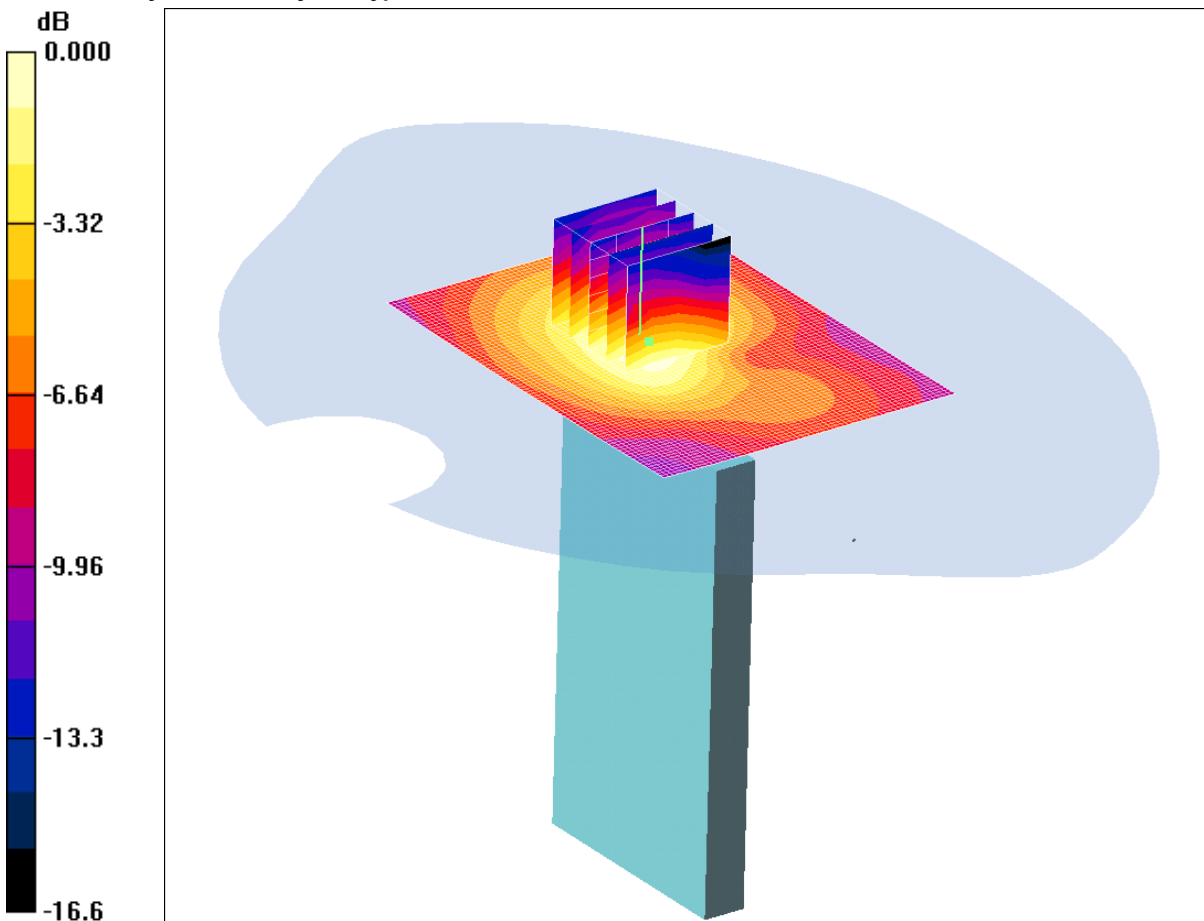
SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.149 mW/g

Maximum value of SAR (measured) = 0.268 mW/g

SCN/85119JD02/043: Bottom of EUT Facing Phantom GPRS CH661

Date 02/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.279mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Bottom of EUT Facing Phantom - Middle/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.286 mW/g

Bottom of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 0.397 W/kg

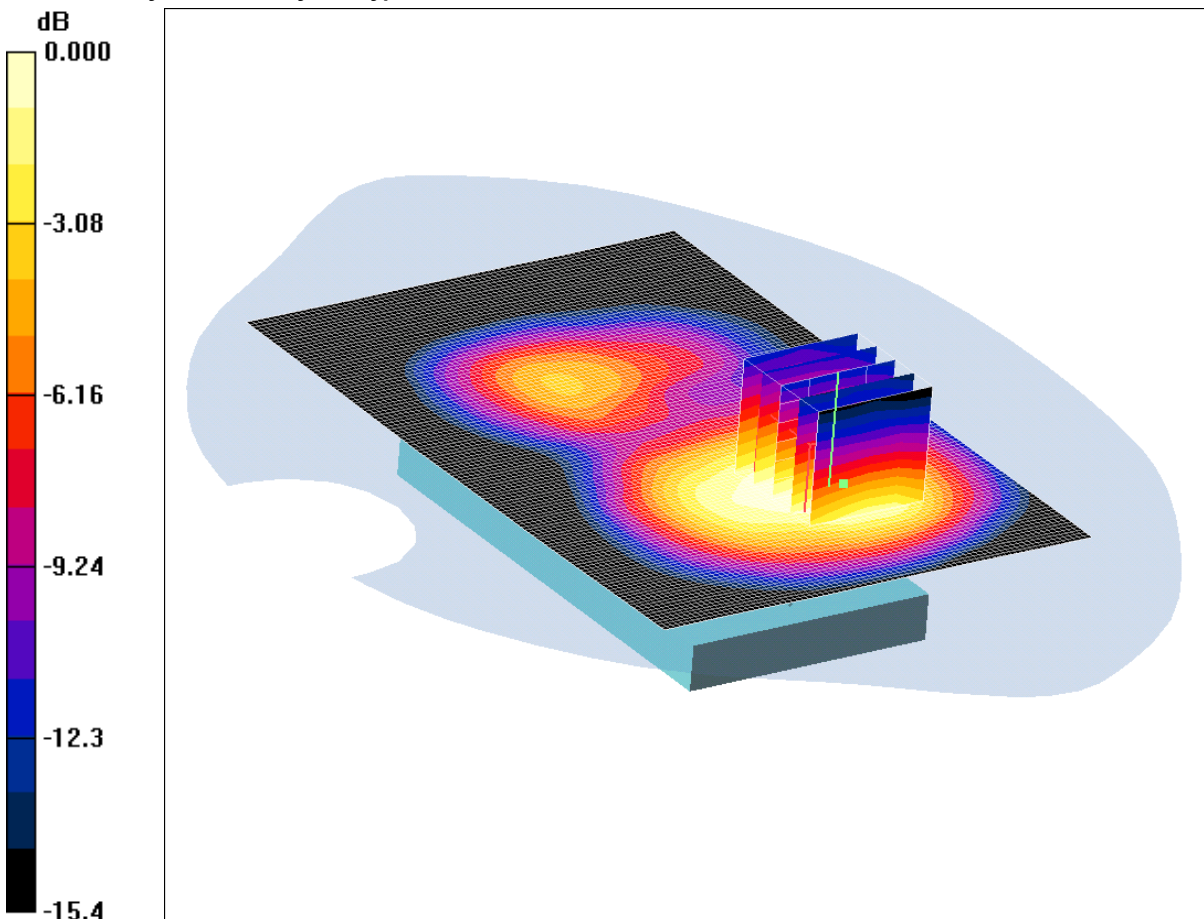
SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.163 mW/g

Maximum value of SAR (measured) = 0.279 mW/g

SCN/85119JD02/044: Rear of EUT Facing Phantom EDGE CH661

Date 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.993mW/g

Communication System: EDGE 1900 4Tx; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.04 mW/g

Rear of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.4 V/m; Power Drift = 0.179 dB

Peak SAR (extrapolated) = 1.39 W/kg

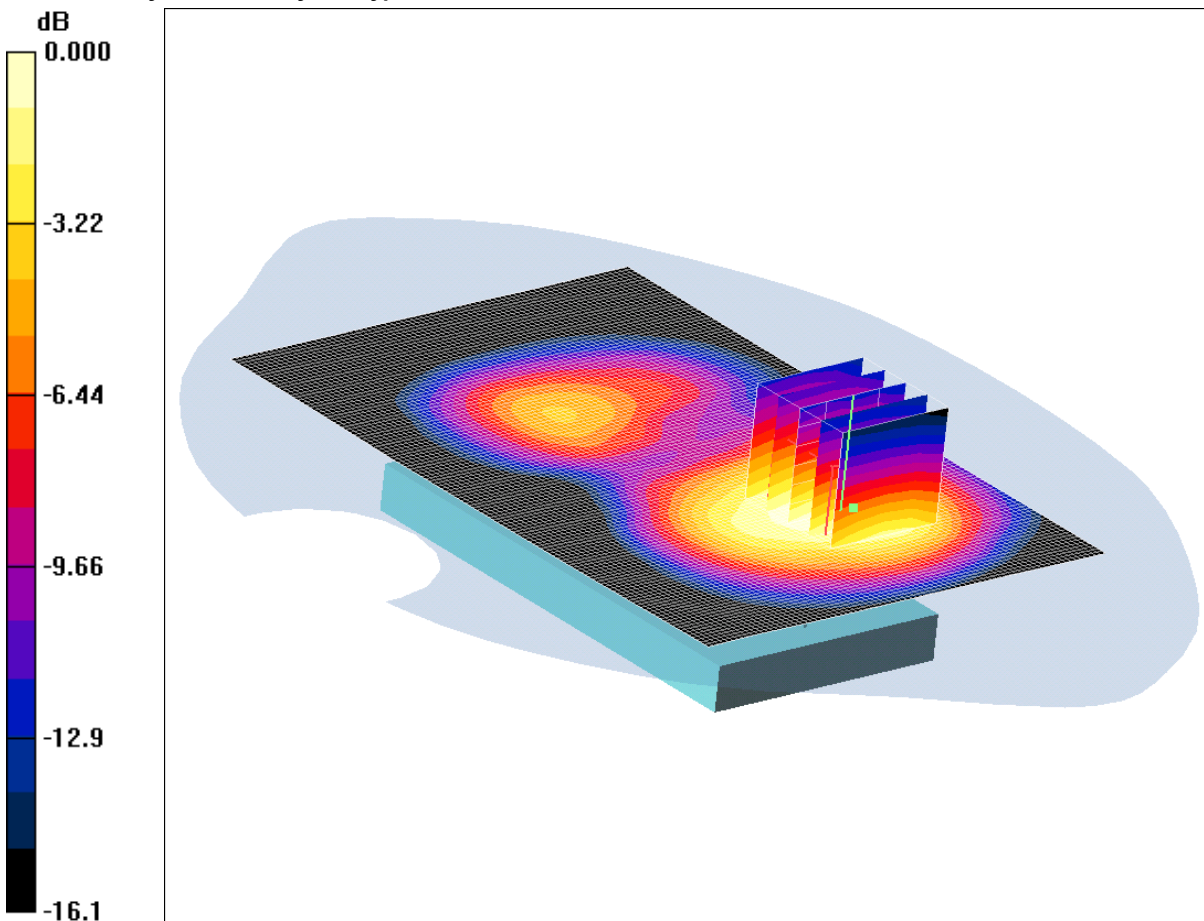
SAR(1 g) = 0.924 mW/g; SAR(10 g) = 0.588 mW/g

Maximum value of SAR (measured) = 0.993 mW/g

SCN/85119JD02/045: Rear of EUT Facing Phantom EDGE CH512

Date 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.15mW/g

Communication System: EDGE 1900 4Tx; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1850.2 MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Low/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.16 mW/g

Rear of EUT Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.86 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 1.56 W/kg

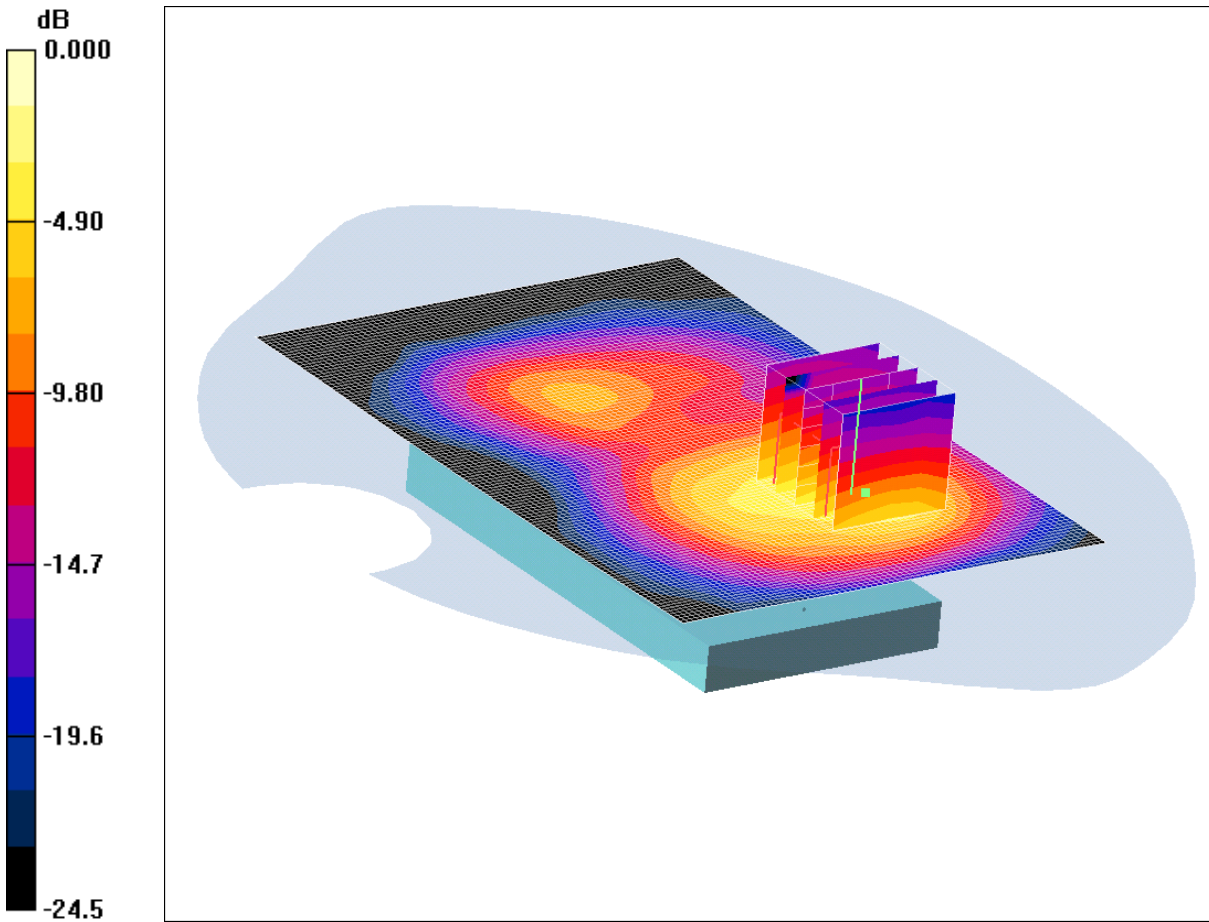
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.663 mW/g

Maximum value of SAR (measured) = 1.15 mW/g

SCN/85119JD02/046: Rear of EUT Facing Phantom EDGE CH810

Date 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 2.00mW/g

Communication System: EDGE 1900 4Tx; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 51.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - High/Area Scan (81x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.968 mW/g

Rear of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.0 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 1.35 W/kg

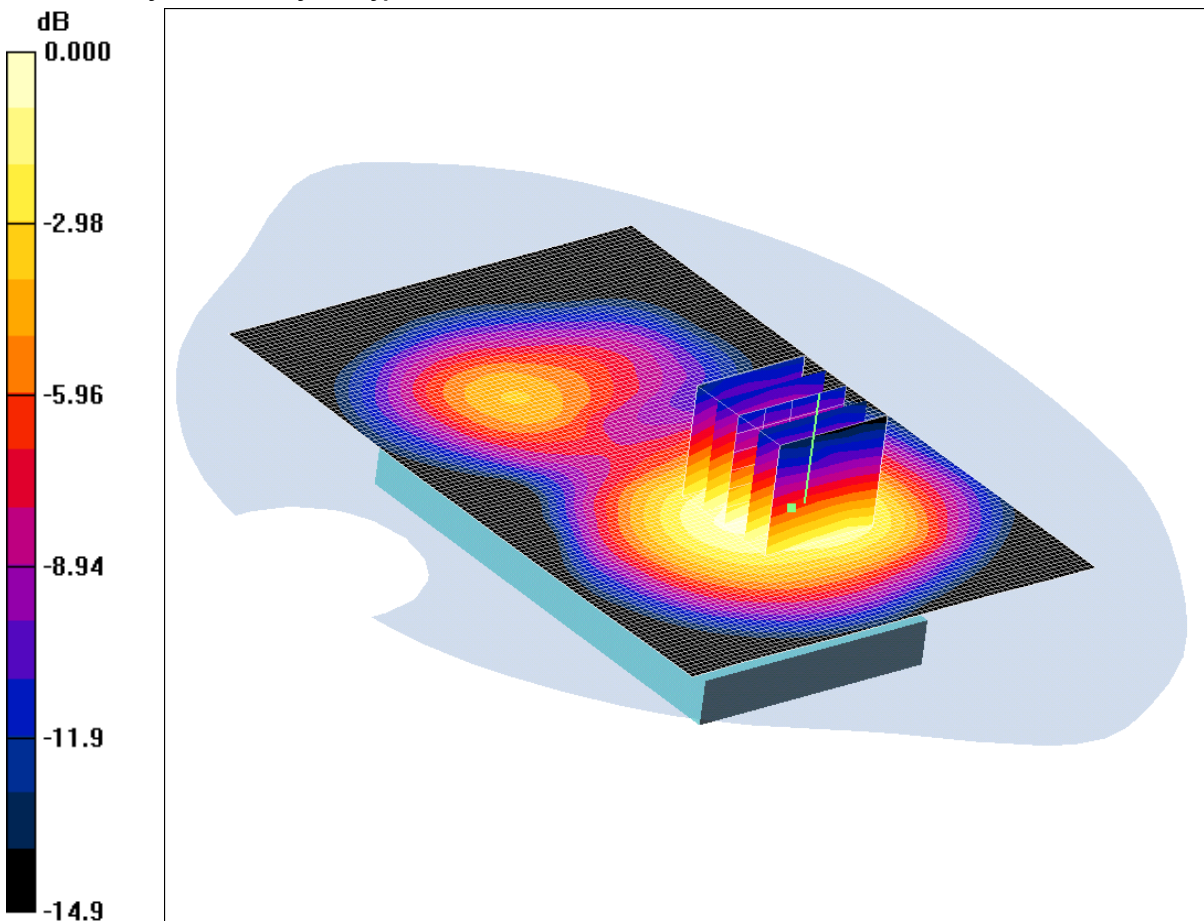
SAR(1 g) = 0.879 mW/g; SAR(10 g) = 0.551 mW/g

Maximum value of SAR (measured) = 0.950 mW/g

SCN/85119JD02/047: Rear of EUT Facing Phantom PCS CH661

Date 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.441mW/g

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.426 mW/g

Rear of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.42 V/m; Power Drift = 0.124 dB

Peak SAR (extrapolated) = 0.608 W/kg

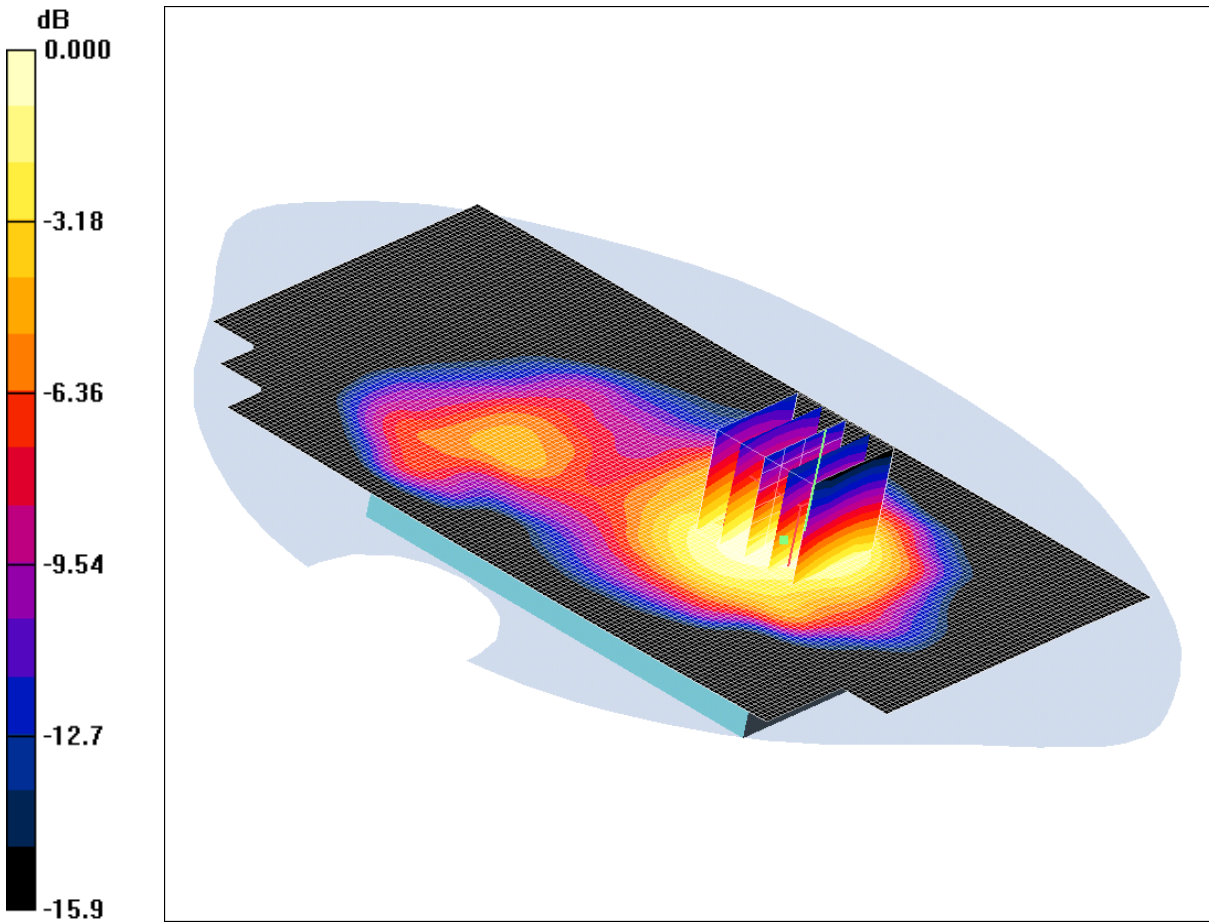
SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.263 mW/g

Maximum value of SAR (measured) = 0.441 mW/g

SCN/85119JD02/048: Rear of EUT Facing Phantom With PHF GPRS CH661

Date: 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.08mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom With PHF - Middle/Area Scan (91x151x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.21 mW/g

Rear of EUT Facing Phantom With PHF - Middle/Zoom Scan (5x5x7) 2 2 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = 0.194 dB

Peak SAR (extrapolated) = 1.57 W/kg

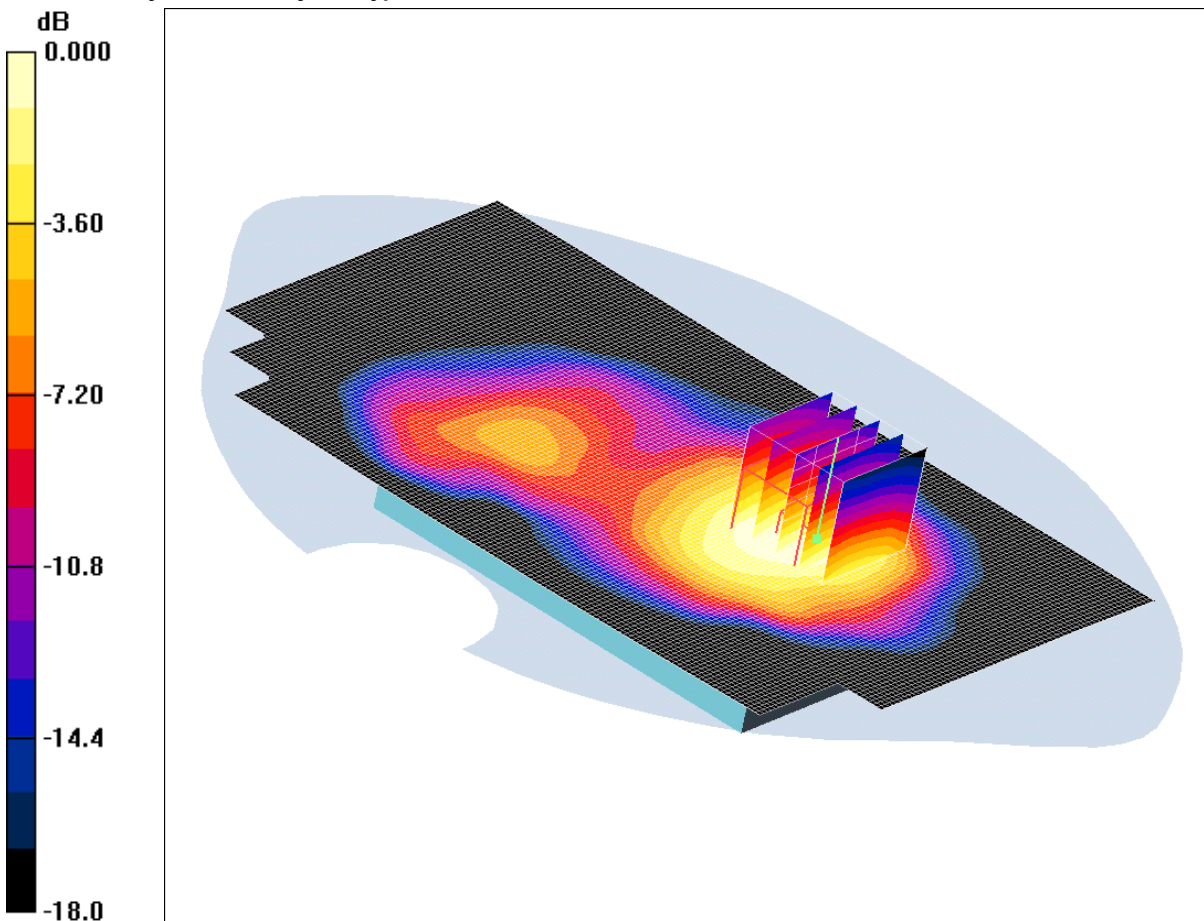
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.628 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

SCN/85119JD02/049: Rear of EUT Facing Phantom With PHF GPRS CH512

Date: 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.23mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom With PHF - Low/Area Scan (91x151x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.21 mW/g

Rear of EUT Facing Phantom With PHF - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.0 V/m; Power Drift = -0.115 dB

Peak SAR (extrapolated) = 1.73 W/kg

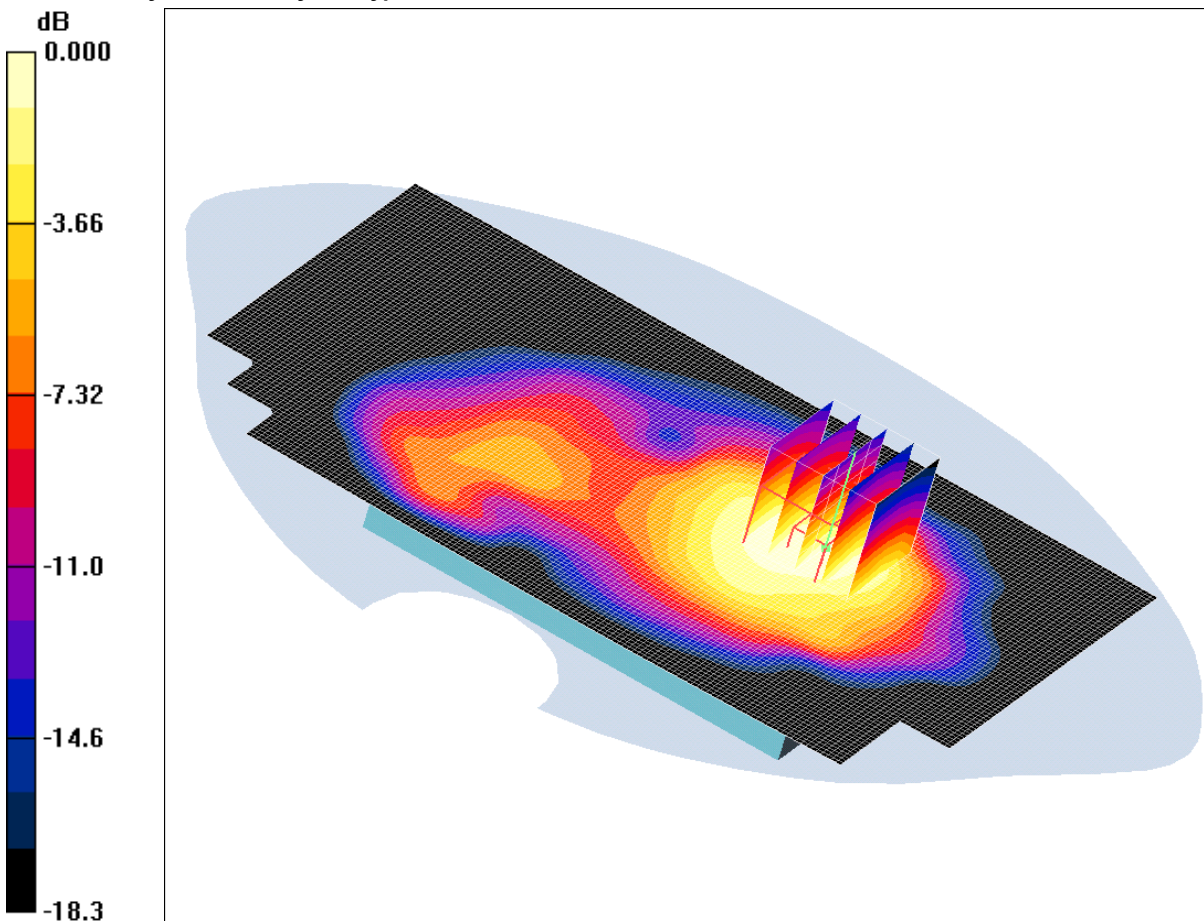
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.710 mW/g

Maximum value of SAR (measured) = 1.23 mW/g

SCN/85119JD02/050: Rear of EUT Facing Phantom With PHF GPRS CH810

Date: 05/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.05mW/g

Communication System: GPRS 1900 4Tx; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: 1900 MHz MSL Medium parameters used (interpolated): $f = 1909.8$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom With PHF - High/Area Scan (91x151x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

Rear of EUT Facing Phantom With PHF - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.9 V/m; Power Drift = -0.144 dB

Peak SAR (extrapolated) = 1.52 W/kg

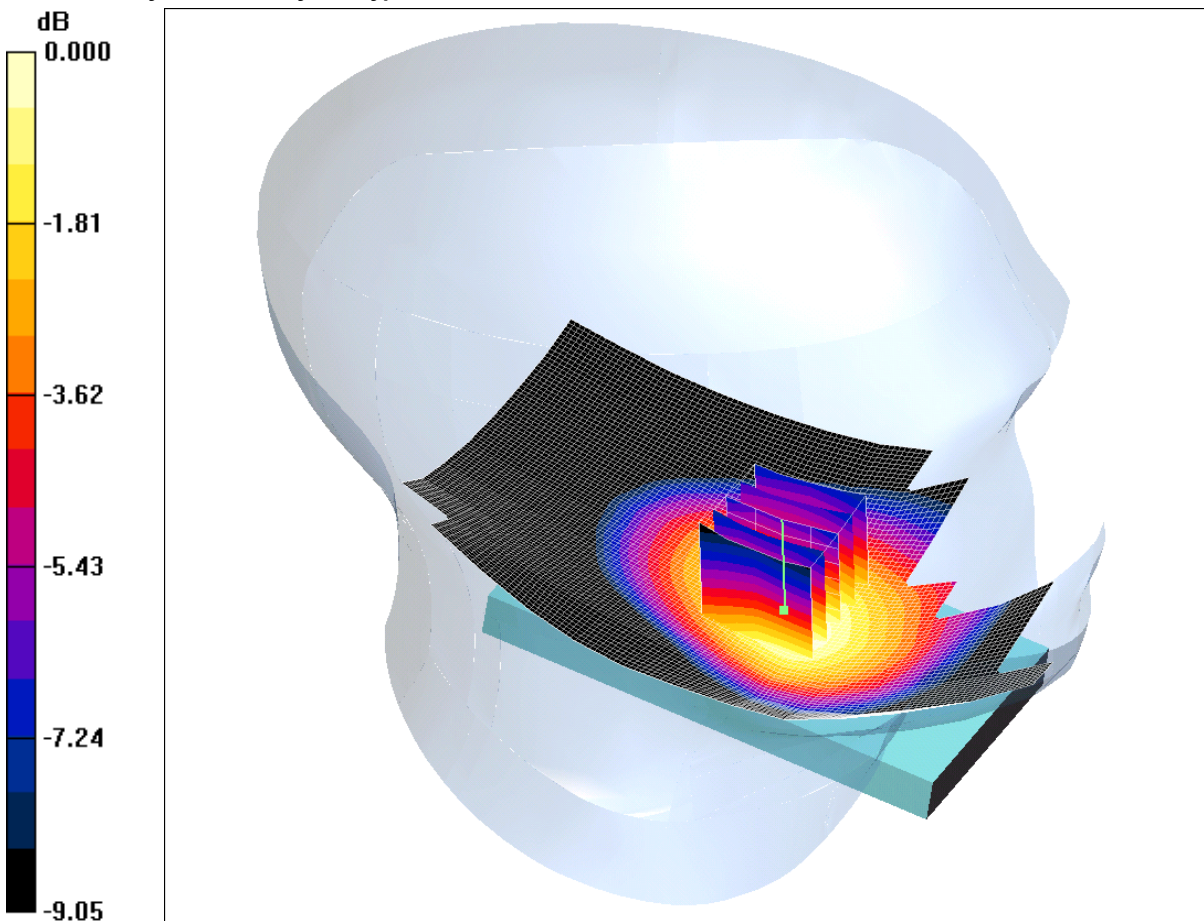
SAR(1 g) = 0.962 mW/g; SAR(10 g) = 0.592 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

SCN/85119JD02/051: Touch Left UMTS FDD V CH4183

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.837mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Left - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.821 mW/g

Touch Left - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.4 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.973 W/kg

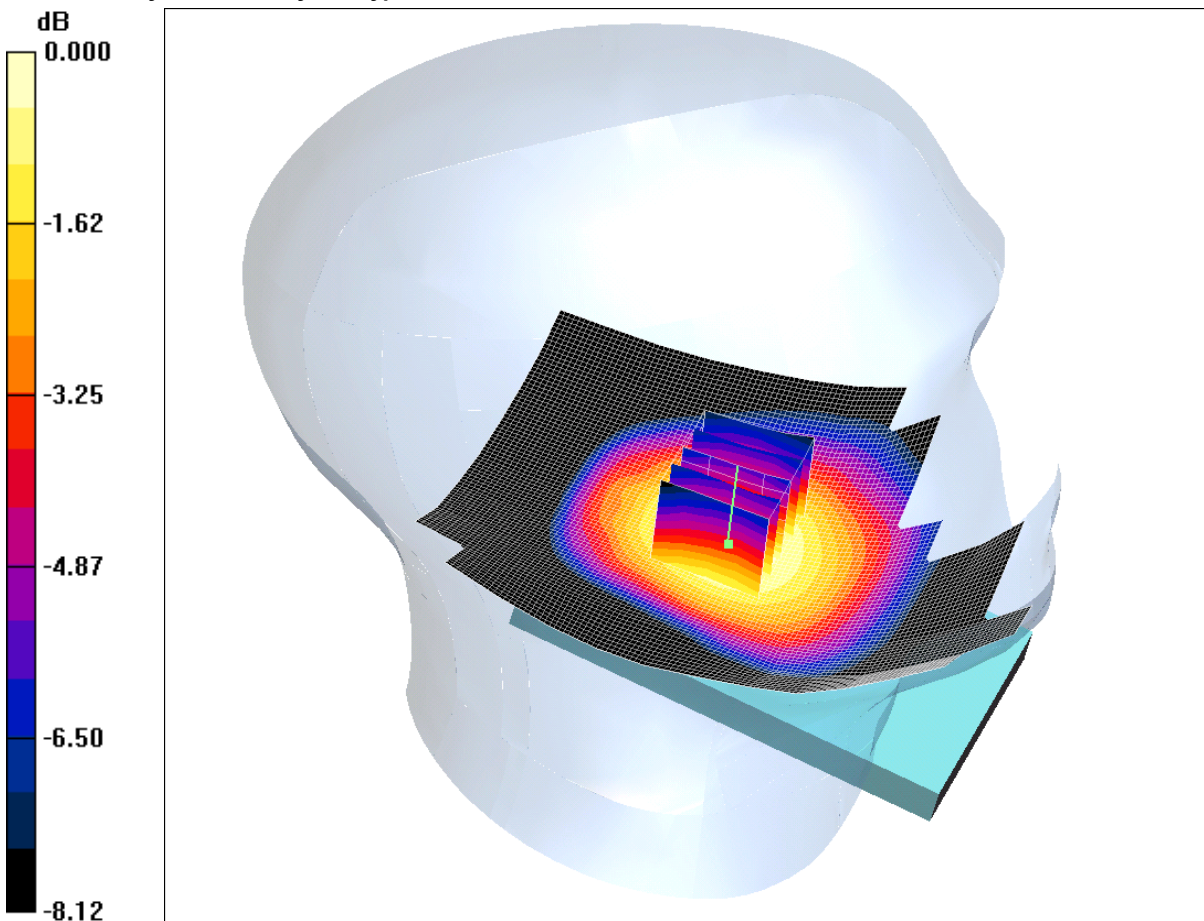
SAR(1 g) = 0.788 mW/g; SAR(10 g) = 0.591 mW/g

Maximum value of SAR (measured) = 0.837 mW/g

SCN/85119JD02/052: Tilt Left UMTS FDD V CH4183

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.546mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Left - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.547 mW/g

Tilt Left - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.9 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 0.615 W/kg

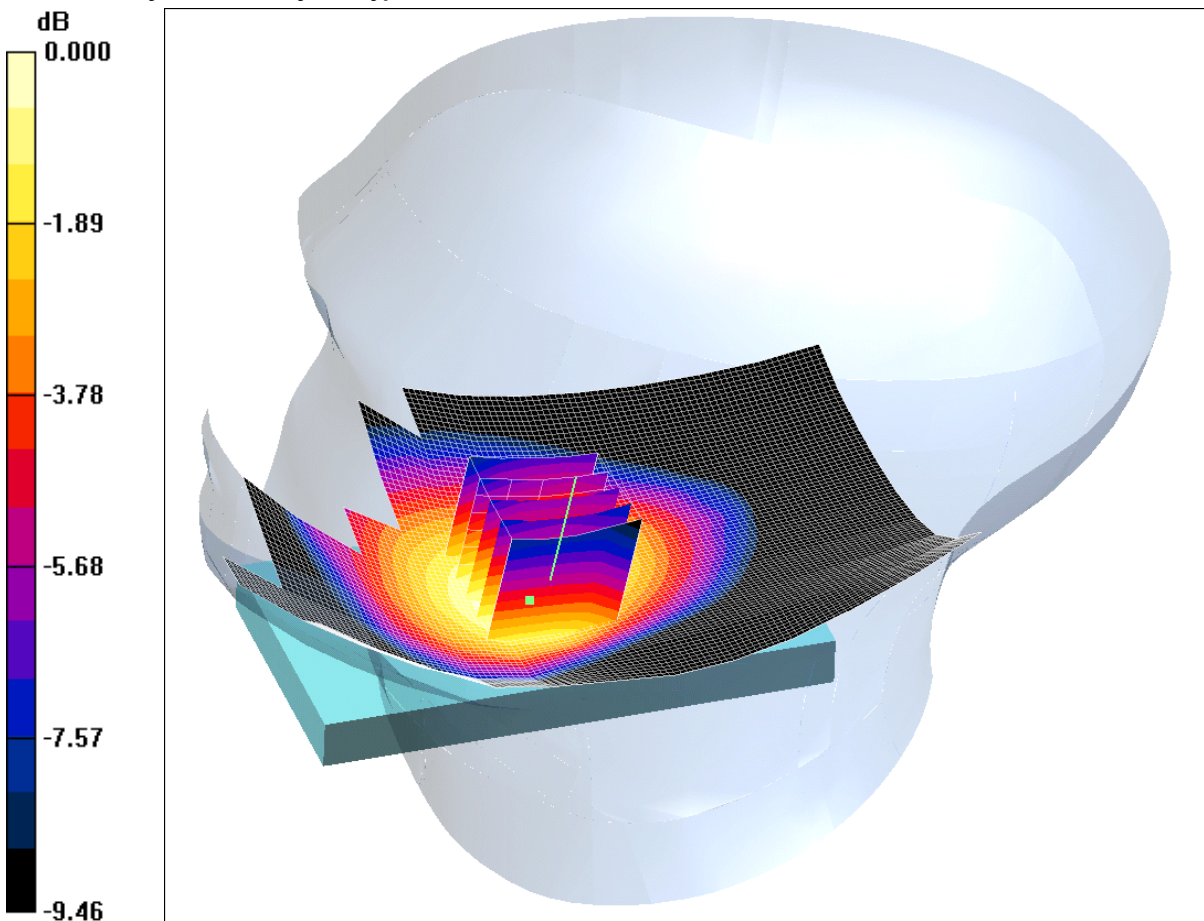
SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.403 mW/g

Maximum value of SAR (measured) = 0.546 mW/g

SCN/85119JD02/053: Touch Right UMTS FDD V CH4183

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.872mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Right - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.891 mW/g

Touch Right - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 1.04 W/kg

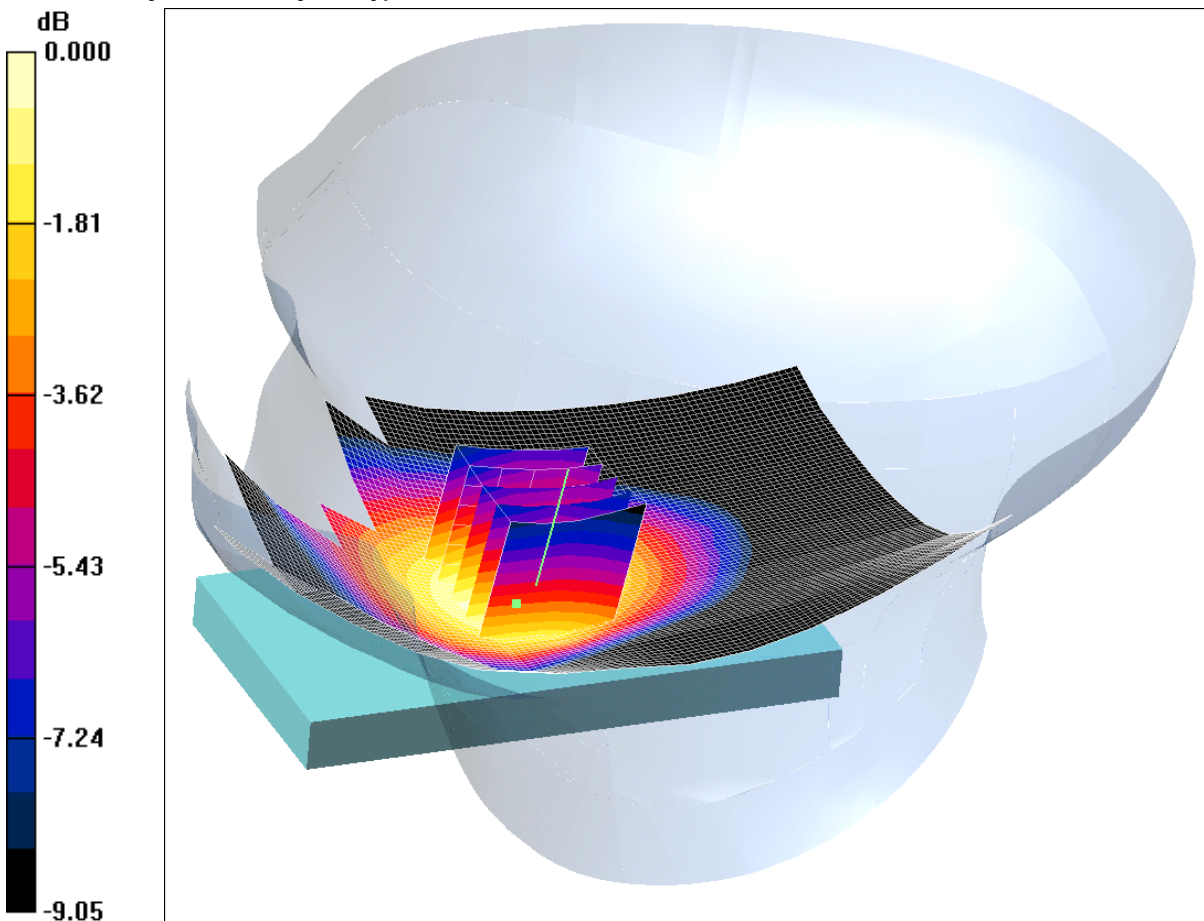
SAR(1 g) = 0.844 mW/g; SAR(10 g) = 0.639 mW/g

Maximum value of SAR (measured) = 0.872 mW/g

SCN/85119JD02/054: Touch Right UMTS FDD V CH4132

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.11mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Right - Low/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.13 mW/g

Touch Right - Low/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = -0.188 dB

Peak SAR (extrapolated) = 1.32 W/kg

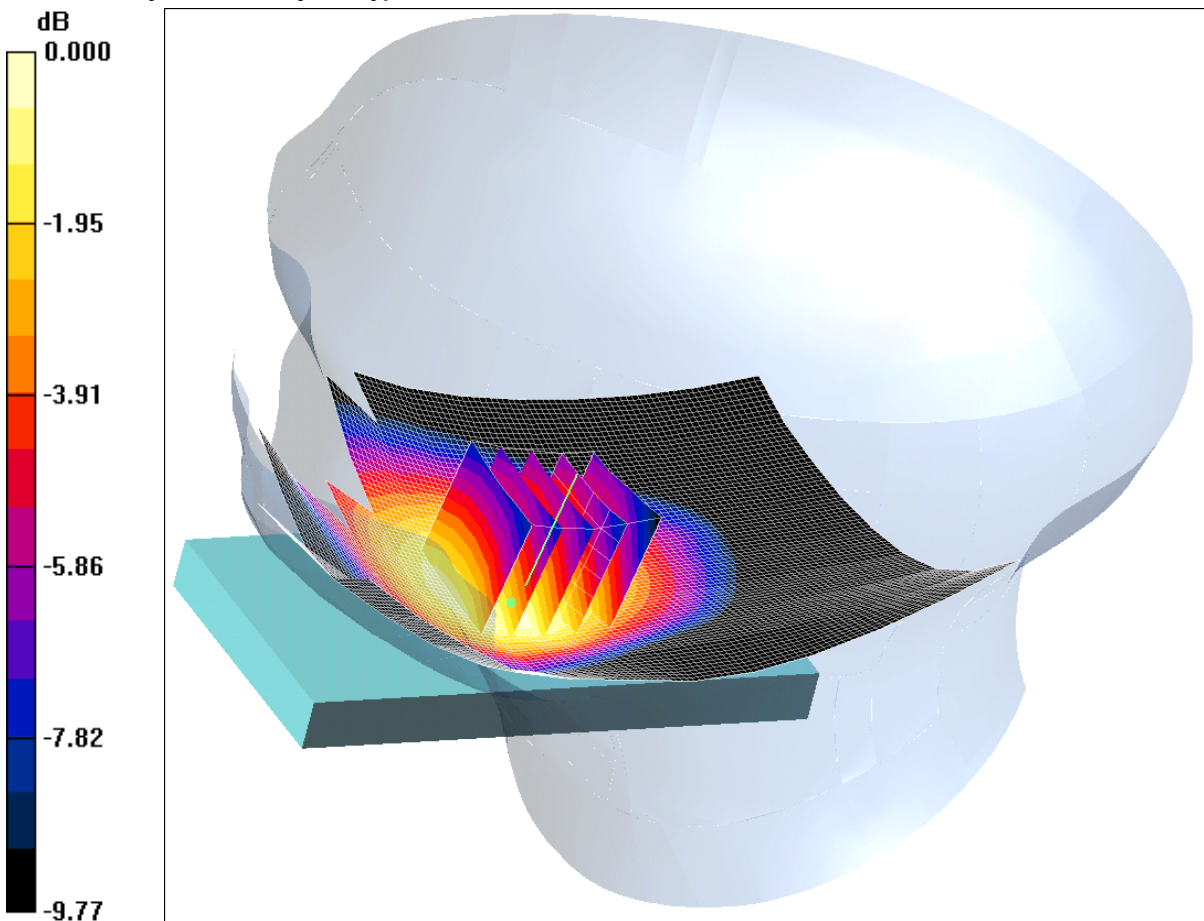
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.818 mW/g

Maximum value of SAR (measured) = 1.11 mW/g

SCN/85119JD02/055: Touch Right UMTS FDD V CH4233

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.20mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.907$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Right - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.23 mW/g

Touch Right - High/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = -0.178 dB

Peak SAR (extrapolated) = 1.44 W/kg

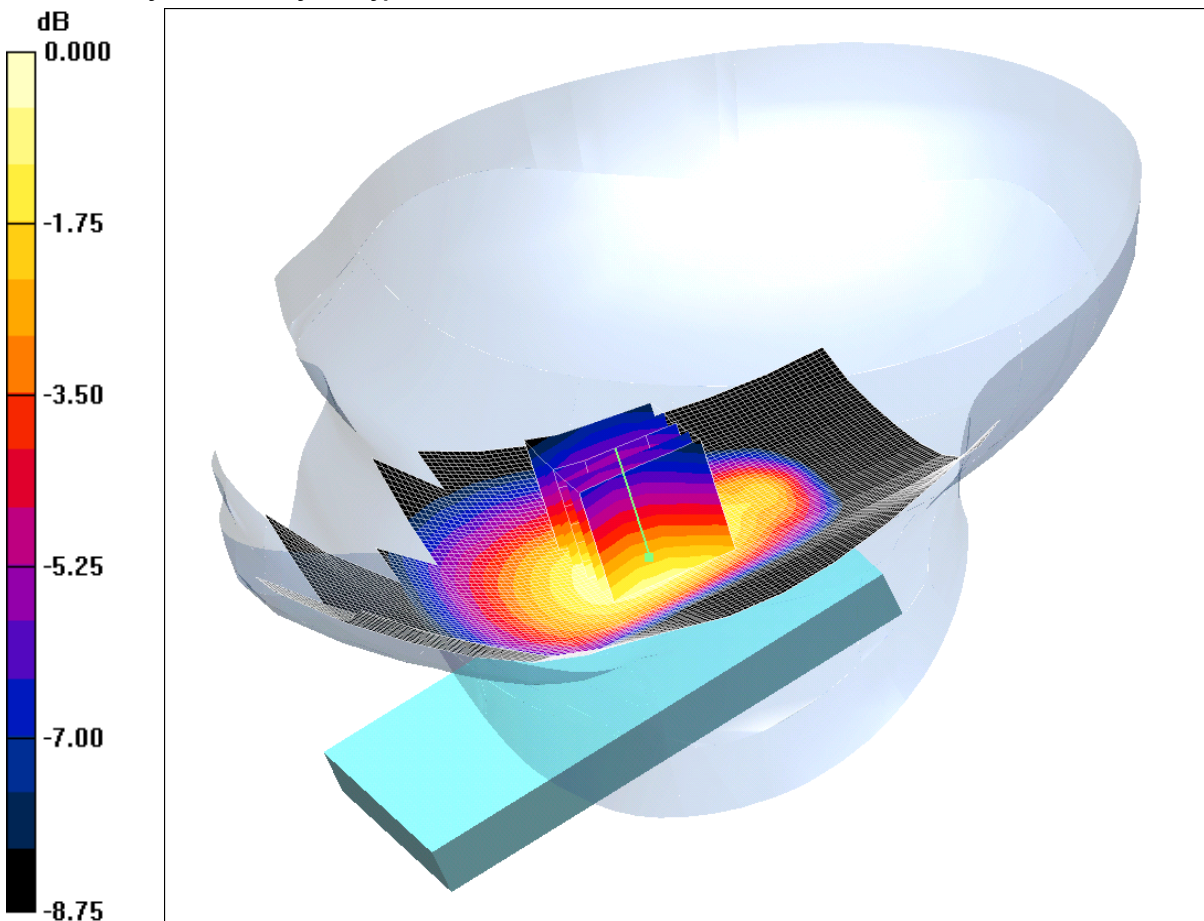
SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.888 mW/g

Maximum value of SAR (measured) = 1.20 mW/g

SCN/85119JD02/056: Tilt Right UMTS FDD V CH4183

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.562mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Right - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.558 mW/g

Tilt Right - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.635 W/kg

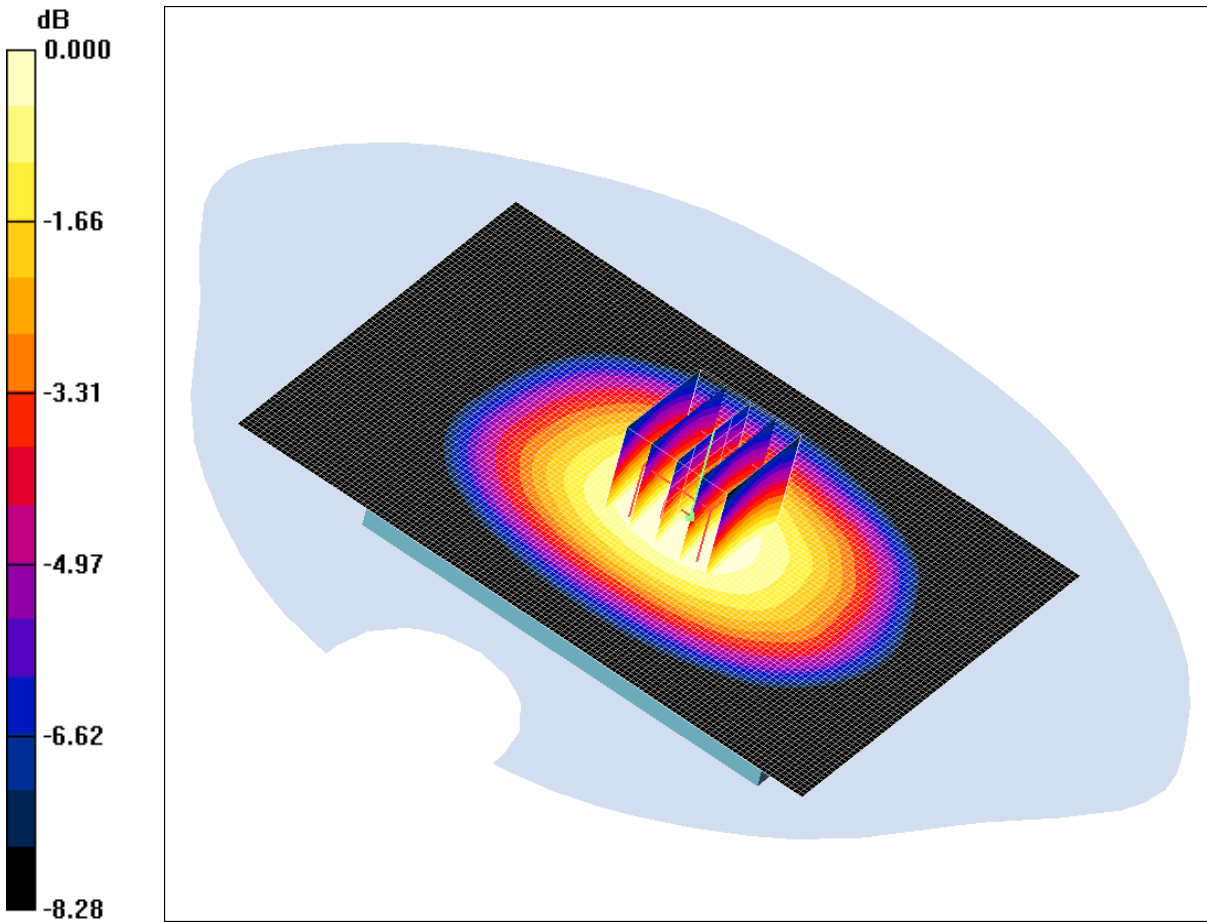
SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.406 mW/g

Maximum value of SAR (measured) = 0.562 mW/g

SCN/85119JD02/057: Front of EUT Facing Phantom UMTS FDD V CH4183

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.993mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.996 mW/g

Front of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.5 V/m; Power Drift = -0.078 dB

Peak SAR (extrapolated) = 1.12 W/kg

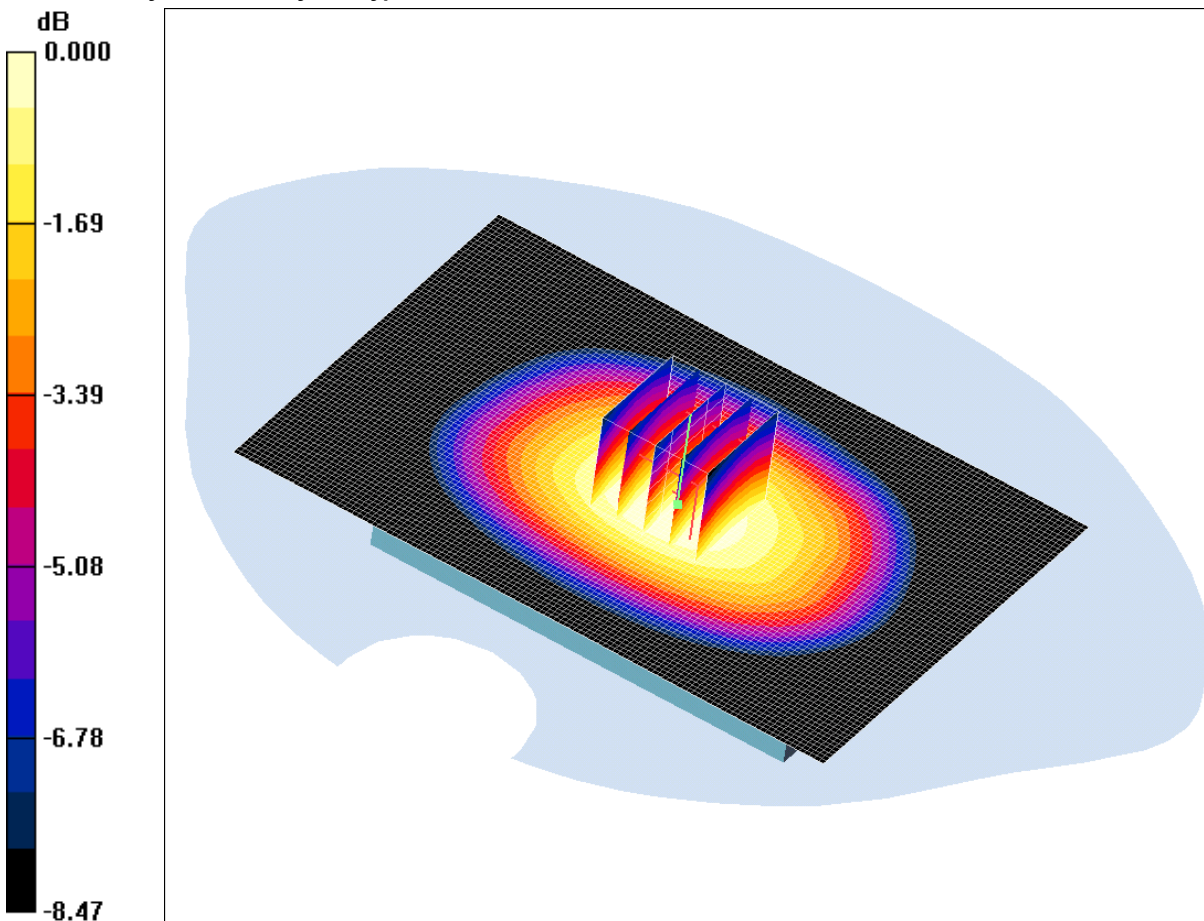
SAR(1 g) = 0.945 mW/g; SAR(10 g) = 0.726 mW/g

Maximum value of SAR (measured) = 0.993 mW/g

SCN/85119JD02/058: Front of EUT Facing Phantom UMTS FDD V CH4132

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.22mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.998$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - Low/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.21 mW/g

Front of EUT Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 1.37 W/kg

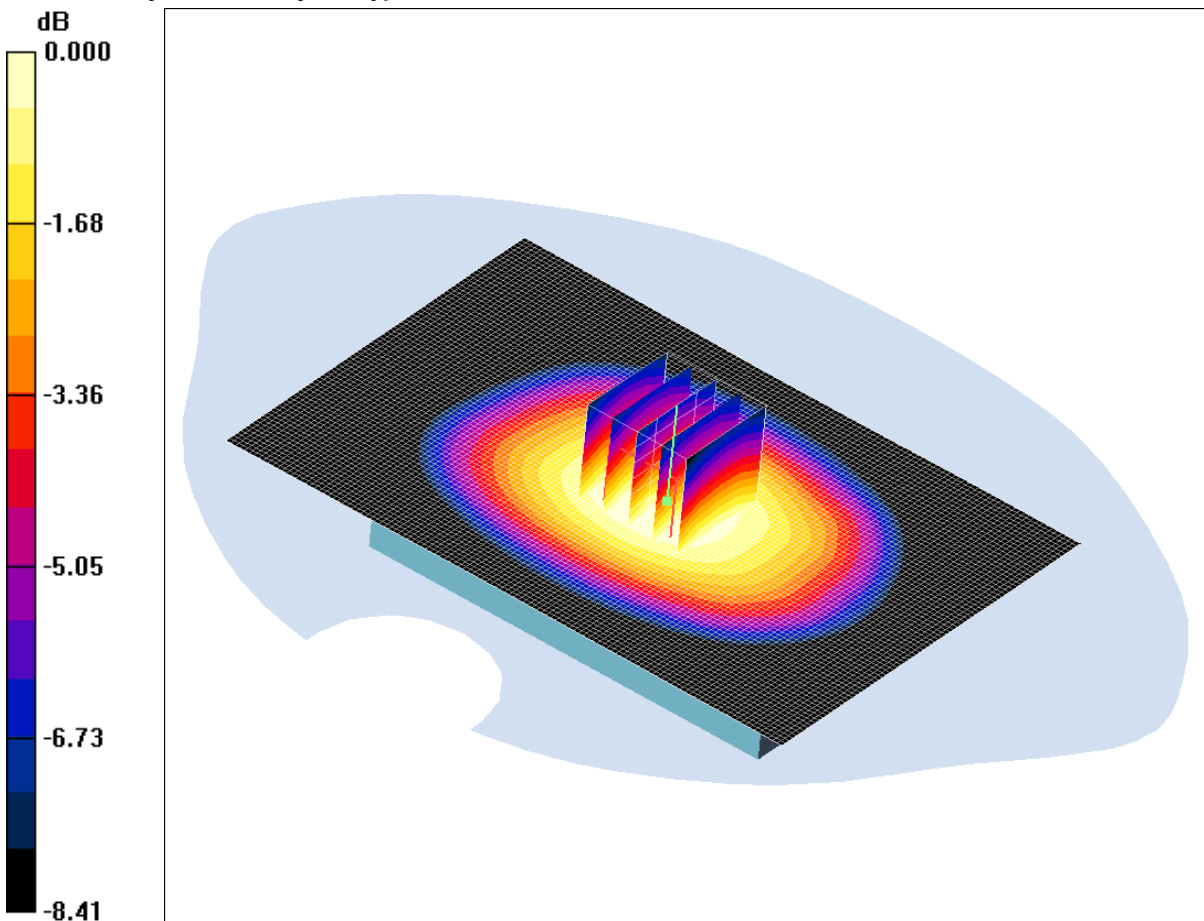
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.893 mW/g

Maximum value of SAR (measured) = 1.22 mW/g

SCN/85119JD02/059: Front of EUT Facing Phantom UMTS FDD V CH4233

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.21mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.22 mW/g

Front of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.9 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.37 W/kg

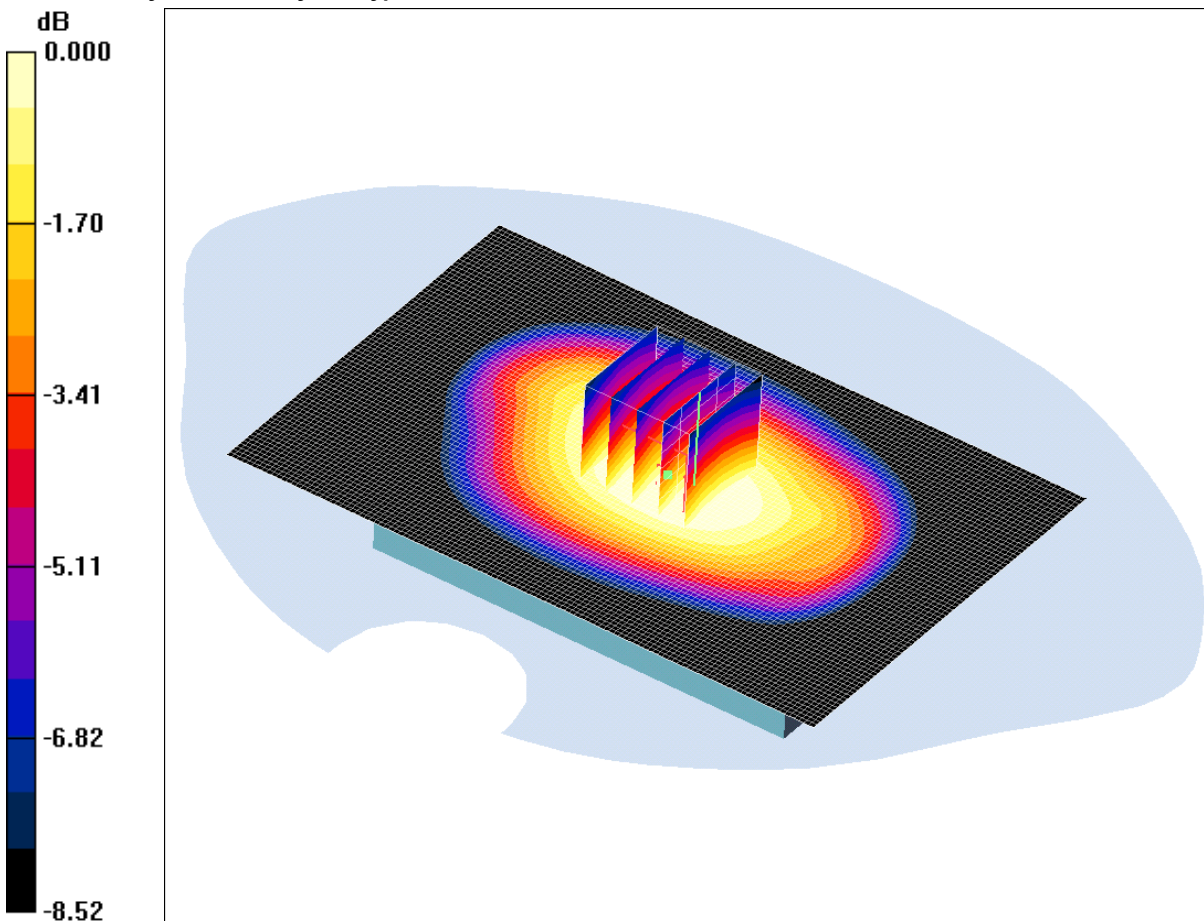
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.885 mW/g

Maximum value of SAR (measured) = 1.21 mW/g

SCN/85119JD02/060: Rear of EUT Facing Phantom UMTS FDD V CH4183

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.02mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.05 mW/g

Rear of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.6 V/m; Power Drift = -0.132 dB

Peak SAR (extrapolated) = 1.16 W/kg

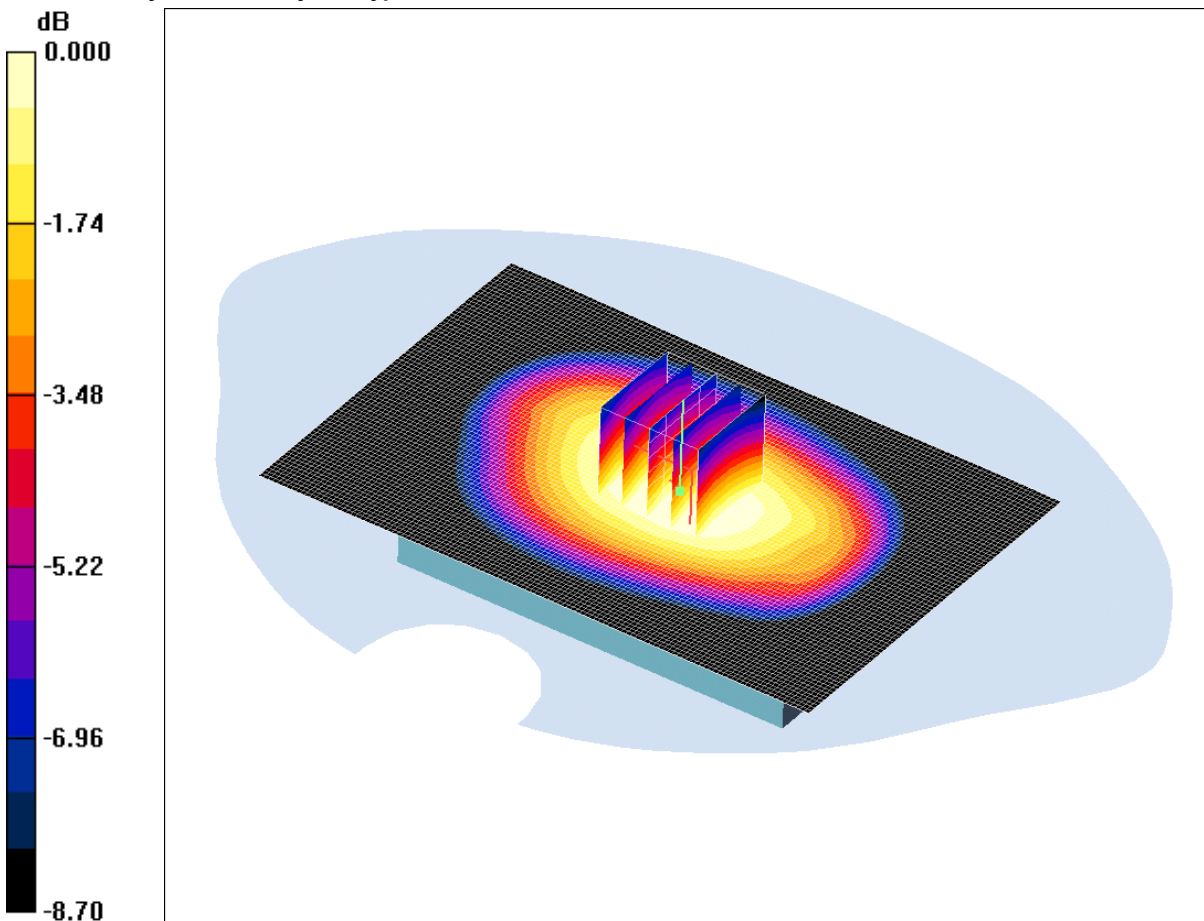
SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.746 mW/g

Maximum value of SAR (measured) = 1.02 mW/g

SCN/85119JD02/061: Rear of EUT Facing Phantom UMTS FDD V CH4132

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.14mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.998$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Low/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.16 mW/g

Rear of EUT Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.0 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 1.29 W/kg

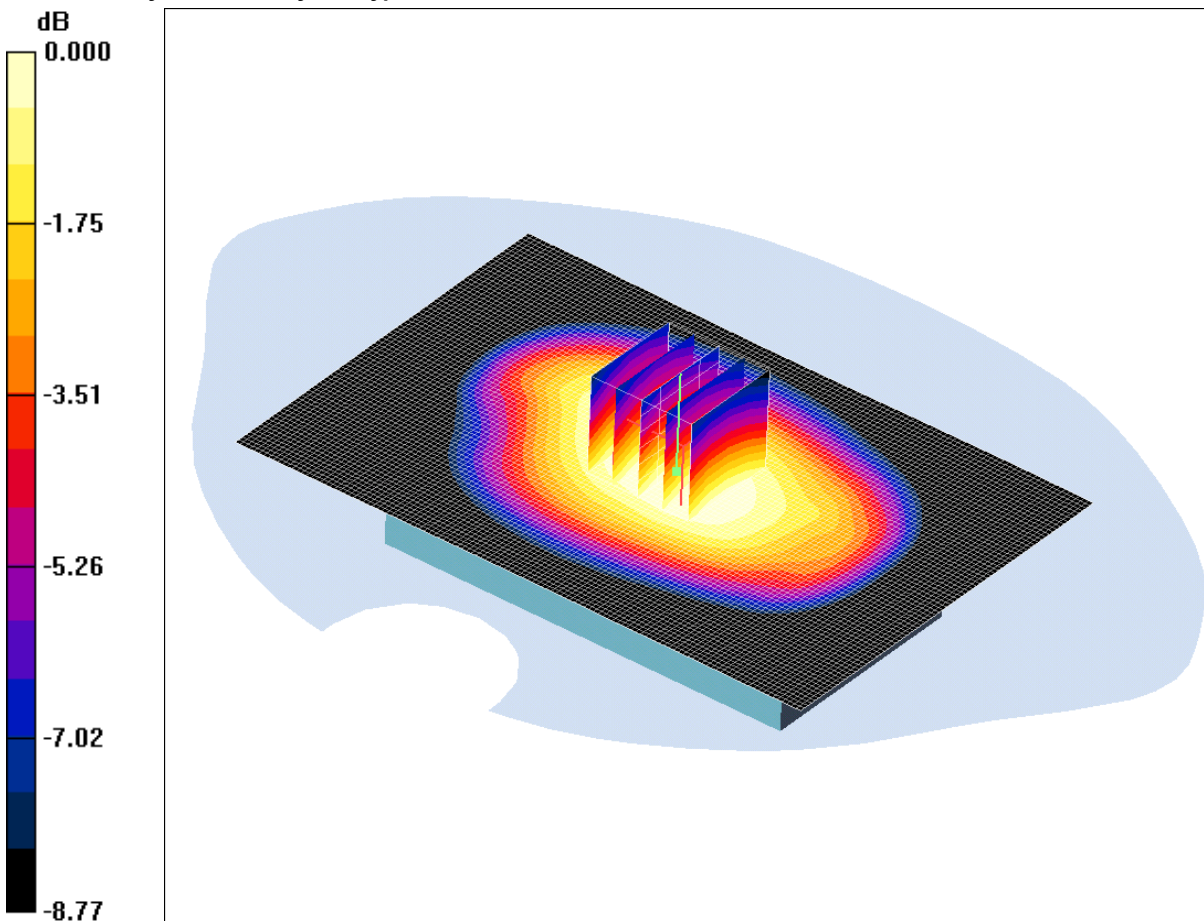
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.835 mW/g

Maximum value of SAR (measured) = 1.14 mW/g

SCN/85119JD02/062: Rear of EUT Facing Phantom UMTS FDD V CH4233

Date: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.10mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.12 mW/g

Rear of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 34.5 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 1.25 W/kg

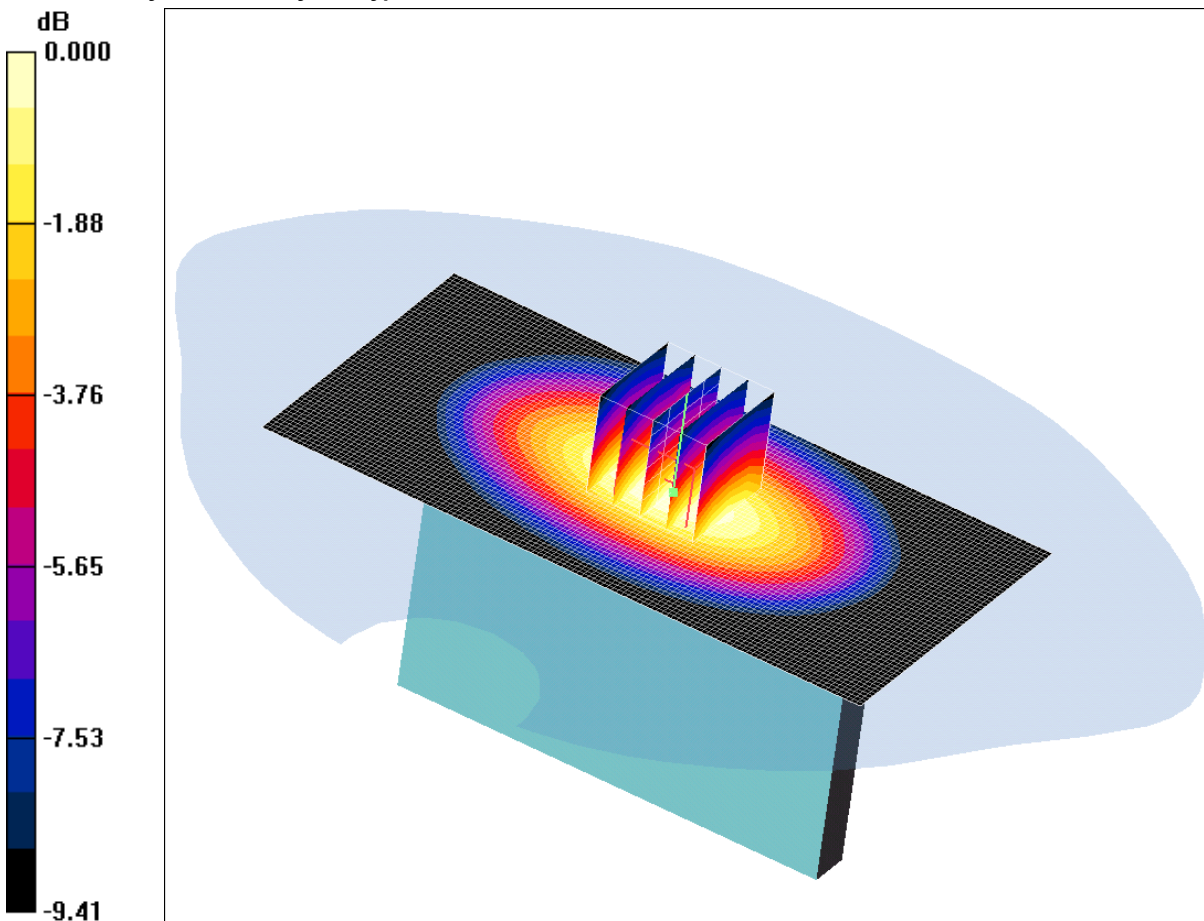
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.805 mW/g

Maximum value of SAR (measured) = 1.10 mW/g

SCN/85119JD02/063: Left Hand Side of EUT Facing Phantom UMTS FDD V CH4183

Date/Time: 08/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.846mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Left Hand Side of EUT Facing Phantom - Middle/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.844 mW/g

Left Hand Side of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.2 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 1.04 W/kg

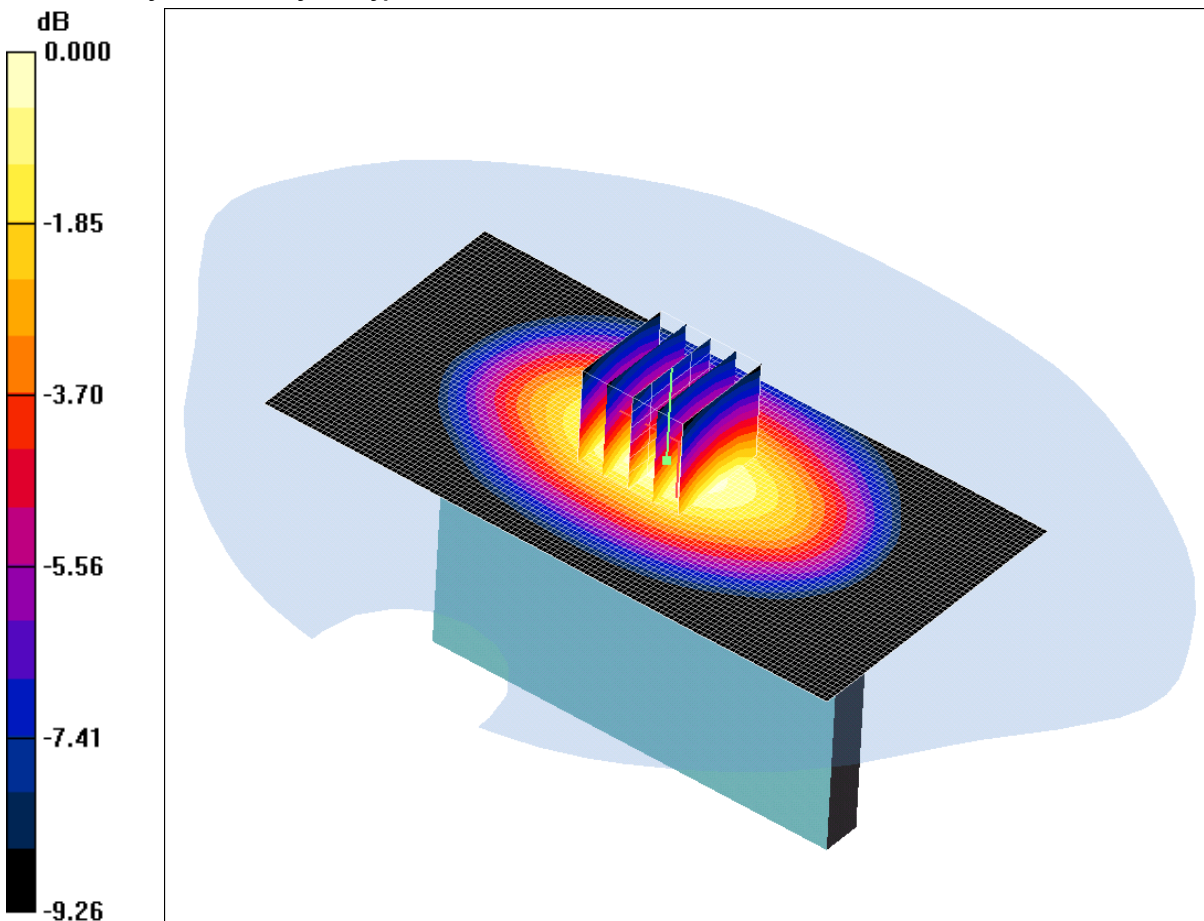
SAR(1 g) = 0.790 mW/g; SAR(10 g) = 0.553 mW/g

Maximum value of SAR (measured) = 0.846 mW/g

SCN/85119JD02/064: Right Hand Side of EUT Facing Phantom UMTS FDD V CH4183

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.831mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Right Hand Side of EUT Facing Phantom - Middle/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.818 mW/g

Right Hand Side of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.3 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 1.02 W/kg

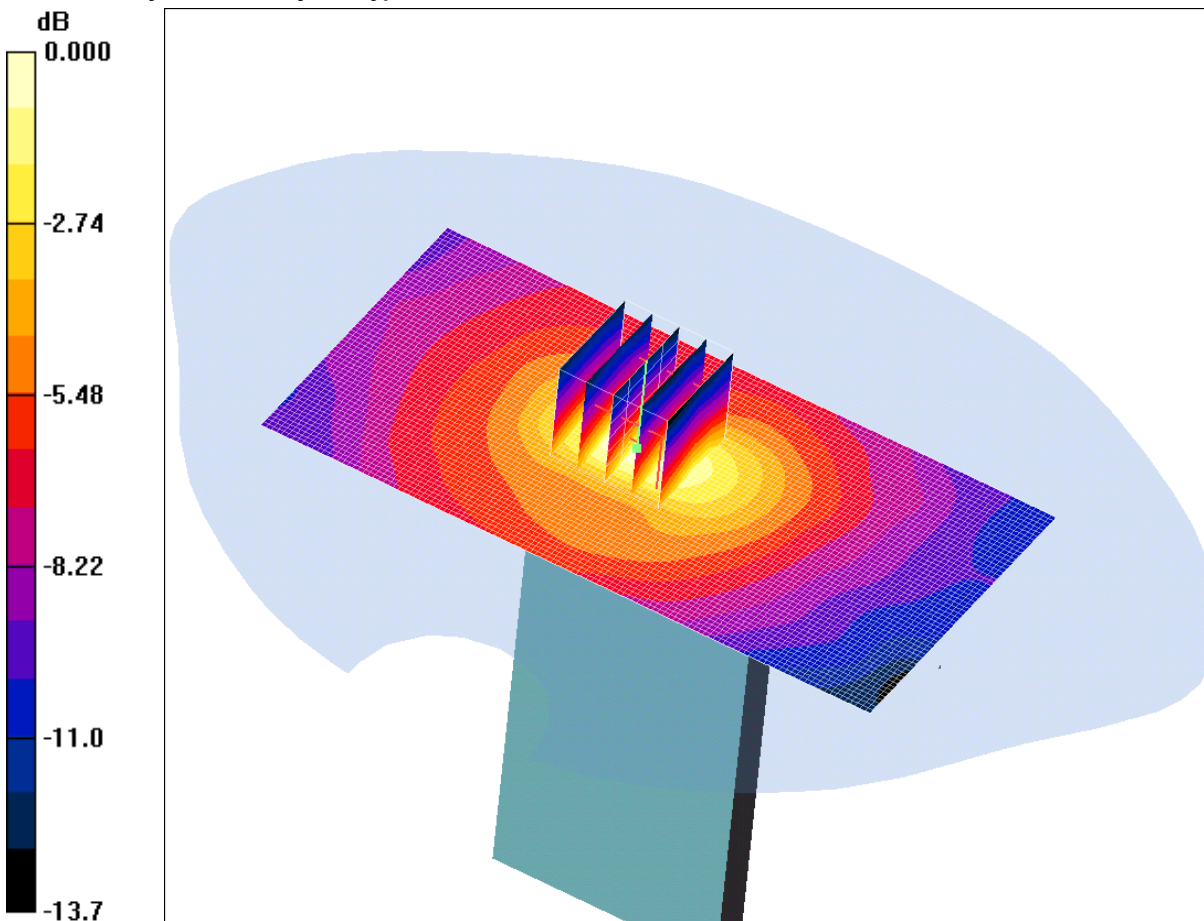
SAR(1 g) = 0.774 mW/g; SAR(10 g) = 0.546 mW/g

Maximum value of SAR (measured) = 0.831 mW/g

SCN/85119JD02/065: Base of EUT Facing Phantom UMTS FDD V CH4183

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.118mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Base of EUT Facing Phantom - Middle/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.109 mW/g

Base of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.93 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.217 W/kg

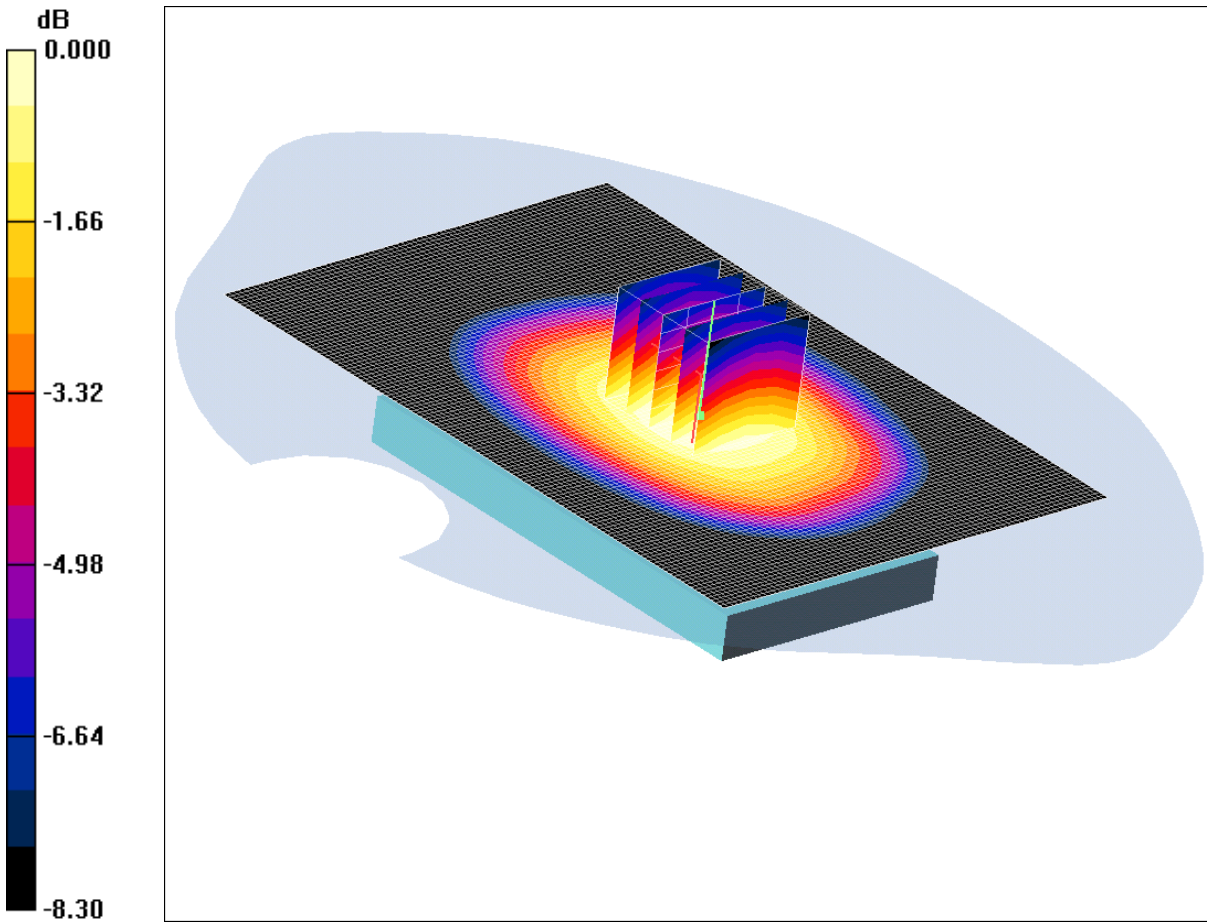
SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.059 mW/g

Maximum value of SAR (measured) = 0.118 mW/g

SCN/85119JD02/066: Front of EUT Facing Phantom UMTS FDD V + HSDPA CH4183

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.913mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.906 mW/g

Front of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.8 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 1.01 W/kg

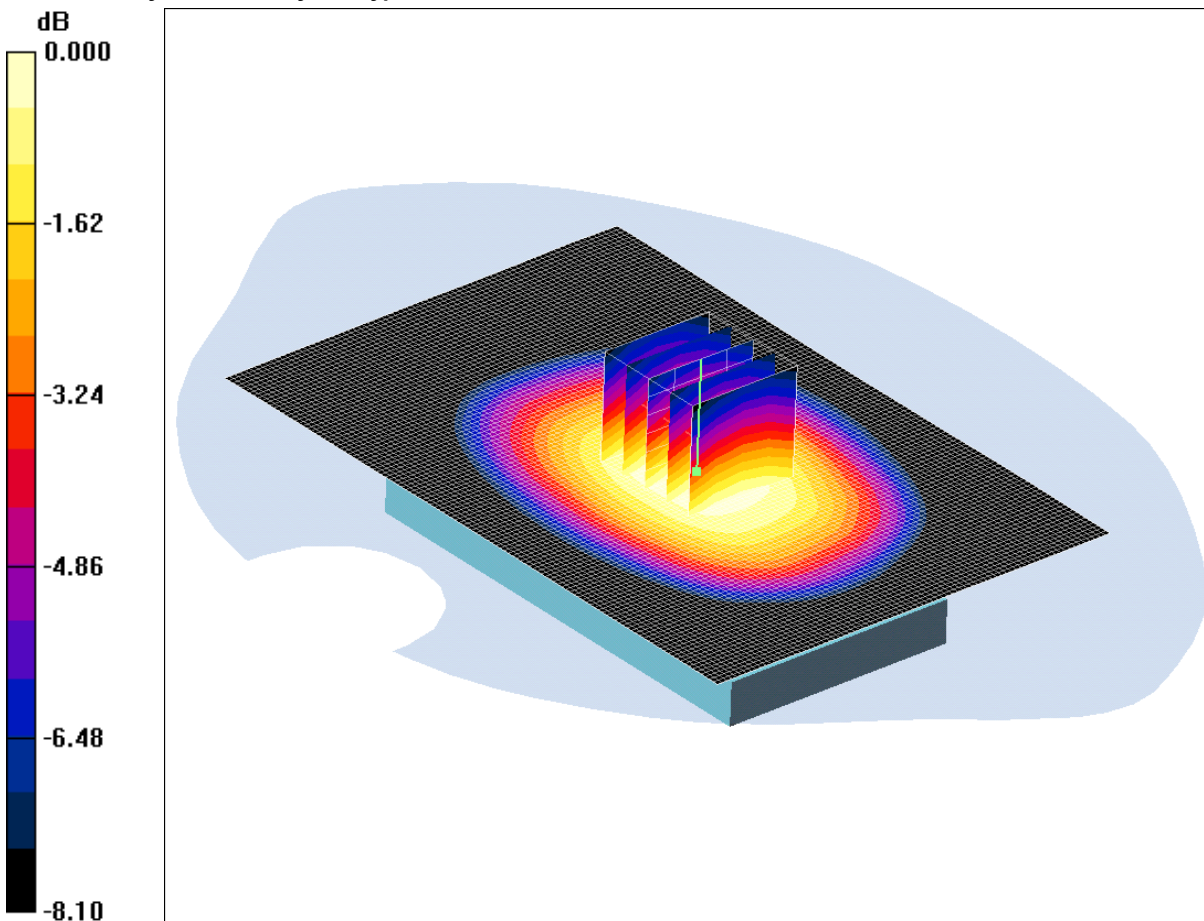
SAR(1 g) = 0.874 mW/g; SAR(10 g) = 0.674 mW/g

Maximum value of SAR (measured) = 0.913 mW/g

SCN/85119JD02/067: Front of EUT Facing Phantom UMTS FDD V + HSDPA CH4132

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.08mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.998$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - Low/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.06 mW/g

Front of EUT Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.3 V/m; Power Drift = 0.162 dB

Peak SAR (extrapolated) = 1.23 W/kg

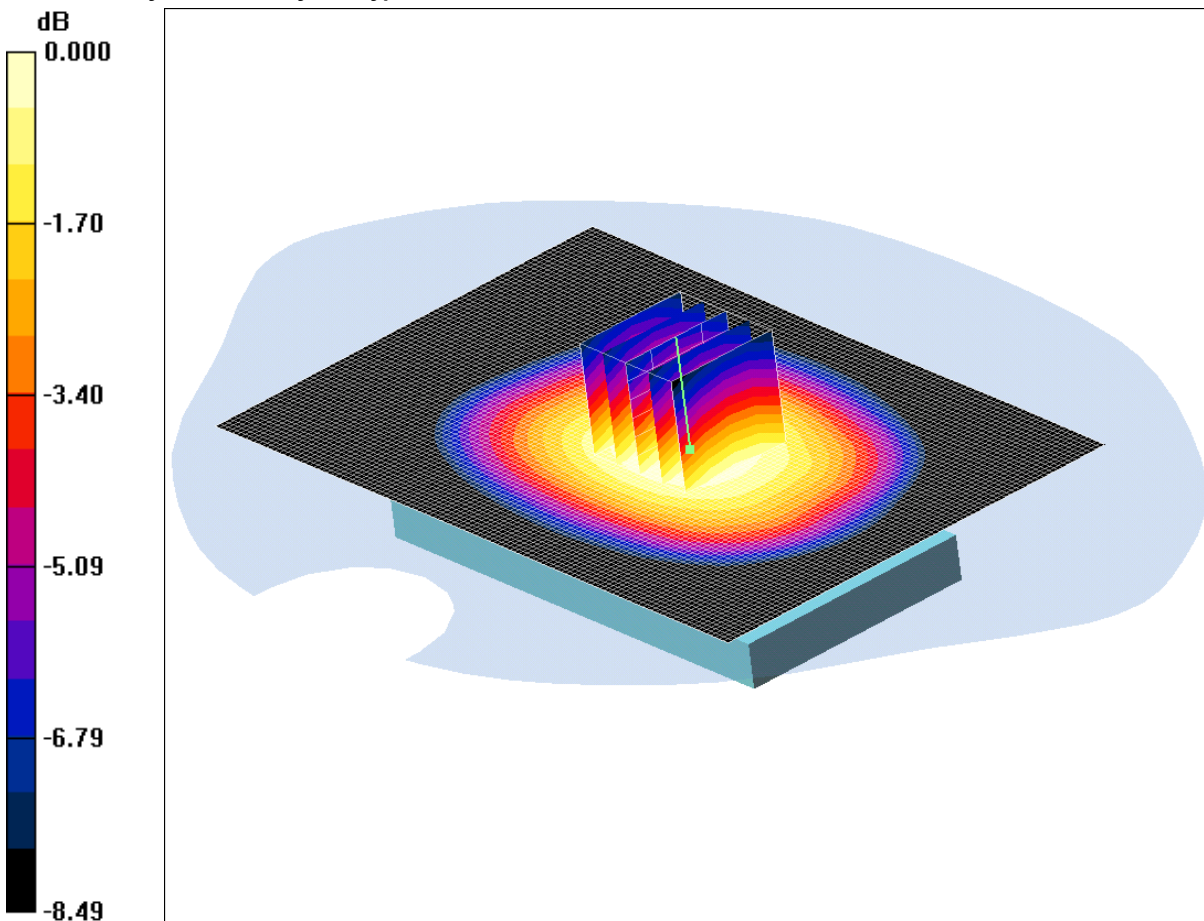
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.796 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

SCN/85119JD02/068: Front of EUT Facing Phantom UMTS FDD V + HSDPA CH4233

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.08mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.08 mW/g

Front of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.6 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 1.22 W/kg

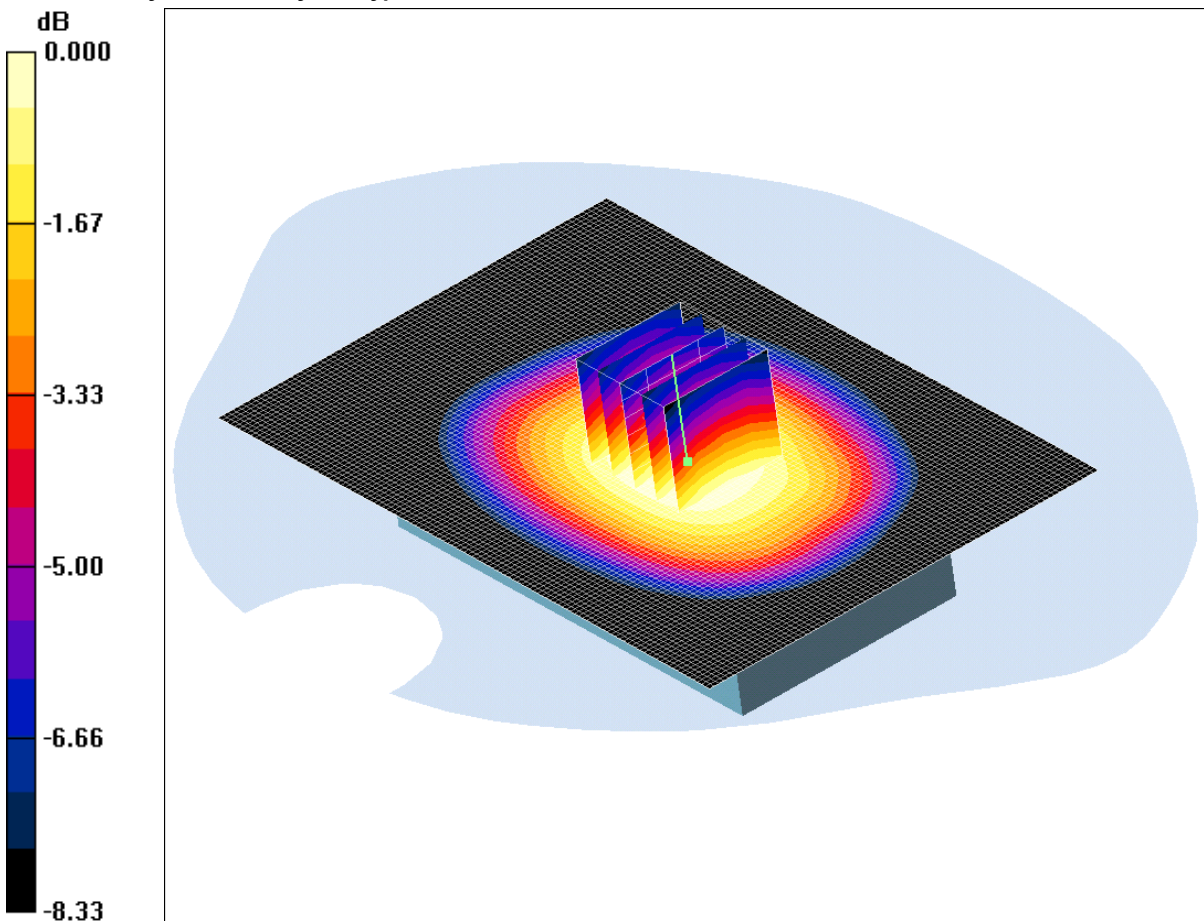
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.794 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

SCN/85119JD02/069: Front of EUT Facing Phantom UMTS FDD V + HSPA CH4183

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.698mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom - Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.717 mW/g

Front of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.2 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 0.779 W/kg

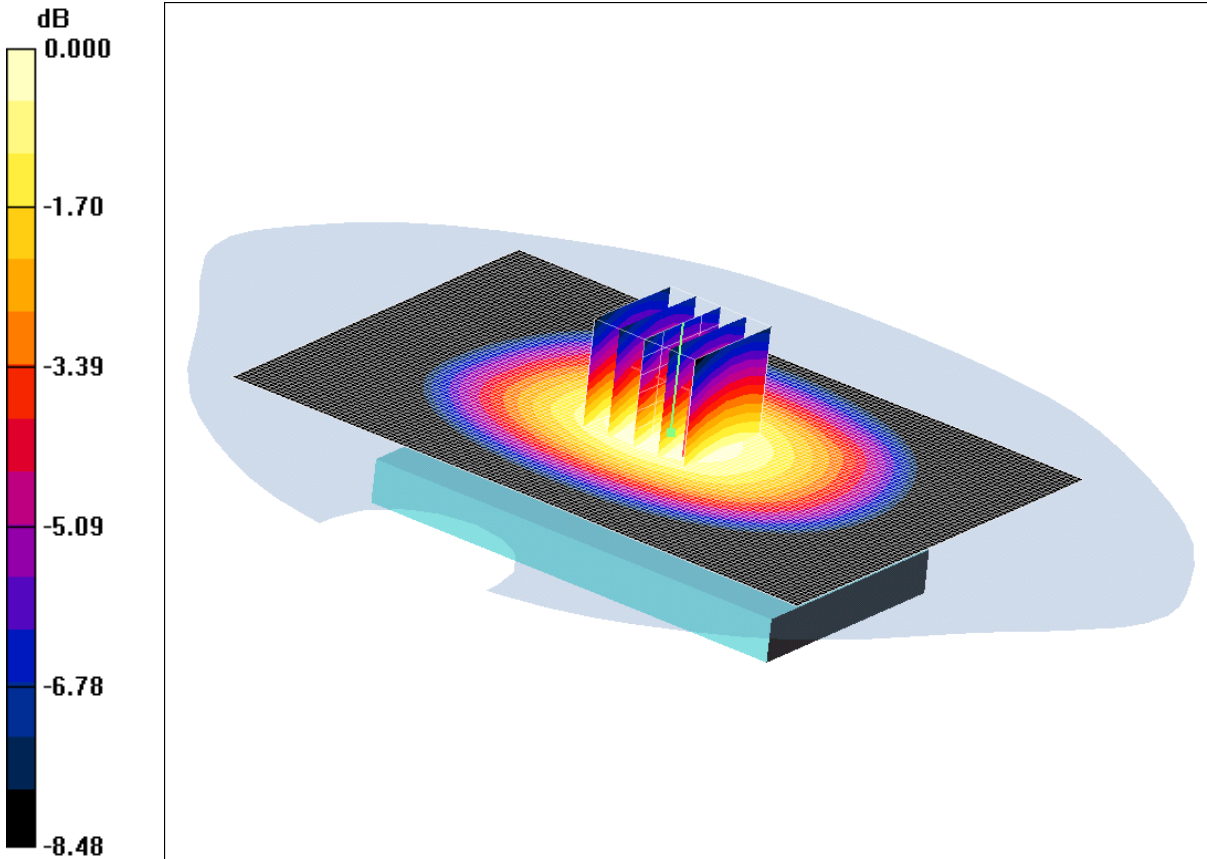
SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.514 mW/g

Maximum value of SAR (measured) = 0.698 mW/g

SCN/85119JD02/070: Front of EUT Facing Phantom at 15mm UMTS FDD V CH4183

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.845mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 09/02/2011
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom at 15mm- Middle/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.838 mW/g

Front of EUT Facing Phantom at 15mm- Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.1 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 0.976 W/kg

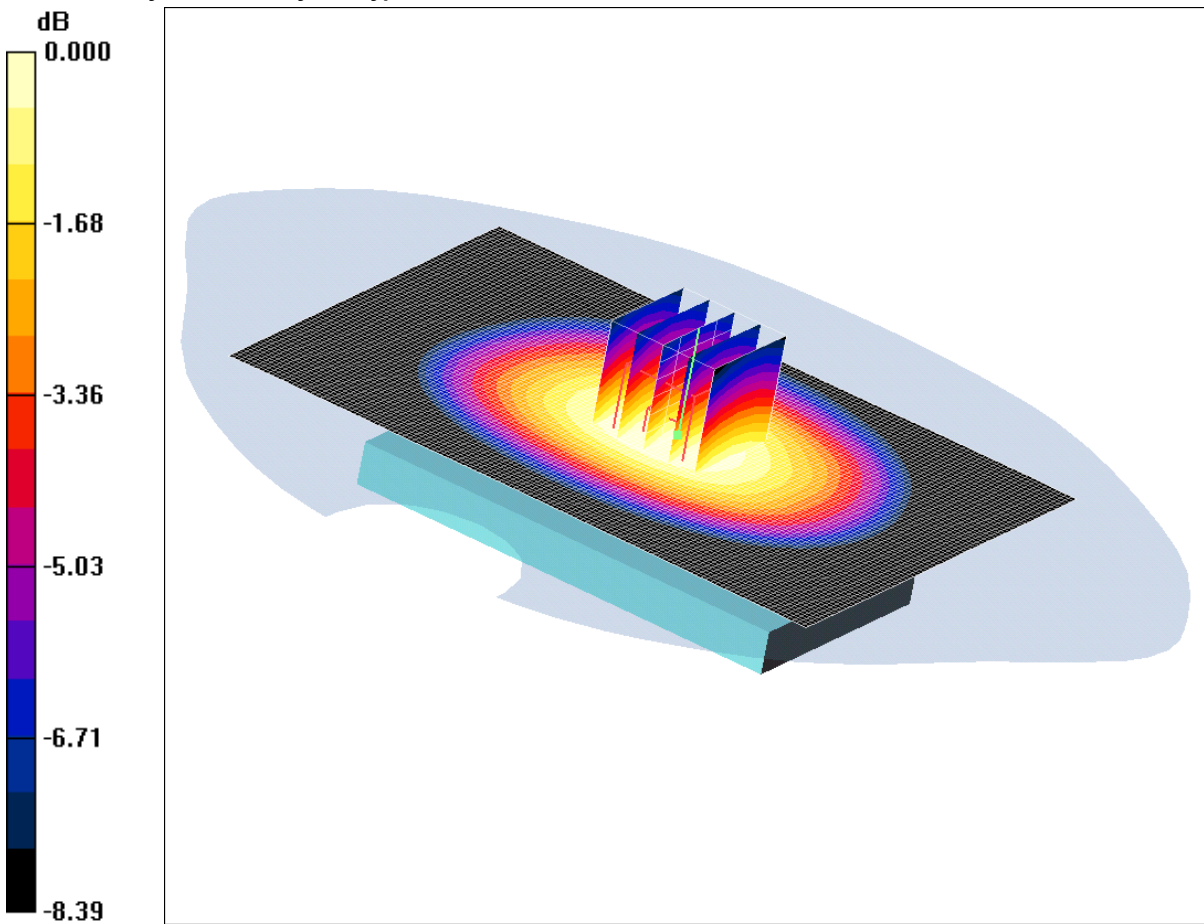
SAR(1 g) = 0.804 mW/g; SAR(10 g) = 0.608 mW/g

Maximum value of SAR (measured) = 0.845 mW/g

SCN/85119JD02/071: Front of EUT Facing Phantom at 15mm UMTS FDD V CH4132

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.938mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.998$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom at 15mm- Low/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.953 mW/g

Front of EUT Facing Phantom at 15mm- Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.2 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 1.07 W/kg

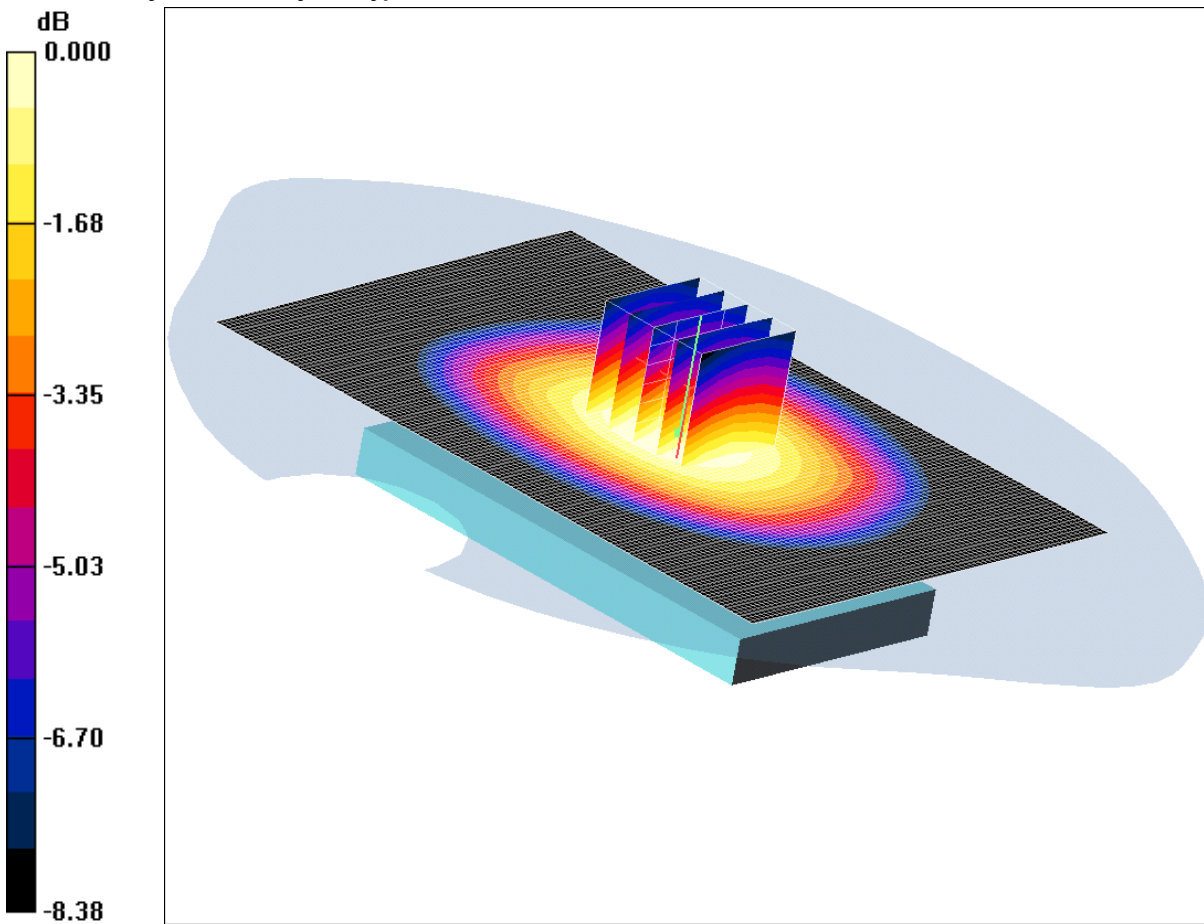
SAR(1 g) = 0.893 mW/g; SAR(10 g) = 0.680 mW/g

Maximum value of SAR (measured) = 0.938 mW/g

SCN/85119JD02/072: Front of EUT Facing Phantom at 15mm UMTS FDD V CH4233

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.952mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom at 15mm- High/Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.956 mW/g

Front of EUT Facing Phantom at 15mm- High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.4 V/m; Power Drift = 0.155 dB

Peak SAR (extrapolated) = 1.08 W/kg

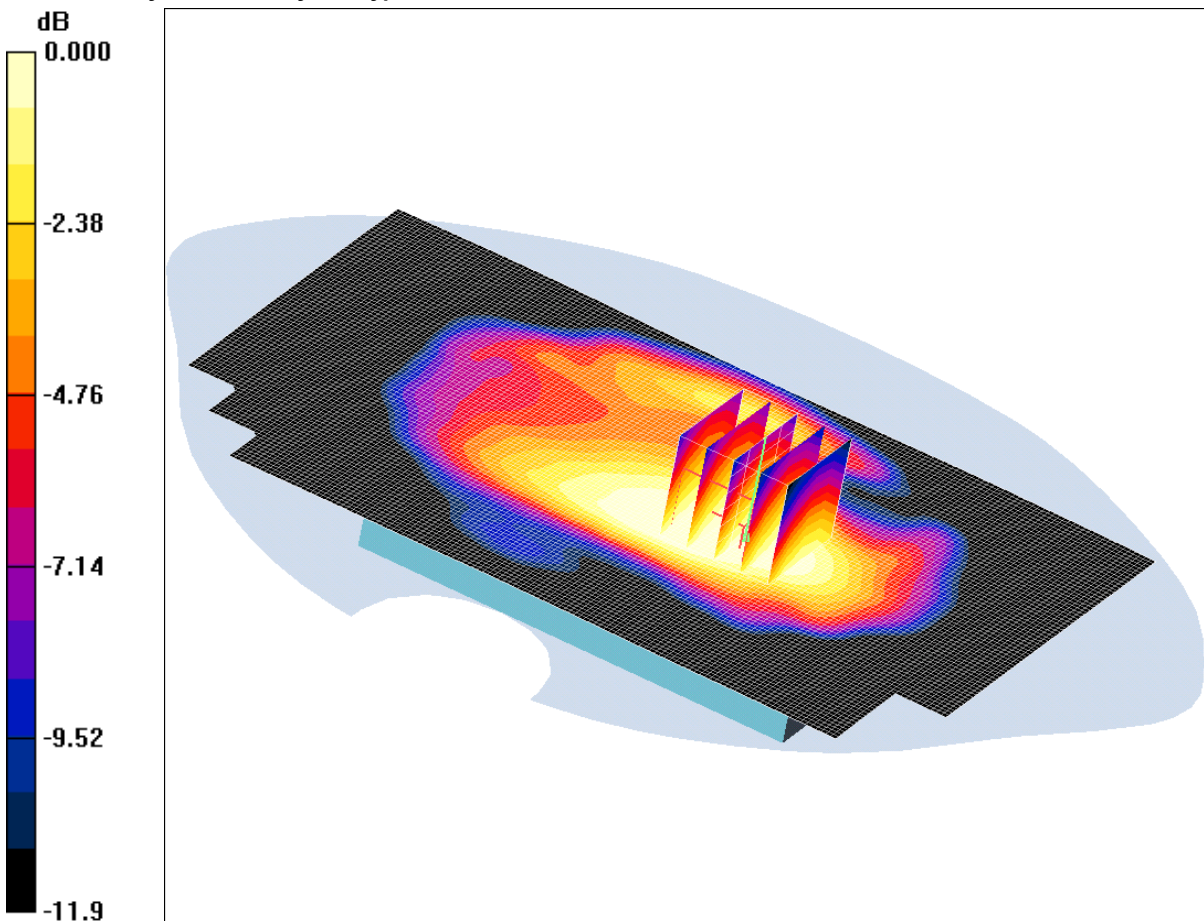
SAR(1 g) = 0.903 mW/g; SAR(10 g) = 0.687 mW/g

Maximum value of SAR (measured) = 0.952 mW/g

SCN/85119JD02/073: Front of EUT Facing Phantom With PHF UMTS FDD V CH4132

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 1.15mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.998$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom With PHF - Low/Area Scan (91x151x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.24 mW/g

Front of EUT Facing Phantom With PHF - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.5 V/m; Power Drift = -0.093 dB

Peak SAR (extrapolated) = 1.27 W/kg

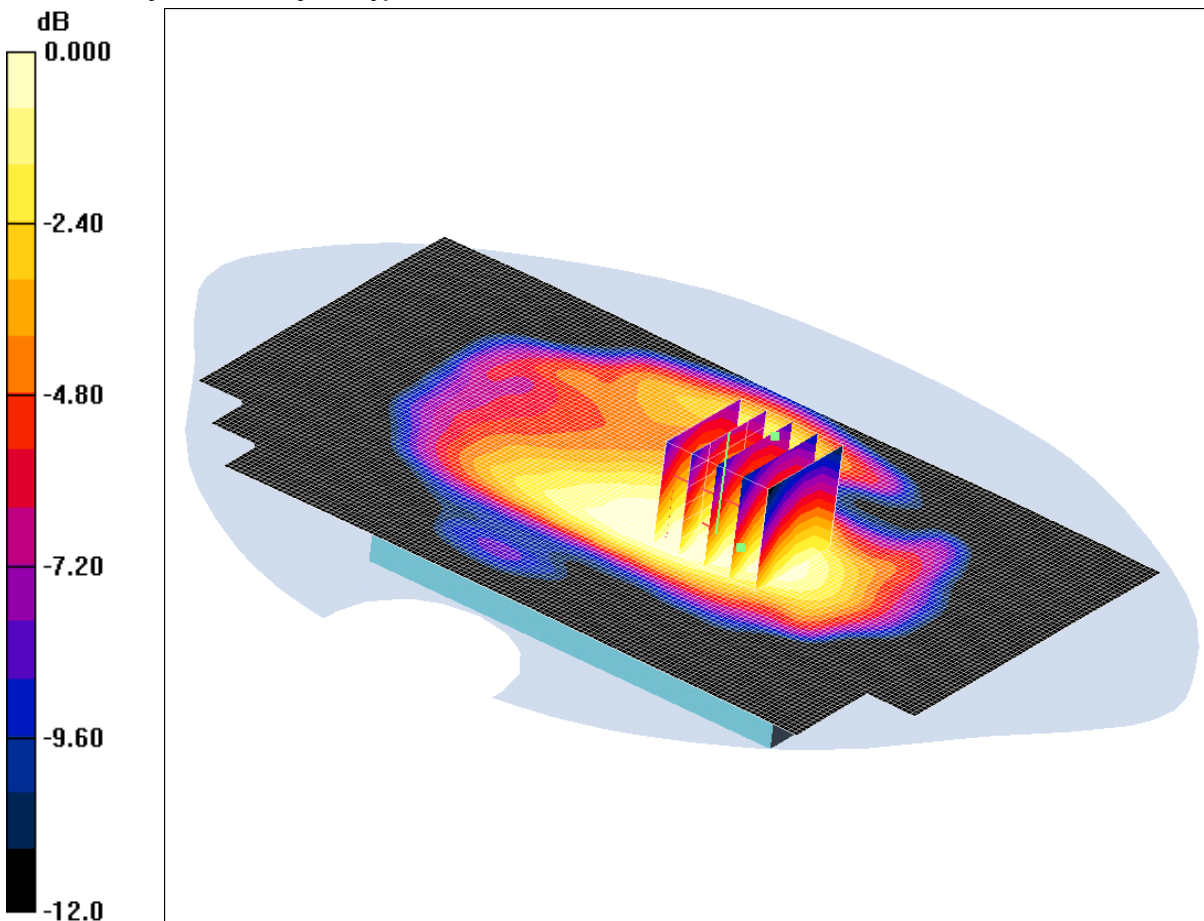
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.828 mW/g

Maximum value of SAR (measured) = 1.15 mW/g

SCN/85119JD02/074: Front of EUT Facing Phantom With PHF UMTS FDD V CH4183

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.900mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom With PHF - Middle/Area Scan (91x151x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.931 mW/g

Front of EUT Facing Phantom With PHF - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.8 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 1.01 W/kg

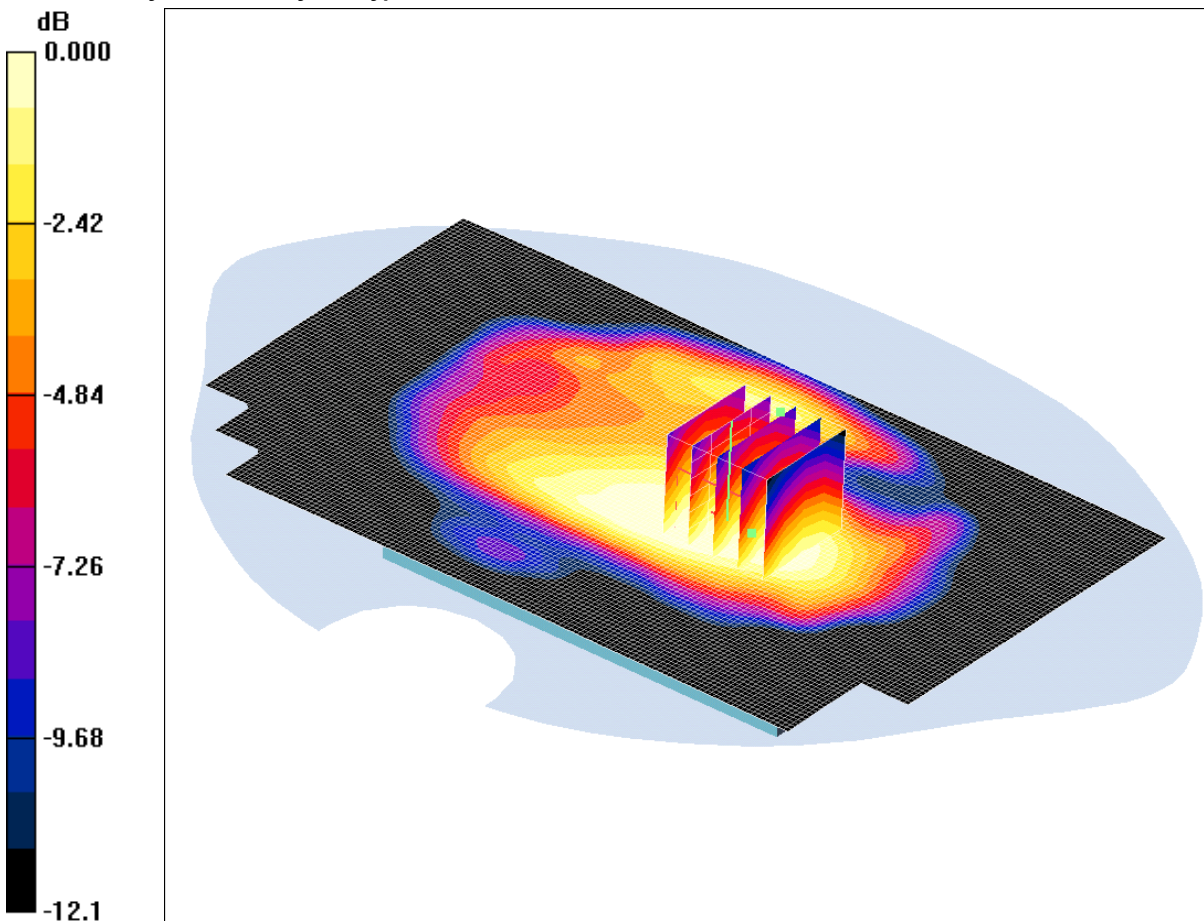
SAR(1 g) = 0.856 mW/g; SAR(10 g) = 0.650 mW/g

Maximum value of SAR (measured) = 0.900 mW/g

SCN/85119JD02/075: Front of EUT Facing Phantom With PHF UMTS FDD V CH4233

Date: 09/12/2011

DUT: Sony Ericsson Hayate; Type: SO-I12; Serial: CB511VD0D5



0 dB = 0.994mW/g

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom With PHF - Middle/Area Scan (91x151x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.07 mW/g

Front of EUT Facing Phantom With PHF - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.3 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 1.11 W/kg

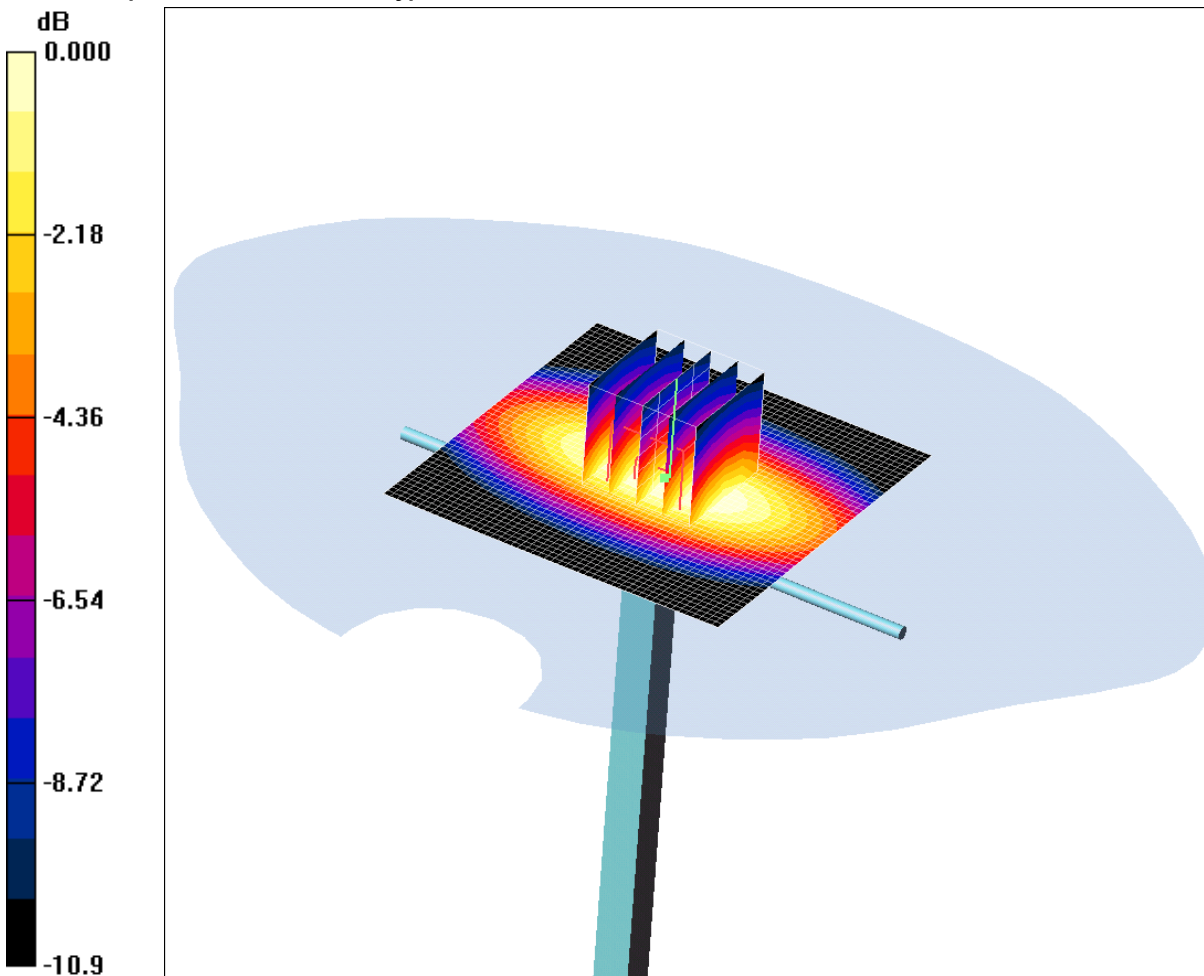
SAR(1 g) = 0.950 mW/g; SAR(10 g) = 0.731 mW/g

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

SCN/85119JD02/076: System Performance Check 900MHz Head 09 12 11

Date: 09/12/2011

DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 2.88mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.947 \text{ mho/m}$; $\epsilon_r = 42.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW 2/Area Scan (51x51x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 3.03 mW/g

d=15mm, Pin=250mW 2/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 58.0 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 3.77 W/kg

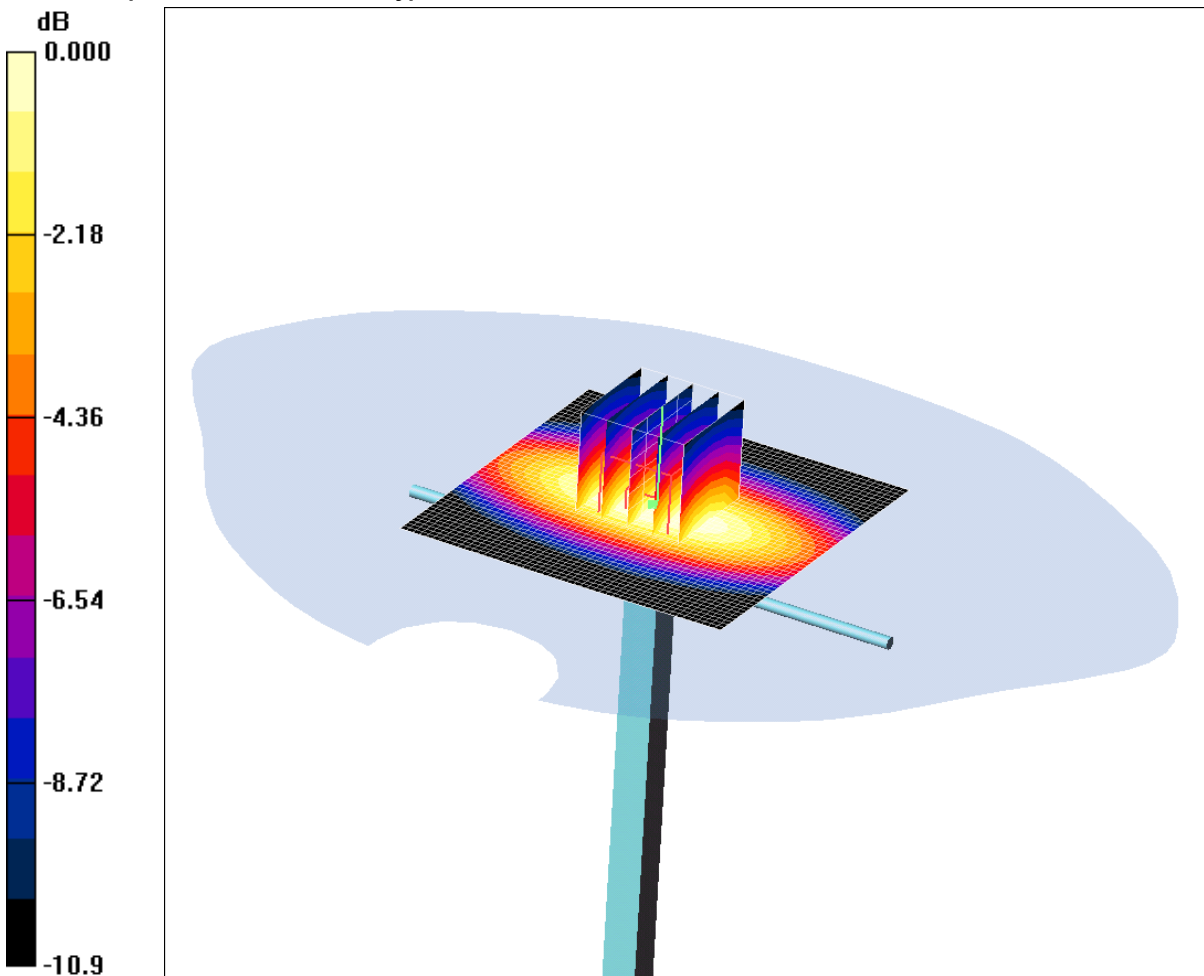
SAR(1 g) = 2.65 mW/g; SAR(10 g) = 1.74 mW/g

Maximum value of SAR (measured) = 2.88 mW/g

SCN/85119JD02/077: System Performance Check 900MHz Head 10 12 11

Date: 10/12/2011

DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 3.01mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.947 \text{ mho/m}$; $\epsilon_r = 42.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.85, 5.85, 5.85); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW 2/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.09 mW/g

d=15mm, Pin=250mW 2/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 58.2 V/m; Power Drift = 0.087 dB

Peak SAR (extrapolated) = 3.98 W/kg

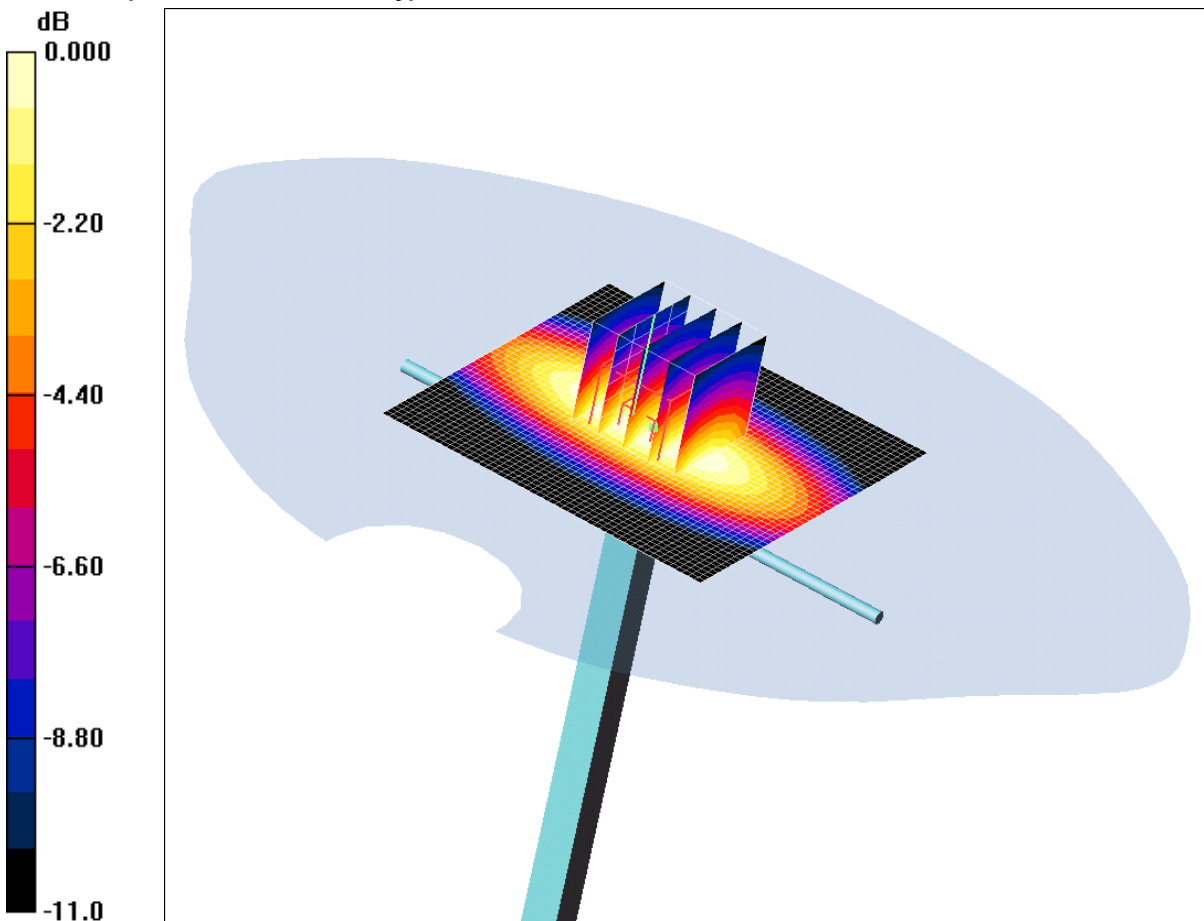
SAR(1 g) = 2.79 mW/g; SAR(10 g) = 1.82 mW/g

Maximum value of SAR (measured) = 3.01 mW/g

SCN/85119JD02/078: System Performance Check 900MHz Body 08 12 11

Date: 08/12/2011

DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 2.93mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 53$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.17 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.6 V/m; Power Drift = -0.181 dB

Peak SAR (extrapolated) = 3.85 W/kg

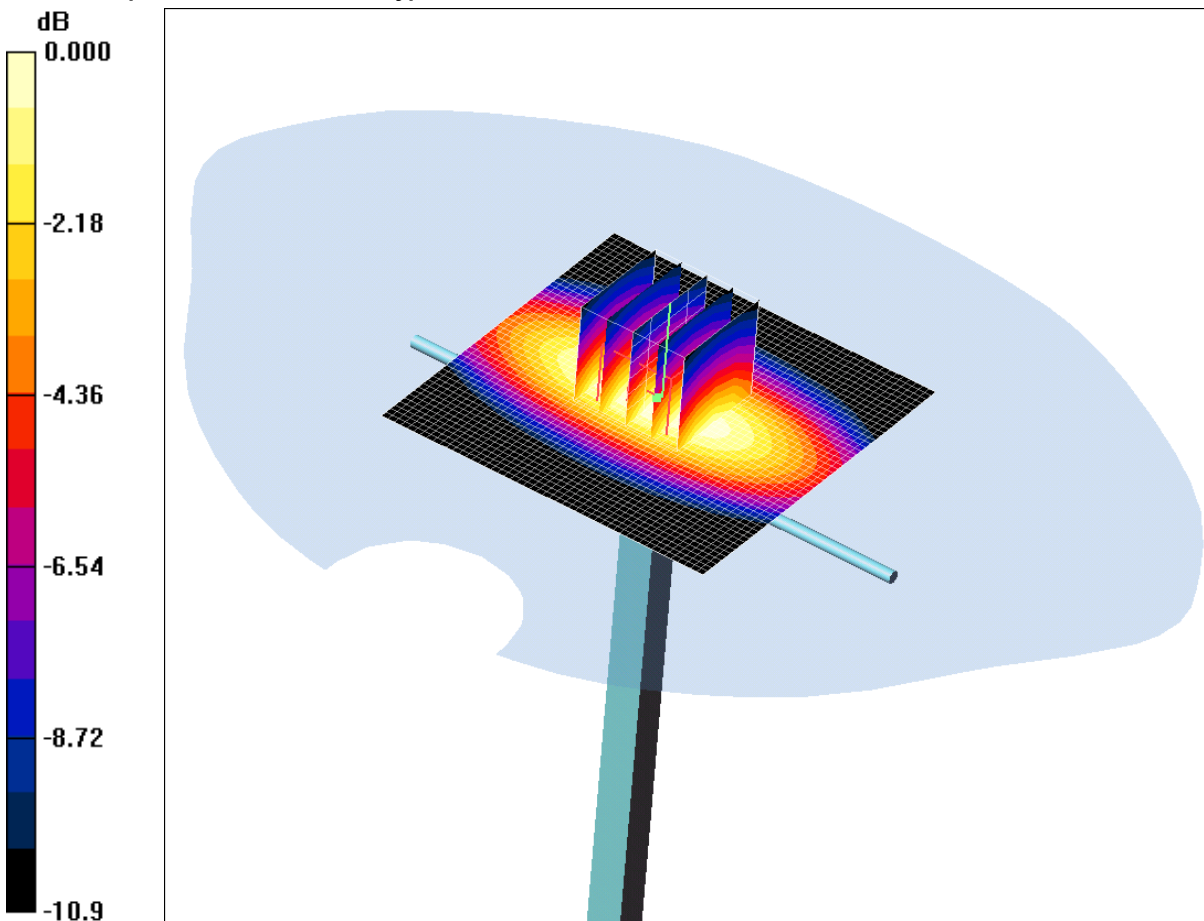
SAR(1 g) = 2.72 mW/g; SAR(10 g) = 1.77 mW/g

Maximum value of SAR (measured) = 2.93 mW/g

SCN/85119JD02/079: System Performance Check 900MHz Body 09 12 11

Date: 09/12/2011

DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 3.10mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 53$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.22 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 57.0 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 4.03 W/kg

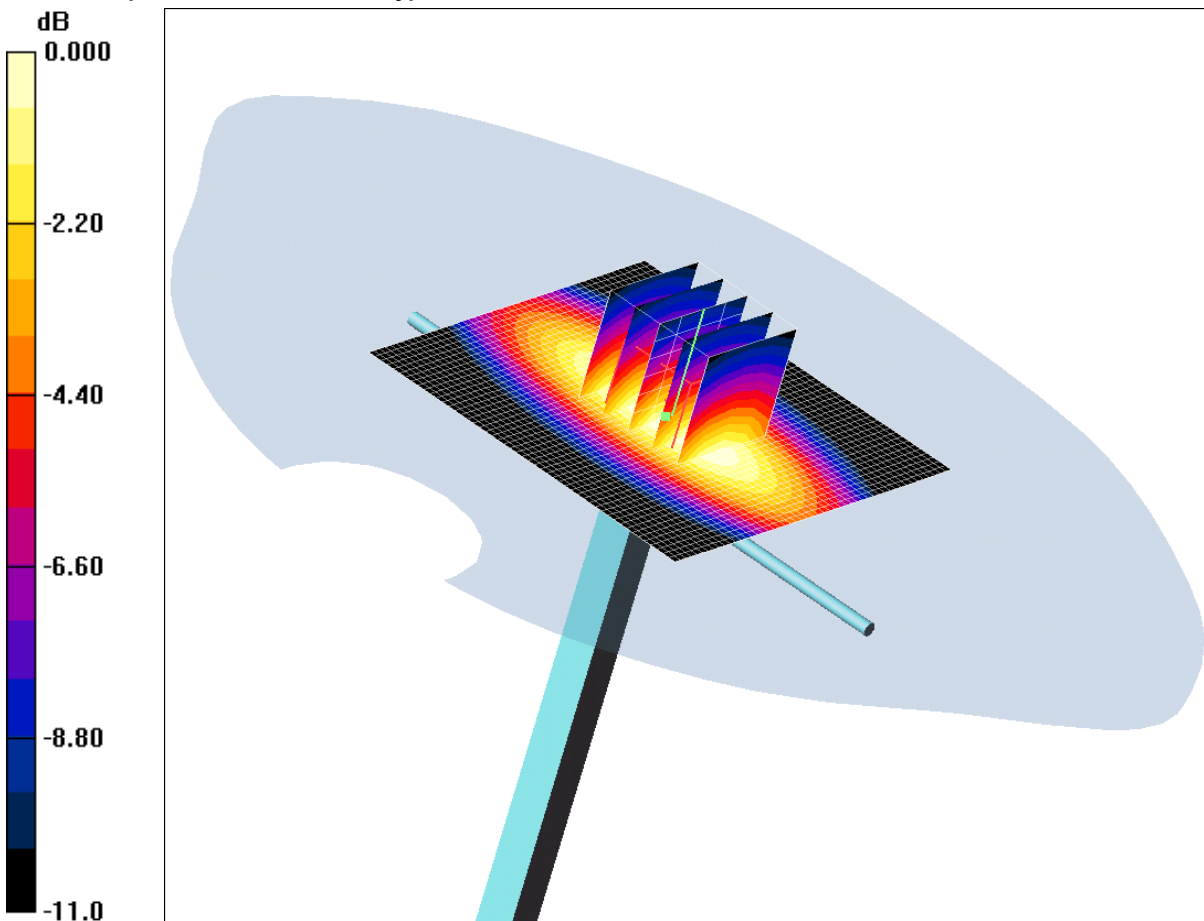
SAR(1 g) = 2.85 mW/g; SAR(10 g) = 1.86 mW/g

Maximum value of SAR (measured) = 3.10 mW/g

SCN/85119JD02/080: System Performance Check 900MHz Body 12 12 11

Date: 12/12/2011

DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 3.12mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.07 \text{ mho/m}$; $\epsilon_r = 53.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.24 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.8 V/m; Power Drift = -0.044 dB

Peak SAR (extrapolated) = 4.09 W/kg

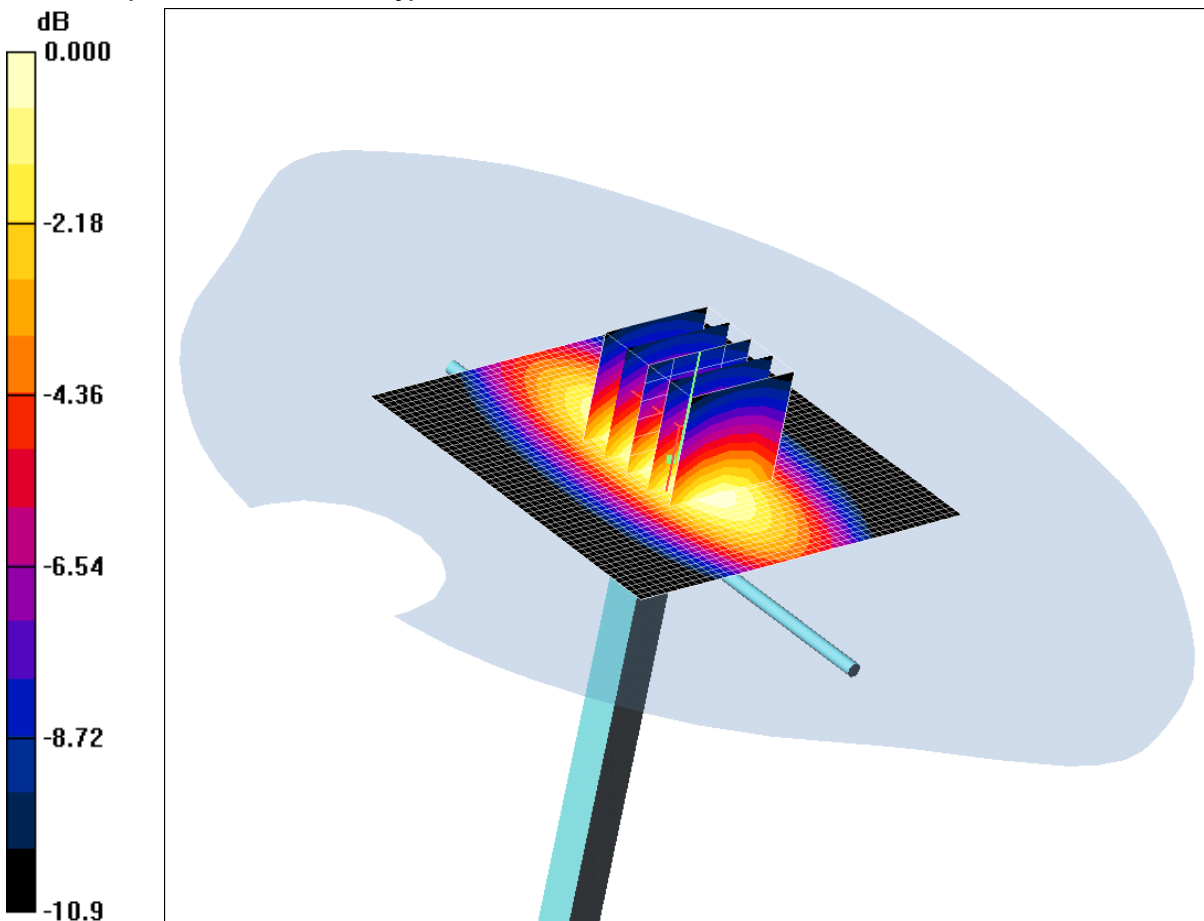
SAR(1 g) = 2.87 mW/g; SAR(10 g) = 1.86 mW/g

Maximum value of SAR (measured) = 3.12 mW/g

SCN/85119JD02/081: System Performance Check 900MHz Body 13 12 11

Date: 13/12/2011

DUT: Dipole 900 MHz; SN: 124; Type: D900V2; Serial: SN124



0 dB = 3.11mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.07 \text{ mho/m}$; $\epsilon_r = 53.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(5.77, 5.77, 5.77); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.26 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.8 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 4.03 W/kg

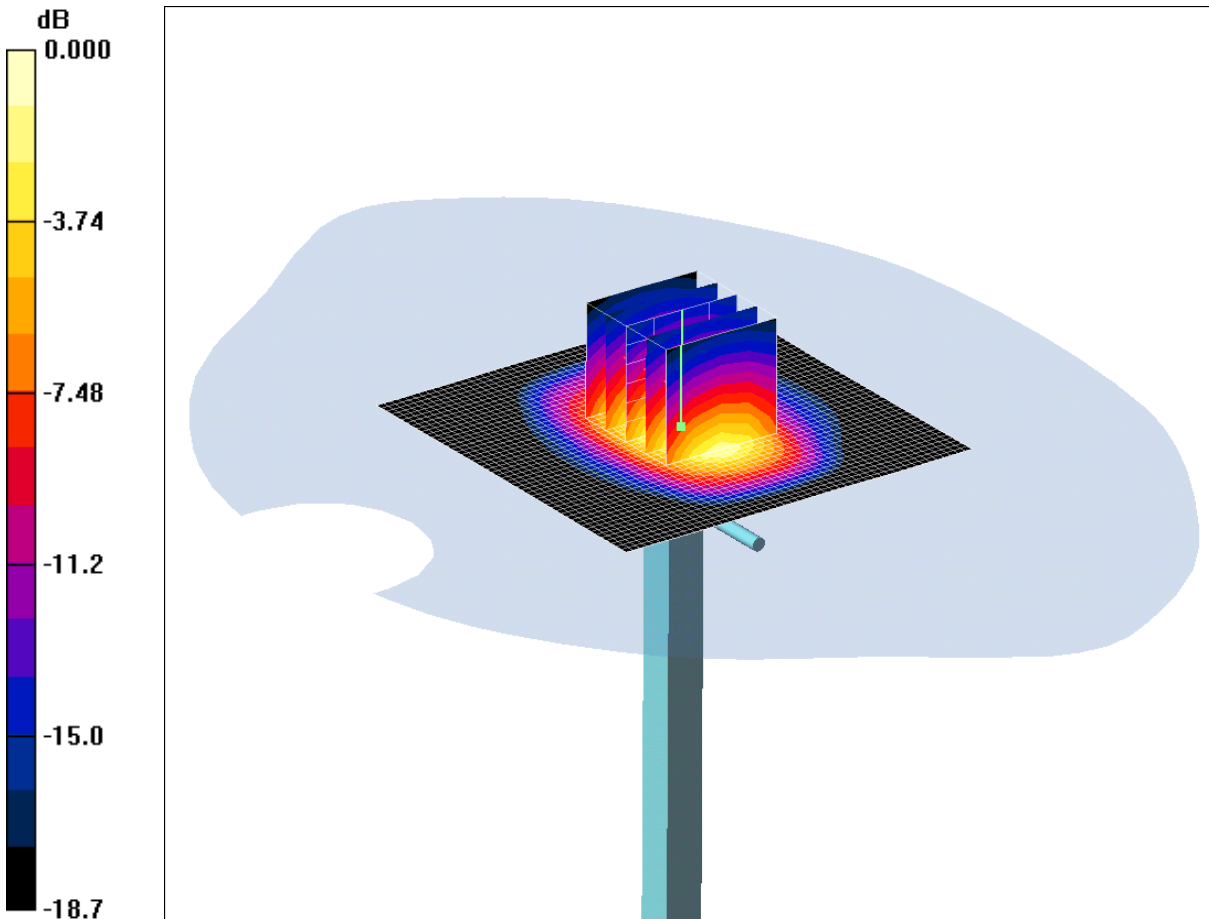
SAR(1 g) = 2.86 mW/g; SAR(10 g) = 1.87 mW/g

Maximum value of SAR (measured) = 3.11 mW/g

SCN/85119JD02/082: System Performance Check 1900MHz Head 01 12 11

Date 01/12/2011

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 11.7mW/g

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

Medium: 1900 MHz HSL Medium parameters used: $f = 1900$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.81, 4.81, 4.81); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=10mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 15.6 mW/g

d=10mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 92.4 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 18.6 W/kg

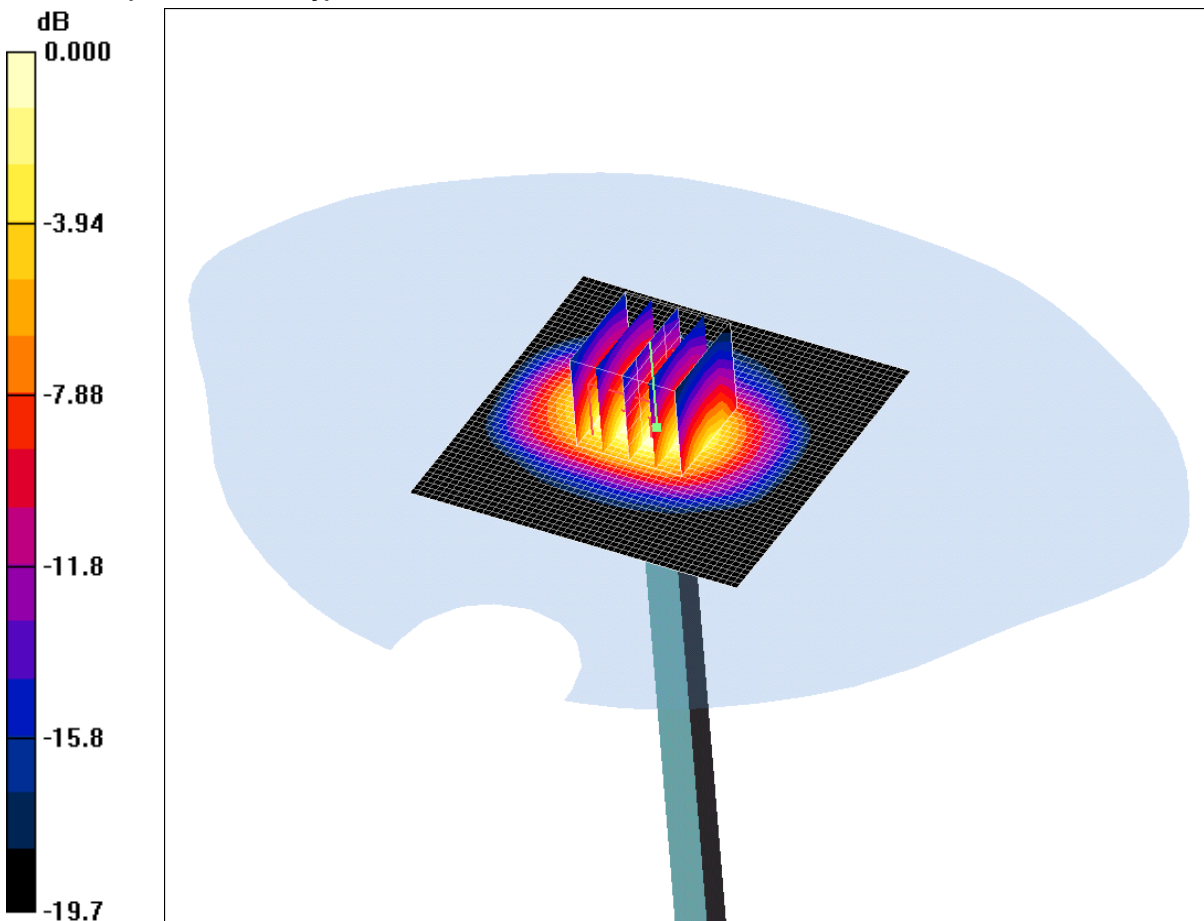
SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.35 mW/g

Maximum value of SAR (measured) = 11.7 mW/g

SCN/85119JD02/083: System Performance Check 1900MHz Head 02 12 11

Date: 02/12/2011

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 11.2mW/g

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

Medium: 1900 MHz HSL Medium parameters used: $f = 1900$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.81, 4.81, 4.81); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=10mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 14.8 mW/g

d=10mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.4 V/m; Power Drift = -0.198 dB

Peak SAR (extrapolated) = 18.4 W/kg

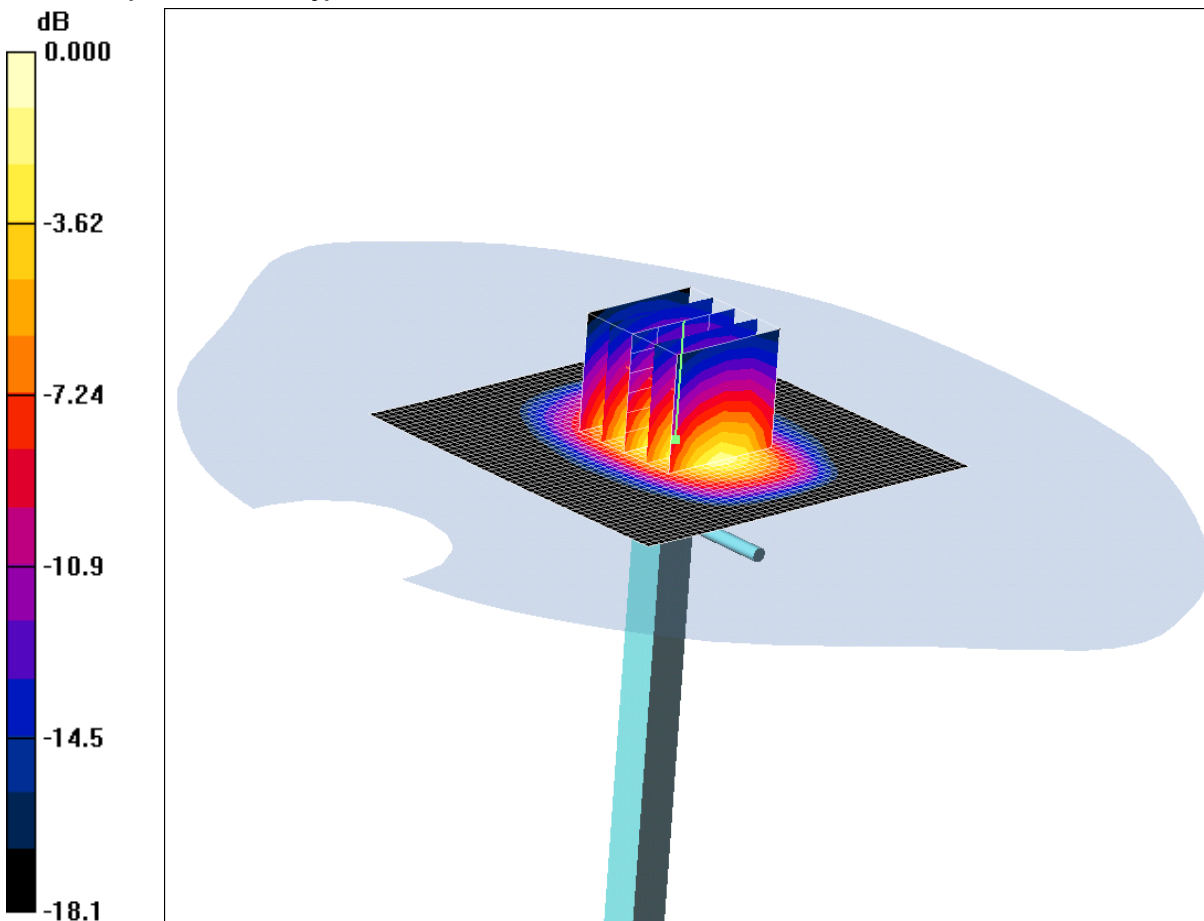
SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.33 mW/g

Maximum value of SAR (measured) = 11.2 mW/g

SCN/85119JD02/084: System Performance Check 1900MHz Body 02 12 11

Date 02/12/2011

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 11.8mW/g

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

Medium: 1900 MHz MSL Medium parameters used: $f = 1900$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=10mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 15.4 mW/g

d=10mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 91.3 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 17.7 W/kg

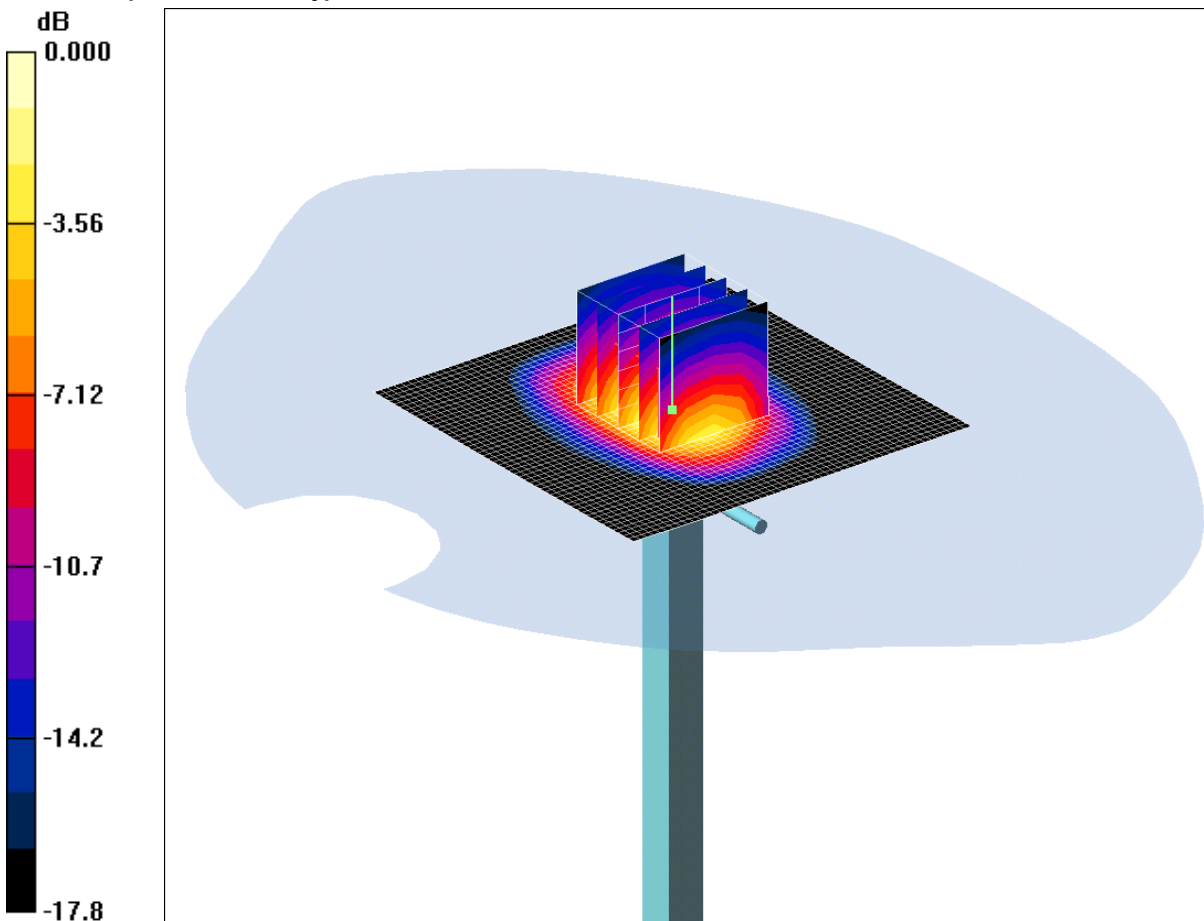
SAR(1 g) = 10.5 mW/g; SAR(10 g) = 5.52 mW/g

Maximum value of SAR (measured) = 11.8 mW/g

SCN/85119JD02/085: System Performance Check 1900MHz Body 05 12 11

Date 05/12/2011

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 11.5mW/g

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

Medium: 1900 MHz MSL Medium parameters used: $f = 1900$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1528; ConvF(4.37, 4.37, 4.37); Calibrated: 18/07/2011

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn450; Calibrated: 09/02/2011

- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=10mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 15.7 mW/g

d=10mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.5 V/m; Power Drift = -0.153 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.42 mW/g

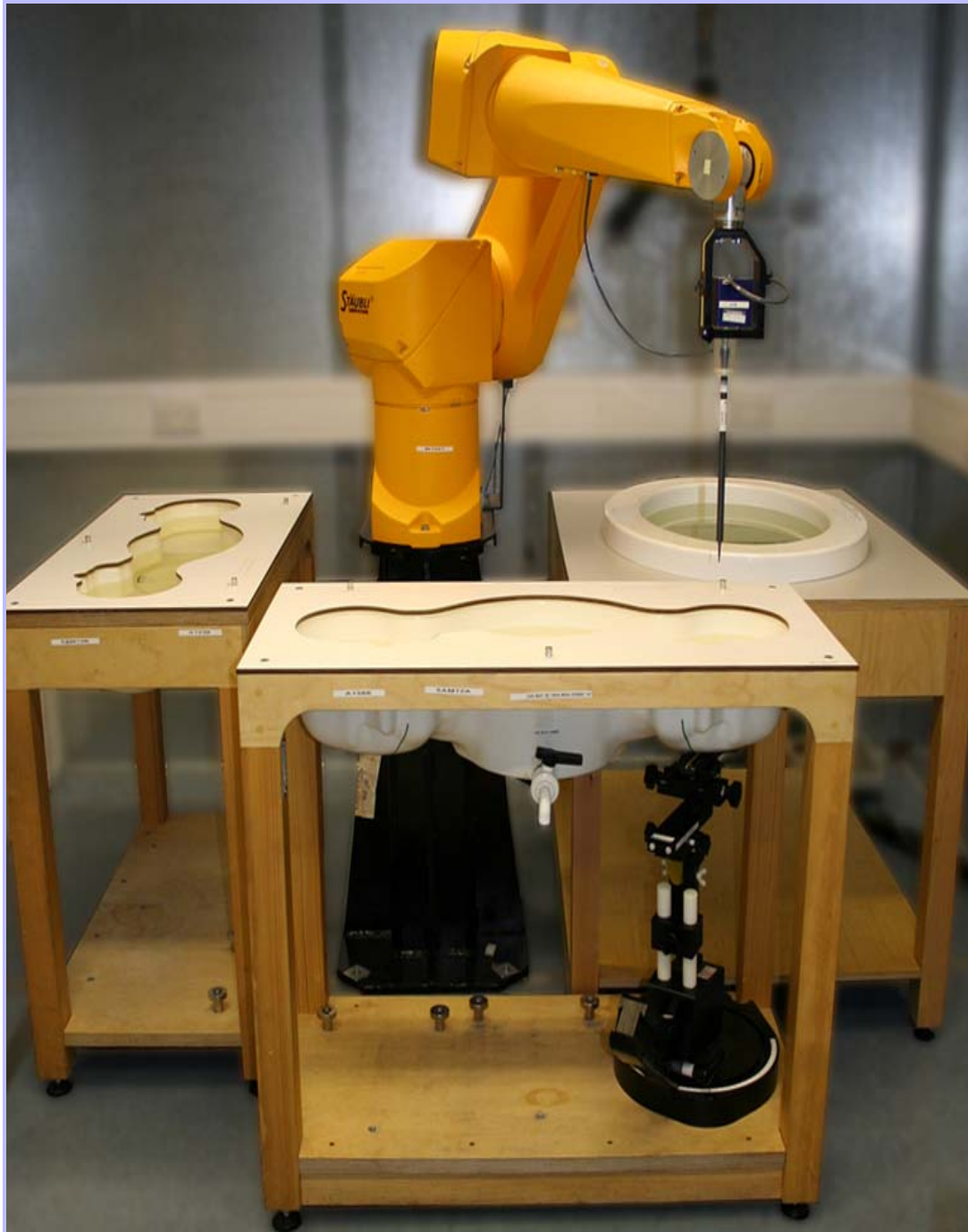
Maximum value of SAR (measured) = 11.5 mW/g

Appendix 4. Photographs

This appendix contains the following photographs:

Photo Reference Number	Title
PHT/85119JD01/001	Test configuration for the measurement of Specific Absorption Rate (SAR)
PHT/85119JD01/002	Touch Left
PHT/85119JD01/003	Tilt Left
PHT/85119JD01/004	Touch Right
PHT/85119JD01/005	Touch Right
PHT/85119JD01/006	Front of EUT Facing Phantom at 10mm Separation
PHT/85119JD01/007	Front of EUT Facing Phantom at 15mm Separation
PHT/85119JD01/008	Rear of EUT Facing Phantom at 10mm Separation
PHT/85119JD01/009	Rear of EUT Facing Phantom at 15mm Separation
PHT/85119JD01/010	Left Hand Side of EUT Facing Phantom
PHT/85119JD01/011	Right Hand Side of EUT Facing Phantom
PHT/85119JD01/012	Top of EUT Facing Phantom
PHT/85119JD01/013	Bottom of EUT Facing Phantom
PHT/85119JD01/014	General setup of EUT Facing Phantom with PHF
PHT/85119JD01/015	Front View of EUT
PHT/85119JD01/016	Rear view of EUT
PHT/85119JD01/017	Left Hand Side View of EUT
PHT/85119JD01/018	Right Hand Side View of EUT
PHT/85119JD01/019	Top View of EUT
PHT/85119JD01/020	Bottom View of EUT
PHT/85119JD01/021	Internal View of EUT (WWAN Radiated Sample)
PHT/85119JD01/022	Internal View of EUT (WLAN Radiated Sample)
PHT/85119JD01/023	Internal View of EUT (WWAN Conducted Sample)
PHT/85119JD01/024	Internal View of EUT (WLAN Conducted Sample)
PHT/85119JD01/025	PHF View
PHT/85119JD01/026	900 MHz Head Fluid Level
PHT/85119JD01/027	900 MHz Body Fluid Level
PHT/85119JD01/028	1900 MHz Head Fluid Level
PHT/85119JD01/029	1900 MHz Body Fluid Level
PHT/85119JD01/030	2450 MHz Head Fluid Level
PHT/85119JD01/031	2450 MHz Body Fluid Level

PHT/85119JD01/001: Test configuration for the measurement of Specific Absorption Rate (SAR)



PHT/85119JD01/002: Touch Left



PHT/85119JD01/003: Tilt Left



PHT/85119JD01/004: Touch Right



PHT/85119JD01/005: Tilt Right



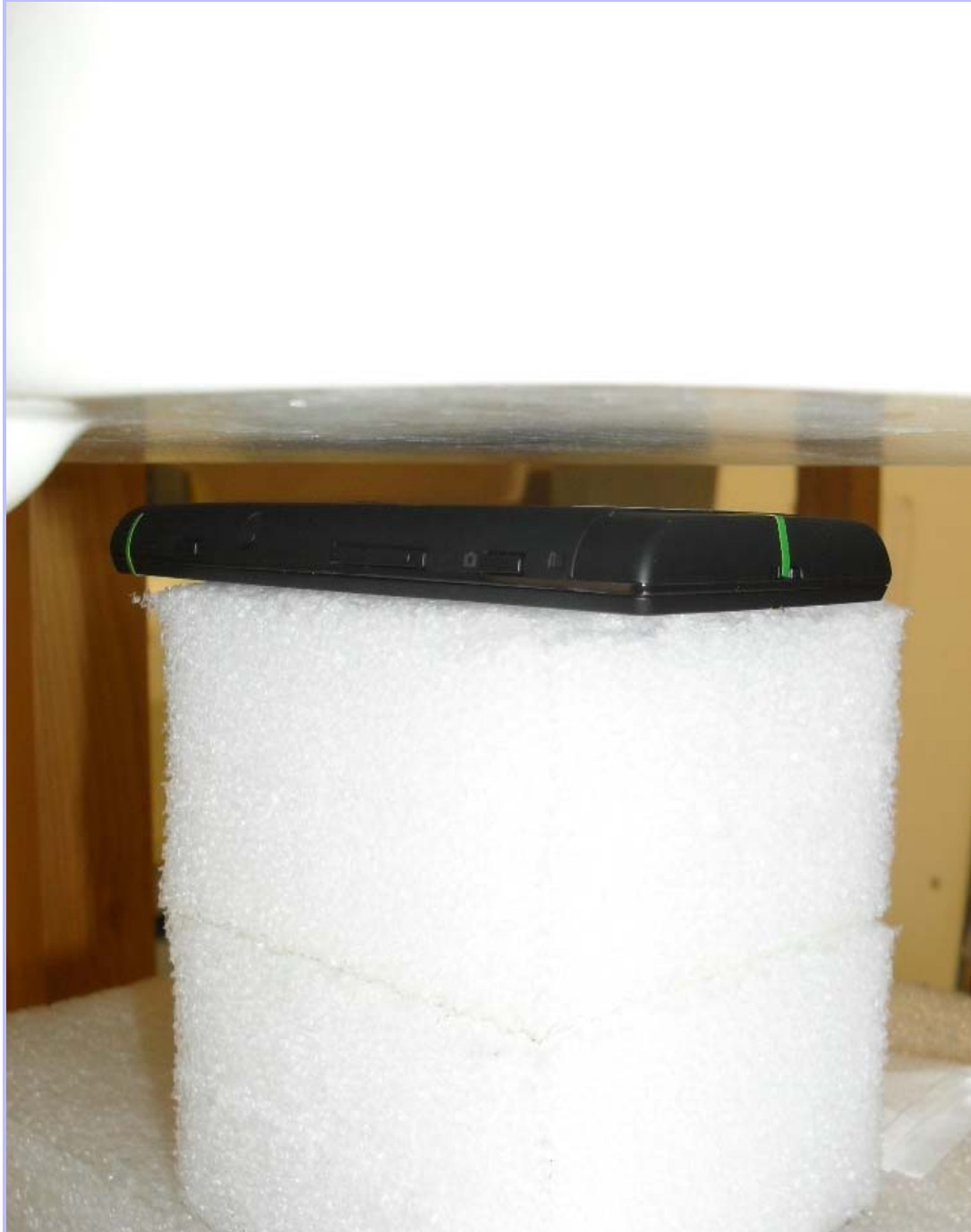
PHT/85119JD01/006: Front of EUT Facing Phantom at 10mm Separation



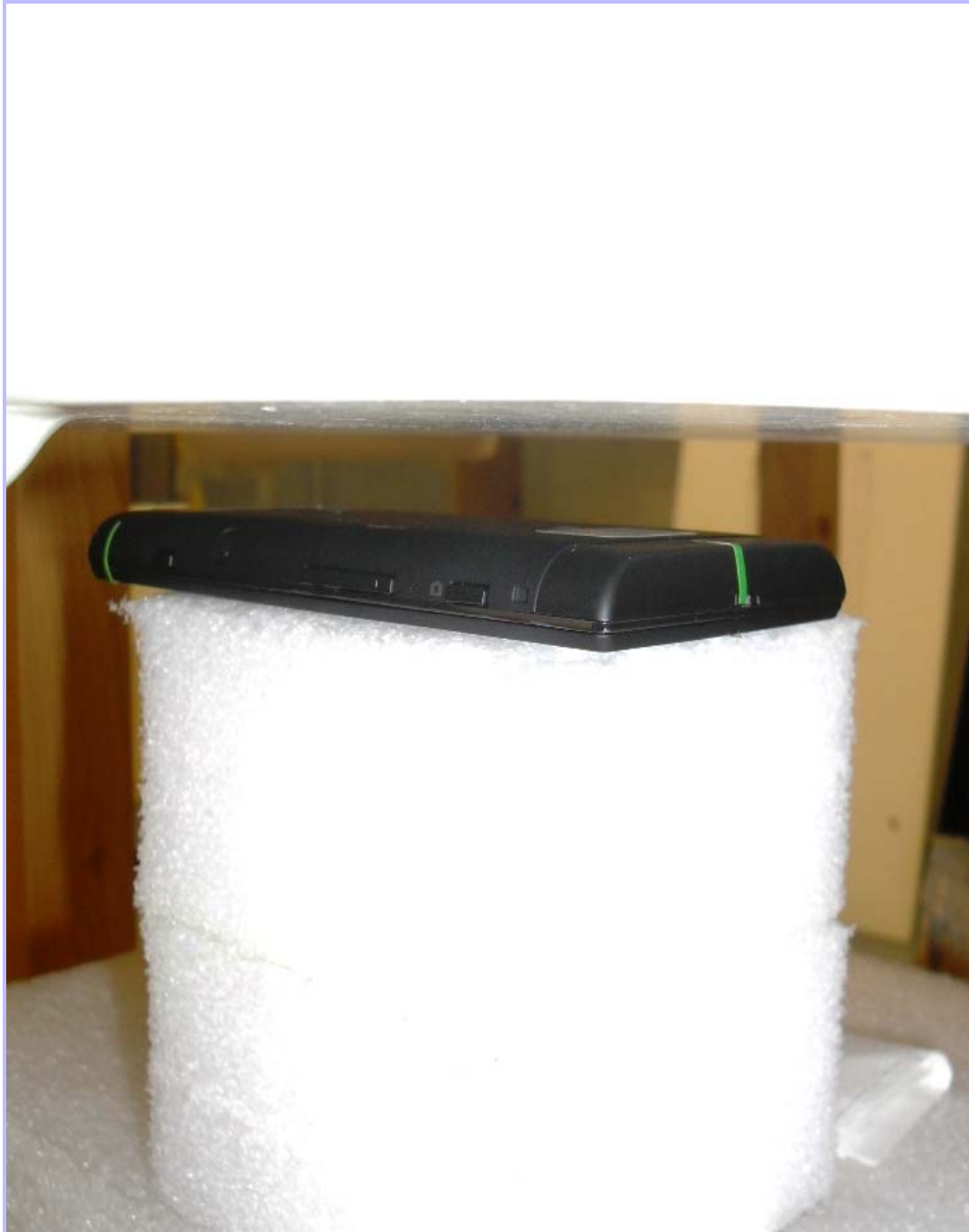
PHT/85119JD01/007: Front of EUT Facing Phantom at 15mm Separation



PHT/85119JD01/008: Rear of EUT Facing Phantom at 10mm Separation



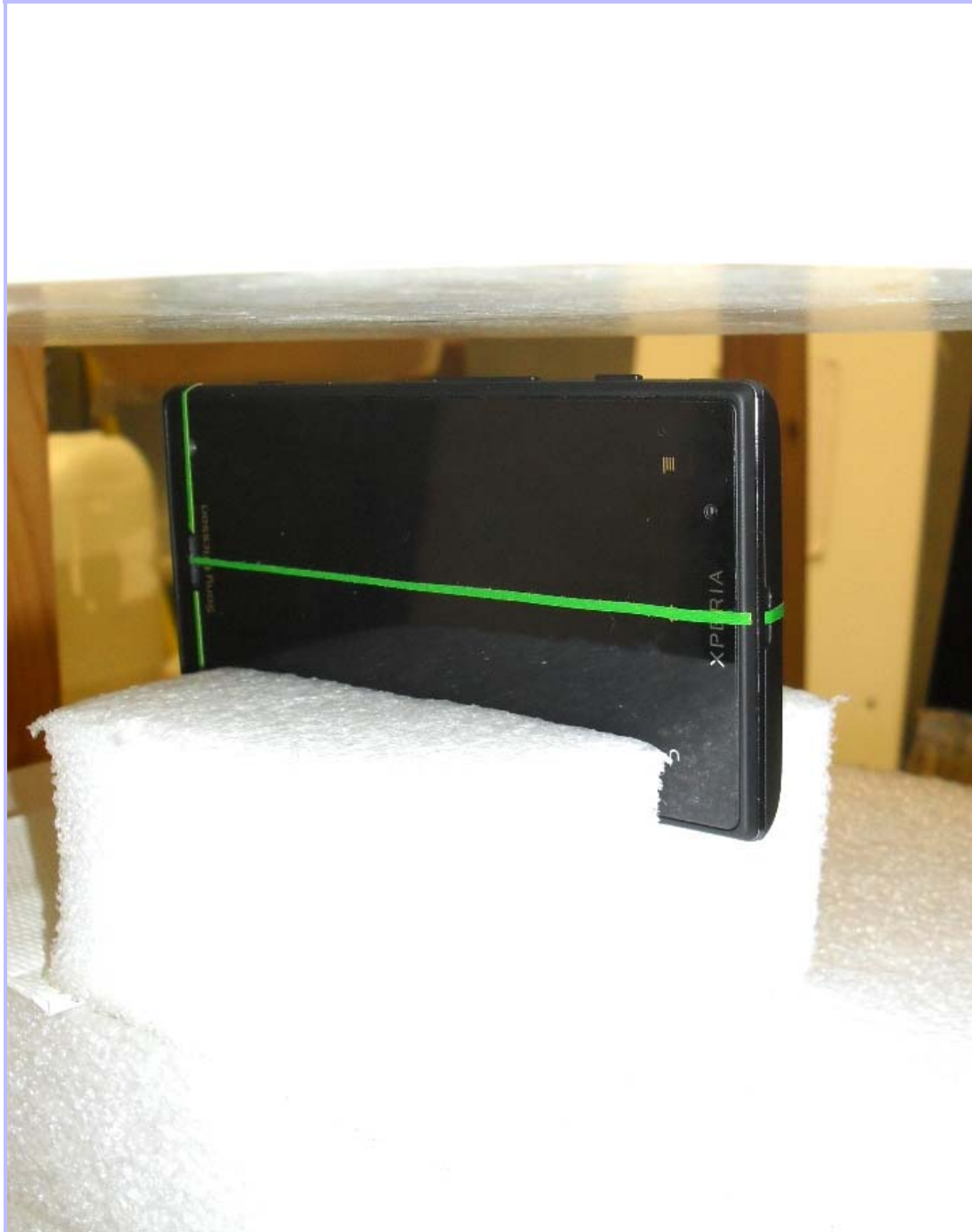
PHT/85119JD01/009: Rear of EUT Facing Phantom at 15mm Separation



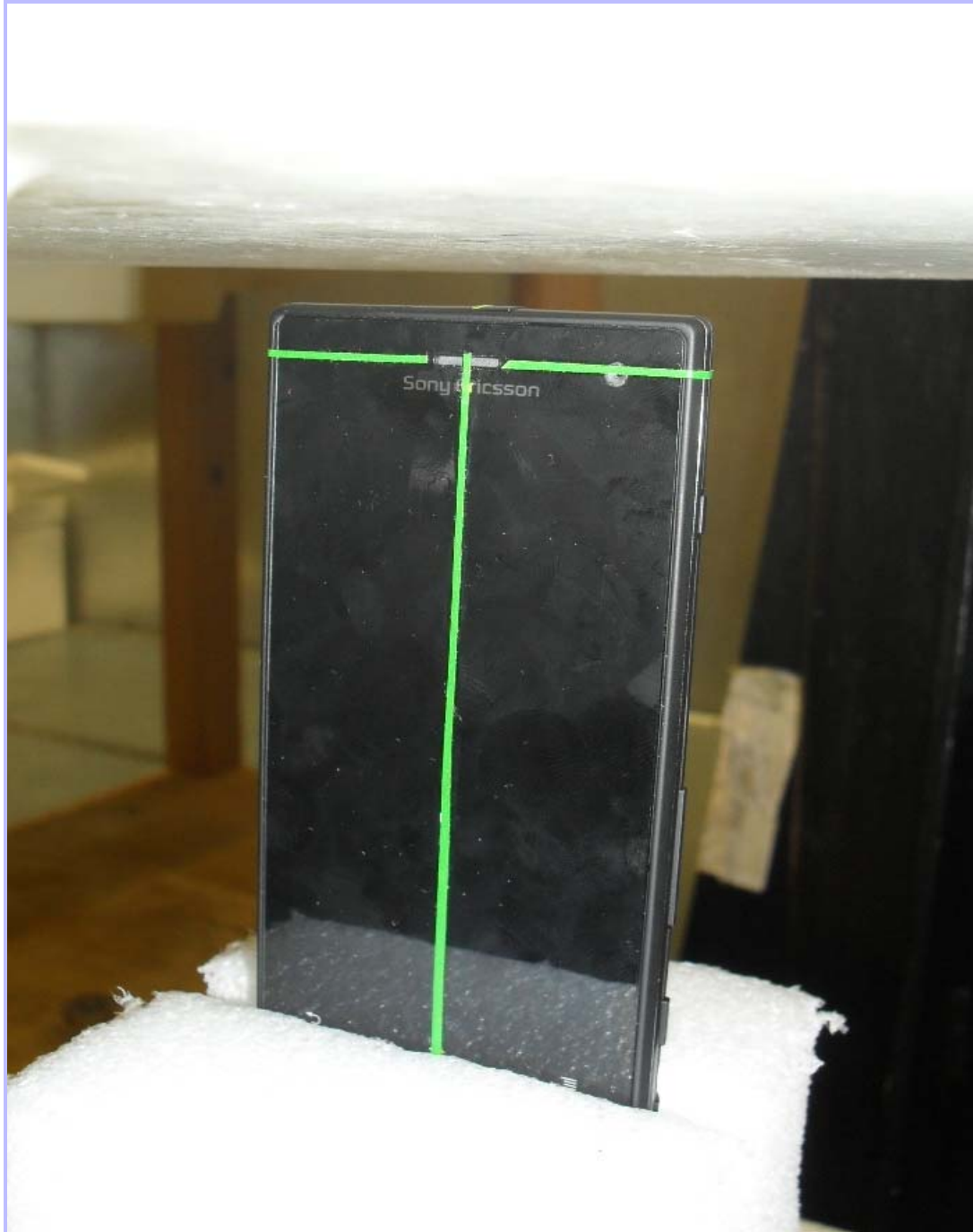
PHT/85119JD01/010: Left Hand Side of EUT Facing Phantom



PHT/85119JD01/011: Right Hand Side of EUT Facing Phantom



PHT/85119JD01/012: Top of EUT Facing Phantom



PHT/85119JD01/013: Bottom of EUT Facing Phantom



PHT/85119JD01/014: General setup of EUT Facing Phantom with PHF



PHT/85119JD01/015: Front View of EUT



PHT/85119JD01/016: Rear view of EUT



PHT/85119JD01/017: Left Hand Side View of EUT



PHT/85119JD01/018: Right Hand Side View of EUT



PHT/85119JD01/019: Top View of EUT



PHT/85119JD01/020: Bottom View of EUT



PHT/85119JD01/021: Internal View of EUT (WWAN Radiated Sample)



PHT/85119JD01/022: Internal View of EUT (WLAN Radiated Sample)



PHT/85119JD01/023: Internal View of EUT (WWAN Conducted Sample)



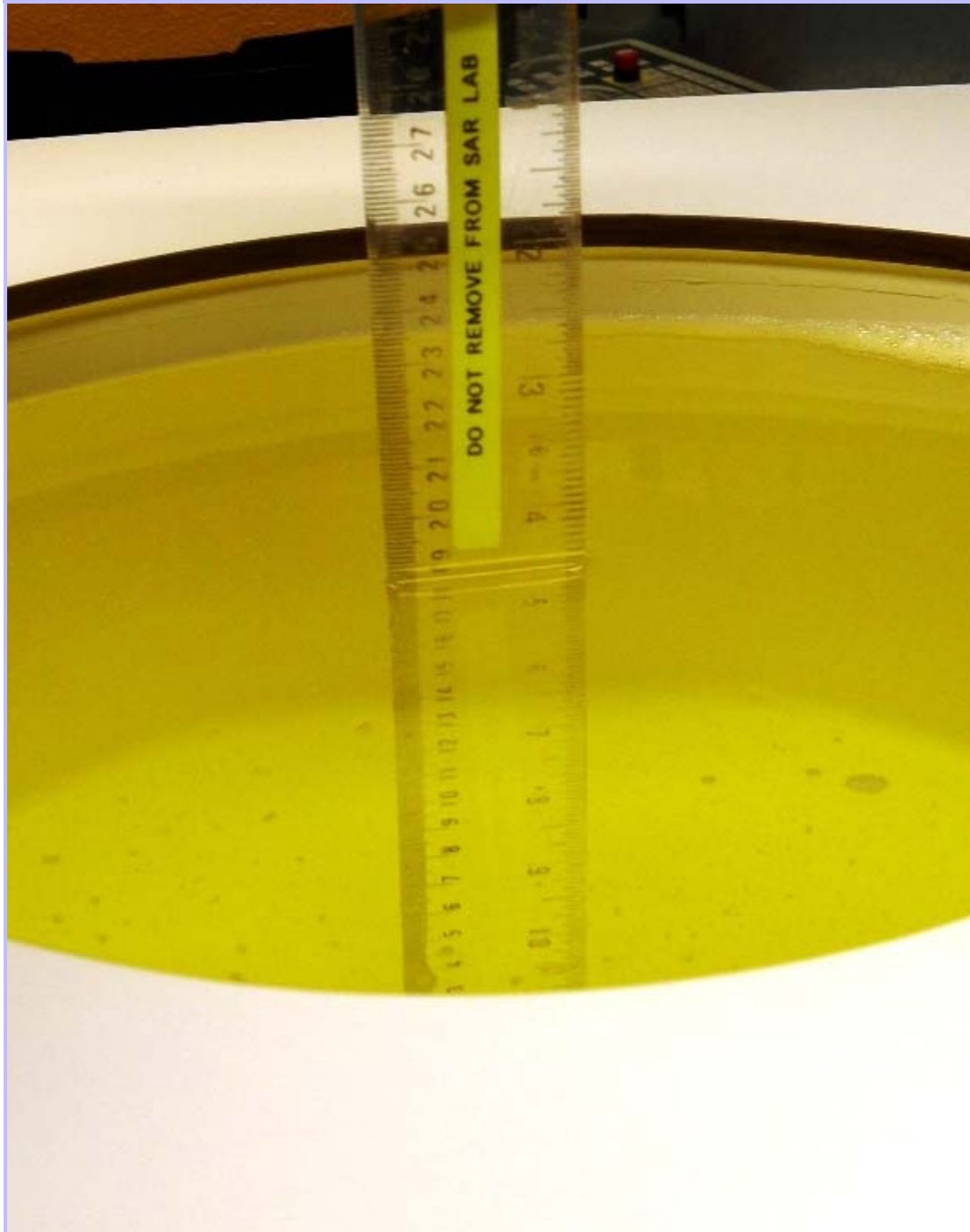
PHT/85119JD01/024: Internal View of EUT (WLAN Conducted Sample)



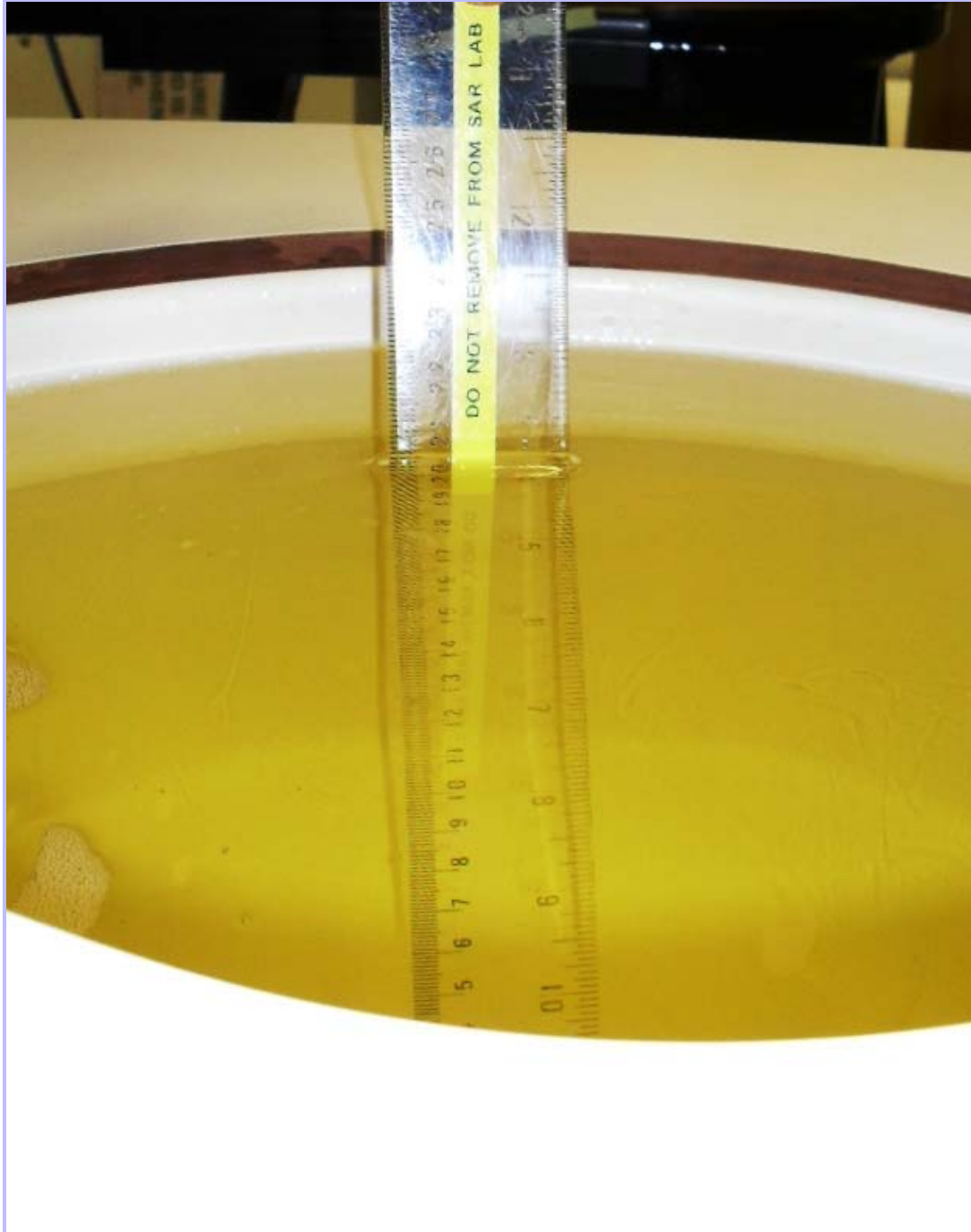
PHT/85119JD01/025: PHF View



PHT/85119JD01/026: 900 MHz Head Fluid Level



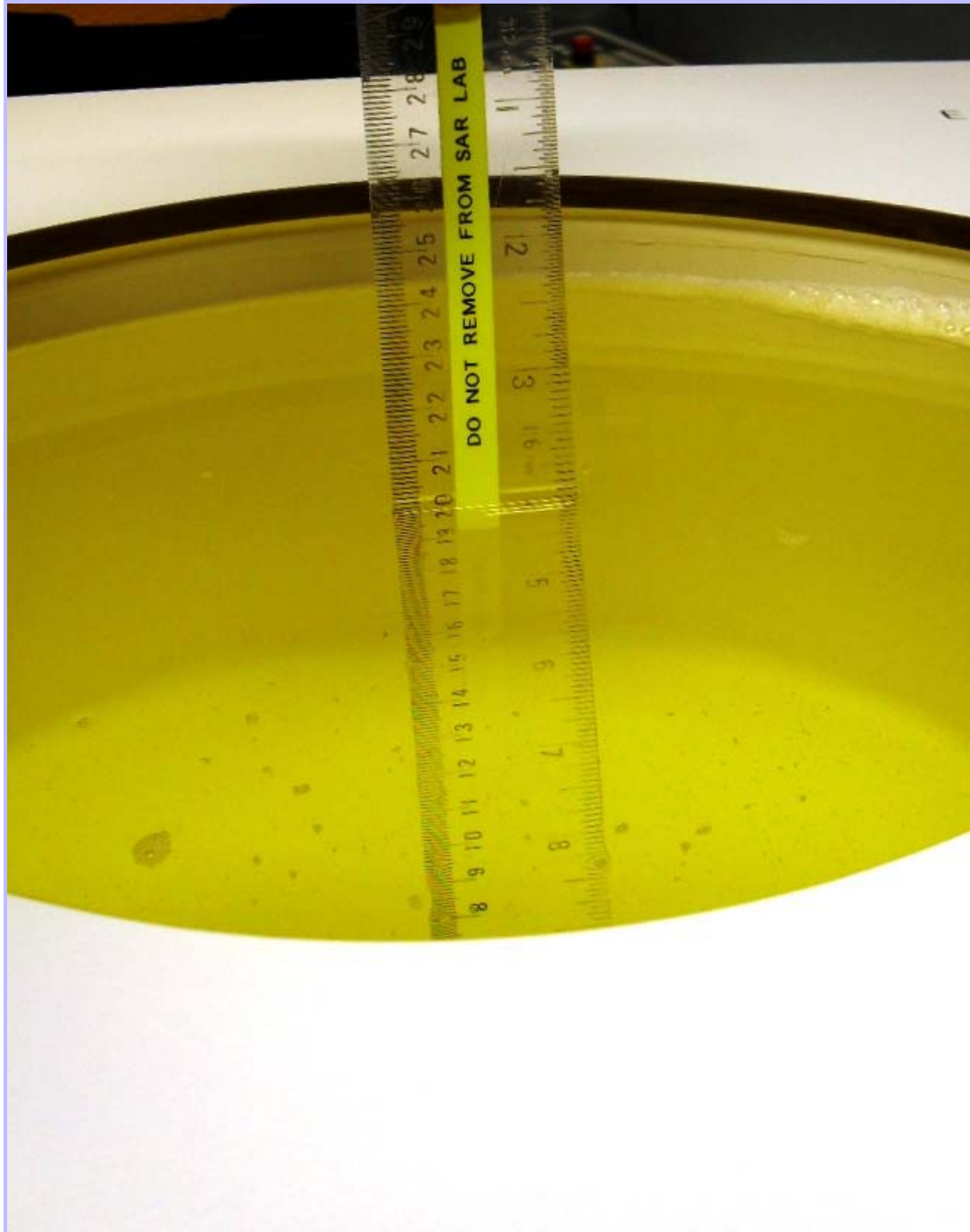
PHT/85119JD01/027: 900 MHz Body Fluid Level



PHT/85119JD01/028: 1900 MHz Head Fluid Level



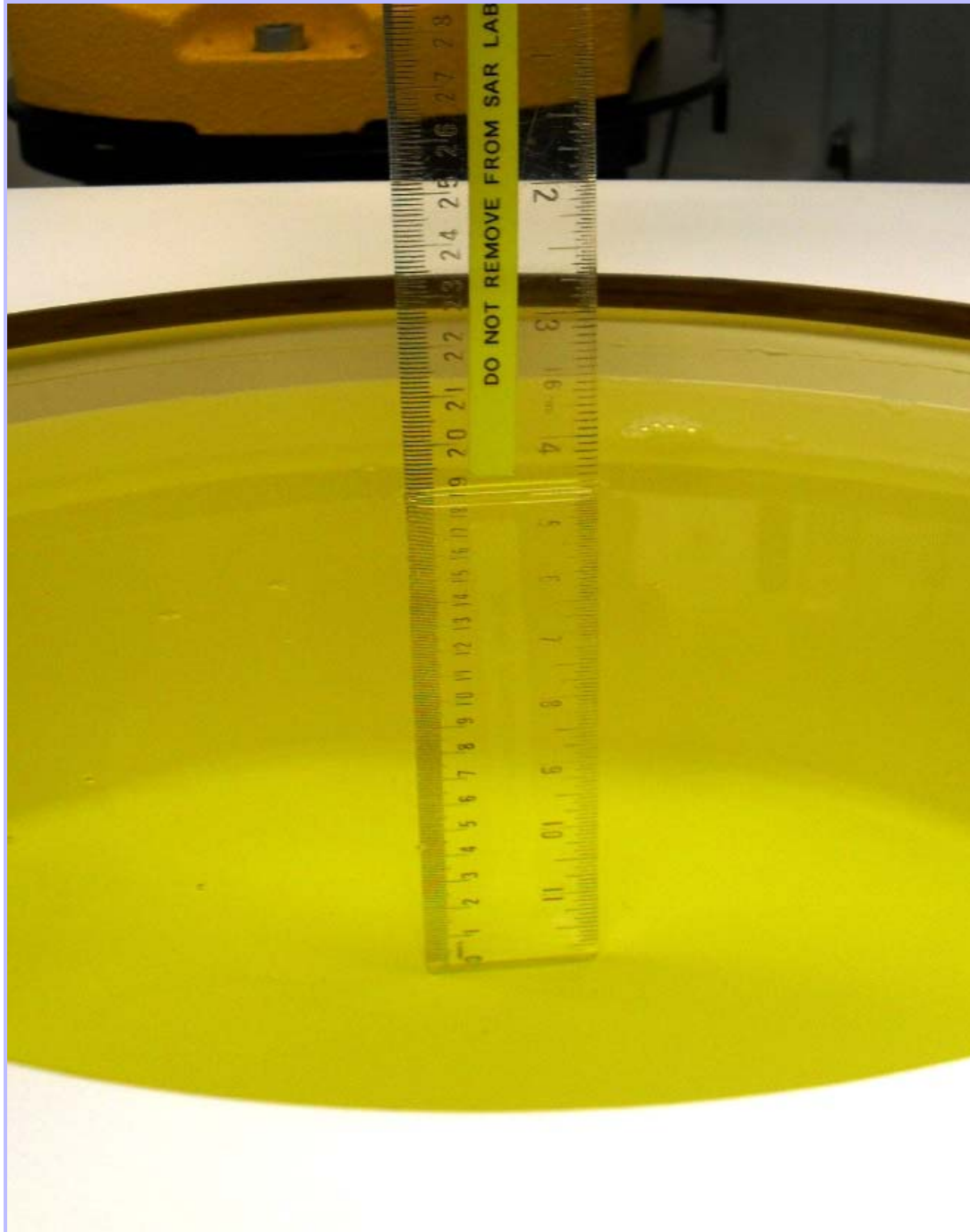
PHT/85119JD01/029: 1900 MHz Body Fluid Level



PHT/85119JD01/030: 2450 MHz Head Fluid Level



PHT/85119JD01/031: 2450 MHz Body Fluid Level



Appendix 5. Validation of System

Prior to the assessment, the system was verified in the flat region of the phantom. A 900MHz, 1900MHz and 2450MHz dipole's was used. A forward power of 250 mW was applied to the dipoles and the system was verified to a tolerance of $\pm 5\%$ for the 900MHz, 1900MHz and 2450MHz dipoles.

The applicable verification normalised to 1 Watt.

Validation of System (Continued) 850/900 Head

Date: 08/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Head	900	24.0°C	22.2°C	ϵ_r	41.50	41.27	-0.54	5.00
				σ	0.97	0.94	-2.92	5.00
				1g SAR	11.00	10.52	-4.36	5.00
				10g SAR	7.01	6.92	-1.28	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
4132	Low	826.4	ϵ_r	42.70
			σ	0.89
4183	Middle	836.6	ϵ_r	42.60
			σ	0.90
4233	High	846.6	ϵ_r	42.60
			σ	0.91

Date: 09/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Head	900	24.0°C	22.6°C	ϵ_r	41.50	42.90	3.37	5.00
				σ	0.97	0.95	-2.50	5.00
				1g SAR	11.00	10.52	-4.36	5.00
				10g SAR	7.01	6.88	-1.85	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
128	Low	824.2	ϵ_r	43.30
			σ	0.90
190	Middle	836.6	ϵ_r	43.30
			σ	0.90
251	High	848.8	ϵ_r	43.20
			σ	0.91

Validation of System (Continued)

Date: 10/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Head	900	24.0°C	22.6°C	ϵ_r	41.50	42.90	3.37	5.00
				σ	0.97	0.95	-2.50	5.00
				1g SAR	11.00	11.16	1.45	5.00
				10g SAR	7.01	7.28	3.85	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
128	Low	824.2	ϵ_r	43.30
			σ	0.90
190	Middle	836.6	ϵ_r	43.30
			σ	0.90
251	High	848.8	ϵ_r	43.20
			σ	0.91

Validation of System (Continued) 850/900 Body

Date: 08/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	900	24.0°C	22.1°C	ϵ_r	55.00	53.02	-3.61	5.00
				σ	1.05	1.04	-0.68	5.00
				1g SAR	11.10	10.88	-1.98	5.00
				10g SAR	7.14	7.08	-0.84	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
4132	Low	826.4	ϵ_r	53.30
			σ	1.00
4183	Middle	836.6	ϵ_r	53.30
			σ	1.00
4233	High	846.6	ϵ_r	53.20
			σ	1.01

Date: 09/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	900	24.0°C	22.1°C	ϵ_r	55.00	53.02	-3.61	5.00
				σ	1.05	1.04	-0.68	5.00
				1g SAR	11.10	11.40	2.70	5.00
				10g SAR	7.14	7.44	4.20	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
4132	Low	826.4	ϵ_r	53.30
			σ	1.00
4183	Middle	836.6	ϵ_r	53.30
			σ	1.00
4233	High	846.6	ϵ_r	53.20
			σ	1.01

Validation of System (Continued) 850/900 Body

Date: 12/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	900	23.0°C	23.0°C	ϵ_r	55.00	53.13	-3.41	5.00
				σ	1.05	1.06	1.30	5.00
				1g SAR	11.10	11.48	3.42	5.00
				10g SAR	7.14	7.44	4.20	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
128	Low	824.2	ϵ_r	53.40
			σ	1.02
190	Middle	836.6	ϵ_r	53.40
			σ	1.02
251	High	848.8	ϵ_r	53.30
			σ	1.03

Date: 13/12/2011

Validation Dipole and Serial Number: D900V2; SN: 124

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	900	24.0°C	22.4°C	ϵ_r	55.00	53.08	-3.50	5.00
				σ	1.05	1.06	0.93	5.00
				1g SAR	11.10	11.44	3.06	5.00
				10g SAR	7.14	7.48	4.76	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
128	Low	824.2	ϵ_r	53.40
			σ	1.02
190	Middle	836.6	ϵ_r	53.40
			σ	1.02
251	High	848.8	ϵ_r	53.30
			σ	1.03

Validation of System (Continued) 1900 Head

Date: 01/12/2011

Validation Dipole and Serial Number: D1900V2; SN: 540

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Head	1900	24.0°C	23.1°C	ϵ_r	40.00	38.76	-3.10	5.00
				Σ	1.40	1.44	3.19	5.00
				1g SAR	40.30	41.20	2.23	5.00
				10g SAR	21.00	21.40	1.90	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
512	Low	1850.2	ϵ_r	38.90
			σ	1.40
661	Middle	1880	ϵ_r	38.80
			σ	1.43
810	High	1909.8	ϵ_r	38.70
			σ	1.46

Date: 02/12/2011

Validation Dipole and Serial Number: D1900V2; SN: 540

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Head	1900	24.0°C	22.1°C	ϵ_r	40.00	38.69	-3.29	5.00
				Σ	1.40	1.44	2.81	5.00
				1g SAR	40.30	40.80	1.24	5.00
				10g SAR	21.00	21.32	1.52	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
512	Low	1850.2	ϵ_r	38.90
			σ	1.40
661	Middle	1880	ϵ_r	38.80
			σ	1.42
810	High	1909.8	ϵ_r	38.60
			σ	1.45

Validation of System (Continued) 1900 Body

Date: 02/12/2011

Validation Dipole and Serial Number: D1900V2: SN: 540

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	1900	24.0°C	24.1°C	ϵ_r	53.30	51.37	-3.62	5.00
				σ	1.52	1.57	3.12	5.00
				1g SAR	40.70	42.00	3.19	5.00
				10g SAR	21.60	22.08	2.22	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
512	Low	1850.2	ϵ_r	51.50
			σ	1.52
661	Middle	1880	ϵ_r	51.40
			σ	1.55
810	High	1909.8	ϵ_r	51.40
			σ	1.58

Date: 05/12/2011

Validation Dipole and Serial Number: D1900V2: SN: 540

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	1900	24.0°C	23.5°C	ϵ_r	53.30	51.48	-3.42	5.00
				σ	1.52	1.56	2.51	5.00
				1g SAR	40.70	40.80	0.25	5.00
				10g SAR	21.60	21.68	0.37	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
512	Low	1850.2	ϵ_r	51.60
			σ	1.52
661	Middle	1880	ϵ_r	51.50
			σ	1.54
810	High	1909.8	ϵ_r	51.40
			σ	1.57

Validation of System (Continued) 2450 Head

Date: 16/12/2011

Validation Dipole and Serial Number: D2450V2; SN: 725

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Head	2450	24.0°C	22.3°C	ϵ_r	39.20	38.49	-1.82	5.00
				Σ	1.80	1.82	1.36	5.00
				1g SAR	52.90	54.40	2.84	5.00
				10g SAR	24.70	24.80	0.40	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
1	Low	2412	ϵ_r	38.6
			σ	1.78
6	Middle	2437	ϵ_r	38.5
			σ	1.81
11	High	2462	ϵ_r	38.4
			σ	1.84

Validation of System (Continued) 2540 Body

Date: 17/12/2011

Validation Dipole and Serial Number: D2450V2; SN: 725

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	2450	24.0 °C	22.5 °C	ϵ_r	52.70	50.92	-3.37	5.00
				σ	1.95	2.02	3.65	5.00
				1g SAR	51.90	54.00	4.05	5.00
				10g SAR	24.10	25.00	3.73	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
1	Low	2412	ϵ_r	51.00
			σ	1.98
6	Middle	2437	ϵ_r	51.00
			σ	2.01
11	High	2462	ϵ_r	50.90
			σ	2.04

Date: 18/12/2011

Validation Dipole and Serial Number: D2450V2; SN: 725

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	2450	24.0 °C	22.5 °C	ϵ_r	52.70	50.92	-3.37	5.00
				σ	1.95	2.02	3.65	5.00
				1g SAR	51.90	51.20	-1.35	5.00
				10g SAR	24.10	23.72	-1.58	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
1	Low	2412	ϵ_r	51.00
			σ	1.98
6	Middle	2437	ϵ_r	51.00
			σ	2.01
11	High	2462	ϵ_r	50.90
			σ	2.04

Validation of System (Continued) 2450 Body

Date: 19/12/2011

Validation Dipole and Serial Number: D2450V2; SN: 725

Simulant	Frequency (MHz)	Room Temp	Liquid Temp	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
Body	2450	24.0 °C	23.9 °C	ϵ_r	52.70	50.62	-3.96	5.00
				σ	1.95	2.00	2.55	5.00
				1g SAR	51.90	52.00	0.19	5.00
				10g SAR	24.10	23.68	-1.74	5.00

Dielectrics for Frequencies Tested

Channel Number	Channel Description	Frequency (MHz)	Parameters	
			ϵ_r	σ
1	Low	2412	ϵ_r	50.70
			σ	1.95
6	Middle	2437	ϵ_r	50.60
			σ	1.99
11	High	2462	ϵ_r	50.60
			σ	2.02

Appendix 6. Simulated Tissues

The body mixture consists of water and glycol. Visual inspection is made to ensure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the tissue.

ingredient	Frequency
	835/850/900 MHz Head
De-ionized Water	52.87
Polysorbate 20 (Tween 20)	46.10
Salt	1.03

Ingredient	Frequency
	835/850/900 MHz Body
De-ionized Water	71.30
Polysorbate 20 (Tween 20)	28.00
Salt	0.70

Ingredient	Frequency
	1800/1900 MHz Head
De-ionized Water	55.40
Polysorbate 20 (Tween 20)	44.22
Salt	0.38

Ingredient	Frequency
	1800/1900 MHz Body
De-ionized Water	71.50
Polysorbate 20 (Tween 20)	28.00
Salt	0.50

Ingredient	Frequency
	2450 MHz Head
De-ionized Water	55.75
Polysorbate 20 (Tween 20)	45.25

Ingredient	Frequency
	2450 MHz Body
De-ionized Water	71.70
Polysorbate 20 (Tween 20)	28.00
Salt	0.30

Appendix 7. DASY4 System Details

A.7.1. DASY4 SAR Measurement System

RFI Global Services Ltd, SAR measurement facility utilises the Dosimetric Assessment System (DASY™) manufactured by Schmid & Partner Engineering AG (SPEAG™) of Zurich, Switzerland. The DASY4 system is comprised of the robot controller, computer, near-field probe, probe alignment sensor, and the SAM phantom containing brain or muscle equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF). A cell controller system contains the power supply, robot controller; teach pendant (Joystick), and remote control. This is used to drive the robot motors. The Staubli robot is connected to the cell controller to allow software manipulation of the robot. The data acquisition electronics (DAE) performs signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection etc. The DAE is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card. The DAE3 utilises a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16-bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe-mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

A.7.2. DASY4 SAR System Specifications

Robot System	
Positioner:	Stäubli Unimation Corp. Robot Model: RX90L
Repeatability:	0.025 mm
No. of Axis:	6
Serial Number:	F00/SD89A1/A/01
Reach:	1185 mm
Payload:	3.5 kg
Control Unit:	CS7
Programming Language:	V+
Data Acquisition Electronic (DAE) System	
Serial Number:	DAE3 SN:450
PC Controller	
PC:	Dell Precision 340
Operating System:	Windows 2000
Data Card:	DASY4 Measurement Server
Serial Number:	1080
Data Converter	
Features:	Signal Amplifier, multiplexer, A/D converted and control logic.
Software:	DASY4 Software
Connecting Lines:	Optical downlink for data and status info. Optical uplink for commands and clock.
PC Interface Card	
Function:	24 bit (64 MHz) DSP for real time processing Link to DAE3 16 nit A/D converter for surface detection system serial link to robot direct emergency stop output for robot.

DASY4 SAR System Specifications (Continued)	
E-Field Probe	
Model:	EX3DV3
Serial No:	3814
Construction:	Triangular core
Frequency:	10 MHz to >6 GHz
Linearity:	±0.2 dB (30 MHz to 6 GHz)
Probe Length (mm):	330
Probe Diameter (mm):	12
Tip Length (mm):	20
Tip Diameter (mm):	2.5
Sensor X Offset (mm):	1
Sensor Y Offset (mm):	1
Sensor Z Offset (mm):	1
E-Field Probe	
Model:	ET3DV6
Serial No:	1528
Construction:	Triangular core
Frequency:	735 MHz to >2.00 GHz
Linearity:	±0.2 dB (735 MHz to 2.00 GHz)
Probe Length (mm):	337
Probe Diameter (mm):	10
Tip Length (mm):	10
Tip Diameter (mm):	6.8
Sensor X Offset (mm):	2.7
Sensor Y Offset (mm):	2.7
Sensor Z Offset (mm):	2.7
Phantom	
Phantom:	SAM Phantom
Shell Material:	Fibreglass
Thickness:	2.0 ±0.1 mm