

APPENDIX A: SYSTEM CHECKING SCANS

Plot1:

Date/Time: 2014-09-05 10:33:18 AM

Test Laboratory: TCC Microsoft

Type: D835V2; Serial: 4d005

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Head 835 SAR3; Medium Notes: Medium Temperature: $t=21.6$

Medium parameters used: $f = 835$ MHz; $\sigma = 0.868$ S/m; $\epsilon_r = 40.128$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3838
- ConvF(9.2, 9.2, 9.2); Calibrated: 2014-03-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2014-03-24
- Phantom: SAR3 - SAM3; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.8 (7028)

d=15mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 51.314 V/m

Fast SAR: SAR(1 g) = 2.16 W/kg

Fast SAR(10 g) = 1.47 W/kg

Maximum value of SAR (interpolated) = 2.32 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 51.314 V/m

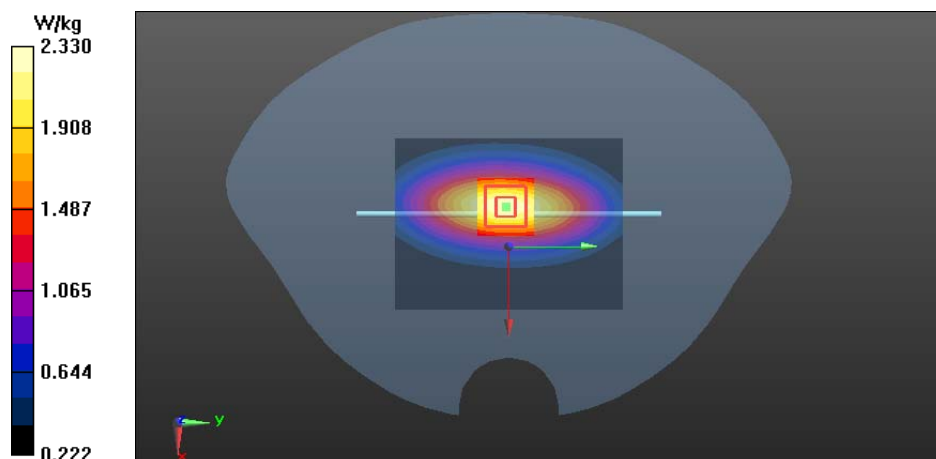
Peak SAR (extrapolated) = 3.21 W/kg

SAR(1 g) = 2.17 W/kg

SAR(10 g) = 1.43 W/kg

Power Drift = -0.06 dB

Maximum value of SAR (measured) = 2.33 W/kg



Plot2:

Date/Time: 2014-09-02 10:20:27 AM

Test Laboratory: TCC Microsoft

Type: D1900V2; Serial: 547

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: Head 1900 SAR1; Medium Notes: Medium Temperature: $t=21.1$ C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.451$ S/m; $\epsilon_r = 38.642$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3195
- ConvF(5.08, 5.08, 5.08); Calibrated: 2014-03-20;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2014-03-12
- Phantom: SAR1 - SAM3; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

d=10mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 88.801 V/m

Fast SAR: SAR(1 g) = 9.73 W/kg

Fast SAR(10 g) = 5.11 W/kg

Maximum value of SAR (interpolated) = 11.3 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 88.801 V/m

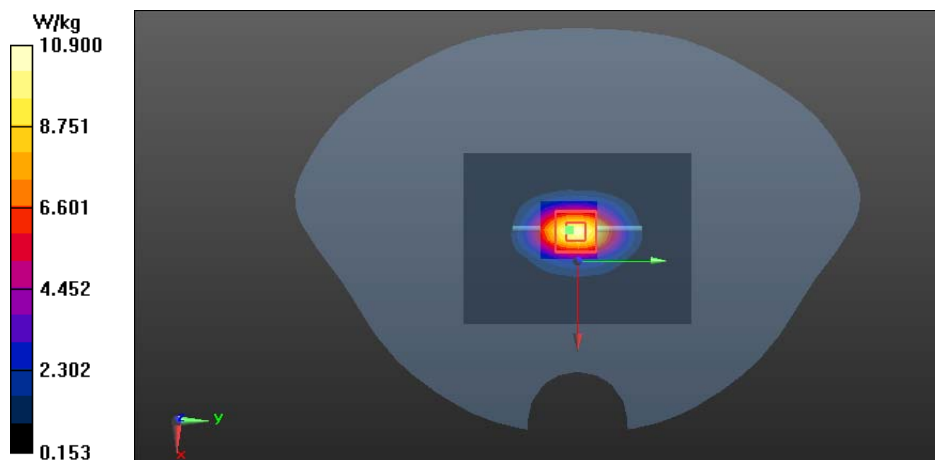
Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 9.64 W/kg

SAR(10 g) = 4.95 W/kg

Power Drift = -0.16 dB

Maximum value of SAR (measured) = 10.9 W/kg



Plot3:

Date/Time: 2014-08-26 9:22:12 AM

Test Laboratory: TCC Microsoft

Type: D2450V2; Serial: D2450V2 - SN:760

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Head 2450 SAR2; Medium Notes: Medium Temperature: $t=21.2^{\circ}\text{C}$

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.81 \text{ S/m}$; $\epsilon_r = 38.216$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3823
- ConvF(6.85, 6.85, 6.85); Calibrated: 2013-09-19;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1319; Calibrated: 2013-09-18
- Phantom: SAR2 - SAM2; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

d=10mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 87.594 V/m

Fast SAR: SAR(1 g) = 12.8 W/kg

Fast SAR(10 g) = 5.7 W/kg

Maximum value of SAR (interpolated) = 14.9 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 87.594 V/m

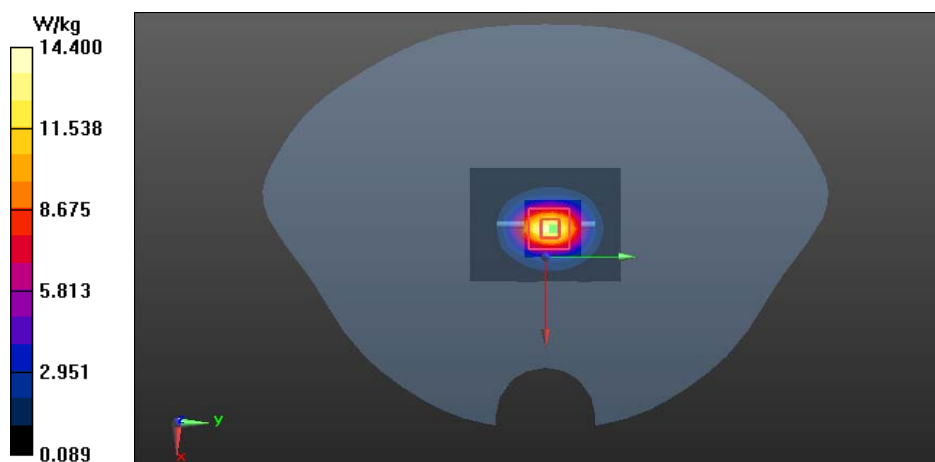
Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 12.8 W/kg

SAR(10 g) = 5.91 W/kg

Power Drift = 0.06 dB

Maximum value of SAR (measured) = 14.4 W/kg



Plot4:

Date/Time: 2014-09-05 10:02:38 AM

Test Laboratory: TCC Microsoft

Type: D2600V2; Serial: D2600V2 - SN:1042

Communication System: CW2600

Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: Head 2600 SAR4; Medium Notes: Medium Temperature: $t=21.5^{\circ}\text{C}$

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.007 \text{ S/m}$; $\epsilon_r = 37.477$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3280
- ConvF(4.35, 4.35, 4.35); Calibrated: 2014-03-20;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn887; Calibrated: 2014-03-31
- Phantom: SAR4 - SAM3; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

d=10mm, Pin=250mW/Area Scan (61x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 91.611 V/m

Fast SAR: SAR(1 g) = 15.1 W/kg

Fast SAR(10 g) = 6.87 W/kg

Maximum value of SAR (interpolated) = 17.7 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.611 V/m

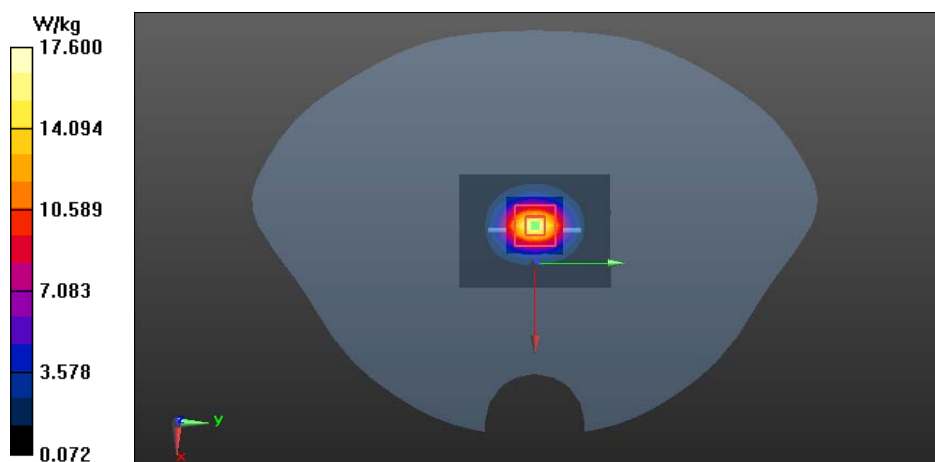
Peak SAR (extrapolated) = 34.3 W/kg

SAR(1 g) = 15.3 W/kg

SAR(10 g) = 6.72 W/kg

Power Drift = 0.03 dB

Maximum value of SAR (measured) = 17.6 W/kg



Plot5:

Date/Time: 2014-08-28 10:14:05 AM

Test Laboratory: TCC Microsoft

Type: D835V2; Serial: 4d005

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Body 835 SAR3; Medium Notes: Medium Temperature: $t=21.2$

Medium parameters used: $f = 835$ MHz; $\sigma = 0.949$ S/m; $\epsilon_r = 53.867$; $\rho = 1000$ kg/m³

Phantom section: Center Section

DASY Configuration:

- Probe: EX3DV4 - SN3838
- ConvF(8.97, 8.97, 8.97); Calibrated: 2014-03-21;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2014-03-24
- Phantom: SAR3 - TFP; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.8 (7028)

d=15mm, Pin=250mW/Area Scan (81x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 52.388 V/m

Fast SAR: SAR(1 g) = 2.4 W/kg

Fast SAR(10 g) = 1.63 W/kg

Maximum value of SAR (interpolated) = 2.59 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

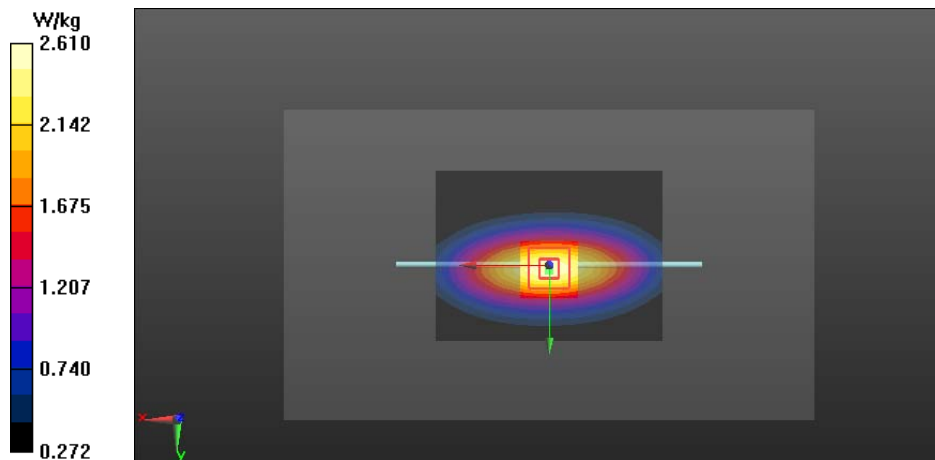
Reference Value = 52.388 V/m

Peak SAR (extrapolated) = 3.54 W/kg

SAR(1 g) = 2.42 W/kg

Maximum value of SAR (measured) = 2.61 W/kg

Power Drift = -0.00 dB



Plot6:

Date/Time: 2014-09-03 9:32:06 AM

Test Laboratory: TCC Microsoft
Type: D1900V2; Serial: 547

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: Body 1900 SAR1; Medium Notes: Medium Temperature: $t=21.2^{\circ}\text{C}$

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.5 \text{ S/m}$; $\epsilon_r = 50.748$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Center Section

DASY Configuration:

- Probe: ES3DV3 - SN3195
- ConvF(4.64, 4.64, 4.64); Calibrated: 2014-03-20;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1324; Calibrated: 2014-03-12
- Phantom: SAR1 - TFP; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

d=10mm, Pin=250mW/Area Scan (81x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 86.612 V/m

Fast SAR: SAR(1 g) = 9.82 W/kg

Fast SAR(10 g) = 5.1 W/kg

Maximum value of SAR (interpolated) = 11.8 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

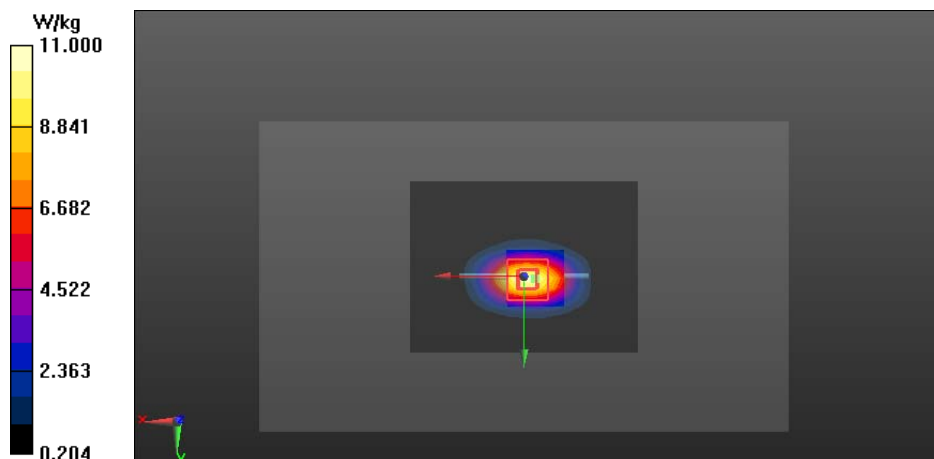
Reference Value = 86.612 V/m

Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 9.77 W/kg

Maximum value of SAR (measured) = 11.0 W/kg

Power Drift = -0.00 dB



Plot7:

Date/Time: 2014-09-03 9:44:57 AM

Test Laboratory: TCC Microsoft

Type: D2450V2; Serial: D2450V2 - SN:883

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Body 2450 SAR4; Medium Notes: Medium Temperature: $t=21.8^{\circ}\text{C}$

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.929 \text{ S/m}$; $\epsilon_r = 50.758$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Center Section

DASY Configuration:

- Probe: ES3DV3 - SN3280
- ConvF(4.2, 4.2, 4.2); Calibrated: 2014-03-20;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn887; Calibrated: 2014-03-31
- Phantom: SAR4 - TFP; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

d=10mm, Pin=250mW/Area Scan (81x61x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 90.741 V/m

Fast SAR: SAR(1 g) = 13.6 W/kg

Fast SAR(10 g) = 6.01 W/kg

Maximum value of SAR (interpolated) = 15.7 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

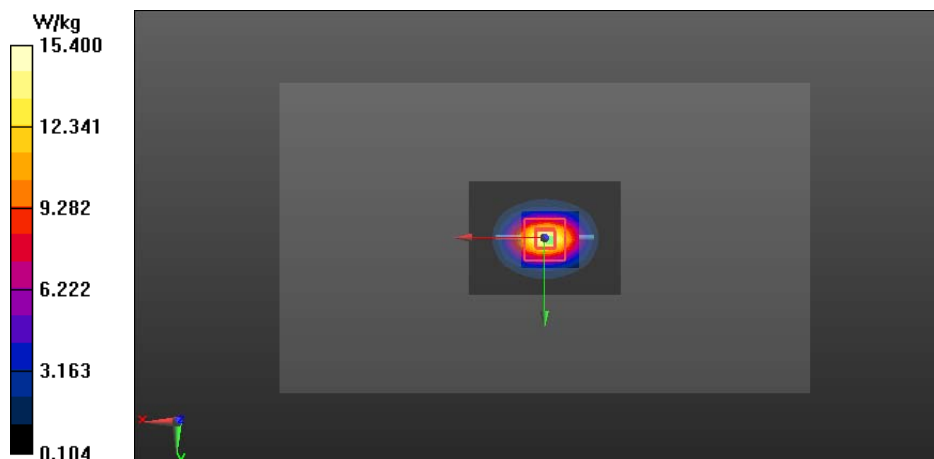
Reference Value = 90.741 V/m

Peak SAR (extrapolated) = 28.3 W/kg

SAR(1 g) = 13.6 W/kg

Maximum value of SAR (measured) = 15.4 W/kg

Power Drift = 0.01 dB



Plot8:

Date/Time: 2014-09-04 9:49:10 AM

Test Laboratory: TCC Microsoft

Type: D2600V2; Serial: D2600V2 - SN:1082

Communication System: CW2600

Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: Body 2450 SAR4; Medium Notes: Medium Temperature: t=21.5C

Medium parameters used: f = 2600 MHz; σ = 2.151 S/m; ϵ_r = 51.139; ρ = 1000 kg/m³

Phantom section: Center Section

DASY Configuration:

- Probe: ES3DV3 - SN3280
- ConvF(3.99, 3.99, 3.99); Calibrated: 2014-03-20;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn887; Calibrated: 2014-03-31
- Phantom: SAR4 - TFP; Type: Not Specified; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

d=10mm, Pin=250mW/Area Scan (81x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 89.349 V/m

Fast SAR: SAR(1 g) = 14.7 W/kg

Fast SAR(10 g) = 6.56 W/kg

Maximum value of SAR (interpolated) = 17.0 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.349 V/m

Peak SAR (extrapolated) = 32.3 W/kg

SAR(1 g) = 14.8 W/kg

Maximum value of SAR (measured) = 16.7 W/kg

Power Drift = -0.00 dB

