**APPENDIX A: SYSTEM CHECK SCANS**

**Plot1:**

Date/Time: 2015-06-18 10:53:47

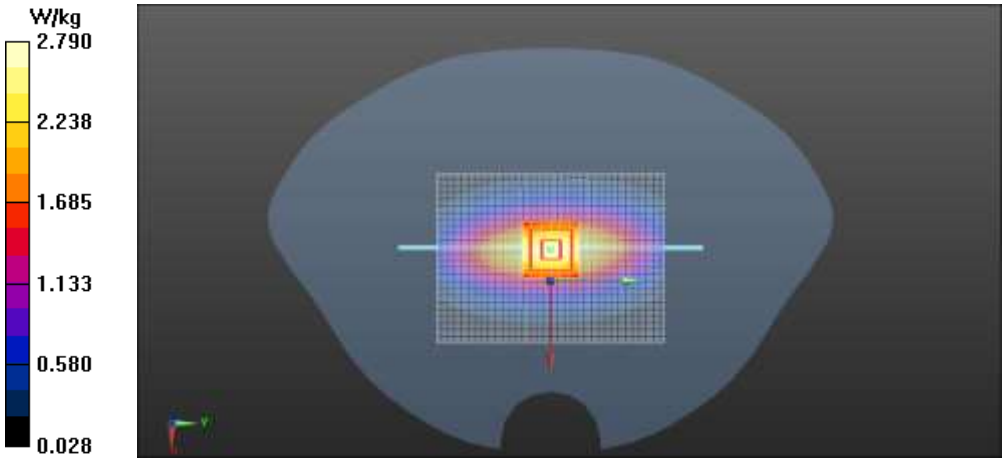
Test Laboratory: TCC Microsoft
**Type: D835V2; Serial: 4d005**

**Communication System: CW835**
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Head 835 SAR1; Medium Notes: Medium Temperature: t=20.5
Medium parameters used: f = 835 MHz; $\sigma$ = 0.907 S/m; $\varepsilon_r$ = 40.911; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY Configuration:
- Probe: EX3DV4 - SN3839
- ConvF(8.88, 8.88, 8.88); Calibrated: 2014-09-15;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2014-09-09
- Phantom: SAR1 - SAM1; Type: TP - 01097; Serial: Not Specified
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (61x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 53.44 V/m
Fast SAR: SAR(1 g) = 2.42 W/kg
Fast SAR(10 g) = 1.63 W/kg
Maximum value of SAR (interpolated) = 2.79 W/kg

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.44 V/m
Peak SAR (extrapolated) = 3.57 W/kg
**SAR(1 g) = 2.39 W/kg**
**SAR(10 g) = 1.57 W/kg**
**Power Drift = -0.00 dB**
Maximum value of SAR (measured) = 2.80 W/kg



**Plot2:**

Date/Time: 2015-06-18 10:23:59

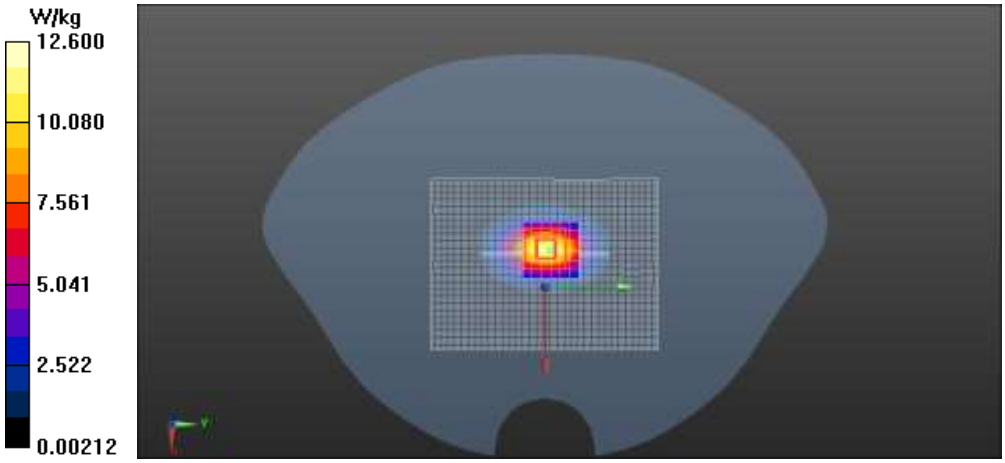
Test Laboratory: TCC Microsoft
**Type: D1900V2; Serial: 509**

**Communication System: CW1900**
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Head 1900 SAR4; Medium Notes: Medium Temperature: t=20.5 C
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.374 S/m; $\varepsilon_r$ = 38.35; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY Configuration:
- Probe: EX3DV4 - SN3574
- ConvF(7.83, 7.83, 7.83); Calibrated: 2014-09-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2014-09-18
- Phantom: SAR4 - SAM1; Type: QD000 P40 CA; Serial: TP - 1274
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (61x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 86.04 V/m
Fast SAR: SAR(1 g) = 9.66 W/kg
Fast SAR(10 g) = 5.08 W/kg
Maximum value of SAR (interpolated) = 12.6 W/kg

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.04 V/m
Peak SAR (extrapolated) = 17.5 W/kg
**SAR(1 g) = 9.54 W/kg**
**SAR(10 g) = 4.98 W/kg**
**Power Drift = -0.03 dB**
Maximum value of SAR (measured) = 12.0 W/kg



**Plot3:**

Date/Time: 2015-06-18 11:45:09

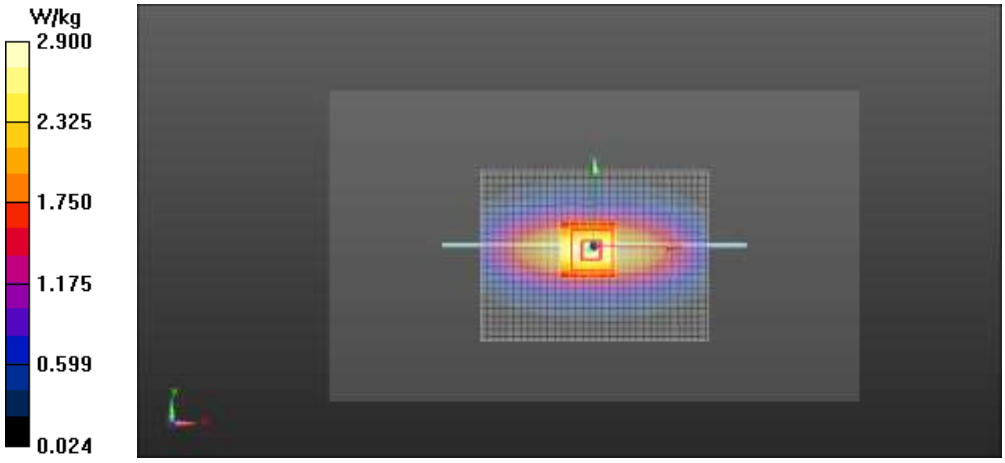
Test Laboratory: TCC Microsoft
**Type: D835V2; Serial: 4d005**

**Communication System: CW835**
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Body 835 SAR1; Medium Notes: Medium Temperature: t=20.5
Medium parameters used: f = 835 MHz; $\sigma$ = 0.958 S/m; $\varepsilon_r$ = 53.56; $\rho$ = 1000 kg/m$^3$
Phantom section: Center Section

DASY Configuration:
- Probe: EX3DV4 - SN3839
- ConvF(8.84, 8.84, 8.84); Calibrated: 2014-09-15;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2014-09-09
- Phantom: SAR1 - TFP; Type: QD 000 P51 CA; Serial: 1125/1
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (81x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 55.07 V/m
Fast SAR: SAR(1 g) = 2.52 W/kg
Fast SAR(10 g) = 1.69 W/kg
Maximum value of SAR (interpolated) = 2.90 W/kg

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.07 V/m
Peak SAR (extrapolated) = 3.65 W/kg
**SAR(1 g) = 2.49 W/kg**
**SAR(10 g) = 1.65 W/kg**
**Power Drift = -0.02 dB**
Maximum value of SAR (measured) = 2.89 W/kg



**Plot4:**

Date/Time: 2015-06-03 15:15:40

Test Laboratory: TCC Microsoft
**Type: D1900V2; Serial: 509**

**Communication System: CW1900**
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Body 1900 SAR4; Medium Notes: Medium Temperature: t=21.0 C
Medium parameters used: f = 1900 MHz; $\sigma$ = 1.492 S/m; $\varepsilon_r$ = 52.646; $\rho$ = 1000 kg/m$^3$
Phantom section: Center Section

DASY Configuration:
- Probe: EX3DV4 - SN3574
- ConvF(7.41, 7.41, 7.41); Calibrated: 2014-09-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2014-09-18
- Phantom: SAR4 - TFP; Type: QD000 P51 CA; Serial: S/N 1148/1
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (81x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 87.78 V/m
Fast SAR: SAR(1 g) = 9.25 W/kg
Fast SAR(10 g) = 4.79 W/kg
Maximum value of SAR (interpolated) = 12.2 W/kg

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.78 V/m
Peak SAR (extrapolated) = 16.6 W/kg
**SAR(1 g) = 9.18 W/kg**
**SAR(10 g) = 4.83 W/kg**
**Power Drift = 0.00 dB**
Maximum value of SAR (measured) = 11.6 W/kg