

## 17.1 System Performance Check Plots

### 20170116\_SystemPerformanceCheck-750MHz

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.955$  S/m;  $\epsilon_r = 57.432$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.98, 9.98, 9.98); Calibrated: 2016/12/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.63 W/kg

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

Reference Value = 53.51 V/m; Power Drift = -0.02 dB

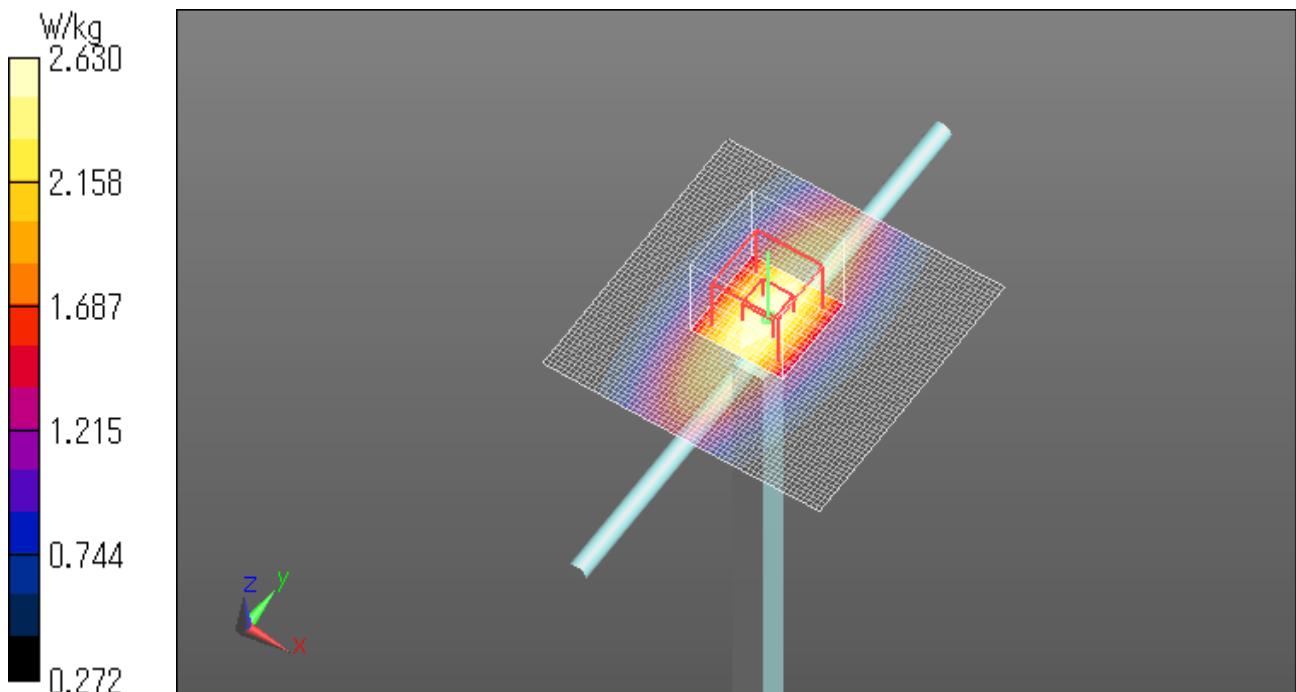
Peak SAR (extrapolated) = 3.10 W/kg

**SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.4 W/kg**

Maximum value of SAR (measured) = 2.63 W/kg

Date: 2017/01/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170116\_SystemPerformanceCheck-750MHz

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.955 \text{ S/m}$ ;  $\epsilon_r = 57.432$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.98, 9.98, 9.98); Calibrated: 2016/12/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

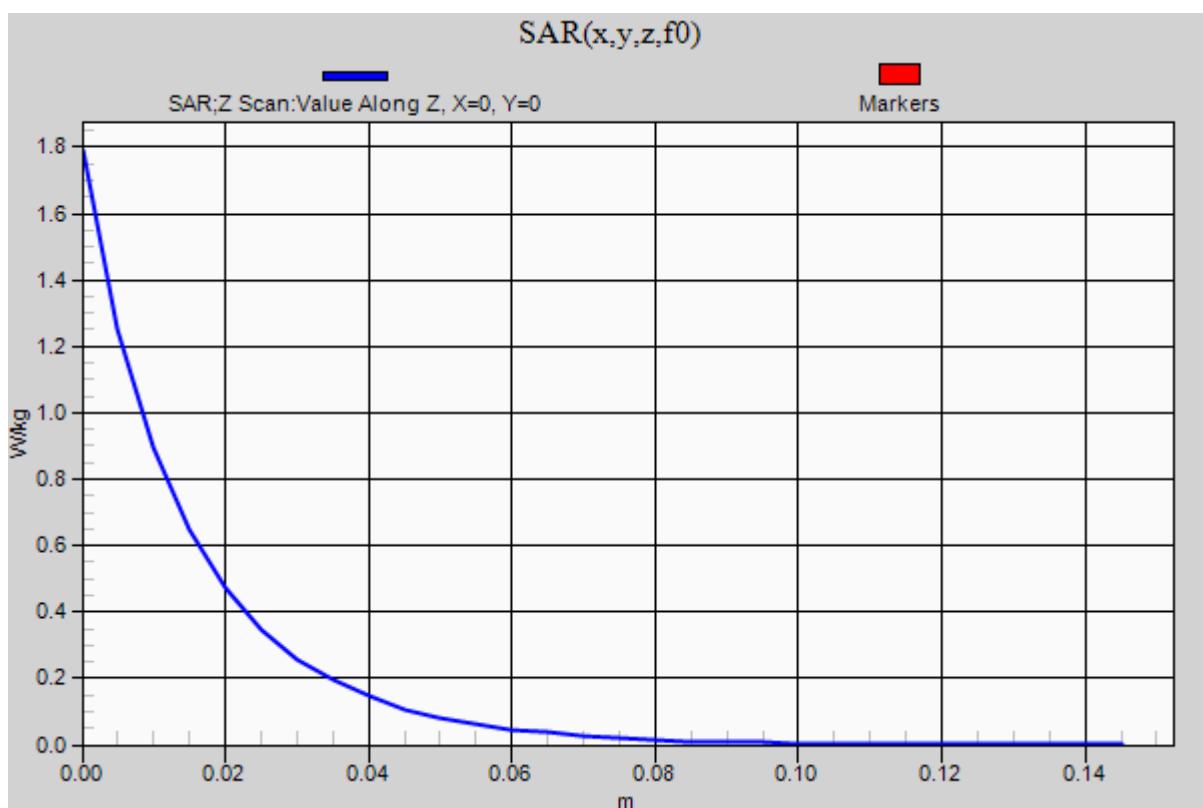
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 1.79 W/kg

Date: 2017/01/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170117\_SystemPerformanceCheck-750MHz

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.931$  S/m;  $\epsilon_r = 55.038$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.98, 9.98, 9.98); Calibrated: 2016/12/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.57 W/kg

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

Reference Value = 53.66 V/m; Power Drift = 0.03 dB

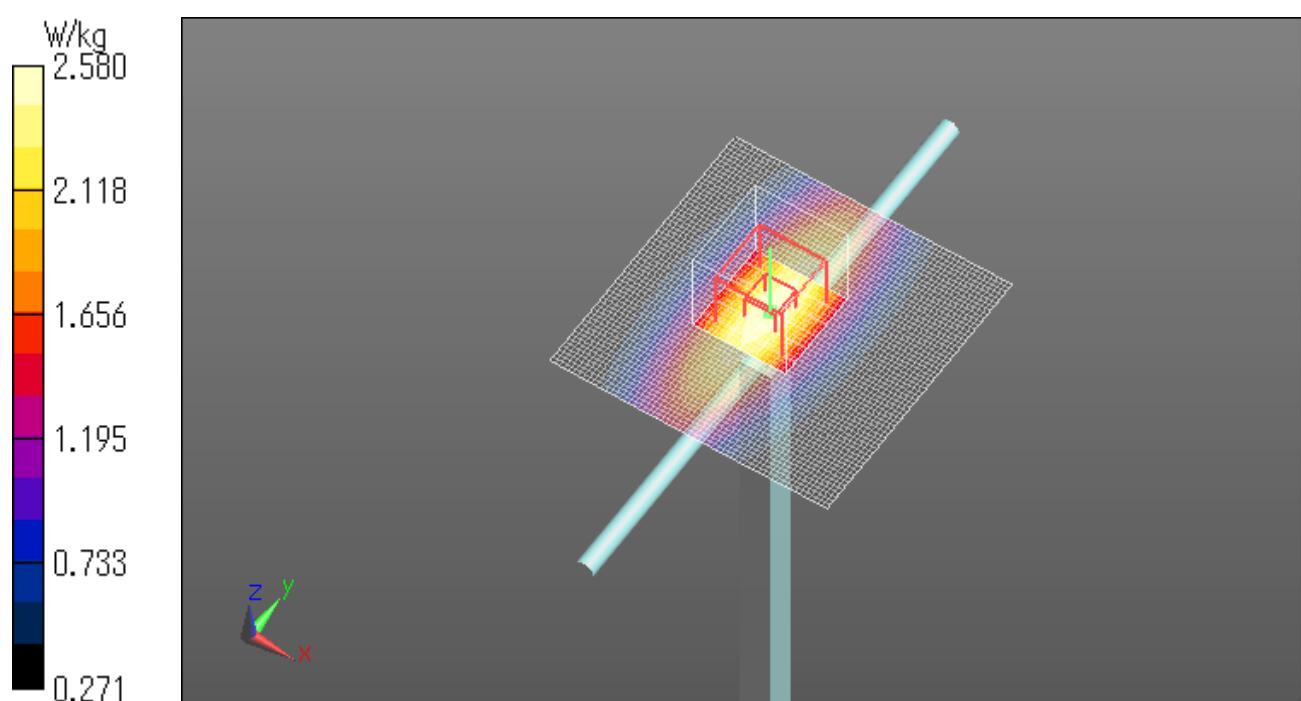
Peak SAR (extrapolated) = 3.04 W/kg

**SAR(1 g) = 2.06 W/kg; SAR(10 g) = 1.38 W/kg**

Maximum value of SAR (measured) = 2.58 W/kg

Date: 2017/01/17

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170117\_SystemPerformanceCheck-750MHz

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.931 \text{ S/m}$ ;  $\epsilon_r = 55.038$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.98, 9.98, 9.98); Calibrated: 2016/12/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

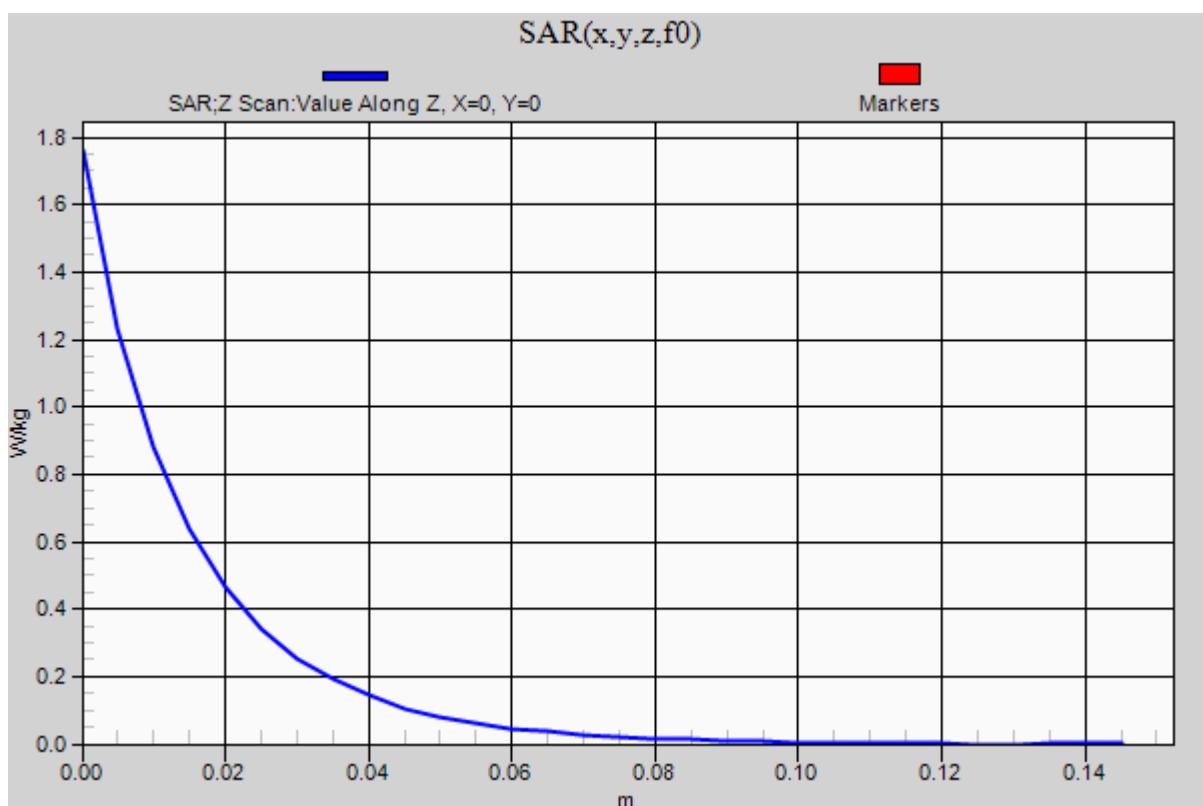
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 1.76 W/kg

Date: 2017/01/17

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170118\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.949 \text{ S/m}$ ;  $\epsilon_r = 54.77$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.9, 9.9, 9.9); Calibrated: 2016/12/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.15 W/kg

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

Reference Value = 58.66 V/m; Power Drift = -0.02 dB

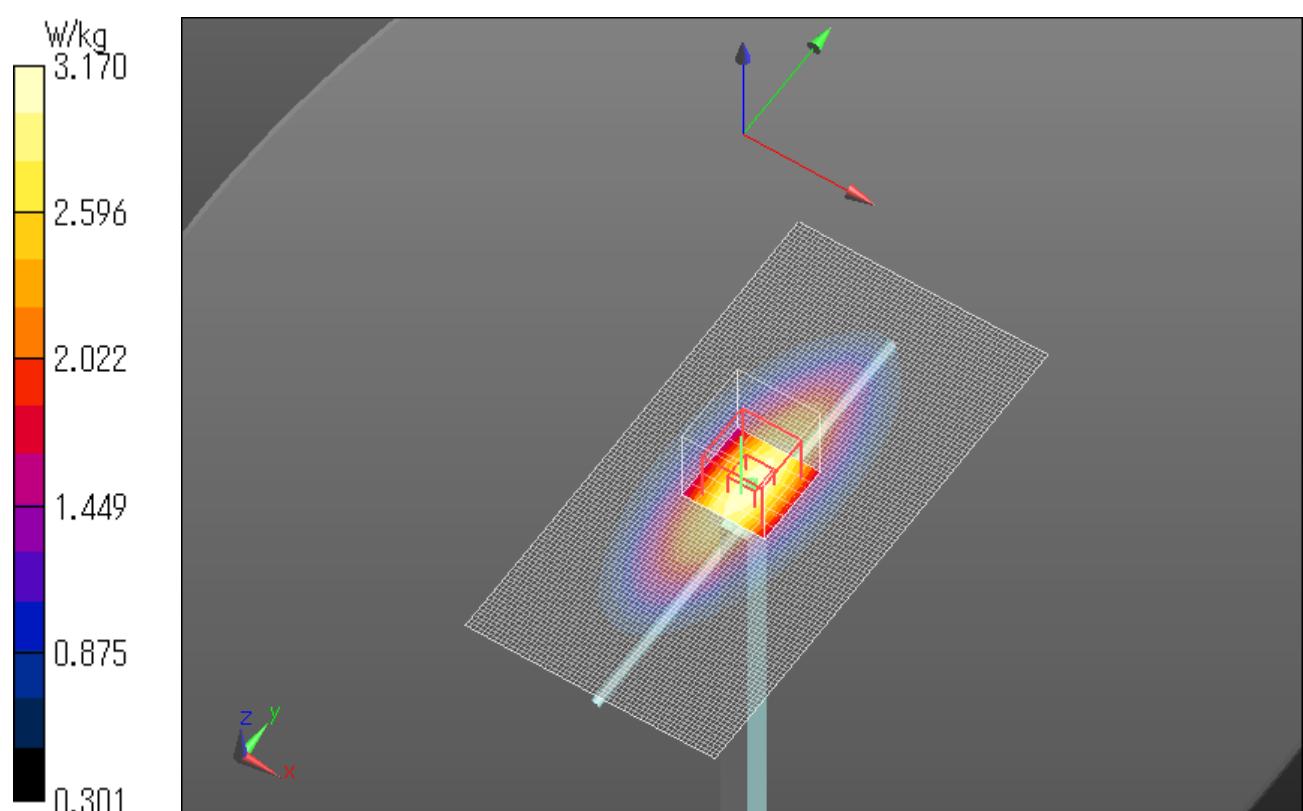
Peak SAR (extrapolated) = 3.75 W/kg

**SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.66 W/kg**

Maximum value of SAR (measured) = 3.17 W/kg

Date: 2017/01/18

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170118\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.949 \text{ S/m}$ ;  $\epsilon_r = 54.77$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.9, 9.9, 9.9); Calibrated: 2016/12/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

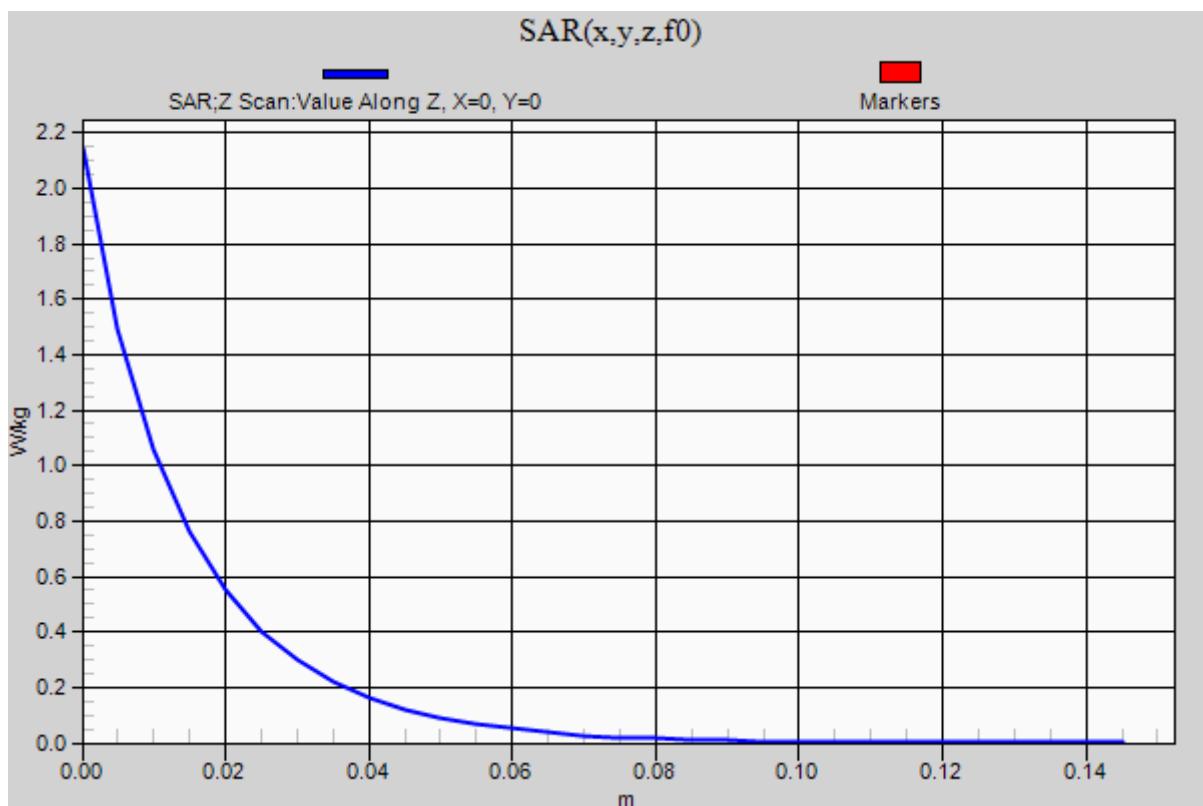
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 2.14 W/kg

Date: 2017/01/18

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170119\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.953 \text{ S/m}$ ;  $\epsilon_r = 54.308$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.9, 9.9, 9.9); Calibrated: 2016/12/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.06 W/kg

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

Reference Value = 57.72 V/m; Power Drift = 0.00 dB

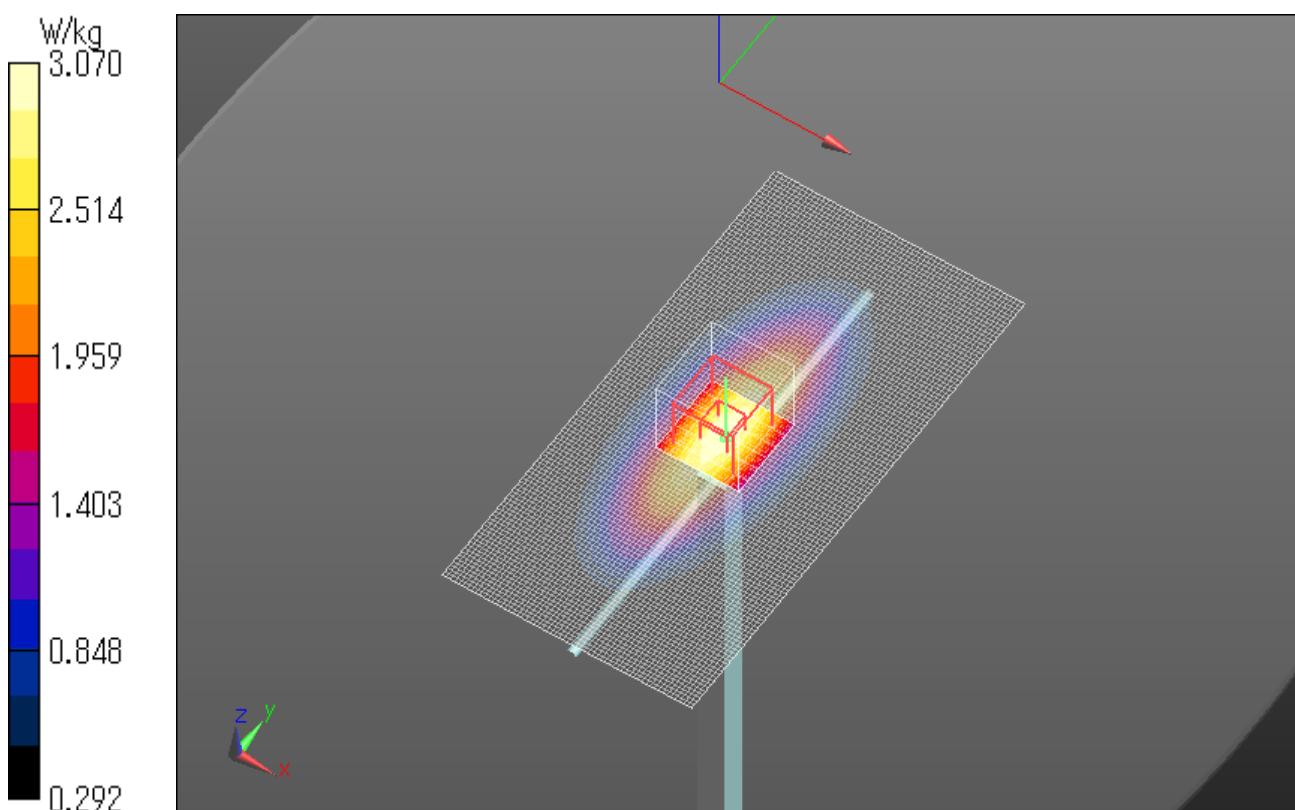
Peak SAR (extrapolated) = 3.63 W/kg

**SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.61 W/kg**

Maximum value of SAR (measured) = 3.07 W/kg

Date: 2017/01/19

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170119\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.953 \text{ S/m}$ ;  $\epsilon_r = 54.308$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.9, 9.9, 9.9); Calibrated: 2016/12/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

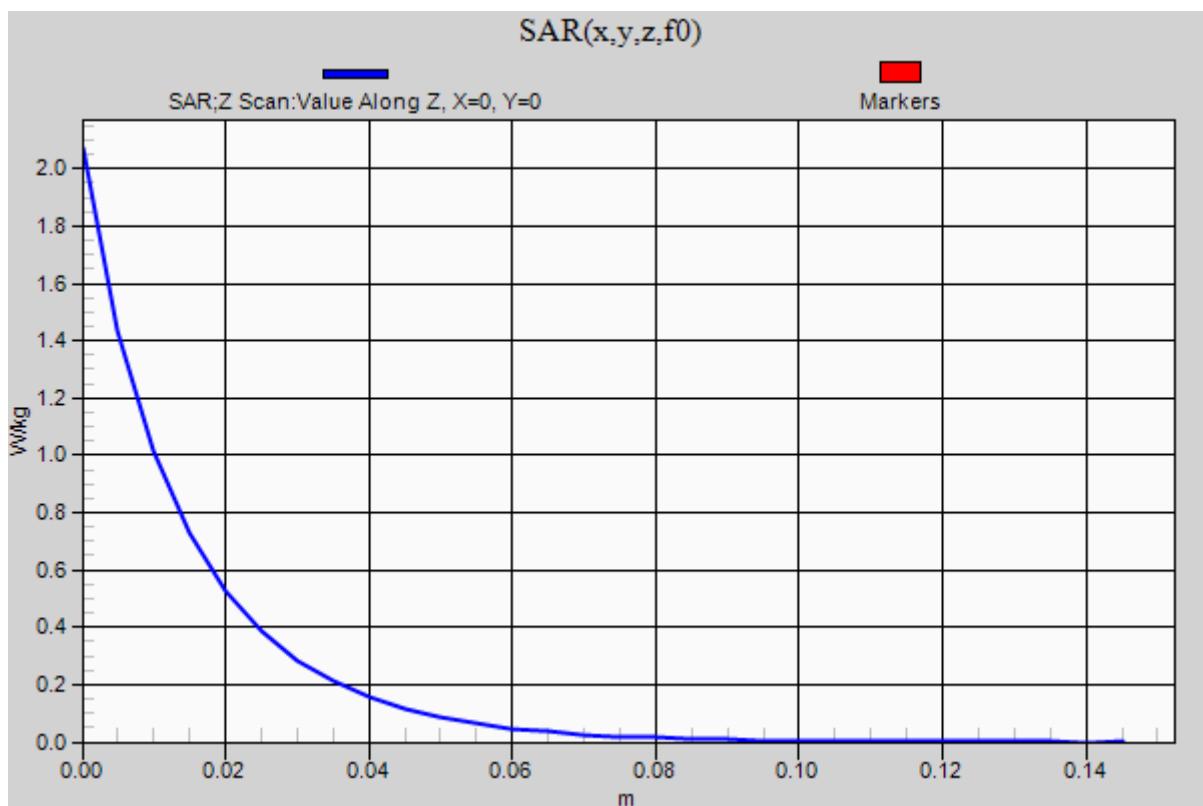
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 2.07 W/kg

Date: 2017/01/19

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170120\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.938 \text{ S/m}$ ;  $\epsilon_r = 55.883$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.9, 9.9, 9.9); Calibrated: 2016/12/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.20 W/kg

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

Reference Value = 59.38 V/m; Power Drift = -0.02 dB

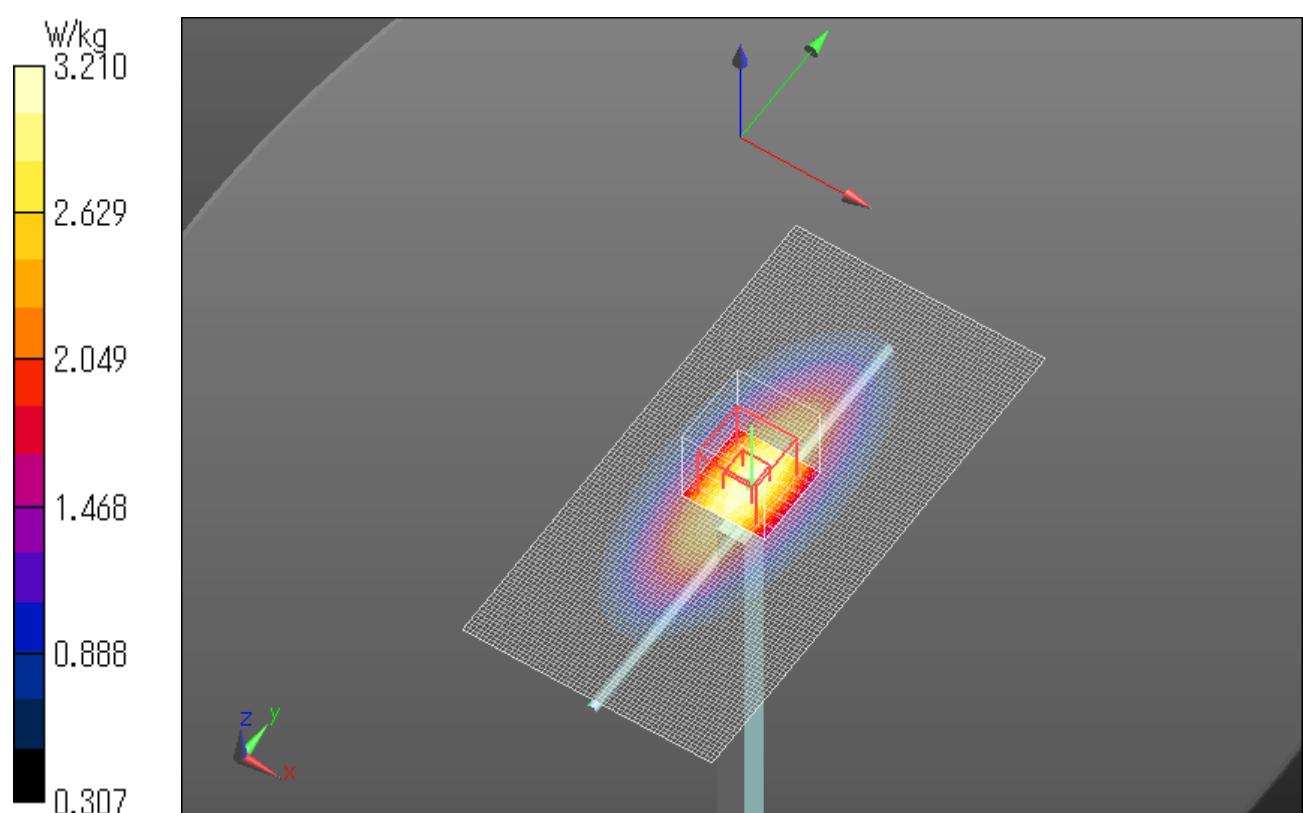
Peak SAR (extrapolated) = 3.79 W/kg

**SAR(1 g) = 2.53 W/kg; SAR(10 g) = 1.67 W/kg**

Maximum value of SAR (measured) = 3.21 W/kg

Date: 2017/01/20

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**20170120\_SystemPerformanceCheck-835MHz**

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.938 \text{ S/m}$ ;  $\epsilon_r = 55.883$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(9.9, 9.9, 9.9); Calibrated: 2016/12/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn509; Calibrated: 2016/07/07

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

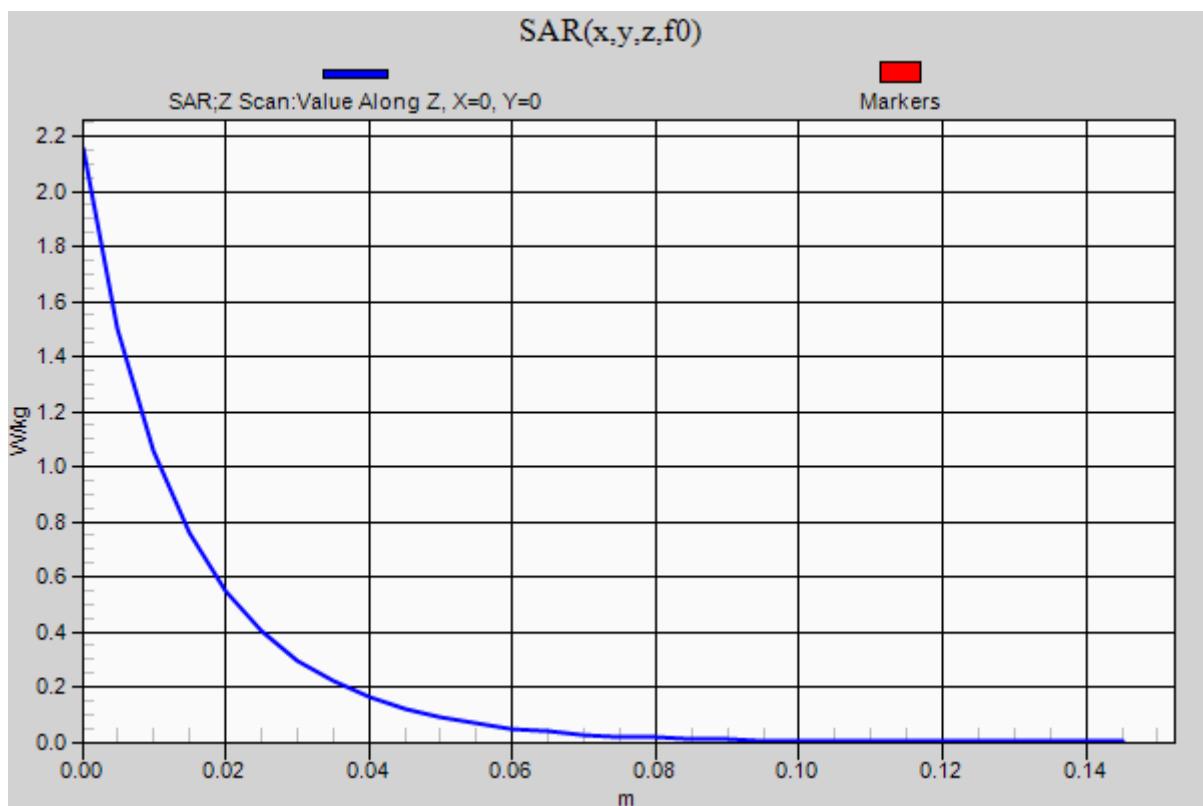
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 2.15 W/kg

Date: 2017/01/20

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170220\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.972$  S/m;  $\epsilon_r = 54.679$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.6, 9.6, 9.6); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.12 W/kg

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

Reference Value = 58.10 V/m; Power Drift = -0.01 dB

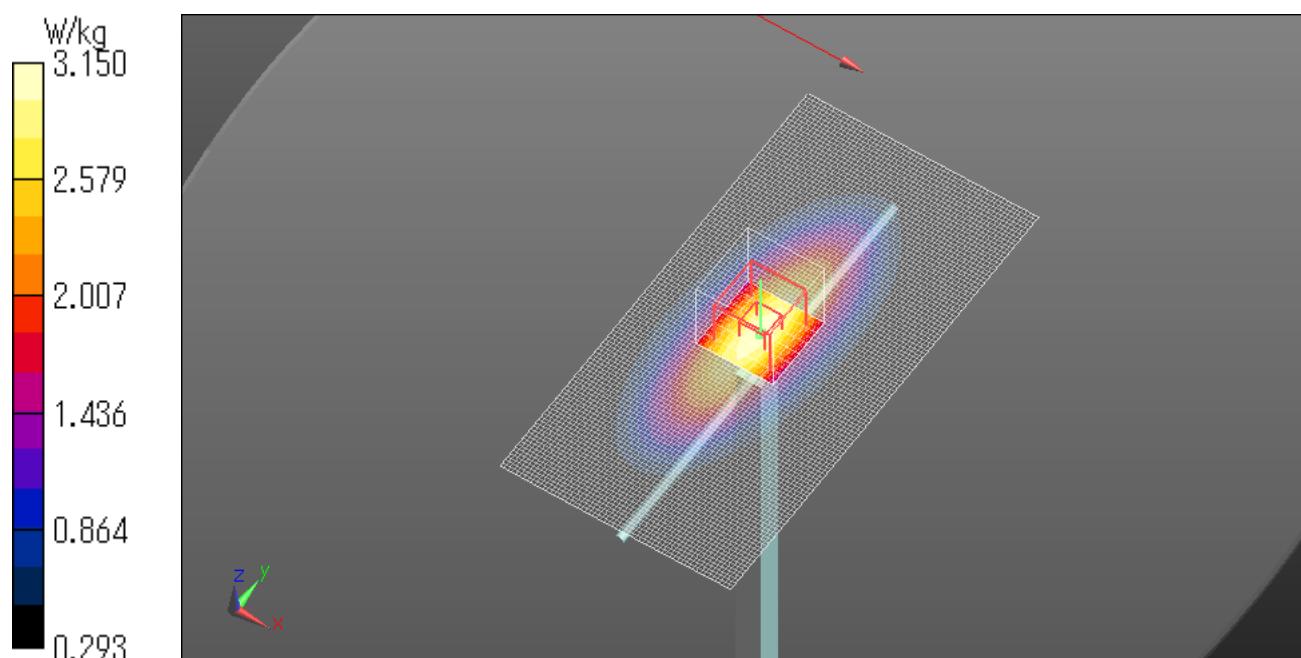
Peak SAR (extrapolated) = 3.70 W/kg

**SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.64 W/kg**

Maximum value of SAR (measured) = 3.15 W/kg

Date: 2017/02/20

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170220\_SystemPerformanceCheck-835MHz

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.972 \text{ S/m}$ ;  $\epsilon_r = 54.679$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.6, 9.6, 9.6); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

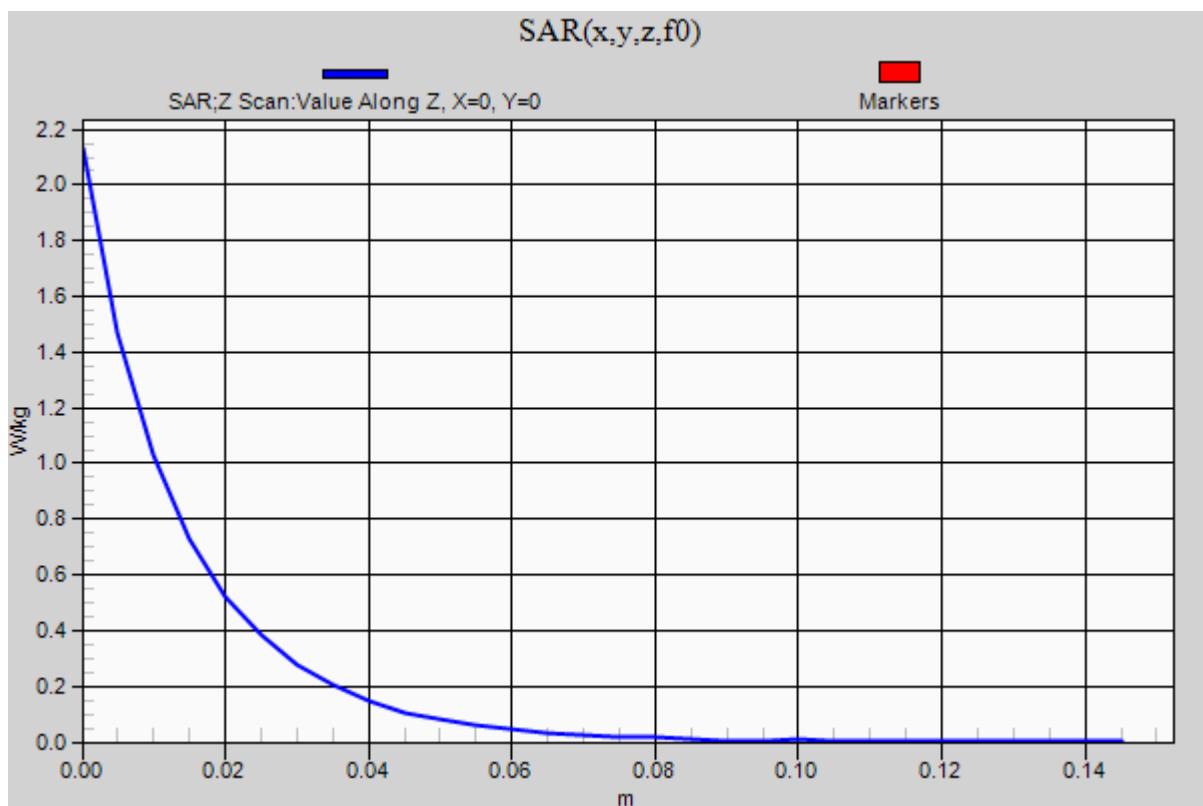
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 2.13 W/kg

Date: 2017/02/20

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170113\_SystemPerformanceCheck-1750MHz

Communication System: UID 0, CW (0); Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.487$  S/m;  $\epsilon_r = 51.443$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.9, 7.9, 7.9); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 13.0 W/kg

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

Reference Value = 96.31 V/m; Power Drift = -0.02 dB

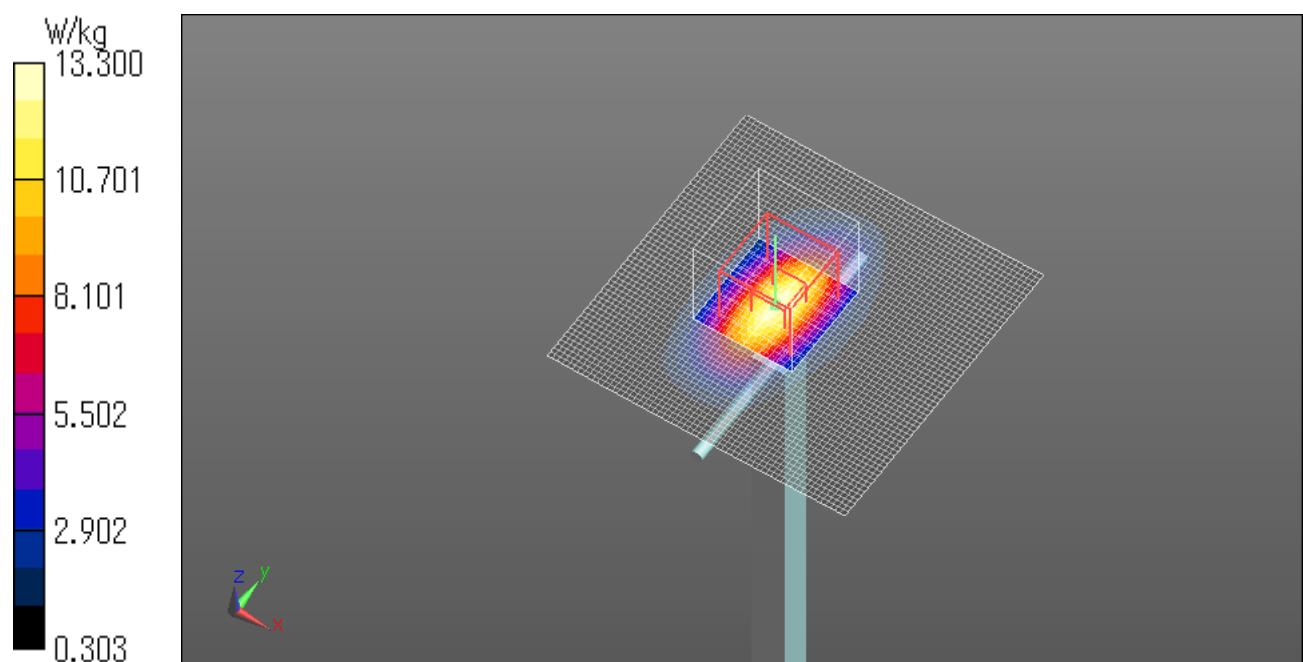
Peak SAR (extrapolated) = 16.7 W/kg

**SAR(1 g) = 9.39 W/kg; SAR(10 g) = 5 W/kg**

Maximum value of SAR (measured) = 13.3 W/kg

Date: 2017/01/13

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**20170113\_SystemPerformanceCheck-1750MHz**

Communication System: UID 0, CW (0); Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.487$  S/m;  $\epsilon_r = 51.443$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.9, 7.9, 7.9); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

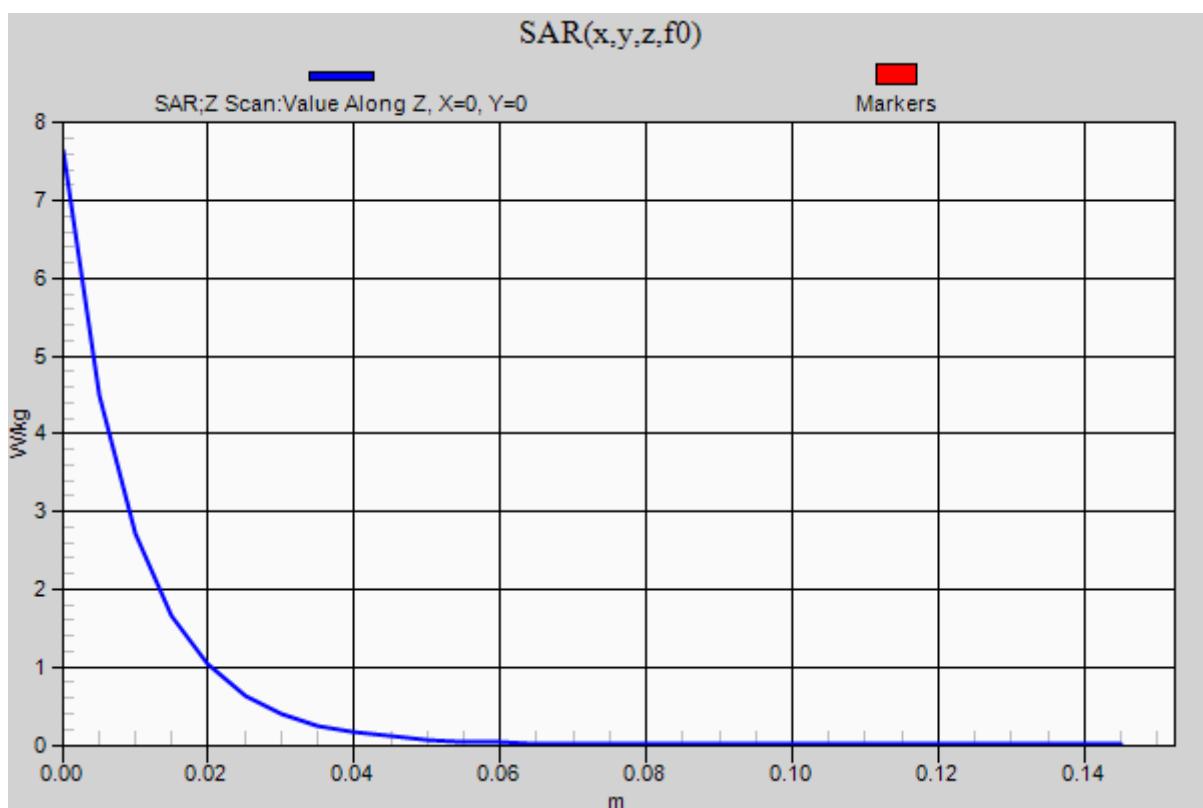
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 7.64 W/kg

Date: 2017/01/13

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170116\_SystemPerformanceCheck-1750MHz

Communication System: UID 0, CW (0); Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.511$  S/m;  $\epsilon_r = 51.111$ ;  $\rho = 1000$  kg/m $^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.9, 7.9, 7.9); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.4 W/kg

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

Reference Value = 93.03 V/m; Power Drift = -0.03 dB

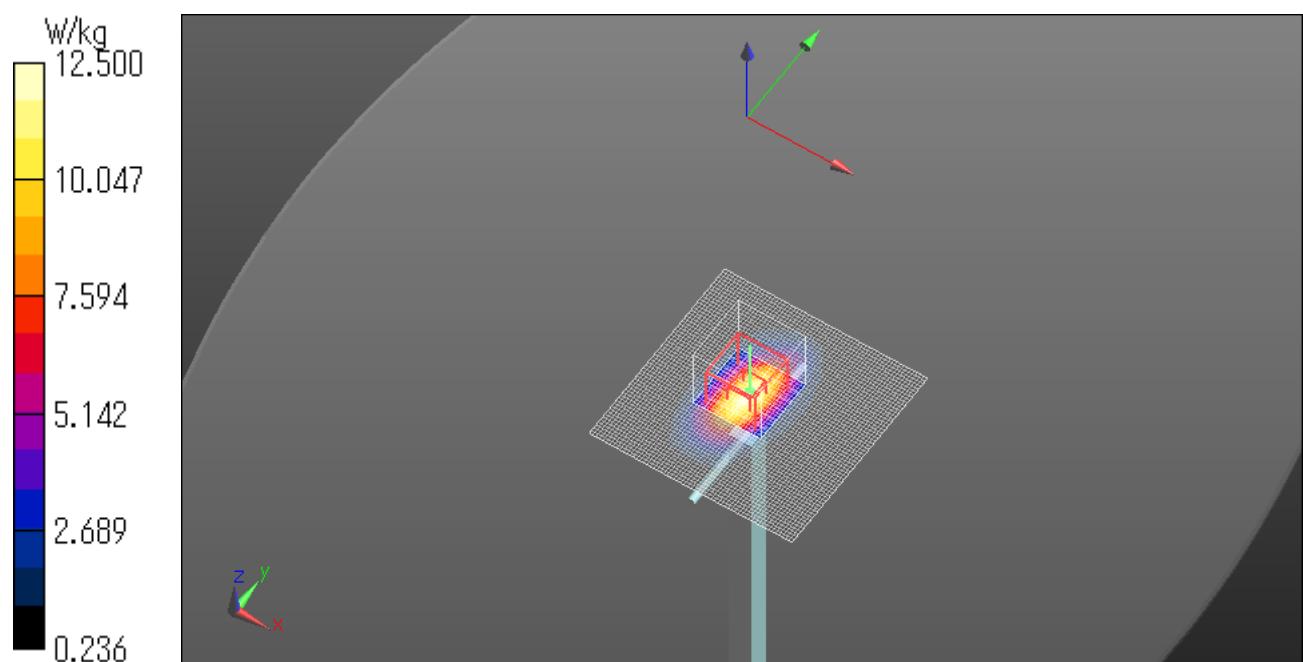
Peak SAR (extrapolated) = 16.0 W/kg

**SAR(1 g) = 8.81 W/kg; SAR(10 g) = 4.62 W/kg**

Maximum value of SAR (measured) = 12.5 W/kg

Date: 2017/01/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## **20170116\_SystemPerformanceCheck-1750MHz**

Communication System: UID 0, CW (0); Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.511$  S/m;  $\epsilon_r = 51.111$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.9, 7.9, 7.9); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

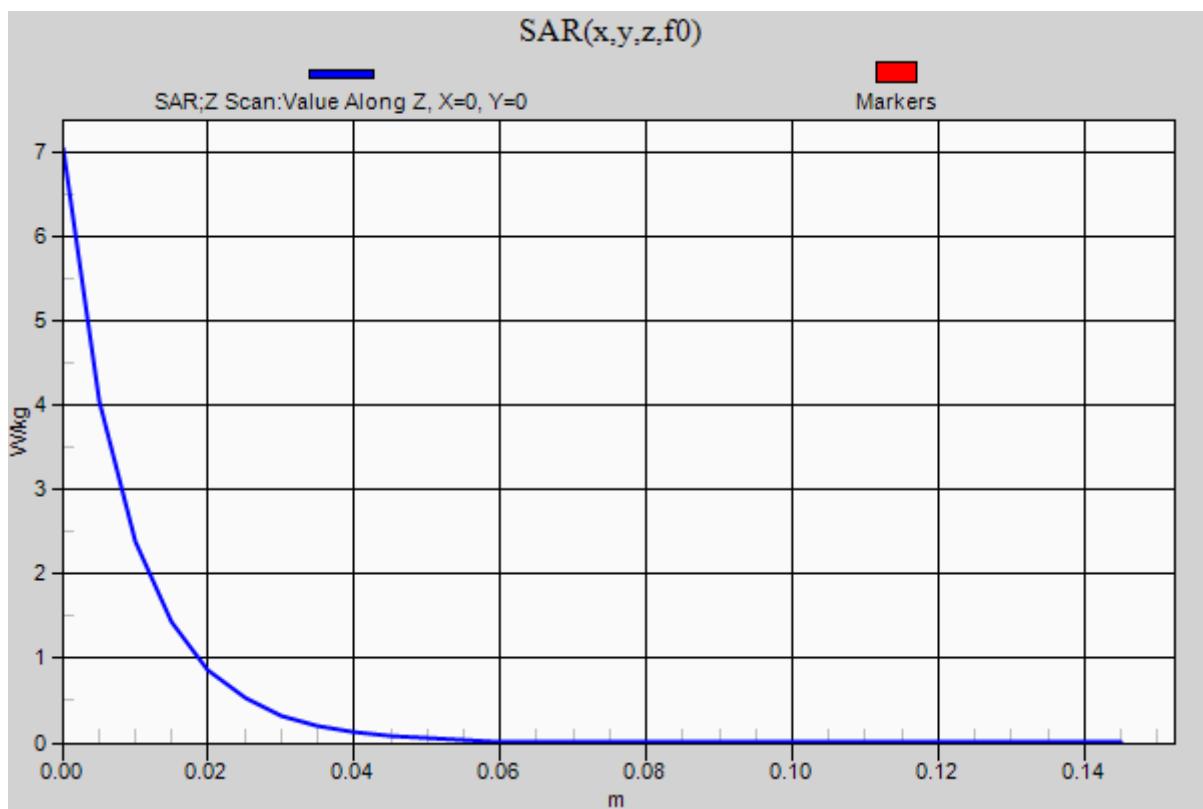
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 7.04 W/kg

Date: 2017/01/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170215\_SystemPerformanceCheck-1750MHz

Communication System: UID 0, CW (0); Communication System Band: D1750 (1750.0 MHz); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.511$  S/m;  $\epsilon_r = 51.111$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.9, 7.9, 7.9); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 13.7 W/kg

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

Reference Value = 96.07 V/m; Power Drift = -0.00 dB

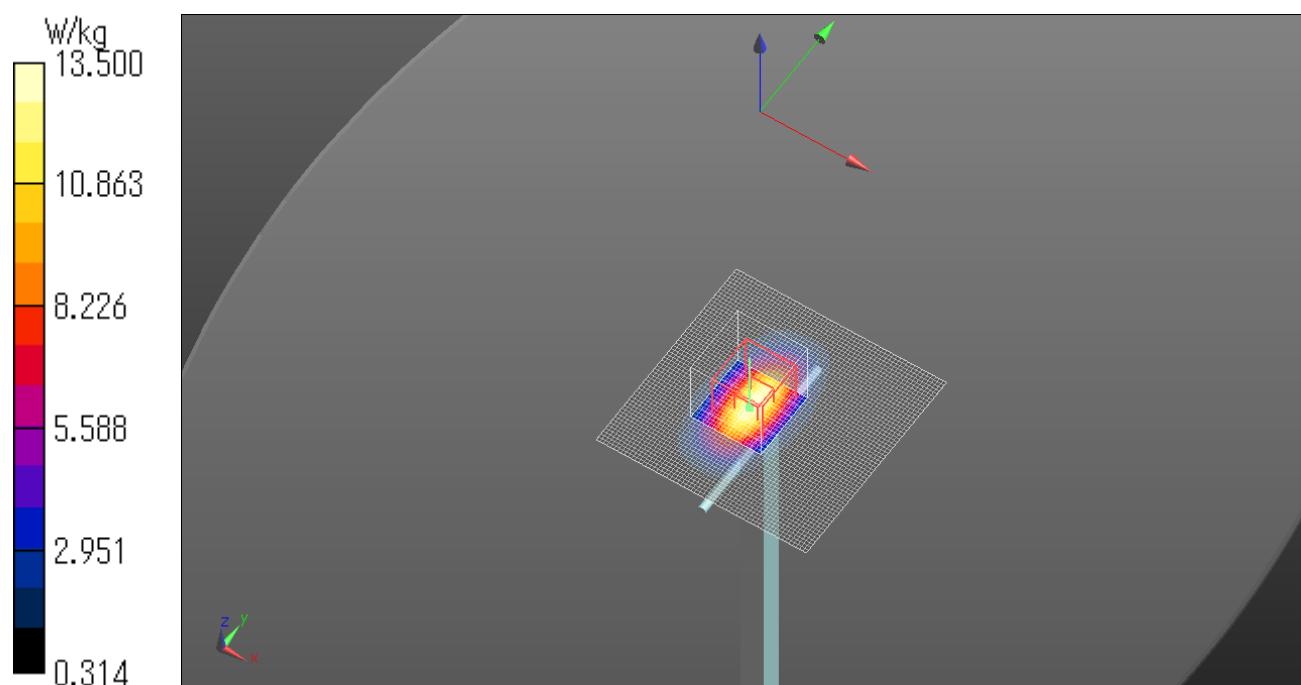
Peak SAR (extrapolated) = 16.9 W/kg

**SAR(1 g) = 9.63 W/kg; SAR(10 g) = 5.18 W/kg**

Maximum value of SAR (measured) = 13.5 W/kg

Date: 2017/02/15

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170215\_SystemPerformanceCheck-1750MHz

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.556$  S/m;  $\epsilon_r = 50.828$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.68, 7.68, 7.68); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 13.7 W/kg

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

Reference Value = 96.20 V/m; Power Drift = -0.01 dB

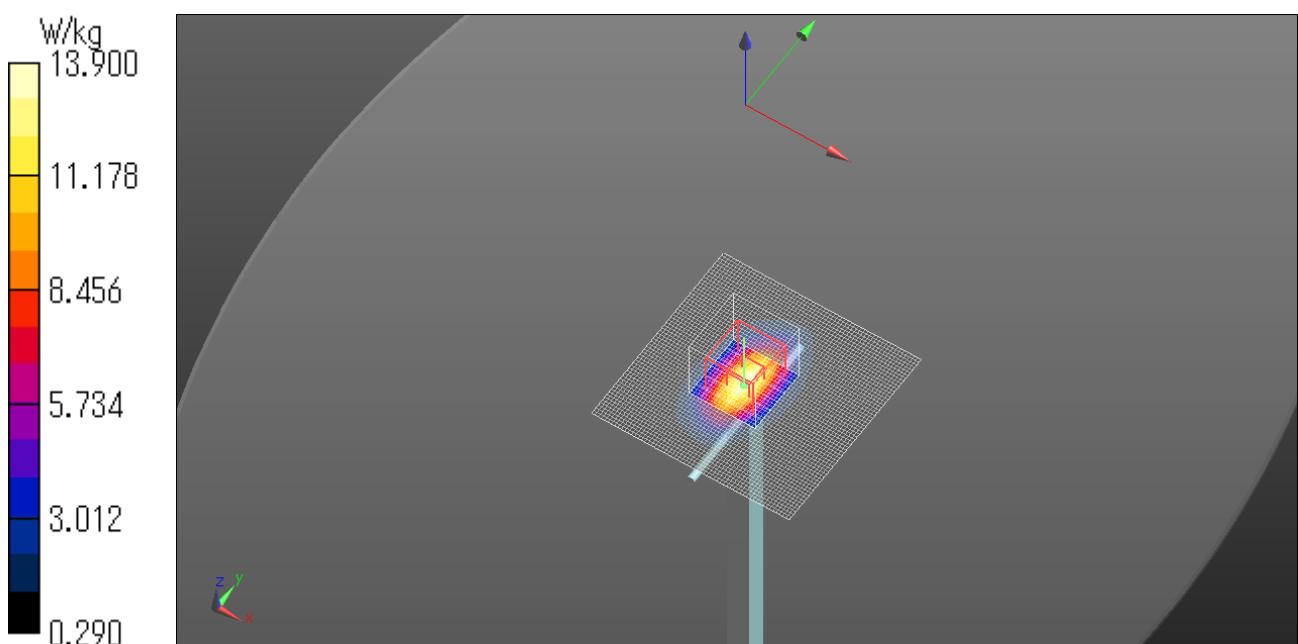
Peak SAR (extrapolated) = 17.6 W/kg

**SAR(1 g) = 9.76 W/kg; SAR(10 g) = 5.12 W/kg**

Maximum value of SAR (measured) = 13.9 W/kg

Date: 2017/01/17

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**20170117\_SystemPerformanceCheck-1900MHz**

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.556 \text{ S/m}$ ;  $\epsilon_r = 50.828$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.68, 7.68, 7.68); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

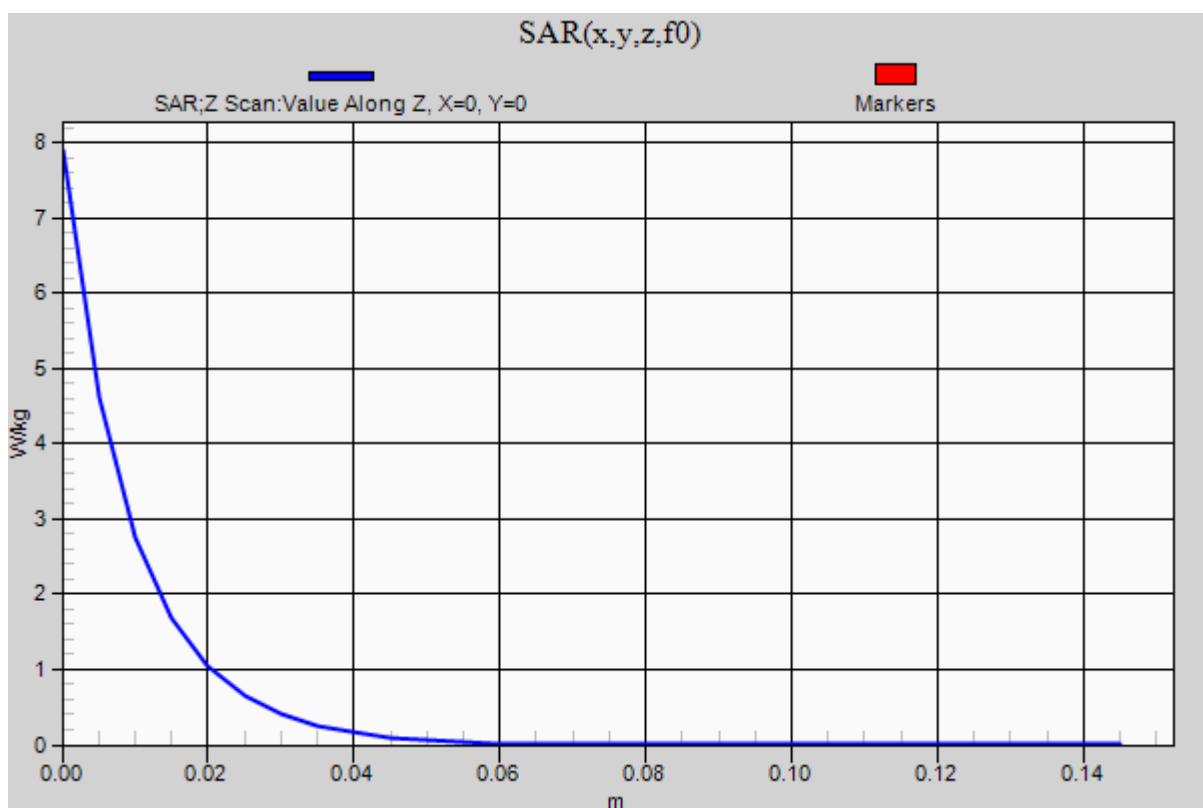
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 7.89 W/kg

Date: 2017/01/17

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170118\_SystemPerformanceCheck-1900MHz

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.54$  S/m;  $\epsilon_r = 51.261$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.68, 7.68, 7.68); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 14.5 W/kg

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

Reference Value = 99.11 V/m; Power Drift = -0.04 dB

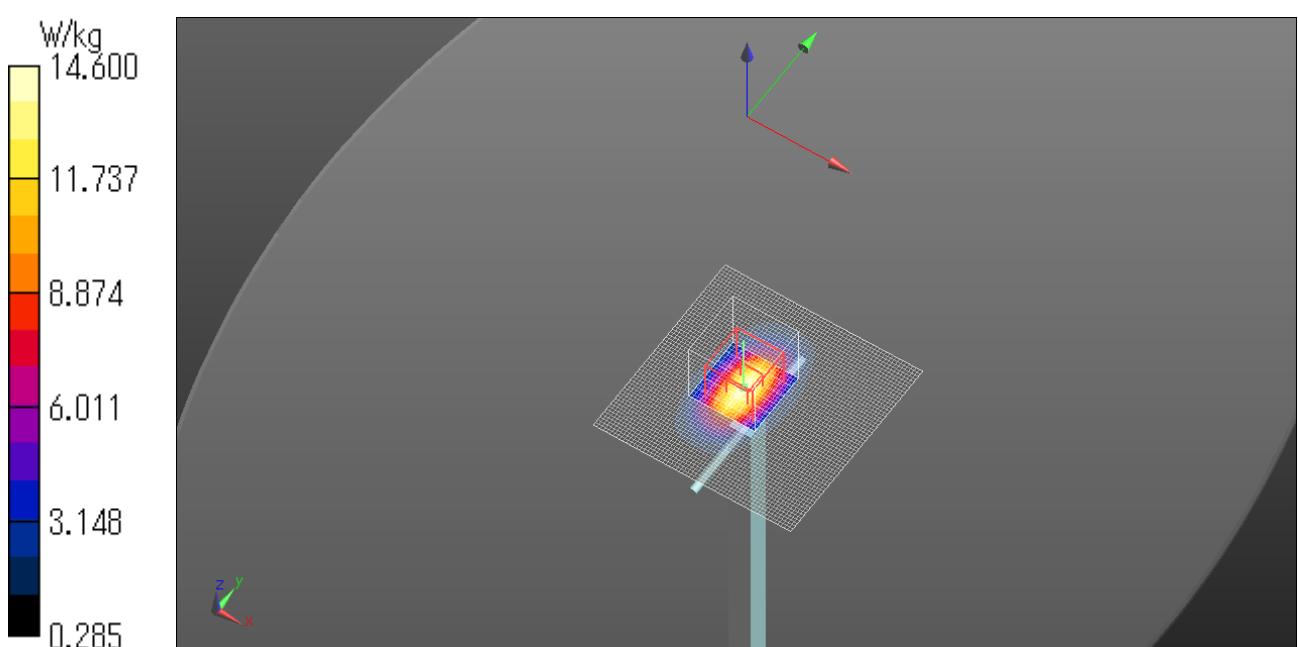
Peak SAR (extrapolated) = 18.6 W/kg

**SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.41 W/kg**

Maximum value of SAR (measured) = 14.6 W/kg

Date: 2017/01/18

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**20170118\_SystemPerformanceCheck-1900MHz**

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.54 \text{ S/m}$ ;  $\epsilon_r = 51.261$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.68, 7.68, 7.68); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

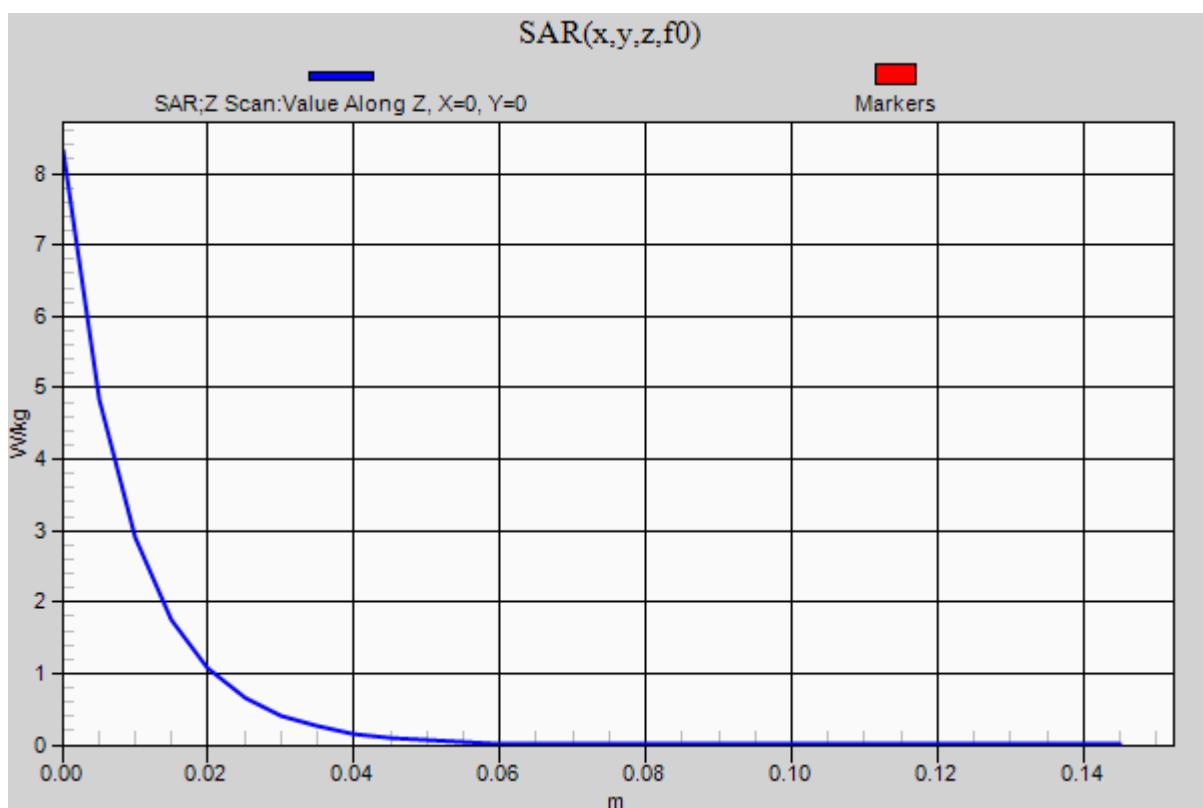
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 8.31 W/kg

Date: 2017/01/18

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170216\_SystemPerformanceCheck-1900MHz

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;

Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.575$  S/m;  $\epsilon_r = 50.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.68, 7.68, 7.68); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 14.6 W/kg

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

Reference Value = 98.38 V/m; Power Drift = 0.02 dB

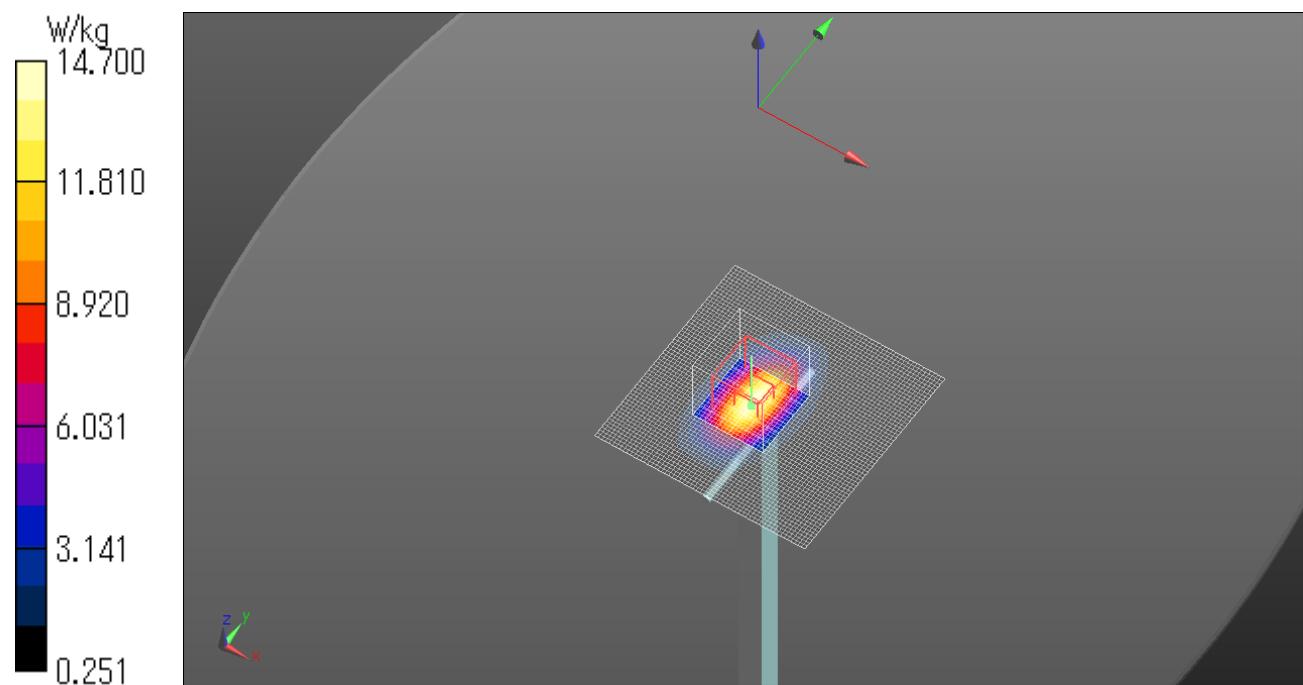
Peak SAR (extrapolated) = 18.9 W/kg

**SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.32 W/kg**

Maximum value of SAR (measured) = 14.7 W/kg

Date: 2017/02/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170216\_SystemPerformanceCheck-1900MHz

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;

Duty Cycle: 1:1

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.575 \text{ S/m}$ ;  $\epsilon_r = 50.97$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.68, 7.68, 7.68); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

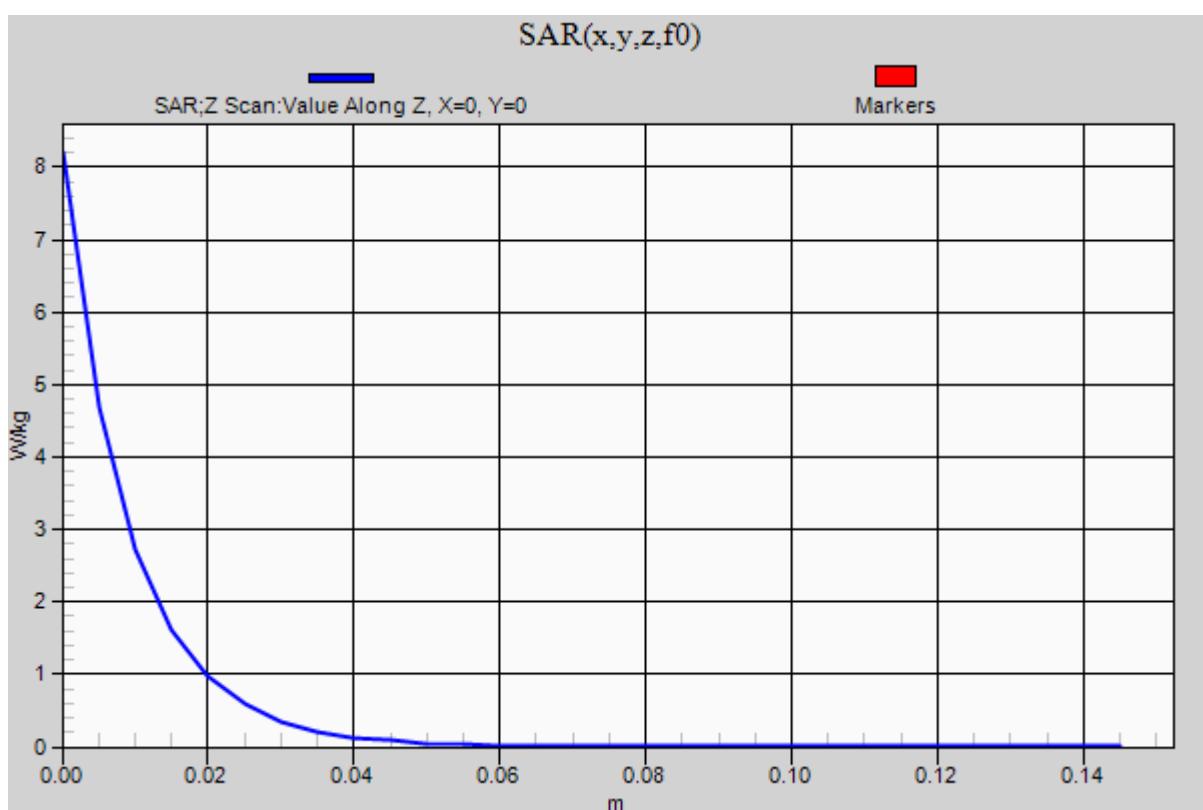
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 8.20 W/kg

Date: 2017/02/16

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170119\_SystemPerformanceCheck-2600MHz

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;

Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.23$  S/m;  $\epsilon_r = 50.184$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (81x71x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 22.7 W/kg

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

Reference Value = 99.64 V/m; Power Drift = -0.05 dB

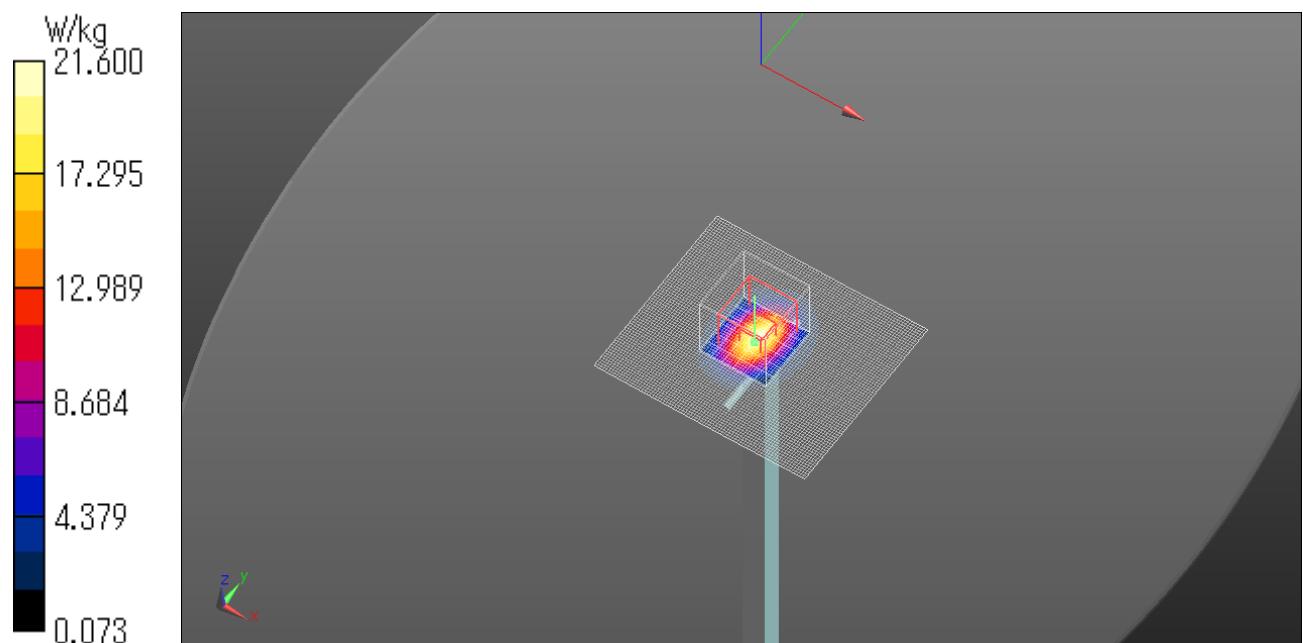
Peak SAR (extrapolated) = 30.1 W/kg

**SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.09 W/kg**

Maximum value of SAR (measured) = 21.6 W/kg

Date: 2017/01/19

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**20170119\_SystemPerformanceCheck-2600MHz**

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600 \text{ MHz}$ ;  $\sigma = 2.23 \text{ S/m}$ ;  $\epsilon_r = 50.184$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

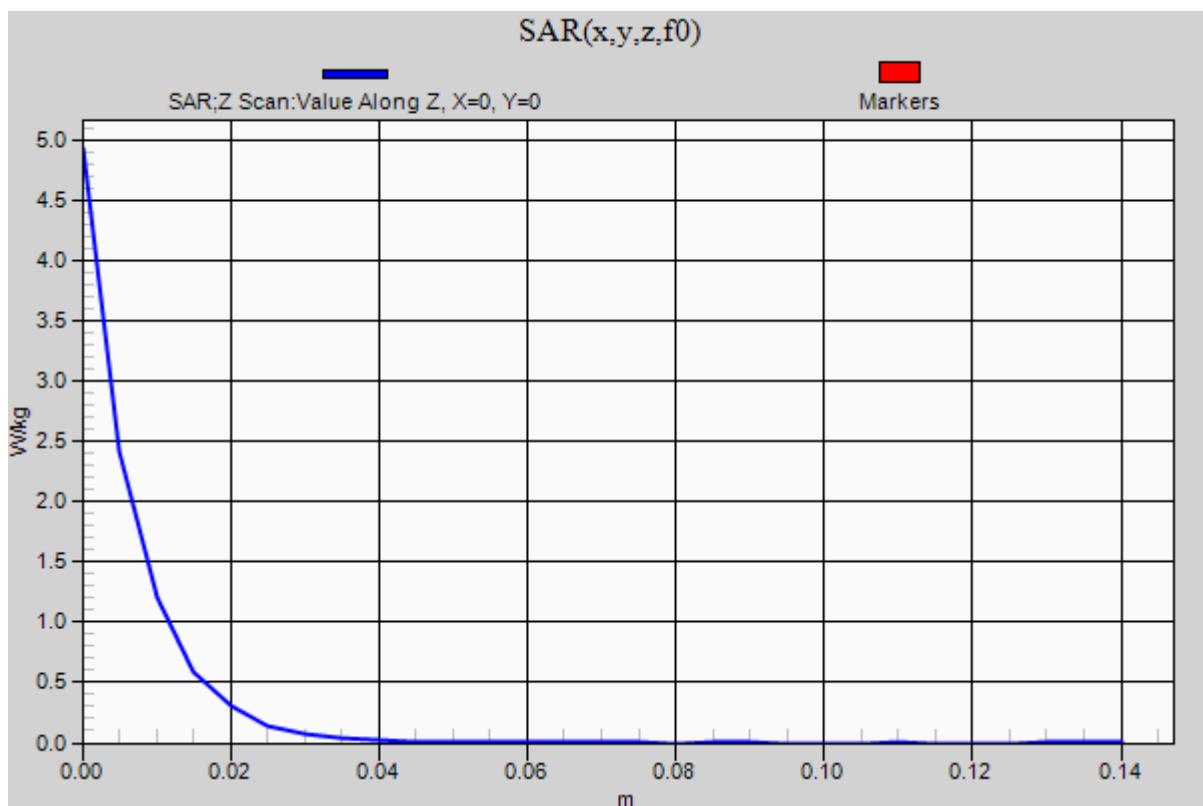
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 4.92 W/kg

Date: 2017/01/19

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170120\_SystemPerformanceCheck-2600MHz

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.234$  S/m;  $\epsilon_r = 51.259$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (81x71x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 22.4 W/kg

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

Reference Value = 100.8 V/m; Power Drift = -0.01 dB

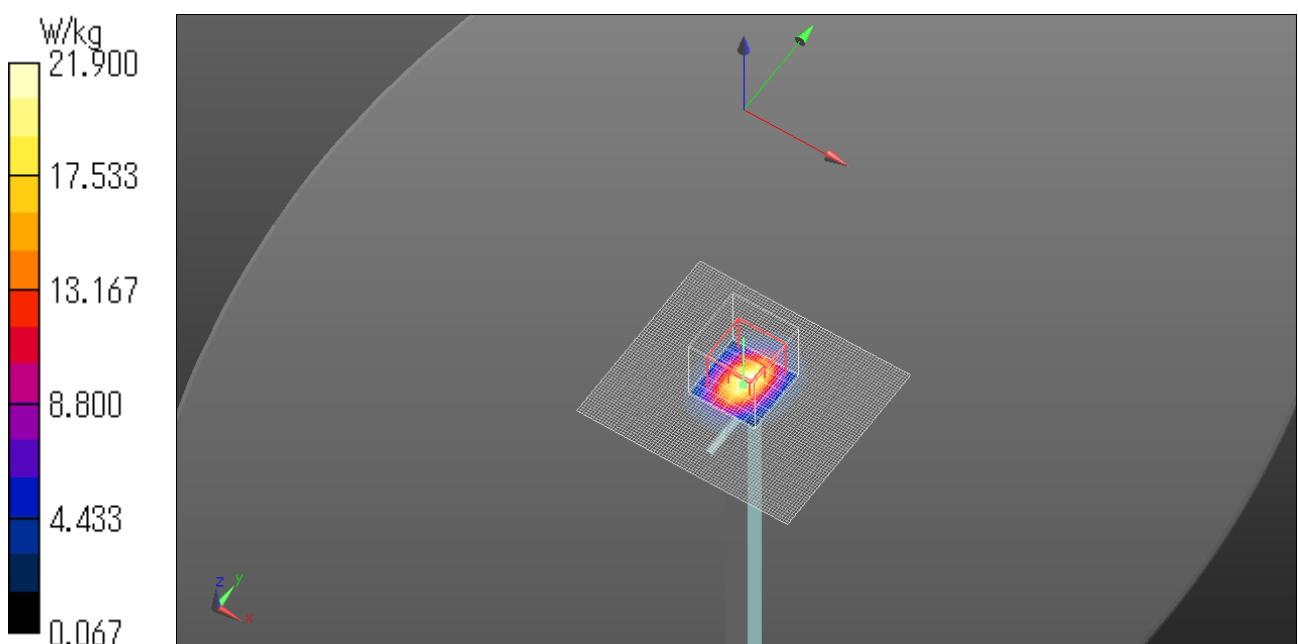
Peak SAR (extrapolated) = 30.8 W/kg

**SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.02 W/kg**

Maximum value of SAR (measured) = 21.9 W/kg

Date: 2017/01/20

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170120\_SystemPerformanceCheck-2600MHz

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600 \text{ MHz}$ ;  $\sigma = 2.234 \text{ S/m}$ ;  $\epsilon_r = 51.259$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

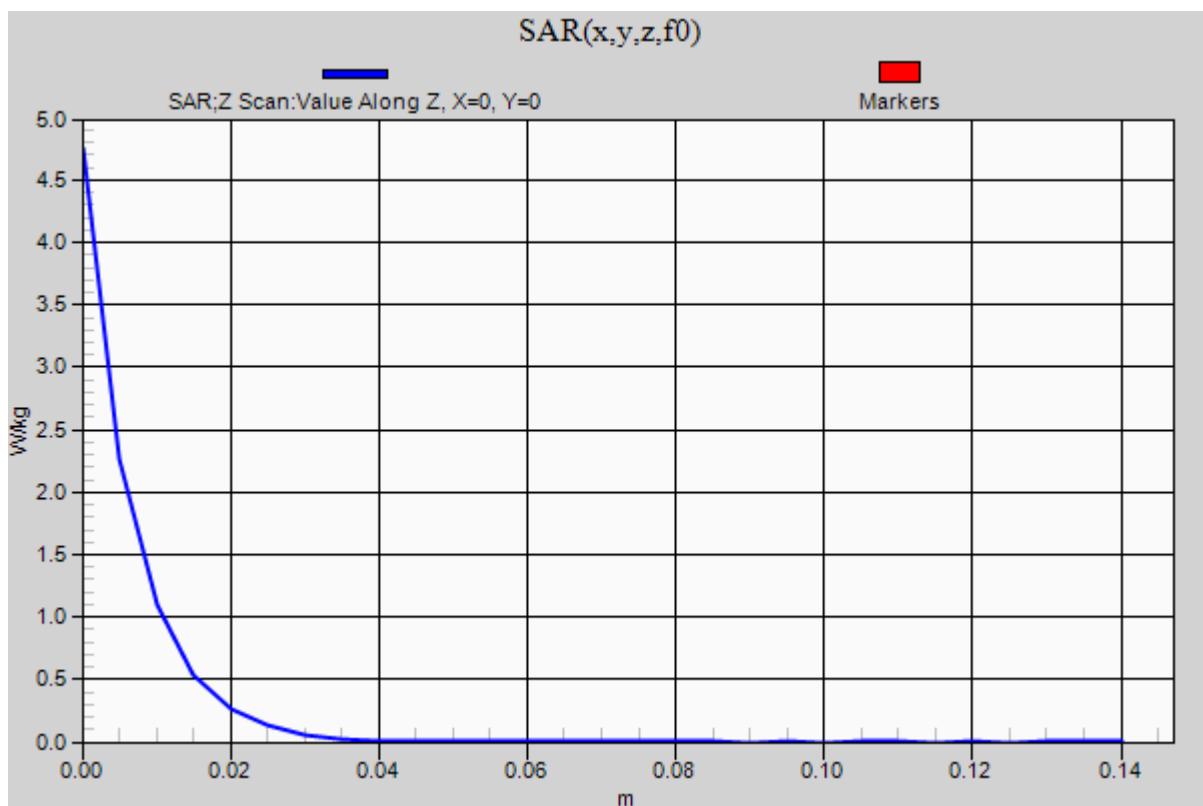
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=5\text{mm}$

Maximum value of SAR (measured) = 4.75 W/kg

Date: 2017/01/20

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170123\_SystemPerformanceCheck-2600MHz

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.226$  S/m;  $\epsilon_r = 51.269$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (81x71x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 22.5 W/kg

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

Reference Value = 99.46 V/m; Power Drift = -0.01 dB

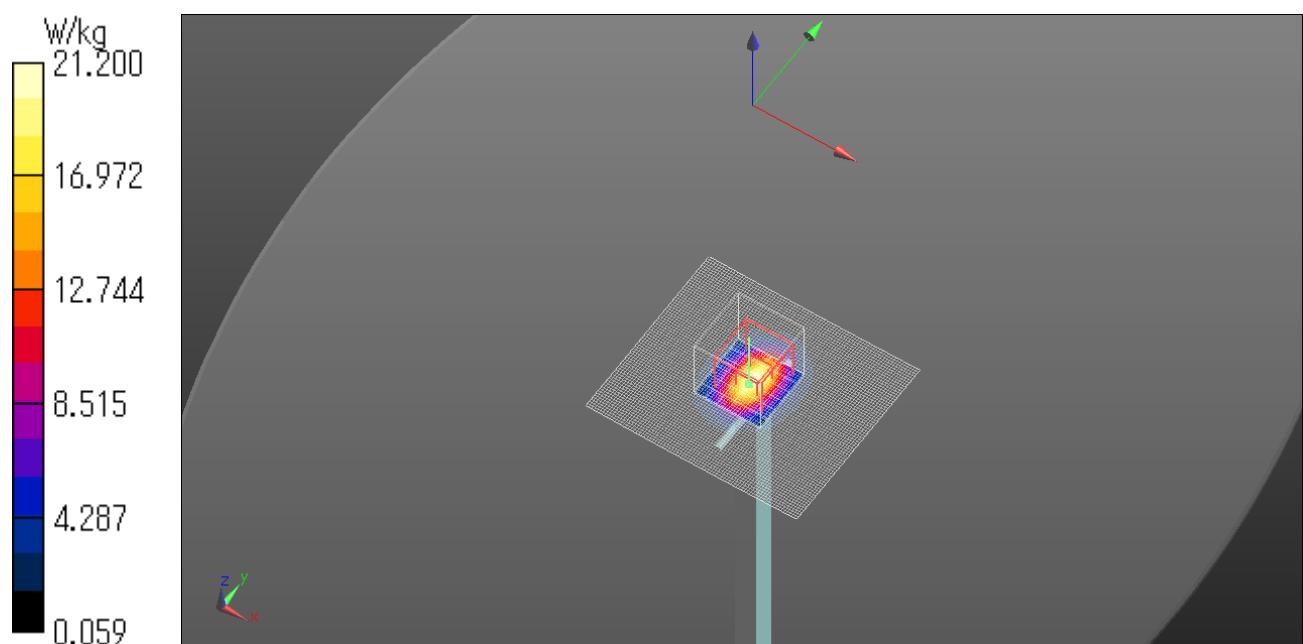
Peak SAR (extrapolated) = 30.1 W/kg

**SAR(1 g) = 13.5 W/kg; SAR(10 g) = 5.84 W/kg**

Maximum value of SAR (measured) = 21.2 W/kg

Date: 2017/01/23

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



**20170123\_SystemPerformanceCheck-2600MHz**

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.226$  S/m;  $\epsilon_r = 51.269$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:1203

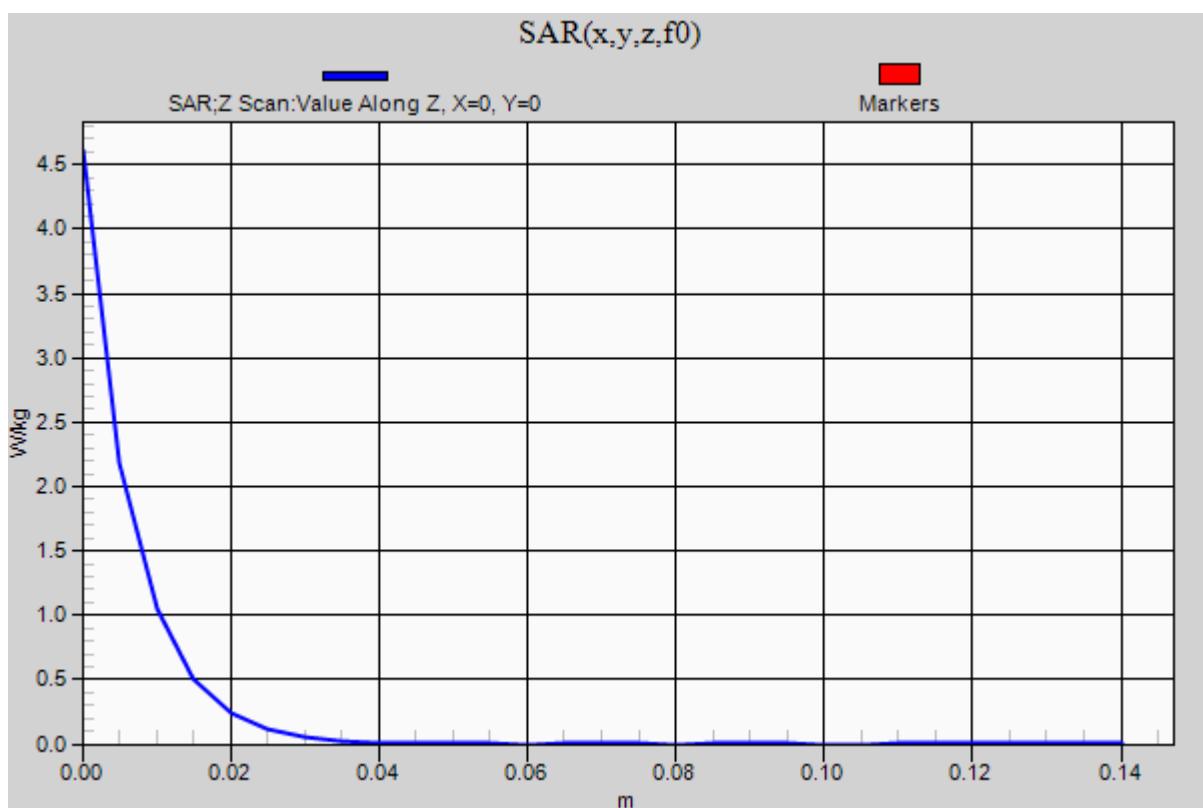
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 4.61 W/kg

Date: 2017/01/23

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170221\_SystemPerformanceCheck-2600MHz

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;

Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.111$  S/m;  $\epsilon_r = 51.039$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Area Scan (81x71x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 22.4 W/kg

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

Reference Value = 101.9 V/m; Power Drift = 0.06 dB

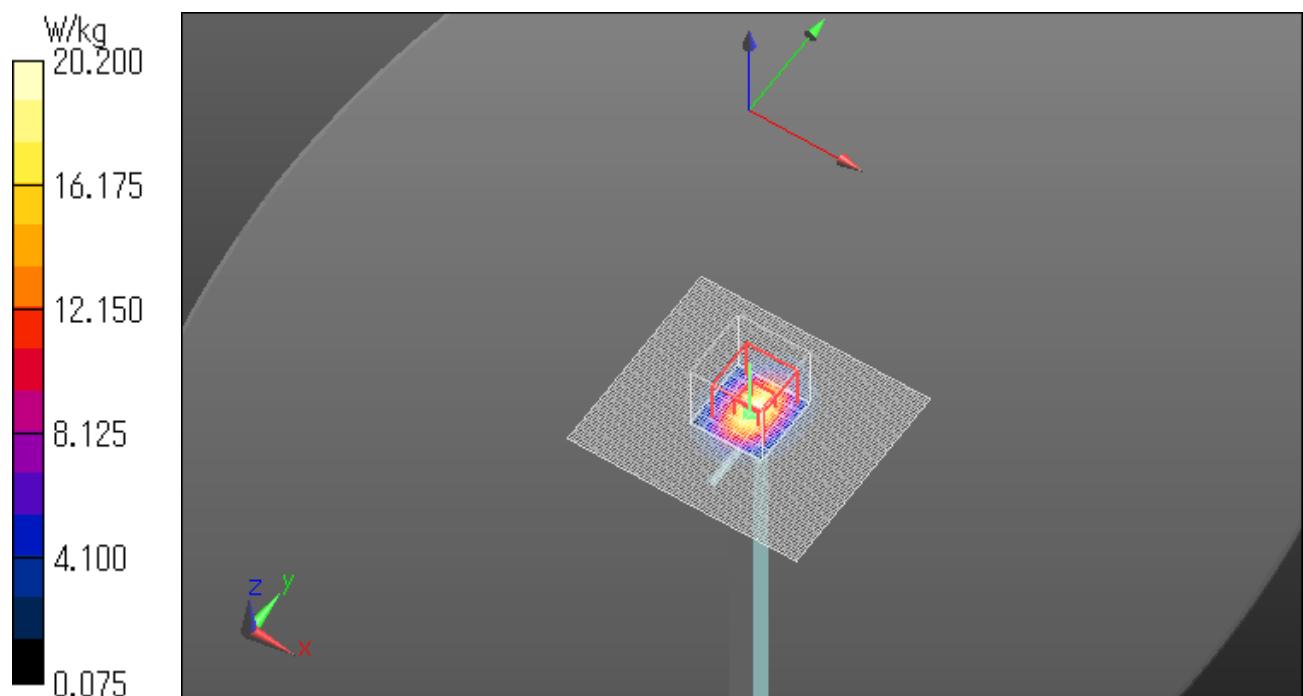
Peak SAR (extrapolated) = 28.6 W/kg

**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 5.85 W/kg**

Maximum value of SAR (measured) = 20.2 W/kg

Date: 2017/02/21

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



## 20170221\_SystemPerformanceCheck-2600MHz

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz); Frequency: 2600 MHz;

Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.111$  S/m;  $\epsilon_r = 51.039$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.08, 7.08, 7.08); Calibrated: 2016/05/12;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2016/05/13

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Z Scan (1x1x21):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 22.3 W/kg

Date: 2017/02/21

Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.

