

## 17.5 SAR test plots for LTE Band4

### LTE Band4 QPSK Allocation1 Start0 1720MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 1.45 W/kg

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

Reference Value = 31.35 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.65 W/kg

**SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.446 W/kg**

Maximum value of SAR (measured) = 1.23 W/kg

**Zoom Scan 2 (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 31.35 V/m; Power Drift = -0.03 dB

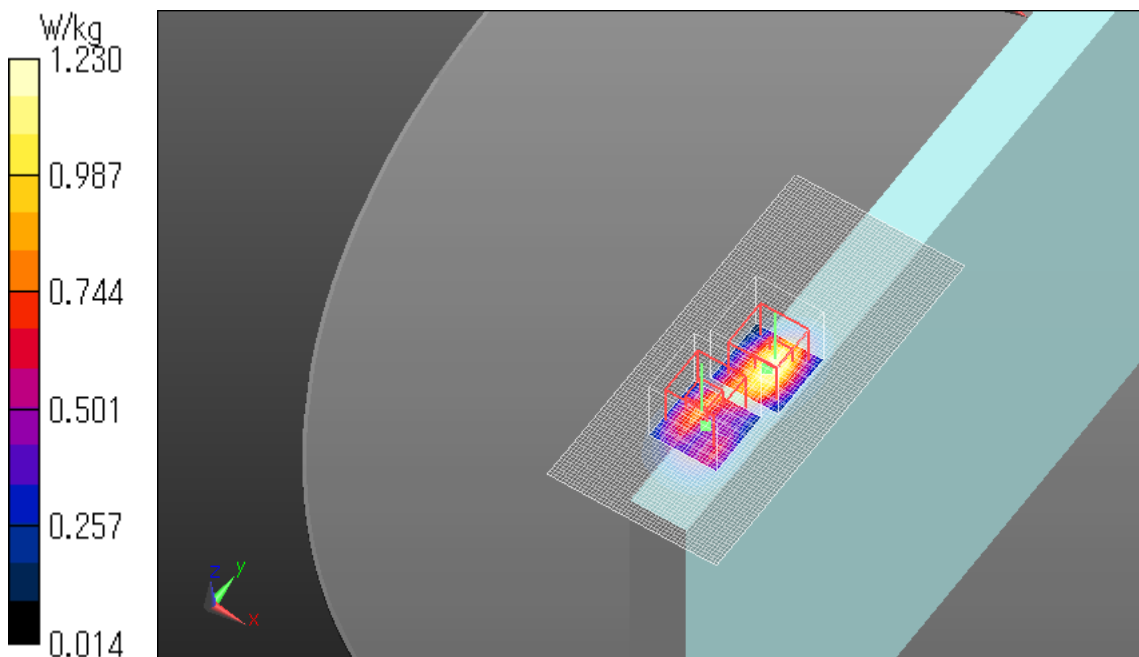
Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.532 W/kg; SAR(10 g) = 0.263 W/kg**

Maximum value of SAR (measured) = 0.847 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation1 Start0 1732.5MHz Edge1 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.471$  S/m;  $\epsilon_r = 51.489$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.43 W/kg

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

Reference Value = 31.15 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.61 W/kg

**SAR(1 g) = 0.855 W/kg; SAR(10 g) = 0.437 W/kg**

Maximum value of SAR (measured) = 1.20 W/kg

**Zoom Scan 2 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.15 V/m; Power Drift = -0.13 dB

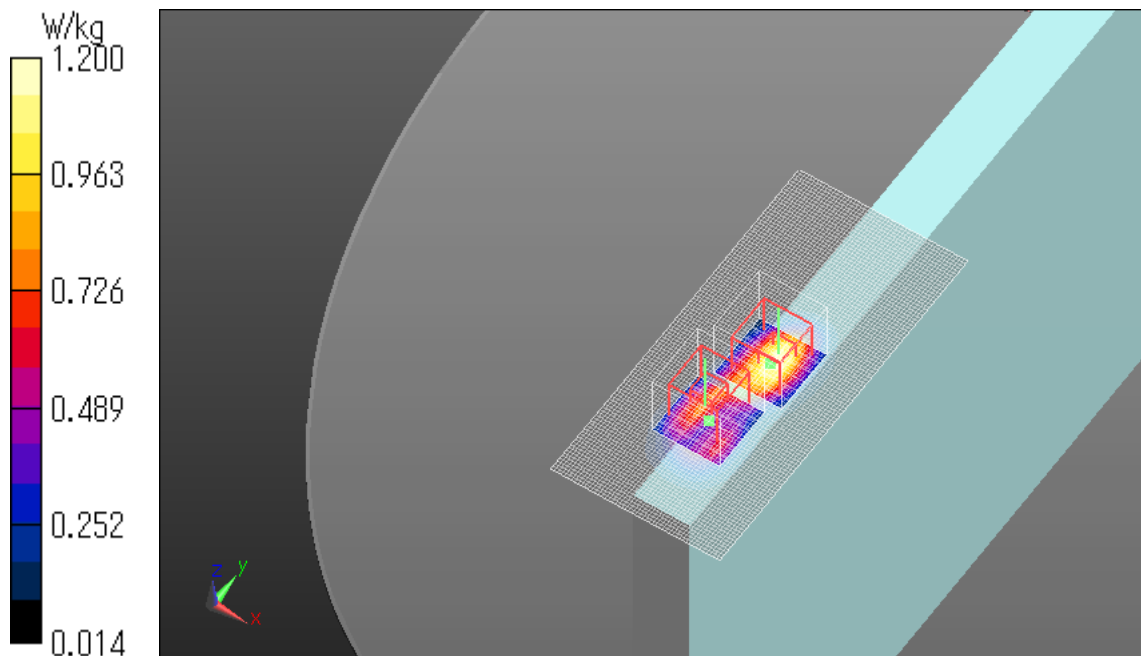
Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.252 W/kg**

Maximum value of SAR (measured) = 0.812 W/kg

Date: 2017/01/13

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



### **LTE Band4 QPSK Allocation1 Start99 1745MHz Edge1 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.483$  S/m;  $\epsilon_r = 51.456$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.44 W/kg

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

Reference Value = 29.94 V/m; Power Drift = -0.08 dB

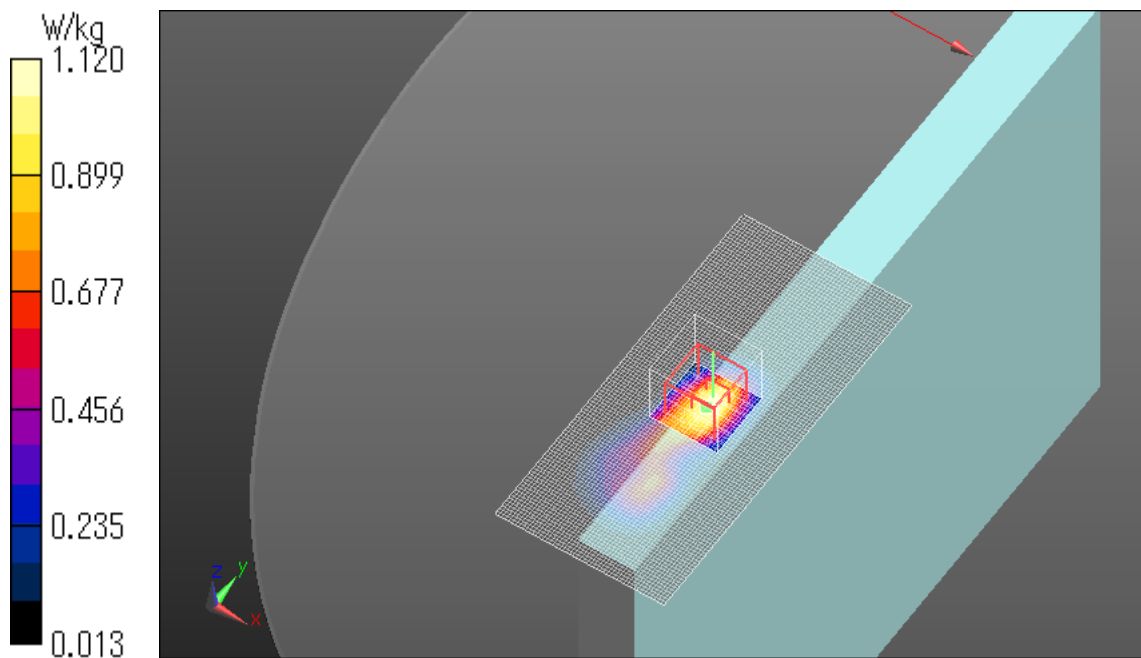
Peak SAR (extrapolated) = 1.51 W/kg

**SAR(1 g) = 0.801 W/kg; SAR(10 g) = 0.413 W/kg**

Maximum value of SAR (measured) = 1.12 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start0 1720MHz Edge1 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.54 W/kg

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

Reference Value = 31.63 V/m; Power Drift = -0.13 dB

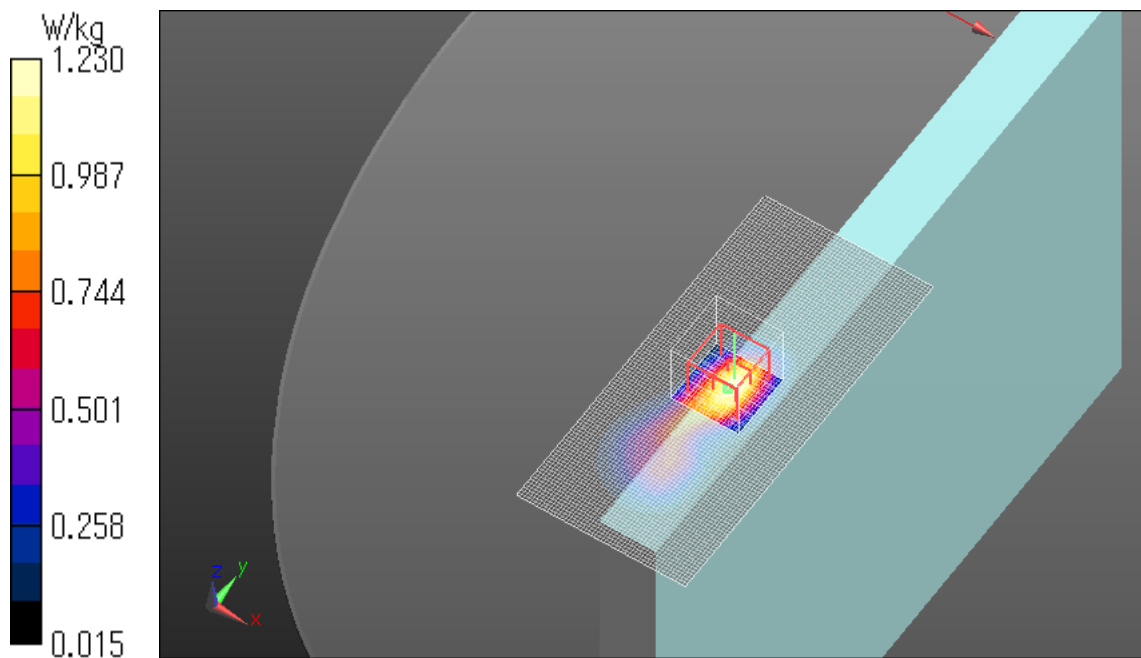
Peak SAR (extrapolated) = 1.66 W/kg

**SAR(1 g) = 0.883 W/kg; SAR(10 g) = 0.451 W/kg**

Maximum value of SAR (measured) = 1.23 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start49 1732.5MHz Edge1 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.471$  S/m;  $\epsilon_r = 51.489$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.49 W/kg

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

Reference Value = 30.65 V/m; Power Drift = -0.12 dB

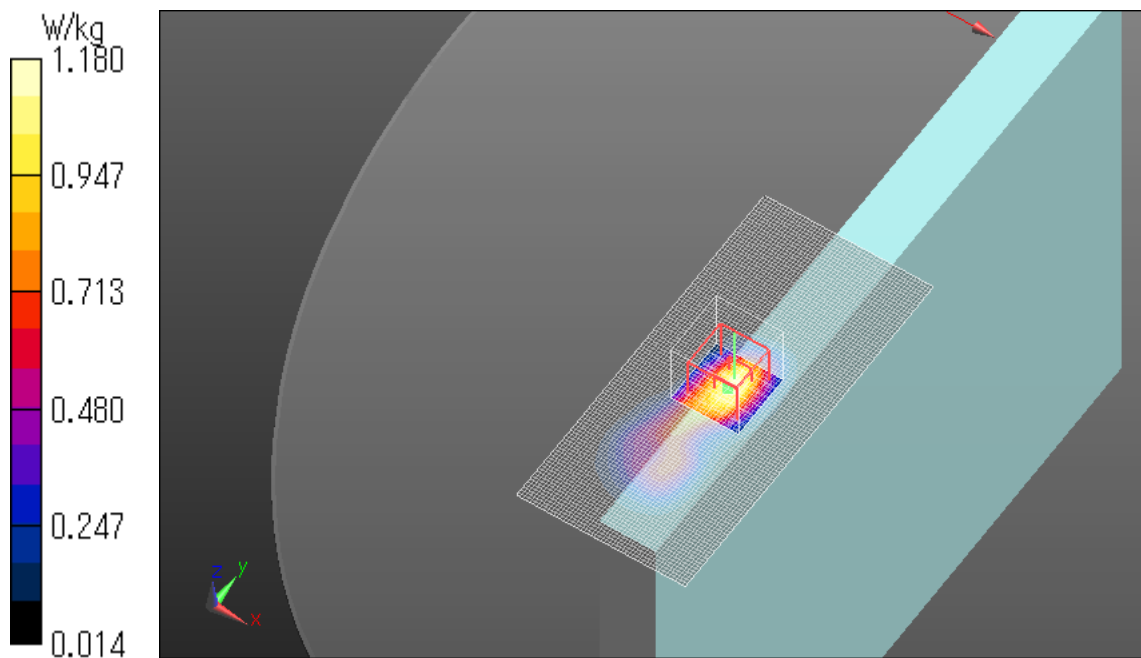
Peak SAR (extrapolated) = 1.57 W/kg

**SAR(1 g) = 0.838 W/kg; SAR(10 g) = 0.431 W/kg**

Maximum value of SAR (measured) = 1.18 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start49 1745MHz Edge1 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.483$  S/m;  $\epsilon_r = 51.456$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.52 W/kg

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

Reference Value = 30.87 V/m; Power Drift = -0.12 dB

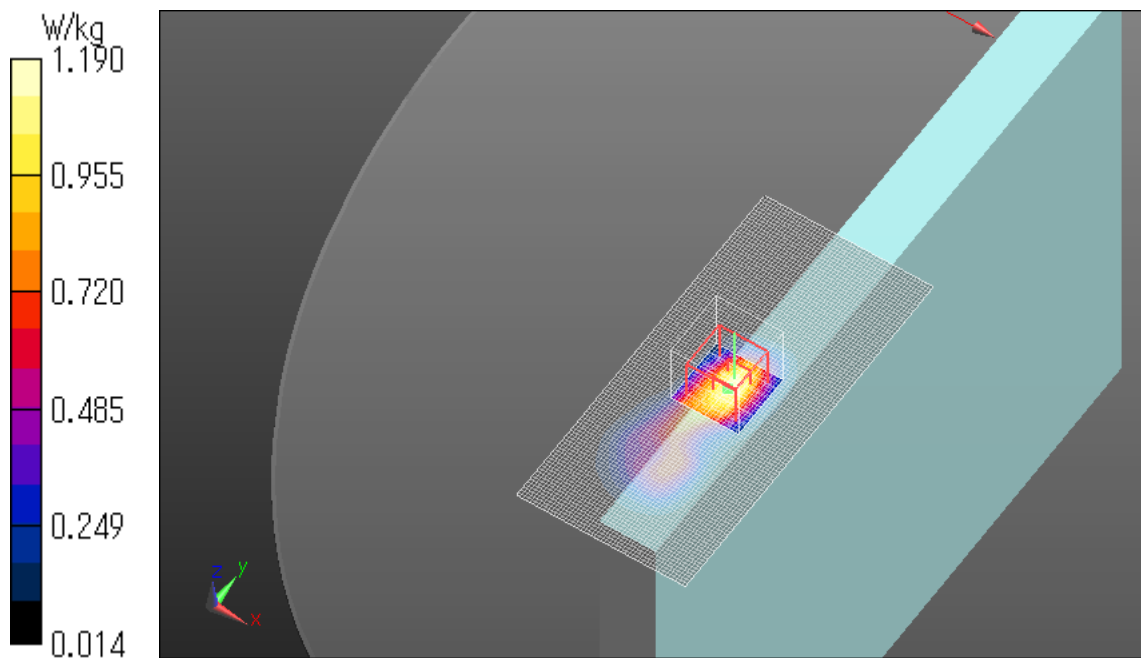
Peak SAR (extrapolated) = 1.59 W/kg

**SAR(1 g) = 0.846 W/kg; SAR(10 g) = 0.436 W/kg**

Maximum value of SAR (measured) = 1.19 W/kg

Date: 2017/01/13

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



# **LTE Band4 QPSK Allocation100 Start0 1720MHz Edge1 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.52 W/kg

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

Reference Value = 31.72 V/m; Power Drift = -0.11 dB

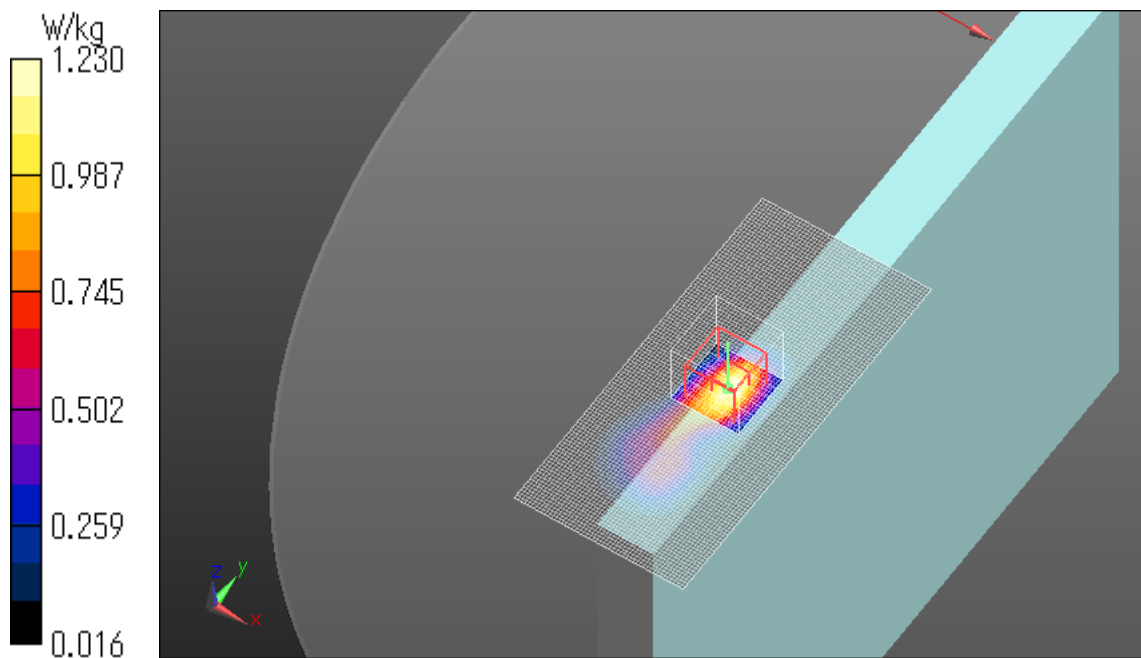
Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 0.873 W/kg; SAR(10 g) = 0.446 W/kg**

Maximum value of SAR (measured) = 1.23 W/kg

Date: 2017/01/13

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



#### **LTE Band4 QPSK Allocation1 Start0 1720MHz Rear 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.781 W/kg

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

Reference Value = 28.75 V/m; Power Drift = -0.09 dB

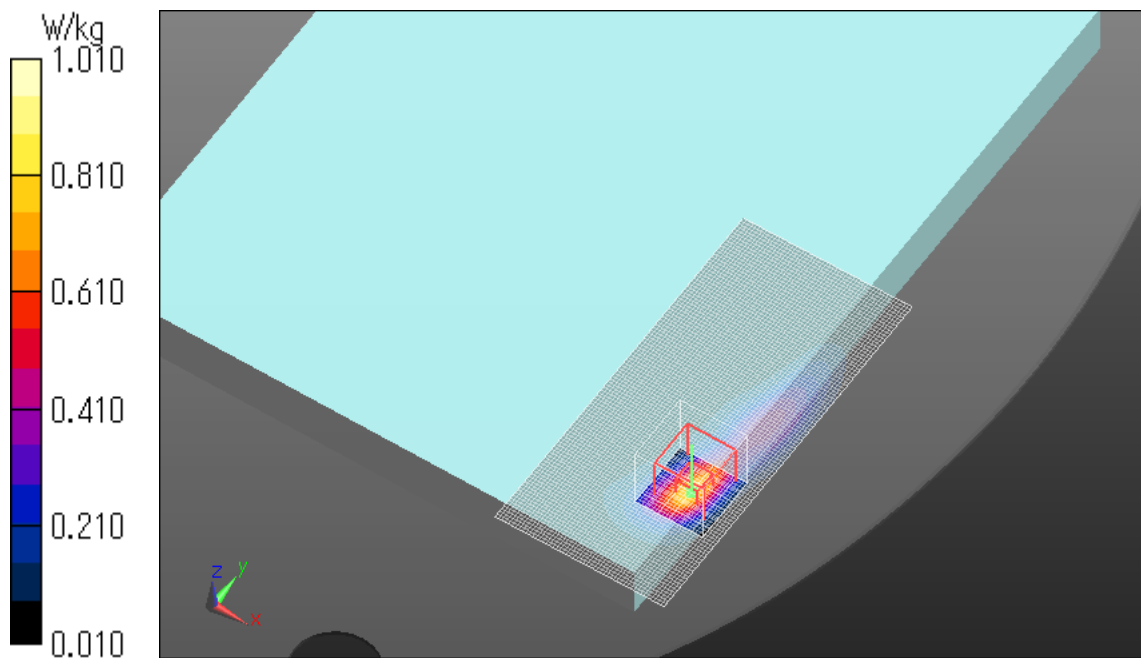
Peak SAR (extrapolated) = 1.35 W/kg

**SAR(1 g) = 0.666 W/kg; SAR(10 g) = 0.304 W/kg**

Maximum value of SAR (measured) = 1.01 W/kg

Date: 2017/01/13

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



#### **LTE Band4 QPSK Allocation50 Start0 1720MHz Rear 0mm Power Reduction**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.948 W/kg

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

Reference Value = 28.92 V/m; Power Drift = -0.07 dB

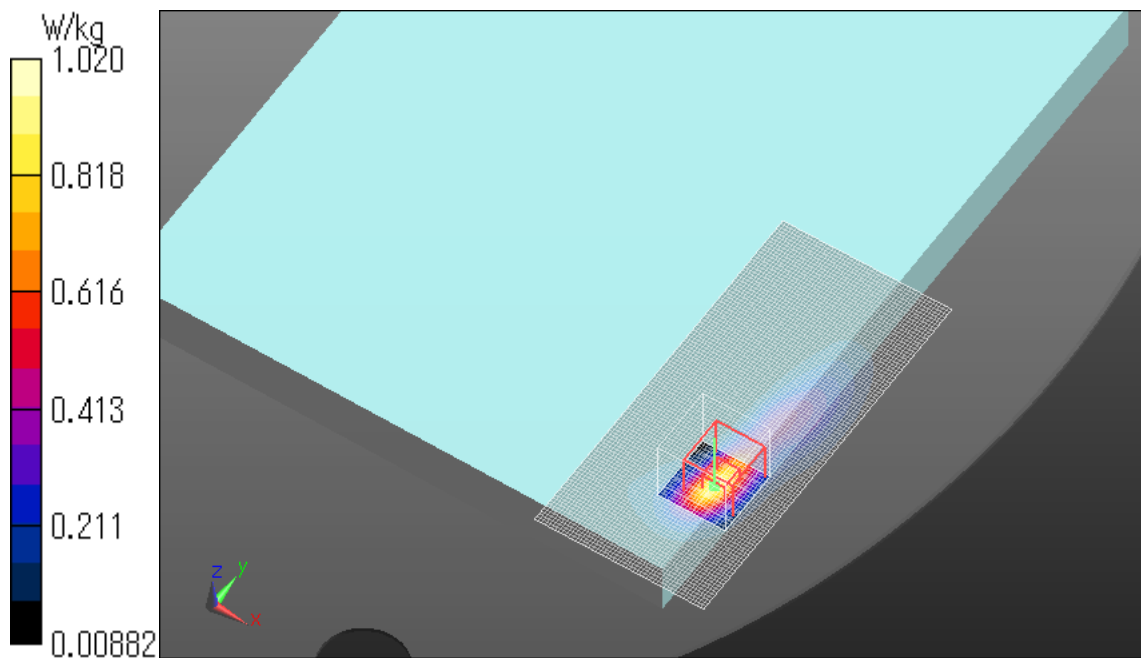
Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 0.677 W/kg; SAR(10 g) = 0.308 W/kg**

Maximum value of SAR (measured) = 1.02 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Edge1 39mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.261 W/kg

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

Reference Value = 14.37 V/m; Power Drift = -0.02 dB

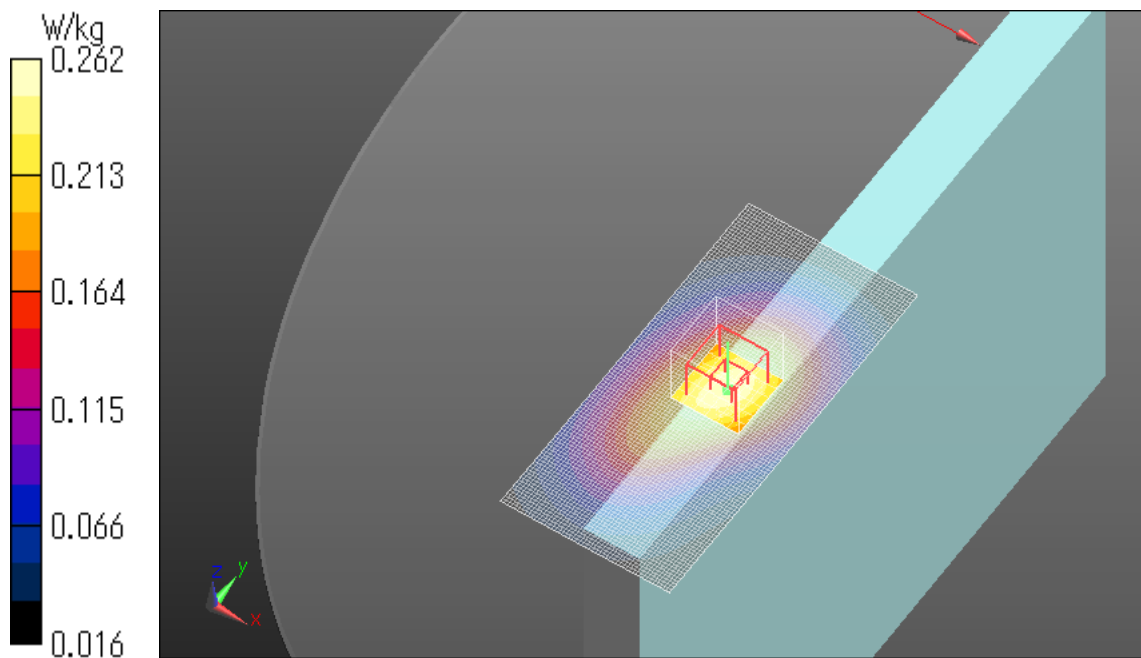
Peak SAR (extrapolated) = 0.309 W/kg

**SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.139 W/kg**

Maximum value of SAR (measured) = 0.262 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Edge1 39mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.217 W/kg

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

Reference Value = 13.13 V/m; Power Drift = -0.01 dB

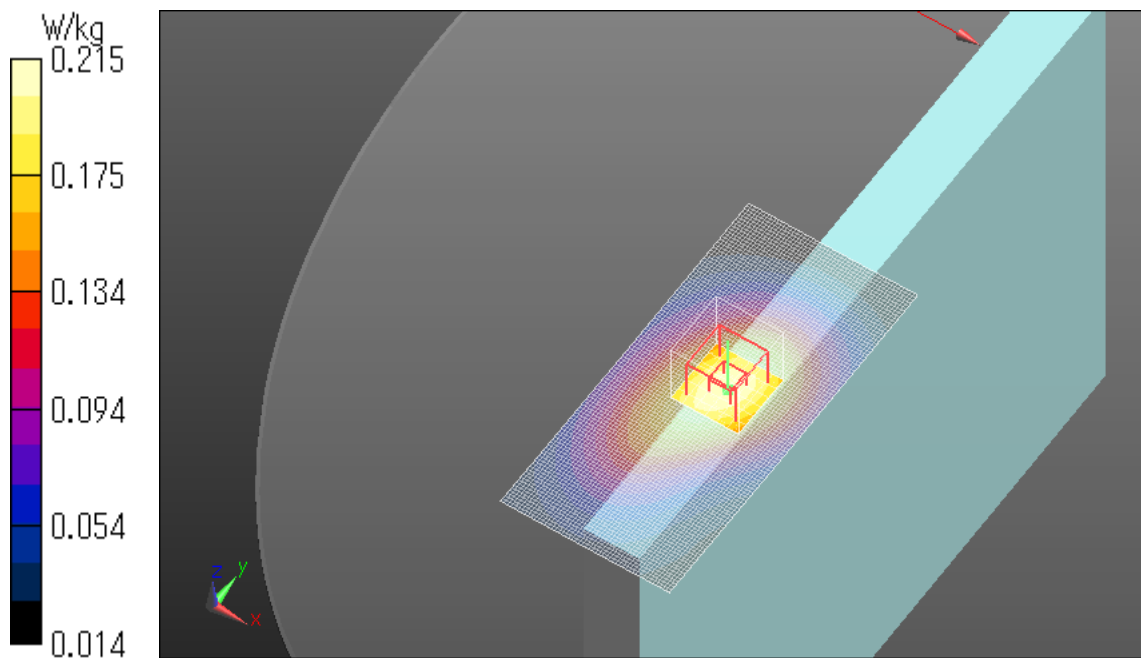
Peak SAR (extrapolated) = 0.253 W/kg

**SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.114 W/kg**

Maximum value of SAR (measured) = 0.215 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Edge2 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0113 W/kg

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

Reference Value = 2.579 V/m; Power Drift = -0.12 dB

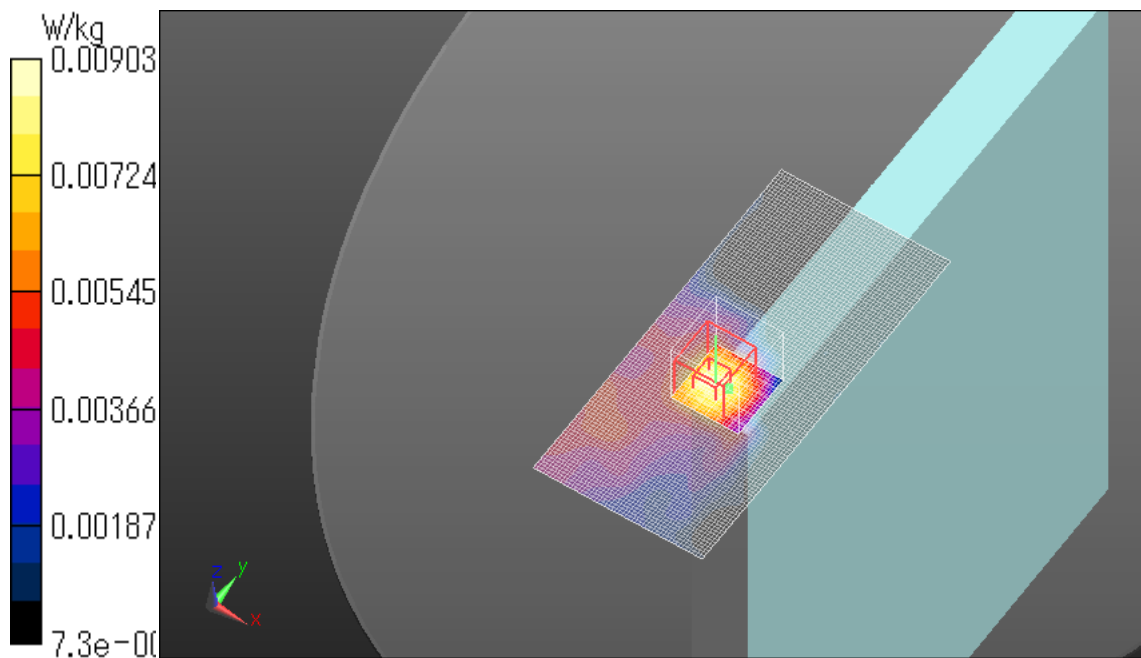
Peak SAR (extrapolated) = 0.0210 W/kg

**SAR(1 g) = 0.00662 W/kg; SAR(10 g) = 0.004 W/kg**

Maximum value of SAR (measured) = 0.00903 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Edge2 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.00821 W/kg

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

Reference Value = 2.334 V/m; Power Drift = -0.13 dB

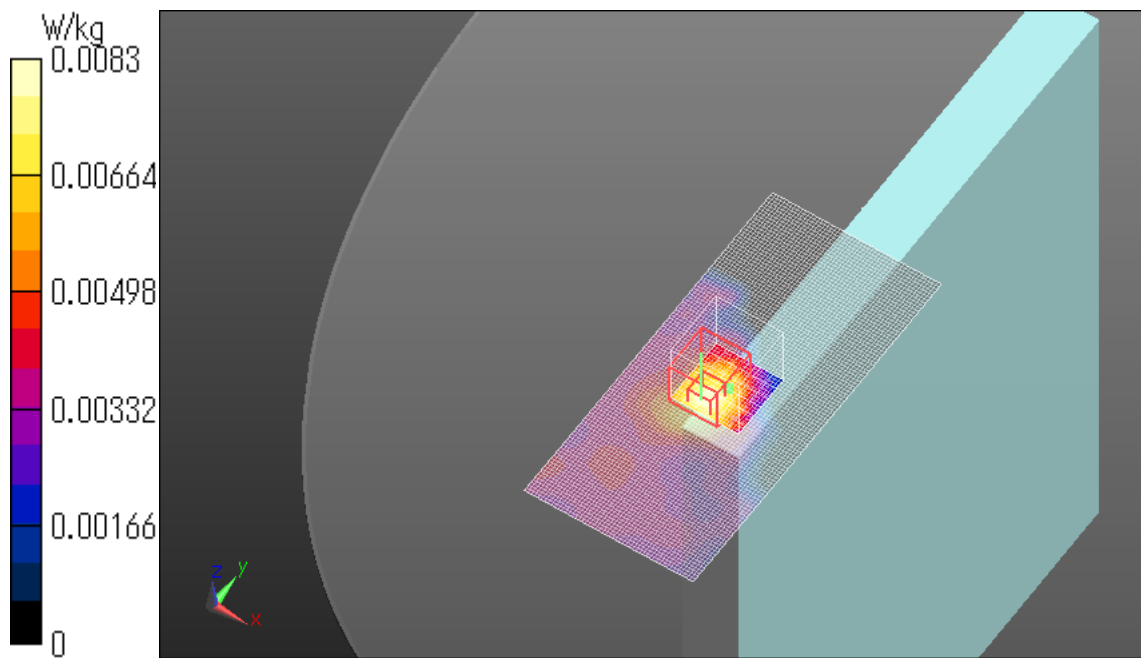
Peak SAR (extrapolated) = 0.0180 W/kg

**SAR(1 g) = 0.00618 W/kg; SAR(10 g) = 0.00373 W/kg**

Maximum value of SAR (measured) = 0.00830 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Edge2 tilt 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 51.342$ ;  $\rho = 1000$  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 (91x91x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0116 W/kg

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

Reference Value = 3.160 V/m; Power Drift = -0.06 dB

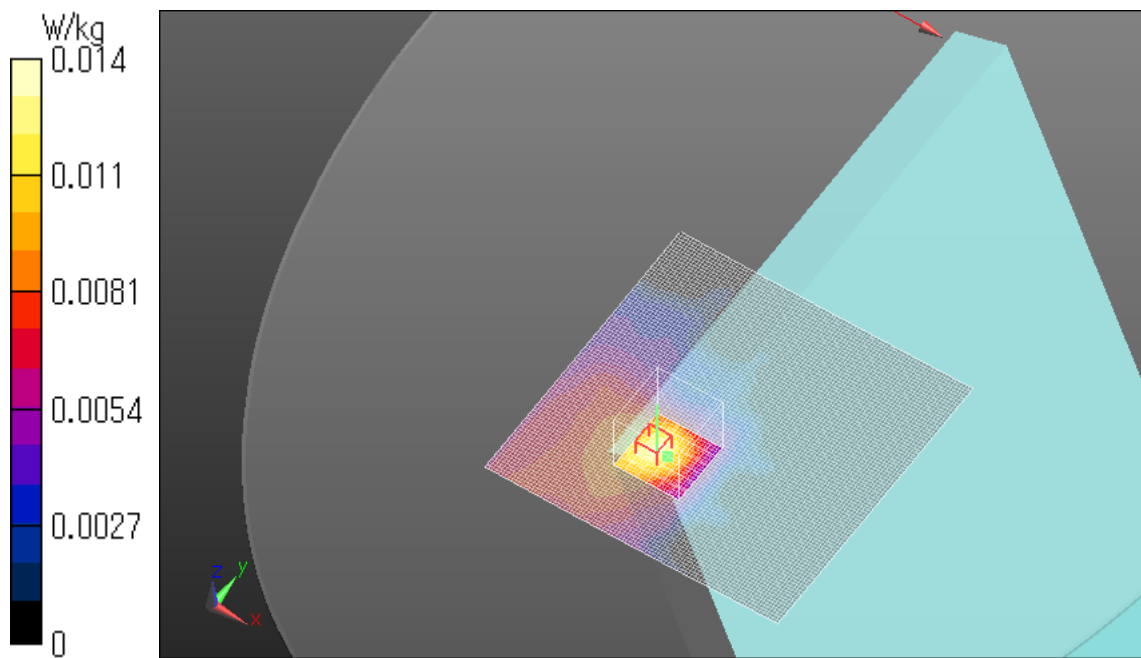
Peak SAR (extrapolated) = 0.0230 W/kg

**SAR(1 g) = 0.00898 W/kg**

Maximum value of SAR (measured) = 0.0135 W/kg

Date: 2017/02/15

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Edge2 tilt 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 51.342$ ;  $\rho = 1000$  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 (91x91x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.00975 W/kg

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

Reference Value = 2.963 V/m; Power Drift = -1.34 dB

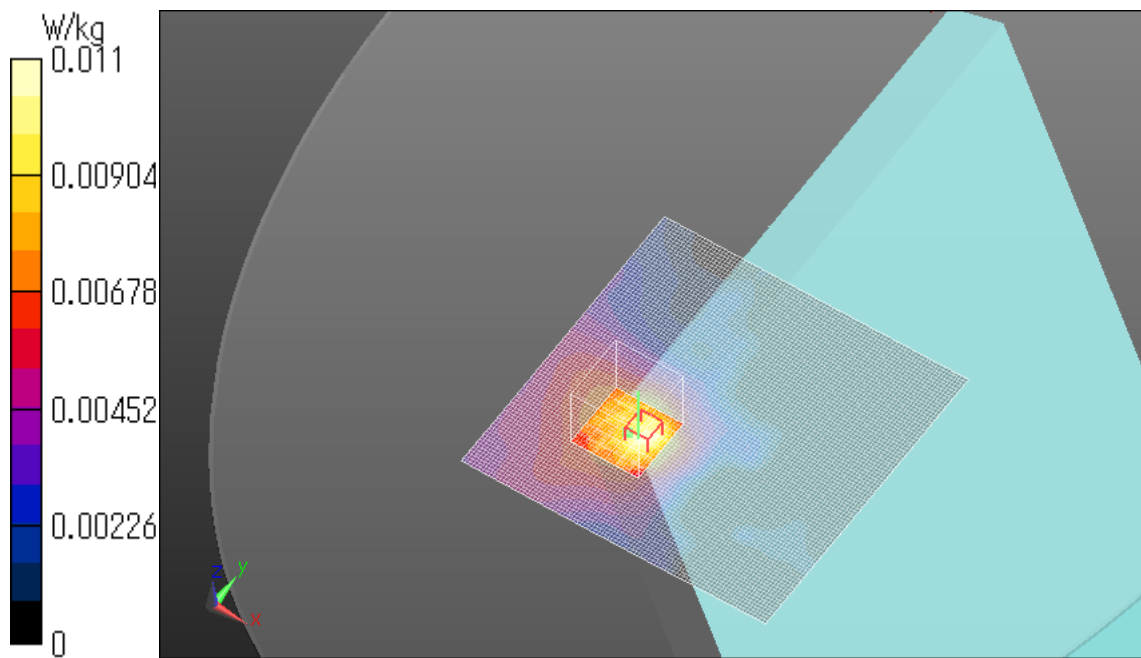
Peak SAR (extrapolated) = 0.0160 W/kg

**SAR(1 g) = 0.00738 W/kg**

Maximum value of SAR (measured) = 0.0113 W/kg

Date: 2017/02/15

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Edge3 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.00609 W/kg

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

Reference Value = 1.776 V/m; Power Drift = 0.12 dB

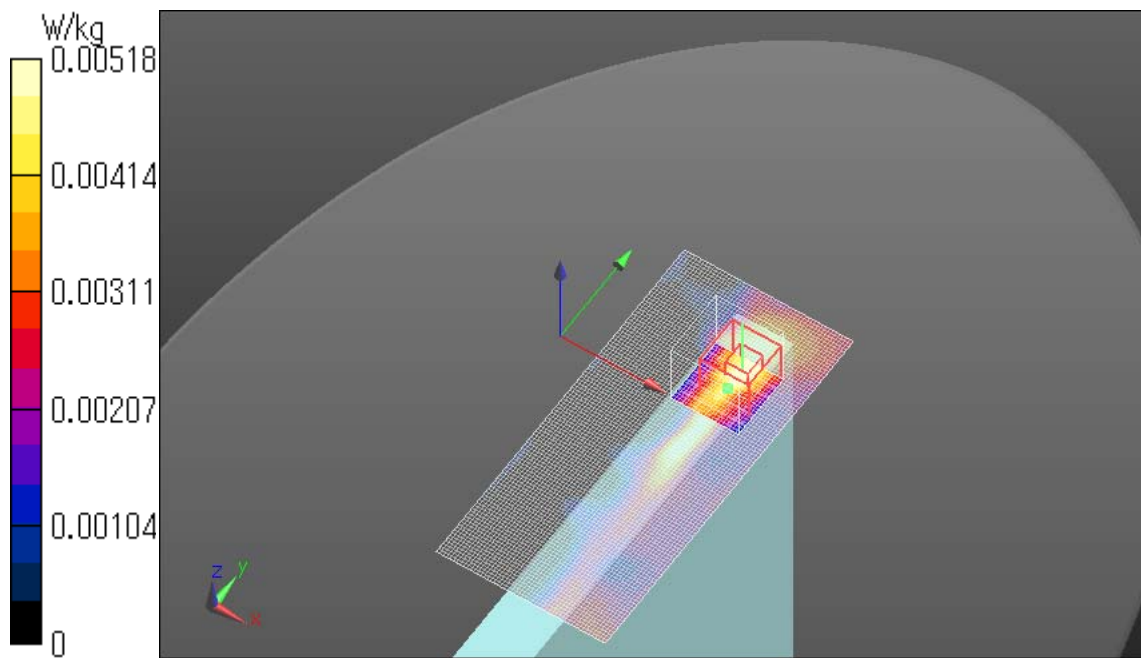
Peak SAR (extrapolated) = 0.00972 W/kg

**SAR(1 g) = 0.00356 W/kg; SAR(10 g) = 0.00148 W/kg**

Maximum value of SAR (measured) = 0.00518 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Edge3 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.00698 W/kg

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

Reference Value = 2.286 V/m; Power Drift = -0.06 dB

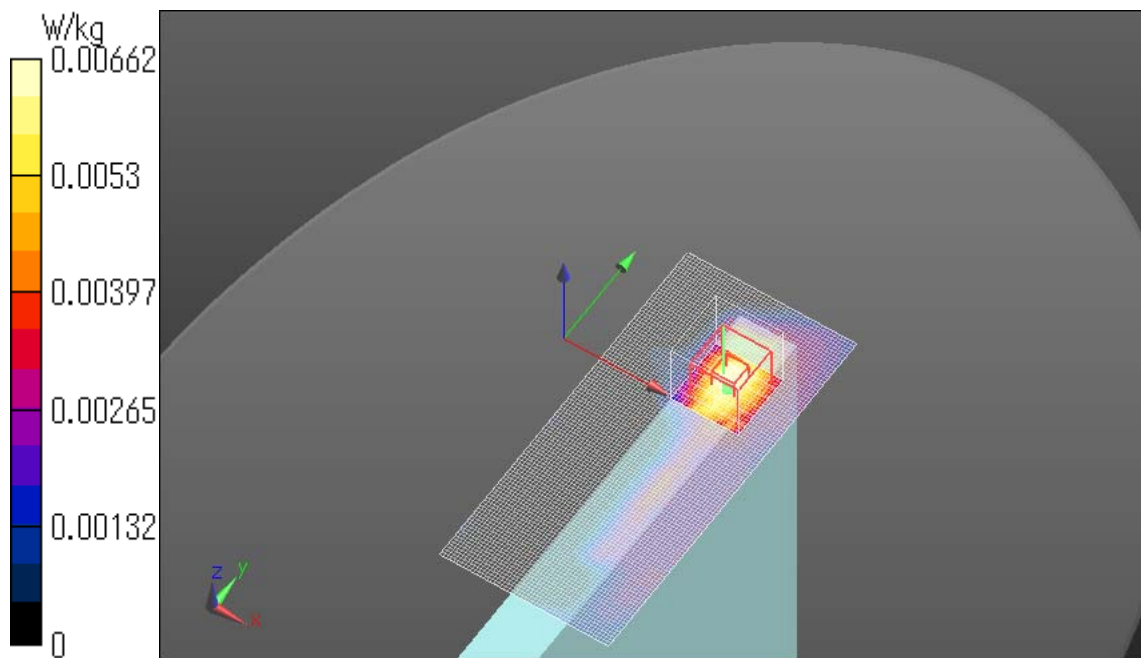
Peak SAR (extrapolated) = 0.0260 W/kg

**SAR(1 g) = 0.00494 W/kg; SAR(10 g) = 0.00266 W/kg**

Maximum value of SAR (measured) = 0.00662 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Edge4 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.478$  S/m;  $\epsilon_r = 51.268$ ;  $\rho = 1000$  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 (81x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.249 W/kg

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

Reference Value = 14.48 V/m; Power Drift = -0.11 dB

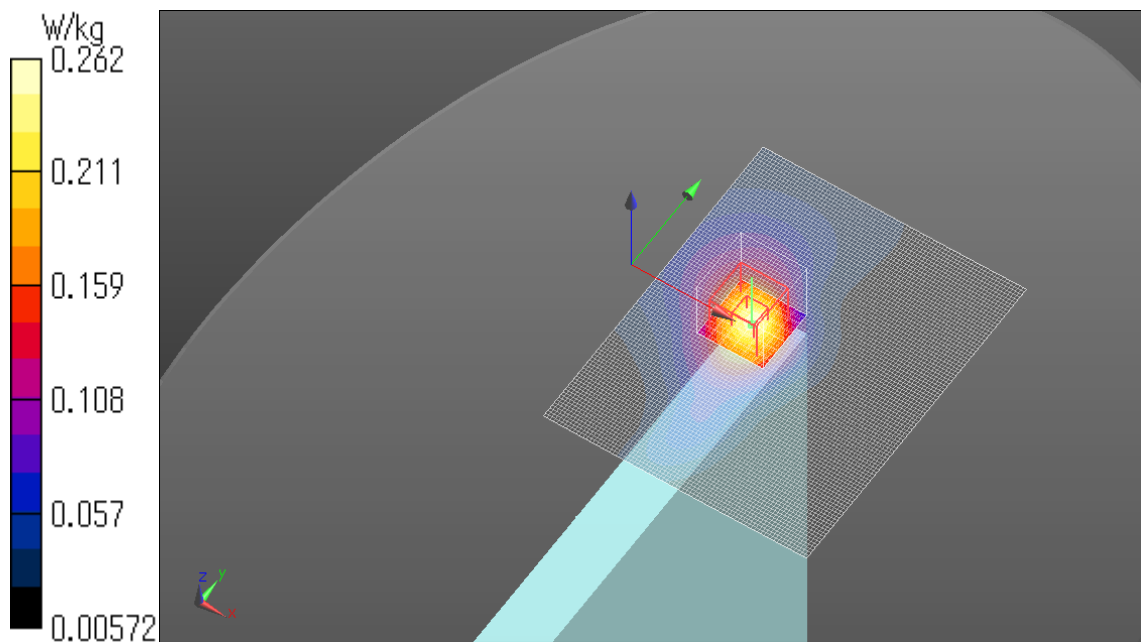
Peak SAR (extrapolated) = 0.327 W/kg

**SAR(1 g) = 0.192 W/kg; SAR(10 g) = 0.112 W/kg**

Maximum value of SAR (measured) = 0.262 W/kg

Date: 2017/01/16

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Edge4 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.478$  S/m;  $\epsilon_r = 51.268$ ;  $\rho = 1000$  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 (81x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.249 W/kg

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

Reference Value = 14.40 V/m; Power Drift = 0.03 dB

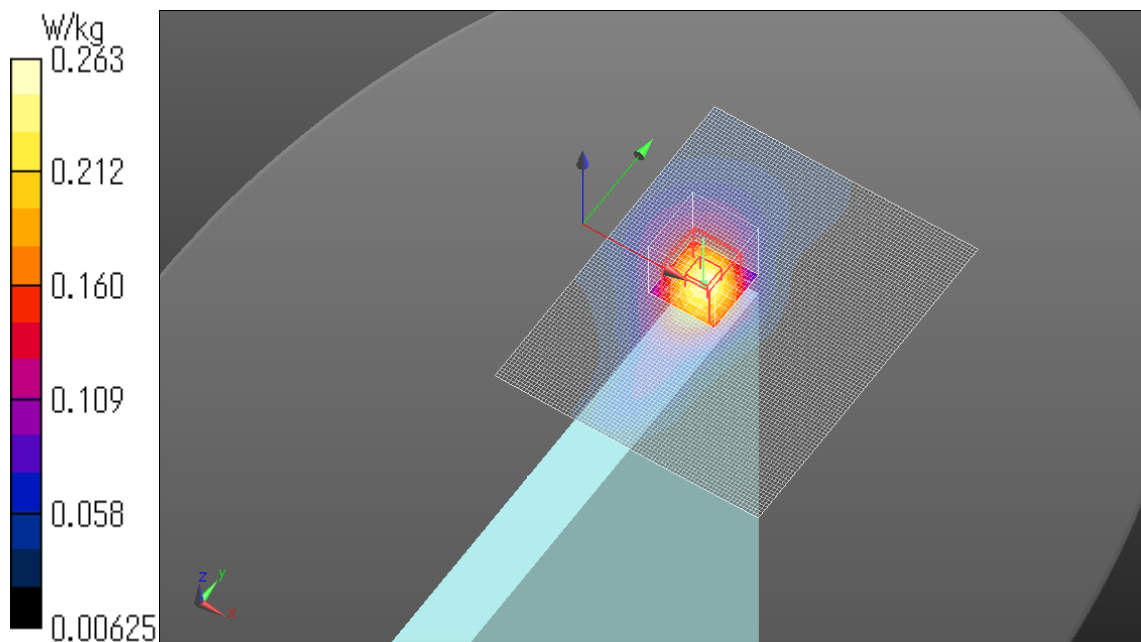
Peak SAR (extrapolated) = 0.328 W/kg

**SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.112 W/kg**

Maximum value of SAR (measured) = 0.263 W/kg

Date: 2017/01/16

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Edge4 tilt 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 51.342$ ;  $\rho = 1000$  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 (81x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.179 W/kg

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

Reference Value = 12.18 V/m; Power Drift = -0.17 dB

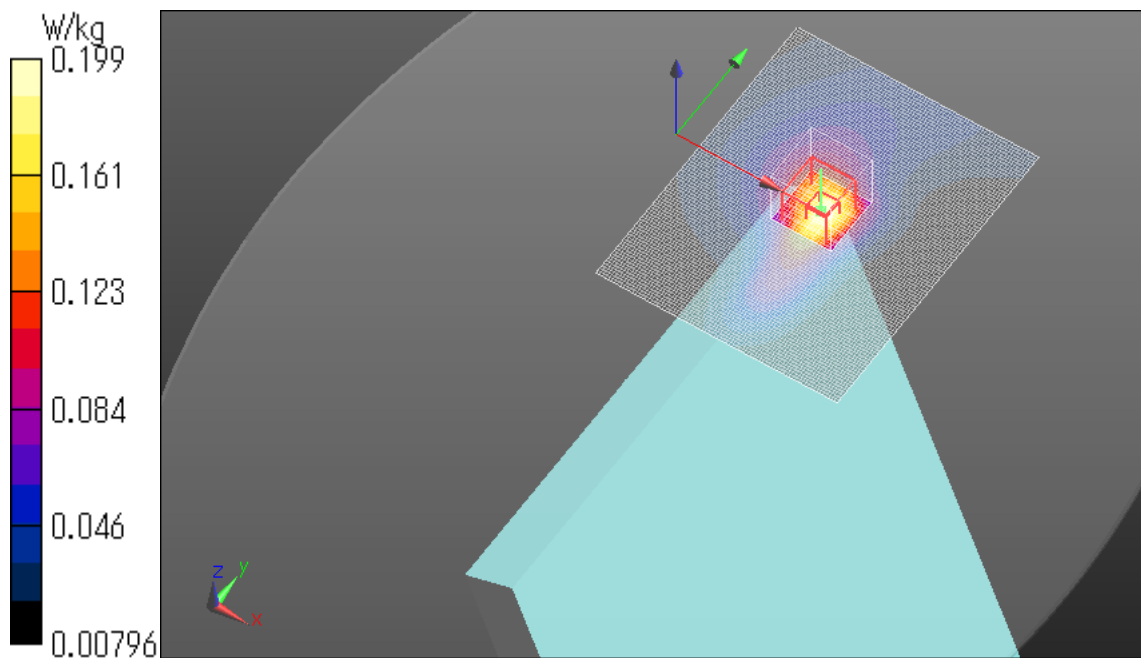
Peak SAR (extrapolated) = 0.240 W/kg

**SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.091 W/kg**

Maximum value of SAR (measured) = 0.199 W/kg

Date: 2017/02/15

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Edge4 tilt 0mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.416$  S/m;  $\epsilon_r = 51.342$ ;  $\rho = 1000$  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 (81x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.184 W/kg

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

Reference Value = 12.76 V/m; Power Drift = 0.07 dB

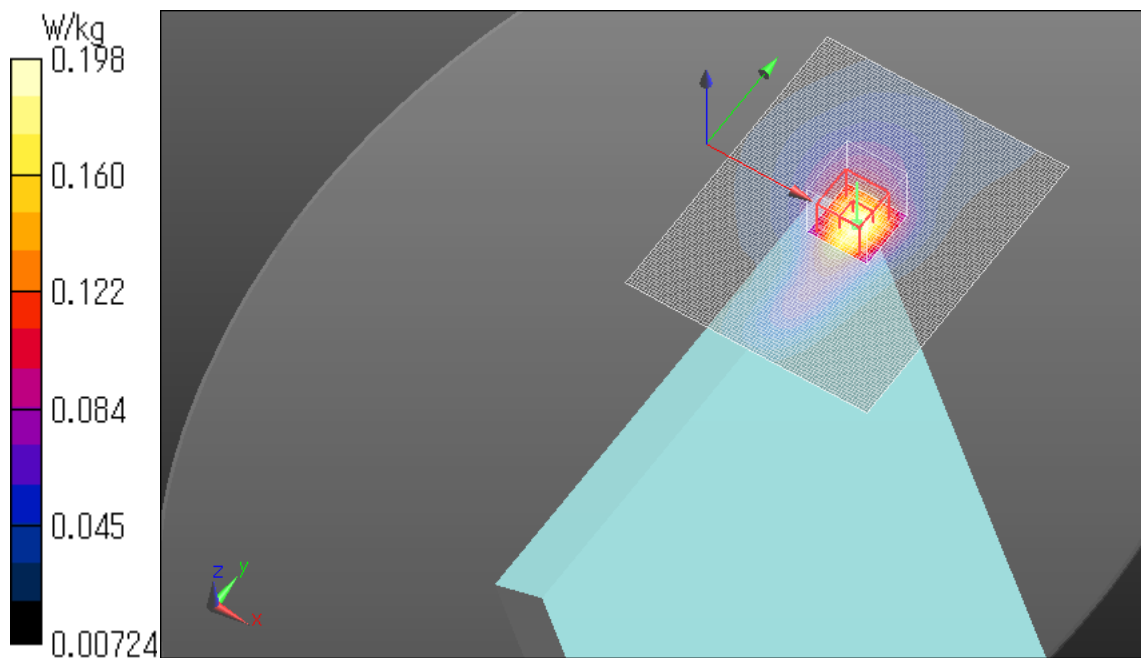
Peak SAR (extrapolated) = 0.241 W/kg

**SAR(1 g) = 0.150 W/kg; SAR(10 g) = 0.090 W/kg**

Maximum value of SAR (measured) = 0.198 W/kg

Date: 2017/02/15

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



**LTE Band4 QPSK Allocation1 Start0 1720MHz Rear 21mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.513 W/kg

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

Reference Value = 20.21 V/m; Power Drift = -0.03 dB

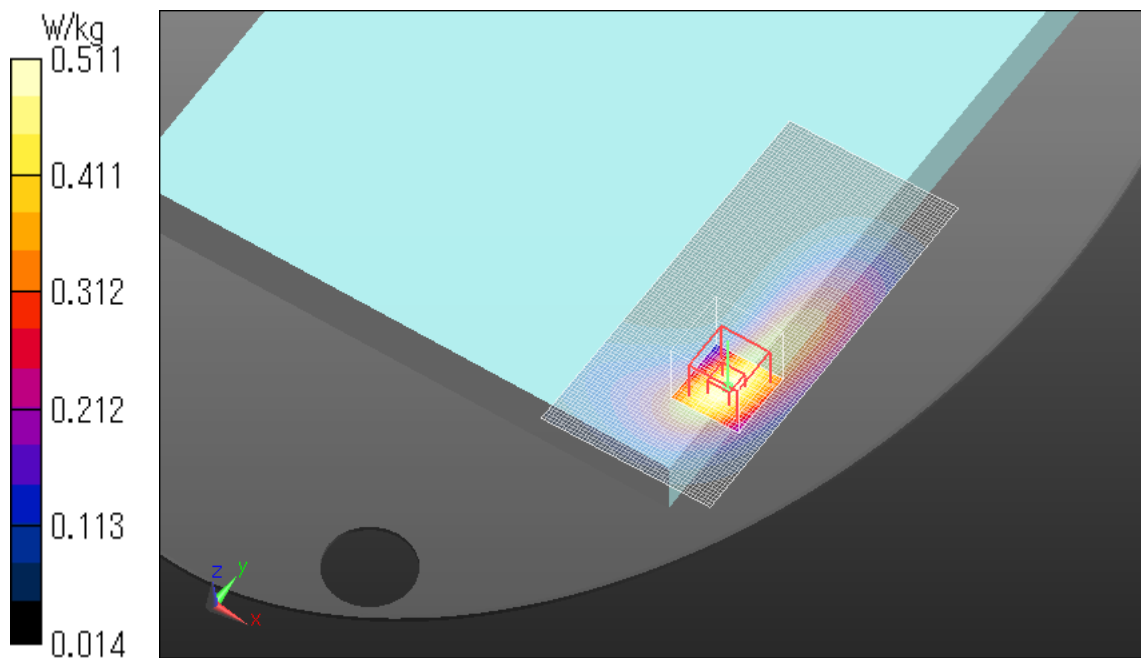
Peak SAR (extrapolated) = 0.610 W/kg

**SAR(1 g) = 0.393 W/kg; SAR(10 g) = 0.238 W/kg**

Maximum value of SAR (measured) = 0.511 W/kg

Date: 2017/01/13

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



**LTE Band4 QPSK Allocation50 Start24 1720MHz Rear 21mm**

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 4, E-UTRA/FDD (1710.0 - 1755.0 MHz); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.461$  S/m;  $\epsilon_r = 51.515$ ;  $\rho = 1000$  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 (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.413 W/kg

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

Reference Value = 18.70 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.525 W/kg

**SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.202 W/kg**

Maximum value of SAR (measured) = 0.439 W/kg

Date: 2017/01/13

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

