

## 15.12 SAR test plots for LTE Band 5

### LTE Band 5 Edge1 0mm 1RB Reduced Power 844.0MHz

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.976$  S/m;  $\epsilon_r = 54.587$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 1.56 W/kg

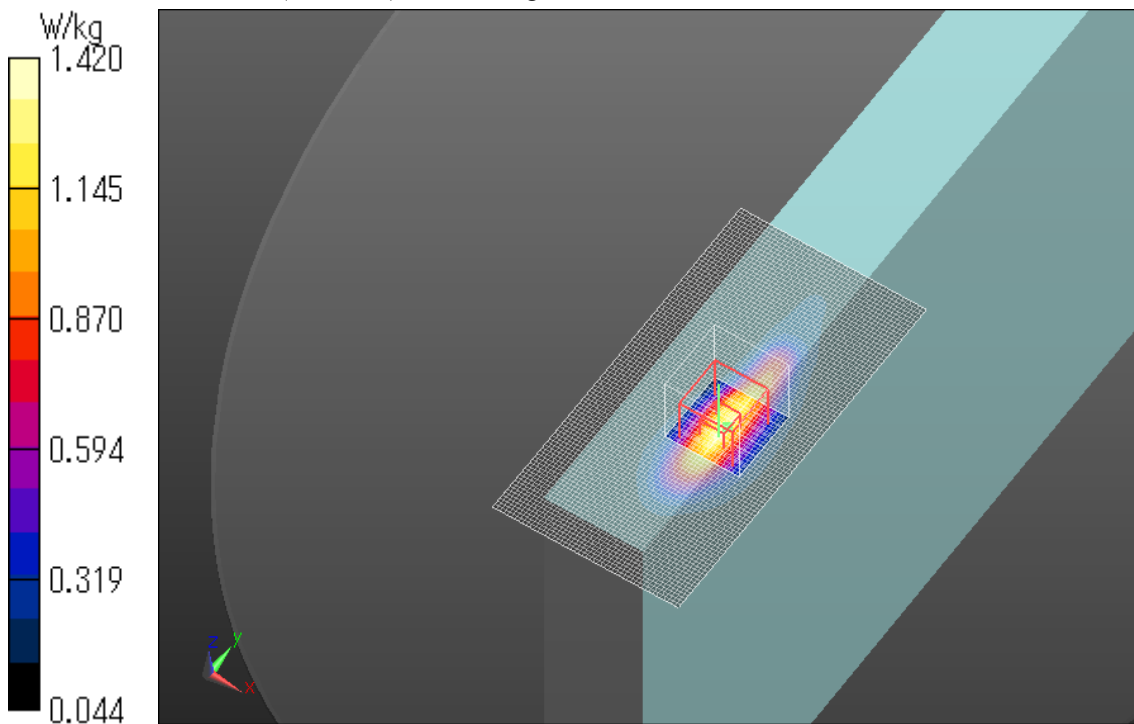
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 6.384 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.89 W/kg

**SAR(1 g) = 0.948 W/kg; SAR(10 g) = 0.503 W/kg**

Maximum value of SAR (measured) = 1.42 W/kg



Plot No.1

**LTE Band 5 Edge1 0mm 1RB Reduced Power 844.0MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.976$  S/m;  $\epsilon_r = 54.587$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

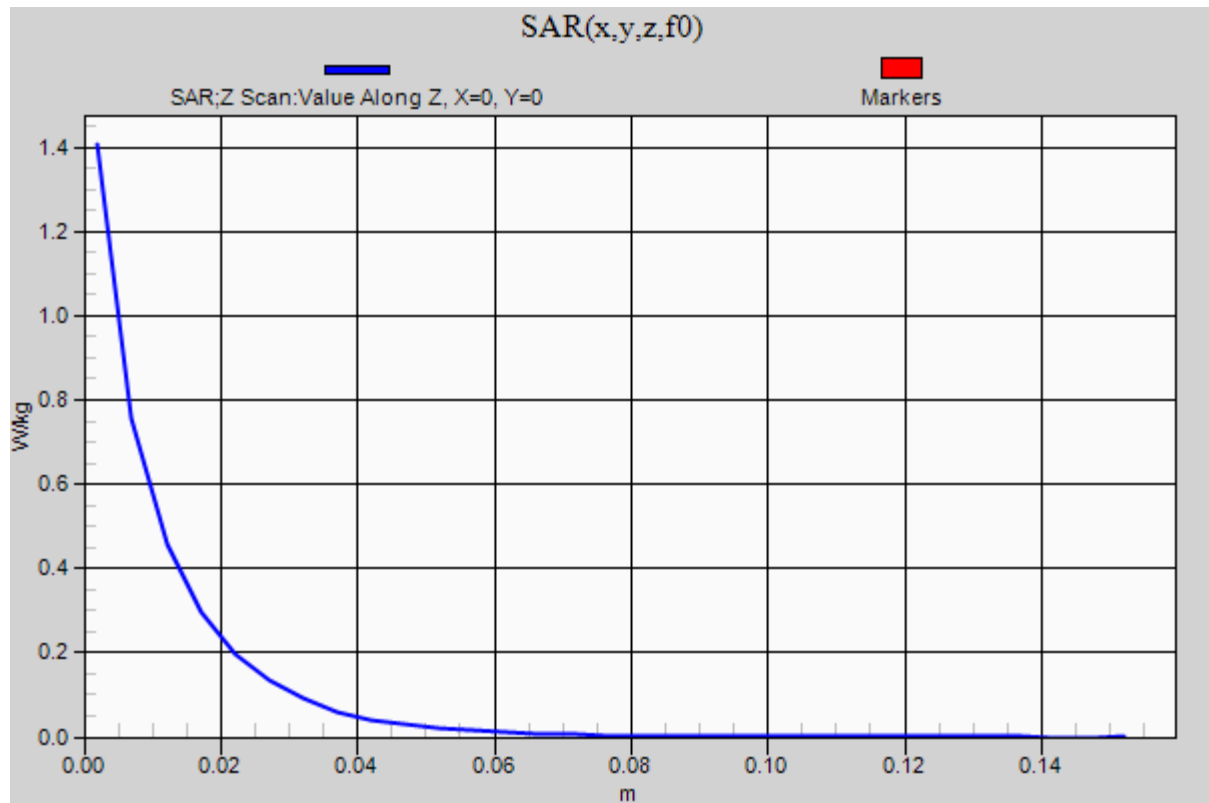
Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

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

Maximum value of SAR (measured) = 1.41 W/kg



**LTE Band 5 Edge1 0mm 1RB Reduced Power 829.0MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

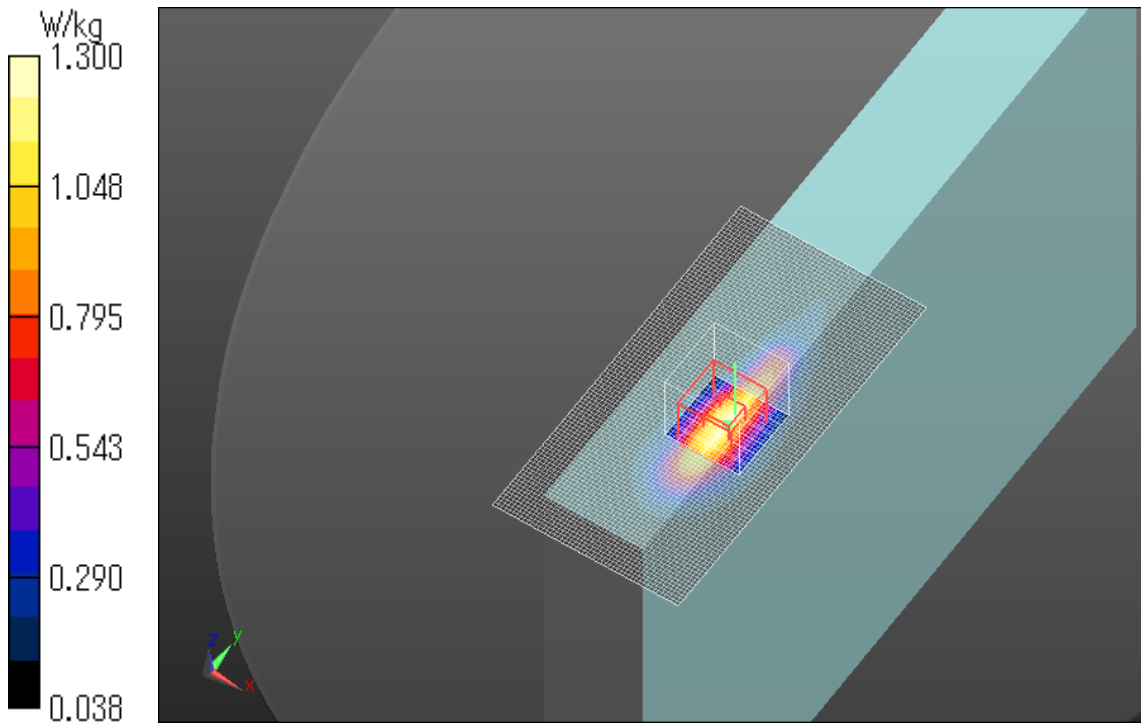
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.417 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.75 W/kg

**SAR(1 g) = 0.878 W/kg; SAR(10 g) = 0.477 W/kg**

Maximum value of SAR (measured) = 1.30 W/kg



**Plot No.2**

**LTE Band 5 Edge1 0mm Reduced Power 1RB 836.5MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.967$  S/m;  $\epsilon_r = 54.651$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

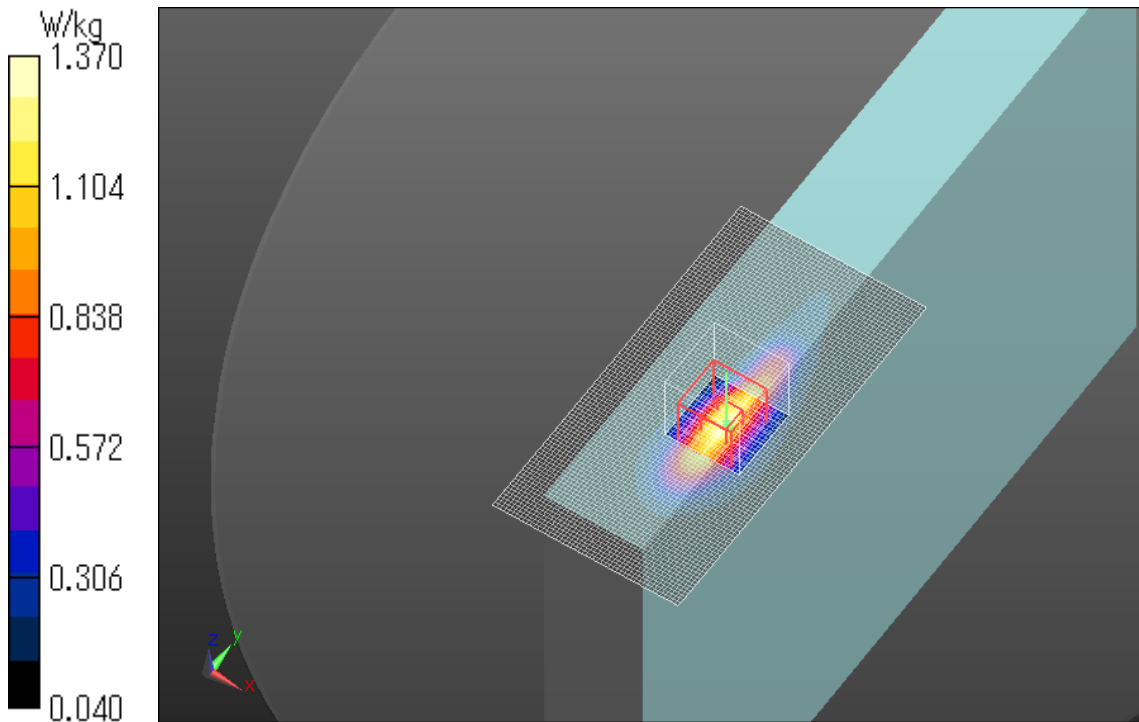
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.572 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.90 W/kg

**SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.480 W/kg**

Maximum value of SAR (measured) = 1.37 W/kg



**Plot No.3**

**LTE Band 5 Edge1 0mm 25%RB Reduced Power 836.5MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 836.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.967$  S/m;  $\epsilon_r = 54.651$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.51 W/kg

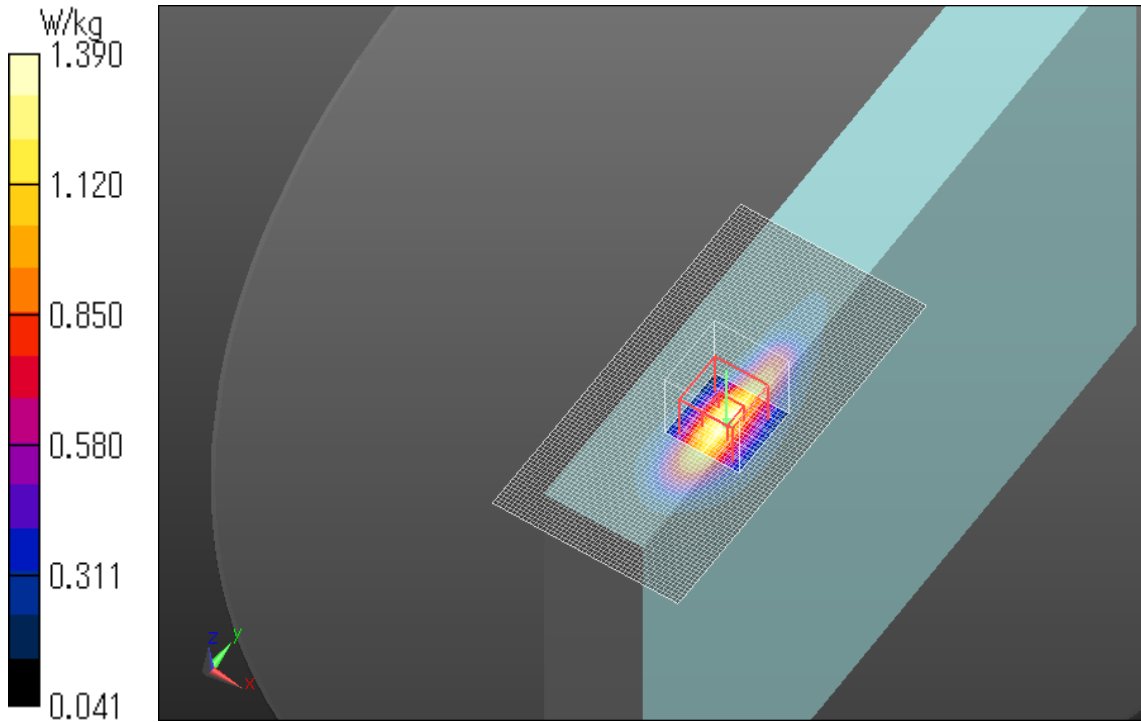
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.333 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.90 W/kg

**SAR(1 g) = 0.939 W/kg; SAR(10 g) = 0.497 W/kg**

Maximum value of SAR (measured) = 1.39 W/kg



**Plot No.4**

**LTE Band 5 Edge1 0mm 25%RB Reduced Power 829.0MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

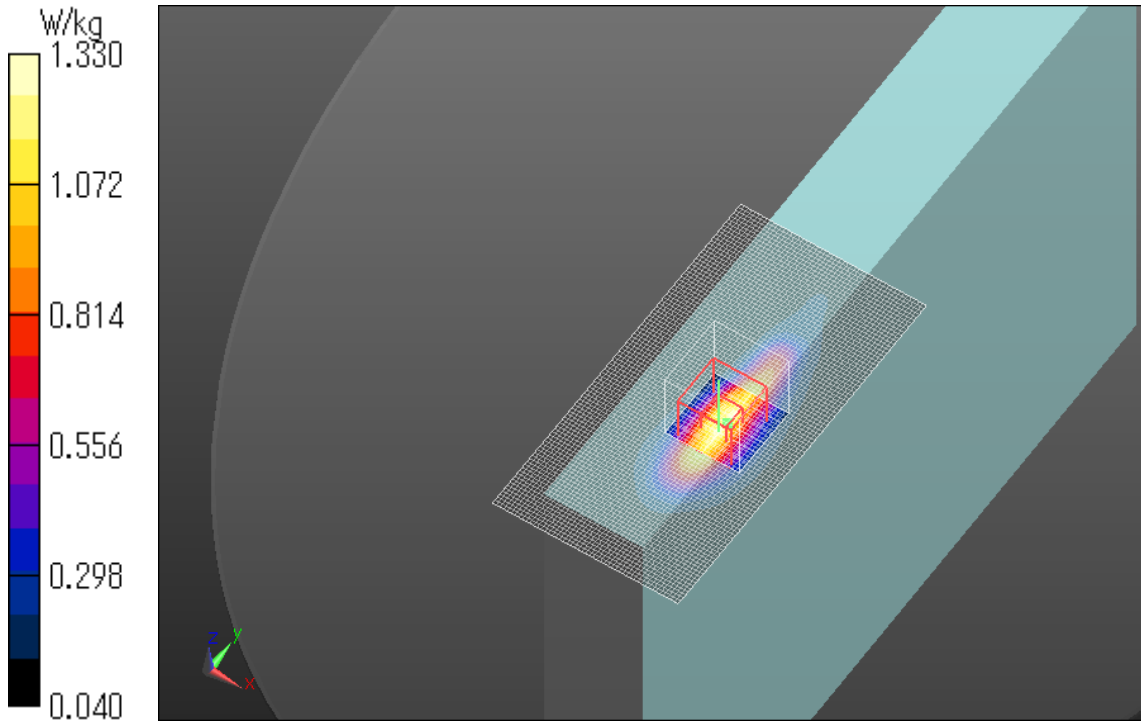
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.544 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.78 W/kg

**SAR(1 g) = 0.903 W/kg; SAR(10 g) = 0.477 W/kg**

Maximum value of SAR (measured) = 1.33 W/kg



**Plot No.5**

**LTE Band 5 Edge1 0mm 25%RB Reduced Power 844.0MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.976$  S/m;  $\epsilon_r = 54.587$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

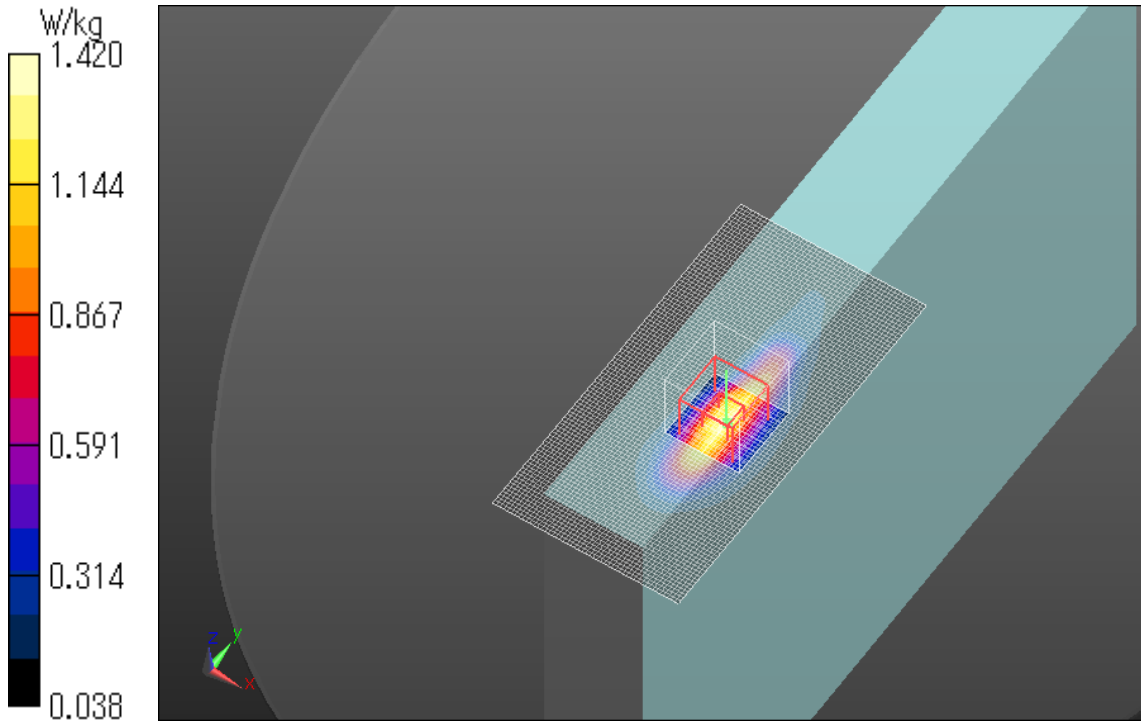
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.296 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.99 W/kg

**SAR(1 g) = 0.933 W/kg; SAR(10 g) = 0.487 W/kg**

Maximum value of SAR (measured) = 1.42 W/kg



**Plot No.6**

**LTE Band 5 Edge1 0mm 50%RB Reduced Power 829.0MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

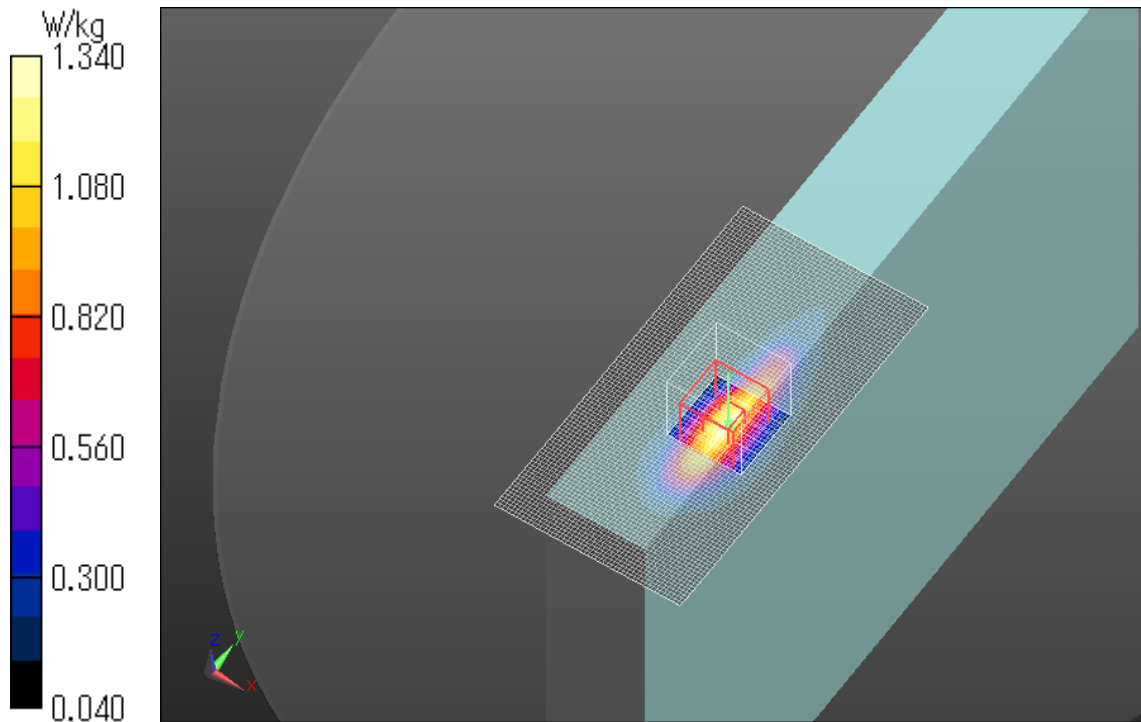
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.421 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.81 W/kg

**SAR(1 g) = 0.895 W/kg; SAR(10 g) = 0.470 W/kg**

Maximum value of SAR (measured) = 1.34 W/kg



**Plot No.7**

**LTE Band 5 Rear 0mm 1RB Full Power 829MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 2 (81x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.361 W/kg

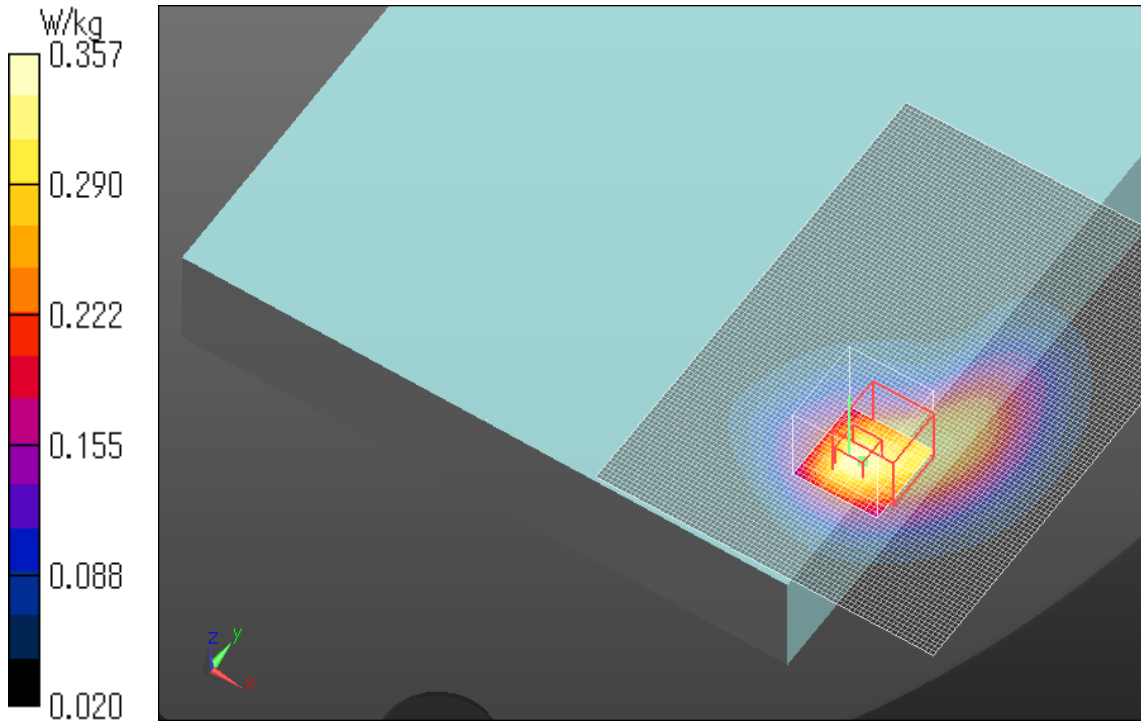
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.142 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.454 W/kg

**SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.169 W/kg**

Maximum value of SAR (measured) = 0.357 W/kg



**Plot No.8**

**LTE Band 5 Rear 0mm 25%RB Full Power 829MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 2 (81x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.309 W/kg

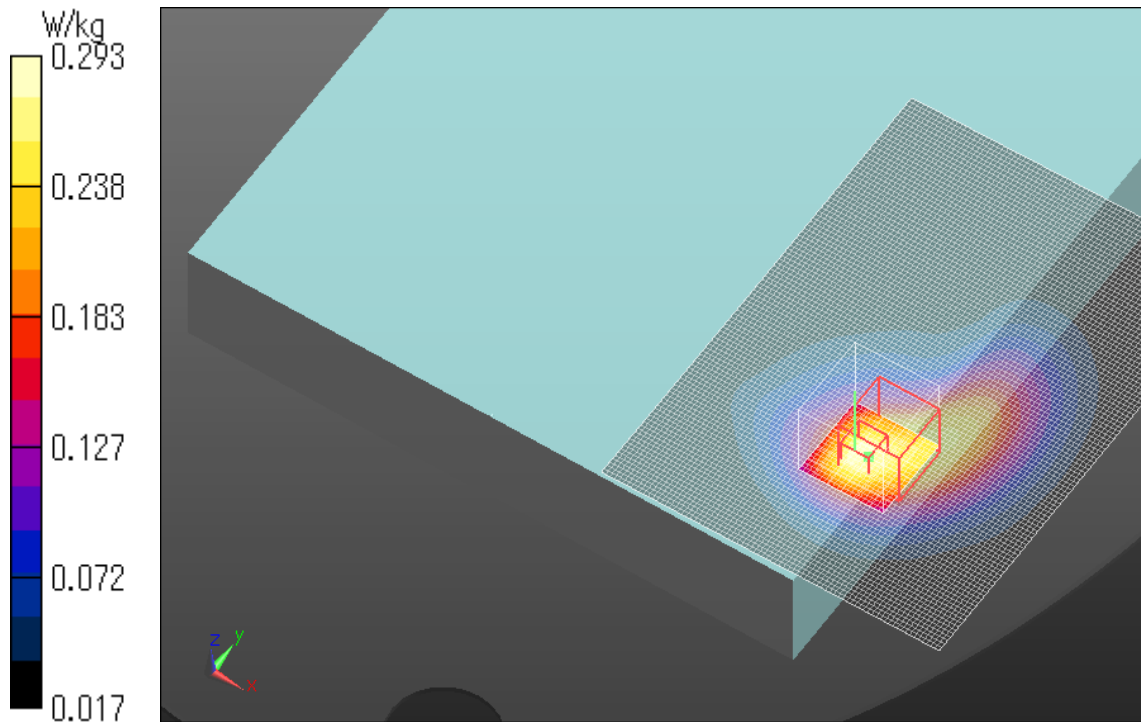
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.552 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.365 W/kg

**SAR(1 g) = 0.219 W/kg; SAR(10 g) = 0.140 W/kg**

Maximum value of SAR (measured) = 0.293 W/kg



**Plot No.9**

**LTE Band 5 Edge1 16mm 1RB Full Power 829MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.404 W/kg

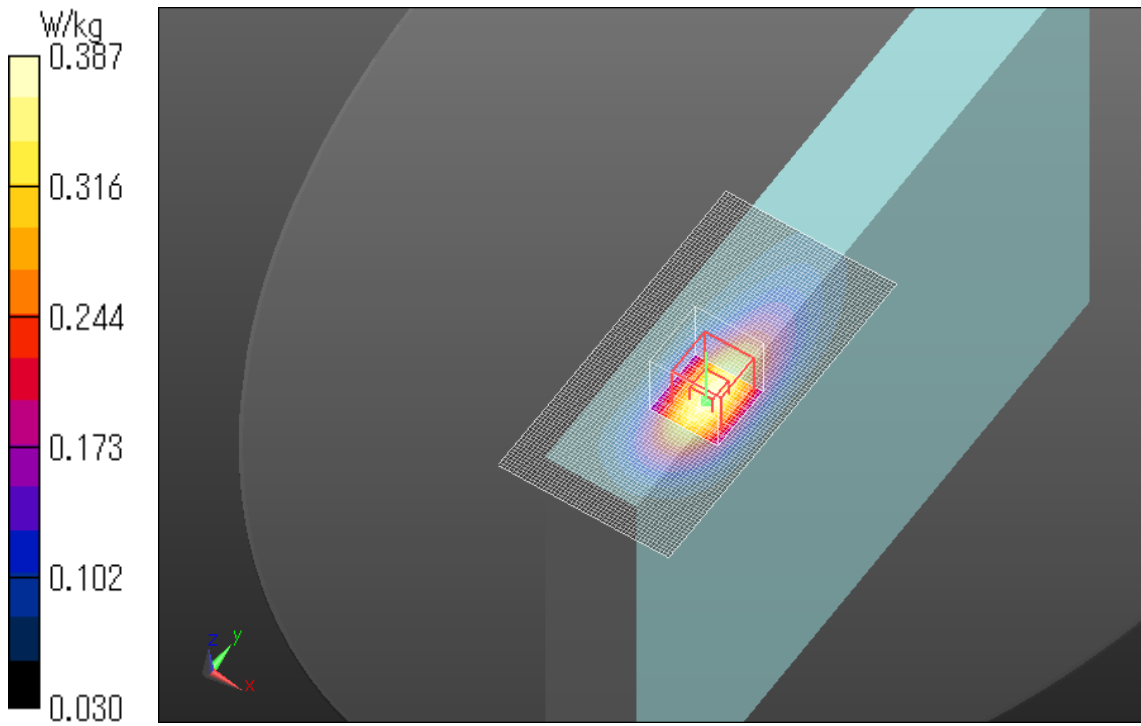
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.870 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.448 W/kg

**SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.202 W/kg**

Maximum value of SAR (measured) = 0.387 W/kg



**Plot No.10**

**LTE Band 5 Edge1 16mm 25%RB Full Power 829MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 (51x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.322 W/kg

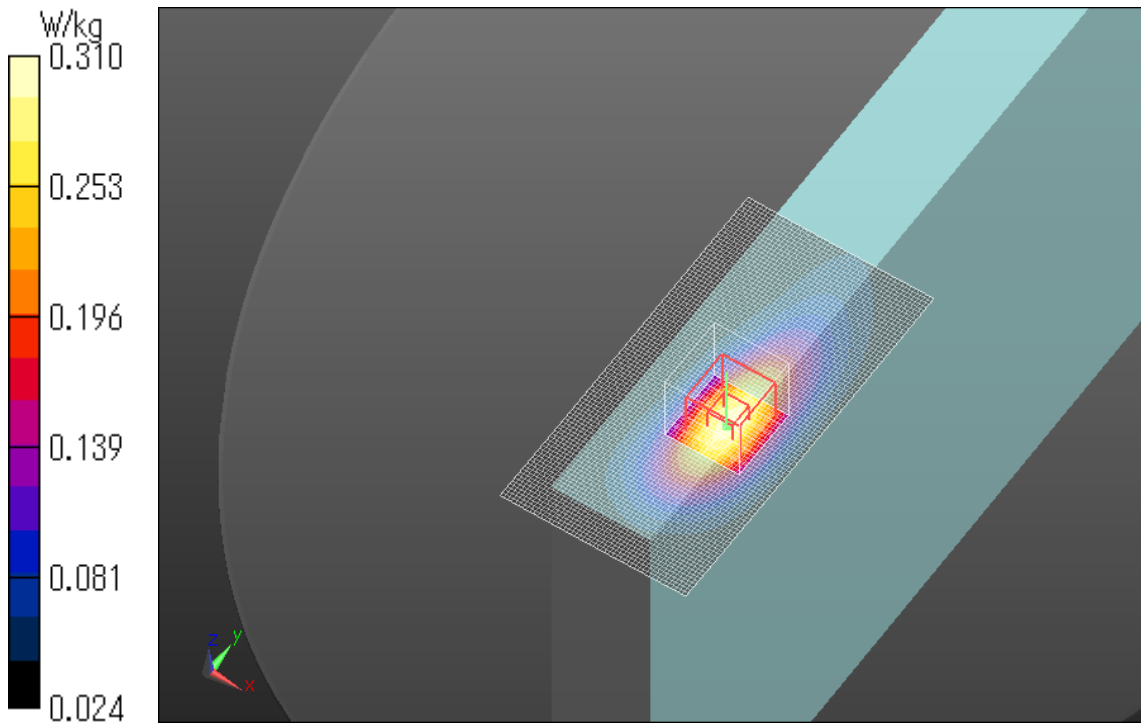
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.818 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.359 W/kg

**SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.162 W/kg**

Maximum value of SAR (measured) = 0.310 W/kg



**Plot No.11**

**LTE Band 5 Edge4 0mm 1RB Full Power 829MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.189 W/kg

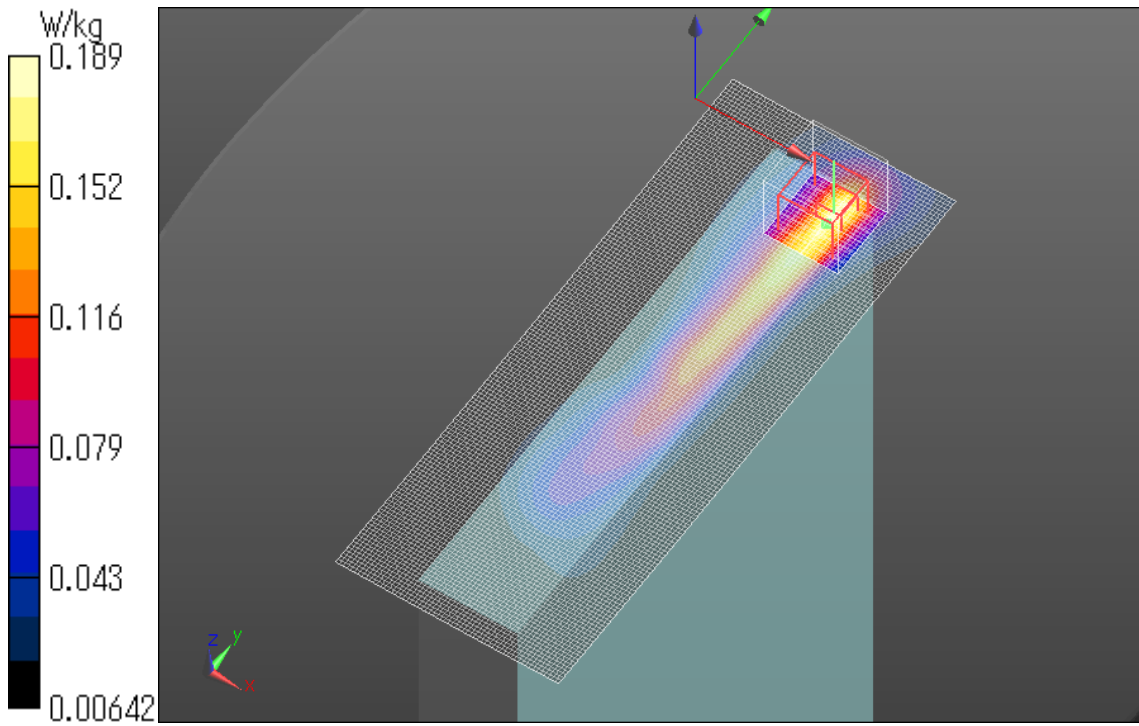
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.018 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.264 W/kg

**SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.069 W/kg**

Maximum value of SAR (measured) = 0.189 W/kg



**Plot No.12**

**LTE Band 5 Edge4 0mm 25%RB Full Power 829MHz**

Communication System: UID 0, LTE (0); Communication System Band: Band 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.958$  S/m;  $\epsilon_r = 54.711$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.76, 9.76, 9.76); Calibrated: 2013/05/14;

Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)),

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2013/05/13

Phantom: ELI v5.0 SN1203; Type: QDOVA002AA;

Measurement SW: DASYS2, Version 52.8 (7);

**Area Scan 2 (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.158 W/kg

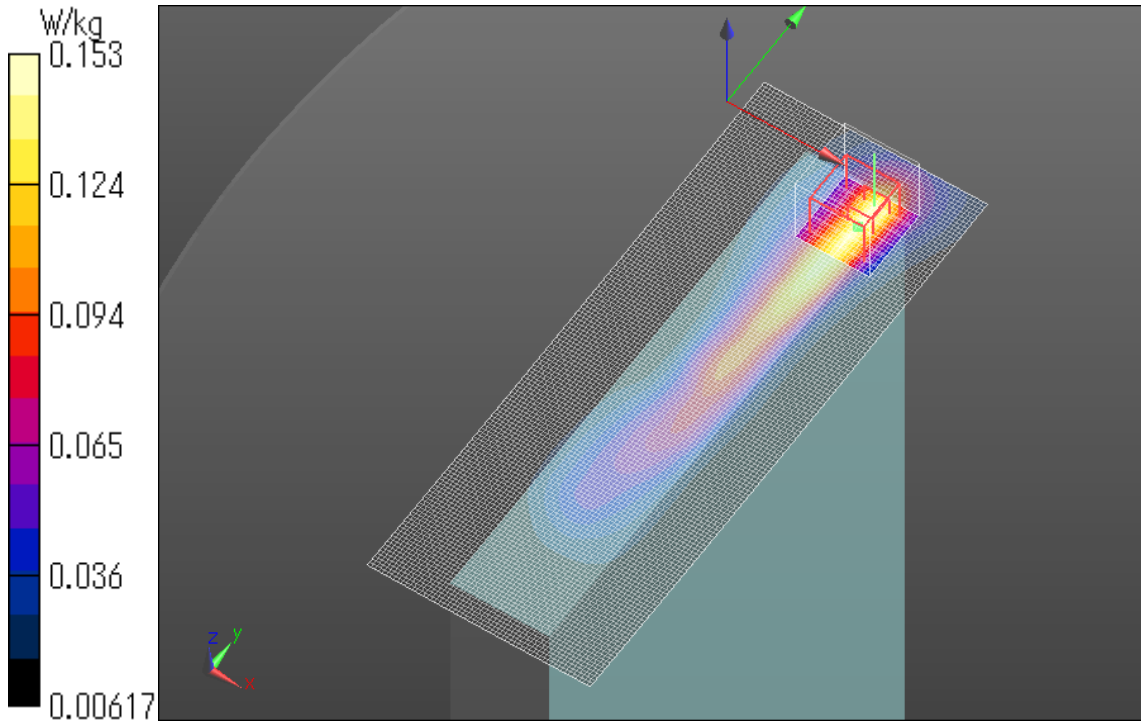
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.169 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.220 W/kg

**SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.058 W/kg**

Maximum value of SAR (measured) = 0.153 W/kg



**Plot No.13**