

17.6 SAR test plots for LTE Band5

LTE Band5 QPSK Allocation1 Start0 829MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.942$ S/m; $\epsilon_r = 54.838$; $\rho = 1000$ kg/m³

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.26 W/kg

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

Reference Value = 38.99 V/m; Power Drift = -0.05 dB

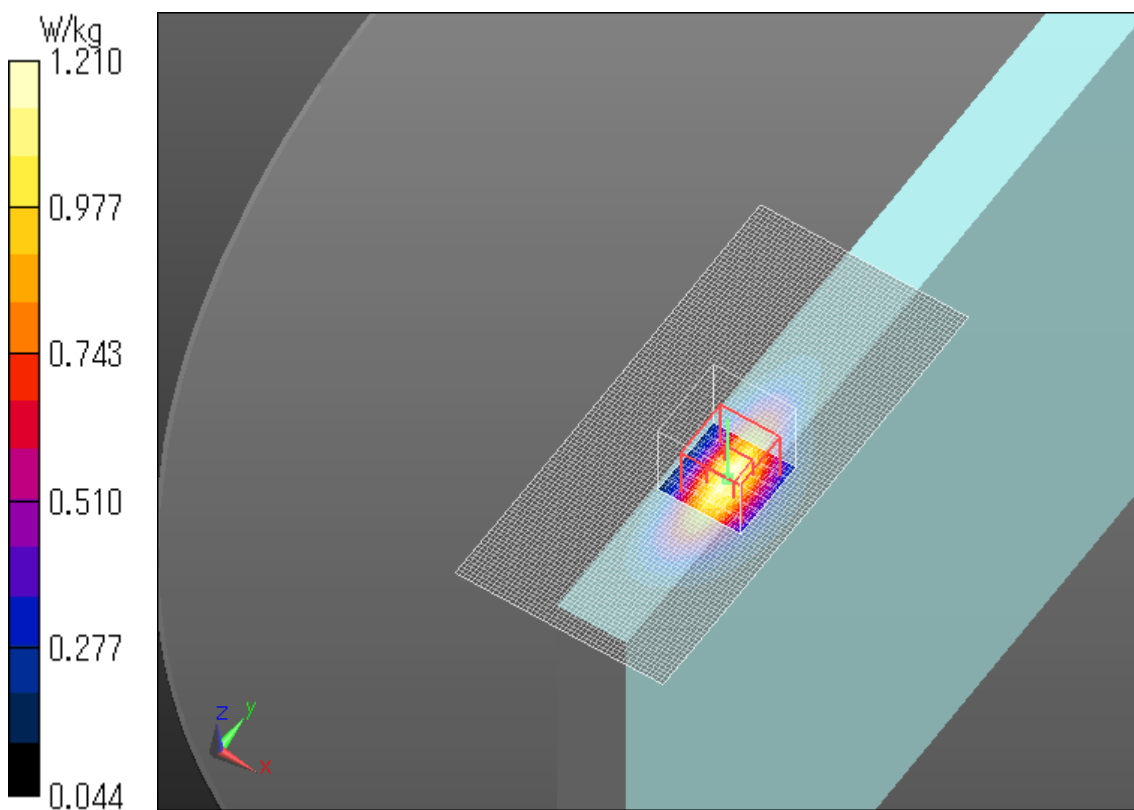
Peak SAR (extrapolated) = 1.60 W/kg

SAR(1 g) = 0.850 W/kg; SAR(10 g) = 0.463 W/kg

Maximum value of SAR (measured) = 1.21 W/kg

Date: 2017/01/18

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



LTE Band5 QPSK Allocation1 Start49 836.5MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.754$; $\rho = 1000$ kg/m³

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.22 W/kg

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

Reference Value = 38.74 V/m; Power Drift = -0.02 dB

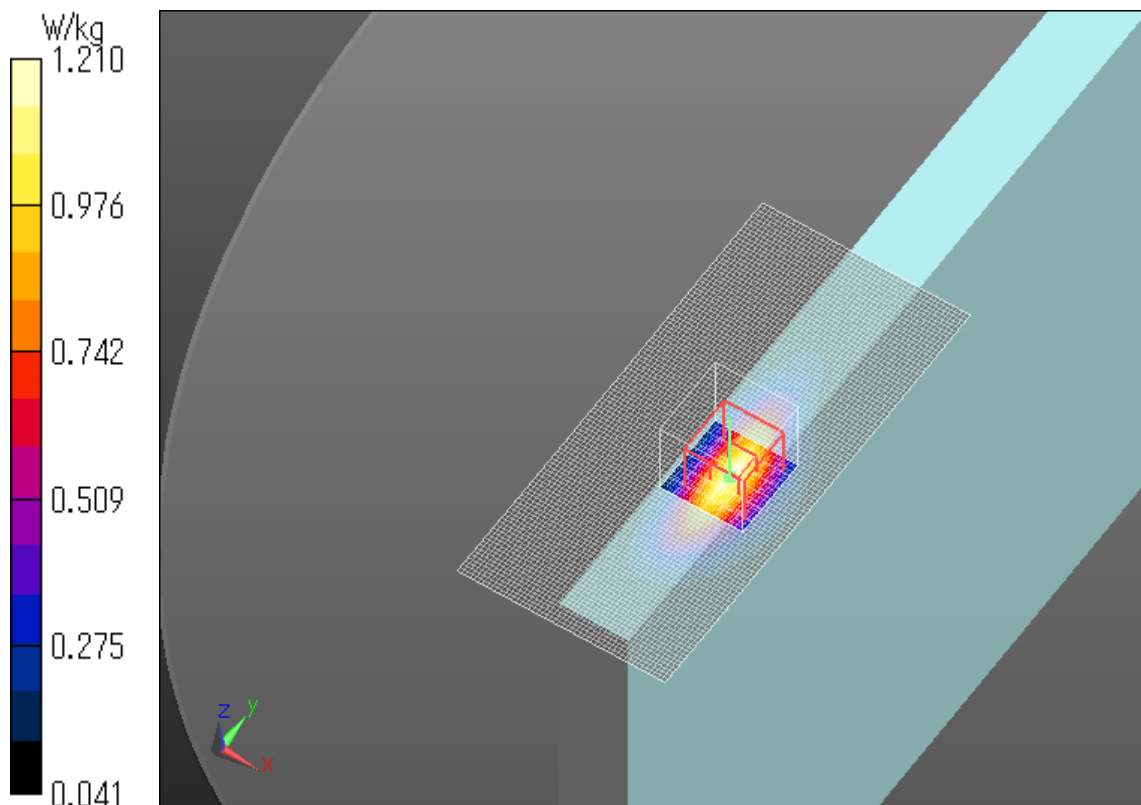
Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.842 W/kg; SAR(10 g) = 0.457 W/kg

Maximum value of SAR (measured) = 1.21 W/kg

Date: 2017/01/18

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



LTE Band5 QPSK Allocation1 Start49 844MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.958$ S/m; $\epsilon_r = 54.687$; $\rho = 1000$ kg/m³

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.28 W/kg

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

Reference Value = 39.76 V/m; Power Drift = -0.14 dB

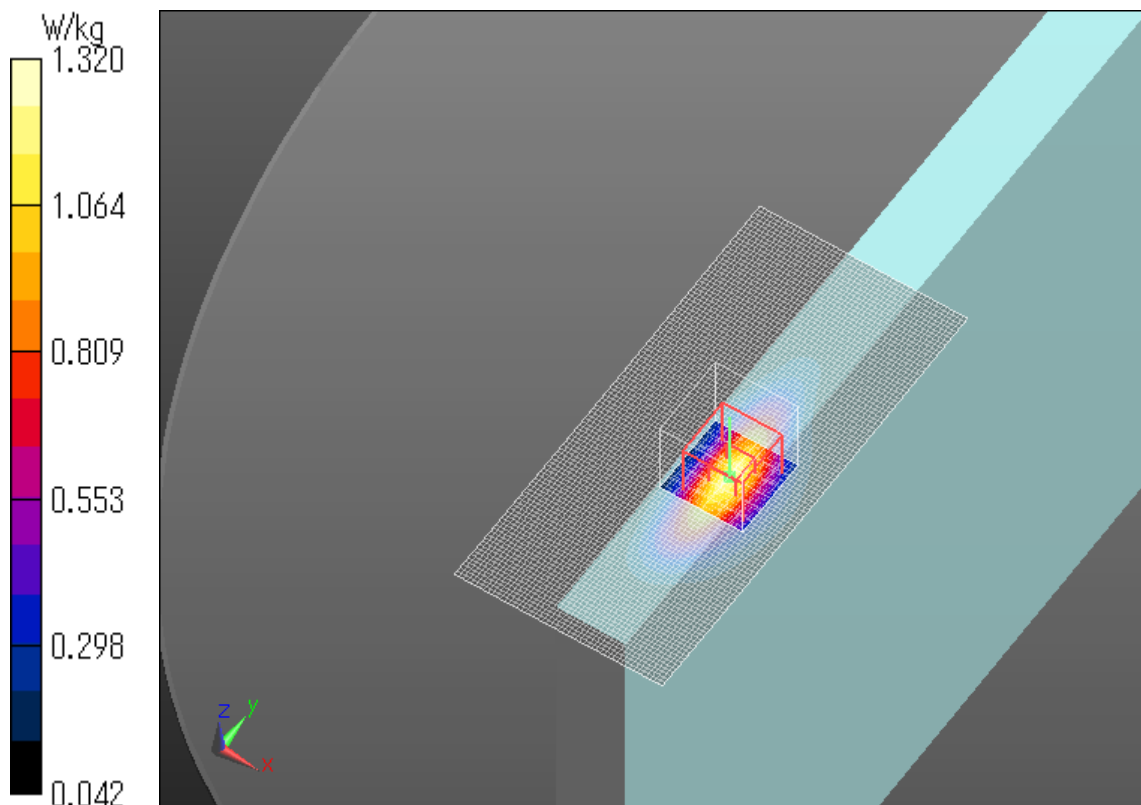
Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 0.892 W/kg; SAR(10 g) = 0.479 W/kg

Maximum value of SAR (measured) = 1.32 W/kg

Date: 2017/01/18

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



LTE Band5 QPSK Allocation25 Start12 829MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.942$ S/m; $\epsilon_r = 54.838$; $\rho = 1000$ kg/m³

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.25 W/kg

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

Reference Value = 39.40 V/m; Power Drift = -0.07 dB

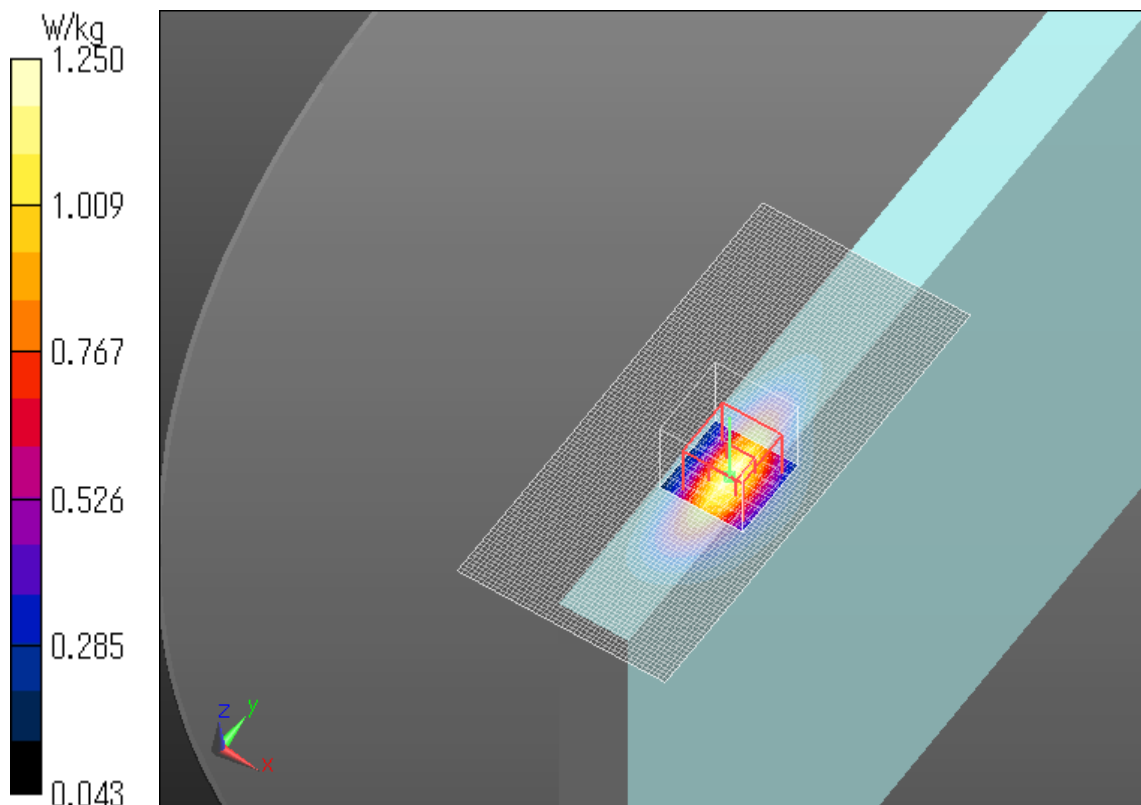
Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.865 W/kg; SAR(10 g) = 0.469 W/kg

Maximum value of SAR (measured) = 1.25 W/kg

Date: 2017/01/18

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



LTE Band5 QPSK Allocation25 Start0 836.5MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.754$; $\rho = 1000$ kg/m³

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

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

Reference Value = 38.38 V/m; Power Drift = -0.02 dB

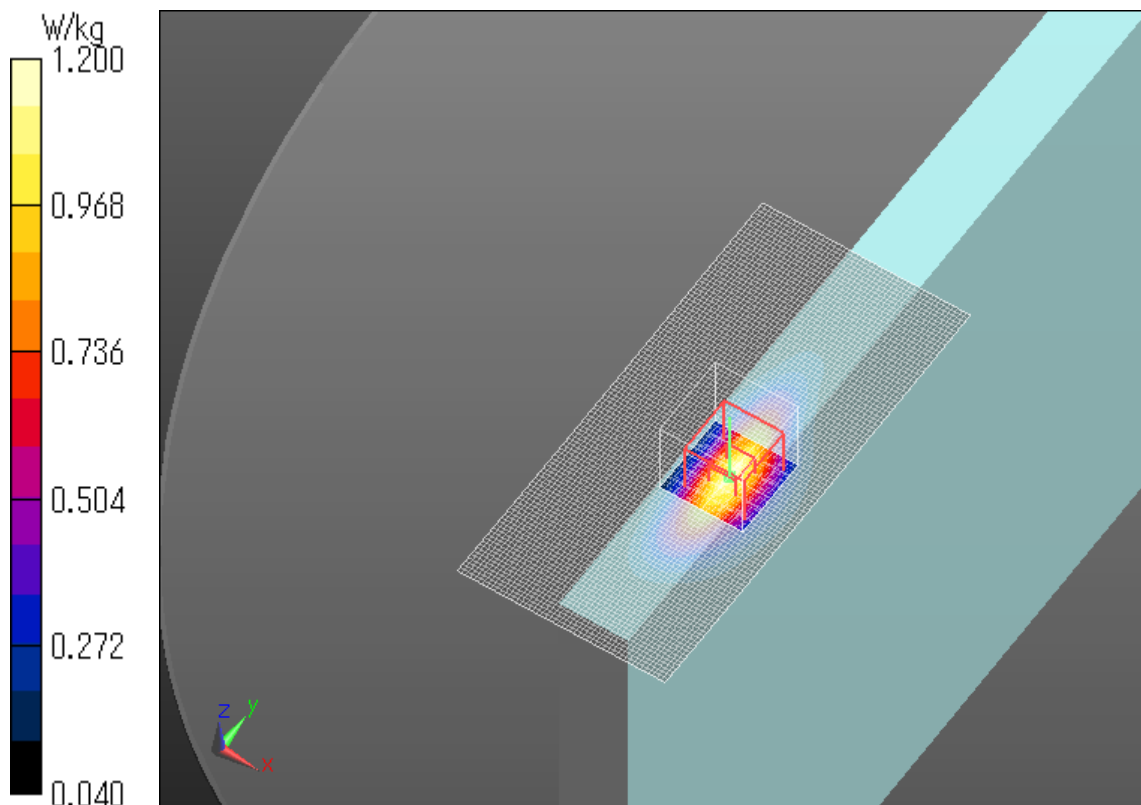
Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.829 W/kg; SAR(10 g) = 0.448 W/kg

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

Date: 2017/01/18

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



LTE Band5 QPSK Allocation25 Start12 844MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.958$ S/m; $\epsilon_r = 54.687$; $\rho = 1000$ kg/m³

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 (Locations From Previous Scan Used)),

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.29 W/kg

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

Reference Value = 40.03 V/m; Power Drift = -0.05 dB

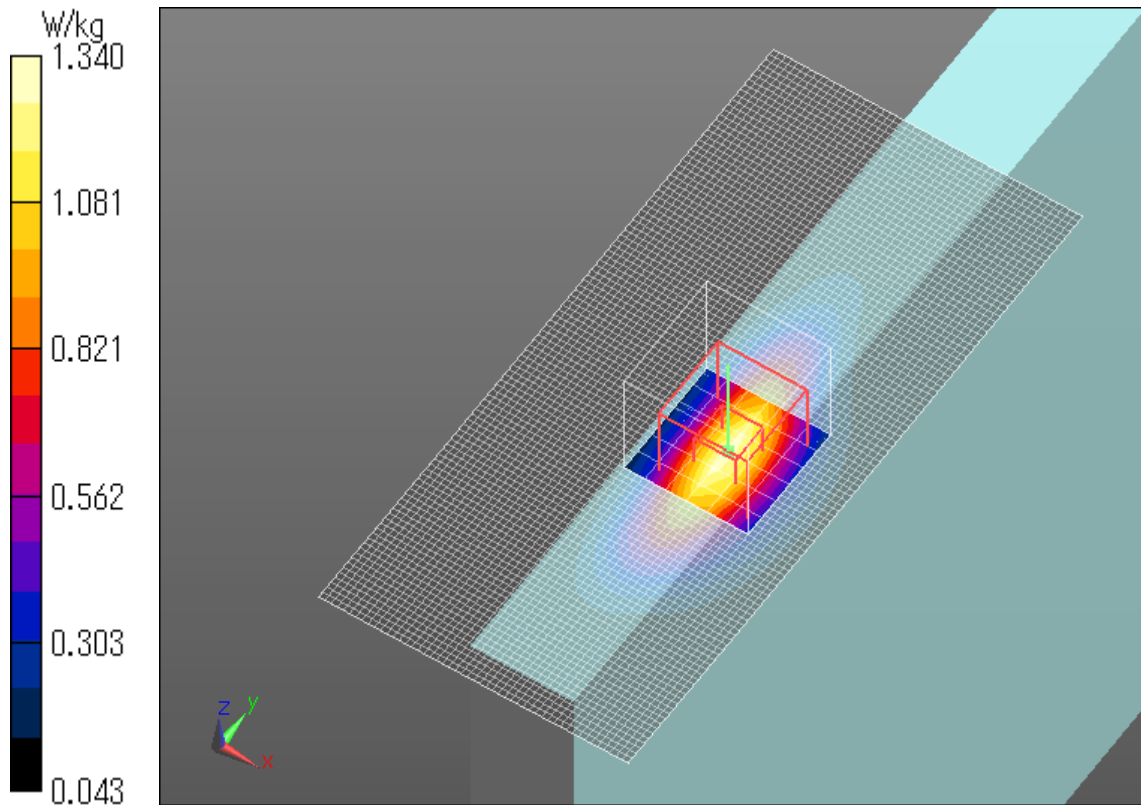
Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.923 W/kg; SAR(10 g) = 0.498 W/kg

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

Date: 2017/01/18

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



LTE Band5 QPSK Allocation50 Start0 829MHz Edge1 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.942$ S/m; $\epsilon_r = 54.838$; $\rho = 1000$ kg/m³

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 (51x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.22 W/kg

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

Reference Value = 39.04 V/m; Power Drift = -0.04 dB

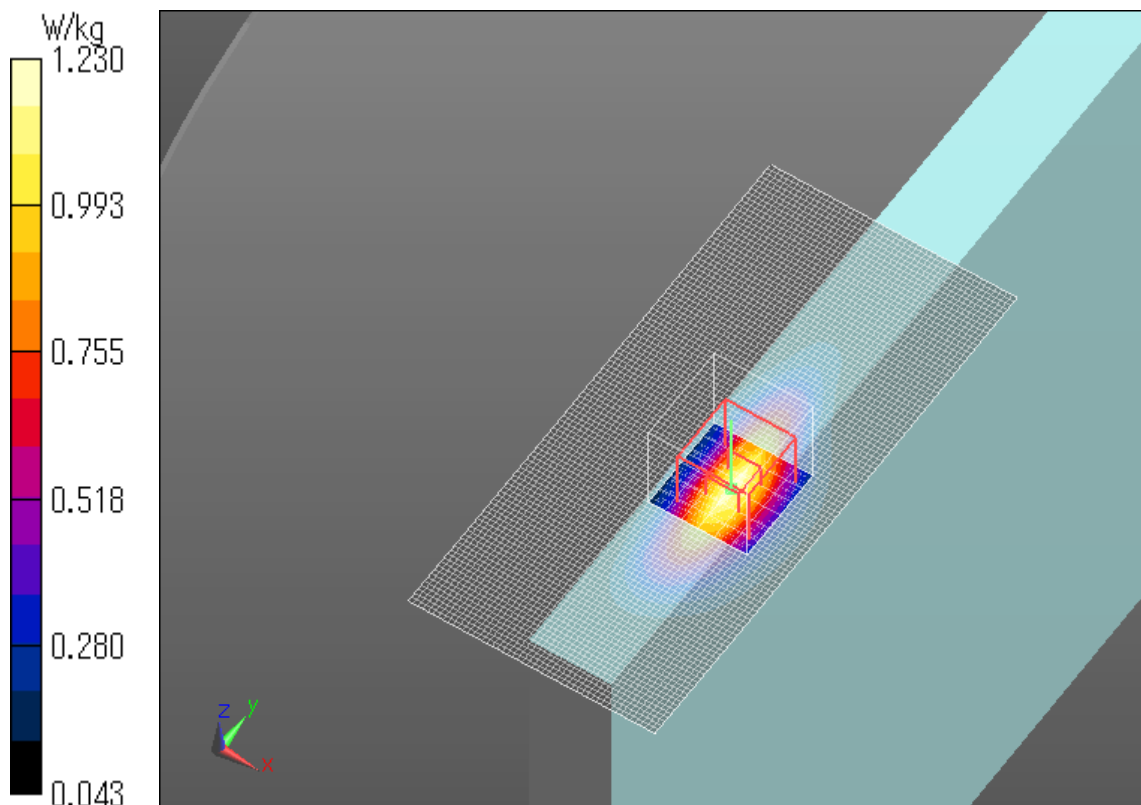
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.850 W/kg; SAR(10 g) = 0.460 W/kg

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

Date: 2017/01/18

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



LTE Band5 QPSK Allocation1 Start49 844MHz Rear 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.958$ S/m; $\epsilon_r = 54.687$; $\rho = 1000$ kg/m³

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 (Locations From Previous Scan Used)),

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 (61x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.425 W/kg

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

Reference Value = 22.68 V/m; Power Drift = -0.06 dB

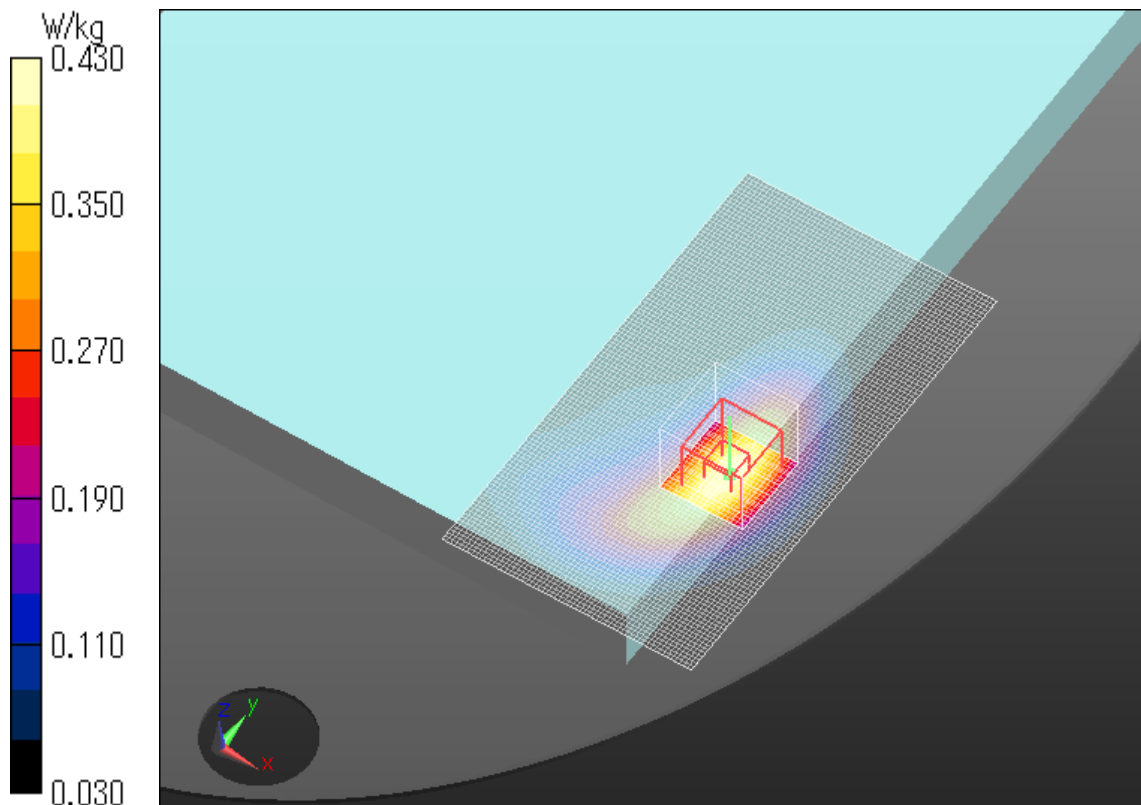
Peak SAR (extrapolated) = 0.509 W/kg

SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.430 W/kg

Date: 2017/01/18

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



LTE Band5 QPSK Allocation25 Start12 829MHz Rear 0mm Power Reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 5, E-UTRA/FDD (824.0 - 849.0 MHz); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.942$ S/m; $\epsilon_r = 54.838$; $\rho = 1000$ kg/m³

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 (Locations From Previous Scan Used)),

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 (61x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.455 W/kg

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

Reference Value = 23.74 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.368 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.461 W/kg

Date: 2017/01/18

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

