

17.2 SAR test plots

WCDMA Band2 Edge2 0mm RMC12.2k 1907.6MHz power reduction

Communication System: UID 0, WCDMA (0); Communication System Band: Band II; Frequency:

1907.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.561$ S/m; $\epsilon_r = 53.106$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(8, 8, 8); Calibrated: 2017/12/11;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2017/07/11

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)

WCDMA B2/Edge2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.68 W/kg

WCDMA B2/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.44 V/m; Power Drift = 0.18 dB

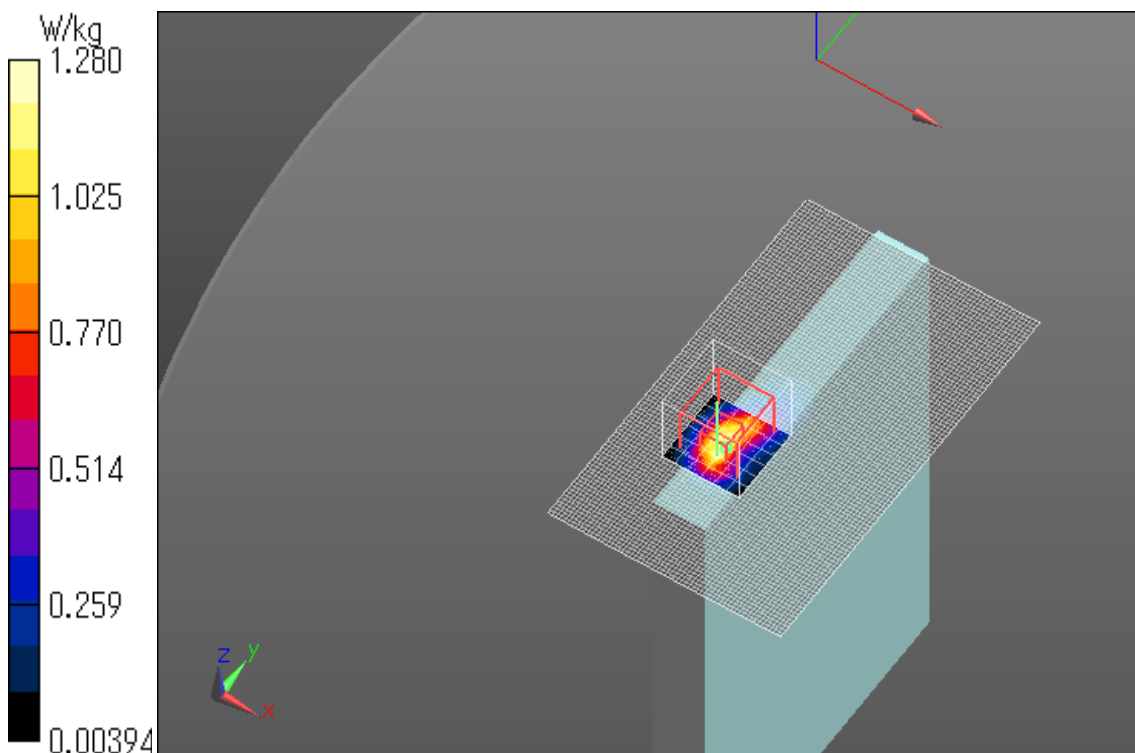
Peak SAR (extrapolated) = 1.98 W/kg

SAR(1 g) = 0.794 W/kg; SAR(10 g) = 0.323 W/kg

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

Date: 2018/02/21

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



WCDMA Band2 Edge2 15mm RMC12.2k 1880MHz

Communication System: UID 0, WCDMA (0); Communication System Band: Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.483$ S/m; $\epsilon_r = 51.023$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(8.04, 8.04, 8.04); Calibrated: 2017/05/16;

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

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

WCDMA B2/Edge2/Area Scan 2 (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.851 W/kg

WCDMA B2/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.76 V/m; Power Drift = 0.04 dB

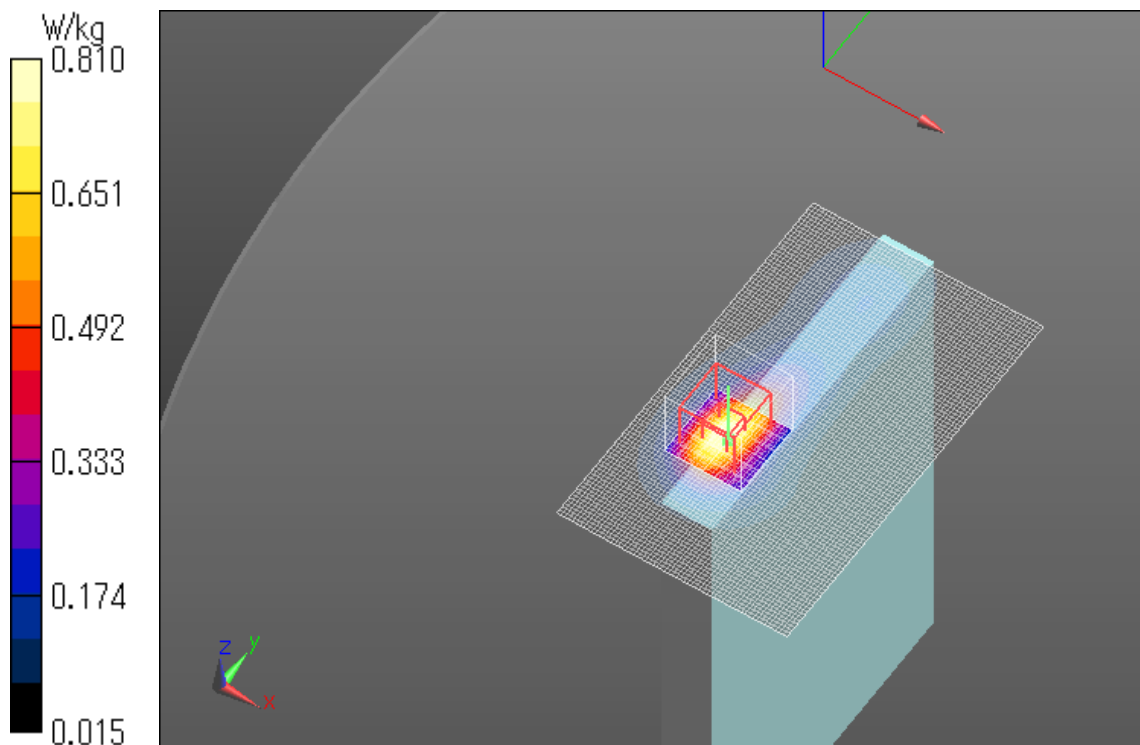
Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.617 W/kg; SAR(10 g) = 0.336 W/kg

Maximum value of SAR (measured) = 0.810 W/kg

Date: 2018/03/06

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



WCDMA Band4 Edge2 0mm RMC12.2k 1752.6MHz power reduction

Communication System: UID 0, WCDMA (0); Communication System Band: Band IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.493$ S/m; $\epsilon_r = 53.105$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(8.29, 8.29, 8.29); Calibrated: 2017/12/11;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2017/07/11

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)

WCDMA B4/Edge2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.63 W/kg

WCDMA B4/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.58 V/m; Power Drift = 0.06 dB

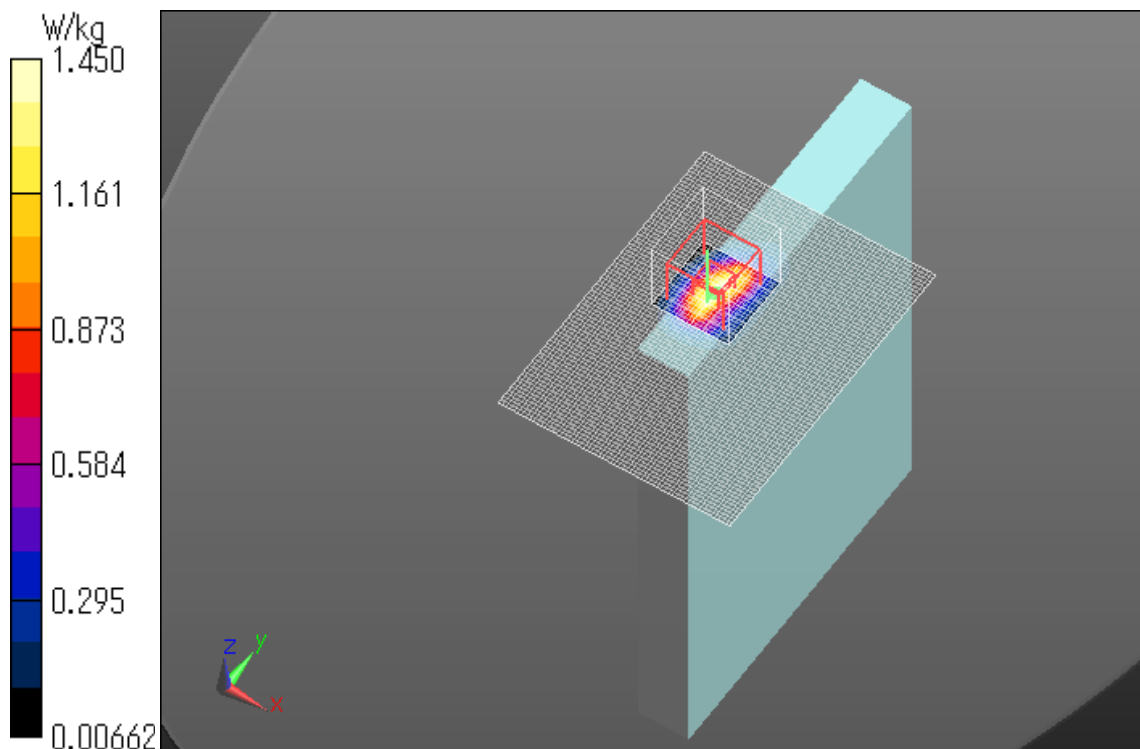
Peak SAR (extrapolated) = 2.12 W/kg

SAR(1 g) = 0.928 W/kg; SAR(10 g) = 0.392 W/kg

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

Date: 2018/02/16

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



WCDMA Band4 Edge2 15mm RMC12.2k 1752.6MHz

Communication System: UID 0, WCDMA (0); Communication System Band: Band IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.443$ S/m; $\epsilon_r = 52.702$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(8.3, 8.3, 8.3); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

WCDMA B4/Edge2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.448 W/kg

WCDMA B4/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.94 V/m; Power Drift = -0.05 dB

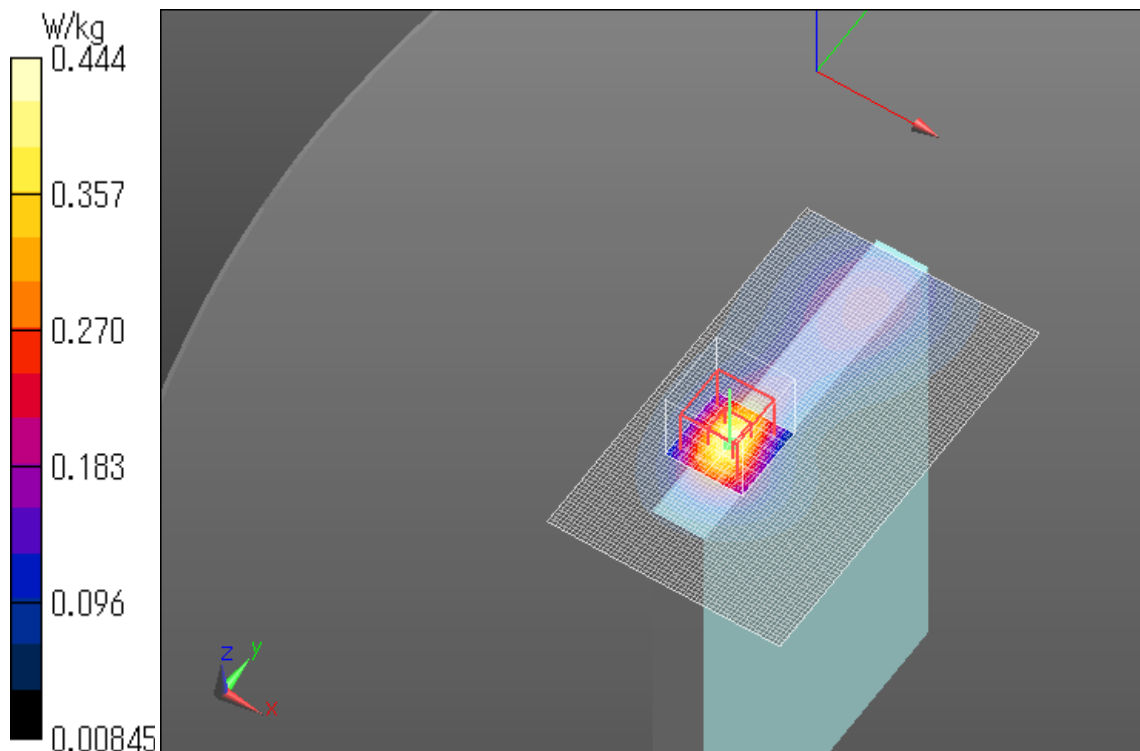
Peak SAR (extrapolated) = 0.537 W/kg

SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (measured) = 0.444 W/kg

Date: 2018/03/07

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



WCDMA Band5 Edge1 0mm RMC12.2k 846.6MHz power reduction

Communication System: UID 0, WCDMA (0); Communication System Band: Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.019$ S/m; $\epsilon_r = 53.856$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.93, 9.93, 9.93); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

WCDMA B5/Edge1/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

WCDMA B5/Edge1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 34.27 V/m; Power Drift = -0.09 dB

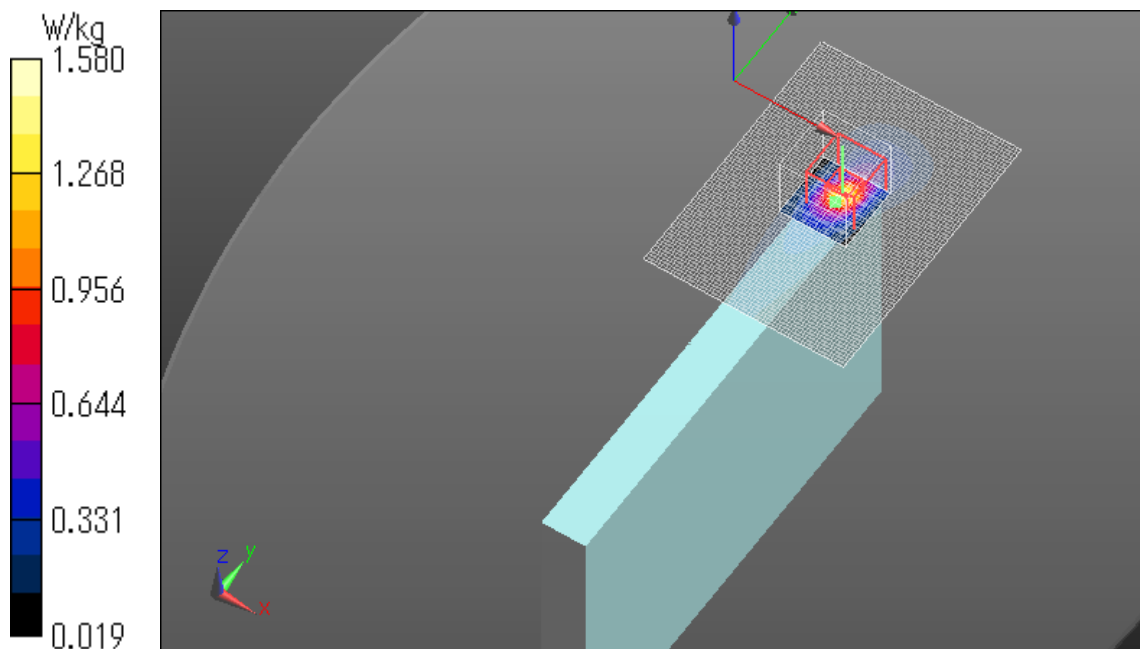
Peak SAR (extrapolated) = 2.80 W/kg

SAR(1 g) = 0.825 W/kg; SAR(10 g) = 0.330 W/kg

Maximum value of SAR (measured) = 1.58 W/kg

Date: 2018/02/21

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



WCDMA Band5 Edge2 15mm RMC12.2k 836.6MHz

Communication System: UID 0, WCDMA (0); Communication System Band: Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1.001$ S/m; $\epsilon_r = 56.401$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.93, 9.93, 9.93); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

WCDMA B5/Edge2/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.368 W/kg

WCDMA B5/Edge2/Zoom Scan (7x8x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 18.90 V/m; Power Drift = 0.07 dB

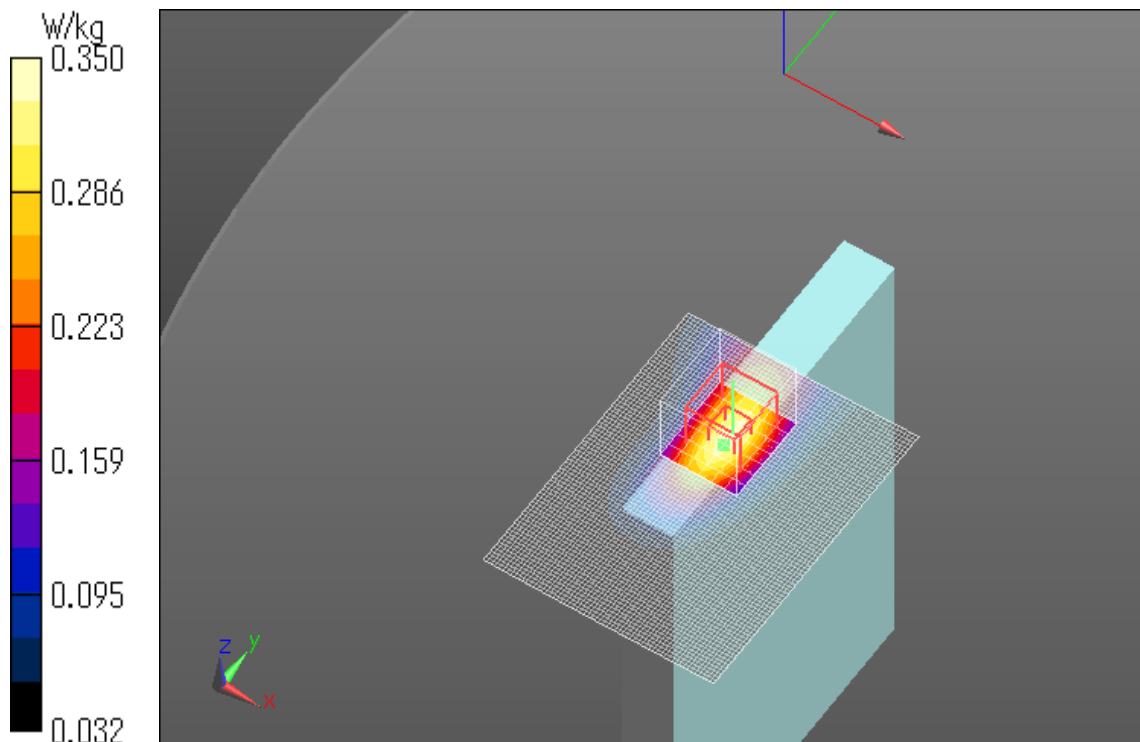
Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.189 W/kg

Maximum value of SAR (measured) = 0.350 W/kg

Date: 2018/03/05

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



LTE Band2 Edge2 0mm QPSK 1900MHz Allocation100 Start0 power reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ S/m; $\epsilon_r = 52.464$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(8, 8, 8); Calibrated: 2017/12/11;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2017/07/11

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)

LTE B2/Edge2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.89 W/kg

LTE B2/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.61 V/m; Power Drift = 0.13 dB

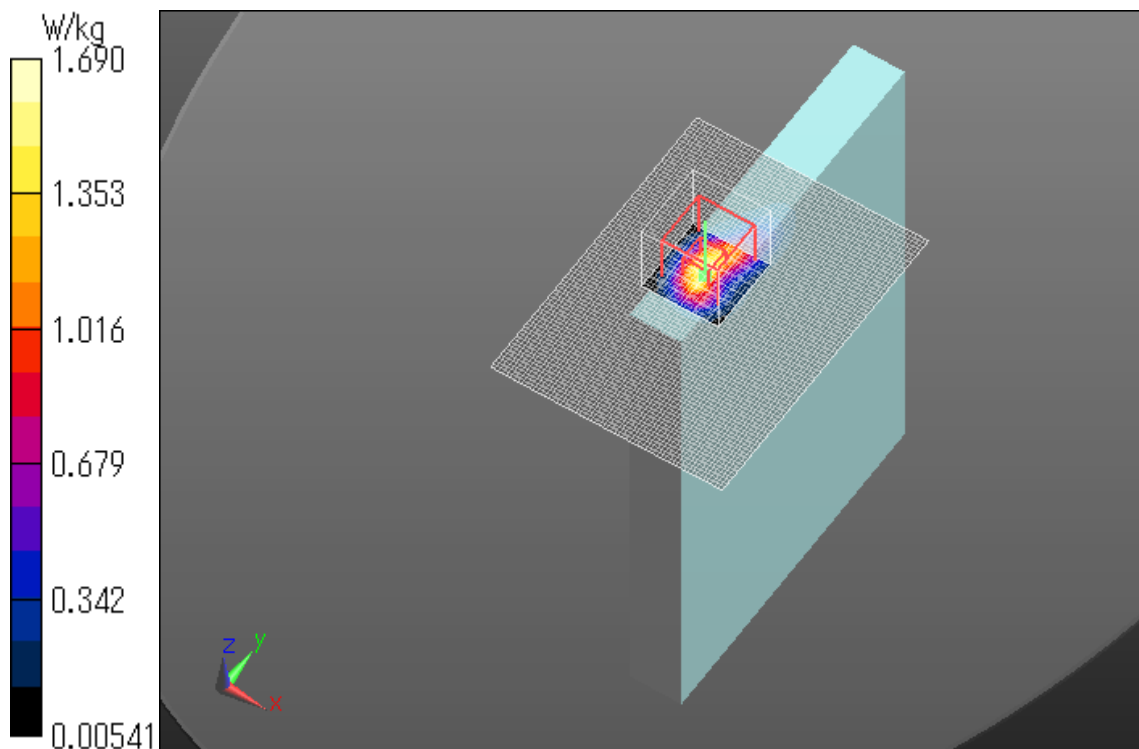
Peak SAR (extrapolated) = 2.50 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.420 W/kg

Maximum value of SAR (measured) = 1.69 W/kg

Date: 2018/02/19

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



LTE Band2 Edge2 15mm QPSK 1880MHz Allocation1 Start0

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.483$ S/m; $\epsilon_r = 51.023$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(8.04, 8.04, 8.04); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B2/Edge2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.722 W/kg

LTE B2/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.54 V/m; Power Drift = -0.01 dB

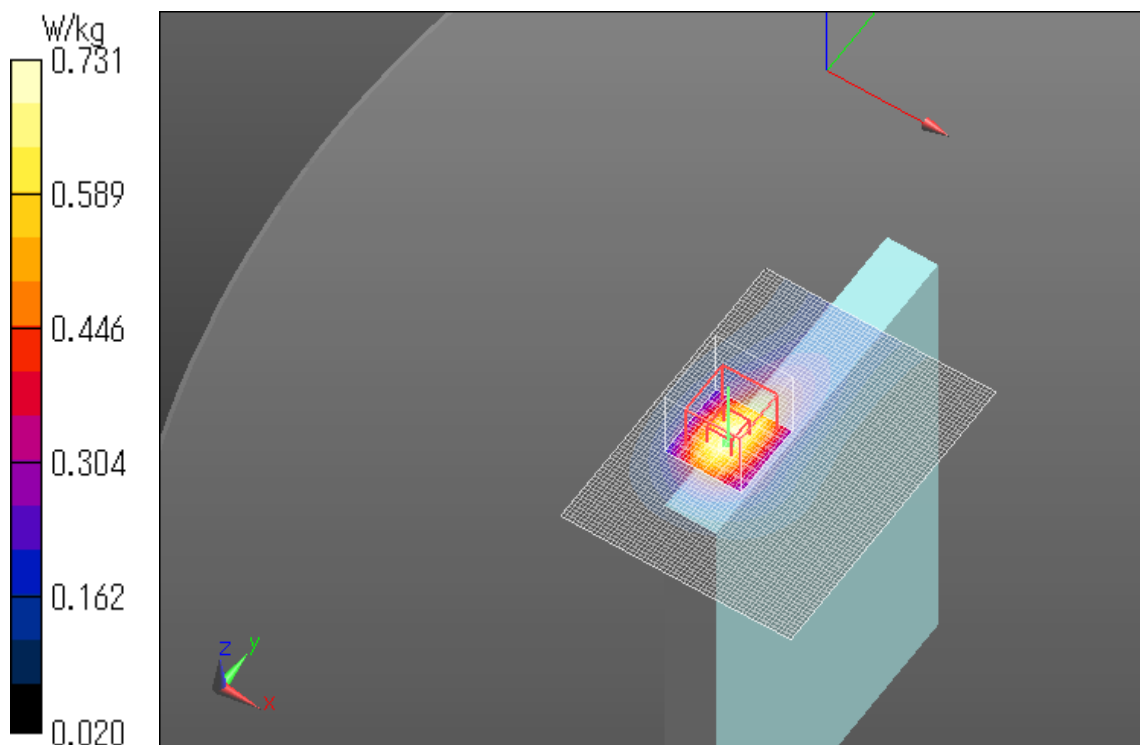
Peak SAR (extrapolated) = 0.881 W/kg

SAR(1 g) = 0.552 W/kg; SAR(10 g) = 0.317 W/kg

Maximum value of SAR (measured) = 0.731 W/kg

Date: 2018/03/06

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



LTE Band4 Edge2 0mm QPSK 1745MHz Allocation50 Start24 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; $\sigma = 1.433$ S/m; $\epsilon_r = 52.996$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(8.29, 8.29, 8.29); Calibrated: 2017/12/11;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2017/07/11

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)

LTE B4/Edge2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.70 W/kg

LTE B4/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.33 V/m; Power Drift = 0.07 dB

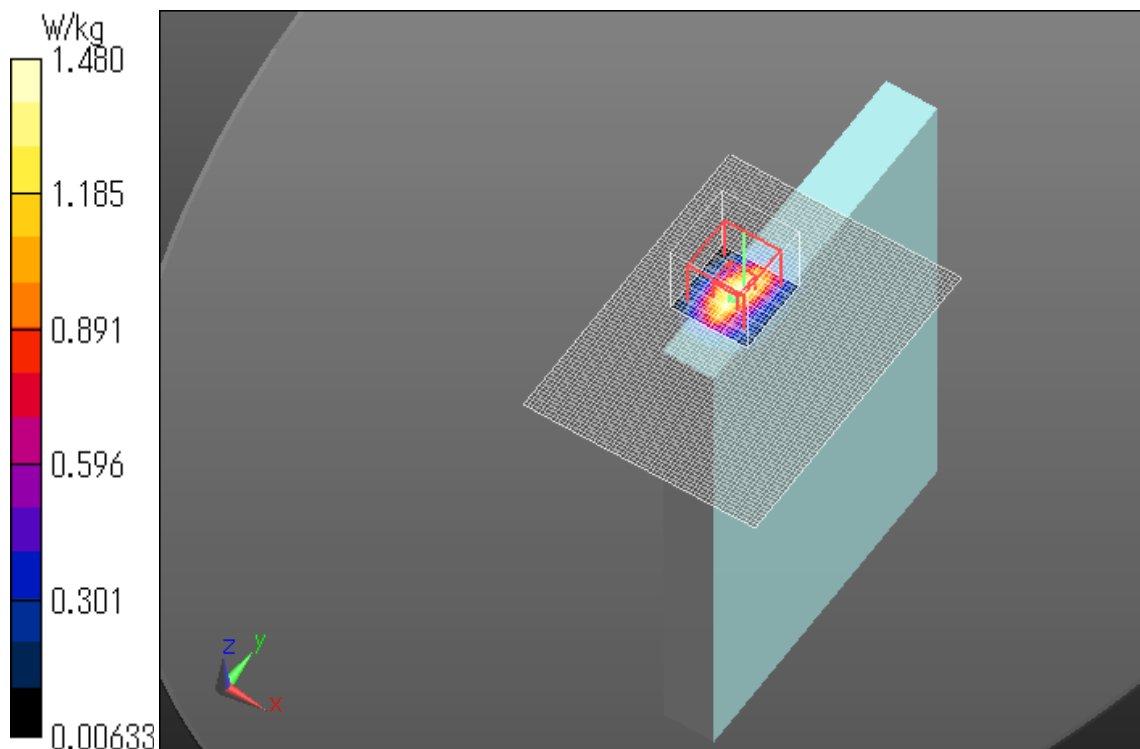
Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 0.942 W/kg; SAR(10 g) = 0.398 W/kg

Maximum value of SAR (measured) = 1.48 W/kg

Date: 2018/02/15

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



LTE Band4 Edge2 15mm QPSK 1732.5MHz Allocation1 Start49

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; $\sigma = 1.423$ S/m; $\epsilon_r = 52.735$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(8.3, 8.3, 8.3); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B4/Edge2/Area Scan 2 (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.704 W/kg

LTE B4/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.74 V/m; Power Drift = -0.12 dB

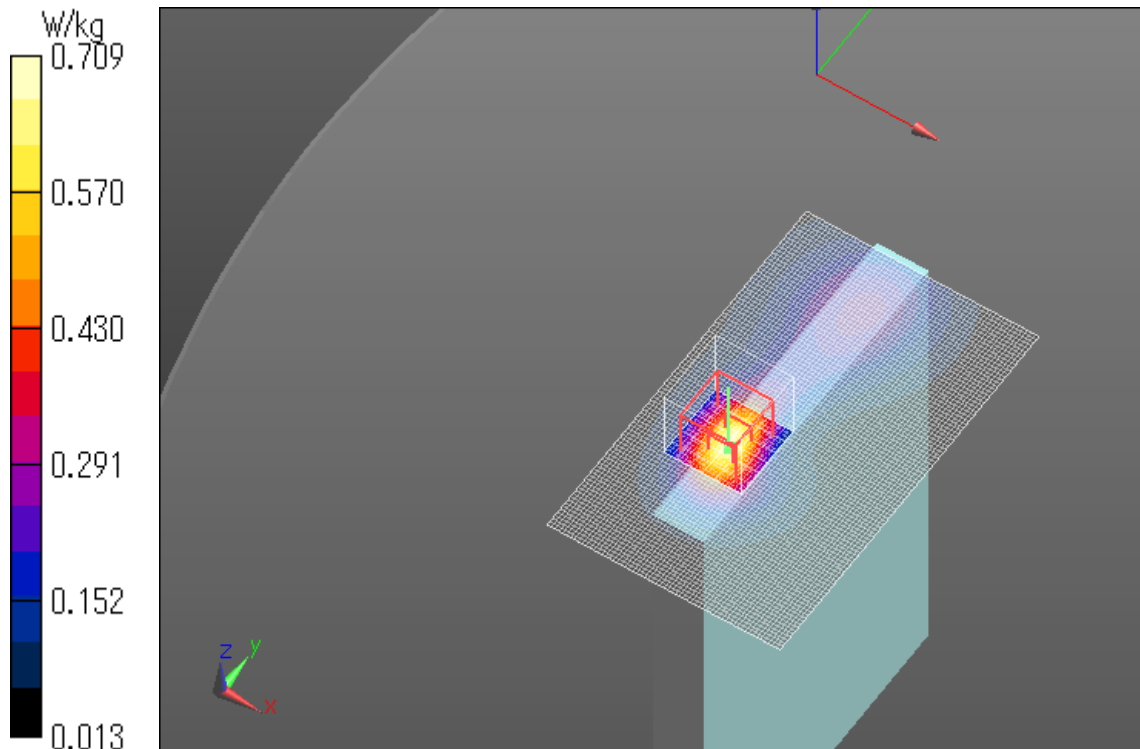
Peak SAR (extrapolated) = 0.856 W/kg

SAR(1 g) = 0.519 W/kg; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 0.709 W/kg

Date: 2018/03/07

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



LTE Band5 Edge1 0mm QPSK 844MHz Allocation25 Start24 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; $\sigma = 1.016$ S/m; $\epsilon_r = 53.282$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.93, 9.93, 9.93); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B5/Edge1/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.988 W/kg

LTE B5/Edge1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.44 V/m; Power Drift = -0.06 dB

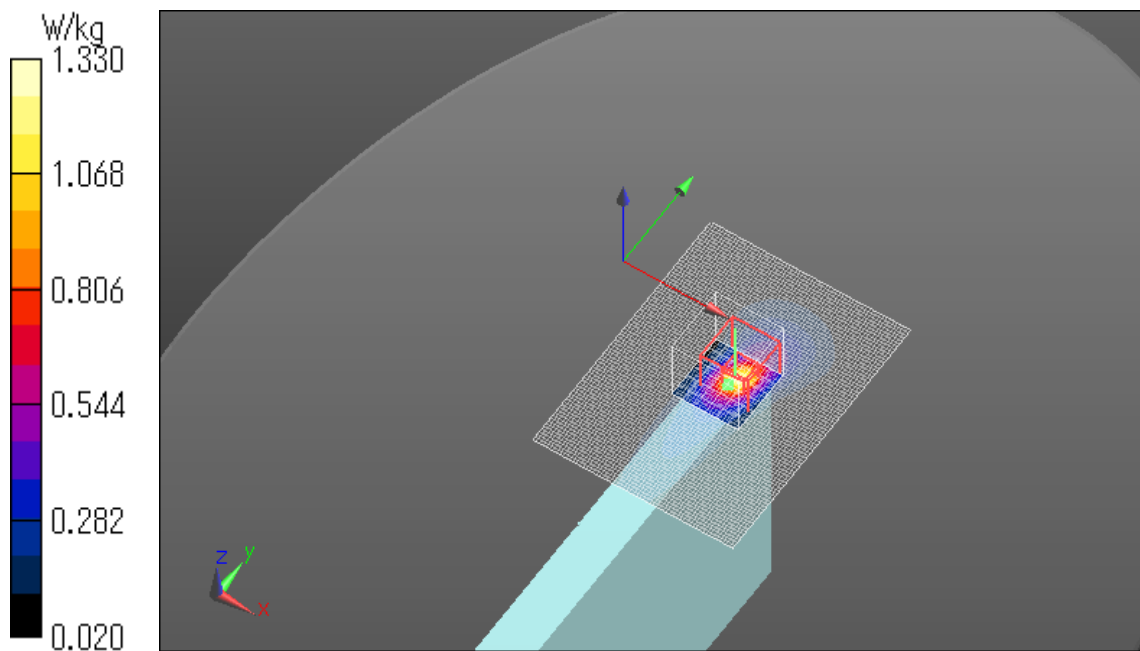
Peak SAR (extrapolated) = 2.42 W/kg

SAR(1 g) = 0.776 W/kg; SAR(10 g) = 0.329 W/kg

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

Date: 2018/02/19

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



LTE Band5 Edge2 15mm QPSK 844MHz Allocation1 Start49

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; $\sigma = 1.008$ S/m; $\epsilon_r = 56.332$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.93, 9.93, 9.93); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B5/Edge2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.568 W/kg

LTE B5/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.36 V/m; Power Drift = 0.01 dB

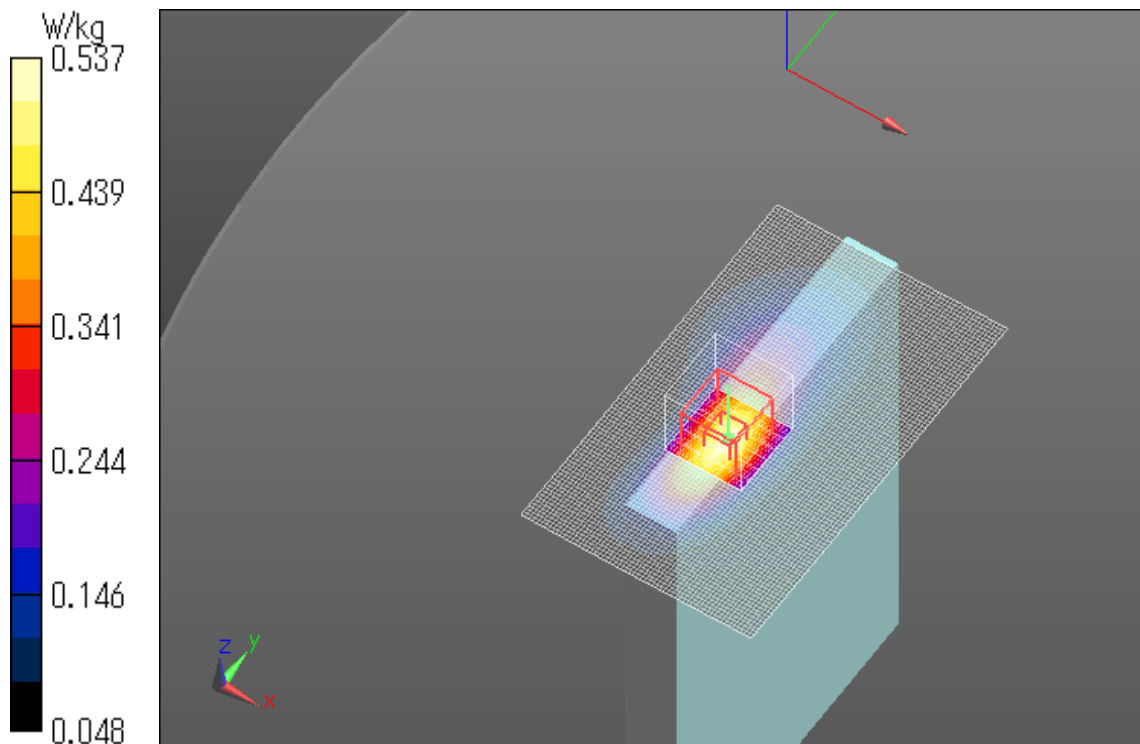
Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 0.537 W/kg

Date: 2018/03/05

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



LTE Band7 Edge2 0mm QPSK 2560MHz Allocation50 Start24 power reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.181$ S/m; $\epsilon_r = 50.63$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.41, 7.41, 7.41); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B7/Edge2/Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.64 W/kg

LTE B7/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.52 V/m; Power Drift = 0.13 dB

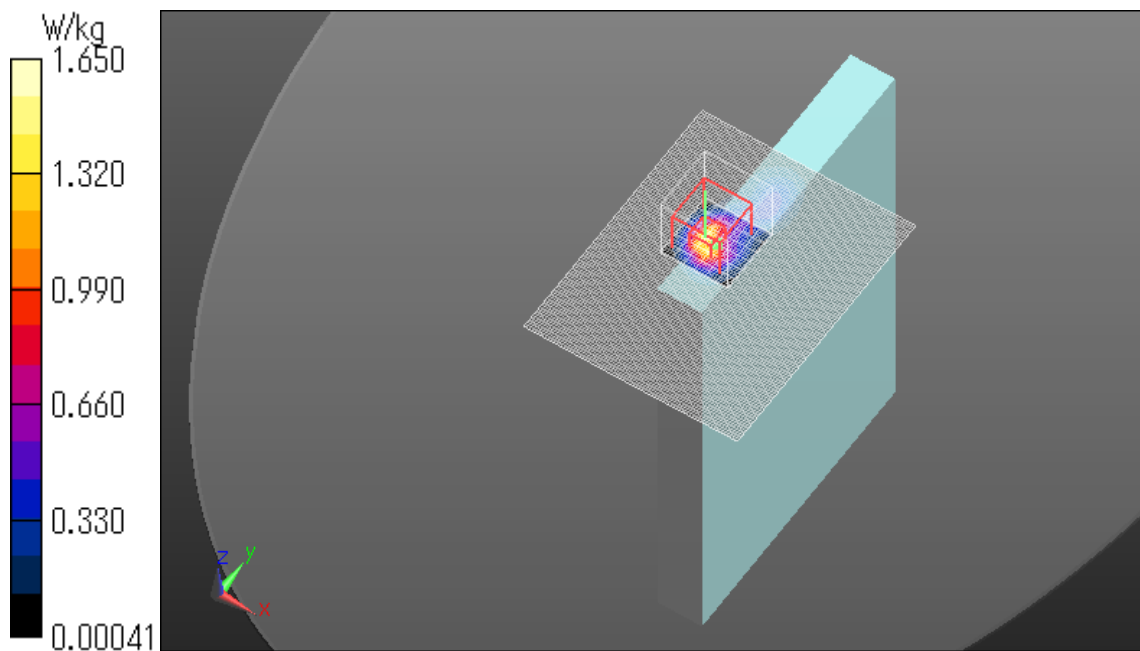
Peak SAR (extrapolated) = 2.56 W/kg

SAR(1 g) = 0.835 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 1.65 W/kg

Date: 2018/02/13

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



LTE Band7 Edge2 15mm QPSK 2510MHz Allocation1 Start49

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 7, E-UTRA/FDD (2500.0 - 2570.0 MHz); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.118$ S/m; $\epsilon_r = 50.749$; $\rho = 1000$ kg/m³

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: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B7/Edge2/Area Scan (81x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.40 W/kg

LTE B7/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.01 V/m; Power Drift = -0.03 dB

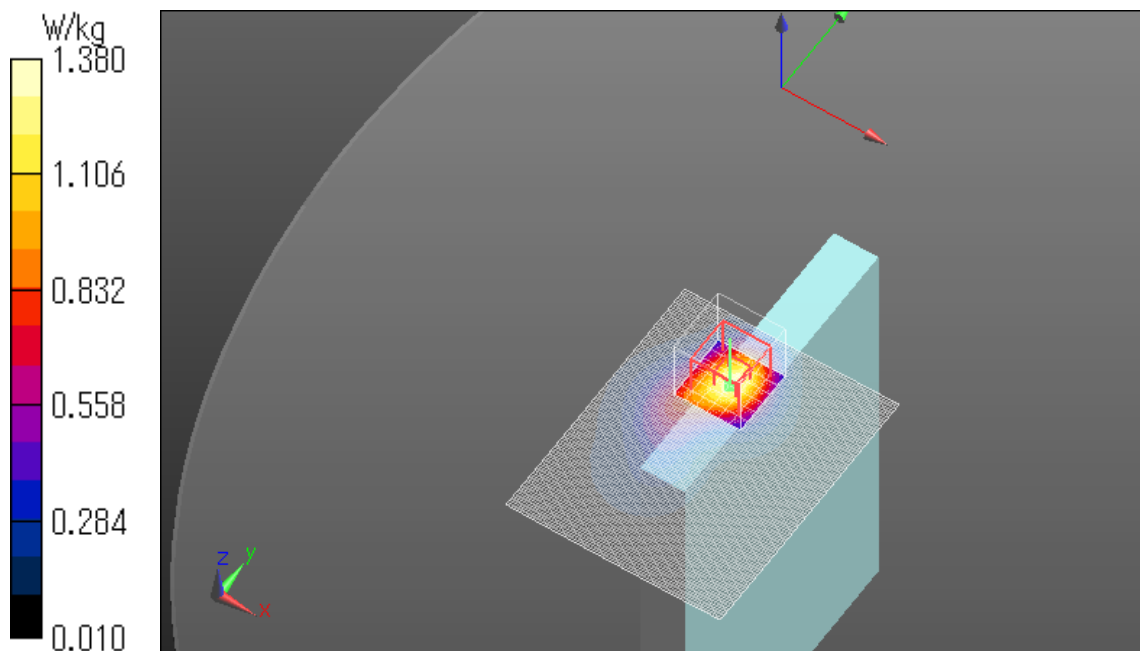
Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.973 W/kg; SAR(10 g) = 0.506 W/kg

Maximum value of SAR (measured) = 1.38 W/kg

Date: 2018/02/14

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



LTE Band12 Bottom 0mm QPSK 704MHz Allocation25 Start0 power reduction

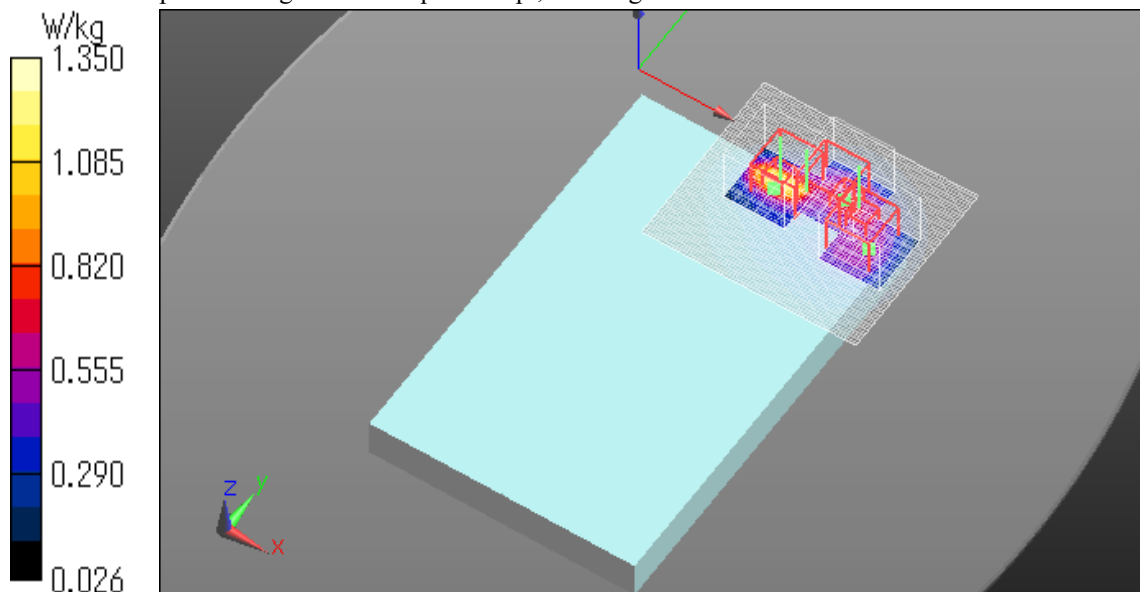
Communication System: UID 0, Generic LTE (0); Communication System Band: Band 12,
E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 704 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 704$ MHz; $\sigma = 0.927$ S/m; $\epsilon_r = 55.374$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration
Probe: EX3DV4 - SN3917; ConvF(10.37, 10.37, 10.37); Calibrated: 2017/05/16;
Sensor-Surface: 2mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1369; Calibrated: 2017/05/12
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

LTE B12/Bottom/Area Scan (71x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.757 W/kg

LTE B12/Bottom/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.01 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.50 W/kg
SAR(1 g) = 0.777 W/kg; SAR(10 g) = 0.364 W/kg
Maximum value of SAR (measured) = 1.35 W/kg

LTE B12/Bottom/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.01 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.332 W/kg
Maximum value of SAR (measured) = 0.807 W/kg

LTE B12/Bottom/Zoom Scan 3 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.01 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.900 W/kg
SAR(1 g) = 0.451 W/kg; SAR(10 g) = 0.284 W/kg
Maximum value of SAR (measured) = 0.685 W/kg
Date: 2018/02/22
Ambient Temp. : 24.0 degree.C. Liquid Temp.; 23.5 degree.C.



LTE Band12 Edge2 15mm QPSK 711MHz Allocation1 Start0

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 12,
E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 711 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.936$ S/m; $\epsilon_r = 54.888$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration
Probe: EX3DV4 - SN3917; ConvF(10.37, 10.37, 10.37); Calibrated: 2017/05/16;
Sensor-Surface: 2mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1369; Calibrated: 2017/05/12
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

LTE B12/Edge2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.302 W/kg

LTE B12/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.18 V/m; Power Drift = 0.06 dB

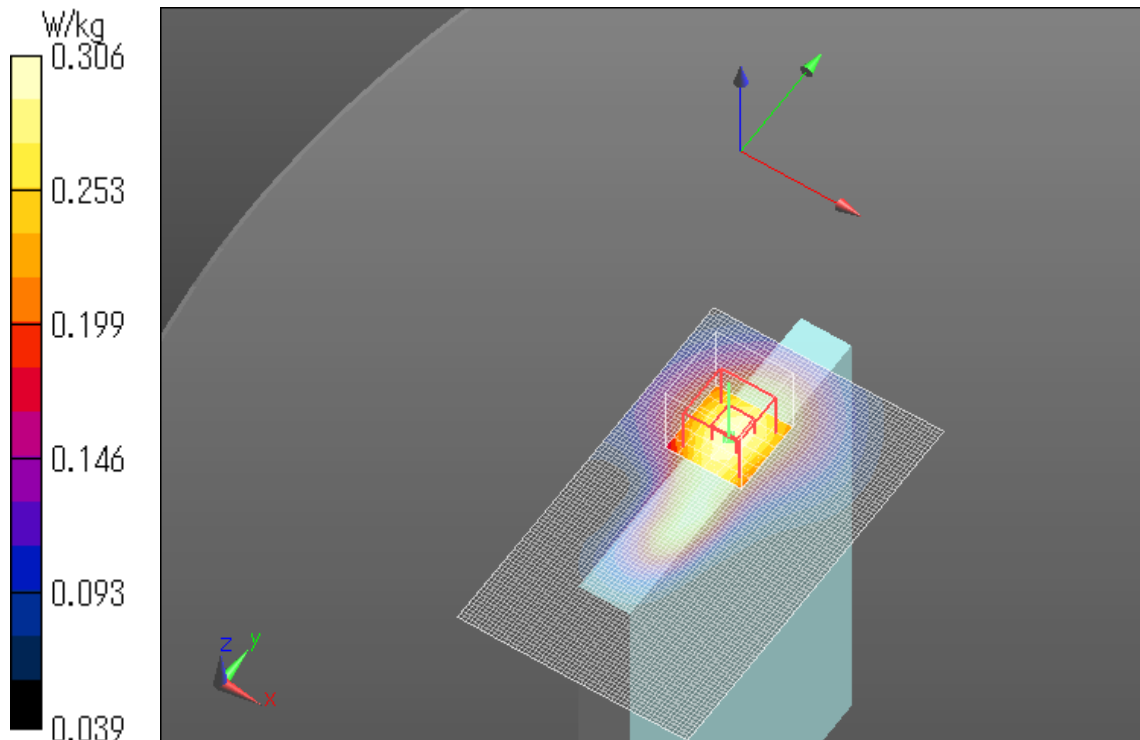
Peak SAR (extrapolated) = 0.351 W/kg

SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (measured) = 0.306 W/kg

Date: 2018/03/05

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



LTE Band13 Bottom 0mm QPSK 782MHz Allocation50 Start0 power reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 13,

E-UTRA/FDD (777.0 - 787.0 MHz); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.585$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(10.29, 10.29, 10.29); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B13/Bottom/Area Scan (71x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.14 W/kg

LTE B13/Bottom/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.05 V/m; Power Drift = 0.01 dB

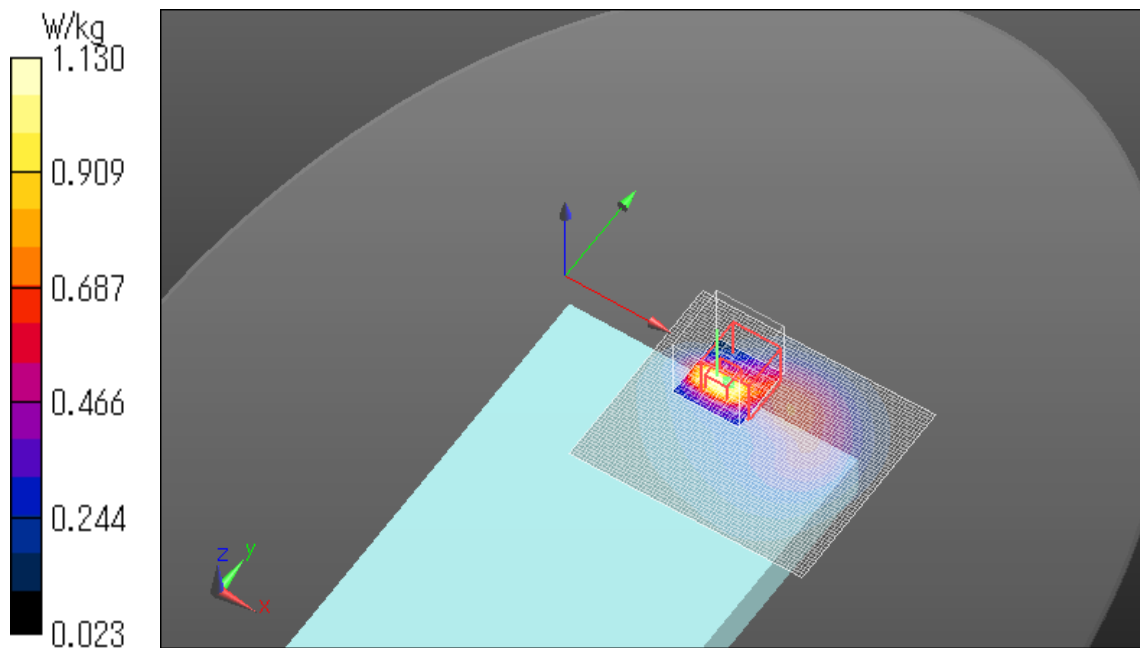
Peak SAR (extrapolated) = 2.18 W/kg

SAR(1 g) = 0.717 W/kg; SAR(10 g) = 0.359 W/kg

Maximum value of SAR (measured) = 1.13 W/kg

Date: 2018/02/21

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



LTE Band13 Edge2 15mm QPSK 782MHz Allocation1 Start49

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 13,
E-UTRA/FDD (777.0 - 787.0 MHz); Frequency: 782 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.949$ S/m; $\epsilon_r = 56.911$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration
Probe: EX3DV4 - SN3917; ConvF(10.29, 10.29, 10.29); Calibrated: 2017/05/16;
Sensor-Surface: 2mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1369; Calibrated: 2017/05/12
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

LTE B13/Edge2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.401 W/kg

LTE B13/Edge2/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.81 V/m; Power Drift = -0.09 dB

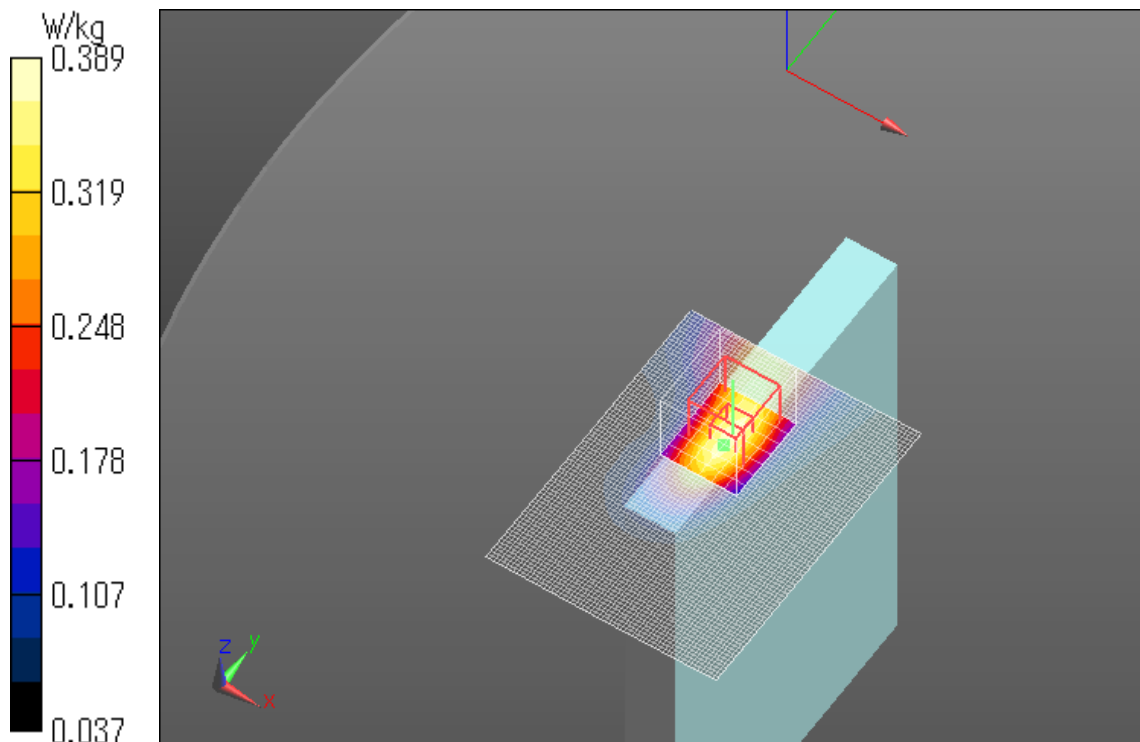
Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.318 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 0.389 W/kg

Date: 2018/03/05

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



LTE Band25 Edge2 0mm QPSK 1905MHz Allocation1 Start49 power reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 25, E-UTRA/FDD (1850.0 - 1915.0 MHz); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1905$ MHz; $\sigma = 1.543$ S/m; $\epsilon_r = 53.426$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(8, 8, 8); Calibrated: 2017/12/11;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2017/07/11

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)

LTE B25/Edge2/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.97 W/kg

LTE B25/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.00 V/m; Power Drift = 0.01 dB

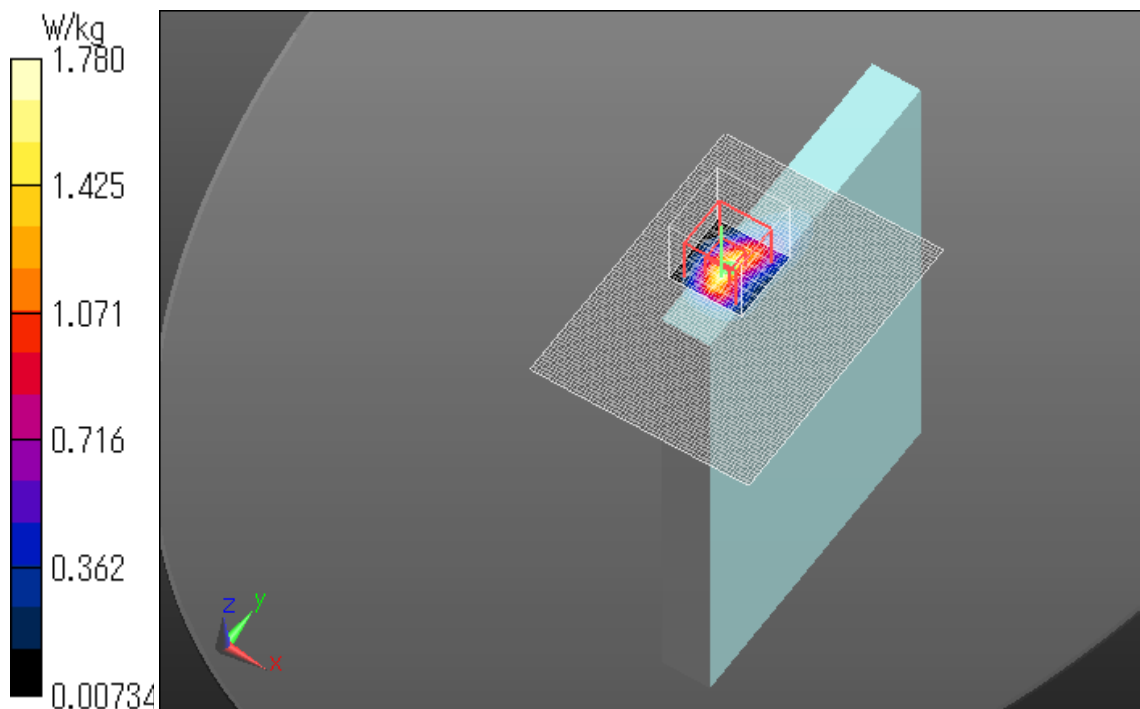
Peak SAR (extrapolated) = 2.51 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.426 W/kg

Maximum value of SAR (measured) = 1.78 W/kg

Date: 2018/02/20

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



LTE Band25 Edge2 15mm QPSK 1905MHz Allocation1 Start49

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 25, E-UTRA/FDD (1850.0 - 1915.0 MHz); Frequency: 1905 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1905$ MHz; $\sigma = 1.51$ S/m; $\epsilon_r = 50.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(8.04, 8.04, 8.04); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B2/Edge2/Area Scan (61x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.824 W/kg

LTE B2/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 23.76 V/m; Power Drift = 0.01 dB

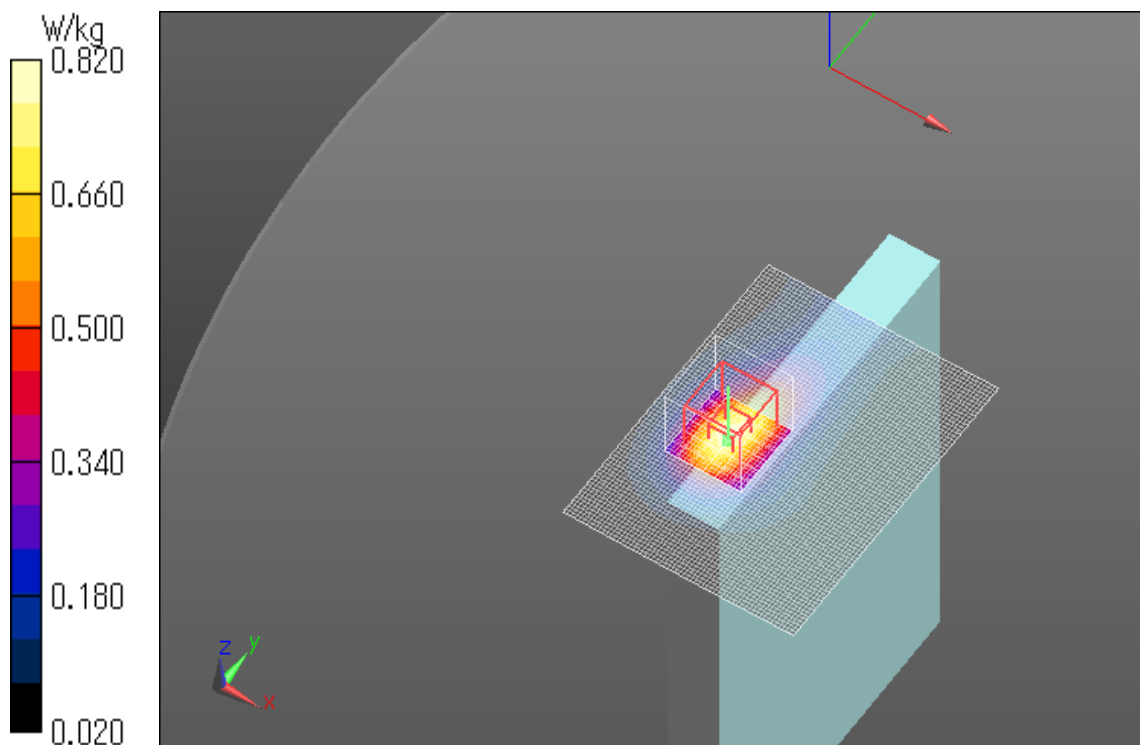
Peak SAR (extrapolated) = 0.990 W/kg

SAR(1 g) = 0.623 W/kg; SAR(10 g) = 0.359 W/kg

Maximum value of SAR (measured) = 0.820 W/kg

Date: 2018/03/06

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



LTE Band26 Bottom 0mm QPSK 821.5MHz Allocation1 Start0 power reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 26,
E-UTRA/FDD (814.0 - 849.0 MHz); Frequency: 821.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 821.5$ MHz; $\sigma = 0.985$ S/m; $\epsilon_r = 54.904$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration
Probe: EX3DV4 - SN3917; ConvF(9.93, 9.93, 9.93); Calibrated: 2017/05/16;
Sensor-Surface: 2mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1369; Calibrated: 2017/05/12
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

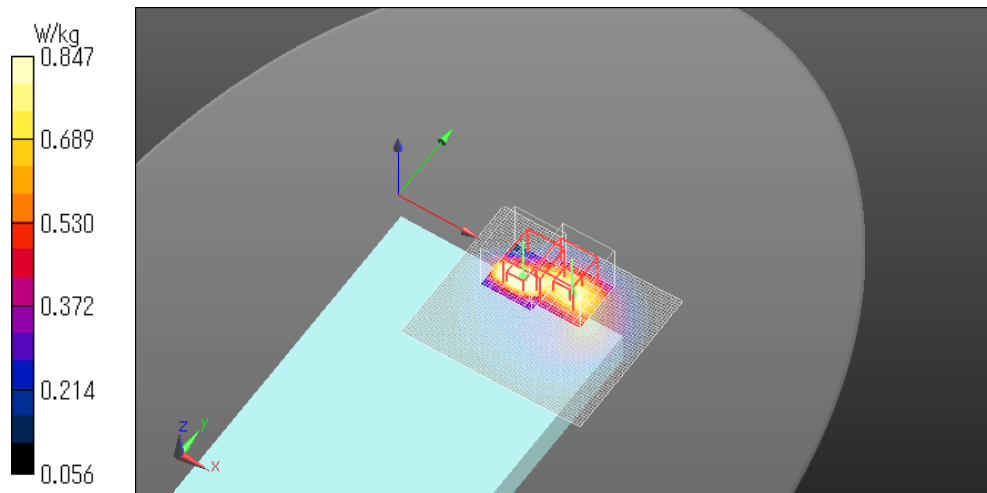
LTE B26/Bottom/Area Scan (71x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.19 W/kg

LTE B26/Bottom/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.85 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 2.02 W/kg
SAR(1 g) = 0.738 W/kg; SAR(10 g) = 0.391 W/kg
Maximum value of SAR (measured) = 1.16 W/kg

LTE B26/Bottom/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.85 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.407 W/kg
Maximum value of SAR (measured) = 0.847 W/kg

Date: 2018/02/20

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



LTE Band26 Edge2 15mm QPSK 821.5MHz Allocation1 Start0

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 26,
E-UTRA/FDD (814.0 - 849.0 MHz); Frequency: 821.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 821.5$ MHz; $\sigma = 0.987$ S/m; $\epsilon_r = 56.55$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration
Probe: EX3DV4 - SN3917; ConvF(9.93, 9.93, 9.93); Calibrated: 2017/05/16;
Sensor-Surface: 2mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1369; Calibrated: 2017/05/12
Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

LTE B26/Edge2/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.506 W/kg

LTE B26/Edge2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.66 V/m; Power Drift = -0.00 dB

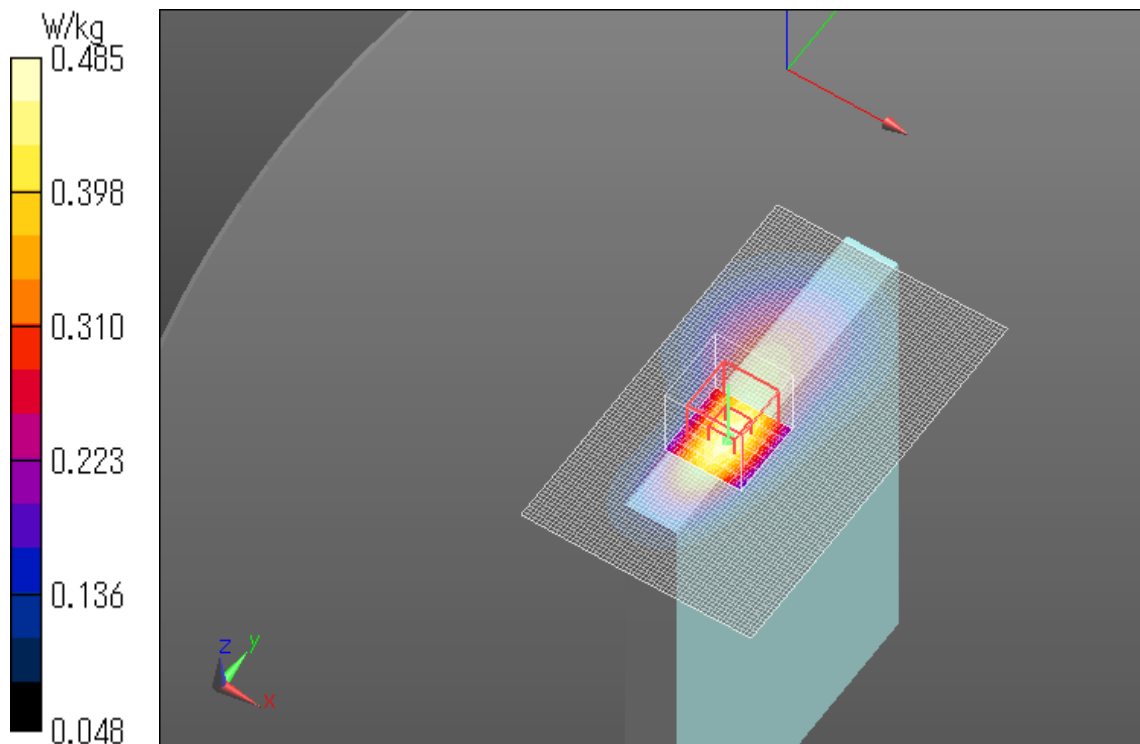
Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.394 W/kg; SAR(10 g) = 0.265 W/kg

Maximum value of SAR (measured) = 0.485 W/kg

Date: 2018/03/05

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



LTE Band41 Bottom 0mm QPSK 2680MHz Allocation50 Start49 power reduction

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2680 MHz; Duty Cycle: 1:1.59956

Medium parameters used: $f = 2680$ MHz; $\sigma = 2.247$ S/m; $\epsilon_r = 50.244$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.41, 7.41, 7.41); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B41/Bottom/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.843 W/kg

LTE B41/Bottom/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.53 V/m; Power Drift = -0.04 dB

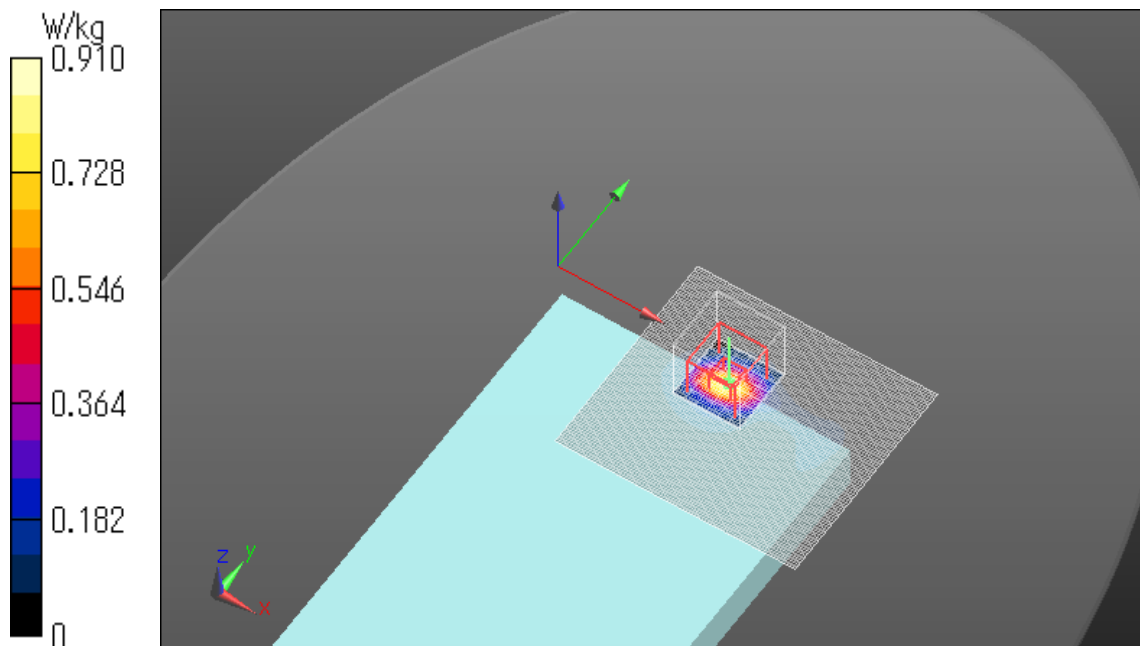
Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.560 W/kg; SAR(10 g) = 0.213 W/kg

Maximum value of SAR (measured) = 0.910 W/kg

Date: 2018/02/15

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



LTE Band41 Edge2 15mm QPSK 2680MHz Allocation1 Start49

Communication System: UID 0, Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); Frequency: 2680 MHz; Duty Cycle: 1:1.59956

Medium parameters used: $f = 2680$ MHz; $\sigma = 2.247$ S/m; $\epsilon_r = 50.244$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.41, 7.41, 7.41); Calibrated: 2017/05/16;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2017/05/12

Phantom: ELI v5.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1203

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

LTE B41/Edge2 2/Area Scan (81x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

LTE B41/Edge2 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.52 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.683 W/kg; SAR(10 g) = 0.334 W/kg

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

Date: 2018/02/15

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

