

17.4 SAR test plots for WCDMA Band5

WCDMA Band5 12.2kRMC 836.6MHz Edge1 0mm Power Reduction

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (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: DASYS2, 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) = 1.07 W/kg

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

Reference Value = 36.40 V/m; Power Drift = -0.10 dB

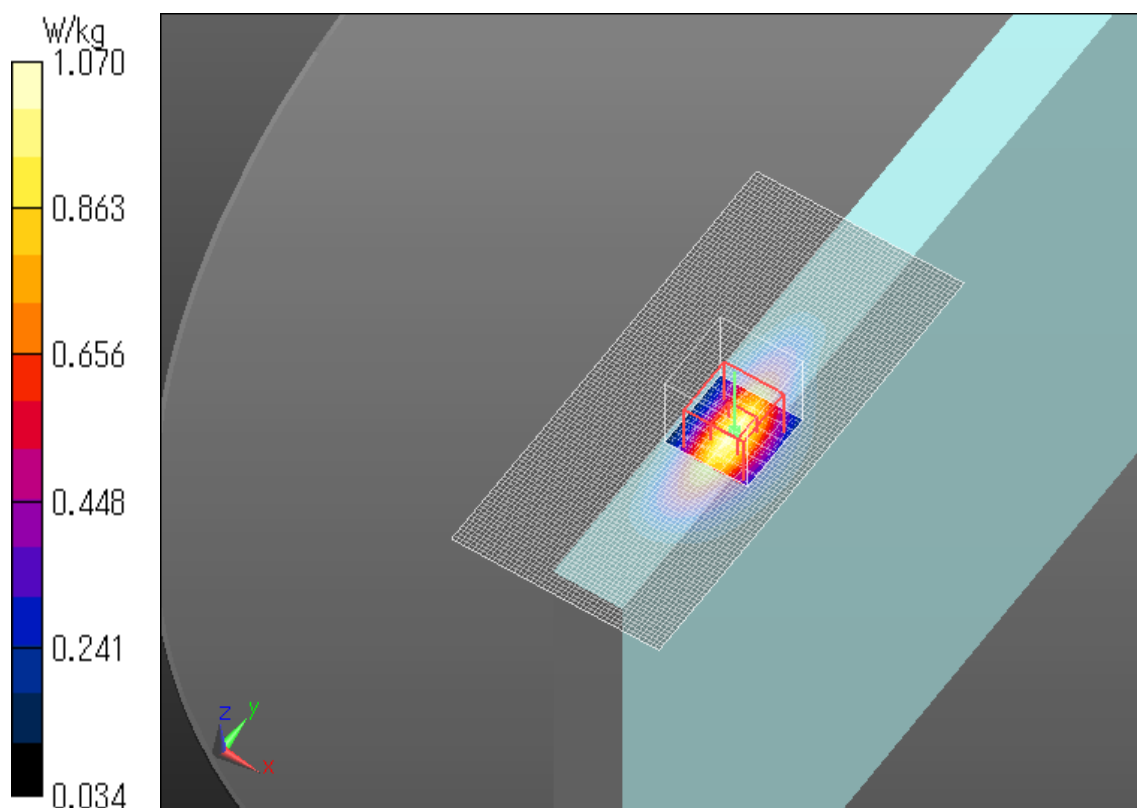
Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.741 W/kg; SAR(10 g) = 0.400 W/kg

Maximum value of SAR (measured) = 1.07 W/kg

Date: 2017/01/18

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



WCDMA Band5 12.2kRMC 836.6MHz Rear 0mm Power Reduction

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ 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 (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.327 W/kg

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

Reference Value = 19.67 V/m; Power Drift = -0.03 dB

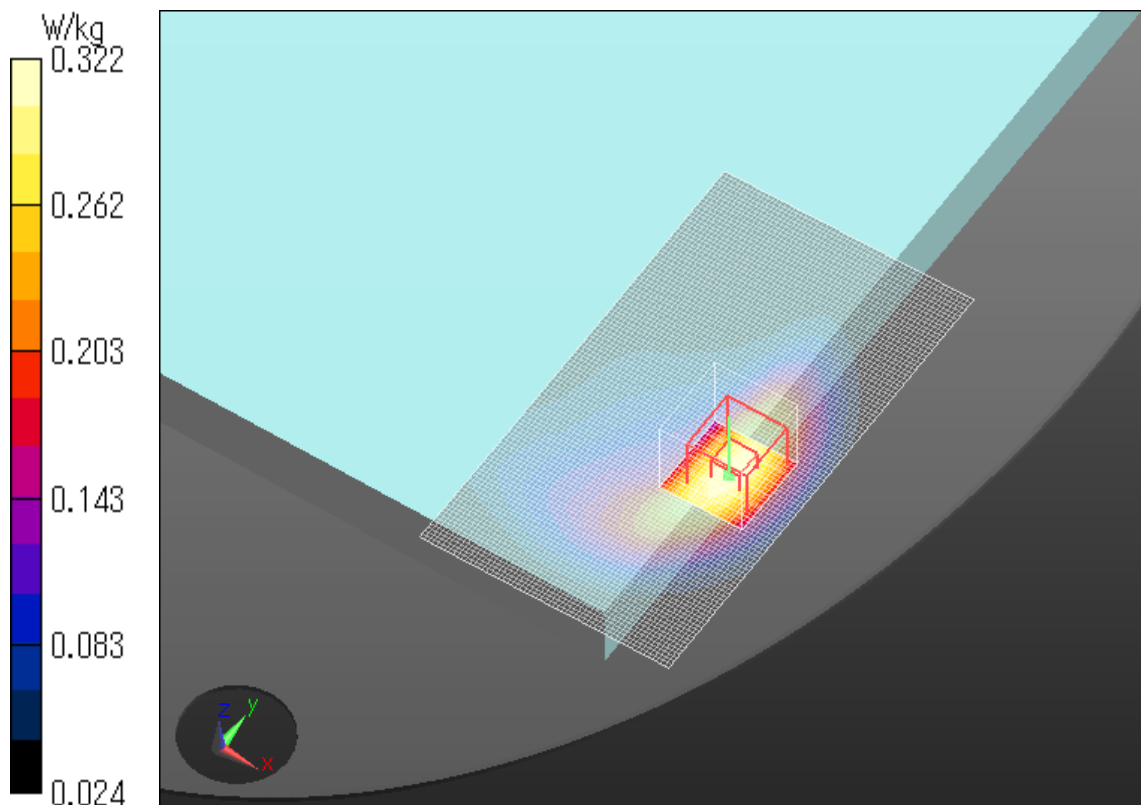
Peak SAR (extrapolated) = 0.379 W/kg

SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.171 W/kg

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

Date: 2017/01/18

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



WCDMA Band5 12.2kRMC 836.6MHz Edge1 37mm

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ 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) = 0.0992 W/kg

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

Reference Value = 10.81 V/m; Power Drift = -0.08 dB

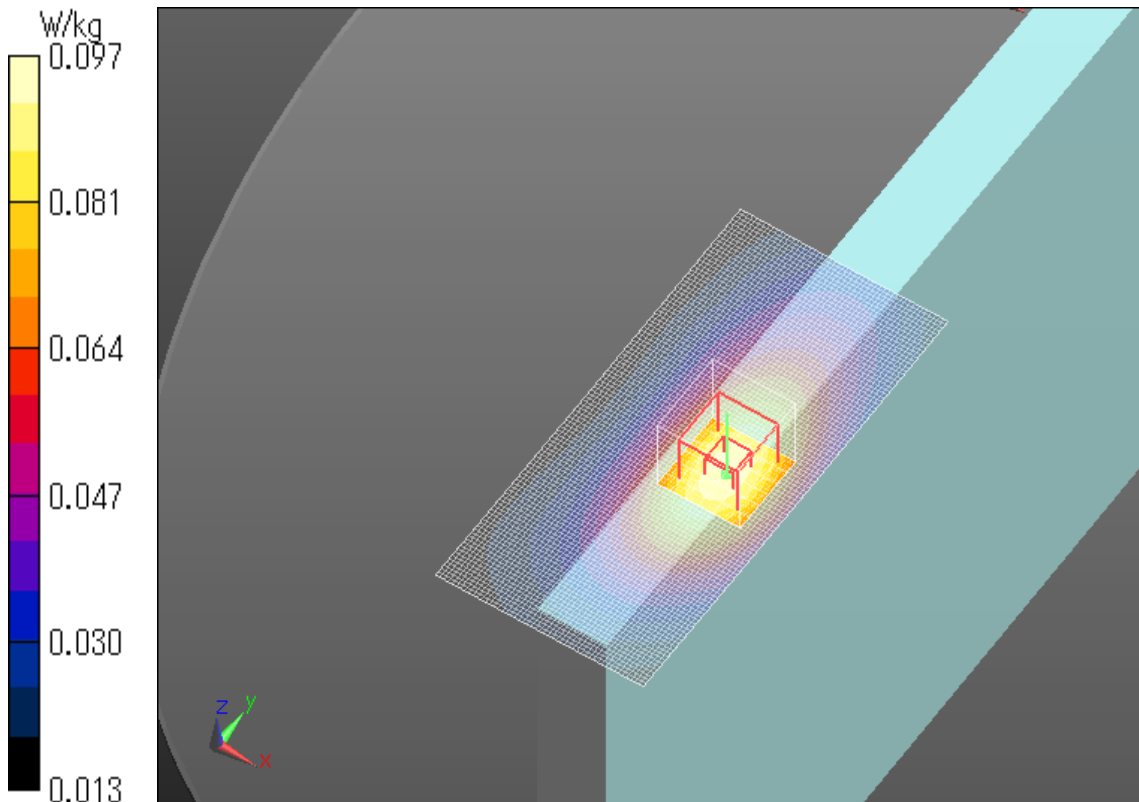
Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.059 W/kg

Maximum value of SAR (measured) = 0.0974 W/kg

Date: 2017/01/18

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



WCDMA Band5 12.2kRMC 836.6MHz Edge2 0mm

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ 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) = 0.00890 W/kg

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

Reference Value = 3.315 V/m; Power Drift = -0.12 dB

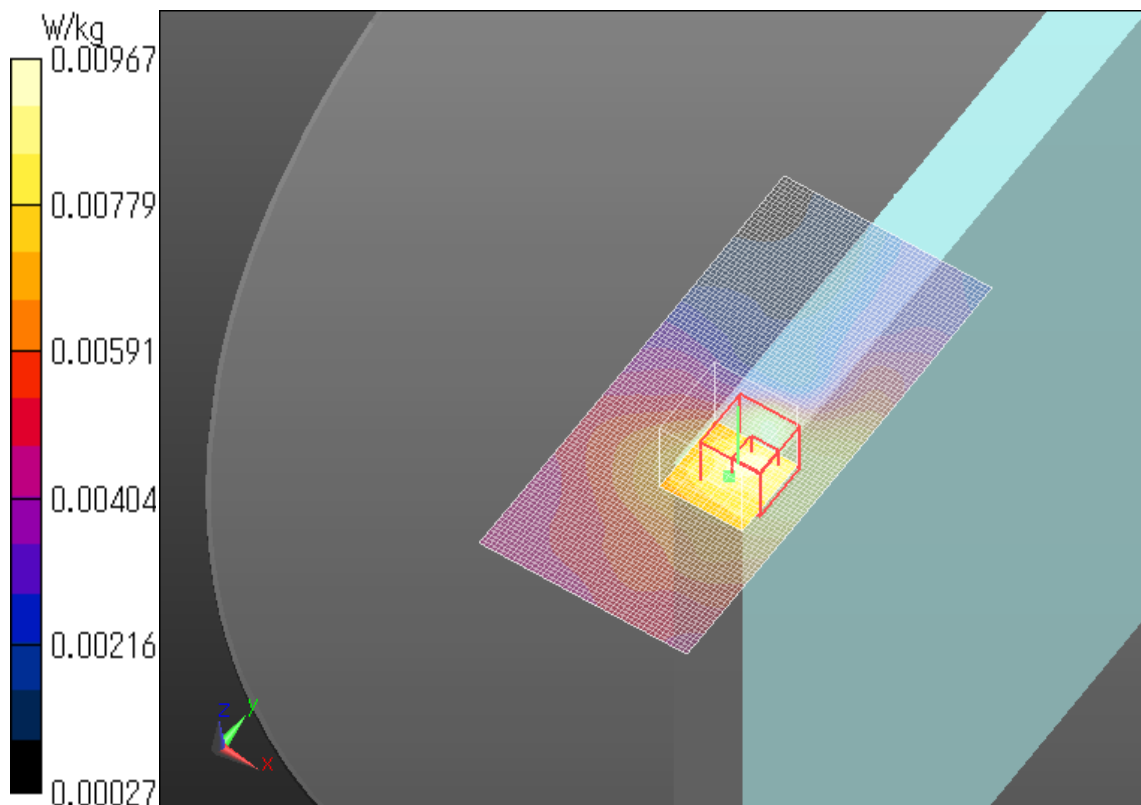
Peak SAR (extrapolated) = 0.0120 W/kg

SAR(1 g) = 0.00758 W/kg; SAR(10 g) = 0.0052 W/kg

Maximum value of SAR (measured) = 0.00967 W/kg

Date: 2017/01/18

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



WCDMA Band5 12.2kRMC 836.6MHz Edge2 tilt 0mm

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; $\sigma = 0.974$ S/m; $\epsilon_r = 54.659$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

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

Sensor-Surface: 2mm (Mechanical Surface Detection)

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

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

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

Area Scan (91x91x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0150 W/kg

Zoom Scan (9x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.783 V/m; Power Drift = -0.21 dB

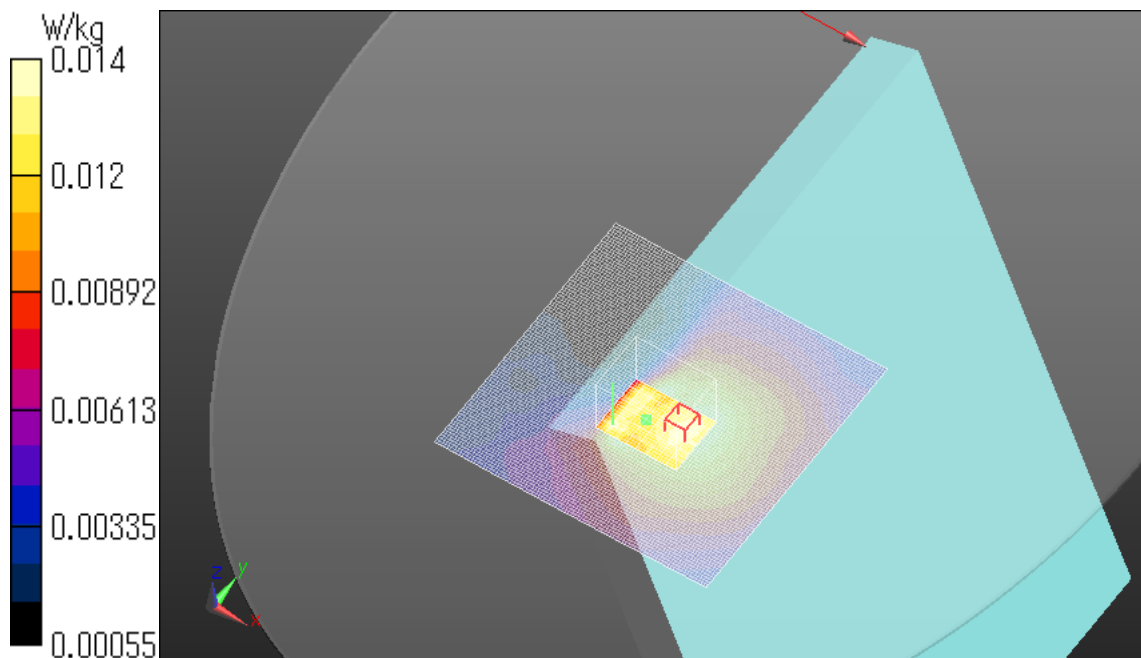
Peak SAR (extrapolated) = 0.0210 W/kg

SAR(1 g) = 0.012 W/kg

Maximum value of SAR (measured) = 0.0145 W/kg

Date: 2017/02/20

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



WCDMA Band5 12.2kRMC 836.6MHz Edge3 0mm

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ 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) = 0.0525 W/kg

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

Reference Value = 8.017 V/m; Power Drift = -0.00 dB

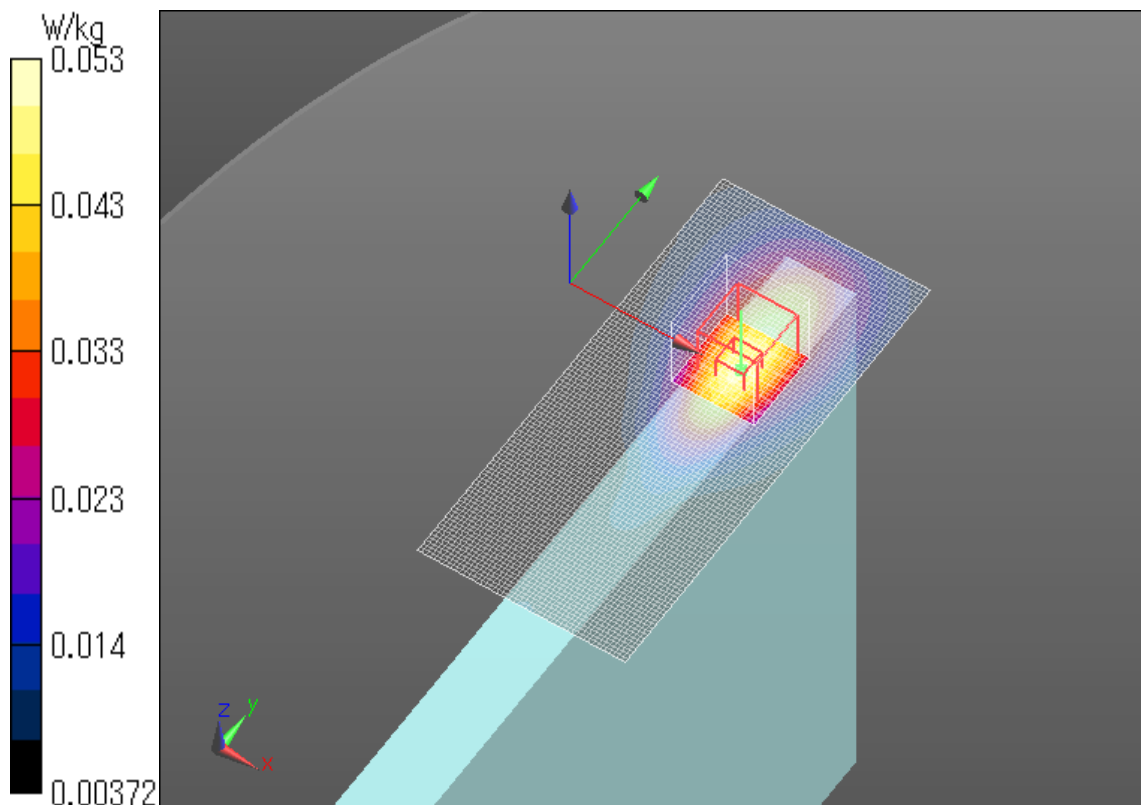
Peak SAR (extrapolated) = 0.0650 W/kg

SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.025 W/kg

Maximum value of SAR (measured) = 0.0527 W/kg

Date: 2017/01/18

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



WCDMA Band5 12.2kRMC 836.6MHz Edge4 0mm

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ 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 (81x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.214 W/kg

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

Reference Value = 16.16 V/m; Power Drift = -0.07 dB

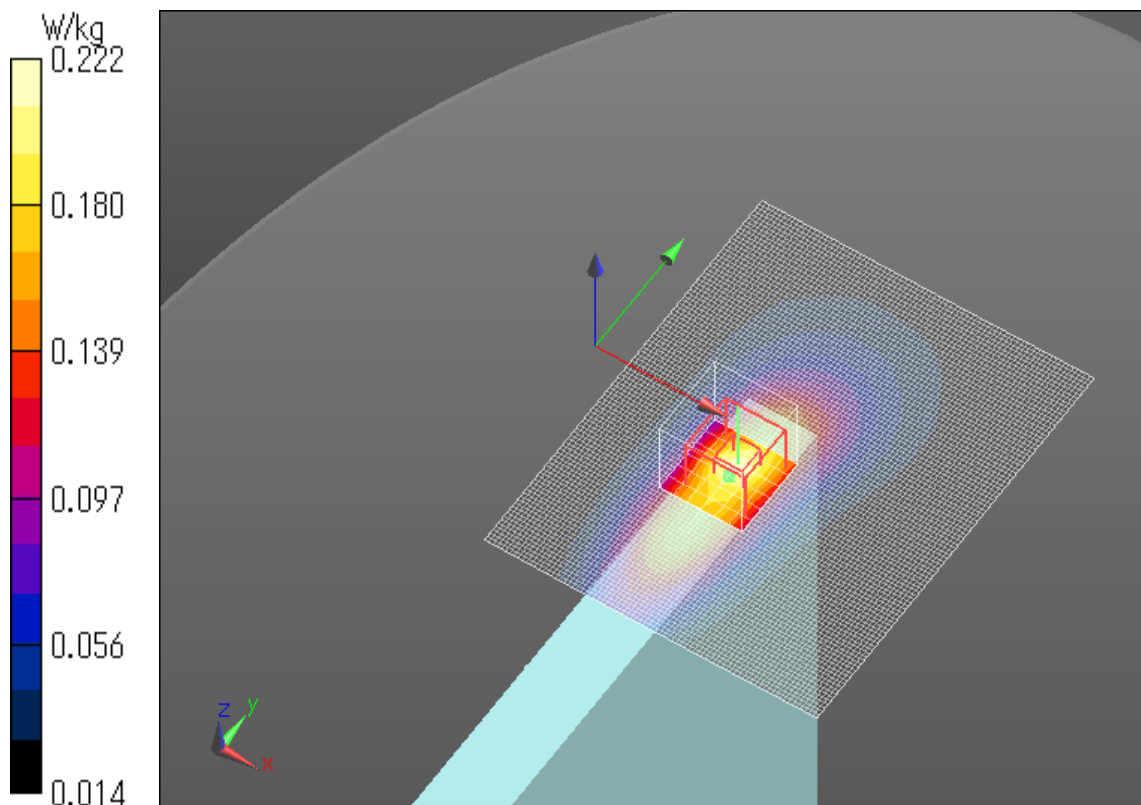
Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.222 W/kg

Date: 2017/01/18

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



WCDMA Band5 12.2kRMC 836.6MHz Edge4 tilt 0mm

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; $\sigma = 0.974$ S/m; $\epsilon_r = 54.659$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration

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

Sensor-Surface: 2mm (Mechanical Surface Detection)

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

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

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

Area Scan (81x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.338 W/kg

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

Reference Value = 20.94 V/m; Power Drift = -0.10 dB

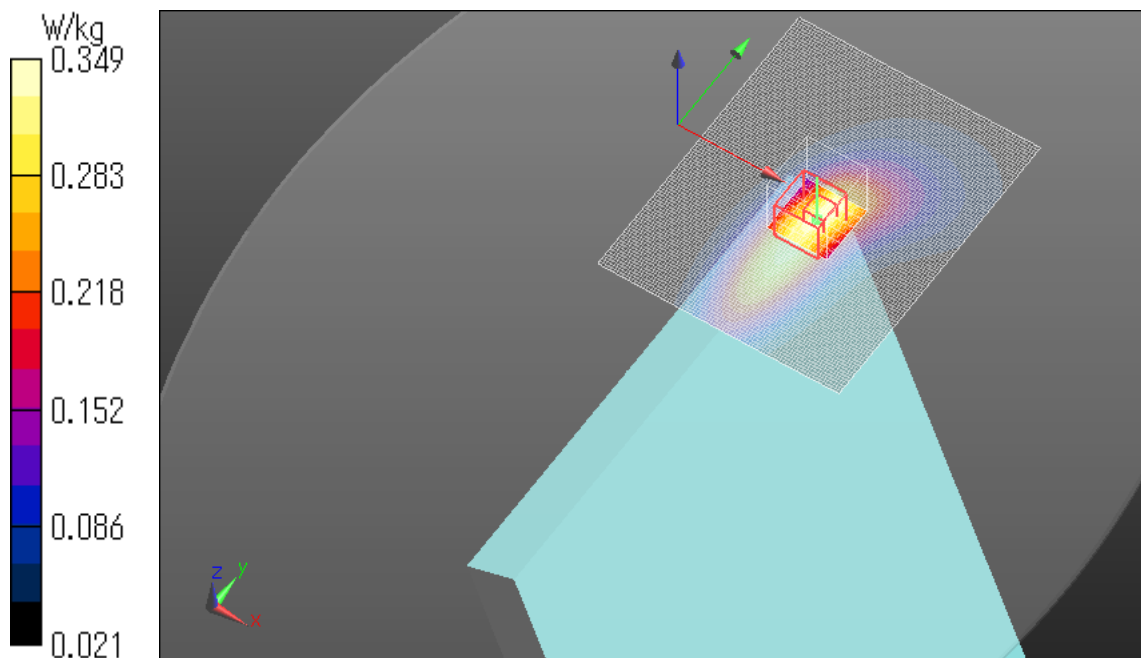
Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.171 W/kg

Maximum value of SAR (measured) = 0.349 W/kg

Date: 2017/02/20

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



WCDMA Band5 12.2kRMC 836.6MHz Rear 20mm

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; $\sigma = 0.951$ S/m; $\epsilon_r = 54.753$; $\rho = 1000$ 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 (61x111x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.144 W/kg

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

Reference Value = 13.03 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.143 W/kg

Date: 2017/01/18

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

