

## Appendix B SAR Measurement data

### B.1 Evaluation procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the E-field at a fixed location above the ear point or central position of flat phantom was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of head or body position was measured at a distance of each device from the inner surface of the shell. The area covered the entire dimension of the antenna of EUT and the horizontal grid spacing was 15 mm x 15 mm, 12 mm x 12 mm or 10mm x 10mm. Based on these data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Around this point found in the Step 2 (area scan), a volume of 30mm x 30mm x 30mm or more was assessed by measuring 7 x 7 x 7 points at least for below 3GHz and a volume of 28 mm x 28mm x 22.5mm or more was assessed by measuring 8 x 8 x 6 (ratio step method (\*1)) points at least for 5GHz band.

And for any secondary peaks found in the Step2 which are within 2dB of maximum peak and not with this Step3 (Zoom scan) is repeated. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

(1). The data at the surface were extrapolated, since the center of the dipoles is 1mm(EX3DV4) away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm [4]. A polynomial of the fourth order was calculated through the points in z-axes.

This polynomial was then used to evaluate the points between the surface and the probe tip.

(2). The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one-dimensional splines with the "Not a knot"-condition (in x, y and z-directions) [4], [5]. The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

(3). All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

\*1. Ratio step method parameters used;

The first measurement point: 2mm from the phantom surface, the initial grid separation: 2mm, subsequent graded grid ratio: 1.5

These parameters comply with the requirement of the KDB 865664D01.

Step 4: Re-measurement of the E-field at the same location as in Step 1.

Confirmation after SAR testing

It was checked that the power drift [W] is within +/-5%. The verification of power drift during the SAR test is that DASY5 system calculates the power drift by measuring the e-field at the same location at beginning and the end of the scan measurement for each test position.

DASY5 system calculation Power drift value[dB] =  $20\log(E_a)/(E_b)$

Before SAR testing :  $E_b[V/m]$

After SAR testing :  $E_a[V/m]$

Limit of power drift[W] = +/-5%

$X[dB] = 10\log[P] = 10\log(1.05/1) = 10\log(1.05) - 10\log(1) = 0.212dB$

from E-field relations with power.

$p = E^2/\eta = E^2/377$

Therefore, The correlation of power and the E-field

$XdB = 10\log(P) = 10\log(E)^2 = 20\log(E)$

Therefore,

The calculated power drift of DASY5 System must be the less than +/-0.212dB.

B.2 Plot No. W2.1 / Full/WCDMA B2 ch9400 1880MHz RMC,12.2 kbps Rear tilt Edge1 0mm

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.574$  S/m;  $\epsilon_r = 55.703$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1880 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/WCDMA B2 ch9400 1880MHz RMC,12.2 kbps Rear tilt Edge1 0mm/Area Scan (101x61x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.03 W/kg

**Full/WCDMA B2 ch9400 1880MHz RMC,12.2 kbps Rear tilt Edge1 0mm/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.57 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.722 W/kg; SAR(10 g) = 0.430 W/kg** (SAR corrected for target medium)

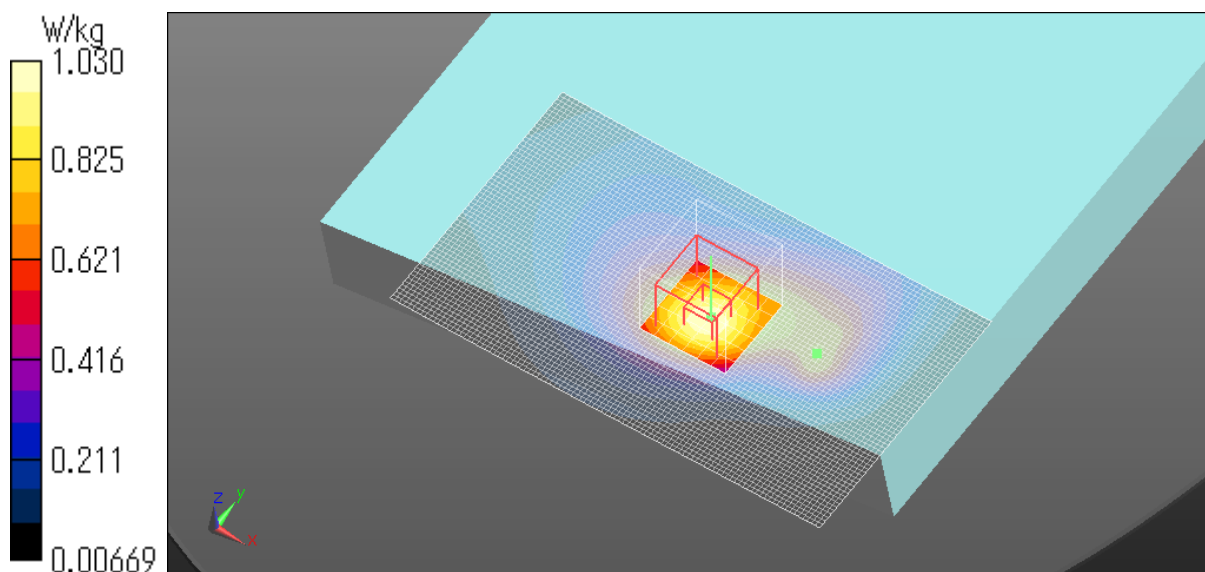
Smallest distance from peaks to all points 3 dB below = 16.3 mm

Ratio of SAR at M2 to SAR at M1 = 59.5%

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

Date: 2021/08/17

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.



B.3 Plot No. W2.2 / Red/WCDMA B2 ch9538 1907.6MHz RMC,12.2 kbps Edge4 0mm

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;  $\sigma = 1.593$  S/m;  $\epsilon_r = 55.798$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1907.6 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/WCDMA B2 ch9538 1907.6MHz RMC,12.2 kbps Edge4 0mm/Area Scan (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.972 W/kg

**Red/WCDMA B2 ch9538 1907.6MHz RMC,12.2 kbps Edge4 0mm/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.31 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.36 W/kg

**SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.331 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.2 mm

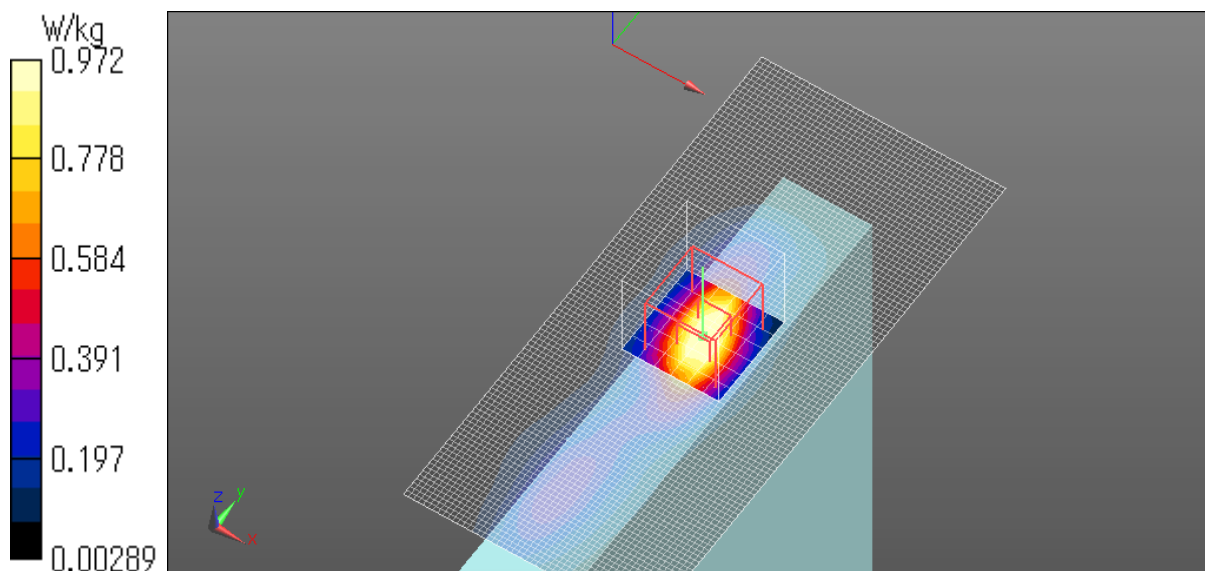
Ratio of SAR at M2 to SAR at M1 = 51.6%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.11 W/kg

Date: 2021/08/17

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.



B.4 Plot No. W4.1 / Full/WCDMA B4 ch1312 1712.4MHz RMC,12.2 kbps Rear tilt Edge4 9mm

Communication System: UID 0, #WCDMA (0); Communication System Band: Band IV; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.463$  S/m;  $\epsilon_r = 51.392$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(8.1, 8.1, 8.1) @ 1712.4 MHz; Calibrated: 2021/07/22

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509; Calibrated: 2021/07/13

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

Measurement SW: DASYS52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/WCDMA B4 ch1312 1712.4MHz RMC,12.2 kbps Rear tilt Edge4 9mm/Area Scan (101x61x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Full/WCDMA B4 ch1312 1712.4MHz RMC,12.2 kbps Rear tilt Edge4 9mm/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.32 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.61 W/kg

**SAR(1 g) = 1 W/kg; SAR(10 g) = 0.601 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 14.9 mm

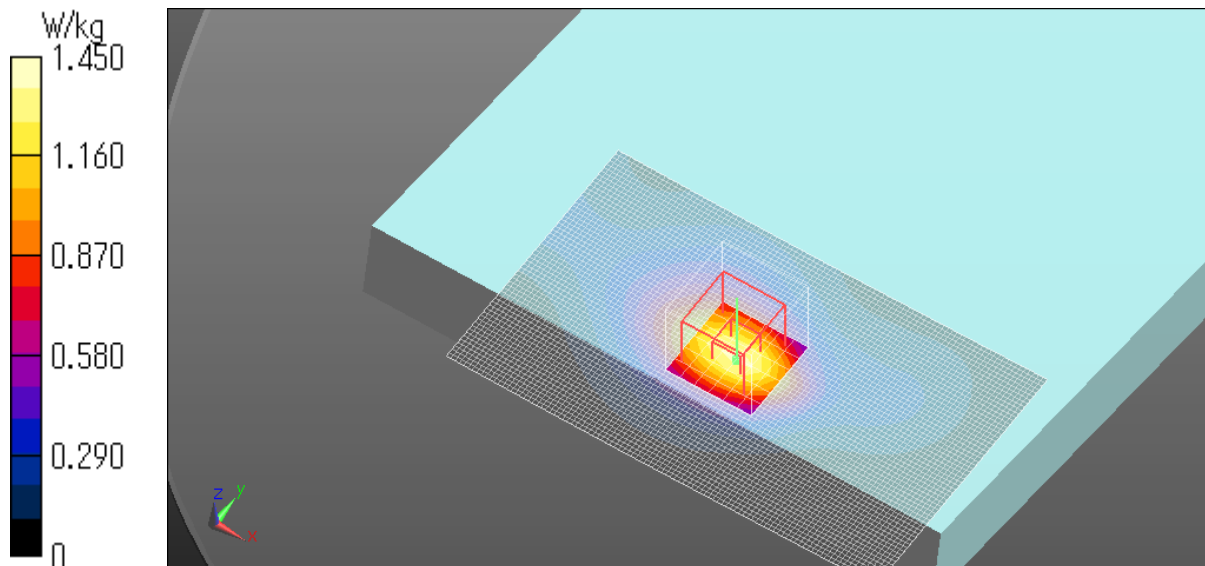
Ratio of SAR at M2 to SAR at M1 = 62.3%

Info: Interpolated medium parameters used for SAR evaluation.

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

Date: 2021/08/12

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 22.5 degree.C.



B.5 Plot No. W4.2 / Red/WCDMA B4 ch1413 1732.6MHz RMC,12.2 kbps Edge4 0mm

Communication System: UID 0, #WCDMA (0); Communication System Band: Band IV; Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.6$  MHz;  $\sigma = 1.452$  S/m;  $\epsilon_r = 52.934$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1732.6 MHz; Calibrated: 2021/05/20

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369; Calibrated: 2021/05/11

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1045

Measurement SW: DASYS52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/WCDMA B4 ch1413 1732.6MHz RMC,12.2 kbps Edge4 0mm/Area Scan (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.853 W/kg

**Red/WCDMA B4 ch1413 1732.6MHz RMC,12.2 kbps Edge4 0mm/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.33 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.08 W/kg

**SAR(1 g) = 0.551 W/kg; SAR(10 g) = 0.275 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

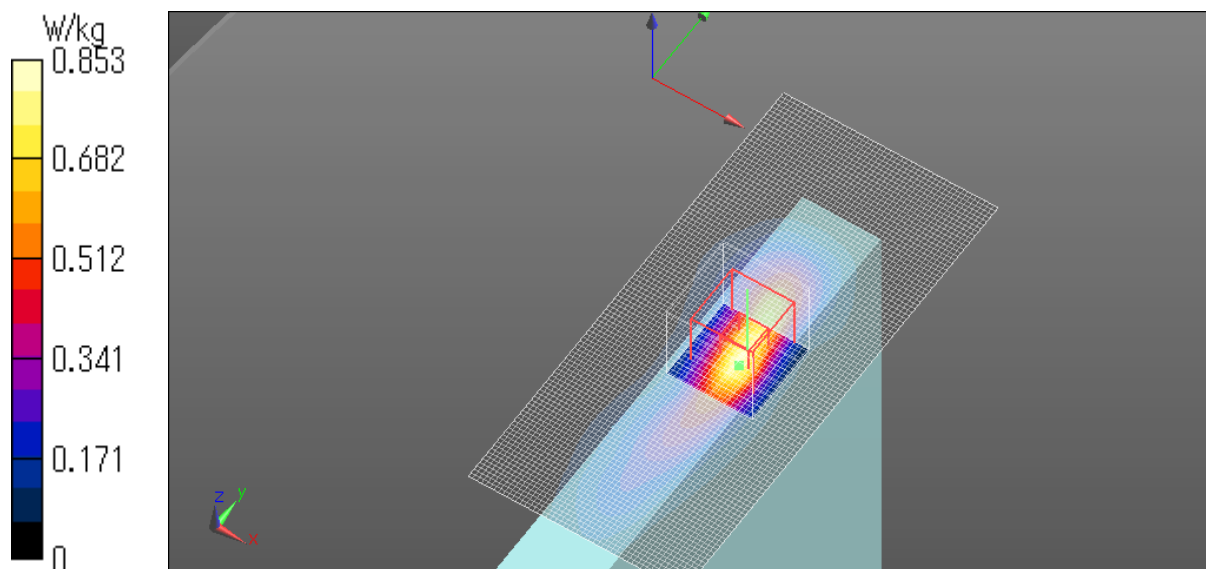
Ratio of SAR at M2 to SAR at M1 = 54%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.855 W/kg

Date: 2021/08/04

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 22.5 degree.C.



B.6 Plot No. W5.1 / Full/WCDMA B5 ch4183 836.6MHz RMC,12.2 kbps Rear tilt Edge4 9mm

Communication System: UID 0, #WCDMA (0); Communication System Band: Band V; ; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 1.012$  S/m;  $\epsilon_r = 52.804$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 836.6 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full/WCDMA B5 ch4183 836.6MHz RMC,12.2 kbps Rear tilt(Edge4) 9mm/Area Scan (101x61x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.904 W/kg

**Full/WCDMA B5 ch4183 836.6MHz RMC,12.2 kbps Rear tilt(Edge4) 9mm/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.31 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.674 W/kg; SAR(10 g) = 0.442 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 15.3 mm

Ratio of SAR at M2 to SAR at M1 = 65%

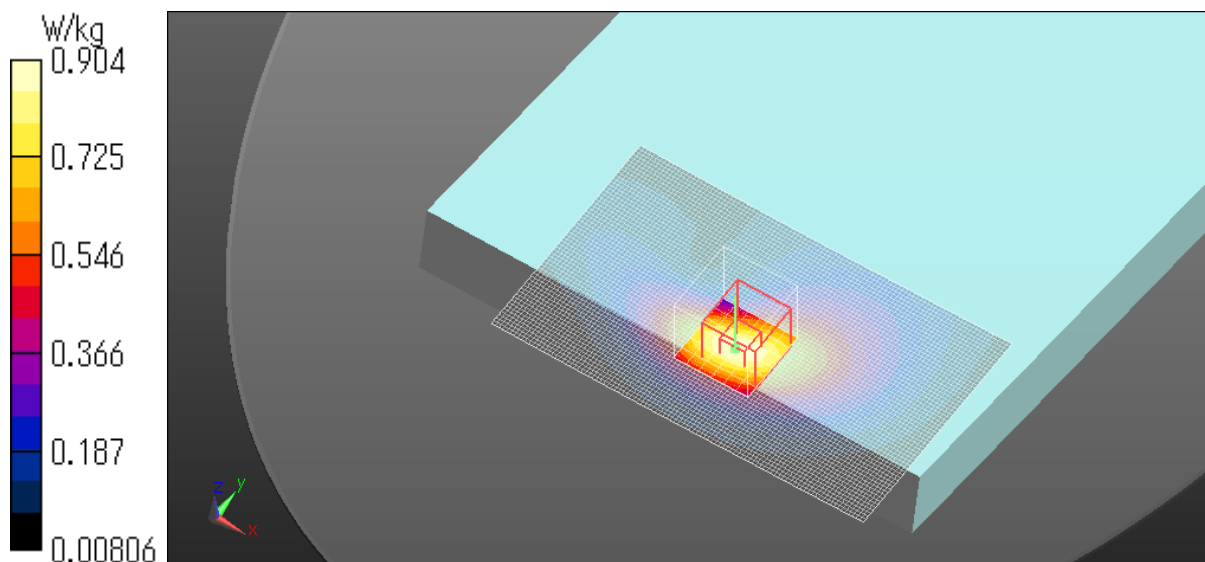
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.911 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/18



B.7 Plot No. W5.2 / Red/WCDMA B5 ch4233 846.6MHz RMC,12.2 kbps Edge4 0mm

Communication System: UID 0, #WCDMA (0); Communication System Band: Band V; ; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 1.015$  S/m;  $\epsilon_r = 52.796$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 846.6 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/WCDMA B5 ch4233 846.6MHz RMC,12.2 kbps Edge4 0mm/Area Scan (51x111x1):** Interpolated grid:  
dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.921 W/kg

**Red/WCDMA B5 ch4233 846.6MHz RMC,12.2 kbps Edge4 0mm/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.36 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.353 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 52%

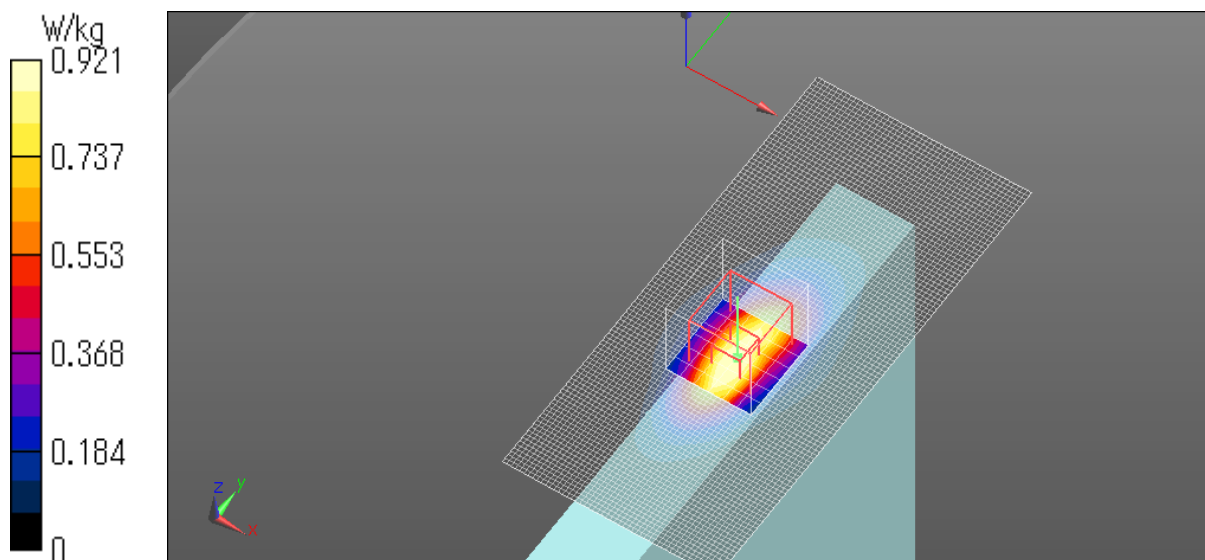
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.04 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/19



B.8 Plot No. L2.1 / Full /LTE B2 ch18700 1860MHz QPSK Rear tilt Edge1 0mm 20MHz RBn1 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.558$  S/m;  $\epsilon_r = 50.847$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1860 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full /LTE B2 ch18700 1860MHz QPSK Rear tilt(Edge1) 0mm 20MHz RBn1 RBp0/Area Scan (101x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.852 W/kg

**Full /LTE B2 ch18700 1860MHz QPSK Rear tilt(Edge1) 0mm 20MHz RBn1 RBp0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.71 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.362 W/kg** (SAR corrected for target medium)

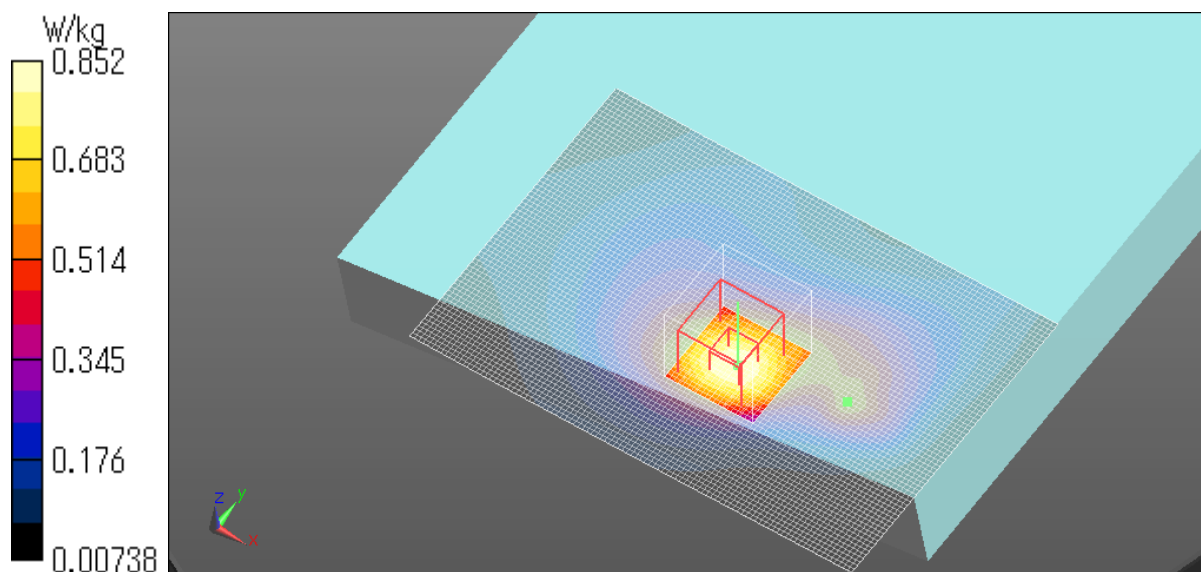
Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 59.8%

Maximum value of SAR (measured) = 0.869 W/kg

Date: 2021/07/27

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 23.0 degree.C.





B.9 Plot No. L2.2 / Red/LTE B2 ch18700 1860MHz QPSK Edge4 0mm 20MHz RBn100 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 2, E-UTRA/FDD (1850.0 - 1910.0 MHz); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.569$  S/m;  $\epsilon_r = 53.996$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1860 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B2 ch18700 1860MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.965 W/kg

**Red/LTE B2 ch18700 1860MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.65 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.692 W/kg; SAR(10 g) = 0.339 W/kg** (SAR corrected for target medium)

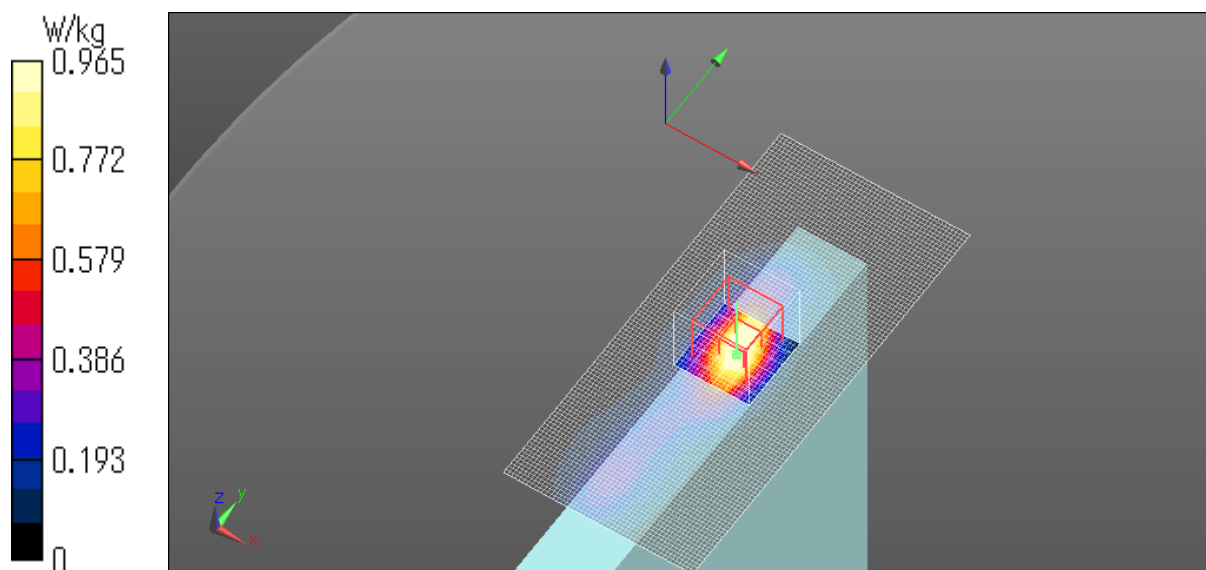
Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 52.3%

Maximum value of SAR (measured) = 1.11 W/kg

Date: 2021/08/12

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.



B.10 Plot No. L4.1 / Full /LTE B4 ch20175 1732.5MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99

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

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.497$  S/m;  $\epsilon_r = 51.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1732.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full /LTE B4 ch20175 1732.5MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99/Area Scan (101x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Full /LTE B4 ch20175 1732.5MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.38 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.35 W/kg

**SAR(1 g) = 0.823 W/kg; SAR(10 g) = 0.492 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 15.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.1%

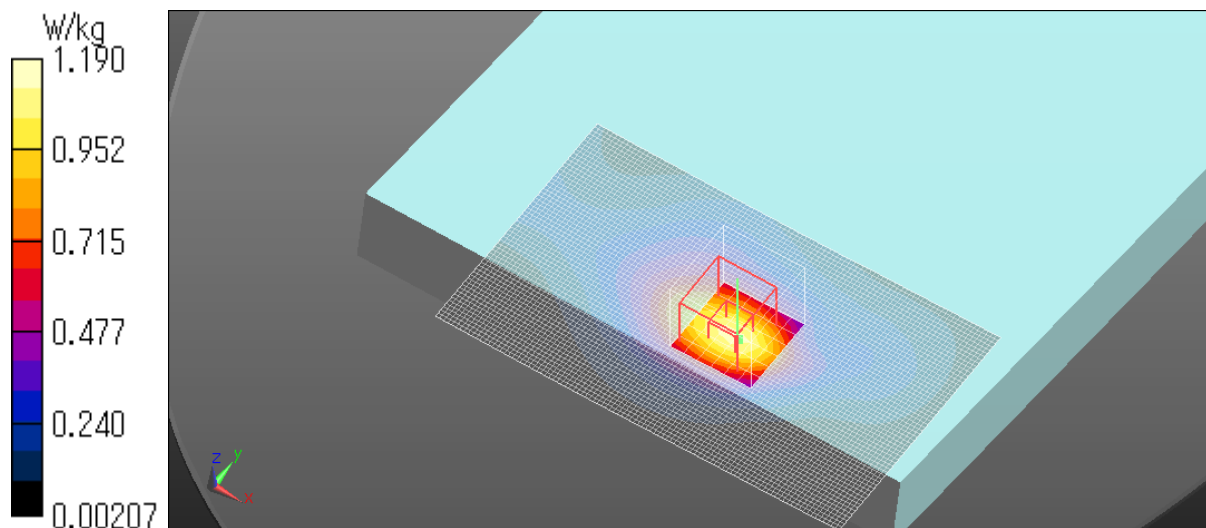
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.16 W/kg

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.5 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/27



B.11 Plot No. L4.2 / Red/LTE B4 20175ch 1732.5MHz QPSK Edge4 0mm 20MHz RBn100 RBp0

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

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.497$  S/m;  $\epsilon_r = 51.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1732.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B4 20175ch 1732.5MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.06 W/kg

**Red/LTE B4 20175ch 1732.5MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.88 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.686 W/kg; SAR(10 g) = 0.343 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

Ratio of SAR at M2 to SAR at M1 = 54.4%

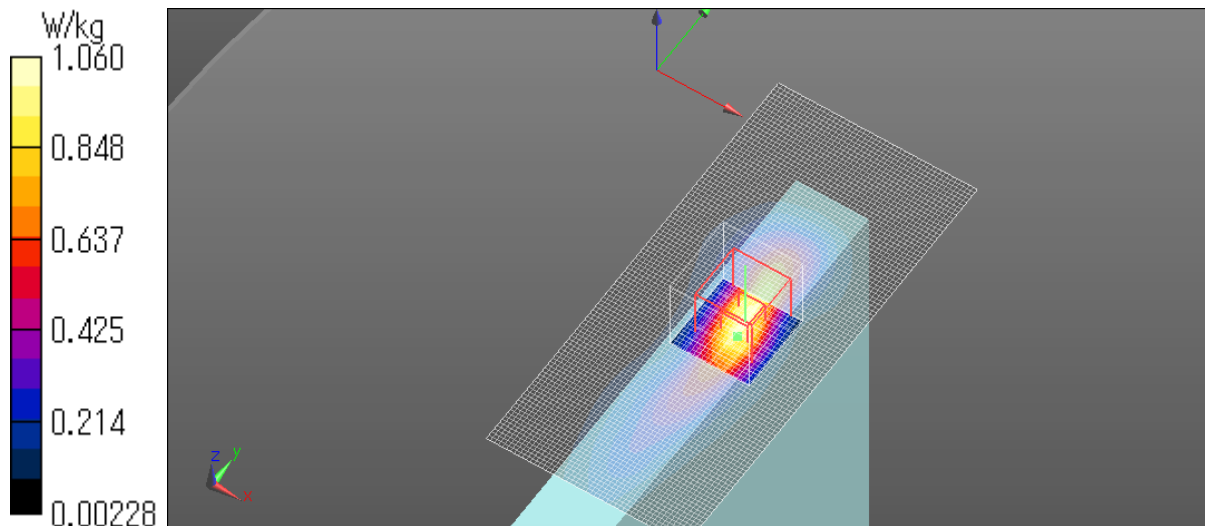
Info: Interpolated medium parameters used for SAR evaluation.

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

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.5 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/29



B.12 Plot No. L5.1 / Full/LTE B5 ch20525 836.5MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0

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;  $\sigma = 1.031$  S/m;  $\epsilon_r = 52.827$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 836.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/LTE B5 ch20525 836.5MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0/Area Scan (101x71x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.874 W/kg

**Full/LTE B5 ch20525 836.5MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0/Zoom Scan**

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

Reference Value = 29.92 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.988 W/kg

**SAR(1 g) = 0.650 W/kg; SAR(10 g) = 0.435 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 17 mm

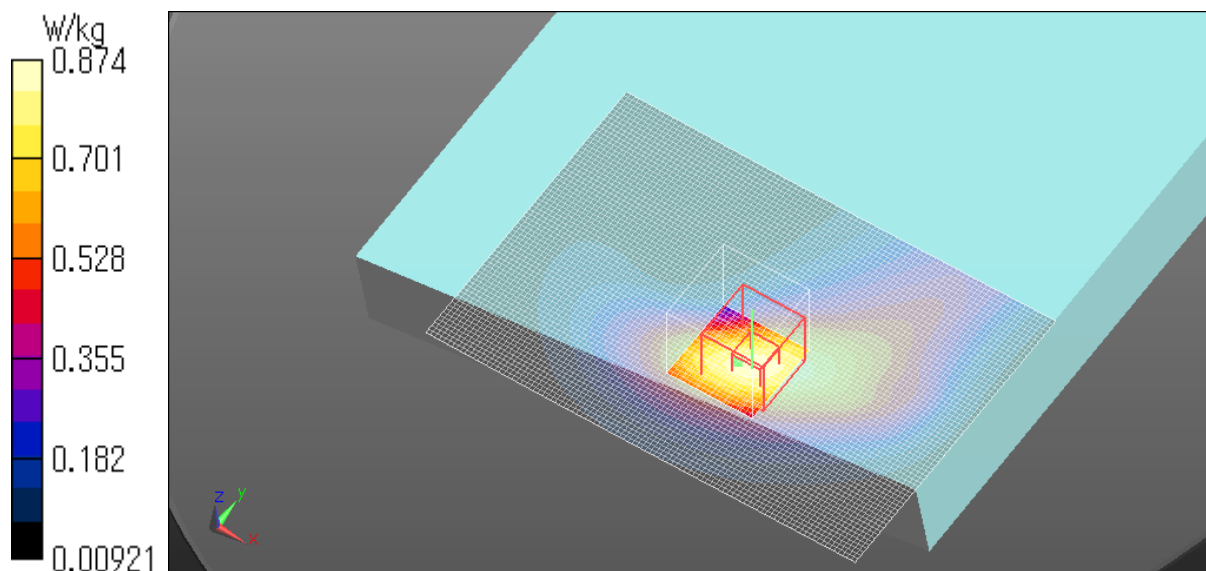
Ratio of SAR at M2 to SAR at M1 = 66.7%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.866 W/kg

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.13 Plot No. L5.2 / Red/LTE B5 ch20525 836.5MHz QPSK Edge4 0mm 10MHz RBn50 RBp0

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;  $\sigma = 1.031$  S/m;  $\epsilon_r = 52.827$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 836.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B5 ch20525 836.5MHz QPSK Edge4 0mm 10MHz RBn50 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.962 W/kg

**Red/LTE B5 ch20525 836.5MHz QPSK Edge4 0mm 10MHz RBn50 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.79 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 0.671 W/kg; SAR(10 g) = 0.364 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

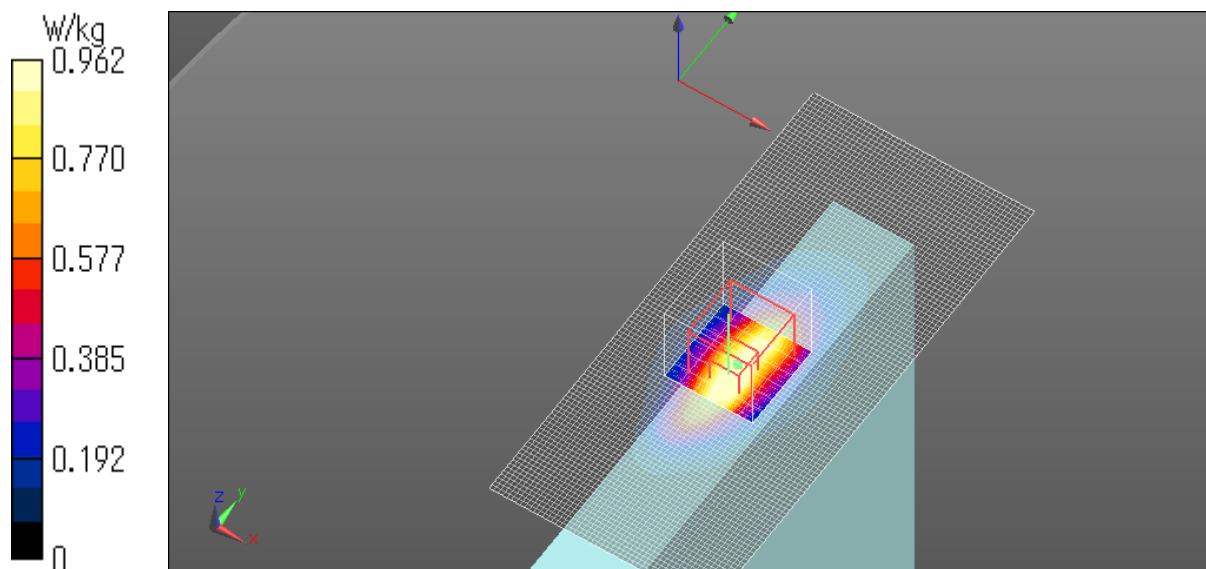
Ratio of SAR at M2 to SAR at M1 = 51%

Info: Interpolated medium parameters used for SAR evaluation.

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

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.14 Plot No. L7.1 / Full/LTE B7 ch21100 2535MHz QPSK Rear tilt Edge1 0mm 20MHz RBn1 RBp0

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

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 2.1$  S/m;  $\epsilon_r = 50.146$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2535 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full/LTE B7 ch21100 2535MHz QPSK N/A rear tilt Edge1 0mm 20MHz RBn1 RBp0/Area Scan**

**(111x121x1)**: Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**Full/LTE B7 ch21100 2535MHz QPSK N/A rear tilt Edge1 0mm 20MHz RBn1 RBp0/Zoom Scan**

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

Reference Value = 25.80 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.67 W/kg

**SAR(1 g) = 0.848 W/kg; SAR(10 g) = 0.466 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 20 mm

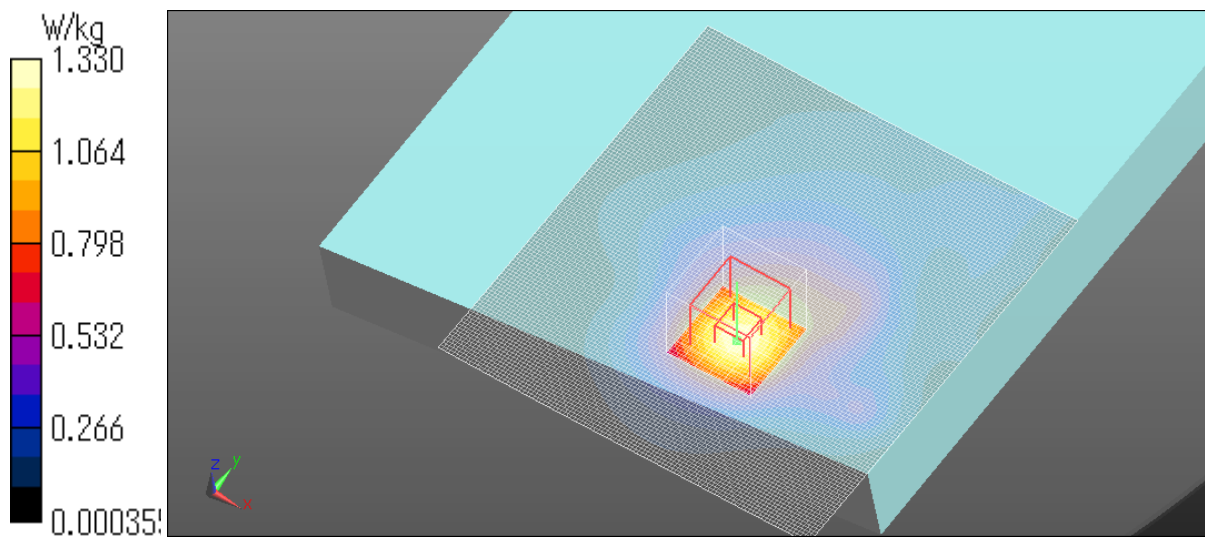
Ratio of SAR at M2 to SAR at M1 = 49.7%

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

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/21



B.15 Plot No. L7.2 / Red/LTE B7 ch21100 2535MHz QPSK Edge4 0mm 20MHz RBn1 RBp99

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

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 2.1$  S/m;  $\epsilon_r = 50.146$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2535 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B7 ch21100 2535MHz QPSK N/A Edge4 0mm 20MHz RBn1 RBp99/Area Scan (61x131x1):**

Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**Red/LTE B7 ch21100 2535MHz QPSK N/A Edge4 0mm 20MHz RBn1 RBp99/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.67 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.69 W/kg

**SAR(1 g) = 0.749 W/kg; SAR(10 g) = 0.328 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

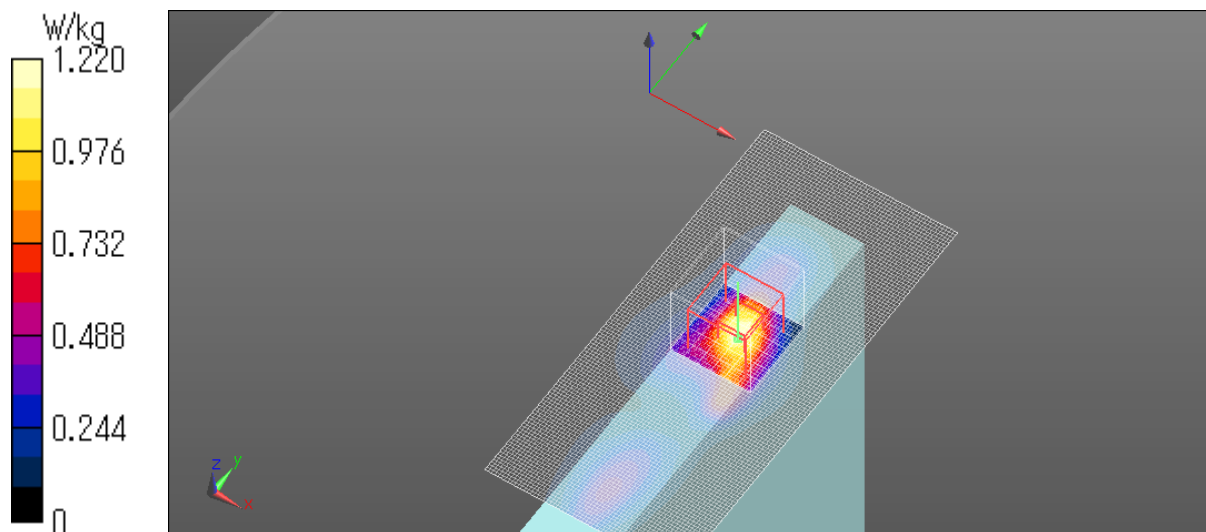
Ratio of SAR at M2 to SAR at M1 = 45.8%

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

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/21



B.16 Plot No. L12.1 / Full/LTE B12 ch23095 707.5MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp49

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.98$  S/m;  $\epsilon_r = 53.224$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 707.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/LTE B12 ch23095 707.5MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp49/Area Scan (101x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Full/LTE B12 ch23095 707.5MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp49/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.46 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.458 W/kg

**SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.230 W/kg** (SAR corrected for target medium)

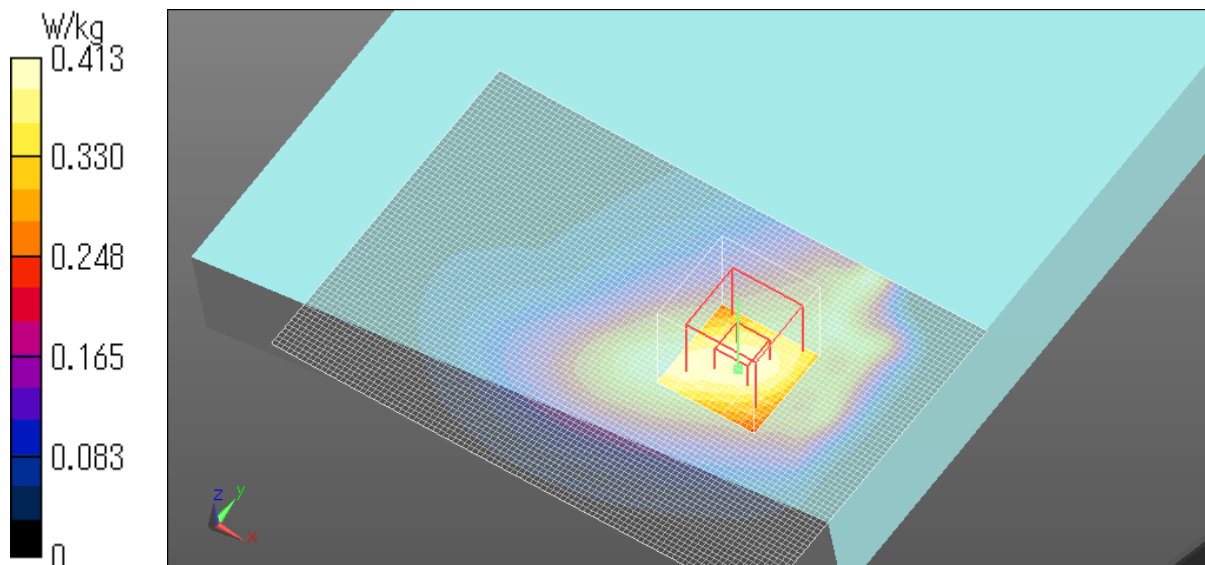
Ratio of SAR at M2 to SAR at M1 = 71.8%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.410 W/kg

Date: 2021/08/11

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.





B.17 Plot No. L12.2 / Red/LTE B12 ch23095 707.5MHz QPSK Edge4 0mm 10MHz RBn1 RBp49

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 12, E-UTRA/FDD (698.0 - 716.0 MHz); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.98$  S/m;  $\epsilon_r = 53.224$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 707.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B12 ch23095 707.5MHz QPSK Edge4 0mm 10MHz RBn1 RBp49/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Red/LTE B12 ch23095 707.5MHz QPSK Edge4 0mm 10MHz RBn1 RBp49/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 38.03 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.78 W/kg

**SAR(1 g) = 0.802 W/kg; SAR(10 g) = 0.420 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7 mm

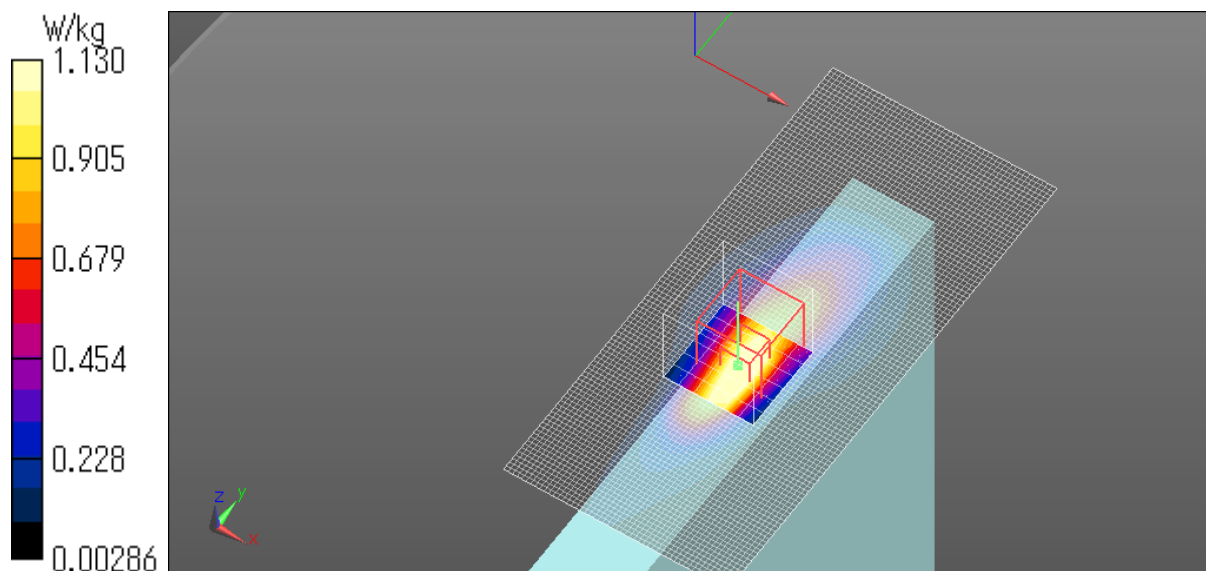
Ratio of SAR at M2 to SAR at M1 = 48.7%

Info: Interpolated medium parameters used for SAR evaluation.

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

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.18 Plot No. L13.1 / Full/LTE B13 ch23230 782MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0

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;  $\sigma = 1.007$  S/m;  $\epsilon_r = 53.039$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 782 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/LTE B13 ch23230 782MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0/Area Scan (101x71x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.615 W/kg

**Full/LTE B13 ch23230 782MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0/Zoom Scan**

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

Reference Value = 25.59 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.687 W/kg

**SAR(1 g) = 0.463 W/kg; SAR(10 g) = 0.323 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 20.6 mm

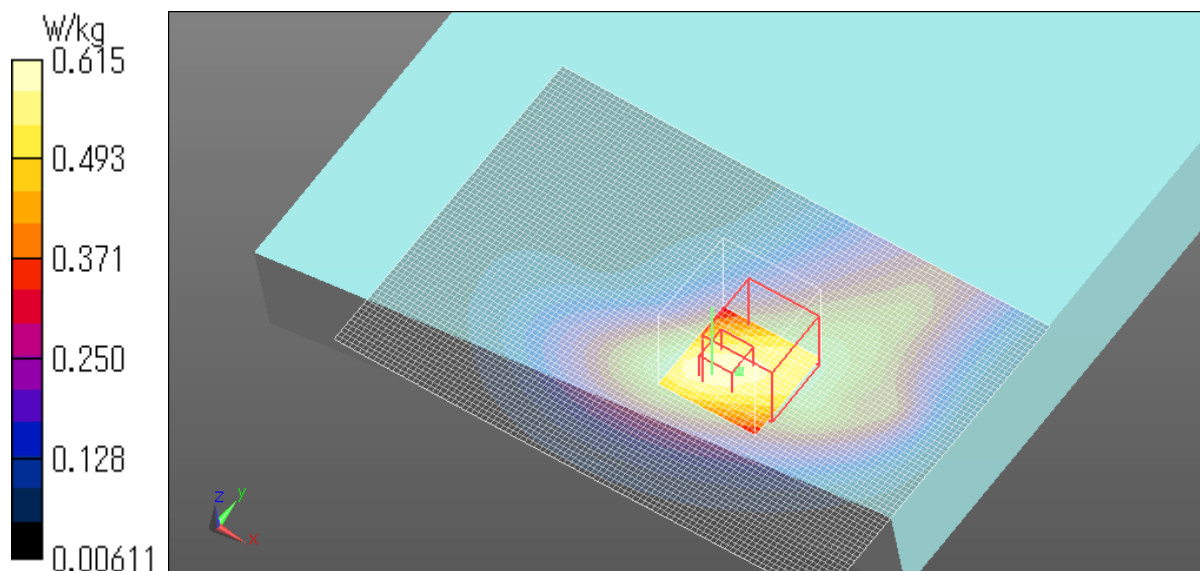
Ratio of SAR at M2 to SAR at M1 = 67.6%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.603 W/kg

Date: 2021/08/11

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.19 Plot No. L13.2 / Red/LTE B13 ch23230 782MHz QPSK Edge4 0mm 10MHz RBn50 RBp0

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;  $\sigma = 1.007$  S/m;  $\epsilon_r = 53.039$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 782 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B13 ch23230 782MHz QPSK Edge4 0mm 10MHz RBn50 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.949 W/kg

**Red/LTE B13 ch23230 782MHz QPSK Edge4 0mm 10MHz RBn50 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.56 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.45 W/kg

**SAR(1 g) = 0.688 W/kg; SAR(10 g) = 0.370 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7 mm

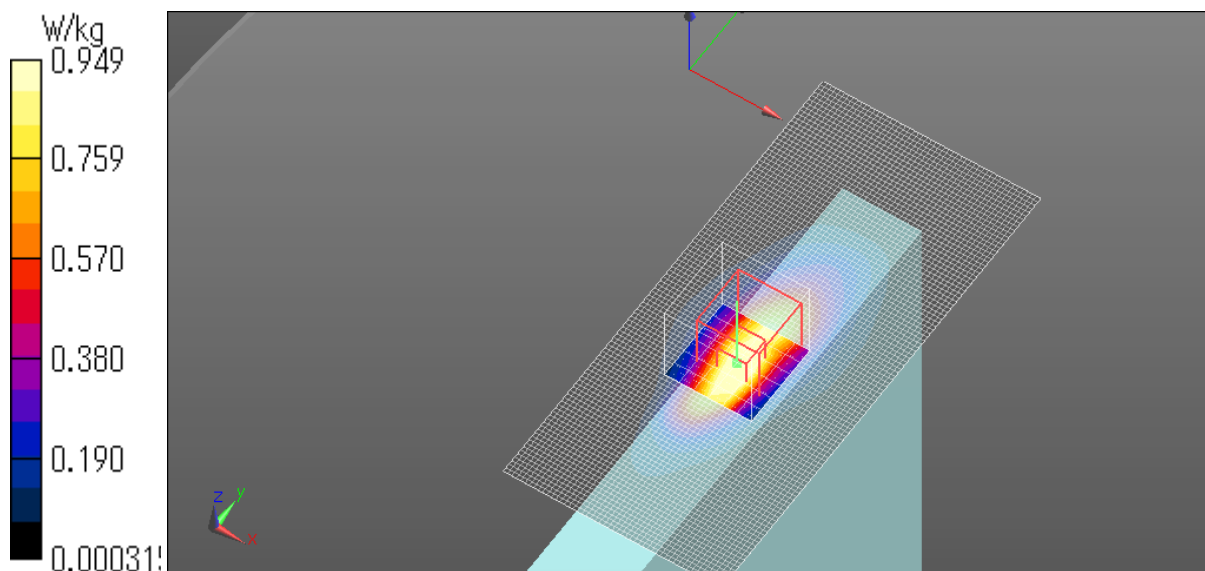
Ratio of SAR at M2 to SAR at M1 = 50.7%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.11 W/kg

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.20 Plot No. L14.1 / Full/LTE B14 ch23330 793MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 14, E-UTRA/FDD (788.0 - 798.0 MHz); Frequency: 793 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 793$  MHz;  $\sigma = 1.011$  S/m;  $\epsilon_r = 52.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 793 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/LTE B14 ch23330 793MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0/Area Scan (101x71x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.714 W/kg

**Full/LTE B14 ch23330 793MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp0/Zoom Scan**

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

Reference Value = 27.91 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.816 W/kg

**SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.370 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 17.2 mm

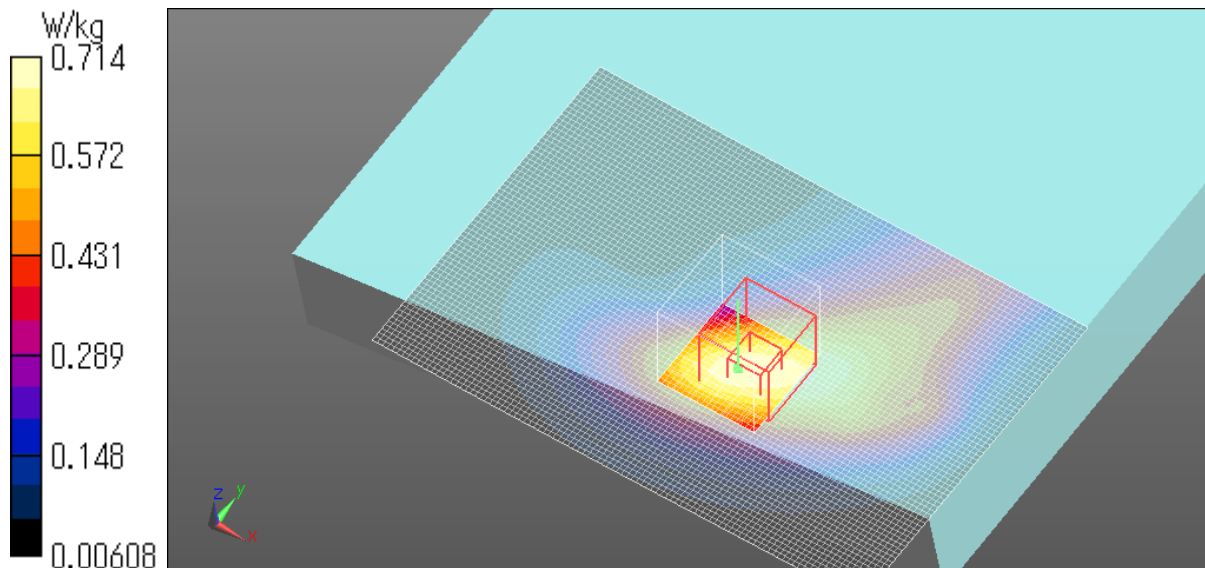
Ratio of SAR at M2 to SAR at M1 = 66.4%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.718 W/kg

Date: 2021/08/11

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.21 Plot No. L14.2 / Red/LTE B14 ch23330 793MHz QPSK Edge4 0mm 10MHz RBn50 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 14, E-UTRA/FDD (788.0 - 798.0 MHz); Frequency: 793 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 793$  MHz;  $\sigma = 1.011$  S/m;  $\epsilon_r = 52.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 793 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B14 ch23330 793MHz QPSK Edge4 0mm 10MHz RBn50 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.968 W/kg

**Red/LTE B14 ch23330 793MHz QPSK Edge4 0mm 10MHz RBn50 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.21 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.642 W/kg; SAR(10 g) = 0.343 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

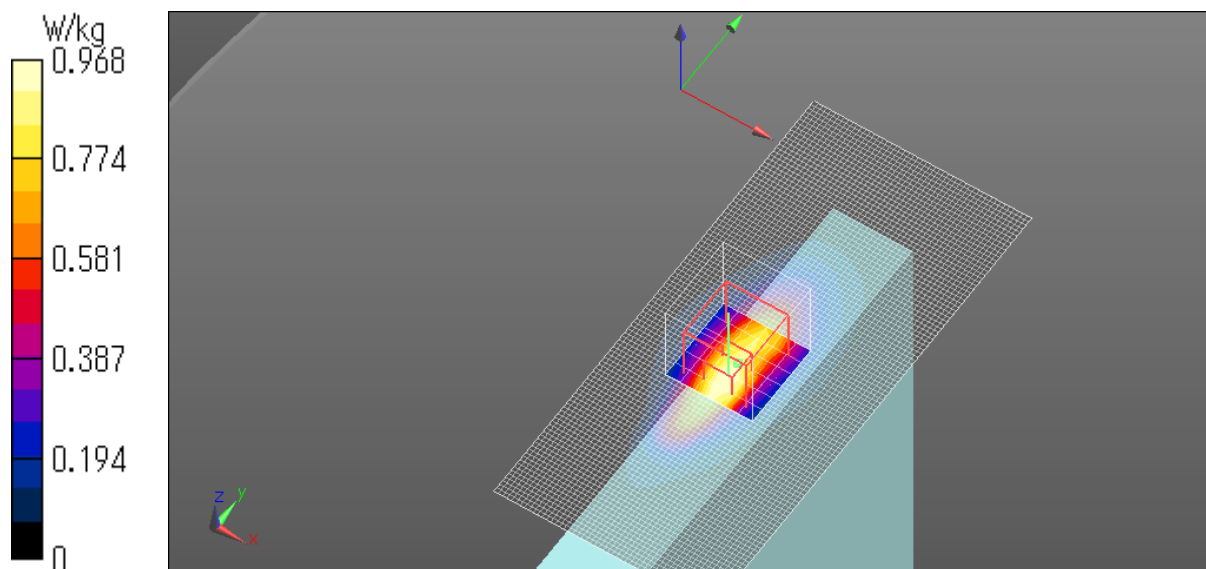
Ratio of SAR at M2 to SAR at M1 = 50.1%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.06 W/kg

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.22 Plot No. L17.1 / Full/LTE B17 ch23790 710MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp49

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 17, E-UTRA/FDD (704.0 - 716.0 MHz); Frequency: 710 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 710$  MHz;  $\sigma = 0.981$  S/m;  $\epsilon_r = 53.214$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 710 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/LTE B17 ch23790 710MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp49/Area Scan (101x71x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.422 W/kg

**Full/LTE B17 ch23790 710MHz QPSK Rear tilt Edge1 0mm 10MHz RBn1 RBp49/Zoom Scan**

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

Reference Value = 21.70 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.464 W/kg

**SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.232 W/kg** (SAR corrected for target medium)

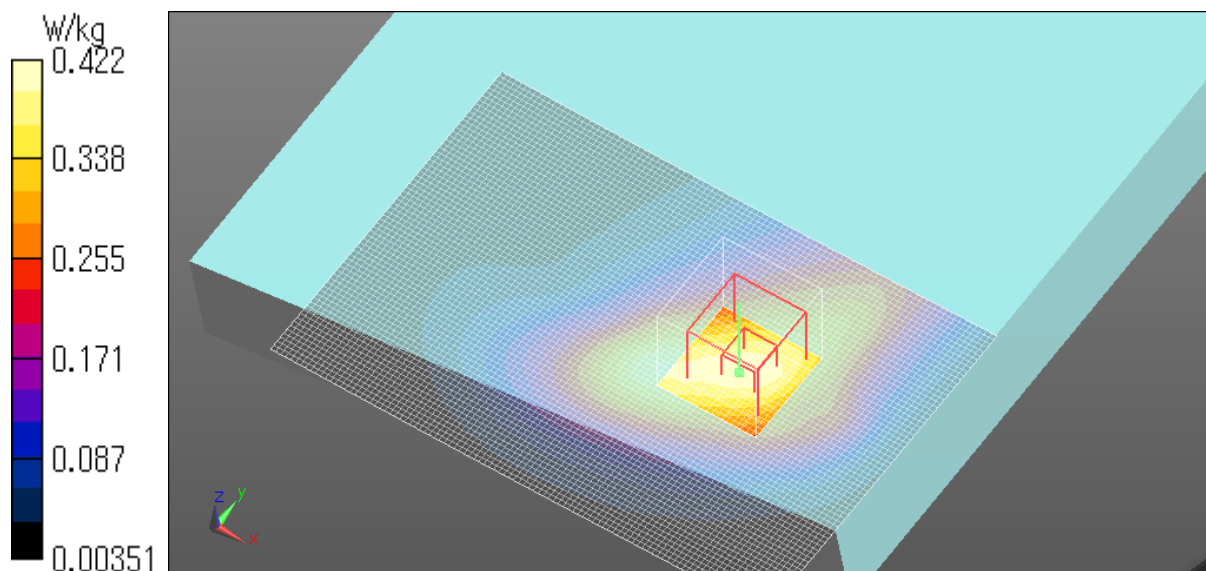
Ratio of SAR at M2 to SAR at M1 = 70.8%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.417 W/kg

Date: 2021/08/11

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.23 Plot No. L17.2 / Red/LTE B17 ch23790 710MHz QPSK Edge4 0mm 10MHz RBn25 RBp24

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 17, E-UTRA/FDD (704.0 - 716.0 MHz); Frequency: 710 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 710$  MHz;  $\sigma = 0.981$  S/m;  $\epsilon_r = 53.214$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(10.03, 10.03, 10.03) @ 710 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B17 ch23790 710MHz QPSK Edge4 0mm 10MHz RBn25 RBp24/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.961 W/kg

**Red/LTE B17 ch23790 710MHz QPSK Edge4 0mm 10MHz RBn25 RBp24/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.23 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.43 W/kg

**SAR(1 g) = 0.636 W/kg; SAR(10 g) = 0.332 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 49.7%

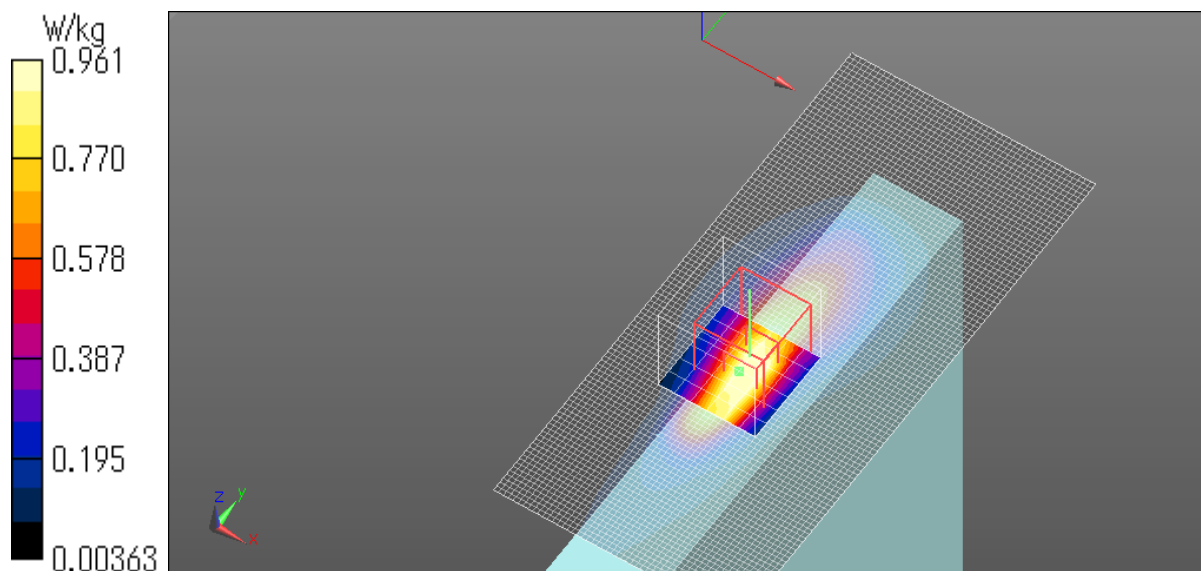
Info: Interpolated medium parameters used for SAR evaluation.

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

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

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.24 Plot No. L25.1 / Full /LTE B25 ch26140 1860MHz QPSK Rear tilt Edge1 20MHz RBn1 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 25, E-UTRA/FDD (1850.0 - 1915.0 MHz); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.558$  S/m;  $\epsilon_r = 50.847$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1860 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full /LTE B25 ch26140 1860MHz QPSK Rear tilt Edge1 20MHz RBn1 RBp0/Area Scan (101x71x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.823 W/kg

**Full /LTE B25 ch26140 1860MHz QPSK Rear tilt Edge1 20MHz RBn1 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.00 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.00 W/kg

**SAR(1 g) = 0.594 W/kg; SAR(10 g) = 0.352 W/kg** (SAR corrected for target medium)

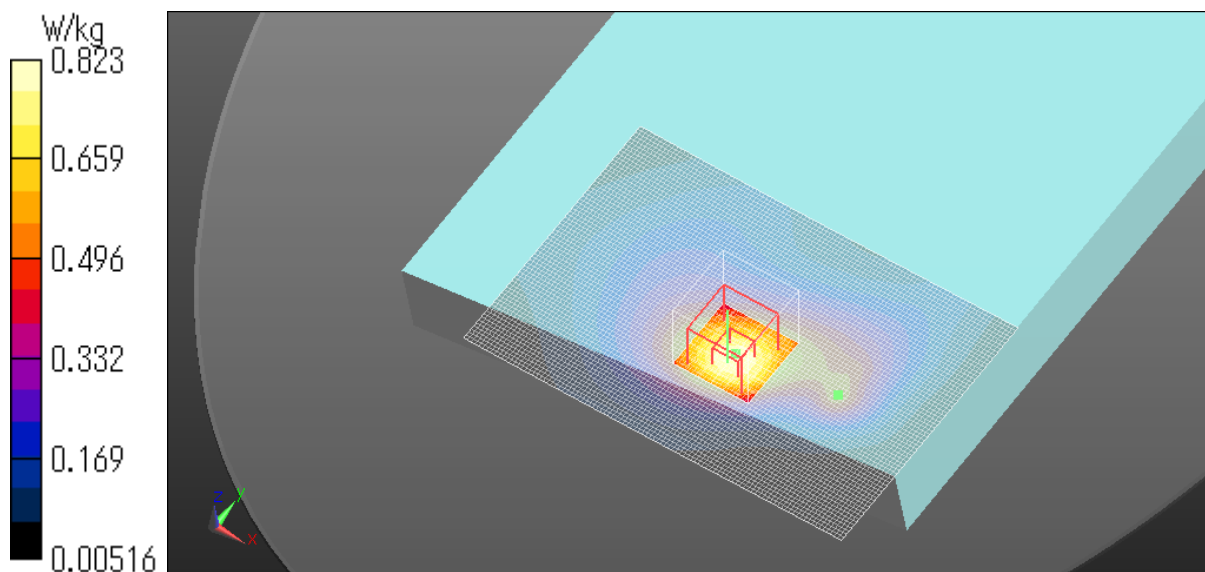
Smallest distance from peaks to all points 3 dB below = 17 mm

Ratio of SAR at M2 to SAR at M1 = 59.3%

Maximum value of SAR (measured) = 0.841 W/kg

Date: 2021/07/27

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 23.0 degree.C.





B.25 Plot No. L25.2 / Red/LTE B25 ch26140 1860MHz QPSK Edge4 0mm 20MHz RBn100 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 25, E-UTRA/FDD (1850.0 - 1915.0 MHz); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.569$  S/m;  $\epsilon_r = 53.996$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1860 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B25 ch26140 1860MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.961 W/kg

**red/LTE B25 ch26140 1860MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.29 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.36 W/kg

**SAR(1 g) = 0.679 W/kg; SAR(10 g) = 0.331 W/kg** (SAR corrected for target medium)

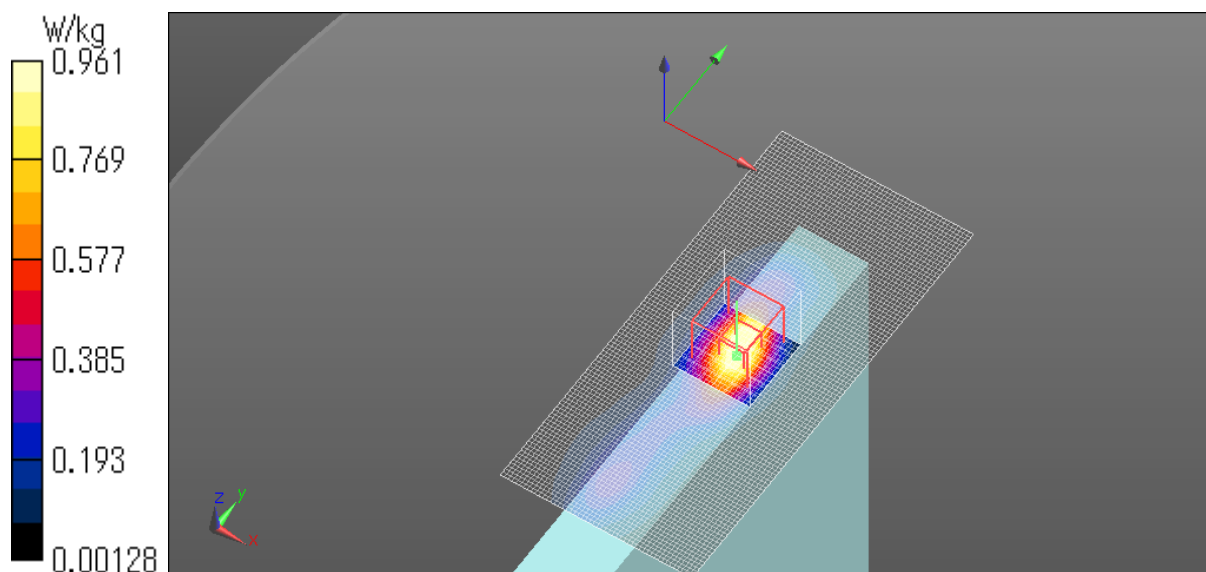
Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.2%

Maximum value of SAR (measured) = 1.09 W/kg

Date: 2021/08/12

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.



B.26 Plot No. L26.1 / Full/LTE B26 ch26865 831.5MHz QPSK Rear tilt Edge4 9mm 15MHz RBn1 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 26, E-UTRA/FDD (814.0 - 849.0 MHz); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 1.025$  S/m;  $\epsilon_r = 53.397$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 831.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/LTE B26 ch26865 831.5MHz QPSK Rear tilt(Edge4) 9mm 15MHz RBn1 RBp0/Area Scan (101x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.877 W/kg

**Full/LTE B26 ch26865 831.5MHz QPSK Rear tilt(Edge4) 9mm 15MHz RBn1 RBp0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 30.69 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.649 W/kg; SAR(10 g) = 0.423 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 15.3 mm

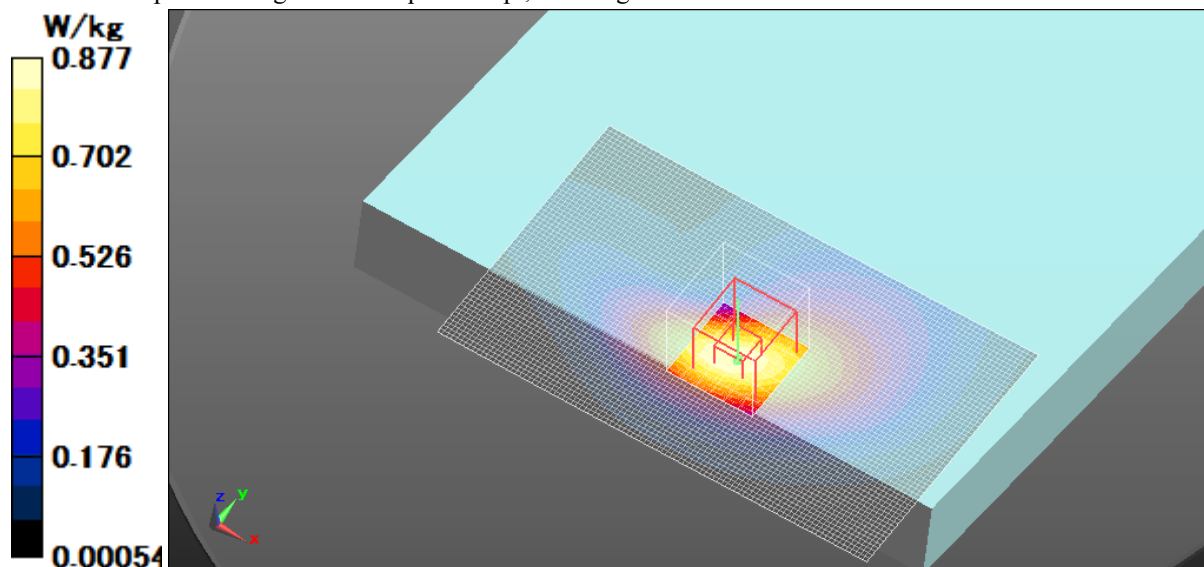
Ratio of SAR at M2 to SAR at M1 = 63.5%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.892 W/kg

Date: 2021/08/03

Ambient Temp. : 21.5 degree.C. Liquid Temp.; 21.5 degree.C.



B.27 Plot No. L26.2 / Red/LTE B26 ch26865 831.5MHz QPSK Edge4 0mm 15MHz RBn75 RBp0

Communication System: UID 0, \_Generic LTE (0); Communication System Band: Band 26, E-UTRA/FDD (814.0 - 849.0 MHz); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 1.029$  S/m;  $\epsilon_r = 52.842$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 831.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/LTE B26 ch26865 831.5MHz QPSK Edge4 0mm 15MHz RBn75 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Red/LTE B26 ch26865 831.5MHz QPSK Edge4 0mm 15MHz RBn75 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.70 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.38 W/kg

**SAR(1 g) = 0.657 W/kg; SAR(10 g) = 0.354 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.2 mm

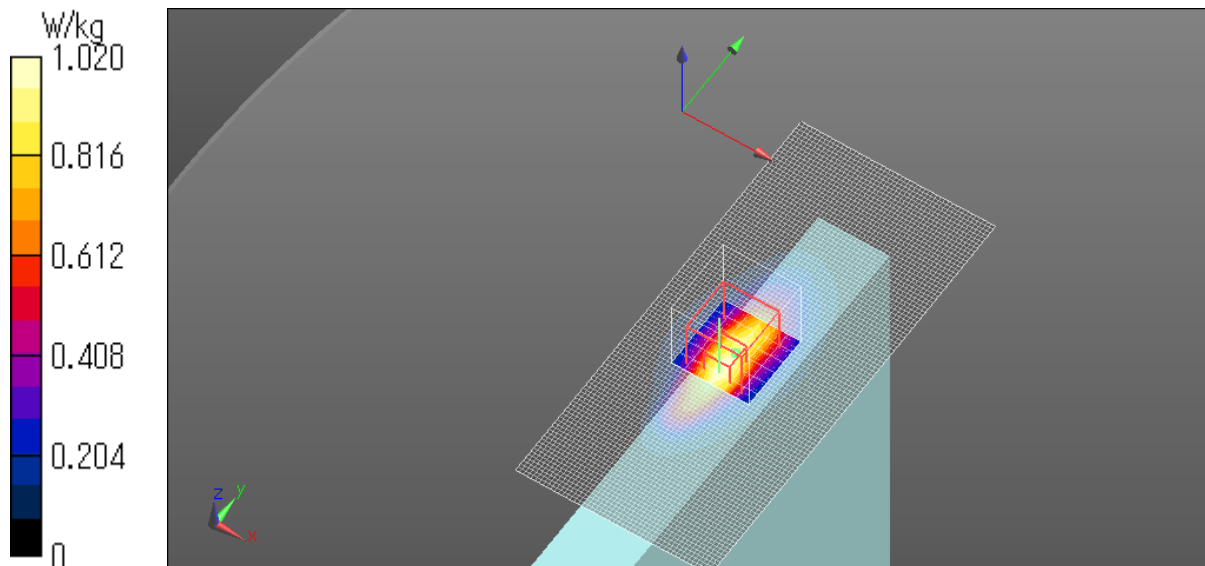
Ratio of SAR at M2 to SAR at M1 = 48.8%

Info: Interpolated medium parameters used for SAR evaluation.

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

Date: 2021/08/10

Ambient Temp. : 21.1 degree.C. Liquid Temp.; 21.1 degree.C.



B.28 Plot No. L38.1 / Full/LTE B38 ch38000 2595MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp49

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used (interpolated):  $f = 2595$  MHz;  $\sigma = 2.255$  S/m;  $\epsilon_r = 54.063$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2595 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full/LTE B38 ch38000 2595MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp49/Area Scan (121x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.699 W/kg

**Full/LTE B38 ch38000 2595MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp49/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.02 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.873 W/kg

**SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.235 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 48.4%

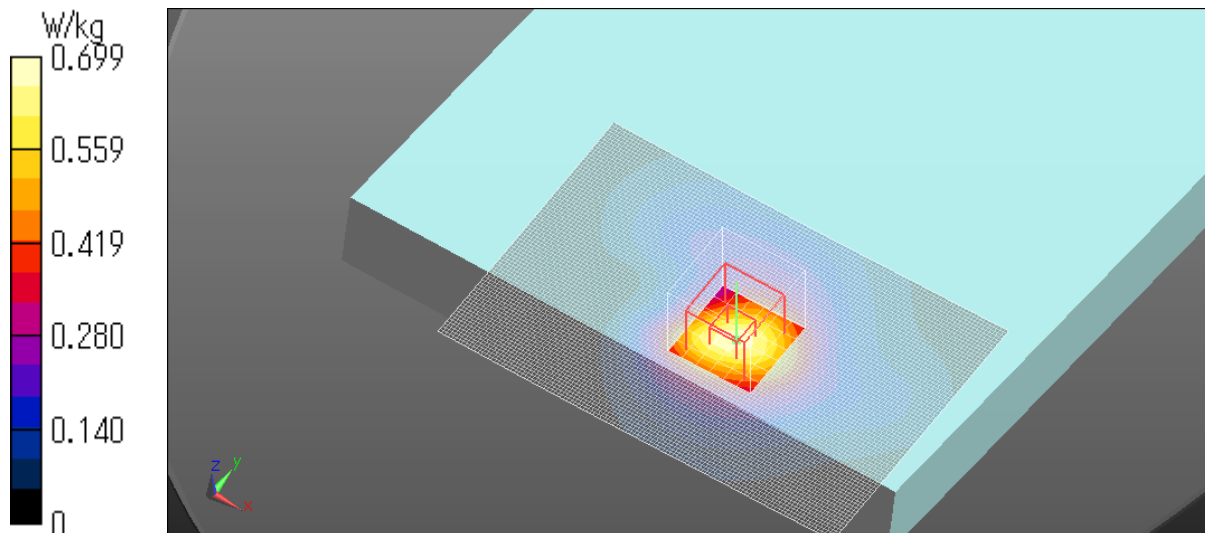
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.691 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/16



B.29 Plot No. L38.2 / Red/LTE B38 ch38000 2595MHz QPSK Edge4 0mm 20MHz RBn100 RBp0

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used (interpolated):  $f = 2595$  MHz;  $\sigma = 2.255$  S/m;  $\epsilon_r = 54.063$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2595 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B38 ch38000 2595MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Area Scan (71x101x1):**

Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Red/LTE B38 ch38000 2595MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.14 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.74 W/kg

**SAR(1 g) = 0.748 W/kg; SAR(10 g) = 0.313 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.3 mm

Ratio of SAR at M2 to SAR at M1 = 45.5%

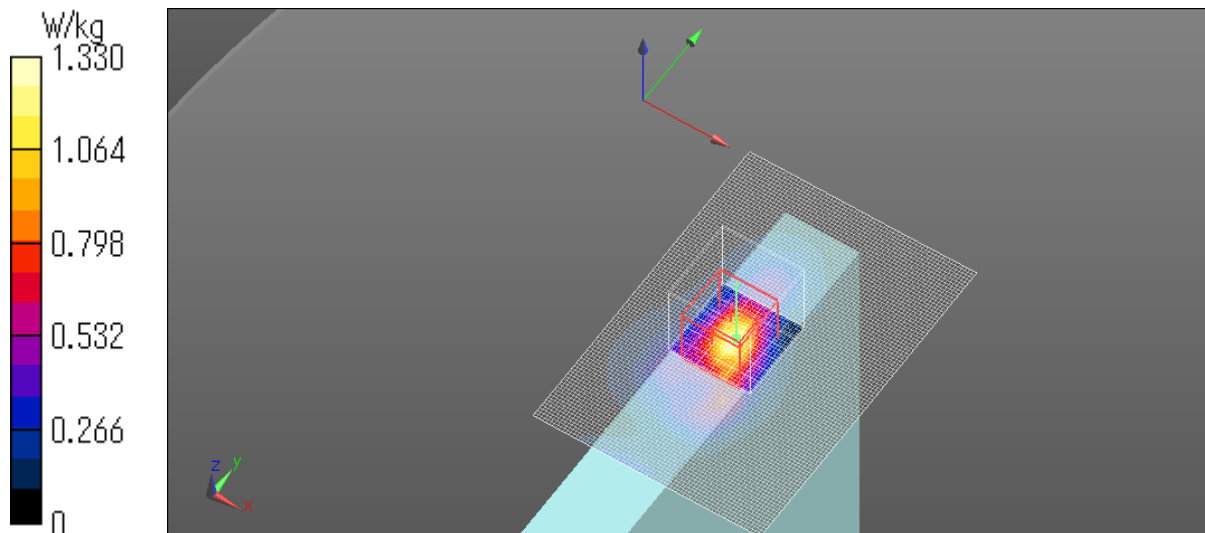
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.35 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/17



B.30 Plot No. L41.1 / Full/LTE B41 ch40620 2593MHz QPSK Rear tilt Edge1 0mm 20MHz RBn1 RBp0

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.253$  S/m;  $\epsilon_r = 54.067$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2593 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full/LTE B41 ch40620 2593MHz QPSK Rear tilt Edge1 0mm 20MHz RBn1 RBp0/Area Scan (111x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.725 W/kg

**Full/LTE B41 ch40620 2593MHz QPSK Rear tilt Edge1 0mm 20MHz RBn1 RBp0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.58 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.923 W/kg

**SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.251 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 18.4 mm

Ratio of SAR at M2 to SAR at M1 = 48.5%

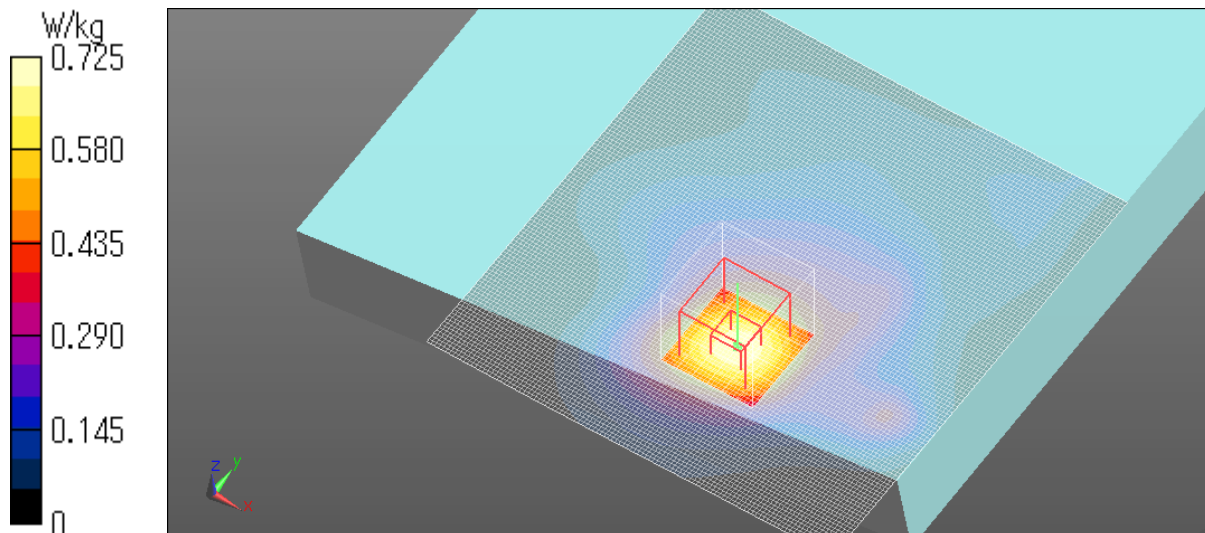
Info: Interpolated medium parameters used for SAR evaluation.

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

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/16



B.31 Plot No. L41.2 / Red/LTE B41 ch40185 2549.5MHz QPSK Edge4 0mm 20MHz RBn50 RBp49

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used:  $f = 2550$  MHz;  $\sigma = 2.21$  S/m;  $\epsilon_r = 54.166$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2549.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B41 ch40185 2549.5MHz QPSK Edge4 0mm 20MHz RBn50 RBp49/Area Scan (71x101x1):**

Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**Red/LTE B41 ch40185 2549.5MHz QPSK Edge4 0mm 20MHz RBn50 RBp49/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.38 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.14 W/kg

**SAR(1 g) = 0.940 W/kg; SAR(10 g) = 0.407 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

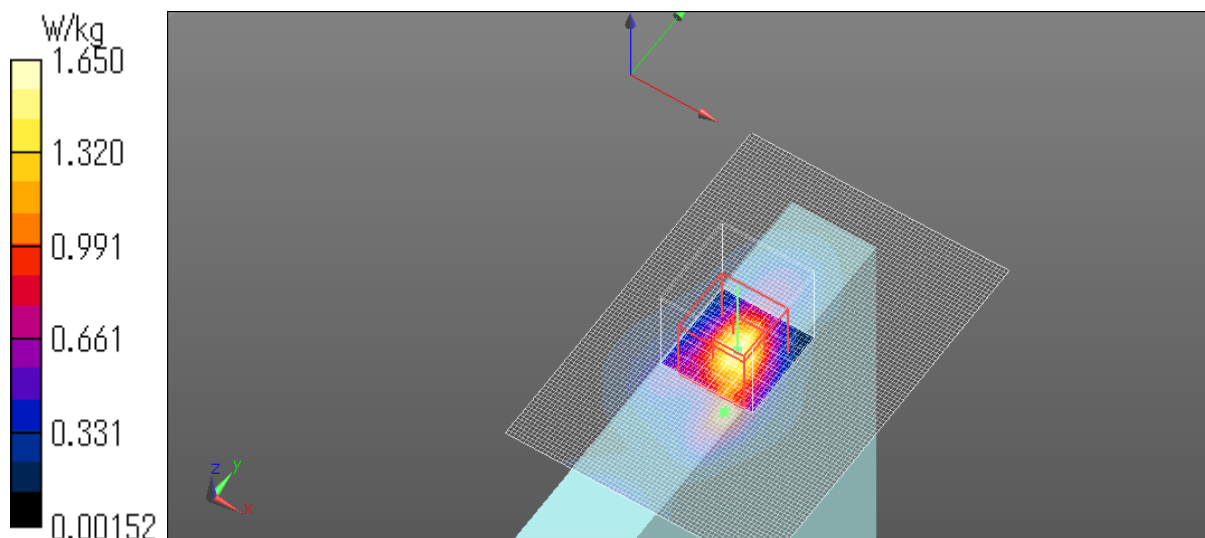
Ratio of SAR at M2 to SAR at M1 = 45.6%

Maximum value of SAR (measured) = 1.67 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/17



B.32 Plot No. L48.1 / Full /LTE B48 ch55340 3560MHz QPSK Edge4 19mm 20MHz RBn50 RBp50

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 48, E-UTRA/TDD (3560.0 - 3690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used:  $f = 3560$  MHz;  $\sigma = 3.223$  S/m;  $\epsilon_r = 49.558$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(6.4, 6.4, 6.4) @ 3560 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**LTE B42 48 QPSK rear tilt Edge 4 19mm 20MHz/LTE Full 5 B48 ch55340 3560MHz QPSK NA Edge4 19mm 20MHz RBn50 RBp50/Area Scan (61x131x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 0.0751 W/kg

**LTE B42 48 QPSK rear tilt Edge 4 19mm 20MHz/LTE Full 5 B48 ch55340 3560MHz QPSK NA Edge4 19mm 20MHz RBn50 RBp50/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.219 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.0960 W/kg

**SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.017 W/kg**

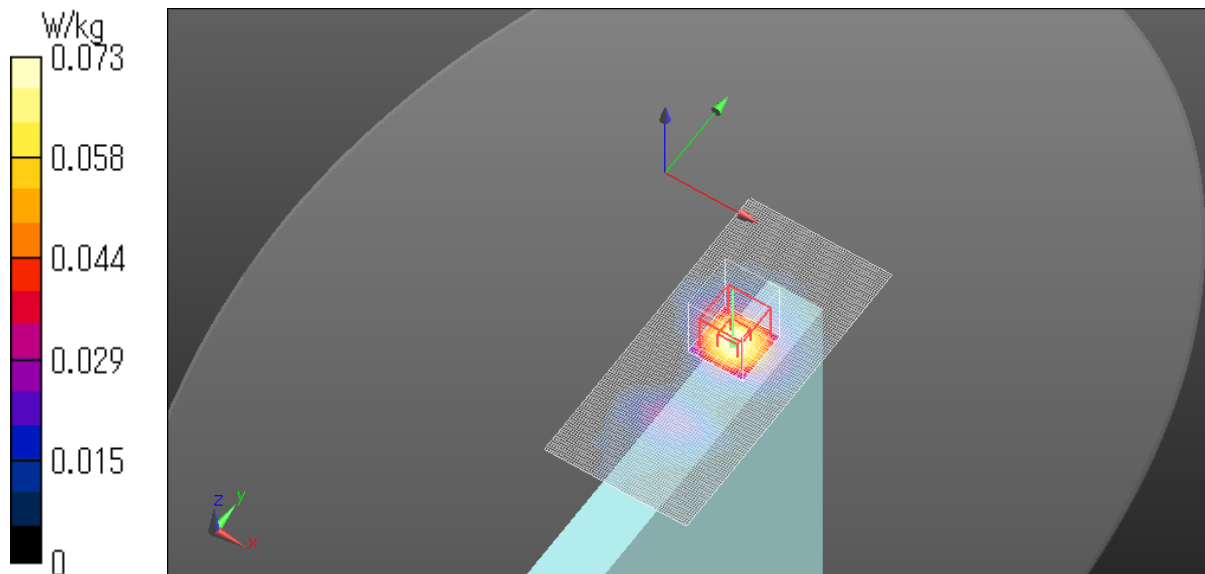
Ratio of SAR at M2 to SAR at M1 = 77.2%

Maximum value of SAR (measured) = 0.0729 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 19.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/11/05





B.33 Plot No. L48.2 / Red/LTE B48 ch55340 3560MHz QPSK Edge4 0mm 20MHz RBn50 RBp49

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 48, E-UTRA/TDD (3560.0 - 3690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used:  $f = 3560$  MHz;  $\sigma = 3.363$  S/m;  $\epsilon_r = 52.039$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(6.4, 6.4, 6.4) @ 3560 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B48 ch55340 3560MHz QPSK Edge4 0mm 20MHz RBn50 RBp49/Area Scan (61x131x1):**

Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**Red/LTE B48 ch55340 3560MHz QPSK Edge4 0mm 20MHz RBn50 RBp49/Zoom Scan (8x8x8)/Cube 0:**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 19.35 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.45 W/kg

**SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.154 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.8 mm

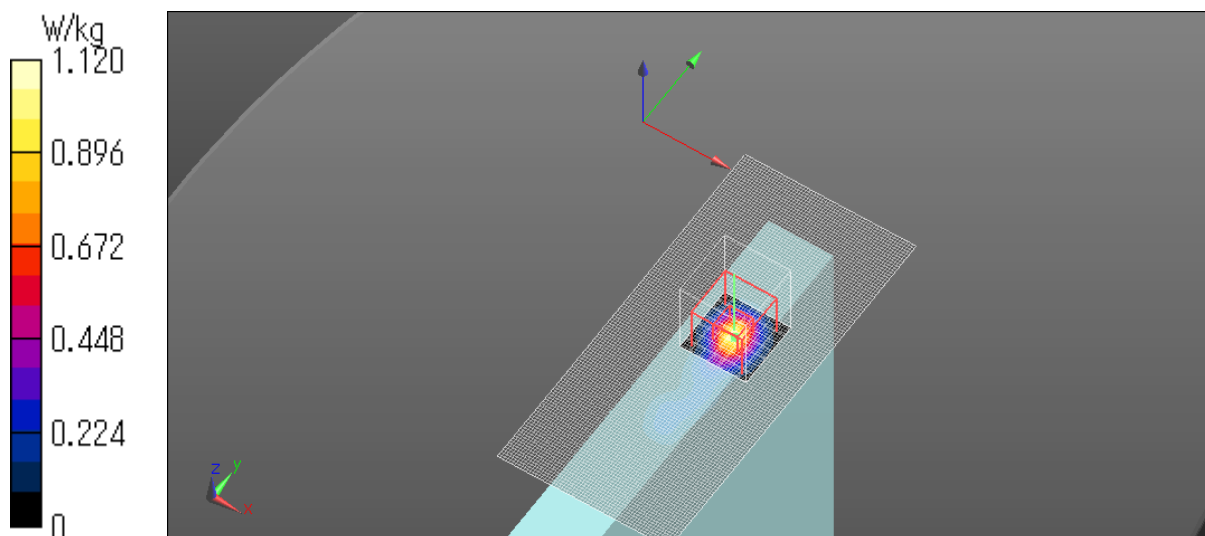
Ratio of SAR at M2 to SAR at M1 = 76.5%

Maximum value of SAR (measured) = 1.06 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/18



B.34 Plot No.ULCA7-1 / LTE Full 5 B7(SCC 20902) ch21100 2535MHz QPSK NA Rear tilt edge1 0mm  
20MHz RBn1 RBp0

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

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 2.1$  S/m;  $\epsilon_r = 50.146$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2535 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**ULCA/LTE B7(SCC 20902) ch21100 2535MHz QPSK rear tilt Edge1 0mm 20MHz RBn1 RBp0/Area  
Scan (111x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**ULCA/LTE B7(SCC 20902) ch21100 2535MHz QPSK rear tilt Edge1 0mm 20MHz RBn1 RBp0/Zoom  
Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.30 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.65 W/kg

**SAR(1 g) = 0.833 W/kg; SAR(10 g) = 0.461 W/kg** (SAR corrected for target medium)

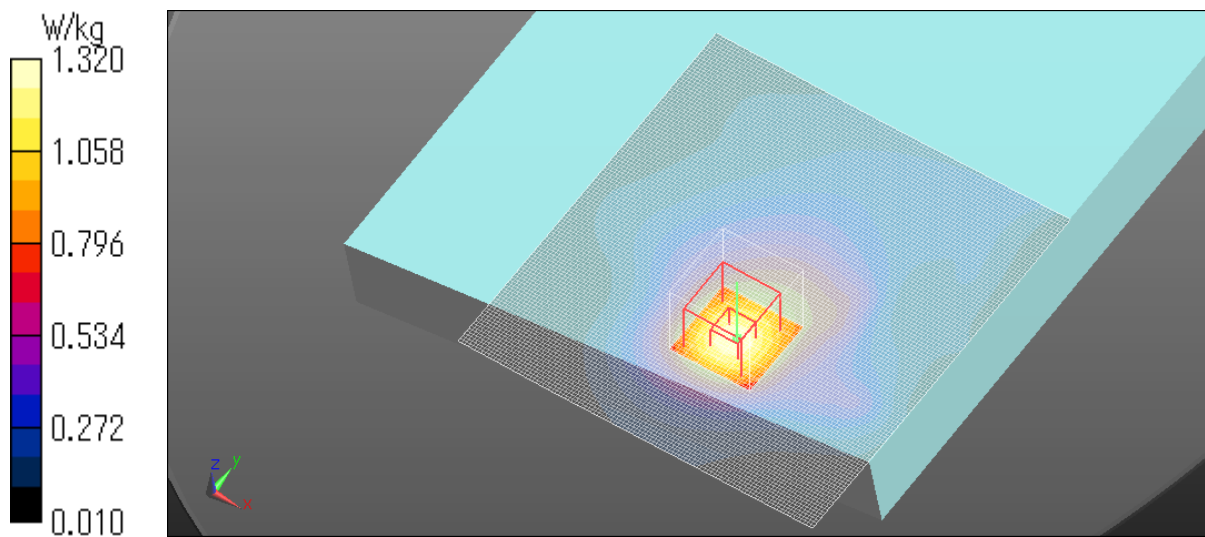
Ratio of SAR at M2 to SAR at M1 = 48.9%

Maximum value of SAR (measured) = 1.31 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/24



B.35 Plot No.ULCA7-2 / LTE Red 5 B7(SCC 21298) ch21100 2535MHz QPSK DFTsOFDM Edge4 0mm  
20MHz RBn1 RBp99

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

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 2.1$  S/m;  $\epsilon_r = 50.146$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2535 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**ULCA/LTE B7(SCC 21298) ch21100 2535MHz QPSK Edge4 0mm 20MHz RBn1 RBp99/Area Scan  
(61x131x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**ULCA/LTE B7(SCC 21298) ch21100 2535MHz QPSK Edge4 0mm 20MHz RBn1 RBp99/Zoom Scan  
(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.66 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.71 W/kg

**SAR(1 g) = 0.742 W/kg; SAR(10 g) = 0.324 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

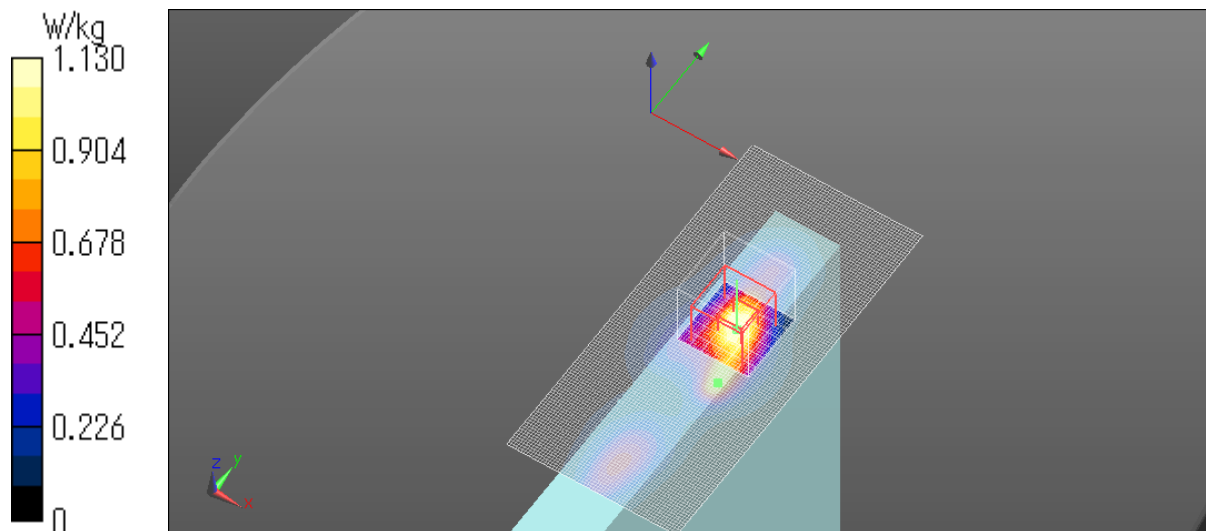
Ratio of SAR at M2 to SAR at M1 = 45.9%

Maximum value of SAR (measured) = 1.31 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/24



B.36 Plot No.ULCA41-1 / LTE Full 5 B41(SCC1 40422) ch40620 2593MHz QPSK NA Rear tilt edge1  
0mm 20MHz RBn1 RBp0

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD  
(2496.0 - 2690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.219$  S/m;  $\epsilon_r = 52.596$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2593 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**ULCA/Re LTE B41(SCC1 40422) ch40620 2593MHz QPSK rear tilt Edge1 0mm 20MHz RBn1  
RBp0/Area Scan (111x121x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.729 W/kg

**ULCA/Re LTE B41(SCC1 40422) ch40620 2593MHz QPSK rear tilt Edge1 0mm 20MHz RBn1  
RBp0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.81 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.925 W/kg

**SAR(1 g) = 0.468 W/kg; SAR(10 g) = 0.258 W/kg** (SAR corrected for target medium)

Ratio of SAR at M2 to SAR at M1 = 49.3%

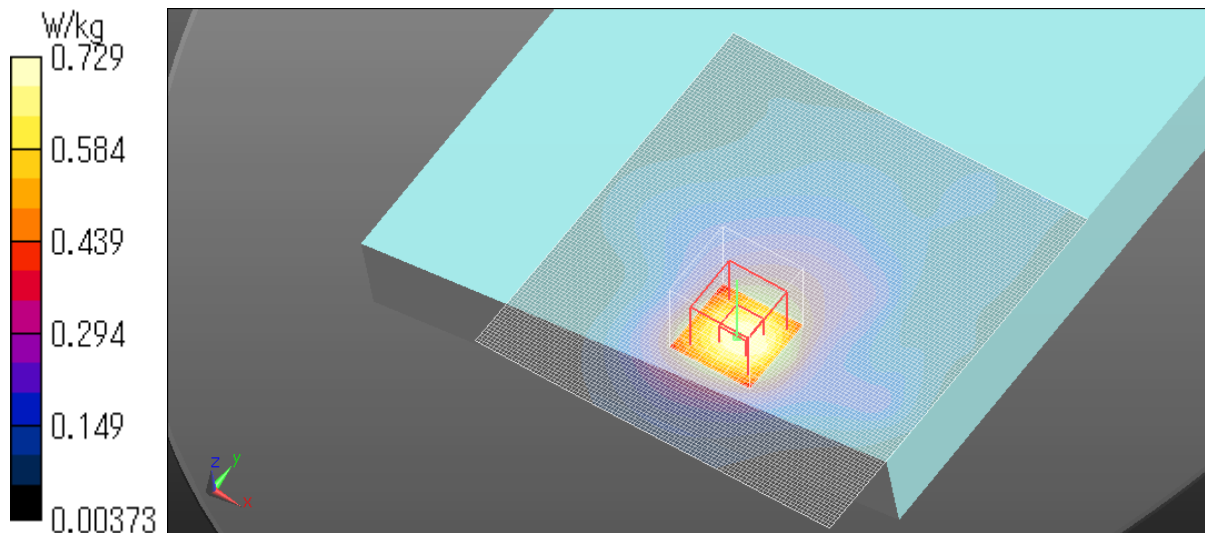
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.729 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/10



B.37 Plot No.ULCA41-2 / LTE Red 5 B41(SCC1 40422) ch40185 2549.5MHz QPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp50

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used:  $f = 2550$  MHz;  $\sigma = 2.167$  S/m;  $\epsilon_r = 52.693$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2549.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**ULCA/Re LTE B41(SCC1 40422) ch40185 2549.5MHz QPSK Edge4 0mm 20MHz RBn50 RBp50 2 2/Area Scan (71x101x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

**ULCA/Re LTE B41(SCC1 40422) ch40185 2549.5MHz QPSK Edge4 0mm 20MHz RBn50 RBp50 2 2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.01 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.05 W/kg

**SAR(1 g) = 0.902 W/kg; SAR(10 g) = 0.395 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

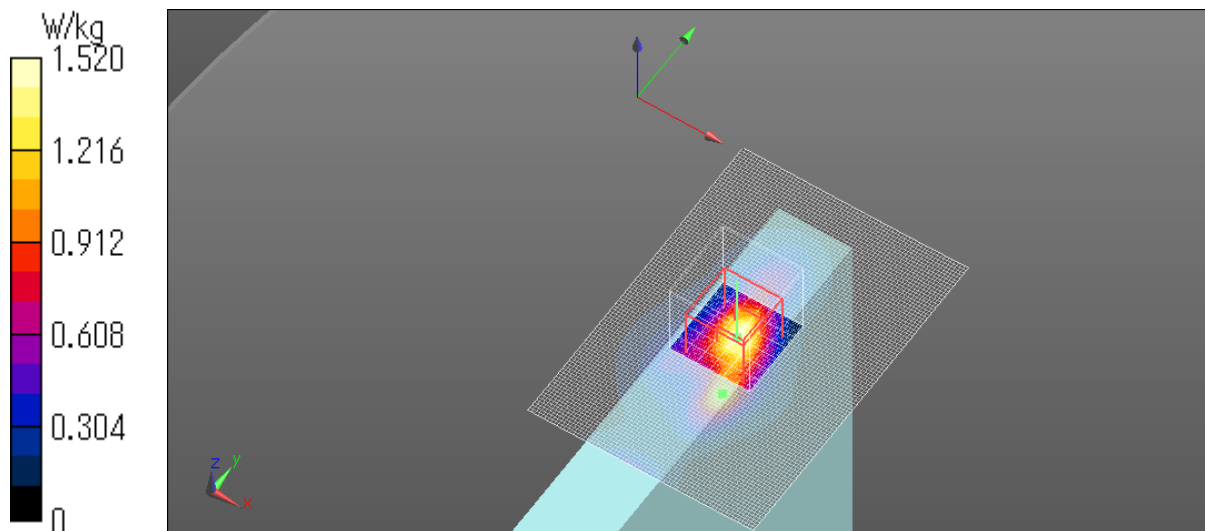
Ratio of SAR at M2 to SAR at M1 = 46.2%

Maximum value of SAR (measured) = 1.61 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/10



B.38 Plot No.ULCA48-1 / LTE Full 5 B48(SCC1 55340) ch55340 3560MHz QPSK NA Edge4 19mm  
20MHz RBn50 RBp50

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 48, E-UTRA/TDD (3560.0 - 3690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used:  $f = 3560$  MHz;  $\sigma = 3.257$  S/m;  $\epsilon_r = 49.631$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(6.4, 6.4, 6.4) @ 3560 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**LTE B42 48 QPSK rear tilt Edge 4 19mm 20MHz/LTE(ULCA) Full 5 B48 ch55340 3560MHz QPSK NA Edge4 19mm 20MHz RBn50 RBp50 OK/Area Scan (61x131x1);** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 0.0697 W/kg

**LTE B42 48 QPSK rear tilt Edge 4 19mm 20MHz/LTE(ULCA) Full 5 B48 ch55340 3560MHz QPSK NA Edge4 19mm 20MHz RBn50 RBp50 OK/Zoom Scan (8x8x8)/Cube 0;** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 4.913 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.101 W/kg

**SAR(1 g) = 0.038 W/kg; SAR(10 g) = 0.016 W/kg**

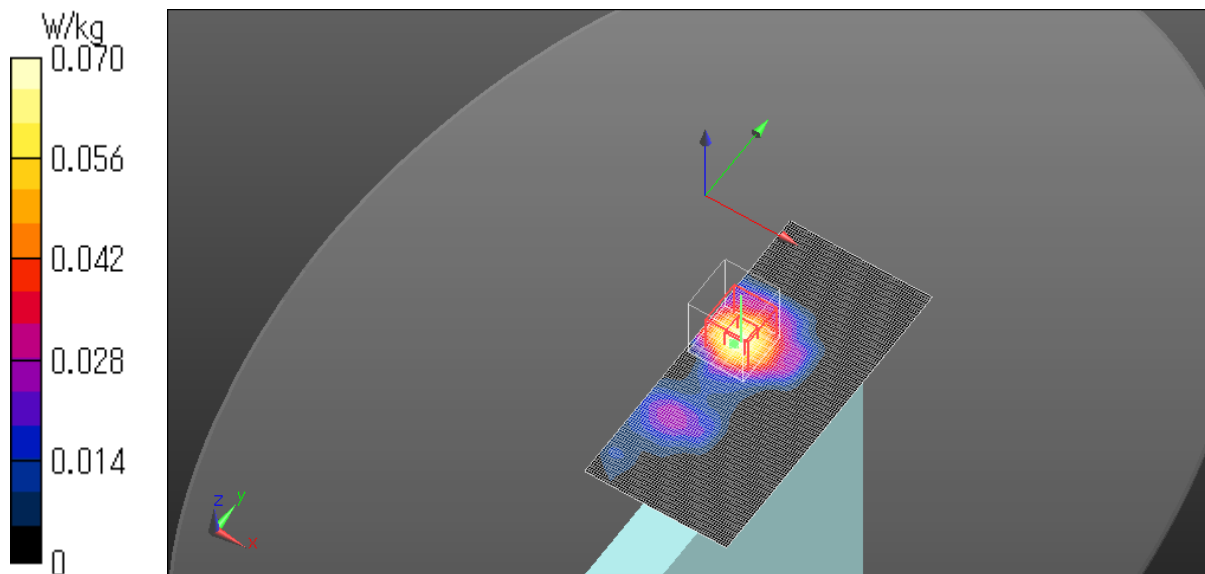
Ratio of SAR at M2 to SAR at M1 = 70.8%

Maximum value of SAR (measured) = 0.0701 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 19.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/11/09



B.39 Plot No.ULCA48-2 / LTE Red 5 B48(SCC1 55340) ch55340 3560MHz QPSK DFTsOFDM Edge4  
0mm 20MHz RBn50 RBp49

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 48, E-UTRA/TDD  
(3560.0 - 3690.0 MHz); ; Duty Cycle: 1:1.5787

Medium parameters used:  $f = 3560$  MHz;  $\sigma = 3.274$  S/m;  $\epsilon_r = 50.768$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(6.4, 6.4, 6.4) @ 3560 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

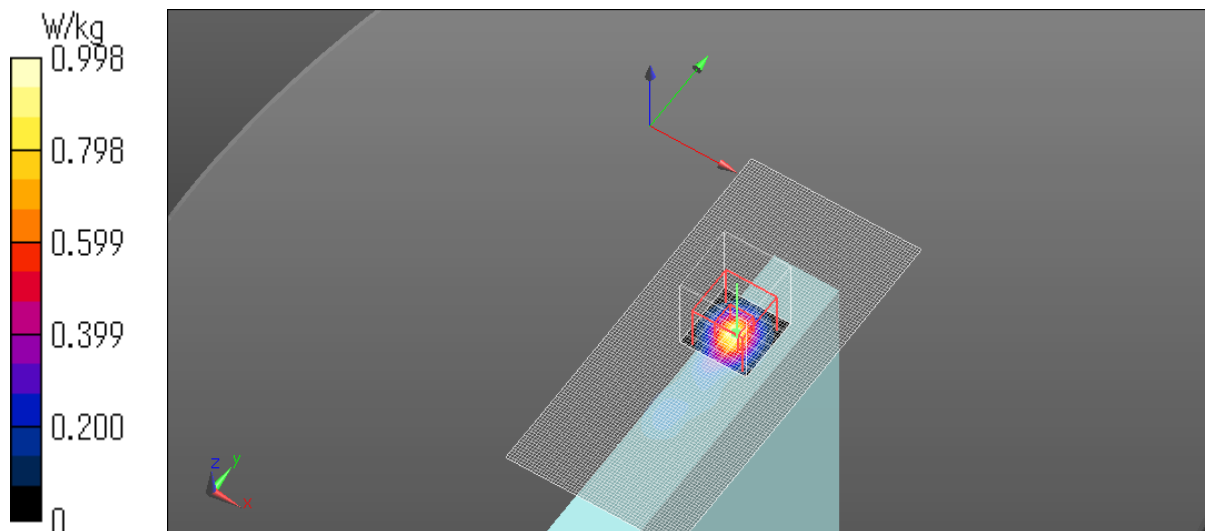
**ULCA/Re LTE Red 5 B48(SCC 1 55340) ch55340 3560MHz QPSK Edge4 0mm 20MHz RBn50  
RBp50/Area Scan (61x131x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 0.998 W/kg

**ULCA/Re LTE Red 5 B48(SCC 1 55340) ch55340 3560MHz QPSK Edge4 0mm 20MHz RBn50  
RBp50/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 18.67 V/m; Power Drift = -0.05 dB  
Peak SAR (extrapolated) = 1.28 W/kg  
**SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.142 W/kg** (SAR corrected for target medium)  
Smallest distance from peaks to all points 3 dB below = 5.8 mm  
Ratio of SAR at M2 to SAR at M1 = 78.6%  
Maximum value of SAR (measured) = 0.927 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/09/10



B.40 Plot No. L66.1 / Full /LTE B66 ch132072 1720MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 66; ; Duty Cycle: 1:1  
Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.134$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1720 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full /LTE B66 ch132072 1720MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99/Area Scan**

**(101x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.27 W/kg

**Full /LTE B66 ch132072 1720MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99/Zoom Scan**

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

Reference Value = 30.24 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.45 W/kg

**SAR(1 g) = 0.888 W/kg; SAR(10 g) = 0.533 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 16.1 mm

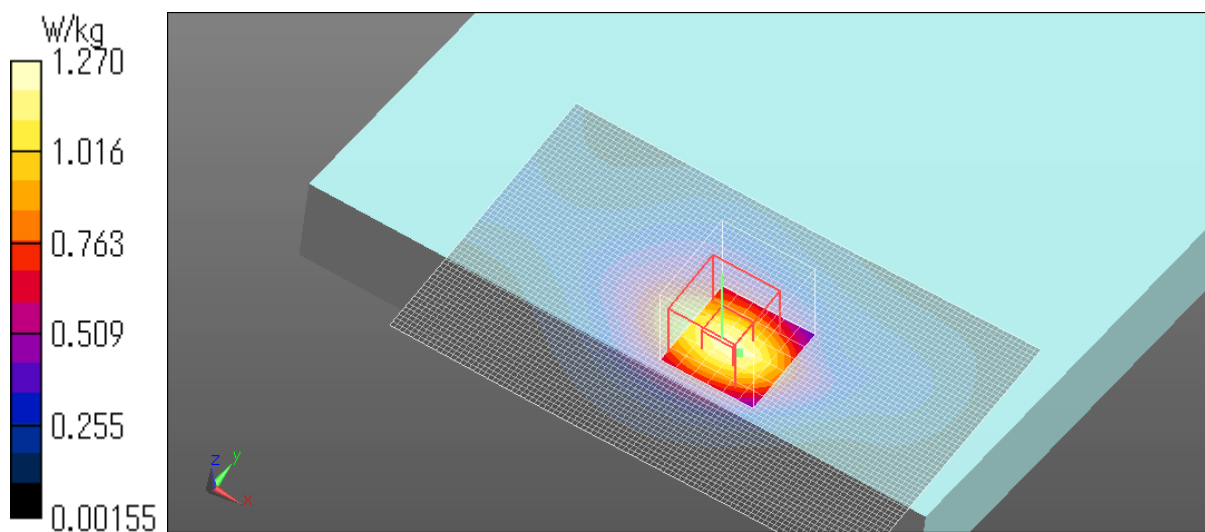
Ratio of SAR at M2 to SAR at M1 = 61.8%

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

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.5 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/27





B.41 Plot No. L66.2 / Red/LTE B66 ch132572 1770MHz QPSK Edge4 0mm 20MHz RBn100 RBp0

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 66; ; Duty Cycle: 1:1  
Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.518$  S/m;  $\epsilon_r = 51.078$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1770 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B66 132572ch 1770MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

**Red/LTE B66 132572ch 1770MHz QPSK Edge4 0mm 20MHz RBn100 RBp0/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.69 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.46 W/kg

**SAR(1 g) = 0.744 W/kg; SAR(10 g) = 0.372 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

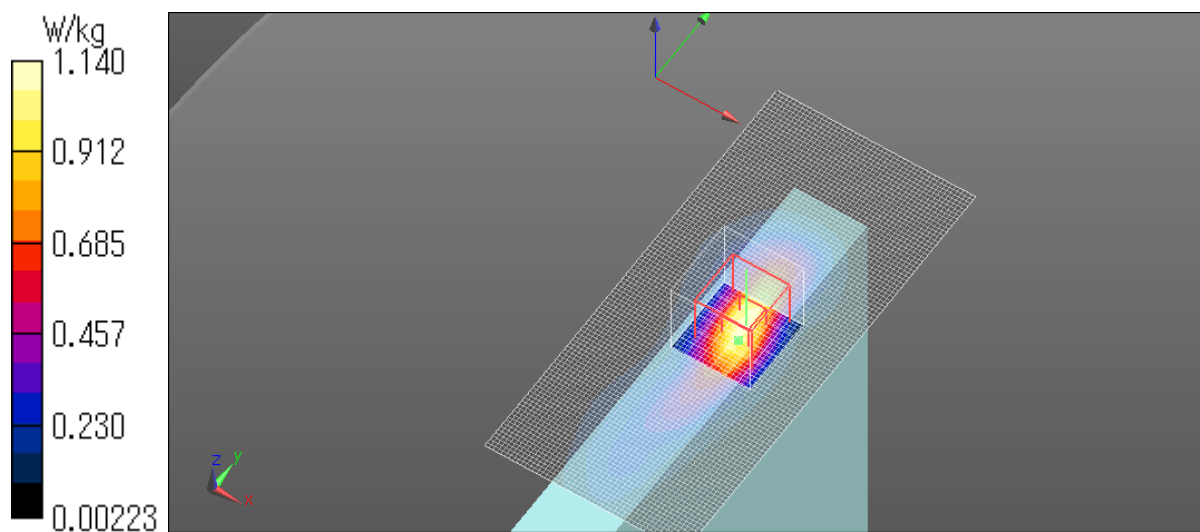
Ratio of SAR at M2 to SAR at M1 = 53.3%

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

Ambient Temp. : 22.5 degree.C. Liquid Temp.; 22.5 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/29



B.42 Plot No. L71.1 / Full/LTE B71 ch133297 680.5MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 71, E-UTRA/FDD (663.0 - 698.0MHz); ; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 680.5$  MHz;  $\sigma = 0.923$  S/m;  $\epsilon_r = 54.846$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.72, 9.72, 9.72) @ 680.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full/LTE B71 133297ch 680.5MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99/Area Scan (101x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.707 W/kg

**Full/LTE B71 133297ch 680.5MHz QPSK Rear tilt Edge4 9mm 20MHz RBn1 RBp99/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.64 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.820 W/kg

**SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.343 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 63.3%

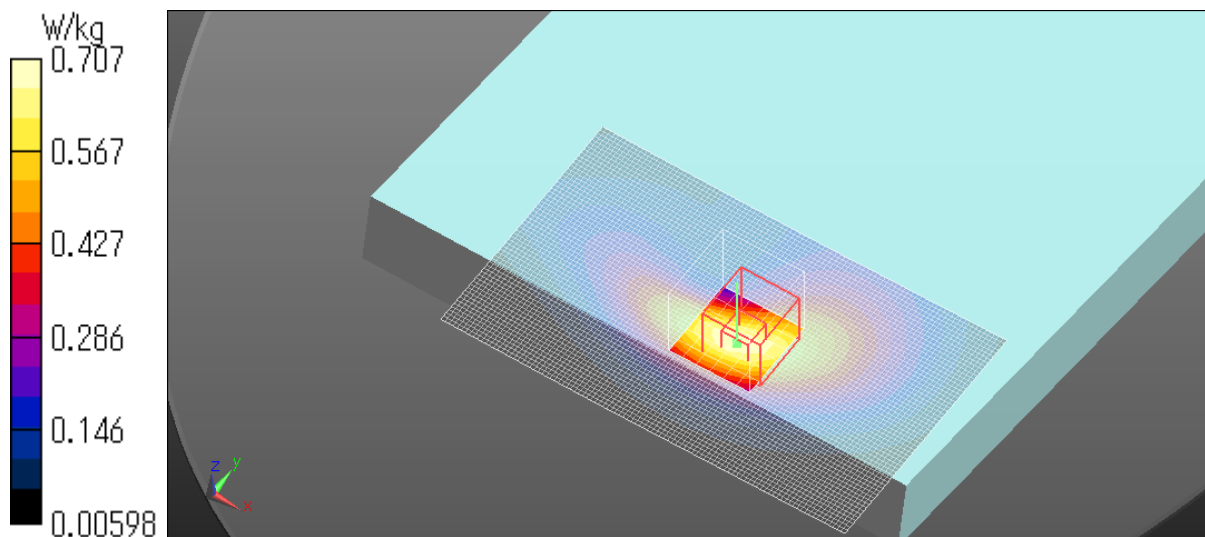
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.702 W/kg

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 23 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/02



B.43 Plot No. L71.2 / Red/LTE B71 ch133297 680.5MHz QPSK Edge4 0mm 20MHz RBn1 RBp99

Communication System: UID 0, #Generic LTE (0); Communication System Band: Band 71, E-UTRA/FDD (663.0 - 698.0MHz); ; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 680.5$  MHz;  $\sigma = 0.962$  S/m;  $\epsilon_r = 53.956$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.72, 9.72, 9.72) @ 680.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/LTE B71 ch133297 680.5MHz QPSK Edge4 0mm 20MHz RBn1 RBp99/Area Scan (51x111x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.08 W/kg

**Red/LTE B71 ch133297 680.5MHz QPSK Edge4 0mm 20MHz RBn1 RBp99/Zoom Scan (8x10x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.81 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.62 W/kg

**SAR(1 g) = 0.718 W/kg; SAR(10 g) = 0.371 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 46.4%

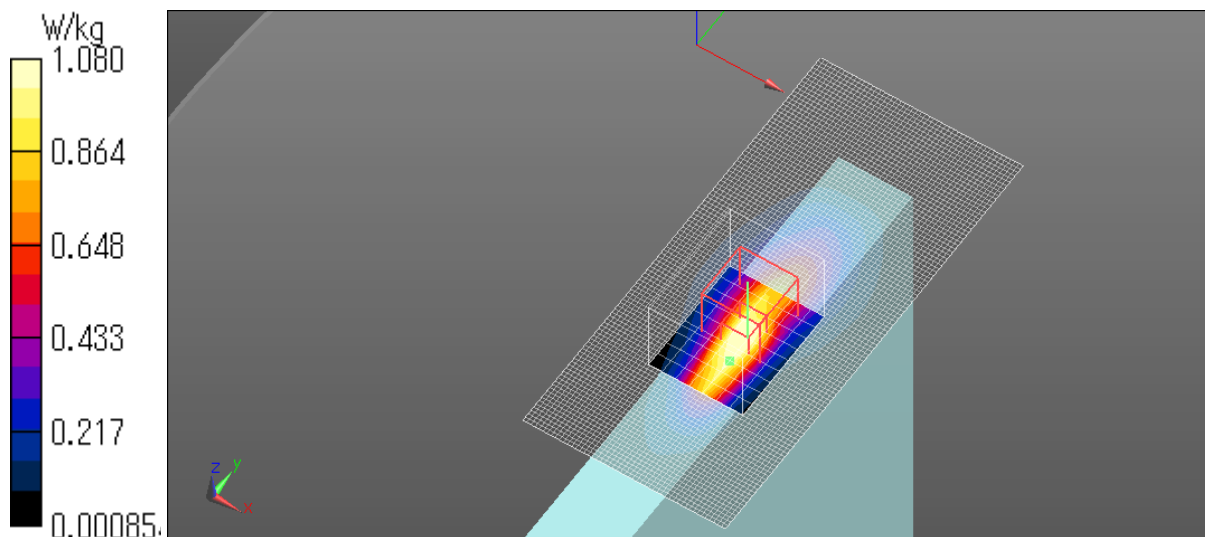
Info: Interpolated medium parameters used for SAR evaluation.

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

Ambient Temp. : 22.0 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/23



B.44 Plot No. N2.1 / Full/NR Bn2 ch372000 1860MHz BPSK DFTsOFDM Rear tilt Edge1 0mm 20MHz RBn50 RBp28

Communication System: UID 0, \_NR (0); Communication System Band: n2; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.558$  S/m;  $\epsilon_r = 50.847$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1860 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Full/NR Bn2 ch372000 1860MHz BPSK DFTsOFDM Rear tilt Edge1 0mm 20MHz RBn50 RBp28/Area**

**Scan (101x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.968 W/kg

**Full /NR Bn2 ch372000 1860MHz BPSK DFTsOFDM Rear tilt Edge1 0mm 20MHz RBn50 RBp28/Zoom**

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

Reference Value = 25.78 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.11 W/kg

**SAR(1 g) = 0.679 W/kg; SAR(10 g) = 0.402 W/kg** (SAR corrected for target medium)

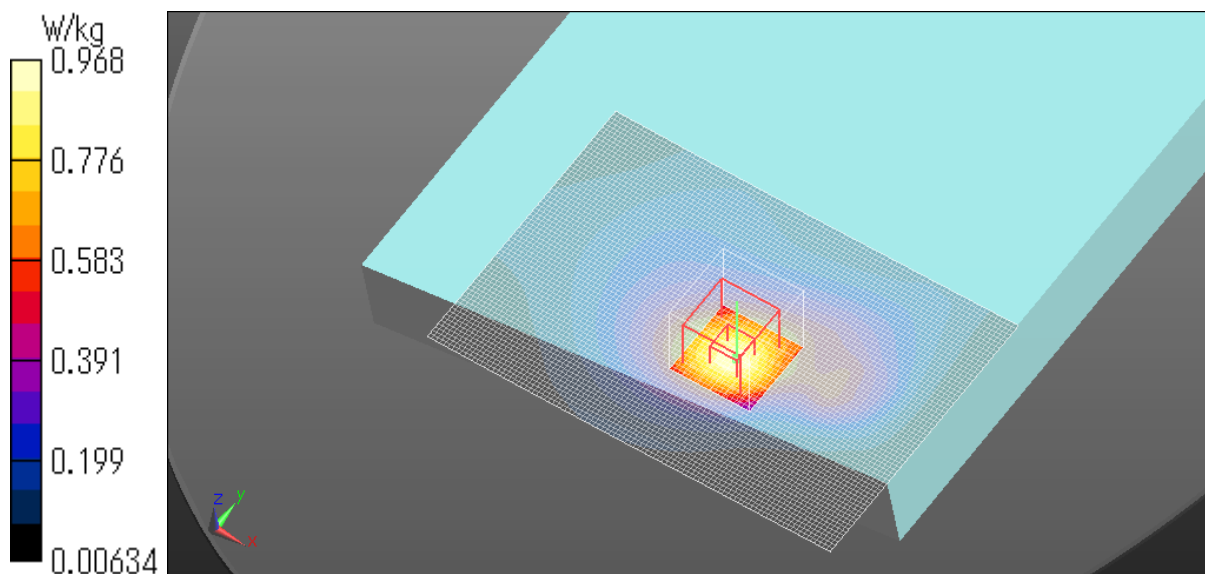
Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.9%

Maximum value of SAR (measured) = 0.955 W/kg

Date: 2021/07/26

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 23.0 degree.C.



B.45 Plot No. N2.2 / Red/NR Bn2 ch380000 1900MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp28

Communication System: UID 0, \_NR (0); Communication System Band: n2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.593$  S/m;  $\epsilon_r = 50.897$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(7.71, 7.71, 7.71) @ 1900 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1372; Calibrated: 2020/08/12

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/NR Bn2 ch380000 1900MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp28/Area Scan (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.879 W/kg

**Red/NR Bn2 ch380000 1900MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp28/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.18 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 1.23 W/kg

**SAR(1 g) = 0.634 W/kg; SAR(10 g) = 0.305 W/kg** (SAR corrected for target medium)

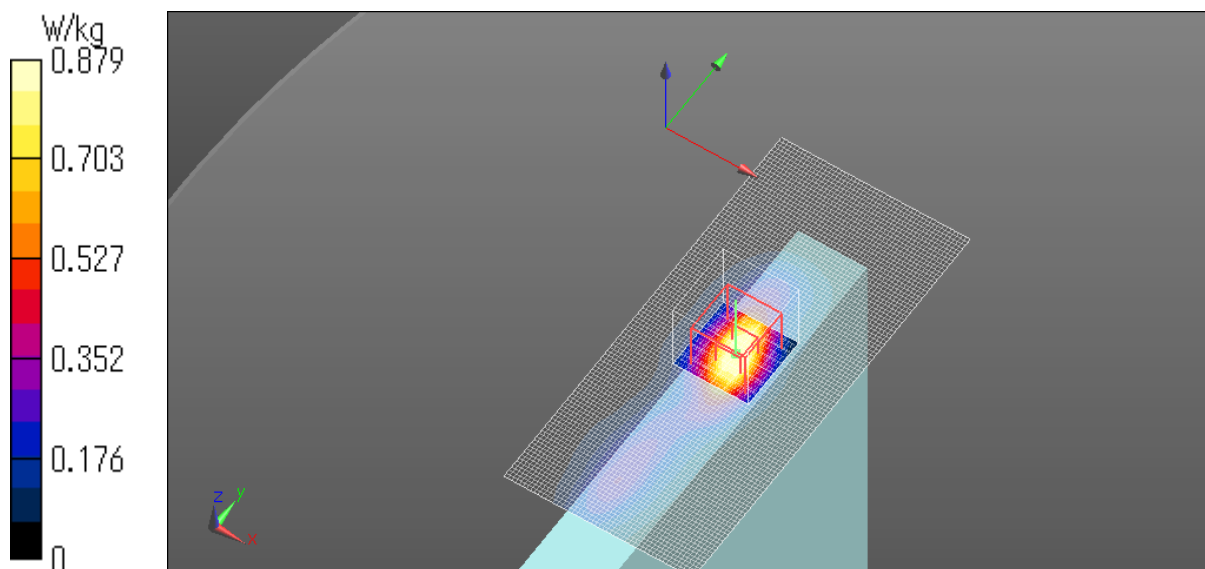
Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.6%

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

Date: 2021/07/28

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 23.0 degree.C.



B.46 Plot No. N5.1 / Full /NR Bn5 ch167300 836.5MHz BPSK DFTsOFDM Rear tilt Edge4 9mm 20MHz RBn50 RBp28

Communication System: UID 0, #NR (0) (0); Communication System Band: Band 5; ; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.006$  S/m;  $\epsilon_r = 54.279$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 836.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554;

Phantom: ELI V5.0 (20deg probe tilt)\_SAR1\_1207; Type: QD OVA 002 Ax;Serial: 1207

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full /NR Bn5 ch167300 836.5MHz BPSK DFTsOFDM Rear tilt Edge4 9mm 20MHz RBn50 RBp28/Area Scan (101x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.11 W/kg

**Full/NR Bn5 ch167300 836.5MHz BPSK DFTsOFDM Rear tilt Edge4 9mm 20MHz RBn50 RBp28/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.64 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.29 W/kg

**SAR(1 g) = 0.807 W/kg; SAR(10 g) = 0.520 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 13.9 mm

Ratio of SAR at M2 to SAR at M1 = 63.2%

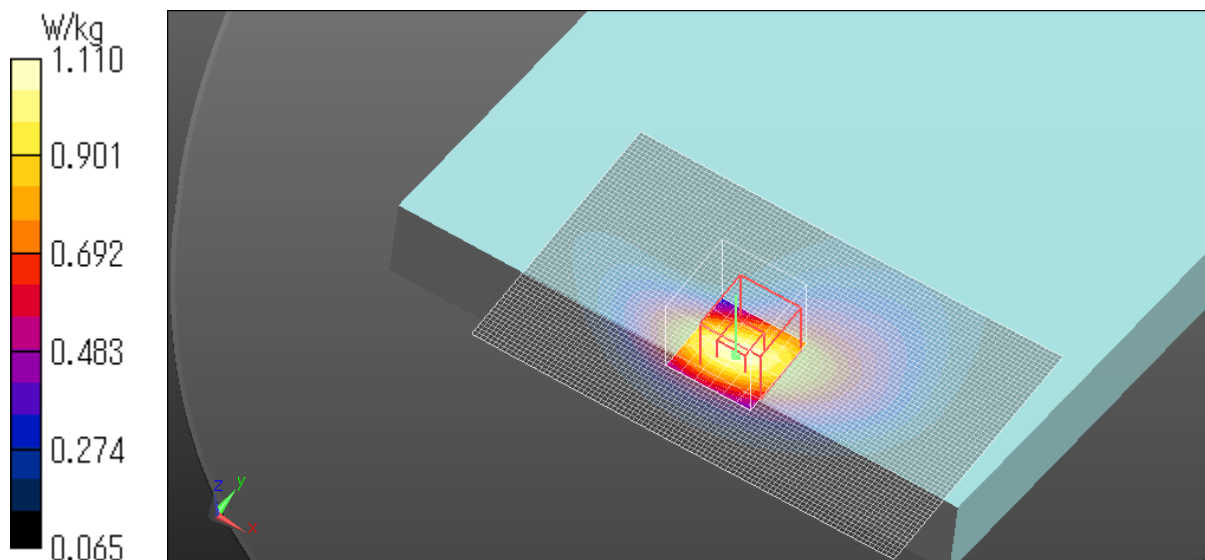
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.11 W/kg

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/20



B.47 Plot No. N5.2 / Red/NR Bn5 ch167300 836.5MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn100 RBp0

Communication System: UID 0, \_NR (0); Communication System Band: n5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.027$  S/m;  $\epsilon_r = 53.386$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY5 Configuration

Probe: EX3DV4 - SN7372; ConvF(9.86, 9.86, 9.86) @ 836.5 MHz; Calibrated: 2021/04/23

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn554; Calibrated: 2021/04/13

Phantom: ELI v5.0 TP1207 (30deg probe tilt); Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

**Red/NR Bn5 ch167300 836.5MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn100 RBp0/Area Scan (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Red/NR Bn5 ch167300 836.5MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn100 RBp0/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.36 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.718 W/kg; SAR(10 g) = 0.391 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.5 mm

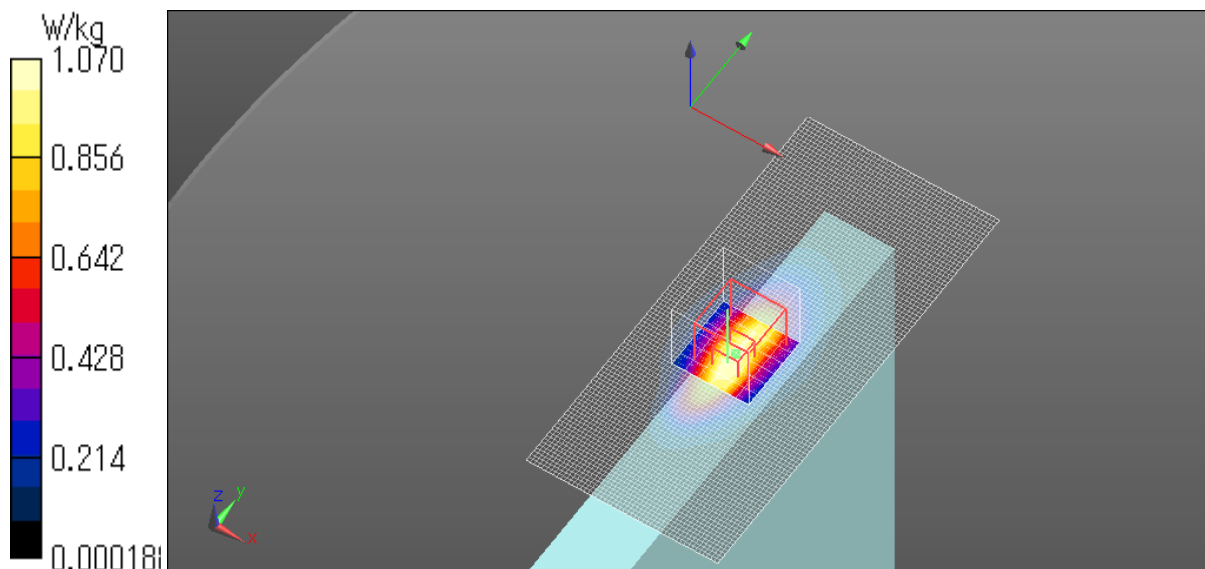
Ratio of SAR at M2 to SAR at M1 = 50.5%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.16 W/kg

Date: 2021/08/05

Ambient Temp. : 21.5 degree.C. Liquid Temp.; 21.5 degree.C.



B.48 Plot No. N41.1 / Full/NR Bn41 ch518600 2593MHz BPSK DFTsOFDM Rear tilt Edge2 9mm 100MHz RBn135 RBp69

Communication System: UID 0, #NR (0); Communication System Band: NR 41; ; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.224$  S/m;  $\epsilon_r = 51.152$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY5 Configuration  
 Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2593 MHz;  
 Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
 Electronics: DAE4 Sn1369;  
 Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045  
 Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

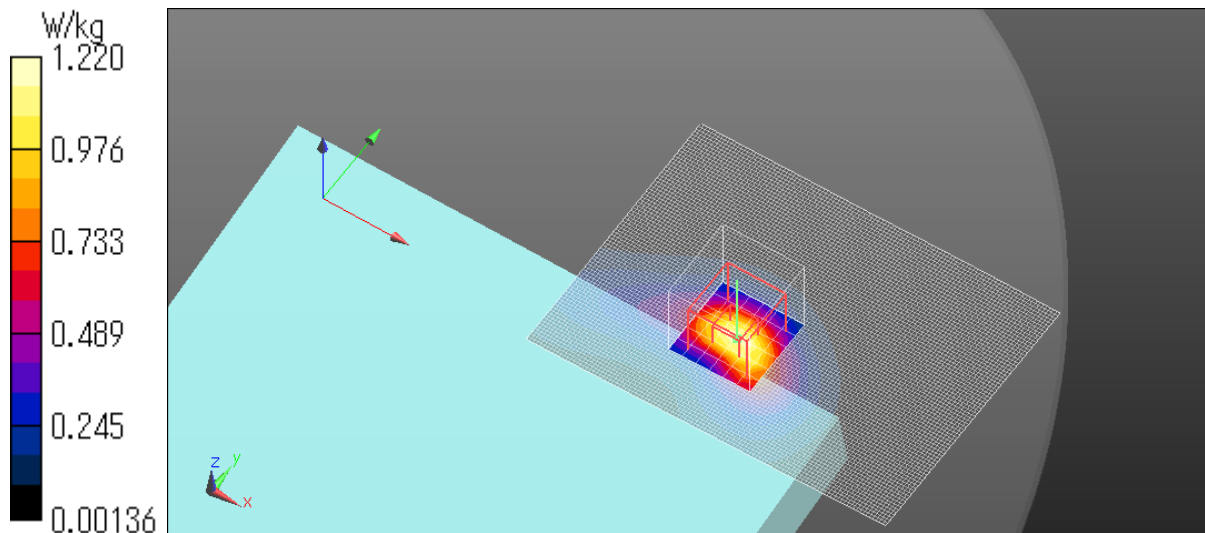
**Full/NR Bn41 ch518600 2593MHz BPSK DFTsOFDM Rear tilt Edge2 9mm 100MHz RBn135 RBp69/Area Scan (111x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.  
 Maximum value of SAR (interpolated) = 1.22 W/kg

**Full/NR Bn41 ch518600 2593MHz BPSK DFTsOFDM Rear tilt Edge2 9mm 100MHz RBn135 RBp69/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 24.26 V/m; Power Drift = -0.04 dB  
 Peak SAR (extrapolated) = 1.59 W/kg  
**SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.340 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below = 8.2 mm  
 Ratio of SAR at M2 to SAR at M1 = 47%

Info: Interpolated medium parameters used for SAR evaluation.  
 Maximum value of SAR (measured) = 1.24 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.  
 Liquid temp. is kept within the 2 degree.C. during the test.  
 Date: 2021/08/30





B.49 Plot No. N41.2 / Red/NR Bn41 ch518600 2593MHz BPSK DFTsOFDM Edge2 0mm 100MHz  
RBn135 RBp69

Communication System: UID 0, #NR (0); Communication System Band: NR 41; ; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.224$  S/m;  $\epsilon_r = 51.152$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.26, 7.26, 7.26) @ 2593 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/NR Bn41 ch518600 2593MHz BPSK DFTsOFDM Edge2 0mm 100MHz RBn135 RBp69/Area Scan (61x131x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.98 W/kg

**Red/NR Bn41 ch518600 2593MHz BPSK DFTsOFDM Edge2 0mm 100MHz RBn135 RBp69/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.29 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 2.80 W/kg

**SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.339 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.1 mm

Ratio of SAR at M2 to SAR at M1 = 41%

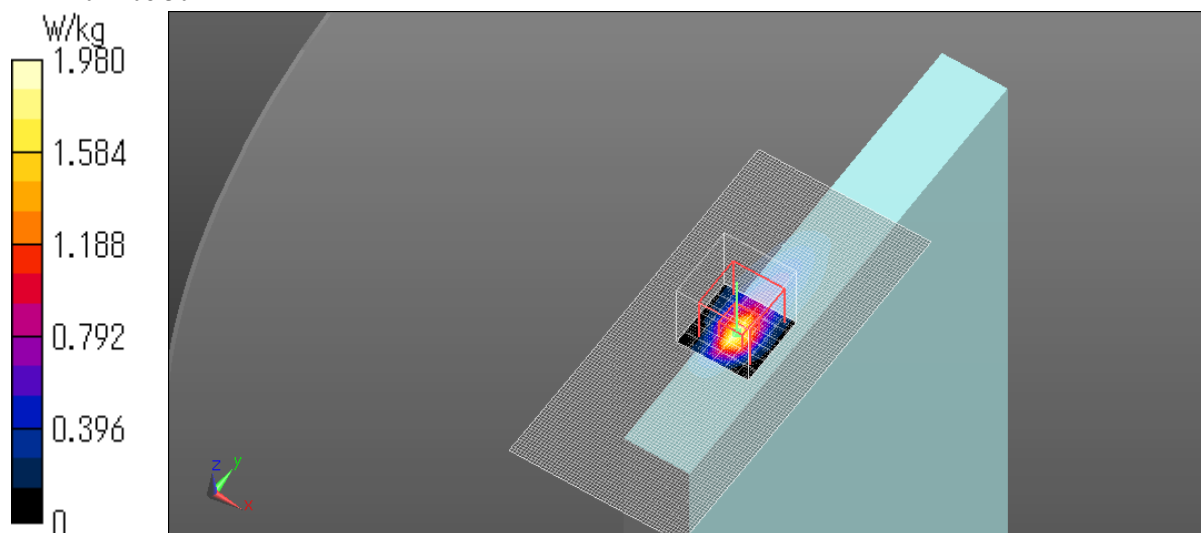
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.06 W/kg

Ambient Temp. : 20.0 degree.C. Liquid Temp.; 20.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/08/30



B.50 Plot No. N66.1 / Full/NR Bn66 ch344000 1720MHz BPSK DFTsOFDM Rear tilt Edge4 9mm 20MHz RBn50 RBp28

Communication System: UID 0, #NR (0); Communication System Band: NR 66; ; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.479$  S/m;  $\epsilon_r = 51.232$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1720 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full/NR Bn66 344000ch 1720MHz BPSK DFTsOFDM Rear tilt Edge4 9mm 20MHz RBn50 RBp28/Area Scan (101x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

**Full/NR Bn66 344000ch 1720MHz BPSK DFTsOFDM Rear tilt Edge4 9mm 20MHz RBn50 RBp28/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.60 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.59 W/kg

**SAR(1 g) = 0.971 W/kg; SAR(10 g) = 0.582 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 14.6 mm

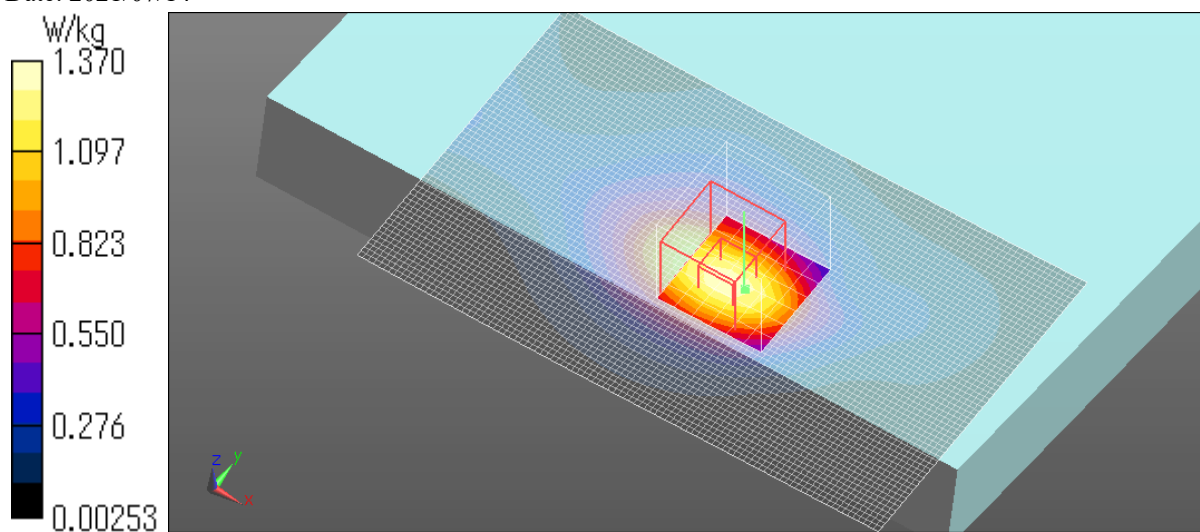
Ratio of SAR at M2 to SAR at M1 = 61.3%

Maximum value of SAR (measured) = 1.35 W/kg

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 23 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/14



B.51 Plot No. N66.2 / Red/NR Bn66 ch354000 1770MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp28

Communication System: UID 0, #NR (0); Communication System Band: NR 66; ; Duty Cycle: 1:1

Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.511$  S/m;  $\epsilon_r = 51.182$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.95, 7.95, 7.95) @ 1770 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red /NR Bn66 ch354000 1770MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp28/Area Scan (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.861 W/kg

**Red /NR Bn66 ch354000 1770MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn50 RBp28/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.62 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.25 W/kg

**SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.325 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

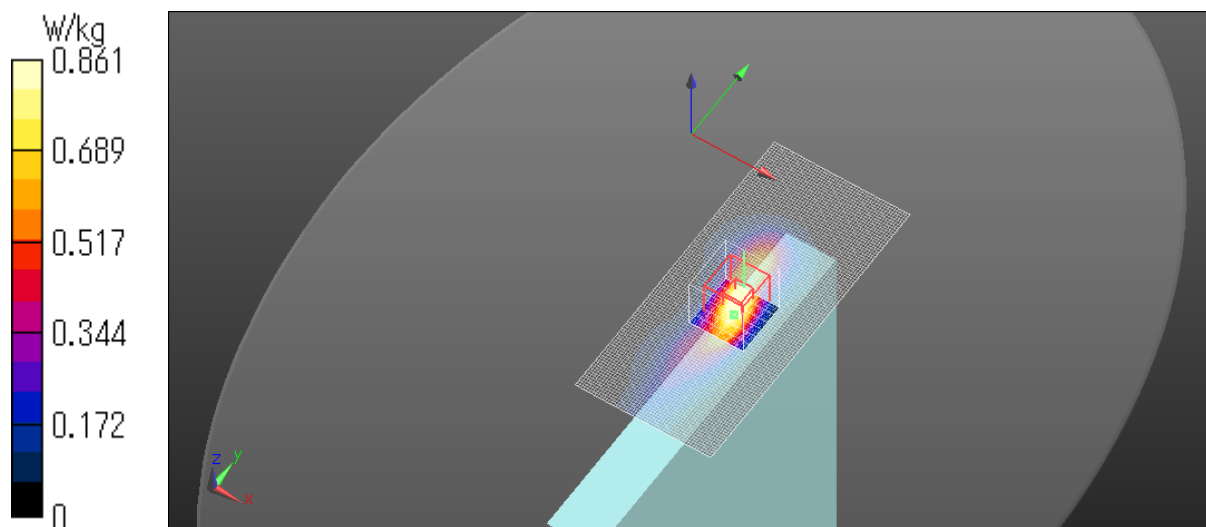
Ratio of SAR at M2 to SAR at M1 = 51.2%

Maximum value of SAR (measured) = 1.00 W/kg

Ambient Temp. : 23.0 degree.C. Liquid Temp. : 23 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/16



B.52 Plot No. N71.1 / Full /NR Bn71 ch136100 680.5MHz BPSK DFTsOFDM 0mm 20MHz RBn28 RBp50

Communication System: UID 0, #NR (0); Communication System Band: NR band; ; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 680.5$  MHz;  $\sigma = 0.984$  S/m;  $\epsilon_r = 53.728$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.72, 9.72, 9.72) @ 680.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Full /NR Bn71 ch136100 680.5MHz BPSK DFTsOFDM 0mm 20MHz RBn28 RBp50/Area Scan (91x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.555 W/kg

**Full /NR Bn71 ch136100 680.5MHz BPSK DFTsOFDM 0mm 20MHz RBn28 RBp50/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.66 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.632 W/kg

**SAR(1 g) = 0.420 W/kg; SAR(10 g) = 0.294 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 20 mm

Ratio of SAR at M2 to SAR at M1 = 66.9%

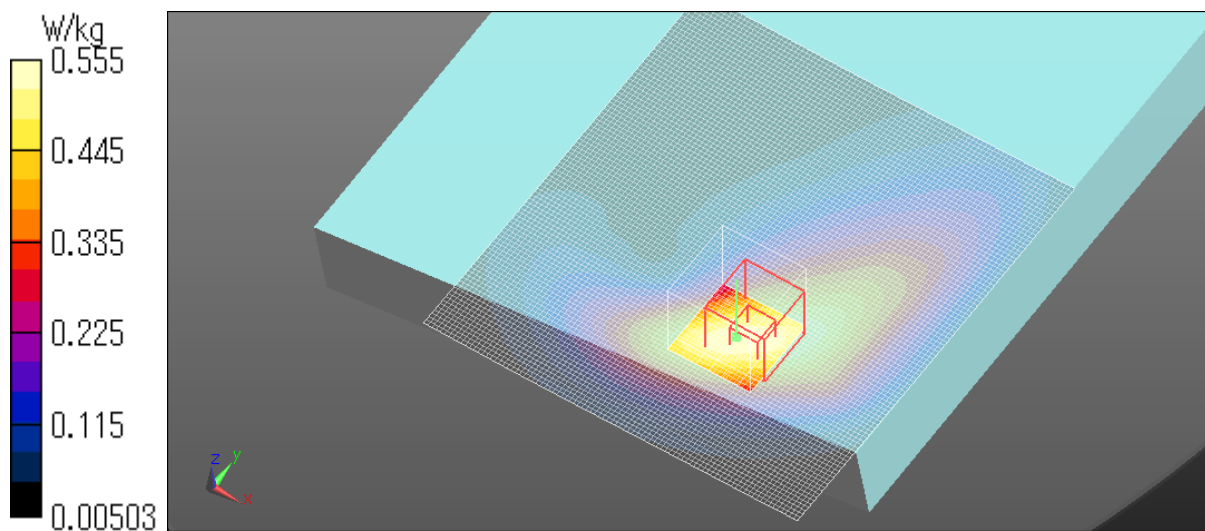
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.550 W/kg

Ambient Temp. : 21.0 degree.C. Liquid Temp.; 21 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/12



B.53 Plot No. N71.2 / Red/NR Bn71 ch136100 680.5MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn28 RBp50

Communication System: UID 0, #NR (0); Communication System Band: NR band; ; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 680.5$  MHz;  $\sigma = 0.984$  S/m;  $\epsilon_r = 53.728$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(9.72, 9.72, 9.72) @ 680.5 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB;Serial: TP:1045

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**Red/NR Bn71 ch136100 680.5MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn28 RBp50/Area Scan (51x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Red/NR Bn71 ch136100 680.5MHz BPSK DFTsOFDM Edge4 0mm 20MHz RBn28 RBp50/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 39.27 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.91 W/kg

**SAR(1 g) = 0.859 W/kg; SAR(10 g) = 0.451 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 48.9%

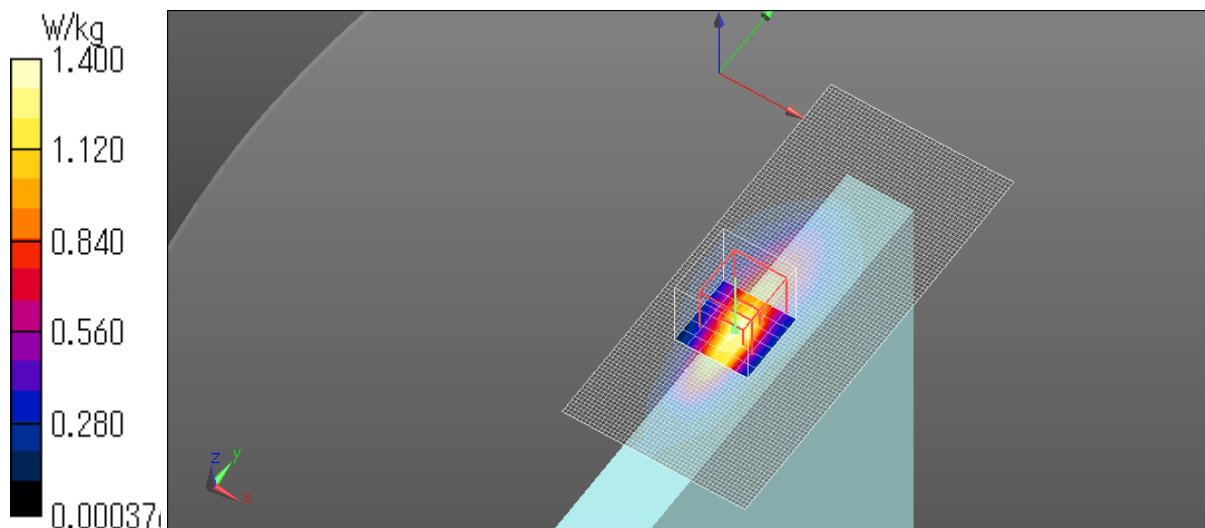
Info: Interpolated medium parameters used for SAR evaluation.

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

Ambient Temp. : 21.0 degree.C. Liquid Temp.; 21 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/07/13



B.54 Plot No. W2.4.1 / WLAN 2.4GHz Ant 2 / Rear tilt(Edge2 side) 11b 2412MHz

Communication System: UID 0, #WLAN 11a/b/g/n (0); Communication System Band: 11b/g/n (2.4G); ; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.972$  S/m;  $\epsilon_r = 51.276$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3922; ConvF(7.7, 7.7, 7.7) @ 2412 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**2.4GHz Ant 2/Rear tilt(Edge2 side) 11b 2412MHz/Area Scan (71x101x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.273 W/kg

**2.4GHz Ant 2/Edge 2 11b 2412MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.359 W/kg

**SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.084 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 50%

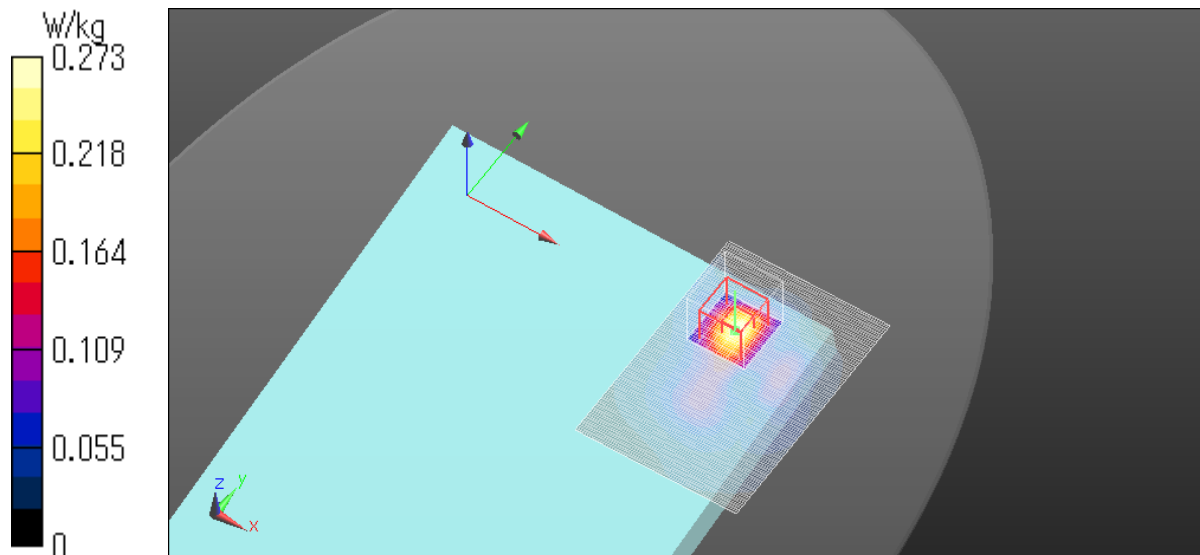
[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.285 W/kg

Ambient Temp. : 23.0 degree.C. Liquid Temp.; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/06/15



B.55 Plot No. W5.3.1 / WLAN 5.3GHz Ant 2 / Rear tilt (Edge2 side) 11ac80 5290MHz

Communication System: UID 0, #WLAN 5GHz (0); Communication System Band: WLAN 5GHz Low; ; Duty Cycle: 1:1

Medium parameters used:  $f = 5290$  MHz;  $\sigma = 5.554$  S/m;  $\epsilon_r = 46.809$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3922; ConvF(4.8, 4.8, 4.8) @ 5290 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**5.3GHz Ant 2/Rear tilt (Edge2 side) 11ac80 5290MHz/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.236 W/kg

**5.3GHz Ant 2/Rear tilt (Edge2 side) 11ac80 5290MHz/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 7.479 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.370 W/kg

**SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.038 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.1 mm

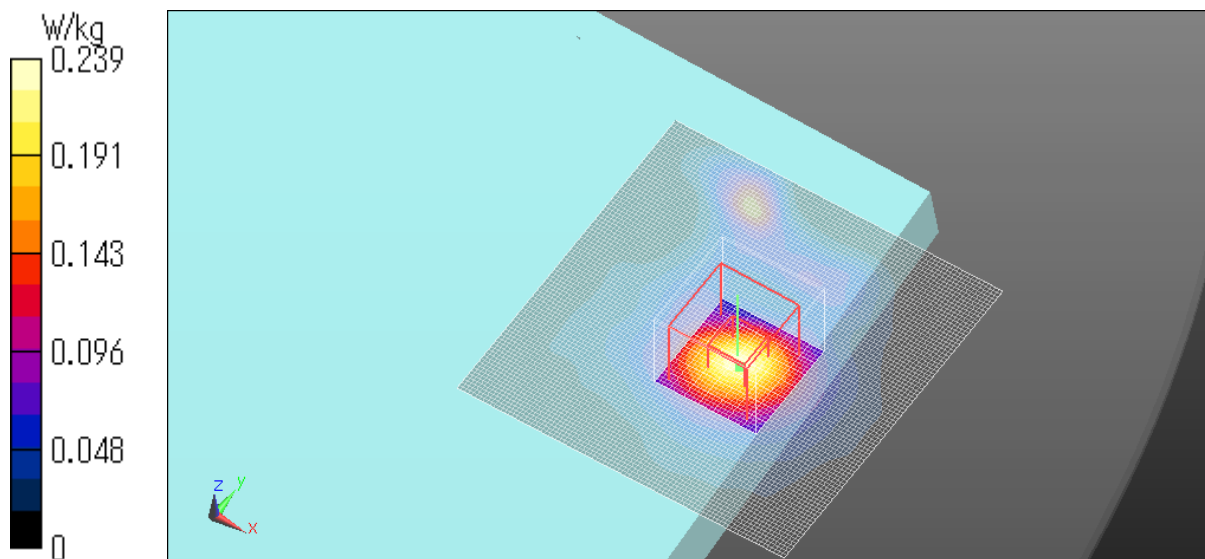
Ratio of SAR at M2 to SAR at M1 = 66%

Maximum value of SAR (measured) = 0.239 W/kg

Ambient Temp. : 22.0 degree.C. Liquid Temp.; 21.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/06/16



B.56 Plot No. W5.5.1 / WLAN5.5GHz Ant 2 / Rear tilt (Edge2 side) 11ac80 5690MHz

Communication System: UID 0, #WLAN 5GHz (0); Communication System Band: WLAN 5GHz Mid; ; Duty Cycle: 1:1

Medium parameters used:  $f = 5690$  MHz;  $\sigma = 6.094$  S/m;  $\epsilon_r = 46.05$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3922; ConvF(4.07, 4.07, 4.07) @ 5690 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**5.6GHz Ant 2/Rear tilt (Edge2 side) 11ac80 5690MHz/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.355 W/kg

**5.6GHz Ant 2/Rear tilt (Edge2 side) 11ac80 5690MHz/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 8.713 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.601 W/kg

**SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.050 W/kg**

Smallest distance from peaks to all points 3 dB below = 8 mm

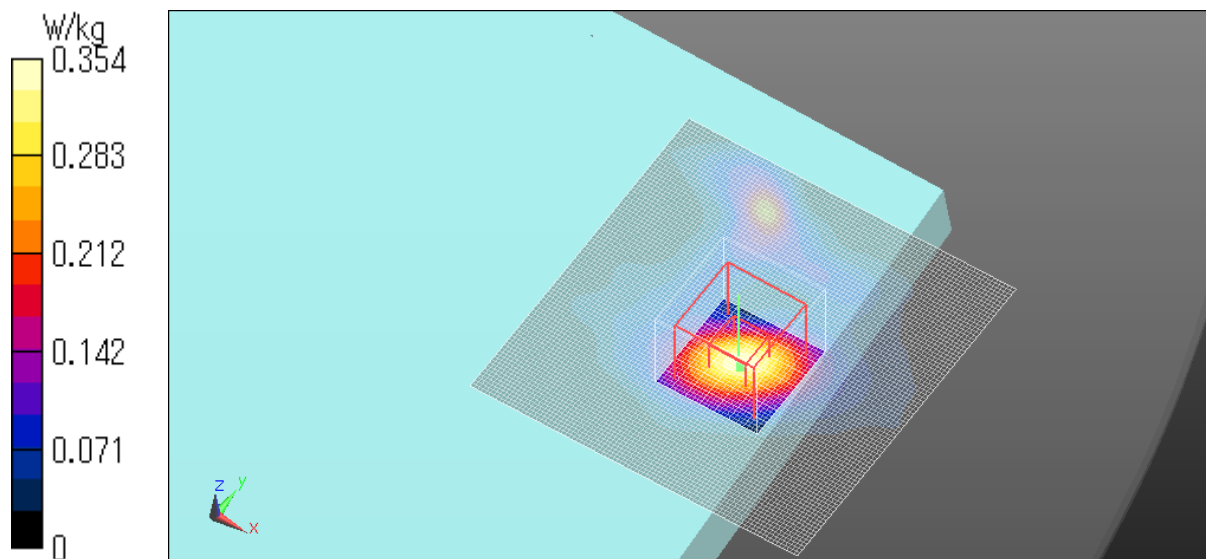
Ratio of SAR at M2 to SAR at M1 = 61.2%

Maximum value of SAR (measured) = 0.354 W/kg

Ambient Temp. : 22.0 degree.C. Liquid Temp.; 21.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/06/17





B.57 Plot No. W5.8.1 / WLAN5.8GHz Ant 2 / Rear tilt (Edge2 side) 11ac80 5775MHz

Communication System: UID 0, #WLAN 11a/b/g/n (0); Communication System Band: 11ac80(W58); ; Duty Cycle: 1:1

Medium parameters used:  $f = 5775$  MHz;  $\sigma = 6.258$  S/m;  $\epsilon_r = 45.983$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3922; ConvF(4.14, 4.14, 4.14) @ 5775 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**5.8GHz Ant 2/Rear tilt (Edge2 side) 11ac80 5775MHz/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.412 W/kg

**5.8GHz Ant 2/Rear tilt (Edge2 side) 11ac80 5775MHz/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 9.256 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.720 W/kg

**SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.058 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.9 mm

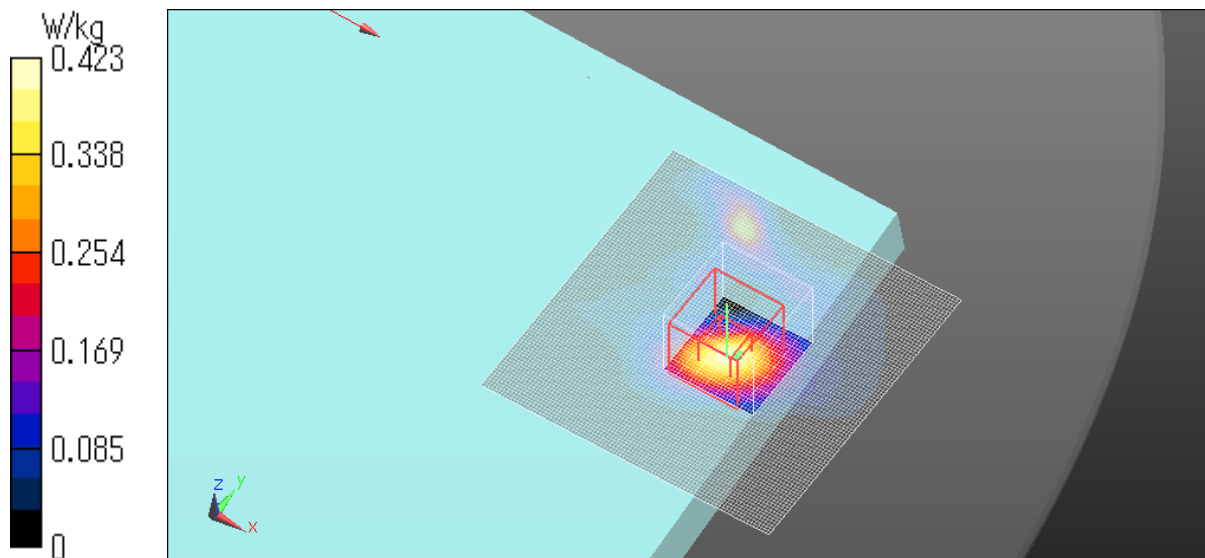
Ratio of SAR at M2 to SAR at M1 = 61%

Maximum value of SAR (measured) = 0.423 W/kg

Ambient Temp. : 22.0 degree.C. Liquid Temp.; 21.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/06/18



B.58 Plot No. BT1 / Bluetooth Ant 2 / Rear tilt (Edge2 side) DH5 2480MHz

Communication System: UID 0, #Bluetooth (0); Communication System Band: Bluetooth; ; Duty Cycle: 1:1

Medium parameters used:  $f = 2480$  MHz;  $\sigma = 2.074$  S/m;  $\epsilon_r = 50.983$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration

Probe: EX3DV4 - SN3922; ConvF(7.7, 7.7, 7.7) @ 2480 MHz;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

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

Measurement SW: DASY52, Version 52.10 (3);SEMCAD X Version 14.6.13 (7474)

**BT Ant 2/ Rear tilt (Edge2 side) DH5 2480MHz/Area Scan (71x101x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.105 W/kg

**BT Ant 2/ Rear tilt (Edge2 side) DH5 2480MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.445 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.140 W/kg

**SAR(1 g) = 0.064 W/kg; SAR(10 g) = 0.029 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46.4%

Maximum value of SAR (measured) = 0.108 W/kg

Ambient Temp. : 23.0 degree.C. Liquid Temp. ; 22.0 degree.C.

Liquid temp. is kept within the 2 degree.C. during the test.

Date: 2021/06/15

