Appendix C System Check

C.1 20220222_SAR1_5250 MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); ;

Duty Cycle: 1:1

Medium parameters used: f = 5250 MHz; $\sigma = 4.586$ S/m; $\varepsilon_r = 35.692$; $\rho = 1000$ kg/m³

Phantom section: Flat Section DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(5.12, 5.12, 5.12) @ 5250 MHz;

Sensor-Surface: 1.4 mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509;

Phantom: ELI v5.0 (20 deg probe tilt); Type: QDOVA001BB;Serial: TP:1203 Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

Pin/100 mW START - Find Maximum/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 20.2 W/kg

Pin/100 mW/Zoom Scan, dist=1.4 mm (8x8x7)/Cube 0: Measurement grid: dx=4 mm, dy=4 mm, dz=1.4 mm

Reference Value = 72.39 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 31.3 W/kg

SAR(1 g) = 8.05 W/kg; SAR(10 g) = 2.29 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

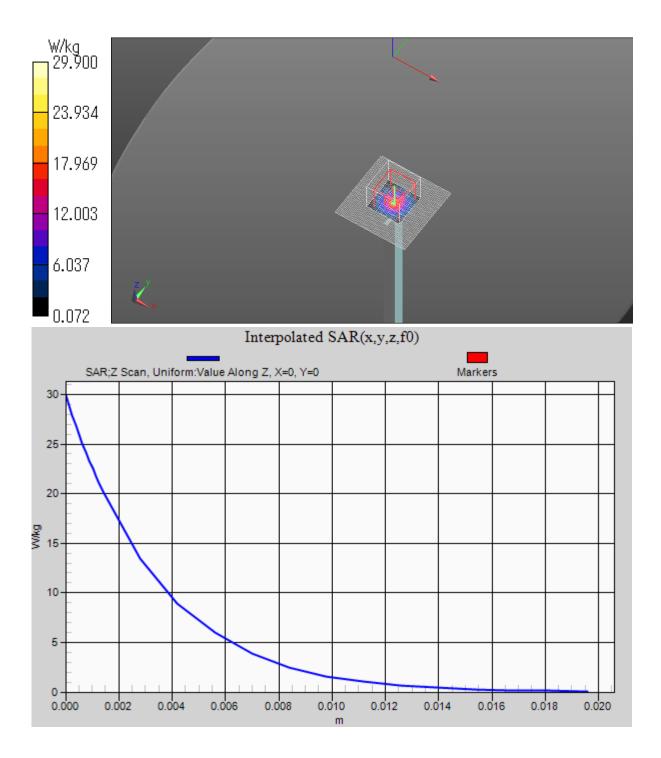
Ratio of SAR at M2 to SAR at M1 = 66.3 %

Maximum value of SAR (measured) = 19.3 W/kg

Pin/100 mW/Z Scan, Uniform (1x1x25): Measurement grid: dx=20 mm, dy=20 mm, dz=1.4 mm

Penetration depth = 3.174 (3.549, 3.152) [mm] Maximum value of SAR (interpolated) = 29.9 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.



C.2 20220222 SAR1 5600 MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); ;

Duty Cycle: 1:1

Medium parameters used: f = 5600 MHz; $\sigma = 4.866 \text{ S/m}$; $\varepsilon_r = 35.194$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(4.66, 4.66, 4.66) @ 5600 MHz;

Sensor-Surface: 1.4 mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509;

Phantom: ELI v5.0 (20 deg probe tilt); Type: QDOVA001BB;Serial: TP:1203 Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

Pin/100 mW START - Find Maximum/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 21.7 W/kg

Pin/100 mW/Zoom Scan, dist=1.4 mm (8x8x7)/Cube 0: Measurement grid: dx=4 mm, dy=4 mm, dz=1.4 mm Reference Value = 74.49 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 35.7 W/kg

SAR(1 g) = 8.47 W/kg; SAR(10 g) = 2.42 W/kg

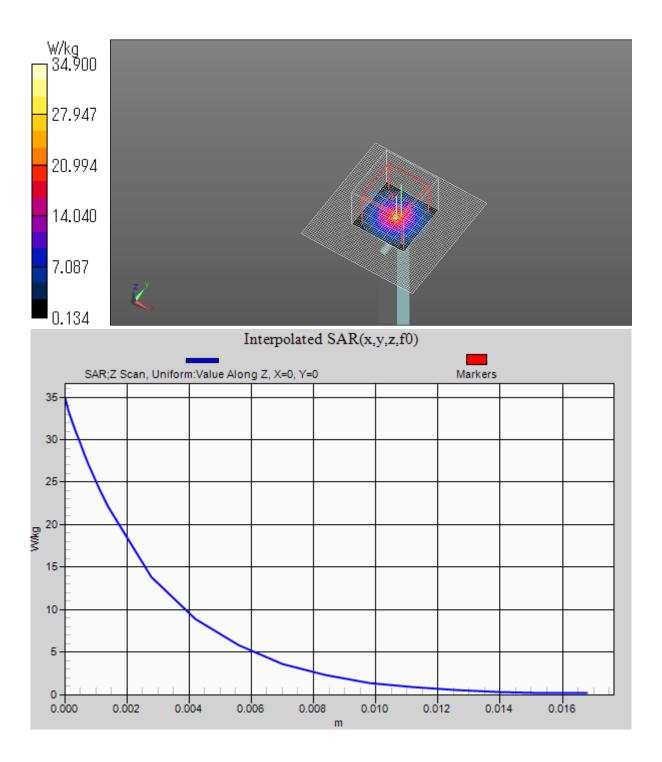
Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 63.2 %Maximum value of SAR (measured) = 20.5 W/kg

Pin/100 mW/Z Scan, Uniform (1x1x23): Measurement grid: dx=20 mm, dy=20 mm, dz=1.4 mm

Penetration depth = 2.966 (3.328, 3.076) [mm] Maximum value of SAR (interpolated) = 34.9 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.



C.3 20220222 SAR1 5800 MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); ;

Duty Cycle: 1:1

Medium parameters used: f = 5800 MHz; $\sigma = 5.176$ S/m; $\varepsilon_r = 34.763$; $\rho = 1000$ kg/m³

Phantom section: Flat Section DASY5 Configuration

Probe: EX3DV4 - SN3825; ConvF(4.68, 4.68, 4.68) @ 5800 MHz;

Sensor-Surface: 1.4 mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509;

Phantom: ELI v5.0 (20 deg probe tilt); Type: QDOVA001BB;Serial: TP:1203 Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

Pin/100 mW START - Find Maximum/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 21.4 W/kg

Pin/100 mW/Zoom Scan, dist=1.4 mm (8x8x7)/Cube 0: Measurement grid: dx=4 mm, dy=4 mm, dz=1.4 mm Reference Value = 70.67 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 36.2 W/kg

SAR(1 g) = 8.26 W/kg; SAR(10 g) = 2.4 W/kg

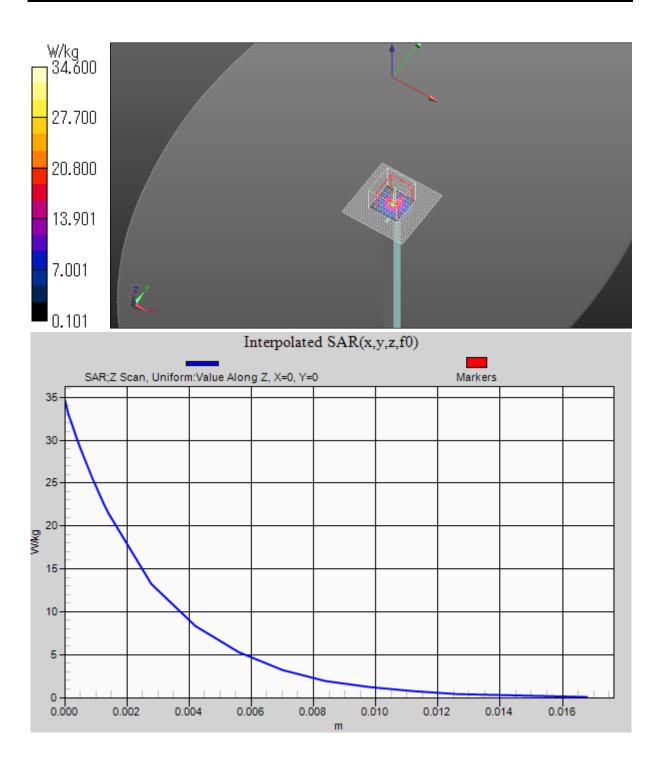
Smallest distance from peaks to all points 3 dB below = 7.5 mm

Ratio of SAR at M2 to SAR at M1 = 61.8 % Maximum value of SAR (measured) = 21.2 W/kg

Pin/100 mW/Z Scan, Uniform (1x1x23): Measurement grid: dx=20 mm, dy=20 mm, dz=1.4 mm

Penetration depth = 2.842 (3.141, 2.829) [mm] Maximum value of SAR (interpolated) = 34.6 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.



C.4 20220225 SAR1 2600 MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D2600 (2600.0 MHz); ; Duty Cycle:

1:1

Medium parameters used: f = 2600 MHz; $\sigma = 1.88 \text{ S/m}$; $\varepsilon_r = 39.06$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.2, 7.2, 7.2) @ 2600 MHz; Sensor-Surface: 1.4 mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509;

Phantom: ELI v5.0 (20 deg probe tilt); Type: QDOVA001BB;Serial: TP:1203 Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

SPC/250 mW 2/Area Scan (81x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 24.1 W/kg

SPC/250 mW 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5 mm, dy=5 mm, dz=5 mm

Reference Value = 116.4 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.47 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

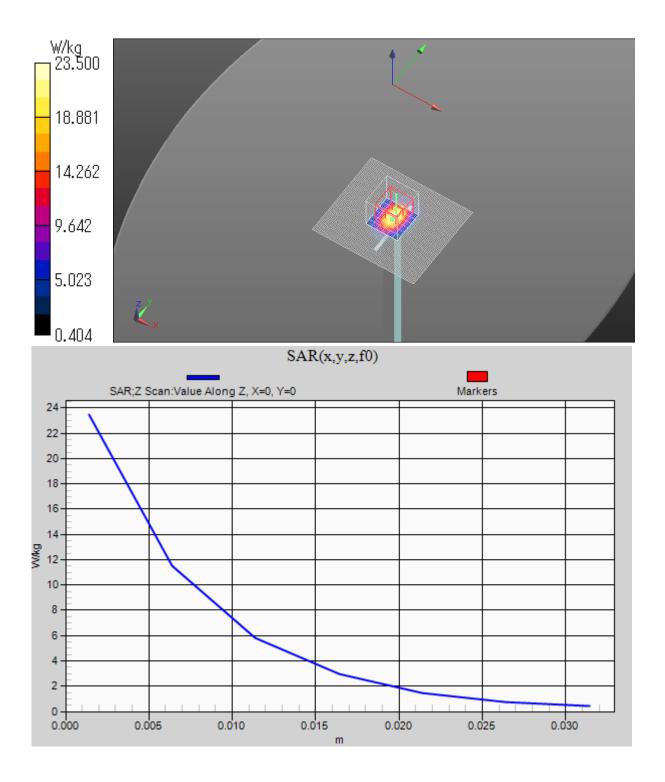
Ratio of SAR at M2 to SAR at M1 = 49.1 %

Maximum value of SAR (measured) = 23.5 W/kg

SPC/250 mW 2/Z Scan (1x1x7): Measurement grid: dx=20 mm, dy=20 mm, dz=5 mm

Maximum value of SAR (measured) = 23.5 W/kg

Ambient Temp.: 20.0 degree.C. Liquid Temp.; 20 degree.C. Liquid temp. is kept within the 2 degree.C. during the test.



C.5 20220225 SAR1 2450 MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D2450 (2450.0 MHz); ; Duty Cycle:

1:1

Medium parameters used: f = 2450 MHz; $\sigma = 1.748$ S/m; $\varepsilon_r = 39.352$; $\rho = 1000$ kg/m³

Phantom section: Flat Section DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.42, 7.42, 7.42) @ 2450 MHz;

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

1.4 mm (Mechanical Surface Detection)

Electronics: DAE4 Sn509;

Phantom: ELI v5.0 (20 deg probe tilt); Type: QDOVA001BB;Serial: TP:1203 Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

SPC/250 mW 3/Area Scan (81x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 23.3 W/kg

SPC/250 mW 3/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5 mm, dy=5 mm, dz=5 mm

Reference Value = 117.8 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 26.7 W/kg

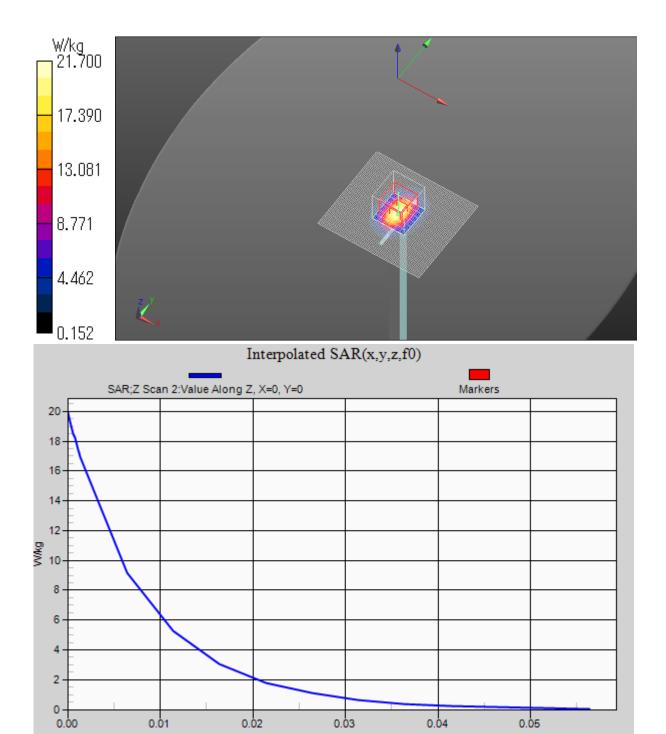
SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.42 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 51.4 %

Maximum value of SAR (measured) = 21.7 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.



C.6 20220301 SAR3 2600 MHz System Check

Communication System: UID 0, #CW (0); Communication System Band: D2600 (2600.0 MHz); ; Duty Cycle:

1:1

Medium parameters used: f = 2600 MHz; $\sigma = 1.902$ S/m; $\varepsilon_r = 38.413$; $\rho = 1000$ kg/m³

Phantom section: Flat Section DASY5 Configuration

Probe: EX3DV4 - SN3917; ConvF(7.2, 7.2, 7.2) @ 2600 MHz; Sensor-Surface: 1.4 mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1369;

Phantom: ELI v4.0 (20 deg probe tilt); Type: QDOVA001BB;Serial: TP:1045 Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7501)

Configuration/250 mW/Area Scan (81x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 24.7 W/kg

Configuration/250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5 mm, dy=5 mm, dz=5

mm

Reference Value = 116.3 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 30.1 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.2 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46.6 %Maximum value of SAR (measured) = 23.7 W/kg

Configuration/250 mW/Z Scan (1x1x18): Measurement grid: dx=20 mm, dy=20 mm, dz=5 mm

Penetration depth = 6.893 (6.594, 7.120) [mm] Maximum value of SAR (interpolated) = 29.3 W/kg

Ambient Temp.: 23.0 degree.C. Liquid Temp.; 23.0 degree.C. Liquid temp. is kept within the 2 degree.C. during the test.

