

APPENDIX B: SYSTEM CHECKING SCANS

Date: 2/24/2022

750 HEAD

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.9 \text{ S/m}$; $\epsilon_r = 41.86$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(9.85, 9.85, 9.85) @ 750 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (7x14x1): Interpolated grid: $dx=15\text{mm}$, $dy=15 \text{ mm}$

Maximum value of SAR (interpolated) = 1.98 W/kg

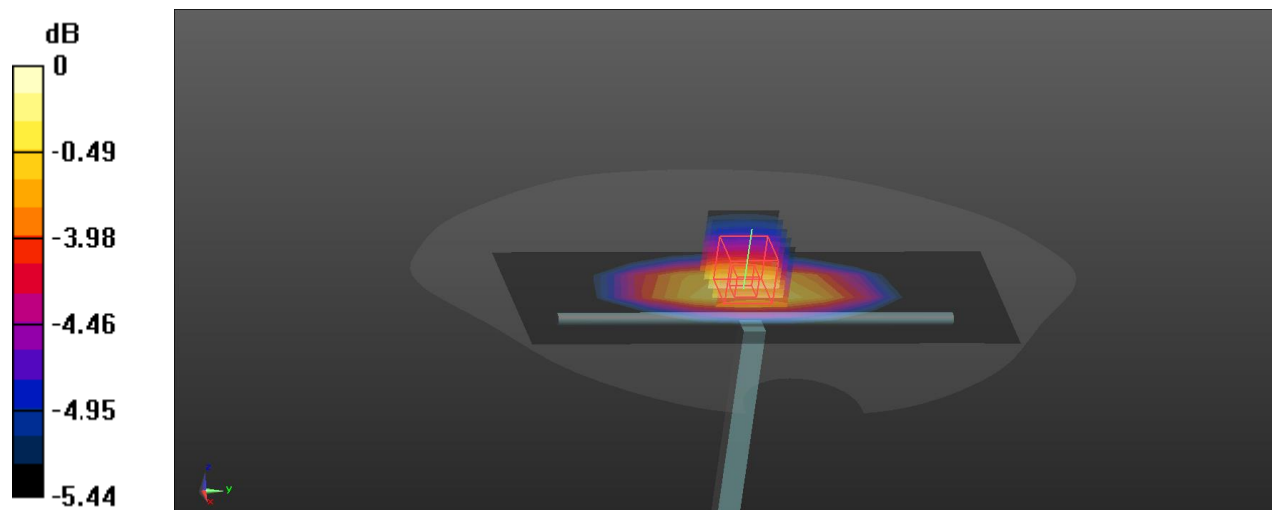
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 44.12 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 1.95 W/kg; SAR(10 g) = 1.45 W/kg

Maximum value of SAR (measured) = 2.16 W/kg



835 HEAD

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 41.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(9.48, 9.48, 9.48) @ 835 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (7x13x1): Interpolated grid: $dx=15 \text{ mm}$, $dy=15 \text{ mm}$

Maximum value of SAR (interpolated) = 3.23 W/kg

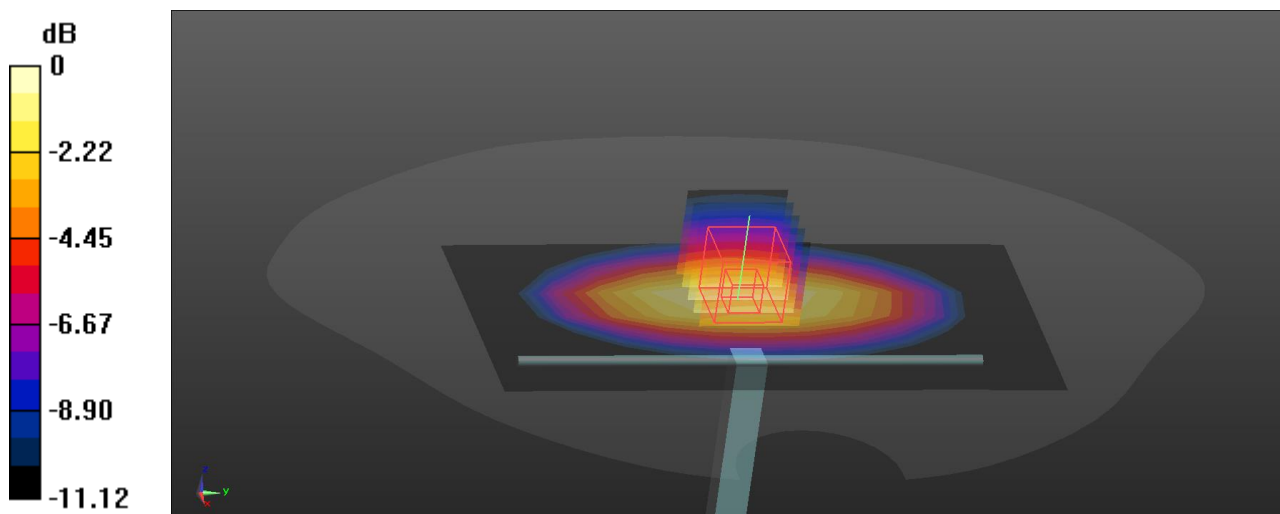
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.41 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 4.01 W/kg

SAR(1 g) = 2.58 W/kg; SAR(10 g) = 1.67 W/kg

Maximum value of SAR (measured) = 3.51 W/kg



1750 HEAD

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used: $f = 1750$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.02$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(8.16, 8.16, 8.16) @ 1750 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (6x8x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 9.00 W/kg

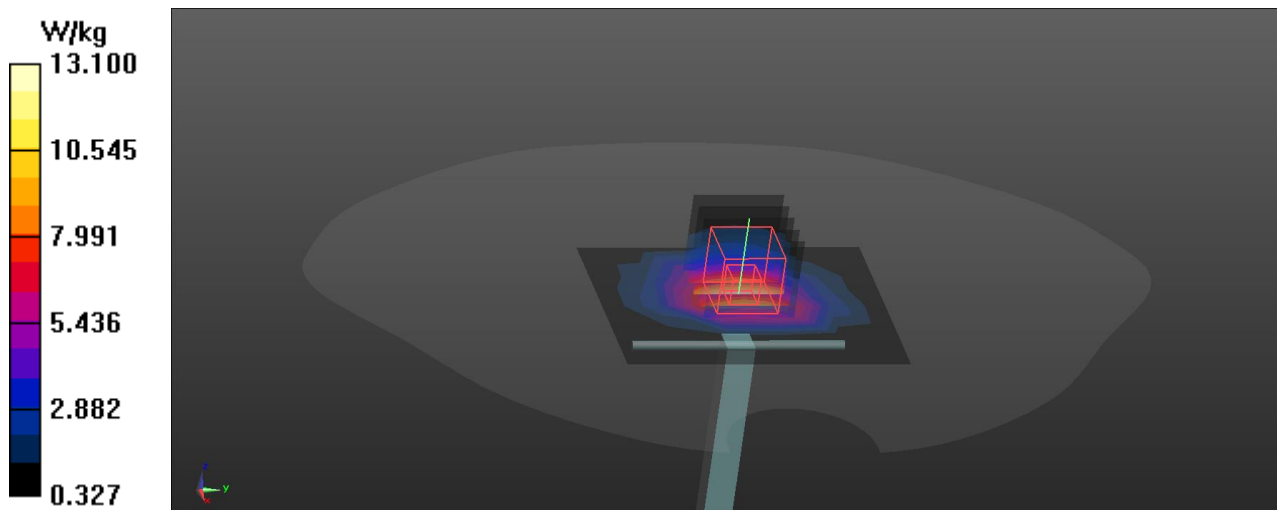
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.69 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 15.4 W/kg

SAR(1 g) = 8.89 W/kg; SAR(10 g) = 5.02 W/kg

Maximum value of SAR (measured) = 13.1 W/kg



1900 HEAD

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used: $f = 1900$ MHz; $\sigma = 1.45$ S/m; $\epsilon_r = 39.75$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(7.90, 7.90, 7.90) @ 1900 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (7x9x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 14.4 W/kg

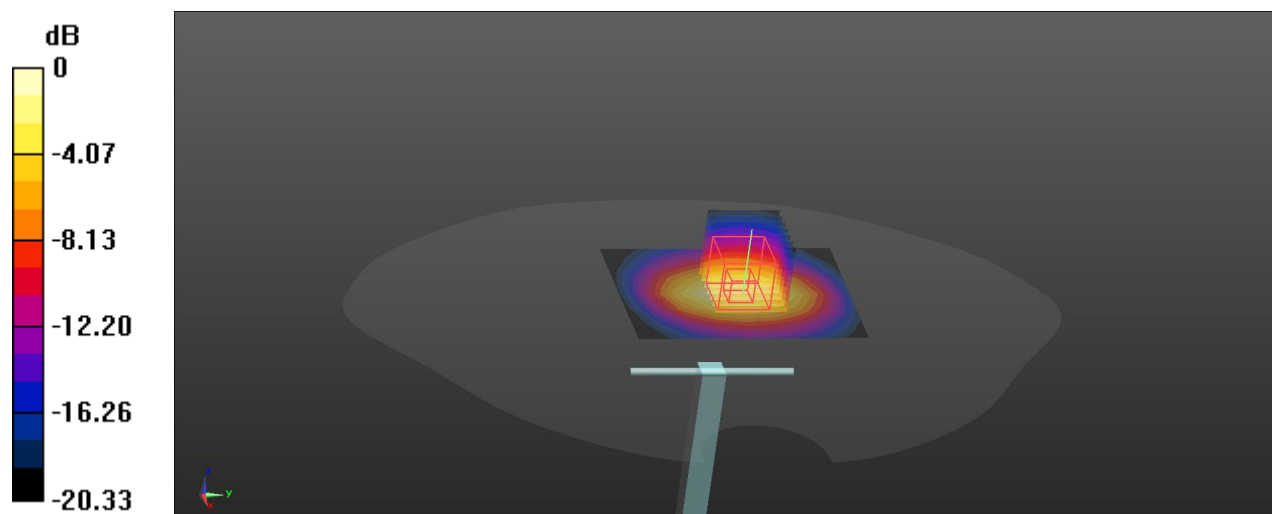
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 103.6 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 8.97 W/kg; SAR(10 g) = 4.7 W/kg

Maximum value of SAR (measured) = 14.3 W/kg



2450 HEAD

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used: $f = 2450$ MHz; $\sigma = 1.88$ S/m; $\epsilon_r = 37.97$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(7.28, 7.28, 7.28) @ 2450 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (7x9x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 15.1 W/kg

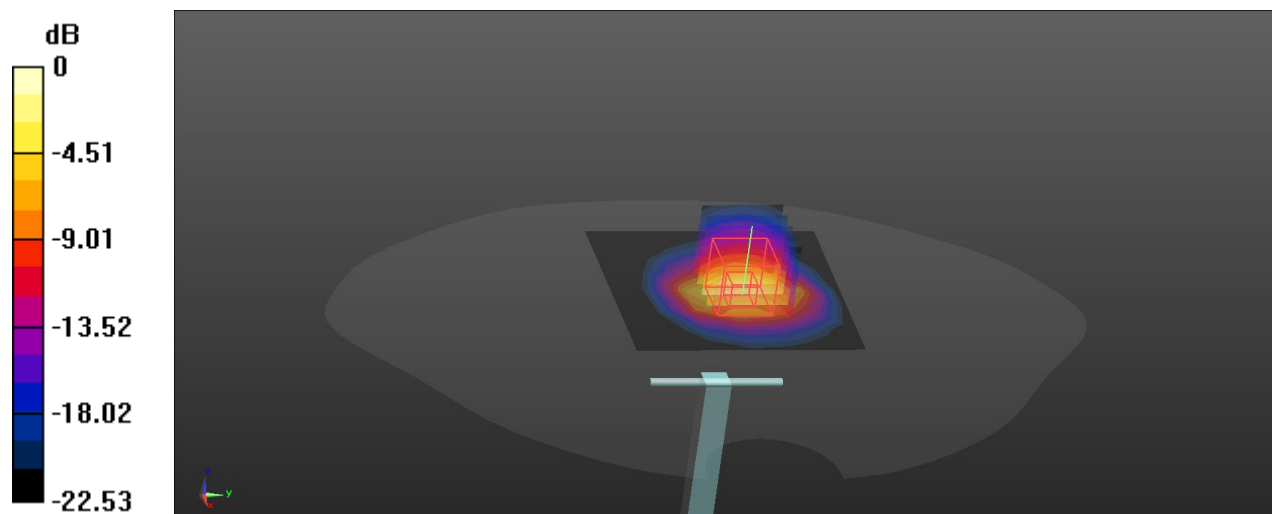
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.32 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.1 W/kg

Maximum value of SAR (measured) = 17.5 W/kg



2600 HEAD

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2600 Head Medium parameters used: $f = 2600$ MHz; $\sigma = 2.02$ S/m; $\epsilon_r = 39.53$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(7.12, 7.12, 7.12) @ 2600 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (7x9x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 18.2 W/kg

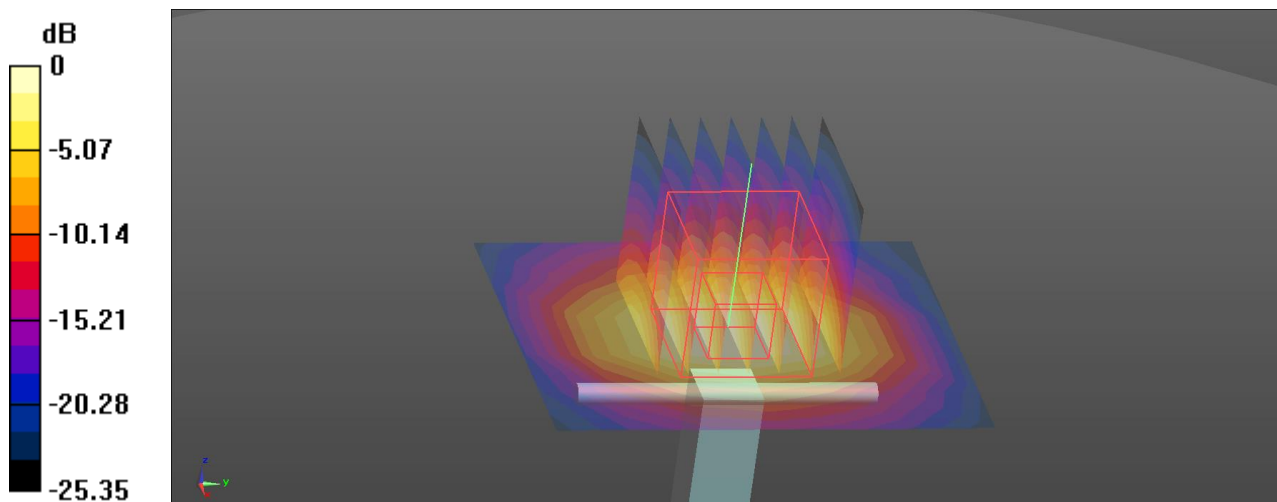
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.25 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 32.3 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 5.97 W/kg

Maximum value of SAR (measured) = 18.8 W/kg



APPENDIX C: MEASUREMENT SCANS

Date: 2/25/2022

Test Laboratory: Intertek Service

GSM850 1-Side_CH 190

Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium: HSL900 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.9025$ m; $\epsilon_r = 42.479$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(9.48, 9.48, 9.48) @ 836.6 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.91 W/kg

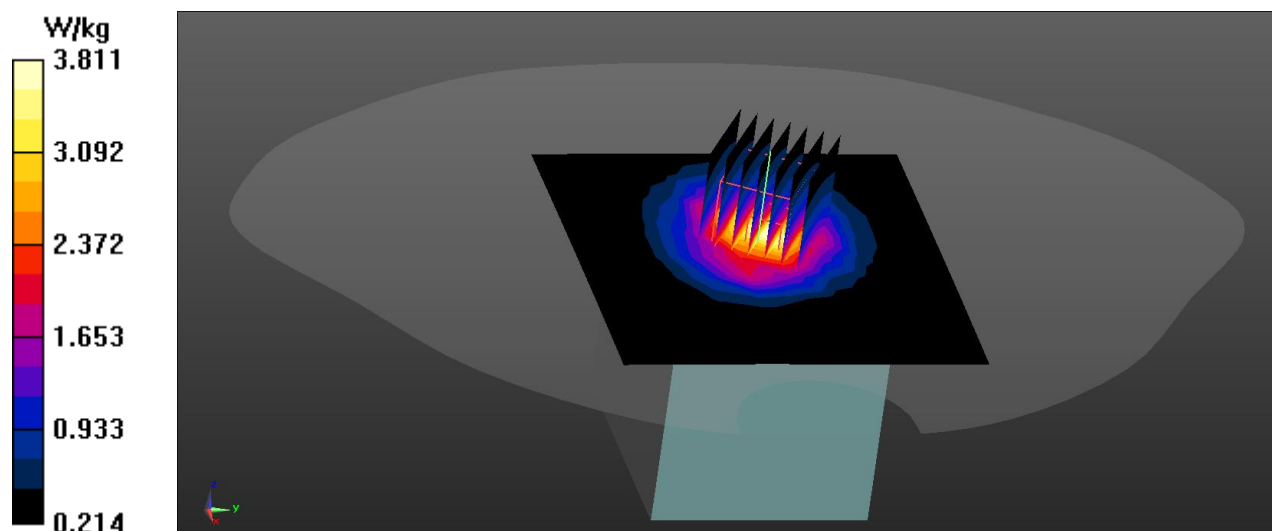
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.31 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 4.71 W/kg

SAR(1 g) = 2.67 W/kg; SAR(10 g) = 1.64 W/kg

Maximum value of SAR (measured) = 3.81 W/kg



Date: 2/26/2022

Test Laboratory: Intertek Service

FCC GSM1900 8-Side_CH 661

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium: 1900 Head Medium parameters used: $f = 1880$ MHz; $\sigma = 1.389$ S/m; $\epsilon_r = 40.311$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(7.90, 7.90, 7.90) @ 1880 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x19x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 5.42 W/kg

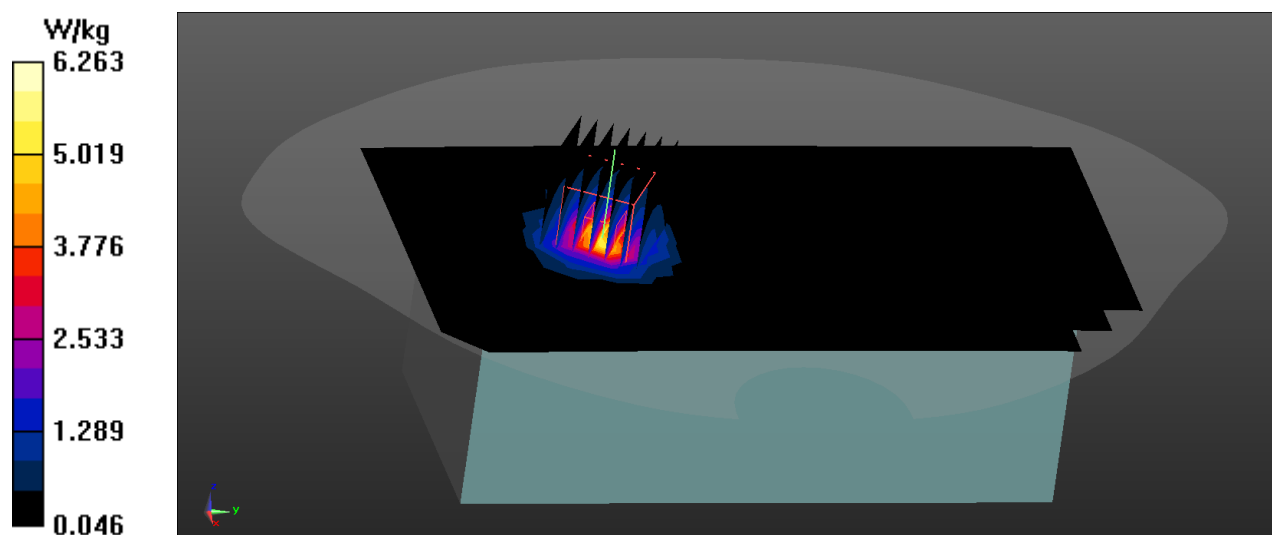
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.410 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 7.63 W/kg

SAR(1 g) = 3.76 W/kg; SAR(10 g) = 1.76 W/kg

Maximum value of SAR (measured) = 6.26 W/kg



Date: 2/27/2022

Test Laboratory: Intertek Service

FCC WCDMA BAND2 8-Side_CH 9400

Communication System: UID 0, WCDMA 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used: $f = 1880$ MHz; $\sigma = 1.389$ S/m; $\epsilon_r = 40.311$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(7.90, 7.90, 7.90) @ 1880 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x19x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 8.17 W/kg

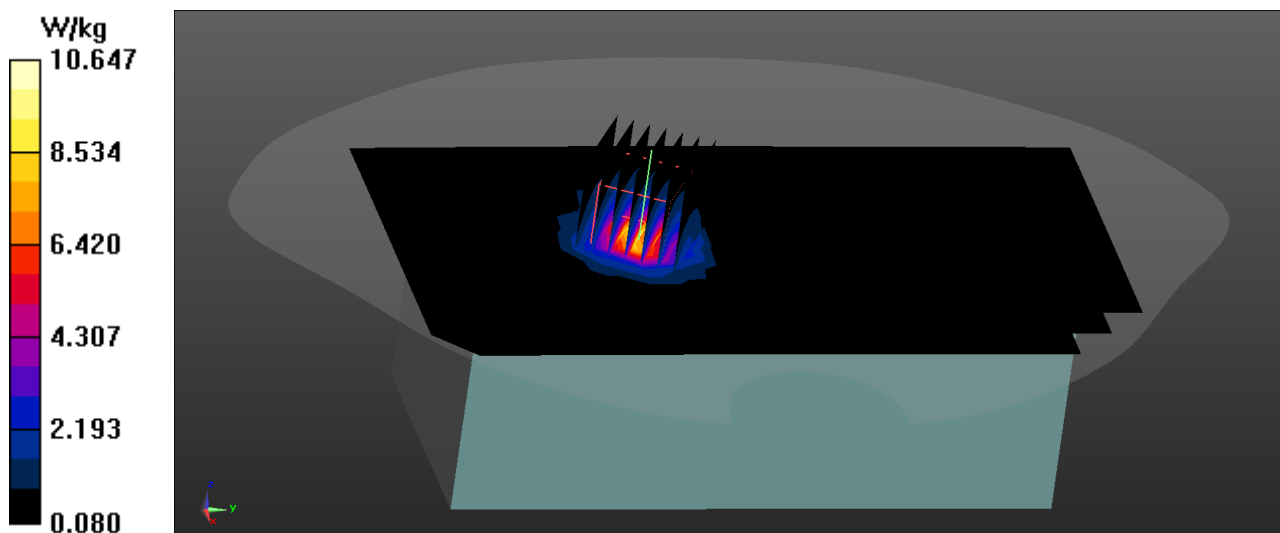
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.801 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 6.22 W/kg; SAR(10 g) = 2.85 W/kg

Maximum value of SAR (measured) = 10.6 W/kg



Date: 2/25/2022

Test Laboratory: Intertek Service

FCC WCDMA BAND4 1-Side_CH 1312

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

Medium: 1750 Head Medium parameters used: $f = 1712.4$ MHz; $\sigma = 1.363$ S/m; $\epsilon_r = 40.132$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(8.16, 8.16, 8.16) @ 1732.6 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 7.09 W/kg

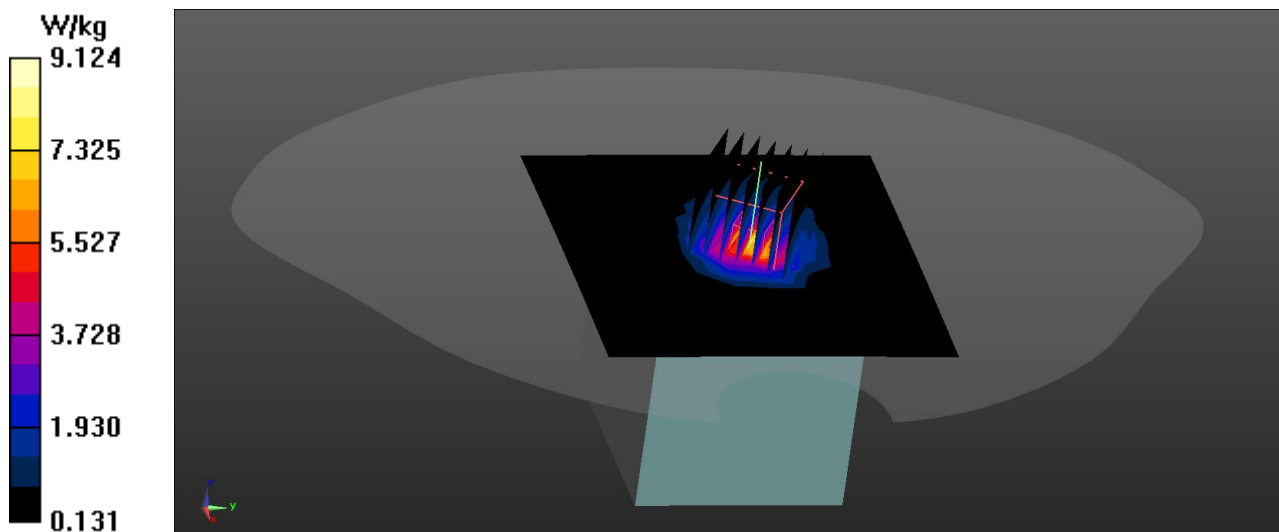
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 64.93 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 11.2 W/kg

SAR(1 g) = 5.51 W/kg; SAR(10 g) = 2.73 W/kg

Maximum value of SAR (measured) = 9.12 W/kg



Date: 2/27/2022

Test Laboratory: Intertek Service

FCC LTE BAND2 8-Side_CH 18700

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used: $f = 1860$ MHz; $\sigma = 1.381$ S/m; $\epsilon_r = 40.365$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(7.90, 7.90, 7.90) @ 1880 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x19x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 4.25 W/kg

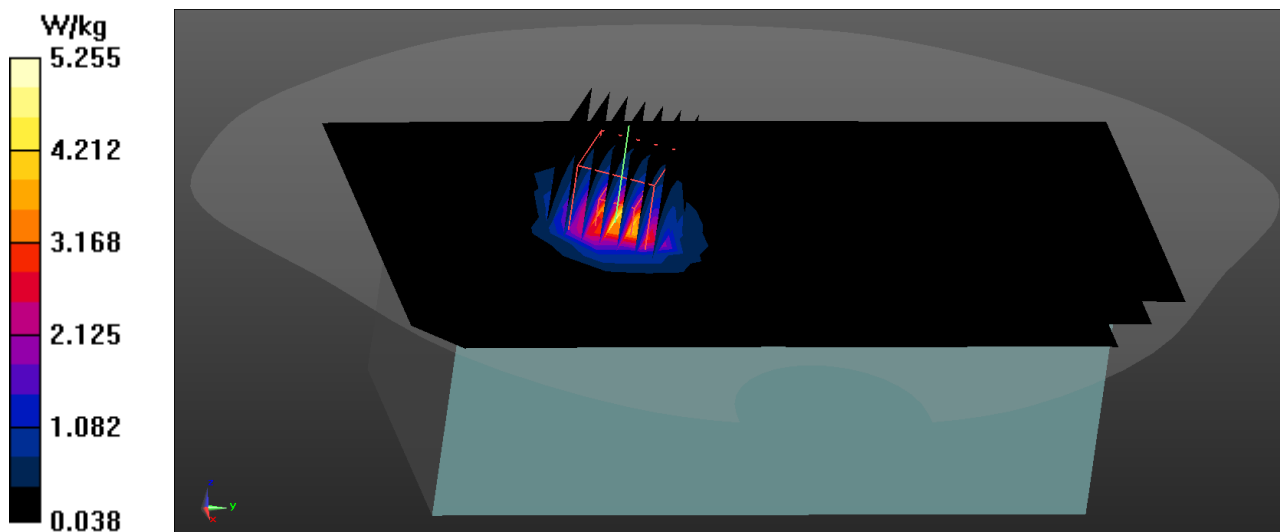
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.654 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 6.48 W/kg

SAR(1 g) = 3.16 W/kg; SAR(10 g) = 1.45 W/kg

Maximum value of SAR (measured) = 5.26 W/kg



Date: 2/26/2022

Test Laboratory: Intertek Service

FCC LTE BAND4 1-Side_CH 20175

Communication System: UID 0, Generic LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.325$ S/m; $\epsilon_r = 41.169$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(8.16, 8.16, 8.16) @ 1732.5 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.98 W/kg

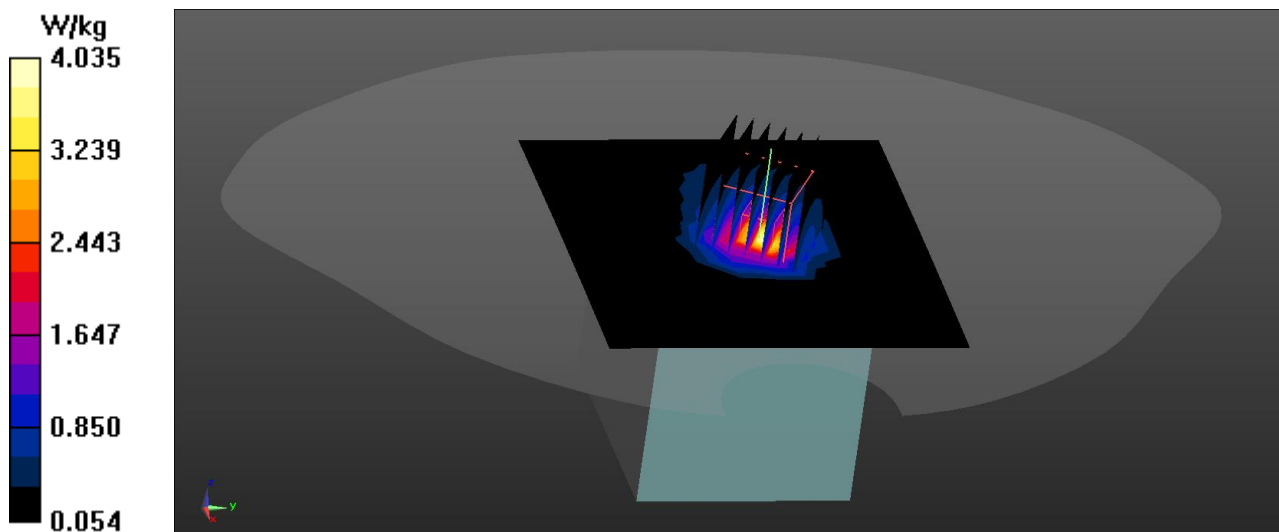
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.91 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 4.92 W/kg

SAR(1 g) = 2.36 W/kg; SAR(10 g) = 1.17 W/kg

Maximum value of SAR (measured) = 4.04 W/kg



Date: 2/28/2022

Test Laboratory: Intertek Service

FCC LTE BAND7 1-Side_CH 21350

Communication System: UID 0, Generic LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used: $f = 2560$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 39.824$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(7.28, 7.28, 7.28) @ 2535 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 2.56 W/kg

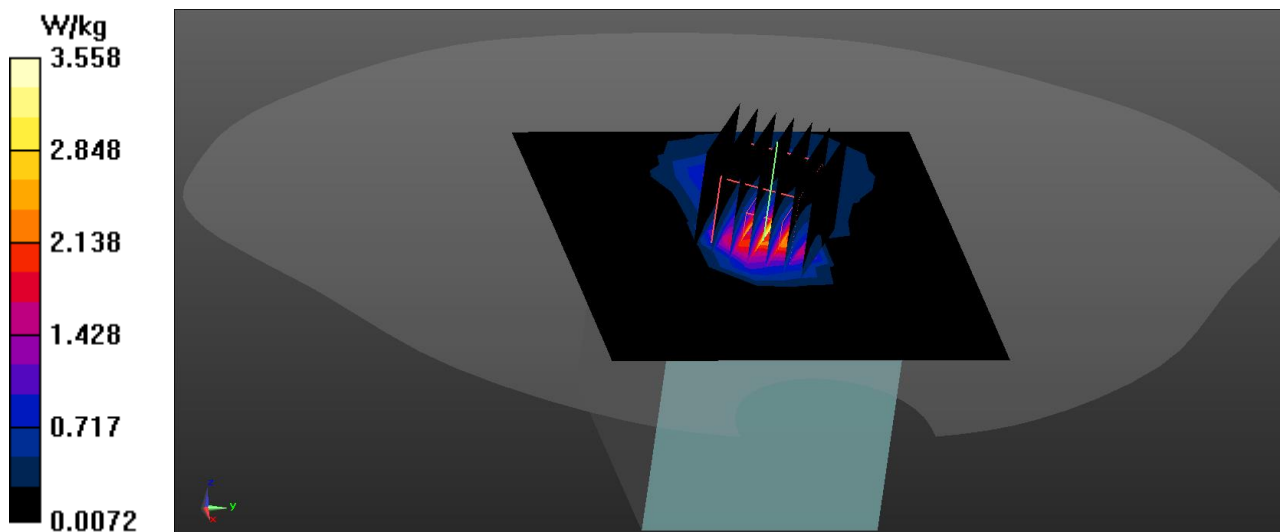
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 39.19 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 4.72 W/kg

SAR(1 g) = 1.96 W/kg; SAR(10 g) = 0.812 W/kg

Maximum value of SAR (measured) = 3.56 W/kg



Date: 2/25/2022

Test Laboratory: Intertek Service

FCC LTE BAND12 6-Side_CH 23130

Communication System: UID 0, Generic LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium: HSL750 Medium parameters used (interpolated): $f = 711 \text{ MHz}$; $\sigma = 0.858 \text{ S/m}$; $\epsilon_r = 42.446$;
 $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(9.85, 9.85, 9.85) @ 707.5 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 2.01 W/kg

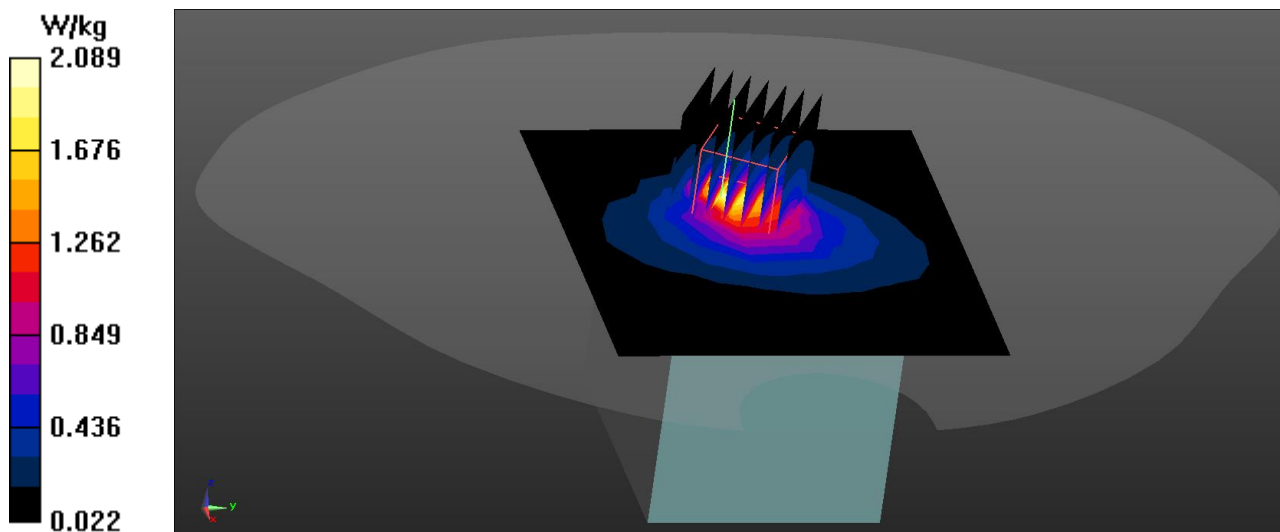
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.43 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.29 W/kg

SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.611 W/kg

Maximum value of SAR (measured) = 2.09 W/kg



Date: 2/25/2022

Test Laboratory: Intertek Service

FCC LTE BAND13 1-Side_CH 23230

Communication System: UID 0, Generic LTE (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: HSL750 Medium parameters used (interpolated): $f = 782 \text{ MHz}$; $\sigma = 0.926 \text{ S/m}$; $\epsilon_r = 41.412$;
 $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: $22.0 \text{ }^\circ\text{C}$; Liquid Temperature: $21.5 \text{ }^\circ\text{C}$

DASY Configuration:

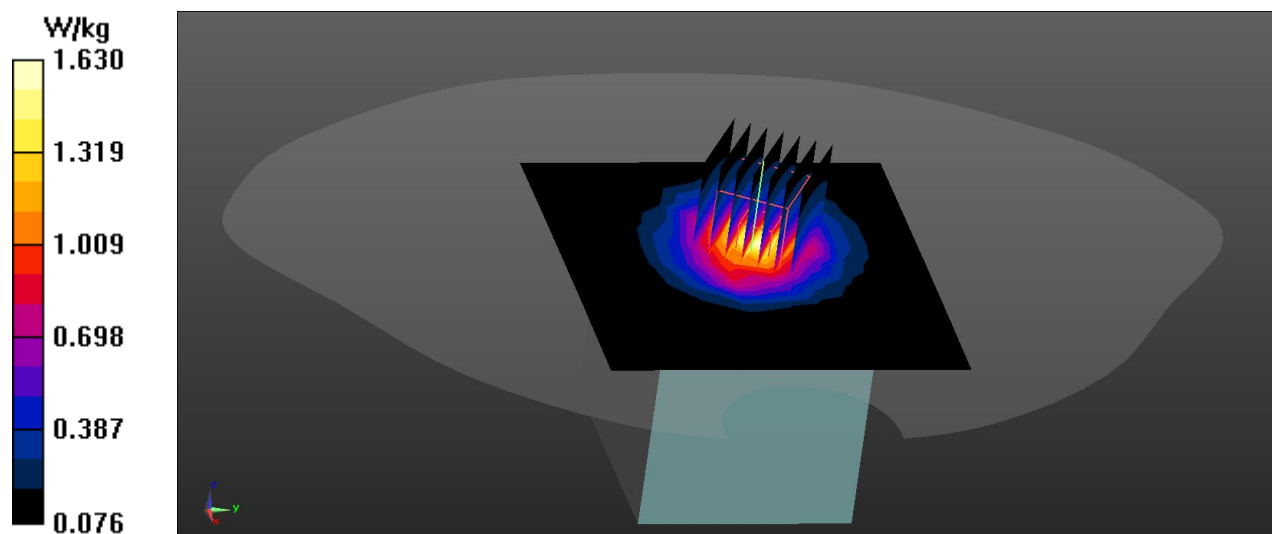
Probe: EX3DV4 - SN7322; ConvF(9.85, 9.85, 9.85) @ 782 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$ Maximum value of SAR (measured) = 1.59 W/kg Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 35.29 V/m ; Power Drift = 0.14 dB Peak SAR (extrapolated) = 2.02 W/kg SAR(1 g) = 1.11 W/kg ; SAR(10 g) = 0.660 W/kg Maximum value of SAR (measured) = 1.63 W/kg 

Date: 2/28/2022

Test Laboratory: Intertek Service

FCC LTE BAND25 1-Side_CH 26465

Communication System: UID 0, Generic LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.46$ S/m; $\epsilon_r = 40.071$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(7.90, 7.90, 7.90) @ 1860 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 4.79 W/kg

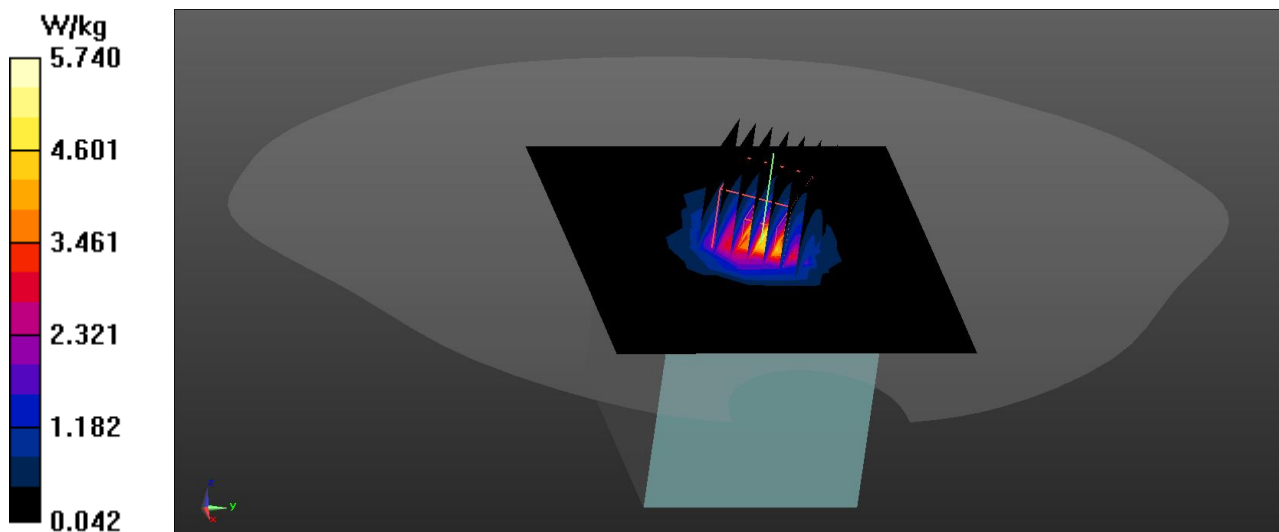
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.67 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 7.14 W/kg

SAR(1 g) = 3.35 W/kg; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (measured) = 5.74 W/kg



Date: 2/24/2022

Test Laboratory: Intertek Service

FCC LTE BAND26 1-Side_CH 26765 (814MHz-824MHz)

Communication System: UID 0, Generic LTE (0); Frequency: 821.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (extrapolated): $f = 821.5$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 41.082$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(9.48, 9.48, 9.48) @ 821.5 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.85 W/kg

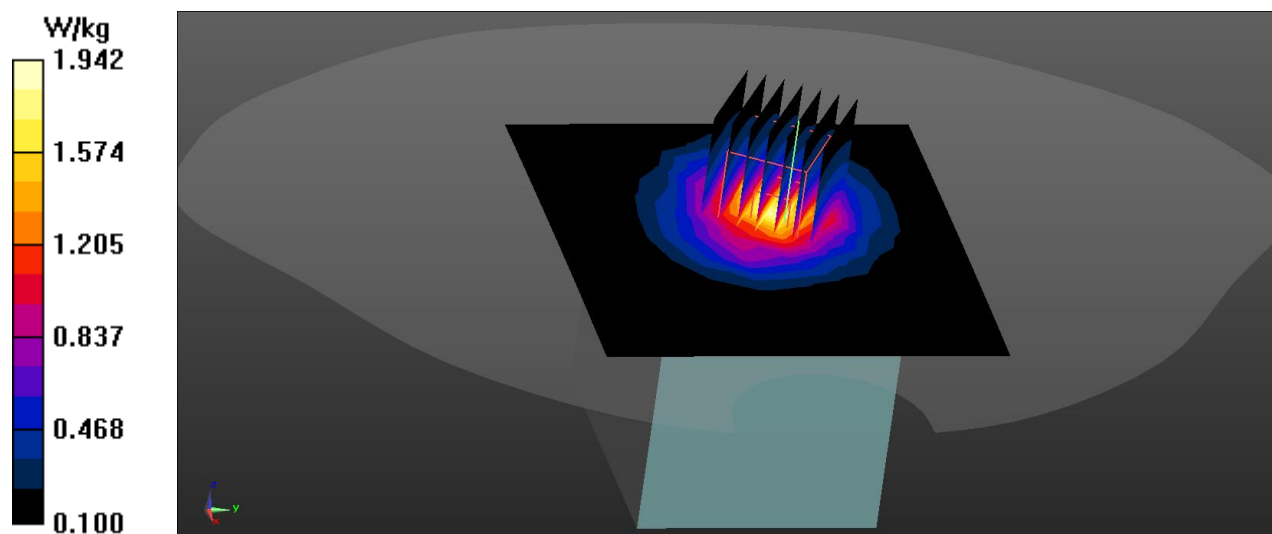
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.37 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 2.39 W/kg

SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.798 W/kg

Maximum value of SAR (measured) = 1.94 W/kg



Date: 2/24/2022

Test Laboratory: Intertek Service

FCC LTE BAND26 1-Side_CH 26865 (824MHz-849MHz)

Communication System: UID 0, Generic LTE (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.907$ S/m; $\epsilon_r = 41.299$;
 $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(9.48, 9.48, 9.48) @ 831.5 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.81 W/kg

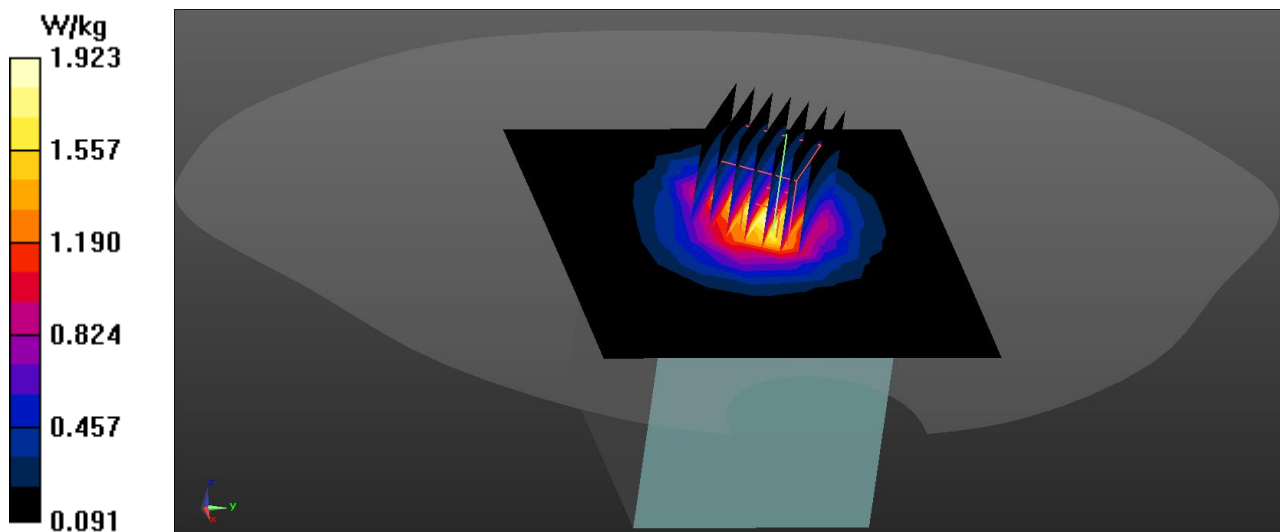
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 41.02 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.42 W/kg

SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.780 W/kg

Maximum value of SAR (measured) = 1.92 W/kg



Date: 2/28/2022

Test Laboratory: Intertek Service

LTE BAND38-Position 8-Side_CH 38000

Communication System: UID 0, Generic LTE TDD (0); Frequency: 2595 MHz; Duty Cycle: 1:1.58016
Medium: 2600 Head Medium parameters used: $f = 2595$ MHz; $\sigma = 2.003$ S/m; $\epsilon_r = 39.611$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(7.12, 7.12, 7.12) @ 2610 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x19x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.943 W/kg

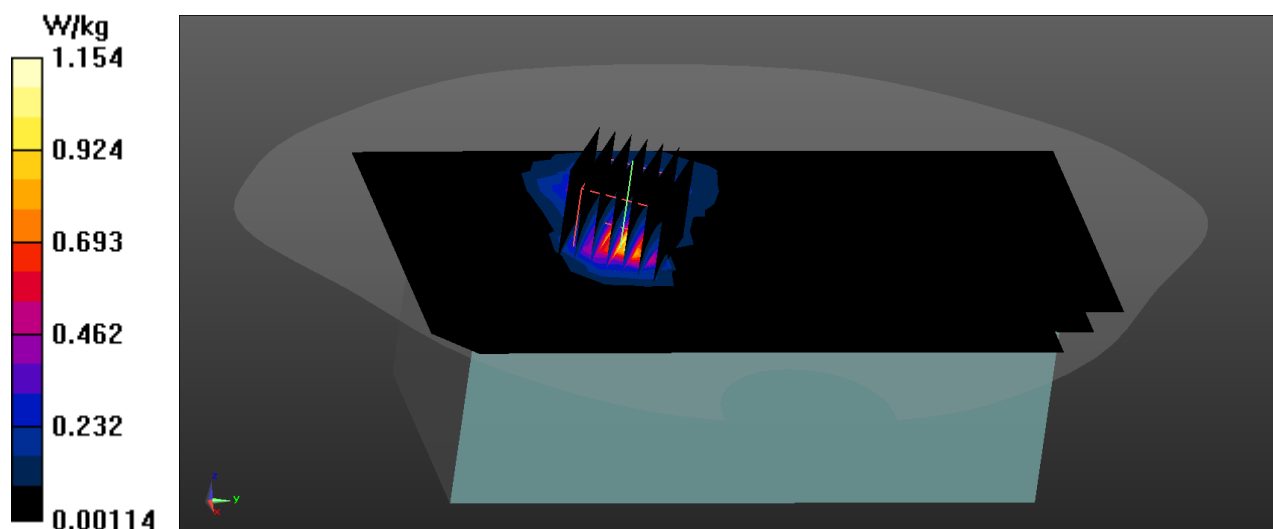
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.694 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.241 W/kg

Maximum value of SAR (measured) = 1.15 W/kg



Date: 2/28/2022

Test Laboratory: Intertek Service

FCC LTE BAND41 1-Side_CH 40620

Communication System: UID 0, Generic LTE TDD (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58016
Medium: 2600 Head Medium parameters used: $f = 2593$ MHz; $\sigma = 2.091$ S/m; $\epsilon_r = 39.643$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

Probe: EX3DV4 - SN7322; ConvF(7.12, 7.12, 7.12) @ 2593 MHz; Calibrated: 1/17/2022

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1473; Calibrated: 12/30/2021

Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888

DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: dx=12mm, dy=12mm

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

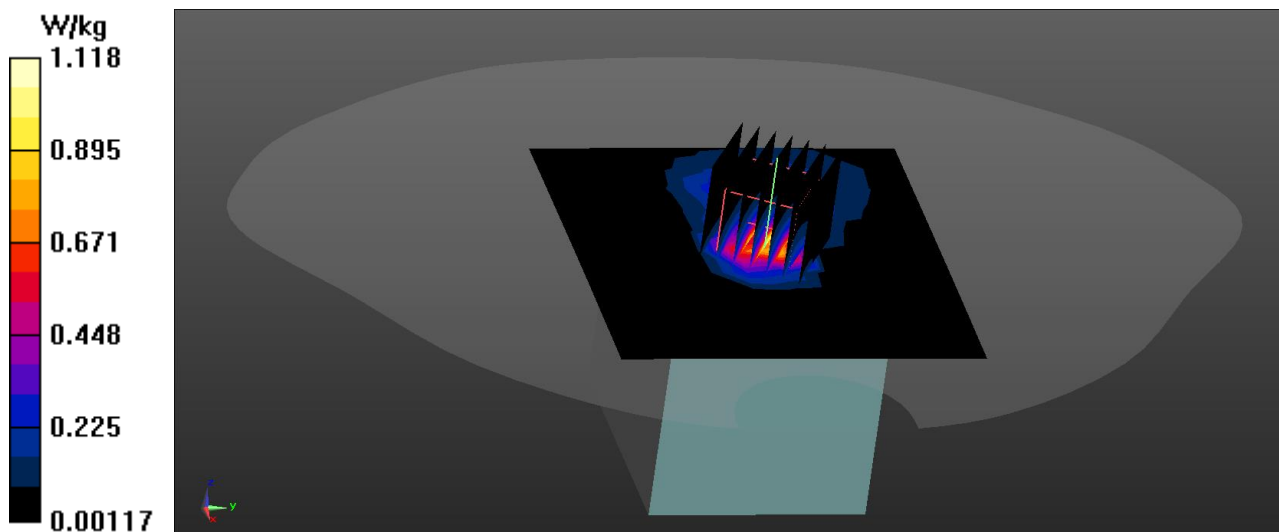
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.68 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.601 W/kg; SAR(10 g) = 0.241 W/kg

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



Test Laboratory: Intertek Service

WIFI b_Position 6_CH 1

Communication System: UID 0, WiFi 802.11 b (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.87 \text{ S/m}$; $\epsilon_r = 38.02$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature: 22.0 °C; Liquid Temperature: 21.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN7322; ConvF(7.28, 7.28, 7.28) @ 2442 MHz; Calibrated: 1/17/2022
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1473; Calibrated: 12/30/2021
- Phantom: SAM 1 V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1888
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (11x10x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 1.17 W/kg

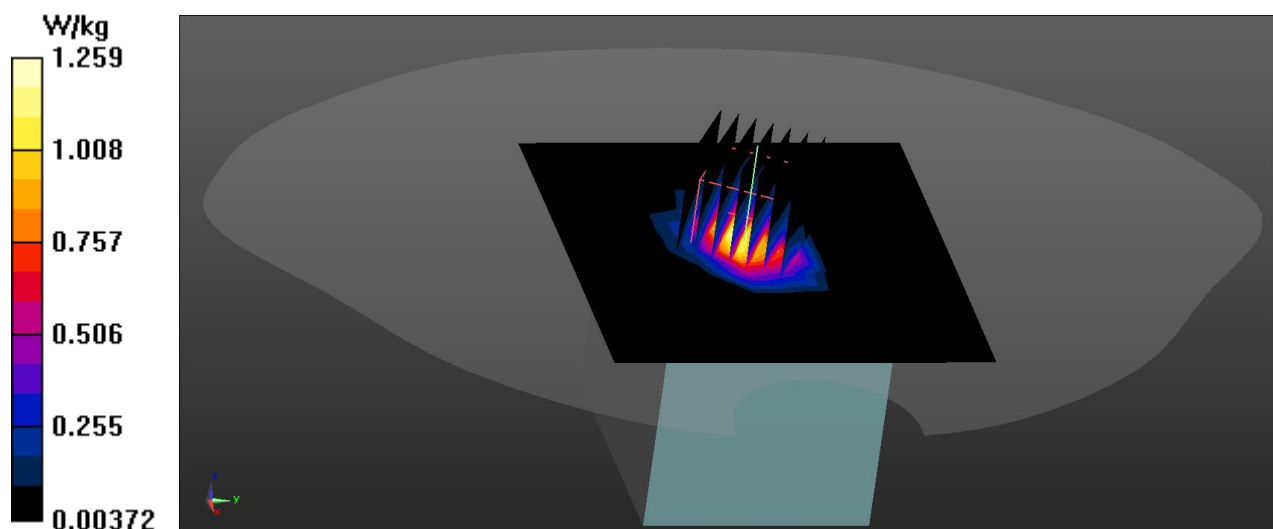
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.51 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 0.952 W/kg; SAR(10 g) = 0.550 W/kg

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



ANNEX D: SYSTEM VALIDATION

The SAR system must be validated against its performance specifications before it is deployed. When SAR probes, system components or software are changed, upgraded or recalibrated, these must be validated with the SAR system(s) that operates with such components.

Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (≤ 20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

Table D.1: Antenna Parameters with Body Tissue Simulating Liquid

Table D.1: System Validation Part 1

Dipole D750V3 SN: 1141				
Head Liquid				
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	$\Delta\Omega$
2019-09-23	-28.8	-	50.9+3.54j	-
2020-08-30	-28.6	-0.2	51.2+2.73j	0.3
2021-08-30	-28.1	-0.7	51.6+2.81j	0.7

Table D.2: System Validation Part 2

System No.	Probe SN.	Liquid name	Validation date	Frequency point	Permittivity ϵ	Conductivity σ (S/m)
1	1141	Head	2/24/2022	750MHz	41.86	0.90

Table D.3: System Validation Part 3

CW Validation	Sensitivity	PASS	PASS
	Probe linearity	PASS	PASS
	Probe Isotropy	PASS	PASS
Mod. Validation	MOD.type	QPSK	QPSK
	Duty factor	PASS	PASS
	PAR	PASS	PASS