

Annex A. Plots of System Verification

The plots for system verification are shown as follows.

Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S01 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N1_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.915$ S/m; $\epsilon_r = 43.052$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 835 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.611 W/kg

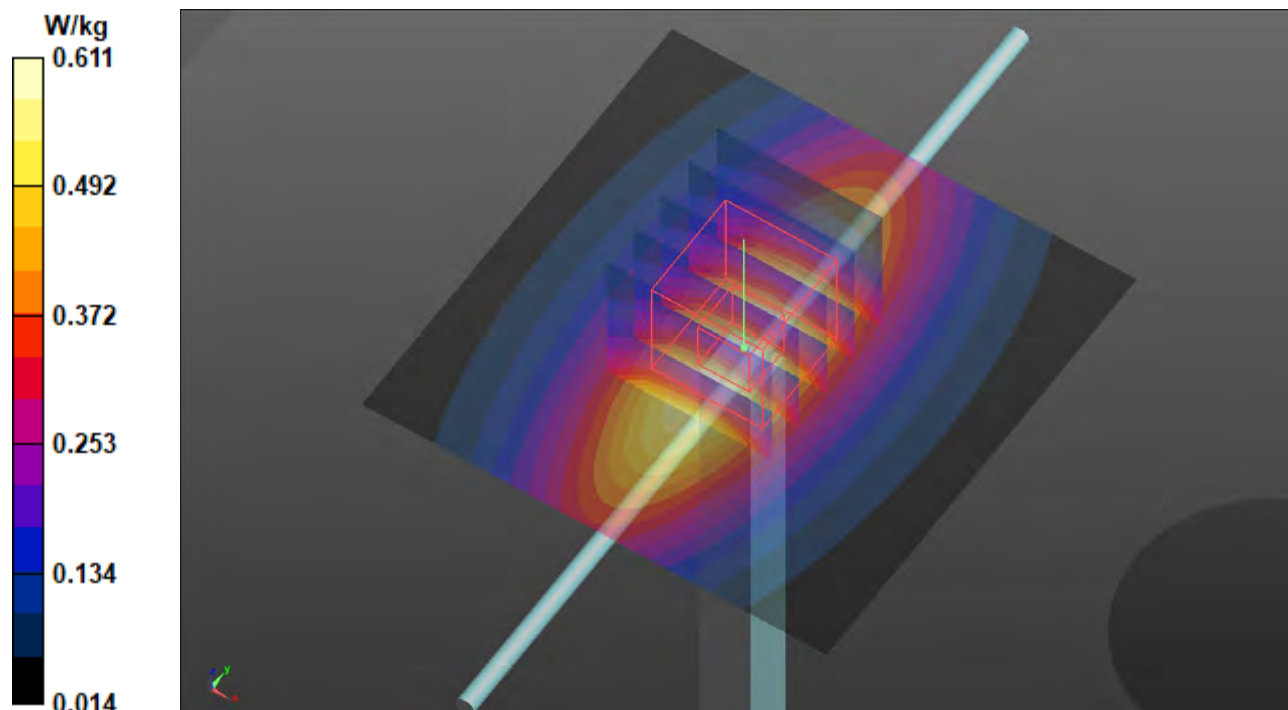
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 26.88 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.298 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.611 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S02 System Check_H1900_220209

DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

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

Medium: H16T20N1_0209 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.463$ S/m; $\epsilon_r = 41.25$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(8.17, 8.17, 8.17) @ 1900 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 3.08 W/kg

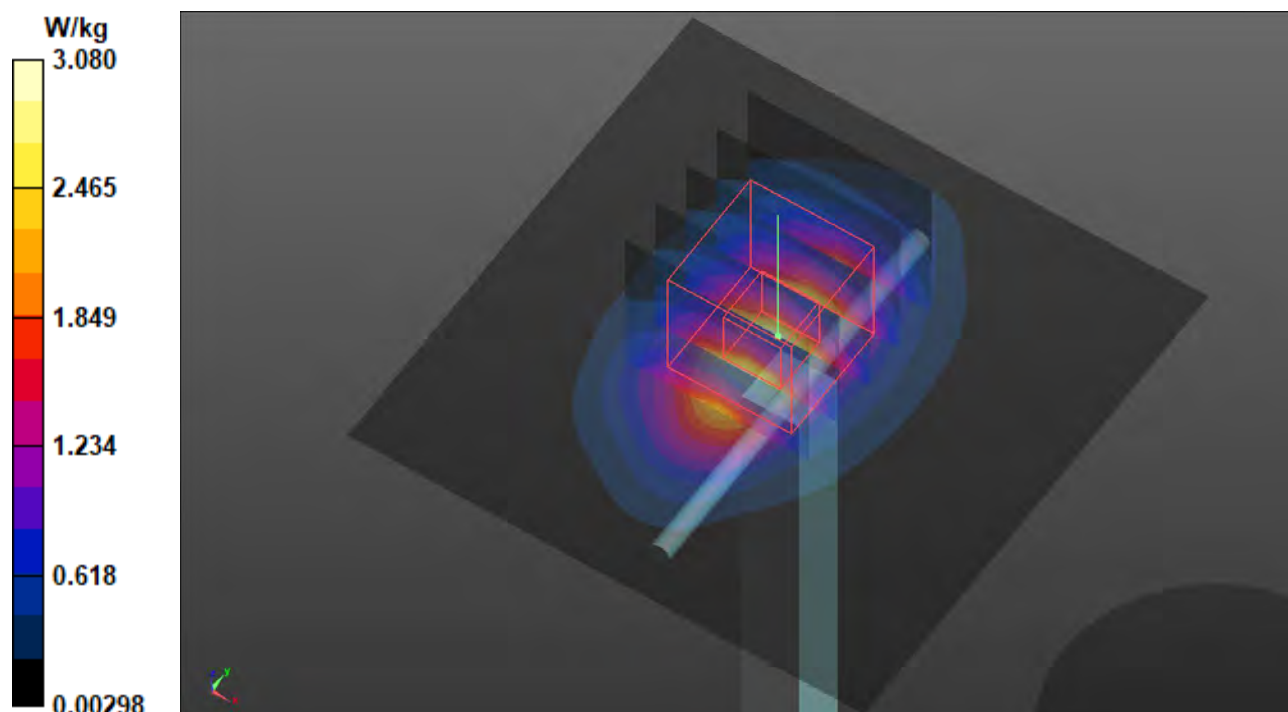
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 44.90 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.69 W/kg

SAR(1 g) = 1.94 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.08 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S03 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N3_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.666 W/kg

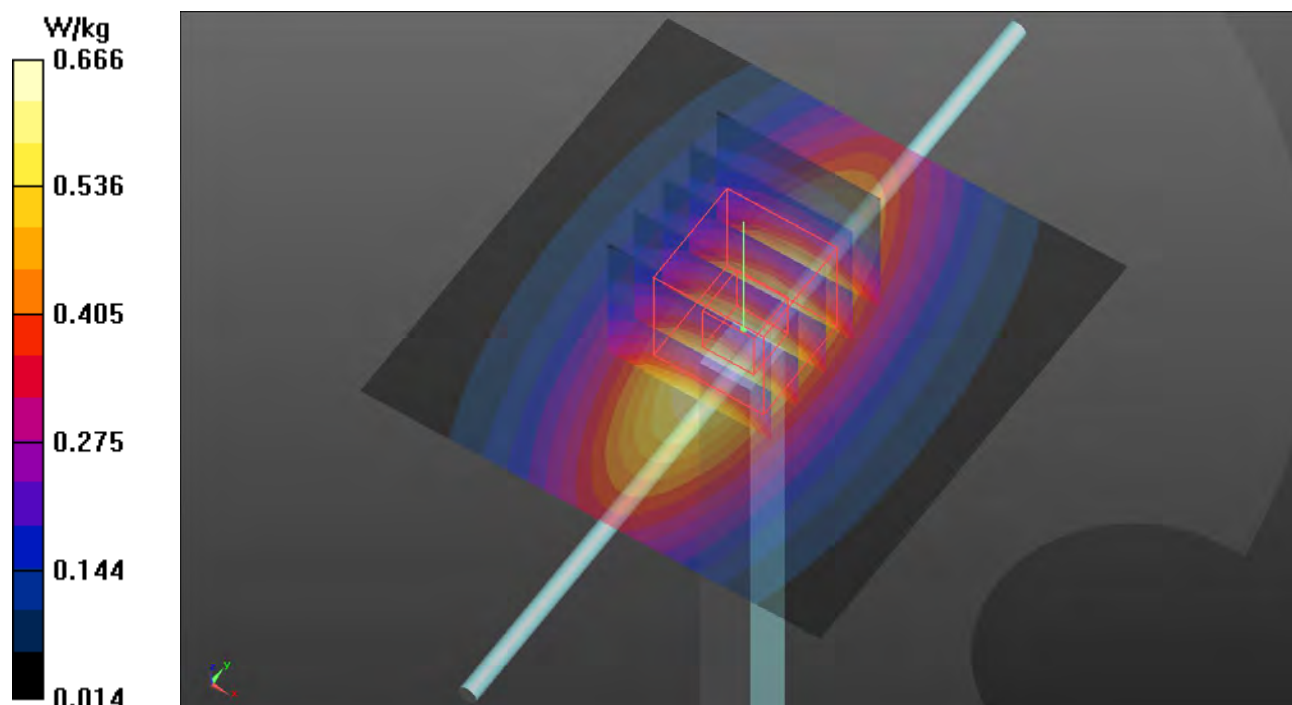
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 28.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.323 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.663 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S04 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N3_0210 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 42.999$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $23.1 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.666 W/kg

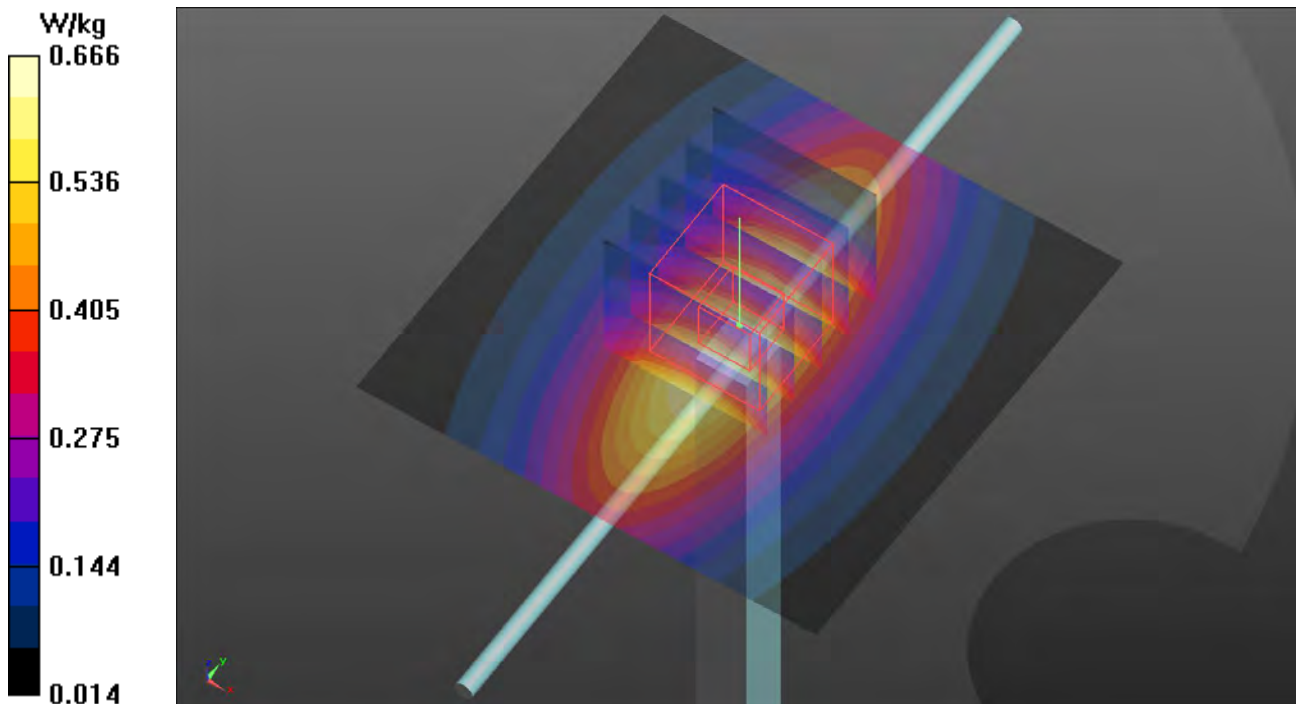
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.36 V/m ; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.496 W/kg ; SAR(10 g) = 0.323 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.663 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S05 System Check_H2600_220209

DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

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

Medium: H19T27N1_0209 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.035$ S/m; $\epsilon_r = 38.071$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.3, 7.3, 7.3) @ 2600 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 4.85 W/kg

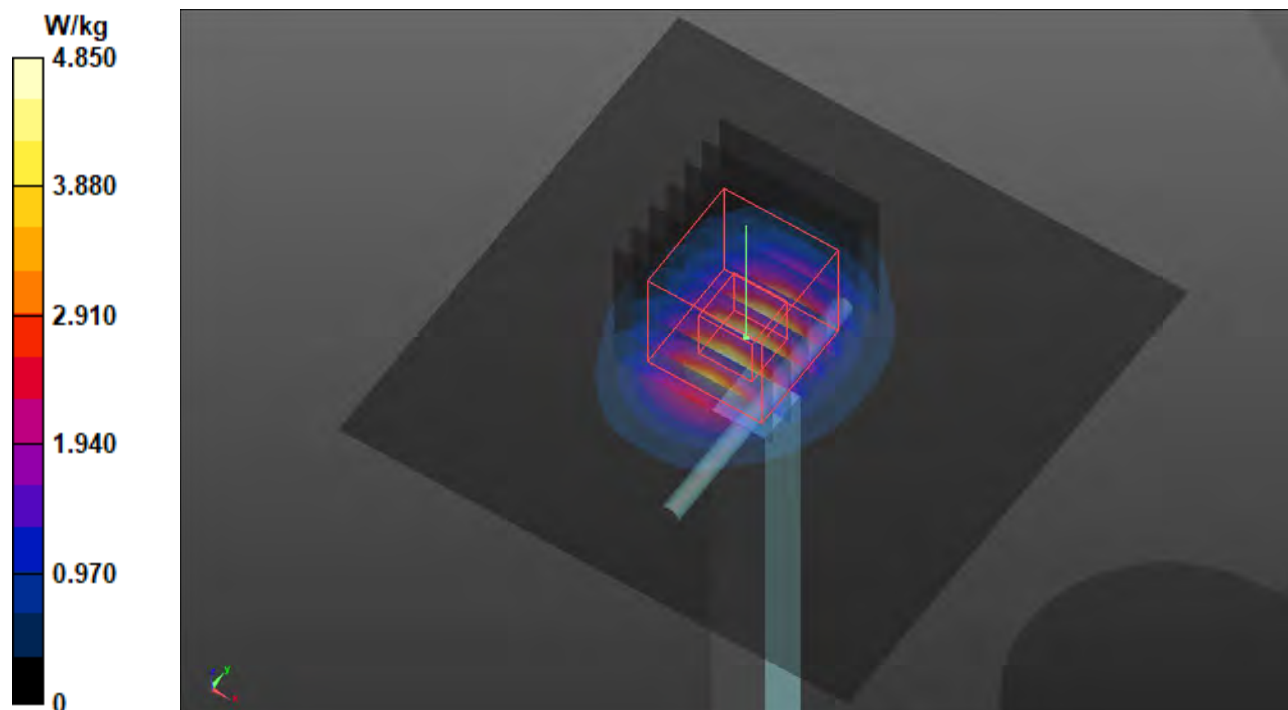
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 46.06 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 6.43 W/kg

SAR(1 g) = 2.88 W/kg; SAR(10 g) = 1.32 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.06 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S06 System Check_H2450_220209

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

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

Medium: H19T27N1_0209 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.89$ S/m; $\epsilon_r = 38.349$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2450 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 3.52 W/kg

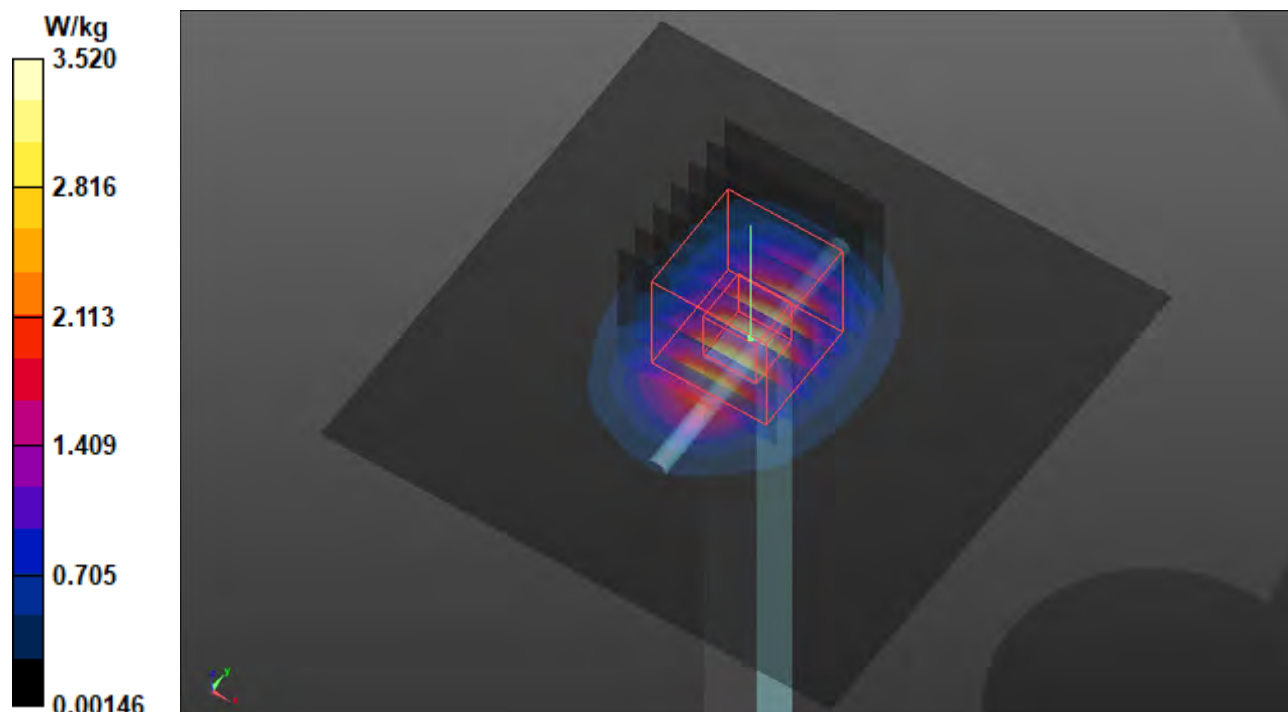
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 42.03 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 4.12 W/kg

SAR(1 g) = 2.65 W/kg; SAR(10 g) = 1.08 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.37 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/17

S07 System Check_H5250_220217

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0217 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.676$ S/m; $\epsilon_r = 37.628$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.29, 5.29, 5.29) @ 5250 MHz; Calibrated: 2021/3/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/4/14
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.66 W/kg

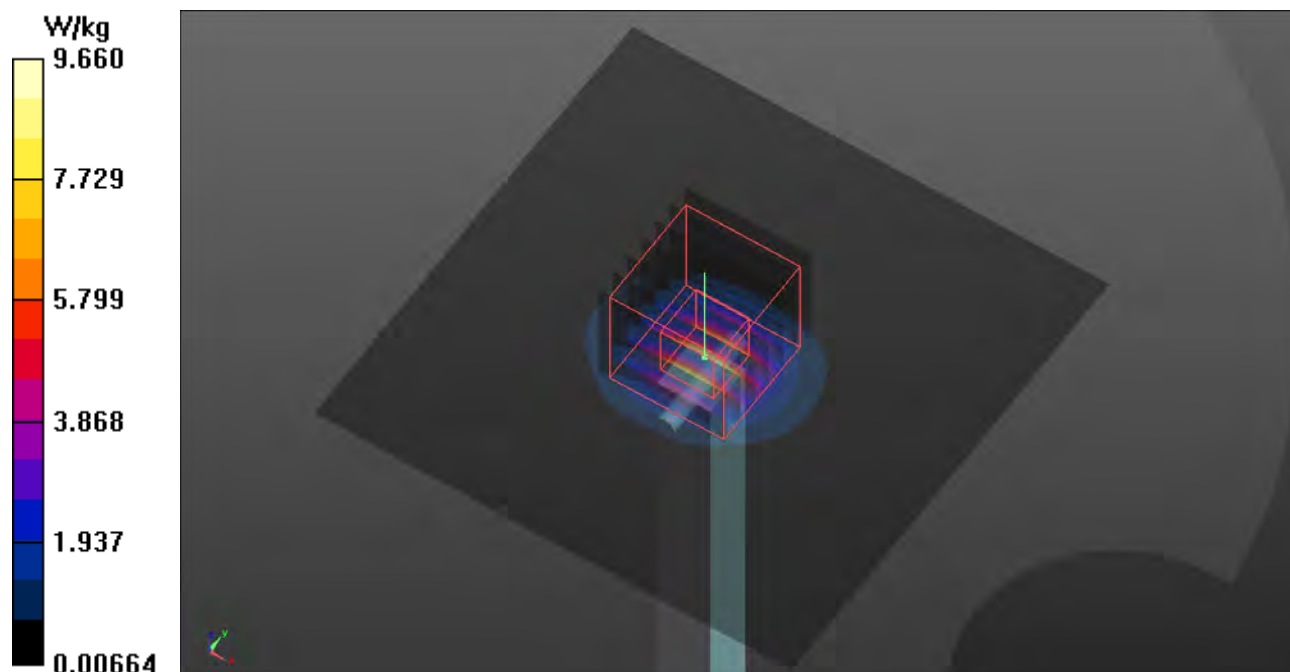
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 50.86 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 4.23 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.5 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S08 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N1_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.915$ S/m; $\epsilon_r = 43.052$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 835 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.611 W/kg

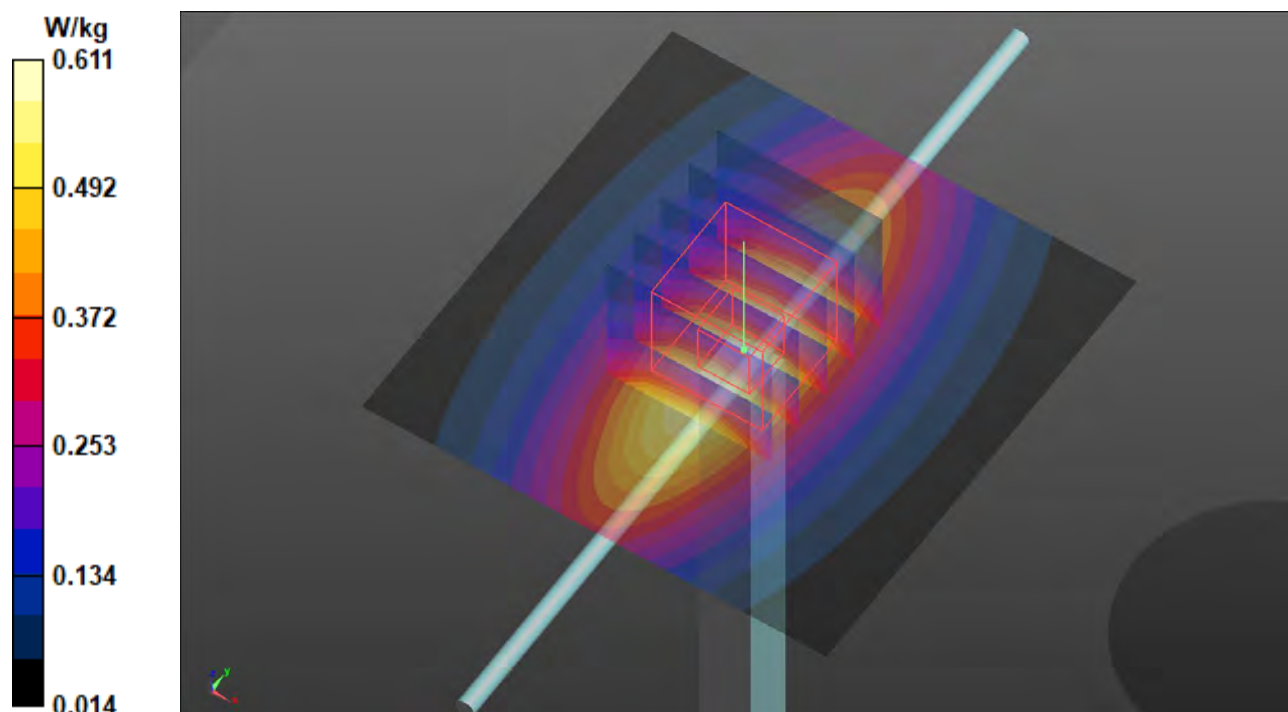
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 26.88 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.298 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.611 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S09 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N3_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.666 W/kg

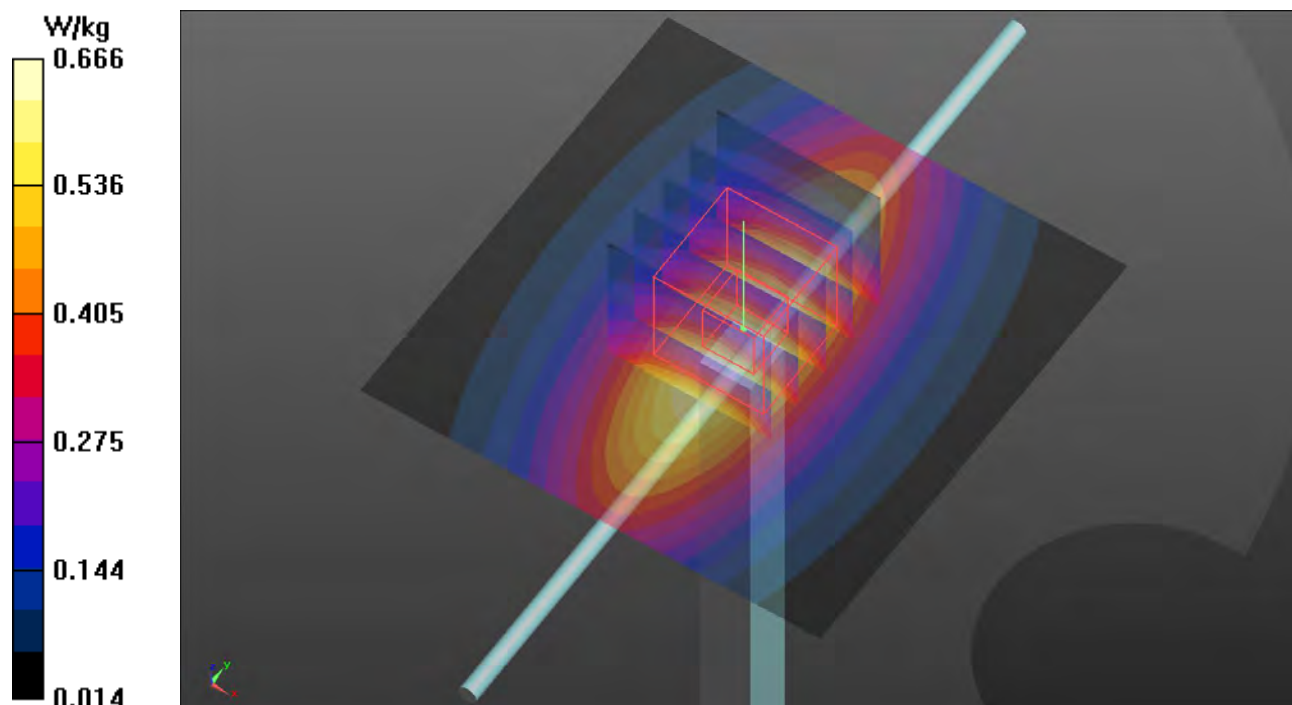
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 28.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.323 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.663 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S10 System Check_H1900_220210

DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

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

Medium: H16T20N2_0210 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.463$ S/m; $\epsilon_r = 41.25$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(8.17, 8.17, 8.17) @ 1900 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.14 W/kg

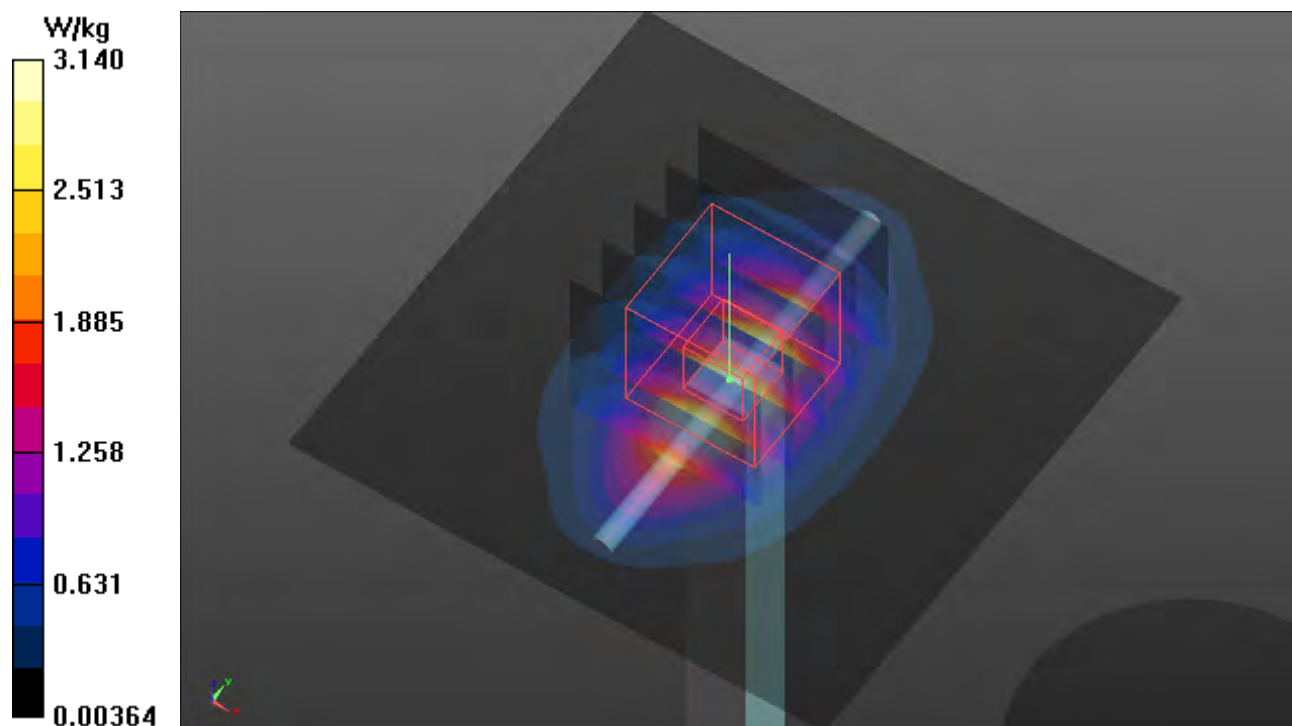
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.82 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.16 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S11 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N3_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.666 W/kg

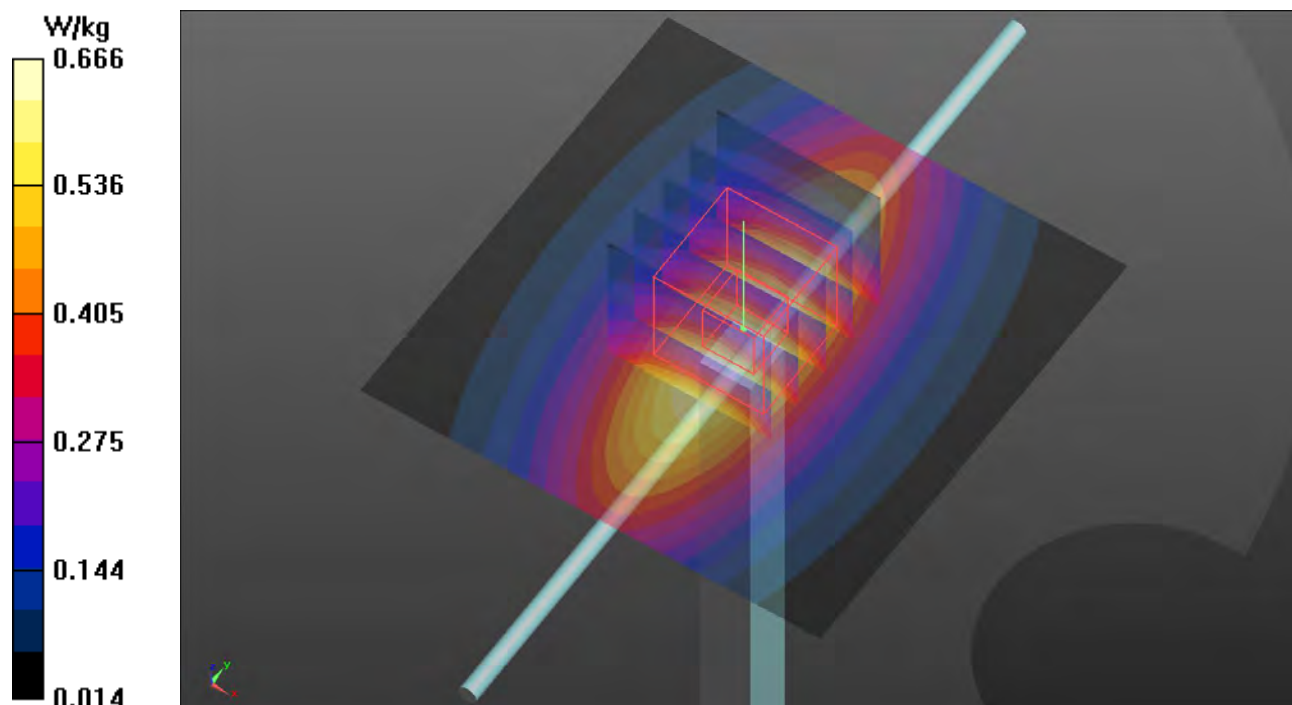
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 28.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.323 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.663 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S12 System Check_H2600_220209

DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

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

Medium: H19T27N1_0209 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.035$ S/m; $\epsilon_r = 38.071$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.41, 7.41, 7.41) @ 2600 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 4.85 W/kg

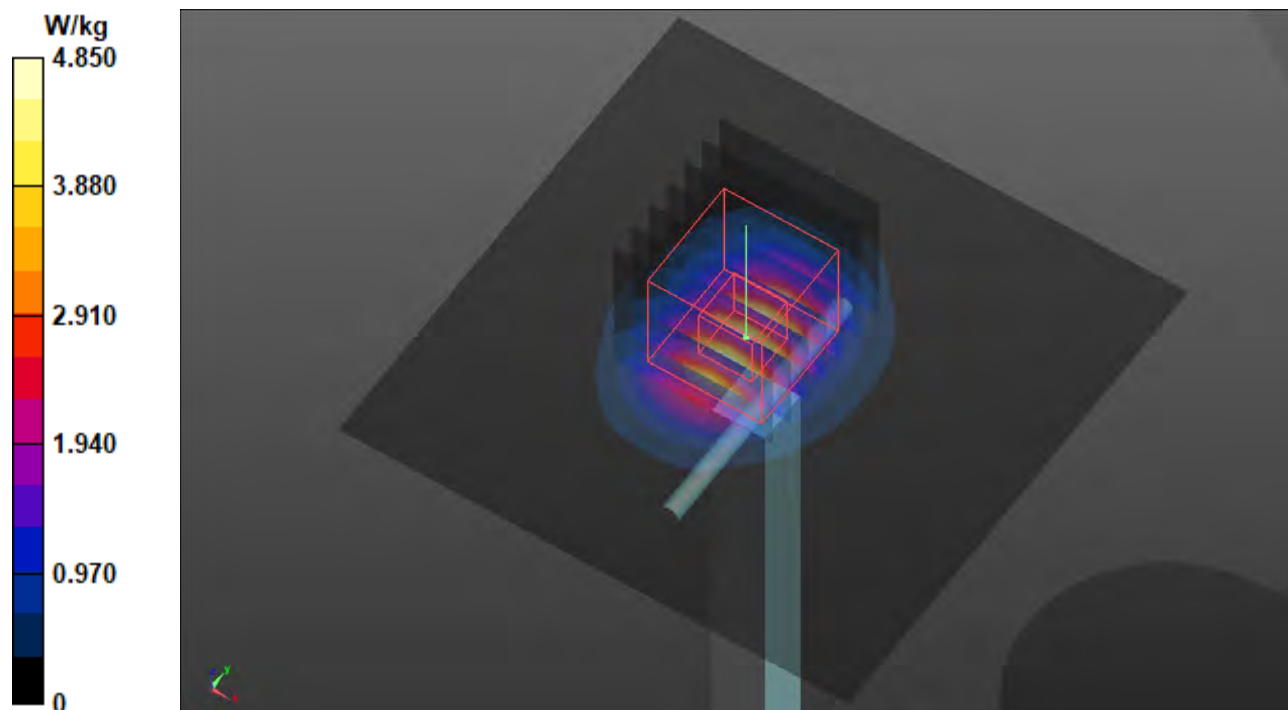
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 46.27 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 6.18 W/kg

SAR(1 g) = 2.86 W/kg; SAR(10 g) = 1.31 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.94 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S13 System Check_H2450_220209

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

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

Medium: H19T27N1_0209 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.876$ S/m; $\epsilon_r = 38.596$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2450 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 4.49 W/kg

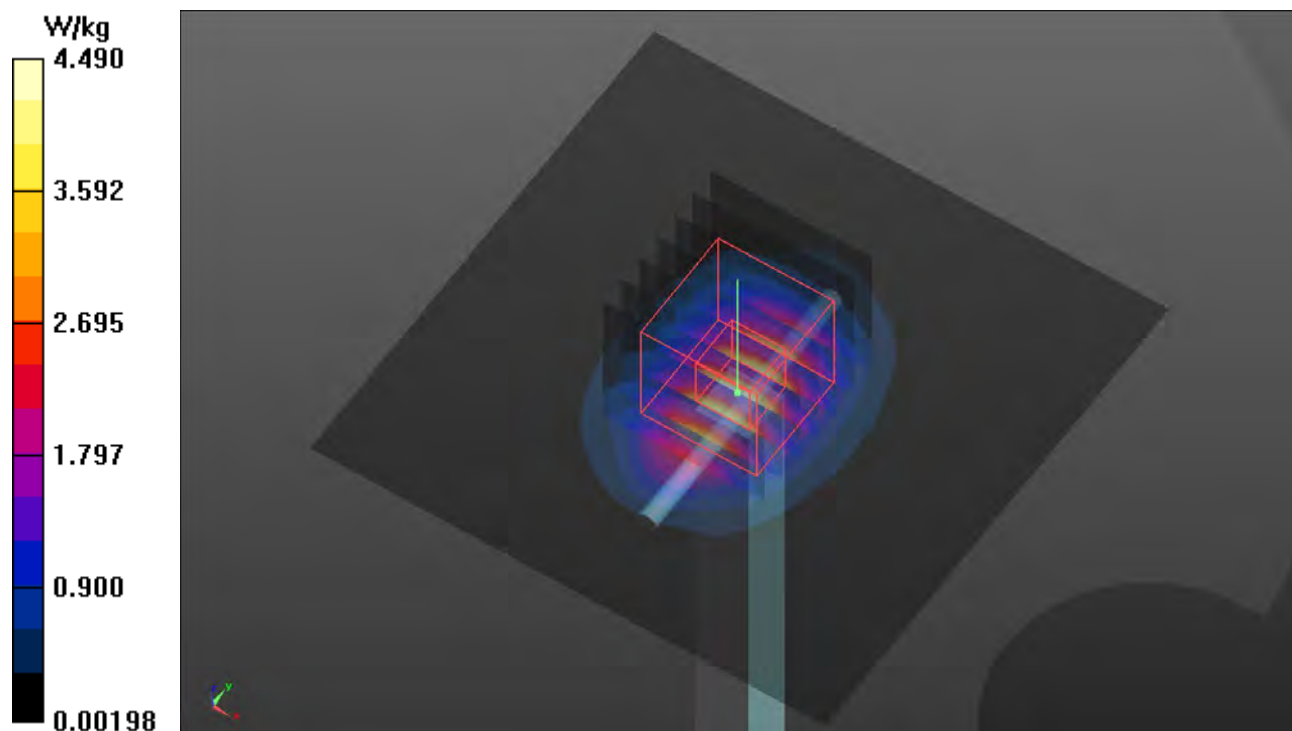
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 49.83 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.71 W/kg

SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.53 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/17

S14 System Check_H5250_220217

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0217 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.676$ S/m; $\epsilon_r = 37.628$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.29, 5.29, 5.29) @ 5250 MHz; Calibrated: 2021/3/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/4/14
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.66 W/kg

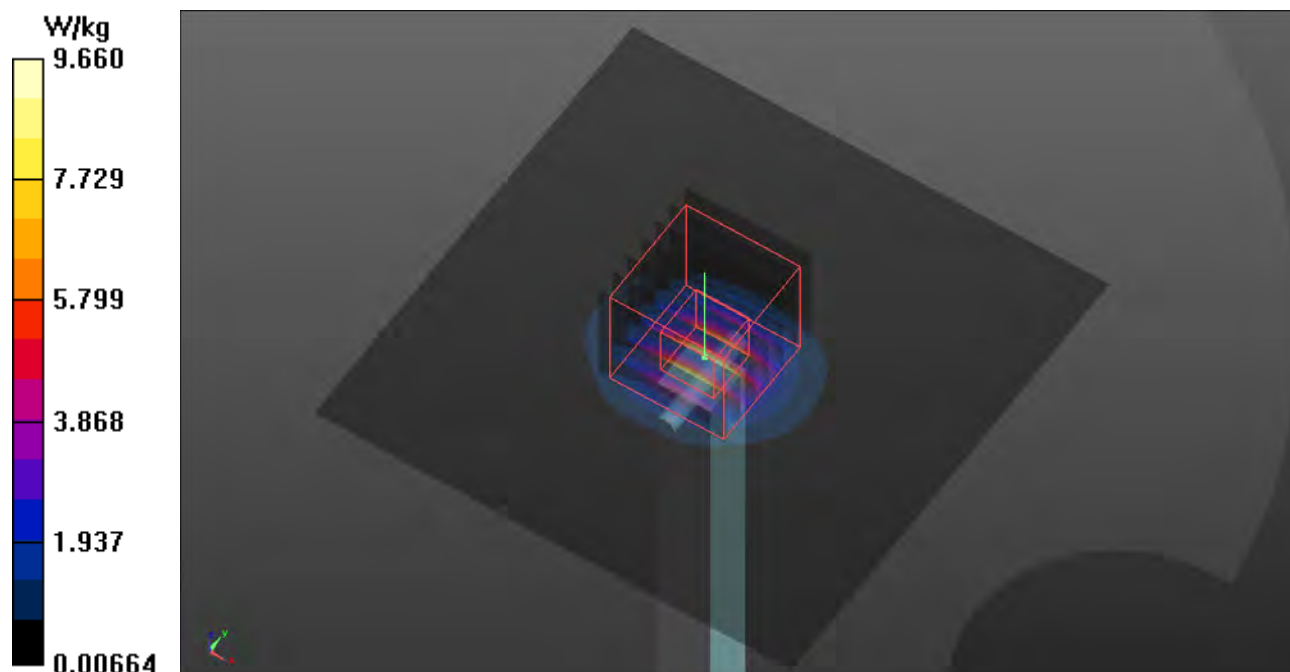
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 50.86 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 4.23 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.5 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S15 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N1_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.915$ S/m; $\epsilon_r = 43.052$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 835 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.611 W/kg

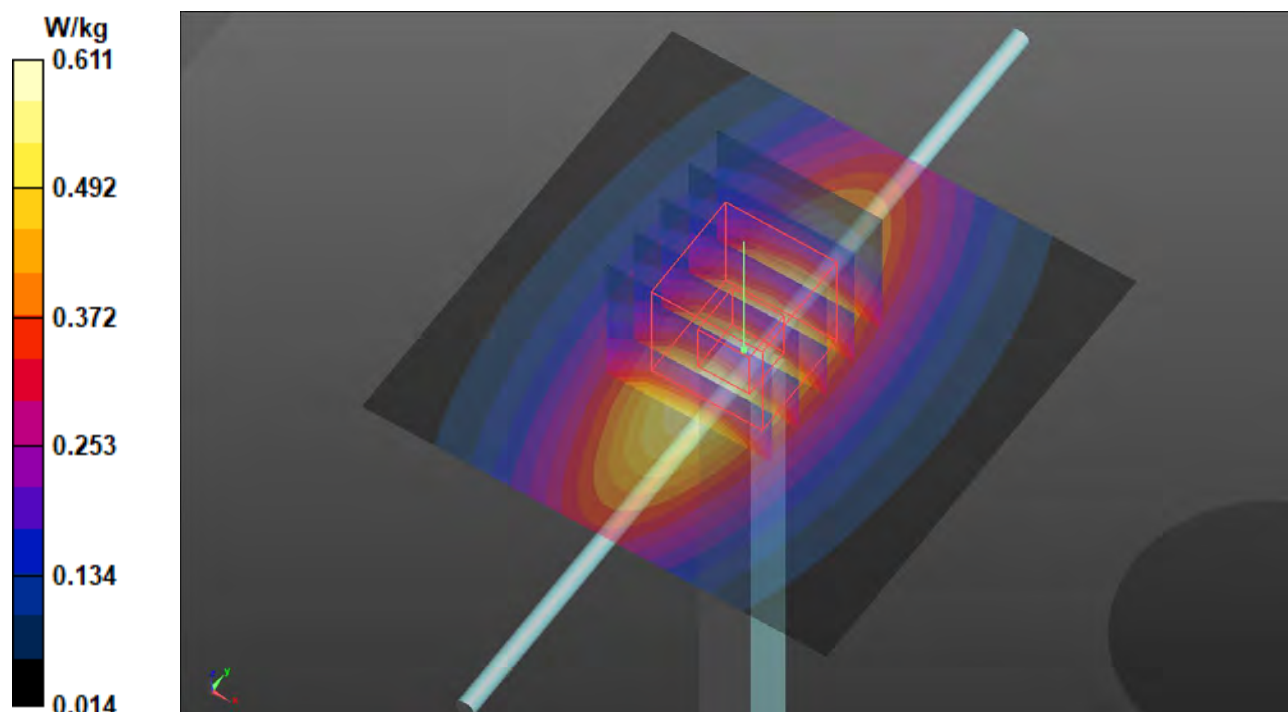
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 26.88 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.298 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.611 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S16 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N3_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.666 W/kg

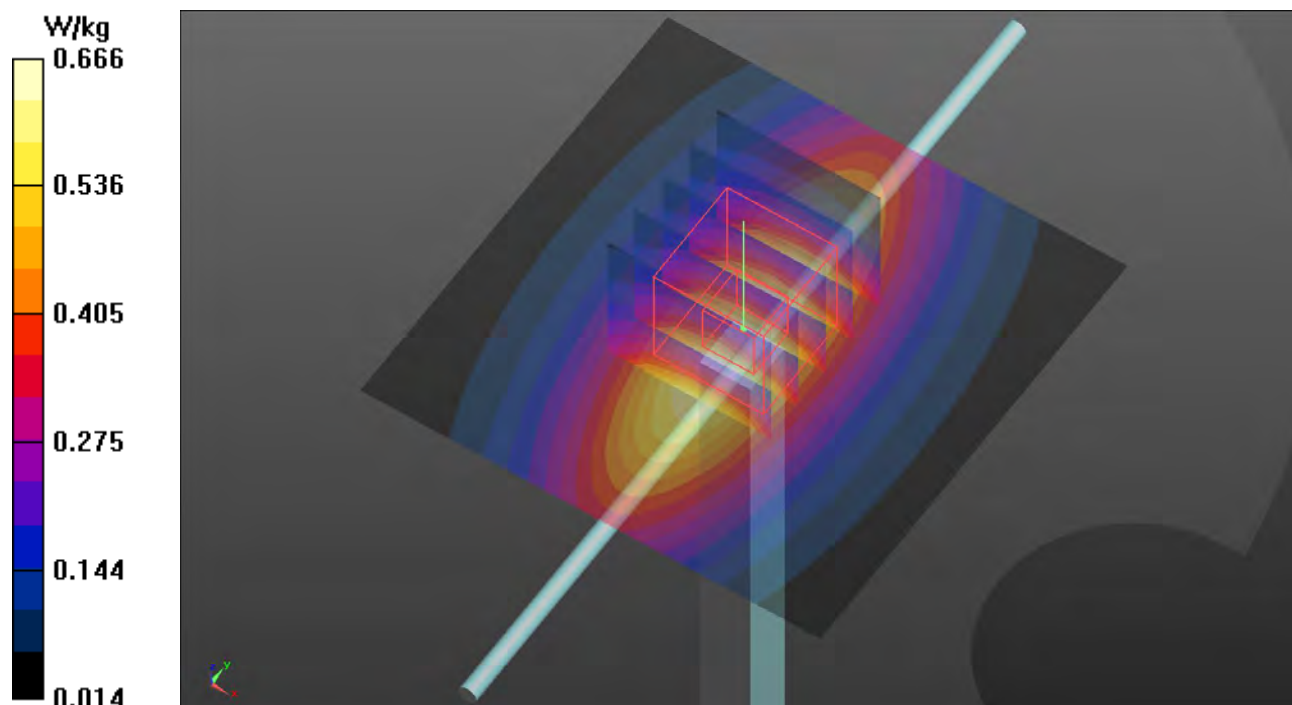
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 28.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.323 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.663 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S17 System Check_H1900_220210

DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

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

Medium: H16T20N2_0210 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.463$ S/m; $\epsilon_r = 41.25$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(8.17, 8.17, 8.17) @ 1900 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 3.14 W/kg

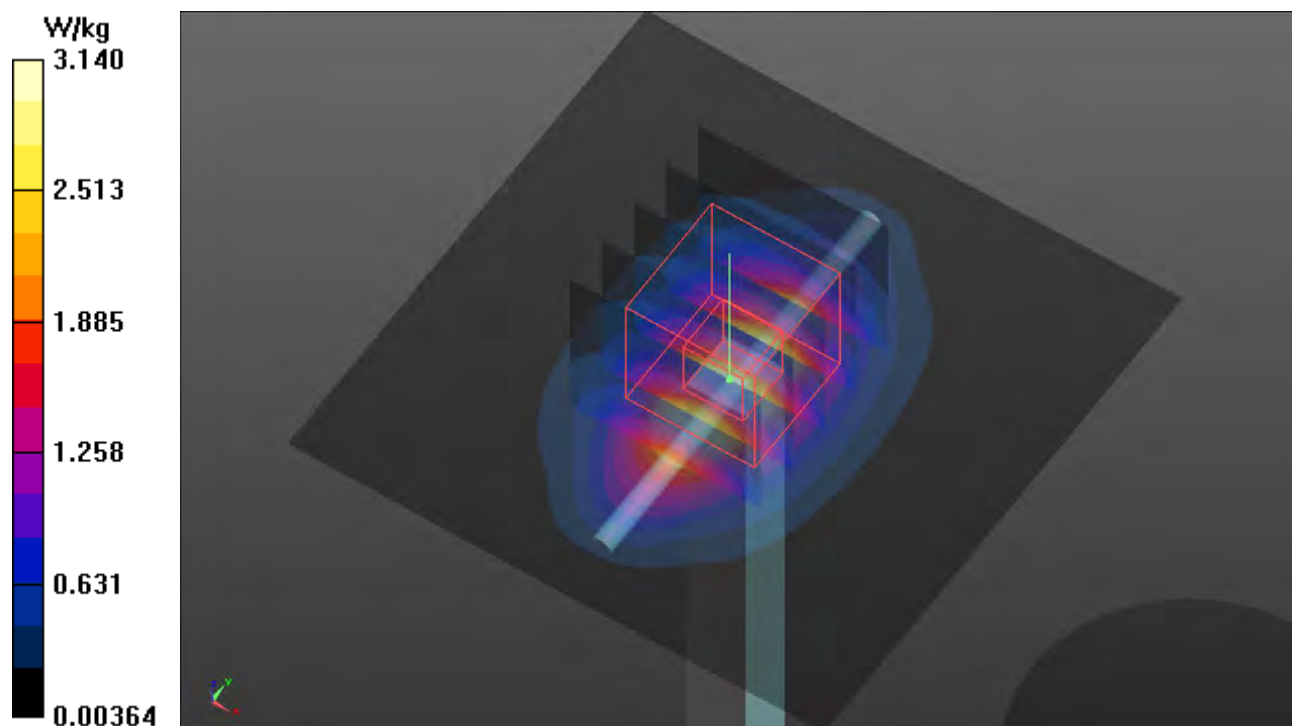
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 47.82 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.16 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

S18 System Check_H835_220210

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

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

Medium: H07T10N3_0210 Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 42.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 835 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.666 W/kg

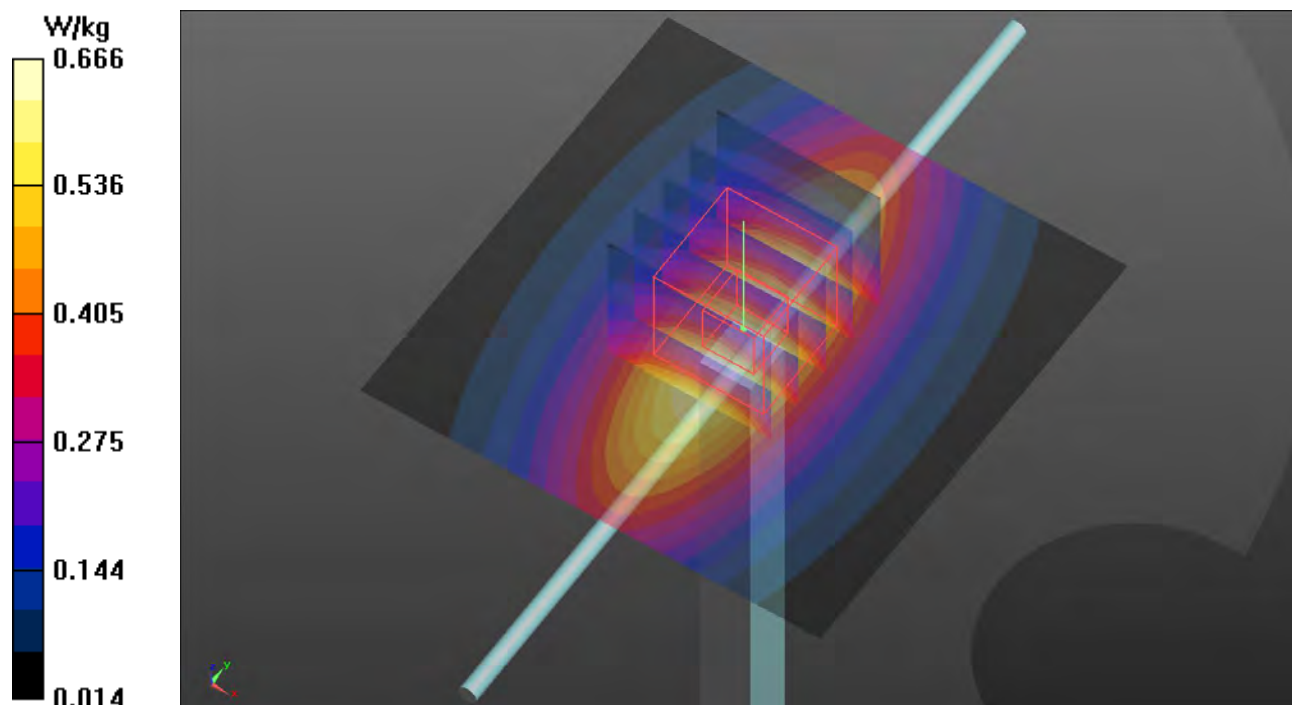
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 28.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.323 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.663 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S19 System Check_H2600_220209

DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

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

Medium: H19T27N1_0209 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.035$ S/m; $\epsilon_r = 38.071$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.41, 7.41, 7.41) @ 2600 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 4.85 W/kg

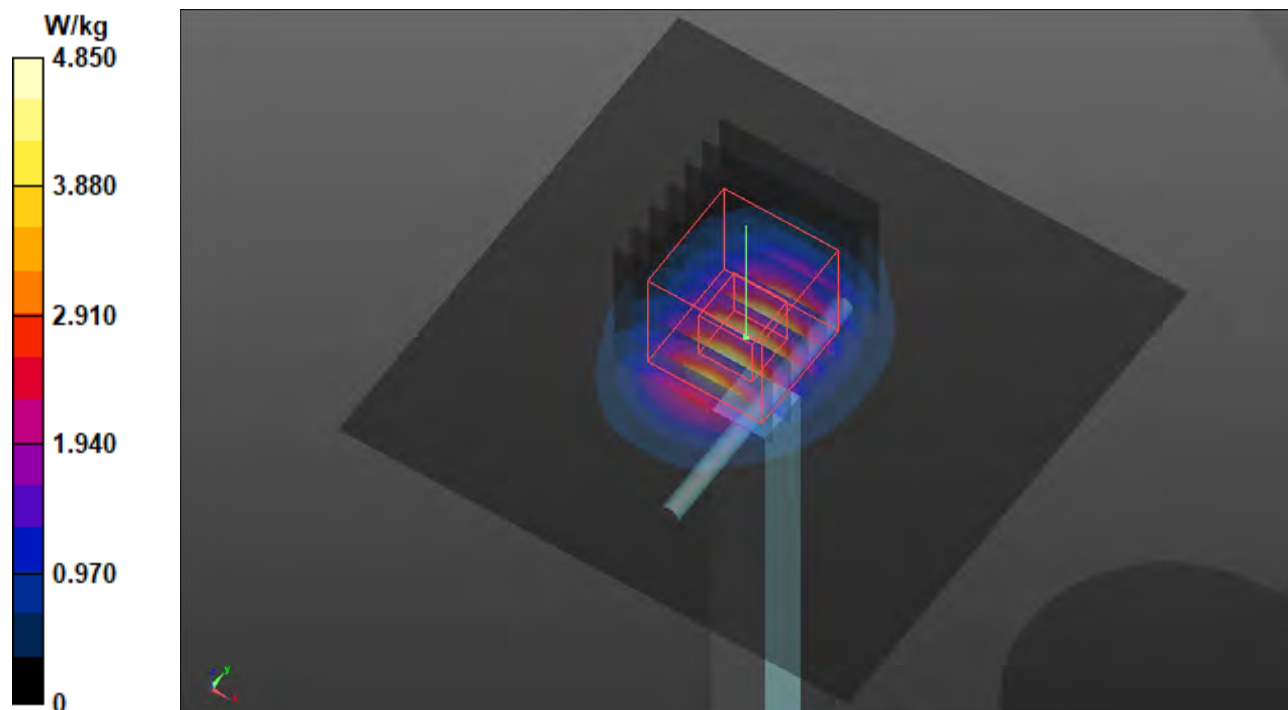
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 46.27 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 6.18 W/kg

SAR(1 g) = 2.86 W/kg; SAR(10 g) = 1.31 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.94 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S20 System Check_H2450_220209

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

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

Medium: H19T27N1_0209 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.876$ S/m; $\epsilon_r = 38.596$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2450 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.49 W/kg

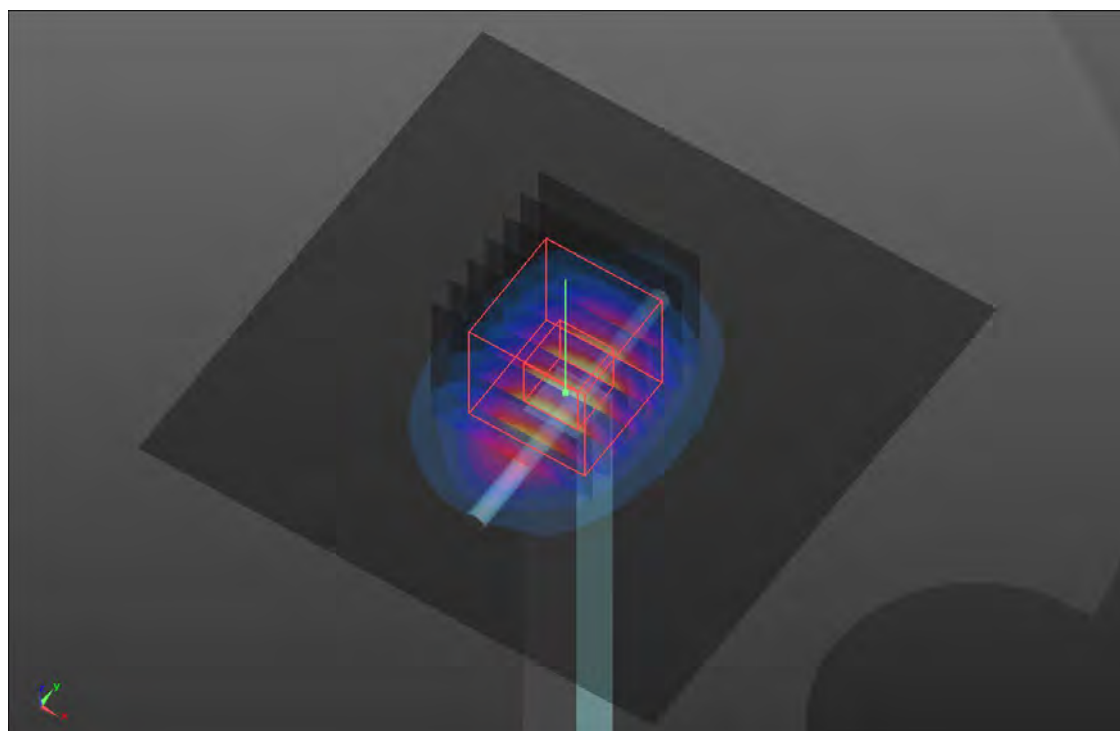
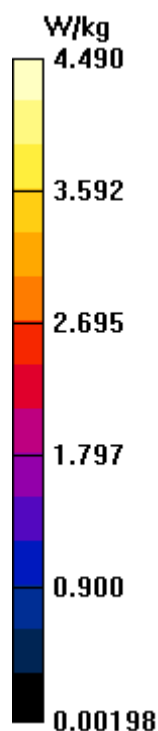
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.83 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.71 W/kg

SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.53 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/17

S21 System Check_H5250_220217

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0217 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.676$ S/m; $\epsilon_r = 37.628$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.29, 5.29, 5.29) @ 5250 MHz; Calibrated: 2021/3/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/4/14
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.66 W/kg

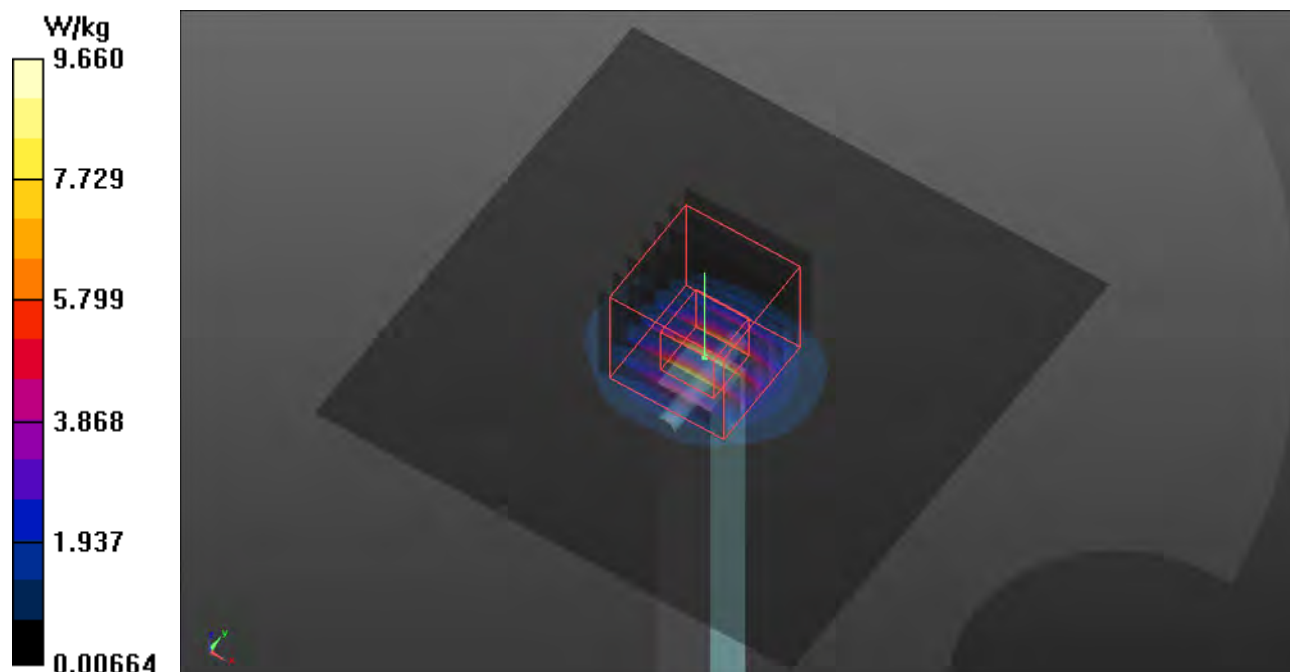
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 50.86 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 4.23 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.5 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

S22 System Check_H2450_220209

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

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

Medium: H19T27N1_0209 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.876$ S/m; $\epsilon_r = 38.596$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2450 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 4.49 W/kg

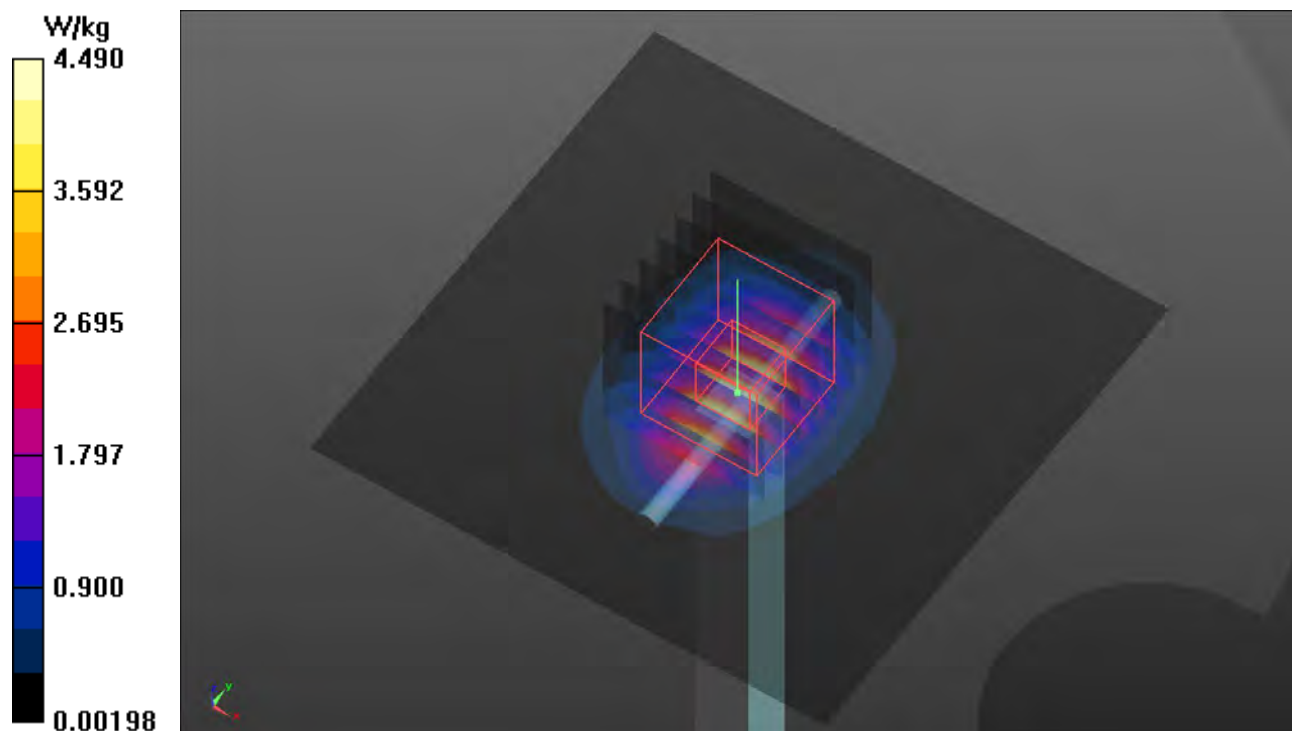
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 49.83 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.71 W/kg

SAR(1 g) = 2.62 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.53 W/kg



Annex B. Plots of Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination are shown as follows.

Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P01 GSM850_GPRS8_Right Cheek_Ch189

DUT: BERD-WTW-P22010914

Communication System: UID 10023 - DAC, GPRS-FDD (TDMA, GMSK, TN 0); Frequency: 836.4 MHz; Duty Cycle: 1:9.06

Medium: H07T10N1_0210 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.916$ S/m; $\epsilon_r = 43.033$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 836.4 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.495 W/kg

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

Reference Value = 23.51 V/m; Power Drift = -0.04 dB

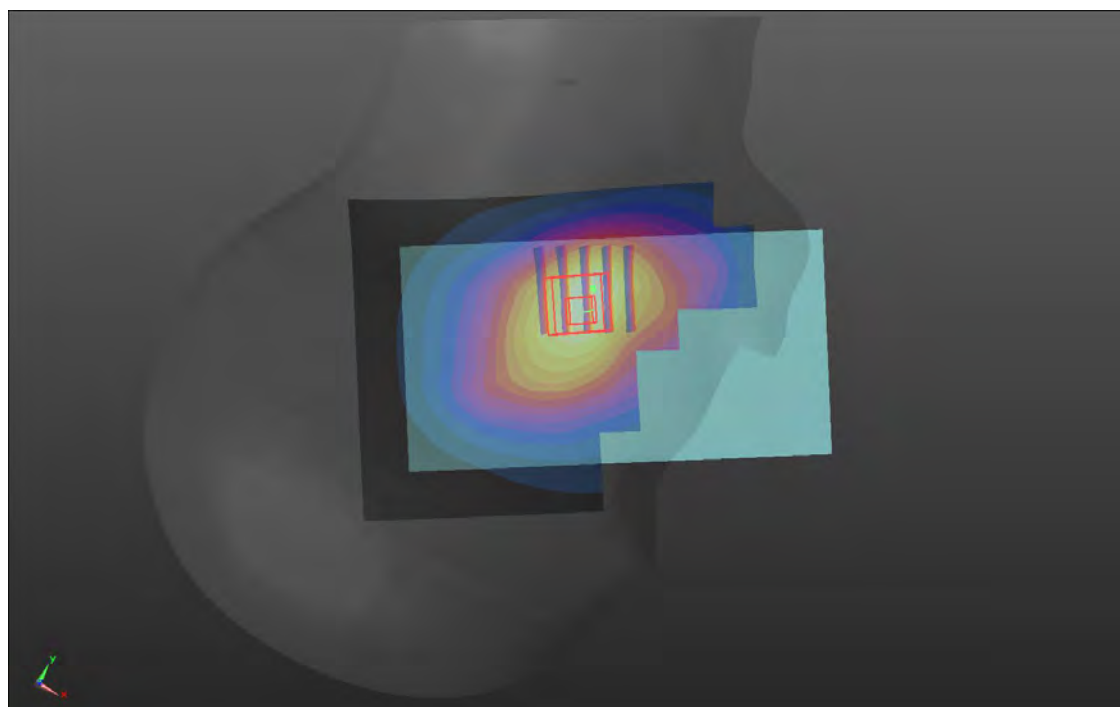
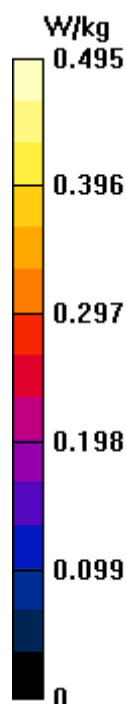
Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.423 W/kg; SAR(10 g) = 0.322 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 24.2 mm

Ratio of SAR at M2 to SAR at M1 = 80.5%

Maximum value of SAR (measured) = 0.487 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P02 WCDMA II_RMC12.2K_Left Cheek_Ch9538

DUT: BERD-WTW-P22010914

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1907.6 MHz; Duty Cycle: 1:1.95
Medium: H16T20N1_0209 Medium parameters used: $f = 1908$ MHz; $\sigma = 1.467$ S/m; $\epsilon_r = 41.246$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(8.17, 8.17, 8.17) @ 1907.6 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 1.05 W/kg

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

Reference Value = 25.39 V/m; Power Drift = 0.03 dB

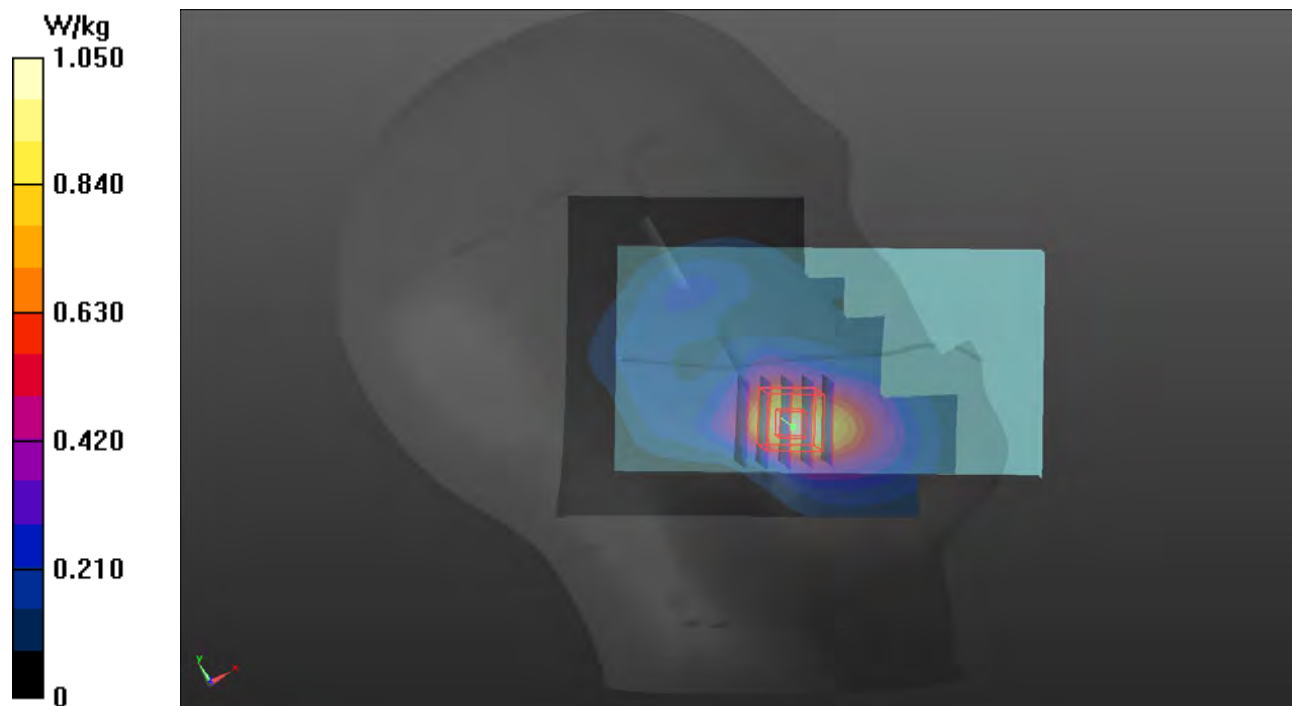
Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.371 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 12.8 mm

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

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



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P03 CDMA BC0_RC3+SO55_Right Cheek_Ch777

DUT: BERD-WTW-P22010914

Communication System: UID 10291 - AAB, CDMA2000, RC3, SO55, Full Rate; Frequency: 848.31 MHz; Duty Cycle: 1:2.22

Medium: H07T10N3_0210 Medium parameters used (interpolated): $f = 848.31$ MHz; $\sigma = 0.927$ S/m; $\epsilon_r = 42.817$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 848.31 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 0.662 W/kg

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

Reference Value = 26.38 V/m; Power Drift = -0.01 dB

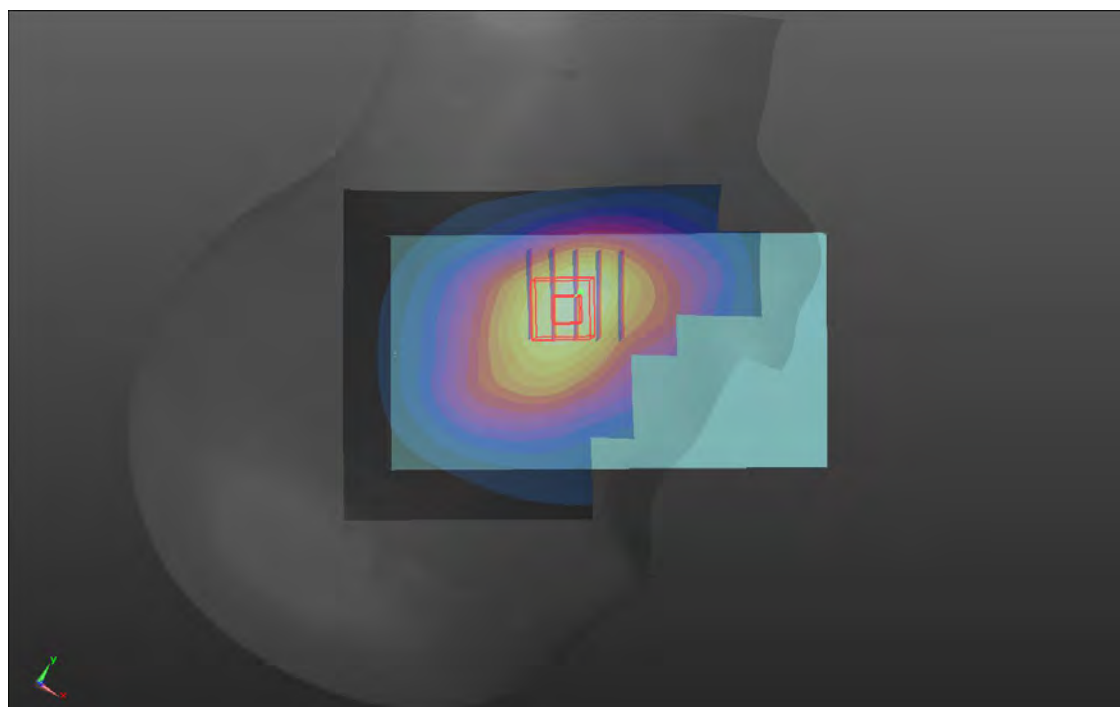
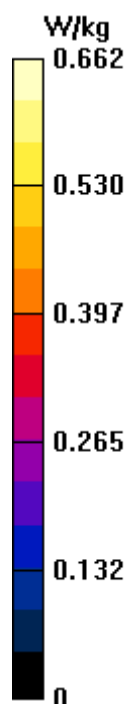
Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.421 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 23.1 mm

Ratio of SAR at M2 to SAR at M1 = 79.3%

Maximum value of SAR (measured) = 0.633 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P04 CDMA BC10_RC3+SO55_Right Cheek_Ch580

DUT: BERD-WTW-P22010914

Communication System: UID 10291 - AAB, CDMA2000, RC3, SO55, Full Rate; Frequency: 820.5 MHz; Duty Cycle: 1:2.22

Medium: H07T10N3_0210 Medium parameters used (interpolated): $f = 820.5$ MHz; $\sigma = 0.901$ S/m; $\epsilon_r = 43.214$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 820.5 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.596 W/kg

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

Reference Value = 26.02 V/m; Power Drift = -0.03 dB

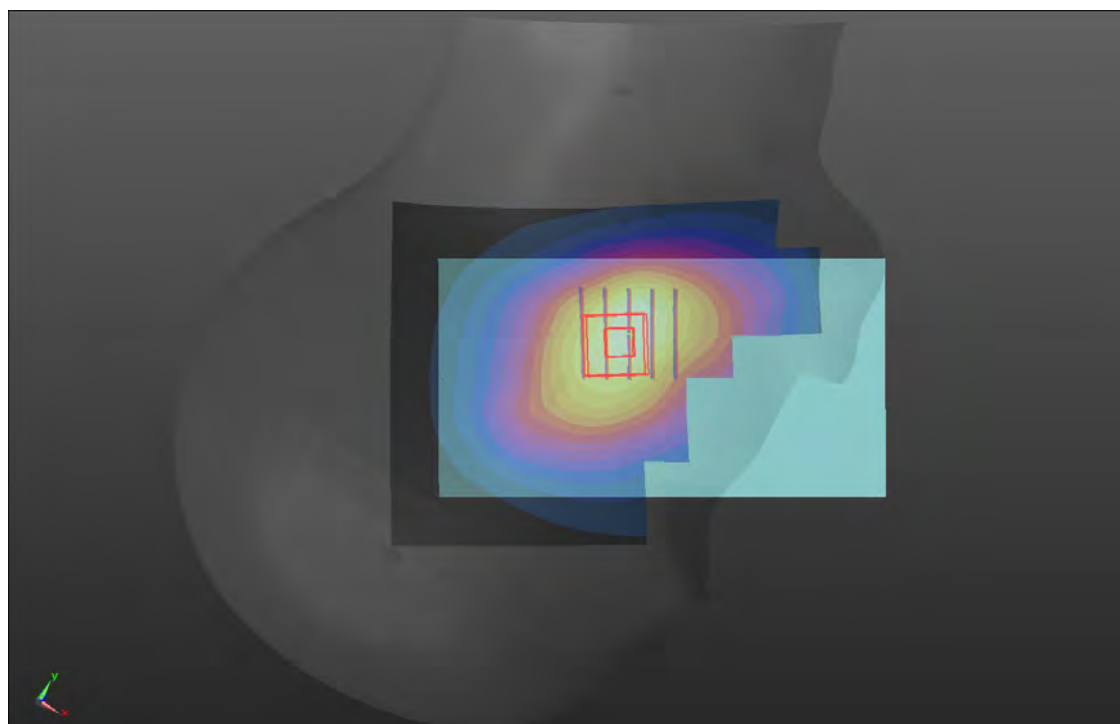
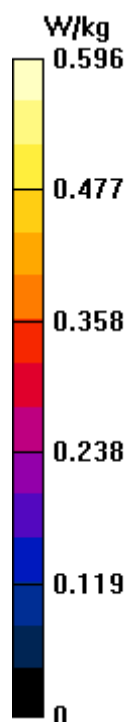
Peak SAR (extrapolated) = 0.600 W/kg

SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.393 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 82%

Maximum value of SAR (measured) = 0.565 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P05 LTE 7_QPSK20M_Left Cheek_Ch21100_1RB_OS0

DUT: BERD-WTW-P22010914

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2535 MHz; Duty Cycle: 1:3.74

Medium: H19T27N1_0209 Medium parameters used (interpolated): $f = 2535$ MHz; $\sigma = 1.964$ S/m; $\epsilon_r = 38.294$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.3, 7.3, 7.3) @ 2535 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.779 W/kg

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

Reference Value = 19.03 V/m; Power Drift = 0.08 dB

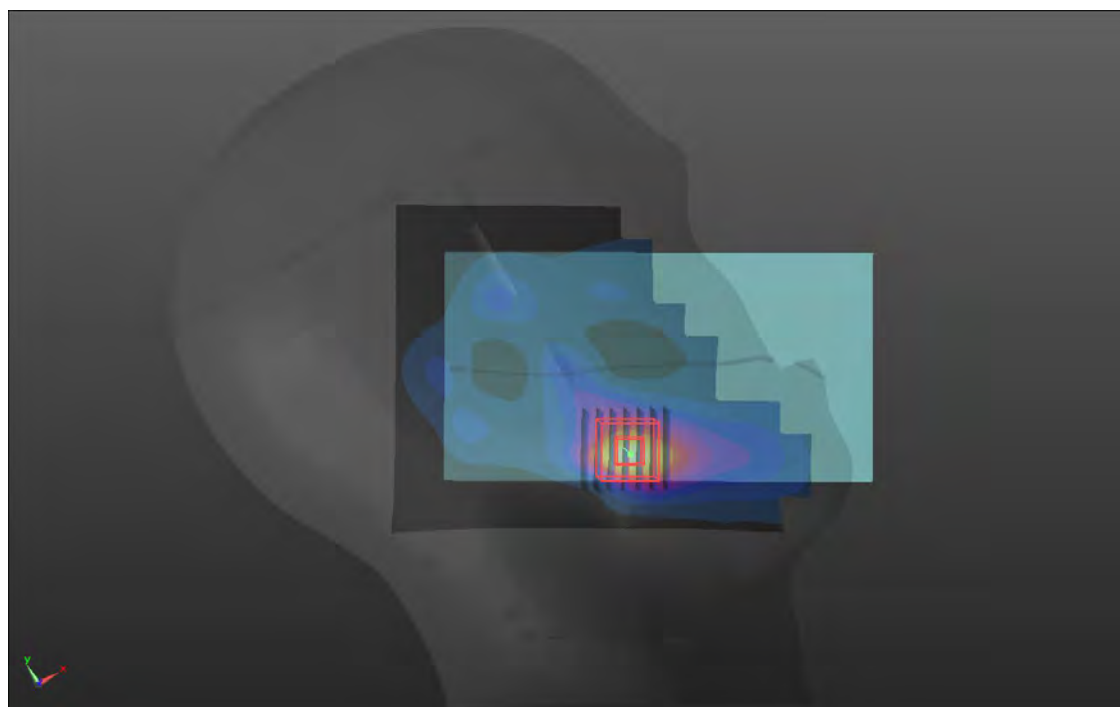
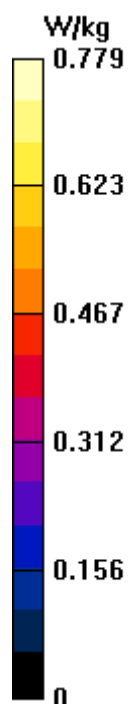
Peak SAR (extrapolated) = 0.903 W/kg

SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.240 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 51.2%

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



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P06 WLAN2.4G_802.11b_Right Cheek_Ch1

DUT: BERD-WTW-P22010914

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0209 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.835$ S/m; $\epsilon_r = 38.742$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2412 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

/Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.49 W/kg

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

Reference Value = 24.62 V/m; Power Drift = 0.11 dB

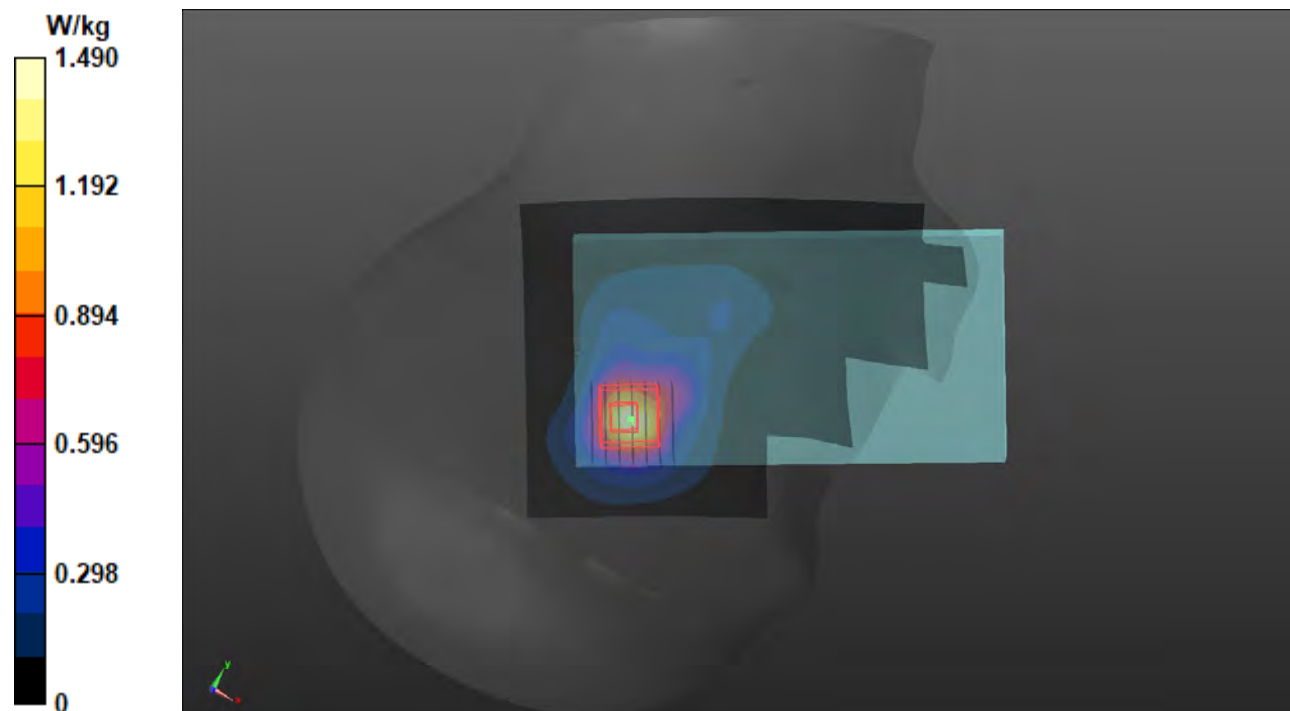
Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.933 W/kg; SAR(10 g) = 0.465 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 10.3 mm

Ratio of SAR at M2 to SAR at M1 = 52.7%

Maximum value of SAR (measured) = 1.49 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/17

P07 WLAN5.3G_802.11ac VHT80_Right Cheek_Ch58

DUT: BERD-WTW-P22010914

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5290 MHz; Duty Cycle: 1:1.08

Medium: H34T60N1_0217 Medium parameters used (interpolated): $f = 5290$ MHz; $\sigma = 4.7$ S/m; $\epsilon_r = 37.564$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.29, 5.29, 5.29) @ 5290 MHz; Calibrated: 2021/3/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/4/14
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (121x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.677 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 10.55 V/m; Power Drift = 0.15 dB

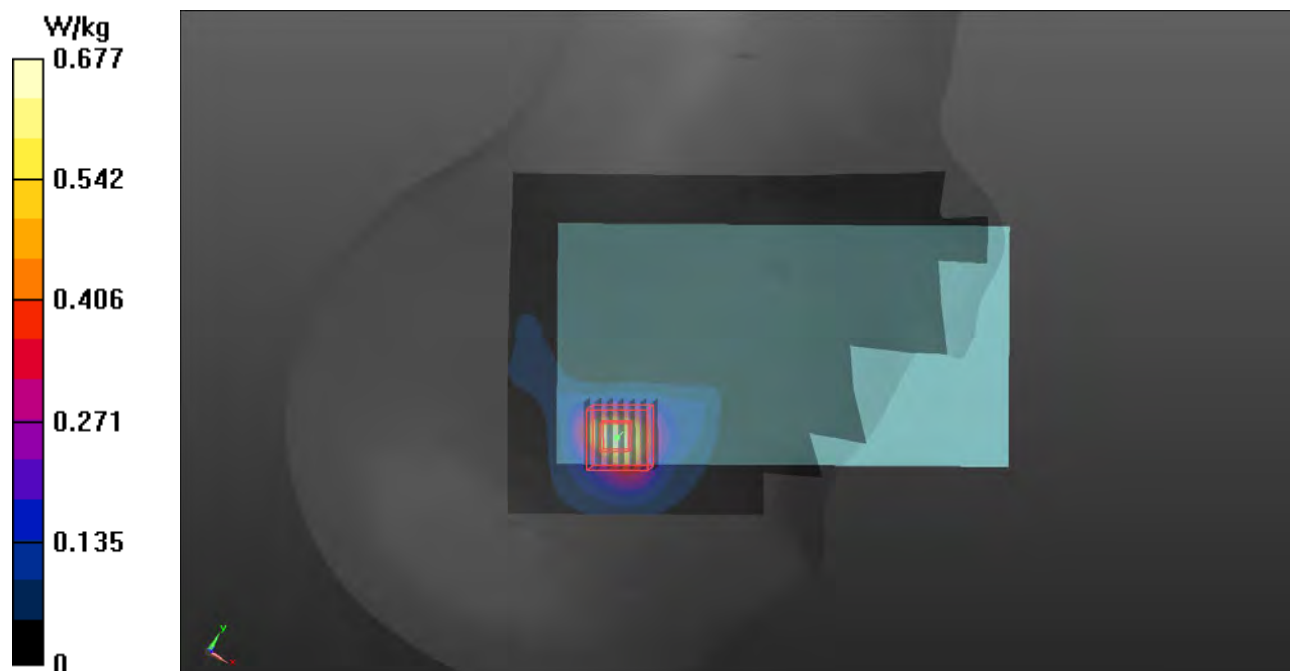
Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.109 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 = 67%

Maximum value of SAR (measured) = 0.780 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P08 GSM850_GPRS8_Rear Face_10mm_Ch189_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10023 - DAC, GPRS-FDD (TDMA, GMSK, TN 0); Frequency: 836.4 MHz; Duty Cycle: 1:9.06

Medium: H07T10N1_0210 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.916$ S/m; $\epsilon_r = 43.033$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 836.4 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.500 W/kg

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

Reference Value = 24.59 V/m; Power Drift = 0.01 dB

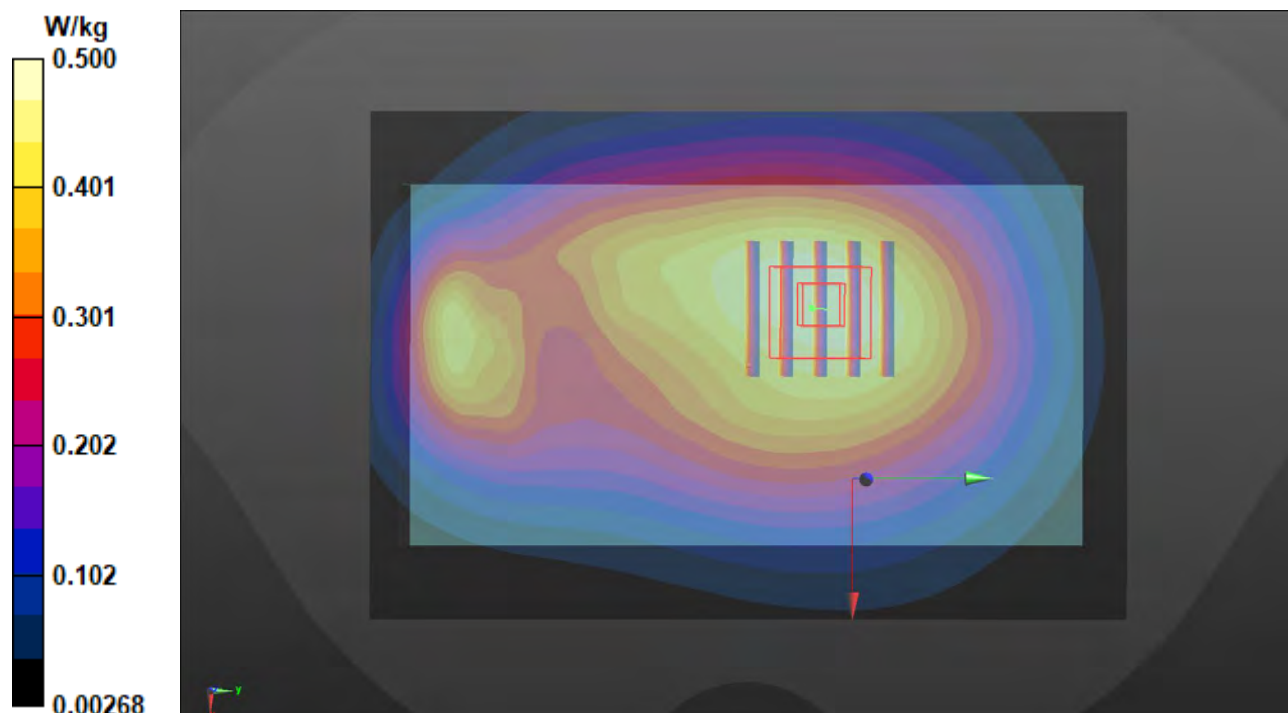
Peak SAR (extrapolated) = 0.557 W/kg

SAR(1 g) = 0.412 W/kg; SAR(10 g) = 0.306 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below: 18.5 mm

Ratio of SAR at M2 to SAR at M1 = 74.4%

Maximum value of SAR (measured) = 0.504 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P09 CDMA BC0_RTAP153.6_Rear Face_10mm_Ch777_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10403 - AAB, CDMA2000 (1xEV-DO, Rev. 0); Frequency: 848.31 MHz; Duty Cycle: 1:2.38

Medium: H07T10N3_0210 Medium parameters used (interpolated): $f = 848.31$ MHz; $\sigma = 0.927$ S/m; $\epsilon_r = 42.817$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 848.31 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.668 W/kg

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

Reference Value = 28.04 V/m; Power Drift = -0.04 dB

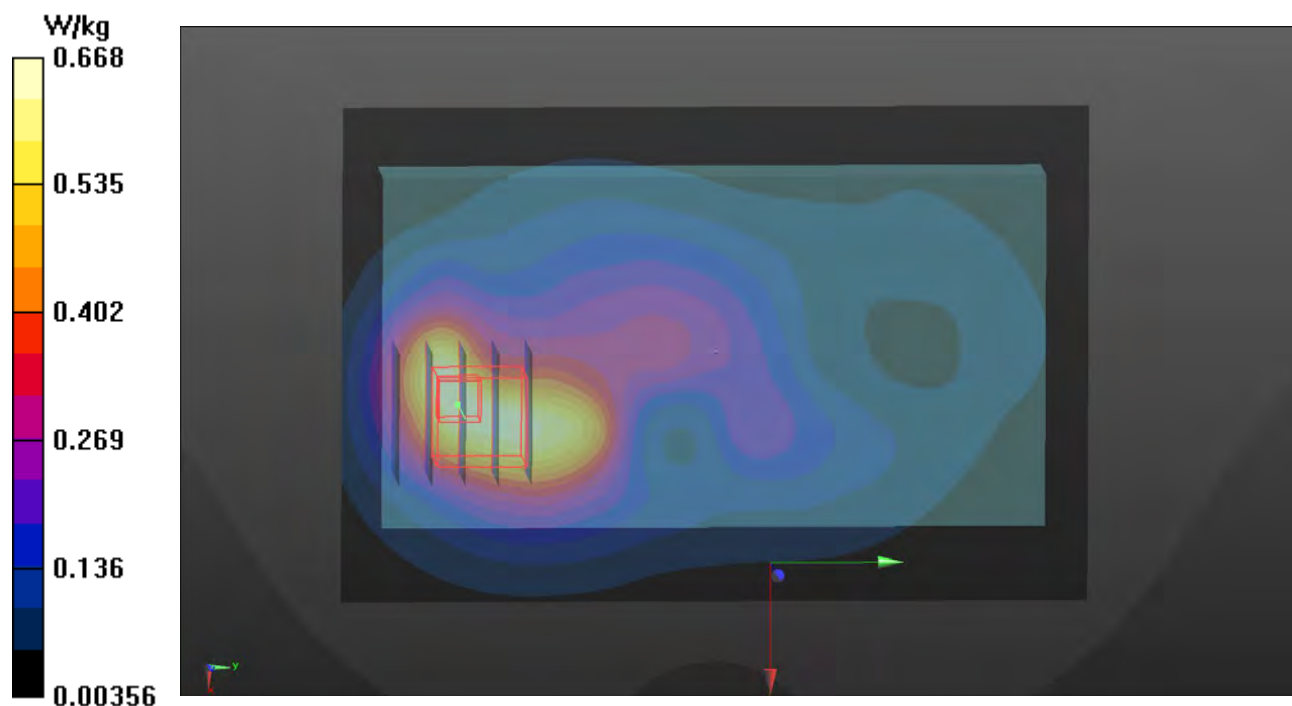
Peak SAR (extrapolated) = 0.743 W/kg

SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.393 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 71.4%

Maximum value of SAR (measured) = 0.667 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P10 CDMA BC1_RTAP153.6_Rear Face_10mm_Ch1175_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10403 - AAB, CDMA2000 (1xEV-DO, Rev. 0); Frequency: 1908.75 MHz; Duty Cycle: 1:2.38

Medium: H16T20N2_0210 Medium parameters used: $f = 1909$ MHz; $\sigma = 1.467$ S/m; $\epsilon_r = 41.246$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(8.17, 8.17, 8.17) @ 1908.75 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 27.78 V/m; Power Drift = -0.03 dB

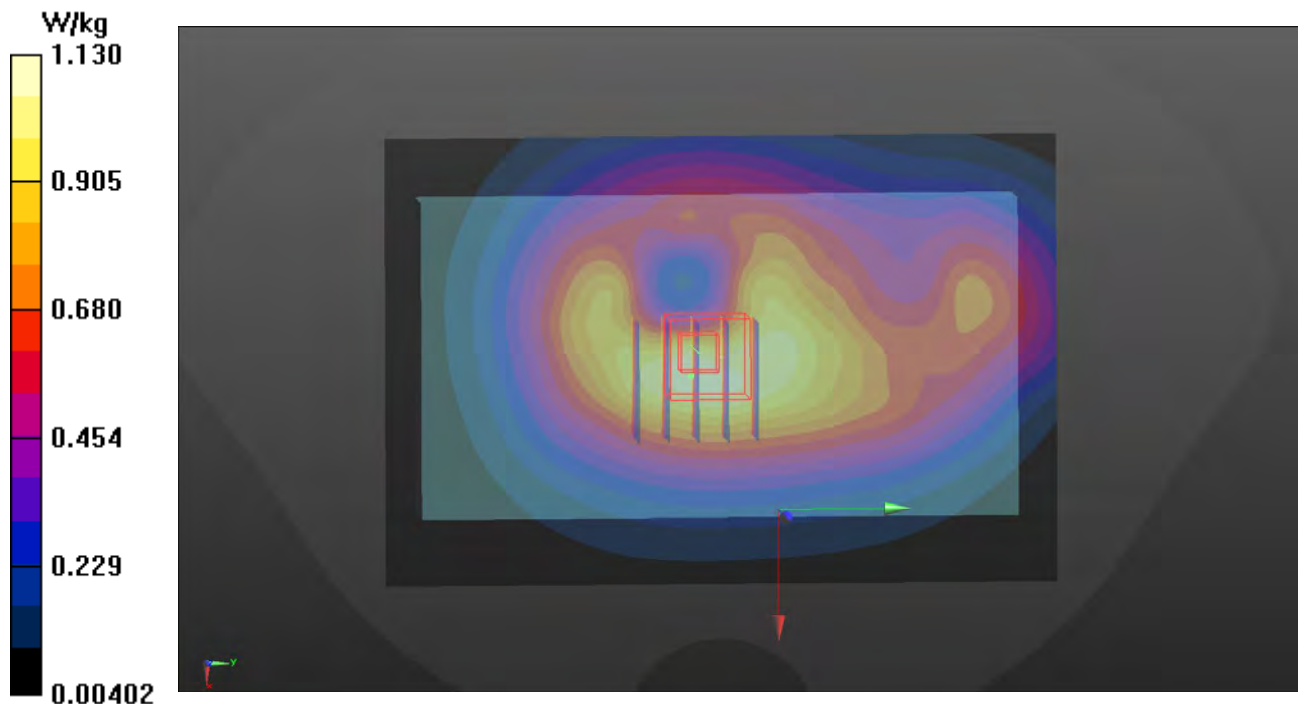
Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.453 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 = 55.9%

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



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P11 CDMA BC10_RTAP153.6_Rear Face_10mm_Ch580_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10403 - AAB, CDMA2000 (1xEV-DO, Rev. 0); Frequency: 820.5 MHz; Duty Cycle: 1:2.38

Medium: H07T10N3_0210 Medium parameters used (interpolated): $f = 820.5$ MHz; $\sigma = 0.901$ S/m; $\epsilon_r = 43.214$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 820.5 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.549 W/kg

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

Reference Value = 25.37 V/m; Power Drift = -0.03 dB

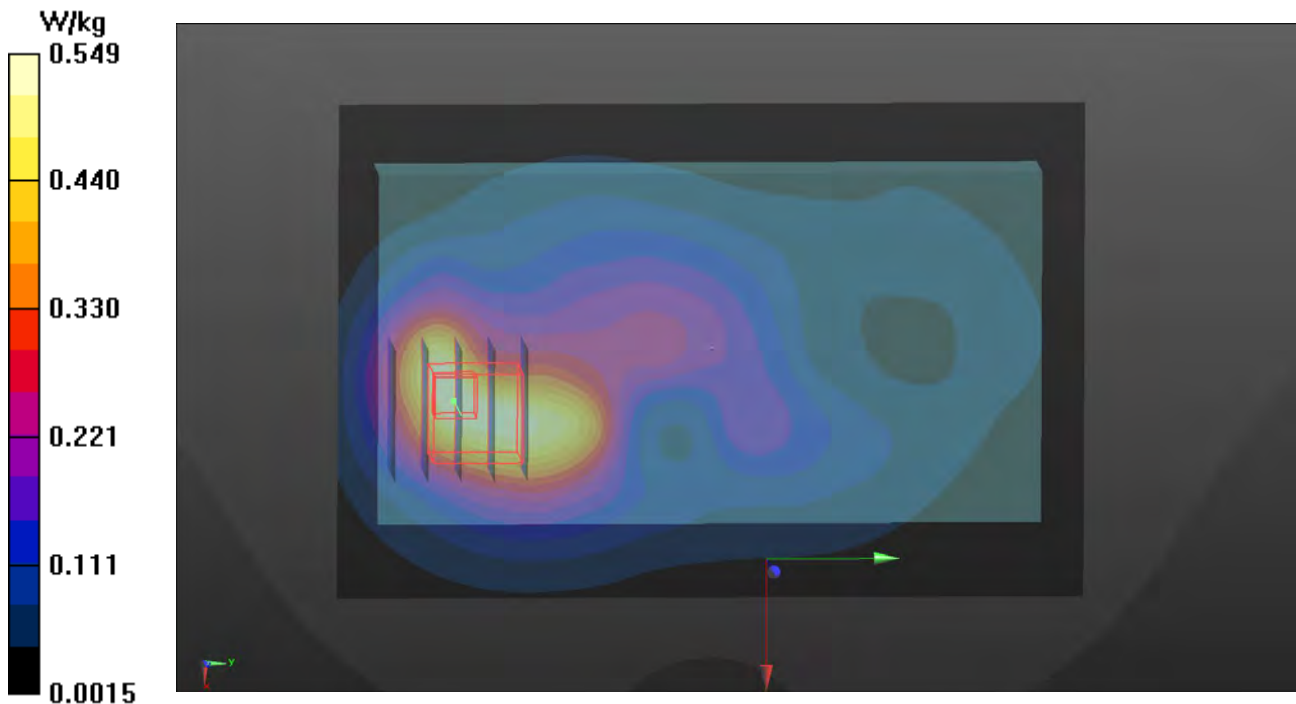
Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.230 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 = 59.1%

Maximum value of SAR (measured) = 0.559 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P12 LTE 7_QPSK20M_Rear Face_10mm_Ch21350_1RB_OS0_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2560 MHz; Duty Cycle: 1:3.74

Medium: H19T27N1_0209 Medium parameters used: $f = 2560$ MHz; $\sigma = 1.992$ S/m; $\epsilon_r = 38.213$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.41, 7.41, 7.41) @ 2560 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 2.02 W/kg

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

Reference Value = 31.96 V/m; Power Drift = -0.09 dB

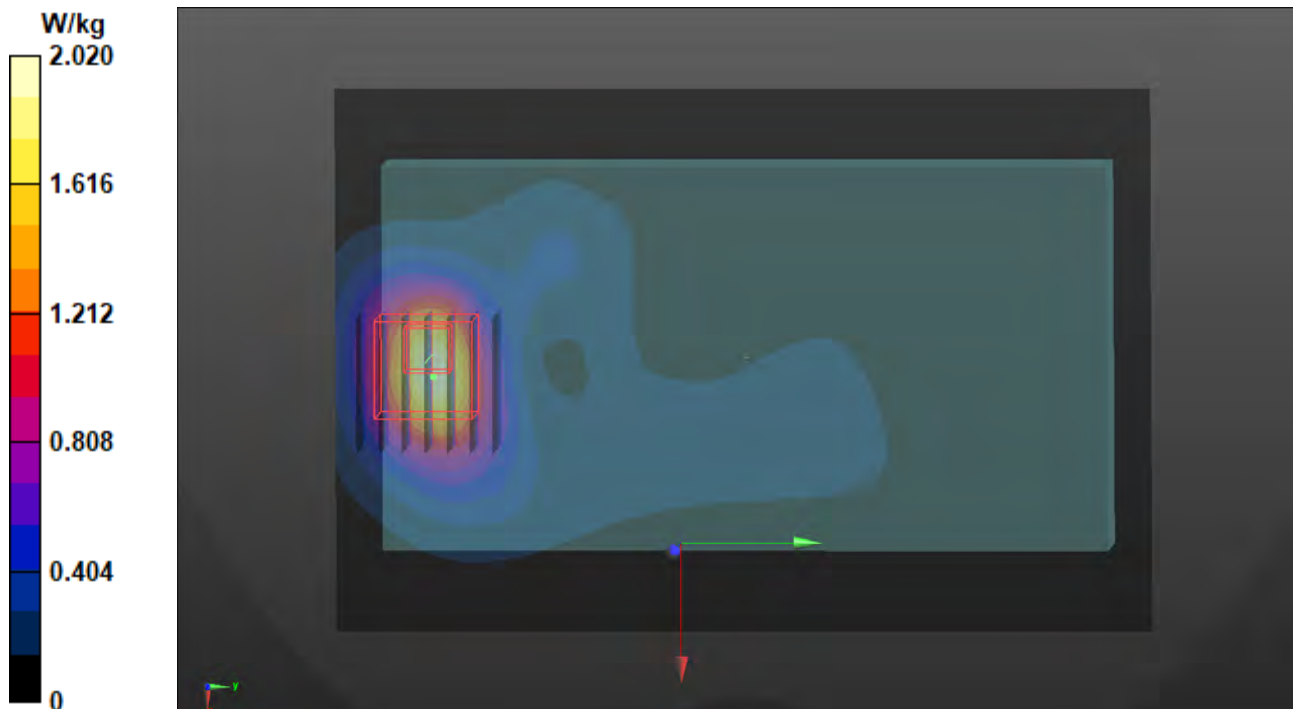
Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.482 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 11.7 mm

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

Maximum value of SAR (measured) = 1.86 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P13 WLAN2.4G_802.11b_Front Face_10mm_Ch1_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0209 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.835$ S/m; $\epsilon_r = 38.742$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2412 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.462 W/kg

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

Reference Value = 16.03 V/m; Power Drift = -0.05 dB

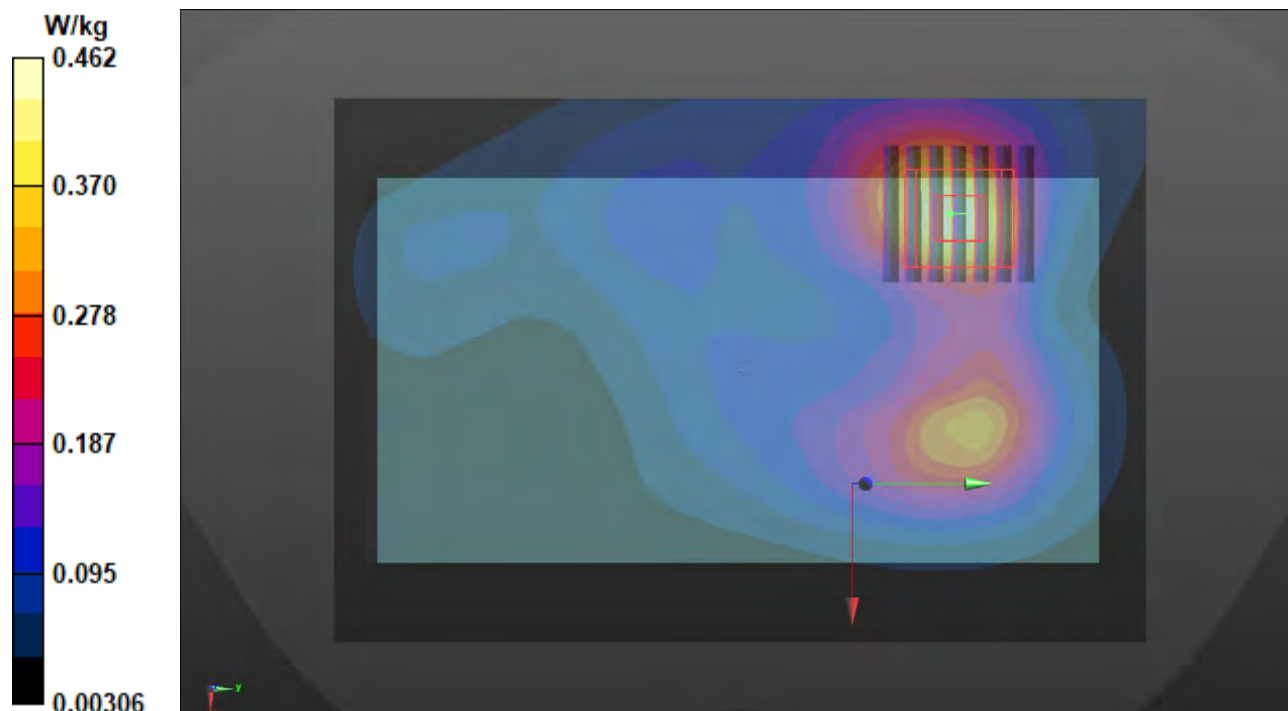
Peak SAR (extrapolated) = 0.574 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.164 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 = 53.8%

Maximum value of SAR (measured) = 0.471 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/2/17

P14 WLAN5.3G_802.11ac VHT80_Rear Face_10mm_Ch58_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5290 MHz; Duty Cycle: 1:1.08

Medium: H34T60N1_0217 Medium parameters used (interpolated): $f = 5290$ MHz; $\sigma = 4.7$ S/m; $\epsilon_r = 37.564$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.29, 5.29, 5.29) @ 5290 MHz; Calibrated: 2021/3/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/4/14
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (121x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.619 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 12.26 V/m; Power Drift = -0.05 dB

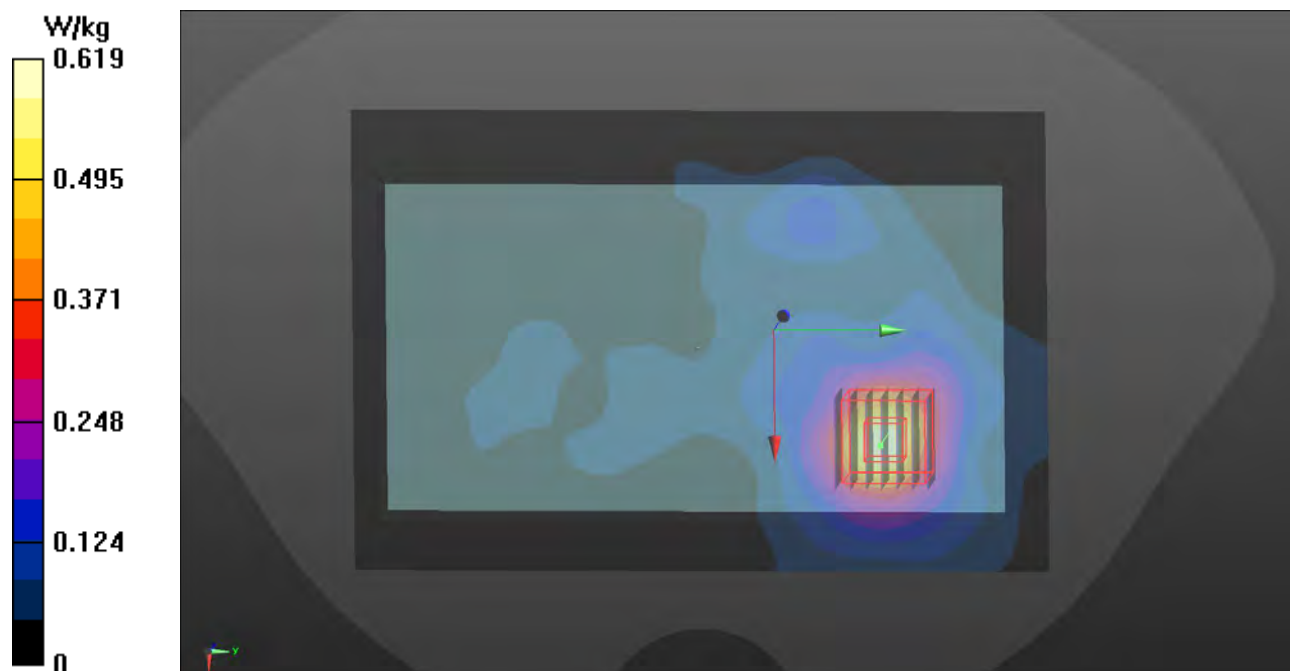
Peak SAR (extrapolated) = 0.852 W/kg

SAR(1 g) = 0.219 W/kg; SAR(10 g) = 0.097 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 14 mm

Ratio of SAR at M2 to SAR at M1 = 64.5%

Maximum value of SAR (measured) = 0.536 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P15 GSM850_GPRS8_Rear Face_10mm_Ch189_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10023 - DAC, GPRS-FDD (TDMA, GMSK, TN 0); Frequency: 836.4 MHz; Duty Cycle: 1:9.06

Medium: H07T10N1_0210 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.916$ S/m; $\epsilon_r = 43.033$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 836.4 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.500 W/kg

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

Reference Value = 24.59 V/m; Power Drift = 0.01 dB

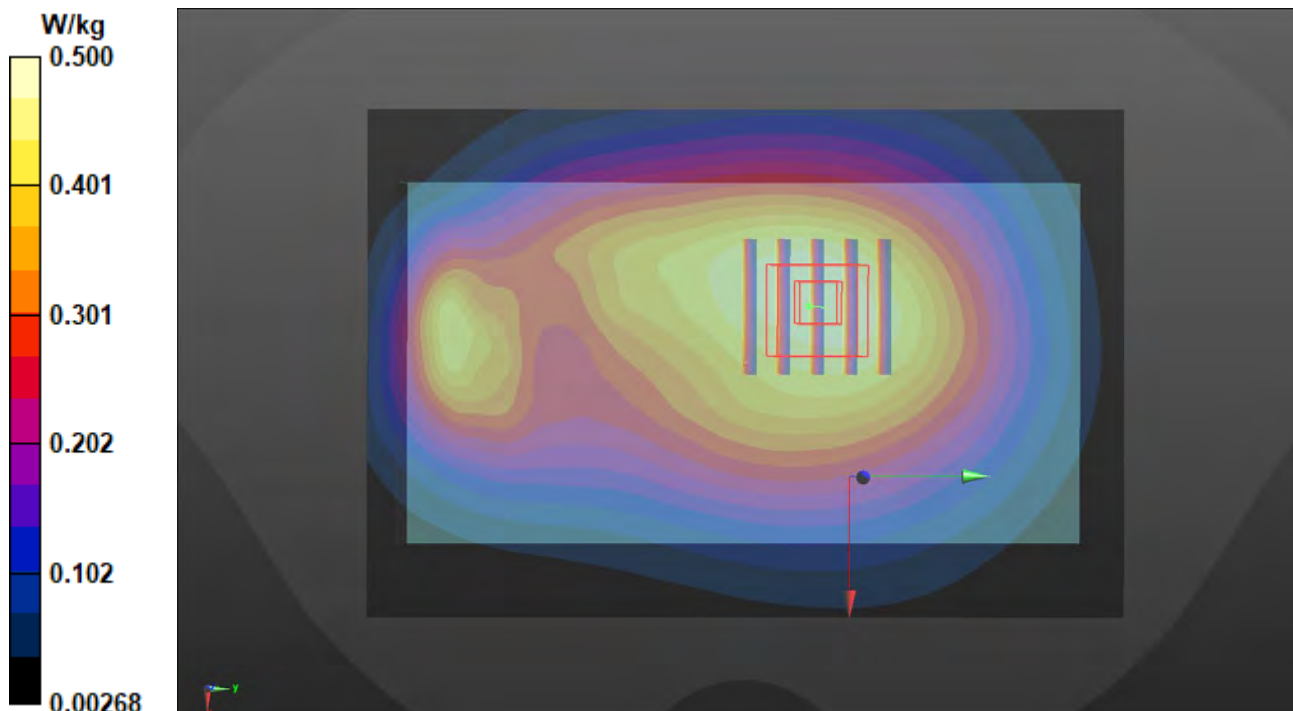
Peak SAR (extrapolated) = 0.557 W/kg

SAR(1 g) = 0.412 W/kg; SAR(10 g) = 0.306 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below: 18.5 mm

Ratio of SAR at M2 to SAR at M1 = 74.4%

Maximum value of SAR (measured) = 0.504 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P16 CDMA BC0_RTAP153.6_Rear Face_10mm_Ch777_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10403 - AAB, CDMA2000 (1xEV-DO, Rev. 0); Frequency: 848.31 MHz; Duty Cycle: 1:2.38

Medium: H07T10N3_0210 Medium parameters used (interpolated): $f = 848.31$ MHz; $\sigma = 0.927$ S/m; $\epsilon_r = 42.817$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 848.31 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.668 W/kg

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

Reference Value = 28.04 V/m; Power Drift = -0.04 dB

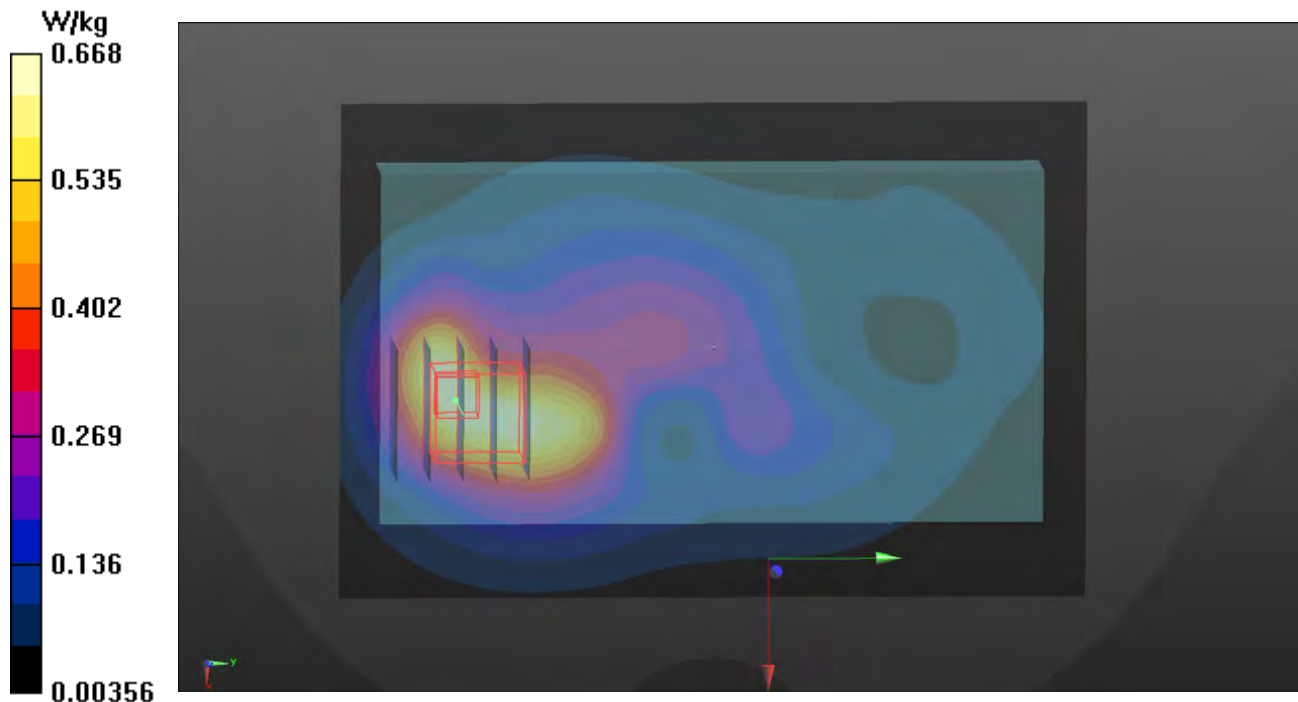
Peak SAR (extrapolated) = 0.743 W/kg

SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.393 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 71.4%

Maximum value of SAR (measured) = 0.667 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P17 CDMA BC1_RTAP153.6_Rear Face_10mm_Ch1175_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10403 - AAB, CDMA2000 (1xEV-DO, Rev. 0); Frequency: 1908.75 MHz; Duty Cycle: 1:2.38

Medium: H16T20N2_0210 Medium parameters used: $f = 1909$ MHz; $\sigma = 1.467$ S/m; $\epsilon_r = 41.246$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(8.17, 8.17, 8.17) @ 1908.75 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 27.78 V/m; Power Drift = -0.03 dB

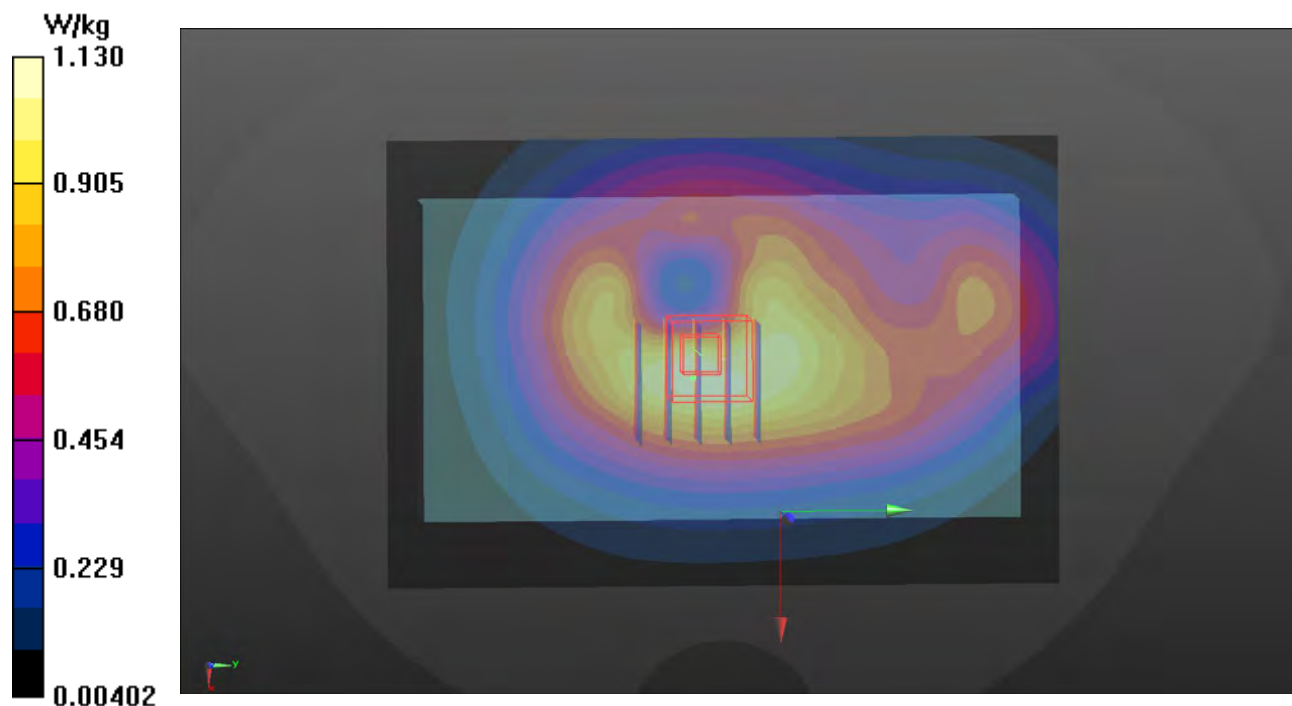
Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.453 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 = 55.9%

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



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/10

P18 CDMA BC10_RTAP153.6_Rear Face_10mm_Ch580_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10403 - AAB, CDMA2000 (1xEV-DO, Rev. 0); Frequency: 820.5 MHz; Duty Cycle: 1:2.38

Medium: H07T10N3_0210 Medium parameters used (interpolated): $f = 820.5$ MHz; $\sigma = 0.901$ S/m; $\epsilon_r = 43.214$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(9.92, 9.92, 9.92) @ 820.5 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 0.549 W/kg

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

Reference Value = 25.37 V/m; Power Drift = -0.03 dB

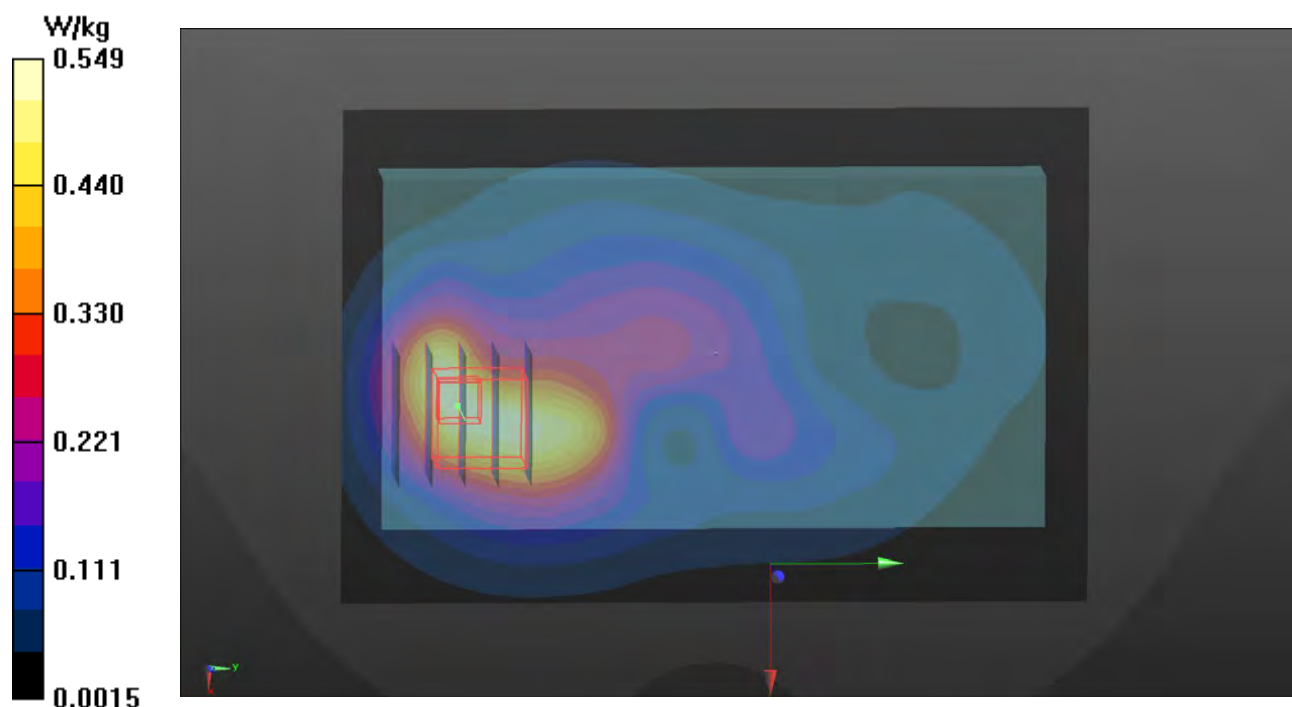
Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.230 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 = 59.1%

Maximum value of SAR (measured) = 0.559 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P19 LTE 7_QPSK20M_Rear Face_10mm_Ch21350_1RB_OS0_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2560 MHz; Duty Cycle: 1:3.79

Medium: H19T27N1_0209 Medium parameters used: $f = 2560$ MHz; $\sigma = 1.992$ S/m; $\epsilon_r = 38.213$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.41, 7.41, 7.41) @ 2560 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 2.02 W/kg

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

Reference Value = 31.96 V/m; Power Drift = -0.09 dB

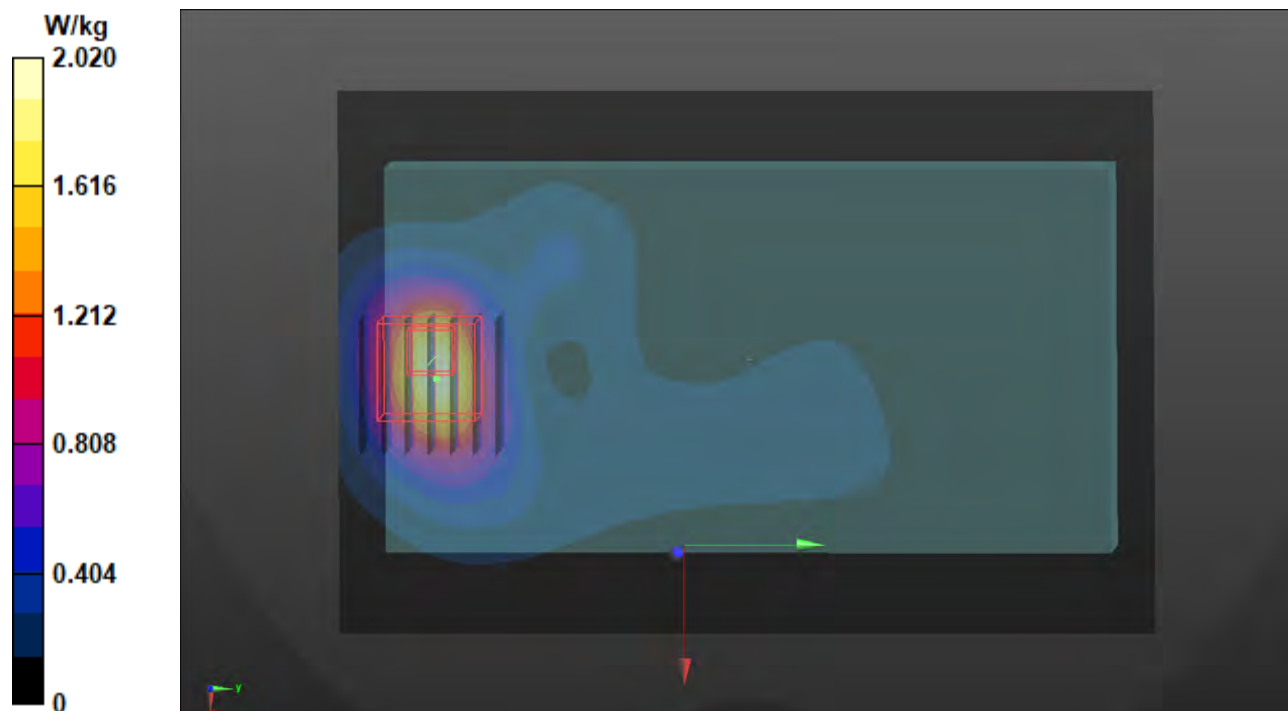
Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.482 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 11.7 mm

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

Maximum value of SAR (measured) = 1.86 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P20 WLAN2.4G_802.11b_Front Face_10mm_Ch1_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0209 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.835$ S/m; $\epsilon_r = 38.742$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2412 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.462 W/kg

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

Reference Value = 16.03 V/m; Power Drift = -0.05 dB

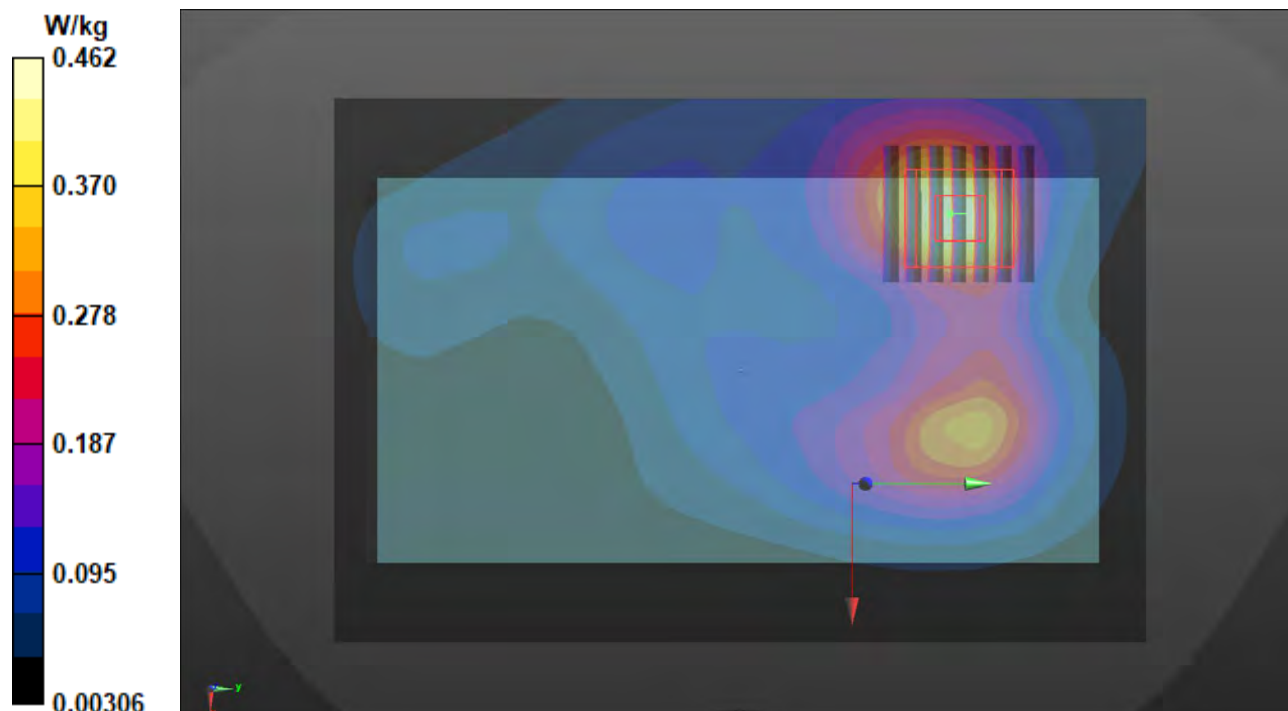
Peak SAR (extrapolated) = 0.574 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.164 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 = 53.8%

Maximum value of SAR (measured) = 0.471 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/17

P21 WLAN5.2G_802.11ac VHT80_Rear Face_10mm_Ch42_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5210 MHz; Duty Cycle: 1:1.08

Medium: H34T60N1_0217 Medium parameters used (interpolated): $f = 5210$ MHz; $\sigma = 4.628$ S/m; $\epsilon_r = 37.641$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.29, 5.29, 5.29) @ 5210 MHz; Calibrated: 2021/03/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (121x181x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 0.594 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 12.10 V/m; Power Drift = -0.05 dB

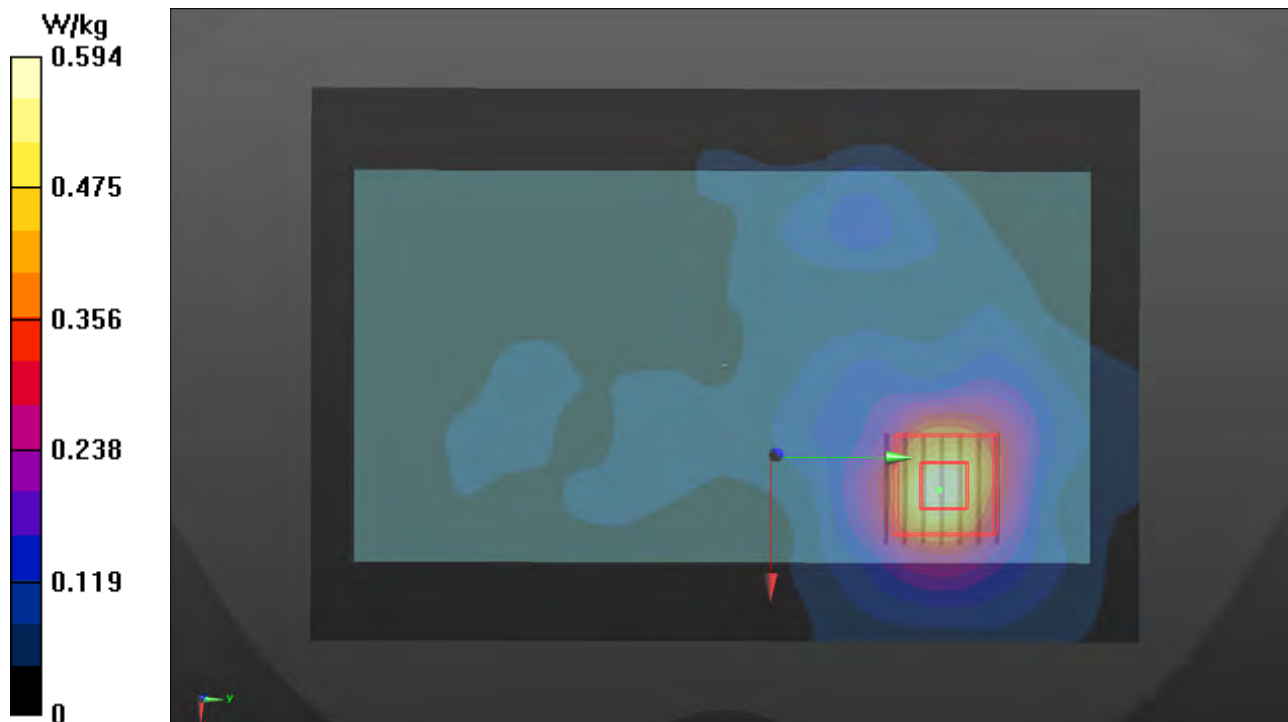
Peak SAR (extrapolated) = 0.817 W/kg

SAR(1 g) = 0.219 W/kg; SAR(10 g) = 0.097 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 14 mm

Ratio of SAR at M2 to SAR at M1 = 64.5%

Maximum value of SAR (measured) = 0.514 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/09

P22 WLAN2.4G_802.11b_Left Side_0mm_Ch1_Holster_w_o

DUT: BERD-WTW-P22010914

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0209 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.835$ S/m; $\epsilon_r = 38.742$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2412 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (51x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.06 W/kg

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

Reference Value = 32.85 V/m; Power Drift = -0.01 dB

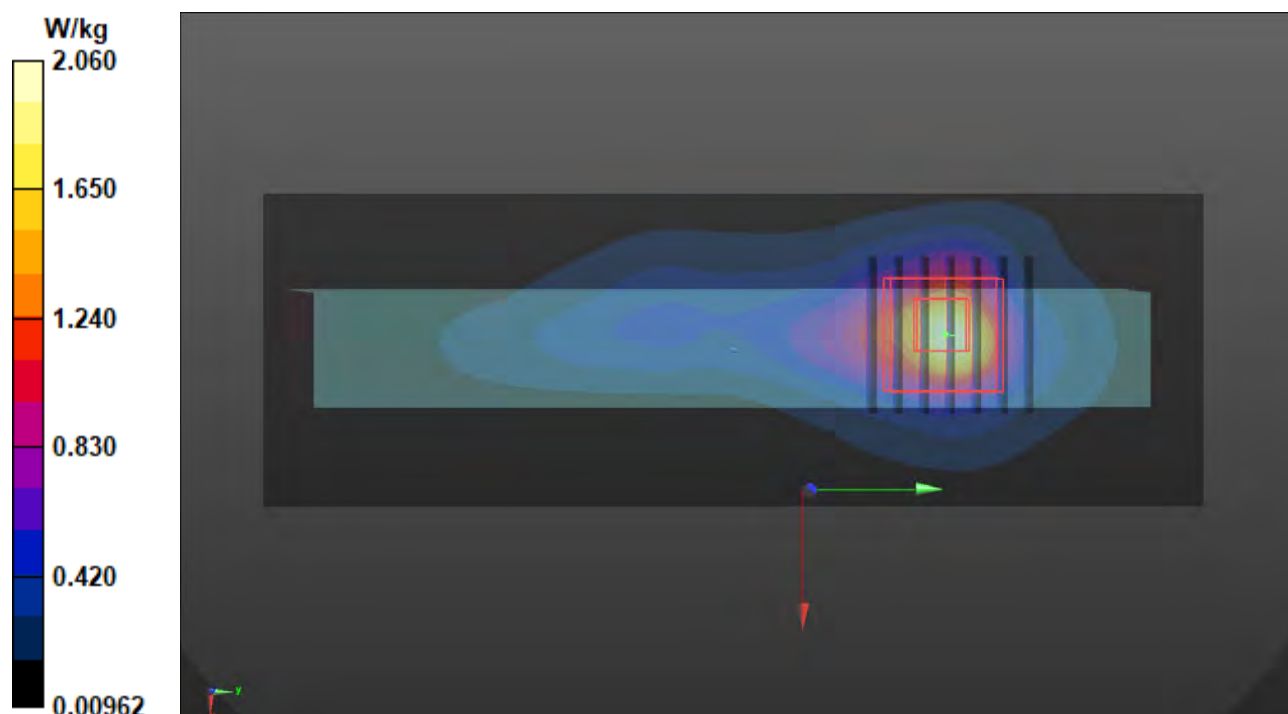
Peak SAR (extrapolated) = 3.40 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.574 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 = 44.2%

Maximum value of SAR (measured) = 2.48 W/kg



Annex C. Tissue & System Verification

The measuring results for tissue simulating liquid and system check are shown as below.

Note:

1. For Section 4.3, the dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within $\pm 10\%$ of the target values. Liquid temperature during the SAR testing has kept within $\pm 2^\circ\text{C}$.
2. For Section 4.4, The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.
3. For Section 4.5, Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Annex A of this report.

Tissue Verification									Validation for CW			Validation for Modulation				System Validation					Note			
Plot No.	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Targeted Conductivity (σ)	Targeted Permittivity (ε _r)	Deviation Conductivity (σ)	Deviation Permittivity (ε _r)	Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date	Frequency (MHz)	Targeted 1g SAR (W/kg)	Measured 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N	Output Power (dB)
S01	835	23.1	0.915	43.052	0.9	41.5	1.67	3.74	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.456	9.10	-5.03	4d121	7537	1585	17
S02	1900	23.2	1.463	41.25	1.4	40	4.50	3.13	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 09, 2022	1900	40.40	1.94	38.71	-4.19	5d036	7554	1589	17
S03	835	23.1	0.914	42.999	0.9	41.5	1.56	3.61	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.496	9.90	3.30	4d121	7554	1589	17
S04	835	23.1	0.914	42.999	0.9	41.5	1.56	3.61	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.496	9.90	3.30	4d121	7554	1589	17
S05	2600	23.2	2.035	38.071	1.96	39	3.83	-2.38	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 09, 2022	2600	57.60	2.88	57.46	-0.24	1020	7554	1589	17
S06	2450	23.2	1.89	38.349	1.8	39.2	5.00	-2.17	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 09, 2022	2450	52.60	2.65	52.87	0.52	737	7537	1585	17
S07	5250	23.1	4.676	37.628	4.71	35.9	-0.72	4.81	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 17, 2022	5250	80.60	4.23	84.40	4.71	1019	3650	861	17
S08	835	23.1	0.915	43.052	0.9	41.5	1.67	3.74	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.456	9.10	-5.03	4d121	7537	1585	17
S09	835	23.1	0.914	42.999	0.9	41.5	1.56	3.61	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.496	9.90	3.30	4d121	7554	1589	17
S10	1900	23.1	1.463	41.25	1.4	40	4.50	3.13	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	1900	40.40	1.97	39.31	-2.71	5d036	7554	1589	17
S11	835	23.1	0.914	42.999	0.9	41.5	1.56	3.61	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.496	9.90	3.30	4d121	7554	1589	17
S12	2600	23.3	2.035	38.071	1.96	39	3.83	-2.38	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 09, 2022	2600	57.60	2.86	57.06	-0.93	1020	7537	1585	17
S13	2450	23.2	1.876	38.596	1.8	39.2	4.22	-1.54	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 09, 2022	2450	52.60	2.62	52.28	-0.62	737	7554	1589	17
S14	5250	23.1	4.676	37.628	4.71	35.9	-0.72	4.81	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 17, 2022	5250	80.60	4.23	84.40	4.71	1019	3650	861	17
S15	835	23.1	0.915	43.052	0.9	41.5	1.67	3.74	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.456	9.10	-5.03	4d121	7537	1585	17
S16	835	23.1	0.914	42.999	0.9	41.5	1.56	3.61	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.496	9.90	3.30	4d121	7554	1589	17
S17	1900	23.1	1.463	41.25	1.4	40	4.50	3.13	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	1900	40.40	1.97	39.31	-2.71	5d036	7554	1589	17
S18	835	23.1	0.914	42.999	0.9	41.5	1.56	3.61	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 10, 2022	835	9.58	0.496	9.90	3.30	4d121	7554	1589	17
S19	2600	23.3	2.035	38.071	1.96	39	3.83	-2.38	Pass	Pass	Pass	N/A	N/A	N/A	Feb. 09, 2022	2600	57.60	2.86	57.06	-0.93	1020	7537	1585	17
S20	2450	23.2	1.876	38.596	1.8	39.2	4.22	-1.54	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 09, 2022	2450	52.60	2.62	52.28	-0.62	737	7554	1589	17
S21	5250	23.1	4.676	37.628	4.71	35.9	-0.72	4.81	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 17, 2022	5250	80.60	4.23	84.40	4.71	1019	3650	861	17

Tissue Verification									Validation for CW			Validation for Modulation				System Validation					Note			
Plot No.	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Targeted Conductivity (σ)	Targeted Permittivity (ε _r)	Deviation Conductivity (σ)	Deviation Permittivity (ε _r)	Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date	Frequency (MHz)	Targeted 10g SAR (W/kg)	Measured 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N	Output Power (dB)
S22	2450	23.2	1.876	38.596	1.8	39.2	4.22	-1.54	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 09, 2022	2450	23.90	1.23	24.54	2.69	737	7554	1589	17

Annex D. Maximum Target Conducted Power

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

GSM Max. Tune-up Power (Full)		
Mode	GSM850	GSM850
	Maximum Burst-Averaged Output Power	Maximum Frame-Averaged Output Power
	Maximum Target Power	Maximum Target Power
GSM (GMSK, 1Tx-slot)	33.8	24.8
GPRS (GMSK, 1Tx-slot)	33.8	24.8
GPRS (GMSK, 2Tx-slot)	30.8	24.8
GPRS (GMSK, 3Tx-slot)	28.9	24.6
GPRS (GMSK, 4Tx-slot)	27.5	24.5
EDGE (8PSK, 1Tx-slot)	33.8	24.8
EDGE (8PSK, 2Tx-slot)	30.8	24.8
EDGE (8PSK, 3Tx-slot)	28.8	24.5
EDGE (8PSK, 4Tx-slot)	27.5	24.5

CDMA Max. Tune-up Power (Full)		
Mode	1xRTT	1xEVDO
	Maximum Target Power	Maximum Target Power
CDMA BC0	24.8	24.8
CDMA BC10	24.8	24.8

LTE Max. Tune-up Power (Full)				
Mode	QPSK	16QAM	64QAM	256QAM
	Maximum Target Power	Maximum Target Power	Maximum Target Power	Maximum Target Power
LTE 7	24.0	23.0	22.0	19.0

WLAN Tune-up Power (Full)			
WLAN 2.4GHz			
Mode	Channel	Frequency	SISO Ant 0 Max Tune up
802.11b	1	2412	19.0
	6	2437	19.0
	11	2462	19.0
802.11g	1	2412	16.5
	6	2437	16.5
	11	2462	16.5
802.11n HT20	1	2412	16.5
	6	2437	16.5
	11	2462	16.5
802.11n HT40	3	2422	13.0
	6	2437	15.5
	9	2452	15.5

Annex E. Measured Conducted Power Result

The measuring conducted power (Unit: dBm) are shown as below.

GSM Conducted Power (Full)			
Band	GSM850		
Channel	128	189	251
Frequency	824.2	836.4	848.8
GSM	33.74	33.71	33.78
GPRS 1Tx Slot	33.75	33.80	33.79
GPRS 2Tx Slot	30.27	30.56	30.63
GPRS 3Tx Slot	27.85	28.51	28.61
GPRS 4Tx Slot	26.62	26.97	27.13
EDGE 1Tx Slot (MCS9)	33.65	33.70	33.69
EDGE 2Tx Slot (MCS9)	30.17	30.46	30.53
EDGE 3Tx Slot (MCS9)	27.75	28.41	28.51
EDGE 4Tx Slot (MCS9)	26.52	26.87	27.03

CDMA Conducted Power (Full)						
Band	CDMA2000 BC0			CDMA2000 BC10		
Channel	1013	384	777	476	580	684
Frequency	824.7	836.52	848.31	817.9	820.5	823.1
RC1+SO55	24.00	24.02	24.07	24.00	24.02	24.01
RC3+SO55	24.05	24.07	24.11	24.16	24.18	24.17
RC3+SO32(+ F-SCH)	24.03	24.05	24.08	24.11	24.13	24.12
RC3+SO32(+SCH)	24.02	24.04	24.07	24.09	24.11	24.10
RC1+SO3, 1/8 Rate	24.00	24.05	24.06	24.07	24.12	24.09
RTAP 153.6	24.03	24.05	24.08	24.11	24.13	24.12
RETAP 4096	24.00	24.02	24.05	24.09	24.11	24.10

LTE Conducted Power (Full)							
LTE Band 7							
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20850	21100	21350	
		Frequency (MHz)		2510	2535	2560	
20M	QPSK	1	0	23.50	23.98	23.72	0
		1	50	23.49	23.67	23.95	0
		1	99	23.32	23.42	23.80	0
		50	0	22.47	22.41	22.99	1
		50	25	22.43	22.35	22.93	1
		50	50	22.41	22.31	22.89	1
		100	0	22.43	22.33	22.91	1
20M	16QAM	1	0	22.38	22.28	22.86	1
		1	50	22.32	22.25	22.83	1
		1	99	22.27	22.17	22.75	1
		50	0	21.47	21.41	21.99	2
		50	25	21.34	21.32	21.90	2
		50	50	21.35	21.28	21.86	2
		100	0	21.34	21.24	21.82	2
20M	64QAM	1	0	21.49	21.39	21.97	2
		1	50	21.41	21.33	21.91	2
		1	99	21.37	21.27	21.85	2
		50	0	20.46	20.37	20.95	3
		50	25	20.42	20.32	20.90	3
		50	50	20.34	20.26	20.84	3
		100	0	20.32	20.22	20.80	3
BW	MCS Index	Channel		20825	21100	21375	3GPP MPR
		Frequency (MHz)		2507.5	2535	2562.5	
15M	QPSK	1	0	23.44	23.34	23.92	0
		1	37	23.42	23.31	23.89	0
		1	74	23.23	23.16	23.74	0
		36	0	22.45	22.35	22.93	1
		36	19	22.39	22.29	22.87	1
		36	39	22.36	22.25	22.83	1
		75	0	22.37	22.27	22.85	1
15M	16QAM	1	0	22.32	22.22	22.80	1
		1	37	22.29	22.19	22.77	1
		1	74	22.21	22.11	22.69	1
		36	0	21.45	21.35	21.93	2
		36	19	21.36	21.26	21.84	2
		36	39	21.29	21.22	21.80	2
		75	0	21.25	21.18	21.76	2
15M	64QAM	1	0	21.41	21.33	21.91	2
		1	37	21.37	21.27	21.85	2
		1	74	21.33	21.21	21.79	2
		36	0	20.41	20.31	20.89	3
		36	19	20.37	20.26	20.84	3
		36	39	20.29	20.20	20.78	3
		75	0	20.25	20.16	20.74	3

LTE Conducted Power (Full)							
LTE Band 7							
BW	MCS Index	Channel		20800	21100	21400	3GPP MPR
		Frequency (MHz)		2505	2535	2565	
10M	QPSK	1	0	23.41	23.31	23.89	0
		1	24	23.39	23.28	23.86	0
		1	49	23.20	23.13	23.71	0
		25	0	22.42	22.32	22.90	1
		25	12	22.36	22.26	22.84	1
		25	25	22.33	22.22	22.80	1
		50	0	22.34	22.24	22.82	1
10M	16QAM	1	0	22.29	22.19	22.77	1
		1	24	22.26	22.16	22.74	1
		1	49	22.18	22.08	22.66	1
		25	0	21.42	21.32	21.90	2
		25	12	21.33	21.23	21.81	2
		25	25	21.26	21.19	21.77	2
		50	0	21.22	21.15	21.73	2
10M	64QAM	1	0	21.38	21.30	21.88	2
		1	24	21.34	21.24	21.82	2
		1	49	21.30	21.18	21.76	2
		25	0	20.38	20.28	20.86	3
		25	12	20.34	20.23	20.81	3
		25	25	20.26	20.17	20.75	3
		50	0	20.22	20.13	20.71	3
BW	MCS Index	Channel		20775	21100	21425	3GPP MPR
		Frequency (MHz)		2502.5	2535	2567.5	
5M	QPSK	1	0	23.36	23.26	23.84	0
		1	12	23.34	23.23	23.81	0
		1	24	23.15	23.08	23.66	0
		12	0	22.37	22.27	22.85	1
		12	6	22.31	22.21	22.79	1
		12	13	22.28	22.17	22.75	1
		25	0	22.29	22.19	22.77	1
5M	16QAM	1	0	22.24	22.14	22.72	1
		1	12	22.21	22.11	22.69	1
		1	24	22.13	22.03	22.61	1
		12	0	21.37	21.27	21.85	2
		12	6	21.28	21.18	21.76	2
		12	13	21.21	21.14	21.72	2
		25	0	21.17	21.10	21.68	2
5M	64QAM	1	0	21.33	21.25	21.83	2
		1	12	21.29	21.19	21.77	2
		1	24	21.25	21.13	21.71	2
		12	0	20.33	20.23	20.81	3
		12	6	20.29	20.18	20.76	3
		12	13	20.21	20.12	20.70	3
		25	0	20.17	20.08	20.66	3

WLAN Conducted Power (Full)			
WLAN2.4GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11b	1	2412	18.11
	6	2437	18.13
	11	2462	18.09
802.11n HT40	3	2422	12.81
	6	2437	15.1
	9	2452	13.59

Annex F. SAR Test Result

SAR Results for Head / Body / Hotspot /Extremity Exposure Condition.

Note:

1. SAR testing for WLAN was performed on the maximum power mode.
2. SAR testing for LTE was performed on the maximum power mode.
3. The “< 0.001” means there is no SAR value or the SAR is too low to be measured.
4. Since LTE of this device supports VOIP capability through 3rd party apps software, we have evaluated data mode for head SAR.

Head SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Holster	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
1	GSM850	GPRS8	Right Cheek	-	189			-	-	1.00	33.80	33.80	1.00	-0.04	0.423	0.42
	GSM850	GPRS8	Right Tilted	-	189			-	-	1.00	33.80	33.80	1.00	0.02	0.272	0.27
	GSM850	GPRS8	Left Cheek	-	189			-	-	1.00	33.80	33.80	1.00	-0.08	0.354	0.35
	GSM850	GPRS8	Left Tilted	-	189			-	-	1.00	33.80	33.80	1.00	0.06	0.256	0.26
	GSM850	GPRS8	Right Cheek	-	128			-	-	1.00	33.80	33.75	1.01	0.08	0.405	0.41
	GSM850	GPRS8	Right Cheek	-	251			-	-	1.00	33.80	33.79	1.00	-0.04	0.398	0.40
2	WCDMA II	RMC12.2K	Left Cheek	-	9538			-	-	1.00	25.10	24.18	1.24	0.03	0.587	0.73
3	CDMA BC0	RC3+SO55	Right Cheek	-	777			-	-	1.00	24.80	24.11	1.17	-0.01	0.523	0.61
	CDMA BC0	RC3+SO55	Right Tilted	-	777			-	-	1.00	24.80	24.11	1.17	-0.02	0.379	0.44
	CDMA BC0	RC3+SO55	Left Cheek	-	777			-	-	1.00	24.80	24.11	1.17	0.05	0.473	0.55
	CDMA BC0	RC3+SO55	Left Tilted	-	777			-	-	1.00	24.80	24.11	1.17	0.07	0.364	0.43
	CDMA BC0	RC3+SO55	Right Cheek	-	1013			-	-	1.00	24.80	24.05	1.19	-0.19	0.491	0.58
	CDMA BC0	RC3+SO55	Right Cheek	-	384			-	-	1.00	24.80	24.07	1.18	-0.17	0.508	0.60
4	CDMA BC10	RC3+SO55	Right Cheek	-	580			-	-	1.00	24.80	24.18	1.15	-0.03	0.499	0.57
	CDMA BC10	RC3+SO55	Right Tilted	-	580			-	-	1.00	24.80	24.18	1.15	-0.04	0.328	0.38
	CDMA BC10	RC3+SO55	Left Cheek	-	580			-	-	1.00	24.80	24.18	1.15	-0.1	0.449	0.52
	CDMA BC10	RC3+SO55	Left Tilted	-	580			-	-	1.00	24.80	24.18	1.15	-0.19	0.337	0.39
	CDMA BC10	RC3+SO55	Right Cheek	-	476			-	-	1.00	24.80	24.16	1.16	-0.04	0.476	0.55
	CDMA BC10	RC3+SO55	Right Cheek	-	684			-	-	1.00	24.80	24.17	1.16	0.19	0.481	0.56
5	LTE 7	QPSK20M	Right Cheek	-	21100	1	0	-	-	1.00	24.00	23.98	1.00	0.01	0.23	0.23
	LTE 7	QPSK20M	Right Tilted	-	21100	1	0	-	-	1.00	24.00	23.98	1.00	-0.02	0.185	0.19
	LTE 7	QPSK20M	Left Cheek	-	21100	1	0	-	-	1.00	24.00	23.98	1.00	0.08	0.452	0.45
	LTE 7	QPSK20M	Left Tilted	-	21100	1	0	-	-	1.00	24.00	23.98	1.00	0.08	0.151	0.15
	LTE 7	QPSK20M	Right Cheek	-	21350	50	0	-	-	1.00	23.00	22.99	1.00	0.09	0.183	0.18
	LTE 7	QPSK20M	Right Tilted	-	21350	50	0	-	-	1.00	23.00	22.99	1.00	0.11	0.145	0.15
	LTE 7	QPSK20M	Left Cheek	-	21350	50	0	-	-	1.00	23.00	22.99	1.00	0.06	0.332	0.33
	LTE 7	QPSK20M	Left Tilted	-	21350	50	0	-	-	1.00	23.00	22.99	1.00	0.08	0.262	0.26
	LTE 7	QPSK20M	Left Cheek	-	20850	1	0	-	-	1.00	24.00	23.50	1.12	0.06	0.404	0.45
	LTE 7	QPSK20M	Left Cheek	-	21350	1	0	-	-	1.00	24.00	23.72	1.07	-0.03	0.414	0.44
6	WLAN2.4G	802.11b	Right Cheek	-	6			-	100.00	1.00	19.00	18.13	1.22	0.02	0.473	0.58
	WLAN2.4G	802.11b	Right Tilted	-	6			-	100.00	1.00	19.00	18.13	1.22	0.06	0.293	0.36
	WLAN2.4G	802.11b	Left Cheek	-	6			-	100.00	1.00	19.00	18.13	1.22	0.08	0.268	0.33
	WLAN2.4G	802.11b	Left Tilted	-	6			-	100.00	1.00	19.00	18.13	1.22	0.03	0.195	0.24
	WLAN2.4G	802.11b	Right Cheek	-	1			-	100.00	1.00	19.00	18.11	1.23	-0.06	0.513	0.63
	WLAN2.4G	802.11b	Right Cheek	-	11			-	100.00	1.00	19.00	18.09	1.23	-0.04	0.48	0.59
7	WLAN5.3G	802.11ac VHT80	Right Cheek	-	58			-	92.70	1.08	16.50	15.70	1.20	0.15	0.317	0.41

Body SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Holster	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
8	GSM850	GPRS8	Front Face	10	189			w/o	-	1.00	33.80	33.80	1.00	0.08	0.318	0.32
	GSM850	GPRS8	Rear Face	10	189			w/o	-	1.00	33.80	33.80	1.00	0.01	0.412	0.41
	GSM850	GPRS8	Front Face	0	189			w/ Holster 1	-	1.00	33.80	33.80	1.00	0.06	0.367	0.37
	GSM850	GPRS8	Rear Face	0	189			w/ Holster 1	-	1.00	33.80	33.80	1.00	0.07	0.199	0.20
	GSM850	GPRS8	Front Face	0	189			w/ Holster 2	-	1.00	33.80	33.80	1.00	0.04	0.301	0.30
	GSM850	GPRS8	Rear Face	0	189			w/ Holster 2	-	1.00	33.80	33.80	1.00	0.02	0.25	0.25
	GSM850	GPRS8	Rear Face	10	128			w/o	-	1.00	33.80	33.75	1.01	-0.06	0.395	0.40
	GSM850	GPRS8	Rear Face	10	251			w/o	-	1.00	33.80	33.79	1.00	0.01	0.391	0.39
9	CDMA BC0	RTAP153.6	Front Face	10	777			w/o	-	1.00	24.80	24.08	1.18	0.12	0.425	0.50
	CDMA BC0	RTAP153.6	Rear Face	10	777			w/o	-	1.00	24.80	24.08	1.18	-0.04	0.534	0.63
	CDMA BC0	RTAP153.6	Front Face	0	777			w/ Holster 1	-	1.00	24.80	24.08	1.18	0.1	0.367	0.43
	CDMA BC0	RTAP153.6	Rear Face	0	777			w/ Holster 1	-	1.00	24.80	24.08	1.18	0.08	0.206	0.24
	CDMA BC0	RTAP153.6	Front Face	0	777			w/ Holster 2	-	1.00	24.80	24.08	1.18	0.13	0.364	0.43
	CDMA BC0	RTAP153.6	Rear Face	0	777			w/ Holster 2	-	1.00	24.80	24.08	1.18	0.02	0.347	0.41
	CDMA BC0	RTAP153.6	Rear Face	10	1013			w/o	-	1.00	24.80	24.03	1.19	0.16	0.503	0.60
	CDMA BC0	RTAP153.6	Rear Face	10	384			w/o	-	1.00	24.80	24.05	1.19	-0.07	0.519	0.62
10	CDMA BC1	RTAP153.6	Rear Face	10	1175			w/o	-	1.00	24.30	23.84	1.11	-0.03	0.768	0.85
11	CDMA BC10	RTAP153.6	Front Face	10	580			w/o	-	1.00	24.80	24.13	1.17	0.05	0.276	0.32
	CDMA BC10	RTAP153.6	Rear Face	10	580			w/o	-	1.00	24.80	24.13	1.17	-0.03	0.392	0.46
	CDMA BC10	RTAP153.6	Front Face	0	580			w/ Holster 1	-	1.00	24.80	24.13	1.17	-0.09	0.308	0.36
	CDMA BC10	RTAP153.6	Rear Face	0	580			w/ Holster 1	-	1.00	24.80	24.13	1.17	-0.05	0.169	0.20
	CDMA BC10	RTAP153.6	Front Face	0	580			w/ Holster 2	-	1.00	24.80	24.13	1.17	0.13	0.277	0.32
	CDMA BC10	RTAP153.6	Rear Face	0	580			w/ Holster 2	-	1.00	24.80	24.13	1.17	-0.19	0.264	0.31
	CDMA BC10	RTAP153.6	Rear Face	10	476			w/o	-	1.00	24.80	24.11	1.17	-0.12	0.28	0.33
	CDMA BC10	RTAP153.6	Rear Face	10	684			w/o	-	1.00	24.80	24.12	1.17	0.1	0.277	0.32

Body SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Holster	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 7	QPSK20M	Front Face	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.11	0.709	0.71
	LTE 7	QPSK20M	Rear Face	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.12	1.06	1.06
	LTE 7	QPSK20M	Front Face	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	-0.03	0.559	0.56
	LTE 7	QPSK20M	Rear Face	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	0.06	0.9	0.90
	LTE 7	QPSK20M	Rear Face	10	21100	100	0	w/o	-	1.00	23.00	22.33	1.17	0.09	0.62	0.73
	LTE 7	QPSK20M	Front Face	0	21100	1	0	w/ Holster 1	-	1.00	24.00	23.98	1.00	0.02	0.156	0.16
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	w/ Holster 1	-	1.00	24.00	23.98	1.00	-0.06	0.215	0.22
	LTE 7	QPSK20M	Front Face	0	21350	50	0	w/ Holster 1	-	1.00	23.00	22.99	1.00	0.04	0.141	0.14
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	w/ Holster 1	-	1.00	23.00	22.99	1.00	0.08	0.185	0.19
	LTE 7	QPSK20M	Front Face	0	21100	1	0	w/ Holster 2	-	1.00	24.00	23.98	1.00	-0.06	0.549	0.55
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	w/ Holster 2	-	1.00	24.00	23.98	1.00	0.02	0.574	0.57
	LTE 7	QPSK20M	Front Face	0	21350	50	0	w/ Holster 2	-	1.00	23.00	22.99	1.00	0.01	0.445	0.45
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	w/ Holster 2	-	1.00	23.00	22.99	1.00	-0.07	0.477	0.48
	LTE 7	QPSK20M	Rear Face	10	20850	1	0	w/o	-	1.00	24.00	23.50	1.12	0.08	1	1.12
12	LTE 7	QPSK20M	Rear Face	10	21350	1	0	w/o	-	1.00	24.00	23.72	1.07	-0.09	1.07	1.14
	LTE 7	QPSK20M	Rear Face	10	21350	1	0	w/o	-	1.00	24.00	23.72	1.07	0.02	1.05	1.12
	WLAN2.4G	802.11b	Front Face	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0.01	0.152	0.19
	WLAN2.4G	802.11b	Rear Face	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0.05	0.139	0.17
	WLAN2.4G	802.11b	Front Face	0	6			w/ Holster 1	100.00	1.00	19.00	18.13	1.22	0.02	0.09	0.11
	WLAN2.4G	802.11b	Rear Face	0	6			w/ Holster 1	100.00	1.00	19.00	18.13	1.22	0.03	0.091	0.11
	WLAN2.4G	802.11b	Front Face	0	6			w/ Holster 2	100.00	1.00	19.00	18.13	1.22	0.04	0.095	0.12
	WLAN2.4G	802.11b	Rear Face	0	6			w/ Holster 2	100.00	1.00	19.00	18.13	1.22	0.07	0.097	0.12
13	WLAN2.4G	802.11b	Front Face	10	1			w/o	100.00	1.00	19.00	18.11	1.23	-0.01	0.159	0.20
	WLAN2.4G	802.11b	Front Face	10	11			w/o	100.00	1.00	19.00	18.09	1.23	-0.17	0.143	0.18
14	WLAN5.3G	802.11ac VHT80	Rear Face	10	58			w/o	92.70	1.08	16.50	15.70	1.20	-0.05	0.219	0.28

Hotspot SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Holster	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
15	GSM850	GPRS8	Front Face	10	189			w/o	-	1.00	33.80	33.80	1.00	0.08	0.318	0.32
	GSM850	GPRS8	Rear Face	10	189			w/o	-	1.00	33.80	33.80	1.00	0.01	0.412	0.41
	GSM850	GPRS8	Left Side	10	189			w/o	-	1.00	33.80	33.80	1.00	0.08	0.088	0.09
	GSM850	GPRS8	Right Side	10	189			w/o	-	1.00	33.80	33.80	1.00	0.06	0.182	0.18
	GSM850	GPRS8	Top Side	10	189			w/o	-	1.00	33.80	33.80	1.00	0	<0.001	0.00
	GSM850	GPRS8	Bottom Side	10	189			w/o	-	1.00	33.80	33.80	1.00	0.02	0.201	0.20
	GSM850	GPRS8	Front Face	0	189			w/ Holster 1	-	1.00	33.80	33.80	1.00	0.06	0.367	0.37
	GSM850	GPRS8	Rear Face	0	189			w/ Holster 1	-	1.00	33.80	33.80	1.00	0.07	0.199	0.20
	GSM850	GPRS8	Front Face	0	189			w/ Holster 2	-	1.00	33.80	33.80	1.00	0.04	0.301	0.30
	GSM850	GPRS8	Rear Face	0	189			w/ Holster 2	-	1.00	33.80	33.80	1.00	0.02	0.25	0.25
	GSM850	GPRS8	Rear Face	10	128			w/o	-	1.00	33.80	33.75	1.01	-0.06	0.395	0.40
	GSM850	GPRS8	Rear Face	10	251			w/o	-	1.00	33.80	33.79	1.00	0.01	0.391	0.39
16	CDMA BC0	RTAP153.6	Front Face	10	777			w/o	-	1.00	24.80	24.08	1.18	-0.12	0.425	0.50
	CDMA BC0	RTAP153.6	Rear Face	10	777			w/o	-	1.00	24.80	24.08	1.18	-0.04	0.534	0.63
	CDMA BC0	RTAP153.6	Left Side	10	777			w/o	-	1.00	24.80	24.08	1.18	0.05	0.082	0.10
	CDMA BC0	RTAP153.6	Right Side	10	777			w/o	-	1.00	24.80	24.08	1.18	0	<0.001	0.00
	CDMA BC0	RTAP153.6	Top Side	10	777			w/o	-	1.00	24.80	24.08	1.18	0	<0.001	0.00
	CDMA BC0	RTAP153.6	Bottom Side	10	777			w/o	-	1.00	24.80	24.08	1.18	-0.05	0.317	0.37
	CDMA BC0	RTAP153.6	Front Face	0	777			w/ Holster 1	-	1.00	24.80	24.08	1.18	-0.11	0.367	0.43
	CDMA BC0	RTAP153.6	Rear Face	0	777			w/ Holster 1	-	1.00	24.80	24.08	1.18	-0.04	0.206	0.24
	CDMA BC0	RTAP153.6	Front Face	0	777			w/ Holster 2	-	1.00	24.80	24.08	1.18	-0.02	0.364	0.43
	CDMA BC0	RTAP153.6	Rear Face	0	777			w/ Holster 2	-	1.00	24.80	24.08	1.18	0.13	0.347	0.41
	CDMA BC0	RTAP153.6	Rear Face	10	1013			w/o	-	1.00	24.80	24.03	1.19	-0.1	0.503	0.60
	CDMA BC0	RTAP153.6	Rear Face	10	384			w/o	-	1.00	24.80	24.05	1.19	-0.06	0.519	0.62
17	CDMA BC1	RTAP153.6	Rear Face	10	1175			w/o	-	1.00	24.30	23.84	1.11	-0.03	0.768	0.85
	CDMA BC10	RTAP153.6	Front Face	10	580			w/o	-	1.00	24.80	24.13	1.17	0.08	0.276	0.32
	CDMA BC10	RTAP153.6	Rear Face	10	580			w/o	-	1.00	24.80	24.13	1.17	-0.03	0.392	0.46
	CDMA BC10	RTAP153.6	Left Side	10	580			w/o	-	1.00	24.80	24.13	1.17	0.12	0.092	0.11
	CDMA BC10	RTAP153.6	Right Side	10	580			w/o	-	1.00	24.80	24.13	1.17	0.06	0.1	0.12
	CDMA BC10	RTAP153.6	Top Side	10	580			w/o	-	1.00	24.80	24.13	1.17	0	<0.001	0.00
	CDMA BC10	RTAP153.6	Bottom Side	10	580			w/o	-	1.00	24.80	24.13	1.17	-0.1	0.077	0.09
	CDMA BC10	RTAP153.6	Front Face	0	580			w/ Holster 1	-	1.00	24.80	24.13	1.17	-0.14	0.308	0.36
	CDMA BC10	RTAP153.6	Rear Face	0	580			w/ Holster 1	-	1.00	24.80	24.13	1.17	0.17	0.169	0.20
	CDMA BC10	RTAP153.6	Front Face	0	580			w/ Holster 2	-	1.00	24.80	24.13	1.17	0.04	0.277	0.32
	CDMA BC10	RTAP153.6	Rear Face	0	580			w/ Holster 2	-	1.00	24.80	24.13	1.17	0.18	0.264	0.31
	CDMA BC10	RTAP153.6	Rear Face	10	476			w/o	-	1.00	24.80	24.11	1.17	-0.17	0.28	0.33
18	CDMA BC10	RTAP153.6	Rear Face	10	684			w/o	-	1.00	24.80	24.12	1.17	-0.06	0.277	0.32

Hotspot SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Holster	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	LTE 7	QPSK20M	Front Face	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.11	0.709	0.71
	LTE 7	QPSK20M	Rear Face	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.12	1.06	1.06
	LTE 7	QPSK20M	Left Side	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.06	0.421	0.42
	LTE 7	QPSK20M	Right Side	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.08	0.162	0.16
	LTE 7	QPSK20M	Top Side	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	10	21100	1	0	w/o	-	1.00	24.00	23.98	1.00	0.02	1.04	1.04
	LTE 7	QPSK20M	Front Face	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	-0.03	0.559	0.56
	LTE 7	QPSK20M	Rear Face	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	0.06	0.9	0.90
	LTE 7	QPSK20M	Left Side	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	-0.16	0.289	0.29
	LTE 7	QPSK20M	Right Side	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	0.05	0.104	0.10
	LTE 7	QPSK20M	Top Side	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	10	21350	50	0	w/o	-	1.00	23.00	22.99	1.00	0.12	0.879	0.88
	LTE 7	QPSK20M	Rear Face	10	21100	100	0	w/o	-	1.00	23.00	22.33	1.17	0.09	0.62	0.73
	LTE 7	QPSK20M	Front Face	0	21100	1	0	w/ Holster 1	-	1.00	24.00	23.98	1.00	0.02	0.156	0.16
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	w/ Holster 1	-	1.00	24.00	23.98	1.00	-0.06	0.215	0.22
	LTE 7	QPSK20M	Front Face	0	21350	50	0	w/ Holster 1	-	1.00	23.00	22.99	1.00	0.04	0.141	0.14
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	w/ Holster 1	-	1.00	23.00	22.99	1.00	0.08	0.185	0.19
	LTE 7	QPSK20M	Front Face	0	21100	1	0	w/ Holster 2	-	1.00	24.00	23.98	1.00	-0.06	0.549	0.55
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	w/ Holster 2	-	1.00	24.00	23.98	1.00	0.02	0.574	0.57
	LTE 7	QPSK20M	Front Face	0	21350	50	0	w/ Holster 2	-	1.00	23.00	22.99	1.00	0.01	0.445	0.45
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	w/ Holster 2	-	1.00	23.00	22.99	1.00	-0.07	0.477	0.48
	LTE 7	QPSK20M	Rear Face	10	20850	1	0	w/o	-	1.00	24.00	23.50	1.12	0.08	1	1.12
19	LTE 7	QPSK20M	Rear Face	10	21350	1	0	w/o	-	1.00	24.00	23.72	1.07	-0.09	1.07	1.14
	LTE 7	QPSK20M	Rear Face	10	21350	1	0	w/o	-	1.00	24.00	23.72	1.07	0.02	1.05	1.12
	WLAN2.4G	802.11b	Front Face	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0.01	0.152	0.19
	WLAN2.4G	802.11b	Rear Face	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0.05	0.139	0.17
	WLAN2.4G	802.11b	Left Side	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0.02	0.049	0.06
	WLAN2.4G	802.11b	Right Side	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0	<0.001	0.00
	WLAN2.4G	802.11b	Top Side	10	6			w/o	100.00	1.00	19.00	18.89	1.03	0	<0.001	0.00
	WLAN2.4G	802.11b	Bottom Side	10	6			w/o	100.00	1.00	19.00	18.13	1.22	0	<0.001	0.00
	WLAN2.4G	802.11b	Front Face	0	6			w/ Holster 1	100.00	1.00	19.00	18.13	1.22	0.02	0.09	0.11
	WLAN2.4G	802.11b	Rear Face	0	6			w/ Holster 1	100.00	1.00	19.00	18.13	1.22	0.03	0.091	0.11
	WLAN2.4G	802.11b	Front Face	0	6			w/ Holster 2	100.00	1.00	19.00	18.13	1.22	0.04	0.095	0.12
	WLAN2.4G	802.11b	Rear Face	0	6			w/ Holster 2	100.00	1.00	19.00	18.13	1.22	0.07	0.097	0.12
20	WLAN2.4G	802.11b	Front Face	10	1			w/o	100.00	1.00	19.00	18.11	1.23	-0.01	0.159	0.20
	WLAN2.4G	802.11b	Front Face	10	11			w/o	100.00	1.00	19.00	18.09	1.23	-0.17	0.143	0.18
21	WLAN5.2G	802.11ac VHT80	Rear Face	10	42			w/o	92.70	1.08	16.50	15.38	1.29	-0.05	0.219	0.31

Extrimity SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Holster	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-10g (W/kg)	Scaled SAR-10g (W/kg)
	WLAN2.4G	802.11b	Front Face	0	6			w/o	100.00	1.00	19.00	18.13	1.22	-0.08	0.342	0.42
	WLAN2.4G	802.11b	Rear Face	0	6			w/o	100.00	1.00	19.00	18.13	1.22	-0.08	0.227	0.28
	WLAN2.4G	802.11b	Left Side	0	6			w/o	100.00	1.00	19.00	18.13	1.22	-0.04	0.419	0.51
	WLAN2.4G	802.11b	Top Side	0	6			w/o	100.00	1.00	19.00	18.13	1.22	-0.06	0.157	0.19
22	WLAN2.4G	802.11b	Left Side	0	1			w/o	100.00	1.00	19.00	18.11	1.23	-0.01	0.426	0.52
	WLAN2.4G	802.11b	Left Side	0	11			w/o	100.00	1.00	19.00	18.09	1.23	-0.01	0.412	0.51

Annex G. SAR Measurement Variability

SAR repeated measurement are shown as below.

Repeat SAR							
Plot	Band	Mode	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio
R06	WLAN2.4G	802.11b	Right Cheek	1	0.933	0.927	1.01
R12	LTE 7	QPSK20M	Rear Face	21350	1.07	1.05	1.02

Annex H. Analysis of Simultaneous Transmission SAR.

The analysis of simultaneous transmission SAR are shown as below.

<Possibilities of Simultaneous Transmission>

The simultaneous transmission possibilities for this device are listed as below.

Simultaneous TX Combination	Capable Transmit Configurations	Head / Body / Hotspot Exposure Condition
A	WWAN + WLAN 2.4G	Yes
B	WWAN + WLAN 5G	Yes

Notes

- 1. The WLAN 2.4G and WLAN 5G cannot transmit simultaneously.

Simultaneous Transmission SAR Evaluation (Head)						
Band	Position	1	2	3	A(1+2)	B(1+3)
		Max WWAN	Max WLAN 2.4GHz	Max WLAN 5GHz	Summimg result	Summimg result
		1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg
GSM850	Right Cheek	0.42	0.63	0.41	1.05	0.83
	Right Tilted	0.27	0.36	0.00	0.63	0.27
	Left Cheek	0.35	0.33	0.00	0.68	0.35
	Left Tilted	0.26	0.24	0.00	0.50	0.26
WCDMA II	Right Cheek	0.00	0.63	0.41	0.63	0.41
	Right Tilted	0.00	0.36	0.00	0.36	0.00
	Left Cheek	0.73	0.33	0.00	1.06	0.73
	Left Tilted	0.00	0.24	0.00	0.24	0.00
CDMA BC0	Right Cheek	0.61	0.63	0.41	1.24	1.02
	Right Tilted	0.44	0.36	0.00	0.80	0.44
	Left Cheek	0.55	0.33	0.00	0.88	0.55
	Left Tilted	0.43	0.24	0.00	0.67	0.43
CDMA BC10	Right Cheek	0.57	0.63	0.41	1.20	0.98
	Right Tilted	0.38	0.36	0.00	0.74	0.38
	Left Cheek	0.52	0.33	0.00	0.85	0.52
	Left Tilted	0.39	0.24	0.00	0.63	0.39
LTE 7	Right Cheek	0.23	0.63	0.41	0.86	0.64
	Right Tilted	0.19	0.36	0.00	0.55	0.19
	Left Cheek	0.45	0.33	0.00	0.78	0.45
	Left Tilted	0.26	0.24	0.00	0.50	0.26

Simultaneous Transmission SAR Evaluation (Body)						
Band	Position	1	2	3	A(1+2)	B(1+3)
		Max WWAN	Max WLAN 2.4GHz	Max WLAN 5GHz	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg
		1g SAR W/kg	1g SAR W/kg	1g SAR W/kg		
GSM850	Front Face	0.37	0.20	0.00	0.57	0.37
	Rear Face	0.41	0.17	0.28	0.58	0.69
CDMA BC0	Front Face	0.50	0.20	0.00	0.70	0.50
	Rear Face	0.63	0.17	0.28	0.80	0.91
CDMA BC1	Rear Face	0.85	0.17	0.28	1.02	1.13
CDMA BC10	Front Face	0.36	0.20	0.00	0.56	0.36
	Rear Face	0.46	0.17	0.28	0.63	0.74
LTE 7	Front Face	0.71	0.20	0.00	0.91	0.71
	Rear Face	1.14	0.17	0.28	1.31	1.42

Simultaneous Transmission SAR Evaluation (Hotspot)						
Band	Position	1	2	3	A(1+2)	B(1+3)
		Max WWAN	Max WLAN 2.4GHz	Max WLAN 5GHz	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg
		1g SAR W/kg	1g SAR W/kg	1g SAR W/kg		
GSM850	Front Face	0.37	0.20	0.00	0.57	0.37
	Rear Face	0.41	0.17	0.31	0.58	0.72
	Left Side	0.09	0.06	0.00	0.15	0.09
	Right Side	0.18	0.00	0.00	0.18	0.18
	Top Side	0.00	0.00	0.00	0.00	0.00
	Bottom Side	0.20	0.00	0.00	0.20	0.20
CDMA BC0	Front Face	0.50	0.20	0.00	0.70	0.50
	Rear Face	0.63	0.17	0.31	0.80	0.94
	Left Side	0.10	0.06	0.00	0.16	0.10
	Right Side	0.00	0.00	0.00	0.00	0.00
	Top Side	0.00	0.00	0.00	0.00	0.00
	Bottom Side	0.37	0.00	0.00	0.37	0.37
CDMA BC1	Rear Face	0.85	0.17	0.31	1.02	1.16
CDMA BC10	Front Face	0.36	0.20	0.00	0.56	0.36
	Rear Face	0.46	0.17	0.31	0.63	0.77
	Left Side	0.11	0.06	0.00	0.17	0.11
	Right Side	0.12	0.00	0.00	0.12	0.12
	Top Side	0.00	0.00	0.00	0.00	0.00
	Bottom Side	0.09	0.00	0.00	0.09	0.09
LTE 7	Front Face	0.71	0.20	0.00	0.91	0.71
	Rear Face	1.14	0.17	0.31	1.31	1.45
	Left Side	0.42	0.06	0.00	0.48	0.42
	Right Side	0.16	0.00	0.00	0.16	0.16
	Top Side	0.00	0.00	0.00	0.00	0.00
	Bottom Side	1.04	0.00	0.00	1.04	1.04

Annex I. SAR to Peak Location Separation Ratio Analysis.

Since sum of simultaneous transmission SAR is less than the SAR limit for Body / Head : SAR_{1g} 1.6 W/kg ;
Extremity SAR_{10g} 4.0 W/kg. There is no requirement for SAR to Peak Location Separation Ratio Analysis.

Annex J. Calibration of Test Equipment List

Calibration of Test Equipment List are shown as below.

Equipment for SAR Test					
Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D835V2	4d121	Aug. 31, 2021	1 Year
System Validation Dipole	SPEAG	D1900V2	5d036	Jan. 22, 2021	2 Year
System Validation Dipole	SPEAG	D2450V2	737	Aug. 26, 2021	1 Year
System Validation Dipole	SPEAG	D2600V2	1020	Aug. 17, 2021	1 Year
System Validation Dipole	SPEAG	D5GHzV2	1019	Mar. 19, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7537	Apr. 26, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7554	Aug. 26, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3650	Mar. 26, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	861	Apr. 14, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1585	Apr. 15, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1589	Aug. 20, 2021	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Apr. 06, 2021	1 Year
Universal Wireless Test Set	Anritsu	MT8870A/MU887000A	6201699387	Sep. 22, 2021	1 Year
Thermometer	YFE	YF-160A	191100743	Apr. 12, 2021	1 Year
Dielectric Assessment Kit	SPEAG	DAKS-3.5	1151	Jul. 14, 2021	1 Year
Powersource1	SPEAG	SE_UMS_160 BA	4010	Jul. 13, 2021	1 Year