

Annex A. SAR Plots of System Verification

The plots for system verification are shown as follows.

S01 System Check_H1900_211012

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

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

Medium: H16T20N1_1012 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.452$ S/m; $\epsilon_r = 39.322$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.27, 8.27, 8.27) @ 1900 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 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) = 3.57 W/kg

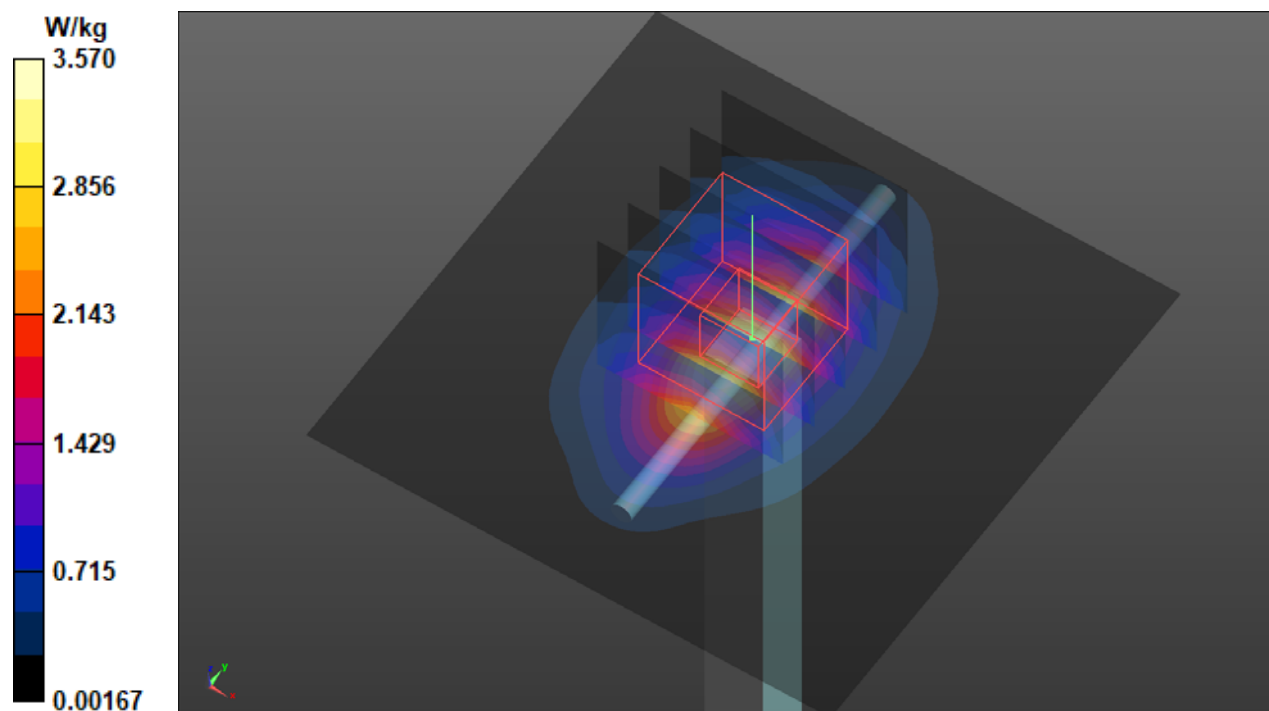
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.56 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 4.15 W/kg

SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.53 W/kg



S02 System Check_H1750_211012

DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1111

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

Medium: H16T20N1_1012 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.323$ S/m; $\epsilon_r = 39.859$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.55, 8.55, 8.55) @ 1750 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

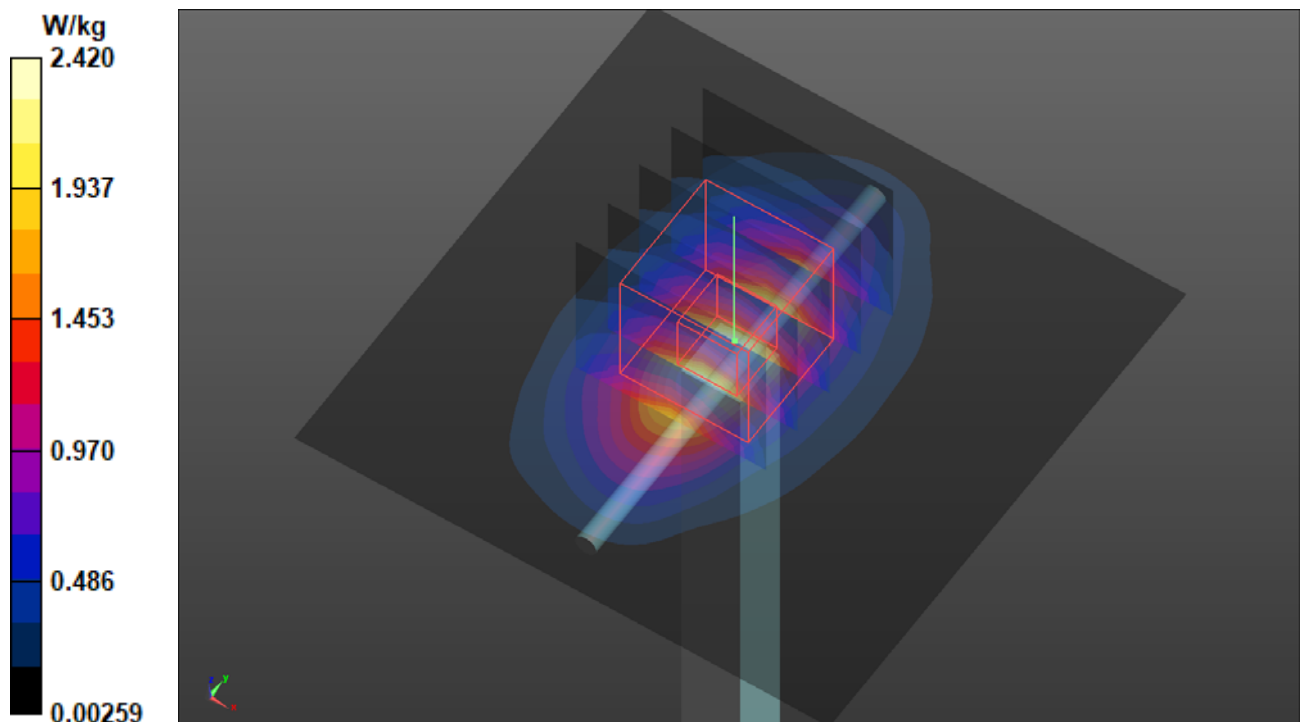
Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.42 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 41.70 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 1.64 W/kg; SAR(10 g) = 0.860 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.46 W/kg



S03 System Check_H835_211012

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d092

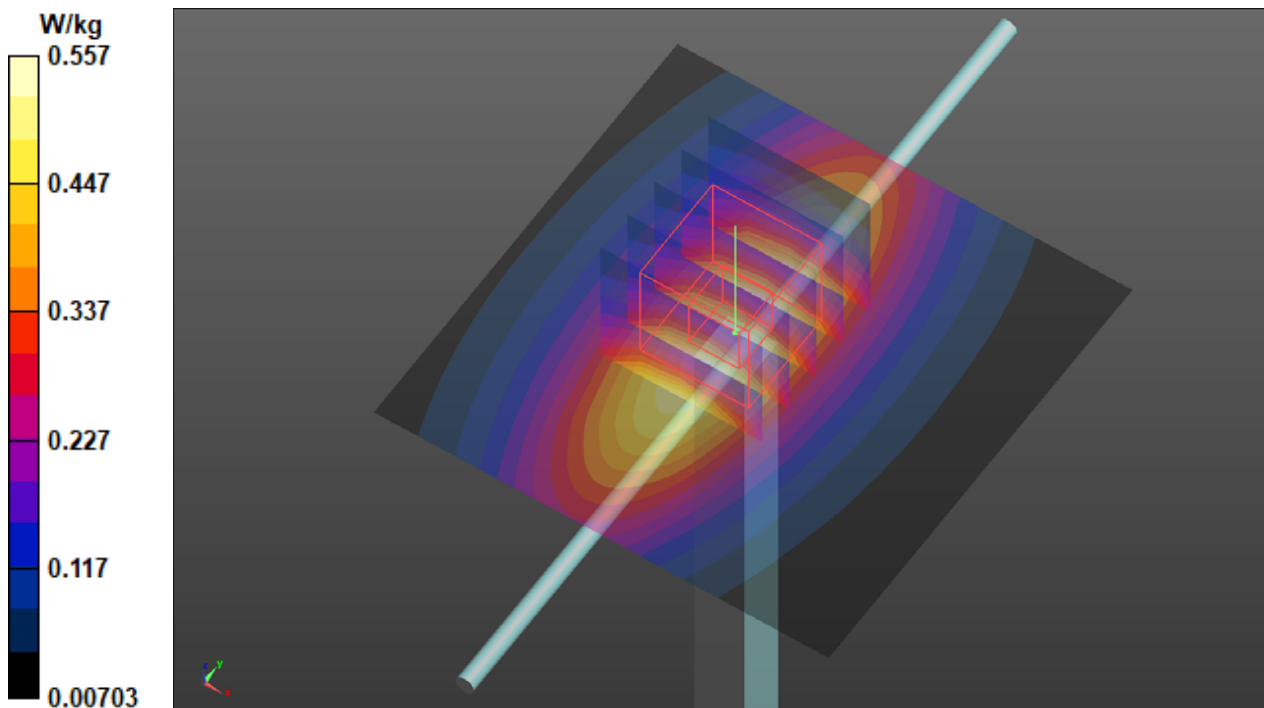
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: H07T10N1_1012 Medium parameters used: $f = 835$ MHz; $\sigma = 0.908$ S/m; $\epsilon_r = 42.679$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

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-ELI Phantom_2118; Type: QD OVA 004 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) = 0.557 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.18 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.628 W/kg
SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.282 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.565 W/kg



S04 System Check_H1900_211012

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

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

Medium: H16T20N1_1012 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.452$ S/m; $\epsilon_r = 39.322$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.27, 8.27, 8.27) @ 1900 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 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) = 3.57 W/kg

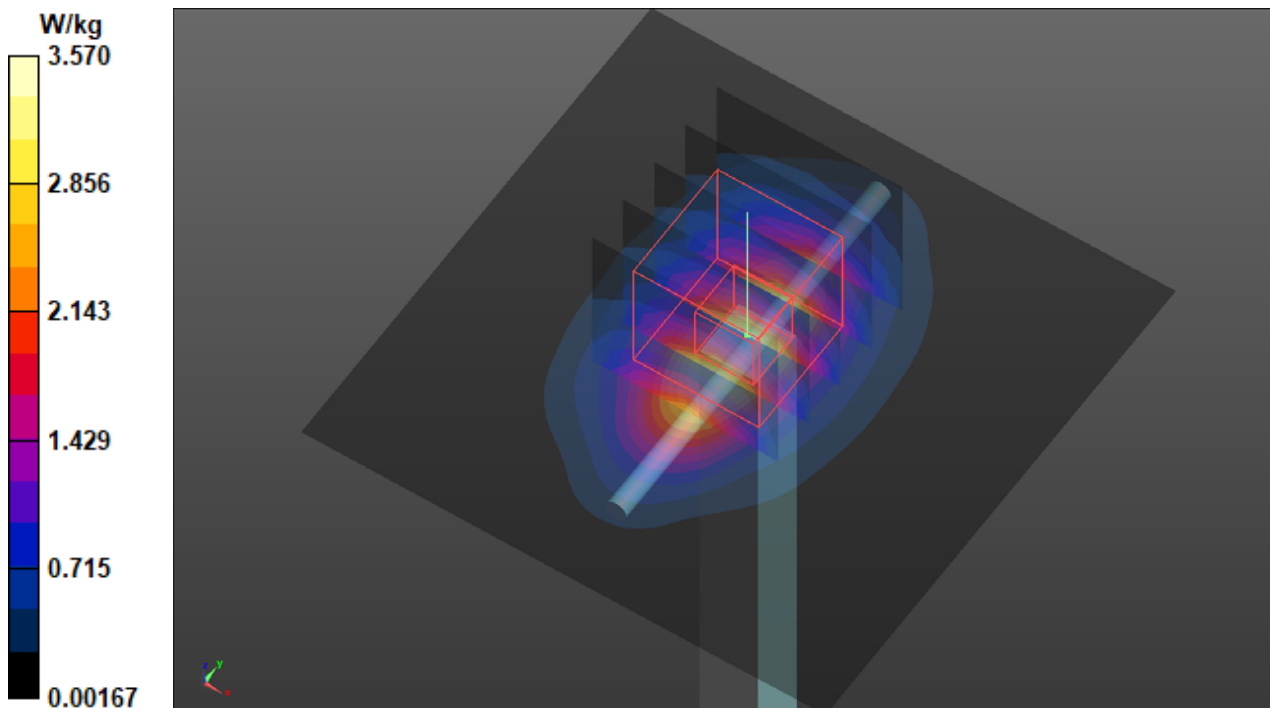
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.56 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 4.15 W/kg

SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.53 W/kg



S05 System Check_H1750_211012

DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1111

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

Medium: H16T20N1_1012 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.323$ S/m; $\epsilon_r = 39.859$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.55, 8.55, 8.55) @ 1750 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 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) = 2.42 W/kg

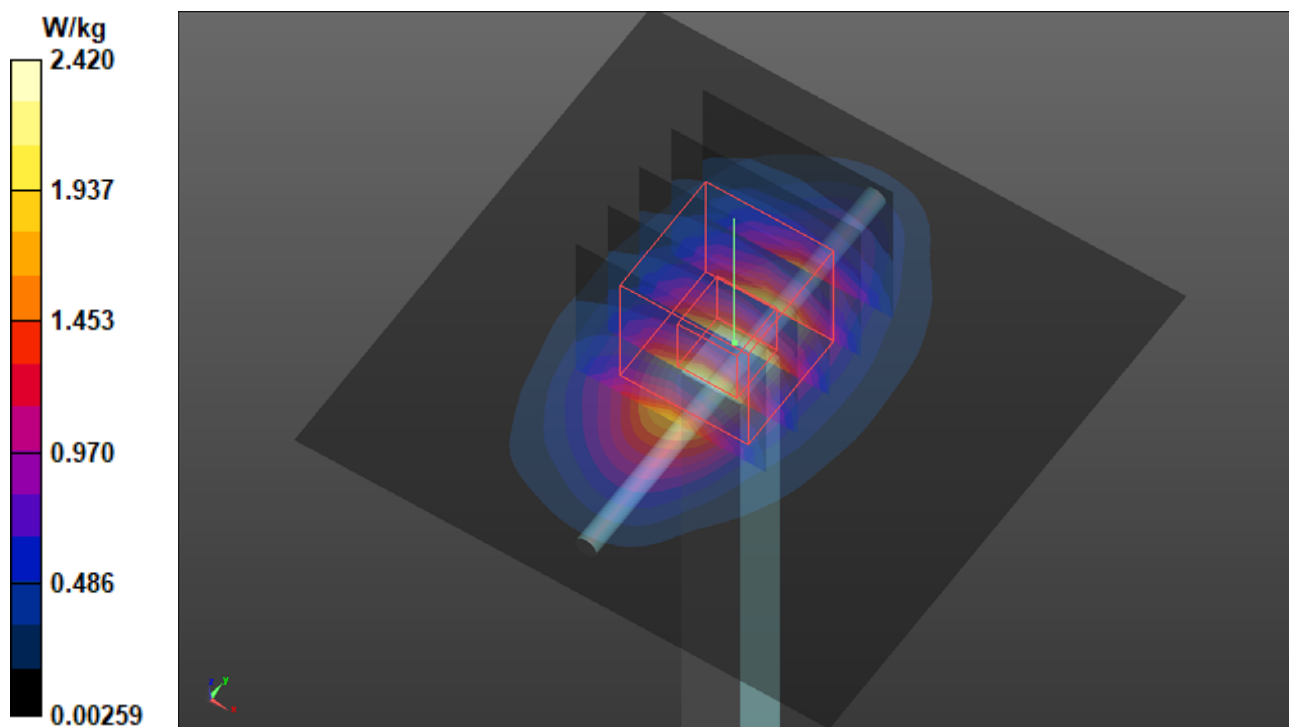
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 41.70 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 1.64 W/kg; SAR(10 g) = 0.860 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.46 W/kg



S06 System Check_H835_211012

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d092

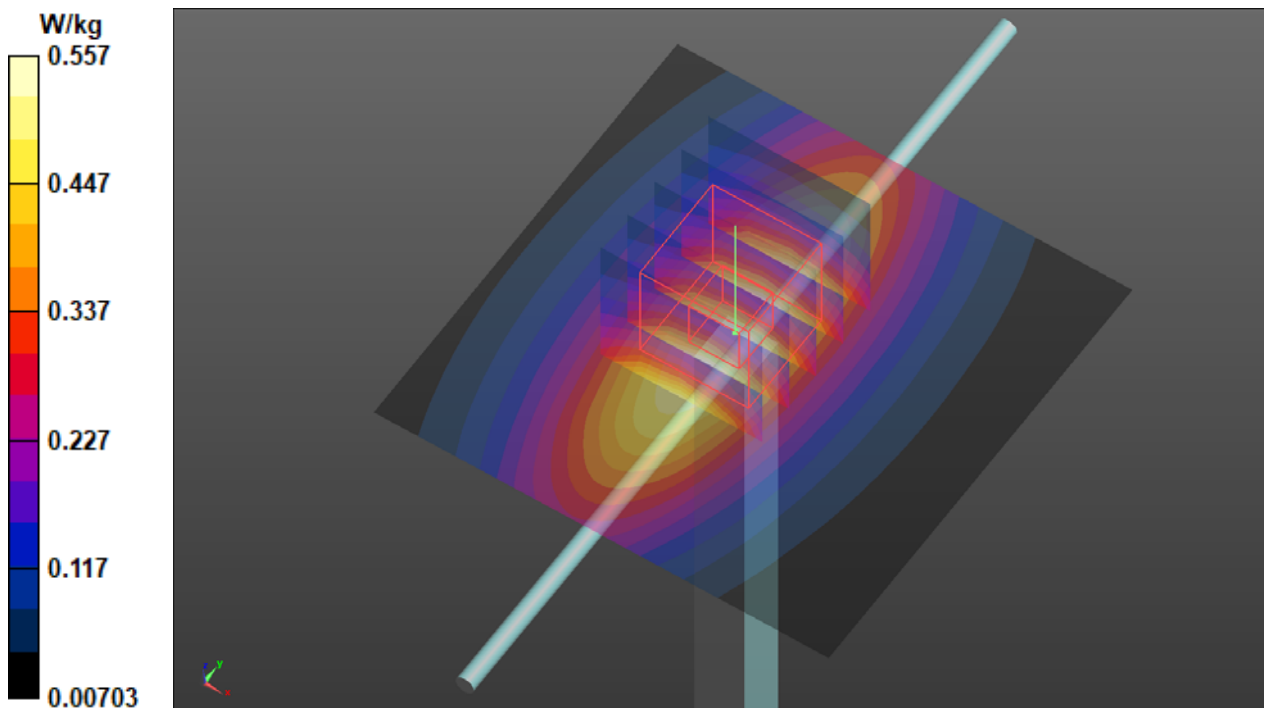
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: H07T10N1_1012 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 42.679$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

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-ELI Phantom_2118; Type: QD OVA 004 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) = 0.557 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.18 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.628 W/kg
SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.282 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.565 W/kg



S07 System Check_H2600_211012

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

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

Medium: H19T27N1_1012 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.039$ S/m; $\epsilon_r = 38.794$; $\rho = 1000$ kg/m³

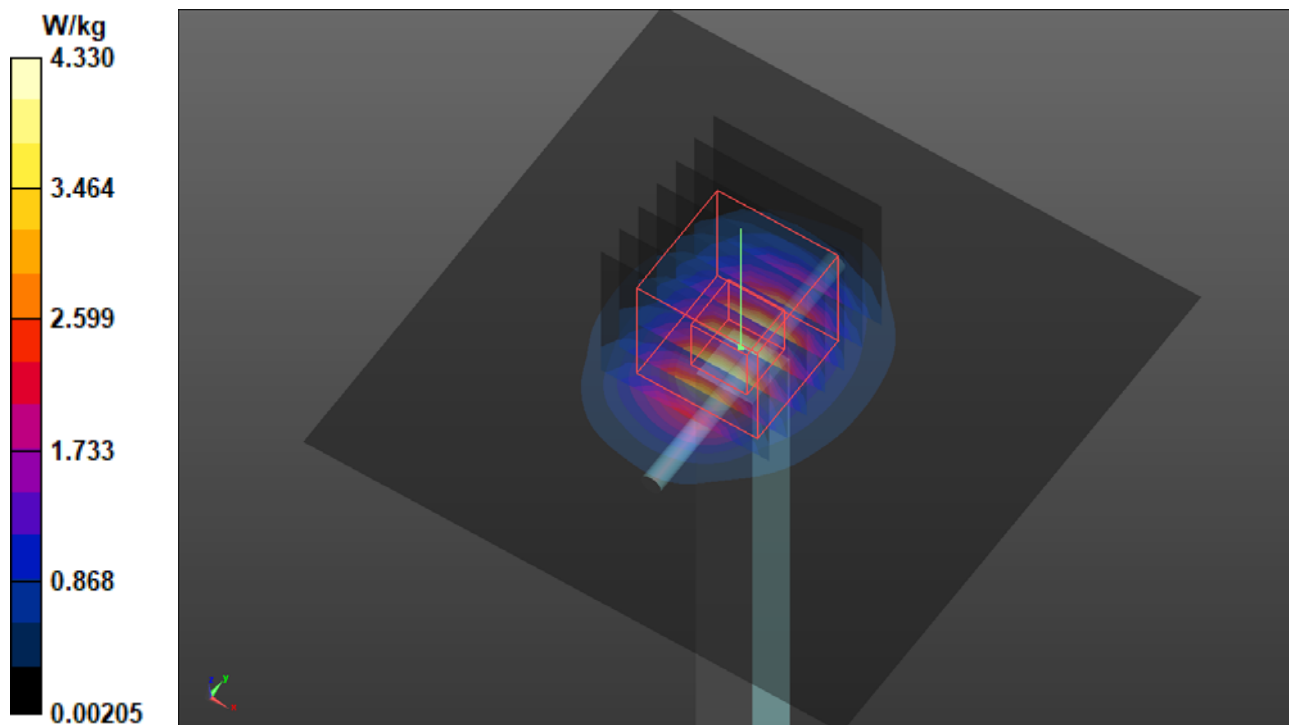
Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

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-ELI Phantom_2118; Type: QD OVA 004 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) = 4.33 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 45.57 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 5.34 W/kg
SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.32 W/kg



S08 System Check_H750_211012

DUT: Dipole 750 MHz; Type: D750V3; SN: 1078

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

Medium: H06T09N1_1012 Medium parameters used: $f = 750$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 41.478$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.69, 10.69, 10.69) @ 750 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

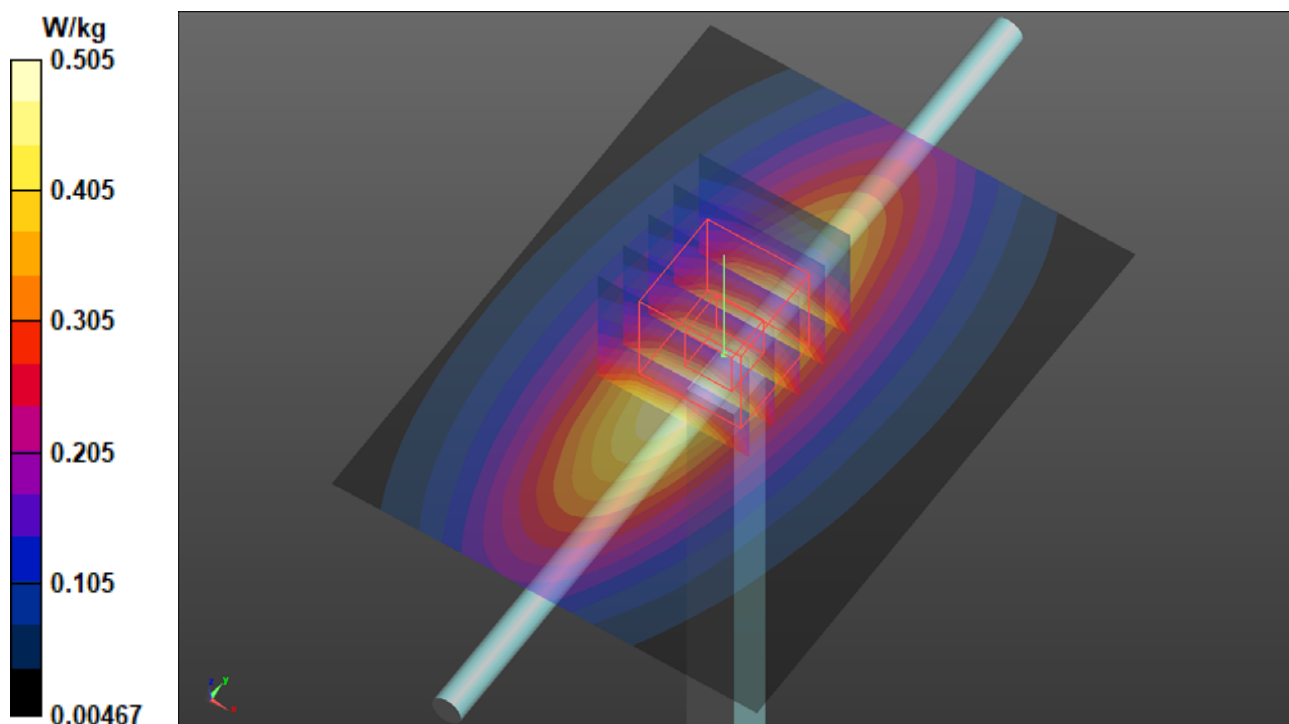
Pin=50mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.505 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.81 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.559 W/kg

SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.253 W/kg (SAR corrected for target medium)

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



S09 System Check_H750_211012

DUT: Dipole 750 MHz; Type: D750V3; SN: 1078

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

Medium: H06T09N1_1012 Medium parameters used: $f = 750$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 41.478$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.69, 10.69, 10.69) @ 750 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

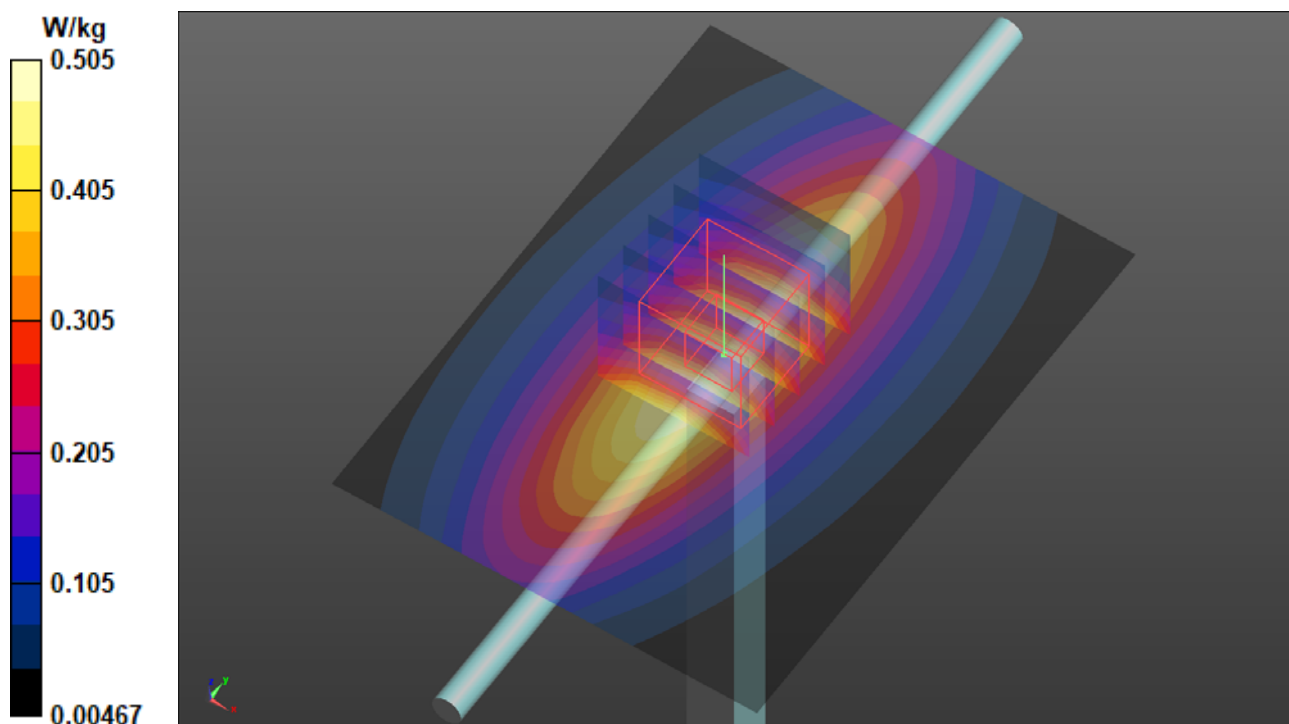
Pin=50mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.505 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.81 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.559 W/kg

SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.253 W/kg (SAR corrected for target medium)

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



S10 System Check_H1900_211012

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

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

Medium: H16T20N1_1012 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.452$ S/m; $\epsilon_r = 39.322$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.27, 8.27, 8.27) @ 1900 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 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) = 3.57 W/kg

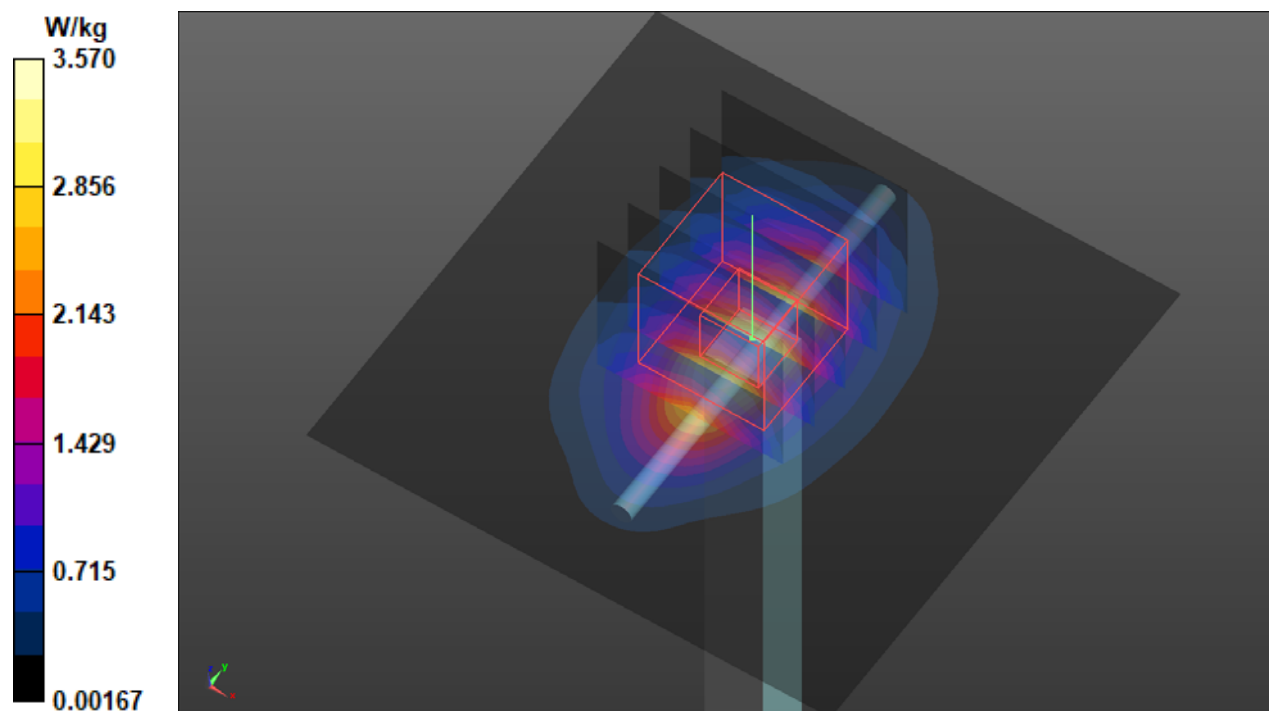
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.56 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 4.15 W/kg

SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.53 W/kg



S11 System Check_H835_211012

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d092

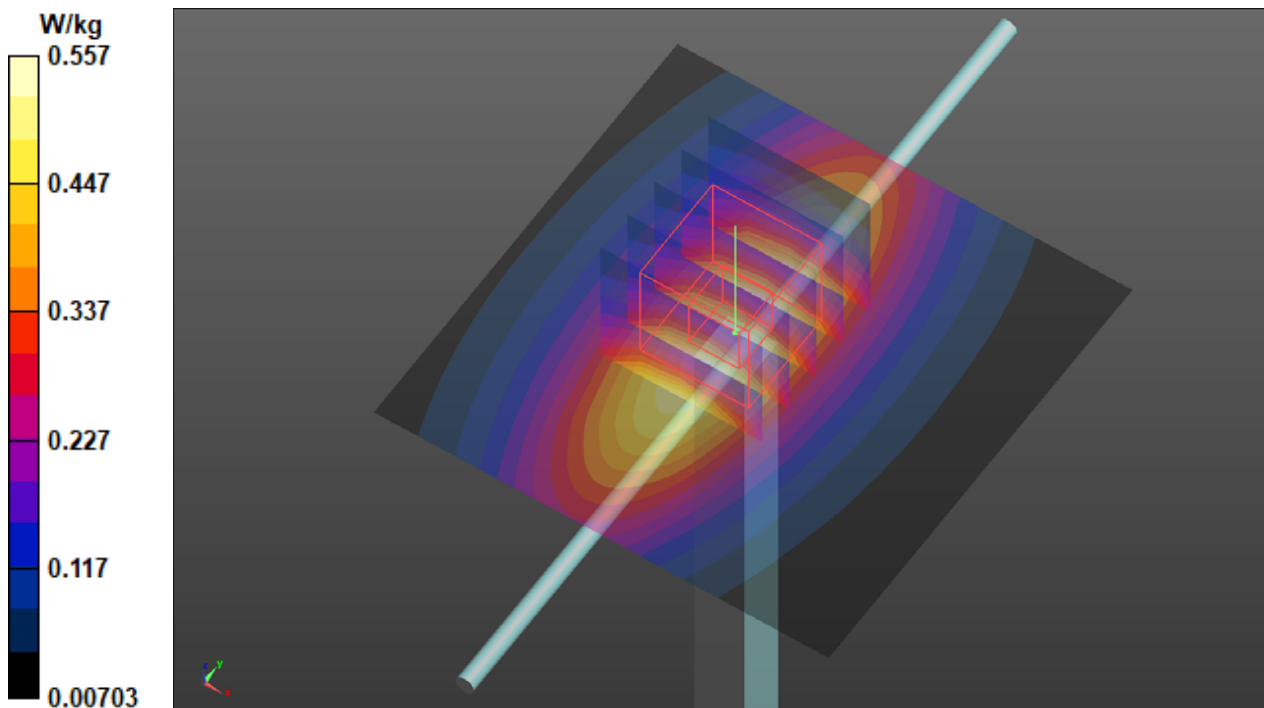
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: H07T10N1_1012 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 42.679$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

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-ELI Phantom_2118; Type: QD OVA 004 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) = 0.557 W/kg

Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.18 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.628 W/kg
SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.282 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.565 W/kg



S12 System Check_H2000_211012

DUT: Dipole 2000 MHz; Type: D2000V2; SN: 1013

Communication System: UID 0, CW; Frequency: 2000 MHz; Duty Cycle: 1:1

Medium: H19T27N1_1012 Medium parameters used: $f = 2000$ MHz; $\sigma = 1.432$ S/m; $\epsilon_r = 40.891$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.2, 8.2, 8.2) @ 2000 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 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) = 3.08 W/kg

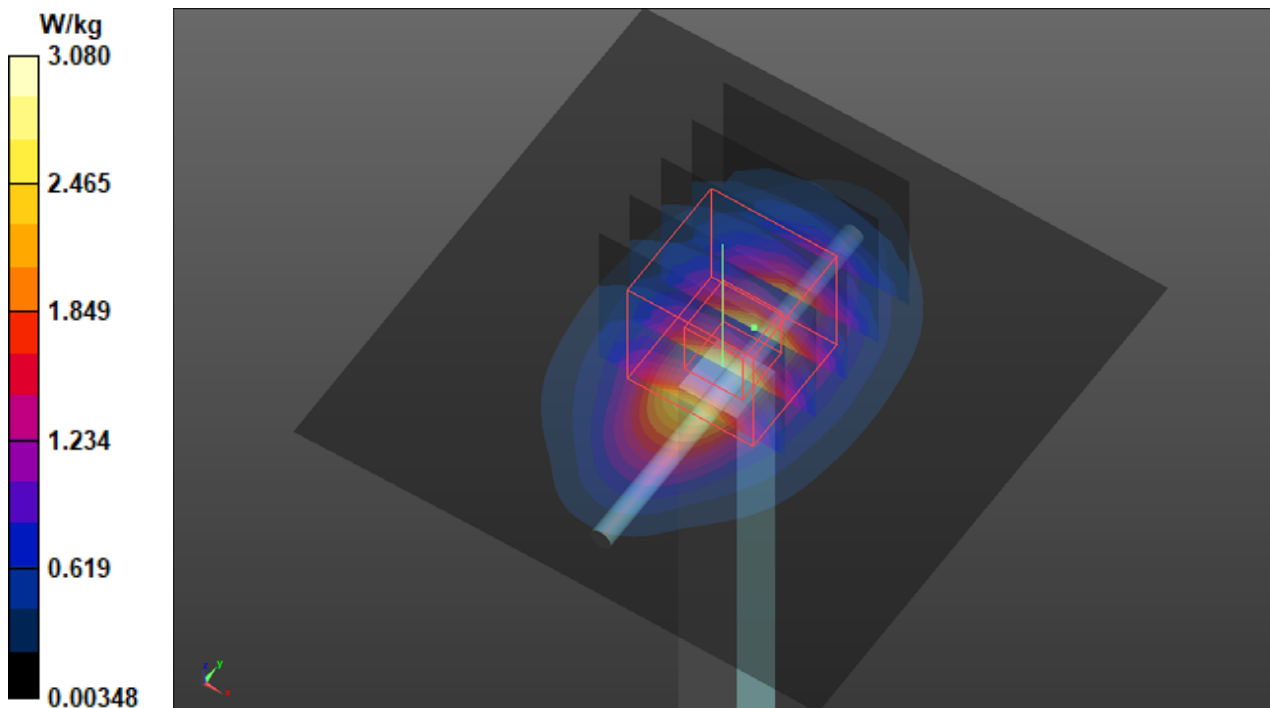
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.82 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 3.62 W/kg

SAR(1 g) = 1.95 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.04 W/kg



S13 System Check_H2450_211008

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 835

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

Medium: H19T27N1_1008 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.883$ S/m;

$\epsilon_r = 38.286$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.87, 7.87, 7.87) @ 2450 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 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) = 3.91 W/kg

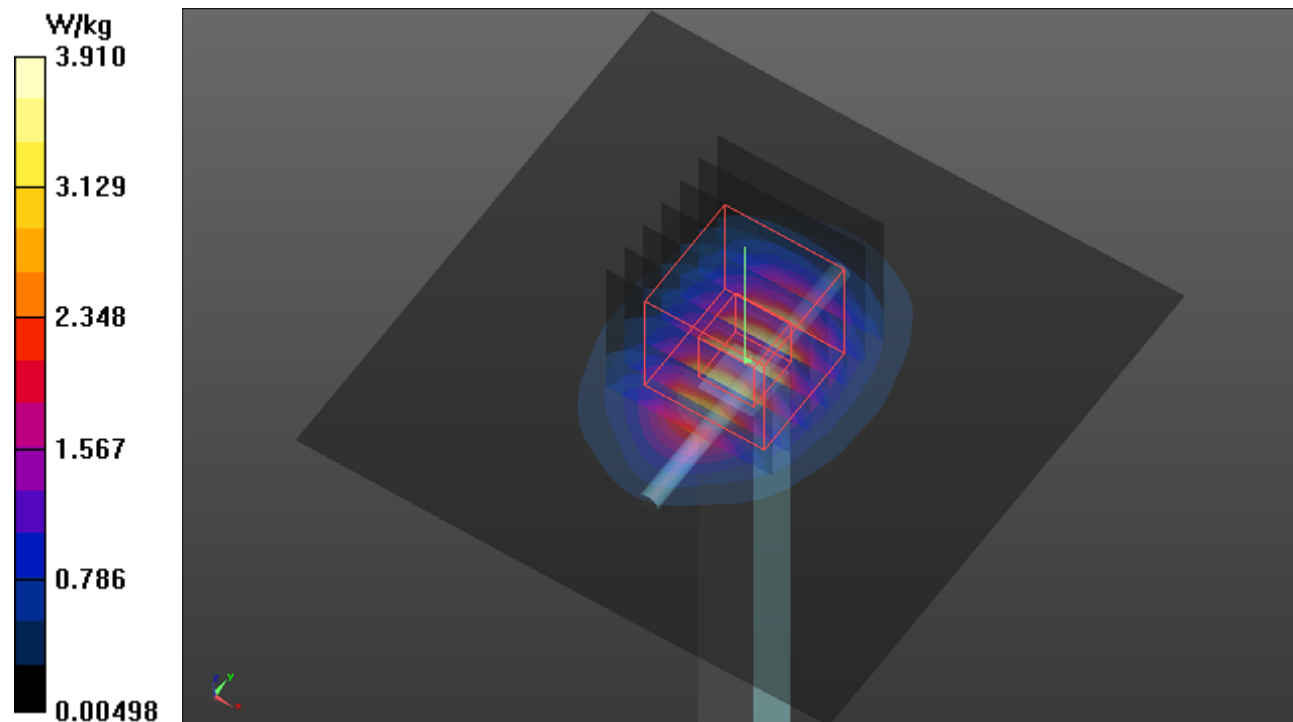
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.79 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 4.74 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.86 W/kg



S14 System Check_H5250_211012

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

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

Medium: H34T60N1_1012 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.621$ S/m;

$\epsilon_r = 34.556$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(5.2, 5.2, 5.2) @ 5250 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

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

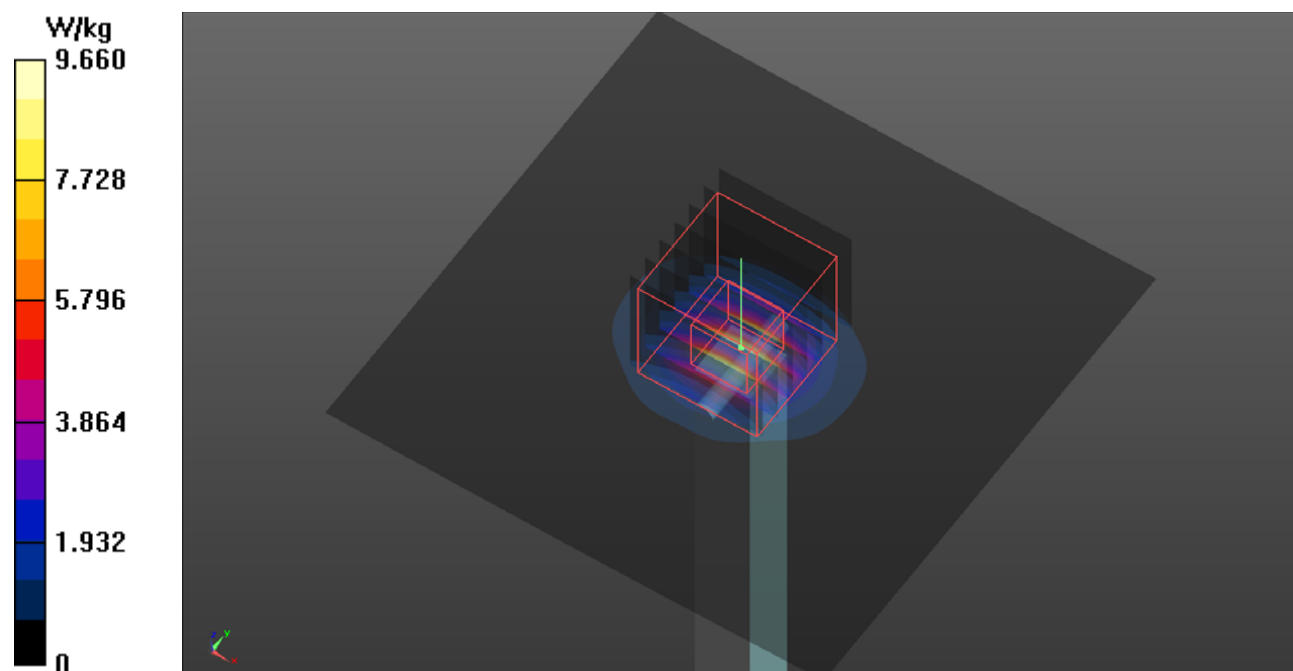
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 51.51 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 4.17 W/kg; SAR(10 g) = 1.22 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.3 W/kg



S15 System Check_H5600_211008

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

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: H34T60N1_1008 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.956$ S/m; $\epsilon_r = 34.103$; $\rho = 1000$ kg/m³

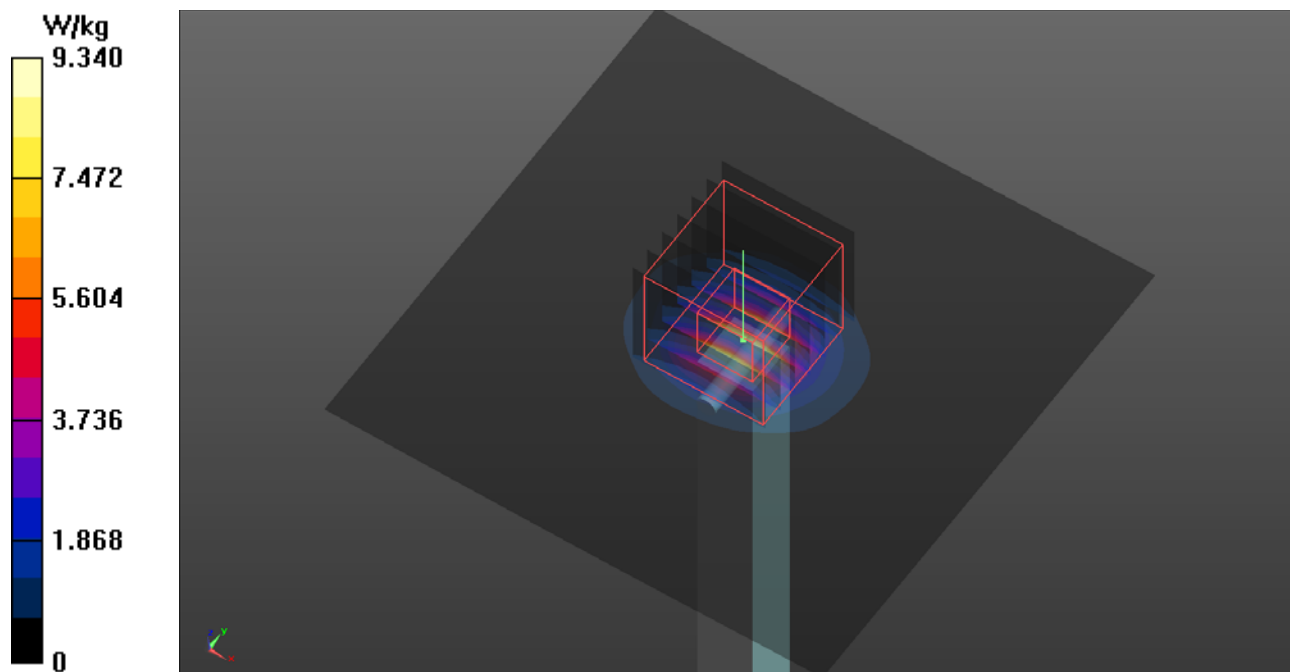
Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.9, 4.9, 4.9) @ 5600 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.34 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.18 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 15.5 W/kg
SAR(1 g) = 3.9 W/kg; SAR(10 g) = 1.12 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.80 W/kg



S16 System Check_H5750_211008

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

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: H34T60N1_1008 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.106$ S/m; $\epsilon_r = 33.879$; $\rho = 1000$ kg/m³

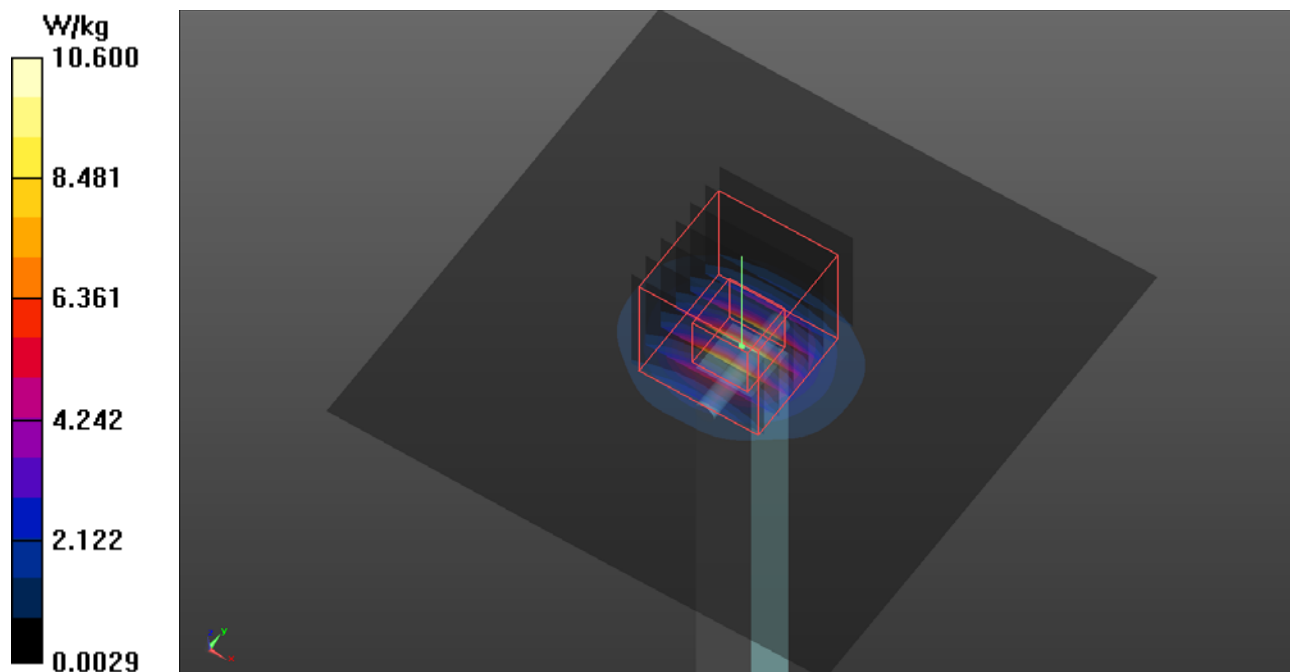
Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.95, 4.95, 4.95) @ 5750 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.0 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 49.29 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 17.5 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 1.18 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.6 W/kg



S17 System Check_H2450_211008

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 835

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

Medium: H19T27N1_1008 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.883$ S/m;

$\epsilon_r = 38.286$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.87, 7.87, 7.87) @ 2450 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 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) = 3.91 W/kg

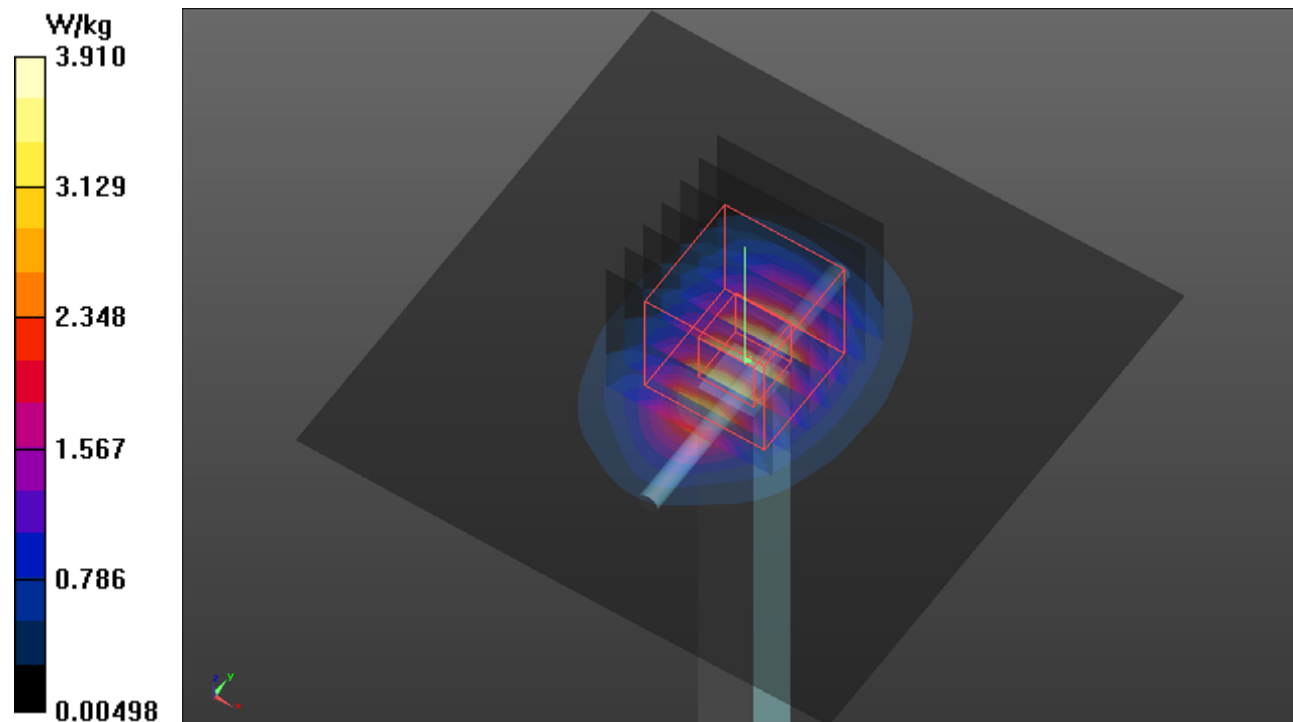
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.79 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 4.74 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.86 W/kg



Annex B. SAR Plots of SAR Measurement

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

P01 WCDMA II_RMC12.2K_Leftt Side_0mm_ch9400

DUT: BICM-WTW-P21090968

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz; Duty Cycle: 1:1.95

Medium: H16T20N1_1012 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.433$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.27, 8.27, 8.27) @ 1880 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 28.81 V/m; Power Drift = -0.11 dB

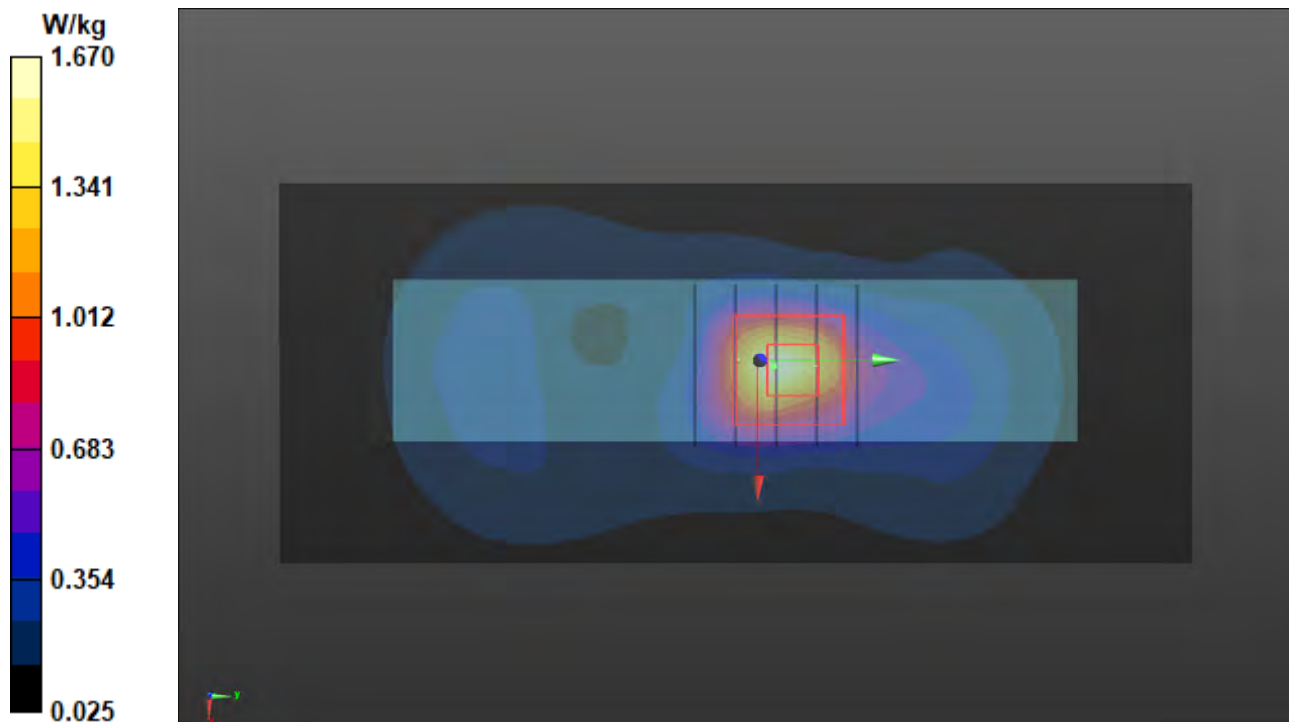
Peak SAR (extrapolated) = 2.57 W/kg

SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.554 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 42.8%

Maximum value of SAR (measured) = 2.07 W/kg



P02 WCDMA IV_RMC12.2K_Leftt Side_0mm_Ch1312

DUT: BICM-WTW-P21090968

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1712.4 MHz; Duty Cycle: 1:1.95

Medium: H16T20N1_1012 Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.294$ S/m; $\epsilon_r = 40.015$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.55, 8.55, 8.55) @ 1712.4 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 25.58 V/m; Power Drift = -0.12 dB

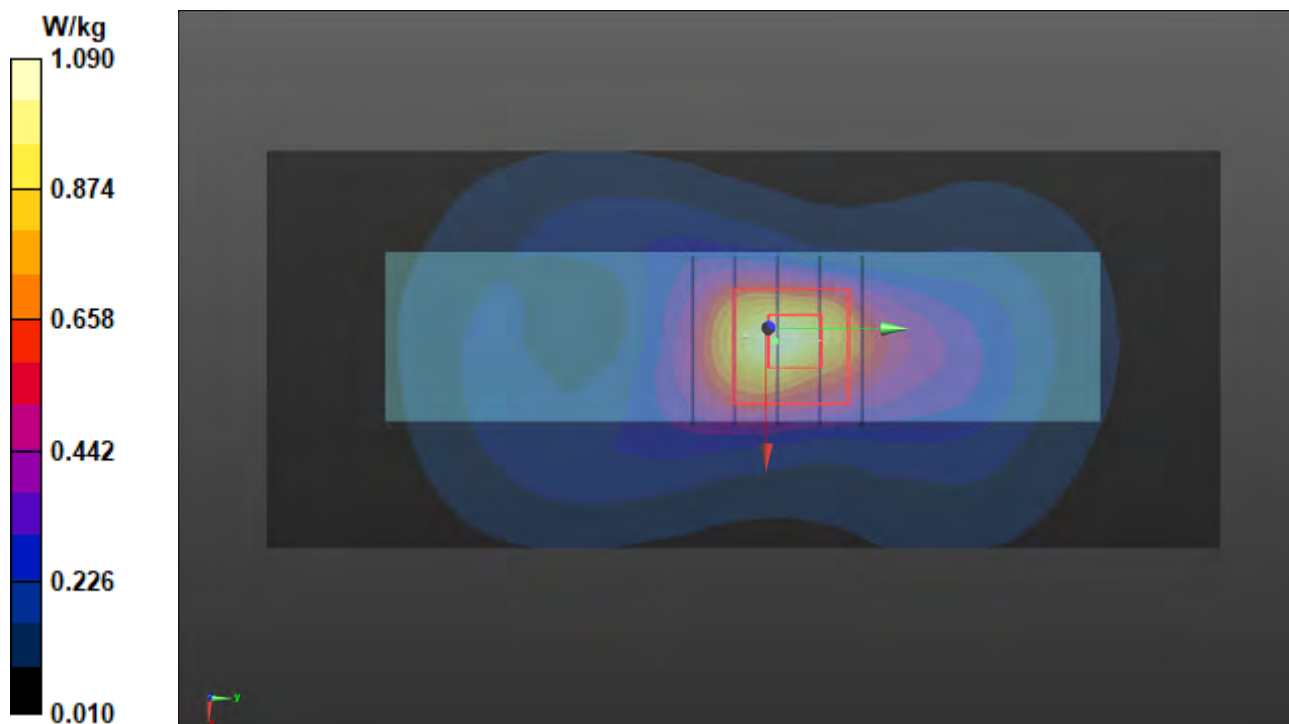
Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 0.849 W/kg; SAR(10 g) = 0.417 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 43.8%

Maximum value of SAR (measured) = 1.46 W/kg



P03 WCDMA V_RMC12.2K_Left Side_0mm_Ch4233

DUT: BICM-WTW-P21090968

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 846.6 MHz; Duty Cycle: 1:1.95

Medium: H06T09N1_1012 Medium parameters used: $f = 847$ MHz; $\sigma = 0.969$ S/m; $\epsilon_r = 41.659$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 846.6 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 34.87 V/m; Power Drift = 0.15 dB

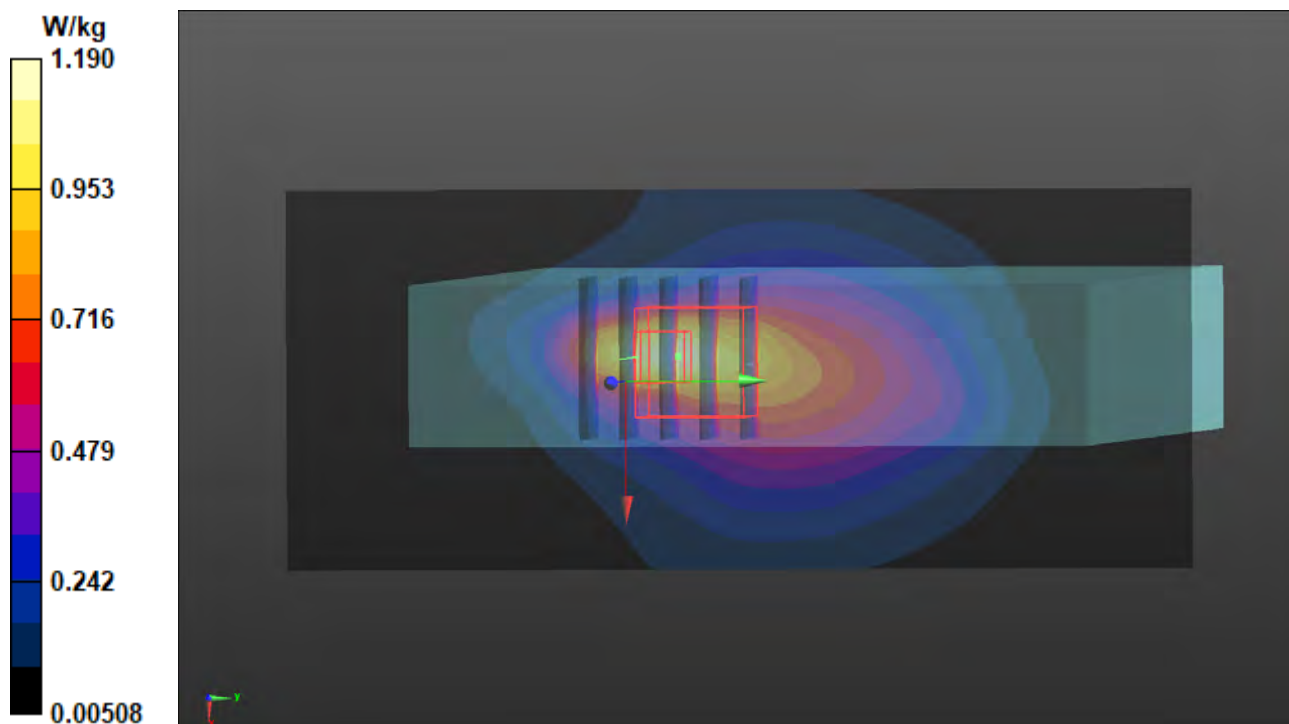
Peak SAR (extrapolated) = 2.29 W/kg

SAR(1 g) = 0.840 W/kg; SAR(10 g) = 0.424 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 36.8%

Maximum value of SAR (measured) = 1.73 W/kg



P04 LTE 2_QPSK20M_Leftt Side_0mm_Ch18900_1RB_OS0

DUT: BICM-WTW-P21090968

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

Frequency: 1880 MHz; Duty Cycle: 1:3.74

Medium: H16T20N1_1012 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.433$ S/m; $\epsilon_r = 39.374$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.27, 8.27, 8.27) @ 1880 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.39 W/kg

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

Reference Value = 26.50 V/m; Power Drift = -0.10 dB

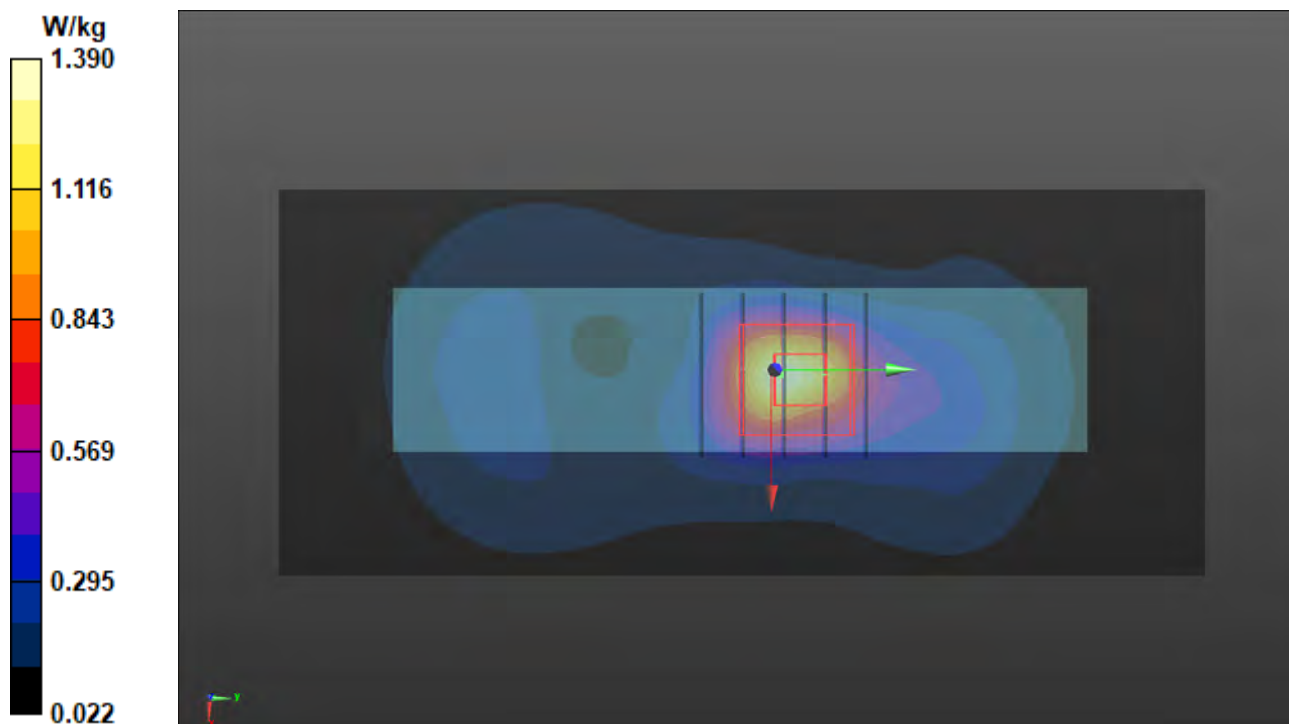
Peak SAR (extrapolated) = 2.14 W/kg

SAR(1 g) = 0.967 W/kg; SAR(10 g) = 0.470 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 43.2%

Maximum value of SAR (measured) = 1.73 W/kg



P05 LTE 4_QPSK20M_Leftt Side_0mm_Ch20175_1RB_OS0

DUT: BICM-WTW-P21090968

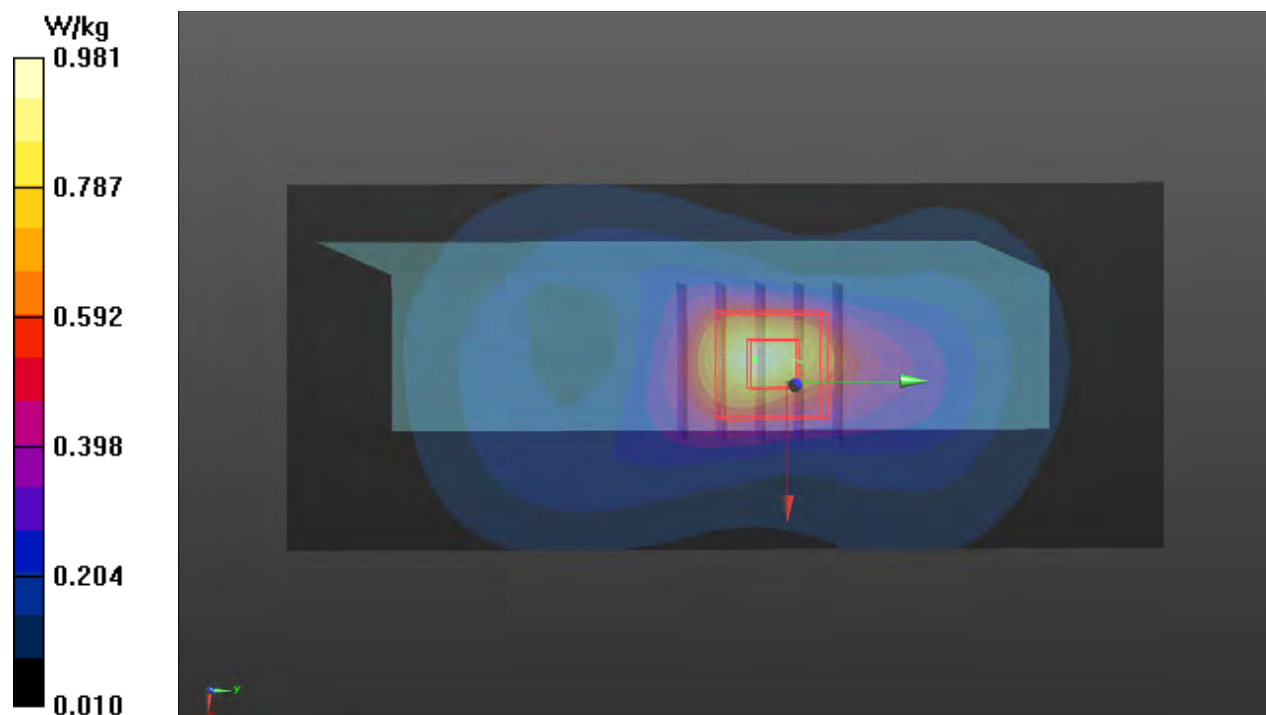
Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1732.5 MHz; Duty Cycle: 1:3.74
Medium: H16T20N1_1012 Medium parameters used: $f = 1733$ MHz; $\sigma = 1.31$ S/m; $\epsilon_r = 39.937$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.55, 8.55, 8.55) @ 1732.5 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.981 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.92 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.760 W/kg; SAR(10 g) = 0.375 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 44.2%
Maximum value of SAR (measured) = 1.31 W/kg



P06 LTE 5_QPSK10M_Leftt Side_0mm_Ch20600_1RB_OS0

DUT: BICM-WTW-P21090968

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 844 MHz; Duty Cycle: 1:3.74

Medium: H07T10N1_1012 Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 42.564$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 844 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.967 W/kg

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

Reference Value = 32.17 V/m; Power Drift = -0.18 dB

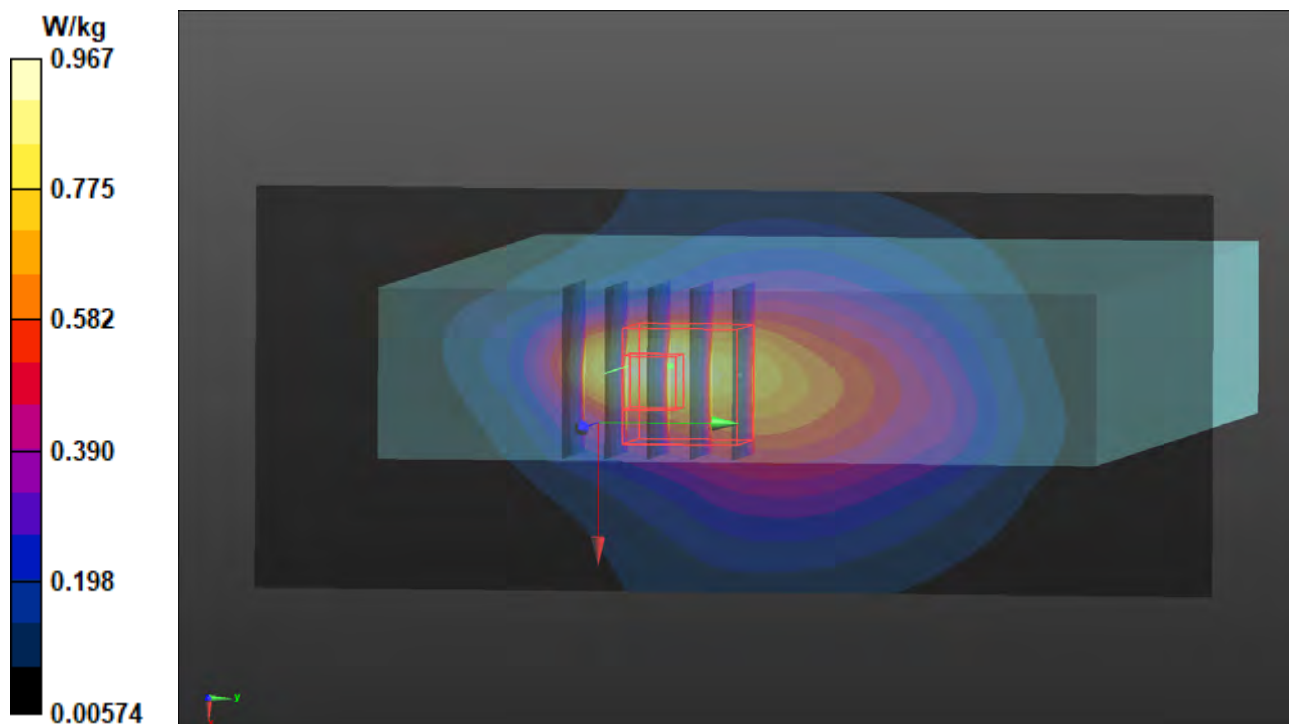
Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 0.766 W/kg; SAR(10 g) = 0.391 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 41.5%

Maximum value of SAR (measured) = 1.28 W/kg



P07 LTE 7_QPSK20M_Leftt Side_0mm_Ch21100_1RB_OS0

DUT: BICM-WTW-P21090968

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

Frequency: 2535 MHz; Duty Cycle: 1:3.74

Medium: H19T27N1_1012 Medium parameters used (interpolated): $f = 2535$ MHz; $\sigma = 1.966$ S/m; $\epsilon_r = 38.985$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.41, 7.41, 7.41) @ 2535 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.44 W/kg

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

Reference Value = 32.41 V/m; Power Drift = -0.18 dB

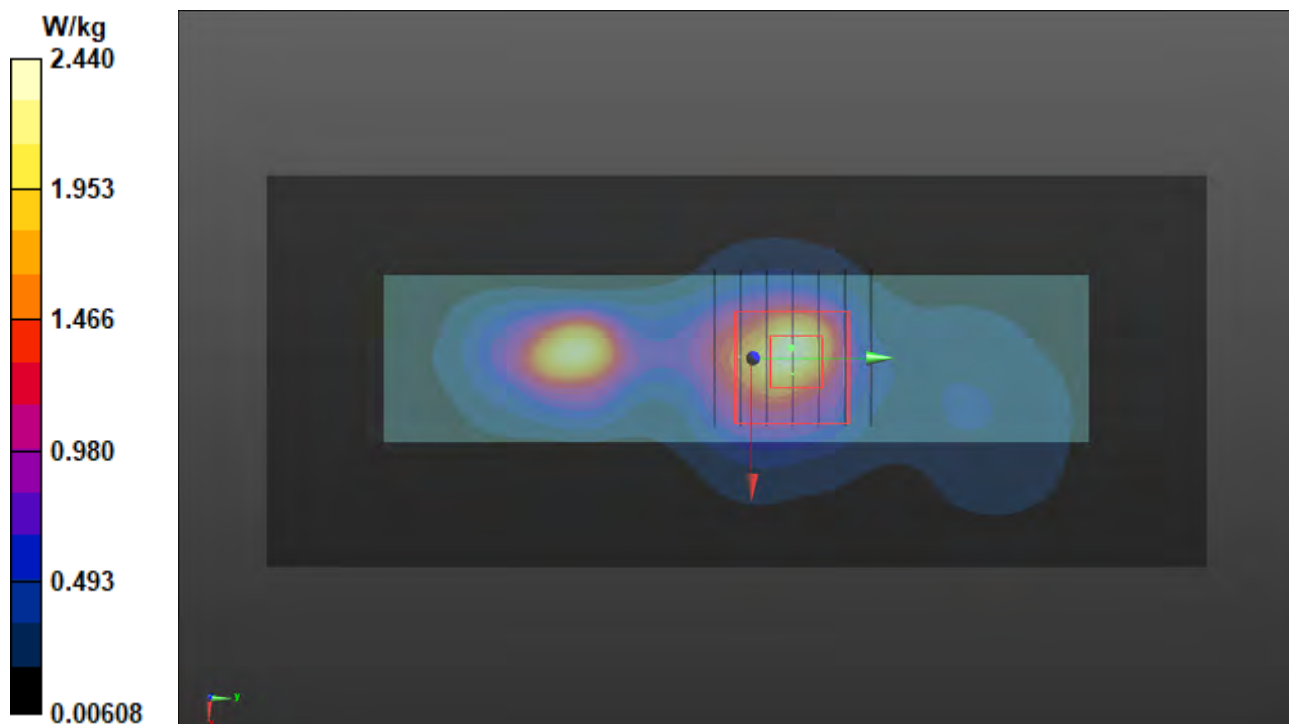
Peak SAR (extrapolated) = 5.31 W/kg

SAR(1 g) = 1.97 W/kg; SAR(10 g) = 0.776 W/kg (SAR corrected for target medium)

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

Ratio of SAR at M2 to SAR at M1 = 43.1%

Maximum value of SAR (measured) = 3.53 W/kg



P08 LTE 12_QPSK10M_Left Side_0mm_Ch23095_1RB_OS0

DUT: BICM-WTW-P21090968

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 707.5 MHz; Duty Cycle: 1:3.74

Medium: H06T09N1_1012 Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.889$ S/m; $\epsilon_r = 41.588$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.69, 10.69, 10.69) @ 707.5 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.919 W/kg

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

Reference Value = 31.66 V/m; Power Drift = -0.19 dB

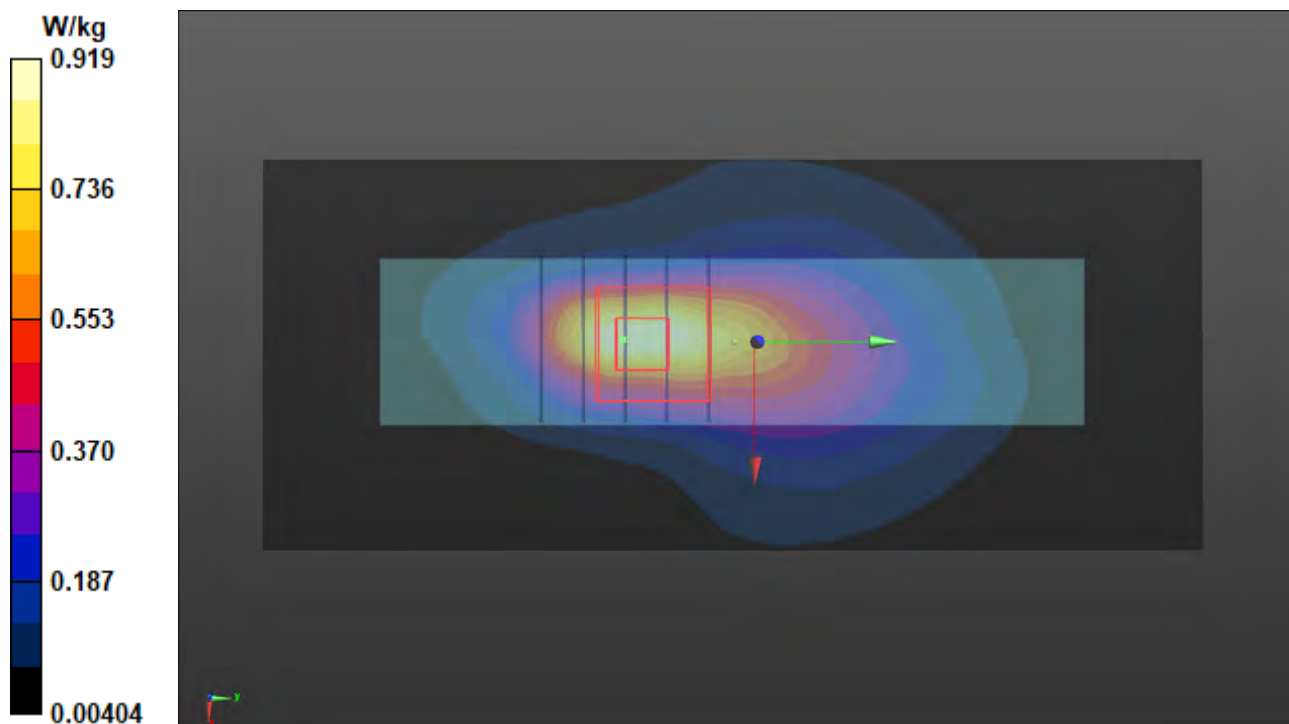
Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.743 W/kg; SAR(10 g) = 0.356 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 38.2%

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



P09 LTE 13_QPSK10M_Leftt Side_0mm_Ch23230_1RB_OS0

DUT: BICM-WTW-P21090968

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 782 MHz; Duty Cycle: 1:3.74

Medium: H06T09N1_1012 Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 41.368$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.69, 10.69, 10.69) @ 782 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

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

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

Reference Value = 34.97 V/m; Power Drift = -0.18 dB

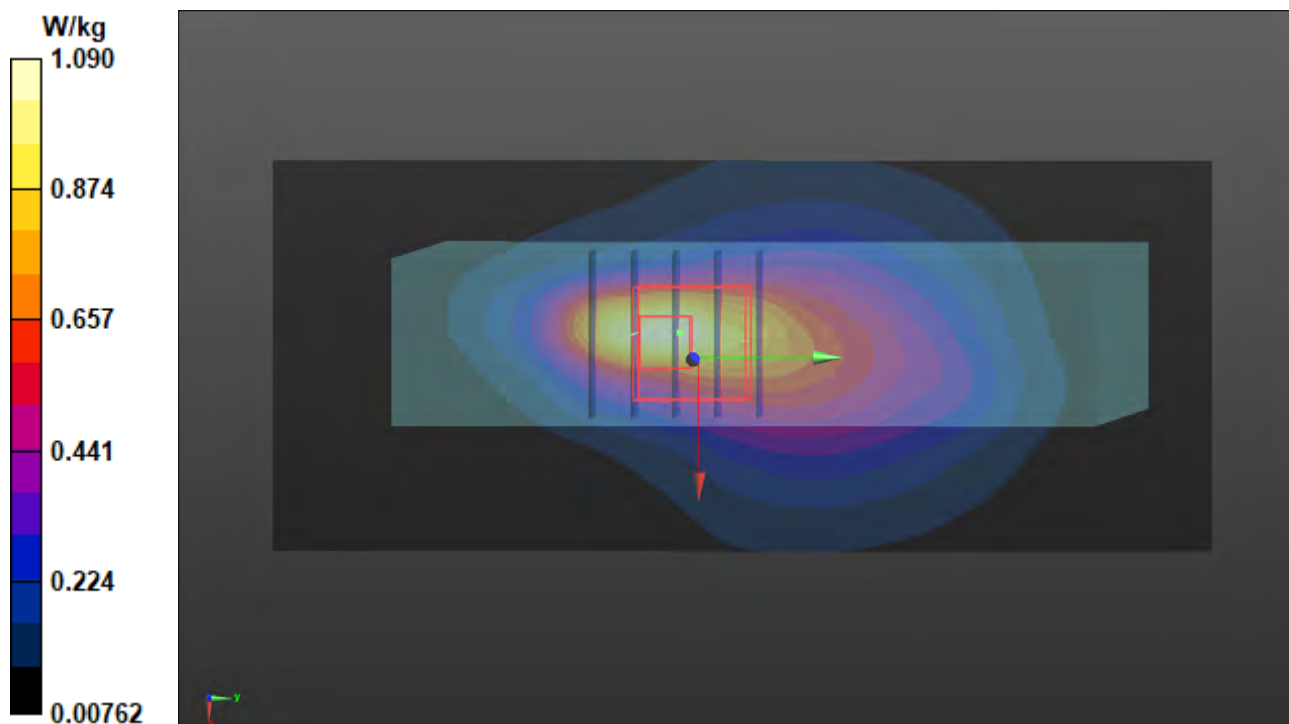
Peak SAR (extrapolated) = 1.98 W/kg

SAR(1 g) = 0.656 W/kg; SAR(10 g) = 0.247 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 40.4%

Maximum value of SAR (measured) = 1.47 W/kg



P10 LTE 25_QPSK20M_Leftt Side_0mm_Ch26590_1RB_OS0

DUT: BICM-WTW-P21090968

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1905 MHz; Duty Cycle: 1:3.74
Medium: H16T20N1_1012 Medium parameters used (interpolated): $f = 1905$ MHz; $\sigma = 1.457$ S/m;
 $\epsilon_r = 39.316$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.27, 8.27, 8.27) @ 1905 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.29 W/kg

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

Reference Value = 26.57 V/m; Power Drift = 0.12 dB

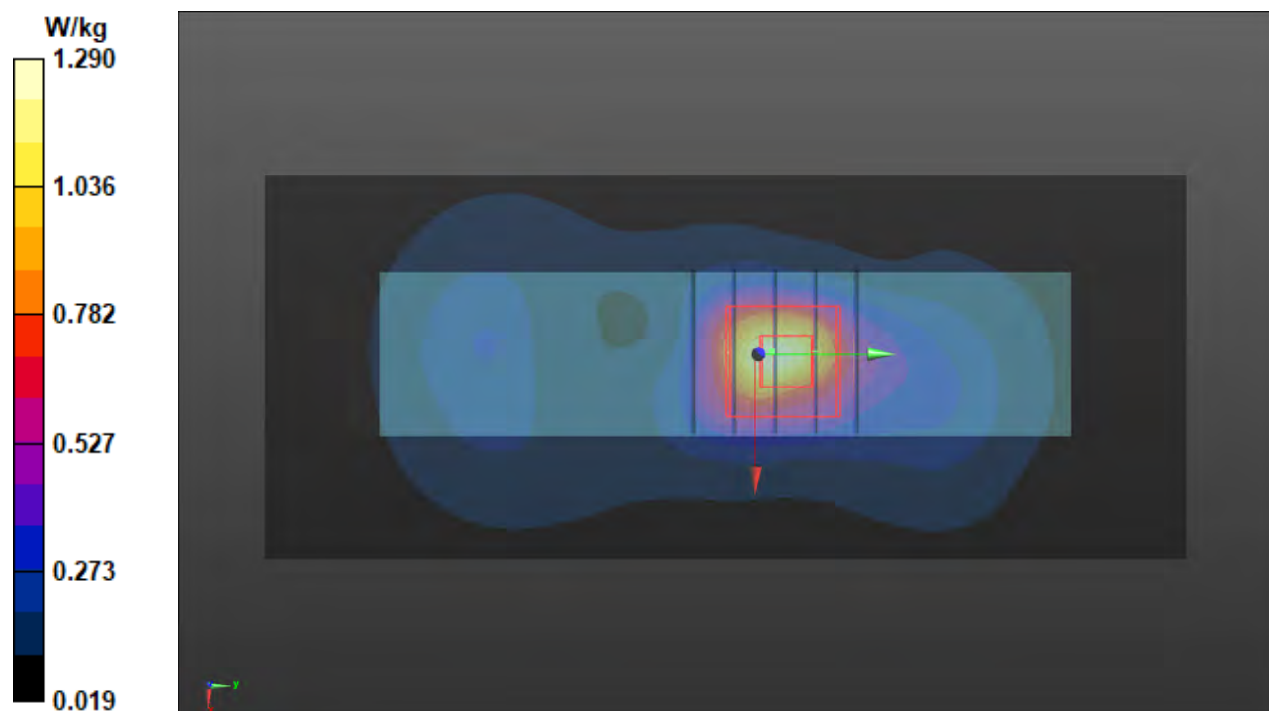
Peak SAR (extrapolated) = 2.29 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.508 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 43.2%

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



P11 LTE 26_QPSK15M_Leftt Side_0mm_Ch26965_1RB_OS0

DUT: BICM-WTW-P21090968

Communication System: UID 10181 - CAE, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);

Frequency: 841.5 MHz; Duty Cycle: 1:3.74

Medium: H07T10N1_1012 Medium parameters used (interpolated): $f = 841.5 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 42.596$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(10.5, 10.5, 10.5) @ 841.5 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.851 W/kg

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

Reference Value = 30.49 V/m; Power Drift = 0.10 dB

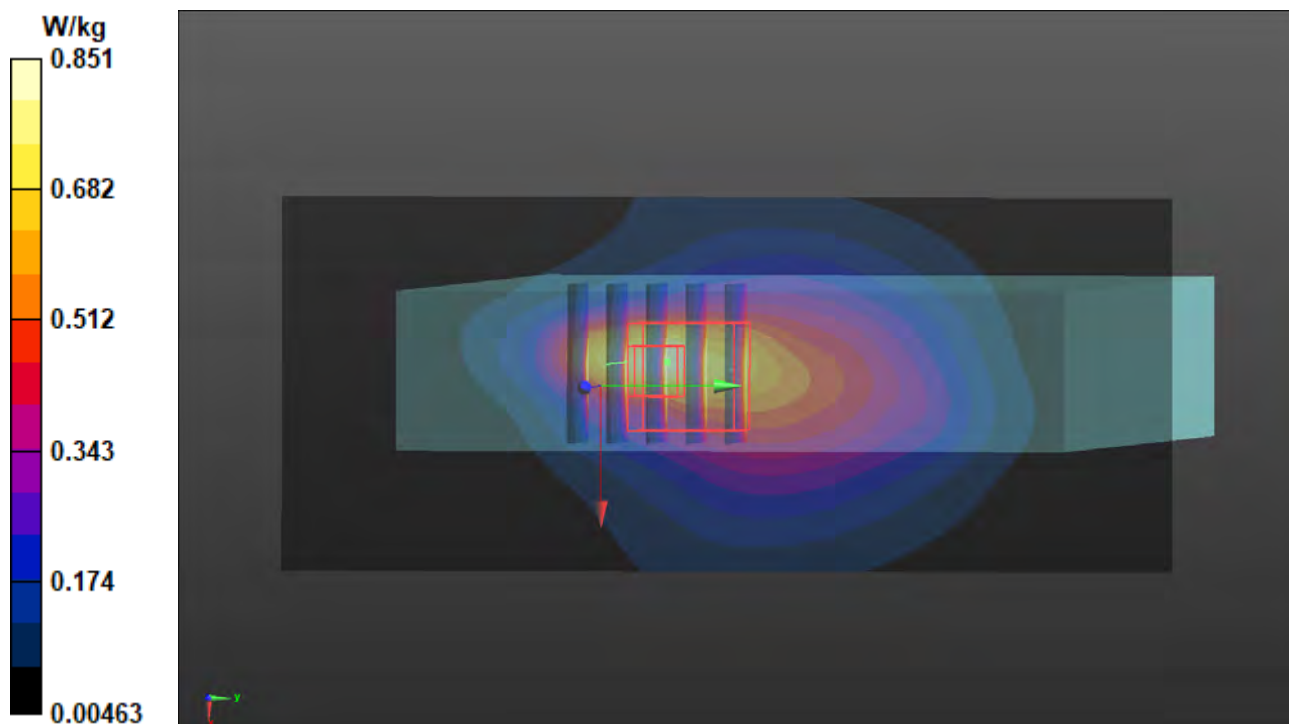
Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 0.768 W/kg; SAR(10 g) = 0.394 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 39.3%

Maximum value of SAR (measured) = 1.37 W/kg



P12 LTE 41_QPSK20M_Leftt Side_0mm_Ch40620_1RB_OS0

DUT: BICM-WTW-P21090968

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 2593 MHz; Duty Cycle: 1:8.33

Medium: H19T27N1_1012 Medium parameters used (interpolated): $f = 2593$ MHz; $\sigma = 2.031$ S/m; $\epsilon_r = 38.817$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.41, 7.41, 7.41) @ 2593 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: Twin-ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 2.65 W/kg

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

Reference Value = 35.20 V/m; Power Drift = -0.18 dB

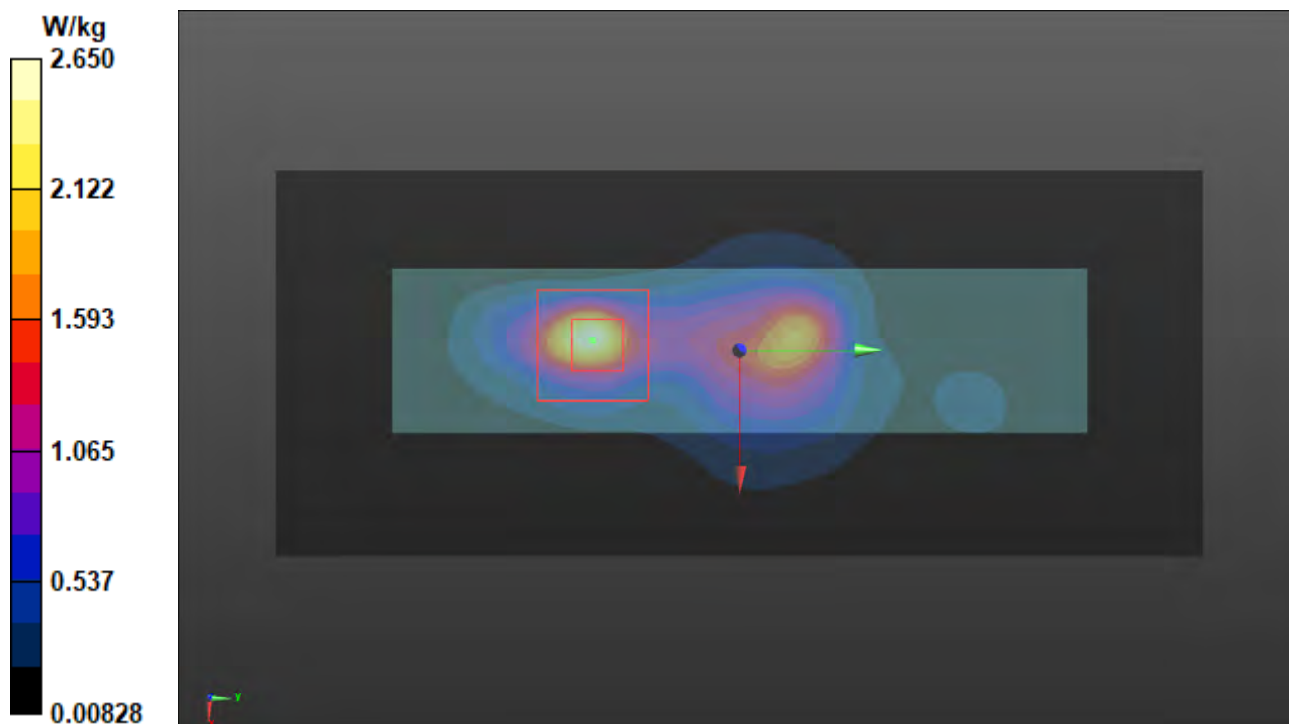
Peak SAR (extrapolated) = 4.14 W/kg

SAR(1 g) = 1.68 W/kg; SAR(10 g) = 0.656 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.1 mm

Ratio of SAR at M2 to SAR at M1 = 46.8%

Maximum value of SAR (measured) = 3.01 W/kg



P13 WLAN 2.4G_802.11b_Right Side_0mm_ch6_Ant0

DUT: BICM-WTW-P21090968

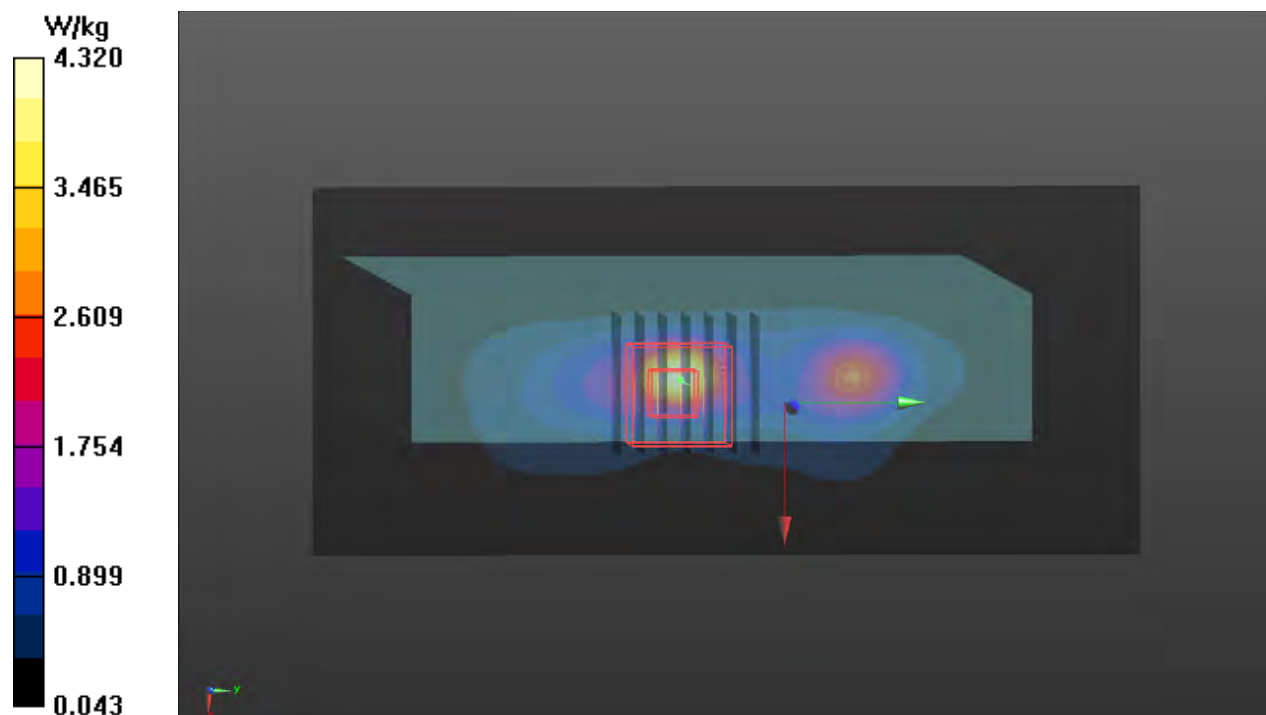
Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps);
Frequency: 2437 MHz; Duty Cycle: 1:1.01
Medium: H19T27N1_1008 Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.873$ S/m;
 $\epsilon_r = 38.363$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.87, 7.87, 7.87) @ 2437 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.32 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.12 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 8.11 W/kg
SAR(1 g) = 3.07 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 43.5%
Maximum value of SAR (measured) = 5.47 W/kg



P14 WLAN 5.3G_802.11n HT20_Top Side_0mm_ch60_Ant0+1

DUT: BICM-WTW-P21090968

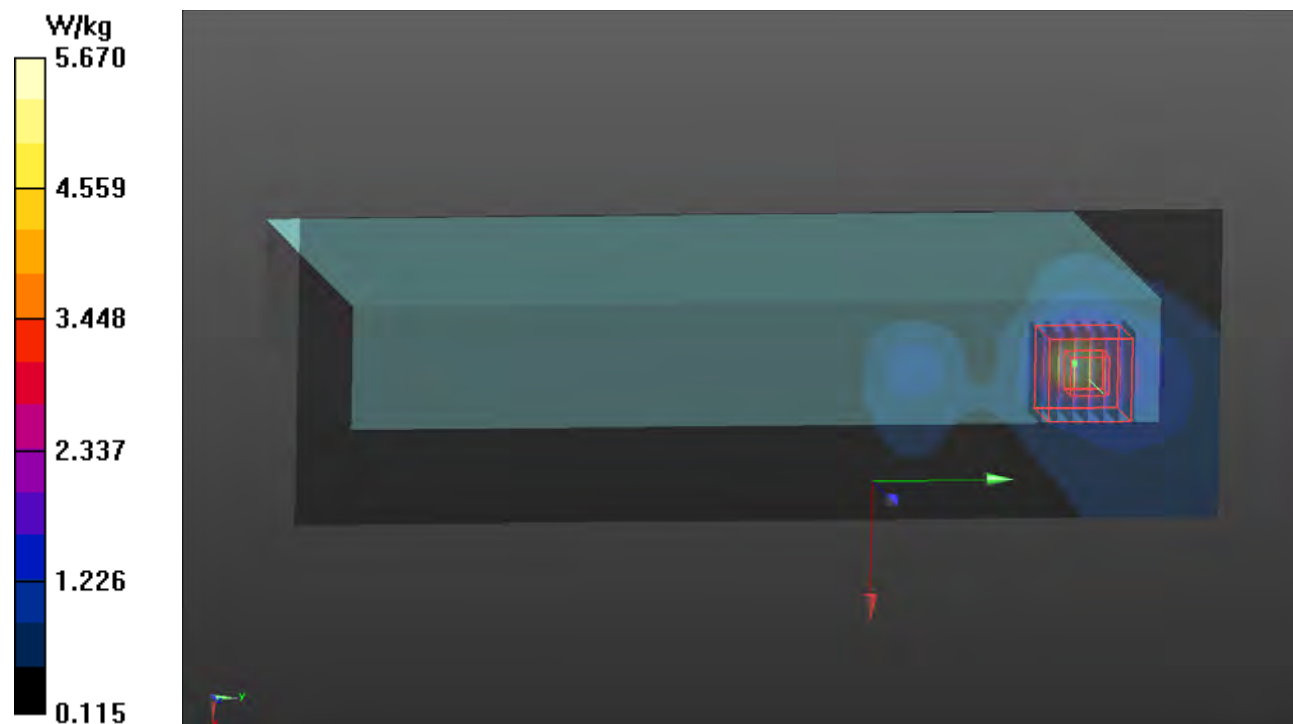
Communication System: UID 10591 - AAC, IEEE 802.11n (HT Mixed, 20MHz, MCS0);
Frequency: 5300 MHz; Duty Cycle: 1:1.04
Medium: H34T60N1_1012 Medium parameters used (interpolated): $f = 5300 \text{ MHz}$; $\sigma = 4.702 \text{ S/m}$;
 $\epsilon_r = 35.232$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(5.2, 5.2, 5.2) @ 5300 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 5.67 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 36.55 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 10.5 W/kg
SAR(1 g) = 2.79 W/kg; SAR(10 g) = 0.960 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 8.8 mm
Ratio of SAR at M2 to SAR at M1 = 70.4%
Maximum value of SAR (measured) = 6.05 W/kg



P15 WLAN 5.6G_802.11n HT40_Top Side_0mm_ch110_Ant0+1

DUT: BICM-WTW-P21090968

Communication System: UID 10599 - AAC, IEEE 802.11n (HT Mixed, 40MHz, MCS0);
Frequency: 5550 MHz; Duty Cycle: 1:1.18

Medium: H34T60N1_1008 Medium parameters used: $f = 5550$ MHz; $\sigma = 5.002$ S/m; $\epsilon_r = 34.872$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.9, 4.9, 4.9) @ 5550 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.61 W/kg

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

Reference Value = 44.69 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 15.2 W/kg

SAR(1 g) = 4.37 W/kg; SAR(10 g) = 1.5 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 67.8%

Maximum value of SAR (measured) = 9.69 W/kg



P16 WLAN 5.8G_802.11a_Top Side_0mm_ch149_Ant0

DUT: BICM-WTW-P21090968

Communication System: UID 10062 - CAD, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps);

Frequency: 5745 MHz; Duty Cycle: 1:1.03

Medium: H34T60N1_1008 Medium parameters used (interpolated): $f = 5745$ MHz; $\sigma = 5.101$ S/m;

$\epsilon_r = 33.886$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.95, 4.95, 4.95) @ 5745 MHz; Calibrated: 2021/01/27

- Sensor-Surface: 1.4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24

- Phantom: ELI Phantom_1043; Type: QD OVA 002 Ax;

- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (81x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 7.38 W/kg

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

Reference Value = 40.43 V/m; Power Drift = -0.02 dB

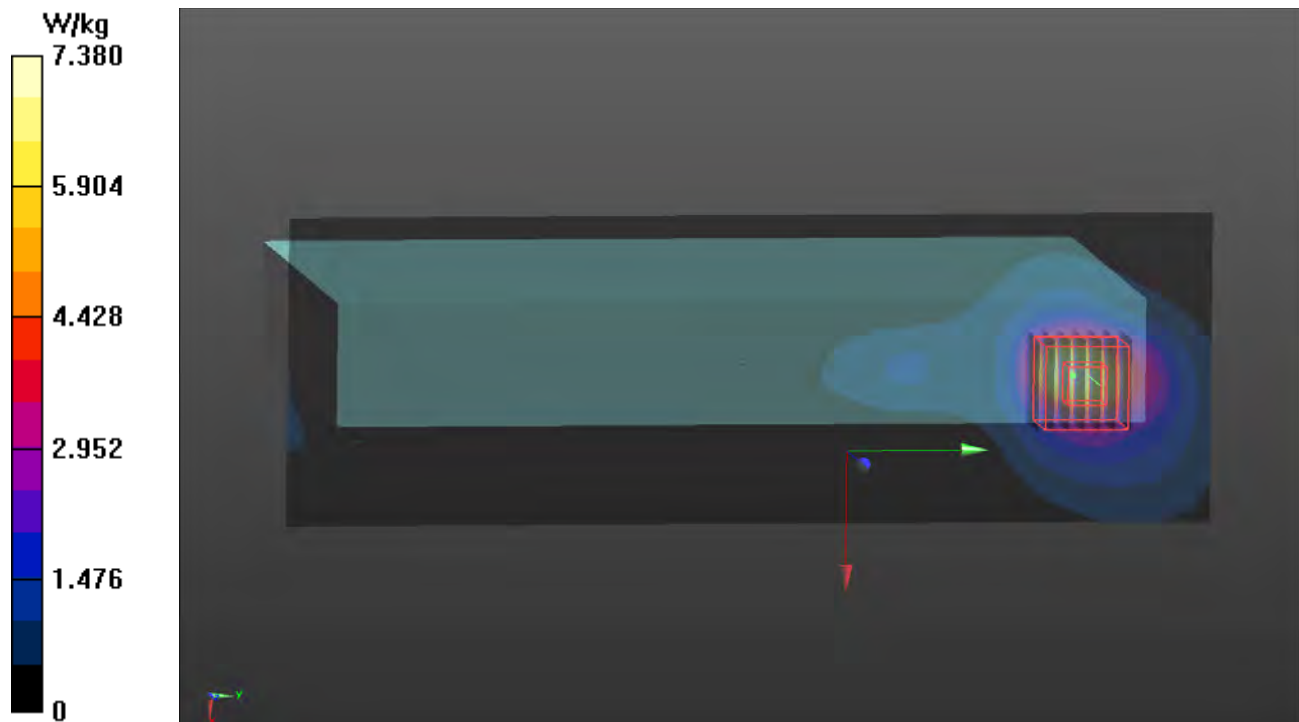
Peak SAR (extrapolated) = 15.0 W/kg

SAR(1 g) = 3.96 W/kg; SAR(10 g) = 1.4 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 9.4 mm

Ratio of SAR at M2 to SAR at M1 = 64.2%

Maximum value of SAR (measured) = 9.09 W/kg



P17 BT_EDR_Right Side_0mm_Ch78_Ant1

DUT: BICM-WTW-P21090968

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2480 MHz; Duty Cycle: 1:1.30

Medium: H19T27N1_1008 Medium parameters used: $f = 2480$ MHz; $\sigma = 1.895$ S/m; $\epsilon_r = 37.962$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2480 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (221x301x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0 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 ± 10 % of the target values. Liquid temperature during the SAR testing has kept within ± 2 °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 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)
S01	1900	23.3	1.452	39.322	1.4	40	3.71	-1.69	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	1900	21.10	1.16	23.15	9.69	5d036	7537	1585	17
S02	1750	23.3	1.323	39.859	1.37	40.1	-3.43	-0.60	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	1750	19.00	0.86	17.16	-9.69	1111	7537	1585	17
S03	835	23.3	0.908	42.679	0.9	41.5	0.89	2.84	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	835	6.11	0.282	5.63	-7.91	4d092	7537	1585	17
S04	1900	23.3	1.452	39.322	1.4	40	3.71	-1.69	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	1900	21.10	1.16	23.15	9.69	5d036	7537	1585	17
S05	1750	23.3	1.323	39.859	1.37	40.1	-3.43	-0.60	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	1750	19.00	0.86	17.16	-9.69	1111	7537	1585	17
S06	835	23.3	0.908	42.679	0.9	41.5	0.89	2.84	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	835	6.11	0.282	5.63	-7.91	4d092	7537	1585	17
S07	2600	23.3	2.039	38.794	1.96	39	4.03	-0.53	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	2600	25.70	1.16	23.15	-9.94	1020	7537	1585	17
S08	750	23.3	0.903	41.478	0.89	41.9	1.46	-1.01	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	750	5.59	0.253	5.05	-9.70	1078	7537	1585	17
S09	750	23.3	0.903	41.478	0.89	41.9	1.46	-1.01	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	750	5.59	0.253	5.05	-9.70	1078	7537	1585	17
S10	1900	23.3	1.452	39.322	1.4	40	3.71	-1.69	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	1900	21.10	1.16	23.15	9.69	5d036	7537	1585	17
S11	835	23.3	0.908	42.679	0.9	41.5	0.89	2.84	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	835	6.11	0.282	5.63	-7.91	4d092	7537	1585	17
S12	2000	23.3	1.432	40.891	1.4	40	2.29	2.23	Pass	Pass	Pass	N/A	N/A	N/A	Oct. 12, 2021	2000	21.10	1.03	20.55	-2.60	1013	7537	1585	17
S13	2450	23.3	1.883	38.286	1.8	39.2	4.61	-2.33	Pass	Pass	Pass	OFDM	N/A	Pass	Oct. 08, 2021	2450	23.90	1.09	21.75	-9.00	835	3971	1431	17
S14	5250	23.3	4.621	34.556	4.71	35.9	-1.89	-3.74	Pass	Pass	Pass	OFDM	N/A	Pass	Oct. 12, 2021	5250	23.00	1.22	24.34	5.84	1019	3971	1431	17
S15	5600	23.3	4.956	34.103	5.07	35.5	-2.25	-3.94	Pass	Pass	Pass	OFDM	N/A	Pass	Oct. 08, 2021	5600	23.30	1.12	22.35	-4.09	1019	3971	1431	17
S16	5750	23.3	5.106	33.879	5.22	35.4	-2.18	-4.30	Pass	Pass	Pass	OFDM	N/A	Pass	Oct. 08, 2021	5750	22.40	1.18	23.54	5.11	1019	3971	1431	17
S17	2450	23.3	1.883	38.286	1.8	39.2	4.61	-2.33	Pass	Pass	Pass	OFDM	N/A	Pass	Oct. 08, 2021	2450	23.90	1.09	21.75	-9.00	835	3971	1431	17

Annex D. Maximum Target Conducted Power

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

WCDMA Max. Tune-up Power (Full)		
Mode	RMC 12.2K	HSDPA DC-HSDPA HSUPA
	Maximum Target Power	Maximum Target Power
WCDMA Band II	24.0	23.0
WCDMA Band IV	24.0	23.0
WCDMA Band V	24.0	23.0

LTE Max. Tune-up Power (Full)		
Mode	QPSK	16QAM
	Maximum Target Power	Maximum Target Power
LTE 2	24.0	23.0
LTE 4	24.0	23.0
LTE 5	24.0	23.0
LTE 7	23.0	22.0
LTE 12	24.0	23.0
LTE 13	24.0	23.0
LTE 25	24.0	23.0
LTE 26	24.0	23.0
LTE 41	23.0	22.0

WLAN Tune-up Power (Full)							
WLAN 2.4GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11b	1	2412	19.5	20.0			
	6	2437	21.0	21.0			
	11	2462	20.0	21.0			
	12	2467	17.5	18.0			
	13	2472	15.0	14.5			
802.11g	1	2412	16.5	17.0			
	6	2437	21.0	21.0			
	11	2462	17.0	16.5			
	12	2467	13.5	13.5			
	13	2472	-5.5	-5.5			
802.11n HT20	1	2412	16.0	16.5	16.0	16.0	19.0
	6	2437	20.5	21.0	20.5	20.5	23.5
	11	2462	16.0	16.5	16.0	16.0	19.0
	12	2467	13.5	13.5	12.0	12.0	15.0
	13	2472	-6.0	-6.0	-8.5	-8.5	-5.5
802.11n HT40	3	2422	14.0	13.5	13.5	13.5	16.5
	6	2437	16.0	16.0	16.0	16.0	19.0
	9	2452	14.5	14.5	14.5	14.5	17.5
	10	2457	14.5	14.5	14.5	14.5	17.5
	11	2462	14.5	14.5	14.5	14.5	17.5

WLAN Tune-up Power (Full)**Bluetooth**

Mode	Channel	Frequency	Ant 1 Max Tune-up
BR / EDR	0	2402	11.5
	39	2441	11.5
	78	2480	11.5
LE	0	2402	10.0
	19	2440	10.0
	39	2480	10.0

WLAN Tune-up Power (Full)							
WLAN 5.2GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	36	5180	17.5	17.5			
	40	5200	20.5	20.5			
	44	5220	21.0	21.0			
	48	5240	21.0	21.0			
802.11n HT20	36	5180	17.0	17.5	17.0	17.0	20.0
	40	5200	20.0	20.5	20.0	20.0	23.0
	44	5220	21.0	21.0	21.0	21.0	24.0
	48	5240	21.0	21.0	21.0	21.0	24.0
802.11n HT40	38	5190	18.0	17.5	17.5	17.5	20.5
	46	5230	19.5	18.5	18.5	18.5	21.5
802.11ac VHT80	42	5210	18.0	18.0	18.0	18.0	21.0

WLAN Tune-up Power (Full)							
WLAN 5.3GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	52	5260	21.0	21.5			
	56	5280	21.0	21.5			
	60	5300	21.0	21.5			
	64	5320	17.5	17.0			
802.11n HT20	52	5260	21.0	21.5	21.0	21.0	24.0
	56	5280	21.0	21.0	21.0	21.0	24.0
	60	5300	21.0	21.0	21.0	21.0	24.0
	64	5320	17.0	17.5	17.0	17.0	20.0
802.11n HT40	54	5270	18.5	18.5	18.5	18.5	21.5
	62	5310	15.5	15.5	15.5	15.5	18.5
802.11ac VHT80	58	5290	16.5	16.0	16.0	16.0	19.0
802.11ac VHT160	50	5250	13.0	13.5	13.0	13.0	16.0

WLAN Tune-up Power (Full)							
WLAN 5.6GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	100	5500	18.5	17.5			
	116	5580	21.0	21.5			
	120	5600	21.0	21.5			
	124	5620	21.0	21.5			
	132	5660	21.0	21.5			
	140	5700	19.0	18.5			
	144	5720	19.0	18.5			
802.11n HT20	100	5500	16.5	18.5	16.5	16.5	19.5
	116	5580	21.0	21.5	21.0	21.0	24.0
	120	5600	21.0	21.5	21.0	21.0	24.0
	124	5620	21.0	21.5	21.0	21.0	24.0
	132	5660	21.0	21.5	21.0	21.0	24.0
	140	5700	18.5	19.0	18.5	18.5	21.5
	144	5720	18.5	19.0	18.5	18.5	21.5
802.11n HT40	102	5510	17.5	18.0	17.5	17.5	20.5
	110	5550	21.5	21.5	21.5	21.5	24.5
	118	5590	21.5	21.5	21.5	21.5	24.5
	126	5630	21.5	21.5	21.5	21.5	24.5
	134	5670	18.5	19.0	18.5	18.5	21.5
	142	5710	18.5	19.0	18.5	18.5	21.5
802.11ac VHT80	106	5530	18.5	17.5	17.5	17.5	20.5
	122	5610	20.5	20.0	20.0	20.0	23.0
	138	5690	21.0	21.0	21.0	21.0	24.0
802.11ac VHT160	114	5570	15.0	15.0	15.0	15.0	18.0

WLAN Tune-up Power (Full)							
WLAN 5.8GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	149	5745	22.0	22.0			
	153	5765	22.0	22.0			
	157	5785	21.5	21.5			
	161	5805	21.5	21.5			
	165	5825	21.5	21.5			
802.11n HT20	149	5745	22.0	21.0	21.0	21.0	24.0
	153	5765	22.0	21.5	21.5	21.5	24.5
	157	5785	21.5	21.5	21.5	21.5	24.5
	161	5805	21.5	21.5	21.5	21.5	24.5
	165	5825	21.5	21.5	21.5	21.5	24.5
802.11n HT40	151	5755	19.5	19.5	19.5	19.5	22.5
	159	5795	20.0	20.5	20.5	20.5	23.5
802.11ac VHT80	155	5775	18.5	18.5	18.5	18.5	21.5

Annex E. Measured Conducted Power Result

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

Band	WCDMA Band II			WCDMA Band IV			WCDMA Band V			3GPP MPR (dB)
Channel	9262	9400	9538	1312	1413	1513	4132	4182	4233	
Frequency (MHz)	1852.4	1880.0	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6	
RMC 12.2K	22.86	22.87	22.82	22.99	22.95	22.98	22.80	22.83	22.86	-
HSDPA Subtest-1	21.80	21.81	21.76	21.70	21.64	21.65	21.62	21.65	21.68	0
HSDPA Subtest-2	21.82	21.83	21.78	21.75	21.69	21.70	21.65	21.68	21.71	0
HSDPA Subtest-3	21.30	21.31	21.26	21.25	21.19	21.20	21.15	21.18	21.21	0.5
HSDPA Subtest-4	21.29	21.30	21.25	21.24	21.18	21.19	21.14	21.17	21.20	0.5
HSUPA Subtest-1	21.48	21.49	21.42	21.50	21.44	21.45	21.38	21.41	21.44	0
HSUPA Subtest-2	20.85	20.86	20.81	20.85	20.79	20.80	20.69	20.72	20.75	2
HSUPA Subtest-3	20.44	20.45	20.40	20.43	20.37	20.38	20.35	20.38	20.41	1
HSUPA Subtest-4	20.70	20.71	20.66	20.73	20.67	20.68	20.94	20.97	21.00	2
HSUPA Subtest-5	21.89	21.90	21.85	21.86	21.80	21.81	21.77	21.80	21.83	0

LTE Band 2

BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			18700 MHz	18900 MHz	19100 MHz		18607 MHz	18900 MHz	19193 MHz	
20	1	0	22.96	23.01	22.98	0	21.99	22.04	22.01	1
	1	50	22.87	22.92	22.89	0	21.90	21.95	21.92	1
	1	99	22.66	22.71	22.68	0	21.69	21.74	21.71	1
	50	0	21.99	22.04	22.01	1	21.02	21.07	21.04	2
	50	25	21.97	22.02	21.99	1	21.00	21.05	21.02	2
	50	50	21.92	21.97	21.94	1	20.95	21.00	20.97	2
100	0	21.91	21.96	21.93	1	20.94	20.99	20.96	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			18675 MHz	18900 MHz	19125 MHz		18675 MHz	18900 MHz	19125 MHz	
15	1	0	22.91	22.96	22.93	0	21.94	21.99	21.96	1
	1	37	22.82	22.87	22.84	0	21.85	21.90	21.87	1
	1	74	22.61	22.66	22.63	0	21.64	21.69	21.66	1
	36	0	21.94	21.99	21.96	1	20.97	21.02	20.99	2
	36	19	21.92	21.97	21.94	1	20.95	21.00	20.97	2
	36	39	21.87	21.92	21.89	1	20.90	20.95	20.92	2
	75	0	21.86	21.91	21.88	1	20.89	20.94	20.91	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			18650 MHz	18900 MHz	19150 MHz		18650 MHz	18900 MHz	19150 MHz	
10	1	0	22.85	22.90	22.87	0	21.88	21.93	21.90	1
	1	24	22.76	22.81	22.78	0	21.79	21.84	21.81	1
	1	49	22.55	22.60	22.57	0	21.58	21.63	21.60	1
	25	0	21.88	21.93	21.90	1	20.91	20.96	20.93	2
	25	12	21.86	21.91	21.88	1	20.89	20.94	20.91	2
	25	25	21.81	21.86	21.83	1	20.84	20.89	20.86	2
	50	0	21.80	21.85	21.82	1	20.83	20.88	20.85	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			18625 MHz	18900 MHz	19175 MHz		18625 MHz	18900 MHz	19175 MHz	
5	1	0	22.82	22.87	22.84	0	21.85	21.90	21.87	1
	1	12	22.73	22.78	22.75	0	21.76	21.81	21.78	1
	1	24	22.52	22.57	22.54	0	21.55	21.60	21.57	1
	12	0	21.85	21.90	21.87	1	20.88	20.93	20.90	2
	12	6	21.83	21.88	21.85	1	20.86	20.91	20.88	2
	12	13	21.78	21.83	21.80	1	20.81	20.86	20.83	2
	25	0	21.77	21.82	21.79	1	20.80	20.85	20.82	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			18615 MHz	18900 MHz	19185 MHz		18615 MHz	18900 MHz	19185 MHz	
3	1	0	22.77	22.82	22.79	0	21.80	21.85	21.82	1
	1	7	22.68	22.73	22.70	0	21.71	21.76	21.73	1
	1	14	22.47	22.52	22.49	0	21.50	21.55	21.52	1
	8	0	21.80	21.85	21.82	1	20.83	20.88	20.85	2
	8	3	21.78	21.83	21.80	1	20.81	20.86	20.83	2
	8	7	21.73	21.78	21.75	1	20.76	20.81	20.78	2
15	0	21.72	21.77	21.74	1	20.75	20.80	20.77	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			18607 MHz	18900 MHz	19193 MHz		18607 MHz	18900 MHz	19193 MHz	
1.4	1	0	22.73	22.78	22.75	0	21.76	21.81	21.78	1
	1	2	22.64	22.69	22.66	0	21.67	21.72	21.69	1
	1	5	22.43	22.48	22.45	0	21.46	21.51	21.48	1
	3	0	22.08	22.13	22.10	0	21.11	21.16	21.13	1
	3	1	22.06	22.11	22.08	0	21.09	21.14	21.11	1
	3	3	22.01	22.06	22.03	0	21.04	21.09	21.06	1
6	0	21.68	21.73	21.70	1	20.71	20.76	20.73	2	

LTE Band 4

BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			20050 MHz	20175 MHz	20300 MHz		20050 MHz	20175 MHz	20300 MHz	
20	1	0	23.19	23.23	23.20	0	22.27	22.31	22.28	1
	1	50	23.12	23.16	23.13	0	22.20	22.24	22.21	1
	1	99	22.88	22.92	22.89	0	21.96	22.00	21.97	1
	50	0	22.14	22.18	22.15	1	21.22	21.26	21.23	2
	50	25	22.12	22.16	22.13	1	21.20	21.24	21.21	2
	50	50	22.09	22.13	22.10	1	21.17	21.21	21.18	2
	100	0	22.04	22.08	22.05	1	21.12	21.16	21.13	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			20025 MHz	20175 MHz	20325 MHz		20025 MHz	20175 MHz	20325 MHz	
15	1	0	23.16	23.20	23.17	0	22.24	22.28	22.25	1
	1	37	23.09	23.13	23.10	0	22.17	22.21	22.18	1
	1	74	22.85	22.89	22.86	0	21.93	21.97	21.94	1
	36	0	22.11	22.15	22.12	1	21.19	21.23	21.20	2
	36	19	22.09	22.13	22.10	1	21.17	21.21	21.18	2
	36	39	22.06	22.10	22.07	1	21.14	21.18	21.15	2
	75	0	22.01	22.05	22.02	1	21.09	21.13	21.10	2
	BW (MHz)	RB Size	RB Offset	QPSK				16QAM		
Low CH				Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
20000 MHz				20175 MHz	20350 MHz		20000 MHz	20175 MHz	20350 MHz	
10	1	0	23.12	23.16	23.13	0	22.20	22.24	22.21	1
	1	24	23.05	23.09	23.06	0	22.13	22.17	22.14	1
	1	49	22.81	22.85	22.82	0	21.89	21.93	21.90	1
	25	0	22.07	22.11	22.08	1	21.15	21.19	21.16	2
	25	12	22.05	22.09	22.06	1	21.13	21.17	21.14	2
	25	25	22.02	22.06	22.03	1	21.10	21.14	21.11	2
	50	0	21.97	22.01	21.98	1	21.05	21.09	21.06	2
	BW (MHz)	RB Size	RB Offset	QPSK				16QAM		
Low CH				Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
19975 MHz				20175 MHz	20375 MHz		19975 MHz	20175 MHz	20375 MHz	
5	1	0	23.06	23.10	23.07	0	22.14	22.18	22.15	1
	1	12	22.99	23.03	23.00	0	22.07	22.11	22.08	1
	1	24	22.75	22.79	22.76	0	21.83	21.87	21.84	1
	12	0	22.01	22.05	22.02	1	21.09	21.13	21.10	2
	12	6	21.99	22.03	22.00	1	21.07	21.11	21.08	2
	12	13	21.96	22.00	21.97	1	21.04	21.08	21.05	2
	25	0	21.91	21.95	21.92	1	20.99	21.03	21.00	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			19965 MHz	20175 MHz	20385 MHz		19965 MHz	20175 MHz	20385 MHz	
3	1	0	23.02	23.06	23.03	0	22.10	22.14	22.11	1
	1	7	22.95	22.99	22.96	0	22.03	22.07	22.04	1
	1	14	22.71	22.75	22.72	0	21.79	21.83	21.80	1
	8	0	21.97	22.01	21.98	1	21.05	21.09	21.06	2
	8	3	21.95	21.99	21.96	1	21.03	21.07	21.04	2
	8	7	21.92	21.96	21.93	1	21.00	21.04	21.01	2
	15	0	21.87	21.91	21.88	1	20.95	20.99	20.96	2
	BW (MHz)	RB Size	RB Offset	QPSK				16QAM		
Low CH				Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
19957 MHz				20175 MHz	20393 MHz		19957 MHz	20175 MHz	20393 MHz	
1.4	1	0	22.97	23.01	22.98	0	22.05	22.09	22.06	1
	1	2	22.90	22.94	22.91	0	21.98	22.02	21.99	1
	1	5	22.66	22.70	22.67	0	21.74	21.78	21.75	1
	3	0	22.05	22.09	22.06	0	21.13	21.17	21.14	1
	3	1	22.03	22.07	22.04	0	21.11	21.15	21.12	1
	3	3	22.01	22.04	22.01	0	21.08	21.12	21.09	1
	6	0	21.82	21.86	21.83	1	20.90	20.94	20.91	2

LTE Band 5

BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 20450	Mid CH 20525	High CH 20600	3GPP MPR (dB)	Low CH 20450	Mid CH 20525	High CH 20600	3GPP MPR (dB)
			829.0 MHz	836.5 MHz	844.0 MHz		829.0 MHz	836.5 MHz	844.0 MHz	
10	1	0	22.80	22.87	22.91	0	21.85	21.92	21.96	1
	1	24	22.77	22.84	22.88	0	21.82	21.89	21.93	1
	1	49	22.69	22.76	22.80	0	21.74	21.81	21.85	1
	25	0	21.73	21.80	21.84	1	20.78	20.85	20.89	2
	25	12	21.76	21.83	21.87	1	20.81	20.88	20.92	2
	25	25	21.66	21.73	21.77	1	20.71	20.78	20.82	2
50	0	21.75	21.82	21.86	1	20.80	20.87	20.91	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 20425	Mid CH 20525	High CH 20625	3GPP MPR (dB)	Low CH 20425	Mid CH 20525	High CH 20625	3GPP MPR (dB)
			826.5 MHz	836.5 MHz	846.5 MHz		826.5 MHz	836.5 MHz	846.5 MHz	
5	1	0	22.76	22.83	22.87	0	21.81	21.88	21.92	1
	1	12	22.73	22.80	22.84	0	21.78	21.85	21.89	1
	1	24	22.65	22.72	22.76	0	21.70	21.77	21.81	1
	12	0	21.69	21.76	21.80	1	20.74	20.81	20.85	2
	12	6	21.72	21.79	21.83	1	20.77	20.84	20.88	2
	12	13	21.62	21.69	21.73	1	20.67	20.74	20.78	2
	25	0	21.71	21.78	21.82	1	20.76	20.83	20.87	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 20415	Mid CH 20525	High CH 20635	3GPP MPR (dB)	Low CH 20415	Mid CH 20525	High CH 20635	3GPP MPR (dB)
			825.5 MHz	836.5 MHz	847.5 MHz		825.5 MHz	836.5 MHz	847.5 MHz	
3	1	0	22.73	22.80	22.84	0	21.78	21.85	21.89	1
	1	7	22.70	22.77	22.81	0	21.75	21.82	21.86	1
	1	14	22.62	22.69	22.73	0	21.67	21.74	21.78	1
	8	0	21.66	21.73	21.77	1	20.71	20.78	20.82	2
	8	3	21.69	21.76	21.80	1	20.74	20.81	20.85	2
	8	7	21.59	21.66	21.70	1	20.64	20.71	20.75	2
	15	0	21.68	21.75	21.79	1	20.73	20.80	20.84	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 20407	Mid CH 20525	High CH 20643	3GPP MPR (dB)	Low CH 20407	Mid CH 20525	High CH 20643	3GPP MPR (dB)
			824.7 MHz	836.5 MHz	848.3 MHz		824.7 MHz	836.5 MHz	848.3 MHz	
1.4	1	0	22.67	22.74	22.78	0	21.72	21.79	21.83	1
	1	2	22.64	22.71	22.75	0	21.69	21.76	21.80	1
	1	5	22.56	22.63	22.67	0	21.61	21.68	21.72	1
	3	0	22.08	22.15	22.19	0	21.13	21.20	21.24	1
	3	1	22.11	22.18	22.22	0	21.16	21.23	21.27	1
	3	3	22.01	22.08	22.12	0	21.06	21.13	21.17	1
	6	0	21.62	21.69	21.73	1	20.67	20.74	20.78	2

LTE Band 7

BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			20850 MHz	21100 MHz	21350 MHz		20850 MHz	21100 MHz	21350 MHz	
20	1	0	22.81	22.88	22.43	0	21.87	21.94	21.49	1
	1	50	22.78	22.85	22.40	0	21.84	21.91	21.46	1
	1	99	22.16	22.23	21.78	0	21.22	21.29	20.84	1
	50	0	21.90	21.97	21.52	1	20.96	20.99	20.58	2
	50	25	21.84	21.91	21.46	1	20.90	20.97	20.52	2
	50	50	21.60	21.67	21.22	1	20.66	20.73	20.28	2
	100	0	21.71	21.78	21.33	1	20.77	20.84	20.39	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			20825 MHz	21100 MHz	21375 MHz		20825 MHz	21100 MHz	21375 MHz	
15	1	0	22.78	22.85	22.40	0	21.84	21.91	21.46	1
	1	37	22.75	22.82	22.37	0	21.81	21.88	21.43	1
	1	74	22.13	22.20	21.75	0	21.19	21.26	20.81	1
	36	0	21.87	21.94	21.49	1	20.93	20.96	20.55	2
	36	19	21.81	21.88	21.43	1	20.87	20.94	20.49	2
	36	39	21.57	21.64	21.19	1	20.63	20.70	20.25	2
	75	0	21.68	21.75	21.30	1	20.74	20.81	20.36	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			20800 MHz	21100 MHz	21400 MHz		20800 MHz	21100 MHz	21400 MHz	
10	1	0	22.72	22.79	22.34	0	21.78	21.85	21.40	1
	1	24	22.69	22.76	22.31	0	21.75	21.82	21.37	1
	1	49	22.07	22.14	21.69	0	21.13	21.20	20.75	1
	25	0	21.81	21.88	21.43	1	20.87	20.90	20.49	2
	25	12	21.75	21.82	21.37	1	20.81	20.88	20.43	2
	25	25	21.51	21.58	21.13	1	20.57	20.64	20.19	2
	50	0	21.62	21.69	21.24	1	20.68	20.75	20.30	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			20775 MHz	21100 MHz	21425 MHz		20775 MHz	21100 MHz	21425 MHz	
5	1	0	22.68	22.75	22.30	0	21.74	21.81	21.36	1
	1	12	22.65	22.72	22.27	0	21.71	21.78	21.33	1
	1	24	22.03	22.10	21.65	0	21.09	21.16	20.71	1
	12	0	21.77	21.84	21.39	1	20.83	20.86	20.45	2
	12	6	21.71	21.78	21.33	1	20.77	20.84	20.39	2
	12	13	21.47	21.54	21.09	1	20.53	20.60	20.15	2
	25	0	21.58	21.65	21.20	1	20.64	20.71	20.26	2

LTE Band 12										
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 23060	Mid CH 23095	High CH 23130	3GPP MPR (dB)	Low CH 23060	Mid CH 23095	High CH 23130	3GPP MPR (dB)
			704.0 MHz	707.5 MHz	711.0 MHz		704.0 MHz	707.5 MHz	711.0 MHz	
10	1	0	23.34	23.37	23.23	0	22.39	22.42	22.28	1
	1	24	23.12	23.15	23.01	0	22.17	22.20	22.06	1
	1	49	23.16	23.19	23.05	0	22.21	22.24	22.10	1
	25	0	22.14	22.17	22.03	1	21.19	21.22	21.08	2
	25	12	22.11	22.14	22.00	1	21.16	21.19	21.05	2
	25	25	22.08	22.11	21.97	1	21.13	21.16	21.02	2
50	0	22.11	22.14	22.00	1	21.16	21.19	21.05	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 23035	Mid CH 23095	High CH 23155	3GPP MPR (dB)	Low CH 23035	Mid CH 23095	High CH 23155	3GPP MPR (dB)
			701.5 MHz	707.5 MHz	713.5 MHz		701.5 MHz	707.5 MHz	713.5 MHz	
5	1	0	23.30	23.33	23.19	0	22.35	22.38	22.24	1
	1	12	23.08	23.11	22.97	0	22.13	22.16	22.02	1
	1	24	23.12	23.15	23.01	0	22.17	22.20	22.06	1
	12	0	22.10	22.13	21.99	1	21.15	21.18	21.04	2
	12	6	22.07	22.10	21.96	1	21.12	21.15	21.01	2
	12	13	22.04	22.07	21.93	1	21.09	21.12	20.98	2
	25	0	22.07	22.10	21.96	1	21.12	21.15	21.01	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 23025	Mid CH 23095	High CH 23165	3GPP MPR (dB)	Low CH 23025	Mid CH 23095	High CH 23165	3GPP MPR (dB)
			700.5 MHz	707.5 MHz	714.5 MHz		700.5 MHz	707.5 MHz	714.5 MHz	
3	1	0	23.27	23.30	23.16	0	22.32	22.35	22.21	1
	1	7	23.05	23.08	22.94	0	22.10	22.13	21.99	1
	1	14	23.09	23.12	22.98	0	22.14	22.17	22.03	1
	8	0	22.07	22.10	21.96	1	21.12	21.15	21.01	2
	8	3	22.04	22.07	21.93	1	21.09	21.12	20.98	2
	8	7	22.01	22.04	21.90	1	21.06	21.09	20.95	2
	15	0	22.04	22.07	21.93	1	21.09	21.12	20.98	2
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 23017	Mid CH 23095	High CH 23173	3GPP MPR (dB)	Low CH 23017	Mid CH 23095	High CH 23173	3GPP MPR (dB)
			699.7 MHz	707.5 MHz	715.3 MHz		699.7 MHz	707.5 MHz	715.3 MHz	
1.4	1	0	23.23	23.26	23.12	0	22.28	22.31	22.17	1
	1	2	23.01	23.04	22.90	0	22.06	22.09	21.95	1
	1	5	23.05	23.08	22.94	0	22.10	22.13	21.99	1
	3	0	22.03	22.06	22.07	0	21.08	21.11	21.07	1
	3	1	22.40	22.03	22.04	0	21.45	21.08	21.04	1
	3	3	22.02	22.04	22.01	0	21.07	21.05	21.01	1
	6	0	22.00	22.03	21.89	1	21.05	21.08	20.94	2

LTE Band 13										
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 23230	Mid CH 782.0 MHz	High CH	3GPP MPR (dB)	Low CH 23230	Mid CH 782.0 MHz	High CH	3GPP MPR (dB)
10	1	0		22.98		0		22.04		1
	1	24		22.06		0		21.12		1
	1	49		22.85		0		21.91		1
	25	0		21.93		1		20.99		2
	25	12		21.92		1		20.98		2
	25	25		21.91		1		20.97		2
50	0		22.05		1		21.11		2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH 23205	Mid CH 23230	High CH 23255	3GPP MPR (dB)	Low CH 23205	Mid CH 23230	High CH 23255	3GPP MPR (dB)
			779.5 MHz	782.0 MHz	784.5 MHz		779.5 MHz	782.0 MHz	784.5 MHz	
5	1	0	22.15	22.80	22.93	0	21.22	21.87	22.00	1
	1	12	22.11	22.76	22.89	0	21.18	21.83	21.96	1
	1	24	22.04	22.69	22.82	0	21.11	21.76	21.89	1
	12	0	21.26	21.81	21.94	1	20.33	20.88	21.01	2
	12	6	21.25	21.80	21.93	1	20.32	20.87	21.00	2
	12	13	21.09	21.64	21.77	1	20.16	20.71	20.84	2
	25	0	21.27	21.82	21.95	1	20.34	20.89	21.02	2

LTE Band 25

BW (MHz)	RB Size	RB Offset	OPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26140 MHz	26365 MHz	26590 MHz		26140 MHz	26365 MHz	26590 MHz	
20	1	0	23.12	23.01	23.17	0	22.19	22.08	22.24	1
	1	50	23.06	22.95	23.11	0	22.13	22.02	22.18	1
	1	99	22.68	22.57	22.73	0	21.75	21.64	21.80	1
	50	0	22.08	21.97	22.13	1	21.15	21.04	21.20	2
	50	25	21.93	21.82	21.98	1	21.00	20.89	21.05	2
	50	50	21.75	21.64	21.80	1	20.82	20.71	20.87	2
100	0	21.96	21.85	22.01	1	21.03	20.92	21.08	2	
BW (MHz)	RB Size	RB Offset	OPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26115 MHz	26365 MHz	26615 MHz		26115 MHz	26365 MHz	26615 MHz	
15	1	0	23.08	22.97	23.13	0	22.15	22.04	22.20	1
	1	37	23.02	22.91	23.07	0	22.09	21.98	22.14	1
	1	74	22.64	22.53	22.69	0	21.71	21.60	21.76	1
	36	0	22.04	21.93	22.09	1	21.11	21.00	21.16	2
	36	19	21.89	21.78	21.94	1	20.96	20.85	21.01	2
	36	39	21.71	21.60	21.76	1	20.78	20.67	20.83	2
	75	0	21.92	21.81	21.97	1	20.99	20.88	21.04	2
BW (MHz)	RB Size	RB Offset	OPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26090 MHz	26365 MHz	26640 MHz		26090 MHz	26365 MHz	26640 MHz	
10	1	0	23.05	22.94	23.10	0	22.12	22.01	22.17	1
	1	24	22.99	22.88	23.04	0	22.06	21.95	22.11	1
	1	49	22.61	22.50	22.66	0	21.68	21.57	21.73	1
	25	0	22.01	21.90	22.06	1	21.08	20.97	21.13	2
	25	12	21.86	21.75	21.91	1	20.93	20.82	20.98	2
	25	25	21.68	21.57	21.73	1	20.75	20.64	20.80	2
	50	0	21.89	21.78	21.94	1	20.96	20.85	21.01	2
BW (MHz)	RB Size	RB Offset	OPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26065 MHz	26365 MHz	26640 MHz		26065 MHz	26365 MHz	26640 MHz	
5	1	0	23.00	22.89	23.05	0	22.07	21.96	22.12	1
	1	12	22.94	22.83	22.99	0	22.01	21.90	22.06	1
	1	24	22.56	22.45	22.61	0	21.63	21.52	21.68	1
	12	0	21.96	21.85	22.01	1	21.03	20.92	21.08	2
	12	6	21.81	21.70	21.86	1	20.88	20.77	20.93	2
	12	13	21.63	21.52	21.68	1	20.70	20.59	20.75	2
	25	0	21.84	21.73	21.89	1	20.91	20.80	20.96	2
BW (MHz)	RB Size	RB Offset	OPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26055 MHz	26365 MHz	26675 MHz		26055 MHz	26365 MHz	26675 MHz	
3	1	0	22.96	22.85	23.01	0	22.03	21.92	22.08	1
	1	7	22.90	22.79	22.95	0	21.97	21.86	22.02	1
	1	14	22.52	22.41	22.57	0	21.59	21.48	21.64	1
	8	0	21.92	21.81	21.97	1	20.99	20.88	21.04	2
	8	3	21.77	21.66	21.82	1	20.84	20.73	20.89	2
	8	7	21.59	21.48	21.64	1	20.66	20.55	20.71	2
	15	0	21.80	21.69	21.85	1	20.87	20.76	20.92	2
BW (MHz)	RB Size	RB Offset	OPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26047 MHz	26365 MHz	26683 MHz		26047 MHz	26365 MHz	26683 MHz	
1.4	1	0	22.92	22.81	22.97	0	21.99	21.88	22.04	1
	1	2	22.86	22.75	22.91	0	21.93	21.82	21.98	1
	1	5	22.48	22.37	22.53	0	21.55	21.44	21.60	1
	3	0	22.57	22.34	22.50	0	21.52	21.41	21.57	1
	3	1	22.30	22.19	22.35	0	21.37	21.26	21.42	1
	3	3	22.12	22.01	22.17	0	21.19	21.08	21.24	1
	6	0	21.76	21.65	21.81	1	20.83	20.72	20.88	2

LTE Band 26

BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26765 MHz	26865 MHz	26965 MHz		26765 MHz	26865 MHz	26965 MHz	
15	1	0	22.97	22.90	23.04	0	22.04	21.97	22.11	1
	1	37	22.87	22.80	22.94	0	21.94	21.87	22.01	1
	1	74	22.71	22.64	22.78	0	21.78	21.71	21.85	1
	36	0	22.01	21.94	22.08	1	21.08	21.01	21.15	2
	36	19	21.98	21.91	22.05	1	21.05	20.98	21.12	2
	36	39	21.80	21.73	21.87	1	20.87	20.80	20.94	2
75	0	22.00	21.93	22.07	1	21.07	21.00	21.14	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26740 MHz	26865 MHz	26990 MHz		26740 MHz	26865 MHz	26990 MHz	
10	1	0	22.93	22.86	23.00	0	22.00	21.93	22.07	1
	1	24	22.83	22.76	22.90	0	21.90	21.83	21.97	1
	1	49	22.67	22.60	22.74	0	21.74	21.67	21.81	1
	25	0	21.97	21.90	22.04	1	21.04	20.97	21.11	2
	25	12	21.94	21.87	22.01	1	21.01	20.94	21.08	2
	25	25	21.76	21.69	21.83	1	20.83	20.76	20.90	2
50	0	21.96	21.89	22.03	1	21.03	20.96	21.10	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26715 MHz	26865 MHz	27015 MHz		26715 MHz	26865 MHz	27015 MHz	
5	1	0	22.87	22.80	22.94	0	21.94	21.87	22.01	1
	1	12	22.77	22.70	22.84	0	21.84	21.77	21.91	1
	1	24	22.61	22.54	22.68	0	21.68	21.61	21.75	1
	12	0	21.91	21.84	21.98	1	20.98	20.91	21.05	2
	12	6	21.88	21.81	21.95	1	20.95	20.88	21.02	2
	12	13	21.70	21.63	21.77	1	20.77	20.70	20.84	2
25	0	21.90	21.83	21.97	1	20.97	20.90	21.04	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26705 MHz	26865 MHz	27025 MHz		26705 MHz	26865 MHz	27025 MHz	
3	1	0	22.83	22.76	22.90	0	21.90	21.83	21.97	1
	1	7	22.73	22.66	22.80	0	21.80	21.73	21.87	1
	1	14	22.57	22.50	22.64	0	21.64	21.57	21.71	1
	8	0	21.87	21.80	21.94	1	20.94	20.87	21.01	2
	8	3	21.84	21.77	21.91	1	20.91	20.84	20.98	2
	8	7	21.66	21.59	21.73	1	20.73	20.66	20.80	2
15	0	21.86	21.79	21.93	1	20.93	20.86	21.00	2	
BW (MHz)	RB Size	RB Offset	QPSK				16QAM			
			Low CH	Mid CH	High CH	3GPP MPR (dB)	Low CH	Mid CH	High CH	3GPP MPR (dB)
			26697 MHz	26865 MHz	27033 MHz		26697 MHz	26865 MHz	27033 MHz	
1.4	1	0	22.78	22.71	22.85	0	21.85	21.78	21.92	1
	1	2	22.68	22.61	22.75	0	21.75	21.68	21.82	1
	1	5	22.52	22.45	22.59	0	21.59	21.52	21.66	1
	3	0	22.29	22.22	22.36	0	21.29	21.22	21.36	1
	3	1	22.26	22.19	22.33	0	21.26	21.19	21.33	1
	3	3	22.08	22.01	22.15	0	21.08	21.01	21.15	1
6	0	21.81	21.74	21.88	1	20.88	20.81	20.95	2	

LTE Band 41 (Power Class 3)														
BW (MHz)	RB Size	RB Offset	QPSK						16QAM					
			L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)	L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)
			39750	40185	40620	41055	41490		39750	40185	40620	41055	41490	
2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz		2506.0 MHz	2549.5 MHz	2593.0 MHz	2636.5 MHz	2680.0 MHz				
20	1	0	21.68	22.72	22.75	22.36	21.35	0	20.72	21.76	21.79	21.40	20.39	1
	1	50	21.63	22.67	22.70	22.31	21.30	0	20.67	21.71	21.74	21.35	20.34	1
	1	99	21.25	22.29	22.32	21.93	21.23	0	20.29	21.33	21.36	20.97	20.27	1
	50	0	20.88	21.92	21.95	21.56	20.55	1	19.92	20.96	20.99	20.60	19.59	2
	50	25	20.91	21.95	21.98	21.59	20.58	1	19.95	20.99	20.97	20.63	19.62	2
	50	50	20.65	21.69	21.72	21.33	20.32	1	19.69	20.73	20.76	20.37	19.36	2
100	0	20.83	21.87	21.90	21.51	20.50	1	19.87	20.91	20.94	20.55	19.54	2	
BW (MHz)	RB Size	RB Offset	QPSK						16QAM					
			L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)	L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)
			39725	40173	40620	41068	41515		39725	40173	40620	41068	41515	
2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593.0 MHz	2637.8 MHz	2682.5 MHz				
15	1	0	21.64	22.68	22.71	22.32	21.31	0	20.68	21.72	21.75	21.36	20.35	1
	1	37	21.59	22.63	22.66	22.27	21.26	0	20.63	21.67	21.70	21.31	20.30	1
	1	74	21.21	22.25	22.28	21.89	21.19	0	20.25	21.29	21.32	20.93	20.23	1
	36	0	20.84	21.88	21.91	21.52	20.51	1	19.88	20.92	20.95	20.56	19.55	2
	36	19	20.87	21.91	21.94	21.55	20.54	1	19.91	20.95	20.93	20.59	19.58	2
	36	39	20.61	21.65	21.68	21.29	20.28	1	19.65	20.69	20.72	20.33	19.32	2
	75	0	20.79	21.83	21.86	21.47	20.46	1	19.83	20.87	20.90	20.51	19.50	2
BW (MHz)	RB Size	RB Offset	QPSK						16QAM					
			L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)	L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)
			39700	40160	40620	41080	41540		39700	40160	40620	41080	41540	
2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz		2501.0 MHz	2547.0 MHz	2593.0 MHz	2639.0 MHz	2685.0 MHz				
10	1	0	21.61	22.65	22.68	22.29	21.28	0	20.69	21.73	21.76	21.37	20.36	1
	1	24	21.56	22.60	22.63	22.24	21.23	0	20.64	21.68	21.71	21.32	20.31	1
	1	49	21.18	22.22	22.25	21.86	21.16	0	20.26	21.30	21.33	20.94	20.24	1
	25	0	20.81	21.85	21.88	21.49	20.48	1	19.89	20.93	20.96	20.57	19.56	2
	25	12	20.84	21.88	21.91	21.52	20.51	1	19.92	20.96	20.94	20.60	19.59	2
	25	25	20.58	21.62	21.65	21.26	20.25	1	19.66	20.70	20.73	20.34	19.33	2
	50	0	20.76	21.80	21.83	21.44	20.43	1	19.84	20.88	20.91	20.52	19.51	2
BW (MHz)	RB Size	RB Offset	QPSK						16QAM					
			L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)	L-CH	M-CH	M-CH	M-CH	H-CH	3GPP MPR (dB)
			39675	40148	40620	41093	41565		39675	40148	40620	41093	41565	
2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593.0 MHz	2640.3 MHz	2687.5 MHz				
5	1	0	21.55	22.59	22.62	22.23	21.22	0	20.63	21.67	21.70	21.31	20.30	1
	1	12	21.50	22.54	22.57	22.18	21.17	0	20.58	21.62	21.65	21.26	20.25	1
	1	24	21.12	22.16	22.19	21.80	21.10	0	20.20	21.24	21.27	20.88	20.18	1
	12	0	20.75	21.79	21.82	21.43	20.42	1	19.83	20.87	20.90	20.51	19.50	2
	12	6	20.78	21.82	21.85	21.46	20.45	1	19.86	20.90	20.88	20.54	19.53	2
	12	13	20.52	21.56	21.59	21.20	20.19	1	19.60	20.64	20.67	20.28	19.27	2
	25	0	20.70	21.74	21.77	21.38	20.37	1	19.78	20.82	20.85	20.46	19.45	2

WLAN Conducted Power (Full)			
WLAN2.4GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11b	1	2412	19.48
	6	2437	20.93
	11	2462	19.96
	12	2467	17.49
	13	2472	14.36

WLAN Conducted Power (Full)			
WLAN2.4GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11b	1	2412	19.98
	6	2437	20.95
	11	2462	20.96
	12	2467	17.84
	13	2472	14.32

WLAN Conducted Power (Full)					
WLAN2.4GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT20	1	2412	15.95	15.97	18.97
	6	2437	19.37	19.33	22.36
	11	2462	15.98	15.98	18.99
	12	2467	11.94	11.91	14.94
	13	2472	-8.56	-8.52	-5.53

WLAN Conducted Power (Full)			
Bluetooth Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
BR / EDR	0	2402	9.64
	39	2441	9.84
	78	2480	10.57
LE	0	2402	8.28
	19	2440	8.61
	39	2480	8.9

WLAN Conducted Power (Full)			
WLAN 5.2GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11a	36	5180	17.47
	40	5200	20.47
	44	5220	20.96
	48	5240	20.97

WLAN Conducted Power (Full)			
WLAN 5.2GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11a	36	5180	17.47
	40	5200	20.48
	44	5220	20.97
	48	5240	20.97

WLAN Conducted Power (Full)					
WLAN 5.2GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT20	36	5180	16.95	16.98	19.98
	40	5200	19.97	19.96	22.98
	44	5220	20.81	19.99	23.43
	48	5240	20.63	19.9	23.29

WLAN Conducted Power (Full)			
WLAN 5.3GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11a	52	5260	20.93
	56	5280	20.99
	60	5300	20.92
	64	5320	17.49

WLAN Conducted Power (Full)			
WLAN 5.3GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11a	52	5260	21.48
	56	5280	21.49
	60	5300	21.41
	64	5320	16.99

WLAN Conducted Power (Full)					
WLAN 5.3GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT20	52	5260	20.81	20.03	23.45
	56	5280	20.91	20.15	23.56
	60	5300	20.81	20.54	23.69
	64	5320	16.95	16.98	19.98

WLAN Conducted Power (Full)			
WLAN 5.6GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11n HT40	102	5510	17.48
	110	5550	21.48
	118	5590	21.33
	126	5630	21.42
	134	5670	18.47
	142	5710	18.49

WLAN Conducted Power (Full)			
WLAN 5.6GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11n HT40	102	5510	17.96
	110	5550	21.49
	118	5590	21.45
	126	5630	21.34
	134	5670	18.98
	142	5710	18.96

WLAN Conducted Power (Full)					
WLAN 5.6GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT40	102	5510	17.48	17.49	20.5
	110	5550	21.26	20.96	24.12
	118	5590	20.97	20.61	23.8
	126	5630	21	20.53	23.78
	134	5670	18.47	18.44	21.47
	142	5710	18.48	18.48	21.49

WLAN Conducted Power (Full)			
WLAN 5.8GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11a	149	5745	21.94
	153	5765	21.74
	157	5785	21.47
	161	5805	21.42
	165	5825	21.45

WLAN Conducted Power (Full)			
WLAN 5.8GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11a	149	5745	21.95
	153	5765	21.96
	157	5785	21.48
	161	5805	21.44
	165	5825	21.45

WLAN Conducted Power (Full)					
WLAN 5.8GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT20	149	5745	20.99	20.2	23.62
	153	5765	21.41	20.23	23.87
	157	5785	21.47	20.25	23.91
	161	5805	21.33	20.63	24
	165	5825	21.48	20.98	24.25

Annex F. SAR Test Result

SAR Results for Body worn 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.

Extremity SAR Test Result

System & Position								DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Ant Status	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)
1	WCDMA II	RMC12.2K	Left Side	0	9400				-	1.00	24.00	22.87	1.30	-0.11	0.554	0.72
2	WCDMA IV	RMC12.2K	Left Side	0	1312				-	1.00	24.00	22.99	1.26	-0.12	0.417	0.53
3	WCDMA V	RMC12.2K	Left Side	0	4233				-	1.00	24.00	22.86	1.30	0.15	0.424	0.55
4	LTE 2	QPSK20M	Left Side	0	18900	1	0		-	1.00	24.00	23.01	1.26	-0.1	0.47	0.59
5	LTE 4	QPSK20M	Left Side	0	20175	1	0		-	1.00	24.00	23.23	1.19	-0.14	0.375	0.45
6	LTE 5	QPSK10M	Left Side	0	20600	1	0		-	1.00	24.00	22.91	1.29	-0.18	0.391	0.50
7	LTE 7	QPSK20M	Left Side	0	21100	1	0		-	1.00	23.00	22.88	1.03	-0.18	0.776	0.80
8	LTE 12	QPSK10M	Left Side	0	23095	1	0		-	1.00	24.00	23.37	1.16	-0.19	0.356	0.41
9	LTE 13	QPSK10M	Left Side	0	23230	1	0		-	1.00	24.00	22.98	1.26	-0.18	0.247	0.31
10	LTE 25	QPSK20M	Left Side	0	26590	1	0		-	1.00	24.00	23.17	1.21	0.12	0.508	0.61
11	LTE 26	QPSK15M	Left Side	0	26965	1	0		-	1.00	24.00	23.04	1.25	0.1	0.394	0.49
12	LTE 41	QPSK20M	Left Side	0	40620	1	0		-	1.00	23.00	22.75	1.06	-0.18	0.656	0.70

Extremity SAR Test Result

System & Position								DUT & Accessory		SAR						
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Ant Status	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	Rear Face	0	6			Ant 0	99.12	1.01	21.00	20.93	1.02	-0.16	0.552	0.57
	WLAN2.4G	802.11b	Left Side	0	6			Ant 0	99.12	1.01	21.00	20.93	1.02	0	<0.001	0
13	WLAN2.4G	802.11b	Right Side	0	6			Ant 0	99.12	1.01	21.00	20.93	1.02	-0.18	1.17	1.21
	WLAN2.4G	802.11b	Top Side	0	6			Ant 0	99.12	1.01	21.00	20.93	1.02	0.15	0.119	0.12
	WLAN2.4G	802.11b	Bottom Side	0	6			Ant 0	99.12	1.01	21.00	20.93	1.02	0	<0.001	0
	WLAN2.4G	802.11b	Rear Face	0	11			Ant 1	99.12	1.01	21.00	20.96	1.01	-0.03	0.112	0.11
	WLAN2.4G	802.11b	Left Side	0	11			Ant 1	99.12	1.01	21.00	20.96	1.01	0	<0.001	0
	WLAN2.4G	802.11b	Right Side	0	11			Ant 1	99.12	1.01	21.00	20.96	1.01	0	0.088	0.09
	WLAN2.4G	802.11b	Top Side	0	11			Ant 1	99.12	1.01	21.00	20.96	1.01	0	<0.001	0
	WLAN2.4G	802.11b	Bottom Side	0	11			Ant 1	99.12	1.01	21.00	20.96	1.01	0	<0.001	0
	WLAN2.4G	802.11n HT20	Rear Face	0	6			Ant 0+1	96.79	1.03	23.50	22.36	1.30	-0.09	0.128	0.17
	WLAN2.4G	802.11n HT20	Left Side	0	6			Ant 0+1	96.79	1.03	23.50	22.36	1.30	0	<0.001	0
	WLAN2.4G	802.11n HT20	Right Side	0	6			Ant 0+1	96.79	1.03	23.50	22.36	1.30	-0.19	0.788	1.06
	WLAN2.4G	802.11n HT20	Top Side	0	6			Ant 0+1	96.79	1.03	23.50	22.36	1.30	0.03	0.089	0.12
	WLAN2.4G	802.11n HT20	Bottom Side	0	6			Ant 0+1	96.79	1.03	23.50	22.36	1.30	0	<0.001	0
	WLAN2.4G	802.11b	Right Side	0	1			Ant 0	99.12	1.01	19.50	19.48	1.00	-0.14	0.914	0.92
	WLAN2.4G	802.11b	Right Side	0	11			Ant 0	99.12	1.01	20.00	19.96	1.01	0.16	1.06	1.08
	WLAN2.4G	802.11b	Right Side	0	12			Ant 0	99.12	1.01	17.50	17.49	1.00	0.07	0.842	0.85
	WLAN2.4G	802.11b	Right Side	0	13			Ant 0	99.12	1.01	15.00	14.36	1.16	0.1	0.375	0.44

Extremity SAR Test Result

System & Position								DUT & Accessory		SAR						
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Ant Status	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)
	WLAN5.3G	802.11a	Rear Face	0	56			Ant 0	97.42	1.03	21.00	20.99	1.00	0.19	0.167	0.17
	WLAN5.3G	802.11a	Left Side	0	56			Ant 0	97.42	1.03	21.00	20.99	1.00	0	<0.001	0
	WLAN5.3G	802.11a	Right Side	0	56			Ant 0	97.42	1.03	21.00	20.99	1.00	0.15	0.633	0.65
	WLAN5.3G	802.11a	Top Side	0	56			Ant 0	97.42	1.03	21.00	20.99	1.00	0.13	0.68	0.70
	WLAN5.3G	802.11a	Bottom Side	0	56			Ant 0	97.42	1.03	21.00	20.99	1.00	0	<0.001	0
	WLAN5.3G	802.11a	Rear Face	0	56			Ant 1	97.09	1.03	21.50	21.49	1.00	-0.09	0.287	0.30
	WLAN5.3G	802.11a	Left Side	0	56			Ant 1	97.09	1.03	21.50	21.49	1.00	0	<0.001	0
	WLAN5.3G	802.11a	Right Side	0	56			Ant 1	97.09	1.03	21.50	21.49	1.00	0.06	0.122	0.13
	WLAN5.3G	802.11a	Top Side	0	56			Ant 1	97.09	1.03	21.50	21.49	1.00	0	<0.001	0
	WLAN5.3G	802.11a	Bottom Side	0	56			Ant 1	97.09	1.03	21.50	21.49	1.00	0	<0.001	0
	WLAN5.3G	802.11n HT20	Rear Face	0	60			Ant 0+1	96.18	1.04	24.00	23.69	1.07	0.03	0.417	0.46
	WLAN5.3G	802.11n HT20	Left Side	0	60			Ant 0+1	96.18	1.04	24.00	23.69	1.07	0	<0.001	0
	WLAN5.3G	802.11n HT20	Right Side	0	60			Ant 0+1	96.18	1.04	24.00	23.69	1.07	0.17	0.496	0.55
14	WLAN5.3G	802.11n HT20	Top Side	0	60			Ant 0+1	96.18	1.04	24.00	23.69	1.07	-0.06	0.96	1.07
	WLAN5.3G	802.11n HT20	Bottom Side	0	60			Ant 0+1	96.18	1.04	24.00	23.69	1.07	0	<0.001	0
	WLAN5.3G	802.11n HT20	Top Side	0	52			Ant 0+1	96.18	1.04	24.00	23.45	1.14	0.04	0.652	0.77
	WLAN5.3G	802.11n HT20	Top Side	0	56			Ant 0+1	96.18	1.04	24.00	23.56	1.11	-0.07	0.813	0.94
	WLAN5.3G	802.11n HT20	Top Side	0	64			Ant 0+1	96.18	1.04	20.00	19.98	1.00	0.02	0.372	0.39
	WLAN5.6G	802.11n HT40	Rear Face	0	110			Ant 0	91.72	1.09	21.50	21.48	1.00	-0.01	0.364	0.40
	WLAN5.6G	802.11n HT40	Left Side	0	110			Ant 0	91.72	1.09	21.50	21.48	1.00	0	<0.001	0
	WLAN5.6G	802.11n HT40	Right Side	0	110			Ant 0	91.72	1.09	21.50	21.48	1.00	0.19	0.789	0.86
	WLAN5.6G	802.11n HT40	Top Side	0	110			Ant 0	91.72	1.09	21.50	21.48	1.00	-0.08	1.67	1.82
	WLAN5.6G	802.11n HT40	Bottom Side	0	110			Ant 0	91.72	1.09	21.50	21.48	1.00	0	<0.001	0
	WLAN5.6G	802.11n HT40	Rear Face	0	110			Ant 1	92.00	1.09	21.50	21.49	1.00	-0.04	<0.001	0
	WLAN5.6G	802.11n HT40	Left Side	0	110			Ant 1	92.00	1.09	21.50	21.49	1.00	0	<0.001	0
	WLAN5.6G	802.11n HT40	Right Side	0	110			Ant 1	92.00	1.09	21.50	21.49	1.00	0.04	0.132	0.14
	WLAN5.6G	802.11n HT40	Top Side	0	110			Ant 1	92.00	1.09	21.50	21.49	1.00	0	<0.001	0
	WLAN5.6G	802.11n HT40	Bottom Side	0	110			Ant 1	92.00	1.09	21.50	21.49	1.00	0	<0.001	0
	WLAN5.6G	802.11n HT40	Rear Face	0	110			Ant 0+1	84.46	1.18	24.50	24.12	1.09	0.06	0.535	0.69
	WLAN5.6G	802.11n HT40	Left Side	0	110			Ant 0+1	84.46	1.18	24.50	24.12	1.09	0	<0.001	0
	WLAN5.6G	802.11n HT40	Right Side	0	110			Ant 0+1	84.46	1.18	24.50	24.12	1.09	-0.06	0.696	0.90
15	WLAN5.6G	802.11n HT40	Top Side	0	110			Ant 0+1	84.46	1.18	24.50	24.12	1.09	-0.05	1.5	1.93
	WLAN5.6G	802.11n HT40	Bottom Side	0	110			Ant 0+1	84.46	1.18	24.50	24.12	1.09	0	<0.001	0
	WLAN5.6G	802.11n HT40	Top Side	0	102			Ant 0+1	84.46	1.18	20.50	20.50	1.00	-0.19	0.514	0.61
	WLAN5.6G	802.11n HT40	Top Side	0	118			Ant 0+1	84.46	1.18	24.50	23.80	1.17	0.17	1.34	1.85
	WLAN5.6G	802.11n HT40	Top Side	0	126			Ant 0+1	84.46	1.18	24.50	23.78	1.18	0.19	1.26	1.75
	WLAN5.6G	802.11n HT40	Top Side	0	134			Ant 0+1	84.46	1.18	21.50	21.47	1.01	-0.01	0.665	0.79
	WLAN5.6G	802.11n HT40	Top Side	0	142			Ant 0+1	84.46	1.18	21.50	21.49	1.00	0.12	0.629	0.74

Extremity SAR Test Result

System & Position								DUT & Accessory		SAR						
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	RB#	RB offset	Ant Status	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)
	WLAN5.8G	802.11a	Rear Face	0	149			Ant 0	97.42	1.03	22.00	21.94	1.01	0.07	0.311	0.32
	WLAN5.8G	802.11a	Left Side	0	149			Ant 0	97.42	1.03	22.00	21.94	1.01	-0.04	<0.001	0
	WLAN5.8G	802.11a	Right Side	0	149			Ant 0	97.42	1.03	22.00	21.94	1.01	0.14	0.733	0.76
16	WLAN5.8G	802.11a	Top Side	0	149			Ant 0	97.42	1.03	22.00	21.94	1.01	-0.02	1.4	1.46
	WLAN5.8G	802.11a	Bottom Side	0	149			Ant 0	97.42	1.03	22.00	21.94	1.01	0	<0.001	0
	WLAN5.8G	802.11a	Rear Face	0	153			Ant 1	97.09	1.03	22.00	21.96	1.01	-0.11	0.213	0.22
	WLAN5.8G	802.11a	Left Side	0	153			Ant 1	97.09	1.03	22.00	21.96	1.01	0	<0.001	0.00
	WLAN5.8G	802.11a	Right Side	0	153			Ant 1	97.09	1.03	22.00	21.96	1.01	0.08	0.061	0.06
	WLAN5.8G	802.11a	Top Side	0	153			Ant 1	97.09	1.03	22.00	21.96	1.01	0	<0.001	0
	WLAN5.8G	802.11a	Bottom Side	0	153			Ant 1	97.09	1.03	22.00	21.96	1.01	0	<0.001	0
	WLAN5.8G	802.11n HT20	Rear Face	0	165			Ant 0+1	96.18	1.04	24.50	24.25	1.06	0.13	0.431	0.48
	WLAN5.8G	802.11n HT20	Left Side	0	165			Ant 0+1	96.18	1.04	24.50	24.25	1.06	0	<0.001	0
	WLAN5.8G	802.11n HT20	Right Side	0	165			Ant 0+1	96.18	1.04	24.50	24.25	1.06	0.09	0.427	0.47
	WLAN5.8G	802.11n HT20	Top Side	0	165			Ant 0+1	96.18	1.04	24.50	24.25	1.06	-0.05	1.01	1.11
	WLAN5.8G	802.11n HT20	Bottom Side	0	165			Ant 0+1	96.18	1.04	24.50	24.25	1.06	0	<0.001	0
	WLAN5.8G	802.11a	Top Side	0	153			Ant 0	97.42	1.03	22.00	21.74	1.06	0.03	1.11	1.21
	WLAN5.8G	802.11a	Top Side	0	157			Ant 0	97.42	1.03	21.50	21.47	1.01	-0.08	0.86	0.89
	WLAN5.8G	802.11a	Top Side	0	161			Ant 0	97.42	1.03	21.50	21.42	1.02	0.02	0.78	0.82
	WLAN5.8G	802.11a	Top Side	0	165			Ant 0	97.42	1.03	21.50	21.45	1.01	0.16	0.753	0.78
	BT	EDR	Rear Face	0	78			Ant 1	76.80	1.30	11.50	10.57	1.24	0	<0.001	0
	BT	EDR	Left Side	0	78			Ant 1	76.80	1.30	11.50	10.57	1.24	0	<0.001	0
17	BT	EDR	Right Side	0	78			Ant 1	76.80	1.30	11.50	10.57	1.24	0	<0.001	0
	BT	EDR	Top Side	0	78			Ant 1	76.80	1.30	11.50	10.57	1.24	0	<0.001	0
	BT	EDR	Bottom Side	0	78			Ant 1	76.80	1.30	11.50	10.57	1.24	0	<0.001	0
	BT	EDR	Right Side	0	0			Ant 1	76.80	1.30	11.50	9.64	1.53	0	<0.001	0
	BT	EDR	Right Side	0	39			Ant 1	76.80	1.30	11.50	9.84	1.47	0	<0.001	0

Annex G. SAR Measurement Variability

Since all the measured SAR_{10g} are less than 2.0 W/kg, the repeated measurement is not required.

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	Extremity Exposure Condition
A	MAX WWAN + WLAN 2.4G_Ant 0 + BT_Ant 1	Yes
B	MAX WWAN + WLAN 5G_Ant 0 + BT_Ant 1	Yes
C	MAX WWAN + WLAN 5G_MIMO + BT_Ant 1	Yes

Notes

1. The WLAN 2.4G and WLAN 5G cannot transmit simultaneously.
2. The WLAN and Bluetooth cannot transmit simultaneously.

Simultaneous Transmission SAR Evaluation (Body)									
Band	Position	1	2	3	4	5	A(1+2+5)	B(1+3+5)	C(1+4+5)
		Max WWAN	WLAN 2.4GHz Ant 0	WLAN 5GHz Ant 0	WLAN 5GHz Ant 0+1	BT Ant 1	Summimg result 10g SAR W/kg	Summimg result 10g SAR W/kg	Summimg result 10g SAR W/kg
		10g SAR W/kg	10g SAR W/kg	10g SAR W/kg	10g SAR W/kg	10g SAR W/kg			
WCDMA II	Rear Face	0.73	0.57	0.40	0.69	0.00	1.30	1.13	1.42
	Left Side	0.95	0.00	0.00	0.00	0.00	0.95	0.95	0.95
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.20	0.12	1.82	1.93	0.00	0.32	2.02	2.13
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
WCDMA IV	Rear Face	0.71	0.57	0.40	0.69	0.00	1.28	1.11	1.40
	Left Side	0.82	0.00	0.00	0.00	0.00	0.82	0.82	0.82
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.16	0.12	1.82	1.93	0.00	0.28	1.98	2.09
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
WCDMA V	Rear Face	0.65	0.57	0.40	0.69	0.00	1.22	1.05	1.34
	Left Side	0.67	0.00	0.00	0.00	0.00	0.67	0.67	0.67
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.07	0.12	1.82	1.93	0.00	0.19	1.89	2.00
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 2	Rear Face	0.74	0.57	0.40	0.69	0.00	1.31	1.14	1.43
	Left Side	1.03	0.00	0.00	0.00	0.00	1.03	1.03	1.03
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.24	0.12	1.82	1.93	0.00	0.36	2.06	2.17
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 4	Rear Face	0.81	0.57	0.40	0.69	0.00	1.38	1.21	1.50
	Left Side	0.89	0.00	0.00	0.00	0.00	0.89	0.89	0.89
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.16	0.12	1.82	1.93	0.00	0.28	1.98	2.09
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 5	Rear Face	0.65	0.57	0.40	0.69	0.00	1.22	1.05	1.34
	Left Side	0.71	0.00	0.00	0.00	0.00	0.71	0.71	0.71
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.10	0.12	1.82	1.93	0.00	0.22	1.92	2.03
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 7	Rear Face	0.41	0.57	0.40	0.69	0.00	0.98	0.81	1.10
	Left Side	1.14	0.00	0.00	0.00	0.00	1.14	1.14	1.14
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.16	0.12	1.82	1.93	0.00	0.28	1.98	2.09
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 12	Rear Face	0.30	0.57	0.40	0.69	0.00	0.87	0.70	0.99
	Left Side	0.41	0.00	0.00	0.00	0.00	0.41	0.41	0.41
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.09	0.12	1.82	1.93	0.00	0.21	1.91	2.02
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 13	Rear Face	0.24	0.57	0.40	0.69	0.00	0.81	0.64	0.93
	Left Side	0.32	0.00	0.00	0.00	0.00	0.32	0.32	0.32
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.07	0.12	1.82	1.93	0.00	0.19	1.89	2.00
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 25	Rear Face	0.65	0.57	0.40	0.69	0.00	1.22	1.05	1.34
	Left Side	0.90	0.00	0.00	0.00	0.00	0.90	0.90	0.90
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.19	0.12	1.82	1.93	0.00	0.31	2.01	2.12
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 26	Rear Face	0.50	0.57	0.40	0.69	0.00	1.07	0.90	1.19
	Left Side	0.58	0.00	0.00	0.00	0.00	0.58	0.58	0.58
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.08	0.12	1.82	1.93	0.00	0.20	1.90	2.01
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
LTE 41	Rear Face	0.29	0.57	0.40	0.69	0.00	0.86	0.69	0.98
	Left Side	0.89	0.00	0.00	0.00	0.00	0.89	0.89	0.89
	Right Side	1.00	1.21	0.86	0.90	0.00	2.21	1.86	1.90
	Top Side	0.17	0.12	1.82	1.93	0.00	0.29	1.99	2.10
	Bottom Side	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00

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	D750V3	1078	Jun. 21, 2021	1 Year
System Validation Dipole	SPEAG	D835V2	4d092	Jun. 23, 2021	1 Year
System Validation Dipole	SPEAG	D1750V2	1111	Apr. 14, 2021	1 Year
System Validation Dipole	SPEAG	D1900V2	5d036	Jan. 22, 2021	1 Year
System Validation Dipole	SPEAG	D2000V2	1013	Mar. 17, 2021	1 Year
System Validation Dipole	SPEAG	D2450V2	835	Jun. 22, 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	3971	Jan. 27, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7537	Apr. 26, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1585	Apr. 15, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1431	Mar. 24, 2021	1 Year
Universal Radio Communication Tester	Anritsu	MT8821C	6201381727	Aug. 24, 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

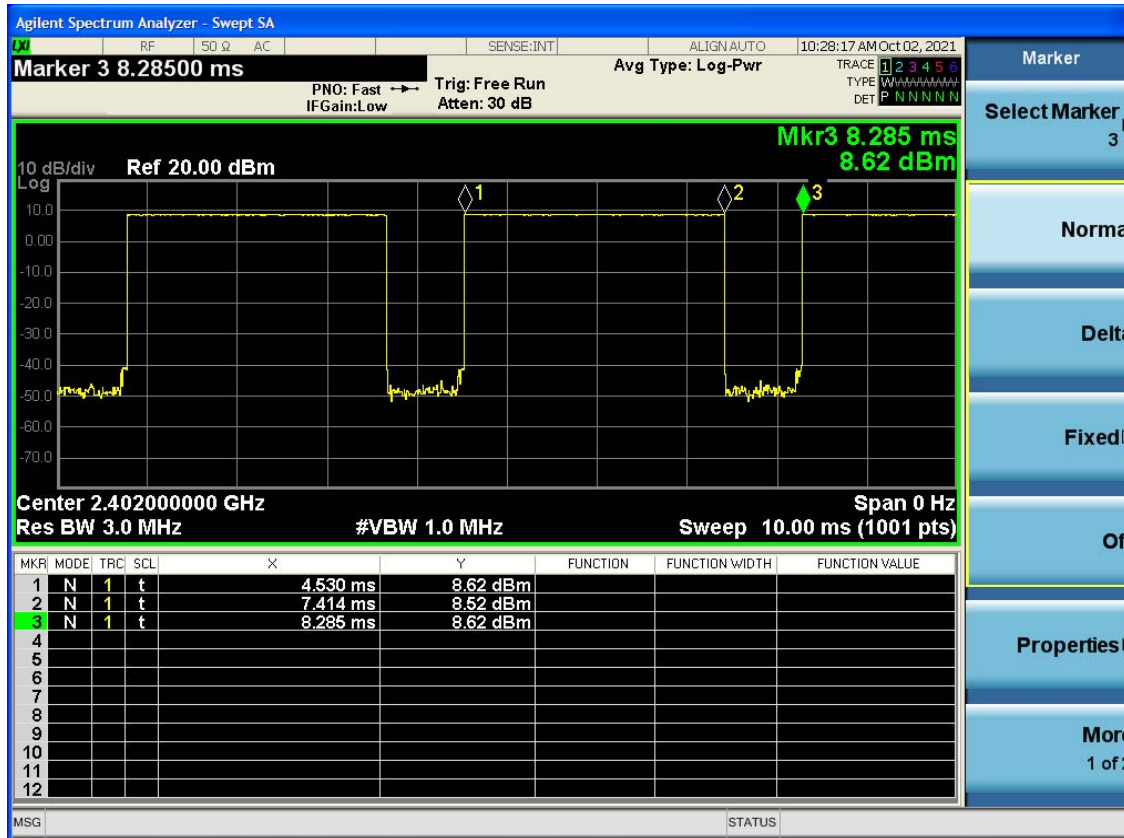
Annex K. Considerations Related to Bluetooth for Setup and Testing

This device has installed Bluetooth engineering testing software which can provide continuous transmitting RF signal. During Bluetooth SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

The Bluetooth call box has been used during SAR measurement and the EUT was set to DH5 mode at the maximum output power. Its duty factor was calculated as below and the measured SAR for Bluetooth would be scaled to the 100% transmission duty factor to determine compliance.

The duty factor of Bluetooth signal are shown as below.

<Time-domain plot for Bluetooth transmission signal>



Time-domain plot for Bluetooth transmission signal

The duty factor of Bluetooth signal has been calculated as following.

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = (7.414 - 4.53) / (8.285 - 4.53) = 76.80\%$$