

REPORT No.: SZ19020019S01

# **Annex C Plots of System Performance Check**



## System Check 750MHz Head 190326

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

Medium: HSL 750 Medium parameters used: f = 750 MHz;  $\sigma = 0.885$  S/m;  $\varepsilon_r = 40.809$ ;  $\rho =$ 

Date: 2019.03.26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.5 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN7445; ConvF(10.03, 10.03, 10.03); Calibrated: 2018.09.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 750/Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 2.11 W/kg

CW 750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,

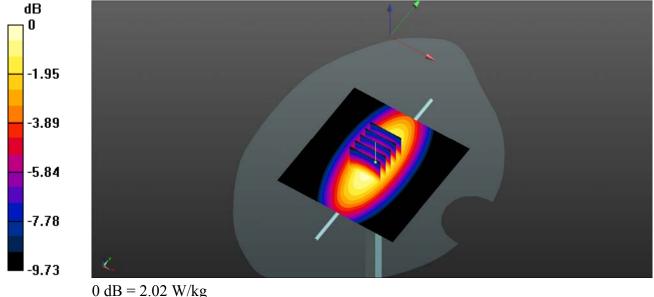
dz=5mm

Reference Value = 49.18 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.83 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.45 W/kg

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



## System Check 835MHz Head 190326

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

Medium: HS1\_835 Medium parameters used: f = 835 MHz;  $\sigma = 0.902$  S/m;  $\epsilon_r = 40.935$ ;  $\rho = 1000$ 

Date: 2019.03.26

 $kg/m^3$ 

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.5 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(9.32, 9.32, 9.32); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW835/Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 2.51 W/kg

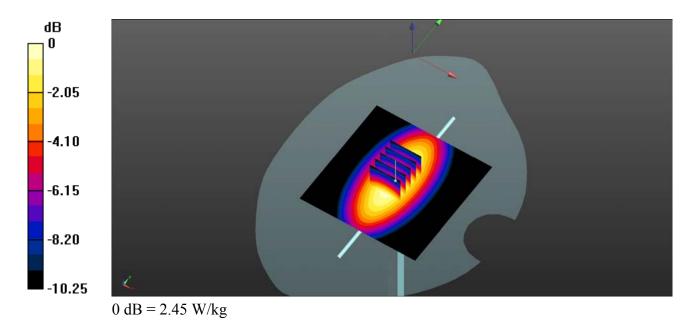
CW835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 52.96 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.38 W/kg

SAR(1 g) = 2.28 W/kg; SAR(10 g) = 1.5 W/kg

Maximum value of SAR (measured) = 2.45 W/kg



## System Check 1750MHz Head 190327

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

Medium: HSL\_1750 Medium parameters used: f = 1750 MHz;  $\sigma = 1.391$  S/m;  $\epsilon_r = 40.358$ ;  $\rho$ 

Date: 2019.03.27

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(7.98, 7.98, 7.98); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 2; Type: QD000P40CC; Serial: TP:1464
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 1750/Area Scan (81x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 10.5 W/kg

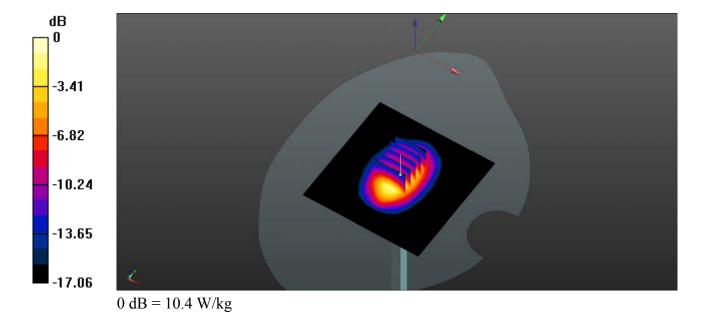
CW 1750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.16 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 16.75 W/kg

SAR(1 g) = 9.24 W/kg; SAR(10 g) = 4.92 W/kg

Maximum value of SAR (measured) = 10.4 W/kg



# System Check\_1900MHz\_Head\_190327

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

Medium: HSL\_1900 Medium parameters used: f = 1900 MHz;  $\sigma = 1.452$  S/m;  $\epsilon_r = 40.908$ ;  $\rho$ 

Date: 2019.03.27

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(7.68, 7.68, 7.68); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 2; Type: QD000P40CC; Serial: TP:1464
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 1900/Area Scan (81x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 11.32 W/kg

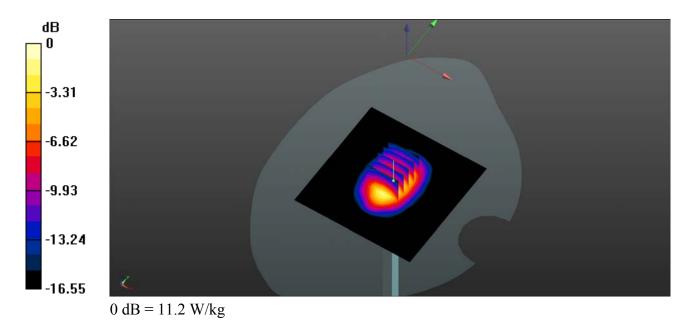
CW 1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.56 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 9.98 W/kg; SAR(10 g) = 5.32 W/kg

Maximum value of SAR (measured) = 11.2 W/kg



## System Check 2450MHz Head 190327

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

Medium: HSL\_2450 Medium parameters used: f = 2450 MHz;  $\sigma = 1.731$  S/m;  $\varepsilon_r = 37.302$ ;  $\rho$ 

Date: 2019.03.27

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.5 °C; Liquid Temperature: 22.3 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(7.34, 7.34, 7.34); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 2; Type: QD000P40CC; Serial: TP:1464
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

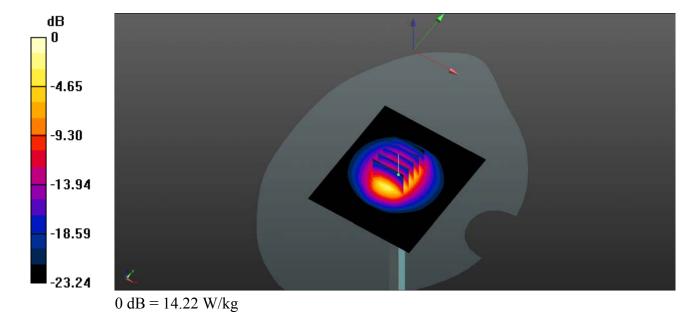
**CW2450/Area Scan (71x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 15.92 W/kg

CW2450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.71 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 27.4 W/kg

SAR(1 g) = 12.72 W/kg; SAR(10 g) = 6.01 W/kgMaximum value of SAR (measured) = 14.22 W/kg



## System Check 750MHz Body 190324

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

Medium: MSL\_750 Medium parameters used: f = 750 MHz;  $\sigma = 0.965$  S/m;  $\varepsilon_r = 54.221$ ;  $\rho =$ 

Date: 2019.03.24

 $1000 \text{ kg/m}^3$ 

Ambient Temperature : 22.9 °C; Liquid Temperature : 22.1 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN7445; ConvF(10.05, 10.05, 10.05); Calibrated: 2018.09.04;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 750/Area Scan (81x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 4.21 W/kg

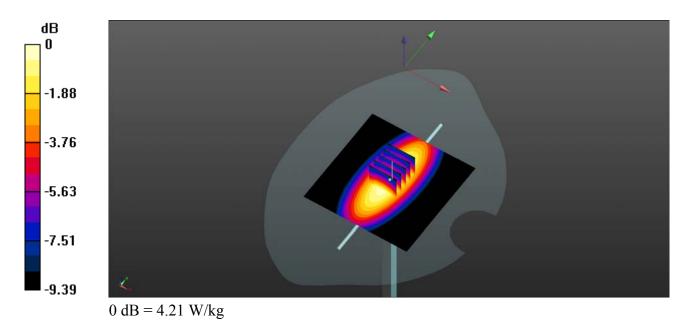
CW 750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 66.3 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 5.87 W/kg

SAR(1 g) = 2.22 W/kg; SAR(10 g) = 1.41 W/kg

Maximum value of SAR (measured) = 4.21 W/kg



## System Check 835MHz Body 190324

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

Medium: MSL\_835 Medium parameters used: f = 835 MHz;  $\sigma = 0.981$  S/m;  $\epsilon_r = 54.351$ ;  $\rho =$ 

Date: 2019.03.24

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.9 °C; Liquid Temperature: 22.1 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(9.24, 9.24, 9.24); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 835/Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 3.95 W/kg

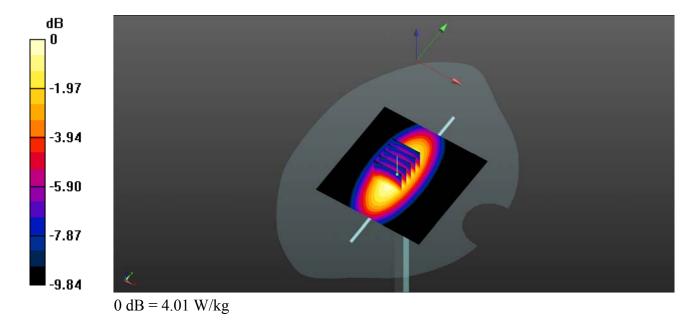
CW 835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 69.85 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 5.00 W/kg

SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.6 W/kg

Maximum value of SAR (measured) = 4.01 W/kg



# System Check\_1750MHz\_Body\_190323

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

Medium: MSL\_1750 Medium parameters used: f = 1750 MHz;  $\sigma = 1.446$  S/m;  $\varepsilon_r = 54.718$ ;  $\rho$ 

Date: 2019.03.23

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.4 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(7.65, 7.65, 7.65); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 1750/Area Scan (81x81x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 10.62 W/kg

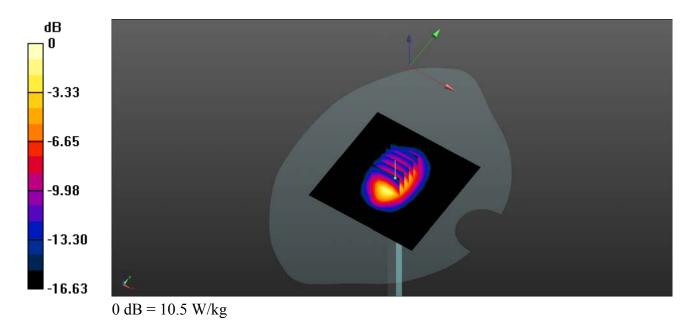
CW 1750/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.75 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.36 W/kg; SAR(10 g) = 4.93 W/kg

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



## System Check 1900MHz Body 190323

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

Medium: MSL\_1900 Medium parameters used: f = 1900 MHz;  $\sigma = 1.52$  S/m;  $\epsilon_r = 53.565$ ;  $\rho$ 

Date: 2019.03.23

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.4 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(7.4, 7.4, 7.4); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

CW 1900/Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 11.14 W/kg

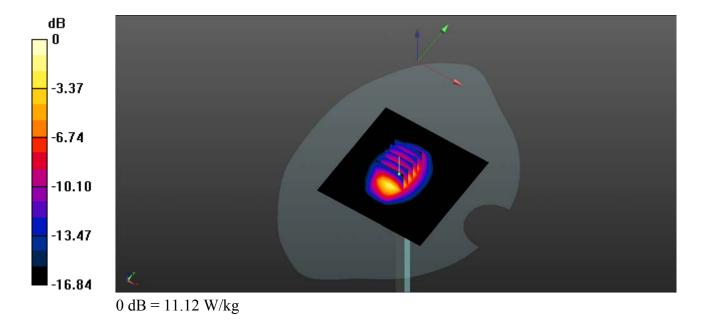
CW 1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.1 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 9.84 W/kg; SAR(10 g) = 5.12 W/kg

Maximum value of SAR (measured) = 11.12 W/kg



# System Check\_2450MHz\_Body\_190326

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

Medium: MSL 2450 Medium parameters used: f = 2450 MHz;  $\sigma = 1.924$  S/m;  $\varepsilon_r = 50.987$ ;  $\rho$ 

Date: 2019.03.26

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.5 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3823; ConvF(7.15, 7.15, 7.15); Calibrated: 2018.11.12;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn480; Calibrated: 2018.10.29
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1471
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**CW 2450/Area Scan (101x101x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 14.52 W/kg

CW 2450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.59 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 26.8 W/kg

SAR(1 g) = 12.72 W/kg; SAR(10 g) = 5.81 W/kg

Maximum value of SAR (measured) = 14.52 W/kg

