Test report no.: 17-1-0180901T09a

Issue Date: 5/1/2018



Annex A System performance check

- 1. System Performance Check for Body Tissue simulating liquid
- System Performance Check 2450 MHz Body
- System Performance Check 5200 MHz Body
- System Performance Check 5600 MHz Body
- System Performance Check 5800 MHz Body

Test Laboratory: Cetecom Essen

System Performance Check 2450 MHz Body

DUT: D2450V2; Type: D2450V2; Serial: 993

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450 MHz);

Frequency: 2450 MHz;

Medium parameters used: f = 2450 MHz; $\sigma = 2.02 \text{ S/m}$; $\varepsilon_r = 52.291$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

• Probe: EX3DV4 - SN3860; ConvF(7.98, 7.98, 7.98); Calibrated: 25.09.2017;

- Sensor-Surface: 3mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 Ax; Serial: 1125
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Configuration/Body/Area Scan (7x7x1): Measurement grid: dx=12mm, dy=12mm Maximum value of SAR (measured) = 13.2 W/kg

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

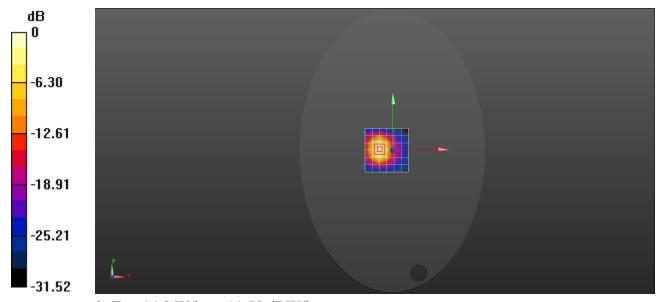
dy=5mm, dz=5mm

Reference Value = 105.3 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 25.8 W/kg

SAR(1 g) = 13.12 W/kg; SAR(10 g) = 6.25 W/kg

Maximum value of SAR (measured) = 14.8 W/kg



0 dB = 14.8 W/kg = 11.70 dBW/kg

Date: 14.12.2017

Test Laboratory: Cetecom Essen

System Performance Check 5200 MHz Body

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1193

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

MHz); Frequency: 5200 MHz;

Medium parameters used: f = 5200 MHz; $\sigma = 5.391 \text{ S/m}$; $\varepsilon_r = 47.33$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

• Probe: EX3DV4 - SN3860; ConvF(4.59, 4.59, 4.59); Calibrated: 25.09.2017;

- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 Ax; Serial: 1125
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Configuration/Body/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 16.51 W/kg

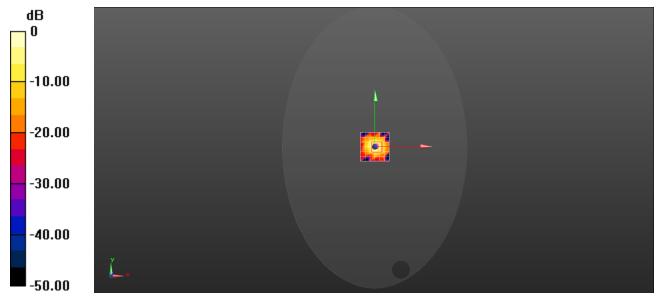
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 71.79 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 28.7 W/kg

SAR(1 g) = 7.22 W/kg; SAR(10 g) = 2.03 W/kg

Maximum value of SAR (measured) = 18.3 W/kg



0 dB = 18.3 W/kg = 12.62 dBW/kg

Date: 15.12.2017

Test Laboratory: Cetecom Essen

System Performance Check 5600 MHz Body

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1193

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

MHz); Frequency: 5600 MHz;

Medium parameters used: f = 5600 MHz; $\sigma = 5.965 \text{ S/m}$; $\varepsilon_r = 46.41$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 SN3860; ConvF(3.94, 3.94, 3.94); Calibrated: 25.09.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 Ax; Serial: 1125
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Configuration/Body/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 18.51 W/kg

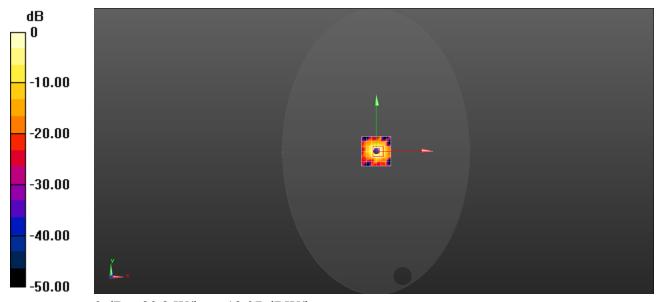
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 67.79 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 34.7 W/kg

SAR(1 g) = 7.82 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 20.3 W/kg = 13.07 dBW/kg

Date: 27.12.2017

Test Laboratory: Cetecom Essen

System Performance Check 5800 MHz Body

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1193

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

MHz); Frequency: 5800 MHz;

Medium parameters used: f = 5800 MHz; $\sigma = 6.268 \text{ S/m}$; $\varepsilon_r = 46.052$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 SN3860; ConvF(4.23, 4.23, 4.23); Calibrated: 25.09.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: ELI V5.0 (20deg probe tilt); Type: QD OVA 002 Ax; Serial: 1125
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Configuration/Body/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 15.9 W/kg

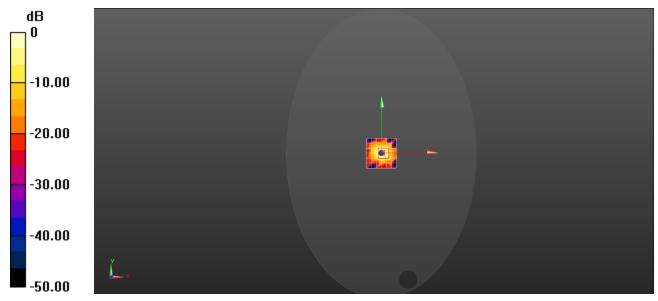
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 57.79 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 35.7 W/kg

SAR(1 g) = 7.74 W/kg; SAR(10 g) = 2.31 W/kg

Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.6 W/kg = 12.92 dBW/kg