

Annex A

System performance check

1. System Performance Check for Body Tissue simulating liquid
 - System Performance Check 750 MHz Body
 - System Performance Check 900 MHz Body
 - System Performance Check 1800 MHz Body
 - System Performance Check 1900 MHz Body

Date: 16.07.2018

Test Laboratory: Cetecom Essen

System Performance Check 750 MHz Body 250mW

DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:xxx

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz); Frequency: 750 MHz;

Medium parameters used: $f = 750$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 55.56$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3340; ConvF(6.47, 6.47, 6.47); Calibrated: 14.02.2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: Twin-SAM right V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1640
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

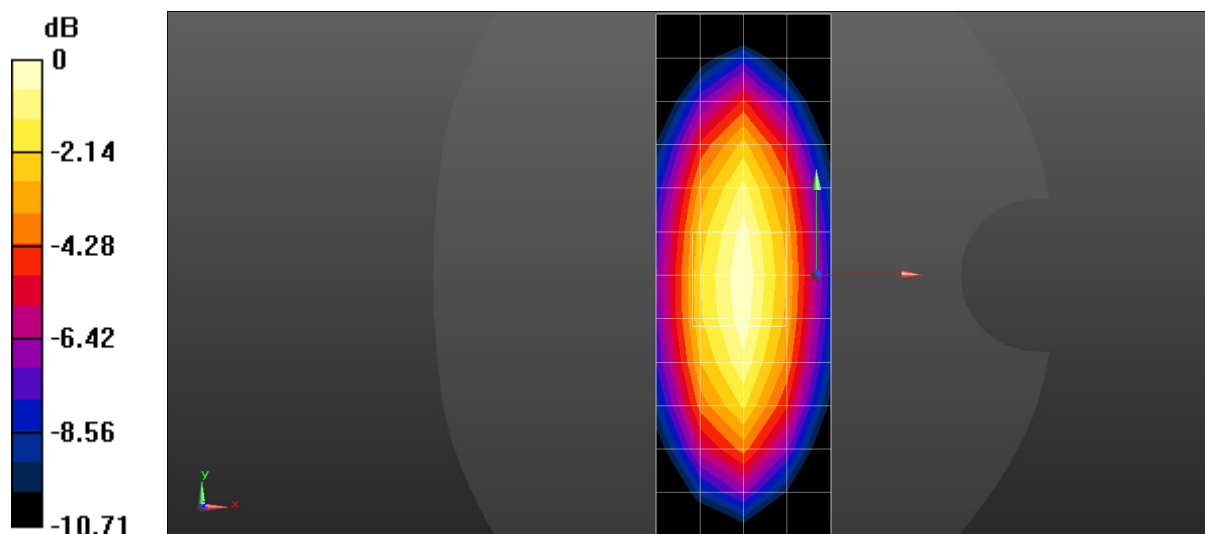
Configuration/Body/Area Scan (5x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 2.26 W/kg

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

Reference Value = 49.92 V/m; Power Drift = 0.07 dB

Maximum value of SAR (measured) = 2.29 W/kg



0 dB = 2.29 W/kg = 3.60 dBW/kg

Date: 16.07.2018

Test Laboratory: Cetecom Essen

System Performance Check 900 MHz Body 250mW

DUT: Dipole 900 MHz - D900V2 - SN-099_May16; Type: D900V2; Serial: D900V2 - SN:099

Communication System: UID 0, CW (0); Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;

Medium parameters used: $f = 900$ MHz; $\sigma = 1.022$ S/m; $\epsilon_r = 54.637$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3340; ConvF(6.24, 6.24, 6.24); Calibrated: 14.02.2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: Twin-SAM right V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1640
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

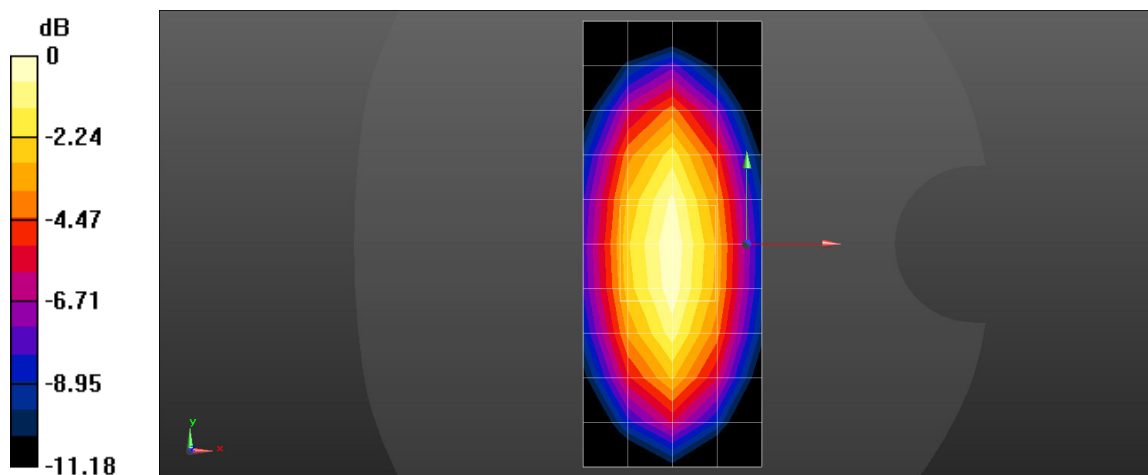
Configuration/Body/Area Scan (5x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 2.98 W/kg

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

Reference Value = 55.83 V/m; Power Drift = -0.00 dB

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



0 dB = 3.01 W/kg = 4.79 dBW/kg

Date: 17.07.2018

Test Laboratory: Cetecom Essen

System Performance Check 1800 MHz Body 250mW

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:xxx

Communication System: UID 0, CW (0); Communication System Band: D1800 (1800.0 MHz); Frequency: 1800 MHz;

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.484$ S/m; $\epsilon_r = 54.602$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3340; ConvF(5.03, 5.03, 5.03); Calibrated: 14.02.2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: Twin-SAM right V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1640
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

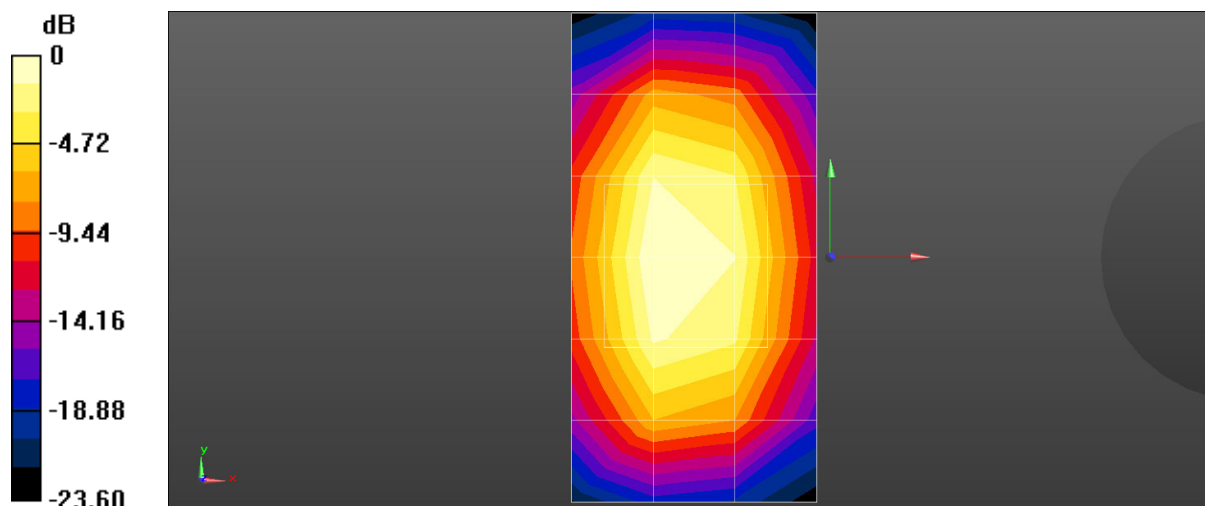
Configuration/Body/Area Scan (4x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 9.62 W/kg

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

Reference Value = 92.79 V/m; Power Drift = 0.07 dB

Maximum value of SAR (measured) = 12.1 W/kg



0 dB = 9.62 W/kg = 9.83 dBW/kg

Date: 19.07.2018

Test Laboratory: Cetecom Essen

System Performance Check 1900 MHz Body 250mW

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:xxx

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.553$ S/m; $\epsilon_r = 54.151$; $\rho = 1000$ kg/m³

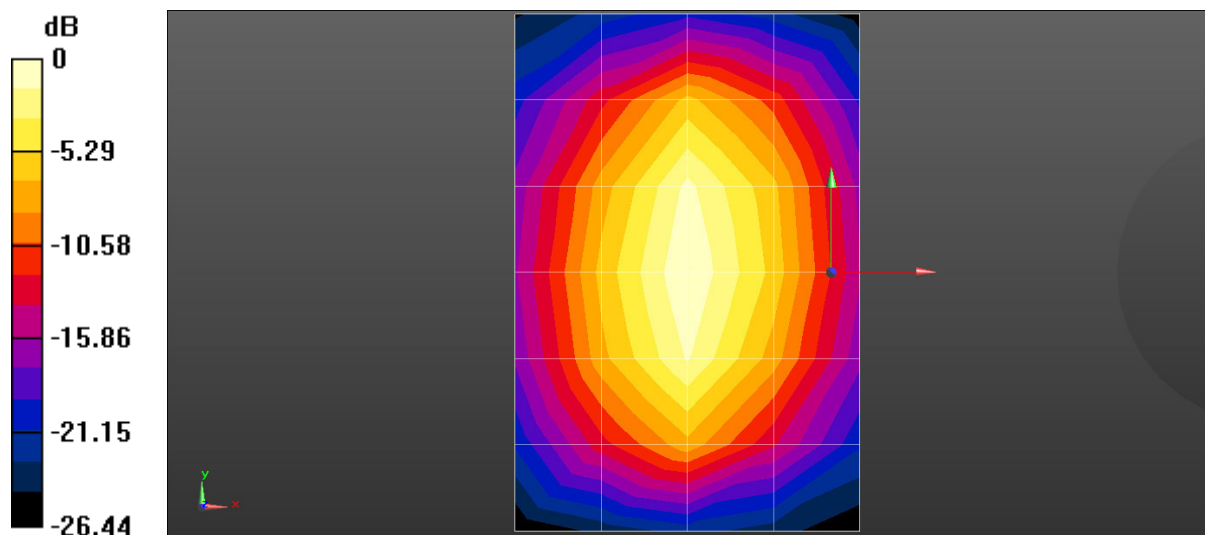
Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3340; ConvF(4.89, 4.89, 4.89); Calibrated: 14.02.2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0$
- Electronics: DAE4 Sn1233; Calibrated: 16.02.2017
- Phantom: Twin-SAM right V5.0 (30deg); Type: QD 000 P40 CD; Serial: 1640
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7373)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 12.1 W/kg



0 dB = 12.1 W/kg = 10.83 dBW/kg