Test Laboratory: UnionTrust Date: 9/11/2018

System Check H750

DUT: Dipole 750 MHz D750V3

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

Medium: HSL750 Medium parameters used: f = 750 MHz; $\sigma = 0.909$ S/m; $\varepsilon_r = 40.259$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(6.37, 6.37, 6.37); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Configuration/System Check/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0971 W/kg

Configuration/System Check/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

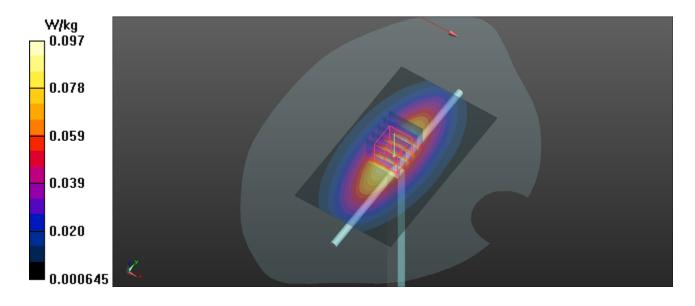
dy=8mm, dz=5mm

Reference Value = 10.49 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.128 W/kg

SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.0971 W/kg



Test Laboratory: UnionTrust Date: 9/11/2018

System Check H835

DUT: Dipole 835 MHz D835V2

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

Medium: HSL850 Medium parameters used: f = 835 MHz; $\sigma = 0.886$ S/m; $\varepsilon_r = 42.018$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(6.13, 6.13, 6.13); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Configuration/System Check/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.108 W/kg

Configuration/System Check/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

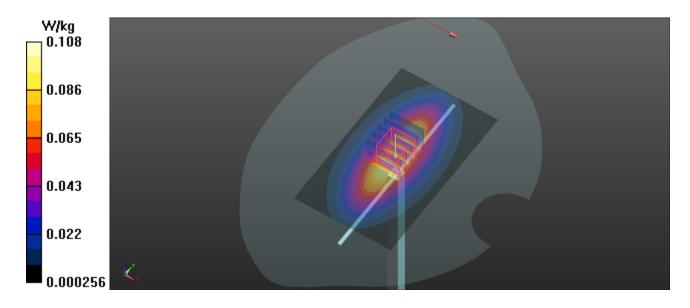
dy=8mm, dz=5mm

Reference Value = 11.31 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.142 W/kg

SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.059 W/kg

Maximum value of SAR (measured) = 0.109 W/kg



Test Laboratory: UnionTrust Date: 9/9/2018

System Check H1800

DUT: Dipole 1800 MHz D1800V2

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1 Medium: HSL1800 Medium parameters used: f = 1800 MHz; $\sigma = 1.431$ S/m; $\epsilon_r = 39.259$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(5.33, 5.33, 5.33); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

Maximum value of SAR (interpolated) = 5.23 W/kg

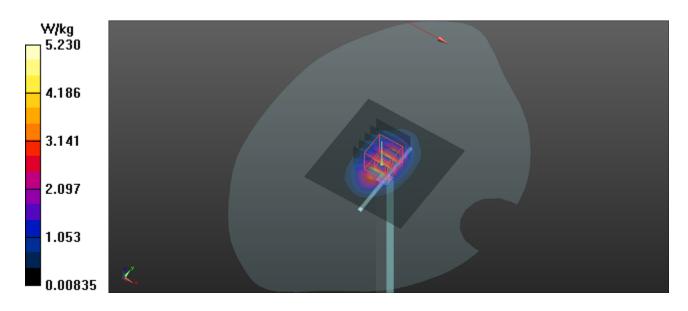
Configuration/Configuration/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 62.02 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 7.34 W/kg

SAR(1 g) = 4.11 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 5.19 W/kg



Test Laboratory: UnionTrust Date: 9/8/2018

System Check H1900

DUT: Dipole 1900 MHz D1900V2

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1 Medium: HSL1900 Medium parameters used: f = 1900 MHz; $\sigma = 1.434$ S/m; $\epsilon_r = 39.746$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(5.13, 5.13, 5.13); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

Maximum value of SAR (interpolated) = 0.496 W/kg

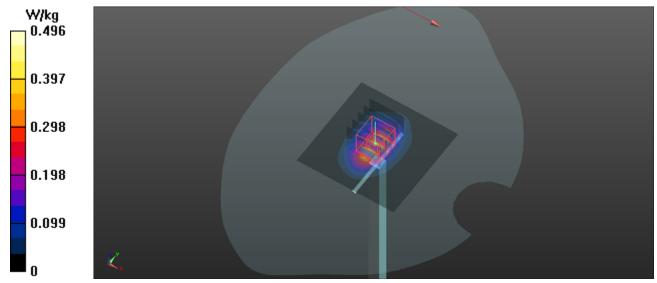
Configuration/Configuration/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.87 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.708 W/kg

SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.494 W/kg



Test Laboratory: UnionTrust Date: 9/10/2018

System Check H2450

DUT: Dipole 2450 MHz D2450V2

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1 Medium: HSL2450 Medium parameters used: f = 2450 MHz; $\sigma = 1.824$ S/m; $\epsilon_r = 37.441$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.74, 4.74, 4.74); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

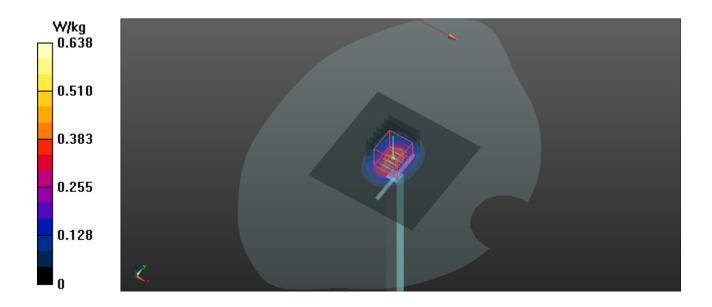
Maximum value of SAR (interpolated) = 0.638 W/kg

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

Reference Value = 19.16 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.993 W/kg

SAR(1 g) = 0.490 W/kg; SAR(10 g) = 0.231 W/kgMaximum value of SAR (measured) = 0.646 W/kg



Test Laboratory: UnionTrust Date: 9/10/2018

System Check H2600

DUT: Dipole 2600 MHz D2600V2

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

Medium: H2600 Medium parameters used: f = 2600 MHz; $\sigma = 2.053$ S/m; $\varepsilon_r = 37.984$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.63, 4.63, 4.63); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

Maximum value of SAR (interpolated) = 0.740 W/kg

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

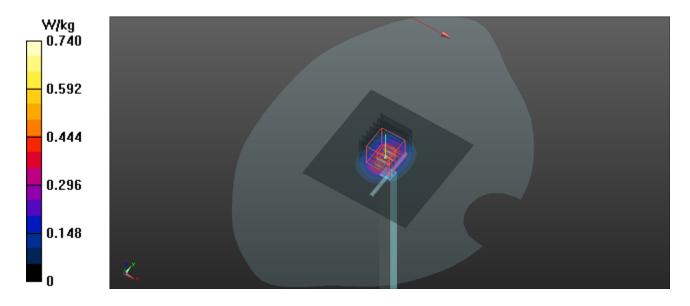
dy=5mm, dz=5mm

Reference Value = 19.25 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.554 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.743 W/kg



Test Laboratory: UnionTrust Date: 9/4/2018

System Check B750

DUT: Dipole 750 MHz D750V3

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

Medium: MSL750 Medium parameters used: f = 750 MHz; $\sigma = 0.966$ S/m; $\varepsilon_r = 55.257$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(6.43, 6.43, 6.43); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Configuration/System Check/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0971 W/kg

Configuration/System Check/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

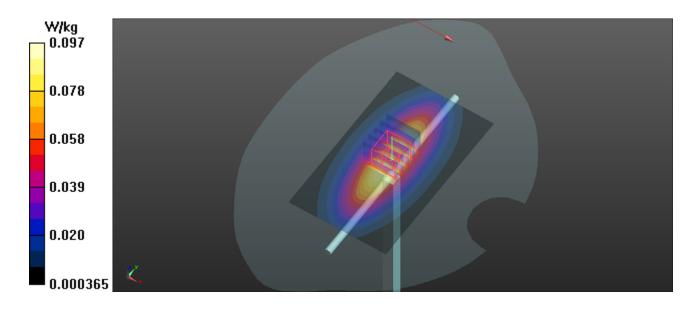
dy=8mm, dz=5mm

Reference Value = 10.17 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.126 W/kg

SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.054 W/kg

Maximum value of SAR (measured) = 0.0974 W/kg



Test Laboratory: UnionTrust Date: 9/4/2018

System Check B835

DUT: Dipole 835 MHz D835V2

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

Medium: MSL850 Medium parameters used: f = 835 MHz; $\sigma = 0.994$ S/m; $\varepsilon_r = 56.012$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(6.29, 6.29, 6.29); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Configuration/System Check/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.109 W/kg

Configuration/System Check/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,

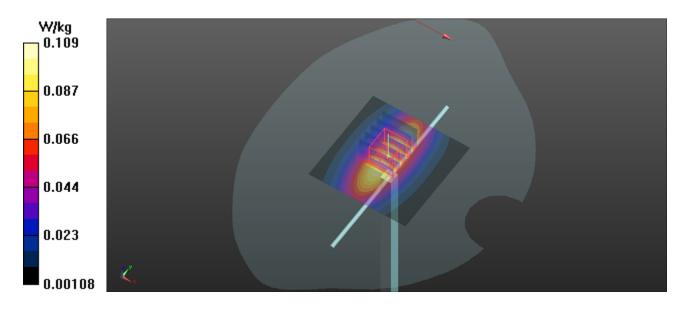
dy=8mm, dz=5mm

Reference Value = 10.73 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.139 W/kg

SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.110 W/kg



Test Laboratory: UnionTrust Date: 9/5/2018

System Check B1800

DUT: Dipole 1800 MHz D1800V2

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1 Medium: MSL1800 Medium parameters used: f = 1800 MHz; $\sigma = 1.52$ S/m; $\epsilon_r = 53.47$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.99, 4.99, 4.99); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

Maximum value of SAR (interpolated) = 4.58 W/kg

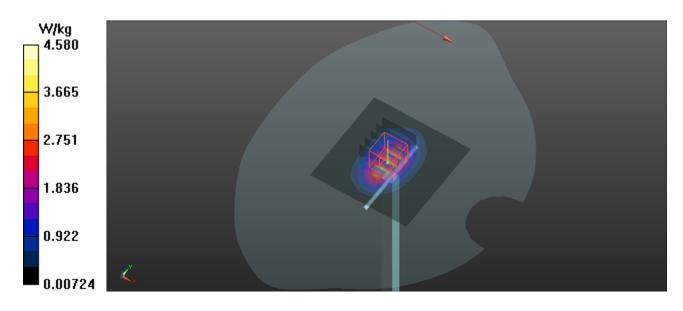
Configuration/Configuration/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 58.12 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 6.50 W/kg

SAR(1 g) = 3.72 W/kg; SAR(10 g) = 1.92 W/kg

Maximum value of SAR (measured) = 4.58 W/kg



Test Laboratory: UnionTrust Date: 8/29/2018

System Check B1900

DUT: Dipole 1900 MHz D1900V2

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1 Medium: MSL1900 Medium parameters used: f = 1900 MHz; $\sigma = 1.533$ S/m; $\varepsilon_r = 53.731$; $\rho = 1000$ kg/m^3

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.8, 4.8, 4.8); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

Maximum value of SAR (interpolated) = 4.59 W/kg

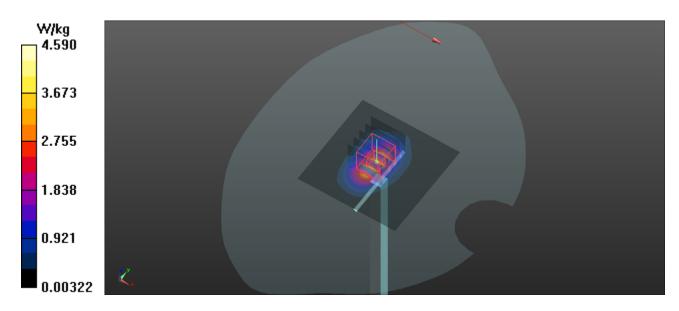
Configuration/Configuration/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.56 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 6.50 W/kg

SAR(1 g) = 3.81 W/kg; SAR(10 g) = 1.88 W/kg

Maximum value of SAR (measured) = 4.59 W/kg



Test Laboratory: UnionTrust Date: 9/14/2018

System Check B2450

DUT: Dipole 2450 MHz D2450V2

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1 Medium: MSL2450 Medium parameters used: f = 2450 MHz; $\sigma = 2.008$ S/m; $\epsilon_r = 53.053$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.57, 4.57, 4.57); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

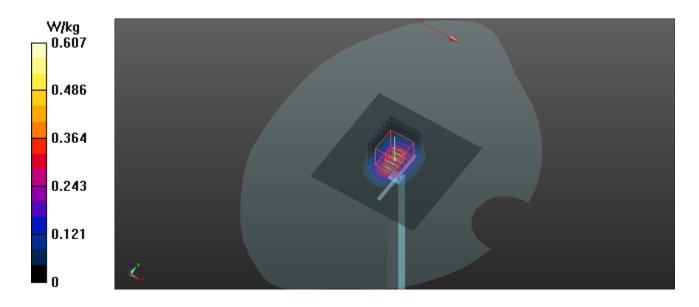
Maximum value of SAR (interpolated) = 0.607 W/kg

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

Reference Value = 17.51 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.999 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.206 W/kgMaximum value of SAR (measured) = 0.609 W/kg



Test Laboratory: UnionTrust Date: 9/12/2018

System Check B2600

DUT: Dipole 2600 MHz D2600V2

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

Medium: MSL2600 Medium parameters used: f = 2600 MHz; $\sigma = 2.21$ S/m; $\varepsilon_r = 52.42$; $\rho = 1000$ kg/m³

DASY5 Configuration:

- Probe: ES3DV3 SN3240; ConvF(4.28, 4.28, 4.28); Calibrated: 3/28/2018;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn420; Calibrated: 3/22/2018
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1469
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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

Maximum value of SAR (interpolated) = 0.715 W/kg

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

dy=8mm, dz=5mm

Reference Value = 18.52 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.228 W/kg

Maximum value of SAR (measured) = 0.725 W/kg

