Appendix B - System Performance Check Plots

Test Laboratory: A Test Lab Techno Corp.
Date: 2022/6/13

System Performance Check at 750 MHz

DUT: Dipole 750 MHz_SN1004

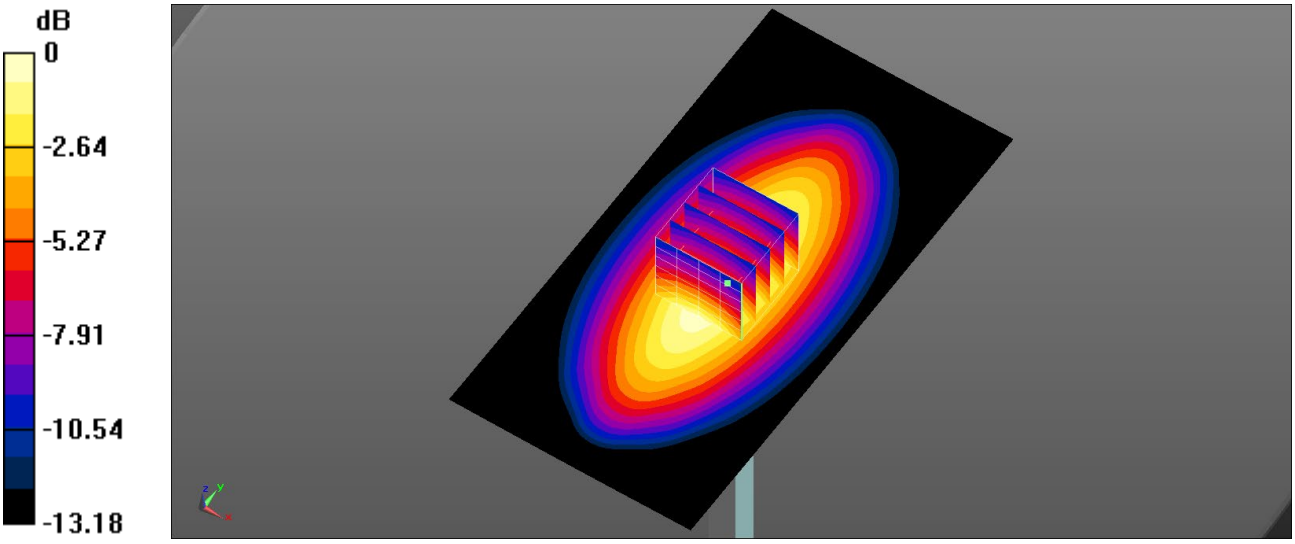
Communication System: UID 0, CW (0); Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.897 S/m; ε_r = 42.272; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(9.93, 9.93, 9.93) @ 750 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 750MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.78 W/kg

System Performance Check at 750MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 69.42 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 4.29 W/kg
SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.43 W/kg
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 65.5%
Maximum value of SAR (measured) = 3.78 W/kg



0 dB = 3.78 W/kg = 5.67 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2022/6/14

System Performance Check at 835 MHz

DUT: Dipole 835 MHz_SN4d082

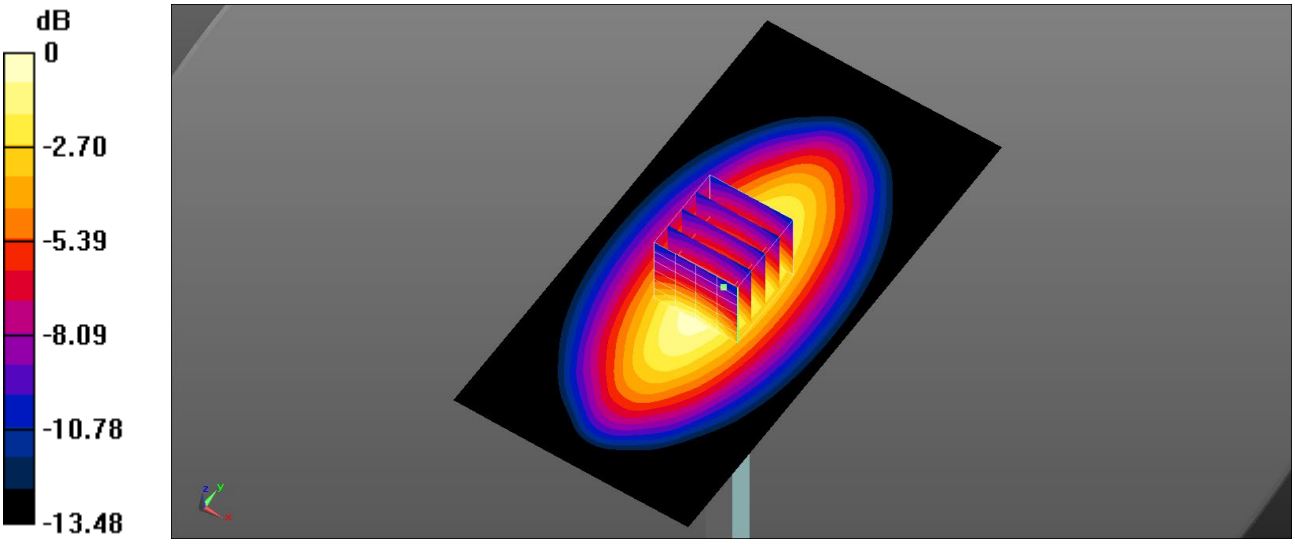
Communication System: UID 0, CW (0); Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.915 S/m; ε_r = 42.172; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(9.67, 9.67, 9.67) @ 835 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 835MHz/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.80 W/kg

System Performance Check at 835MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 67.54 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 4.21 W/kg
SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.54 W/kg
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 65.2%
Maximum value of SAR (measured) = 3.79 W/kg



0 dB = 3.79 W/kg = 5.8 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2022/6/15

System Performance Check at 1800 MHz

DUT: Dipole 1800 MHz_SN2d122

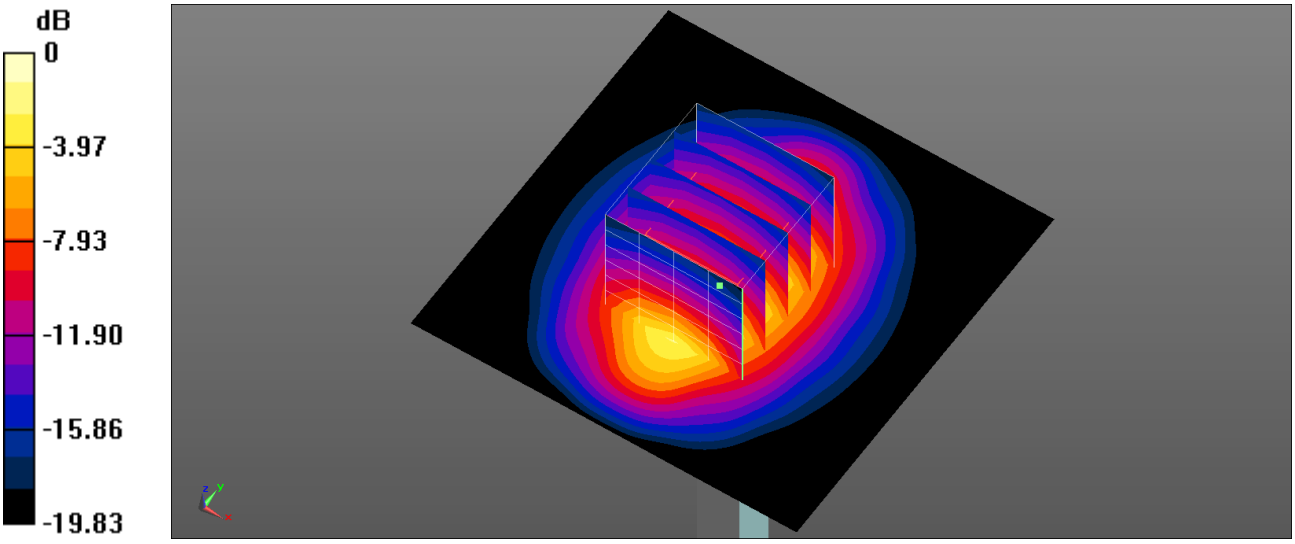
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.394 S/m; ε_r = 39.109; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(8.18, 8.18, 8.18) @ 1800 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 1800MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 17.1 W/kg

System Performance Check at 1800MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 113.3 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 21.2 W/kg
SAR(1 g) = 9.51 W/kg; SAR(10 g) = 4.92 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 51.6%
Maximum value of SAR (measured) = 17.1 W/kg



0 dB = 17.1 W/kg = 12.32 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2022/6/16

System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz_SN5d067

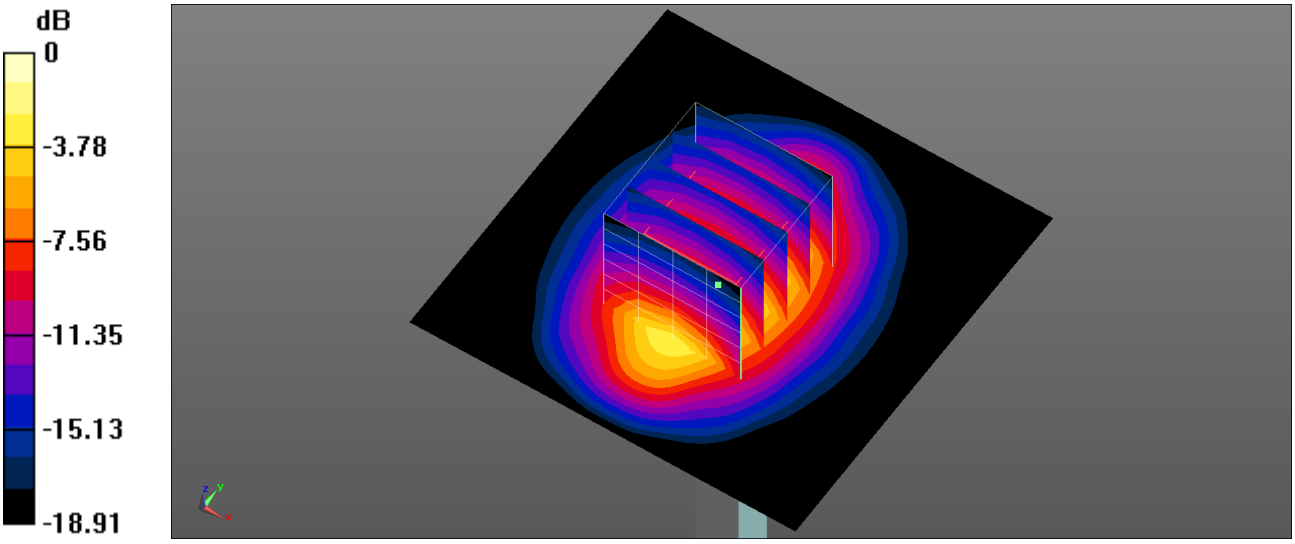
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.391 S/m; ε_r = 39.884; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(8.08, 8.08, 8.08) @ 1900 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 16.6 W/kg

System Performance Check at 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 112.4 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 20.1 W/kg
SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.29 W/kg
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 50.9%
Maximum value of SAR (measured) = 16.6 W/kg



0 dB = 16.6 W/kg = 12.23 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2022/6/17

System Performance Check at 2300 MHz

DUT: Dipole 2300 MHz_SN1092

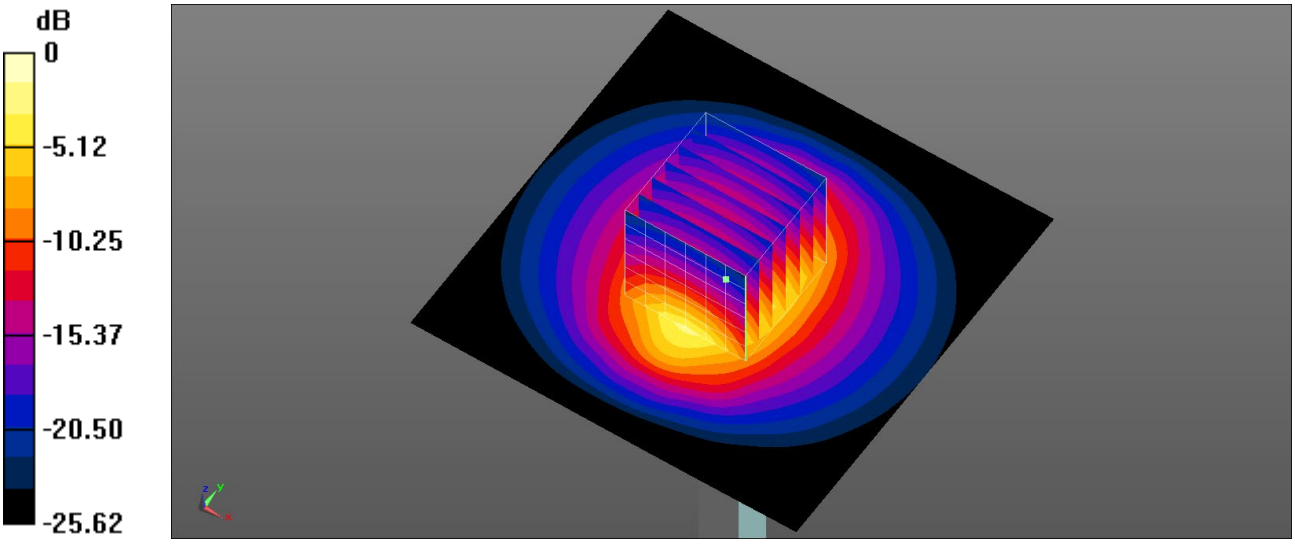
Communication System: UID 0, CW (0); Frequency: 2300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2300 MHz; σ = 1.644 S/m; ε_r = 39.91; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.61, 7.61, 7.61) @ 2300 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 2300MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 22.2 W/kg

System Performance Check at 2300MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 118.6 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 27.0 W/kg
SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.82 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 46.7%
Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.44 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2022/6/17

System Performance Check at 2600 MHz

DUT: Dipole 2600 MHz_SN1007

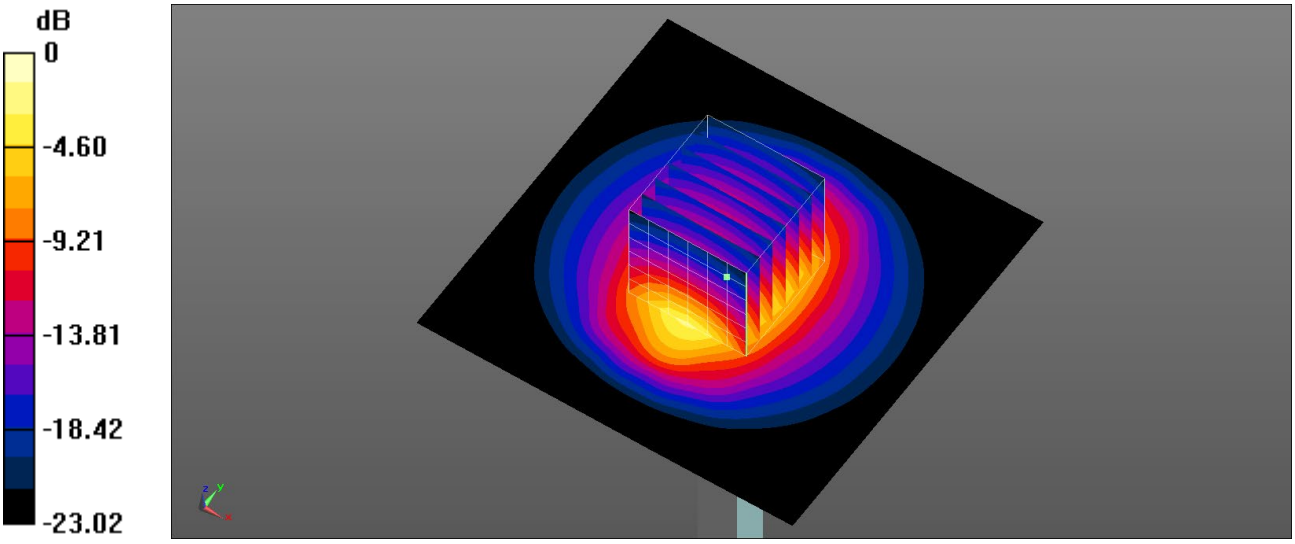
Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.962 S/m; ε_r = 38.859; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.15, 7.15, 7.15) @ 2600 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 2600MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 23.7 W/kg

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 114.3 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 29.2 W/kg
SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.42 W/kg
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 48.1%
Maximum value of SAR (measured) = 23.7 W/kg



0 dB = 23.7 W/kg = 13.78 dBW/kg