Appendix A

Detailed System Validation Results

System Performance Check 835 MHz Body
System Performance Check 1900 MHz Body
System Performance Check 2450MHz Body

Date/Time: 2014-10-13 8:41:07

Test Laboratory: SGS-SAR Lab

System Performance Check 835MHz Body

DUT: Dipole 835MHz; Type: D835V2; Serial: 4d105

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

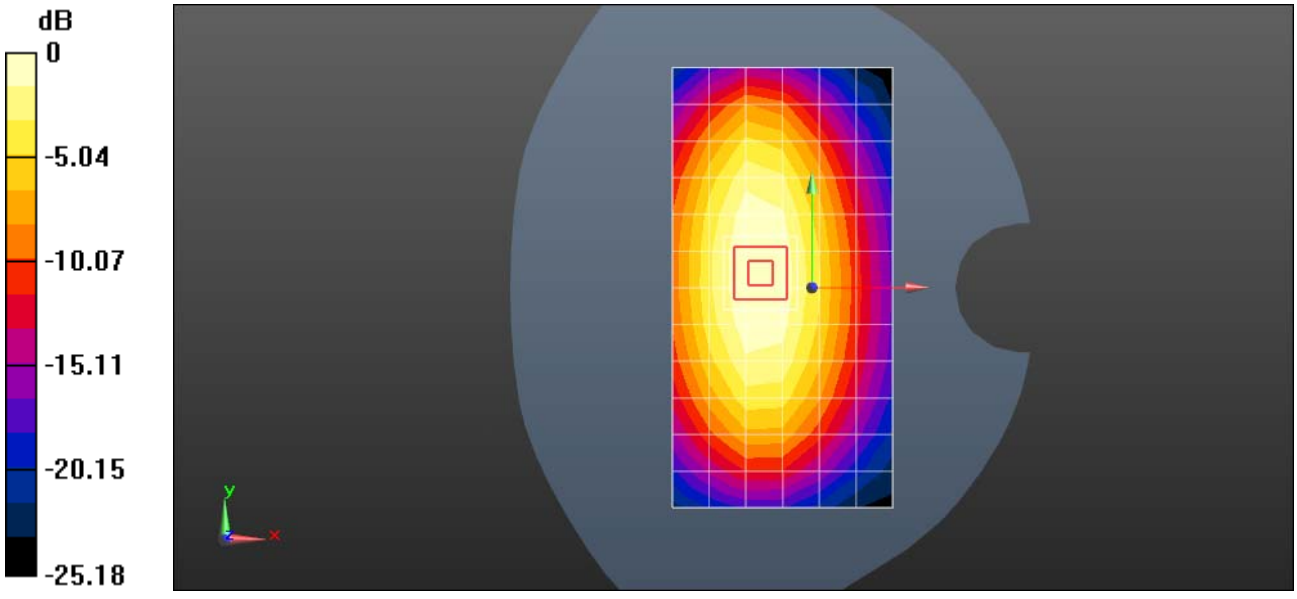
Medium: MSL835;Medium parameters used: f = 835 MHz; σ = 0.986 S/m; ε_r = 55.496;
ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(9.75, 9.75, 9.75); Calibrated: 2013-12-10;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2013-11-22
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/d=15mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.50 W/kg

Configuration/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 61.14 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.58W/kg
SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.57 W/kg
Maximum value of SAR (measured) = 2.84W/kg



0 dB = 2.84 W/kg = 4.53 dBW/kg

Date/Time: 2014-10-14 8:51:51

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Body

DUT: D1900V2; Type: D1900V2; Serial: 5d028

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

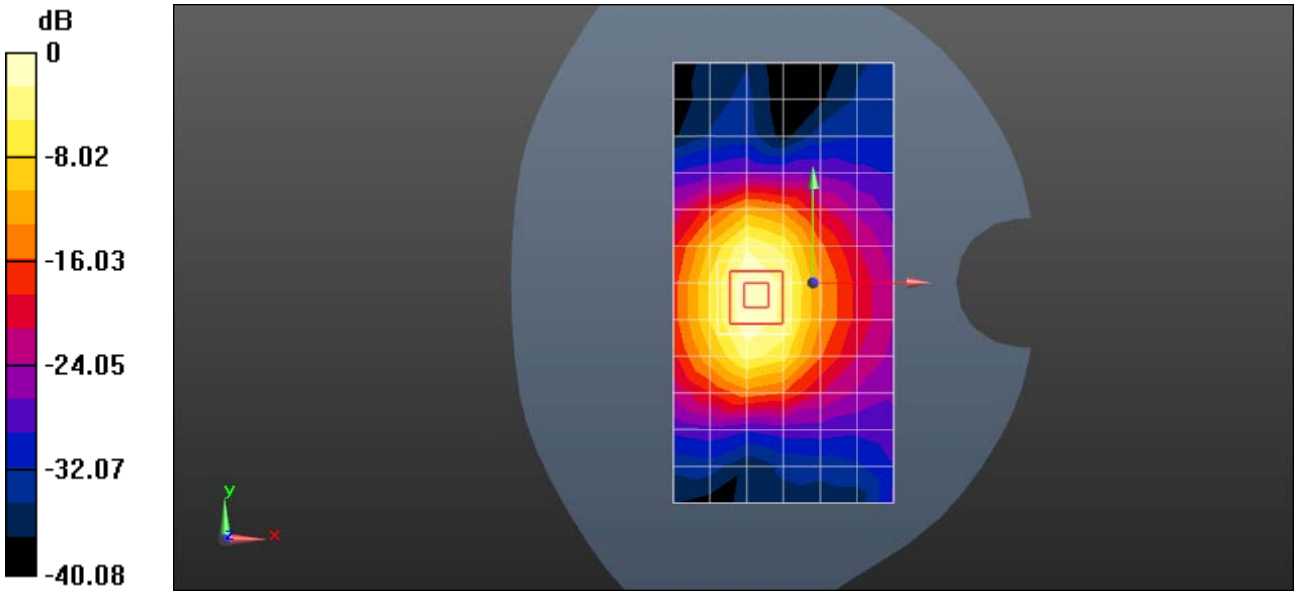
Medium: MSL1900;Medium parameters used: f = 1900 MHz; σ = 1.546 S/m; ε_r = 51.903;
ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.68, 7.68, 7.68); Calibrated: 2013-12-10;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1303; Calibrated: 2014-04-23
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=15mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.5 W/kg

Body/d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 75.14 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 21.0 W/kg
SAR(1 g) = 10.7 W/kg; SAR(10 g) = 5.41 W/kg
Maximum value of SAR (measured) = 12.2 W/kg



0 dB = 10.5 W/kg = 10.21 dBW/kg

Date/Time: 2014-10-15 8:32:59

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Body

DUT: D2450V2; Type: D2450V2; Serial: 733

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

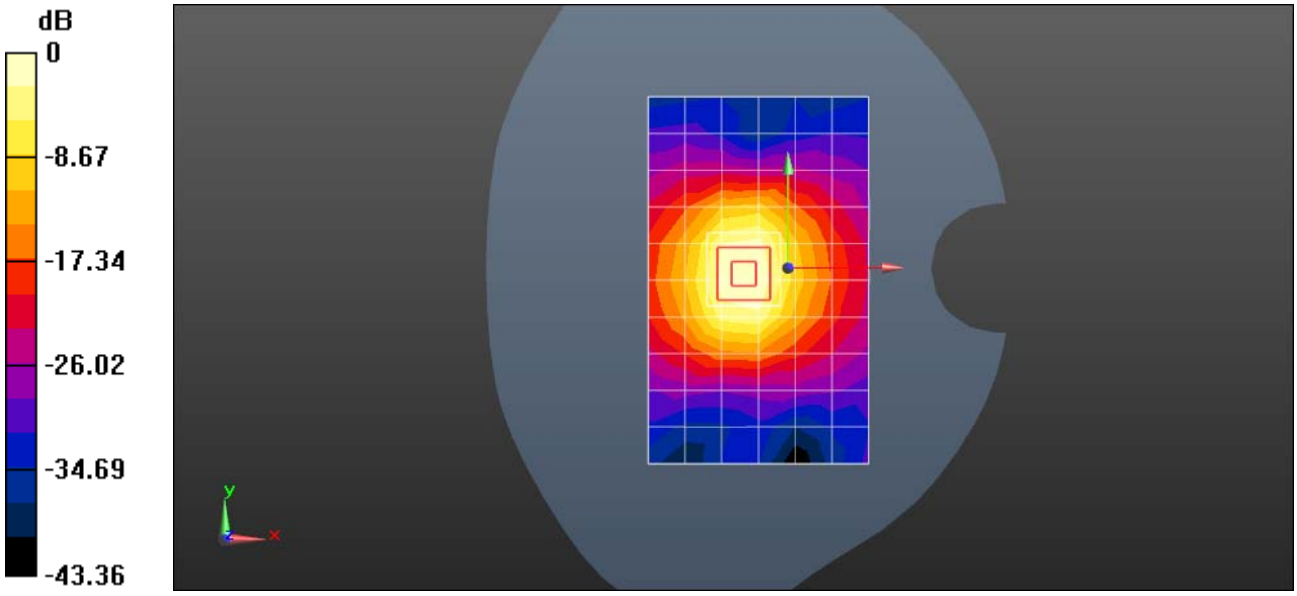
Medium: MSL2450;Medium parameters used: f = 2450 MHz; σ = 1.951 S/m; ε_r = 51.68;
ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.13, 7.13, 7.13); Calibrated: 2013-12-10;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE4 Sn1303; Calibrated: 2014-04-23
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 9.85 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 82.08 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 26.5 W/kg
SAR(1 g) = 11.9 W/kg; SAR(10 g) = 5.35 W/kg
Maximum value of SAR (measured) = 13.5 W/kg



0 dB = 9.85 W/kg = 9.93 dBW/kg