

Appendix A
System Performance Check

Test Laboratory: EMTEK (Shenzhen) Co.,Ltd.

Date/Time: 13.09.2016

SystemPerformanceCheck-D2450V2-MSL-160913

Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160913

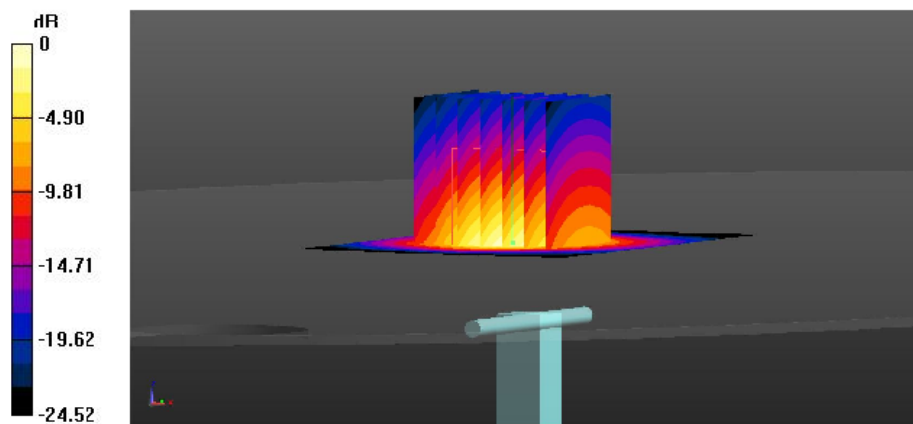
Medium parameters used: $f = 2450$ MHz; $\sigma = 2.005$ S/m; $\epsilon_r = 52.826$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.57, 7.57, 7.57); Calibrated: 07.09.2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 05.09.2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequency at 2450MHz/d=10mm, Pin=250mW, dist=2.0mm (EX-Probe)/Area Scan (41x61x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 17.4 W/kg

System Performance Check at Frequency at 2450MHz/d=10mm, Pin=250mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.197 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 26.6 W/kg
SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.85 W/kg
Maximum value of SAR (measured) = 17.3 W/kg



Appendix A

Test Plots of SAR Measurement

Test Laboratory: EMTEK (Shenzhen) Co.,Ltd.

Date/Time: 13.09.2016

01-WLAN2.4G-802.11b-1Mbps-Front Face-0cm-Ch1

Communication System: UID 0, WIFI (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160913

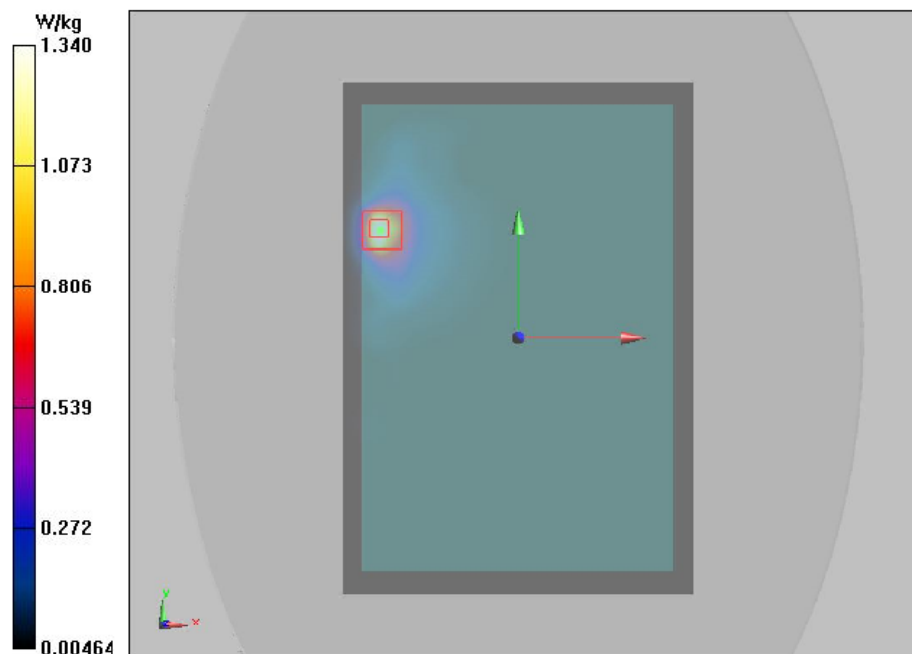
Medium parameters used: $f = 2412$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 52.915$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.57, 7.57, 7.57); Calibrated: 07.09.2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 05.09.2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Ch1/Area Scan (161x231x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.55 W/kg

Ch1/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.534 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 2.77 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.496 W/kg
Maximum value of SAR (measured) = 1.34 W/kg



0 dB = 1.34 W/kg = 1.27 dBW/kg

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Date/Time: 13.09.2016

02-WLAN2.4G-802.11b-1Mbps-Bottom Face-0cm-Ch1

Communication System: UID 0, WIFI (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160913

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 52.915$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.57, 7.57, 7.57); Calibrated: 07.09.2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 05.09.2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Ch1/Area Scan (161x231x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.615 W/kg

Ch1/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.761 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.977 W/kg
SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.230 W/kg
Maximum value of SAR (measured) = 0.504 W/kg



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Date/Time: 13.09.2016

03-WLAN2.4G-802.11b-1Mbps-Bottom Face with keyboard-0cm-Ch1

Communication System: UID 0, WIFI (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160913

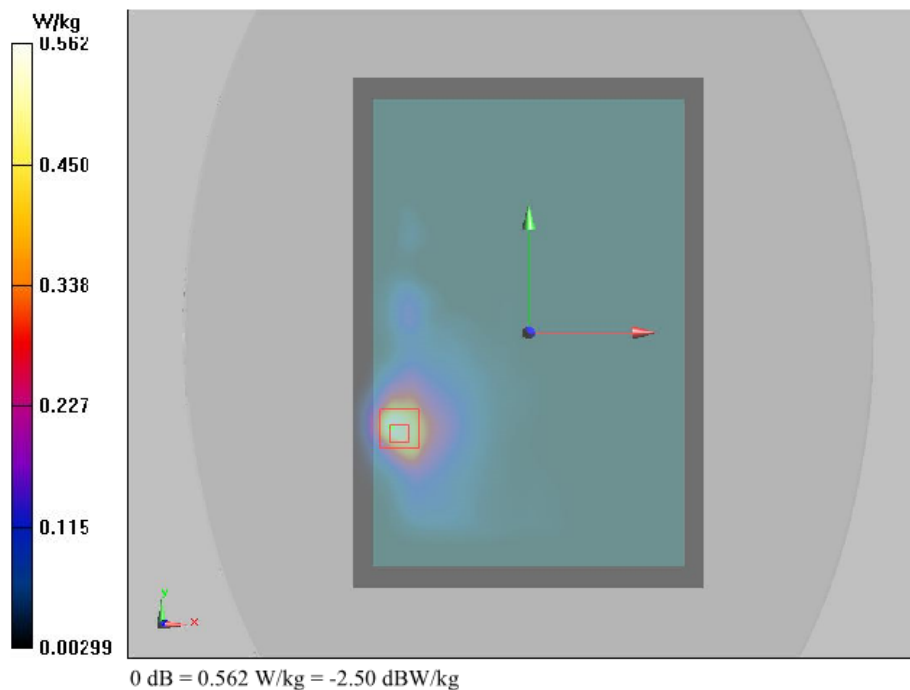
Medium parameters used: $f = 2412$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 52.915$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.57, 7.57, 7.57); Calibrated: 07.09.2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 05.09.2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Ch1/Area Scan (161x231x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.602 W/kg

Ch1/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.520 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.257 W/kg
Maximum value of SAR (measured) = 0.562 W/kg



Test Laboratory: EMTEK (Shenzhen) Co.,Ltd.

Date/Time: 13.09.2016

04-WLAN2.4G-802.11b-1Mbps-Edge 1-0cm-Ch1

Communication System: UID 0, WIFI (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160913

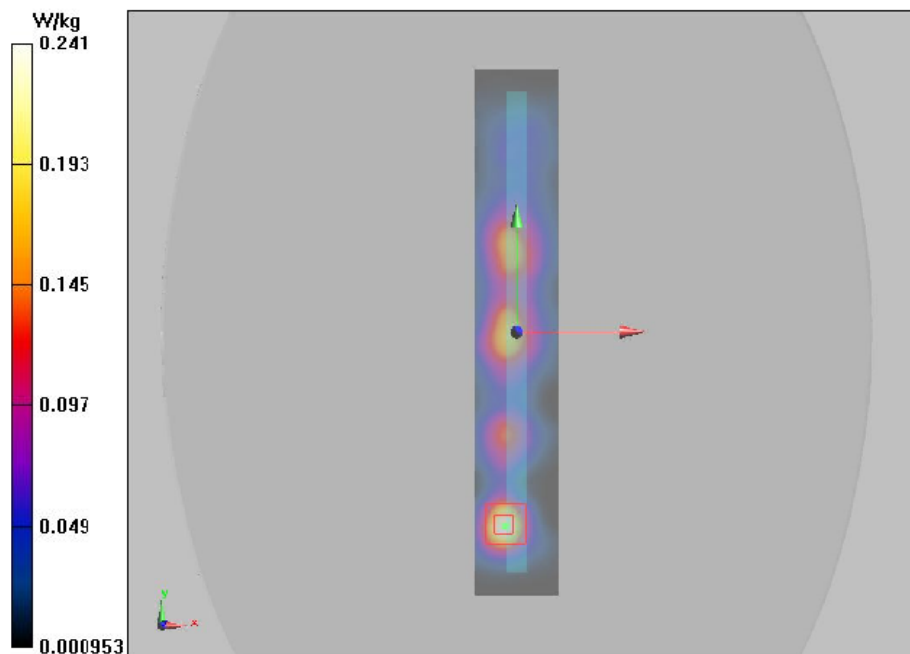
Medium parameters used: $f = 2412$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 52.915$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.57, 7.57, 7.57); Calibrated: 07.09.2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 05.09.2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Ch1/Area Scan (41x231x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.260 W/kg

Ch1/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.829 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.402 W/kg
SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.101 W/kg
Maximum value of SAR (measured) = 0.241 W/kg



0 dB = 0.241 W/kg = -6.18 dBW/kg

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Date/Time: 13.09.2016

WLAN2.4G-802.11b-1Mbps-Front Face-0cm-Ch1-Repeat SAR

Communication System: UID 0, WIFI (0); Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160913

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 52.915$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.57, 7.57, 7.57); Calibrated: 07.09.2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 05.09.2016
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Ch1/Area Scan (161x231x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.53 W/kg

Ch1/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.523 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.73 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.478 W/kg
Maximum value of SAR (measured) = 1.31 W/kg

