

Appendix A

System Performance Check

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

Date/Time: 04.07.2016

SystemPerformanceCheck-D2450V2-MSL-160704

Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160704

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 2.022 \text{ S/m}$; $\epsilon_r = 53.095$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: $23.3 \text{ }^\circ\text{C}$; Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.66, 7.66, 7.66); Calibrated: 10.07.2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 10.07.2015
- 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 (51x81x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 16.5 W/kg

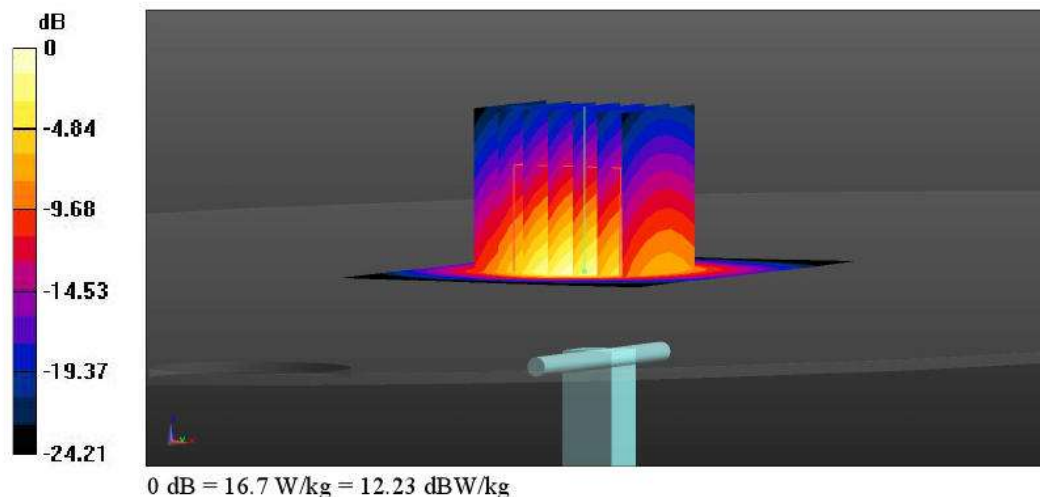
System Performance Check at Frequency at 2450MHz/d=10mm, Pin=250mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.224 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 26.8 W/kg

SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.72 W/kg

Maximum value of SAR (measured) = 16.7 W/kg



Appendix A

Test Plots of SAR Measurement

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

Date/Time: 04.07.2016

01-WLAN2.4G-802.11b 1Mbps-Bottom Face-0cm-Ch6

Communication System: UID 0, WIFI (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450_160704

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 2.003 \text{ S/m}$; $\epsilon_r = 53.145$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: $23.3 \text{ }^\circ\text{C}$; Liquid Temperature: $22.5 \text{ }^\circ\text{C}$

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.66, 7.66, 7.66); Calibrated: 10.07.2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 25.08.2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Configuration/Ch6/Area Scan (111x101x1): Interpolated grid: $dx=12\text{mm}$, $dy=12\text{mm}$
Maximum value of SAR (interpolated) = 0.996 W/kg

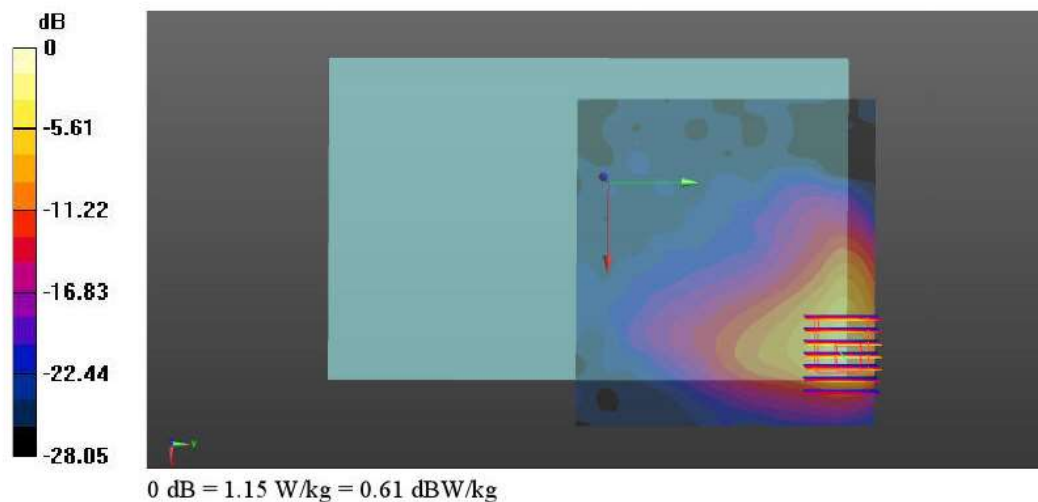
Configuration/Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.011 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.617 W/kg ; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 1.15 W/kg



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

Date/Time: 04.07.2016

02-WLAN2.4G-802.11b 1Mbps-Edge3-0cm-Ch6

Communication System: UID 0, WIFI (0); Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: MSL_2450_160704

Medium parameters used: $f = 2437$ MHz; $\sigma = 2.003$ S/m; $\epsilon_r = 53.145$; $\rho = 1000$ kg/m³
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.66, 7.66, 7.66); Calibrated: 10.07.2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 25.08.2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Configuration/Ch6/Area Scan (41x101x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.169 W/kg

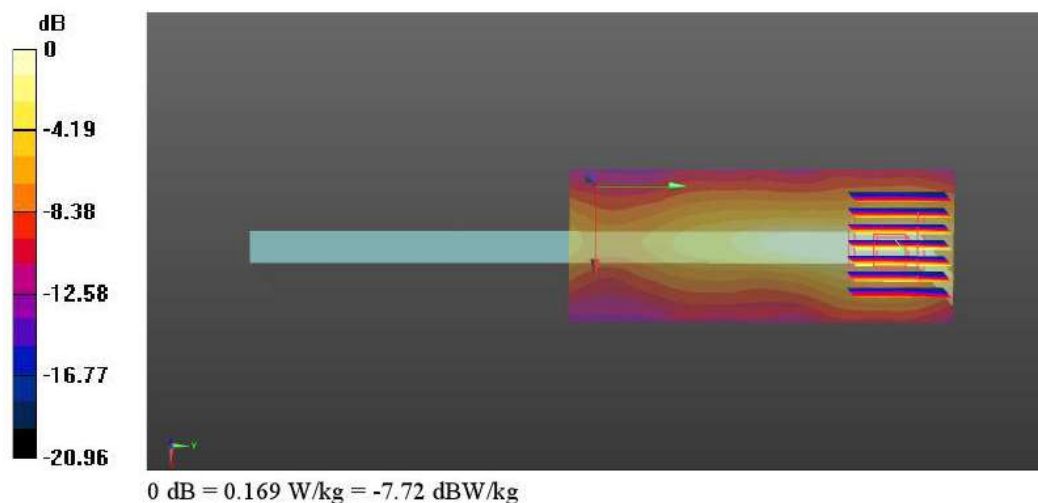
Configuration/Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.222 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.054 W/kg

Maximum value of SAR (measured) = 0.169 W/kg



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

Date/Time: 04.07.2016

03-WLAN2.4G-802.11b 1Mbps-Edge4-0cm-Ch6

Communication System: UID 0, WIFI (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL_2450_160704

Medium parameters used: $f = 2437$ MHz; $\sigma = 2.003$ S/m; $\epsilon_r = 53.145$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.66, 7.66, 7.66); Calibrated: 10.07.2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1341; Calibrated: 25.08.2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Configuration/Ch6/Area Scan (41x141x1): Interpolated grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.278 W/kg

Configuration/Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.786 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.397 W/kg

SAR(1 g) = 0.186 W/kg; SAR(10 g) = 0.074 W/kg

Maximum value of SAR (measured) = 0.285 W/kg

