

Test Laboratory: Compliance Certification Services

Host # 1(Toshiba)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5745 \text{ MHz}$; $\sigma = 6.21 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Antenna B, L-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1 mW/g

Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 6.01 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.21 W/kg

SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.155 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 1.06 mW/g

Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

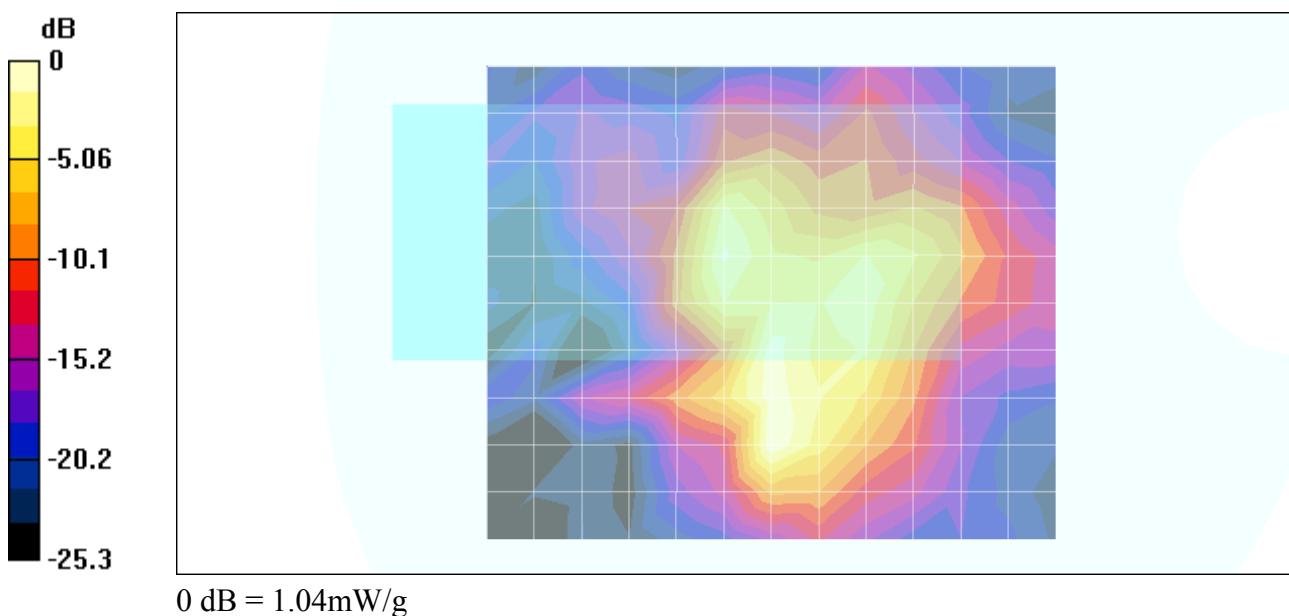
Reference Value = 6.01 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.22 W/kg

SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.174 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 1.04 mW/g



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Phantom section: Flat Section

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Medium parameters used (interpolated): $f = 5745 \text{ MHz}$; $\sigma = 6.21 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Antenna A, H-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.847 mW/g

Antenna A, H-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 5.78 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.187 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.878 mW/g

Antenna A, H-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

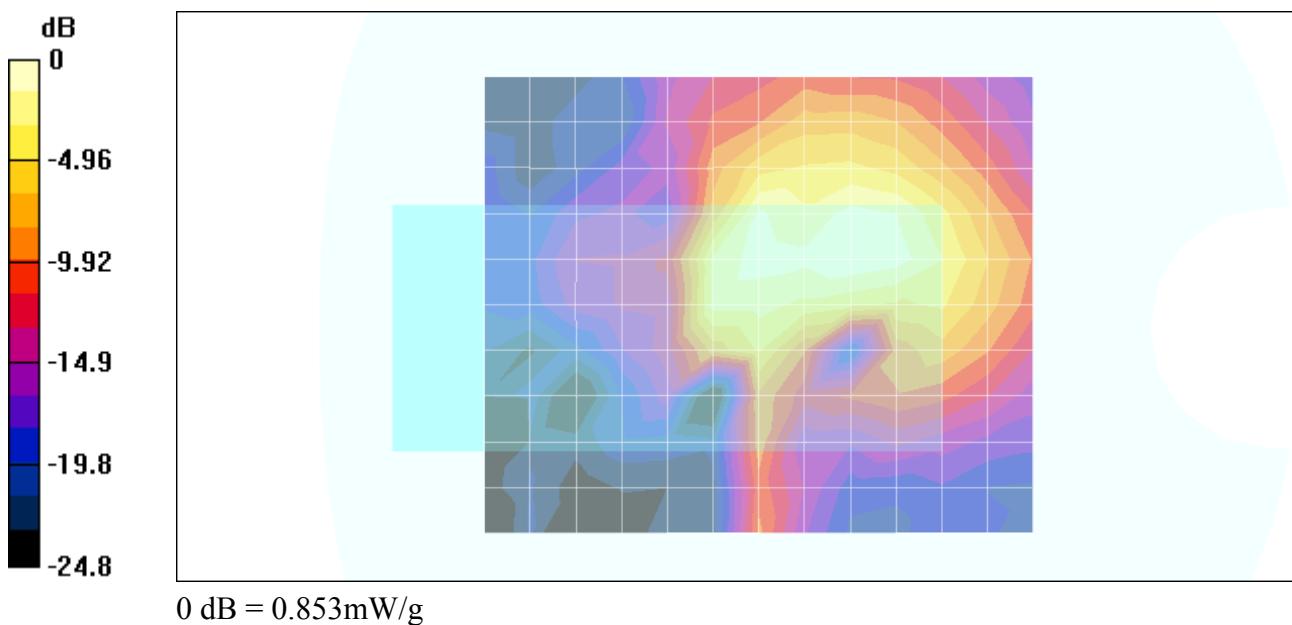
Reference Value = 5.78 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.164 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.853 mW/g



Test Laboratory: Compliance Certification Services

Host # 1(Toshiba)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785 \text{ MHz}$; $\sigma = 6.26 \text{ mho/m}$; $\epsilon_r = 48.2$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Antenna B, M-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.482 mW/g

Antenna B, M-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 6.61 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.092 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.627 mW/g

Antenna B, M-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

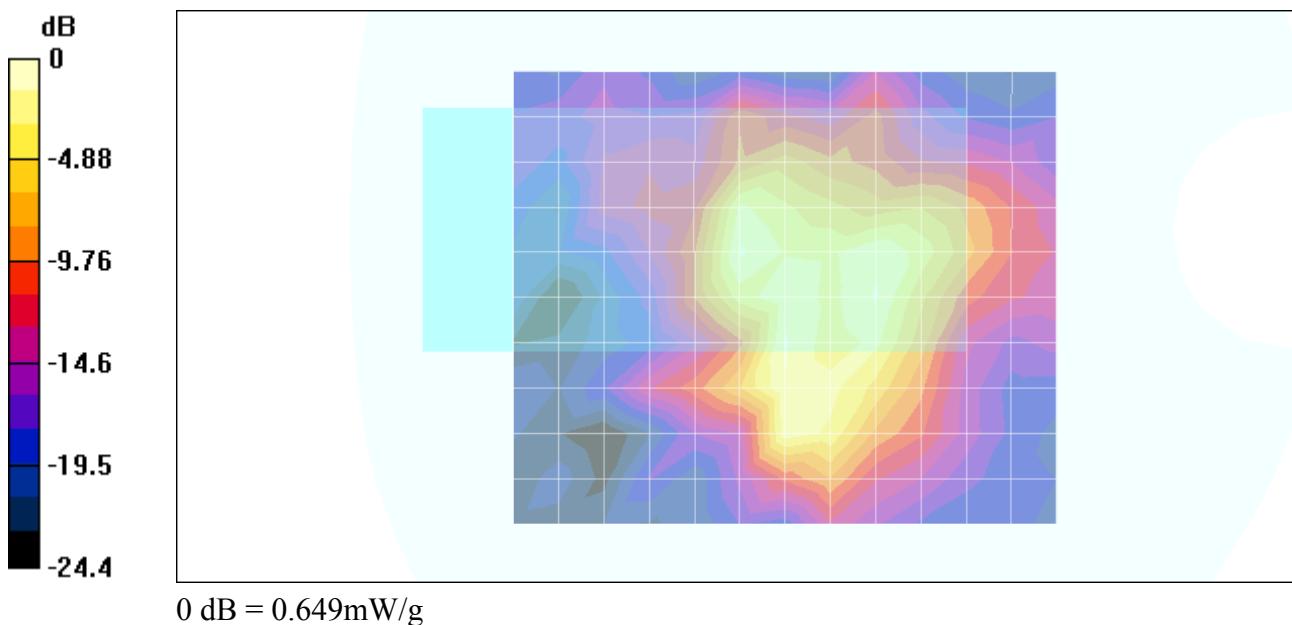
Reference Value = 6.61 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 14 W/kg

SAR(1 g) = 0.302 mW/g; SAR(10 g) = 0.096 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.649 mW/g



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Host # 1(Toshiba)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5825 \text{ MHz}$; $\sigma = 6.32 \text{ mho/m}$; $\epsilon_r = 48.1$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Antenna B, H-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.702 mW/g

Antenna B, H-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 7.81 V/m; Power Drift = 0.2 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.371 mW/g; SAR(10 g) = 0.116 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.769 mW/g

Antenna B, H-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

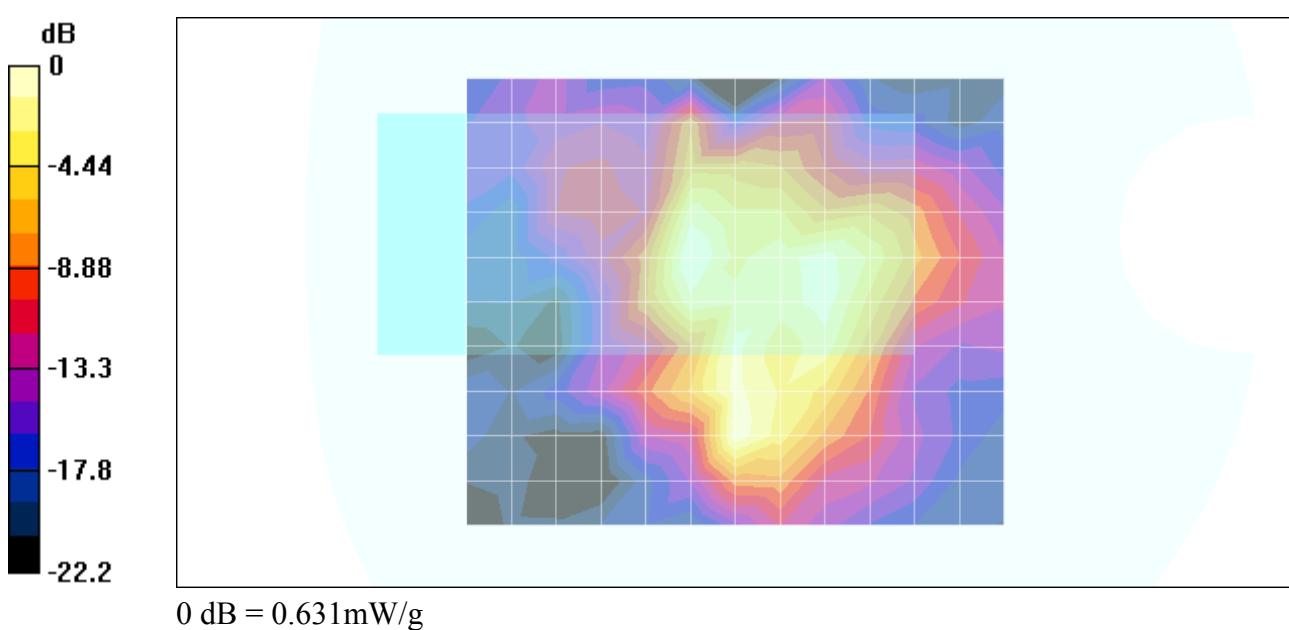
Reference Value = 7.81 V/m; Power Drift = 0.2 dB

Peak SAR (extrapolated) = 1.4 W/kg

SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.091 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.631 mW/g



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Host # 1(Toshiba)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5760 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5760 \text{ MHz}$; $\sigma = 6.27 \text{ mho/m}$; $\epsilon_r = 48.2$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Turbo_Antenna B, L-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.807 mW/g

Turbo_Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$
Reference Value = 7.2 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.123 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.844 mW/g

Turbo_Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

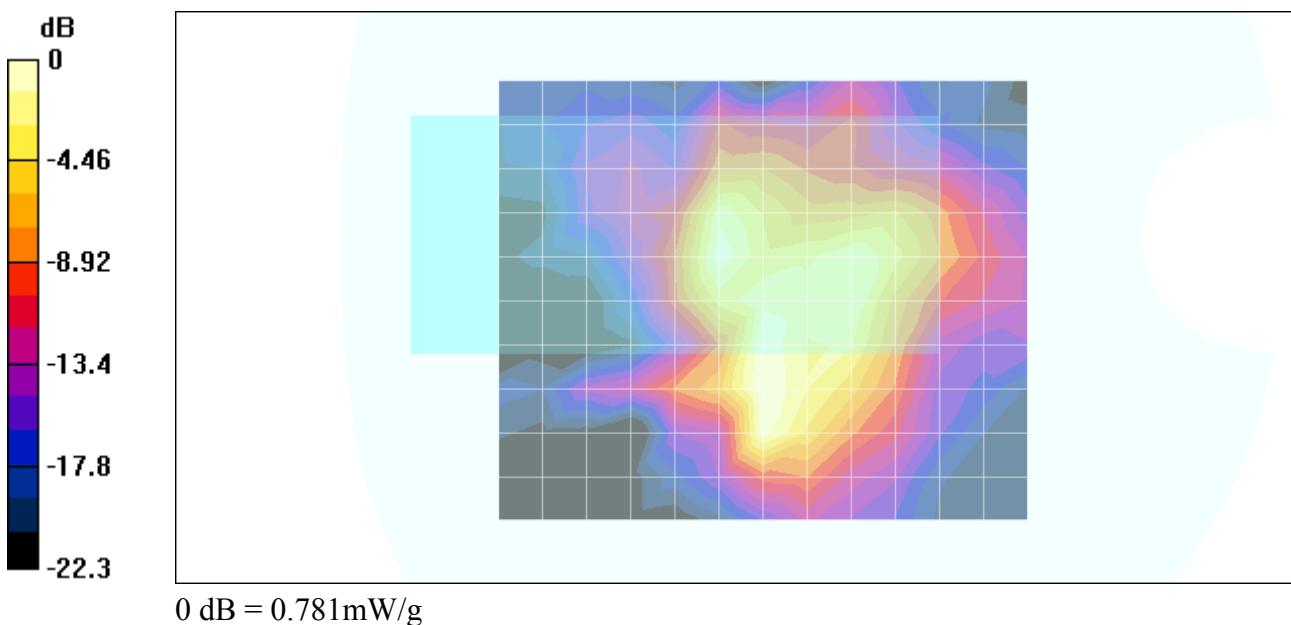
Reference Value = 7.2 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.377 mW/g; SAR(10 g) = 0.124 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.781 mW/g



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Host # 1(Toshiba)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5805 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5805 \text{ MHz}$; $\sigma = 6.35 \text{ mho/m}$; $\epsilon_r = 48$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Turbo_Antenna B, H-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.686 mW/g

Turbo_Antenna B, H-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$
Reference Value = 7.7 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.363 mW/g; SAR(10 g) = 0.104 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.724 mW/g

Turbo_Antenna B, H-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

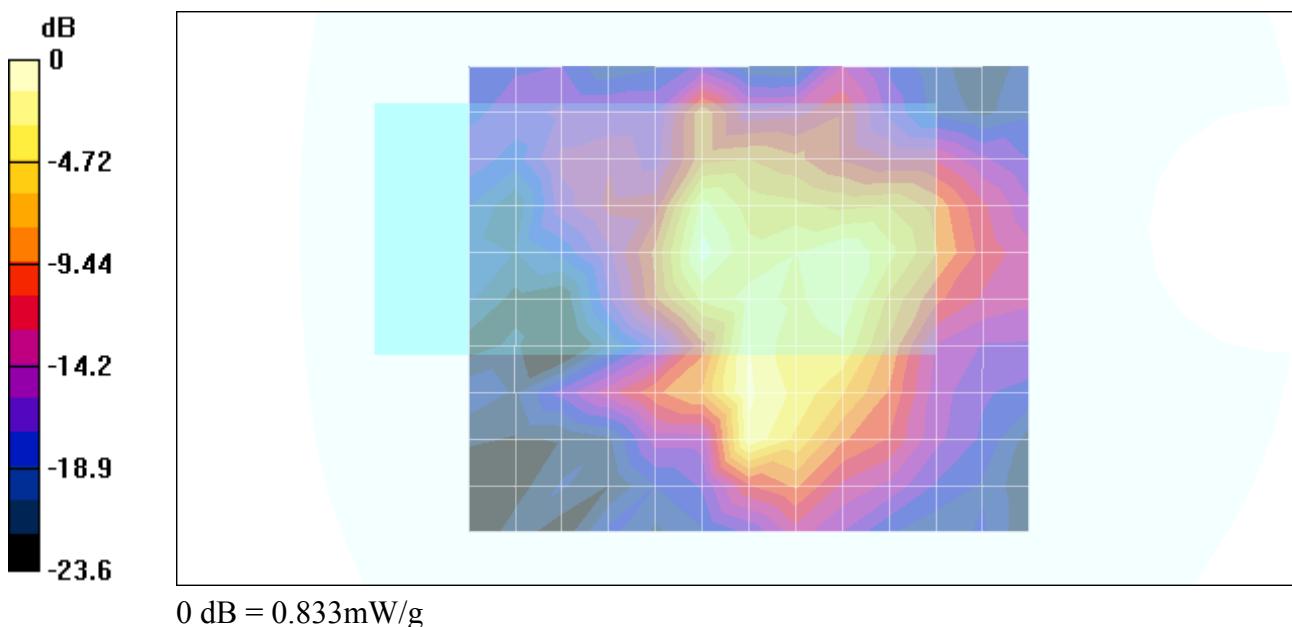
Reference Value = 7.7 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 0.391 mW/g; SAR(10 g) = 0.121 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.833 mW/g



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Host # 2 (IBM)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5745 \text{ MHz}$; $\sigma = 6.21 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Antenna B, L-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.686 mW/g

Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 6.56 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.151 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.743 mW/g

Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

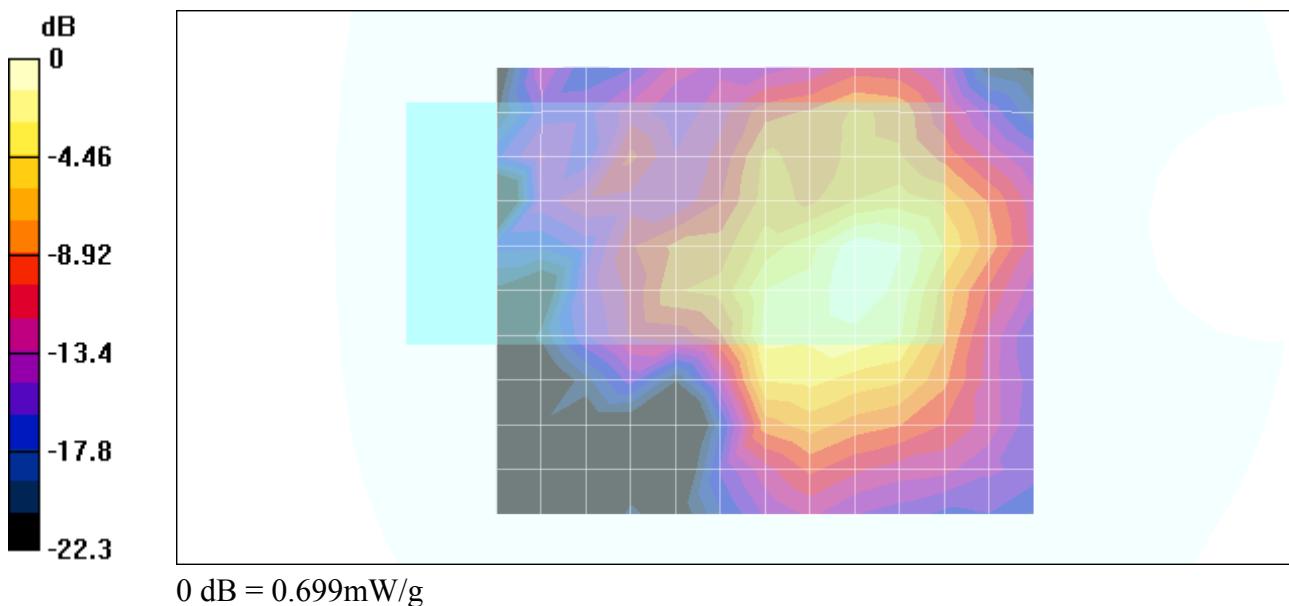
Reference Value = 6.56 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.276 mW/g; SAR(10 g) = 0.112 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.699 mW/g



Test Laboratory: Compliance Certification Services

Host # 2 (IBM)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5760 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5760 \text{ MHz}$; $\sigma = 6.27 \text{ mho/m}$; $\epsilon_r = 48.2$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Turbo_Antenna B, L-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.593 mW/g

Turbo_Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 5.89 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.132 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.627 mW/g

Turbo_Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 1: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

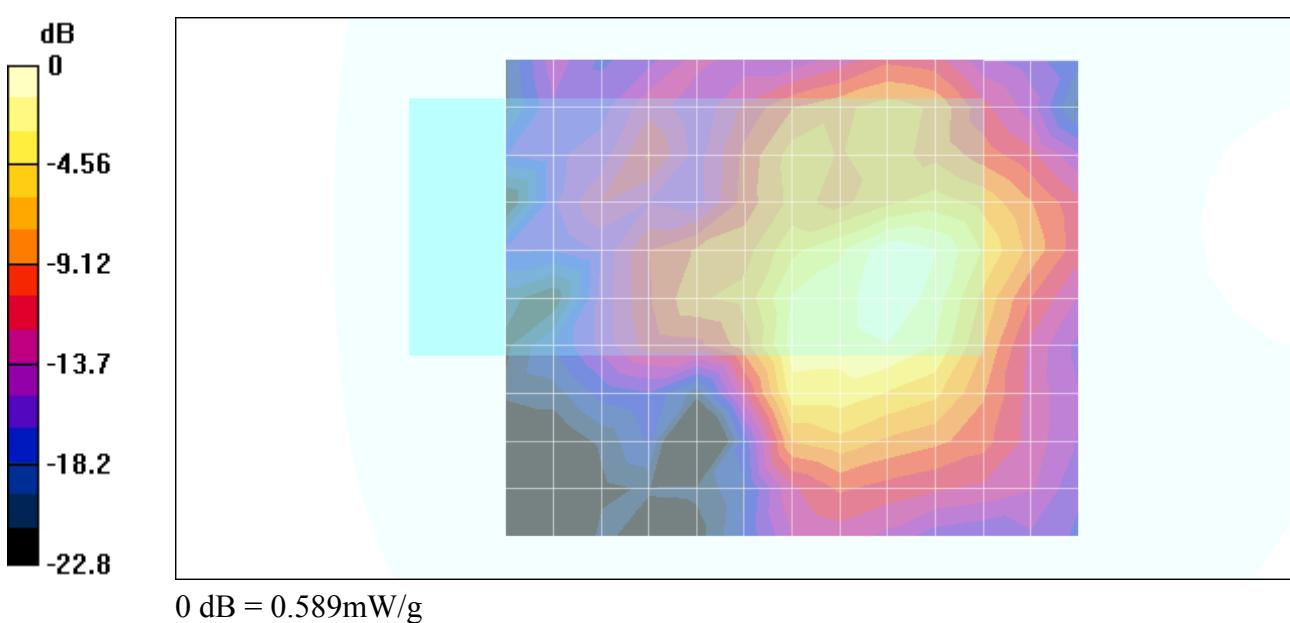
Reference Value = 5.89 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.235 mW/g; SAR(10 g) = 0.099 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 0.589 mW/g



Test Laboratory: Compliance Certification Services

Host # 3 (Dell)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5745 \text{ MHz}$; $\sigma = 6.21 \text{ mho/m}$; $\epsilon_r = 48.3$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Antenna B, L-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.800 mW/g

Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

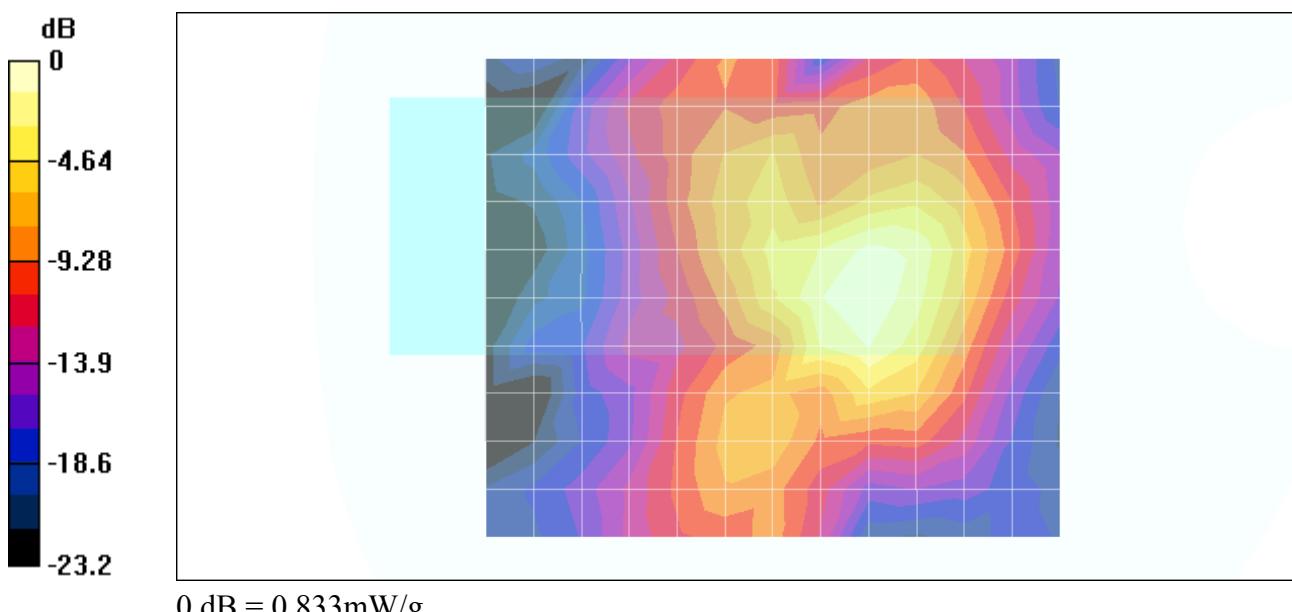
Reference Value = 7.14 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.455 mW/g; SAR(10 g) = 0.183 mW/g

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.833 mW/g



Test Laboratory: Compliance Certification Services

Host # 3 (Dell)

DUT: Atheros; Type: AR5BCB; Serial: CB62-420-36

Phantom section: Flat Section

Frequency: 5760 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5760 \text{ MHz}$; $\sigma = 6.27 \text{ mho/m}$; $\epsilon_r = 48.2$; $\rho = 1000 \text{ kg/m}^3$

Measurement Standard: DASY4 (High Precision Assessment)

- Room Ambient Temperature: 24.5 deg. C; Liquid Temperature: 24.0 deg. C
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV3 - SN3531; ConvF(4.64, 4.64, 4.64);
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 12/23/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Turbo_Antenna B, L-ch/Area Scan (13x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.785 mW/g

Turbo_Antenna B, L-ch/Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=4.3\text{mm}$, $dy=4.3\text{mm}$, $dz=3\text{mm}$

Reference Value = 5.88 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.411 mW/g; SAR(10 g) = 0.167 mW/g

[Info: Interpolated medium parameters used for SAR evaluation!](#)

Maximum value of SAR (measured) = 0.762 mW/g

