

Test Laboratory: Compliance Certification Services Inc.

**DUT: X220P; Type: X220P; Serial: N/A**

Communication System: IEEE 802.11b WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
- 1 Sensor-Surface: 2.5mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211b High CH 11/Area Scan 1 (9x21x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.049 mW/g

**80211b High CH 11/Zoom Scan (7x7x9)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=3mm

Reference Value = 0.000 V/m; Power Drift = -0.072 dB

Peak SAR (extrapolated) = 0.084 W/kg

**SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.018 mW/g**

Maximum value of SAR (measured) = 0.053 mW/g

**80211b High CH 11/Zoom Scan (7x7x9)/Cube 1:** Measurement grid:

dx=5mm, dy=5mm, dz=3mm

Reference Value = 0.000 V/m; Power Drift = -0.072 dB

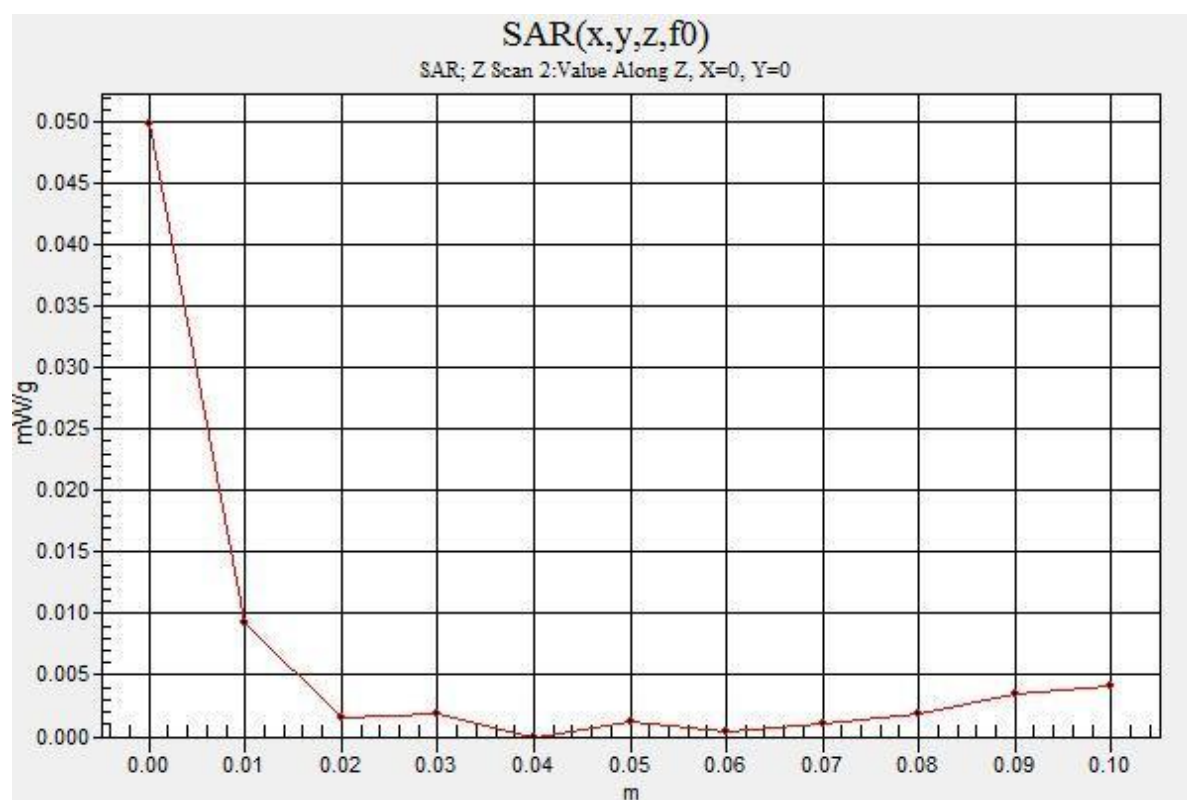
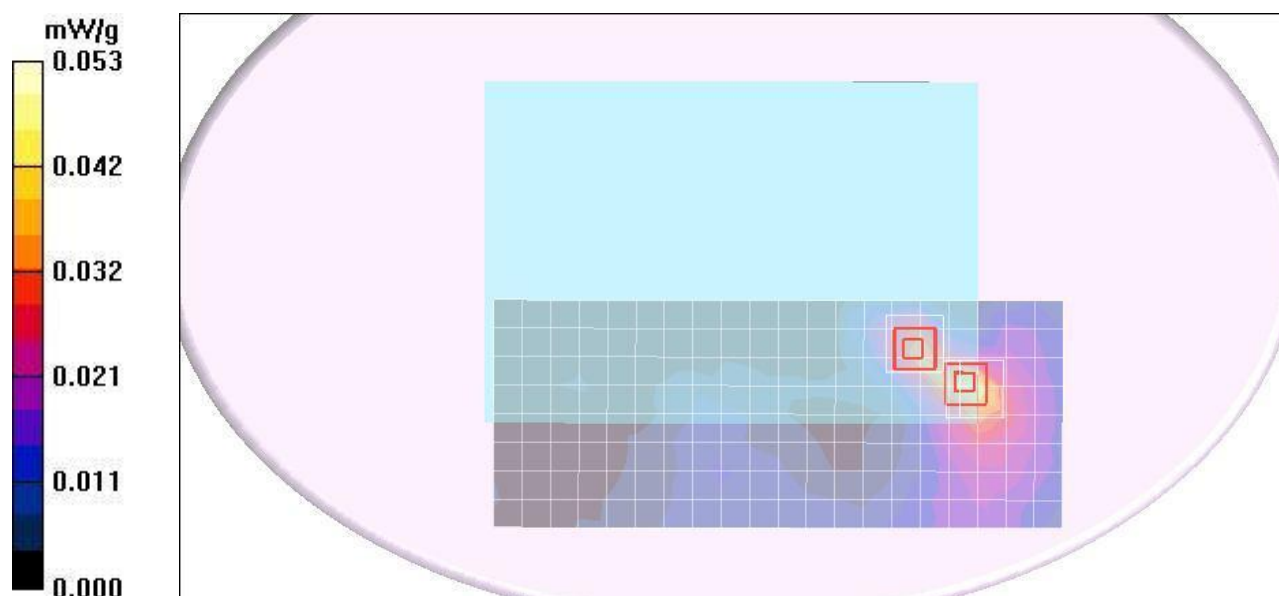
Peak SAR (extrapolated) = 0.061 W/kg

**SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.016 mW/g**

Maximum value of SAR (measured) = 0.041 mW/g

**80211b High CH 11/Z Scan (1x1x11):** Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 0.050 mW/g



Test Laboratory: Compliance Certification Services Inc.

**DUT: X220P; Type: X220P; Serial: N/A**

Communication System: IEEE 802.11g WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
- 1 Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211g Middle CH 6/Area Scan (9x11x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (measured) = 0.008 mW/g

**80211g Middle CH 6/Zoom Scan (7x7x9)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=3mm

Reference Value = 0.000 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.011 W/kg

**SAR(1 g) = 0.00707 mW/g; SAR(10 g) = 0.00254 mW/g**

Maximum value of SAR (measured) = 0.009 mW/g

**80211g Middle CH 6/Zoom Scan (7x7x9)/Cube 1:** Measurement grid:

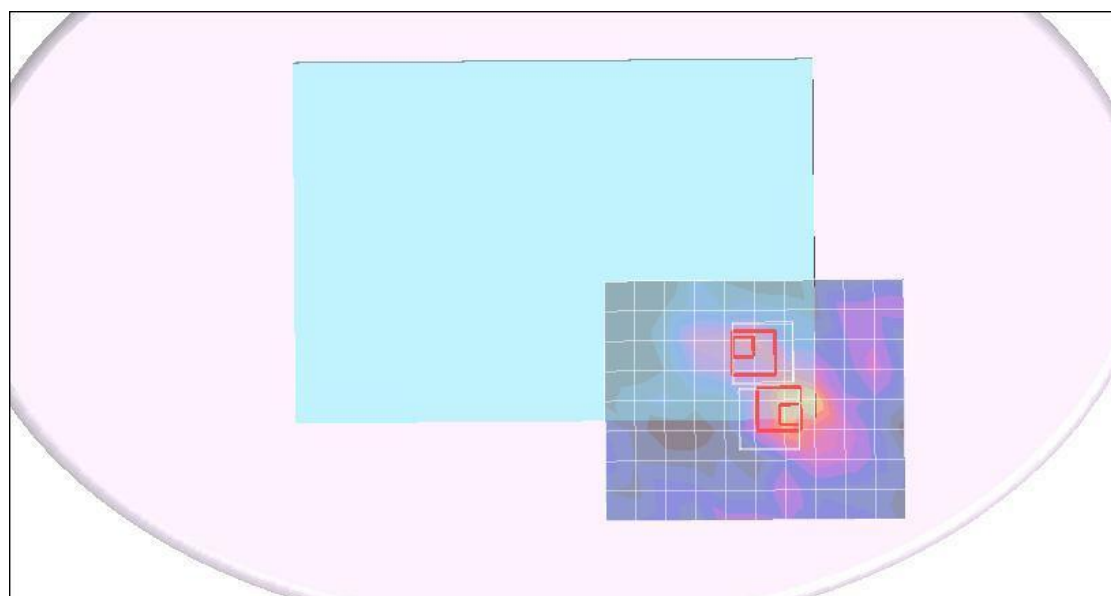
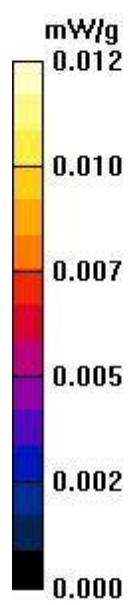
dx=5mm, dy=5mm, dz=3mm

Reference Value = 0.000 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.015 W/kg

**SAR(1 g) = 0.00593 mW/g; SAR(10 g) = 0.00211 mW/g**

Maximum value of SAR (measured) = 0.009 mW/g



Test Laboratory: Compliance Certification Services Inc.

**DUT: X220P; Type: X220P; Serial: N/A**

Communication System: IEEE 802.11g HT20 WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
- 1 Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211g HT20 Middle CH 6/Area Scan (9x11x1):** Measurement grid:

$dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.009 mW/g

**80211g HT20 Middle CH 6/Zoom Scan (7x7x9)/Cube 0:** Measurement

grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=3$ mm

Reference Value = 0.272 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.019 W/kg

**SAR(1 g) = 0.00588 mW/g; SAR(10 g) = 0.00228 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g

**80211g HT20 Middle CH 6/Zoom Scan (7x7x9)/Cube 1:** Measurement

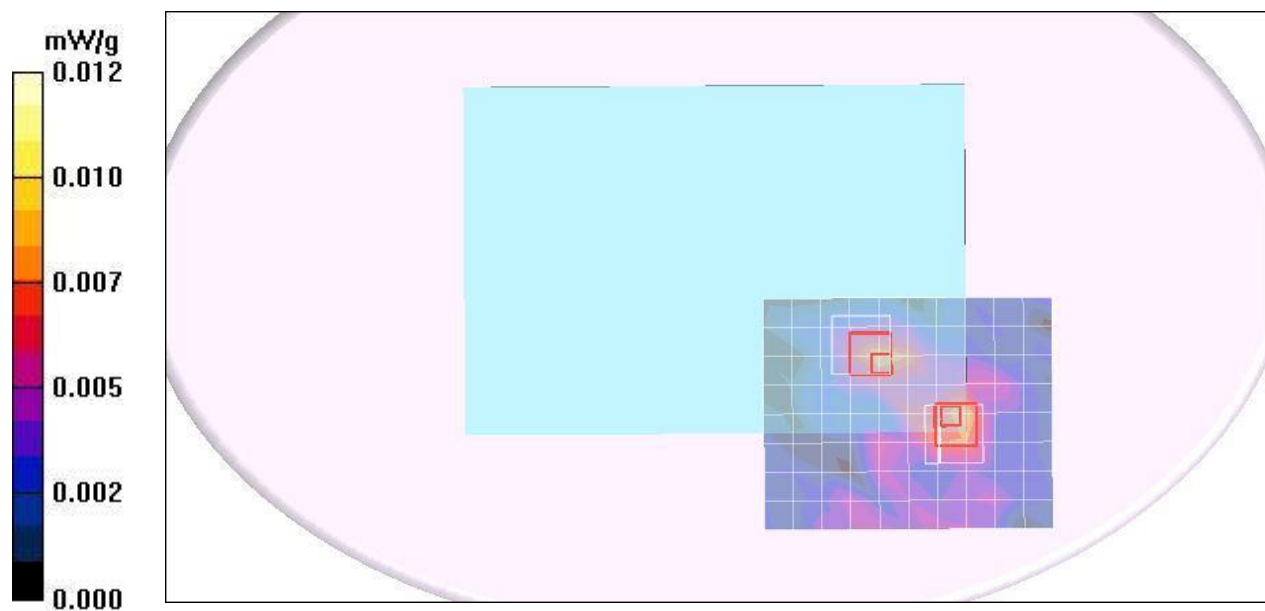
grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=3$ mm

Reference Value = 0.272 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.014 W/kg

**SAR(1 g) = 0.00757 mW/g; SAR(10 g) = 0.00322 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g



Test Laboratory: Compliance Certification Services Inc.

**DUT: X220P; Type: X220P; Serial: N/A**

Communication System: IEEE 802.11g WLAN HT40; Frequency: 2422 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2422$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
- 1 Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211g HT40 Low CH 1/Area Scan (9x11x1):** Measurement grid:

$dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.009 mW/g

**80211g HT40 Low CH 1/Zoom Scan (7x7x9)/Cube 0:** Measurement

grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=3$ mm

Reference Value = 0.000 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.012 W/kg

**SAR(1 g) = 0.00616 mW/g; SAR(10 g) = 0.00322 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g

**80211g HT40 Low CH 1/Zoom Scan (7x7x9)/Cube 1:** Measurement

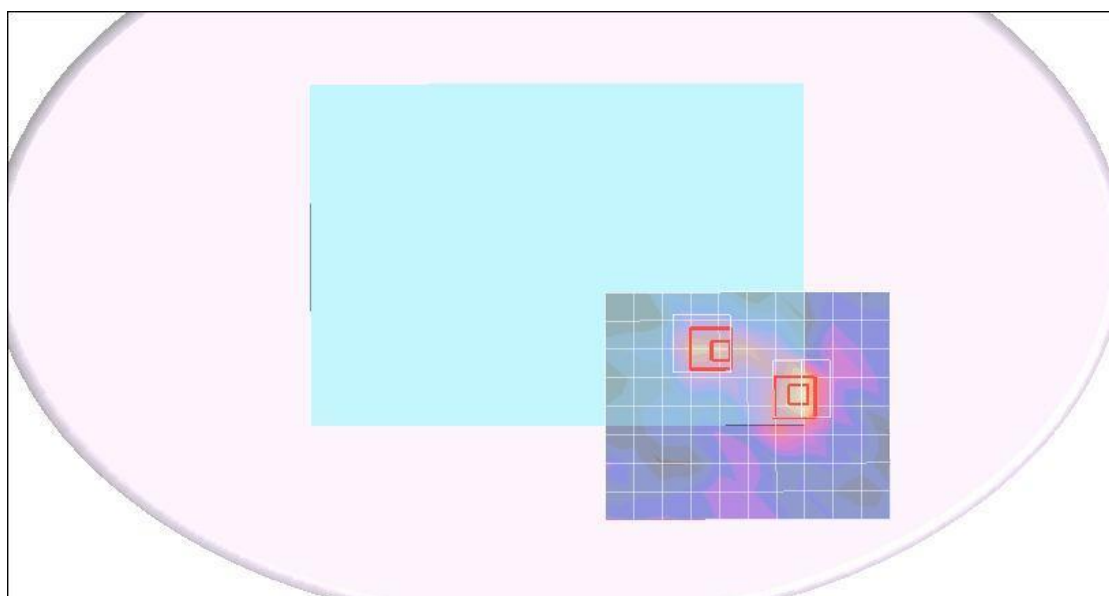
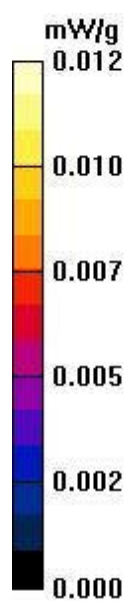
grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=3$ mm

Reference Value = 0.000 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.016 W/kg

**SAR(1 g) = 0.00527 mW/g; SAR(10 g) = 0.00199 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g





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**DUT: X220P; Type: X220P; Serial: N/A**

Communication System: IEEE 802.11b WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
- 1 Sensor-Surface: 2.5mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211b High CH 11/Area Scan 1 (9x21x1):** Measurement grid: dx=18mm, dy=18mm

Maximum value of SAR (measured) = 0.011 mW/g

**80211b High CH 11/Zoom Scan (7x7x9)/Cube 0:** Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.913 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.033 W/kg

**SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00744 mW/g**

Maximum value of SAR (measured) = 0.053 mW/g

**80211b High CH 11/Zoom Scan (7x7x9)/Cube 1:** Measurement grid:

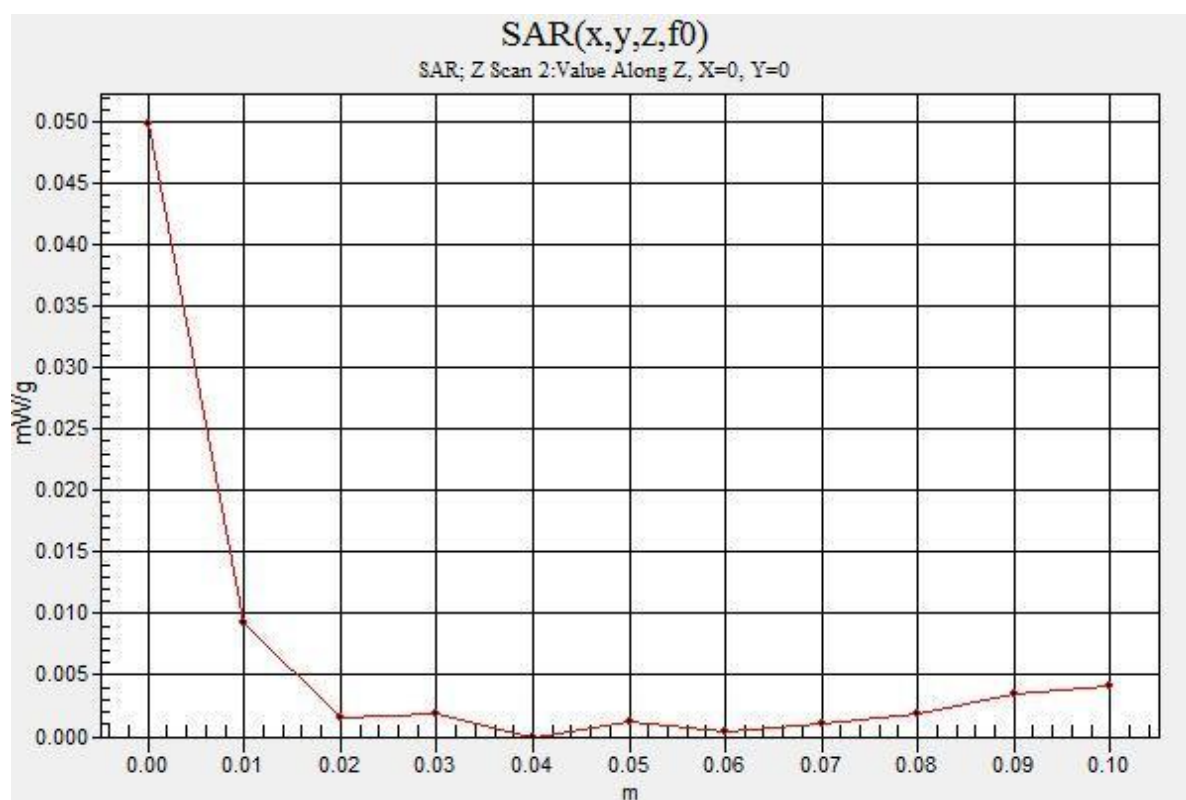
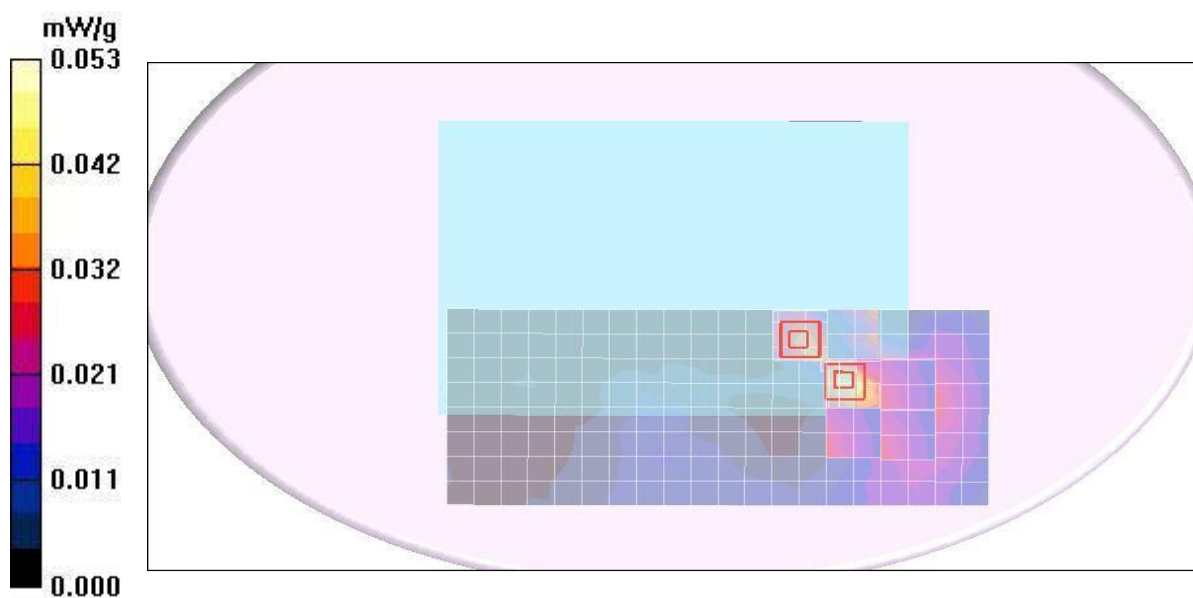
dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.913 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.022 W/kg

**SAR(1 g) = 0.00988 mW/g; SAR(10 g) = 0.00677 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g



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**DUT: X220P; Type: X220P; Serial: N/A**

Communication System: IEEE 802.11g WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
- 1 Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211g Middle CH 6/Area Scan (9x11x1):** Measurement grid: dx=18mm,

dy=18mm

Maximum value of SAR (measured) = 0.011 mW/g

**80211g Middle CH 6/Zoom Scan (7x7x9)/Cube 0:** Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.913 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.033 W/kg

**SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00742 mW/g**

Maximum value of SAR (measured) = 0.012 mW/g

**80211g Middle CH 6/Zoom Scan (7x7x9)/Cube 1:** Measurement grid:

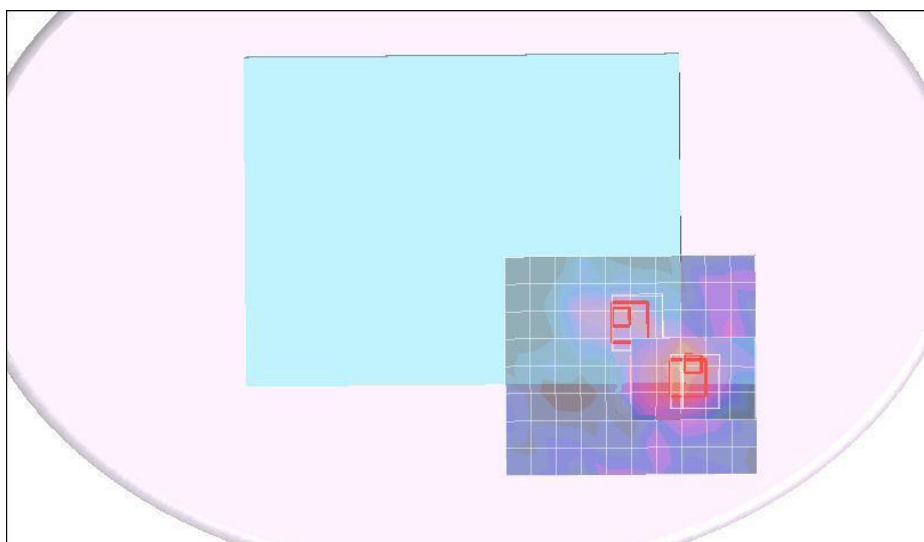
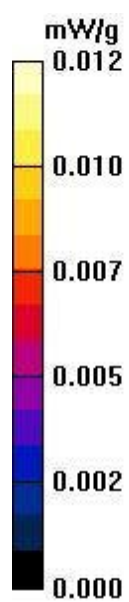
dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.913V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.023W/kg

**SAR(1 g) = 0.00987mW/g; SAR(10 g) = 0.00675 mW/g**

Maximum value of SAR (measured) = 0.009 mW/g



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Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

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- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211g HT20 Middle CH 6/Area Scan (9x11x1):** Measurement grid:

dx=18mm, dy=18mm

Maximum value of SAR (measured) = 0.011 mW/g

**80211g HT20 Middle CH 6/Zoom Scan (7x7x9)/Cube 0:** Measurement

grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.913 V/m; Power Drift = 0.012dB

Peak SAR (extrapolated) = 0.035 W/kg

**SAR(1 g) = 0.0987 mW/g; SAR(10 g) = 0.00725mW/g**

Maximum value of SAR (measured) = 0.010 mW/g

**80211g HT20 Middle CH 6/Zoom Scan (7x7x9)/Cube 1:** Measurement

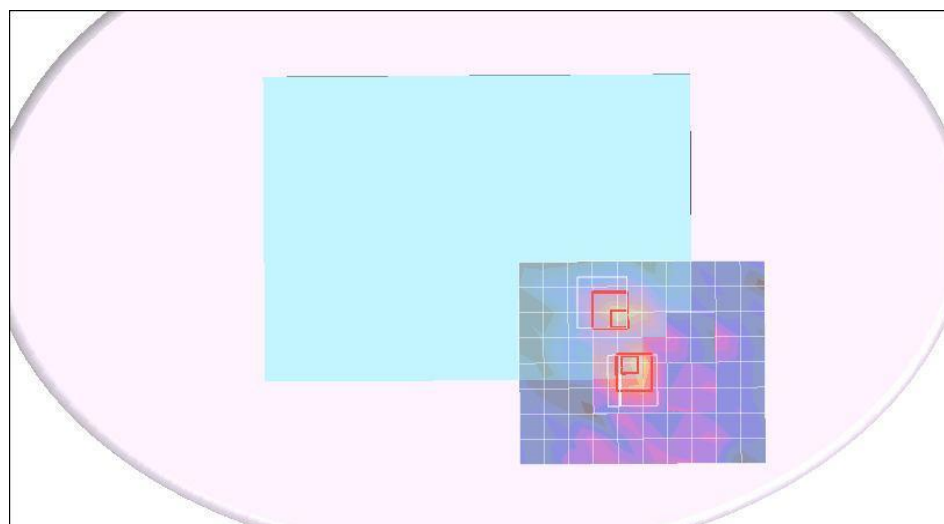
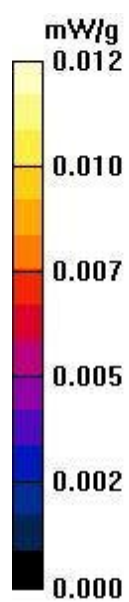
grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.913 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.014 W/kg

**SAR(1 g) = 0.00948 mW/g; SAR(10 g) = 0.00657 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g



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Medium parameters used:  $f = 2422$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Air Temperature: 24.6 deg C; Liquid Temperature: 23.6 deg C

Area Scan Find Secondary Maximum Within 2dB and with a peak SAR value greater than 0.0012W/kg

DASY4 Configuration:

- 1 Probe: EX3DV4 - SN3554; ConvF(5.8, 5.8, 5.8);
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- 1 Electronics: DAE4 Sn558; Calibrated: 2009/7/17
- 1 Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN: 1052
- 1 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**80211g HT40 Low CH 1/Area Scan (9x11x1):** Measurement grid:

$dx=20$ mm,  $dy=20$ mm

Maximum value of SAR (measured) = 0.011 mW/g

**80211g HT40 Low CH 1/Zoom Scan (7x7x9)/Cube 0:** Measurement

grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 0.913 V/m; Power Drift = 0.011dB

Peak SAR (extrapolated) = 0.030 W/kg

**SAR(1 g) = 0.00914 mW/g; SAR(10 g) = 0.00645 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g

**80211g HT40 Low CH 1/Zoom Scan (7x7x9)/Cube 1:** Measurement

grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 0.913 V/m; Power Drift = 0.009 dB

Peak SAR (extrapolated) = 0.016 W/kg

**SAR(1 g) = 0.00749 mW/g; SAR(10 g) = 0.00587 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g

