CC SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date : 2007/12/25

# Body\_802.11n Ch52\_NB Bottom with 0cm Gap\_Ant-1&3 2Tx\_DELL M2300\_BW 20M

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5300 MHz;  $\sigma = 5.31$  mho/m;  $\varepsilon_r = 48.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.31, 4.31, 4.31); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch52/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.828 mW/g

Ch52/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.76 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.235 mW/g

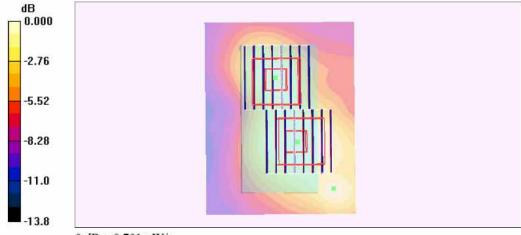
Maximum value of SAR (measured) = 0.814 mW/g

Ch52/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.76 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.197 mW/gMaximum value of SAR (measured) = 0.731 mW/g



0 dB = 0.731 mW/g

C SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch52 NB Bottom with 0cm Gap Ant-1&3 2Tx IBM 2653 BW 20M

### **DUT: 7D1410**

Communication System: 802.11n; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: MSL 5G Medium parameters used: f = 5300 MHz;  $\sigma = 5.31 \text{ mho/m}$ ;  $\epsilon_{\nu} = 48.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.8 °C; Liquid Temperature: 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.31, 4.31, 4.31); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch52/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.830 mW/g

Ch52/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 8.15 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.486 mW/g; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.855 mW/g

## Ch52/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 8.15 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.232 mW/gMaximum value of SAR (measured) = 0.834 mW/g



0 dB = 0.834 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

## Body 802.11a Ch120 NB Bottom with 0cm Gap Ant-1 DELL D500

**DUT: 7D1410** 

Communication System: 802.11a; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch120/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.981 mW/g

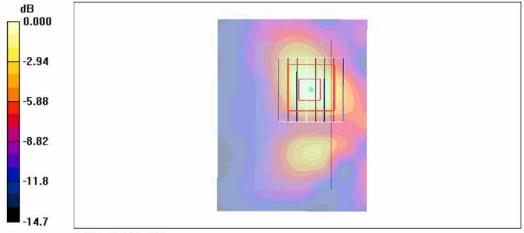
Ch120/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 5.20 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.205 mW/g

Maximum value of SAR (measured) = 0.933 mW/g



0 dB = 0.933 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11a Ch120 NB Bottom with 0cm Gap Ant-3 DELL D500

**DUT: 7D1410** 

Communication System: 802.11a; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch120/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.25 mW/g

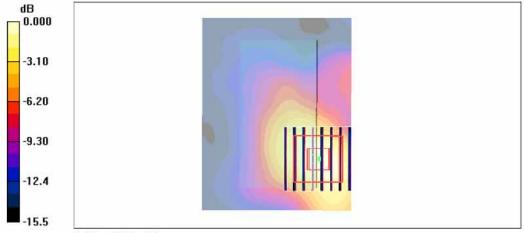
Ch120/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.08 V/m; Power Drift = 0.169 dB

Peak SAR (extrapolated) = 2.53 W/kg

SAR(1 g) = 0.710 mW/g; SAR(10 g) = 0.304 mW/g

Maximum value of SAR (measured) = 1.29 mW/g



0 dB = 1.29 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch120 NB Bottom with 0cm Gap Ant-1 BW 20M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch120/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.615 mW/g

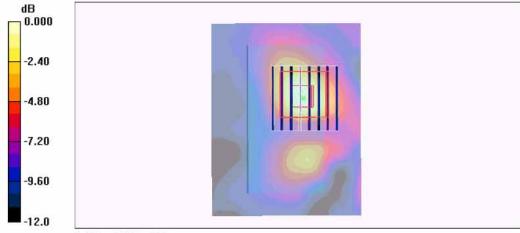
Ch120/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.84 V/m; Power Drift = 0.195 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.333 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.577 mW/g



0 dB = 0.577 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch120 NB Bottom with 0cm Gap Ant-3 BW 20M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL 5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\epsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

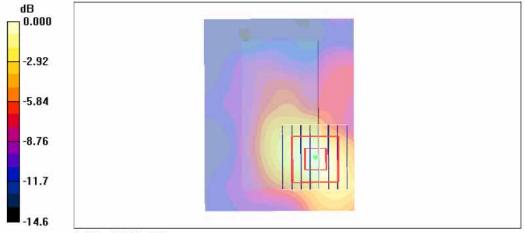
Ch120/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.860 mW/g

Ch120/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.67 V/m; Power Drift = 0.013 dB Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.475 mW/g; SAR(10 g) = 0.216 mW/g

Maximum value of SAR (measured) = 0.838 mW/g



0 dB = 0.838 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch120 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 20M DELL D500

### **DUT: 7D1410**

Communication System: 802.11n; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch120/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.01 mW/g

# Ch120/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.08 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.557 mW/g; SAR(10 g) = 0.248 mW/g

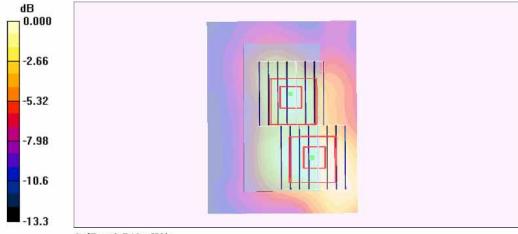
Maximum value of SAR (measured) = 0.981 mW/g

## Ch120/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.08 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.418 mW/g; SAR(10 g) = 0.189 mW/gMaximum value of SAR (measured) = 0.740 mW/g



0 dB = 0.740 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date : 2007/12/25

## Body 802.11n Ch118 NB Bottom with 0cm Gap Ant-1 BW 40M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch118/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.762 mW/g

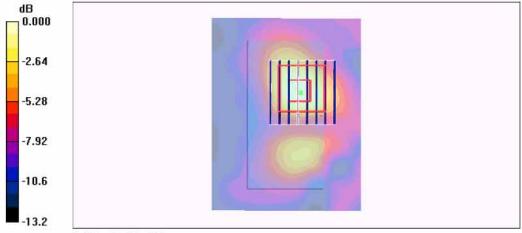
Ch118/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 5.11 V/m; Power Drift = 0.165 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.385 mW/g; SAR(10 g) = 0.166 mW/g

Maximum value of SAR (measured) = 0.682 mW/g



0 dB = 0.682 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch118 NB Bottom with 0cm Gap Ant-3 BW 40M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: MSL 5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

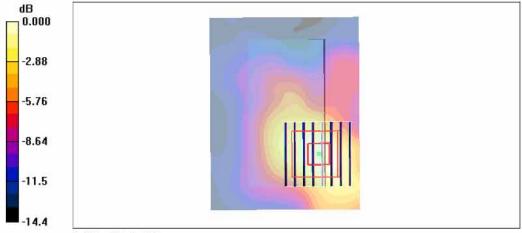
Ch118/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.18 mW/g

Ch118/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 5.67 V/m; Power Drift = 0.180 dB Peak SAR (extrapolated) = 2.24 W/kg

SAR(1 g) = 0.640 mW/g; SAR(10 g) = 0.284 mW/g

Maximum value of SAR (measured) = 1.14 mW/g



0 dB = 1.14 mW/g

SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch102 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5510 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5500 MHz;  $\sigma = 5.54$  mho/m;  $\epsilon_r = 48.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6 °C; Liquid Temperature: 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch102/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.51 mW/g

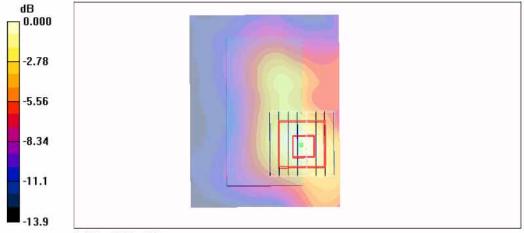
Ch102/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 8.52 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 2.89 W/kg

SAR(1 g) = 0.852 mW/g; SAR(10 g) = 0.379 mW/g

Maximum value of SAR (measured) = 1.50 mW/g



0 dB = 1.50 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch118 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M DELL M2300

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch118/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.911 mW/g

# Ch118/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.92 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 0.503 mW/g; SAR(10 g) = 0.222 mW/g

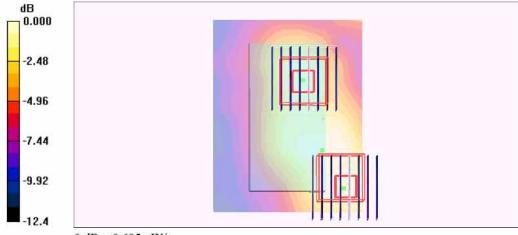
Maximum value of SAR (measured) = 0.946 mW/g

## Ch118/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.92 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.195 mW/gMaximum value of SAR (measured) = 0.695 mW/g



0 dB = 0.695 mW/g

C SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch118 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M IBM 2653

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5600 MHz;  $\sigma = 5.65 \text{ mho/m}$ ;  $\varepsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch118/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.587 mW/g

# Ch118/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.18 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 1.18 W/kg

# SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.600 mW/g

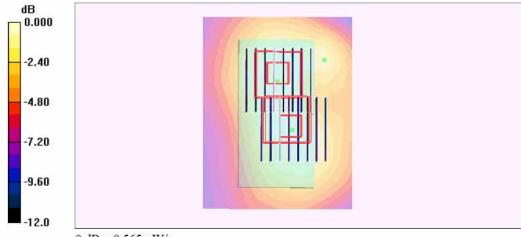
## Ch118/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.18 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 1.13 W/kg

# SAR(1 g) = 0.331 mW/g; SAR(10 g) = 0.173 mW/g

Maximum value of SAR (measured) = 0.565 mW/g



0 dB = 0.565 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11a Ch157 NB Bottom with 0cm Gap Ant-1 DELL D500

**DUT: 7D1410** 

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\varepsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch157/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.787 mW/g

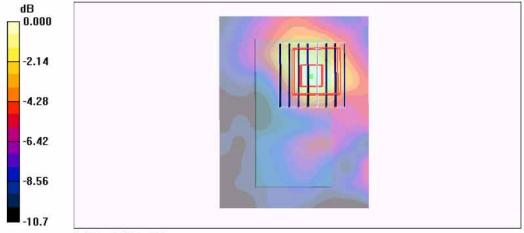
Ch157/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.49 V/m; Power Drift = -0.144 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 0.430 mW/g; SAR(10 g) = 0.207 mW/g

Maximum value of SAR (measured) = 0.734 mW/g



0 dB = 0.734 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11a Ch157 NB Bottom with 0cm Gap Ant-3 DELL D500

**DUT: 7D1410** 

Communication System: 802.11a; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\varepsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch157/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.23 mW/g

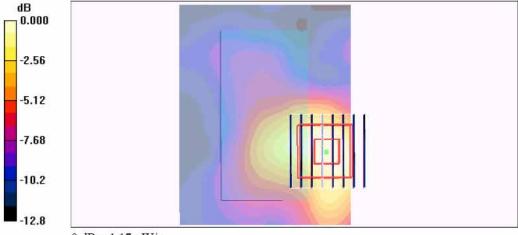
Ch157/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.83 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 2.52 W/kg

SAR(1 g) = 0.663 mW/g; SAR(10 g) = 0.312 mW/g

Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17 mW/g



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch157 NB Bottom with 0cm Gap Ant-1 BW 20M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.6 °C; Liquid Temperature : 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch157/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.509 mW/g

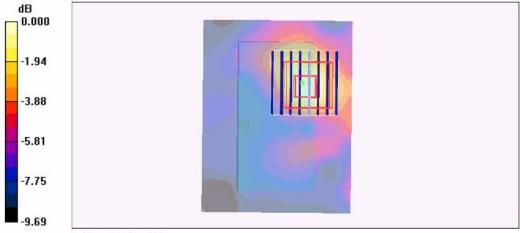
Ch157/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.77 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.164 mW/g

Maximum value of SAR (measured) = 0.513 mW/g



0 dB = 0.513 mW/g



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch157 NB Bottom with 0cm Gap Ant-3 BW 20M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: MSL 5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88 \text{ mho/m}$ ;  $\epsilon_e = 47.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch157/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.843 mW/g

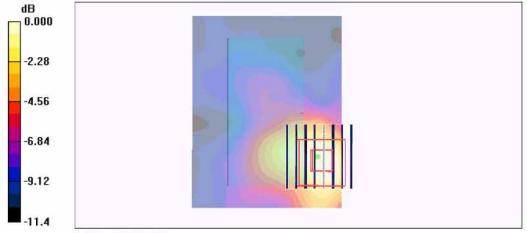
# Ch157/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 5.35 V/m; Power Drift = -0.149 dB

Peak SAR (extrapolated) = 1.76 W/kg

# SAR(1 g) = 0.479 mW/g; SAR(10 g) = 0.235 mW/g

Maximum value of SAR (measured) = 0.816 mW/g



0 dB = 0.816 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date/Time: 2007/12/25

# Body\_802.11n Ch157\_NB Bottom with 0cm Gap\_Ant-1&3 2Tx\_BW 20M\_DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch157/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 0.897 mW/g

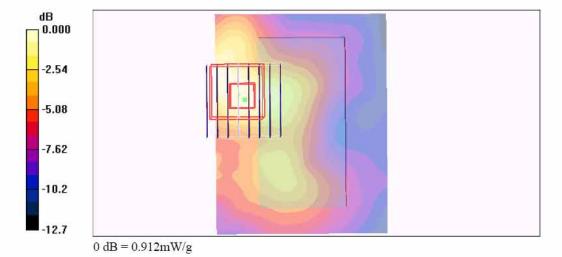
Ch157/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.15 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.252 mW/g

Maximum value of SAR (measured) = 0.912 mW/g



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Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch151 NB Bottom with 0cm Gap Ant-1 BW 40M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch151/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.739 mW/g

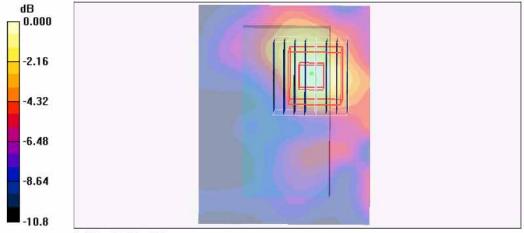
# Ch151/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 4.76 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.689 mW/g



0 dB = 0.689 mW/g

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch151 NB Bottom with 0cm Gap Ant-3 BW 40M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\varepsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## Ch151/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.42 mW/g

Maximum value of SAR (interpolated) = 1.42 mw/g

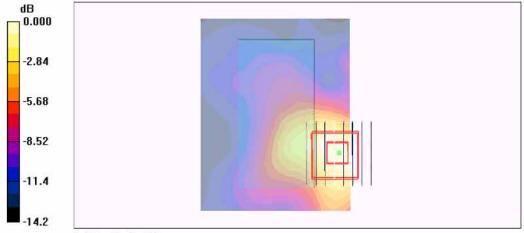
# Ch151/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.21 V/m; Power Drift = -0.140 dB

Peak SAR (extrapolated) = 3.13 W/kg

# SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.371 mW/g

Maximum value of SAR (measured) = 1.47 mW/g



0 dB = 1.47 mW/g

SAR lest Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch151 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M DELL D500

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch151/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.50 mW/g

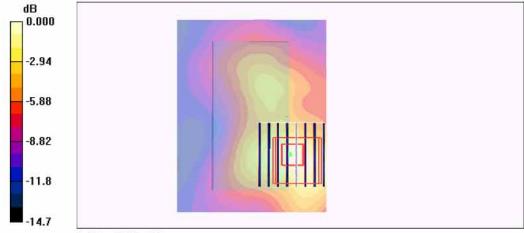
Ch151/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.34 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 3.28 W/kg

SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.387 mW/g

Maximum value of SAR (measured) = 1.57 mW/g



0 dB = 1.57 mW/g



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch151 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M DELL M2300

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6 °C; Liquid Temperature: 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch151/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.895 mW/g

## Ch151/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.76 V/m; Power Drift = 0.176 dB

Peak SAR (extrapolated) = 1.98 W/kg

## SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.235 mW/g

Maximum value of SAR (measured) = 0.827 mW/g

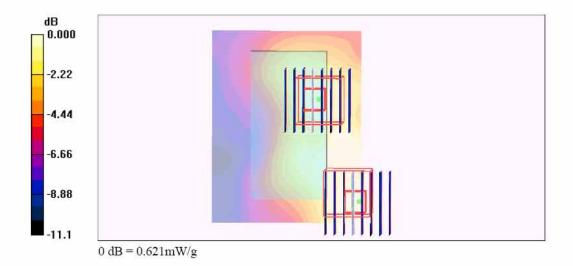
### Ch151/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.76 V/m; Power Drift = 0.176 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.364 mW/g; SAR(10 g) = 0.188 mW/g

Maximum value of SAR (measured) = 0.621 mW/g





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch151 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M IBM 2653

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: MSL 5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88 \text{ mho/m}$ ;  $\epsilon_r = 47.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6 °C; Liquid Temperature: 21.6 °C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## Ch151/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.614 mW/g

Ch151/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.25 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.363 mW/g; SAR(10 g) = 0.184 mW/g

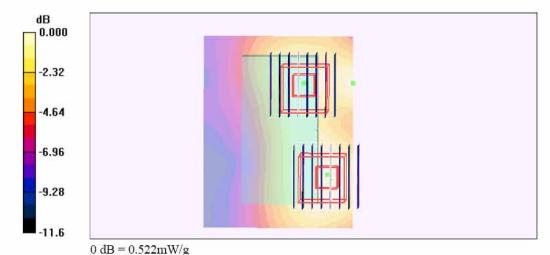
Maximum value of SAR (measured) = 0.628 mW/g

Ch151/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 6.25 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.156 mW/gMaximum value of SAR (measured) = 0.522 mW/g



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/26

# Body 802.11b Ch6 NB Bottom with 0cm Gap Ant-3 DELL D500 2D

**DUT: 7D1410** 

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL\_2450 Medium parameters used: f = 2437 MHz;  $\sigma = 1.95$  mho/m;  $\varepsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9 °C; Liquid Temperature: 21.5 °C

### DASY4 Configuration:

- Probe: ET3DV6 SN1787; ConvF(4.02, 4.02, 4.02); Calibrated: 2007/8/28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch6/Area Scan (61x51x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.343 mW/g

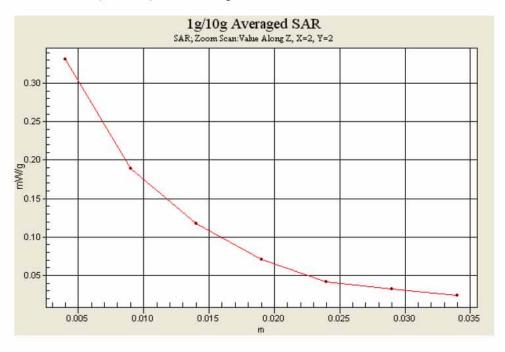
Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.2 V/m; Power Drift = -0.098 dB

Peak SAR (extrapolated) = 0.595 W/kg

SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.168 mW/g

Maximum value of SAR (measured) = 0.331 mW/g



C SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch52 NB Bottom with 0cm Gap Ant-1&3 2Tx DELL D500 BW 20M 2D

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5300 MHz;  $\sigma = 5.31$  mho/m;  $\epsilon_r = 48.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

#### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.31, 4.31, 4.31); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

# Ch52/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.59 mW/g

Ch52/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 9.52 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 2.79 W/kg

SAR(1 g) = 0.877 mW/g; SAR(10 g) = 0.392 mW/g

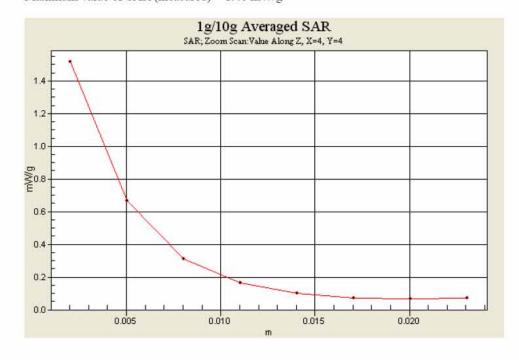
Maximum value of SAR (measured) = 1.51 mW/g

Ch52/Zoom Scan (8x8x8)/Cube 1: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 9.52 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 2.78 W/kg

SAR(1 g) = 0.653 mW/g; SAR(10 g) = 0.296 mW/gMaximum value of SAR (measured) = 1.46 mW/g



SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch102 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M DELL D500 2D

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5510 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5500 MHz;  $\sigma = 5.54$  mho/m;  $\epsilon_r = 48.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

### DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.09, 4.09, 4.09); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

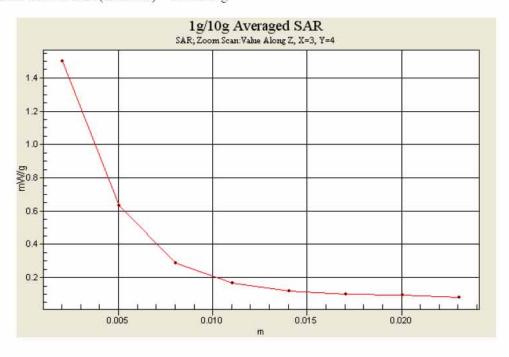
**Ch102/Area Scan (91x71x1):** Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 1.51 mW/g

Ch102/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm Reference Value = 8.52 V/m: Power Drift = 0.070 dB

Peak SAR (extrapolated) = 2.89 W/kg

SAR(1 g) = 0.852 mW/g; SAR(10 g) = 0.379 mW/g

Maximum value of SAR (measured) = 1.50 mW/g



C SAR Test Report Test Report No : FA7D1410-02

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2007/12/25

# Body 802.11n Ch151 NB Bottom with 0cm Gap Ant-1&3 2Tx BW 40M DELL D500 2D

**DUT: 7D1410** 

Communication System: 802.11n; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: MSL\_5G Medium parameters used: f = 5800 MHz;  $\sigma = 5.88$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.6°C; Liquid Temperature: 21.6°C

# DASY4 Configuration:

- Probe: EX3DV3 SN3514; ConvF(4.16, 4.16, 4.16); Calibrated: 2007/2/21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1029
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### Ch151/Area Scan (91x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.50 mW/g

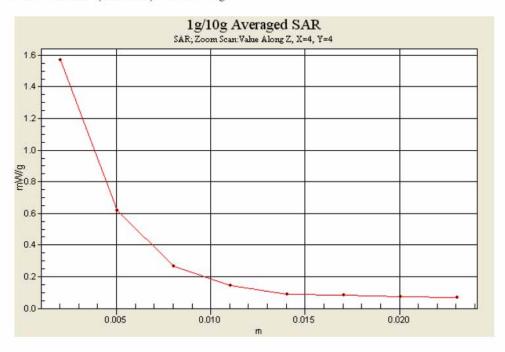
Ch151/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 7.34 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 3.28 W/kg

SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.387 mW/g

Maximum value of SAR (measured) = 1.57 mW/g



# Appendix C - Calibration Data

Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerlscher Kallbrierdienst
C Service suisse d'étalonnage
Servizio svizzero di taretura
S Swiss Galibration Service

Test Report No : FA7D1410-02

Accredited by the Swiss Federal Office of Metrology and Accreditation The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

Sporton (Auden)

Accreditation No.: SCS 108

Certificate No: D2450V2-736\_Jul07

D2450V2 - SN: 7	36	
QA CAL-05.v6 Calibration proce	dure for dipole validation kits	
July 12, 2007		- Al-
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G637480704 U337292783 SN: 5066 (25g) SN: 5047.2 (10r) SN: 3025 SN: 601	G3-Oct-06 (METAS, No. 217-00608) C3-Oct-06 (METAS, No. 217-00608) 10-Aug-06 (METAS, No. 217-00591) 10-Aug-06 (METAS, No. 217-00591) 19-Oct-06 (SPEAG, No. ES3-3025_Oct06) 30-Jan-07 (SPEAG, No. DAE4-601_Jan07)	Oct-07 Oct-07 Aug-07 Aug-07 Oct-07 Jan-08
10.4	Check Date (in house)	Scheduled Check
MY41092317 MY41000875 US37390585 S4206	18-Oct-02 (SPEAG, in house check Oct-05) 11-May-05 (SPEAG, in house check Nov-05) 18-Oct-01 (SPEAG, in house check Oct-06)	In house check: Oct-07 In house check: Nav-07 In house check: Oct-07
Name	Function	Signature
Mke Mell	Laboratory Technician	Titelli
Katja Pokovic	Technical Manager	20
	QA CAL-05.v6 Calibration proce July 12, 2007 In Tolerance  sents the traceability to resist antices with confidence proceed in the closed laborator TE critical for calibration) ID # GB37480704 US37292783 SN 5066 (20g) SN 5047.2 (10r) SN 3025 SN 601 ID # MY41092317 MY41092317 MY41000675 US37390585 S4206 Name Mike Melli	July 12, 2007  In Tolerance  ments the traceability to national standards, which realize the physical units of promitions with confidence probability are given on the following pages and are cool in the closed laboratory facility: environment temperature (22 ± 3)°C and TE critical for calibration)    ID #

Certificate No: D2450V2-736\_Jul07

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#### Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





Schweizerischer Kallbrierdienst S

Service suisse d'étalonnage

C Servizio svizzero di taratura

Swiss Calibration Service

Accreditation No.: SCS 108

Accredited by the Swiss Federal Office of Metrology and Accreditation The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### Glossary:

TSL

tissue simulating liquid

ConvF N/A

sensitivity in TSL / NORM x,y,z not applicable or not measured

### Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003

b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)",

February 2005

c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

#### Additional Documentation:

d) DASY4 System Handbook

### Methods Applied and Interpretation of Parameters:

- · Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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#### Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

Head TSL parameters
The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mha/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.6 ± 6 %	1.81 mho/m ± 6 %
Head TSL temperature during test	(22.0 ± 0.2) °C		

### SAR result with Head TSL

SAR averaged over 1 cm3 (1 g) of Head TSL	condition	
SAR measured	250 mW input power	13.3 mW / g
SAR normalized	normalized to 1W	53.2 mW / g
SAR for nominal Head TSL parameters 1	normalized to 1W	52.7 mW / g ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.17 mW/g
SAR normalized	normalized to 1W	24.7 mW / g
SAR for nominal Hoad TSL parameters 1	-normalized to 1W	24.5 mW / g ± 16.5 % (k=2)

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<sup>1</sup> Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

Body TSL parameters
The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.5 ± 8 %	1.94 mho/m ± 6 %
Body TSL temperature during test	(22.0 ± 0.2) °C		

# SAR result with Body TSL

SAR averaged over 1 cm3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.0 mW / g
SAR normalized	normalized to 1W	52,0 mW / g
SAR for nominal Body TSL parameters 2	normalized to 1W	52.5 mW / g ± 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	6.05 mW / g
SAR normalized	normalized to 1W	24.2 mW / g
SAR for nominal Body TSL parameters 2	normalized to 1W	24.4 mW / g ± 16.5 % (k=2)

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<sup>&</sup>lt;sup>2</sup> Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"