

Date/Time: 3/19/2008 9:04:13 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-835MHz

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 158.1 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 113.5 V/m; Power Drift = 0.006 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>154.0 M4</b>	<b>159.6 M4</b>	<b>155.3 M4</b>
Grid 4	Grid 5	Grid 6
<b>78.1 M4</b>	<b>83.1 M4</b>	<b>82.2 M4</b>
Grid 7	Grid 8	Grid 9
<b>143.3 M4</b>	<b>158.1 M4</b>	<b>146.2 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

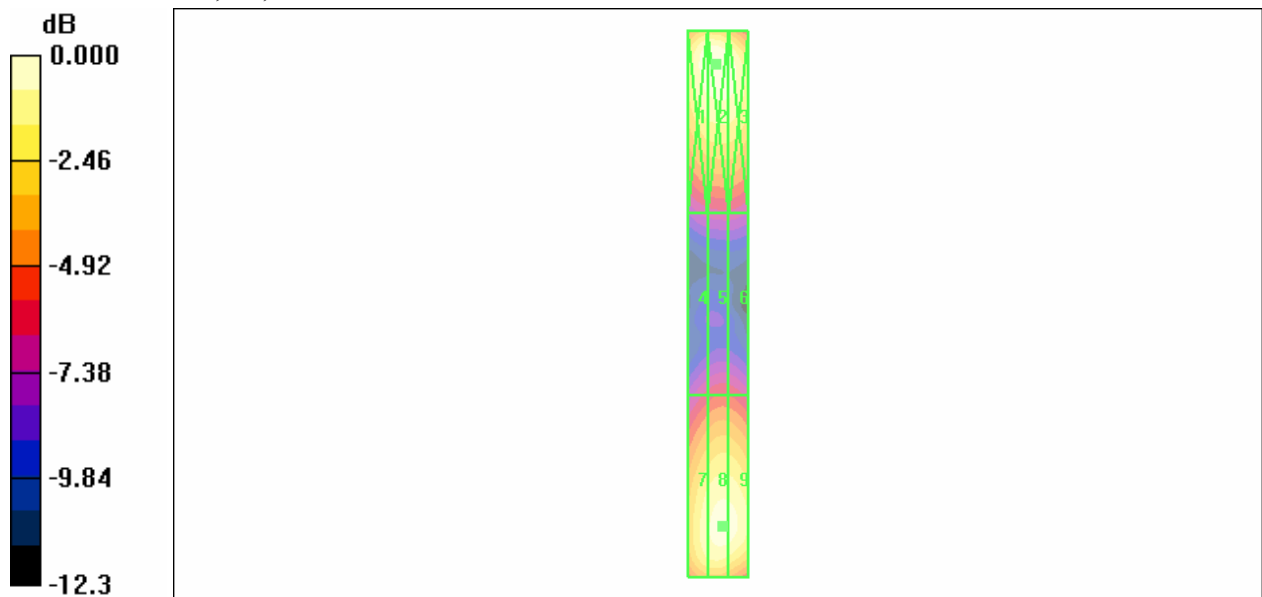
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 159.6 V/m

E Category: M4

Location: 0.5, -79, 365.8 mm



0 dB = 159.3V/m

Date/Time: 3/19/2008 9:25:31 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-835MHz(AM 80%)

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: AM 80%; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 97.8 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 71.2 V/m; Power Drift = 0.010 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>97.6 M4</b>	<b>98.8 M4</b>	<b>95.0 M4</b>
Grid 4	Grid 5	Grid 6
<b>49.4 M4</b>	<b>54.4 M4</b>	<b>53.1 M4</b>
Grid 7	Grid 8	Grid 9
<b>95.6 M4</b>	<b>97.8 M4</b>	<b>95.2 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

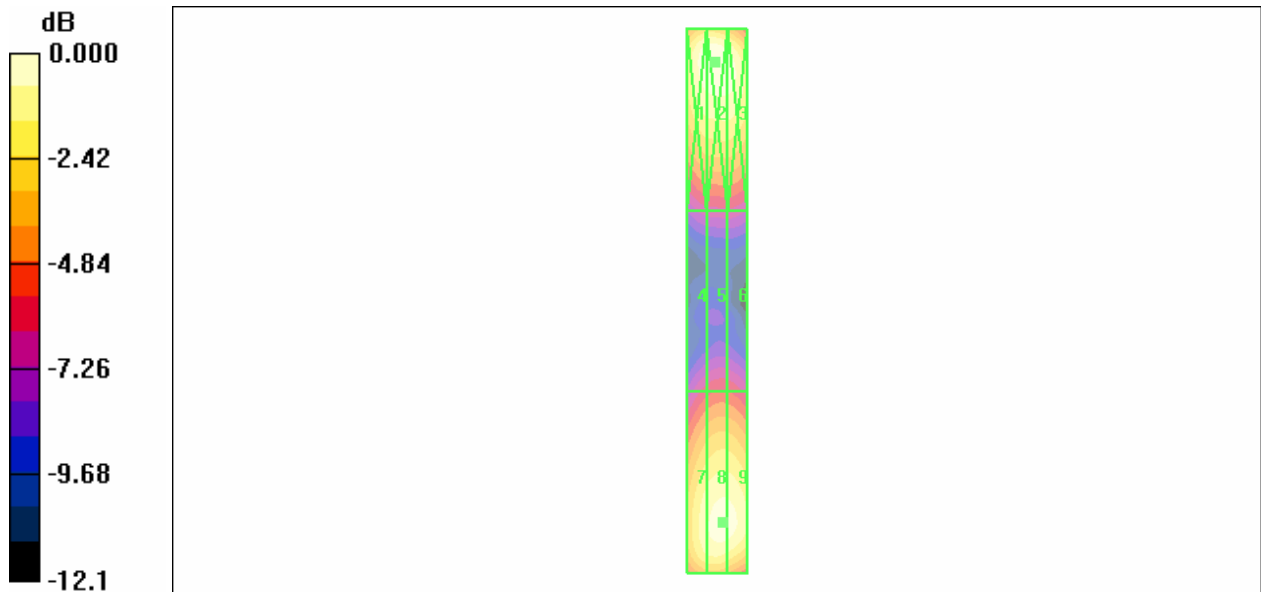
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 98.8 V/m

E Category: M4

Location: 0.5, -79, 365.8 mm



0 dB = 98.8V/m

Date/Time: 3/20/2008 3:13:05 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-835MHz-GSM

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: GSM; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Device Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 71.8 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 20.5 V/m; Power Drift = 0.003 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 <b>63.8 M4</b>	Grid 2 <b>78.2 M4</b>	Grid 3 <b>67.9 M4</b>
Grid 4 <b>32.2 M4</b>	Grid 5 <b>34.2 M4</b>	Grid 6 <b>32.8 M4</b>
Grid 7 <b>62.8 M4</b>	Grid 8 <b>71.8 M4</b>	Grid 9 <b>60.2 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

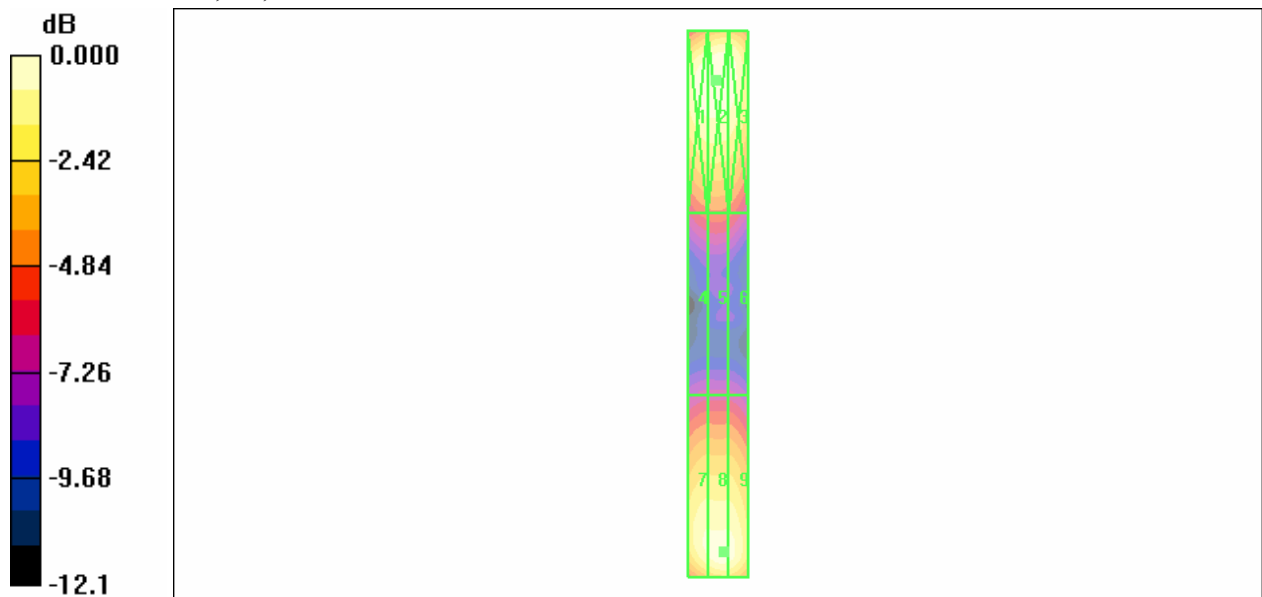
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 78.2 V/m

E Category: M4

Location: 0.5, -72, 365.8 mm



0 dB = 78.2V/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-835MHz(CDMA)

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: CDMA ; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 147.2 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 112.3 V/m; Power Drift = 0.002 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 <b>150.1 M4</b>	Grid 2 <b>155.5 M4</b>	Grid 3 <b>154.8 M4</b>
Grid 4 <b>80.6 M4</b>	Grid 5 <b>82.8 M4</b>	Grid 6 <b>82.1 M4</b>
Grid 7 <b>145.3 M4</b>	Grid 8 <b>147.2 M4</b>	Grid 9 <b>143.6 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

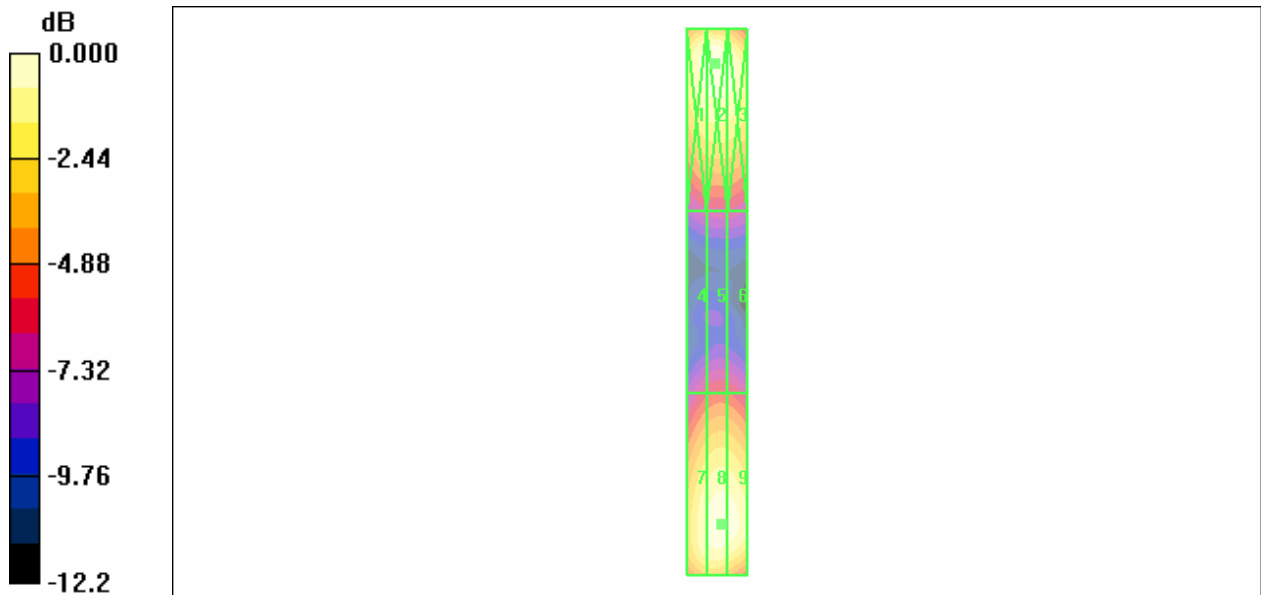
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 155.5 V/m

E Category: M4

Location: 0.5, -78.5, 365.8 mm



0 dB = 155.5V/m



Date/Time: 3/19/2008 10:42:09 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-1880MHz

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test

**(41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 135.8 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 134.8 V/m; Power Drift = 0.011 dB

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>129.4 M2</b>	<b>136.6 M2</b>	<b>127.7 M2</b>
Grid 4	Grid 5	Grid 6
<b>82.2 M3</b>	<b>85.5 M3</b>	<b>84.1 M3</b>
Grid 7	Grid 8	Grid 9
<b>126.4 M2</b>	<b>135.8 M2</b>	<b>126.8 M2</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

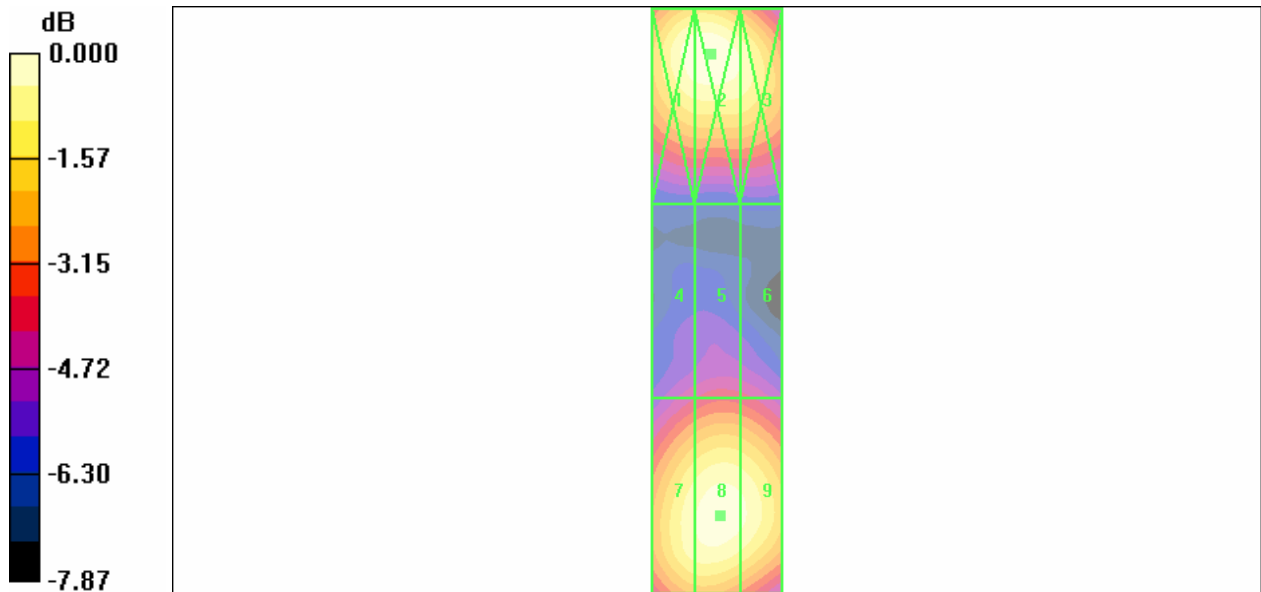
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 136.6 V/m

E Category: M2

Location: 1, -38, 365.8 mm



0 dB = 136.6V/m

Date/Time: 3/19/2008 11:05:09 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-1880MHz(AM 80%)

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: AM 80%; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test

**(41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 83.6 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 84.4 V/m; Power Drift = 0.018 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>82.2 M3</b>	<b>83.7 M3</b>	<b>78.8 M3</b>
Grid 4	Grid 5	Grid 6
<b>54.5 M4</b>	<b>57.2 M4</b>	<b>54.6 M4</b>
Grid 7	Grid 8	Grid 9
<b>78.1 M3</b>	<b>83.6 M3</b>	<b>80.4 M3</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

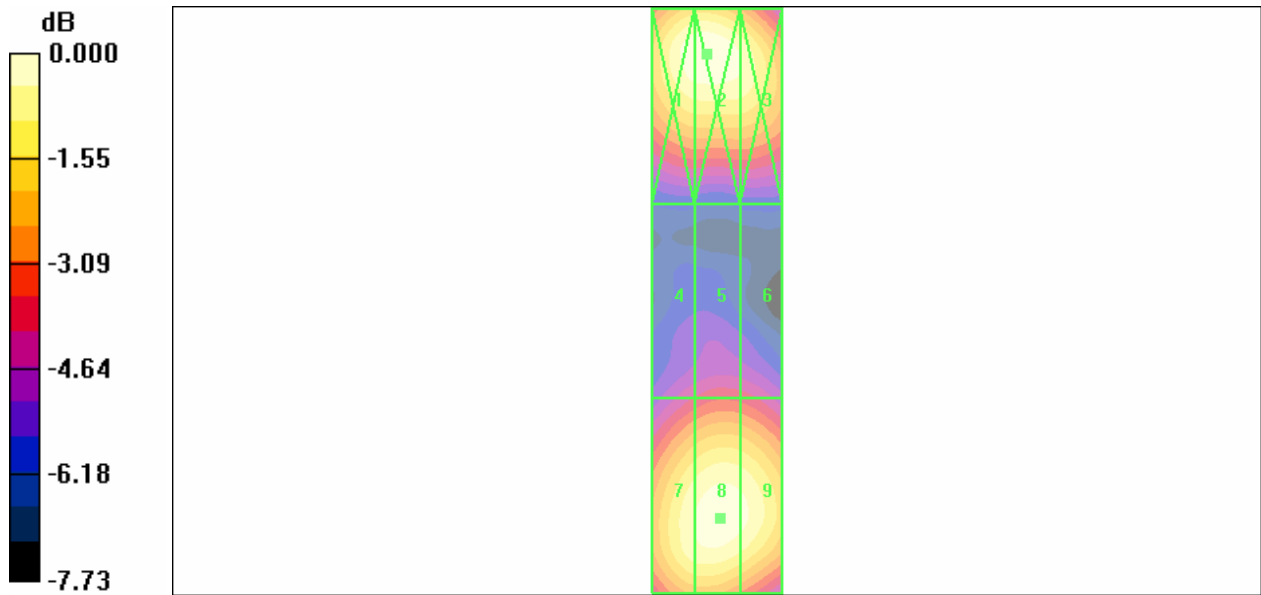
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 83.7 V/m

E Category: M3

Location: 1.5, -38, 365.8 mm



0 dB = 83.7V/m

Date/Time: 3/20/2008 3:58:15 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-1880MHz-GSM

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: GSM; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test

**(41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 62.2 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 50.6 V/m; Power Drift = 0.008 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>58.8 M3</b>	<b>66.5 M3</b>	<b>59.2 M3</b>
Grid 4	Grid 5	Grid 6
<b>37.1 M4</b>	<b>33.0 M4</b>	<b>35.6 M4</b>
Grid 7	Grid 8	Grid 9
<b>42.6 M4</b>	<b>62.2 M3</b>	<b>43.9 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

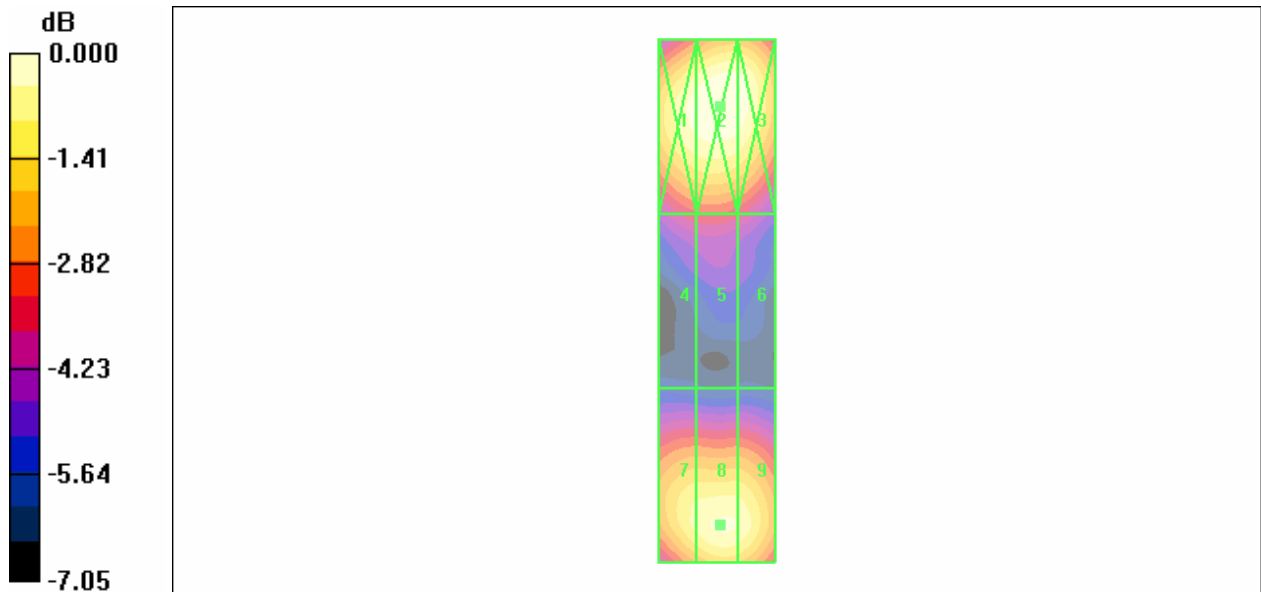
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 66.5 V/m

E Category: M3

Location: -0.5, -33, 365.8 mm



0 dB = 66.5V/m

Date/Time: 3/20/2008 4:27:33 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-1880MHz(WCDMA)

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: CDMA; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test

**(41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 125.6 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 125.8 V/m; Power Drift = 0.011 dB

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>122.8 M2</b>	<b>127.7 M2</b>	<b>125.6 M2</b>
Grid 4	Grid 5	Grid 6
<b>77.4 M3</b>	<b>81.6 M3</b>	<b>79.3 M3</b>
Grid 7	Grid 8	Grid 9
<b>119.8 M2</b>	<b>125.6 M2</b>	<b>117.2 M2</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

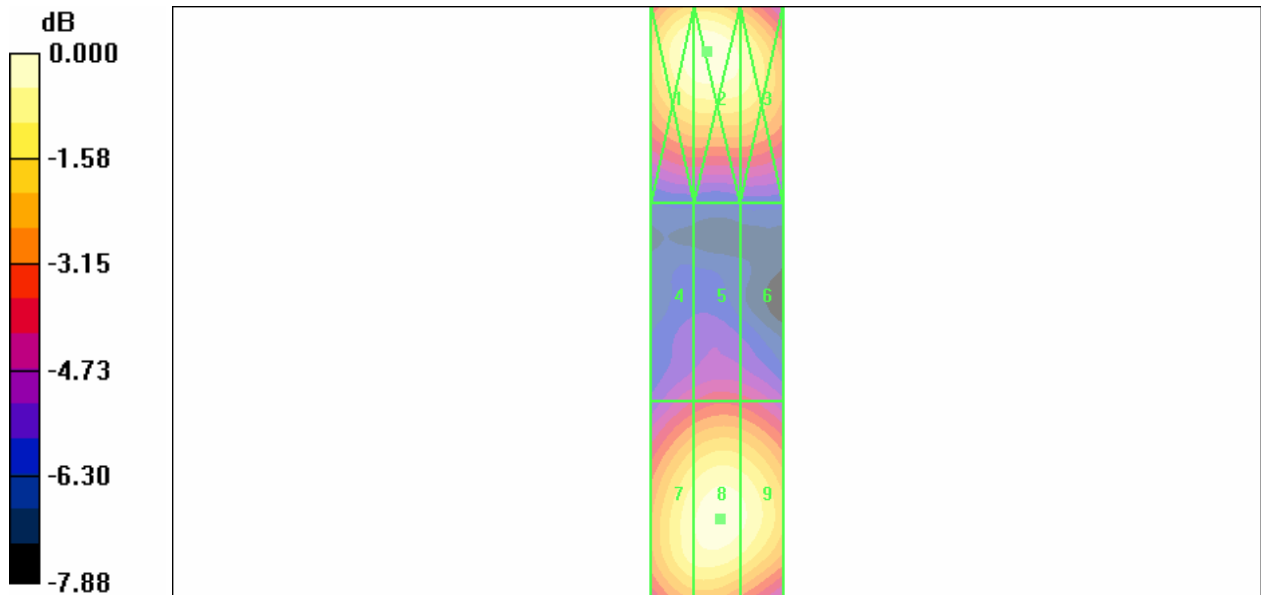
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 127.7 V/m

E Category: M2

Location: 1.5, -38, 365.8 mm



0 dB = 127.7V/m



Date/Time: 3/19/2008 1:21:05 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_835MHz-CW

**DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1031**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.463 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.485 A/m; Power Drift = 0.015 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.390 M4</b>	Grid 2 <b>0.418 M4</b>	Grid 3 <b>0.398 M4</b>
Grid 4 <b>0.422 M4</b>	Grid 5 <b>0.463 M4</b>	Grid 6 <b>0.448 M4</b>
Grid 7 <b>0.372 M4</b>	Grid 8 <b>0.401 M4</b>	Grid 9 <b>0.397 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

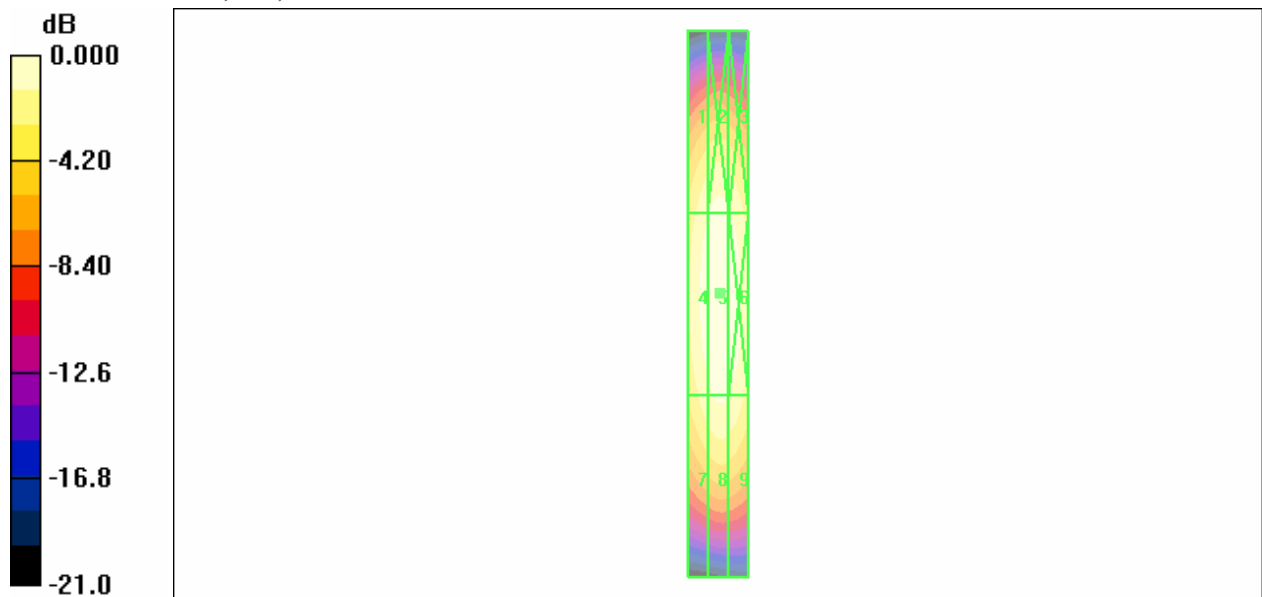
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.463 A/m

H Category: M4

Location: -0.5, -3.5, 365.6 mm



0 dB = 0.463A/m

Date/Time: 3/19/2008 1:44:20 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_835MHz-AM

**DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1031**

Communication System: AM 80%; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.291 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.320 A/m; Power Drift = 0.012 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.232 M4</b>	Grid 2 <b>0.256 M4</b>	Grid 3 <b>0.248 M4</b>
Grid 4 <b>0.268 M4</b>	Grid 5 <b>0.291 M4</b>	Grid 6 <b>0.279 M4</b>
Grid 7 <b>0.229 M4</b>	Grid 8 <b>0.254 M4</b>	Grid 9 <b>0.245 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

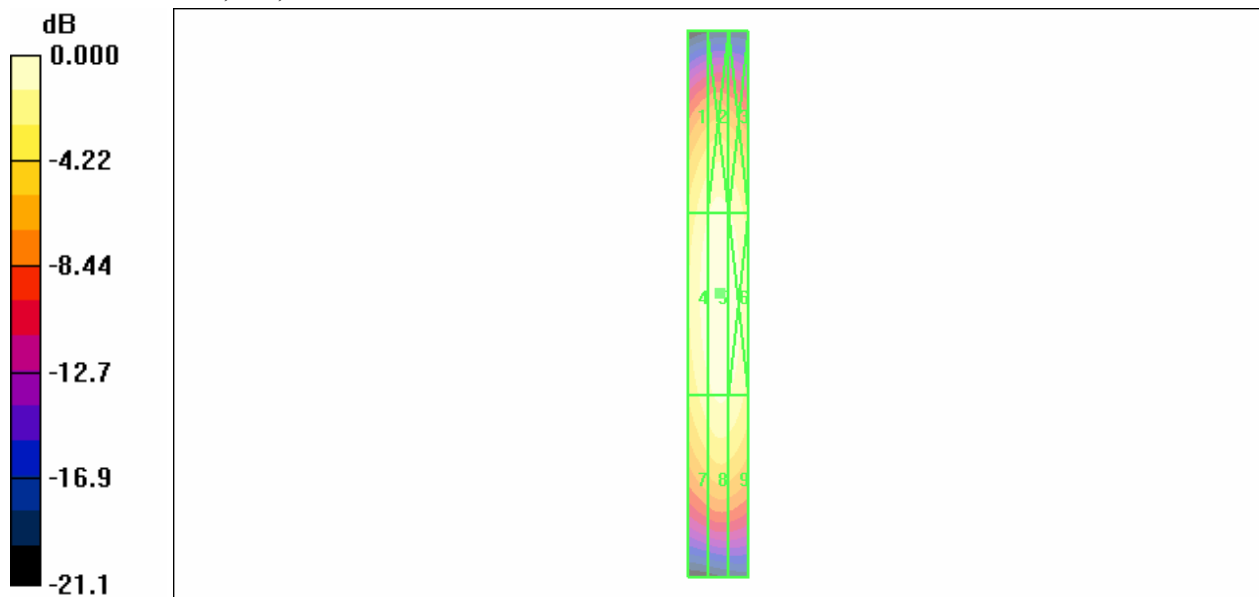
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.291 A/m

H Category: M4

Location: -0.5, -3.5, 365.6 mm



Date/Time: 3/20/2008 4:58:44 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_835MHz-GSM

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: GSM; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.221 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.173 A/m; Power Drift = 0.024 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.187 M4</b>	Grid 2 <b>0.196 M4</b>	Grid 3 <b>0.190 M4</b>
Grid 4 <b>0.204 M4</b>	Grid 5 <b>0.221 M4</b>	Grid 6 <b>0.206 M4</b>
Grid 7 <b>0.181 M4</b>	Grid 8 <b>0.195 M4</b>	Grid 9 <b>0.187 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

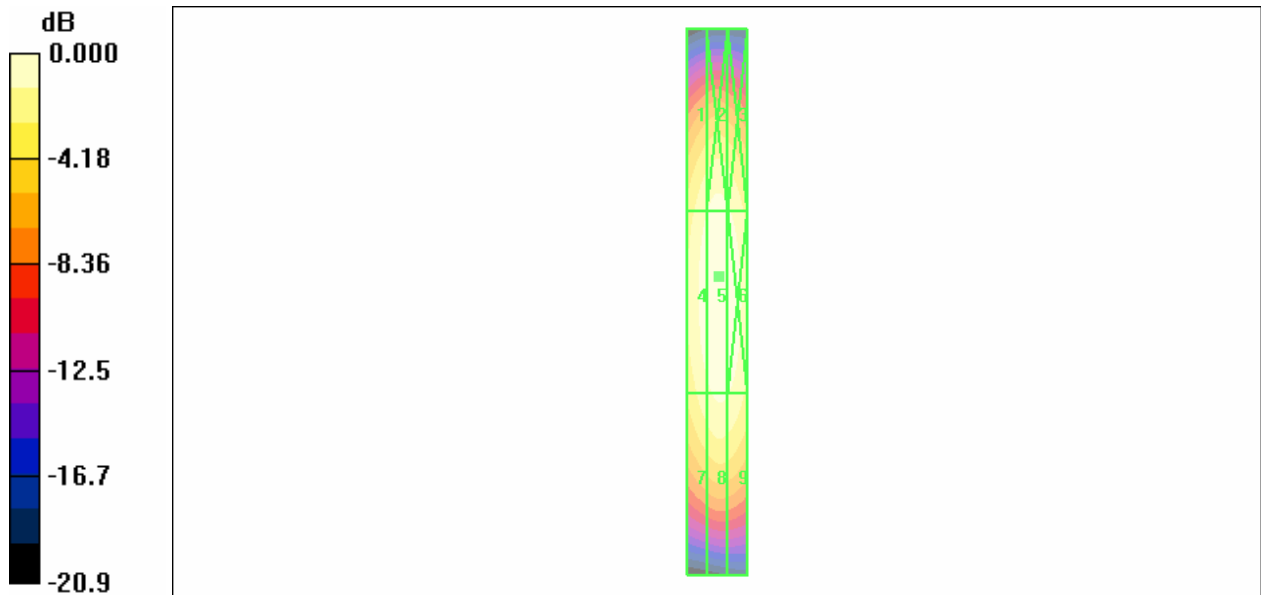
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.221 A/m

H Category: M4

Location: -0.5, -9, 365.6 mm



0 dB = 0.221A/m

Date/Time: 3/20/2008 5:26:21 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_835MHz-WCDMA

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: CDMA; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test

**(41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.451 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.462 A/m; Power Drift = 0.010 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.368 M4</b>	Grid 2 <b>0.389 M4</b>	Grid 3 <b>0.367 M4</b>
Grid 4 <b>0.415 M4</b>	Grid 5 <b>0.451 M4</b>	Grid 6 <b>0.417 M4</b>
Grid 7 <b>0.356 M4</b>	Grid 8 <b>0.381 M4</b>	Grid 9 <b>0.364 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

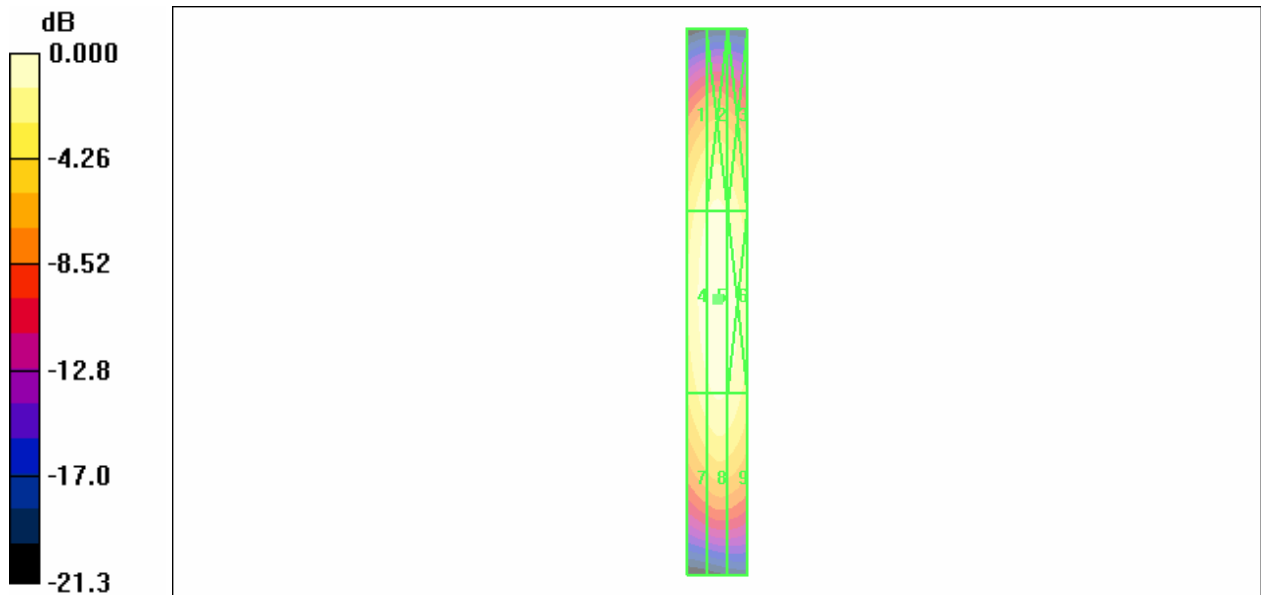
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.451 A/m

H Category: M3

Location: 0, -1, 365.6 mm



0 dB = 0.451A/m



Date/Time: 3/19/2008 2:53:06 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_1880MHz-CW

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.458 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.522 A/m; Power Drift = 0.034 dB

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.403 M2</b>	Grid 2 <b>0.431 M2</b>	Grid 3 <b>0.416 M2</b>
Grid 4 <b>0.435 M2</b>	Grid 5 <b>0.458 M2</b>	Grid 6 <b>0.447 M2</b>
Grid 7 <b>0.400 M2</b>	Grid 8 <b>0.420 M2</b>	Grid 9 <b>0.408 M2</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

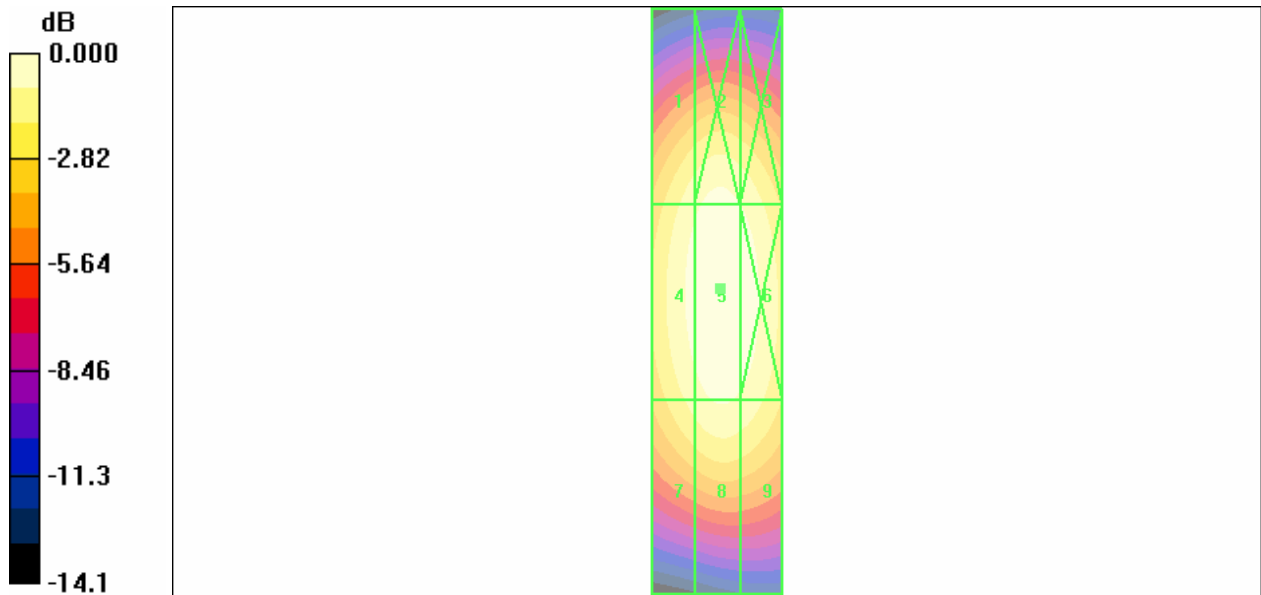
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.458 A/m

H Category: M2

Location: -0.5, -2, 365.6 mm



0 dB = 0.458A/m

Date/Time: 3/19/2008 3:18:02 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_1880MHz-AM

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: AM 80%; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.323 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.350 A/m; Power Drift = 0.011 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.274 M3</b>	Grid 2 <b>0.299 M3</b>	Grid 3 <b>0.288 M3</b>
Grid 4 <b>0.296 M3</b>	Grid 5 <b>0.323 M3</b>	Grid 6 <b>0.302 M3</b>
Grid 7 <b>0.257 M3</b>	Grid 8 <b>0.295 M3</b>	Grid 9 <b>0.275 M3</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

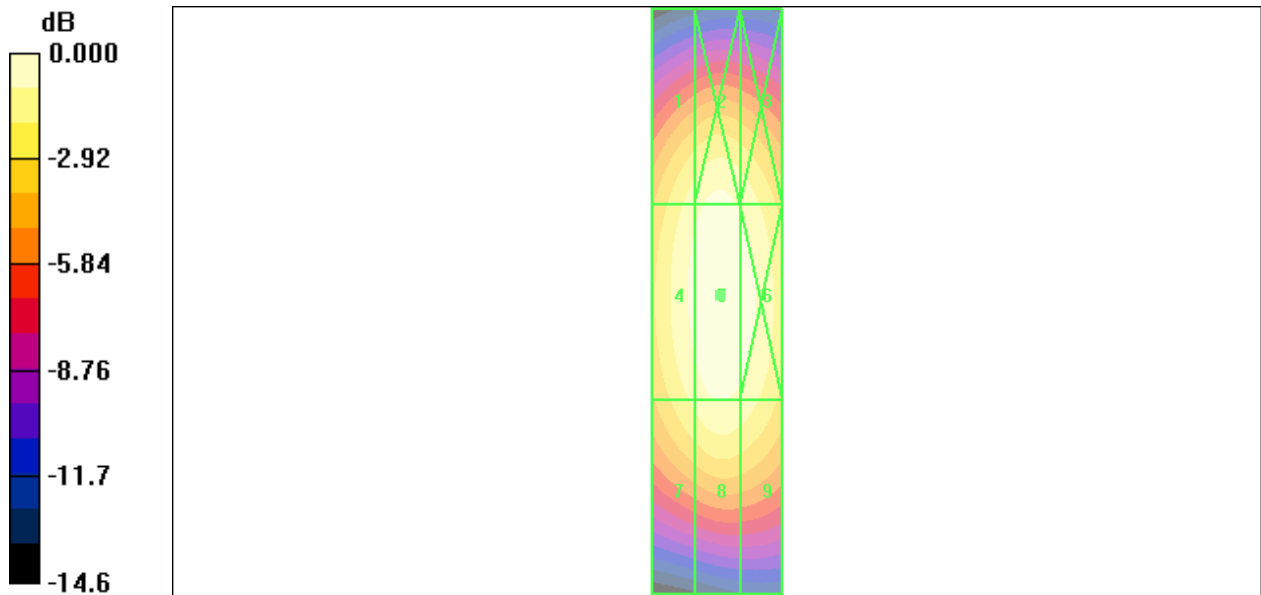
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.323 A/m

H Category: M3

Location: -0.5, -1, 365.6 mm



0 dB = 0.323A/m

Date/Time: 3/20/2008 5:49:58 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_1880MHz-GSM

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: GSM; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.219 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.177 A/m; Power Drift = 0.006 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.204 M4</b>	Grid 2 <b>0.216 M4</b>	Grid 3 <b>0.208 M4</b>
Grid 4 <b>0.213 M4</b>	Grid 5 <b>0.219 M4</b>	Grid 6 <b>0.215 M4</b>
Grid 7 <b>0.200 M4</b>	Grid 8 <b>0.211 M4</b>	Grid 9 <b>0.204 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

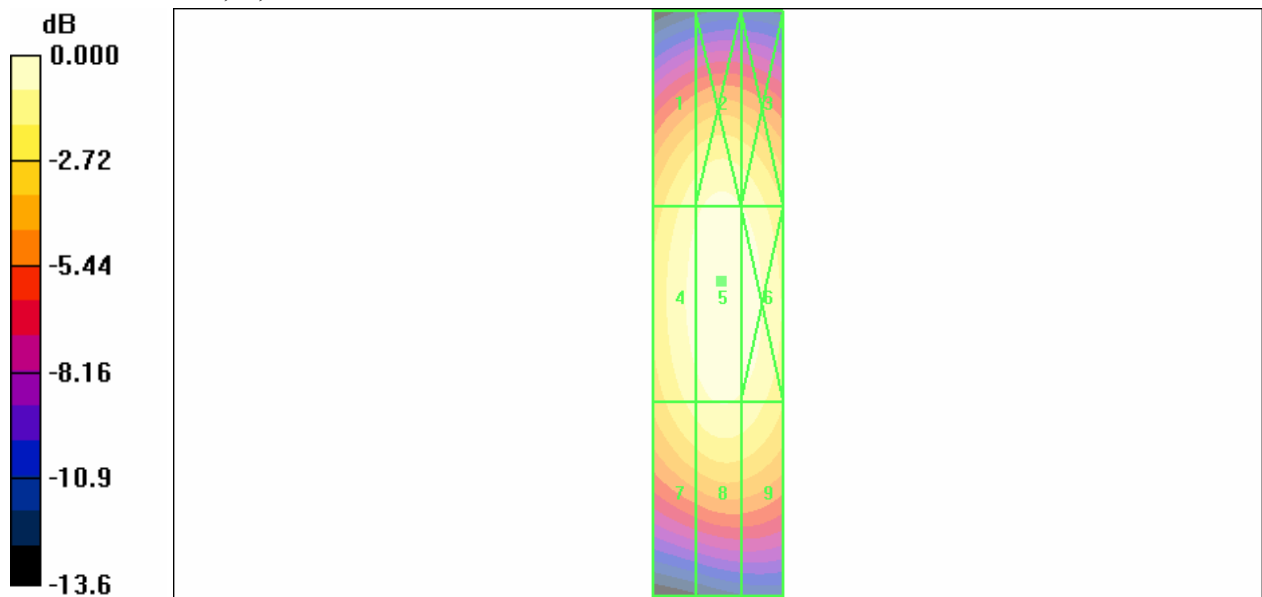
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.219 A/m

H Category: M4

Location: -0.5, -4, 365.6 mm



0 dB = 0.219A/m

Date/Time: 3/20/2008 6:18:22 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_1880MHz-WCDMA

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.446 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.482 A/m; Power Drift = 0.013 dB

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.403 M2</b>	Grid 2 <b>0.412 M2</b>	Grid 3 <b>0.375 M2</b>
Grid 4 <b>0.437 M2</b>	Grid 5 <b>0.446 M2</b>	Grid 6 <b>0.426 M2</b>
Grid 7 <b>0.392 M2</b>	Grid 8 <b>0.420 M2</b>	Grid 9 <b>0.388 M2</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

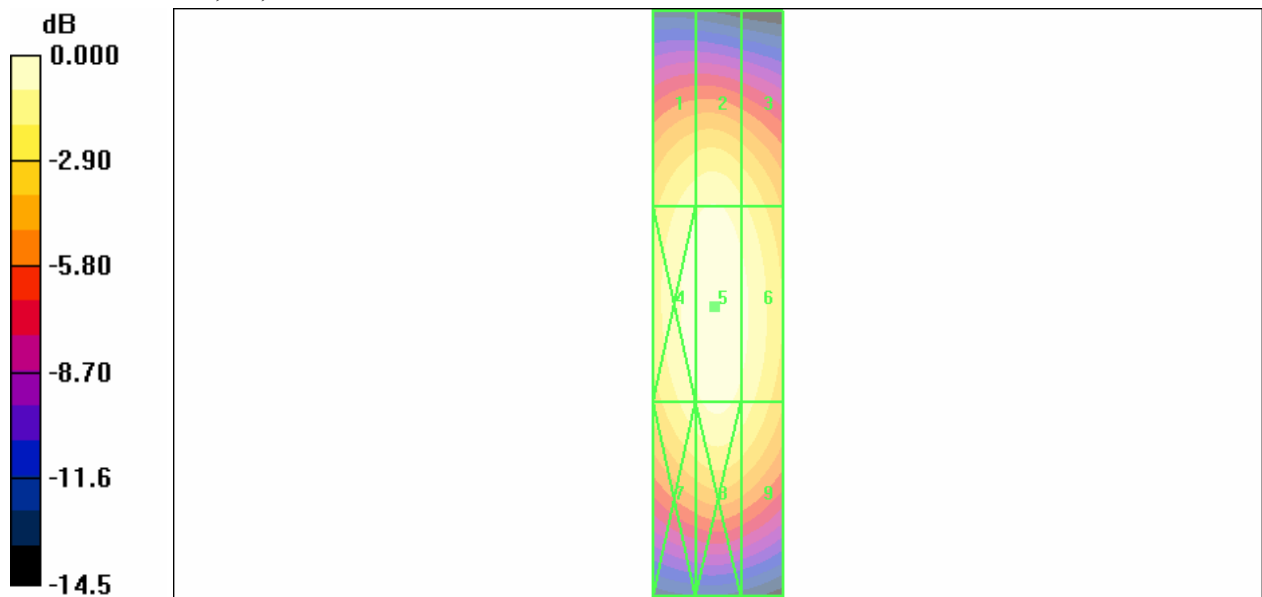
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.446 A/m

H Category: M2

Location: 0.5, 0.5, 365.6 mm



0 dB = 0.446A/m



Date/Time: 3/20/2008 5:36:09 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_GSM 835 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Low/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 125.3 V/m

Probe Modulation Factor = 2.20

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 56.5 V/m; Power Drift = 0.005 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>96.2 M4</b>	<b>123.7 M4</b>	<b>123.7 M4</b>
Grid 4	Grid 5	Grid 6
<b>95.6 M4</b>	<b>125.3 M4</b>	<b>124.3 M4</b>
Grid 7	Grid 8	Grid 9
<b>91.7 M4</b>	<b>121.7 M4</b>	<b>121.5 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

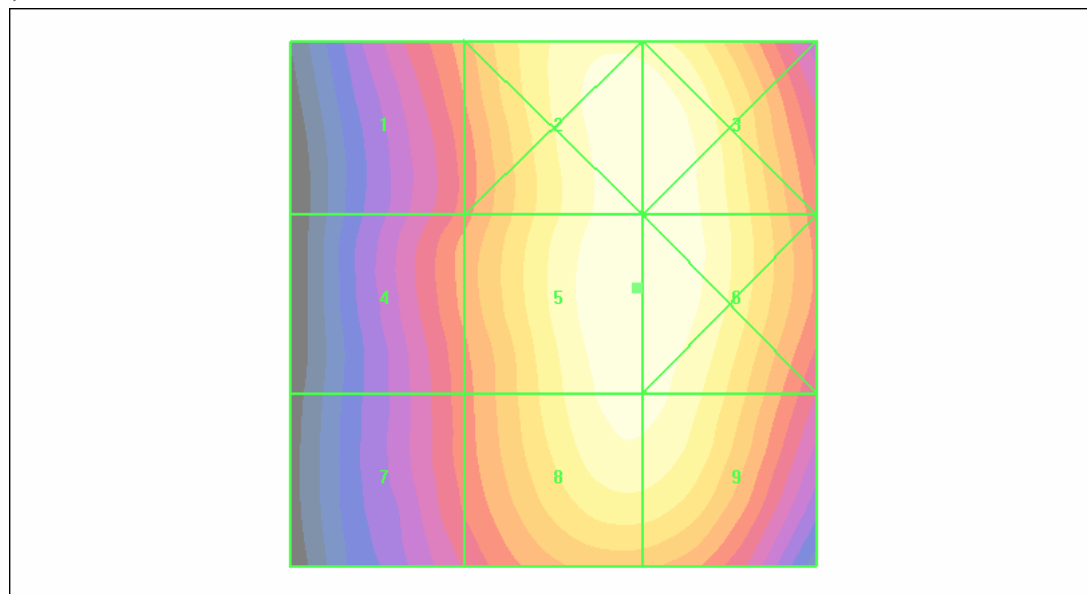
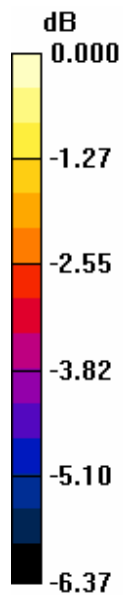
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 125.3 V/m

E Category: M4

Location: -8, -1.5, 365.8 mm



0 dB = 125.3V/m

Date/Time: 3/20/2008 5:27:08 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_GSM 835 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 132.0 V/m

Probe Modulation Factor = 2.20

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 59.2 V/m; Power Drift = 0.046 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak E-field in V/m

Grid 1 <b>101.1 M4</b>	Grid 2 <b>129.8 M4</b>	Grid 3 <b>129.8 M4</b>
Grid 4 <b>100.4 M4</b>	Grid 5 <b>132.0 M4</b>	Grid 6 <b>131.0 M4</b>
Grid 7 <b>96.8 M4</b>	Grid 8 <b>129.5 M4</b>	Grid 9 <b>129.2 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

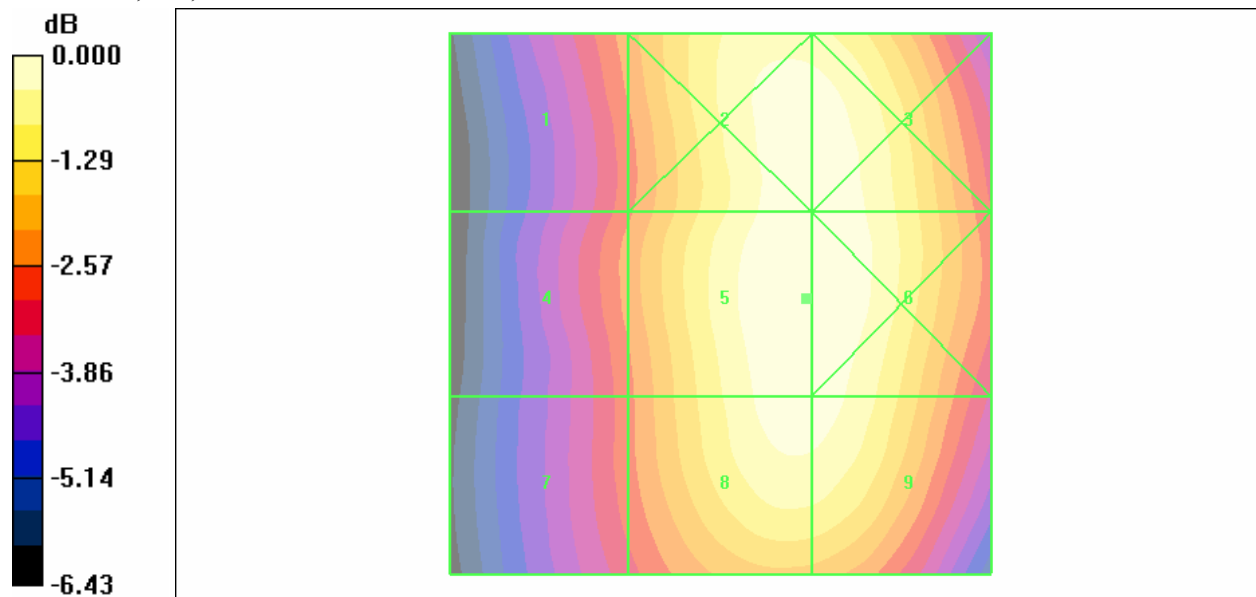
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 132.0 V/m

E Category: M4

Location: -8, -0.5, 365.8 mm



Date/Time: 3/20/2008 5:45:00 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_GSM 835 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -High/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 121.7 V/m

Probe Modulation Factor = 2.20

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 54.9 V/m; Power Drift = 0.003 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>94.3 M4</b>	<b>118.6 M4</b>	<b>118.0 M4</b>
Grid 4	Grid 5	Grid 6
<b>93.9 M4</b>	<b>121.7 M4</b>	<b>120.4 M4</b>
Grid 7	Grid 8	Grid 9
<b>91.3 M4</b>	<b>119.5 M4</b>	<b>117.9 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

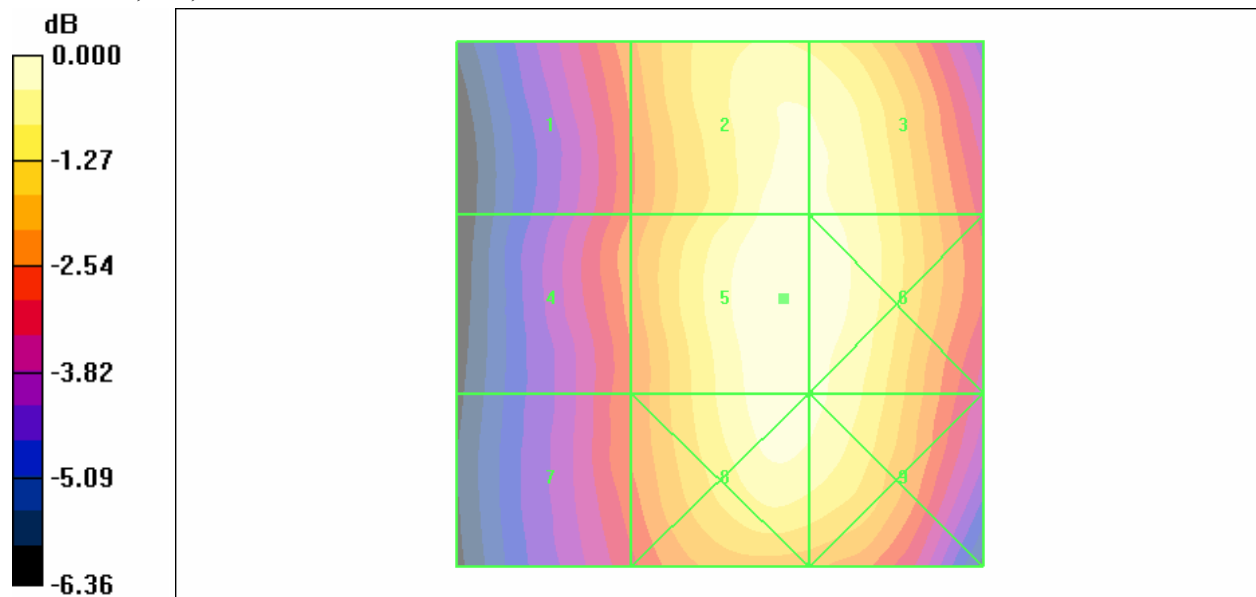
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 121.7 V/m

E Category: M4

Location: -6, -0.5, 365.8 mm



0 dB = 121.7V/m

Date/Time: 3/20/2008 6:36:25 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_PCS1900 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Low/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 26.0 V/m

Probe Modulation Factor = 2.18

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 11.30 V/m; Power Drift = 0.075 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak E-field in V/m

Grid 1 <b>27.5 M4</b>	Grid 2 <b>31.6 M4</b>	Grid 3 <b>27.9 M4</b>
Grid 4 <b>19.2 M4</b>	Grid 5 <b>26.0 M4</b>	Grid 6 <b>25.1 M4</b>
Grid 7 <b>25.7 M4</b>	Grid 8 <b>24.1 M4</b>	Grid 9 <b>20.9 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

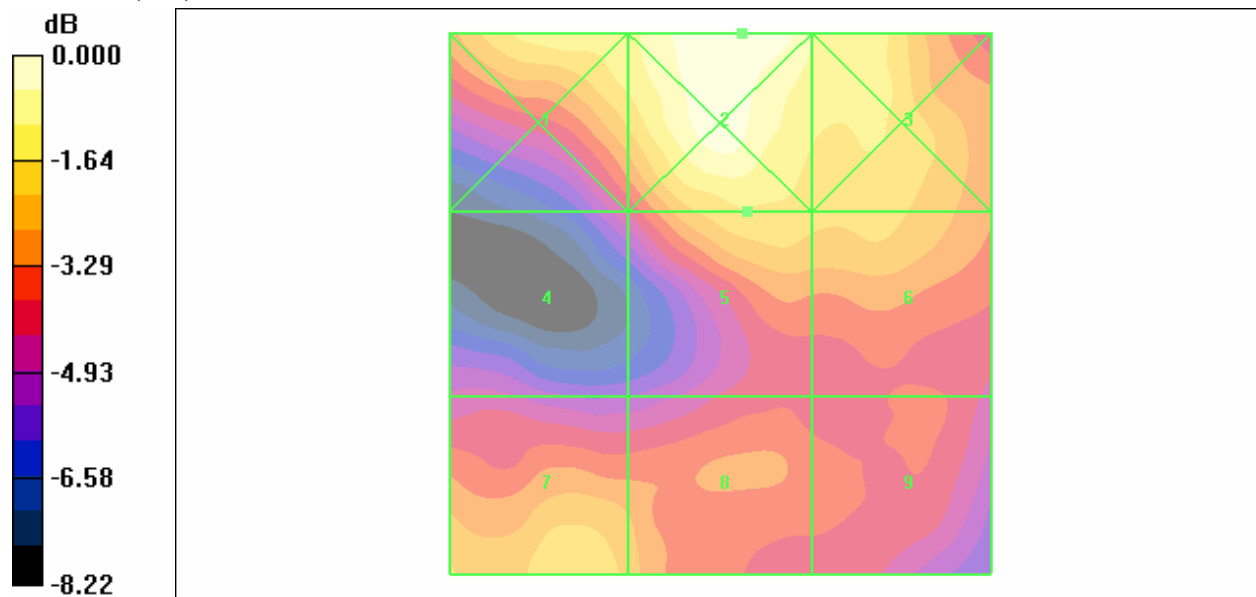
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 31.6 V/m

E Category: M4

Location: -2, -25, 365.8 mm



0 dB = 31.6V/m



Date/Time: 3/20/2008 6:03:32 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_PCS1900 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 30.5 V/m

Probe Modulation Factor = 2.18

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 13.2 V/m; Power Drift = 0.013 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak E-field in V/m

Grid 1 <b>31.4 M4</b>	Grid 2 <b>33.0 M4</b>	Grid 3 <b>33.1 M4</b>
Grid 4 <b>21.0 M4</b>	Grid 5 <b>30.5 M4</b>	Grid 6 <b>30.5 M4</b>
Grid 7 <b>27.4 M4</b>	Grid 8 <b>25.1 M4</b>	Grid 9 <b>21.9 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

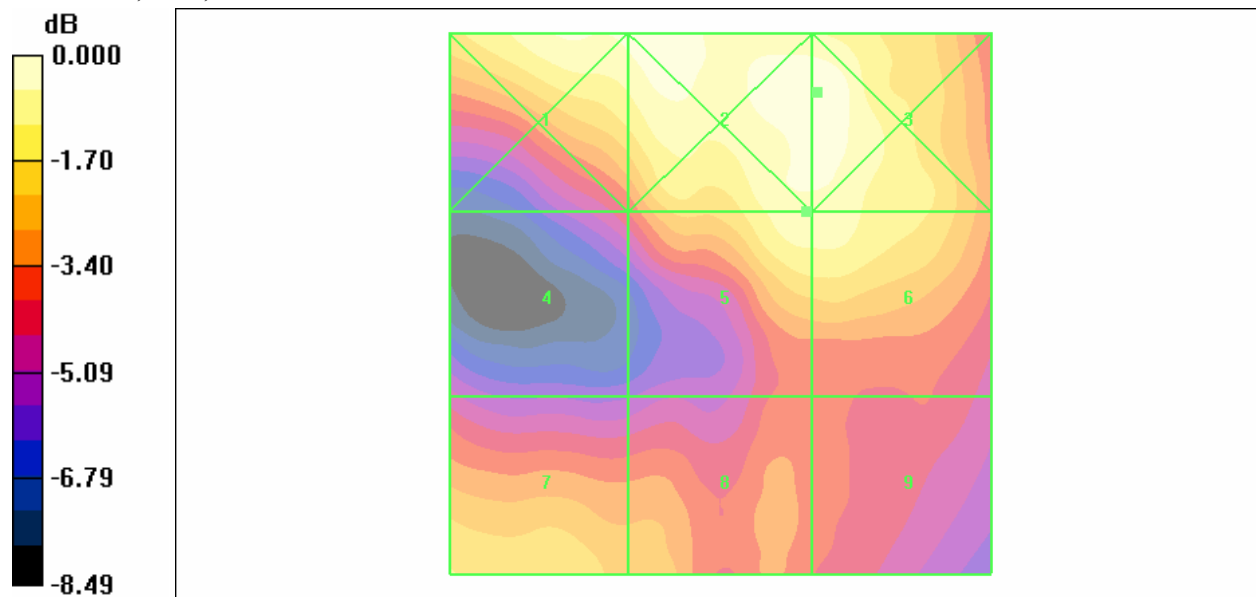
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 33.1 V/m

E Category: M4

Location: -9, -19.5, 365.8 mm



0 dB = 33.1V/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_PCS1900 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -High/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 33.0 V/m

Probe Modulation Factor = 2.18

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 14.8 V/m; Power Drift = 0.009 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak E-field in V/m

Grid 1 <b>35.5 M4</b>	Grid 2 <b>37.2 M4</b>	Grid 3 <b>35.7 M4</b>
Grid 4 <b>23.4 M4</b>	Grid 5 <b>33.0 M4</b>	Grid 6 <b>32.9 M4</b>
Grid 7 <b>29.4 M4</b>	Grid 8 <b>25.8 M4</b>	Grid 9 <b>24.3 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

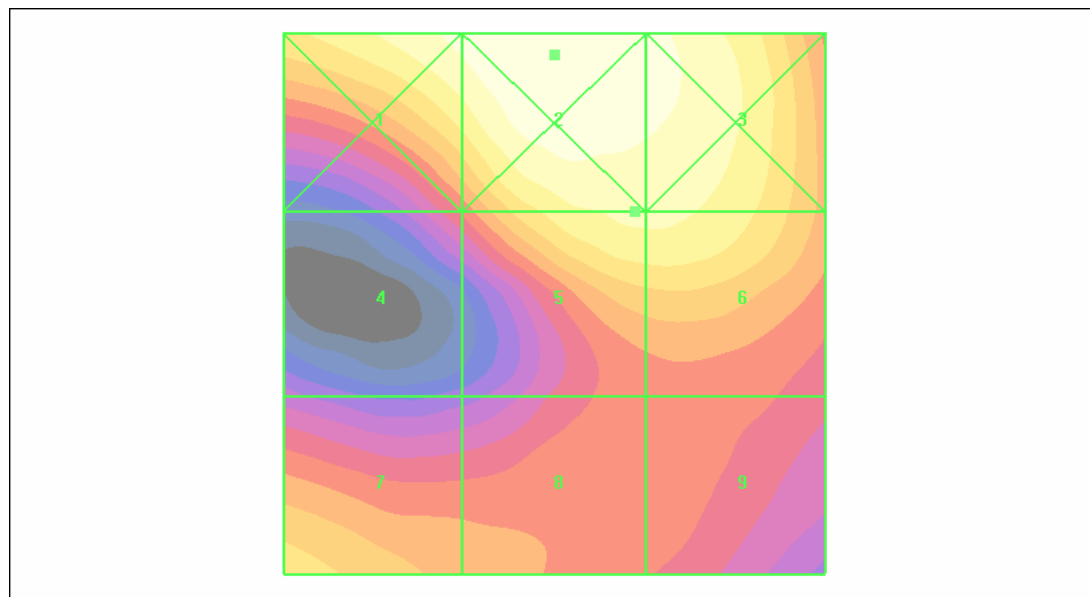
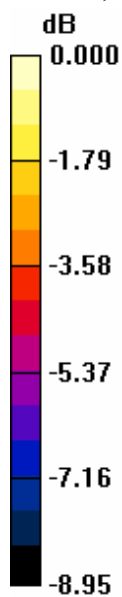
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 37.2 V/m

E Category: M4

Location: 0, -23, 365.8 mm



0 dB = 37.2V/m

Date/Time: 3/20/2008 5:04:11 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_WCDMA Band v POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Low/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 78.4 V/m

Probe Modulation Factor = 1.07

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 72.2 V/m; Power Drift = 0.006 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 <b>62.4 M4</b>	Grid 2 <b>78.6 M4</b>	Grid 3 <b>78.5 M4</b>
Grid 4 <b>60.2 M4</b>	Grid 5 <b>78.4 M4</b>	Grid 6 <b>78.3 M4</b>
Grid 7 <b>57.4 M4</b>	Grid 8 <b>75.6 M4</b>	Grid 9 <b>75.4 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

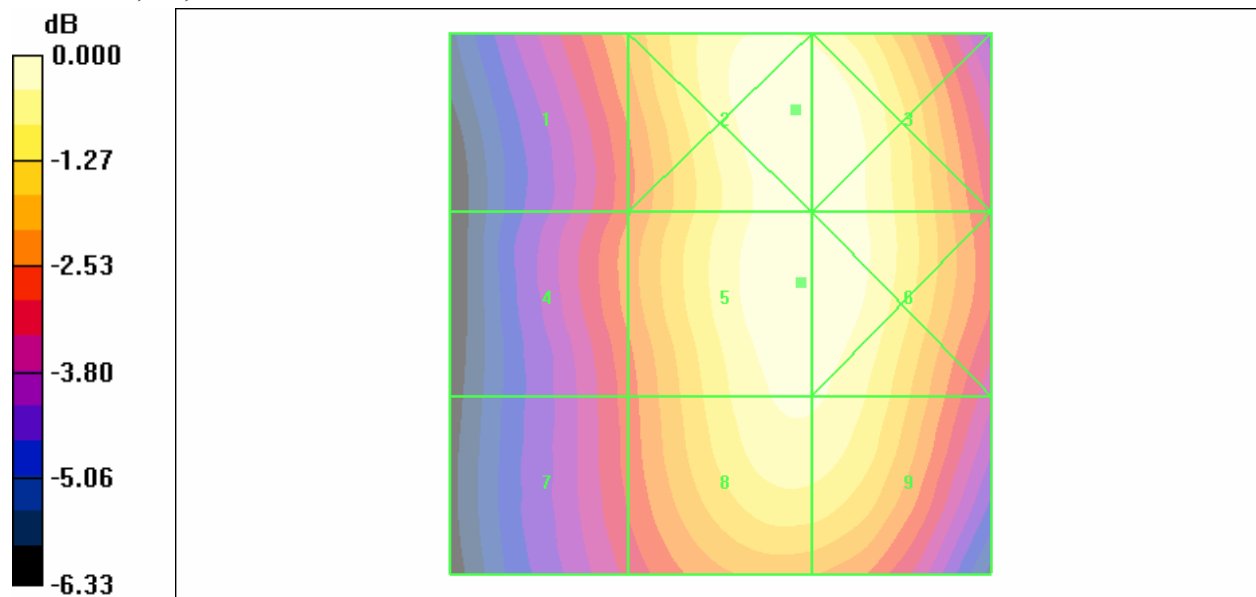
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 78.6 V/m

E Category: M4

Location: -7, -18, 365.8 mm



0 dB = 78.6V/m

Date/Time: 3/20/2008 4:56:37 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_WCDMA Band v POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 99.2 V/m

Probe Modulation Factor = 1.07

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 92.0 V/m; Power Drift = 0.000 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>77.9 M4</b>	<b>98.7 M4</b>	<b>98.5 M4</b>
Grid 4	Grid 5	Grid 6
<b>76.8 M4</b>	<b>99.2 M4</b>	<b>99.0 M4</b>
Grid 7	Grid 8	Grid 9
<b>72.8 M4</b>	<b>96.0 M4</b>	<b>95.7 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

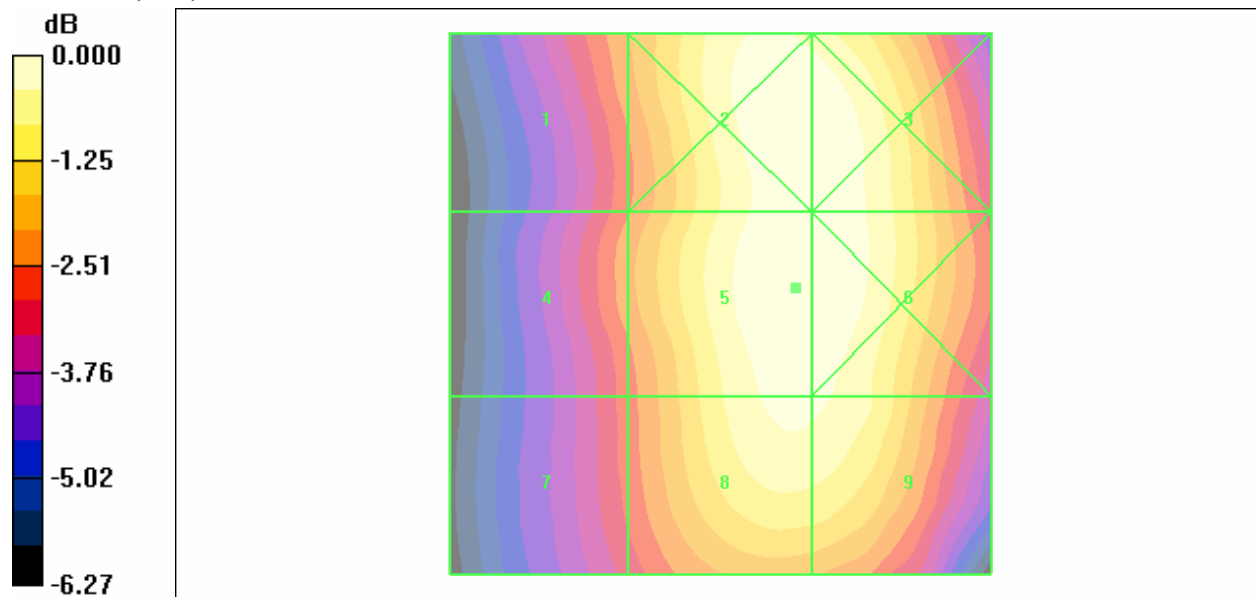
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 99.2 V/m

E Category: M4

Location: -7, -1.5, 365.8 mm



0 dB = 99.2V/m



Date/Time: 3/20/2008 5:13:39 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_WCDMA Band v POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -High/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 83.7 V/m

Probe Modulation Factor = 1.07

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 77.6 V/m; Power Drift = 0.009 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
<b>66.4 M4</b>	<b>82.7 M4</b>	<b>82.6 M4</b>
Grid 4	Grid 5	Grid 6
<b>64.9 M4</b>	<b>83.7 M4</b>	<b>83.5 M4</b>
Grid 7	Grid 8	Grid 9
<b>62.5 M4</b>	<b>81.4 M4</b>	<b>81.1 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

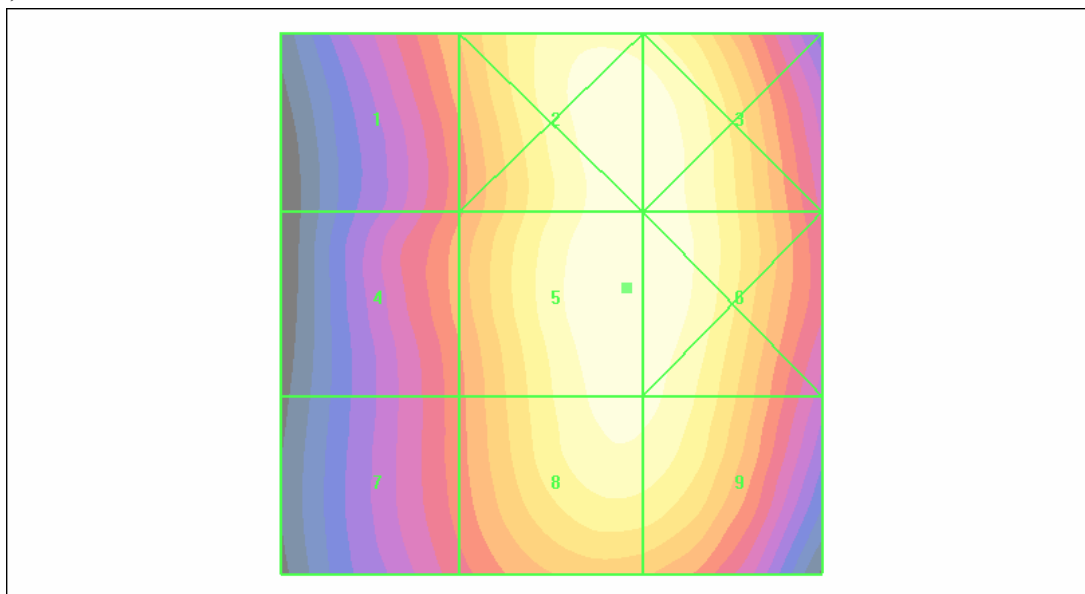
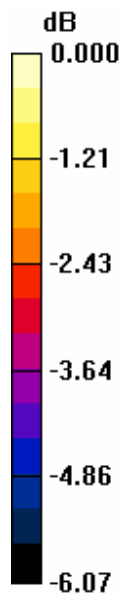
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 83.7 V/m

E Category: M4

Location: -7, -1.5, 365.8 mm



0 dB = 83.7V/m

Date/Time: 3/20/2008 4:25:09 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_WCDMA Band II POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Low/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 57.0 V/m

Probe Modulation Factor = 1.08

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 52.2 V/m; Power Drift = 0.060 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 <b>62.5 M4</b>	Grid 2 <b>65.2 M3</b>	Grid 3 <b>61.8 M4</b>
Grid 4 <b>41.9 M4</b>	Grid 5 <b>55.7 M4</b>	Grid 6 <b>55.4 M4</b>
Grid 7 <b>57.0 M4</b>	Grid 8 <b>52.5 M4</b>	Grid 9 <b>48.1 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

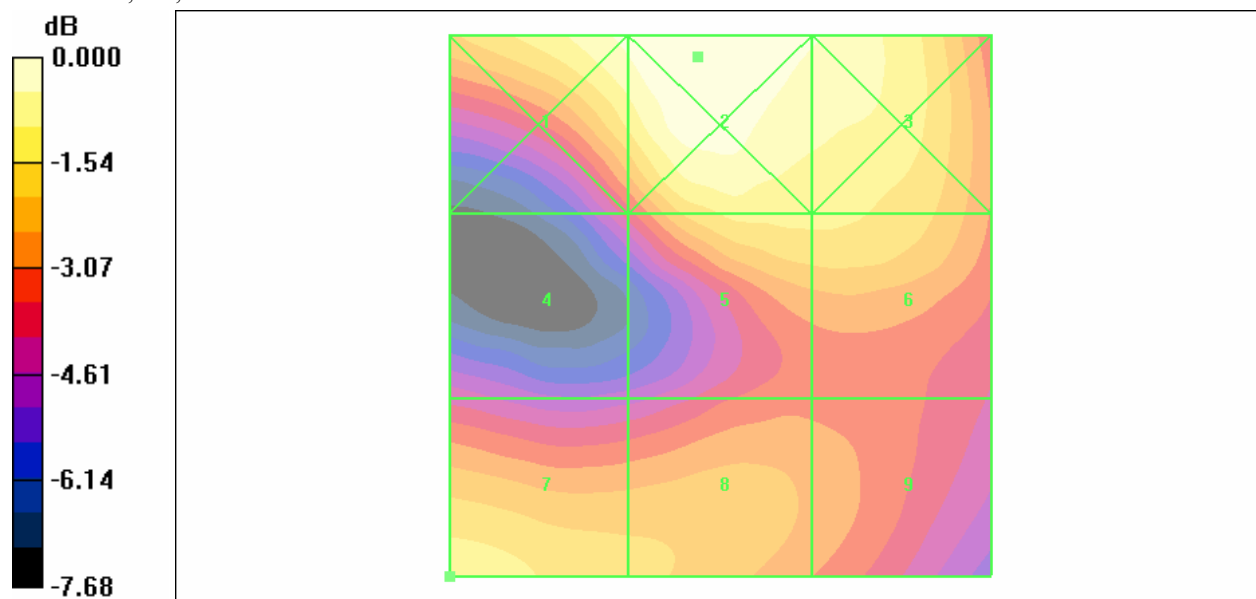
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 65.2 V/m

E Category: M3

Location: 2, -23, 365.8 mm



0 dB = 65.2V/m

Date/Time: 3/20/2008 4:16:08 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_WCDMA Band II POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 59.1 V/m

Probe Modulation Factor = 1.08

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 54.6 V/m; Power Drift = 0.060 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 <b>64.9 M3</b>	Grid 2 <b>68.4 M3</b>	Grid 3 <b>65.2 M3</b>
Grid 4 <b>42.6 M4</b>	Grid 5 <b>59.1 M4</b>	Grid 6 <b>59.1 M4</b>
Grid 7 <b>54.5 M4</b>	Grid 8 <b>49.3 M4</b>	Grid 9 <b>44.9 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

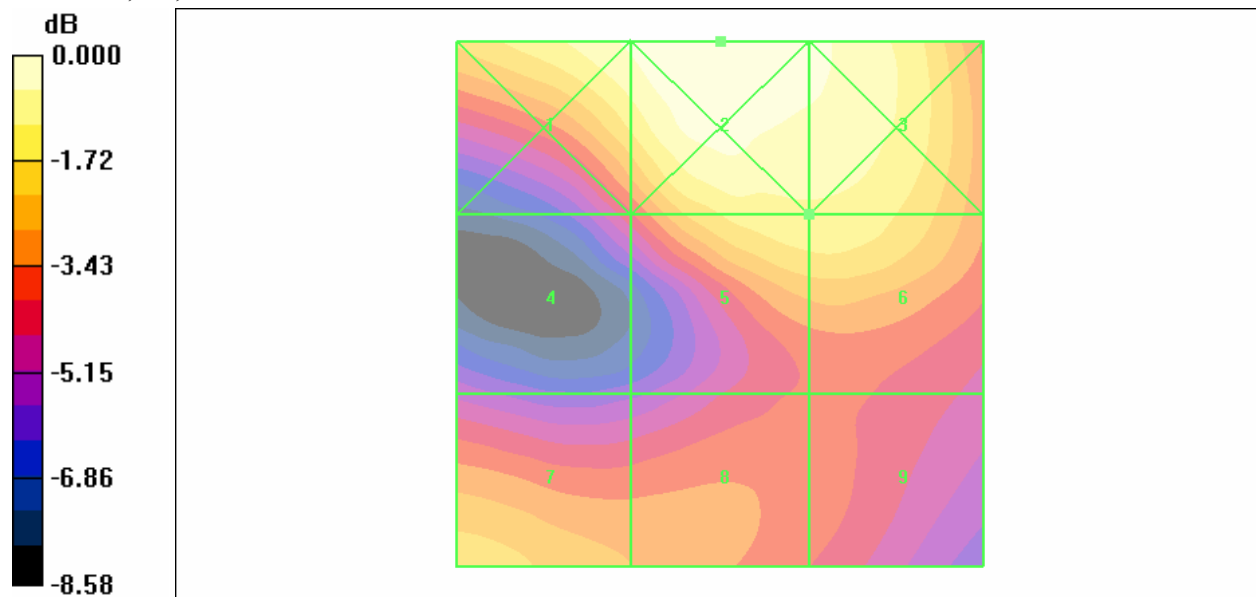
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 68.4 V/m

E Category: M3

Location: 0, -25, 365.8 mm



0 dB = 68.4V/m

Date/Time: 3/20/2008 4:33:34 PM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_SCAN\_WCDMA Band II POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### E Scan - ER probe tip 15mm above Device -High/Hearing Aid

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 47.9 V/m

Probe Modulation Factor = 1.08

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 44.4 V/m; Power Drift = 0.074 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 <b>51.0 M4</b>	Grid 2 <b>53.7 M4</b>	Grid 3 <b>52.7 M4</b>
Grid 4 <b>36.1 M4</b>	Grid 5 <b>47.9 M4</b>	Grid 6 <b>47.9 M4</b>
Grid 7 <b>42.7 M4</b>	Grid 8 <b>38.8 M4</b>	Grid 9 <b>37.0 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

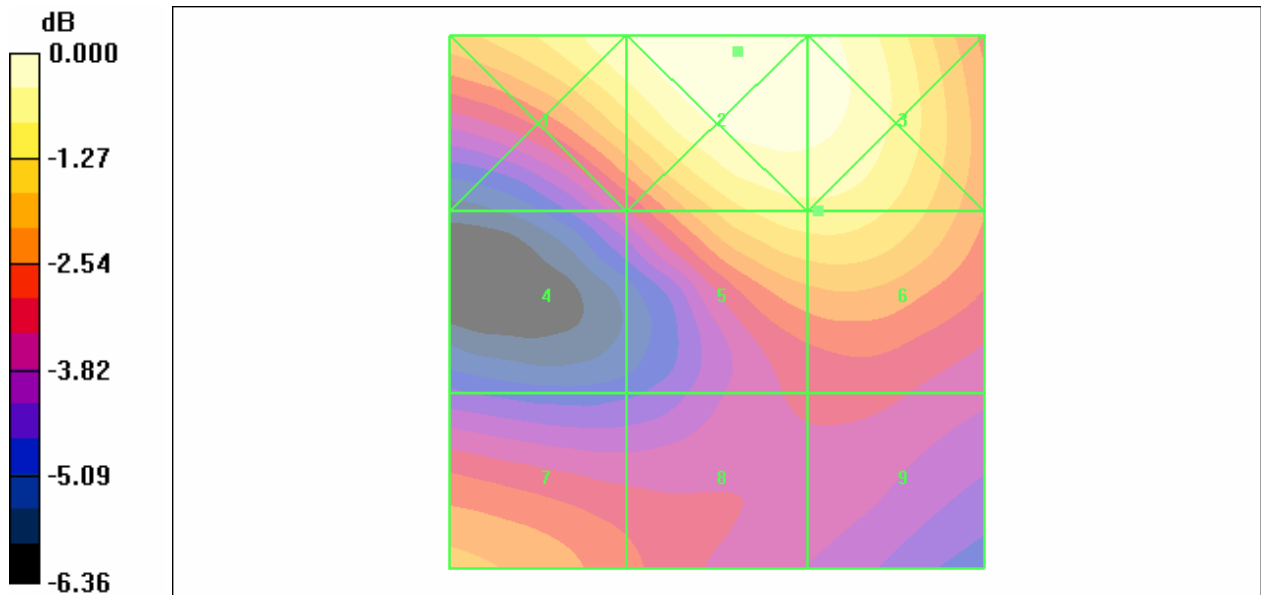
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 53.7 V/m

E Category: M4

Location: -2, -23.5, 365.8 mm



0 dB = 53.7V/m



Date/Time: 3/20/2008 8:16:36 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_GSM 835 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -Low/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.374 A/m

Probe Modulation Factor = 2.10

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.168 A/m; Power Drift = 0.040 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak H-field in A/m

Grid 1 <b>0.453 M3</b>	Grid 2 <b>0.451 M3</b>	Grid 3 <b>0.324 M4</b>
Grid 4 <b>0.374 M4</b>	Grid 5 <b>0.374 M4</b>	Grid 6 <b>0.304 M4</b>
Grid 7 <b>0.280 M4</b>	Grid 8 <b>0.260 M4</b>	Grid 9 <b>0.229 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

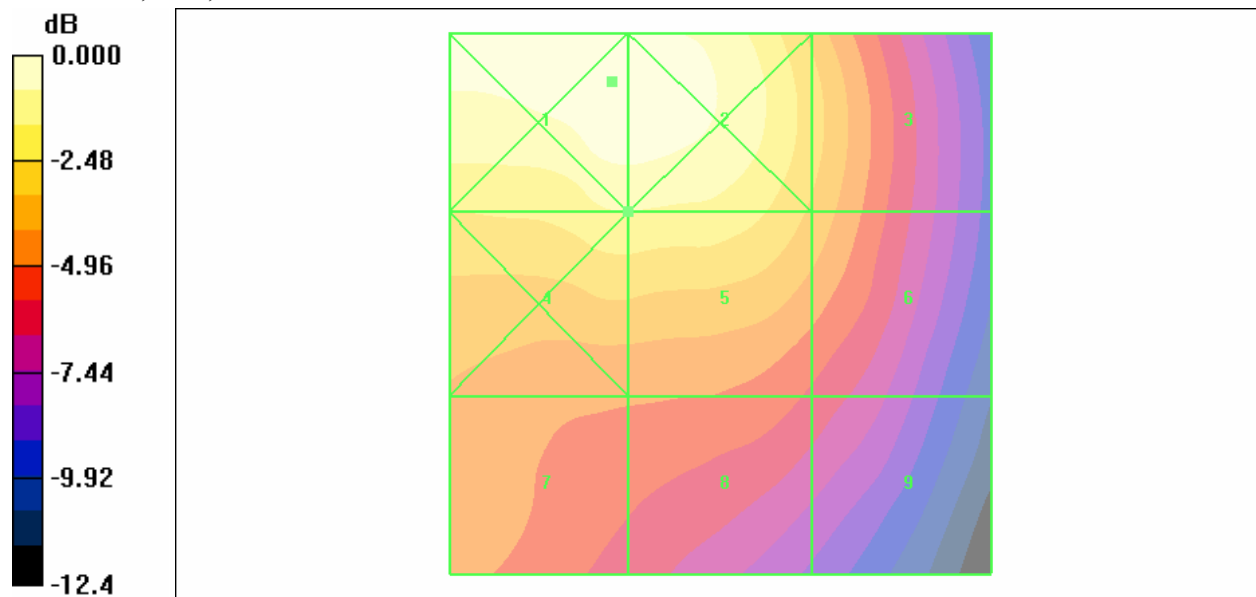
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.453 A/m

H Category: M3

Location: 10, -20.5, 365.6 mm



0 dB = 0.453A/m

Date/Time: 3/20/2008 8:08:35 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_GSM 835 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.389 A/m

Probe Modulation Factor = 2.10

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.176 A/m; Power Drift = 0.008 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak H-field in A/m

Grid 1 <b>0.460 M3</b>	Grid 2 <b>0.459 M3</b>	Grid 3 <b>0.337 M4</b>
Grid 4 <b>0.385 M4</b>	Grid 5 <b>0.389 M4</b>	Grid 6 <b>0.318 M4</b>
Grid 7 <b>0.308 M4</b>	Grid 8 <b>0.278 M4</b>	Grid 9 <b>0.242 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

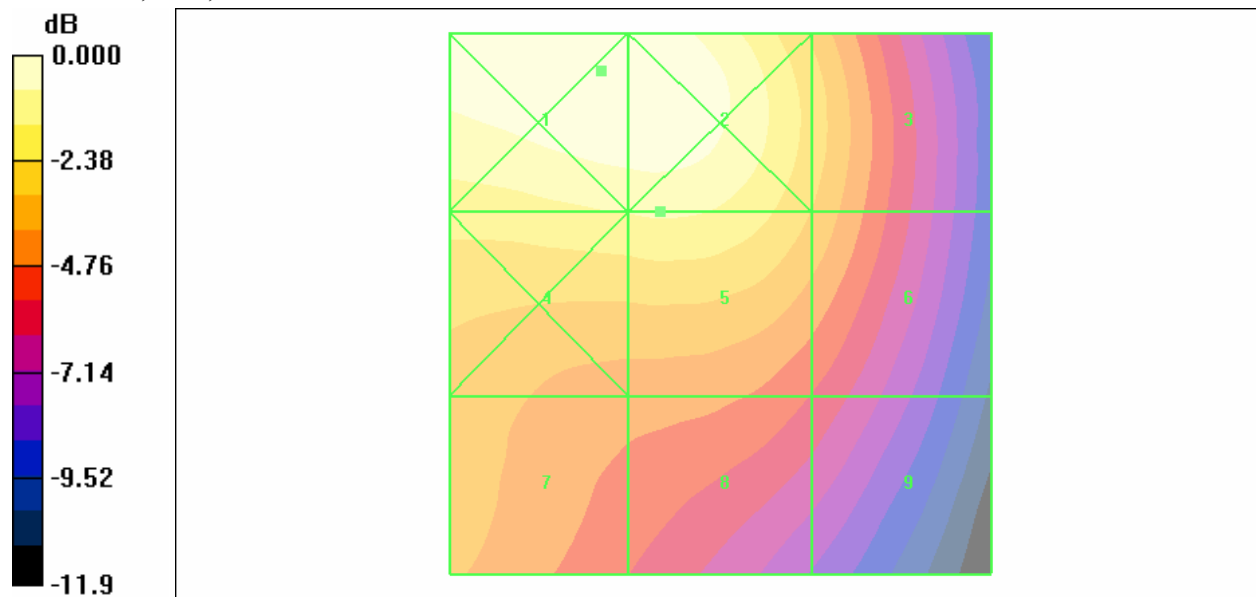
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.460 A/m

H Category: M3

Location: 11, -21.5, 365.6 mm



0 dB = 0.460A/m

Date/Time: 3/20/2008 8:24:22 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_GSM 835 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -High/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.336 A/m

Probe Modulation Factor = 2.10

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.140 A/m; Power Drift = 0.045 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak H-field in A/m

Grid 1 <b>0.390 M4</b>	Grid 2 <b>0.390 M4</b>	Grid 3 <b>0.280 M4</b>
Grid 4 <b>0.336 M4</b>	Grid 5 <b>0.336 M4</b>	Grid 6 <b>0.267 M4</b>
Grid 7 <b>0.261 M4</b>	Grid 8 <b>0.246 M4</b>	Grid 9 <b>0.211 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

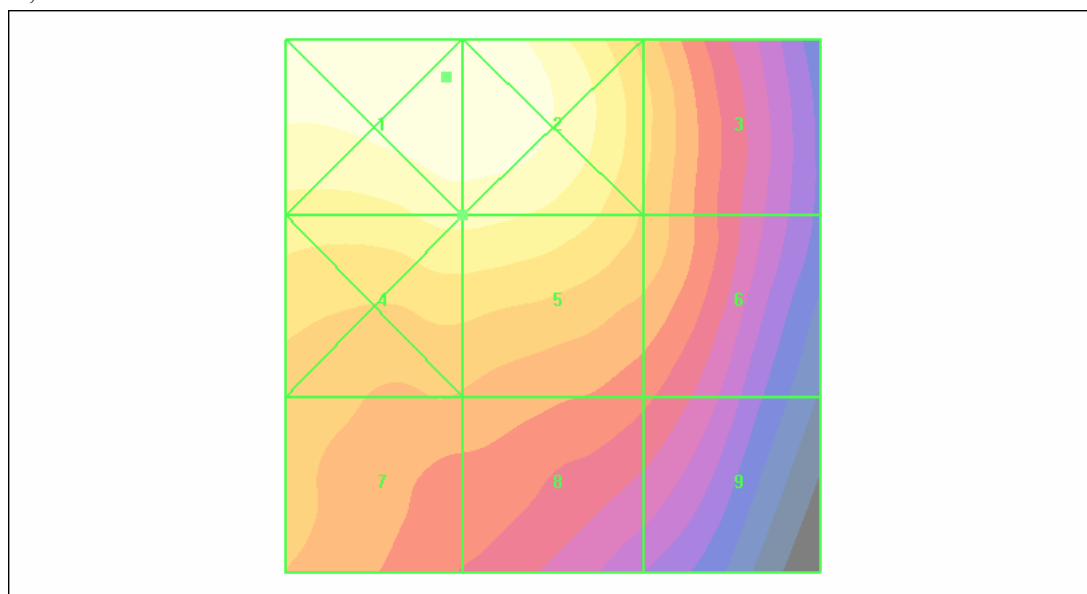
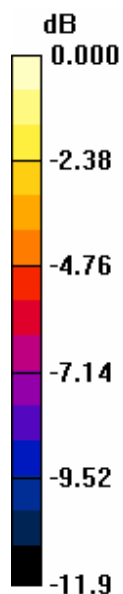
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.390 A/m

H Category: M4

Location: 10, -21.5, 365.6 mm



0 dB = 0.390A/m

Date/Time: 3/20/2008 8:44:49 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_PCS1900 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -Low/Hearing Aid Compatibility

**Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.111 A/m

Probe Modulation Factor = 2.09

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.050 A/m; Power Drift = 0.009 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak H-field in A/m

Grid 1 <b>0.093 M4</b>	Grid 2 <b>0.108 M4</b>	Grid 3 <b>0.103 M4</b>
Grid 4 <b>0.095 M4</b>	Grid 5 <b>0.111 M4</b>	Grid 6 <b>0.106 M4</b>
Grid 7 <b>0.085 M4</b>	Grid 8 <b>0.102 M4</b>	Grid 9 <b>0.097 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

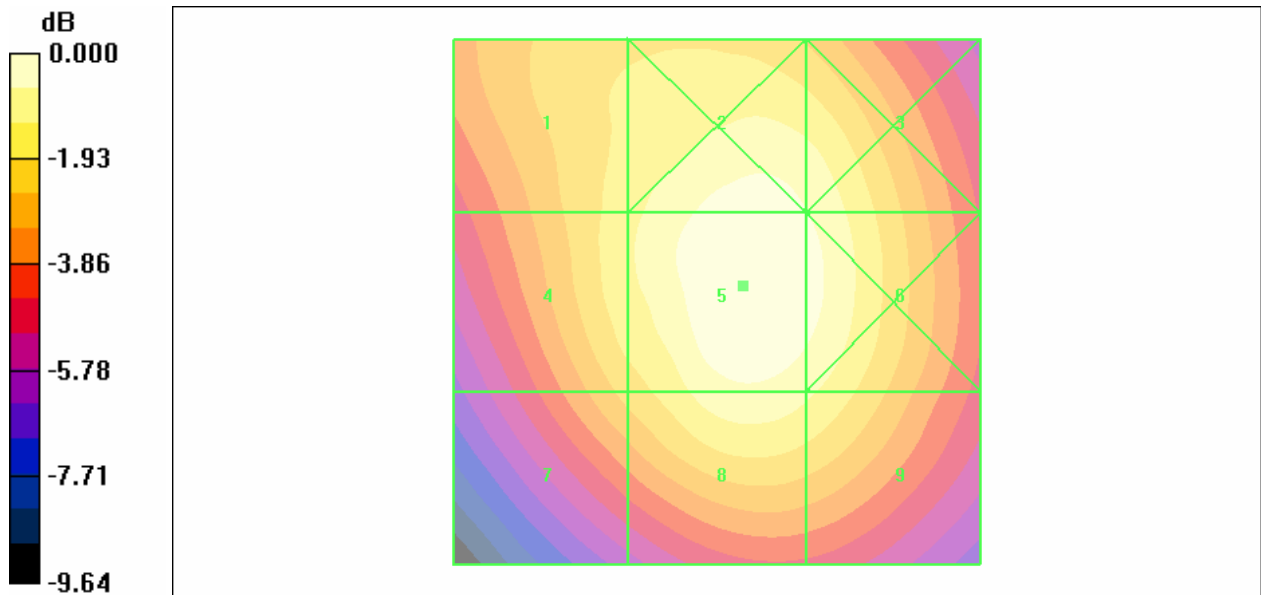
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.111 A/m

H Category: M4

Location: -2.5, -1.5, 365.6 mm



0 dB = 0.111A/m



Date/Time: 3/20/2008 8:36:52 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_PCS1900 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -Middle/Hearing Aid

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.121 A/m

Probe Modulation Factor = 2.09

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.052 A/m; Power Drift = 0.042 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak H-field in A/m

Grid 1 <b>0.102 M4</b>	Grid 2 <b>0.117 M4</b>	Grid 3 <b>0.113 M4</b>
Grid 4 <b>0.103 M4</b>	Grid 5 <b>0.121 M4</b>	Grid 6 <b>0.117 M4</b>
Grid 7 <b>0.095 M4</b>	Grid 8 <b>0.114 M4</b>	Grid 9 <b>0.110 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

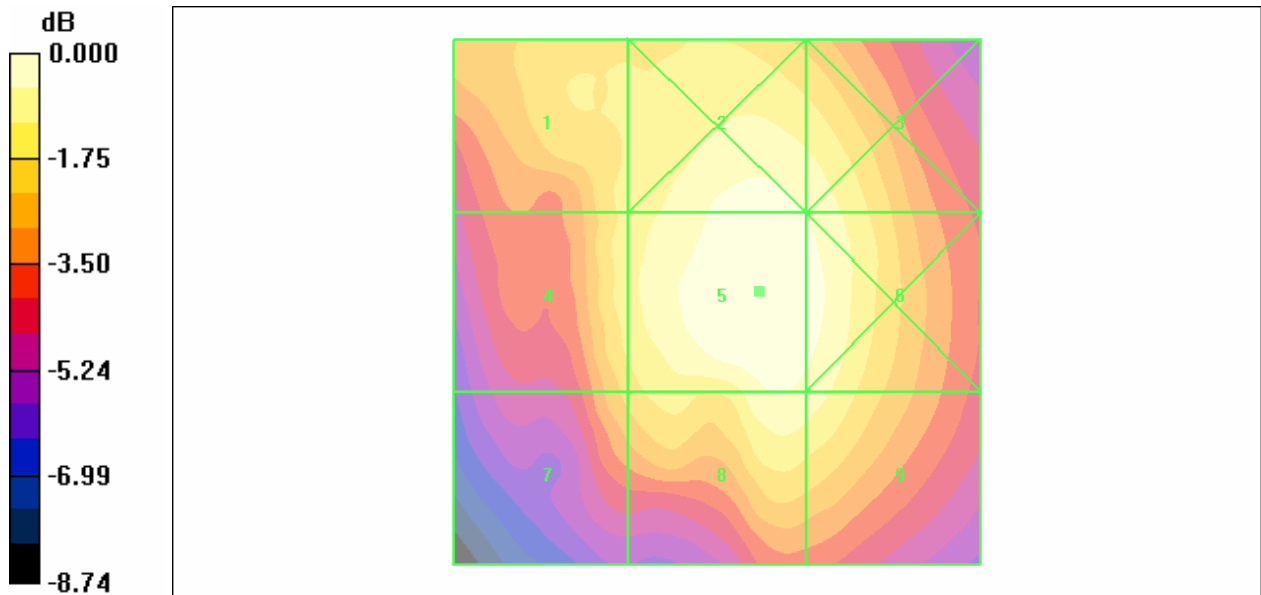
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.121 A/m

H Category: M4

Location: -4, -1, 365.6 mm



0 dB = 0.121A/m

Date/Time: 3/20/2008 8:52:22 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_PCS1900 POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -High/Hearing Aid

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.127 A/m

Probe Modulation Factor = 2.09

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.055 A/m; Power Drift = 0.004 dB

**Hearing Aid Near-Field Category: M4 (AWF -5 dB)**

Peak H-field in A/m

Grid 1 <b>0.110 M4</b>	Grid 2 <b>0.122 M4</b>	Grid 3 <b>0.117 M4</b>
Grid 4 <b>0.111 M4</b>	Grid 5 <b>0.127 M4</b>	Grid 6 <b>0.121 M4</b>
Grid 7 <b>0.102 M4</b>	Grid 8 <b>0.119 M4</b>	Grid 9 <b>0.114 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

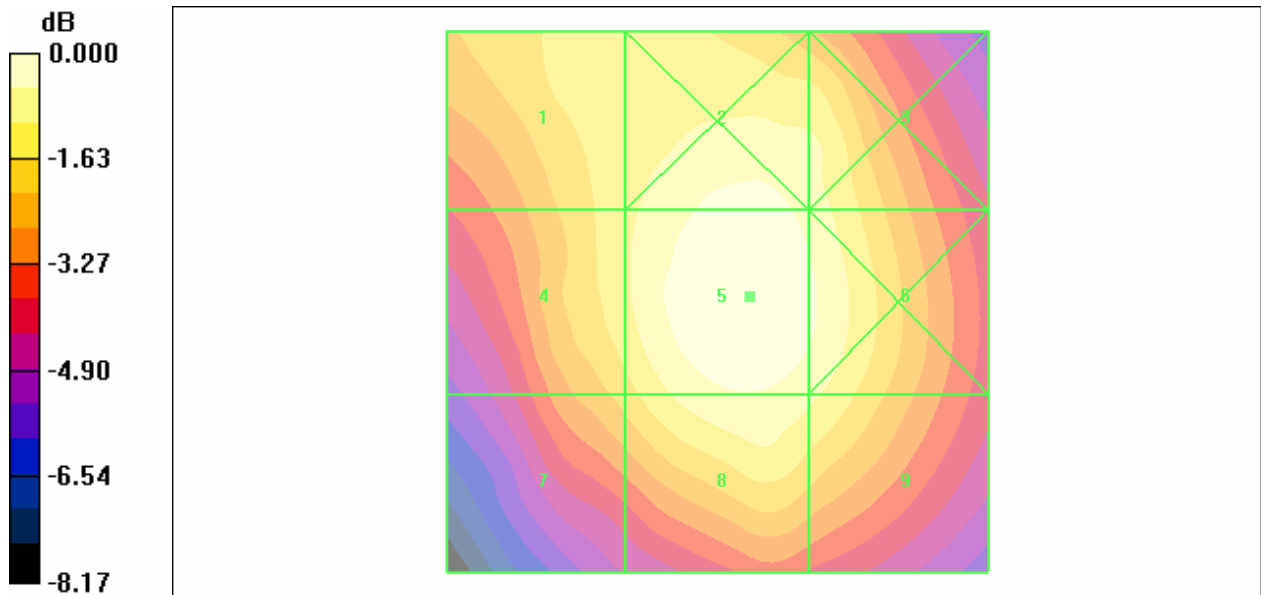
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.127 A/m

H Category: M4

Location: -3, -0.5, 365.6 mm



Date/Time: 3/20/2008 9:13:43 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_WCDMA Band V POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -Low/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.212 A/m

Probe Modulation Factor = 1.03

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.195 A/m; Power Drift = 0.017 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.248 M4</b>	Grid 2 <b>0.248 M4</b>	Grid 3 <b>0.182 M4</b>
Grid 4 <b>0.208 M4</b>	Grid 5 <b>0.212 M4</b>	Grid 6 <b>0.174 M4</b>
Grid 7 <b>0.159 M4</b>	Grid 8 <b>0.151 M4</b>	Grid 9 <b>0.132 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

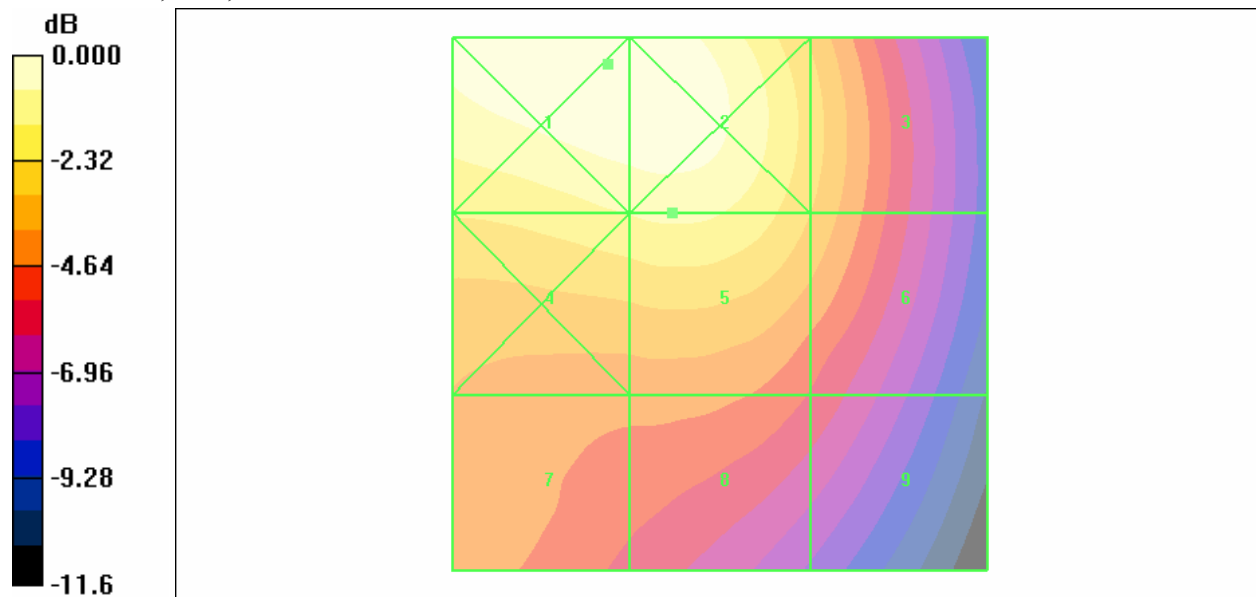
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.248 A/m

H Category: M4

Location: 10.5, -22.5, 365.6 mm



0 dB = 0.248A/m

Date/Time: 3/20/2008 9:05:06 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_WCDMA Band V POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.256 A/m

Probe Modulation Factor = 1.03

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.236 A/m; Power Drift = 0.010 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.296 M4</b>	Grid 2 <b>0.295 M4</b>	Grid 3 <b>0.222 M4</b>
Grid 4 <b>0.251 M4</b>	Grid 5 <b>0.256 M4</b>	Grid 6 <b>0.212 M4</b>
Grid 7 <b>0.197 M4</b>	Grid 8 <b>0.186 M4</b>	Grid 9 <b>0.163 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

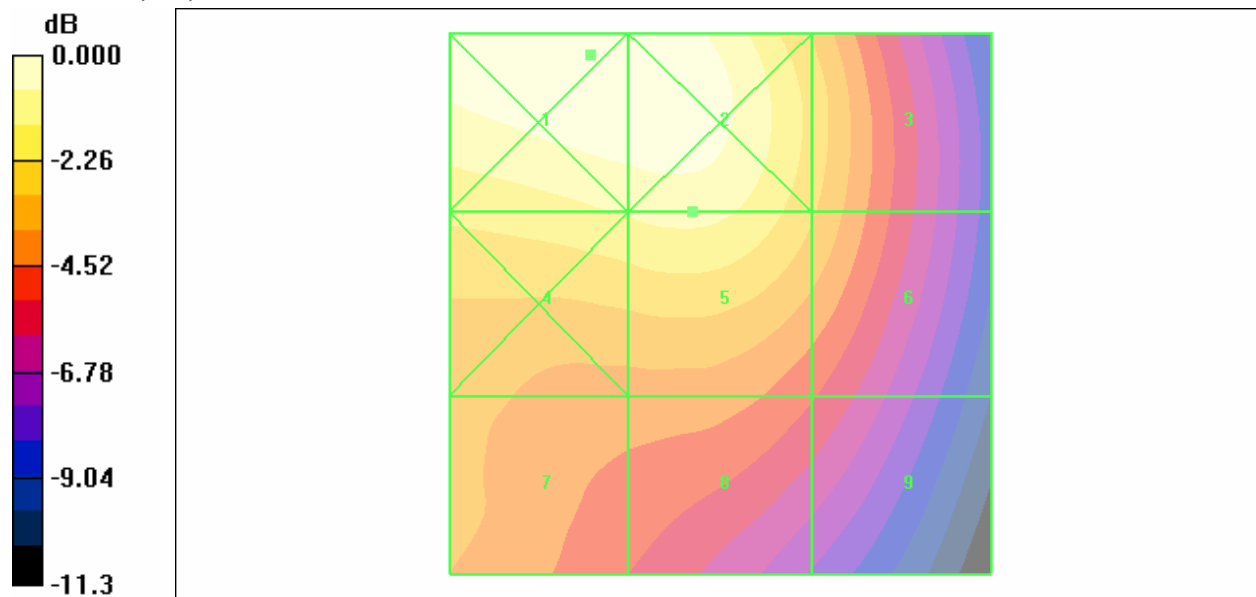
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.296 A/m

H Category: M4

Location: 12, -23, 365.6 mm



0 dB = 0.296A/m



Date/Time: 3/20/2008 9:21:11 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_WCDMA Band V POLLUX ULTIMATE 8502

**DUT: ULTIMATE 8502; Type: POLLUX; Serial: N/A**

Communication System: WCDMA ; Frequency: 846.6 MHz;Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

### H Scan - H probe tip 15mm above Device -High/Hearing Aid

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.218 A/m

Probe Modulation Factor = 1.03

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.191 A/m; Power Drift = 0.045 dB

**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.253 M4</b>	Grid 2 <b>0.252 M4</b>	Grid 3 <b>0.184 M4</b>
Grid 4 <b>0.214 M4</b>	Grid 5 <b>0.218 M4</b>	Grid 6 <b>0.177 M4</b>
Grid 7 <b>0.166 M4</b>	Grid 8 <b>0.158 M4</b>	Grid 9 <b>0.137 M4</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

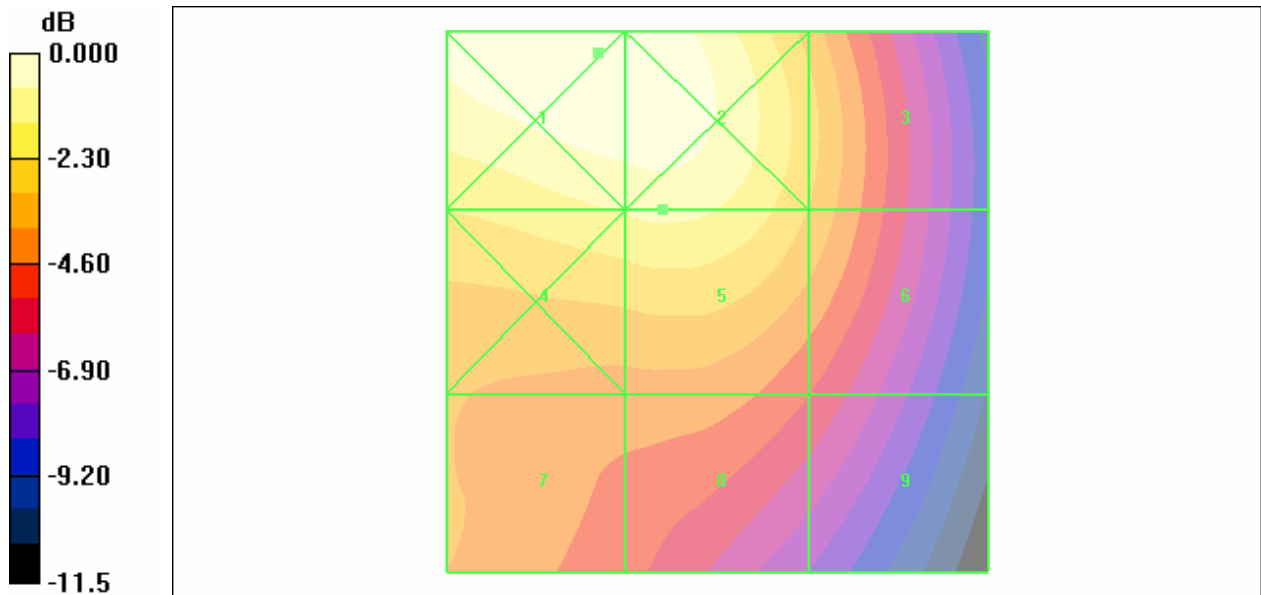
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.253 A/m

H Category: M4

Location: 11, -23, 365.6 mm



0 dB = 0.253A/m

Date/Time: 3/20/2008 9:40:22 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_WCDMA Band II ULTIMATE 9502 close

**DUT: ULTIMATE 9502; Type: ATLAS; Serial: N/A**

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DAS4 (High Precision Assessment)

DAS4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H probe tip 15mm above Device -Low/Hearing Aid Compatibility

**Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.252 A/m

Probe Modulation Factor = 1.02

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.240 A/m; Power Drift = 0.018 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.211 M3</b>	Grid 2 <b>0.246 M3</b>	Grid 3 <b>0.238 M3</b>
Grid 4 <b>0.214 M3</b>	Grid 5 <b>0.252 M3</b>	Grid 6 <b>0.241 M3</b>
Grid 7 <b>0.191 M3</b>	Grid 8 <b>0.225 M3</b>	Grid 9 <b>0.215 M3</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

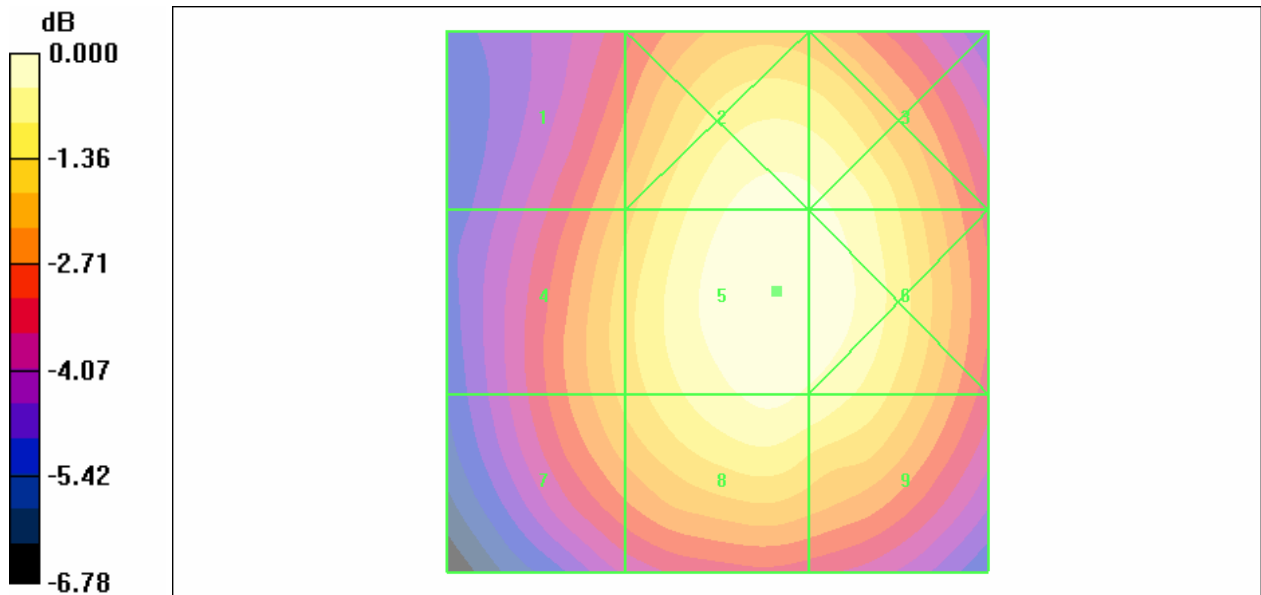
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.252 A/m

H Category: M3

Location: -3.5, -3.5, 365.6 mm



0 dB = 0.252A/m

Date/Time: 3/20/2008 9:31:22 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_WCDMA Band II ULTIMATE 9502 close

**DUT: ULTIMATE 9502; Type: ATLAS; Serial: N/A**

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H probe tip 15mm above Device -Middle/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.245 A/m

Probe Modulation Factor = 1.02

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.232 A/m; Power Drift = 0.010 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.210 M3</b>	Grid 2 <b>0.240 M3</b>	Grid 3 <b>0.231 M3</b>
Grid 4 <b>0.213 M3</b>	Grid 5 <b>0.245 M3</b>	Grid 6 <b>0.236 M3</b>
Grid 7 <b>0.191 M3</b>	Grid 8 <b>0.223 M3</b>	Grid 9 <b>0.215 M3</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

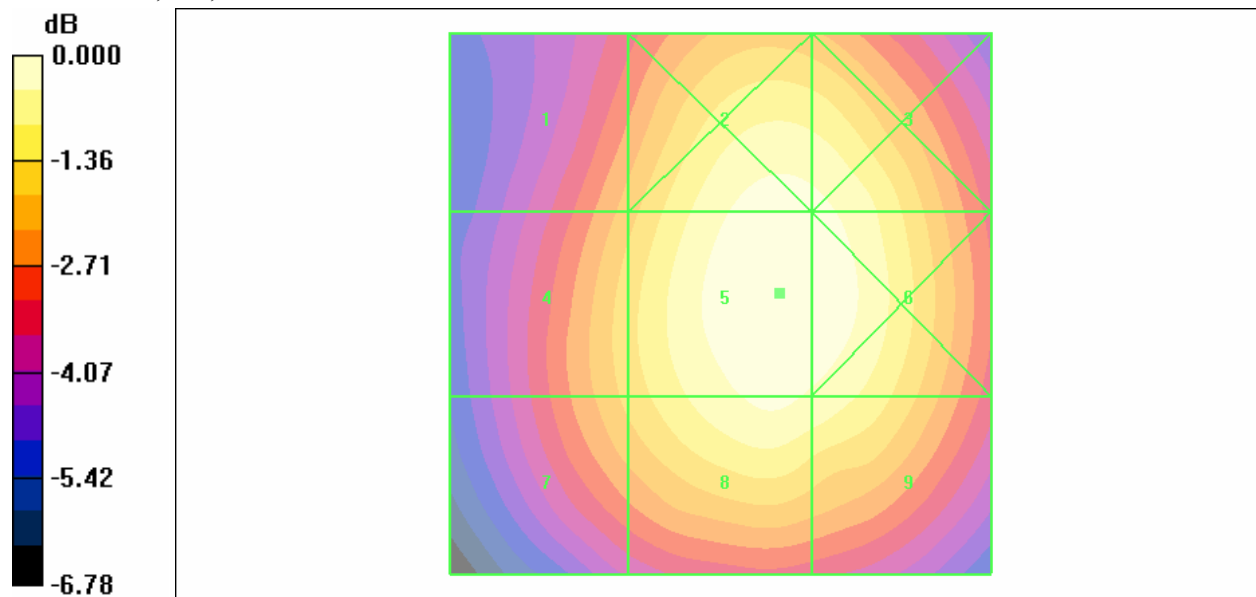
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.245 A/m

H Category: M3

Location: -3.5, -2.5, 365.6 mm



0 dB = 0.245A/m

Date/Time: 3/20/2008 9:49:25 AM

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_SCAN\_WCDMA Band II ULTIMATE 9502 close

**DUT: ULTIMATE 9502; Type: ATLAS; Serial: N/A**

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Device Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6163; ; Calibrated: 4/20/2007
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn558; Calibrated: 8/29/2007
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

## H Scan - H probe tip 15mm above Device -High/Hearing Aid Compatibility Test

**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.234 A/m

Probe Modulation Factor = 1.02

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.210 A/m; Power Drift = 0.012 dB

**Hearing Aid Near-Field Category: M3 (AWF 0 dB)**

Peak H-field in A/m

Grid 1 <b>0.203 M4</b>	Grid 2 <b>0.228 M3</b>	Grid 3 <b>0.217 M3</b>
Grid 4 <b>0.205 M4</b>	Grid 5 <b>0.234 M3</b>	Grid 6 <b>0.221 M3</b>
Grid 7 <b>0.186 M4</b>	Grid 8 <b>0.214 M3</b>	Grid 9 <b>0.204 M3</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m) > 960MHz	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	AWF (dB)	Limits for E-Field Emissions (V/m) < 960MHz	Limits for H-Field Emissions (A/m) < 960 MHz
M1	0	631 - 1122	1.91 - 3.39
	-5	473.2 - 841.4	1.43 - 2.54
M2	0	354.8 - 631	1.07 - 1.91
	-5	266.1 - 473.2	0.8 - 1.43
M3	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M4	0	<199.5	<0.6
	-5	<149.6	<0.45

**Cursor:**

Total = 0.234 A/m

H Category: M3

Location: -2.5, -2, 365.6 mm

