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: 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 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

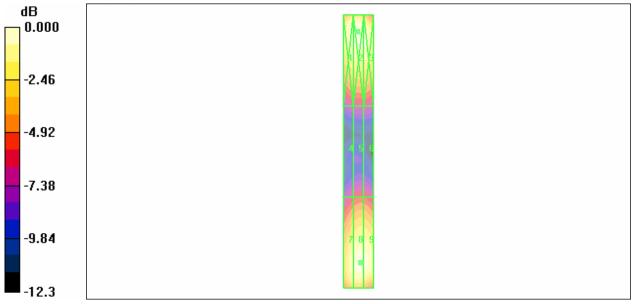
### Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Category		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 = 159.3 V/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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 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)

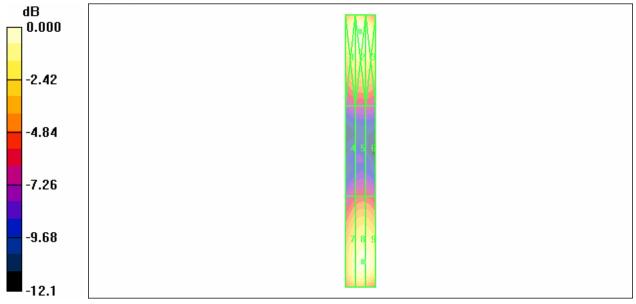
Grid 1	Grid 2	Grid 3
97.6 M4	98.8 M4	95.0 M4
Grid 4	Grid 5	Grid 6
49.4 M4	54.4 M4	53.1 M4
Grid 7	Grid 8	Grid 9
05 6 MA	97 8 M4	95.2 M4

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Device 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 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

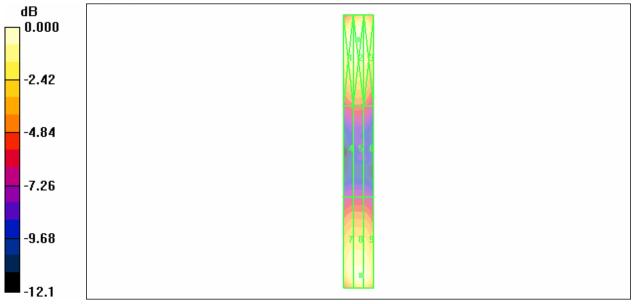
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

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
C'ategory	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



 $0\ dB = 78.2V/m$ 

Date/Time: 3/20/2008 3:37:39 AM

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 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

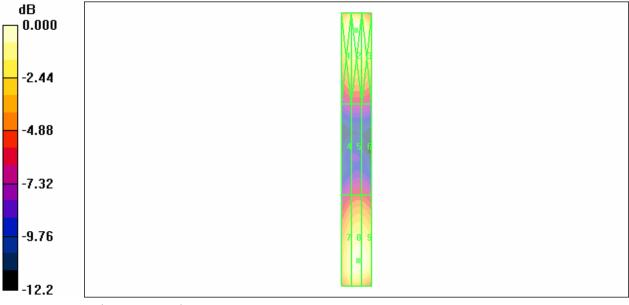
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Category		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: 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 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)

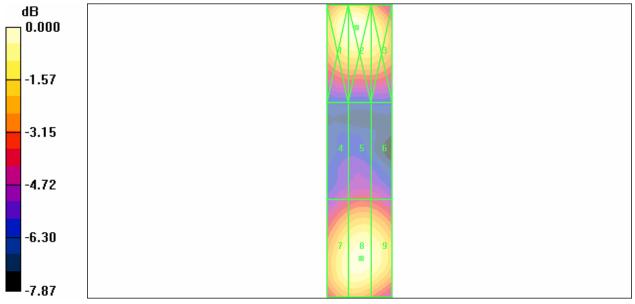
Grid 1	Grid 2	Grid 3
129.4 M2	136.6 M2	127.7 M2
Grid 4	Grid 5	Grid 6
82.2 M3	85.5 M3	84.1 M3
Grid 7	Grid 8	Grid 9
126.4 M2	135.8 M2	126.8 M2

Category		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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 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)

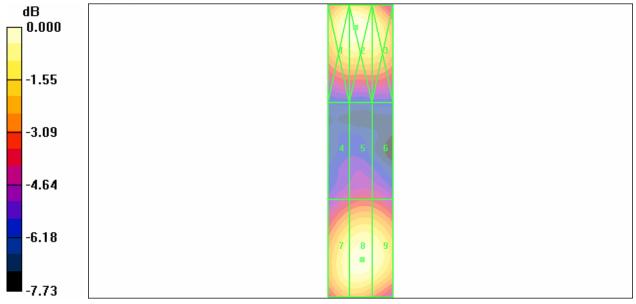
Grid 1	Grid 2	Grid 3
82.2 M3	83.7 M3	78.8 M3
Grid 4	Grid 5	Grid 6
1		
54.5 M4	57.2 M4	54.6 M4
		<b>54.6 M4</b> Grid 9

Category	AWF		Limits for H-Field Emissions
	(dB)	(V/m) > 960MHz	(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 = 83.7 V/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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 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)

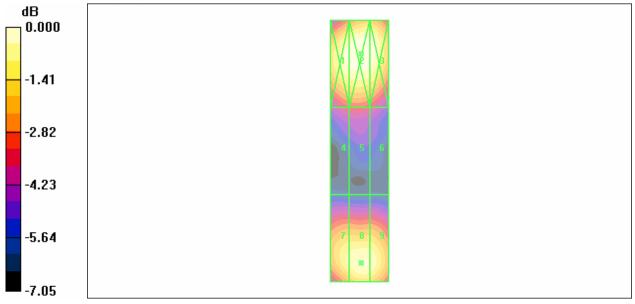
Grid 1	Grid 2	Grid 3
58.8 M3	66.5 M3	59.2 M3
Grid 4	Grid 5	Grid 6
1		
37.1 M4	33.0 M4	35.6 M4
		<b>35.6 M4</b> Grid 9

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 = 66.5 V/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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 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

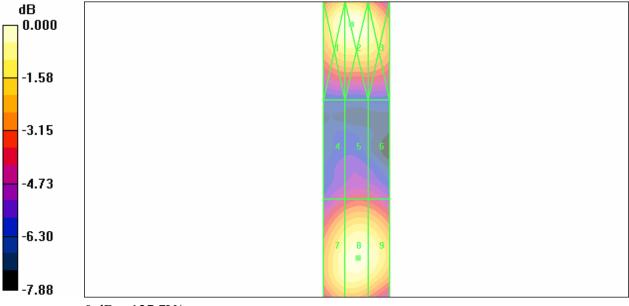
### Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

Category		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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 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)

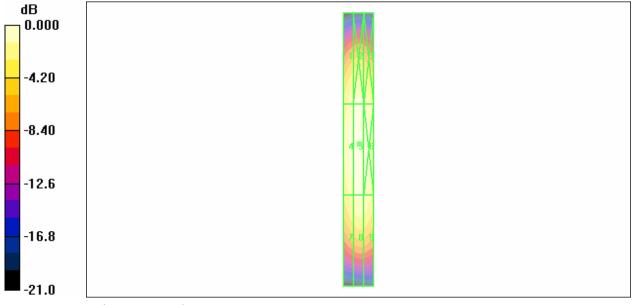
Grid 1	Grid 2	Grid 3
0.390 M4	0.418 M4	0.398 M4
Grid 4	Grid 5	Grid 6
0.422 M4	0.463 M4	0.448 M4
Grid 7	Grid 8	Grid 9
0.372 M4	0.401 M4	0.397 M4

( 'ategory		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
( 'ategory	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 = 0.463 A/m

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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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 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

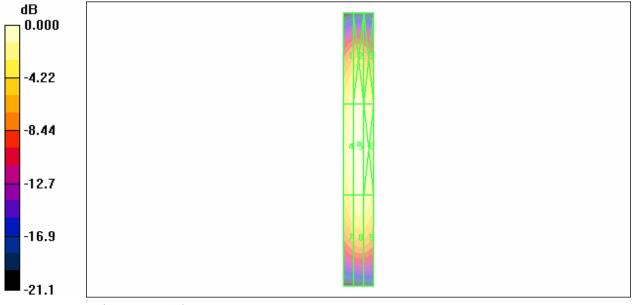
### Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

( 'ategory		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



0 dB = 0.291 A/m

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 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

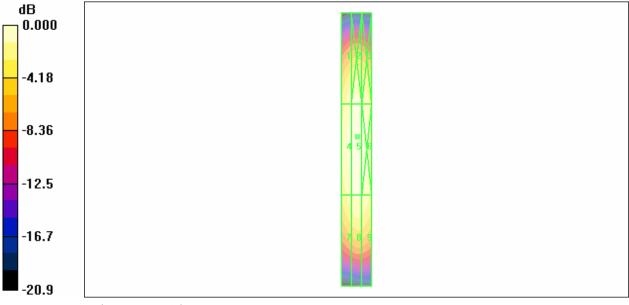
# Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

( 'ategory		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 = 0.221 A/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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 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

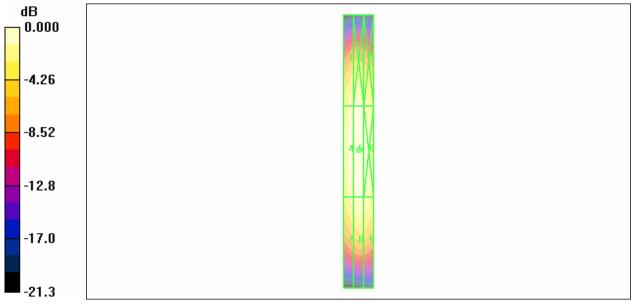
# Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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

Catagagg	AWF	Limits for E-Field Emissions	Limits for H-Field Emissions
Category	(dB)	(V/m) > 960MHz	(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 = 0.451 A/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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 - 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

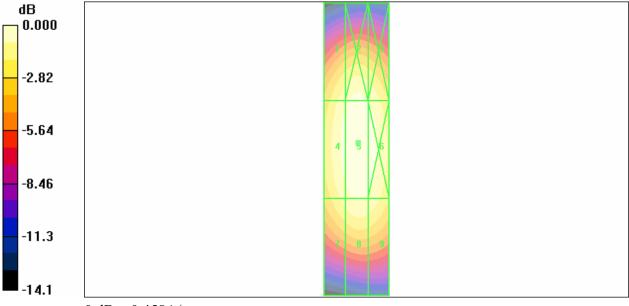
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

( 'afegory		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
C'ategory	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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 - 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

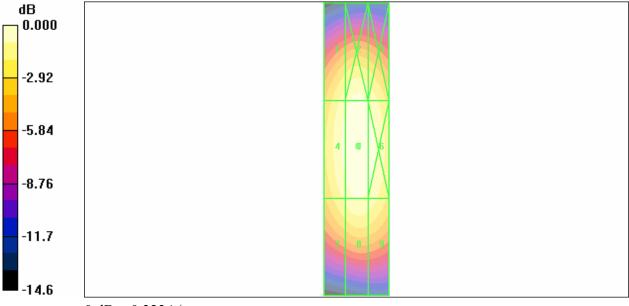
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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

( 'ategory		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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 - 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

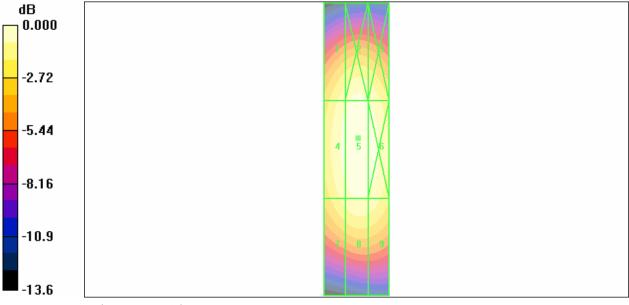
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Catagagg	AWF	Limits for E-Field Emissions	Limits for H-Field Emissions
Category	(dB)	(V/m) > 960MHz	(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 = 0.219 A/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,  $\varepsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole 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 - 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

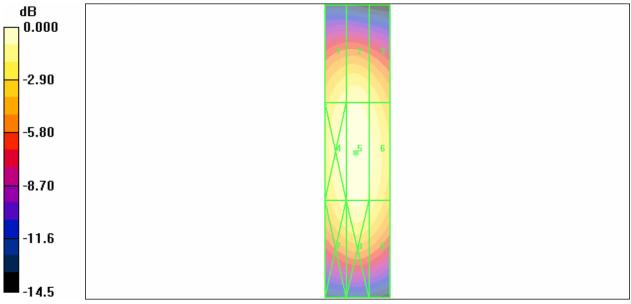
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

( 'ategory		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 = 0.446 A/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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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)

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

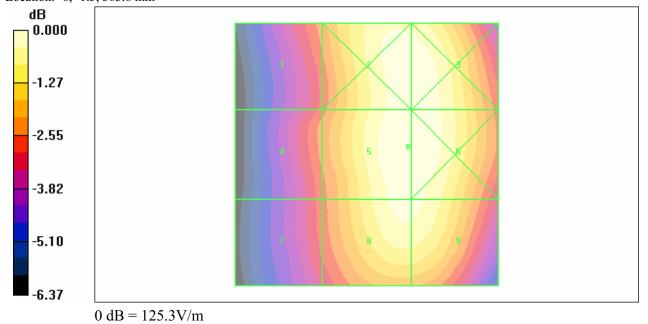
Category		` ′	Limits for H-Field Emissions (A/m) > 960MHz
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34

	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category		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



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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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)

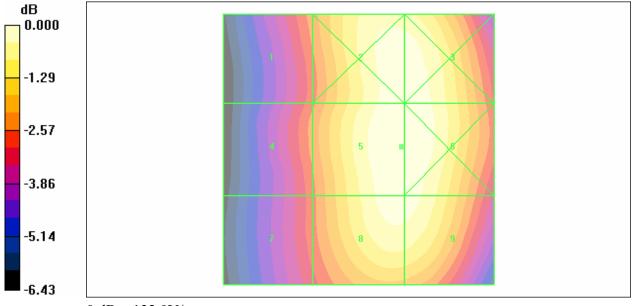
Grid 1	Grid 2	Grid 3
101.1 M4	129.8 M4	129.8 M4
Grid 4	Grid 5	Grid 6
100.4 M4	132.0 M4	131.0 M4
Grid 7	Grid 8	Grid 9
96.8 M4	129.5 M4	129.2 M4

Category		\ ′	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

	1		
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	I	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



 $0\ dB=132.0V/m$ 

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

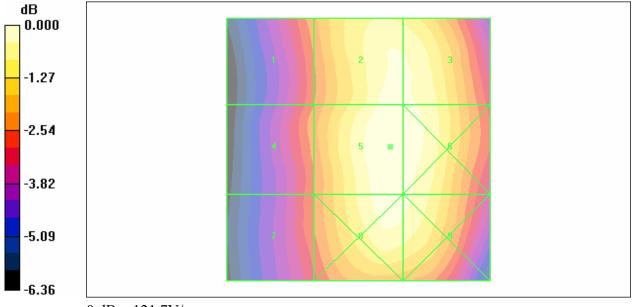
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category		\ ′	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
	-3	47.3 - 64.1	0.14 - 0.23
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Cotogory	AWF	Limits for E-Field Emissions (V/m) <	Limits for H-Field Emissions (A/m) <
Category	(dB)	960MHz	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

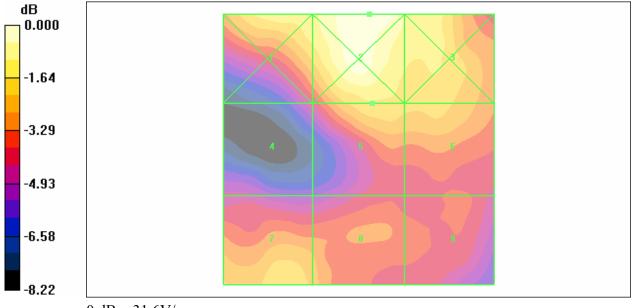
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category		\ ′	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

Total = 31.6 V/m E Category: M4 Location: -2, -25, 365.8 mm



0 dB = 31.6V/m

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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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

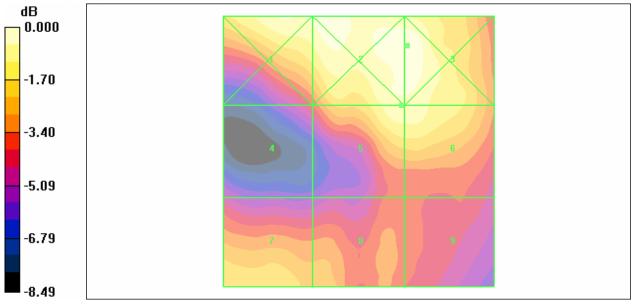
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category		\ ′	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
	-3	47.3 - 64.1	0.14 - 0.23
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Cotogory	AWF	Limits for E-Field Emissions (V/m) <	Limits for H-Field Emissions (A/m) <
Category	(dB)	960MHz	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

Total = 33.1 V/m E Category: M4 Location: -9, -19.5, 365.8 mm



 $0\ dB = 33.1 V/m$ 

Date/Time: 3/20/2008 6:16:45 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: 1909.8 MHz; Duty Cycle: 1:8

Medium parameters used:  $\sigma = 0$  mho/m,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

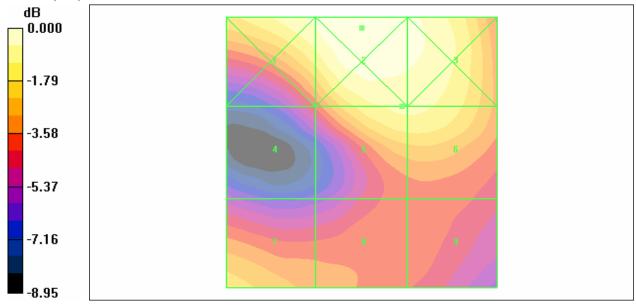
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category		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

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

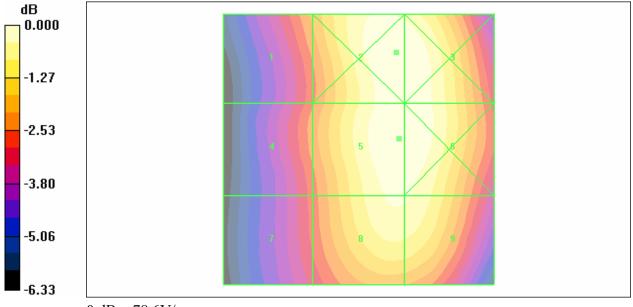
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Category	1	` ′	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

	1		
	-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 = 78.6 V/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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

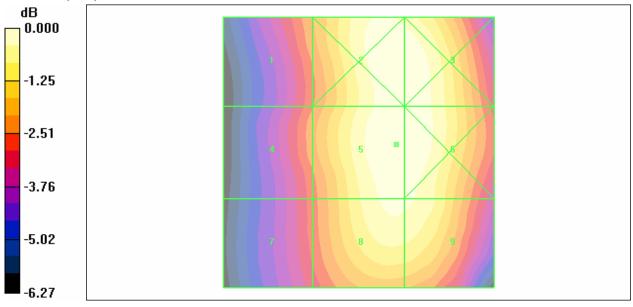
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Category	1	\ ′	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

	1		
	-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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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)

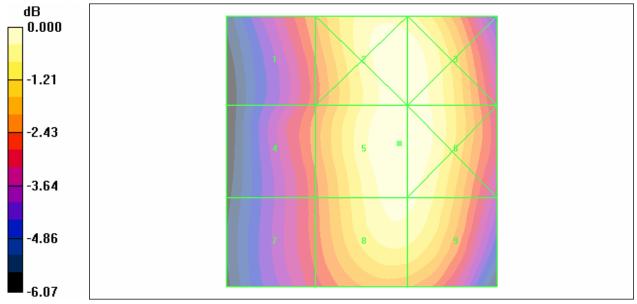
Peak E-field in V/m

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

Category		\	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		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

Total = 83.7 V/m E Category: M4 Location: -7, -1.5, 365.8 mm



0 dB = 83.7 V/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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

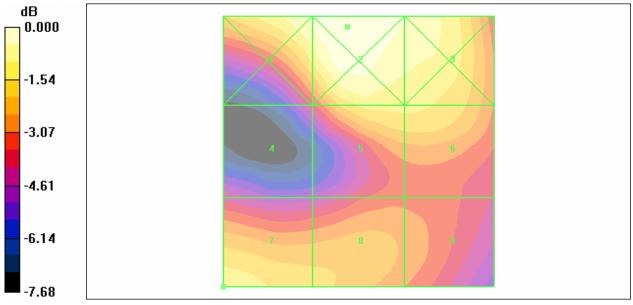
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
62.5 M4	65.2 M3	61.8 M4
Grid 4	Grid 5	Grid 6
41.9 M4	55.7 M4	55.4 M4
~	C 110	0:10
Grid 7	Grid 8	Grid 9

Category		\ ′	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

	1		
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	I	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

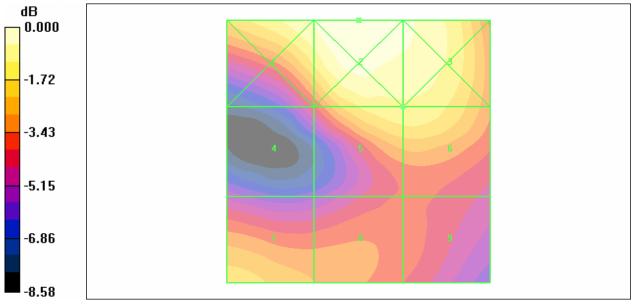
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
64.9 M3	68.4 M3	65.2 M3
Grid 4	Grid 5	Grid 6
42.6 M4	59.1 M4	59.1 M4
		<b>59.1 M4</b> Grid 9

Category		\ ′	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
	-3	47.3 - 64.1	0.14 - 0.23
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Cotogory	AWF	Limits for E-Field Emissions (V/m) <	Limits for H-Field Emissions (A/m) <
Category	(dB)	960MHz	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1000$  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 10mm 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

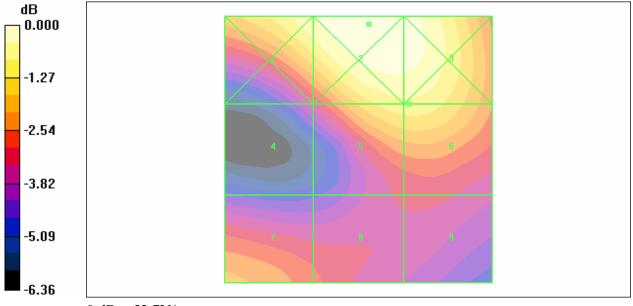
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

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
C'ategory	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



 $0\ dB = 53.7 V/m$ 

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

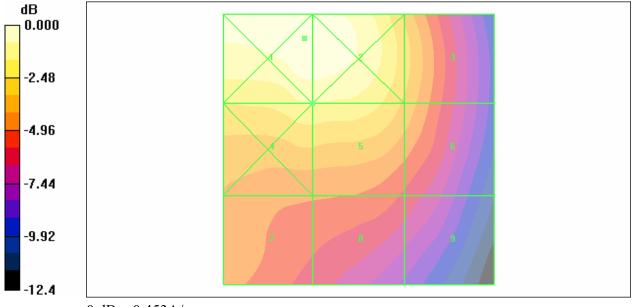
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category	l	` ′	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

	1		
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	I	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

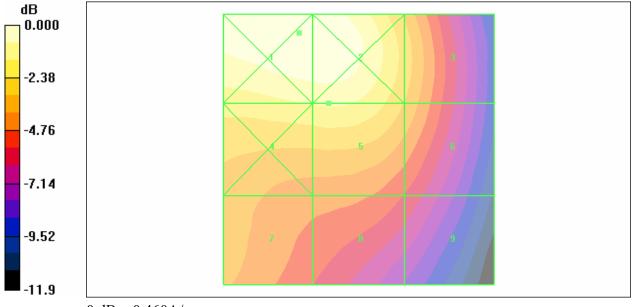
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category		\ ′	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

	1		
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	I	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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)

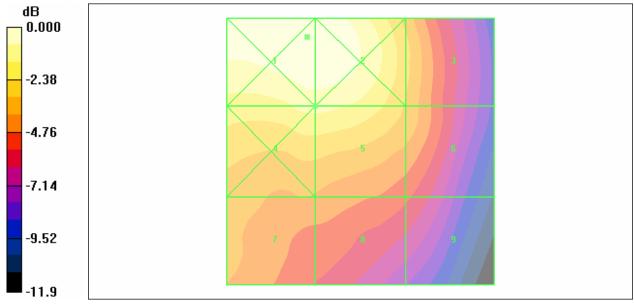
Grid 1	Grid 2	Grid 3
0.390 M4	0.390 M4	0.280 M4
Grid 4	Grid 5	Grid 6
0.336 M4	0.336 M4	0.267 M4
Grid 7	Grid 8	Grid 9
0.261 M4	0.246 M4	0.211 M4

Category	1	` ′	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

Total = 0.390 A/m H Category: M4

Location: 10, -21.5, 365.6 mm



0 dB = 0.390 A/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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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  $\bar{\text{Factor}} = 2.09$ 

Device Reference Point: 0.000, 0.000, 353.7 mm Reference Value = 0.050 A/m; Power Drift = 0.009 dB

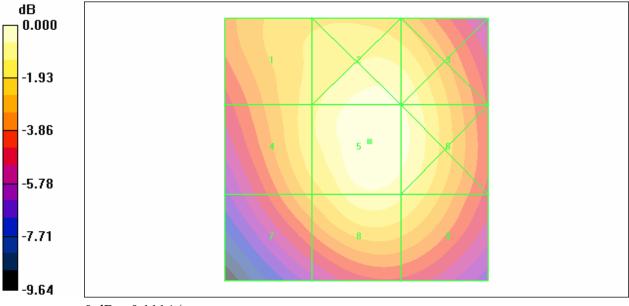
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Category		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		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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

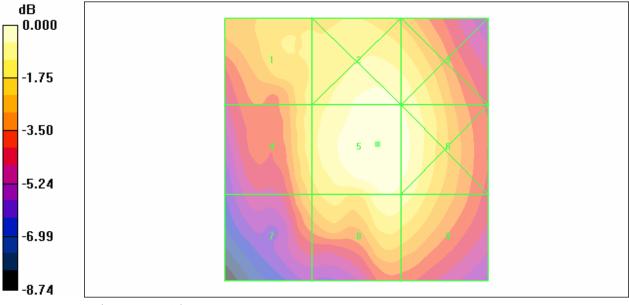
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

Cotocomi	AWF	Limits for E-Field Emissions	Limits for H-Field Emissions
Category	(dB)	(V/m) > 960MHz	(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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

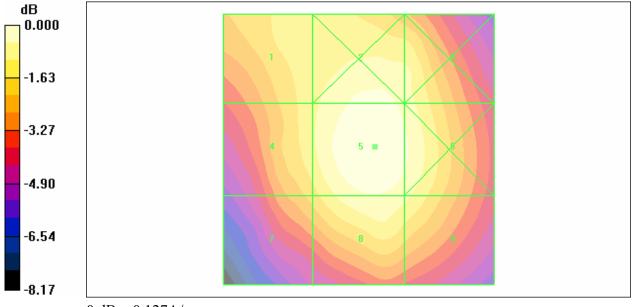
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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

C'ategory		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
( 'ategory	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



 $0\ dB=0.127A/m$ 

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

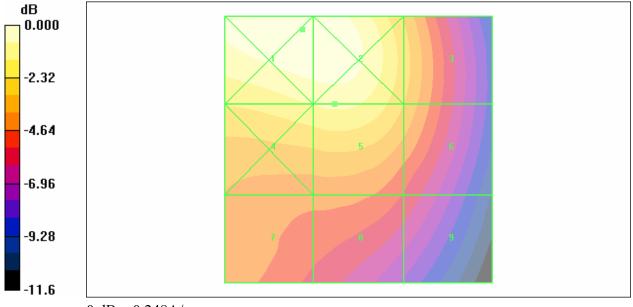
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Category		\ ′	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

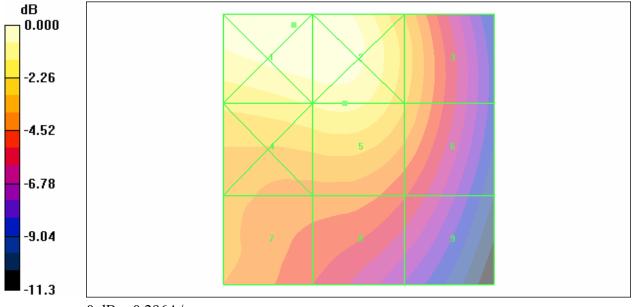
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Category		\ ′	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

	1		
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	I	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

Total = 0.296 A/m H Category: M4 Location: 12, -23, 365.6 mm



0 dB = 0.296 A/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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

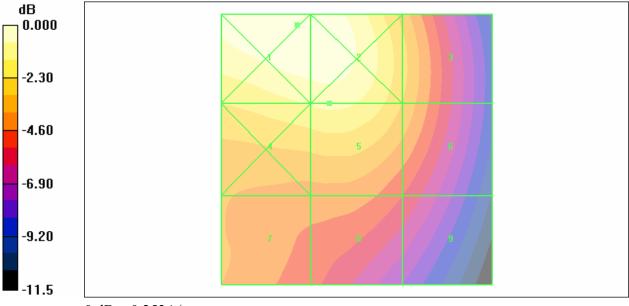
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
0.253 M4	0.252 M4	0.184 M4
Grid 4	Grid 5	Grid 6
0.214 M4	0.218 M4	0.177 M4
Grid 7	Grid 8	Grid 9
1	0 4 - 0 4	0.137 M4

C'ategory		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
( 'ategory	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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

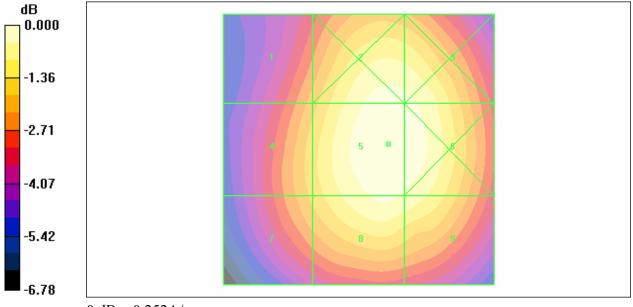
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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

( 'ategory		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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

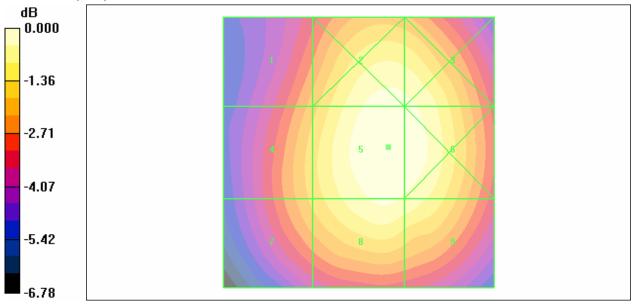
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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

Category	I	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
	-3	47.3 - 64.1	0.14 - 0.23
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Cotogory	AWF	Limits for E-Field Emissions (V/m) <	Limits for H-Field Emissions (A/m) <
Category	(dB)	960MHz	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

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,  $\varepsilon_r = 1$ ;  $\rho = 1$  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 10mm 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

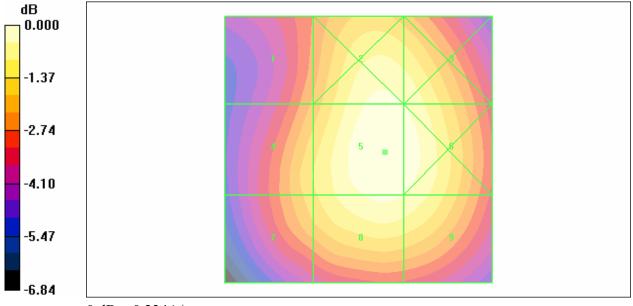
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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

Category		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

	1		
	-5	47.3 - 84.1	0.14 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.14
Category	I	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

Total = 0.234 A/m H Category: M3 Location: -2.5, -2, 365.6 mm



 $0\ dB=0.234A/m$