

## **APPENDIX A. HAC TEST PLOTS**

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Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /25

Test Date Mar.03, 2008

**DUT: CDM8074; Type: Folder; Serial: #1**

Communication System: PCS 1900MHz FCC; Frequency: 1851.25 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 SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2007-06-25
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn447; Calibrated: 2007-09-13
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:

dx=5mm, dy=5mm

Maximum value of peak Total field = 45.7 V/m

Probe Modulation Factor = 0.965

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 30.3 V/m; Power Drift = 0.015 dB

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

Peak E-field in V/m

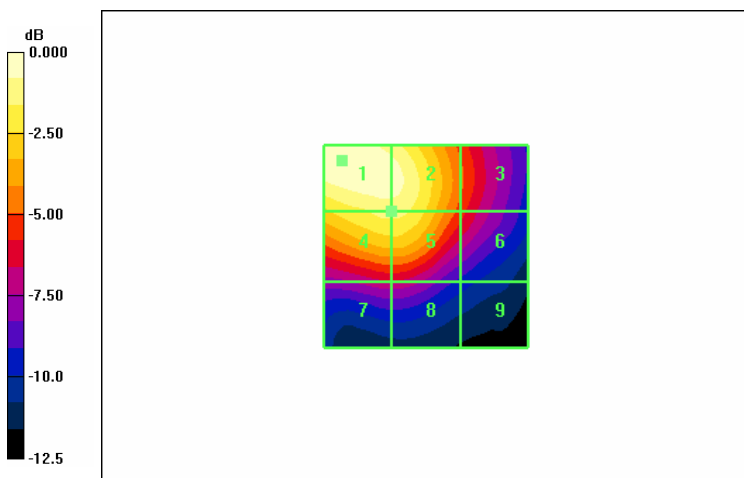
Grid 1	Grid 2	Grid 3
45.7 M4	43.7 M4	26.5 M4
Grid 4	Grid 5	Grid 6
39.0 M4	39.0 M4	24.5 M4
Grid 7	Grid 8	Grid 9
21.2 M4	21.2 M4	15.6 M4

**Cursor:**

Total = 45.7 V/m

E Category: M4

Location: 20.5, -21, 364.8 mm



0 dB = 45.7V/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature / Channel 21.3 °C /600  
 Test Date Mar.03, 2008

**DUT: CDM8074; Type: Folder; Serial: #1**

Communication System: PCS 1900MHz FCC; 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 Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

**DASY4 Configuration:**

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2007-06-25
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn447; Calibrated: 2007-09-13
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

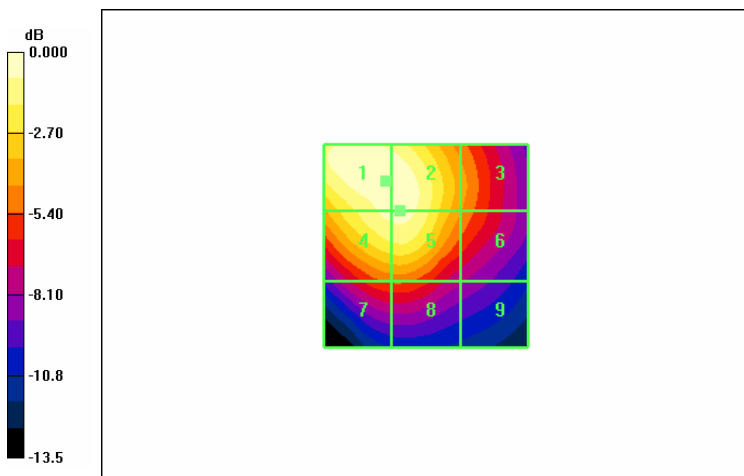
Maximum value of peak Total field = 58.9 V/m  
 Probe Modulation Factor = 0.965  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 46.1 V/m; Power Drift = 0.155 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
58.9 M4	58.6 M4	37.2 M4
Grid 4	Grid 5	Grid 6
55.1 M4	55.7 M4	35.4 M4
Grid 7	Grid 8	Grid 9
32.5 M4	32.7 M4	23.8 M4

**Cursor:**

Total = 58.9 V/m  
 E Category: M4  
 Location: 10, -16, 364.8 mm



0 dB = 58.9V/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature / Channel 21.3 °C /1175  
 Test Date Mar.03, 2008

**DUT: CDM8074; Type: Folder; Serial: #1**

Communication System: PCS 1900MHz FCC; Frequency: 1908.75 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 SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2007-06-25
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn447; Calibrated: 2007-09-13
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
 dx=5mm, dy=5mm

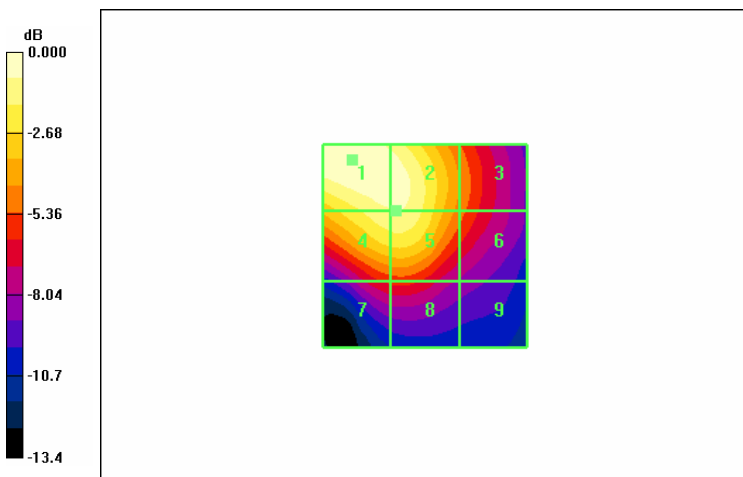
Maximum value of peak Total field = 51.3 V/m  
 Probe Modulation Factor = 0.965  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 38.1 V/m; Power Drift = 0.075 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
51.3 M4	50.0 M4	30.8 M4
Grid 4	Grid 5	Grid 6
45.8 M4	46.1 M4	29.2 M4
Grid 7	Grid 8	Grid 9
26.1 M4	26.4 M4	20.1 M4

**Cursor:**

Total = 51.3 V/m  
 E Category: M4  
 Location: 18, -21, 364.8 mm



0 dB = 51.3V/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature / Channel 21.3 °C /25  
 Test Date Mar.03, 2008

**DUT: CDM8074; Type: Folder; Serial: #1**

Communication System: PCS 1900MHz FCC; Frequency: 1851.25 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 SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

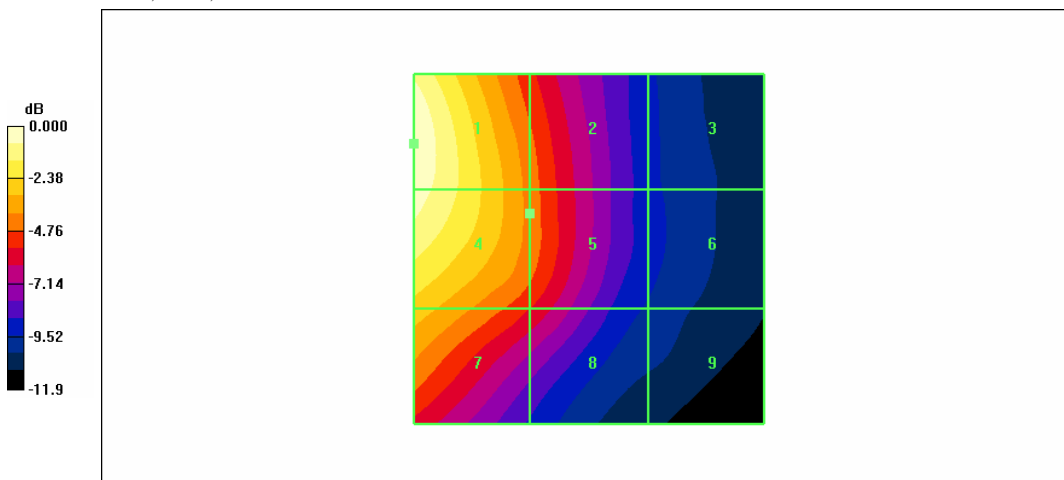
DASY4 Configuration:  
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
 dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.073 A/m  
 Probe Modulation Factor = 0.761  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 0.044 A/m; Power Drift = -0.027 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.073 M4	0.045 M4	0.025 M4
Grid 4	Grid 5	Grid 6
0.070 M4	0.045 M4	0.026 M4
Grid 7	Grid 8	Grid 9
0.054 M4	0.039 M4	0.024 M4

**Cursor:**  
 Total = 0.073 A/m  
 H Category: M4  
 Location: 25, -15, 365.6 mm



0 dB = 0.073A/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature / Channel 21.3 °C /600  
 Test Date Mar.03, 2008

**DUT: CDM8074; Type: Folder; Serial: #1**

Communication System: PCS 1900MHz FCC; 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 SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:  
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

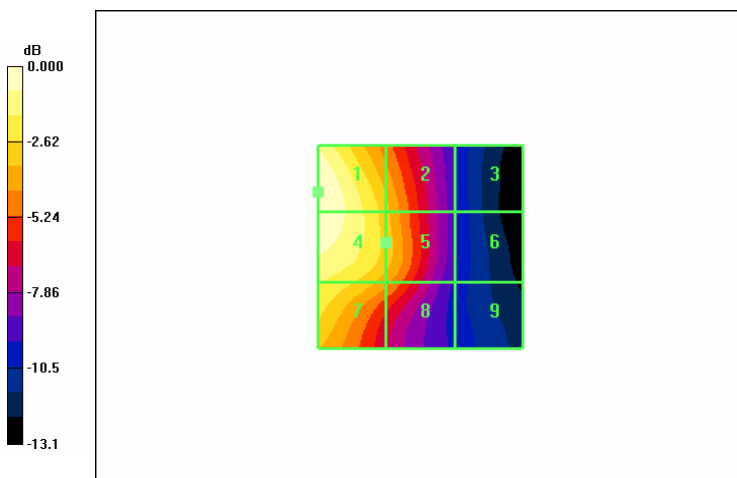
**H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
 dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.058 A/m  
 Probe Modulation Factor = 0.761  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 0.038 A/m; Power Drift = 0.052 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.058 M4	0.040 M4	0.020 M4
Grid 4	Grid 5	Grid 6
0.057 M4	0.041 M4	0.020 M4
Grid 7	Grid 8	Grid 9
0.048 M4	0.036 M4	0.019 M4

**Cursor:**

Total = 0.058 A/m  
 H Category: M4  
 Location: 25, -13.5, 365.6 mm



0 dB = 0.058A/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature / Channel 21.3 °C /1175  
 Test Date Mar.03, 2008

**DUT: CDM8074; Type: Folder; Serial: #1**

Communication System: PCS 1900MHz FCC; Frequency: 1908.75 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 SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:  
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
 dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.065 A/m  
 Probe Modulation Factor = 0.761  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 0.043 A/m; Power Drift = -0.056 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.065 M4	0.043 M4	0.025 M4
Grid 4	Grid 5	Grid 6
0.064 M4	0.043 M4	0.025 M4
Grid 7	Grid 8	Grid 9
0.051 M4	0.036 M4	0.022 M4

**Cursor:**  
 Total = 0.065 A/m  
 H Category: M4  
 Location: 25, -13.5, 365.6 mm

