

APPENDIX A. HAC TEST PLOTS

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.6 °C /25

Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide up; 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/m³
 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 = 67.2 V/m

Probe Modulation Factor = 0.965

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 46.0 V/m; Power Drift = 0.010 dB

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

Peak E-field in V/m

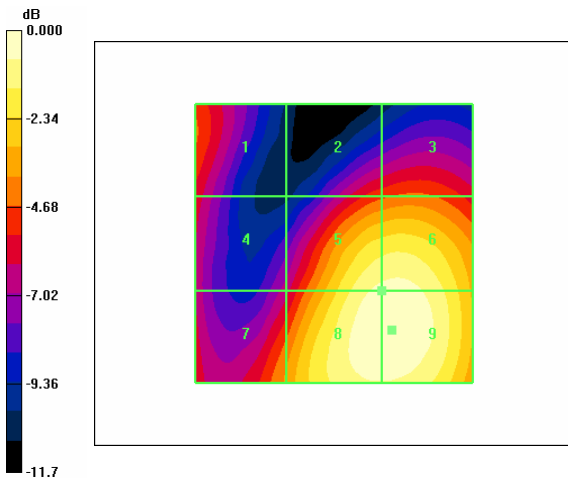
Grid 1	Grid 2	Grid 3
40.1 M4	38.3 M4	40.2 M4
Grid 4	Grid 5	Grid 6
35.2 M4	63.1 M3	64.0 M3
Grid 7	Grid 8	Grid 9
44.1 M4	66.8 M3	67.2 M3

Cursor:

Total = 67.2 V/m

E Category: M3

Location: -10.5, 15.5, 364.8 mm



0 dB = 67.2V/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /600
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide up; 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/m³
 Phantom section: E Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

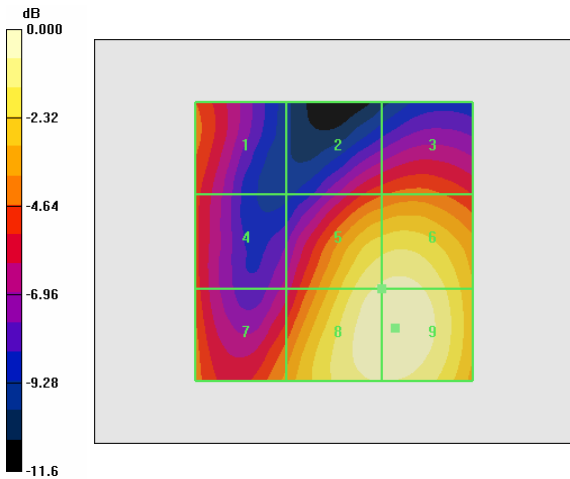
DASY4 Configuration:
 - Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2007-06-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 58.5 V/m
 Probe Modulation Factor = 0.965
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 40.5 V/m; Power Drift = -0.166 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
35.7 M4	33.8 M4	35.8 M4
Grid 4	Grid 5	Grid 6
33.4 M4	54.7 M4	55.7 M4
Grid 7	Grid 8	Grid 9
38.7 M4	57.9 M4	58.5 M4

Cursor:
 Total = 58.5 V/m
 E Category: M4
 Location: -11, 15.5, 364.8 mm



0 dB = 58.5V/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /1175
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide up; 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/m³
 Phantom section: E Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

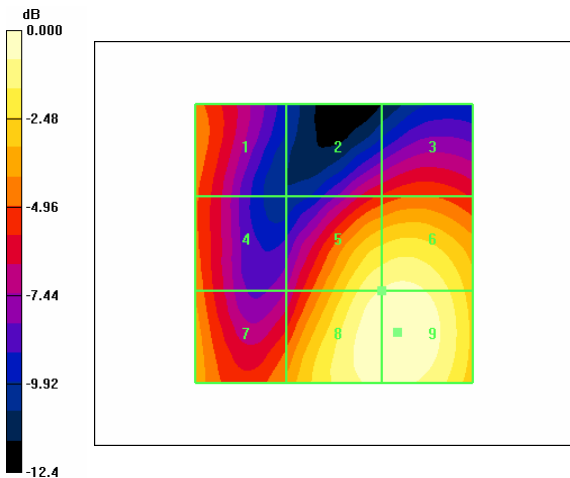
DASY4 Configuration:
 - Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2007-06-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 56.0 V/m
 Probe Modulation Factor = 0.965
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 34.9 V/m; Power Drift = 0.005 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
34.3 M4	29.3 M4	32.0 M4
Grid 4	Grid 5	Grid 6
34.7 M4	51.2 M4	52.6 M4
Grid 7	Grid 8	Grid 9
38.5 M4	55.2 M4	56.0 M4

Cursor:
 Total = 56.0 V/m
 E Category: M4
 Location: -11.5, 16, 364.8 mm



0 dB = 56.0V/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /25
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide up; 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/m³
 Phantom section: H Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

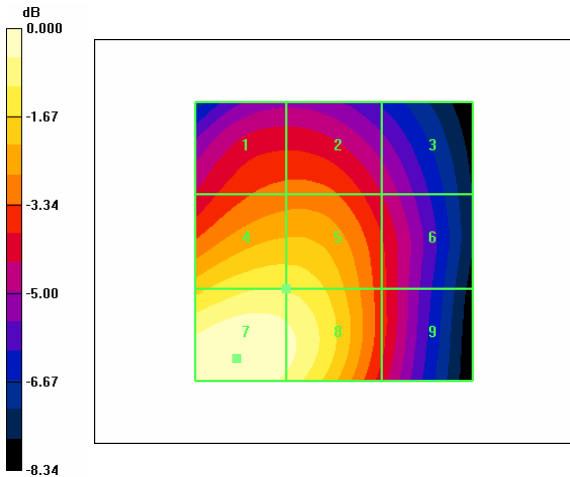
DASY4 Configuration:
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.147 A/m
 Probe Modulation Factor = 0.761
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 0.154 A/m; Power Drift = -0.001 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.103 M4	0.104 M4	0.088 M4
Grid 4	Grid 5	Grid 6
0.129 M4	0.129 M4	0.097 M4
Grid 7	Grid 8	Grid 9
0.147 M4	0.141 M4	0.097 M4

Cursor:
 Total = 0.147 A/m
 H Category: M4
 Location: 17.5, 21, 365.6 mm



0 dB = 0.147A/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /600
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide up; 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/m³
 Phantom section: H Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

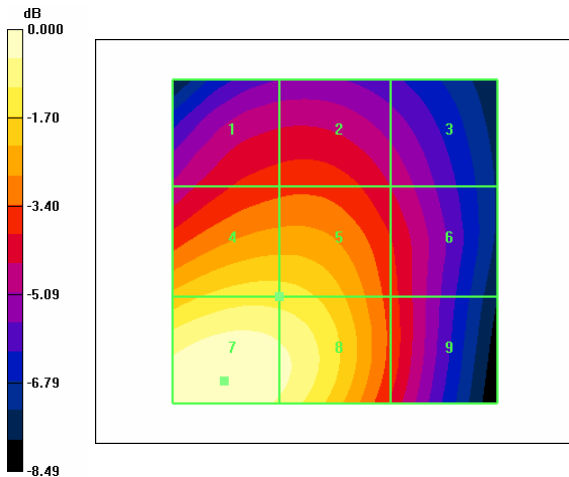
DASY4 Configuration:
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.137 A/m
 Probe Modulation Factor = 0.761
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 0.137 A/m; Power Drift = 0.080 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.091 M4	0.091 M4	0.081 M4
Grid 4	Grid 5	Grid 6
0.118 M4	0.117 M4	0.090 M4
Grid 7	Grid 8	Grid 9
0.137 M4	0.131 M4	0.091 M4

Cursor:
 Total = 0.137 A/m
 H Category: M4
 Location: 17, 21.5, 365.6 mm



0 dB = 0.137A/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /1175
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide up; 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/m³
 Phantom section: H Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

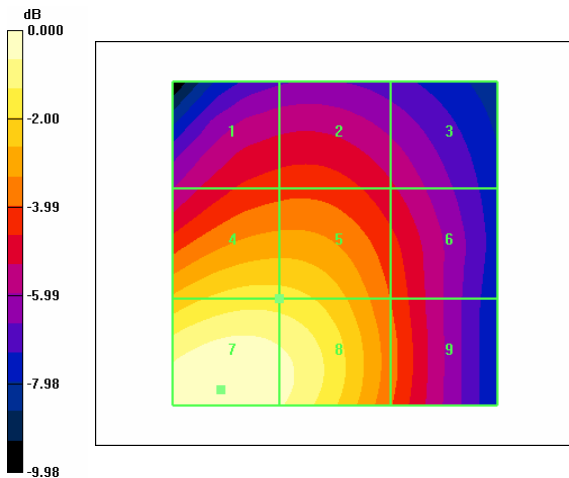
DASY4 Configuration:
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.138 A/m
 Probe Modulation Factor = 0.761
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 0.128 A/m; Power Drift = 0.071 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 0.085 M4	Grid 2 0.085 M4	Grid 3 0.076 M4
Grid 4 0.115 M4	Grid 5 0.114 M4	Grid 6 0.087 M4
Grid 7 0.138 M4	Grid 8 0.132 M4	Grid 9 0.091 M4

Cursor:
 Total = 0.138 A/m
 H Category: M4
 Location: 17.5, 22.5, 365.6 mm



0 dB = 0.138A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.6 °C /25

Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide down; 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/m³
 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 = 40.8 V/m

Probe Modulation Factor = 0.965

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 25.7 V/m; Power Drift = 0.092 dB

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

Peak E-field in V/m

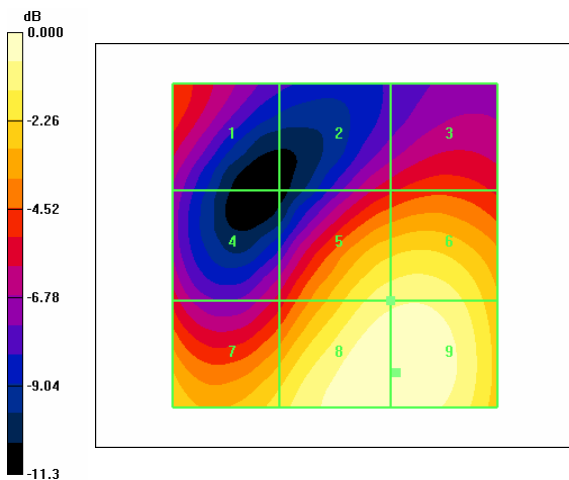
Grid 1	Grid 2	Grid 3
24.2 M4	21.8 M4	23.8 M4
Grid 4	Grid 5	Grid 6
21.8 M4	36.5 M4	37.2 M4
Grid 7	Grid 8	Grid 9
33.0 M4	40.7 M4	40.8 M4

Cursor:

Total = 40.8 V/m

E Category: M4

Location: -9.5, 19.5, 364.8 mm



0 dB = 40.8V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.6 °C /600

Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide down; 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/m³
 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 = 37.8 V/m
 Probe Modulation Factor = 0.965
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 22.5 V/m; Power Drift = 0.004 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

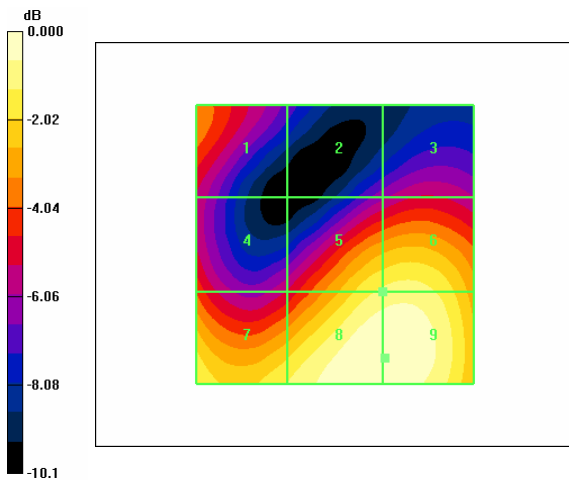
Grid 1	Grid 2	Grid 3
25.6 M4	18.5 M4	20.6 M4
Grid 4	Grid 5	Grid 6
23.8 M4	33.0 M4	33.8 M4
Grid 7	Grid 8	Grid 9
32.8 M4	37.8 M4	37.8 M4

Cursor:

Total = 37.8 V/m

E Category: M4

Location: -9, 20.5, 364.8 mm



Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /1175
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide down; 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/m³
 Phantom section: E Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

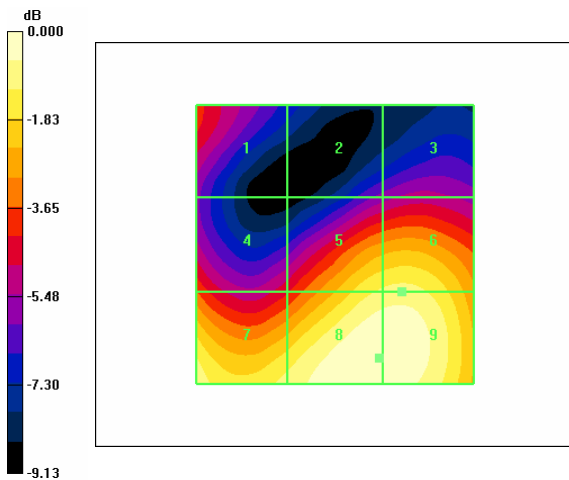
DASY4 Configuration:
 - Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2007-06-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 40.6 V/m
 Probe Modulation Factor = 0.965
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 27.1 V/m; Power Drift = -0.022 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
25.7 M4	20.9 M4	22.4 M4
Grid 4	Grid 5	Grid 6
27.0 M4	35.8 M4	36.4 M4
Grid 7	Grid 8	Grid 9
37.5 M4	40.6 M4	40.6 M4

Cursor:
 Total = 40.6 V/m
 E Category: M4
 Location: -8, 20.5, 364.8 mm



0 dB = 40.6V/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /25
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide down; 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/m³
 Phantom section: H Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

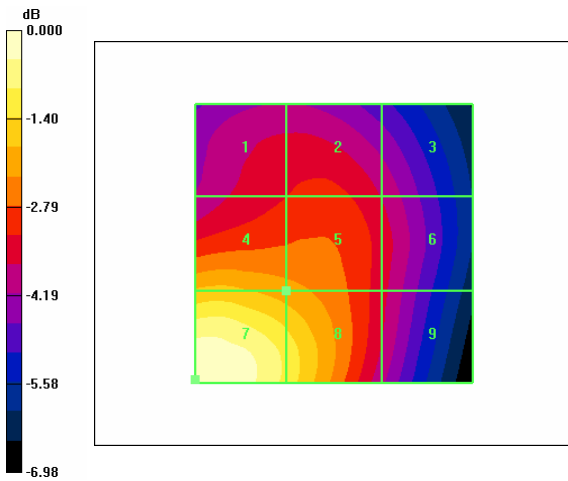
DASY4 Configuration:
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.097 A/m
 Probe Modulation Factor = 0.761
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 0.096 A/m; Power Drift = 0.196 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.067 M4	0.068 M4	0.063 M4
Grid 4	Grid 5	Grid 6
0.080 M4	0.076 M4	0.065 M4
Grid 7	Grid 8	Grid 9
0.097 M4	0.086 M4	0.065 M4

Cursor:
 Total = 0.097 A/m
 H Category: M4
 Location: 25, 24.5, 365.6 mm



0 dB = 0.097A/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /600
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide down; 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/m³
 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

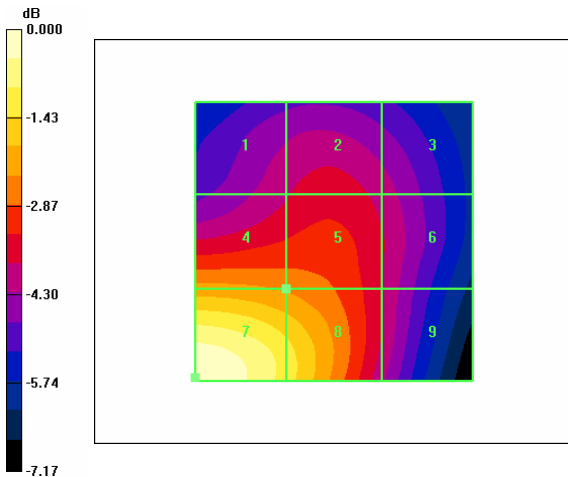
H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.098 A/m
 Probe Modulation Factor = 0.761
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 0.093 A/m; Power Drift = -0.036 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.063 M4	0.065 M4	0.062 M4
Grid 4	Grid 5	Grid 6
0.076 M4	0.074 M4	0.064 M4
Grid 7	Grid 8	Grid 9
0.098 M4	0.086 M4	0.063 M4

Cursor:

Total = 0.098 A/m
 H Category: M4
 Location: 25, 24.5, 365.6 mm



0 dB = 0.098A/m

Test Laboratory: HCT CO., LTD.
 Ambient Temperature / Channel 21.6 °C /1175
 Test Date April 10, 2008

DUT: CDM8964VM; Type: Slide down; 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/m³
 Phantom section: H Device Section ; Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 176

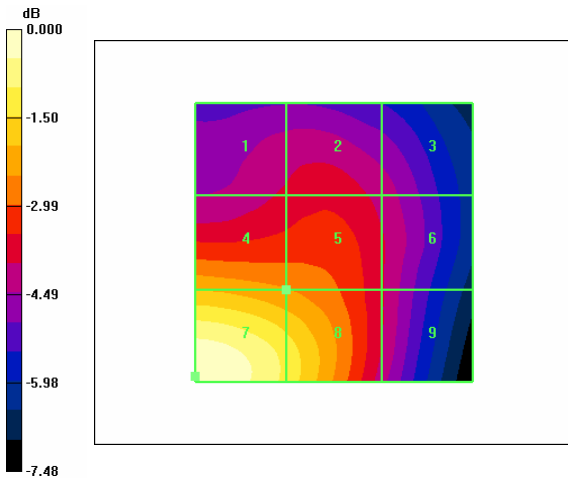
DASY4 Configuration:
 - Probe: H3DV6 - SN6101; ; Calibrated: 2007-07-25
 - Sensor-Surface: (Fix Surface)
 - Electronics: DAE4 Sn447; Calibrated: 2007-09-13
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan 10mm above Device Reference/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.103 A/m
 Probe Modulation Factor = 0.761
 Device Reference Point: 0.000, 0.000, 353.7 mm
 Reference Value = 0.098 A/m; Power Drift = -0.133 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.066 M4	0.068 M4	0.064 M4
Grid 4	Grid 5	Grid 6
0.082 M4	0.078 M4	0.066 M4
Grid 7	Grid 8	Grid 9
0.103 M4	0.090 M4	0.066 M4

Cursor:
 Total = 0.103 A/m
 H Category: M4
 Location: 25, 24, 365.6 mm



0 dB = 0.103A/m