

APPENDIX A. HAC TEST PLOTS

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1013

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; Serial: #1

Communication System: CDMA 835MHz FCC; Frequency: 824.7 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2009-05-22
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2009-05-22
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 70.6 V/m

Probe Modulation Factor = 0.956

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 92.4 V/m; Power Drift = 0.011 dB

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

Peak E-field in V/m

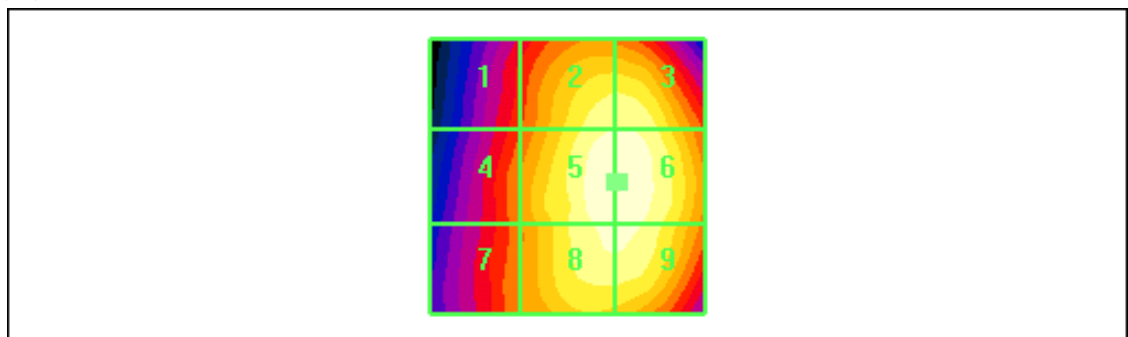
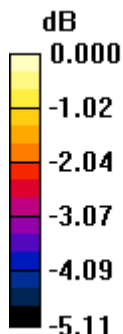
Grid 1	Grid 2	Grid 3
55.8 M4	68.0 M4	68.1 M4
Grid 4	Grid 5	Grid 6
58.6 M4	70.5 M4	70.6 M4
Grid 7	Grid 8	Grid 9
58.4 M4	69.0 M4	69.1 M4

Cursor:

Total = 70.6 V/m

E Category: M4

Location: -9.5, 1, 369.9 mm



0 dB = 70.6V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /384

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; Serial: #1

Communication System: CDMA 835MHz FCC; Frequency: 836.52 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2009-05-22

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn446; Calibrated: 2009-05-22

- Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 80.5 V/m

Probe Modulation Factor = 0.956

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 107.4 V/m; Power Drift = -0.077 dB

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

Peak E-field in V/m

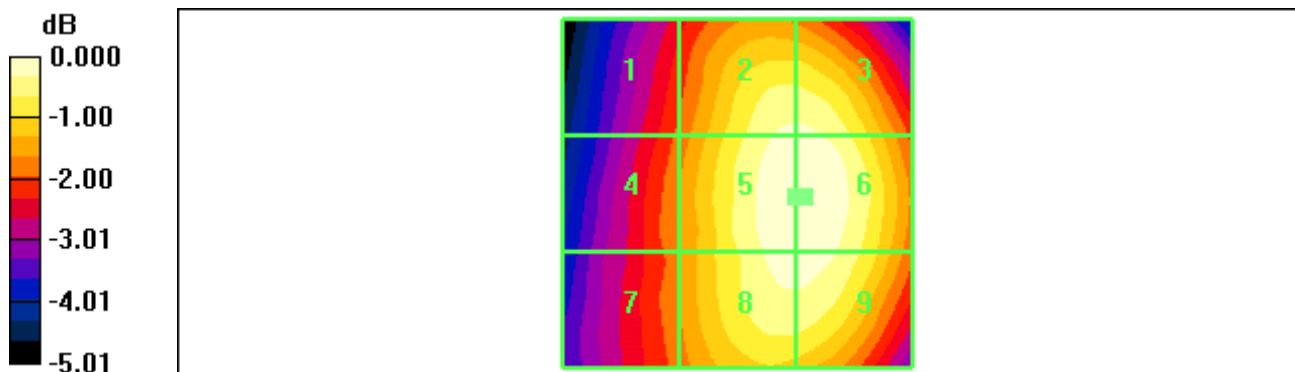
Grid 1	Grid 2	Grid 3
64.5 M4	78.2 M4	78.2 M4
Grid 4	Grid 5	Grid 6
66.7 M4	80.4 M4	80.5 M4
Grid 7	Grid 8	Grid 9
66.4 M4	79.0 M4	79.0 M4

Cursor:

Total = 80.5 V/m

E Category: M4

Location: -9.5, 0.5, 369.9 mm



0 dB = 80.5V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /777

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; Serial: #1

Communication System: CDMA 835MHz FCC; Frequency: 848.31 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2009-05-22

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn446; Calibrated: 2009-05-22

- Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 74.3 V/m

Probe Modulation Factor = 0.956

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 98.4 V/m; Power Drift = 0.083 dB

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

Peak E-field in V/m

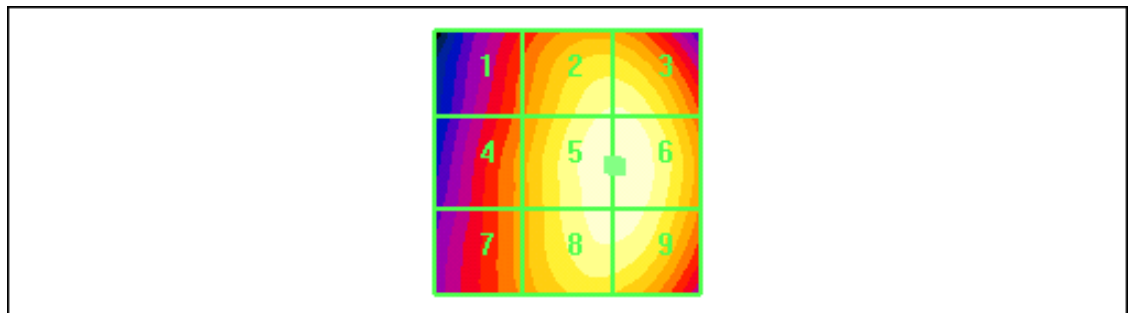
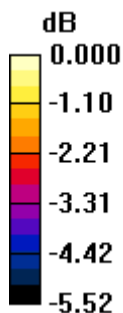
Grid 1	Grid 2	Grid 3
59.5 M4	72.1 M4	72.1 M4
Grid 4	Grid 5	Grid 6
61.8 M4	74.3 M4	74.3 M4
Grid 7	Grid 8	Grid 9
61.7 M4	73.3 M4	73.4 M4

Cursor:

Total = 74.3 V/m

E Category: M4

Location: -9.5, 1, 369.9 mm



0 dB = 74.3V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /25

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2009-05-22

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn446; Calibrated: 2009-05-22

- Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 31.4 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 13.4 V/m; Power Drift = -0.042 dB

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

Peak E-field in V/m

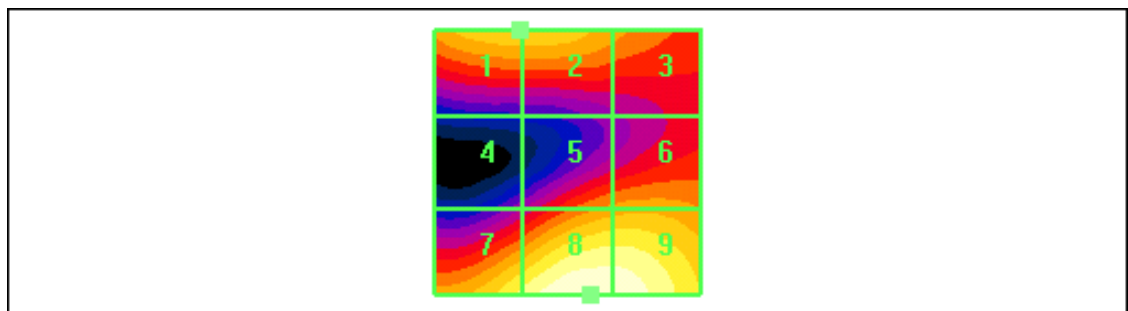
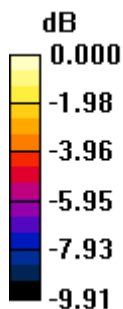
Grid 1	Grid 2	Grid 3
24.9 M4	24.9 M4	22.3 M4
Grid 4	Grid 5	Grid 6
15.7 M4	22.0 M4	22.6 M4
Grid 7	Grid 8	Grid 9
27.8 M4	31.4 M4	31.1 M4

Cursor:

Total = 31.4 V/m

E Category: M4

Location: -4.5, 25, 369.9 mm



0 dB = 31.4V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /600

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2009-05-22

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn446; Calibrated: 2009-05-22

- Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 33.7 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 15.5 V/m; Power Drift = 0.053 dB

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

Peak E-field in V/m

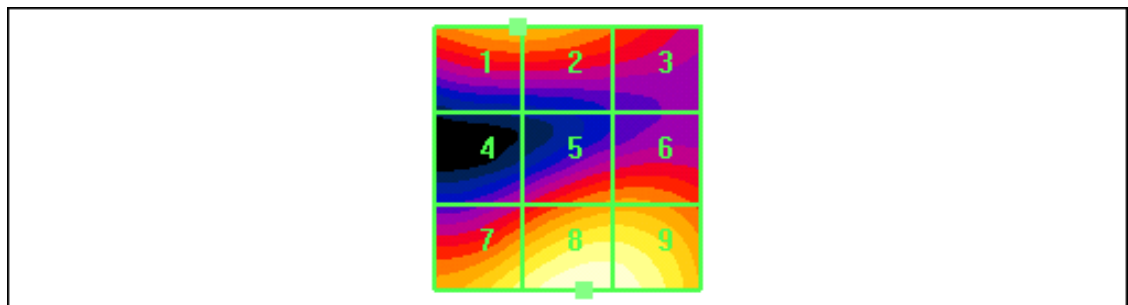
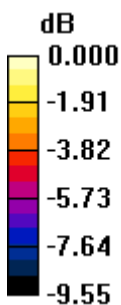
Grid 1	Grid 2	Grid 3
25.2 M4	25.2 M4	22.1 M4
Grid 4	Grid 5	Grid 6
18.3 M4	23.9 M4	24.1 M4
Grid 7	Grid 8	Grid 9
30.2 M4	33.7 M4	33.0 M4

Cursor:

Total = 33.7 V/m

E Category: M4

Location: -3, 25, 369.9 mm



0 dB = 33.7V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1175

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2009-05-22

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn446; Calibrated: 2009-05-22

- Phantom: HAC Test Arch; Type: SD HAC P01 BA

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 28.1 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 11.9 V/m; Power Drift = 0.029 dB

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

Peak E-field in V/m

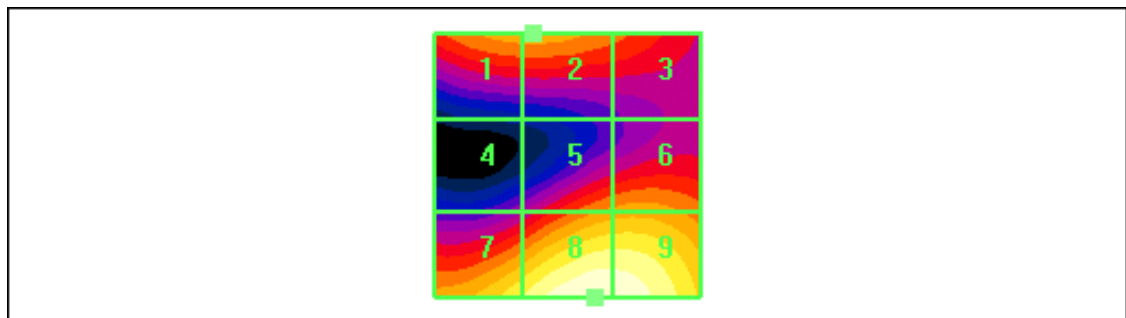
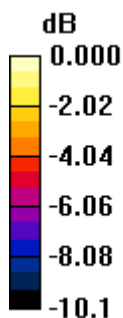
Grid 1	Grid 2	Grid 3
20.0 M4	20.0 M4	18.3 M4
Grid 4	Grid 5	Grid 6
13.9 M4	19.5 M4	19.9 M4
Grid 7	Grid 8	Grid 9
24.3 M4	28.1 M4	27.8 M4

Cursor:

Total = 28.1 V/m

E Category: M4

Location: -5, 25, 369.9 mm



0 dB = 28.1V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1013

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; Serial: #1

Communication System: CDMA 835MHz FCC; Frequency: 824.7 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2009-05-22

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn446; Calibrated: 2009-05-22

- Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.140 A/m

Probe Modulation Factor = 0.846

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.118 A/m; Power Drift = -0.010 dB

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

Peak H-field in A/m

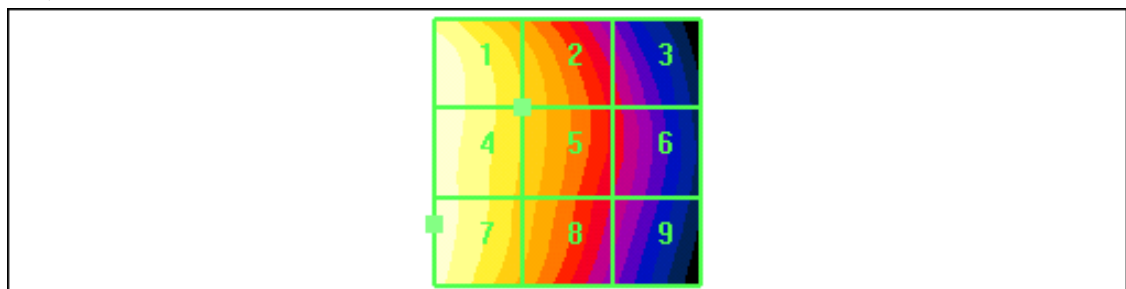
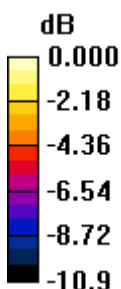
Grid 1 0.140 M4	Grid 2 0.109 M4	Grid 3 0.076 M4
Grid 4 0.139 M4	Grid 5 0.109 M4	Grid 6 0.077 M4
Grid 7 0.140 M4	Grid 8 0.106 M4	Grid 9 0.072 M4

Cursor:

Total = 0.140 A/m

H Category: M4

Location: 25, 13.5, 369.4 mm



0 dB = 0.140A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /384

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; Serial: #1

Communication System: CDMA 835MHz FCC; Frequency: 836.52 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2009-05-22
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2009-05-22
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.157 A/m

Probe Modulation Factor = 0.846

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.129 A/m; Power Drift = -0.034 dB

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

Peak H-field in A/m

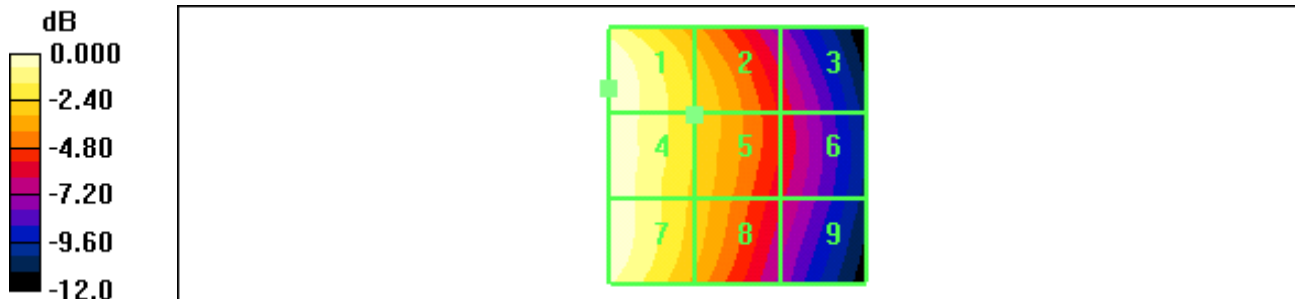
Grid 1 0.157 M4	Grid 2 0.120 M4	Grid 3 0.081 M4
Grid 4 0.157 M4	Grid 5 0.120 M4	Grid 6 0.082 M4
Grid 7 0.154 M4	Grid 8 0.116 M4	Grid 9 0.077 M4

Cursor:

Total = 0.157 A/m

H Category: M4

Location: 25, -13, 369.4 mm



0 dB = 0.157A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /777

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; Serial: #1

Communication System: CDMA 835MHz FCC; Frequency: 848.31 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2009-05-22
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2009-05-22
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.145 A/m

Probe Modulation Factor = 0.846

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.120 A/m; Power Drift = 0.029 dB

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

Peak H-field in A/m

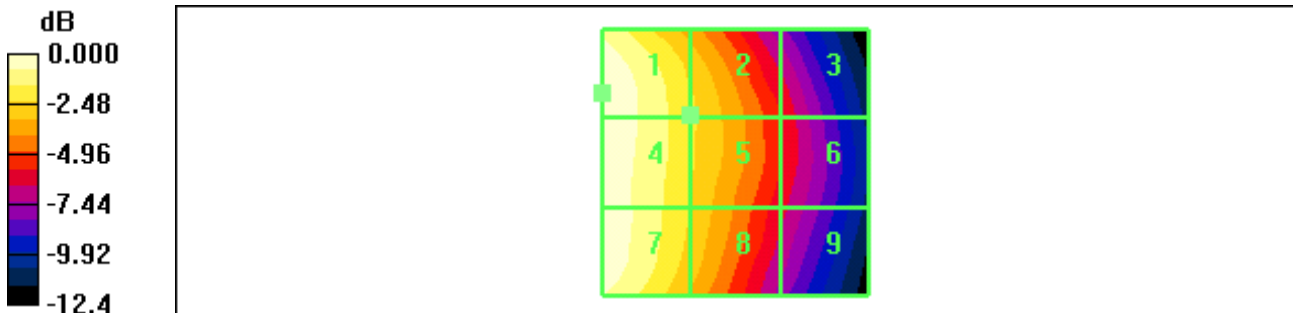
Grid 1	Grid 2	Grid 3
0.145 M4	0.112 M4	0.075 M4
Grid 4	Grid 5	Grid 6
0.145 M4	0.112 M4	0.076 M4
Grid 7	Grid 8	Grid 9
0.143 M4	0.109 M4	0.070 M4

Cursor:

Total = 0.145 A/m

H Category: M4

Location: 25, -13, 369.4 mm



0 dB = 0.145A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /25

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2009-05-22
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2009-05-22
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.074 A/m

Probe Modulation Factor = 0.733

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.092 A/m; Power Drift = 0.058 dB

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

Peak H-field in A/m

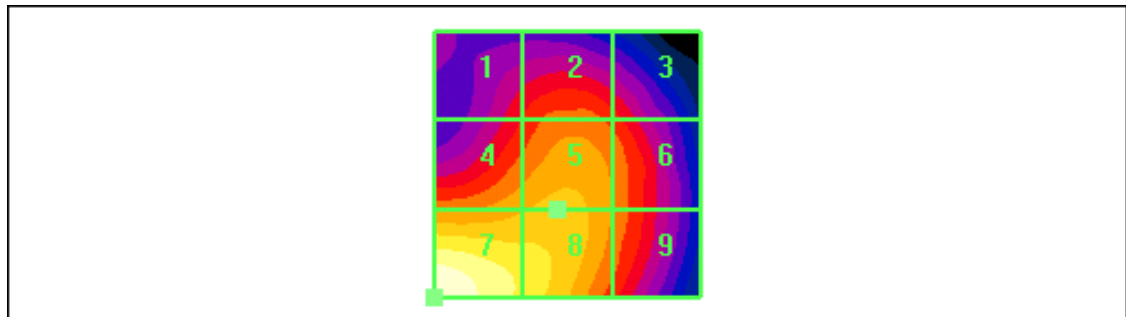
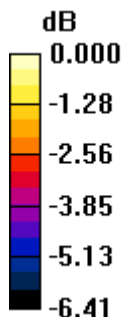
Grid 1	Grid 2	Grid 3
0.053 M4	0.056 M4	0.054 M4
Grid 4	Grid 5	Grid 6
0.061 M4	0.062 M4	0.058 M4
Grid 7	Grid 8	Grid 9
0.074 M4	0.066 M4	0.058 M4

Cursor:

Total = 0.074 A/m

H Category: M4

Location: 25, 25, 369.4 mm



0 dB = 0.074A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /600

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2009-05-22
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2009-05-22
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.076 A/m

Probe Modulation Factor = 0.733

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.090 A/m; Power Drift = 0.030 dB

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

Peak H-field in A/m

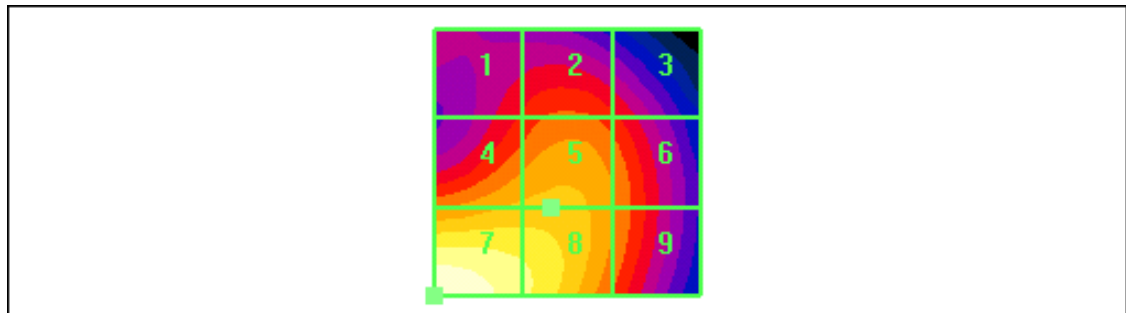
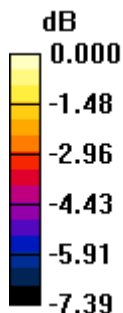
Grid 1	Grid 2	Grid 3
0.052 M4	0.055 M4	0.052 M4
Grid 4	Grid 5	Grid 6
0.062 M4	0.062 M4	0.058 M4
Grid 7	Grid 8	Grid 9
0.076 M4	0.069 M4	0.057 M4

Cursor:

Total = 0.076 A/m

H Category: M4

Location: 25, 25, 369.4 mm



0 dB = 0.076A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1175

Test Date May. 14, 2010

DUT: CDM8999; Type: Bar; 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 71; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2009-05-22
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2009-05-22
- Phantom: HAC Test Arch; Type: SD HAC P01 BA

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.065 A/m

Probe Modulation Factor = 0.733

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.081 A/m; Power Drift = 0.012 dB

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

Peak H-field in A/m

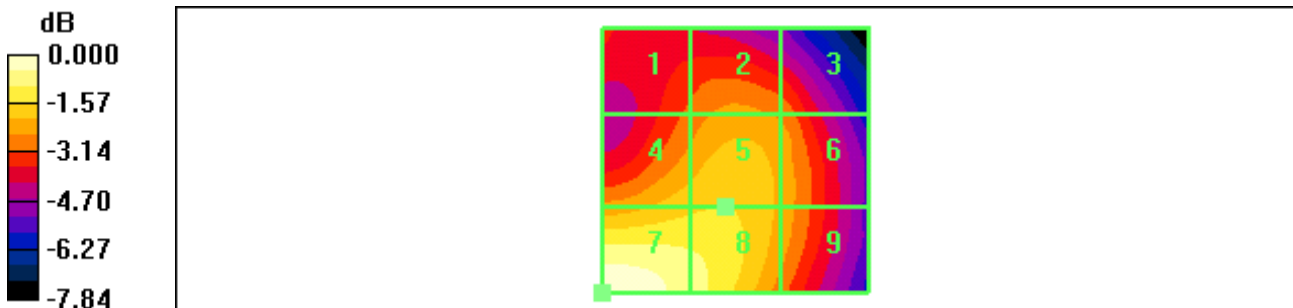
Grid 1	Grid 2	Grid 3
0.046 M4	0.049 M4	0.048 M4
Grid 4	Grid 5	Grid 6
0.053 M4	0.054 M4	0.050 M4
Grid 7	Grid 8	Grid 9
0.065 M4	0.059 M4	0.050 M4

Cursor:

Total = 0.065 A/m

H Category: M4

Location: 25, 25, 369.4 mm



0 dB = 0.065A/m