

APPENDIX A. HAC TEST PLOTS

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1013

Test Date May 12,2011

DUT: CDM8992; 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 Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ER3DV6R - SN2242; ConvF(1, 1, 1); Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 70.1 V/m

Probe Modulation Factor = 0.948

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 97.7 V/m; Power Drift = -0.118 dB

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

Peak E-field in V/m

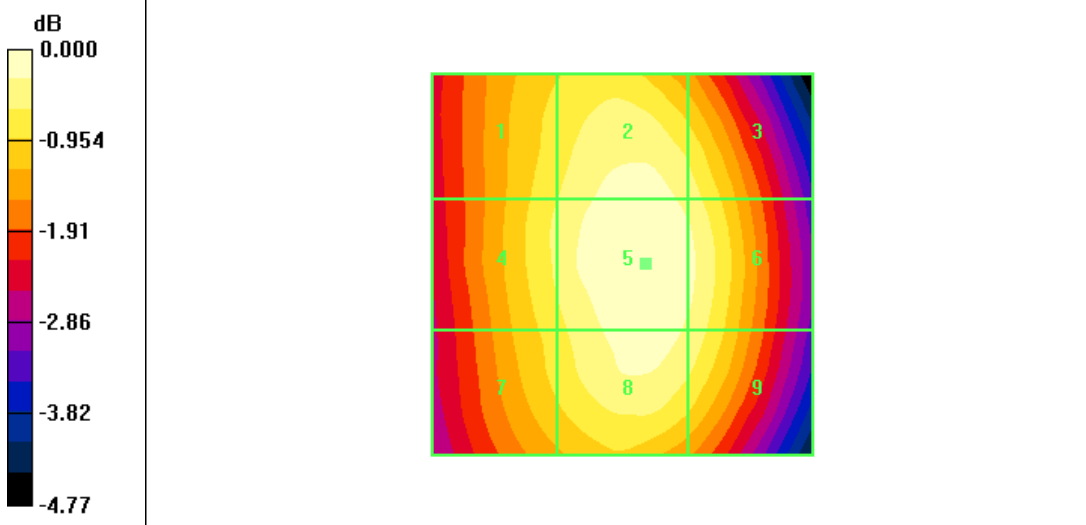
Grid 1	Grid 2	Grid 3
65.2 M4	69.0 M4	66.8 M4
Grid 4	Grid 5	Grid 6
65.9 M4	70.1 M4	68.4 M4
Grid 7	Grid 8	Grid 9
64.4 M4	68.9 M4	67.2 M4

Cursor:

Total = 70.1 V/m

E Category: M4

Location: -3, 0, 370.9 mm



0 dB = 70.1V/m

Test Laboratory: HCT CO., LTD.
Ambient Temperature / Channel 21.3 °C /384
Test Date May 12,2011

DUT: CDM8992; 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 Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ER3DV6R - SN2242; ConvF(1, 1, 1); Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 77.9 V/m

Probe Modulation Factor = 0.948

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 105.5 V/m; Power Drift = -0.005 dB

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

Peak E-field in V/m

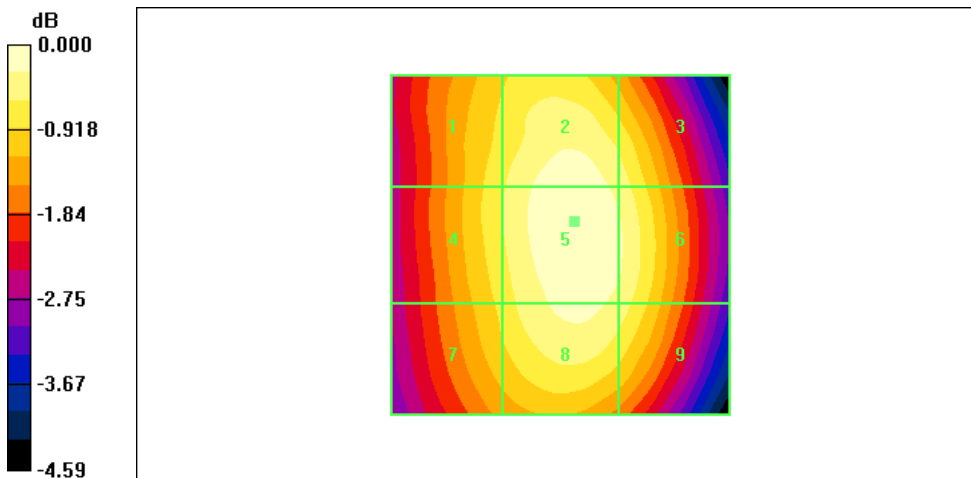
Grid 1	Grid 2	Grid 3
72.4 M4	76.9 M4	74.3 M4
Grid 4	Grid 5	Grid 6
72.7 M4	77.9 M4	75.7 M4
Grid 7	Grid 8	Grid 9
71.1 M4	76.1 M4	74.2 M4

Cursor:

Total = 77.9 V/m

E Category: M4

Location: -2, -3.5, 370.9 mm



Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /777

Test Date May 12,2011

DUT: CDM8992; 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 Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ER3DV6R - SN2242; ConvF(1, 1, 1); Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 72.6 V/m

Probe Modulation Factor = 0.948

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 99.4 V/m; Power Drift = 0.059 dB

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

Peak E-field in V/m

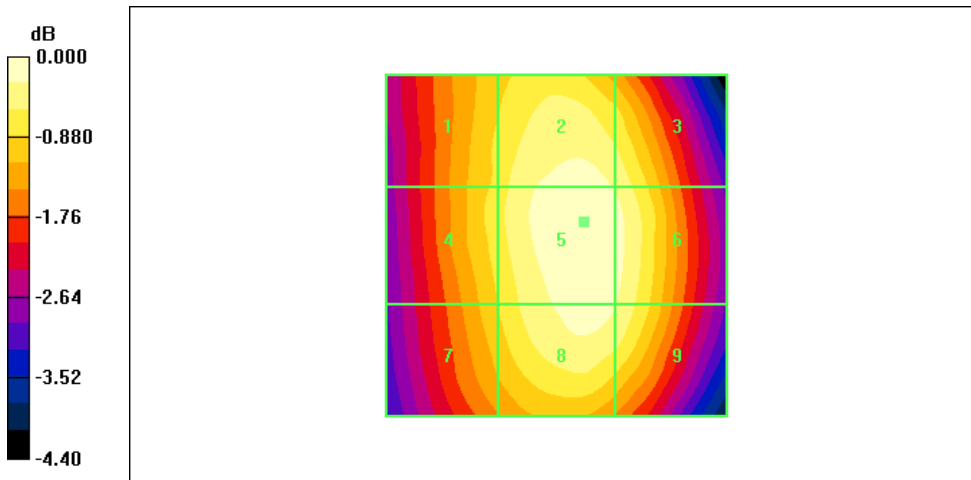
Grid 1	Grid 2	Grid 3
66.7 M4	71.5 M4	70.0 M4
Grid 4	Grid 5	Grid 6
67.2 M4	72.6 M4	71.3 M4
Grid 7	Grid 8	Grid 9
65.7 M4	71.6 M4	70.4 M4

Cursor:

Total = 72.6 V/m

E Category: M4

Location: -4, -3.5, 370.9 mm



Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /25

Test Date May 12, 2011

DUT: CDM8992; 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 Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ER3DV6R - SN2242; ConvF(1, 1, 1); Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 36.6 V/m

Probe Modulation Factor = 0.980

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 13.6 V/m; Power Drift = -0.032 dB

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

Peak E-field in V/m

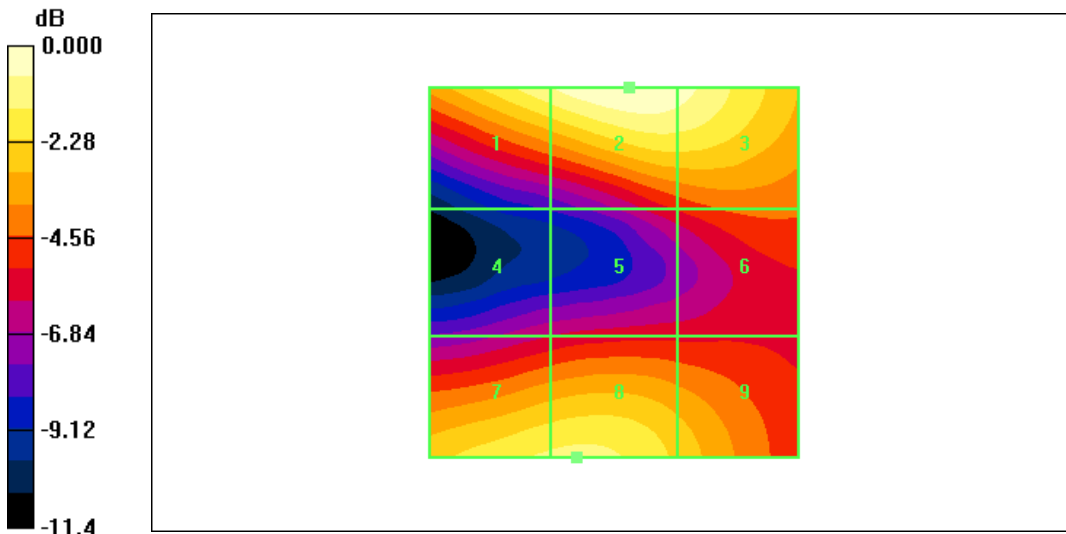
Grid 1	Grid 2	Grid 3
33.6 M4	36.6 M4	34.9 M4
Grid 4	Grid 5	Grid 6
18.2 M4	20.0 M4	22.2 M4
Grid 7	Grid 8	Grid 9
31.3 M4	31.7 M4	27.6 M4

Cursor:

Total = 36.6 V/m

E Category: M4

Location: -2, -25, 366.6 mm



0 dB = 36.6V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / 21.3 °C /600

Channel

Test Date May 12,2011

DUT: CDM8992; 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 Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ER3DV6R - SN2242; ConvF(1, 1, 1); Calibrated: 2010-09-20

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn869; Calibrated: 2010-09-21

- 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 = 40.5 V/m

Probe Modulation Factor = 0.980

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 15.4 V/m; Power Drift = -0.033 dB

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

Peak E-field in V/m

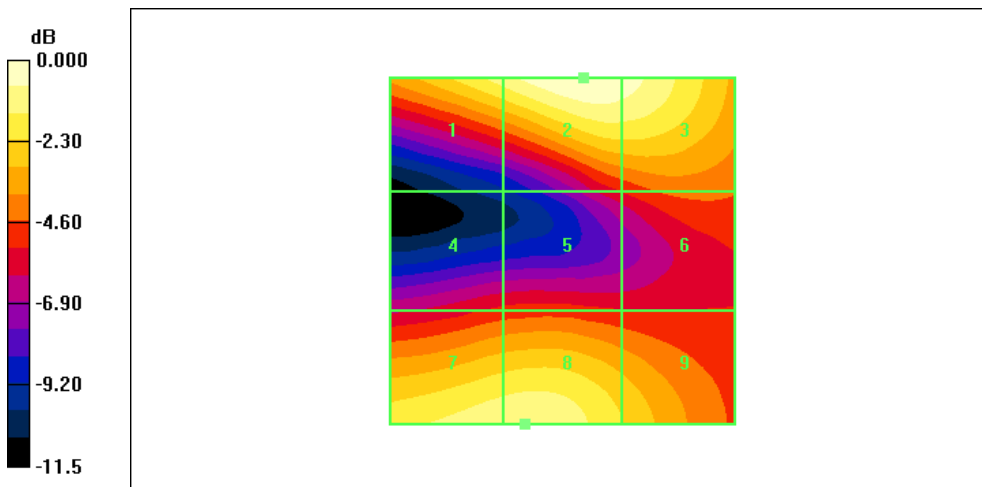
Grid 1	Grid 2	Grid 3
35.8 M4	40.5 M4	38.9 M4
Grid 4	Grid 5	Grid 6
22.5 M4	22.9 M4	24.6 M4
Grid 7	Grid 8	Grid 9
36.5 M4	36.9 M4	31.4 M4

Cursor:

Total = 40.5 V/m

E Category: M4

Location: -3, -25, 366.6 mm



0 dB = 40.5V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C / 1175

Test Date May 12, 2011

DUT: CDM8992; 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 Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ER3DV6R - SN2242; ConvF(1, 1, 1); Calibrated: 2010-09-20

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn869; Calibrated: 2010-09-21

- 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 = 37.2 V/m

Probe Modulation Factor = 0.980

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 14.4 V/m; Power Drift = 0.003 dB

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

Peak E-field in V/m

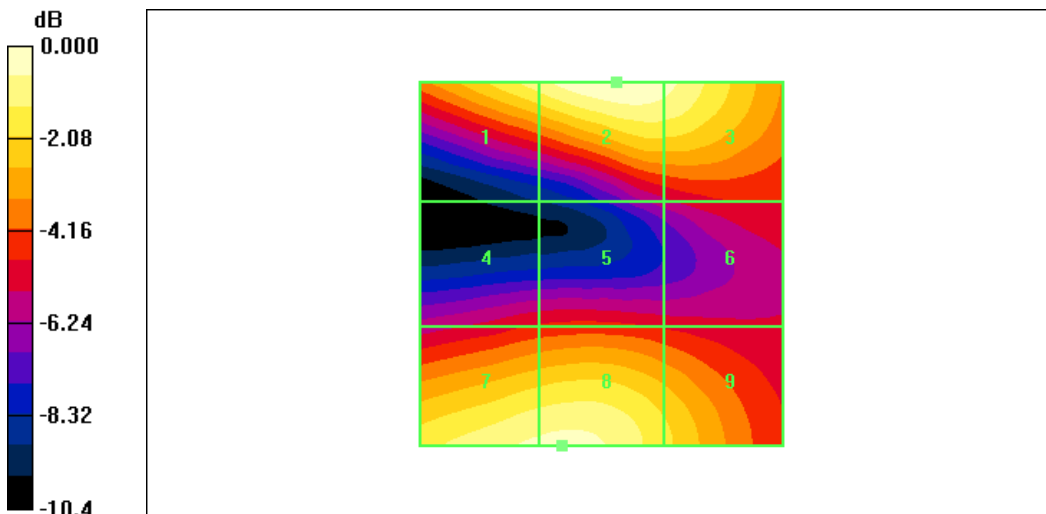
Grid 1	Grid 2	Grid 3
33.5 M4	37.2 M4	35.4 M4
Grid 4	Grid 5	Grid 6
21.5 M4	22.0 M4	21.3 M4
Grid 7	Grid 8	Grid 9
35.1 M4	35.4 M4	30.1 M4

Cursor:

Total = 37.2 V/m

E Category: M4

Location: -2, -25, 366.6 mm



0 dB = 37.2V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1013

Test Date May 12,2011

DUT: CDM8992; 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 184

DASY4 Configuration:

- Probe: H3DV6 - SN6051; ; Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 0.141 A/m

Probe Modulation Factor = 0.862

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.092 A/m; Power Drift = 0.000 dB

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

Peak H-field in A/m

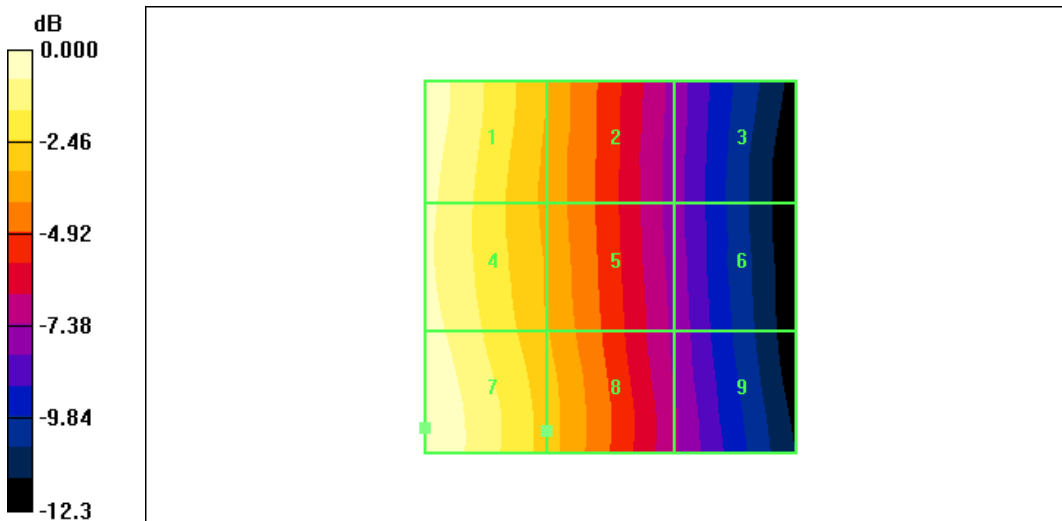
Grid 1 0.138 M4	Grid 2 0.096 M4	Grid 3 0.058 M4
Grid 4 0.134 M4	Grid 5 0.097 M4	Grid 6 0.059 M4
Grid 7 0.141 M4	Grid 8 0.101 M4	Grid 9 0.062 M4

Cursor:

Total = 0.141 A/m

H Category: M4

Location: 25, 21.5, 369.4 mm



0 dB = 0.141A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /384

Test Date May 12,2011

DUT: CDM8992; 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 184

DASY4 Configuration:

- Probe: H3DV6 - SN6051; ; Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 0.150 A/m

Probe Modulation Factor = 0.862

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.092 A/m; Power Drift = 0.017 dB

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

Peak H-field in A/m

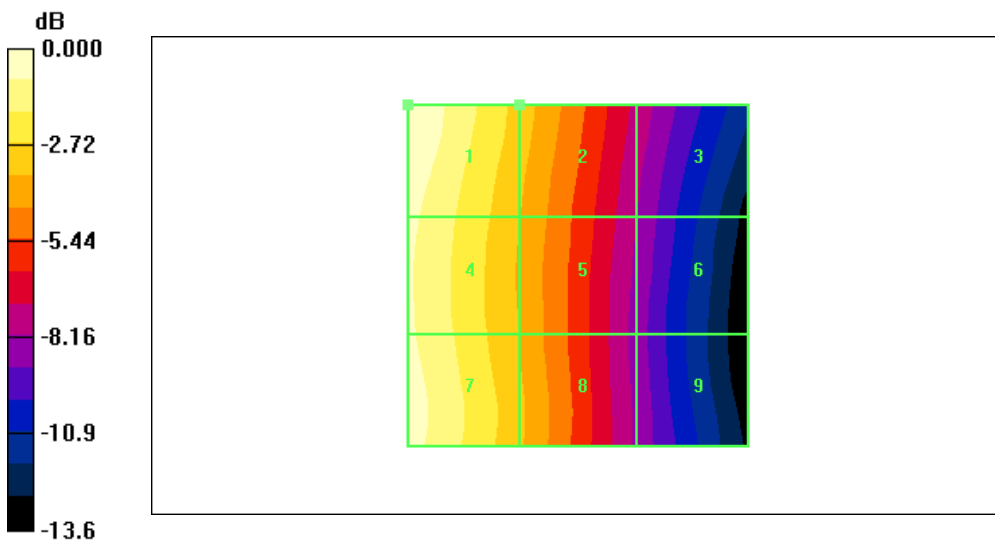
Grid 1 0.150 M4	Grid 2 0.105 M4	Grid 3 0.064 M4
Grid 4 0.140 M4	Grid 5 0.099 M4	Grid 6 0.059 M4
Grid 7 0.142 M4	Grid 8 0.101 M4	Grid 9 0.058 M4

Cursor:

Total = 0.150 A/m

H Category: M4

Location: 25, -25, 369.4 mm



0 dB = 0.150A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /777

Test Date May 12,2011

DUT: CDM8992; 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 184

DASY4 Configuration:

- Probe: H3DV6 - SN6051; ; Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 0.146 A/m

Probe Modulation Factor = 0.862

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.088 A/m; Power Drift = 0.016 dB

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

Peak H-field in A/m

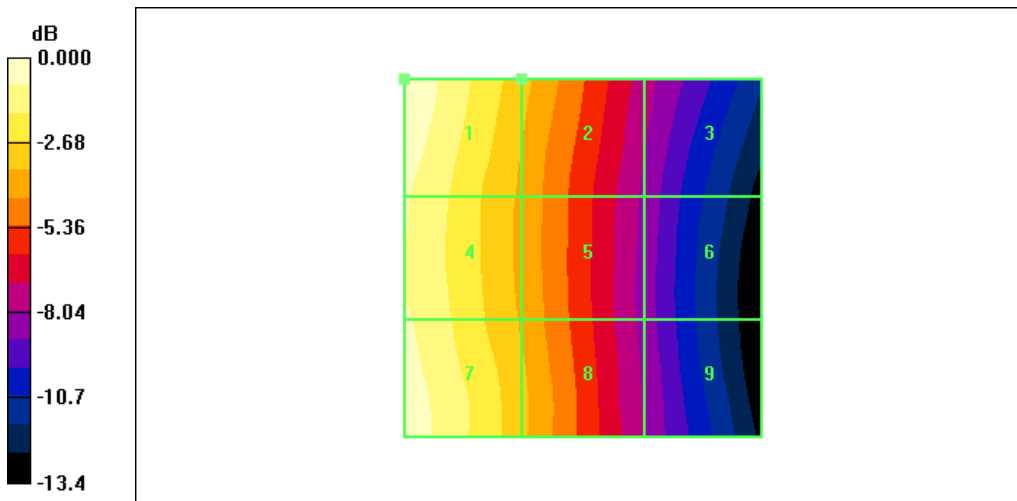
Grid 1 0.146 M4	Grid 2 0.101 M4	Grid 3 0.061 M4
Grid 4 0.134 M4	Grid 5 0.095 M4	Grid 6 0.057 M4
Grid 7 0.141 M4	Grid 8 0.099 M4	Grid 9 0.058 M4

Cursor:

Total = 0.146 A/m

H Category: M4

Location: 25, -25, 369.4 mm



0 dB = 0.146A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /25

Test Date May 12,2011

DUT: CDM8992; 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: E Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: H3DV6 - SN6051; ; Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 0.066 A/m

Probe Modulation Factor = 0.770

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 0.095 A/m; Power Drift = -0.026 dB

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

Peak H-field in A/m

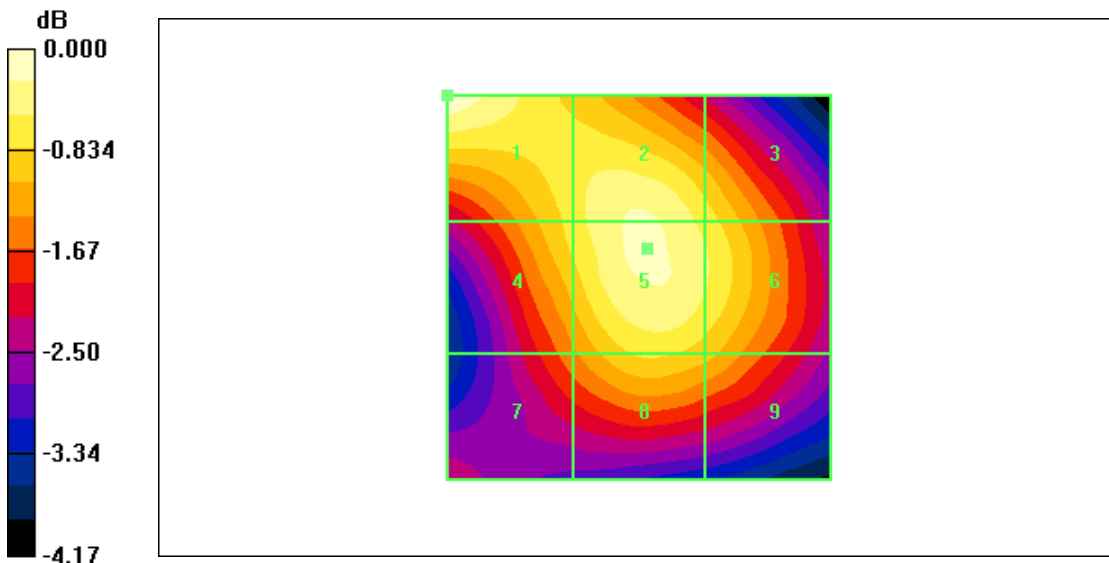
Grid 1 0.066 M4	Grid 2 0.064 M4	Grid 3 0.061 M4
Grid 4 0.061 M4	Grid 5 0.065 M4	Grid 6 0.062 M4
Grid 7 0.056 M4	Grid 8 0.060 M4	Grid 9 0.059 M4

Cursor:

Total = 0.066 A/m

H Category: M4

Location: 25, -25, 370.9 mm



Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /600

Test Date May 12,2011

DUT: CDM8992; 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: E Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: H3DV6 - SN6051; ; Calibrated: 2010-09-20
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2010-09-21
- 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 = 0.075 A/m

Probe Modulation Factor = 0.770

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 0.109 A/m; Power Drift = 0.019 dB

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

Peak H-field in A/m

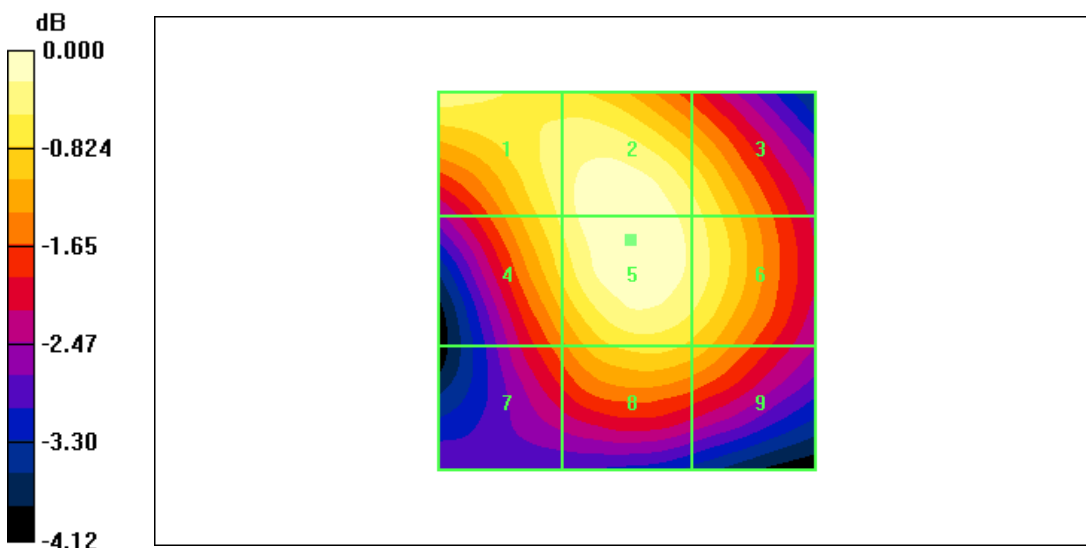
Grid 1 0.072 M4	Grid 2 0.075 M4	Grid 3 0.072 M4
Grid 4 0.071 M4	Grid 5 0.075 M4	Grid 6 0.072 M4
Grid 7 0.064 M4	Grid 8 0.069 M4	Grid 9 0.068 M4

Cursor:

Total = 0.075 A/m

H Category: M4

Location: -0.5, -5.5, 370.9 mm



0 dB = 0.075A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.3 °C /1175

Test Date May 12,2011

DUT: CDM8992; 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: E Dipole Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: H3DV6 - SN6051; ; Calibrated: 2010-09-20

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn869; Calibrated: 2010-09-21

- 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 = 0.072 A/m

Probe Modulation Factor = 0.770

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 0.104 A/m; Power Drift = 0.044 dB

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

Peak H-field in A/m

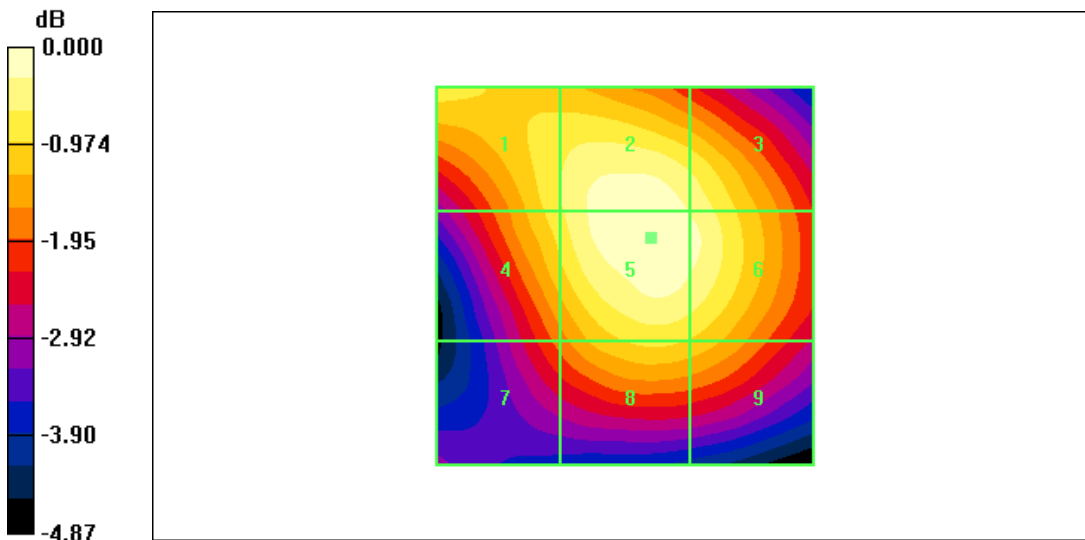
Grid 1 0.067 M4	Grid 2 0.071 M4	Grid 3 0.069 M4
Grid 4 0.066 M4	Grid 5 0.072 M4	Grid 6 0.070 M4
Grid 7 0.059 M4	Grid 8 0.065 M4	Grid 9 0.064 M4

Cursor:

Total = 0.072 A/m

H Category: M4

Location: -3.5, -5, 370.9 mm



0 dB = 0.072A/m