

APPENDIX A. HAC TEST PLOTS

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /1013

Test Date June 5, 2011

DUT: ADR8995; 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 = 40.0 V/m

Probe Modulation Factor = 0.948

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 53.4 V/m; Power Drift = 0.078 dB

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

Peak E-field in V/m

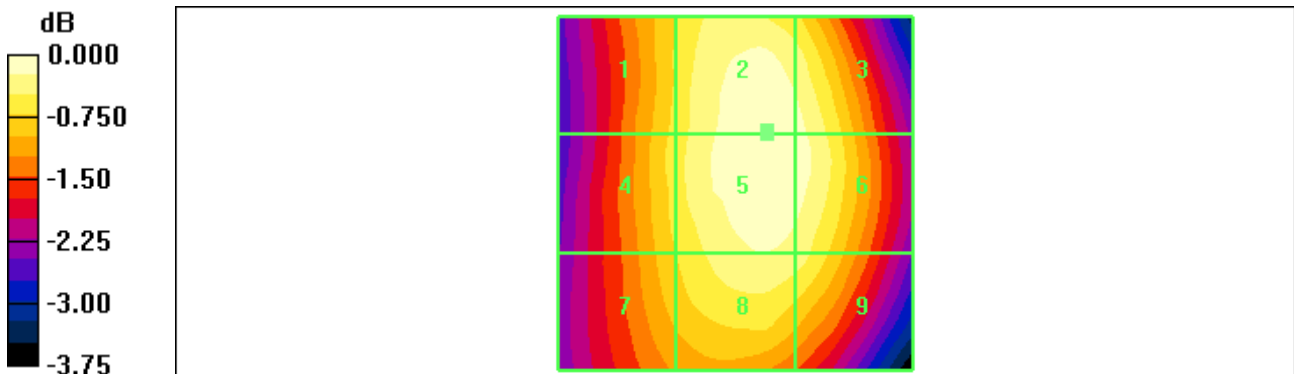
Grid 1	Grid 2	Grid 3
37.1 M4	40.0 M4	39.4 M4
Grid 4	Grid 5	Grid 6
37.3 M4	40.0 M4	39.6 M4
Grid 7	Grid 8	Grid 9
36.7 M4	38.8 M4	38.3 M4

Cursor:

Total = 40.0 V/m

E Category: M4

Location: -4.5, -9, 370.9 mm



0 dB = 40.0V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /384

Test Date June 5, 2011

DUT: ADR8995; 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 = 45.6 V/m

Probe Modulation Factor = 0.948

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 60.9 V/m; Power Drift = -0.120 dB

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

Peak E-field in V/m

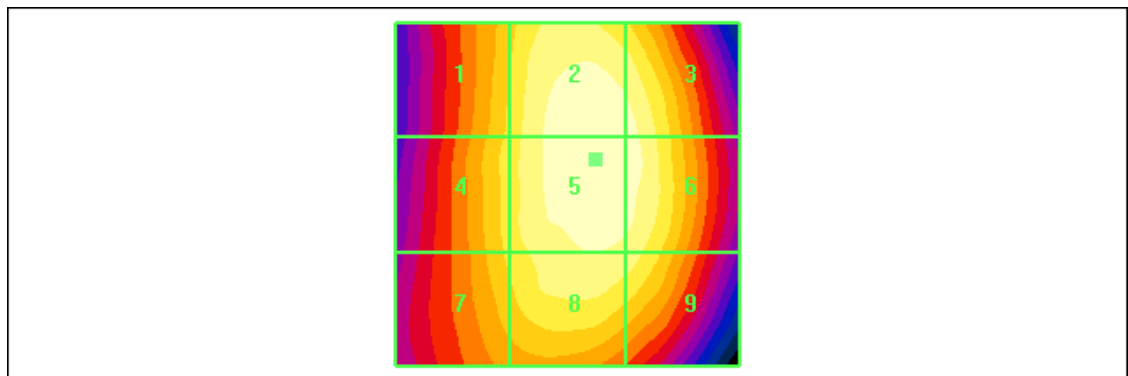
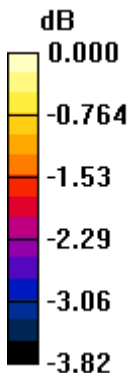
Grid 1	Grid 2	Grid 3
42.1 M4	45.5 M4	44.9 M4
Grid 4	Grid 5	Grid 6
42.4 M4	45.6 M4	45.2 M4
Grid 7	Grid 8	Grid 9
42.1 M4	44.3 M4	43.8 M4

Cursor:

Total = 45.6 V/m

E Category: M4

Location: -4, -5, 370.9 mm



0 dB = 45.6V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /777

Test Date June 5, 2011

DUT: ADR8995; 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 = 42.1 V/m

Probe Modulation Factor = 0.948

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 56.2 V/m; Power Drift = -0.007 dB

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

Peak E-field in V/m

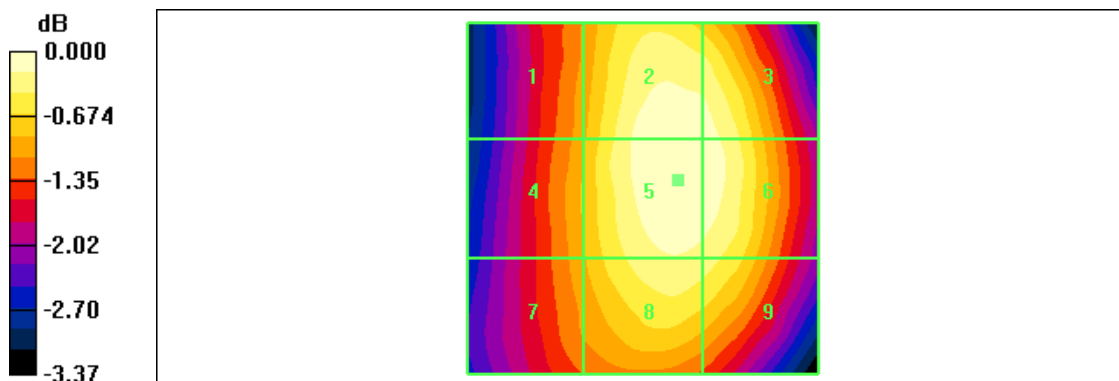
Grid 1	Grid 2	Grid 3
37.8 M4	42.0 M4	41.7 M4
Grid 4	Grid 5	Grid 6
38.1 M4	42.1 M4	41.9 M4
Grid 7	Grid 8	Grid 9
37.9 M4	40.9 M4	40.6 M4

Cursor:

Total = 42.1 V/m

E Category: M4

Location: -5, -2.5, 370.9 mm



Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /25

Test Date June 5, 2011

DUT: ADR8995; 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 = 38.8 V/m

Probe Modulation Factor = 0.980

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 27.0 V/m; Power Drift = 0.009 dB

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

Peak E-field in V/m

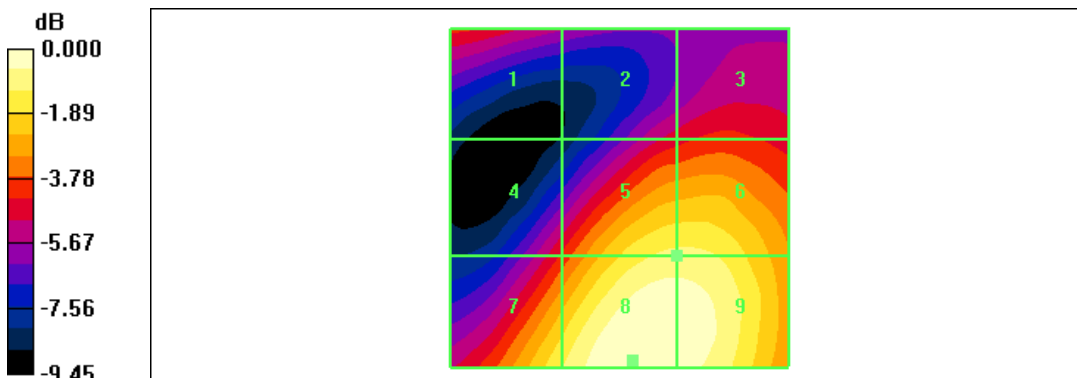
Grid 1	Grid 2	Grid 3
24.1 M4	22.8 M4	24.1 M4
Grid 4	Grid 5	Grid 6
23.7 M4	34.3 M4	34.3 M4
Grid 7	Grid 8	Grid 9
33.5 M4	38.8 M4	37.9 M4

Cursor:

Total = 38.8 V/m

E Category: M4

Location: -2, 24, 366.6 mm



0 dB = 38.8V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /600

Test Date June 5, 2011

DUT: ADR8995; 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 = 41.4 V/m

Probe Modulation Factor = 0.980

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 26.9 V/m; Power Drift = 0.095 dB

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

Peak E-field in V/m

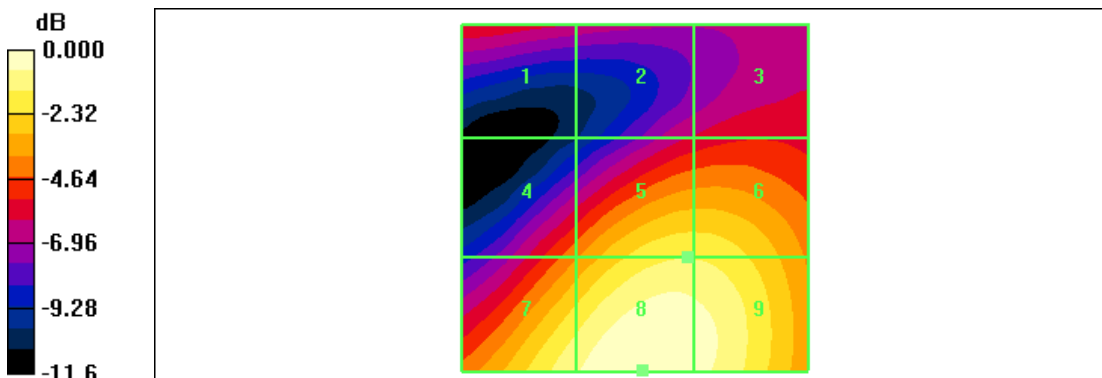
Grid 1	Grid 2	Grid 3
22.3 M4	20.7 M4	22.2 M4
Grid 4	Grid 5	Grid 6
26.2 M4	34.5 M4	34.4 M4
Grid 7	Grid 8	Grid 9
37.5 M4	41.4 M4	39.8 M4

Cursor:

Total = 41.4 V/m

E Category: M4

Location: -1, 25, 366.6 mm



0 dB = 41.4V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /1175

Test Date June 5, 2011

DUT: ADR8995; 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 = 40.1 V/m

Probe Modulation Factor = 0.980

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 26.8 V/m; Power Drift = -0.071 dB

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

Peak E-field in V/m

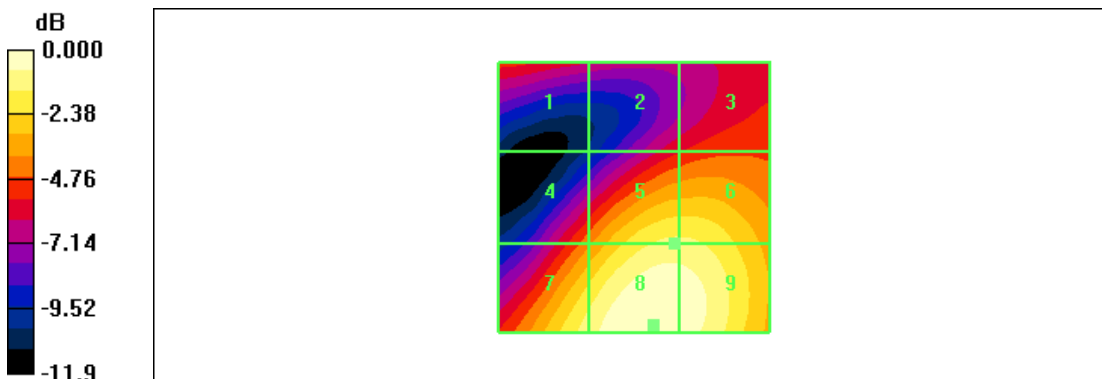
Grid 1	Grid 2	Grid 3
22.2 M4	21.1 M4	22.9 M4
Grid 4	Grid 5	Grid 6
24.8 M4	34.3 M4	34.3 M4
Grid 7	Grid 8	Grid 9
35.2 M4	40.1 M4	39.2 M4

Cursor:

Total = 40.1 V/m

E Category: M4

Location: -3.5, 23.5, 366.6 mm



0 dB = 40.1V/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /1013

Test Date June 5, 2011

DUT: APACHE; 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 = 0.088 A/m

Probe Modulation Factor = 0.862

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.081 A/m; Power Drift = 0.052 dB

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

Peak H-field in A/m

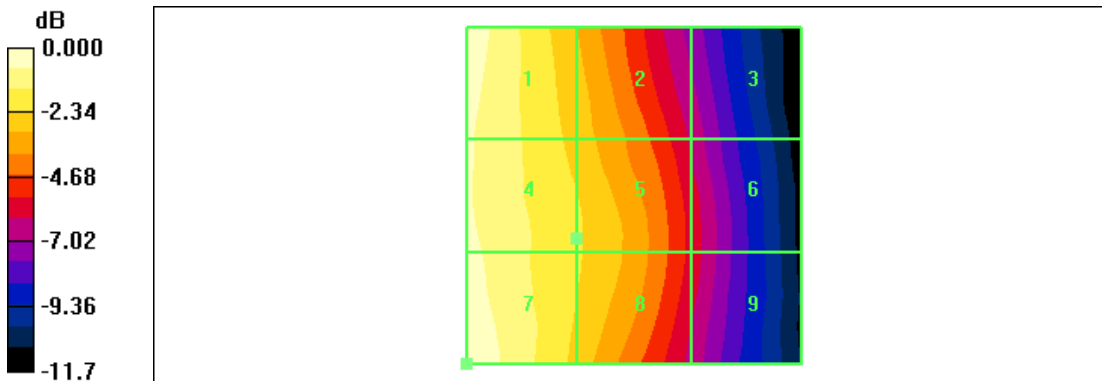
Grid 1	Grid 2	Grid 3
0.085 M4	0.065 M4	0.042 M4
Grid 4	Grid 5	Grid 6
0.082 M4	0.068 M4	0.046 M4
Grid 7	Grid 8	Grid 9
0.088 M4	0.068 M4	0.046 M4

Cursor:

Total = 0.088 A/m

H Category: M4

Location: 25, 25, 369.4 mm



Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /384

Test Date June 5, 2011

DUT: APACHE; 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 = 0.099 A/m

Probe Modulation Factor = 0.862

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.099 A/m; Power Drift = 0.059 dB

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

Peak H-field in A/m

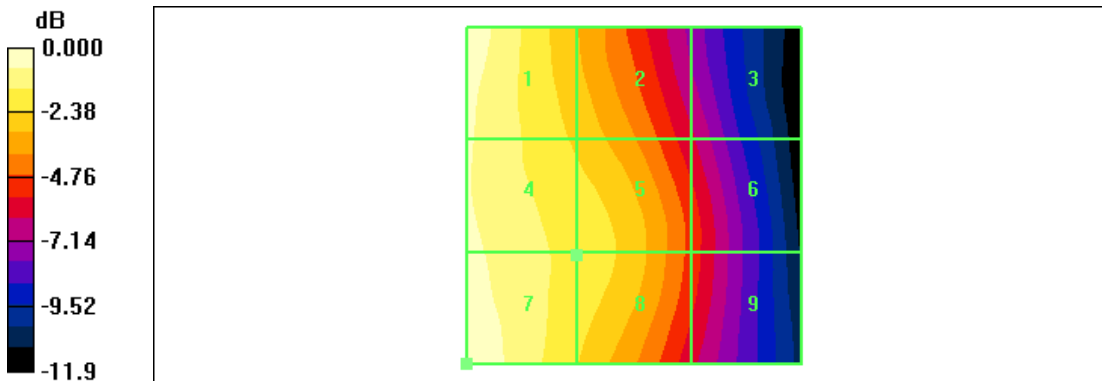
Grid 1	Grid 2	Grid 3
0.097 M4	0.074 M4	0.049 M4
Grid 4	Grid 5	Grid 6
0.093 M4	0.080 M4	0.056 M4
Grid 7	Grid 8	Grid 9
0.099 M4	0.080 M4	0.056 M4

Cursor:

Total = 0.099 A/m

H Category: M4

Location: 25, 25, 369.4 mm



0 dB = 0.099A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /777

Test Date June 5, 2011

DUT: APACHE; 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 = 0.087 A/m

Probe Modulation Factor = 0.862

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.084 A/m; Power Drift = -0.039 dB

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

Peak H-field in A/m

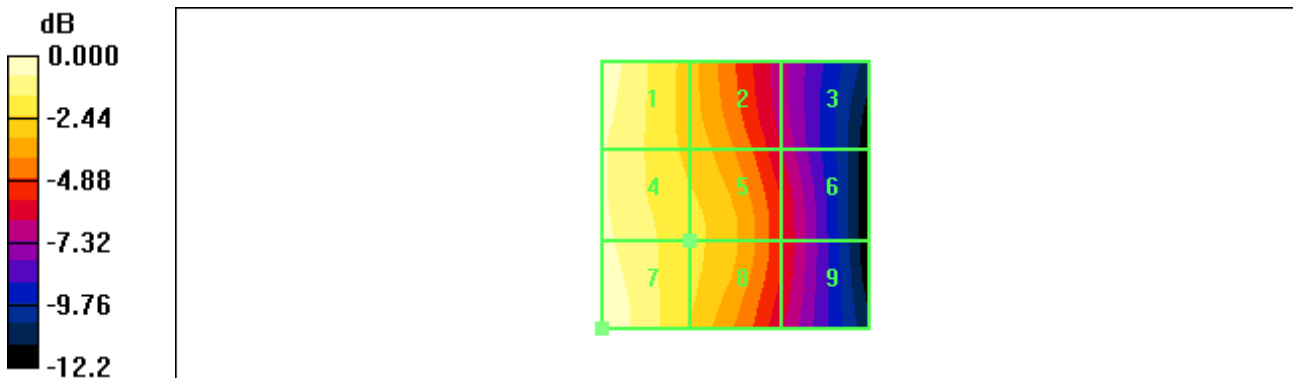
Grid 1	Grid 2	Grid 3
0.085 M4	0.064 M4	0.041 M4
Grid 4	Grid 5	Grid 6
0.082 M4	0.068 M4	0.046 M4
Grid 7	Grid 8	Grid 9
0.087 M4	0.068 M4	0.046 M4

Cursor:

Total = 0.087 A/m

H Category: M4

Location: 25, 25, 369.4 mm



0 dB = 0.087A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /25

Test Date June 5, 2011

DUT: APACHE; 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 = 0.078 A/m

Probe Modulation Factor = 0.770

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 0.091 A/m; Power Drift = -0.052 dB

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

Peak H-field in A/m

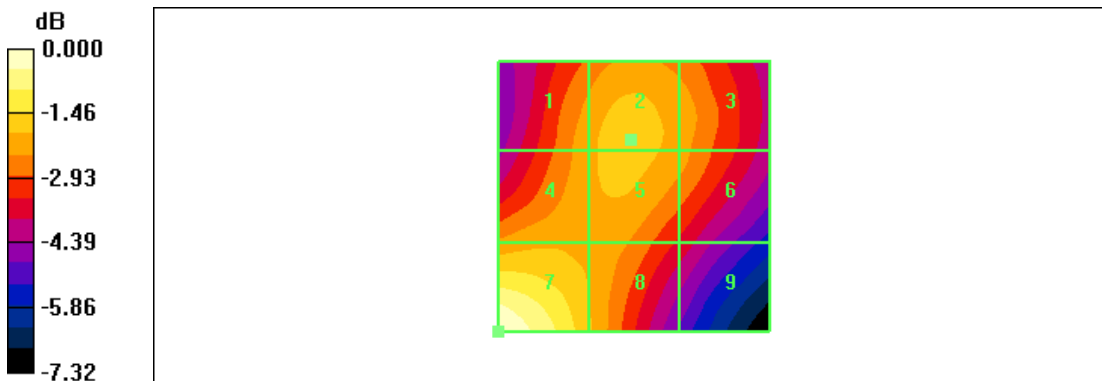
Grid 1	Grid 2	Grid 3
0.061 M4	0.064 M4	0.061 M4
Grid 4	Grid 5	Grid 6
0.062 M4	0.064 M4	0.060 M4
Grid 7	Grid 8	Grid 9
0.078 M4	0.063 M4	0.052 M4

Cursor:

Total = 0.078 A/m

H Category: M4

Location: 25, 25, 370.9 mm



0 dB = 0.078A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /600

Test Date June 5, 2011

DUT: APACHE; 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 = 0.076 A/m

Probe Modulation Factor = 0.770

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 0.101 A/m; Power Drift = -0.013 dB

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

Peak H-field in A/m

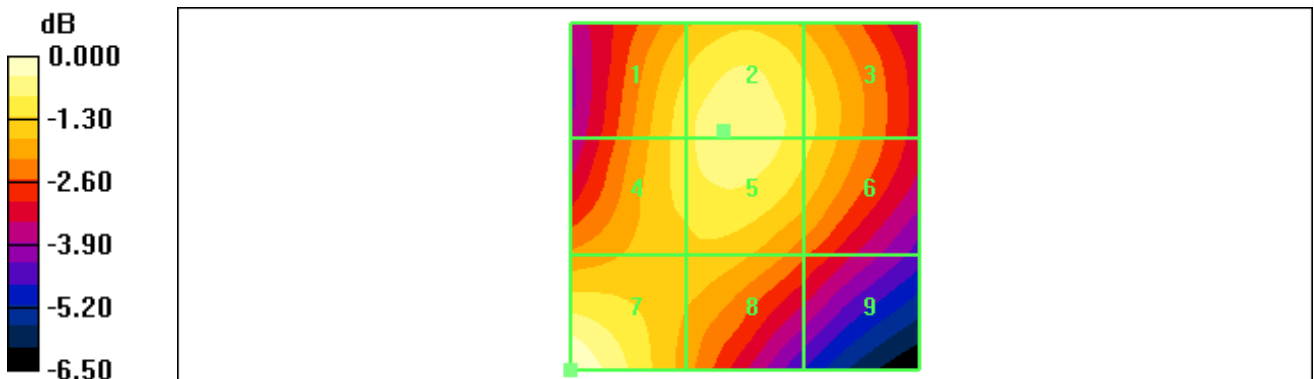
Grid 1	Grid 2	Grid 3
0.068 M4	0.071 M4	0.067 M4
Grid 4	Grid 5	Grid 6
0.068 M4	0.071 M4	0.067 M4
Grid 7	Grid 8	Grid 9
0.076 M4	0.065 M4	0.057 M4

Cursor:

Total = 0.076 A/m

H Category: M4

Location: 25, 25, 370.9 mm



0 dB = 0.076A/m

Test Laboratory: HCT CO., LTD.

Ambient Temperature / Channel 21.5 °C /1175

Test Date June 5, 2011

DUT: APACHE; 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 = 0.082 A/m

Probe Modulation Factor = 0.770

Device Reference Point: 0.000, 0.000, 354.7 mm

Reference Value = 0.105 A/m; Power Drift = -0.030 dB

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

Peak H-field in A/m

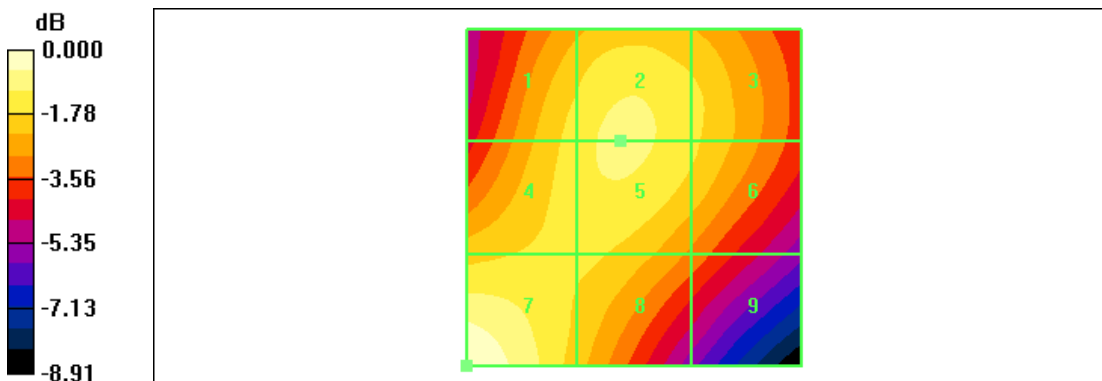
Grid 1	Grid 2	Grid 3
0.069 M4	0.073 M4	0.068 M4
Grid 4	Grid 5	Grid 6
0.069 M4	0.073 M4	0.068 M4
Grid 7	Grid 8	Grid 9
0.082 M4	0.068 M4	0.057 M4

Cursor:

Total = 0.082 A/m

H Category: M4

Location: 25, 25, 370.9 mm



0 dB = 0.082A/m