

Test Laboratory: UL CCS SAR Lab C

1_GSM 850

Communication System: Generic GSM; Frequency: 824.2 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement

grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 159.4 V/m

Probe Modulation Factor = 2.790

Device Reference Point: 0, 0, -6.3 mm

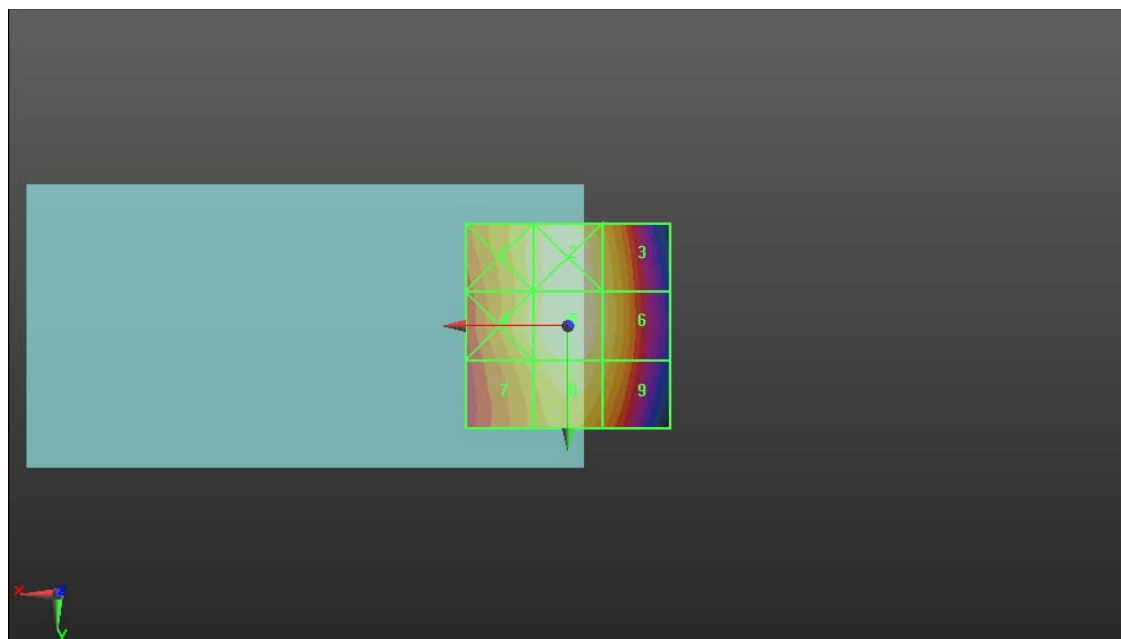
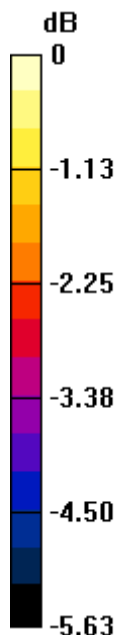
Reference Value = 76.941 V/m; Power Drift = -0.10 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 149.3 M4	Grid 2 158.6 M3	Grid 3 148.3 M4
Grid 4 149.7 M3	Grid 5 159.4 M3	Grid 6 149.5 M4
Grid 7 143.7 M4	Grid 8 153.9 M3	Grid 9 144.6 M4

Location: -0.5, -1.5, 8.7 mm



0 dB = 159.4V/m

Test Laboratory: UL CCS SAR Lab C

1_GSM 850

Communication System: Generic GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement

grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 173.4 V/m

Probe Modulation Factor = 2.790

Device Reference Point: 0, 0, -6.3 mm

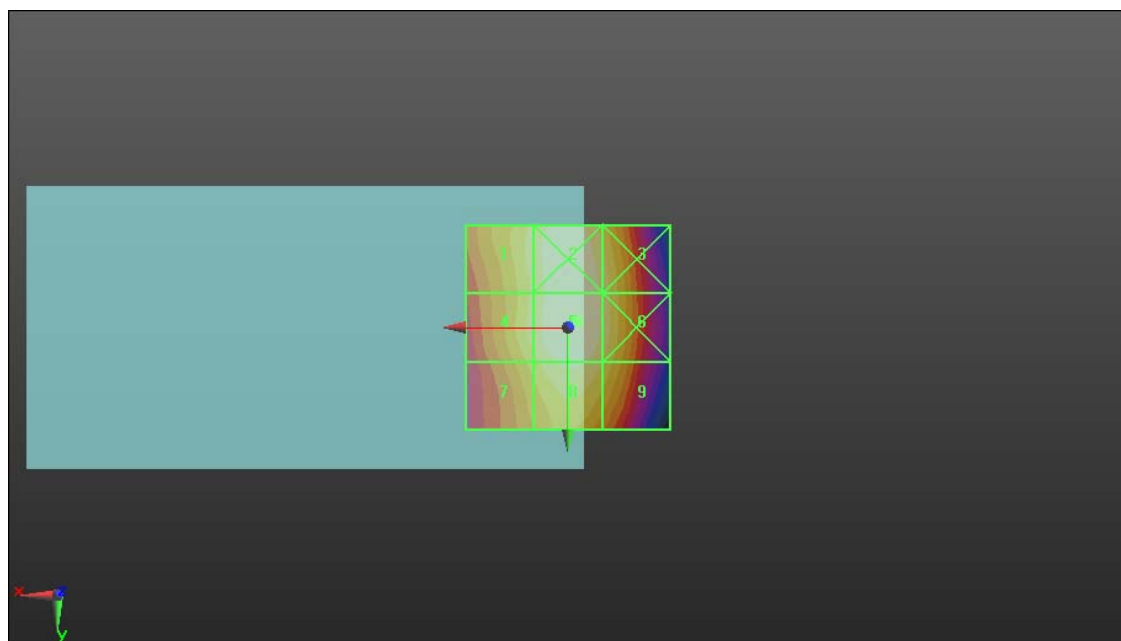
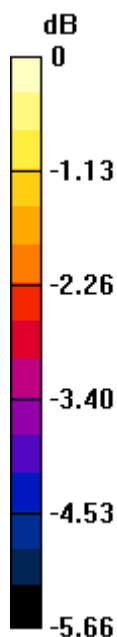
Reference Value = 83.054 V/m; Power Drift = 0.04 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 162.8 M3	Grid 2 173.1 M3	Grid 3 164.1 M3
Grid 4 162.4 M3	Grid 5 173.4 M3	Grid 6 164.5 M3
Grid 7 155.8 M3	Grid 8 167.7 M3	Grid 9 158.8 M3

Location: -2.5, -1.5, 8.7 mm



0 dB = 173.4V/m

Test Laboratory: UL CCS SAR Lab C

1_GSM 850

Communication System: Generic GSM; Frequency: 848.6 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement

grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 165.9 V/m

Probe Modulation Factor = 2.790

Device Reference Point: 0, 0, -6.3 mm

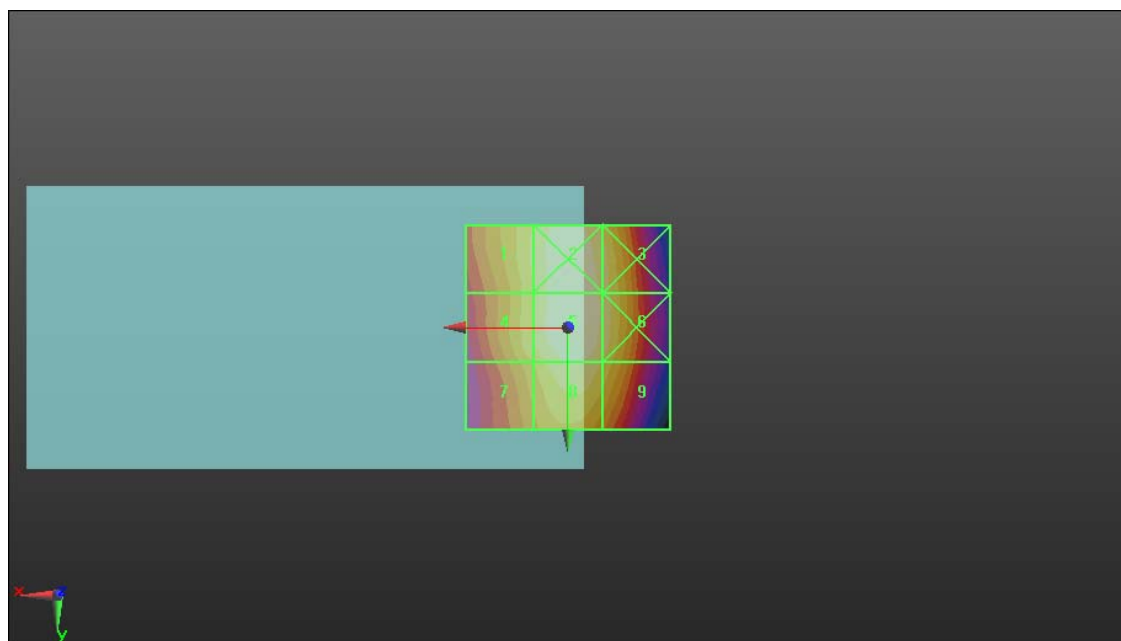
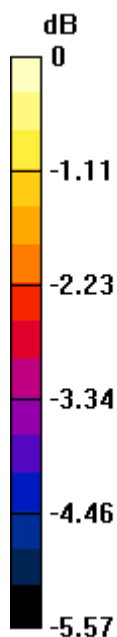
Reference Value = 79.932 V/m; Power Drift = -0.04 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 153.8 M3	Grid 2 165.0 M3	Grid 3 156.8 M3
Grid 4 152.9 M3	Grid 5 165.9 M3	Grid 6 157.7 M3
Grid 7 146.3 M4	Grid 8 159.8 M3	Grid 9 152.0 M3

Location: -1, -1, 8.7 mm



0 dB = 165.9V/m

Test Laboratory: UL CCS SAR Lab C

2_GSM 1900

Communication System: Generic GSM; Frequency: 1850.2 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement

grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 60.566 V/m

Probe Modulation Factor = 2.820

Device Reference Point: 0, 0, -6.3 mm

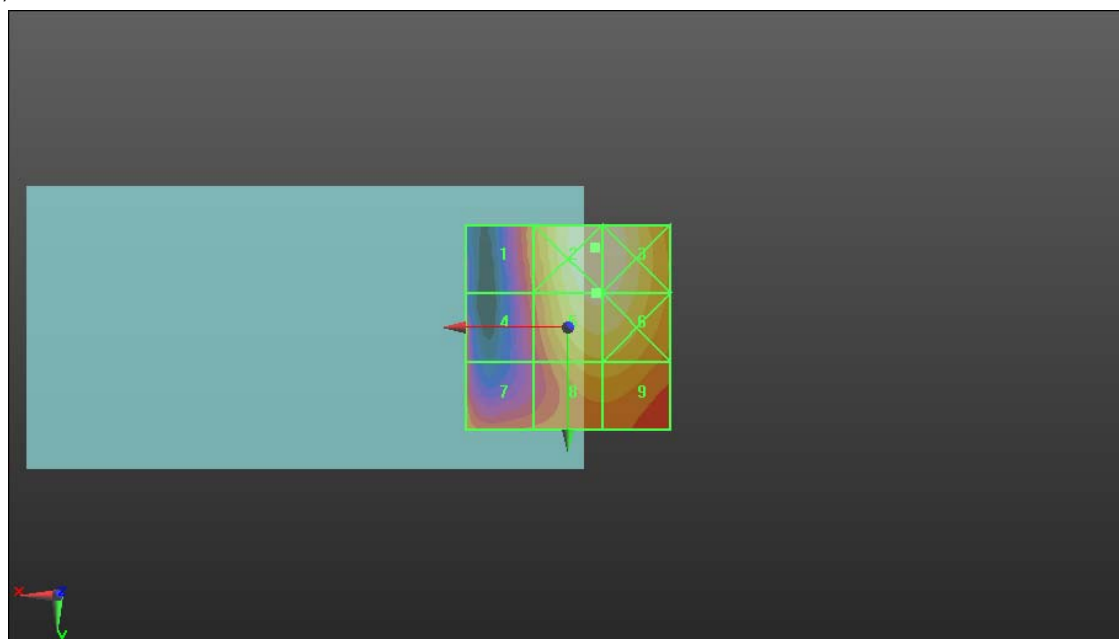
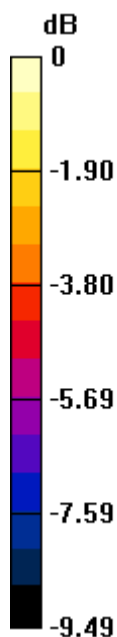
Reference Value = 24.581 V/m; Power Drift = -0.08 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 45.318 M4	Grid 2 63.514 M3	Grid 3 63.071 M3
Grid 4 49.926 M3	Grid 5 60.566 M3	Grid 6 60.369 M3
Grid 7 44.169 M4	Grid 8 50.199 M3	Grid 9 50.142 M3

Location: -6.5, -19.5, 8.7 mm



0 dB = 63.510V/m

Test Laboratory: UL CCS SAR Lab C

2_GSM 1900

Communication System: Generic GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement

grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 54.123 V/m

Probe Modulation Factor = 2.820

Device Reference Point: 0, 0, -6.3 mm

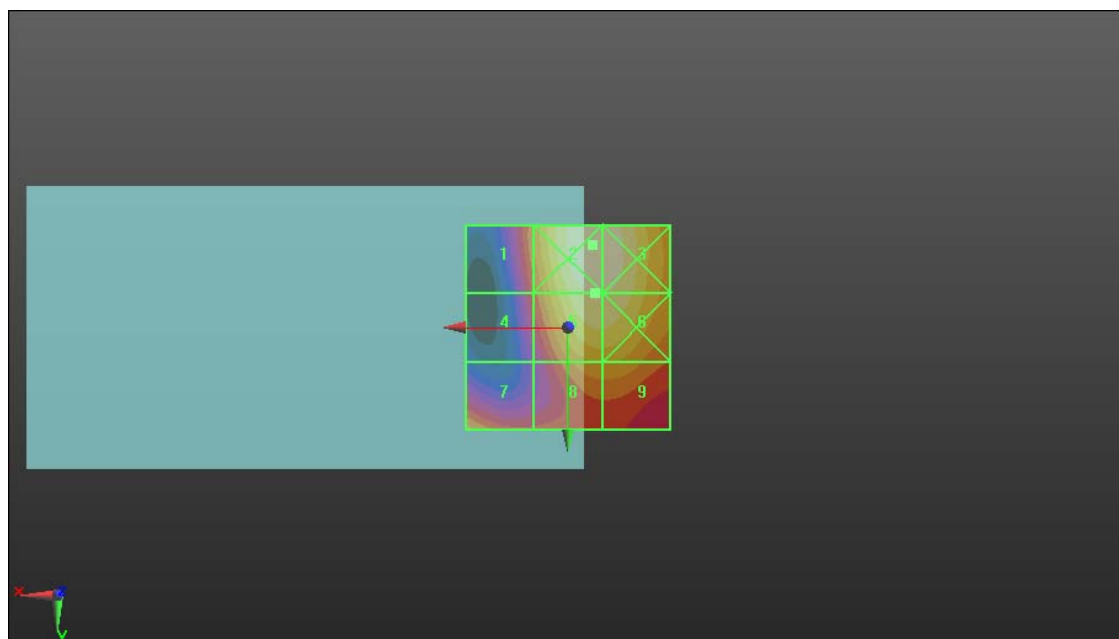
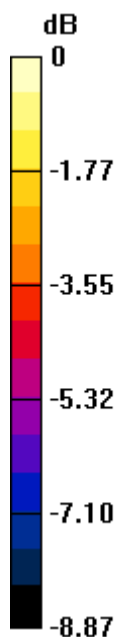
Reference Value = 22.212 V/m; Power Drift = -0.07 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 40.569 M4	Grid 2 57.066 M3	Grid 3 56.452 M3
Grid 4 36.537 M4	Grid 5 54.123 M3	Grid 6 53.816 M3
Grid 7 42.888 M4	Grid 8 43.664 M4	Grid 9 43.641 M4

Location: -6, -20, 8.7 mm



0 dB = 57.070V/m

Test Laboratory: UL CCS SAR Lab C

2_GSM 1900

Communication System: Generic GSM; Frequency: 1909.8 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement

grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 50.642 V/m

Probe Modulation Factor = 2.820

Device Reference Point: 0, 0, -6.3 mm

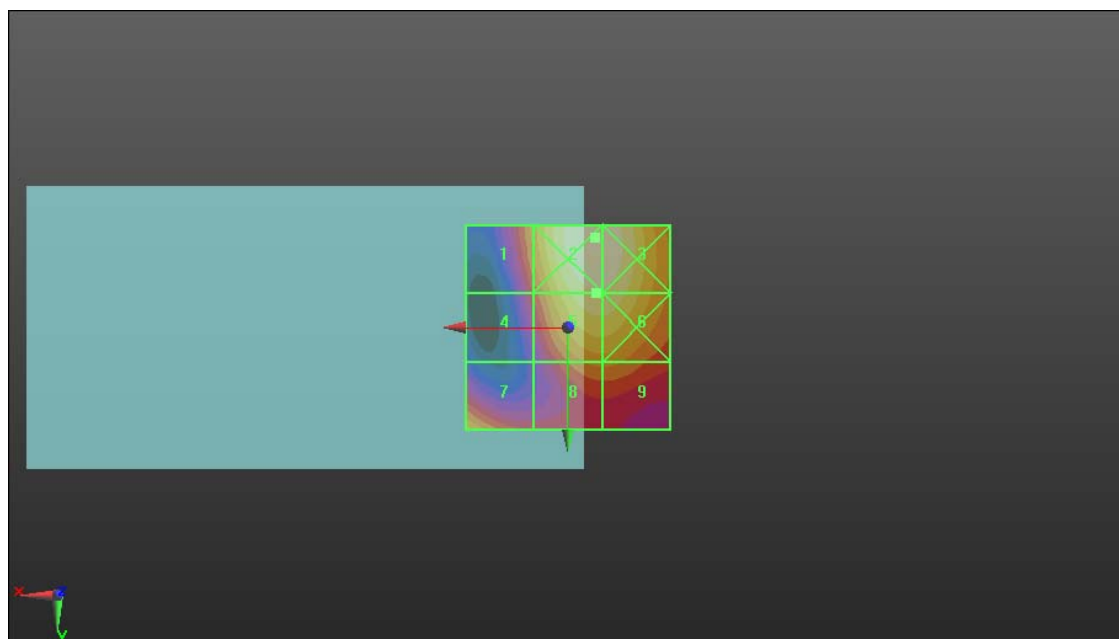
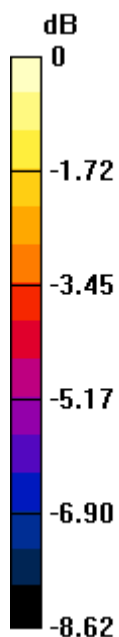
Reference Value = 20.831 V/m; Power Drift = -0.08 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 40.361 M4	Grid 2 54.342 M3	Grid 3 53.986 M3
Grid 4 34.755 M4	Grid 5 50.642 M3	Grid 6 50.531 M3
Grid 7 43.530 M4	Grid 8 39.932 M4	Grid 9 39.925 M4

Location: -6.5, -22, 8.7 mm



0 dB = 54.340V/m

Test Laboratory: UL CCS SAR Lab C

3_CDMA2000_850

Communication System: CDMA2000; Frequency: 824.7 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, 1x RTT (RC3, SO55)/L ch/Hearing Aid Compatibility Test**(101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 62.741 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

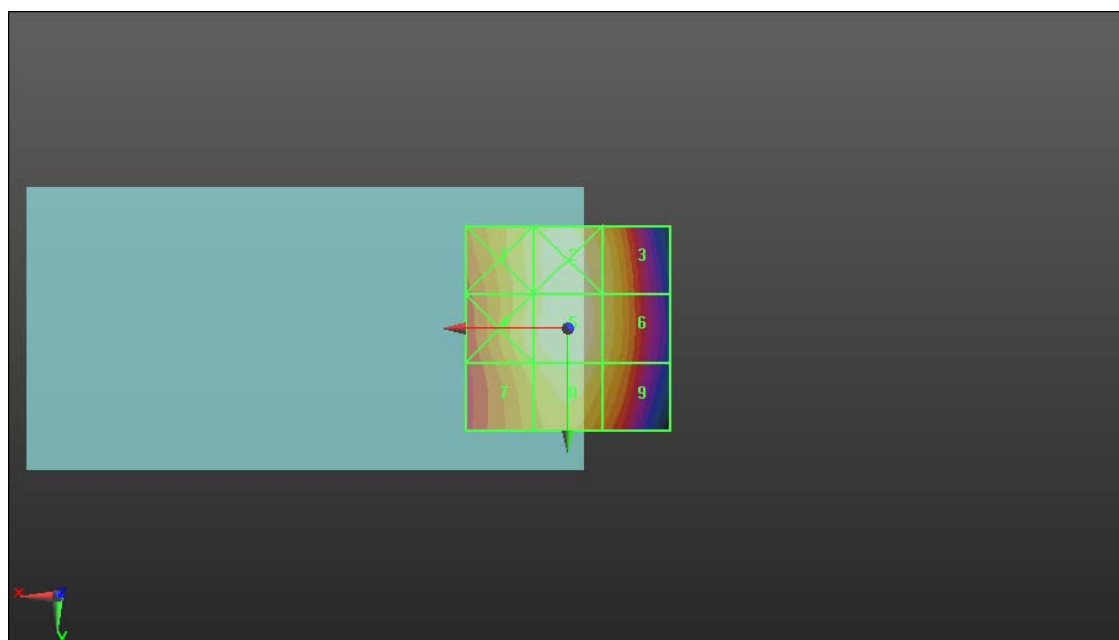
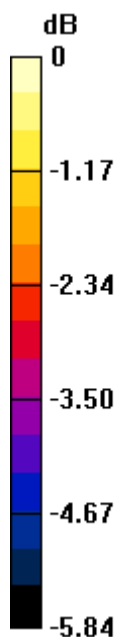
Reference Value = 89.508 V/m; Power Drift = 0.04 dB

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

Peak E-field in V/m

Grid 1 58.799 M4	Grid 2 62.043 M4	Grid 3 58.115 M4
Grid 4 59.242 M4	Grid 5 62.741 M4	Grid 6 58.113 M4
Grid 7 56.953 M4	Grid 8 60.484 M4	Grid 9 56.109 M4

Location: 0, -0.5, 8.7 mm



0 dB = 62.740V/m

Test Laboratory: UL CCS SAR Lab C

3_CDMA2000_850

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, 1x RTT (RC3, SO55)/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 67.274 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

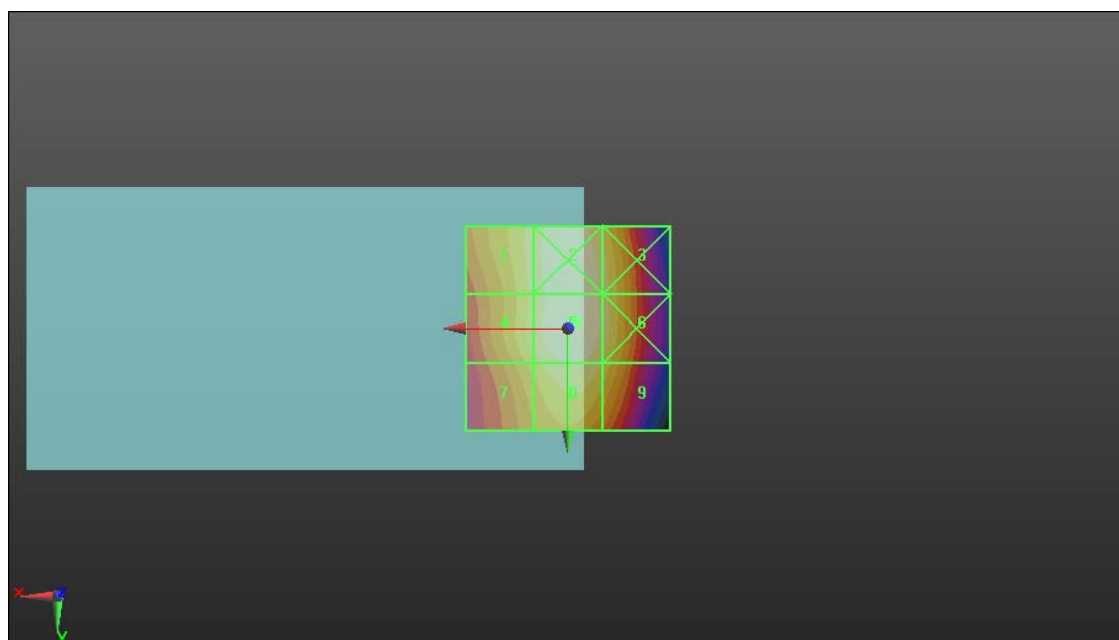
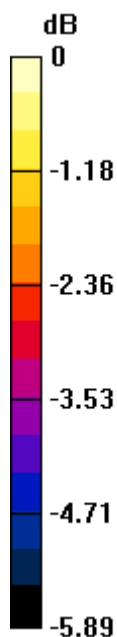
Reference Value = 96.226 V/m; Power Drift = -0.05 dB

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

Peak E-field in V/m

Grid 1 62.988 M4	Grid 2 67.239 M4	Grid 3 63.255 M4
Grid 4 62.783 M4	Grid 5 67.274 M4	Grid 6 63.499 M4
Grid 7 60.023 M4	Grid 8 64.512 M4	Grid 9 60.993 M4

Location: -2, -1.5, 8.7 mm



0 dB = 67.270V/m

Test Laboratory: UL CCS SAR Lab C

3_CDMA2000_850

Communication System: CDMA2000; Frequency: 848.31 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, 1x RTT (RC3, SO55)/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 66.890 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

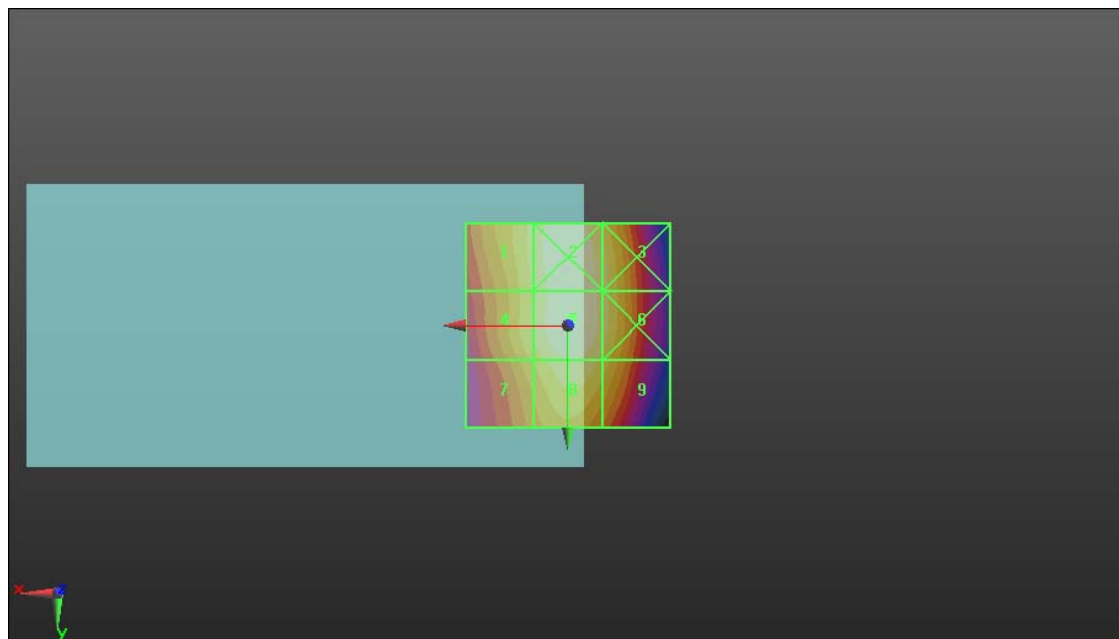
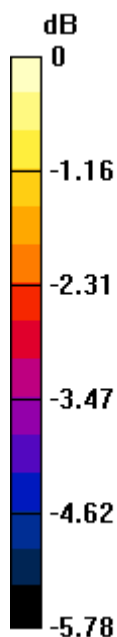
Reference Value = 92.982 V/m; Power Drift = 0.15 dB

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

Peak E-field in V/m

Grid 1 62.365 M4	Grid 2 66.575 M4	Grid 3 62.762 M4
Grid 4 61.842 M4	Grid 5 66.890 M4	Grid 6 62.913 M4
Grid 7 59.043 M4	Grid 8 64.008 M4	Grid 9 60.376 M4

Location: -1, -1.5, 8.7 mm



0 dB = 66.890V/m

Test Laboratory: UL CCS SAR Lab C

4_CDMA2000_1900

Communication System: CDMA2000; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, 1x RTT (RC3, SO55)/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 42.941 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

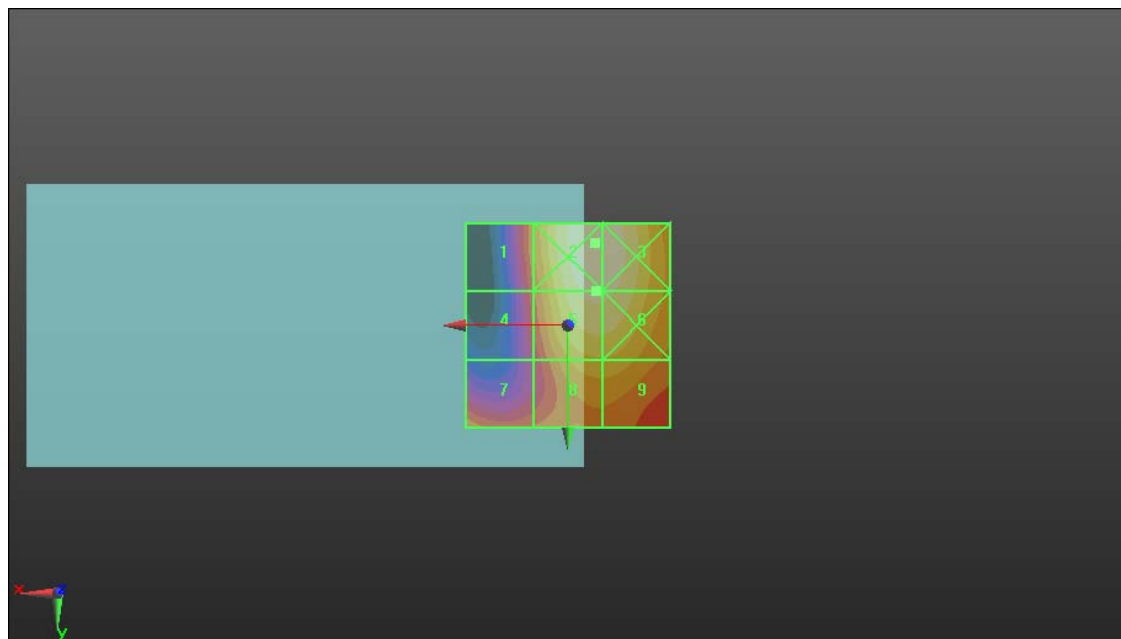
Reference Value = 53.642 V/m; Power Drift = -0.14 dB

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

Peak E-field in V/m

Grid 1 31.476 M4	Grid 2 45.009 M4	Grid 3 44.681 M4
Grid 4 29.045 M4	Grid 5 42.941 M4	Grid 6 42.763 M4
Grid 7 32.124 M4	Grid 8 35.982 M4	Grid 9 35.956 M4

Location: -6.5, -20, 8.7 mm



0 dB = 45.010V/m

Test Laboratory: UL CCS SAR Lab C

4_CDMA2000_1900

Communication System: CDMA2000; Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, 1x RTT (RC3, SO55)/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 40.812 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

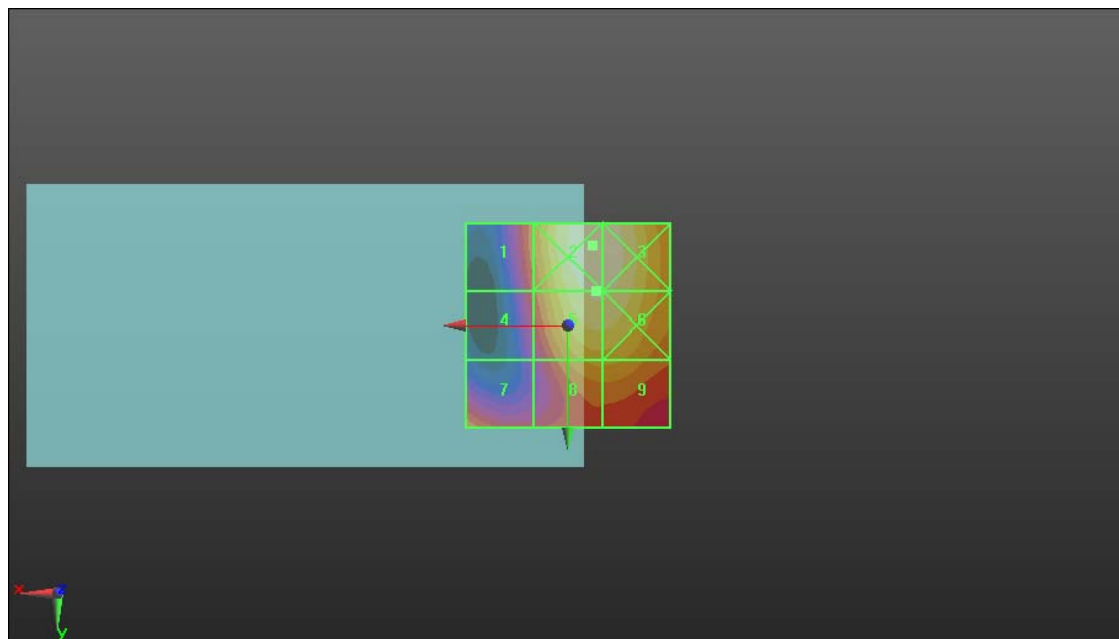
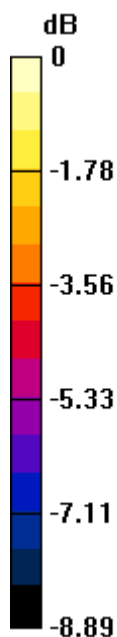
Reference Value = 50.310 V/m; Power Drift = 0.09 dB

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

Peak E-field in V/m

Grid 1 30.374 M4	Grid 2 42.867 M4	Grid 3 42.450 M4
Grid 4 27.681 M4	Grid 5 40.812 M4	Grid 6 40.700 M4
Grid 7 31.107 M4	Grid 8 33.467 M4	Grid 9 33.428 M4

Location: -6, -19.5, 8.7 mm



0 dB = 42.870V/m

Test Laboratory: UL CCS SAR Lab C

4_CDMA2000_1900

Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, 1x RTT (RC3, SO55)/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 36.330 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

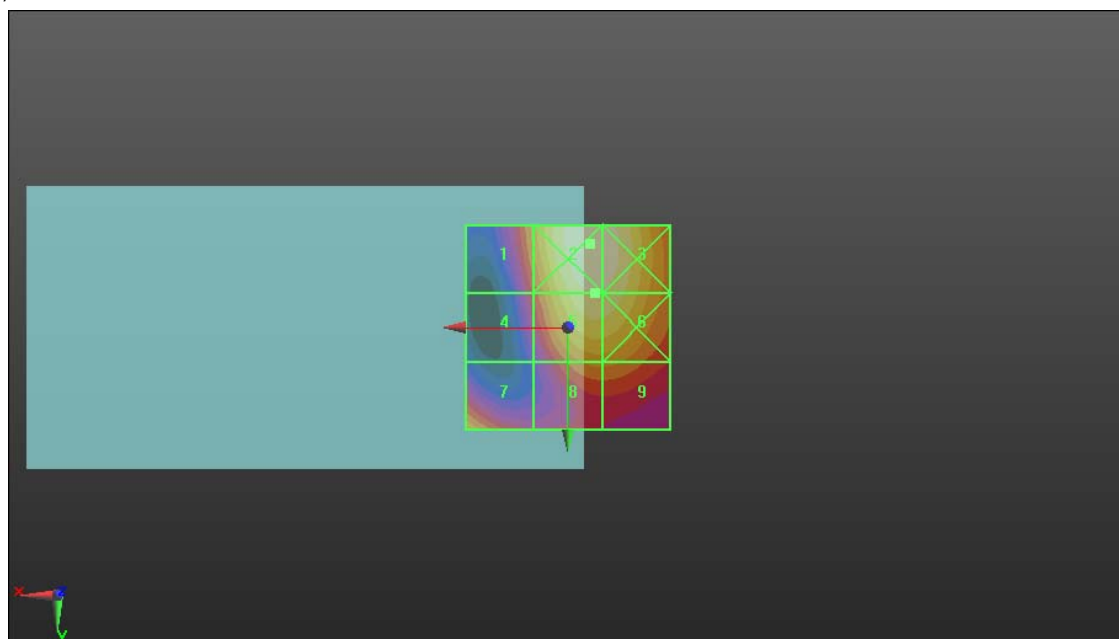
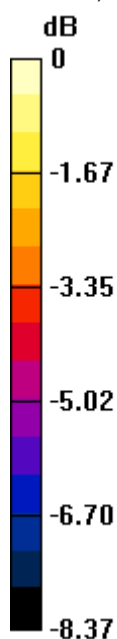
Reference Value = 45.503 V/m; Power Drift = -0.14 dB

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

Peak E-field in V/m

Grid 1 28.724 M4	Grid 2 38.635 M4	Grid 3 38.080 M4
Grid 4 25.064 M4	Grid 5 36.330 M4	Grid 6 36.086 M4
Grid 7 30.754 M4	Grid 8 28.684 M4	Grid 9 28.630 M4

Location: -5.5, -20.5, 8.7 mm



0 dB = 38.640V/m

Test Laboratory: UL CCS SAR Lab C

5_UMTS band II

Communication System: UMTS-FDD (WCDMA); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, R99 RMC 12.2kbps/L ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 35.699 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

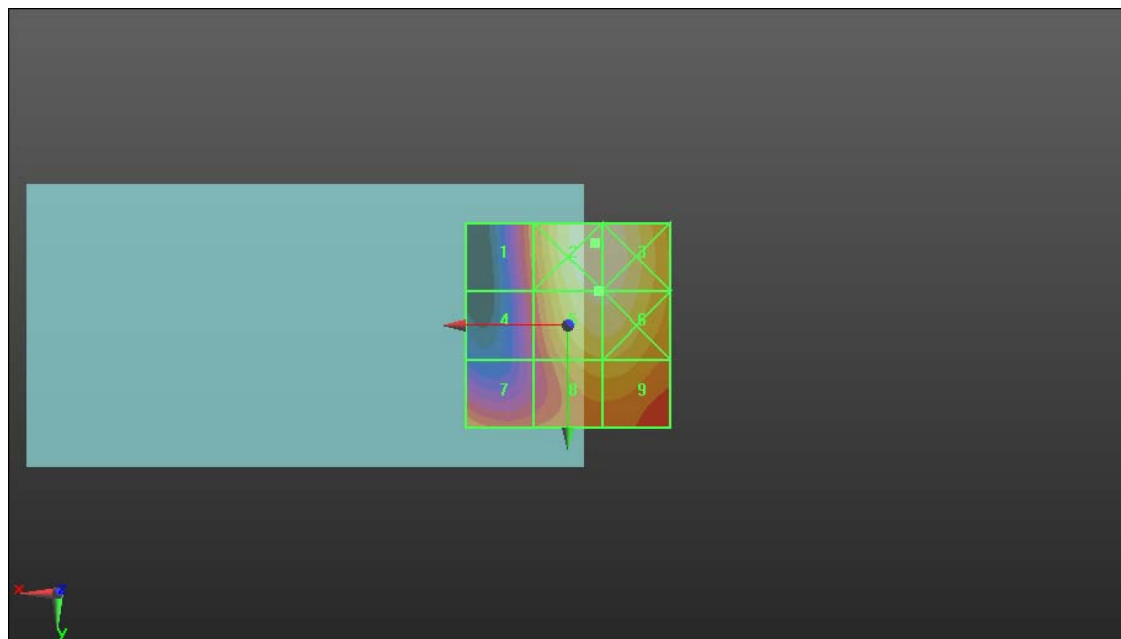
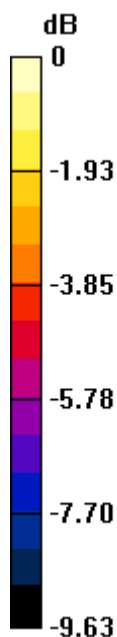
Reference Value = 42.802 V/m; Power Drift = 0.10 dB

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

Peak E-field in V/m

Grid 1 25.733 M4	Grid 2 37.567 M4	Grid 3 37.318 M4
Grid 4 23.520 M4	Grid 5 35.699 M4	Grid 6 35.651 M4
Grid 7 26.857 M4	Grid 8 29.885 M4	Grid 9 29.894 M4

Location: -6.5, -20, 8.7 mm



0 dB = 37.570V/m

Test Laboratory: UL CCS SAR Lab C

5_UMTS band II

Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, R99 RMC 12.2kbps/M ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 35.178 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

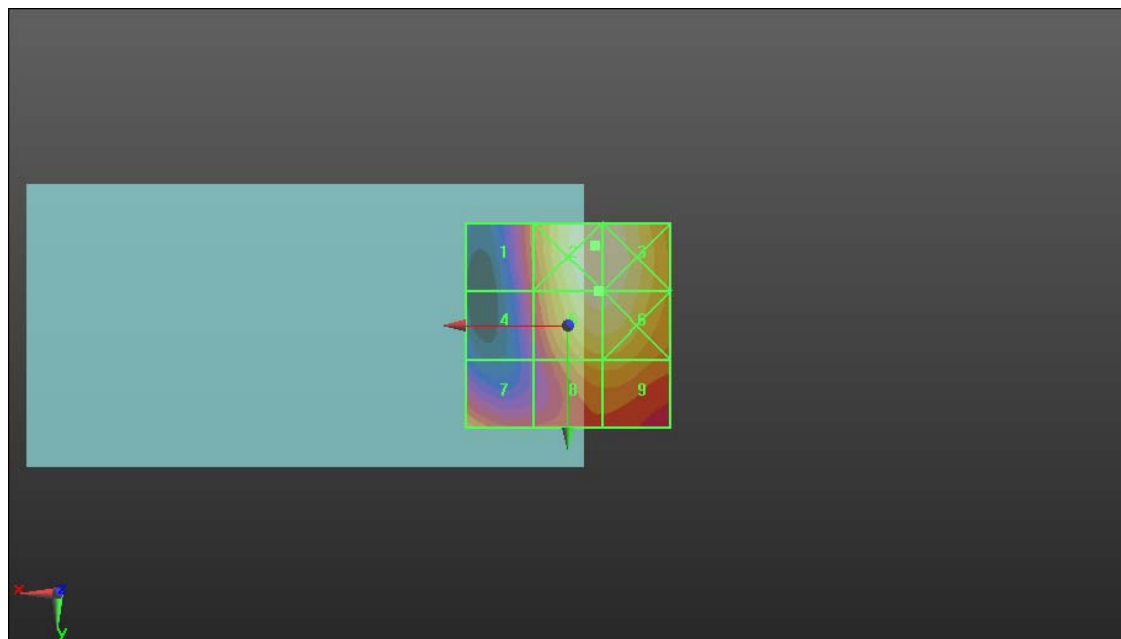
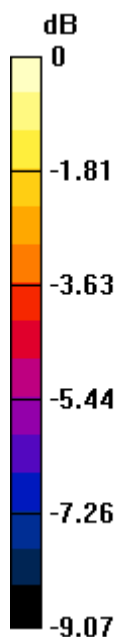
Reference Value = 41.837 V/m; Power Drift = 0.09 dB

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

Peak E-field in V/m

Grid 1 25.079 M4	Grid 2 36.354 M4	Grid 3 36.197 M4
Grid 4 22.821 M4	Grid 5 35.178 M4	Grid 6 35.132 M4
Grid 7 27.303 M4	Grid 8 28.738 M4	Grid 9 28.738 M4

Location: -6.5, -19.5, 8.7 mm



0 dB = 36.350V/m

Test Laboratory: UL CCS SAR Lab C

5_UMTS band II

Communication System: UMTS-FDD (WCDMA); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Standard Cover, R99 RMC 12.2kbps/H ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 32.528 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

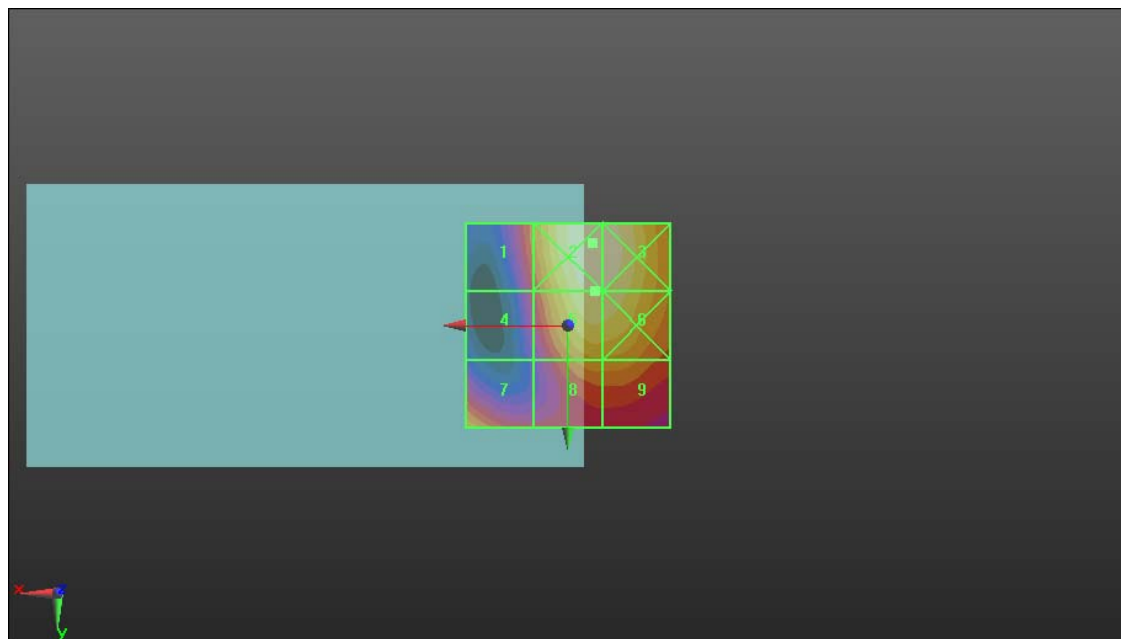
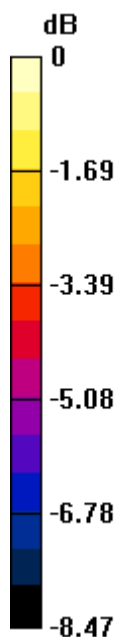
Reference Value = 39.417 V/m; Power Drift = -0.03 dB

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

Peak E-field in V/m

Grid 1 24.254 M4	Grid 2 34.170 M4	Grid 3 33.815 M4
Grid 4 21.442 M4	Grid 5 32.528 M4	Grid 6 32.220 M4
Grid 7 26.970 M4	Grid 8 26.094 M4	Grid 9 26.006 M4

Location: -6, -20, 8.7 mm



0 dB = 34.170V/m

Test Laboratory: UL CCS SAR Lab C

1_GSM 850

Communication System: Generic GSM; Frequency: 824.2 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover/L ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 143.6 V/m

Probe Modulation Factor = 2.790

Device Reference Point: 0, 0, -6.3 mm

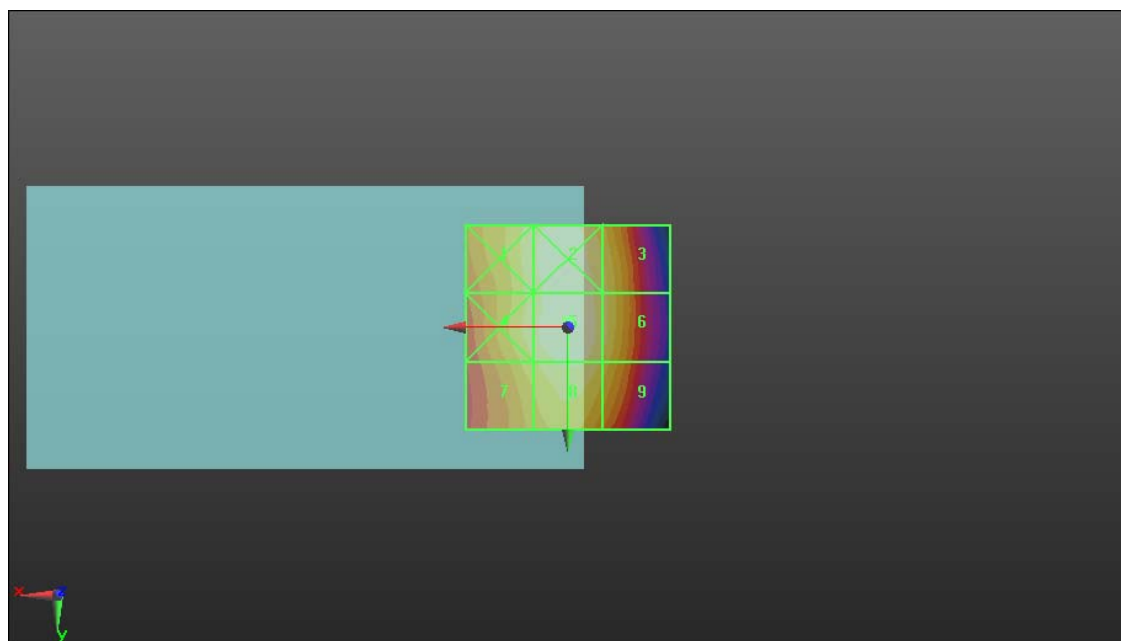
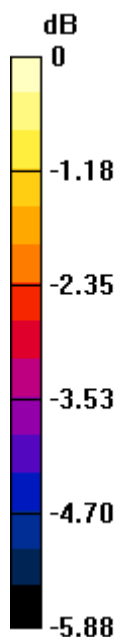
Reference Value = 69.245 V/m; Power Drift = 0.04 dB

Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 136.0 M4	Grid 2 142.2 M4	Grid 3 133.7 M4
Grid 4 135.8 M4	Grid 5 143.6 M4	Grid 6 134.3 M4
Grid 7 130.4 M4	Grid 8 138.3 M4	Grid 9 129.4 M4

Location: 0, -1.5, 8.7 mm



0 dB = 143.6V/m

Test Laboratory: UL CCS SAR Lab C

1_GSM 850

Communication System: Generic GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover/M ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 159.7 V/m

Probe Modulation Factor = 2.790

Device Reference Point: 0, 0, -6.3 mm

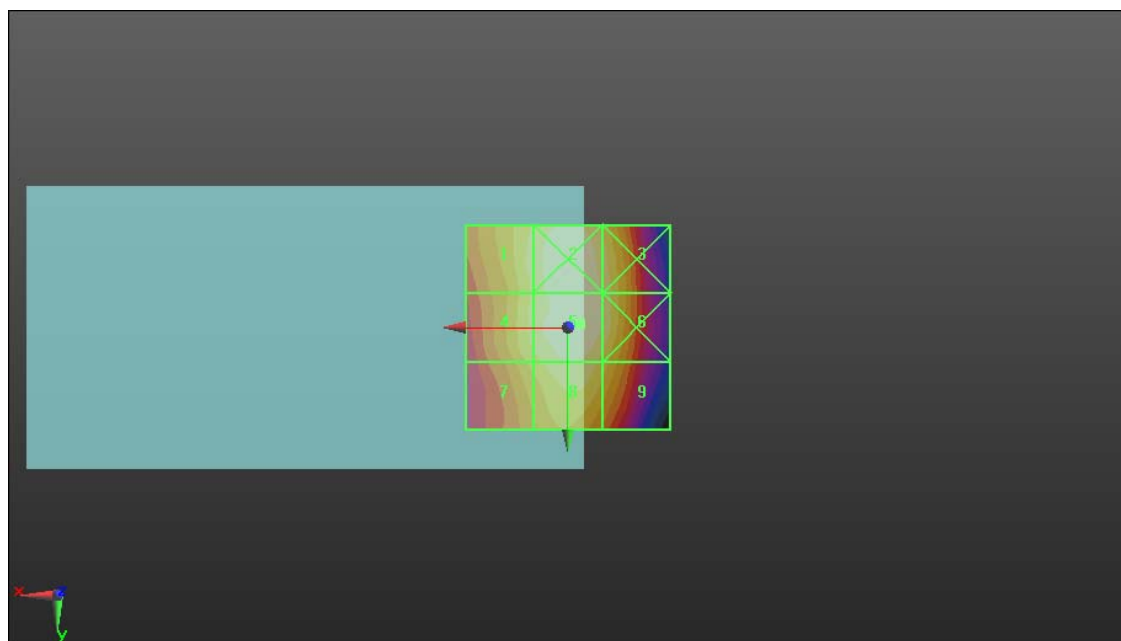
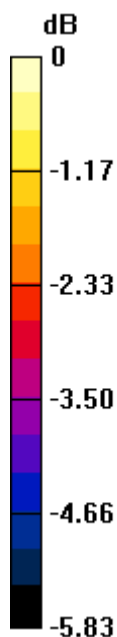
Reference Value = 77.098 V/m; Power Drift = 0.14 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 149.4 M4	Grid 2 158.5 M3	Grid 3 151.6 M3
Grid 4 148.3 M4	Grid 5 159.7 M3	Grid 6 152.1 M3
Grid 7 142.5 M4	Grid 8 152.6 M3	Grid 9 143.3 M4

Location: -3, -1, 8.7 mm



0 dB = 159.7V/m

Test Laboratory: UL CCS SAR Lab C

1_GSM 850

Communication System: Generic GSM; Frequency: 848.6 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover/H ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 155.2 V/m

Probe Modulation Factor = 2.790

Device Reference Point: 0, 0, -6.3 mm

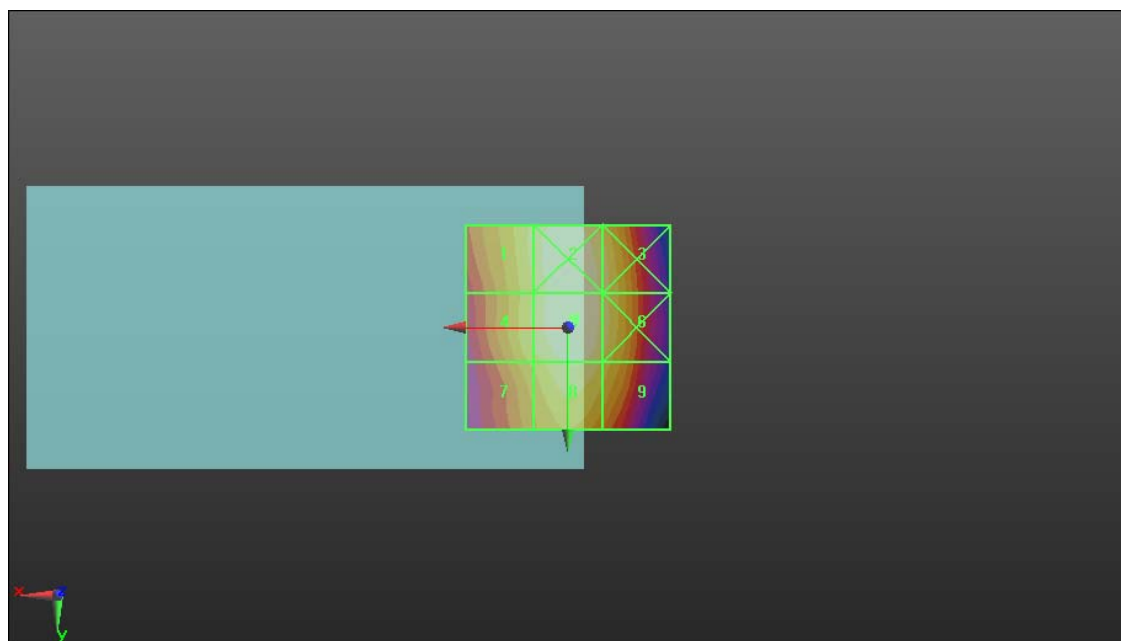
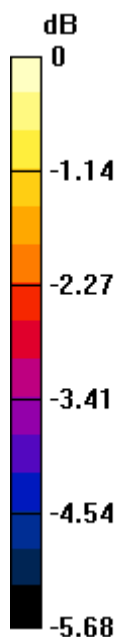
Reference Value = 74.907 V/m; Power Drift = 0.06 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 144.7 M4	Grid 2 154.9 M3	Grid 3 146.6 M4
Grid 4 143.6 M4	Grid 5 155.2 M3	Grid 6 146.5 M4
Grid 7 138.1 M4	Grid 8 149.6 M4	Grid 9 141.0 M4

Location: -1.5, -2, 8.7 mm



0 dB = 155.2V/m

Test Laboratory: UL CCS SAR Lab C

2_GSM 1900

Communication System: Generic GSM; Frequency: 1850.2 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover/L ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 60.503 V/m

Probe Modulation Factor = 2.820

Device Reference Point: 0, 0, -6.3 mm

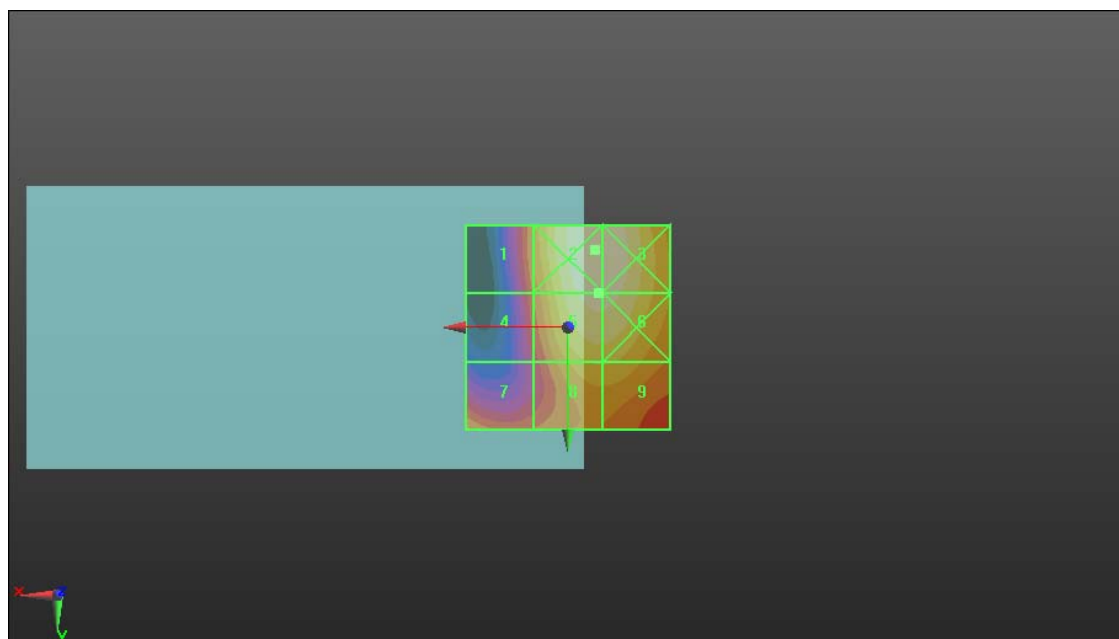
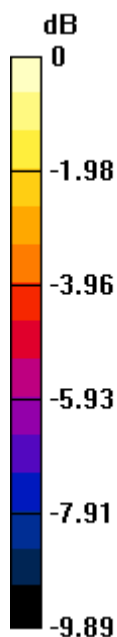
Reference Value = 25.122 V/m; Power Drift = -0.02 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 43.710 M4	Grid 2 62.965 M3	Grid 3 62.685 M3
Grid 4 40.433 M4	Grid 5 60.503 M3	Grid 6 60.389 M3
Grid 7 45.089 M4	Grid 8 50.626 M3	Grid 9 50.592 M3

Location: -6.5, -19, 8.7 mm



0 dB = 62.970V/m

Test Laboratory: UL CCS SAR Lab C

2_GSM 1900

Communication System: Generic GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover/M ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 55.399 V/m

Probe Modulation Factor = 2.820

Device Reference Point: 0, 0, -6.3 mm

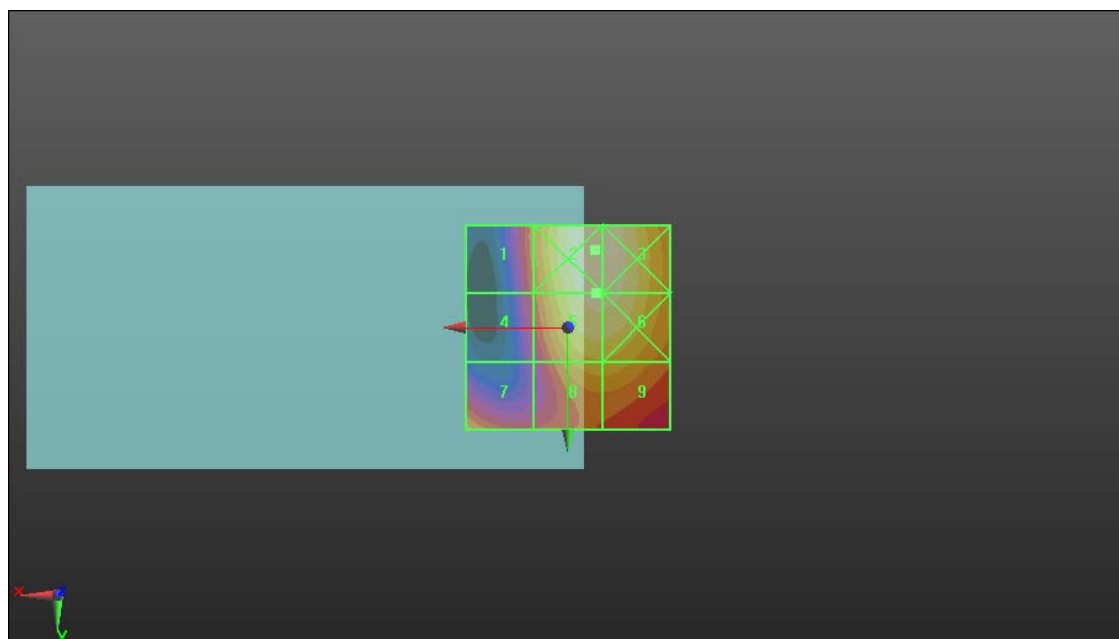
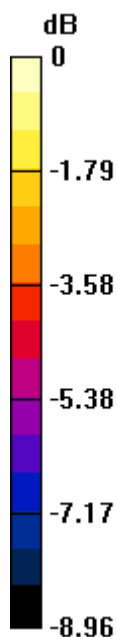
Reference Value = 23.463 V/m; Power Drift = -0.12 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 40.097 M4	Grid 2 57.333 M3	Grid 3 57.007 M3
Grid 4 37.156 M4	Grid 5 55.399 M3	Grid 6 55.242 M3
Grid 7 43.063 M4	Grid 8 46.075 M4	Grid 9 46.049 M4

Location: -6.5, -19, 8.7 mm



0 dB = 57.330V/m

Test Laboratory: UL CCS SAR Lab C

2_GSM 1900

Communication System: Generic GSM; Frequency: 1909.8 MHz; Duty Cycle: 1:8.30042

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover/H ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 52.491 V/m

Probe Modulation Factor = 2.820

Device Reference Point: 0, 0, -6.3 mm

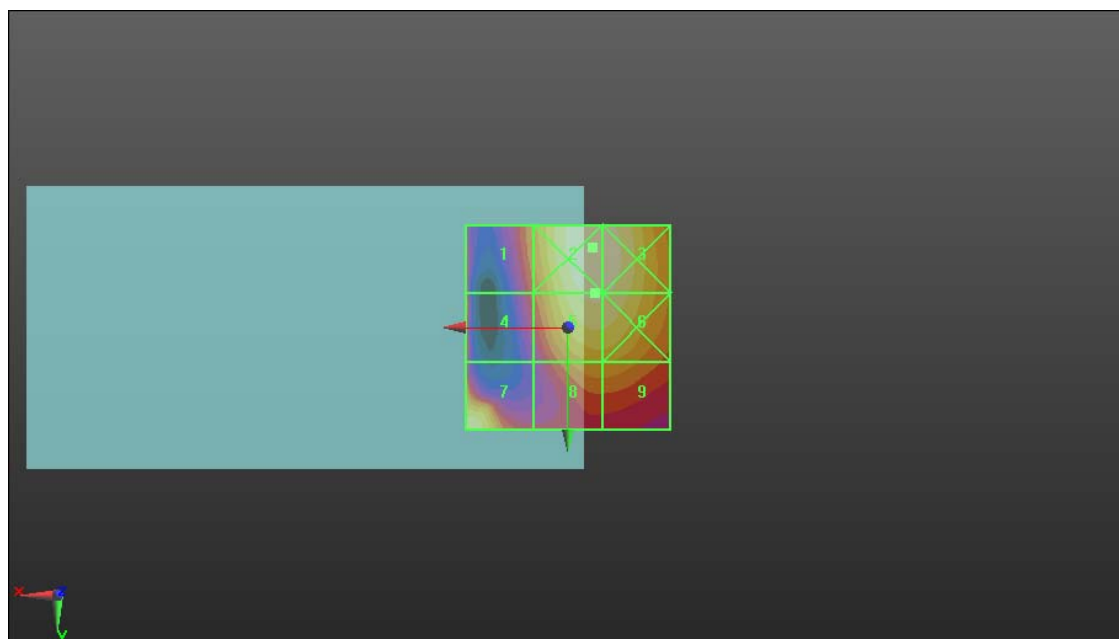
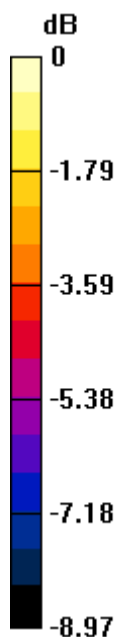
Reference Value = 21.152 V/m; Power Drift = 0.35 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 39.781 M4	Grid 2 54.979 M3	Grid 3 54.218 M3
Grid 4 47.678 M3	Grid 5 52.491 M3	Grid 6 52.112 M3
Grid 7 50.960 M3	Grid 8 42.088 M4	Grid 9 42.015 M4

Location: -6, -19.5, 8.7 mm



0 dB = 54.980V/m

Test Laboratory: UL CCS SAR Lab C

3_CDMA2000_850

Communication System: CDMA2000; Frequency: 824.7 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, 1x RTT (RC3, SO55)/L ch/Hearing Aid**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 56.768 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

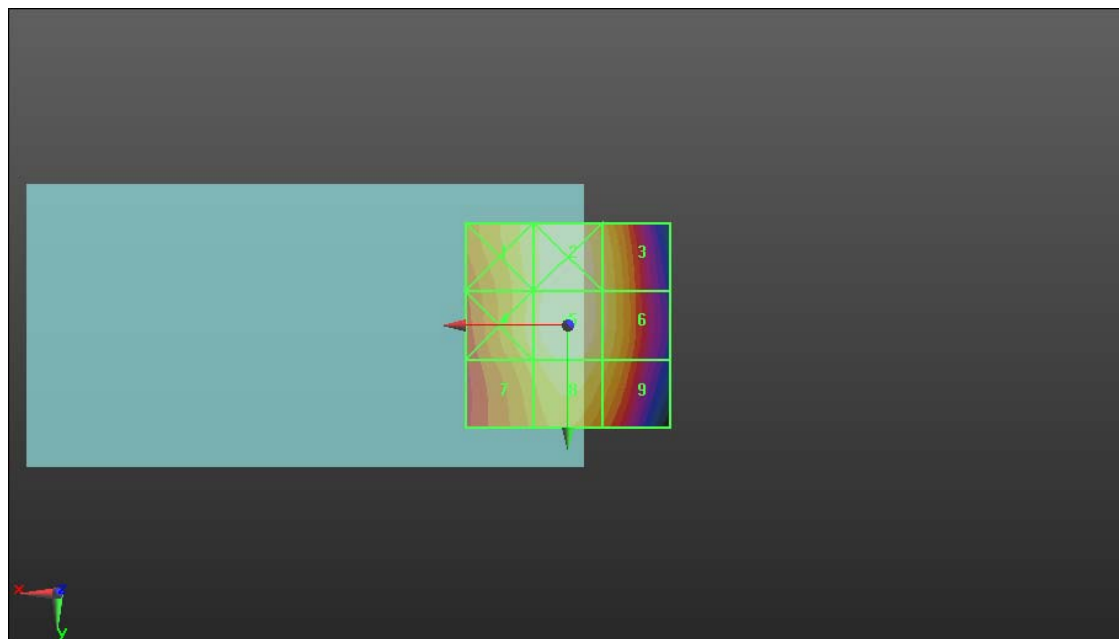
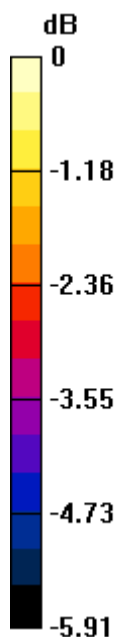
Reference Value = 79.059 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Grid 1 53.618 M4	Grid 2 56.509 M4	Grid 3 52.767 M4
Grid 4 53.329 M4	Grid 5 56.768 M4	Grid 6 52.941 M4
Grid 7 51.103 M4	Grid 8 54.490 M4	Grid 9 50.957 M4

Location: 0, -1, 8.7 mm



0 dB = 56.770V/m

Test Laboratory: UL CCS SAR Lab C

3_CDMA2000_850

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, 1x RTT (RC3, SO55)/M ch/Hearing Aid**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 62.964 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

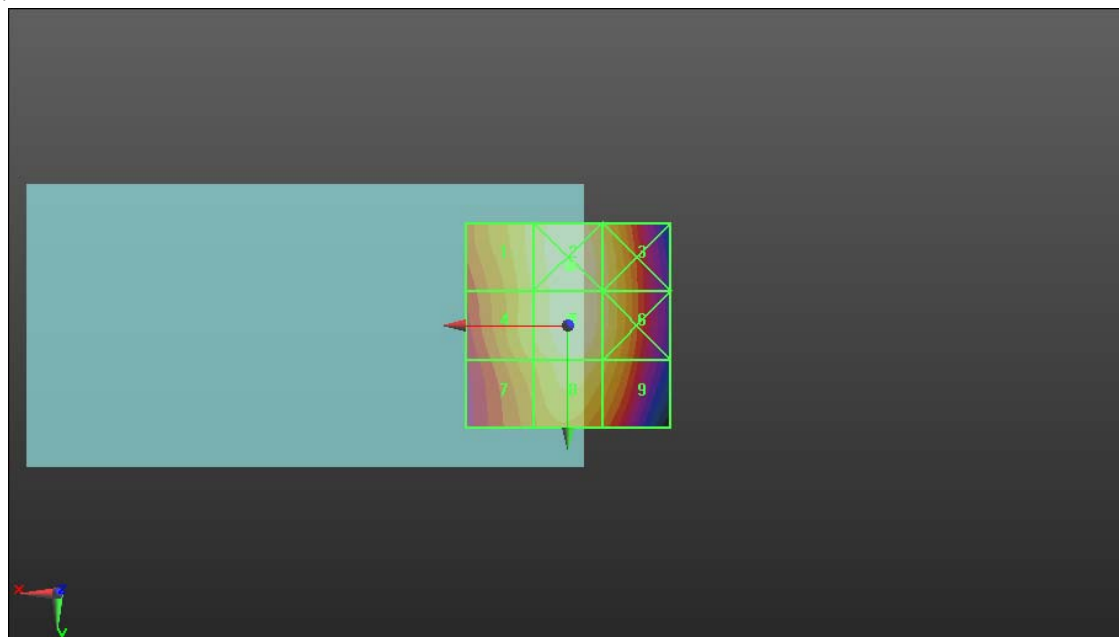
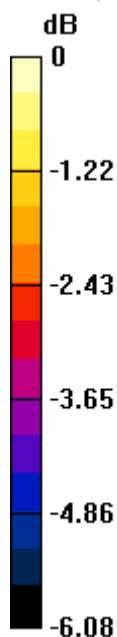
Reference Value = 85.486 V/m; Power Drift = 0.22 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
58.724 M4	63.066 M4	58.993 M4
Grid 4	Grid 5	Grid 6
57.930 M4	62.964 M4	59.043 M4
Grid 7	Grid 8	Grid 9
55.244 M4	60.173 M4	56.419 M4

Location: -0.5, -14.5, 8.7 mm



0 dB = 63.070V/m

Test Laboratory: UL CCS SAR Lab C

3_CDMA2000_850

Communication System: CDMA2000; Frequency: 848.31 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, 1x RTT (RC3, SO55)/H ch/Hearing Aid**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 63.179 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

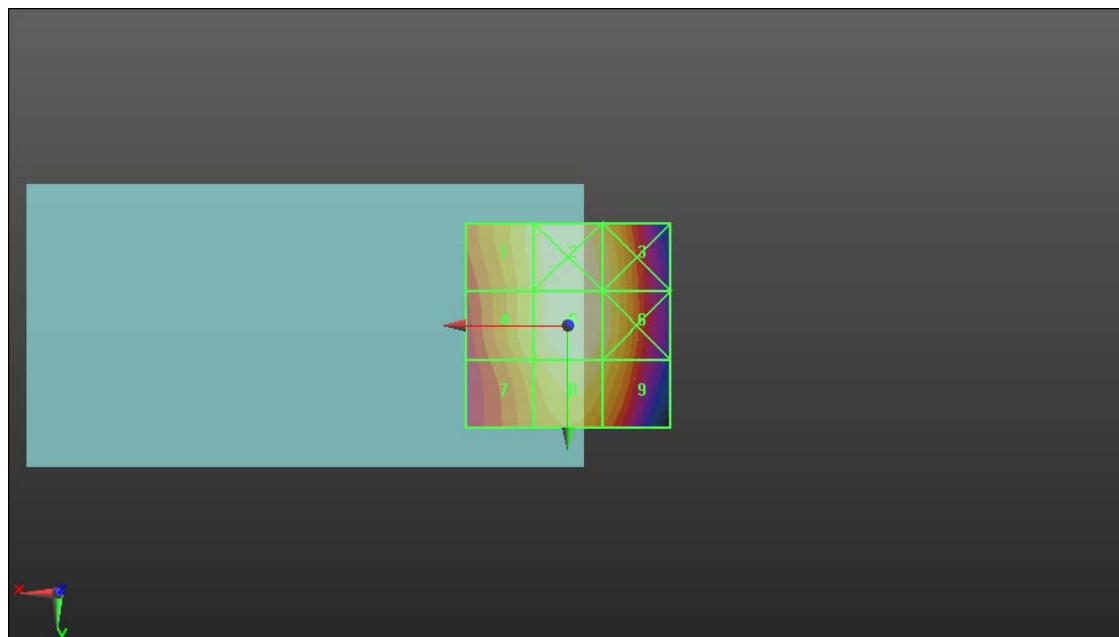
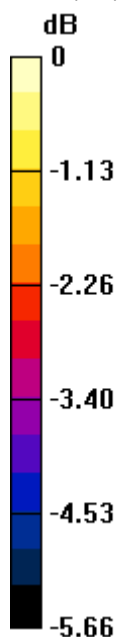
Reference Value = 89.099 V/m; Power Drift = 0.02 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
59.277 M4	62.958 M4	60.012 M4
Grid 4	Grid 5	Grid 6
58.803 M4	63.179 M4	60.138 M4
Grid 7	Grid 8	Grid 9
56.368 M4	60.881 M4	57.962 M4

Location: -1, -1, 8.7 mm



0 dB = 63.180V/m

Test Laboratory: UL CCS SAR Lab C

4_CDMA2000_1900

Communication System: CDMA2000; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, 1x RTT (RC3, SO55)/L ch/Hearing Aid**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 42.513 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

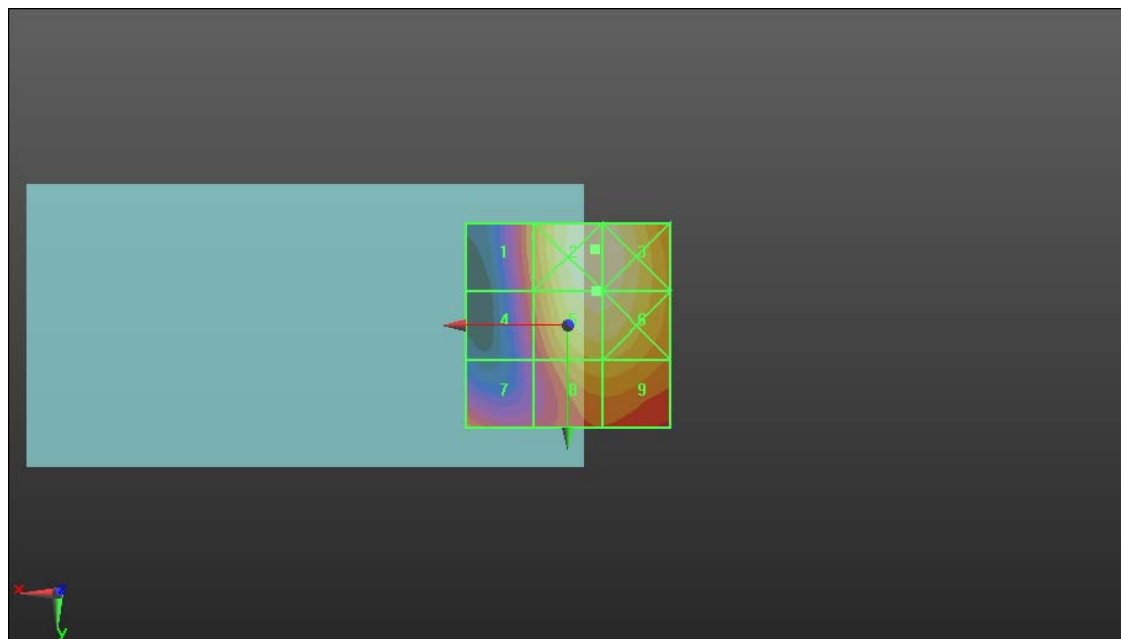
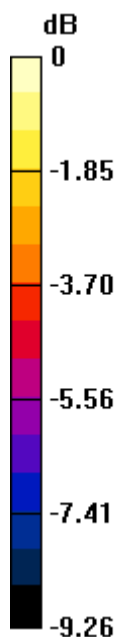
Reference Value = 51.503 V/m; Power Drift = 0.12 dB

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

Peak E-field in V/m

Grid 1 31.426 M4	Grid 2 43.941 M4	Grid 3 43.629 M4
Grid 4 29.217 M4	Grid 5 42.513 M4	Grid 6 42.360 M4
Grid 7 30.451 M4	Grid 8 35.500 M4	Grid 9 35.492 M4

Location: -6.5, -18.5, 8.7 mm



0 dB = 43.940V/m

Test Laboratory: UL CCS SAR Lab C

4_CDMA2000_1900

Communication System: CDMA2000; Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, 1x RTT (RC3, SO55)/M ch/Hearing Aid**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 43.035 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

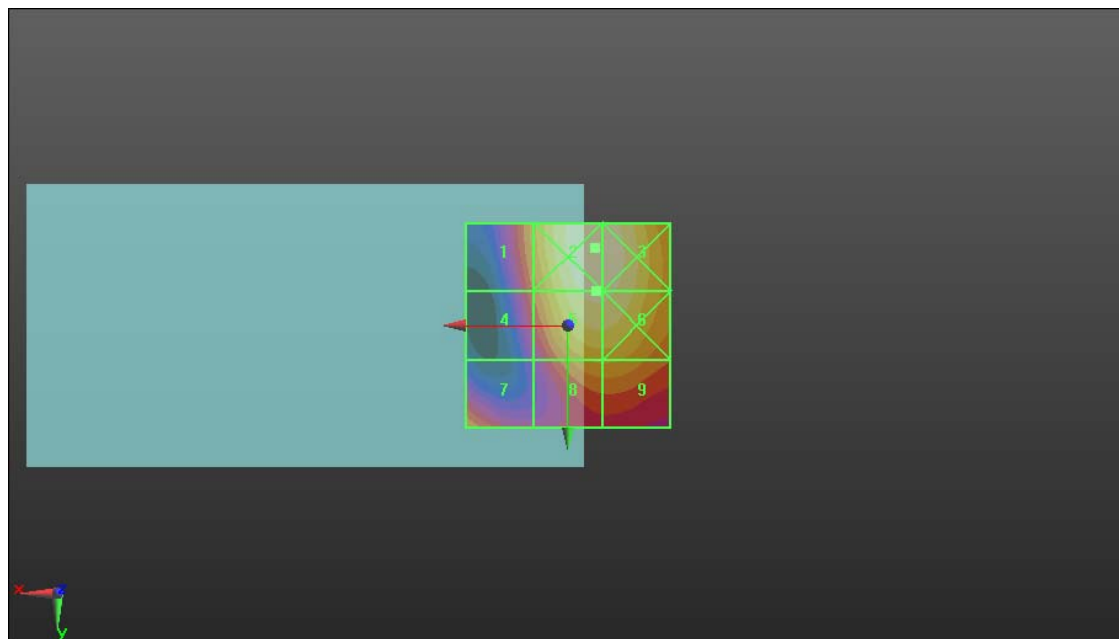
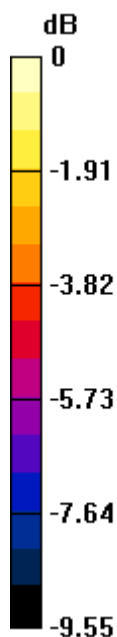
Reference Value = 51.754 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Grid 1 32.625 M4	Grid 2 45.080 M4	Grid 3 44.756 M4
Grid 4 29.323 M4	Grid 5 43.035 M4	Grid 6 42.899 M4
Grid 7 32.415 M4	Grid 8 34.183 M4	Grid 9 34.183 M4

Location: -6.5, -19, 8.7 mm



0 dB = 45.080V/m

Test Laboratory: UL CCS SAR Lab C

4_CDMA2000_1900

Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

**E-Field, Wireless Changer Cover, 1x RTT (RC3, SO55)/H ch/Hearing Aid
 Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 39.240 V/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

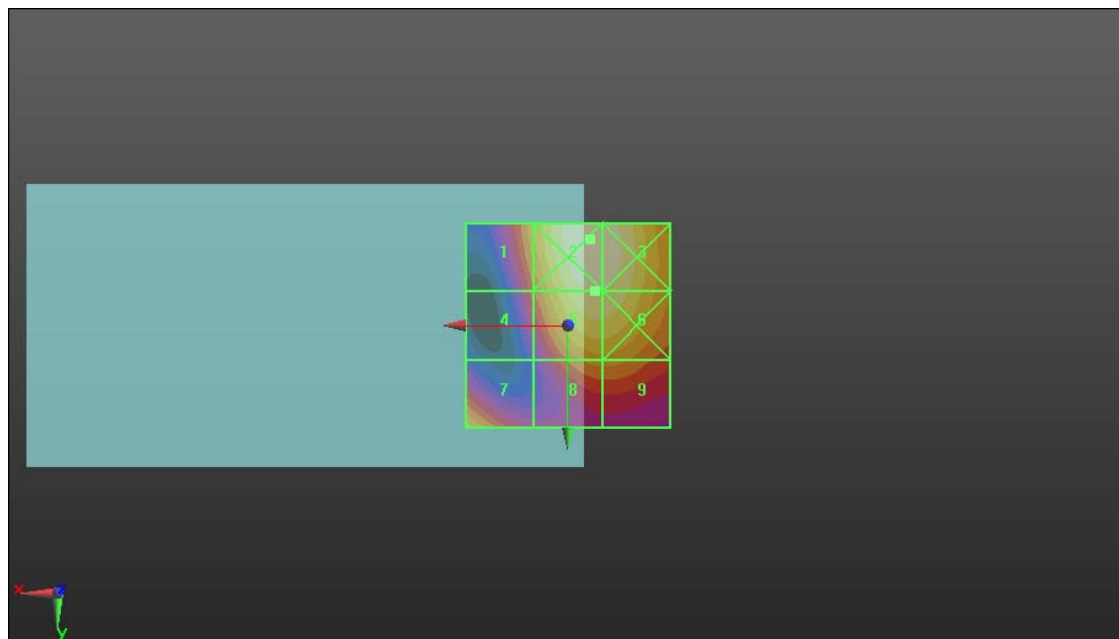
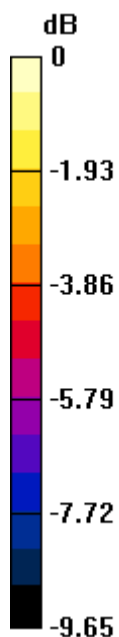
Reference Value = 46.866 V/m; Power Drift = -0.05 dB

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

Peak E-field in V/m

Grid 1 30.961 M4	Grid 2 41.971 M4	Grid 3 41.415 M4
Grid 4 26.496 M4	Grid 5 39.240 M4	Grid 6 39.054 M4
Grid 7 33.084 M4	Grid 8 30.076 M4	Grid 9 30.076 M4

Location: -5.5, -21, 8.7 mm



Test Laboratory: UL CCS SAR Lab C

5_UMTS band II

Communication System: UMTS-FDD (WCDMA); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, R99 RMC 12.2kbps/L ch/Hearing Aid Compatibility

Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 33.643 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

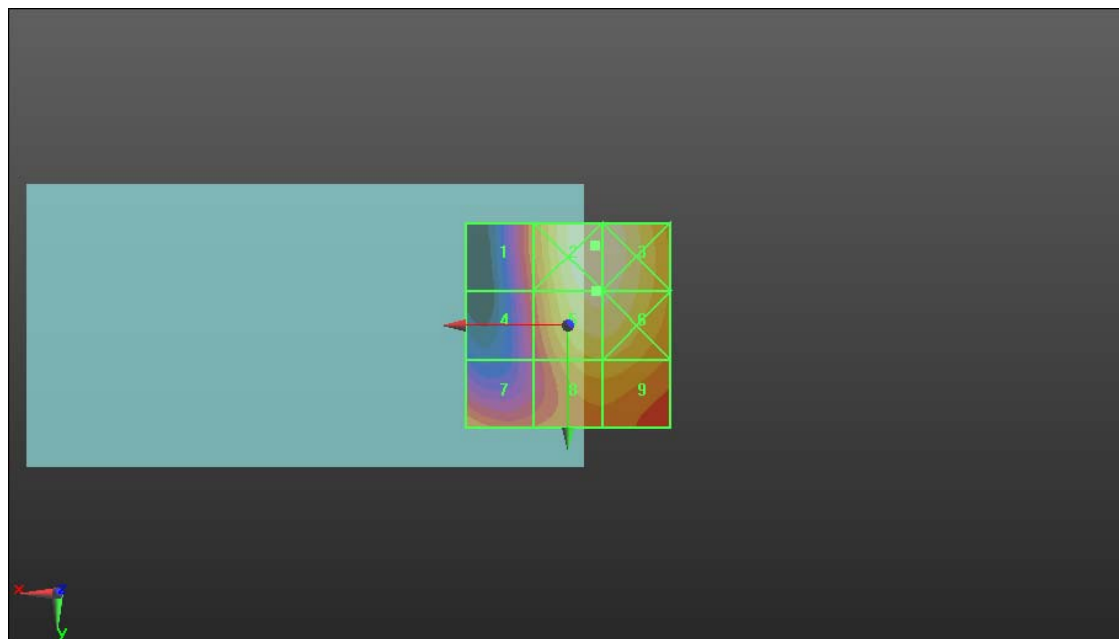
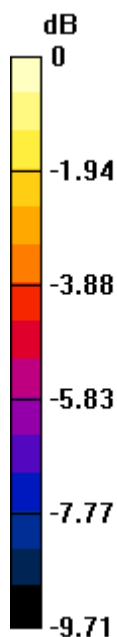
Reference Value = 40.393 V/m; Power Drift = 0.05 dB

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

Peak E-field in V/m

Grid 1 24.114 M4	Grid 2 35.206 M4	Grid 3 34.954 M4
Grid 4 22.168 M4	Grid 5 33.643 M4	Grid 6 33.552 M4
Grid 7 25.324 M4	Grid 8 28.001 M4	Grid 9 27.985 M4

Location: -6.5, -19.5, 8.7 mm



0 dB = 35.210V/m

Test Laboratory: UL CCS SAR Lab C

5_UMTS band II

Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz;Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, R99 RMC 12.2kbps/M ch/Hearing Aid

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 33.249 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

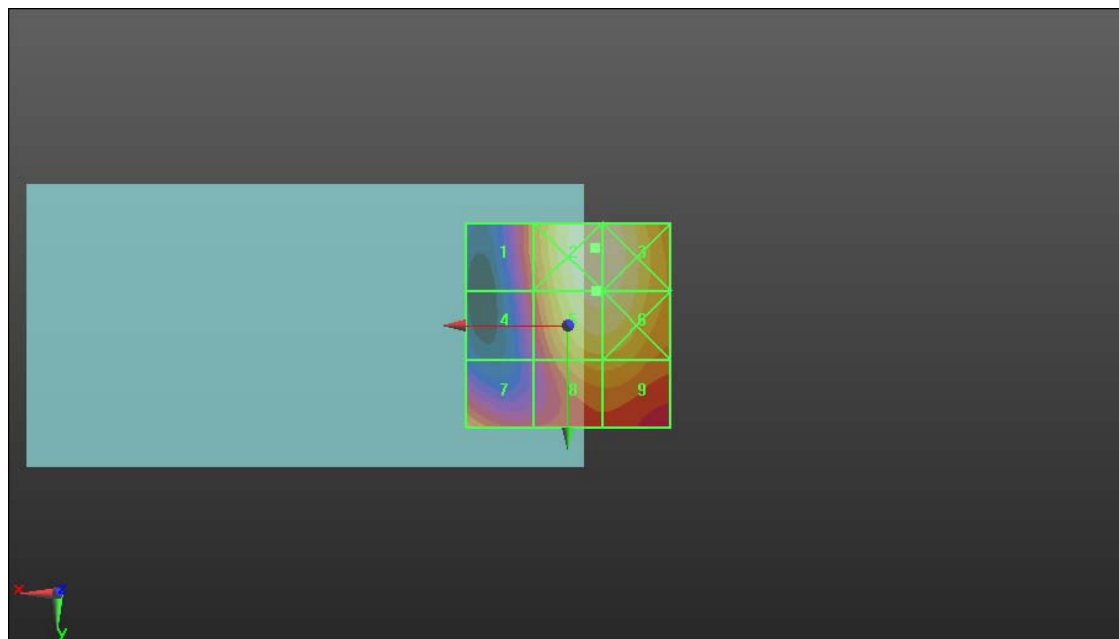
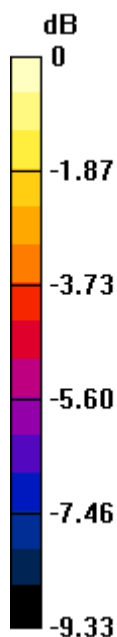
Reference Value = 40.523 V/m; Power Drift = 0.02 dB

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

Peak E-field in V/m

Grid 1 24.177 M4	Grid 2 34.636 M4	Grid 3 34.391 M4
Grid 4 22.057 M4	Grid 5 33.249 M4	Grid 6 33.148 M4
Grid 7 25.748 M4	Grid 8 27.196 M4	Grid 9 27.191 M4

Location: -6.5, -19, 8.7 mm



Test Laboratory: UL CCS SAR Lab C

5_UMTS band II

Communication System: UMTS-FDD (WCDMA); Frequency: 1907.6 MHz;Duty Cycle: 1:1

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 4/8/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

E-Field, Wireless Changer Cover, R99 RMC 12.2kbps/H ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 32.093 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

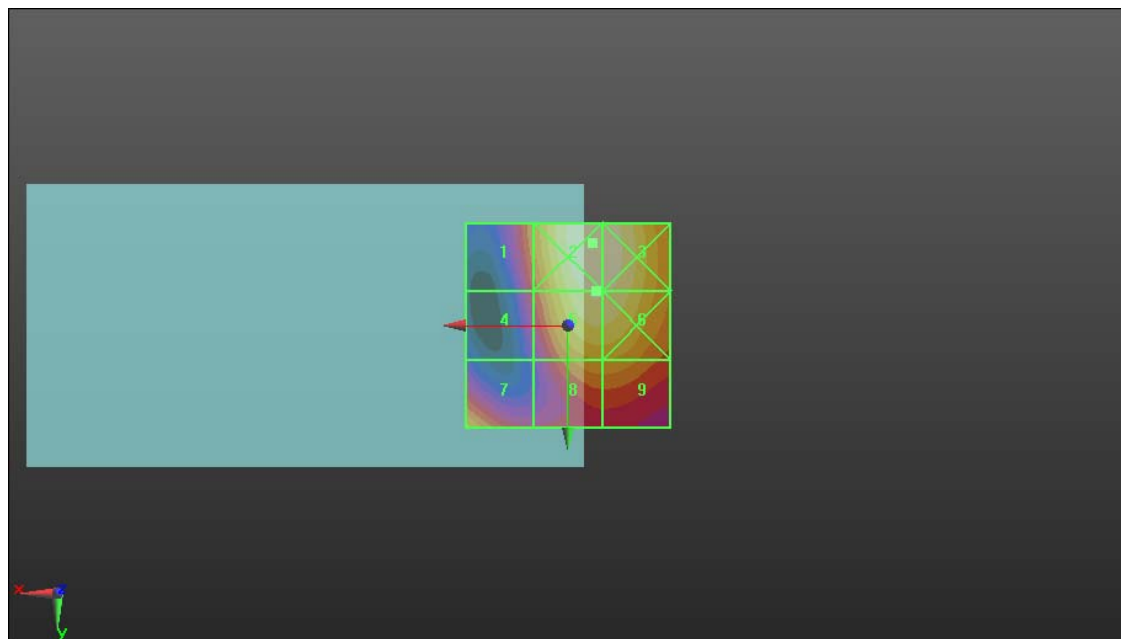
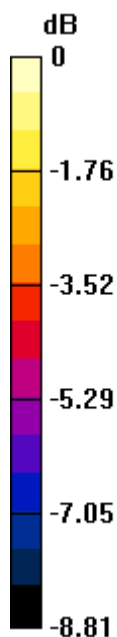
Reference Value = 39.047 V/m; Power Drift = 0.13 dB

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

Peak E-field in V/m

Grid 1 24.044 M4	Grid 2 33.739 M4	Grid 3 33.408 M4
Grid 4 21.225 M4	Grid 5 32.093 M4	Grid 6 31.963 M4
Grid 7 26.975 M4	Grid 8 25.720 M4	Grid 9 25.710 M4

Location: -6, -20, 8.7 mm



0 dB = 33.740V/m