

Test Laboratory: UL CCS SAR Lab C

GSM 850

Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 824.4 MHz; Duty Cycle: 1:8.00018

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 182.3 V/m

Probe Modulation Factor = 2.790

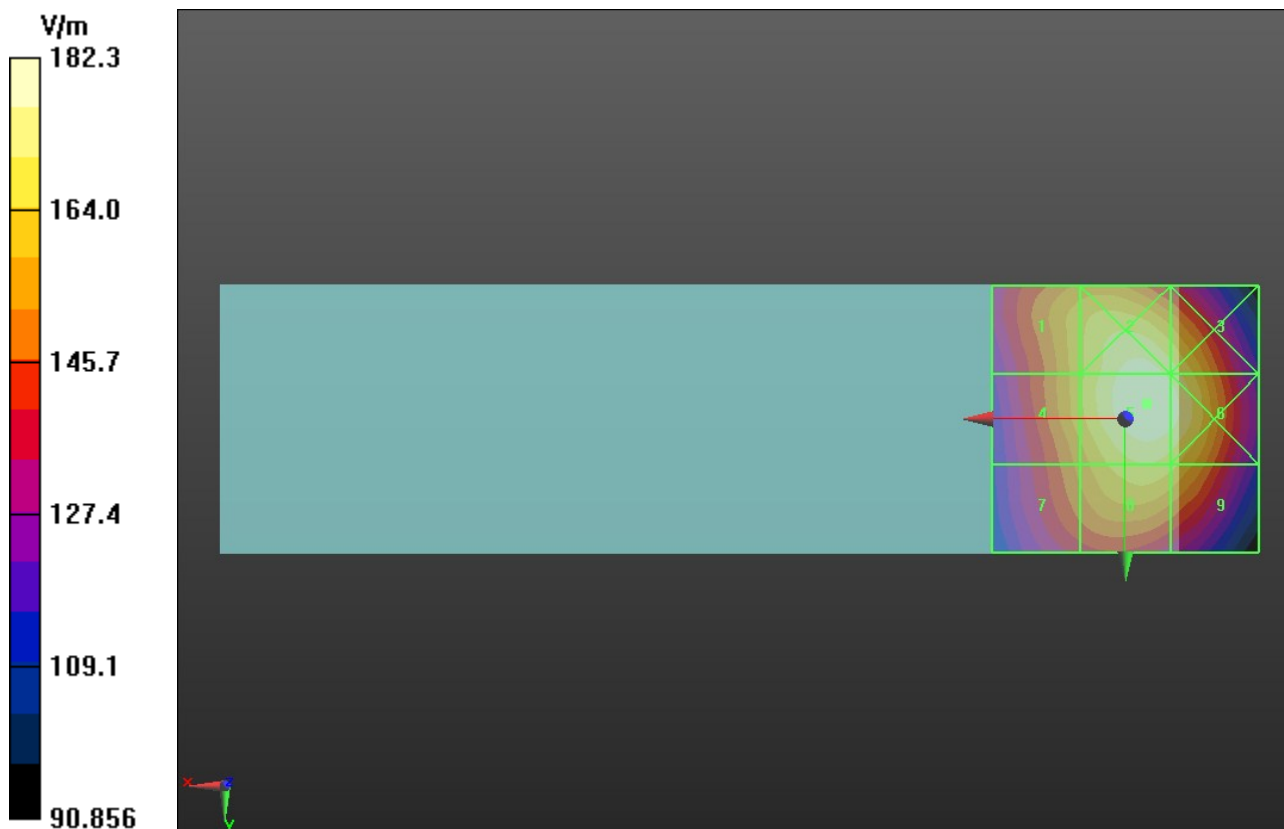
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 88.690 V/m; Power Drift = -0.03 dB

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

Peak E-field in V/m

Grid 1 163.0 M3	Grid 2 179.3 M3	Grid 3 174.3 M3
Grid 4 163.0 M3	Grid 5 182.3 M3	Grid 6 179.1 M3
Grid 7 154.5 M3	Grid 8 170.2 M3	Grid 9 166.4 M3



Test Laboratory: UL CCS SAR Lab C

GSM 850

Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 176.9 V/m

Probe Modulation Factor = 2.790

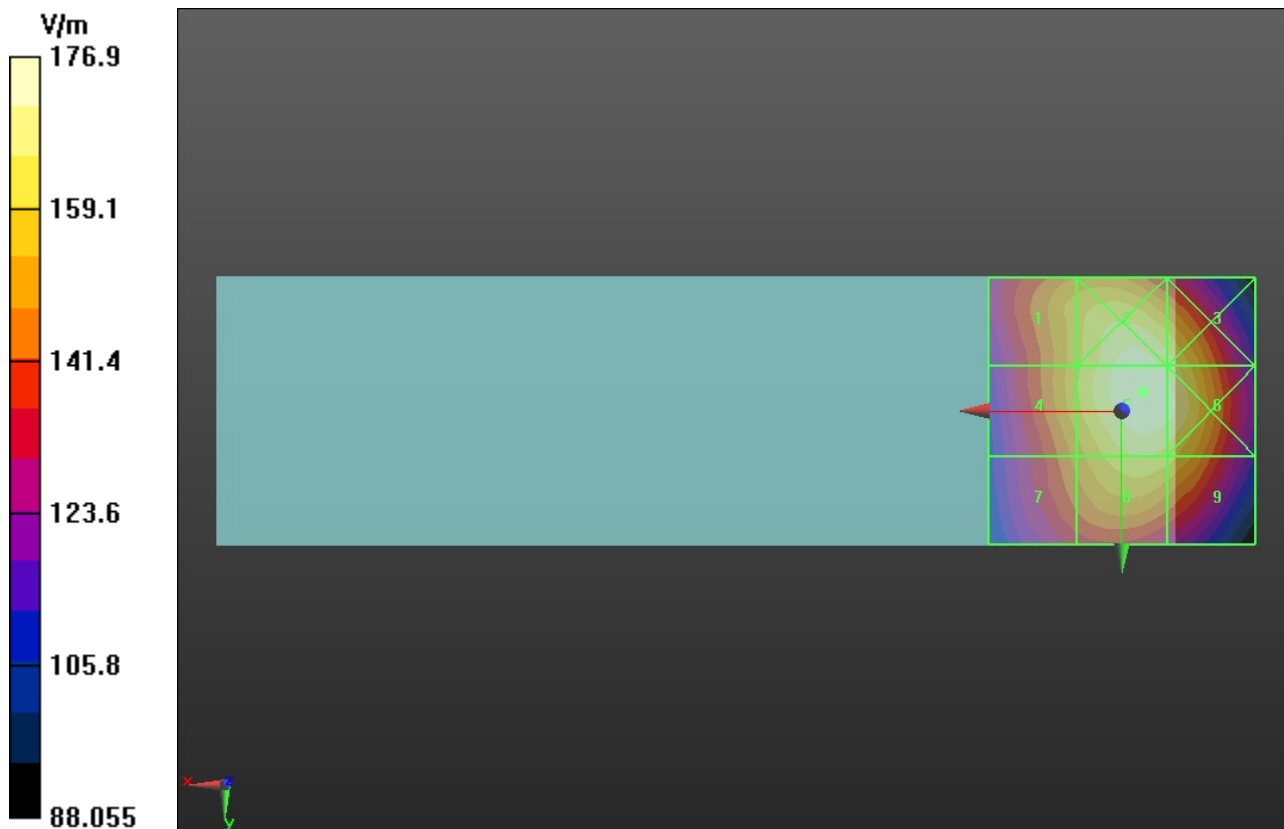
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 85.735 V/m; Power Drift = -0.07 dB

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

Peak E-field in V/m

Grid 1 157.6 M3	Grid 2 174.2 M3	Grid 3 169.3 M3
Grid 4 158.5 M3	Grid 5 176.9 M3	Grid 6 173.7 M3
Grid 7 150.0 M3	Grid 8 165.4 M3	Grid 9 162.1 M3



Test Laboratory: UL CCS SAR Lab C

GSM 850

Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 848.8 MHz; Duty Cycle: 1:8.00018

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 174.1 V/m

Probe Modulation Factor = 2.790

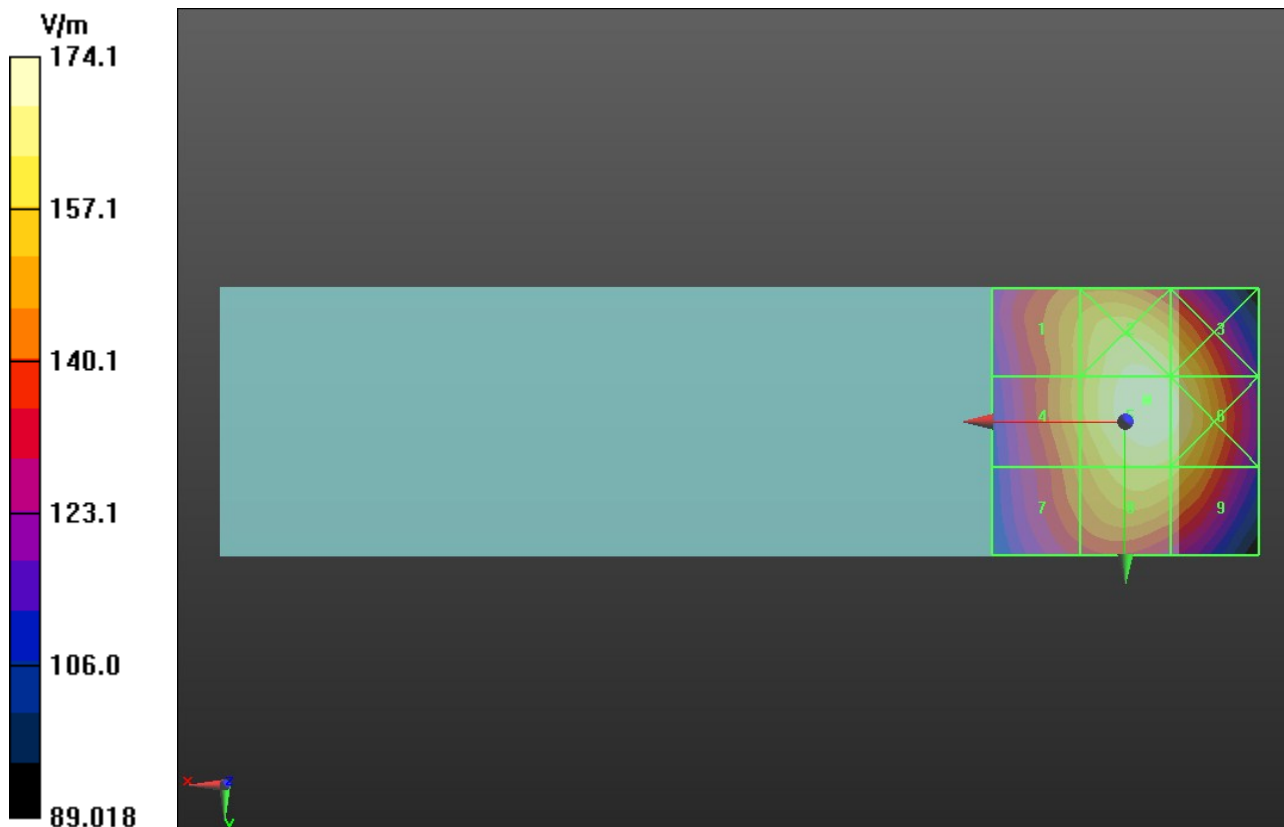
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 84.002 V/m; Power Drift = -0.0093 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
154.8 M3	170.7 M3	166.5 M3
Grid 4	Grid 5	Grid 6
155.7 M3	174.1 M3	171.2 M3
Grid 7	Grid 8	Grid 9
148.2 M4	163.0 M3	160.3 M3



Test Laboratory: UL CCS SAR Lab C

GSM 1900

Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 1850.2 MHz; Duty Cycle: 1:8.00018

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 56.394 V/m

Probe Modulation Factor = 2.820

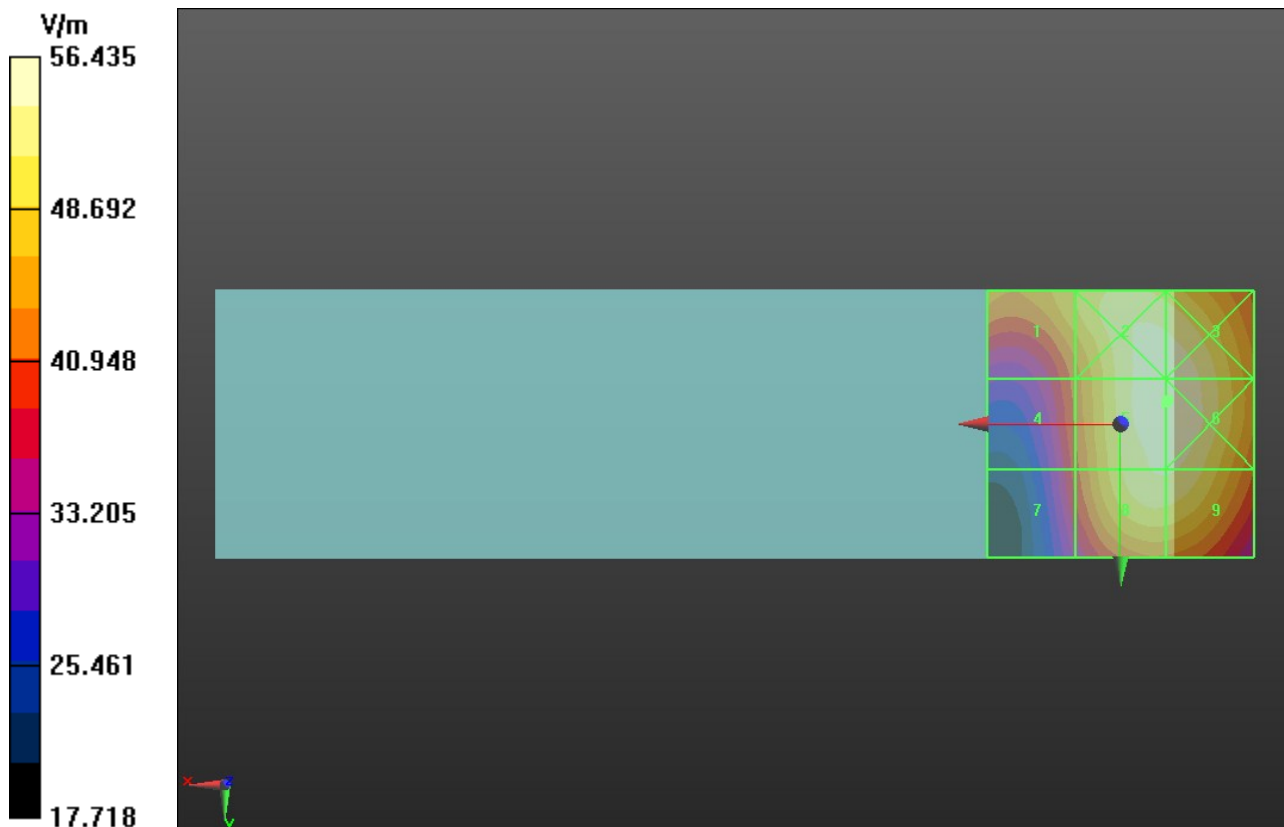
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 24.101 V/m; Power Drift = -0.02 dB

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

Peak E-field in V/m

Grid 1 48.862 M3	Grid 2 55.849 M3	Grid 3 55.859 M3
Grid 4 42.261 M4	Grid 5 56.394 M3	Grid 6 56.435 M3
Grid 7 39.905 M4	Grid 8 54.170 M3	Grid 9 54.170 M3



Test Laboratory: UL CCS SAR Lab C

GSM 1900

Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 47.608 V/m

Probe Modulation Factor = 2.820

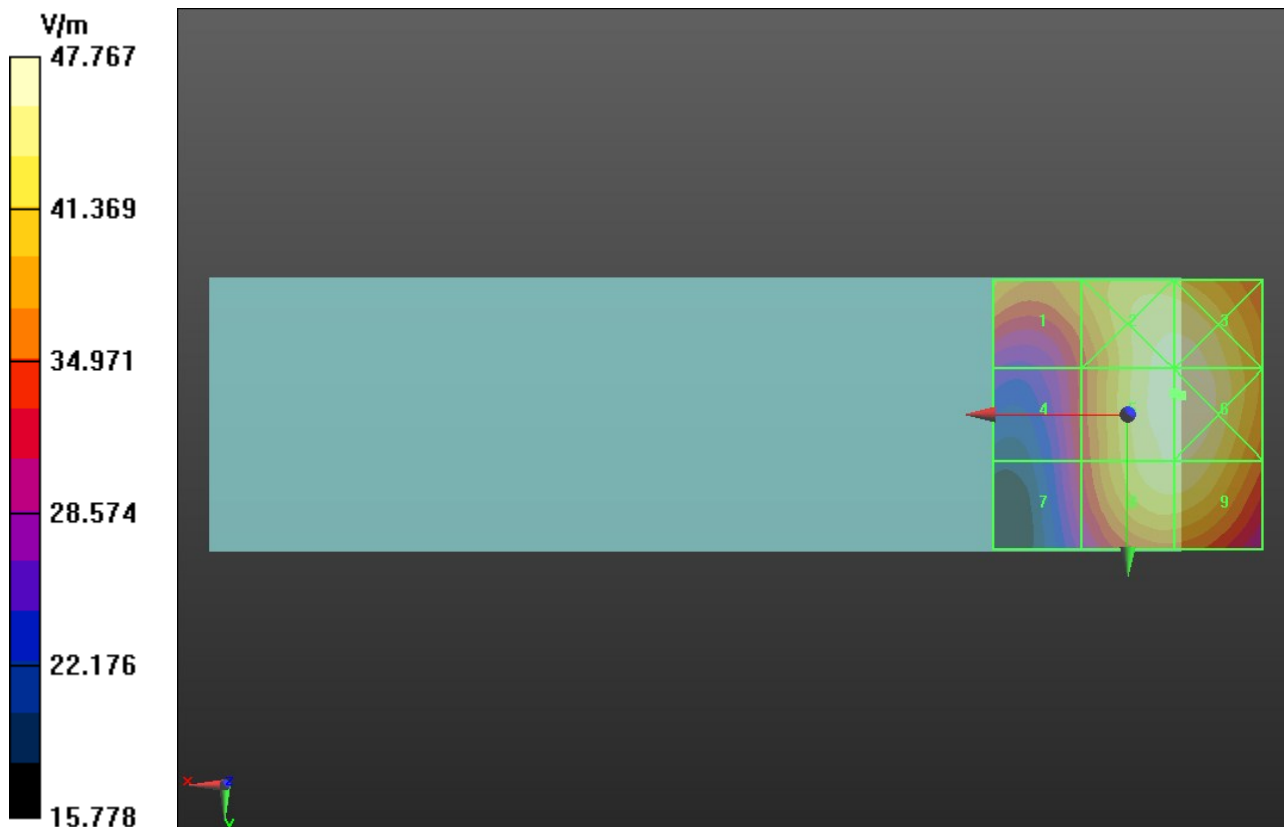
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 20.462 V/m; Power Drift = -0.02 dB

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

Peak E-field in V/m

Grid 1 40.238 M4	Grid 2 47.076 M4	Grid 3 47.140 M4
Grid 4 33.869 M4	Grid 5 47.608 M3	Grid 6 47.767 M3
Grid 7 32.762 M4	Grid 8 45.871 M4	Grid 9 45.887 M4



Test Laboratory: UL CCS SAR Lab C

GSM 1900

Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 1909.8 MHz; Duty Cycle: 1:8.00018

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 43.901 V/m

Probe Modulation Factor = 2.820

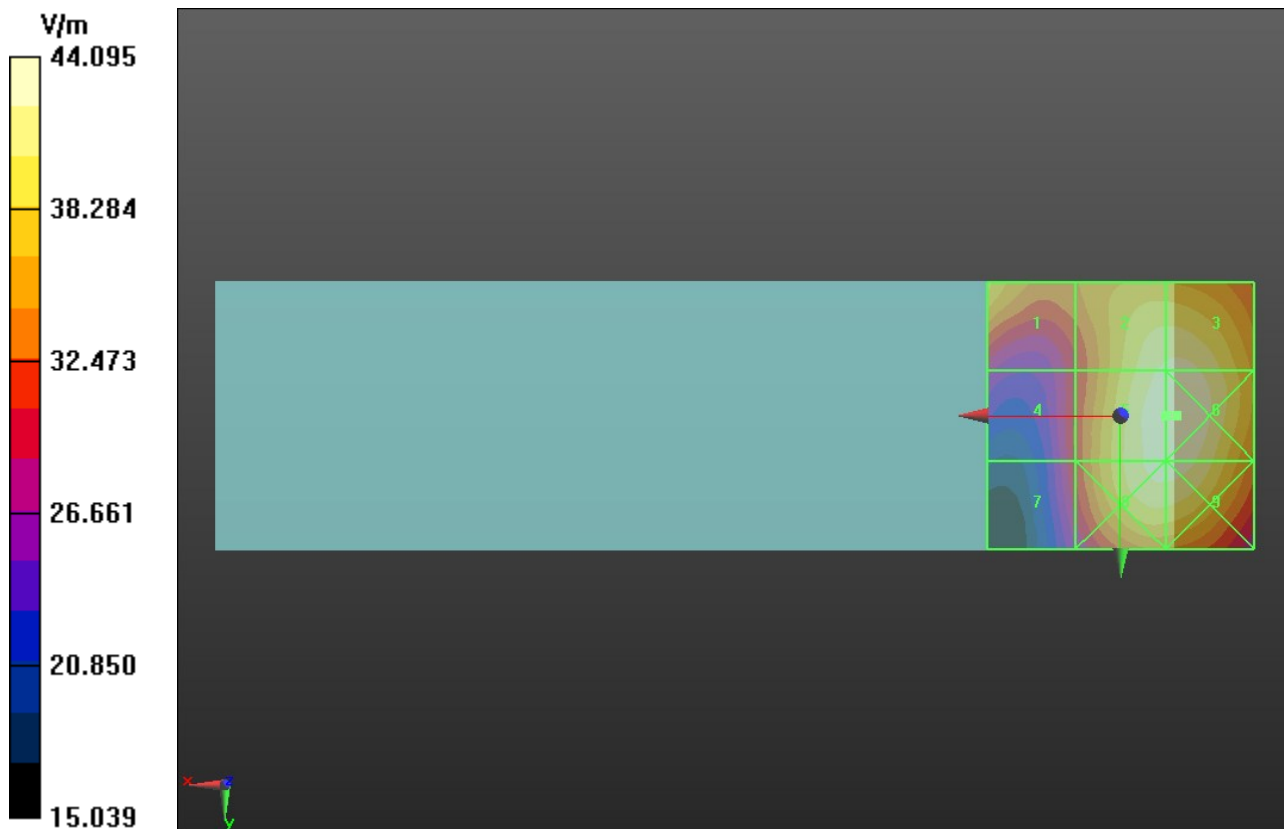
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 18.374 V/m; Power Drift = 0.10 dB

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

Peak E-field in V/m

Grid 1 38.961 M4	Grid 2 42.622 M4	Grid 3 42.833 M4
Grid 4 31.089 M4	Grid 5 43.901 M4	Grid 6 44.095 M4
Grid 7 30.867 M4	Grid 8 43.118 M4	Grid 9 43.144 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA band V

Communication System: UMTS-FDD (WCDMA); Frequency: 826.4 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

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

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 54.525 V/m

Probe Modulation Factor = 0.890

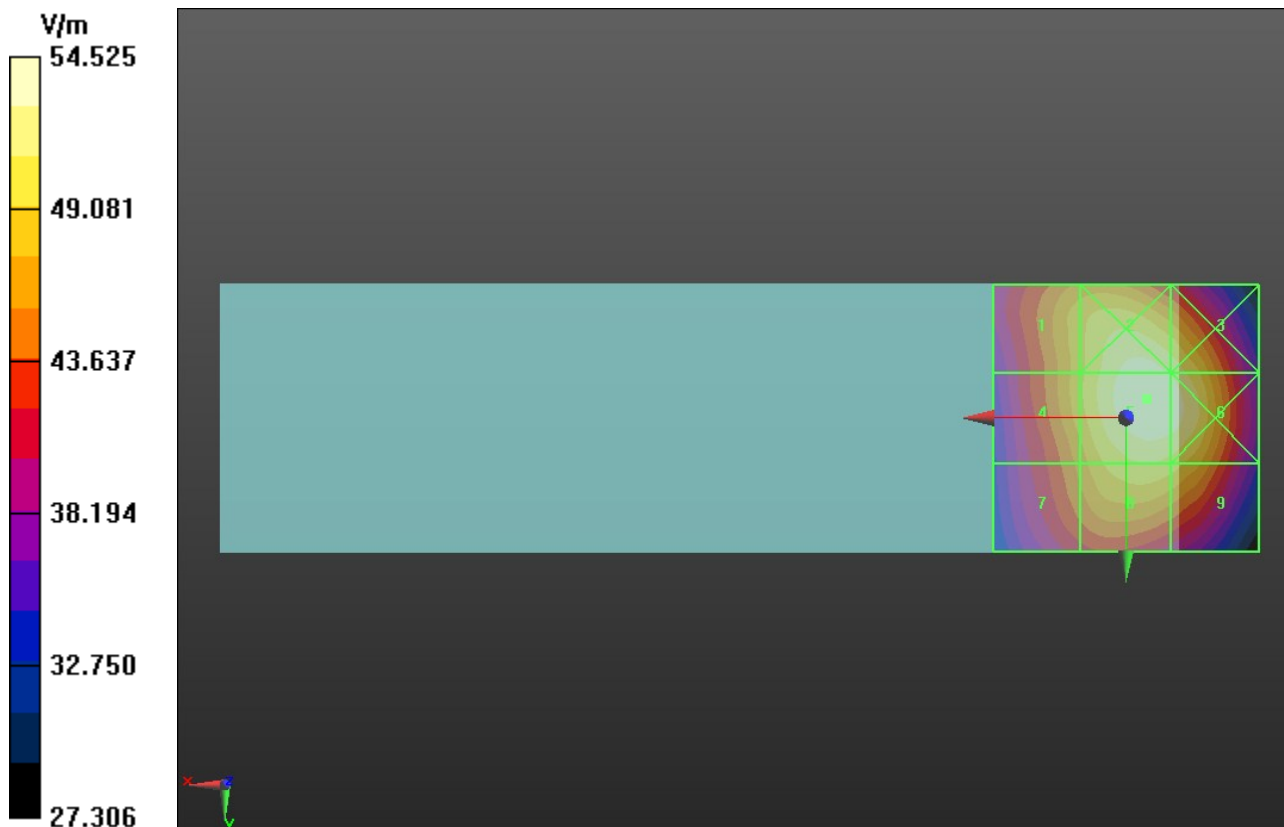
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 82.977 V/m; Power Drift = -0.02 dB

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

Peak E-field in V/m

Grid 1 48.693 M4	Grid 2 53.615 M4	Grid 3 52.500 M4
Grid 4 48.853 M4	Grid 5 54.525 M4	Grid 6 53.866 M4
Grid 7 46.328 M4	Grid 8 50.977 M4	Grid 9 50.177 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA band V

Communication System: UMTS-FDD (WCDMA); Frequency: 836.6 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

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

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 65.260 V/m

Probe Modulation Factor = 0.890

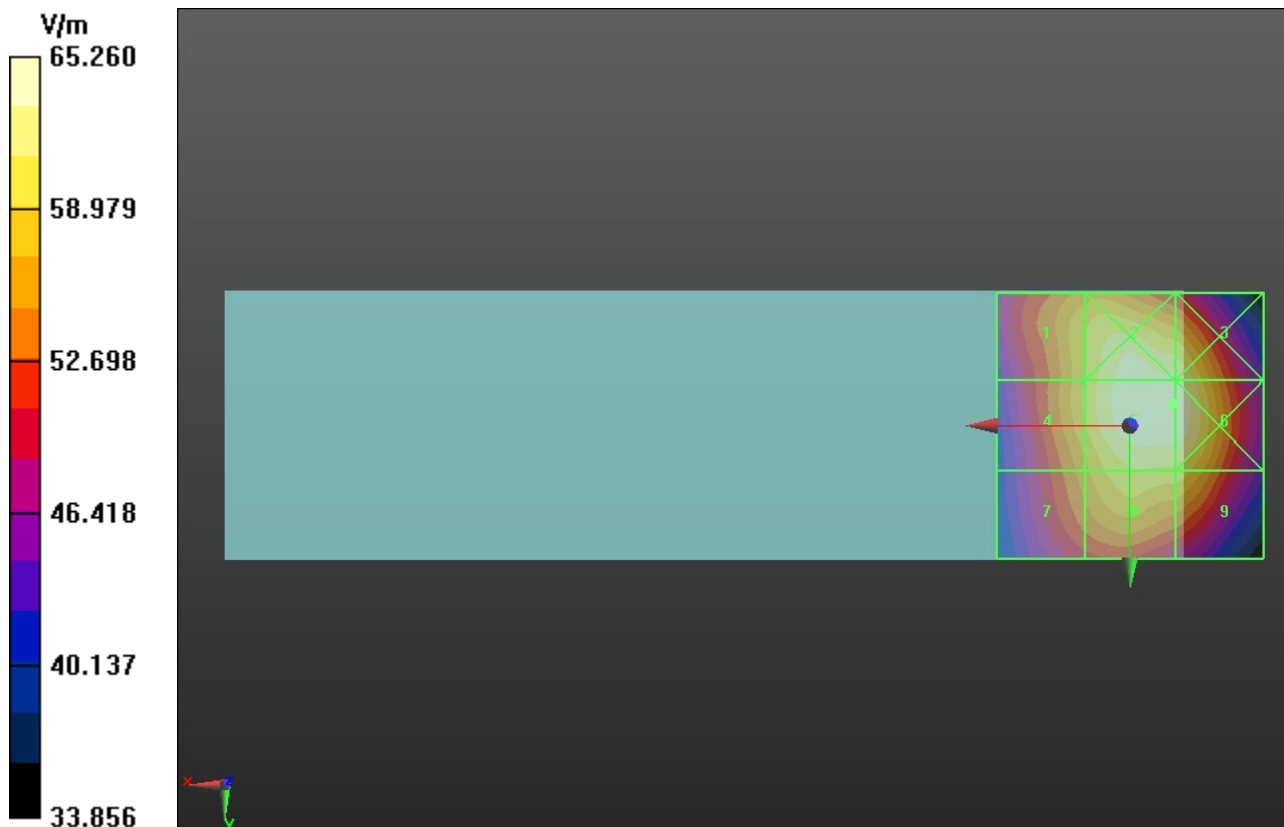
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 99.447 V/m; Power Drift = 0.0056 dB

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

Peak E-field in V/m

Grid 1 59.106 M4	Grid 2 64.547 M4	Grid 3 63.769 M4
Grid 4 59.377 M4	Grid 5 65.260 M4	Grid 6 65.241 M4
Grid 7 56.239 M4	Grid 8 60.967 M4	Grid 9 60.526 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA band V

Communication System: UMTS-FDD (WCDMA); Frequency: 846.6 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 59.404 V/m

Probe Modulation Factor = 0.890

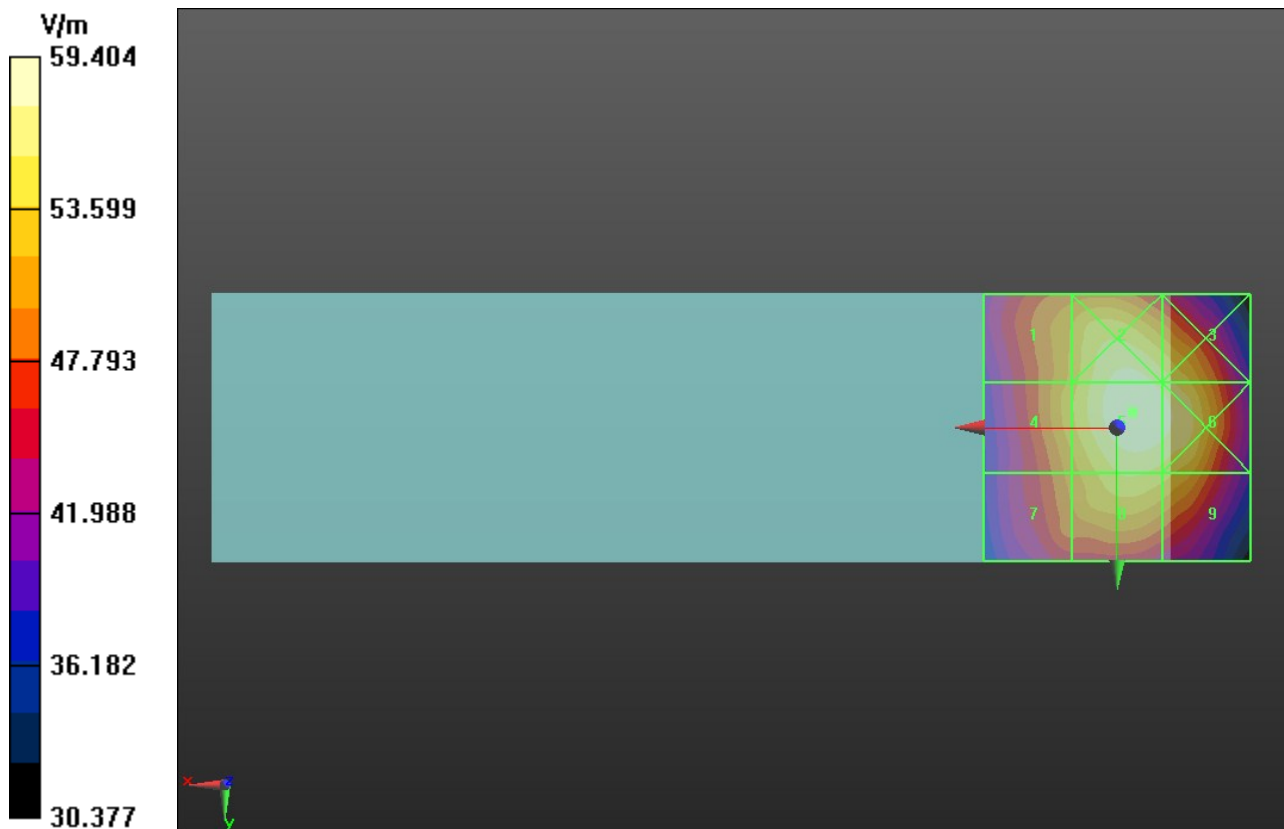
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 90.334 V/m; Power Drift = 0.06 dB

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

Peak E-field in V/m

Grid 1 52.579 M4	Grid 2 58.381 M4	Grid 3 56.748 M4
Grid 4 53.392 M4	Grid 5 59.404 M4	Grid 6 58.298 M4
Grid 7 50.804 M4	Grid 8 55.831 M4	Grid 9 54.690 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA band II

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 26.116 V/m

Probe Modulation Factor = 0.960

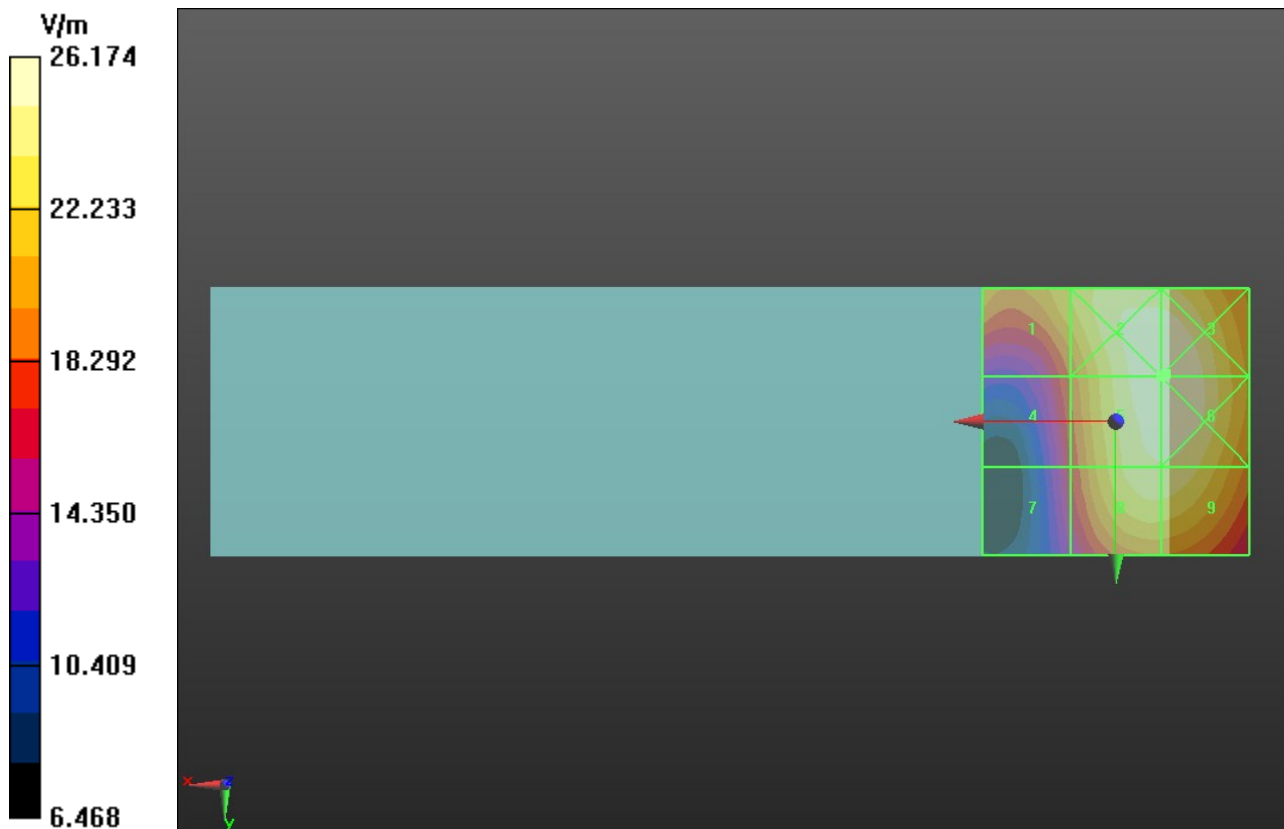
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 32.743 V/m; Power Drift = -0.14 dB

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

Peak E-field in V/m

Grid 1 22.330 M4	Grid 2 26.134 M4	Grid 3 26.174 M4
Grid 4 18.628 M4	Grid 5 26.116 M4	Grid 6 26.166 M4
Grid 7 17.038 M4	Grid 8 24.743 M4	Grid 9 24.744 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA band II

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

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

- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 24.706 V/m

Probe Modulation Factor = 0.960

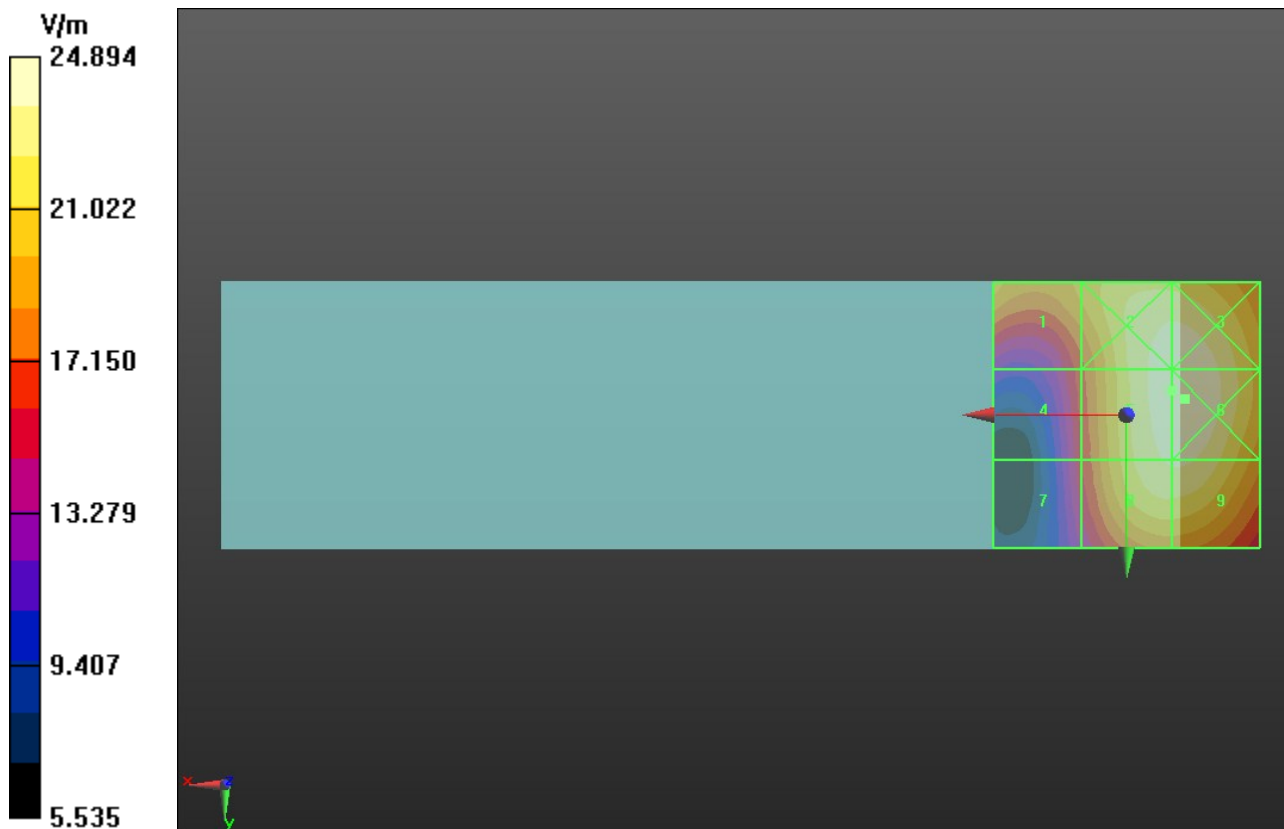
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 30.531 V/m; Power Drift = 0.04 dB

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

Peak E-field in V/m

Grid 1 20.497 M4	Grid 2 24.576 M4	Grid 3 24.705 M4
Grid 4 16.740 M4	Grid 5 24.706 M4	Grid 6 24.894 M4
Grid 7 15.827 M4	Grid 8 23.762 M4	Grid 9 23.805 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA band II

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

E-Field/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 23.731 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 29.148 V/m; Power Drift = -0.02 dB

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

Peak E-field in V/m

Grid 1 20.839 M4	Grid 2 23.374 M4	Grid 3 23.533 M4
Grid 4 15.903 M4	Grid 5 23.731 M4	Grid 6 23.905 M4
Grid 7 15.356 M4	Grid 8 23.070 M4	Grid 9 23.107 M4

