

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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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 = 170.2 V/m

Probe Modulation Factor = 2.790

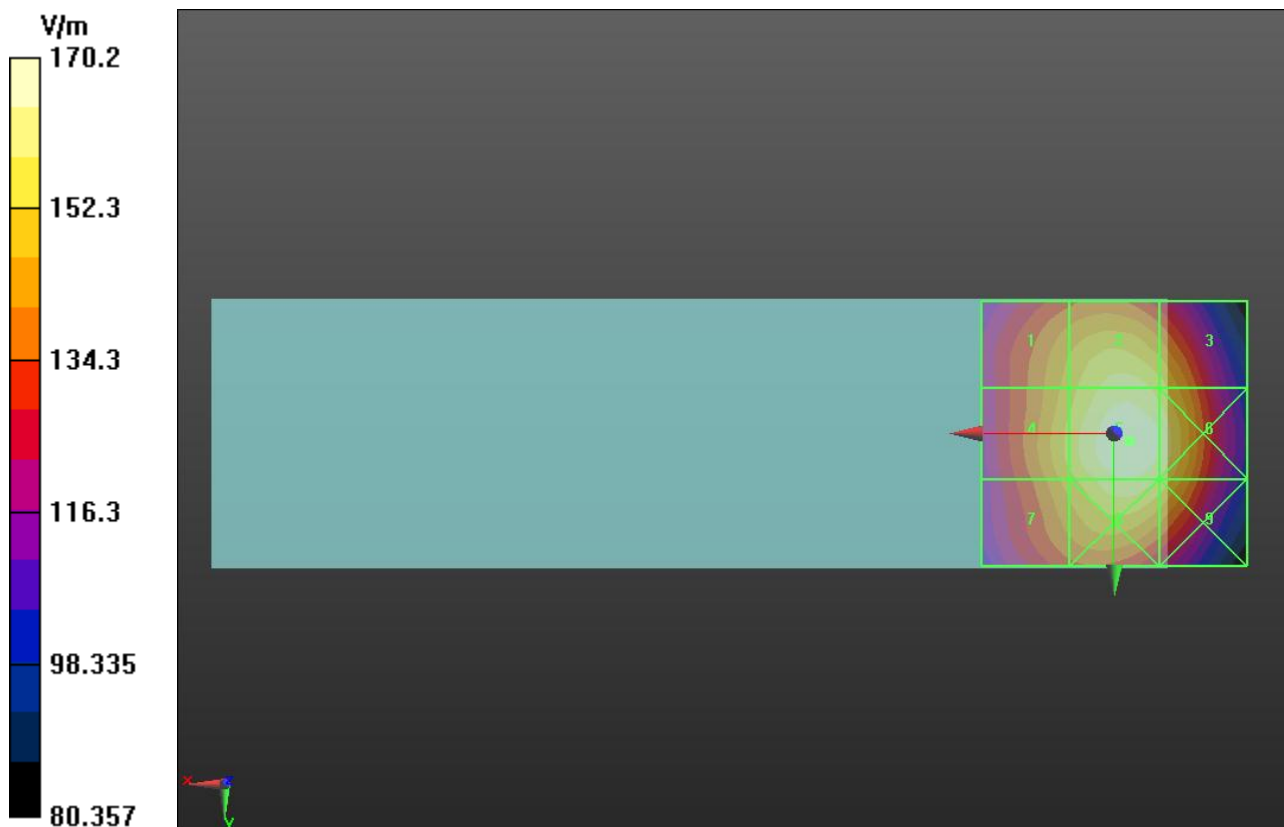
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 83.553 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Grid 1 149.6 M3	Grid 2 161.7 M3	Grid 3 155.7 M3
Grid 4 154.6 M3	Grid 5 170.2 M3	Grid 6 164.5 M3
Grid 7 150.0 M3	Grid 8 164.2 M3	Grid 9 158.0 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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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 = 179.5 V/m

Probe Modulation Factor = 2.790

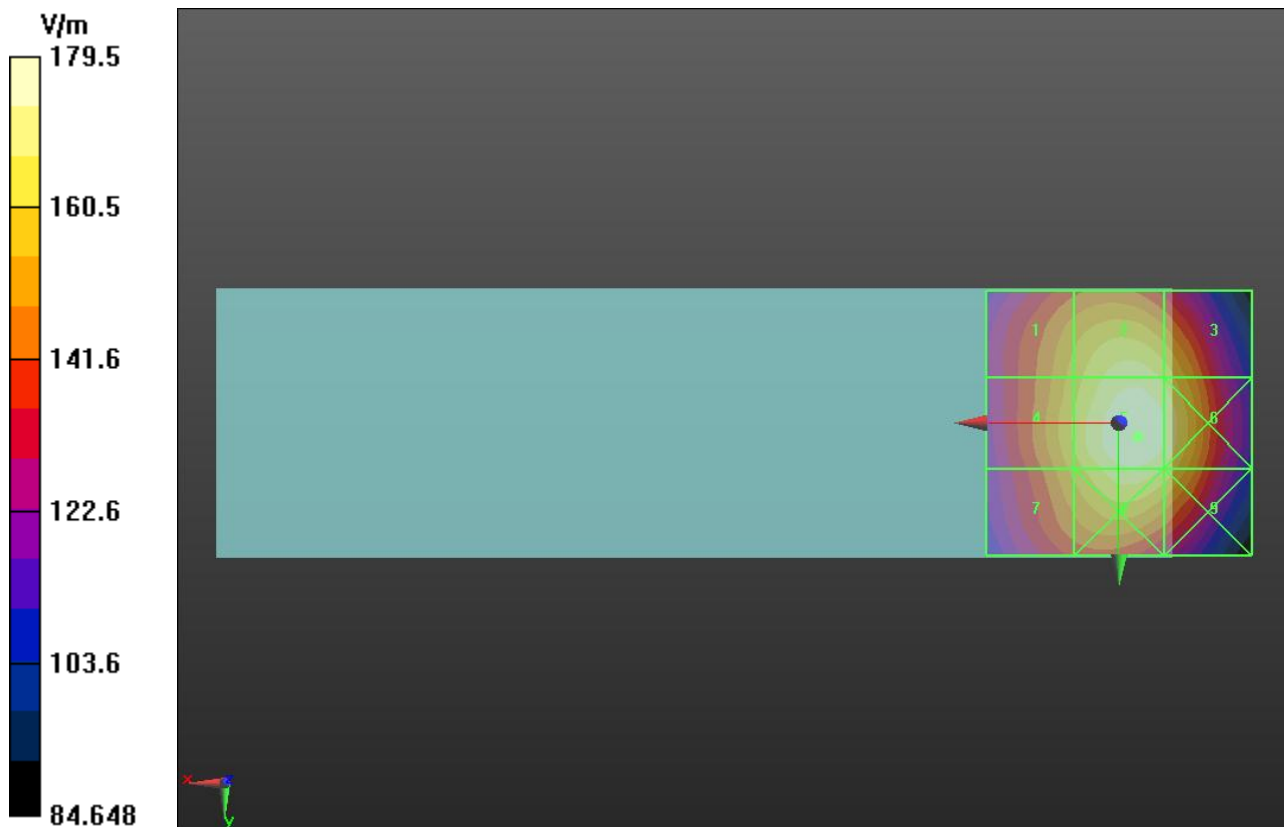
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 88.082 V/m; Power Drift = 0.02 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
157.4 M3	171.3 M3	165.5 M3
Grid 4	Grid 5	Grid 6
161.9 M3	179.5 M3	173.9 M3
Grid 7	Grid 8	Grid 9
156.9 M3	172.8 M3	166.6 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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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 = 193.0 V/m

Probe Modulation Factor = 2.790

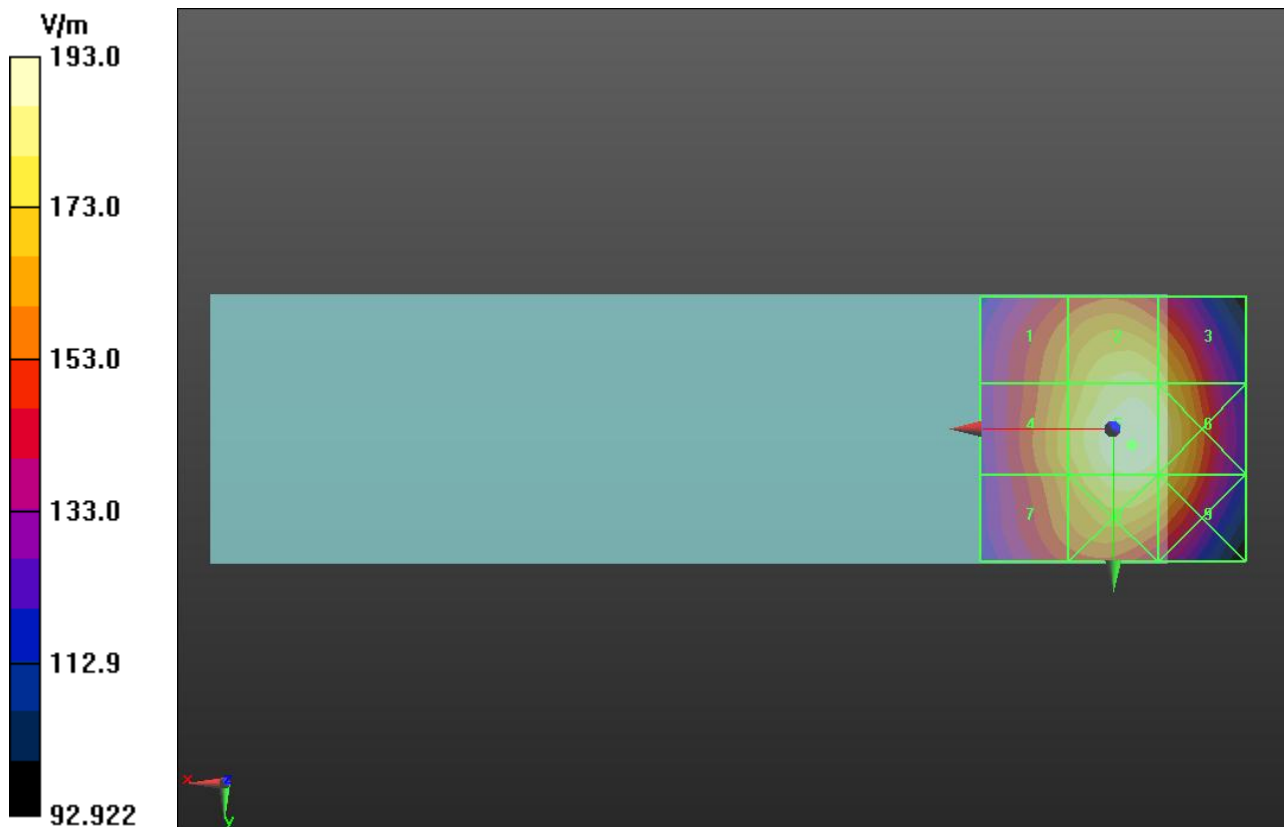
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 95.133 V/m; Power Drift = -0.07 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
166.1 M3	183.1 M3	177.7 M3
Grid 4	Grid 5	Grid 6
172.1 M3	193.0 M3	187.4 M3
Grid 7	Grid 8	Grid 9
166.9 M3	186.2 M3	179.9 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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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 = 47.896 V/m

Probe Modulation Factor = 2.820

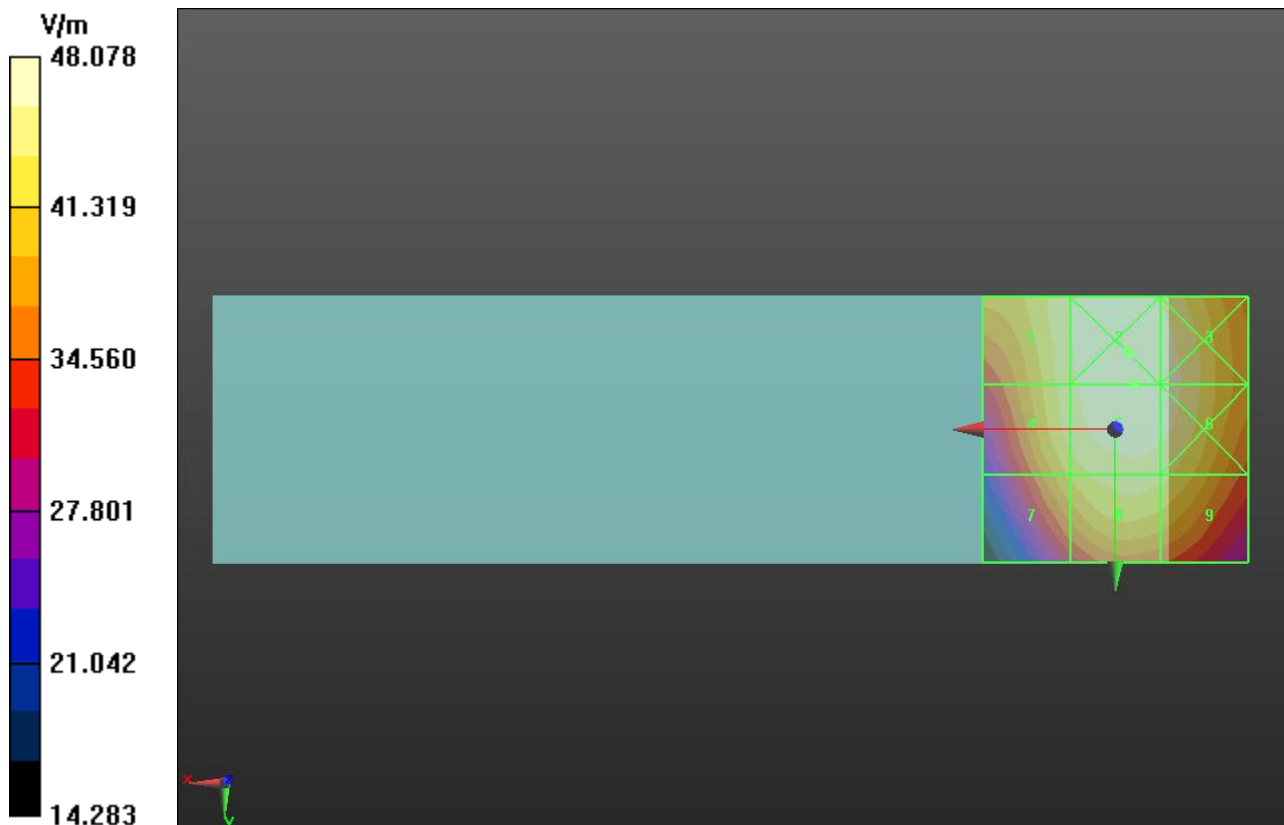
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.931 V/m; Power Drift = 0.0086 dB

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

Peak E-field in V/m

Grid 1 45.925 M4	Grid 2 48.078 M3	Grid 3 47.330 M3
Grid 4 45.245 M4	Grid 5 47.896 M3	Grid 6 47.304 M3
Grid 7 41.836 M4	Grid 8 44.900 M4	Grid 9 44.282 M4



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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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 = 46.681 V/m

Probe Modulation Factor = 2.820

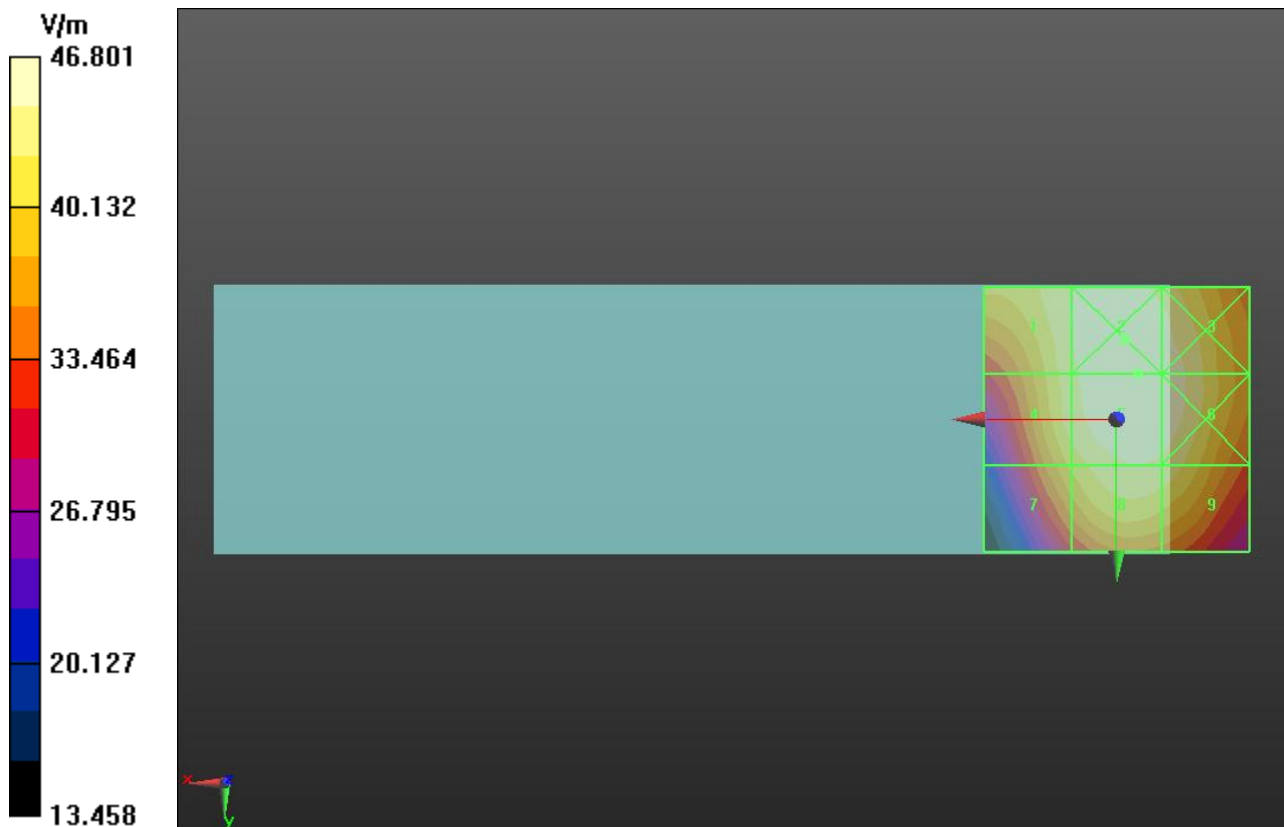
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.863 V/m; Power Drift = -0.01 dB

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

Peak E-field in V/m

Grid 1 44.801 M4	Grid 2 46.801 M4	Grid 3 46.164 M4
Grid 4 44.021 M4	Grid 5 46.681 M4	Grid 6 46.270 M4
Grid 7 40.802 M4	Grid 8 44.604 M4	Grid 9 44.060 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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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 = 48.577 V/m

Probe Modulation Factor = 2.820

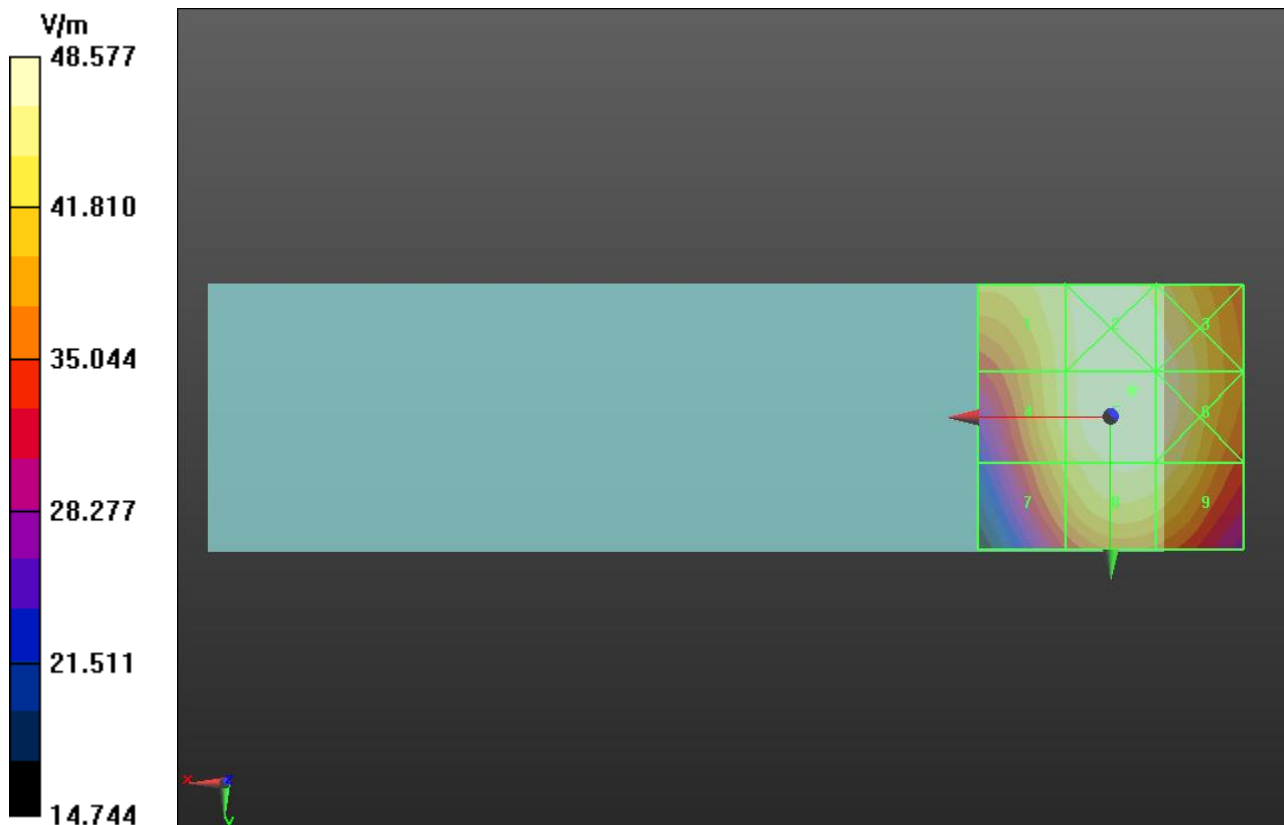
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 20.652 V/m; Power Drift = 0.01 dB

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

Peak E-field in V/m

Grid 1 46.050 M4	Grid 2 48.444 M3	Grid 3 47.976 M3
Grid 4 45.367 M4	Grid 5 48.577 M3	Grid 6 48.141 M3
Grid 7 42.831 M4	Grid 8 46.860 M4	Grid 9 46.134 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

DASY4 Configuration:

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

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn500; Calibrated: 7/14/2011

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

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

Maximum value of peak Total field = 62.337 V/m

Probe Modulation Factor = 0.890

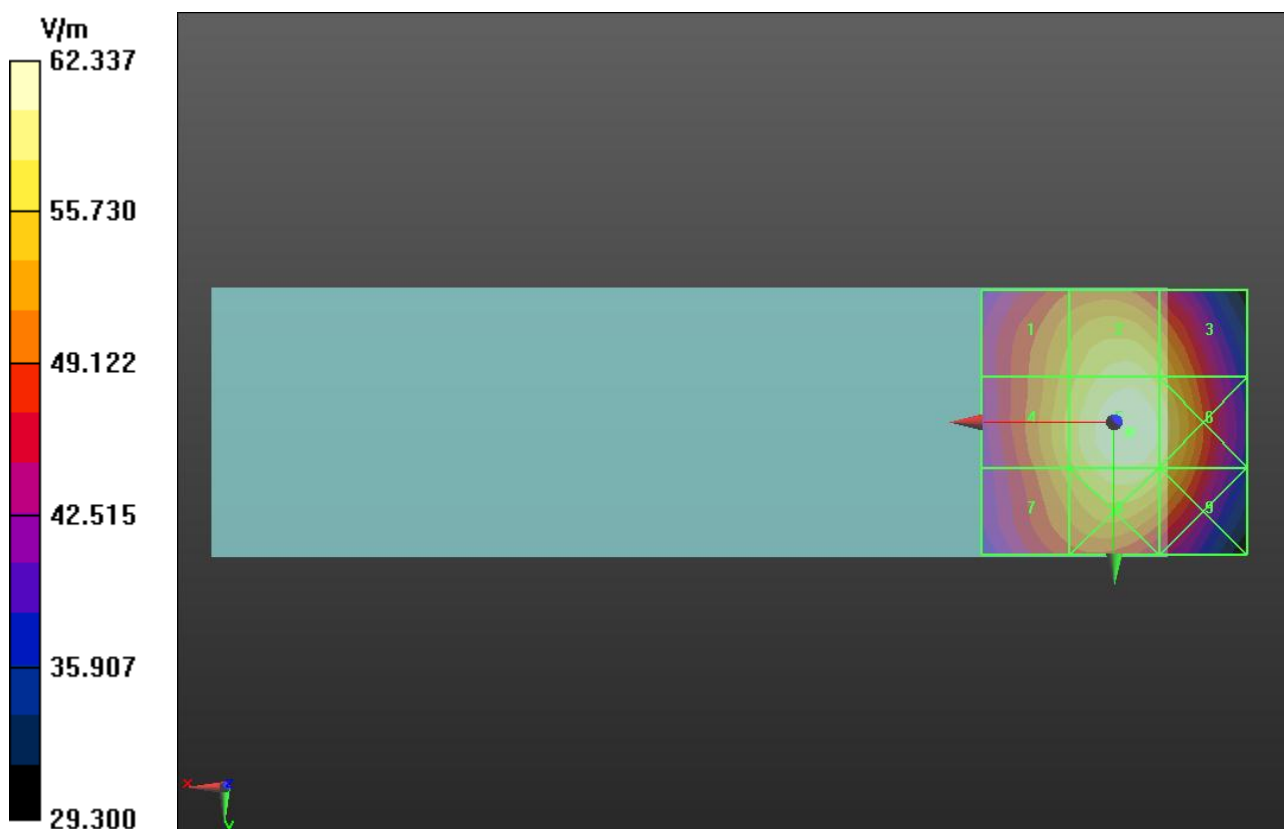
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 94.674 V/m; Power Drift = 0.15 dB

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

Peak E-field in V/m

Grid 1 54.917 M4	Grid 2 59.308 M4	Grid 3 56.864 M4
Grid 4 56.560 M4	Grid 5 62.337 M4	Grid 6 59.954 M4
Grid 7 54.956 M4	Grid 8 60.030 M4	Grid 9 57.536 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

DASY4 Configuration:

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

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn500; Calibrated: 7/14/2011

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

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

Maximum value of peak Total field = 56.687 V/m

Probe Modulation Factor = 0.890

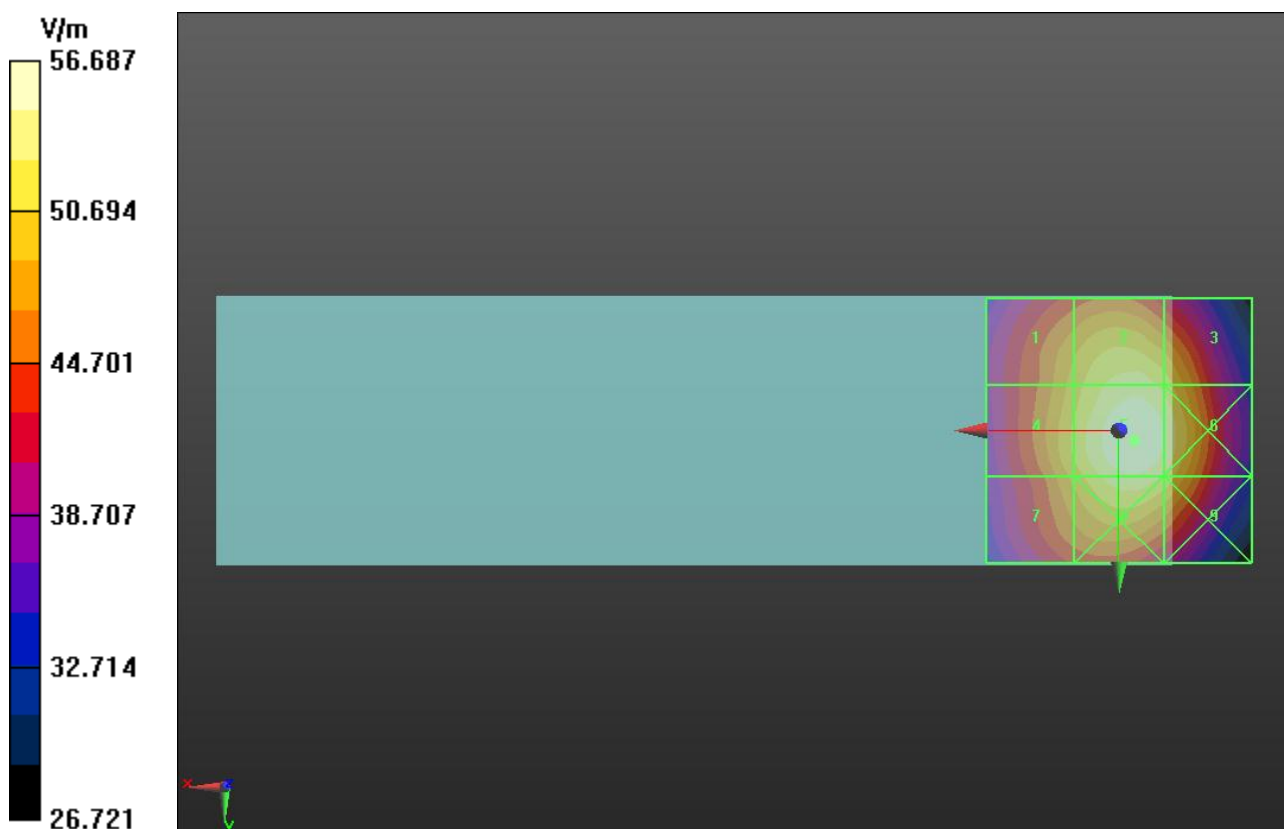
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 86.598 V/m; Power Drift = 0.06 dB

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

Peak E-field in V/m

Grid 1 49.661 M4	Grid 2 53.868 M4	Grid 3 52.072 M4
Grid 4 51.145 M4	Grid 5 56.687 M4	Grid 6 54.818 M4
Grid 7 49.515 M4	Grid 8 54.469 M4	Grid 9 52.474 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

DASY4 Configuration:

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

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn500; Calibrated: 7/14/2011

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

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

Maximum value of peak Total field = 64.121 V/m

Probe Modulation Factor = 0.890

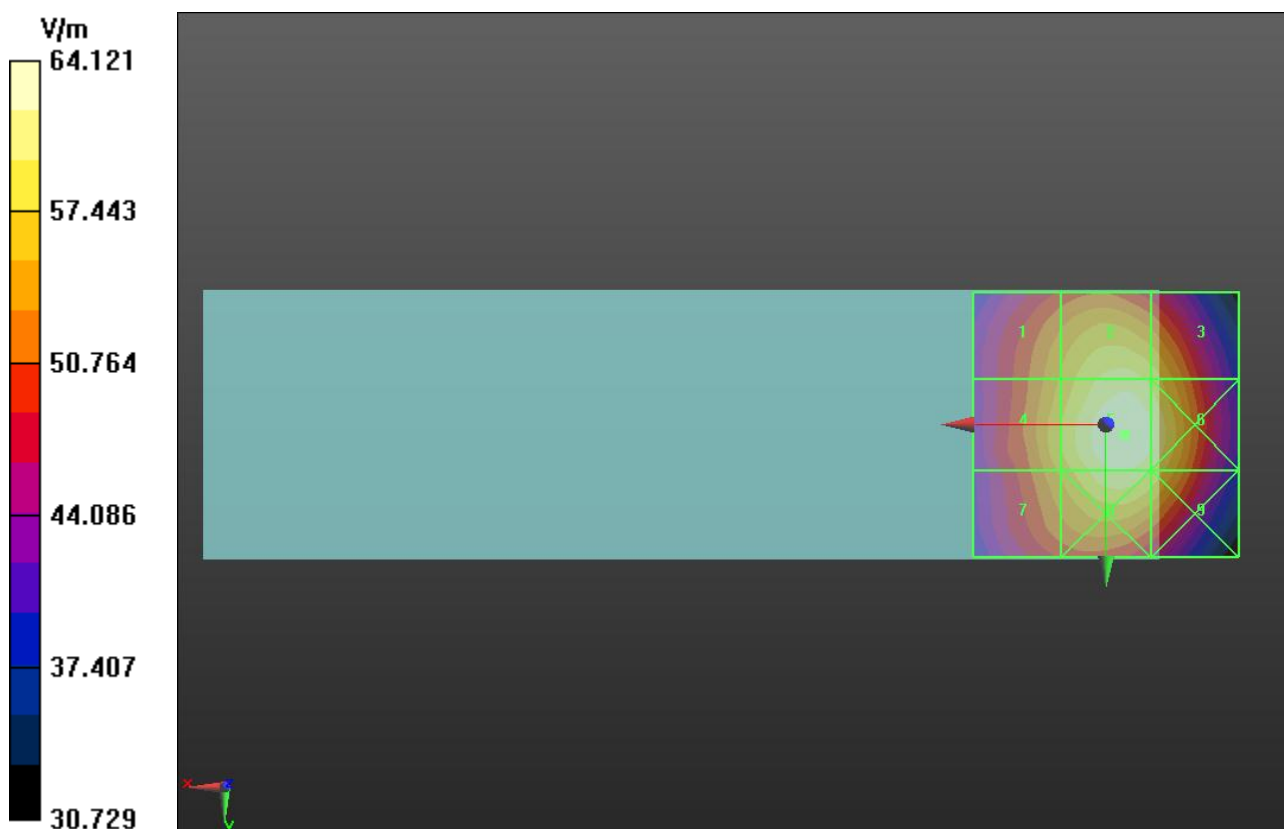
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 99.359 V/m; Power Drift = -0.07 dB

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

Peak E-field in V/m

Grid 1 55.610 M4	Grid 2 60.813 M4	Grid 3 59.079 M4
Grid 4 57.518 M4	Grid 5 64.121 M4	Grid 6 62.273 M4
Grid 7 55.898 M4	Grid 8 62.094 M4	Grid 9 59.943 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

DASY4 Configuration:

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

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn500; Calibrated: 7/14/2011

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

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

Maximum value of peak Total field = 26.012 V/m

Probe Modulation Factor = 0.960

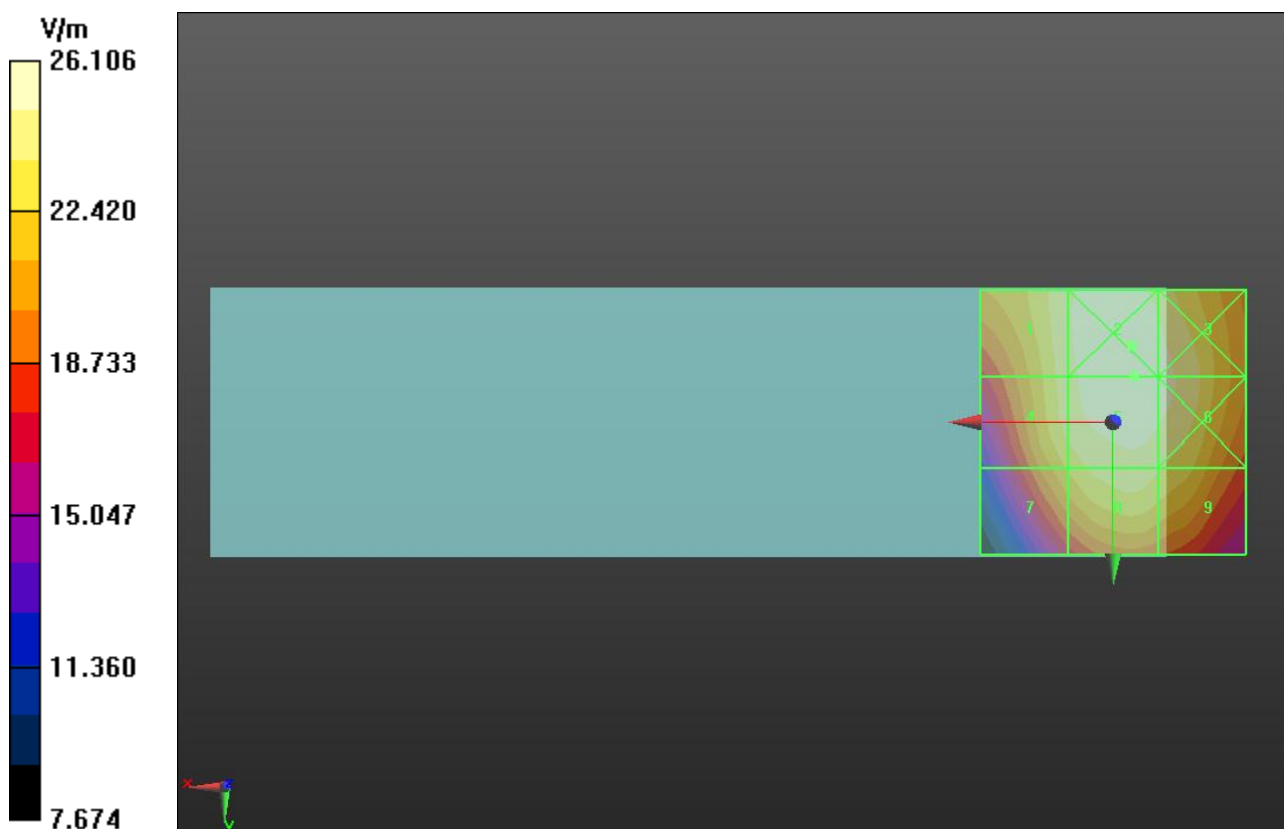
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 31.434 V/m; Power Drift = 0.15 dB

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

Peak E-field in V/m

Grid 1 24.709 M4	Grid 2 26.106 M4	Grid 3 25.462 M4
Grid 4 24.451 M4	Grid 5 26.012 M4	Grid 6 25.471 M4
Grid 7 22.646 M4	Grid 8 24.471 M4	Grid 9 23.833 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

DASY4 Configuration:

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

- Sensor-Surface: (Fix Surface)

- Electronics: DAE3 Sn500; Calibrated: 7/14/2011

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

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

Maximum value of peak Total field = 25.664 V/m

Probe Modulation Factor = 0.960

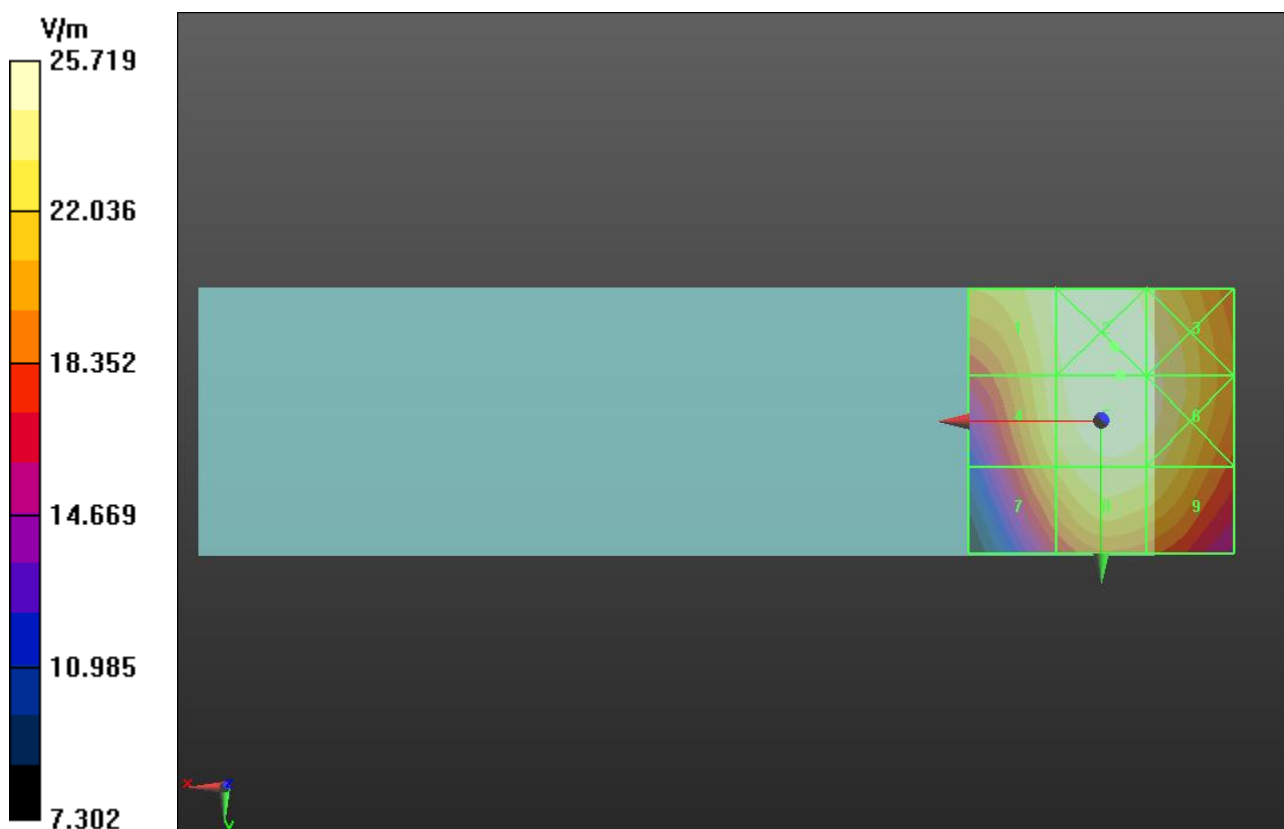
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 31.572 V/m; Power Drift = 0.02 dB

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

Peak E-field in V/m

Grid 1 24.719 M4	Grid 2 25.719 M4	Grid 3 25.079 M4
Grid 4 24.122 M4	Grid 5 25.664 M4	Grid 6 25.147 M4
Grid 7 22.313 M4	Grid 8 24.285 M4	Grid 9 23.782 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

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- 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, R99 RMC 12.2kbps/H ch/Hearing Aid Compatibility Test (101x101x1):

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

Maximum value of peak Total field = 28.076 V/m

Probe Modulation Factor = 0.960

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 35.038 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Grid 1 26.747 M4	Grid 2 28.042 M4	Grid 3 27.732 M4
Grid 4 26.416 M4	Grid 5 28.076 M4	Grid 6 27.814 M4
Grid 7 24.571 M4	Grid 8 26.852 M4	Grid 9 26.344 M4

