

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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.120 A/m

Probe Modulation Factor = 2.790

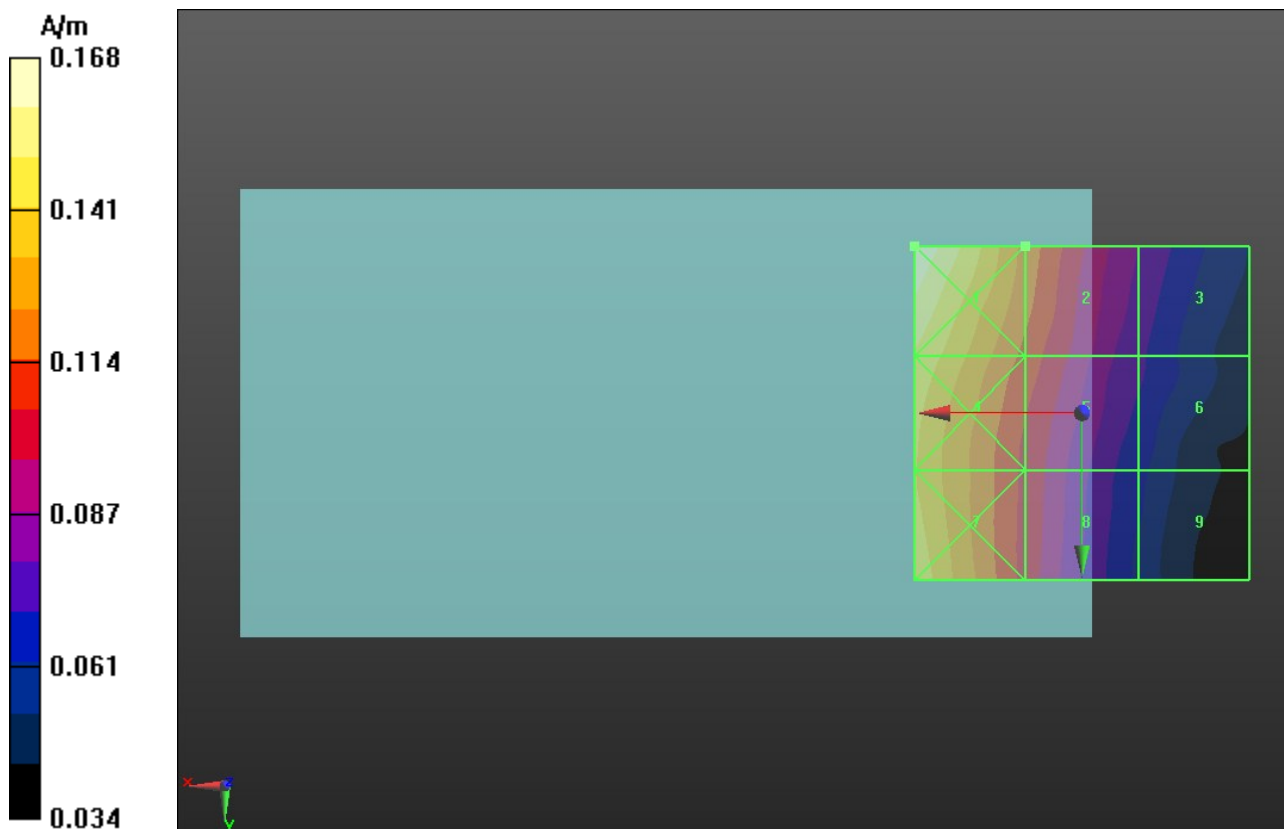
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.032 A/m; Power Drift = -0.0094 dB

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

Peak H-field in A/m

Grid 1 0.168 M4	Grid 2 0.120 M4	Grid 3 0.079 M4
Grid 4 0.149 M4	Grid 5 0.112 M4	Grid 6 0.072 M4
Grid 7 0.150 M4	Grid 8 0.103 M4	Grid 9 0.064 M4



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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.123 A/m

Probe Modulation Factor = 2.790

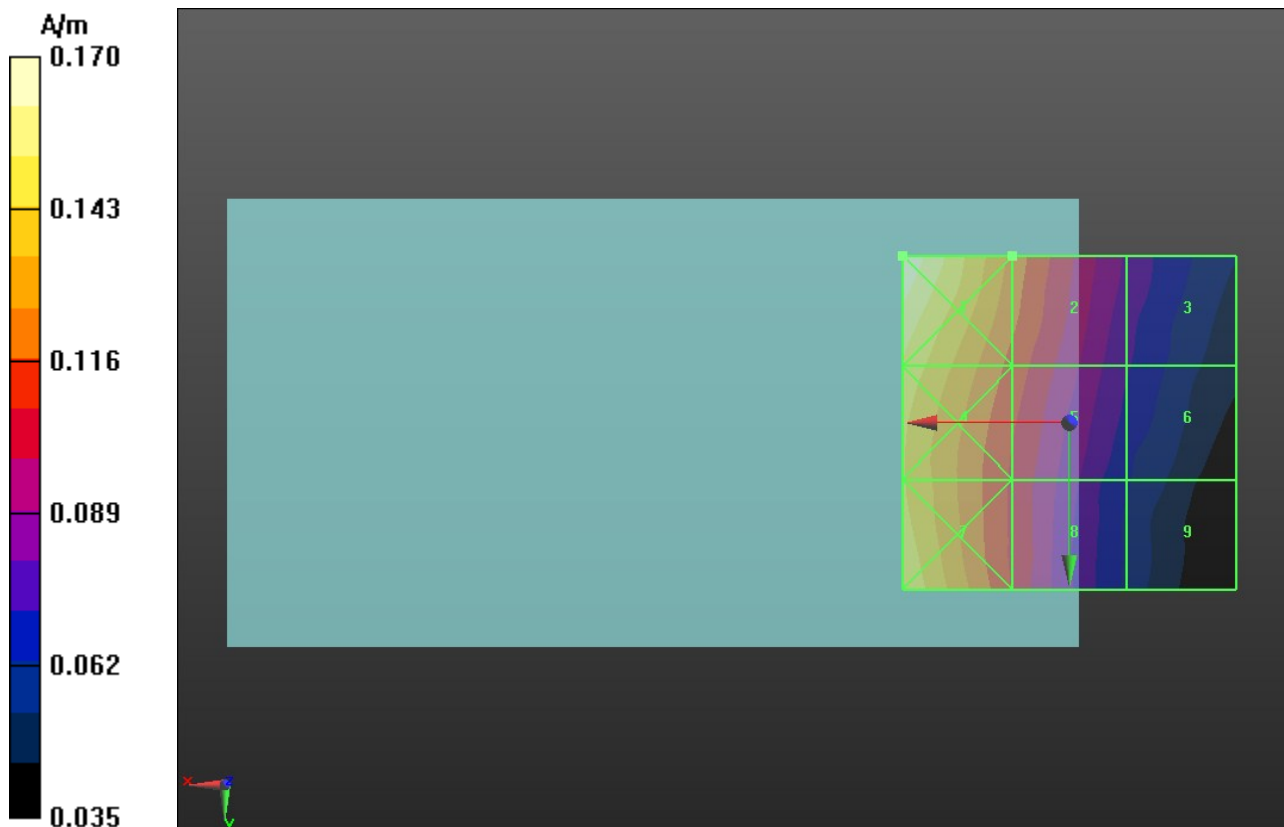
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.033 A/m; Power Drift = 0.06 dB

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

Peak H-field in A/m

Grid 1 0.170 M4	Grid 2 0.123 M4	Grid 3 0.079 M4
Grid 4 0.151 M4	Grid 5 0.113 M4	Grid 6 0.073 M4
Grid 7 0.153 M4	Grid 8 0.106 M4	Grid 9 0.064 M4



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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.126 A/m

Probe Modulation Factor = 2.790

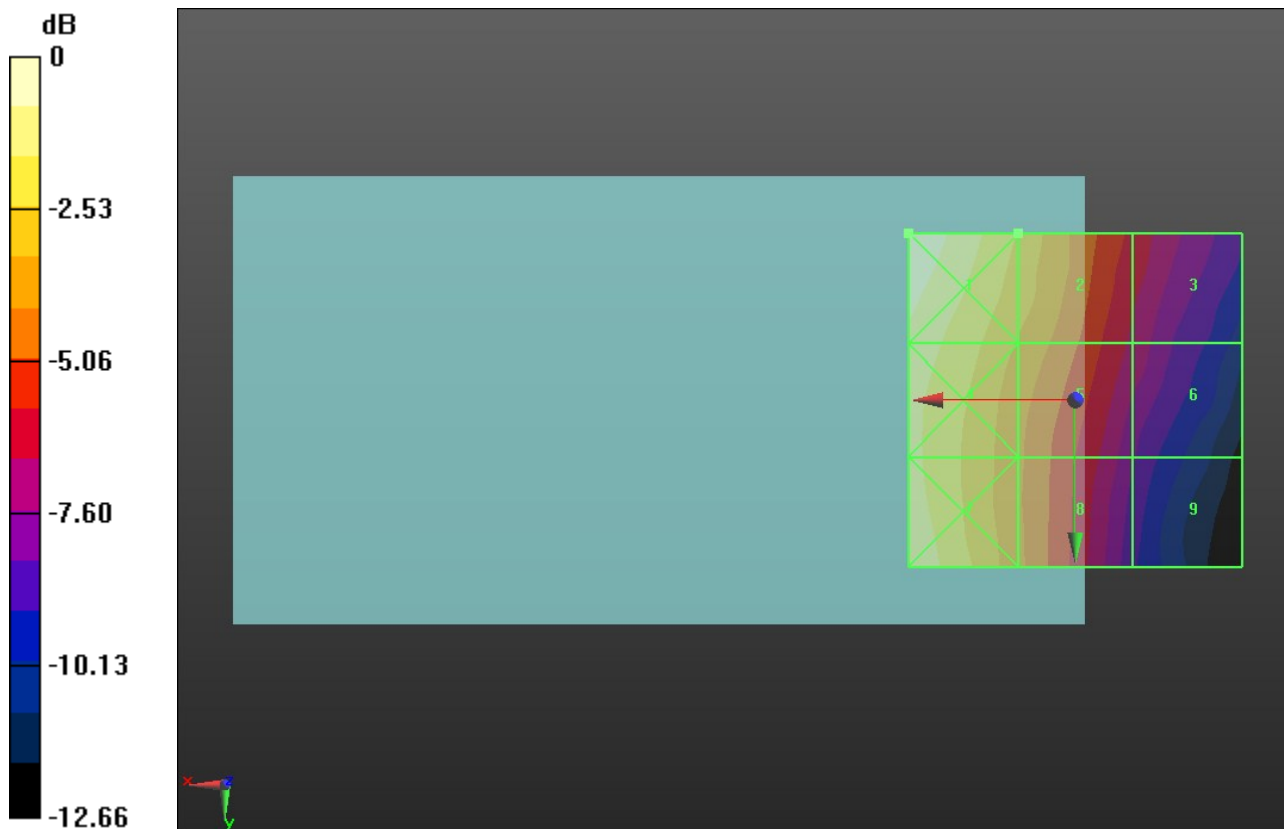
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.034 A/m; Power Drift = 0.13 dB

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

Peak H-field in A/m

Grid 1 0.170 M4	Grid 2 0.126 M4	Grid 3 0.084 M4
Grid 4 0.151 M4	Grid 5 0.114 M4	Grid 6 0.077 M4
Grid 7 0.154 M4	Grid 8 0.107 M4	Grid 9 0.066 M4



0 dB = 0.170A/m

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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.109 A/m

Probe Modulation Factor = 2.840

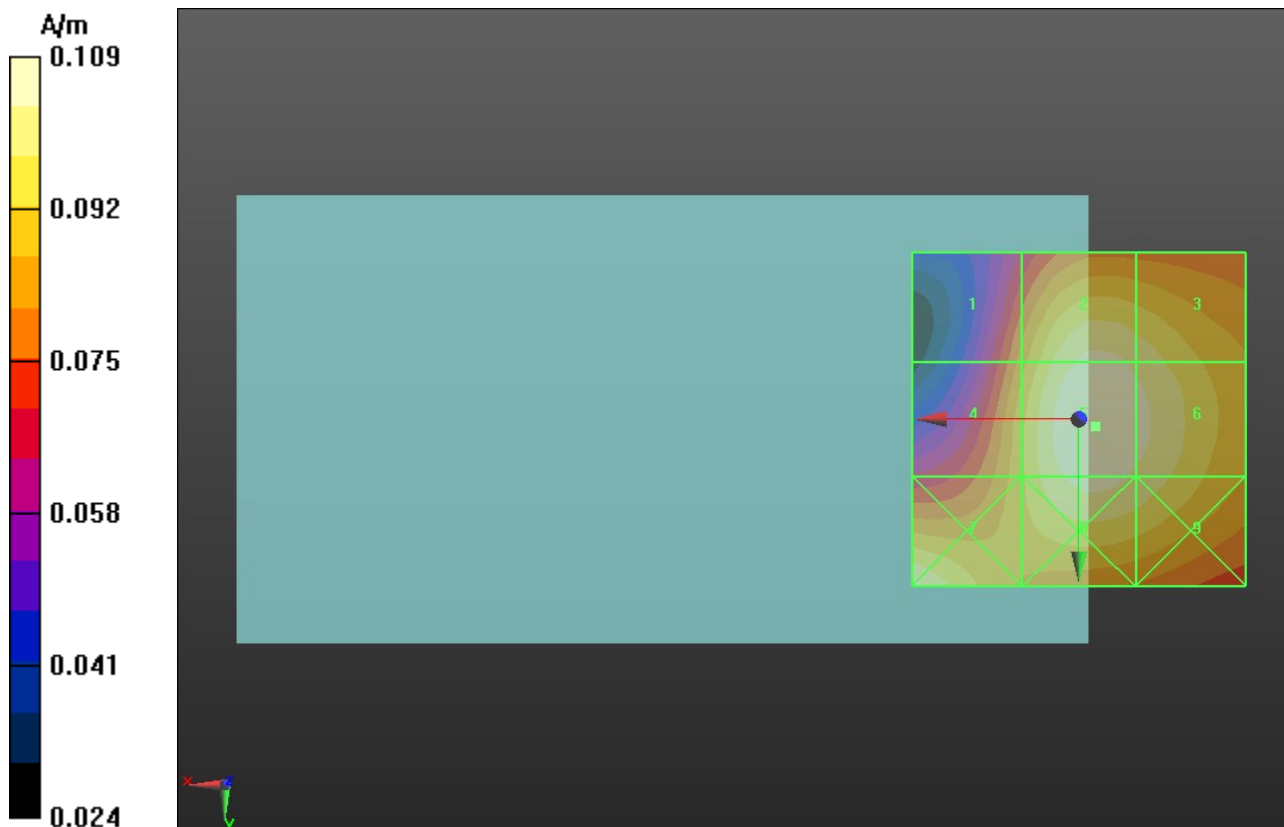
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.050 A/m; Power Drift = 0.07 dB

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

Peak H-field in A/m

Grid 1 0.084 M4	Grid 2 0.105 M4	Grid 3 0.102 M4
Grid 4 0.091 M4	Grid 5 0.109 M4	Grid 6 0.105 M4
Grid 7 0.106 M4	Grid 8 0.105 M4	Grid 9 0.102 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

DASY5 Configuration:

- Probe: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.103 A/m

Probe Modulation Factor = 2.840

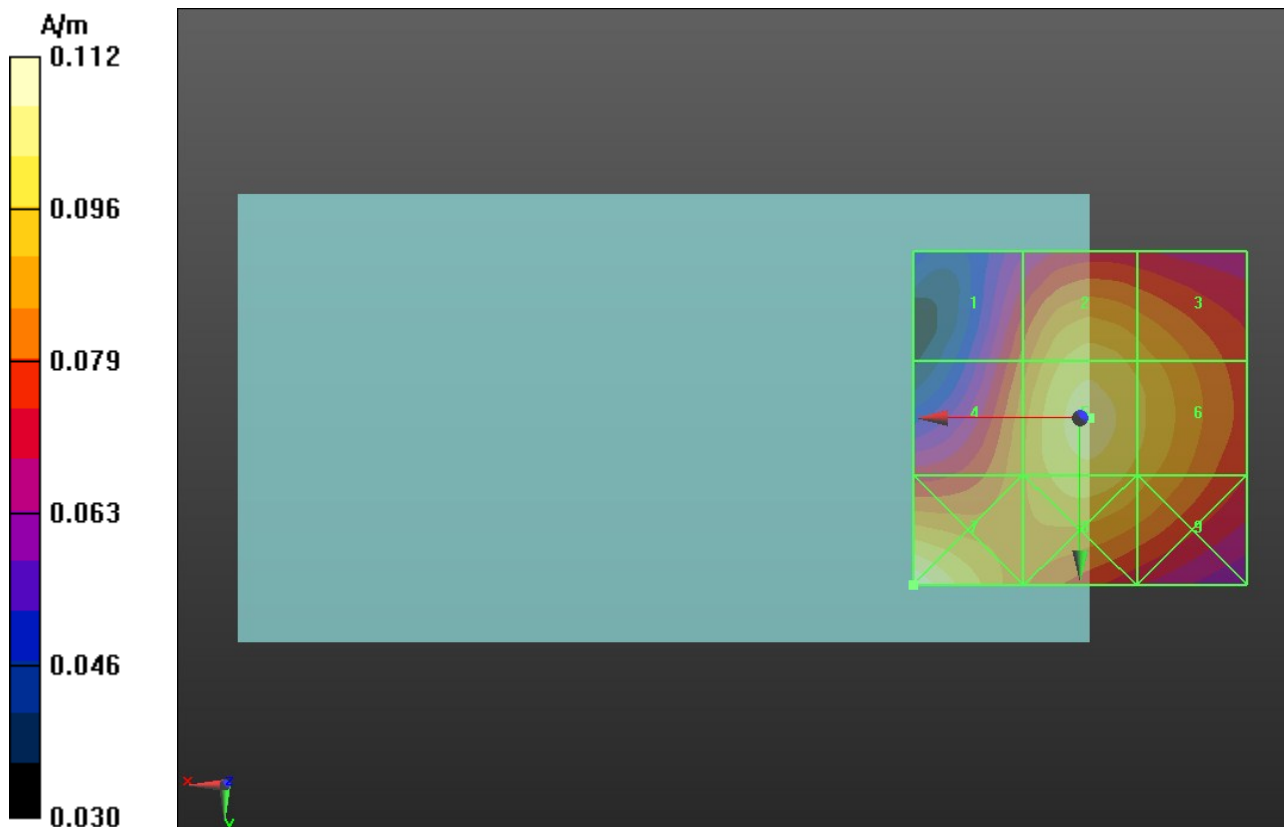
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.047 A/m; Power Drift = -0.05 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.082 M4	0.099 M4	0.094 M4
Grid 4	Grid 5	Grid 6
0.090 M4	0.103 M4	0.097 M4
Grid 7	Grid 8	Grid 9
0.112 M4	0.099 M4	0.093 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.098 A/m

Probe Modulation Factor = 2.840

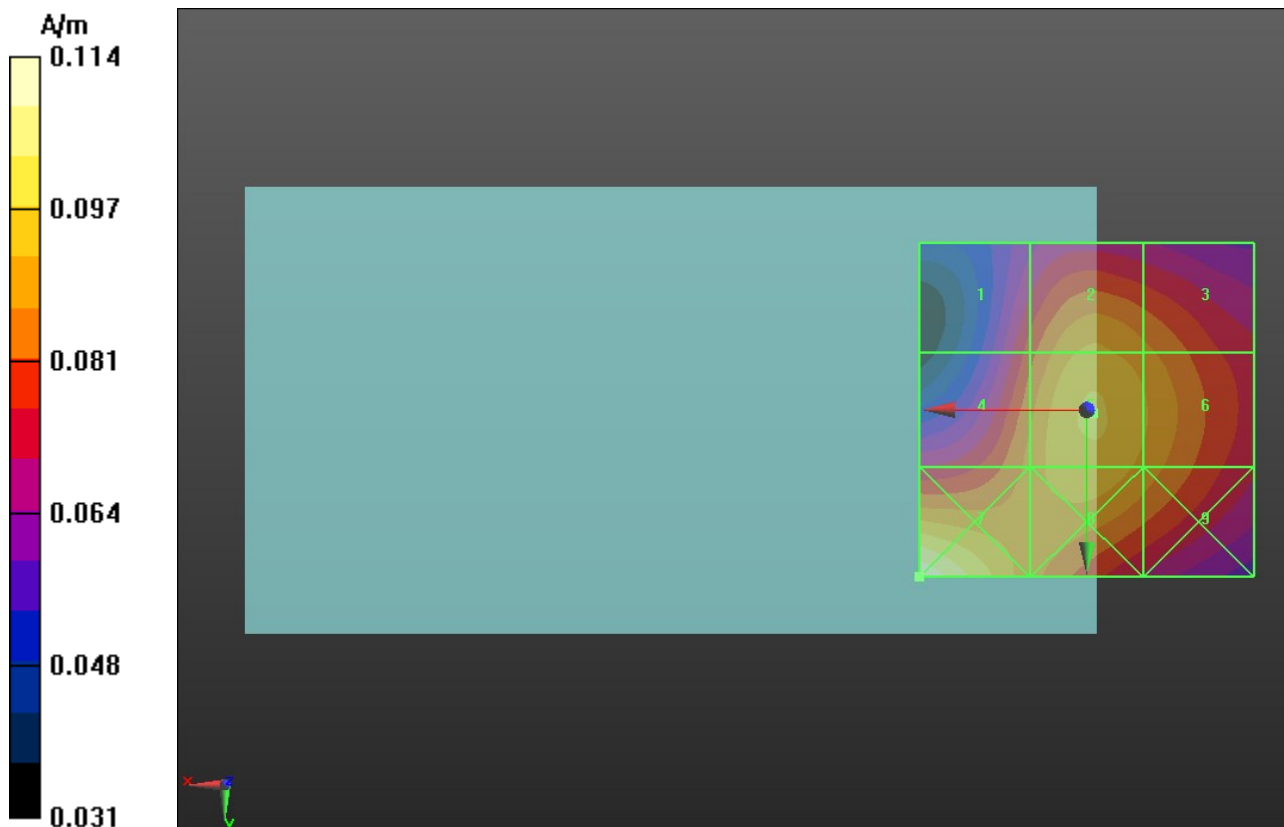
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.044 A/m; Power Drift = -0.04 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.079 M4	0.093 M4	0.088 M4
Grid 4	Grid 5	Grid 6
0.088 M4	0.098 M4	0.093 M4
Grid 7	Grid 8	Grid 9
0.114 M4	0.096 M4	0.090 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.047 A/m

Probe Modulation Factor = 0.900

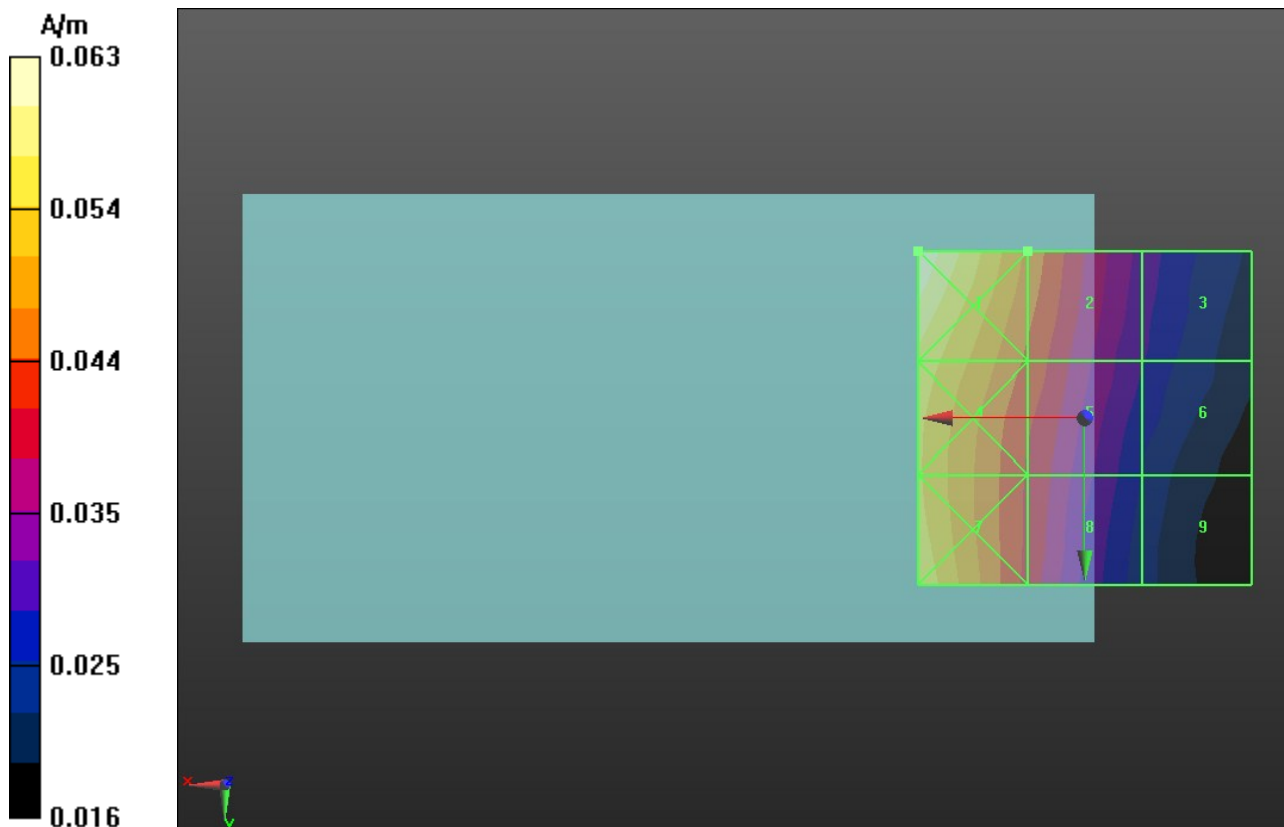
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.040 A/m; Power Drift = 0.0095 dB

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

Peak H-field in A/m

Grid 1 0.063 M4	Grid 2 0.047 M4	Grid 3 0.031 M4
Grid 4 0.056 M4	Grid 5 0.043 M4	Grid 6 0.029 M4
Grid 7 0.057 M4	Grid 8 0.041 M4	Grid 9 0.025 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.045 A/m

Probe Modulation Factor = 0.900

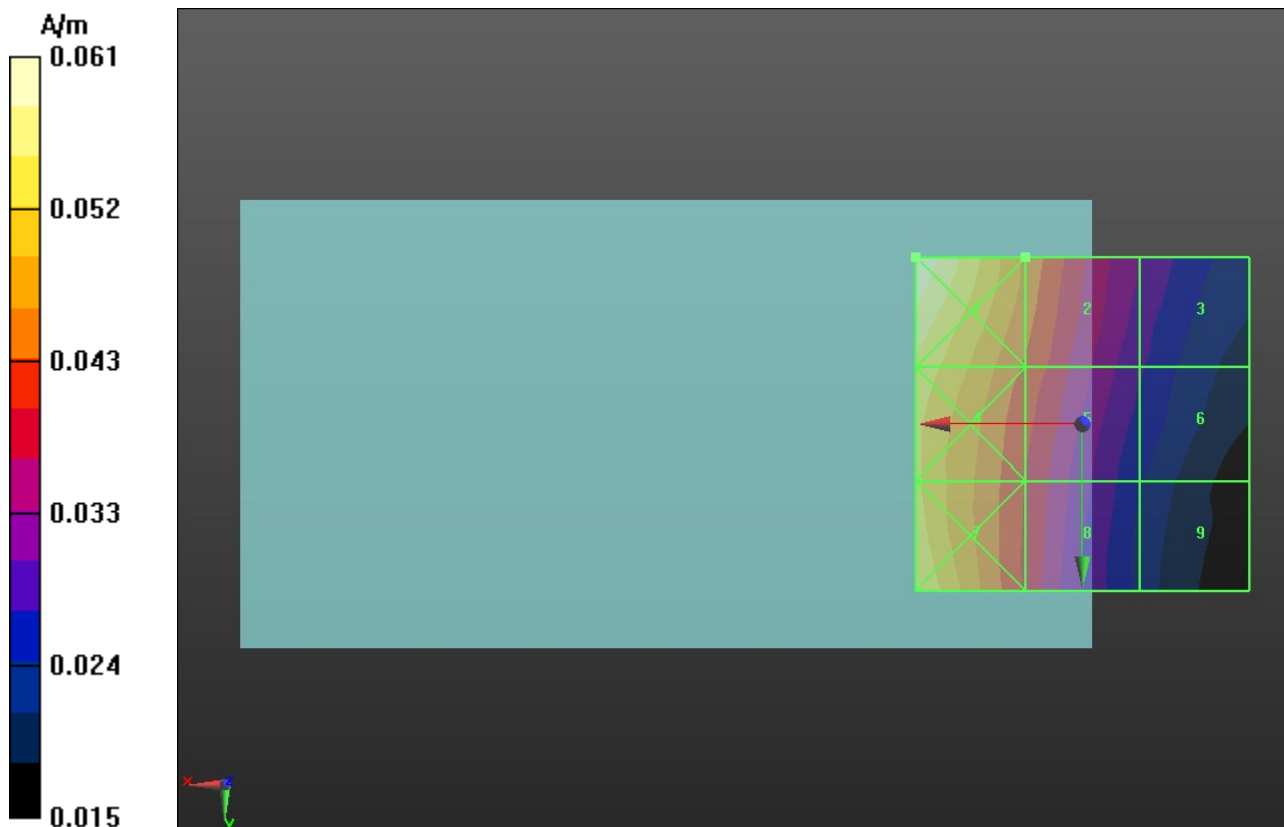
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.039 A/m; Power Drift = 0.06 dB

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

Peak H-field in A/m

Grid 1 0.061 M4	Grid 2 0.045 M4	Grid 3 0.031 M4
Grid 4 0.055 M4	Grid 5 0.042 M4	Grid 6 0.028 M4
Grid 7 0.056 M4	Grid 8 0.040 M4	Grid 9 0.025 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.045 A/m

Probe Modulation Factor = 0.900

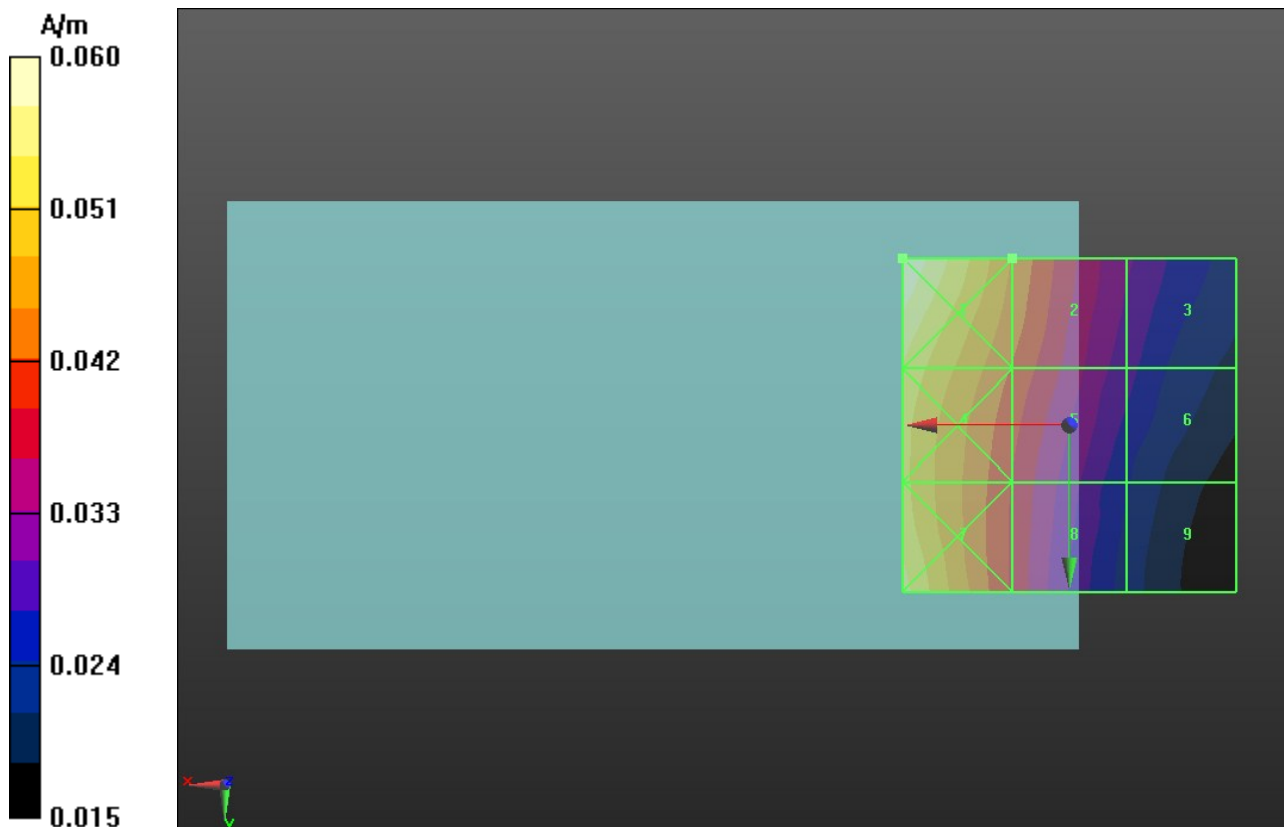
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.039 A/m; Power Drift = 0.07 dB

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

Peak H-field in A/m

Grid 1 0.060 M4	Grid 2 0.045 M4	Grid 3 0.031 M4
Grid 4 0.054 M4	Grid 5 0.042 M4	Grid 6 0.028 M4
Grid 7 0.055 M4	Grid 8 0.039 M4	Grid 9 0.025 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA Band IV

Communication System: UMTS-FDD (WCDMA); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1);SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.057 A/m

Probe Modulation Factor = 0.950

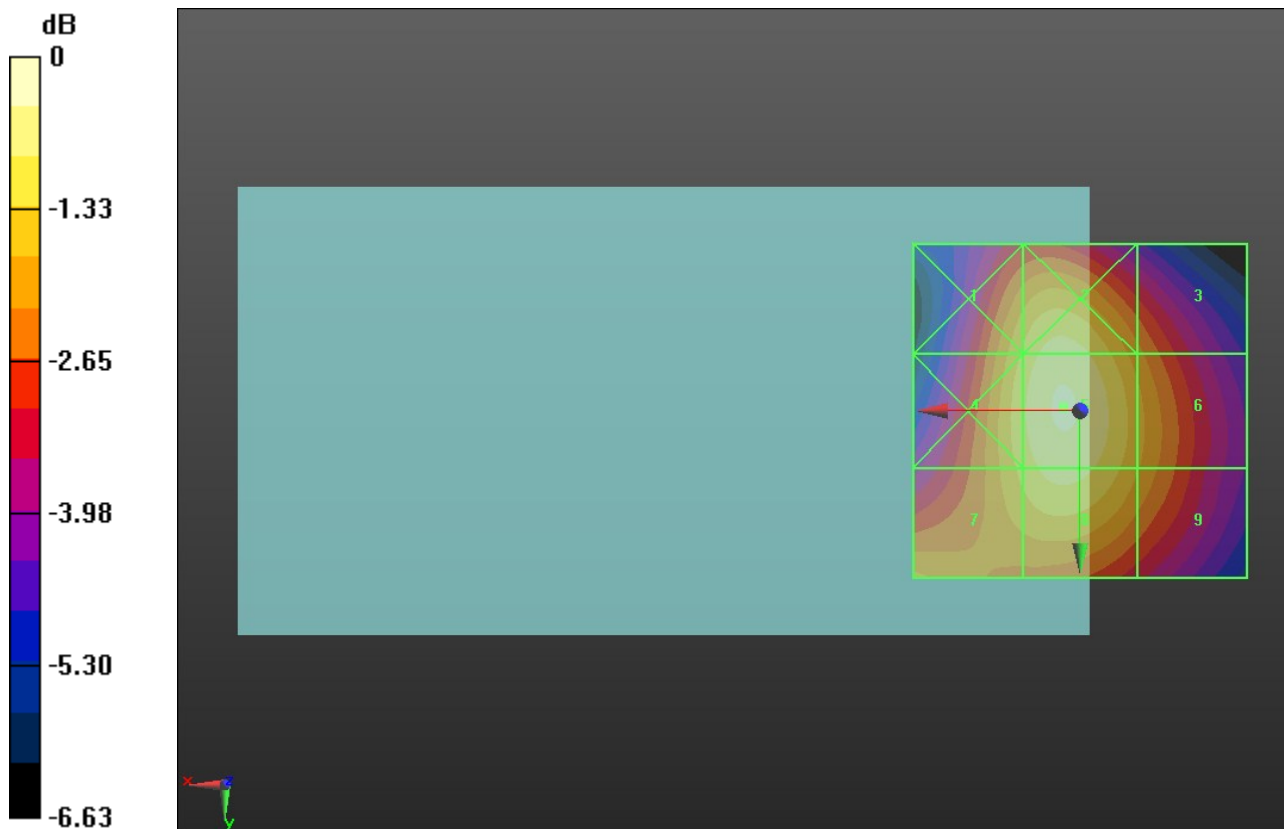
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.074 A/m; Power Drift = 0.07 dB

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

Peak H-field in A/m

Grid 1 0.052 M4	Grid 2 0.056 M4	Grid 3 0.048 M4
Grid 4 0.054 M4	Grid 5 0.057 M4	Grid 6 0.050 M4
Grid 7 0.053 M4	Grid 8 0.055 M4	Grid 9 0.049 M4



0 dB = 0.060A/m

Test Laboratory: UL CCS SAR Lab C

W-CDMA Band IV

Communication System: UMTS-FDD (WCDMA); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.055 A/m

Probe Modulation Factor = 0.950

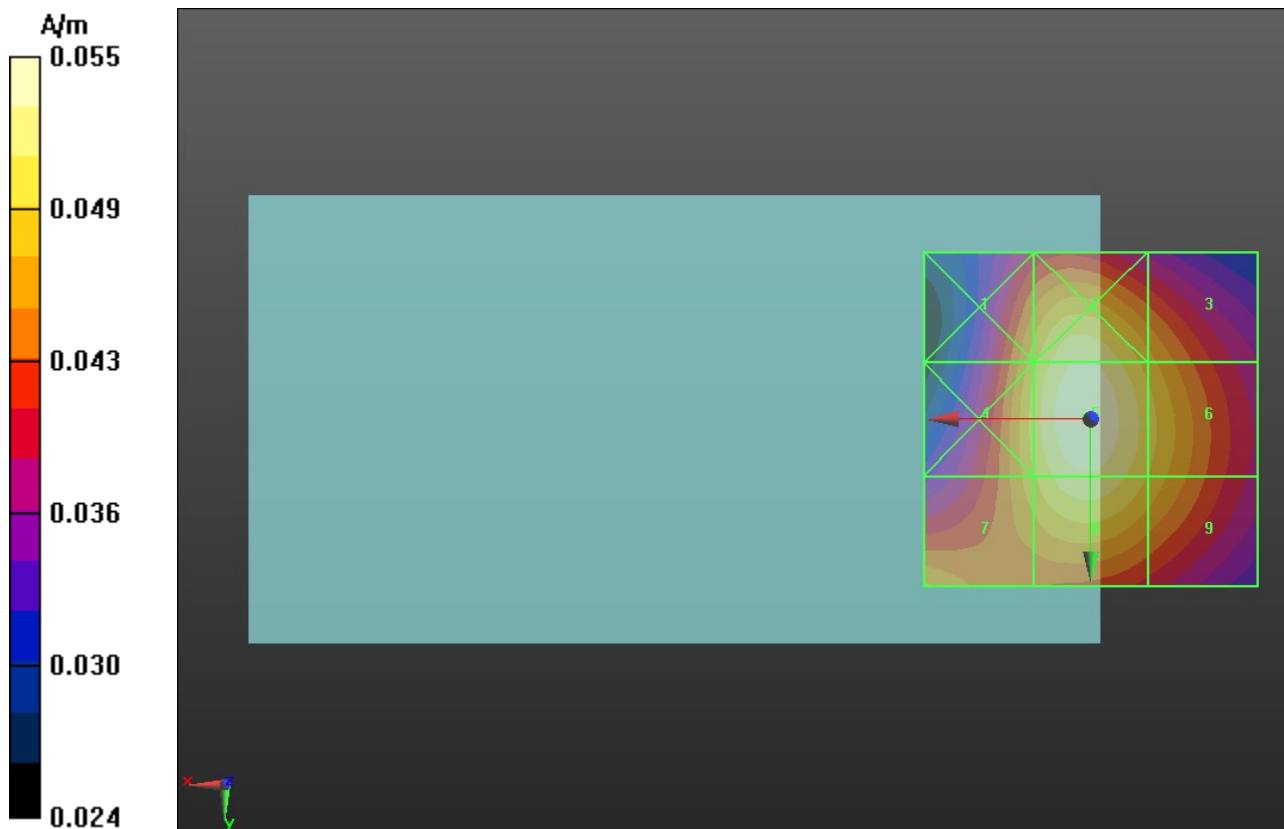
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.071 A/m; Power Drift = 0.01 dB

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

Peak H-field in A/m

Grid 1 0.048 M4	Grid 2 0.053 M4	Grid 3 0.048 M4
Grid 4 0.050 M4	Grid 5 0.055 M4	Grid 6 0.050 M4
Grid 7 0.049 M4	Grid 8 0.053 M4	Grid 9 0.049 M4



Test Laboratory: UL CCS SAR Lab C

W-CDMA Band IV

Communication System: UMTS-FDD (WCDMA); Frequency: 1752.5 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.051 A/m

Probe Modulation Factor = 0.950

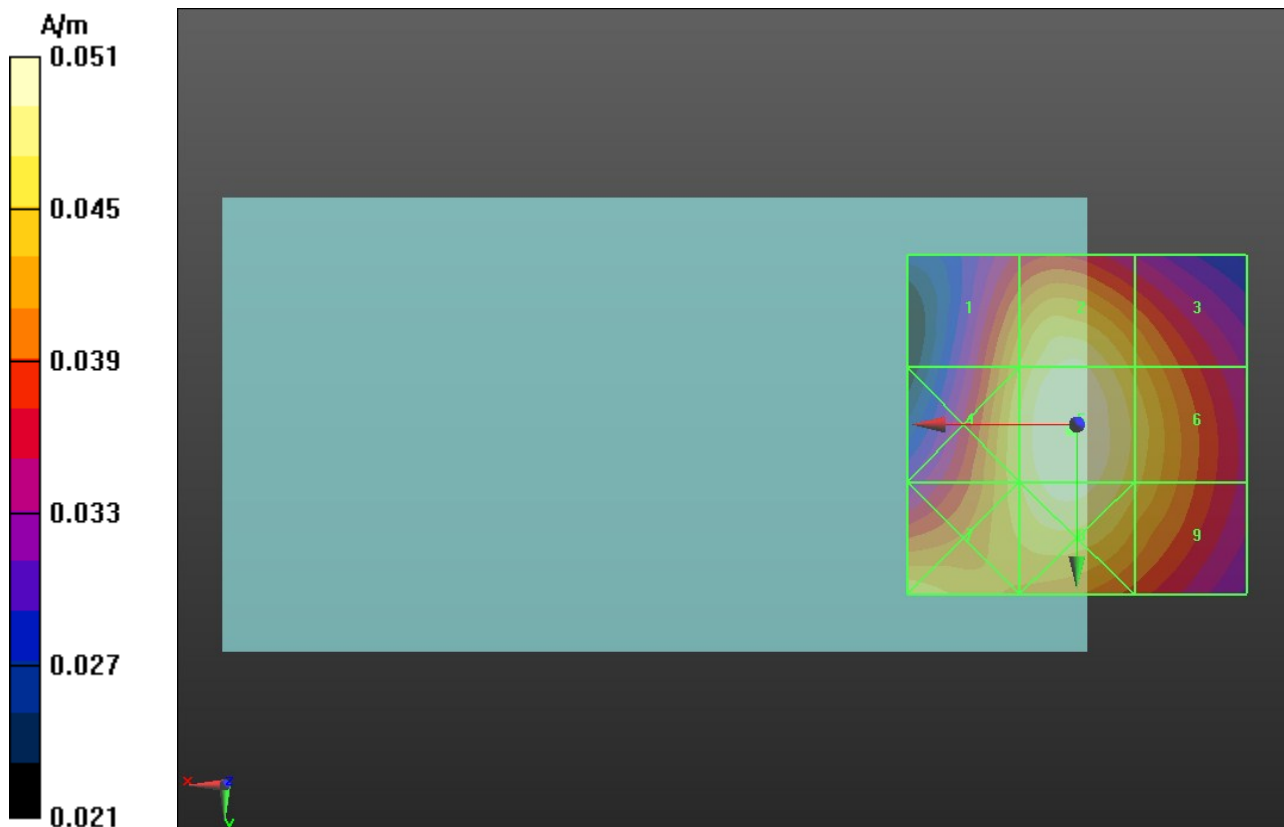
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.068 A/m; Power Drift = -0.07 dB

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

Peak H-field in A/m

Grid 1 0.045 M4	Grid 2 0.050 M4	Grid 3 0.044 M4
Grid 4 0.047 M4	Grid 5 0.051 M4	Grid 6 0.047 M4
Grid 7 0.047 M4	Grid 8 0.050 M4	Grid 9 0.046 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.043 A/m

Probe Modulation Factor = 0.950

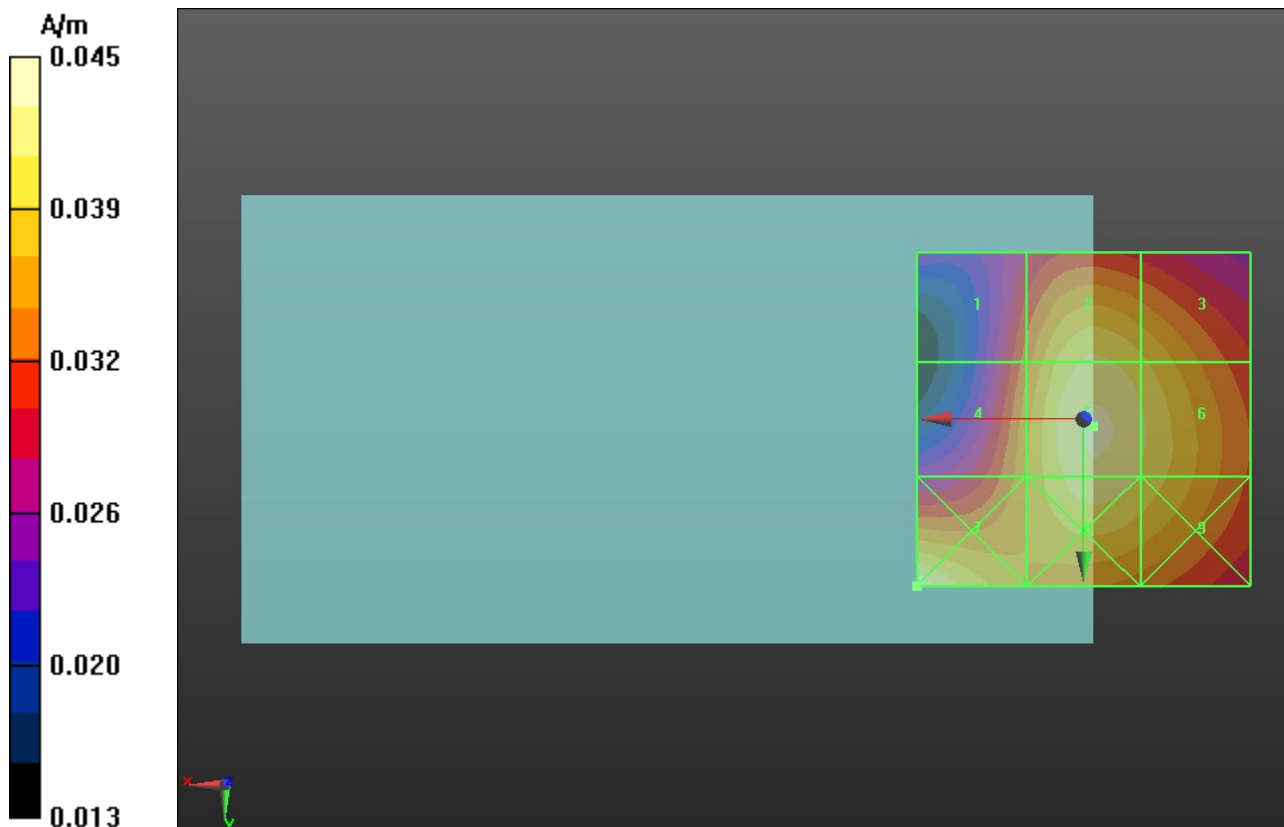
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.058 A/m; Power Drift = 0.03 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.034 M4	0.041 M4	0.039 M4
Grid 4	Grid 5	Grid 6
0.036 M4	0.043 M4	0.041 M4
Grid 7	Grid 8	Grid 9
0.045 M4	0.042 M4	0.040 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.043 A/m

Probe Modulation Factor = 0.950

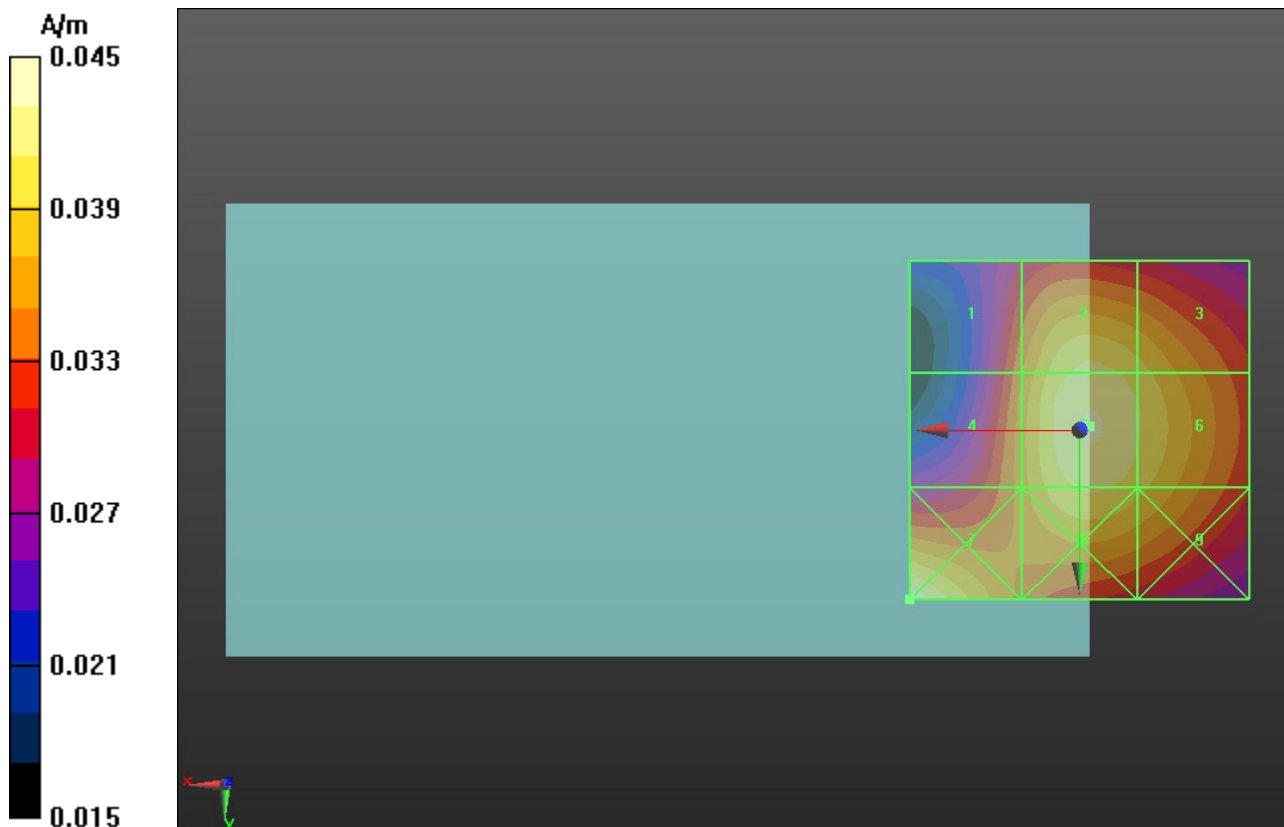
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.057 A/m; Power Drift = -0.03 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.035 M4	0.042 M4	0.040 M4
Grid 4	Grid 5	Grid 6
0.036 M4	0.043 M4	0.041 M4
Grid 7	Grid 8	Grid 9
0.045 M4	0.041 M4	0.040 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: H3DV6 - SN6157; ; Calibrated: 1/30/2012
- 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 (1); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of peak Total field = 0.045 A/m

Probe Modulation Factor = 0.950

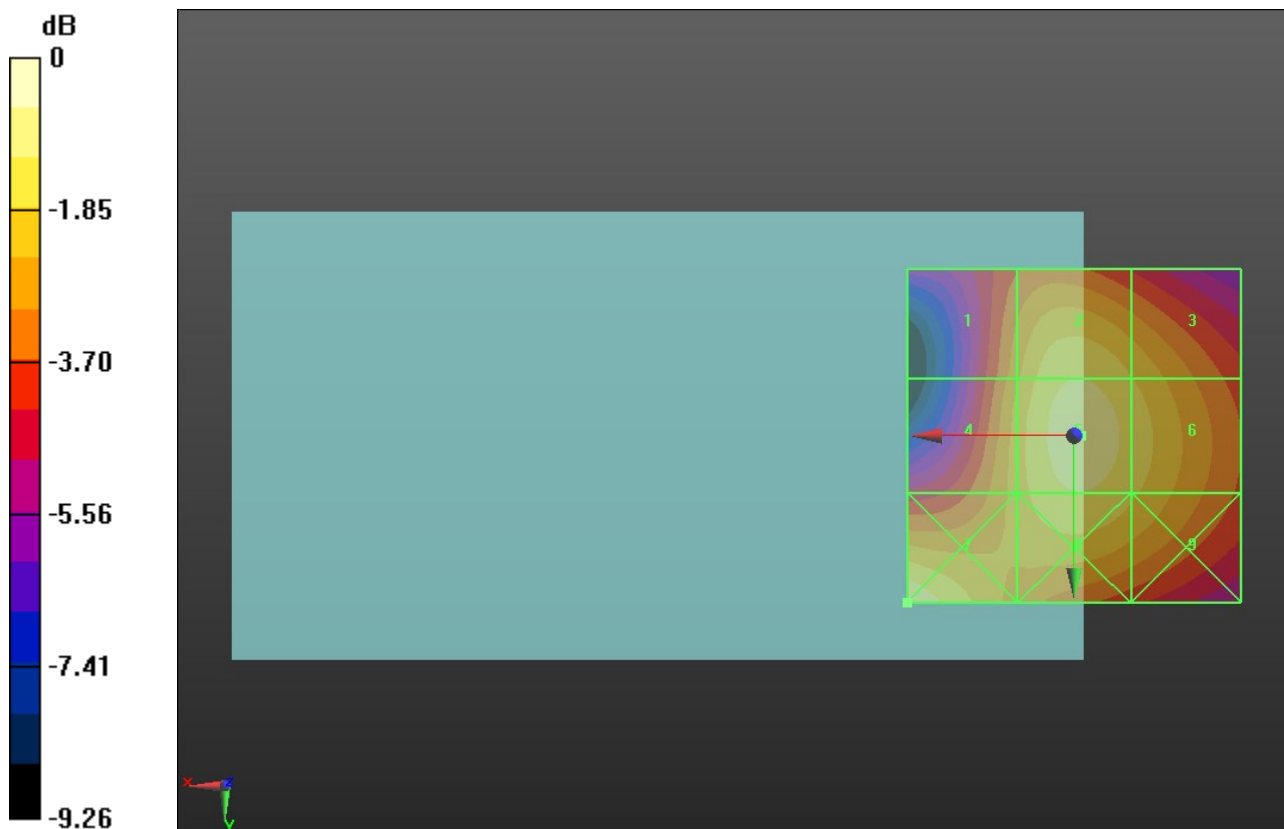
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.058 A/m; Power Drift = 0.09 dB

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

Peak H-field in A/m

Grid 1 0.037 M4	Grid 2 0.044 M4	Grid 3 0.041 M4
Grid 4 0.039 M4	Grid 5 0.045 M4	Grid 6 0.042 M4
Grid 7 0.047 M4	Grid 8 0.043 M4	Grid 9 0.041 M4



0 dB = 0.050A/m