

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 = 0.169 A/m

Probe Modulation Factor = 2.790

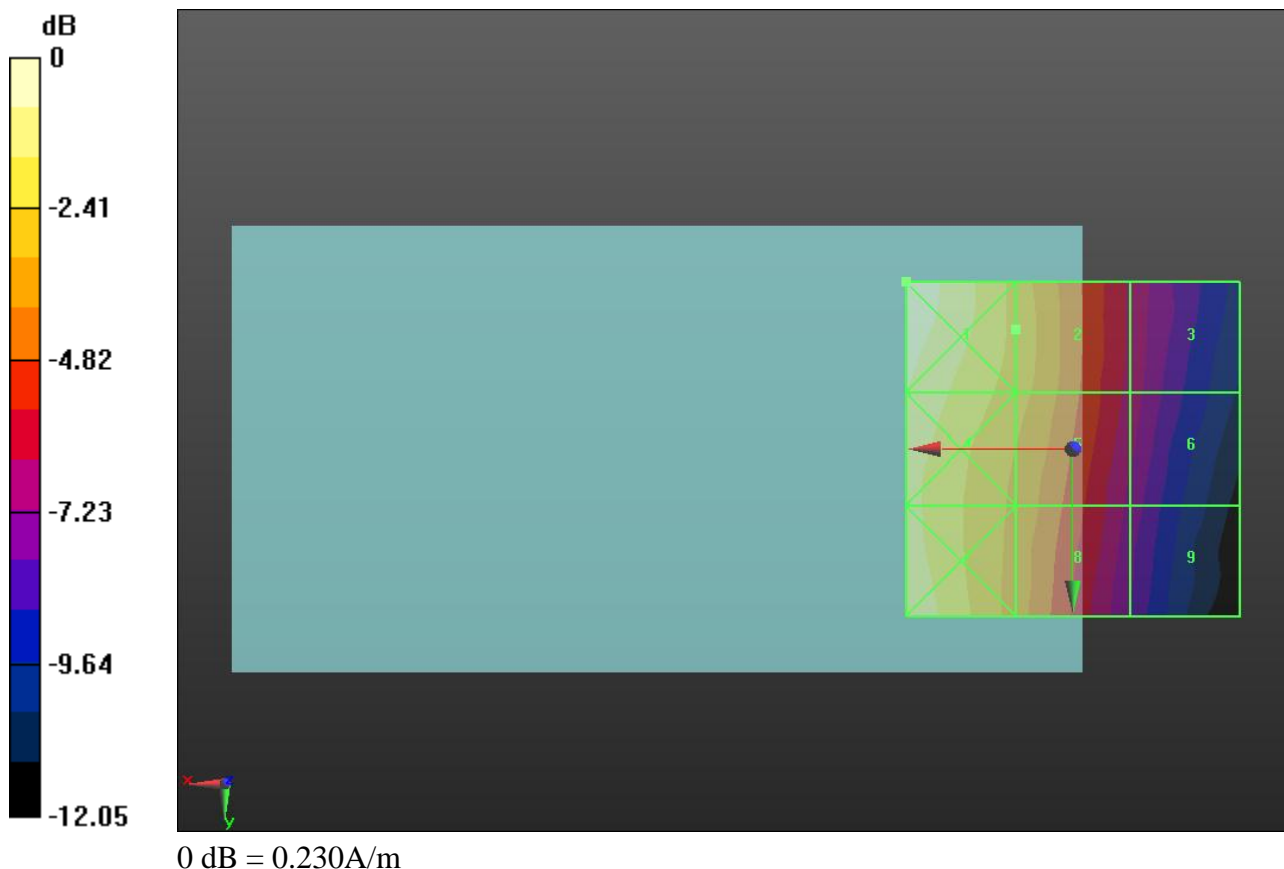
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.051 A/m; Power Drift = -0.05 dB

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

Peak H-field in A/m

Grid 1 <b>0.226 M4</b>	Grid 2 <b>0.169 M4</b>	Grid 3 <b>0.108 M4</b>
Grid 4 <b>0.210 M4</b>	Grid 5 <b>0.165 M4</b>	Grid 6 <b>0.106 M4</b>
Grid 7 <b>0.211 M4</b>	Grid 8 <b>0.155 M4</b>	Grid 9 <b>0.098 M4</b>



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**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 = 0.151 A/m

Probe Modulation Factor = 2.790

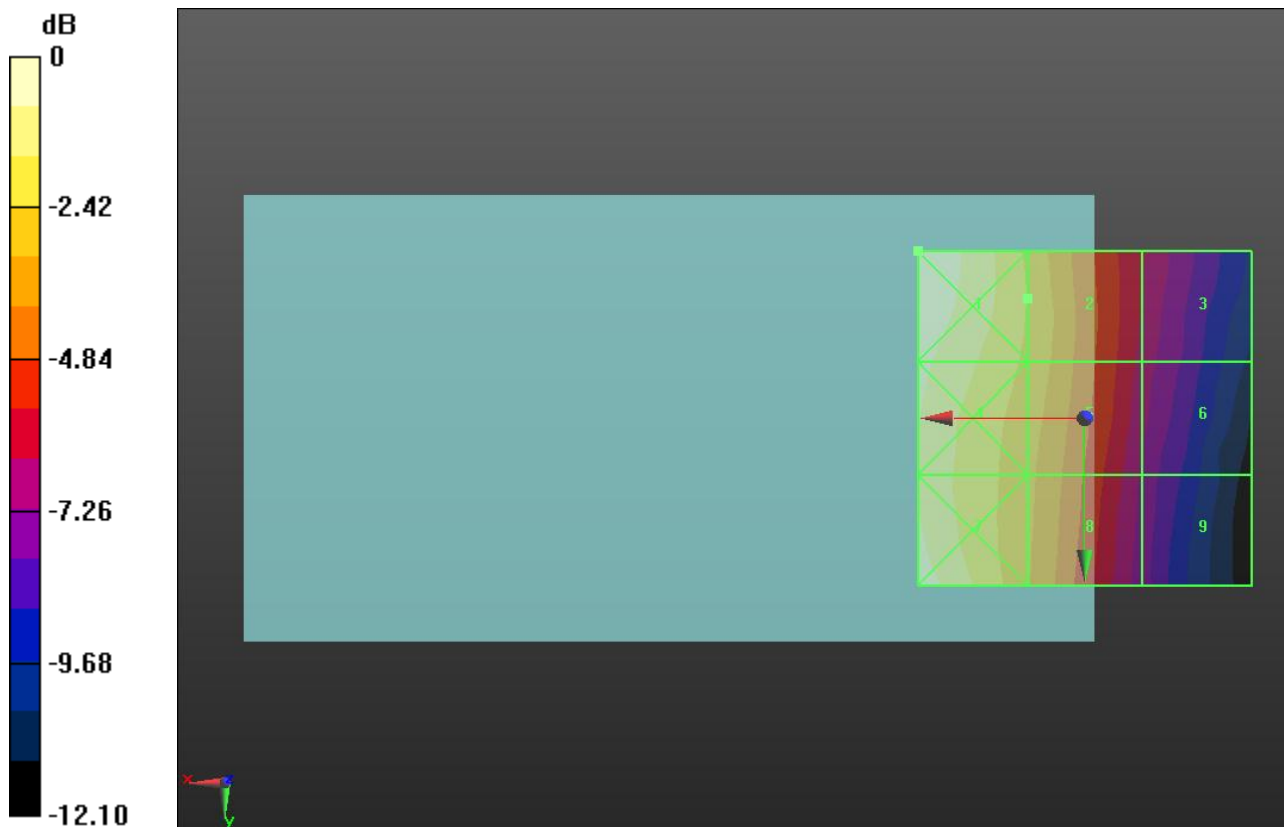
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.046 A/m; Power Drift = 0.04 dB

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

Peak H-field in A/m

Grid 1 <b>0.203 M4</b>	Grid 2 <b>0.151 M4</b>	Grid 3 <b>0.097 M4</b>
Grid 4 <b>0.189 M4</b>	Grid 5 <b>0.148 M4</b>	Grid 6 <b>0.093 M4</b>
Grid 7 <b>0.194 M4</b>	Grid 8 <b>0.141 M4</b>	Grid 9 <b>0.086 M4</b>



0 dB = 0.200A/m

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**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 = 0.123 A/m

Probe Modulation Factor = 2.790

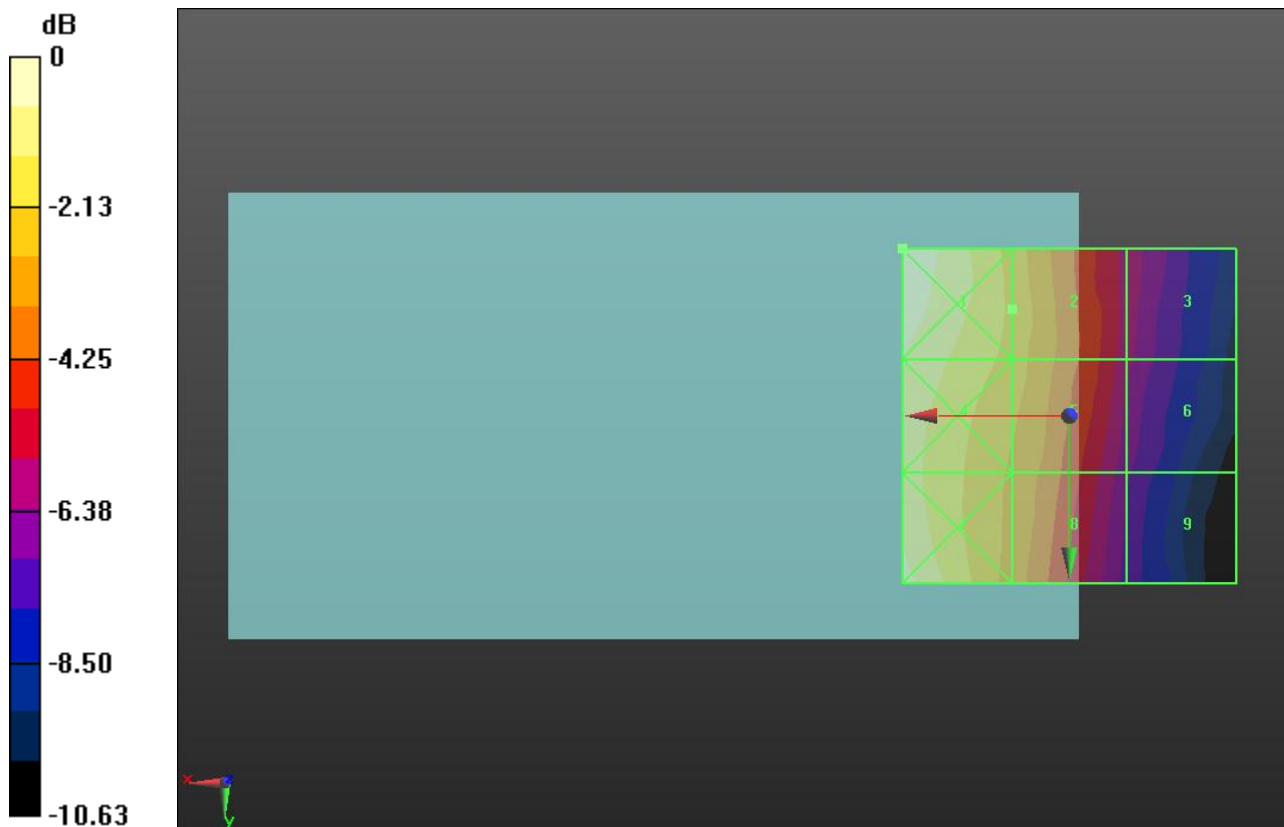
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.039 A/m; Power Drift = 0.04 dB

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

Peak H-field in A/m

Grid 1 <b>0.159 M4</b>	Grid 2 <b>0.123 M4</b>	Grid 3 <b>0.081 M4</b>
Grid 4 <b>0.148 M4</b>	Grid 5 <b>0.120 M4</b>	Grid 6 <b>0.079 M4</b>
Grid 7 <b>0.153 M4</b>	Grid 8 <b>0.114 M4</b>	Grid 9 <b>0.073 M4</b>



0 dB = 0.160A/m

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## 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 = 0.166 A/m

Probe Modulation Factor = 2.840

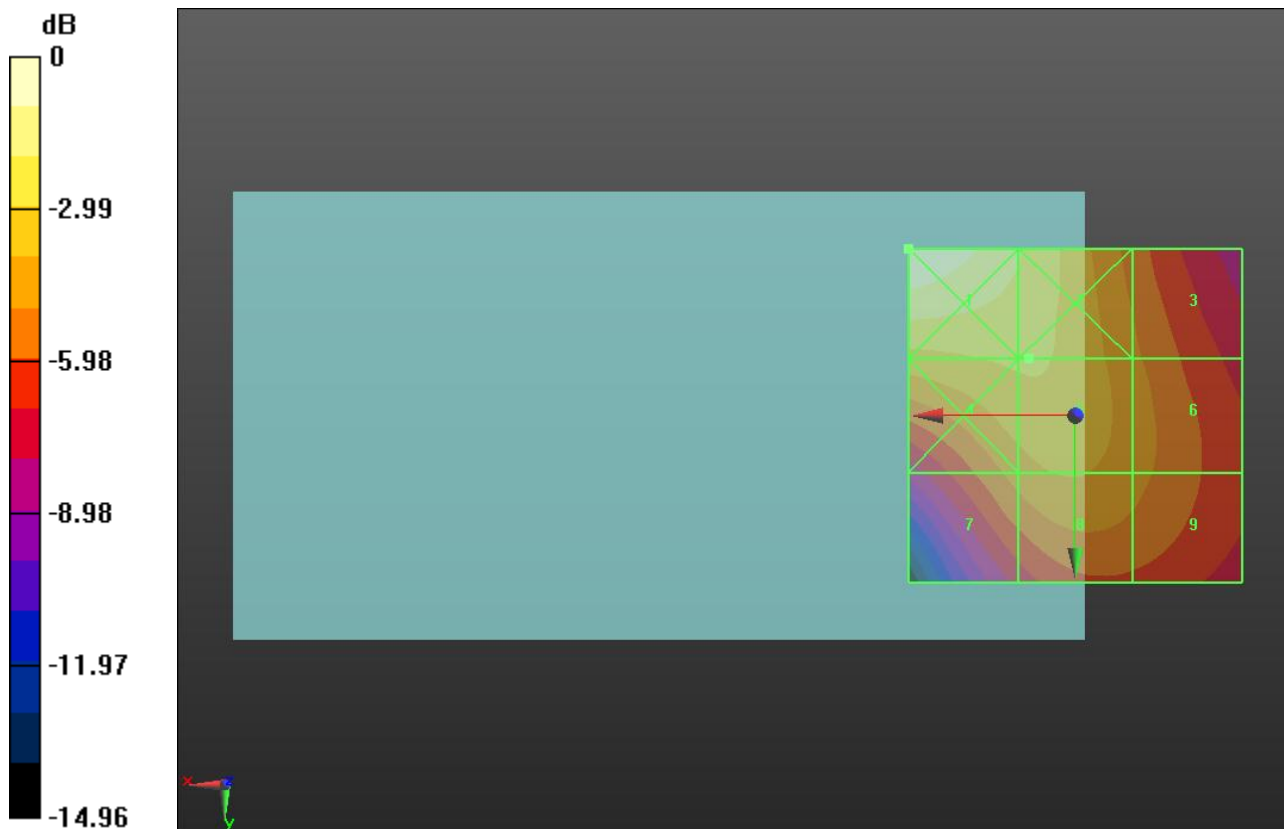
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.067 A/m; Power Drift = -0.03 dB

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

Peak H-field in A/m

Grid 1 <b>0.233 M3</b>	Grid 2 <b>0.185 M3</b>	Grid 3 <b>0.134 M4</b>
Grid 4 <b>0.165 M3</b>	Grid 5 <b>0.166 M3</b>	Grid 6 <b>0.138 M4</b>
Grid 7 <b>0.137 M4</b>	Grid 8 <b>0.147 M3</b>	Grid 9 <b>0.136 M4</b>



0 dB = 0.230A/m

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**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 = 0.197 A/m

Probe Modulation Factor = 2.840

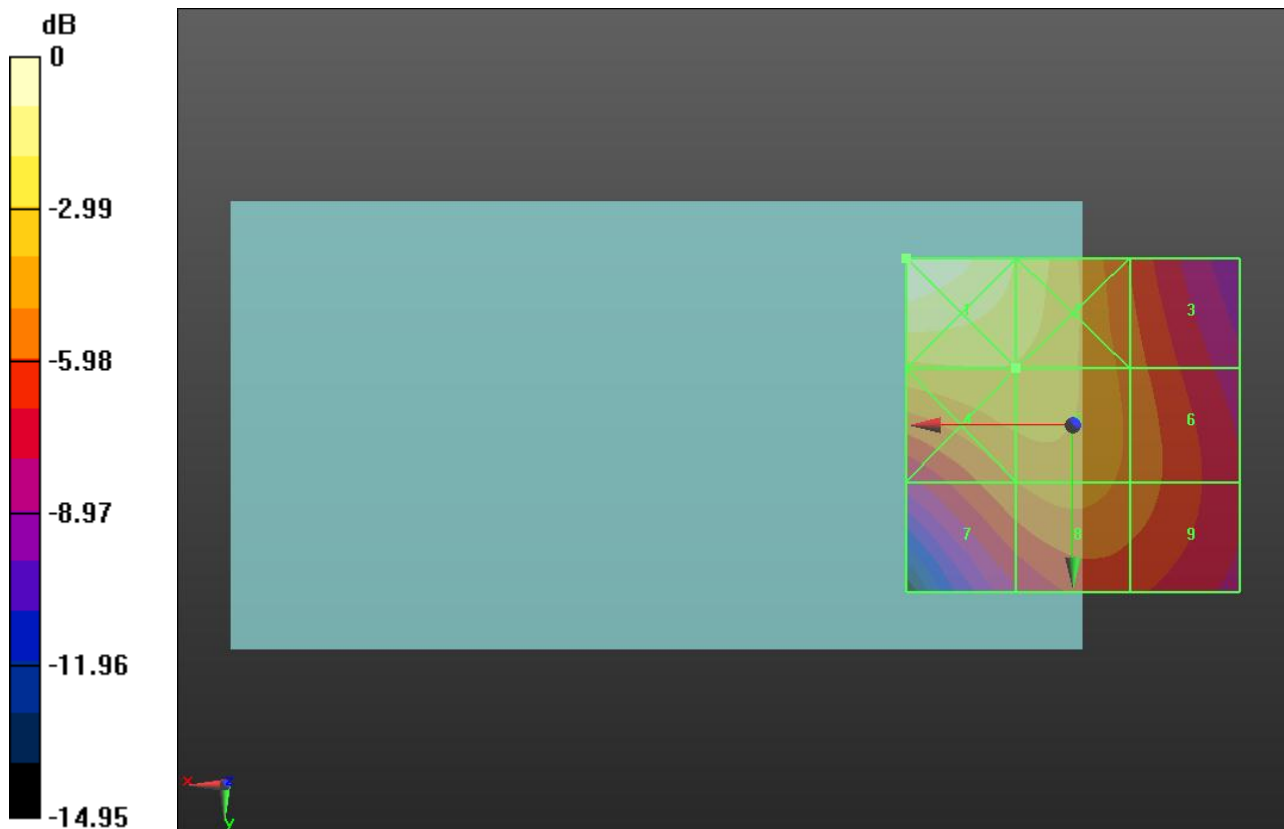
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.074 A/m; Power Drift = 0.01 dB

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

Peak H-field in A/m

Grid 1 <b>0.283 M2</b>	Grid 2 <b>0.222 M3</b>	Grid 3 <b>0.151 M3</b>
Grid 4 <b>0.198 M3</b>	Grid 5 <b>0.197 M3</b>	Grid 6 <b>0.155 M3</b>
Grid 7 <b>0.158 M3</b>	Grid 8 <b>0.166 M3</b>	Grid 9 <b>0.153 M3</b>



0 dB = 0.280A/m

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**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 = 0.203 A/m

Probe Modulation Factor = 2.840

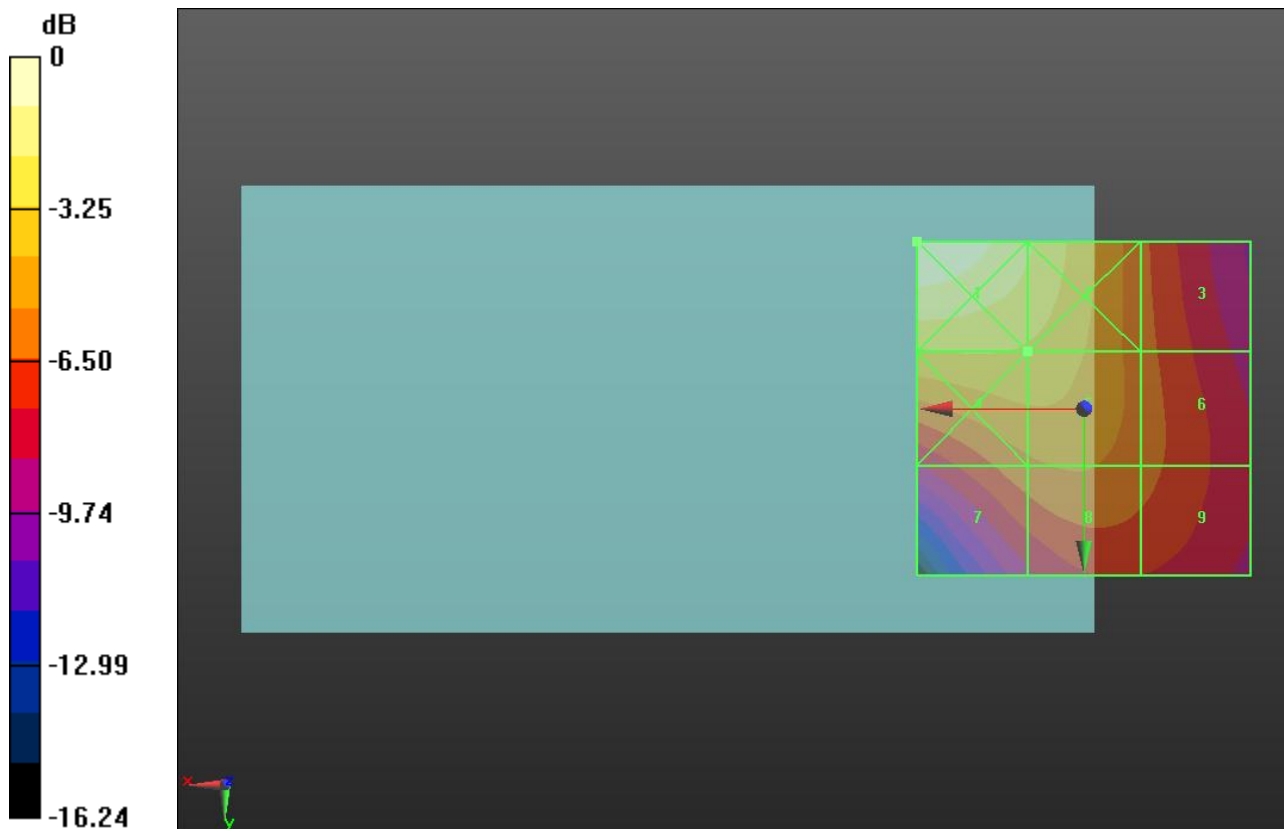
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.073 A/m; Power Drift = 0.0064 dB

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

Peak H-field in A/m

Grid 1 <b>0.303 M2</b>	Grid 2 <b>0.239 M3</b>	Grid 3 <b>0.151 M3</b>
Grid 4 <b>0.208 M3</b>	Grid 5 <b>0.203 M3</b>	Grid 6 <b>0.153 M3</b>
Grid 7 <b>0.156 M3</b>	Grid 8 <b>0.163 M3</b>	Grid 9 <b>0.150 M3</b>



0 dB = 0.300A/m

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## 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 = 0.045 A/m

Probe Modulation Factor = 0.900

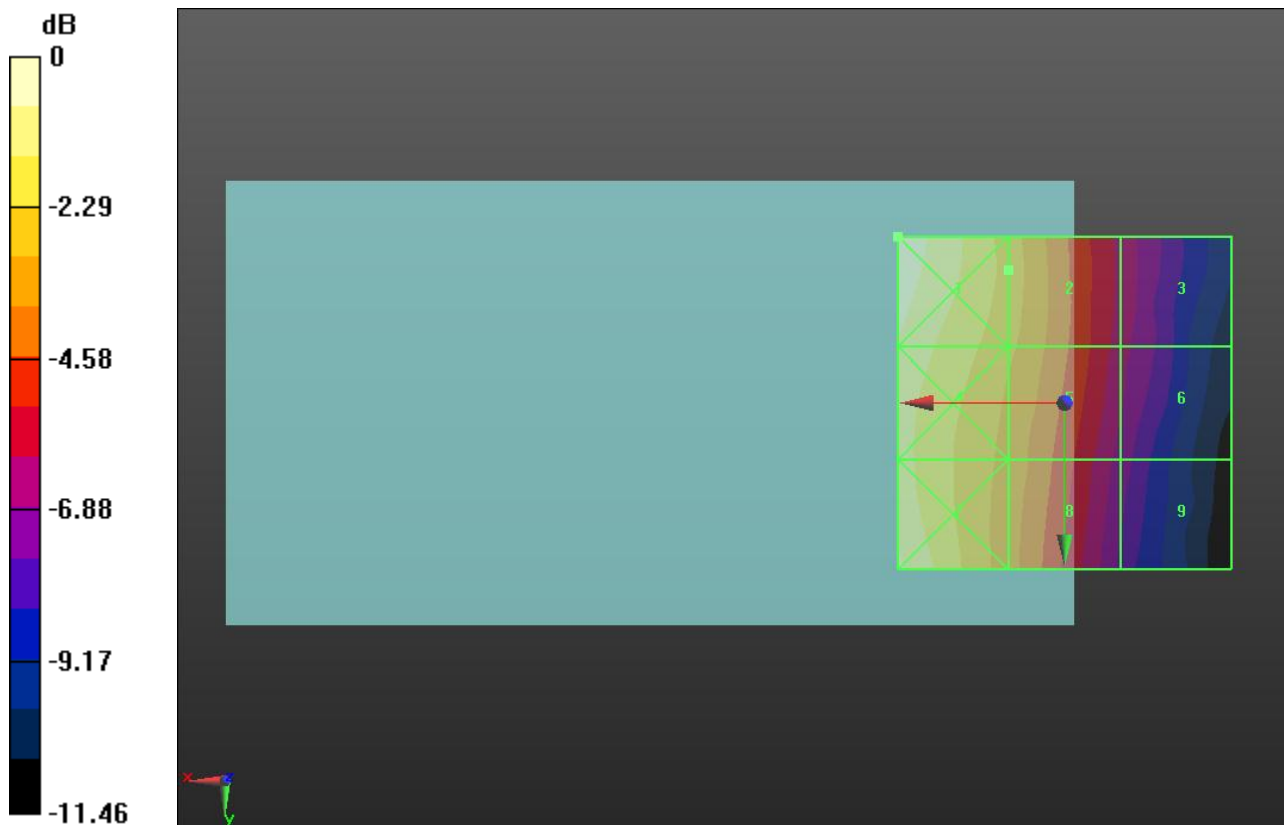
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.042 A/m; Power Drift = -0.04 dB

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

Peak H-field in A/m

Grid 1 <b>0.059 M4</b>	Grid 2 <b>0.045 M4</b>	Grid 3 <b>0.029 M4</b>
Grid 4 <b>0.055 M4</b>	Grid 5 <b>0.043 M4</b>	Grid 6 <b>0.028 M4</b>
Grid 7 <b>0.056 M4</b>	Grid 8 <b>0.041 M4</b>	Grid 9 <b>0.026 M4</b>



0 dB = 0.060A/m

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## 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 = 0.040 A/m

Probe Modulation Factor = 0.900

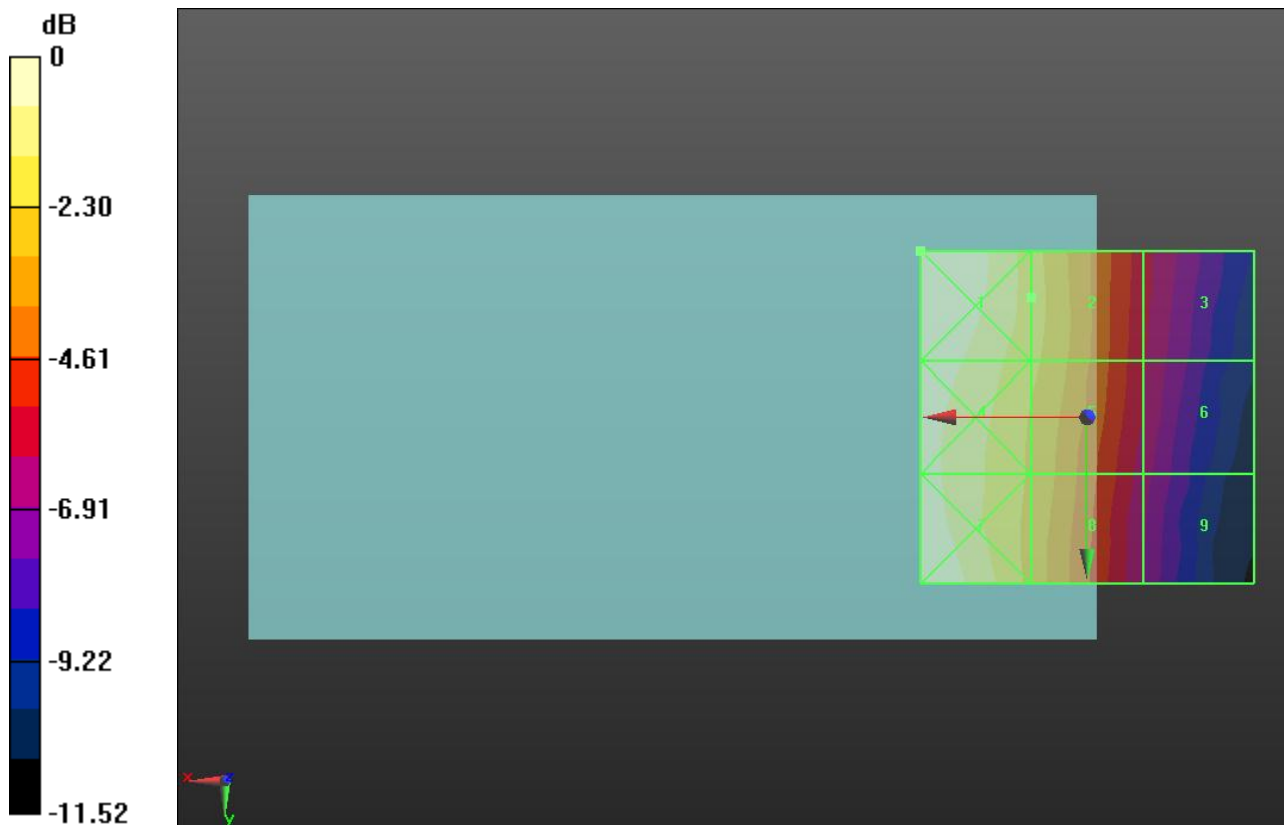
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.039 A/m; Power Drift = 0.04 dB

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

Peak H-field in A/m

Grid 1 <b>0.054 M4</b>	Grid 2 <b>0.040 M4</b>	Grid 3 <b>0.026 M4</b>
Grid 4 <b>0.050 M4</b>	Grid 5 <b>0.039 M4</b>	Grid 6 <b>0.025 M4</b>
Grid 7 <b>0.052 M4</b>	Grid 8 <b>0.038 M4</b>	Grid 9 <b>0.024 M4</b>



0 dB = 0.050A/m



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## 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 = 0.035 A/m

Probe Modulation Factor = 0.900

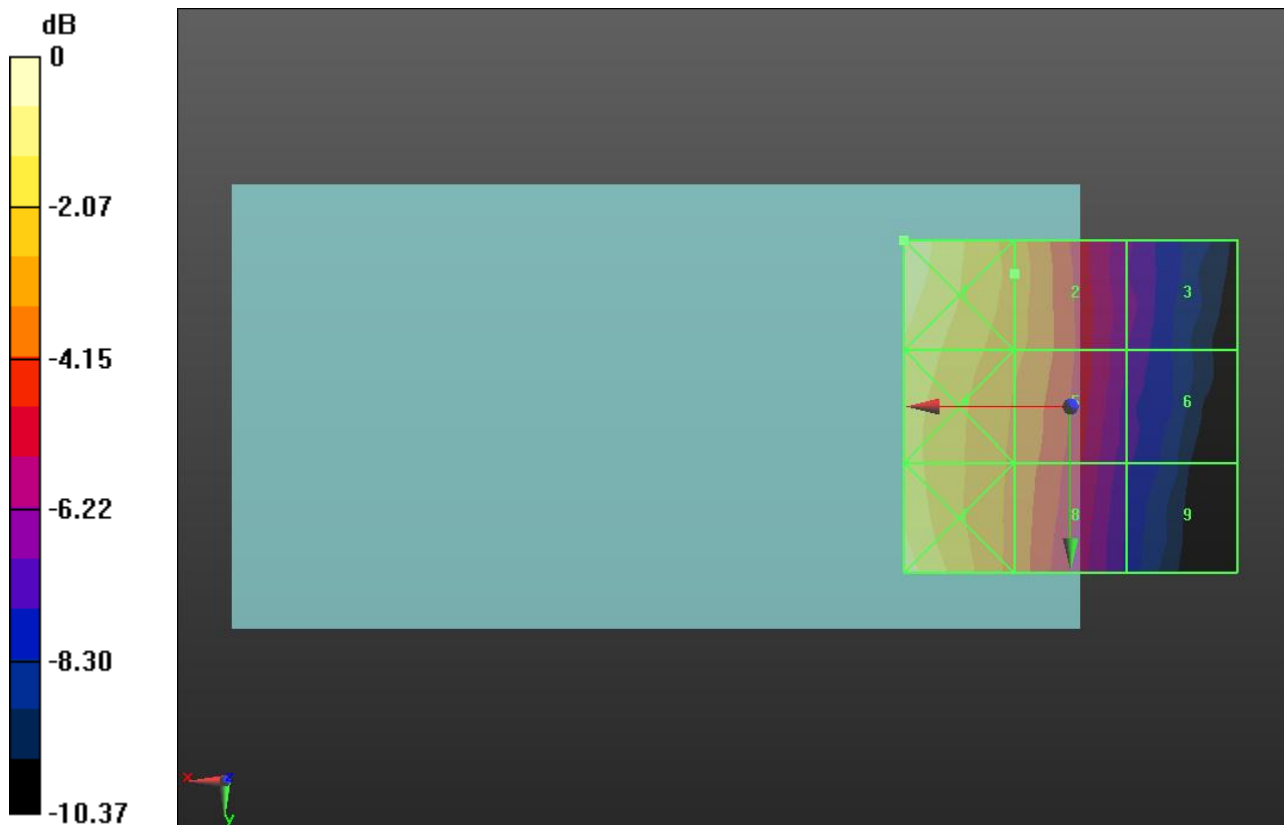
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.035 A/m; Power Drift = 0.09 dB

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

Peak H-field in A/m

Grid 1 <b>0.045 M4</b>	Grid 2 <b>0.035 M4</b>	Grid 3 <b>0.023 M4</b>
Grid 4 <b>0.042 M4</b>	Grid 5 <b>0.034 M4</b>	Grid 6 <b>0.023 M4</b>
Grid 7 <b>0.045 M4</b>	Grid 8 <b>0.033 M4</b>	Grid 9 <b>0.021 M4</b>



0 dB = 0.050A/m

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**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 = 0.079 A/m

Probe Modulation Factor = 0.950

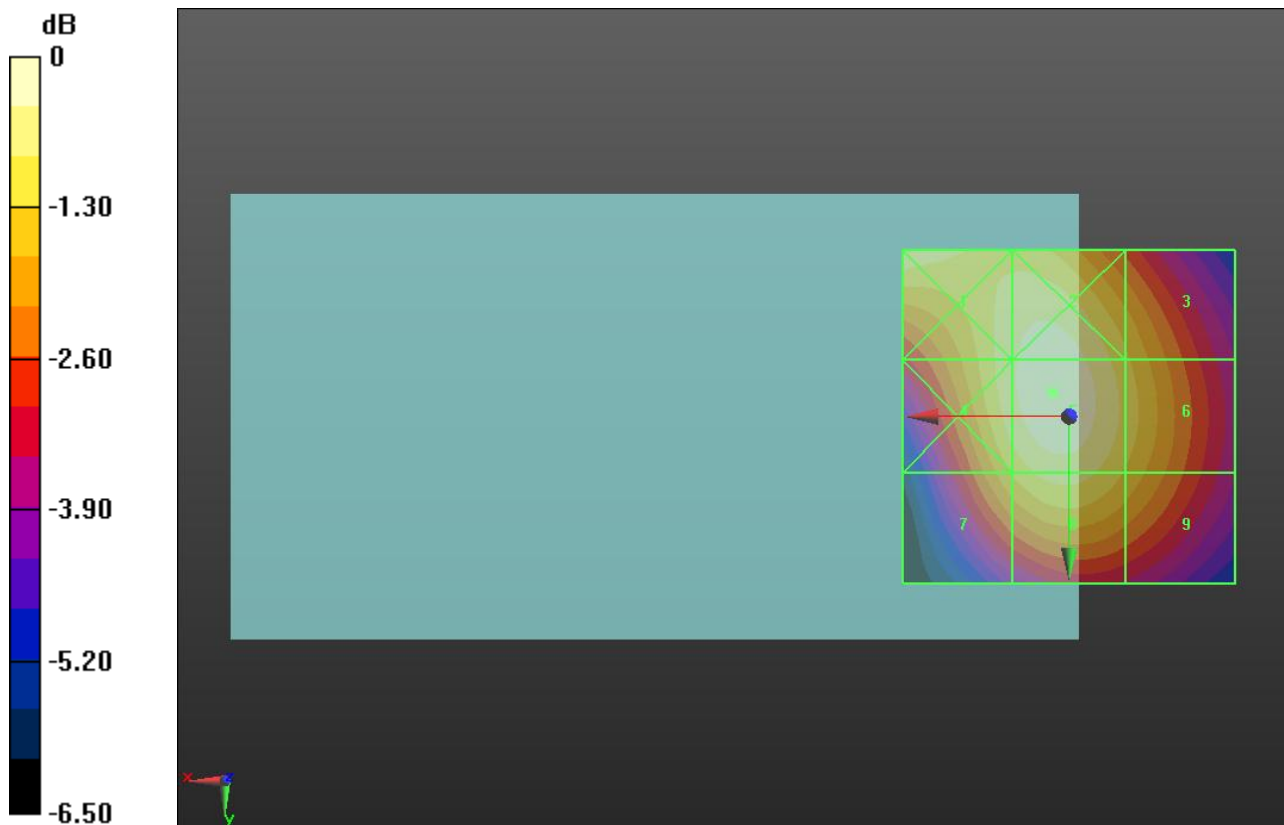
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.099 A/m; Power Drift = 0.02 dB

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

Peak H-field in A/m

Grid 1 <b>0.077 M4</b>	Grid 2 <b>0.078 M4</b>	Grid 3 <b>0.070 M4</b>
Grid 4 <b>0.076 M4</b>	Grid 5 <b>0.079 M4</b>	Grid 6 <b>0.071 M4</b>
Grid 7 <b>0.069 M4</b>	Grid 8 <b>0.074 M4</b>	Grid 9 <b>0.068 M4</b>



0 dB = 0.080A/m

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## 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 = 0.079 A/m

Probe Modulation Factor = 0.950

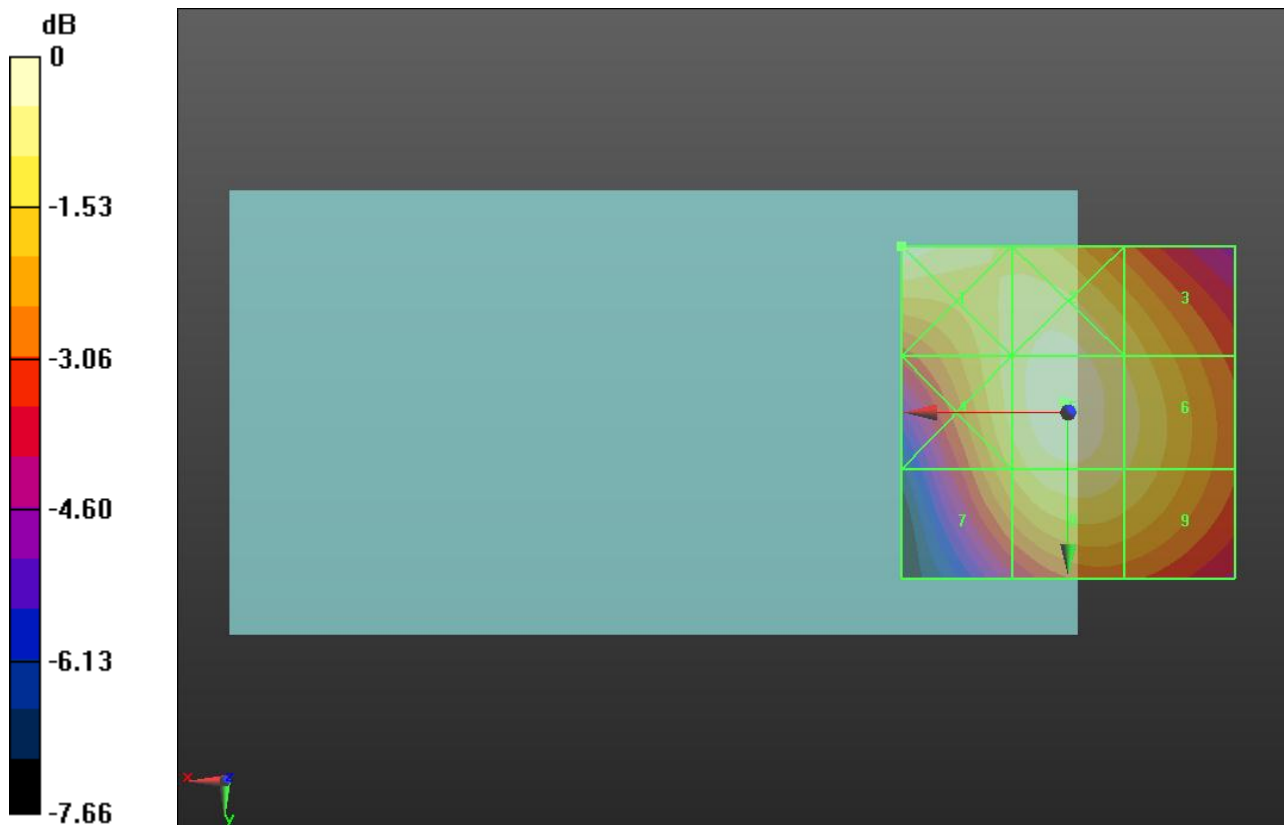
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.099 A/m; Power Drift = 0.02 dB

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

Peak H-field in A/m

Grid 1 <b>0.080 M4</b>	Grid 2 <b>0.077 M4</b>	Grid 3 <b>0.071 M4</b>
Grid 4 <b>0.073 M4</b>	Grid 5 <b>0.079 M4</b>	Grid 6 <b>0.073 M4</b>
Grid 7 <b>0.068 M4</b>	Grid 8 <b>0.075 M4</b>	Grid 9 <b>0.071 M4</b>



0 dB = 0.080A/m

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## 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 = 0.067 A/m

Probe Modulation Factor = 0.950

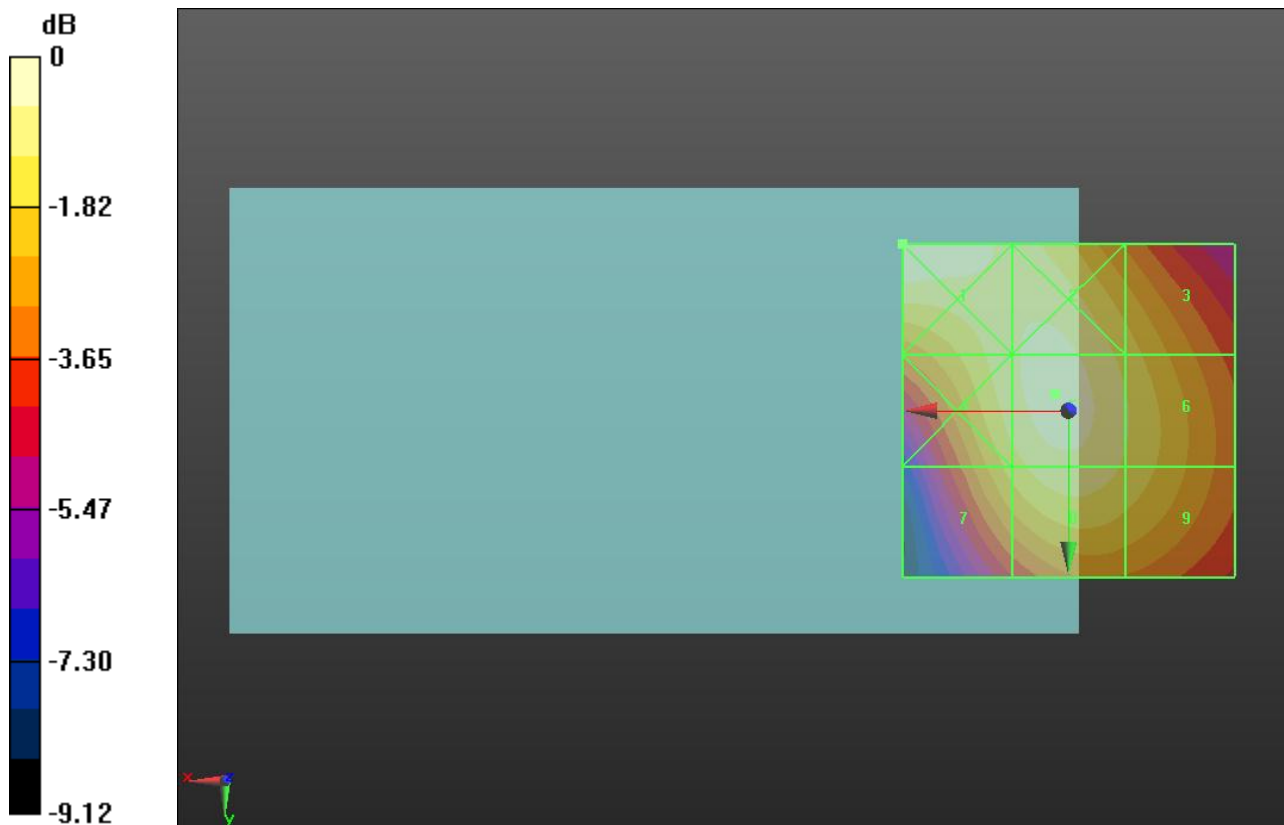
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.085 A/m; Power Drift = 0.04 dB

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

Peak H-field in A/m

Grid 1 <b>0.074 M4</b>	Grid 2 <b>0.067 M4</b>	Grid 3 <b>0.059 M4</b>
Grid 4 <b>0.064 M4</b>	Grid 5 <b>0.067 M4</b>	Grid 6 <b>0.062 M4</b>
Grid 7 <b>0.059 M4</b>	Grid 8 <b>0.064 M4</b>	Grid 9 <b>0.060 M4</b>



0 dB = 0.070A/m

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 = 0.072 A/m

Probe Modulation Factor = 0.950

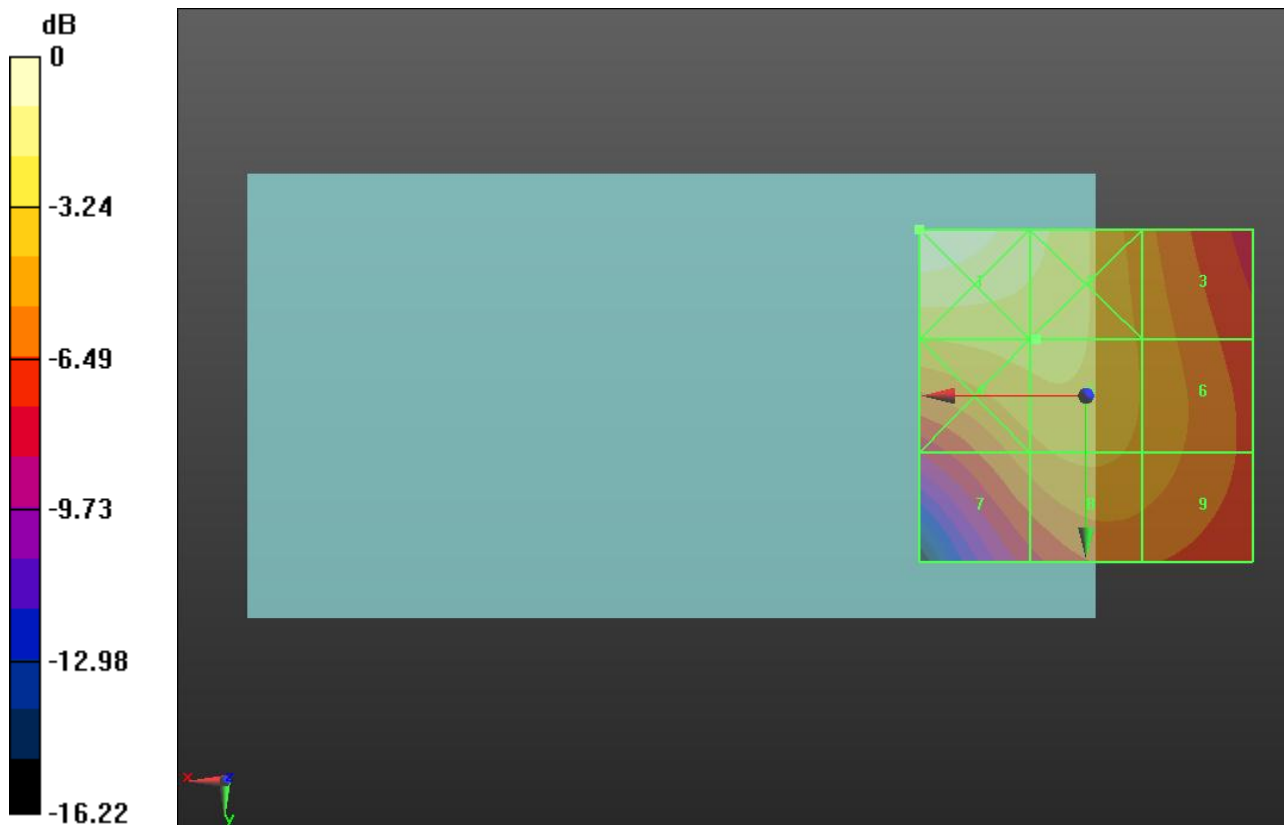
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.086 A/m; Power Drift = -0.07 dB

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

Peak H-field in A/m

Grid 1 <b>0.101 M4</b>	Grid 2 <b>0.082 M4</b>	Grid 3 <b>0.060 M4</b>
Grid 4 <b>0.072 M4</b>	Grid 5 <b>0.072 M4</b>	Grid 6 <b>0.060 M4</b>
Grid 7 <b>0.058 M4</b>	Grid 8 <b>0.063 M4</b>	Grid 9 <b>0.059 M4</b>



0 dB = 0.100A/m

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 = 0.087 A/m

Probe Modulation Factor = 0.950

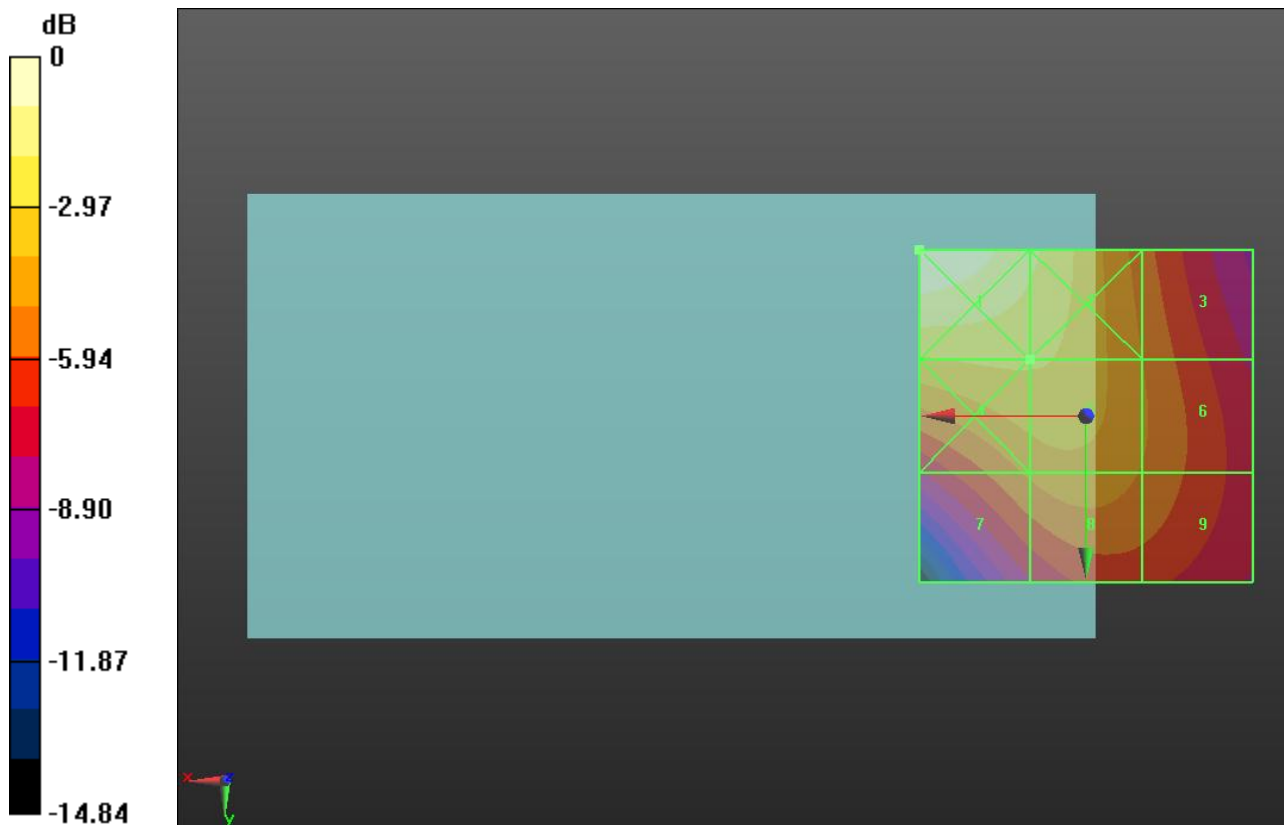
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.098 A/m; Power Drift = -0.02 dB

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

Peak H-field in A/m

Grid 1 <b>0.121 M4</b>	Grid 2 <b>0.098 M4</b>	Grid 3 <b>0.068 M4</b>
Grid 4 <b>0.087 M4</b>	Grid 5 <b>0.087 M4</b>	Grid 6 <b>0.069 M4</b>
Grid 7 <b>0.069 M4</b>	Grid 8 <b>0.073 M4</b>	Grid 9 <b>0.067 M4</b>



0 dB = 0.120A/m

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 = 0.087 A/m

Probe Modulation Factor = 0.950

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.094 A/m; Power Drift = 0.01 dB

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

Peak H-field in A/m

Grid 1 <b>0.123 M4</b>	Grid 2 <b>0.101 M4</b>	Grid 3 <b>0.067 M4</b>
Grid 4 <b>0.087 M4</b>	Grid 5 <b>0.087 M4</b>	Grid 6 <b>0.067 M4</b>
Grid 7 <b>0.067 M4</b>	Grid 8 <b>0.070 M4</b>	Grid 9 <b>0.064 M4</b>

