



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch128_Close

DUT: 821901

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Ambient Temperature : 22.8 °C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch128/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.116 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.033 A/m; Power Drift = -0.043 dB

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

Peak H-field in A/m

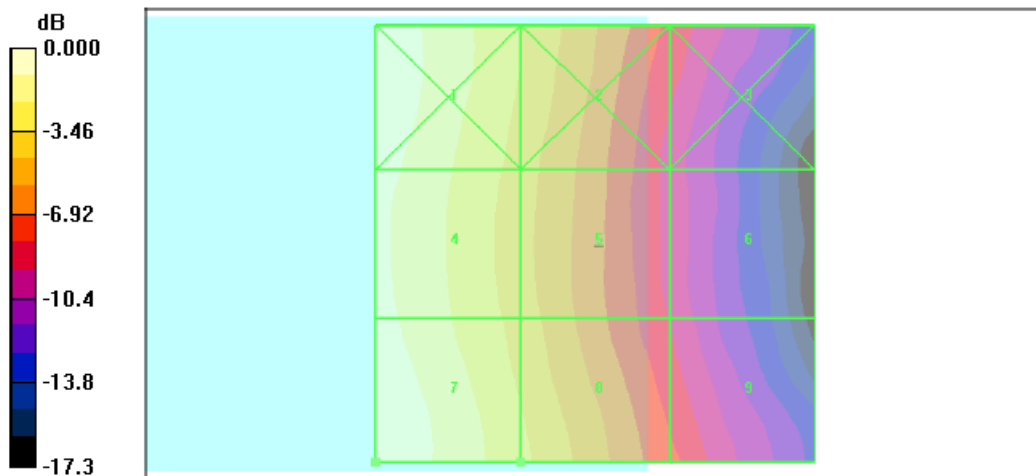
Grid 1	Grid 2	Grid 3
0.114 M4	0.078 M4	0.044 M4
Grid 4	Grid 5	Grid 6
0.107 M4	0.074 M4	0.040 M4
Grid 7	Grid 8	Grid 9
0.116 M4	0.081 M4	0.048 M4

Cursor:

Total = 0.116 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.116A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch189_Close

DUT: 821901

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch189/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.131 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.038 A/m; Power Drift = -0.235 dB

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

Peak H-field in A/m

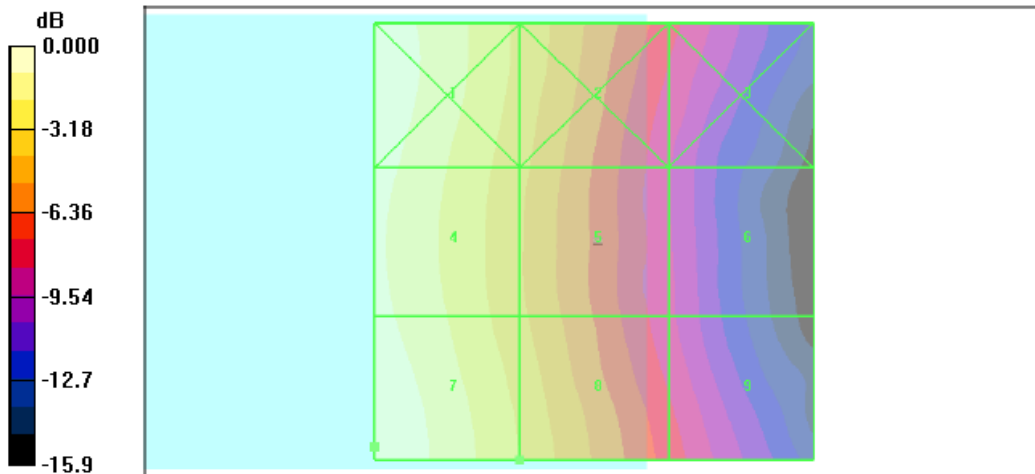
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.130 M4, 0.089 M4, 0.052 M4, etc.

Cursor:

Total = 0.131 A/m

H Category: M4

Location: 25, 23.5, 365.6 mm



0 dB = 0.131A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Close

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.139 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.039 A/m; Power Drift = -0.040 dB

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

Peak H-field in A/m

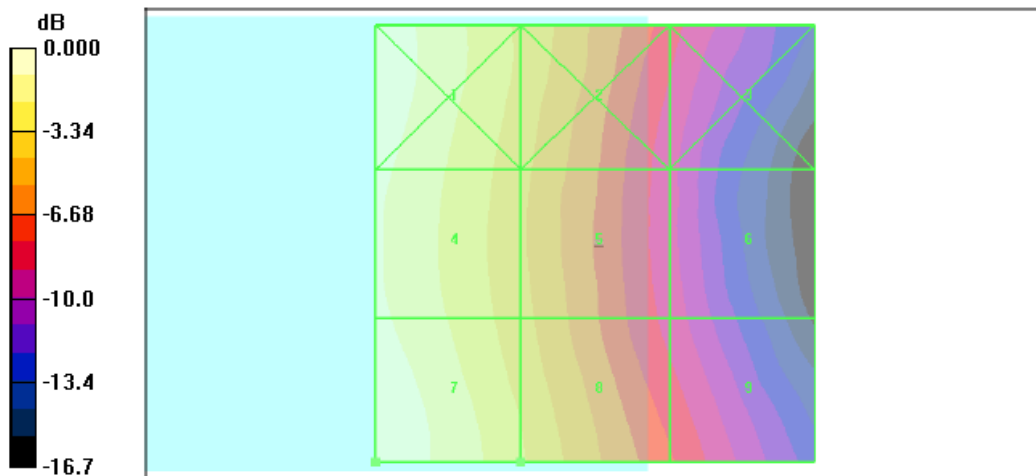
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.136 M4, 0.093 M4, 0.053 M4, etc.

Cursor:

Total = 0.139 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.139A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Close Backlight On

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.136 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.038 A/m; Power Drift = 0.069 dB

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

Peak H-field in A/m

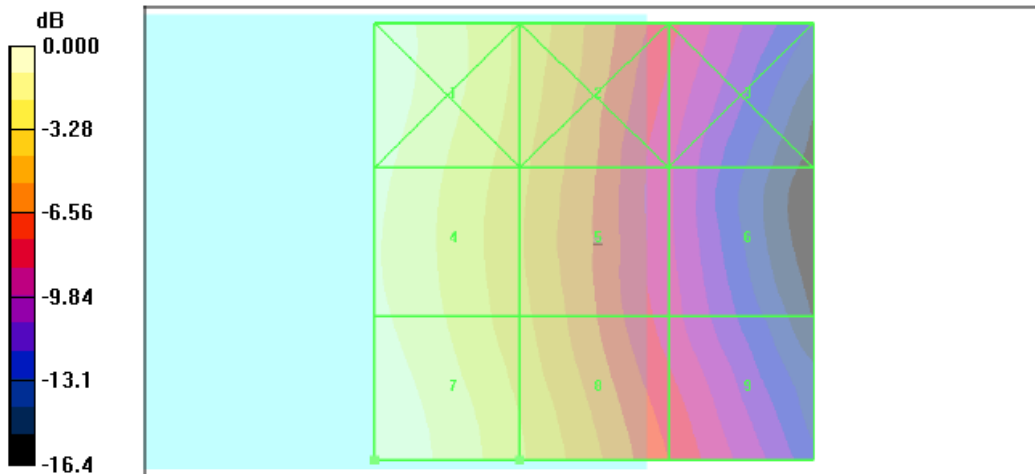
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.133 M4, 0.091 M4, 0.052 M4, etc.

Cursor:

Total = 0.136 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.136A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Close_Bluetooth On

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.136 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.038 A/m; Power Drift = -0.194 dB

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

Peak H-field in A/m

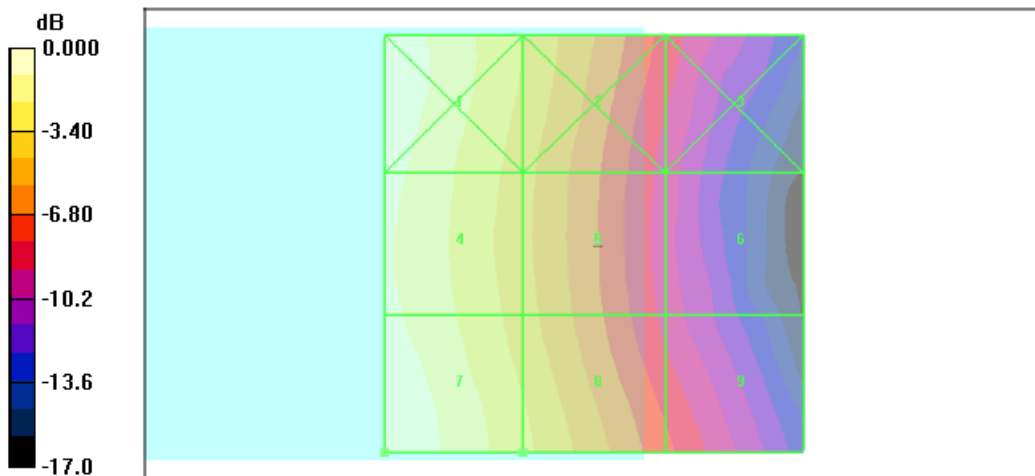
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.052 M4 to 0.136 M4.

Cursor:

Total = 0.136 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.136A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Close_Wifi On

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Ambient Temperature : 22.8 °C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.138 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.040 A/m; Power Drift = 0.006 dB

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

Peak H-field in A/m

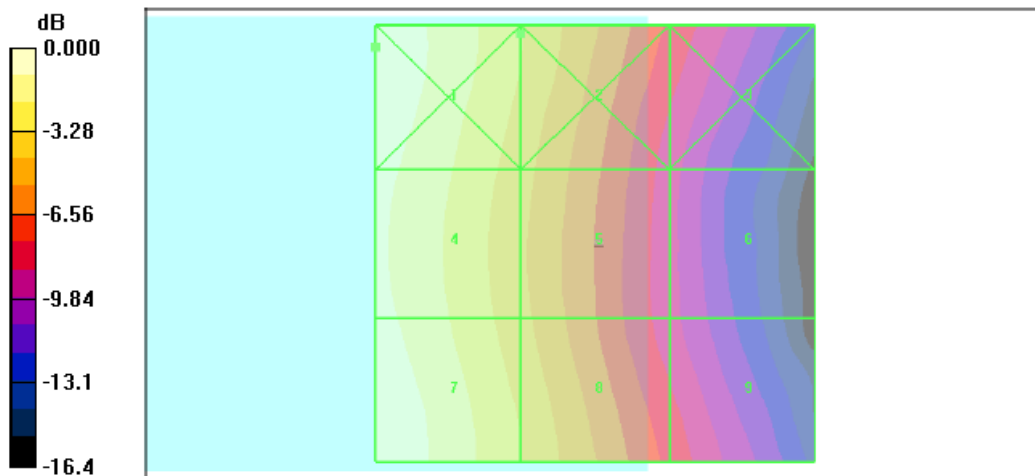
Grid 1	Grid 2	Grid 3
0.139 M4	0.096 M4	0.057 M4
Grid 4	Grid 5	Grid 6
0.129 M4	0.089 M4	0.048 M4
Grid 7	Grid 8	Grid 9
0.138 M4	0.096 M4	0.056 M4

Cursor:

Total = 0.139 A/m

H Category: M4

Location: 25, -22.5, 365.6 mm



0 dB = 0.139A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch128_Open

DUT: 821901

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Ambient Temperature : 22.8 °C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch128/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.152 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.041 A/m; Power Drift = 0.108 dB

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

Peak H-field in A/m

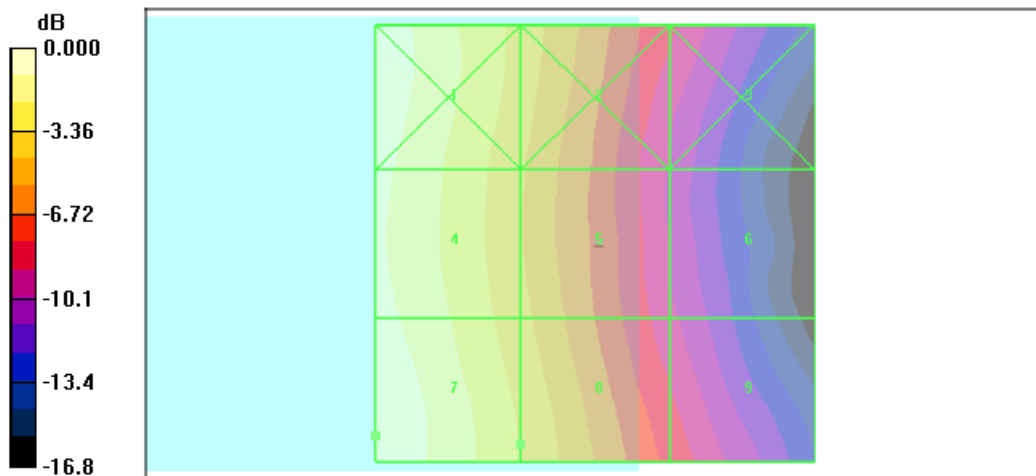
Grid 1	Grid 2	Grid 3
0.147 M4	0.099 M4	0.056 M4
Grid 4	Grid 5	Grid 6
0.140 M4	0.095 M4	0.050 M4
Grid 7	Grid 8	Grid 9
0.152 M4	0.103 M4	0.060 M4

Cursor:

Total = 0.152 A/m

H Category: M4

Location: 25, 22, 365.6 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch189_Open

DUT: 821901

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Ambient Temperature : 22.8 °C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch189/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.159 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.044 A/m; Power Drift = 0.006 dB

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

Peak H-field in A/m

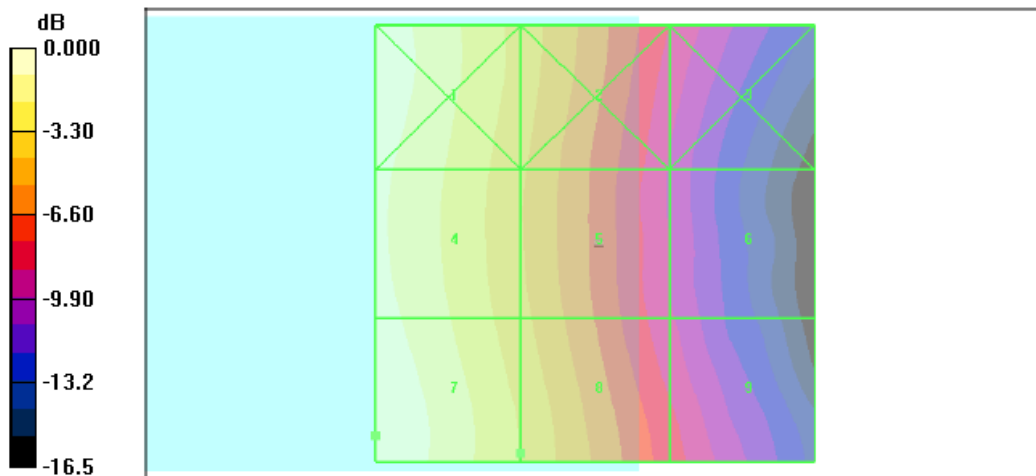
Grid 1 0.155 M4	Grid 2 0.104 M4	Grid 3 0.058 M4
Grid 4 0.148 M4	Grid 5 0.100 M4	Grid 6 0.052 M4
Grid 7 0.159 M4	Grid 8 0.108 M4	Grid 9 0.062 M4

Cursor:

Total = 0.159 A/m

H Category: M4

Location: 25, 22, 365.6 mm



0 dB = 0.159A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Open

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.168 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.046 A/m; Power Drift = 0.049 dB

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

Peak H-field in A/m

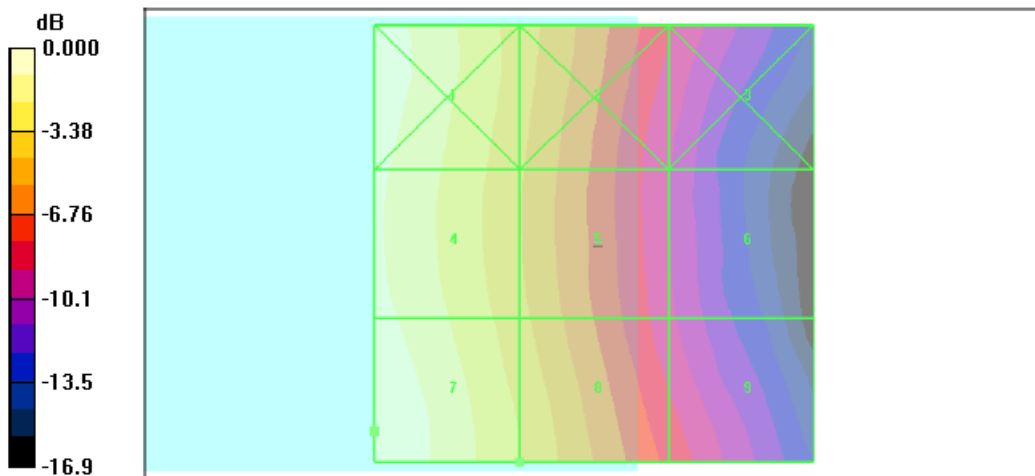
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.061 M4 to 0.168 M4.

Cursor:

Total = 0.168 A/m

H Category: M4

Location: 25, 21.5, 365.6 mm



0 dB = 0.168A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Open_Backlight on

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.166 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.044 A/m; Power Drift = 0.126 dB

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

Peak H-field in A/m

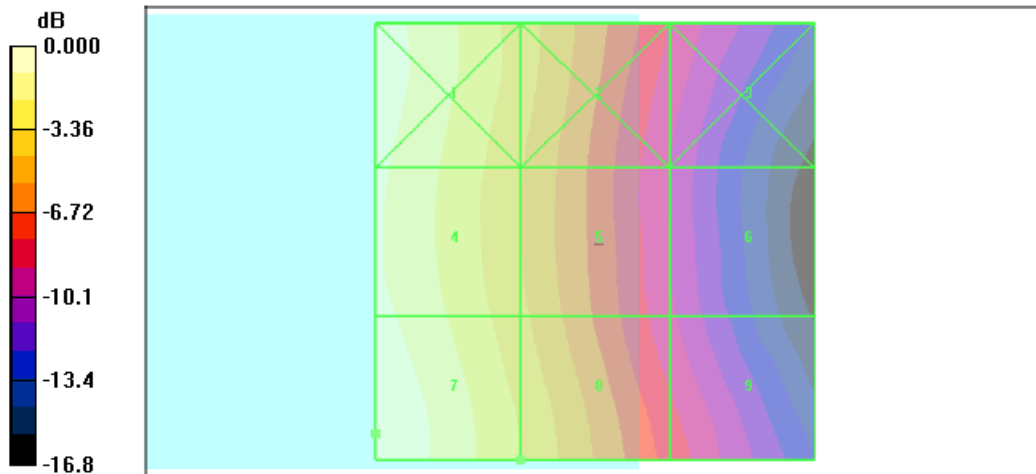
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.158 M4, 0.106 M4, 0.059 M4, etc.

Cursor:

Total = 0.166 A/m

H Category: M4

Location: 25, 22, 365.6 mm



0 dB = 0.166A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Open_Bluetooth on

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.167 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.046 A/m; Power Drift = -0.028 dB

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

Peak H-field in A/m

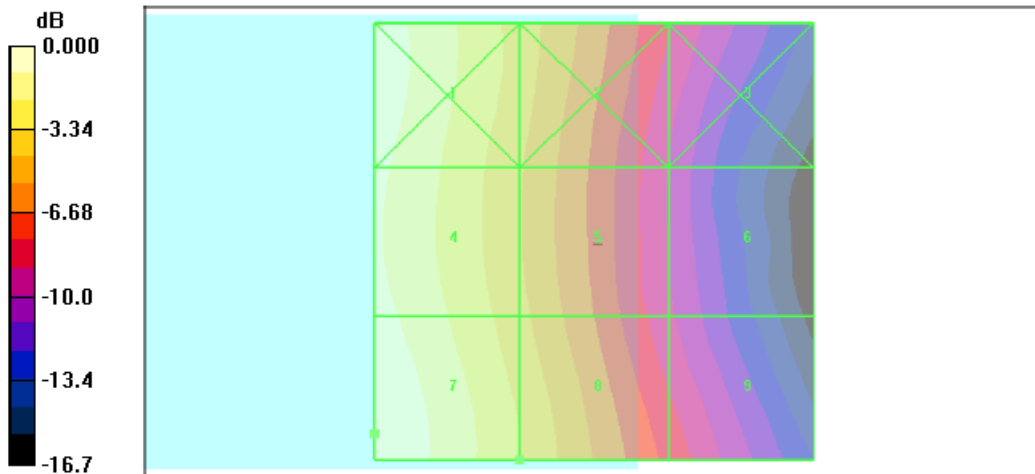
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.160 M4, 0.108 M4, 0.061 M4, etc.

Cursor:

Total = 0.167 A/m

H Category: M4

Location: 25, 22, 365.6 mm



0 dB = 0.167A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_GSM850_Ch251_Open_Wifi On

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch251/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.172 A/m

Probe Modulation Factor = 1.67

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.048 A/m; Power Drift = -0.153 dB

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

Peak H-field in A/m

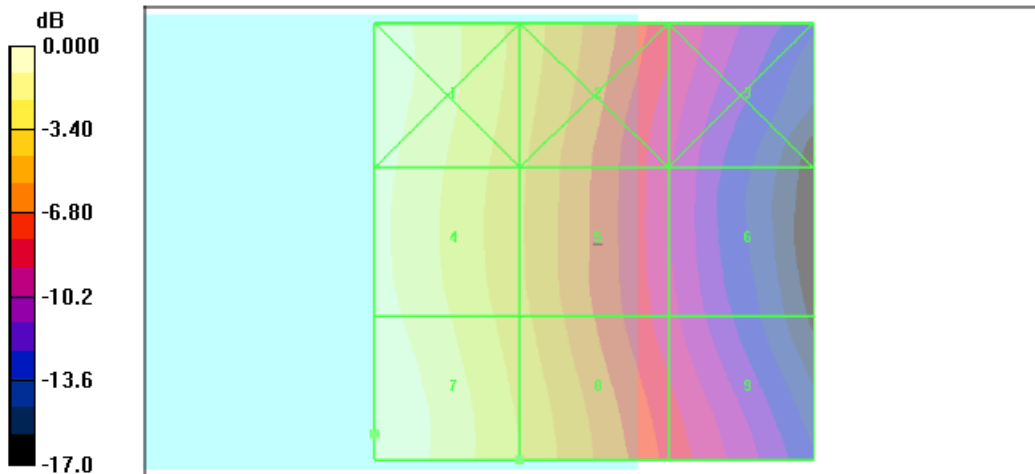
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.062 M4 to 0.172 M4.

Cursor:

Total = 0.172 A/m

H Category: M4

Location: 25, 22, 365.6 mm



0 dB = 0.172A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch512_Close

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch512/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.056 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.036 A/m; Power Drift = 0.075 dB

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

Peak H-field in A/m

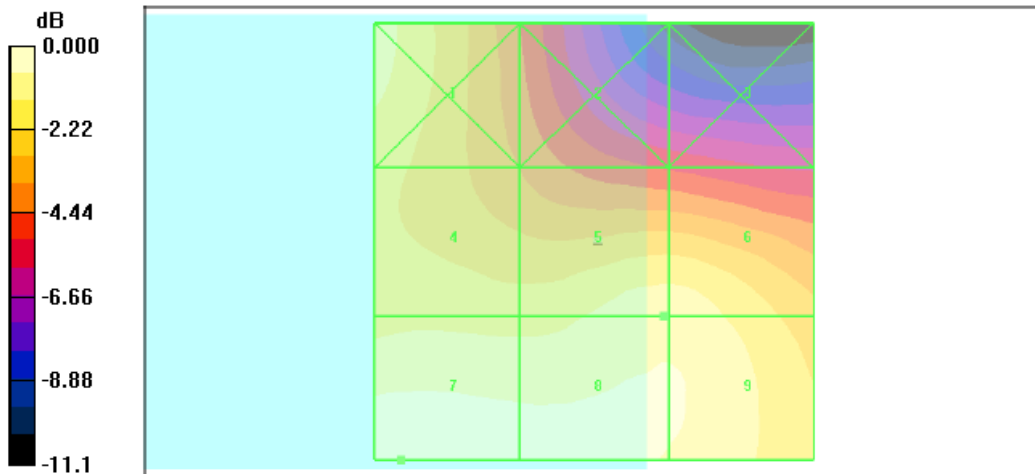
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.031 M4 to 0.056 M4.

Cursor:

Total = 0.056 A/m

H Category: M4

Location: 22, 25, 365.6 mm



0 dB = 0.056A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch661_Close

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch661/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.068 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.049 A/m; Power Drift = 0.028 dB

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

Peak H-field in A/m

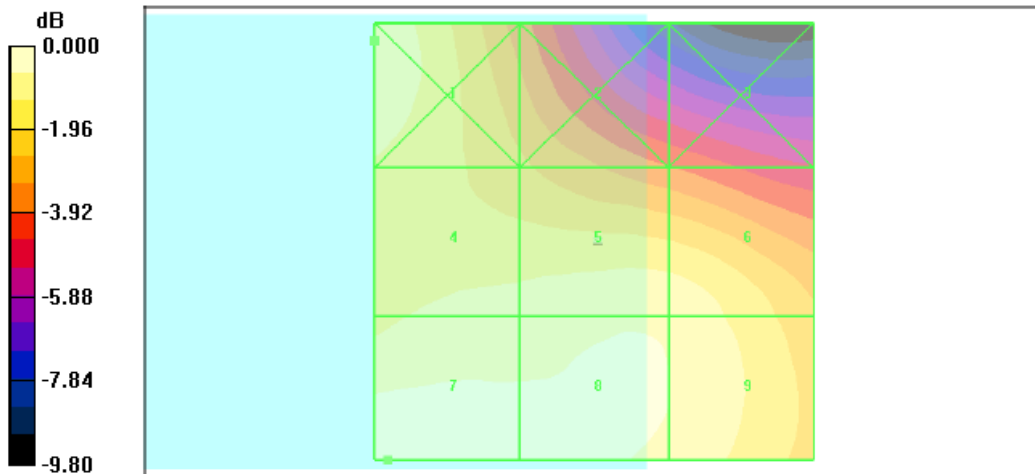
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.044 M4 to 0.068 M4.

Cursor:

Total = 0.068 A/m

H Category: M4

Location: 23.5, 25, 365.6 mm



0 dB = 0.068A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch810_Close

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.085 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.060 A/m; Power Drift = 0.031 dB

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

Peak H-field in A/m

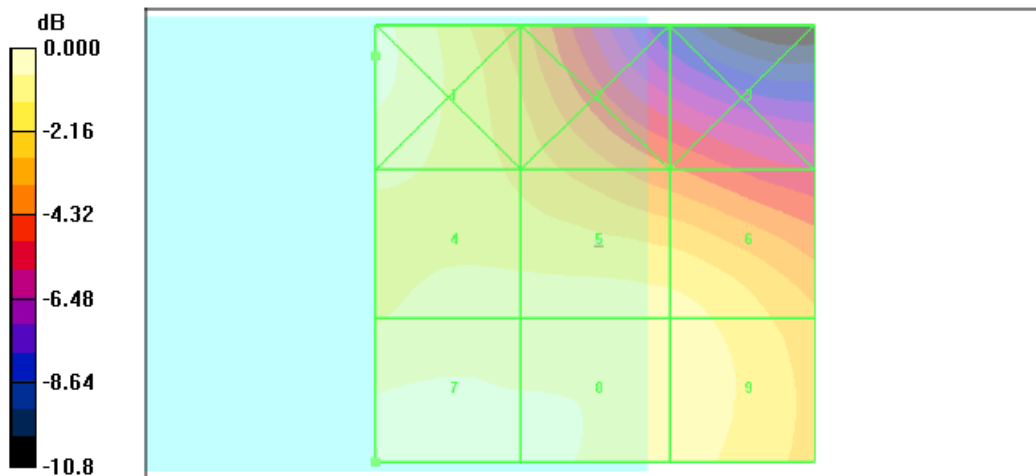
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.053 M4 to 0.085 M4.

Cursor:

Total = 0.085 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.085A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch810_Close_Backlight On

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.085 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.060 A/m; Power Drift = 0.001 dB

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

Peak H-field in A/m

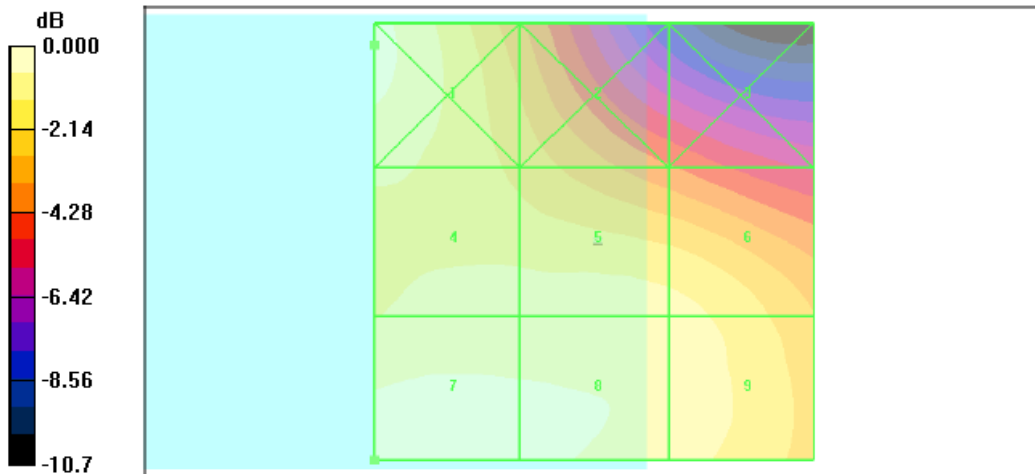
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.053 M4 to 0.085 M4.

Cursor:

Total = 0.085 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.085A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch810_Close_Bluetooth On

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.085 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.060 A/m; Power Drift = -0.013 dB

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

Peak H-field in A/m

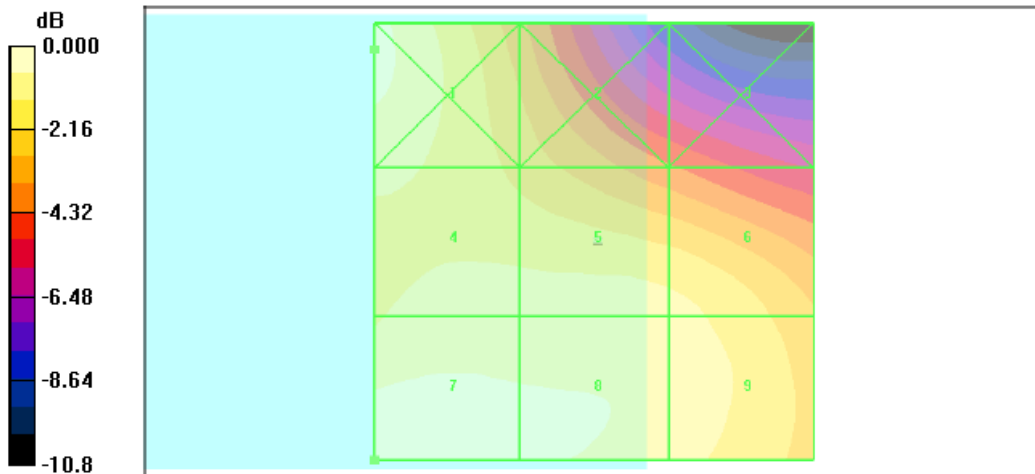
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.053 M4 to 0.085 M4.

Cursor:

Total = 0.085 A/m

H Category: M4

Location: 25, 25, 365.6 mm



0 dB = 0.085A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch810_Close_Wifi On

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.076 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.057 A/m; Power Drift = 0.064 dB

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

Peak H-field in A/m

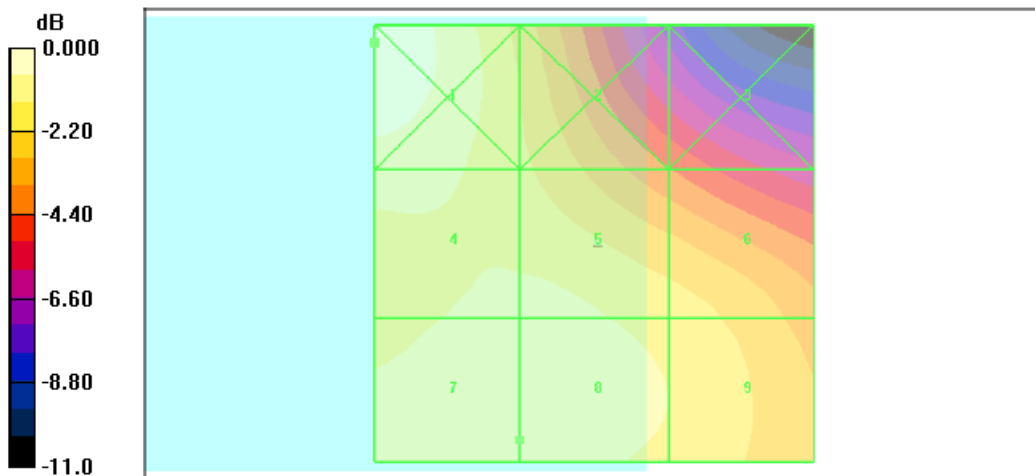
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.050 M4 to 0.076 M4.

Cursor:

Total = 0.083 A/m

H Category: M4

Location: 25, -23, 365.6 mm



0 dB = 0.083A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS Ch512_Open

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch512/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.058 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.049 A/m; Power Drift = -0.035 dB

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

Peak H-field in A/m

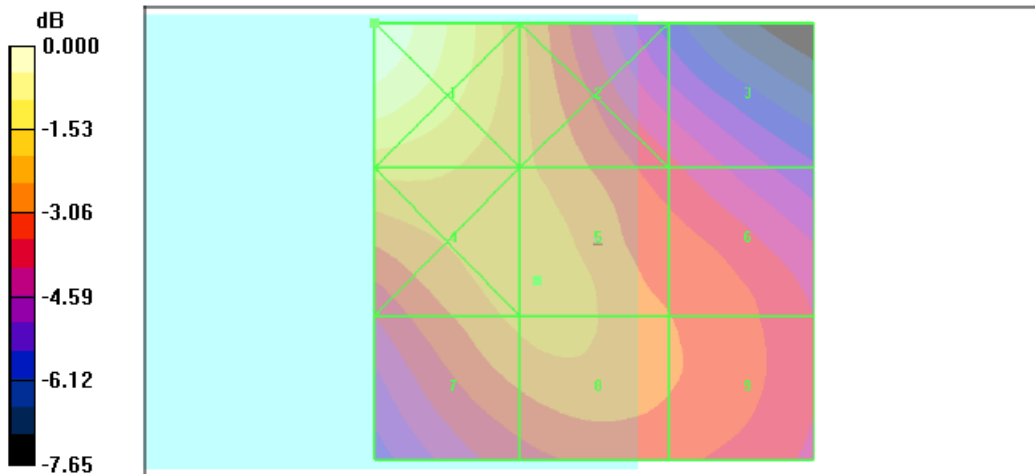
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.075 M4, 0.057 M4, 0.048 M4, etc.

Cursor:

Total = 0.075 A/m

H Category: M4

Location: 25, -25, 365.6 mm



0 dB = 0.075A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS Ch661_Open

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch661/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.065 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.053 A/m; Power Drift = -0.068 dB

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

Peak H-field in A/m

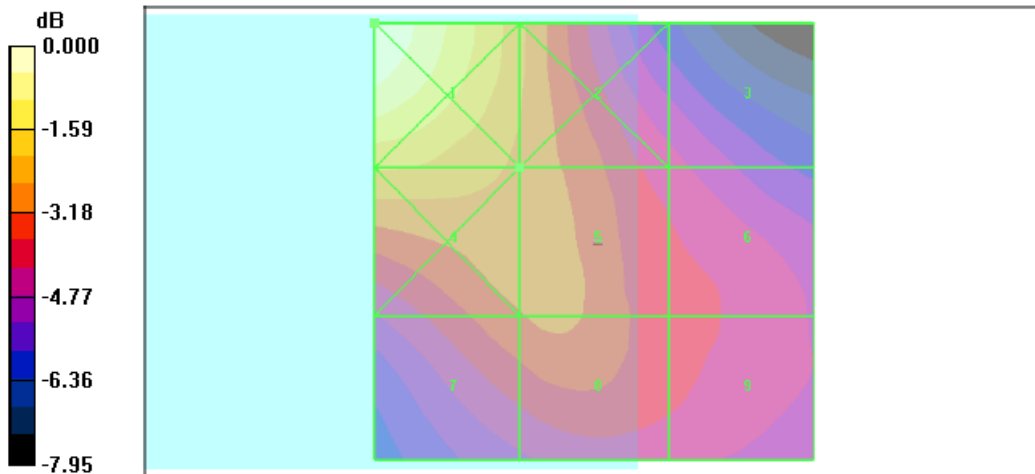
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.089 M4, 0.067 M4, 0.053 M4.

Cursor:

Total = 0.089 A/m

H Category: M4

Location: 25, -25, 365.6 mm



0 dB = 0.089A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS Ch810_Open

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.068 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.055 A/m; Power Drift = 0.024 dB

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

Peak H-field in A/m

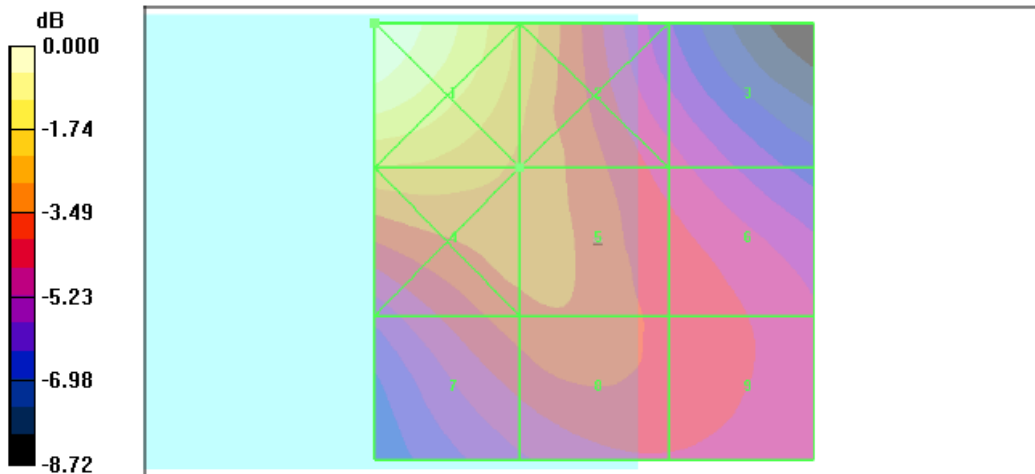
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, such as 0.096 M4, 0.073 M4, 0.054 M4, etc.

Cursor:

Total = 0.096 A/m

H Category: M4

Location: 25, -25, 365.6 mm



0 dB = 0.096A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS Ch810_Open_Backlight on

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.068 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.054 A/m; Power Drift = 0.012 dB

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

Peak H-field in A/m

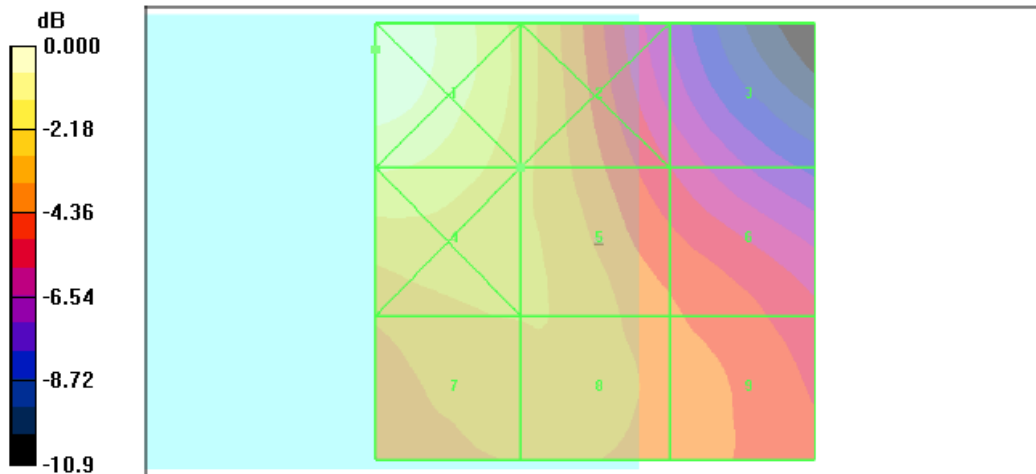
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.048 M4 to 0.093 M4.

Cursor:

Total = 0.093 A/m

H Category: M4

Location: 25, -22, 365.6 mm



0 dB = 0.093A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS Ch810_Open_Bluetooth on

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.069 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.054 A/m; Power Drift = 0.002 dB

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

Peak H-field in A/m

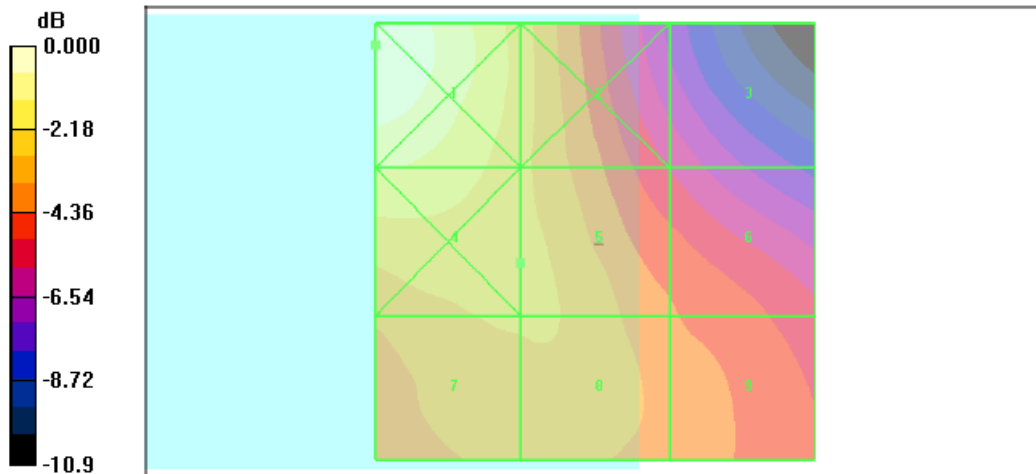
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.048 M4 to 0.094 M4.

Cursor:

Total = 0.094 A/m

H Category: M4

Location: 25, -22.5, 365.6 mm



0 dB = 0.094A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date:2008/3/18

HAC_H_PCS_Ch810_Open_Wifi On

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: sigma = 0 mho/m, epsilon_r = 1; rho = 1 kg/m^3
Ambient Temperature : 22.8 C

DASY4 Configuration:

- Probe: H3DV6 - SN6184; ; Calibrated: 2008/1/28
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch 4.6; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Ch810/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.070 A/m

Probe Modulation Factor = 1.17

Device Reference Point: 0.000, 0.000, 353.7 mm

Reference Value = 0.054 A/m; Power Drift = 0.036 dB

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

Peak H-field in A/m

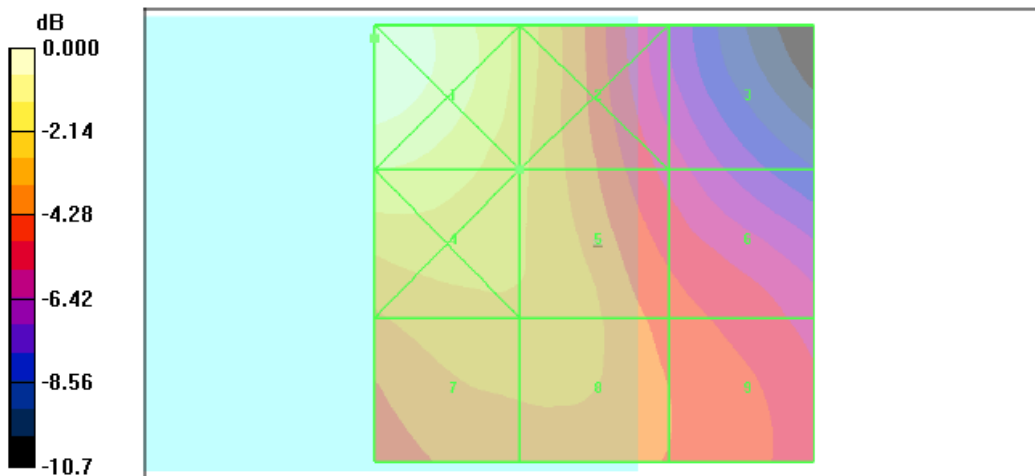
Table with 3 columns (Grid 1-3, Grid 4-6, Grid 7-9) and 3 rows of peak H-field values in A/m, ranging from 0.048 M4 to 0.095 M4.

Cursor:

Total = 0.095 A/m

H Category: M4

Location: 25, -23.5, 365.6 mm



0 dB = 0.095A/m



Appendix C – Calibration Data

Calibration Laboratory of Schmid & Partner Engineering AG



S Schweizerischer Kalibrierdienst
C Service suisse d'etalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client Sporton (Auden)

Certificate No: ER3-2358_Jan08

CALIBRATION CERTIFICATE
Object: ER3DV6 - SN:2358
Calibration procedure(s): QA CAL-02.v5
Calibration date: January 28, 2008
Condition of the calibrated item: In Tolerance
This calibration certificate documents the traceability to national standards...
All calibrations have been conducted in the closed laboratory facility...
Calibration Equipment used (M&TE critical for calibration)
Primary Standards table with columns: ID #, Cal Date, Scheduled Calibration
Secondary Standards table with columns: ID #, Check Date, Scheduled Check
Calibrated by: Katja Pckovic, Technical Manager
Approved by: Niels Kustar, Quality Manager
Issued: January 28, 2008



Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'etalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

- NORMx,y,z sensitivity in free space
DCP diode compression point
Polarization phi phi rotation around probe axis
Polarization theta theta rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., theta = 0 is normal to probe axis
Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1309-2005, " IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005.

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization theta = 0 for XY sensors and theta = 90 for Z sensor (f <= 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide).
NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart).
DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency.
Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide setup.
Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).



ER3DV6 SN:2358

January 28, 2008

Probe ER3DV6

SN:2358

Manufactured:	July 7, 2005
Last calibrated:	February 21, 2007
Recalibrated:	January 28, 2008

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)



ER3DV6 SN:2358

January 28, 2008

DASY - Parameters of Probe: ER3DV6 SN:2358

Sensitivity in Free Space [$\mu\text{V}/(\text{V}/\text{m})^2$]		Diode Compression ^A	
NormX	1.70 ± 10.1 % (k=2)	DCP X	92 mV
NormY	1.55 ± 10.1 % (k=2)	DCP Y	92 mV
NormZ	1.61 ± 10.1 % (k=2)	DCP Z	96 mV

Frequency Correction

X	0.0
Y	0.0
Z	0.0

Sensor Offset (Probe Tip to Sensor Center)

X	2.5 mm
Y	2.5 mm
Z	2.5 mm

Connector Angle -243 °

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A numerical linearization parameter: uncertainty not required

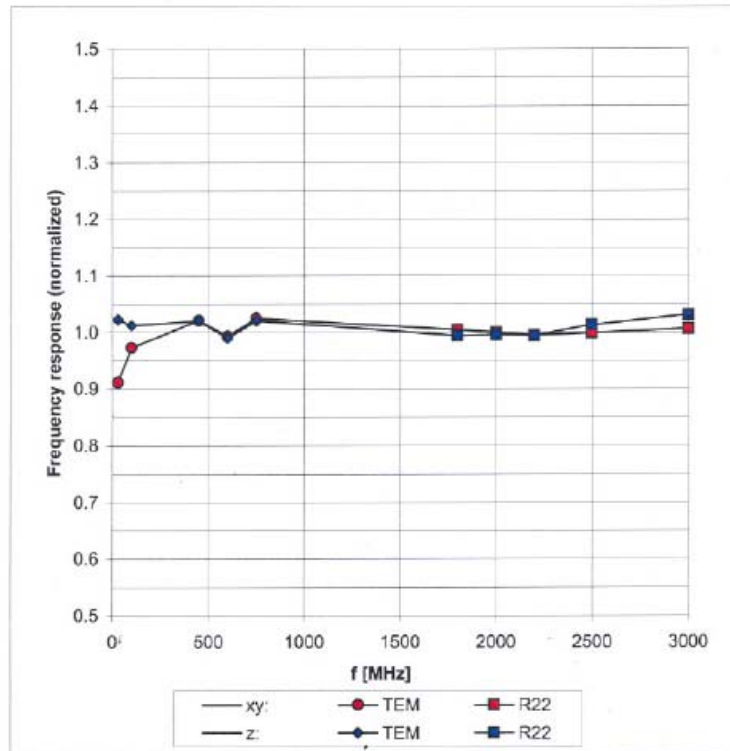


ER3DV6 SN:2358

January 28, 2008

Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide R22)



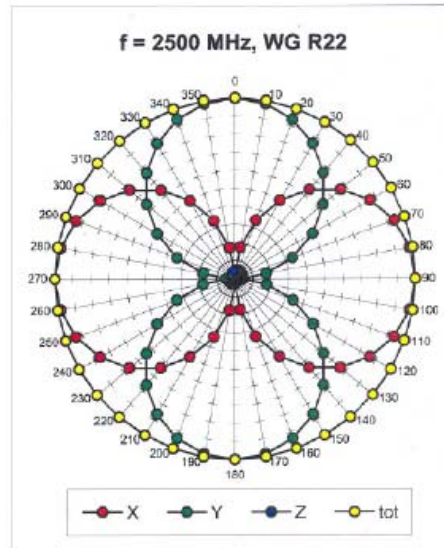
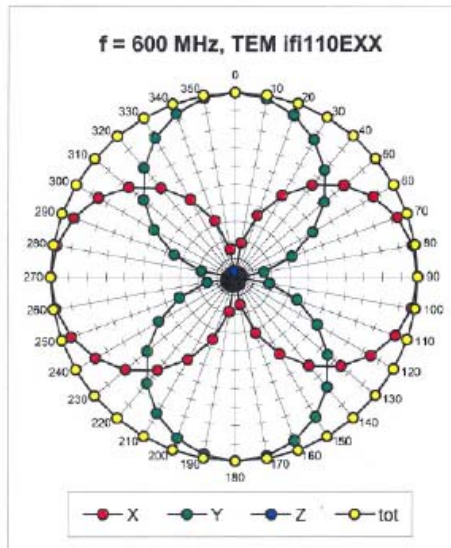
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)



ER3DV6 SN:2358

January 28, 2008

Receiving Pattern (ϕ), $\vartheta = 0^\circ$



Receiving Pattern (ϕ), $\vartheta = 90^\circ$

