Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/2/15

## HAC_E_Dipole_835_120215

### DUT: Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m$^3$
Ambient Temperature：22.3 ℃

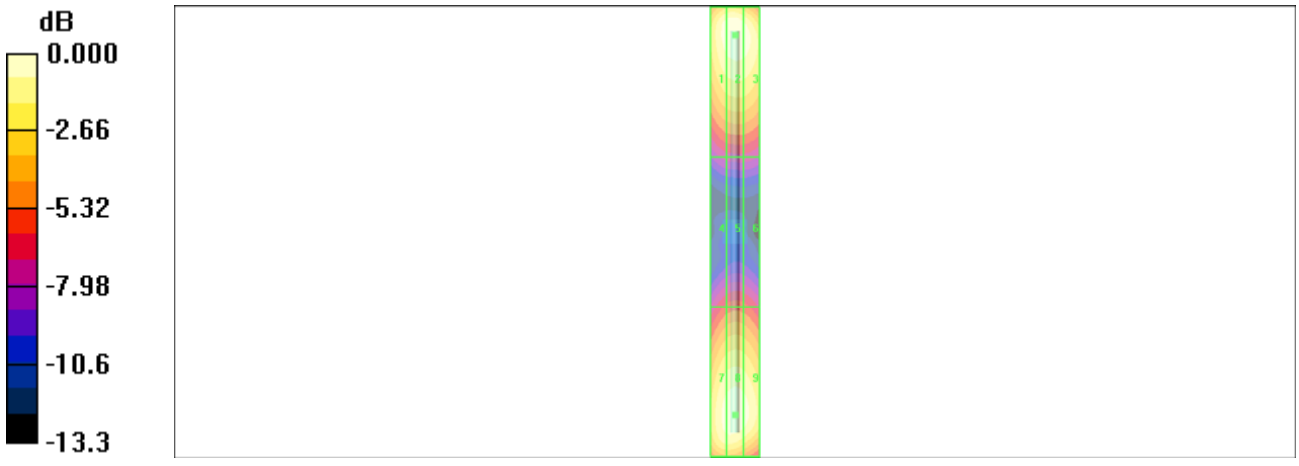
DASY4 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 174.2 V/m
Probe Modulation Factor = 1.00
Device Reference Point: 0.000, 0.000, -6.30 mm
Reference Value = 126.6 V/m; Power Drift = -0.035 dB
Average value of Total=(174.2+170.8) / 2 = 172.5 V/m

Peak E-field in V/m

| | | |
|---|---|---|
| Grid 1 **168.0 M4** | Grid 2 **174.2 M4** | Grid 3 **169.1 M4** |
| Grid 4 **87.8 M4** | Grid 5 **91.1 M4** | Grid 6 **89.2 M4** |
| Grid 7 **165.5 M4** | Grid 8 **170.8 M4** | Grid 9 **165.6 M4** |

**Cursor:**
Total = 174.2 V/m
E Category: M4
Location: 0, -79, 4.7 mm




0 dB = 174.2V/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/3/2

## HAC_E_Dipole_835_120302

### DUT: Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m$^3$
Ambient Temperature：22.6 ℃

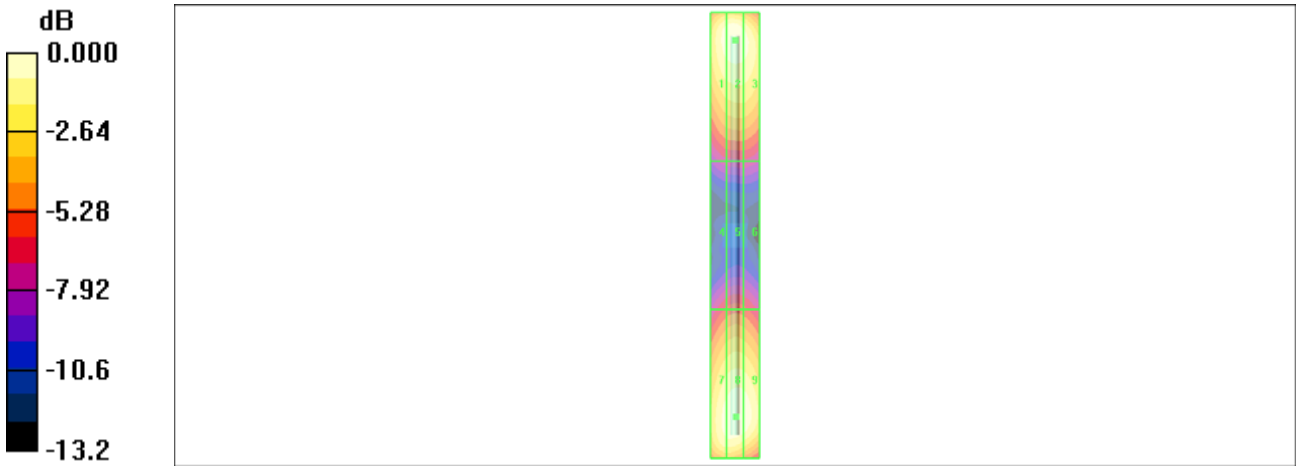
DASY4 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2011/11/22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 166.2 V/m
Probe Modulation Factor = 1.00
Reference Value = 121.5 V/m; Power Drift = 0.008 dB
Average value of Total=(165.9+166.2) / 2 = 166.05 V/m

Peak E-field in V/m

| | | |
|---|---|---|
| Grid 1 **160.5 M4** | Grid 2 **165.9 M4** | Grid 3 **158.9 M4** |
| Grid 4 **84.1 M4** | Grid 5 **87.7 M4** | Grid 6 **85.5 M4** |
| Grid 7 **158.8 M4** | Grid 8 **166.2 M4** | Grid 9 **163.1 M4** |

**Cursor:**
Total = 166.2 V/m
E Category: M4
Location: -0.5, 73.5, 4.7 mm




0 dB = 166.2V/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/2/15

## HAC_E_Dipole_1880_120215

### DUT: HAC Dipole 1880 MHz

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m$^3$
Ambient Temperature：22.3 ℃

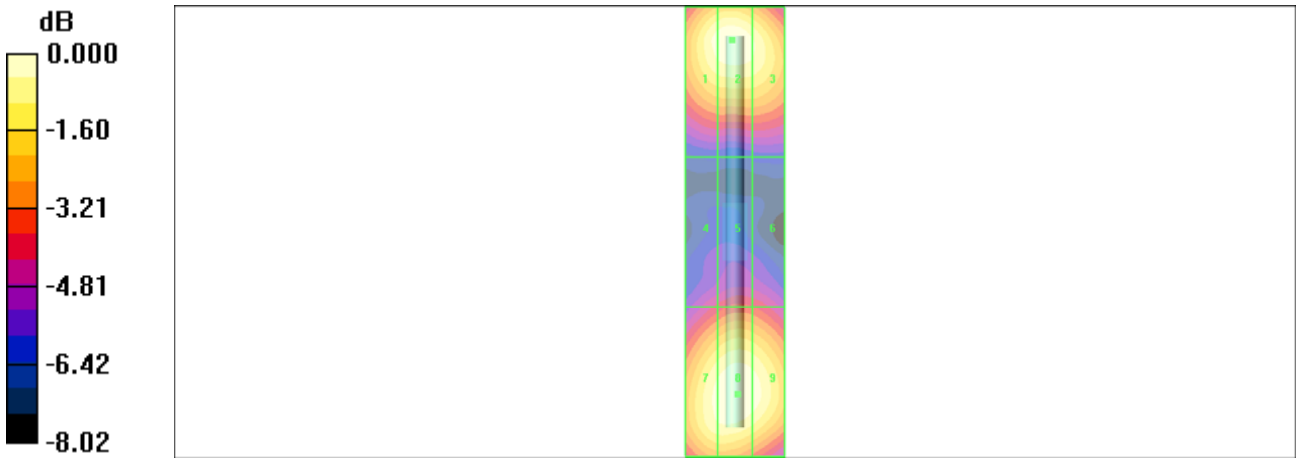
DASY4 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 143.0 V/m
Probe Modulation Factor = 1.00
Device Reference Point: 0.000, 0.000, -6.30 mm
Reference Value = 145.4 V/m; Power Drift = -0.027 dB
Average value of Total=(143+143) / 2 = 143 V/m

Peak E-field in V/m

| | | |
|---|---|---|
| Grid 1 **138.8 M2** | Grid 2 **143.0 M2** | Grid 3 **136.0 M2** |
| Grid 4 **89.4 M3** | Grid 5 **95.2 M3** | Grid 6 **93.3 M3** |
| Grid 7 **138.2 M2** | Grid 8 **143.0 M2** | Grid 9 **139.6 M2** |

**Cursor:**
Total = 143.0 V/m
E Category: M2
Location: 0.5, -38.5, 4.7 mm




0 dB = 143.0V/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/3/2

## HAC_E_Dipole_1880_120302

### DUT: HAC Dipole 1880 MHz

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m$^3$
Ambient Temperature：22.6 ℃

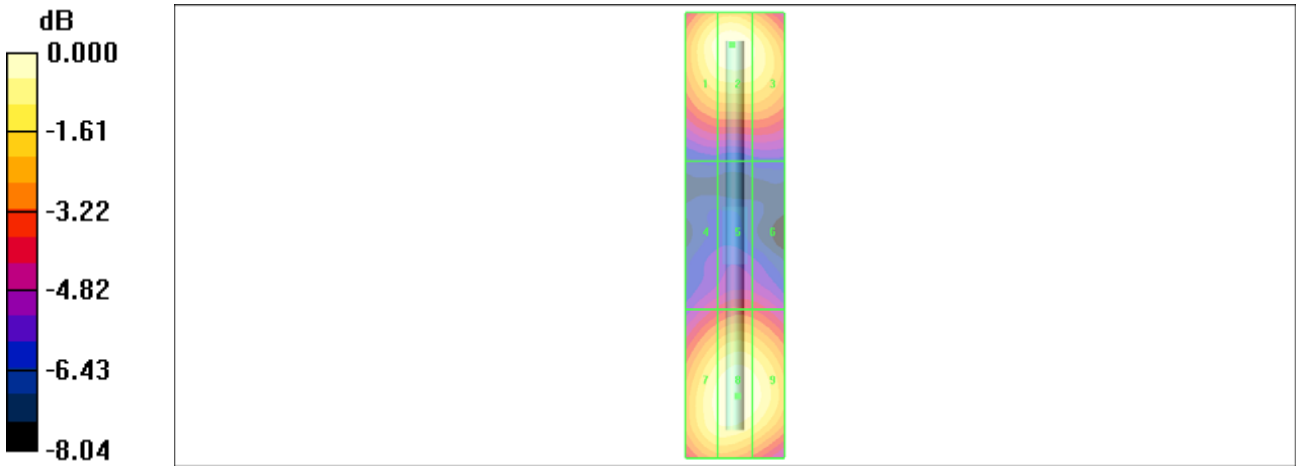
DASY4 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2011/11/22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 130.5 V/m
Probe Modulation Factor = 1.00
Reference Value = 132.5 V/m; Power Drift = 0.005 dB
Average value of Total=(130.5+130.5) / 2 = 130.5 V/m

Peak E-field in V/m

| | | |
|---|---|---|
| Grid 1 **126.8 M2** | Grid 2 **130.5 M2** | Grid 3 **124.3 M2** |
| Grid 4 **81.5 M3** | Grid 5 **86.7 M3** | Grid 6 **85.0 M3** |
| Grid 7 **126.1 M2** | Grid 8 **130.5 M2** | Grid 9 **127.4 M2** |

**Cursor:**
Total = 130.5 V/m
E Category: M2
Location: 0.5, -38.5, 4.7 mm




0 dB = 130.5V/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/2/15

## HAC_H_Dipole_835_120215

### DUT: HAC-Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m$^3$
Ambient Temperature：22.3 ℃

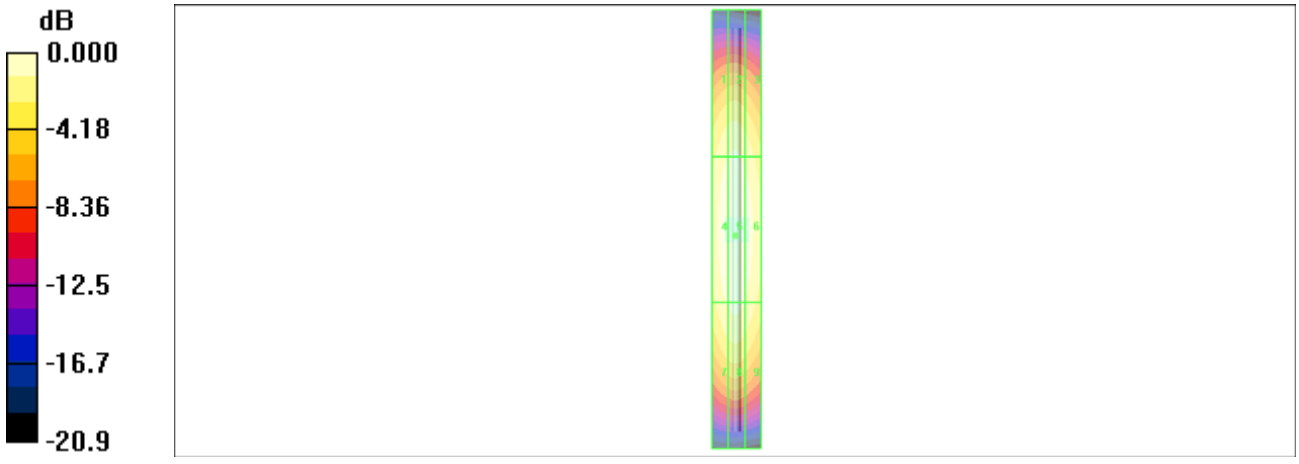
DASY4 Configuration:
- Probe: H3DV6 - SN6184; ; Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm
Probe Modulation Factor = 1.00
Reference Value = 0.491 A/m; Power Drift = -0.006 dB
Maximum value of peak Total field = 0.443 A/m

Peak H-field in A/m

| | | |
|---|---|---|
| Grid 1 **0.377 M4** | Grid 2 **0.388 M4** | Grid 3 **0.363 M4** |
| Grid 4 **0.429 M4** | Grid 5 **0.443 M4** | Grid 6 **0.415 M4** |
| Grid 7 **0.384 M4** | Grid 8 **0.398 M4** | Grid 9 **0.371 M4** |

**Cursor:**
Total = 0.443 A/m
H Category: M4
Location: 0.5, 2.5, 5.2 mm




0 dB = 0.443A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/3/2

## HAC_H_Dipole_835_120302

### DUT: HAC-Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m$^3$
Ambient Temperature：22.6 ℃

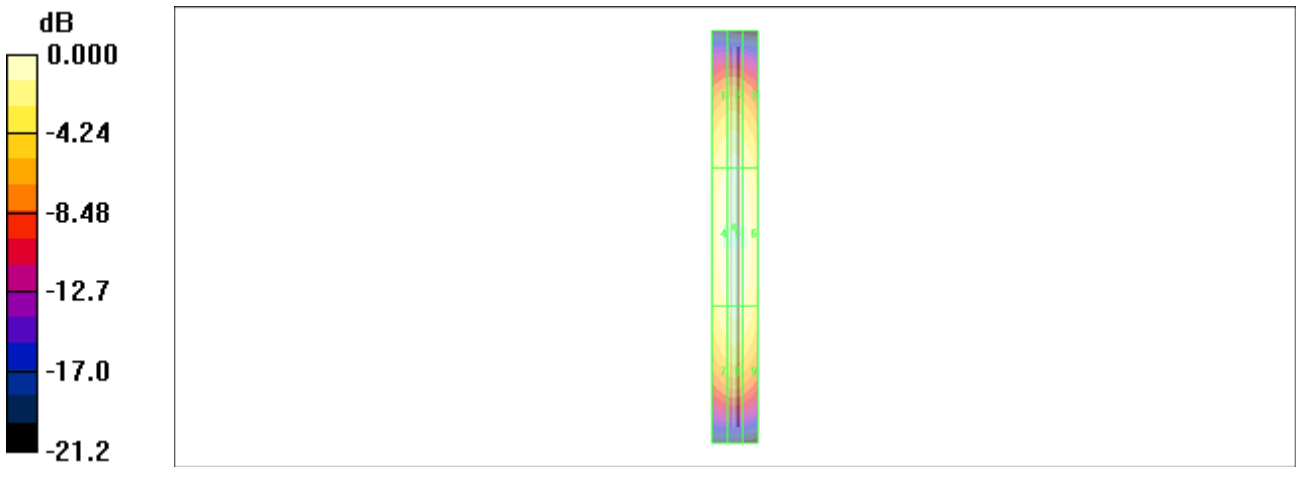
DASY4 Configuration:
- Probe: H3DV6 - SN6184; ; Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2011/11/22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm
Probe Modulation Factor = 1.00
Reference Value = 0.522 A/m; Power Drift = -0.052 dB
Maximum value of peak Total field = 0.468 A/m

Peak H-field in A/m

| | | |
|---|---|---|
| Grid 1 **0.407 M4** | Grid 2 **0.425 M4** | Grid 3 **0.400 M4** |
| Grid 4 **0.450 M4** | Grid 5 **0.468 M4** | Grid 6 **0.444 M4** |
| Grid 7 **0.401 M4** | Grid 8 **0.422 M4** | Grid 9 **0.401 M4** |

**Cursor:**
Total = 0.468 A/m
H Category: M4
Location: 0.5, -4.5, 5.2 mm




0 dB = 0.468A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/2/15

## HAC_H_Dipole_1880_120215

### DUT: HAC Dipole 1880 MHz

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m$^3$
Ambient Temperature：22.3 ℃

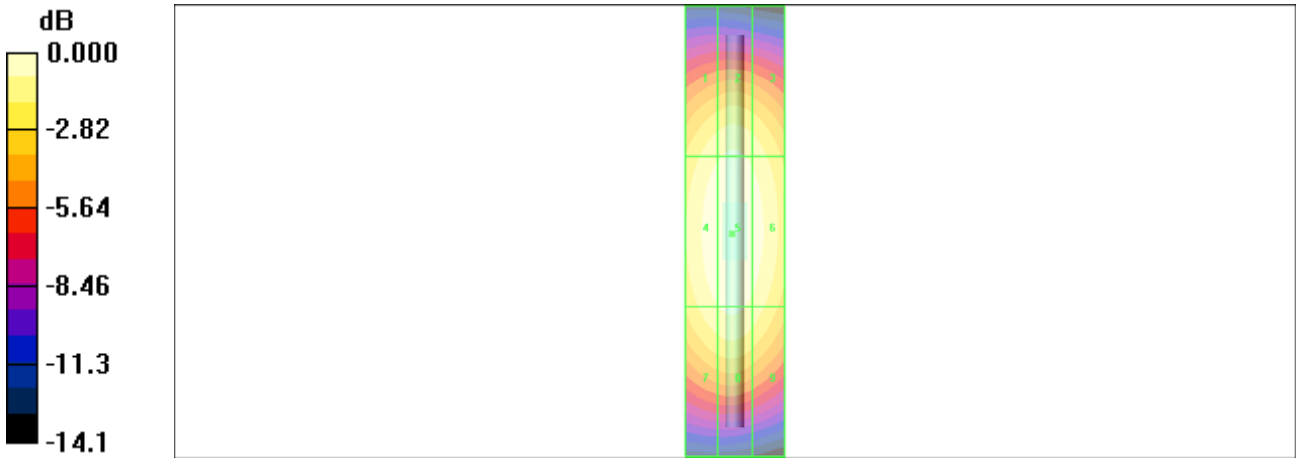
DASY4 Configuration:
- Probe: H3DV6 - SN6184; ; Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn495; Calibrated: 2011/4/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm
Probe Modulation Factor = 1.00
Reference Value = 0.542 A/m; Power Drift = 0.001 dB
Maximum value of peak Total field = 0.491 A/m

Peak H-field in A/m

| | | |
|---|---|---|
| Grid 1 **0.435 M2** | Grid 2 **0.451 M2** | Grid 3 **0.429 M2** |
| Grid 4 **0.475 M2** | Grid 5 **0.491 M2** | Grid 6 **0.468 M2** |
| Grid 7 **0.439 M2** | Grid 8 **0.453 M2** | Grid 9 **0.426 M2** |

**Cursor:**
Total = 0.491 A/m
H Category: M2
Location: 0.5, 0.5, 5.2 mm




0 dB = 0.491A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2012/3/2

## HAC_H_Dipole_1880_120302

### DUT: HAC Dipole 1880 MHz

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m$^3$
Ambient Temperature：22.6 ℃

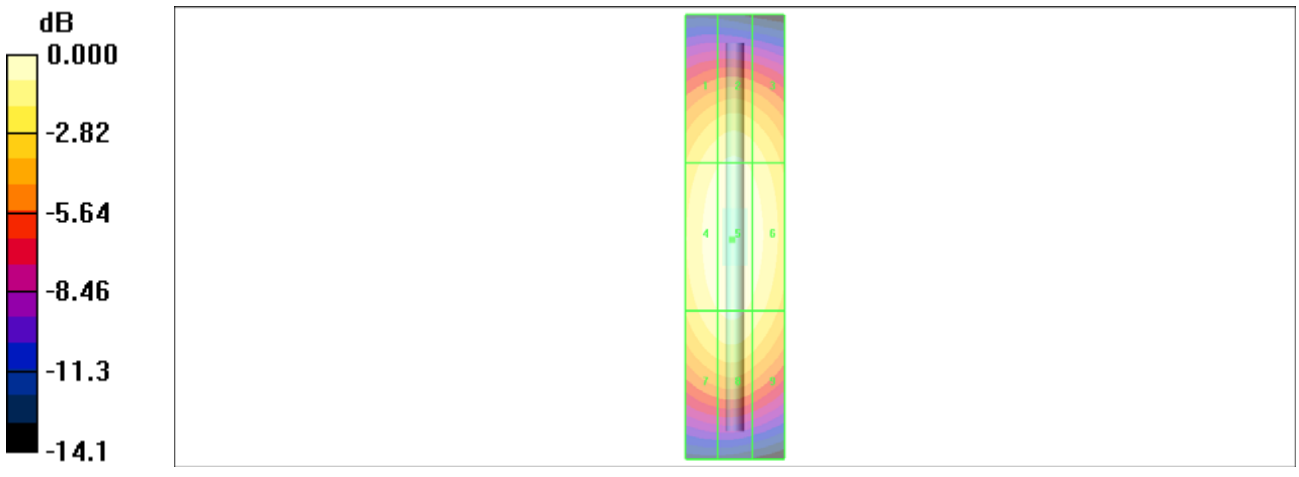
DASY4 Configuration:
- Probe: H3DV6 - SN6184; ; Calibrated: 2012/1/26
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2011/11/22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm
Probe Modulation Factor = 1.00
Reference Value = 0.546 A/m; Power Drift = 0.011 dB
Maximum value of peak Total field = 0.487 A/m

Peak H-field in A/m

| | | |
|---|---|---|
| Grid 1 **0.435 M2** | Grid 2 **0.451 M2** | Grid 3 **0.430 M2** |
| Grid 4 **0.475 M2** | Grid 5 **0.487 M2** | Grid 6 **0.468 M2** |
| Grid 7 **0.439 M2** | Grid 8 **0.454 M2** | Grid 9 **0.426 M2** |

**Cursor:**
Total = 0.487 A/m
H Category: M2
Location: 0.5, 0.5, 5.2 mm




0 dB = 0.491A/m