

Test Laboratory: Compliance Certification Services

**HAC\_E\_Dipole 835 MHz\_072805**

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1014**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: H Dipole Section  
 Measurement Standard: DAS4 (High Precision Assessment)

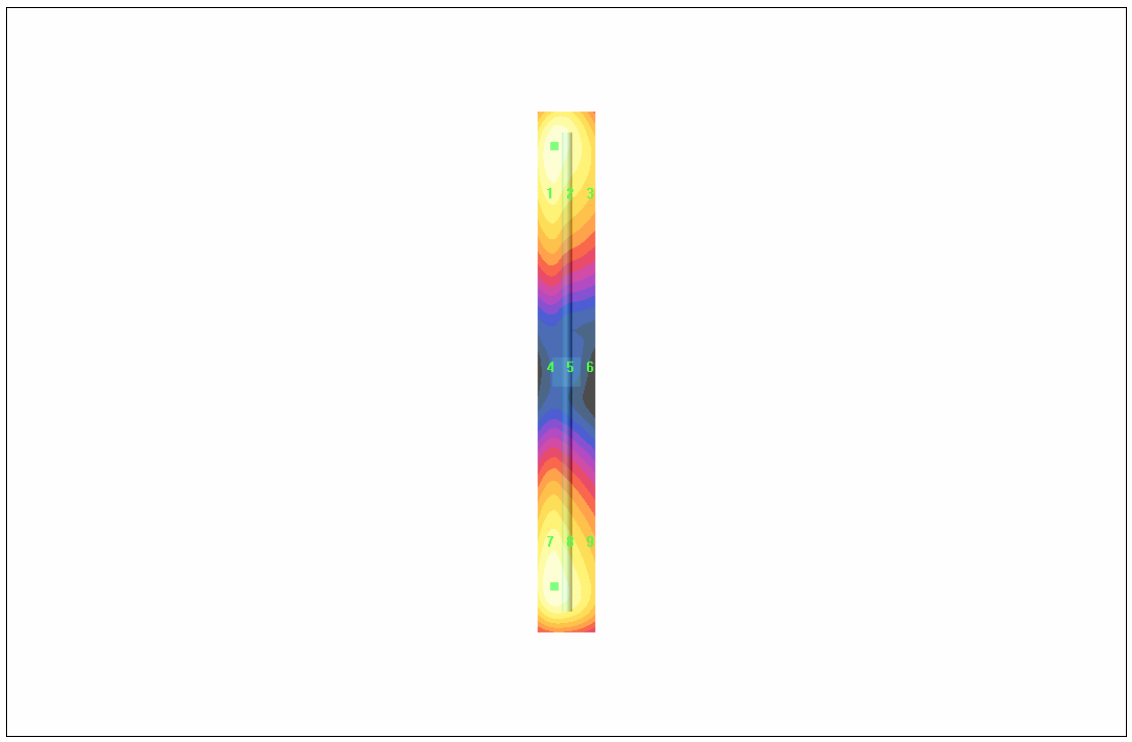
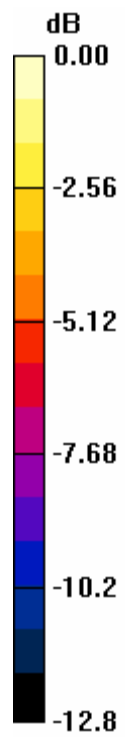
DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 3/11/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 2/7/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1011
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan - ER probe center 10mm above CD835 Dipole/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of Total field (slot averaged) = 183.0 V/m  
**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

E in V/m (Time averaged)			E in V/m (Slot averaged)		
Grid 1	Grid 2	Grid 3	Grid 1	Grid 2	Grid 3
181.1	180.7	157.3	181.1	180.7	157.3
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
92.4	92.1	78.8	92.4	92.1	78.8
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
183.0	182.4	156.6	183.0	182.4	156.6

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.15



0 dB = 183.0V/m

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## HAC\_E\_Dipole 1880 MHz\_072705

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1010**

Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 3/11/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 2/7/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1011
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

### E Scan - ER probe center 10mm above CD1880 Dipole/Hearing Aid Compatibility Test

**(41x181x1):** Measurement grid: dx=5mm, dy=5mm

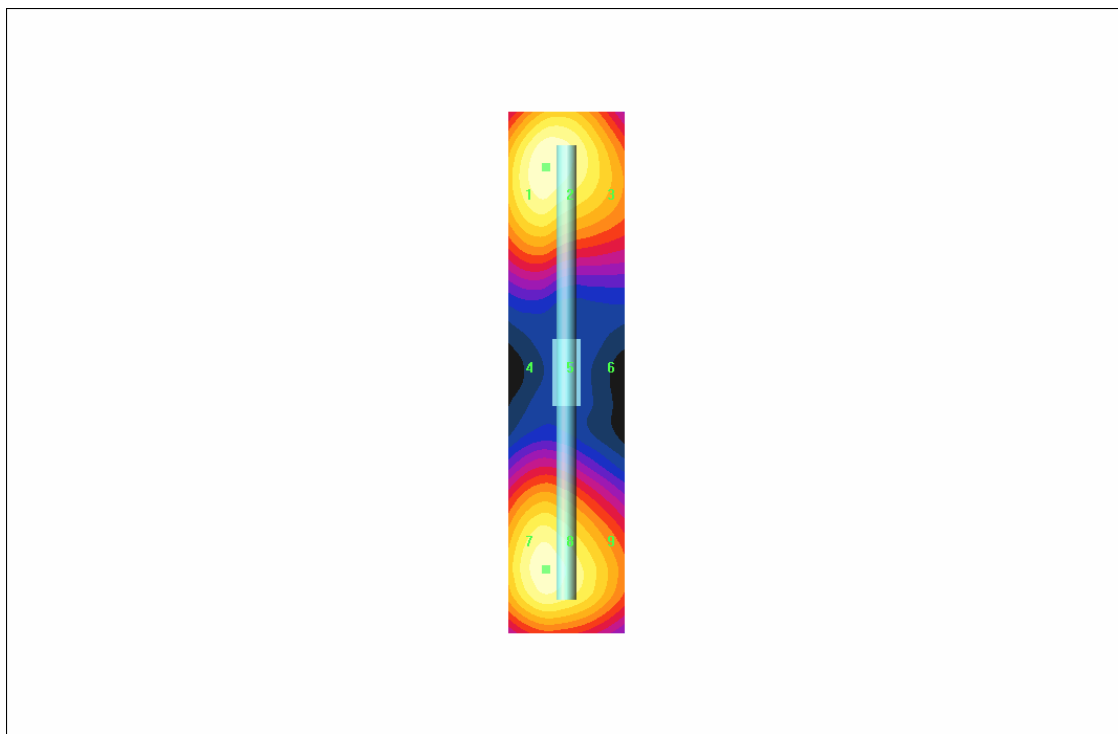
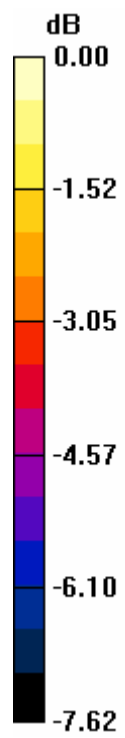
Maximum value of Total field (slot averaged) = 138.8 V/m

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

E in V/m (Time averaged)    E in V/m (Slot averaged)

Grid 1	Grid 2	Grid 3	Grid 1	Grid 2	Grid 3
<b>138.5</b>	<b>138.8</b>	<b>124.1</b>	<b>138.5</b>	<b>138.8</b>	<b>124.1</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>81.4</b>	<b>81.4</b>	<b>73.8</b>	<b>81.4</b>	<b>81.4</b>	<b>73.8</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>137.0</b>	<b>137.1</b>	<b>122.0</b>	<b>137.0</b>	<b>137.1</b>	<b>122.0</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.15



0 dB = 138.8V/m

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### HAC\_H\_Dipole 835 MHz\_072805

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1014**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 - SN6157; ; Calibrated: 3/11/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 2/7/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1011
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**H Scan - H3DV6 probe center 10mm above CD835 Dipole/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

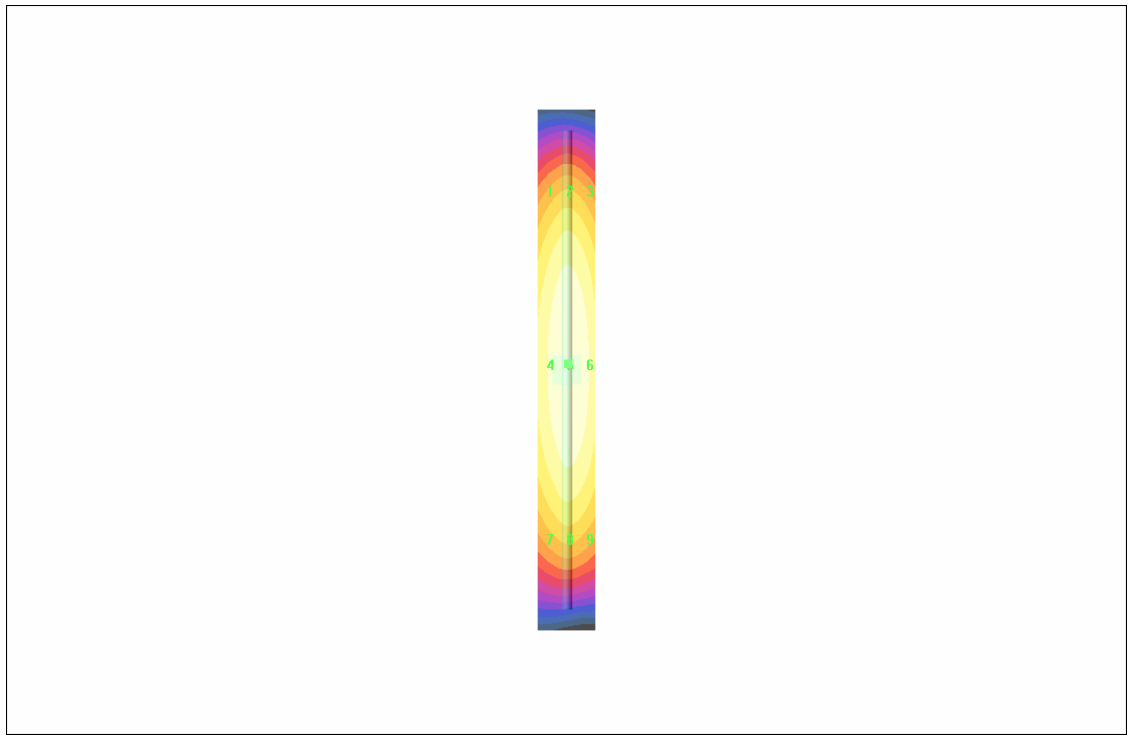
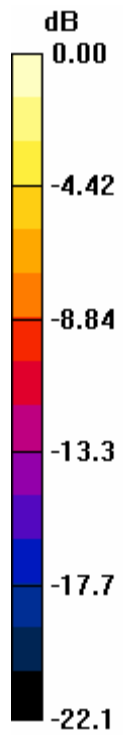
Maximum value of Total field (slot averaged) = 0.469 A/m

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

H in A/m (Time averaged)      H in A/m (Slot averaged)

Grid 1	Grid 2	Grid 3	Grid 1	Grid 2	Grid 3
<b>0.386</b>	<b>0.420</b>	<b>0.404</b>	<b>0.386</b>	<b>0.420</b>	<b>0.404</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.430</b>	<b>0.469</b>	<b>0.453</b>	<b>0.430</b>	<b>0.469</b>	<b>0.453</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.378</b>	<b>0.410</b>	<b>0.396</b>	<b>0.378</b>	<b>0.410</b>	<b>0.396</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.15



0 dB = 0.469A/m

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### HAC\_H\_Dipole 1880 MHz\_072705

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Communication System: CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

Phantom section: H Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

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- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1011
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**H Scan - H3DV6 probe center 10mm above CD1880 Dipole/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

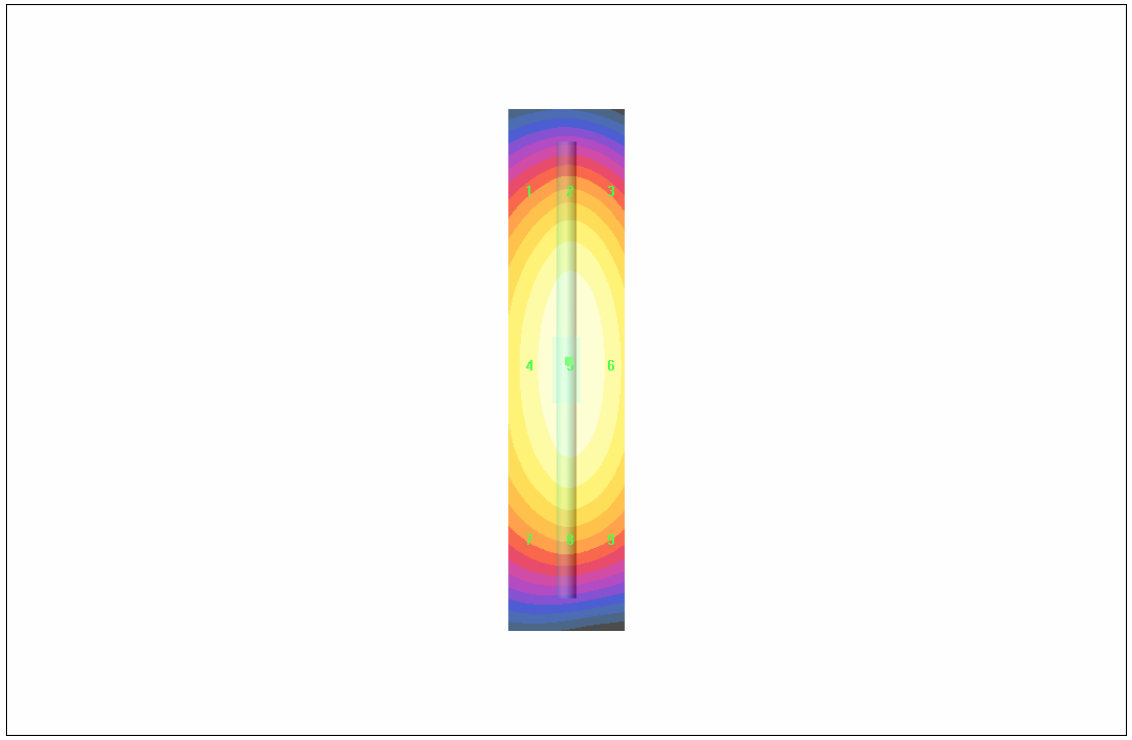
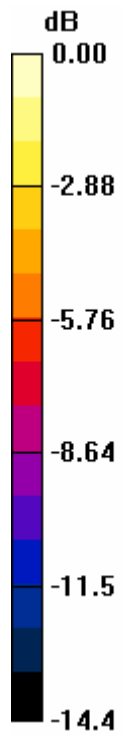
Maximum value of Total field (slot averaged) = 0.467 A/m

**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

H in A/m (Time averaged)      H in A/m (Slot averaged)

Grid 1	Grid 2	Grid 3	Grid 1	Grid 2	Grid 3
<b>0.392</b>	<b>0.429</b>	<b>0.416</b>	<b>0.392</b>	<b>0.429</b>	<b>0.416</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.430</b>	<b>0.467</b>	<b>0.454</b>	<b>0.430</b>	<b>0.467</b>	<b>0.454</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.387</b>	<b>0.419</b>	<b>0.406</b>	<b>0.387</b>	<b>0.419</b>	<b>0.406</b>

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19
	-5	<47.3	<0.15



0 dB = 0.467A/m