

Test Laboratory: Compliance Certification Services Inc.

## HAC\_E\_Dipole\_-835MHz(CW)

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

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: E Dipole Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 2005/6/3
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

### E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

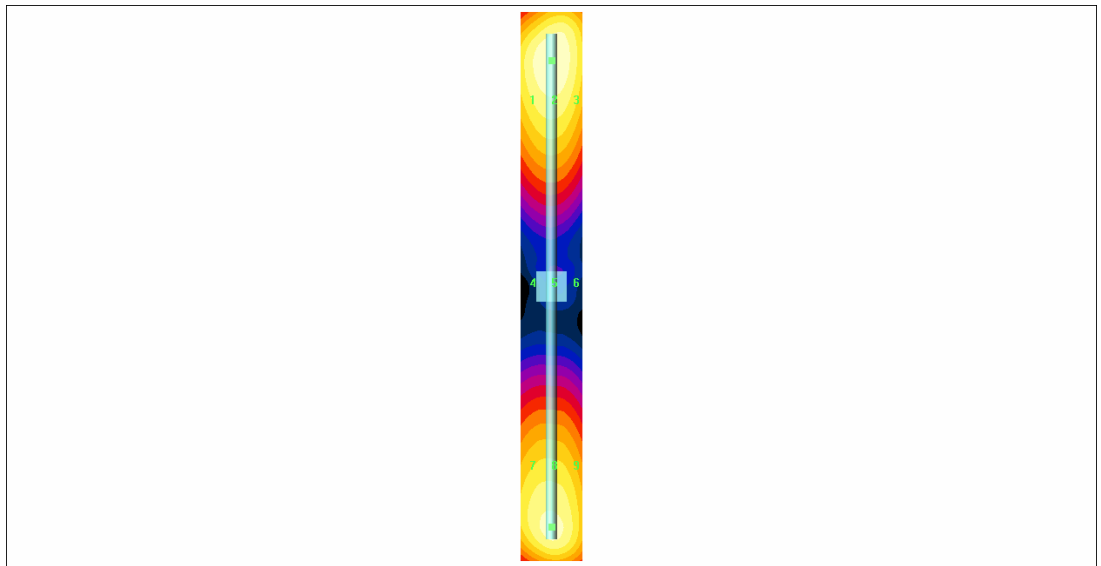
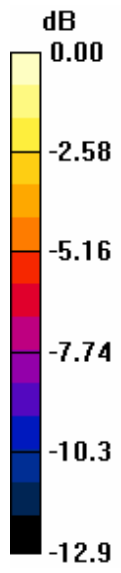
Maximum value of Total field (slot averaged) = **165.8** V/m

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>158.6</b>	<b>165.8</b>	<b>161.1</b>	<b>158.6</b>	<b>165.8</b>	<b>161.1</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>80.6</b>	<b>83.3</b>	<b>80.7</b>	<b>80.6</b>	<b>83.3</b>	<b>80.7</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>150.2</b>	<b>156.6</b>	<b>151.8</b>	<b>150.2</b>	<b>156.6</b>	<b>151.8</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 = 165.8V/m

Test Laboratory: Compliance Certification Services Inc.

**HAC\_E\_Dipole\_-835MHz(AM 80%)**

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: AM 80%; 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: E Dipole Section  
 Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 2005/6/3
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm**

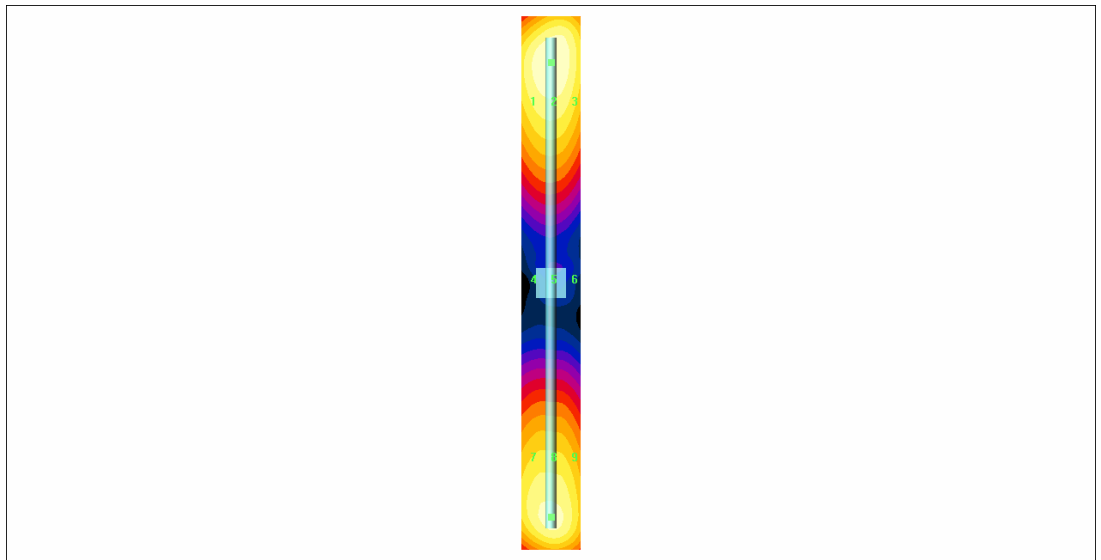
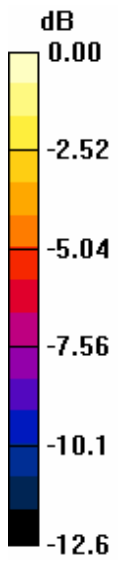
**Maximum value of Total field (slot averaged) = 103.1 V/m**

**Hearing Aid Near-Field Category: M3 (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>99.5</b>	<b>103.1</b>	<b>100.8</b>	<b>99.5</b>	<b>103.1</b>	<b>100.8</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>51.4</b>	<b>52.8</b>	<b>51.2</b>	<b>51.4</b>	<b>52.8</b>	<b>51.2</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>94.3</b>	<b>97.7</b>	<b>95.2</b>	<b>94.3</b>	<b>97.7</b>	<b>95.2</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 = 103.1V/m

Test Laboratory: Compliance Certification Services Inc.

**HAC\_E\_Dipole\_-835MHz(CDMA)**

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: CDMA ; 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: E Dipole Section  
 Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 2005/6/3
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm**

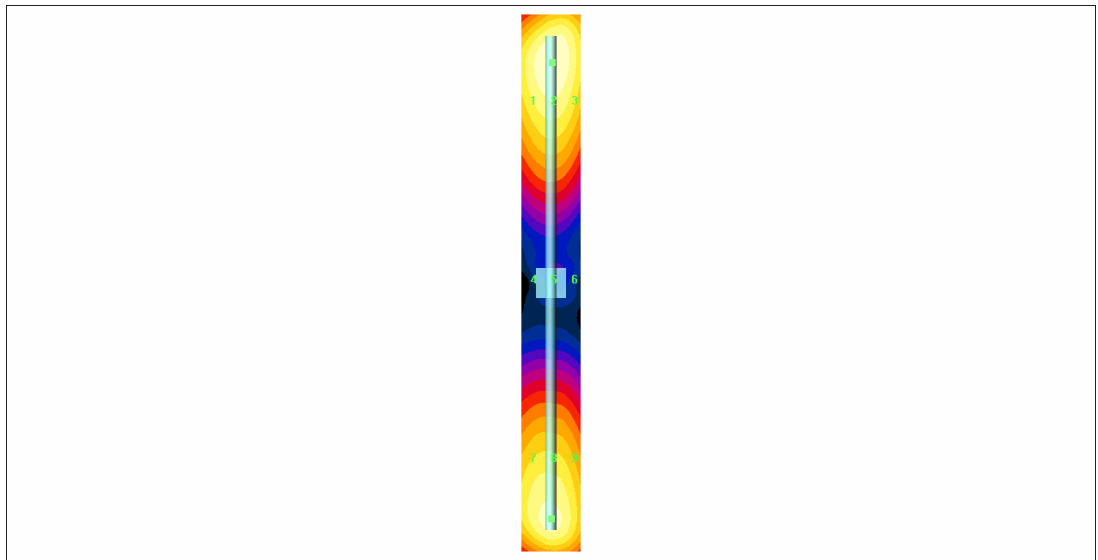
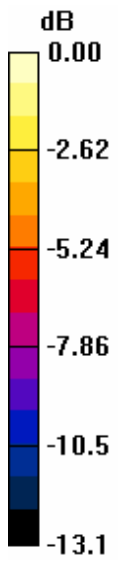
**Maximum value of Total field (slot averaged) = 164.4 V/m**

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

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

Grid 1 <b>156.3</b>	Grid 2 <b>164.4</b>	Grid 3 <b>160.2</b>	Grid 1 <b>156.3</b>	Grid 2 <b>164.4</b>	Grid 3 <b>160.2</b>
Grid 4 <b>78.9</b>	Grid 5 <b>81.9</b>	Grid 6 <b>79.4</b>	Grid 4 <b>78.9</b>	Grid 5 <b>81.9</b>	Grid 6 <b>79.4</b>
Grid 7 <b>149.5</b>	Grid 8 <b>155.6</b>	Grid 9 <b>149.3</b>	Grid 7 <b>149.5</b>	Grid 8 <b>155.6</b>	Grid 9 <b>149.3</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 = 164.4V/m

Test Laboratory: Compliance Certification Services Inc.

**HAC\_E\_Dipole\_-1880MHz(CW)**

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

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 - SN2345; ConvF(1, 1, 1); Calibrated: 2005/6/3
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):**

Measurement grid: dx=5mm, dy=5mm

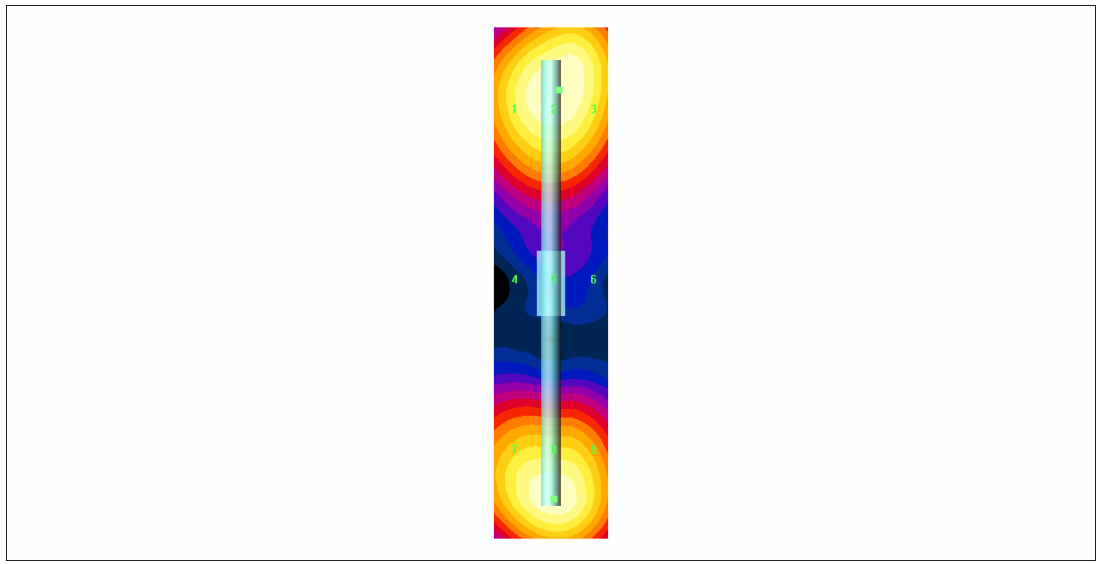
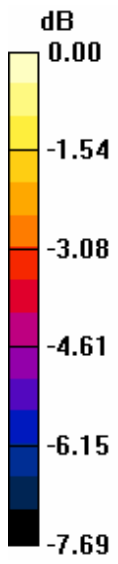
Maximum value of Total field (slot averaged) = **139.9** V/m

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>133.3</b>	<b>139.9</b>	<b>138.9</b>	<b>133.3</b>	<b>139.9</b>	<b>138.9</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>86.6</b>	<b>89.9</b>	<b>87.2</b>	<b>86.6</b>	<b>89.9</b>	<b>87.2</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>131.6</b>	<b>138.8</b>	<b>135.2</b>	<b>131.6</b>	<b>138.8</b>	<b>135.2</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 = 139.9V/m



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**HAC\_E\_Dipole\_-1880MHz(AM 80%)**

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: AM 80%; 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 - SN2345; ConvF(1, 1, 1); Calibrated: 2005/6/3
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):**

Measurement grid: dx=5mm, dy=5mm

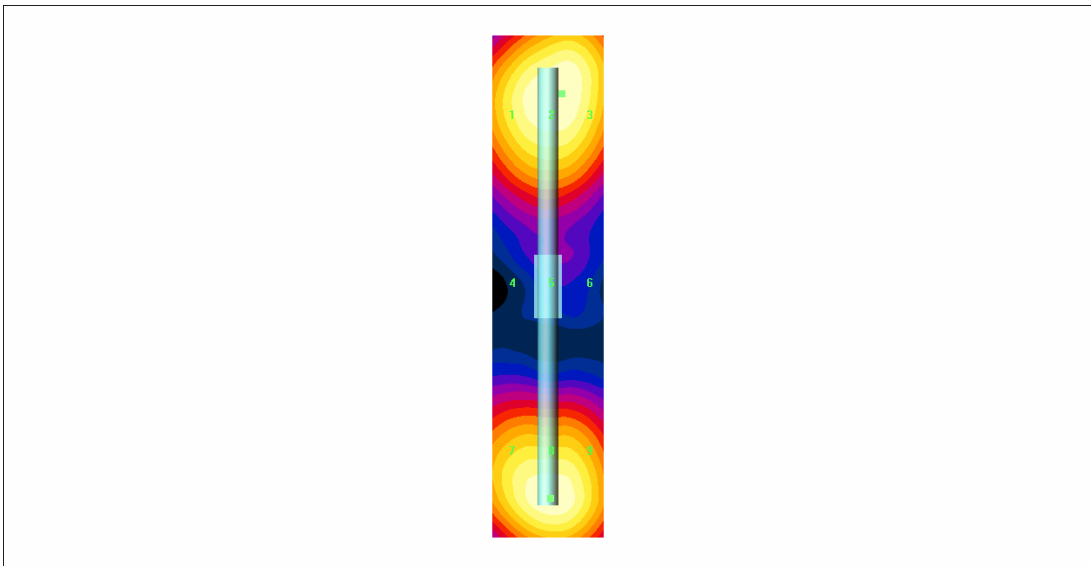
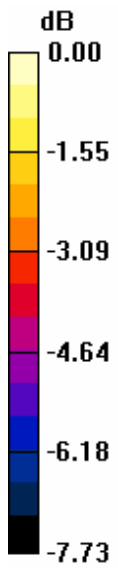
Maximum value of Total field (slot averaged) = **87.2** V/m

Hearing Aid Near-Field Category: **M3 (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>83.2</b>	<b>87.2</b>	<b>86.9</b>	<b>83.2</b>	<b>87.2</b>	<b>86.9</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>54.0</b>	<b>56.7</b>	<b>54.5</b>	<b>54.0</b>	<b>56.7</b>	<b>54.5</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>82.2</b>	<b>86.6</b>	<b>84.9</b>	<b>82.2</b>	<b>86.6</b>	<b>84.9</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 = 87.2V/m

Test Laboratory: Compliance Certification Services Inc.

**HAC\_E\_Dipole\_-1880MHz(CDMA)**

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: CDMA; 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 - SN2345; ConvF(1, 1, 1); Calibrated: 2005/6/3
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):**

Measurement grid: dx=5mm, dy=5mm

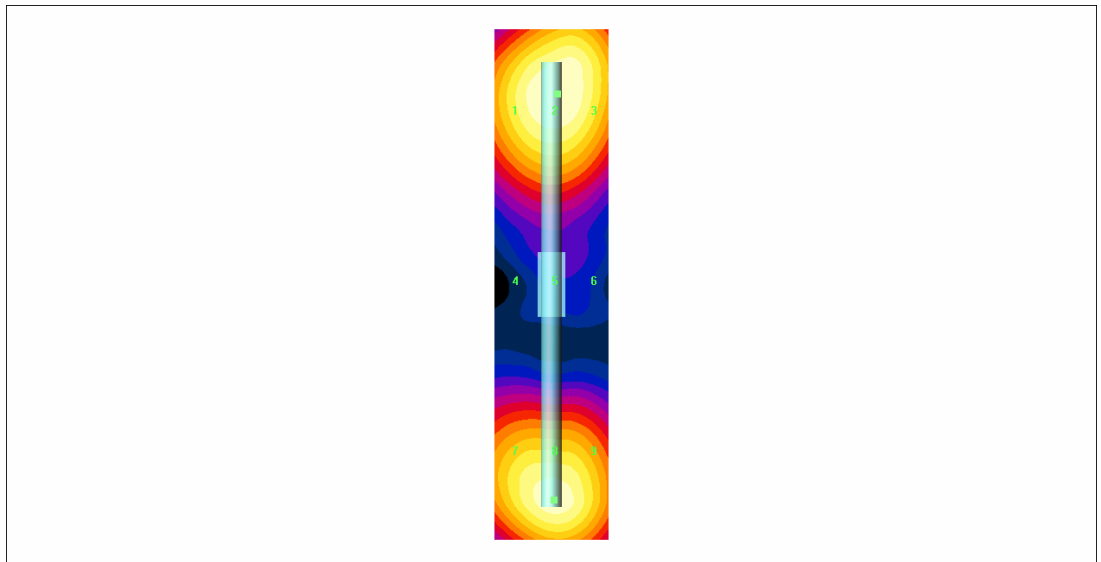
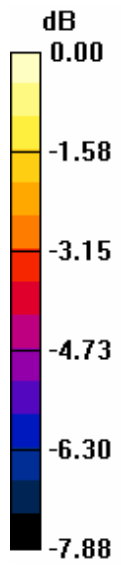
Maximum value of Total field (slot averaged) = **139.2** V/m

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>132.7</b>	<b>139.2</b>	<b>137.5</b>	<b>132.7</b>	<b>139.2</b>	<b>137.5</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>85.0</b>	<b>88.7</b>	<b>85.4</b>	<b>85.0</b>	<b>88.7</b>	<b>85.4</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>128.9</b>	<b>136.2</b>	<b>132.4</b>	<b>128.9</b>	<b>136.2</b>	<b>132.4</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 = 139.2V/m

Test Laboratory: Compliance Certification Services Inc.

**HAC\_E\_Dipole\_-2450MHz-0728**

**DUT: HAC Dipole 2450 MHz; Type: CD2450V3; Serial: 1026**

Communication System: CW; Frequency: 2450 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: DASYS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ER3DV6 - SN2345; ConvF(1, 1, 1); Calibrated: 6/3/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 8/24/2004
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DASYS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 2450 MHz/Hearing Aid Compatibility Test (41x181x1):**

Measurement grid: dx=5mm, dy=5mm

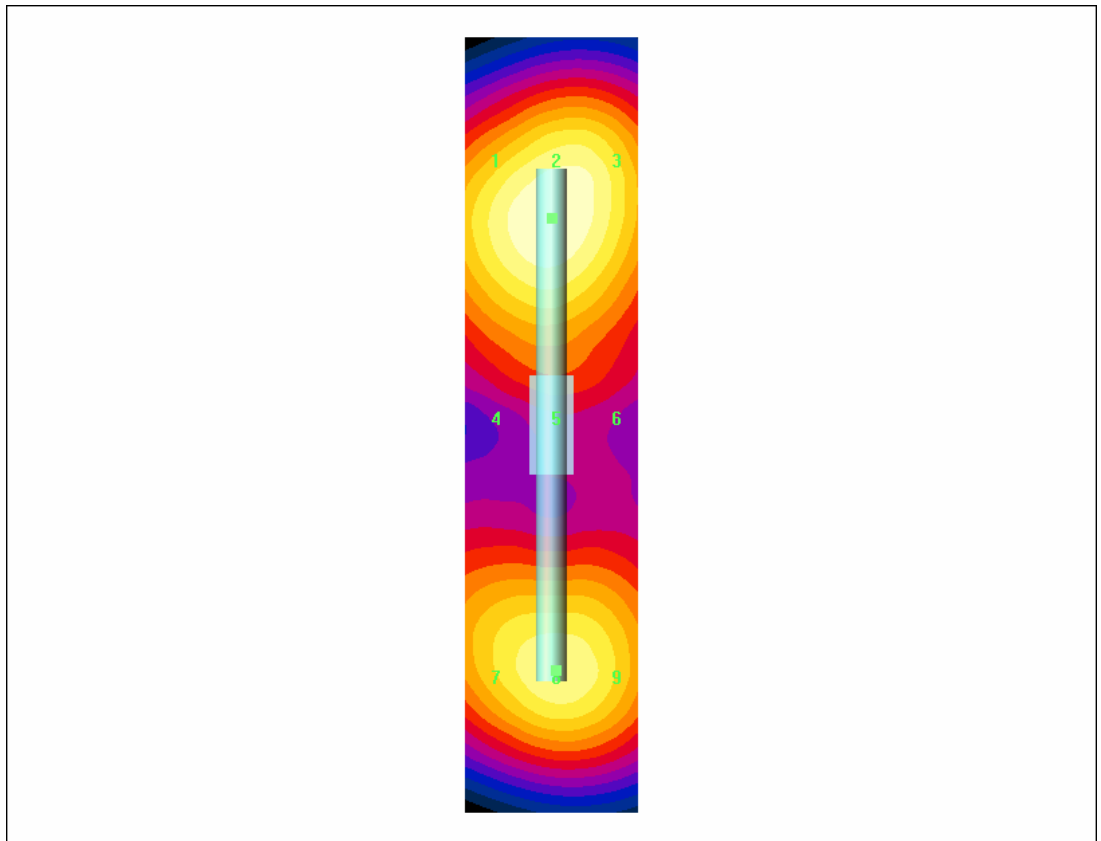
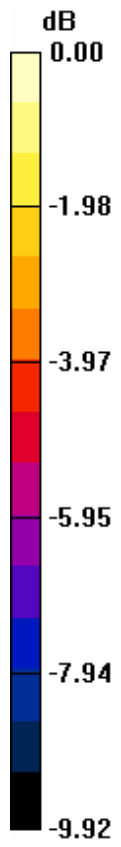
Maximum value of Total field (slot averaged) = **144.4** V/m

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>137.9</b>	<b>144.4</b>	<b>139.2</b>	<b>137.9</b>	<b>144.4</b>	<b>139.2</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>116.4</b>	<b>121.3</b>	<b>114.0</b>	<b>116.4</b>	<b>121.3</b>	<b>114.0</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>124.5</b>	<b>133.5</b>	<b>130.1</b>	<b>124.5</b>	<b>133.5</b>	<b>130.1</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 = 144.4V/m

Test Laboratory: Compliance Certification Services Inc.

**HAC\_E\_Dipole\_-2450MHz(AM 80%)-0728**

**DUT: HAC Dipole 2450 MHz; Type: CD2450V3; Serial: 1026**

Communication System: AM 80%; 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 - SN2345; ConvF(1, 1, 1); Calibrated: 6/3/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 8/24/2004
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**E Scan 10mm above CD 2450 MHz/Hearing Aid Compatibility Test (41x181x1):**

Measurement grid: dx=5mm, dy=5mm

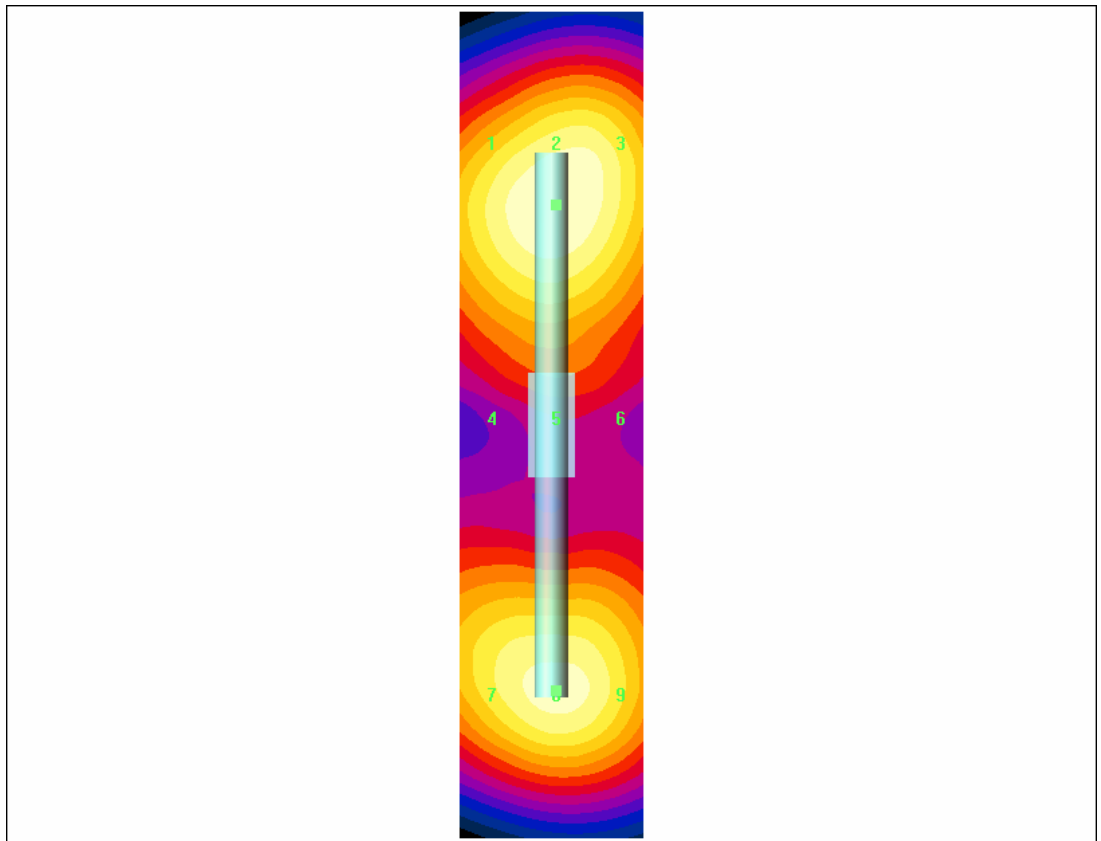
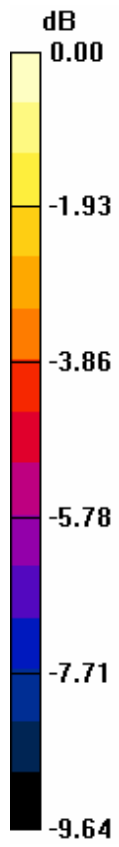
Maximum value of Total field (slot averaged) = **89.3** V/m

Hearing Aid Near-Field Category: **M3 (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>85.1</b>	<b>89.3</b>	<b>87.5</b>	<b>85.1</b>	<b>89.3</b>	<b>87.5</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>72.8</b>	<b>76.1</b>	<b>72.7</b>	<b>72.8</b>	<b>76.1</b>	<b>72.7</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>81.6</b>	<b>86.7</b>	<b>84.1</b>	<b>81.6</b>	<b>86.7</b>	<b>84.1</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 = 89.3V/m



Test Laboratory: Compliance Certification Services Inc.

**HAC\_H\_Dipole\_835MHz-CW**

**DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1031**

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 - SN6163; ; Calibrated: 2005/4/27
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm**

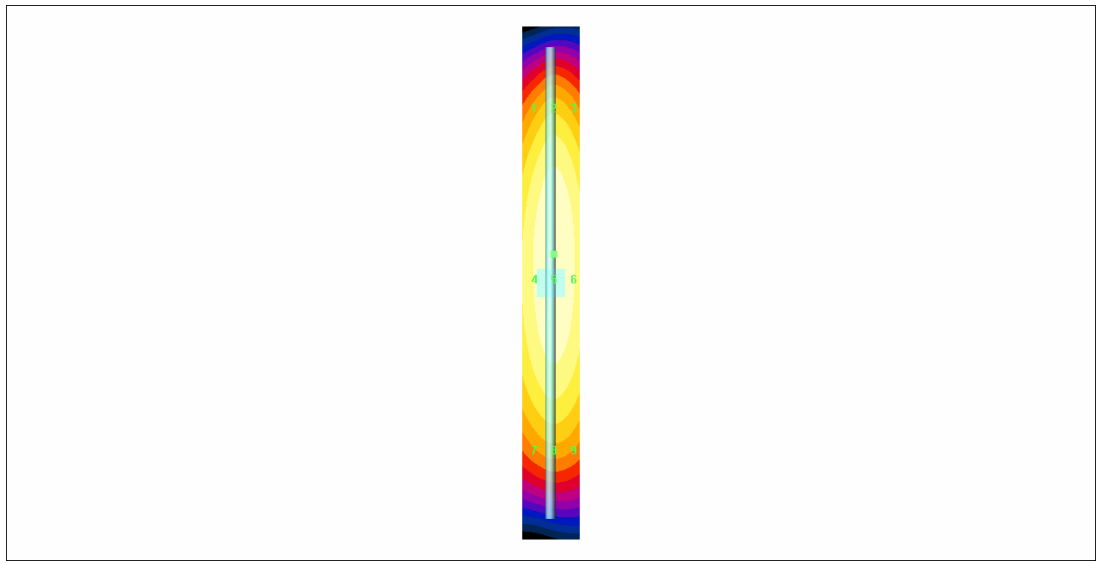
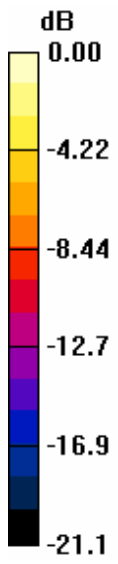
**Maximum value of Total field (slot averaged) = 0.409 A/m**

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

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

Grid 1 <b>0.347</b>	Grid 2 <b>0.384</b>	Grid 3 <b>0.373</b>	Grid 1 <b>0.347</b>	Grid 2 <b>0.384</b>	Grid 3 <b>0.373</b>
Grid 4 <b>0.375</b>	Grid 5 <b>0.409</b>	Grid 6 <b>0.399</b>	Grid 4 <b>0.375</b>	Grid 5 <b>0.409</b>	Grid 6 <b>0.399</b>
Grid 7 <b>0.318</b>	Grid 8 <b>0.342</b>	Grid 9 <b>0.334</b>	Grid 7 <b>0.318</b>	Grid 8 <b>0.342</b>	Grid 9 <b>0.334</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 = 0.409A/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_835MHz-AM

**DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1031**

Communication System: AM 80%; 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 - SN6163; ; Calibrated: 2005/4/27
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm**

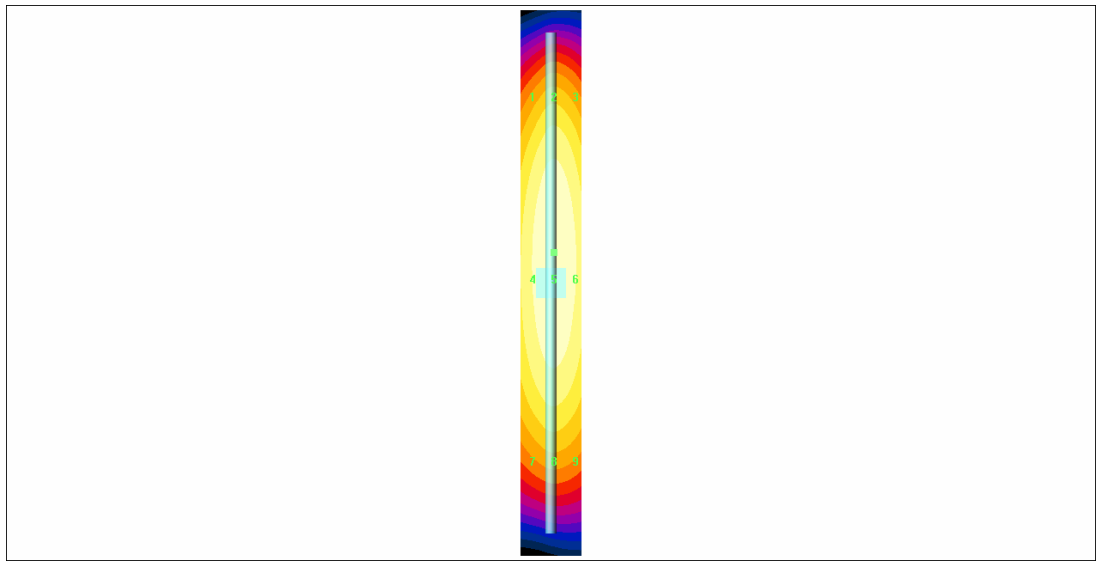
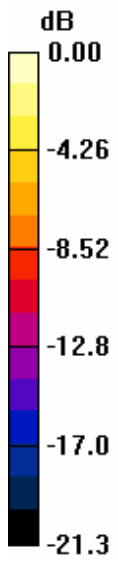
**Maximum value of Total field (slot averaged) = 0.266 A/m**

**Hearing Aid Near-Field Category: M3 (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>0.226</b>	<b>0.250</b>	<b>0.242</b>	<b>0.226</b>	<b>0.250</b>	<b>0.242</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.244</b>	<b>0.266</b>	<b>0.259</b>	<b>0.244</b>	<b>0.266</b>	<b>0.259</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.206</b>	<b>0.222</b>	<b>0.217</b>	<b>0.206</b>	<b>0.222</b>	<b>0.217</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 = 0.266A/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_835MHz-CDMA

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1031**

Communication System: CDMA; 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 - SN6163; ; Calibrated: 2005/4/27
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm**

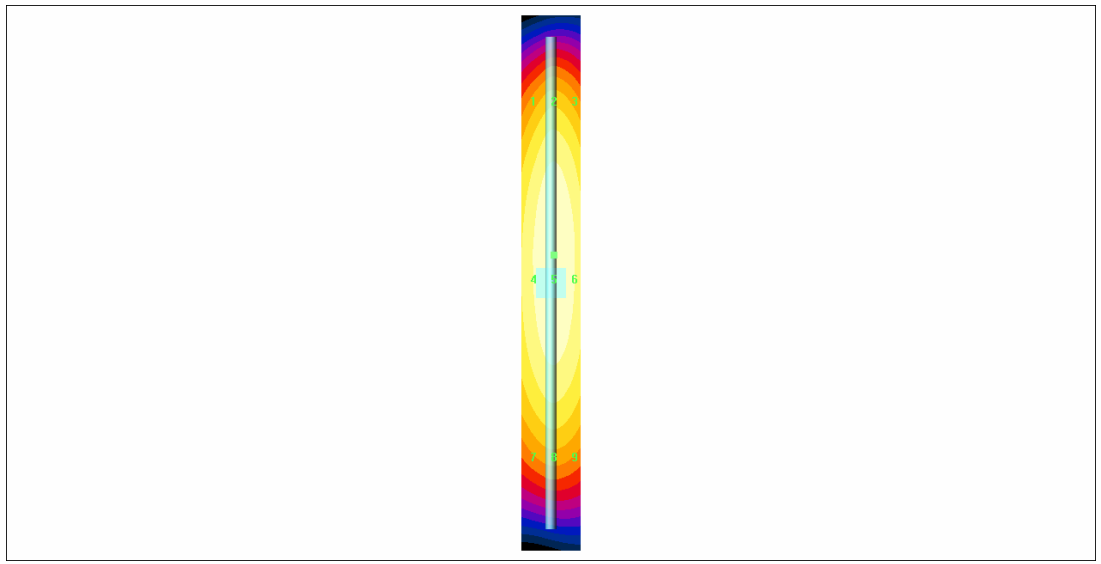
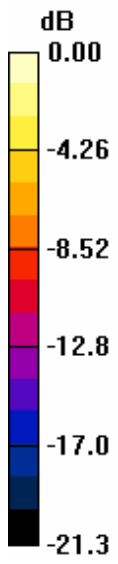
**Maximum value of Total field (slot averaged) = 0.406 A/m**

**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>0.343</b>	<b>0.380</b>	<b>0.368</b>	<b>0.343</b>	<b>0.380</b>	<b>0.368</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.371</b>	<b>0.406</b>	<b>0.394</b>	<b>0.371</b>	<b>0.406</b>	<b>0.394</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.311</b>	<b>0.337</b>	<b>0.329</b>	<b>0.311</b>	<b>0.337</b>	<b>0.329</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 = 0.406A/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_1880MHz-CW

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

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:

- Probe: H3DV6 - SN6163; ; Calibrated: 2005/4/27
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid Compatibility Test

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

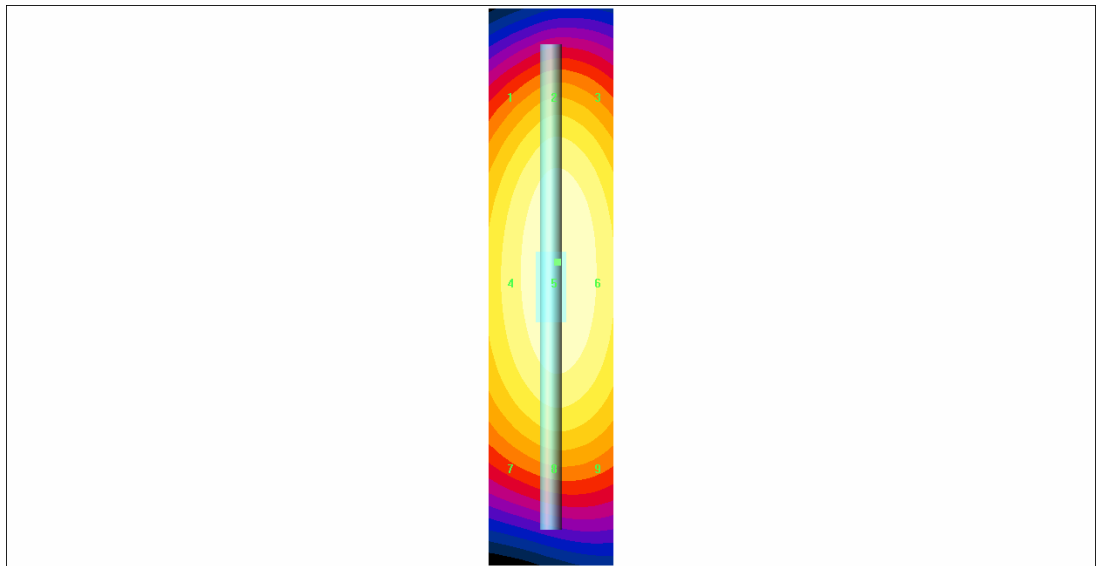
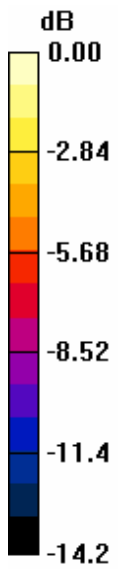
Maximum value of Total field (slot averaged) = **0.441** A/m

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>0.380</b>	<b>0.417</b>	<b>0.408</b>	<b>0.380</b>	<b>0.417</b>	<b>0.408</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.406</b>	<b>0.441</b>	<b>0.432</b>	<b>0.406</b>	<b>0.441</b>	<b>0.432</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.360</b>	<b>0.390</b>	<b>0.382</b>	<b>0.360</b>	<b>0.390</b>	<b>0.382</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 = 0.441A/m



Test Laboratory: Compliance Certification Services Inc.

**HAC\_H\_Dipole\_1880MHz-AM**

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: AM 80%; 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:

- Probe: H3DV6 - SN6163; ; Calibrated: 2005/4/27
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid Compatibility Test**

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

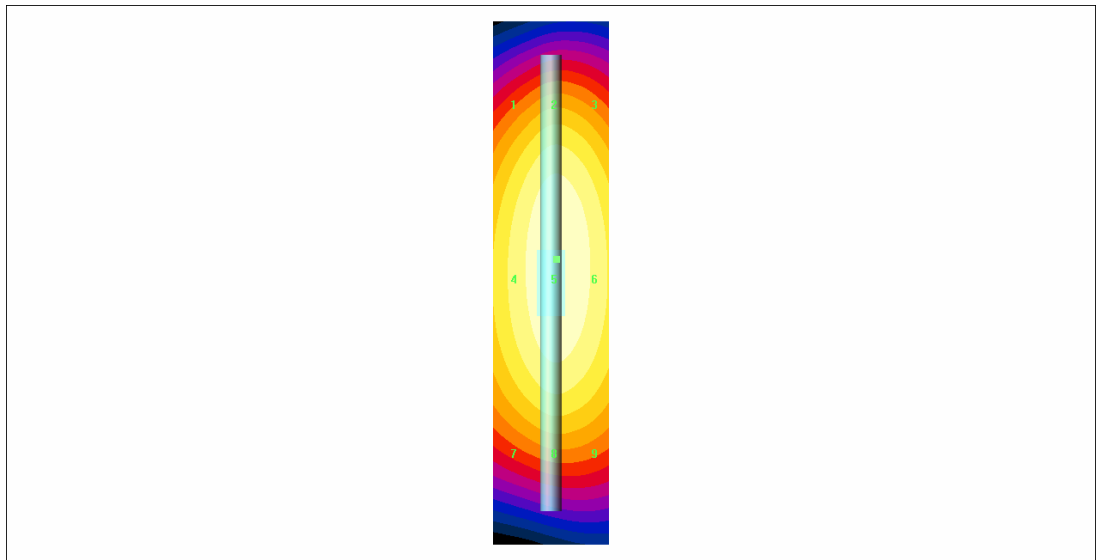
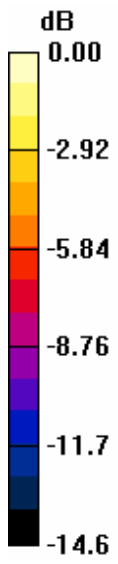
**Maximum value of Total field (slot averaged) = 0.293 A/m**

**Hearing Aid Near-Field Category: M3 (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>0.247</b>	<b>0.275</b>	<b>0.267</b>	<b>0.247</b>	<b>0.275</b>	<b>0.267</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.265</b>	<b>0.293</b>	<b>0.285</b>	<b>0.265</b>	<b>0.293</b>	<b>0.285</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.234</b>	<b>0.256</b>	<b>0.250</b>	<b>0.234</b>	<b>0.256</b>	<b>0.250</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 = 0.293A/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_1880MHz-CDMA

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1024**

Communication System: CDMA; 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:

- Probe: H3DV6 - SN6163; ; Calibrated: 2005/4/27
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 2004/8/24
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

### H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid Compatibility Test

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

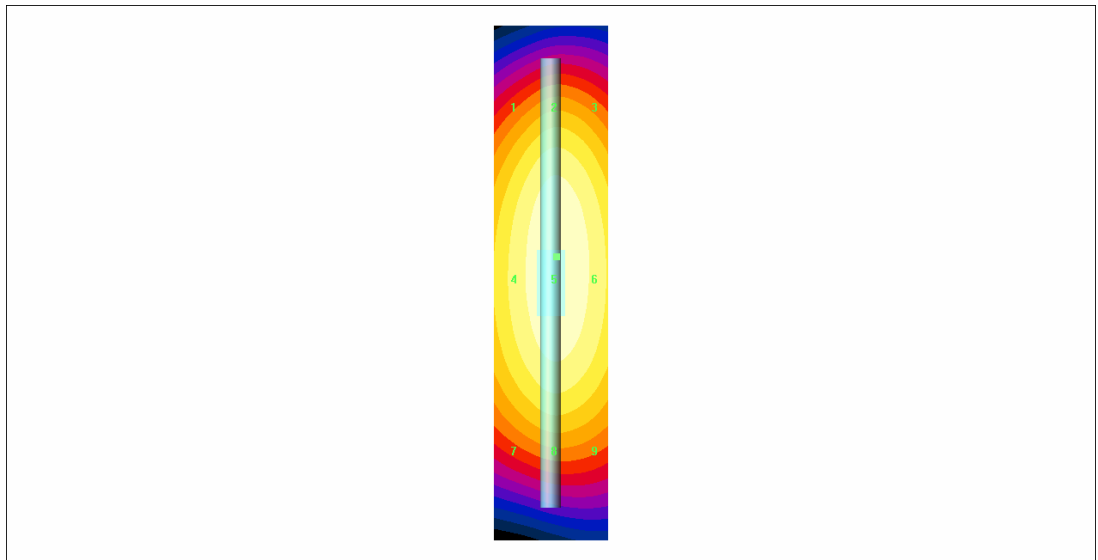
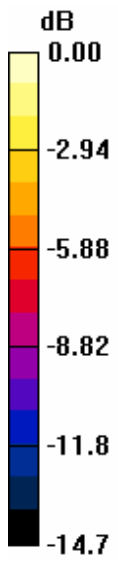
Maximum value of Total field (slot averaged) = **0.437** A/m

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>0.368</b>	<b>0.410</b>	<b>0.398</b>	<b>0.368</b>	<b>0.410</b>	<b>0.398</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.397</b>	<b>0.437</b>	<b>0.424</b>	<b>0.397</b>	<b>0.437</b>	<b>0.424</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.350</b>	<b>0.382</b>	<b>0.373</b>	<b>0.350</b>	<b>0.382</b>	<b>0.373</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 = 0.437A/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_2450MHz-CW

**DUT: HAC Dipole 2450 MHz; Type: CD2450V3; Serial: 1026**

Communication System: CW; Frequency: 2450 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 - SN6163; ; Calibrated: 4/27/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 8/24/2004
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid Compatibility Test

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

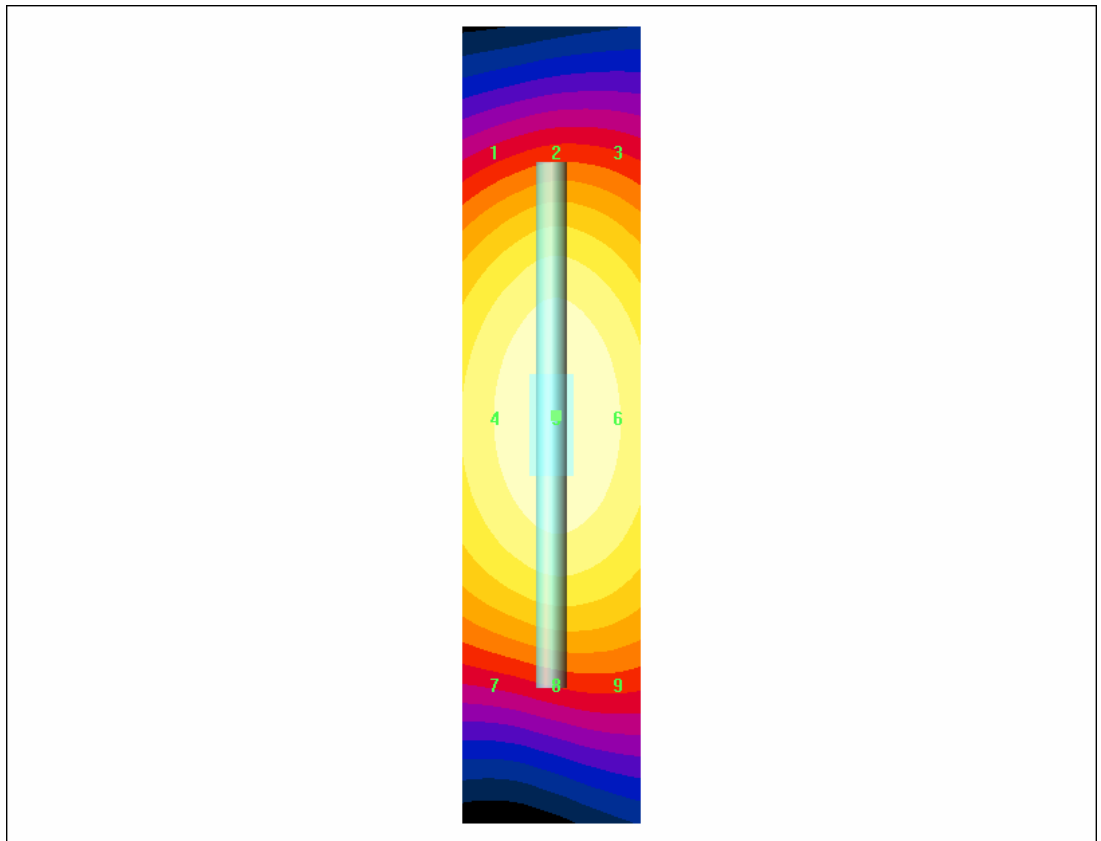
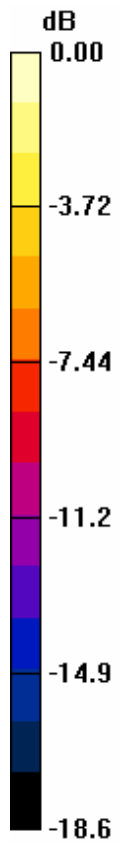
Maximum value of Total field (slot averaged) = **0.458** A/m

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>0.356</b>	<b>0.385</b>	<b>0.372</b>	<b>0.356</b>	<b>0.385</b>	<b>0.372</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.428</b>	<b>0.458</b>	<b>0.444</b>	<b>0.428</b>	<b>0.458</b>	<b>0.444</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.344</b>	<b>0.369</b>	<b>0.361</b>	<b>0.344</b>	<b>0.369</b>	<b>0.361</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 = 0.458A/m

Test Laboratory: Compliance Certification Services Inc.

## HAC\_H\_Dipole\_2450MHz-AM

**DUT: HAC Dipole 2450 MHz; Type: CD2450V3; Serial: 1026**

Communication System: AM 80%; Frequency: 2450 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 - SN6163; ; Calibrated: 4/27/2005
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn558; Calibrated: 8/24/2004
- Phantom: HAC Test Arch; Type: SD HAC P01 BA; Serial: 1027
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

## H Scan - H3DV6 probe tip 10mm above Device Reference/Hearing Aid Compatibility Test

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

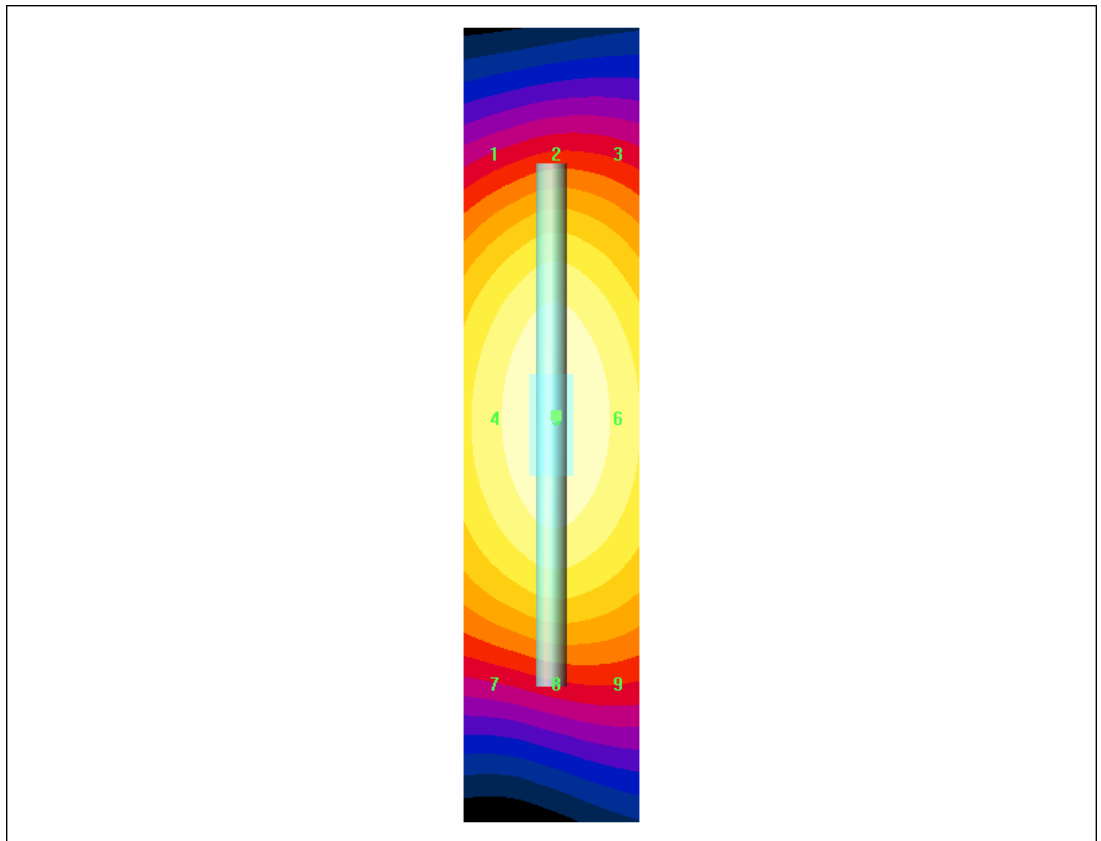
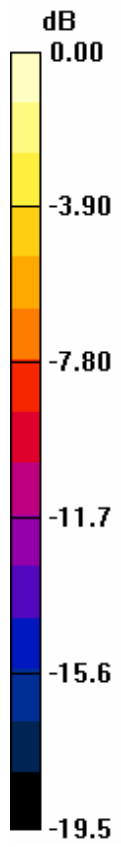
Maximum value of Total field (slot averaged) = **0.327** A/m

Hearing Aid Near-Field Category: **M3 (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>0.244</b>	<b>0.269</b>	<b>0.256</b>	<b>0.244</b>	<b>0.269</b>	<b>0.256</b>
Grid 4	Grid 5	Grid 6	Grid 4	Grid 5	Grid 6
<b>0.299</b>	<b>0.327</b>	<b>0.311</b>	<b>0.299</b>	<b>0.327</b>	<b>0.311</b>
Grid 7	Grid 8	Grid 9	Grid 7	Grid 8	Grid 9
<b>0.234</b>	<b>0.256</b>	<b>0.246</b>	<b>0.234</b>	<b>0.256</b>	<b>0.246</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 = 0.327A/m