

## APPENDIX C (DIPOLE VALIDATION)

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Test Laboratory: HCT CO., LTD.  
 Ambient Temperature 21.3 °C  
 Test Date Apr. 17, 2012

**DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1024**

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 SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

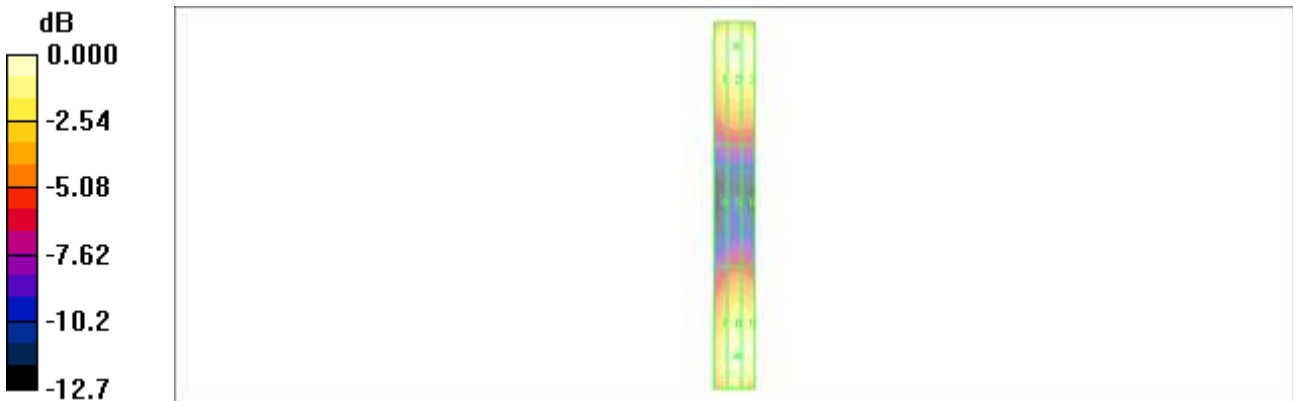
DASY4 Configuration:  
 - Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2011-05-16  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE3 Sn446; Calibrated: 2011-09-27  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 164.1 V/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 354.7 mm  
 Reference Value = 129.2 V/m; Power Drift = 0.001 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
155.0 M4	164.1 M4	161.6 M4
Grid 4	Grid 5	Grid 6
77.6 M4	84.8 M4	84.2 M4
Grid 7	Grid 8	Grid 9
148.5 M4	161.8 M4	160.8 M4

**Cursor:**  
 Total = 164.1 V/m  
 E Category: M4  
 Location: -1, -78.5, 365.8 mm



0 dB = 164.1V/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature 21.3 °C  
 Test Date Apr. 17, 2012

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1019**

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 Device Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

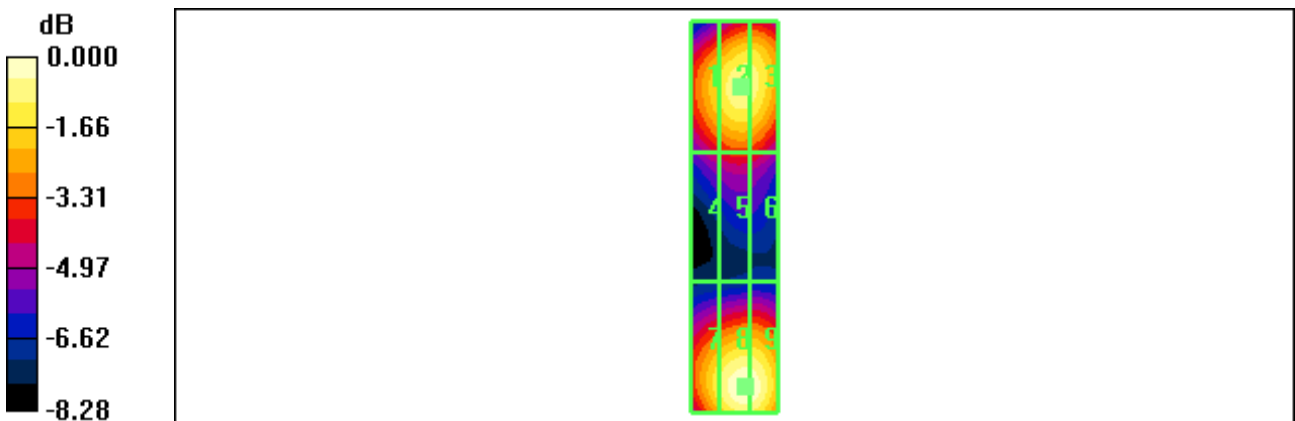
DASY4 Configuration:  
 - Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2011-05-16  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE3 Sn446; Calibrated: 2011-09-27  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 148.3 V/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 77.8 V/m; Power Drift = -0.020 dB  
**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
125.5 M2	137.2 M2	136.2 M2
Grid 4	Grid 5	Grid 6
93.2 M3	99.4 M3	97.9 M3
Grid 7	Grid 8	Grid 9
131.4 M2	148.3 M2	147.7 M2

**Cursor:**  
 Total = 148.3 V/m  
 E Category: M2  
 Location: -2.5, 39, 364.8 mm



0 dB = 148.3V/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature 21.3 °C  
 Test Date Apr. 17, 2012

**DUT: HAC–Dipole 835 MHz; Type: D835V3; Serial: 1024**

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 SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

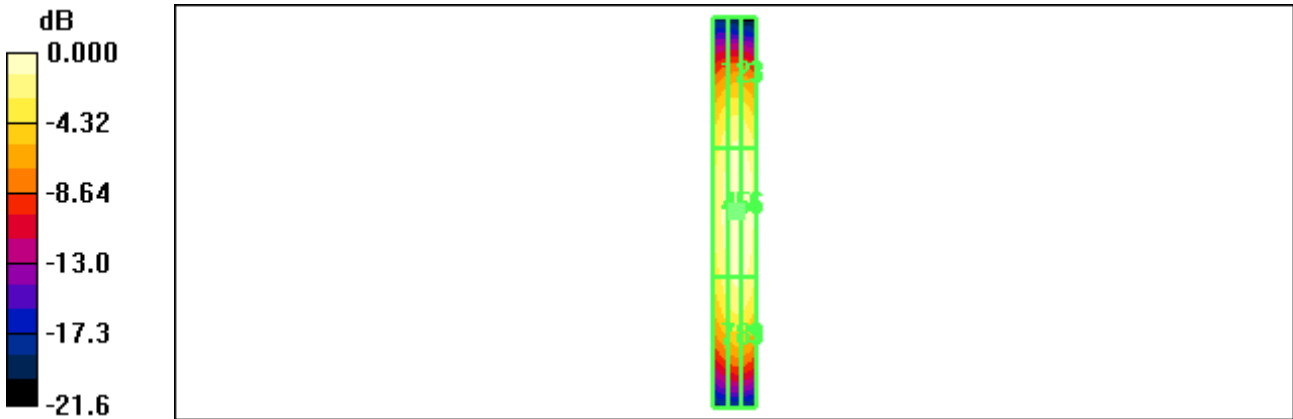
DASY4 Configuration:  
 - Probe: H3DV6 - SN6101; ; Calibrated: 2011-05-18  
 - Sensor–Surface: (Fix Surface)  
 - Electronics: DAE3 Sn446; Calibrated: 2011-09-27  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.456 A/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 354.7 mm  
 Reference Value = 0.569 A/m; Power Drift = -0.047 dB  
**Hearing Aid Near–Field Category: M4 (AWF 0 dB)**

Peak H–field in A/m

Grid 1	Grid 2	Grid 3
0.368 M4	0.400 M4	0.393 M4
Grid 4	Grid 5	Grid 6
0.415 M4	0.456 M4	0.449 M4
Grid 7	Grid 8	Grid 9
0.366 M4	0.405 M4	0.399 M4

**Cursor:**  
 Total = 0.456 A/m  
 H Category: M4  
 Location: -1.5, -0.5, 366.6 mm



0 dB = 0.456A/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature 21.3 °C  
 Test Date Apr. 17, 2012

**DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1019**

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 SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

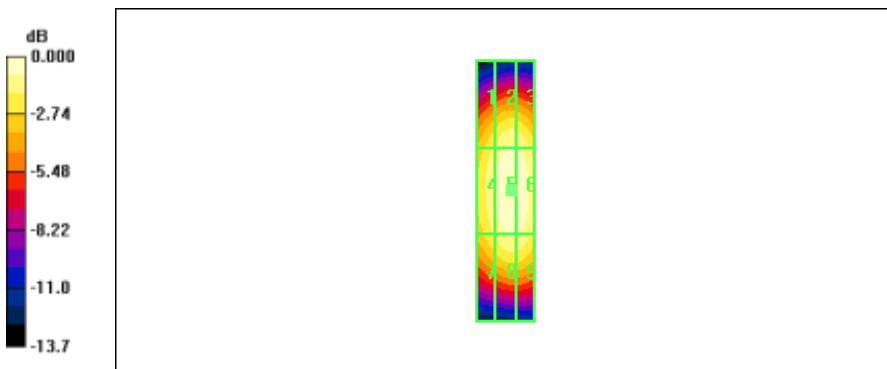
- DASY4 Configuration:
- Probe: H3DV6 - SN6101; ; Calibrated: 2011-05-18
  - Sensor-Surface: (Fix Surface)
  - Electronics: DAE3 Sn446; Calibrated: 2011-09-27
  - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.440 A/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 354.7 mm  
 Reference Value = 0.533 A/m; Power Drift = -0.021 dB  
**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.364 M2	0.403 M2	0.399 M2
Grid 4	Grid 5	Grid 6
0.399 M2	0.440 M2	0.437 M2
Grid 7	Grid 8	Grid 9
0.363 M2	0.401 M2	0.399 M2

**Cursor:**  
 Total = 0.440 A/m  
 H Category: M2  
 Location: -2, 0, 366.6 mm



0 dB = 0.440A/m