

## **APPENDIX C (DIPOLE VALIDATION)**

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Test Laboratory: HCT CO., LTD.  
 Ambient Temperature: 21.5 °C  
 Test Date: Oct.26, 2010

**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

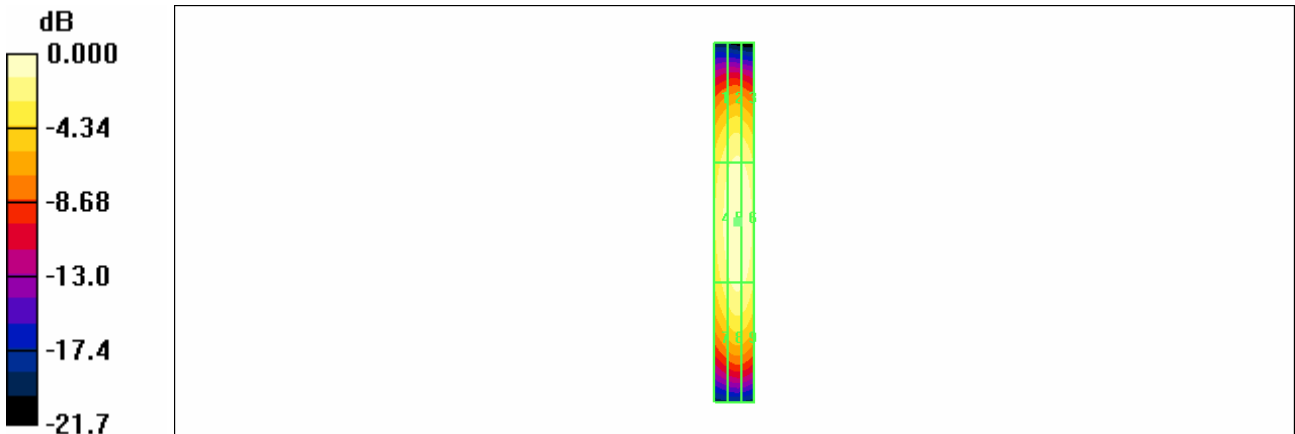
DASY4 Configuration:  
 - Probe: H3DV6 - SN6101; ; Calibrated: 2010-05-27  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE3 Sn466; Calibrated: 2010-07-21  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.453 A/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 354.7 mm  
 Reference Value = 0.565 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
0.366 M4	0.397 M4	0.391 M4
Grid 4	Grid 5	Grid 6
0.412 M4	0.453 M4	0.446 M4
Grid 7	Grid 8	Grid 9
0.364 M4	0.403 M4	0.396 M4

**Cursor:**  
 Total = 0.453 A/m  
 H Category: M4  
 Location: -1.5, -0.5, 366.6 mm



0 dB = 0.453A/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature: 21.5 °C  
 Test Date: Oct.26, 2010

**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

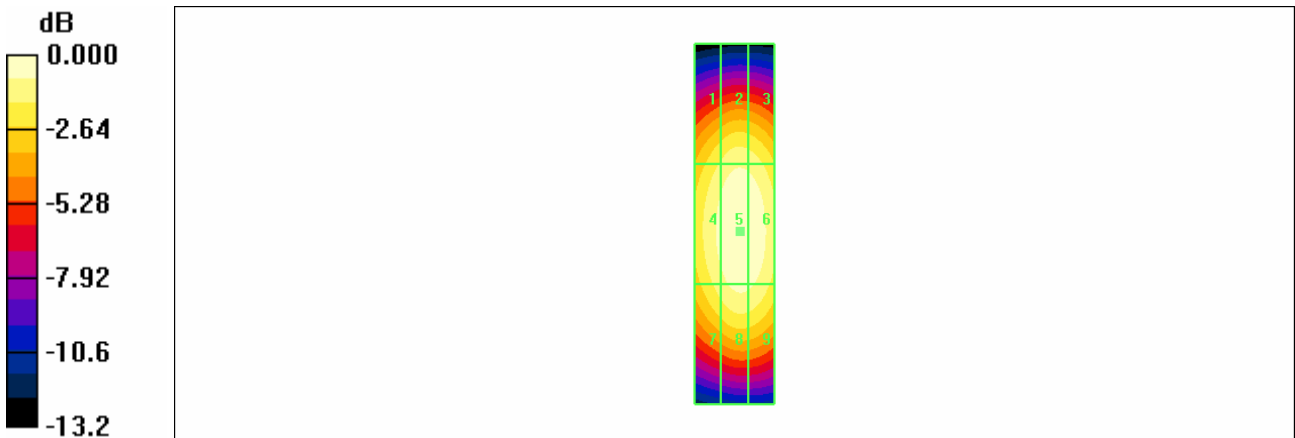
DASY4 Configuration:  
 - Probe: H3DV6 - SN6101; ; Calibrated: 2010-05-27  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE3 Sn466; Calibrated: 2010-07-21  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.458 A/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 354.7 mm  
 Reference Value = 0.547 A/m; Power Drift = 0.013 dB  
**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.379 M2	0.408 M2	0.402 M2
Grid 4	Grid 5	Grid 6
0.427 M2	0.458 M2	0.453 M2
Grid 7	Grid 8	Grid 9
0.395 M2	0.427 M2	0.422 M2

**Cursor:**  
 Total = 0.458 A/m  
 H Category: M2  
 Location: -1.5, 2, 366.6 mm



0 dB = 0.458A/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature: 21.5 °C  
 Test Date: Oct.26, 2010

**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

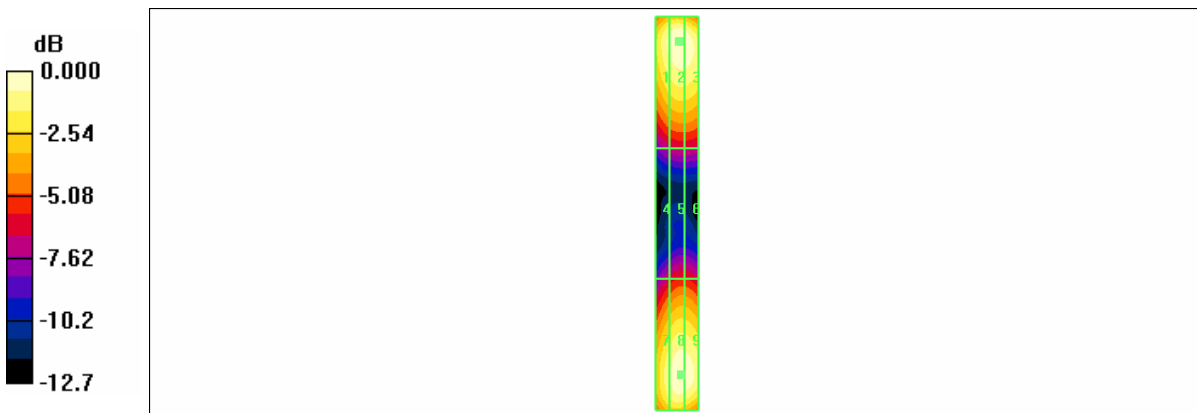
DASY4 Configuration:  
 - Probe: ER3DV6 – SN2343; ConvF(1, 1, 1); Calibrated: 2010-05-20  
 - Sensor–Surface: (Fix Surface)  
 - Electronics: DAE3 Sn466; Calibrated: 2010-07-21  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 164.0 V/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 354.7 mm  
 Reference Value = 128.6 V/m; Power Drift = -0.004 dB  
**Hearing Aid Near–Field Category: M4 (AWF 0 dB)**

Peak E–field in V/m

Grid 1	Grid 2	Grid 3
154.4 M4	164.0 M4	161.5 M4
Grid 4	Grid 5	Grid 6
77.1 M4	84.7 M4	84.2 M4
Grid 7	Grid 8	Grid 9
147.6 M4	161.7 M4	160.8 M4

**Cursor:**  
 Total = 164.0 V/m  
 E Category: M4  
 Location: -1, -78.5, 365.8 mm



0 dB = 164.0V/m

Test Laboratory: HCT CO., LTD.  
 Ambient Temperature: 21.5 °C  
 Test Date: Oct.26, 2010

**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

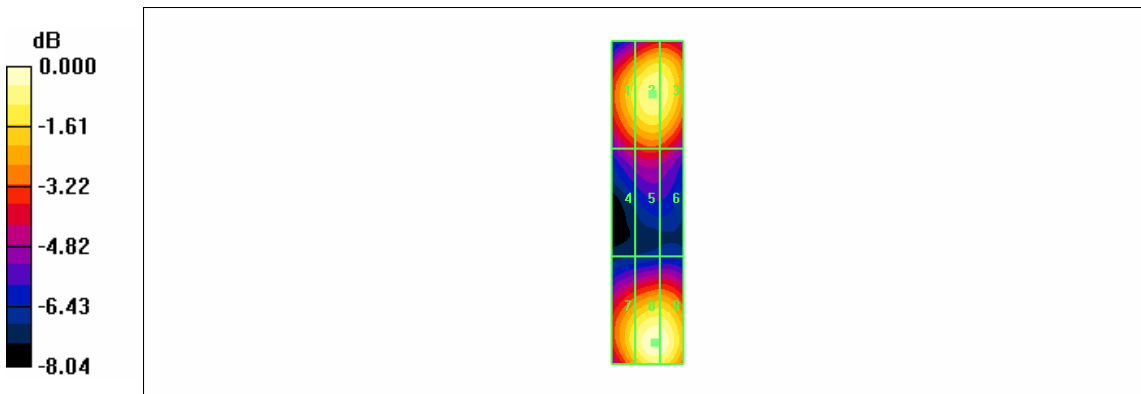
DASY4 Configuration:  
 - Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2010-05-20  
 - Sensor-Surface: (Fix Surface)  
 - Electronics: DAE3 Sn466; Calibrated: 2010-07-21  
 - Phantom: HAC Test Arch; Type: SD HAC P01 BA

**E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 138.9 V/m  
 Probe Modulation Factor = 1.00  
 Device Reference Point: 0.000, 0.000, 353.7 mm  
 Reference Value = 74.4 V/m; Power Drift = -0.034 dB  
**Hearing Aid Near-Field Category: M2 (AWF 0 dB)**

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
119.6 M2	130.8 M2	129.5 M2
Grid 4	Grid 5	Grid 6
88.9 M3	94.3 M3	92.6 M3
Grid 7	Grid 8	Grid 9
123.0 M2	138.9 M2	138.1 M2

**Cursor:**  
 Total = 138.9 V/m  
 E Category: M2  
 Location: -2, 39, 364.8 mm



0 dB = 138.9V/m