

ATTACHMENT B – DIPOLE VALIDATION

Validation Data (E-Field 835MHz)

Test Laboratory: HCT

DUT: HAC-Dipole 835 MHz; Type: D835V3

Program Name: HAC E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

Phantom section: E Dipole Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2005-04-27

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn614; Calibrated: 2005-04-21

- 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 = 180.3 V/m

Probe Modulation Factor = 1.00

Reference Value = 118.8 V/m; Power Drift = 0.020 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
165.9	180.3	173.2
Grid 4	Grid 5	Grid 6
81.4	94.1	94.1
Grid 7	Grid 8	Grid 9
152.4	176.2	176.2

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



■ Validation Data (E-Field 1880 MHz)

Test Laboratory: HCT

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Program Name: HAC H Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

Phantom section: E Dipole Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2343; ConvF(1, 1, 1); Calibrated: 2005-04-27

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn614; Calibrated: 2005-04-21

- Phantom: HAC Test Arch; Type: SD HAC F01 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 = 141.7 V/m

Probe Modulation Factor = 1.00

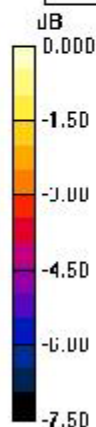
Reference Value = 158.4 V/m; Power Drift = -0.082 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
141.7	141.7	125.0
Grid 4	Grid 5	Grid 6
89.6	89.5	78.8
Grid 7	Grid 8	Grid 9
140.2	140.2	123.8

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 = 141.7V/m

■ Validation Data (H-Field 835 MHz)

Test Laboratory: HCT

DUT: HAC-Dipole 835 MHz; Type: D835V3

Program Name: HAC E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: H Dipole Section

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2005-07-20

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn614; Calibrated: 2005-04-21

- 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 = 0.491 A/m

Probe Modulation Factor = 1.00

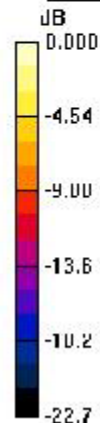
Reference Value = 0.521 A/m; Power Drift = 0.048 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.418	0.432	0.399
Grid 4	Grid 5	Grid 6
0.473	0.491	0.455
Grid 7	Grid 8	Grid 9
0.416	0.432	0.399

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 = 0.491 A/m



■ Validation Data (H-Field 1880 MHz)

Test Laboratory: HCT

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Program Name: HAC H Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: H Dipole Section

DASY4 Configuration:

- Probe: H3DV6 - SN6101; ; Calibrated: 2005-07-20

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn614; Calibrated: 2005-04-21

- 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 = 0.483 A/m

Probe Modulation Factor = 1.00

Reference Value = 0.502 A/m; Power Drift = 0.058 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.436	0.451	0.410
Grid 4	Grid 5	Grid 6
0.470	0.483	0.445
Grid 7	Grid 8	Grid 9
0.425	0.437	0.405

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

