

ATTACHMENT B – DIPOLE VALIDATION

■ Validation Data (E-Field 835MHz)

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

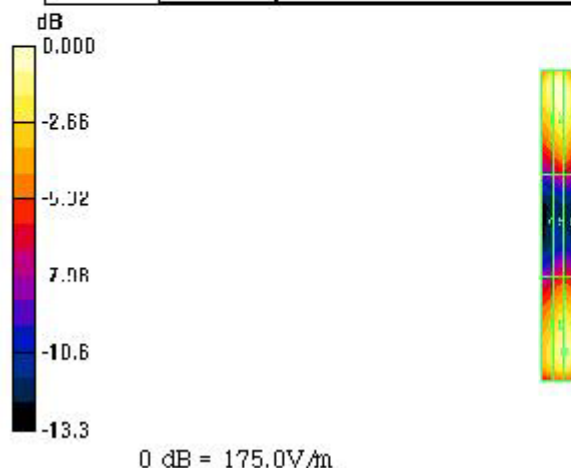
E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 175.0 V/m
Probe Modulation Factor = 1.00
Reference Value = 107.6 V/m; Power Drift = -0.055 dB
Hearing Aid Hear-Field Category: M2 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
161.7	175.0	167.9
Grid 4	Grid 5	Grid 6
75.8	88.2	88.2
Grid 7	Grid 8	Grid 9
139.7	162.7	162.9

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)

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 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 = 137.7 V/m

Probe Modulation Factor = 1.00

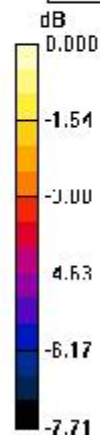
Reference Value = 149.8 V/m; Power Drift = 0.018 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
135.8	135.8	121.0
Grid 4	Grid 5	Grid 6
92.1	92.1	81.5
Grid 7	Grid 8	Grid 9
137.7	137.7	124.3

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 = 137.7V/m



Validation Data (H-Field 835 MHz)

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: $\sigma = 0 \text{ mho/m}$, $\epsilon_r = 1$; $\rho = 1 \text{ kg/m}^3$
 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

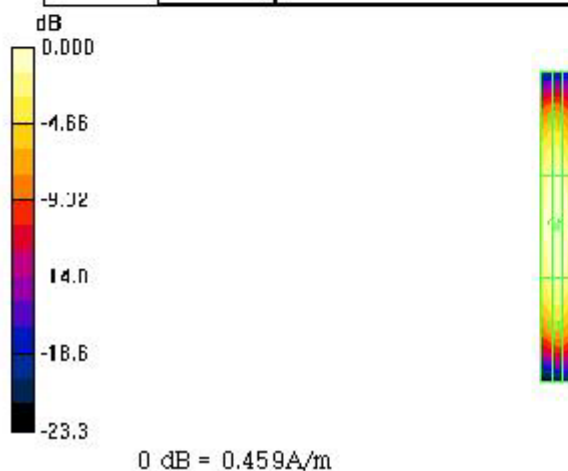
H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):

Measurement grid: dx=5mm, dy=5mm
 Maximum value of peak Total field = 0.459 A/m
 Probe Modulation Factor = 1.00
 Reference Value = 0.486 A/m; Power Drift = 0.028 dB
Hearing Aid Hear-Field Category: M2 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.397	0.408	0.377
Grid 4	Grid 5	Grid 6
0.441	0.459	0.431
Grid 7	Grid 8	Grid 9
0.380	0.403	0.381

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 (H-Field 1880 MHz)

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: 2002-01-07

- Sensor Surface: (Fix Surface)

- Electronics: DAB4 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 = 0.480 A/m

Probe Modulation Factor = 1.00

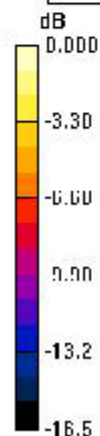
Reference Value = 0.511 A/m; Power Drift = 0.008 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.433	0.452	0.424
Grid 4	Grid 5	Grid 6
0.458	0.480	0.450
Grid 7	Grid 8	Grid 9
0.404	0.429	0.402

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 = 0.480 A/m

