

ATTACHMENT B – DIPOLE VALIDATION

■ Validation Data (E-Field 835MHz)

Test Laboratory : HCT

DUT: HA C-Dipole 835 MHz; Type: D835V3
Program Name: HAC E Dipole

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ rho/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: SDHAC P01 BA

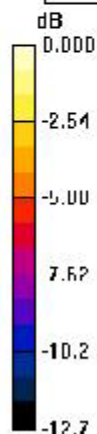
E Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 167.2 V/m
Probe Modulation Factor = 1.00
Reference Value = 102.5 V/m; Power Drift = -0.038 dB
Hearing Aid Hear-Field Category: M2 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
154.4	167.2	160.5
Grid 4	Grid 5	Grid 6
72.0	85.7	85.9
Grid 7	Grid 8	Grid 9
135.2	159.4	160.7

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 = 167.2V/m

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: SDHAC P01 BA

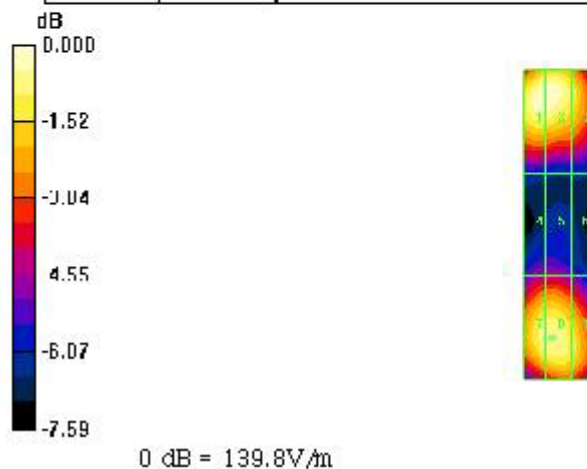
H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 139.8 V/m
Probe Modulation Factor = 1.00
Reference Value = 148.1 V/m; Power Drift = 0.022 dB
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
139.8	139.8	124.9
Grid 4	Grid 5	Grid 6
86.2	86.3	79.4
Grid 7	Grid 8	Grid 9
131.2	132.2	123.5

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 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

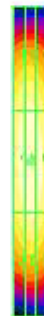
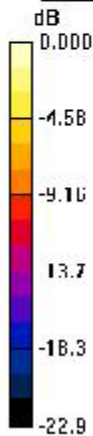
H Scan 10mm above CD 835 MHz/Hearing Aid Compatibility Test (41x361x1):

Measurement grid: dx=5mm dy=5mm
Maximum value of peak Total field = 0.450 A/m
Probe Modulation Factor = 1.00
Reference Value = 0.477 A/m; Power Drift = -0.003 dB
Hearing Aid Hear-Field Category: M2 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.386	0.400	0.373
Grid 4	Grid 5	Grid 6
0.430	0.450	0.424
Grid 7	Grid 8	Grid 9
0.371	0.394	0.375

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 = 0.450 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: 2002-01-07
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn614; Calibrated: 2005-04-21
- Phantom: HAC Test Arch; Type: SDHAC P01 BA

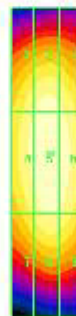
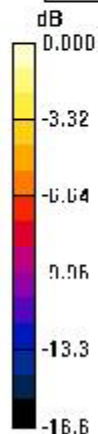
H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.481 A/m
Probe Modulation Factor = 1.00
Reference Value = 0.514 A/m; Power Drift = -0.018 dB
Hearing Aid Hear-Field Category: M2 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.423	0.456	0.438
Grid 4	Grid 5	Grid 6
0.444	0.481	0.467
Grid 7	Grid 8	Grid 9
0.385	0.428	0.417

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 = 0.481 A/m