



Appendix A

Detailed System Check Results

1. System Check Results
System Performance Check 835 MHz
System Performance Check 1880 MHz
System Performance Check 2450 MHz

Test Laboratory: SGS-SAR Lab

HAC-E-Dipole CD835V3

DUT: CD835V3; Type: CD835V3; Serial: 1052

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2020-05-29;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn896; Calibrated: 2020-06-11
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 = 15mm/Hearing Aid Compatibility Test at 15mm distance

(41x361x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 181.0 V/m; Power Drift = 0.05 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 107.2 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

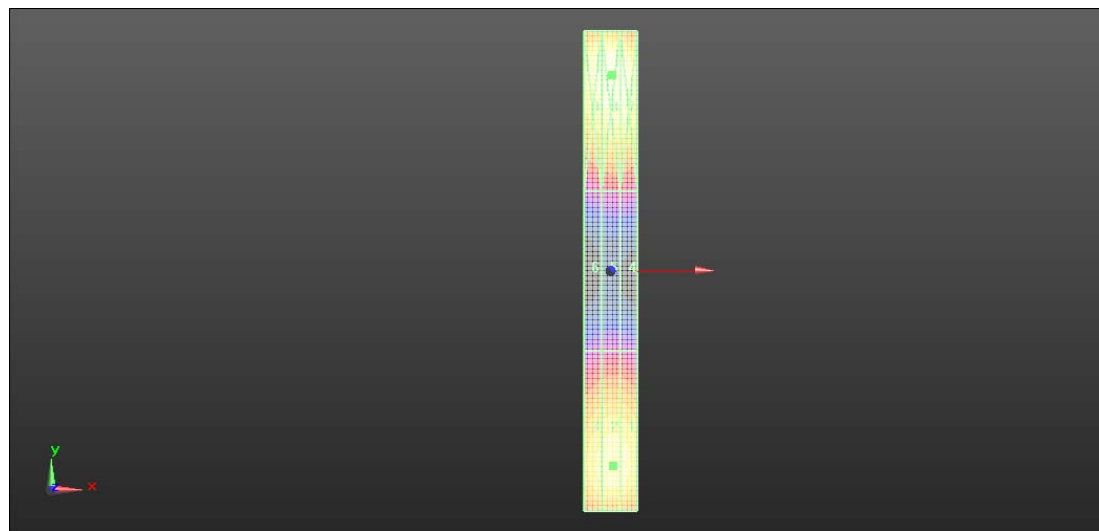
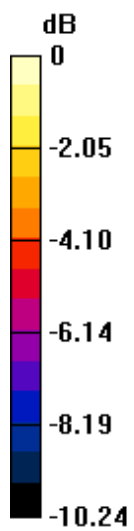
Grid 1 M4 106.4 V/m	Grid 2 M4 107.2 V/m	Grid 3 M4 104.1 V/m
Grid 4 M4 63.46 V/m	Grid 5 M4 63.60 V/m	Grid 6 M4 61.42 V/m
Grid 7 M4 115.6 V/m	Grid 8 M4 117.6 V/m	Grid 9 M4 113.6 V/m

Cursor:

Total = 117.6 V/m

E Category: M4

Location: 0.5, 73.5, 8.7 mm



0 dB = 117.6 V/m = 41.41 dBV/m

Test Laboratory: SGS-SAR Lab

HAC-E-Dipole CD835V3

DUT: CD835V3; Type: CD835V3; Serial: 1052

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

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

Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2020-05-29;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn896; Calibrated: 2020-06-11
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 = 15mm/Hearing Aid Compatibility Test at 15mm distance

(41x361x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 180.9 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 106.6 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

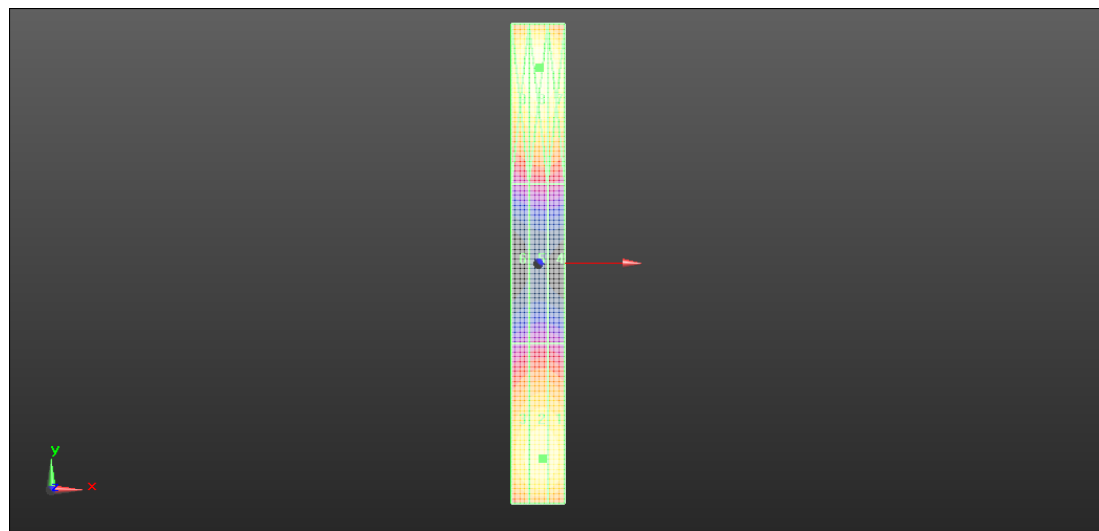
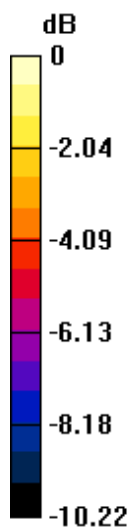
Grid 1 M4 106.0 V/m	Grid 2 M4 106.6 V/m	Grid 3 M4 103.1 V/m
Grid 4 M4 63.25 V/m	Grid 5 M4 63.39 V/m	Grid 6 M4 61.16 V/m
Grid 7 M4 115.0 V/m	Grid 8 M4 117.1 V/m	Grid 9 M4 113.3 V/m

Cursor:

Total = 117.1 V/m

E Category: M4

Location: 0.5, 73.5, 8.7 mm



0 dB = 117.1 V/m = 41.37 dBV/m

Test Laboratory: SGS-SAR Lab

HAC-E-Dipole CD1880V3

DUT: CD1880V3; Type: CD1880V3; Serial: 1044

Communication System: UID 0, CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2020-05-29;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn896; Calibrated: 2020-06-11
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 = 15mm/Hearing Aid Compatibility Test at 15mm distance

(41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 156.3 V/m; Power Drift = -0.14 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 88.71 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

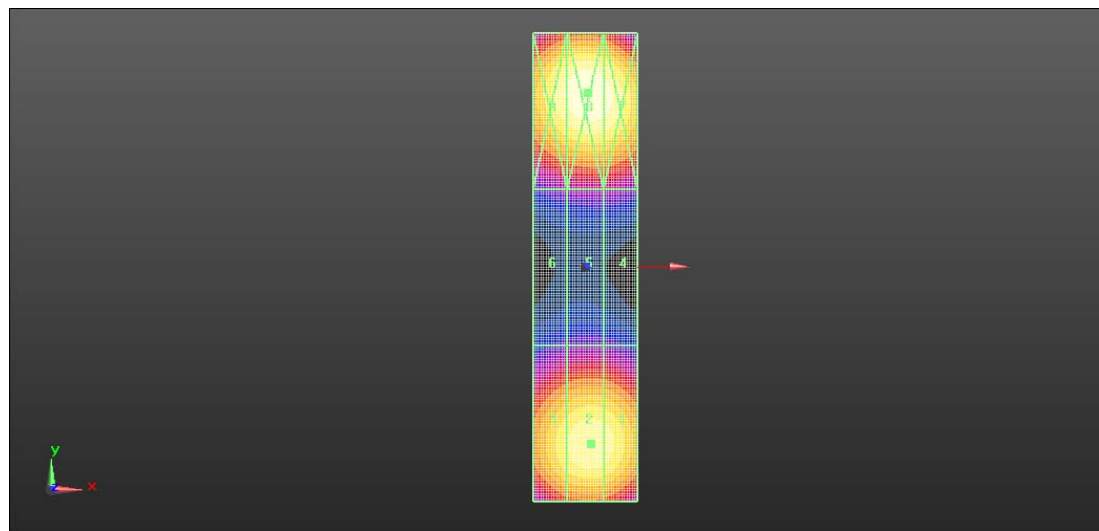
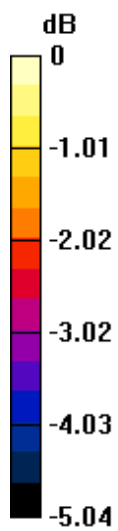
Grid 1 M3 87.93 V/m	Grid 2 M3 88.71 V/m	Grid 3 M3 85.90 V/m
Grid 4 M3 65.75 V/m	Grid 5 M3 65.78 V/m	Grid 6 M3 64.36 V/m
Grid 7 M3 91.22 V/m	Grid 8 M3 92.55 V/m	Grid 9 M3 89.70 V/m

Cursor:

Total = 92.55 V/m

E Category: M3

Location: 0.5, 33.5, 8.7 mm



0 dB = 92.55 V/m = 39.33 dBV/m

Test Laboratory: SGS-SAR Lab

HAC-E-Dipole CD1880V3

DUT: CD1880V3; Type: CD1880V3; Serial: 1044

Communication System: UID 0, CW; Frequency: 1880 MHz; Duty Cycle: 1:1

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

Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2020-05-29;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn896; Calibrated: 2020-06-11
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 = 15mm/Hearing Aid Compatibility Test at 15mm distance

(41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 156.6 V/m; Power Drift = -0.05 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 88.83 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

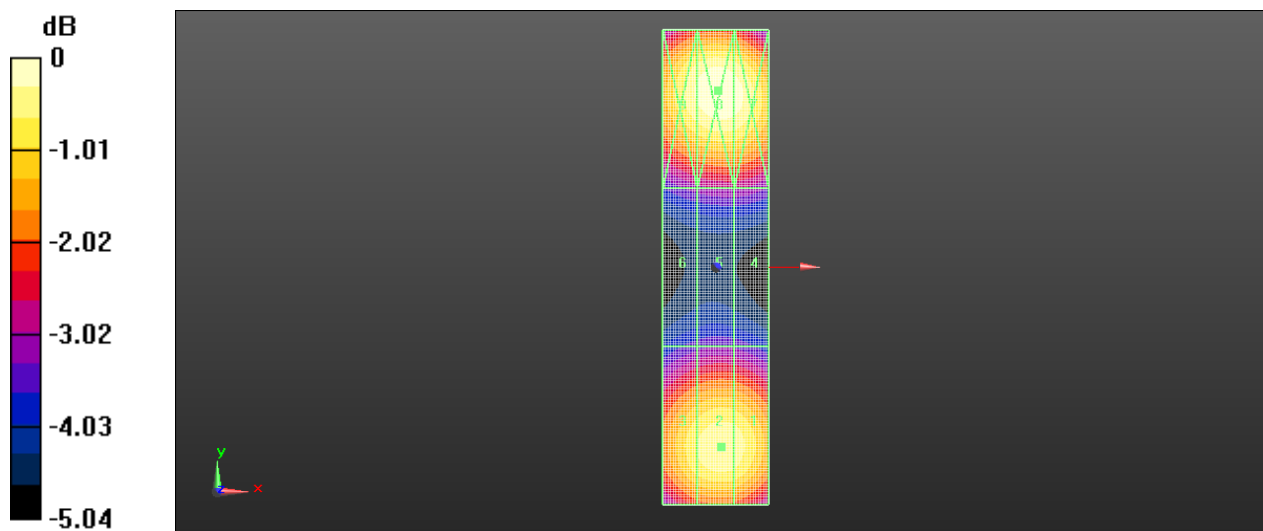
Grid 1 M3 87.99 V/m	Grid 2 M3 88.83 V/m	Grid 3 M3 85.99 V/m
Grid 4 M3 65.87 V/m	Grid 5 M3 65.88 V/m	Grid 6 M3 64.48V/m
Grid 7 M3 91.45 V/m	Grid 8 M3 92.78 V/m	Grid 9 M3 89.97 V/m

Cursor:

Total = 92.78 V/m

E Category: M3

Location: 0.5, 33.5, 8.7 mm



0 dB = 92.78 V/m = 39.35 dBV/m

Test Laboratory: SGS-SAR Lab

HAC-E-Dipole CD2450V3

DUT: CD2450V3; Type: CD2450V3; Serial: 1044

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2020-05-29;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn896; Calibrated: 2020-06-11
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD2450 = 15mm/Hearing Aid Compatibility Test at 15mm distance

(41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 80.50 V/m; Power Drift = 0.00 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 91.74 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

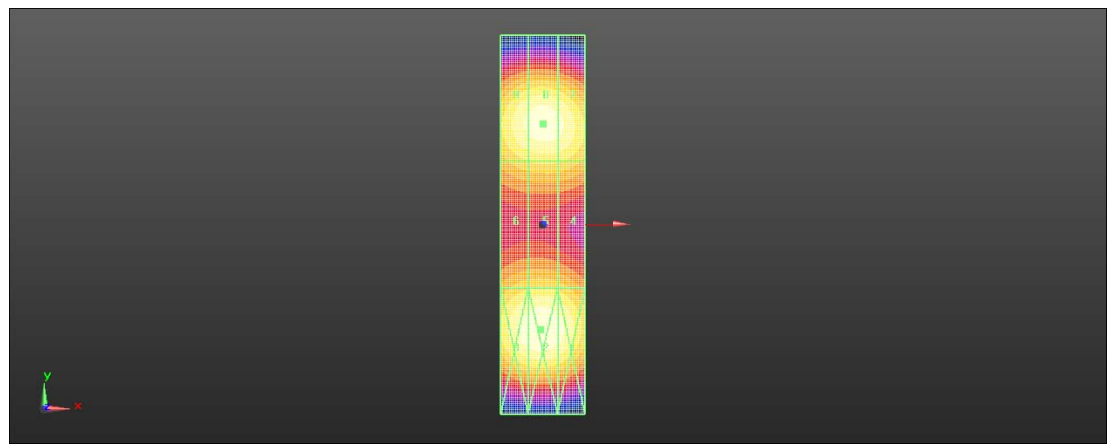
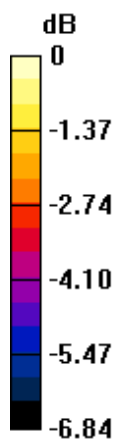
Grid 1 M3 90.93 V/m	Grid 2 M3 93.27 V/m	Grid 3 M3 91.70 V/m
Grid 4 M3 80.40 V/m	Grid 5 M3 80.82 V/m	Grid 6 M3 79.56 V/m
Grid 7 M3 90.16 V/m	Grid 8 M3 91.74 V/m	Grid 9 M3 89.62 V/m

Cursor:

Total = 93.27 V/m

E Category: M3

Location: -0.5, -25, 8.7 mm



0 dB = 93.27 V/m = 39.39 dBV/m