

Test Laboratory: UL CCS SAR Lab C

20120702 HAC-RF Emission System Validation (ER3DV6 SN2509)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 6/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD835/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x361x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 117.8 V/m; Power Drift = -0.01 dB

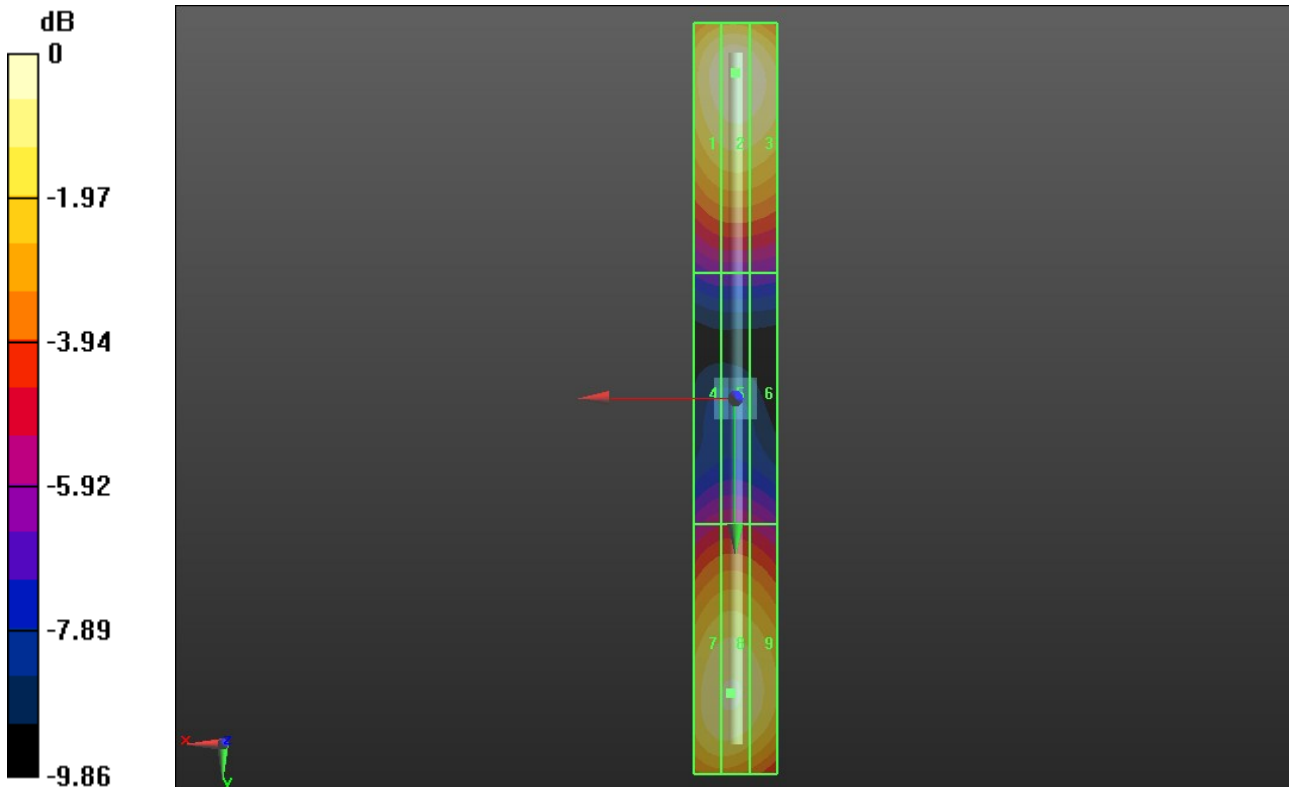
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 112.3 V/m

Near-field category: **M4 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M4 109.7 V/m	Grid 2 M4 112.3 V/m	Grid 3 M4 110.3 V/m
Grid 4 M4 61.05 V/m	Grid 5 M4 61.68 V/m	Grid 6 M4 60.33 V/m
Grid 7 M4 104.1 V/m	Grid 8 M4 105.1 V/m	Grid 9 M4 101.9 V/m



0 dB = 112.3V/m = 41.01 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120702 HAC-RF Emission System Validation (ER3DV6 SN2509)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 6/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD1880/E /Hearing Aid Compatibility Test at 15mm distance (41x181x1): Measurement grid:

dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 137.8 V/m; Power Drift = 0.00 dB

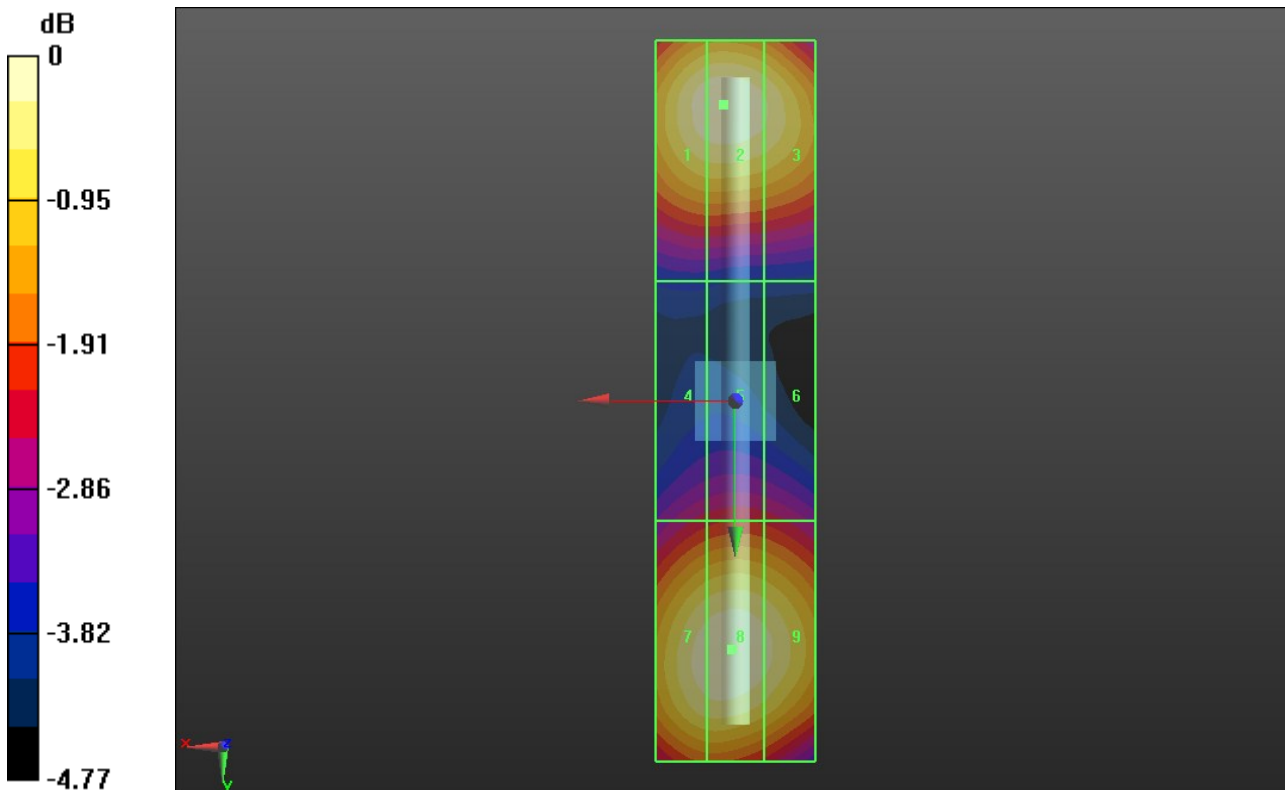
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 89.76 V/m

Near-field category: **M3 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M3 88.85 V/m	Grid 2 M3 89.50 V/m	Grid 3 M3 87.13 V/m
Grid 4 M3 68.58 V/m	Grid 5 M3 69.73 V/m	Grid 6 M3 68.98 V/m
Grid 7 M3 88.79 V/m	Grid 8 M3 89.76 V/m	Grid 9 M3 87.73 V/m



0 dB = 89.760V/m = 39.06 dB V/m

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20120702 HAC-RF Emission System Validation (ER3DV6 SN2516)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2516; ConvF(1, 1, 1); Calibrated: 8/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD835/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x361x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 115.3 V/m; Power Drift = 0.04 dB

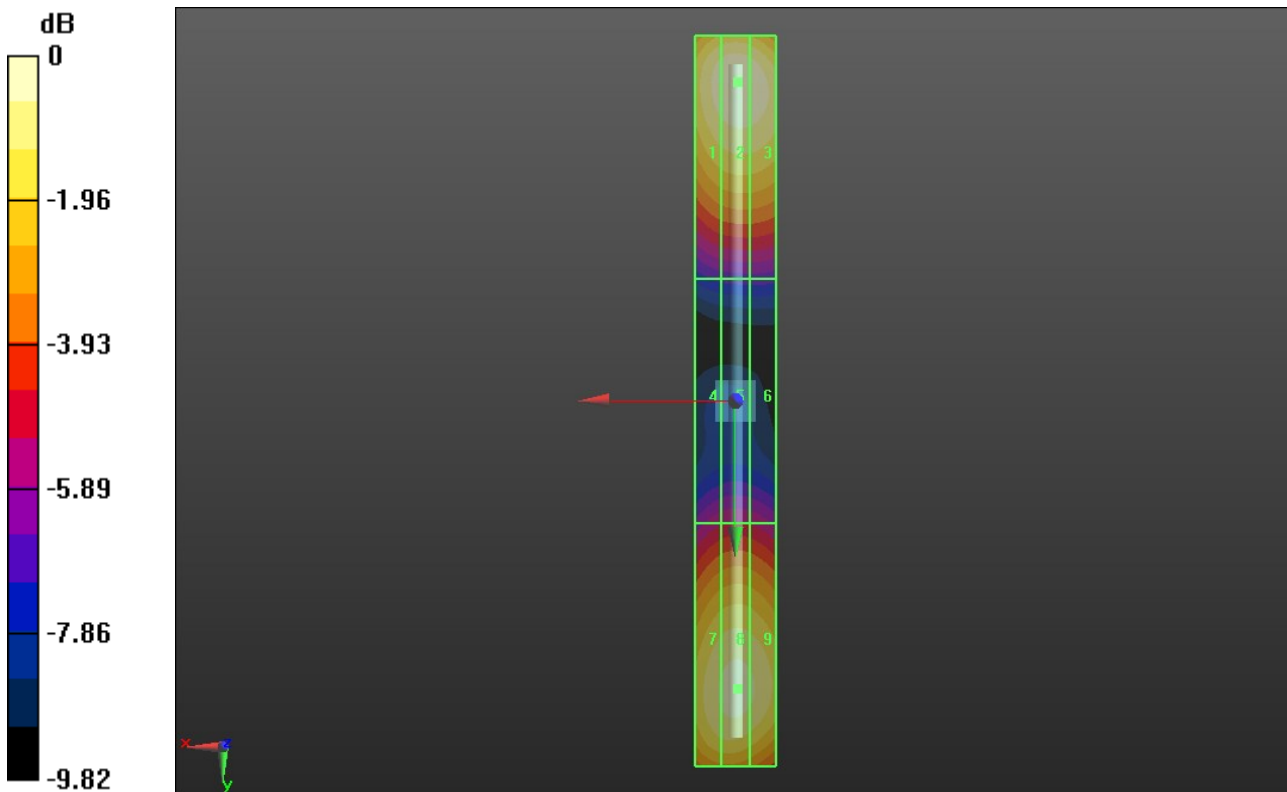
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 109.2 V/m

Near-field category: **M4 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M4 106.2 V/m	Grid 2 M4 109.2 V/m	Grid 3 M4 108.0 V/m
Grid 4 M4 59.13 V/m	Grid 5 M4 60.21 V/m	Grid 6 M4 59.47 V/m
Grid 7 M4 102.2 V/m	Grid 8 M4 104.4 V/m	Grid 9 M4 102.7 V/m



0 dB = 109.2V/m = 40.76 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120702 HAC-RF Emission System Validation (ER3DV6 SN2516)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2516; ConvF(1, 1, 1); Calibrated: 8/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD1880/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x181x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 134.6 V/m; Power Drift = 0.00 dB

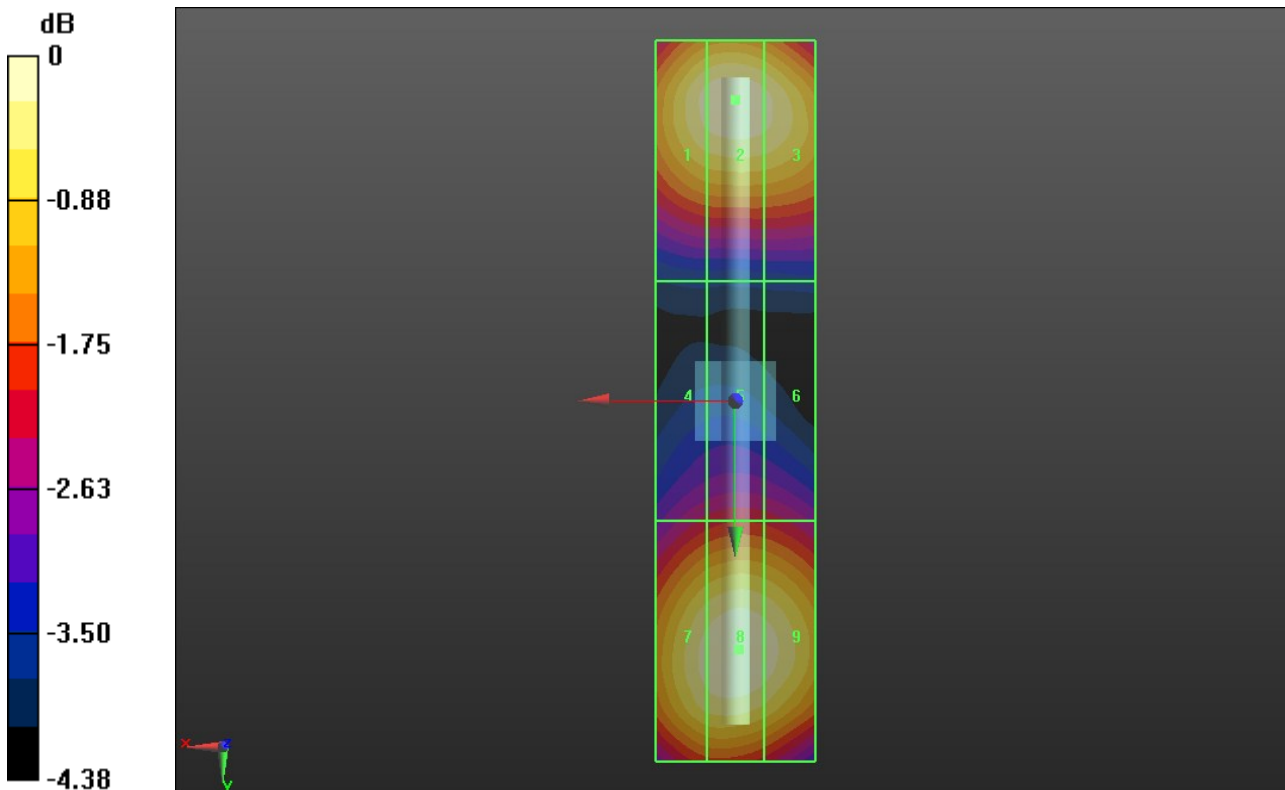
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 87.31 V/m

Near-field category: **M3 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M3 85.69 V/m	Grid 2 M3 86.93 V/m	Grid 3 M3 85.58 V/m
Grid 4 M3 67.71 V/m	Grid 5 M3 69.08 V/m	Grid 6 M3 68.55 V/m
Grid 7 M3 85.74 V/m	Grid 8 M3 87.31 V/m	Grid 9 M3 86.13 V/m



0 dB = 87.310V/m = 38.82 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120718 HAC-RF Emission System Validation (ER3DV6 SN2509)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 6/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD835/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x361x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 112.7 V/m; Power Drift = 0.02 dB

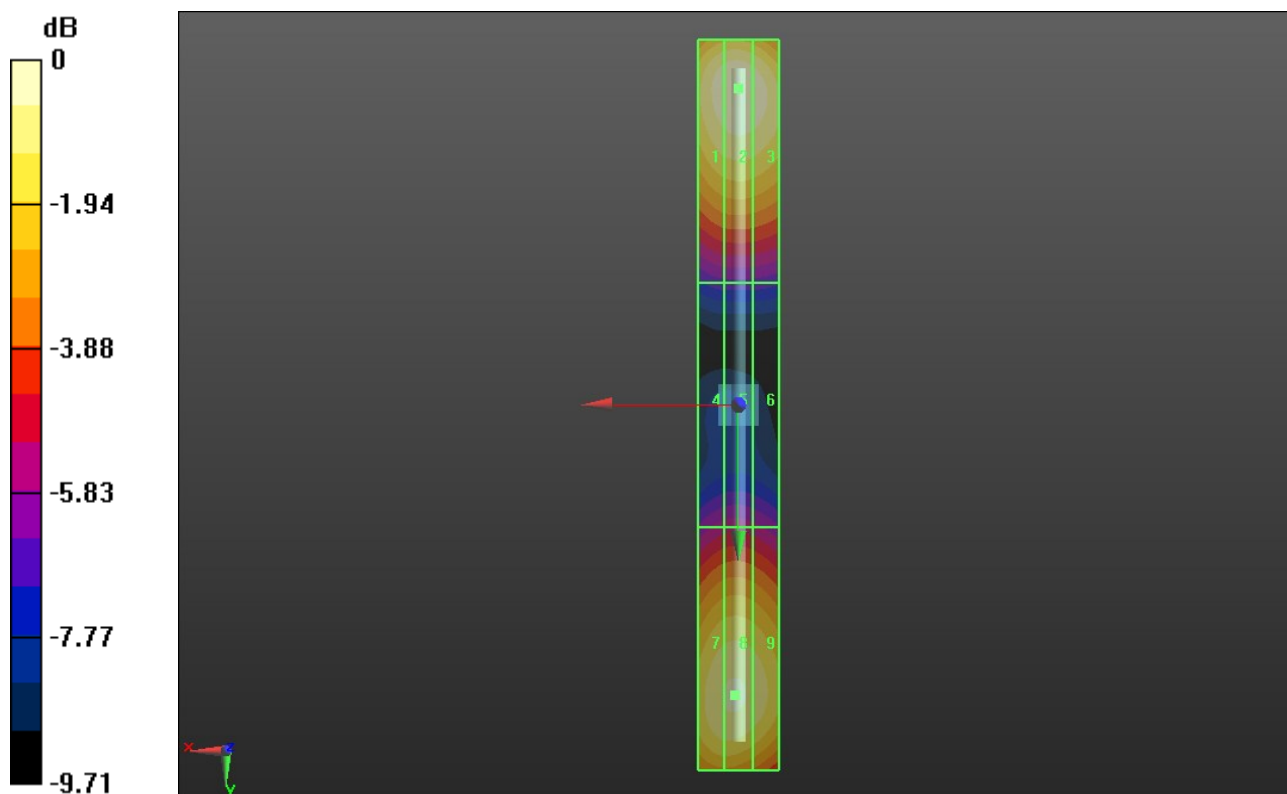
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 110.2 V/m

Near-field category: **M4 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M4 108.2 V/m	Grid 2 M4 110.2 V/m	Grid 3 M4 108.0 V/m
Grid 4 M4 58.64 V/m	Grid 5 M4 59.28 V/m	Grid 6 M4 57.98 V/m
Grid 7 M4 102.6 V/m	Grid 8 M4 103.4 V/m	Grid 9 M4 100.7 V/m



0 dB = 110.2V/m = 40.84 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120718 HAC-RF Emission System Validation (ER3DV6 SN2509)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 6/20/2012

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD1880/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x181x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 137.6 V/m; Power Drift = 0.00 dB

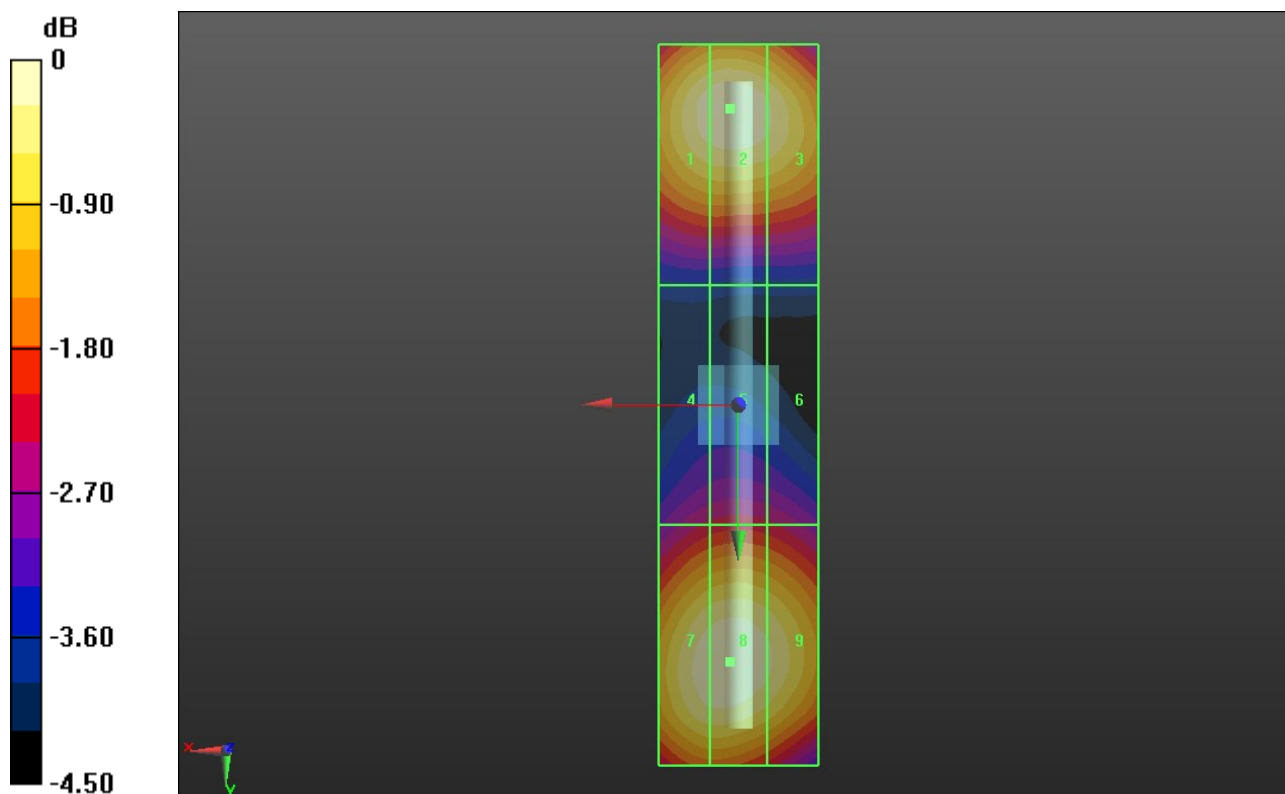
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 89.46 V/m

Near-field category: **M3 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M3 88.46 V/m	Grid 2 M3 89.32 V/m	Grid 3 M3 87.24 V/m
Grid 4 M3 68.70 V/m	Grid 5 M3 69.63 V/m	Grid 6 M3 68.81 V/m
Grid 7 M3 88.90 V/m	Grid 8 M3 89.46 V/m	Grid 9 M3 87.16 V/m



0 dB = 89.460V/m = 39.03 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120718 HAC-RF Emission System Validation (ER3DV6 SN2516)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2516; ConvF(1, 1, 1); Calibrated: 8/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD835/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x361x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 115.7 V/m; Power Drift = -0.03 dB

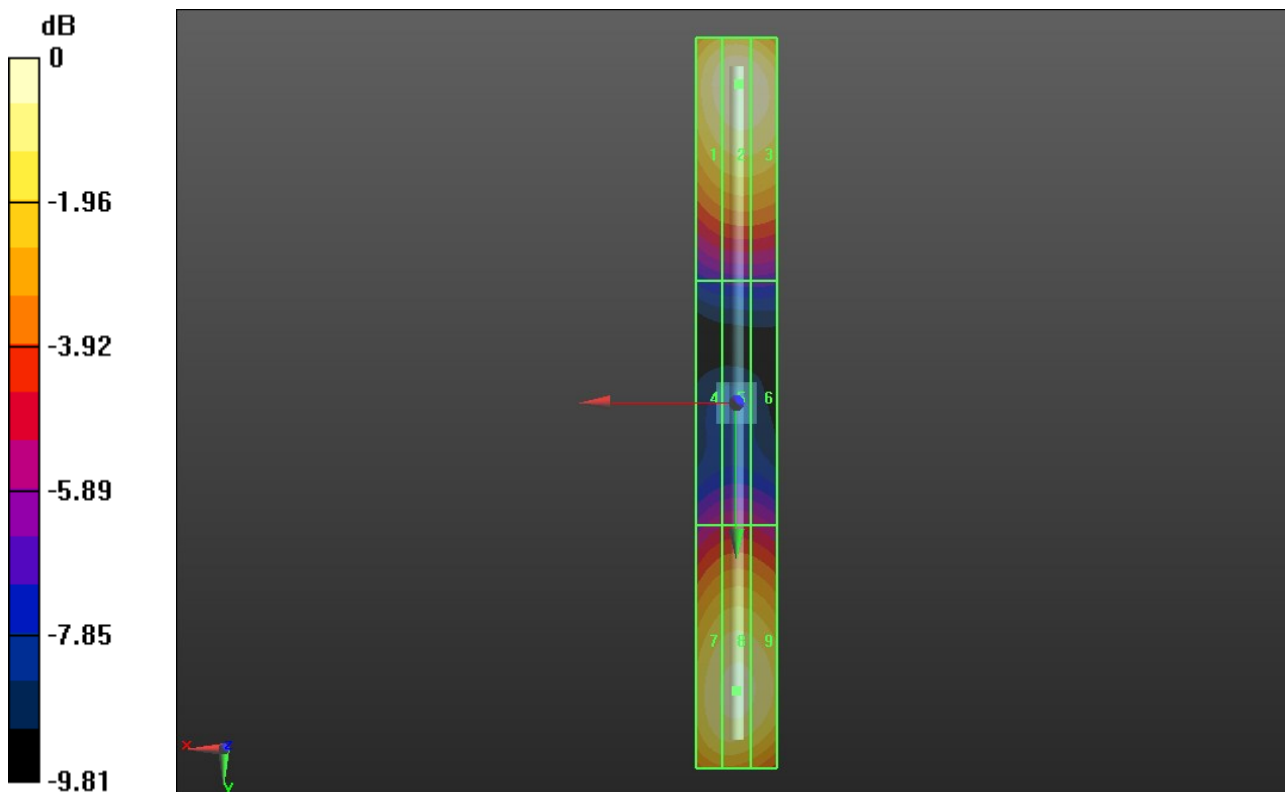
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 109.1 V/m

Near-field category: **M4 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M4 106.1 V/m	Grid 2 M4 109.1 V/m	Grid 3 M4 107.7 V/m
Grid 4 M4 59.07 V/m	Grid 5 M4 60.04 V/m	Grid 6 M4 59.33 V/m
Grid 7 M4 102.1 V/m	Grid 8 M4 104.0 V/m	Grid 9 M4 102.4 V/m



0 dB = 109.1V/m = 40.76 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120718 HAC-RF Emission System Validation (ER3DV6 SN2516)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2516; ConvF(1, 1, 1); Calibrated: 8/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD1880/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x181x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 134.8 V/m; Power Drift = -0.01 dB

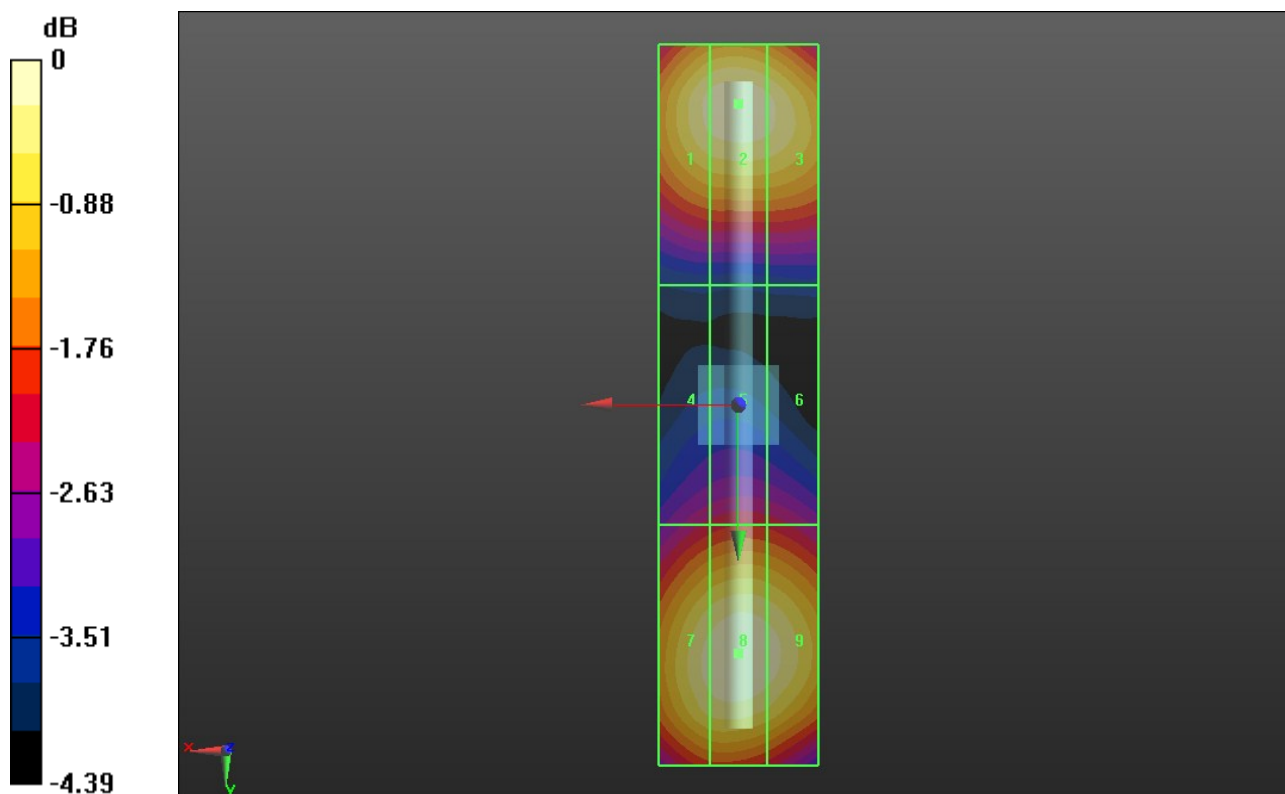
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 87.41 V/m

Near-field category: **M3 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M3 85.73 V/m	Grid 2 M3 86.94 V/m	Grid 3 M3 85.60 V/m
Grid 4 M3 67.74 V/m	Grid 5 M3 69.16 V/m	Grid 6 M3 68.61 V/m
Grid 7 M3 85.80 V/m	Grid 8 M3 87.41 V/m	Grid 9 M3 86.19 V/m



0 dB = 87.410V/m = 38.83 dB V/m

Test Laboratory: UL CCS SAR Lab C

20120730 HAC-RF Emission System Validation (ER3DV6 SN2516)

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2516; ConvF(1, 1, 1); Calibrated: 8/8/2011

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.4 (4989)

CD1880/E Scan/Hearing Aid Compatibility Test at 15mm distance (41x181x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 134.5 V/m; Power Drift = 0.00 dB

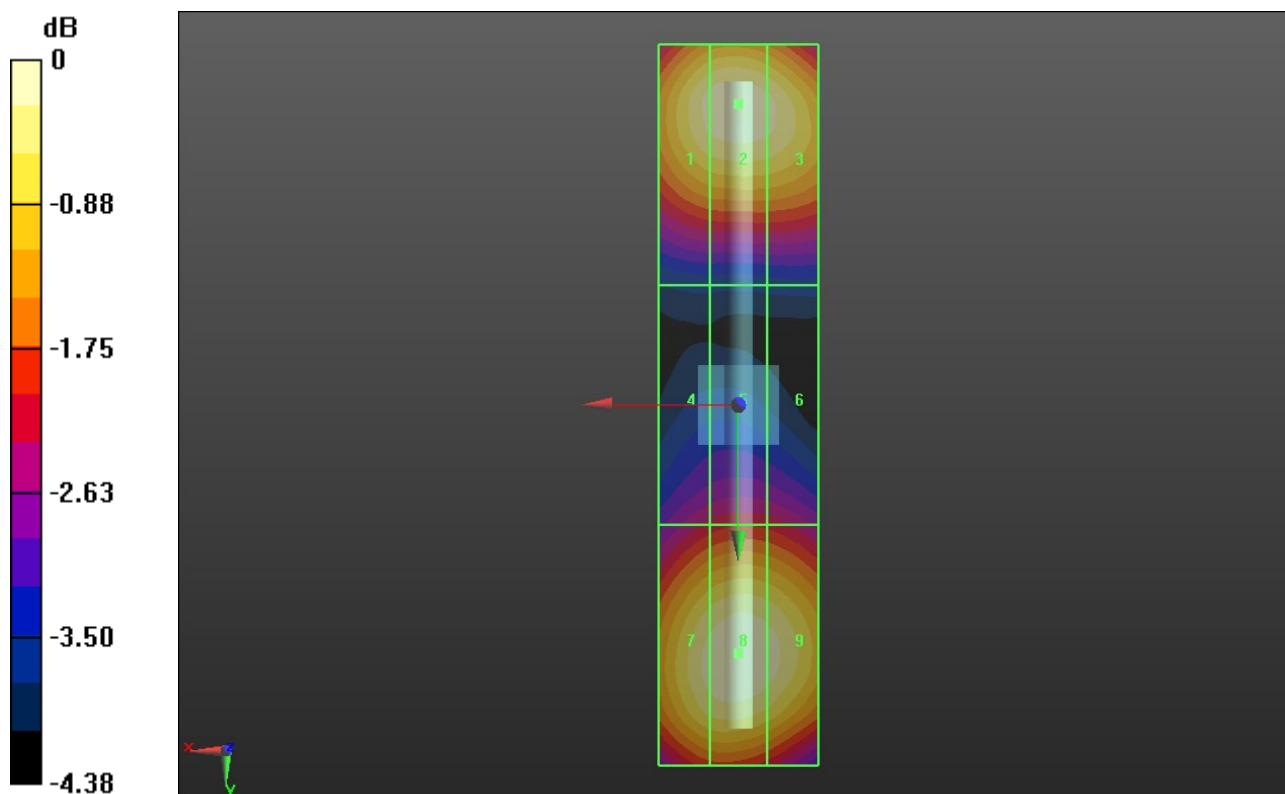
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 87.20 V/m

Near-field category: **M3 (AWF 0 dB)**

PMF scaled E-field

Grid 1 M3 85.58 V/m	Grid 2 M3 86.80 V/m	Grid 3 M3 85.45 V/m
Grid 4 M3 67.61 V/m	Grid 5 M3 68.93 V/m	Grid 6 M3 68.37 V/m
Grid 7 M3 85.59 V/m	Grid 8 M3 87.20 V/m	Grid 9 M3 85.93 V/m



0 dB = 87.200V/m = 38.81 dB V/m