

HAC-RF Emission

Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

GSM850 E-Field measurement/Voice_ch 128/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 62.85 V/m; Power Drift = -0.03 dB

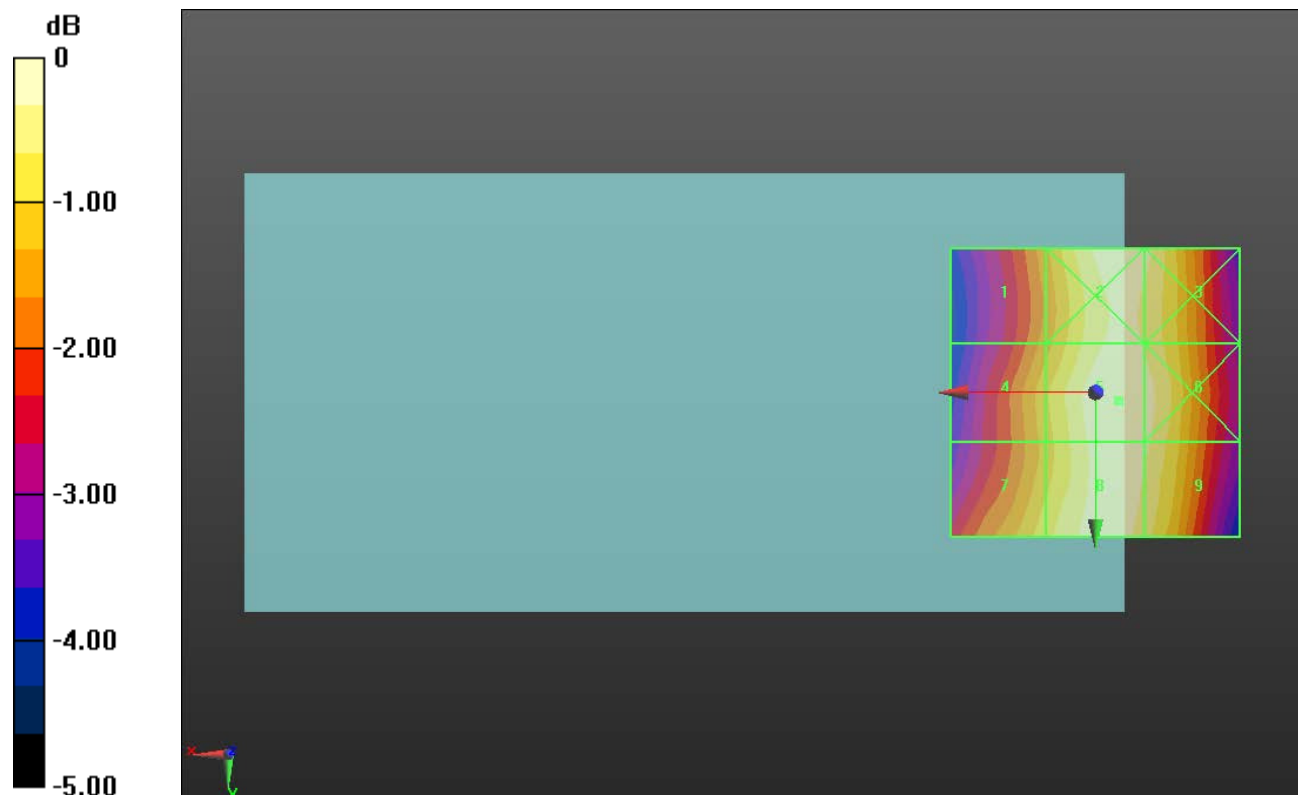
Applied MIF = 3.63 dB

RF audio interference level = 37.27 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 35.9 dBV/m	Grid 2 M4 37.21 dBV/m	Grid 3 M4 37.06 dBV/m
Grid 4 M4 36.22 dBV/m	Grid 5 M4 37.27 dBV/m	Grid 6 M4 37.1 dBV/m
Grid 7 M4 36.5 dBV/m	Grid 8 M4 37.15 dBV/m	Grid 9 M4 37 dBV/m



0 dB = 72.99 V/m = 37.27 dBV/m

HAC-RF Emission

Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

GSM850 E-Field measurement/Voice_ch 190/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 57.65 V/m; Power Drift = -0.04 dB

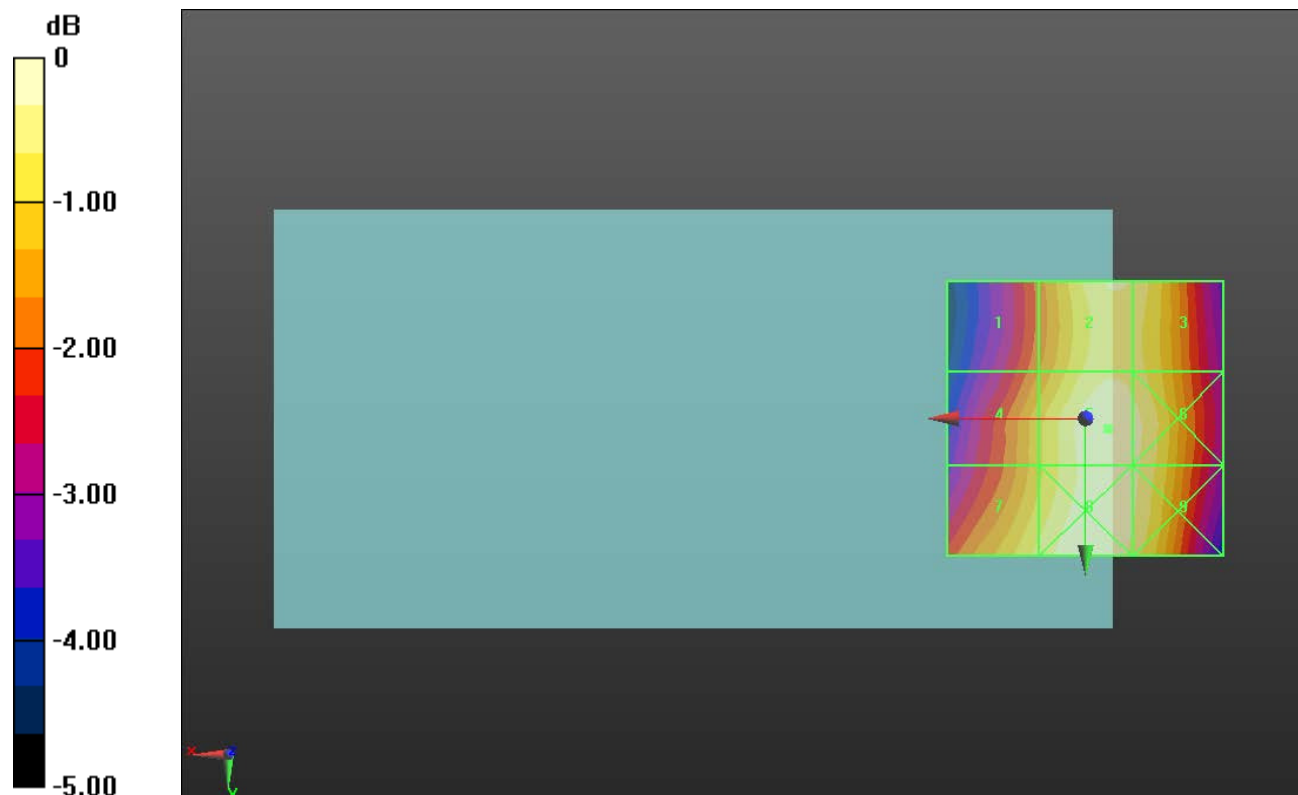
Applied MIF = 3.63 dB

RF audio interference level = 36.59 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 34.92 dBV/m	Grid 2 M4 36.31 dBV/m	Grid 3 M4 36.23 dBV/m
Grid 4 M4 35.51 dBV/m	Grid 5 M4 36.59 dBV/m	Grid 6 M4 36.41 dBV/m
Grid 7 M4 36.04 dBV/m	Grid 8 M4 36.56 dBV/m	Grid 9 M4 36.37 dBV/m



0 dB = 67.53 V/m = 36.59 dBV/m

HAC-RF Emission

Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

GSM850 E-Field measurement/Voice_ch 251/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 52.58 V/m; Power Drift = -0.00 dB

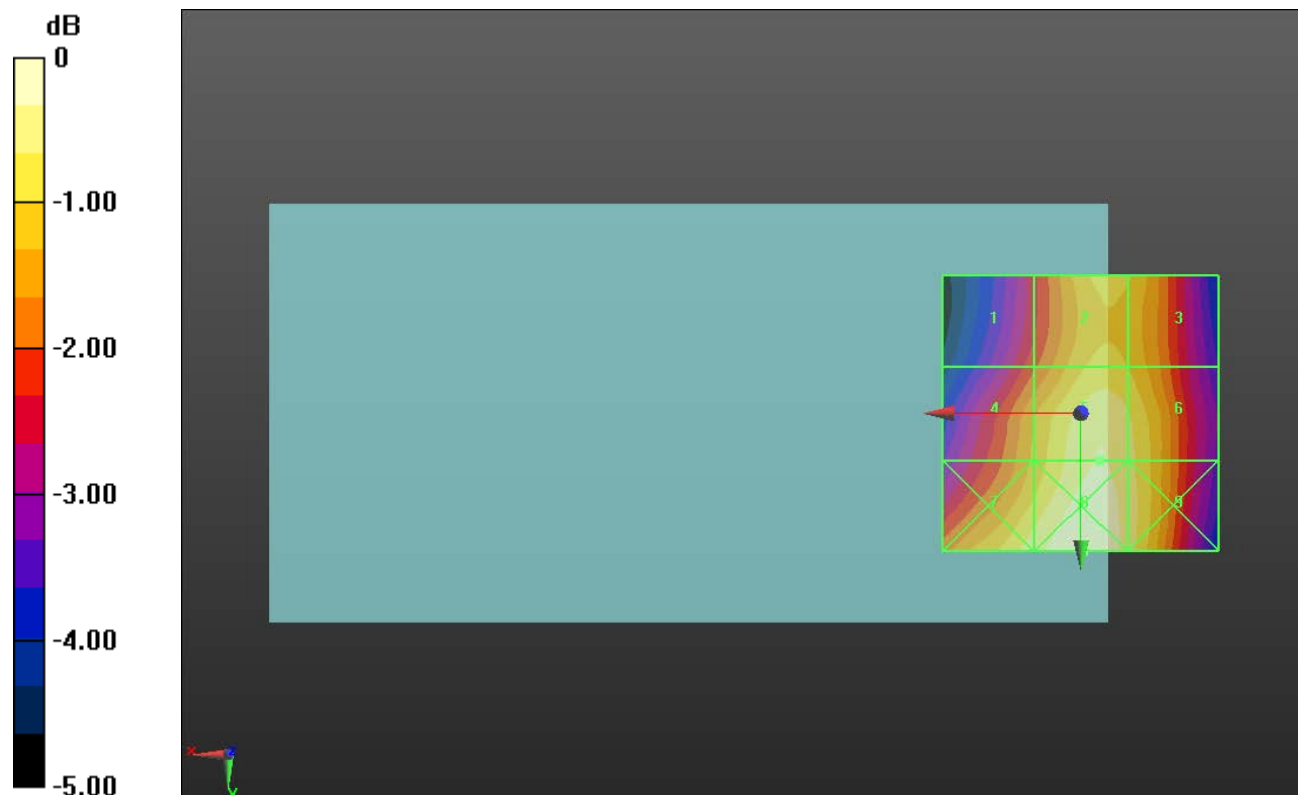
Applied MIF = 3.63 dB

RF audio interference level = 35.87 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 34.13 dBV/m	Grid 2 M4 35.33 dBV/m	Grid 3 M4 35.24 dBV/m
Grid 4 M4 34.95 dBV/m	Grid 5 M4 35.87 dBV/m	Grid 6 M4 35.65 dBV/m
Grid 7 M4 35.73 dBV/m	Grid 8 M4 36.19 dBV/m	Grid 9 M4 35.74 dBV/m



0 dB = 64.48 V/m = 36.19 dBV/m

HAC-RF Emission

Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

GSM1900 E-Field measurement/Voice_ch 512/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 26.37 V/m; Power Drift = -0.03 dB

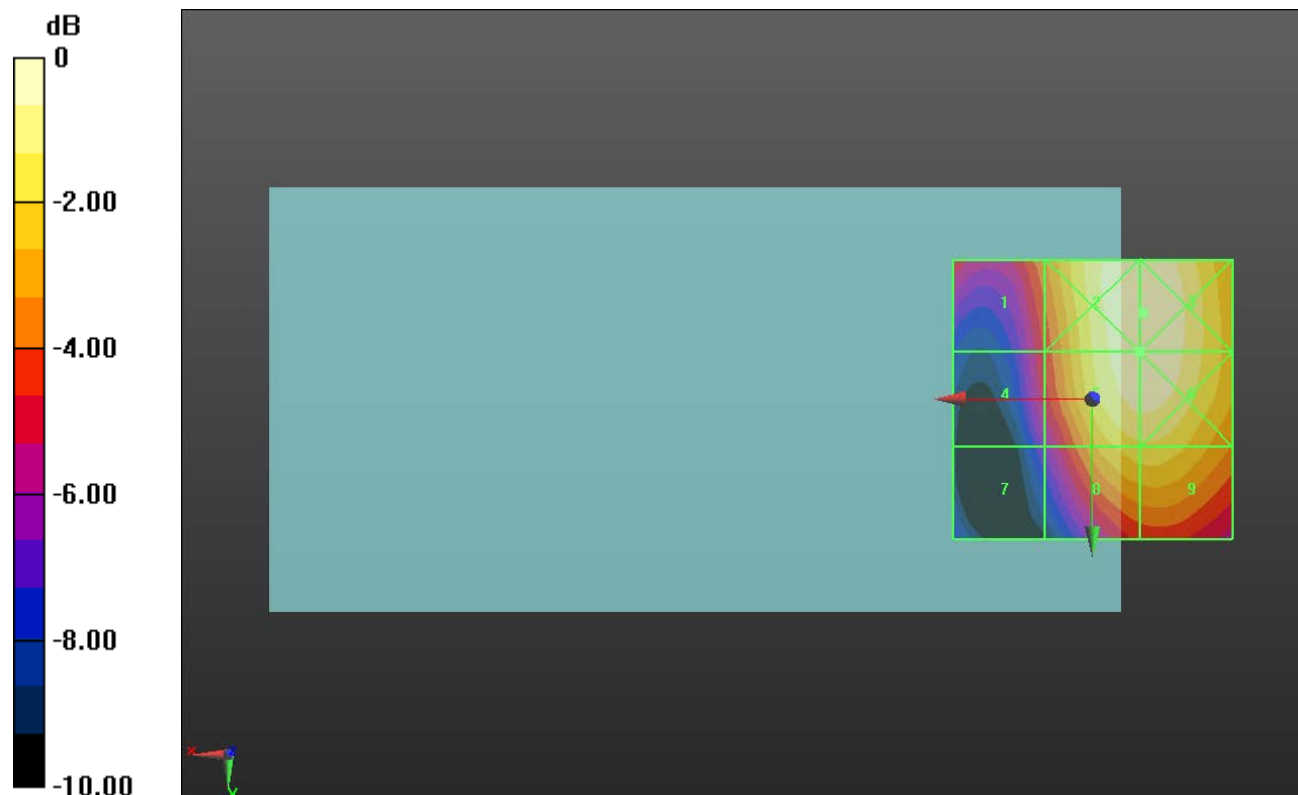
Applied MIF = 3.63 dB

RF audio interference level = 30.74 dBV/m

Emission category: M3

MIF scaled E-field

Grid 1 M4 27.49 dBV/m	Grid 2 M3 30.82 dBV/m	Grid 3 M3 30.83 dBV/m
Grid 4 M4 26.32 dBV/m	Grid 5 M3 30.74 dBV/m	Grid 6 M3 30.76 dBV/m
Grid 7 M4 24.43 dBV/m	Grid 8 M4 29.34 dBV/m	Grid 9 M4 29.38 dBV/m



0 dB = 34.79 V/m = 30.83 dBV/m

HAC-RF Emission

Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

GSM1900 E-Field measurement/Voice_ch 661/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 17.87 V/m; Power Drift = -0.02 dB

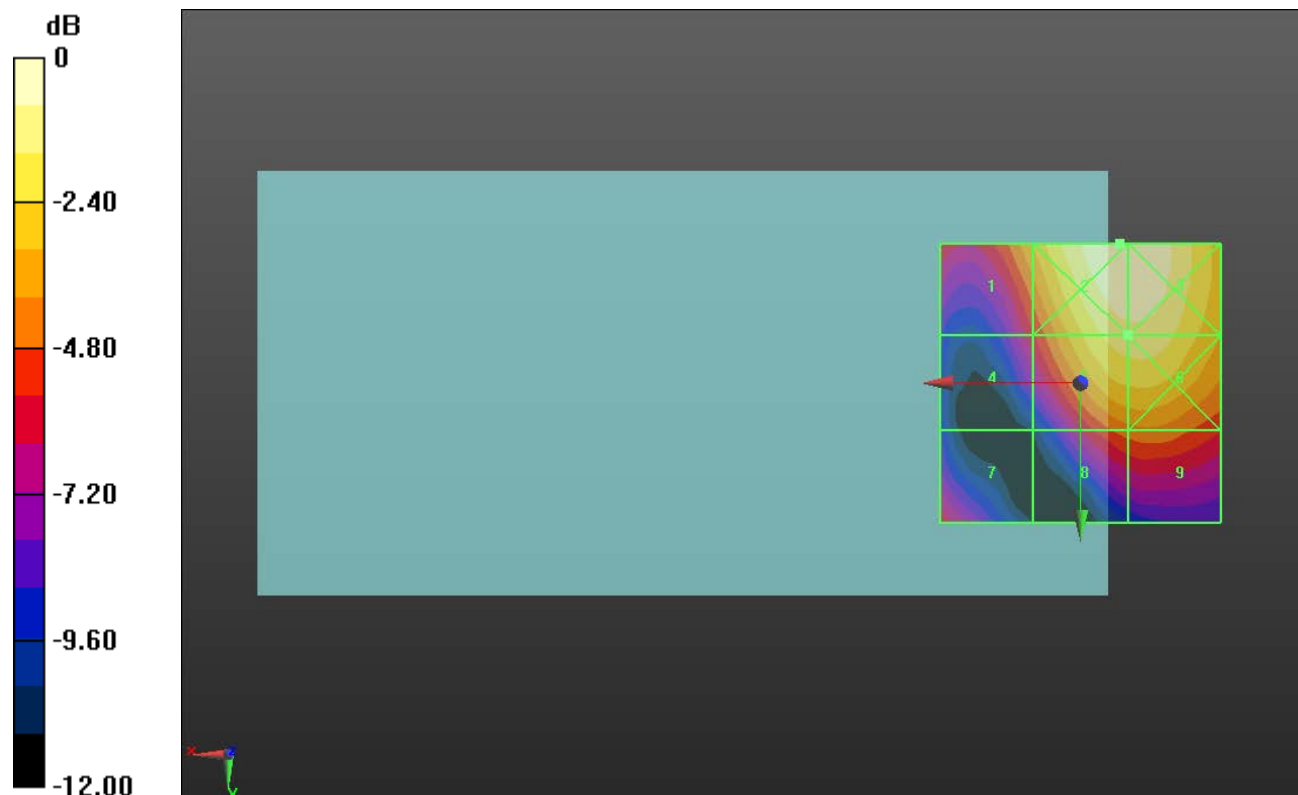
Applied MIF = 3.63 dB

RF audio interference level = 28.72 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 26.7 dBV/m	Grid 2 M4 29.82 dBV/m	Grid 3 M4 29.8 dBV/m
Grid 4 M4 24.1 dBV/m	Grid 5 M4 28.72 dBV/m	Grid 6 M4 28.76 dBV/m
Grid 7 M4 23.94 dBV/m	Grid 8 M4 25.46 dBV/m	Grid 9 M4 25.67 dBV/m



0 dB = 30.97 V/m = 29.82 dBV/m

HAC-RF Emission

Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

GSM1900 E-Field measurement/Voice_ch 810/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.18 V/m; Power Drift = -0.03 dB

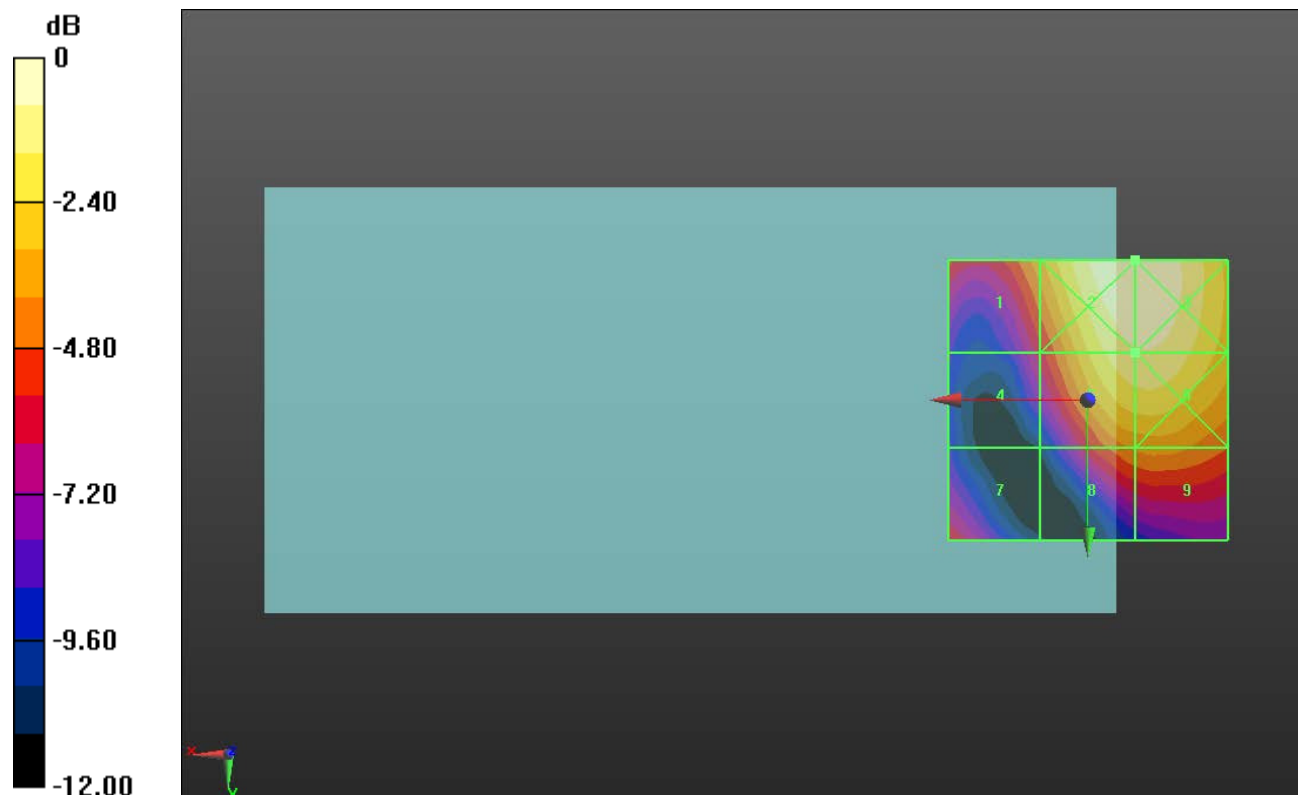
Applied MIF = 3.63 dB

RF audio interference level = 29.21 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 26.73 dBV/m	Grid 2 M3 30.11 dBV/m	Grid 3 M3 30.11 dBV/m
Grid 4 M4 24.2 dBV/m	Grid 5 M4 29.21 dBV/m	Grid 6 M4 29.26 dBV/m
Grid 7 M4 24.47 dBV/m	Grid 8 M4 26.28 dBV/m	Grid 9 M4 26.48 dBV/m



0 dB = 32.03 V/m = 30.11 dBV/m

HAC-RF Emission

Communication System: UID 0, LTE (TDD) (0); Frequency: 2580 MHz; Duty Cycle: 1:1.59956

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 38 E-Field Measurement/16QAM_RB 1/50_ch 37850/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.325 V/m; Power Drift = -0.26 dB

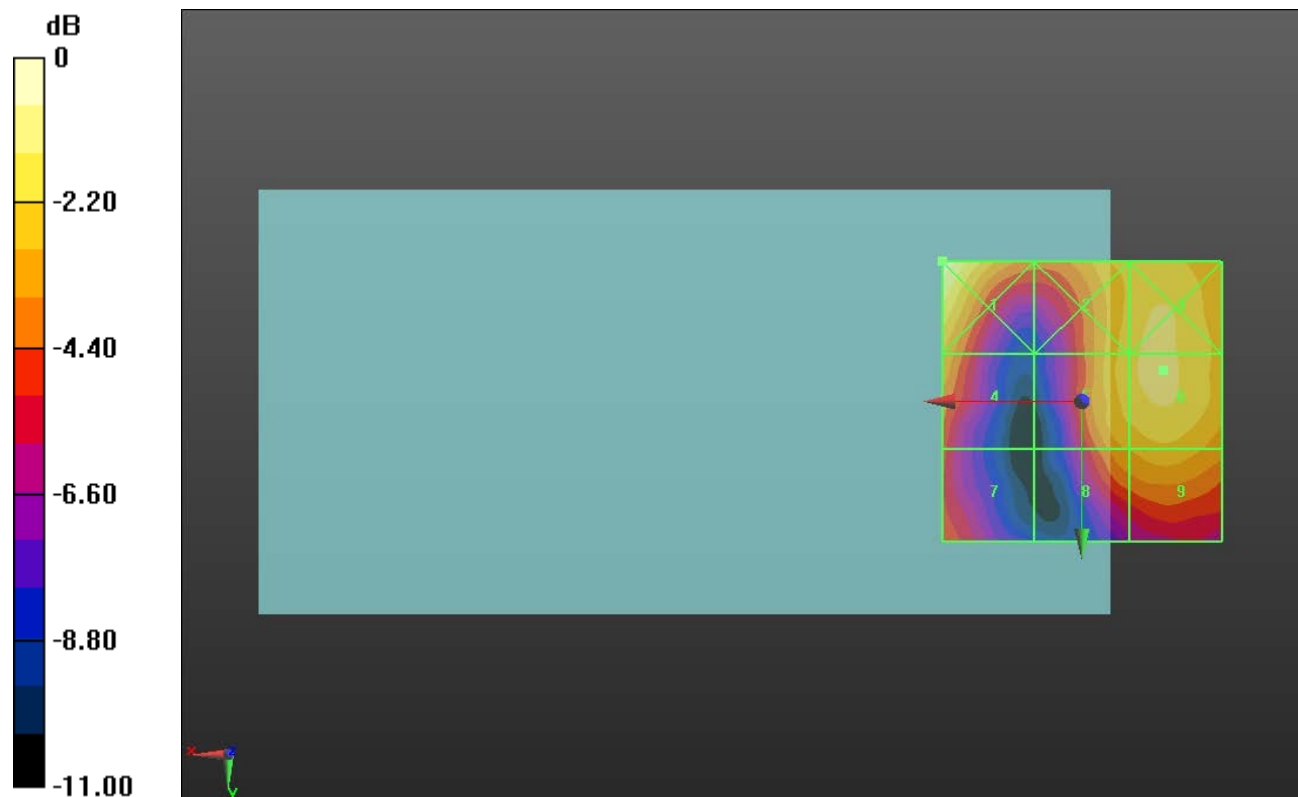
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 10.91 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4 12.49 V/m	Grid 2 M4 10.23 V/m	Grid 3 M4 10.78 V/m
Grid 4 M4 8.970 V/m	Grid 5 M4 10.29 V/m	Grid 6 M4 10.91 V/m
Grid 7 M4 7.405 V/m	Grid 8 M4 8.973 V/m	Grid 9 M4 9.519 V/m



0 dB = 12.49 V/m = 21.93 dBV/m

HAC-RF Emission

Communication System: UID 0, LTE (TDD) (0); Frequency: 2595 MHz; Duty Cycle: 1:1.59956

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 38 E-Field Measurement/16QAM_RB 1/50_ch 38000/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.655 V/m; Power Drift = -0.21 dB

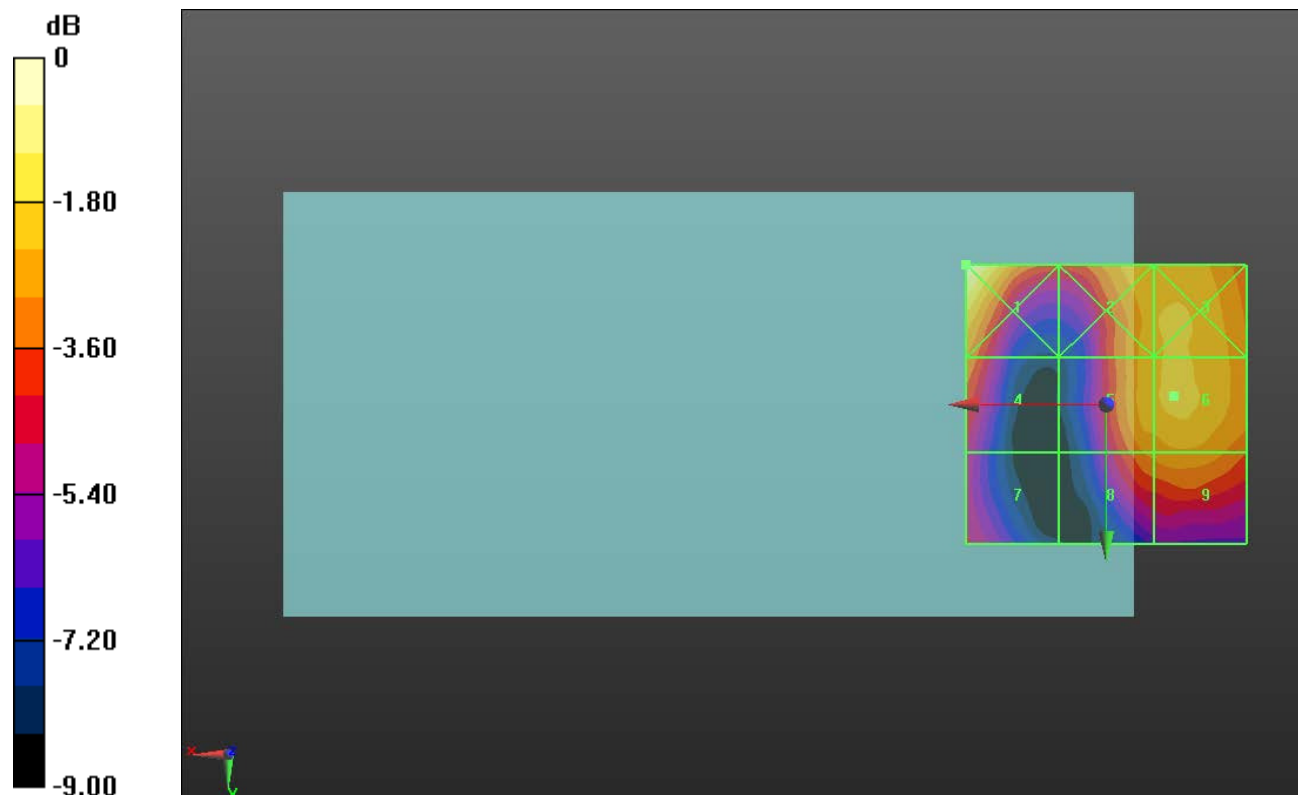
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 10.21 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4 12.35 V/m	Grid 2 M4 10.02 V/m	Grid 3 M4 10.21 V/m
Grid 4 M4 8.790 V/m	Grid 5 M4 9.941 V/m	Grid 6 M4 10.21 V/m
Grid 7 M4 7.283 V/m	Grid 8 M4 8.985 V/m	Grid 9 M4 9.269 V/m



0 dB = 12.35 V/m = 21.83 dBV/m

HAC-RF Emission

Communication System: UID 0, LTE (TDD) (0); Frequency: 2610 MHz; Duty Cycle: 1:1.59956

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 38 E-Field Measurement/16QAM_RB 1/50_ch 38150/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 10.26 V/m; Power Drift = -0.02 dB

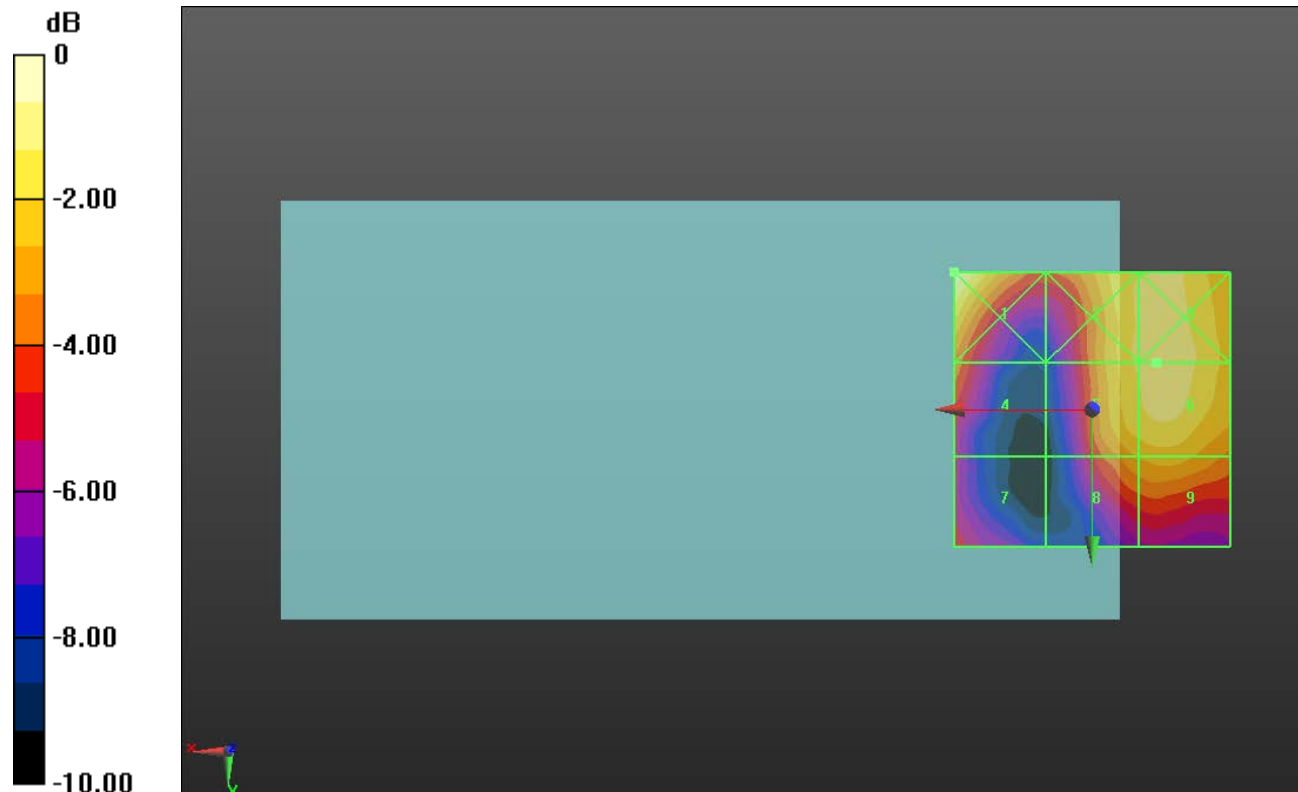
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 11.07 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4 12.30 V/m	Grid 2 M4 10.80 V/m	Grid 3 M4 11.13 V/m
Grid 4 M4 8.282 V/m	Grid 5 M4 10.75 V/m	Grid 6 M4 11.07 V/m
Grid 7 M4 7.221 V/m	Grid 8 M4 9.113 V/m	Grid 9 M4 9.448 V/m



0 dB = 12.30 V/m = 21.80 dBV/m

HAC-RF Emission

Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2506 MHz; Duty Cycle: 1:8.87156

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 41 E-Field measurement/16QAM_RB 1/50_ch 39750/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 11.37 V/m; Power Drift = -0.18 dB

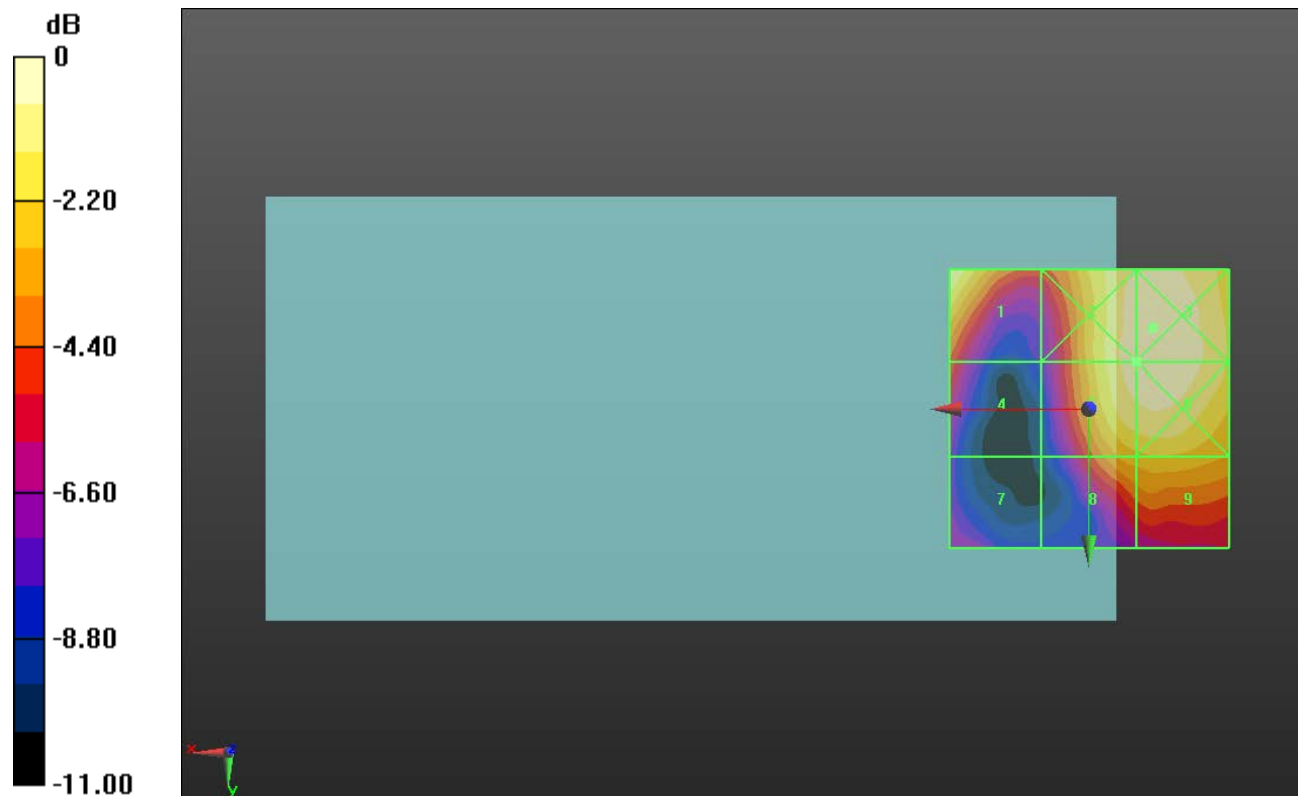
Applied MIF = -1.44 dB

RF audio interference level = 19.81 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 19.78 dBV/m	Grid 2 M4 19.91 dBV/m	Grid 3 M4 20.16 dBV/m
Grid 4 M4 15.82 dBV/m	Grid 5 M4 19.81 dBV/m	Grid 6 M4 20.02 dBV/m
Grid 7 M4 13.51 dBV/m	Grid 8 M4 17.7 dBV/m	Grid 9 M4 17.94 dBV/m



0 dB = 10.19 V/m = 20.16 dBV/m

HAC-RF Emission

Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2549.5 MHz; Duty Cycle: 1:8.87156

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 41 E-Field measurement/16QAM_RB 1/50_ch 40185/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 11.71 V/m; Power Drift = 0.06 dB

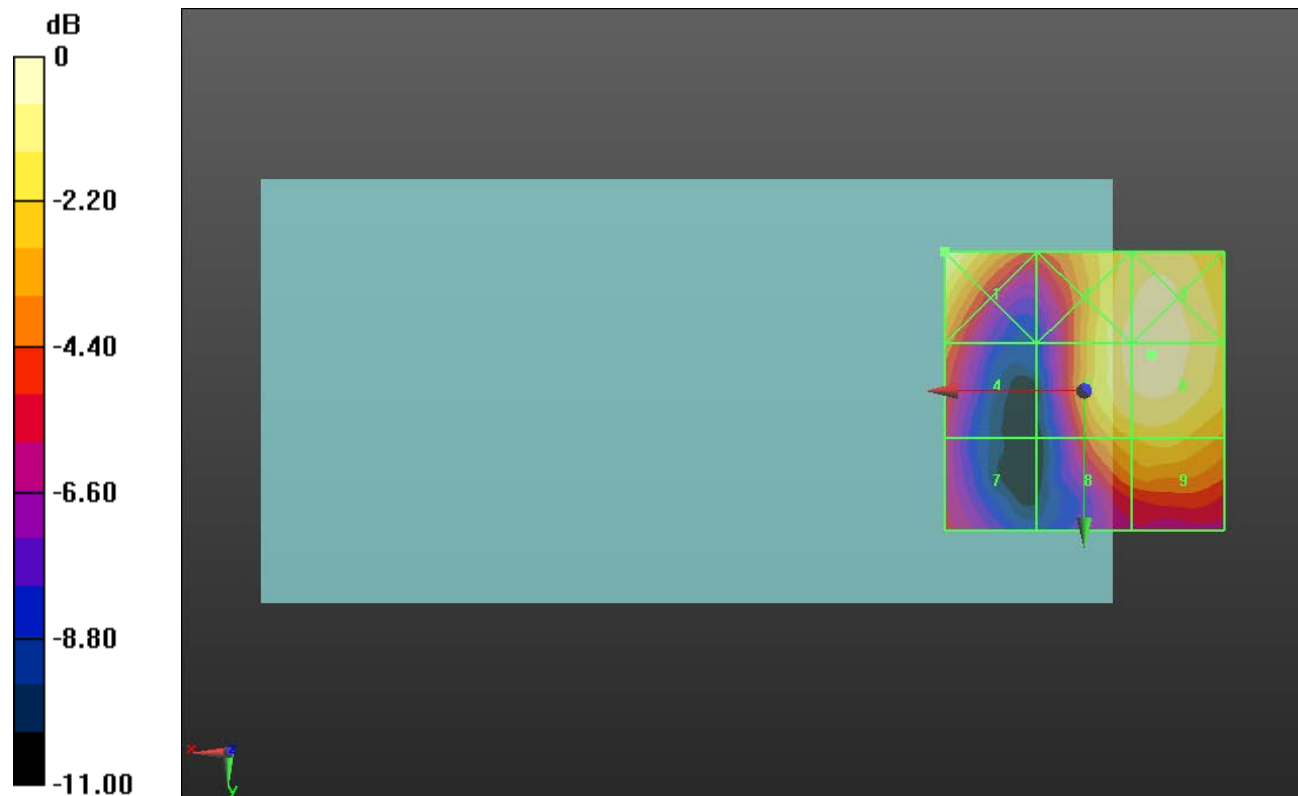
Applied MIF = -1.44 dB

RF audio interference level = 20.29 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 20.55 dBV/m	Grid 2 M4 20.05 dBV/m	Grid 3 M4 20.28 dBV/m
Grid 4 M4 16.91 dBV/m	Grid 5 M4 20.07 dBV/m	Grid 6 M4 20.29 dBV/m
Grid 7 M4 15.09 dBV/m	Grid 8 M4 18.32 dBV/m	Grid 9 M4 18.69 dBV/m



0 dB = 10.65 V/m = 20.55 dBV/m

HAC-RF Emission

Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2593 MHz; Duty Cycle: 1:8.87156

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 41 E-Field measurement/16QAM_RB 1/50_ch 40620/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.636 V/m; Power Drift = -0.14 dB

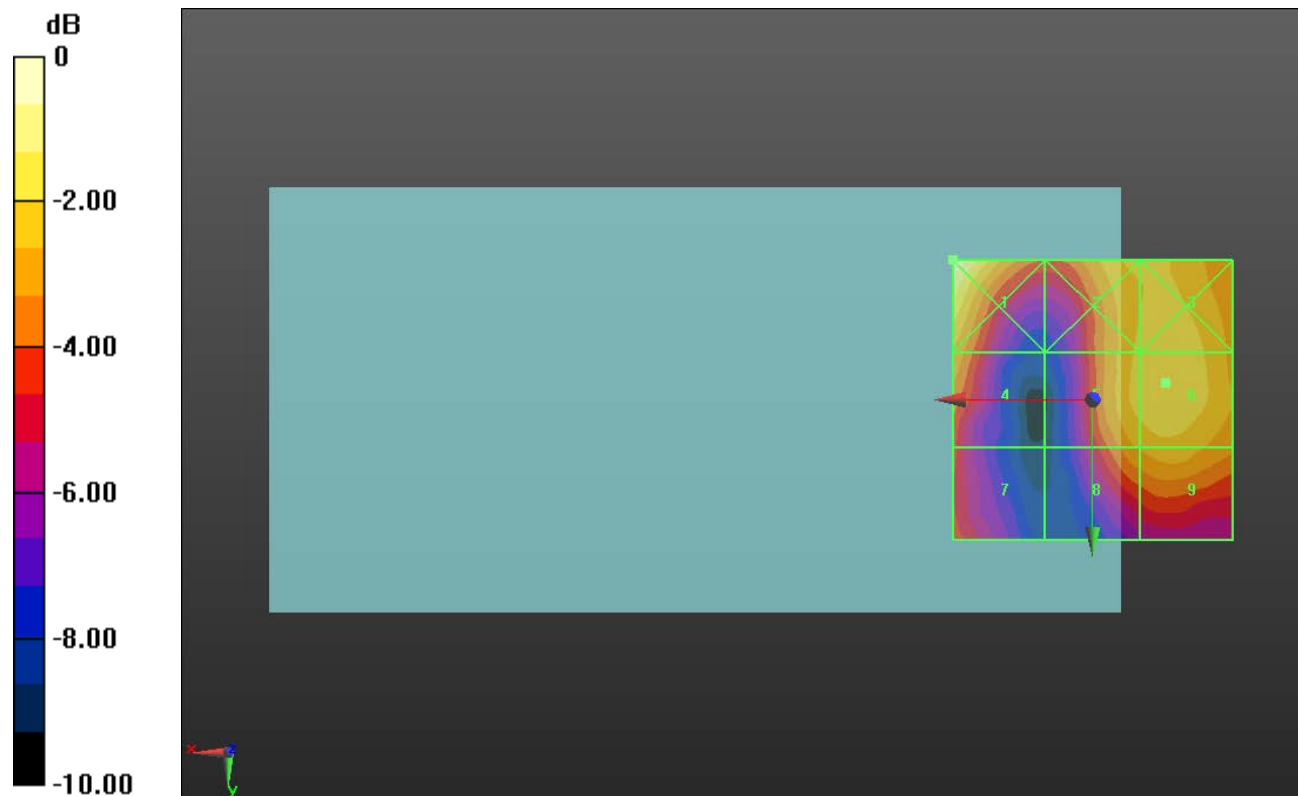
Applied MIF = -1.44 dB

RF audio interference level = 18.93 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 20.41 dBV/m	Grid 2 M4 18.59 dBV/m	Grid 3 M4 18.89 dBV/m
Grid 4 M4 17.71 dBV/m	Grid 5 M4 18.66 dBV/m	Grid 6 M4 18.93 dBV/m
Grid 7 M4 16.22 dBV/m	Grid 8 M4 17.83 dBV/m	Grid 9 M4 18.24 dBV/m



0 dB = 10.48 V/m = 20.41 dBV/m

HAC-RF Emission

Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2636.5 MHz; Duty Cycle: 1:8.87156

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 41 E-Field measurement/16QAM_RB 1/50_ch 41055/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 11.02 V/m; Power Drift = 0.05 dB

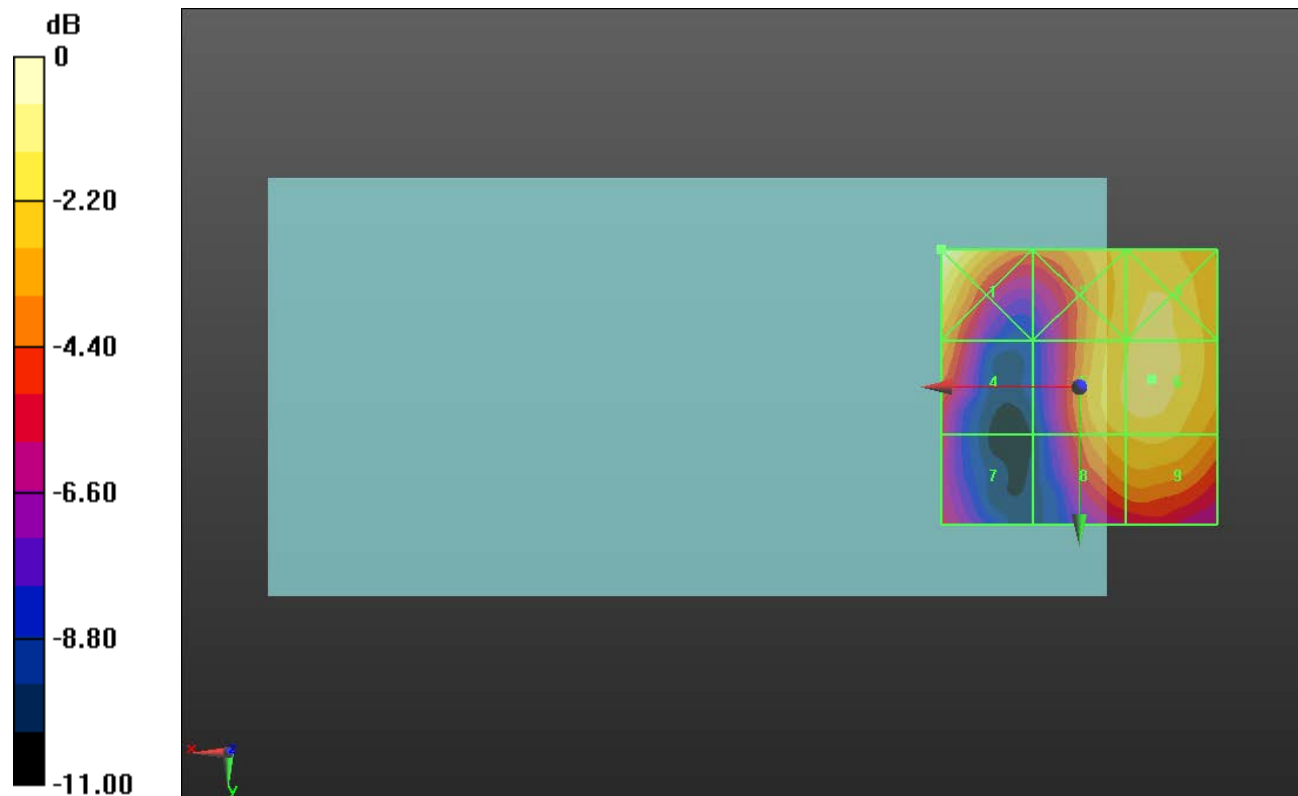
Applied MIF = -1.44 dB

RF audio interference level = 19.51 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 20.64 dBV/m	Grid 2 M4 19.09 dBV/m	Grid 3 M4 19.39 dBV/m
Grid 4 M4 17.51 dBV/m	Grid 5 M4 19.27 dBV/m	Grid 6 M4 19.51 dBV/m
Grid 7 M4 15.39 dBV/m	Grid 8 M4 18.53 dBV/m	Grid 9 M4 18.74 dBV/m



0 dB = 10.77 V/m = 20.64 dBV/m

HAC-RF Emission

Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2680 MHz; Duty Cycle: 1:8.87156

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

LTE Band 41 E-Field measurement/16QAM_RB 1/50_ch 41490/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 10.39 V/m; Power Drift = -0.06 dB

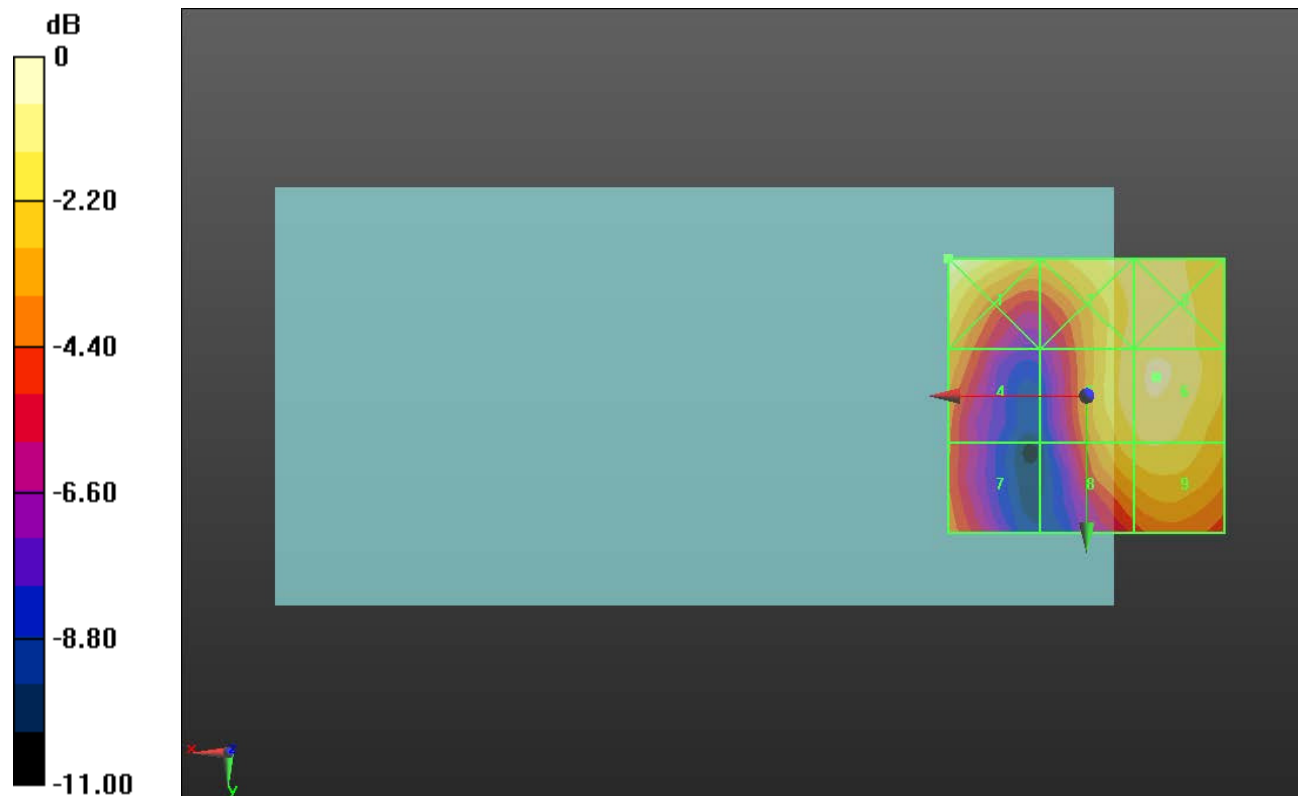
Applied MIF = -1.44 dB

RF audio interference level = 19.45 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 20.09 dBV/m	Grid 2 M4 18.96 dBV/m	Grid 3 M4 19.27 dBV/m
Grid 4 M4 17.27 dBV/m	Grid 5 M4 19.13 dBV/m	Grid 6 M4 19.45 dBV/m
Grid 7 M4 16.1 dBV/m	Grid 8 M4 18.41 dBV/m	Grid 9 M4 18.71 dBV/m



0 dB = 10.11 V/m = 20.10 dBV/m