

HAC-RF Emission

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 26.22 V/m; Power Drift = 0.11 dB

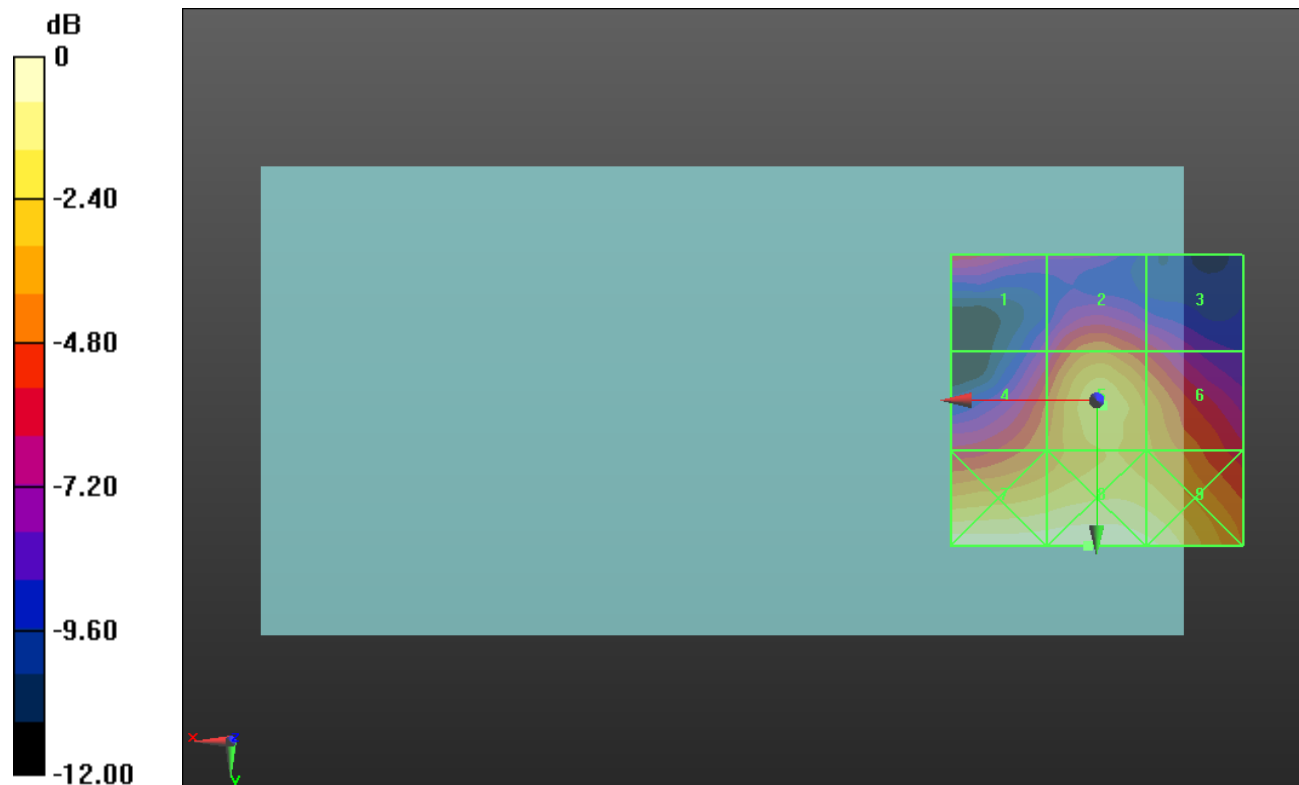
Applied MIF = 3.63 dB

RF audio interference level = 25.46 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 21.55 dBV/m	Grid 2 M4 23.2 dBV/m	Grid 3 M4 21.44 dBV/m
Grid 4 M4 23.33 dBV/m	Grid 5 M4 25.46 dBV/m	Grid 6 M4 24.25 dBV/m
Grid 7 M4 27.19 dBV/m	Grid 8 M4 27.23 dBV/m	Grid 9 M4 26.77 dBV/m



0 dB = 23.00 V/m = 27.23 dBV/m

HAC-RF Emission

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 26.80 V/m; Power Drift = 0.07 dB

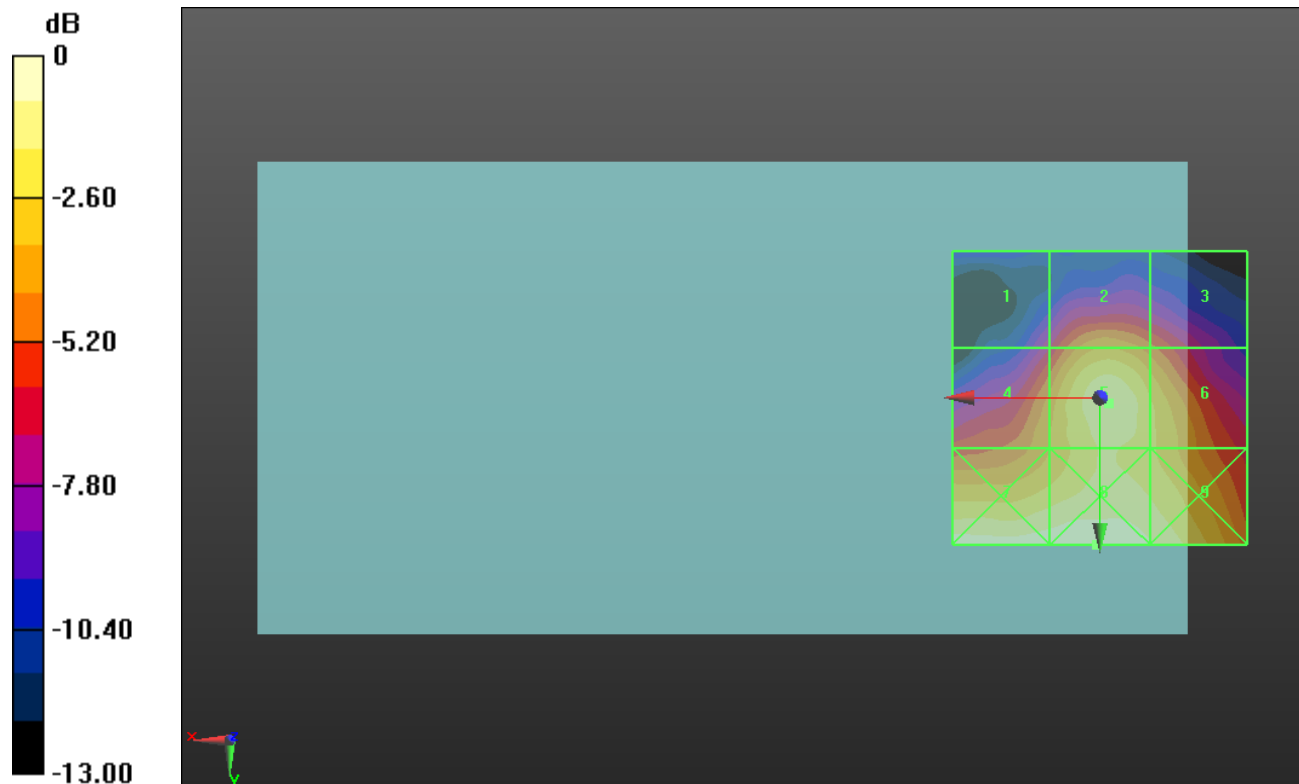
Applied MIF = 3.63 dB

RF audio interference level = 25.38 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 19.58 dBV/m	Grid 2 M4 23.06 dBV/m	Grid 3 M4 21.63 dBV/m
Grid 4 M4 23.01 dBV/m	Grid 5 M4 25.38 dBV/m	Grid 6 M4 24.11 dBV/m
Grid 7 M4 26.25 dBV/m	Grid 8 M4 26.45 dBV/m	Grid 9 M4 25.73 dBV/m



0 dB = 21.02 V/m = 26.45 dBV/m

HAC-RF Emission

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 26.11 V/m; Power Drift = 0.28 dB

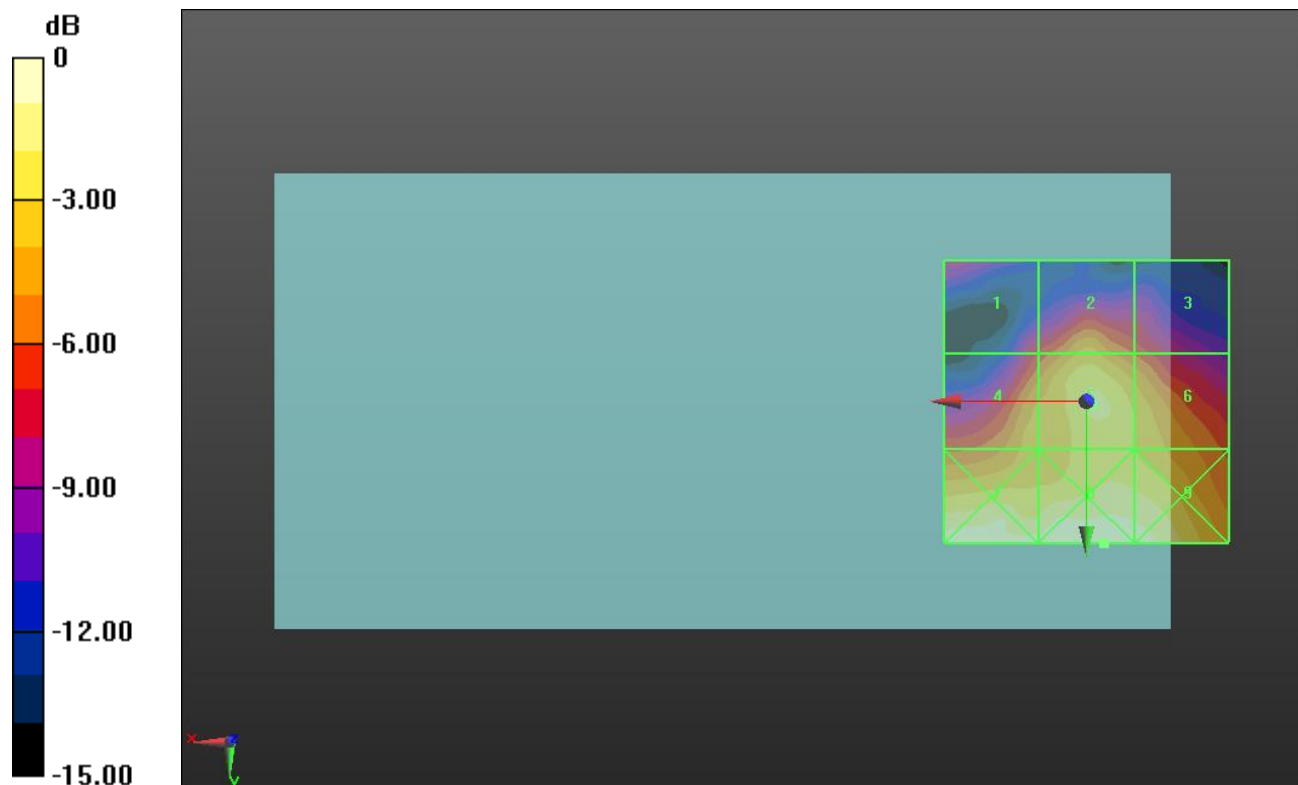
Applied MIF = 3.63 dB

RF audio interference level = 24.95 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 19.85 dBV/m	Grid 2 M4 23.17 dBV/m	Grid 3 M4 20.56 dBV/m
Grid 4 M4 23.26 dBV/m	Grid 5 M4 24.95 dBV/m	Grid 6 M4 23.74 dBV/m
Grid 7 M4 26.6 dBV/m	Grid 8 M4 26.67 dBV/m	Grid 9 M4 26.33 dBV/m



0 dB = 21.56 V/m = 26.67 dBV/m

HAC-RF Emission

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 27.13 V/m; Power Drift = 0.21 dB

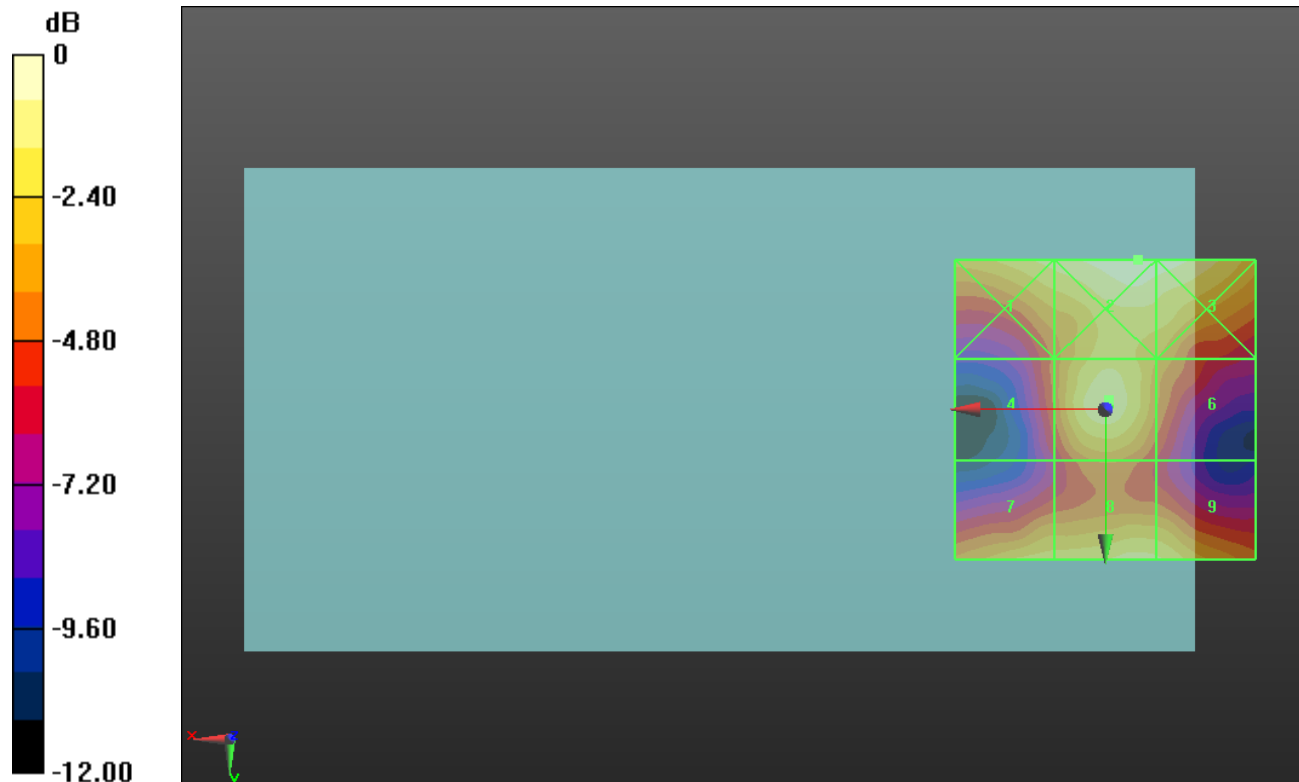
Applied MIF = 3.63 dB

RF audio interference level = 24.77 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 24.61 dBV/m	Grid 2 M4 25.8 dBV/m	Grid 3 M4 25.62 dBV/m
Grid 4 M4 21.39 dBV/m	Grid 5 M4 24.77 dBV/m	Grid 6 M4 22.64 dBV/m
Grid 7 M4 23.93 dBV/m	Grid 8 M4 24.59 dBV/m	Grid 9 M4 24.4 dBV/m



0 dB = 19.49 V/m = 25.80 dBV/m

HAC-RF Emission

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 27.79 V/m; Power Drift = 0.10 dB

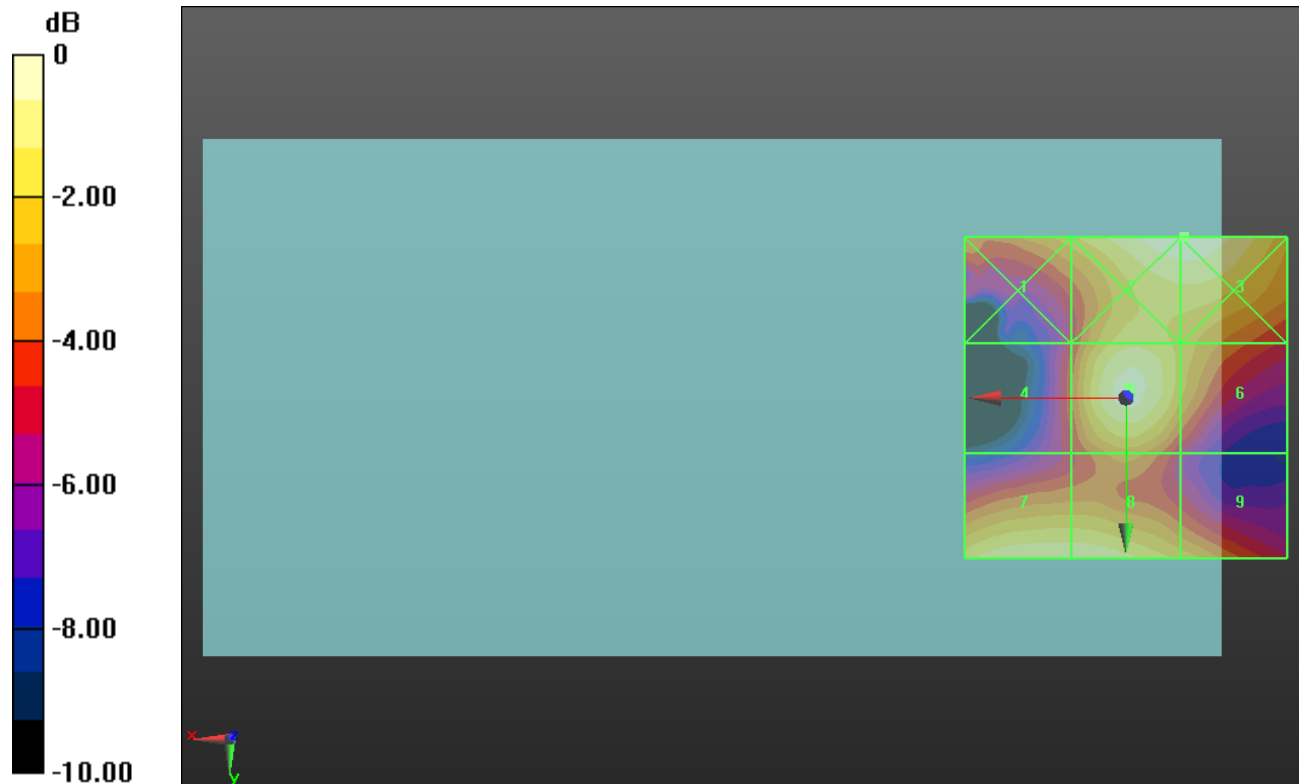
Applied MIF = 3.63 dB

RF audio interference level = 24.82 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 22.95 dBV/m	Grid 2 M4 25.14 dBV/m	Grid 3 M4 25.15 dBV/m
Grid 4 M4 21.02 dBV/m	Grid 5 M4 24.82 dBV/m	Grid 6 M4 22.93 dBV/m
Grid 7 M4 24.56 dBV/m	Grid 8 M4 24.56 dBV/m	Grid 9 M4 23.06 dBV/m



0 dB = 18.08 V/m = 25.14 dBV/m

HAC-RF Emission

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

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 28.33 V/m; Power Drift = 0.03 dB

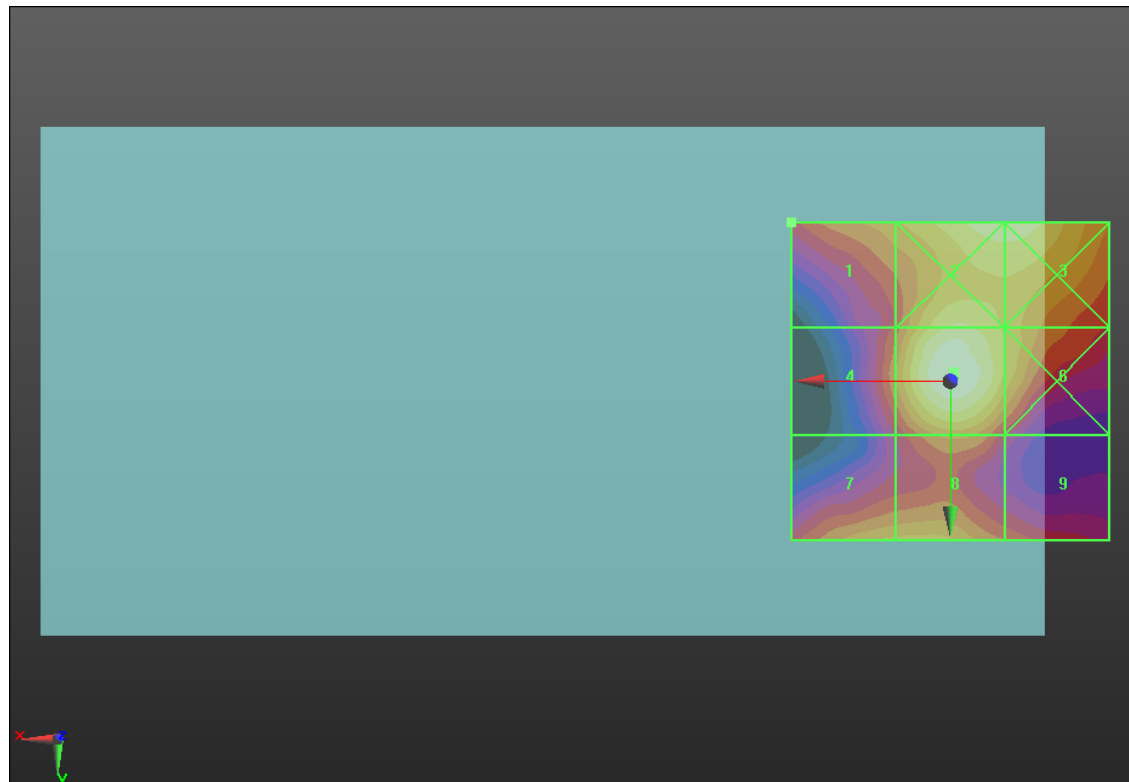
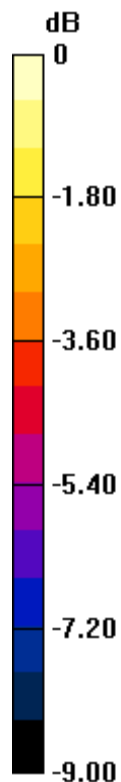
Applied MIF = 3.63 dB

RF audio interference level = 25.46 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 22.92 dBV/m	Grid 2 M4 24.65 dBV/m	Grid 3 M4 24.65 dBV/m
Grid 4 M4 22.48 dBV/m	Grid 5 M4 25.46 dBV/m	Grid 6 M4 23.71 dBV/m
Grid 7 M4 23.24 dBV/m	Grid 8 M4 23.32 dBV/m	Grid 9 M4 21.87 dBV/m



0 dB = 18.75 V/m = 25.46 dBV/m

HAC-RF Emission

Communication System: 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 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 9.569 V/m; Power Drift = -0.09 dB

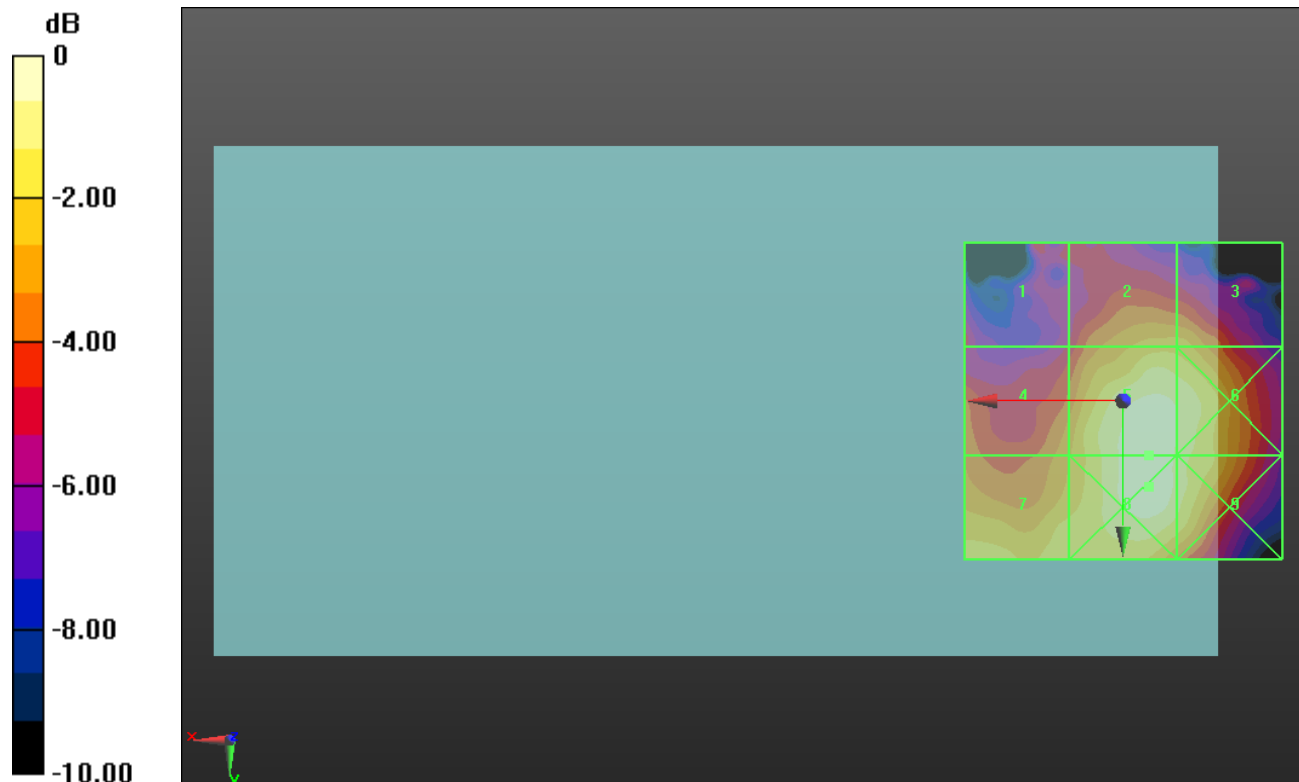
Applied MIF = -1.44 dB

RF audio interference level = 16.37 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 11.67 dBV/m	Grid 2 M4 14.19 dBV/m	Grid 3 M4 14.15 dBV/m
Grid 4 M4 13.66 dBV/m	Grid 5 M4 16.37 dBV/m	Grid 6 M4 15.75 dBV/m
Grid 7 M4 14.79 dBV/m	Grid 8 M4 16.4 dBV/m	Grid 9 M4 15.58 dBV/m



0 dB = 6.610 V/m = 16.40 dBV/m

HAC-RF Emission

Communication System: 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 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 7.641 V/m; Power Drift = -0.46 dB

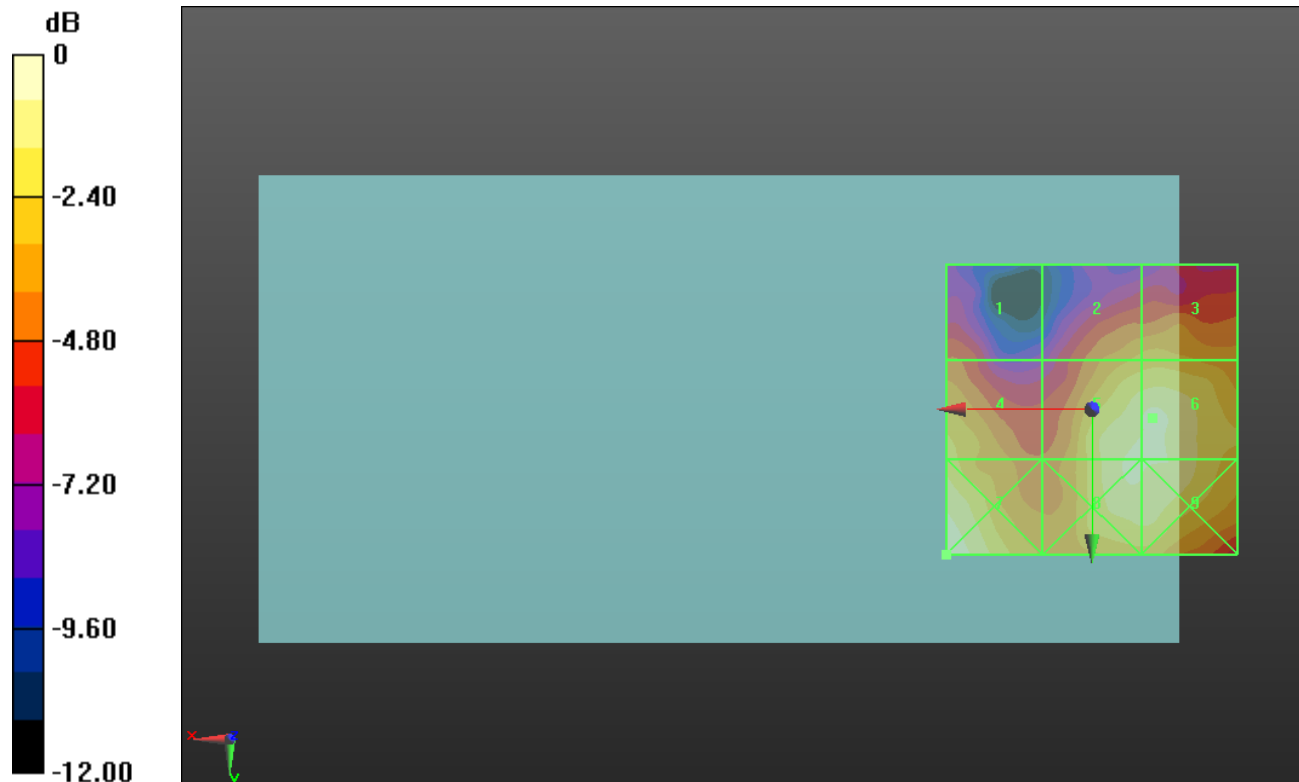
Applied MIF = -1.44 dB

RF audio interference level = 15.59 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 11.59 dBV/m	Grid 2 M4 13.38 dBV/m	Grid 3 M4 13.56 dBV/m
Grid 4 M4 14.39 dBV/m	Grid 5 M4 15.53 dBV/m	Grid 6 M4 15.59 dBV/m
Grid 7 M4 16.24 dBV/m	Grid 8 M4 15.55 dBV/m	Grid 9 M4 15.51 dBV/m



0 dB = 6.487 V/m = 16.24 dBV/m

HAC-RF Emission

Communication System: 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 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 7.972 V/m; Power Drift = -0.33 dB

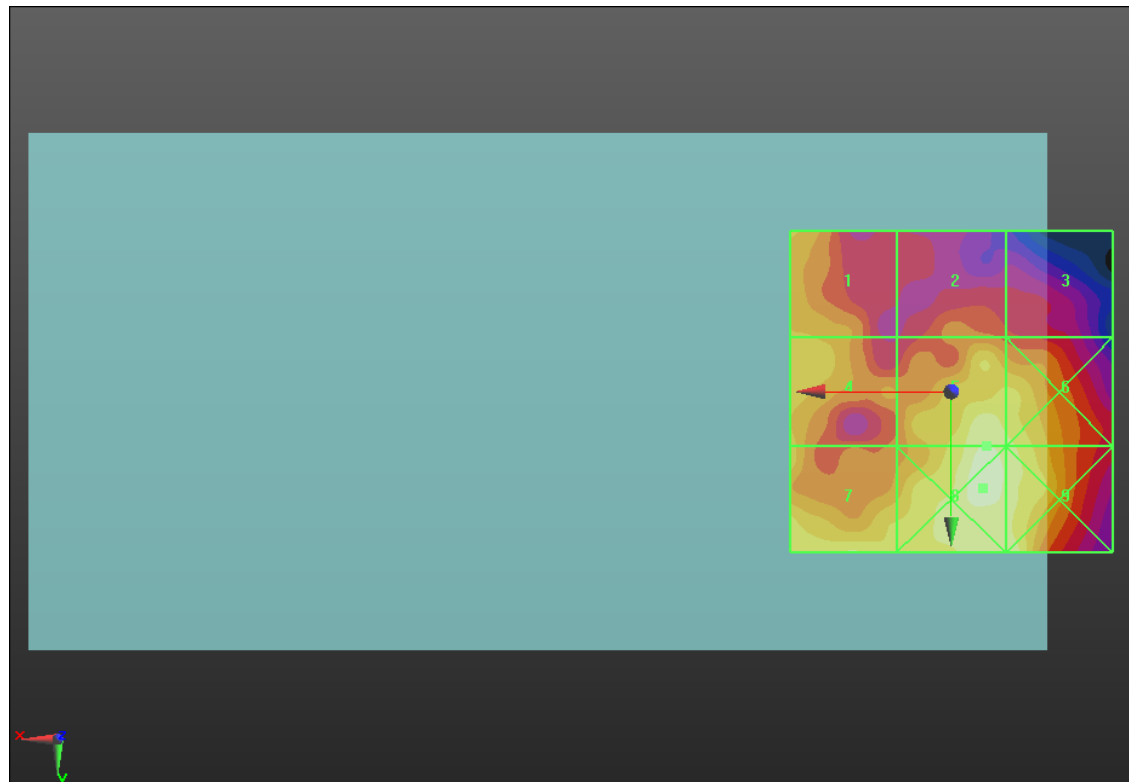
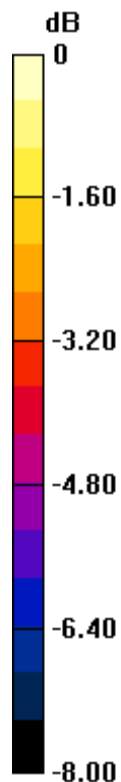
Applied MIF = -1.44 dB

RF audio interference level = 16.29 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 14.87 dBV/m	Grid 2 M4 13.87 dBV/m	Grid 3 M4 13.37 dBV/m
Grid 4 M4 15.16 dBV/m	Grid 5 M4 16.29 dBV/m	Grid 6 M4 15.97 dBV/m
Grid 7 M4 15.87 dBV/m	Grid 8 M4 16.79 dBV/m	Grid 9 M4 16.28 dBV/m



0 dB = 6.913 V/m = 16.79 dBV/m

HAC-RF Emission

Communication System: 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 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 6.428 V/m; Power Drift = -0.00 dB

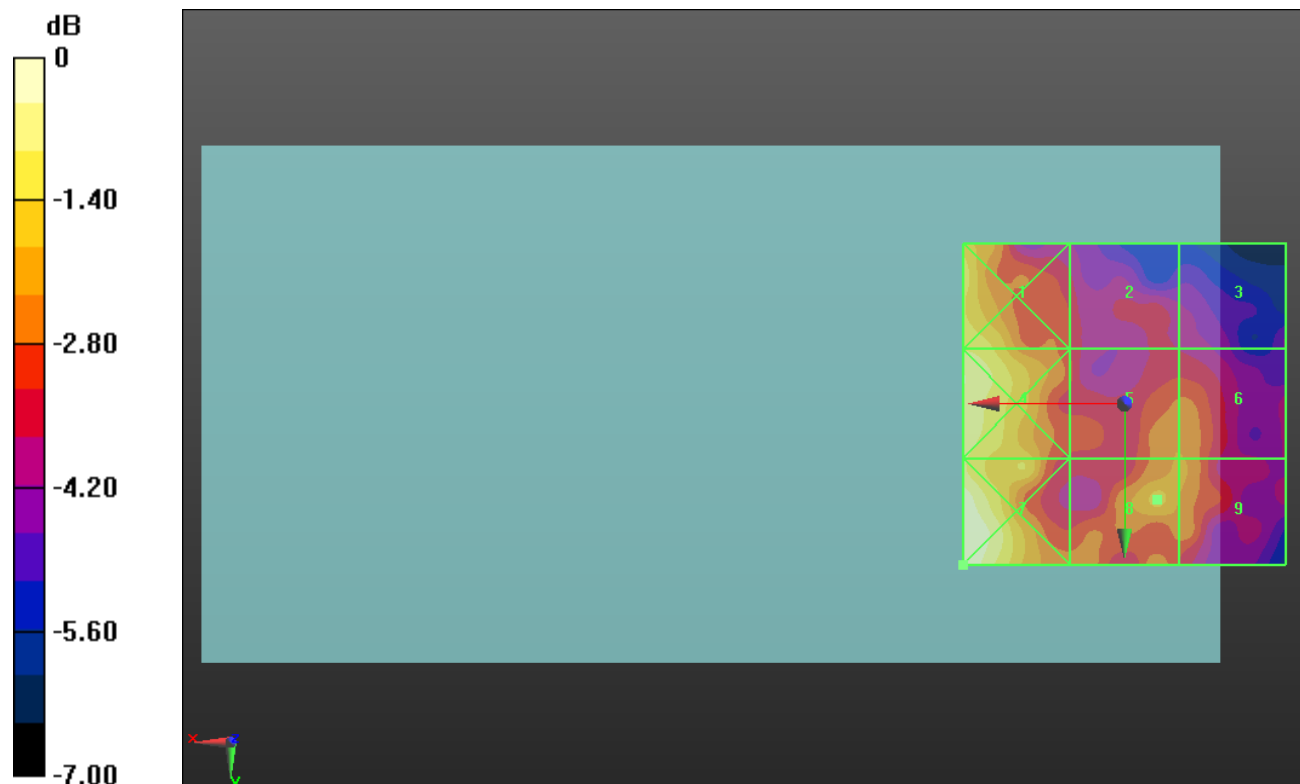
Applied MIF = -1.44 dB

RF audio interference level = 14.90 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 15.67 dBV/m	Grid 2 M4 13.45 dBV/m	Grid 3 M4 12.9 dBV/m
Grid 4 M4 16.2 dBV/m	Grid 5 M4 14.35 dBV/m	Grid 6 M4 14.35 dBV/m
Grid 7 M4 16.64 dBV/m	Grid 8 M4 14.9 dBV/m	Grid 9 M4 14.41 dBV/m



0 dB = 6.790 V/m = 16.64 dBV/m

HAC-RF Emission

Communication System: 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 - SN4041; ConvF(1, 1, 1); Calibrated: 3/14/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1433; Calibrated: 3/8/2017
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

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 = 6.145 V/m; Power Drift = -0.22 dB

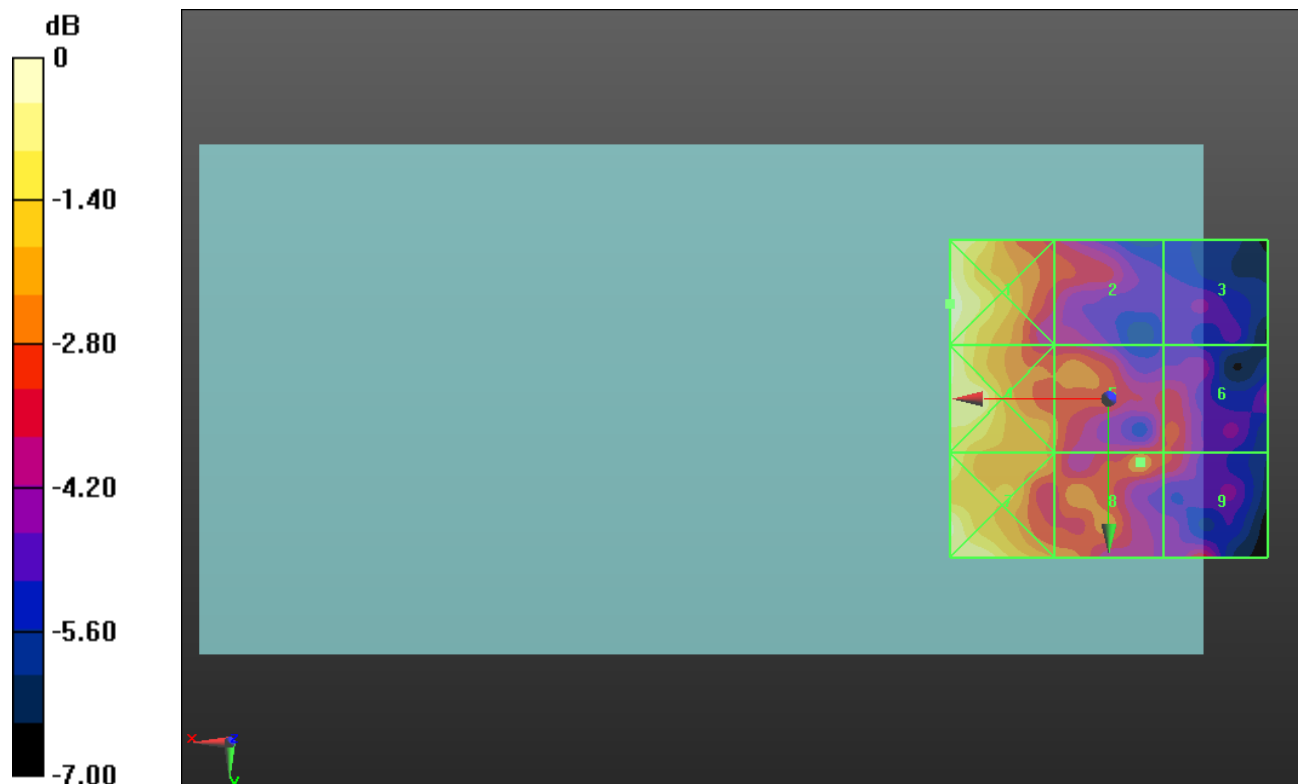
Applied MIF = -1.44 dB

RF audio interference level = 12.76 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 15 dBV/m	Grid 2 M4 11.9 dBV/m	Grid 3 M4 10.45 dBV/m
Grid 4 M4 14.72 dBV/m	Grid 5 M4 12.56 dBV/m	Grid 6 M4 11.95 dBV/m
Grid 7 M4 14.7 dBV/m	Grid 8 M4 12.76 dBV/m	Grid 9 M4 11.87 dBV/m



0 dB = 5.622 V/m = 15.00 dBV/m