

HAC-RF Emission

Communication System: UID 10021 - CAA, 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) @ 824.2 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 17.68 V/m; Power Drift = -0.08 dB

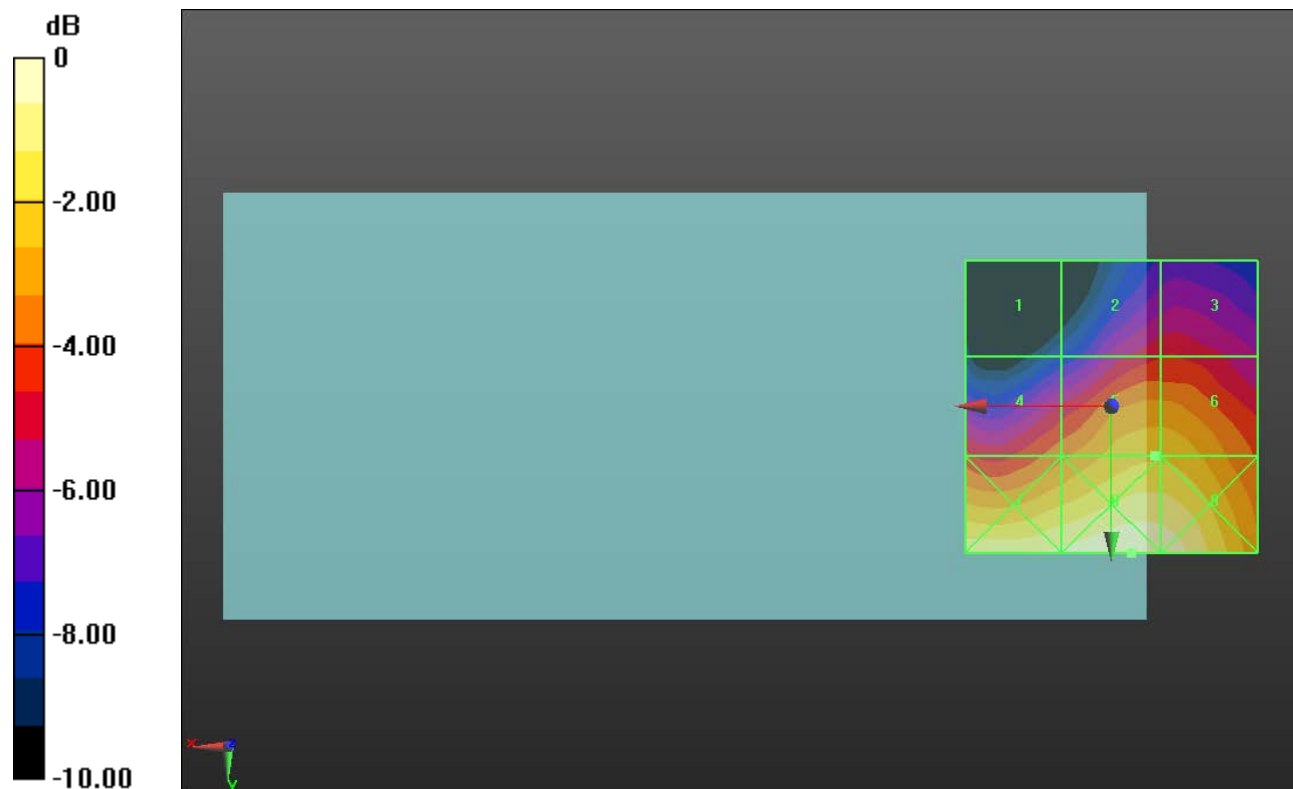
Applied MIF = 3.63 dB

RF audio interference level = 26.88 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 21.08 dBV/m	Grid 2 M4 24.3 dBV/m	Grid 3 M4 24.37 dBV/m
Grid 4 M4 25.45 dBV/m	Grid 5 M4 26.88 dBV/m	Grid 6 M4 26.88 dBV/m
Grid 7 M4 28.47 dBV/m	Grid 8 M4 28.97 dBV/m	Grid 9 M4 28.84 dBV/m



0 dB = 28.08 V/m = 28.97 dBV/m

HAC-RF Emission

Communication System: UID 10021 - CAA, 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) @ 836.6 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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 = 17.20 V/m; Power Drift = 0.03 dB

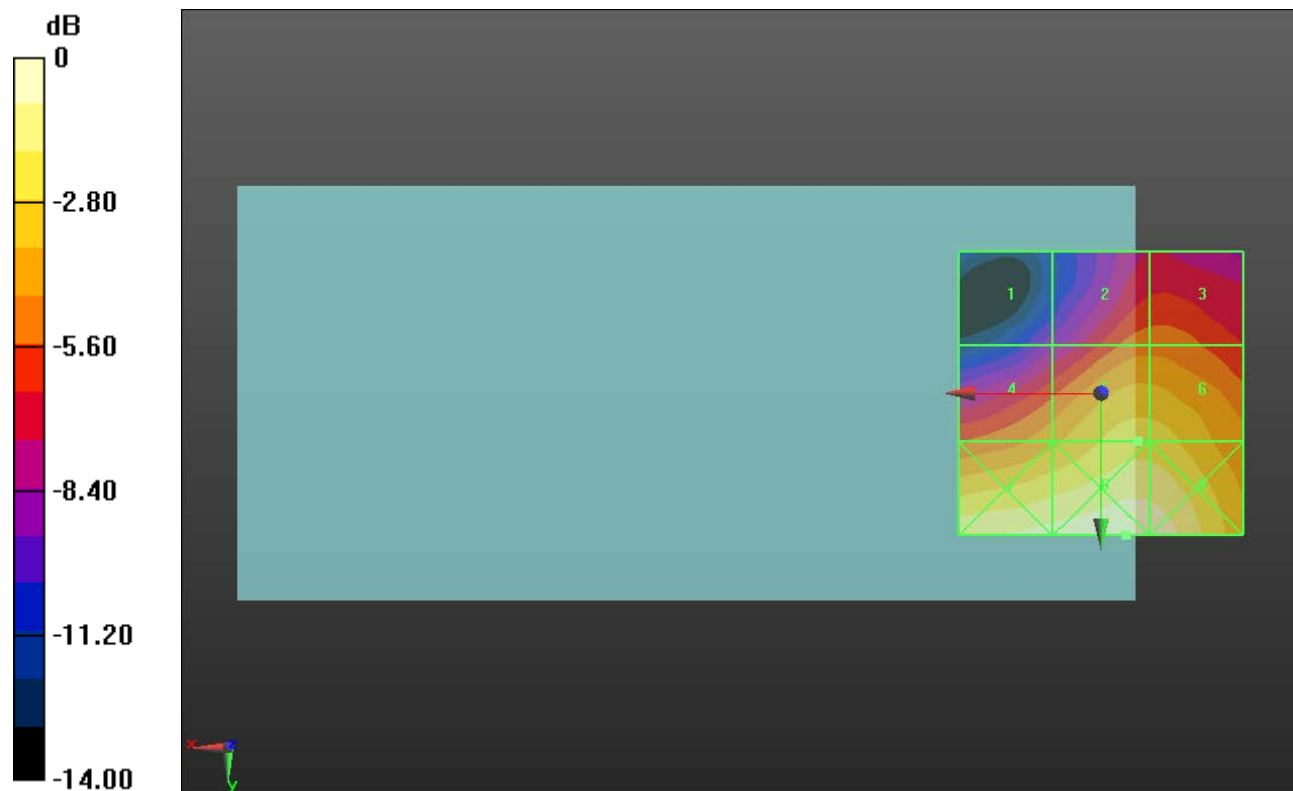
Applied MIF = 3.63 dB

RF audio interference level = 26.75 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 20.39 dBV/m	Grid 2 M4 24.01 dBV/m	Grid 3 M4 24.02 dBV/m
Grid 4 M4 25.06 dBV/m	Grid 5 M4 26.75 dBV/m	Grid 6 M4 26.72 dBV/m
Grid 7 M4 28.47 dBV/m	Grid 8 M4 29.01 dBV/m	Grid 9 M4 28.81 dBV/m



0 dB = 28.20 V/m = 29.00 dBV/m

HAC-RF Emission

Communication System: UID 10021 - CAA, 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) @ 848.6 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 14.82 V/m; Power Drift = 0.02 dB

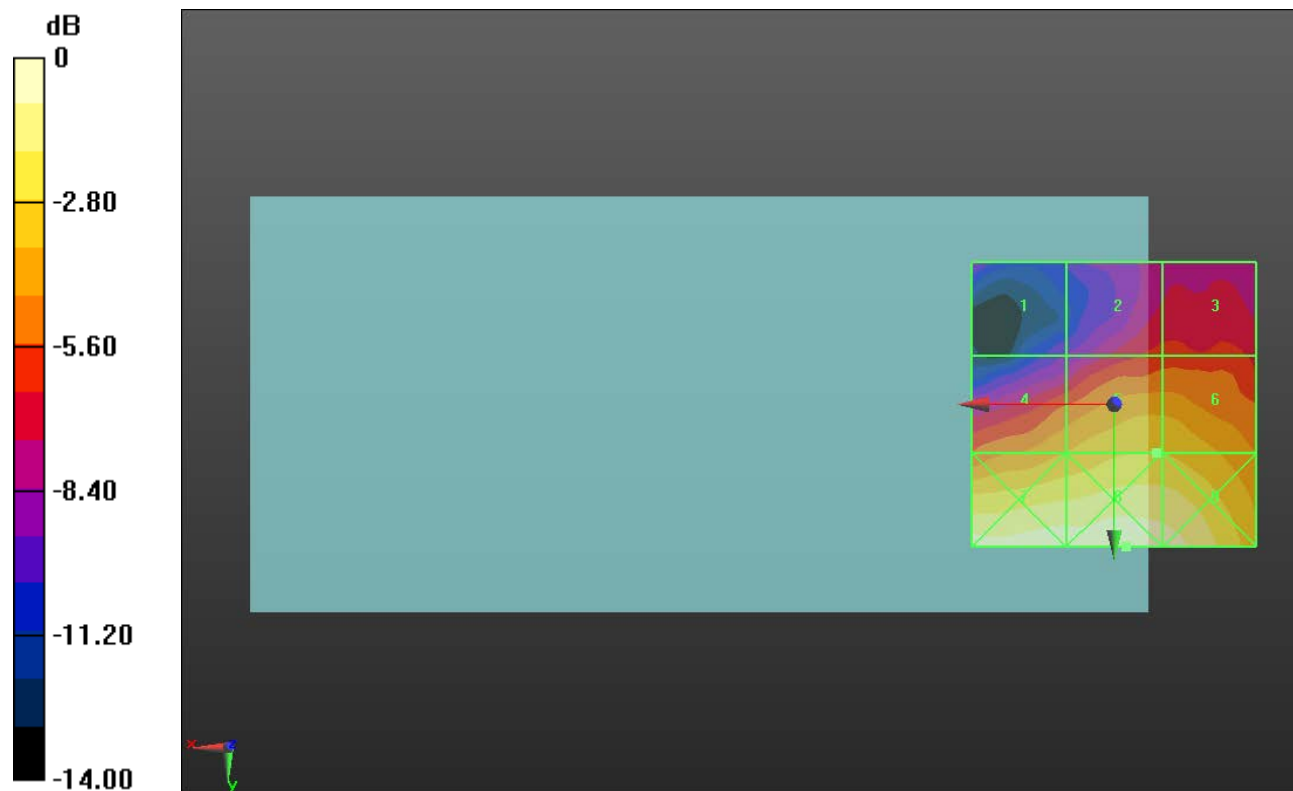
Applied MIF = 3.63 dB

RF audio interference level = 24.83 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 18.94 dBV/m	Grid 2 M4 21.5 dBV/m	Grid 3 M4 21.57 dBV/m
Grid 4 M4 23.89 dBV/m	Grid 5 M4 24.83 dBV/m	Grid 6 M4 24.81 dBV/m
Grid 7 M4 27.23 dBV/m	Grid 8 M4 27.58 dBV/m	Grid 9 M4 27.22 dBV/m



0 dB = 23.93 V/m = 27.58 dBV/m

HAC-RF Emission

Communication System: UID 10021 - CAA, 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) @ 1850.2 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 11.28 V/m; Power Drift = 0.11 dB

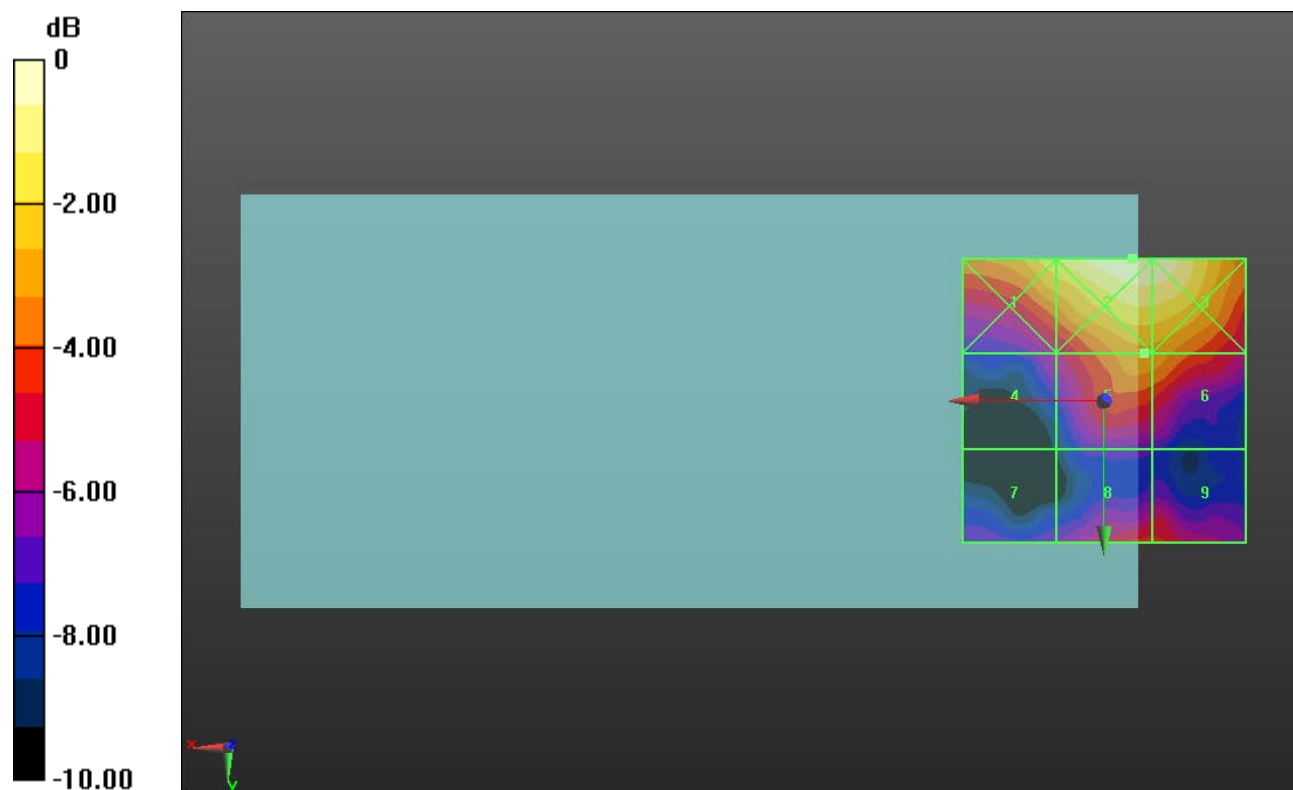
Applied MIF = 3.63 dB

RF audio interference level = 20.82 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 22.26 dBV/m	Grid 2 M4 23.65 dBV/m	Grid 3 M4 23.61 dBV/m
Grid 4 M4 18.11 dBV/m	Grid 5 M4 20.82 dBV/m	Grid 6 M4 20.75 dBV/m
Grid 7 M4 17 dBV/m	Grid 8 M4 19.3 dBV/m	Grid 9 M4 19.27 dBV/m



0 dB = 15.23 V/m = 23.65 dBV/m

HAC-RF Emission

Communication System: UID 10021 - CAA, 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) @ 1880 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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 = 11.42 V/m; Power Drift = -0.17 dB

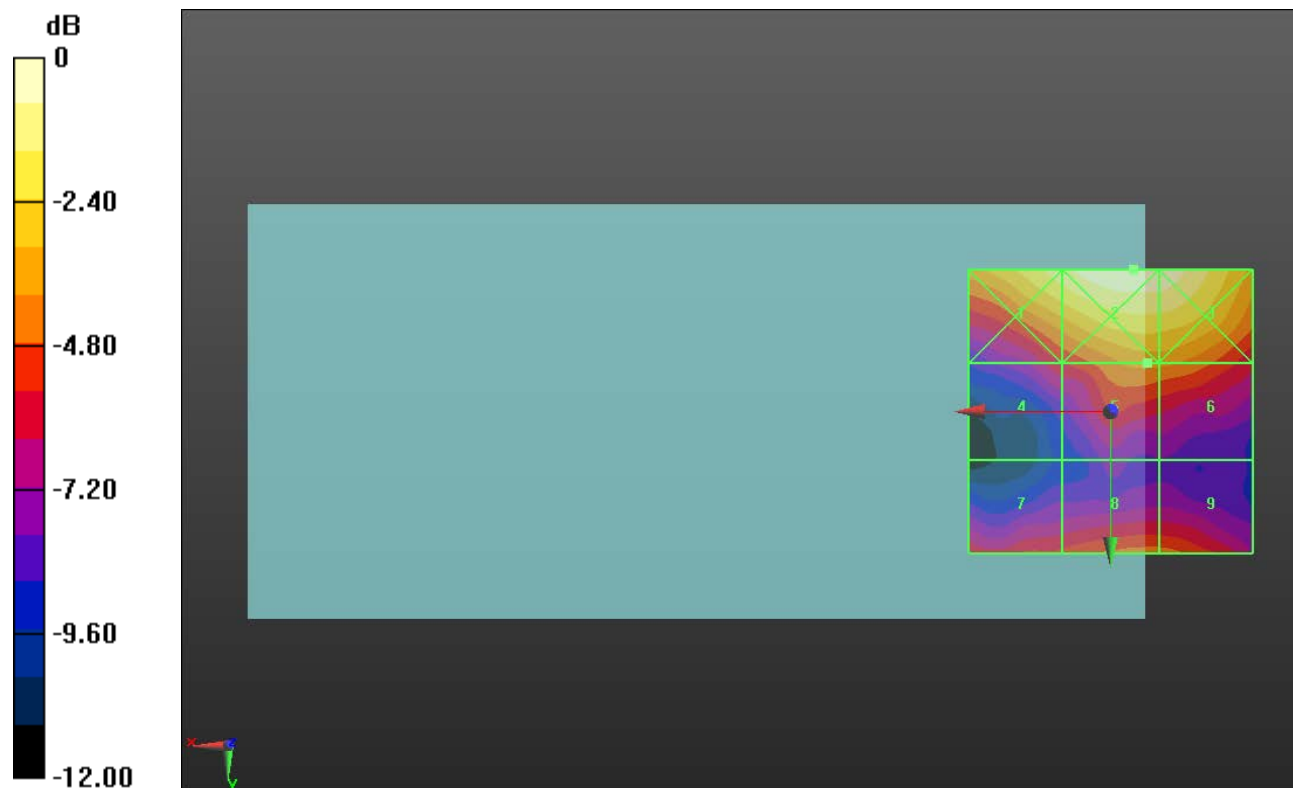
Applied MIF = 3.63 dB

RF audio interference level = 21.45 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 24.17 dBV/m	Grid 2 M4 25.2 dBV/m	Grid 3 M4 25.02 dBV/m
Grid 4 M4 19.57 dBV/m	Grid 5 M4 21.45 dBV/m	Grid 6 M4 21.43 dBV/m
Grid 7 M4 19.89 dBV/m	Grid 8 M4 20.88 dBV/m	Grid 9 M4 20.86 dBV/m



0 dB = 18.21 V/m = 25.21 dBV/m

HAC-RF Emission

Communication System: UID 10021 - CAA, 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) @ 1909.8 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 11.36 V/m; Power Drift = -0.08 dB

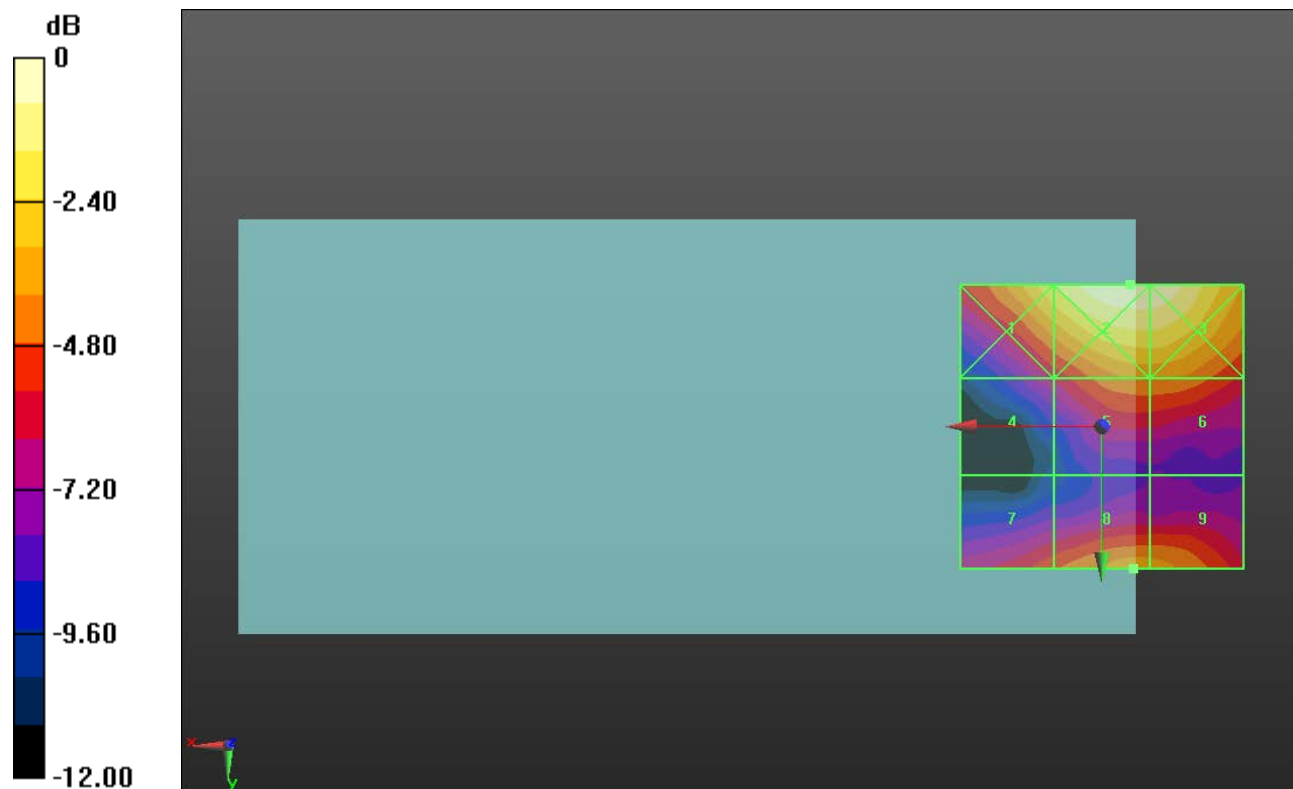
Applied MIF = 3.63 dB

RF audio interference level = 23.51 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 25.2 dBV/m	Grid 2 M4 26.83 dBV/m	Grid 3 M4 26.71 dBV/m
Grid 4 M4 20.58 dBV/m	Grid 5 M4 22.93 dBV/m	Grid 6 M4 22.91 dBV/m
Grid 7 M4 21.92 dBV/m	Grid 8 M4 23.51 dBV/m	Grid 9 M4 23.29 dBV/m



0 dB = 21.96 V/m = 26.83 dBV/m

HAC-RF Emission

Communication System: UID 10173 - CAC, 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) @ 2506 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 4.414 V/m; Power Drift = -0.87 dB

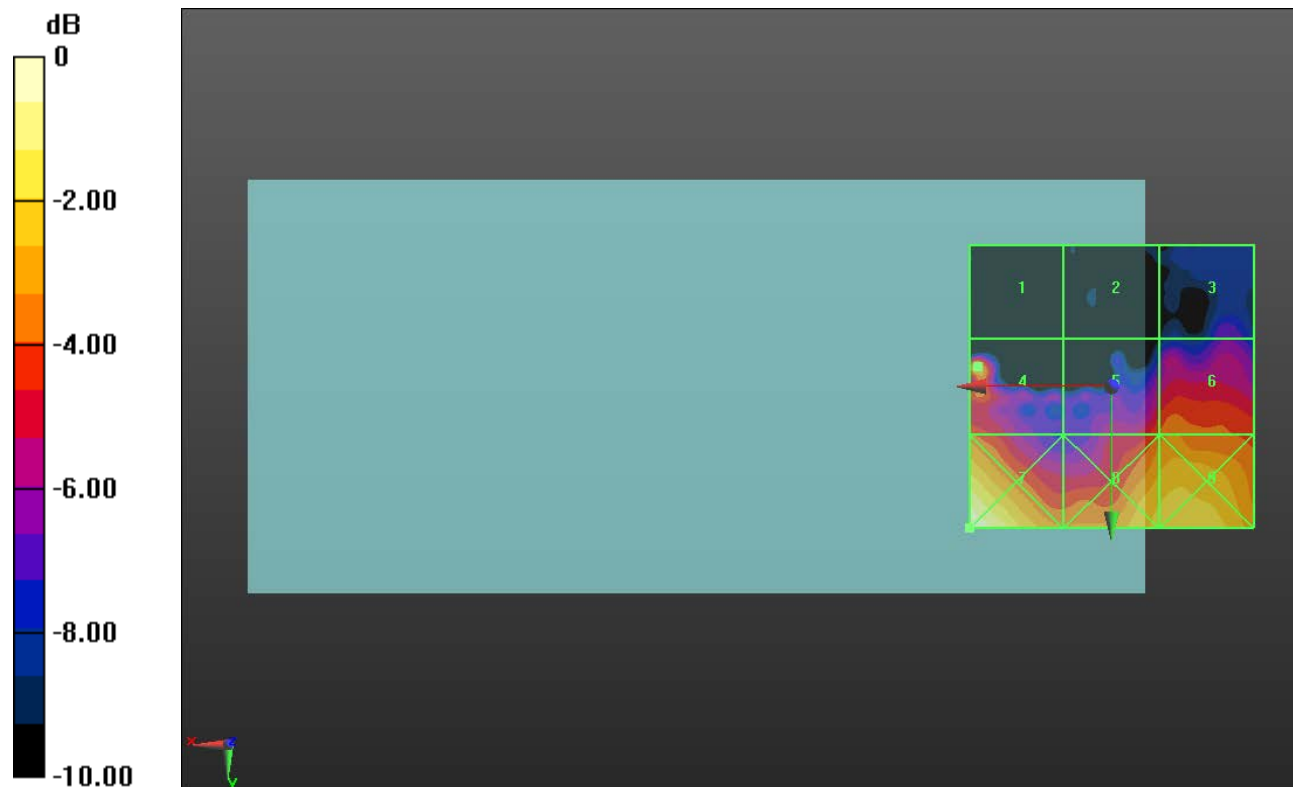
Applied MIF = -1.44 dB

RF audio interference level = 14.64 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 9.45 dBV/m	Grid 2 M4 8.62 dBV/m	Grid 3 M4 10.52 dBV/m
Grid 4 M4 14.64 dBV/m	Grid 5 M4 13.39 dBV/m	Grid 6 M4 13.85 dBV/m
Grid 7 M4 17.14 dBV/m	Grid 8 M4 15.48 dBV/m	Grid 9 M4 15.66 dBV/m



0 dB = 7.197 V/m = 17.14 dBV/m

HAC-RF Emission

Communication System: UID 10173 - CAC, 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) @ 2549.5 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 4.195 V/m; Power Drift = -0.15 dB

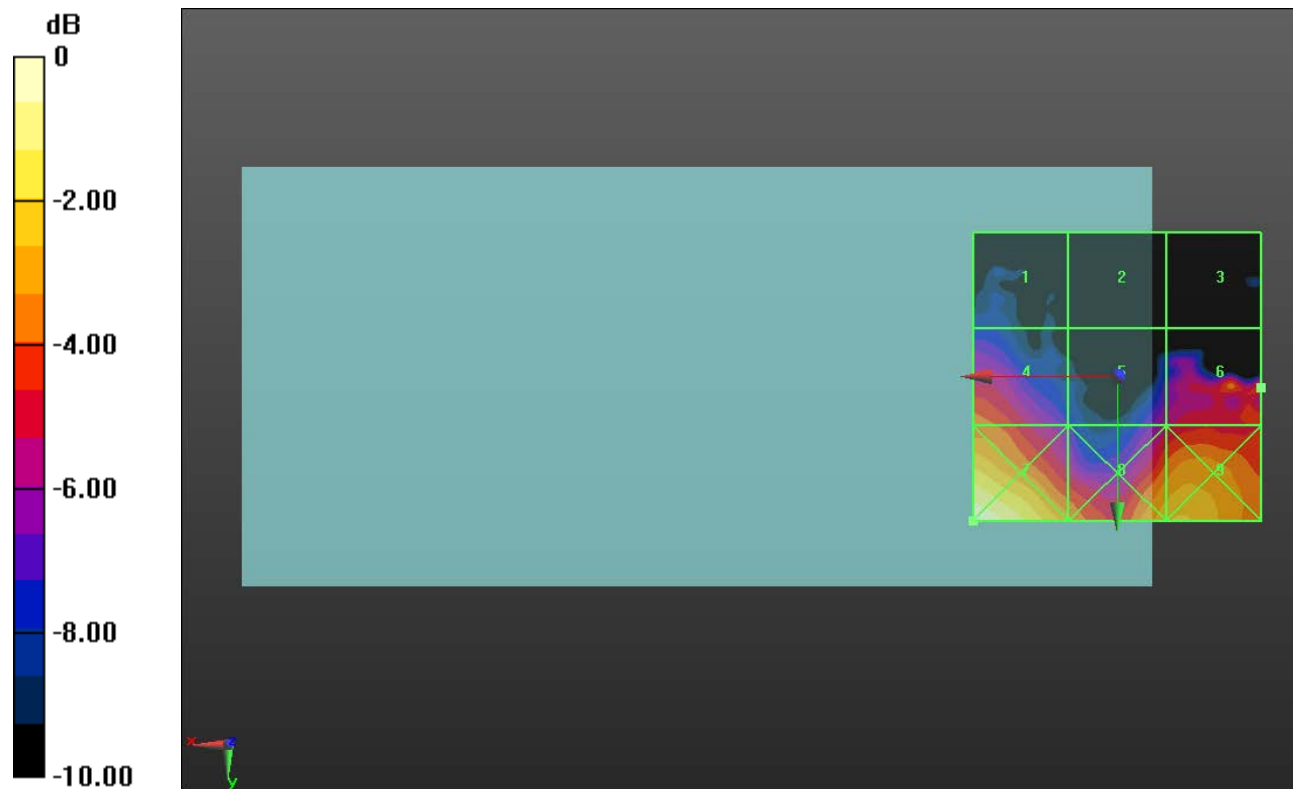
Applied MIF = -1.44 dB

RF audio interference level = 15.64 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 10.84 dBV/m	Grid 2 M4 2.34 dBV/m	Grid 3 M4 10.38 dBV/m
Grid 4 M4 15.09 dBV/m	Grid 5 M4 13.2 dBV/m	Grid 6 M4 15.64 dBV/m
Grid 7 M4 18.81 dBV/m	Grid 8 M4 16.71 dBV/m	Grid 9 M4 16.94 dBV/m



0 dB = 8.724 V/m = 18.81 dBV/m

HAC-RF Emission

Communication System: UID 10173 - CAC, 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) @ 2593 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 4.232 V/m; Power Drift = 0.14 dB

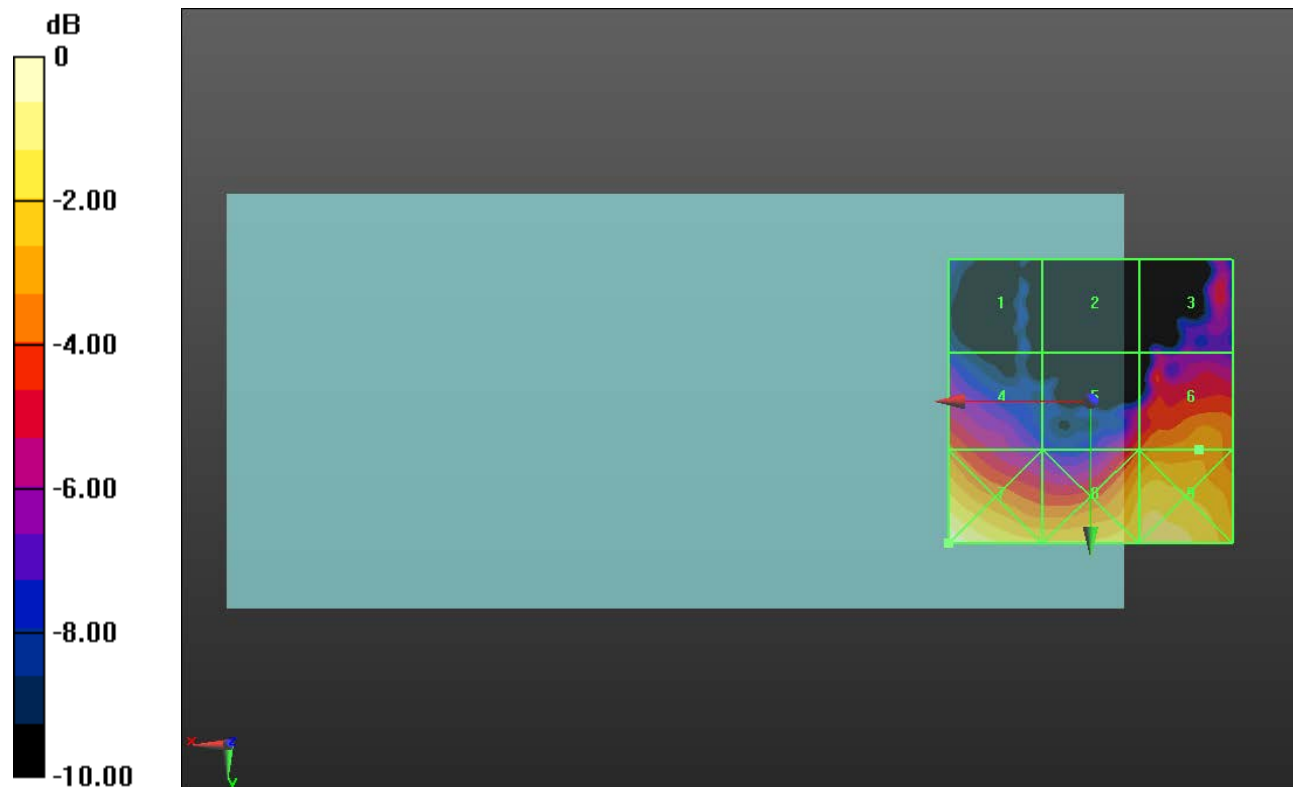
Applied MIF = -1.44 dB

RF audio interference level = 15.30 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 10.24 dBV/m	Grid 2 M4 3.8 dBV/m	Grid 3 M4 13.37 dBV/m
Grid 4 M4 14.52 dBV/m	Grid 5 M4 14.15 dBV/m	Grid 6 M4 15.3 dBV/m
Grid 7 M4 18.17 dBV/m	Grid 8 M4 16.98 dBV/m	Grid 9 M4 17.26 dBV/m



0 dB = 8.096 V/m = 18.17 dBV/m

HAC-RF Emission

Communication System: UID 10173 - CAC, 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) @ 2636.5 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 5.900 V/m; Power Drift = -0.40 dB

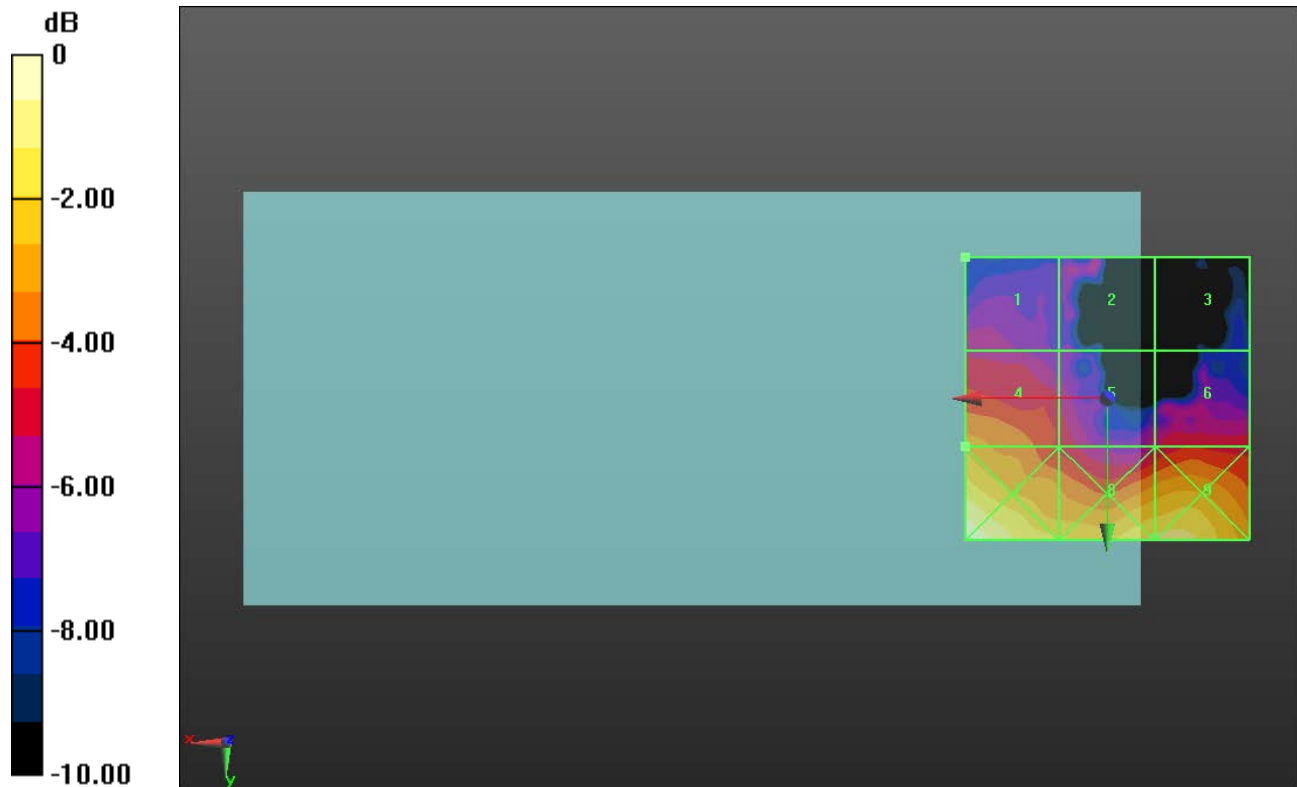
Applied MIF = -1.44 dB

RF audio interference level = 16.07 dBV/m

Emission category: **M4**

MIF scaled E-field

Grid 1 M4 13.48 dBV/m	Grid 2 M4 13.35 dBV/m	Grid 3 M4 11.43 dBV/m
Grid 4 M4 16.07 dBV/m	Grid 5 M4 14.17 dBV/m	Grid 6 M4 14.27 dBV/m
Grid 7 M4 18.92 dBV/m	Grid 8 M4 17.83 dBV/m	Grid 9 M4 17.91 dBV/m



0 dB = 8.831 V/m = 18.92 dBV/m

HAC-RF Emission

Communication System: UID 10173 - CAC, 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) @ 2680 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

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 = 8.735 V/m; Power Drift = 0.04 dB

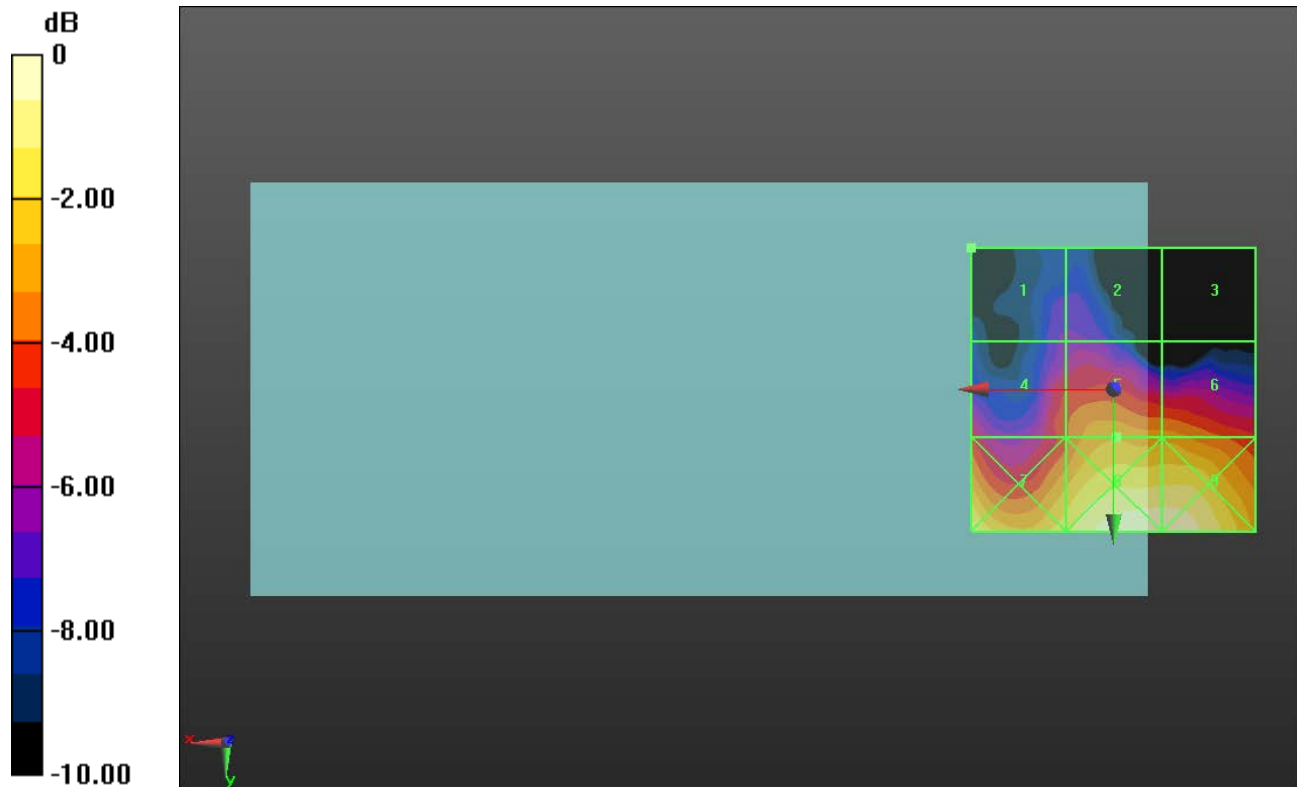
Applied MIF = -1.44 dB

RF audio interference level = 16.63 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 12.93 dBV/m	Grid 2 M4 13.01 dBV/m	Grid 3 M4 9.92 dBV/m
Grid 4 M4 15.29 dBV/m	Grid 5 M4 16.63 dBV/m	Grid 6 M4 16.46 dBV/m
Grid 7 M4 18.48 dBV/m	Grid 8 M4 19.38 dBV/m	Grid 9 M4 19.38 dBV/m



0 dB = 9.310 V/m = 19.38 dBV/m

HAC-RF Emission

Communication System: UID 0, @IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2422 MHz; Duty Cycle: 1:12.5893

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1) @ 2422 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

802.11g Chain 0 E-Field measurement/6Mbps_ch 3/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 = 19.00 V/m; Power Drift = -0.10 dB

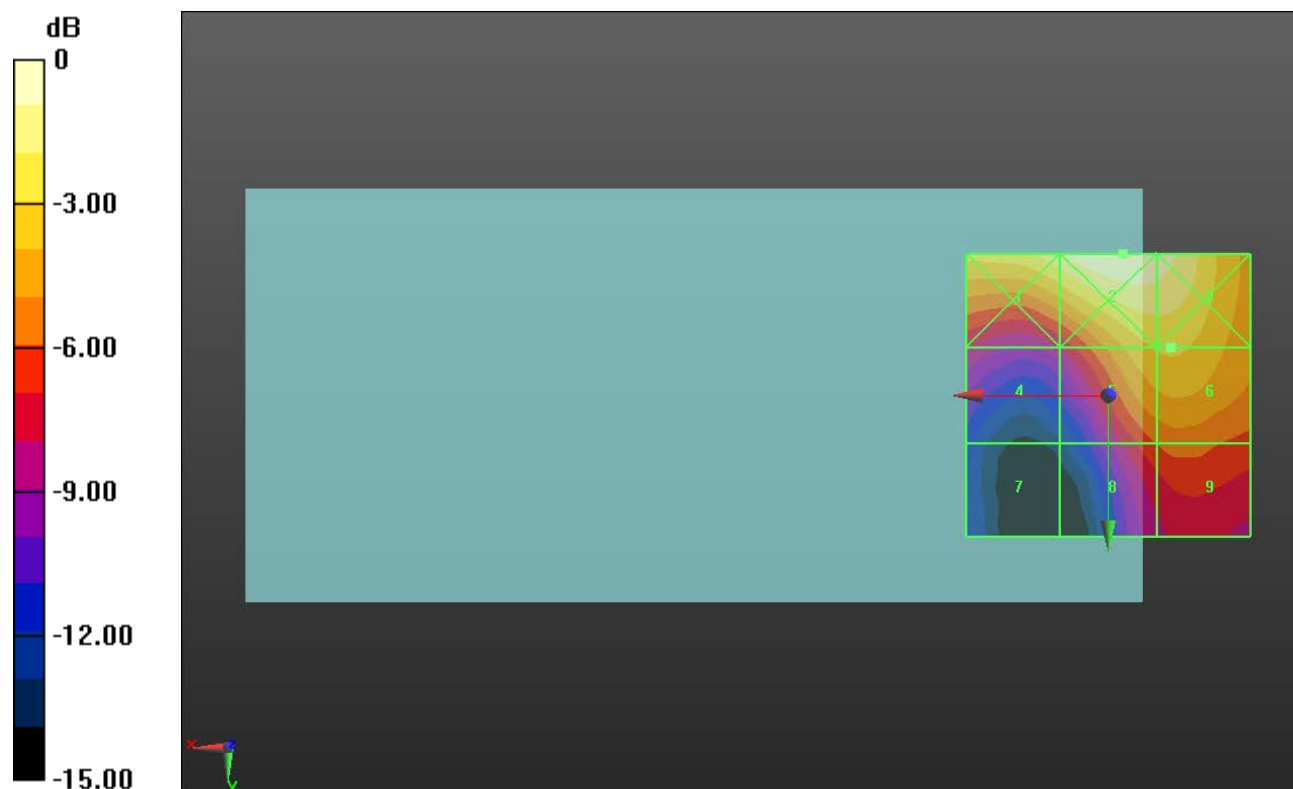
Applied MIF = 0.12 dB

RF audio interference level = 25.94 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 27.56 dBV/m	Grid 2 M4 28.7 dBV/m	Grid 3 M4 28.29 dBV/m
Grid 4 M4 20.91 dBV/m	Grid 5 M4 25.83 dBV/m	Grid 6 M4 25.94 dBV/m
Grid 7 M4 17.46 dBV/m	Grid 8 M4 22.75 dBV/m	Grid 9 M4 23.19 dBV/m



0 dB = 27.23 V/m = 28.70 dBV/m

HAC-RF Emission

Communication System: UID 0, @IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2437 MHz; Duty Cycle: 1:12.5893

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1) @ 2437 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

802.11g Chain 0 E-Field measurement/6Mbps_ch 6/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 = 20.08 V/m; Power Drift = 0.02 dB

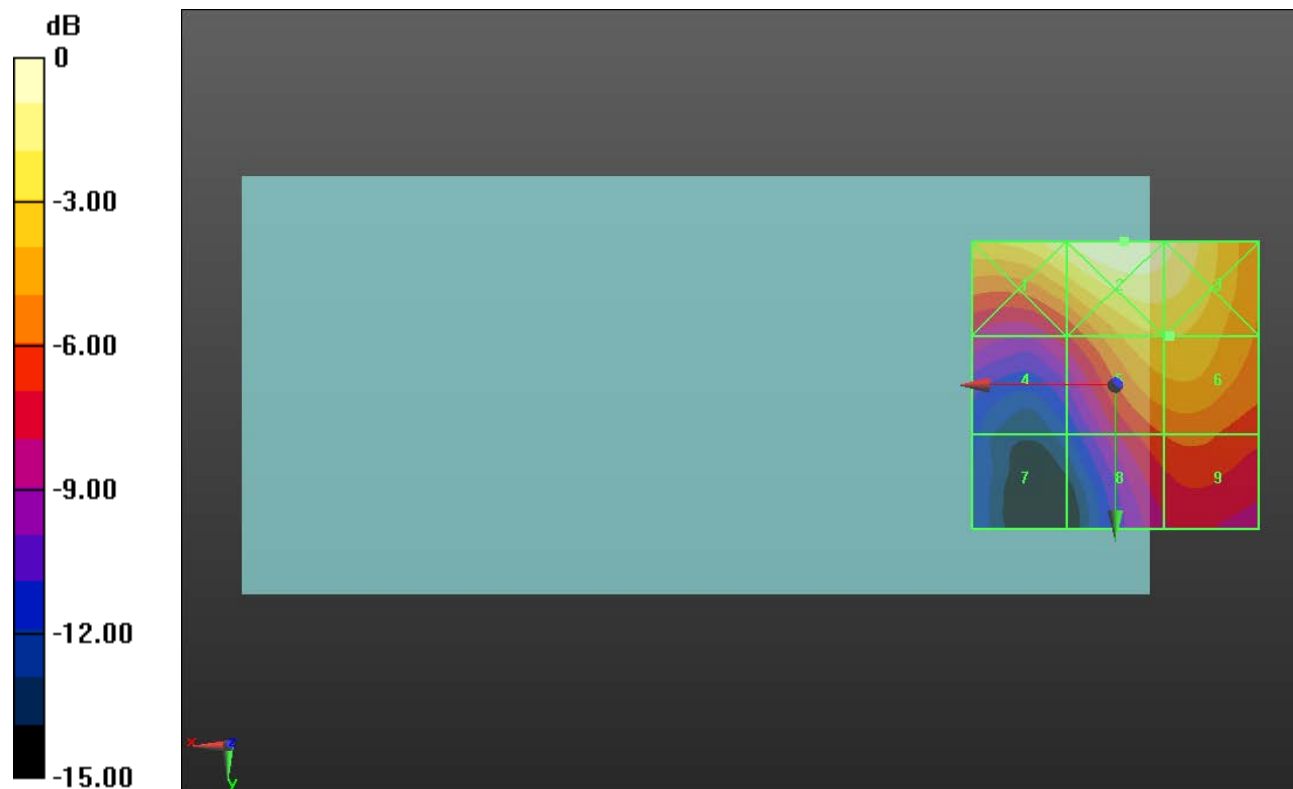
Applied MIF = 0.12 dB

RF audio interference level = 26.14 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 28.01 dBV/m	Grid 2 M4 29.09 dBV/m	Grid 3 M4 28.48 dBV/m
Grid 4 M4 21.93 dBV/m	Grid 5 M4 26.13 dBV/m	Grid 6 M4 26.14 dBV/m
Grid 7 M4 17.62 dBV/m	Grid 8 M4 23.16 dBV/m	Grid 9 M4 23.46 dBV/m



0 dB = 28.48 V/m = 29.09 dBV/m

HAC-RF Emission

Communication System: UID 0, @IEEE 802.11b/g/n 2.4 GHz Band (0); Frequency: 2457 MHz; Duty Cycle: 1:12.5893

Phantom section: RF Section

DASY5 Configuration:

- Probe: EF3DV3 - SN4041; ConvF(1, 1, 1) @ 2457 MHz; Calibrated: 3/16/2018
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1547; Calibrated: 5/3/2018
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

802.11g Chain 0 E-Field measurement/6Mbps_ch 10/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 = 19.27 V/m; Power Drift = -0.06 dB

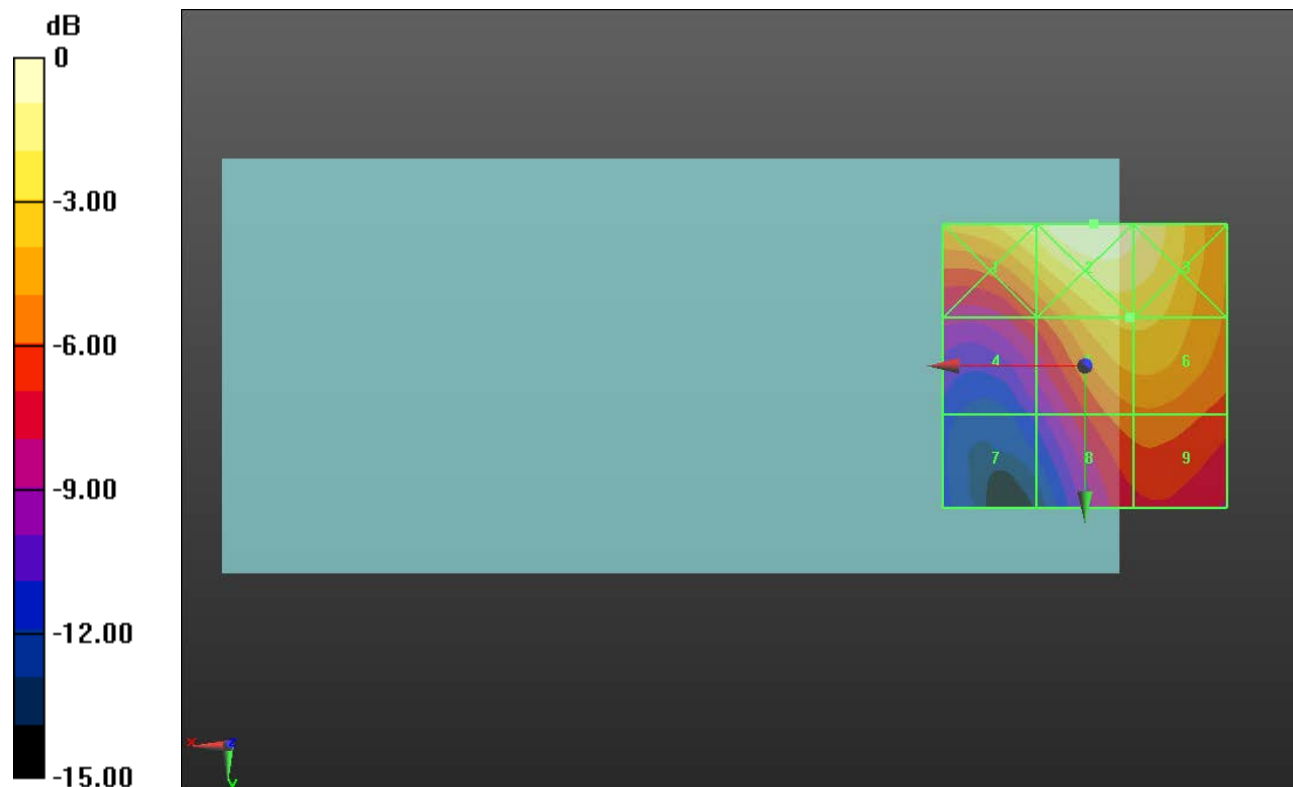
Applied MIF = 0.12 dB

RF audio interference level = 25.52 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 26.92 dBV/m	Grid 2 M4 28.22 dBV/m	Grid 3 M4 27.57 dBV/m
Grid 4 M4 21.92 dBV/m	Grid 5 M4 25.52 dBV/m	Grid 6 M4 25.52 dBV/m
Grid 7 M4 17.79 dBV/m	Grid 8 M4 22.94 dBV/m	Grid 9 M4 23.06 dBV/m



0 dB = 25.77 V/m = 28.22 dBV/m