HAC-RF Emission

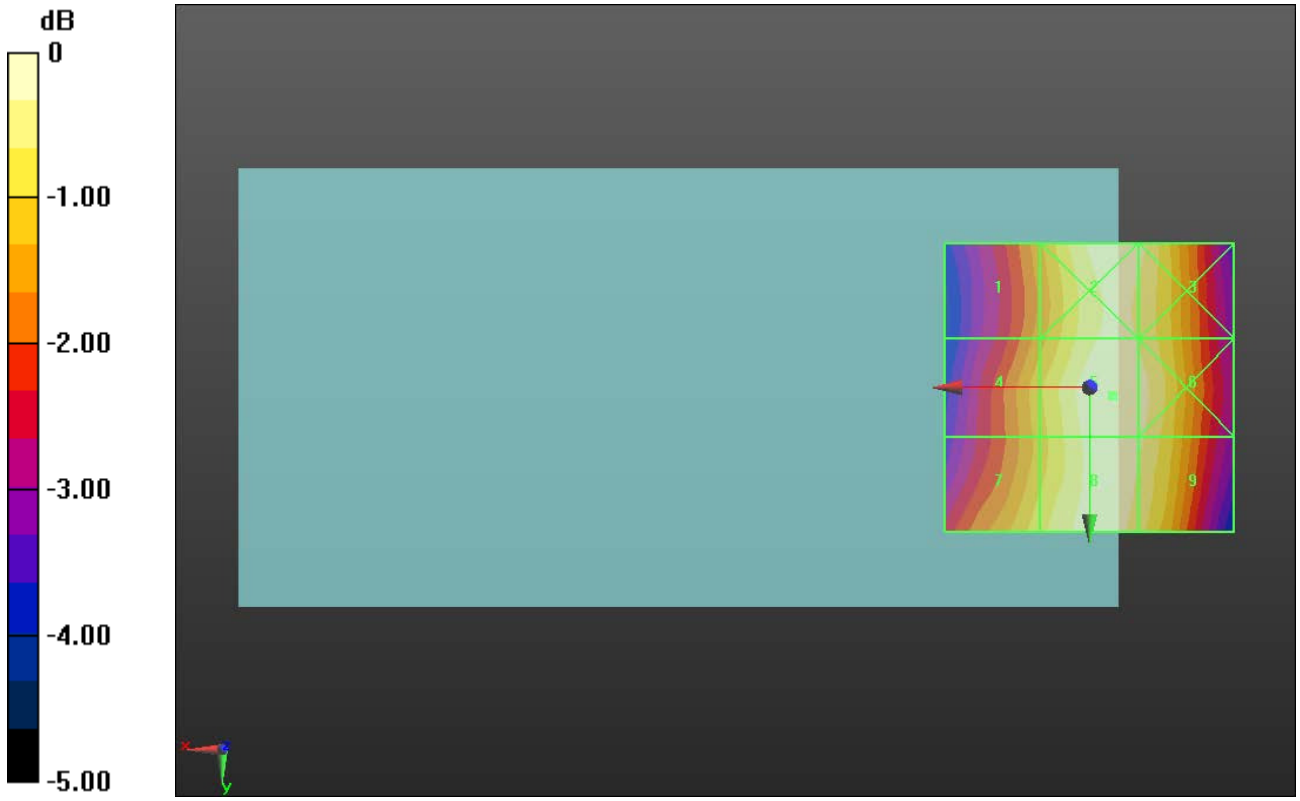
Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: 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

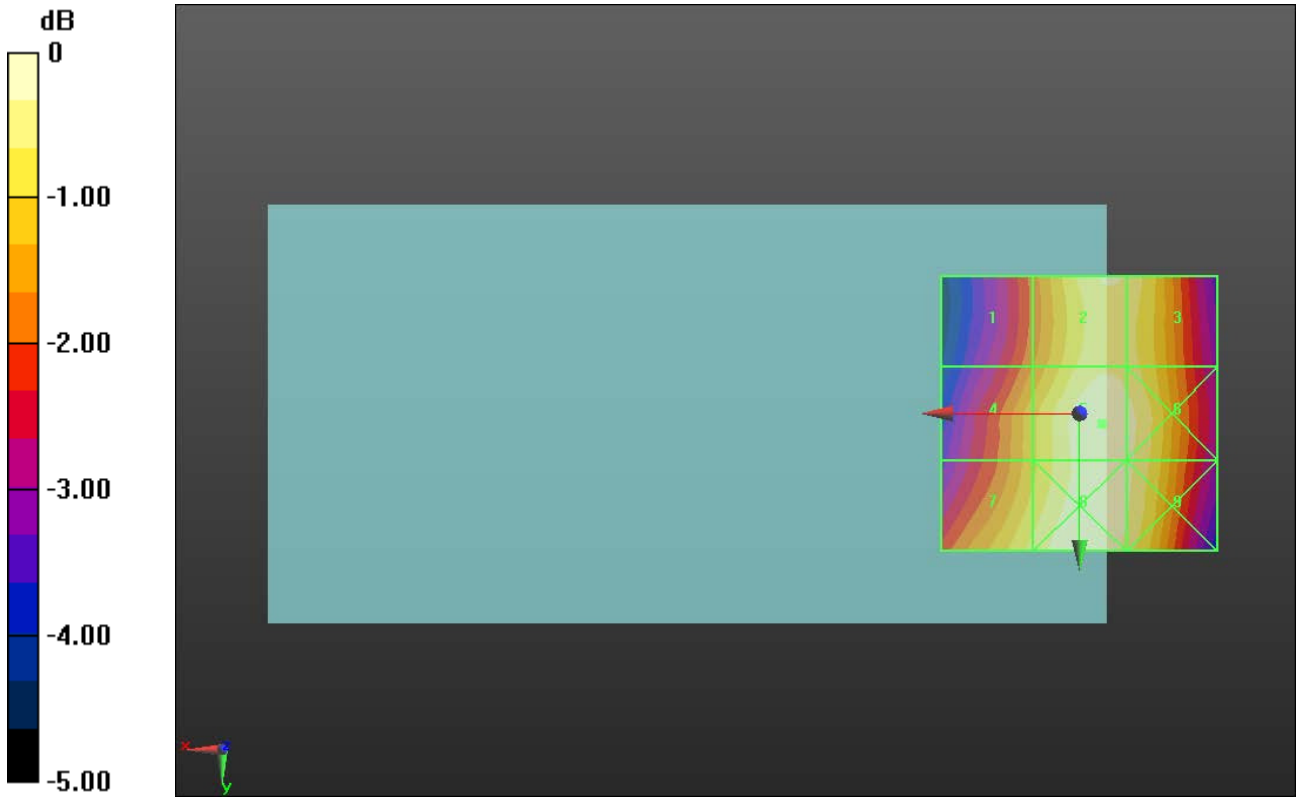
Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: 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

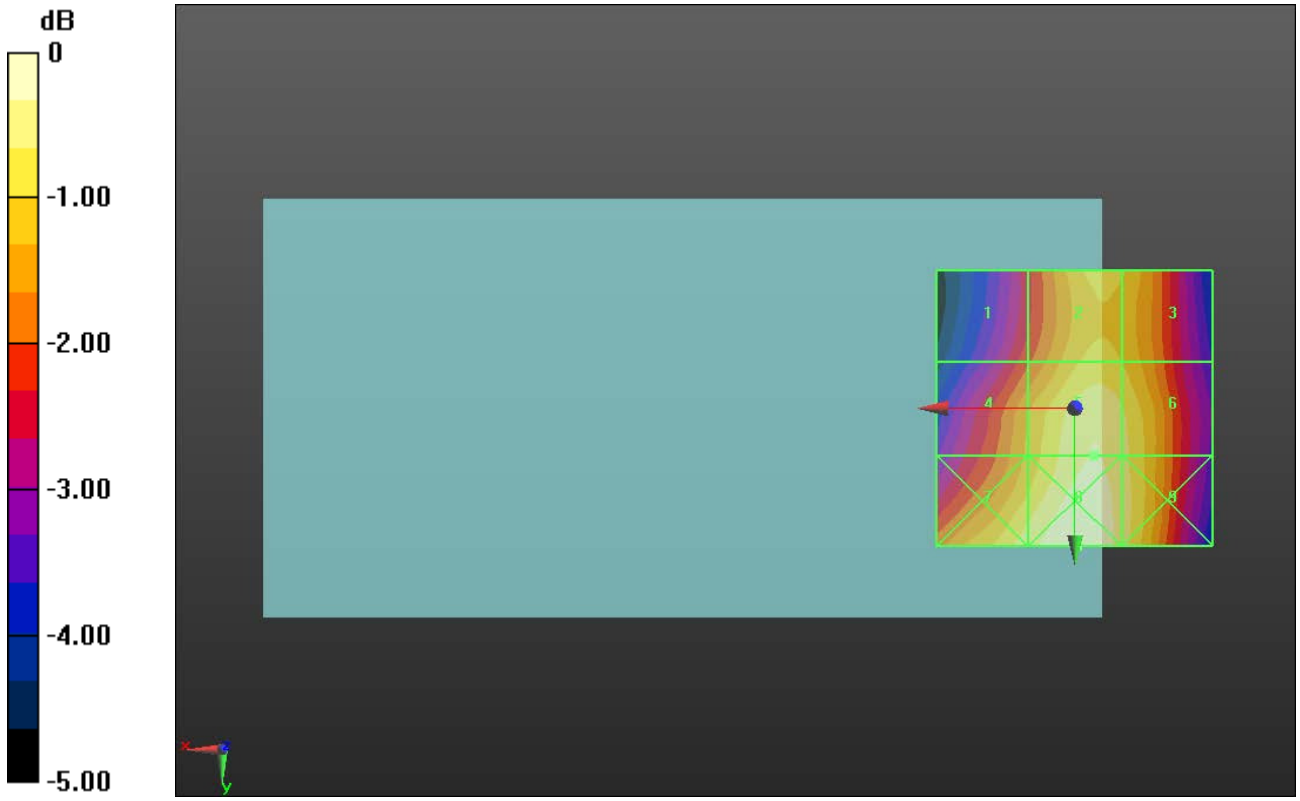
Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: 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

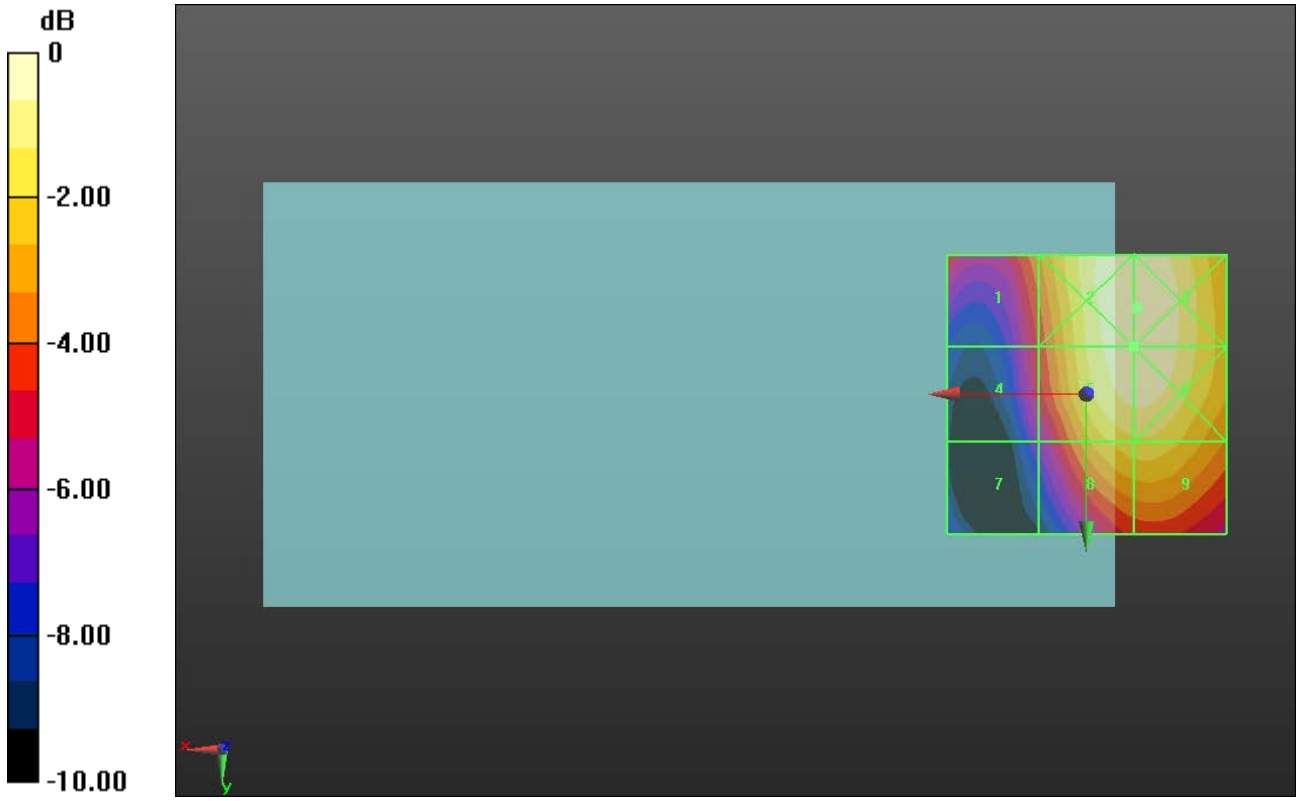
Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: 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

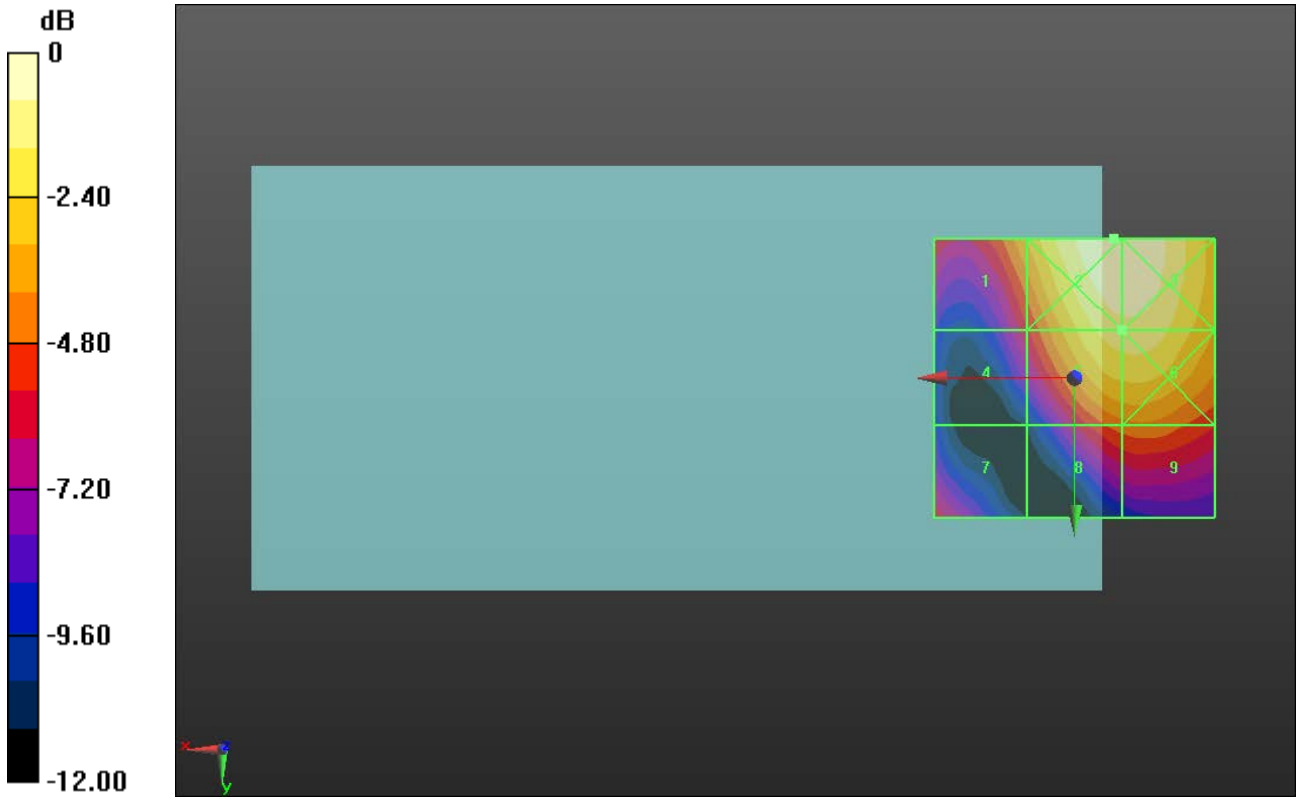
Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: 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

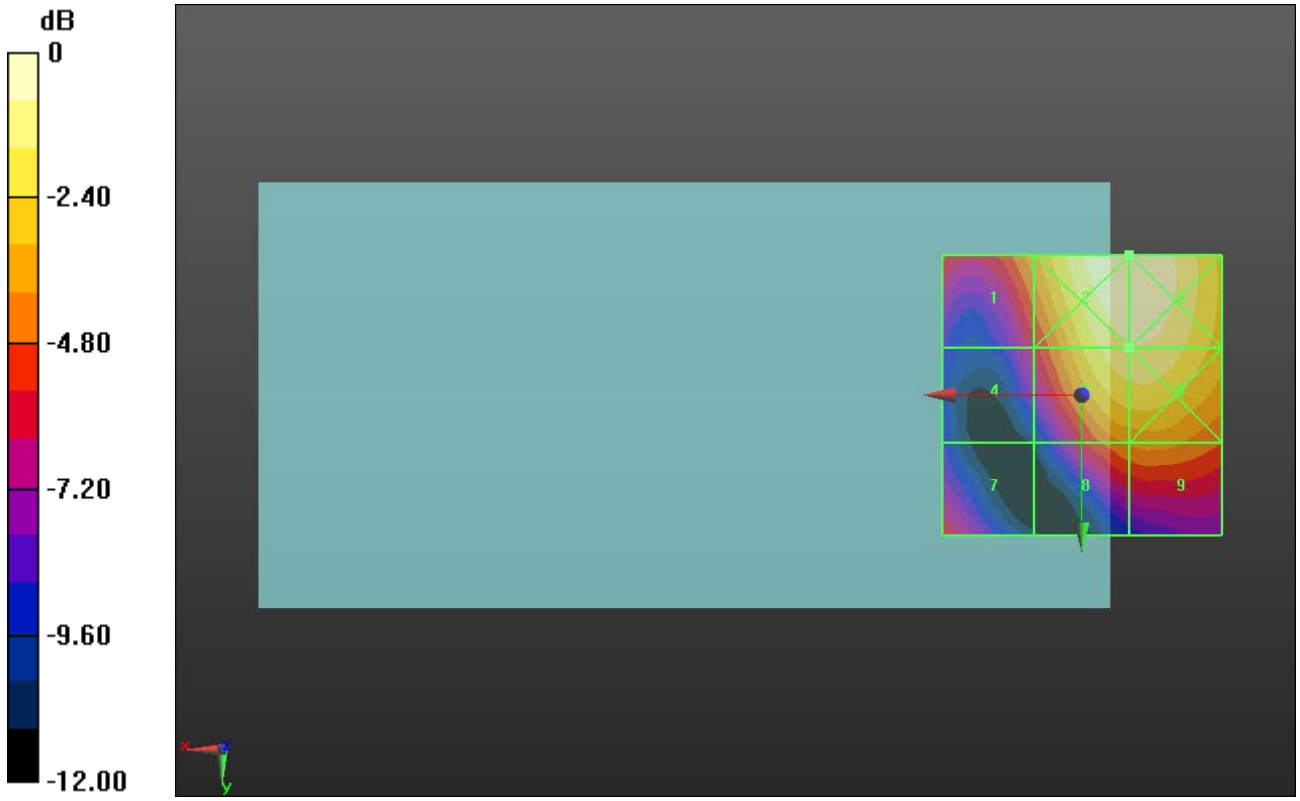
Communication System: UID 10021, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: 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

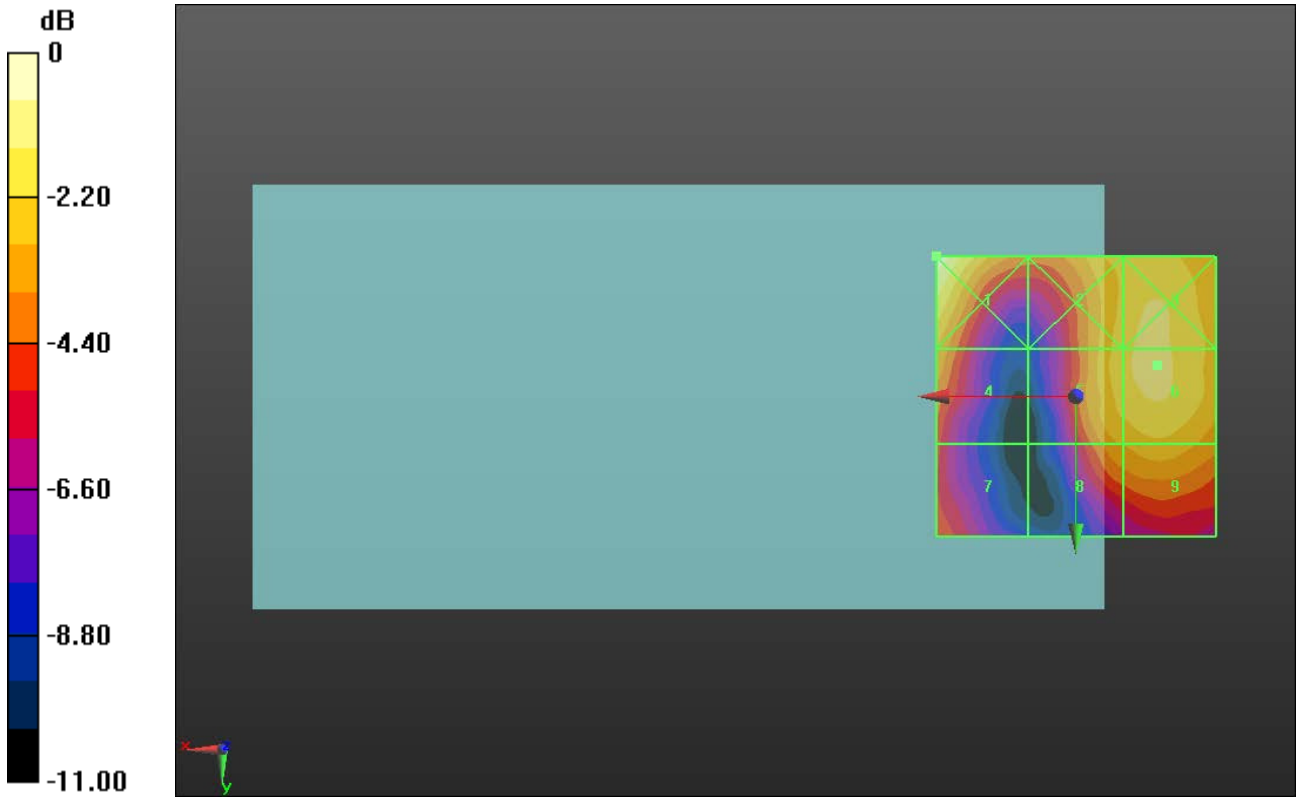
Communication System: UID 0, LTE (TDD) (0); Frequency: 2580 MHz; Duty Cycle: 1:1.59956
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test 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

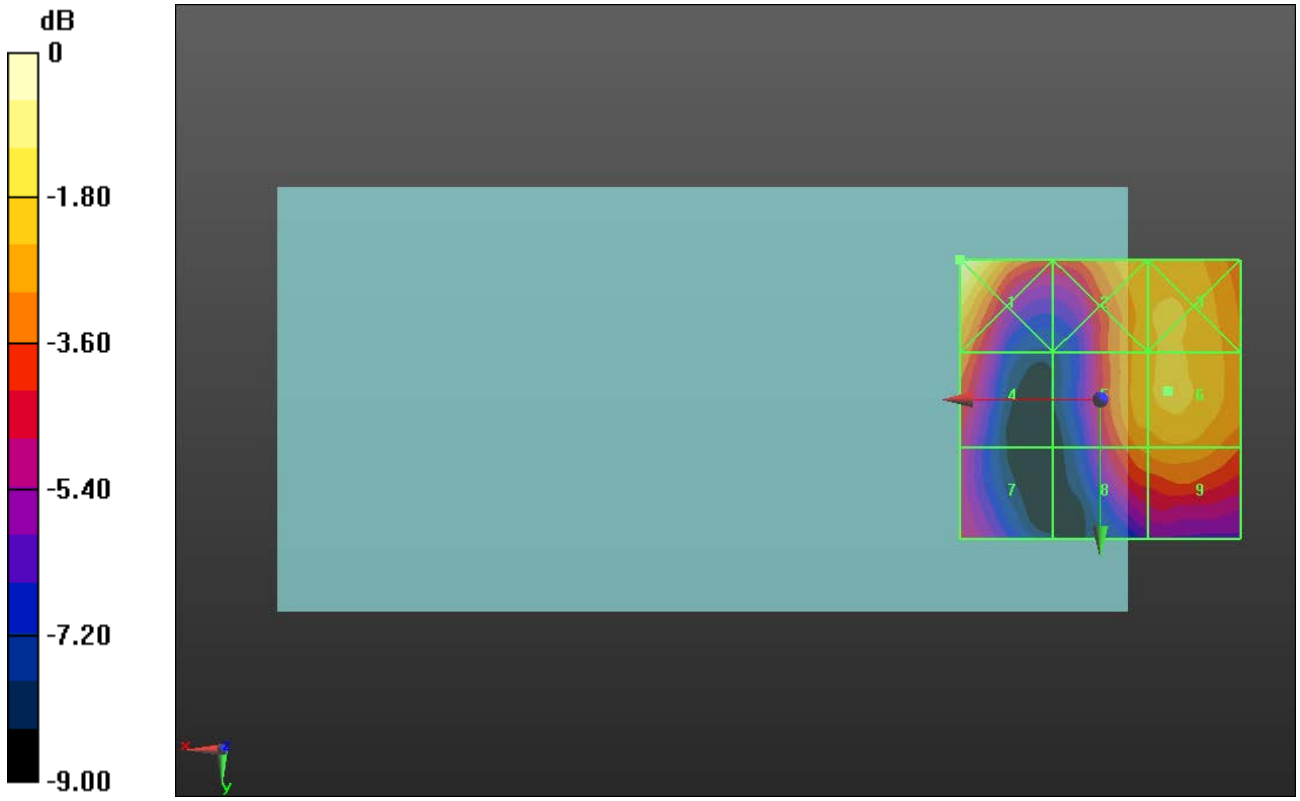
Communication System: UID 0, LTE (TDD) (0); Frequency: 2595 MHz; Duty Cycle: 1:1.59956
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test 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

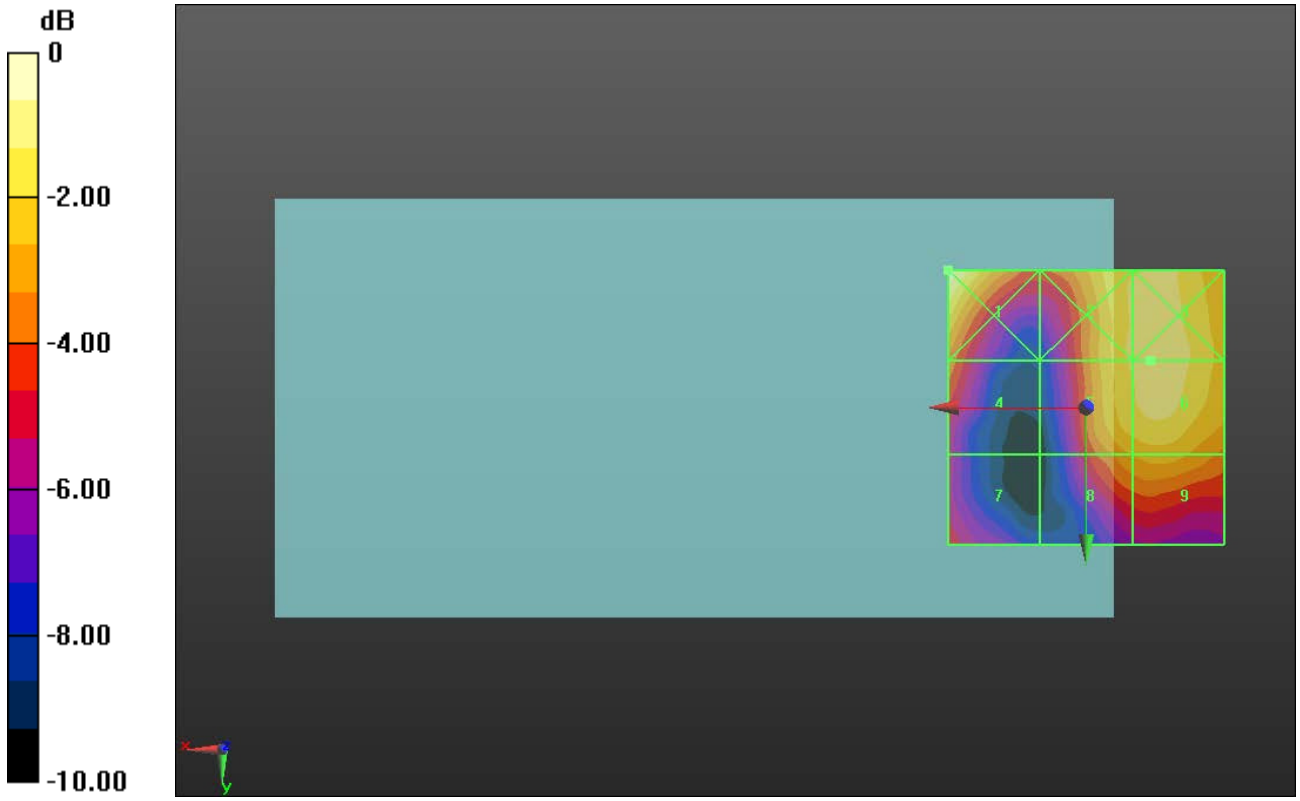
Communication System: UID 0, LTE (TDD) (0); Frequency: 2610 MHz; Duty Cycle: 1:1.59956
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 8/21/2017
- Phantom: HAC Test 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

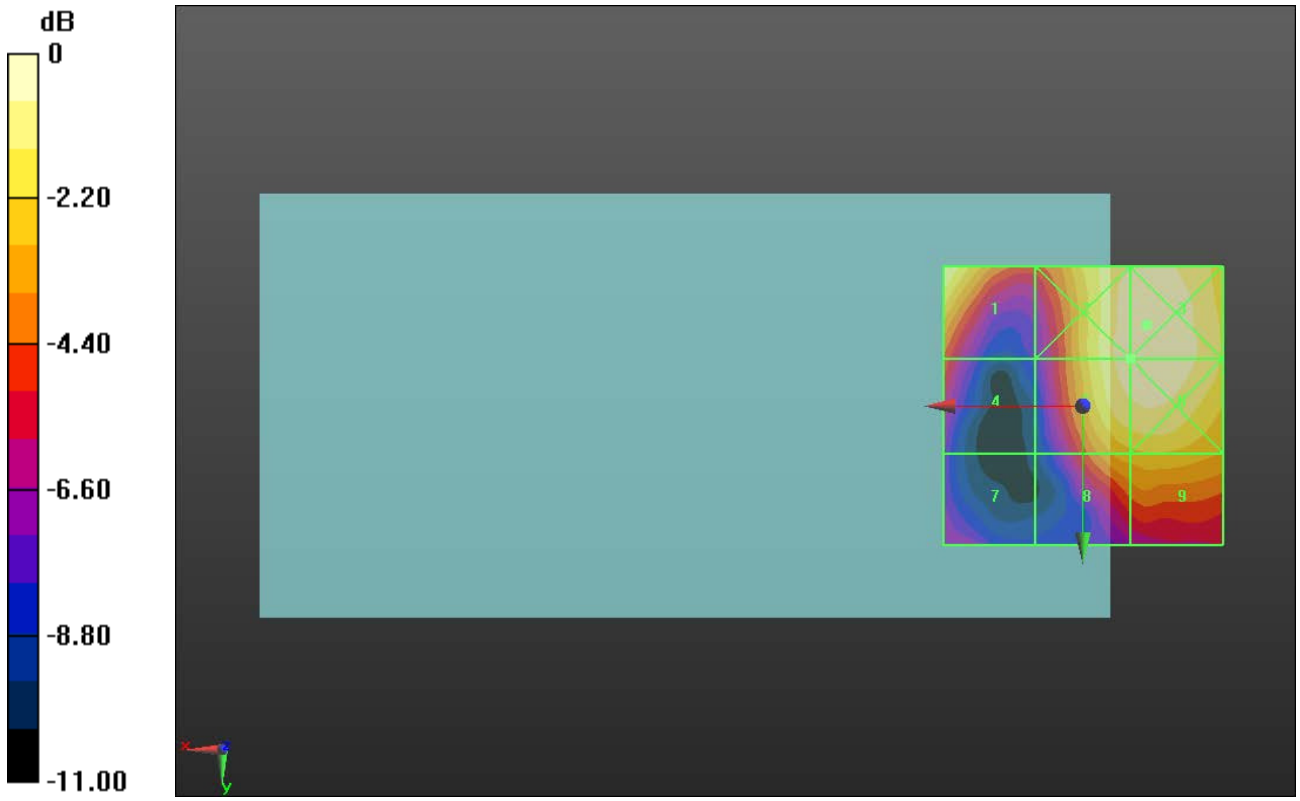
Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2506 MHz; Duty Cycle: 1:8.87156
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 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

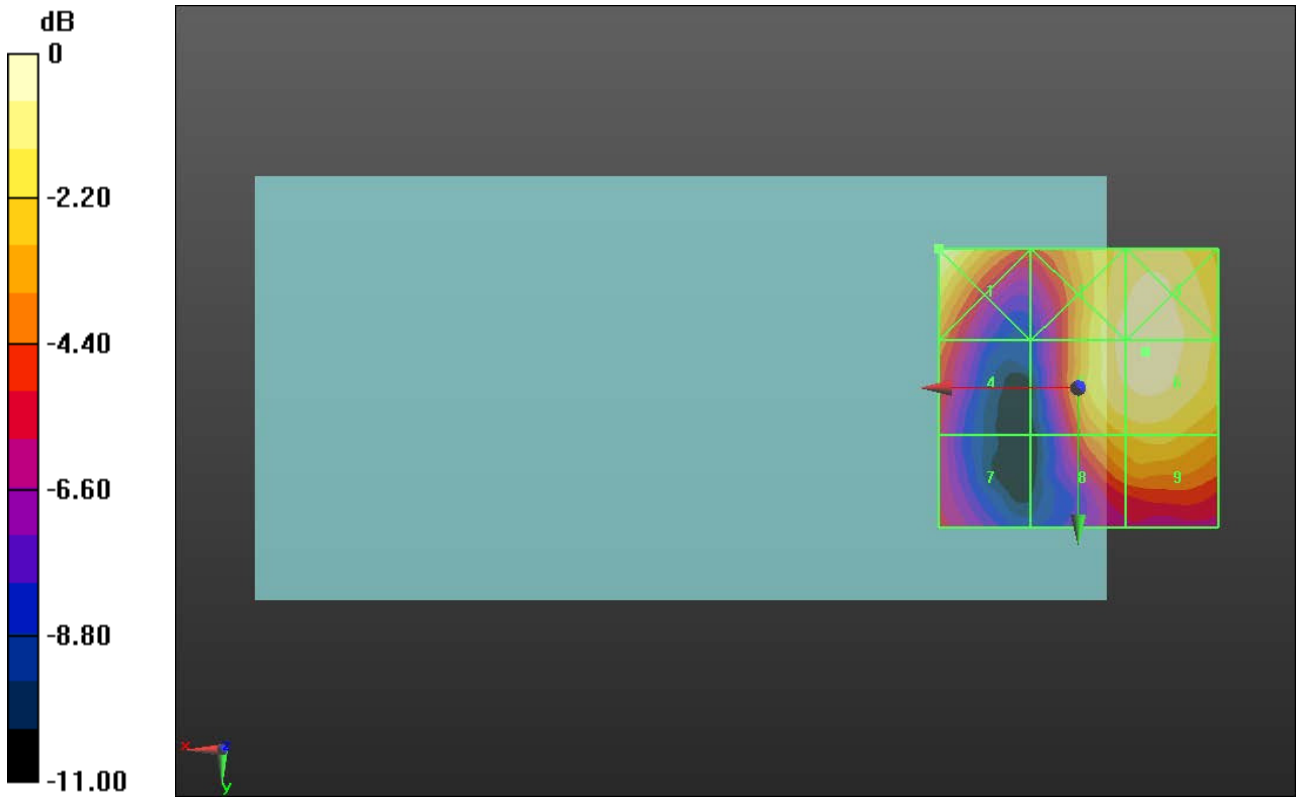
Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2549.5 MHz; Duty Cycle: 1:8.87156
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 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

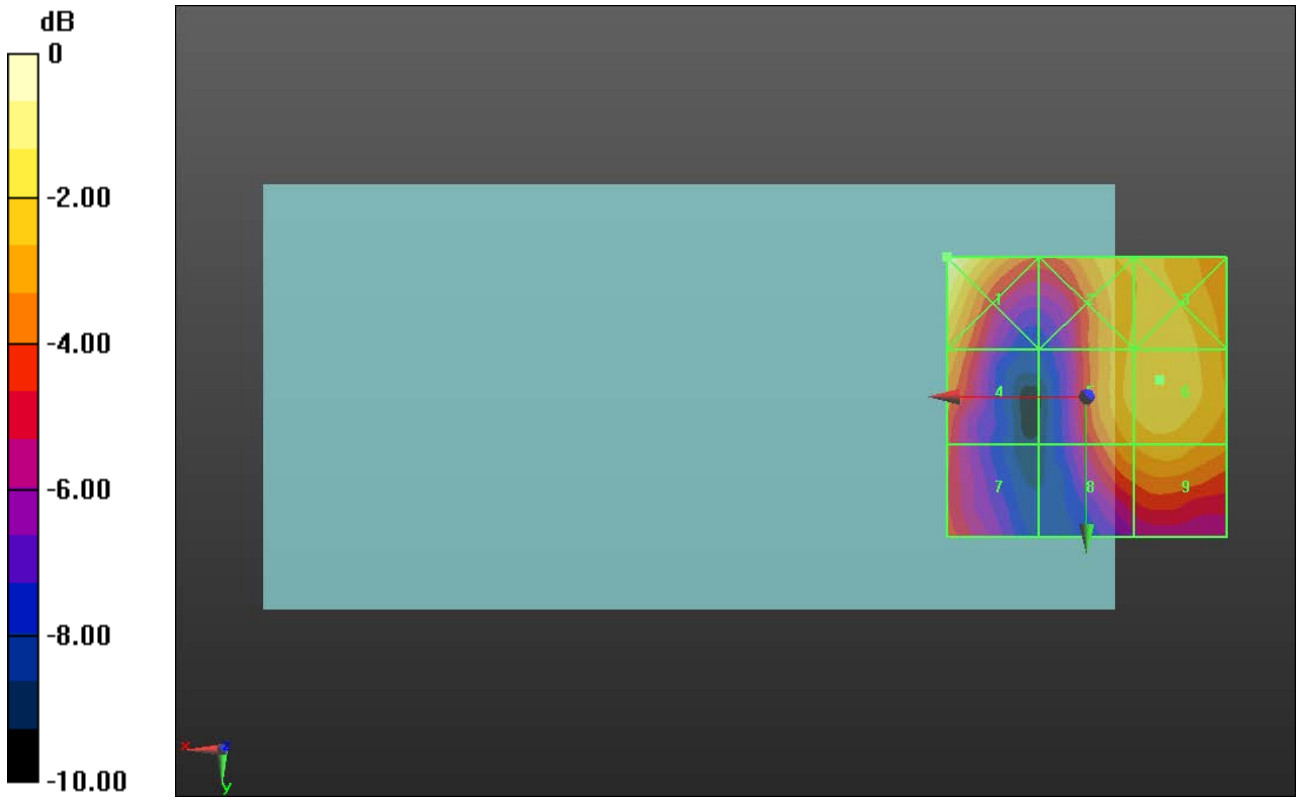
Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2593 MHz; Duty Cycle: 1:8.87156
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 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

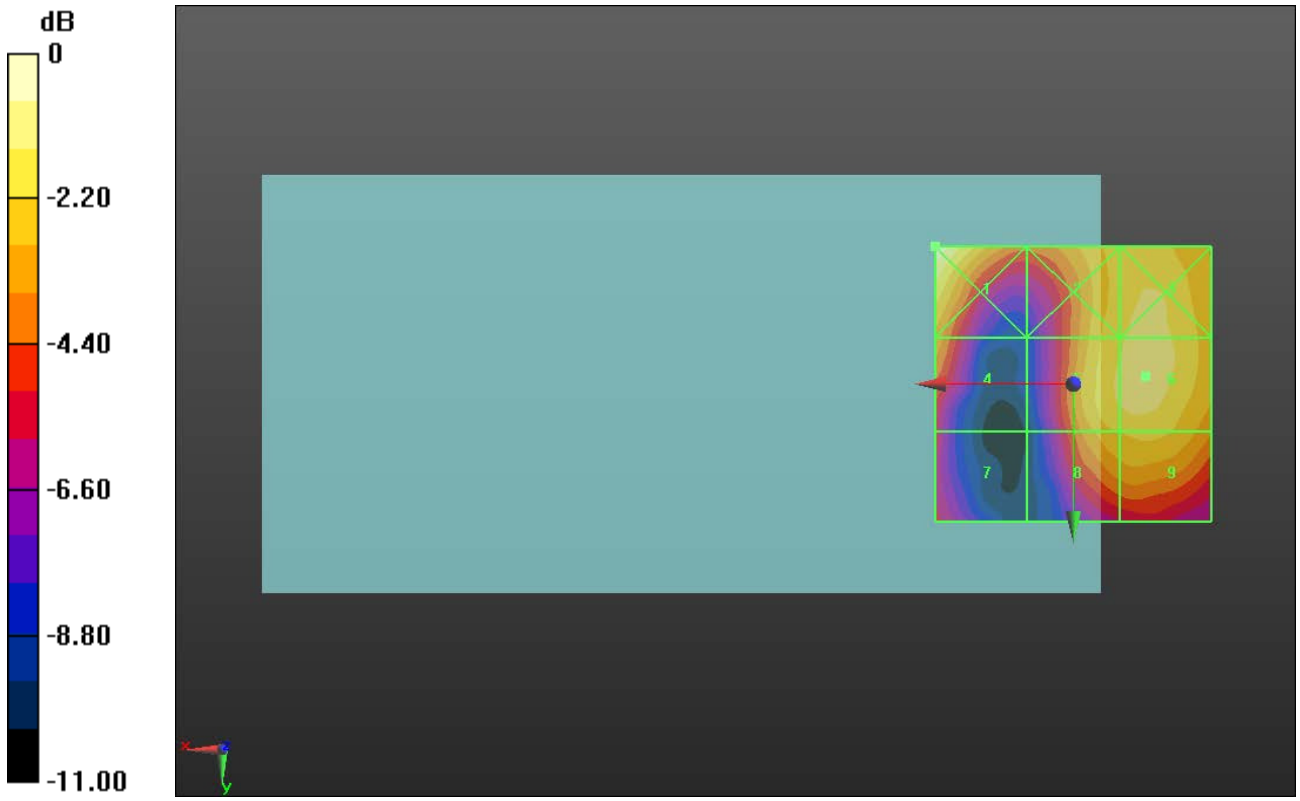
Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2636.5 MHz; Duty Cycle: 1:8.87156
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 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

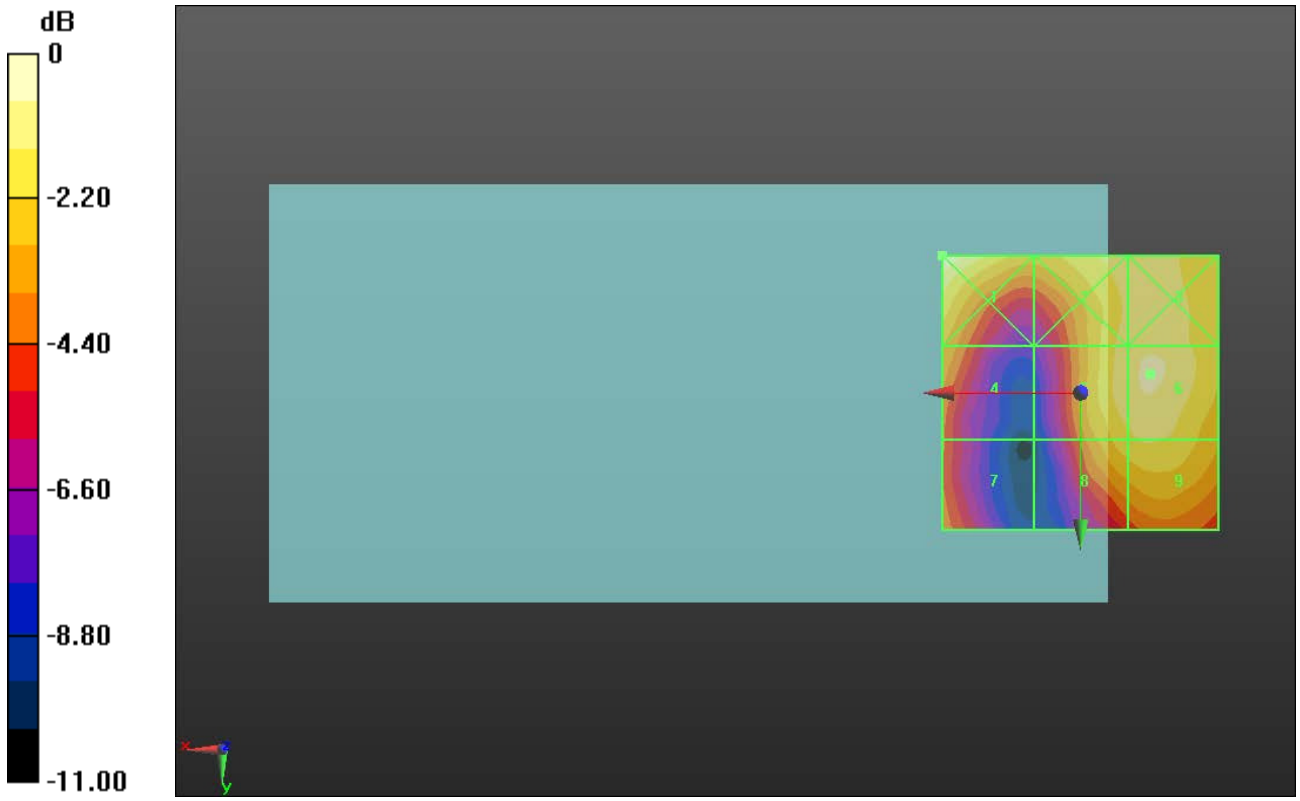
Communication System: UID 10173, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2680 MHz; Duty Cycle: 1:8.87156
Phantom section: RF Section
DASY5 Configuration:
- Probe: EF3DV3 - SN4028; ConvF(1, 1, 1); Calibrated: 7/24/2017;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1343; Calibrated: 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