



Appendix B

Detailed Test Results

1. GSM
GSM850 for E-Field Emission
GSM1900 for E-Field Emission
2. LTE
LTE Band 41 for E-Field Emission

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-GSM850 GSM Voice 128CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

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

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 47.61 V/m; Power Drift = 0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 35.00 dBV/m

Emission category: M4

MIF scaled E-field

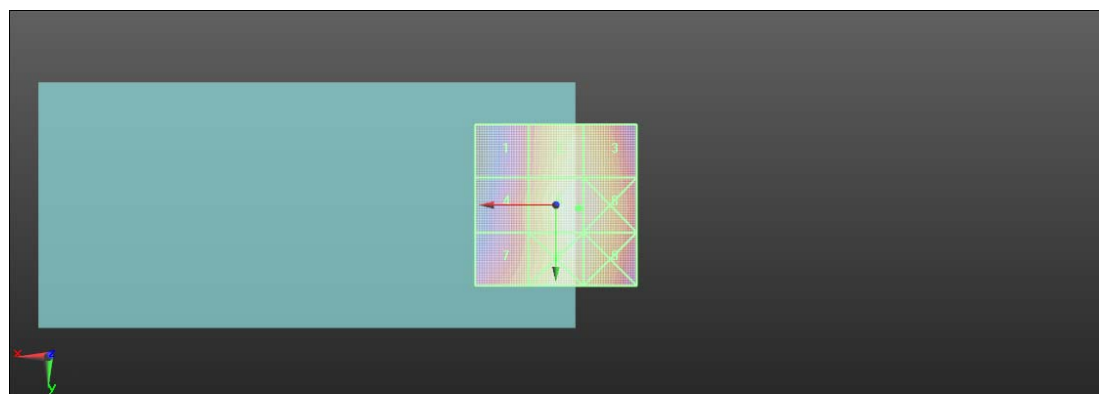
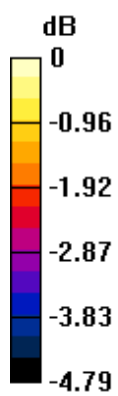
Grid 1 M4 32.97 dBV/m	Grid 2 M4 34.71 dBV/m	Grid 3 M4 34.7 dBV/m
Grid 4 M4 33.39 dBV/m	Grid 5 M4 35 dBV/m	Grid 6 M4 34.98 dBV/m
Grid 7 M4 33.78 dBV/m	Grid 8 M4 34.84 dBV/m	Grid 9 M4 34.82 dBV/m

Cursor:

Total = 35.00 dBV/m

E Category: M4

Location: -7, 1, 7.7 mm



0 dB = 56.24 V/m = 35.00 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-GSM850 GSM Voice 190CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

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

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 57.88 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 36.73 dBV/m

Emission category: M4

MIF scaled E-field

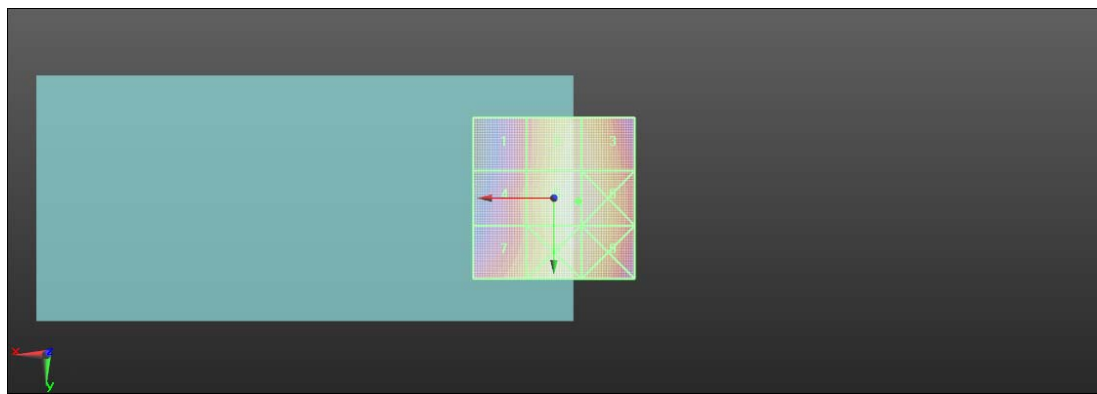
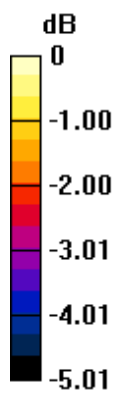
Grid 1 M4 34.61 dBV/m	Grid 2 M4 36.45 dBV/m	Grid 3 M4 36.45 dBV/m
Grid 4 M4 35.09 dBV/m	Grid 5 M4 36.73 dBV/m	Grid 6 M4 36.72 dBV/m
Grid 7 M4 35.51 dBV/m	Grid 8 M4 36.57 dBV/m	Grid 9 M4 36.56 dBV/m

Cursor:

Total = 36.73 dBV/m

E Category: M4

Location: -7.5, 1, 7.7 mm



0 dB = 68.64 V/m = 36.73 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-GSM850 GSM Voice 251CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

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

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 61.38 V/m; Power Drift = 0.08 dB

Applied MIF = 3.63 dB

RF audio interference level = 37.20 dBV/m

Emission category: M4

MIF scaled E-field

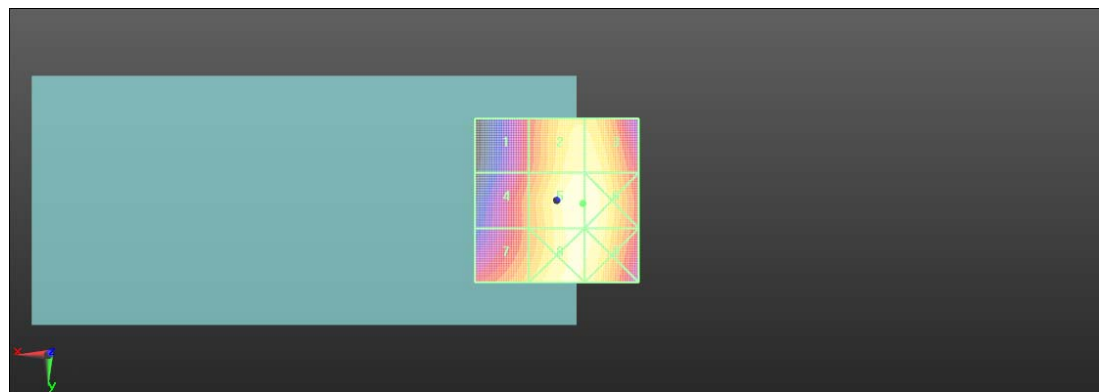
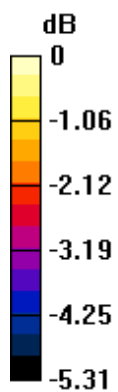
Grid 1 M4 34.96 dBV/m	Grid 2 M4 36.9 dBV/m	Grid 3 M4 36.9 dBV/m
Grid 4 M4 35.46 dBV/m	Grid 5 M4 37.2 dBV/m	Grid 6 M4 37.2 dBV/m
Grid 7 M4 36.04 dBV/m	Grid 8 M4 37.06 dBV/m	Grid 9 M4 37.05 dBV/m

Cursor:

Total = 37.20 dBV/m

E Category: M4

Location: -8, 1, 7.7 mm



0 dB = 72.48 V/m = 37.20 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-GSM1900 GSM Voice 512CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

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

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 16.41 V/m; Power Drift = -0.08 dB

Applied MIF = 3.63 dB

RF audio interference level = 29.24 dBV/m

Emission category: M4

MIF scaled E-field

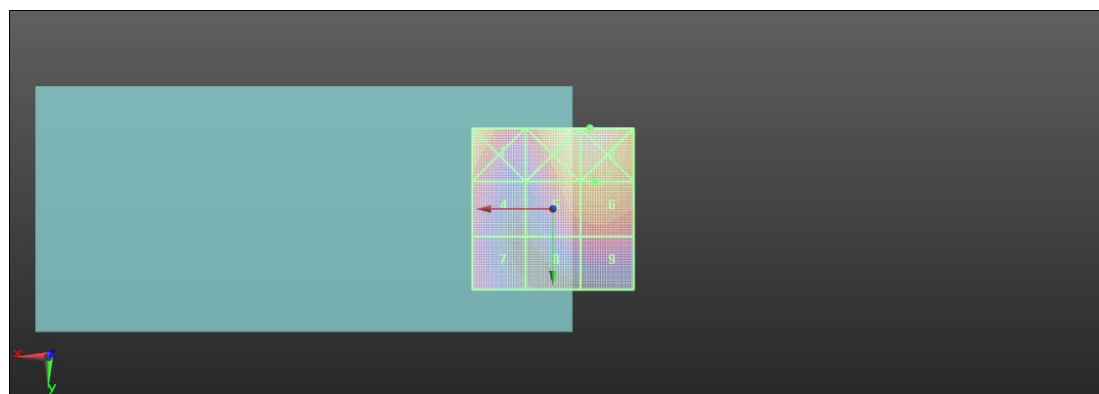
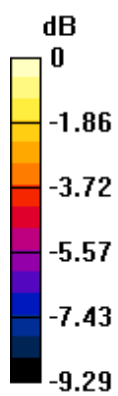
Grid 1 M4 29.35 dBV/m	Grid 2 M3 30.72 dBV/m	Grid 3 M3 30.87 dBV/m
Grid 4 M4 26.89 dBV/m	Grid 5 M4 28.89 dBV/m	Grid 6 M4 29.24 dBV/m
Grid 7 M4 25.87 dBV/m	Grid 8 M4 26.08 dBV/m	Grid 9 M4 26.42 dBV/m

Cursor:

Total = 30.87 dBV/m

E Category: M3

Location: -11.5, -25, 7.7 mm



0 dB = 34.97 V/m = 30.87 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-GSM1900 GSM Voice 661CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

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

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = -0.08 dB

Applied MIF = 3.63 dB

RF audio interference level = 26.66 dBV/m

Emission category: M4

MIF scaled E-field

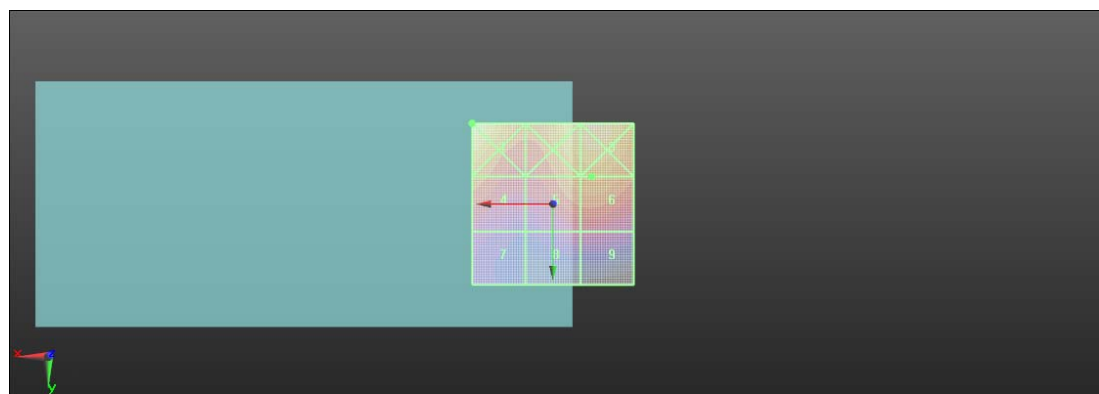
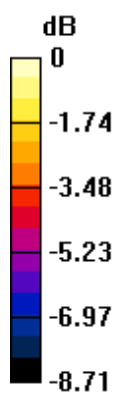
Grid 1 M4 28.79 dBV/m	Grid 2 M4 28.12 dBV/m	Grid 3 M4 28.35 dBV/m
Grid 4 M4 25.99 dBV/m	Grid 5 M4 26.48 dBV/m	Grid 6 M4 26.66 dBV/m
Grid 7 M4 23.72 dBV/m	Grid 8 M4 23.98 dBV/m	Grid 9 M4 24.01 dBV/m

Cursor:

Total = 28.79 dBV/m

E Category: M4

Location: 25, -25, 7.7 mm



0 dB = 27.51 V/m = 28.79 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-GSM1900 GSM Voice 810CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

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

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 14.26 V/m; Power Drift = -0.17 dB

Applied MIF = 3.63 dB

RF audio interference level = 26.07 dBV/m

Emission category: M4

MIF scaled E-field

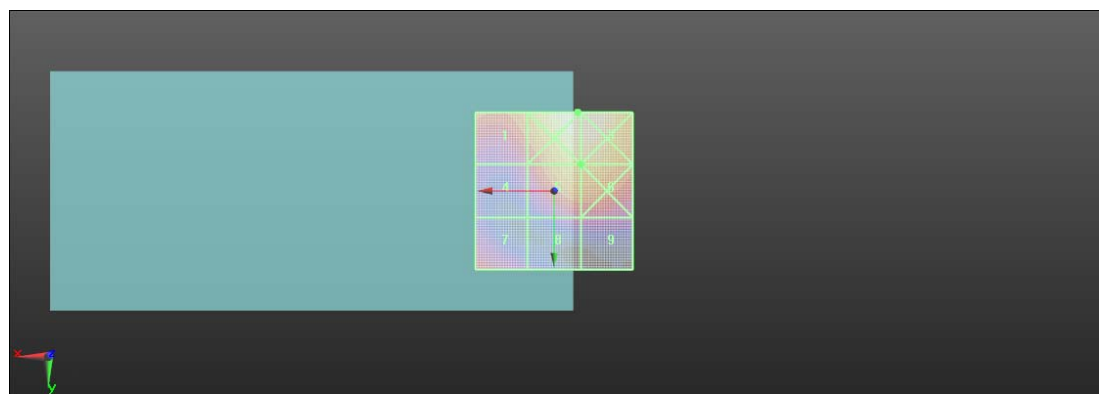
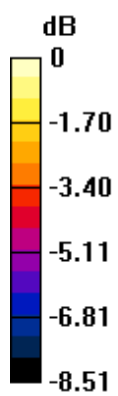
Grid 1 M4 25.03 dBV/m	Grid 2 M4 27.38 dBV/m	Grid 3 M4 27.38 dBV/m
Grid 4 M4 22.91 dBV/m	Grid 5 M4 26.07 dBV/m	Grid 6 M4 26.1 dBV/m
Grid 7 M4 23.39 dBV/m	Grid 8 M4 22.51 dBV/m	Grid 9 M4 22.55 dBV/m

Cursor:

Total = 27.38 dBV/m

E Category: M4

Location: -7.5, -25, 7.7 mm



0 dB = 23.40 V/m = 27.38 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-LTE Band 41 20M QPSK 1RB50 39750CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2506 MHz; Duty Cycle: 1:8.33681

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 22.02 V/m; Power Drift = -0.03 dB

Applied MIF = -1.62 dB

RF audio interference level = 25.38 dBV/m

Emission category: M4

MIF scaled E-field

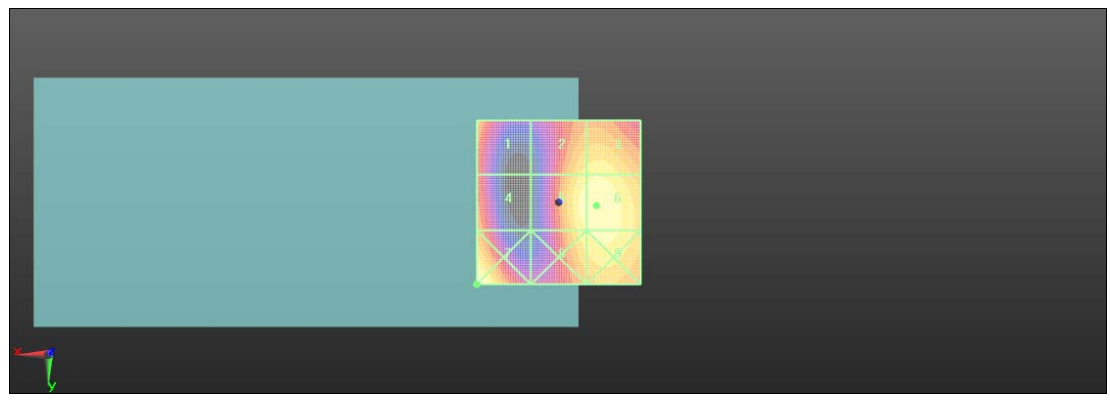
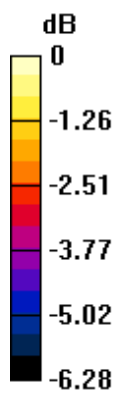
Grid 1 M4 24.09 dBV/m	Grid 2 M4 24.76 dBV/m	Grid 3 M4 24.91 dBV/m
Grid 4 M4 23.85 dBV/m	Grid 5 M4 25.21 dBV/m	Grid 6 M4 25.38 dBV/m
Grid 7 M4 25.79 dBV/m	Grid 8 M4 24.94 dBV/m	Grid 9 M4 25.18 dBV/m

Cursor:

Total = 25.79 dBV/m

E Category: M4

Location: 25, 25, 7.7 mm



0 dB = 19.47 V/m = 25.79 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-LTE Band 41 20M QPSK 1RB50 40185CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2549.5 MHz; Duty Cycle: 1:8.33681

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 12.09 V/m; Power Drift = 0.19 dB

Applied MIF = -1.62 dB

RF audio interference level = 22.14 dBV/m

Emission category: M4

MIF scaled E-field

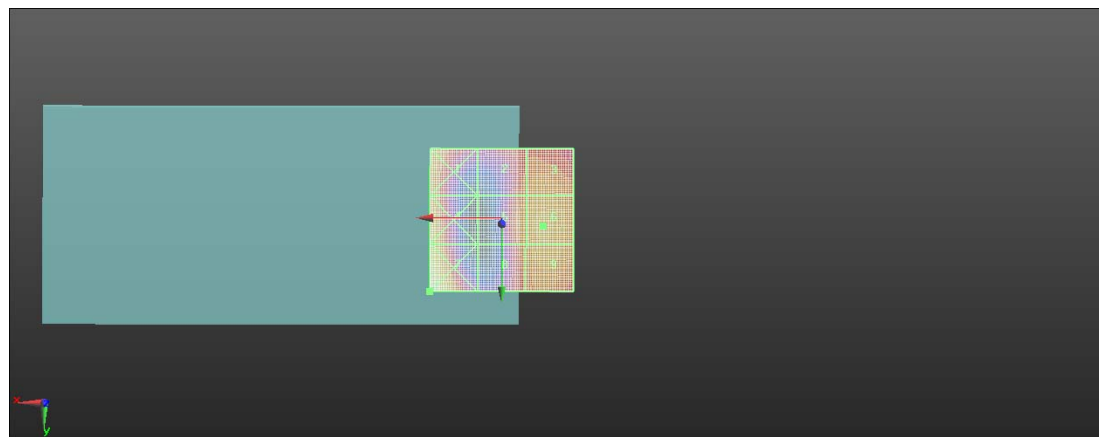
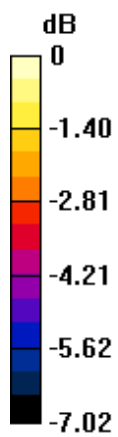
Grid 1 M4 21.89 dBV/m	Grid 2 M4 21.16 dBV/m	Grid 3 M4 21.64 dBV/m
Grid 4 M4 22.22 dBV/m	Grid 5 M4 21.65 dBV/m	Grid 6 M4 22.14 dBV/m
Grid 7 M4 23.43 dBV/m	Grid 8 M4 21.38 dBV/m	Grid 9 M4 22.01 dBV/m

Cursor:

Total = 23.43 dBV/m

E Category: M4

Location: 25, 25, 7.7 mm



0 dB = 14.84 V/m = 23.43 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-LTE Band 41 20M QPSK 1RB50 40620CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2593 MHz; Duty Cycle: 1:8.33681

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 10.62 V/m; Power Drift = -0.13 dB

Applied MIF = -1.62 dB

RF audio interference level = 21.37 dBV/m

Emission category: M4

MIF scaled E-field

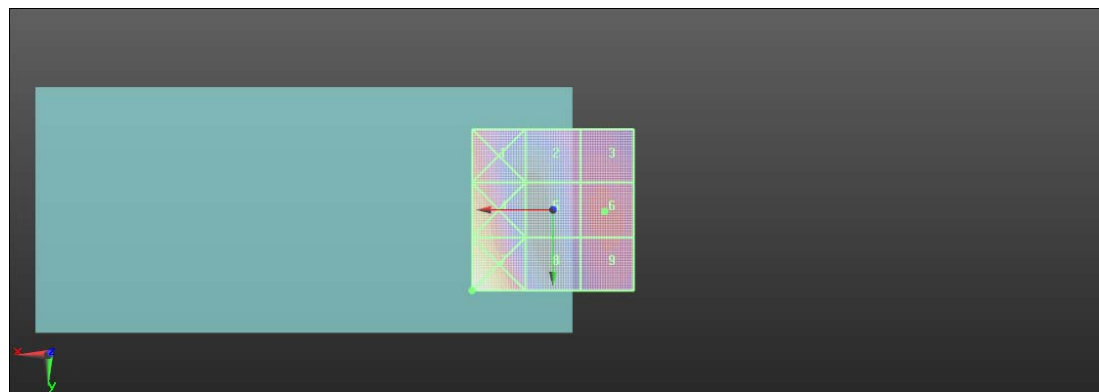
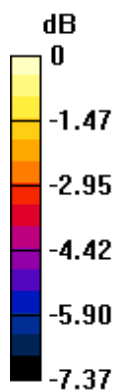
Grid 1 M4 22.17 dBV/m	Grid 2 M4 20.59 dBV/m	Grid 3 M4 21.06 dBV/m
Grid 4 M4 23.48 dBV/m	Grid 5 M4 20.76 dBV/m	Grid 6 M4 21.37 dBV/m
Grid 7 M4 25 dBV/m	Grid 8 M4 20.54 dBV/m	Grid 9 M4 21.23 dBV/m

Cursor:

Total = 25.00 dBV/m

E Category: M4

Location: 25, 25, 7.7 mm



0 dB = 17.78 V/m = 25.00 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-LTE Band 41 20M QPSK 1RB50 41055CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2636.5 MHz; Duty Cycle: 1:8.33681

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 10.25 V/m; Power Drift = -0.11 dB

Applied MIF = -1.62 dB

RF audio interference level = 20.10 dBV/m

Emission category: M4

MIF scaled E-field

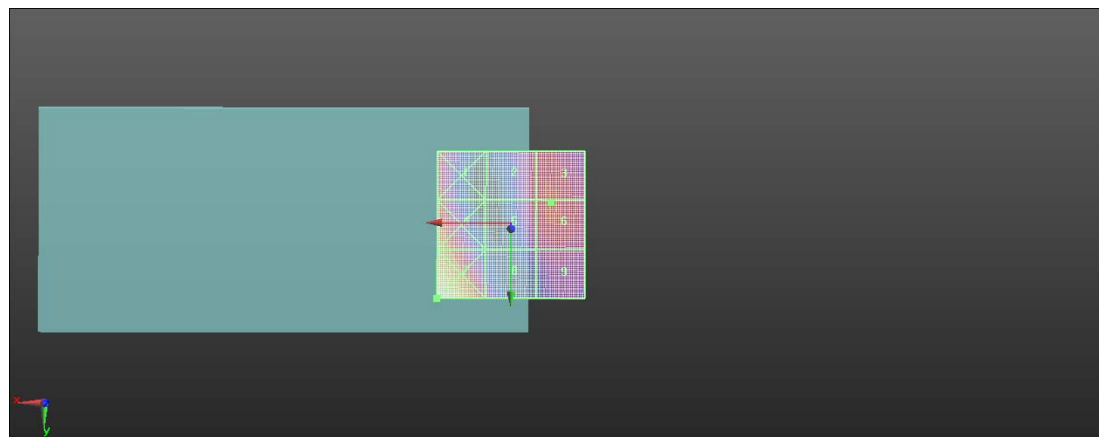
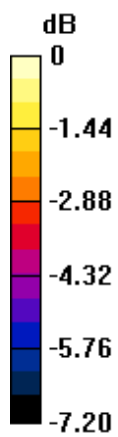
Grid 1 M4 20.25 dBV/m	Grid 2 M4 19.77 dBV/m	Grid 3 M4 20.1 dBV/m
Grid 4 M4 21.49 dBV/m	Grid 5 M4 19.75 dBV/m	Grid 6 M4 20.1 dBV/m
Grid 7 M4 23.35 dBV/m	Grid 8 M4 19.55 dBV/m	Grid 9 M4 19.42 dBV/m

Cursor:

Total = 23.35 dBV/m

E Category: M4

Location: 25, 25, 7.7 mm



0 dB = 14.71 V/m = 23.35 dBV/m

Test Laboratory: SGS-SAR Lab

B110DL HAC-RF-LTE Band 41 20M QPSK 1RB50 41490CH

DUT: B110DL; Type: Smart Phone; Serial: 351529110006643

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2680 MHz; Duty Cycle: 1:8.33681

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³
Phantom section: RF Section

DASY 5 Configuration:

- Probe: EF3DV3 - SN4051; ConvF(1, 1, 1); Calibrated: 2019-06-18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Device E-Field measurement/E Scan - ER3D: 15 mm from Probe Center to the Device/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 = 14.18 V/m; Power Drift = -0.12 dB

Applied MIF = -1.62 dB

RF audio interference level = 21.95 dBV/m

Emission category: M4

MIF scaled E-field

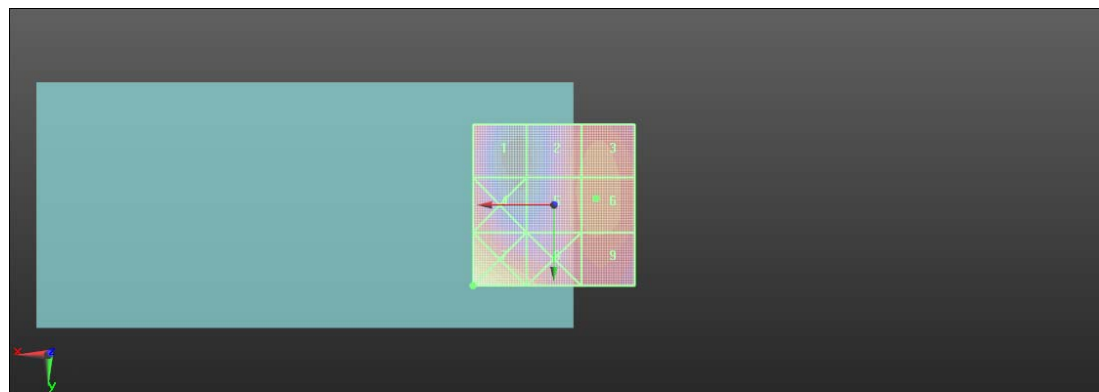
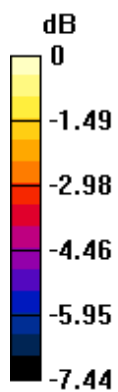
Grid 1 M4 21.31 dBV/m	Grid 2 M4 21.63 dBV/m	Grid 3 M4 21.86 dBV/m
Grid 4 M4 21.76 dBV/m	Grid 5 M4 21.68 dBV/m	Grid 6 M4 21.95 dBV/m
Grid 7 M4 24.45 dBV/m	Grid 8 M4 22.06 dBV/m	Grid 9 M4 21.56 dBV/m

Cursor:

Total = 24.45 dBV/m

E Category: M4

Location: 25, 25, 7.7 mm



0 dB = 16.69 V/m = 24.45 dBV/m