



Appendix B

Detailed Test Results

1. GSM
GSM850 for E-Field Emission
GSM1900 for E-Field Emission

Test Laboratory: SGS-SAR Lab

5028A HAC-RF-GSM850 GSM Voice 128CH

DUT: 5028A; Type: LTE/WCDMA/GSM mobile phone; Serial: ZPXSE68PLJNJPF6

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, $\epsilon_r = 1$; $\rho = 0$ 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 = 126.5 V/m; Power Drift = -0.06 dB

Applied MIF = 3.63 dB

RF audio interference level = 42.30 dBV/m

Emission category: M3

MIF scaled E-field

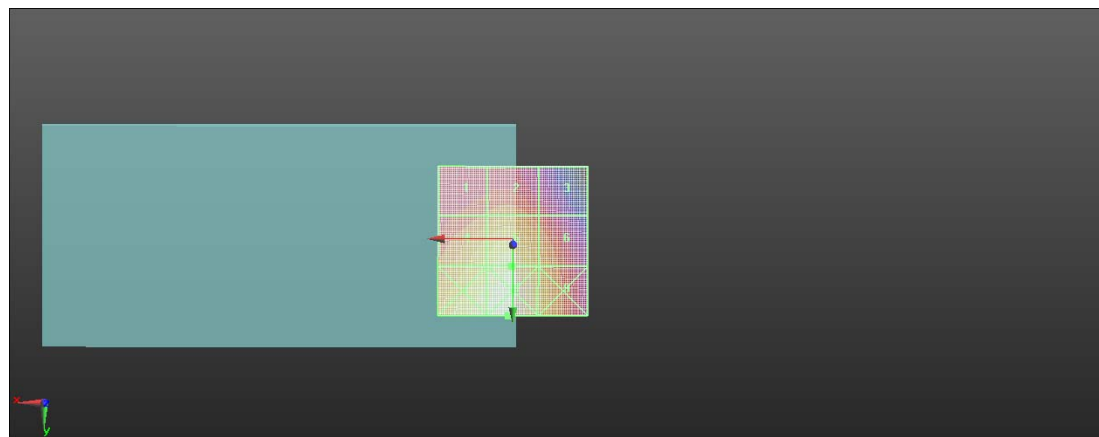
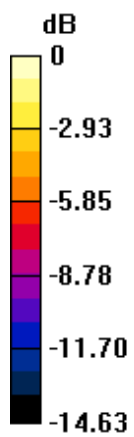
Grid 1 M4 37.94 dBV/m	Grid 2 M4 38.58 dBV/m	Grid 3 M4 36.89 dBV/m
Grid 4 M3 41.1 dBV/m	Grid 5 M3 42.3 dBV/m	Grid 6 M3 40.24 dBV/m
Grid 7 M3 42.67 dBV/m	Grid 8 M3 43.49 dBV/m	Grid 9 M3 41.16 dBV/m

Cursor:

Total = 43.49 dBV/m

E Category: M3

Location: 1.5, 25, 7.7 mm



0 dB = 149.5 V/m = 43.49 dBV/m

Test Laboratory: SGS-SAR Lab

5028A HAC-RF-GSM850 GSM Voice 190CH

DUT: 5028A; Type: LTE/WCDMA/GSM mobile phone; Serial: ZPXSE68PLJNJPF6

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, $\epsilon_r = 1$; $\rho = 0$ 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 = 132.9 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 42.86 dBV/m

Emission category: M3

MIF scaled E-field

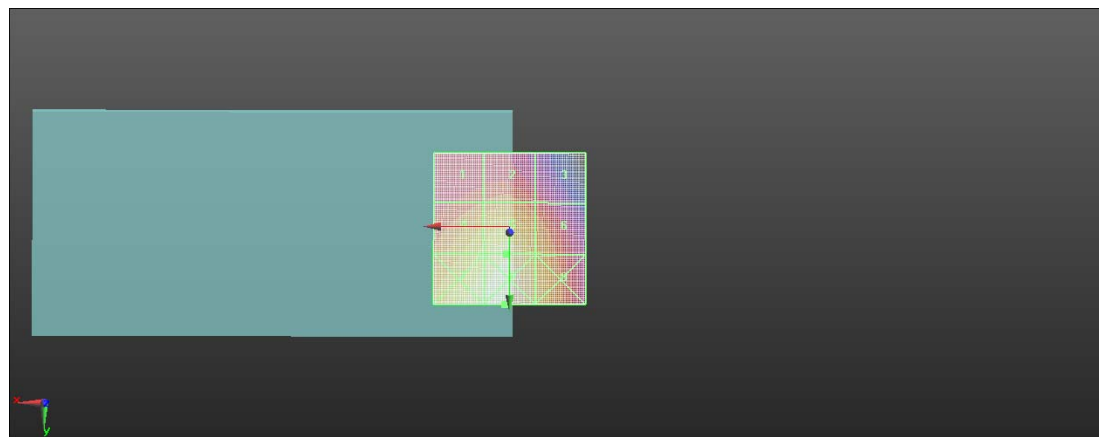
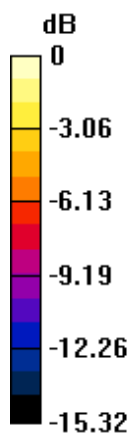
Grid 1 M4 38.16 dBV/m	Grid 2 M4 38.78 dBV/m	Grid 3 M4 37.07 dBV/m
Grid 4 M3 41.67 dBV/m	Grid 5 M3 42.86 dBV/m	Grid 6 M3 40.75 dBV/m
Grid 7 M3 43.35 dBV/m	Grid 8 M3 44.16 dBV/m	Grid 9 M3 41.77 dBV/m

Cursor:

Total = 44.16 dBV/m

E Category: M3

Location: 1.5, 25, 7.7 mm



0 dB = 161.5 V/m = 44.16 dBV/m

Test Laboratory: SGS-SAR Lab

5028A HAC-RF-GSM850 GSM Voice 251CH

DUT: 5028A; Type: LTE/WCDMA/GSM mobile phone; Serial: ZPXSE68PLJNJPF6

Communication System: UID 10021 - DAC, GSM-FDD (TDMA, GMSK); Frequency: 848.8 MHz; Duty Cycle: 1:8.6896

Medium: Air; Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ 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 = 134.1 V/m; Power Drift = 0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 43.03 dBV/m

Emission category: M3

MIF scaled E-field

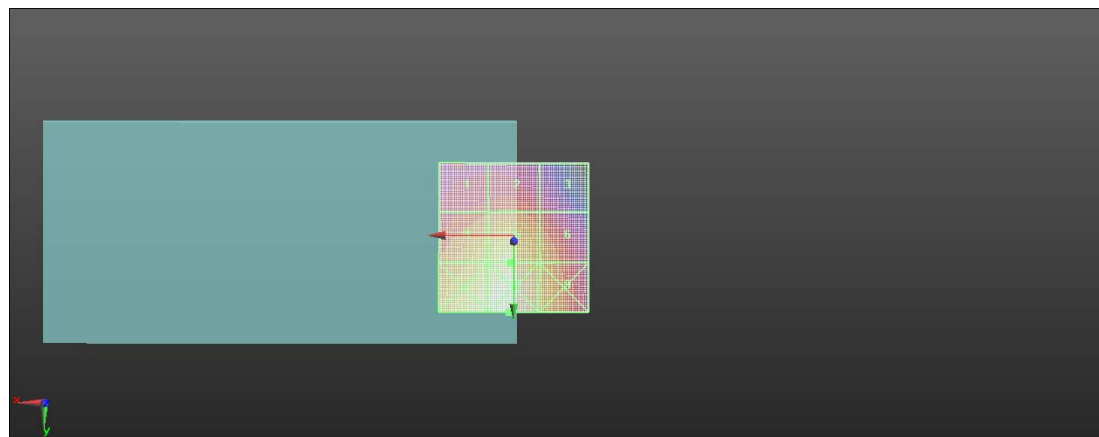
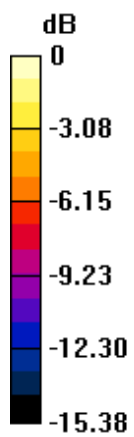
Grid 1 M4 38.11 dBV/m	Grid 2 M4 38.69 dBV/m	Grid 3 M4 37.1 dBV/m
Grid 4 M3 41.86 dBV/m	Grid 5 M3 43.03 dBV/m	Grid 6 M3 40.94 dBV/m
Grid 7 M3 43.65 dBV/m	Grid 8 M3 44.45 dBV/m	Grid 9 M3 42.04 dBV/m

Cursor:

Total = 44.45 dBV/m

E Category: M3

Location: 1.5, 25, 7.7 mm



0 dB = 166.9 V/m = 44.45 dBV/m

Test Laboratory: SGS-SAR Lab

5028A HAC-RF-GSM1900 GSM Voice 512CH

DUT: 5028A; Type: LTE/WCDMA/GSM mobile phone; Serial: ZPXSE68PLJNJPF6

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, $\epsilon_r = 1$; $\rho = 0$ 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 = 9.827 V/m; Power Drift = -0.06 dB

Applied MIF = 3.63 dB

RF audio interference level = 27.27 dBV/m

Emission category: M4

MIF scaled E-field

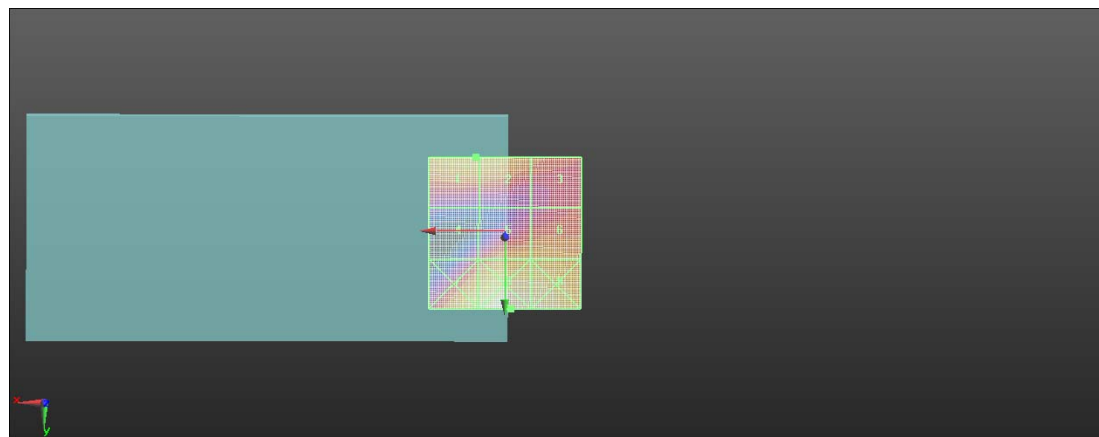
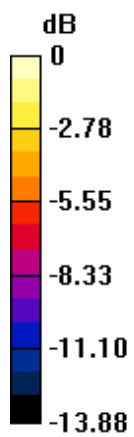
Grid 1 M4 27.27 dBV/m	Grid 2 M4 27.26 dBV/m	Grid 3 M4 25.13 dBV/m
Grid 4 M4 22.89 dBV/m	Grid 5 M4 26.27 dBV/m	Grid 6 M4 26.36 dBV/m
Grid 7 M4 28.41 dBV/m	Grid 8 M4 29.82 dBV/m	Grid 9 M4 29.52 dBV/m

Cursor:

Total = 29.82 dBV/m

E Category: M4

Location: -2, 25, 7.7 mm



0 dB = 30.98 V/m = 29.82 dBV/m

Test Laboratory: SGS-SAR Lab

5028A HAC-RF-GSM1900 GSM Voice 661CH

DUT: 5028A; Type: LTE/WCDMA/GSM mobile phone; Serial: ZPXSE68PLJNJPF6

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, $\epsilon_r = 1$; $\rho = 0$ 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 = 10.52 V/m; Power Drift = 0.13 dB

Applied MIF = 3.63 dB

RF audio interference level = 26.99 dBV/m

Emission category: M4

MIF scaled E-field

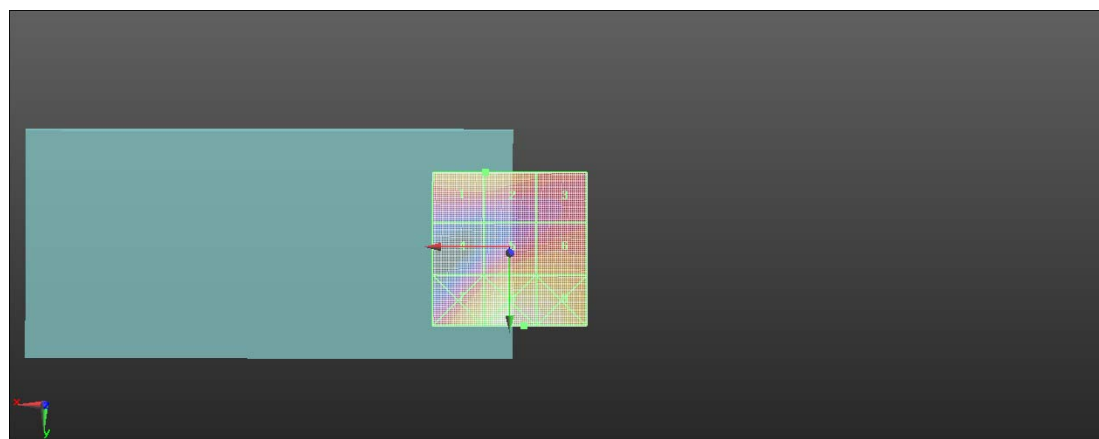
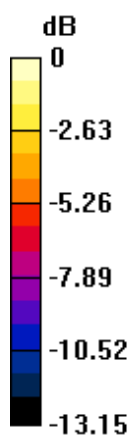
Grid 1 M4 26.99 dBV/m	Grid 2 M4 26.99 dBV/m	Grid 3 M4 25.26 dBV/m
Grid 4 M4 23.54 dBV/m	Grid 5 M4 26.75 dBV/m	Grid 6 M4 26.76 dBV/m
Grid 7 M4 28.51 dBV/m	Grid 8 M3 30.1 dBV/m	Grid 9 M4 29.85 dBV/m

Cursor:

Total = 30.10 dBV/m

E Category: M3

Location: -4.5, 25, 7.7 mm



0 dB = 31.98 V/m = 30.10 dBV/m

Test Laboratory: SGS-SAR Lab

5028A HAC-RF-GSM1900 GSM Voice 810CH

DUT: 5028A; Type: LTE/WCDMA/GSM mobile phone; Serial: ZPXSE68PLJNJPF6

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, $\epsilon_r = 1$; $\rho = 0$ 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 = 12.68 V/m; Power Drift = 0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 27.52 dBV/m

Emission category: M4

MIF scaled E-field

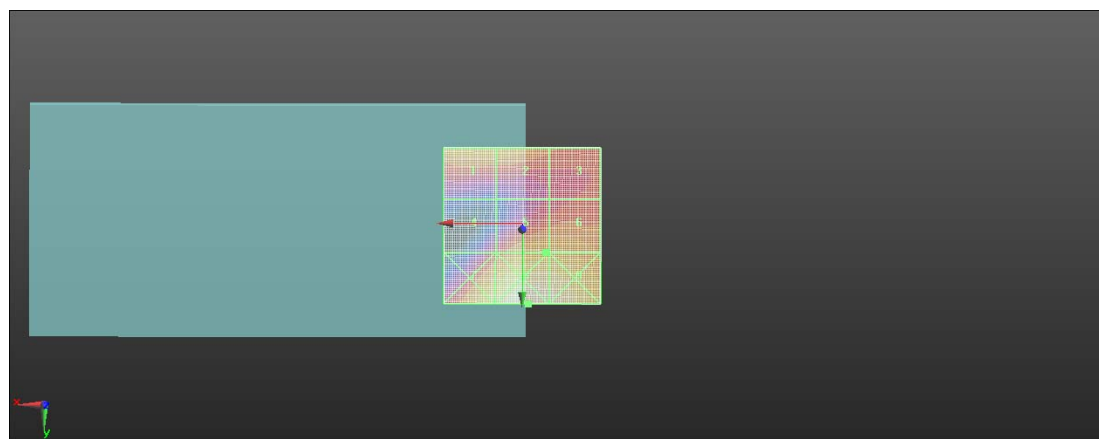
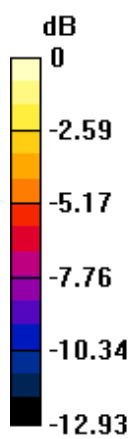
Grid 1 M4 27.39 dBV/m	Grid 2 M4 27.37 dBV/m	Grid 3 M4 25.76 dBV/m
Grid 4 M4 24.35 dBV/m	Grid 5 M4 27.52 dBV/m	Grid 6 M4 27.51 dBV/m
Grid 7 M4 29.2 dBV/m	Grid 8 M3 30.57 dBV/m	Grid 9 M3 30.26 dBV/m

Cursor:

Total = 30.57 dBV/m

E Category: M3

Location: -2, 25, 7.7 mm



0 dB = 33.79 V/m = 30.58 dBV/m