



Appendix B. HAC Measurement Plots

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HAC Measurement Plots of GSM850
HAC Measurement Plots of GSM1900

Test Laboratory: HUAWEI SAR/HAC Lab

HAC_ER3DV6_MT2-L03-GSM850-251CH**DUT: MT2-L03; Type: LTE/UMTS Smart Phone; HUAWEI Ascend Mate2; Serial: SAR1**

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

Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

DASY Configuration:

- Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2013-11-29;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn1236; Calibrated: 2013-11-25
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: $dx=0.5000 \text{ mm}$, $dy=0.5000 \text{ mm}$

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 42.30 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 34.44 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 33.85 dBV/m	Grid 2 M4 34.9 dBV/m	Grid 3 M4 34.65 dBV/m
Grid 4 M4 32.93 dBV/m	Grid 5 M4 34.44 dBV/m	Grid 6 M4 34.38 dBV/m
Grid 7 M4 32.04 dBV/m	Grid 8 M4 33.78 dBV/m	Grid 9 M4 33.76 dBV/m

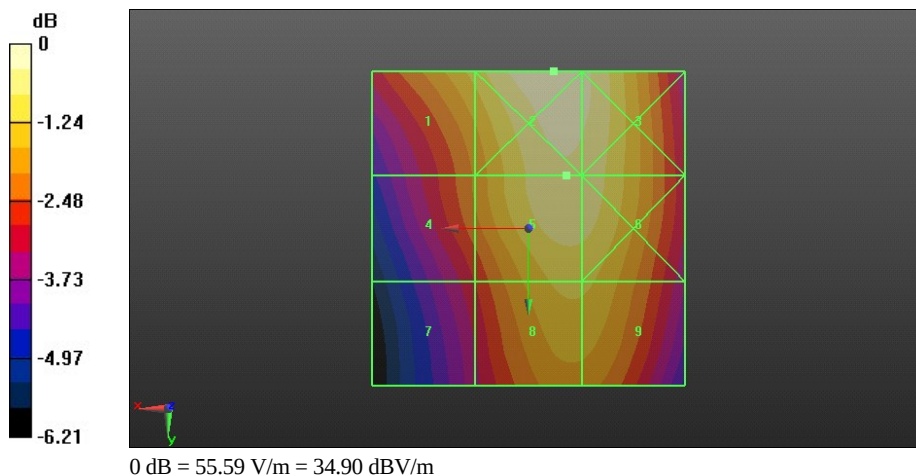
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 34.90 dBV/m

E Category: M4

Location: -4, -25, 8.7 mm



Test Laboratory: HUAWEI SAR/HAC Lab

HAC_ER3DV6_MT2-L03-GSM850-190CH**DUT: MT2-L03; Type: LTE/UMTS Smart Phone; HUAWEI Ascend Mate2; Serial: SAR1**

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

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

Phantom section: RF Section

DASY Configuration:

- Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2013-11-29;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn1236; Calibrated: 2013-11-25
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/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 = 41.39 V/m; Power Drift = -0.06 dB

Applied MIF = 3.63 dB

RF audio interference level = 34.16 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 33.6 dBV/m	Grid 2 M4 34.61 dBV/m	Grid 3 M4 34.38 dBV/m
Grid 4 M4 32.69 dBV/m	Grid 5 M4 34.16 dBV/m	Grid 6 M4 34.12 dBV/m
Grid 7 M4 31.79 dBV/m	Grid 8 M4 33.51 dBV/m	Grid 9 M4 33.5 dBV/m

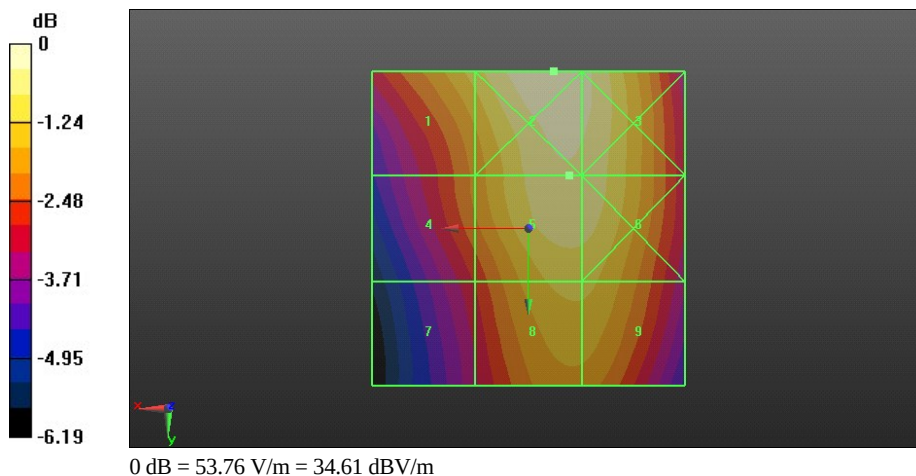
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 34.61 dBV/m

E Category: M4

Location: -4, -25, 8.7 mm



Test Laboratory: HUAWEI SAR/HAC Lab

HAC_ER3DV6_MT2-L03-GSM850-128CH**DUT: MT2-L03; Type: LTE/UMTS Smart Phone; HUAWEI Ascend Mate2; Serial: SAR1**

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

Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

DASY Configuration:

- Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2013-11-29;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn1236; Calibrated: 2013-11-25
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: $dx=0.5000 \text{ mm}$, $dy=0.5000 \text{ mm}$

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 40.37 V/m; Power Drift = -0.06 dB

Applied MIF = 3.63 dB

RF audio interference level = 33.88 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 33.27 dBV/m	Grid 2 M4 34.34 dBV/m	Grid 3 M4 34.11 dBV/m
Grid 4 M4 32.51 dBV/m	Grid 5 M4 33.88 dBV/m	Grid 6 M4 33.85 dBV/m
Grid 7 M4 31.72 dBV/m	Grid 8 M4 33.25 dBV/m	Grid 9 M4 33.24 dBV/m

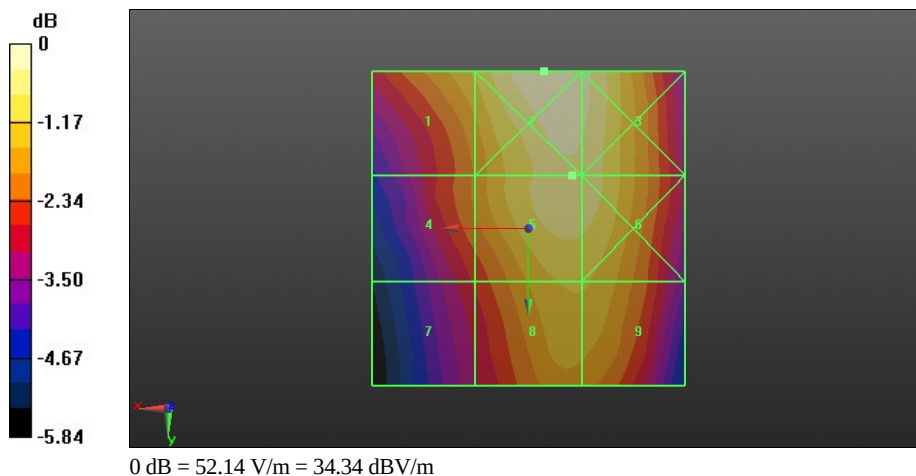
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 34.34 dBV/m

E Category: M4

Location: -2.5, -25, 8.7 mm



Test Laboratory: HUAWEI SAR/HAC Lab

HAC_ER3DV6_MT2-L03-GSM1900-810CH**DUT: MT2-L03; Type: LTE/UMTS Smart Phone; HUAWEI Ascend Mate2; Serial: SAR1**

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

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

Phantom section: RF Section

DASY Configuration:

- Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2013-11-29;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn1236; Calibrated: 2013-11-25
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/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 = 5.983 V/m; Power Drift = 0.17 dB

Applied MIF = 3.63 dB

RF audio interference level = 24.20 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 21.38 dBV/m	Grid 2 M4 24.2 dBV/m	Grid 3 M4 24.19 dBV/m
Grid 4 M4 20.56 dBV/m	Grid 5 M4 23.18 dBV/m	Grid 6 M4 23.32 dBV/m
Grid 7 M4 25.52 dBV/m	Grid 8 M4 27.36 dBV/m	Grid 9 M4 27.31 dBV/m

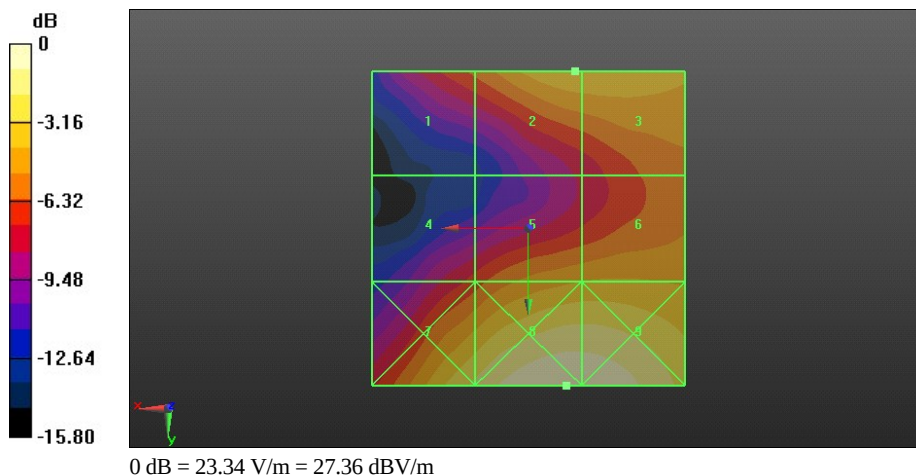
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 27.36 dBV/m

E Category: M4

Location: -6, 25, 8.7 mm



Test Laboratory: HUAWEI SAR/HAC Lab

HAC_ER3DV6_MT2-L03-GSM1900-661CH**DUT: MT2-L03; Type: LTE/UMTS Smart Phone; HUAWEI Ascend Mate2; Serial: SAR1**

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

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

Phantom section: RF Section

DASY Configuration:

- Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2013-11-29;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn1236; Calibrated: 2013-11-25
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/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 = 6.153 V/m; Power Drift = 0.12 dB

Applied MIF = 3.63 dB

RF audio interference level = 24.63 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 22.15 dBV/m	Grid 2 M4 24.63 dBV/m	Grid 3 M4 24.63 dBV/m
Grid 4 M4 21.11 dBV/m	Grid 5 M4 23.56 dBV/m	Grid 6 M4 23.59 dBV/m
Grid 7 M4 26.66 dBV/m	Grid 8 M4 28.1 dBV/m	Grid 9 M4 27.98 dBV/m

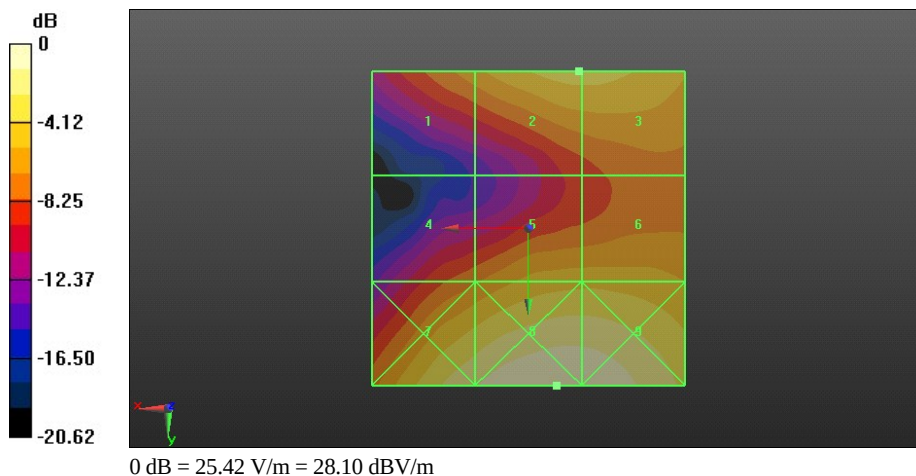
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 28.10 dBV/m

E Category: M4

Location: -4.5, 25, 8.7 mm



Test Laboratory: HUAWEI SAR/HAC Lab

HAC_ER3DV6_MT2-L03-GSM1900-512CH**DUT: MT2-L03; Type: LTE/UMTS Smart Phone; HUAWEI Ascend Mate2; Serial: SAR1**

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

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

Phantom section: RF Section

DASY Configuration:

- Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2013-11-29;
- Sensor-Surface: (Fix Surface), $z = 8.7$
- Electronics: DAE4 Sn1236; Calibrated: 2013-11-25
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/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 = 6.606 V/m; Power Drift = -0.09 dB

Applied MIF = 3.63 dB

RF audio interference level = 25.92 dBV/m

Emission category: M4

MIF scaled E-field

Grid 1 M4 23.74 dBV/m	Grid 2 M4 25.92 dBV/m	Grid 3 M4 25.92 dBV/m
Grid 4 M4 22.55 dBV/m	Grid 5 M4 24.26 dBV/m	Grid 6 M4 24.25 dBV/m
Grid 7 M4 27.83 dBV/m	Grid 8 M4 28.89 dBV/m	Grid 9 M4 28.63 dBV/m

Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

Cursor:

Total = 28.89 dBV/m

E Category: M4

Location: -3.5, 25, 8.7 mm

