SGS-CSTC Standards Technical Services Co., Ltd. Xi'An Branch

Report No.: ZR/2019/B001306

Appendix B

Detailed Test Results

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

Test Laboratory: SGS-SAR Lab

5007G HAC-RF-GSM850 GSM Voice 128CH

DUT: 5007G; Type: LTE/WCDMA/GSM mobile phone; Serial: 859POJBUGEIBKFRC

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, $\varepsilon_r = 1$; $\rho = 0$ 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 = 117.2 V/m; Power Drift = -0.11 dB

Applied MIF = 3.63 dB

RF audio interference level = 41.38 dBV/m

Emission category: M3

MIF scaled E-field

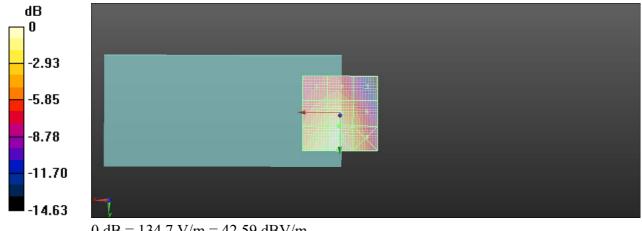
Grid 1 M4	Grid 2 M4	Grid 3 M4
37.44 dBV/m	38.09 dBV/m	36.02 dBV/m
Grid 4 M3	Grid 5 M3	Grid 6 M4
40.2 dBV/m	41.38 dBV/m	39.15 dBV/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
41.71 dBV/m	42.59 dBV/m	40.29 dBV/m

Cursor:

Total = 42.59 dBV/m

E Category: M3

Location: 1.5, 24.5, 7.7 mm



0 dB = 134.7 V/m = 42.59 dBV/m

Test Laboratory: SGS-SAR Lab

5007G HAC-RF-GSM850 GSM Voice 190CH

DUT: 5007G; Type: LTE/WCDMA/GSM mobile phone; Serial: 859POJBUGEIBKFRC

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, $\varepsilon_r = 1$; $\rho = 0$ 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 = 127.7 V/m; Power Drift = 0.04 dB

Applied MIF = 3.63 dB

RF audio interference level = 42.28 dBV/m

Emission category: M3

MIF scaled E-field

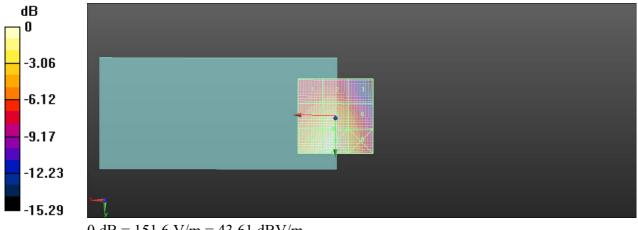
Grid 1 M4	Grid 2 M4	Grid 3 M4
38.08 dBV/m	38.66 dBV/m	36.57 dBV/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
41.14 dBV/m	42.28 dBV/m	40.05 dBV/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
42.71 dBV/m	43.62 dBV/m	41.27 dBV/m

Cursor:

Total = 43.62 dBV/m

E Category: M3

Location: 1.5, 24.5, 7.7 mm



0 dB = 151.6 V/m = 43.61 dBV/m

Test Laboratory: SGS-SAR Lab

5007G HAC-RF-GSM850 GSM Voice 251CH

DUT: 5007G; Type: LTE/WCDMA/GSM mobile phone; Serial: 859POJBUGEIBKFRC

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, $\varepsilon_r = 1$; $\rho = 0$ 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 = 136.4 V/m; Power Drift = 0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 43.04 dBV/m

Emission category: M3

MIF scaled E-field

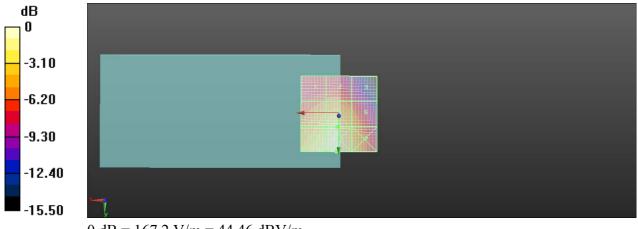
Grid 1 M4	Grid 2 M4	Grid 3 M4
38.51 dBV/m	39.07 dBV/m	37.04 dBV/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
41.87 dBV/m	43.04 dBV/m	40.79 dBV/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
43.6 dBV/m	44.47 dBV/m	42.11 dBV/m

Cursor:

 $Total = 44.47 \ dBV/m$

E Category: M3

Location: 1.5, 25, 7.7 mm



0 dB = 167.2 V/m = 44.46 dBV/m

Test Laboratory: SGS-SAR Lab

5007G HAC-RF-GSM1900 GSM Voice 512CH

DUT: 5007G; Type: LTE/WCDMA/GSM mobile phone; Serial: 859POJBUGEIBKFRC

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, $\varepsilon_r = 1$; $\rho = 0$ 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 = 17.11 V/m; Power Drift = -0.08 dB

Applied MIF = 3.63 dB

RF audio interference level = 29.41 dBV/m

Emission category: M4

MIF scaled E-field

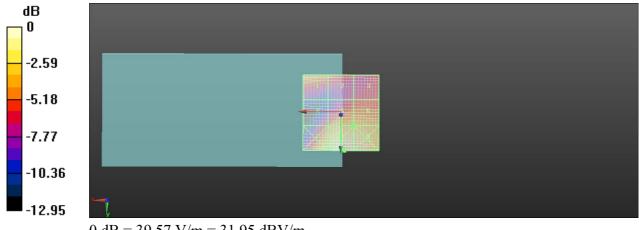
Grid 1 M4	Grid 2 M4	Grid 3 M4
28.59 dBV/m	27.61 dBV/m	26.22 dBV/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
26.46 dBV/m	29.41 dBV/m	29.41 dBV/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
30.4 dBV/m	31.95 dBV/m	31.63 dBV/m

Cursor:

Total = 31.95 dBV/m

E Category: M3

Location: -2.5, 25, 7.7 mm



0 dB = 39.57 V/m = 31.95 dBV/m

Test Laboratory: SGS-SAR Lab

5007G HAC-RF-GSM1900 GSM Voice 661CH

DUT: 5007G; Type: LTE/WCDMA/GSM mobile phone; Serial: 859POJBUGEIBKFRC

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, $\varepsilon_r = 1$; $\rho = 0$ 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 = 19.02 V/m; Power Drift = -0.05 dB

Applied MIF = 3.63 dB

RF audio interference level = 30.04 dBV/m

Emission category: M3

MIF scaled E-field

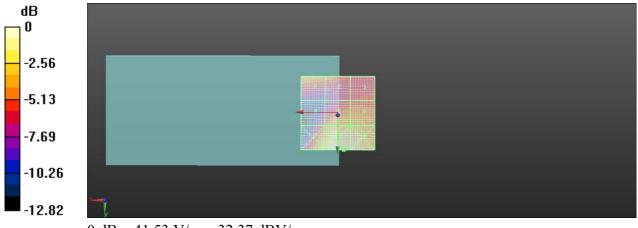
Grid 1 M4	Grid 2 M4	Grid 3 M4
28.85 dBV/m	28.19 dBV/m	26.82 dBV/m
Grid 4 M4	Grid 5 M3	Grid 6 M3
27.09 dBV/m	30.04 dBV/m	30.03 dBV/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
30.56 dBV/m	32.37 dBV/m	32.11 dBV/m

Cursor:

 $Total = 32.37 \ dBV/m$

E Category: M3

Location: -4, 25, 7.7 mm



0 dB = 41.53 V/m = 32.37 dBV/m

Test Laboratory: SGS-SAR Lab

5007G HAC-RF-GSM1900 GSM Voice 810CH

DUT: 5007G; Type: LTE/WCDMA/GSM mobile phone; Serial: 859POJBUGEIBKFRC

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, $\varepsilon_r = 1$; $\rho = 0$ 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 = 19.60 V/m; Power Drift = -0.04 dB

Applied MIF = 3.63 dB

RF audio interference level = 29.99 dBV/m

Emission category: M4

MIF scaled E-field

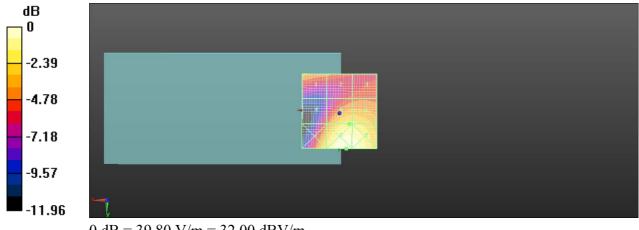
Grid 1 M4	Grid 2 M4	Grid 3 M4
28.37 dBV/m	27.7 dBV/m	27.15 dBV/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
27.06 dBV/m	29.99 dBV/m	29.94 dBV/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
30.15 dBV/m	32 dBV/m	31.76 dBV/m

Cursor:

Total = 32.00 dBV/m

E Category: M3

Location: -4.5, 25, 7.7 mm



 $0 \; dB = 39.80 \; V/m = 32.00 \; dBV/m$