Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/4/3

#01_HAC_E_GSM850_GSM Voice_Ch128

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz;Duty Cycle: 1:8.6896
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.5 ℃

DASY5 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2014/1/30;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (6); SEMCAD X Version 14.6.9 (7117)

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 = 45.68 V/m; Power Drift = -0.07 dB
Applied MIF = 3.63 dB
RF audio interference level = 34.98 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **33.76 dBV/m**	Grid 2 **M4** **34.88 dBV/m**	Grid 3 **M4** **34.85 dBV/m**
Grid 4 **M4** **34.05 dBV/m**	Grid 5 **M4** **34.98 dBV/m**	Grid 6 **M4** **34.9 dBV/m**
Grid 7 **M4** **34.33 dBV/m**	Grid 8 **M4** **34.98 dBV/m**	Grid 9 **M4** **34.91 dBV/m**

Cursor:
Total = 34.98 dBV/m
E Category: M4
Location: -5, 0.5, 8.7 mm

0 dB = 56.13 V/m = 34.98 dBV/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/4/3

#02_HAC_E_GSM850_GSM Voice_Ch189

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz;Duty Cycle: 1:8.6896
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.5 ℃

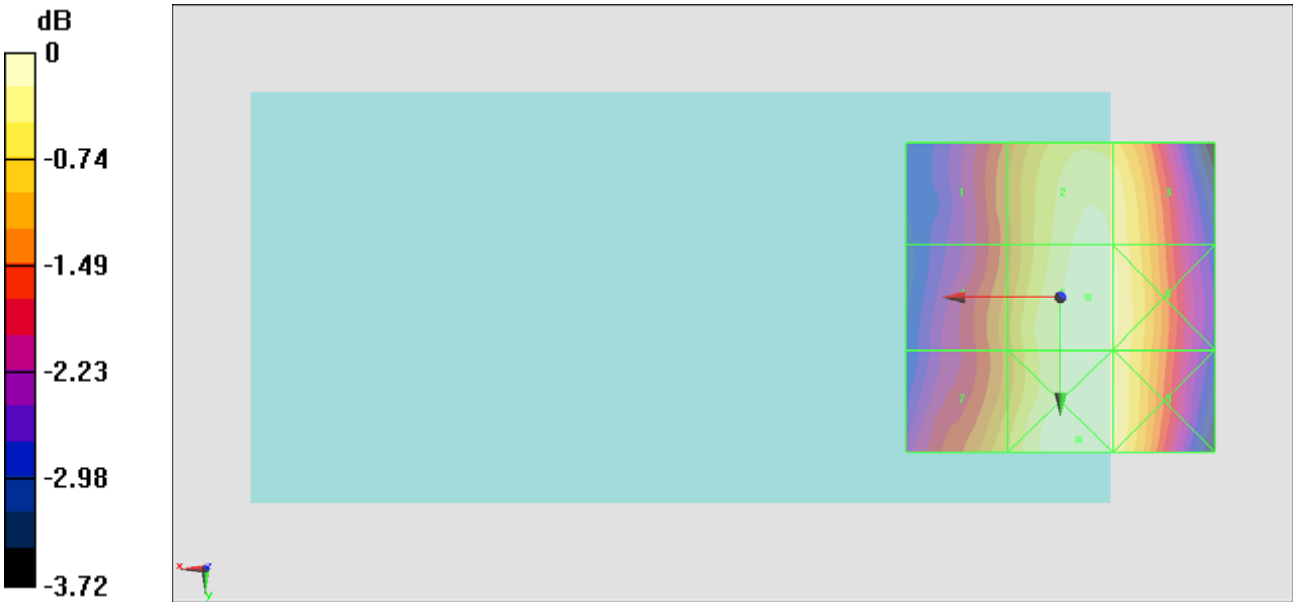
DASY5 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2014/1/30;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (6); SEMCAD X Version 14.6.9 (7117)

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 = 49.52 V/m; Power Drift = 0.01 dB
Applied MIF = 3.63 dB
RF audio interference level = 35.77 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **34.57 dBV/m**	Grid 2 **M4** **35.66 dBV/m**	Grid 3 **M4** **35.55 dBV/m**
Grid 4 **M4** **34.76 dBV/m**	Grid 5 **M4** **35.77 dBV/m**	Grid 6 **M4** **35.63 dBV/m**
Grid 7 **M4** **35.08 dBV/m**	Grid 8 **M4** **35.8 dBV/m**	Grid 9 **M4** **35.62 dBV/m**

Cursor:
Total = 35.80 dBV/m
E Category: M4
Location: -3, 23, 8.7 mm



0 dB = 61.65 V/m = 35.80 dBV/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/4/3

#03_HAC_E_GSM850_GSM Voice_Ch251

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz;Duty Cycle: 1:8.6896
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.5 ℃

DASY5 Configuration:
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2014/1/30;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2014/1/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (6); SEMCAD X Version 14.6.9 (7117)

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 = 52.77 V/m; Power Drift = -0.03 dB
Applied MIF = 3.63 dB
RF audio interference level = 36.43 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **35.01 dBV/m**	Grid 2 **M4** **36.25 dBV/m**	Grid 3 **M4** **36.23 dBV/m**
Grid 4 **M4** **35.35 dBV/m**	Grid 5 **M4** **36.43 dBV/m**	Grid 6 **M4** **36.38 dBV/m**
Grid 7 **M4** **35.58 dBV/m**	Grid 8 **M4** **36.46 dBV/m**	Grid 9 **M4** **36.34 dBV/m**

Cursor:
Total = 36.46 dBV/m
E Category: M4
Location: -4, 20.5, 8.7 mm

0 dB = 66.55 V/m = 36.46 dBV/m

#07_HAC_E_GSM1900_GSM Voice_Ch512

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz;Duty Cycle: 1:8.6896
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.3 ℃

DASY5 Configuration:
- Probe: ER3DV6 - SN2256; ConvF(1, 1, 1); Calibrated: 2013/2/18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2013/8/21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (6); SEMCAD X Version 14.6.9 (7117)

Ch512/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 = 10.97 V/m; Power Drift = -0.11 dB
Applied MIF = 3.63 dB
RF audio interference level = 25.88 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **24.33 dBV/m**	Grid 2 **M4** **25.28 dBV/m**	Grid 3 **M4** **25.31 dBV/m**
Grid 4 **M4** **23.27 dBV/m**	Grid 5 **M4** **25.88 dBV/m**	Grid 6 **M4** **26.25 dBV/m**
Grid 7 **M4** **25.57 dBV/m**	Grid 8 **M4** **28.72 dBV/m**	Grid 9 **M4** **28.84 dBV/m**

Cursor:
Total = 28.84 dBV/m
E Category: M4
Location: -12, 25, 8.7 mm

0 dB = 27.67 V/m = 28.84 dBV/m

#08_HAC_E_GSM1900_GSM Voice_Ch661

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz;Duty Cycle: 1:8.6896
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.3 ℃

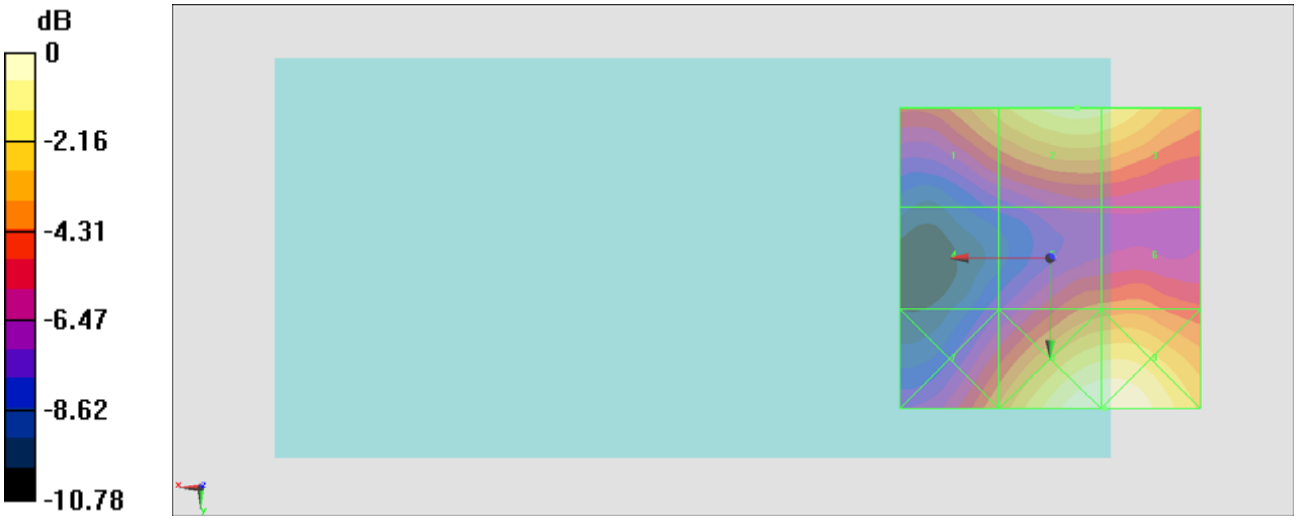
DASY5 Configuration:
- Probe: ER3DV6 - SN2256; ConvF(1, 1, 1); Calibrated: 2013/2/18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2013/8/21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (6); SEMCAD X Version 14.6.9 (7117)

Ch661/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 = 8.827 V/m; Power Drift = -0.03 dB
Applied MIF = 3.63 dB
RF audio interference level = 27.48 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **25.98 dBV/m**	Grid 2 **M4** **27.48 dBV/m**	Grid 3 **M4** **27.33 dBV/m**
Grid 4 **M4** **21.22 dBV/m**	Grid 5 **M4** **24.49 dBV/m**	Grid 6 **M4** **24.69 dBV/m**
Grid 7 **M4** **25.05 dBV/m**	Grid 8 **M4** **28.47 dBV/m**	Grid 9 **M4** **28.48 dBV/m**

Cursor:
Total = 28.48 dBV/m
E Category: M4
Location: -9, 25, 8.7 mm



0 dB = 26.53 V/m = 28.47 dBV/m

#09_HAC_E_GSM1900_GSM Voice_Ch810

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz;Duty Cycle: 1:8.6896
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.3 ℃

DASY5 Configuration:
- Probe: ER3DV6 - SN2256; ConvF(1, 1, 1); Calibrated: 2013/2/18;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2013/8/21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (6); SEMCAD X Version 14.6.9 (7117)

Ch810/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 = 10.72 V/m; Power Drift = -0.56 dB
Applied MIF = 3.63 dB
RF audio interference level = 26.29 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **25.28 dBV/m**	Grid 2 **M4** **25.85 dBV/m**	Grid 3 **M4** **26.29 dBV/m**
Grid 4 **M4** **23.39 dBV/m**	Grid 5 **M4** **25.42 dBV/m**	Grid 6 **M4** **26.18 dBV/m**
Grid 7 **M4** **25.03 dBV/m**	Grid 8 **M4** **27.96 dBV/m**	Grid 9 **M4** **28.19 dBV/m**

Cursor:
Total = 28.19 dBV/m
E Category: M4
Location: -12.5, 25, 8.7 mm

0 dB = 25.66 V/m = 28.19 dBV/m