Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2016/8/15

#01_HAC_E_GSM850_GSM Voice_Ch189

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.4 ℃

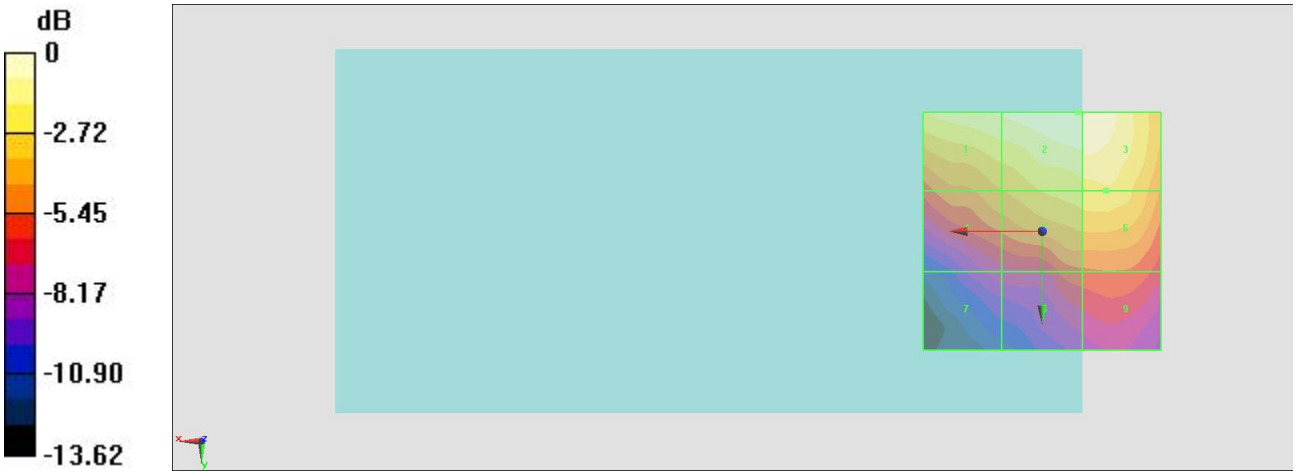
DASY5 Configuration
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2016/1/19;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2016/5/12
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Ch189/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 = 29.56 V/m; Power Drift = -0.18 dB
Applied MIF = 3.63 dB
RF audio interference level = 35.40 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **34.66 dBV/m**	Grid 2 **M4** **35.4 dBV/m**	Grid 3 **M4** **35.39 dBV/m**
Grid 4 **M4** **31.72 dBV/m**	Grid 5 **M4** **33.19 dBV/m**	Grid 6 **M4** **33.41 dBV/m**
Grid 7 **M4** **27.82 dBV/m**	Grid 8 **M4** **29.78 dBV/m**	Grid 9 **M4** **29.93 dBV/m**

Cursor:
Total = 35.40 dBV/m
E Category: M4
Location: -7.5, -25, 8.7 mm



0 dB = 58.88 V/m = 35.40 dBV/m

#02_HAC_E_GSM1900_GSM Voice_Ch810

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.3 ℃

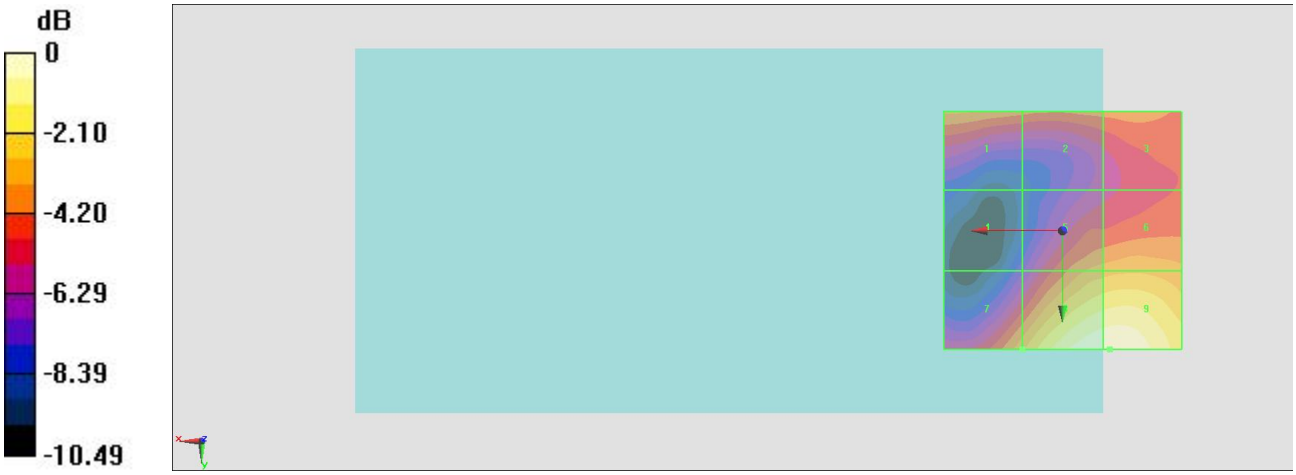
DASY5 Configuration
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2016/1/19;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2016/5/12
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

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 = 14.80 V/m; Power Drift = 0.01 dB
Applied MIF = 3.63 dB
RF audio interference level = 29.09 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **24.4 dBV/m**	Grid 2 **M4** **24.56 dBV/m**	Grid 3 **M4** **25.3 dBV/m**
Grid 4 **M4** **23.08 dBV/m**	Grid 5 **M4** **27.24 dBV/m**	Grid 6 **M4** **27.34 dBV/m**
Grid 7 **M4** **26.36 dBV/m**	Grid 8 **M4** **29.08 dBV/m**	Grid 9 **M4** **29.09 dBV/m**

Cursor:
Total = 29.09 dBV/m
E Category: M4
Location: -9.5, 30, 8.7 mm



0 dB = 28.47 V/m = 29.09 dBV/m

#03_HAC_E_LTE Band 38_20M_QPSK_1_0_Ch38000

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2595 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

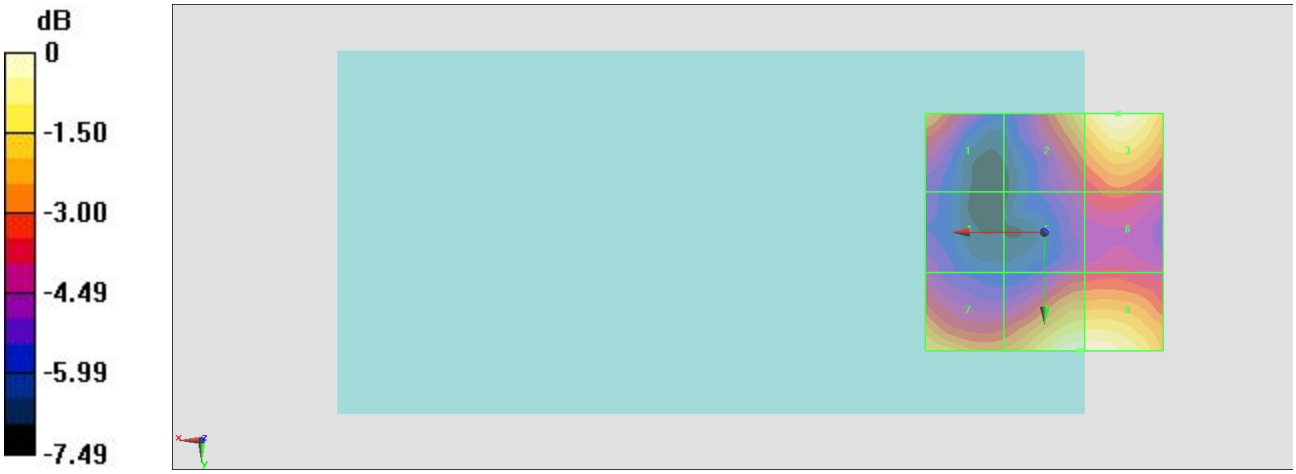
DASY5 Configuration
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2016/1/19;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2016/5/12
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Ch38000/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 = 8.370 V/m; Power Drift = 0.14 dB
Applied MIF = -1.62 dB
RF audio interference level = 20.81 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **18.65 dBV/m**	Grid 2 **M4** **19.65 dBV/m**	Grid 3 **M4** **20.74 dBV/m**
Grid 4 **M4** **16.42 dBV/m**	Grid 5 **M4** **16.91 dBV/m**	Grid 6 **M4** **17.61 dBV/m**
Grid 7 **M4** **19.51 dBV/m**	Grid 8 **M4** **20.81 dBV/m**	Grid 9 **M4** **20.8 dBV/m**

Cursor:
Total = 20.81 dBV/m
E Category: M4
Location: -7.5, 25, 8.7 mm



0 dB = 10.97 V/m = 20.80 dBV/m

#04_HAC_E_LTE Band 38_20M_16QAM_1_0_Ch38000

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2595 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

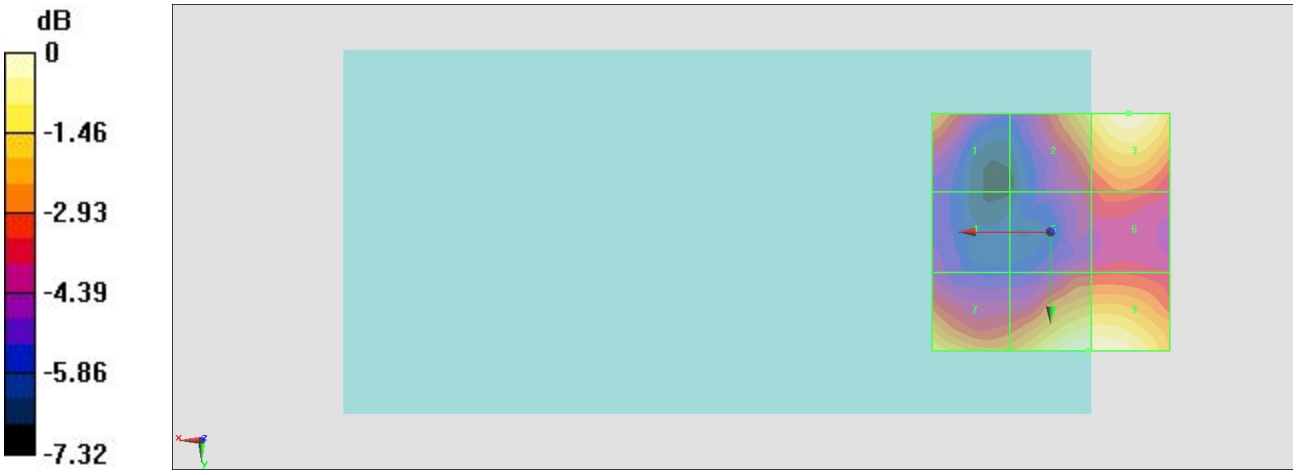
DASY5 Configuration
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2016/1/19;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2016/5/12
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Ch38000/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 = 8.449 V/m; Power Drift = 0.09 dB
Applied MIF = -1.44 dB
RF audio interference level = 19.86 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **18 dBV/m**	Grid 2 **M4** **18.71 dBV/m**	Grid 3 **M4** **19.8 dBV/m**
Grid 4 **M4** **15.48 dBV/m**	Grid 5 **M4** **16.28 dBV/m**	Grid 6 **M4** **16.91 dBV/m**
Grid 7 **M4** **18.81 dBV/m**	Grid 8 **M4** **19.86 dBV/m**	Grid 9 **M4** **19.86 dBV/m**

Cursor:
Total = 19.86 dBV/m
E Category: M4
Location: -8, 25, 8.7 mm



0 dB = 9.842 V/m = 19.86 dBV/m

#05_HAC_E_LTE Band 41_20M_QPSK_1_0_Ch40840

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2615 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

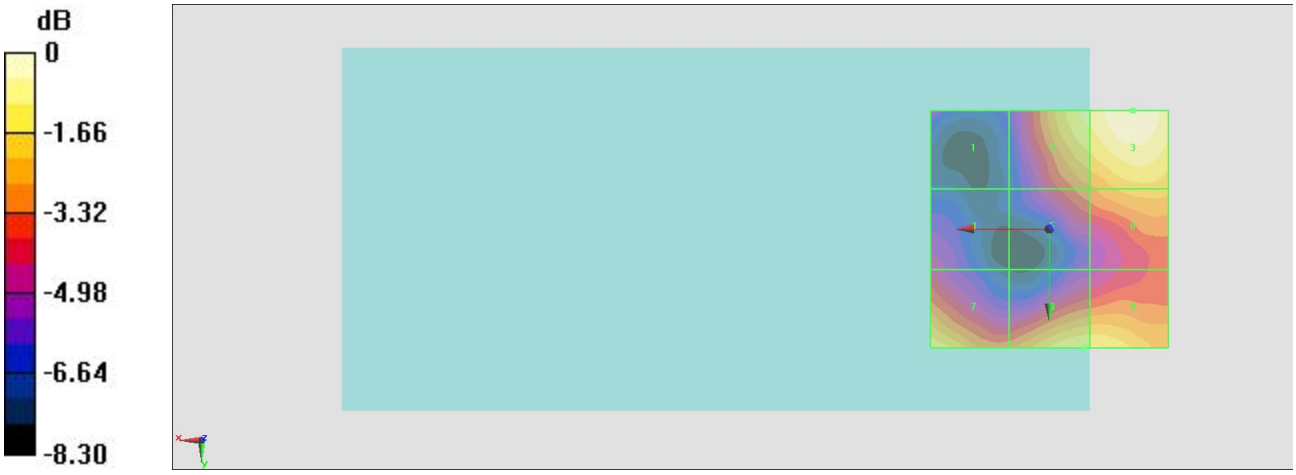
DASY5 Configuration
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2016/1/19;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2016/5/12
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Ch40840/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 = 8.877 V/m; Power Drift = 0.17 dB
Applied MIF = -1.62 dB
RF audio interference level = 21.23 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **16.24 dBV/m**	Grid 2 **M4** **20.34 dBV/m**	Grid 3 **M4** **21.23 dBV/m**
Grid 4 **M4** **16.77 dBV/m**	Grid 5 **M4** **18.36 dBV/m**	Grid 6 **M4** **19.39 dBV/m**
Grid 7 **M4** **20.06 dBV/m**	Grid 8 **M4** **20.29 dBV/m**	Grid 9 **M4** **20.28 dBV/m**

Cursor:
Total = 21.23 dBV/m
E Category: M4
Location: -17.5, -25, 8.7 mm



0 dB = 11.52 V/m = 21.23 dBV/m

#06_HAC_E_LTE Band 41_20M_16QAM_1_0_Ch40840;WPC

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM); Frequency: 2615 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

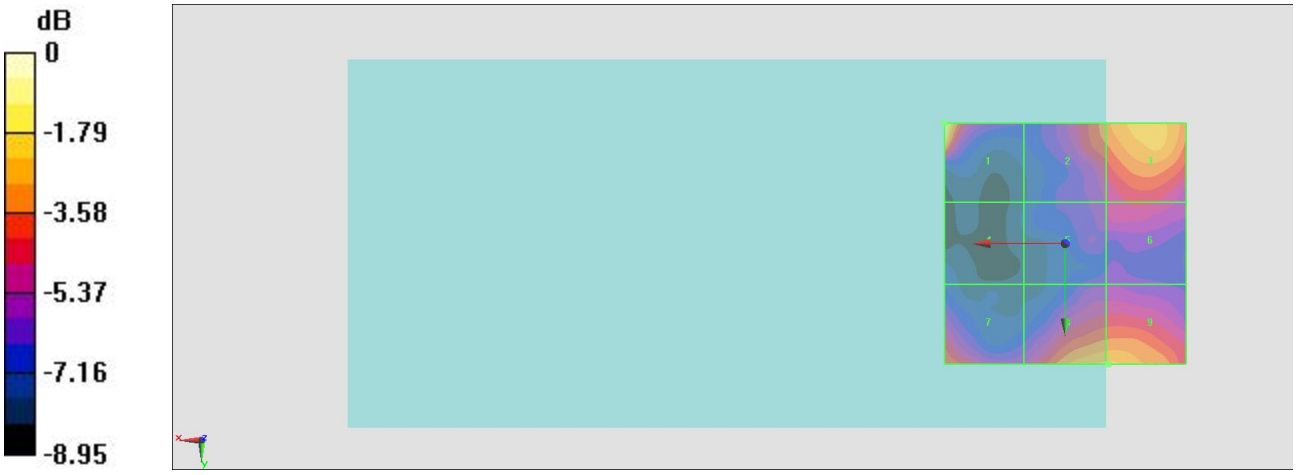
DASY5 Configuration
- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2016/1/19;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2016/5/12
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7373)

Ch40840/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 = 8.076 V/m; Power Drift = 0.16 dB
Applied MIF = -1.44 dB
RF audio interference level = 21.20 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **21.2 dBV/m**	Grid 2 **M4** **18.04 dBV/m**	Grid 3 **M4** **19.15 dBV/m**
Grid 4 **M4** **14.09 dBV/m**	Grid 5 **M4** **15.89 dBV/m**	Grid 6 **M4** **16.57 dBV/m**
Grid 7 **M4** **17.75 dBV/m**	Grid 8 **M4** **18.96 dBV/m**	Grid 9 **M4** **18.97 dBV/m**

Cursor:
Total = 21.20 dBV/m
E Category: M4
Location: 25, -25, 8.7 mm



0 dB = 11.49 V/m = 21.21 dBV/m