# #01 HAC E GSM850 GSM Voice Ch128

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

Date: 2018/10/18

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 ℃

## DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

# 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 = 50.49 V/m; Power Drift = -0.11 dB

Applied MIF = 3.63 dB

RF audio interference level = 35.30 dBV/m

**Emission category: M4** 

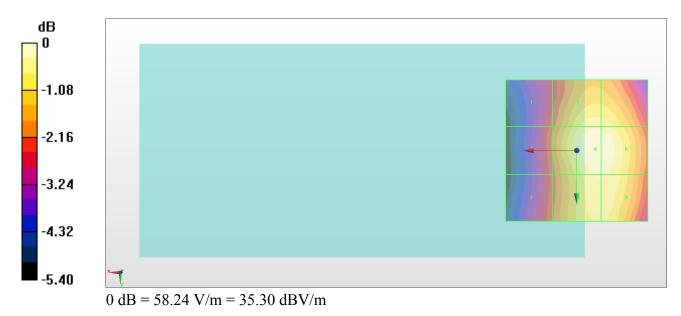
### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
33.02 dBV/m	34.88 dBV/m	34.85 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
33.25 dBV/m	35.3 dBV/m	35.25 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
33.12 dBV/m	34.99 dBV/m	34.98 dBV/m

### **Cursor:**

Total = 35.30 dBV/m E Category: M4

Location: -6.5, -0.5, 8.7 mm



# #02 HAC E GSM850 GSM Voice Ch189

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 836.4 MHz; Duty Cycle: 1:8.6896

Date: 2018/10/18

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 ℃

## DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

# 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 = 52.51 V/m; Power Drift = -0.04 dB

Applied MIF = 3.63 dB

RF audio interference level = 35.72 dBV/m

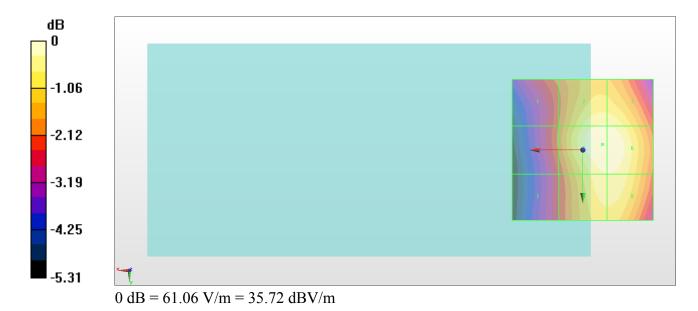
**Emission category: M4** 

### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
33.76 dBV/m	35.42 dBV/m	35.4 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
33.75 dBV/m	35.72 dBV/m	35.7 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
33.3 dBV/m	35.35 dBV/m	35.35 dBV/m

### **Cursor:**

Total = 35.72 dBV/m E Category: M4 Location: -7, -2, 8.7 mm



# #03 HAC E GSM850 GSM Voice Ch251

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

Date: 2018/10/18

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 ℃

## DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

## 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 = 49.86 V/m; Power Drift = -0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 35.34 dBV/m

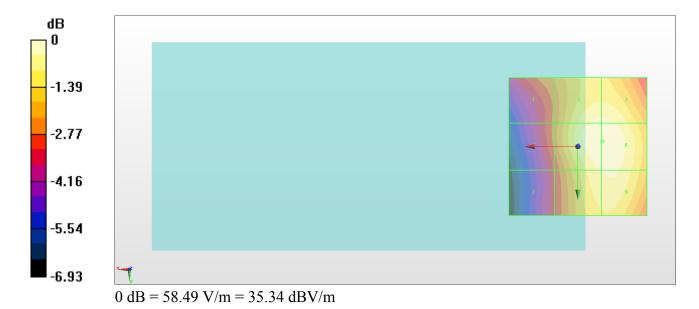
**Emission category: M4** 

### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
33.16 dBV/m	35.04 dBV/m	35.04 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
32.81 dBV/m	35.34 dBV/m	35.34 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
32.2 dBV/m	34.92 dBV/m	34.98 dBV/m

### **Cursor:**

Total = 35.34 dBV/m E Category: M4 Location: -9, -2, 8.7 mm



# #04 HAC E\_GSM1900\_GSM Voice Ch512

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

Date: 2018/10/18

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 ℃

## DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

## 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 = 28.13 V/m; Power Drift = 0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 28.59 dBV/m

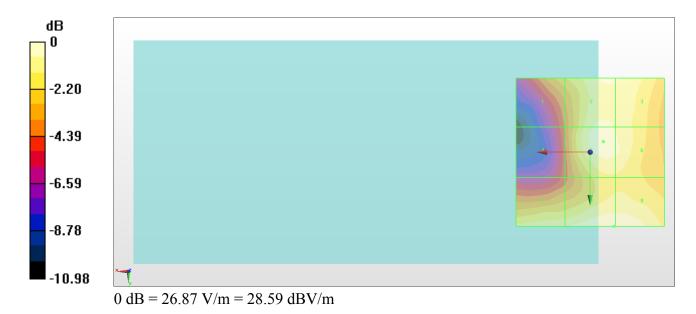
**Emission category: M4** 

### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
26.39 dBV/m	28.06 dBV/m	27.96 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
24.35 dBV/m	28.25 dBV/m	28.02 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
27.76 dBV/m	28.59 dBV/m	28.59 dBV/m

### **Cursor:**

Total = 28.59 dBV/m E Category: M4 Location: -8, 25, 8.7 mm



# #05 HAC E GSM1900 GSM Voice Ch661

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

Date: 2018/10/18

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature: 23.5 °C

## DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

# 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 = 27.44 V/m; Power Drift = -0.04 dB

Applied MIF = 3.63 dB

RF audio interference level = 28.54 dBV/m

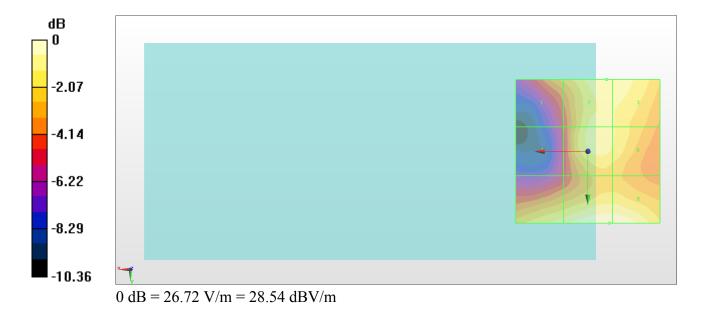
**Emission category: M4** 

### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
26.08 dBV/m	27.87 dBV/m	27.81 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
23.65 dBV/m	27.67 dBV/m	27.26 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
27.63 dBV/m	28.54 dBV/m	28.53 dBV/m

### **Cursor:**

Total = 28.54 dBV/m E Category: M4 Location: -7.5, 25, 8.7 mm



# #06\_HAC\_E\_GSM1900\_GSM Voice\_Ch810

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

Date: 2018/10/18

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 ℃

## DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

# 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 = 27.33 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 28.48 dBV/m

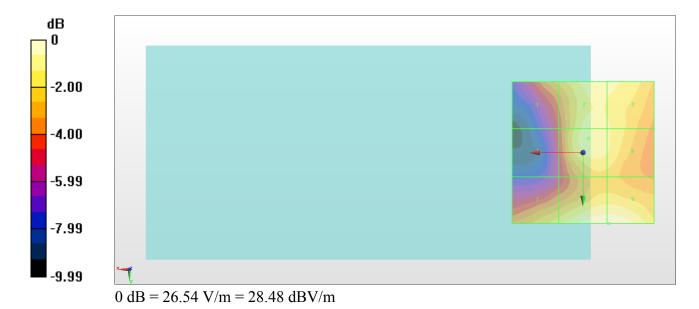
Emission category: M4

### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
26.14 dBV/m	27.73 dBV/m	27.49 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
23.99 dBV/m	27.75 dBV/m	27.3 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
26.99 dBV/m	28.47 dBV/m	28.48 dBV/m

### **Cursor:**

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



# #07\_HAC\_E\_LTE Band 38\_20M\_QPSK\_1\_0\_Ch37850

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2580 MHz; Duty

Date: 2018/10/18

Cycle: 1:8.33681

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C

### DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

## 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 = 11.51 V/m; Power Drift = -0.16 dB

Applied MIF = -1.62 dB

RF audio interference level = 23.59 dBV/m

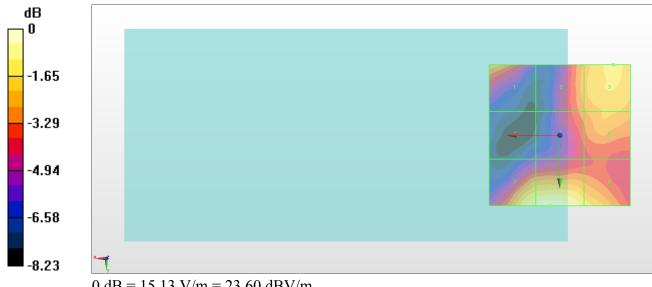
**Emission category: M4** 

#### MIF scaled E-field

Grid 1 <b>M4</b>	Grid 2 <b>M4</b>	Grid 3 <b>M4</b>
21.33 dBV/m	21.17 dBV/m	22.16 dBV/m
Grid 4 <b>M4</b>	Grid 5 <b>M4</b>	Grid 6 <b>M4</b>
17.98 dBV/m	20.7 dBV/m	21.52 dBV/m
Grid 7 <b>M4</b>	Grid 8 <b>M4</b>	Grid 9 <b>M4</b>
23.21 dBV/m	23.59 dBV/m	22.41 dBV/m

### **Cursor:**

Total = 23.59 dBV/mE Category: M4 Location: 3.5, 25, 8.7 mm



0 dB = 15.13 V/m = 23.60 dBV/m

# #08\_HAC\_E\_LTE Band 38\_20M\_QPSK\_1\_0\_Ch38000

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2575 MHz; Duty

Date: 2018/10/18

Cycle: 1:8.33681

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 ℃

### DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

## 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 = 8.565 V/m; Power Drift = 0.01 dB

Applied MIF = -1.62 dB

RF audio interference level = 22.15 dBV/m

Emission category: M4

#### MIF scaled E-field

Grid 1 M4 21.94 dBV/m	Grid 3 <b>M4</b> <b>21.15 dBV/m</b>
Grid 4 <b>M4</b> <b>20.93 dBV/m</b>	Grid 6 <b>M4</b> <b>20.8 dBV/m</b>
Grid 7 <b>M4</b> 22.15 dBV/m	Grid 9 <b>M4</b> <b>20.26 dBV/m</b>

### **Cursor:**

Total = 22.15 dBV/m E Category: M4 Location: 25, 25, 8.7 mm



0 dB = 12.81 V/m = 22.15 dBV/m

# #09 HAC E LTE Band 38 20M QPSK 1 0 Ch38150

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2610 MHz; Duty

Date: 2018/10/18

Cycle: 1:8.33681

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\varepsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C

### DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2018/1/19;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn854; Calibrated: 2018/6/14

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

## 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 = 6.489 V/m; Power Drift = 0.17 dB

Applied MIF = -1.62 dB

RF audio interference level = 21.29 dBV/m

**Emission category: M4** 

#### MIF scaled E-field

Grid 1 <b>M4</b> <b>19.98 dBV/m</b>	Grid 3 <b>M4</b> <b>19.54 dBV/m</b>
Grid 4 <b>M4</b> <b>18.14 dBV/m</b>	Grid 6 <b>M4</b> <b>19.39 dBV/m</b>
Grid 7 <b>M4</b> <b>21.29 dBV/m</b>	Grid 9 <b>M4</b> <b>18.45 dBV/m</b>

### **Cursor:**

Total = 21.29 dBV/mE Category: M4 Location: 17, 25, 8.7 mm



0 dB = 11.60 V/m = 21.29 dBV/m