



## ***Appendix B. Plots of RF Emission Measurement***

The plots are shown as follows.

### #01 HAC\_E\_GSM850\_Ch128

**DUT: 321901**

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

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2013/1/21;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Ch128/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 = 77.23 V/m; Power Drift = 0.02 dB

Applied MIF = 3.63 dB

RF audio interference level = 38.94 dBV/m

**Emission category: M4**

MIF scaled E-field

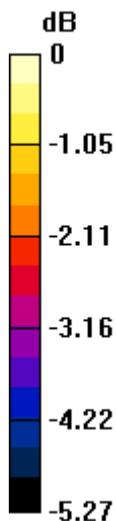
<b>Grid 1 M4</b> <b>38.27 dBV/m</b>	<b>Grid 2 M4</b> <b>38.69 dBV/m</b>	<b>Grid 3 M4</b> <b>38.14 dBV/m</b>
<b>Grid 4 M4</b> <b>38.48 dBV/m</b>	<b>Grid 5 M4</b> <b>38.94 dBV/m</b>	<b>Grid 6 M4</b> <b>38.53 dBV/m</b>
<b>Grid 7 M4</b> <b>38.25 dBV/m</b>	<b>Grid 8 M4</b> <b>38.83 dBV/m</b>	<b>Grid 9 M4</b> <b>38.59 dBV/m</b>

**Cursor:**

Total = 38.94 dBV/m

E Category: M4

Location: 0, 1, 8.7 mm



0 dB = 88.53 V/m = 38.94 dBV/m

## #02 HAC\_E\_GSM850\_Ch189

**DUT: 321901**

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

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2013/1/21;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Ch189/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 = 73.22 V/m; Power Drift = 0.02 dB

Applied MIF = 3.63 dB

RF audio interference level = 38.44 dBV/m

**Emission category: M4**

MIF scaled E-field

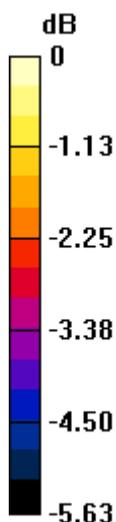
Grid 1 <b>M4</b> <b>38.31 dBV/m</b>	Grid 2 <b>M4</b> <b>38.38 dBV/m</b>	Grid 3 <b>M4</b> <b>37.43 dBV/m</b>
Grid 4 <b>M4</b> <b>38.12 dBV/m</b>	Grid 5 <b>M4</b> <b>38.44 dBV/m</b>	Grid 6 <b>M4</b> <b>37.48 dBV/m</b>
Grid 7 <b>M4</b> <b>37.66 dBV/m</b>	Grid 8 <b>M4</b> <b>38.02 dBV/m</b>	Grid 9 <b>M4</b> <b>37.2 dBV/m</b>

**Cursor:**

Total = 38.44 dBV/m

E Category: M4

Location: 1.5, -1, 8.7 mm



0 dB = 83.54 V/m = 38.44 dBV/m

### #03 HAC\_E\_GSM850\_Ch251

**DUT: 321901**

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

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2013/1/21;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Ch251/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 = 71.64 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 38.10 dBV/m

**Emission category: M4**

MIF scaled E-field

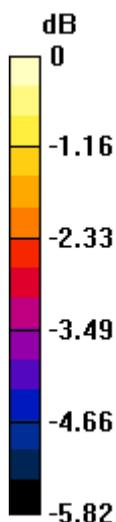
Grid 1 <b>M4</b> <b>37.79 dBV/m</b>	Grid 2 <b>M4</b> <b>38.07 dBV/m</b>	Grid 3 <b>M4</b> <b>37.31 dBV/m</b>
Grid 4 <b>M4</b> <b>37.61 dBV/m</b>	Grid 5 <b>M4</b> <b>38.1 dBV/m</b>	Grid 6 <b>M4</b> <b>37.32 dBV/m</b>
Grid 7 <b>M4</b> <b>37.12 dBV/m</b>	Grid 8 <b>M4</b> <b>37.65 dBV/m</b>	Grid 9 <b>M4</b> <b>36.88 dBV/m</b>

**Cursor:**

Total = 38.10 dBV/m

E Category: M4

Location: 0.5, -1.5, 8.7 mm



0 dB = 80.31 V/m = 38.10 dBV/m

### #04 HAC\_E\_GSM1900\_Ch512

#### DUT: 321901

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

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C

#### DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2013/1/21;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

#### Ch512/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 = 29.49 V/m; Power Drift = -0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 31.09 dBV/m

#### Emission category: M3

MIF scaled E-field

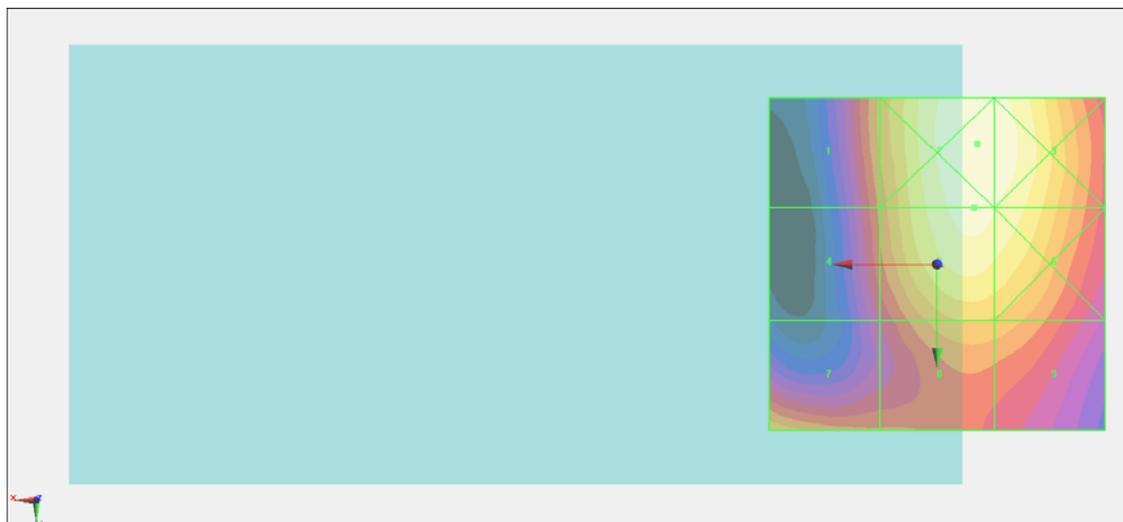
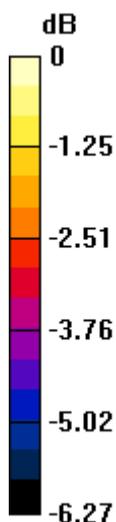
Grid 1 <b>M4</b> <b>29.36 dBV/m</b>	Grid 2 <b>M3</b> <b>31.33 dBV/m</b>	Grid 3 <b>M3</b> <b>31.25 dBV/m</b>
Grid 4 <b>M4</b> <b>28.96 dBV/m</b>	Grid 5 <b>M3</b> <b>31.09 dBV/m</b>	Grid 6 <b>M3</b> <b>30.96 dBV/m</b>
Grid 7 <b>M4</b> <b>29.67 dBV/m</b>	Grid 8 <b>M4</b> <b>29.68 dBV/m</b>	Grid 9 <b>M4</b> <b>29.58 dBV/m</b>

#### Cursor:

Total = 31.33 dBV/m

E Category: M3

Location: -6, -18, 8.7 mm



0 dB = 36.85 V/m = 31.33 dBV/m

### #05 HAC\_E\_GSM1900\_Ch661

#### DUT: 321901

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

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C

#### DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2013/1/21;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

#### Ch661/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 = 26.48 V/m; Power Drift = -0.11 dB

Applied MIF = 3.63 dB

RF audio interference level = 30.21 dBV/m

#### Emission category: M3

MIF scaled E-field

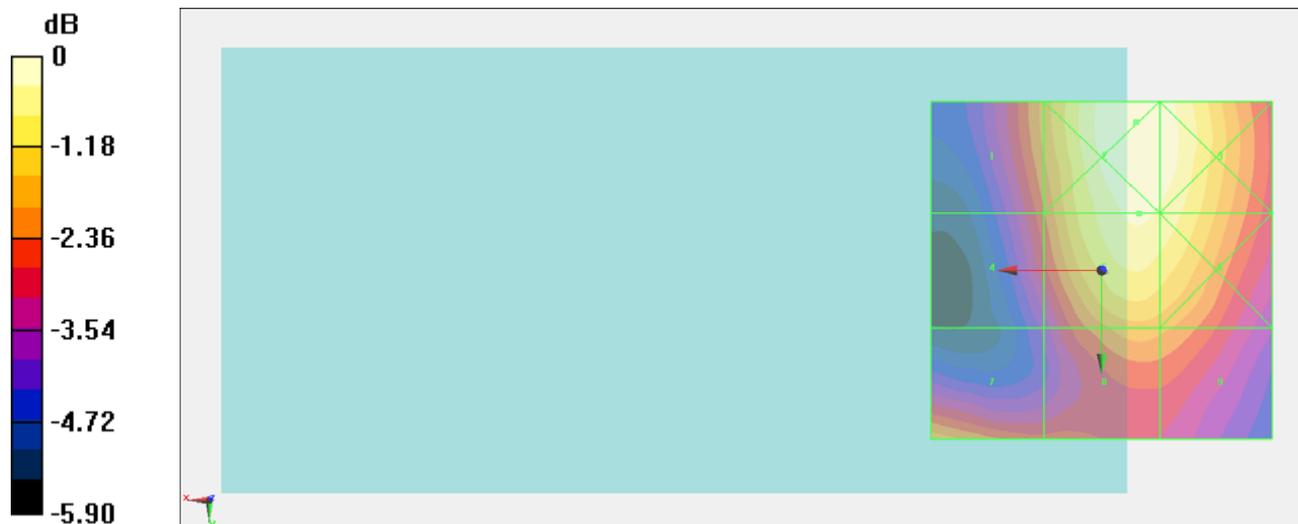
Grid 1 <b>M4</b> <b>28.73 dBV/m</b>	Grid 2 <b>M3</b> <b>30.54 dBV/m</b>	Grid 3 <b>M3</b> <b>30.42 dBV/m</b>
Grid 4 <b>M4</b> <b>28.15 dBV/m</b>	Grid 5 <b>M3</b> <b>30.21 dBV/m</b>	Grid 6 <b>M3</b> <b>30.09 dBV/m</b>
Grid 7 <b>M4</b> <b>28.89 dBV/m</b>	Grid 8 <b>M4</b> <b>28.84 dBV/m</b>	Grid 9 <b>M4</b> <b>28.71 dBV/m</b>

#### Cursor:

Total = 30.54 dBV/m

E Category: M3

Location: -5, -22, 8.7 mm



0 dB = 33.64 V/m = 30.54 dBV/m

### #06 HAC\_E\_GSM1900\_Ch810

#### DUT: 321901

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

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C

#### DASY5 Configuration:

- Probe: ER3DV6 - SN2358; ConvF(1, 1, 1); Calibrated: 2013/1/21;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

#### Ch810/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 = 23.38 V/m; Power Drift = -0.04 dB

Applied MIF = 3.63 dB

RF audio interference level = 29.66 dBV/m

#### Emission category: M4

MIF scaled E-field

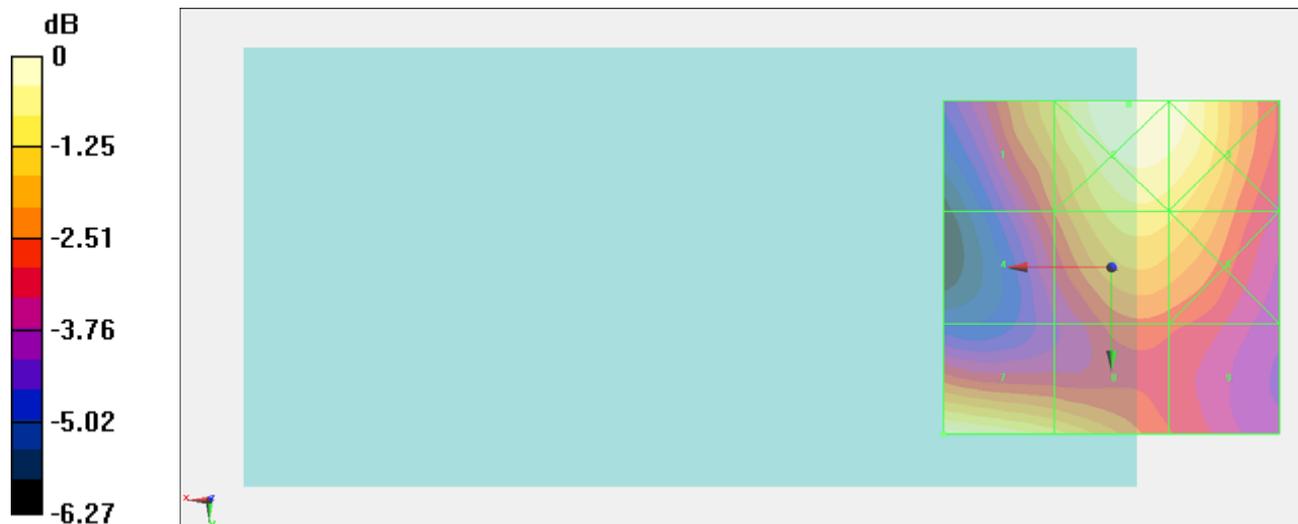
Grid 1 <b>M4</b> <b>28.66 dBV/m</b>	Grid 2 <b>M4</b> <b>29.88 dBV/m</b>	Grid 3 <b>M4</b> <b>29.8 dBV/m</b>
Grid 4 <b>M4</b> <b>27.42 dBV/m</b>	Grid 5 <b>M4</b> <b>28.95 dBV/m</b>	Grid 6 <b>M4</b> <b>28.78 dBV/m</b>
Grid 7 <b>M4</b> <b>29.66 dBV/m</b>	Grid 8 <b>M4</b> <b>28.84 dBV/m</b>	Grid 9 <b>M4</b> <b>27.13 dBV/m</b>

#### Cursor:

Total = 29.88 dBV/m

E Category: M4

Location: -2.5, -24.5, 8.7 mm



0 dB = 31.19 V/m = 29.88 dBV/m