



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

The plots are shown as follows.

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

**DUT: 2D2521**

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.70964

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2476; ConvF(1, 1, 1); Calibrated: 2012-12-12;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

**Device E-Field measurement (E-field scan for ANSI C63.19-2007 & -2011 compliance)/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 = 78.37 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 39.03 dB V/m

**Emission category: M4**

MIF scaled E-field

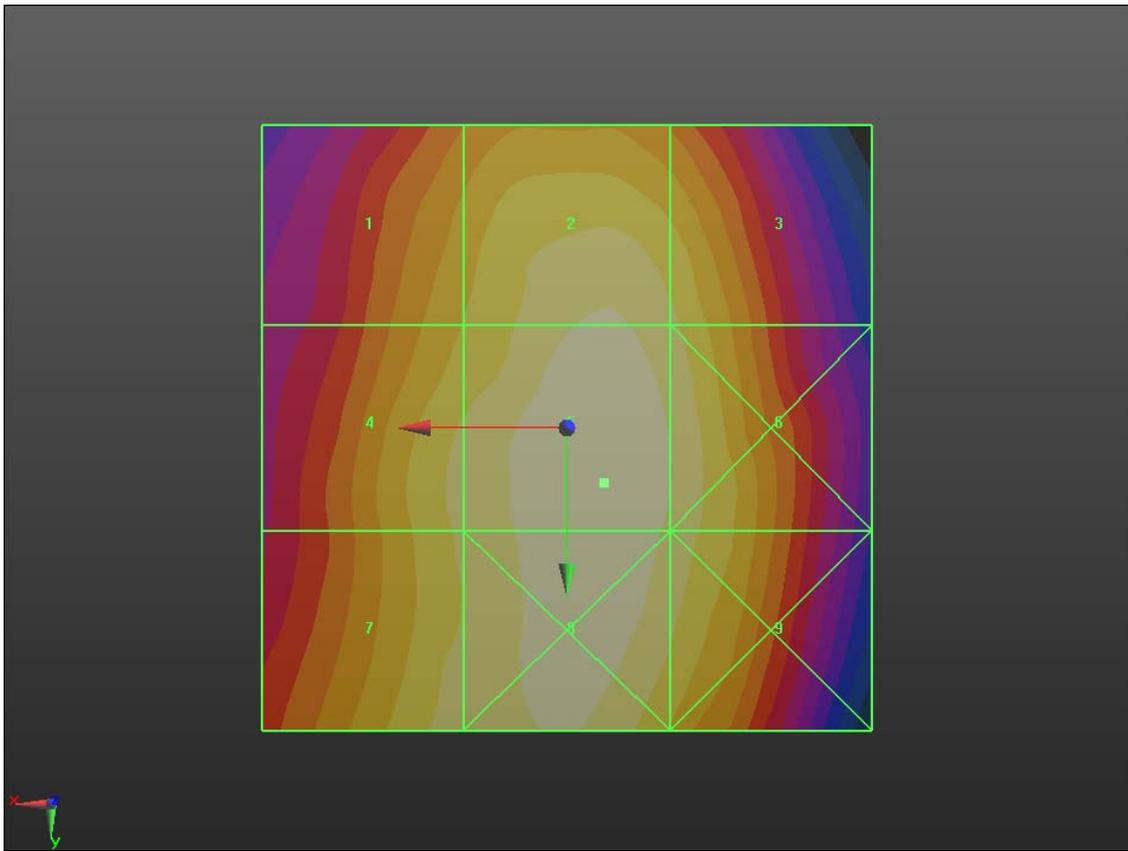
Grid 1 <b>M4</b> <b>38.05 dB V/m</b>	Grid 2 <b>M4</b> <b>38.75 dB V/m</b>	Grid 3 <b>M4</b> <b>38.45 dB V/m</b>
Grid 4 <b>M4</b> <b>38.49 dB V/m</b>	Grid 5 <b>M4</b> <b>39.04 dB V/m</b>	Grid 6 <b>M4</b> <b>38.69 dB V/m</b>
Grid 7 <b>M4</b> <b>38.53 dB V/m</b>	Grid 8 <b>M4</b> <b>38.98 dB V/m</b>	Grid 9 <b>M4</b> <b>38.63 dB V/m</b>

**Cursor:**

Total = 39.04 dB V/m

E Category: M4

Location: -3, 4.5, 8.7 mm



0 dB = 89.49 V/m = 39.04 dB V/m

**#02 HAC\_E\_GSM850\_Ch189**

**DUT: 2D2521**

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.70964

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2476; ConvF(1, 1, 1); Calibrated: 2012-12-12;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

**Device E-Field measurement (E-field scan for ANSI C63.19-2007 & -2011 compliance)/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 = 72.38 V/m; Power Drift = 0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 38.93 dB V/m

**Emission category: M4**

MIF scaled E-field

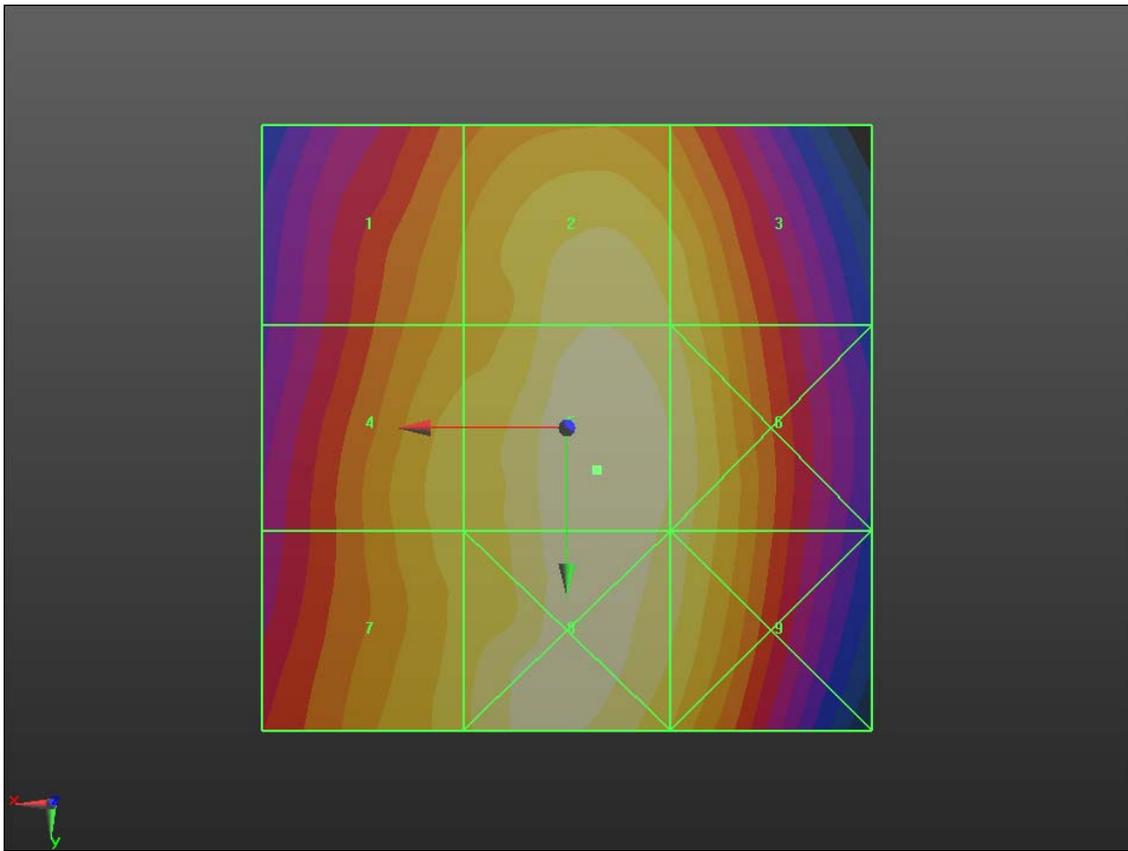
Grid 1 <b>M4</b> <b>37.72 dB V/m</b>	Grid 2 <b>M4</b> <b>38.6 dB V/m</b>	Grid 3 <b>M4</b> <b>38.3 dB V/m</b>
Grid 4 <b>M4</b> <b>38.19 dB V/m</b>	Grid 5 <b>M4</b> <b>38.93 dB V/m</b>	Grid 6 <b>M4</b> <b>38.59 dB V/m</b>
Grid 7 <b>M4</b> <b>38.18 dB V/m</b>	Grid 8 <b>M4</b> <b>38.87 dB V/m</b>	Grid 9 <b>M4</b> <b>38.49 dB V/m</b>

**Cursor:**

Total = 38.93 dB V/m

E Category: M4

Location: -2.5, 3.5, 8.7 mm



0 dB = 88.43 V/m = 38.93 dB V/m

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

**DUT: 2D2521**

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.70964

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2476; ConvF(1, 1, 1); Calibrated: 2012-12-12;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

**Device E-Field measurement (E-field scan for ANSI C63.19-2007 & -2011 compliance)/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 = 76.21 V/m; Power Drift = 0.09 dB

Applied MIF = 3.63 dB

RF audio interference level = 39.01 dB V/m

**Emission category: M4**

MIF scaled E-field

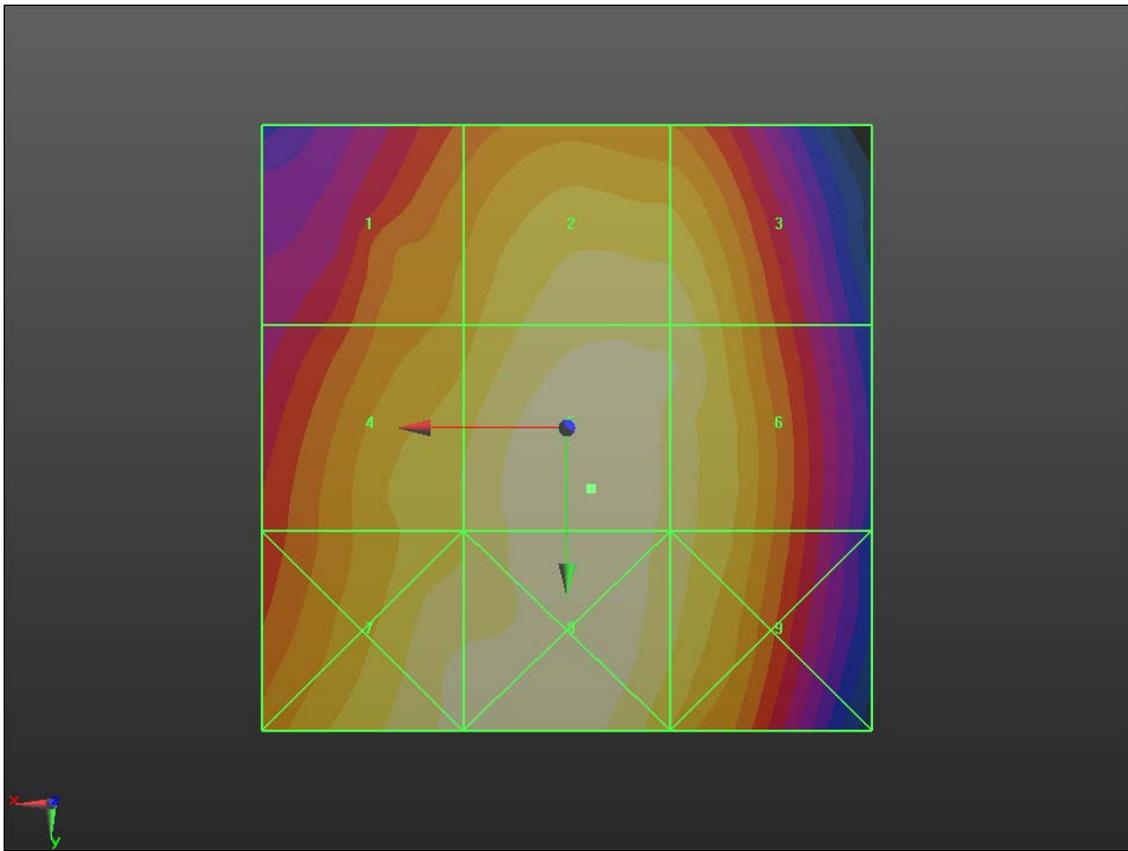
Grid 1 <b>M4</b> <b>37.86 dB V/m</b>	Grid 2 <b>M4</b> <b>38.62 dB V/m</b>	Grid 3 <b>M4</b> <b>38.57 dB V/m</b>
Grid 4 <b>M4</b> <b>38.37 dB V/m</b>	Grid 5 <b>M4</b> <b>39.01 dB V/m</b>	Grid 6 <b>M4</b> <b>38.7 dB V/m</b>
Grid 7 <b>M4</b> <b>38.75 dB V/m</b>	Grid 8 <b>M4</b> <b>38.96 dB V/m</b>	Grid 9 <b>M4</b> <b>38.56 dB V/m</b>

**Cursor:**

Total = 39.01 dB V/m

E Category: M4

Location: -2, 5, 8.7 mm



0 dB = 89.21 V/m = 39.01 dB V/m

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

**DUT: 2D2521**

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.70964

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2476; ConvF(1, 1, 1); Calibrated: 2012-12-12;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

**Device E-Field measurement (E-field scan for ANSI C63.19-2007 & -2011 compliance)/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 = 14.05 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 31.50 dB V/m

**Emission category: M3**

MIF scaled E-field

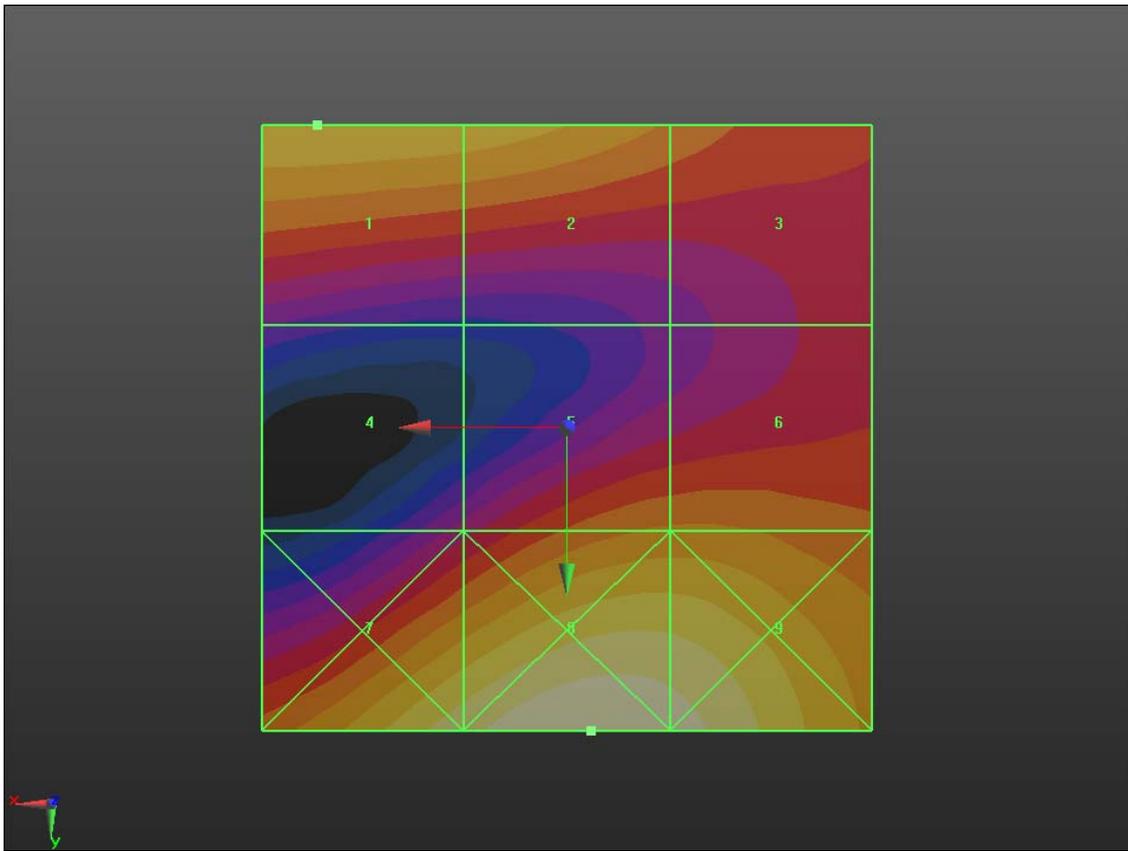
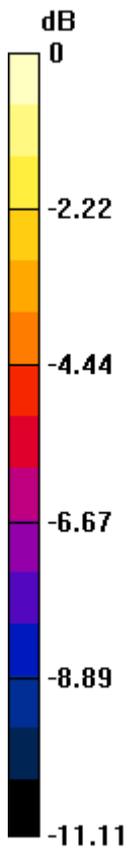
Grid 1 <b>M3</b> <b>31.5 dB V/m</b>	Grid 2 <b>M3</b> <b>31.29 dB V/m</b>	Grid 3 <b>M4</b> <b>29.9 dB V/m</b>
Grid 4 <b>M4</b> <b>27.47 dB V/m</b>	Grid 5 <b>M3</b> <b>30.15 dB V/m</b>	Grid 6 <b>M3</b> <b>30.19 dB V/m</b>
Grid 7 <b>M3</b> <b>32.74 dB V/m</b>	Grid 8 <b>M3</b> <b>33.72 dB V/m</b>	Grid 9 <b>M3</b> <b>33.36 dB V/m</b>

**Cursor:**

Total = 33.72 dB V/m

E Category: M3

Location: -2, 25, 8.7 mm



0 dB = 48.51 V/m = 33.72 dB V/m

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

**DUT: 2D2521**

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.70964

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

Ambient Temperature : 23.3 °C

**DASY5 Configuration:**

- Probe: ER3DV6 - SN2476; ConvF(1, 1, 1); Calibrated: 2012-12-12;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

**Device E-Field measurement (E-field scan for ANSI C63.19-2007 & -2011 compliance)/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 = 17.04 V/m; Power Drift = 0.05 dB

Applied MIF = 3.63 dB

RF audio interference level = 31.42 dB V/m

**Emission category: M3**

MIF scaled E-field

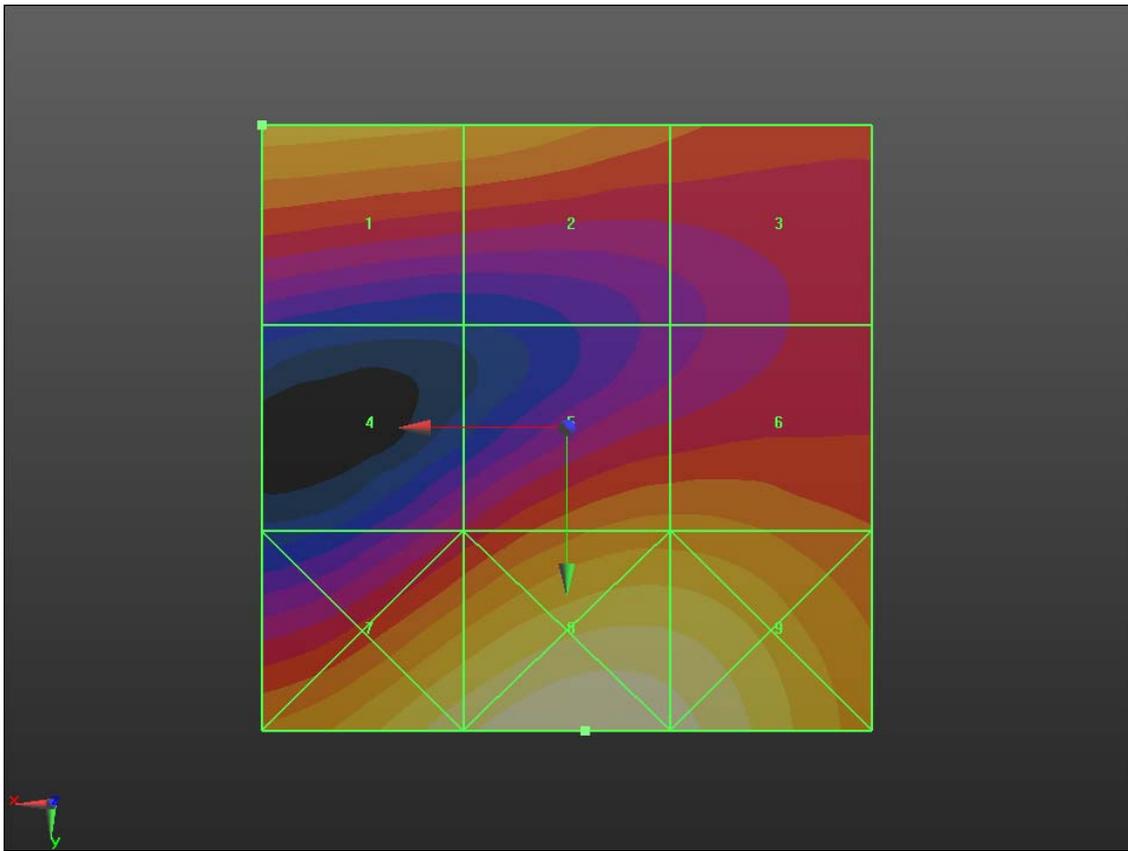
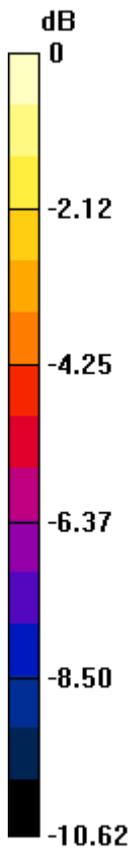
Grid 1 <b>M3</b> <b>31.42 dB V/m</b>	Grid 2 <b>M3</b> <b>31.11 dB V/m</b>	Grid 3 <b>M4</b> <b>29.9 dB V/m</b>
Grid 4 <b>M4</b> <b>28.35 dB V/m</b>	Grid 5 <b>M3</b> <b>30.72 dB V/m</b>	Grid 6 <b>M3</b> <b>30.71 dB V/m</b>
Grid 7 <b>M3</b> <b>33.02 dB V/m</b>	Grid 8 <b>M3</b> <b>33.91 dB V/m</b>	Grid 9 <b>M3</b> <b>33.52 dB V/m</b>

**Cursor:**

Total = 33.91 dB V/m

E Category: M3

Location: -1.5, 25, 8.7 mm



0 dB = 49.60 V/m = 33.91 dB V/m

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

**DUT: 2D2521**

Communication System: GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.70964

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2476; ConvF(1, 1, 1); Calibrated: 2012-12-12;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2012-12-5
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

**Device E-Field measurement (E-field scan for ANSI C63.19-2007 & -2011 compliance)/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 = 17.97 V/m; Power Drift = -0.06 dB

Applied MIF = 3.63 dB

RF audio interference level = 31.62 dB V/m

**Emission category: M3**

MIF scaled E-field

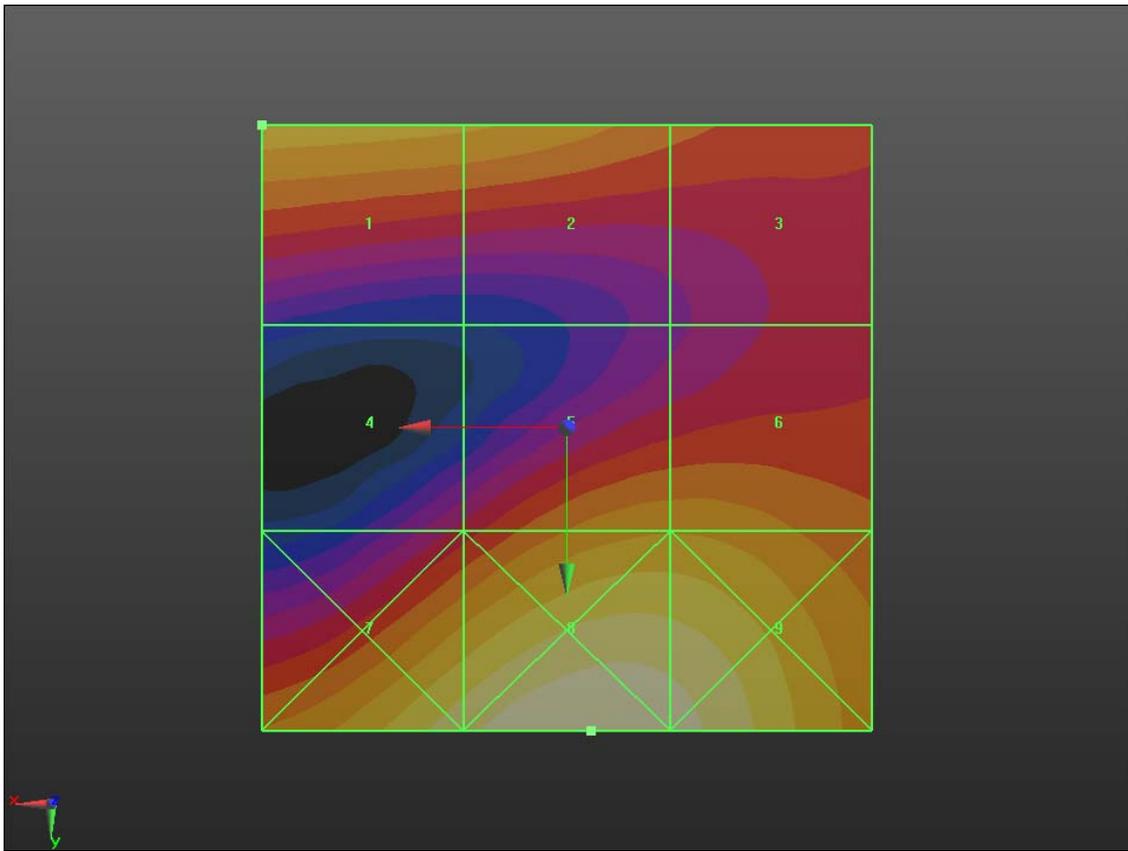
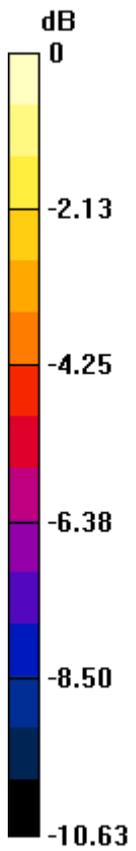
Grid 1 <b>M3</b> <b>31.62 dB V/m</b>	Grid 2 <b>M3</b> <b>31.34 dB V/m</b>	Grid 3 <b>M3</b> <b>30.12 dB V/m</b>
Grid 4 <b>M4</b> <b>28.69 dB V/m</b>	Grid 5 <b>M3</b> <b>31.15 dB V/m</b>	Grid 6 <b>M3</b> <b>31.15 dB V/m</b>
Grid 7 <b>M3</b> <b>33.12 dB V/m</b>	Grid 8 <b>M3</b> <b>34.04 dB V/m</b>	Grid 9 <b>M3</b> <b>33.68 dB V/m</b>

**Cursor:**

Total = 34.04 dB V/m

E Category: M3

Location: -2, 25, 8.7 mm



0 dB = 50.36 V/m = 34.04 dB V/m