



REPORT No.: SZ21010017S01

## Annex D Plots of RF Emission Test Results

### HAC RF\_GSM850\_GSM Voice\_Ch128\_E

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.3

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

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2344; ConvF(1, 1, 1); Calibrated: 2020.06.23;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2020.06.02
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**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 = 60.46 V/m; Power Drift = -0.05 dB

Applied MIF = 3.63 dB

RF audio interference level = 37.46 dBV/m

**Emission category: M4**

MIF scaled E-field

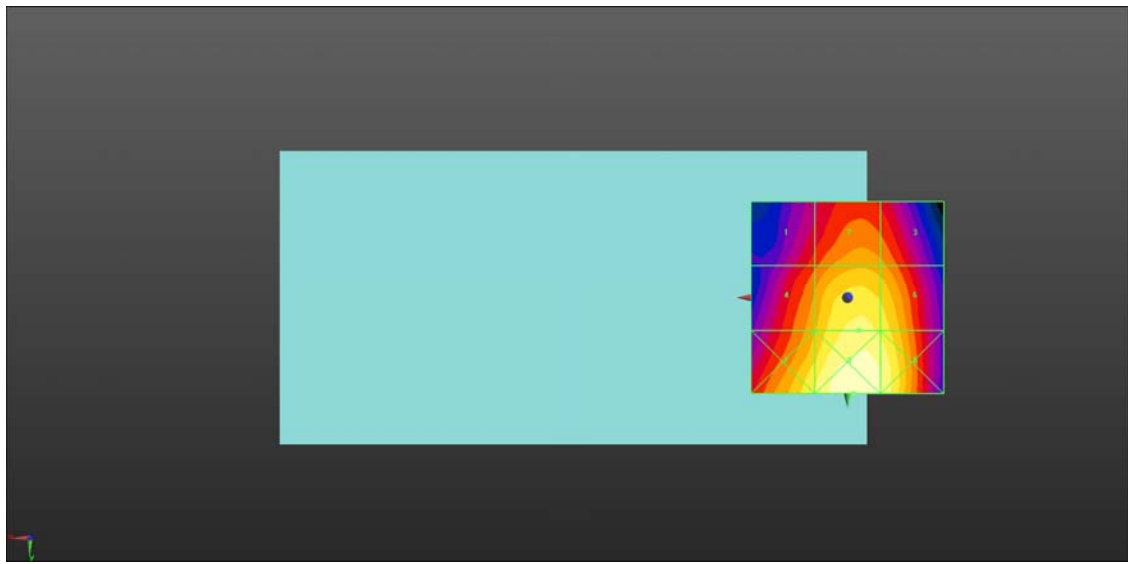
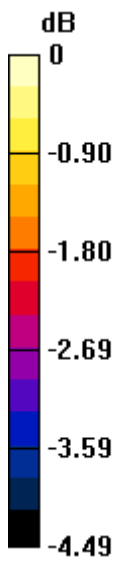
<b>Grid 1 M4</b> <b>36.09 dBV/m</b>	<b>Grid 2 M4</b> <b>36.73 dBV/m</b>	<b>Grid 3 M4</b> <b>36.59 dBV/m</b>
<b>Grid 4 M4</b> <b>36.75 dBV/m</b>	<b>Grid 5 M4</b> <b>37.46 dBV/m</b>	<b>Grid 6 M4</b> <b>37.3 dBV/m</b>
<b>Grid 7 M4</b> <b>37.38 dBV/m</b>	<b>Grid 8 M4</b> <b>37.96 dBV/m</b>	<b>Grid 9 M4</b> <b>37.69 dBV/m</b>

**Cursor:**

Total = 37.96 dBV/m

E Category: M4

Location: -1.5, 25, 8.7 mm



0 dB = 79.10 V/m = 37.96 dBV/m

### HAC RF\_GSM850\_GSM Voice\_Ch189\_E

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 836.4 MHz; Duty Cycle: 1:8.3

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

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: ER3DV6 - SN2344; ConvF(1, 1, 1); Calibrated: 2020.06.23;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2020.06.02
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**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 = 54.34 V/m; Power Drift = 0.07 dB

Applied MIF = 3.63 dB

RF audio interference level = 36.64 dBV/m

**Emission category: M4**

MIF scaled E-field

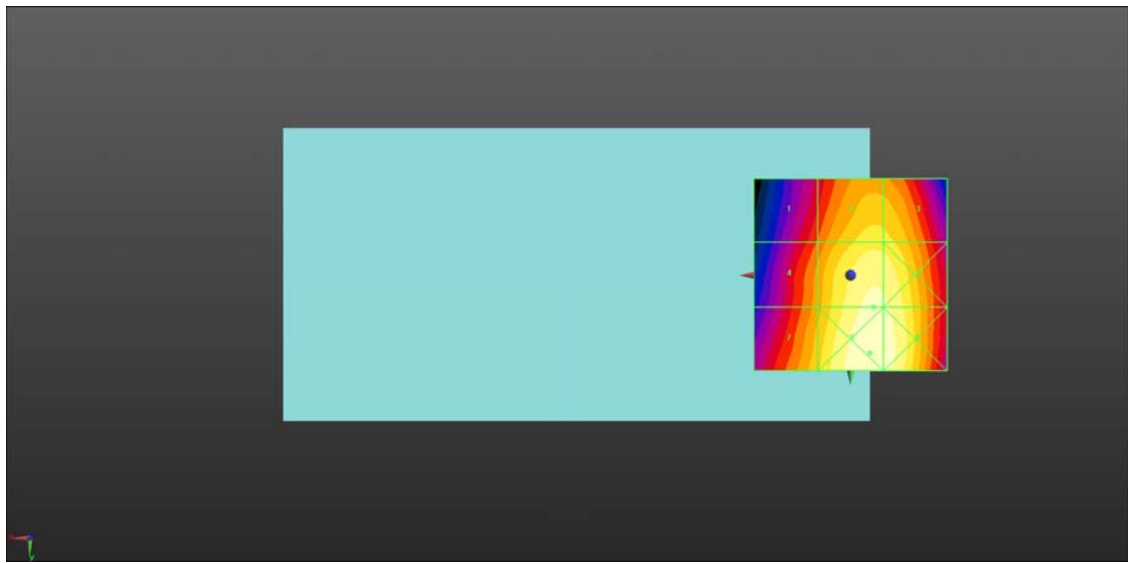
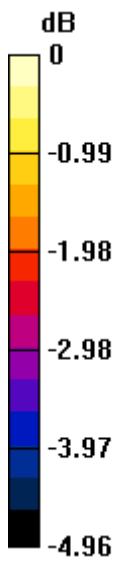
<b>Grid 1 M4</b> <b>34.93 dBV/m</b>	<b>Grid 2 M4</b> <b>36.08 dBV/m</b>	<b>Grid 3 M4</b> <b>36.03 dBV/m</b>
<b>Grid 4 M4</b> <b>35.41 dBV/m</b>	<b>Grid 5 M4</b> <b>36.64 dBV/m</b>	<b>Grid 6 M4</b> <b>36.6 dBV/m</b>
<b>Grid 7 M4</b> <b>35.83 dBV/m</b>	<b>Grid 8 M4</b> <b>36.85 dBV/m</b>	<b>Grid 9 M4</b> <b>36.77 dBV/m</b>

#### Cursor:

Total = 36.85 dBV/m

E Category: M4

Location: -5, 20.5, 8.7 mm



0 dB = 69.60 V/m = 36.85 dBV/m

**HAC RF\_GSM850\_GSM Voice\_Ch251\_E**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.3

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

Ambient Temperature : 23.2 °C

**DASY5 Configuration:**

- Probe: ER3DV6 - SN2344; ConvF(1, 1, 1); Calibrated: 2020.06.23;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2020.06.02
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**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 = 64.35 V/m; Power Drift = 0.00 dB

Applied MIF = 3.63 dB

RF audio interference level = 38.10 dBV/m

**Emission category: M4**

MIF scaled E-field

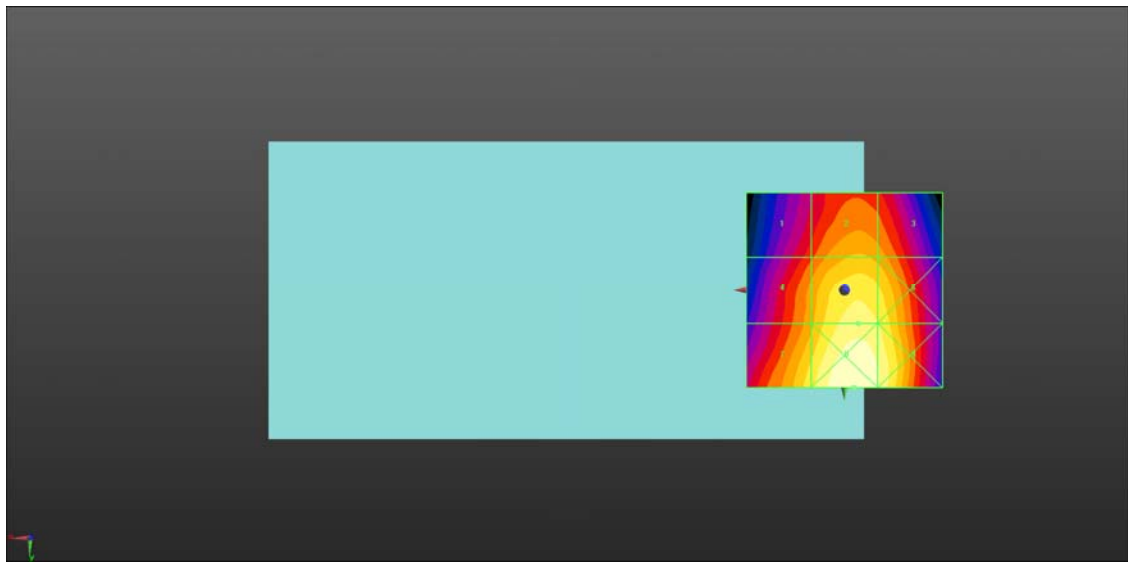
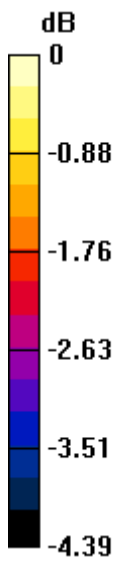
<b>Grid 1 M4</b> <b>36.71 dBV/m</b>	<b>Grid 2 M4</b> <b>37.41 dBV/m</b>	<b>Grid 3 M4</b> <b>37.26 dBV/m</b>
<b>Grid 4 M4</b> <b>37.29 dBV/m</b>	<b>Grid 5 M4</b> <b>38.1 dBV/m</b>	<b>Grid 6 M4</b> <b>37.96 dBV/m</b>
<b>Grid 7 M4</b> <b>37.85 dBV/m</b>	<b>Grid 8 M4</b> <b>38.53 dBV/m</b>	<b>Grid 9 M4</b> <b>38.27 dBV/m</b>

**Cursor:**

Total = 38.53 dBV/m

E Category: M4

Location: -2.5, 25, 8.7 mm



0 dB = 84.42 V/m = 38.53 dBV/m

### HAC RF\_GSM1900\_GSM Voice\_Ch512\_E

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

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

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: ER3DV6 - SN2344; ConvF(1, 1, 1); Calibrated: 2020.06.23;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2020.06.02
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**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 = 16.58 V/m; Power Drift = -0.05 dB

Applied MIF = 3.63 dB

RF audio interference level = 30.15 dBV/m

**Emission category: M3**

MIF scaled E-field

<b>Grid 1 M3</b> <b>30.84 dBV/m</b>	<b>Grid 2 M3</b> <b>30.82 dBV/m</b>	<b>Grid 3 M4</b> <b>28.86 dBV/m</b>
<b>Grid 4 M4</b> <b>28.72 dBV/m</b>	<b>Grid 5 M4</b> <b>27.73 dBV/m</b>	<b>Grid 6 M4</b> <b>27.84 dBV/m</b>
<b>Grid 7 M4</b> <b>29.05 dBV/m</b>	<b>Grid 8 M4</b> <b>29.54 dBV/m</b>	<b>Grid 9 M3</b> <b>30.15 dBV/m</b>

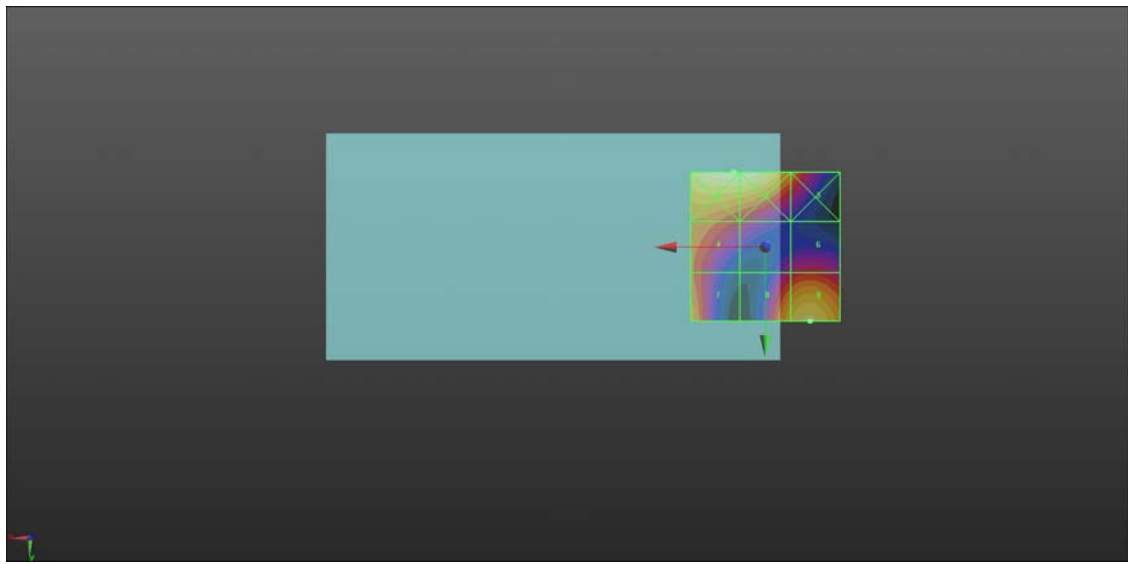
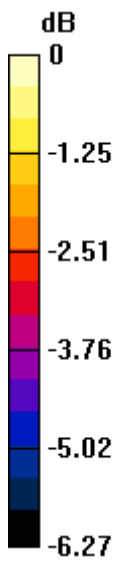
**Cursor:**

Total = 30.84 dBV/m

E Category: M3

Location: 10.5, -25, 8.7 mm





0 dB = 34.83 V/m = 30.84 dBV/m

**HAC RF\_GSM1900\_GSM Voice\_Ch661\_E**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.3

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

Ambient Temperature : 23.2 °C

**DASY5 Configuration:**

- Probe: ER3DV6 - SN2344; ConvF(1, 1, 1); Calibrated: 2020.06.23;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2020.06.02
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**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 = 18.13 V/m; Power Drift = 0.10 dB

Applied MIF = 3.63 dB

RF audio interference level = 29.95 dBV/m

**Emission category: M4**

MIF scaled E-field

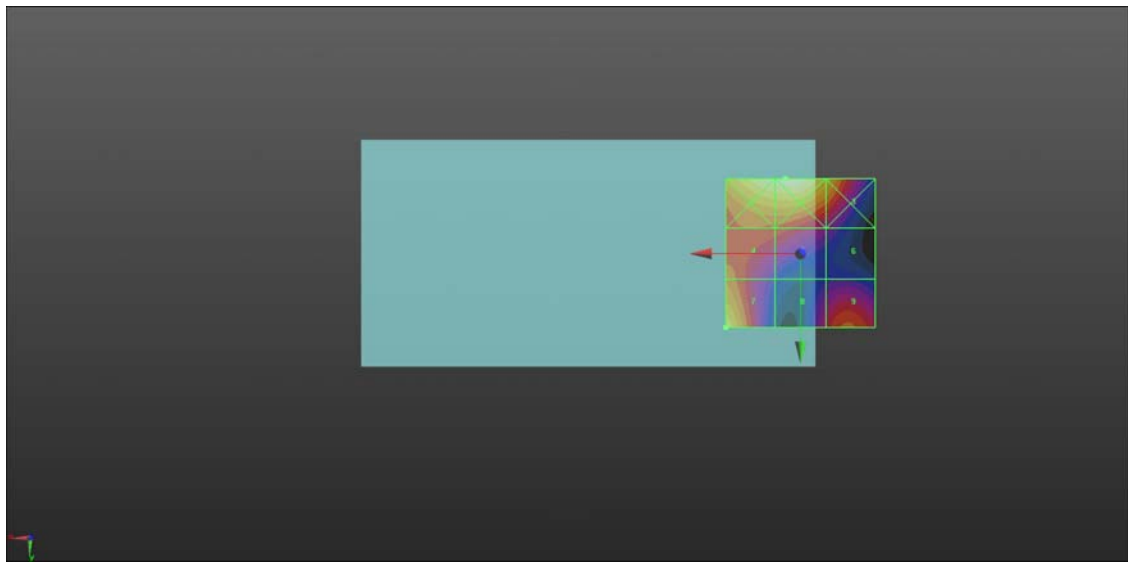
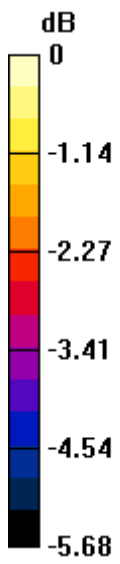
<b>Grid 1 M3</b> <b>30.68 dBV/m</b>	<b>Grid 2 M3</b> <b>30.77 dBV/m</b>	<b>Grid 3 M4</b> <b>29.6 dBV/m</b>
<b>Grid 4 M4</b> <b>28.78 dBV/m</b>	<b>Grid 5 M4</b> <b>28.38 dBV/m</b>	<b>Grid 6 M4</b> <b>27.26 dBV/m</b>
<b>Grid 7 M4</b> <b>29.95 dBV/m</b>	<b>Grid 8 M4</b> <b>27.8 dBV/m</b>	<b>Grid 9 M4</b> <b>28.62 dBV/m</b>

**Cursor:**

Total = 30.77 dBV/m

E Category: M3

Location: 5, -25, 8.7 mm



0 dB = 34.55 V/m = 30.77 dBV/m

### HAC RF\_GSM1900\_GSM Voice\_Ch810\_E

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

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

Ambient Temperature : 23.2 °C

**DASY5 Configuration:**

- Probe: ER3DV6 - SN2344; ConvF(1, 1, 1); Calibrated: 2020.06.23;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2020.06.02
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**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 = 20.45 V/m; Power Drift = 0.02 dB

Applied MIF = 3.63 dB

RF audio interference level = 30.09 dBV/m

**Emission category: M3**

MIF scaled E-field

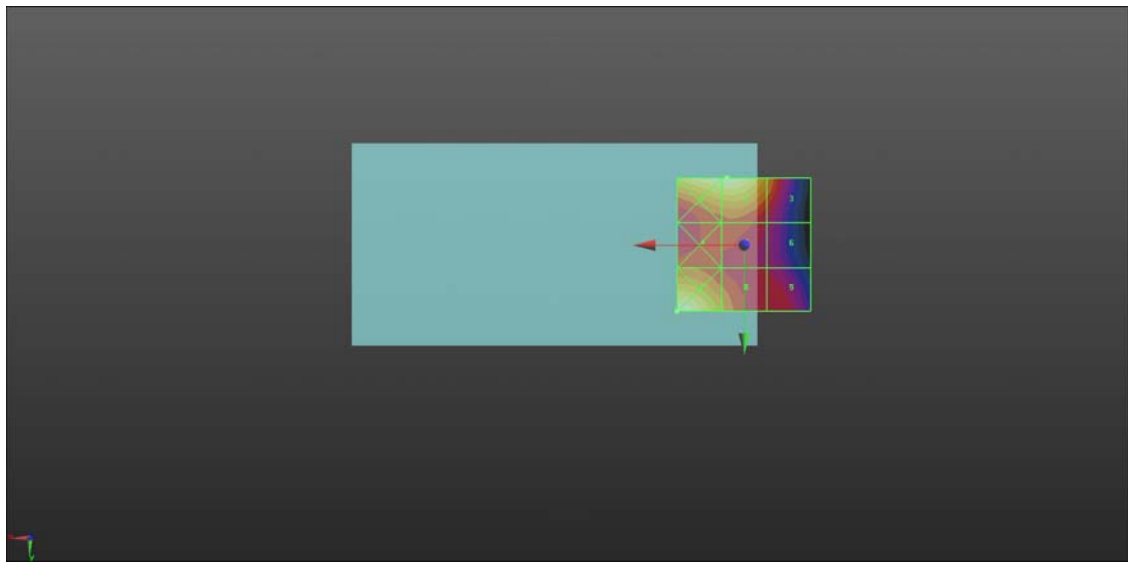
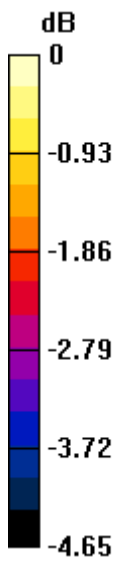
<b>Grid 1 M3</b> <b>30.05 dBV/m</b>	<b>Grid 2 M3</b> <b>30.09 dBV/m</b>	<b>Grid 3 M4</b> <b>28.8 dBV/m</b>
<b>Grid 4 M4</b> <b>28.31 dBV/m</b>	<b>Grid 5 M4</b> <b>28.19 dBV/m</b>	<b>Grid 6 M4</b> <b>27.64 dBV/m</b>
<b>Grid 7 M3</b> <b>30.13 dBV/m</b>	<b>Grid 8 M4</b> <b>28.75 dBV/m</b>	<b>Grid 9 M4</b> <b>27.95 dBV/m</b>

**Cursor:**

Total = 30.13 dBV/m

E Category: M3

Location: 25, 25, 8.7 mm



0 dB = 32.09 V/m = 30.13 dBV/m