



REPORT No. : SZ21050064S02

## 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 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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 = 39.97 V/m; Power Drift = 0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 34.27 dBV/m

**Emission category: M4**

MIF scaled E-field

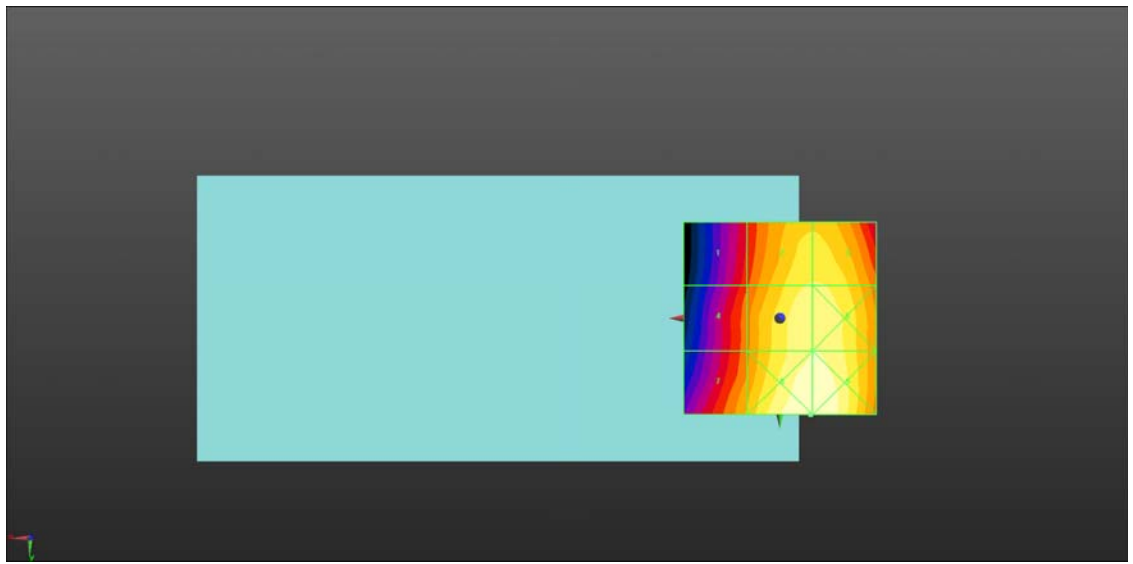
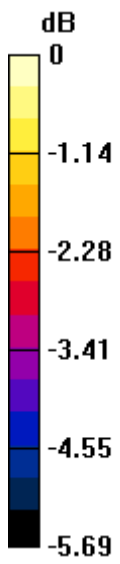
<b>Grid 1 M4</b> <b>32.32 dBV/m</b>	<b>Grid 2 M4</b> <b>33.94 dBV/m</b>	<b>Grid 3 M4</b> <b>33.97 dBV/m</b>
<b>Grid 4 M4</b> <b>32.63 dBV/m</b>	<b>Grid 5 M4</b> <b>34.27 dBV/m</b>	<b>Grid 6 M4</b> <b>34.29 dBV/m</b>
<b>Grid 7 M4</b> <b>33.15 dBV/m</b>	<b>Grid 8 M4</b> <b>34.72 dBV/m</b>	<b>Grid 9 M4</b> <b>34.67 dBV/m</b>

**Cursor:**

Total = 34.72 dBV/m

E Category: M4

Location: -8, 25, 8.7 mm



0 dB = 54.45 V/m = 34.72 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 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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 = 5.657 V/m; Power Drift = -0.02 dB

Applied MIF = 3.63 dB

RF audio interference level = 22.82 dBV/m

**Emission category: M4**

MIF scaled E-field

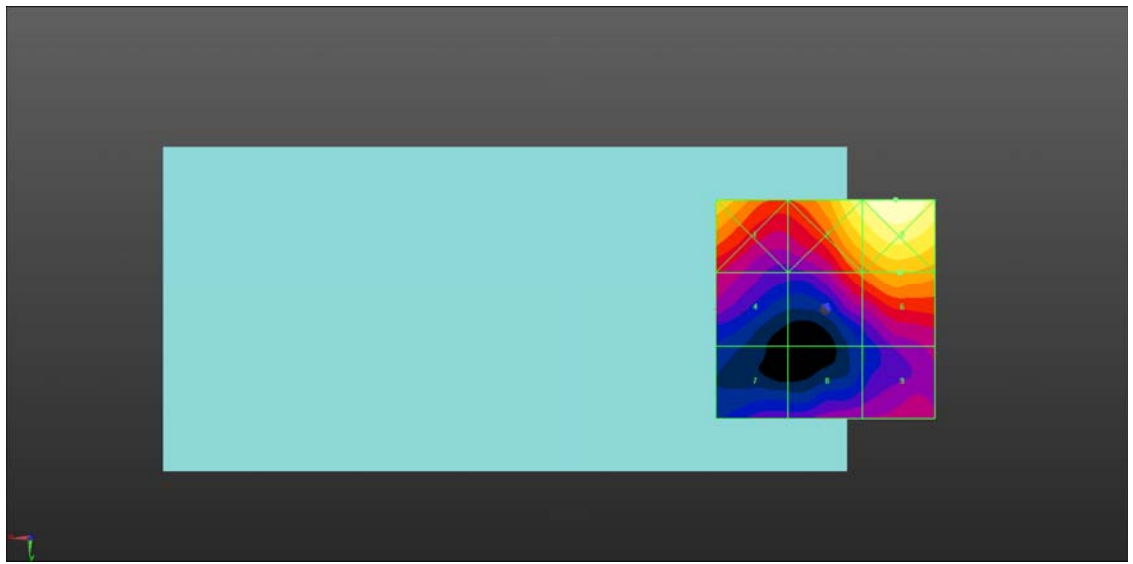
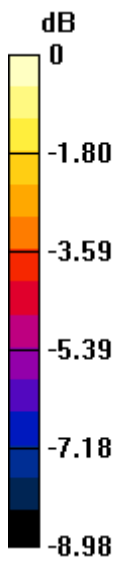
<b>Grid 1 M4</b> <b>23.37 dBV/m</b>	<b>Grid 2 M4</b> <b>24.44 dBV/m</b>	<b>Grid 3 M4</b> <b>26.30 dBV/m</b>
<b>Grid 4 M4</b> <b>20.49 dBV/m</b>	<b>Grid 5 M4</b> <b>21.82 dBV/m</b>	<b>Grid 6 M4</b> <b>22.87 dBV/m</b>
<b>Grid 7 M4</b> <b>19.3 dBV/m</b>	<b>Grid 8 M4</b> <b>19.79 dBV/m</b>	<b>Grid 9 M4</b> <b>20.11 dBV/m</b>

**Cursor:**

Total = 26.30 dBV/m

E Category: M4

Location: -16, -25, 8.7 mm



0 dB = 20.65 V/m = 26.30 dBV/m

**HAC RF\_CDMA2000 BC0\_RC1 SO3\_Ch777\_E**

Communication System: UID 10295 - AAB, CDMA2000, RC1, SO3, 1/8th Rate 25 fr.; Frequency: 848.97 MHz; Duty Cycle: 1:1

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 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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)

**Ch777/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 = 2.942 V/m; Power Drift = -0.07 dB

Applied MIF = 3.26 dB

RF audio interference level = 12.71 dBV/m

**Emission category: M4**

MIF scaled E-field

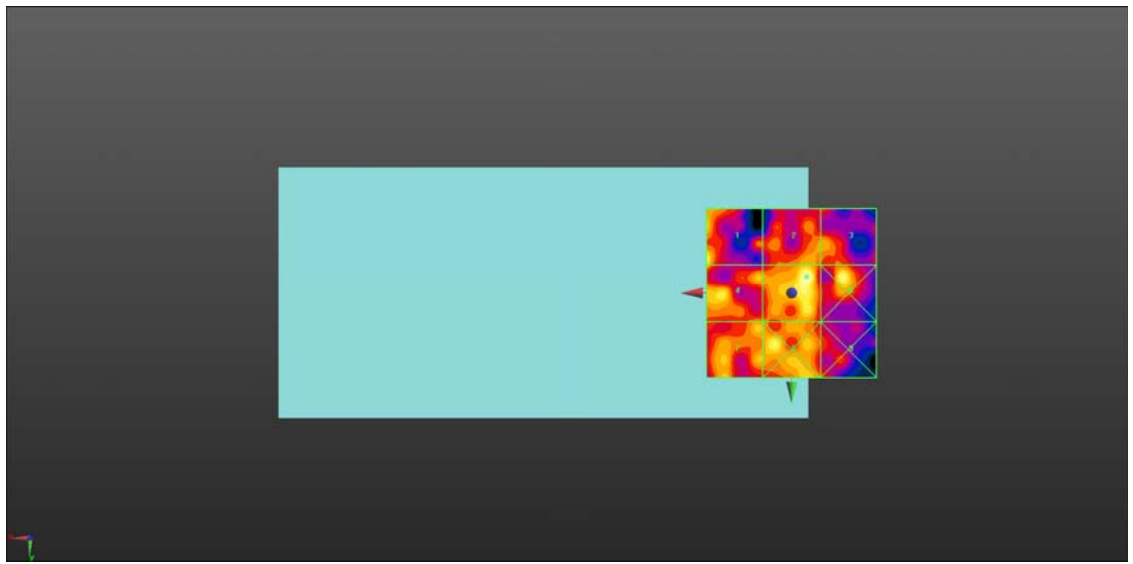
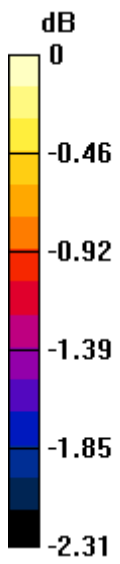
<b>Grid 1 M4</b> <b>12.71 dBV/m</b>	<b>Grid 2 M4</b> <b>11.91 dBV/m</b>	<b>Grid 3 M4</b> <b>11.84 dBV/m</b>
<b>Grid 4 M4</b> <b>11.94 dBV/m</b>	<b>Grid 5 M4</b> <b>13.48 dBV/m</b>	<b>Grid 6 M4</b> <b>12.67 dBV/m</b>
<b>Grid 7 M4</b> <b>11.93 dBV/m</b>	<b>Grid 8 M4</b> <b>12.51 dBV/m</b>	<b>Grid 9 M4</b> <b>11.47 dBV/m</b>

**Cursor:**

Total = 13.48 dBV/m

E Category: M4

Location: -4.5, -5, 8.7 mm



0 dB = 4.72 V/m = 13.48 dBV/m

### HAC RF\_CDMA2000\_BC10\_RC1\_SO3\_Ch580\_E

Communication System: UID 10295 - AAB, CDMA2000, RC1, SO3, 1/8th Rate 25 fr.; Frequency: 820.5 MHz; Duty Cycle: 1:1

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 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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)

**Ch580/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 = 2.920 V/m; Power Drift = 0.04 dB

Applied MIF = 3.26 dB

RF audio interference level = 13.37 dBV/m

**Emission category: M4**

MIF scaled E-field

Grid 1 <b>M4</b> <b>12.39 dBV/m</b>	Grid 2 <b>M4</b> <b>12.87 dBV/m</b>	Grid 3 <b>M4</b> <b>13.37 dBV/m</b>
Grid 4 <b>M4</b> <b>12.76 dBV/m</b>	Grid 5 <b>M4</b> <b>13.62 dBV/m</b>	Grid 6 <b>M4</b> <b>14.56 dBV/m</b>
Grid 7 <b>M4</b> <b>12.57 dBV/m</b>	Grid 8 <b>M4</b> <b>13.76 dBV/m</b>	Grid 9 <b>M4</b> <b>13.35 dBV/m</b>

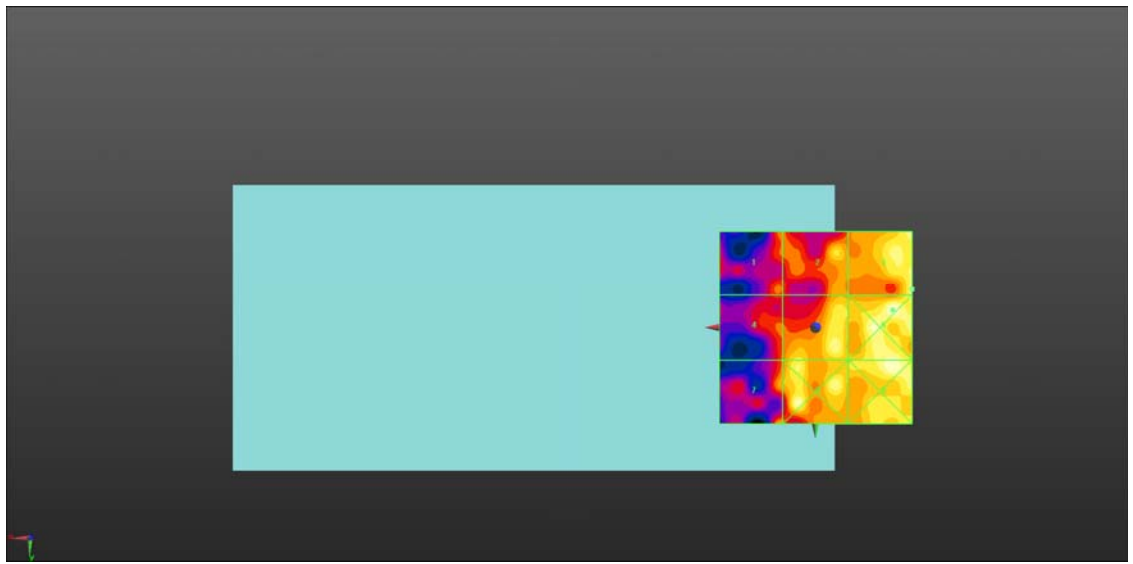
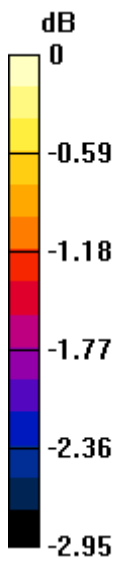
#### Cursor:

Total = 14.56 dBV/m

E Category: M4

Location: -20, -4.5, 8.7 mm





0 dB = 5.35 V/m = 14.56 dBV/m

**HAC RF\_LTE Band 38\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch37850\_E**

Communication System: UID 10172 - CAB, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);  
 Frequency: 2580 MHz; Duty Cycle: 1:1.59

Medium: Air Medium parameters used:  $\sigma = 0 \text{ S/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C

**DASY5 Configuration:**

- Probe: ER3DV6 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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)

**Ch37850/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 = 5.842 V/m; Power Drift = 0.03 dB

Applied MIF = -1.62 dB

RF audio interference level = 15.97 dBV/m

**Emission category: M4**

MIF scaled E-field

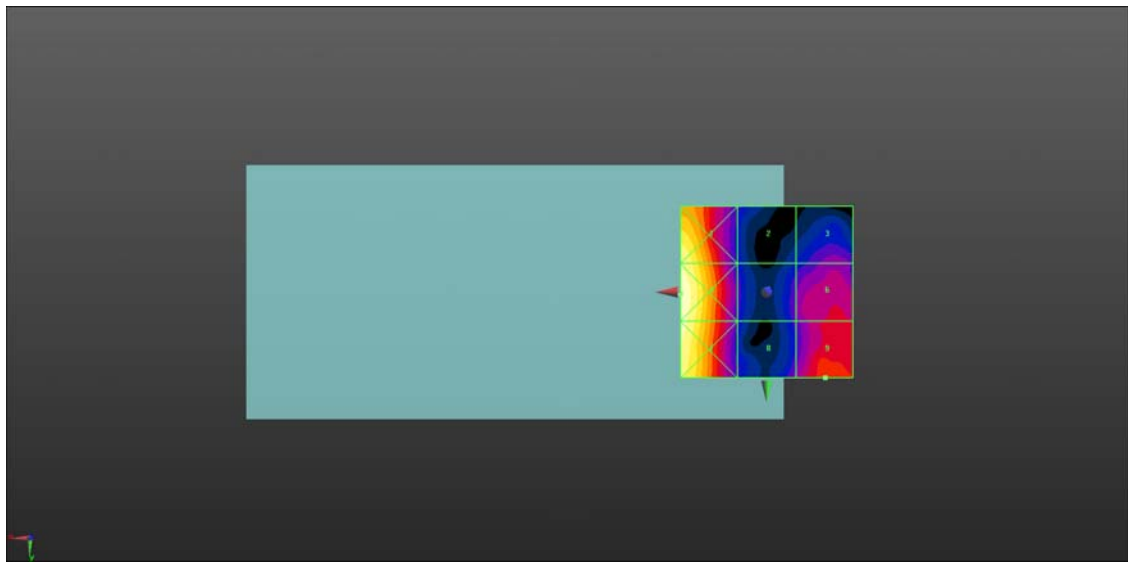
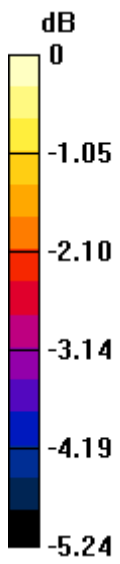
<b>Grid 1 M4</b> <b>17.97 dBV/m</b>	<b>Grid 2 M4</b> <b>14.59 dBV/m</b>	<b>Grid 3 M4</b> <b>15.3 dBV/m</b>
<b>Grid 4 M4</b> <b>19.34 dBV/m</b>	<b>Grid 5 M4</b> <b>14.86 dBV/m</b>	<b>Grid 6 M4</b> <b>15.55 dBV/m</b>
<b>Grid 7 M4</b> <b>18.44 dBV/m</b>	<b>Grid 8 M4</b> <b>15.5 dBV/m</b>	<b>Grid 9 M4</b> <b>15.97 dBV/m</b>

**Cursor:**

Total = 19.34 dBV/m

E Category: M4

Location: 25, 0.5, 8.7 mm



0 dB = 9.27 V/m = 19.34 dBV/m

**HAC RF\_LTE Band 40\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch38750\_E**

Communication System: UID 10172 - CAB, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);  
 Frequency: 2350 MHz; Duty Cycle: 1:1.59

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 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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)

**Ch38750/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 = 16.62 V/m; Power Drift = 0.07 dB

Applied MIF = -1.62 dB

RF audio interference level = 22.88 dBV/m

**Emission category: M4**

MIF scaled E-field

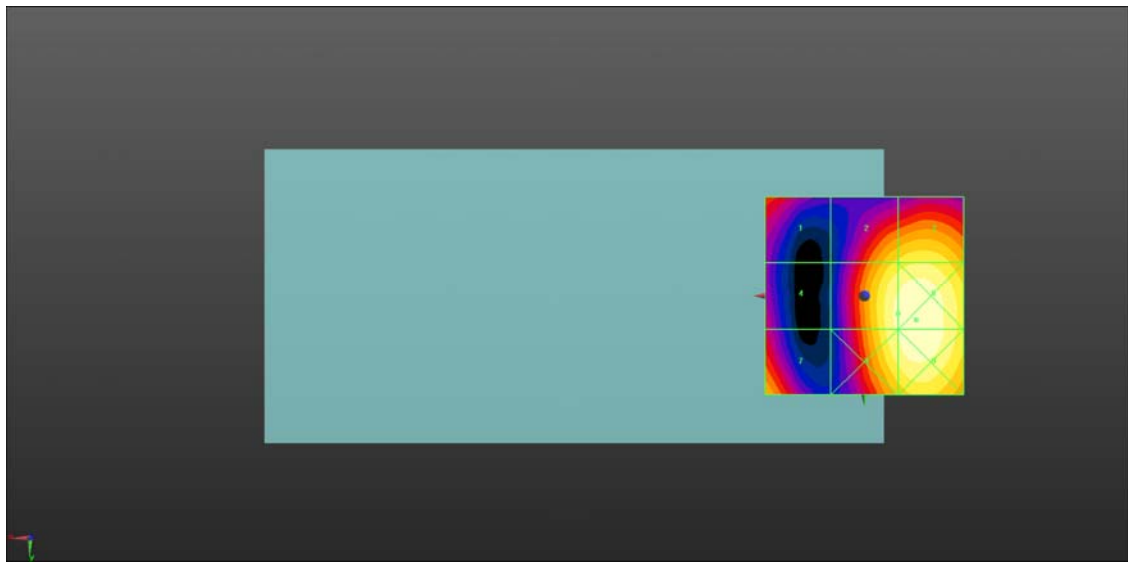
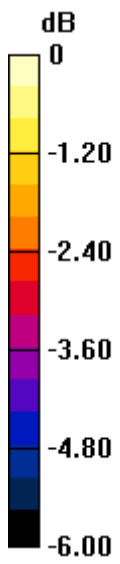
<b>Grid 1 M4</b> <b>20.94 dBV/m</b>	<b>Grid 2 M4</b> <b>22.79 dBV/m</b>	<b>Grid 3 M4</b> <b>22.65 dBV/m</b>
<b>Grid 4 M4</b> <b>19.79 dBV/m</b>	<b>Grid 5 M4</b> <b>22.88 dBV/m</b>	<b>Grid 6 M4</b> <b>25.35 dBV/m</b>
<b>Grid 7 M4</b> <b>21.98 dBV/m</b>	<b>Grid 8 M4</b> <b>22.83 dBV/m</b>	<b>Grid 9 M4</b> <b>23.74 dBV/m</b>

**Cursor:**

Total = 25.35 dBV/m

E Category: M4

Location: -13, 6, 8.7 mm



0 dB = 18.51 V/m = 25.35 dBV/m

**HAC RF\_LTE Band 41\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch39750\_E**

Communication System: UID 10172 - CAB, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);  
Frequency: 2506 MHz; Duty Cycle: 1:1.59

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 - SN2434; ConvF(1, 1, 1); Calibrated: 2021.03.04;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn480; Calibrated: 2021.06.22
- 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)

**Ch39750/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 = 10.43 V/m; Power Drift = -0.04 dB

Applied MIF = -1.62 dB

RF audio interference level = 20.73 dBV/m

**Emission category: M4**

MIF scaled E-field

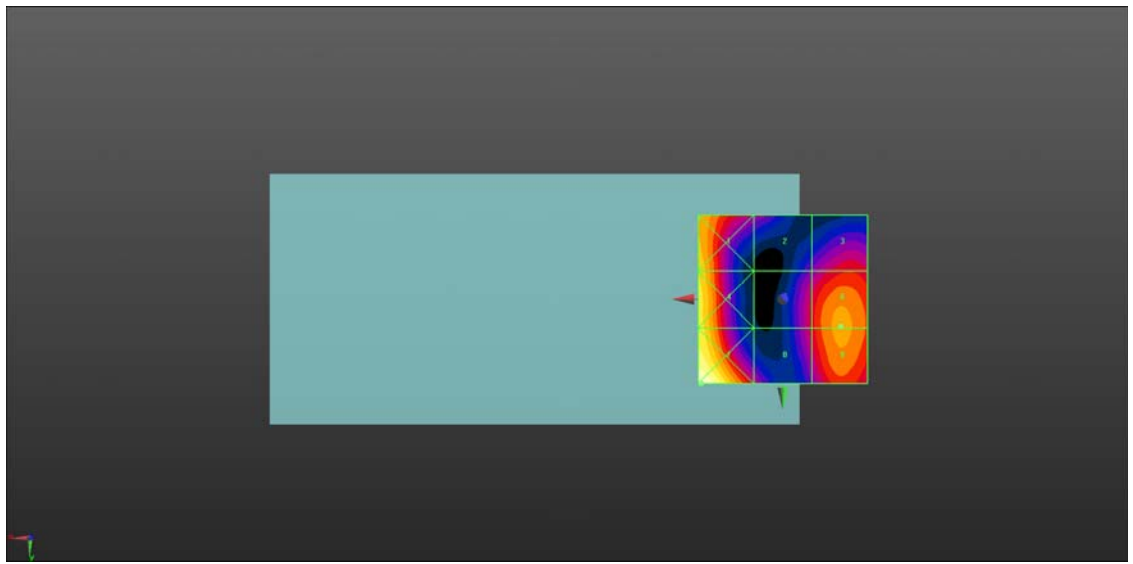
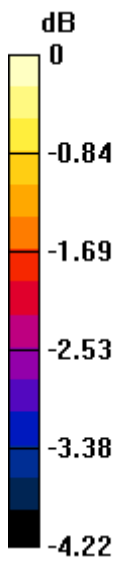
<b>Grid 1 M4</b> <b>21.15 dBV/m</b>	<b>Grid 2 M4</b> <b>19.75 dBV/m</b>	<b>Grid 3 M4</b> <b>20.56 dBV/m</b>
<b>Grid 4 M4</b> <b>21.37 dBV/m</b>	<b>Grid 5 M4</b> <b>19.96 dBV/m</b>	<b>Grid 6 M4</b> <b>20.73 dBV/m</b>
<b>Grid 7 M4</b> <b>23.57 dBV/m</b>	<b>Grid 8 M4</b> <b>19.97 dBV/m</b>	<b>Grid 9 M4</b> <b>20.77 dBV/m</b>

**Cursor:**

Total = 23.57 dBV/m

E Category: M4

Location: 24, 25, 8.7 mm



0 dB = 15.08 V/m = 23.57 dBV/m