

HAC-RF Emission

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7);SEMCAD X Version 14.6.10 (7164)

Dipole E-Field measurement/835 MHz/Hearing Aid Compatibility Test at 15mm distance

(41x361x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 113.7 V/m; Power Drift = -0.02 dB

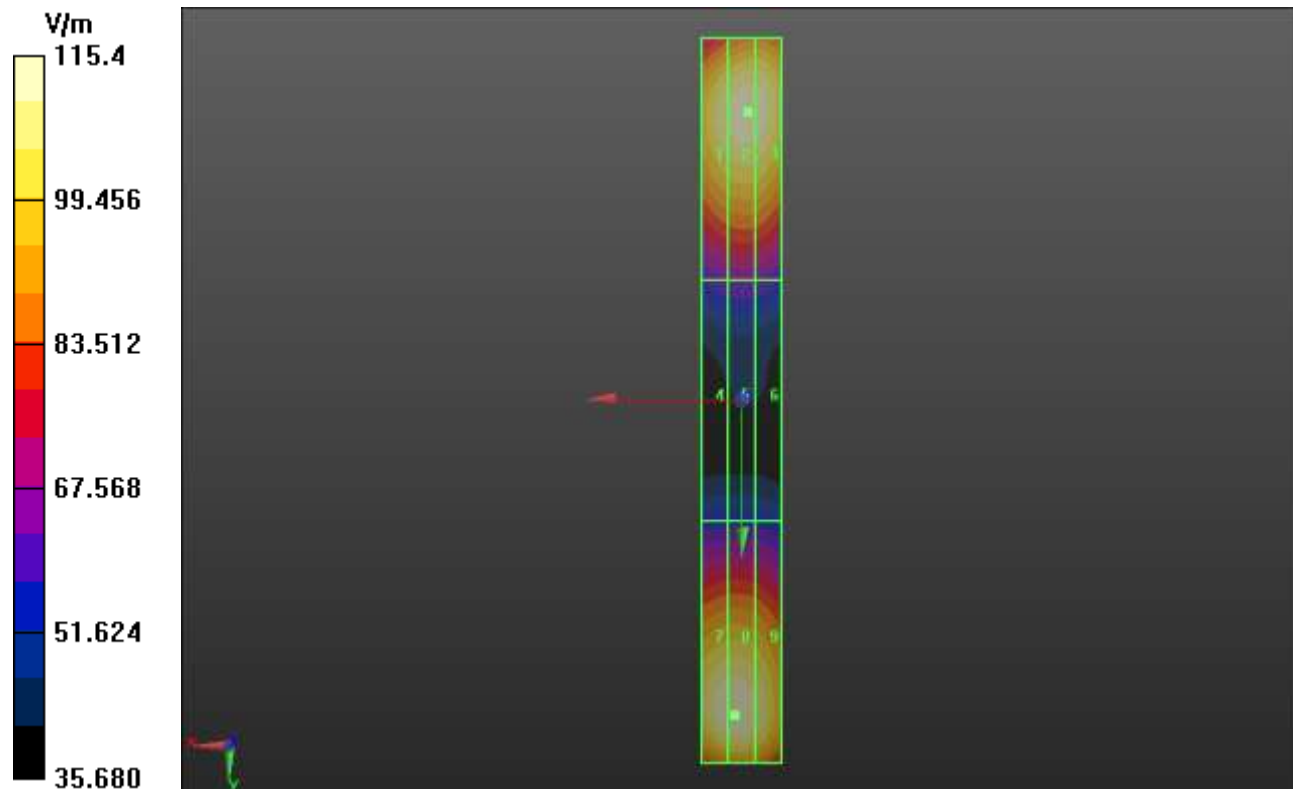
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 115.4 V/m

Near-field category: **M4 (AWF 0 dB)**

PMF scaled E-field

| | | |
|--------------------------------------|--------------------------------------|--------------------------------------|
| Grid 1 M4 110.7 V/m | Grid 2 M4 113.9 V/m | Grid 3 M4 113.4 V/m |
| Grid 4 M4 63.26 V/m | Grid 5 M4 64.43 V/m | Grid 6 M4 63.51 V/m |
| Grid 7 M4 114.6 V/m | Grid 8 M4 115.4 V/m | Grid 9 M4 111.0 V/m |



HAC-RF Emission

Communication System: UID 0, CW; Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;

- Sensor-Surface: (Fix Surface)

- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013

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

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Dipole E-Field measurement/1880 MHz/Hearing Aid Compatibility Test at 15mm distance (41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 156.4 V/m; Power Drift = 0.04 dB

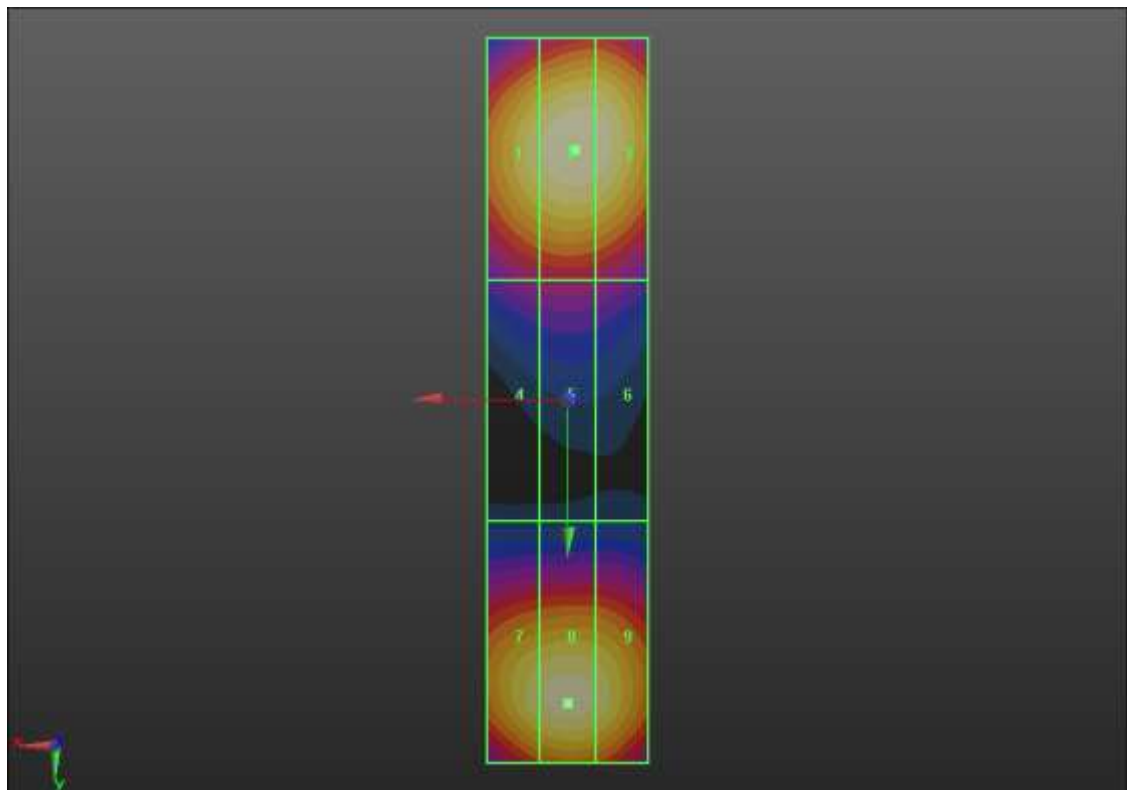
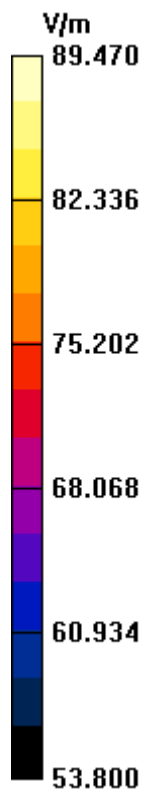
PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 89.47 V/m

Near-field category: **M3 (AWF 0 dB)**

PMF scaled E-field

| | | |
|--------------------------------------|--------------------------------------|--------------------------------------|
| Grid 1 M3 86.94 V/m | Grid 2 M3 89.47 V/m | Grid 3 M3 88.91 V/m |
| Grid 4 M3 69.89 V/m | Grid 5 M3 70.89 V/m | Grid 6 M3 69.95 V/m |
| Grid 7 M3 86.60 V/m | Grid 8 M3 88.18 V/m | Grid 9 M3 86.91 V/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

UAT_GSM850 E-Field measurement/Voice_ch 128/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 = 43.86 V/m; Power Drift = -0.07 dB

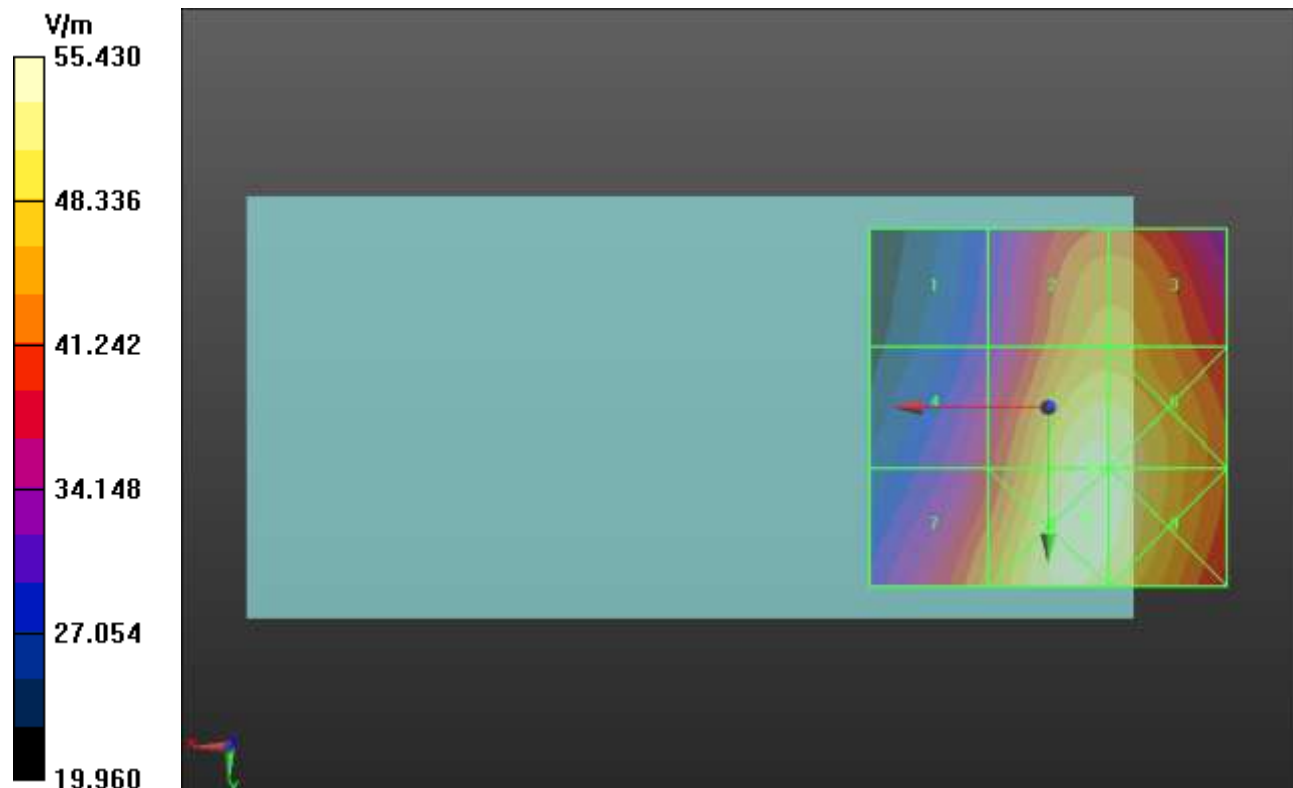
Applied MIF = 3.63 dB

RF audio interference level = 34.69 dBV/m

Emission category: **M4**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 30.16 dBV/m | Grid 2 M4 33.51 dBV/m | Grid 3 M4 33.51 dBV/m |
| Grid 4 M4 31.62 dBV/m | Grid 5 M4 34.69 dBV/m | Grid 6 M4 34.63 dBV/m |
| Grid 7 M4 33.04 dBV/m | Grid 8 M4 34.88 dBV/m | Grid 9 M4 34.7 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

UAT_GSM850 E-Field measurement/Voice_ch 190/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 = 46.37 V/m; Power Drift = 0.02 dB

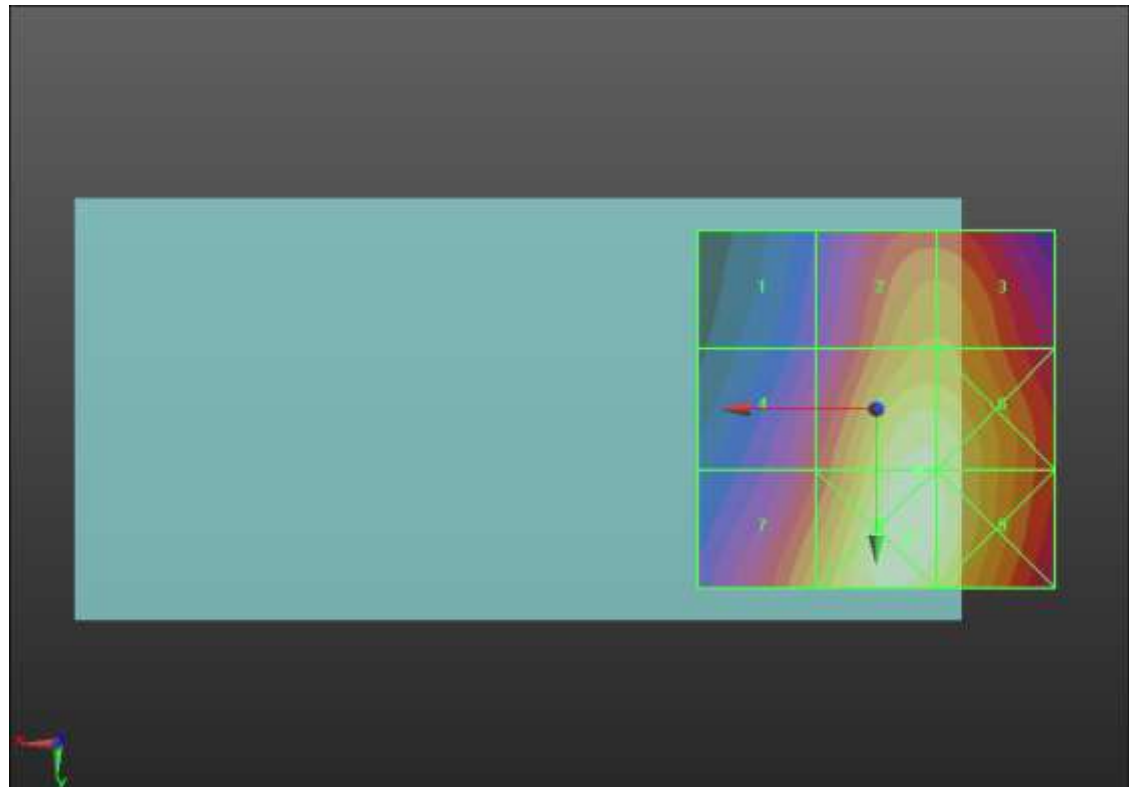
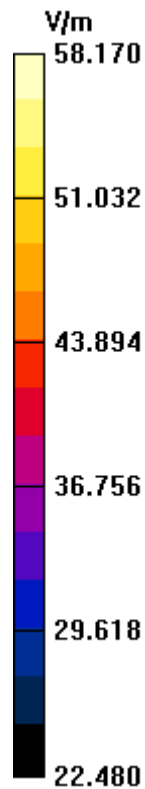
Applied MIF = 3.63 dB

RF audio interference level = 35.13 dBV/m

Emission category: **M4**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 30.89 dBV/m | Grid 2 M4 33.84 dBV/m | Grid 3 M4 33.83 dBV/m |
| Grid 4 M4 32.33 dBV/m | Grid 5 M4 35.13 dBV/m | Grid 6 M4 34.97 dBV/m |
| Grid 7 M4 33.7 dBV/m | Grid 8 M4 35.29 dBV/m | Grid 9 M4 35.07 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

UAT_GSM850 E-Field measurement/Voice_ch 251/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 = 47.18 V/m; Power Drift = 0.01 dB

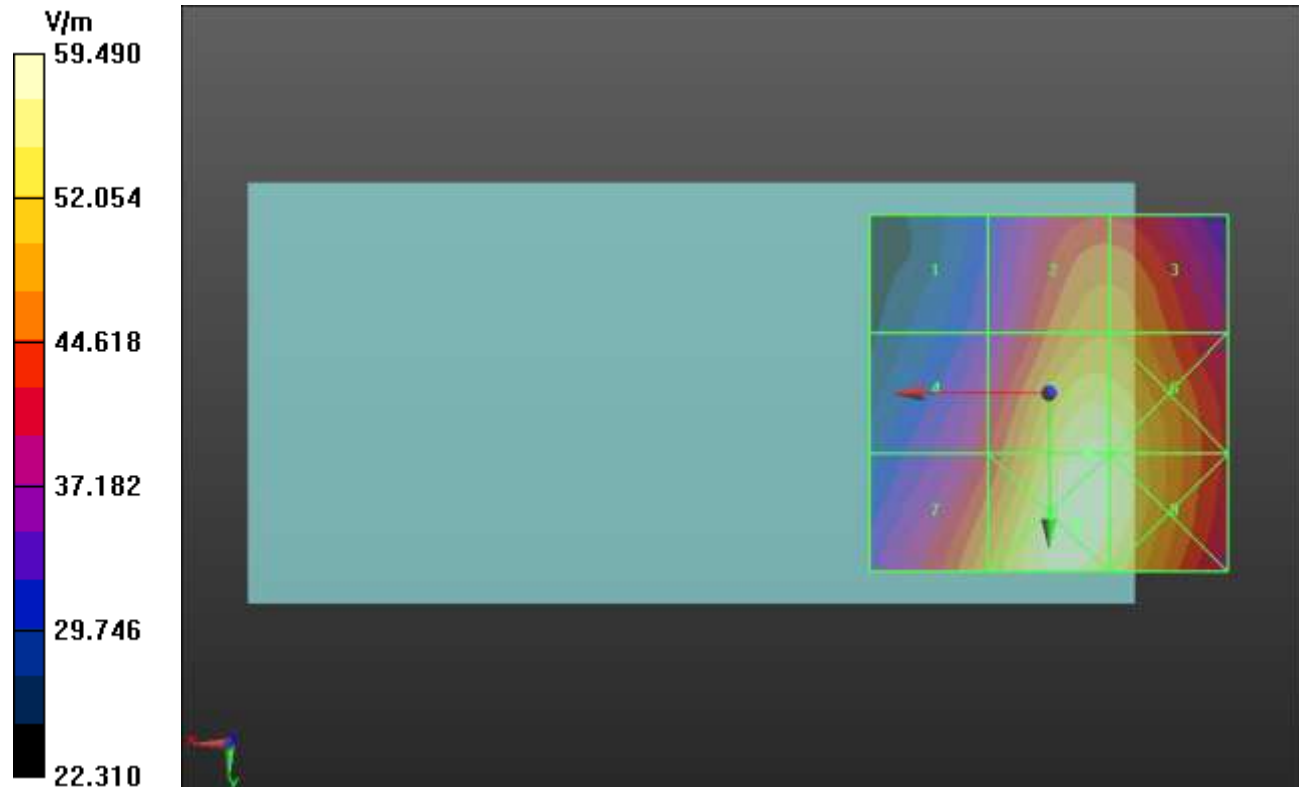
Applied MIF = 3.63 dB

RF audio interference level = 35.26 dBV/m

Emission category: M4

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 30.93 dBV/m | Grid 2 M4 33.86 dBV/m | Grid 3 M4 33.83 dBV/m |
| Grid 4 M4 32.49 dBV/m | Grid 5 M4 35.26 dBV/m | Grid 6 M4 35.07 dBV/m |
| Grid 7 M4 33.92 dBV/m | Grid 8 M4 35.49 dBV/m | Grid 9 M4 35.21 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

UAT_GSM1900 E-Field measurement/Voice_ch 512/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 = 34.82 V/m; Power Drift = 0.02 dB

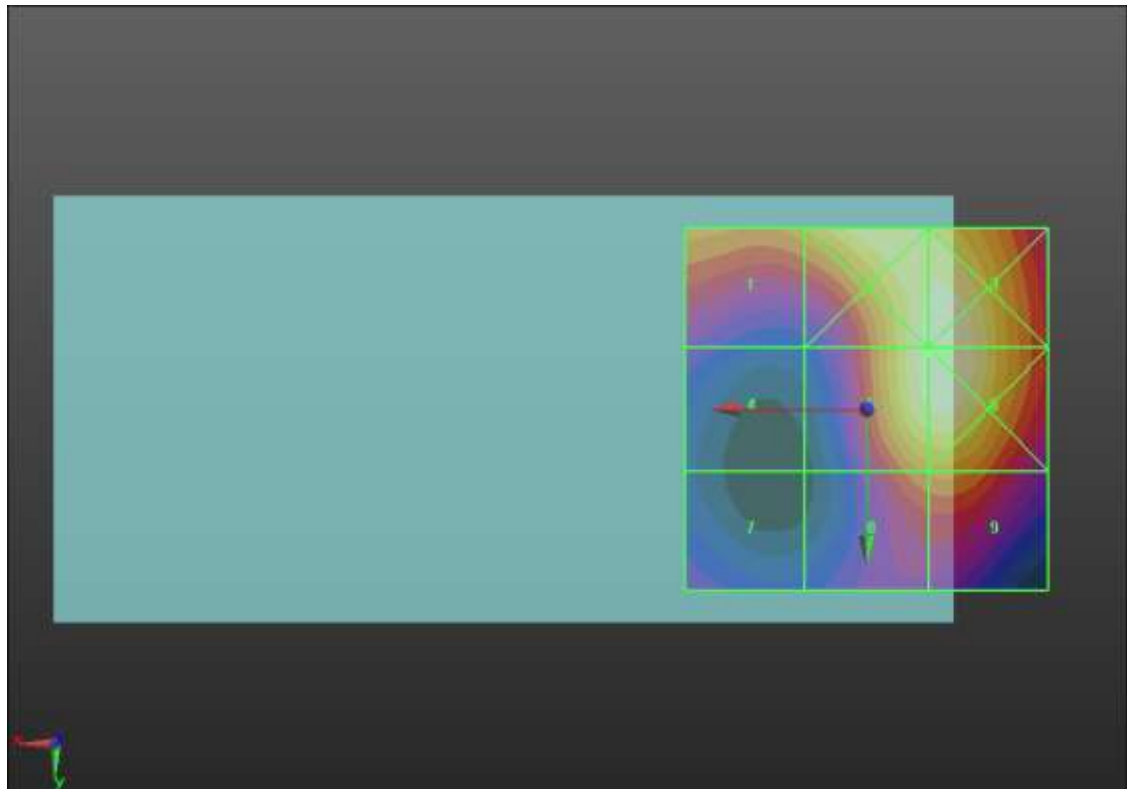
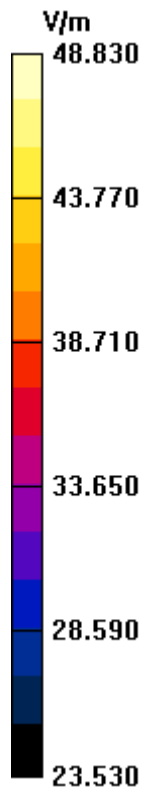
Applied MIF = 3.63 dB

RF audio interference level = 33.65 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|---------------------------------|---------------------------------|---------------------------------|
| Grid 1 M3 32.42 dBV/m | Grid 2 M3 33.64 dBV/m | Grid 3 M3 33.77 dBV/m |
| Grid 4 M3 30.14 dBV/m | Grid 5 M3 33.65 dBV/m | Grid 6 M3 33.77 dBV/m |
| Grid 7 M3 30.16 dBV/m | Grid 8 M3 32.24 dBV/m | Grid 9 M3 32.33 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

UAT_GSM1900 E-Field measurement/Voice_ch 661/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 = 34.97 V/m; Power Drift = -0.05 dB

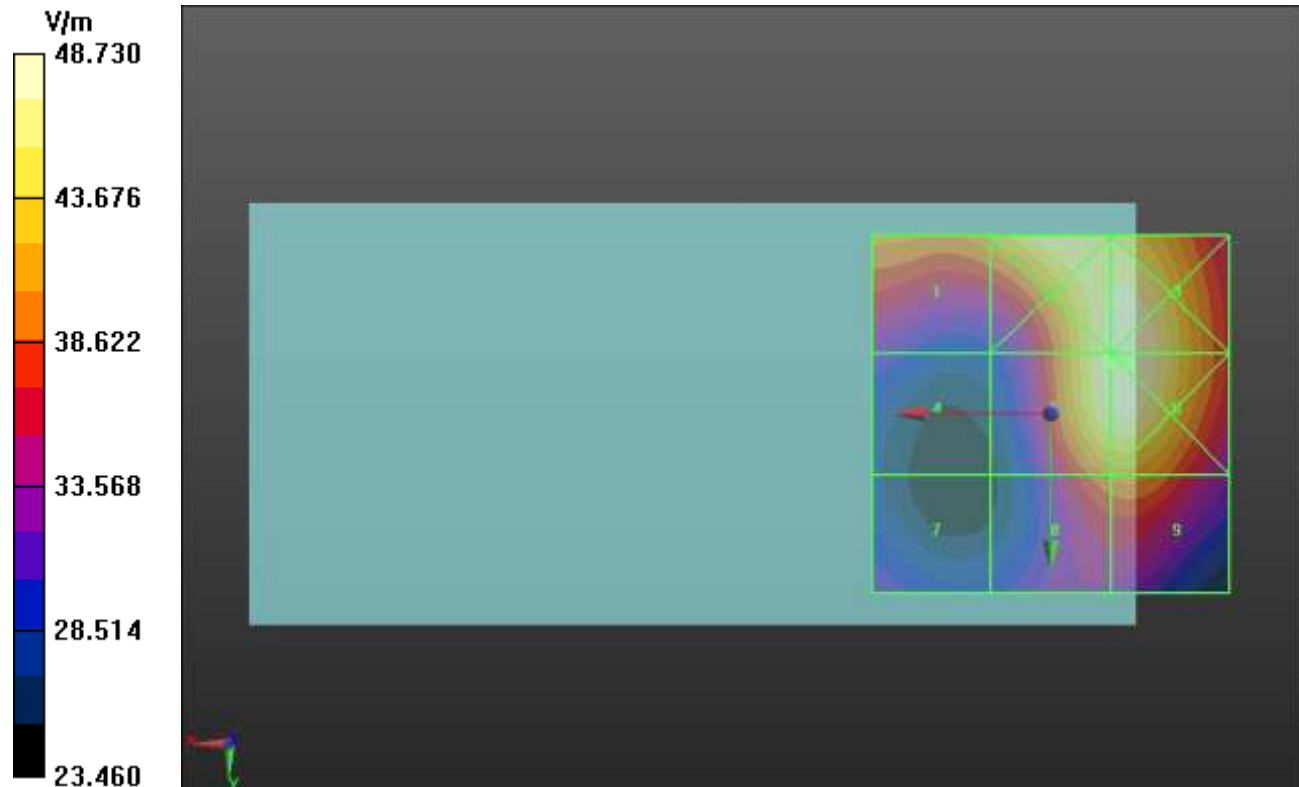
Applied MIF = 3.63 dB

RF audio interference level = 33.63 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|---------------------------------|---------------------------------|---------------------------------|
| Grid 1 M3 32.44 dBV/m | Grid 2 M3 33.62 dBV/m | Grid 3 M3 33.75 dBV/m |
| Grid 4 M3 30.11 dBV/m | Grid 5 M3 33.63 dBV/m | Grid 6 M3 33.76 dBV/m |
| Grid 7 M3 30.08 dBV/m | Grid 8 M3 32.2 dBV/m | Grid 9 M3 32.31 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

UAT_GSM1900 E-Field measurement/Voice_ch 810/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 = 34.44 V/m; Power Drift = 0.04 dB

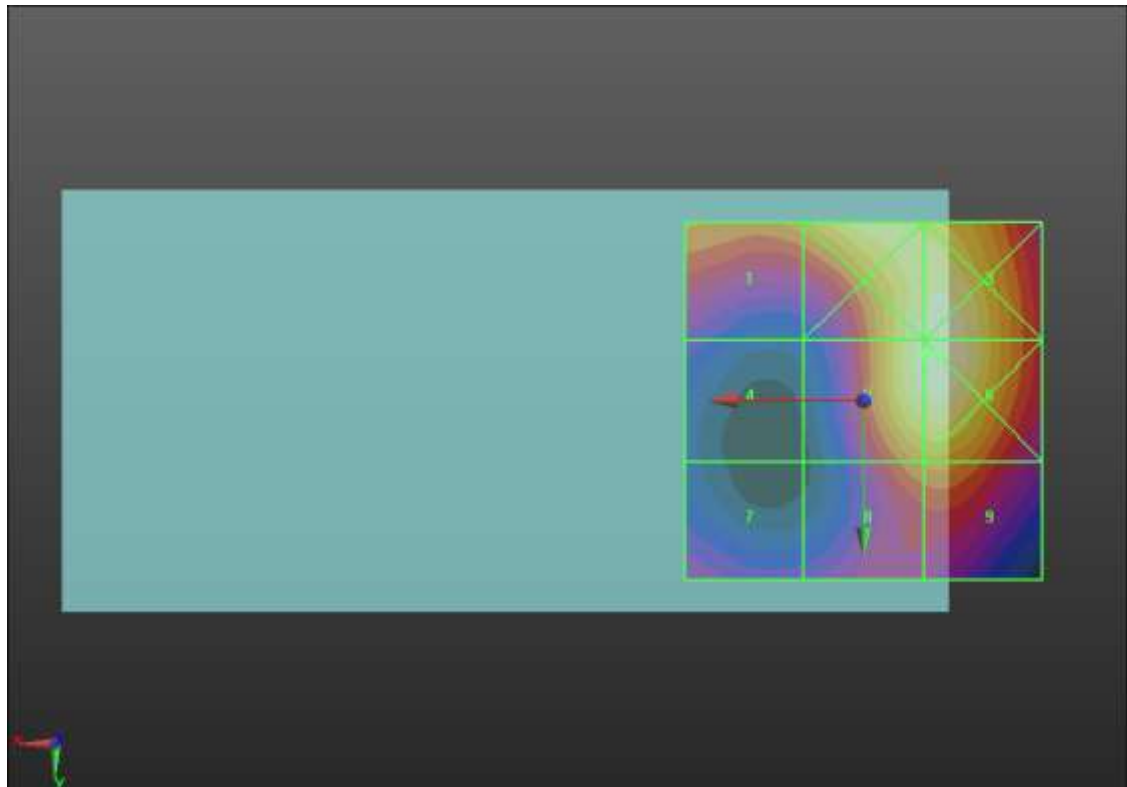
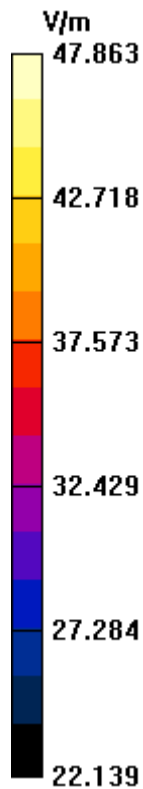
Applied MIF = 3.63 dB

RF audio interference level = 33.48 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|---------------------------------|---------------------------------|---------------------------------|
| Grid 1 M3 32.17 dBV/m | Grid 2 M3 33.44 dBV/m | Grid 3 M3 33.57 dBV/m |
| Grid 4 M4 29.73 dBV/m | Grid 5 M3 33.48 dBV/m | Grid 6 M3 33.6 dBV/m |
| Grid 7 M3 30.2 dBV/m | Grid 8 M3 32.02 dBV/m | Grid 9 M3 32.11 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

LAT_GSM850 E-Field measurement/Voice_ch 128/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 = 73.42 V/m; Power Drift = 0.28 dB

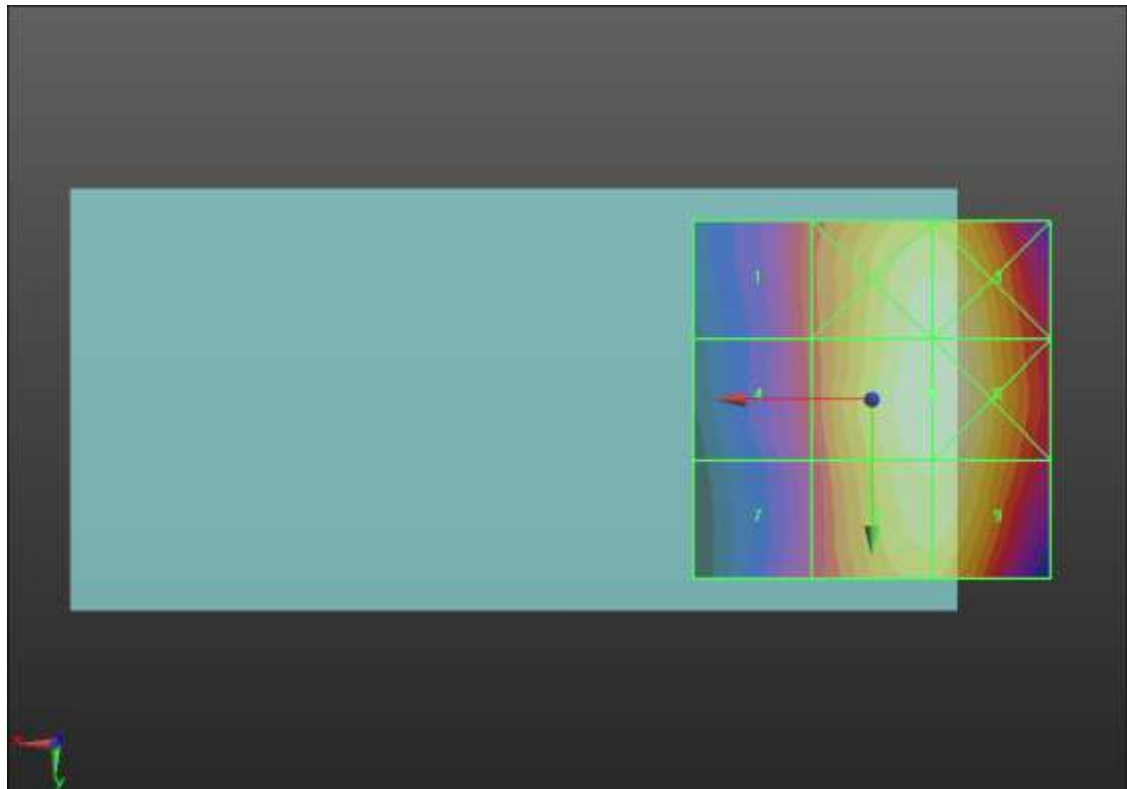
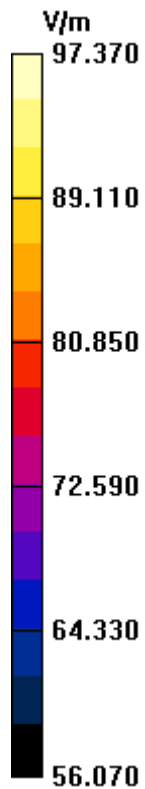
Applied MIF = 3.63 dB

RF audio interference level = 39.77 dBV/m

Emission category: **M4**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 38.08 dBV/m | Grid 2 M4 39.68 dBV/m | Grid 3 M4 39.68 dBV/m |
| Grid 4 M4 37.99 dBV/m | Grid 5 M4 39.77 dBV/m | Grid 6 M4 39.77 dBV/m |
| Grid 7 M4 37.66 dBV/m | Grid 8 M4 39.59 dBV/m | Grid 9 M4 39.59 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

LAT_GSM850 E-Field measurement/Voice_ch 190/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 = 78.17 V/m; Power Drift = -0.01 dB

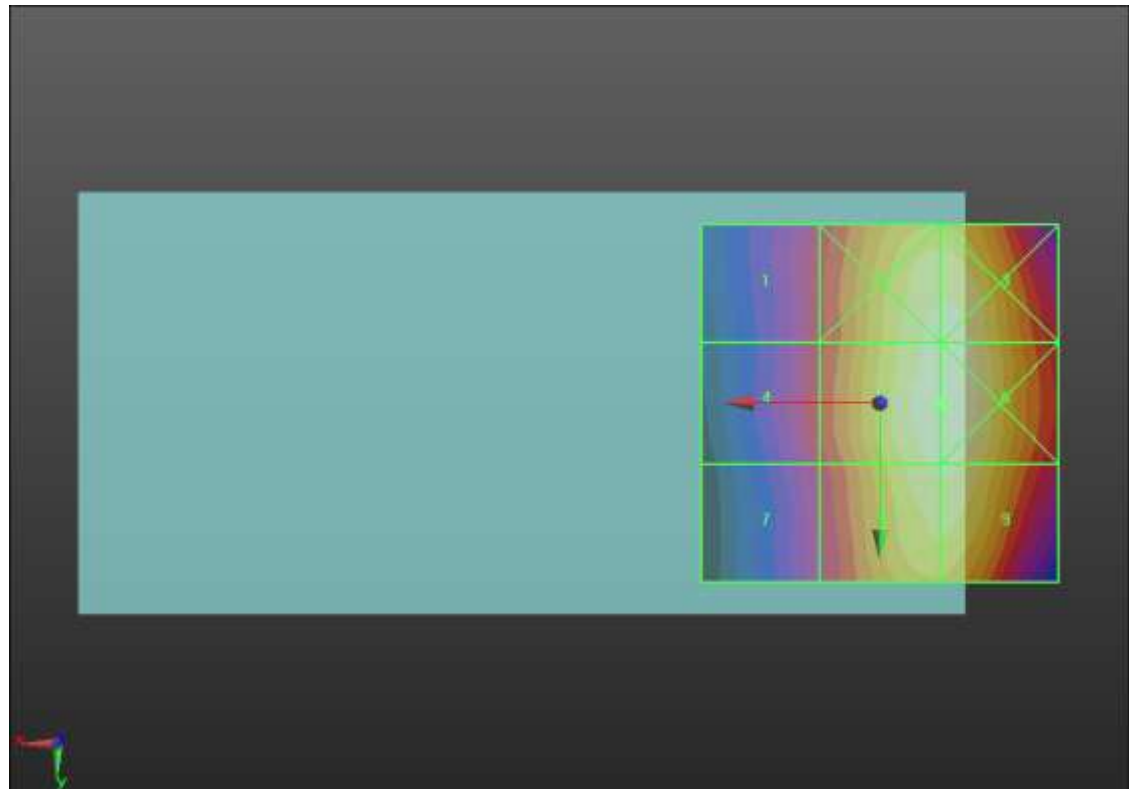
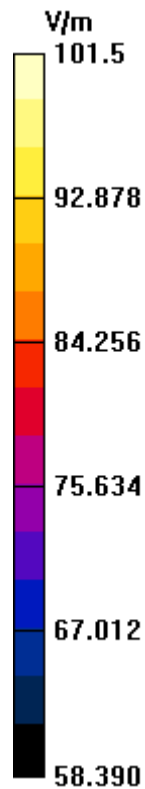
Applied MIF = 3.63 dB

RF audio interference level = 40.13 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 38.13 dBV/m | Grid 2 M3 40.01 dBV/m | Grid 3 M3 40.02 dBV/m |
| Grid 4 M4 38.25 dBV/m | Grid 5 M3 40.12 dBV/m | Grid 6 M3 40.13 dBV/m |
| Grid 7 M4 38.04 dBV/m | Grid 8 M4 39.93 dBV/m | Grid 9 M4 39.93 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

LAT_GSM850 E-Field measurement/Voice_ch 251/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 = 80.46 V/m; Power Drift = -0.01 dB

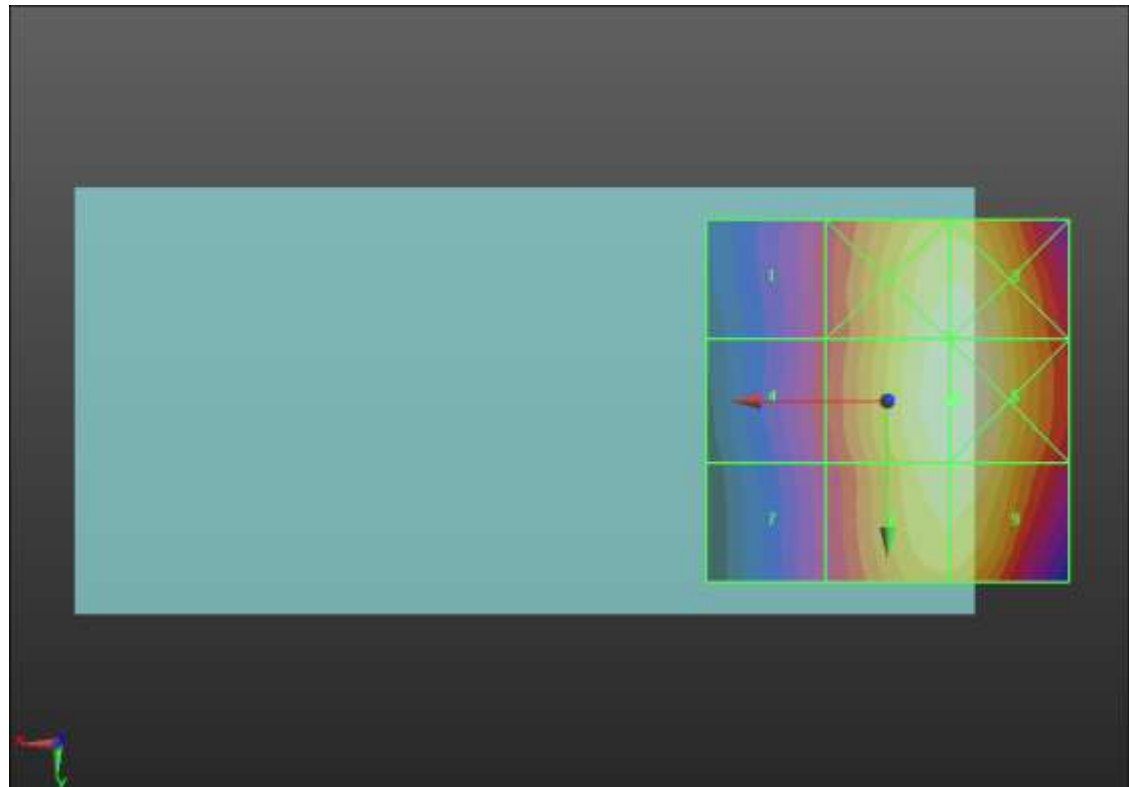
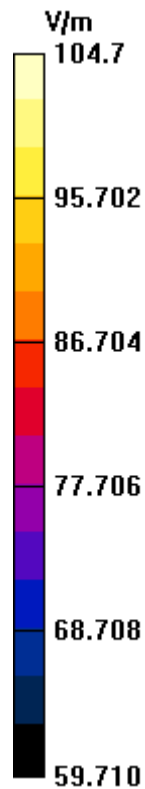
Applied MIF = 3.63 dB

RF audio interference level = 40.38 dBV/m

Emission category: M3

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 38.35 dBV/m | Grid 2 M3 40.29 dBV/m | Grid 3 M3 40.3 dBV/m |
| Grid 4 M4 38.46 dBV/m | Grid 5 M3 40.38 dBV/m | Grid 6 M3 40.4 dBV/m |
| Grid 7 M4 38.22 dBV/m | Grid 8 M3 40.17 dBV/m | Grid 9 M3 40.18 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

LAT_GSM1900 E-Field measurement/Voice_ch 512/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 = 31.15 V/m; Power Drift = 0.01 dB

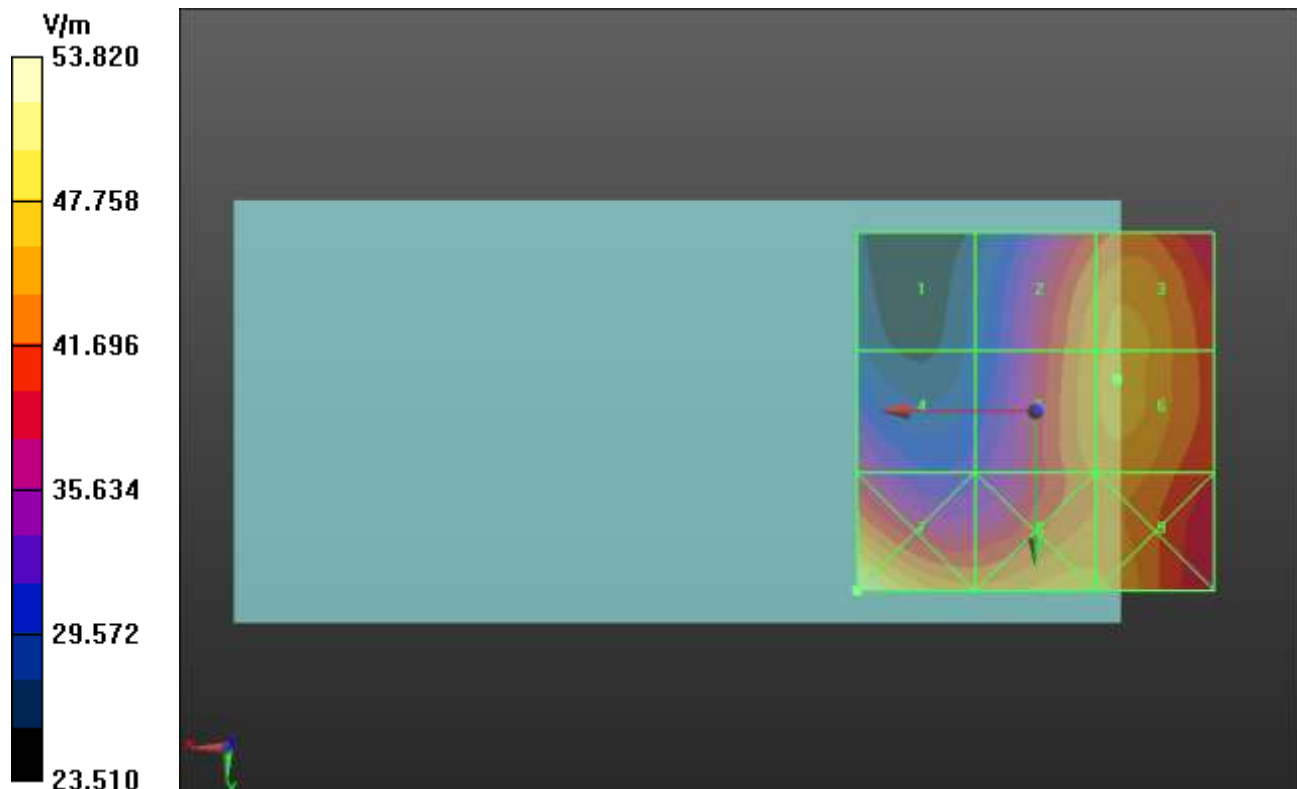
Applied MIF = 3.63 dB

RF audio interference level = 33.36 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 29.27 dBV/m | Grid 2 M3 33.11 dBV/m | Grid 3 M3 33.34 dBV/m |
| Grid 4 M3 31.54 dBV/m | Grid 5 M3 33.18 dBV/m | Grid 6 M3 33.36 dBV/m |
| Grid 7 M3 34.62 dBV/m | Grid 8 M3 33.44 dBV/m | Grid 9 M3 33.35 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

LAT_GSM1900 E-Field measurement/Voice_ch 661/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 = 30.07 V/m; Power Drift = 0.04 dB

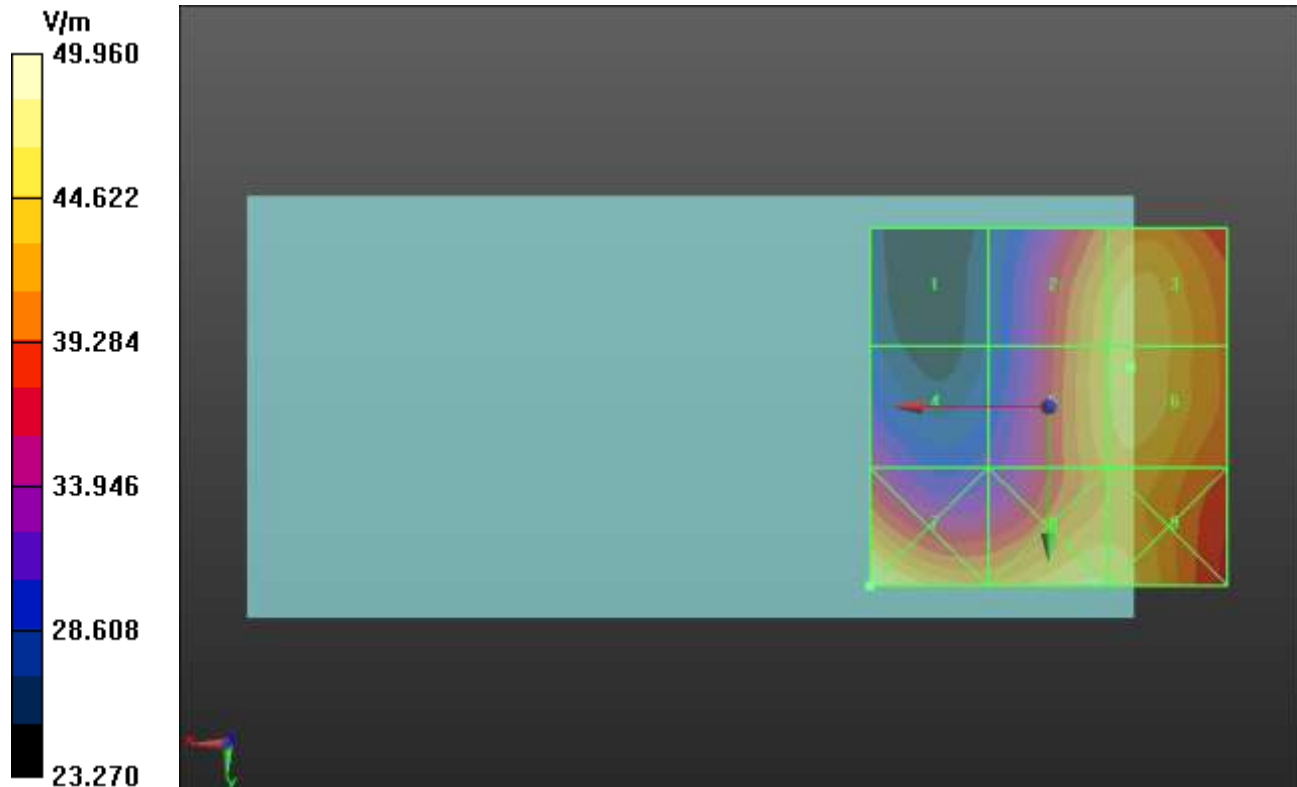
Applied MIF = 3.63 dB

RF audio interference level = 33.24 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 29.01 dBV/m | Grid 2 M3 33 dBV/m | Grid 3 M3 33.24 dBV/m |
| Grid 4 M3 31.05 dBV/m | Grid 5 M3 33.04 dBV/m | Grid 6 M3 33.24 dBV/m |
| Grid 7 M3 33.97 dBV/m | Grid 8 M3 33.42 dBV/m | Grid 9 M3 33.36 dBV/m |



HAC-RF Emission

Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.6896

Phantom section: RF Section

DASY5 Configuration:

- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

LAT_GSM1900 E-Field measurement/Voice_ch 810/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 = 31.65 V/m; Power Drift = -0.06 dB

Applied MIF = 3.63 dB

RF audio interference level = 33.68 dBV/m

Emission category: **M3**

MIF scaled E-field

| | | |
|--|--|--|
| Grid 1 M4 29.6 dBV/m | Grid 2 M3 33.43 dBV/m | Grid 3 M3 33.66 dBV/m |
| Grid 4 M3 31.56 dBV/m | Grid 5 M3 33.48 dBV/m | Grid 6 M3 33.68 dBV/m |
| Grid 7 M3 34.43 dBV/m | Grid 8 M3 33.69 dBV/m | Grid 9 M3 33.69 dBV/m |

