HAC-RF Emission

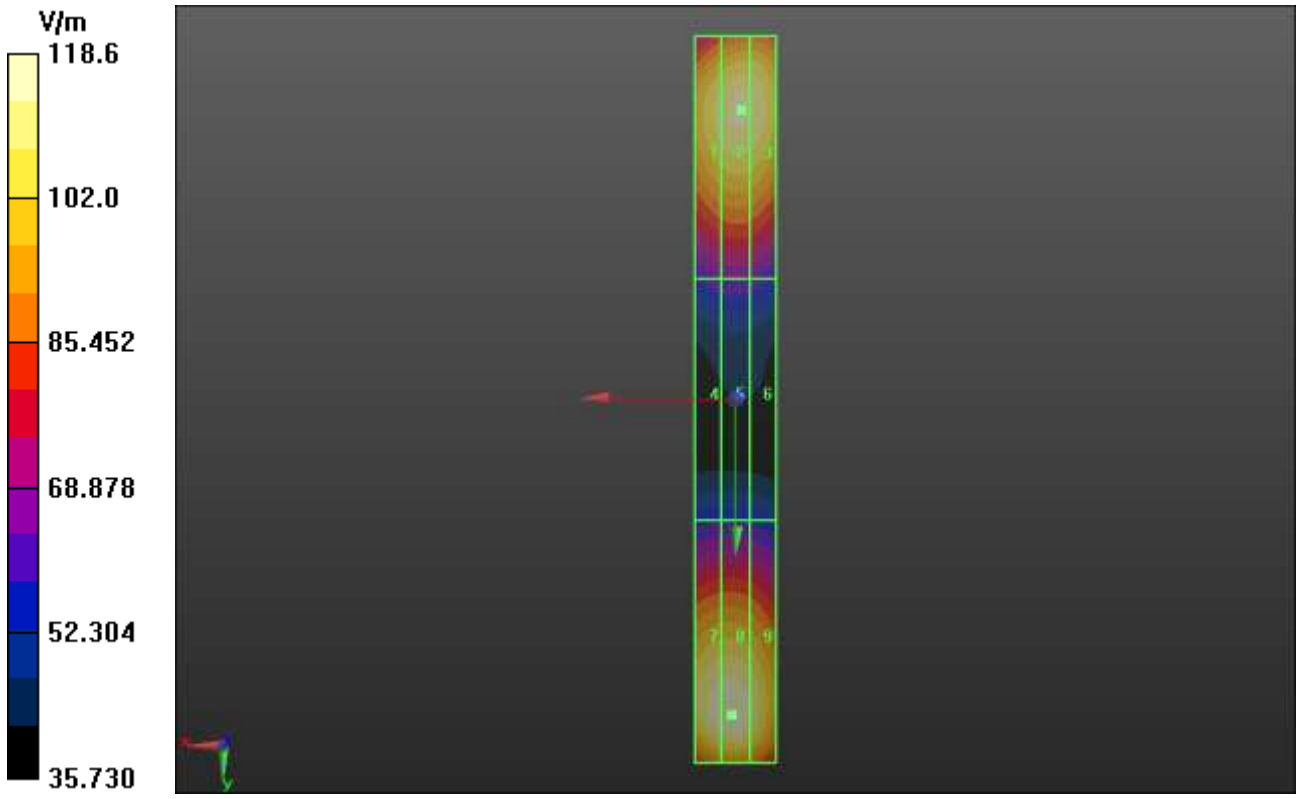
Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; Type: 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 = 117.4 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 118.6 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **111.1 V/m**	Grid 2 **M4** **114.3 V/m**	Grid 3 **M4** **113.7 V/m**
Grid 4 **M4** **63.53 V/m**	Grid 5 **M4** **64.75 V/m**	Grid 6 **M4** **63.86 V/m**
Grid 7 **M4** **117.7 V/m**	Grid 8 **M4** **118.6 V/m**	Grid 9 **M4** **113.6 V/m**



Test Laboratory: UL Verification Services Inc. SAR Lab C Date: 7/11/2013

HAC-RF Emission

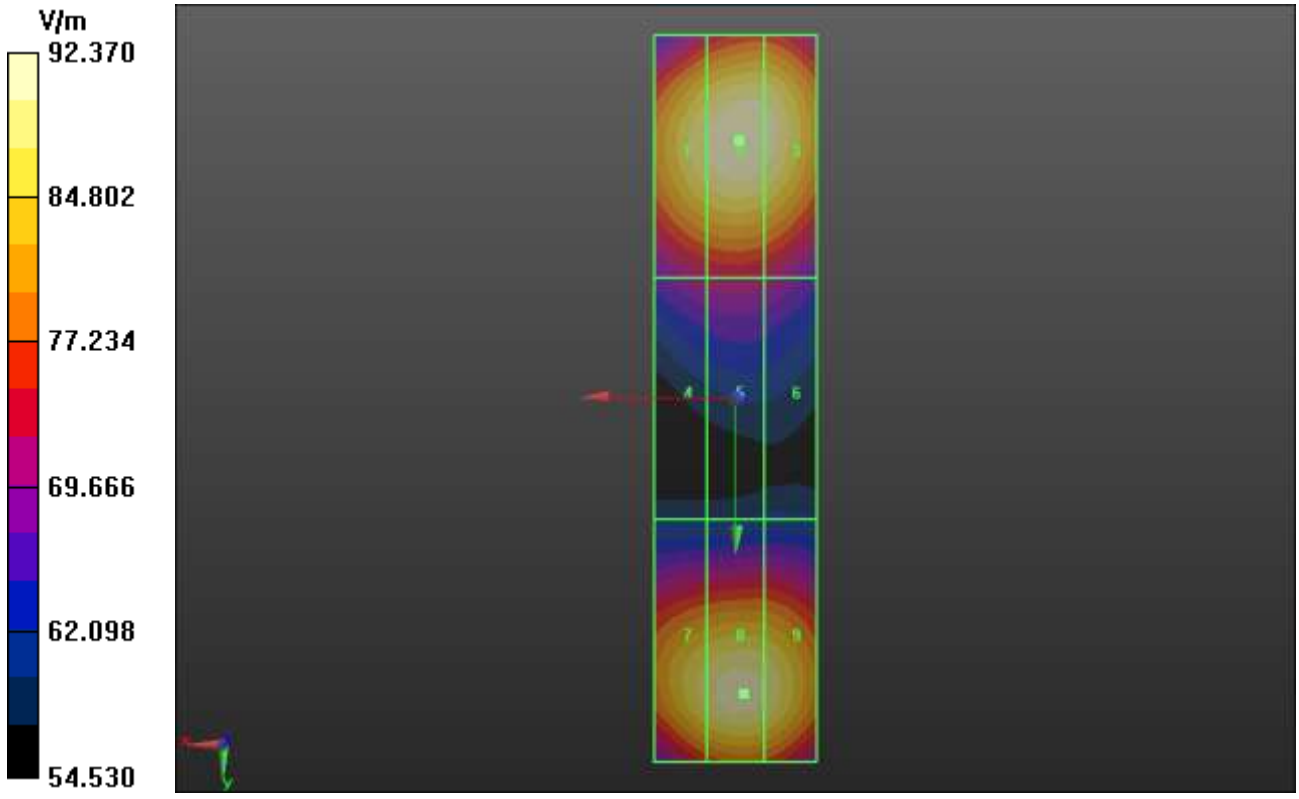
Communication System: UID 0, CW; Frequency: 1880 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: HAC Test Arch with AMCC; 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 = 159.9 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 92.37 V/m
Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M3** **90.21 V/m**	Grid 2 **M3** **92.37 V/m**	Grid 3 **M3** **91.53 V/m**
Grid 4 **M3** **71.68 V/m**	Grid 5 **M3** **72.56 V/m**	Grid 6 **M3** **71.48 V/m**
Grid 7 **M3** **88.87 V/m**	Grid 8 **M3** **90.91 V/m**	Grid 9 **M3** **89.90 V/m**



HAC-RF Emission

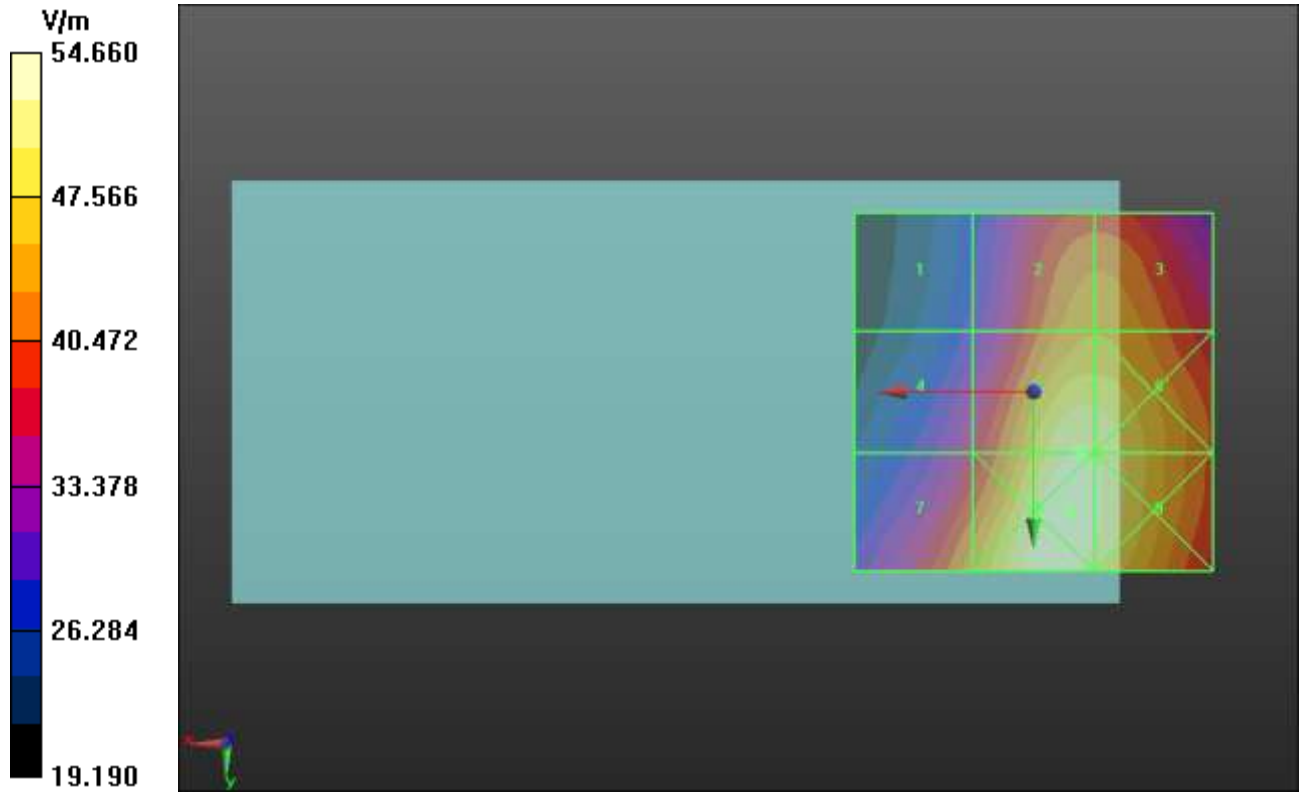
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 42.31 V/m; Power Drift = -0.00 dB
Applied MIF = 3.63 dB
RF audio interference level = 34.44 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **29.54 dBV/m**	Grid 2 **M4** **33.08 dBV/m**	Grid 3 **M4** **33.08 dBV/m**
Grid 4 **M4** **31.19 dBV/m**	Grid 5 **M4** **34.44 dBV/m**	Grid 6 **M4** **34.35 dBV/m**
Grid 7 **M4** **33 dBV/m**	Grid 8 **M4** **34.75 dBV/m**	Grid 9 **M4** **34.5 dBV/m**



HAC-RF Emission

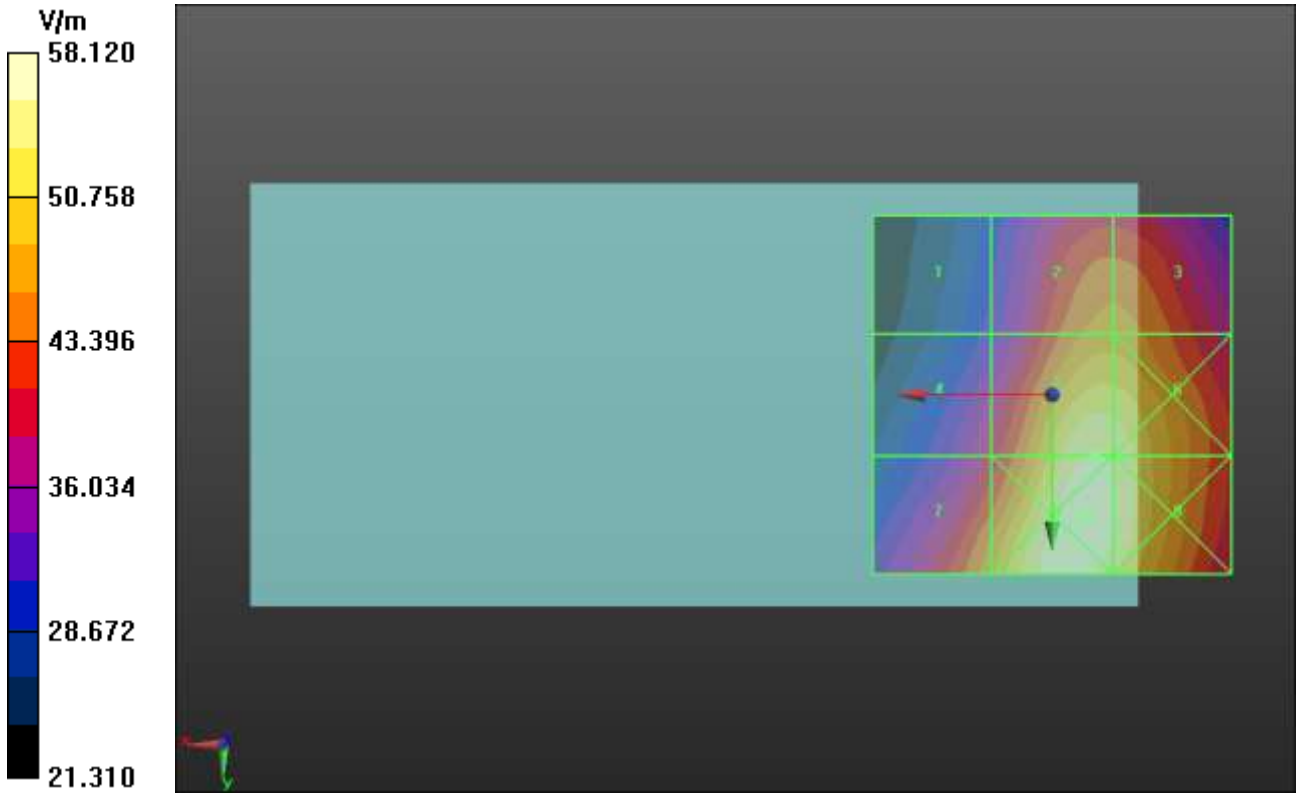
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 45.30 V/m; Power Drift = -0.04 dB
Applied MIF = 3.63 dB
RF audio interference level = 34.95 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **30.28 dBV/m**	Grid 2 **M4** **33.48 dBV/m**	Grid 3 **M4** **33.48 dBV/m**
Grid 4 **M4** **31.94 dBV/m**	Grid 5 **M4** **34.95 dBV/m**	Grid 6 **M4** **34.82 dBV/m**
Grid 7 **M4** **33.61 dBV/m**	Grid 8 **M4** **35.29 dBV/m**	Grid 9 **M4** **34.98 dBV/m**



HAC-RF Emission

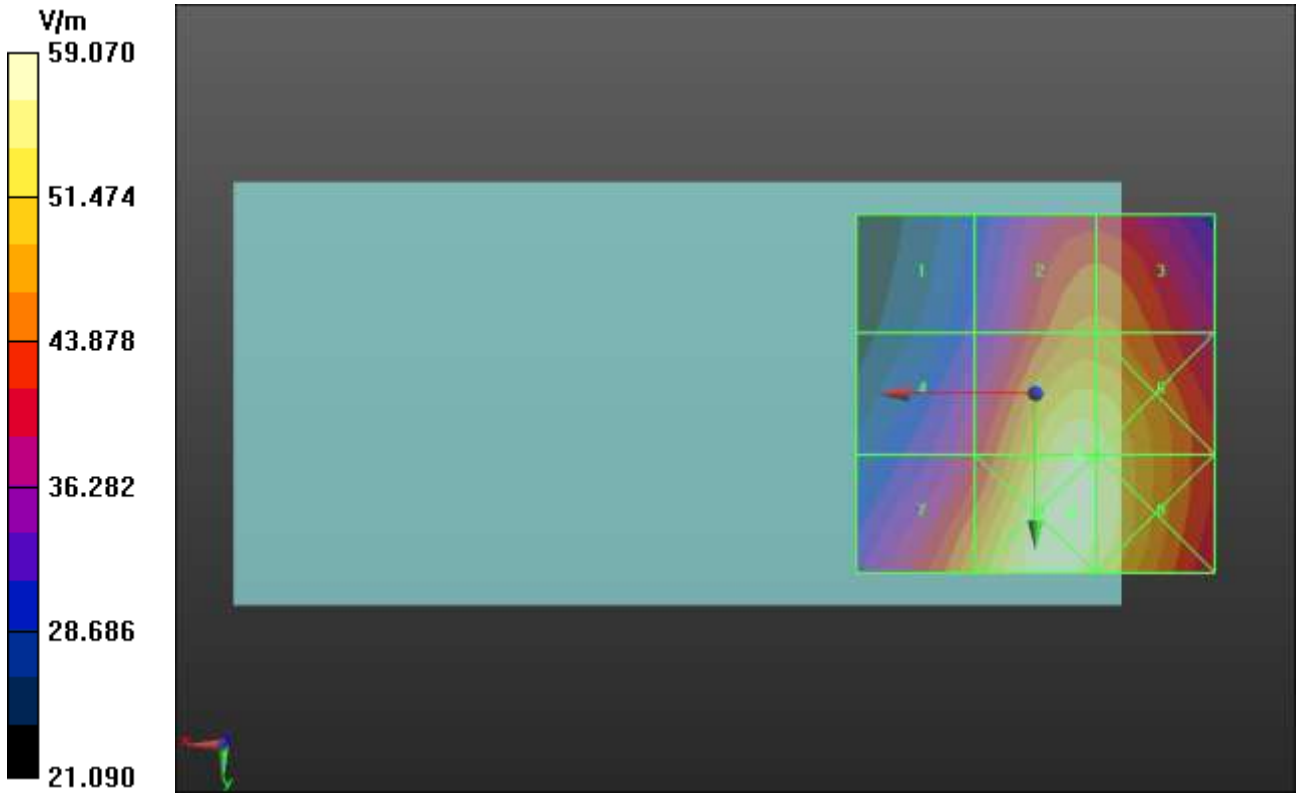
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 45.67 V/m; Power Drift = -0.04 dB
Applied MIF = 3.63 dB
RF audio interference level = 35.05 dBV/m
Emission category: M4

MIF scaled E-field

Grid 1 **M4** **30.28 dBV/m**	Grid 2 **M4** **33.51 dBV/m**	Grid 3 **M4** **33.5 dBV/m**
Grid 4 **M4** **32.02 dBV/m**	Grid 5 **M4** **35.05 dBV/m**	Grid 6 **M4** **34.91 dBV/m**
Grid 7 **M4** **33.79 dBV/m**	Grid 8 **M4** **35.43 dBV/m**	Grid 9 **M4** **35.1 dBV/m**



HAC-RF Emission

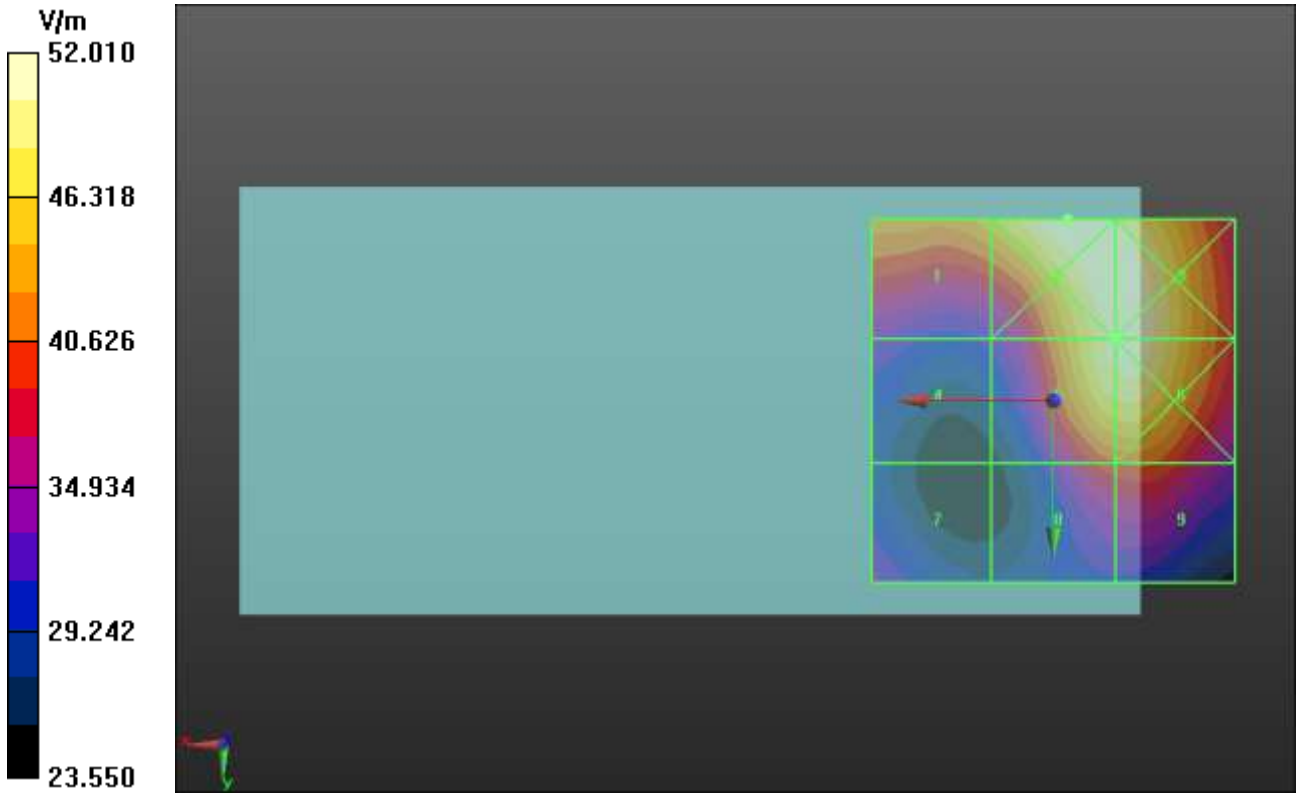
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 36.70 V/m; Power Drift = 0.01 dB
Applied MIF = 3.63 dB
RF audio interference level = 34.13 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M3** **33.22 dBV/m**	Grid 2 **M3** **34.32 dBV/m**	Grid 3 **M3** **34.29 dBV/m**
Grid 4 **M3** **30.55 dBV/m**	Grid 5 **M3** **34.13 dBV/m**	Grid 6 **M3** **34.2 dBV/m**
Grid 7 **M3** **30.61 dBV/m**	Grid 8 **M3** **32.15 dBV/m**	Grid 9 **M3** **32.28 dBV/m**



HAC-RF Emission

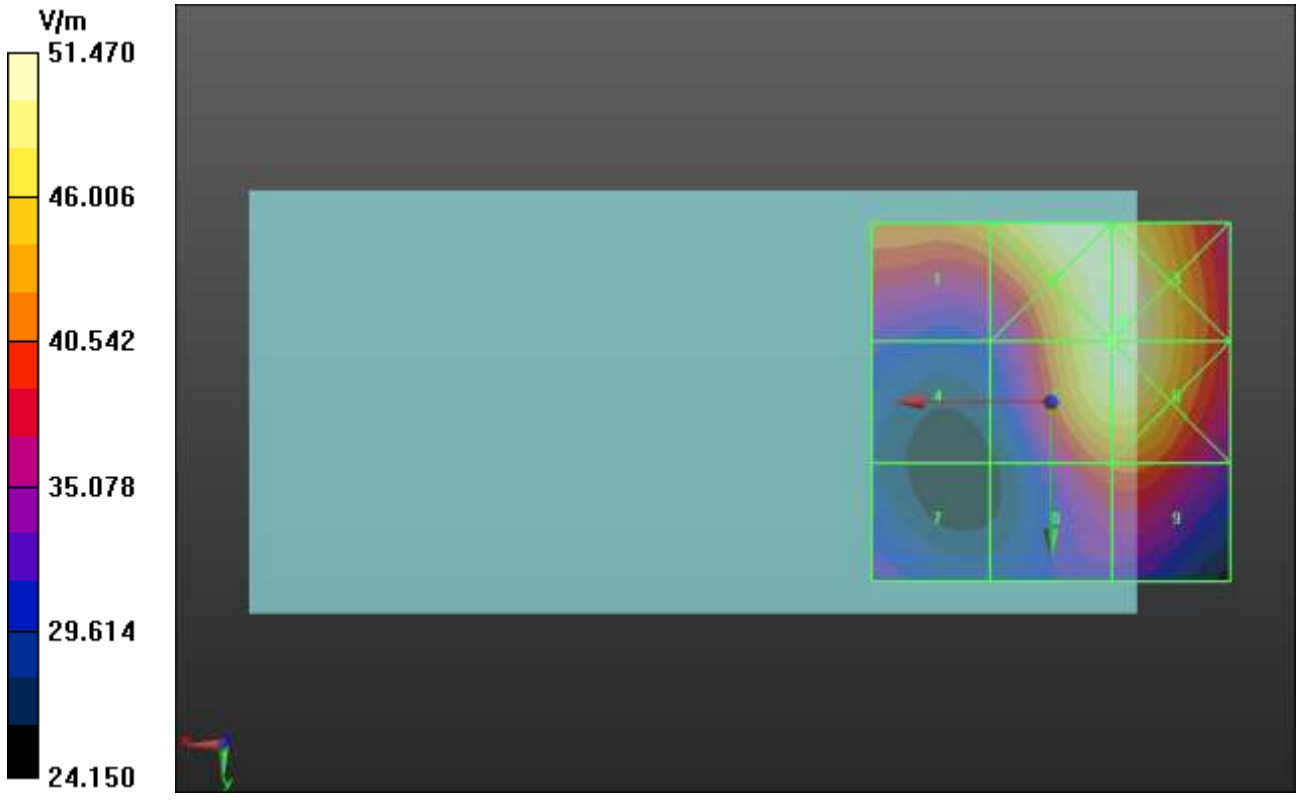
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: 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 = 37.59 V/m; Power Drift = -0.04 dB
Applied MIF = 3.63 dB
RF audio interference level = 34.16 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M3** **33.03 dBV/m**	Grid 2 **M3** **34.19 dBV/m**	Grid 3 **M3** **34.23 dBV/m**
Grid 4 **M3** **30.31 dBV/m**	Grid 5 **M3** **34.16 dBV/m**	Grid 6 **M3** **34.2 dBV/m**
Grid 7 **M3** **30.53 dBV/m**	Grid 8 **M3** **32.32 dBV/m**	Grid 9 **M3** **32.41 dBV/m**



HAC-RF Emission

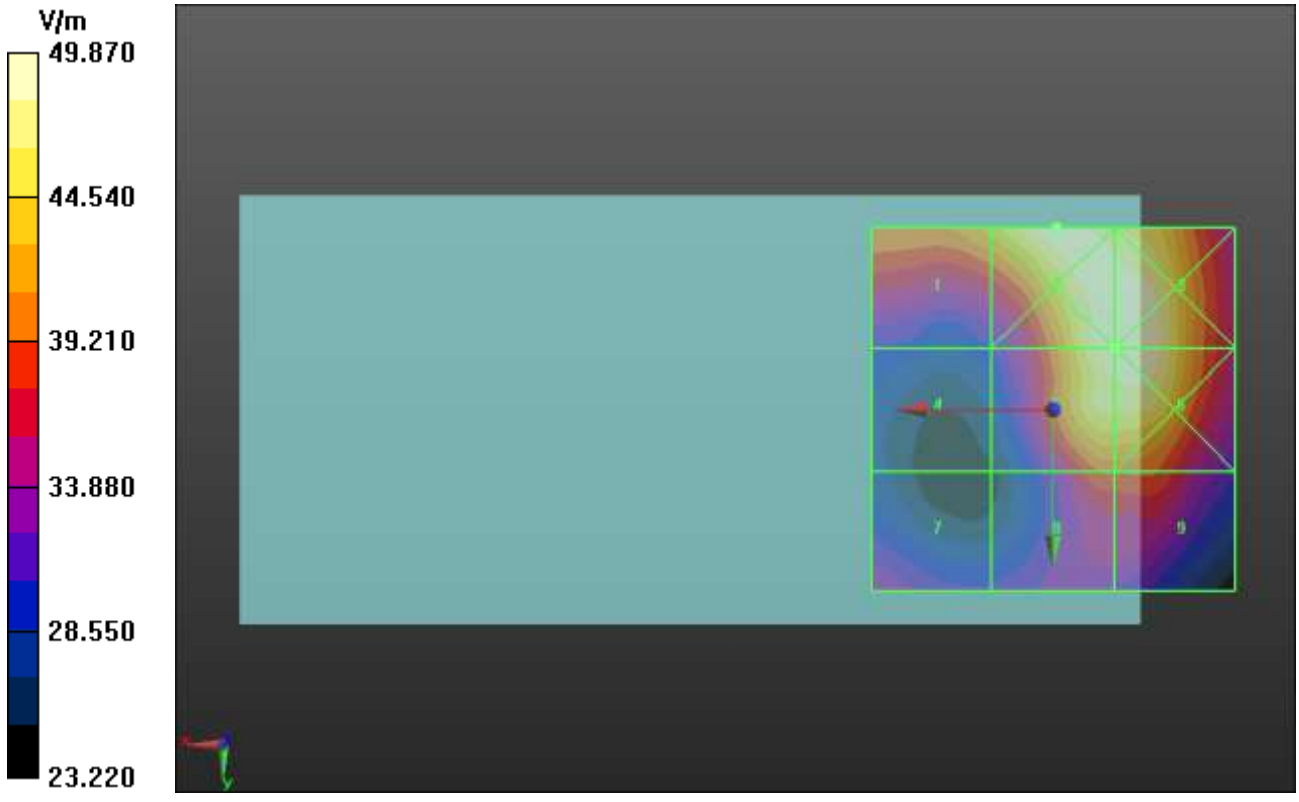
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 37.71 V/m; Power Drift = -0.28 dB
Applied MIF = 3.63 dB
RF audio interference level = 33.81 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M3** **32.82 dBV/m**	Grid 2 **M3** **33.96 dBV/m**	Grid 3 **M3** **33.87 dBV/m**
Grid 4 **M4** **29.73 dBV/m**	Grid 5 **M3** **33.81 dBV/m**	Grid 6 **M3** **33.86 dBV/m**
Grid 7 **M3** **30.71 dBV/m**	Grid 8 **M3** **31.94 dBV/m**	Grid 9 **M3** **31.98 dBV/m**



HAC-RF Emission

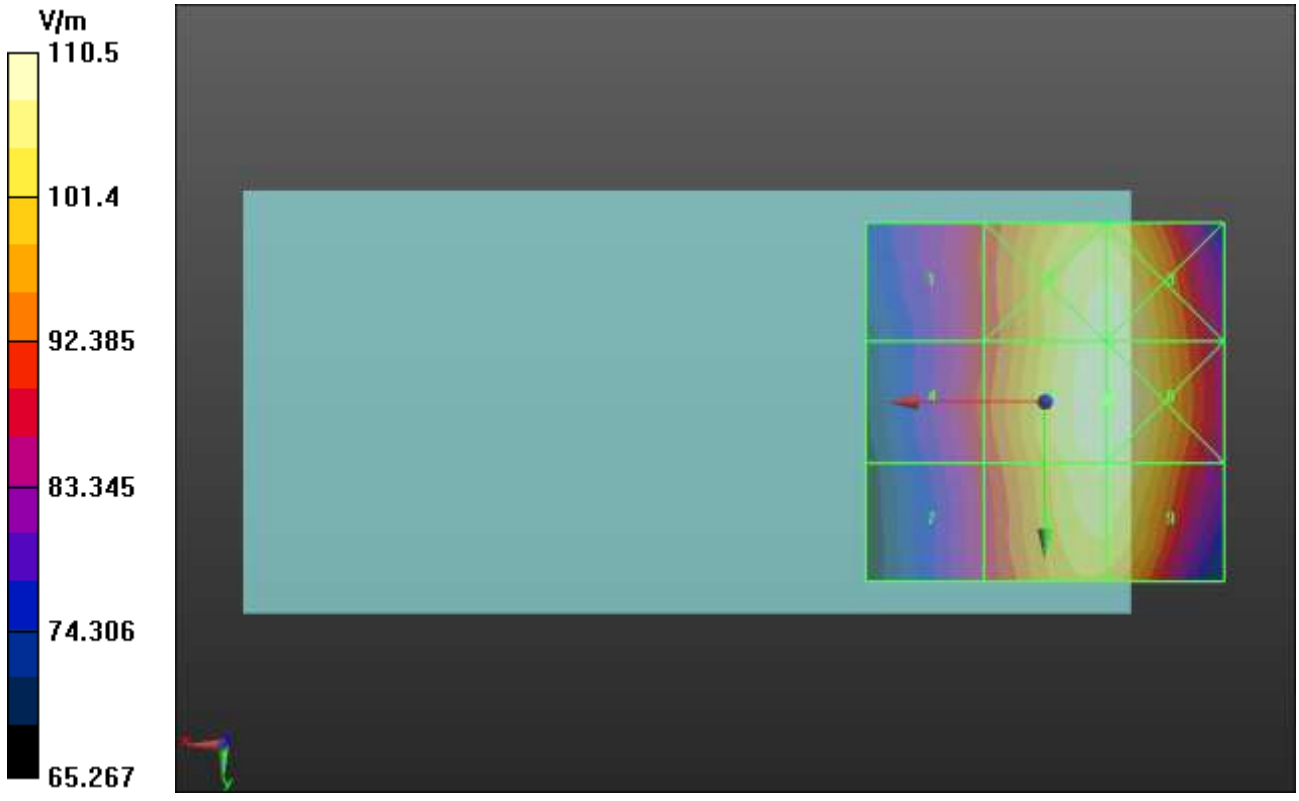
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 87.15 V/m; Power Drift = 0.00 dB
Applied MIF = 3.63 dB
RF audio interference level = 40.86 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M4** **39.13 dBV/m**	Grid 2 **M3** **40.76 dBV/m**	Grid 3 **M3** **40.76 dBV/m**
Grid 4 **M4** **39.2 dBV/m**	Grid 5 **M3** **40.86 dBV/m**	Grid 6 **M3** **40.86 dBV/m**
Grid 7 **M4** **38.97 dBV/m**	Grid 8 **M3** **40.67 dBV/m**	Grid 9 **M3** **40.67 dBV/m**



HAC-RF Emission

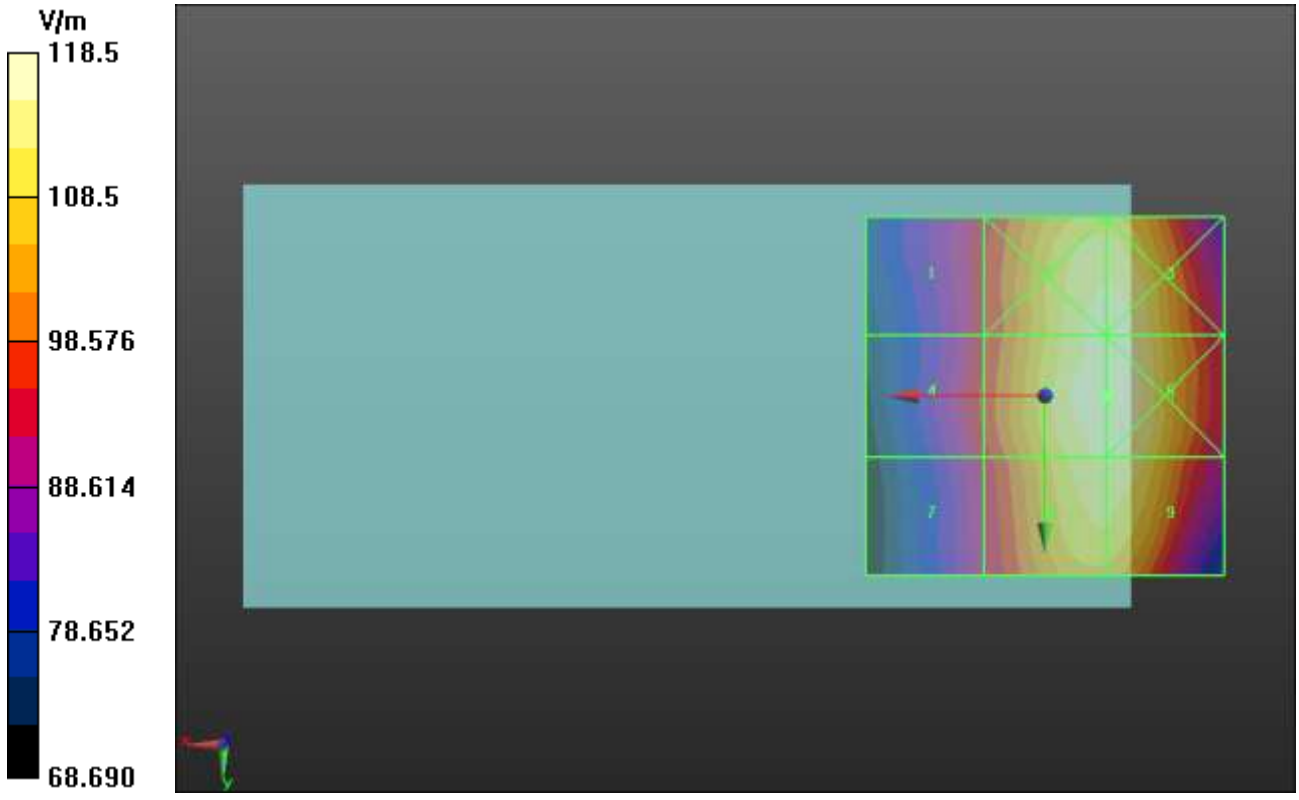
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 93.08 V/m; Power Drift = -0.06 dB
Applied MIF = 3.63 dB
RF audio interference level = 41.47 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M4** **39.57 dBV/m**	Grid 2 **M3** **41.37 dBV/m**	Grid 3 **M3** **41.37 dBV/m**
Grid 4 **M4** **39.69 dBV/m**	Grid 5 **M3** **41.47 dBV/m**	Grid 6 **M3** **41.47 dBV/m**
Grid 7 **M4** **39.43 dBV/m**	Grid 8 **M3** **41.26 dBV/m**	Grid 9 **M3** **41.26 dBV/m**



HAC-RF Emission

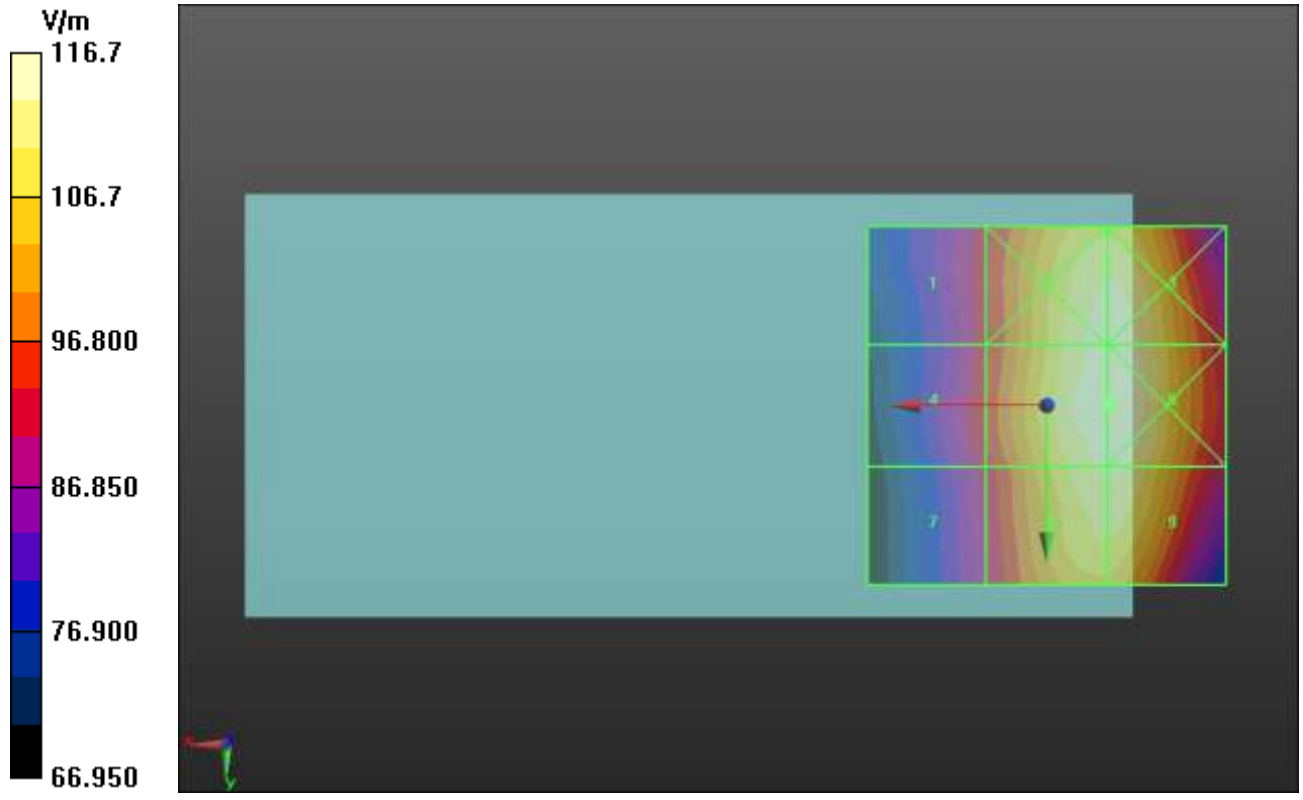
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 848.6 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 90.99 V/m; Power Drift = -0.01 dB
Applied MIF = 3.63 dB
RF audio interference level = 41.34 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M4** **39.39 dBV/m**	Grid 2 **M3** **41.25 dBV/m**	Grid 3 **M3** **41.26 dBV/m**
Grid 4 **M4** **39.48 dBV/m**	Grid 5 **M3** **41.34 dBV/m**	Grid 6 **M3** **41.34 dBV/m**
Grid 7 **M4** **39.25 dBV/m**	Grid 8 **M3** **41.15 dBV/m**	Grid 9 **M3** **41.15 dBV/m**



HAC-RF Emission

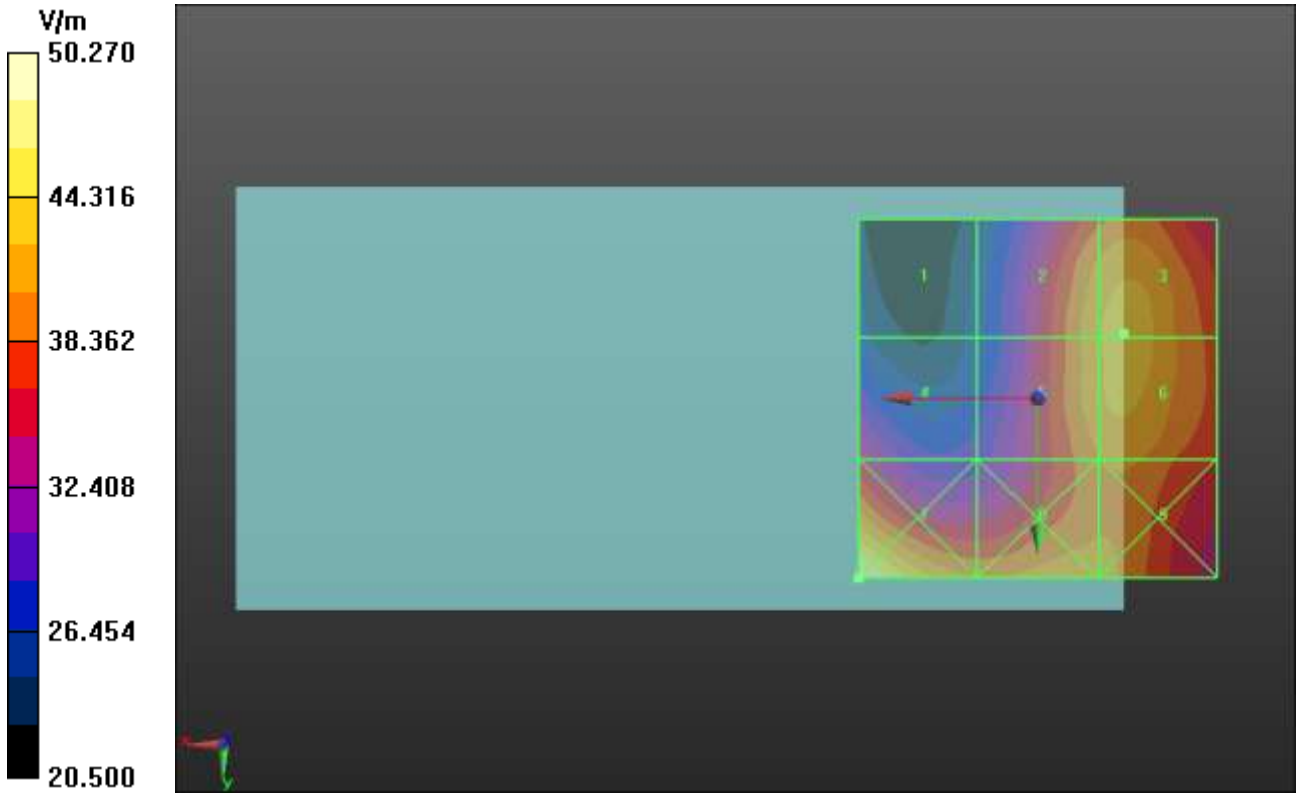
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- 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 = 28.30 V/m; Power Drift = 0.04 dB
Applied MIF = 3.63 dB
RF audio interference level = 32.73 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M4** **28.37 dBV/m**	Grid 2 **M3** **32.5 dBV/m**	Grid 3 **M3** **32.73 dBV/m**
Grid 4 **M3** **30.8 dBV/m**	Grid 5 **M3** **32.5 dBV/m**	Grid 6 **M3** **32.73 dBV/m**
Grid 7 **M3** **34.03 dBV/m**	Grid 8 **M3** **32.39 dBV/m**	Grid 9 **M3** **32.31 dBV/m**



HAC-RF Emission

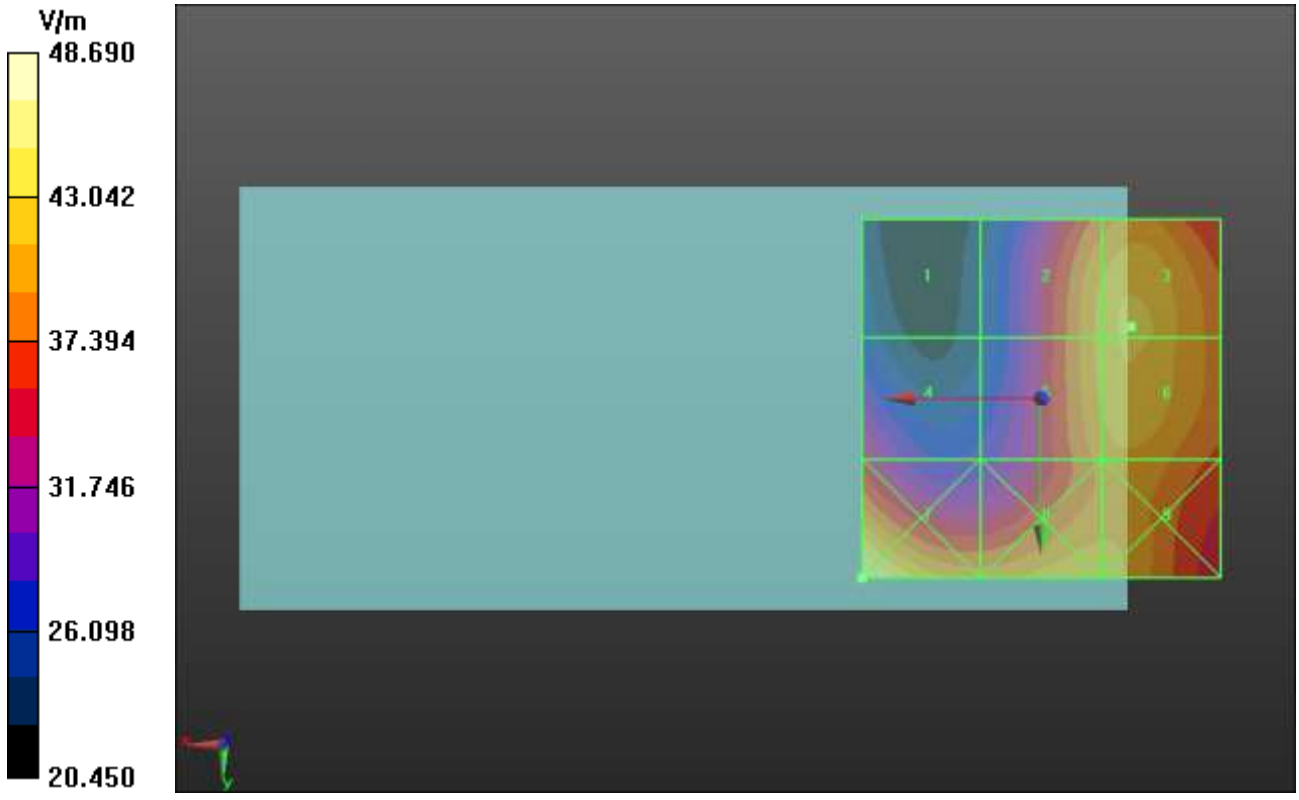
Communication System: UID 10021 - CAA, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896
Phantom section: RF Section
DASY5 Configuration:
- Probe: ER3DV6 - SN2509; ConvF(1, 1, 1); Calibrated: 5/29/2013;
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
- Phantom: 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 = 27.47 V/m; Power Drift = -0.02 dB
Applied MIF = 3.63 dB
RF audio interference level = 32.75 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M4** **28.61 dBV/m**	Grid 2 **M3** **32.45 dBV/m**	Grid 3 **M3** **32.75 dBV/m**
Grid 4 **M3** **30.82 dBV/m**	Grid 5 **M3** **32.45 dBV/m**	Grid 6 **M3** **32.74 dBV/m**
Grid 7 **M3** **33.75 dBV/m**	Grid 8 **M3** **32.62 dBV/m**	Grid 9 **M3** **32.54 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 = 28.74 V/m; Power Drift = 0.04 dB
Applied MIF = 3.63 dB
RF audio interference level = 33.21 dBV/m
Emission category: M3

MIF scaled E-field

Grid 1 **M4** **29.59 dBV/m**	Grid 2 **M3** **32.95 dBV/m**	Grid 3 **M3** **33.21 dBV/m**
Grid 4 **M3** **31.61 dBV/m**	Grid 5 **M3** **32.95 dBV/m**	Grid 6 **M3** **33.21 dBV/m**
Grid 7 **M3** **34.36 dBV/m**	Grid 8 **M3** **32.99 dBV/m**	Grid 9 **M3** **32.96 dBV/m**