Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

GSM 850

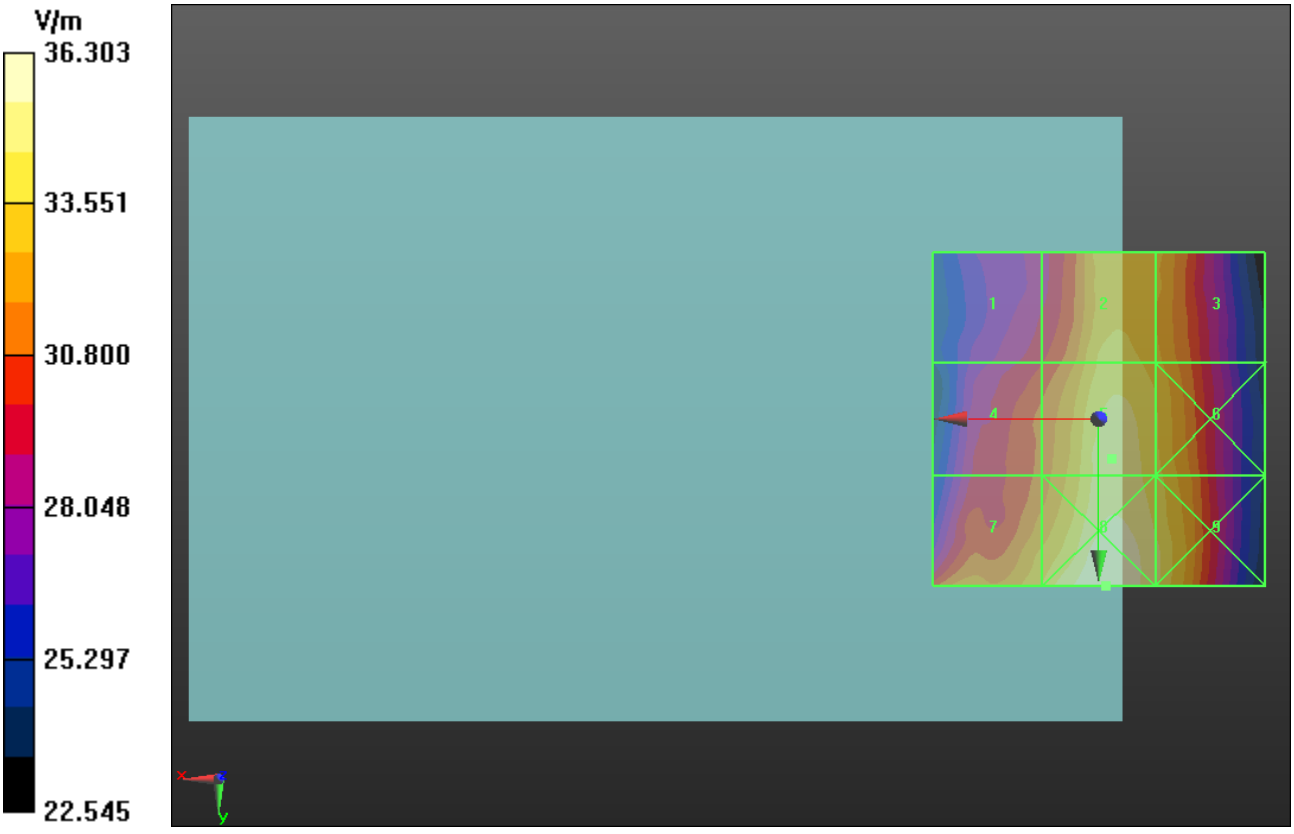
Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 824.4 MHz; Duty Cycle: 1:8.00018
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 35.059 V/m
Probe Modulation Factor = 2.790
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 15.011 V/m; Power Drift = 0.23 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **29.873 M4**	Grid 2 **34.021 M4**	Grid 3 **33.023 M4**
Grid 4 **31.248 M4**	Grid 5 **35.059 M4**	Grid 6 **33.960 M4**
Grid 7 **33.667 M4**	Grid 8 **36.304 M4**	Grid 9 **34.757 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

GSM 850

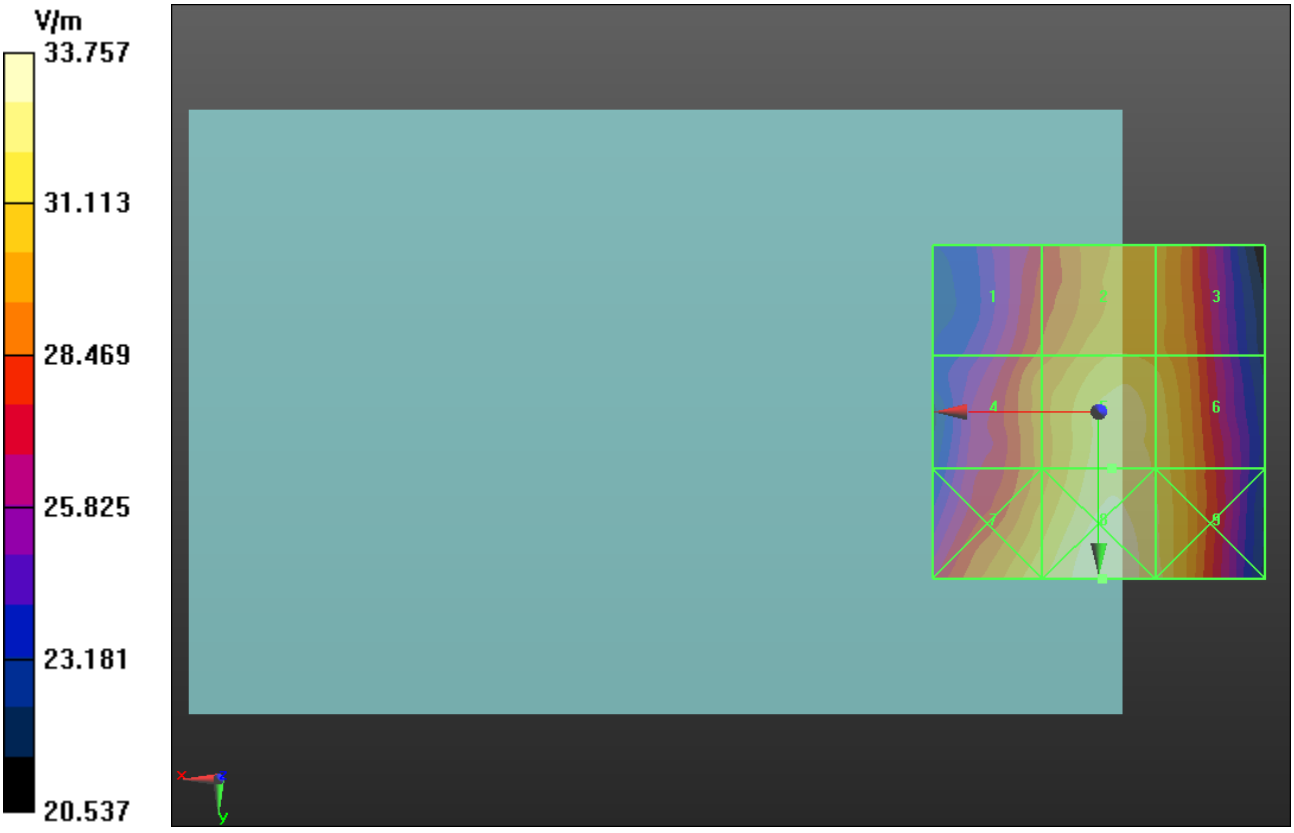
Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 32.612 V/m
Probe Modulation Factor = 2.790
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 14.401 V/m; Power Drift = 0.03 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **28.894 M4**	Grid 2 **31.190 M4**	Grid 3 **30.772 M4**
Grid 4 **29.945 M4**	Grid 5 **32.612 M4**	Grid 6 **31.890 M4**
Grid 7 **31.946 M4**	Grid 8 **33.757 M4**	Grid 9 **32.392 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

GSM 850

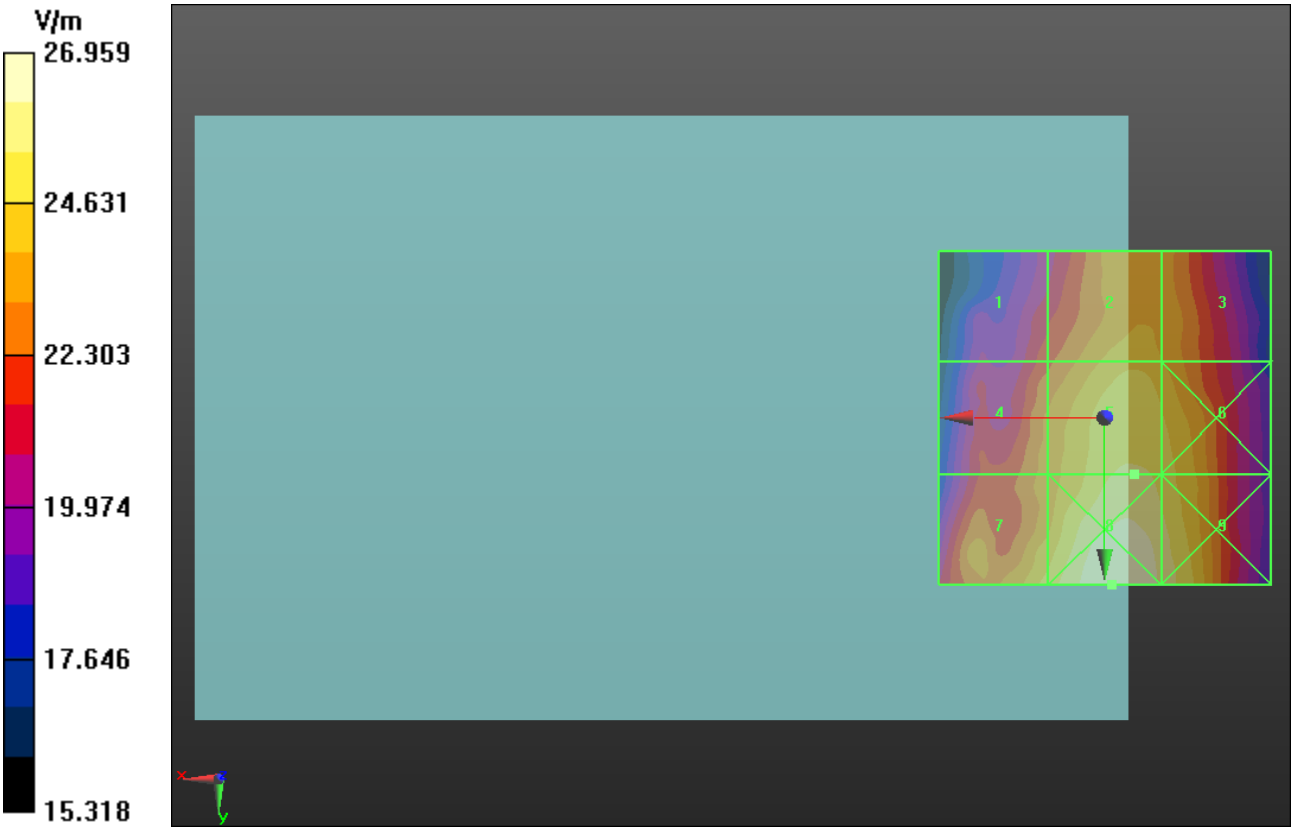
Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 848.8 MHz; Duty Cycle: 1:8.00018
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 25.662 V/m
Probe Modulation Factor = 2.790
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 11.245 V/m; Power Drift = -0.09 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **22.106 M4**	Grid 2 **24.371 M4**	Grid 3 **23.920 M4**
Grid 4 **23.506 M4**	Grid 5 **25.662 M4**	Grid 6 **25.133 M4**
Grid 7 **24.995 M4**	Grid 8 **26.959 M4**	Grid 9 **26.054 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

GSM 1900

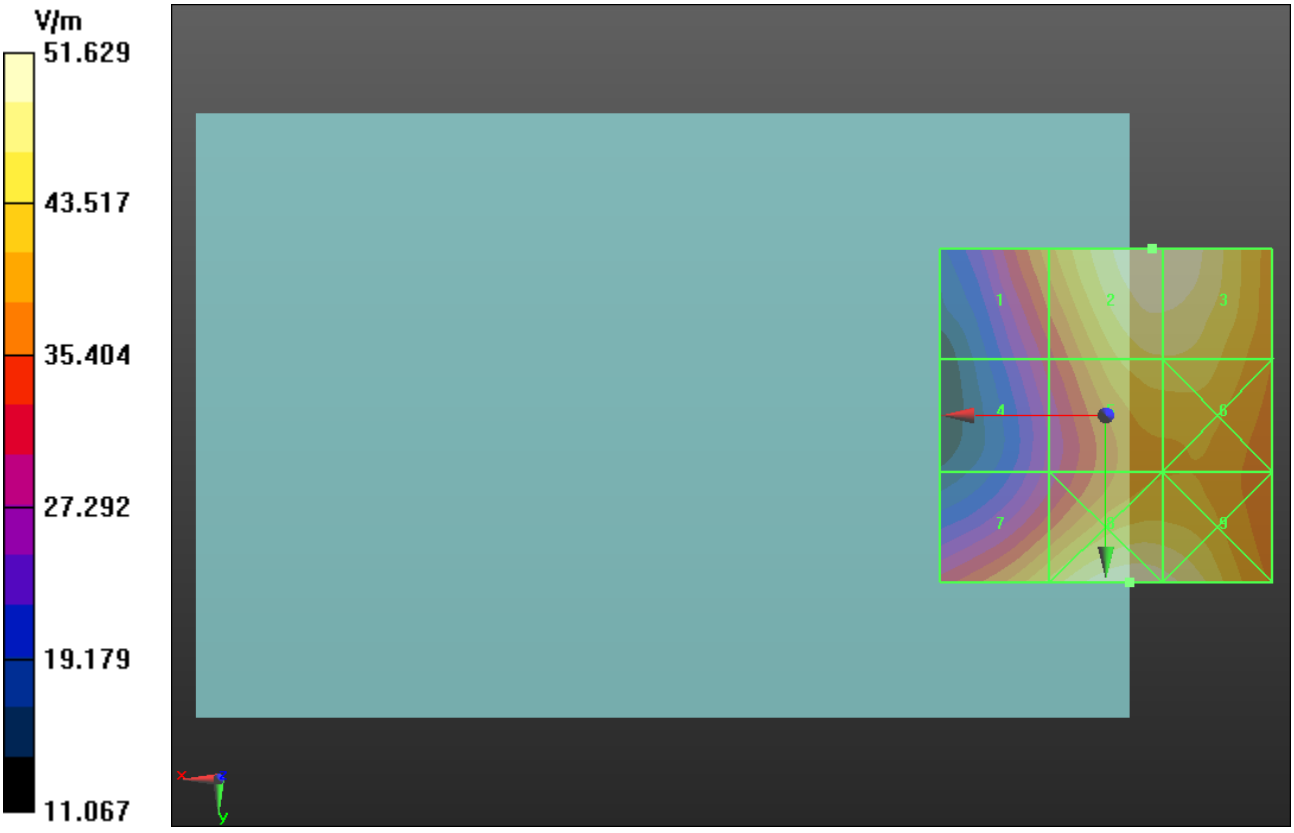
Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 1850.2 MHz; Duty Cycle: 1:8.00018
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 51.339 V/m
Probe Modulation Factor = 2.820
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 16.873 V/m; Power Drift = -0.03 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **39.958 M4**	Grid 2 **51.339 M3**	Grid 3 **51.235 M3**
Grid 4 **31.744 M4**	Grid 5 **45.961 M4**	Grid 6 **45.999 M4**
Grid 7 **44.302 M4**	Grid 8 **51.629 M3**	Grid 9 **50.261 M3**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

GSM 1900

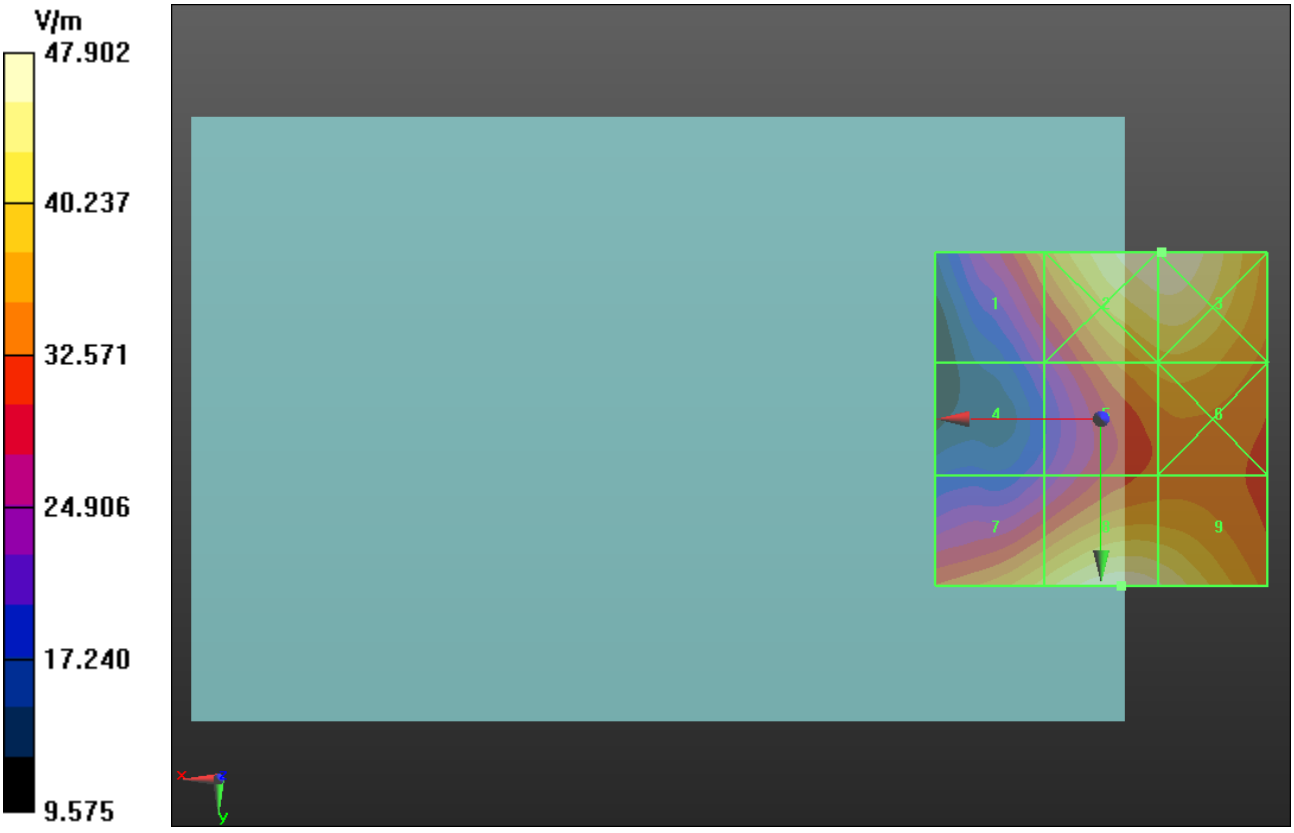
Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 1880 MHz; Duty Cycle: 1:8.00018
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 47.573 V/m
Probe Modulation Factor = 2.820
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 12.696 V/m; Power Drift = 0.03 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **36.516 M4**	Grid 2 **47.871 M3**	Grid 3 **47.902 M3**
Grid 4 **24.100 M4**	Grid 5 **38.953 M4**	Grid 6 **39.533 M4**
Grid 7 **41.645 M4**	Grid 8 **47.573 M3**	Grid 9 **45.930 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

GSM 1900

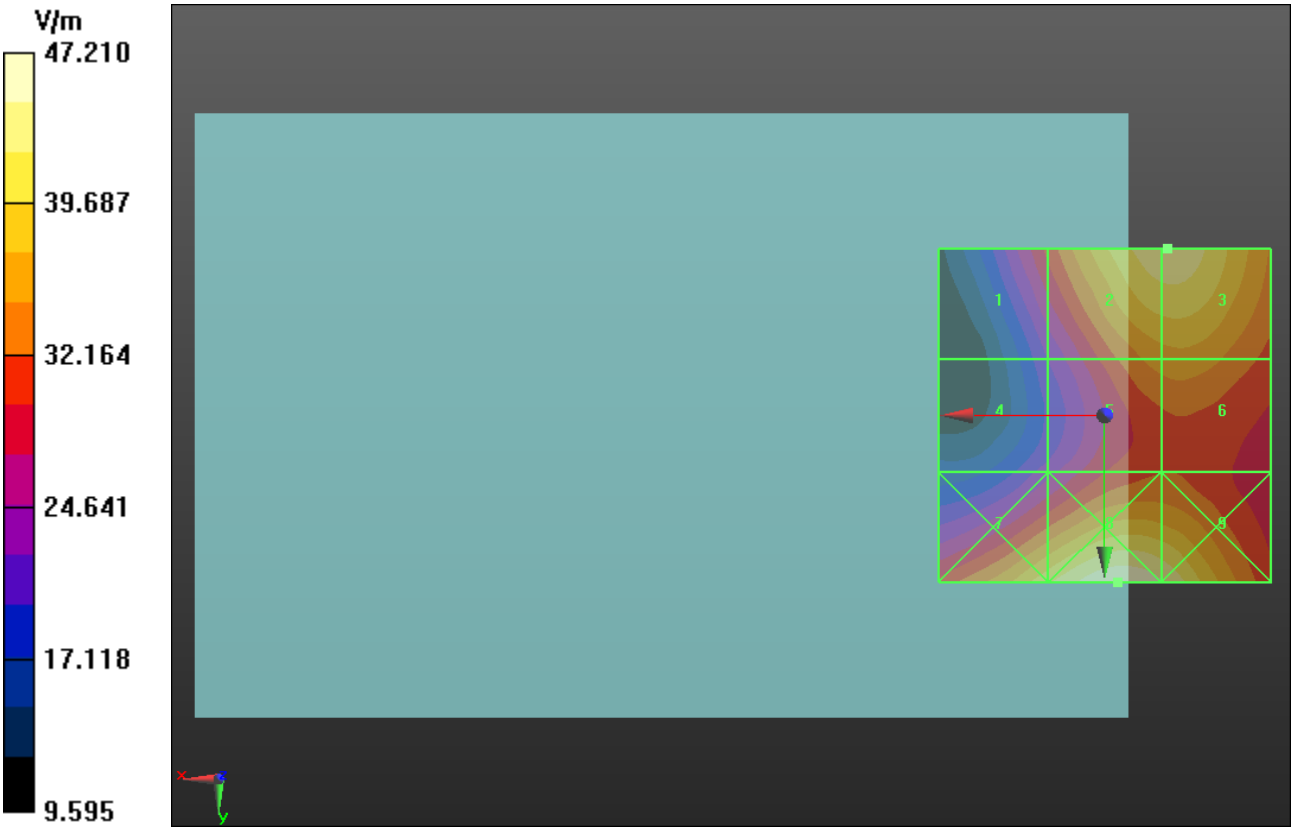
Communication System: GPRS-FDD (TDMA, GMSK, 1 slot); Frequency: 1909.8 MHz; Duty Cycle: 1:8.00018
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 43.999 V/m
Probe Modulation Factor = 2.820
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 12.313 V/m; Power Drift = -0.14 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **30.641 M4**	Grid 2 **43.921 M4**	Grid 3 **43.999 M4**
Grid 4 **23.797 M4**	Grid 5 **35.948 M4**	Grid 6 **36.363 M4**
Grid 7 **41.813 M4**	Grid 8 **47.210 M4**	Grid 9 **45.104 M4**



Date: 4/26/2012

Test Laboratory: UL CCS SAR Lab C

W-CDMA band II

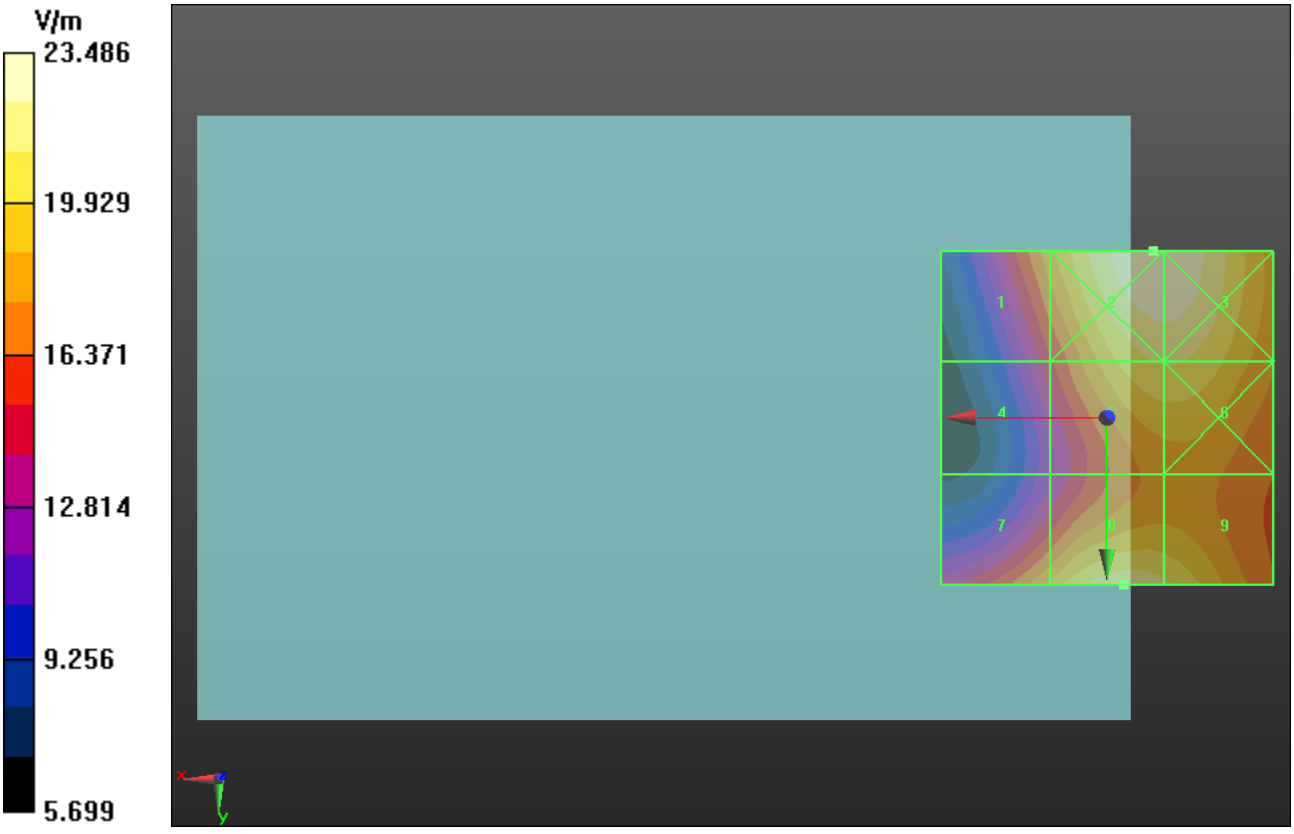
Communication System: UMTS-FDD (WCDMA); Frequency: 1852.4 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, R99 RMC 12.2kbps/L ch/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 22.089 V/m
Probe Modulation Factor = 0.960
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 22.952 V/m; Power Drift = 0.03 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **18.516 M4**	Grid 2 **23.486 M4**	Grid 3 **23.444 M4**
Grid 4 **15.076 M4**	Grid 5 **21.227 M4**	Grid 6 **21.234 M4**
Grid 7 **19.104 M4**	Grid 8 **22.089 M4**	Grid 9 **21.448 M4**



Date: 4/26/2012

Test Laboratory: UL CCS SAR Lab C

W-CDMA band II

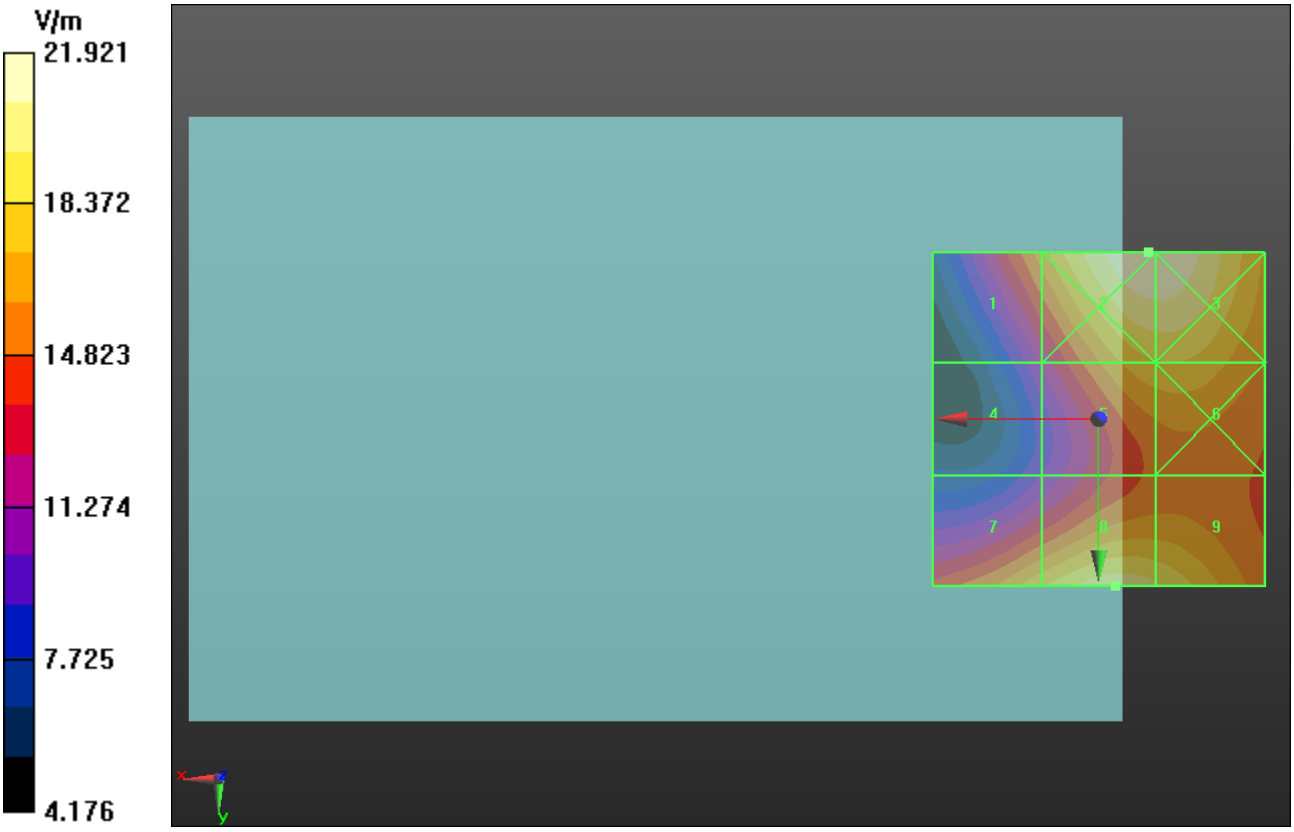
Communication System: UMTS-FDD (WCDMA); Frequency: 1880 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, R99 RMC 12.2kbps/M ch/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 20.448 V/m
Probe Modulation Factor = 0.960
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 17.953 V/m; Power Drift = -0.12 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **16.757 M4**	Grid 2 **21.921 M4**	Grid 3 **21.902 M4**
Grid 4 **11.685 M4**	Grid 5 **18.264 M4**	Grid 6 **18.380 M4**
Grid 7 **18.305 M4**	Grid 8 **20.448 M4**	Grid 9 **19.798 M4**



Date: 4/26/2012

Test Laboratory: UL CCS SAR Lab C

W-CDMA band II

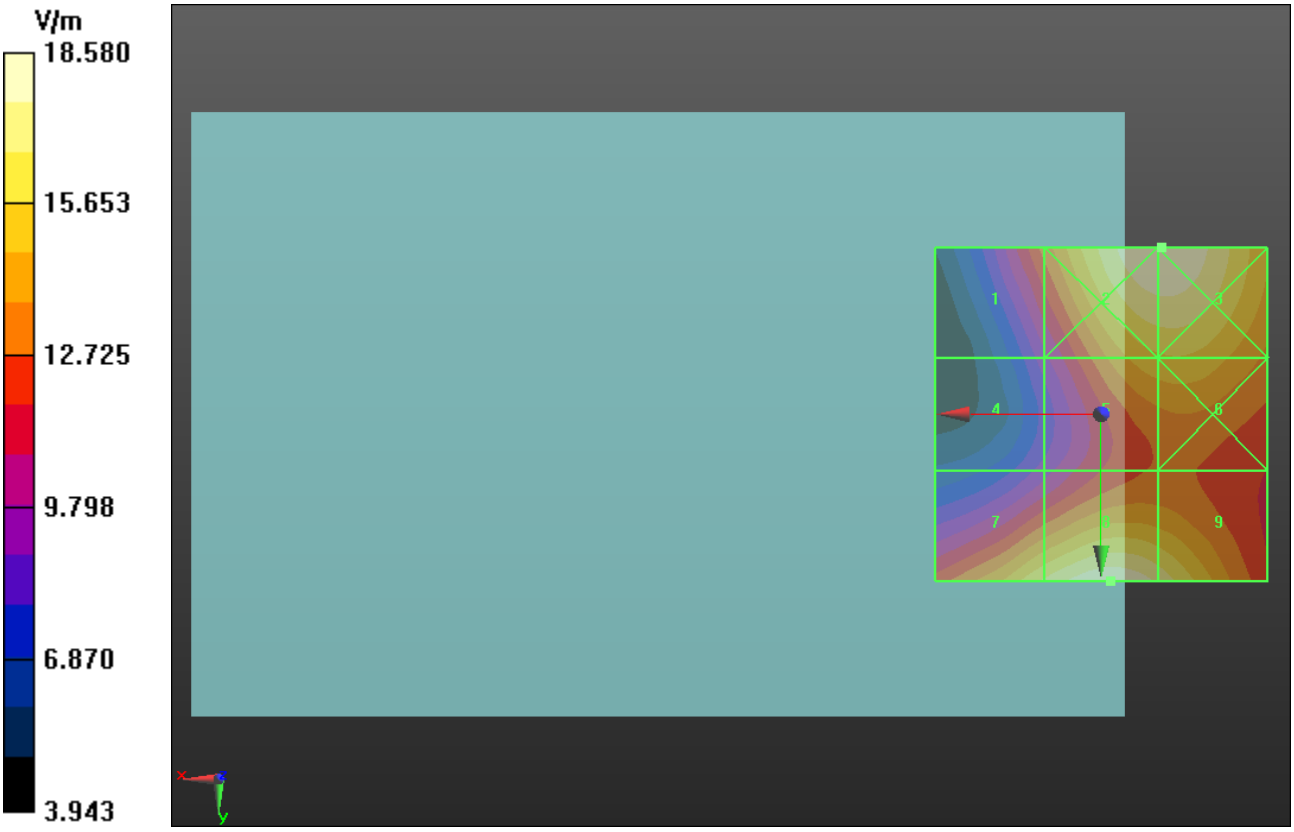
Communication System: UMTS-FDD (WCDMA); Frequency: 1907.6 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, R99 RMC 12.2kbps/H ch/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 18.523 V/m
Probe Modulation Factor = 0.960
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 15.061 V/m; Power Drift = 0.00022 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **13.194 M4**	Grid 2 **18.577 M4**	Grid 3 **18.580 M4**
Grid 4 **9.567 M4**	Grid 5 **15.487 M4**	Grid 6 **15.621 M4**
Grid 7 **16.847 M4**	Grid 8 **18.523 M4**	Grid 9 **17.427 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

CDMA BC0

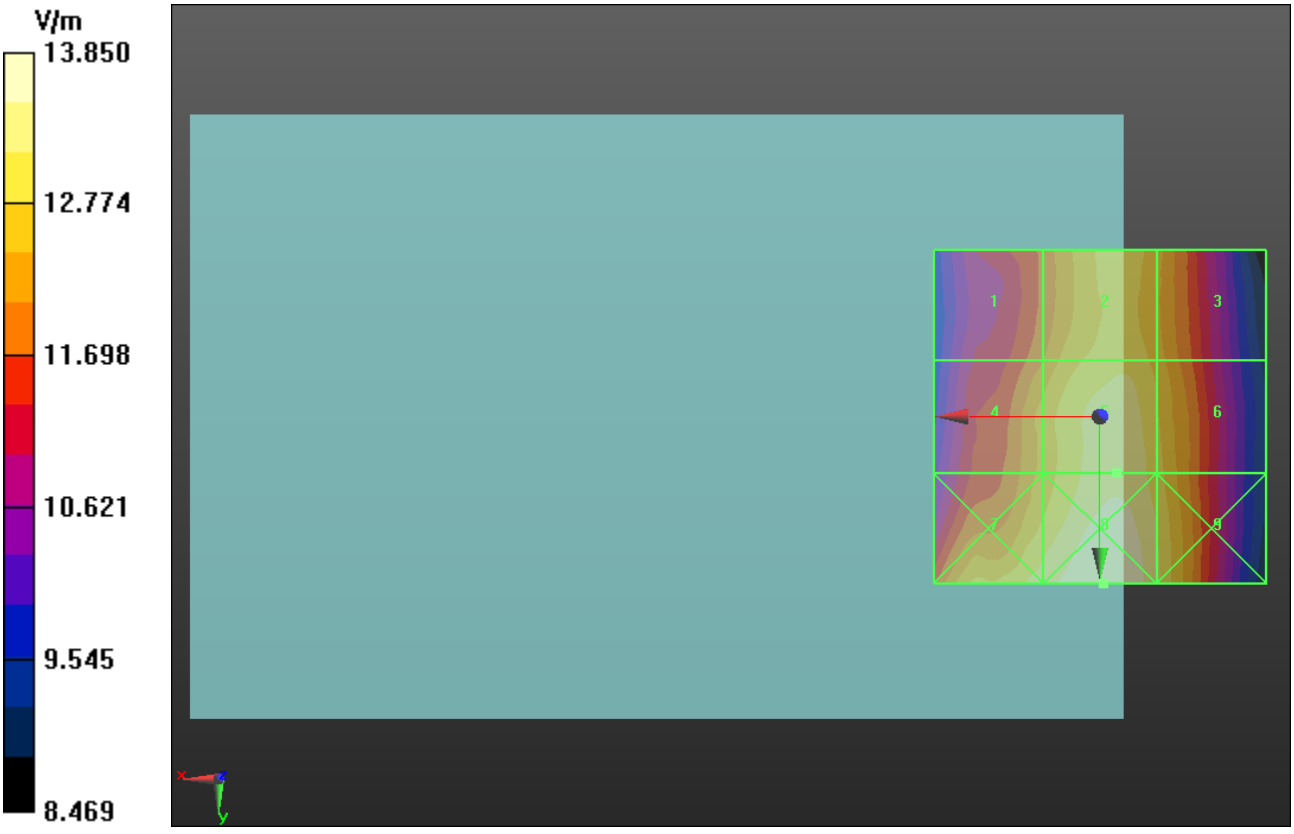
Communication System: CDMA2000; Frequency: 824.7 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, RC3 SO55/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 13.414 V/m
Probe Modulation Factor = 0.950
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 18.088 V/m; Power Drift = -0.33 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **12.066 M4**	Grid 2 **13.035 M4**	Grid 3 **12.623 M4**
Grid 4 **12.589 M4**	Grid 5 **13.414 M4**	Grid 6 **12.953 M4**
Grid 7 **13.339 M4**	Grid 8 **13.850 M4**	Grid 9 **13.239 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

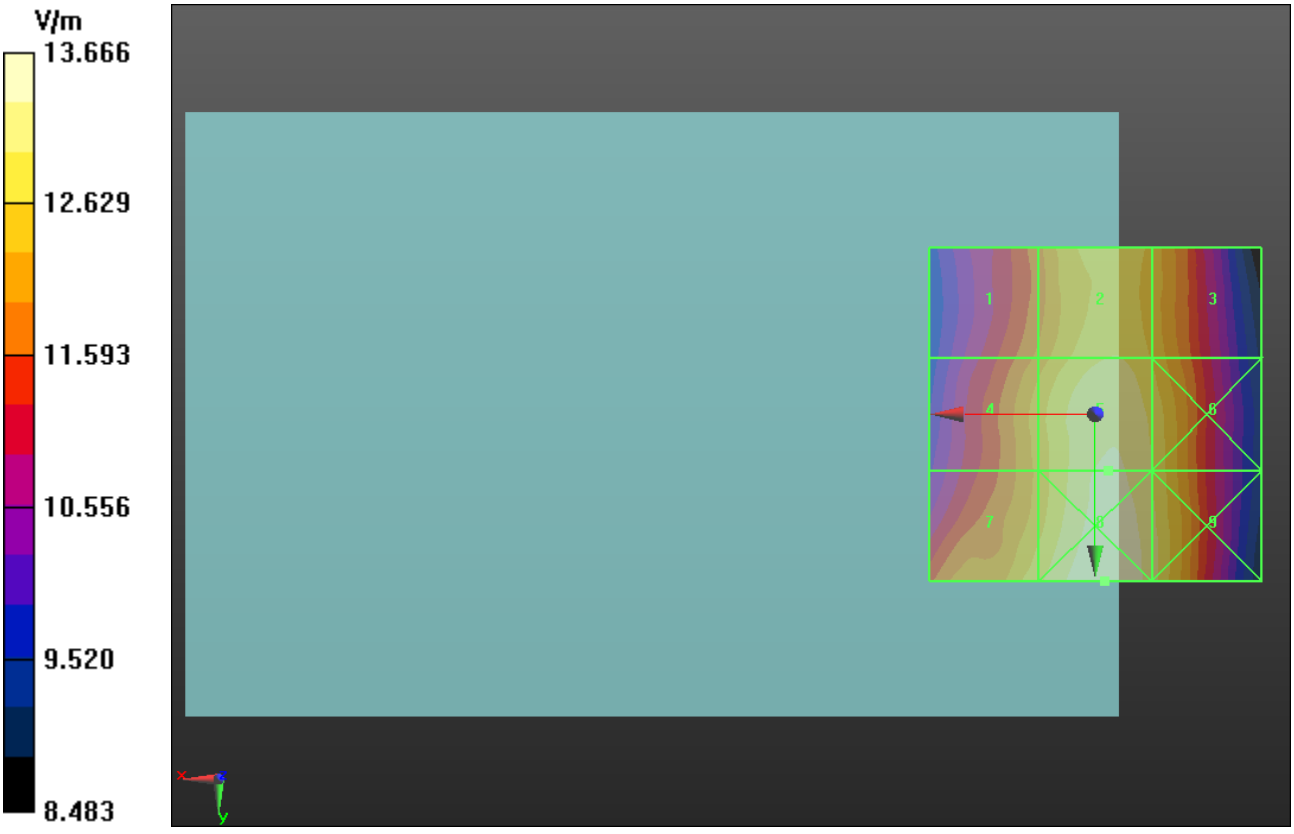
CDMA BC0

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, RC3 SO55/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 13.381 V/m
Probe Modulation Factor = 0.950
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 17.658 V/m; Power Drift = -0.22 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **12.066 M4**	Grid 2 **12.991 M4**	Grid 3 **12.600 M4**
Grid 4 **12.496 M4**	Grid 5 **13.381 M4**	Grid 6 **12.979 M4**
Grid 7 **12.906 M4**	Grid 8 **13.666 M4**	Grid 9 **13.149 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

CDMA BC0

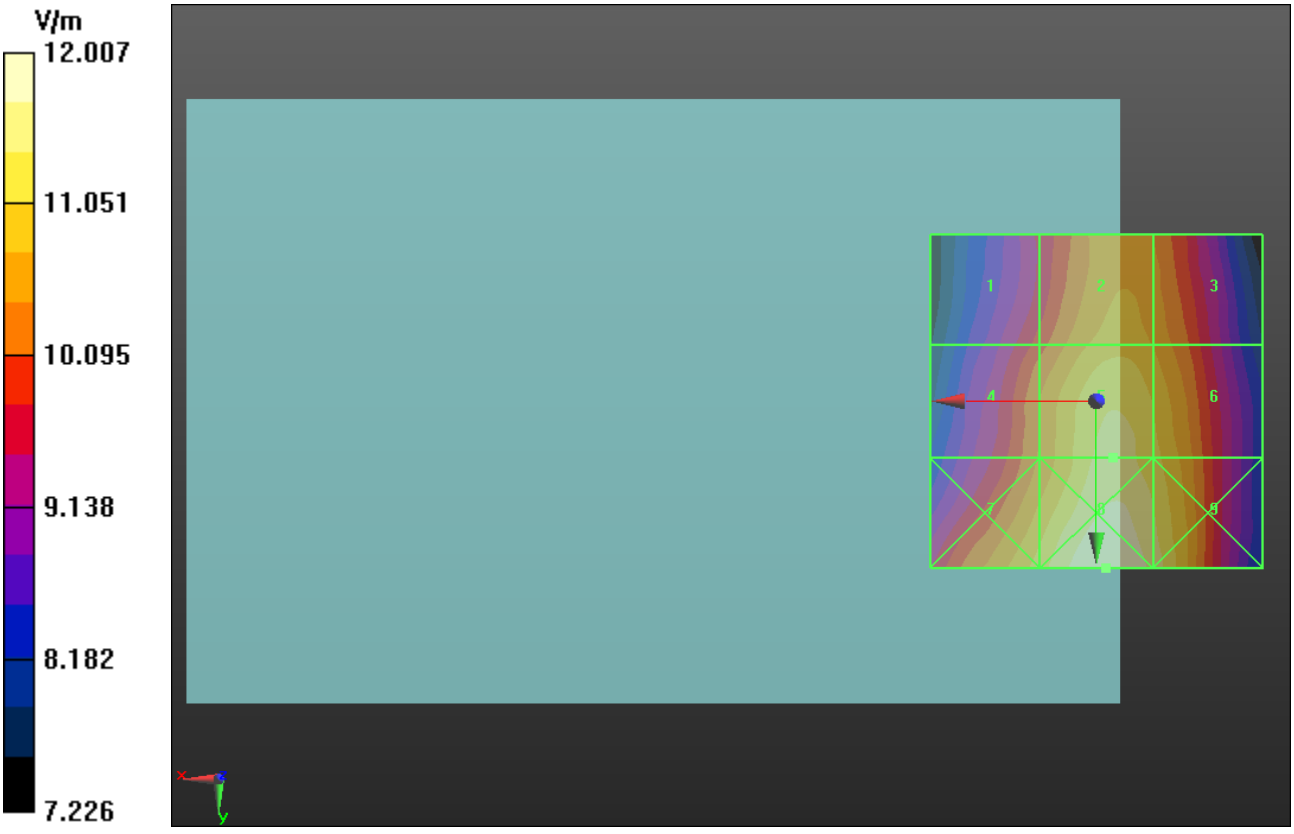
Communication System: CDMA2000; Frequency: 848.31 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, RC3 SO55/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 11.485 V/m
Probe Modulation Factor = 0.950
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 14.598 V/m; Power Drift = 0.11 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **9.958 M4**	Grid 2 **10.943 M4**	Grid 3 **10.717 M4**
Grid 4 **10.474 M4**	Grid 5 **11.485 M4**	Grid 6 **11.189 M4**
Grid 7 **11.223 M4**	Grid 8 **12.007 M4**	Grid 9 **11.600 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

CDMA BC1

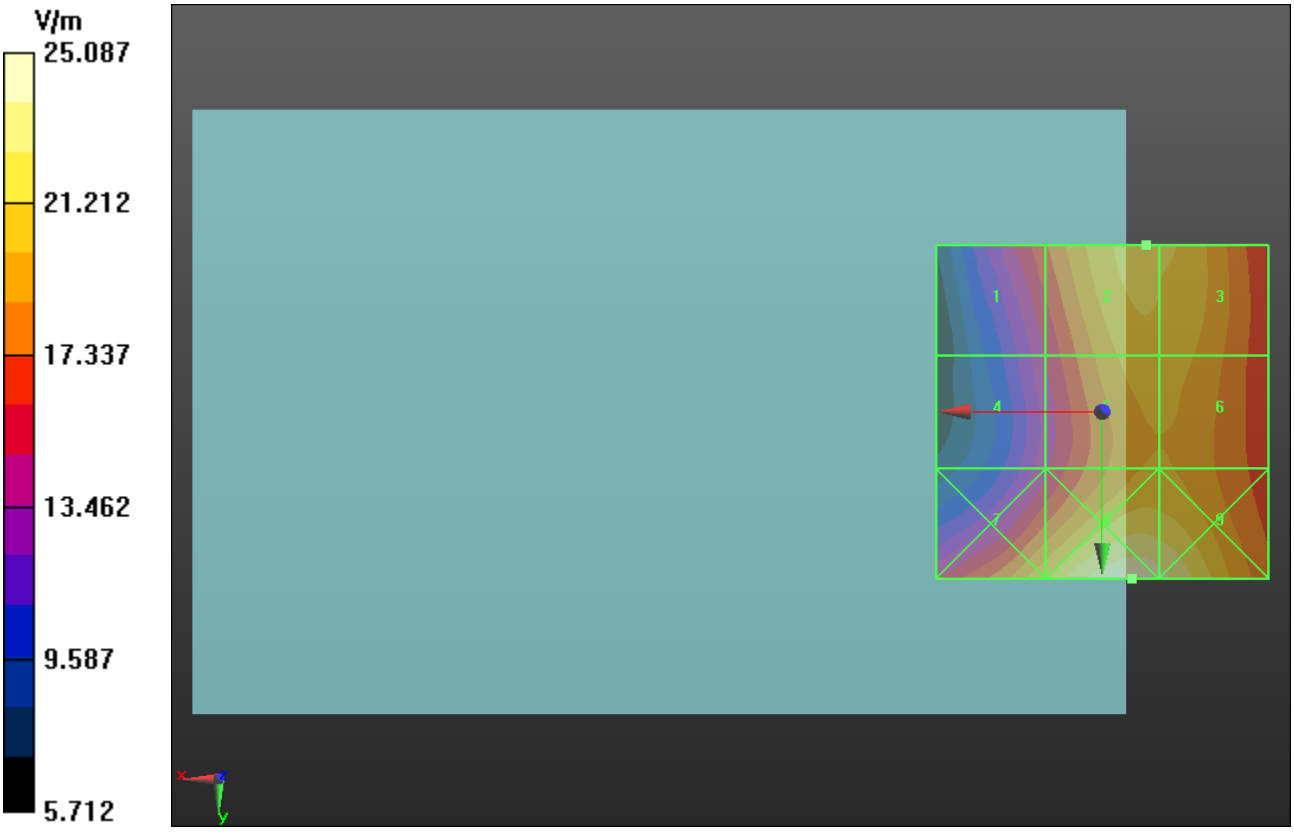
Communication System: CDMA2000; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, RC3 SO55/L ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 21.739 V/m
Probe Modulation Factor = 0.950
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 24.526 V/m; Power Drift = 0.12 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **17.305 M4**	Grid 2 **21.739 M4**	Grid 3 **21.625 M4**
Grid 4 **14.851 M4**	Grid 5 **20.667 M4**	Grid 6 **20.602 M4**
Grid 7 **21.383 M4**	Grid 8 **25.087 M4**	Grid 9 **24.392 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

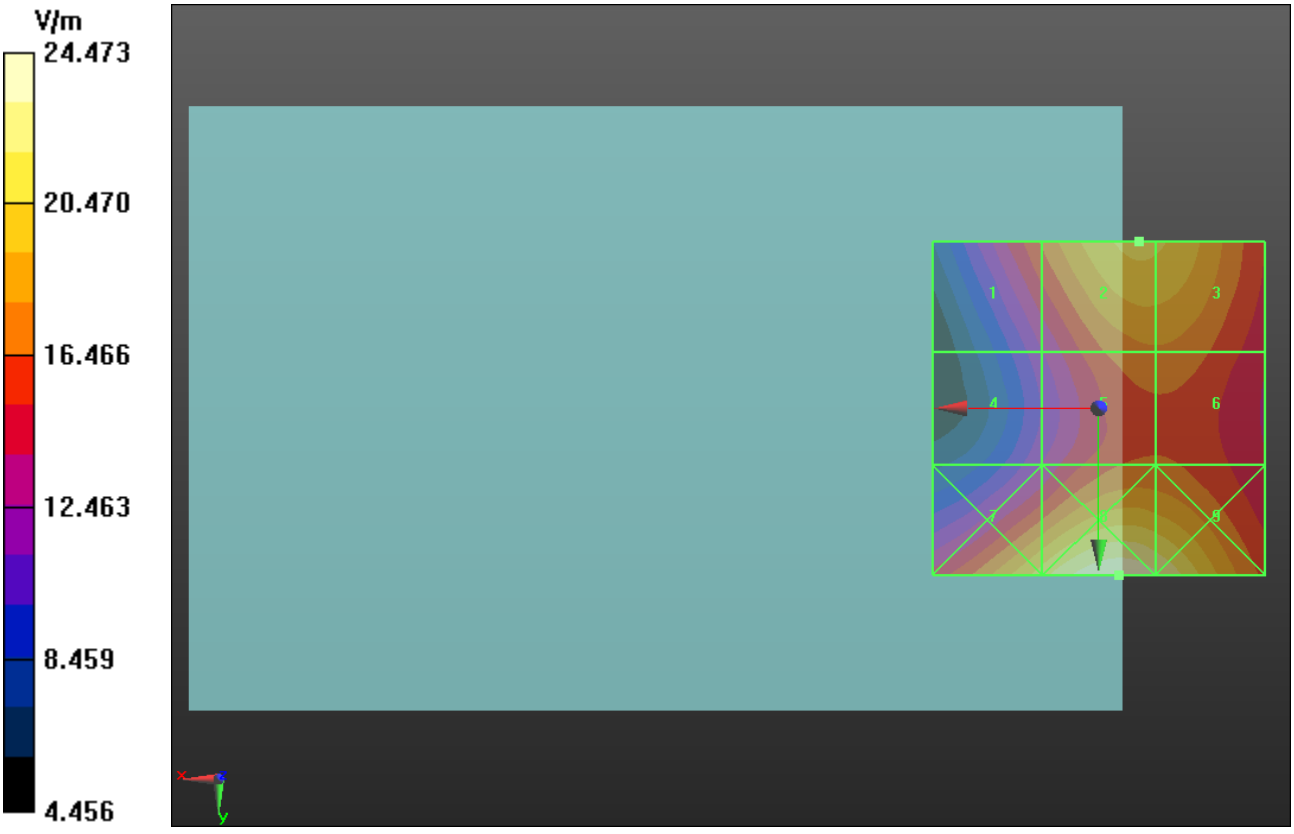
CDMA BC1

Communication System: CDMA2000; Frequency: 1880 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, RC3 SO55/M ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 20.892 V/m
Probe Modulation Factor = 0.950
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 19.350 V/m; Power Drift = 0.07 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **16.737 M4**	Grid 2 **20.892 M4**	Grid 3 **20.735 M4**
Grid 4 **12.624 M4**	Grid 5 **17.621 M4**	Grid 6 **17.621 M4**
Grid 7 **21.304 M4**	Grid 8 **24.473 M4**	Grid 9 **23.473 M4**



Date: 4/25/2012

Test Laboratory: UL CCS SAR Lab C

CDMA BC1

Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1
Phantom section: RF Section
DASY4 Configuration:
- Probe: ER3DV6 - SN2339; ConvF(1, 1, 1); Calibrated: 1/20/2012
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB
- Measurement SW: DASY52, Version 52.8 (0);SEMCAD X Version 14.4.5 (3634)

E-Field, RC3 SO55/H ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 18.769 V/m
Probe Modulation Factor = 0.950
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 17.183 V/m; Power Drift = 0.04 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **14.039 M4**	Grid 2 **18.769 M4**	Grid 3 **18.738 M4**
Grid 4 **11.186 M4**	Grid 5 **16.265 M4**	Grid 6 **16.284 M4**
Grid 7 **18.815 M4**	Grid 8 **21.354 M4**	Grid 9 **20.518 M4**