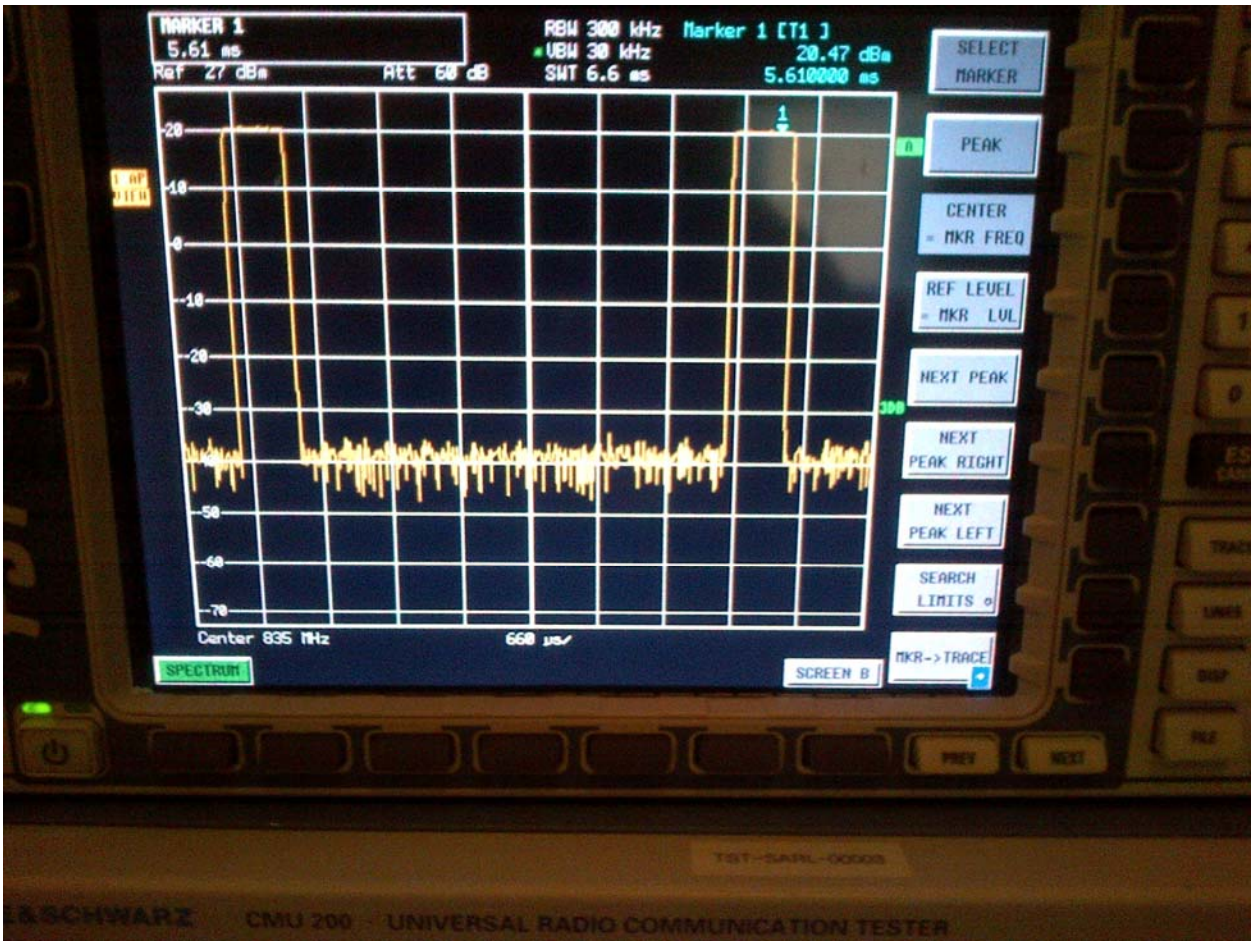
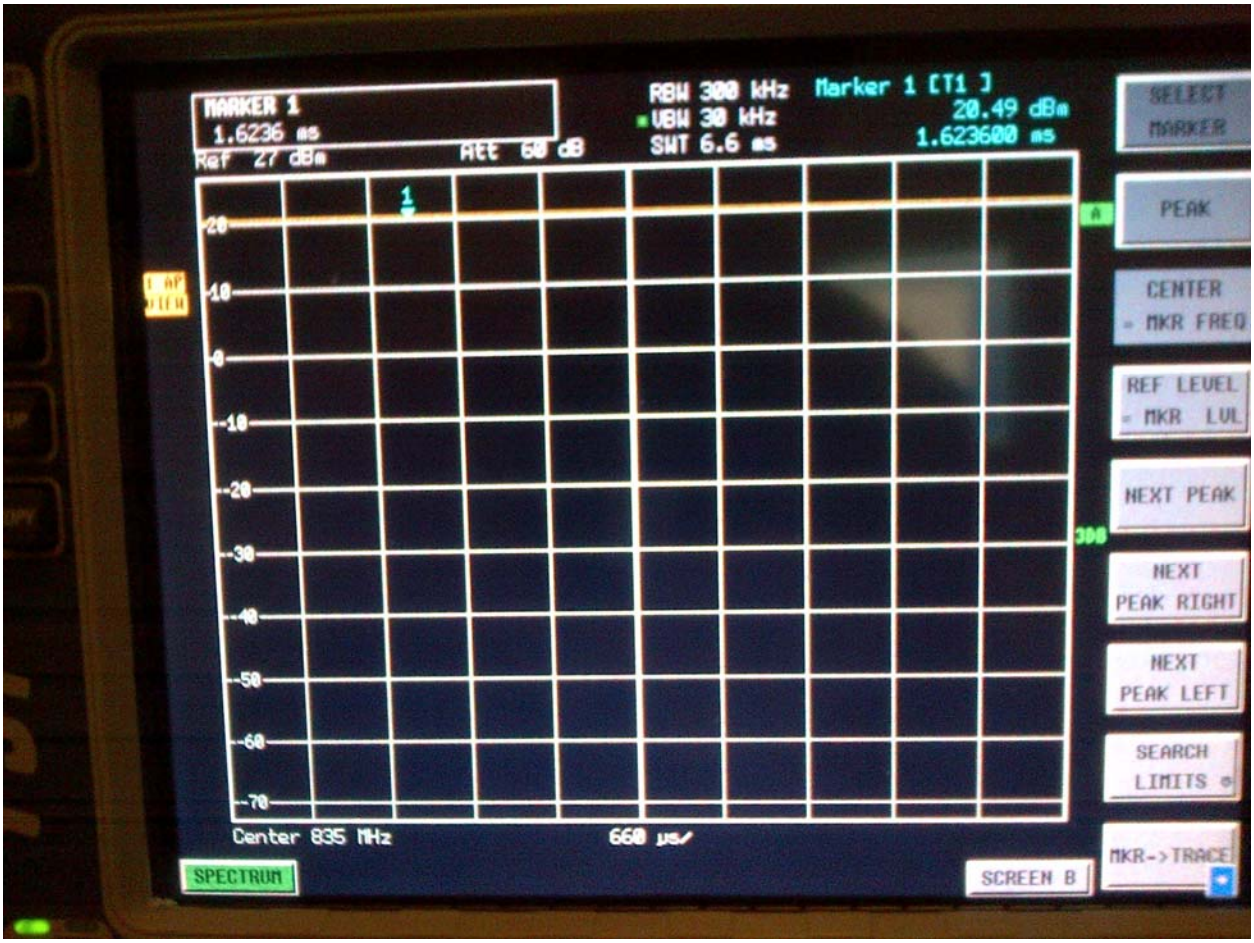
Annex A: Measurement data and plots

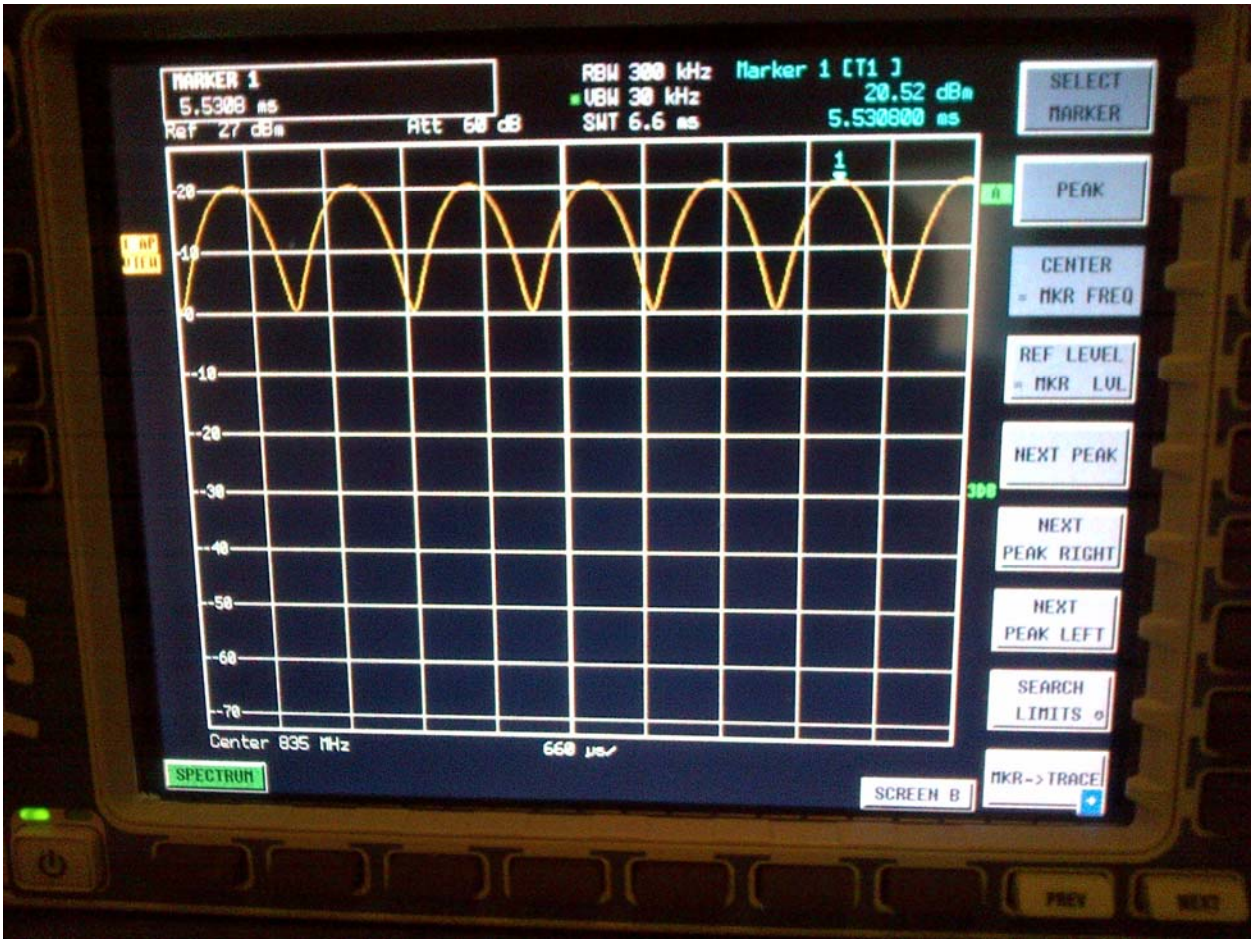
A.1 Spectrum analyser plots: GSM/UMTS, CW, 80%AM, signals



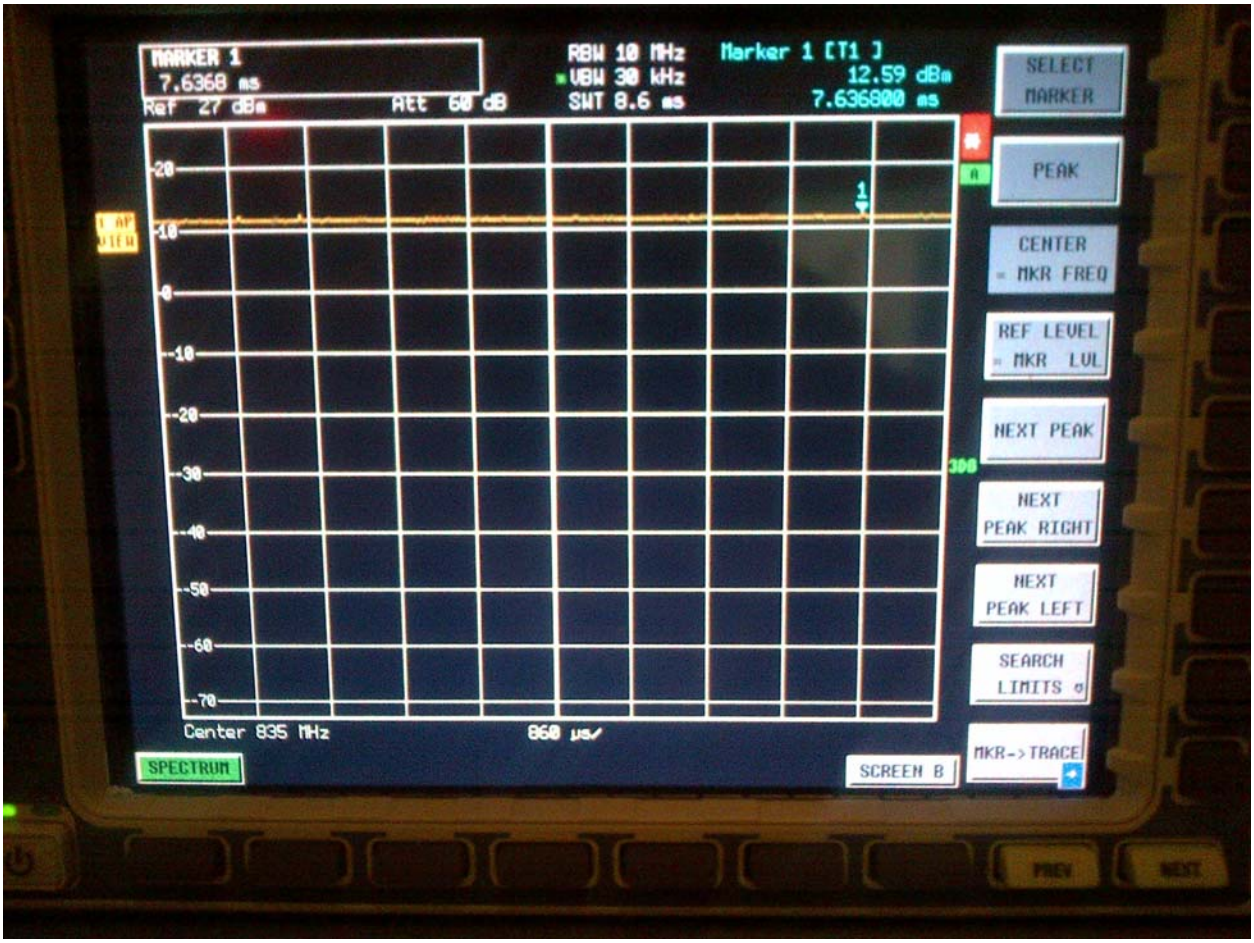
GSM 835 MHz



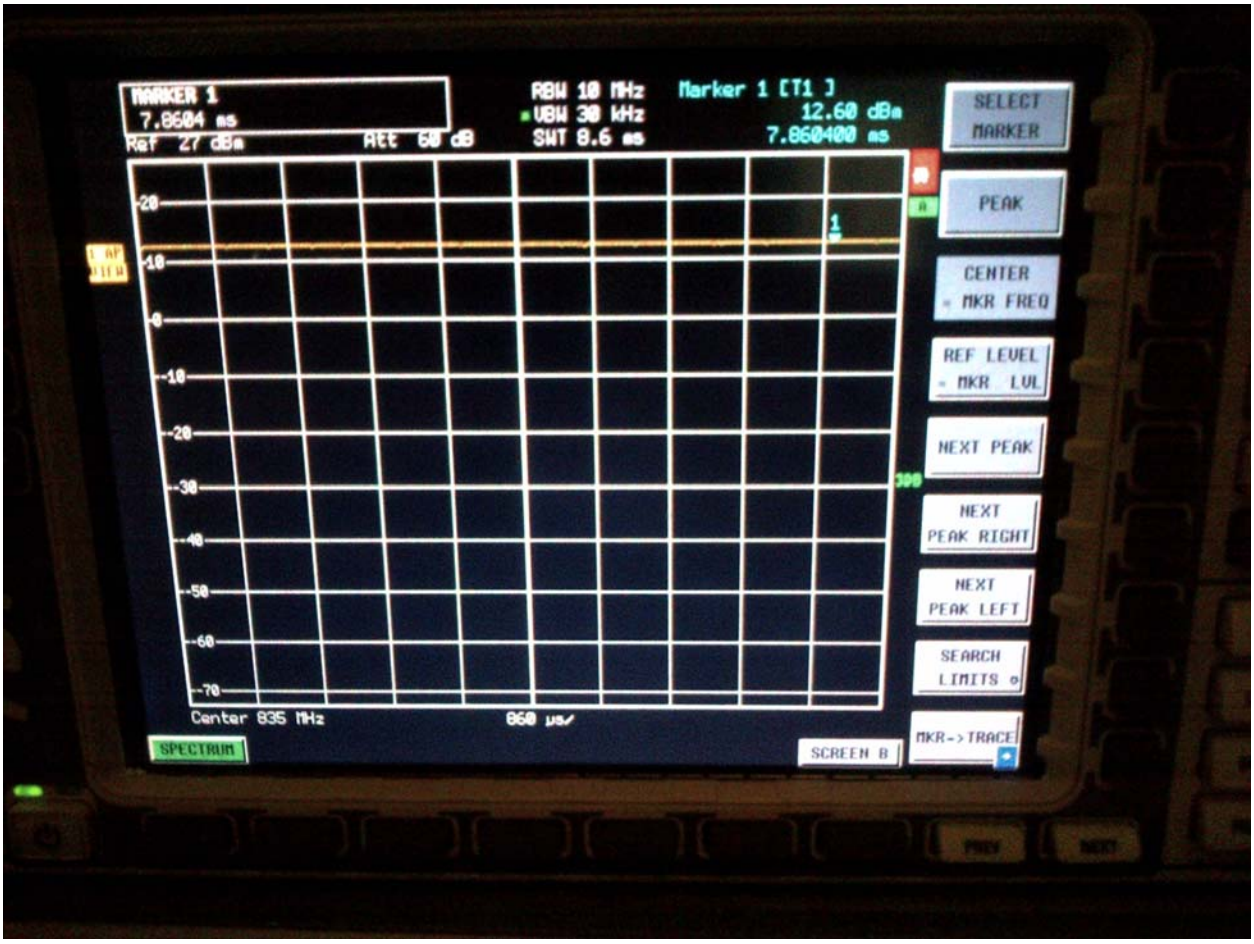
CW 835 MHz



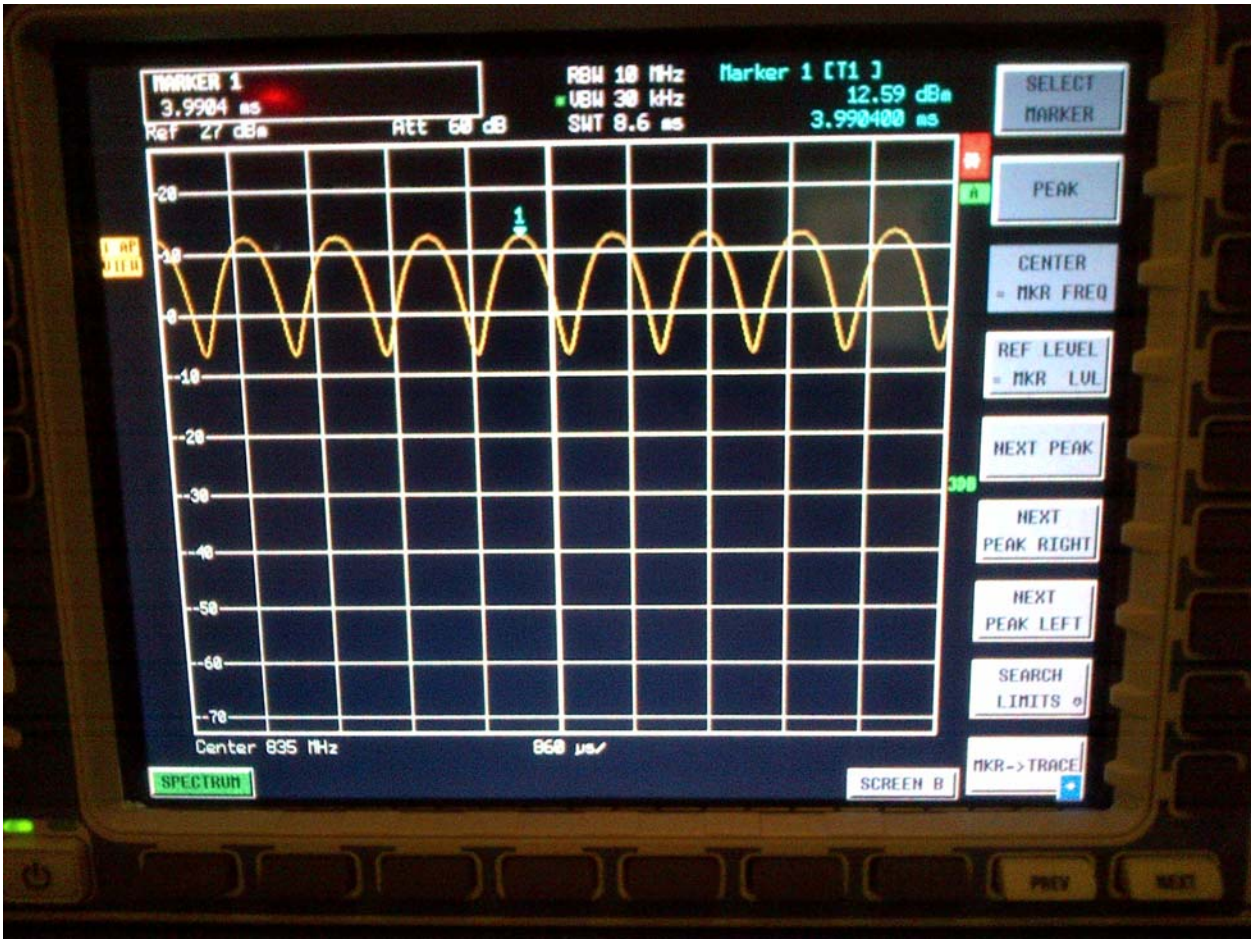
AM 80% 835 MHz



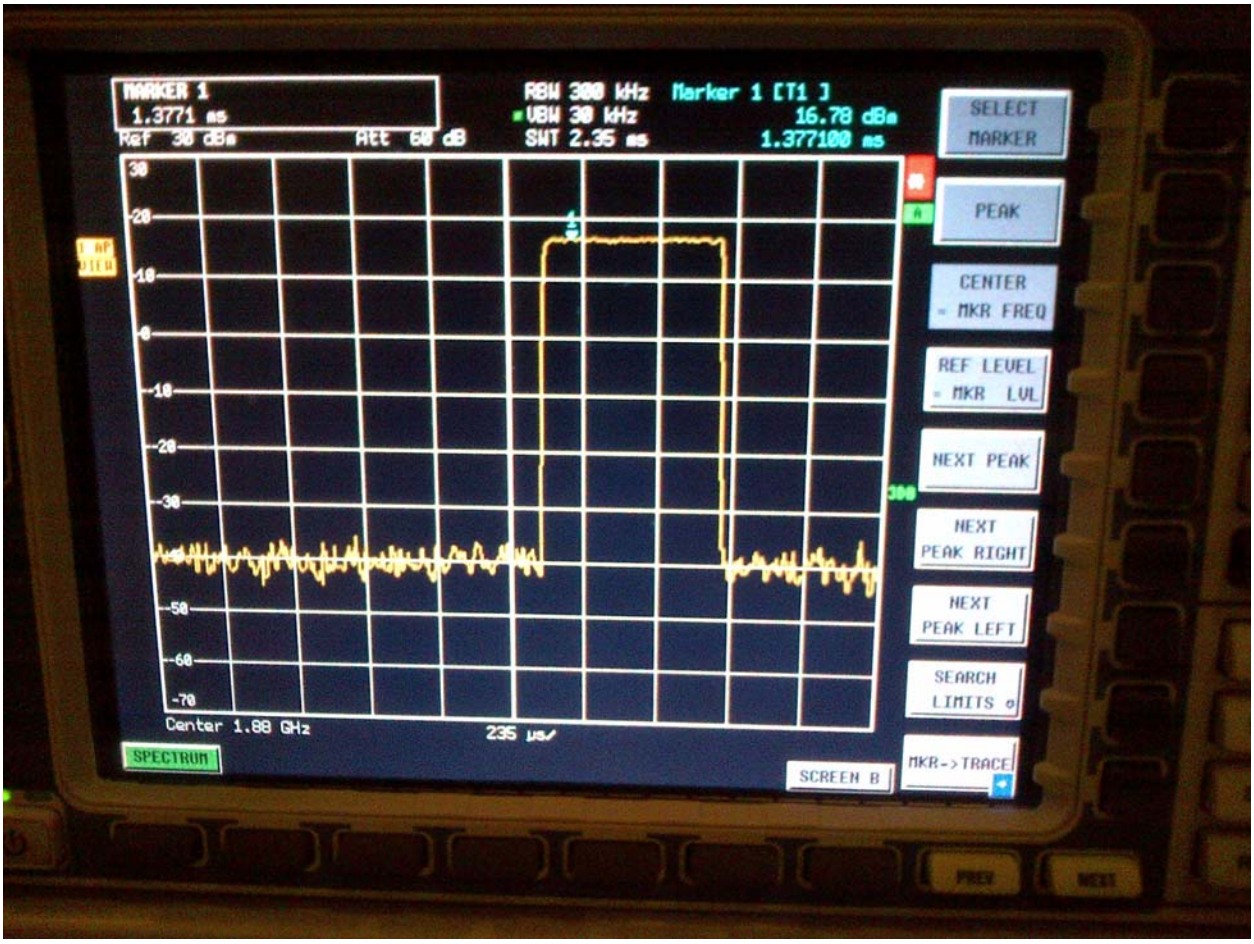
UMTS 835 MHz



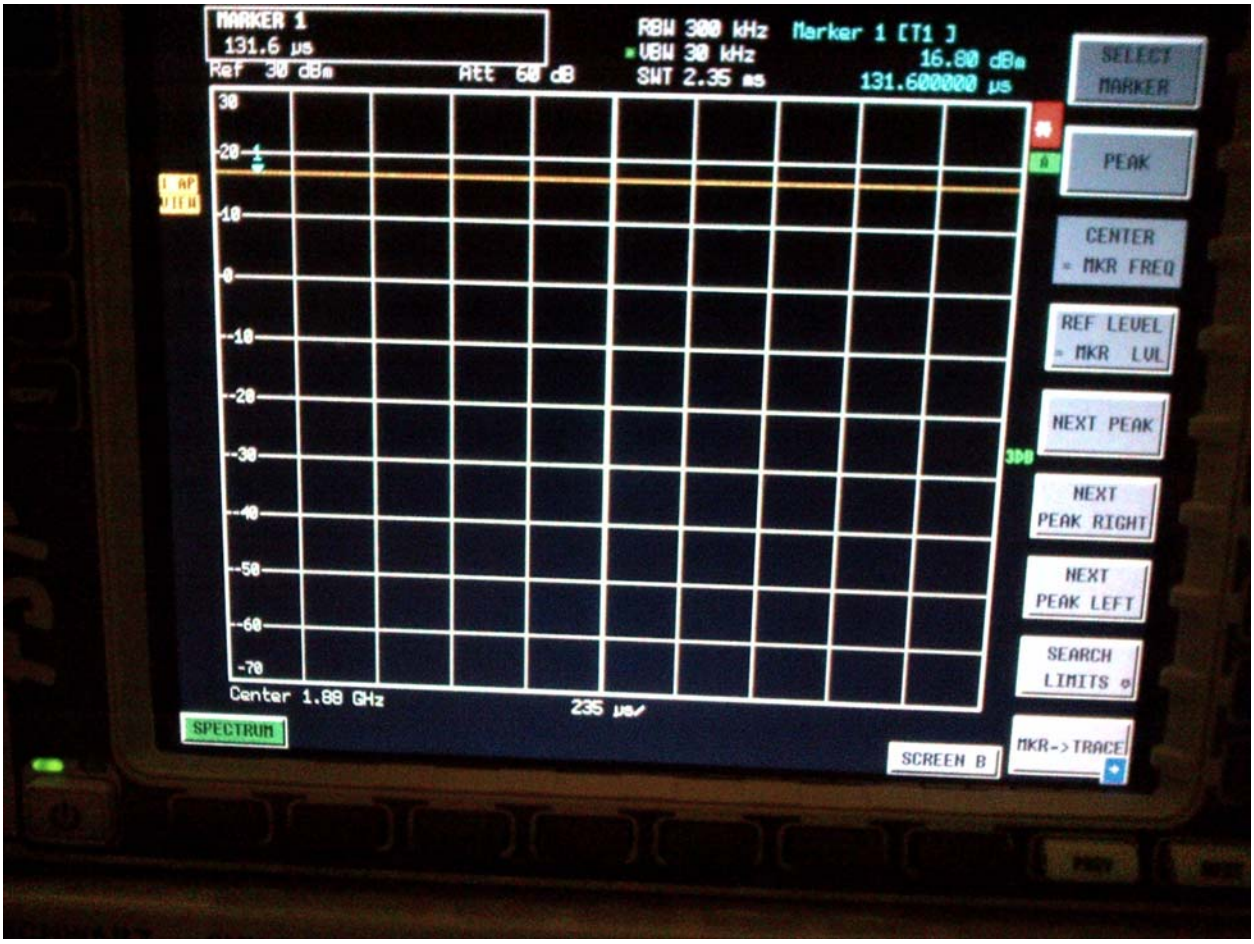
CW 835 MHz



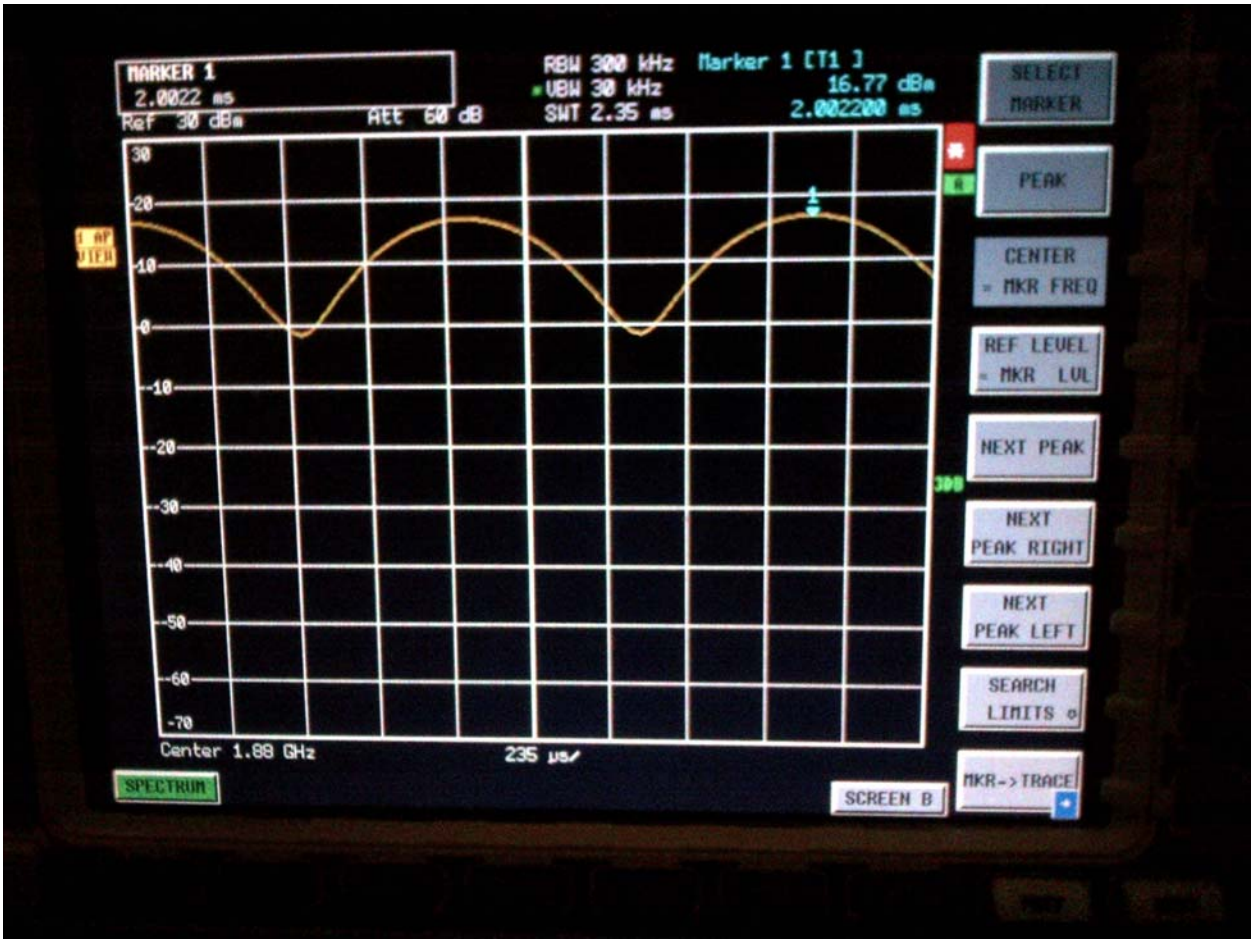
AM 80% 835 MHz



GSM 1880 MHz

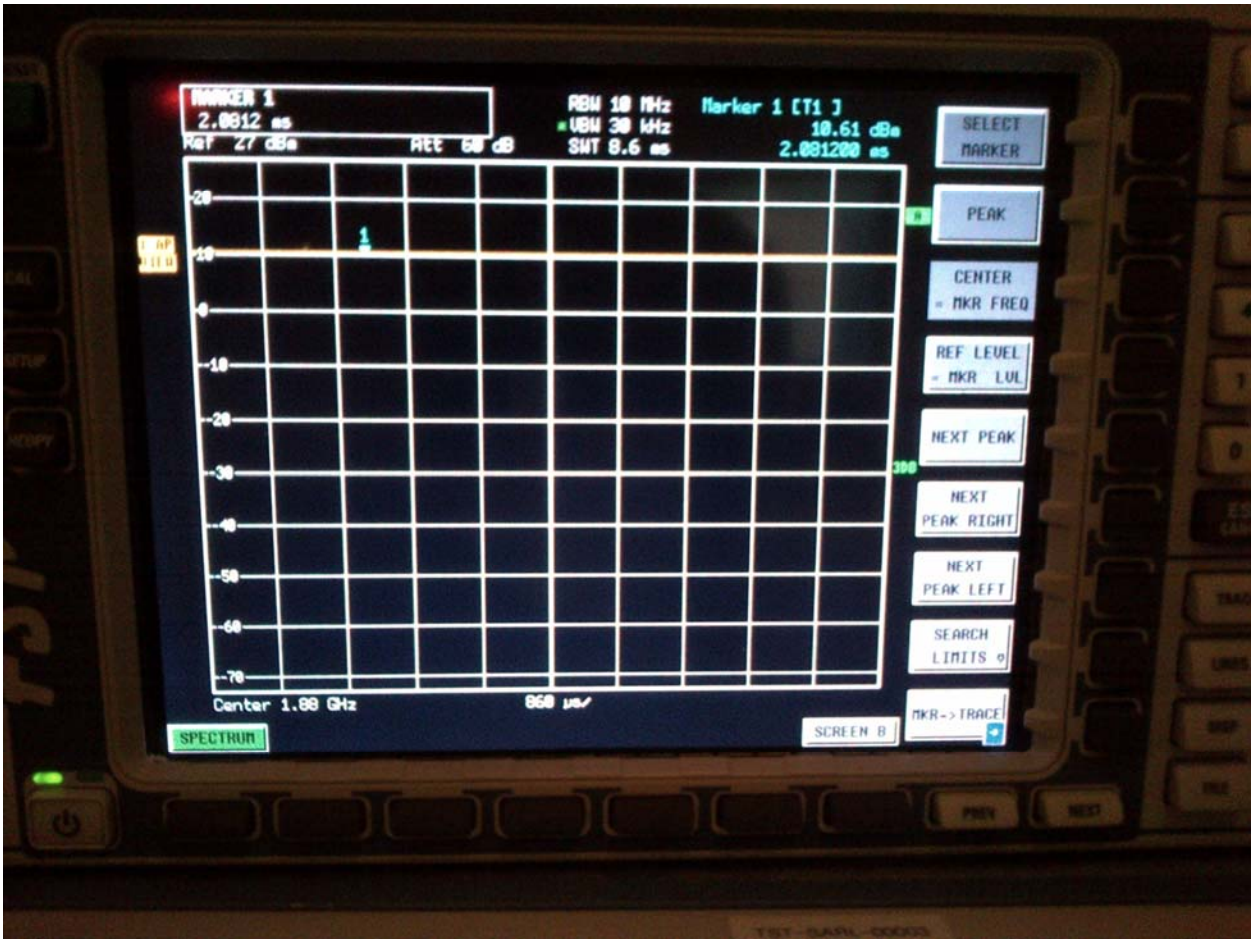


CW 1880 MHz

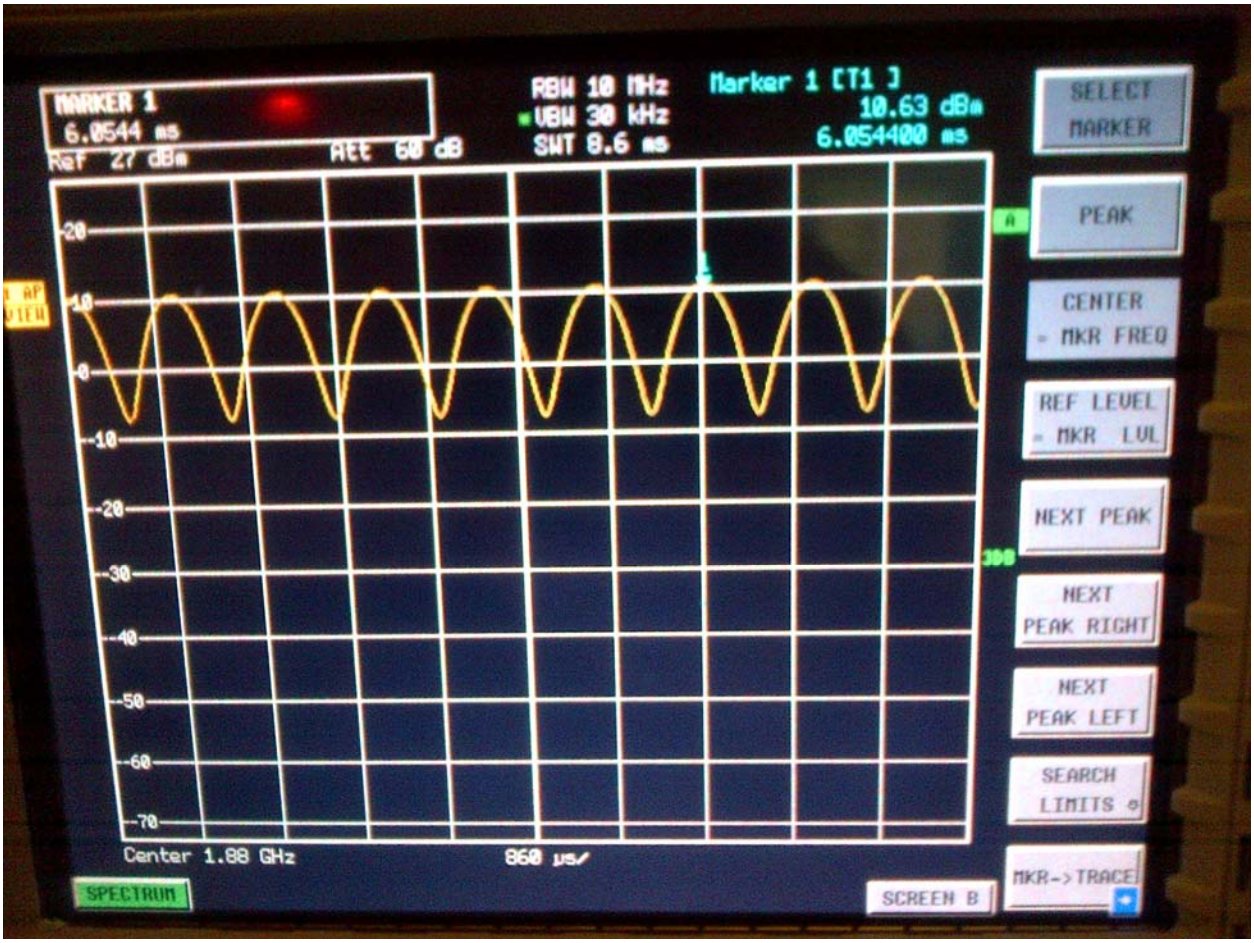


AM 80 % 1880 MHz

UMTS 1880 MHz



CW 1880 MHz



AM 80 % 1880 MHz

A.2 Dipole validation and probe modulation factor plots

Date/Time: 4/24/2013 3:48:05 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_835 MHz_04_24_13

DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1011

Communication System: CW; Frequency: 835 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

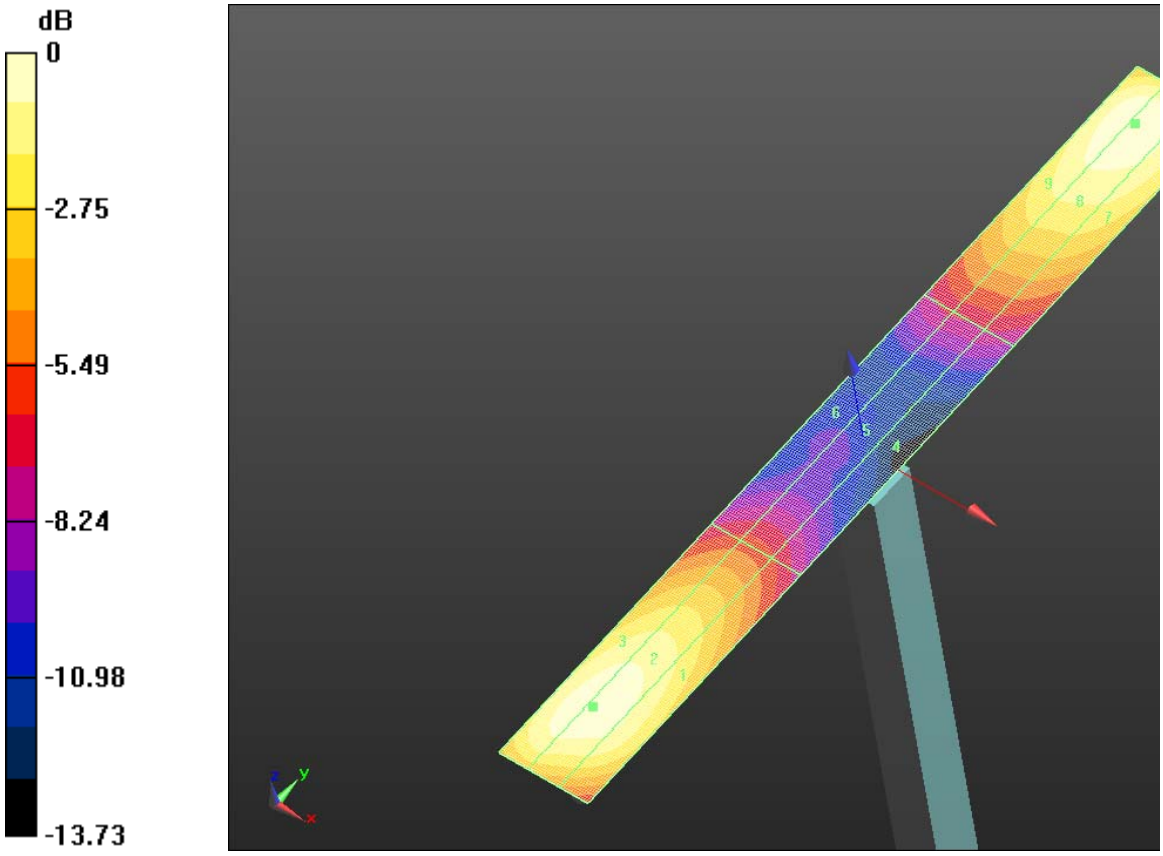
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 106.1 V/m; Power Drift = -0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 168.2 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **153.8 V/m**	Grid 2 **M4** **164.4 V/m**	Grid 3 **M4** **164.1 V/m**
Grid 4 **M4** **81.96 V/m**	Grid 5 **M4** **85.57 V/m**	Grid 6 **M4** **84.27 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

154.3 V/m	**168.2 V/m**	**167.7 V/m**

Cursor:
Total = 168.2 V/m
E Category: M4
Location: -2.5, 80, 4.7 mm



0 dB = 168.2 V/m = 44.52 dBV/m

Date/Time: 6/28/2012 1:13:34 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM835 MHz_06_28_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: GSM 835_PMF, Communication System: CW, Communication System: AM 80%; Frequency: 835 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - GSM 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 34.76 V/m; Power Drift = -0.00 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 54.25 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **49.26 V/m**	Grid 2 **M4** **51.48 V/m**	Grid 3 **M4** **51.48 V/m**
Grid 4 **M4** **27.95 V/m**	Grid 5 **M4** **28.56 V/m**	Grid 6 **M4** **28.13 V/m**
Grid 7 **M4** **51.48 V/m**	Grid 8 **M4** **54.25 V/m**	Grid 9 **M4** **53.95 V/m**

Cursor:
Total = 54.247 V/m
E Category: M4
Location: -2.5, 80.5, 4.7 mm

Dipole E-Field measurement/E Scan - CW 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 103.0 V/m; Power Drift = -0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 162.8 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **148.5 V/m**	Grid 2 **M4** **160.5 V/m**	Grid 3 **M4** **160.4 V/m**
Grid 4 **M4** **82.74 V/m**	Grid 5 **M4** **86.24 V/m**	Grid 6 **M4** **84.62 V/m**
Grid 7 **M4** **158.1 V/m**	Grid 8 **M4** **162.8 V/m**	Grid 9 **M4** **155.2 V/m**

Cursor:
Total = 162.8 V/m
E Category: M4
Location: 0.5, 79.5, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

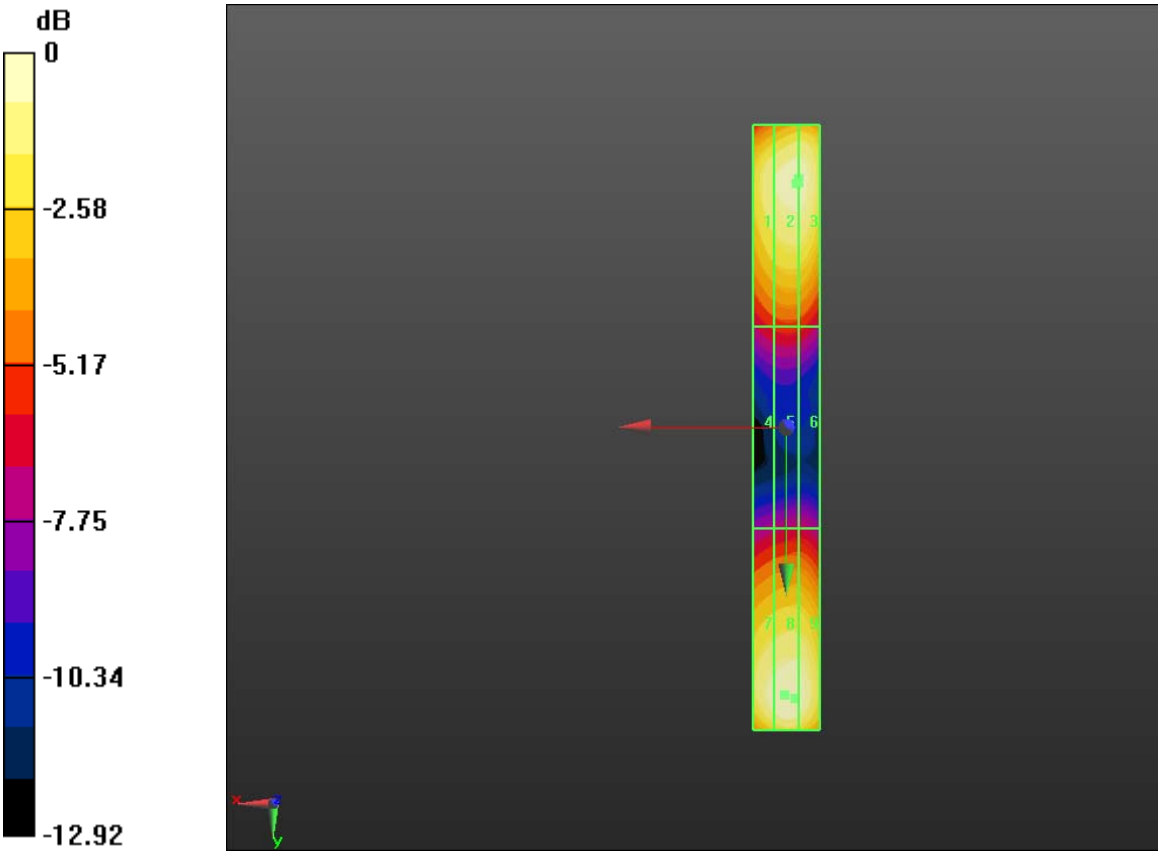
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 64.73 V/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 102.0 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **93.30 V/m**	Grid 2 **M4** **100.3 V/m**	Grid 3 **M4** **100.3 V/m**
Grid 4 **M4**	Grid 5 **M4**	Grid 6 **M4**

52.75 V/m	**54.62 V/m**	**53.83 V/m**
Grid 7 **M4** **99.38 V/m**	Grid 8 **M4** **102.0 V/m**	Grid 9 **M4** **97.92 V/m**

Cursor:
Total = 102.0 V/m
E Category: M4
Location: 0.5, 79.5, 4.7 mm



0 dB = 54.250V/m = 34.69 dB V/m

Date/Time: 2/17/2012 12:24:15 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS835 MHz_02_17_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: WCDMA FDD V, Communication System: CW, Communication System: AM 80%; Frequency: 835 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - UMTS 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 41.08 V/m; Power Drift = 0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 64.41 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **53.11 V/m**	Grid 2 **M4** **55.59 V/m**	Grid 3 **M4** **55.40 V/m**
Grid 4 **M4** **29.72 V/m**	Grid 5 **M4** **30.66 V/m**	Grid 6 **M4** **29.79 V/m**
Grid 7 **M4** **61.55 V/m**	Grid 8 **M4** **64.41 V/m**	Grid 9 **M4** **63.22 V/m**

Cursor:
Total = 64.412 V/m
E Category: M4
Location: -0.5, 79, 4.7 mm

Dipole E-Field measurement/E Scan - CW 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 43.11 V/m; Power Drift = -0.14 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 68.64 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **58.55 V/m**	Grid 2 **M4** **59.20 V/m**	Grid 3 **M4** **57.13 V/m**
Grid 4 **M4** **32.35 V/m**	Grid 5 **M4** **32.63 V/m**	Grid 6 **M4** **31.24 V/m**
Grid 7 **M4** **61.85 V/m**	Grid 8 **M4** **68.64 V/m**	Grid 9 **M4** **68.56 V/m**

Cursor:
Total = 68.635 V/m
E Category: M4
Location: -3, 79.5, 4.7 mm

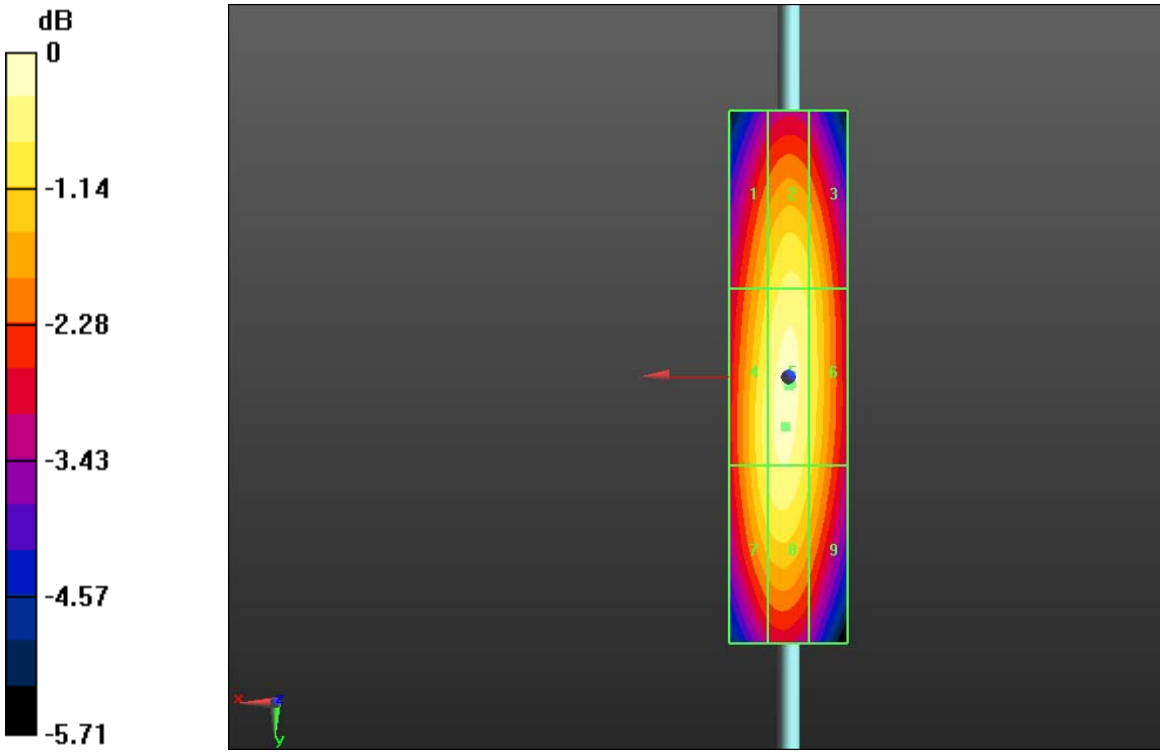
Dipole E-Field measurement/E Scan - AM80%_ 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 28.41 V/m; Power Drift = 0.09 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 45.21 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **38.28 V/m**	Grid 2 **M4** **38.73 V/m**	Grid 3 **M4** **37.25 V/m**
Grid 4 **M4** **21.72 V/m**	Grid 5 **M4** **21.89 V/m**	Grid 6 **M4** **20.80 V/m**
Grid 7 **M4** **40.90 V/m**	Grid 8 **M4** **45.21 V/m**	Grid 9 **M4** **45.16 V/m**

Cursor:
Total = 45.209 V/m
E Category: M4
Location: -3, 79.5, 4.7 mm



0 dB = 0.180A/m = -14.89 dB A/m

Date/Time: 4/24/2013 3:08:00 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_04_24_13

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: CW; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

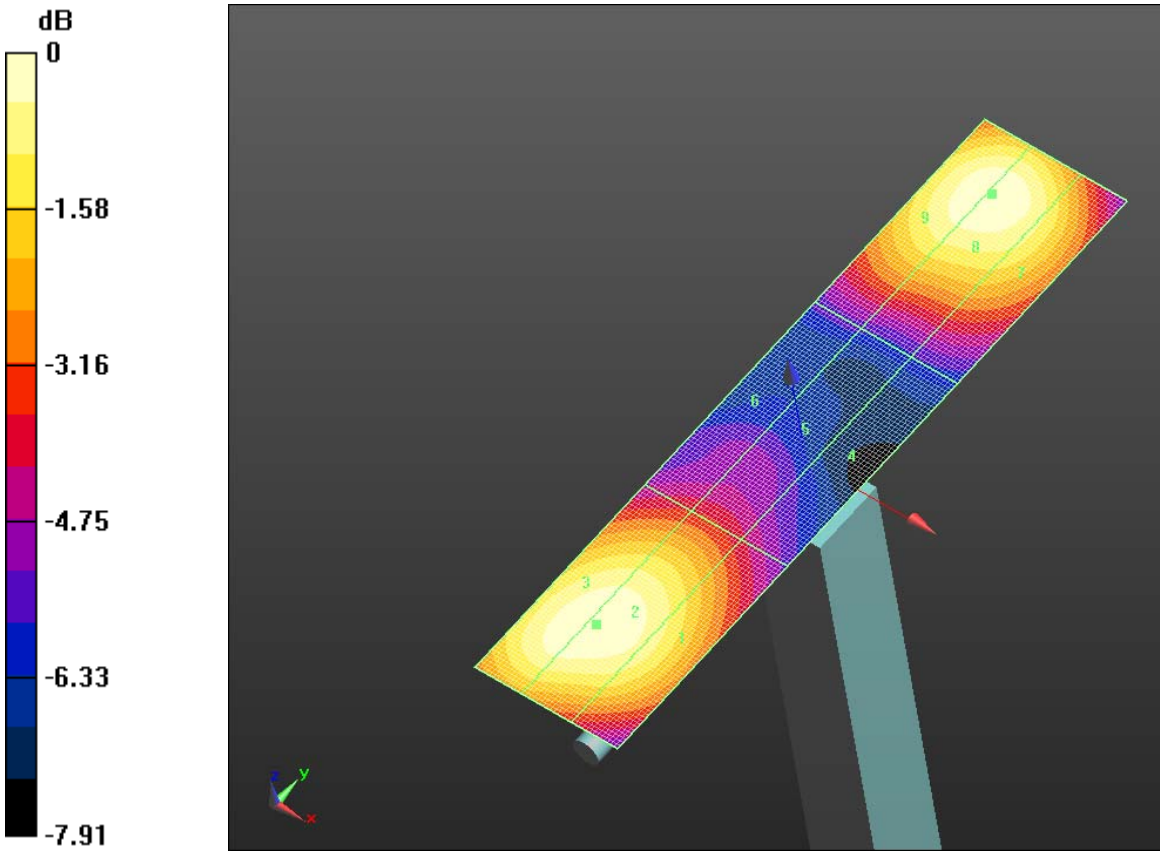
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 142.0 V/m; Power Drift = -0.05 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 131.0 V/m
Near-field category: M2 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M2** **121.1 V/m**	Grid 2 **M2** **130.6 V/m**	Grid 3 **M2** **130.4 V/m**
Grid 4 **M3** **82.22 V/m**	Grid 5 **M3** **87.04 V/m**	Grid 6 **M3** **85.72 V/m**
Grid 7 **M2**	Grid 8 **M2**	Grid 9 **M2**

118.4 V/m	**131.0 V/m**	**130.8 V/m**

Cursor:
Total = 131.0 V/m
E Category: M2
Location: -3, 37.5, 4.7 mm



0 dB = 131.0 V/m = 42.35 dBV/m

Date/Time: 6/3/2013 4:32:36 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_06_03_13

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: UID 0 - n/a, CW; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

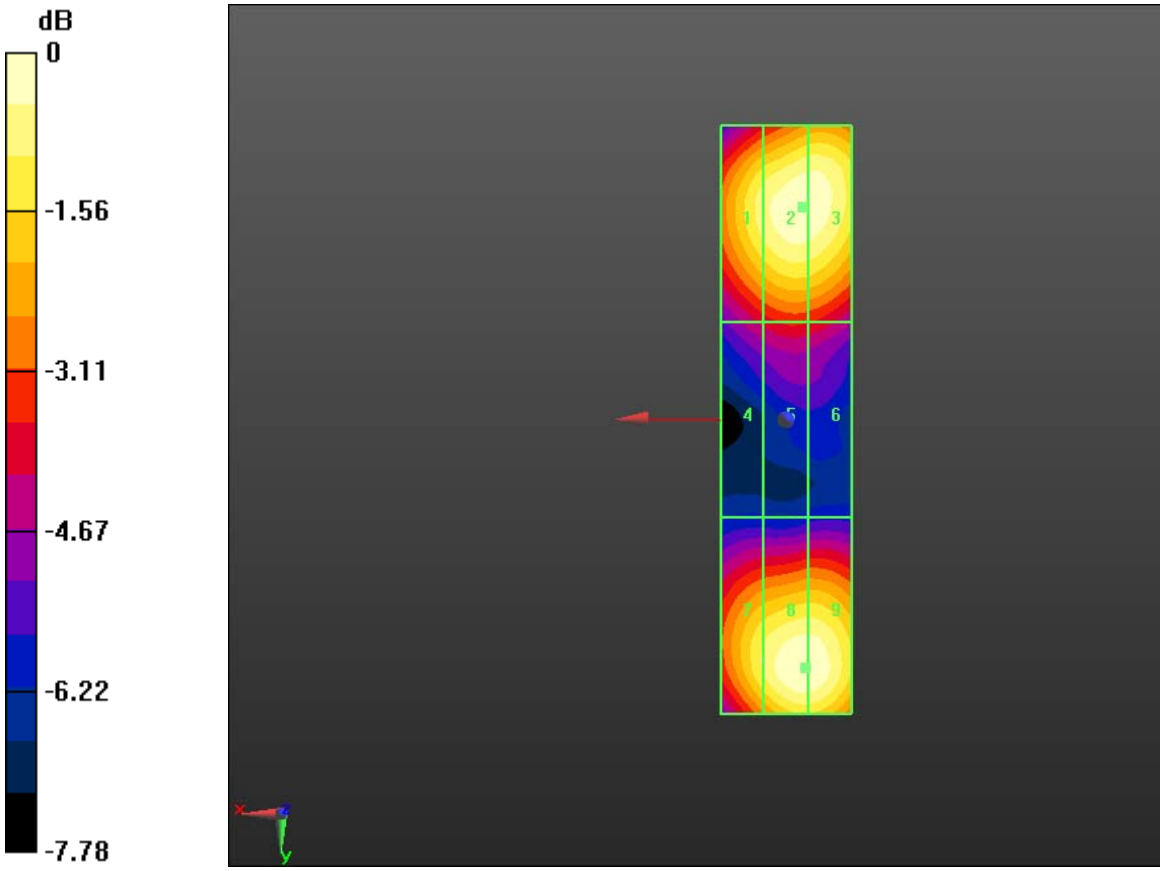
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 139.6 V/m; Power Drift = -0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 128.7 V/m
Near-field category: M2 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M2** **118.5 V/m**	Grid 2 **M2** **127.4 V/m**	Grid 3 **M2** **127.3 V/m**
Grid 4 **M3** **81.74 V/m**	Grid 5 **M3** **86.52 V/m**	Grid 6 **M3** **85.43 V/m**
Grid 7 **M2**	Grid 8 **M2**	Grid 9 **M2**

115.5 V/m	**128.7 V/m**	**128.6 V/m**

Cursor:
Total = 128.7 V/m
E Category: M2
Location: -3, 38, 4.7 mm



0 dB = 128.7 V/m = 42.19 dBV/m

Date/Time: 2/17/2012 3:04:25 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS1733 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD IV, Communication System: CW, Communication System: AM 80%; Frequency: 1732.6 MHz, Frequency: 1733 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - UMTS 1733_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 50.62 V/m; Power Drift = -0.07 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 45.31 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **38.99 V/m**	Grid 2 **M4** **40.35 V/m**	Grid 3 **M4** **39.86 V/m**
Grid 4 **M4** **28.58 V/m**	Grid 5 **M4** **29.21 V/m**	Grid 6 **M4** **28.30 V/m**
Grid 7 **M4** **42.57 V/m**	Grid 8 **M4** **45.31 V/m**	Grid 9 **M4** **44.53 V/m**

Cursor:
Total = 45.306 V/m
E Category: M4
Location: -1, 38, 4.7 mm

Dipole E-Field measurement/E Scan- CW 1733_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 50.63 V/m; Power Drift = 0.07 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 46.45 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **40.60 V/m**	Grid 2 **M4** **41.81 V/m**	Grid 3 **M4** **41.04 V/m**
Grid 4 **M4** **29.57 V/m**	Grid 5 **M4** **30.18 V/m**	Grid 6 **M4** **29.29 V/m**
Grid 7 **M4** **44.02 V/m**	Grid 8 **M4** **46.45 V/m**	Grid 9 **M4** **45.54 V/m**

Cursor:
Total = 46.446 V/m
E Category: M4
Location: -1, 38, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 1733_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

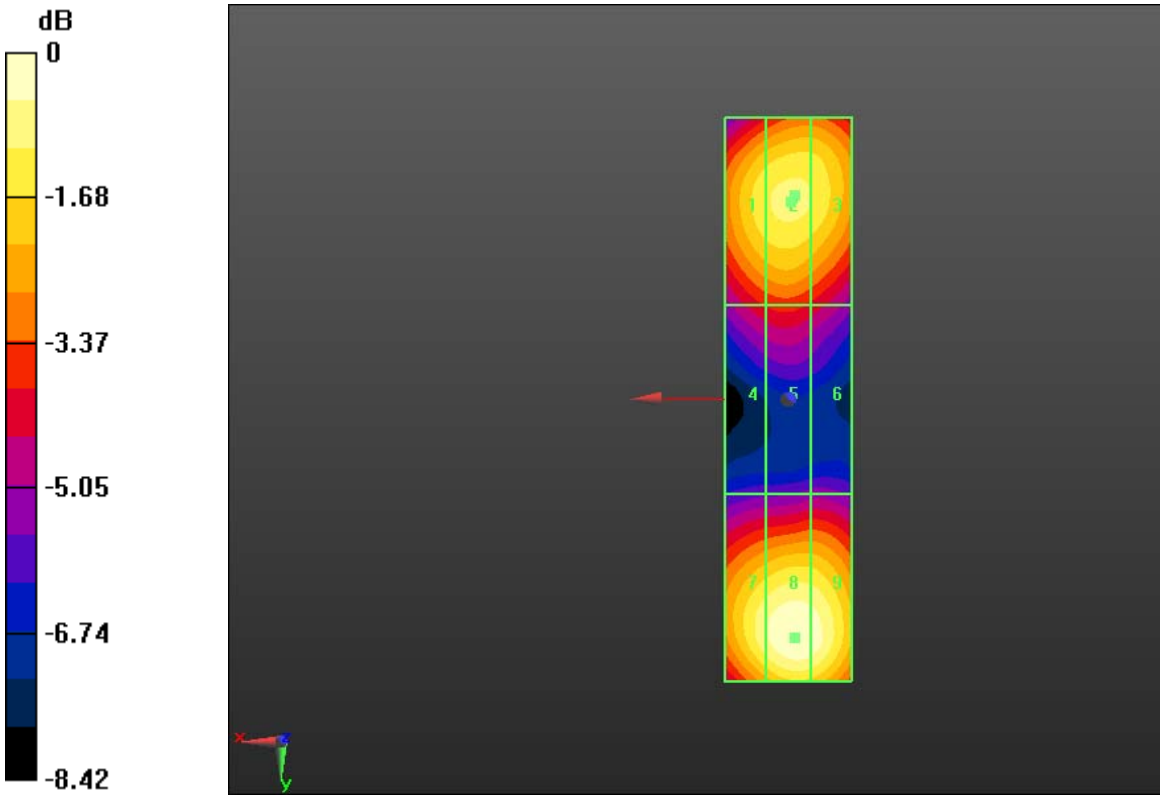
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 32.26 V/m; Power Drift = 0.12 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 29.45 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **25.68 V/m**	Grid 2 **M4** **26.42 V/m**	Grid 3 **M4** **25.96 V/m**
Grid 4 **M4**	Grid 5 **M4**	Grid 6 **M4**

18.91 V/m	**19.39 V/m**	**18.52 V/m**
Grid 7 **M4** **27.45 V/m**	Grid 8 **M4** **29.45 V/m**	Grid 9 **M4** **28.94 V/m**

Cursor:
Total = 29.451 V/m
E Category: M4
Location: -1, 38, 4.7 mm



0 dB = 45.310V/m = 33.12 dB V/m

Date/Time: 6/28/2012 12:54:33 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM1880 MHz_06_28_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: GSM 1880, Communication System: CW, Communication System: AM 80%; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - GSM 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 33.26 V/m; Power Drift = 0.00 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 29.81 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **27.34 V/m**	Grid 2 **M4** **28.65 V/m**	Grid 3 **M4** **28.59 V/m**
Grid 4 **M4** **19.83 V/m**	Grid 5 **M4** **20.51 V/m**	Grid 6 **M4** **20.10 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

28.20 V/m	**29.81 V/m**	**29.37 V/m**

Cursor:
Total = 29.810 V/m
E Category: M4
Location: -1, 38.5, 4.7 mm

Dipole E-Field measurement/E Scan- CW 1800_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 95.34 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 84.88 V/m
Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M3** **78.80 V/m**	Grid 2 **M3** **82.95 V/m**	Grid 3 **M3** **82.43 V/m**
Grid 4 **M4** **56.84 V/m**	Grid 5 **M4** **58.53 V/m**	Grid 6 **M4** **56.53 V/m**
Grid 7 **M3** **80.11 V/m**	Grid 8 **M3** **84.88 V/m**	Grid 9 **M3** **83.31 V/m**

Cursor:
Total = 84.885 V/m
E Category: M3
Location: -0.5, 38.5, 4.7 mm

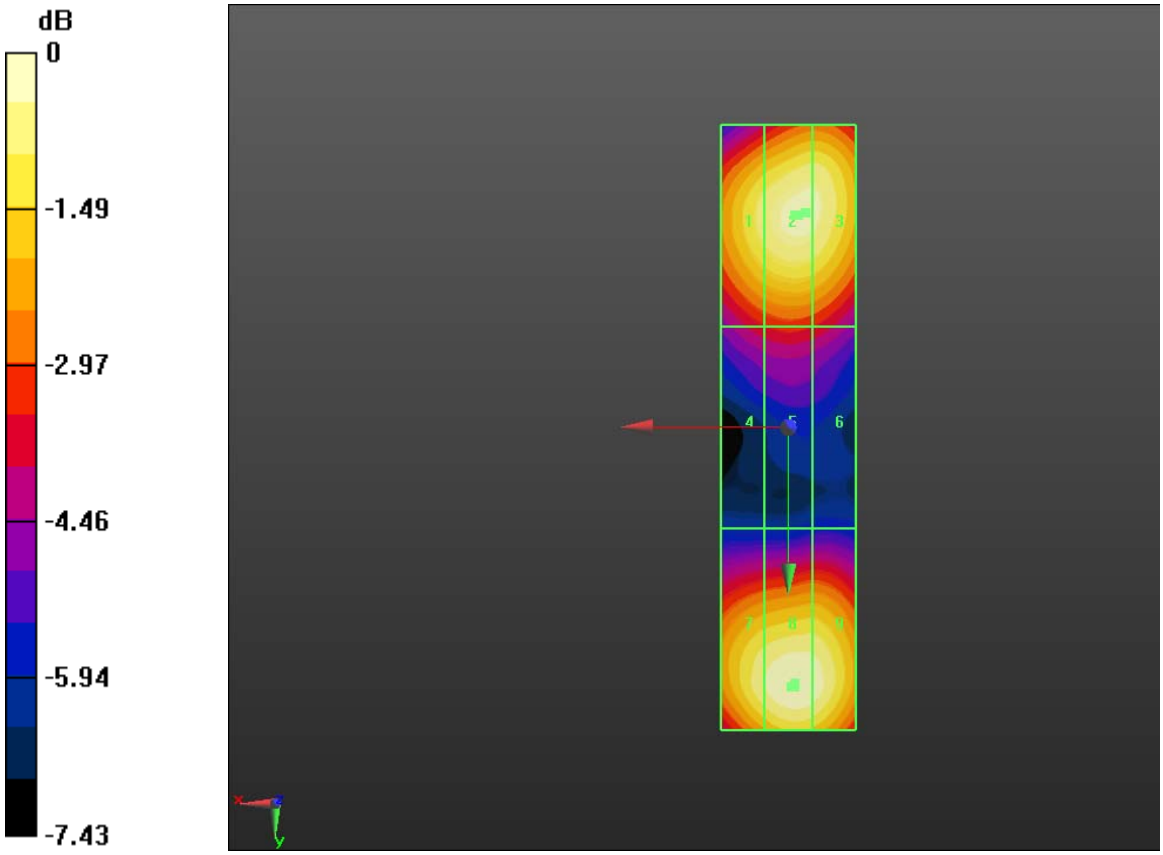
Dipole E-Field measurement/E Scan - AM80%_ 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 60.62 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 53.60 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **49.75 V/m**	Grid 2 **M4** **52.55 V/m**	Grid 3 **M4** **52.06 V/m**
Grid 4 **M4** **35.78 V/m**	Grid 5 **M4** **36.92 V/m**	Grid 6 **M4** **36.02 V/m**
Grid 7 **M4** **50.66 V/m**	Grid 8 **M4** **53.60 V/m**	Grid 9 **M4** **52.63 V/m**

Cursor:
Total = 53.599 V/m
E Category: M4
Location: -1, 38, 4.7 mm



0 dB = 29.810V/m = 29.49 dB V/m

Date/Time: 2/17/2012 2:20:23 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS1880 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD II, Communication System: CW, Communication System: AM 80%; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - UMTS 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 47.02 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 42.43 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **37.98 V/m**	Grid 2 **M4** **39.42 V/m**	Grid 3 **M4** **39.04 V/m**
Grid 4 **M4** **26.86 V/m**	Grid 5 **M4** **27.50 V/m**	Grid 6 **M4** **26.70 V/m**
Grid 7 **M4** **39.63 V/m**	Grid 8 **M4** **42.43 V/m**	Grid 9 **M4** **41.87 V/m**

Cursor:
Total = 42.427 V/m
E Category: M4
Location: -1, 38, 4.7 mm

Dipole E-Field measurement/E Scan- CW 1800_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 47.33 V/m; Power Drift = -0.05 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 42.41 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **38.23 V/m**	Grid 2 **M4** **39.51 V/m**	Grid 3 **M4** **39.41 V/m**
Grid 4 **M4** **26.94 V/m**	Grid 5 **M4** **27.41 V/m**	Grid 6 **M4** **26.77 V/m**
Grid 7 **M4** **40.02 V/m**	Grid 8 **M4** **42.41 V/m**	Grid 9 **M4** **41.99 V/m**

Cursor:
Total = 42.409 V/m
E Category: M4
Location: -1.5, 38, 4.7 mm

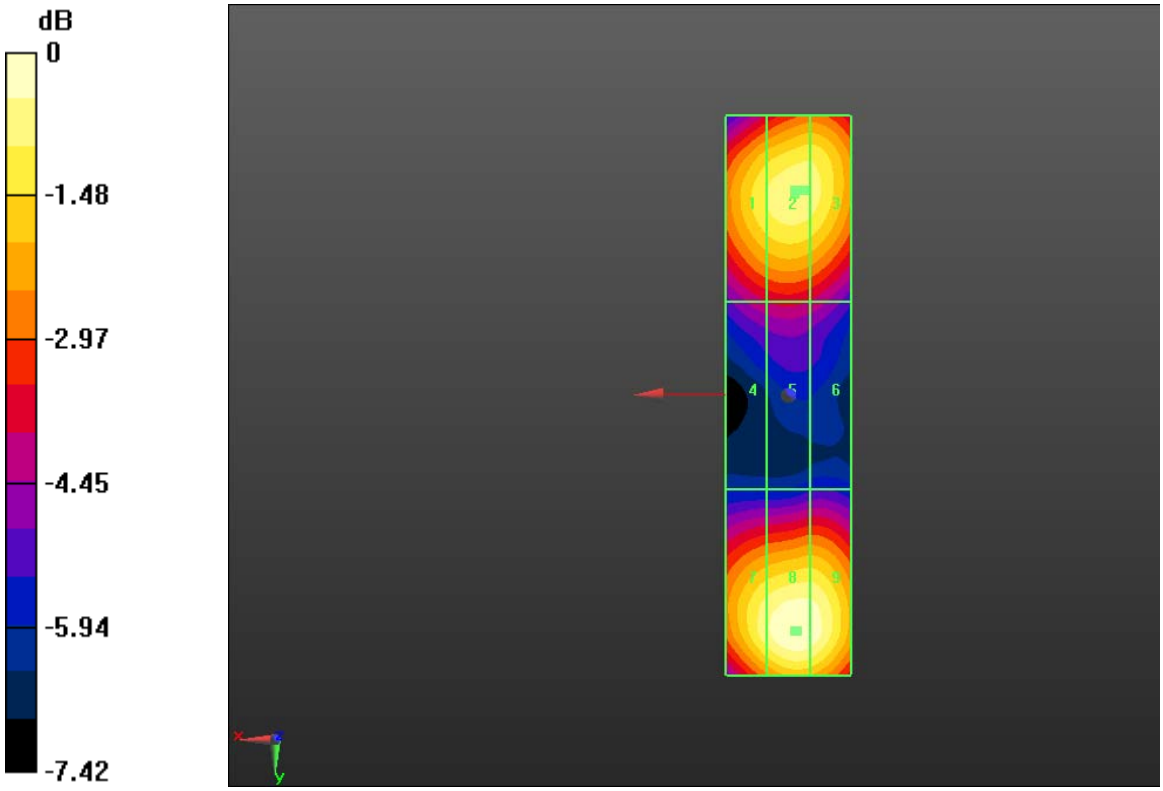
Dipole E-Field measurement/E Scan - AM80%_ 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 30.18 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 27.40 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **24.40 V/m**	Grid 2 **M4** **25.26 V/m**	Grid 3 **M4** **24.95 V/m**
Grid 4 **M4** **17.20 V/m**	Grid 5 **M4** **17.65 V/m**	Grid 6 **M4** **17.12 V/m**
Grid 7 **M4** **25.54 V/m**	Grid 8 **M4** **27.40 V/m**	Grid 9 **M4** **27.02 V/m**

Cursor:
Total = 27.402 V/m
E Category: M4
Location: -1, 38, 4.7 mm



0 dB = 42.430V/m = 32.55 dB V/m

Date/Time: 4/24/2013 4:14:18 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_835 MHz_04_24_13

DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: 1011

Communication System: CW; Frequency: 835 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

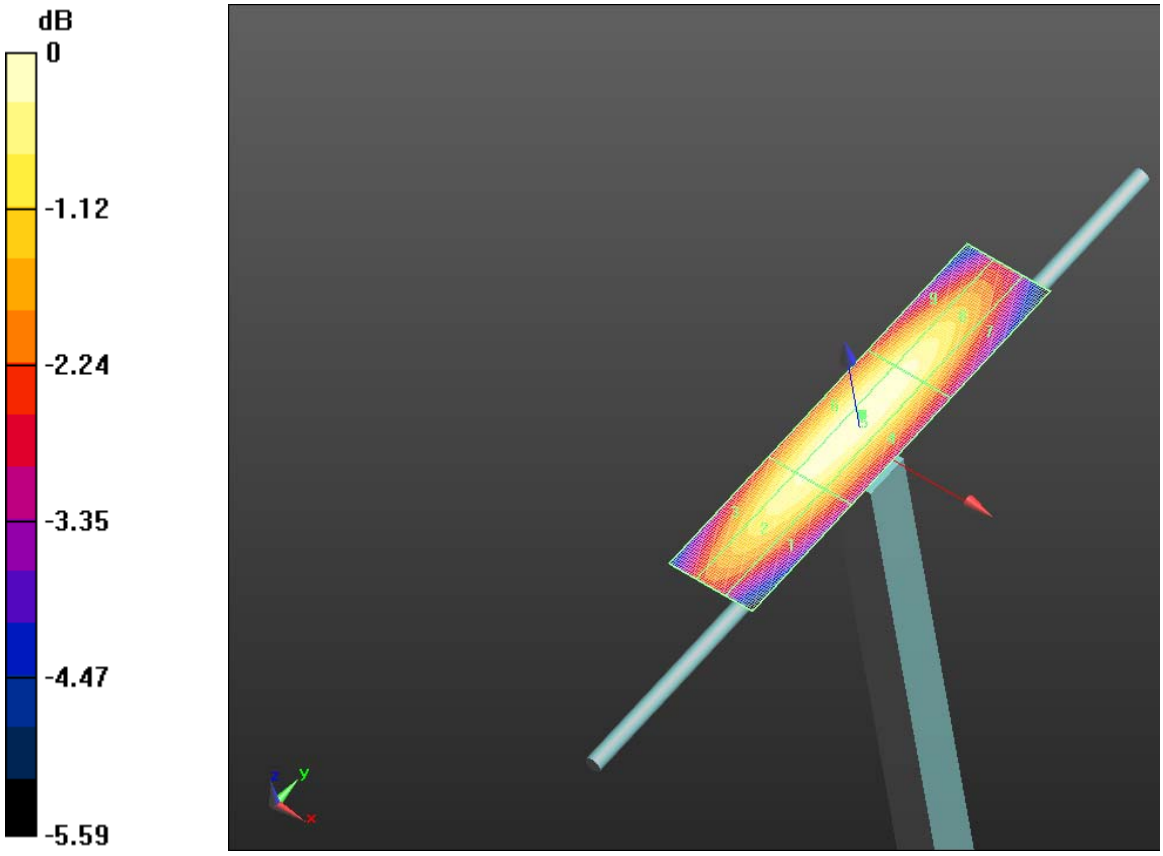
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.5000 A/m; Power Drift = -0.04 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.4745 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.416 A/m**	Grid 2 **M4** **0.459 A/m**	Grid 3 **M4** **0.452 A/m**
Grid 4 **M4** **0.431 A/m**	Grid 5 **M4** **0.474 A/m**	Grid 6 **M4** **0.465 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.425 A/m	**0.462 A/m**	**0.449 A/m**

Cursor:
Total = 0.4744 A/m
H Category: M4
Location: -1.5, 2.5, 4.7 mm



0 dB = 0.4744 A/m = -6.48 dBA/m

Date/Time: 6/28/2012 11:48:13 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM835 MHz_06_28_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: GSM 835_PMF, Communication System: CW, Communication System: AM 80%; Frequency: 835 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan - GSM 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.17 V/m; Power Drift = -0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.16 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.15 A/m**	Grid 2 **M4** **0.16 A/m**	Grid 3 **M4** **0.15 A/m**
Grid 4 **M4**	Grid 5 **M4**	Grid 6 **M4**

0.16 A/m	**0.16 A/m**	**0.16 A/m**
Grid 7 **M4** **0.15 A/m**	Grid 8 **M4** **0.16 A/m**	Grid 9 **M4** **0.15 A/m**

Cursor:
Total = 0.163 A/m
H Category: M4
Location: 0, 8.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.28 V/m; Power Drift = 0.08 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.47 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.44 A/m**	Grid 2 **M4** **0.46 A/m**	Grid 3 **M4** **0.44 A/m**
Grid 4 **M4** **0.45 A/m**	Grid 5 **M4** **0.47 A/m**	Grid 6 **M4** **0.45 A/m**
Grid 7 **M4** **0.45 A/m**	Grid 8 **M4** **0.47 A/m**	Grid 9 **M4** **0.44 A/m**

Cursor:
Total = 0.471 A/m
H Category: M4
Location: 0, 8, 4.7 mm

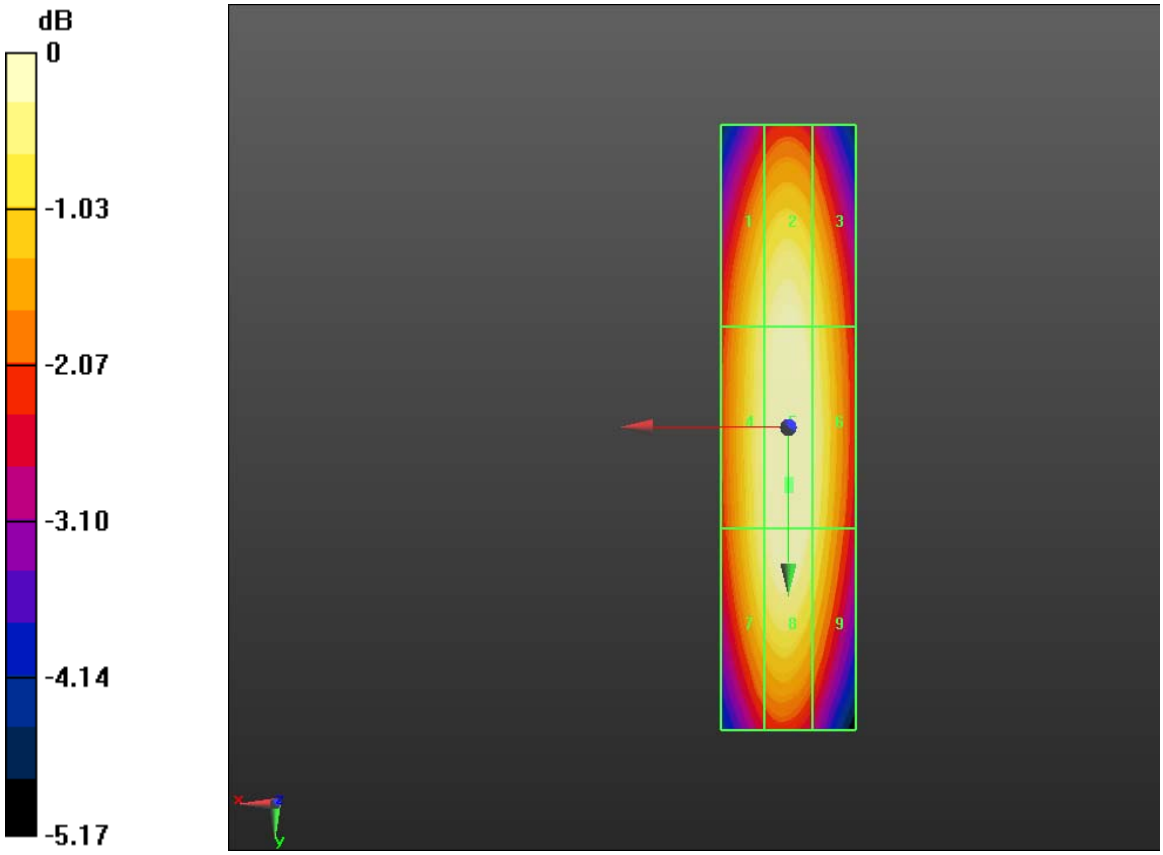
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_PMF/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.32 V/m; Power Drift = 0.12 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.30 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.28 A/m**	Grid 2 **M4** **0.29 A/m**	Grid 3 **M4** **0.28 A/m**
Grid 4 **M4** **0.29 A/m**	Grid 5 **M4** **0.30 A/m**	Grid 6 **M4** **0.29 A/m**
Grid 7 **M4** **0.29 A/m**	Grid 8 **M4** **0.30 A/m**	Grid 9 **M4** **0.28 A/m**

Cursor:
Total = 0.304 A/m
H Category: M4
Location: 0, 9, 4.7 mm



0 dB = 0.160A/m = -15.92 dB A/m

Date/Time: 2/17/2012 4:08:25 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS835 MHz_02_17_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: WCDMA FDD V, Communication System: CW, Communication System: AM 80%; Frequency: 835 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan - UMTS 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.19 V/m; Power Drift = 0.05 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.18 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.16 A/m**	Grid 2 **M4** **0.17 A/m**	Grid 3 **M4** **0.16 A/m**
Grid 4 **M4** **0.17 A/m**	Grid 5 **M4** **0.18 A/m**	Grid 6 **M4** **0.17 A/m**
Grid 7 **M4** **0.17 A/m**	Grid 8 **M4** **0.18 A/m**	Grid 9 **M4** **0.17 A/m**

Cursor:
Total = 0.181 A/m
H Category: M4
Location: 0.5, 8.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.11 V/m; Power Drift = 0.08 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.20 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.17 A/m**	Grid 2 **M4** **0.19 A/m**	Grid 3 **M4** **0.18 A/m**
Grid 4 **M4** **0.18 A/m**	Grid 5 **M4** **0.20 A/m**	Grid 6 **M4** **0.19 A/m**
Grid 7 **M4** **0.18 A/m**	Grid 8 **M4** **0.19 A/m**	Grid 9 **M4** **0.18 A/m**

Cursor:
Total = 0.197 A/m
H Category: M4
Location: -0.5, 1, 4.7 mm

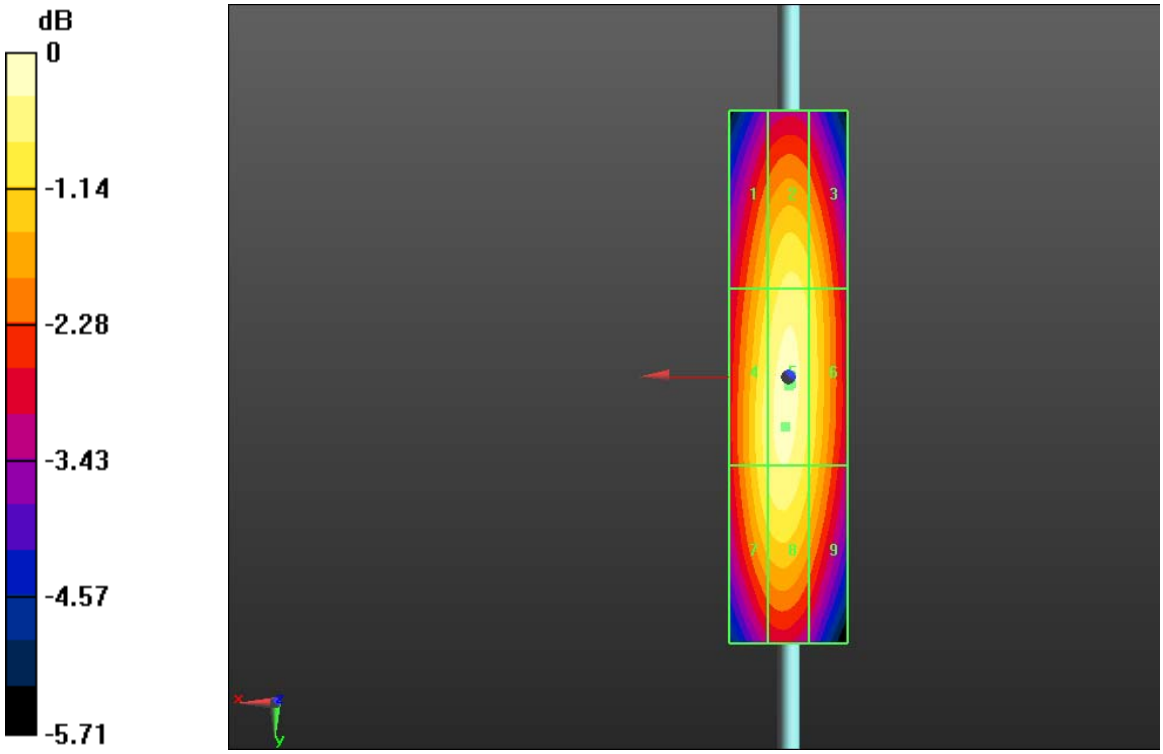
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_PMF/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.14 V/m; Power Drift = 0.10 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.13 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.11 A/m**	Grid 2 **M4** **0.12 A/m**	Grid 3 **M4** **0.12 A/m**
Grid 4 **M4** **0.12 A/m**	Grid 5 **M4** **0.13 A/m**	Grid 6 **M4** **0.12 A/m**
Grid 7 **M4** **0.12 A/m**	Grid 8 **M4** **0.12 A/m**	Grid 9 **M4** **0.12 A/m**

Cursor:
Total = 0.127 A/m
H Category: M4
Location: 0, 1.5, 4.7 mm



0 dB = 0.180A/m = -14.89 dB A/m

Date/Time: 4/24/2013 4:30:53 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_04_24_13

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: CW; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

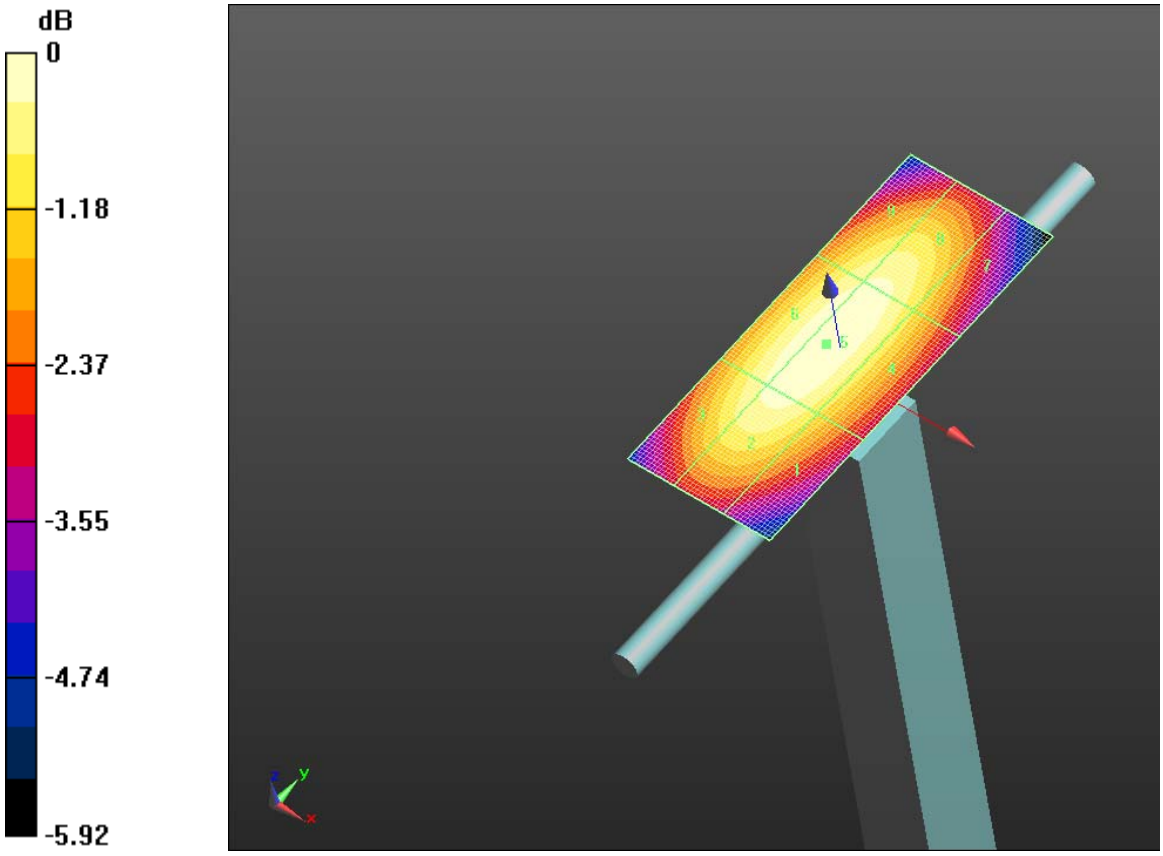
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.5110 A/m; Power Drift = -0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.4847 A/m
Near-field category: M2 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M2** **0.427 A/m**	Grid 2 **M2** **0.473 A/m**	Grid 3 **M2** **0.467 A/m**
Grid 4 **M2** **0.438 A/m**	Grid 5 **M2** **0.485 A/m**	Grid 6 **M2** **0.479 A/m**
Grid 7 **M2**	Grid 8 **M2**	Grid 9 **M2**

0.427 A/m	**0.470 A/m**	**0.463 A/m**

Cursor:
Total = 0.4847 A/m
H Category: M2
Location: -1.5, -0.5, 4.7 mm



0 dB = 0.4847 A/m = -6.29 dBA/m

Date/Time: 6/3/2013 4:49:38 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_06_03_13

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: UID 0 - n/a, CW; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

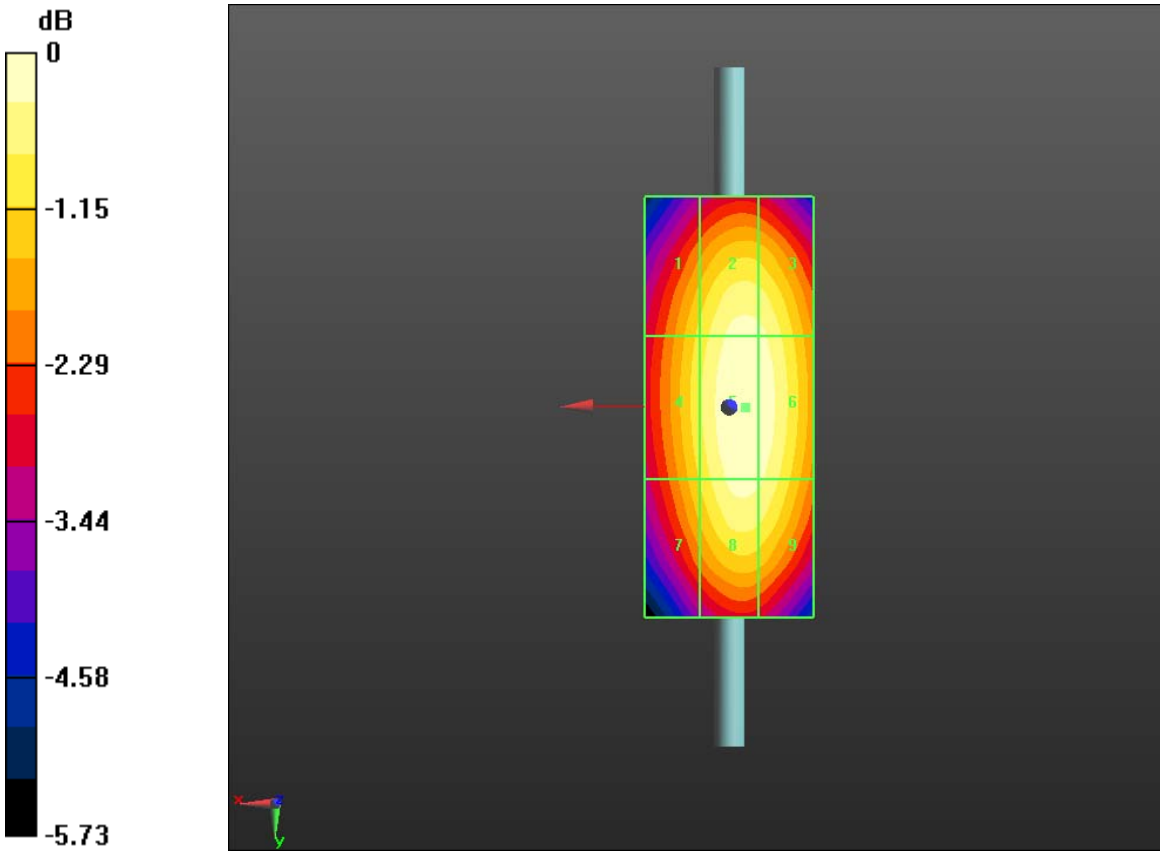
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.4670 A/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.4465 A/m
Near-field category: M2 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M2** **0.397 A/m**	Grid 2 **M2** **0.436 A/m**	Grid 3 **M2** **0.433 A/m**
Grid 4 **M2** **0.406 A/m**	Grid 5 **M2** **0.447 A/m**	Grid 6 **M2** **0.443 A/m**
Grid 7 **M2**	Grid 8 **M2**	Grid 9 **M2**

0.393 A/m	**0.435 A/m**	**0.431 A/m**

Cursor:
Total = 0.4465 A/m
H Category: M2
Location: -2, 0, 4.7 mm



0 dB = 0.4465 A/m = -7.00 dBA/m

Date/Time: 2/17/2012 3:27:55 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS1733 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD IV, Communication System: CW, Communication System: AM 80%; Frequency: 1732.6 MHz, Frequency: 1733 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan -UMTS 1733_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.17 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.16 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.14 A/m**	Grid 2 **M4** **0.15 A/m**	Grid 3 **M4** **0.14 A/m**
Grid 4 **M4** **0.15 A/m**	Grid 5 **M4** **0.16 A/m**	Grid 6 **M4** **0.15 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.14 A/m	**0.15 A/m**	**0.14 A/m**

Cursor:
Total = 0.157 A/m
H Category: M4
Location: 0, 0, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 1733_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement

grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.17 V/m; Power Drift = -0.16 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.16 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.14 A/m**	Grid 2 **M4** **0.15 A/m**	Grid 3 **M4** **0.14 A/m**
Grid 4 **M4** **0.15 A/m**	Grid 5 **M4** **0.16 A/m**	Grid 6 **M4** **0.15 A/m**
Grid 7 **M4** **0.14 A/m**	Grid 8 **M4** **0.15 A/m**	Grid 9 **M4** **0.14 A/m**

Cursor:
Total = 0.157 A/m
H Category: M4
Location: -0.5, 0.5, 4.7 mm

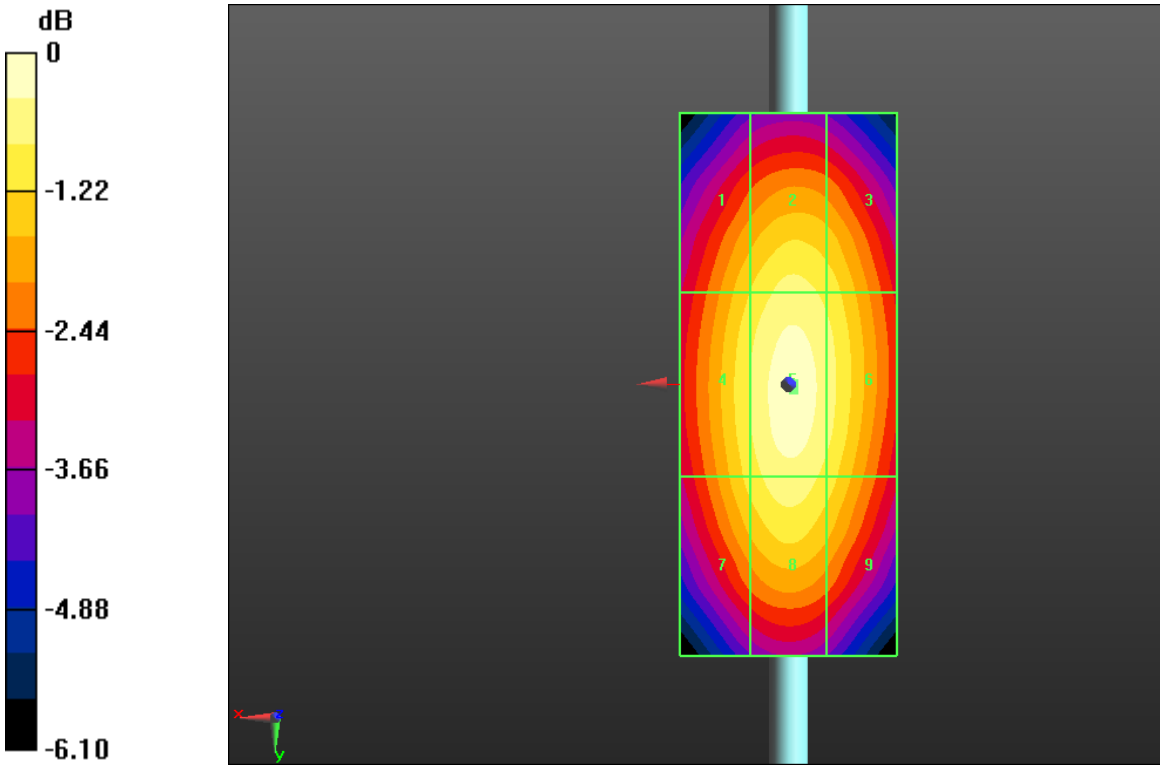
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1733_PMF/Hearing Aid Compatibility Test (41x101x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.11 V/m; Power Drift = -0.14 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.10 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.09 A/m**	Grid 2 **M4** **0.10 A/m**	Grid 3 **M4** **0.09 A/m**
Grid 4 **M4** **0.09 A/m**	Grid 5 **M4** **0.10 A/m**	Grid 6 **M4** **0.10 A/m**
Grid 7 **M4** **0.09 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.09 A/m**

Cursor:
Total = 0.100 A/m
H Category: M4
Location: -0.5, 0, 4.7 mm



0 dB = 0.160A/m = -15.92 dB A/m

Date/Time: 6/28/2012 12:25:06 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM1880 MHz_06_28_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: GSM 1880_PMF, Communication System: CW, Communication System: AM 80%; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan -GSM 1880_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.11 V/m; Power Drift = -0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.11 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.10 A/m**	Grid 2 **M4** **0.10 A/m**	Grid 3 **M4** **0.10 A/m**
Grid 4 **M4**	Grid 5 **M4**	Grid 6 **M4**

0.10 A/m	**0.11 A/m**	**0.10 A/m**
Grid 7 **M4** **0.10 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.10 A/m**

Cursor:
Total = 0.105 A/m
H Category: M4
Location: 0, 0.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 1800_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement

grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.32 V/m; Power Drift = 0.00 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.30 A/m
Near-field category: M3 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M3** **0.28 A/m**	Grid 2 **M3** **0.29 A/m**	Grid 3 **M3** **0.28 A/m**
Grid 4 **M3** **0.29 A/m**	Grid 5 **M3** **0.30 A/m**	Grid 6 **M3** **0.29 A/m**
Grid 7 **M3** **0.28 A/m**	Grid 8 **M3** **0.29 A/m**	Grid 9 **M3** **0.28 A/m**

Cursor:
Total = 0.300 A/m
H Category: M3
Location: 0, 1, 4.7 mm

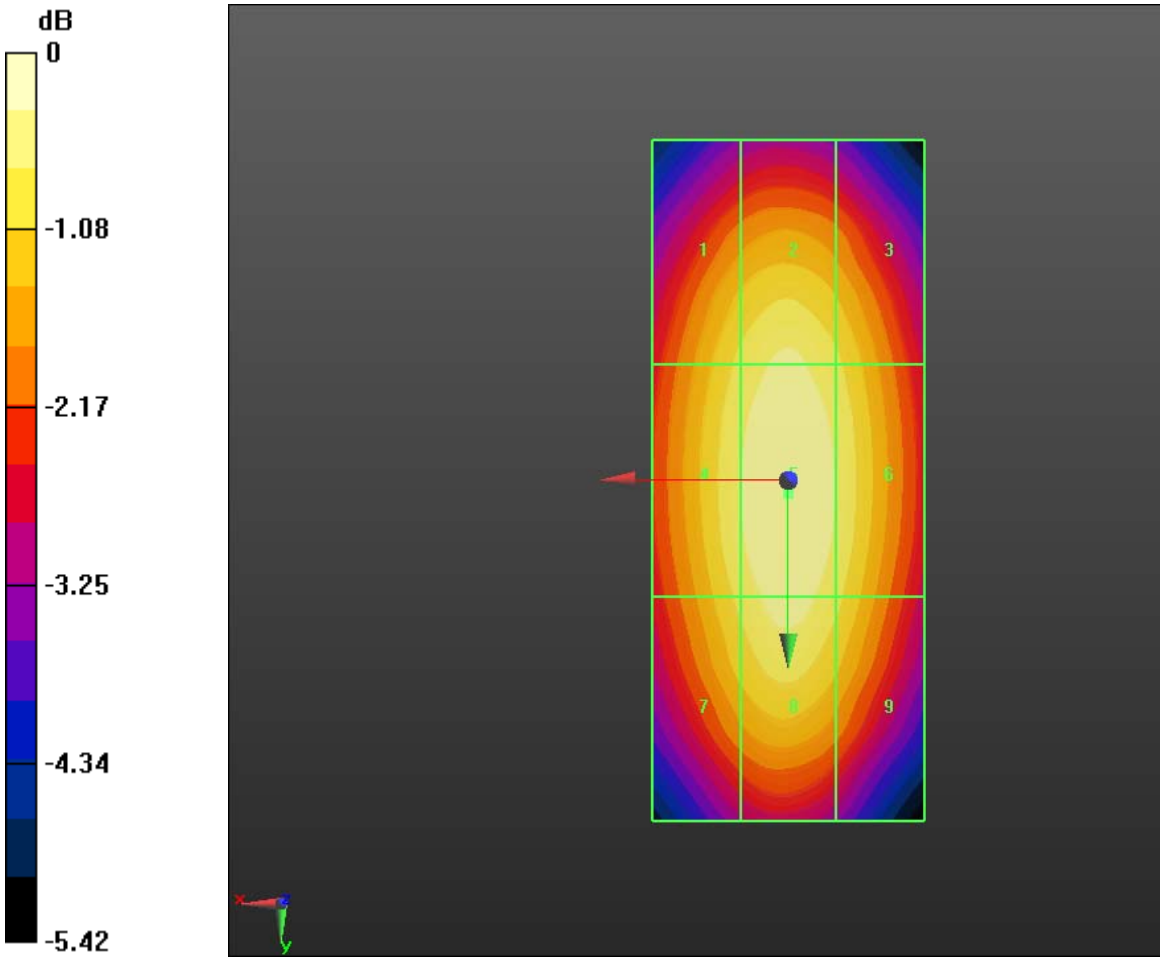
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1880_PMF/Hearing Aid Compatibility Test (41x101x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.21 V/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.19 A/m
Near-field category: M3 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.18 A/m**	Grid 2 **M4** **0.19 A/m**	Grid 3 **M4** **0.18 A/m**
Grid 4 **M4** **0.19 A/m**	Grid 5 **M3** **0.19 A/m**	Grid 6 **M4** **0.19 A/m**
Grid 7 **M4** **0.18 A/m**	Grid 8 **M3** **0.19 A/m**	Grid 9 **M4** **0.18 A/m**

Cursor:
Total = 0.194 A/m
H Category: M3
Location: 0, 0.5, 4.7 mm



0 dB = 0.110A/m = -19.17 dB A/m

Date/Time: 2/17/2012 3:56:44 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS1880 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD II, Communication System: CW, Communication System: AM 80%; Frequency: 1880 MHz
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan -UMTS 1880_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.16 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.15 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.14 A/m**	Grid 2 **M4** **0.14 A/m**	Grid 3 **M4** **0.14 A/m**
Grid 4 **M4** **0.14 A/m**	Grid 5 **M4** **0.15 A/m**	Grid 6 **M4** **0.14 A/m**
Grid 7 **M4** **0.14 A/m**	Grid 8 **M4** **0.15 A/m**	Grid 9 **M4** **0.14 A/m**

Cursor:
Total = 0.150 A/m
H Category: M4
Location: 0, 0.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 1880_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.16 V/m; Power Drift = -0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.15 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.14 A/m**	Grid 2 **M4** **0.14 A/m**	Grid 3 **M4** **0.14 A/m**
Grid 4 **M4** **0.14 A/m**	Grid 5 **M4** **0.15 A/m**	Grid 6 **M4** **0.14 A/m**
Grid 7 **M4** **0.14 A/m**	Grid 8 **M4** **0.15 A/m**	Grid 9 **M4** **0.14 A/m**

Cursor:
Total = 0.149 A/m
H Category: M4
Location: 0, 0.5, 4.7 mm

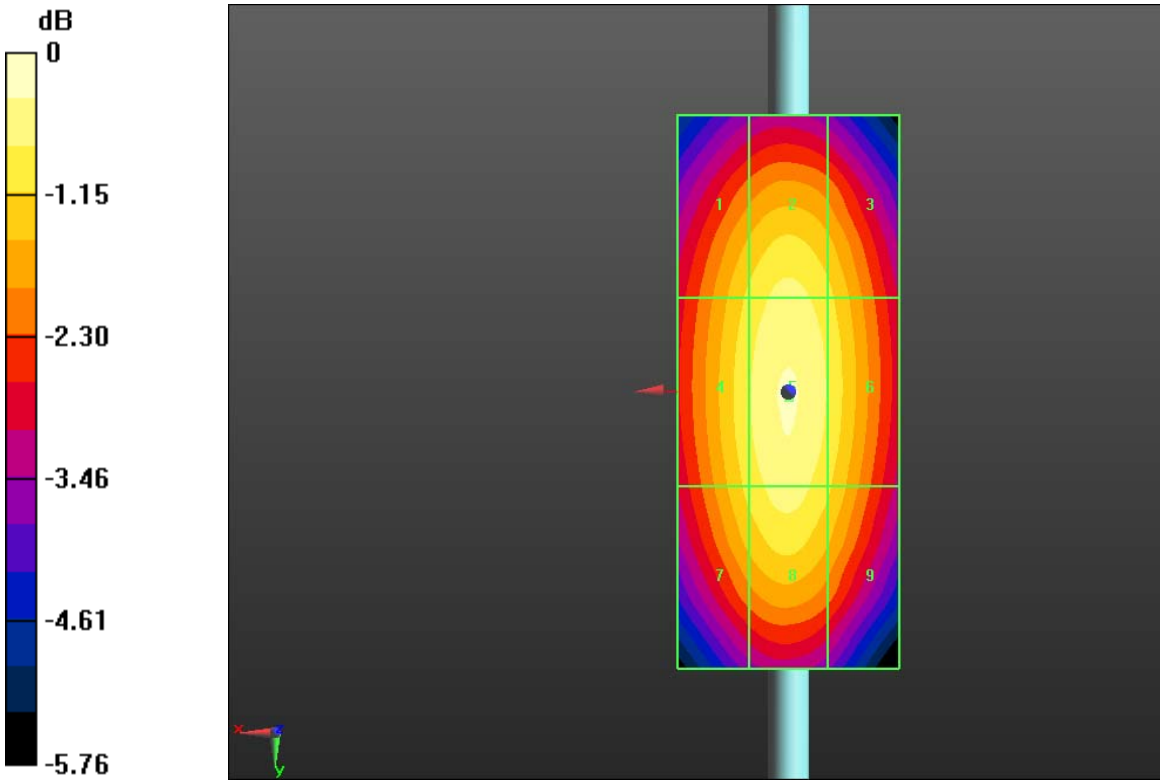
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1880_PMF/Hearing Aid Compatibility Test (41x101x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.10 V/m; Power Drift = -0.07 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.10 A/m
Near-field category: M4 (AWF 0 dB)

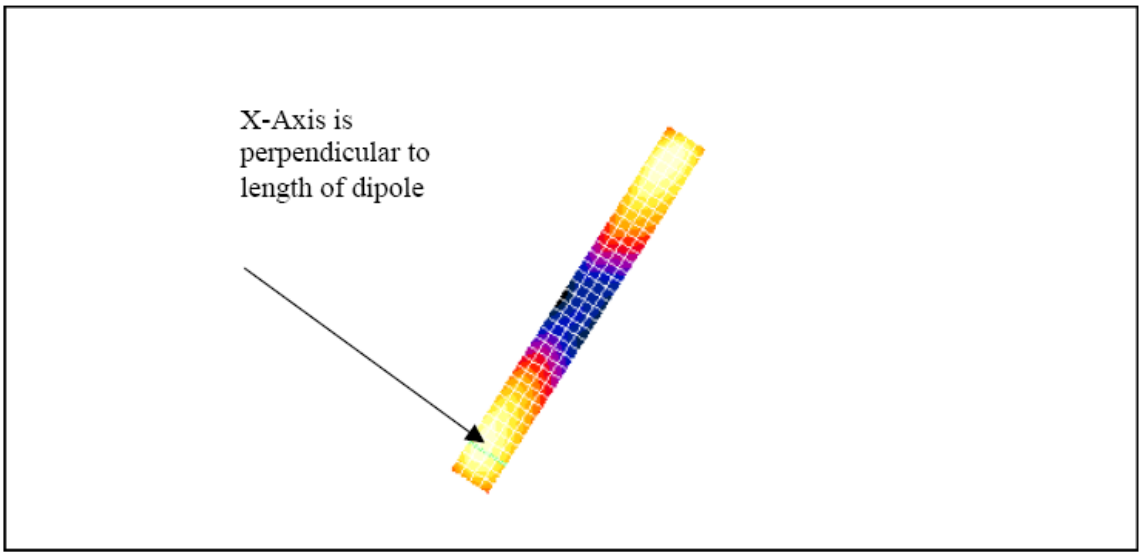
PMF scaled H-field

Grid 1 **M4** **0.09 A/m**	Grid 2 **M4** **0.09 A/m**	Grid 3 **M4** **0.09 A/m**
Grid 4 **M4** **0.09 A/m**	Grid 5 **M4** **0.10 A/m**	Grid 6 **M4** **0.09 A/m**
Grid 7 **M4** **0.09 A/m**	Grid 8 **M4** **0.09 A/m**	Grid 9 **M4** **0.09 A/m**

Cursor:
Total = 0.096 A/m
H Category: M4
Location: 0, 0, 4.7 mm



0 dB = 0.150A/m = -16.48 dB A/m



The green line in this figure shows the axis along which the points lie.

Comparison of 5mm and 2mm step sizes

An additional set of measurements was taken: dipole validations were performed using 5mm and 2mm step sizes. The delta between the two readings is insignificant for both field types (< 0.4% for E and 0% for H), demonstrating that 5mm is sufficient. The plots follow.

Date/Time: 14/07/2005 11:35:24 AM

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Phantom section: H Device Section

DASY4 Configuration:
- Probe: ER3DV6 - SN2285; ConvF(1, 1, 1); Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (5x19x1):
Measurement grid: dx=5mm, dy=5mm
Maximum value of Total (measured) = 134.8 V/m

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):
Measurement grid: dx=5mm, dy=5mm
Maximum value of Total field (slot averaged) = 131.0 V/m
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

E in V/m (Time averaged)

Grid 1 **123.2**	Grid 2 **138.1**	Grid 3 **138.4**
Grid 4 **80.9**	Grid 5 **92.3**	Grid 6 **92.2**
Grid 7 **119.8**	Grid 8 **131.0**	Grid 9 **130.7**

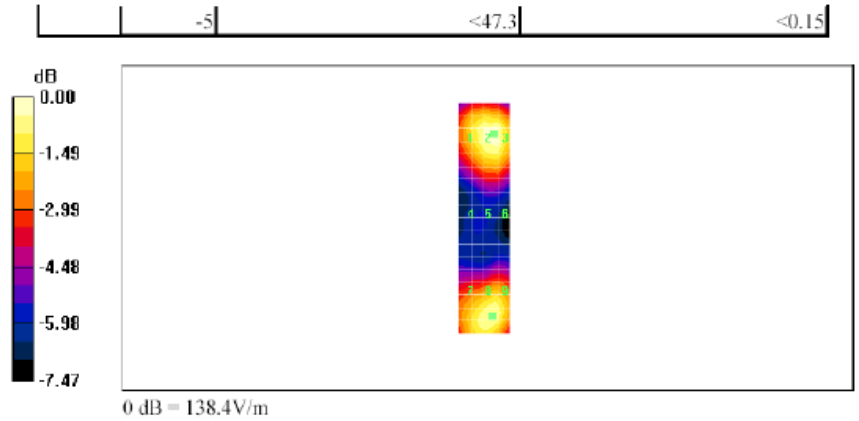
E in V/m (Slot averaged)

Grid 1 **123.2**	Grid 2 **138.1**	Grid 3 **138.4**
Grid 4 **80.9**	Grid 5 **92.3**	Grid 6 **92.2**
Grid 7 **119.8**	Grid 8 **131.0**	Grid 9 **130.7**

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

Date/Time: 14/07/2005 11:35:24 AM

Page 2 of 2



Date/Time: 14/07/2005 11:44:51 AM

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_2mm step_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3
Phantom section: H Device Section

DASY4 Configuration:
- Probe: ER3DV6 - SN2285; ConvF(1, 1, 1); Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (11x46x1):
Measurement grid: dx=2mm, dy=2mm
Maximum value of Total (measured) = 138.0 V/m

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (101x451x1):
Measurement grid: dx=2mm, dy=2mm
Maximum value of Total field (slot averaged) = 131.2 V/m
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

E in V/m (Time averaged)

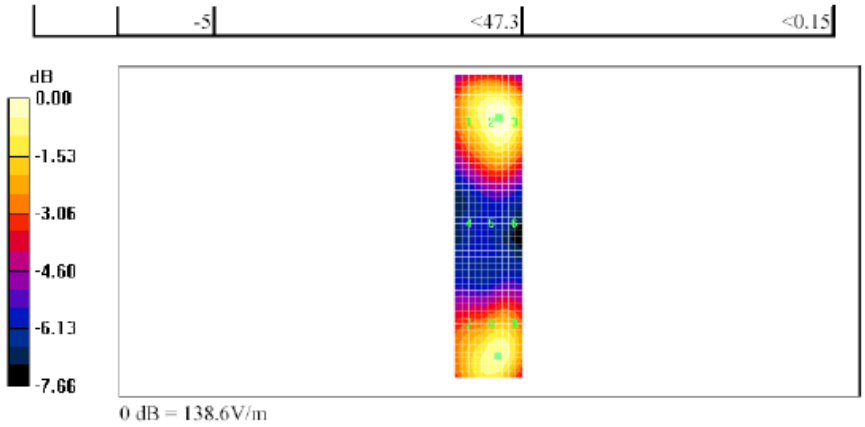
Grid 1 **123.1**	Grid 2 **138.6**	Grid 3 **138.6**
Grid 4 **81.4**	Grid 5 **92.1**	Grid 6 **91.6**
Grid 7 **121.3**	Grid 8 **131.2**	Grid 9 **131.0**

E in V/m (Slot averaged)

Grid 1 **123.1**	Grid 2 **138.6**	Grid 3 **138.6**
Grid 4 **81.4**	Grid 5 **92.1**	Grid 6 **91.6**
Grid 7 **121.3**	Grid 8 **131.2**	Grid 9 **131.0**

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

Date/Time: 14/07/2005 11:44:51 AM



Date/Time: 14/07/2005 12:43:02 PM

Lab: RIM Testing Services (RTS)

HAC_H_Dipole_CW 1880_5 mm step_07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: H Dipole Section

DASY4 Configuration:
- Probe: H3DV6 - SN6105; ; Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (5x19x1):
Measurement grid: dx=5mm, dy=5mm
Maximum value of Total (measured) = 0.406 A/m

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):
Measurement grid: dx=5mm, dy=5mm
Maximum value of Total field (slot averaged) = 0.406 A/m
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

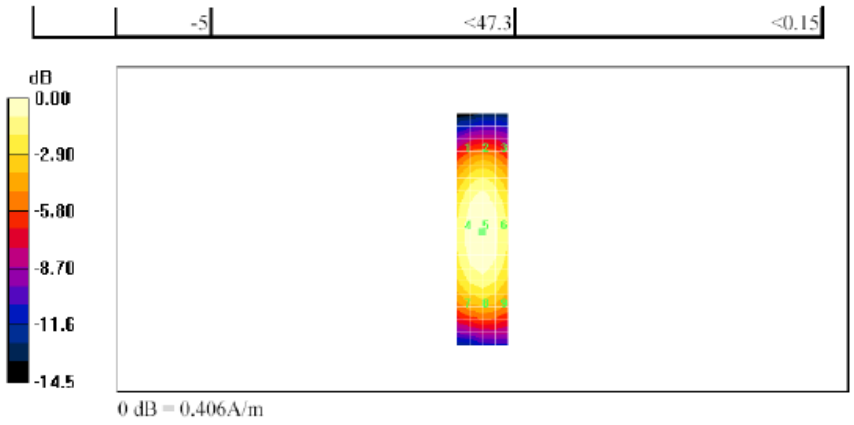
H in A/m (Time averaged)

Grid 1	Grid 2	Grid 3
0.342	**0.359**	**0.344**
Grid 4	Grid 5	Grid 6
0.389	**0.406**	**0.389**
Grid 7	Grid 8	Grid 9
0.363	**0.378**	**0.363**

H in A/m (Slot averaged)

Grid 1	Grid 2	Grid 3
0.342	**0.359**	**0.344**
Grid 4	Grid 5	Grid 6
0.389	**0.406**	**0.389**
Grid 7	Grid 8	Grid 9
0.363	**0.378**	**0.363**

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19



Date/Time: 14/07/2005 12:53:40 PM

Lab: RIM Testing Services (RTS)

HAC_H_Dipole_CW 1880_2 mm step_07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Phantom section: H Dipole Section

DASY4 Configuration:
- Probe: H3DV6 - SN6105; ; Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (11x46x1):
Measurement grid: dx=2mm, dy=2mm
Maximum value of Total (measured) = 0.406 A/m

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (101x451x1):
Measurement grid: dx=2mm, dy=2mm
Maximum value of Total field (slot averaged) = 0.406 A/m
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

H in A/m (Time averaged)

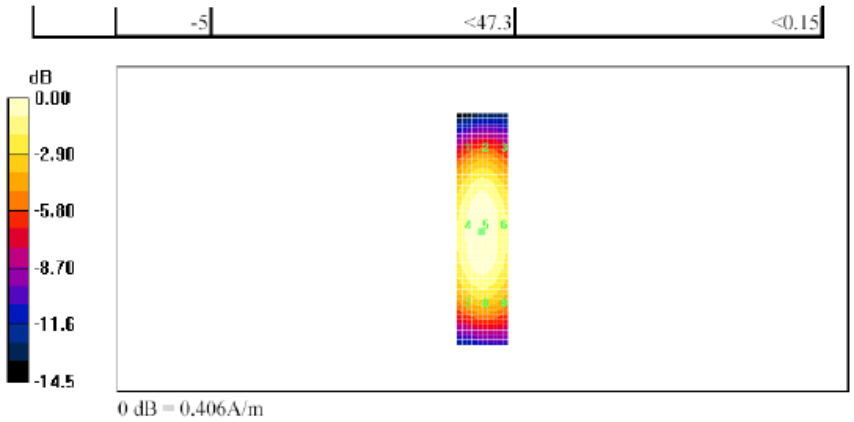
Grid 1 **0.347**	Grid 2 **0.361**	Grid 3 **0.348**
Grid 4 **0.394**	Grid 5 **0.406**	Grid 6 **0.391**
Grid 7 **0.367**	Grid 8 **0.380**	Grid 9 **0.365**

H in A/m (Slot averaged)

Grid 1 **0.347**	Grid 2 **0.361**	Grid 3 **0.348**
Grid 4 **0.394**	Grid 5 **0.406**	Grid 6 **0.391**
Grid 7 **0.367**	Grid 8 **0.380**	Grid 9 **0.365**

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

Date/Time: 14/07/2005 12:53:40 PM



A.3 RF emission field plots

Date/Time: 3/22/2013 3:15:45 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/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 = 75.81 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 194.1 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M4** **149.1 V/m**	Grid 2 **M3** **177.3 V/m**	Grid 3 **M3** **177.3 V/m**
Grid 4 **M3** **163.3 V/m**	Grid 5 **M3** **194.1 V/m**	Grid 6 **M3** **194.0 V/m**

Grid 7 **M3** **175.2 V/m**	Grid 8 **M3** **195.9 V/m**	Grid 9 **M3** **195.6 V/m**

Cursor:
Total = 195.9 V/m
E Category: M3
Location: -7, 16, 8.7 mm

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Mid_Chan/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 = 84.05 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 222.8 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **159.3 V/m**	Grid 2 **M3** **197.4 V/m**	Grid 3 **M3** **197.6 V/m**
Grid 4 **M3** **181.1 V/m**	Grid 5 **M3** **222.8 V/m**	Grid 6 **M3** **222.8 V/m**
Grid 7 **M3** **198.7 V/m**	Grid 8 **M3** **227.1 V/m**	Grid 9 **M3** **227.0 V/m**

Cursor:
Total = 227.1 V/m
E Category: M3
Location: -8, 16, 8.7 mm

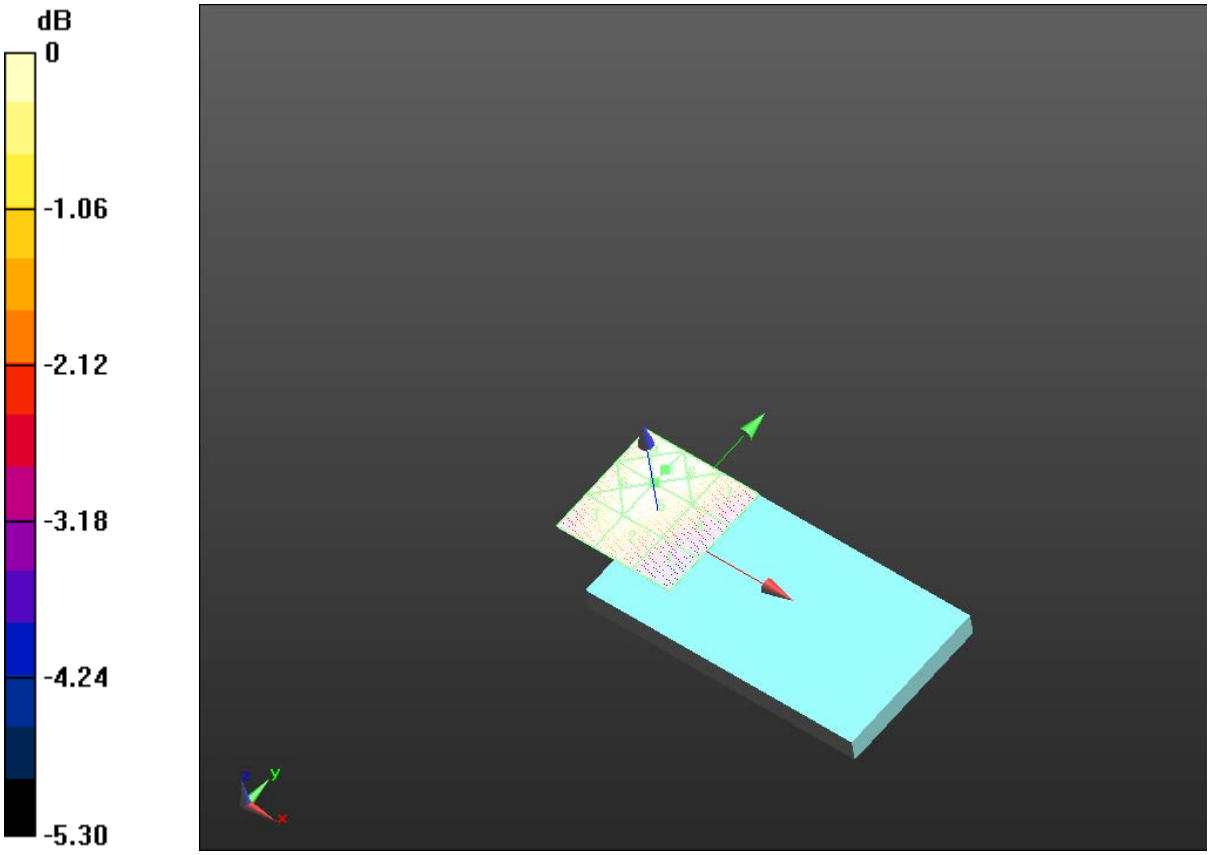
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 83.08 V/m; Power Drift = 0.08 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 220.8 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **162.3 V/m**	Grid 2 **M3** **199.6 V/m**	Grid 3 **M3** **199.8 V/m**
Grid 4 **M3** **178.2 V/m**	Grid 5 **M3** **220.8 V/m**	Grid 6 **M3** **220.8 V/m**
Grid 7 **M3** **187.8 V/m**	Grid 8 **M3** **223.1 V/m**	Grid 9 **M3** **223.1 V/m**

Cursor:
Total = 223.1 V/m
E Category: M3
Location: -9, 15, 8.7 mm



0 dB = 188.1 V/m = 45.49 dBV/m

Date/Time: 3/22/2013 3:28:10 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

Communication System: GSM 850; Frequency: 836.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

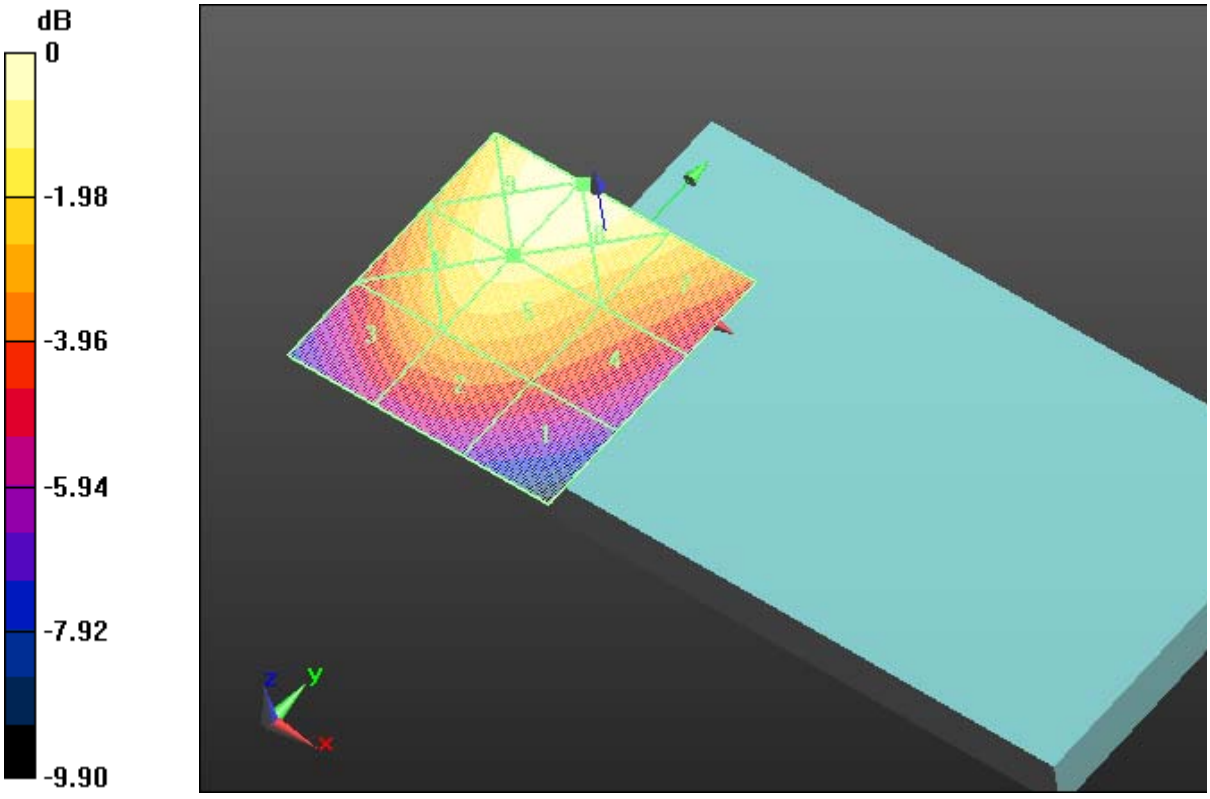
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 83.22 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 191.6 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M4** **131.6 V/m**	Grid 2 **M3** **156.3 V/m**	Grid 3 **M3** **156.2 V/m**
Grid 4 **M3** **153.3 V/m**	Grid 5 **M3** **191.6 V/m**	Grid 6 **M3** **191.6 V/m**
Grid 7 **M3** **176.3 V/m**	Grid 8 **M3** **220.1 V/m**	Grid 9 **M3** **220.1 V/m**

Cursor:
Total = 220.1 V/m
E Category: M3
Location: -8, 5, 8.7 mm



0 dB = 211.3 V/m = 46.50 dBV/m

Date/Time: 3/22/2013 3:44:10 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_V

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz, Frequency: 846.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/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 = 72.64 V/m; Power Drift = 0.07 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 67.52 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **51.25 V/m**	Grid 2 **M4** **61.02 V/m**	Grid 3 **M4** **61.01 V/m**
Grid 4 **M4** **57.57 V/m**	Grid 5 **M4** **67.52 V/m**	Grid 6 **M4** **67.43 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

62.24 V/m	68.82 V/m	68.46 V/m

Cursor:
Total = 68.82 V/m
E Category: M4
Location: -6.5, 18, 8.7 mm

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Mid_Chan/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 = 78.87 V/m; Power Drift = -0.09 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 73.49 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** 53.70 V/m	Grid 2 **M4** 65.78 V/m	Grid 3 **M4** 65.80 V/m
Grid 4 **M4** 60.84 V/m	Grid 5 **M4** 73.49 V/m	Grid 6 **M4** 73.48 V/m
Grid 7 **M4** 66.84 V/m	Grid 8 **M4** 75.40 V/m	Grid 9 **M4** 75.17 V/m

Cursor:
Total = 75.40 V/m
E Category: M4
Location: -6.5, 19.5, 8.7 mm

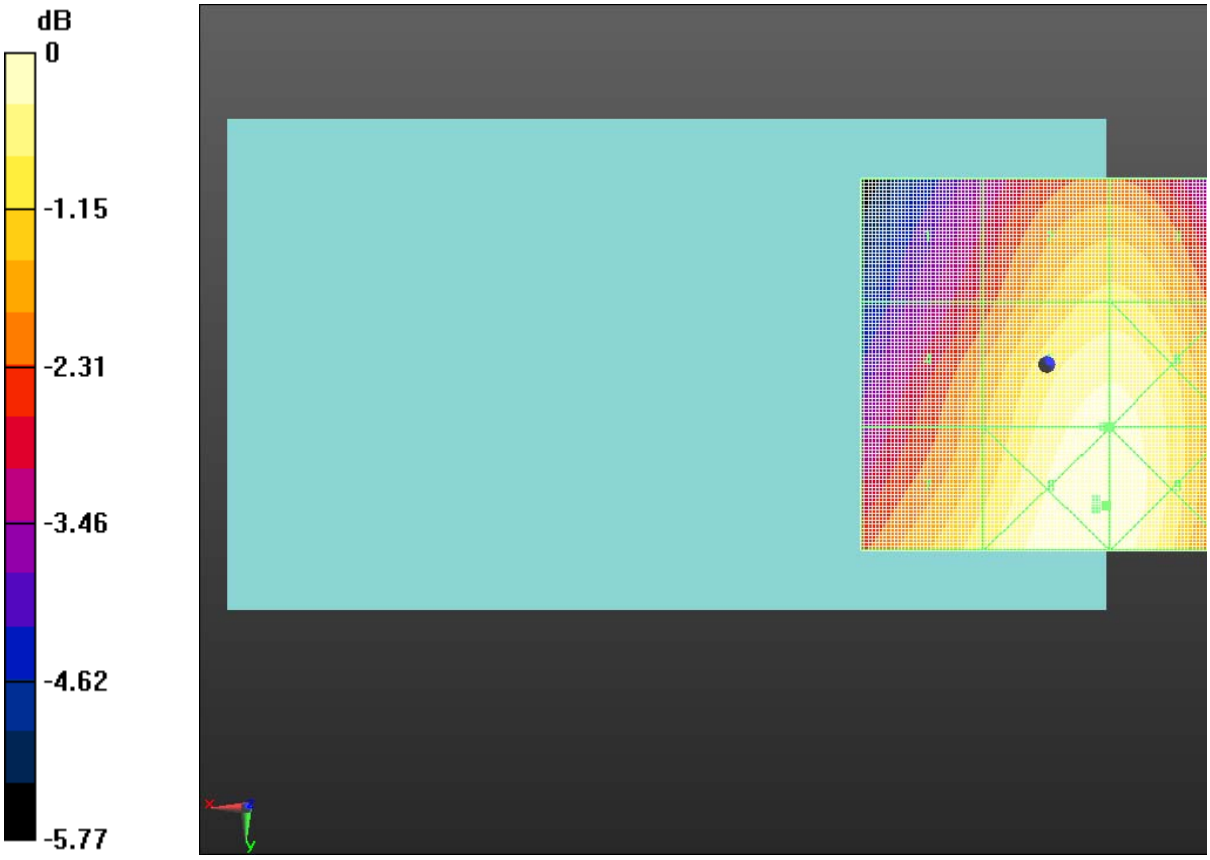
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 78.41 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 73.36 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **55.22 V/m**	Grid 2 **M4** **66.59 V/m**	Grid 3 **M4** **66.63 V/m**
Grid 4 **M4** **61.14 V/m**	Grid 5 **M4** **73.36 V/m**	Grid 6 **M4** **73.36 V/m**
Grid 7 **M4** **65.83 V/m**	Grid 8 **M4** **74.52 V/m**	Grid 9 **M4** **74.51 V/m**

Cursor:
Total = 74.52 V/m
E Category: M4
Location: -8, 19, 8.7 mm



0 dB = 68.82 V/m = 36.75 dBV/m

Date/Time: 3/22/2013 4:02:20 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_V_Telecoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

Communication System: WCDMA FDD V; Frequency: 836.4 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

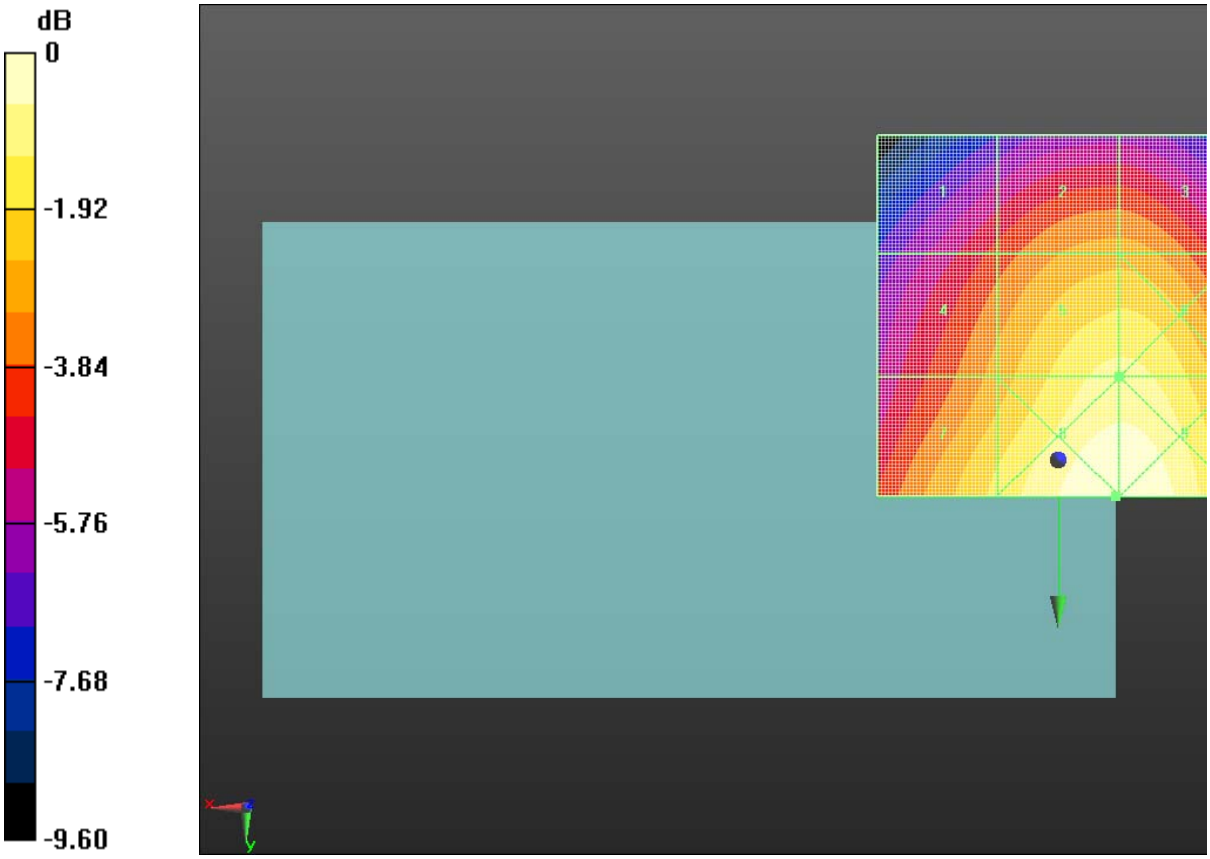
Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 77.75 V/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 63.99 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **44.49 V/m**	Grid 2 **M4** **52.28 V/m**	Grid 3 **M4** **52.28 V/m**
Grid 4 **M4** **51.78 V/m**	Grid 5 **M4** **63.99 V/m**	Grid 6 **M4** **63.99 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

59.38 V/m	**72.39 V/m**	**72.37 V/m**

Cursor:
Total = 72.39 V/m
E Category: M4
Location: -8, 5, 8.7 mm



0 dB = 72.39 V/m = 37.19 dBV/m

Date/Time: 6/4/2013 9:03:57 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_IV-

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB035D0

Communication System: UID 0 - n/a, WCDMA FDD IV; Frequency: 1712.4 MHz, Frequency: 1732.6 MHz, Frequency: 1752.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/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 = 13.82 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 16.49 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **15.96 V/m**	Grid 2 **M4** **14.36 V/m**	Grid 3 **M4** **11.61 V/m**
Grid 4 **M4** **12.75 V/m**	Grid 5 **M4** **16.49 V/m**	Grid 6 **M4** **16.77 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

15.28 V/m	20.85 V/m	20.85 V/m

Cursor:
Total = 20.85 V/m
E Category: M4
Location: -9, 25, 8.7 mm

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Mid_Chan/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 = 13.89 V/m; Power Drift = -0.10 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 16.36 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** 15.84 V/m	Grid 2 **M4** 14.40 V/m	Grid 3 **M4** 11.55 V/m
Grid 4 **M4** 12.68 V/m	Grid 5 **M4** 16.36 V/m	Grid 6 **M4** 16.62 V/m
Grid 7 **M4** 15.23 V/m	Grid 8 **M4** 20.82 V/m	Grid 9 **M4** 20.82 V/m

Cursor:
Total = 20.82 V/m
E Category: M4
Location: -8, 25, 8.7 mm

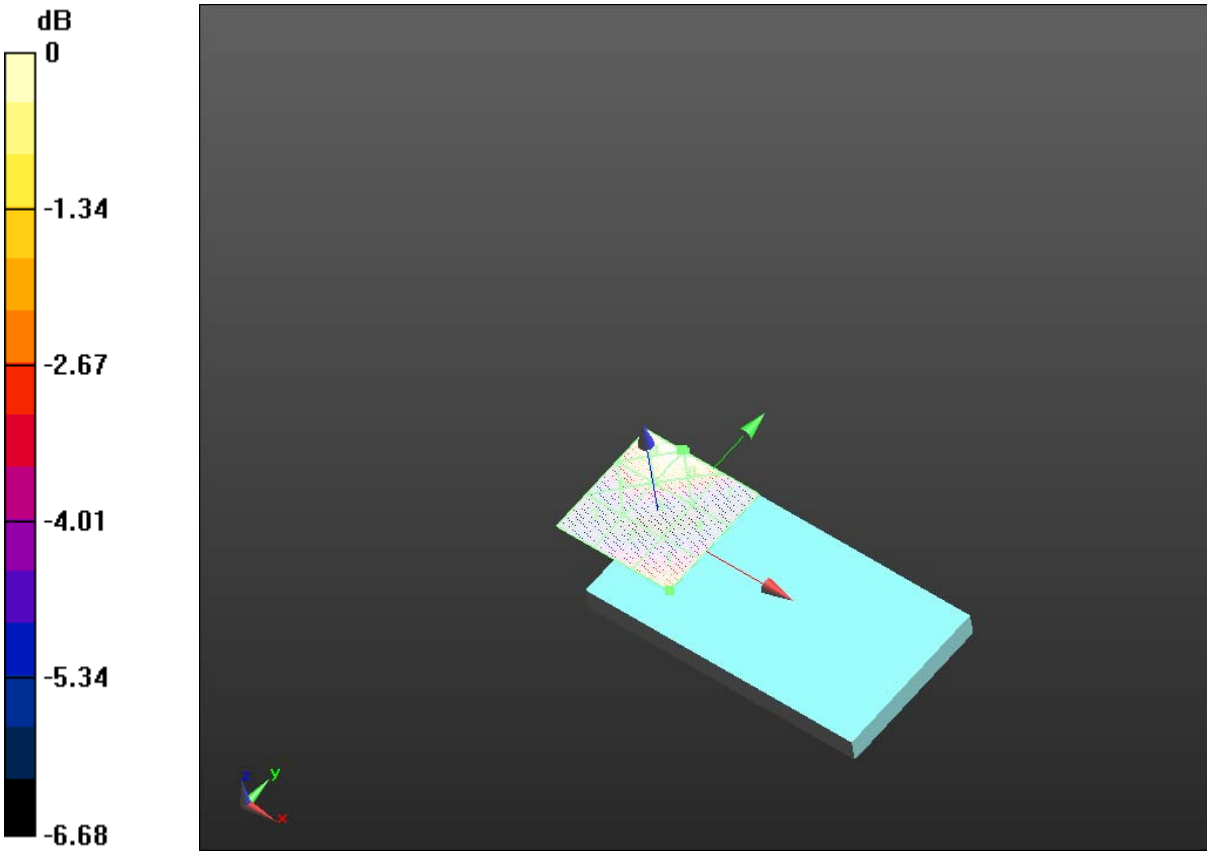
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 13.28 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 17.20 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **17.20 V/m**	Grid 2 **M4** **15.34 V/m**	Grid 3 **M4** **12.48 V/m**
Grid 4 **M4** **13.72 V/m**	Grid 5 **M4** **16.79 V/m**	Grid 6 **M4** **17.28 V/m**
Grid 7 **M4** **15.60 V/m**	Grid 8 **M4** **22.24 V/m**	Grid 9 **M4** **22.27 V/m**

Cursor:
Total = 22.27 V/m
E Category: M4
Location: -9.5, 25, 8.7 mm



0 dB = 20.85 V/m = 26.38 dBV/m

Date/Time: 6/4/2013 9:14:58 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_IV-_Telecoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB035D0

Communication System: UID 0 - n/a, WCDMA FDD IV; Frequency: 1752.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

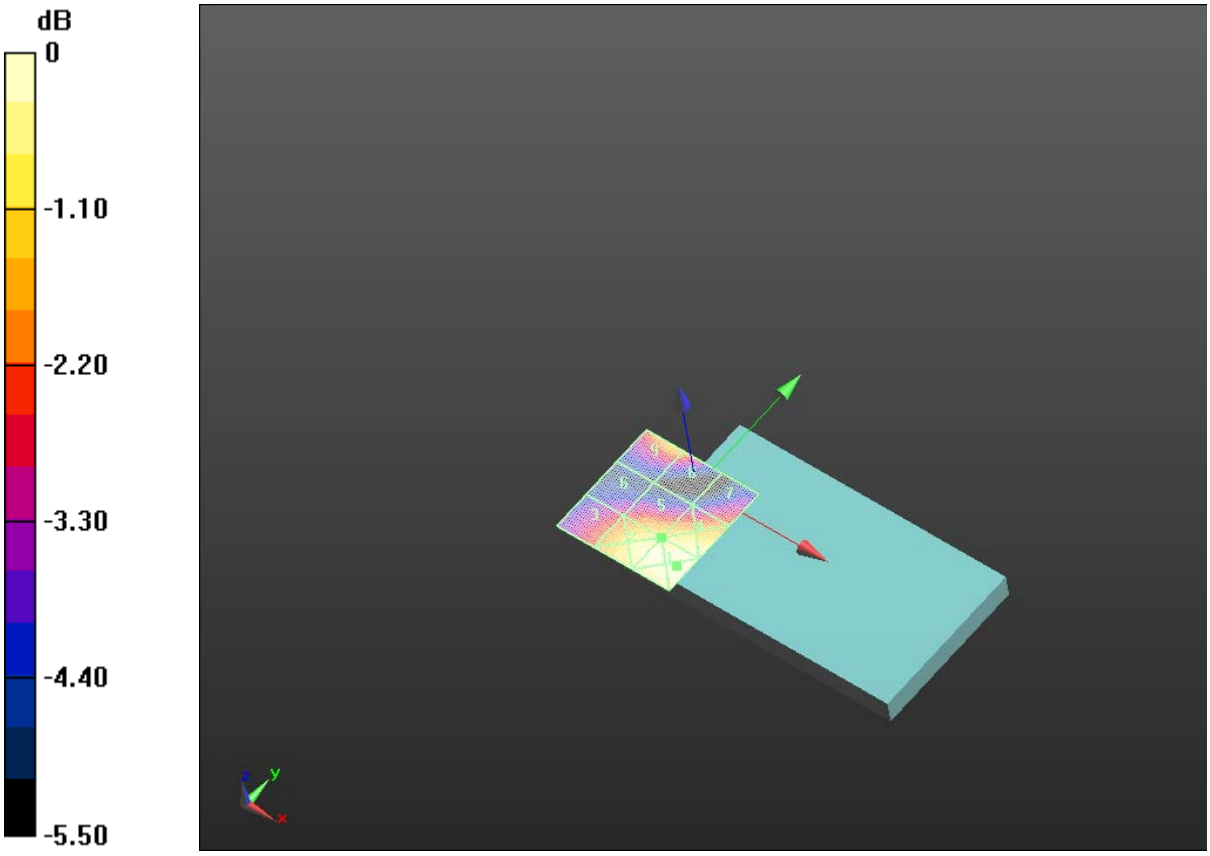
Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 13.24 V/m; Power Drift = -0.02 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 16.38 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **18.02 V/m**	Grid 2 **M4** **17.43 V/m**	Grid 3 **M4** **14.27 V/m**
Grid 4 **M4** **17.62 V/m**	Grid 5 **M4** **16.38 V/m**	Grid 6 **M4** **13.23 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

14.21 V/m	**15.26 V/m**	**15.72 V/m**

Cursor:
Total = 18.02 V/m
E Category: M4
Location: 20.5, -35, 8.7 mm



0 dB = 18.02 V/m = 25.12 dBV/m

Date/Time: 6/3/2013 5:56:09 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900-Rev 2-05

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2FFFB6AF

Communication System: UID 0 - n/a, GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/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 = 12.46 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 57.93 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **57.93 V/m**	Grid 2 **M3** **57.17 V/m**	Grid 3 **M4** **43.51 V/m**
Grid 4 **M4** **43.62 V/m**	Grid 5 **M3** **53.91 V/m**	Grid 6 **M3** **56.97 V/m**
Grid 7 **M4**	Grid 8 **M3**	Grid 9 **M3**

43.82 V/m	72.77 V/m	73.32 V/m

Cursor:
Total = 73.32 V/m
E Category: M3
Location: -10.5, 25, 8.7 mm

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Mid_Chan/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 = 13.02 V/m; Power Drift = -0.02 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 56.98 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** 56.98 V/m	Grid 2 **M3** 56.63 V/m	Grid 3 **M4** 45.21 V/m
Grid 4 **M4** 42.66 V/m	Grid 5 **M3** 52.30 V/m	Grid 6 **M3** 55.17 V/m
Grid 7 **M4** 41.96 V/m	Grid 8 **M3** 69.35 V/m	Grid 9 **M3** 69.68 V/m

Cursor:
Total = 69.68 V/m
E Category: M3
Location: -10, 25, 8.7 mm

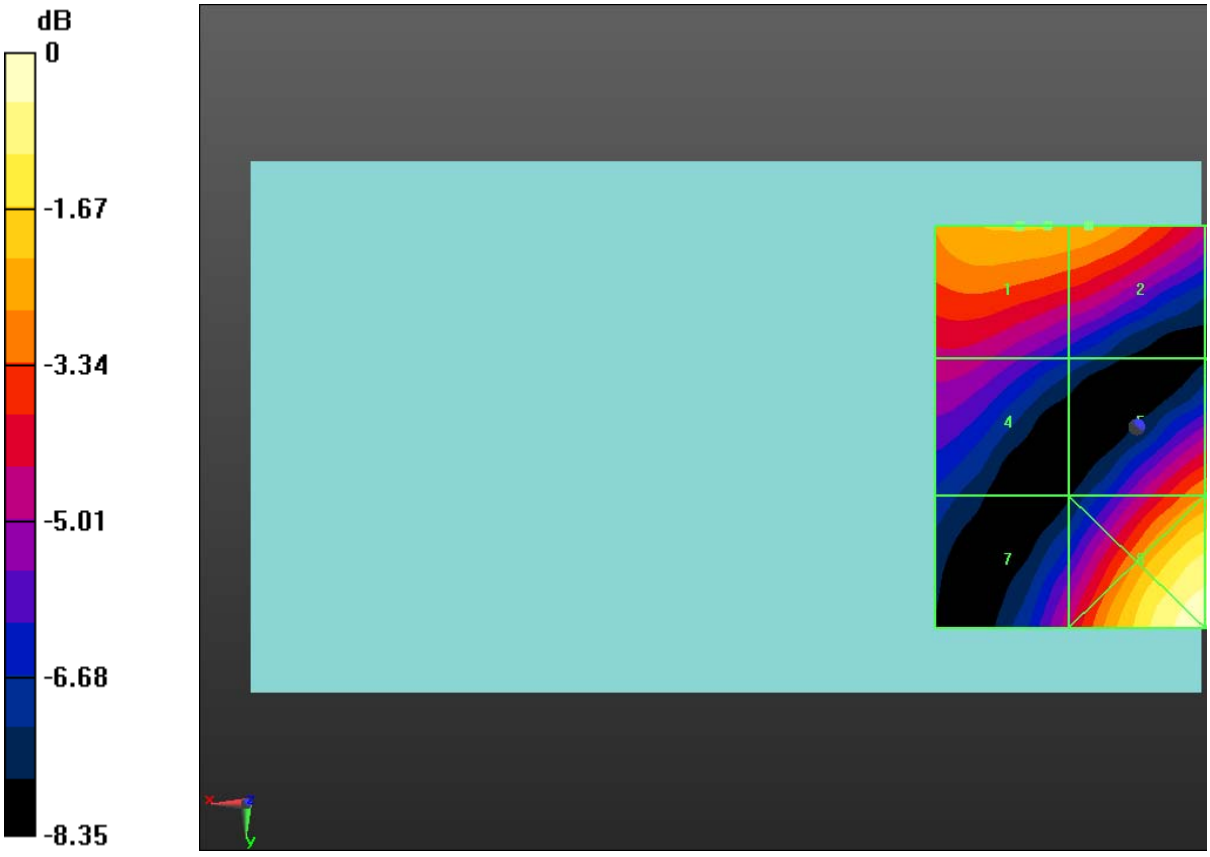
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 12.61 V/m; Power Drift = -0.17 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 61.05 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **60.83 V/m**	Grid 2 **M3** **61.05 V/m**	Grid 3 **M3** **52.29 V/m**
Grid 4 **M4** **45.97 V/m**	Grid 5 **M3** **51.96 V/m**	Grid 6 **M3** **55.69 V/m**
Grid 7 **M4** **39.24 V/m**	Grid 8 **M3** **72.73 V/m**	Grid 9 **M3** **73.52 V/m**

Cursor:
Total = 73.52 V/m
E Category: M3
Location: -11, 25, 8.7 mm



0 dB = 74.12 V/m = 37.40 dBV/m

Date/Time: 6/3/2013 6:08:17 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900-Rev 2-05

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2FFFB6AF

Communication System: UID 0 - n/a, GSM 1900; Frequency: 1850.2 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

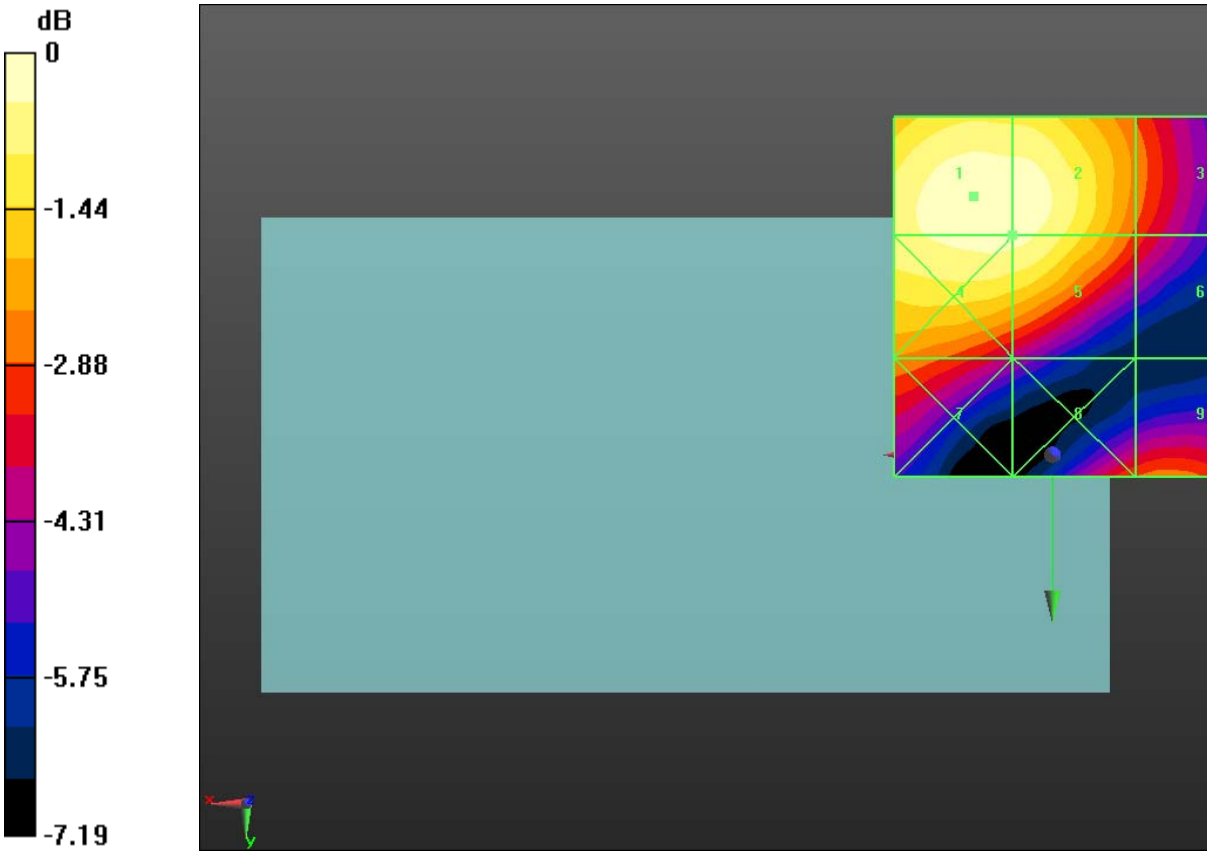
Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 12.57 V/m; Power Drift = -0.31 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 62.98 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **62.98 V/m**	Grid 2 **M3** **62.47 V/m**	Grid 3 **M3** **47.76 V/m**
Grid 4 **M3** **61.71 V/m**	Grid 5 **M3** **61.32 V/m**	Grid 6 **M4** **45.03 V/m**
Grid 7 **M3**	Grid 8 **M4**	Grid 9 **M3**

48.19 V/m	**45.89 V/m**	**47.37 V/m**

Cursor:
Total = 62.98 V/m
E Category: M3
Location: 11, -36, 8.7 mm



0 dB = 63.67 V/m = 36.08 dBV/m

Date/Time: 3/22/2013 4:17:46 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_II

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz, Frequency: 1907.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/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 = 22.94 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 35.99 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **34.11 V/m**	Grid 2 **M4** **34.40 V/m**	Grid 3 **M4** **30.98 V/m**
Grid 4 **M4** **23.65 V/m**	Grid 5 **M4** **35.99 V/m**	Grid 6 **M4** **38.49 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

27.94 V/m	48.61 V/m	49.13 V/m

Cursor:
Total = 49.12 V/m
E Category: M4
Location: -11, 24.5, 8.7 mm

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Mid_Chan/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 = 24.24 V/m; Power Drift = -0.04 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 32.50 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** 31.25 V/m	Grid 2 **M4** 32.50 V/m	Grid 3 **M4** 30.83 V/m
Grid 4 **M4** 21.44 V/m	Grid 5 **M4** 32.32 V/m	Grid 6 **M4** 35.14 V/m
Grid 7 **M4** 24.28 V/m	Grid 8 **M4** 43.21 V/m	Grid 9 **M4** 44.02 V/m

Cursor:
Total = 44.02 V/m
E Category: M4
Location: -11.5, 25, 8.7 mm

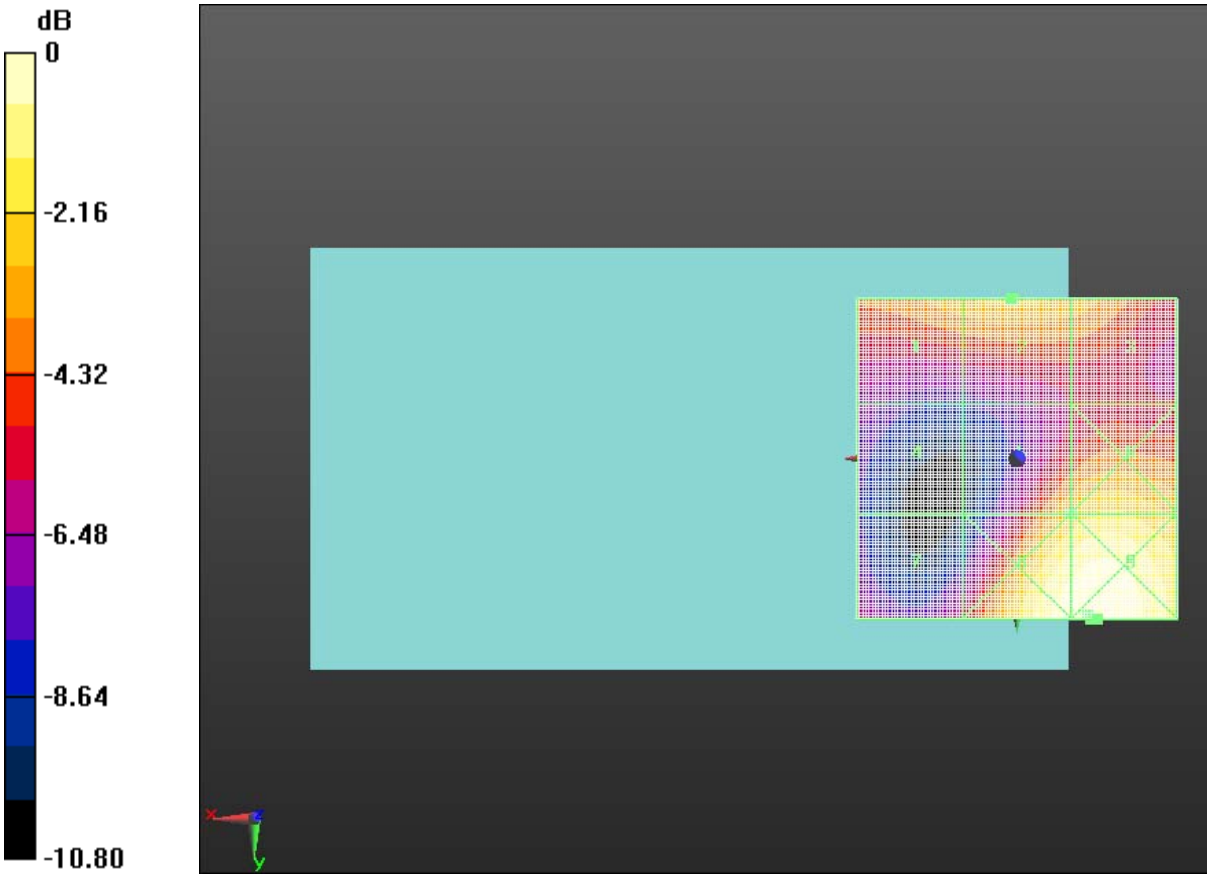
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 25.41 V/m; Power Drift = 0.04 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 33.47 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **32.36 V/m**	Grid 2 **M4** **33.47 V/m**	Grid 3 **M4** **32.17 V/m**
Grid 4 **M4** **22.35 V/m**	Grid 5 **M4** **32.96 V/m**	Grid 6 **M4** **35.49 V/m**
Grid 7 **M4** **24.87 V/m**	Grid 8 **M4** **42.47 V/m**	Grid 9 **M4** **43.42 V/m**

Cursor:
Total = 43.42 V/m
E Category: M4
Location: -12.5, 25, 8.7 mm



0 dB = 49.12 V/m = 33.83 dBV/m

Date/Time: 3/22/2013 4:37:58 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_II_Telecoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2AB04D29

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

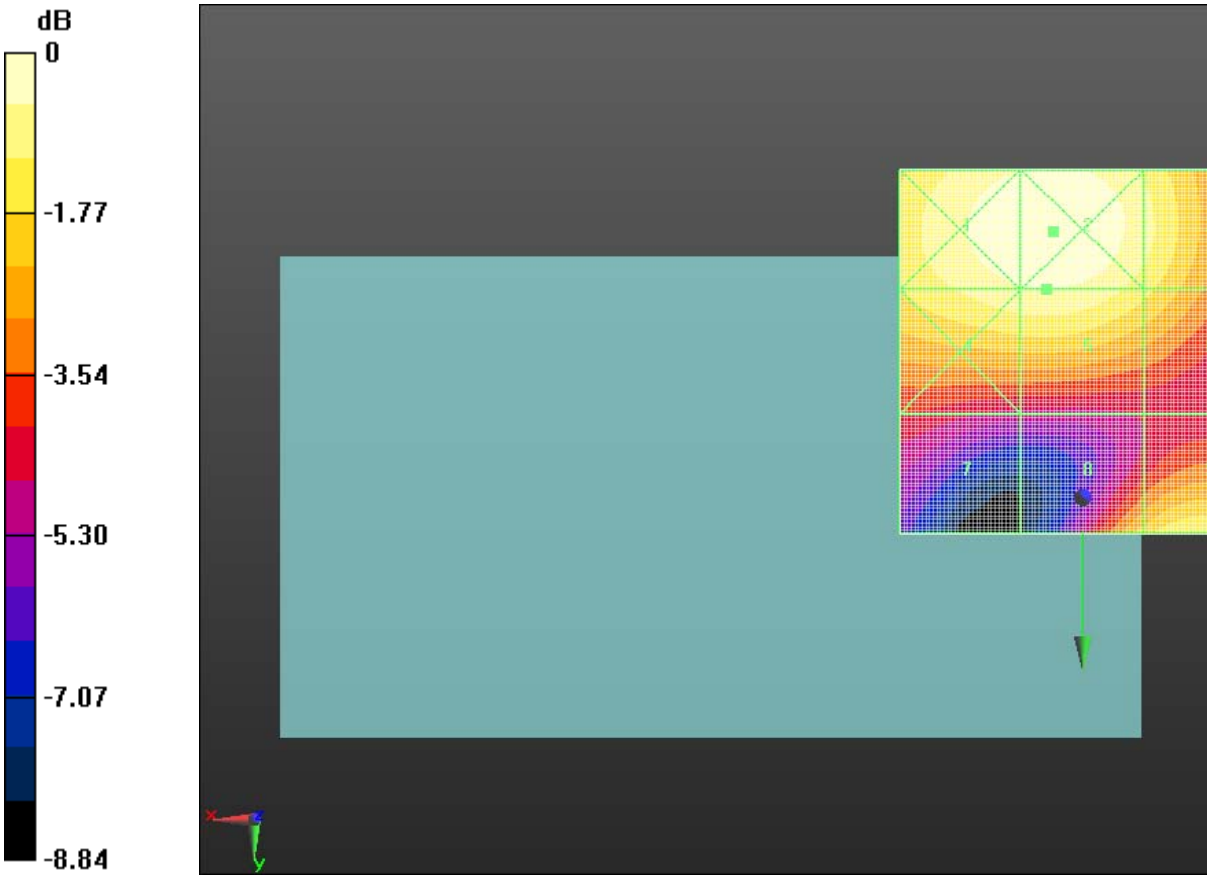
Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 23.09 V/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 37.35 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **39.50 V/m**	Grid 2 **M4** **39.99 V/m**	Grid 3 **M4** **35.82 V/m**
Grid 4 **M4** **37.03 V/m**	Grid 5 **M4** **37.35 V/m**	Grid 6 **M4** **33.38 V/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

25.00 V/m	**31.95 V/m**	**35.14 V/m**

Cursor:
Total = 39.99 V/m
E Category: M4
Location: 4, -36.5, 8.7 mm



0 dB = 39.99 V/m = 32.04 dBV/m

Date/Time: 3/22/2013 5:41:34 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_850

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB04D29

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/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 = 0.1610 A/m; Power Drift = 0.05 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.4894 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.455 A/m**	Grid 2 **M4** **0.367 A/m**	Grid 3 **M4** **0.334 A/m**
Grid 4 **M3** **0.473 A/m**	Grid 5 **M3** **0.489 A/m**	Grid 6 **M3** **0.464 A/m**
Grid 7 **M3**	Grid 8 **M3**	Grid 9 **M3**

0.627 A/m	**0.654 A/m**	**0.592 A/m**

Cursor:
Total = 0.6540 A/m
H Category: M3
Location: 1, 25, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/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 = 0.1670 A/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.4962 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.491 A/m**	Grid 2 **M4** **0.394 A/m**	Grid 3 **M4** **0.346 A/m**
Grid 4 **M3** **0.488 A/m**	Grid 5 **M3** **0.496 A/m**	Grid 6 **M3** **0.464 A/m**
Grid 7 **M3** **0.639 A/m**	Grid 8 **M3** **0.653 A/m**	Grid 9 **M3** **0.585 A/m**

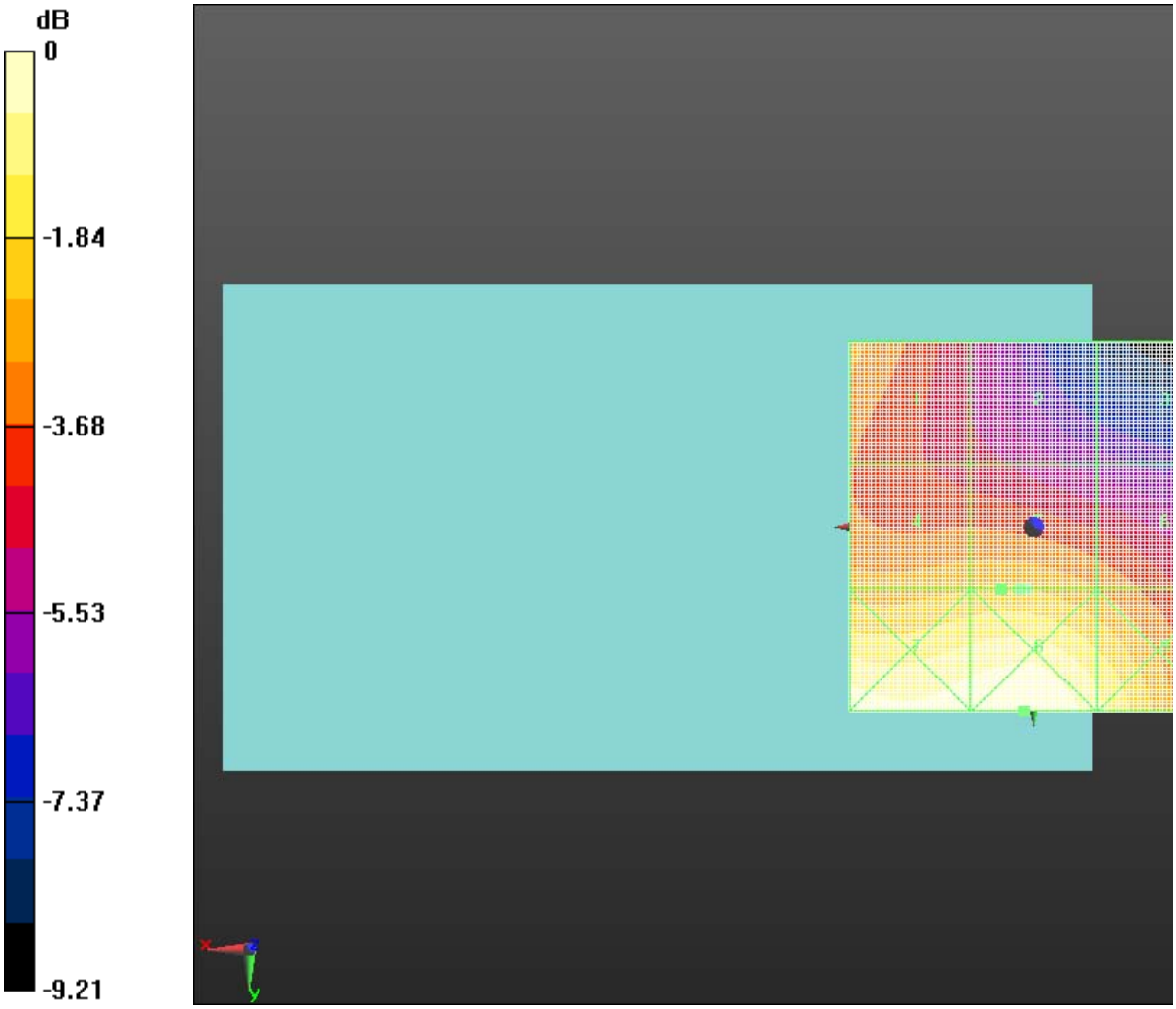
Cursor:
Total = 0.6529 A/m
H Category: M3
Location: 1.5, 25, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/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 = 0.1670 A/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.5164 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.490 A/m**	Grid 2 **M4** **0.398 A/m**	Grid 3 **M4** **0.347 A/m**
Grid 4 **M3** **0.510 A/m**	Grid 5 **M3** **0.516 A/m**	Grid 6 **M3** **0.475 A/m**
Grid 7 **M3** **0.670 A/m**	Grid 8 **M3** **0.678 A/m**	Grid 9 **M3** **0.604 A/m**

Cursor:
Total = 0.6784 A/m
H Category: M3
Location: 1.5, 25, 8.7 mm



0 dB = 0.6520 A/m = -3.72 dBA/m

Date/Time: 3/22/2013 5:53:04 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB04D29

Communication System: GSM 850; Frequency: 848.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

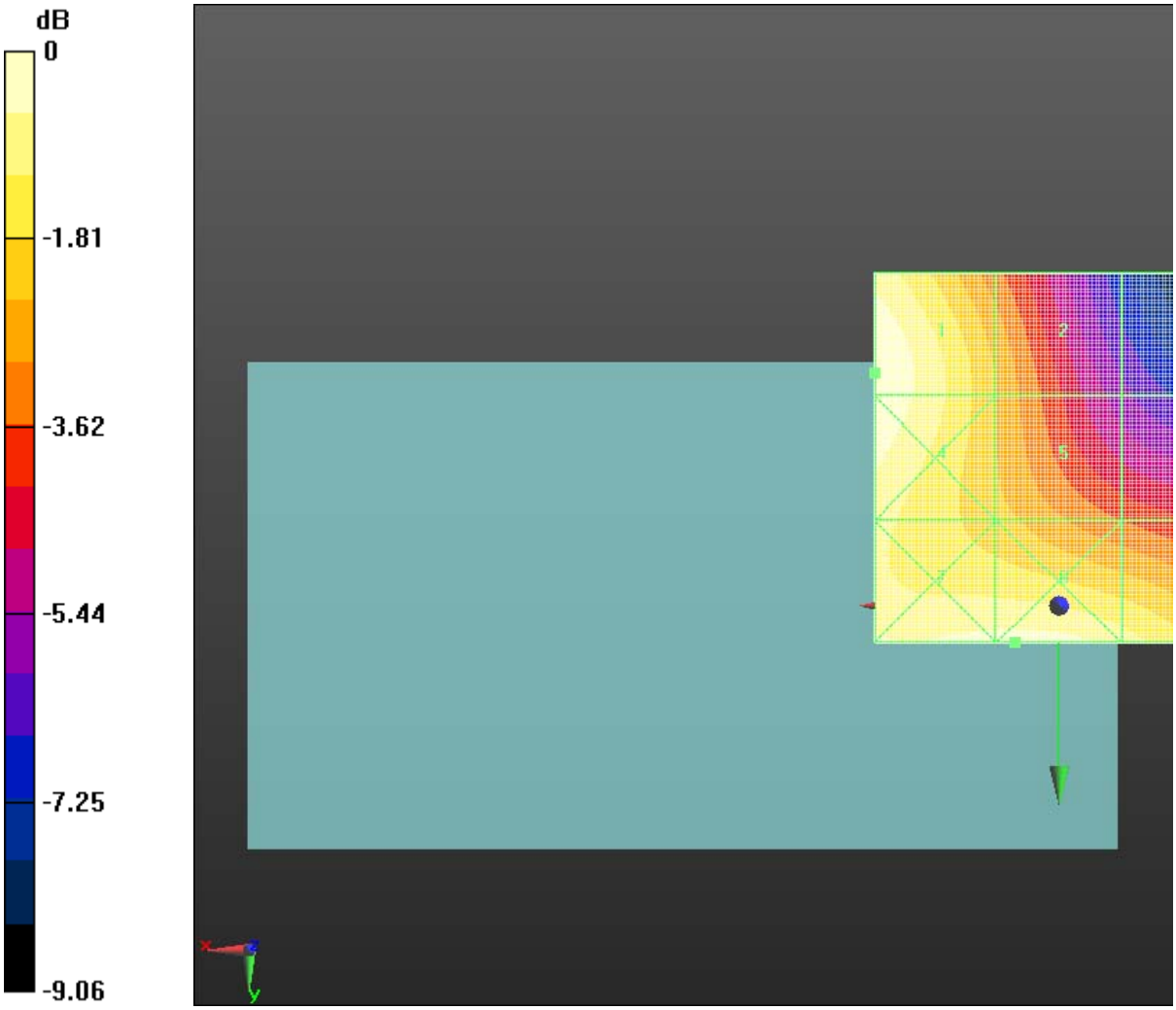
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.1670 A/m; Power Drift = 0.03 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.4964 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.496 A/m**	Grid 2 **M4** **0.376 A/m**	Grid 3 **M4** **0.254 A/m**
Grid 4 **M3** **0.494 A/m**	Grid 5 **M4** **0.386 A/m**	Grid 6 **M4** **0.327 A/m**
Grid 7 **M3**	Grid 8 **M3**	Grid 9 **M4**

0.477 A/m	**0.478 A/m**	**0.447 A/m**

Cursor:
Total = 0.4964 A/m
H Category: M3
Location: 25, -31.5, 8.7 mm



0 dB = 0.4949 A/m = -6.11 dBA/m

Date/Time: 3/22/2013 6:04:45 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_V

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB04D29

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz, Frequency: 846.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/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 = 0.1540 A/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.1770 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.166 A/m**	Grid 2 **M4** **0.136 A/m**	Grid 3 **M4** **0.124 A/m**
Grid 4 **M4** **0.174 A/m**	Grid 5 **M4** **0.177 A/m**	Grid 6 **M4** **0.169 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.228 A/m	**0.229 A/m**	**0.209 A/m**

Cursor:
Total = 0.2293 A/m
H Category: M4
Location: 2.5, 25, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/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 = 0.1560 A/m; Power Drift = 0.04 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.1792 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.176 A/m**	Grid 2 **M4** **0.141 A/m**	Grid 3 **M4** **0.124 A/m**
Grid 4 **M4** **0.179 A/m**	Grid 5 **M4** **0.171 A/m**	Grid 6 **M4** **0.160 A/m**
Grid 7 **M4** **0.248 A/m**	Grid 8 **M4** **0.216 A/m**	Grid 9 **M4** **0.184 A/m**

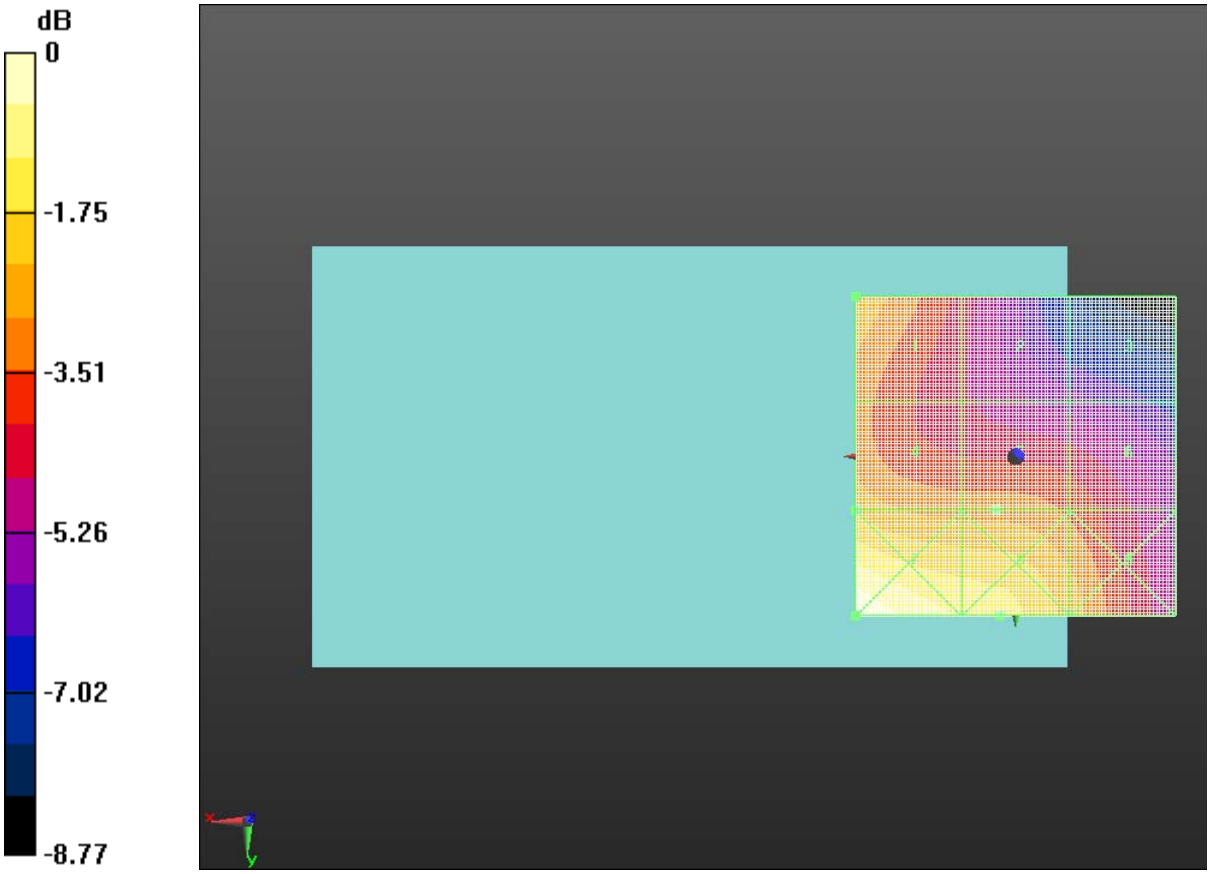
Cursor:
Total = 0.2479 A/m
H Category: M4
Location: 25, 25, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/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 = 0.1540 A/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.1864 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.186 A/m**	Grid 2 **M4** **0.145 A/m**	Grid 3 **M4** **0.123 A/m**
Grid 4 **M4** **0.186 A/m**	Grid 5 **M4** **0.170 A/m**	Grid 6 **M4** **0.159 A/m**
Grid 7 **M4** **0.255 A/m**	Grid 8 **M4** **0.217 A/m**	Grid 9 **M4** **0.182 A/m**

Cursor:
Total = 0.2546 A/m
H Category: M4
Location: 25, 25, 8.7 mm



0 dB = 0.2293 A/m = -12.79 dBA/m

Date/Time: 3/22/2013 6:19:47 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_V_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB04D29

Communication System: WCDMA FDD V; Frequency: 846.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

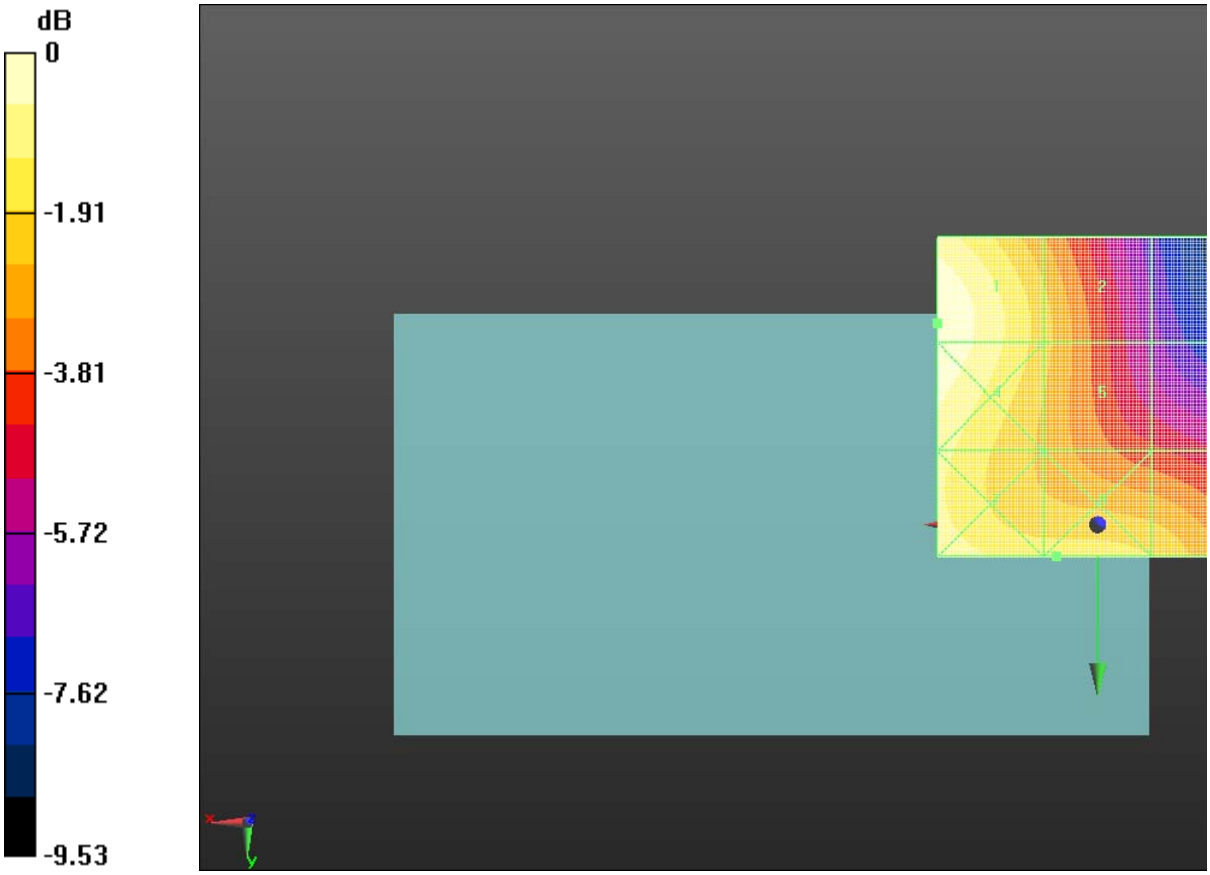
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.1540 A/m; Power Drift = -0.05 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.1894 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.189 A/m**	Grid 2 **M4** **0.146 A/m**	Grid 3 **M4** **0.095 A/m**
Grid 4 **M4** **0.188 A/m**	Grid 5 **M4** **0.146 A/m**	Grid 6 **M4** **0.116 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.176 A/m	**0.159 A/m**	**0.152 A/m**

Cursor:
Total = 0.1894 A/m
H Category: M4
Location: 25, -31.5, 8.7 mm



0 dB = 0.1894 A/m = -14.45 dBA/m

Date/Time: 6/4/2013 9:27:21 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_IV

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB035D0

Communication System: UID 0 - n/a, WCDMA FDD IV; Frequency: 1712.4 MHz, Frequency: 1732.6 MHz, Frequency: 1752.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/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 = 0.04000 A/m; Power Drift = -0.04 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.03908 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.039 A/m**	Grid 2 **M4** **0.038 A/m**	Grid 3 **M4** **0.036 A/m**
Grid 4 **M4** **0.036 A/m**	Grid 5 **M4** **0.037 A/m**	Grid 6 **M4** **0.036 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.041 A/m	**0.037 A/m**	**0.030 A/m**

Cursor:
Total = 0.04150 A/m
H Category: M4
Location: 25, 25, 8.7 mm

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/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 = 0.05200 A/m; Power Drift = -0.16 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.04848 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.047 A/m**	Grid 2 **M4** **0.048 A/m**	Grid 3 **M4** **0.047 A/m**
Grid 4 **M4** **0.045 A/m**	Grid 5 **M4** **0.048 A/m**	Grid 6 **M4** **0.046 A/m**
Grid 7 **M4** **0.050 A/m**	Grid 8 **M4** **0.044 A/m**	Grid 9 **M4** **0.039 A/m**

Cursor:
Total = 0.05032 A/m
H Category: M4
Location: 25, 25, 8.7 mm

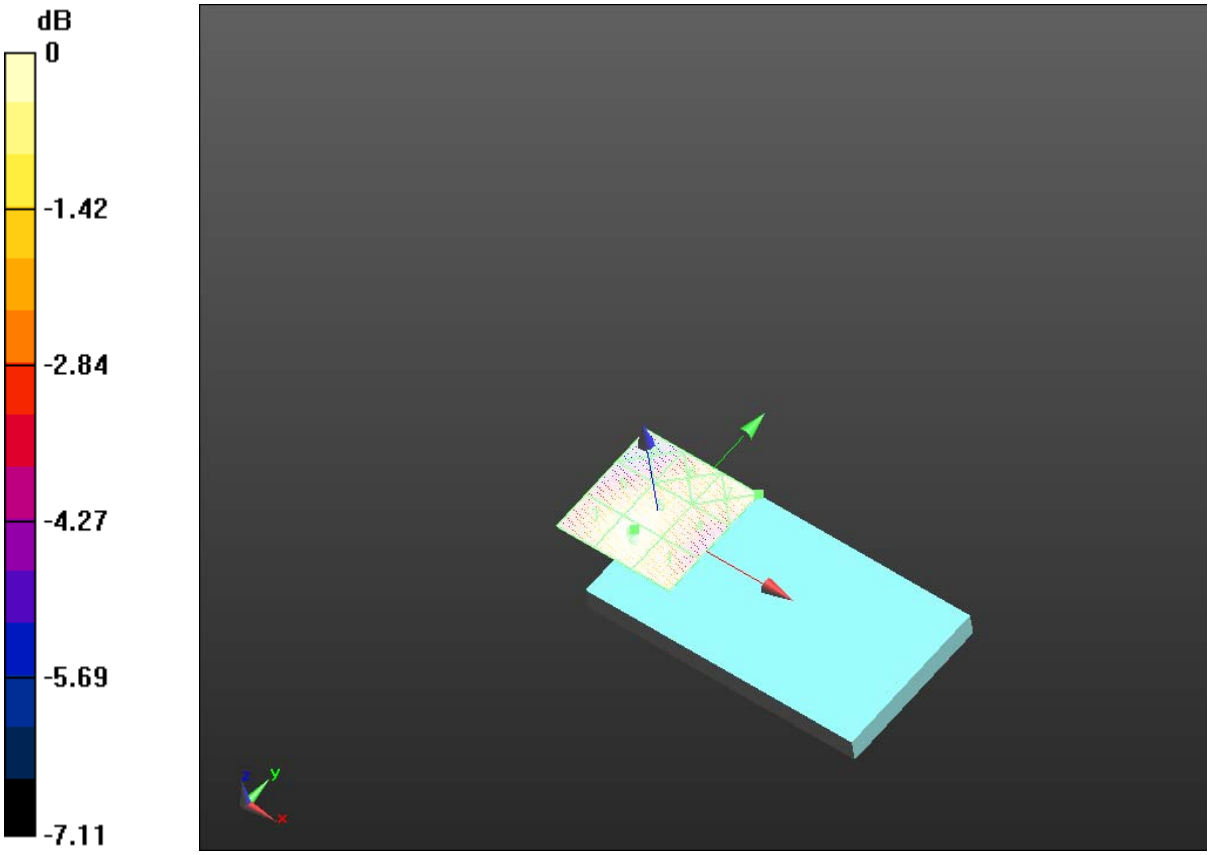
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.06000 A/m; Power Drift = 0.10 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.05522 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.052 A/m**	Grid 2 **M4** **0.055 A/m**	Grid 3 **M4** **0.054 A/m**
Grid 4 **M4** **0.051 A/m**	Grid 5 **M4** **0.055 A/m**	Grid 6 **M4** **0.054 A/m**
Grid 7 **M4** **0.056 A/m**	Grid 8 **M4** **0.051 A/m**	Grid 9 **M4** **0.047 A/m**

Cursor:
Total = 0.05611 A/m
H Category: M4
Location: 25, 25, 8.7 mm



0 dB = 0.04150 A/m = -27.64 dBA/m

Date/Time: 6/4/2013 9:45:08 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_IV_telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB035D0

Communication System: UID 0 - n/a, WCDMA FDD IV; Frequency: 1752.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

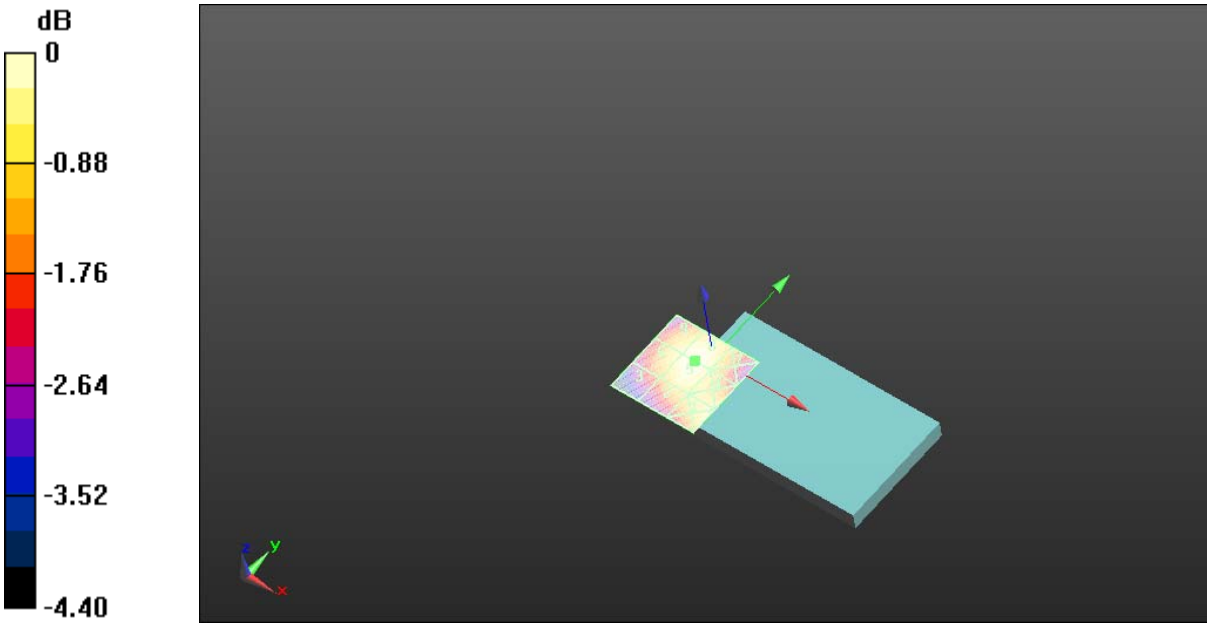
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.05900 A/m; Power Drift = 0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.05454 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.053 A/m**	Grid 2 **M4** **0.050 A/m**	Grid 3 **M4** **0.046 A/m**
Grid 4 **M4** **0.052 A/m**	Grid 5 **M4** **0.055 A/m**	Grid 6 **M4** **0.052 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.051 A/m	**0.055 A/m**	**0.052 A/m**

Cursor:
Total = 0.05454 A/m
H Category: M4
Location: -1, -11, 8.7 mm



0 dB = 0.05454 A/m = -25.27 dBA/m

Date/Time: 6/3/2013 5:10:33 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900-Rev 2-05

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2FFFB6AF

Communication System: UID 0 - n/a, GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/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 = 0.06700 A/m; Power Drift = -0.11 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.1706 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.160 A/m**	Grid 2 **M3** **0.171 A/m**	Grid 3 **M3** **0.169 A/m**
Grid 4 **M3** **0.144 A/m**	Grid 5 **M3** **0.170 A/m**	Grid 6 **M3** **0.168 A/m**
Grid 7 **M3**	Grid 8 **M3**	Grid 9 **M3**

0.184 A/m	**0.176 A/m**	**0.146 A/m**

Cursor:
Total = 0.1836 A/m
H Category: M3
Location: 16, 25, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/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 = 0.07000 A/m; Power Drift = -0.00 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.1759 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.176 A/m**	Grid 2 **M3** **0.176 A/m**	Grid 3 **M3** **0.171 A/m**
Grid 4 **M3** **0.156 A/m**	Grid 5 **M3** **0.176 A/m**	Grid 6 **M3** **0.171 A/m**
Grid 7 **M3** **0.188 A/m**	Grid 8 **M3** **0.180 A/m**	Grid 9 **M3** **0.154 A/m**

Cursor:
Total = 0.1878 A/m
H Category: M3
Location: 20, 25, 8.7 mm

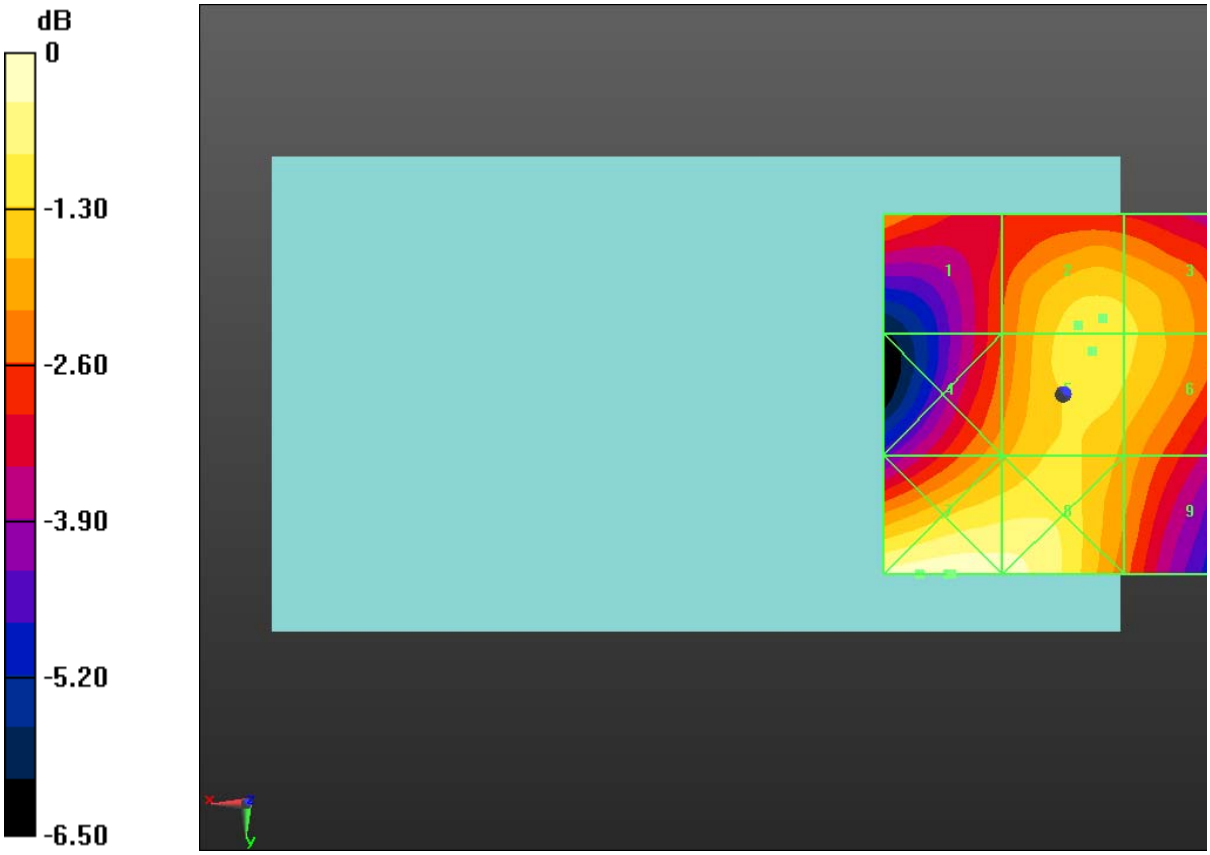
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.08000 A/m; Power Drift = 0.11 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.1978 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.171 A/m**	Grid 2 **M3** **0.197 A/m**	Grid 3 **M3** **0.193 A/m**
Grid 4 **M3** **0.178 A/m**	Grid 5 **M3** **0.198 A/m**	Grid 6 **M3** **0.193 A/m**
Grid 7 **M3** **0.218 A/m**	Grid 8 **M3** **0.214 A/m**	Grid 9 **M3** **0.177 A/m**

Cursor:
Total = 0.2184 A/m
H Category: M3
Location: 15.5, 25, 8.7 mm



0 dB = 0.1849 A/m = -14.66 dBA/m

Date/Time: 6/3/2013 5:31:04 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900-Rev 2-05_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2FFFB6AF

Communication System: UID 0 - n/a, GSM 1900; Frequency: 1909.8 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.6(1115); SEMCAD X 14.6.9(7117)

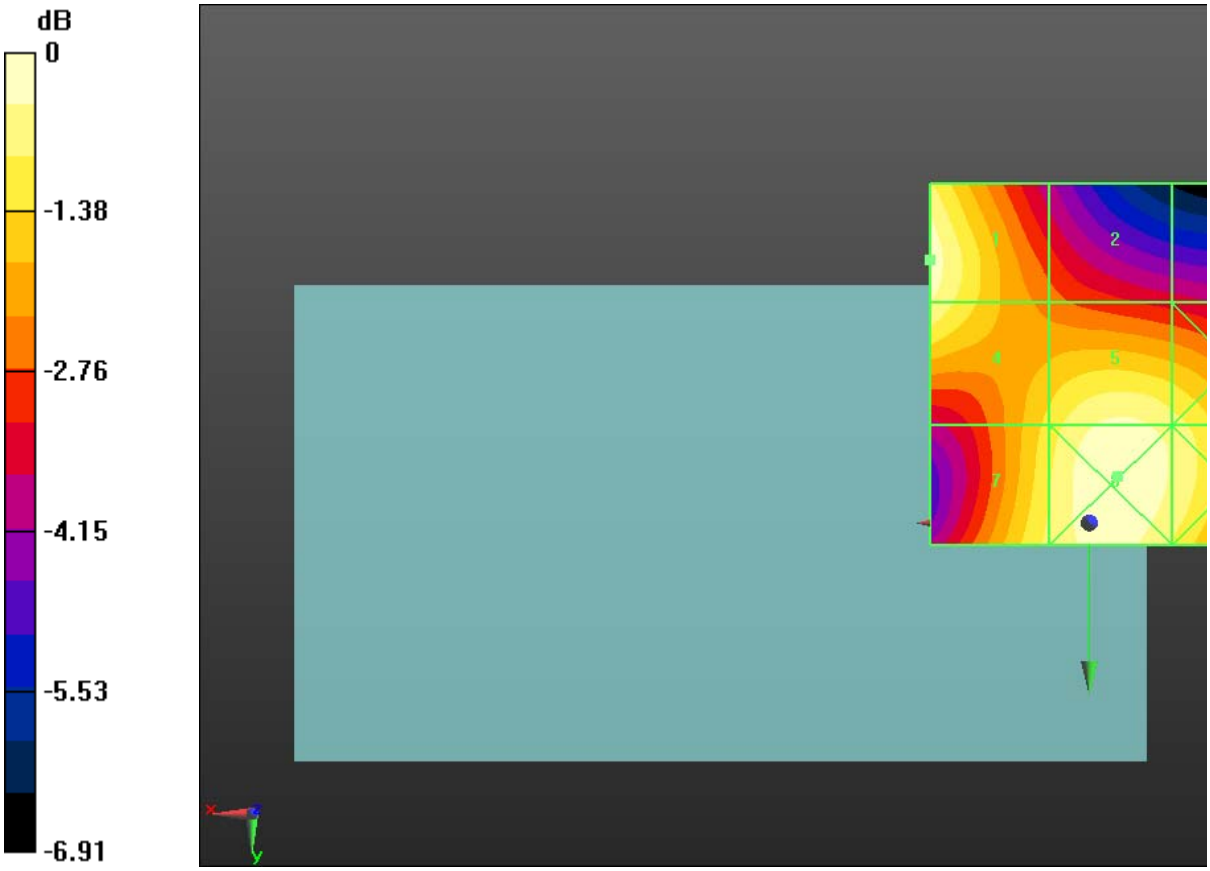
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.08100 A/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.1928 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.193 A/m**	Grid 2 **M3** **0.148 A/m**	Grid 3 **M4** **0.133 A/m**
Grid 4 **M3** **0.186 A/m**	Grid 5 **M3** **0.189 A/m**	Grid 6 **M3** **0.181 A/m**
Grid 7 **M3**	Grid 8 **M3**	Grid 9 **M3**

0.180 A/m	**0.195 A/m**	**0.185 A/m**

Cursor:
Total = 0.1953 A/m
H Category: M3
Location: -4, -6.5, 8.7 mm



0 dB = 0.1967 A/m = -14.12 dBA/m

Date/Time: 3/23/2013 12:24:38 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_II

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB04D29

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz, Frequency: 1907.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/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 = 0.1200 A/m; Power Drift = -0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.1079 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.108 A/m**	Grid 2 **M4** **0.105 A/m**	Grid 3 **M4** **0.103 A/m**
Grid 4 **M4** **0.093 A/m**	Grid 5 **M4** **0.105 A/m**	Grid 6 **M4** **0.103 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.106 A/m	**0.102 A/m**	**0.089 A/m**

Cursor:
Total = 0.1079 A/m
H Category: M4
Location: 25, -25, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/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 = 0.1070 A/m; Power Drift = 0.00 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.1020 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.101 A/m**	Grid 2 **M4** **0.092 A/m**	Grid 3 **M4** **0.090 A/m**
Grid 4 **M4** **0.082 A/m**	Grid 5 **M4** **0.092 A/m**	Grid 6 **M4** **0.090 A/m**
Grid 7 **M4** **0.102 A/m**	Grid 8 **M4** **0.099 A/m**	Grid 9 **M4** **0.082 A/m**

Cursor:
Total = 0.1020 A/m
H Category: M4
Location: 19.5, 25, 8.7 mm

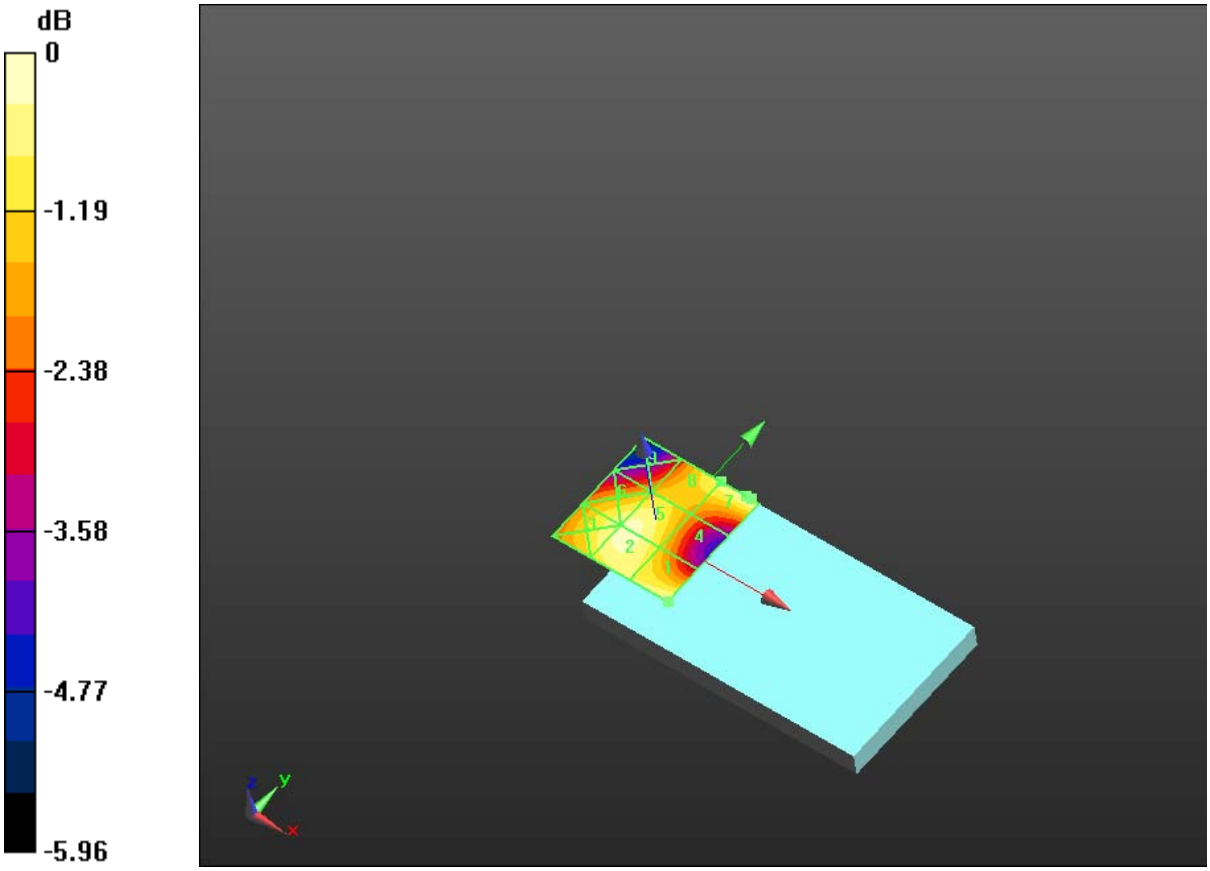
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.1120 A/m; Power Drift = -0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.1070 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.107 A/m**	Grid 2 **M4** **0.099 A/m**	Grid 3 **M4** **0.096 A/m**
Grid 4 **M4** **0.089 A/m**	Grid 5 **M4** **0.098 A/m**	Grid 6 **M4** **0.096 A/m**
Grid 7 **M4** **0.105 A/m**	Grid 8 **M4** **0.100 A/m**	Grid 9 **M4** **0.086 A/m**

Cursor:
Total = 0.1070 A/m
H Category: M4
Location: 25, -25, 8.7 mm



0 dB = 0.1079 A/m = -19.34 dBA/m

Date/Time: 3/23/2013 12:56:54 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_II_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2AB04D29

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE4 Sn881; Calibrated: 1/14/2013
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

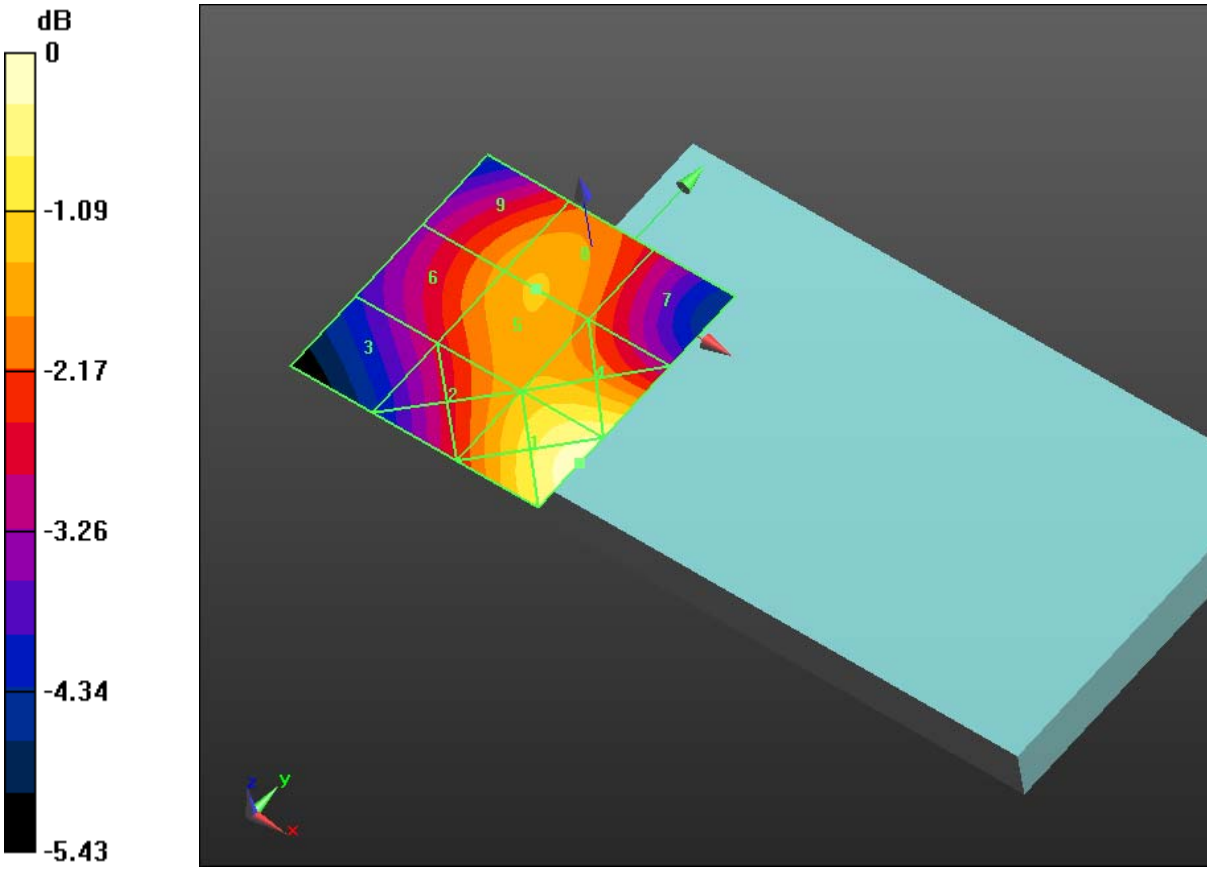
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.1130 A/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.1003 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.118 A/m**	Grid 2 **M4** **0.100 A/m**	Grid 3 **M4** **0.086 A/m**
Grid 4 **M4** **0.114 A/m**	Grid 5 **M4** **0.100 A/m**	Grid 6 **M4** **0.098 A/m**
Grid 7 **M4**	Grid 8 **M4**	Grid 9 **M4**

0.093 A/m	**0.100 A/m**	**0.098 A/m**

Cursor:
Total = 0.1180 A/m
H Category: M4
Location: 25, -34.5, 8.7 mm



0 dB = 0.1180 A/m = -18.56 dBA/m