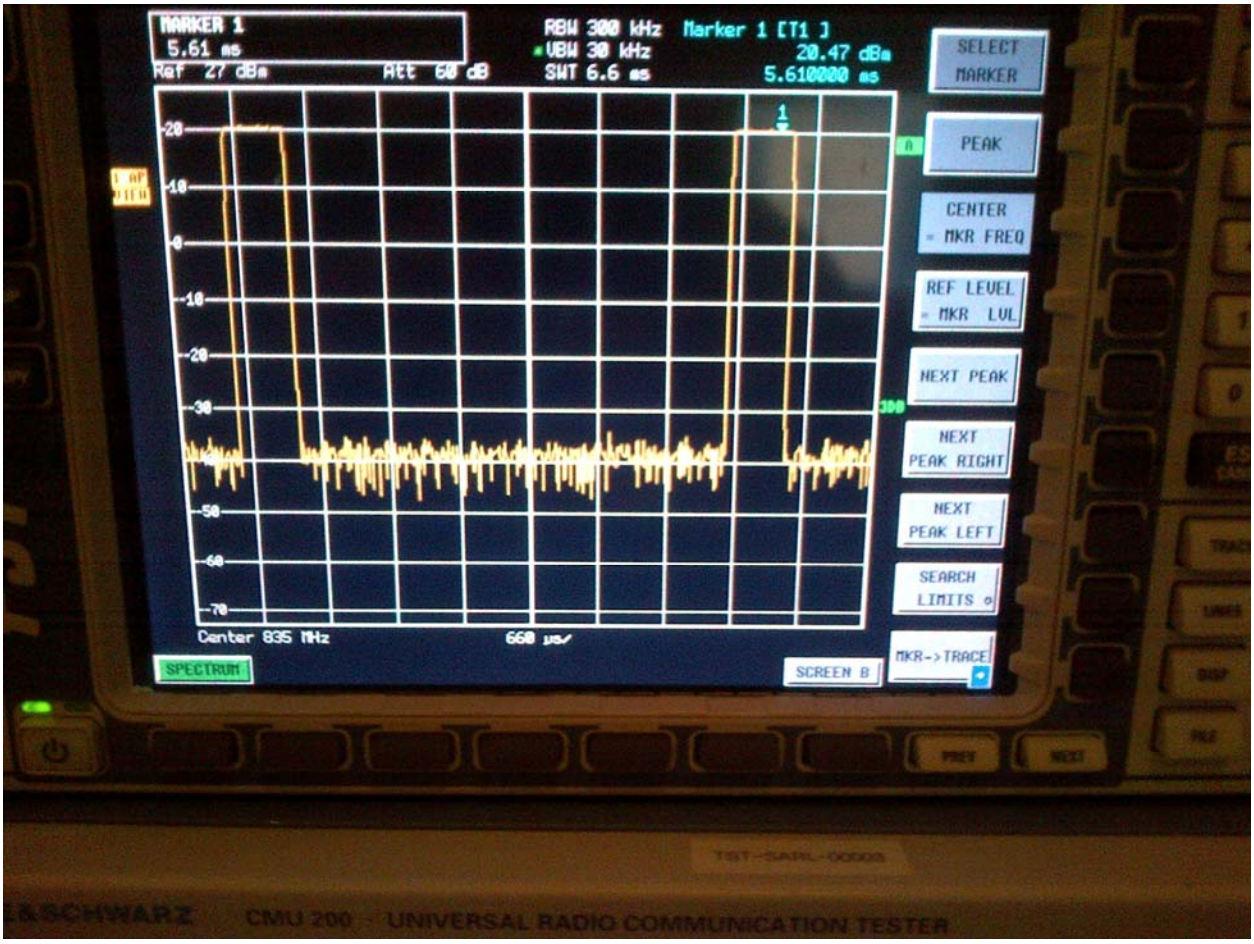
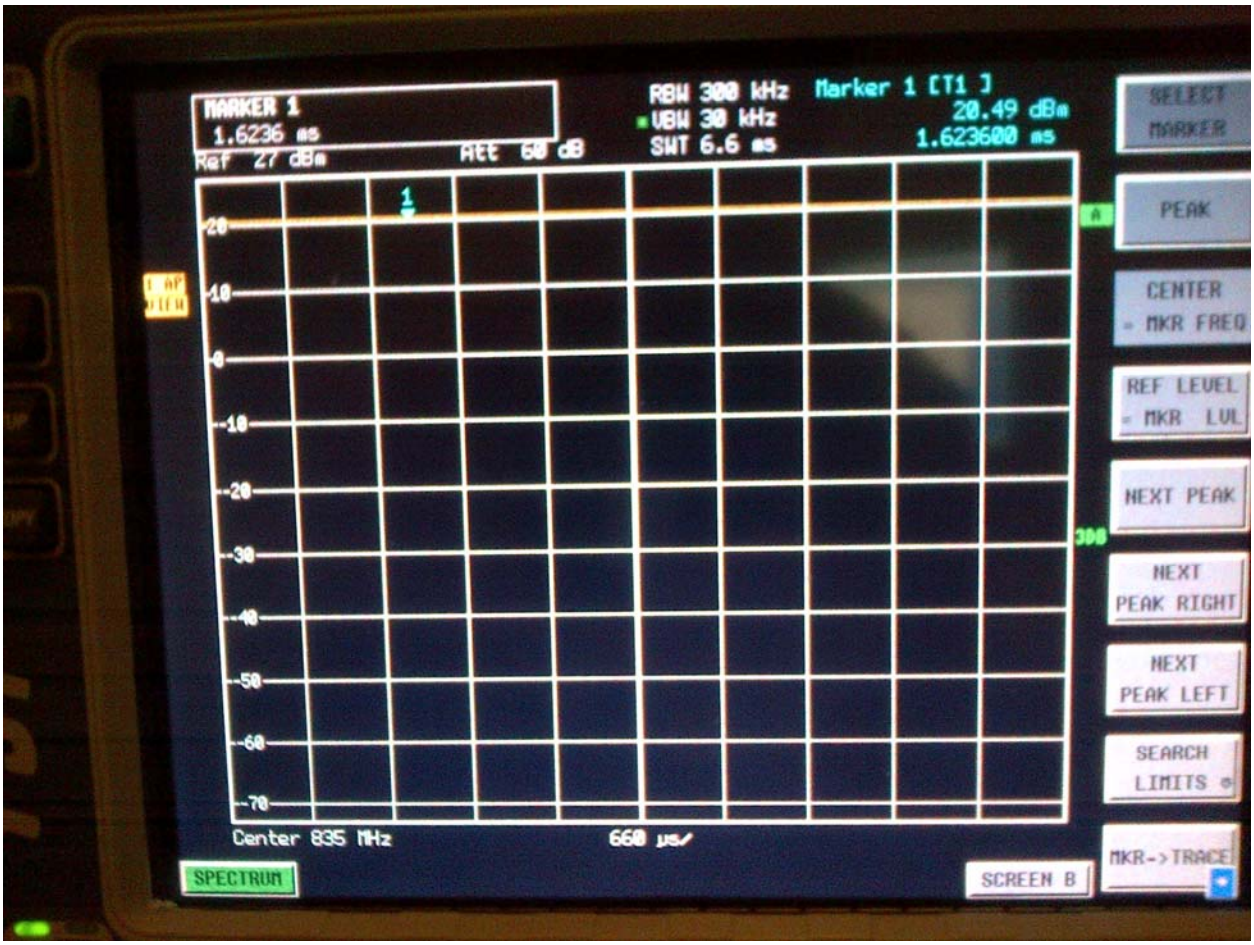
Annex A: Measurement data and plots

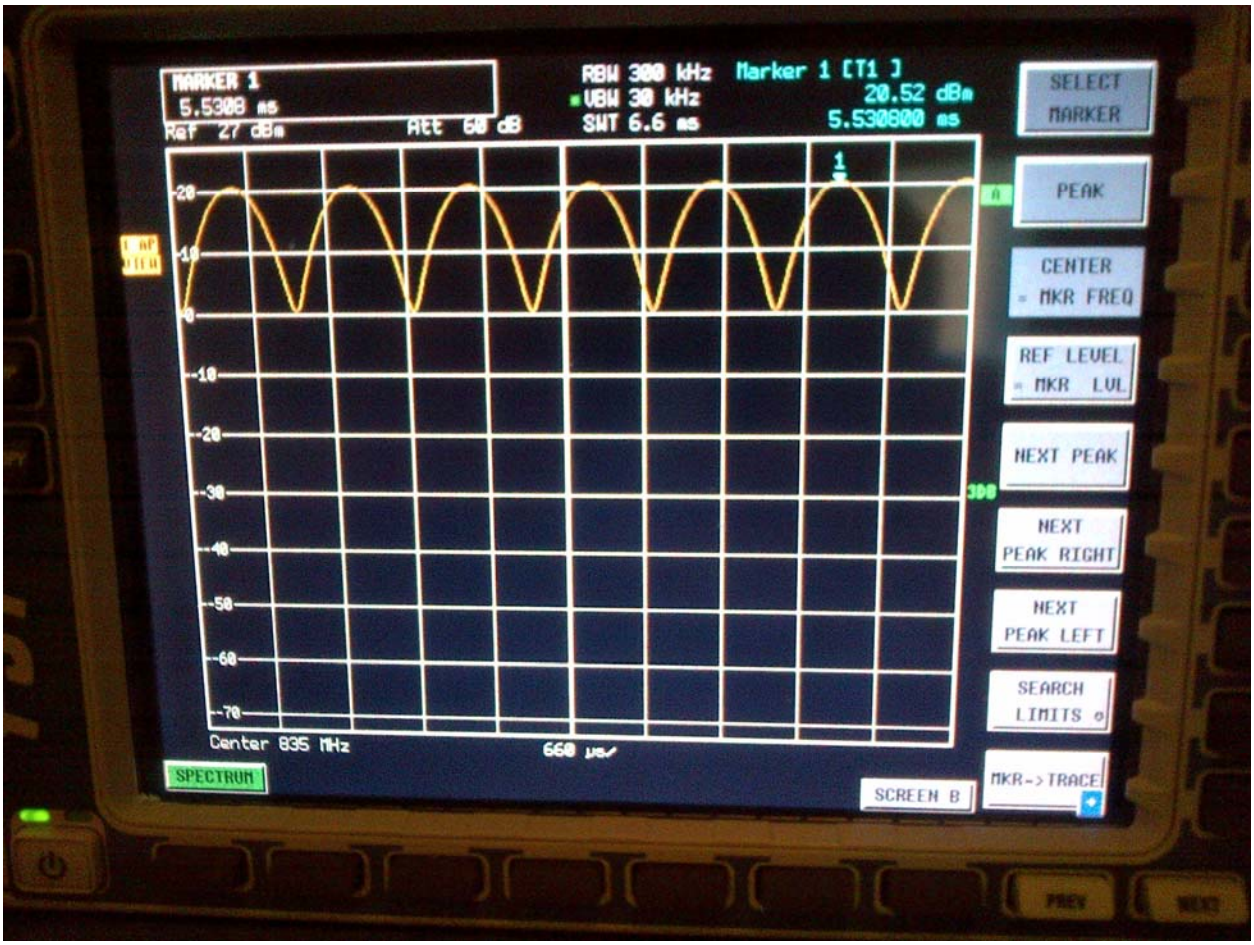
A.1 Spectrum analyser plots: GSM/UMTS, CW, 80%AM, signals



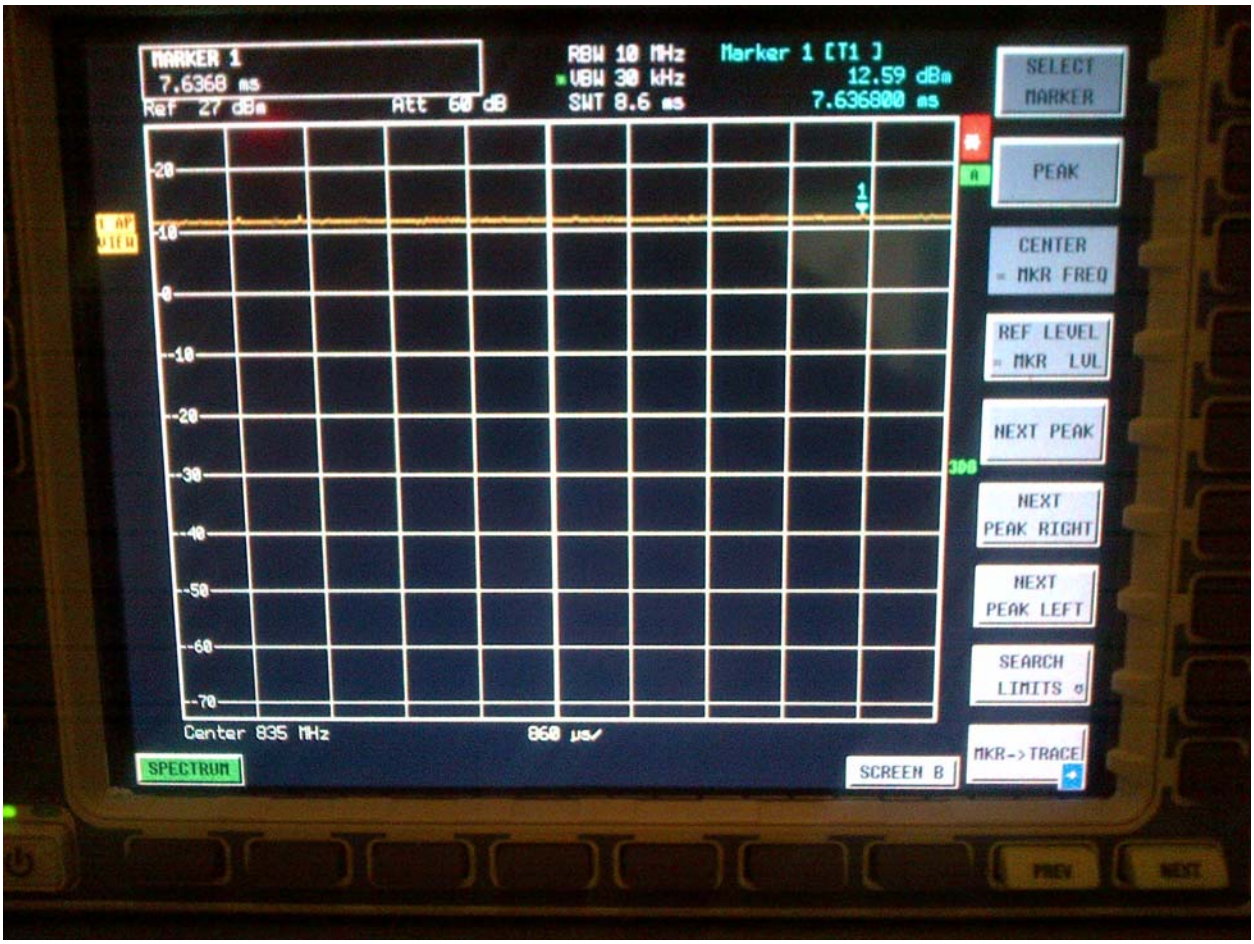
GSM 835 MHz



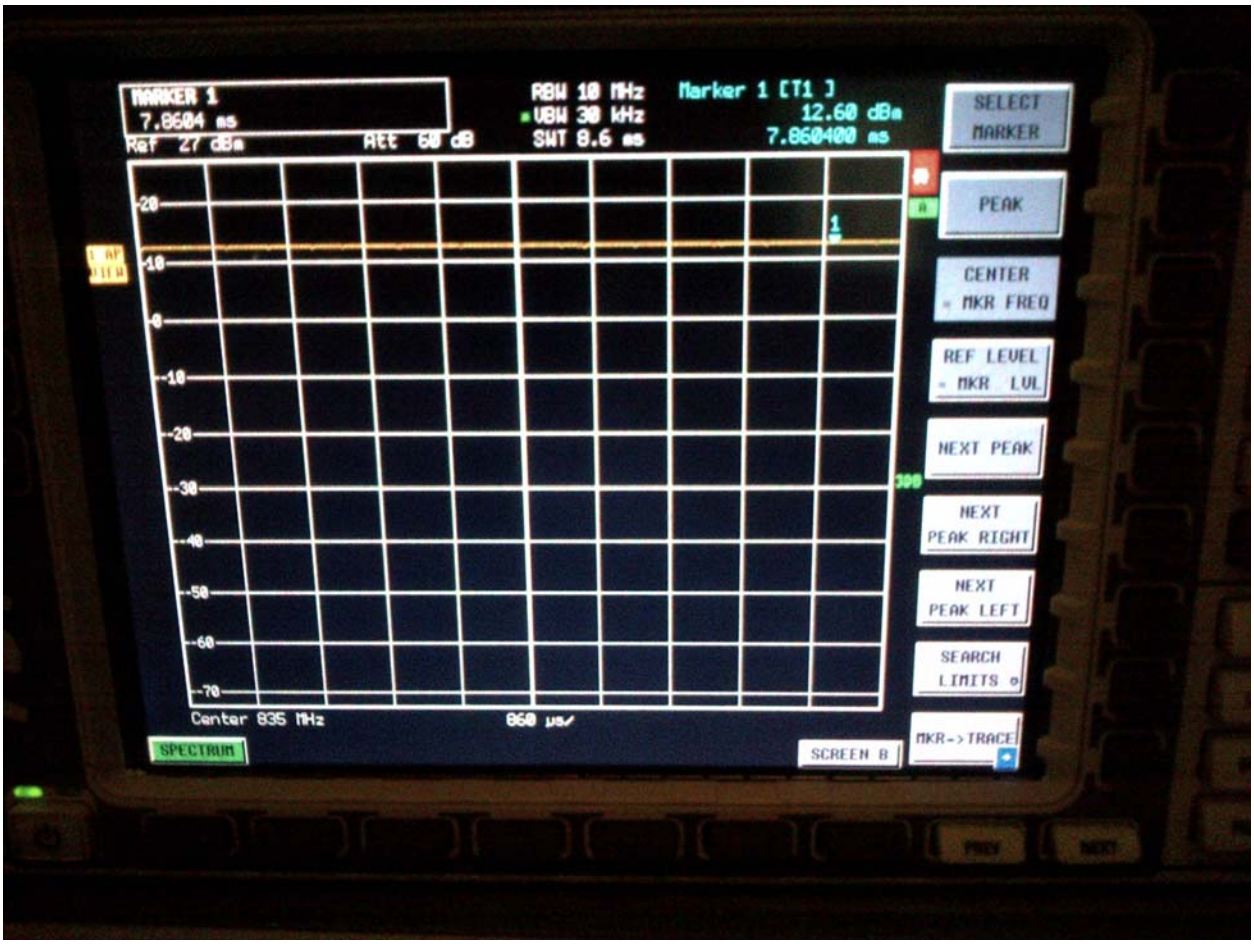
CW 835 MHz



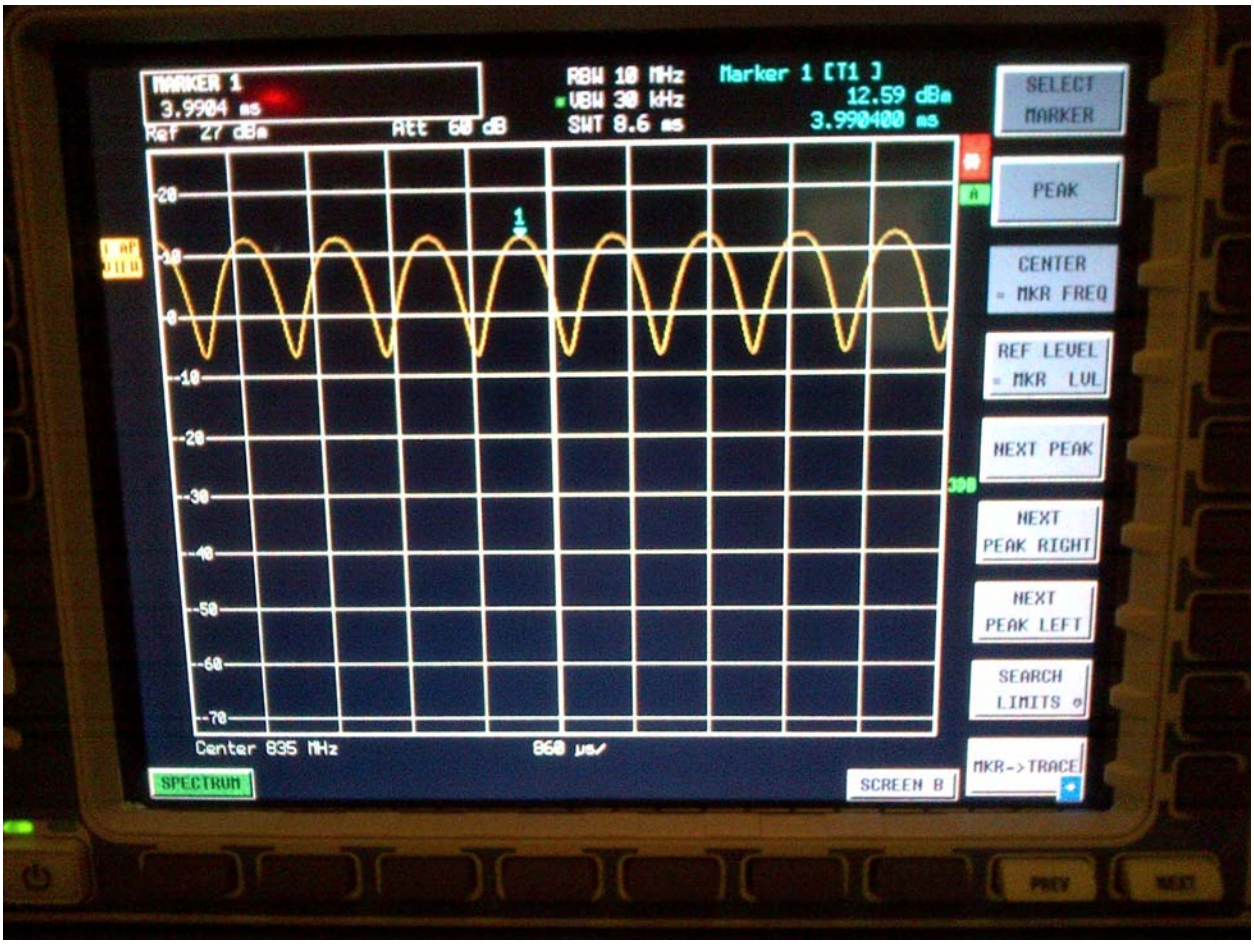
AM 80% 835 MHz



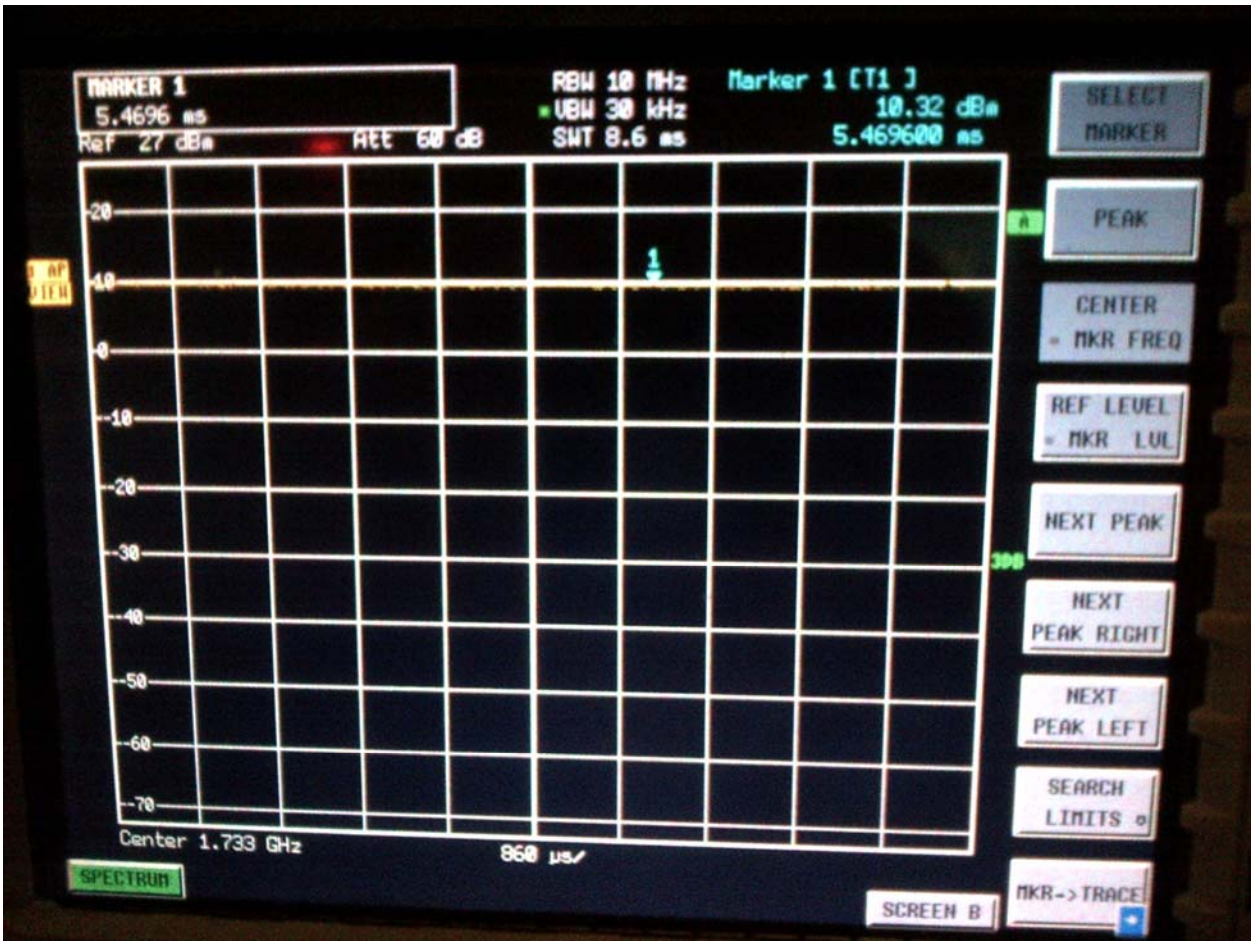
UMTS 835 MHz



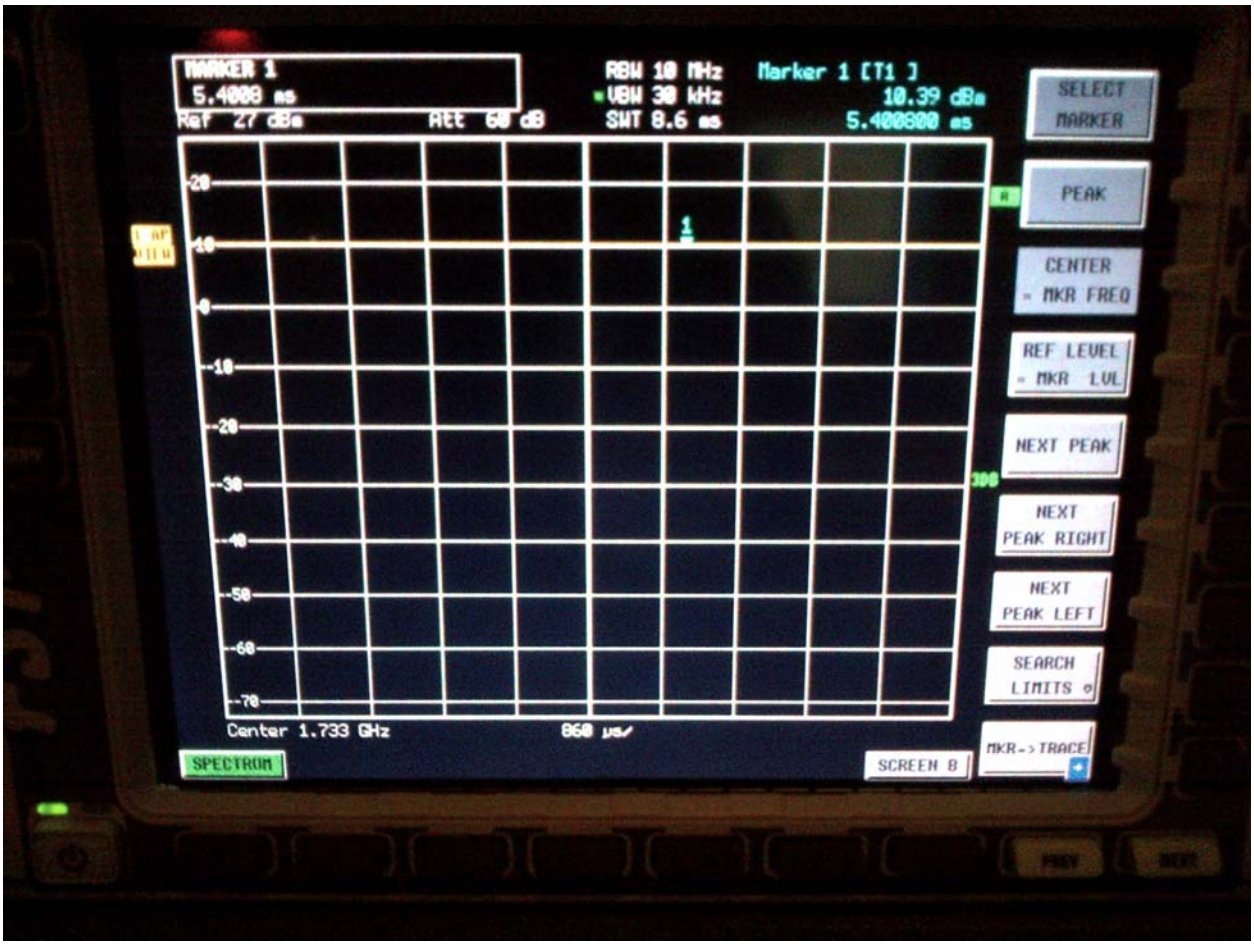
CW 835 MHz



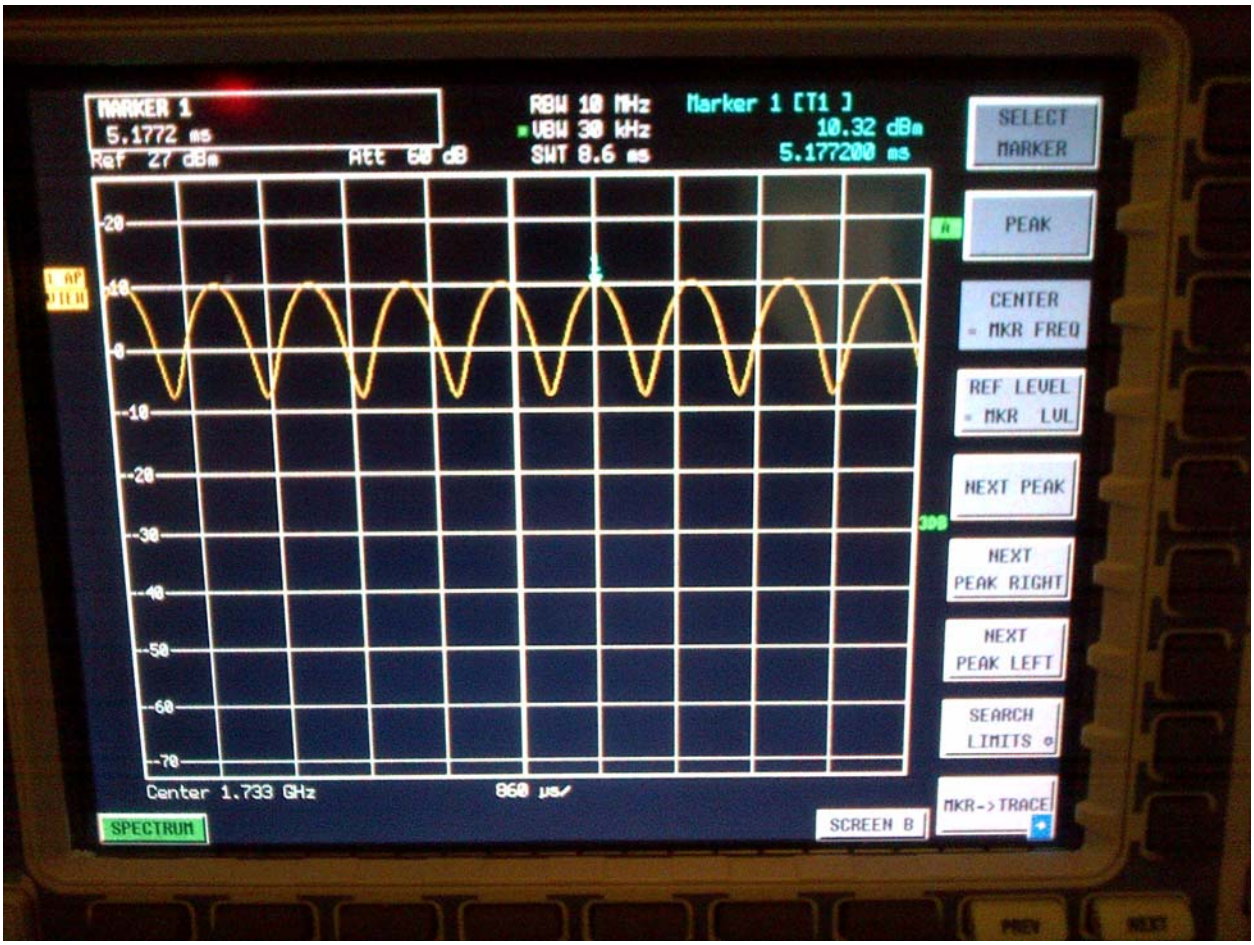
AM 80% 835 MHz



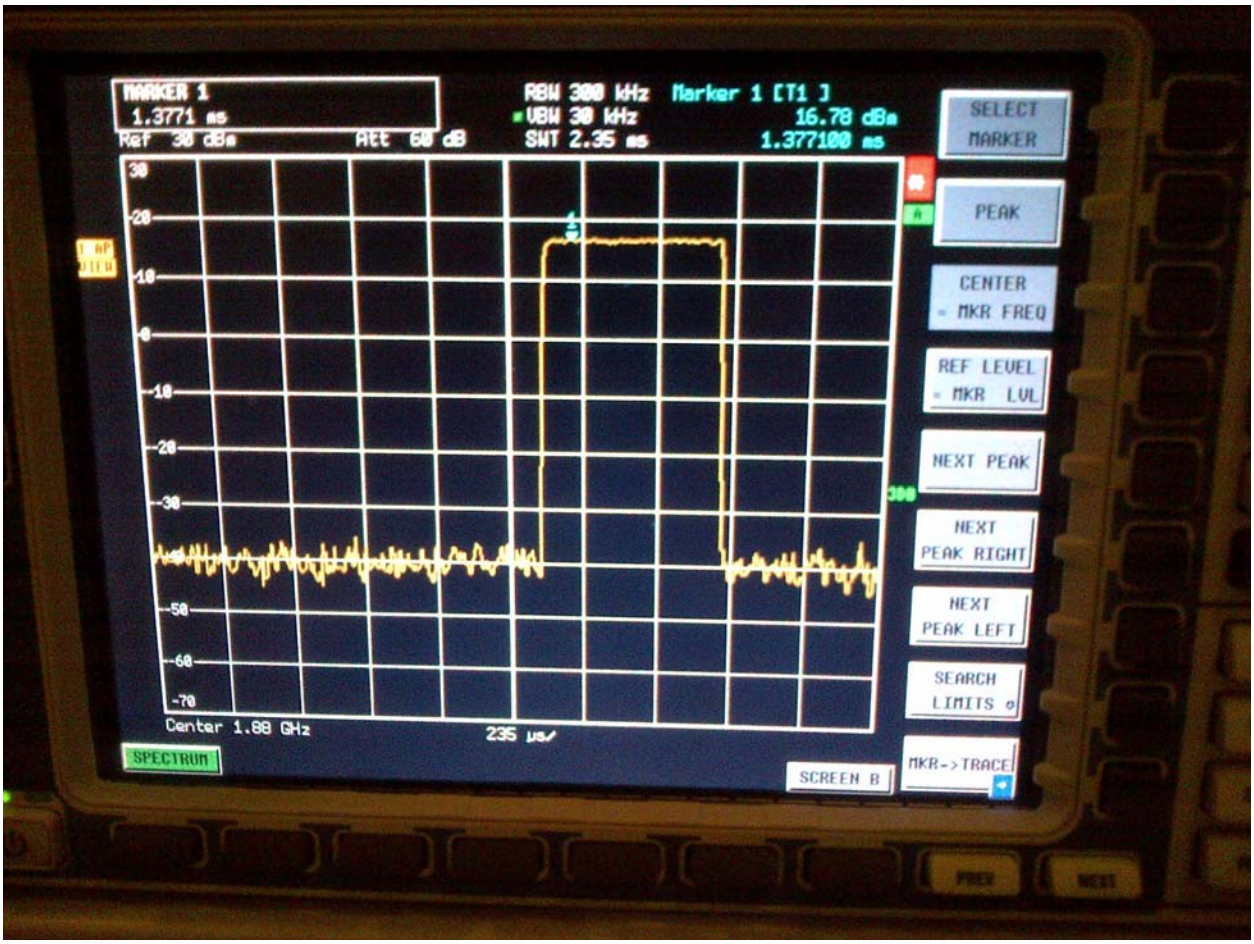
UMTS 1733 MHz



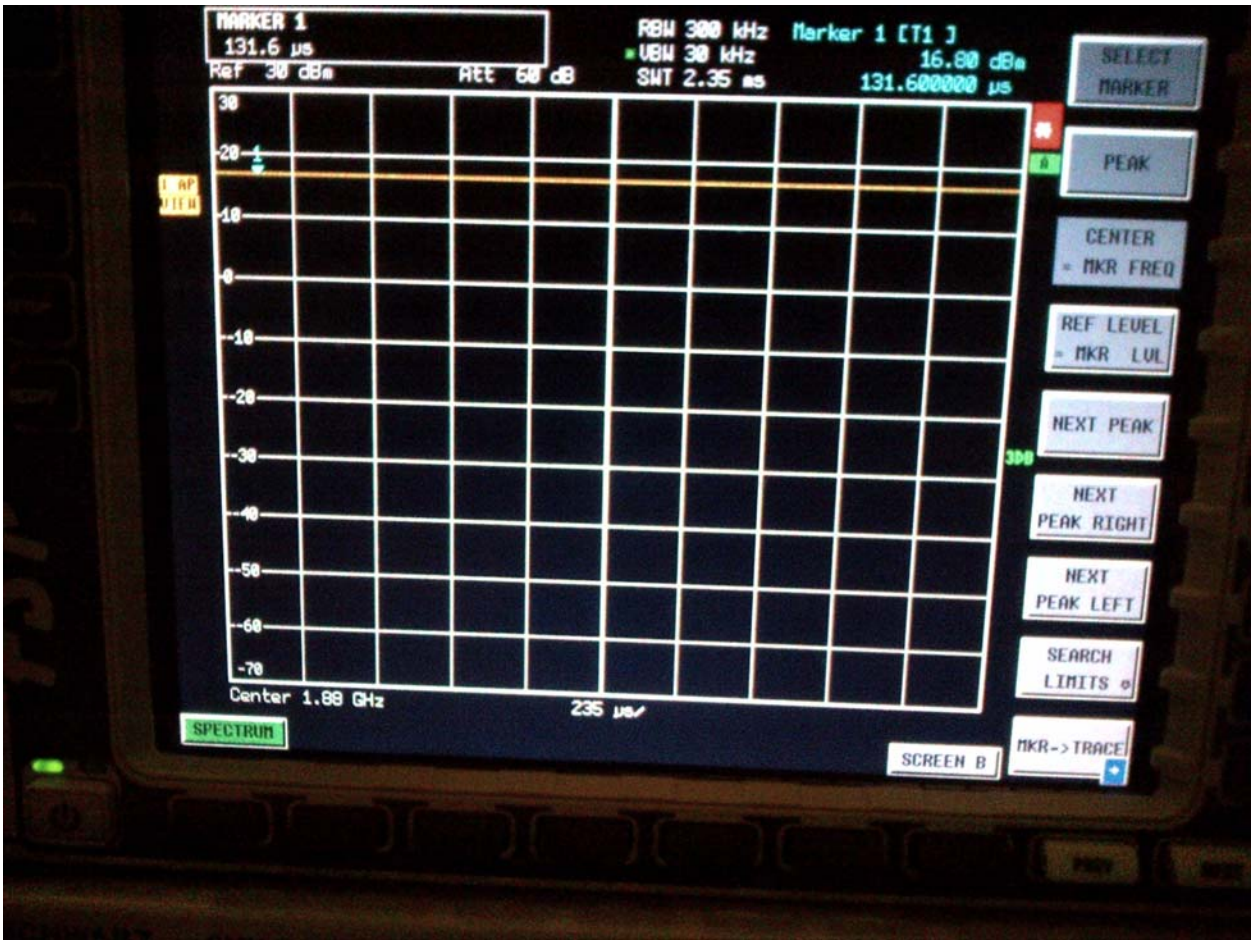
CW 1733 MHz



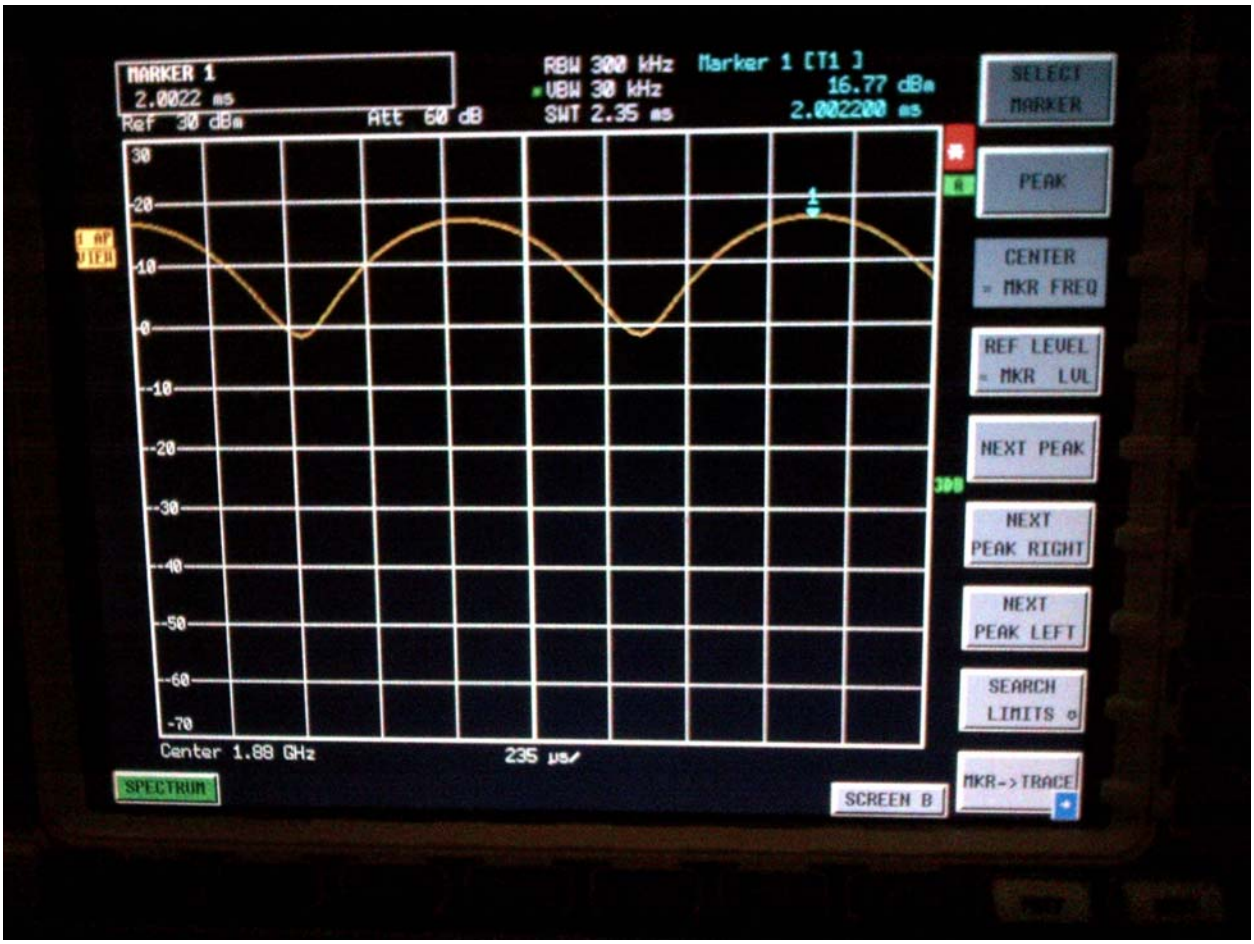
AM80% 1733 MHz



GSM 1880 MHz

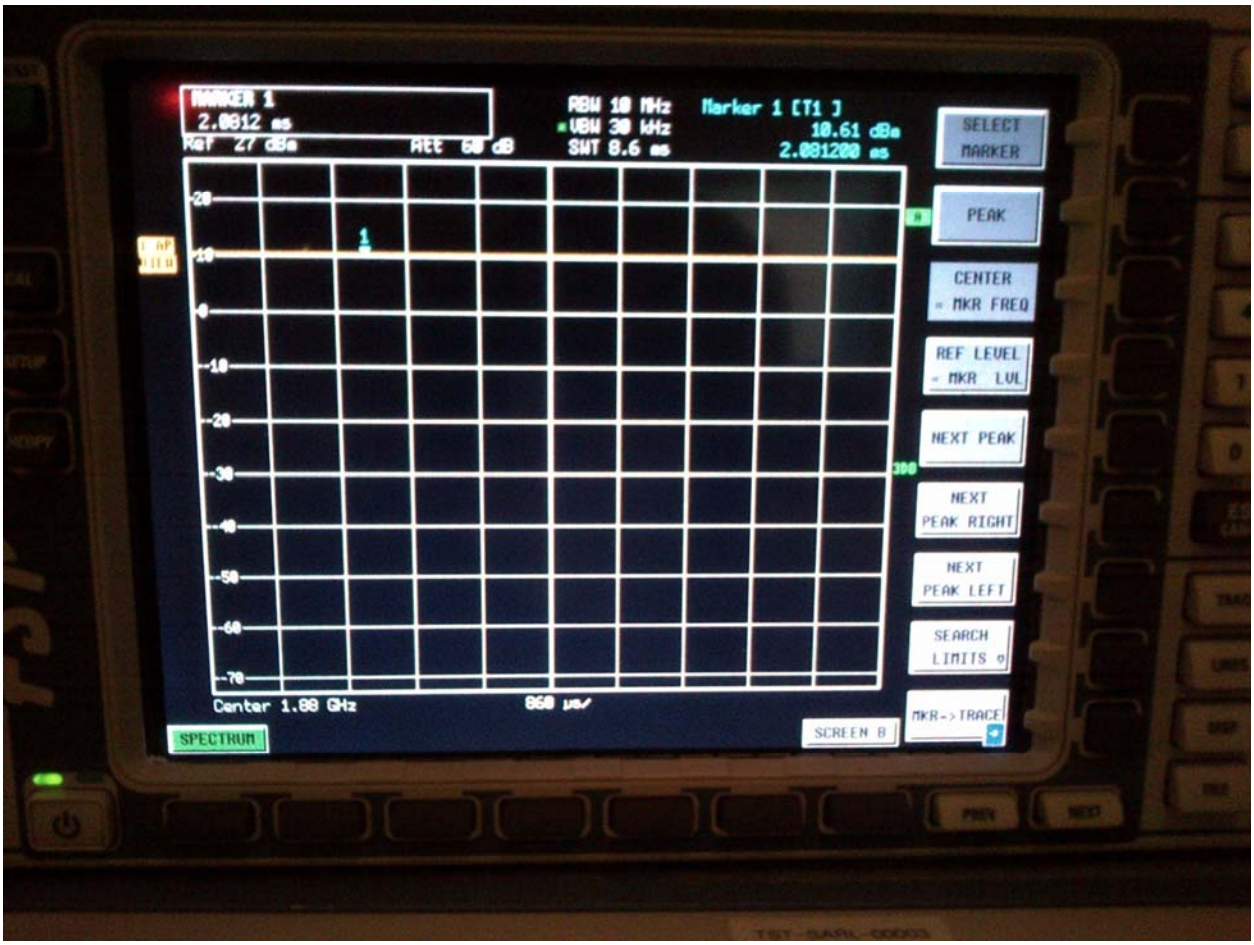


CW 1880 MHz

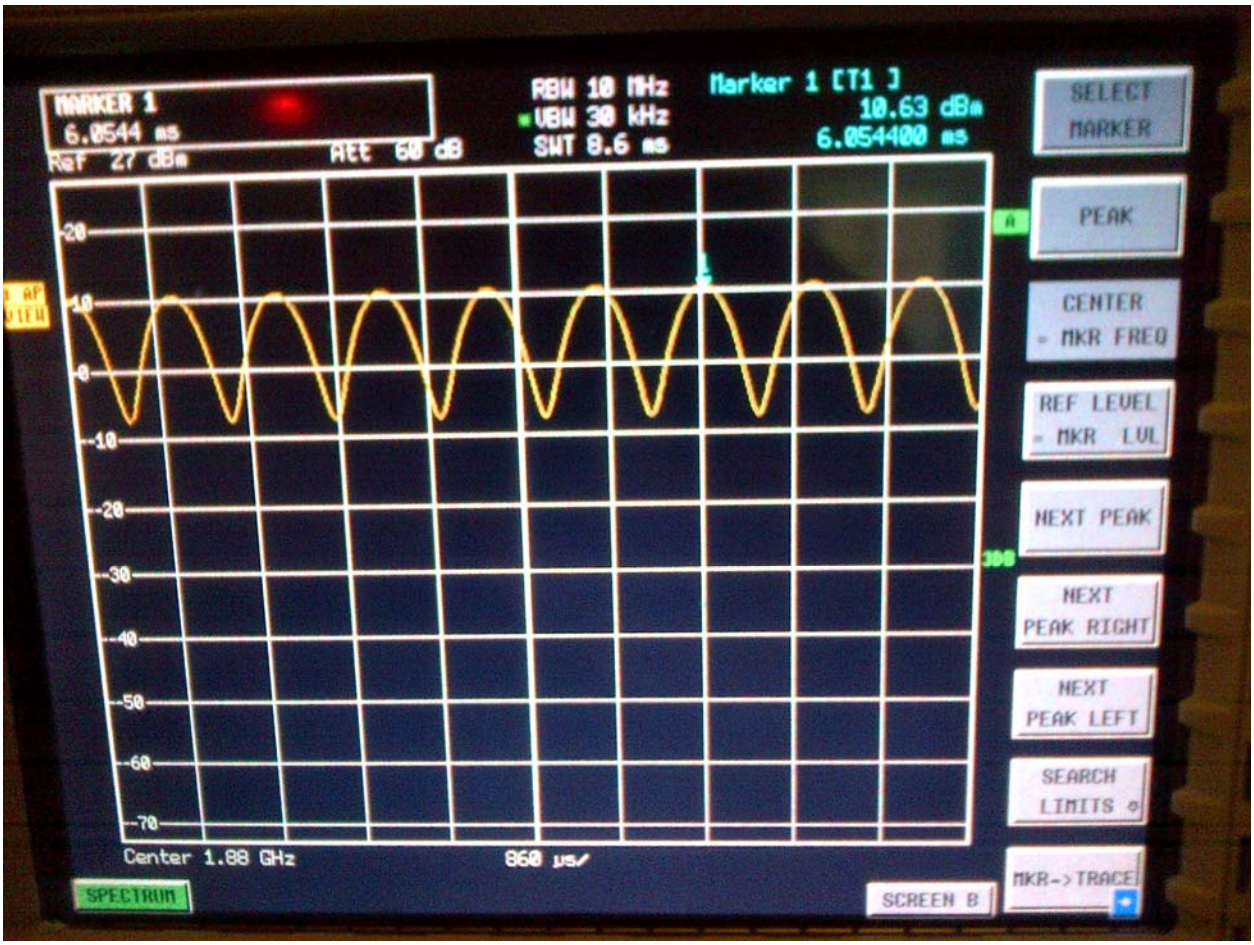


AM 80 % 1880 MHz

UMTS 1880 MHz



CW 1880 MHz



AM 80 % 1880 MHz

A.2 Dipole validation and probe modulation factor plots

Date/Time: 6/28/2012 1:26:32 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_835 MHz_06_28_12

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

Communication System: CW; 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:

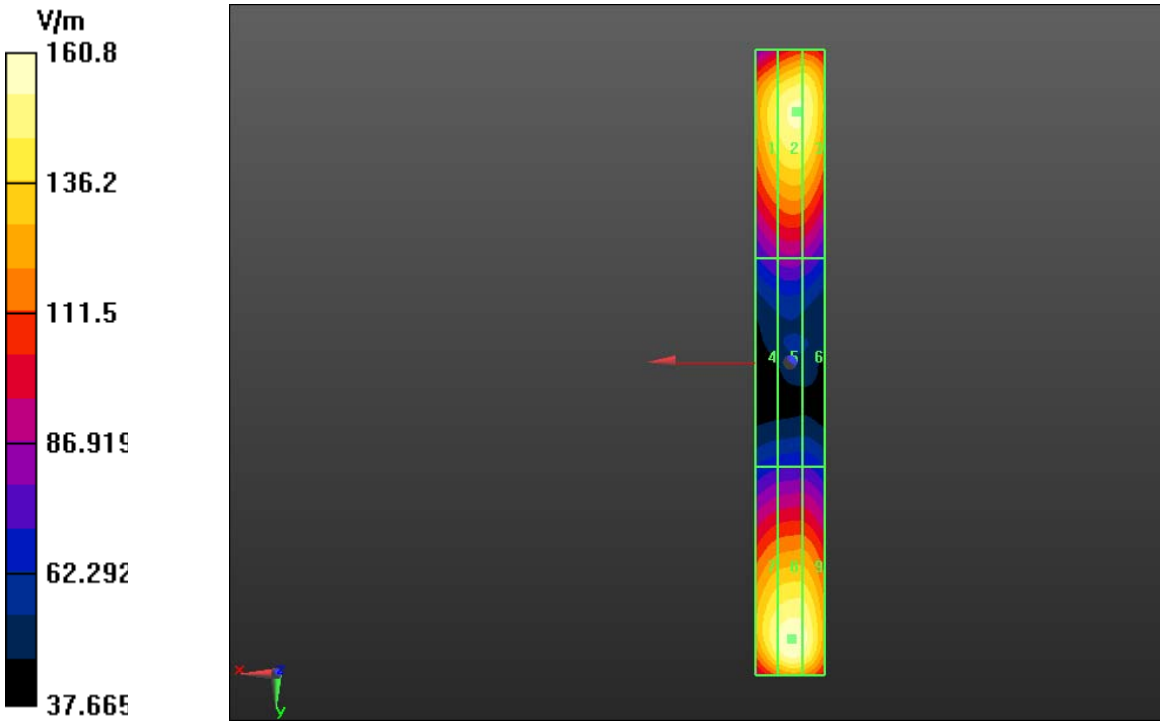
- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 102.0 V/m; Power Drift = -0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 160.8 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **147.1 V/m**	Grid 2 **M4** **154.8 V/m**	Grid 3 **M4** **154.0 V/m**
Grid 4 **M4** **81.97 V/m**	Grid 5 **M4** **84.87 V/m**	Grid 6 **M4** **82.87 V/m**
Grid 7 **M4** **153.8 V/m**	Grid 8 **M4** **160.8 V/m**	Grid 9 **M4** **157.7 V/m**

Cursor:
Total = 160.8 V/m
E Category: M4
Location: -0.5, 79.5, 4.7 mm



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; Serial: Not Specified
- 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

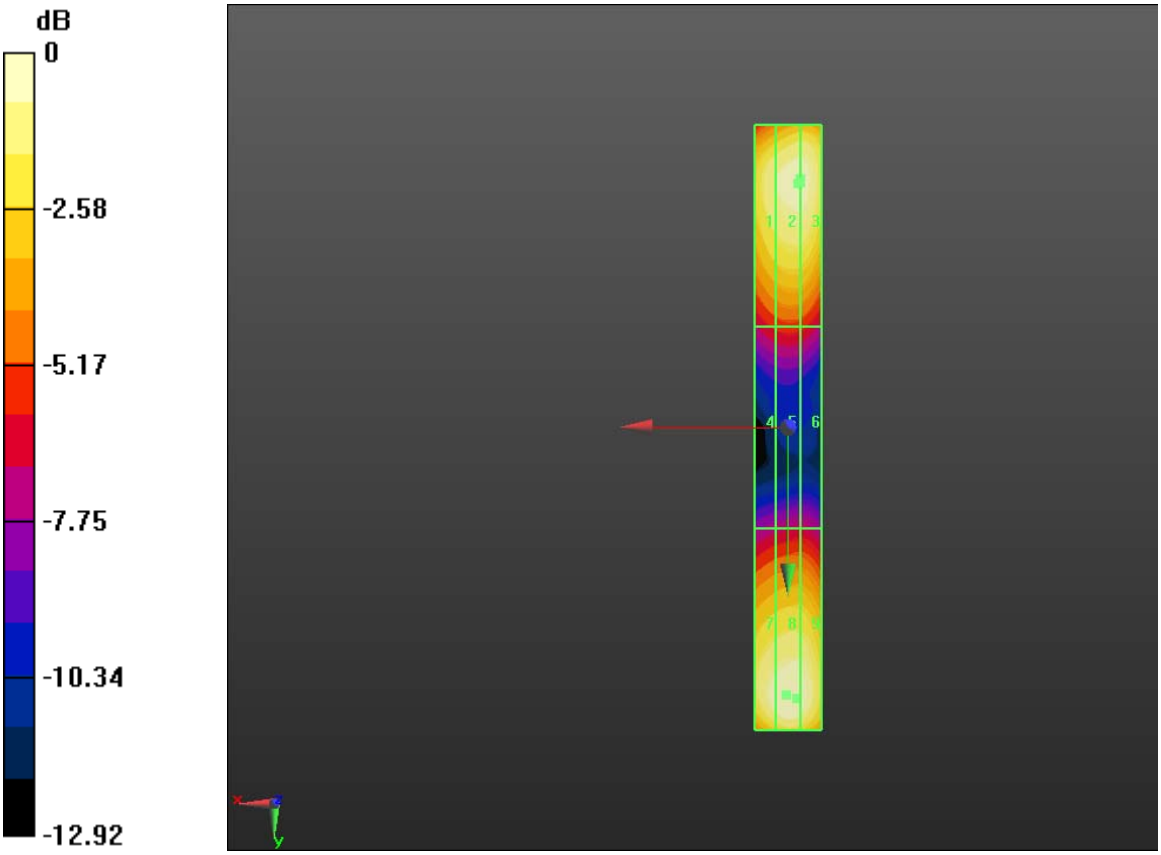
Dipole E-Field measurement/E Scan - AM80%_ 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

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** **52.75 V/m**	Grid 5 **M4** **54.62 V/m**	Grid 6 **M4** **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; Serial: Not Specified
- 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

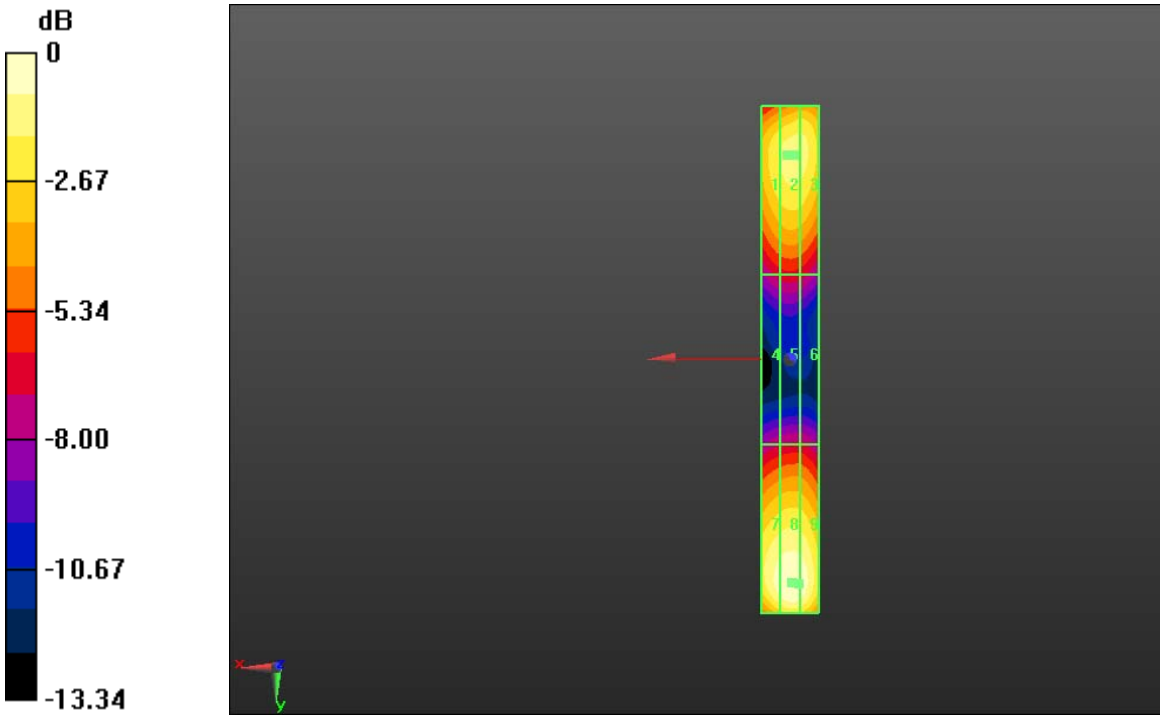
Dipole E-Field measurement/E Scan - AM80%_ 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

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 = 64.410V/m = 36.18 dB V/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; Serial: Not Specified
- 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

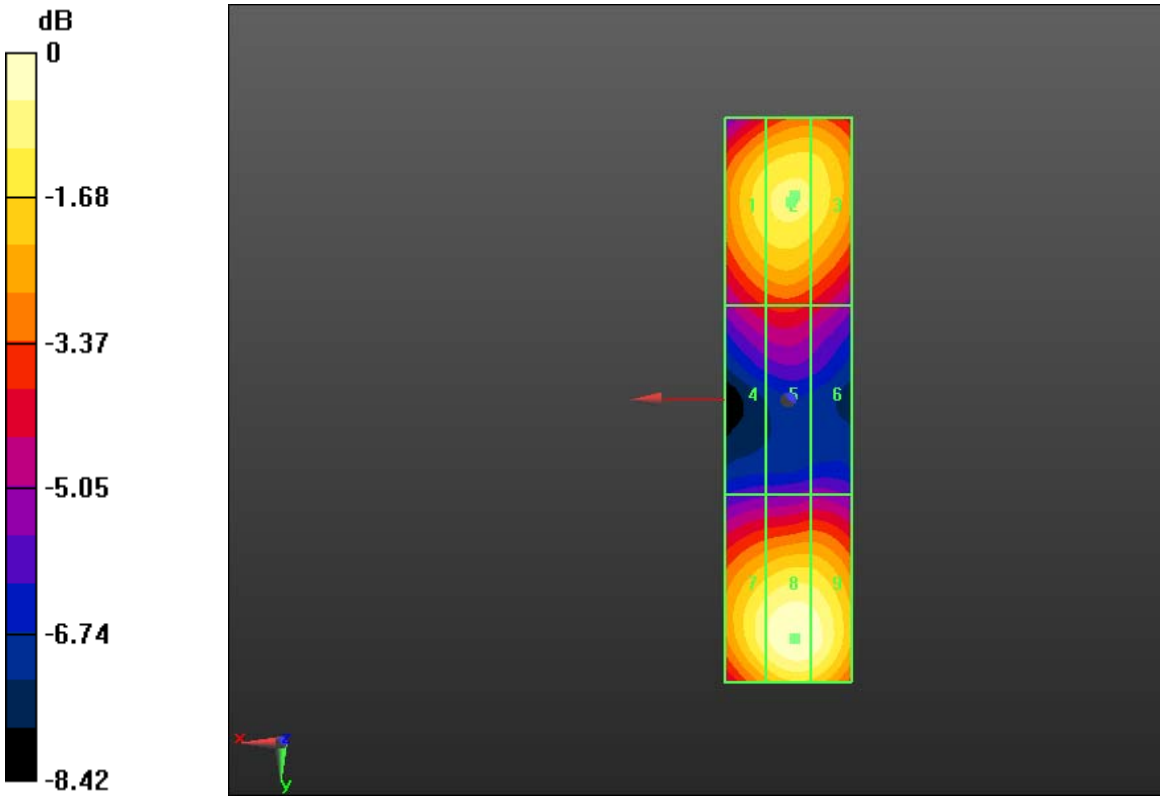
Dipole E-Field measurement/E Scan - AM80%_ 1733_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

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** **18.91 V/m**	Grid 5 **M4** **19.39 V/m**	Grid 6 **M4** **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 1:54:39 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_06_28_12

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

Communication System: CW; 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:

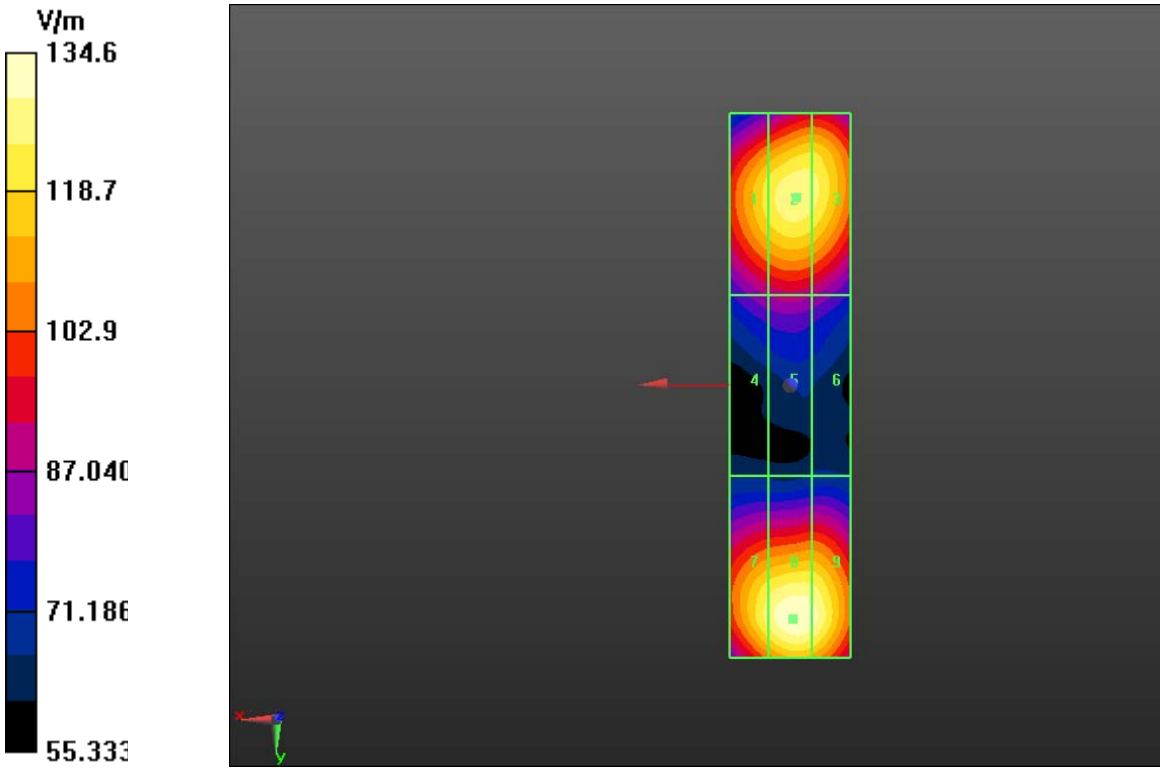
- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 152.6 V/m; Power Drift = -0.04 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 134.6 V/m
Near-field category: M2 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M2** **122.0 V/m**	Grid 2 **M2** **127.9 V/m**	Grid 3 **M2** **126.5 V/m**
Grid 4 **M3** **88.18 V/m**	Grid 5 **M3** **91.05 V/m**	Grid 6 **M3** **88.28 V/m**
Grid 7 **M2** **127.2 V/m**	Grid 8 **M2** **134.6 V/m**	Grid 9 **M2** **132.1 V/m**

Cursor:
Total = 134.6 V/m
E Category: M2
Location: -0.5, 38.5, 4.7 mm



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; Serial: Not Specified
- 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** **28.20 V/m**	Grid 8 **M4** **29.81 V/m**	Grid 9 **M4** **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

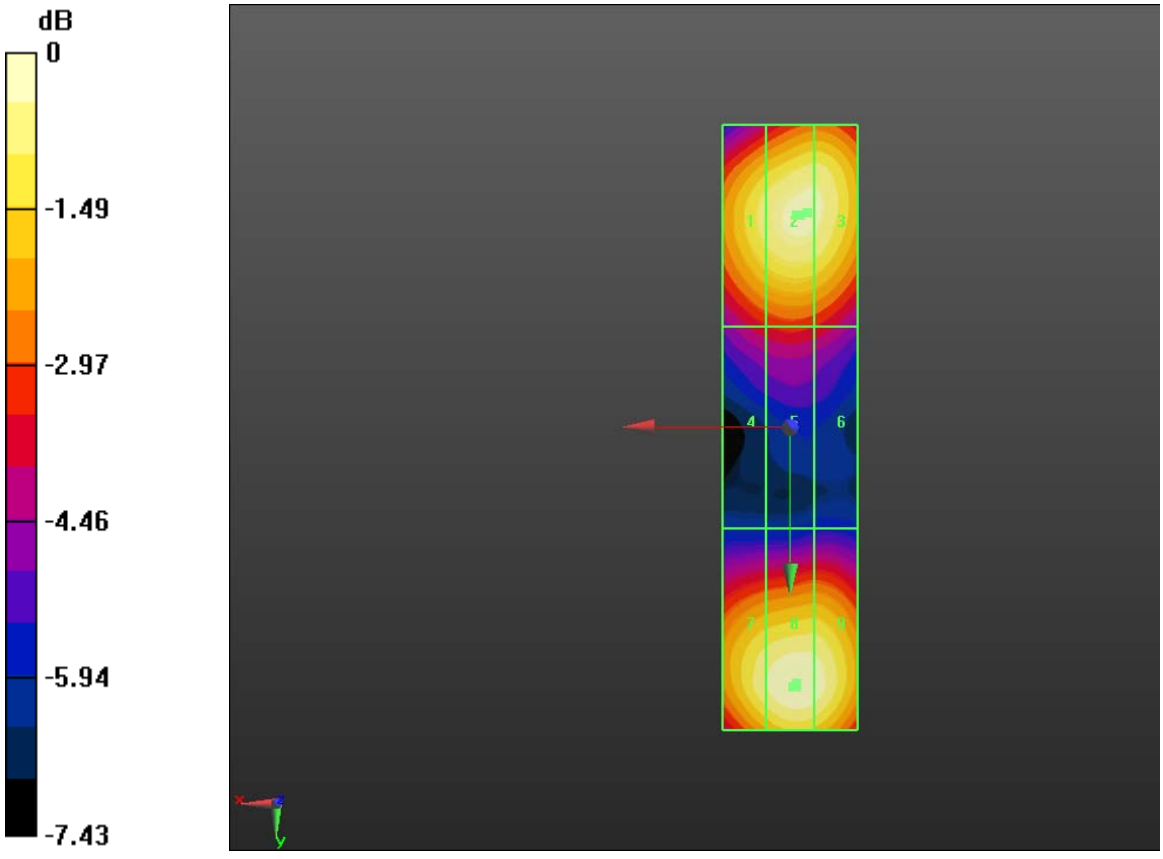
Dipole E-Field measurement/E Scan - AM80%_ 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

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; Serial: Not Specified
- 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

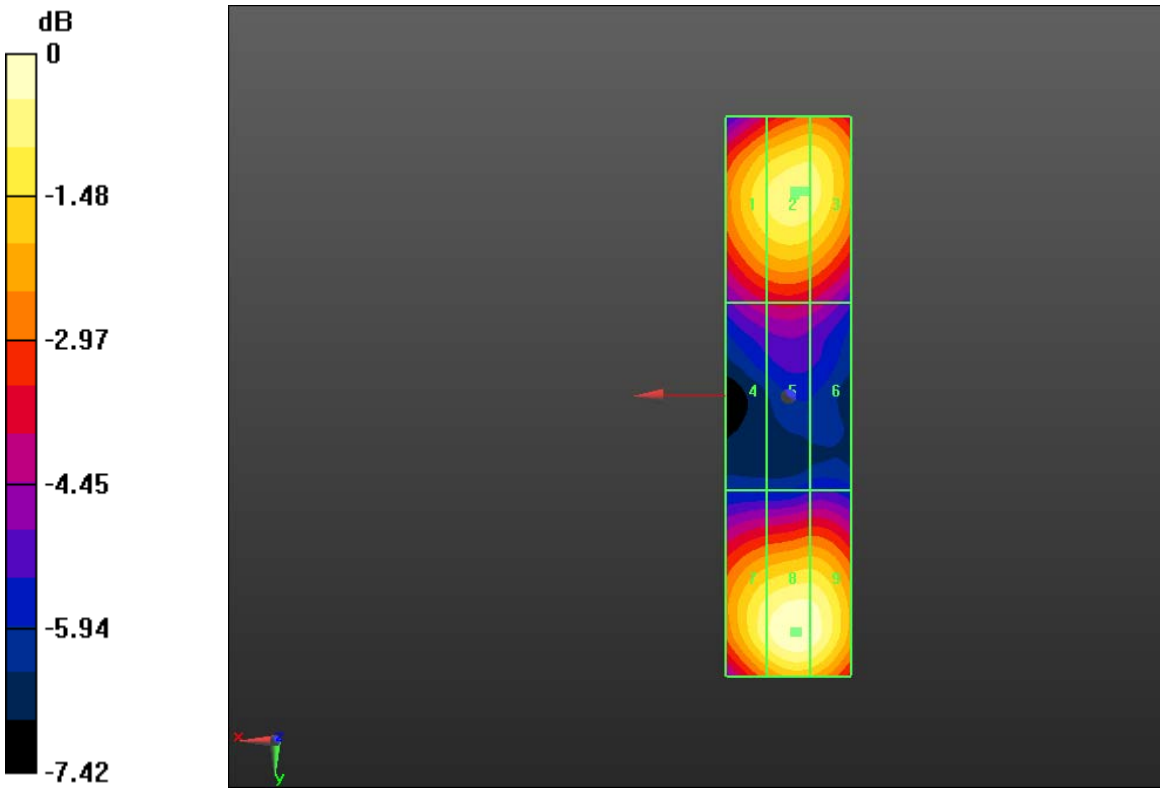
Dipole E-Field measurement/E Scan - AM80%_ 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

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: 6/28/2012 2:59:51 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_835 MHz_06_28_12

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

Communication System: CW; 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:

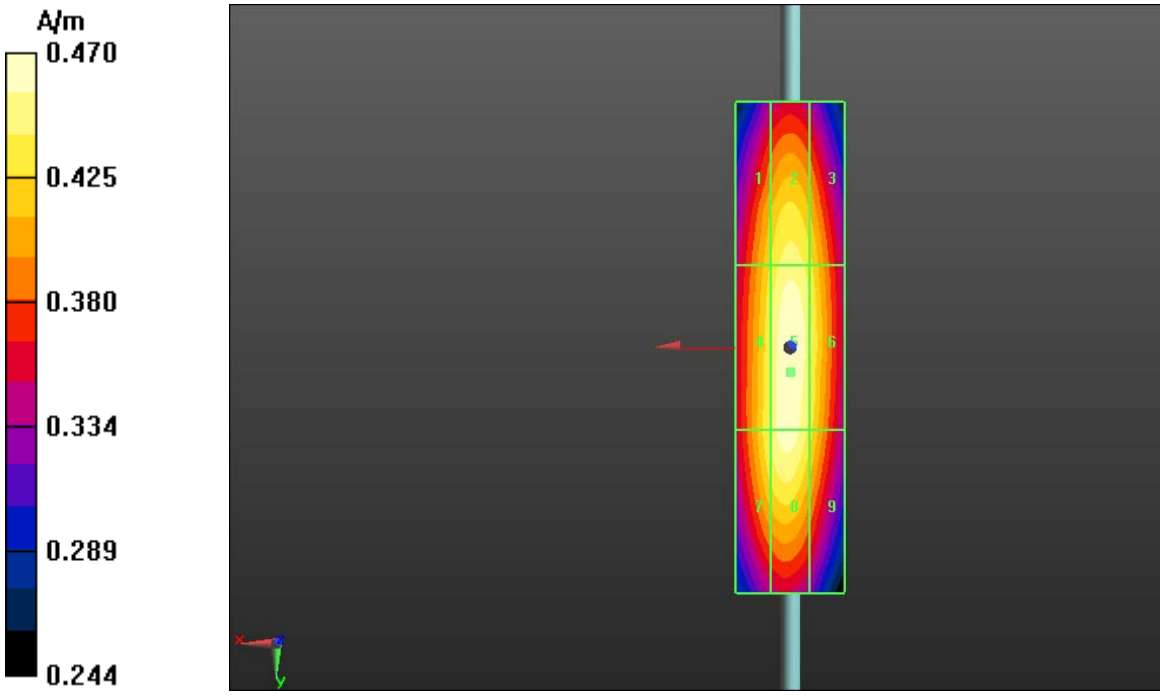
- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.50 V/m; Power Drift = 0.10 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** **0.43 A/m**	Grid 2 **M4** **0.45 A/m**	Grid 3 **M4** **0.43 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** **0.44 A/m**	Grid 8 **M4** **0.46 A/m**	Grid 9 **M4** **0.43 A/m**

Cursor:
Total = 0.470 A/m
H Category: M4
Location: 0, 4.5, 4.7 mm



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; Serial: Not Specified
- 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** **0.16 A/m**	Grid 5 **M4** **0.16 A/m**	Grid 6 **M4** **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

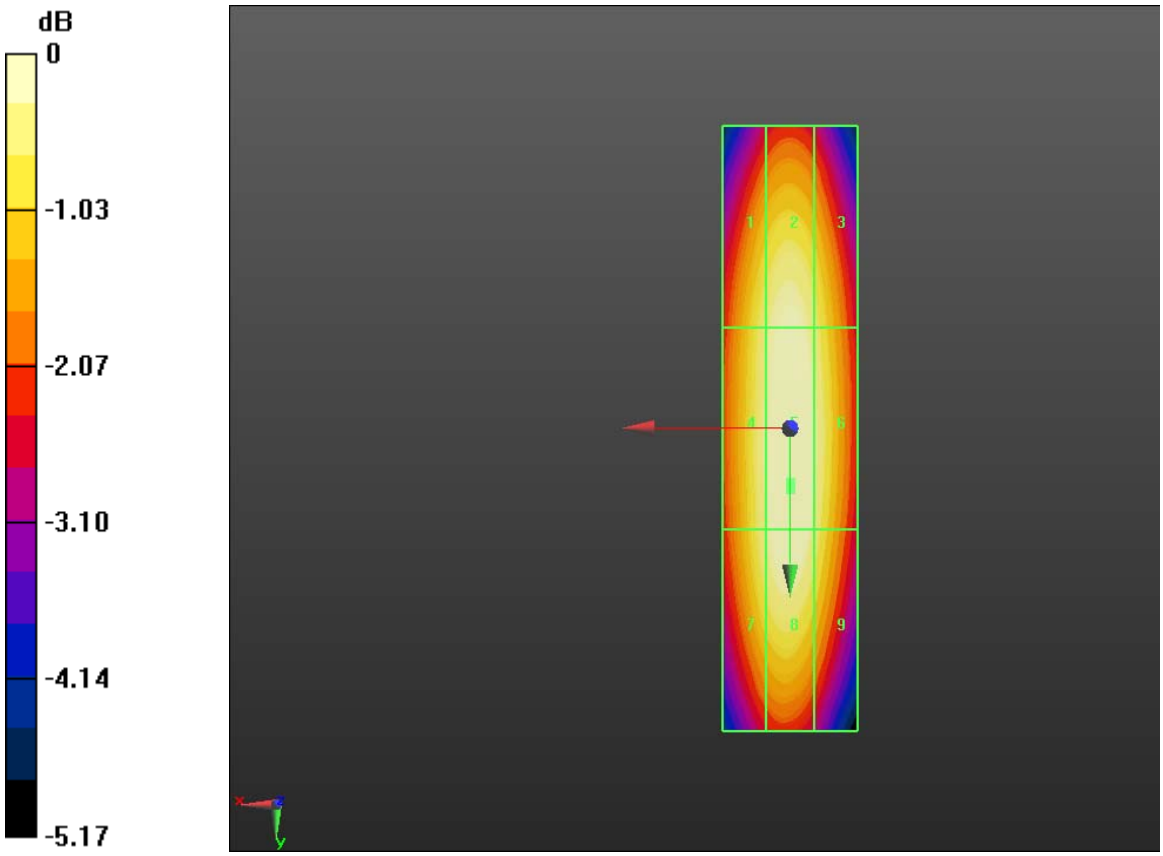
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_PMF/Hearing Aid Compatibility Test (41x181x1):

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; Serial: Not Specified
- 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

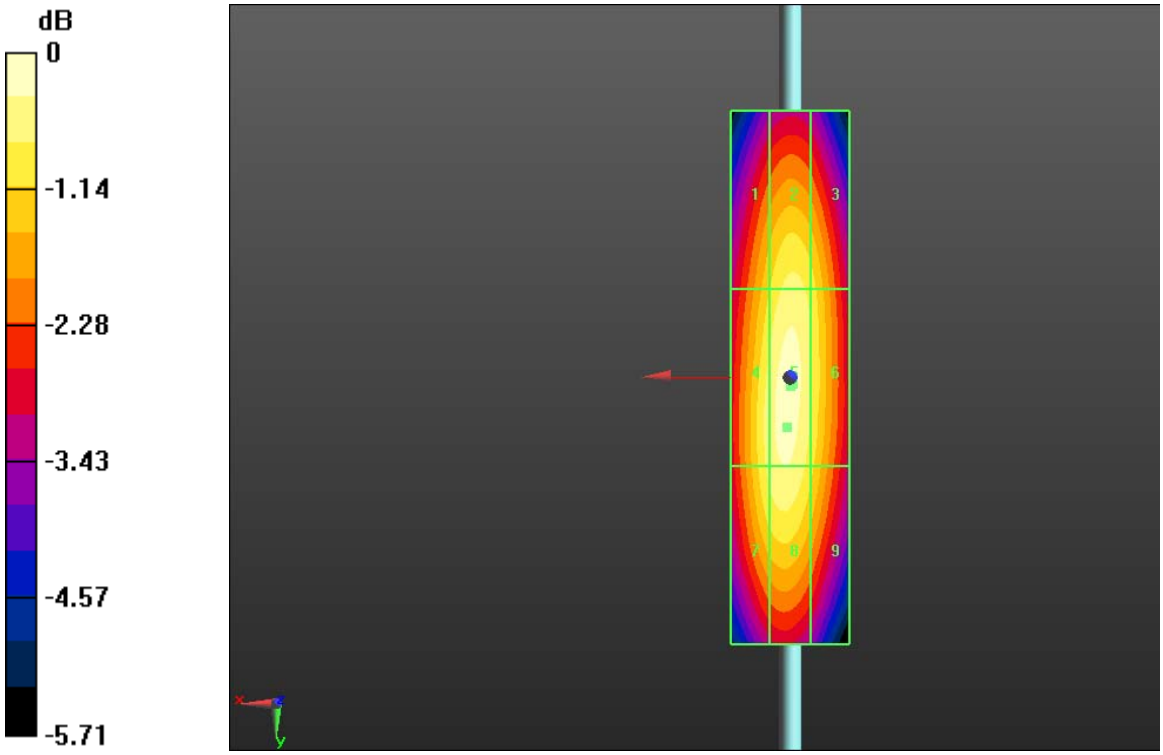
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_PMF/Hearing Aid Compatibility Test (41x181x1):

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: 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; Serial: Not Specified
- 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** **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, 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

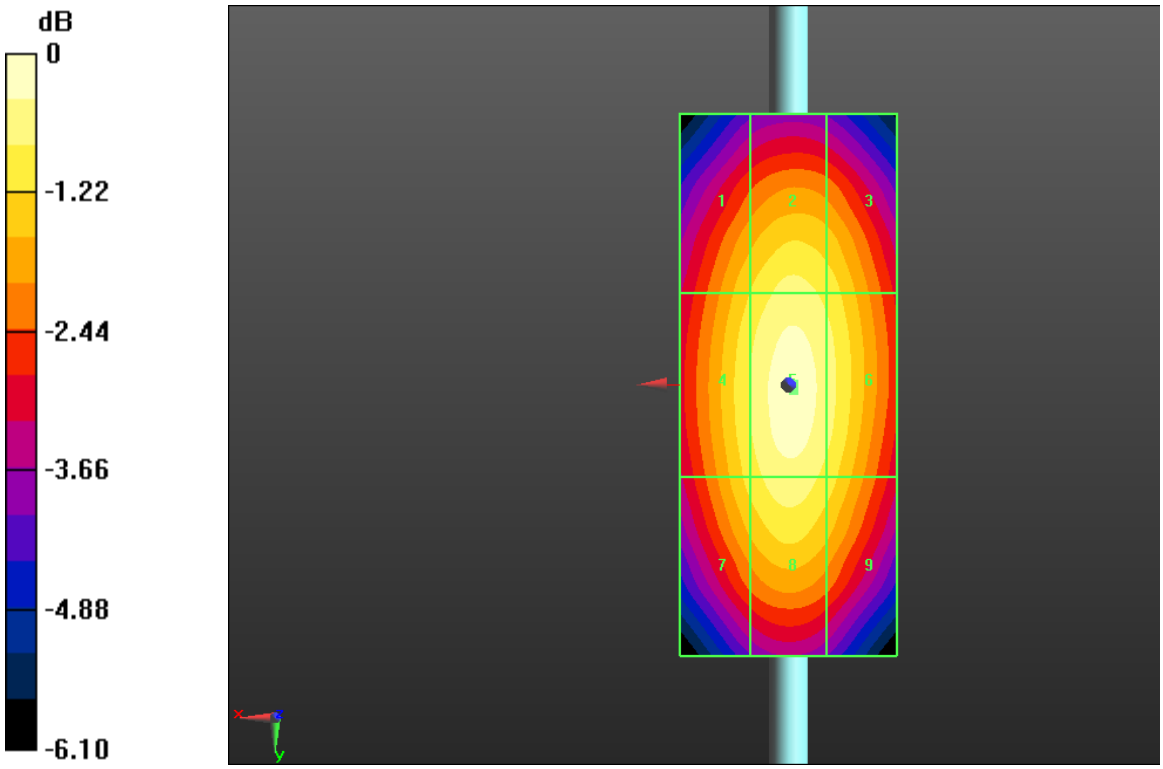
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1733_PMF/Hearing Aid Compatibility Test (41x101x1):

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 2:38:12 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_06_28_12

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

Communication System: CW; 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:

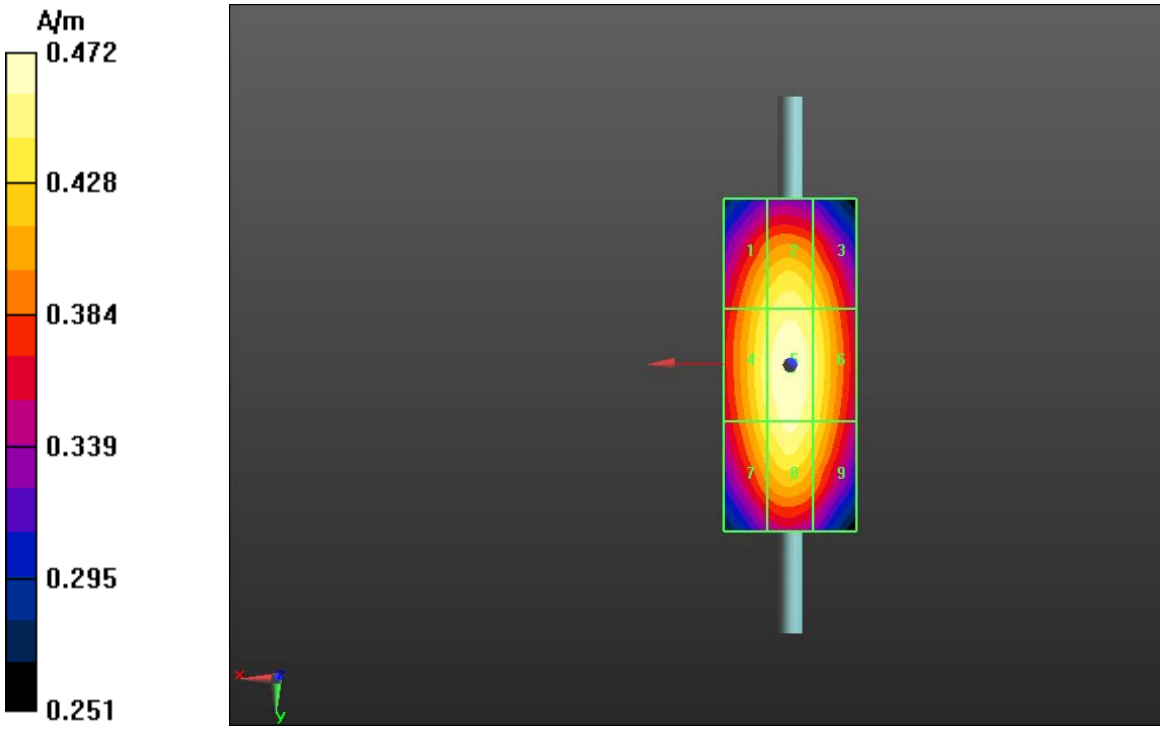
- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.50 V/m; Power Drift = -0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.47 A/m
Near-field category: M2 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M2** **0.44 A/m**	Grid 2 **M2** **0.45 A/m**	Grid 3 **M2** **0.44 A/m**
Grid 4 **M2** **0.45 A/m**	Grid 5 **M2** **0.47 A/m**	Grid 6 **M2** **0.45 A/m**
Grid 7 **M2** **0.44 A/m**	Grid 8 **M2** **0.46 A/m**	Grid 9 **M2** **0.44 A/m**

Cursor:
Total = 0.472 A/m
H Category: M2
Location: 0, 0.5, 4.7 mm



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; Serial: Not Specified
- 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** **0.10 A/m**	Grid 5 **M4** **0.11 A/m**	Grid 6 **M4** **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):

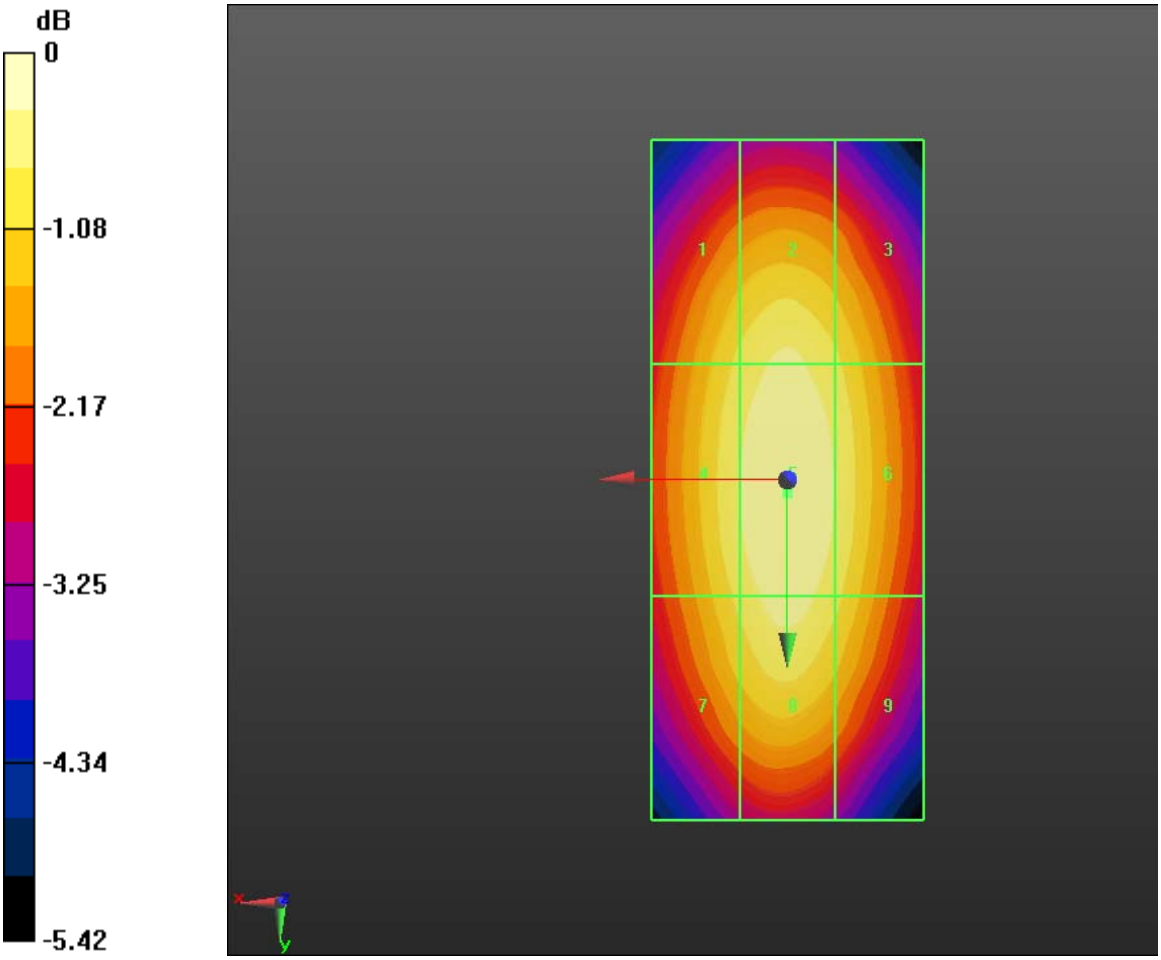
Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.21 V/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.19 A/m

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; Serial: Not Specified
- 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

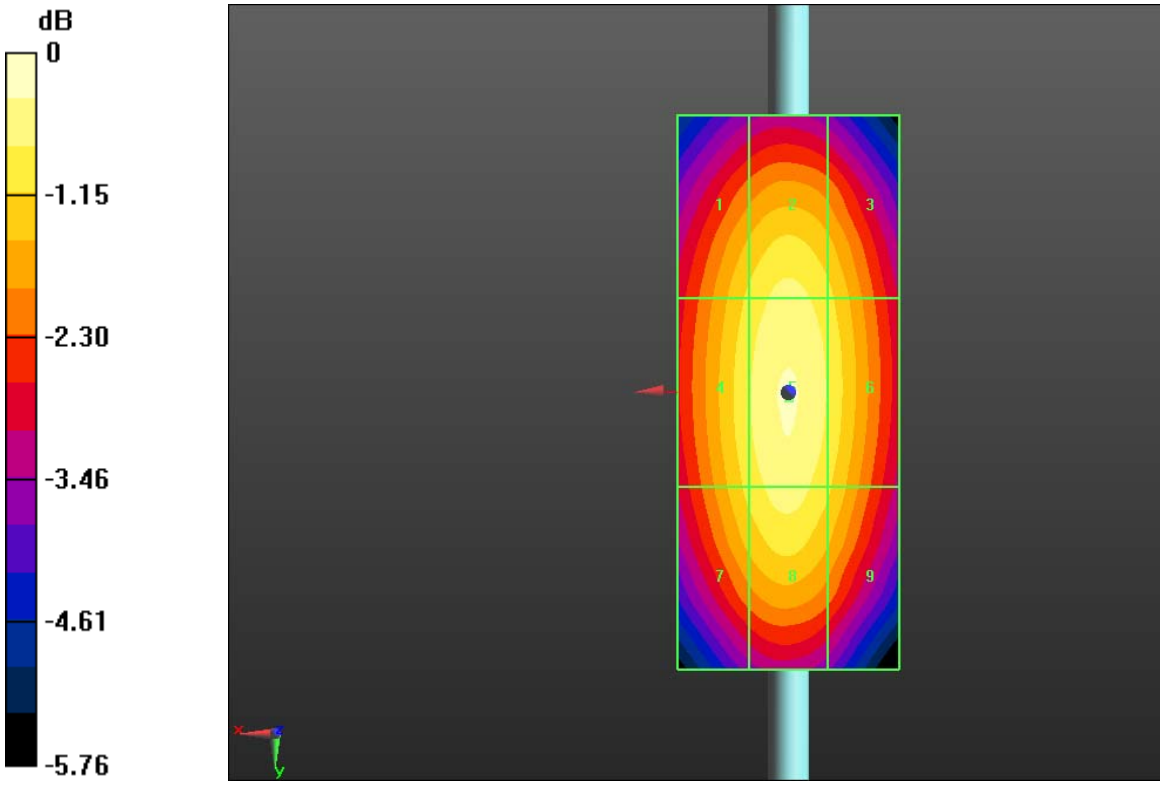
Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1880_PMF/Hearing Aid Compatibility Test (41x101x1):

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)

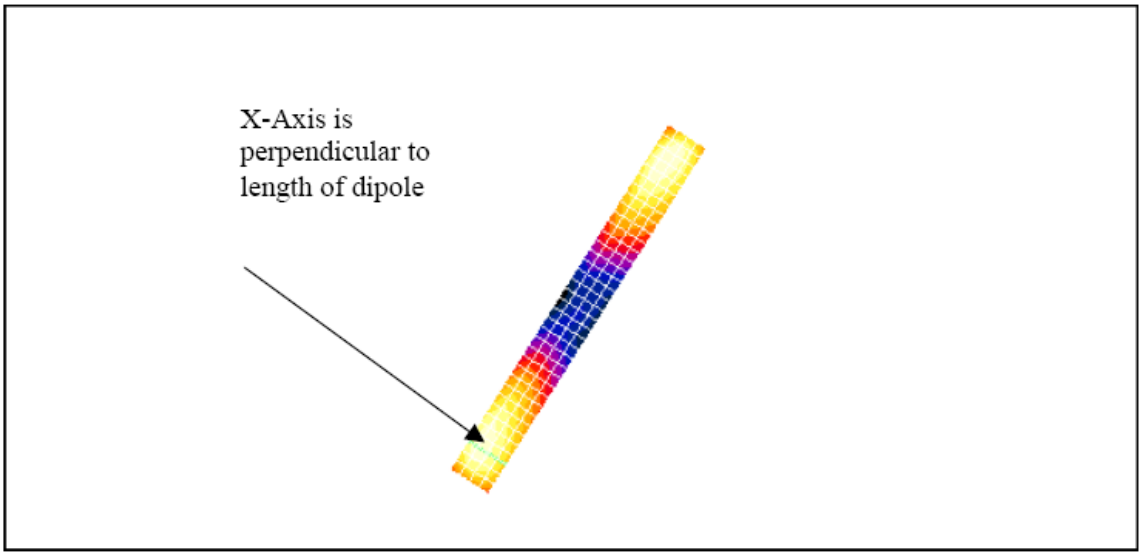
PMF scaled H-field

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)

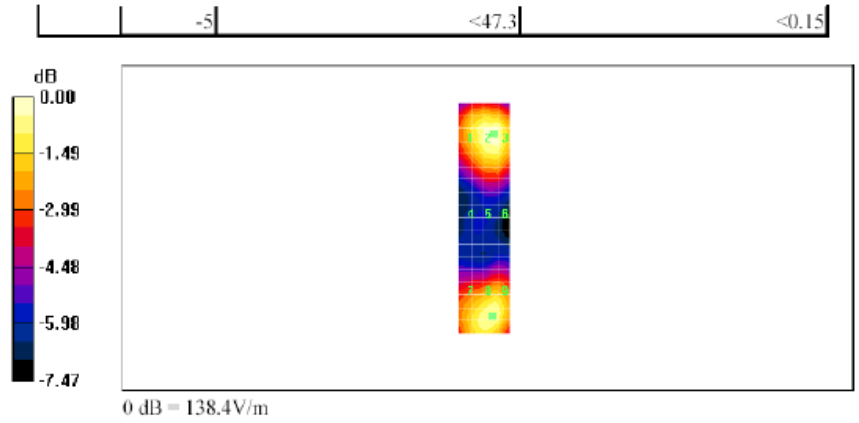
E in V/m (Time averaged)

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

E in V/m (Slot averaged)

Grid 1	Grid 2	Grid 3
123.2	**138.1**	**138.4**
Grid 4	Grid 5	Grid 6
80.9	**92.3**	**92.2**
Grid 7	Grid 8	Grid 9
119.8	**131.0**	**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 11:44:51 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)

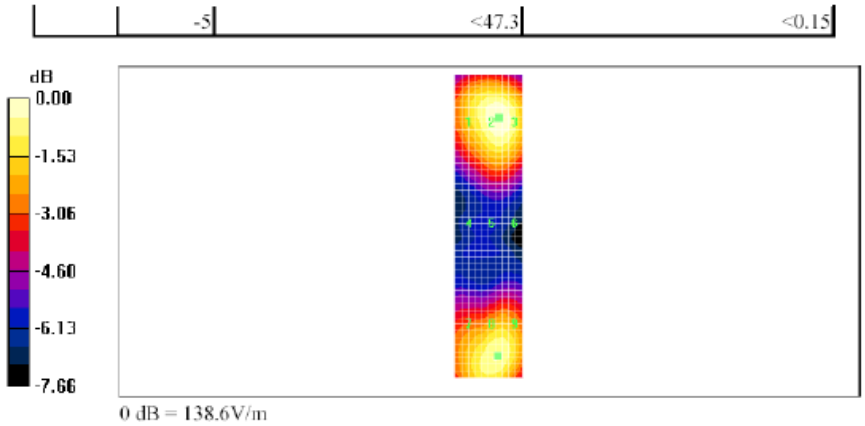
E in V/m (Time averaged)

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

E in V/m (Slot averaged)

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



0 dB = 138.6V/m

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: $\sigma = 0$ 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 (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)

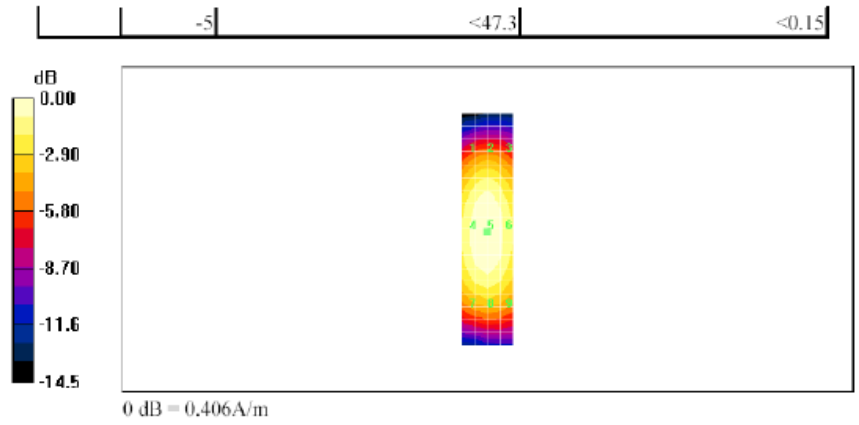
H in A/m (Time averaged)

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

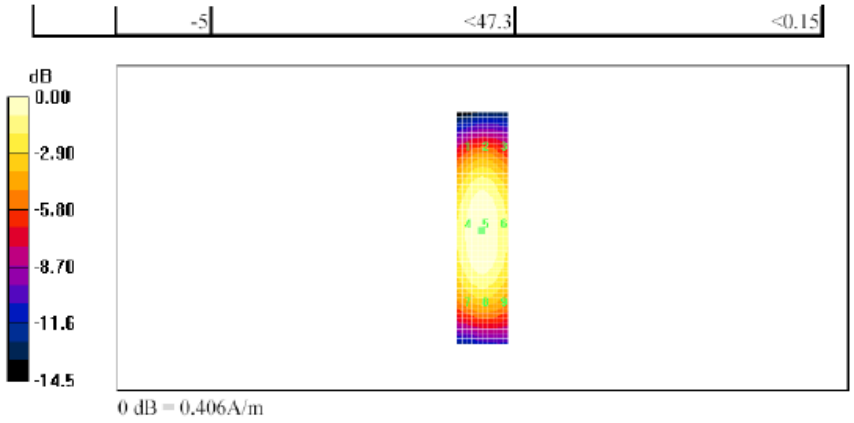
H in A/m (Slot averaged)

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

Page 2 of 2



0 dB = 0.406A/m

A.3 RF emission field plots

Date/Time: 6/28/2012 6:05:07 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 78.00 V/m; Power Drift = 0.03 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 **M3** **158.0 V/m**	Grid 2 **M3** **179.9 V/m**	Grid 3 **M3** **178.9 V/m**
Grid 4 **M3** **168.6 V/m**	Grid 5 **M3** **191.6 V/m**	Grid 6 **M3** **188.8 V/m**
Grid 7 **M3** **174.8 V/m**	Grid 8 **M3** **190.8 V/m**	Grid 9 **M3** **188.5 V/m**

Cursor:

Total = 191.6 V/m
E Category: M3
Location: -5, 6, 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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 88.75 V/m; Power Drift = 0.07 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 222.4 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **179.3 V/m**	Grid 2 **M3** **210.7 V/m**	Grid 3 **M3** **209.8 V/m**
Grid 4 **M3** **189.2 V/m**	Grid 5 **M3** **222.4 V/m**	Grid 6 **M3** **221.7 V/m**
Grid 7 **M3** **195.2 V/m**	Grid 8 **M3** **221.9 V/m**	Grid 9 **M3** **220.6 V/m**

Cursor:

Total = 222.4 V/m
E Category: M3
Location: -6.5, 6.5, 8.7 mm

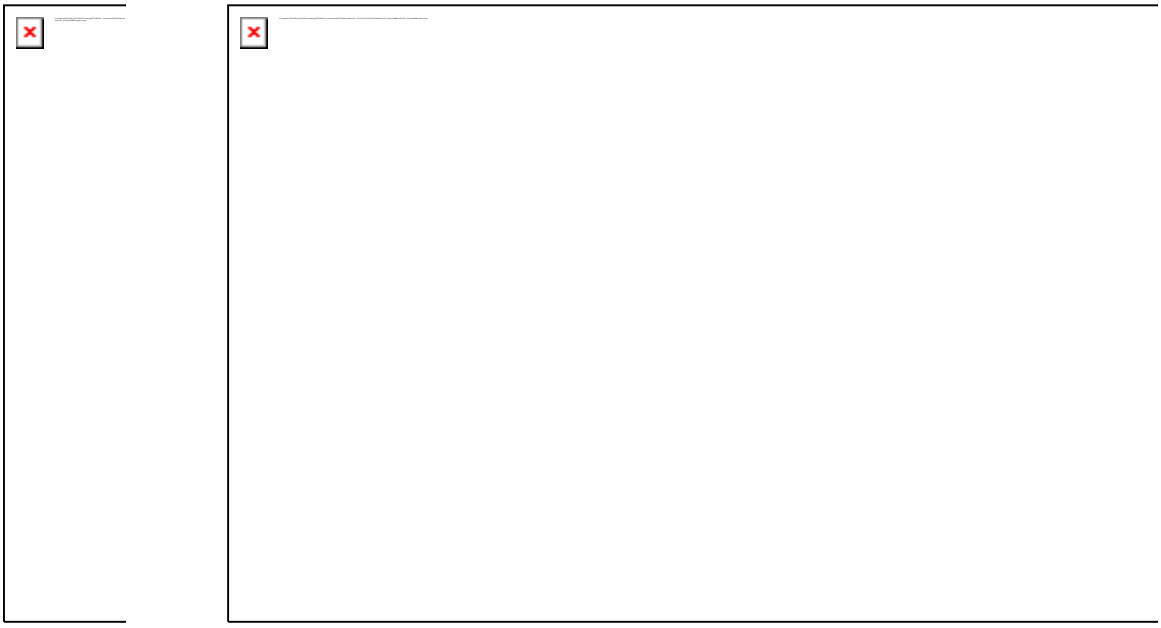
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 99.92 V/m; Power Drift = 0.02 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 243.9 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **198.1 V/m**	Grid 2 **M3** **236.6 V/m**	Grid 3 **M3** **236.6 V/m**
Grid 4 **M3** **206.9 V/m**	Grid 5 **M3** **243.9 V/m**	Grid 6 **M3** **243.8 V/m**
Grid 7 **M3** **210.3 V/m**	Grid 8 **M3** **242.6 V/m**	Grid 9 **M3** **242.0 V/m**

Cursor:

Total = 243.9 V/m
E Category: M3
Location: -8, 4.5, 8.7 mm



0 dB = 184.0V/m = 45.30 dB V/m

Date/Time: 6/29/2012 6:46:57 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 850; Frequency: 848.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 99.29 V/m; Power Drift = 0.10 dB
PMR not calibrated. PMF = 3.000 is applied.
E-field emissions = 249.6 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **213.8 V/m**	Grid 2 **M3** **235.9 V/m**	Grid 3 **M3** **220.3 V/m**
Grid 4 **M3** **225.2 V/m**	Grid 5 **M3** **249.6 V/m**	Grid 6 **M3** **233.1 V/m**
Grid 7 **M3** **225.7 V/m**	Grid 8 **M3** **249.6 V/m**	Grid 9 **M3** **233.1 V/m**

Cursor:

Total = 249.6 V/m
E Category: M3
Location: -7.5, 4, 8.7 mm

0 dB = 239.7V/m = 47.59 dB V/m

Date/Time: 6/28/2012 7:08:04 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_V

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz, Frequency: 846.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 86.20 V/m; Power Drift = 0.05 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 75.65 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **62.21 V/m**	Grid 2 **M4** **71.40 V/m**	Grid 3 **M4** **71.16 V/m**
Grid 4 **M4** **66.05 V/m**	Grid 5 **M4** **75.65 V/m**	Grid 6 **M4** **75.24 V/m**
Grid 7 **M4** **68.73 V/m**	Grid 8 **M4** **75.42 V/m**	Grid 9 **M4** **74.88 V/m**

Cursor:

Total = 75.648 V/m
E Category: M4
Location: -5.5, 6, 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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 96.10 V/m; Power Drift = 0.09 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 86.01 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **68.17 V/m**	Grid 2 **M4** **81.14 V/m**	Grid 3 **M4** **81.08 V/m**
Grid 4 **M4** **72.19 V/m**	Grid 5 **M4** **86.01 V/m**	Grid 6 **M4** **85.78 V/m**
Grid 7 **M4** **75.62 V/m**	Grid 8 **M4** **85.76 V/m**	Grid 9 **M4** **85.45 V/m**

Cursor:

Total = 86.014 V/m
E Category: M4
Location: -6.5, 6, 8.7 mm

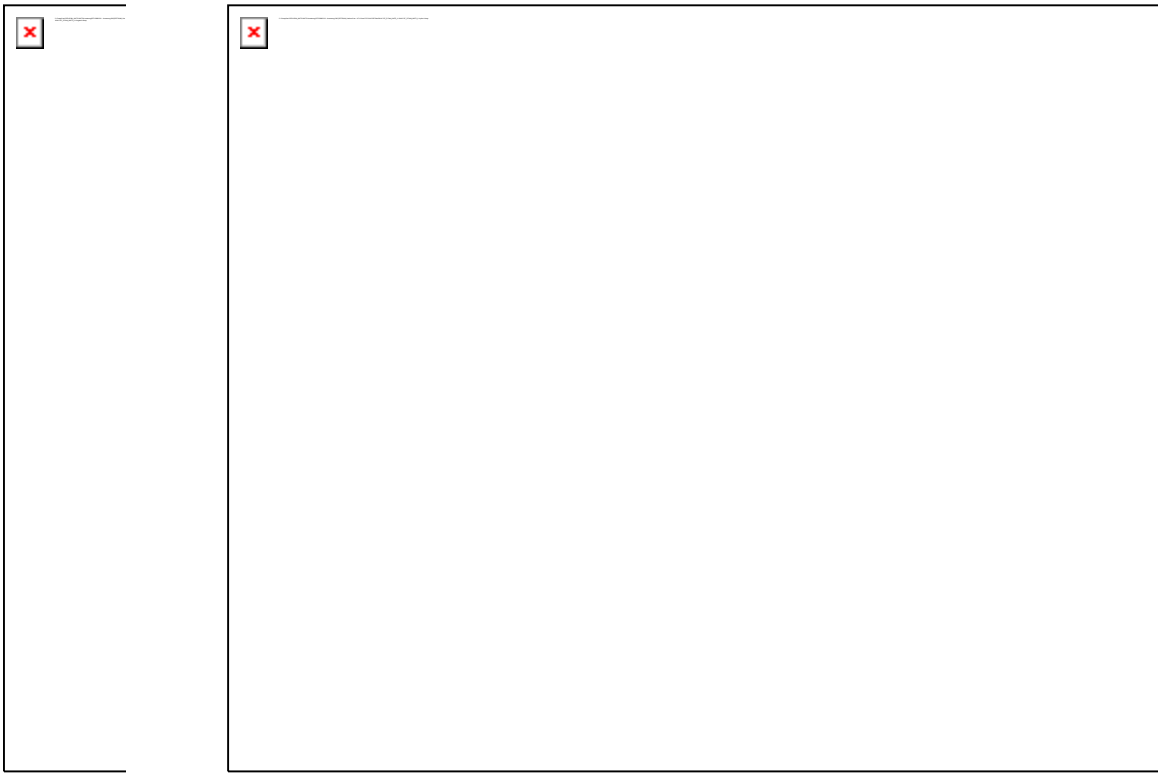
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 108.7 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 1.07 is applied.
E-field emissions = 95.17 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **71.99 V/m**	Grid 2 **M4** **84.80 V/m**	Grid 3 **M4** **84.62 V/m**
Grid 4 **M4** **75.71 V/m**	Grid 5 **M4** **88.94 V/m**	Grid 6 **M4** **88.58 V/m**
Grid 7 **M4** **77.81 V/m**	Grid 8 **M4** **88.44 V/m**	Grid 9 **M4** **87.99 V/m**

Cursor:

Total = 88.937 V/m
E Category: M4
Location: -6, 5.5, 8.7 mm



0 dB = 70.700V/m = 36.99 dB V/m

Date/Time: 6/29/2012 7:03:17 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_V_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD V; Frequency: 846.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

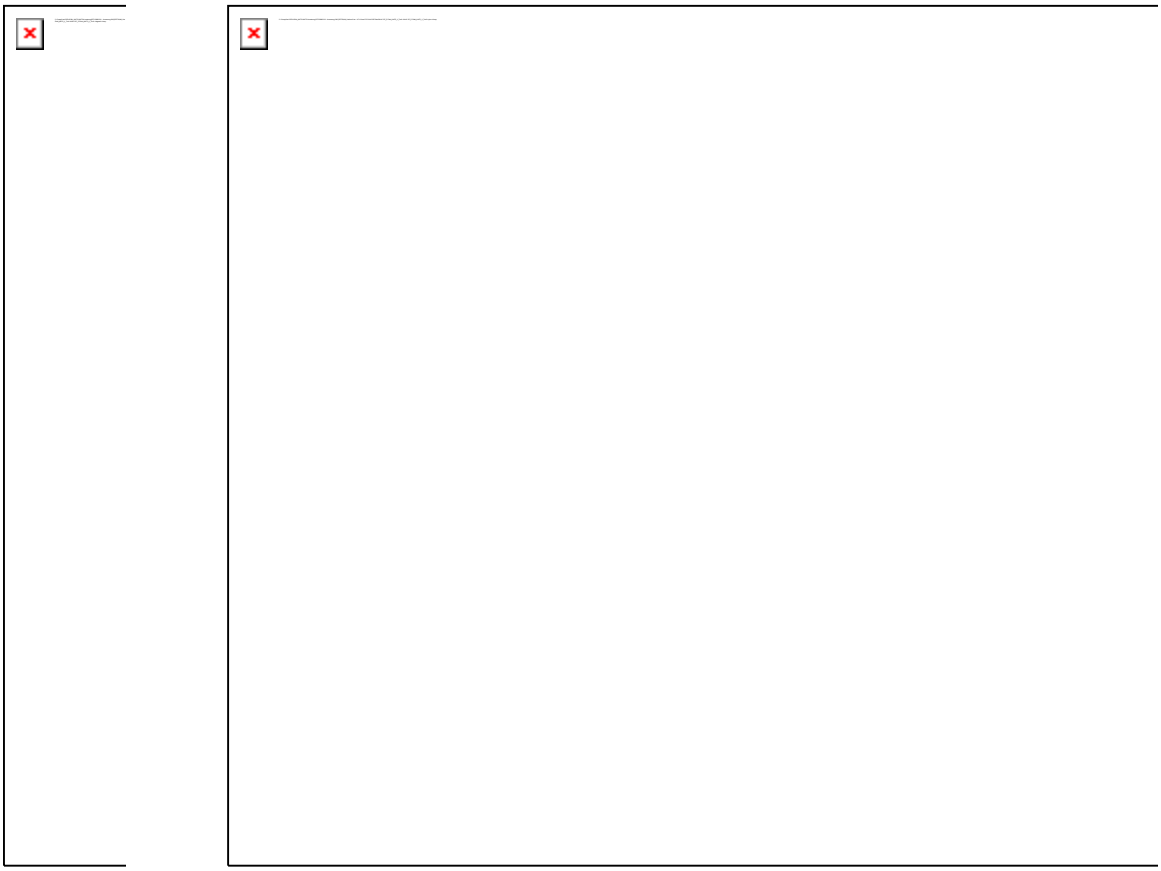
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 110.0 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 1.070 is applied.
E-field emissions = 95.74 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **83.44 V/m**	Grid 2 **M4** **89.07 V/m**	Grid 3 **M4** **83.07 V/m**
Grid 4 **M4** **88.55 V/m**	Grid 5 **M4** **95.74 V/m**	Grid 6 **M4** **89.65 V/m**
Grid 7 **M4** **89.46 V/m**	Grid 8 **M4** **95.77 V/m**	Grid 9 **M4** **89.66 V/m**

Cursor:
Total = 95.771 V/m
E Category: M4
Location: -6, 6, 8.7 mm



0 dB = 95.770V/m = 39.62 dB V/m

Date/Time: 7/11/2012 2:16:25 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 19.88 V/m; Power Drift = -0.20 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 78.73 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **72.44 V/m**	Grid 2 **M3** **74.27 V/m**	Grid 3 **M3** **70.75 V/m**
Grid 4 **M4** **42.68 V/m**	Grid 5 **M3** **67.28 V/m**	Grid 6 **M3** **68.33 V/m**
Grid 7 **M3** **54.67 V/m**	Grid 8 **M3** **79.07 V/m**	Grid 9 **M3** **78.73 V/m**

Cursor:

Total = 79.073 V/m
E Category: M3
Location: -7, 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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 24.00 V/m; Power Drift = 0.05 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 76.42 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **69.49 V/m**	Grid 2 **M3** **75.97 V/m**	Grid 3 **M3** **75.13 V/m**
Grid 4 **M4** **44.20 V/m**	Grid 5 **M3** **74.51 V/m**	Grid 6 **M3** **75.77 V/m**
Grid 7 **M4** **45.75 V/m**	Grid 8 **M3** **75.78 V/m**	Grid 9 **M3** **76.42 V/m**

Cursor:

Total = 76.421 V/m
E Category: M3
Location: -11, 14, 8.7 mm

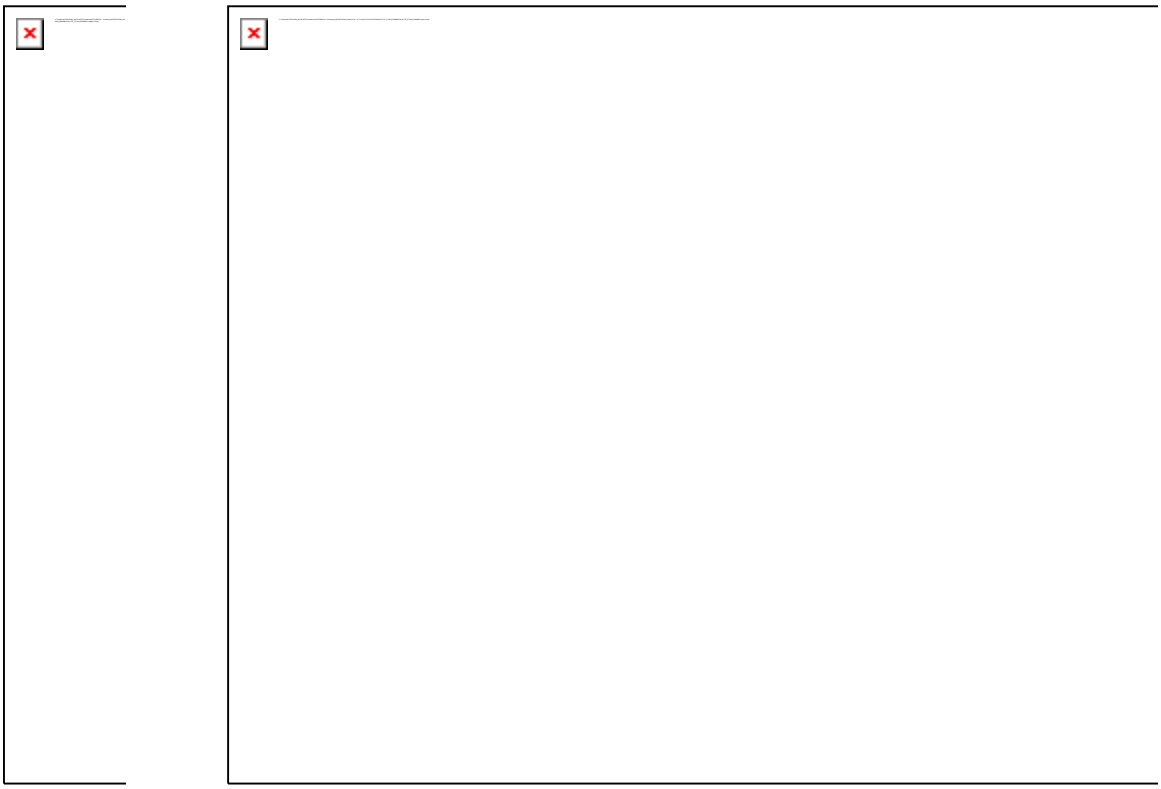
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 23.89 V/m; Power Drift = -0.05 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 76.95 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **70.09 V/m**	Grid 2 **M3** **71.04 V/m**	Grid 3 **M3** **71.02 V/m**
Grid 4 **M4** **44.80 V/m**	Grid 5 **M3** **74.67 V/m**	Grid 6 **M3** **76.14 V/m**
Grid 7 **M4** **44.39 V/m**	Grid 8 **M3** **76.85 V/m**	Grid 9 **M3** **76.95 V/m**

Cursor:

Total = 76.954 V/m
E Category: M3
Location: -10, 17.5, 8.7 mm



0 dB = 79.930V/m = 38.05 dB V/m

Date/Time: 7/11/2012 2:03:41 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 19.91 V/m; Power Drift = -0.09 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 76.95 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **79.01 V/m**	Grid 2 **M3** **79.04 V/m**	Grid 3 **M3** **66.87 V/m**
Grid 4 **M3** **54.86 V/m**	Grid 5 **M3** **63.77 V/m**	Grid 6 **M3** **63.53 V/m**
Grid 7 **M3** **60.52 V/m**	Grid 8 **M3** **76.95 V/m**	Grid 9 **M3** **74.55 V/m**

Cursor:

Total = 79.045 V/m
E Category: M3
Location: 2.5, -30, 8.7 mm

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Mid_Chan_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 23.87 V/m; Power Drift = -0.09 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 76.50 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **78.62 V/m**	Grid 2 **M3** **79.20 V/m**	Grid 3 **M3** **72.24 V/m**
Grid 4 **M3** **57.10 V/m**	Grid 5 **M3** **73.04 V/m**	Grid 6 **M3** **72.92 V/m**
Grid 7 **M3** **58.83 V/m**	Grid 8 **M3** **76.50 V/m**	Grid 9 **M3** **75.87 V/m**

Cursor:

Total = 79.202 V/m
E Category: M3
Location: 0.5, -30, 8.7 mm

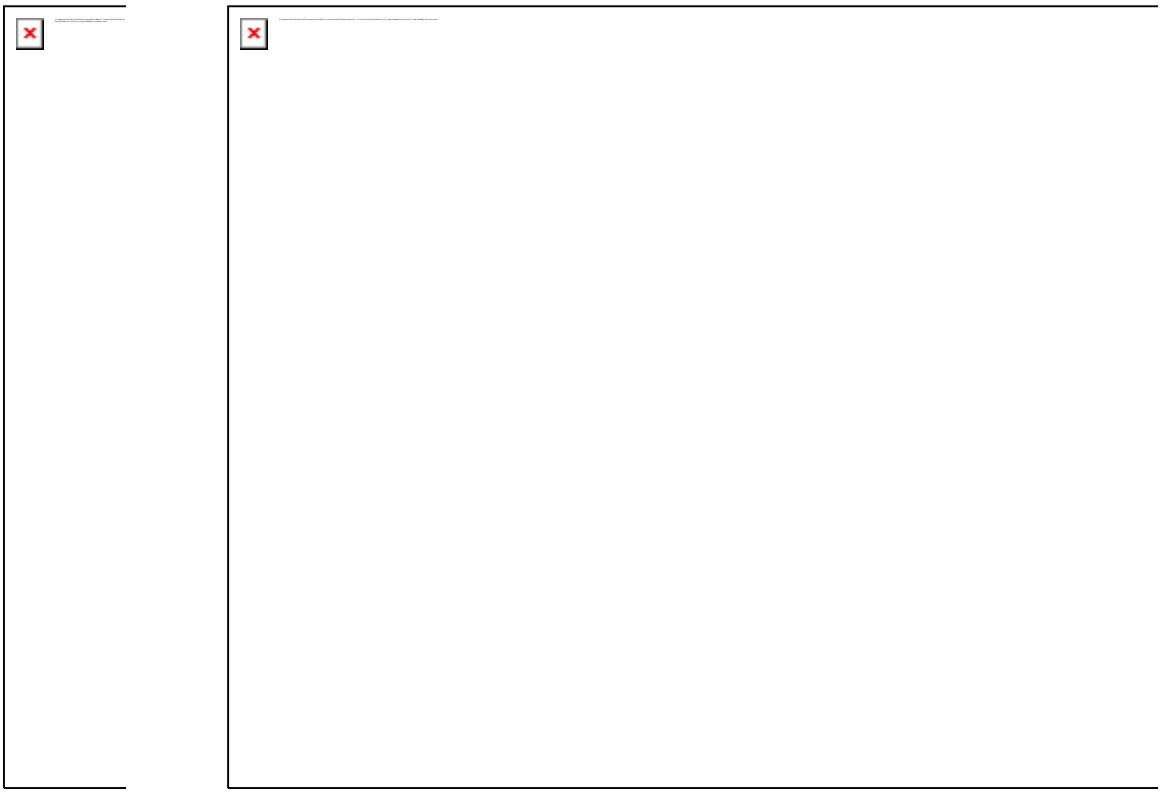
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_High_Chan_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 23.30 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 2.850 is applied.
E-field emissions = 77.17 V/m
Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 **M3** **73.01 V/m**	Grid 2 **M3** **74.16 V/m**	Grid 3 **M3** **69.63 V/m**
Grid 4 **M3** **53.57 V/m**	Grid 5 **M3** **73.51 V/m**	Grid 6 **M3** **73.31 V/m**
Grid 7 **M3** **55.66 V/m**	Grid 8 **M3** **77.17 V/m**	Grid 9 **M3** **76.04 V/m**

Cursor:

Total = 77.170 V/m
E Category: M3
Location: -11, 15.5, 8.7 mm



0 dB = 79.910V/m = 38.05 dB V/m

Date/Time: 6/28/2012 6:45:45 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_IV

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz, Frequency: 1732.6 MHz, Frequency: 1752.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 14.11 V/m; Power Drift = 0.05 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 37.55 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **22.51 V/m**	Grid 2 **M4** **22.54 V/m**	Grid 3 **M4** **21.55 V/m**
Grid 4 **M4** **17.62 V/m**	Grid 5 **M4** **25.27 V/m**	Grid 6 **M4** **25.50 V/m**
Grid 7 **M4** **33.51 V/m**	Grid 8 **M4** **37.55 V/m**	Grid 9 **M4** **36.18 V/m**

Cursor:

Total = 37.548 V/m
E Category: M4
Location: -3, 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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 18.35 V/m; Power Drift = -0.07 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 50.58 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **33.09 V/m**	Grid 2 **M4** **32.63 V/m**	Grid 3 **M4** **30.48 V/m**
Grid 4 **M4** **22.67 V/m**	Grid 5 **M4** **33.23 V/m**	Grid 6 **M4** **33.62 V/m**
Grid 7 **M4** **44.76 V/m**	Grid 8 **M4** **50.58 V/m**	Grid 9 **M4** **49.01 V/m**

Cursor:

Total = 50.580 V/m
E Category: M4
Location: -3.5, 25, 8.7 mm

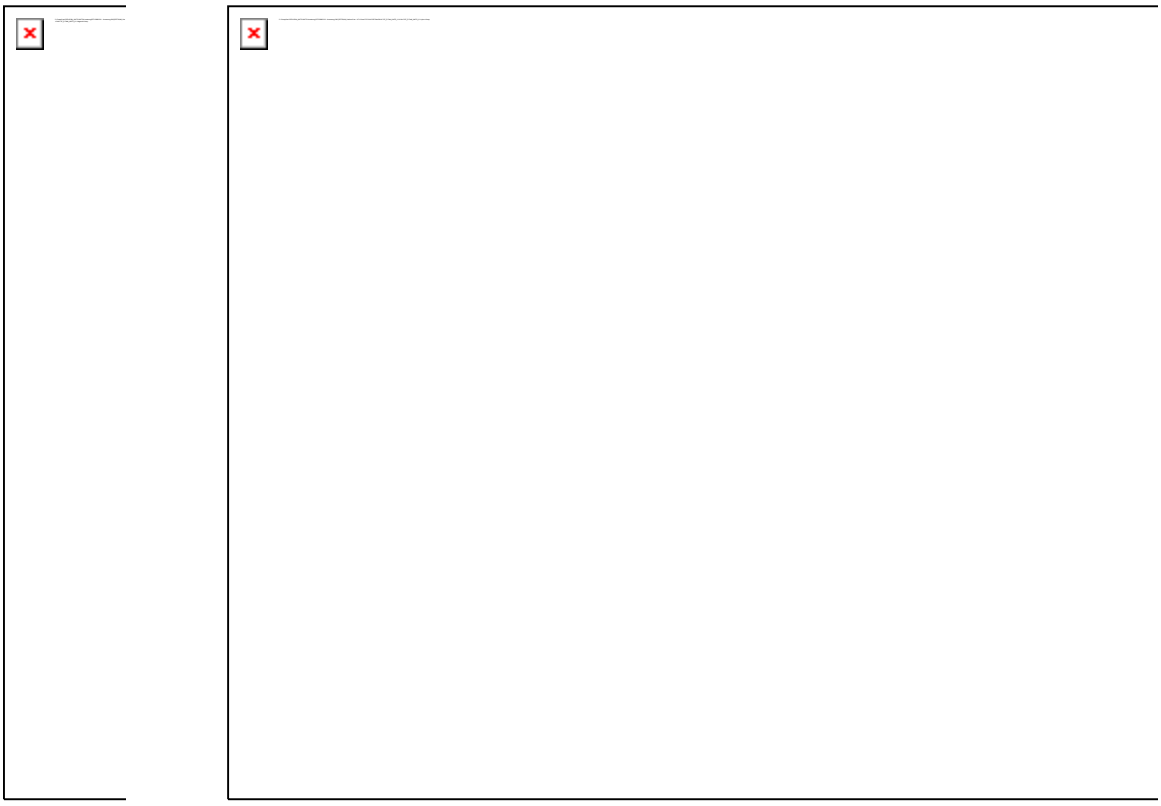
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 20.28 V/m; Power Drift = -0.06 dB
PMR not calibrated. PMF = 1.03 is applied.
E-field emissions = 48.71 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **36.10 V/m**	Grid 2 **M4** **34.60 V/m**	Grid 3 **M4** **31.49 V/m**
Grid 4 **M4** **20.42 V/m**	Grid 5 **M4** **33.16 V/m**	Grid 6 **M4** **33.54 V/m**
Grid 7 **M4** **39.76 V/m**	Grid 8 **M4** **47.29 V/m**	Grid 9 **M4** **46.24 V/m**

Cursor:

Total = 47.287 V/m
E Category: M4
Location: -3, 25, 8.7 mm



0 dB = 36.450V/m = 31.23 dB V/m

Date/Time: 6/29/2012 6:59:42 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_IV_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD IV; Frequency: 1732.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

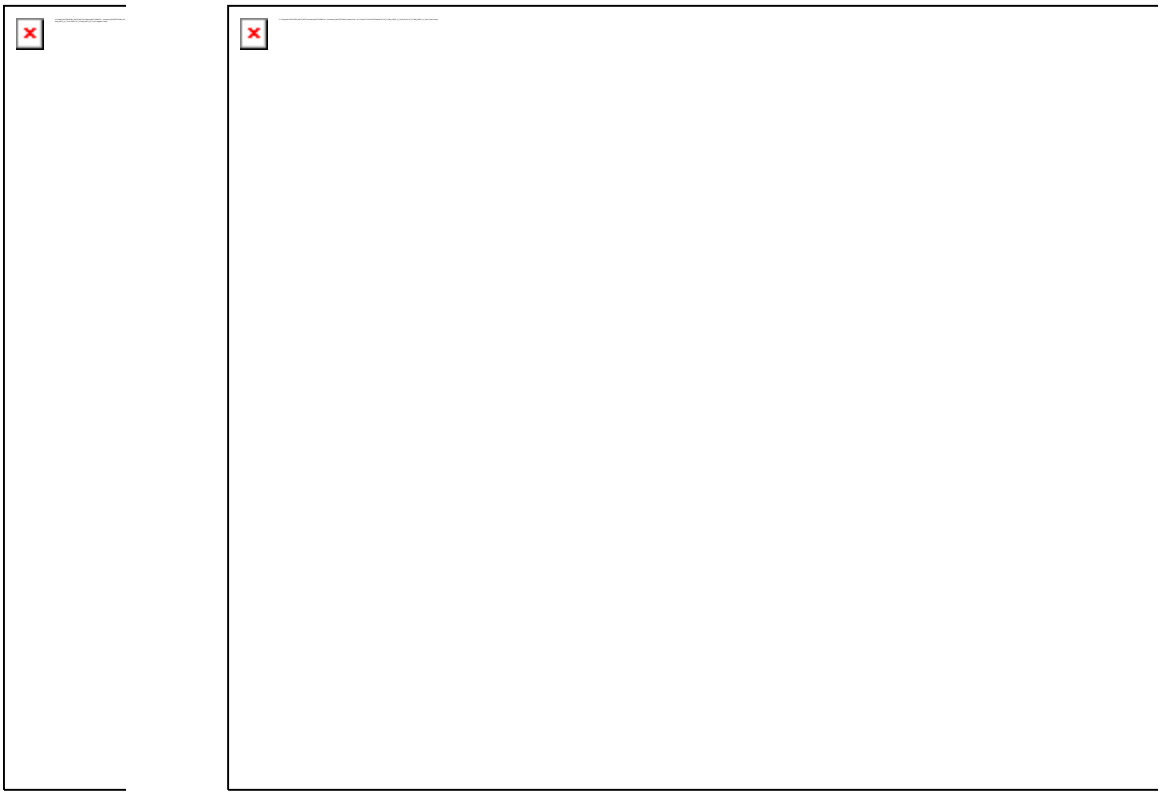
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 18.08 V/m; Power Drift = 0.19 dB
PMR not calibrated. PMF = 1.030 is applied.
E-field emissions = 39.49 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **39.49 V/m**	Grid 2 **M4** **38.03 V/m**	Grid 3 **M4** **32.06 V/m**
Grid 4 **M4** **22.47 V/m**	Grid 5 **M4** **29.23 V/m**	Grid 6 **M4** **29.50 V/m**
Grid 7 **M4** **43.07 V/m**	Grid 8 **M4** **47.16 V/m**	Grid 9 **M4** **43.86 V/m**

Cursor:
Total = 47.162 V/m
E Category: M4
Location: -5.5, 20, 8.7 mm



0 dB = 47.160V/m = 33.47 dB V/m

Date/Time: 6/28/2012 6:32:59 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_II

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz, Frequency: 1907.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 29.92 V/m; Power Drift = -0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 44.30 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **40.94 V/m**	Grid 2 **M4** **42.40 V/m**	Grid 3 **M4** **41.25 V/m**
Grid 4 **M4** **23.57 V/m**	Grid 5 **M4** **37.22 V/m**	Grid 6 **M4** **38.06 V/m**
Grid 7 **M4** **31.27 V/m**	Grid 8 **M4** **44.30 V/m**	Grid 9 **M4** **44.18 V/m**

Cursor:
Total = 44.298 V/m
E Category: M4
Location: -7, 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): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 34.79 V/m; Power Drift = 0.00 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 41.07 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **37.18 V/m**	Grid 2 **M4** **41.07 V/m**	Grid 3 **M4** **40.87 V/m**
Grid 4 **M4** **23.96 V/m**	Grid 5 **M4** **38.28 V/m**	Grid 6 **M4** **39.10 V/m**
Grid 7 **M4** **25.00 V/m**	Grid 8 **M4** **40.04 V/m**	Grid 9 **M4** **40.19 V/m**

Cursor:
Total = 41.065 V/m
E Category: M4
Location: -5.5, -25, 8.7 mm

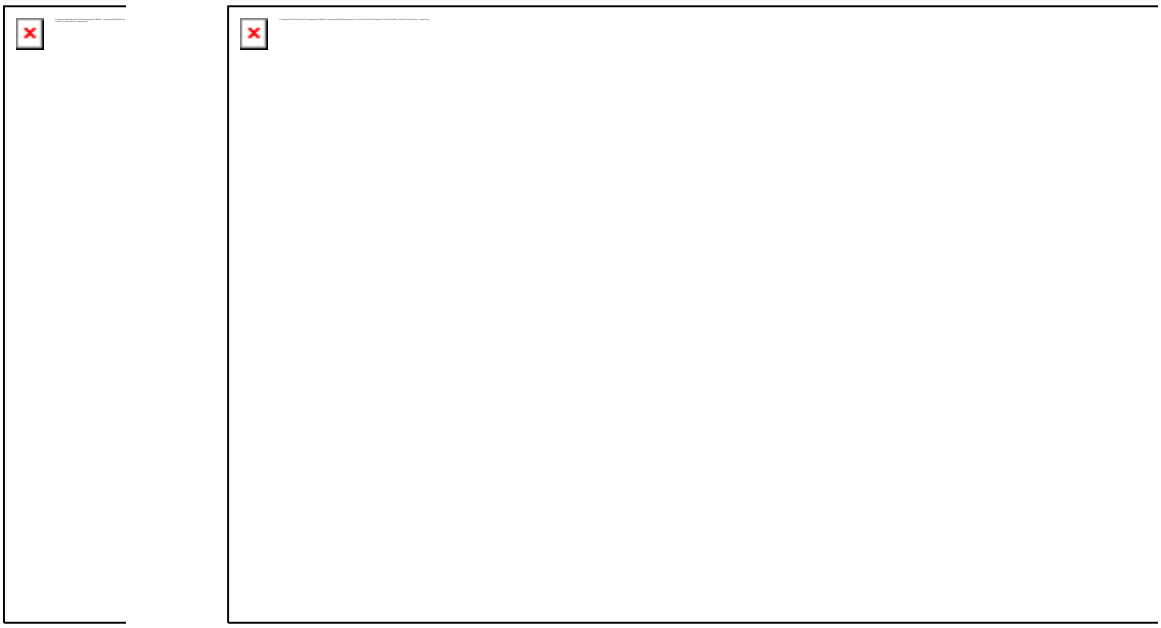
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_High_Chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 36.61 V/m; Power Drift = -0.10 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 39.88 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **34.79 V/m**	Grid 2 **M4** **39.88 V/m**	Grid 3 **M4** **39.87 V/m**
Grid 4 **M4** **23.39 V/m**	Grid 5 **M4** **38.61 V/m**	Grid 6 **M4** **39.38 V/m**
Grid 7 **M4** **23.04 V/m**	Grid 8 **M4** **39.31 V/m**	Grid 9 **M4** **39.68 V/m**

Cursor:
Total = 39.880 V/m
E Category: M4
Location: -8, -25, 8.7 mm



0 dB = 44.300V/m = 32.93 dB V/m

Date/Time: 6/29/2012 6:55:49 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_II_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD II; Frequency: 1852.4 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

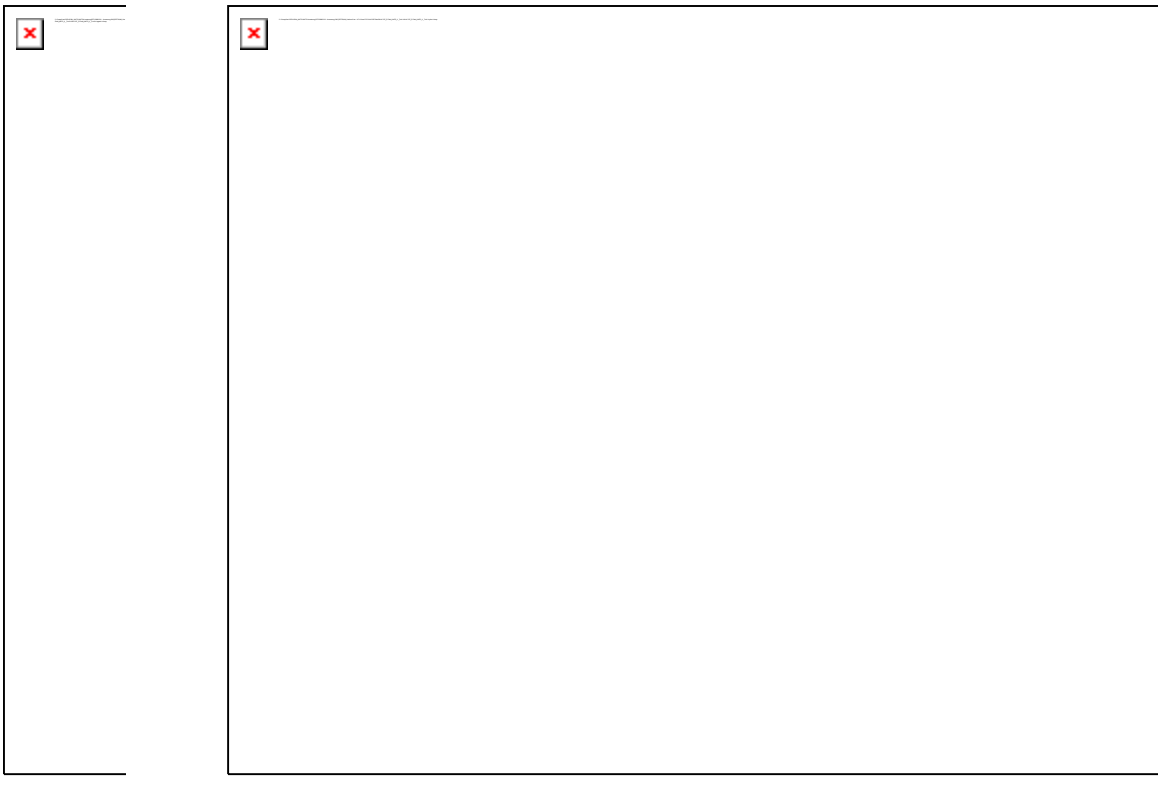
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 29.76 V/m; Power Drift = 0.06 dB
PMR not calibrated. PMF = 1.000 is applied.
E-field emissions = 46.11 V/m
Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 **M4** **47.13 V/m**	Grid 2 **M4** **47.13 V/m**	Grid 3 **M4** **40.39 V/m**
Grid 4 **M4** **30.55 V/m**	Grid 5 **M4** **36.38 V/m**	Grid 6 **M4** **36.31 V/m**
Grid 7 **M4** **37.39 V/m**	Grid 8 **M4** **46.11 V/m**	Grid 9 **M4** **44.35 V/m**

Cursor:
Total = 47.133 V/m
E Category: M4
Location: 4, -30, 8.7 mm



0 dB = 47.130V/m = 33.47 dB V/m

Date/Time: 6/28/2012 8:09:20 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.07 V/m; Power Drift = 0.20 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.39 A/m
Near-field category: M4 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M4** **0.38 A/m**	Grid 2 **M4** **0.27 A/m**	Grid 3 **M4** **0.17 A/m**
Grid 4 **M4** **0.37 A/m**	Grid 5 **M4** **0.26 A/m**	Grid 6 **M4** **0.16 A/m**
Grid 7 **M4** **0.39 A/m**	Grid 8 **M4** **0.28 A/m**	Grid 9 **M4** **0.17 A/m**

Cursor:

Total = 0.394 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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.08 V/m; Power Drift = 0.07 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.43 A/m
Near-field category: M4 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M4** **0.42 A/m**	Grid 2 **M4** **0.31 A/m**	Grid 3 **M4** **0.19 A/m**
Grid 4 **M4** **0.40 A/m**	Grid 5 **M4** **0.28 A/m**	Grid 6 **M4** **0.17 A/m**
Grid 7 **M4** **0.43 A/m**	Grid 8 **M4** **0.30 A/m**	Grid 9 **M4** **0.18 A/m**

Cursor:

Total = 0.426 A/m
H Category: M4
Location: 25, 25, 8.7 mm

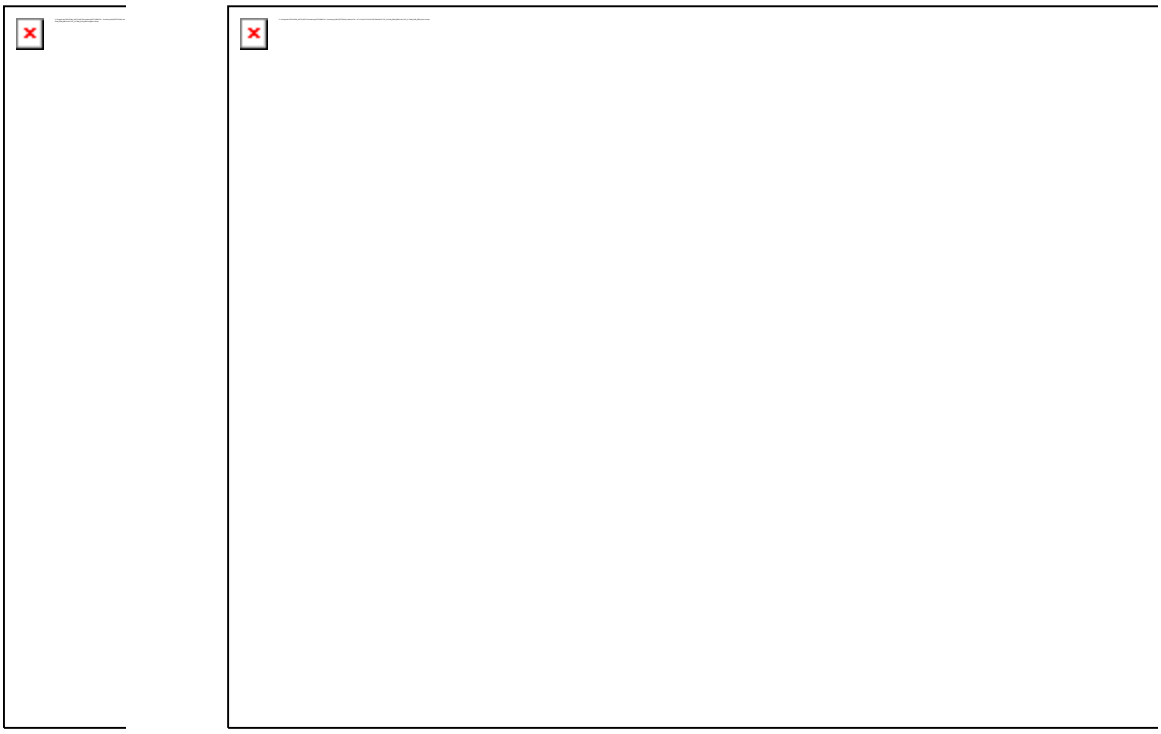
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.10 V/m; Power Drift = -0.02 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.54 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.52 A/m**	Grid 2 **M4** **0.38 A/m**	Grid 3 **M4** **0.23 A/m**
Grid 4 **M3** **0.51 A/m**	Grid 5 **M4** **0.37 A/m**	Grid 6 **M4** **0.23 A/m**
Grid 7 **M3** **0.54 A/m**	Grid 8 **M4** **0.40 A/m**	Grid 9 **M4** **0.25 A/m**

Cursor:

Total = 0.544 A/m
H Category: M3
Location: 25, 25, 8.7 mm



0 dB = 0.390A/m = -8.18 dB A/m

Date/Time: 6/29/2012 7:17:07 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_850_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 850; Frequency: 848.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

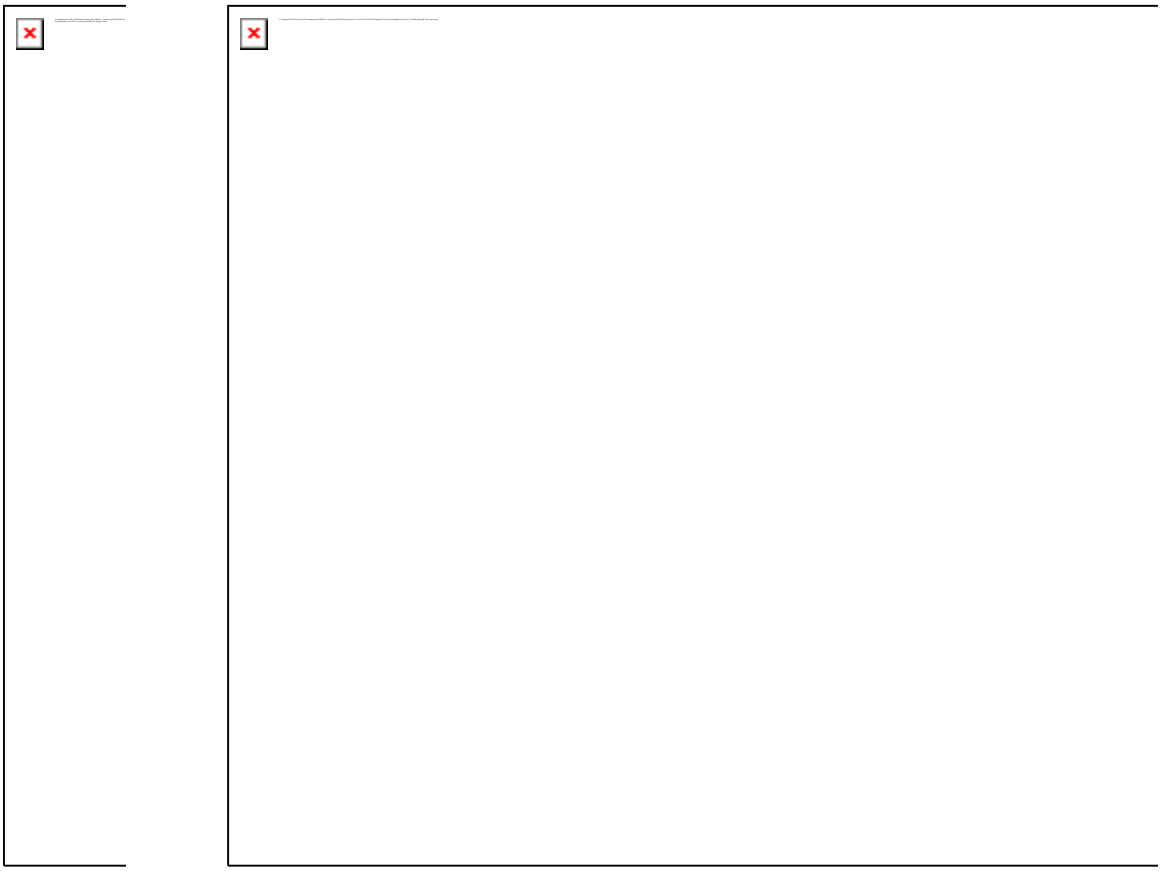
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.10 V/m; Power Drift = -0.07 dB
PMR not calibrated. PMF = 2.890 is applied.
H-field emissions = 0.46 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M3** **0.46 A/m**	Grid 2 **M4** **0.32 A/m**	Grid 3 **M4** **0.19 A/m**
Grid 4 **M3** **0.46 A/m**	Grid 5 **M4** **0.32 A/m**	Grid 6 **M4** **0.20 A/m**
Grid 7 **M3** **0.50 A/m**	Grid 8 **M4** **0.35 A/m**	Grid 9 **M4** **0.23 A/m**

Cursor:

Total = 0.501 A/m
H Category: M3
Location: 20, 20, 8.7 mm



0 dB = 0.500A/m = -6.02 dB A/m

Date/Time: 6/28/2012 9:08:36 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band V

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz, Frequency: 846.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.07 V/m; Power Drift = 0.17 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.15 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.15 A/m**	Grid 2 **M4** **0.11 A/m**	Grid 3 **M4** **0.06 A/m**
Grid 4 **M4** **0.14 A/m**	Grid 5 **M4** **0.10 A/m**	Grid 6 **M4** **0.06 A/m**
Grid 7 **M4** **0.15 A/m**	Grid 8 **M4** **0.11 A/m**	Grid 9 **M4** **0.07 A/m**

Cursor:

Total = 0.154 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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.09 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.18 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.17 A/m**	Grid 2 **M4** **0.12 A/m**	Grid 3 **M4** **0.08 A/m**
Grid 4 **M4** **0.16 A/m**	Grid 5 **M4** **0.12 A/m**	Grid 6 **M4** **0.07 A/m**
Grid 7 **M4** **0.18 A/m**	Grid 8 **M4** **0.13 A/m**	Grid 9 **M4** **0.08 A/m**

Cursor:

Total = 0.175 A/m
H Category: M4
Location: 25, 25, 8.7 mm

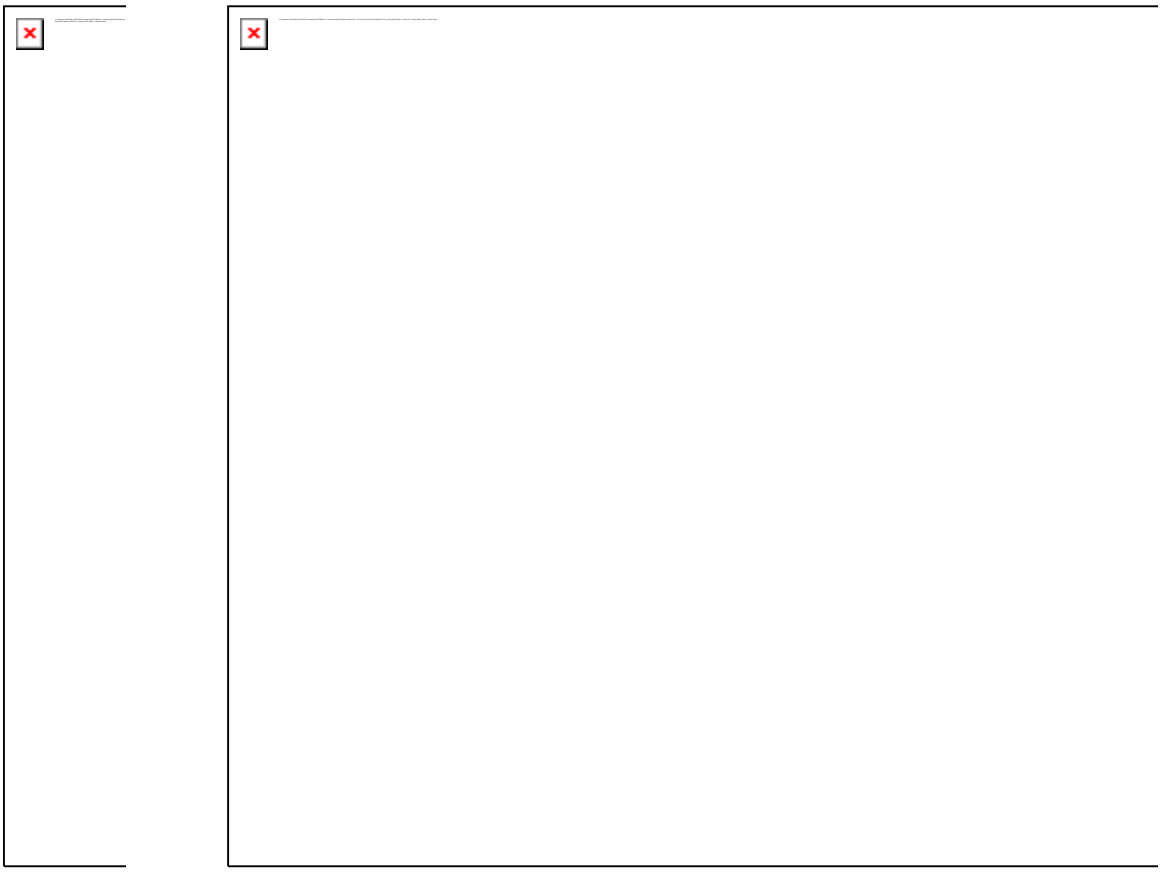
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.11 V/m; Power Drift = -0.09 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.21 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.19 A/m**	Grid 2 **M4** **0.14 A/m**	Grid 3 **M4** **0.09 A/m**
Grid 4 **M4** **0.19 A/m**	Grid 5 **M4** **0.14 A/m**	Grid 6 **M4** **0.09 A/m**
Grid 7 **M4** **0.21 A/m**	Grid 8 **M4** **0.16 A/m**	Grid 9 **M4** **0.10 A/m**

Cursor:

Total = 0.214 A/m
H Category: M4
Location: 25, 25, 8.7 mm



0 dB = 0.140A/m = -17.08 dB A/m

Date/Time: 6/29/2012 7:30:30 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band V_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD V; Frequency: 846.6 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:

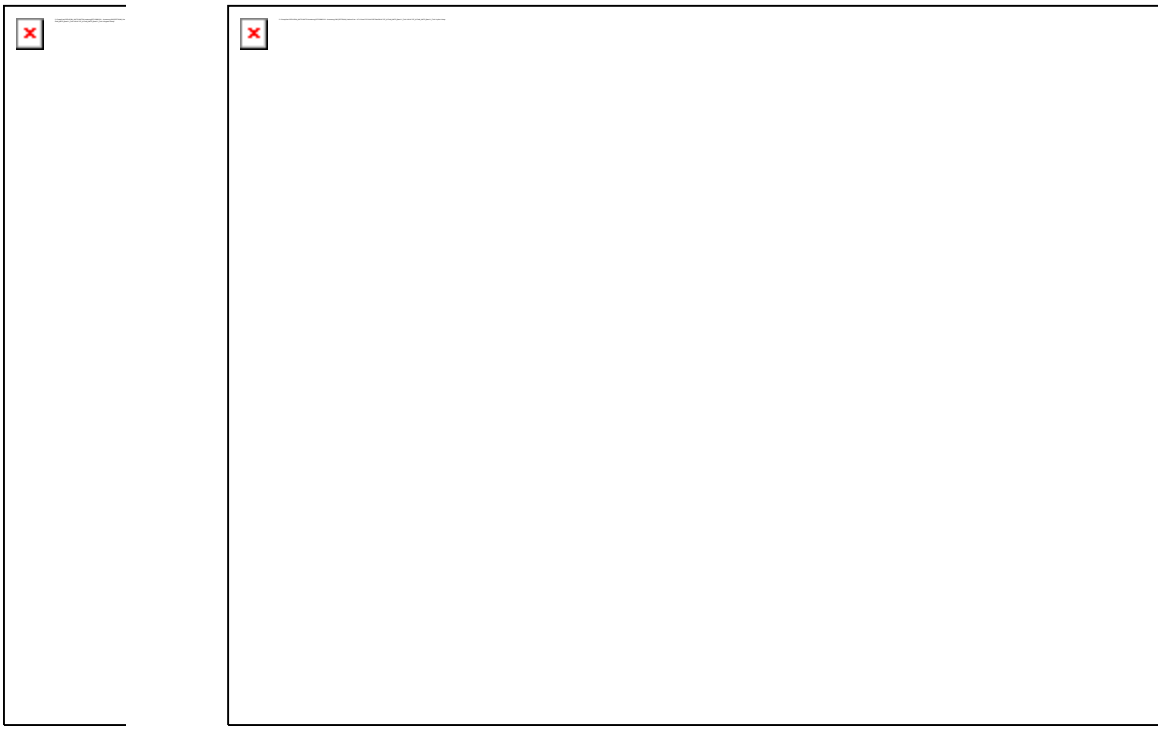
- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.11 V/m; Power Drift = 0.12 dB
PMR not calibrated. PMF = 1.090 is applied.
H-field emissions = 0.18 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.18 A/m**	Grid 2 **M4** **0.13 A/m**	Grid 3 **M4** **0.08 A/m**
Grid 4 **M4** **0.18 A/m**	Grid 5 **M4** **0.13 A/m**	Grid 6 **M4** **0.08 A/m**
Grid 7 **M4** **0.20 A/m**	Grid 8 **M4** **0.14 A/m**	Grid 9 **M4** **0.09 A/m**

Cursor:
Total = 0.195 A/m
H Category: M4
Location: 20, 20, 8.7 mm



0 dB = 0.200A/m = -13.98 dB A/m

Date/Time: 7/11/2012 12:43:37 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.07 V/m; Power Drift = 0.01 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.20 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M2** **0.25 A/m**	Grid 2 **M3** **0.23 A/m**	Grid 3 **M3** **0.20 A/m**
Grid 4 **M3** **0.20 A/m**	Grid 5 **M3** **0.20 A/m**	Grid 6 **M3** **0.20 A/m**
Grid 7 **M3** **0.18 A/m**	Grid 8 **M3** **0.17 A/m**	Grid 9 **M3** **0.16 A/m**

Cursor:

Total = 0.254 A/m
H Category: M2
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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.07 V/m; Power Drift = -0.21 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.21 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M2** **0.27 A/m**	Grid 2 **M3** **0.25 A/m**	Grid 3 **M3** **0.21 A/m**
Grid 4 **M3** **0.21 A/m**	Grid 5 **M3** **0.21 A/m**	Grid 6 **M3** **0.19 A/m**
Grid 7 **M3** **0.18 A/m**	Grid 8 **M3** **0.17 A/m**	Grid 9 **M3** **0.14 A/m**

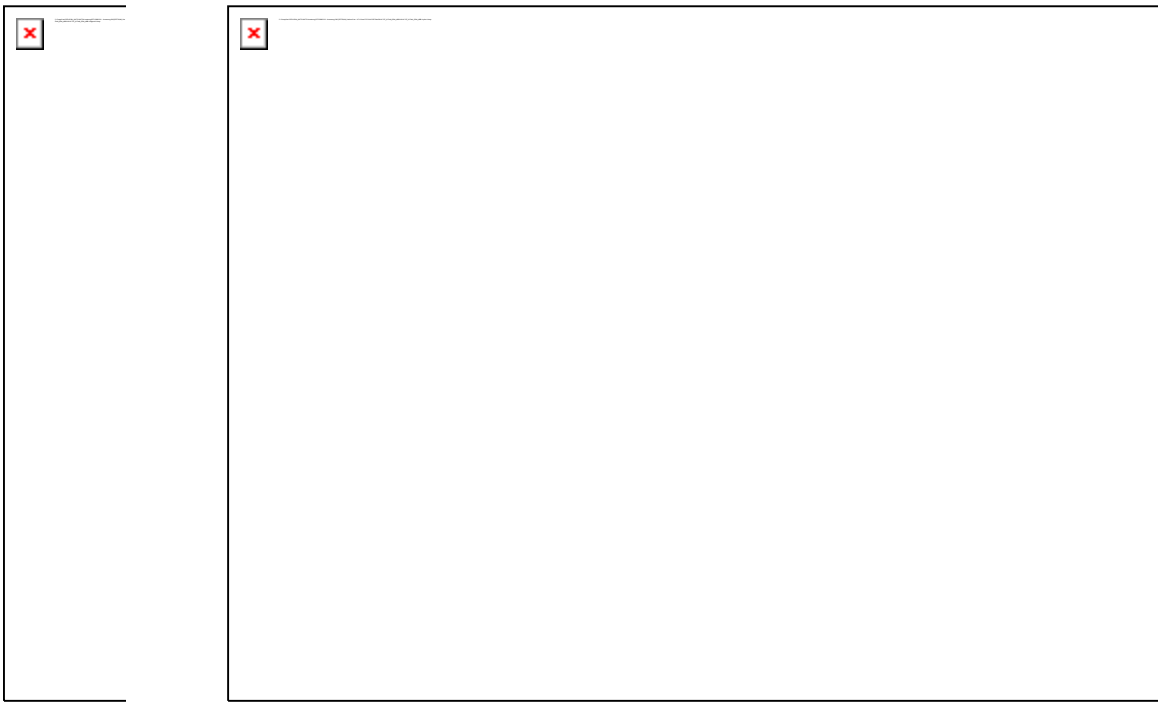
Cursor:

Total = 0.269 A/m
H Category: M2
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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.08 V/m; Power Drift = -0.15 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.23 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M2** **0.29 A/m**	Grid 2 **M2** **0.27 A/m**	Grid 3 **M3** **0.22 A/m**
Grid 4 **M3** **0.23 A/m**	Grid 5 **M3** **0.23 A/m**	Grid 6 **M3** **0.20 A/m**
Grid 7 **M3** **0.20 A/m**	Grid 8 **M3** **0.19 A/m**	Grid 9 **M3** **0.16 A/m**



0 dB = 0.260A/m = -11.70 dB A/m

Date/Time: 7/11/2012 1:03:41 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.07 V/m; Power Drift = 0.10 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.21 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M2** **0.27 A/m**	Grid 2 **M3** **0.23 A/m**	Grid 3 **M3** **0.20 A/m**
Grid 4 **M3** **0.21 A/m**	Grid 5 **M3** **0.21 A/m**	Grid 6 **M3** **0.20 A/m**
Grid 7 **M3** **0.18 A/m**	Grid 8 **M3** **0.18 A/m**	Grid 9 **M3** **0.17 A/m**

Cursor:

Total = 0.265 A/m
H Category: M2
Location: 20, -30, 8.7 mm

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

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.07 V/m; Power Drift = 0.22 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.22 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M2** **0.27 A/m**	Grid 2 **M3** **0.24 A/m**	Grid 3 **M3** **0.20 A/m**
Grid 4 **M3** **0.23 A/m**	Grid 5 **M3** **0.22 A/m**	Grid 6 **M3** **0.19 A/m**
Grid 7 **M3** **0.18 A/m**	Grid 8 **M3** **0.18 A/m**	Grid 9 **M3** **0.15 A/m**

Cursor:

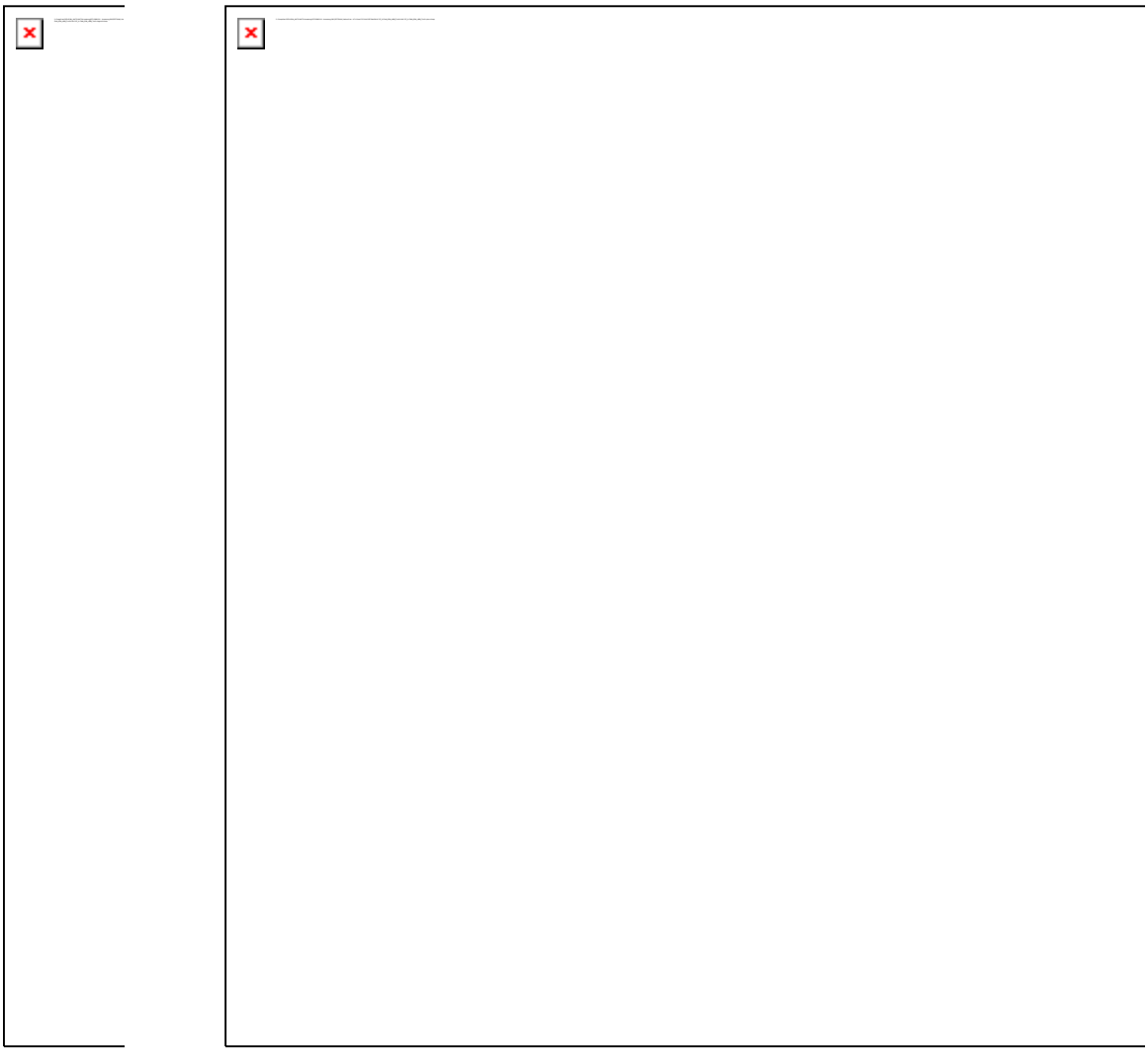
Total = 0.273 A/m
H Category: M2
Location: 18, -30, 8.7 mm

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.08 V/m; Power Drift = 0.04 dB
PMR not calibrated. PMF = 2.860 is applied.
H-field emissions = 0.24 A/m
Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 **M2** **0.29 A/m**	Grid 2 **M2** **0.26 A/m**	Grid 3 **M3** **0.20 A/m**
Grid 4 **M3** **0.25 A/m**	Grid 5 **M3** **0.24 A/m**	Grid 6 **M3** **0.20 A/m**
Grid 7 **M3** **0.20 A/m**	Grid 8 **M3** **0.20 A/m**	Grid 9 **M3** **0.16 A/m**



0 dB = 0.270A/m = -11.37 dB A/m

Date/Time: 6/28/2012 9:29:19 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band IV

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz, Frequency: 1732.6 MHz, Frequency: 1752.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.10 V/m; Power Drift = 0.10 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.12 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** **0.09 A/m**	Grid 6 **M4** **0.09 A/m**
Grid 7 **M4** **0.12 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.09 A/m**

Cursor:
Total = 0.121 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):

Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.12 V/m; Power Drift = 0.07 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** **0.10 A/m**	Grid 2 **M4** **0.11 A/m**	Grid 3 **M4** **0.11 A/m**
Grid 4 **M4** **0.10 A/m**	Grid 5 **M4** **0.11 A/m**	Grid 6 **M4** **0.11 A/m**
Grid 7 **M4** **0.13 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.10 A/m**

Cursor:
Total = 0.125 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):

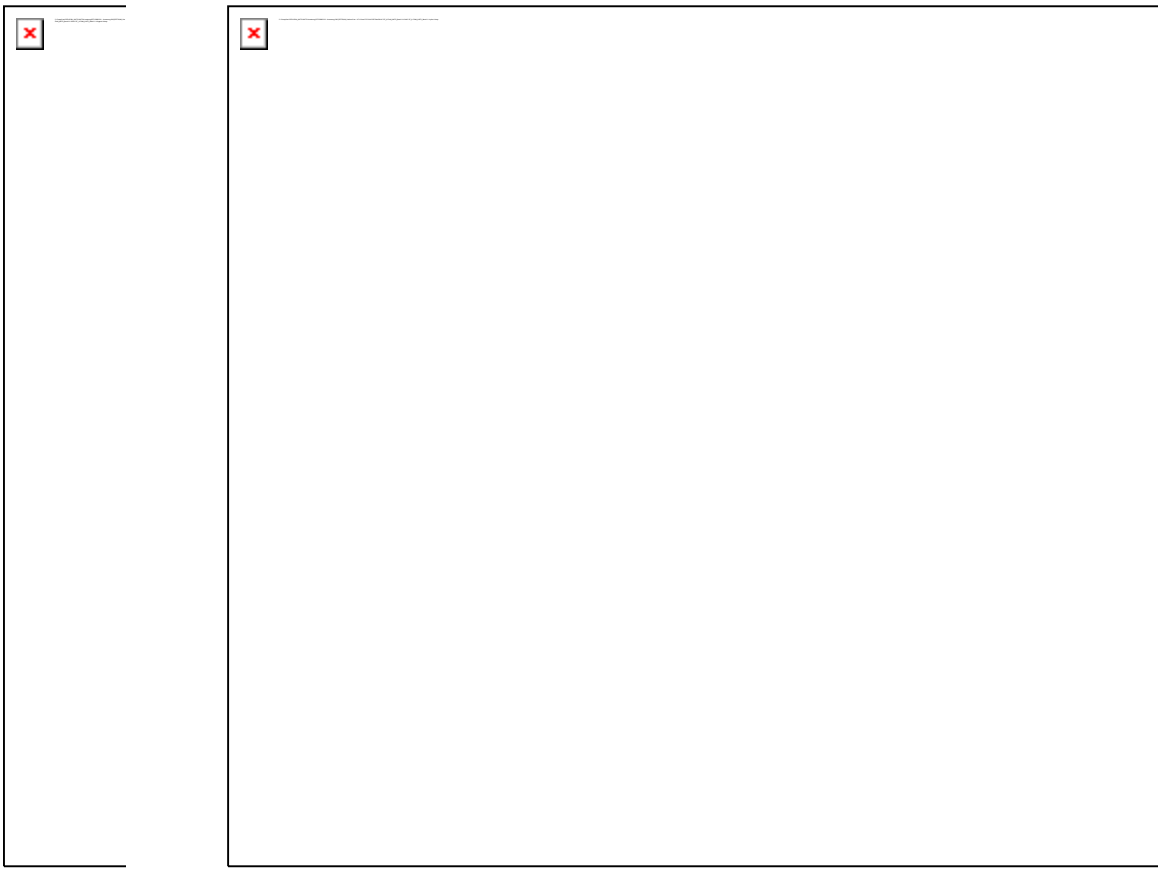
Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.12 V/m; Power Drift = 0.03 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.12 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.11 A/m**	Grid 2 **M4** **0.11 A/m**	Grid 3 **M4** **0.11 A/m**
Grid 4 **M4** **0.10 A/m**	Grid 5 **M4** **0.11 A/m**	Grid 6 **M4** **0.11 A/m**
Grid 7 **M4** **0.12 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.10 A/m**

Cursor:
Total = 0.118 A/m
H Category: M4
Location: 25, 25, 8.7 mm



0 dB = 0.120A/m = -18.42 dB A/m

Date/Time: 6/29/2012 7:34:06 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band IV_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD IV; Frequency: 1732.6 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:

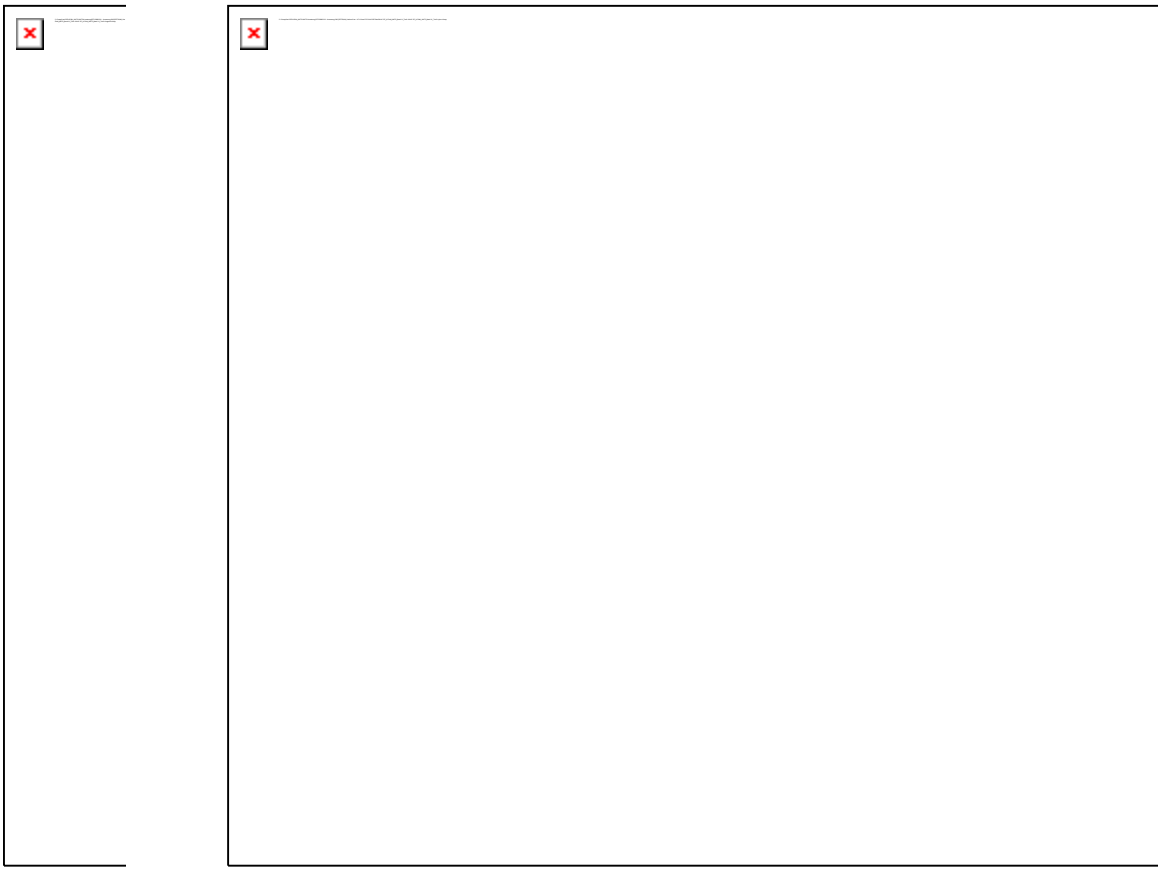
- Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.12 V/m; Power Drift = 0.09 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** **0.11 A/m**	Grid 3 **M4** **0.11 A/m**
Grid 4 **M4** **0.10 A/m**	Grid 5 **M4** **0.11 A/m**	Grid 6 **M4** **0.11 A/m**
Grid 7 **M4** **0.11 A/m**	Grid 8 **M4** **0.11 A/m**	Grid 9 **M4** **0.10 A/m**

Cursor:
Total = 0.111 A/m
H Category: M4
Location: 20, 20, 8.7 mm



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

Date/Time: 6/28/2012 9:45:52 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band II

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz, Frequency: 1907.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.12 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** **0.15 A/m**	Grid 2 **M4** **0.13 A/m**	Grid 3 **M4** **0.12 A/m**
Grid 4 **M4** **0.11 A/m**	Grid 5 **M4** **0.12 A/m**	Grid 6 **M4** **0.12 A/m**
Grid 7 **M4** **0.11 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.09 A/m**

Cursor:
Total = 0.148 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):

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 = 0.15 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.15 A/m**	Grid 2 **M4** **0.13 A/m**	Grid 3 **M4** **0.11 A/m**
Grid 4 **M4** **0.11 A/m**	Grid 5 **M4** **0.11 A/m**	Grid 6 **M4** **0.10 A/m**
Grid 7 **M4** **0.10 A/m**	Grid 8 **M4** **0.09 A/m**	Grid 9 **M4** **0.08 A/m**

Cursor:
Total = 0.146 A/m
H Category: M4
Location: 25, -25, 8.7 mm

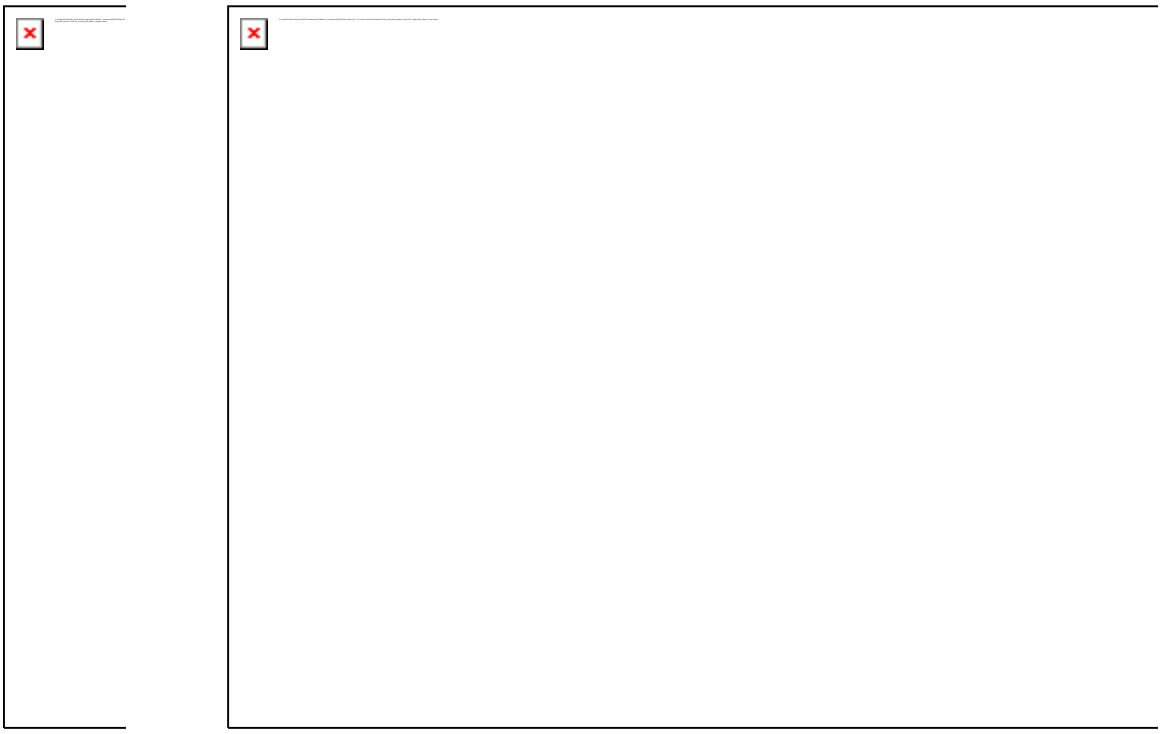
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.11 V/m; Power Drift = -2.02 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** **0.15 A/m**	Grid 2 **M4** **0.13 A/m**	Grid 3 **M4** **0.08 A/m**
Grid 4 **M4** **0.12 A/m**	Grid 5 **M4** **0.12 A/m**	Grid 6 **M4** **0.08 A/m**
Grid 7 **M4** **0.10 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.06 A/m**

Cursor:
Total = 0.145 A/m
H Category: M4
Location: 25, -25, 8.7 mm



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

Date/Time: 6/29/2012 7:21:15 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band II_Tcoil

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 2A2114F7

Communication System: WCDMA FDD II; Frequency: 1907.6 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 = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.12 V/m; Power Drift = -0.01 dB
PMR not calibrated. PMF = 1.000 is applied.
H-field emissions = 0.12 A/m
Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 **M4** **0.16 A/m**	Grid 2 **M4** **0.13 A/m**	Grid 3 **M4** **0.10 A/m**
Grid 4 **M4** **0.13 A/m**	Grid 5 **M4** **0.12 A/m**	Grid 6 **M4** **0.10 A/m**
Grid 7 **M4** **0.10 A/m**	Grid 8 **M4** **0.10 A/m**	Grid 9 **M4** **0.09 A/m**

Cursor:
Total = 0.156 A/m
H Category: M4
Location: 20, -30, 8.7 mm