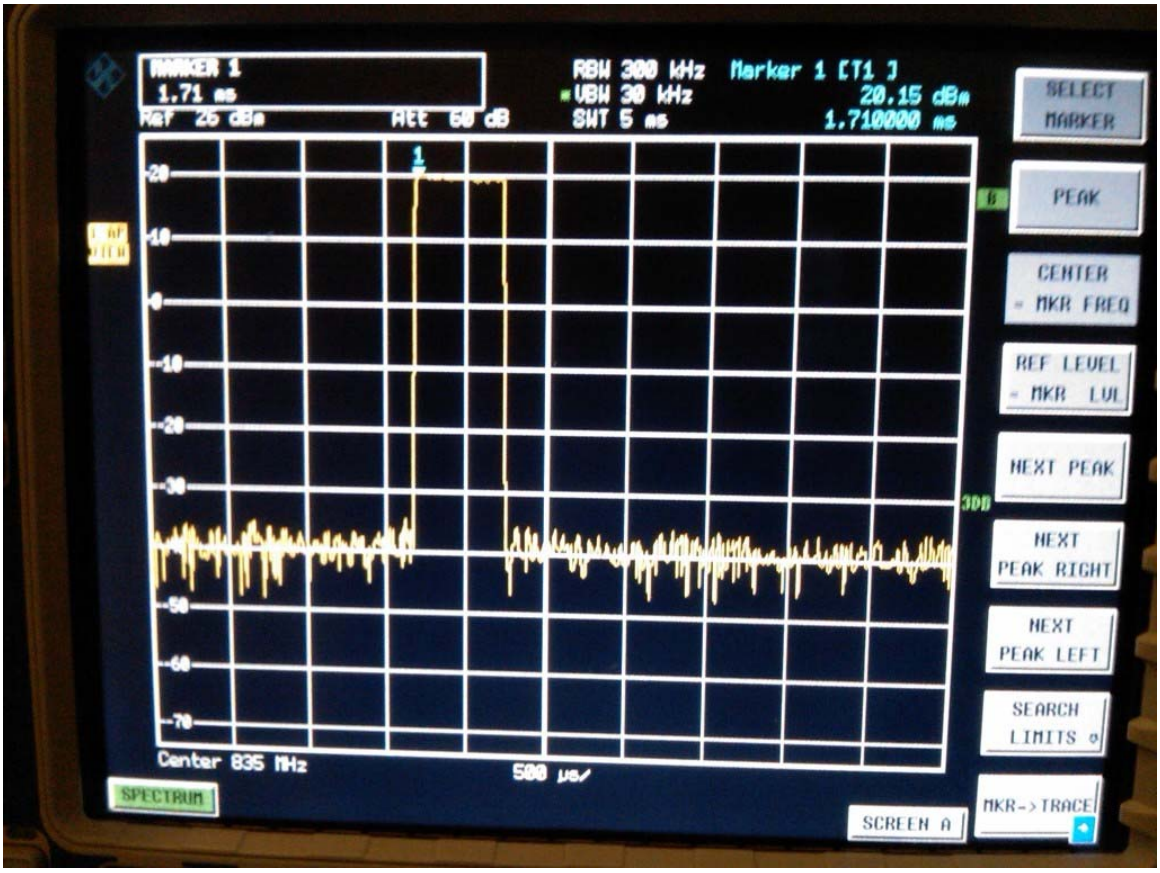
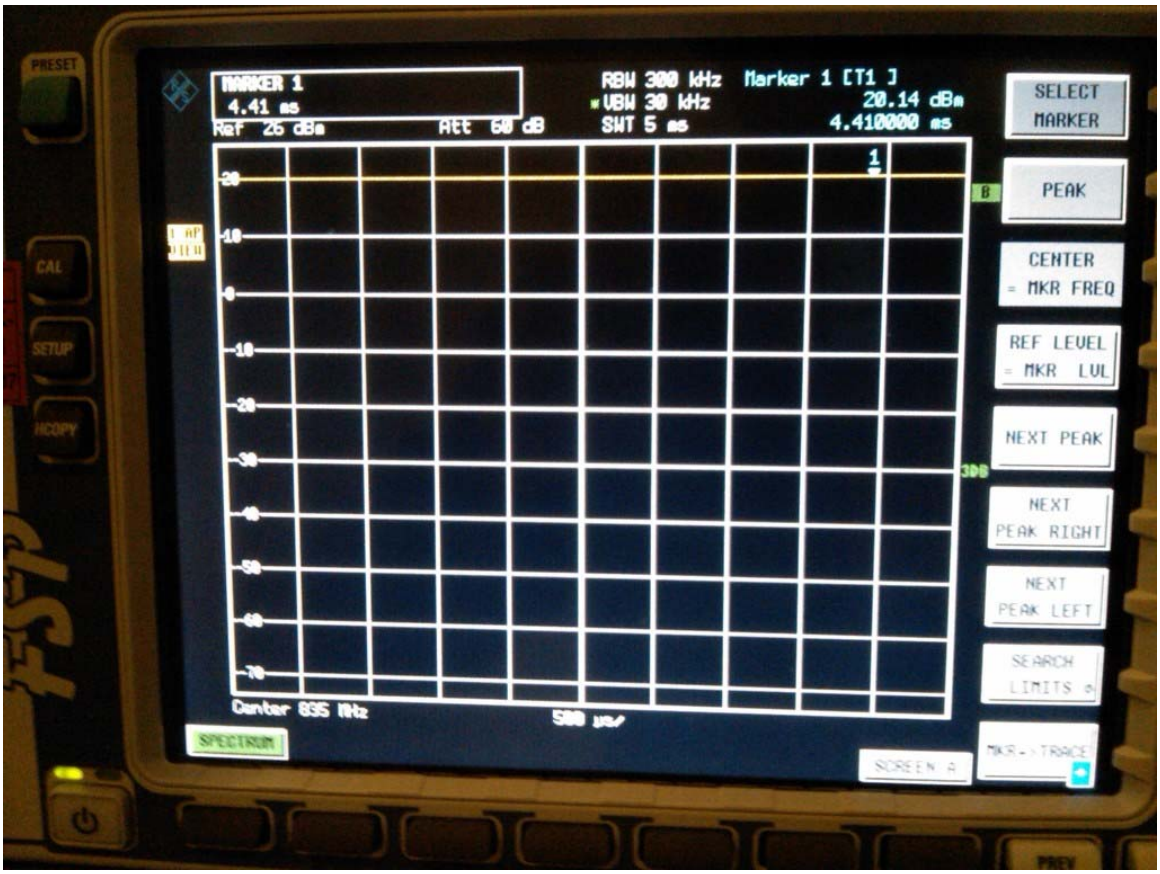
Annex A: Measurement data and plots

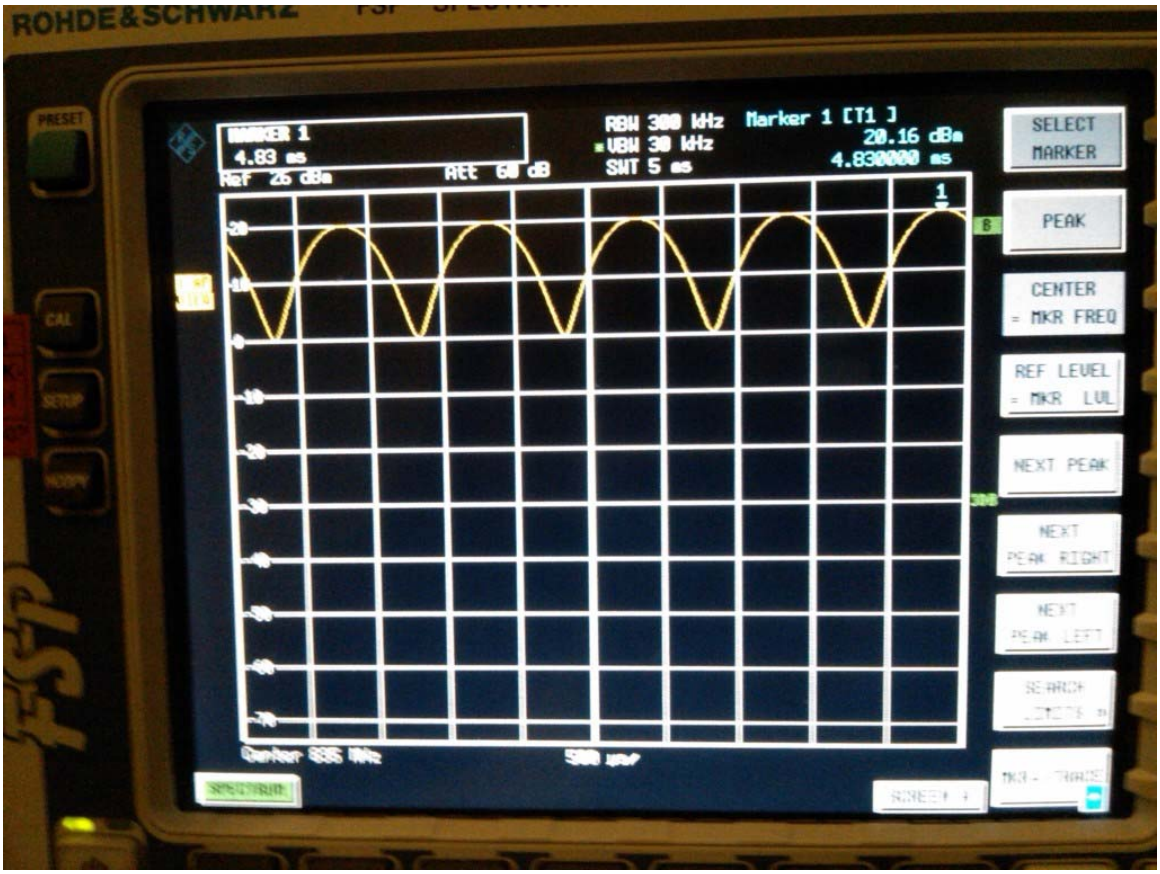
A.1 Spectrum analyser plots: GSM/UMTS, CW, 80%AM, signals



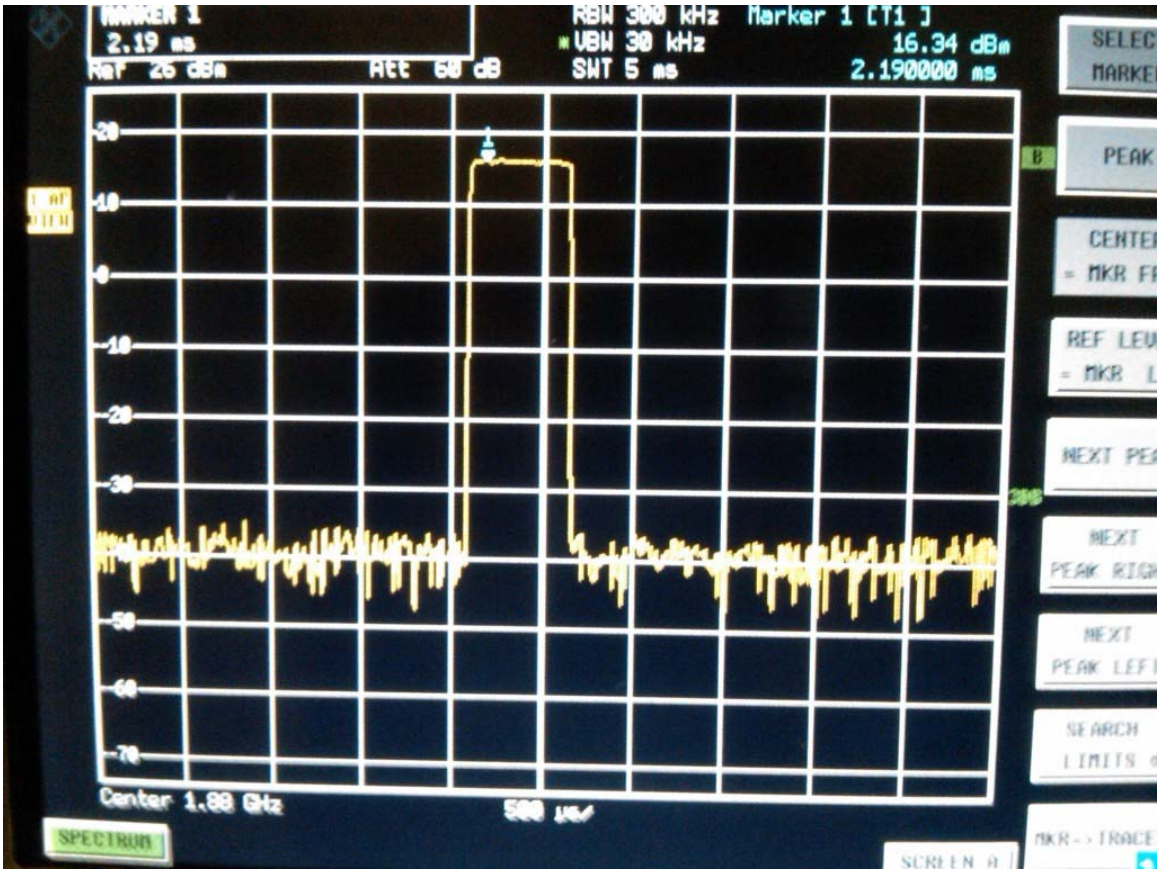
GSM 835 MHz



CW 835 MHz

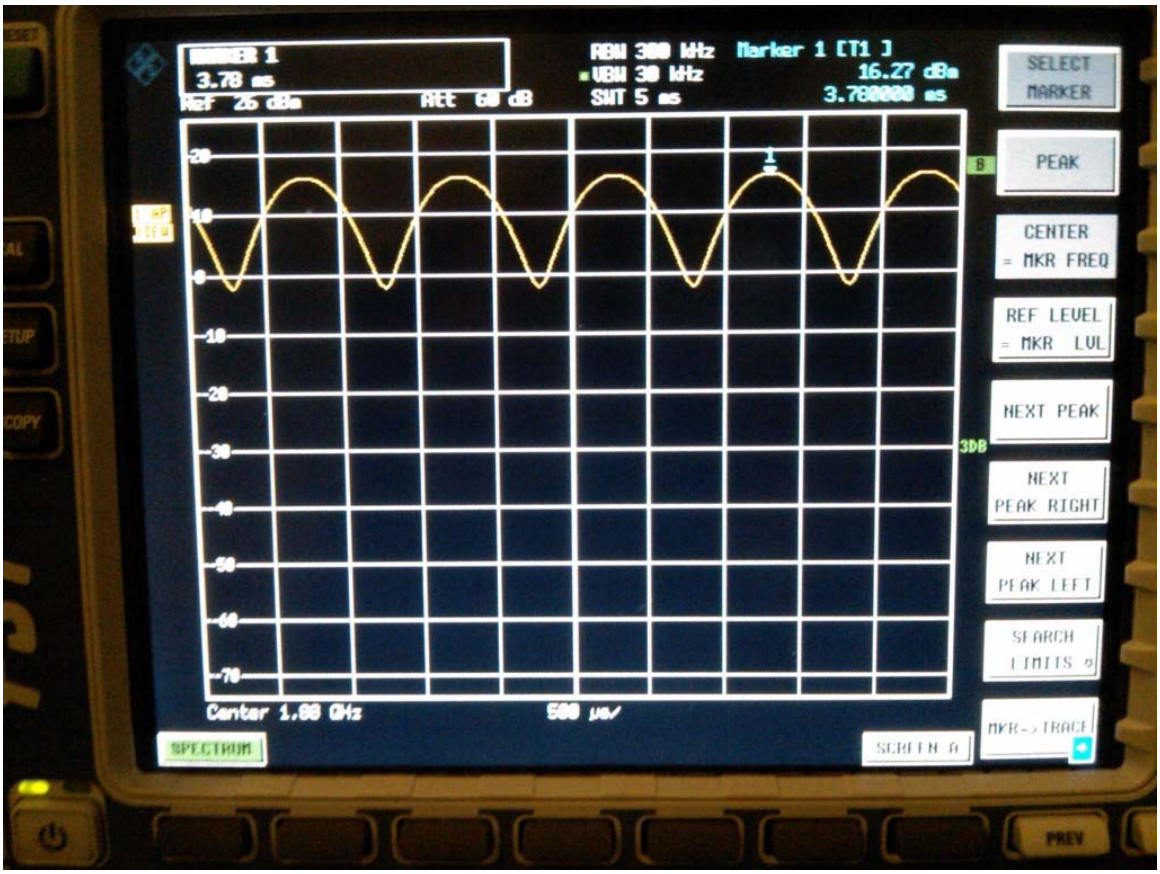


AM 80% 835 MHz

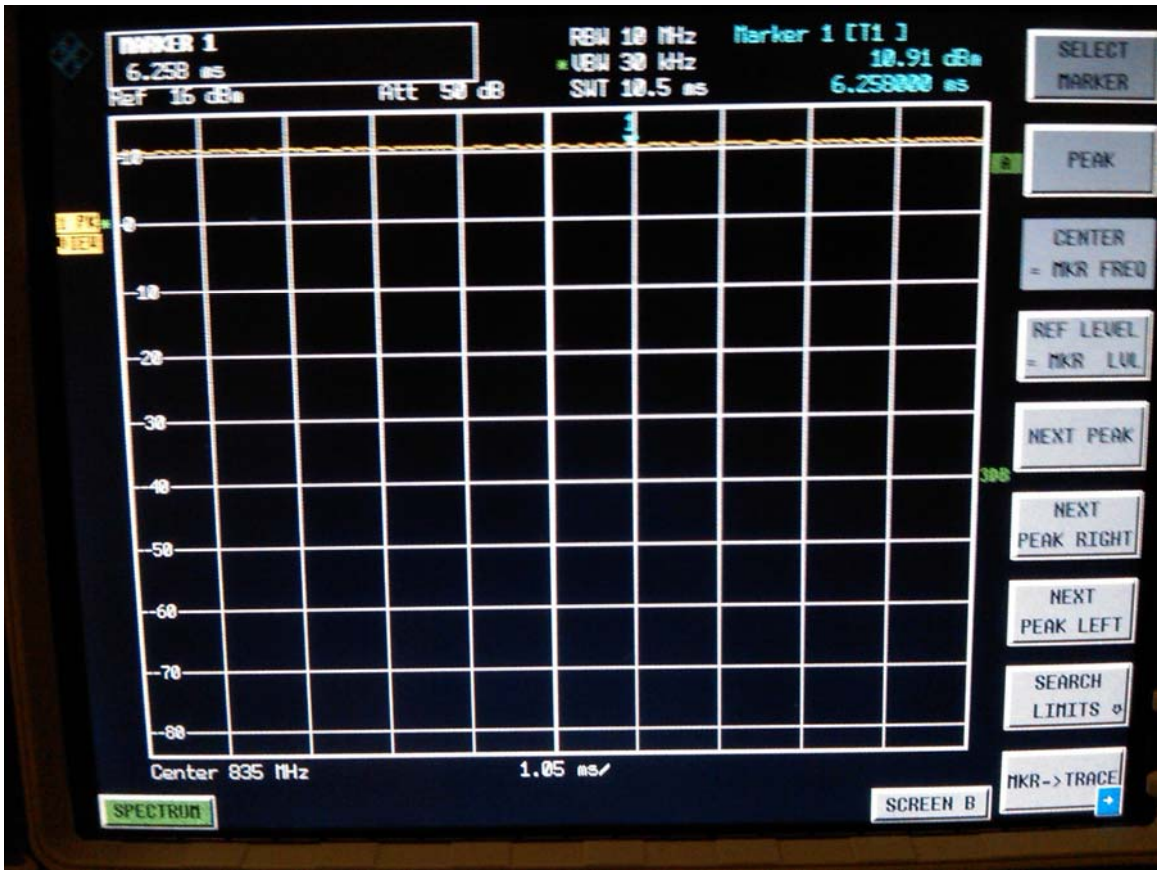


GSM 1880 MHz

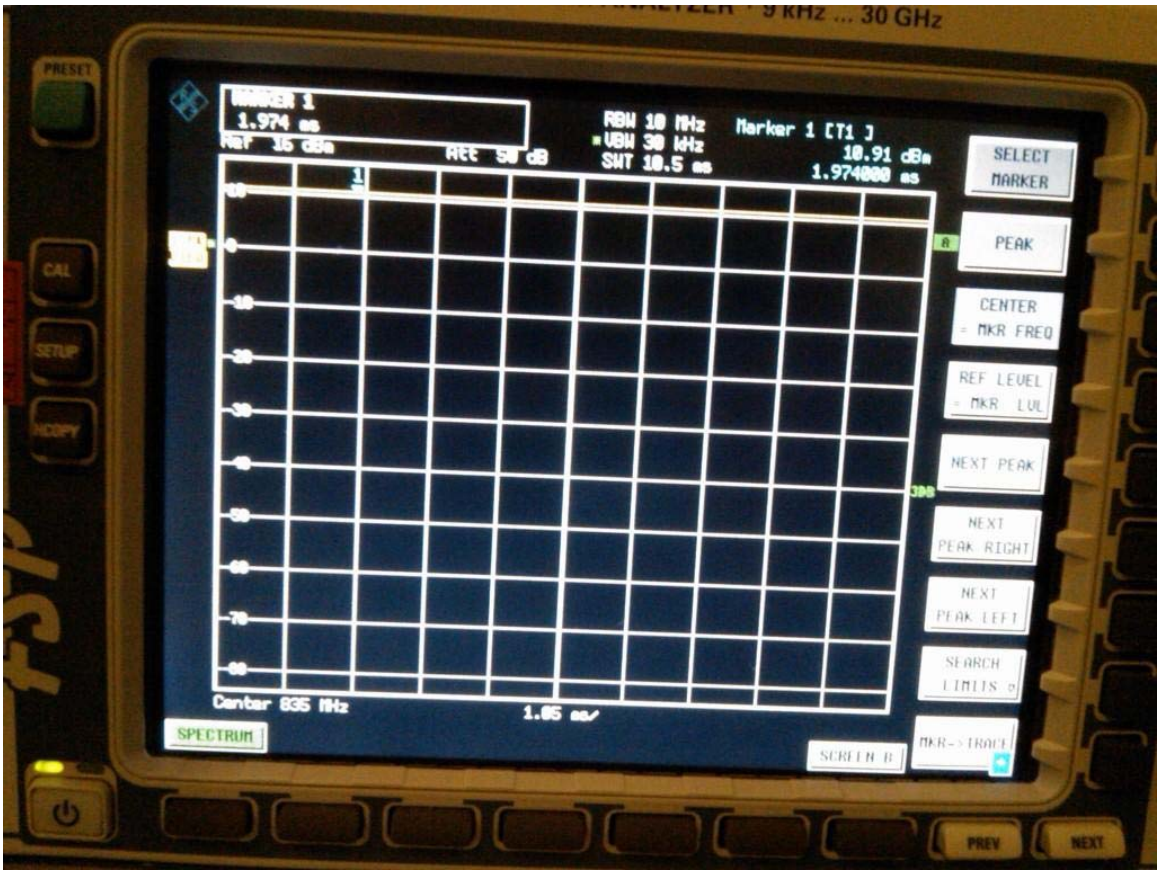
CW 1880 MHz



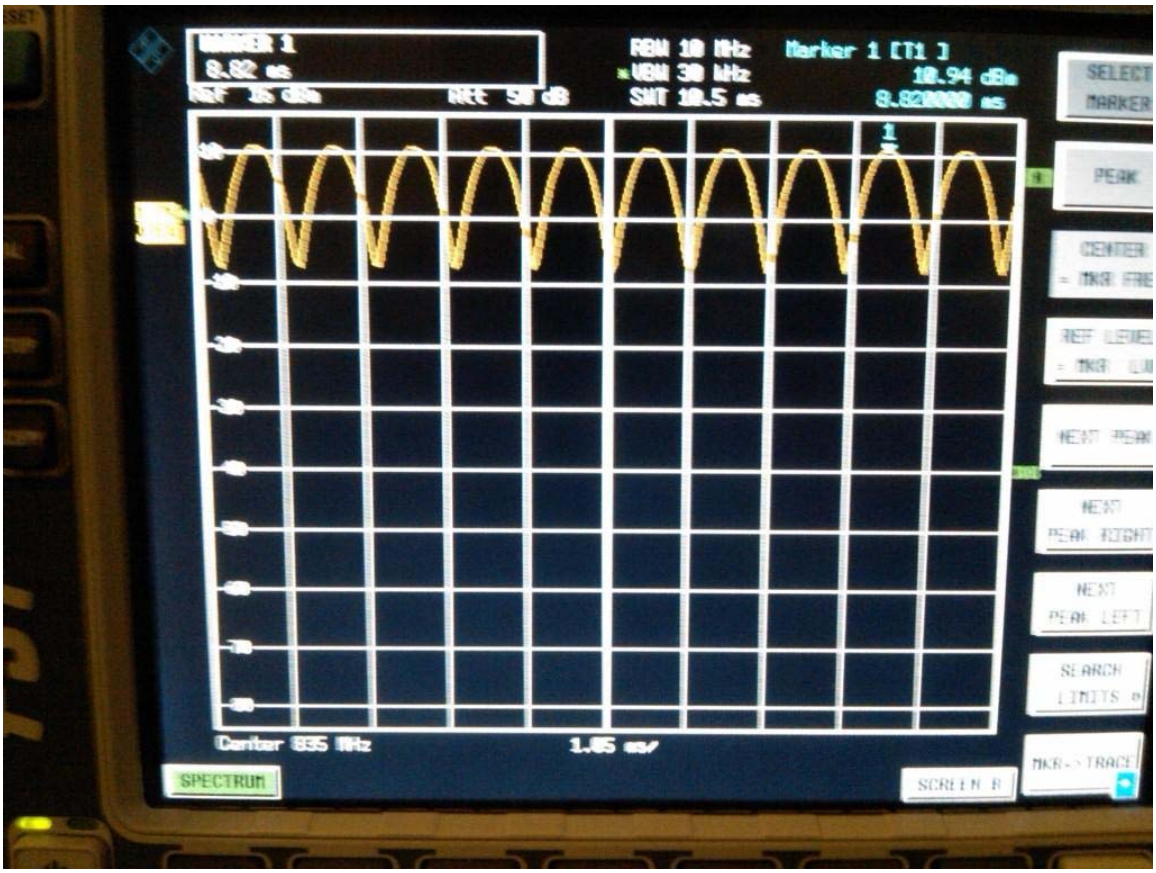
AM 80 % 1880 MHz



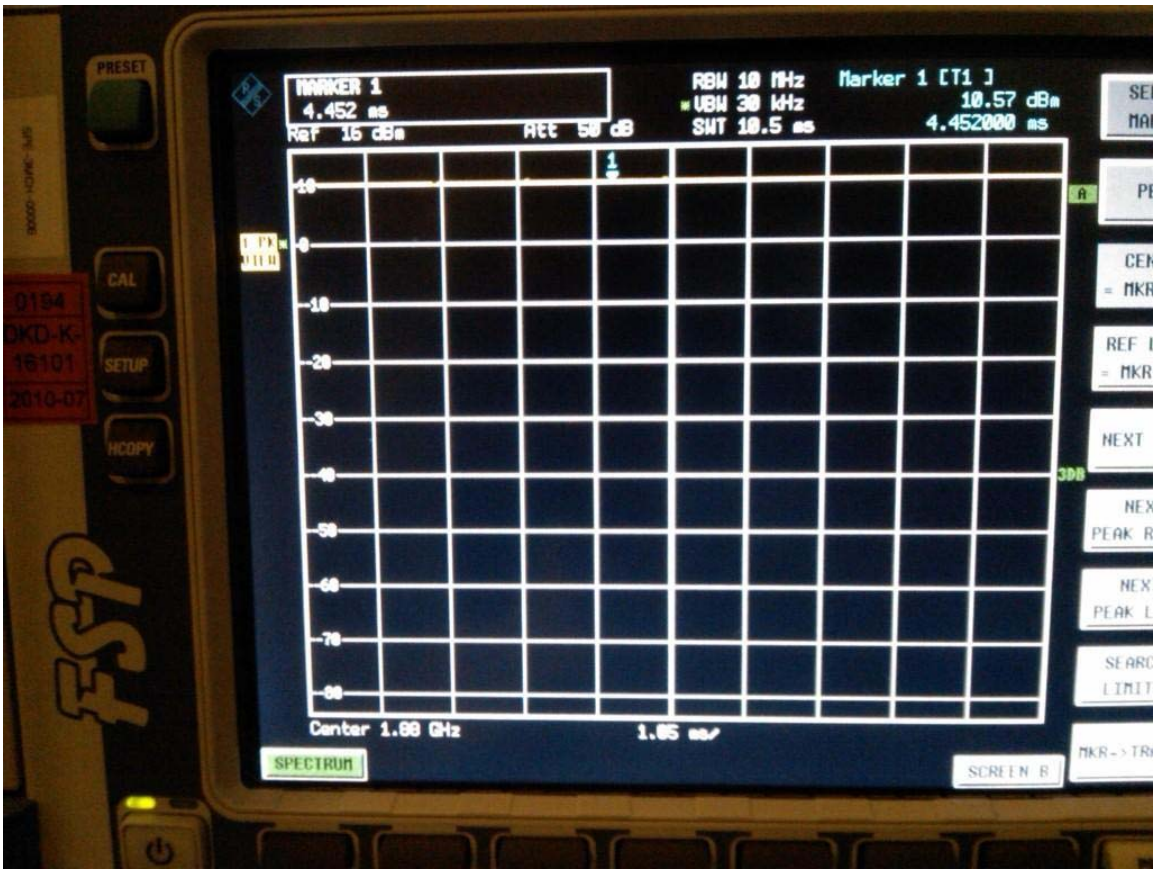
UMTS 835 MHz



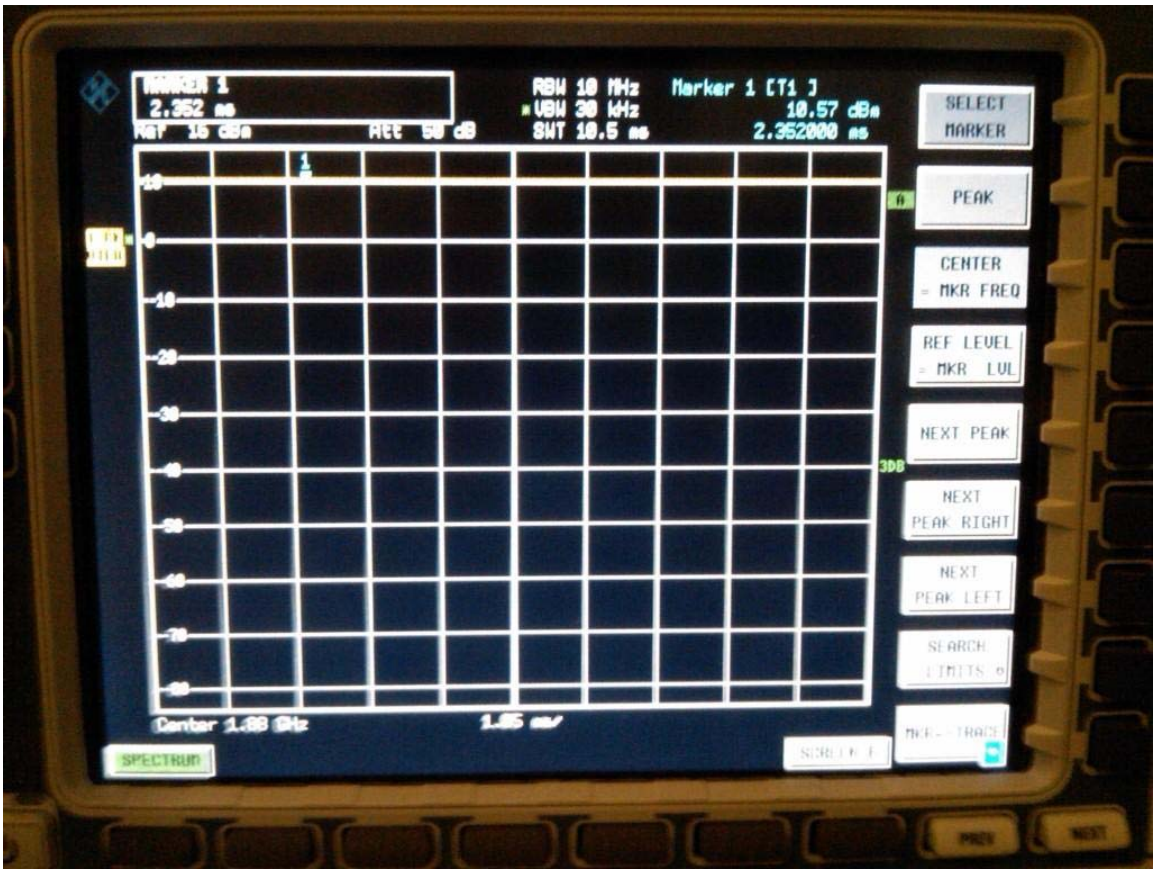
CW 835 MHz



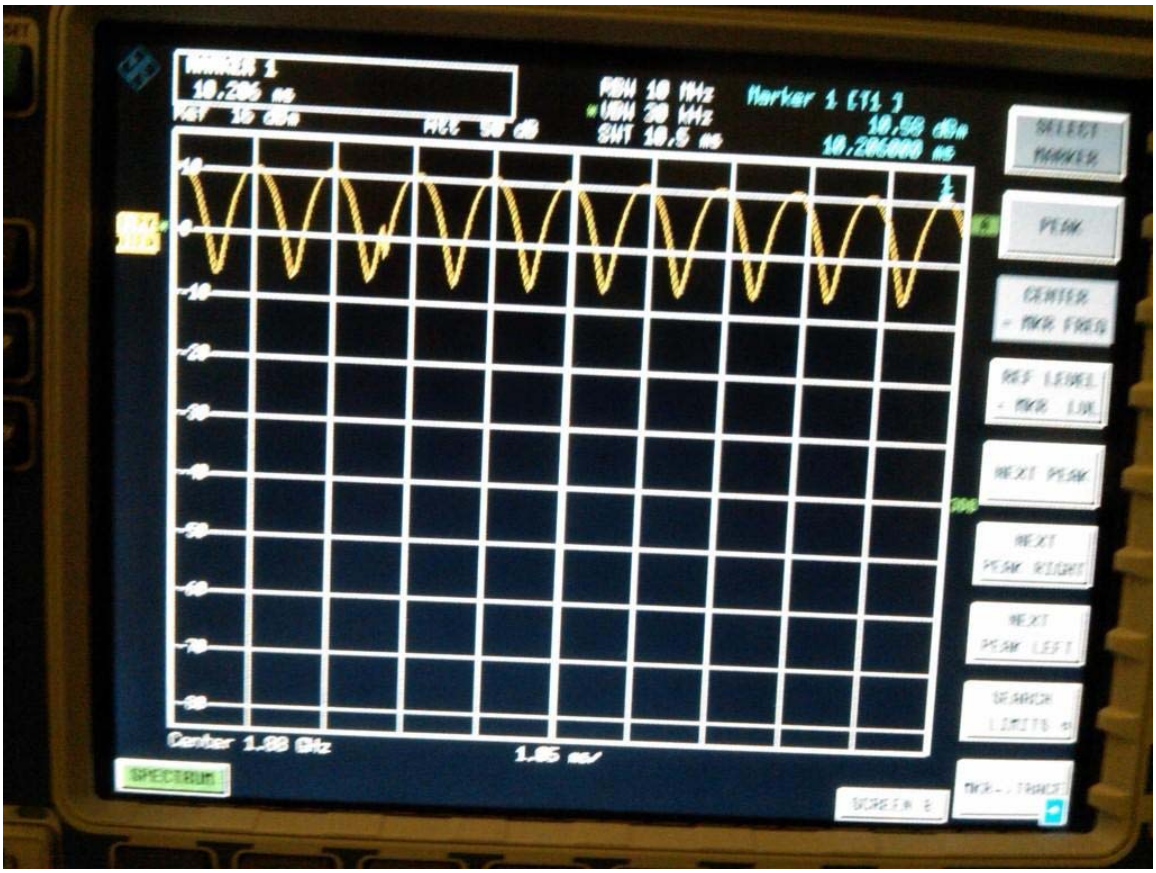
AM 80% 835 MHz



UMTS 1880 MHz



CW 1880 MHz



AM 80 % 1880 MHz

A.2 Dipole validation and probe modulation factor plots

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_835 MHz_10_20_11

DUT: HAC-Dipole 835 MHz; Type: D835V3

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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 163.0 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 120.4 V/m; Power Drift = 0.07 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

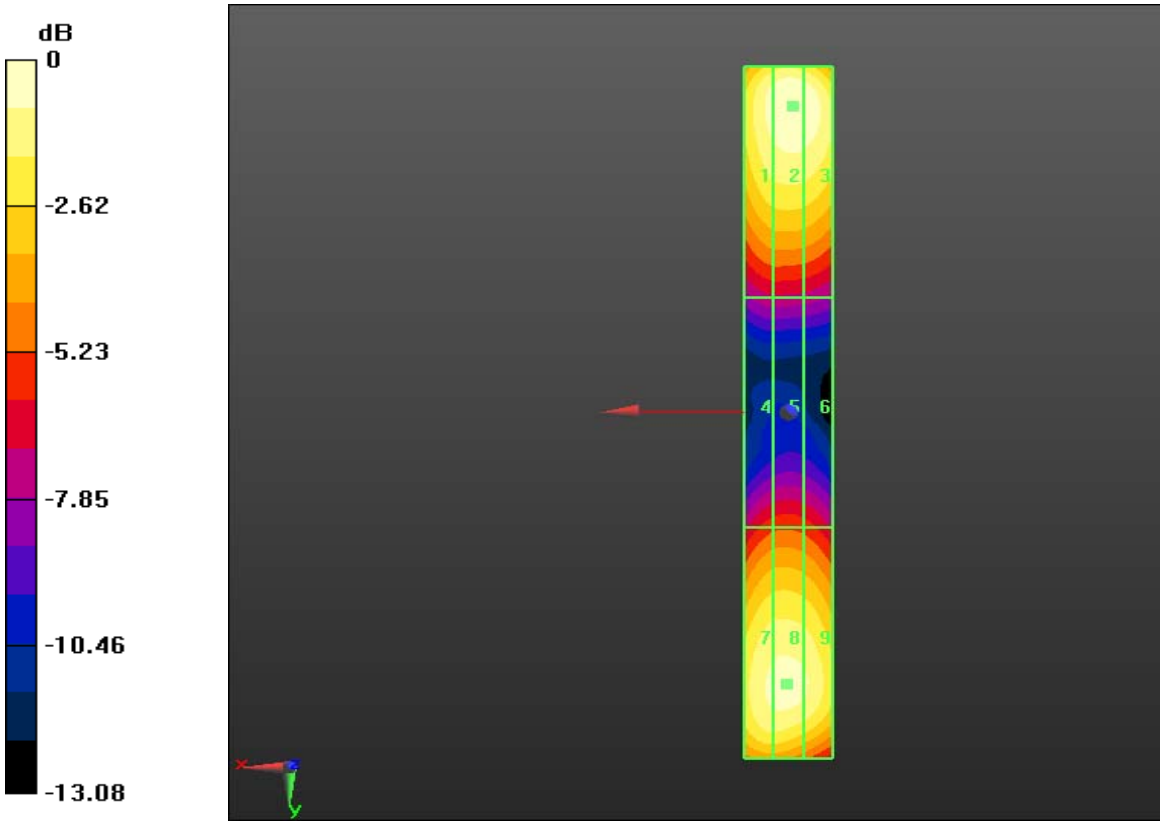
Peak E-field in V/m

Grid 1	Grid 2	Grid 3
155.1 M4	**163.0 M4**	**161.0 M4**

Grid 4 **87.180 M4**	Grid 5 **88.480 M4**	Grid 6 **86.061 M4**
Grid 7 **151.3 M4**	Grid 8 **153.4 M4**	Grid 9 **149.6 M4**

Cursor:

Total = 163.0 V/m
E Category: M4
Location: -1, -79.5, 4.7 mm



0 dB = 163.0V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: GSM 850;; Frequency: 835 MHz;Communication System PAR: 9.191 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

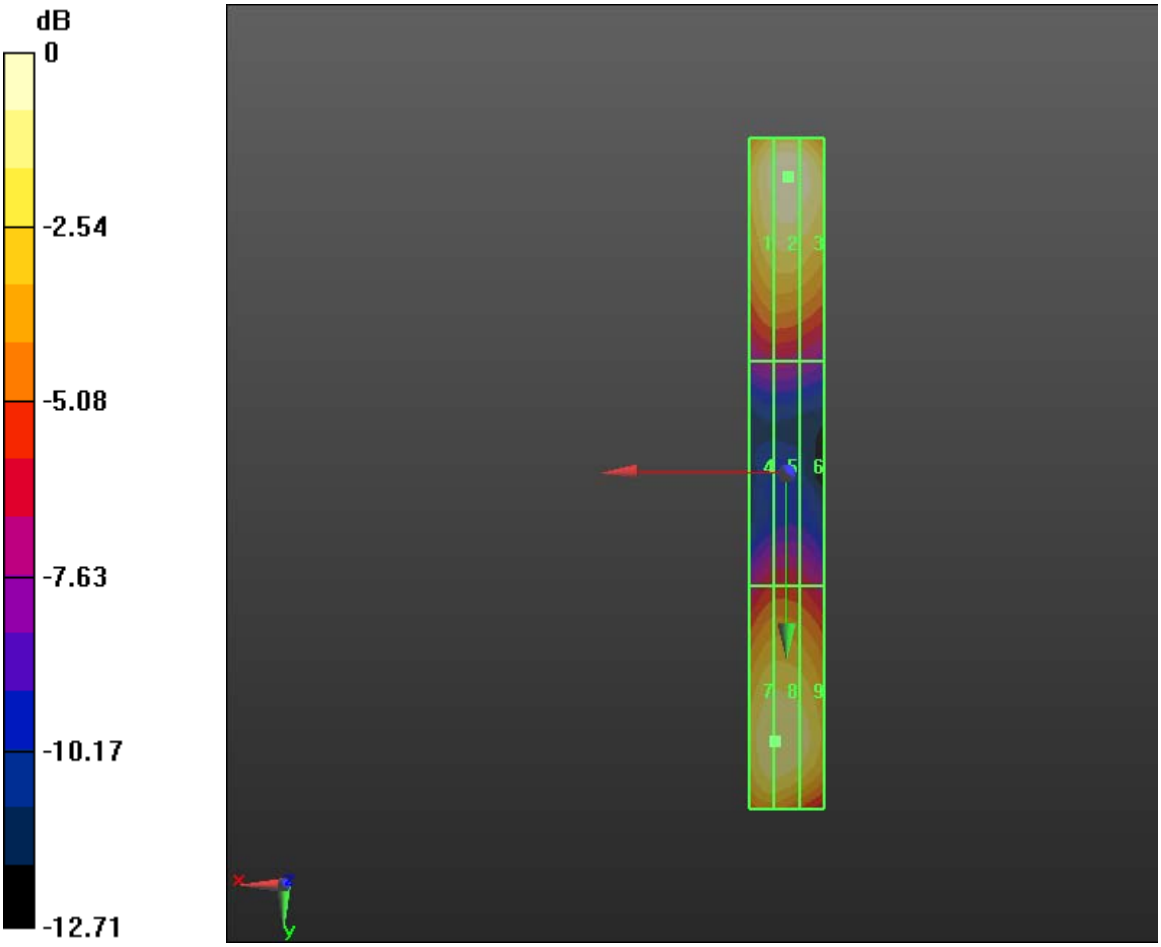
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 54.142 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 38.642 V/m; Power Drift = -0.06 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **51.408 M4**	Grid 2 **54.142 M4**	Grid 3 **52.509 M4**
Grid 4 **27.621 M4**	Grid 5 **27.841 M4**	Grid 6 **27.144 M4**
Grid 7 **49.045 M4**	Grid 8 **49.106 M4**	Grid 9 **47.011 M4**

Cursor:

Total = 54.142 V/m
E Category: M4
Location: -0.5, -79.5, 4.7 mm



0 dB = 54.140V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CW835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

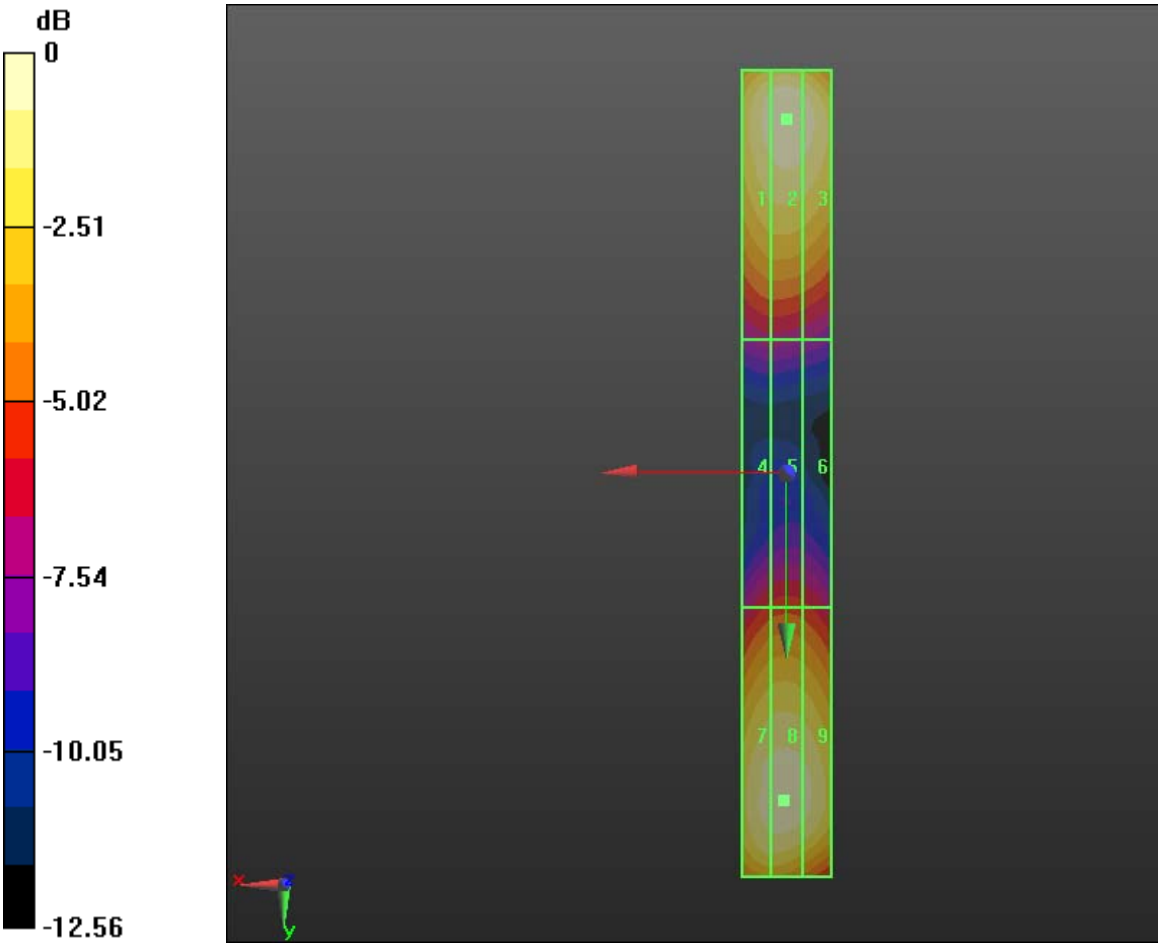
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 159.3 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 120.6 V/m; Power Drift = -0.10 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **153.1 M4**	Grid 2 **159.3 M4**	Grid 3 **154.5 M4**
Grid 4 **8066 M4**	Grid 5 **86.943 M4**	Grid 6 **84.863 M4**
Grid 7 **153.2 M4**	Grid 8 **154.9 M4**	Grid 9 **151.1 M4**

Cursor:

Total = 159.3 V/m
E Category: M4
Location: 0, -79, 4.7 mm



0 dB = 159.3V/m

Date/Time: 3/22/2011 3:09:37 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_AM80%835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz);
Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

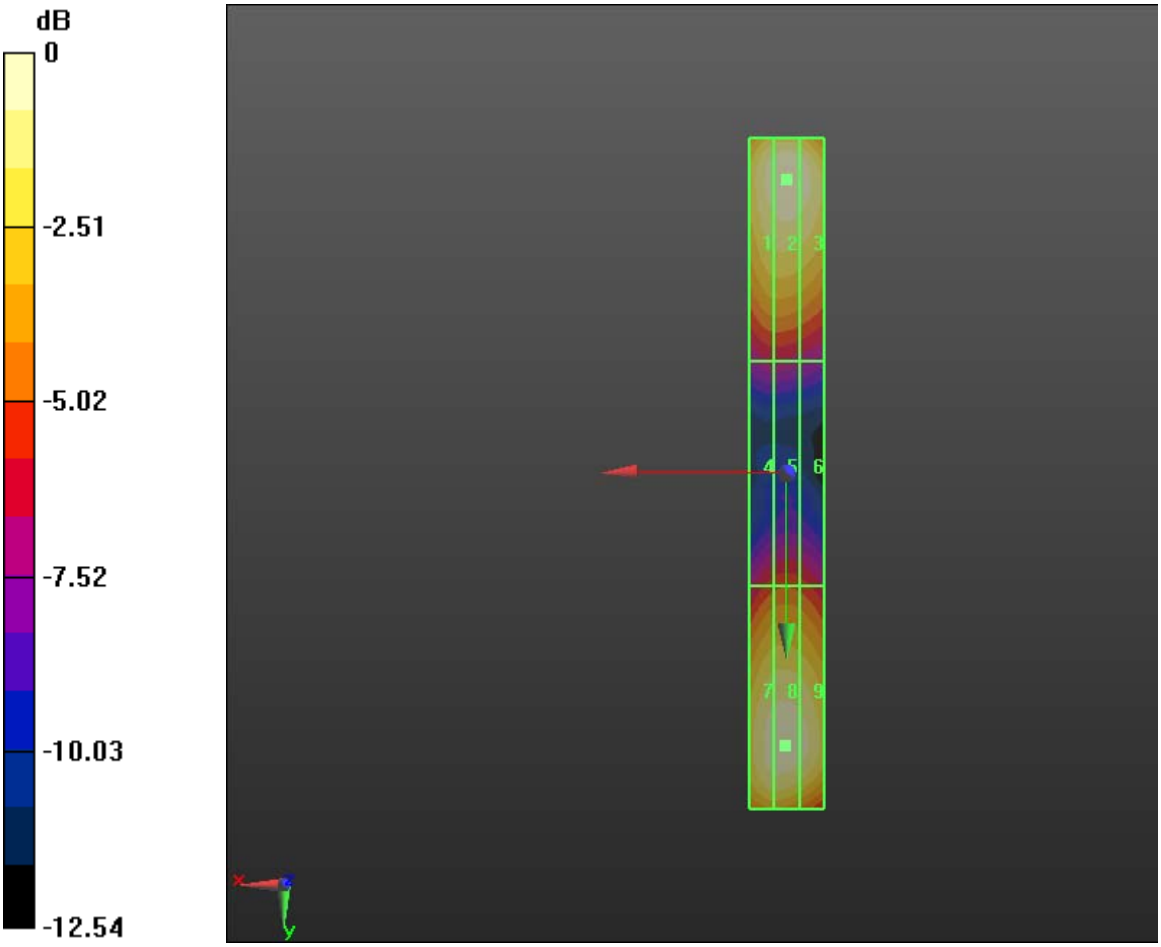
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 99.820 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 74.981 V/m; Power Drift = -0.17 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **96.553 M4**	Grid 2 **99.820 M4**	Grid 3 **97.313 M4**
Grid 4 **54.091 M4**	Grid 5 **55.431 M4**	Grid 6 **53.882 M4**
Grid 7 **95.955 M4**	Grid 8 **97.176 M4**	Grid 9 **95.117 M4**

Cursor:

Total = 99.821 V/m
E Category: M4
Location: 0, -79, 4.7 mm



0 dB = 99.820V/m

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Test Laboratory: RIM Testing Services

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: WCDMA FDD V; Communication System Band:; Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

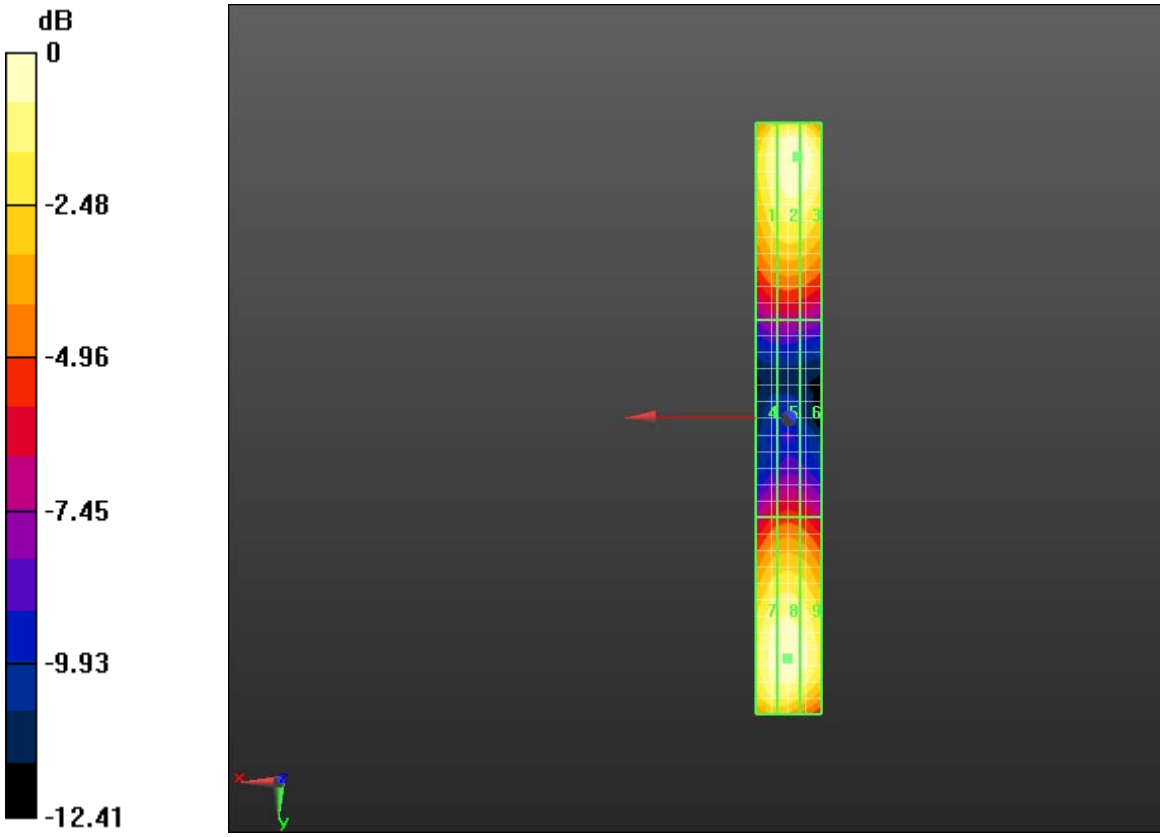
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 56.944 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 42.995 V/m; Power Drift = 0.01 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **53.505 M4**	Grid 2 **56.944 M4**	Grid 3 **56.718 M4**
Grid 4 **30.372 M4**	Grid 5 **31.039 M4**	Grid 6 **30.245 M4**
Grid 7 **54.971 M4**	Grid 8 **56.115 M4**	Grid 9 **54.501 M4**

Cursor:

Total = 56.944 V/m
E Category: M4
Location: -2.5, -79.5, 4.7 mm



0 dB = 56.940V/m

Date/Time: 2/28/2011 12:43:40 PM

Test Laboratory: RIM Testing Services

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

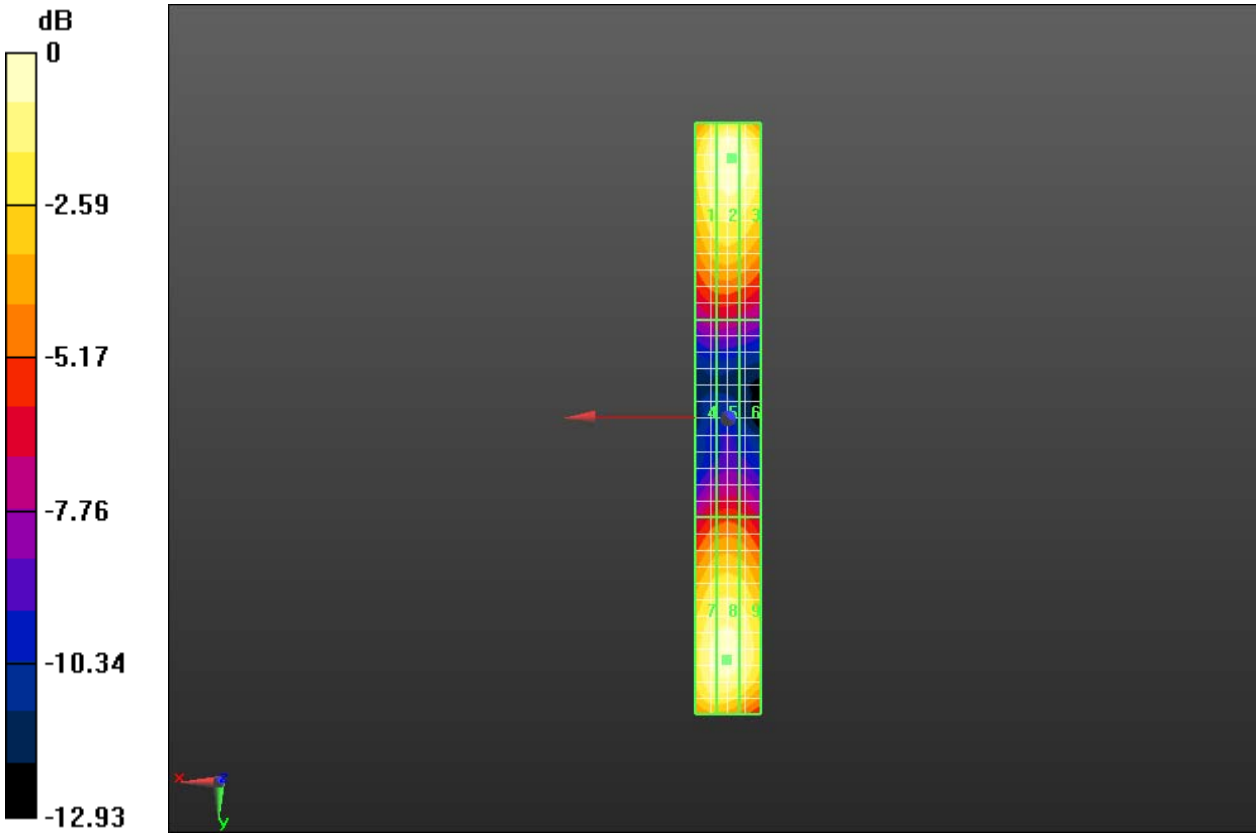
- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 57.608 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 42.622 V/m; Power Drift = -0.06 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **54.388 M4**	Grid 2 **57.608 M4**	Grid 3 **56.620 M4**
Grid 4 **30.355 M4**	Grid 5 **30.943 M4**	Grid 6 **30.261 M4**
Grid 7 **54.334 M4**	Grid 8 **55.102 M4**	Grid 9 **5076 M4**

Cursor:
Total = 57.608 V/m
E Category: M4
Location: -1, -79, 4.7 mm



0 dB = 57.610V/m

Date/Time: 2/28/2011 12:54:03 PM

Test Laboratory: RIM Testing Services

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz);
Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

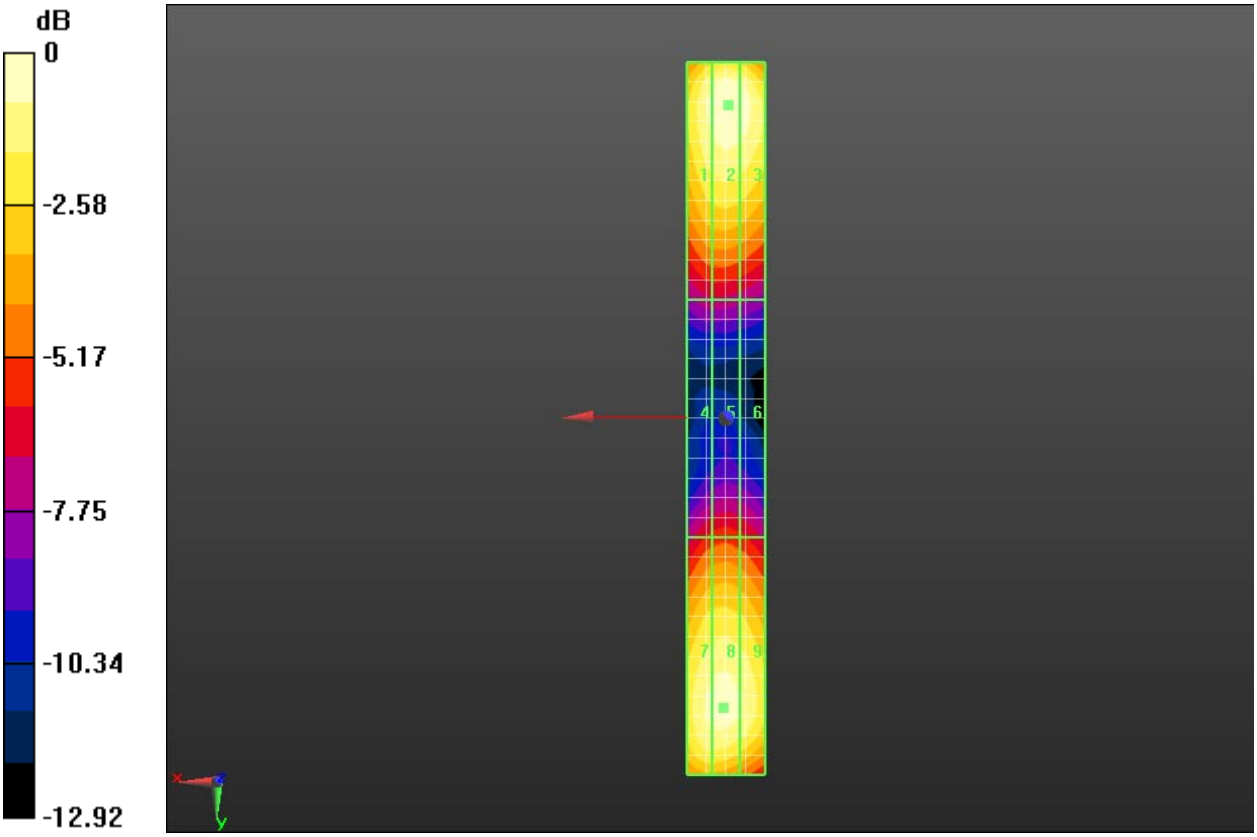
- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 37.106 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 26.469 V/m; Power Drift = 0.17 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **35.158 M4**	Grid 2 **37.106 M4**	Grid 3 **36.227 M4**
Grid 4 **19.445 M4**	Grid 5 **19.878 M4**	Grid 6 **19.259 M4**
Grid 7 **34.812 M4**	Grid 8 **35.203 M4**	Grid 9 **34.158 M4**

Cursor:
Total = 37.106 V/m
E Category: M4
Location: -0.5, -79, 4.7 mm



0 dB = 37.110V/m

Date/Time: 10/20/2011 2:00:57 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_10_20_11

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 132.0 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 117.0 V/m; Power Drift = 0.04 dB
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

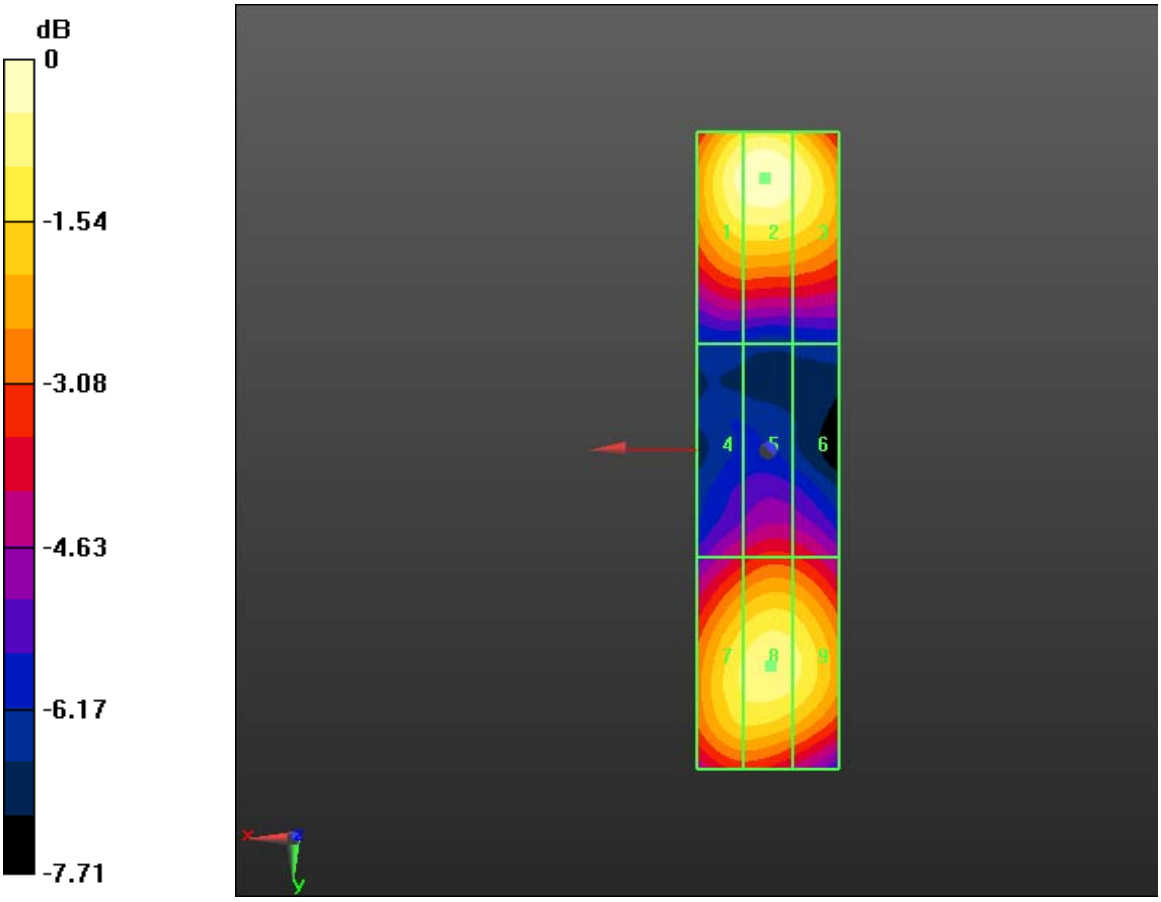
Peak E-field in V/m

Grid 1	Grid 2	Grid 3
128.5 M2	**132.0 M2**	**126.3 M2**

Grid 4 **84.173 M3**	Grid 5 **89.671 M3**	Grid 6 **88.265 M3**
Grid 7 **118.6 M2**	Grid 8 **122.5 M2**	Grid 9 **120.0 M2**

Cursor:

Total = 132.0 V/m
E Category: M2
Location: 0.5, -38.5, 4.7 mm



0 dB = 132.0V/m

Date/Time: 3/22/2011 4:54:49 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: GSM 1900; Frequency: 1880 MHz;Communication System PAR: 9.191 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

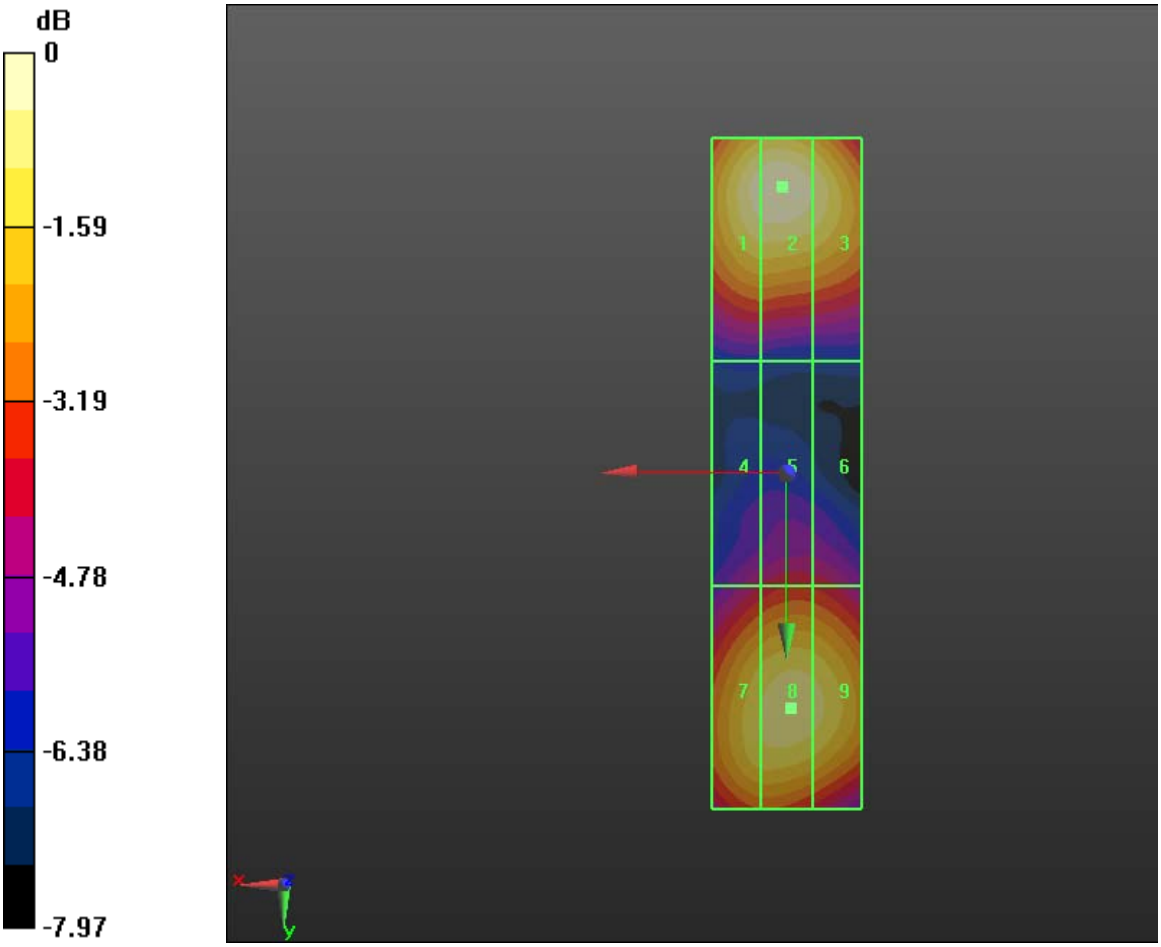
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 27.663 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 25.374 V/m; Power Drift = 0.02 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **27.050 M4**	Grid 2 **27.663 M4**	Grid 3 **26.052 M4**
Grid 4 **17.031 M4**	Grid 5 **18.013 M4**	Grid 6 **17.833 M4**
Grid 7 **2036 M4**	Grid 8 **25.539 M4**	Grid 9 **25.116 M4**

Cursor:

Total = 27.663 V/m
E Category: M4
Location: 0.5, -38.5, 4.7 mm



0 dB = 27.660V/m

Date/Time: 3/23/2011 12:08:40 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CW1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

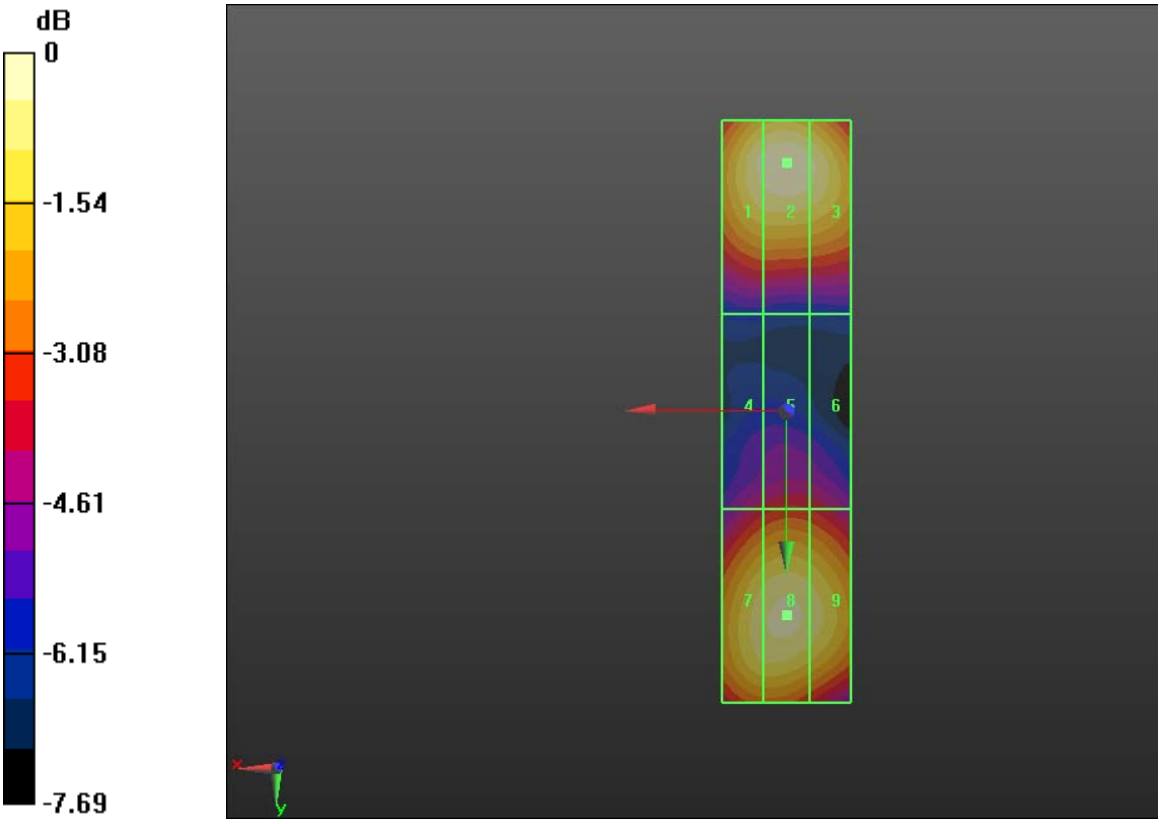
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 82.216 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 78.932 V/m; Power Drift = 0.0039 dB
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **79.692 M3**	Grid 2 **82.216 M3**	Grid 3 **79.228 M3**
Grid 4 **52.849 M4**	Grid 5 **55.292 M4**	Grid 6 **54.232 M4**
Grid 7 **76.960 M3**	Grid 8 **78.815 M3**	Grid 9 **76.489 M3**

Cursor:

Total = 82.216 V/m
E Category: M3
Location: 0, -38.5, 4.7 mm



0 dB = 82.220V/m

Date/Time: 3/22/2011 4:12:07 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_AM80%1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz);
Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

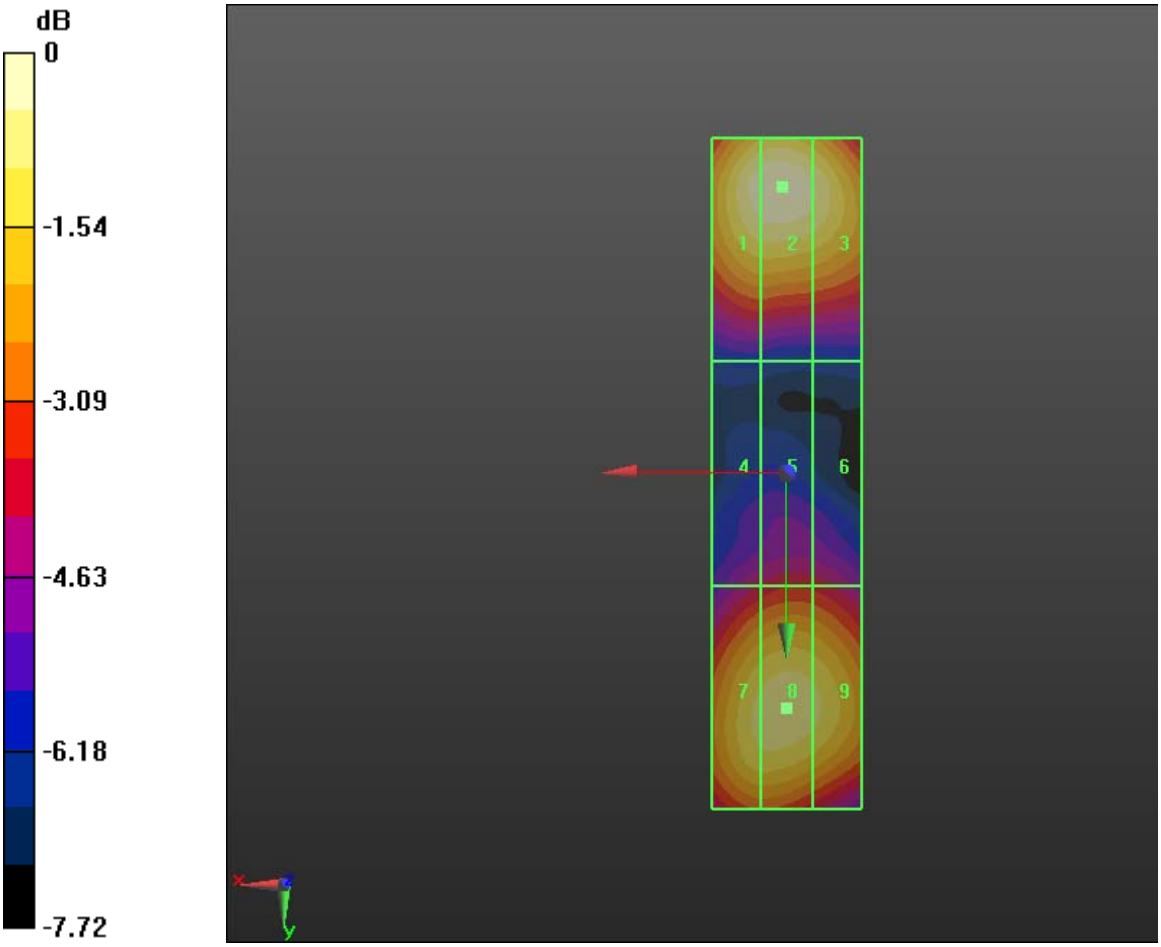
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 53.337 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 49.939 V/m; Power Drift = -0.09 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **52.377 M4**	Grid 2 **53.337 M4**	Grid 3 **50.671 M4**
Grid 4 **3062 M4**	Grid 5 **35.058 M4**	Grid 6 **3043 M4**
Grid 7 **48.429 M4**	Grid 8 **49.374 M4**	Grid 9 **48.243 M4**

Cursor:

Total = 53.337 V/m
E Category: M4
Location: 0.5, -38.5, 4.7 mm



0 dB = 53.340V/m

Date/Time: 2/28/2011 2:07:15 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS_band_II_1880 MHz

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

Communication System: WCDMA FDD II;.; Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

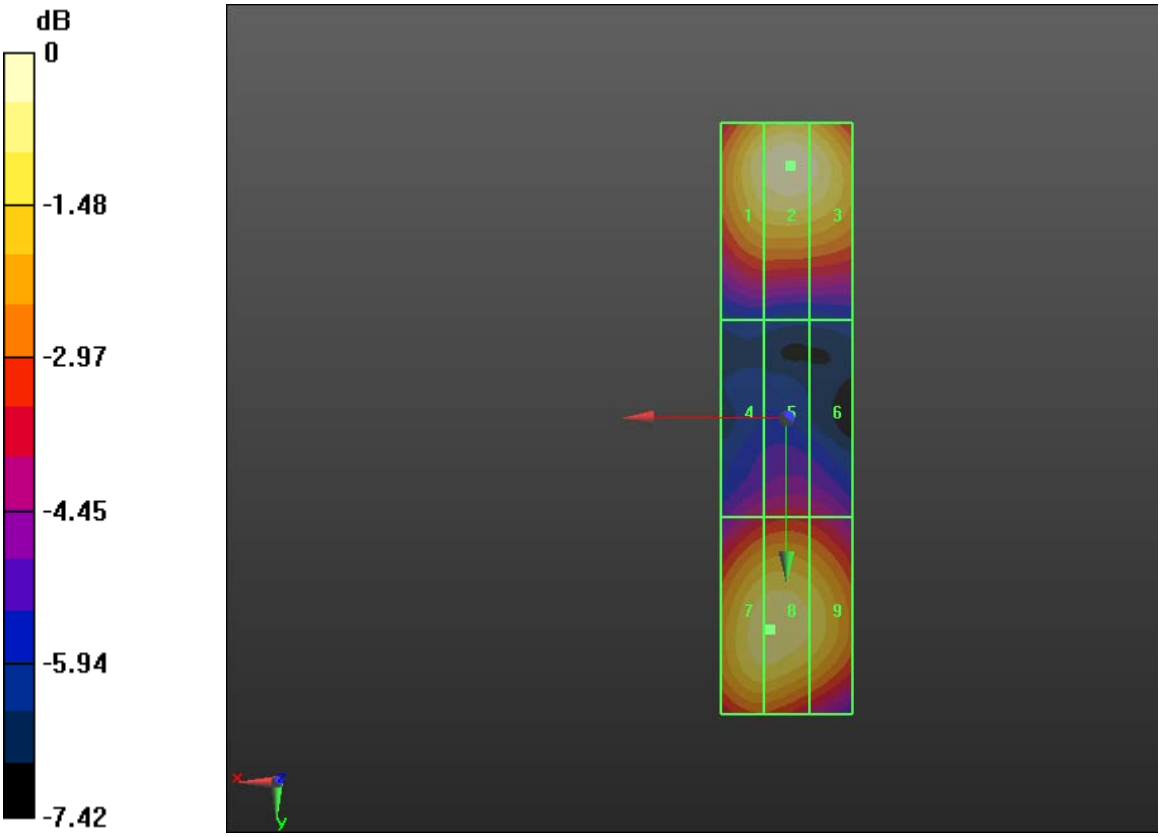
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 38.483 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 35.028 V/m; Power Drift = 0.10 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **36.706 M4**	Grid 2 **38.483 M4**	Grid 3 **37.337 M4**
Grid 4 **24.878 M4**	Grid 5 **25.643 M4**	Grid 6 **25.076 M4**
Grid 7 **35.871 M4**	Grid 8 **35.988 M4**	Grid 9 **34.479 M4**

Cursor:

Total = 38.483 V/m
E Category: M4
Location: -0.5, -38.5, 4.7 mm



0 dB = 38.480V/m

Date/Time: 2/28/2011 2:16:59 PM

Test Laboratory: RIM Testing Services

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

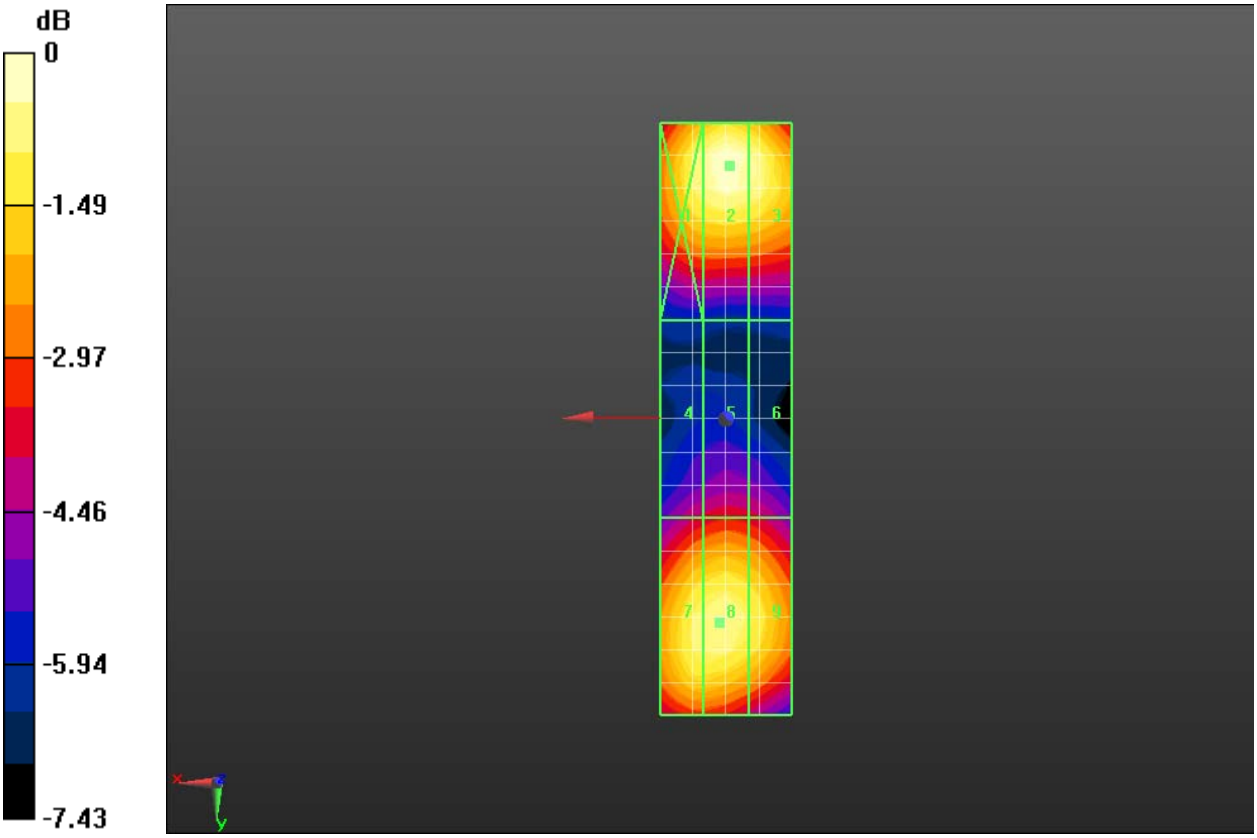
- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 43.024 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 38.861 V/m; Power Drift = 0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **40.897 M4**	Grid 2 **43.024 M4**	Grid 3 **41.671 M4**
Grid 4 **27.919 M4**	Grid 5 **28.886 M4**	Grid 6 **28.274 M4**
Grid 7 **39.759 M4**	Grid 8 **40.082 M4**	Grid 9 **38.641 M4**

Cursor:
Total = 43.024 V/m
E Category: M4
Location: -0.5, -38.5, 4.7 mm



0 dB = 43.020V/m

Date/Time: 2/28/2011 2:21:55 PM

Test Laboratory: RIM Testing Services

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz);
Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

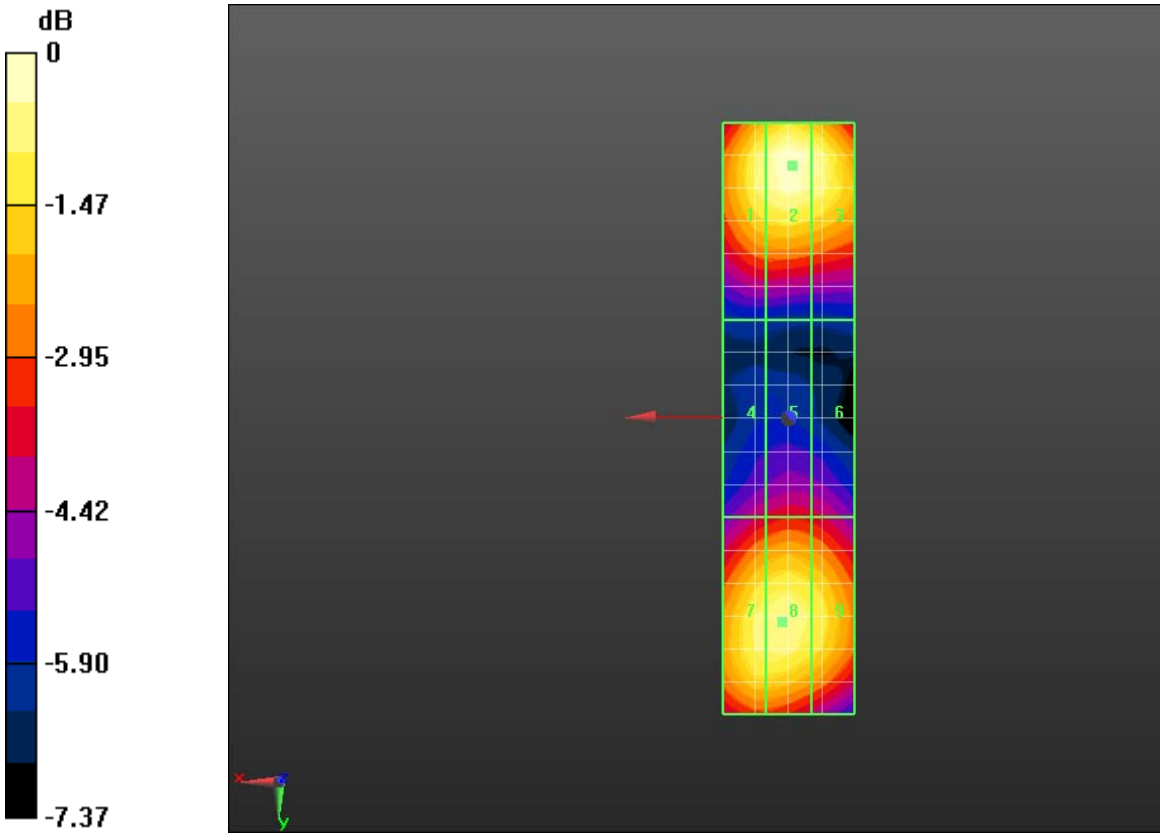
Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 27.543 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 25.024 V/m; Power Drift = -0.0069 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **26.151 M4**	Grid 2 **27.543 M4**	Grid 3 **26.639 M4**
Grid 4 **17.904 M4**	Grid 5 **18.574 M4**	Grid 6 **18.189 M4**
Grid 7 **25.506 M4**	Grid 8 **25.701 M4**	Grid 9 **24.770 M4**

Cursor:

Total = 27.543 V/m
E Category: M4
Location: -0.5, -38.5, 4.7 mm



0 dB = 27.540V/m

Date/Time: 10/20/2011 3:23:56 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_835 MHz_10_20_11

DUT: HAC-Dipole 835 MHz; Type: D835V3

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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

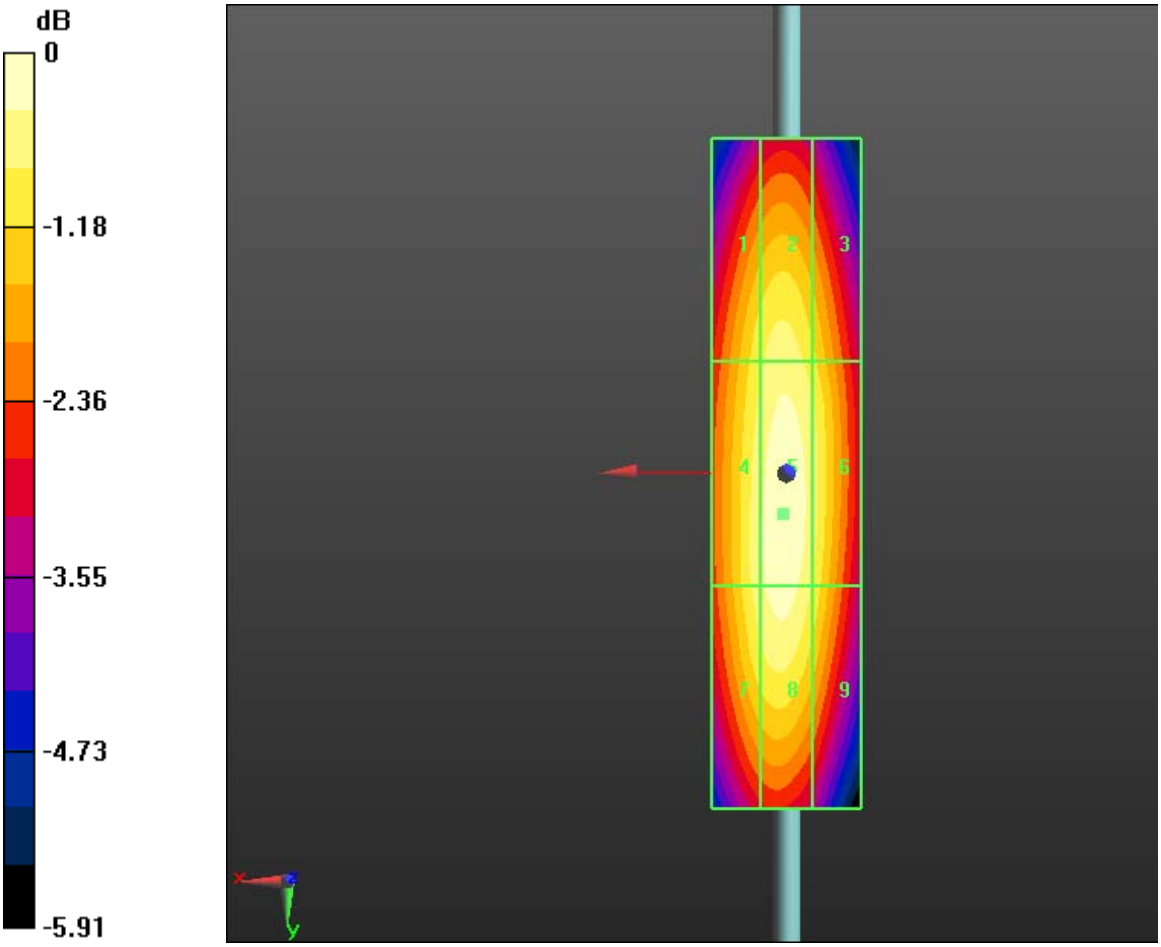
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.475 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.506 A/m; Power Drift = -0.06 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.435 M4**	Grid 2 **0.451 M4**	Grid 3 **0.426 M4**
Grid 4 **0.456 M4**	Grid 5 **0.475 M4**	Grid 6 **0.448 M4**
Grid 7 **0.453 M4**	Grid 8 **0.469 M4**	Grid 9 **0.437 M4**

Cursor:

Total = 0.475 A/m
H Category: M4
Location: 0.5, 5.5, 4.7 mm



0 dB = 0.480A/m

Date/Time: 3/23/2011 3:06:50 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: GSM 850; Frequency: 835 MHz;Communication System PAR: 9.191 dB
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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

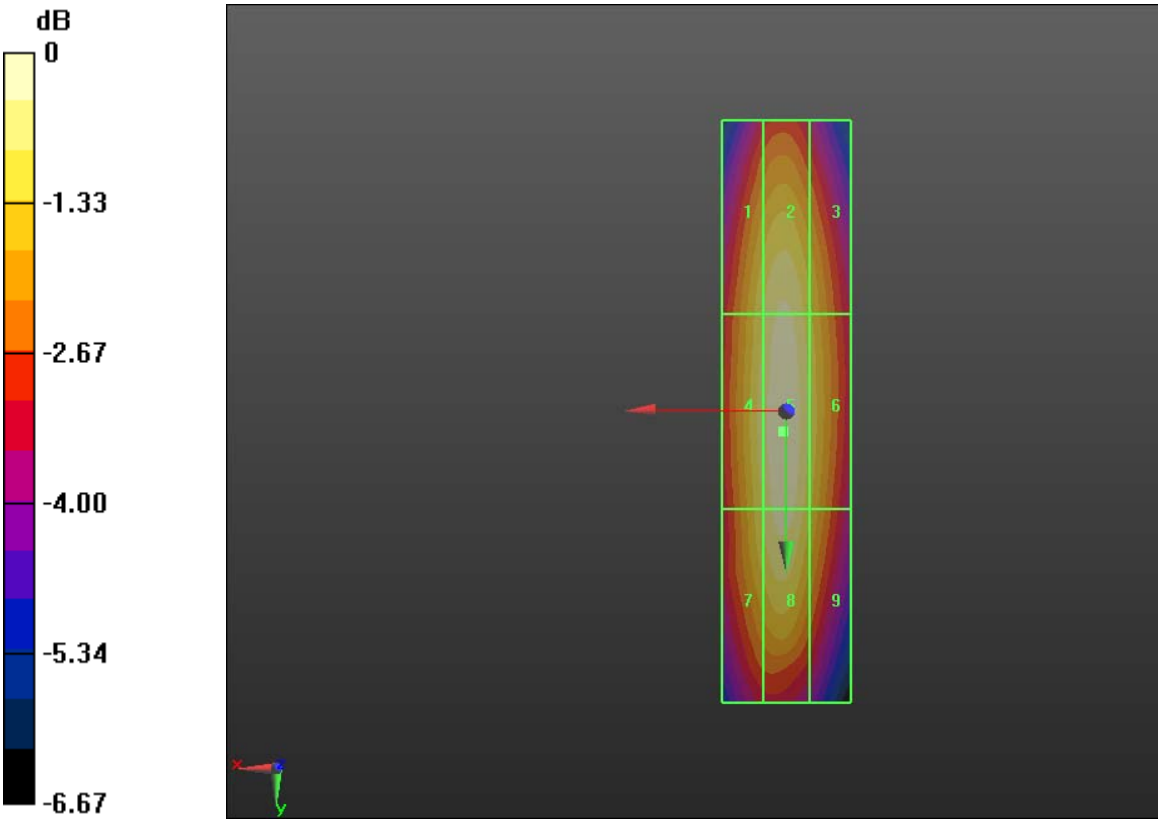
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.168 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.173 A/m; Power Drift = 0.43 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.154 M4**	Grid 2 **0.163 M4**	Grid 3 **0.148 M4**
Grid 4 **0.159 M4**	Grid 5 **0.168 M4**	Grid 6 **0.153 M4**
Grid 7 **0.155 M4**	Grid 8 **0.165 M4**	Grid 9 **0.148 M4**

Cursor:

Total = 0.168 A/m
H Category: M4
Location: 0.5, 3, 4.7 mm



0 dB = 0.170A/m

Date/Time: 3/23/2011 3:23:34 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

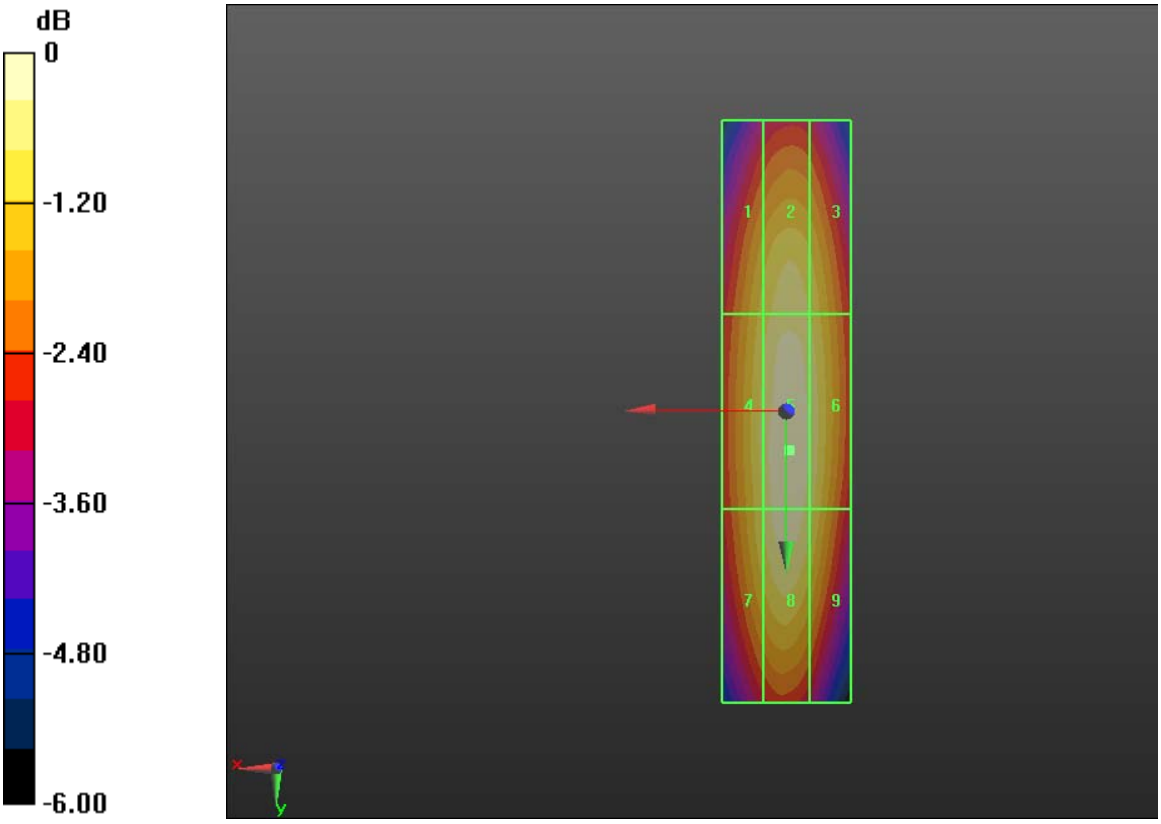
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.482 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.503 A/m; Power Drift = -0.00099 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.429 M4**	Grid 2 **0.450 M4**	Grid 3 **0.439 M4**
Grid 4 **0.449 M4**	Grid 5 **0.482 M4**	Grid 6 **0.458 M4**
Grid 7 **0.441 M4**	Grid 8 **0.475 M4**	Grid 9 **0.448 M4**

Cursor:

Total = 0.482 A/m
H Category: M4
Location: -0.5, 6, 4.7 mm



0 dB = 0.480A/m

Date/Time: 3/23/2011 3:34:08 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz);
Frequency: 835 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

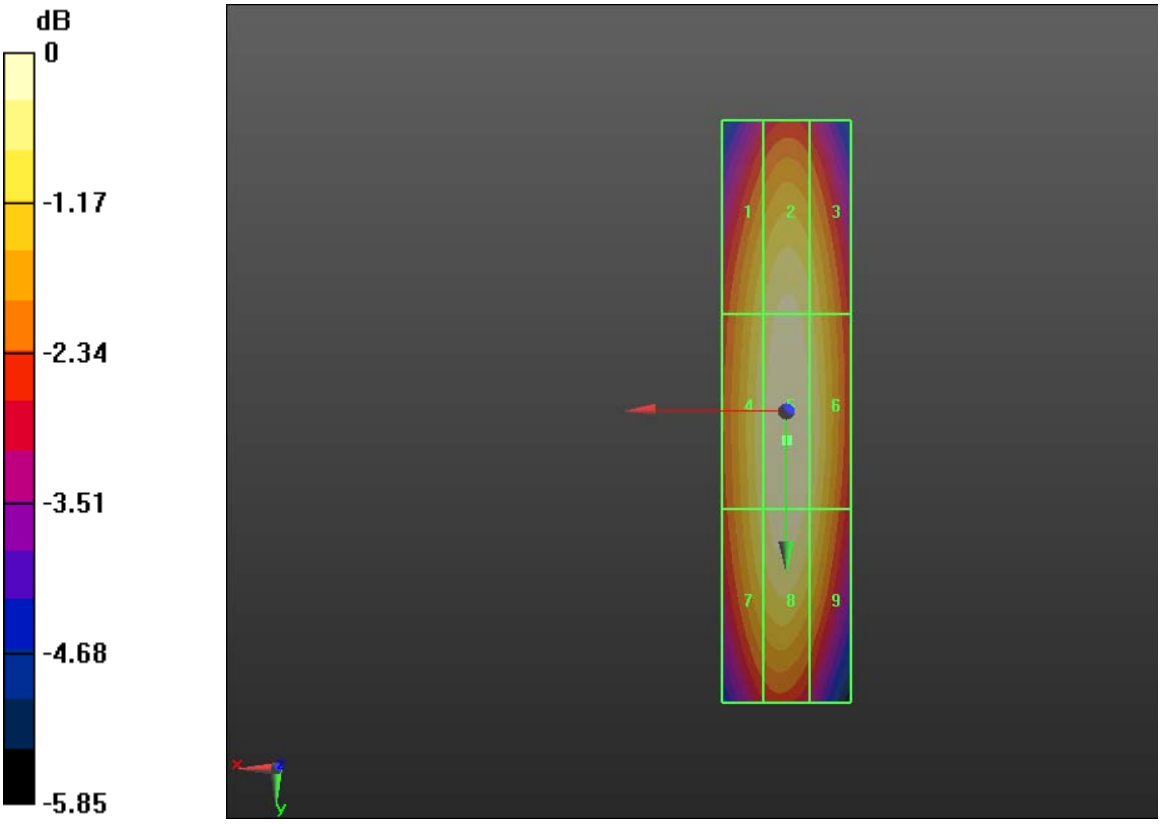
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.302 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.326 A/m; Power Drift = -0.16 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.276 M4**	Grid 2 **0.292 M4**	Grid 3 **0.279 M4**
Grid 4 **0.286 M4**	Grid 5 **0.302 M4**	Grid 6 **0.289 M4**
Grid 7 **0.283 M4**	Grid 8 **0.299 M4**	Grid 9 **0.281 M4**

Cursor:

Total = 0.302 A/m
H Category: M4
Location: 0, 4.5, 4.7 mm



0 dB = 0.300A/m

Date/Time: 2/28/2011 3:32:16 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS_band V_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: WCDMA FDD V; Frequency: 835 MHz;Communication System PAR: 0 dB
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)

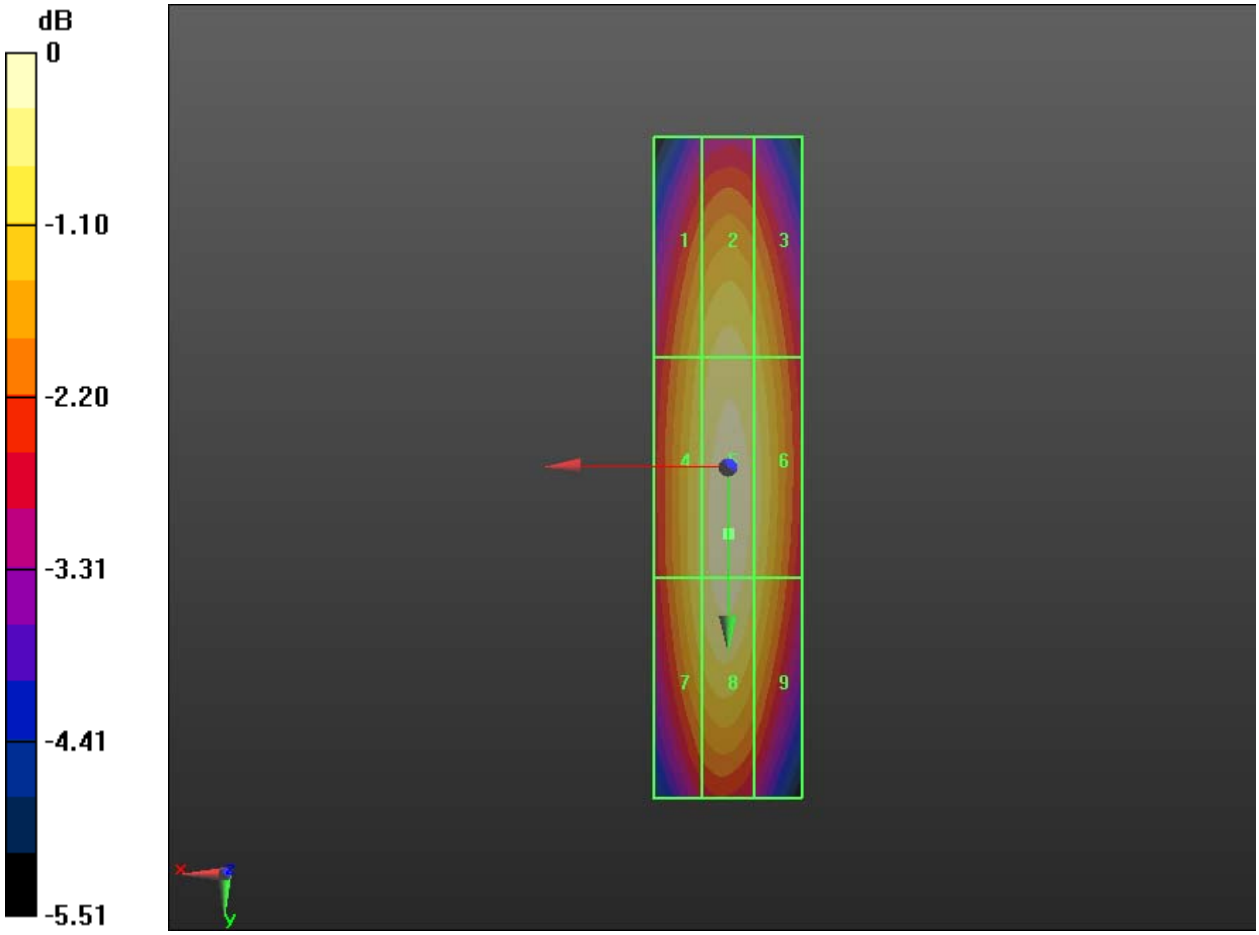
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 0.168 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.178 A/m; Power Drift = 0.23 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.153 M4**	Grid 2 **0.160 M4**	Grid 3 **0.154 M4**
Grid 4 **0.160 M4**	Grid 5 **0.168 M4**	Grid 6 **0.161 M4**
Grid 7 **0.159 M4**	Grid 8 **0.166 M4**	Grid 9 **0.157 M4**



0 dB = 0.170A/m

Date/Time: 2/28/2011 3:41:08 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB
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)

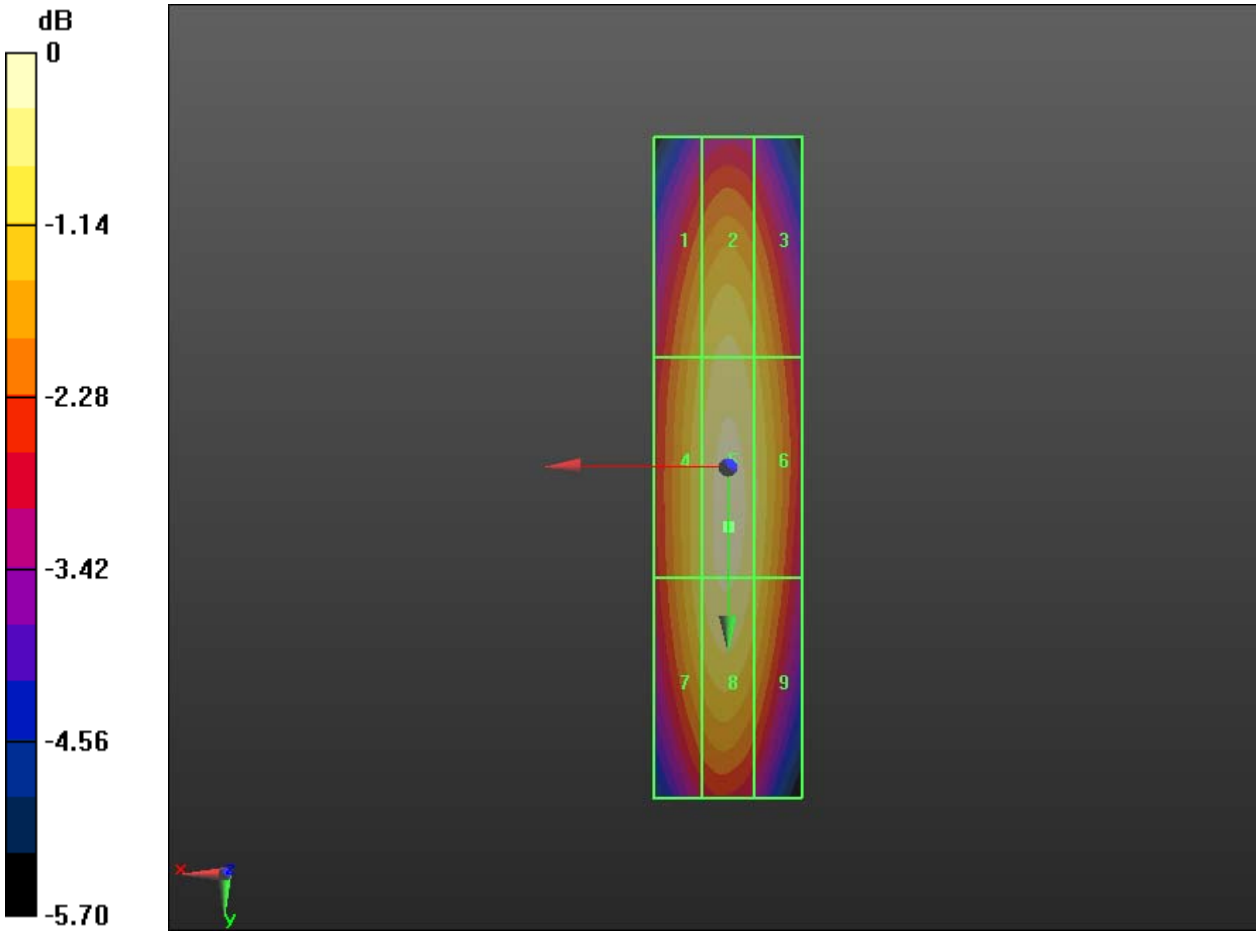
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 0.166 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.177 A/m; Power Drift = -0.10 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.151 M4**	Grid 2 **0.158 M4**	Grid 3 **0.151 M4**
Grid 4 **0.157 M4**	Grid 5 **0.166 M4**	Grid 6 **0.159 M4**
Grid 7 **0.156 M4**	Grid 8 **0.164 M4**	Grid 9 **0.155 M4**



0 dB = 0.170A/m

Date/Time: 2/28/2011 3:45:30 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz);
Frequency: 835 MHz;Communication System PAR: 0 dB
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)

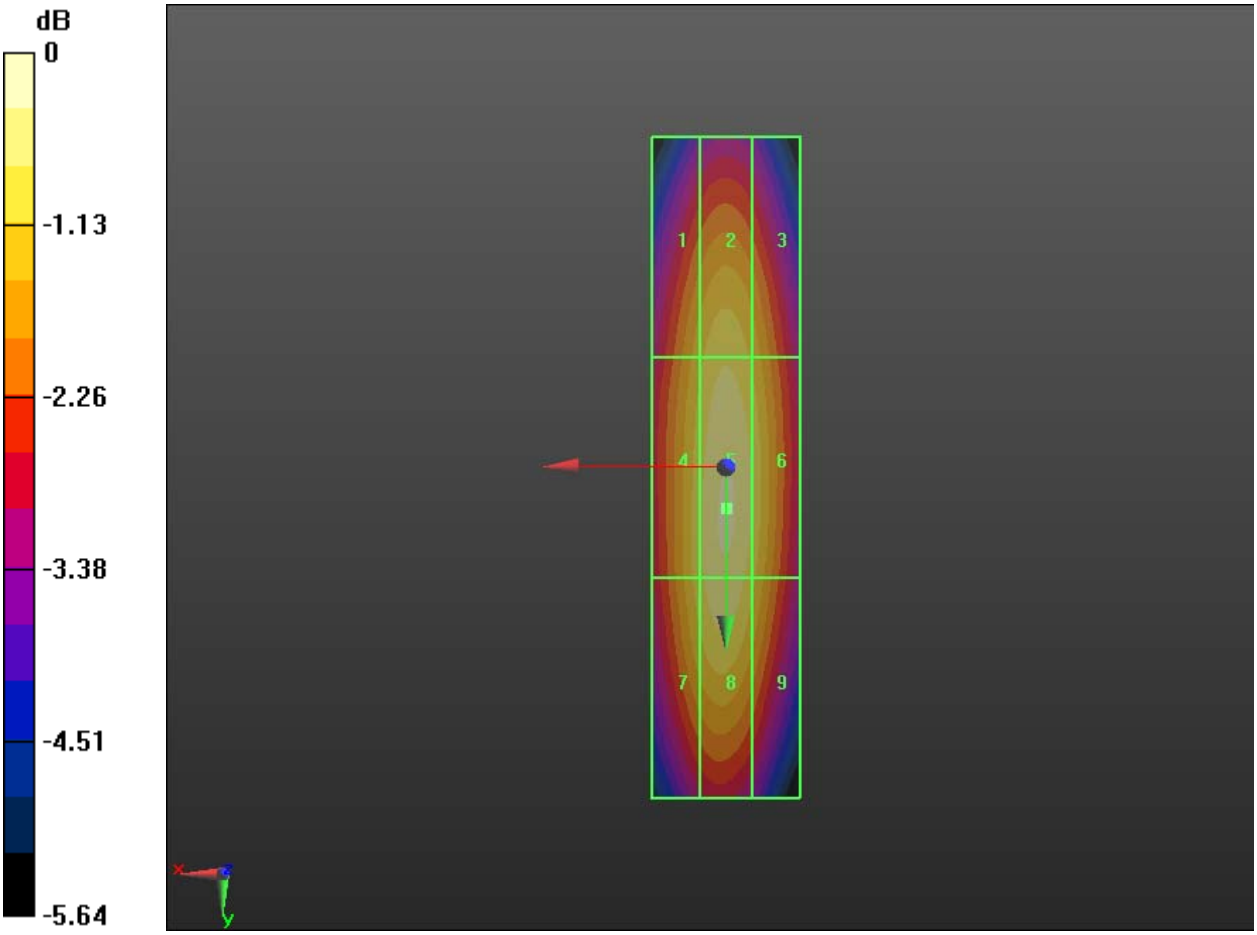
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 0.106 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.113 A/m; Power Drift = 0.0097 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.096 M4**	Grid 2 **0.100 M4**	Grid 3 **0.096 M4**
Grid 4 **0.100 M4**	Grid 5 **0.106 M4**	Grid 6 **0.101 M4**
Grid 7 **0.100 M4**	Grid 8 **0.104 M4**	Grid 9 **0.098 M4**



0 dB = 0.110A/m

Date/Time: 10/20/2011 3:07:35 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_10_20_11

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

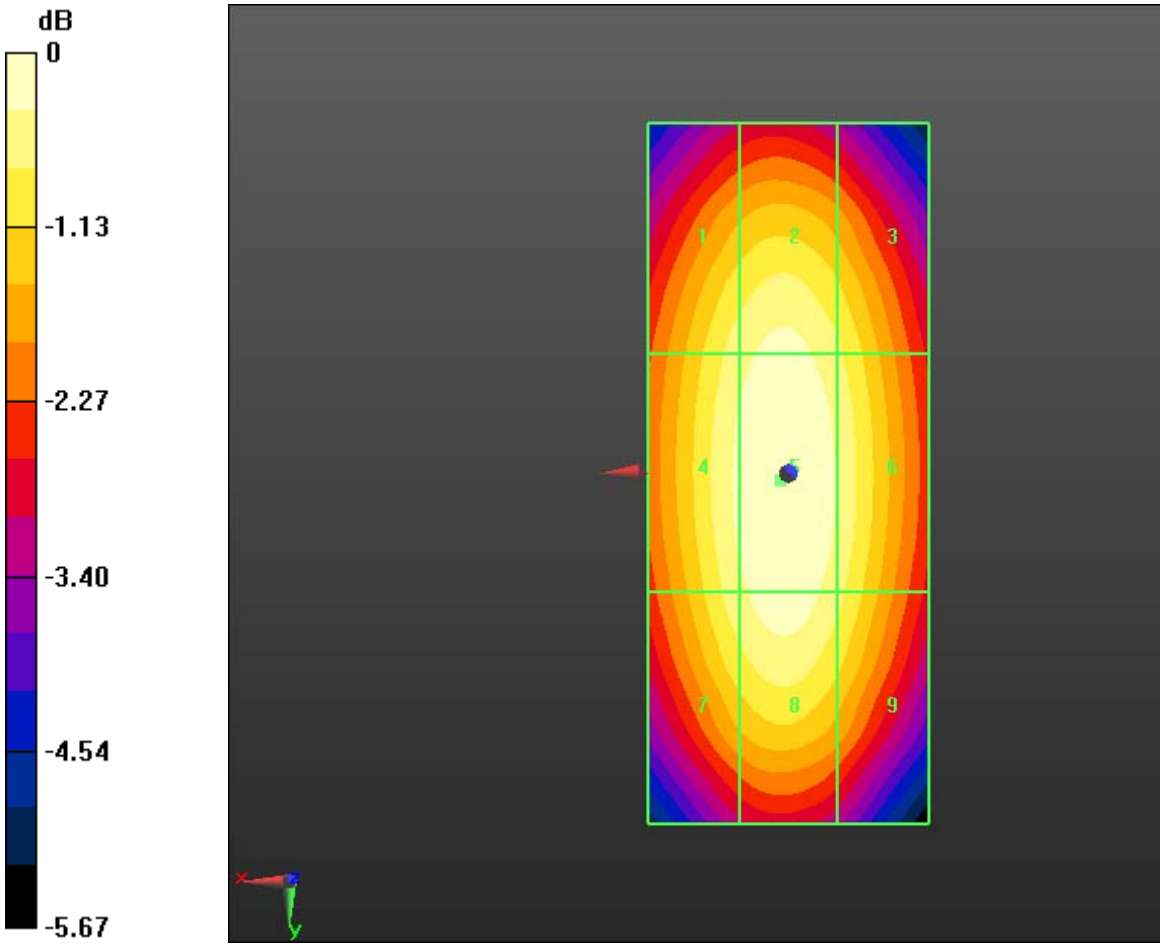
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.464 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.494 A/m; Power Drift = -0.04 dB
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.433 M2**	Grid 2 **0.448 M2**	Grid 3 **0.426 M2**
Grid 4 **0.446 M2**	Grid 5 **0.464 M2**	Grid 6 **0.439 M2**
Grid 7 **0.435 M2**	Grid 8 **0.453 M2**	Grid 9 **0.428 M2**

Cursor:

Total = 0.464 A/m
H Category: M2
Location: 0.5, 0.5, 4.7 mm



0 dB = 0.460A/m

Date/Time: 3/23/2011 1:03:25 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: GSM 1900; Frequency: 1880 MHz;Communication System PAR: 9.191 dB
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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

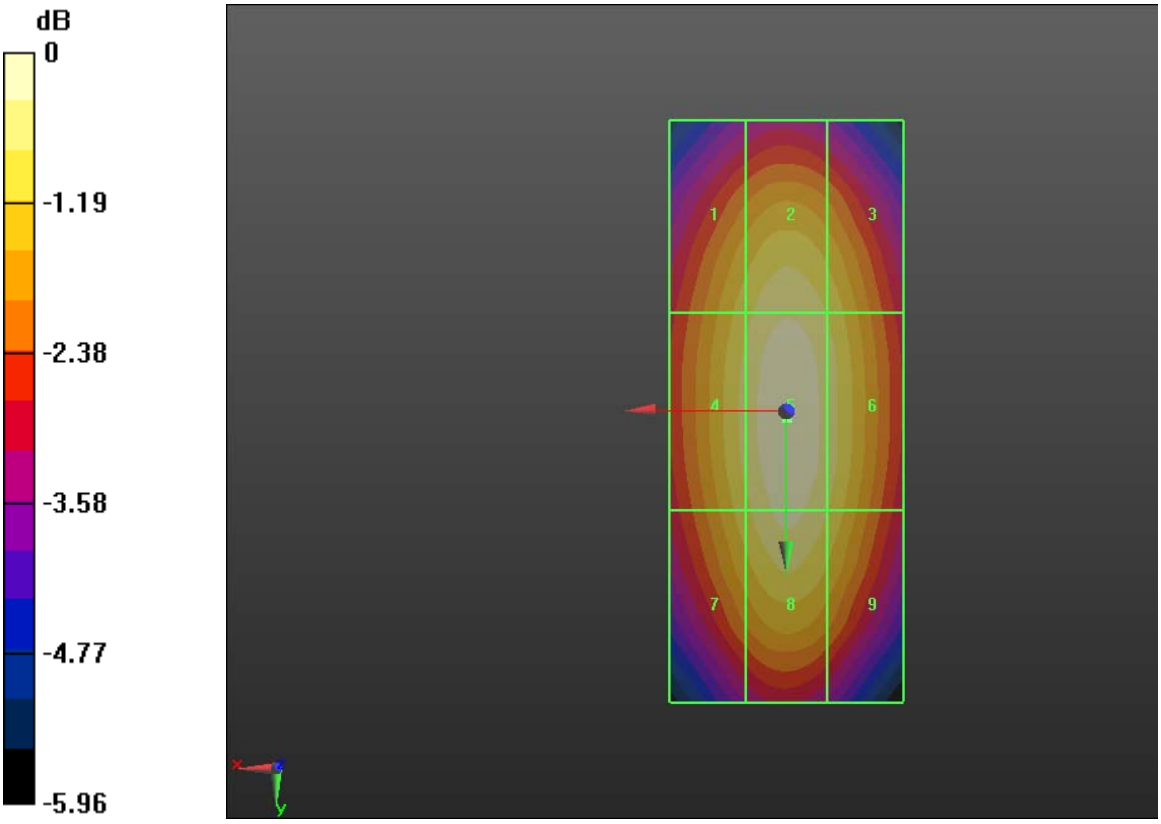
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.099 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.105 A/m; Power Drift = 0.04 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.090 M4**	Grid 2 **0.095 M4**	Grid 3 **0.091 M4**
Grid 4 **0.093 M4**	Grid 5 **0.099 M4**	Grid 6 **0.094 M4**
Grid 7 **0.090 M4**	Grid 8 **0.097 M4**	Grid 9 **0.091 M4**

Cursor:

Total = 0.099 A/m
H Category: M4
Location: 0, 0.5, 4.7 mm



0 dB = 0.100A/m

Date/Time: 3/23/2011 12:41:56 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

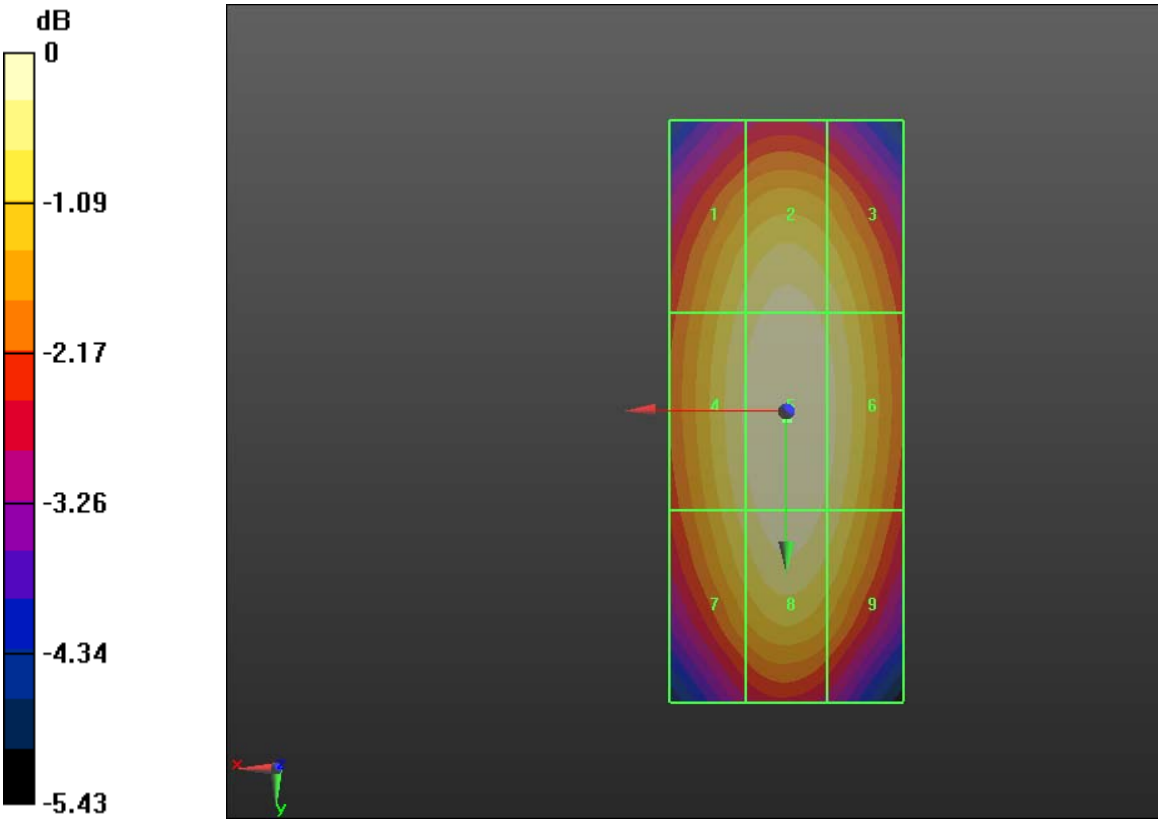
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.284 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.302 A/m; Power Drift = -0.03 dB
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.263 M3**	Grid 2 **0.274 M3**	Grid 3 **0.265 M3**
Grid 4 **0.271 M3**	Grid 5 **0.284 M3**	Grid 6 **0.274 M3**
Grid 7 **0.263 M3**	Grid 8 **0.278 M3**	Grid 9 **0.266 M3**

Cursor:

Total = 0.284 A/m
H Category: M3
Location: 0, 0.5, 4.7 mm



0 dB = 0.280A/m

Date/Time: 3/23/2011 12:51:39 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz);
Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

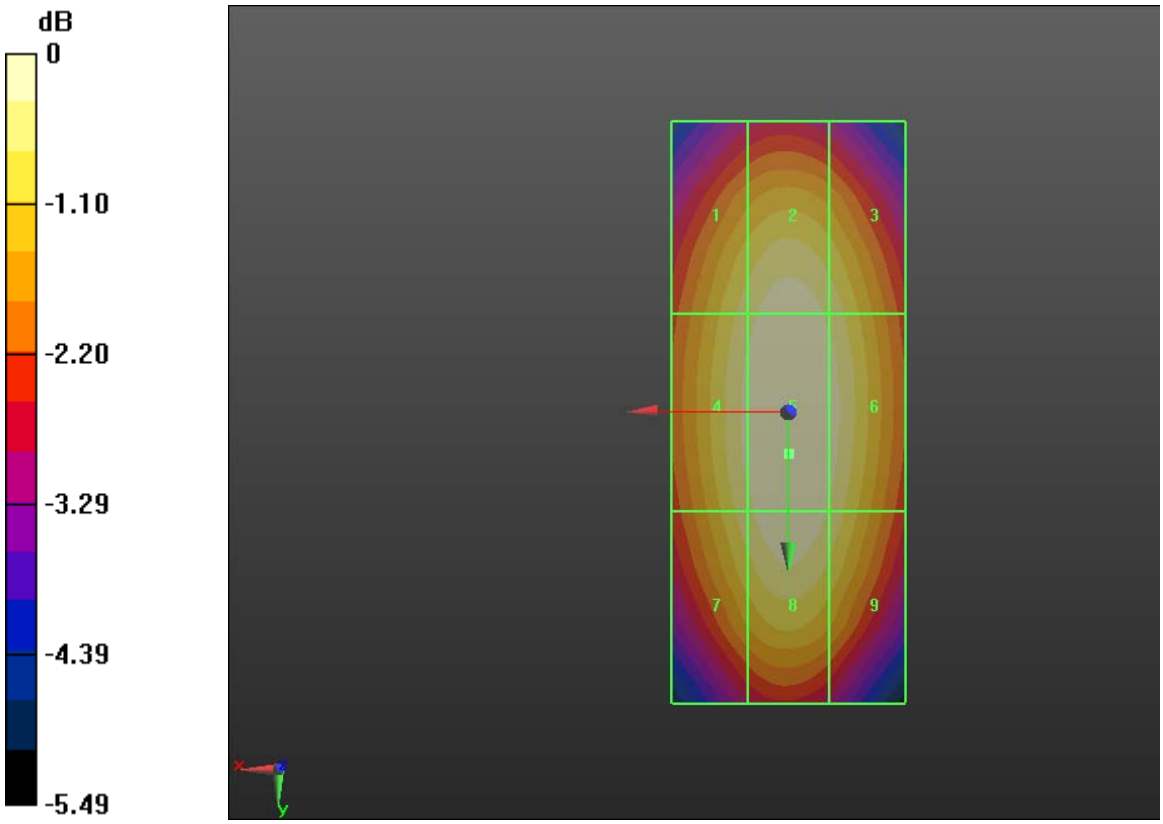
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 0.184 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.196 A/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.170 M4**	Grid 2 **0.178 M4**	Grid 3 **0.171 M4**
Grid 4 **0.175 M4**	Grid 5 **0.184 M4**	Grid 6 **0.177 M4**
Grid 7 **0.170 M4**	Grid 8 **0.180 M4**	Grid 9 **0.172 M4**



0 dB = 0.180A/m

Date/Time: 2/28/2011 2:57:08 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS_band II_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: WCDMA FDD II; Frequency: 1880 MHz;Communication System PAR: 0 dB
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)

DASY5 Configuration:

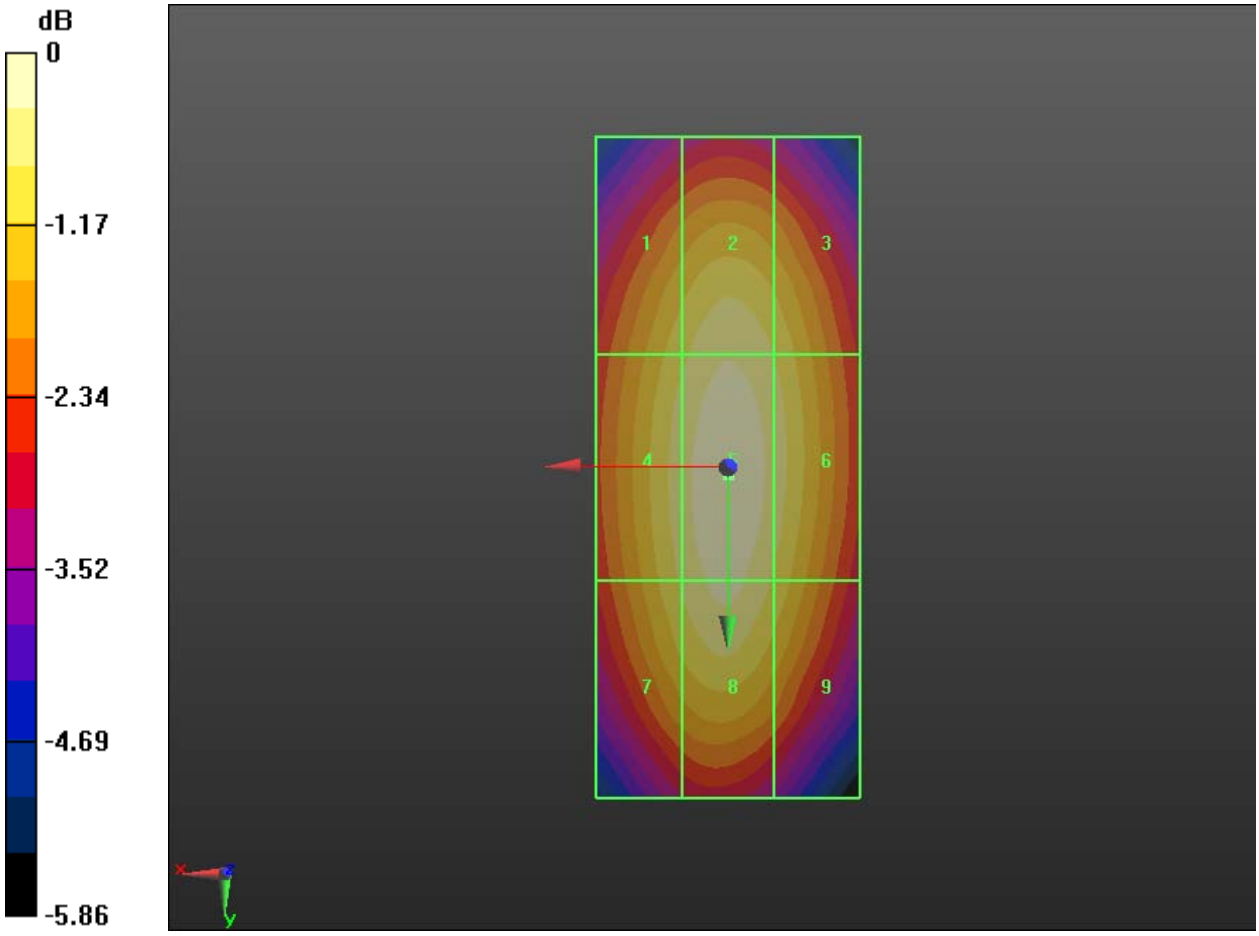
- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 0.138 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.147 A/m; Power Drift = 0.04 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.127 M4	**0.134 M4**	**0.128 M4**

Grid 4 **0.132 M4**	Grid 5 **0.138 M4**	Grid 6 **0.132 M4**
Grid 7 **0.129 M4**	Grid 8 **0.136 M4**	Grid 9 **0.127 M4**



0 dB = 0.140A/m

Date/Time: 2/28/2011 2:40:44 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

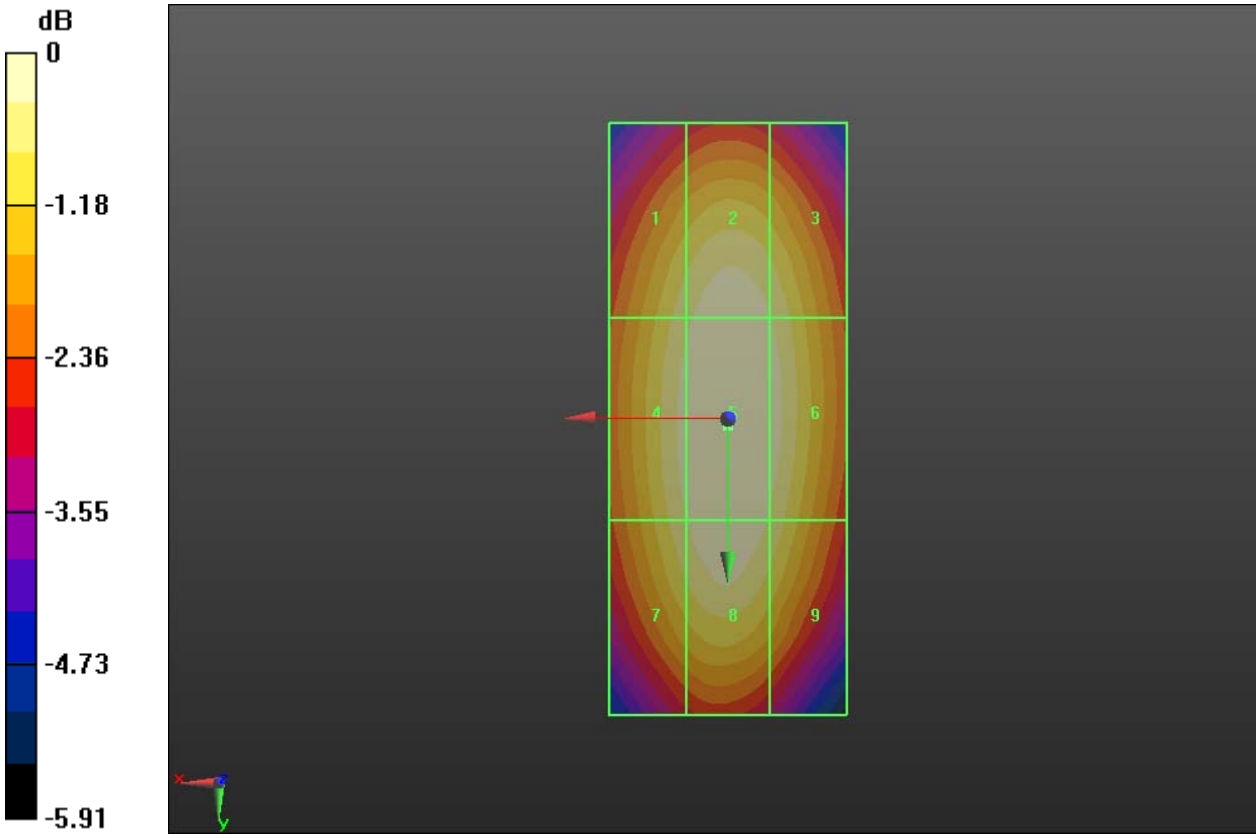
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 0.155 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.163 A/m; Power Drift = 0.06 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.142 M4**	Grid 2 **0.149 M4**	Grid 3 **0.144 M4**
Grid 4 **0.147 M4**	Grid 5 **0.155 M4**	Grid 6 **0.148 M4**
Grid 7 **0.143 M4**	Grid 8 **0.151 M4**	Grid 9 **0.143 M4**



0 dB = 0.150A/m

Date/Time: 2/28/2011 2:44:44 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz);
Frequency: 1880 MHz;Communication System PAR: 0 dB
Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

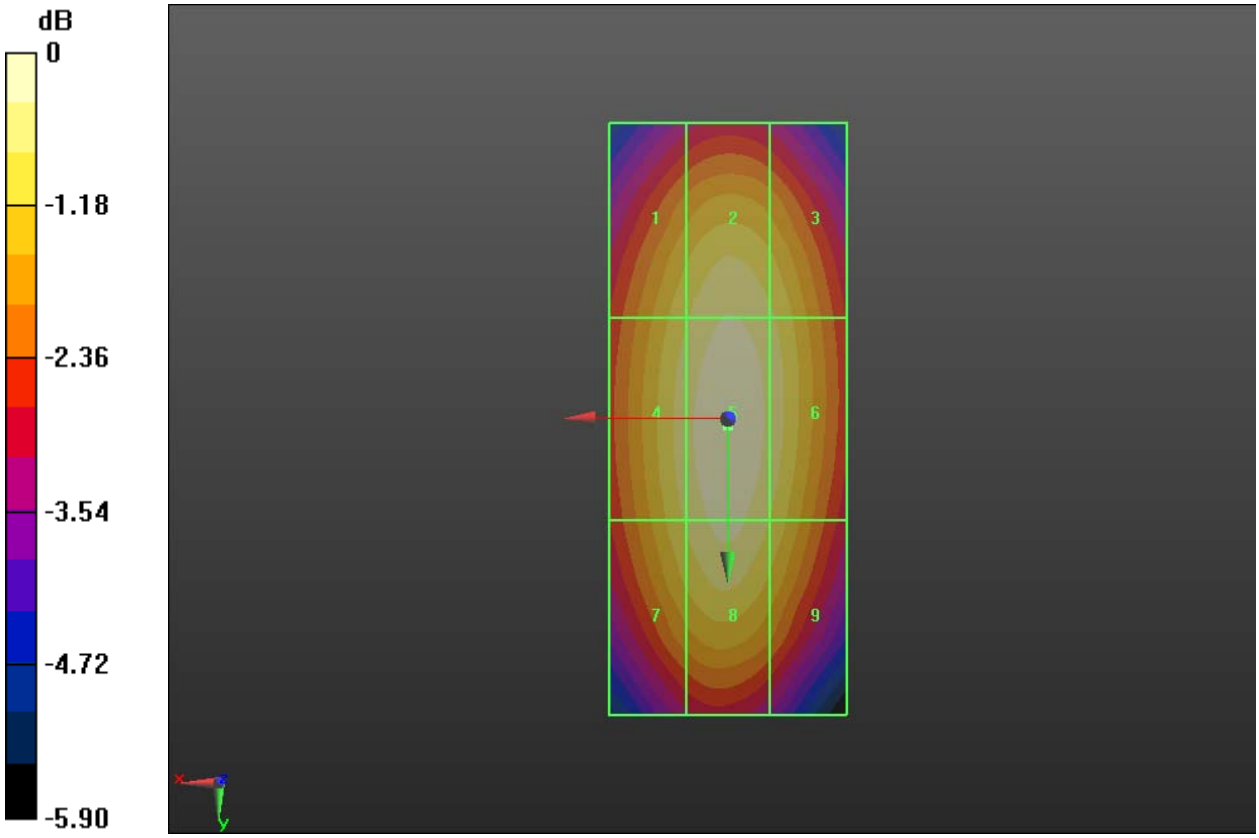
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn881; Calibrated: 4/19/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

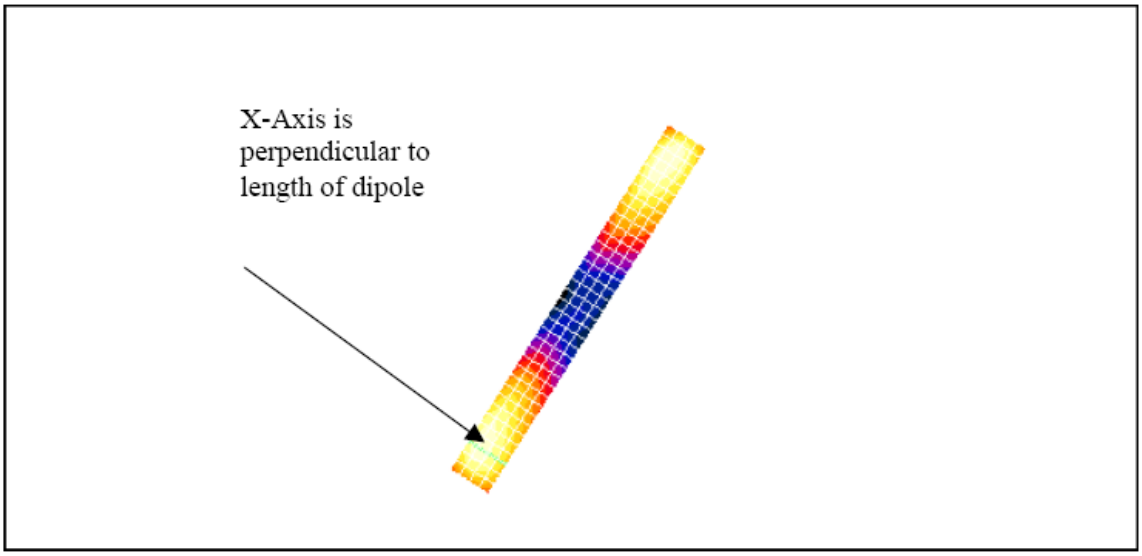
Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.099 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.106 A/m; Power Drift = 0.0091 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.091 M4**	Grid 2 **0.096 M4**	Grid 3 **0.092 M4**
Grid 4 **0.094 M4**	Grid 5 **0.099 M4**	Grid 6 **0.095 M4**
Grid 7 **0.092 M4**	Grid 8 **0.097 M4**	Grid 9 **0.091 M4**



0 dB = 0.100A/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)

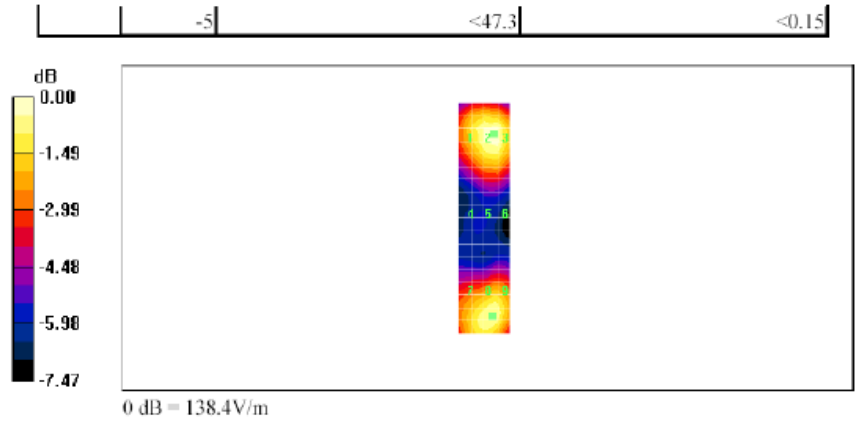
E in V/m (Time averaged)

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)

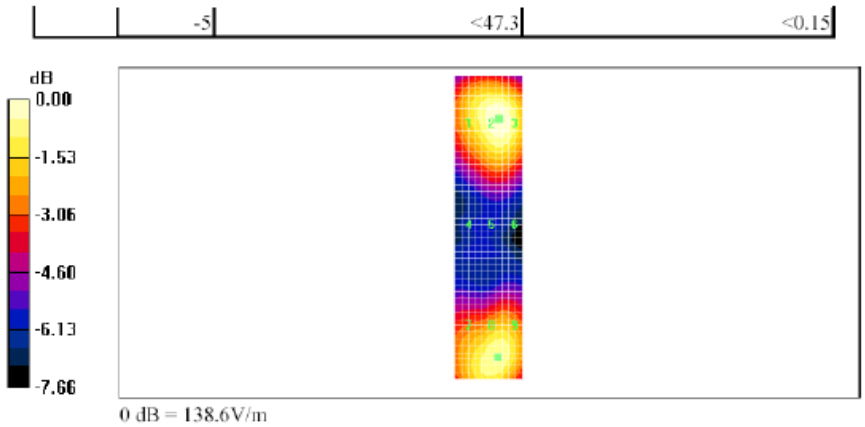
E in V/m (Time averaged)

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



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)

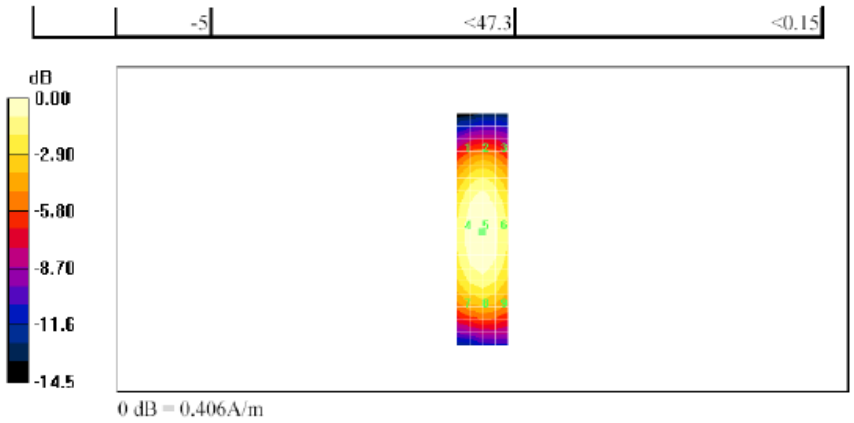
H in A/m (Time averaged)

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)

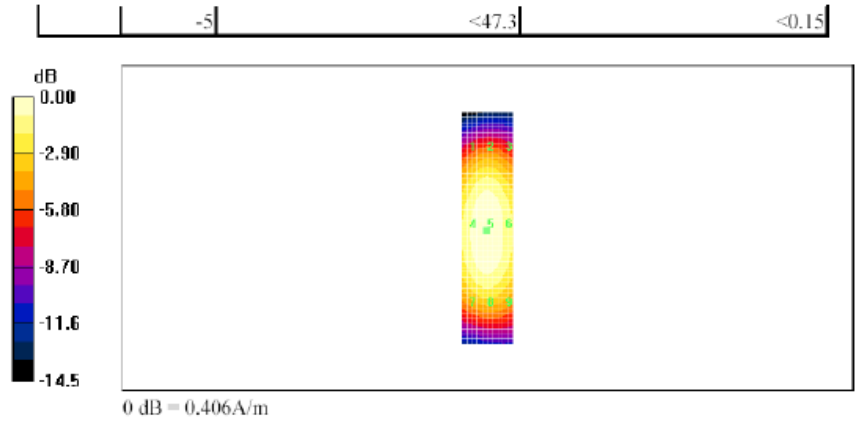
H in A/m (Time averaged)

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



A.3 RF emission field plots

Date/Time: 10/20/2011 6:30:55 PM, Date/Time: 10/20/2011 6:34:47 PM, Date/Time: 10/20/2011 6:40:16 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, Low Ch./Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 132.0 V/m
Probe Modulation Factor = 2.940
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 51.967 V/m; Power Drift = -0.12 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
103.1 M4	**125.3 M4**	**125.5 M4**
Grid 4	Grid 5	Grid 6

111.3 M4	**132.0 M4**	**132.0 M4**
Grid 7 **121.7 M4**	Grid 8 **136.1 M4**	Grid 9 **136.1 M4**

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

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 139.5 V/m
Probe Modulation Factor = 2.940
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 54.026 V/m; Power Drift = -0.11 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **99.616 M4**	Grid 2 **128.8 M4**	Grid 3 **129.8 M4**
Grid 4 **110.8 M4**	Grid 5 **139.5 M4**	Grid 6 **140.0 M4**
Grid 7 **126.0 M4**	Grid 8 **145.8 M4**	Grid 9 **145.7 M4**

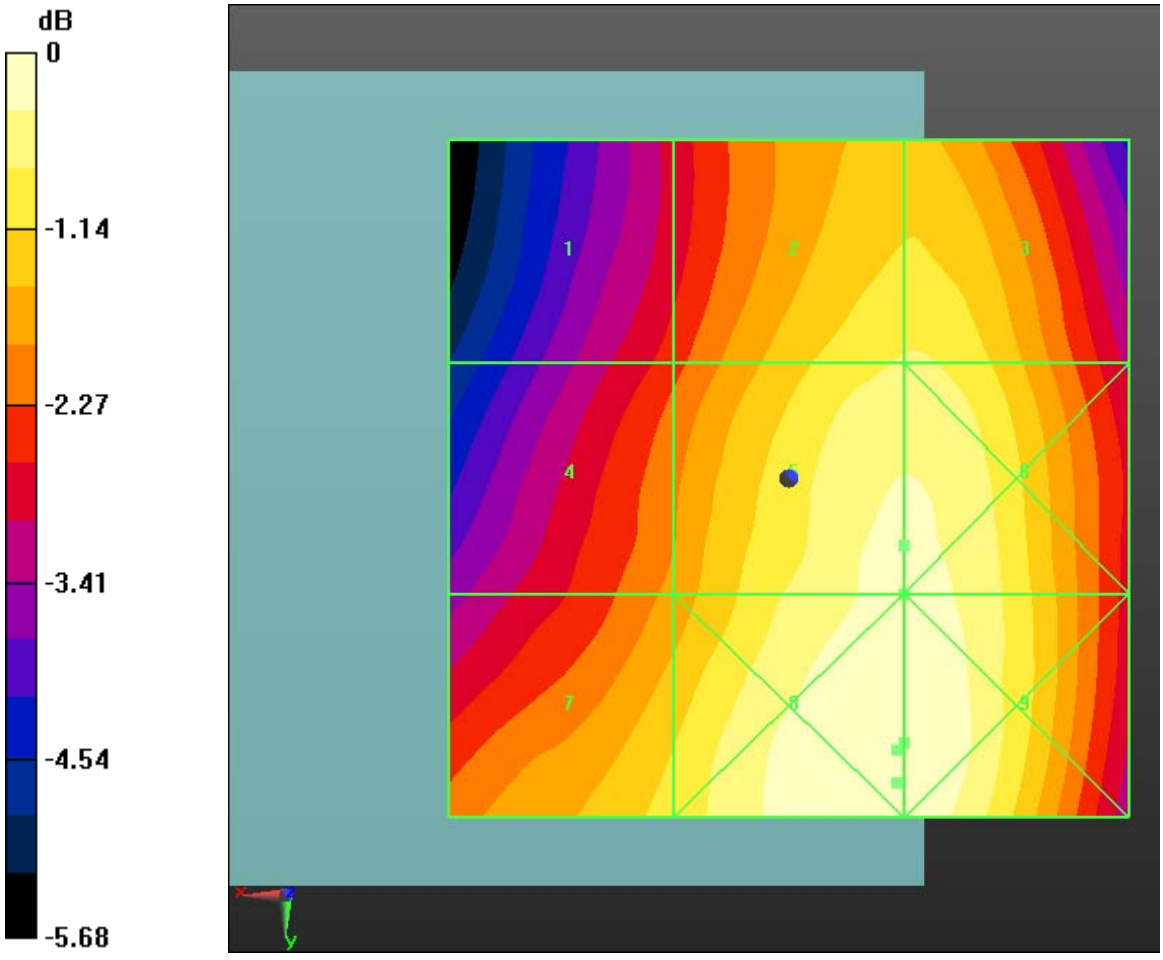
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, High Ch./Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 147.3 V/m
Probe Modulation Factor = 2.940
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 56.444 V/m; Power Drift = -0.20 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **108.2 M4**	Grid 2 **142.2 M4**	Grid 3 **142.9 M4**

Grid 4 **113.9 M4**	Grid 5 **147.3 M4**	Grid 6 **147.5 M4**
Grid 7 **125.4 M4**	Grid 8 **149.3 M4**	Grid 9 **149.3 M4**



0 dB = 136.1V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

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)

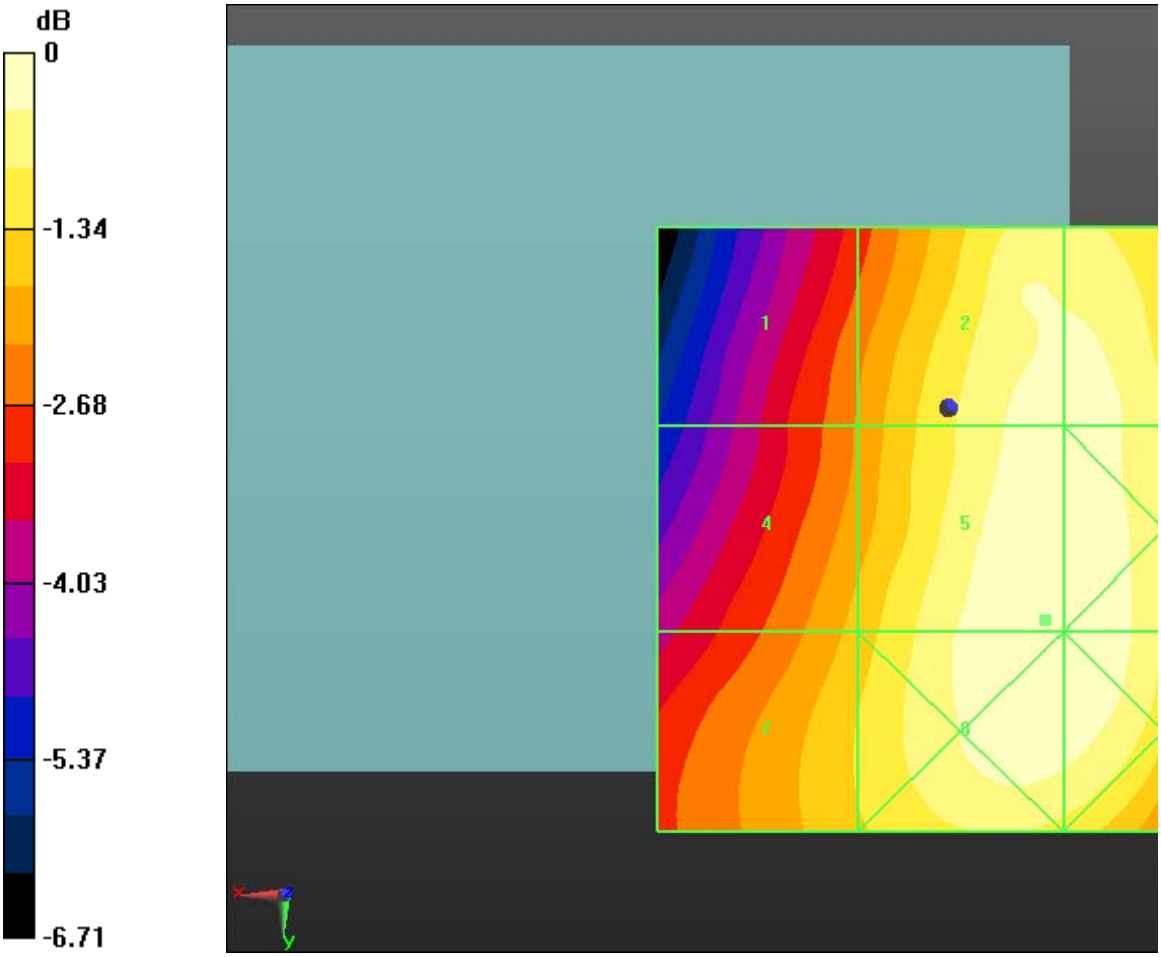
DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 146.2 V/m
Probe Modulation Factor = 2.940
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 55.661 V/m; Power Drift = -0.04 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **113.7 M4**	Grid 2 **142.8 M4**	Grid 3 **142.8 M4**
Grid 4 **121.6 M4**	Grid 5 **146.2 M4**	Grid 6 **145.8 M4**
Grid 7 **125.8 M4**	Grid 8 **146.1 M4**	Grid 9 **145.8 M4**



0 dB = 146.2V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

Maximum value of peak Total field = 45.793 V/m
Probe Modulation Factor = 2.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 5.445 V/m; Power Drift = 0.11 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **43.688 M4**	Grid 2 **57.739 M3**	Grid 3 **57.747 M3**
Grid 4 **22.030 M4**	Grid 5 **30.578 M4**	Grid 6 **31.964 M4**

Grid 7 **37.412 M4**	Grid 8 **45.793 M4**	Grid 9 **45.793 M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, Mid Ch./Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 47.296 V/m
Probe Modulation Factor = 2.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 5.244 V/m; Power Drift = -0.10 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

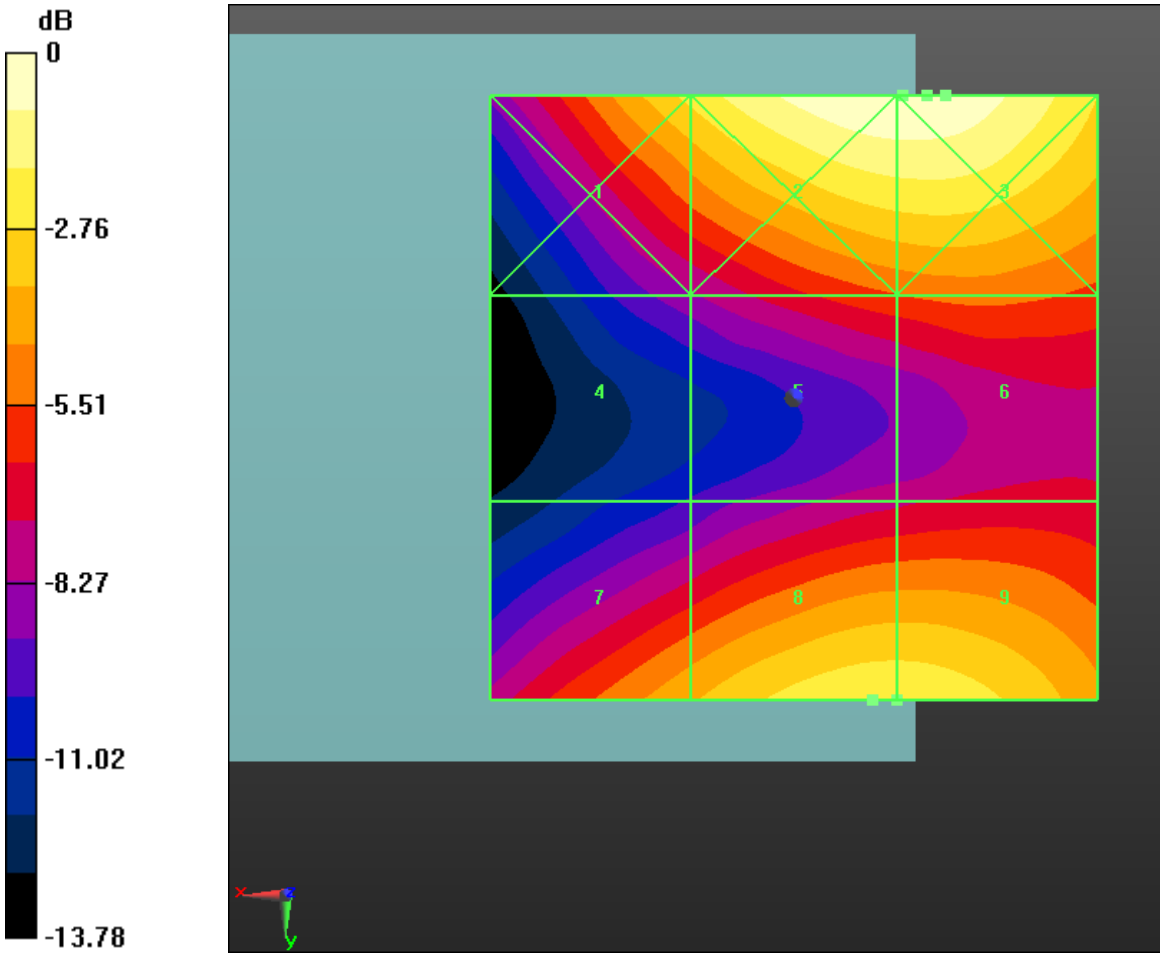
Grid 1 **41.093 M4**	Grid 2 **61.348 M3**	Grid 3 **61.987 M3**
Grid 4 **21.109 M4**	Grid 5 **34.355 M4**	Grid 6 **37.119 M4**
Grid 7 **38.825 M4**	Grid 8 **47.296 M4**	Grid 9 **47.145 M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, High Ch./Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 40.224 V/m
Probe Modulation Factor = 2.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 5.507 V/m; Power Drift = -0.0039 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **36.433 M4**	Grid 2 **58.847 M3**	Grid 3 **60.565 M3**
Grid 4 **18.778 M4**	Grid 5 **34.116 M4**	Grid 6 **37.751 M4**

Grid 7	Grid 8	Grid 9
33.913 M4	**40.224 M4**	**40.115 M4**



0 dB = 57.750V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

Communication System: GSM 1900; 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)

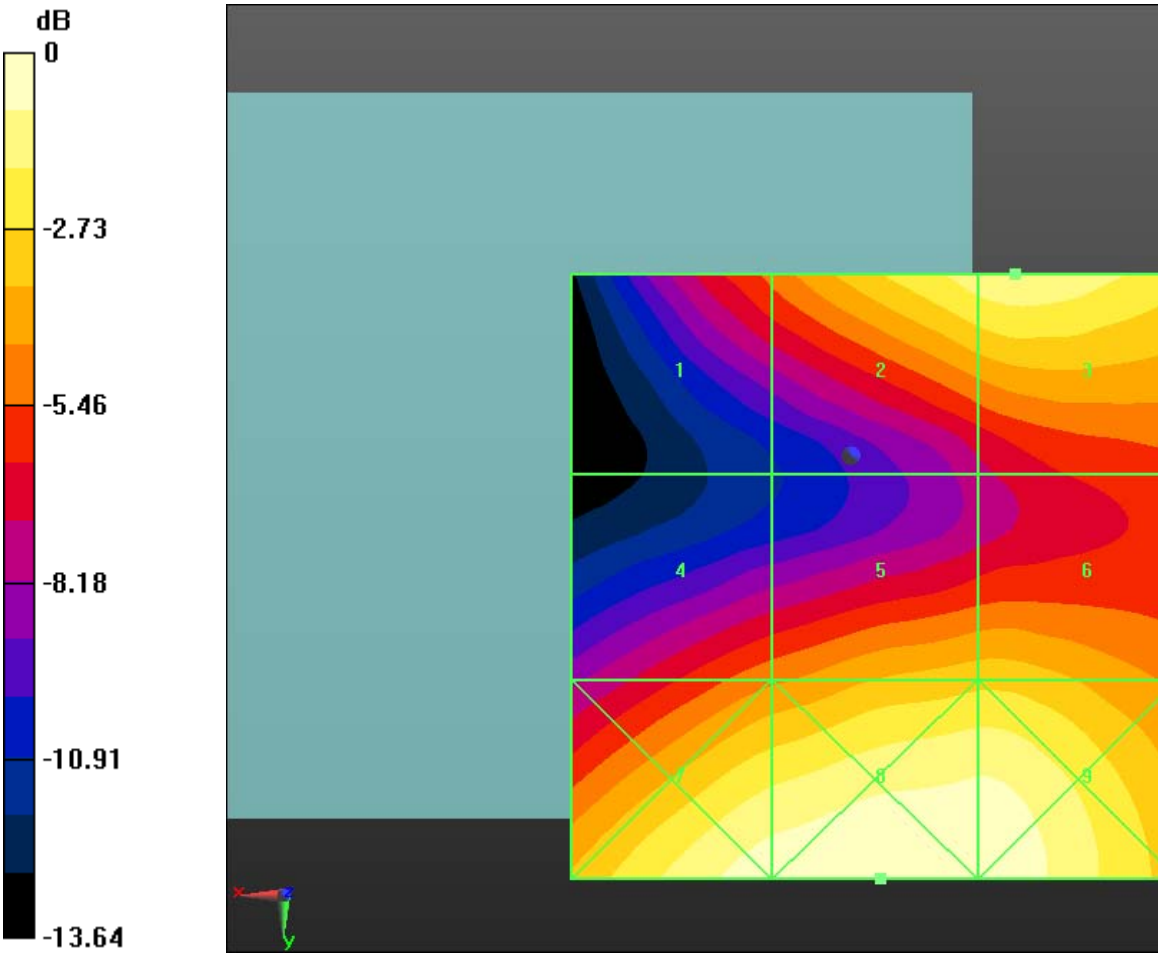
DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 46.975 V/m
Probe Modulation Factor = 2.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 4.921 V/m; Power Drift = 0.17 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **29.270 M4**	Grid 2 **45.700 M4**	Grid 3 **46.975 M4**
Grid 4 **30.515 M4**	Grid 5 **37.143 M4**	Grid 6 **37.243 M4**
Grid 7 **50.593 M3**	Grid 8 **52.704 M3**	Grid 9 **51.762 M3**



0 dB = 52.700V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_V_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

Maximum value of peak Total field = 53.878 V/m
Probe Modulation Factor = 1.010
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 58.638 V/m; Power Drift = 0.18 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **41.457 M4**	Grid 2 **50.804 M4**	Grid 3 **50.818 M4**
Grid 4 **44.412 M4**	Grid 5 **53.878 M4**	Grid 6 **53.878 M4**

Grid 7 **48.604 M4**	Grid 8 **55.089 M4**	Grid 9 **54.999 M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, Mid Ch./Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 59.110 V/m
Probe Modulation Factor = 1.010
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 64.503 V/m; Power Drift = -0.04 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

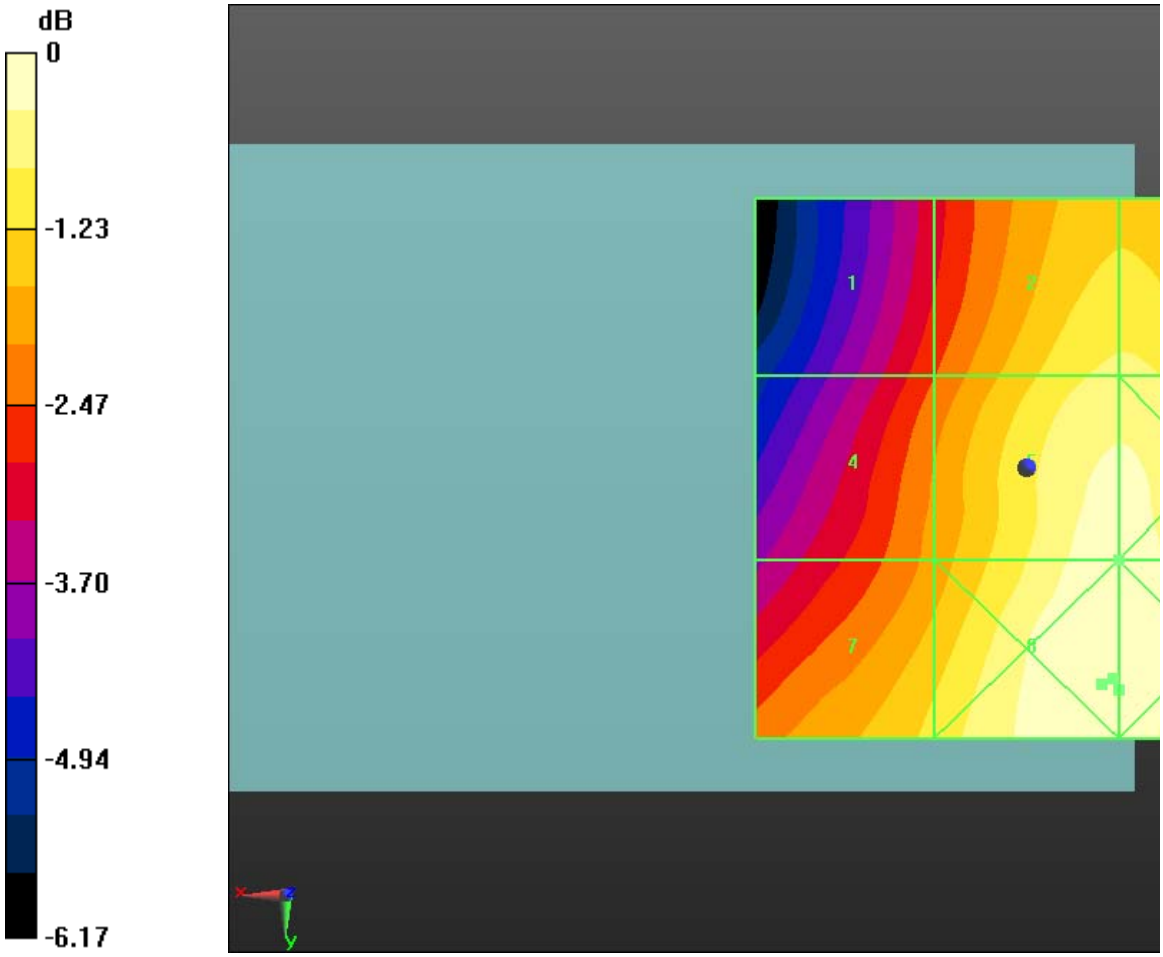
Grid 1 **42.484 M4**	Grid 2 **54.728 M4**	Grid 3 **54.922 M4**
Grid 4 **46.908 M4**	Grid 5 **59.110 M4**	Grid 6 **59.164 M4**
Grid 7 **52.984 M4**	Grid 8 **61.232 M4**	Grid 9 **61.232 M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, High Ch./Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 63.978 V/m
Probe Modulation Factor = 1.010
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 69.642 V/m; Power Drift = 0.07 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **46.952 M4**	Grid 2 **60.561 M4**	Grid 3 **60.639 M4**
Grid 4 **50.951 M4**	Grid 5 **63.978 M4**	Grid 6 **63.983 M4**

Grid 7	Grid 8	Grid 9
56.001 M4	**65.457 M4**	**65.435 M4**



0 dB = 55.090V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_V_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

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)

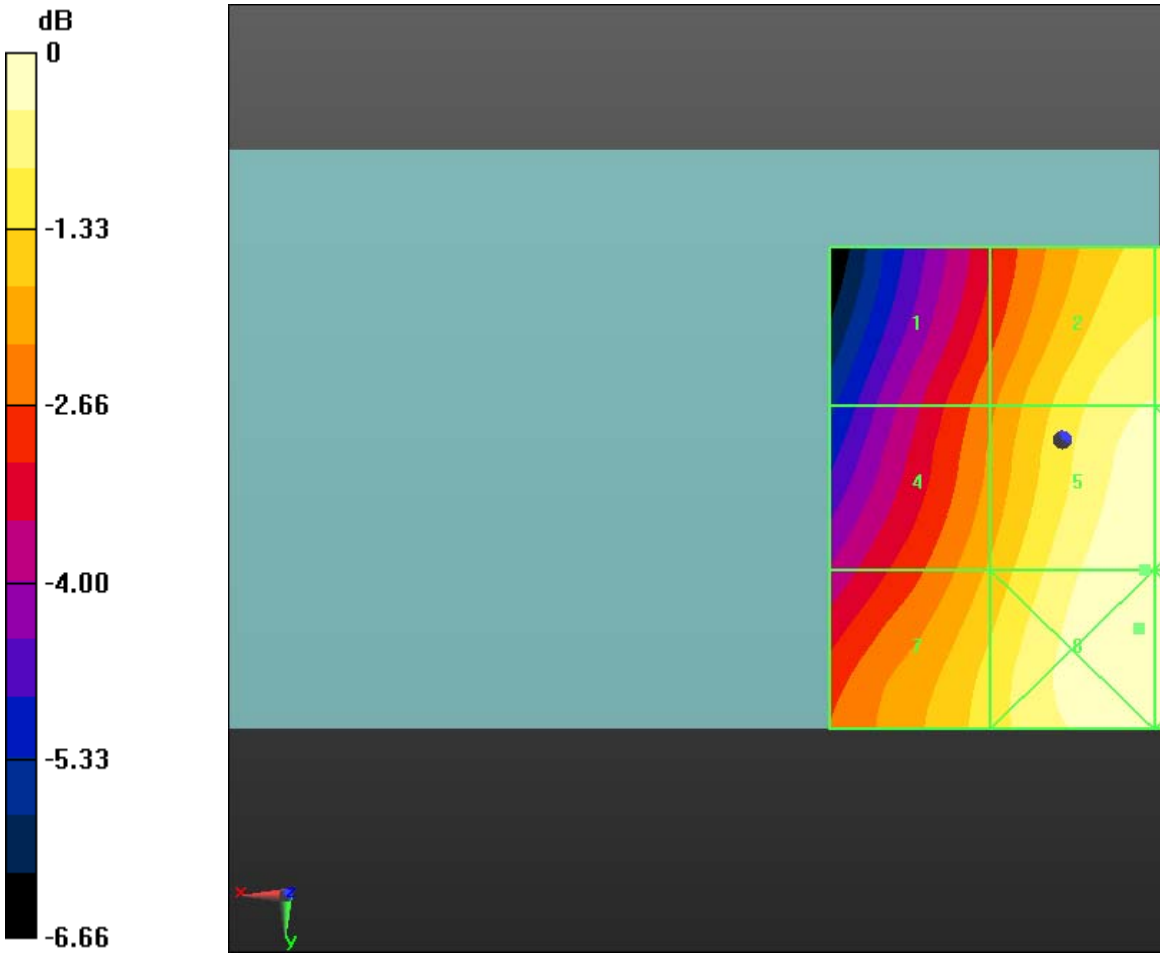
DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 64.375 V/m
Probe Modulation Factor = 1.010
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 69.999 V/m; Power Drift = -0.0074 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **49.759 M4**	Grid 2 **61.932 M4**	Grid 3 **61.932 M4**
Grid 4 **53.436 M4**	Grid 5 **64.375 M4**	Grid 6 **64.331 M4**
Grid 7 **57.151 M4**	Grid 8 **64.966 M4**	Grid 9 **64.845 M4**



0 dB = 64.970V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_II_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

Maximum value of peak Total field = 23.047 V/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 7.716 V/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **24.647 M4**	Grid 2 **32.938 M4**	Grid 3 **32.966 M4**
Grid 4 **12.726 M4**	Grid 5 **17.432 M4**	Grid 6 **18.126 M4**

Grid 7 **19.235 M4**	Grid 8 **23.047 M4**	Grid 9 **23.040 M4**

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

Maximum value of peak Total field = 26.777 V/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 7.739 V/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **23.346 M4**	Grid 2 **35.458 M4**	Grid 3 **35.834 M4**
Grid 4 **11.860 M4**	Grid 5 **20.102 M4**	Grid 6 **21.885 M4**
Grid 7 **21.493 M4**	Grid 8 **26.777 M4**	Grid 9 **26.745 M4**

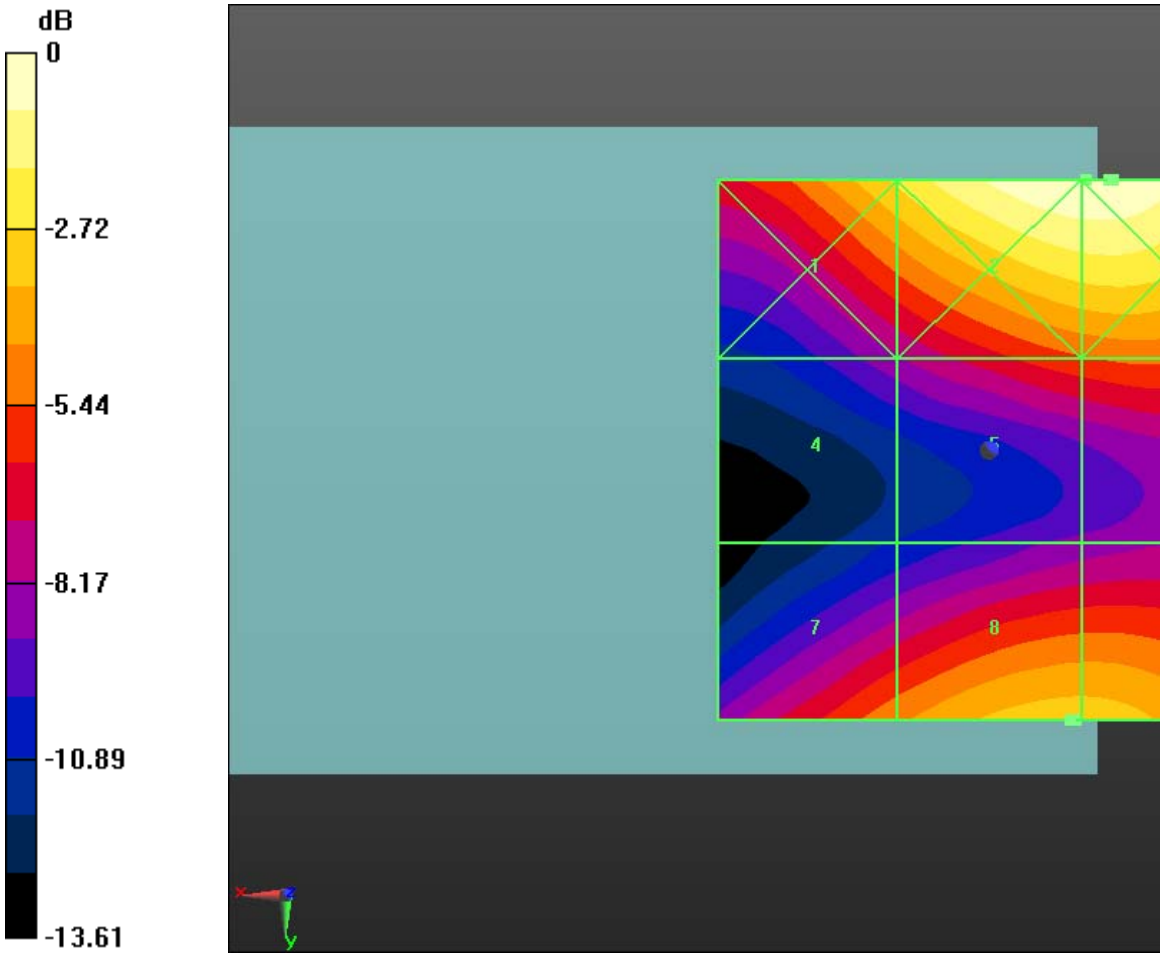
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device, High Ch./Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 23.270 V/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 7.140 V/m; Power Drift = -0.15 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **20.686 M4**	Grid 2 **30.416 M4**	Grid 3 **30.748 M4**
Grid 4 **10.072 M4**	Grid 5 **16.935 M4**	Grid 6 **19.125 M4**

Grid 7	Grid 8	Grid 9
18.988 M4	**23.270 M4**	**23.230 M4**



0 dB = 32.970V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_II_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

Communication System: WCDMA FDD II; 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)

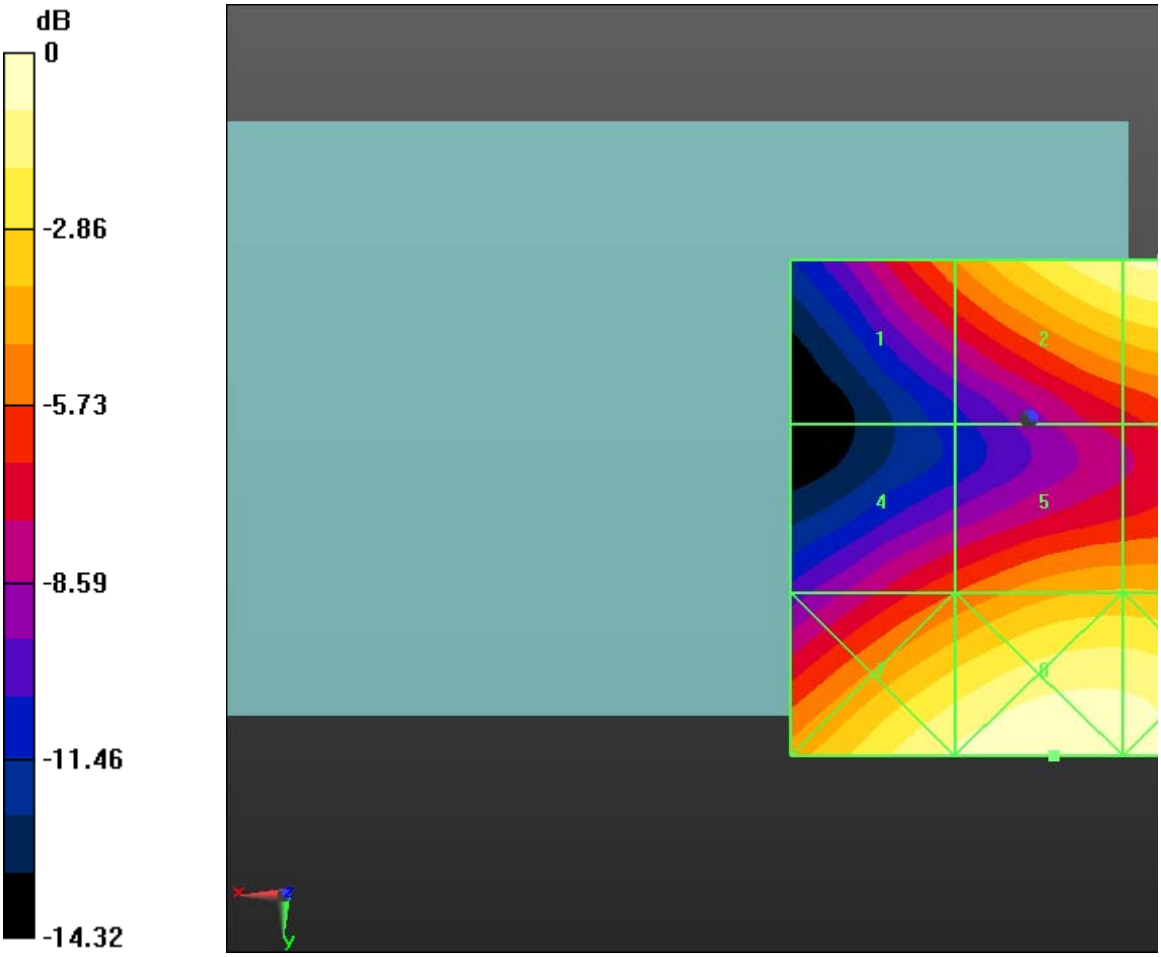
DASY5 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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
Maximum value of peak Total field = 28.621 V/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 7.873 V/m; Power Drift = 0.17 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **17.818 M4**	Grid 2 **27.877 M4**	Grid 3 **28.621 M4**
Grid 4 **15.949 M4**	Grid 5 **20.212 M4**	Grid 6 **20.215 M4**
Grid 7 **28.225 M4**	Grid 8 **30.903 M4**	Grid 9 **30.028 M4**



0 dB = 30.900V/m

Date/Time: 10/20/2011 11:32:58 PM, Date/Time: 10/20/2011 11:38:09 PM, Date/Time: 10/20/2011 11:42:17 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM850_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Low Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.283 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.045 A/m; Power Drift = -0.09 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.283 M4	**0.202 M4**	**0.131 M4**
Grid 4	Grid 5	Grid 6
0.245 M4	**0.169 M4**	**0.110 M4**

Grid 7 **0.248 M4**	Grid 8 **0.174 M4**	Grid 9 **0.105 M4**

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

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.310 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.057 A/m; Power Drift = 0.10 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.310 M4**	Grid 2 **0.234 M4**	Grid 3 **0.164 M4**
Grid 4 **0.276 M4**	Grid 5 **0.203 M4**	Grid 6 **0.146 M4**
Grid 7 **0.285 M4**	Grid 8 **0.209 M4**	Grid 9 **0.132 M4**

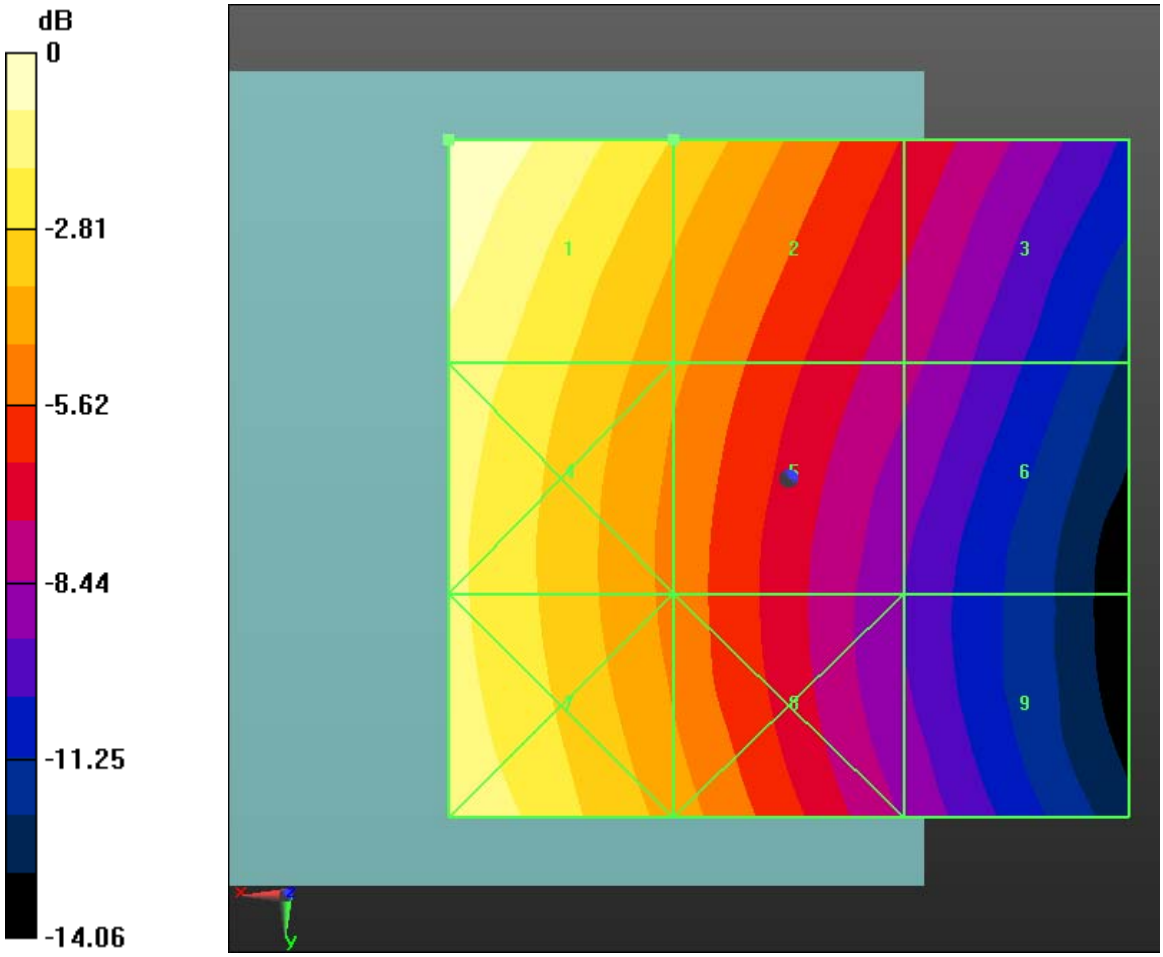
Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, High Ch/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.337 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.063 A/m; Power Drift = -0.06 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.337 M4**	Grid 2 **0.255 M4**	Grid 3 **0.174 M4**
Grid 4 **0.301 M4**	Grid 5 **0.225 M4**	Grid 6 **0.152 M4**

Grid 7	Grid 8	Grid 9
0.325 M4	**0.242 M4**	**0.161 M4**



0 dB = 0.280A/m

Date/Time: 10/20/2011 11:47:00 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

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)

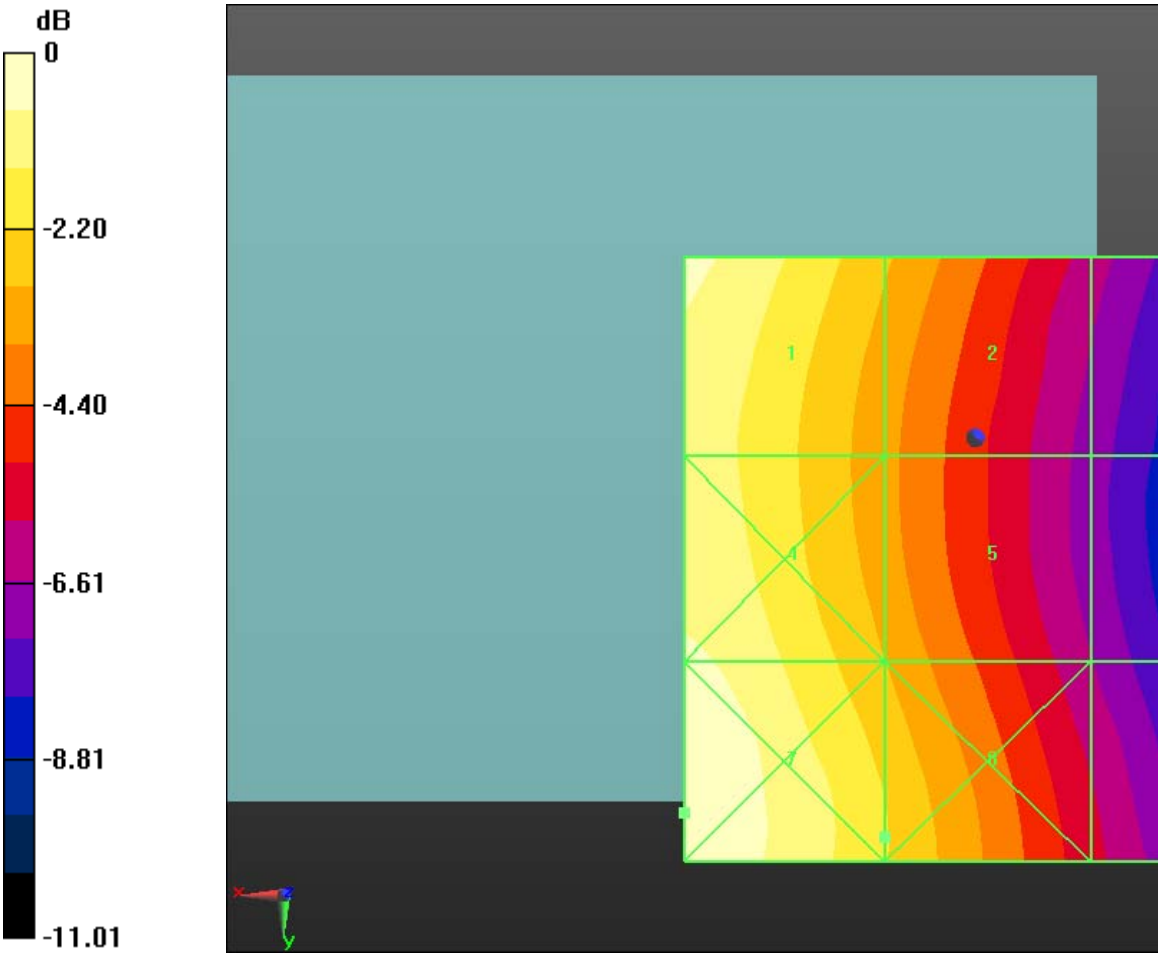
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.303 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.062 A/m; Power Drift = 0.09 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.303 M4**	Grid 2 **0.232 M4**	Grid 3 **0.157 M4**
Grid 4 **0.300 M4**	Grid 5 **0.229 M4**	Grid 6 **0.151 M4**
Grid 7 **0.324 M4**	Grid 8 **0.250 M4**	Grid 9 **0.169 M4**



0 dB = 0.320A/m

Date/Time: 10/21/2011 12:24:35 AM, Date/Time: 10/21/2011 12:28:45 AM, Date/Time: 10/21/2011 12:34:06 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM1900_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Low Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.128 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.043 A/m; Power Drift = 0.14 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.151 M3**	Grid 2 **0.124 M4**	Grid 3 **0.124 M4**
Grid 4 **0.089 M4**	Grid 5 **0.127 M4**	Grid 6 **0.128 M4**

Grid 7 **0.111 M4**	Grid 8 **0.122 M4**	Grid 9 **0.122 M4**

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Mid Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.148 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.047 A/m; Power Drift = 0.08 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak H-field in A/m

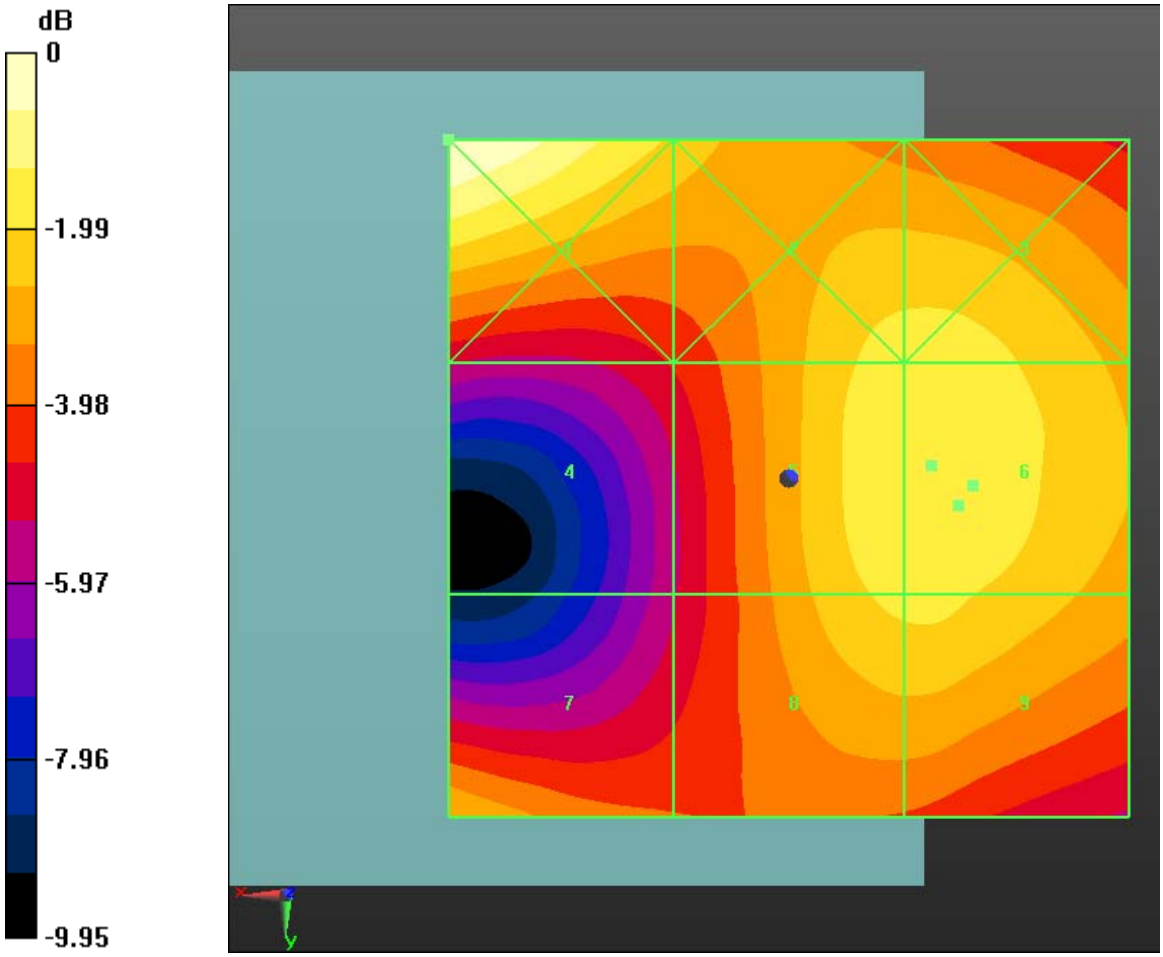
Grid 1 **0.145 M3**	Grid 2 **0.139 M4**	Grid 3 **0.142 M3**
Grid 4 **0.091 M4**	Grid 5 **0.144 M3**	Grid 6 **0.148 M3**
Grid 7 **0.102 M4**	Grid 8 **0.140 M3**	Grid 9 **0.144 M3**

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, High Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.147 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.050 A/m; Power Drift = -0.15 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.146 M3**	Grid 2 **0.139 M4**	Grid 3 **0.141 M3**
Grid 4 **0.099 M4**	Grid 5 **0.145 M3**	Grid 6 **0.147 M3**

Grid 7	Grid 8	Grid 9
0.106 M4	**0.141 M3**	**0.143 M3**



0 dB = 0.150A/m

Date/Time: 10/21/2011 12:51:20 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM1900_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

Communication System: GSM 1900; 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)

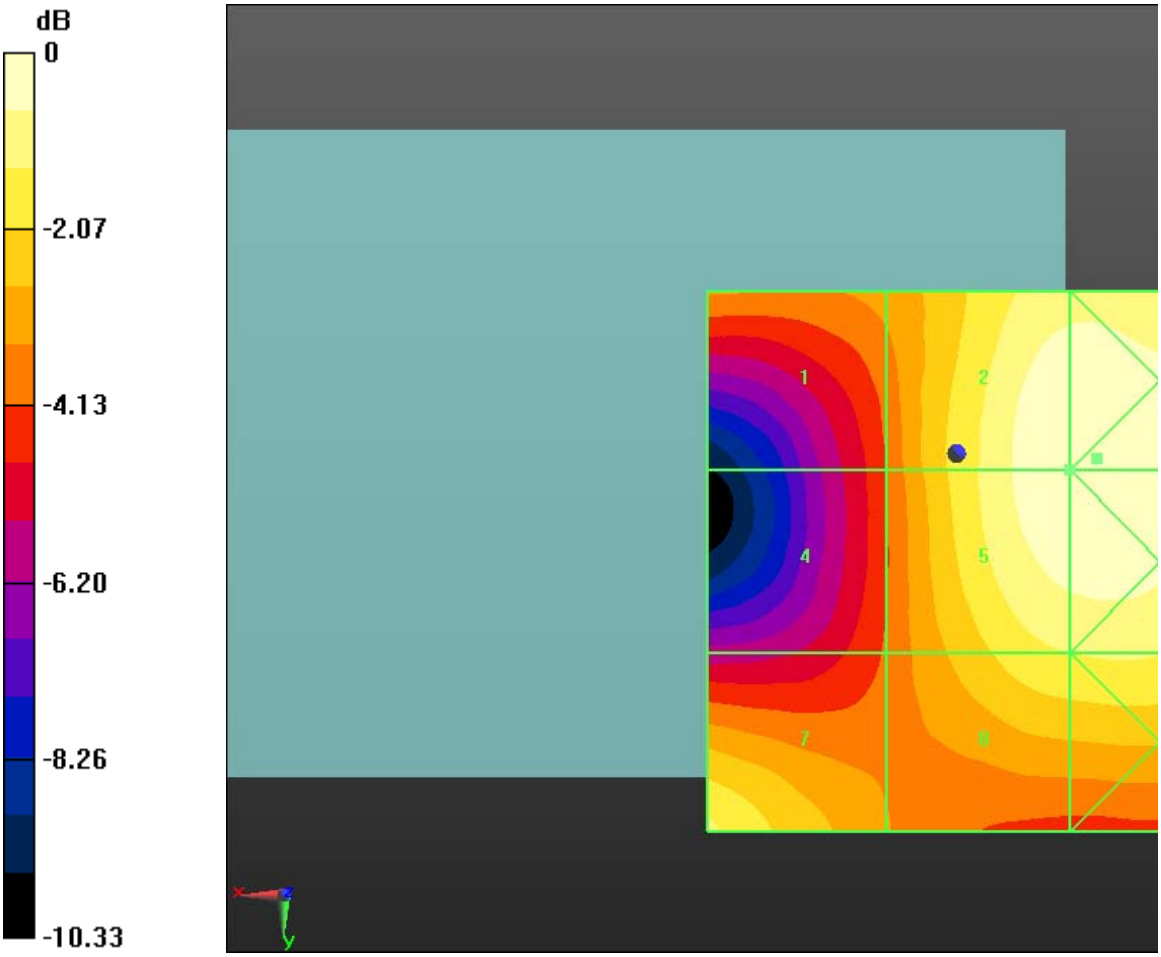
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.148 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.048 A/m; Power Drift = 0.19 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.105 M4**	Grid 2 **0.148 M3**	Grid 3 **0.149 M3**
Grid 4 **0.095 M4**	Grid 5 **0.148 M3**	Grid 6 **0.149 M3**
Grid 7 **0.131 M4**	Grid 8 **0.128 M4**	Grid 9 **0.129 M4**



0 dB = 0.150A/m

Date/Time: 10/21/2011 1:01:48 AM, Date/Time: 10/21/2011 1:05:21 AM, Date/Time: 10/21/2011 1:09:03 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_V_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Low Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.116 A/m
Probe Modulation Factor = 0.990
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.056 A/m; Power Drift = -0.09 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.116 M4	**0.084 M4**	**0.057 M4**
Grid 4	Grid 5	Grid 6
0.101 M4	**0.072 M4**	**0.048 M4**

Grid 7 **0.103 M4**	Grid 8 **0.073 M4**	Grid 9 **0.044 M4**

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Mid Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.122 A/m
Probe Modulation Factor = 0.990
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.066 A/m; Power Drift = 0.04 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

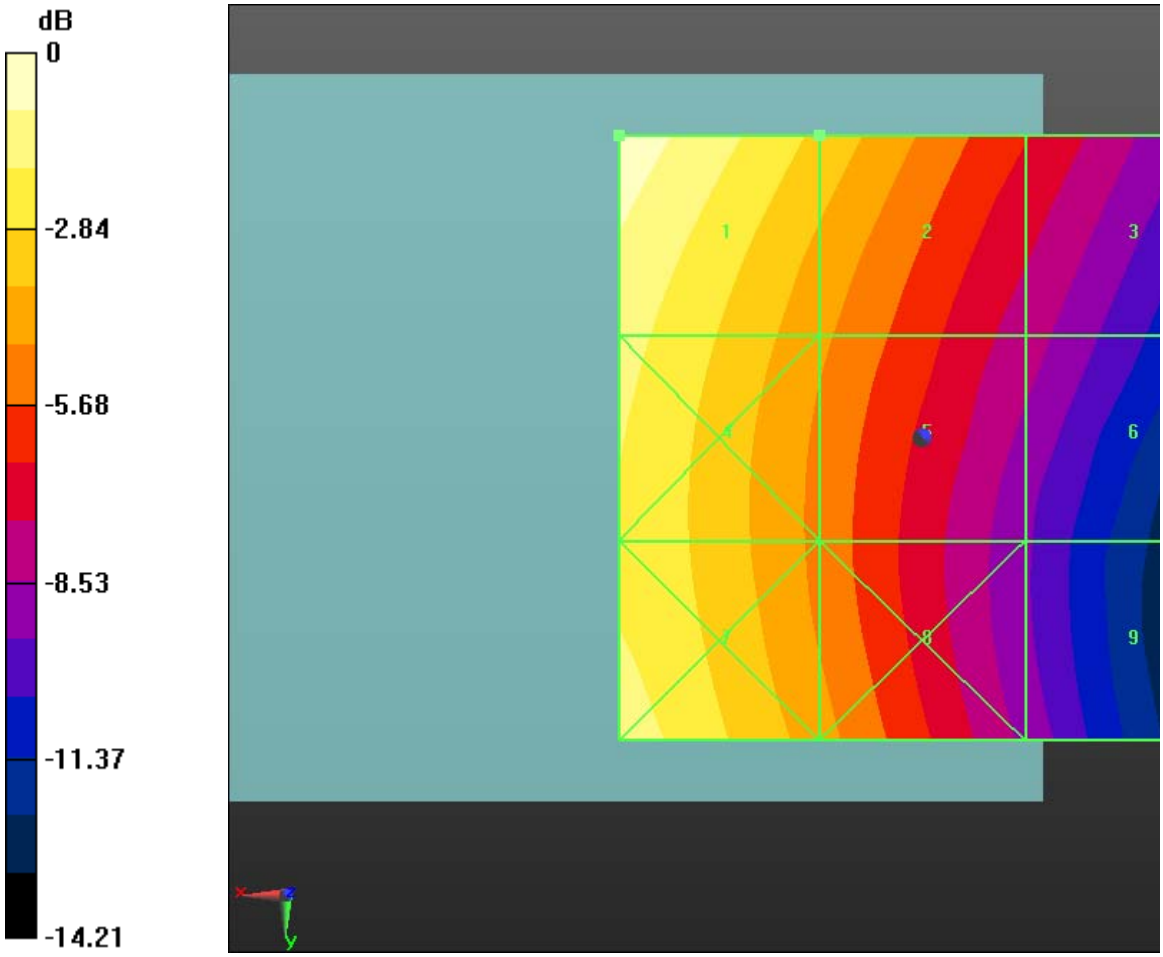
Grid 1 **0.122 M4**	Grid 2 **0.095 M4**	Grid 3 **0.066 M4**
Grid 4 **0.110 M4**	Grid 5 **0.082 M4**	Grid 6 **0.057 M4**
Grid 7 **0.114 M4**	Grid 8 **0.084 M4**	Grid 9 **0.052 M4**

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, High Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.139 A/m
Probe Modulation Factor = 0.990
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.076 A/m; Power Drift = 0.05 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.139 M4**	Grid 2 **0.108 M4**	Grid 3 **0.073 M4**
Grid 4 **0.125 M4**	Grid 5 **0.095 M4**	Grid 6 **0.065 M4**

Grid 7	Grid 8	Grid 9
0.134 M4	**0.102 M4**	**0.065 M4**



0 dB = 0.120A/m

Date/Time: 10/21/2011 1:14:50 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_V_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

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)

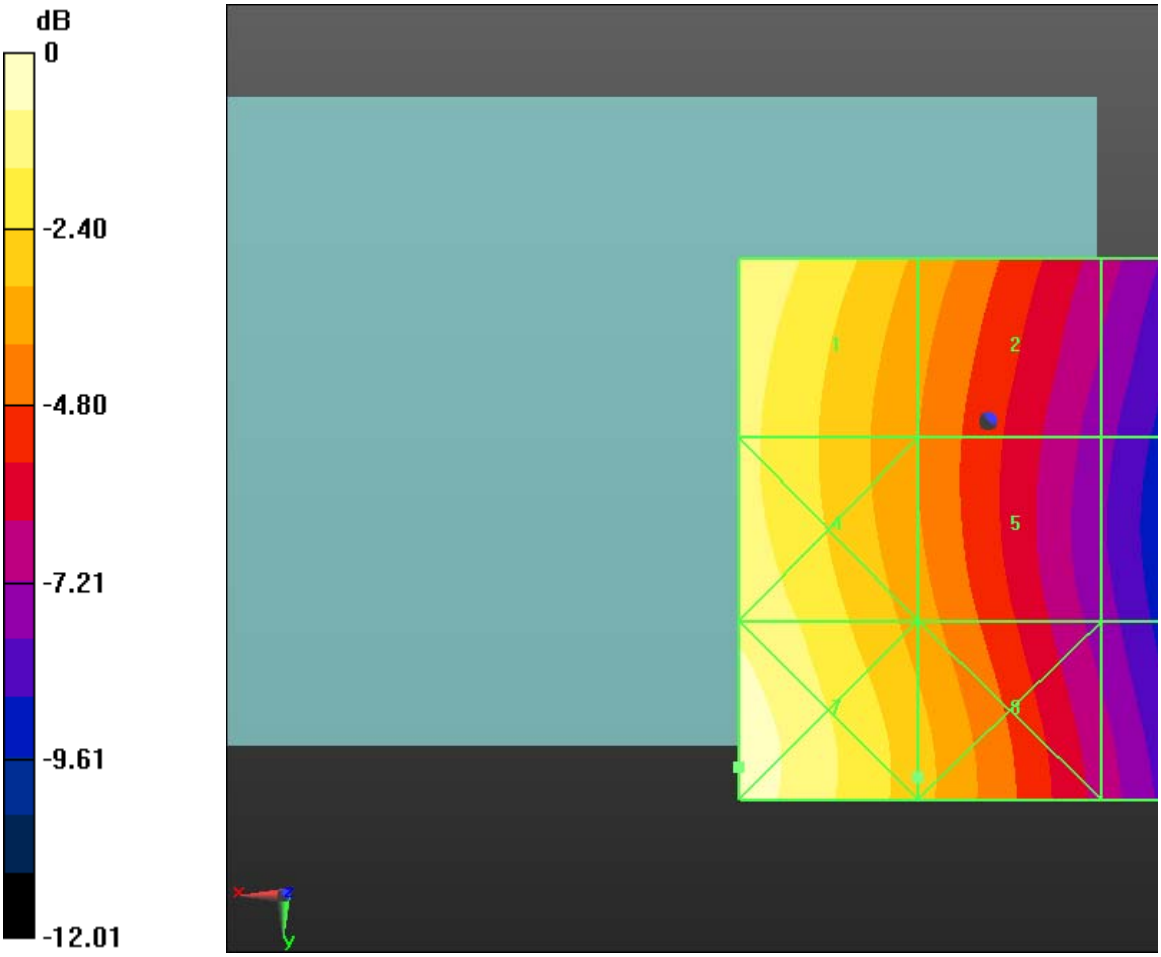
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.127 A/m
Probe Modulation Factor = 0.990
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.077 A/m; Power Drift = -0.07 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.127 M4**	Grid 2 **0.095 M4**	Grid 3 **0.064 M4**
Grid 4 **0.126 M4**	Grid 5 **0.093 M4**	Grid 6 **0.059 M4**
Grid 7 **0.135 M4**	Grid 8 **0.101 M4**	Grid 9 **0.065 M4**



0 dB = 0.140A/m

Date/Time: 10/21/2011 1:23:32 AM, Date/Time: 10/21/2011 1:27:10 AM, Date/Time: 10/21/2011 1:31:37 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_II_Speaker

DUT: BlackBerry Smartphone; Type: Sample

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)

DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Low Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.077 A/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.063 A/m; Power Drift = 0.09 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.095 M4**	Grid 2 **0.075 M4**	Grid 3 **0.076 M4**
Grid 4 **0.055 M4**	Grid 5 **0.075 M4**	Grid 6 **0.077 M4**

Grid 7 **0.057 M4**	Grid 8 **0.071 M4**	Grid 9 **0.072 M4**

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, Mid Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.085 A/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.071 A/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

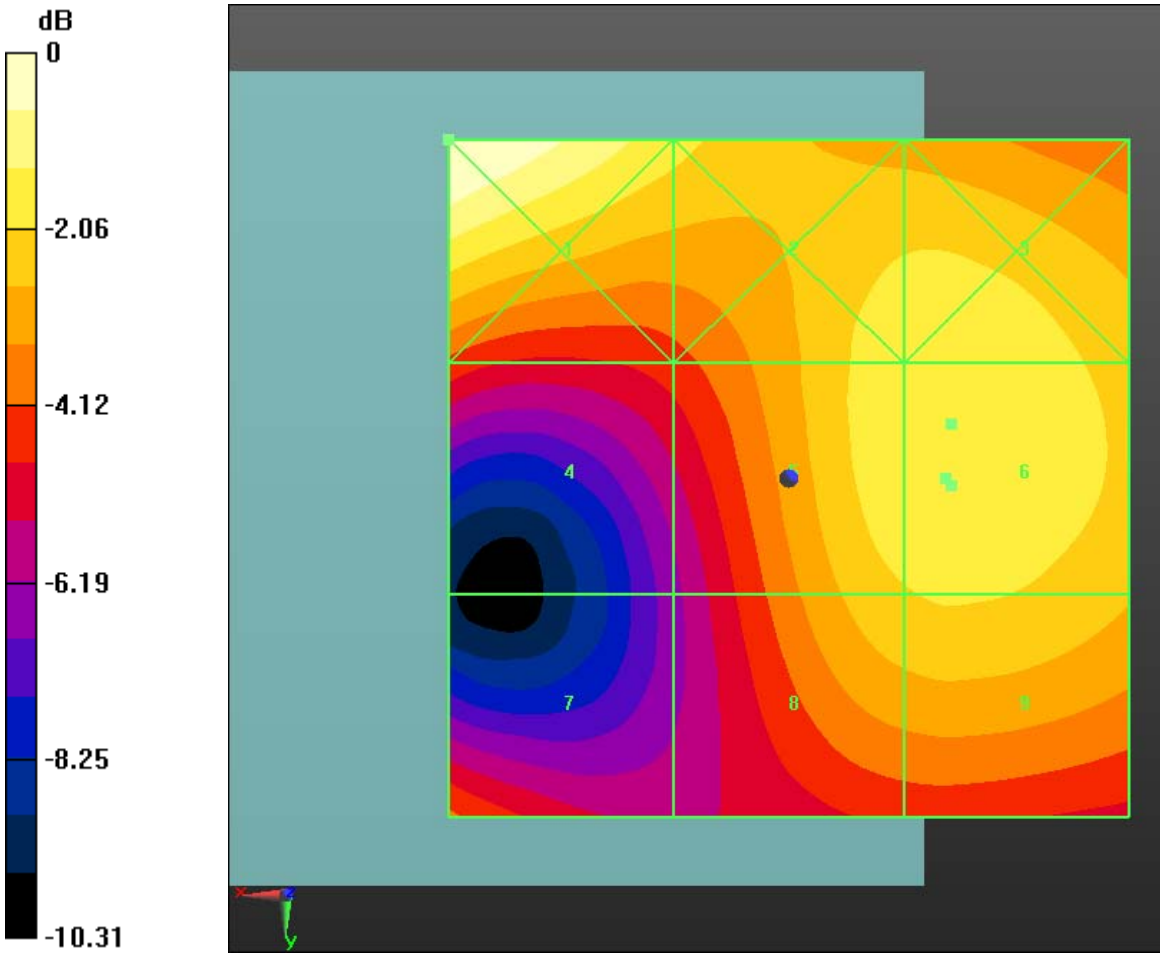
Grid 1 **0.091 M4**	Grid 2 **0.081 M4**	Grid 3 **0.082 M4**
Grid 4 **0.055 M4**	Grid 5 **0.084 M4**	Grid 6 **0.085 M4**
Grid 7 **0.065 M4**	Grid 8 **0.082 M4**	Grid 9 **0.083 M4**

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device, High Ch/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.085 A/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.072 A/m; Power Drift = 0.20 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.084 M4**	Grid 2 **0.082 M4**	Grid 3 **0.083 M4**
Grid 4 **0.056 M4**	Grid 5 **0.084 M4**	Grid 6 **0.085 M4**

Grid 7	Grid 8	Grid 9
0.068 M4	**0.081 M4**	**0.082 M4**



0 dB = 0.090A/m

Date/Time: 10/21/2011 1:39:51 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_II_Telecoil

DUT: BlackBerry Smartphone; Type: Sample

Communication System: WCDMA FDD II; 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)

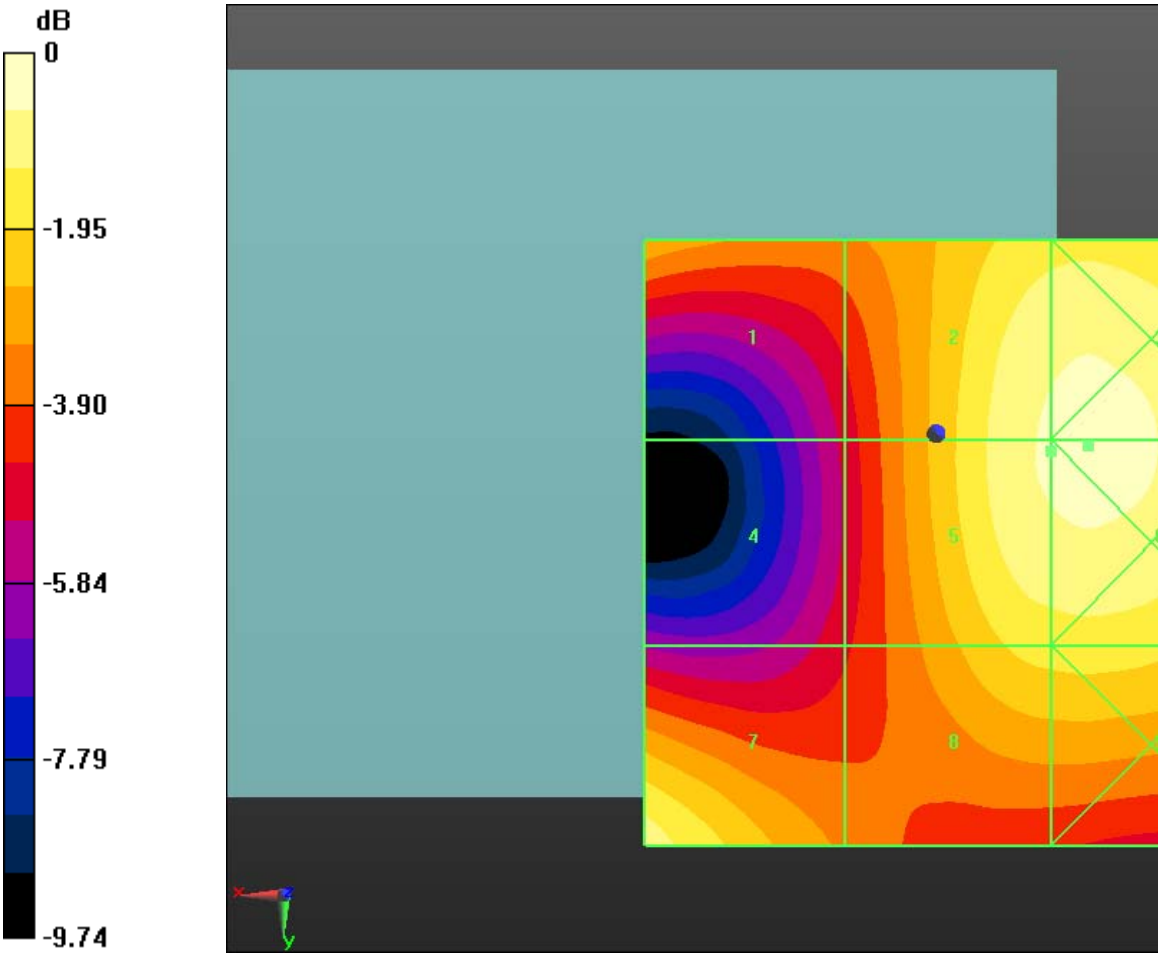
DASY5 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Telecoil/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.084 A/m
Probe Modulation Factor = 1.120
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.070 A/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.066 M4**	Grid 2 **0.084 M4**	Grid 3 **0.086 M4**
Grid 4 **0.053 M4**	Grid 5 **0.084 M4**	Grid 6 **0.086 M4**
Grid 7 **0.081 M4**	Grid 8 **0.074 M4**	Grid 9 **0.075 M4**



0 dB = 0.090A/m