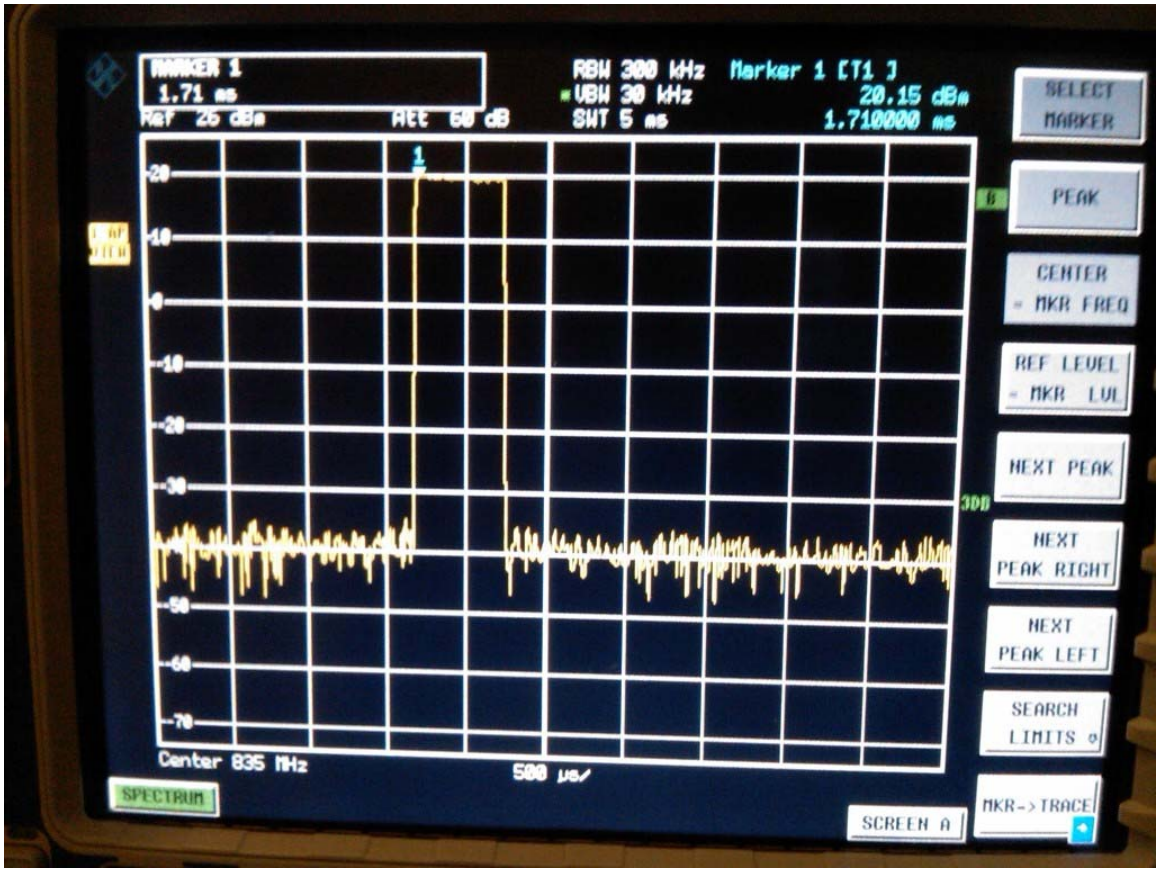
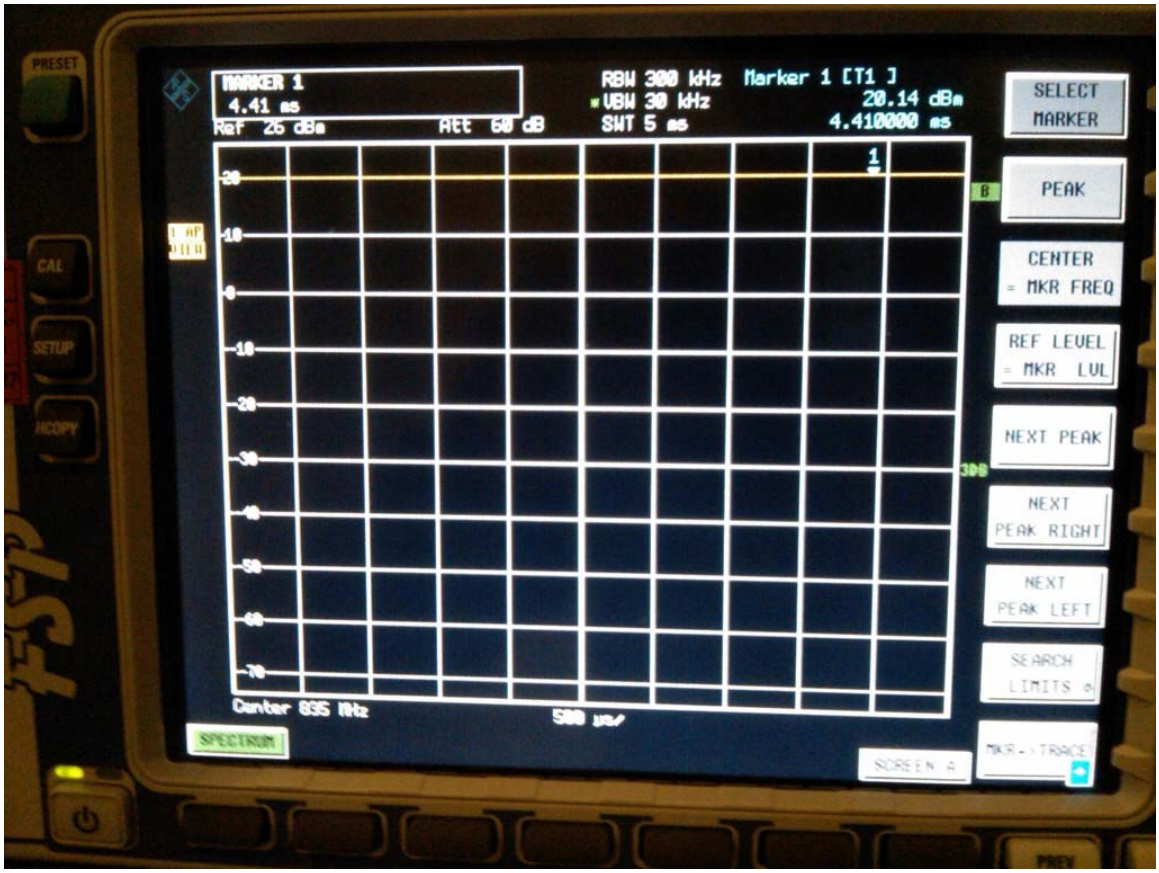
Annex A: Measurement data and plots

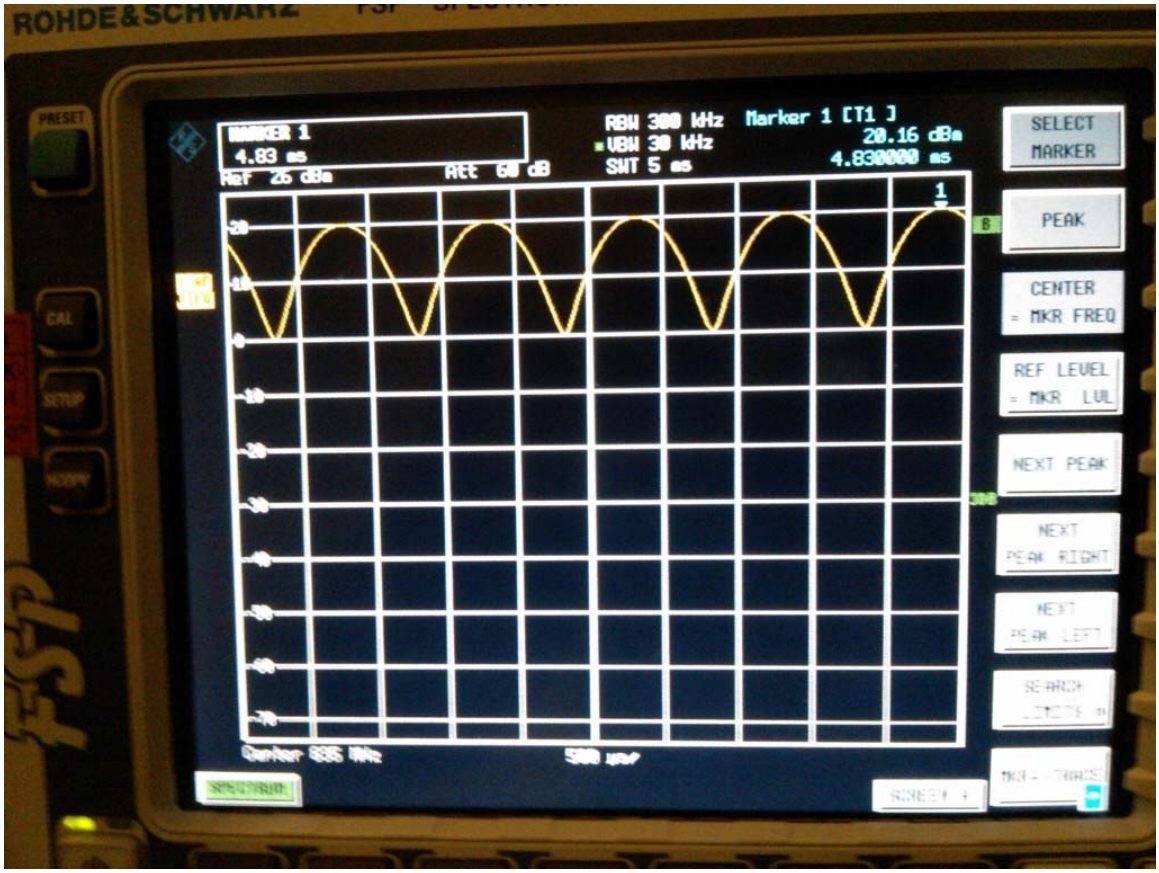
A.1 Spectrum analyser plots: GSM/CDMA, CW, 80%AM, signals



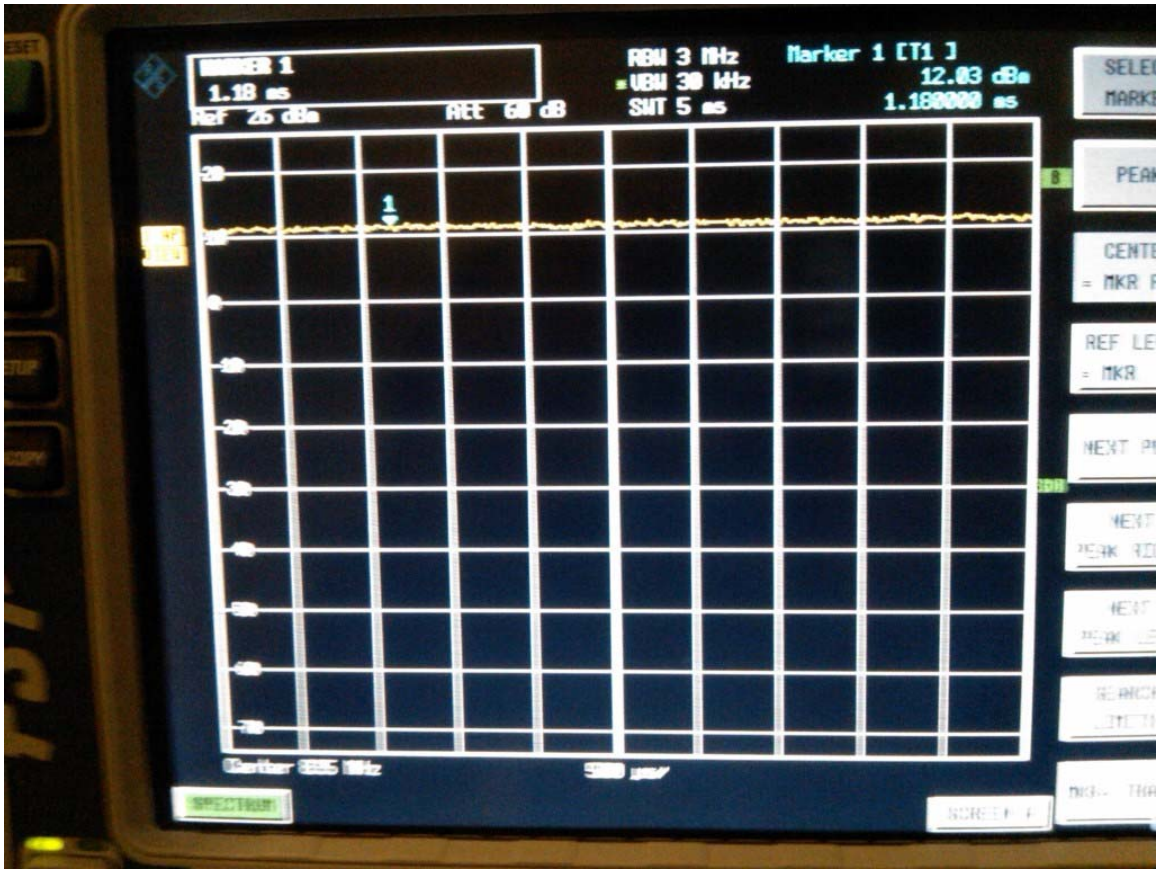
GSM 835 MHz



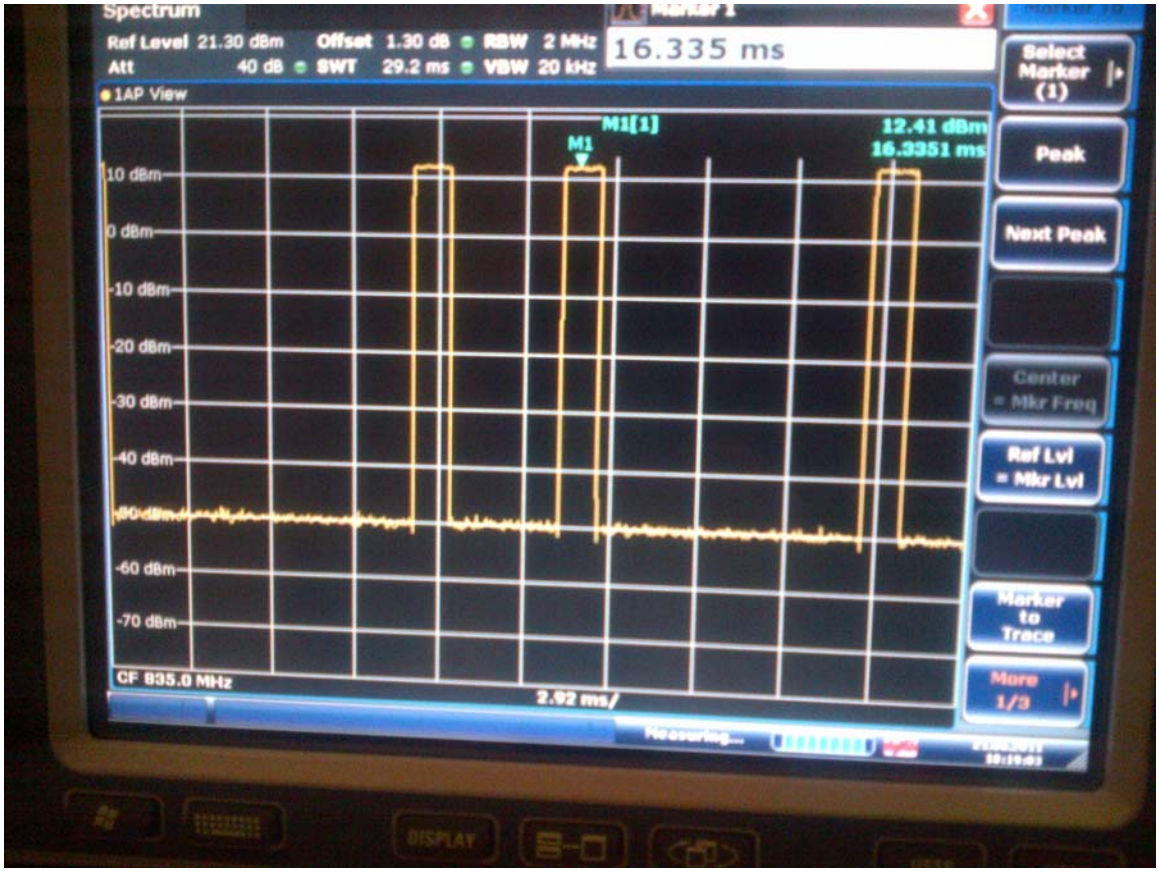
CW 835 MHz



AM 80% 835 MHz

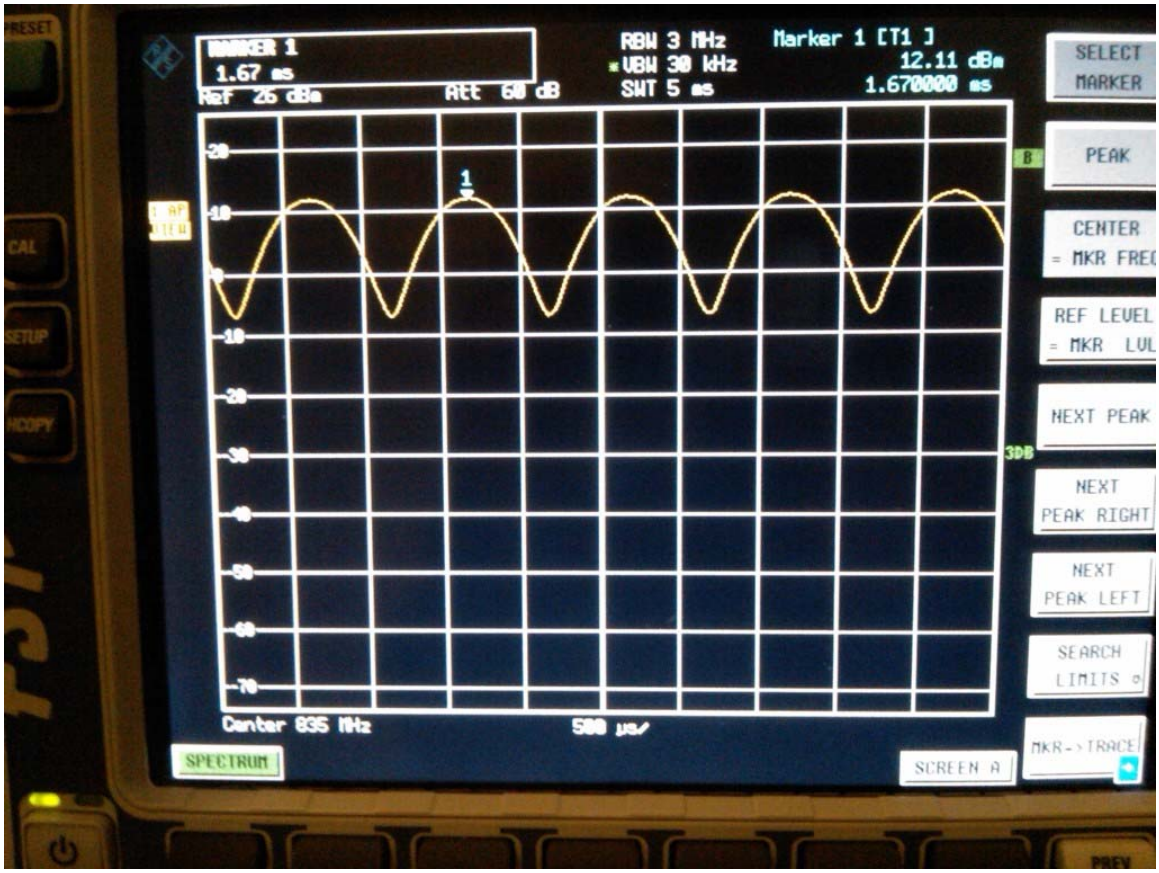


CDMA 835 MHz

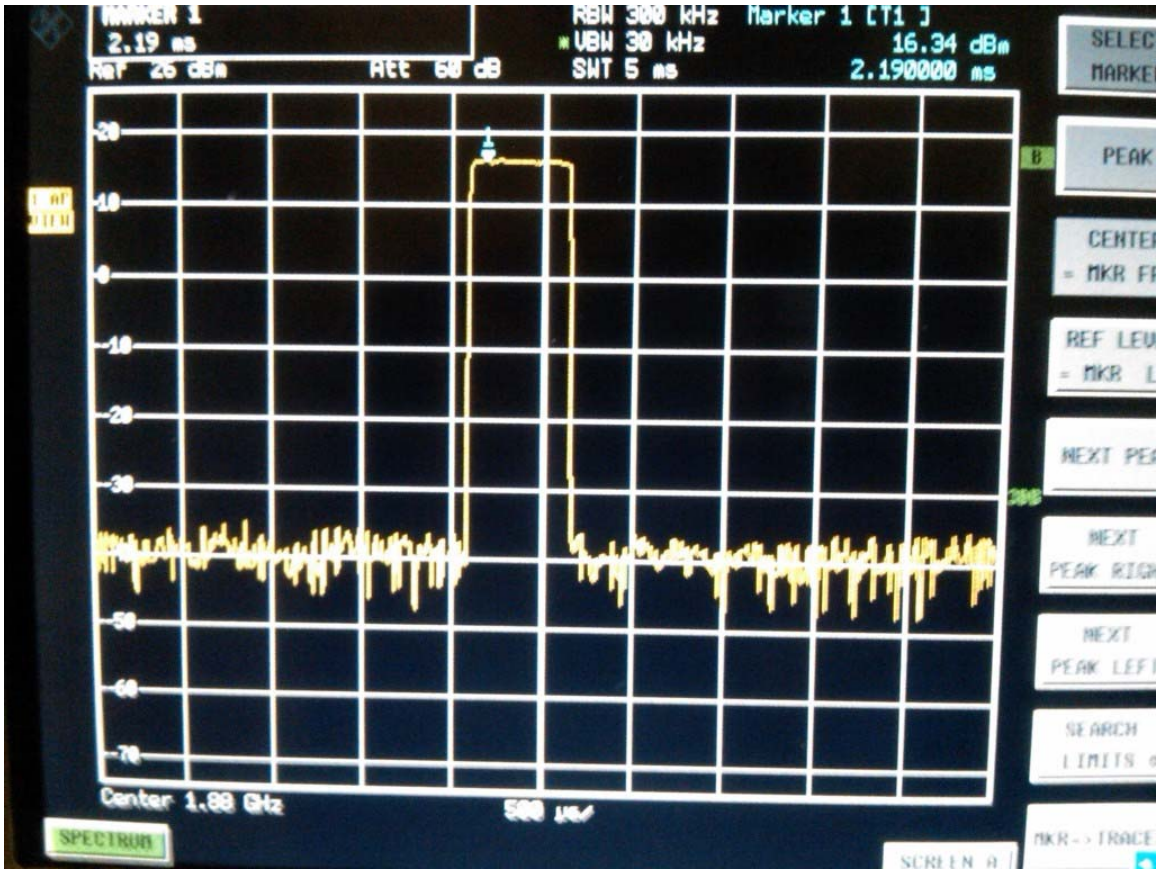


CDMA 835 MHz 1/8th

CW 835 MHz

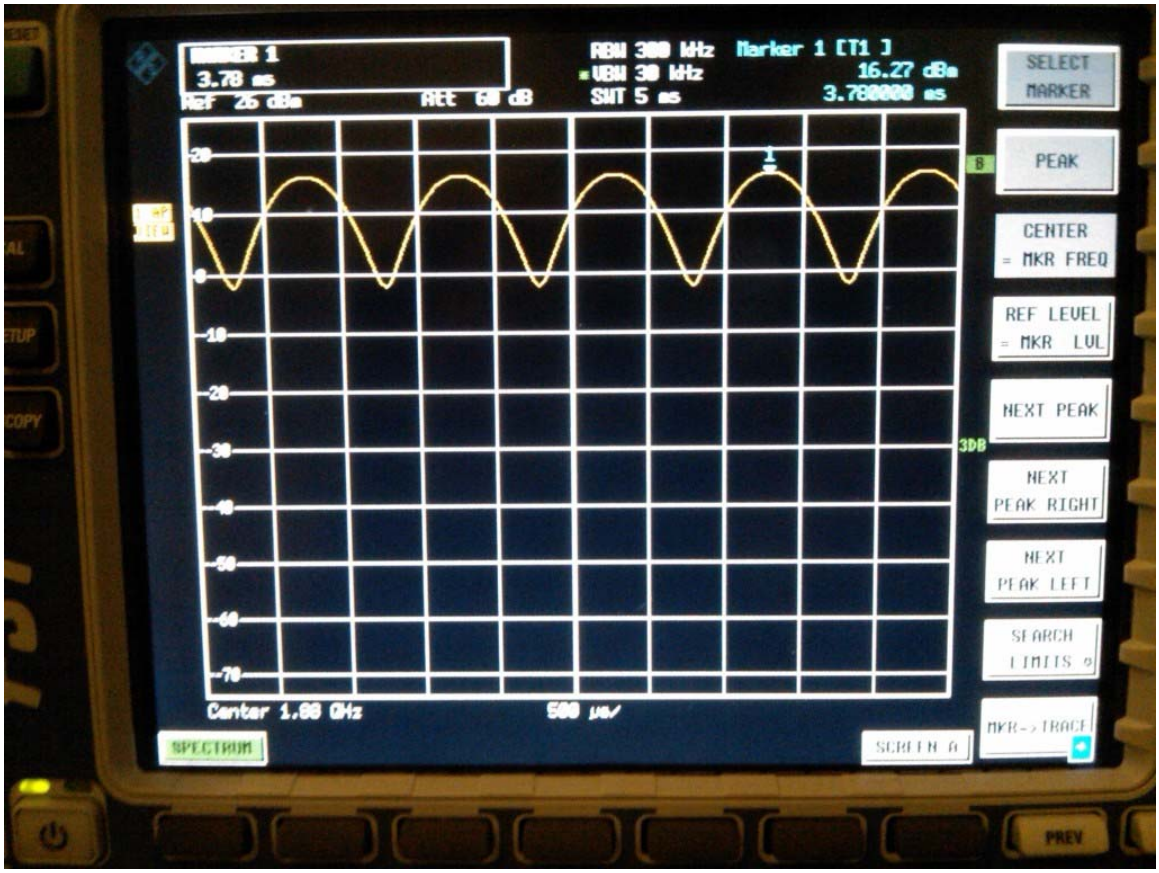


AM 80% 835 MHz



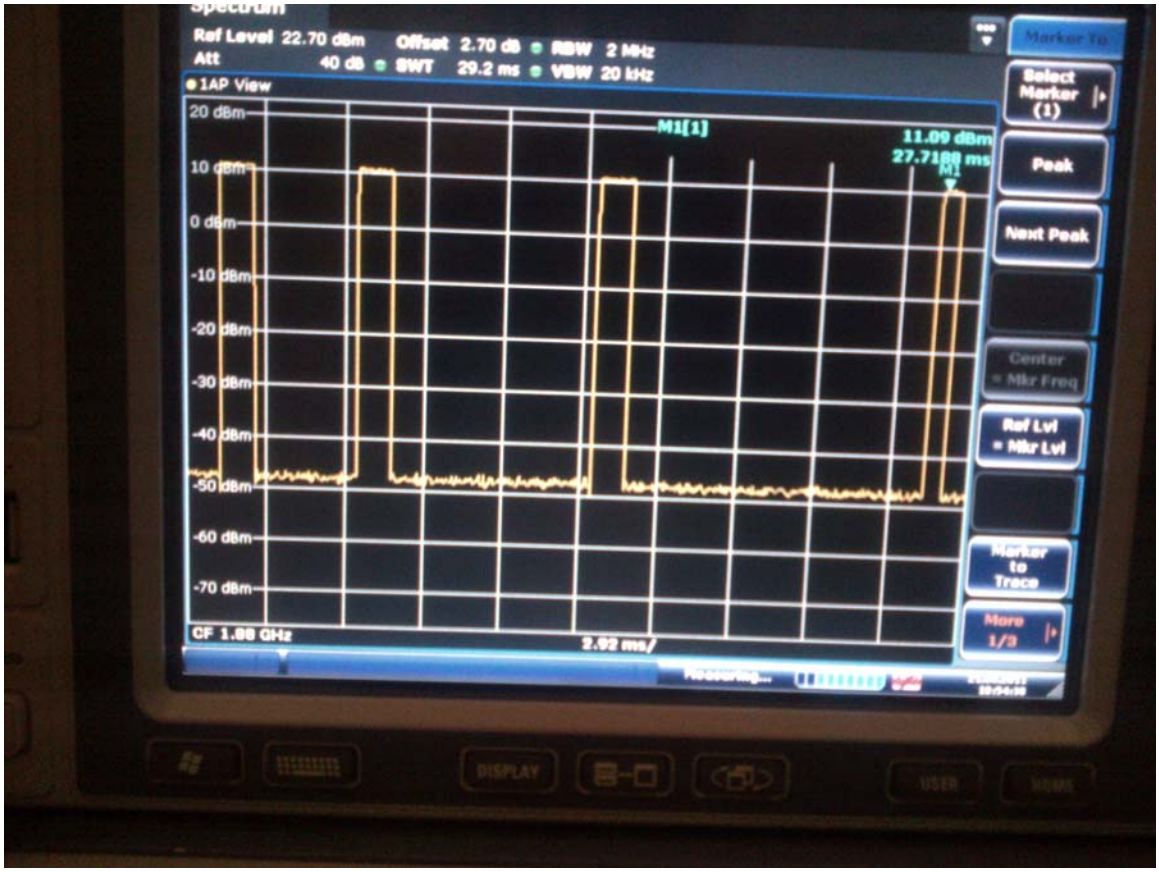
GSM 1880 MHz

CW 1880 MHz

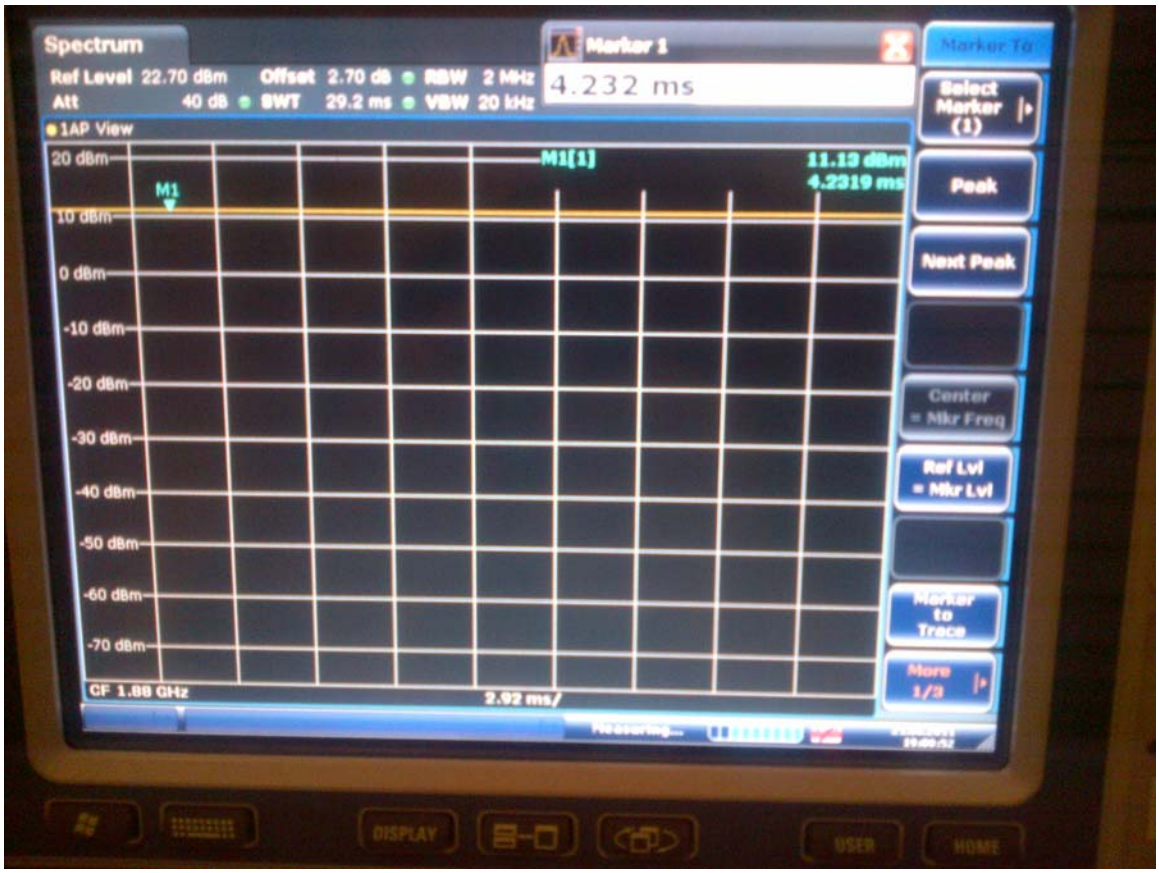


AM 80 % 1880 MHz

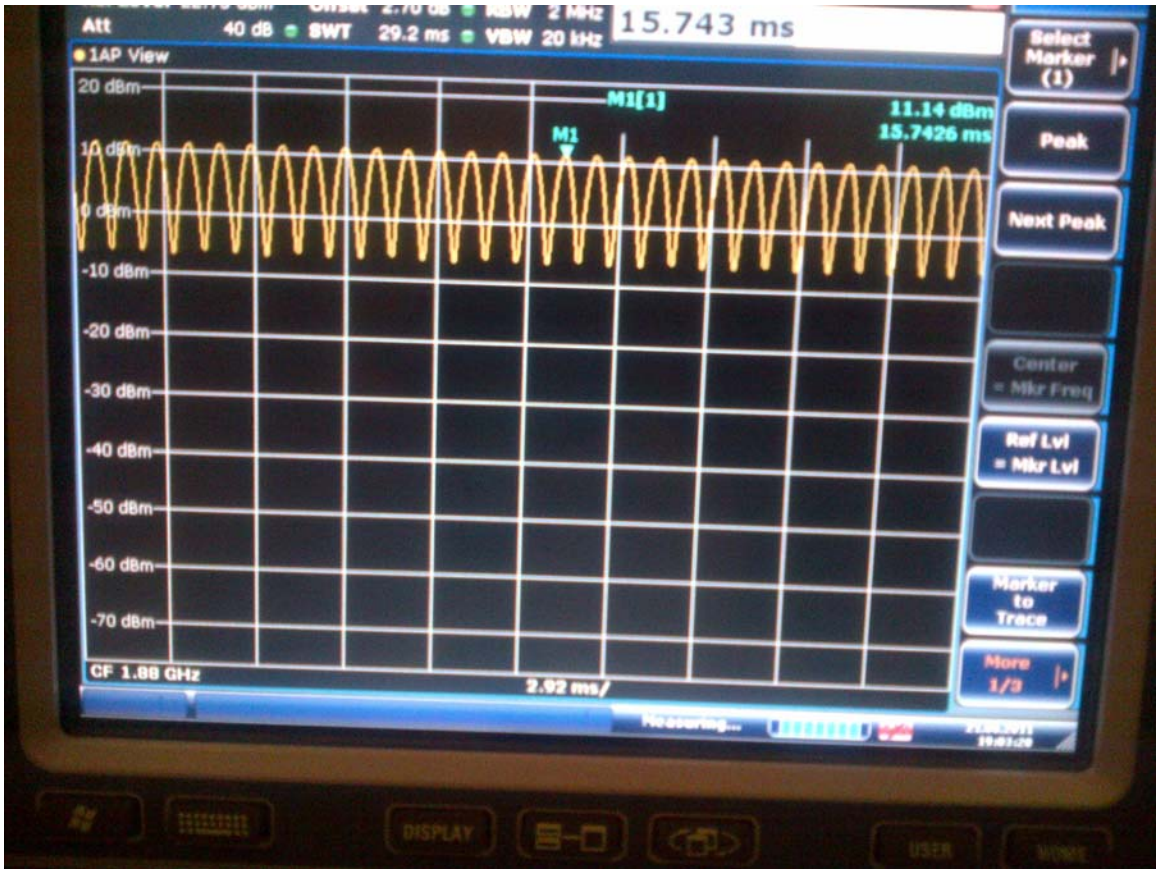
CDMA 1880 MHz



CDMA 1880 MHz 1/8 th



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_PMF_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: CW, Communication System: CDMA 850, Communication System: CDMA 800; Communication System Band: D835 (835.0 MHz), Communication System Band: CDMA 2000 Cellular, Communication System Band: CDMA 2000 BC 10 ; Frequency: 835 MHz, Frequency: 820.5 MHz;Communication System PAR: 0, Communication System PAR: 9.19 dB
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 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 _CW_20dB_Validation - 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 = 157.1 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 120.5 V/m; Power Drift = 0.01 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **150.7** **M4**	Grid 2 **157.1** **M4**	Grid 3 **154.2** **M4**
Grid 4 **84.223** **M4**	Grid 5 **87.459** **M4**	Grid 6 **85.298** **M4**
Grid 7 **151.8** **M4**	Grid 8 **155.1** **M4**	Grid 9 **152.4** **M4**

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: GSM 850; Communication System Band: Exported from older format (data unavailable - please correct).; 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

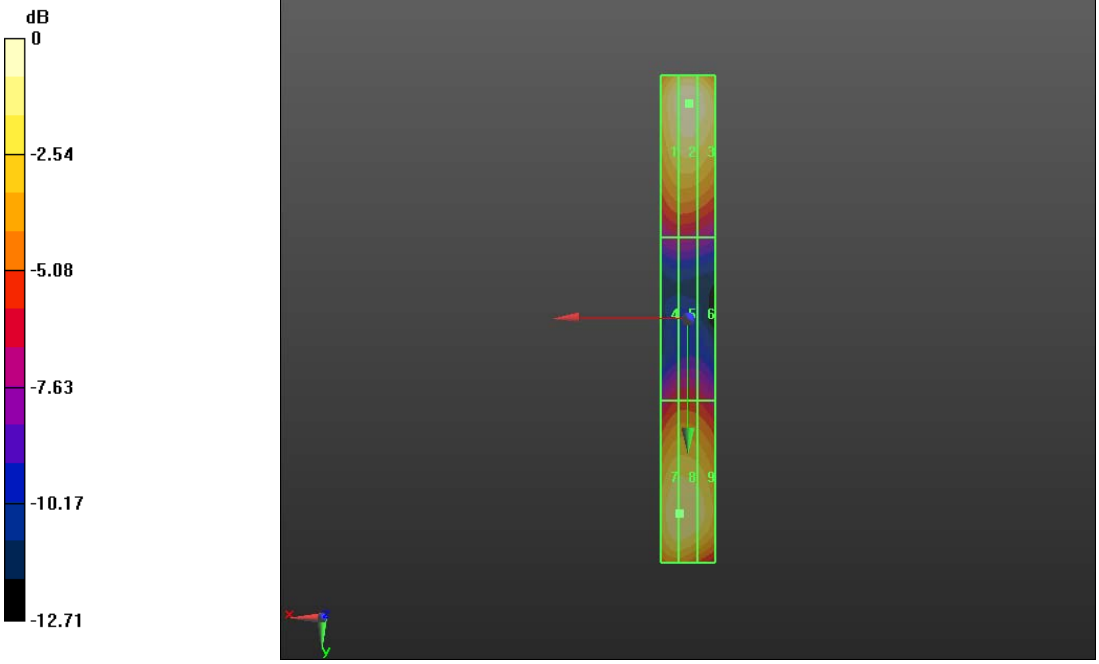
Device Reference Point: 0, 0, -6.3 mm

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**



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; Serial: 32EFD945

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)

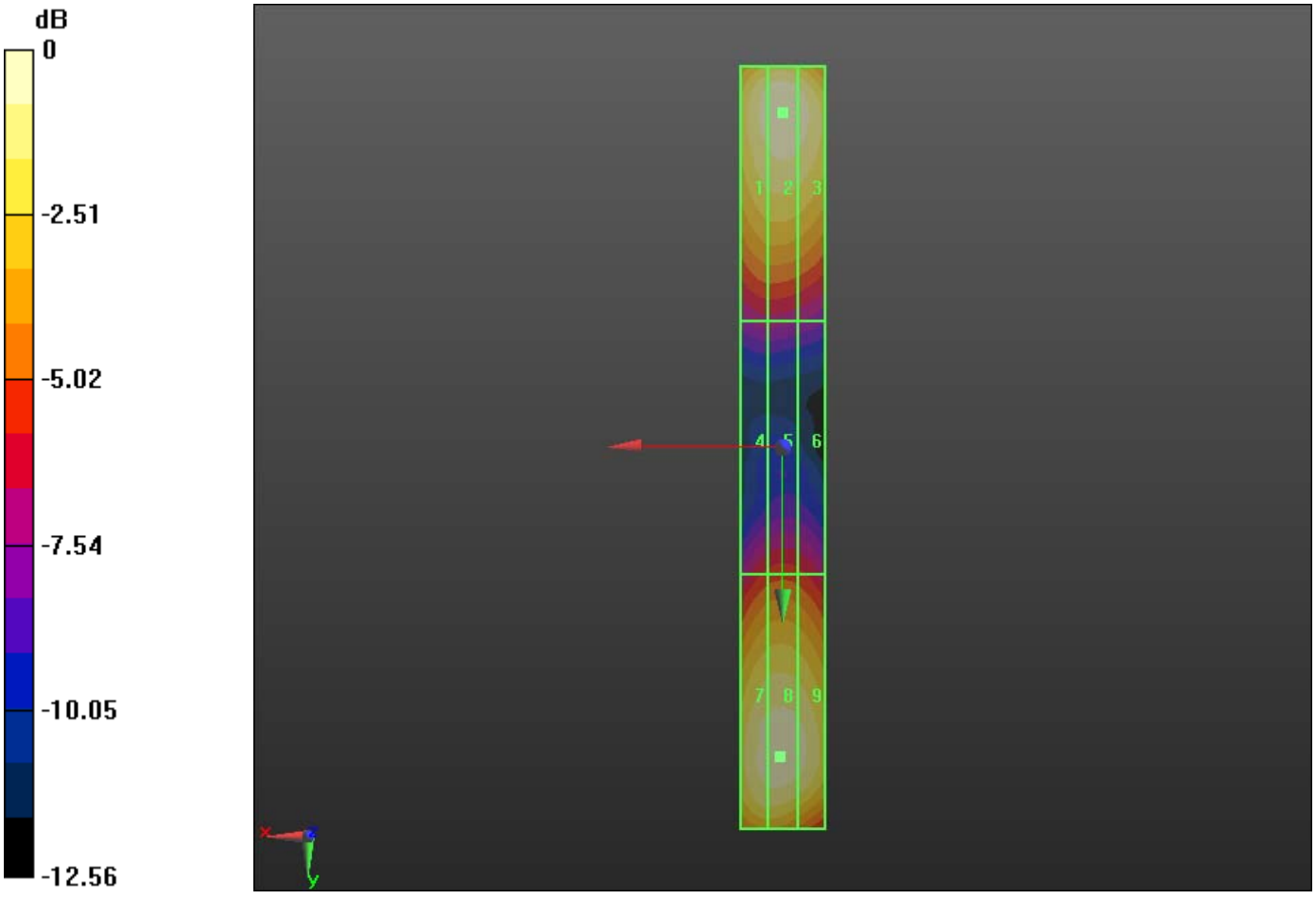
DASY5 Configuration:

- 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** **M 4**	Grid 2 **159.3** **M 4**	Grid 3 **154.5** **M 4**
Grid 4 **84.666** **M4**	Grid 5 **86.943** **M4**	Grid 6 **84.863** **M4**
Grid 7 **153.2** **M 4**	Grid 8 **154.9** **M 4**	Grid 9 **151.1** **M 4**



0 dB = 159.3V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_AM80%835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

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

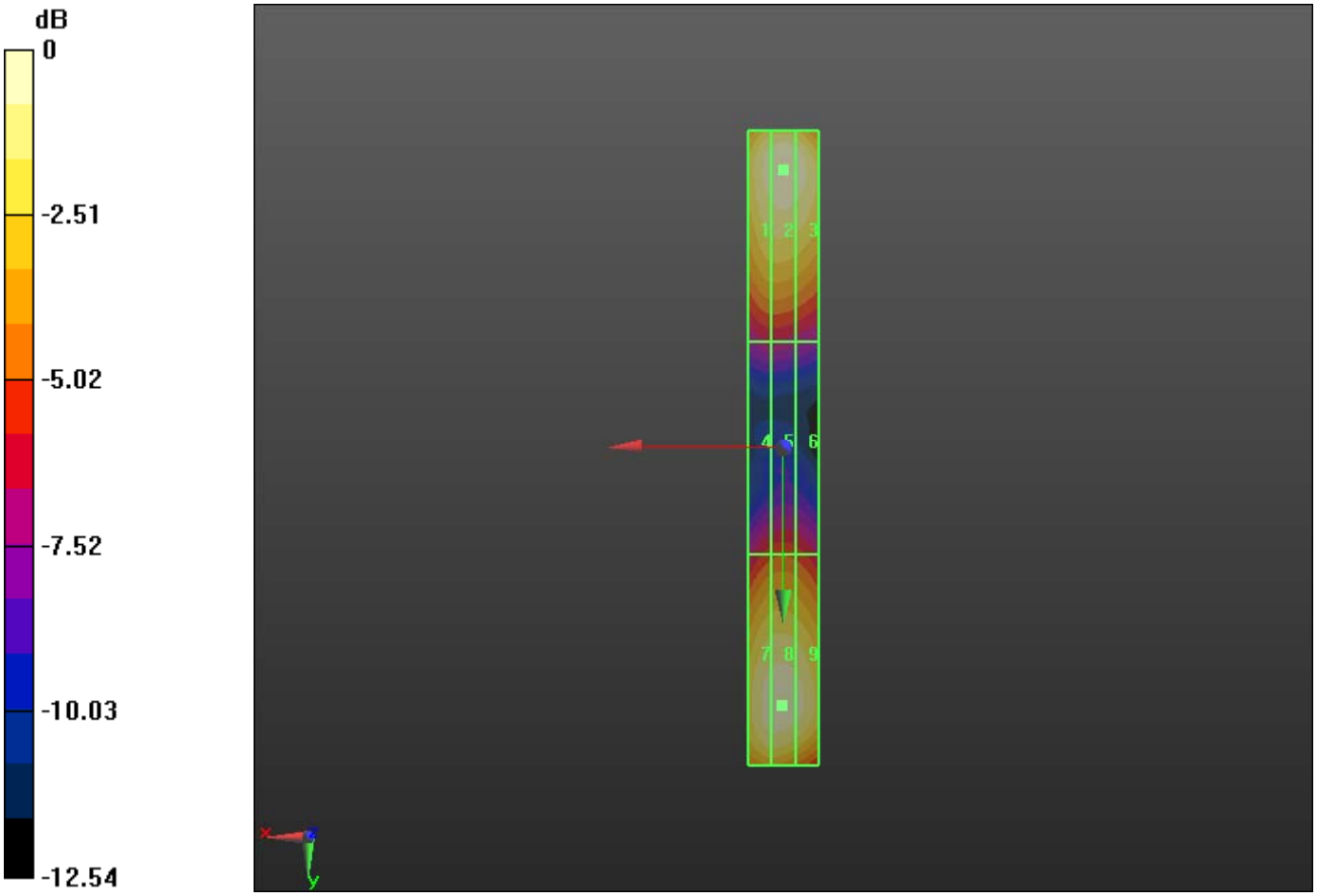
Device Reference Point: 0, 0, -6.3 mm

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**



0 dB = 99.820V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CDMA_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: CDMA 800; Communication System Band: Exported from older format (data unavailable - please correct).; 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 = 63.653 V/m

Probe Modulation Factor = 1.000

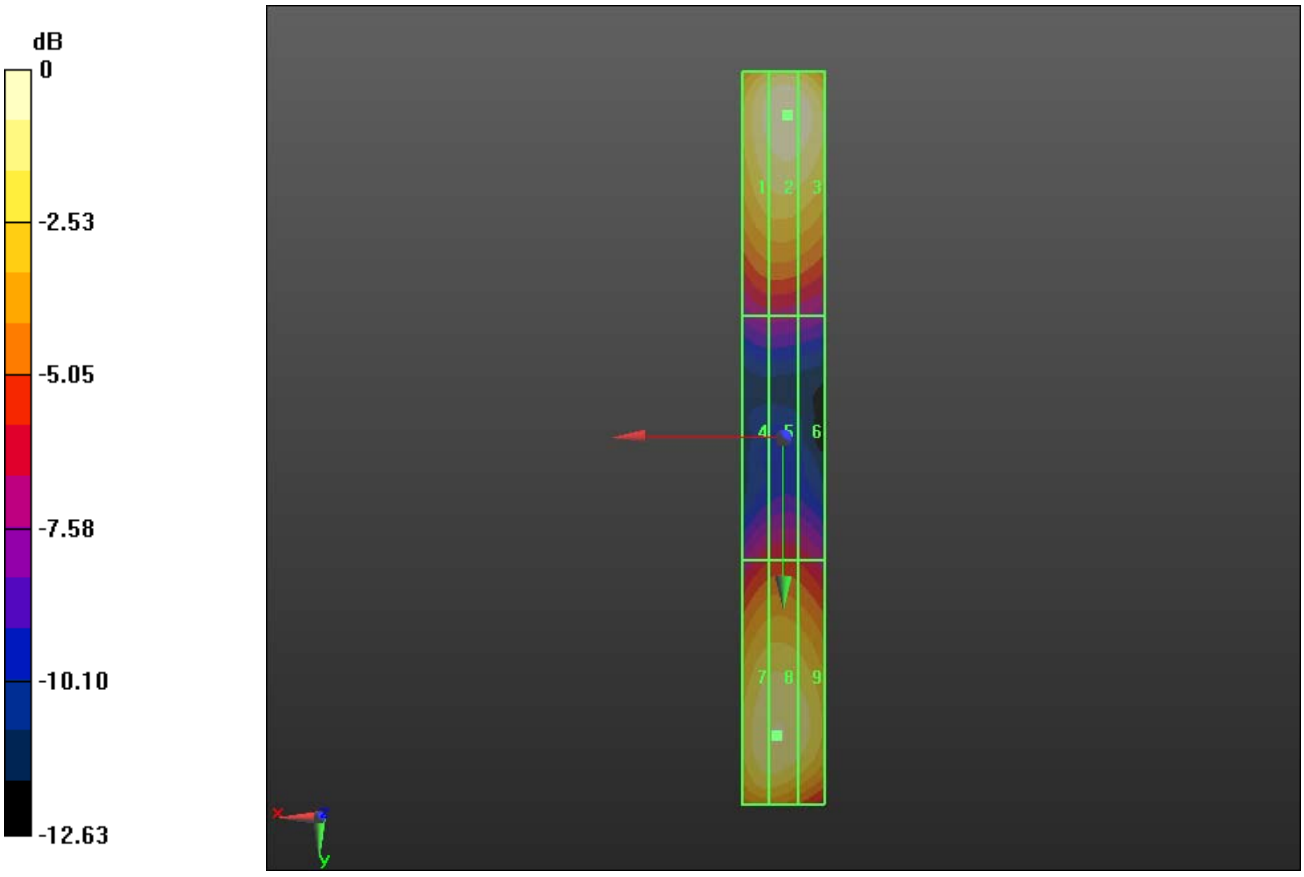
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 45.492 V/m; Power Drift = 0.04 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **60.457** **M4**	Grid 2 **63.653** **M4**	Grid 3 **62.702** **M4**
Grid 4 **32.119** **M4**	Grid 5 **32.806** **M4**	Grid 6 **32.009** **M4**
Grid 7 **57.694** **M4**	Grid 8 **58.081** **M4**	Grid 9 **56.094** **M4**



0 dB = 63.650V/m

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Dipole E-Field measurement/E Scan _CW_CDMA835_PMF - measurement distance from the probe sensor center to CD835 Dipole = 10mm 2/Hearing Aid Compatibility Test (41x361x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 60.020 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 45.311 V/m; Power Drift = -0.13 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **58.156** **M4**	Grid 2 **60.020** **M4**	Grid 3 **58.370** **M4**
Grid 4 **31.911** **M4**	Grid 5 **32.721** **M4**	Grid 6 **32.052** **M4**
Grid 7 **57.400** **M4**	Grid 8 **58.565** **M4**	Grid 9 **57.669** **M4**

Dipole E-Field measurement/E Scan _AM80%_CDMA835_PMF - measurement distance from the probe sensor center to CD835 Dipole = 10mm 2 2/Hearing Aid Compatibility Test (41x361x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 37.844 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 28.705 V/m; Power Drift = -0.04 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

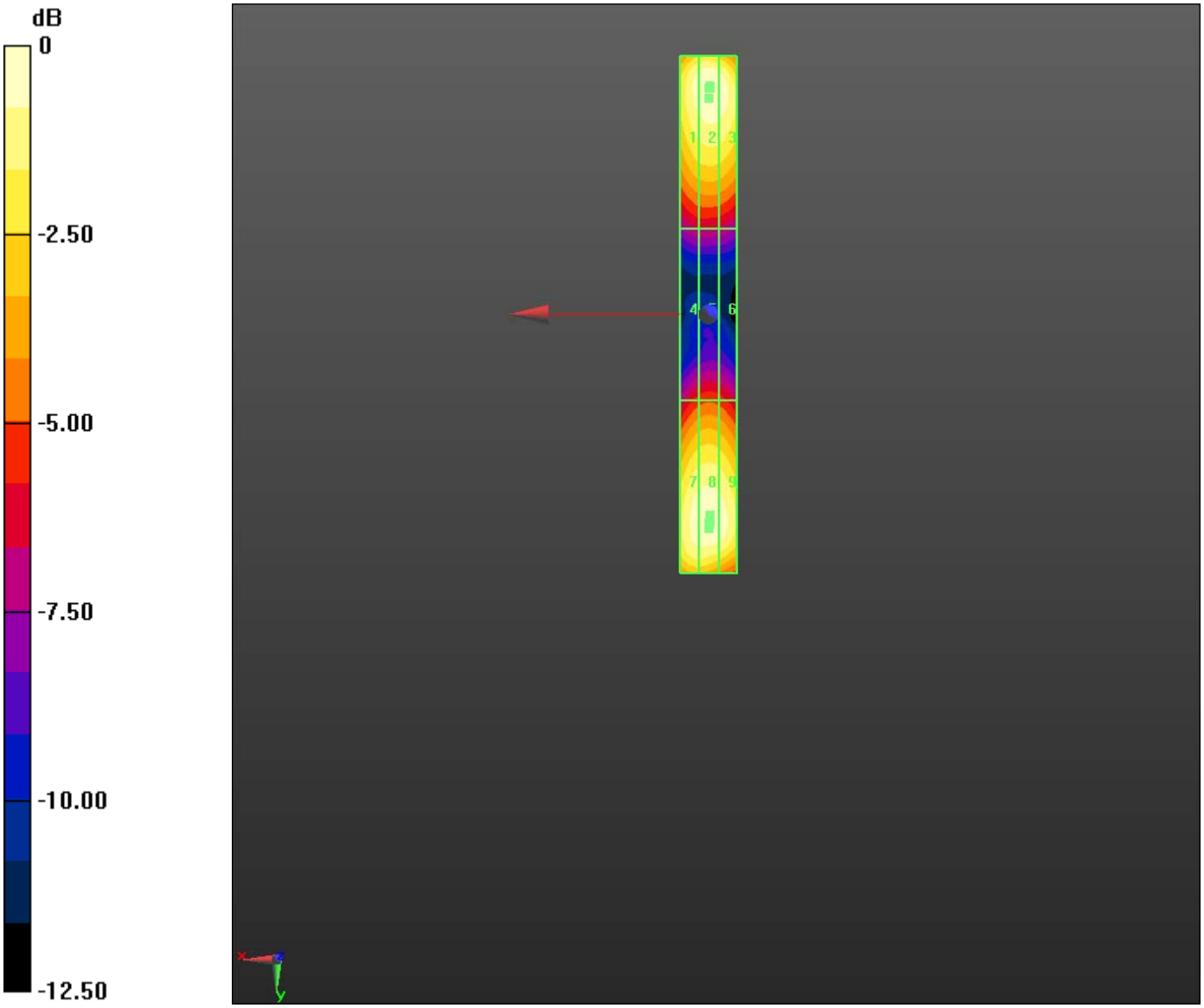
Peak E-field in V/m

Grid 1 **36.315 M4**	Grid 2 **37.844 M4**	Grid 3 **37.101 M4**
Grid 4 **20.380 M4**	Grid 5 **21.197 M4**	Grid 6 **20.358 M4**
Grid 7 **36.696 M4**	Grid 8 **37.645 M4**	Grid 9 **36.579 M4**

Dipole E-Field measurement/E Scan _CDMA835_1_8th_PMF - measurement distance from the probe sensor center to CD835 Dipole = 10mm 2 2 2/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 23.083 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 16.053 V/m; Power Drift = 0.10 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **21.961 M4**	Grid 2 **22.888 M4**	Grid 3 **21.653 M4**
Grid 4 **11.102 M4**	Grid 5 **11.571 M4**	Grid 6 **11.296 M4**
Grid 7 **22.471 M4**	Grid 8 **23.083 M4**	Grid 9 **21.920 M4**



0 dB = 157.1V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_PMF_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

Communication System: CW, Communication System: CDMA 1900; Communication System Band: D1900 (1900.0 MHz), Communication System Band: CDMA 2000 PCS; Frequency: 1880 MHz;Communication System PAR: 0, Communication System PAR: 9.19 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: 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 - 1880_validation_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 = 133.7 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 122.4 V/m; Power Drift = 0.04 dB

Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **128.8** **M2**	Grid 2 **133.7** **M2**	Grid 3 **127.5** **M2**
Grid 4 **82.667** **M3**	Grid 5 **87.106** **M3**	Grid 6 **86.101** **M3**
Grid 7 **120.7** **M2**	Grid 8 **123.8** **M2**	Grid 9 **121.9** **M2**

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM_1880 MHz_R2

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

Communication System: GSM 1900; Communication System Band: Exported from older format (data unavailable - please correct).; 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

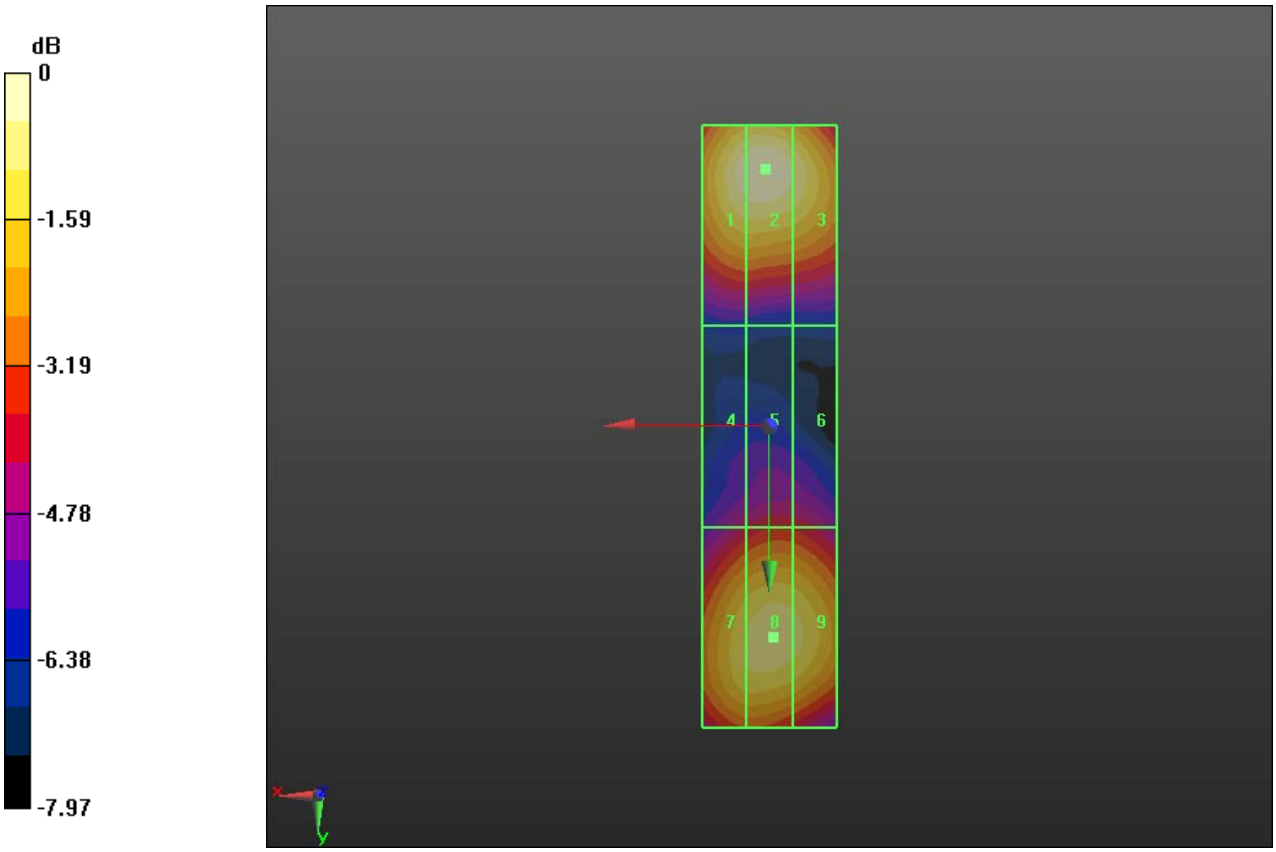
Device Reference Point: 0, 0, -6.3 mm

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 **24.636** **M4**	Grid 8 **25.539** **M4**	Grid 9 **25.116** **M4**



0 dB = 27.660V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CW1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

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

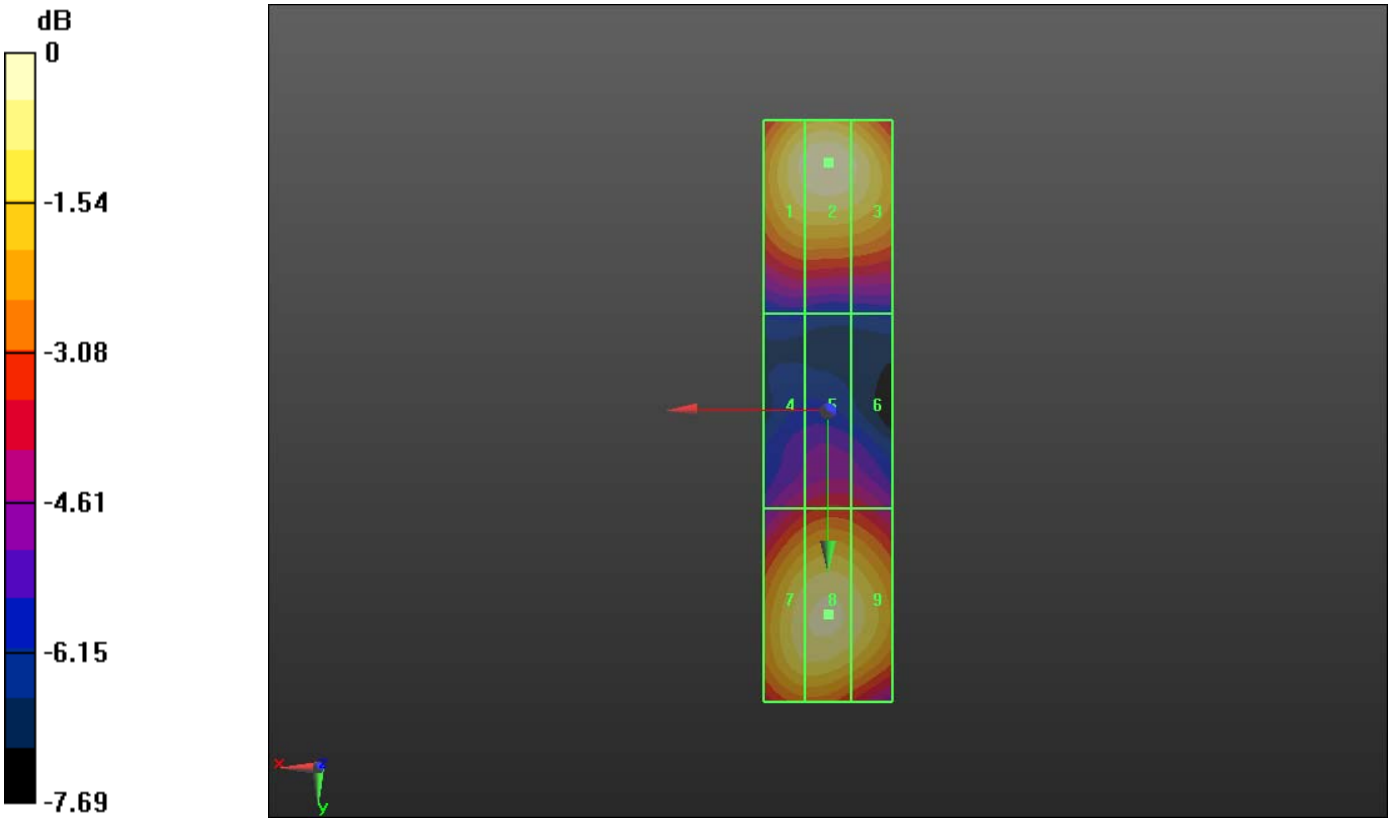
Device Reference Point: 0, 0, -6.3 mm

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**



0 dB = 82.220V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_AM80%1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

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

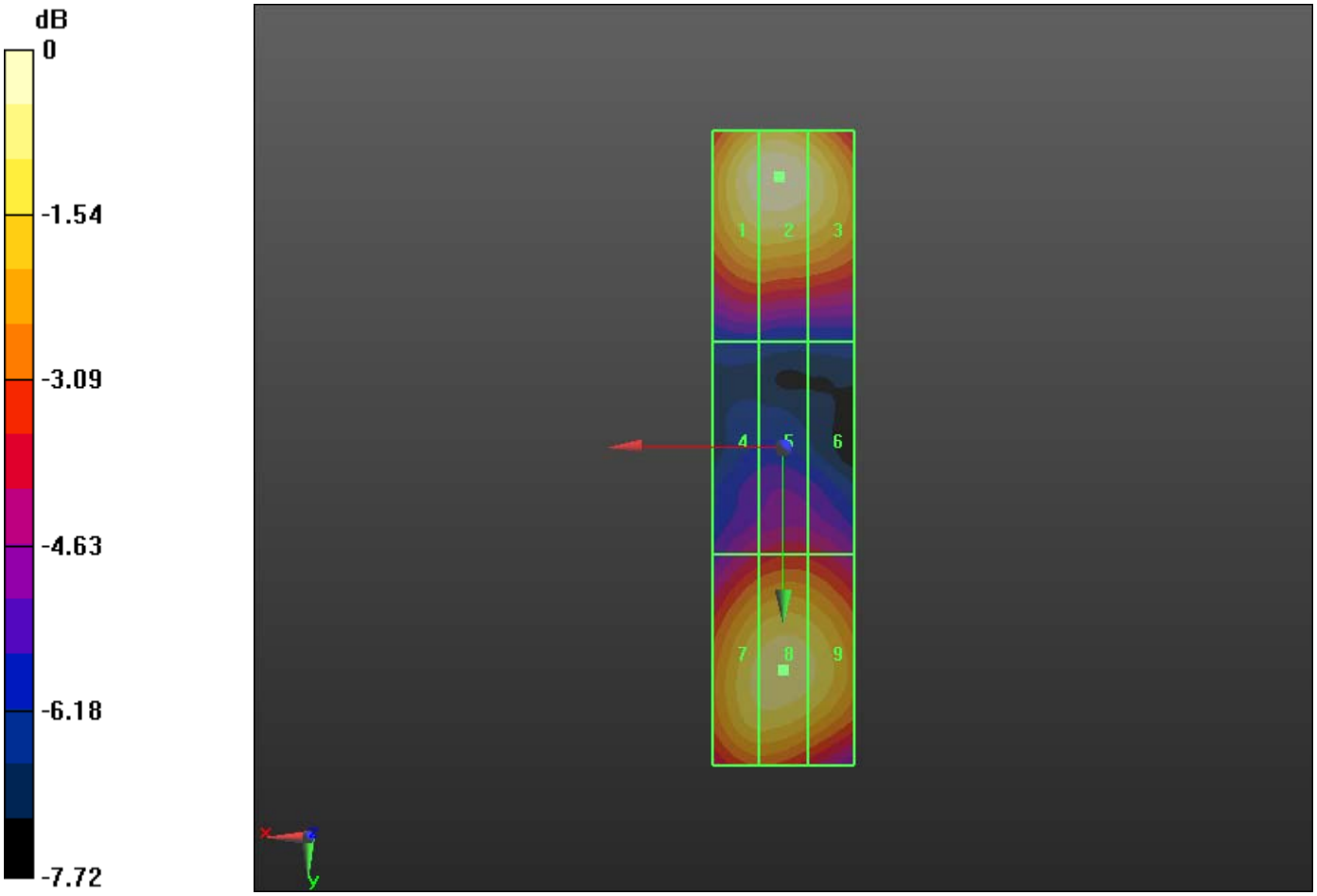
Device Reference Point: 0, 0, -6.3 mm

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 **33.462** **M4**	Grid 5 **35.058** **M4**	Grid 6 **34.643** **M4**
Grid 7 **48.429** **M4**	Grid 8 **49.374** **M4**	Grid 9 **48.243** **M4**



0 dB = 53.340V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CDMA_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

Communication System: WCDMA FDD II; Communication System Band: Exported from older format (data unavailable - please correct).; 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 = 43.150 V/m

Probe Modulation Factor = 1.000

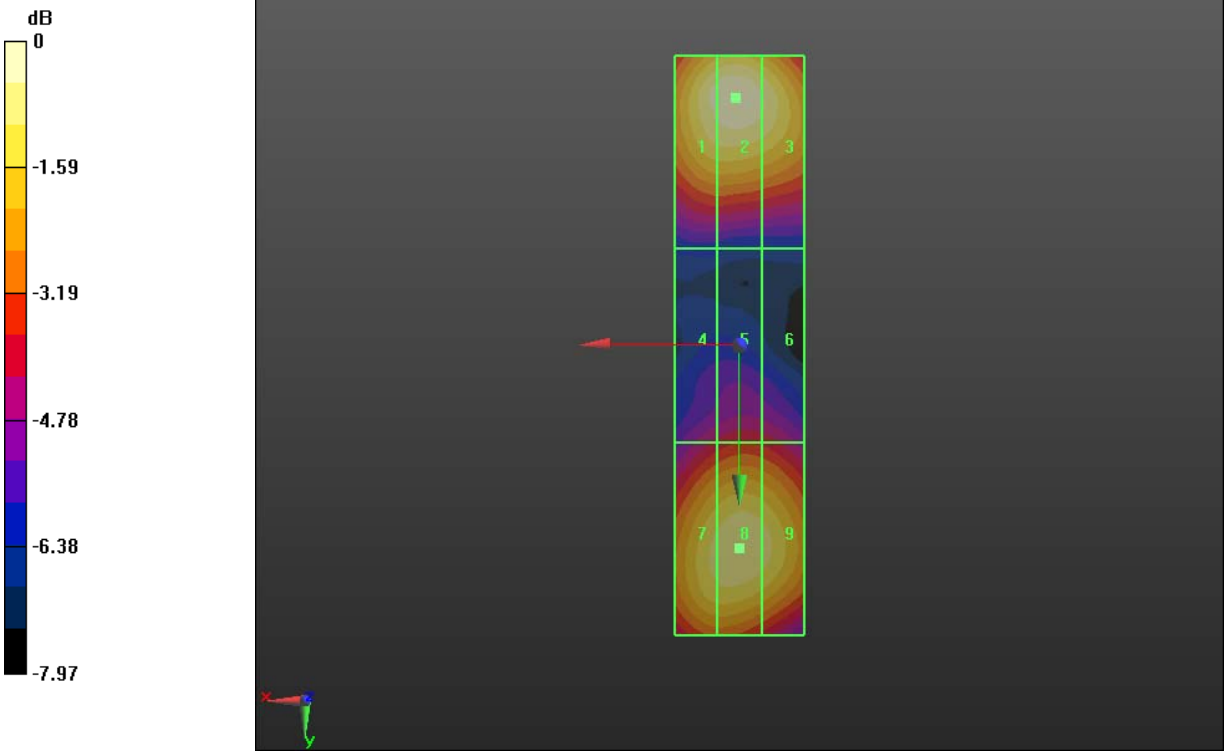
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 40.108 V/m; Power Drift = -0.01 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **41.912** **M4**	Grid 2 **43.150** **M4**	Grid 3 **40.971** **M4**
Grid 4 **26.905** **M4**	Grid 5 **28.223** **M4**	Grid 6 **27.711** **M4**
Grid 7 **39.111** **M4**	Grid 8 **40.205** **M4**	Grid 9 **39.292** **M4**



0 dB = 43.150V/m

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Test Laboratory: RIM Testing Services

Dipole E-Field measurement/E Scan - CW_CDMA1900_measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 36.285 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 33.617 V/m; Power Drift = 0.04 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **34.758 M4**	Grid 2 **36.285 M4**	Grid 3 **34.848 M4**
Grid 4 **22.360 M4**	Grid 5 **23.679 M4**	Grid 6 **23.521 M4**
Grid 7 **32.897 M4**	Grid 8 **33.681 M4**	Grid 9 **33.221 M4**

Dipole E-Field measurement/E Scan - AM80%_CDMA1900_measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2 2/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 23.269 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 21.624 V/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

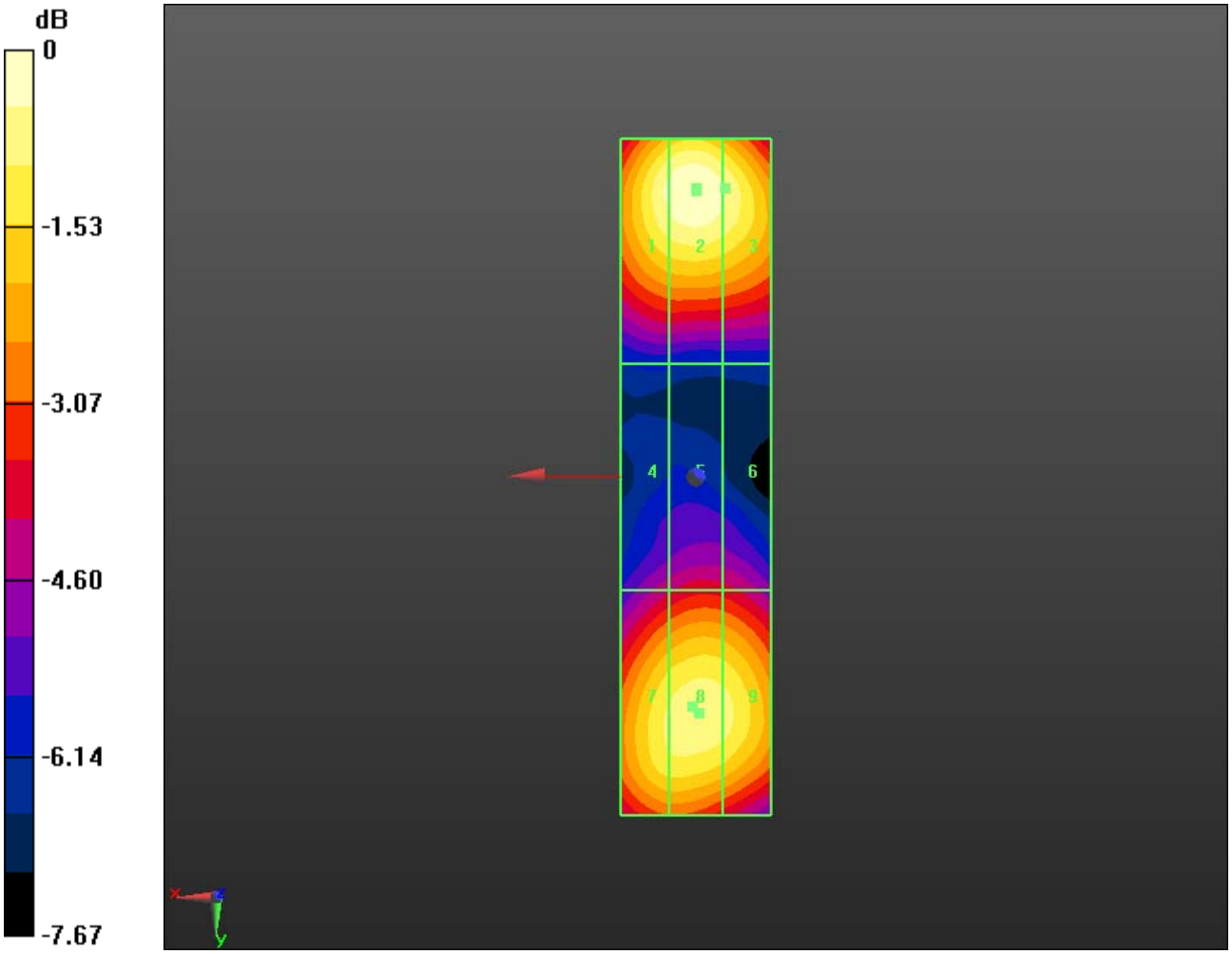
Peak E-field in V/m

Grid 1 **22.379** **M4**	Grid 2 **23.269** **M4**	Grid 3 **22.386** **M4**
Grid 4 **14.427** **M4**	Grid 5 **15.311** **M4**	Grid 6 **15.198** **M4**
Grid 7 **21.091** **M4**	Grid 8 **21.728** **M4**	Grid 9 **21.374** **M4**

Dipole E-Field measurement/E Scan - CDMA1900_1_8th_measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2 2 2/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 14.129 V/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 13.323 V/m; Power Drift = -0.93 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **12.459** **M4**	Grid 2 **14.120** **M4**	Grid 3 **14.129** **M4**
Grid 4 **8.084** **M4**	Grid 5 **8.555** **M4**	Grid 6 **8.489** **M4**
Grid 7 **13.250** **M4**	Grid 8 **13.548** **M4**	Grid 9 **12.104** **M4**



0 dB = 133.7V/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_PMF_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: CW, Communication System: CDMA 800, Communication System: CDMA 850; Communication System Band: D835 (835.0 MHz), Communication System Band: CDMA 2000 BC 10 , Communication System Band: CDMA 2000 Cellular; Frequency: 835 MHz, Frequency: 820.5 MHz, Frequency: 836.52 MHz;Communication System PAR: 0, Communication System PAR: 9.19 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: 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 meausrement with H3DV6 probe/H 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 = 0.479 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.509 A/m; Power Drift = -0.07 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.393** **M4**	Grid 2 **0.406** **M4**	Grid 3 **0.381** **M4**
Grid 4 **0.459** **M4**	Grid 5 **0.479** **M4**	Grid 6 **0.450** **M4**
Grid 7 **0.419** **M4**	Grid 8 **0.435** **M4**	Grid 9 **0.399** **M4**

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: GSM 850; Communication System Band: Exported from older format (data unavailable - please correct).; 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
  - Modulation Compensation: Not calibrated
- 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 meausrement 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

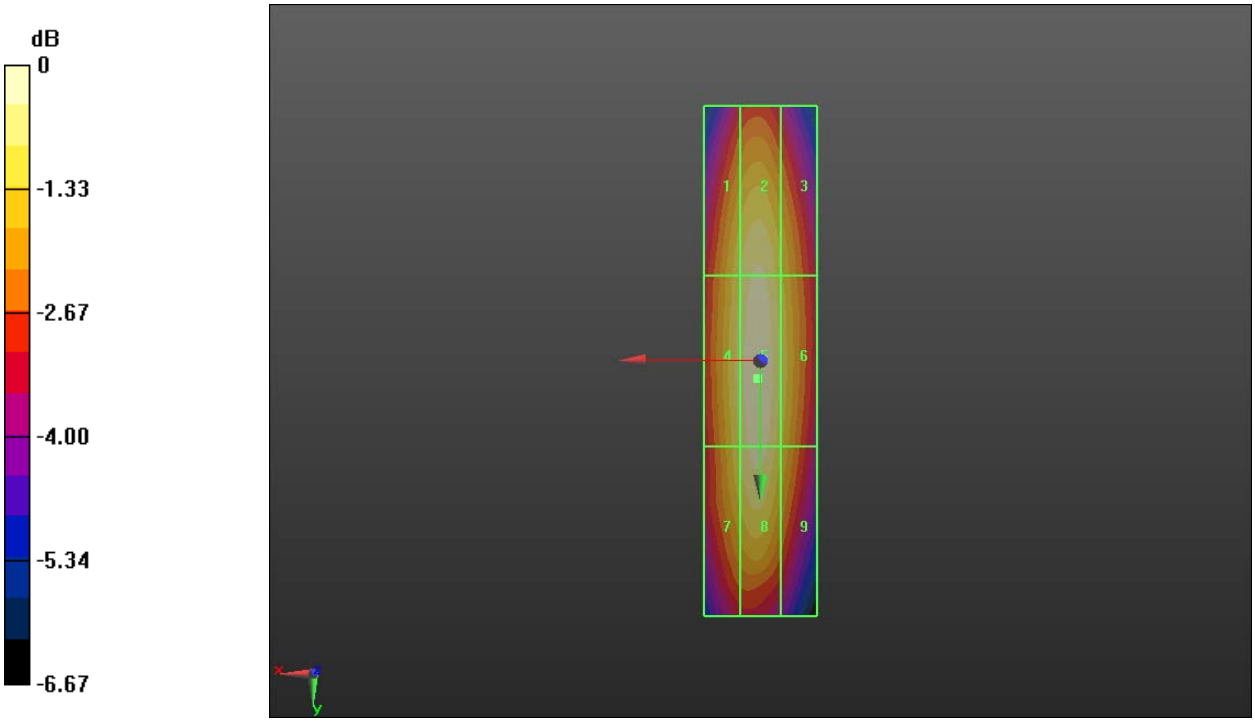
Device Reference Point: 0, 0, -6.3 mm

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**



0 dB = 0.170A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: CW; Communication System Band: D835 (835.0 MHz);
Frequency: 835 MHz;Communication System PAR: 0 dB
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 0 kg/m^3
Phantom section: RF Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

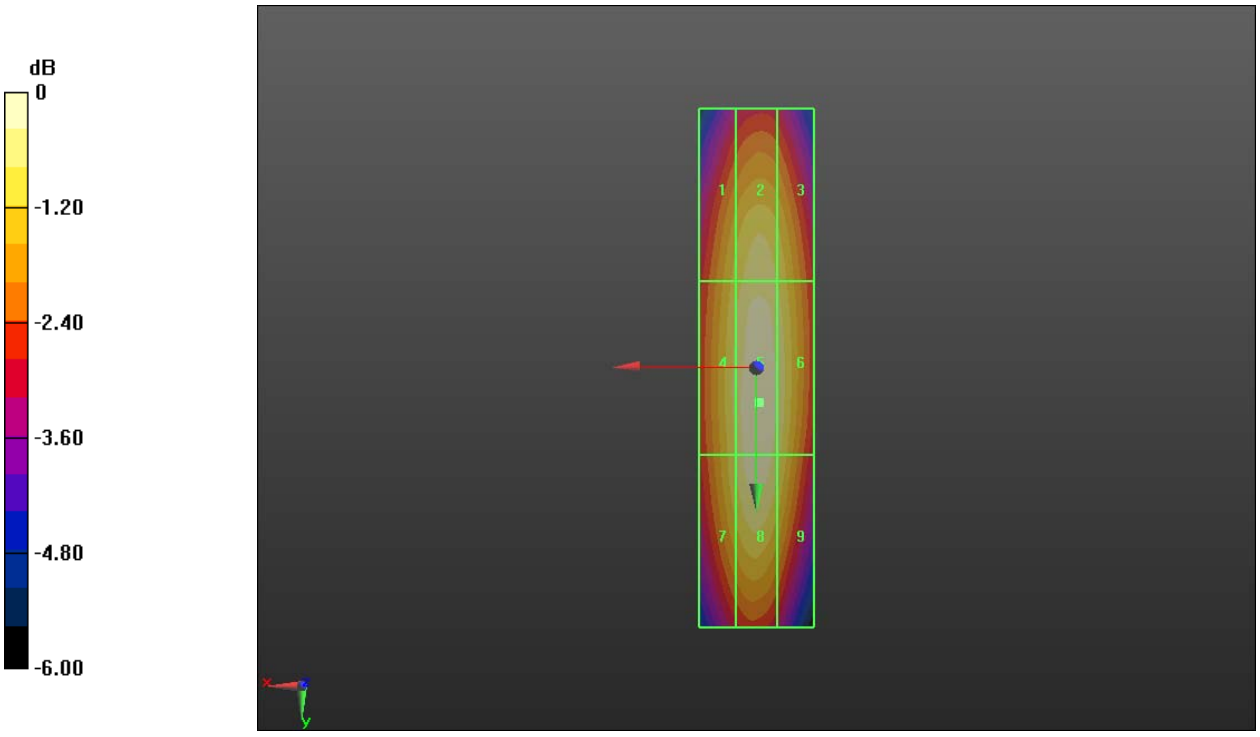
DASY5 Configuration:

- 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 meausrement 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**



0 dB = 0.480A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

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 meausrement 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

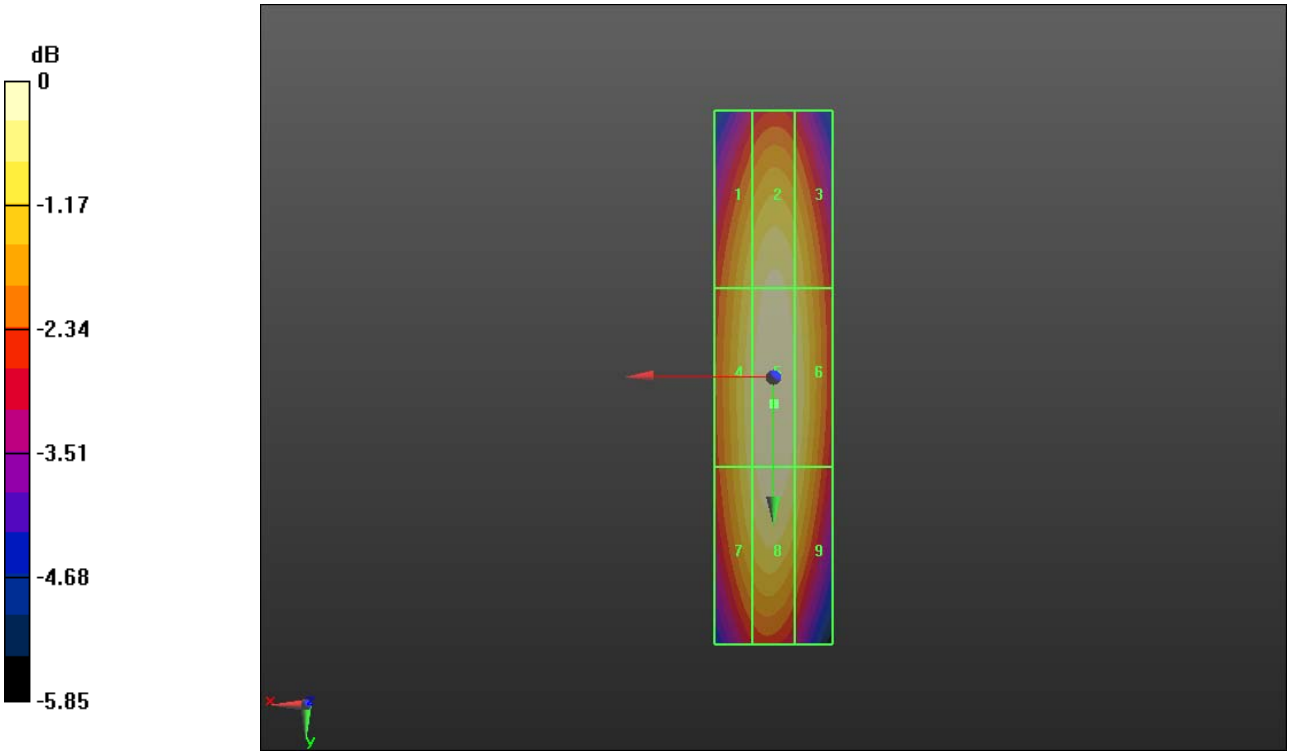
Device Reference Point: 0, 0, -6.3 mm

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**



0 dB = 0.300A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CDMA_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 32EFD945

Communication System: CDMA 800; Communication System Band: Exported from older format (data unavailable - please correct).; 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 meausrement 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 = 0.183 A/m

Probe Modulation Factor = 1.000

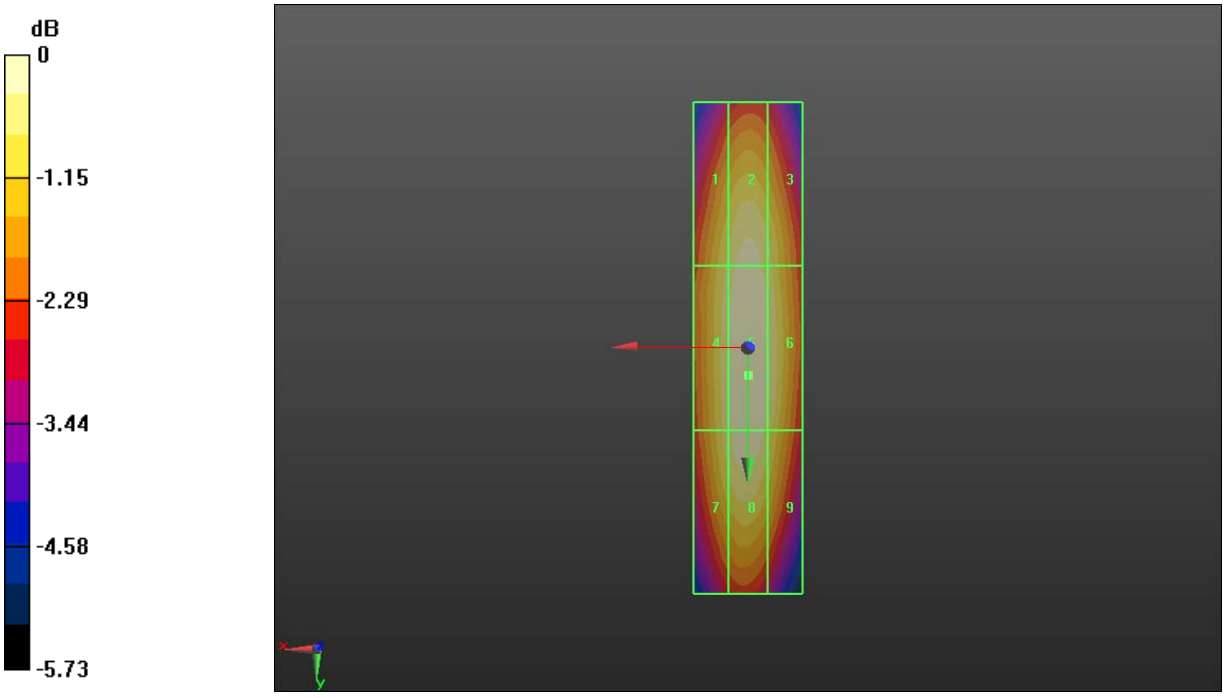
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.196 A/m; Power Drift = 0.01 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.168** **M4**	Grid 2 **0.176** **M4**	Grid 3 **0.169** **M4**
Grid 4 **0.173** **M4**	Grid 5 **0.183** **M4**	Grid 6 **0.175** **M4**
Grid 7 **0.171** **M4**	Grid 8 **0.180** **M4**	Grid 9 **0.169** **M4**



0 dB = 0.180A/m

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Test Laboratory: RIM Testing Services

Dipole H-Field meausrement with H3DV6 probe/H Scan - CDMA835_1_8th_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 = 0.064 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.067 A/m; Power Drift = -0.08 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.052 M4**	Grid 2 **0.055 M4**	Grid 3 **0.052 M4**
Grid 4 **0.060 M4**	Grid 5 **0.064 M4**	Grid 6 **0.060 M4**
Grid 7 **0.055 M4**	Grid 8 **0.056 M4**	Grid 9 **0.052 M4**

Dipole H-Field meausrement with H3DV6 probe/H Scan - CW_CDMA835_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 = 0.177 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.191 A/m; Power Drift = 0.0078 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

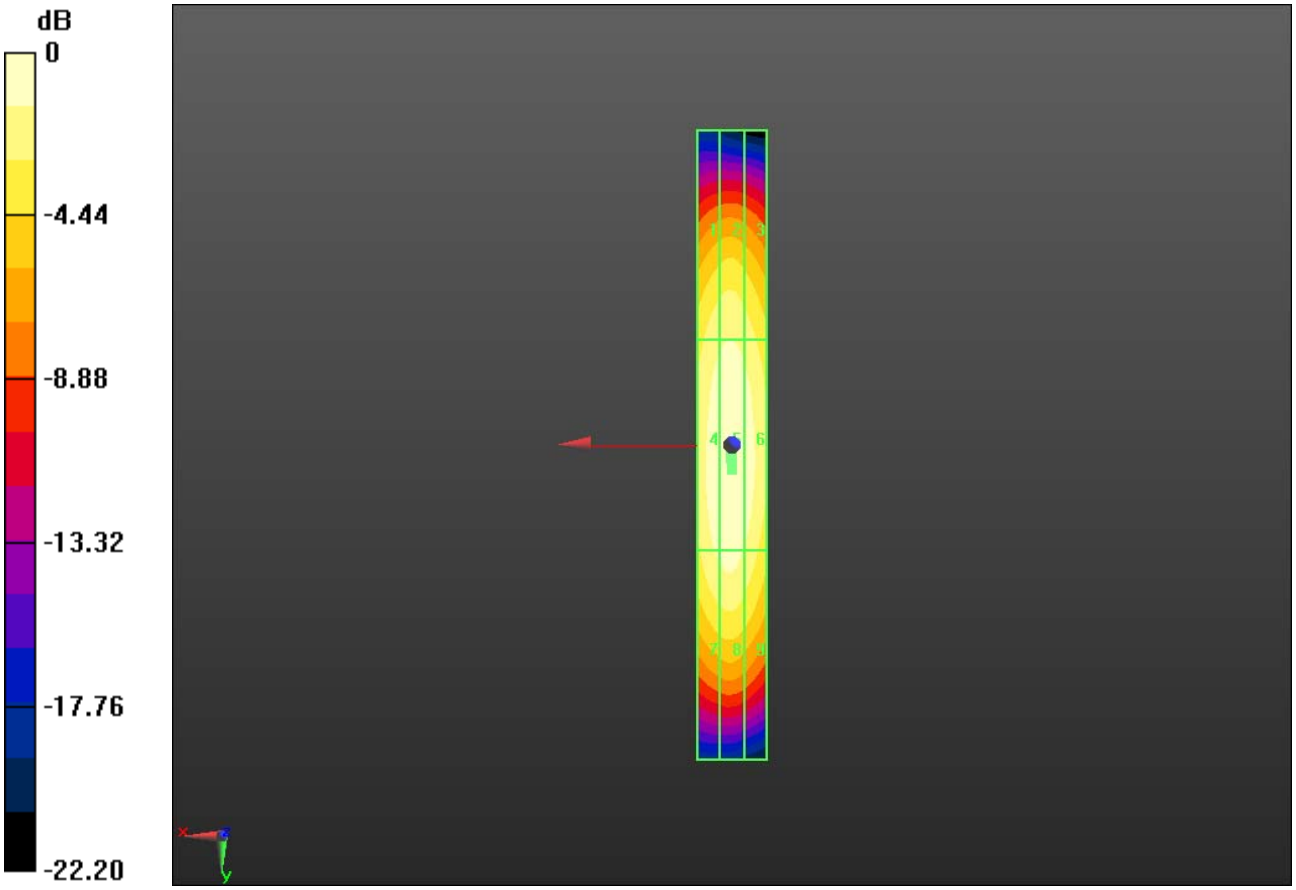
Peak H-field in A/m

Grid 1 **0.145 M4**	Grid 2 **0.151 M4**	Grid 3 **0.144 M4**
Grid 4 **0.169 M4**	Grid 5 **0.177 M4**	Grid 6 **0.167 M4**
Grid 7 **0.154 M4**	Grid 8 **0.159 M4**	Grid 9 **0.146 M4**

Dipole H-Field meausrement with H3DV6 probe/H Scan - AM80%_CDMA835_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 = 0.114 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.120 A/m; Power Drift = 0.10 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.093 M4**	Grid 2 **0.097 M4**	Grid 3 **0.092 M4**
Grid 4 **0.109 M4**	Grid 5 **0.114 M4**	Grid 6 **0.108 M4**
Grid 7 **0.100 M4**	Grid 8 **0.103 M4**	Grid 9 **0.095 M4**



0 dB = 0.480A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_PMF_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0, Communication System PAR: 9.19 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: 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 meausrement 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 = 0.466 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.494 A/m; Power Drift = -0.06 dB

Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.429 M2**	Grid 2 **0.449 M2**	Grid 3 **0.431 M2**
Grid 4 **0.443 M2**	Grid 5 **0.466 M2**	Grid 6 **0.445 M2**
Grid 7 **0.434 M2**	Grid 8 **0.457 M2**	Grid 9 **0.433 M2**

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

Communication System: GSM 1900; Communication System Band: Exported from older format (data unavailable - please correct).; 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 meausrement 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

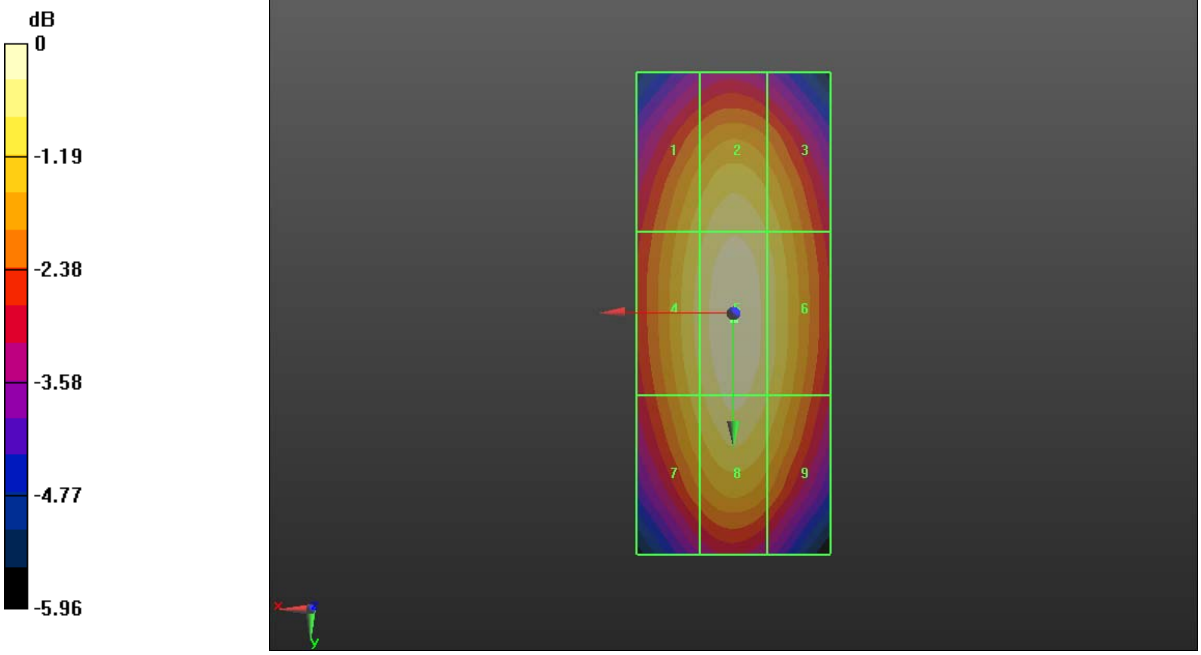
Device Reference Point: 0, 0, -6.3 mm

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**



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; Serial: 32EFD945

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 meausrement 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

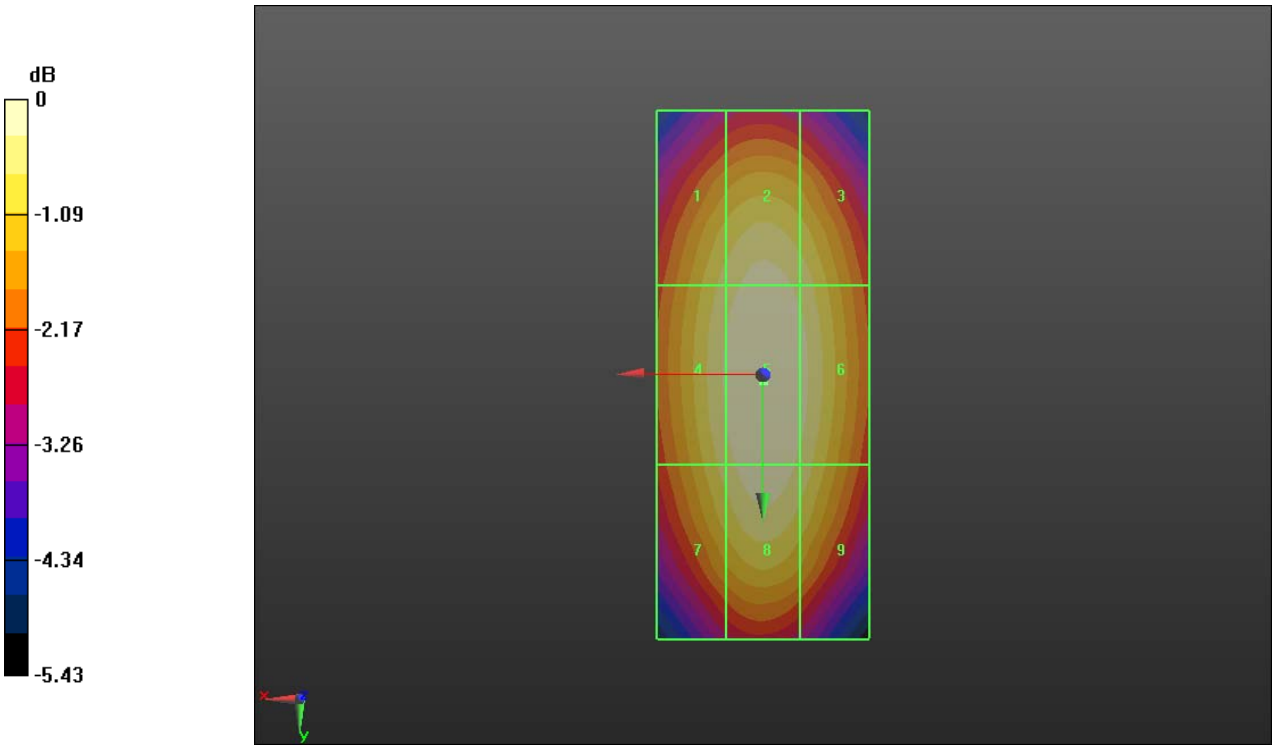
Device Reference Point: 0, 0, -6.3 mm

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**



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; Serial: 32EFD945

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 meausrement 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

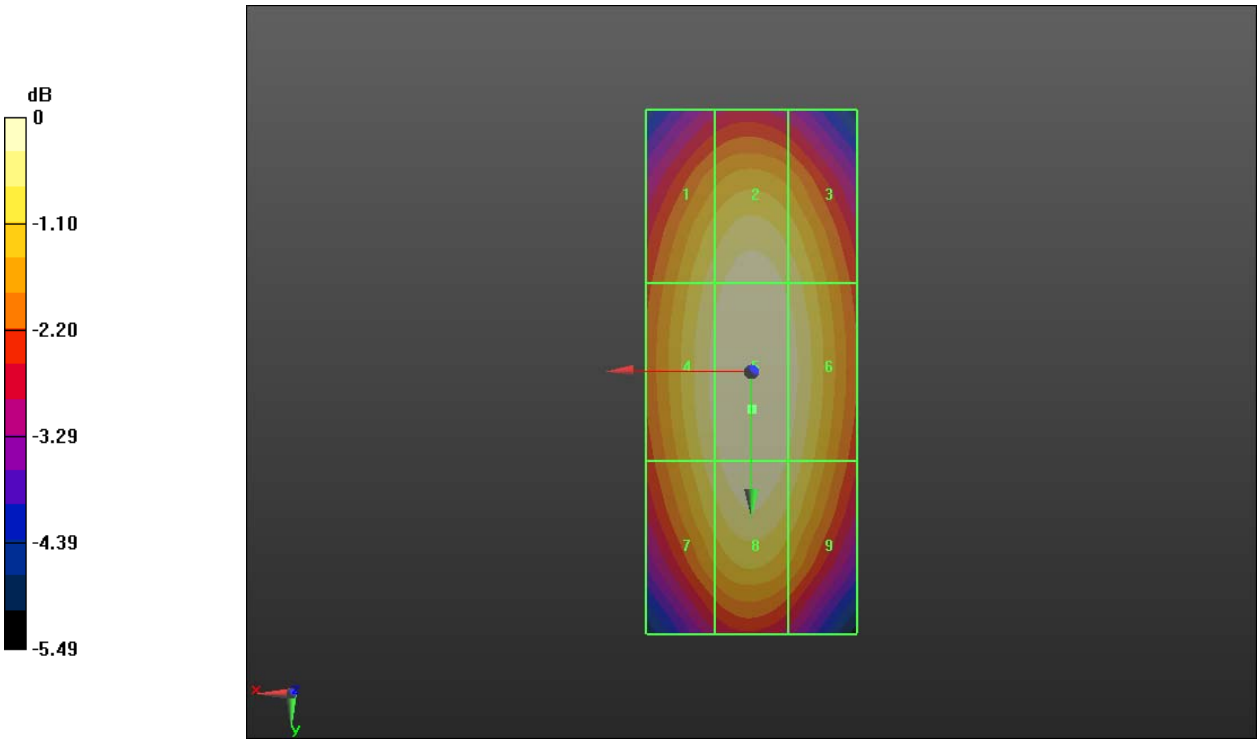
Device Reference Point: 0, 0, -6.3 mm

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

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CDMA_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 32EFD945

Communication System: CDMA 1900; Communication System Band: Exported from older format (data unavailable - please correct).; 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 meausrement 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 = 0.154 A/m

Probe Modulation Factor = 1.000

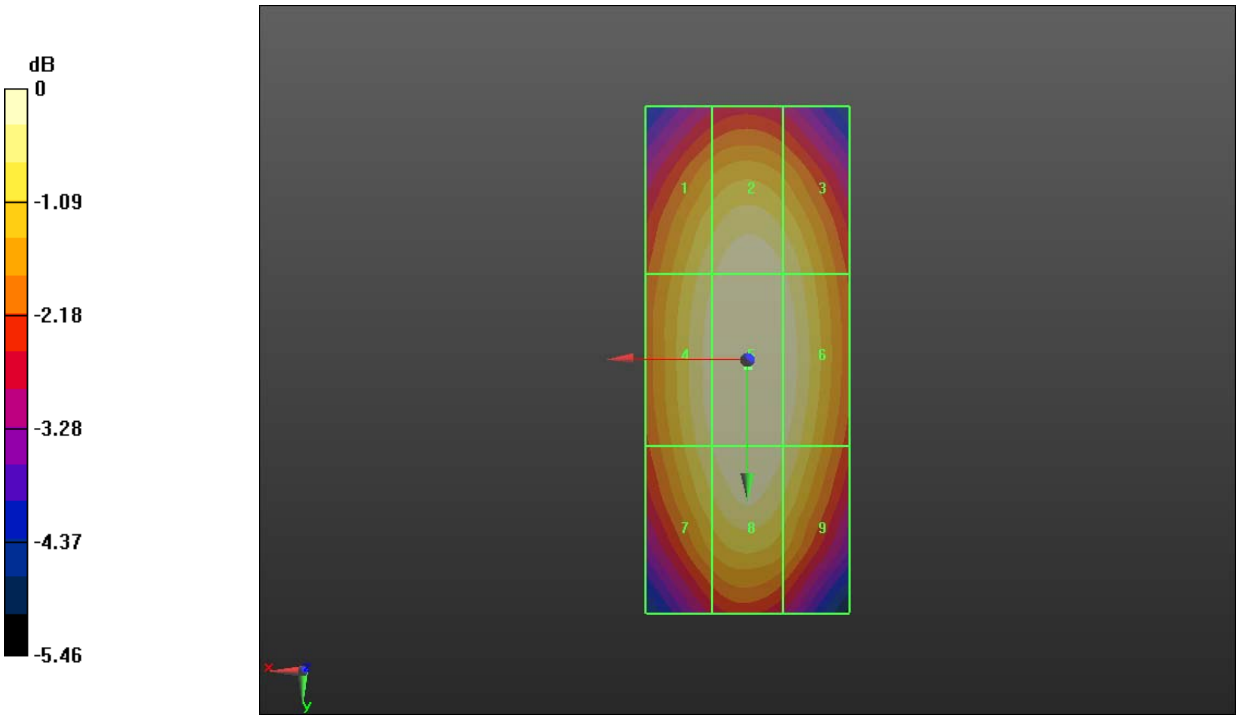
Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.165 A/m; Power Drift = -0.02 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.143** **M4**	Grid 2 **0.150** **M4**	Grid 3 **0.145** **M4**
Grid 4 **0.147** **M4**	Grid 5 **0.154** **M4**	Grid 6 **0.149** **M4**
Grid 7 **0.144** **M4**	Grid 8 **0.152** **M4**	Grid 9 **0.145** **M4**



0 dB = 0.150A/m

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Test Laboratory: RIM Testing Services

Dipole H-Field meausrement with H3DV6 probe/H Scan - CW_CDMA1900_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 = 0.126 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.135 A/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.109 M4**	Grid 2 **0.113 M4**	Grid 3 **0.108 M4**
Grid 4 **0.121 M4**	Grid 5 **0.126 M4**	Grid 6 **0.120 M4**
Grid 7 **0.110 M4**	Grid 8 **0.116 M4**	Grid 9 **0.109 M4**

Dipole H-Field meausrement with H3DV6 probe/H Scan - AM80%_CDMA1900_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 = 0.081 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.086 A/m; Power Drift = -0.0042 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

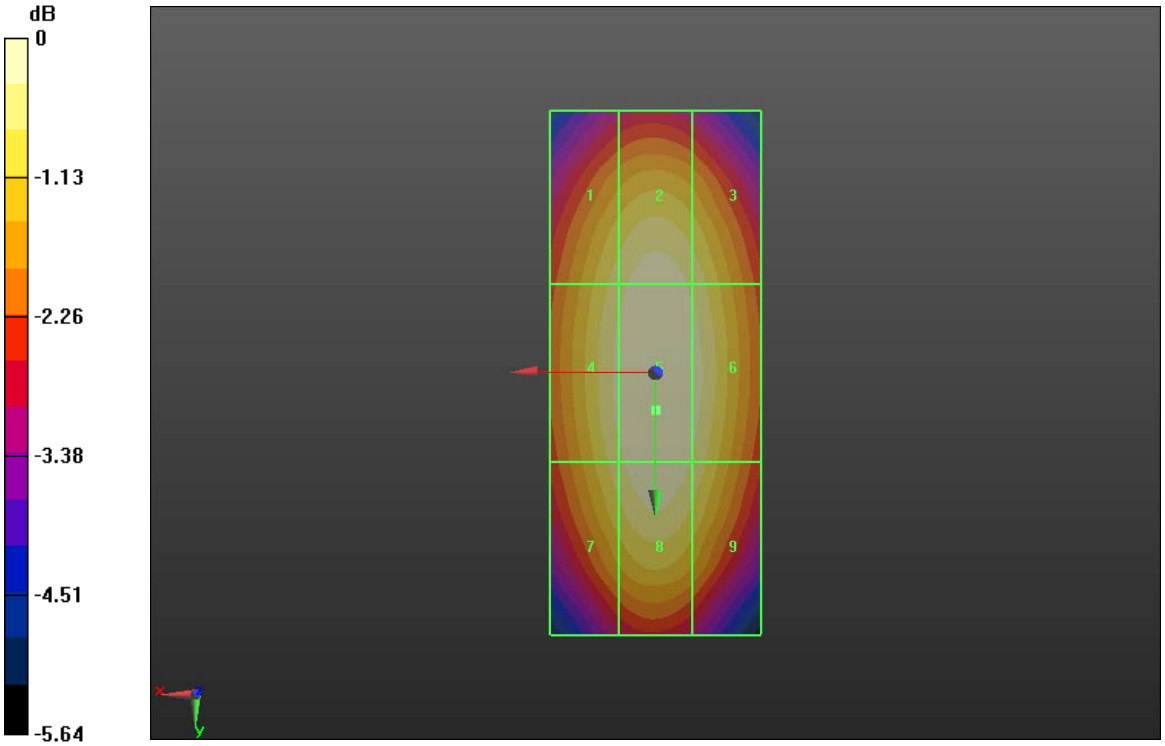
Grid 1 **0.070 M4**	Grid 2 **0.073 M4**	Grid 3 **0.070 M4**
Grid 4 **0.077 M4**	Grid 5 **0.081 M4**	Grid 6 **0.077 M4**
Grid 7 **0.070 M4**	Grid 8 **0.074 M4**	Grid 9 **0.069 M4**

Dipole H-Field meausrement with H3DV6 probe/H Scan - CDMA1900_1_8th_measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1):

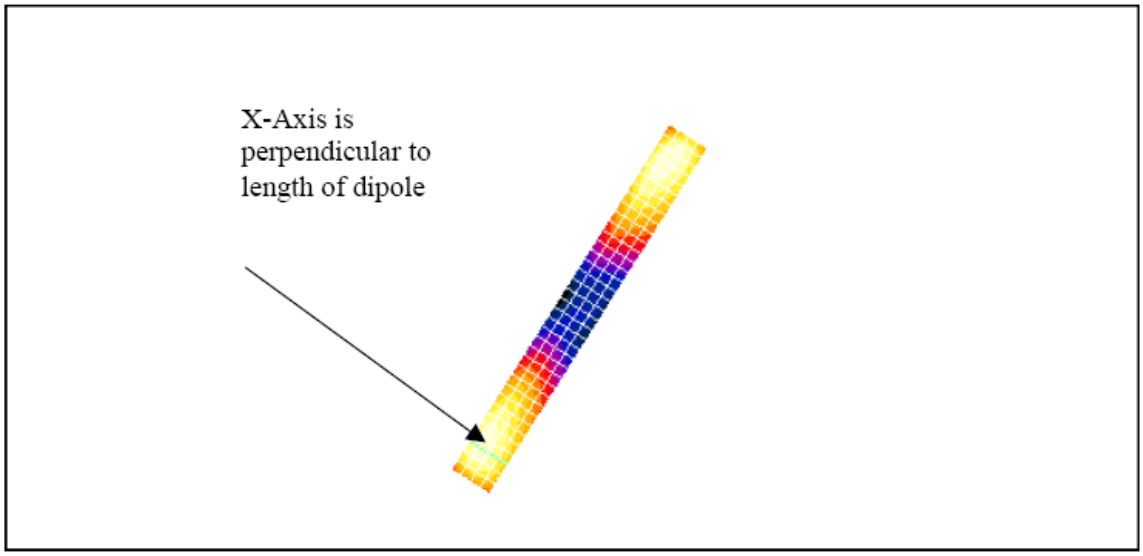
Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.051 A/m
Probe Modulation Factor = 1.000
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.050 A/m; Power Drift = -0.17 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.040 M4**	Grid 2 **0.041 M4**	Grid 3 **0.038 M4**
Grid 4 **0.047 M4**	Grid 5 **0.051 M4**	Grid 6 **0.048 M4**
Grid 7 **0.040 M4**	Grid 8 **0.042 M4**	Grid 9 **0.040 M4**



0 dB = 0.470A/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: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3
Phantom section: H Device Section

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

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

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

E in V/m (Time averaged)

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

E in V/m (Slot averaged)

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

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

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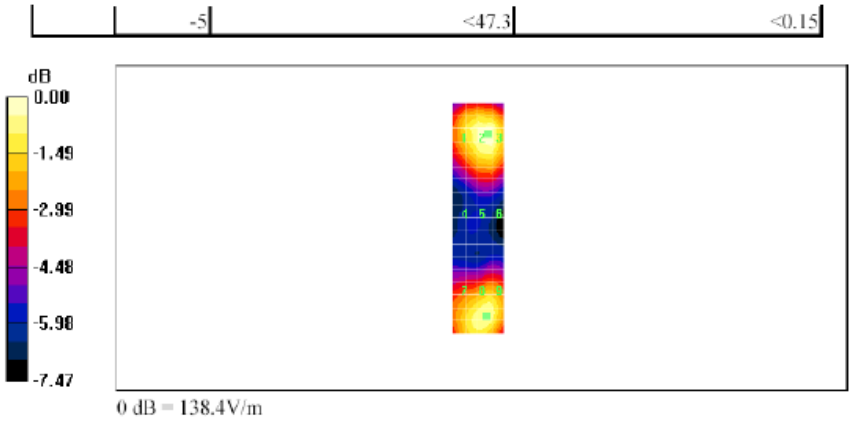


Date/Time: 14/07/2005 11:44:51 AM

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: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3
Phantom section: H Device Section

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

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

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

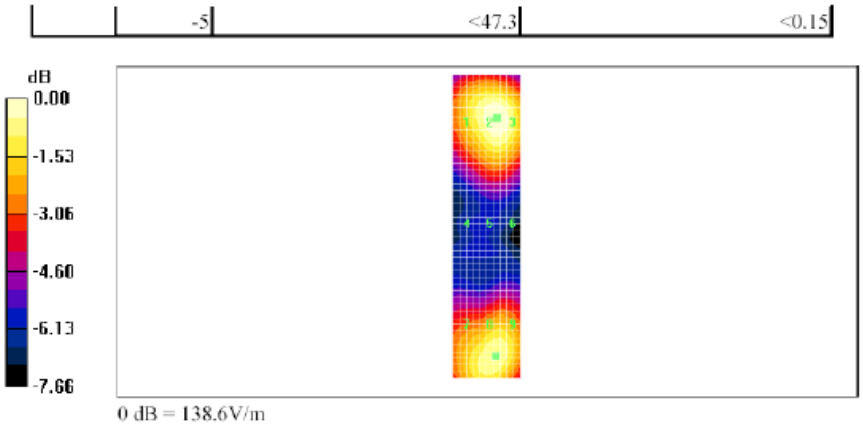
E in V/m (Time averaged)

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

E in V/m (Slot averaged)

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

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



0 dB = 138.6V/m

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

Lab: RIM Testing Services (RTS)

HAC_H_Dipole_CW 1880_5 mm step_07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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

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

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

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

H in A/m (Time averaged)

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

H in A/m (Slot averaged)

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

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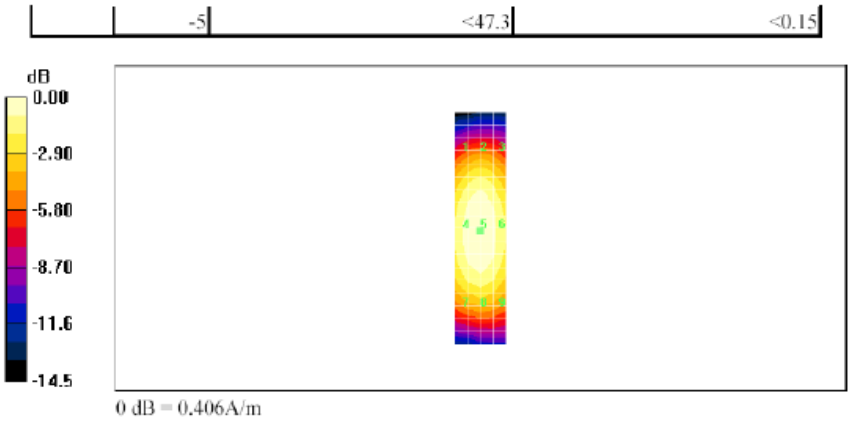

0 dB = 0.406A/m

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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: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: H Dipole Section

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

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

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

H in A/m (Time averaged)

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

H in A/m (Slot averaged)

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

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

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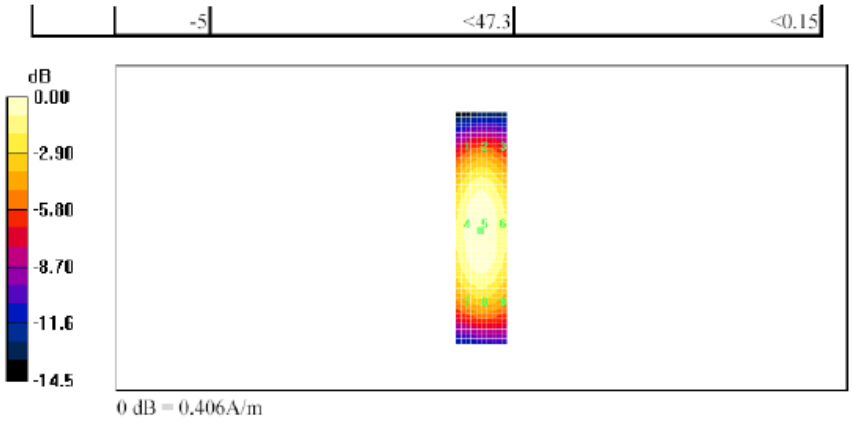

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A.3 RF emissions plots

Date/Time: 6/22/2011 8:39:25 PM,

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: GSM 850; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 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: 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/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 186.5 V/m

Probe Modulation Factor = 2.940

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 79.298 V/m; Power Drift = 0.11 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **162.3** **M3**	Grid 2 **178.7** **M3**	Grid 3 **177.5** **M3**
Grid 4 **167.7** **M3**	Grid 5 **186.5** **M3**	Grid 6 **184.5** **M3**
Grid 7 **172.0** **M3**	Grid 8 **187.1** **M3**	Grid 9 **184.5** **M3**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 201.1 V/m
Probe Modulation Factor = 2.940
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 83.471 V/m; Power Drift = 0.09 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

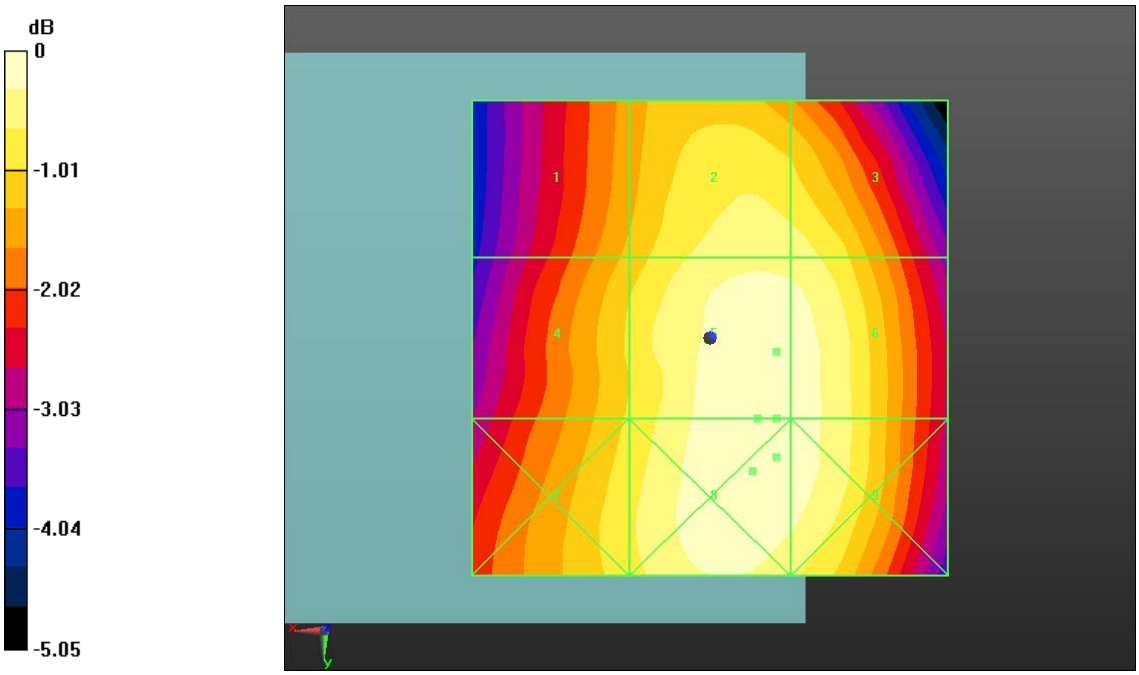
Peak E-field in V/m

Grid 1 **163.7 M3**	Grid 2 **191.2 M3**	Grid 3 **191.2 M3**
Grid 4 **171.5 M3**	Grid 5 **201.1 M3**	Grid 6 **200.8 M3**
Grid 7 **177.2 M3**	Grid 8 **201.5 M3**	Grid 9 **201.1 M3**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 169.6 V/m
Probe Modulation Factor = 2.940
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 70.583 V/m; Power Drift = 0.02 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **138.2** **M4**	Grid 2 **164.8** **M3**	Grid 3 **164.8** **M3**
Grid 4 **142.9** **M4**	Grid 5 **169.6** **M3**	Grid 6 **169.4** **M3**
Grid 7 **144.5** **M4**	Grid 8 **169.3** **M3**	Grid 9 **169.1** **M3**



0 dB = 187.1V/m

Date/Time: 6/22/2011 9:01:44 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: GSM 1900; Communication System Band: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 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: 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/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 83.193 V/m

Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 22.590 V/m; Power Drift = -0.19 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **76.118** **M3**	Grid 2 **68.780** **M3**	Grid 3 **50.404** **M3**
Grid 4 **46.620** **M4**	Grid 5 **83.193** **M3**	Grid 6 **84.510** **M2**
Grid 7 **72.311** **M3**	Grid 8 **100.9** **M2**	Grid 9 **100.9** **M2**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 80.977 V/m
Probe Modulation Factor = 2.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 23.458 V/m; Power Drift = 0.24 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

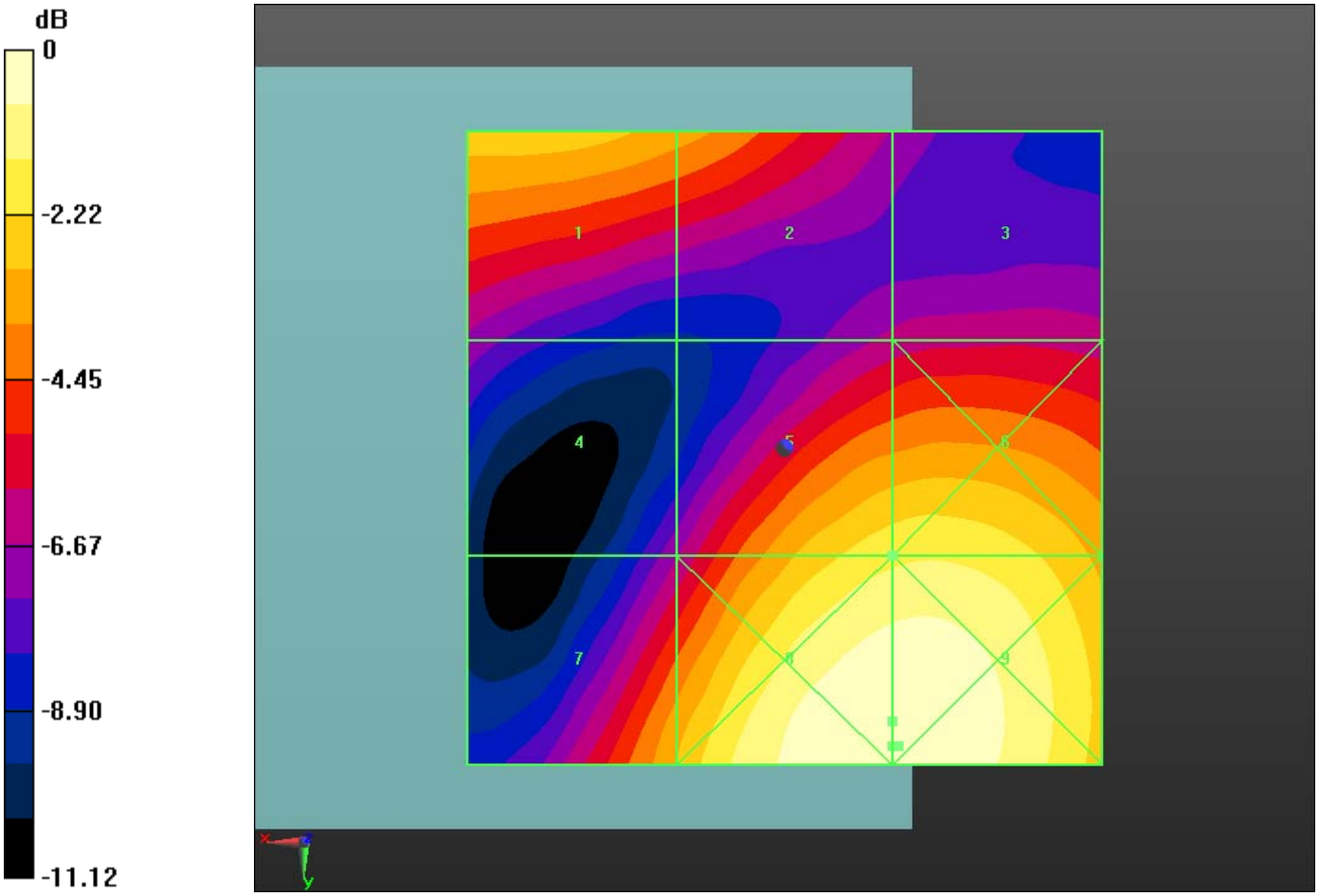
Peak E-field in V/m

Grid 1 **66.868** **M3**	Grid 2 **63.581** **M3**	Grid 3 **54.895** **M3**
Grid 4 **46.356** **M4**	Grid 5 **80.977** **M3**	Grid 6 **81.837** **M3**
Grid 7 **66.484** **M3**	Grid 8 **93.883** **M2**	Grid 9 **93.883** **M2**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 75.872 V/m
Probe Modulation Factor = 2.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 22.845 V/m; Power Drift = 0.0085 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1 **66.330** **M3**	Grid 2 **63.147** **M3**	Grid 3 **54.597** **M3**
Grid 4 **46.015** **M4**	Grid 5 **75.872** **M3**	Grid 6 **76.865** **M3**
Grid 7 **61.242** **M3**	Grid 8 **87.947** **M2**	Grid 9 **87.952** **M2**



0 dB = 100.9V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_CDMA850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: CDMA 850; Communication System Band: CDMA 2000 Cellular; Frequency: 824.7 MHz, Frequency: 836.52 MHz, Frequency: 848.52 MHz;Communication System PAR: 0, Communication System PAR: 9.19 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: 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/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 62.324 V/m

Probe Modulation Factor = 0.84

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 81.613 V/m; Power Drift = 0.21 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **52.944** **M4**	Grid 2 **59.576** **M4**	Grid 3 **59.576** **M4**
Grid 4 **55.469** **M4**	Grid 5 **62.324** **M4**	Grid 6 **62.306** **M4**
Grid 7 **57.118** **M4**	Grid 8 **62.640** **M4**	Grid 9 **62.493** **M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 66.632 V/m
Probe Modulation Factor = 0.84
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 85.532 V/m; Power Drift = -0.03 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **52.871** **M4**	Grid 2 **62.860** **M4**	Grid 3 **62.860** **M4**
Grid 4 **56.387** **M4**	Grid 5 **66.632** **M4**	Grid 6 **66.606** **M4**
Grid 7 **58.708** **M4**	Grid 8 **67.166** **M4**	Grid 9 **67.005** **M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 62.896 V/m
Probe Modulation Factor = 0.84
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 81.124 V/m; Power Drift = 0.03 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **50.933** **M4**	Grid 2 **60.753** **M4**	Grid 3 **60.727** **M4**
Grid 4 **52.928** **M4**	Grid 5 **62.896** **M4**	Grid 6 **62.870** **M4**
Grid 7 **54.025** **M4**	Grid 8 **63.143** **M4**	Grid 9 **63.080** **M4**

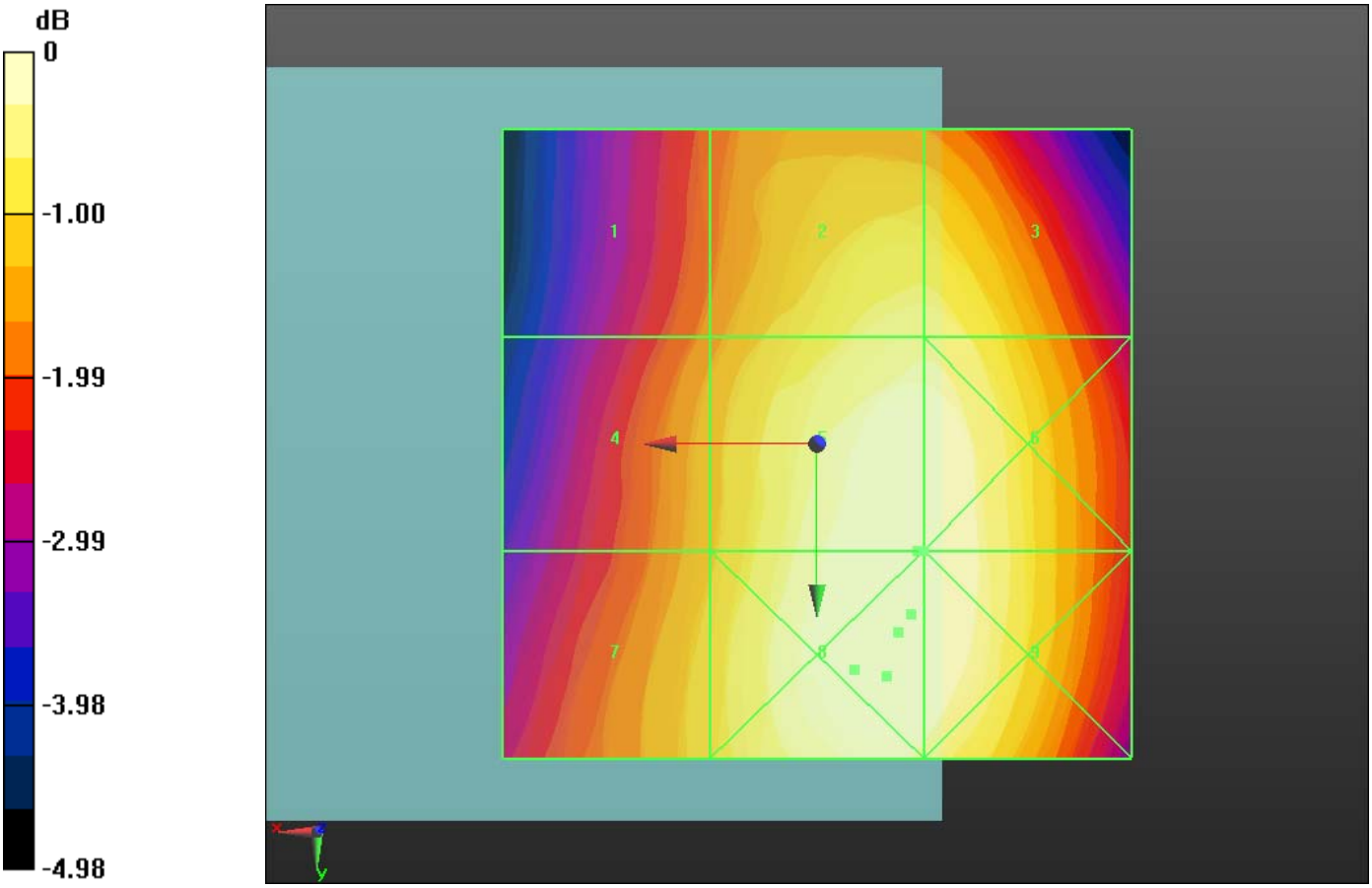
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: CDMA835_1_8th_15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 66.073 V/m
Probe Modulation Factor = 2.600
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 30.221 V/m; Power Drift = 0.16 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **52.835** **M4**	Grid 2 **62.223** **M4**	Grid 3 **62.223** **M4**
Grid 4 **55.740** **M4**	Grid 5 **66.073** **M4**	Grid 6 **66.073** **M4**
Grid 7 **58.007** **M4**	Grid 8 **66.850** **M4**	Grid 9 **66.409** **M4**



0 dB = 62.640V/m

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Test Laboratory: RIM Testing Services

HAC RF_E-Field_CDMA1900

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: CDMA 1900; Communication System Band: Exported from older format (data unavailable - please correct)., Communication System Band: CDMA 2000 PCS; Frequency: 1851.25 MHz, Frequency: 1880 MHz, Frequency: 1908.5 MHz;Communication System PAR: 4.6, Communication System PAR: 9.19 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: 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/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 39.827 V/m

Probe Modulation Factor = 0.84

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 34.241 V/m; Power Drift = -0.07 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **35.365** **M4**	Grid 2 **34.441** **M4**	Grid 3 **26.153** **M4**
Grid 4 **22.037** **M4**	Grid 5 **39.827** **M4**	Grid 6 **40.840** **M4**
Grid 7 **33.950** **M4**	Grid 8 **48.660** **M4**	Grid 9 **48.730** **M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 39.412 V/m
Probe Modulation Factor = 0.84
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 37.193 V/m; Power Drift = -0.09 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **31.897** **M4**	Grid 2 **31.039** **M4**	Grid 3 **26.651** **M4**
Grid 4 **22.556** **M4**	Grid 5 **39.412** **M4**	Grid 6 **39.973** **M4**
Grid 7 **32.707** **M4**	Grid 8 **46.277** **M4**	Grid 9 **46.277** **M4**

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 35.692 V/m
Probe Modulation Factor = 0.84
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 33.813 V/m; Power Drift = -0.13 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **32.731** **M4**	Grid 2 **30.816** **M4**	Grid 3 **25.868** **M4**
Grid 4 **21.852** **M4**	Grid 5 **35.692** **M4**	Grid 6 **36.105** **M4**
Grid 7 **29.886** **M4**	Grid 8 **42.105** **M4**	Grid 9 **42.121** **M4**

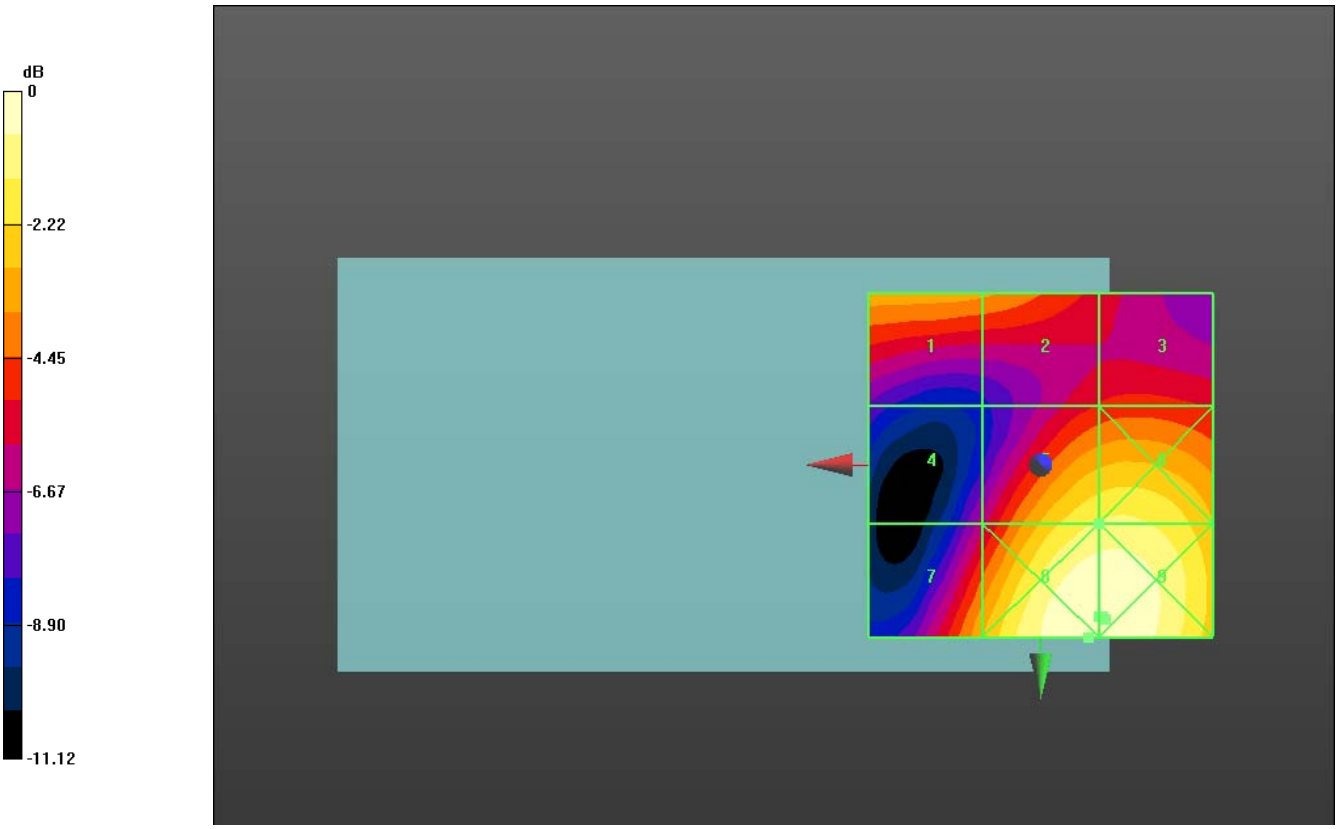
Device E-Field measurement with ER probe/E Scan - ER3D - 2007: CDMA1900_1_8th_15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 37.240 V/m
Probe Modulation Factor = 2.570
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 11.988 V/m; Power Drift = -0.35 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1 **34.159** **M4**	Grid 2 **32.590** **M4**	Grid 3 **25.040** **M4**
Grid 4 **21.265** **M4**	Grid 5 **37.240** **M4**	Grid 6 **37.819** **M4**
Grid 7 **32.448** **M4**	Grid 8 **45.628** **M4**	Grid 9 **45.505** **M4**



0 dB = 48.730V/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: GSM 850; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 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: 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 meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.291 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.088 A/m; Power Drift = -1.02 dB

Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.446** **M4**	Grid 2 **0.276** **M4**	Grid 3 **0.179** **M4**
Grid 4 **0.407** **M4**	Grid 5 **0.267** **M4**	Grid 6 **0.165** **M4**
Grid 7 **0.424** **M4**	Grid 8 **0.291** **M4**	Grid 9 **0.190** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.330 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.090 A/m; Power Drift = -0.02 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

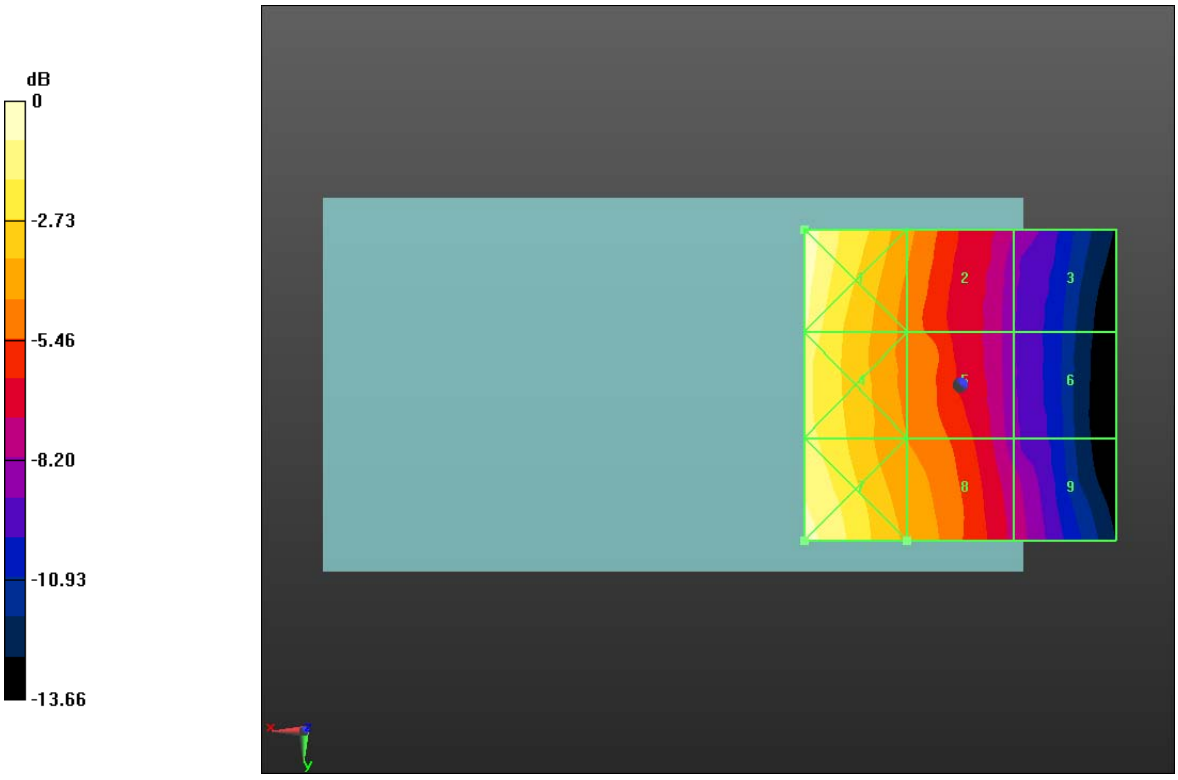
Peak H-field in A/m

Grid 1 **0.445** **M4**	Grid 2 **0.313** **M4**	Grid 3 **0.203** **M4**
Grid 4 **0.408** **M4**	Grid 5 **0.292** **M4**	Grid 6 **0.191** **M4**
Grid 7 **0.456** **M3**	Grid 8 **0.330** **M4**	Grid 9 **0.199** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.314 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.085 A/m; Power Drift = -0.12 dB
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.382** **M4**	Grid 2 **0.273** **M4**	Grid 3 **0.172** **M4**
Grid 4 **0.358** **M4**	Grid 5 **0.280** **M4**	Grid 6 **0.192** **M4**
Grid 7 **0.408** **M4**	Grid 8 **0.314** **M4**	Grid 9 **0.204** **M4**



0 dB = 0.450A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM1900

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: GSM 1900; Communication System Band: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 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: 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 meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.220 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.092 A/m; Power Drift = -0.16 dB

Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.196 M3**	Grid 2 **0.220 M3**	Grid 3 **0.214 M3**
Grid 4 **0.204 M3**	Grid 5 **0.220 M3**	Grid 6 **0.214 M3**
Grid 7 **0.282 M2**	Grid 8 **0.239 M3**	Grid 9 **0.182 M3**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.222 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.085 A/m; Power Drift = 0.13 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

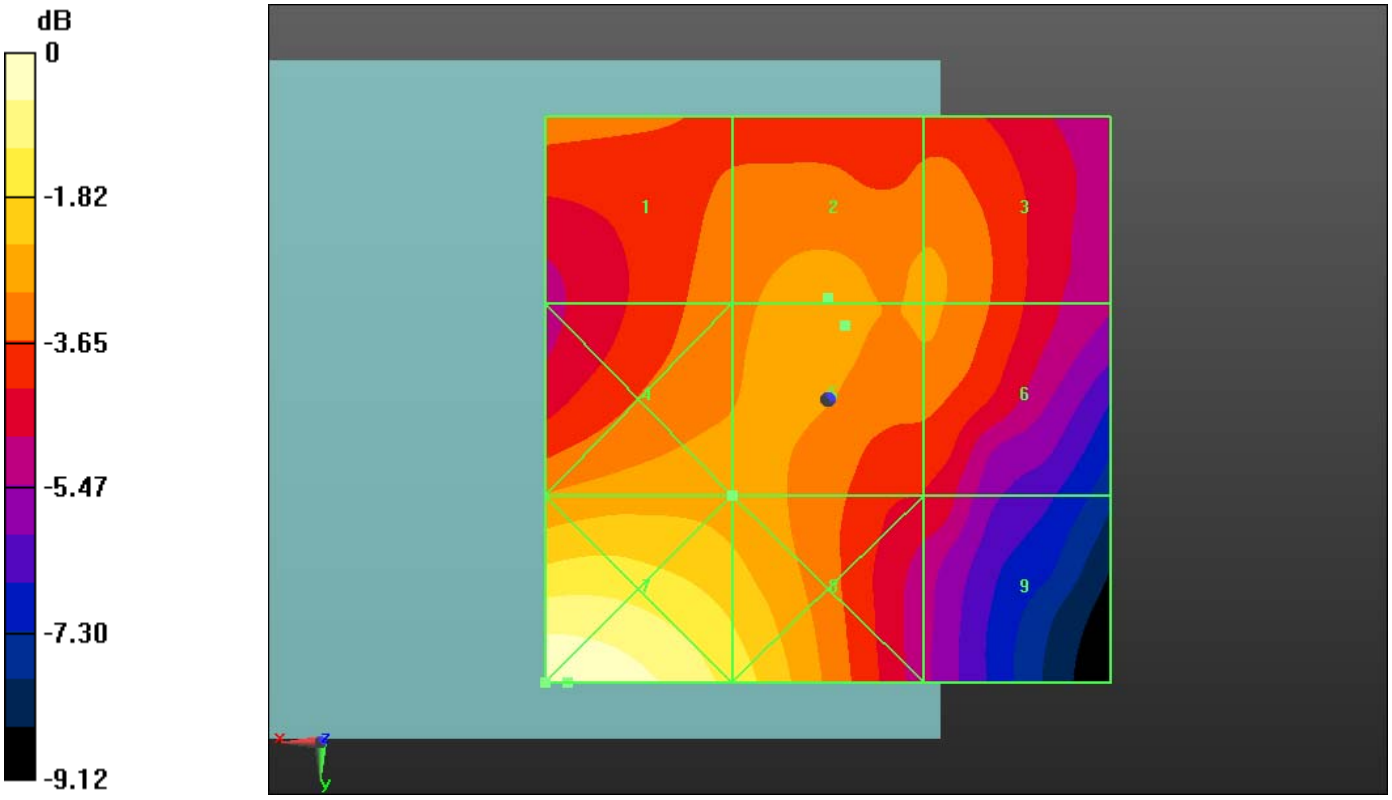
Peak H-field in A/m

Grid 1 **0.207 M3**	Grid 2 **0.222 M3**	Grid 3 **0.208 M3**
Grid 4 **0.220 M3**	Grid 5 **0.222 M3**	Grid 6 **0.207 M3**
Grid 7 **0.285 M2**	Grid 8 **0.256 M2**	Grid 9 **0.181 M3**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.201 A/m
Probe Modulation Factor = 2.870
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.082 A/m; Power Drift = 0.24 dB
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak H-field in A/m

Grid 1 **0.190 M3**	Grid 2 **0.198 M3**	Grid 3 **0.196 M3**
Grid 4 **0.203 M3**	Grid 5 **0.201 M3**	Grid 6 **0.196 M3**
Grid 7 **0.269 M2**	Grid 8 **0.231 M3**	Grid 9 **0.169 M3**



0 dB = 0.280A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_CDMA850

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: CDMA 850; Communication System Band: CDMA 2000 Cellular; Frequency: 824.7 MHz, Frequency: 836.52 MHz, Frequency: 848.52 MHz;Communication System PAR: 0, Communication System PAR: 9.19 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: 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 meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.145 A/m

Probe Modulation Factor = 0.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.089 A/m; Power Drift = -0.13 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.145** **M4**	Grid 2 **0.101** **M4**	Grid 3 **0.065** **M4**
Grid 4 **0.133** **M4**	Grid 5 **0.098** **M4**	Grid 6 **0.062** **M4**
Grid 7 **0.147** **M4**	Grid 8 **0.108** **M4**	Grid 9 **0.066** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.153 A/m
Probe Modulation Factor = 0.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.100 A/m; Power Drift = -0.08 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.153** **M4**	Grid 2 **0.110** **M4**	Grid 3 **0.074** **M4**
Grid 4 **0.140** **M4**	Grid 5 **0.107** **M4**	Grid 6 **0.071** **M4**
Grid 7 **0.156** **M4**	Grid 8 **0.117** **M4**	Grid 9 **0.074** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.147 A/m
Probe Modulation Factor = 0.970
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.100 A/m; Power Drift = 0.008 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

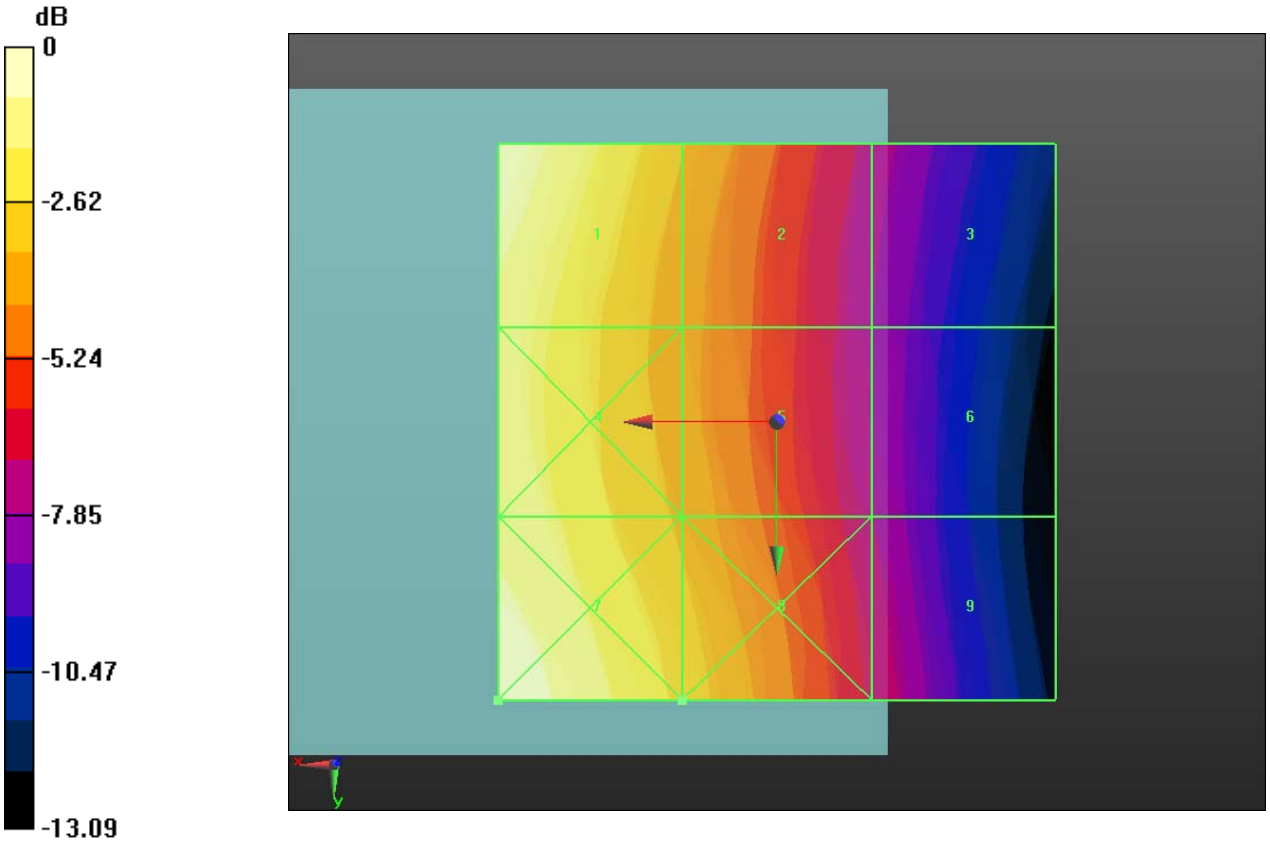
Peak H-field in A/m

Grid 1 **0.147** **M4**	Grid 2 **0.106** **M4**	Grid 3 **0.069** **M4**
Grid 4 **0.142** **M4**	Grid 5 **0.112** **M4**	Grid 6 **0.077** **M4**
Grid 7 **0.161** **M4**	Grid 8 **0.126** **M4**	Grid 9 **0.086** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 1/8/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.150 A/m
Probe Modulation Factor = 2.760
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.035 A/m; Power Drift = 0.20 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.150** **M4**	Grid 2 **0.110** **M4**	Grid 3 **0.071** **M4**
Grid 4 **0.150** **M4**	Grid 5 **0.116** **M4**	Grid 6 **0.079** **M4**
Grid 7 **0.170** **M4**	Grid 8 **0.131** **M4**	Grid 9 **0.088** **M4**



0 dB = 0.150A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_CDMA1900

DUT: BlackBerry Smartphone; Type: Sample ; Serial: 32EFD945

Communication System: CDMA 1900; Communication System Band: CDMA 2000 PCS; Frequency: 1851.25 MHz, Frequency: 1880 MHz, Frequency: 1908.5 MHz;Communication System PAR: 0, Communication System PAR: 9.19 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: 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 meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.099 A/m

Probe Modulation Factor = 0.820

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.141 A/m; Power Drift = 0.10 dB

Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.090** **M4**	Grid 2 **0.098** **M4**	Grid 3 **0.096** **M4**
Grid 4 **0.087** **M4**	Grid 5 **0.099** **M4**	Grid 6 **0.096** **M4**
Grid 7 **0.117** **M4**	Grid 8 **0.099** **M4**	Grid 9 **0.081** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.091 A/m
Probe Modulation Factor = 0.820
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.129 A/m; Power Drift = 0.004 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.089** **M4**	Grid 2 **0.091** **M4**	Grid 3 **0.086** **M4**
Grid 4 **0.086** **M4**	Grid 5 **0.091** **M4**	Grid 6 **0.086** **M4**
Grid 7 **0.117** **M4**	Grid 8 **0.101** **M4**	Grid 9 **0.075** **M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.091 A/m
Probe Modulation Factor = 0.820
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.127 A/m; Power Drift = 0.20 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

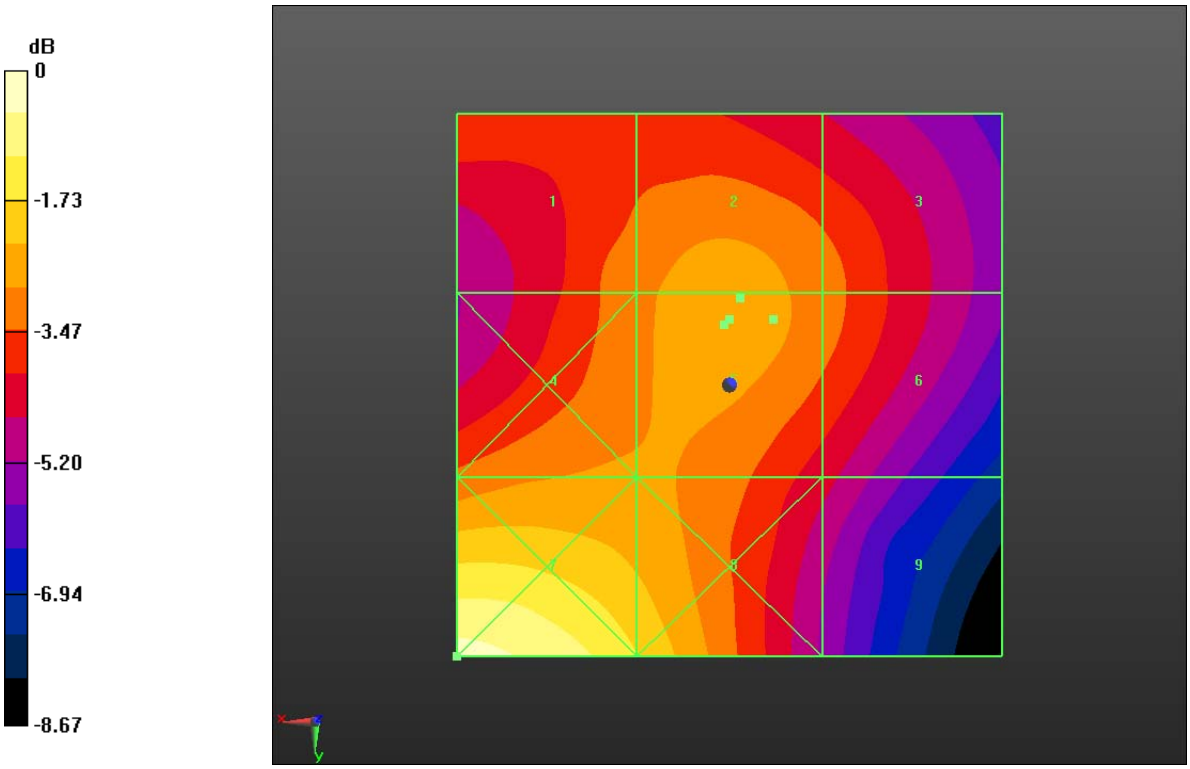
Peak H-field in A/m

Grid 1 **0.087 M4**	Grid 2 **0.091 M4**	Grid 3 **0.086 M4**
Grid 4 **0.089 M4**	Grid 5 **0.091 M4**	Grid 6 **0.086 M4**
Grid 7 **0.116 M4**	Grid 8 **0.100 M4**	Grid 9 **0.076 M4**

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 1/8/Hearing Aid Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm
Maximum value of peak Total field = 0.096 A/m
Probe Modulation Factor = 2.470
Device Reference Point: 0, 0, -6.3 mm
Reference Value = 0.046 A/m; Power Drift = -0.20 dB
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak H-field in A/m

Grid 1 **0.095** **M4**	Grid 2 **0.096** **M4**	Grid 3 **0.091** **M4**
Grid 4 **0.093** **M4**	Grid 5 **0.096** **M4**	Grid 6 **0.091** **M4**
Grid 7 **0.127** **M4**	Grid 8 **0.107** **M4**	Grid 9 **0.079** **M4**



0 dB = 0.120A/m