Annex A: Measurement data and plots

A.1 Spectrum analyser plots: CW, 80%AM, GSM and WCDMA signals

Please refere to Annex A.1 of the report number RTS-1689-0908-37 for the plots

A.2 Dipole validation and probe modulation factor plots

Date/Time: 6/30/2010 10:20:21 AM

Test Laboratory: RIM Testing Services

HAC_E_Dipole_835MHz_20dBm

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (5x37x1):

Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 109.7 V/m; Power Drift = -0.032 dB

Maximum value of Total (measured) = 170.9 V/m

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 = 171.7 V/m

Probe Modulation Factor = 1.00

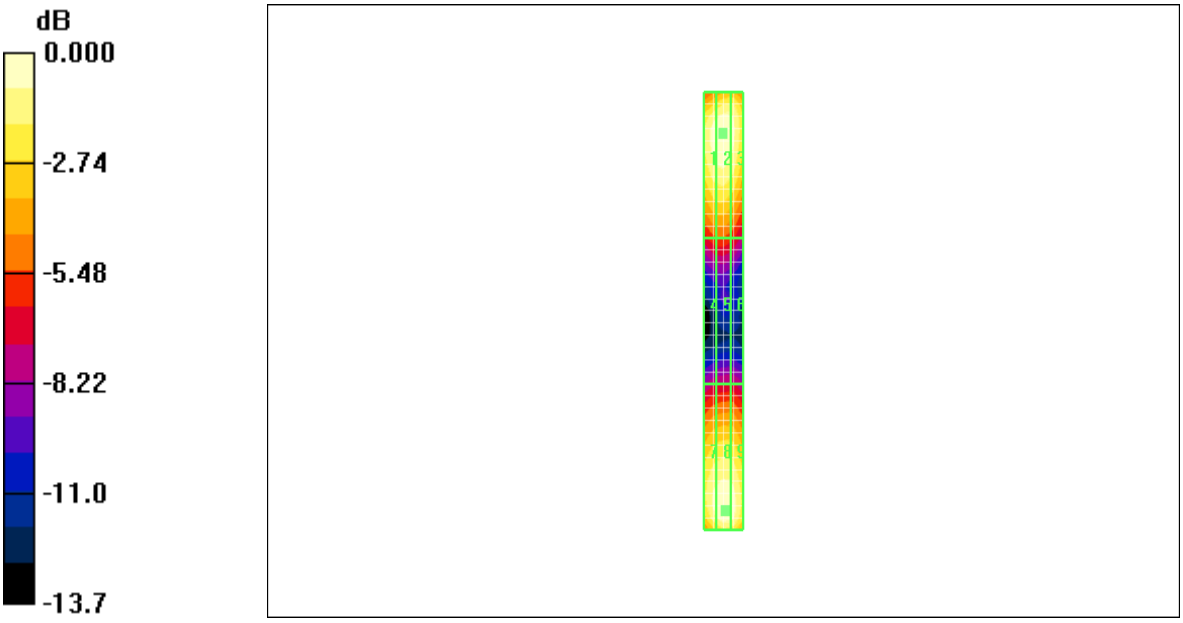
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 109.7 V/m; Power Drift = -0.032 dB

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

Peak E-field in V/m

Grid 1 **167.8 M4**	Grid 2 **171.7 M4**	Grid 3 **164.8 M4**
Grid 4 **90.9 M4**	Grid 5 **91.4 M4**	Grid 6 **87.0 M4**
Grid 7 **164.1 M4**	Grid 8 **171.1 M4**	Grid 9 **168.0 M4**



0 dB = 171.7V/m

Date/Time: 6/30/2010 9:21:21 AM

Test Laboratory: RIM Testing Services

HAC_E_Dipole_1880MHz_20dBm

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (5x19x1):

Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 150.7 V/m; Power Drift = 0.035 dB

Maximum value of Total (measured) = 130.5 V/m

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 = 132.8 V/m

Probe Modulation Factor = 1.00

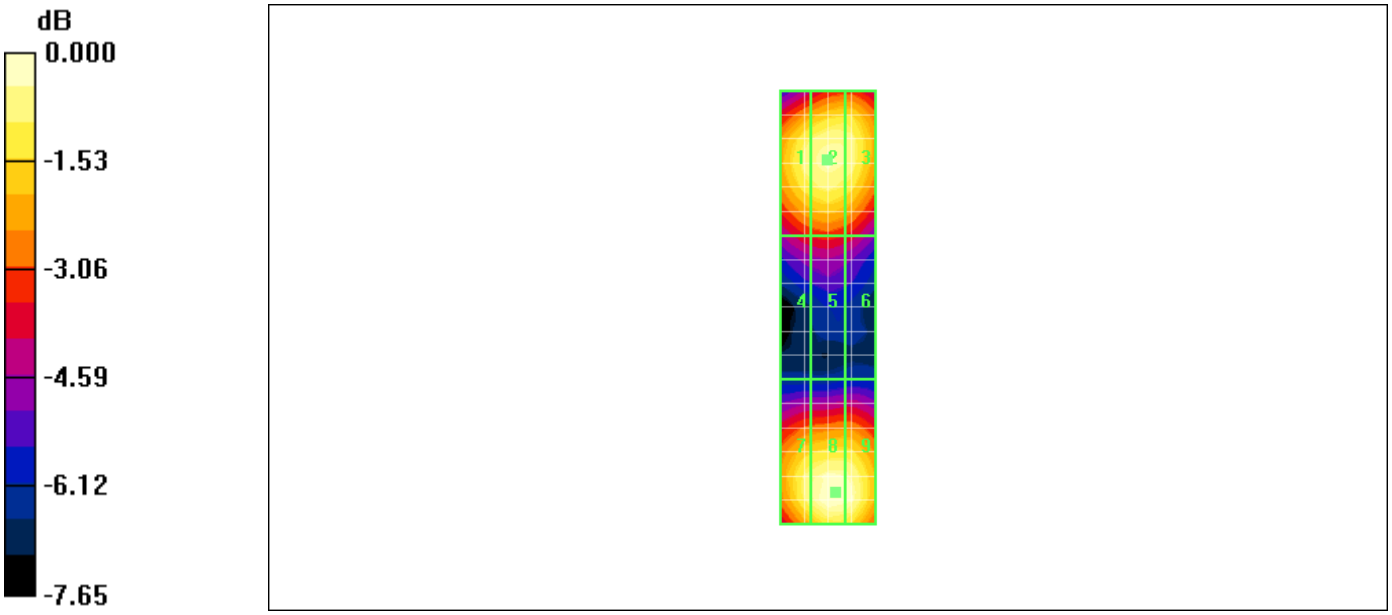
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 150.7 V/m; Power Drift = 0.035 dB

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

Peak E-field in V/m

Grid 1 **123.9 M2**	Grid 2 **127.1 M2**	Grid 3 **125.3 M2**
Grid 4 **89.4 M3**	Grid 5 **91.3 M3**	Grid 6 **88.4 M3**
Grid 7 **125.5 M2**	Grid 8 **132.8 M2**	Grid 9 **131.7 M2**



0 dB = 132.7V/m

Date/Time: 6/30/2010 10:34:30 AM

Test Laboratory: RIM Testing Services

HAC_H_Dipole_835MHz_20dBm

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (5x13x1):

Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.526 A/m; Power Drift = -0.030 dB

Maximum value of Total (measured) = 0.490 A/m

H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x121x1):

Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.491 A/m

Probe Modulation Factor = 1.00

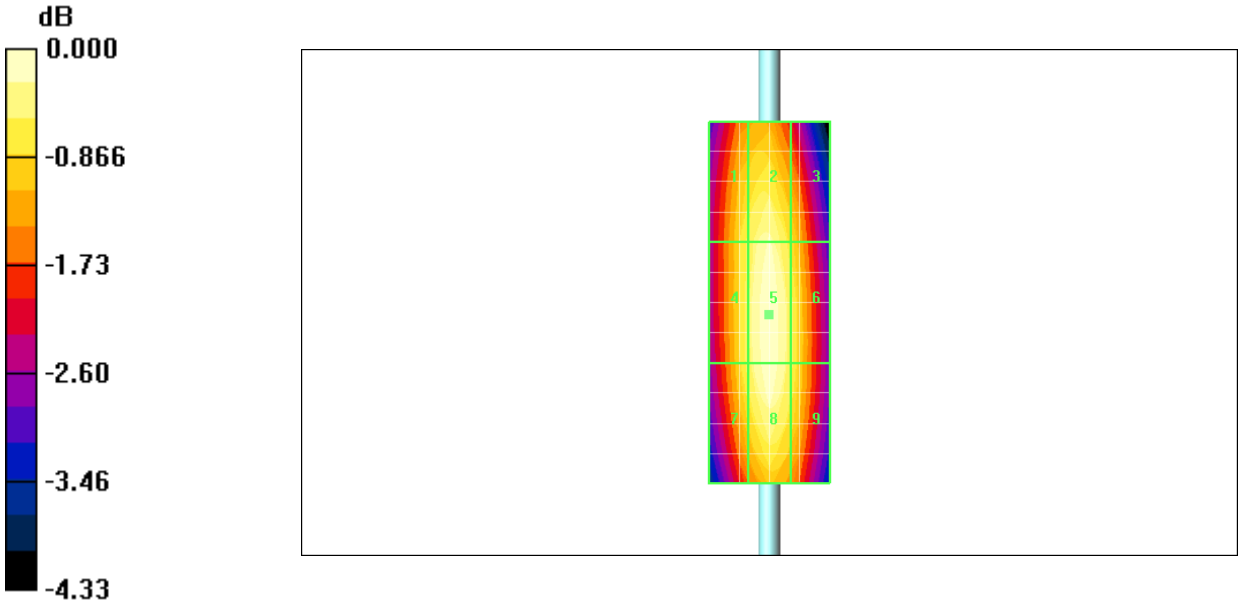
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.526 A/m; Power Drift = -0.030 dB

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

Peak H-field in A/m

Grid 1 **0.464 M4**	Grid 2 **0.479 M4**	Grid 3 **0.452 M4**
Grid 4 **0.469 M4**	Grid 5 **0.491 M4**	Grid 6 **0.466 M4**
Grid 7 **0.466 M4**	Grid 8 **0.489 M4**	Grid 9 **0.465 M4**



0 dB = 0.491A/m

Date/Time: 6/30/2010 8:51:06 AM

Test Laboratory: RIM Testing Services

HAC_H_Dipole_1880MHz_20dBm

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (5x19x1):

Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.499 A/m; Power Drift = -0.048 dB

Maximum value of Total (measured) = 0.467 A/m

H 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 = 0.467 A/m

Probe Modulation Factor = 1.00

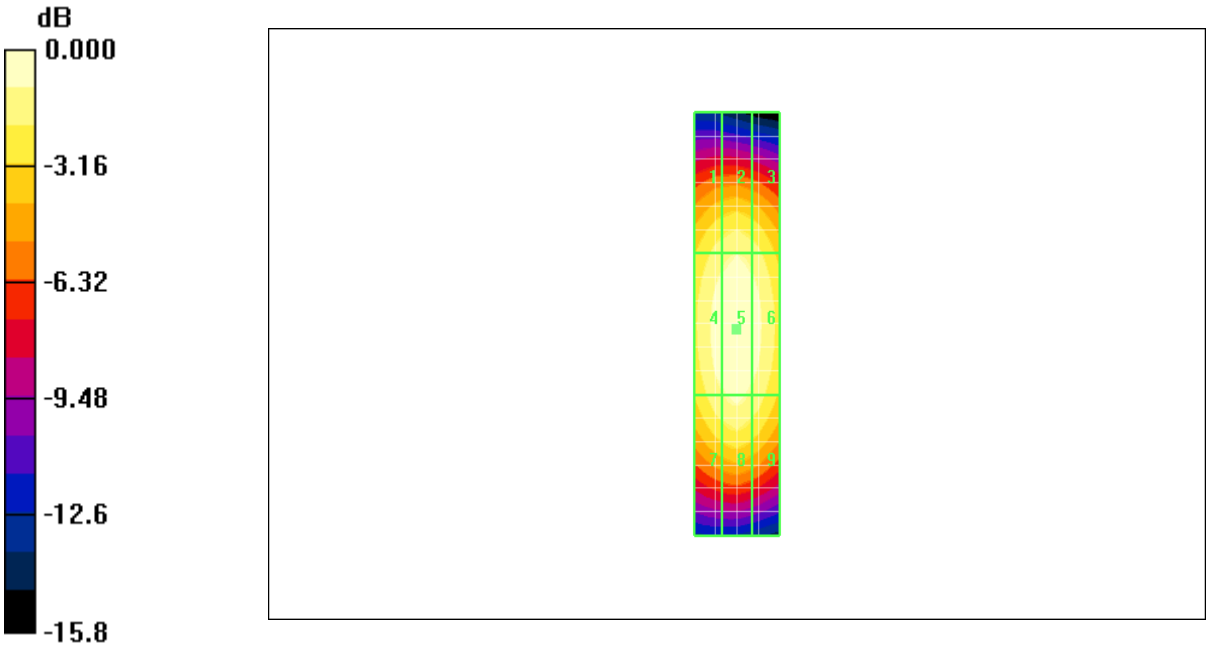
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.499 A/m; Power Drift = -0.048 dB

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

Peak H-field in A/m

Grid 1 **0.396 M2**	Grid 2 **0.413 M2**	Grid 3 **0.394 M2**
Grid 4 **0.447 M2**	Grid 5 **0.467 M2**	Grid 6 **0.442 M2**
Grid 7 **0.411 M2**	Grid 8 **0.431 M2**	Grid 9 **0.405 M2**

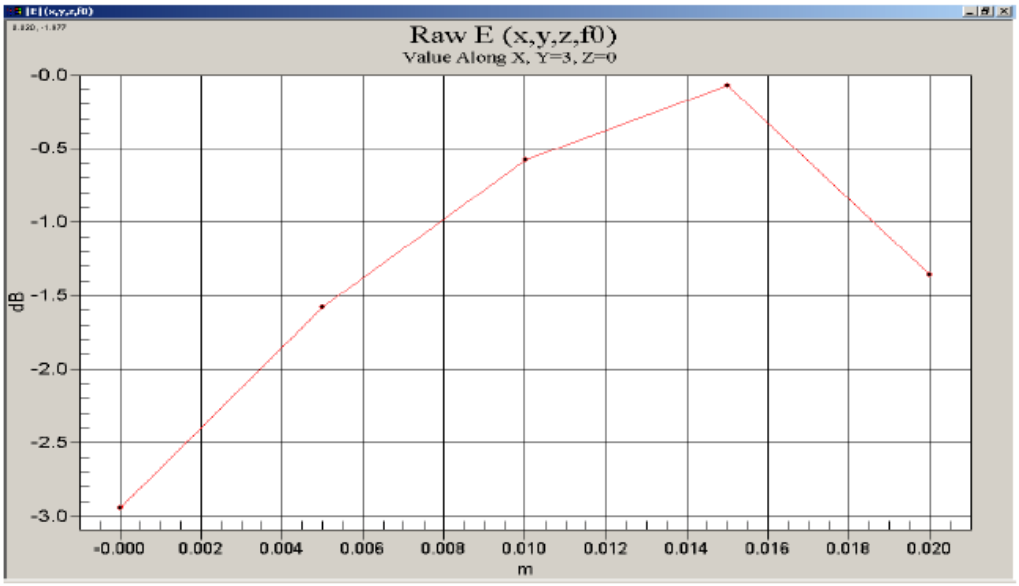


0 dB = 0.467A/m

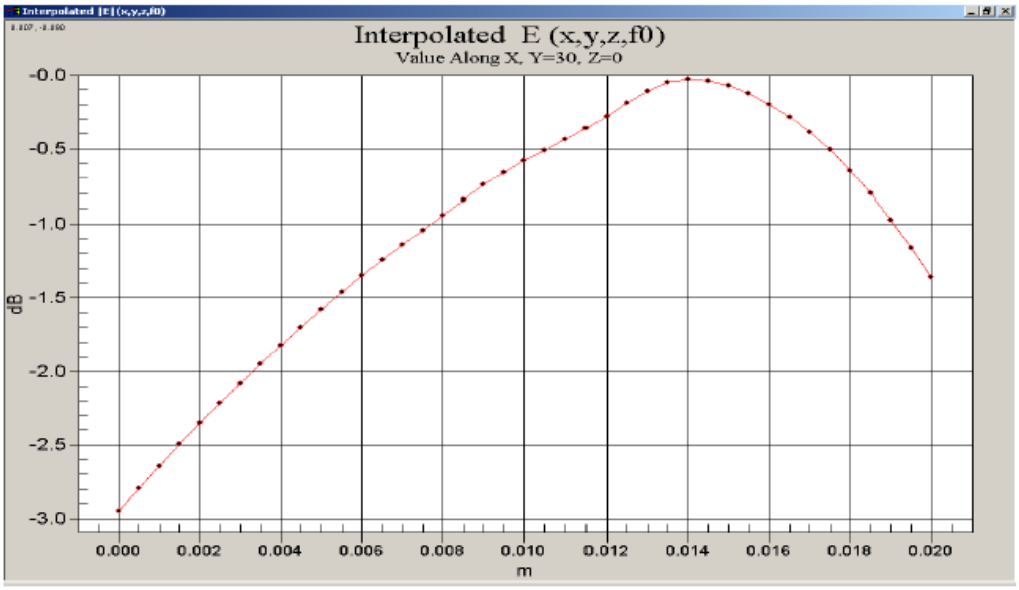
Please refere to Annex A.2 of the report number RTS-1689-0908-37 for the probe modulation factor plots

Justification of Step Size and Interpolation

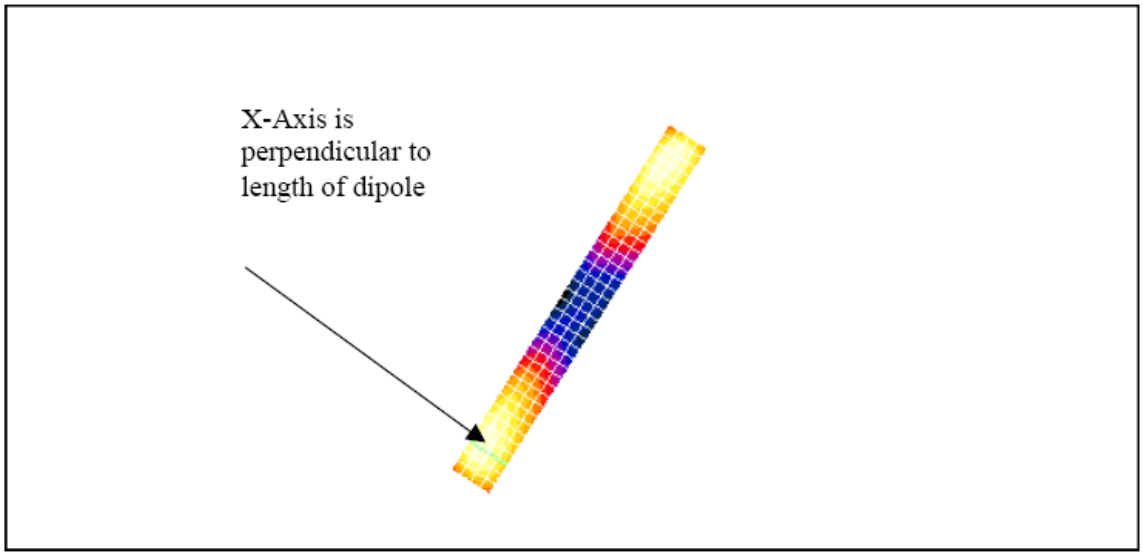
This section demonstrates that a 5mm step size with interpolation provides sufficient resolution for RF emissions measurements. The DASY 4 uses interpolation algorithms to derive 9 interpolated points between every measured point.



The figure above shows the raw measured field strength perpendicular to the length of the validation dipole. The TCB guidance slides require the 3dB width to be much larger than the step size. The width between -3dB points is > 21mm, at least 4 times the step size.



This figure shows the interpolated field strength perpendicular to the dipole. The interpolated points follow the raw points with no inconsistencies.



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)

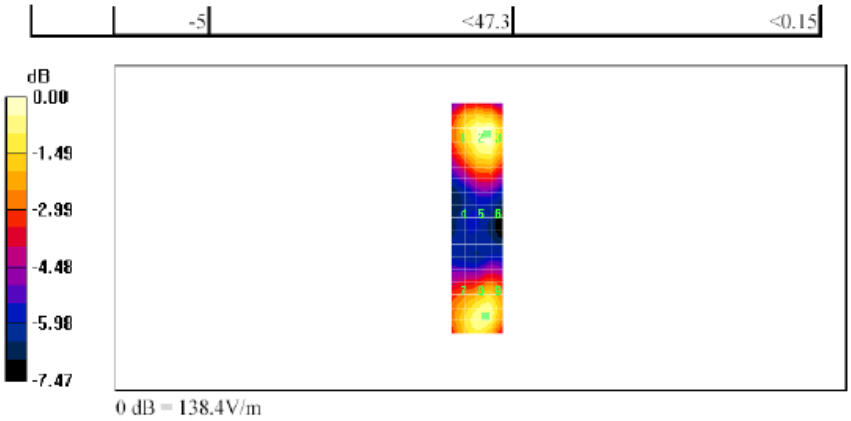
Grid 1 **123.2**	Grid 2 **138.1**	Grid 3 **138.4**
Grid 4 **80.9**	Grid 5 **92.3**	Grid 6 **92.2**
Grid 7 **119.8**	Grid 8 **131.0**	Grid 9 **130.7**

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

Date/Time: 14/07/2005 11:35:24 AM Page 2 of 2



file://C:\Program%20Files\DASY4\Print_Templates\Dipole%20Validation%201880%20... 14/07/2005

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

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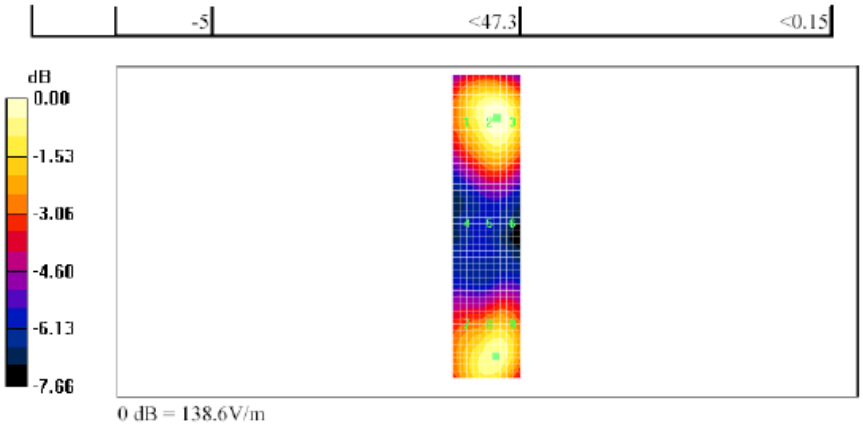


0 dB = 138.6V/m

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)

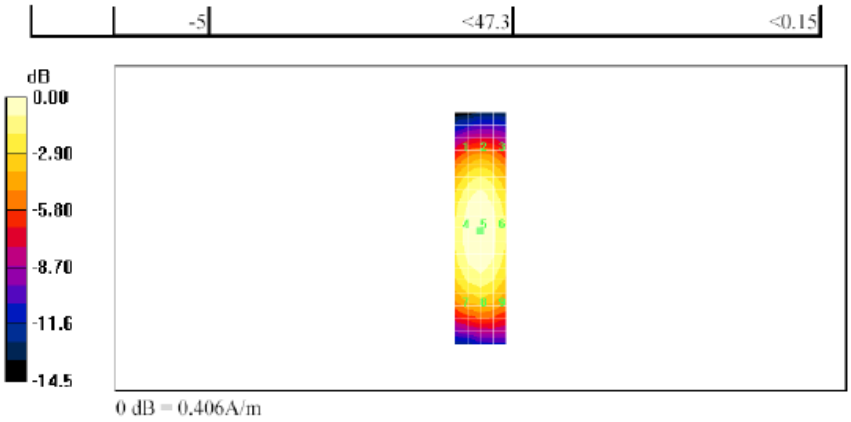
Grid 1 **0.342**	Grid 2 **0.359**	Grid 3 **0.344**
Grid 4 **0.389**	Grid 5 **0.406**	Grid 6 **0.389**
Grid 7 **0.363**	Grid 8 **0.378**	Grid 9 **0.363**

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

Date/Time: 14/07/2005 12:43:02 PM Page 2 of 2



0 dB = 0.406A/m

file://C:\Program%20Files\DASY4\Print_Templates\HAC_H_Dipole_CW%201880_5%... 14/07/2005

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)

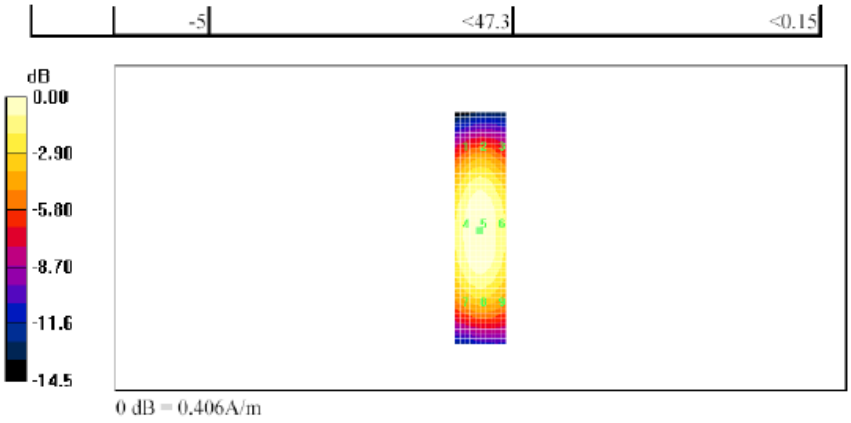
Grid 1 **0.347**	Grid 2 **0.361**	Grid 3 **0.348**
Grid 4 **0.394**	Grid 5 **0.406**	Grid 6 **0.391**
Grid 7 **0.367**	Grid 8 **0.380**	Grid 9 **0.365**

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

Date/Time: 14/07/2005 12:53:40 PM Page 2 of 2



0 dB = 0.406A/m

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A.3 RF emission field plots

Date/Time: 6/30/2010 3:52:25 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_850_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 95.4 V/m; Power Drift = -0.029 dB

Maximum value of Total (measured) = 73.5 V/m

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 = 209.3 V/m

Probe Modulation Factor = 2.87

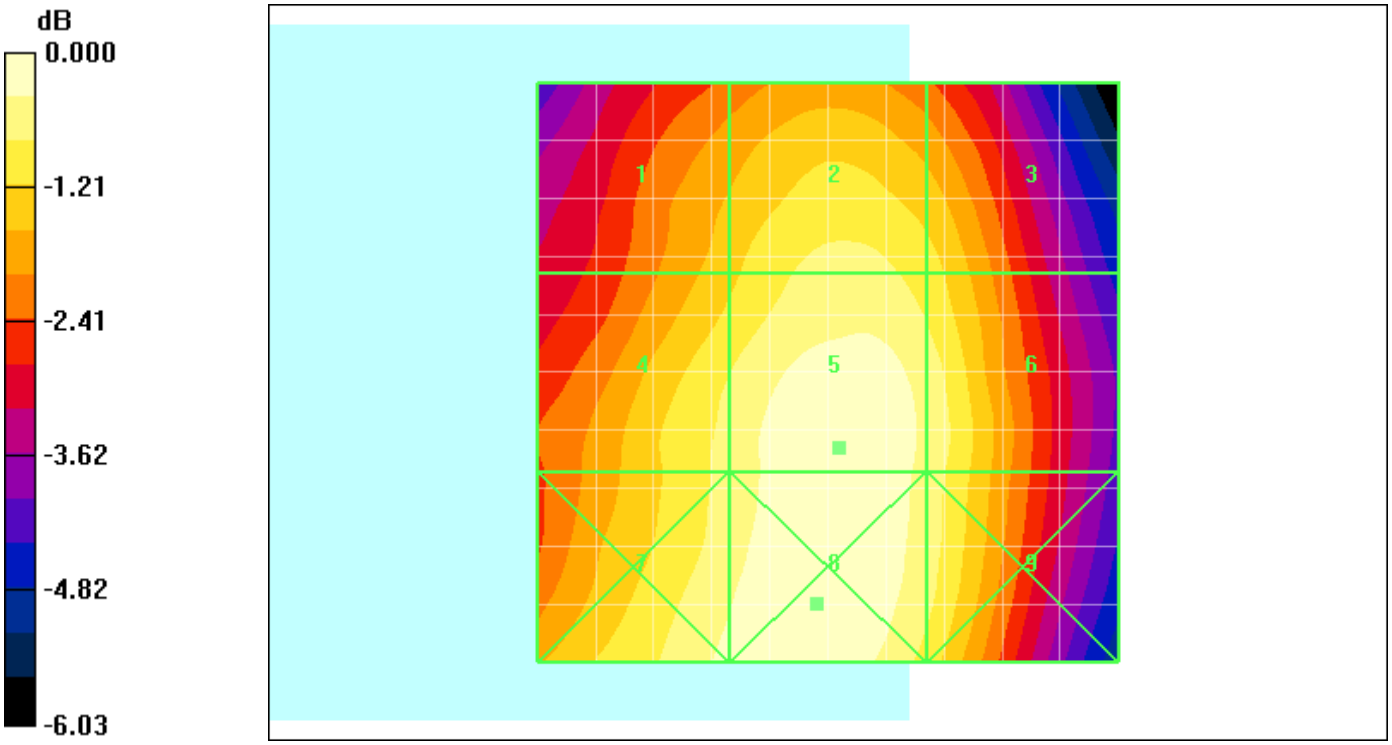
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 95.4 V/m; Power Drift = -0.029 dB

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

Peak E-field in V/m

Grid 1 **181.7 M3**	Grid 2 **195.8 M3**	Grid 3 **188.3 M3**
Grid 4 **196.0 M3**	Grid 5 **209.3 M3**	Grid 6 **199.8 M3**
Grid 7 **203.9 M3**	Grid 8 **211.2 M3**	Grid 9 **198.3 M3**



0 dB = 211.2V/m

Date/Time: 6/30/2010 4:00:39 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_850_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 836.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 99.7 V/m; Power Drift = 0.047 dB

Maximum value of Total (measured) = 81.2 V/m

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 = 229.1 V/m

Probe Modulation Factor = 2.87

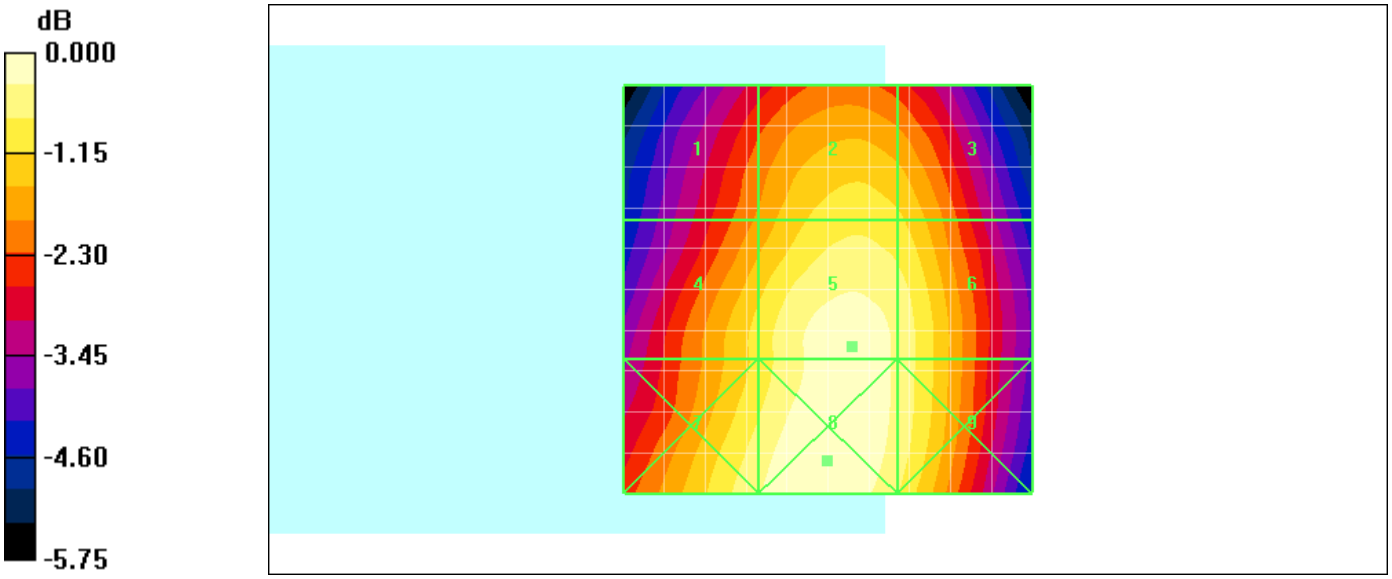
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 99.7 V/m; Power Drift = 0.047 dB

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

Peak E-field in V/m

Grid 1 **189.0 M3**	Grid 2 **210.8 M3**	Grid 3 **206.2 M3**
Grid 4 **208.1 M3**	Grid 5 **229.1 M3**	Grid 6 **221.0 M3**
Grid 7 **222.1 M3**	Grid 8 **233.0 M3**	Grid 9 **220.8 M3**



Date/Time: 6/30/2010 4:06:43 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_850_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 99.6 V/m; Power Drift = 0.030 dB

Maximum value of Total (measured) = 76.7 V/m

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 = 220.8 V/m

Probe Modulation Factor = 2.87

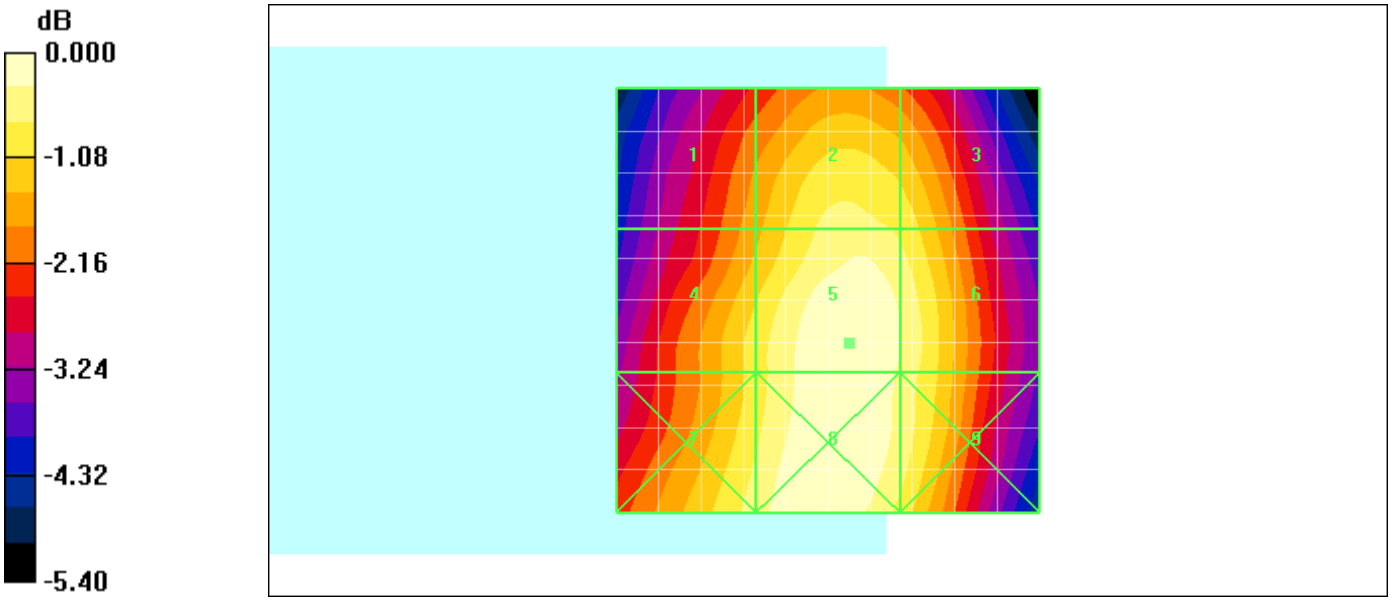
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 99.6 V/m; Power Drift = 0.030 dB

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

Peak E-field in V/m

Grid 1 **185.1** **M3**	Grid 2 **207.0** **M3**	Grid 3 **201.6** **M3**
Grid 4 **199.6** **M3**	Grid 5 **220.8** **M3**	Grid 6 **212.5** **M3**
Grid 7 **207.5** **M3**	Grid 8 **220.2** **M3**	Grid 9 **210.5** **M3**



0 dB = 220.8V/m

Date/Time: 6/30/2010 4:13:52 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_850_mid_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 836.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 99.8 V/m; Power Drift = 0.042 dB

Maximum value of Total (measured) = 79.4 V/m

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 = 228.0 V/m

Probe Modulation Factor = 2.87

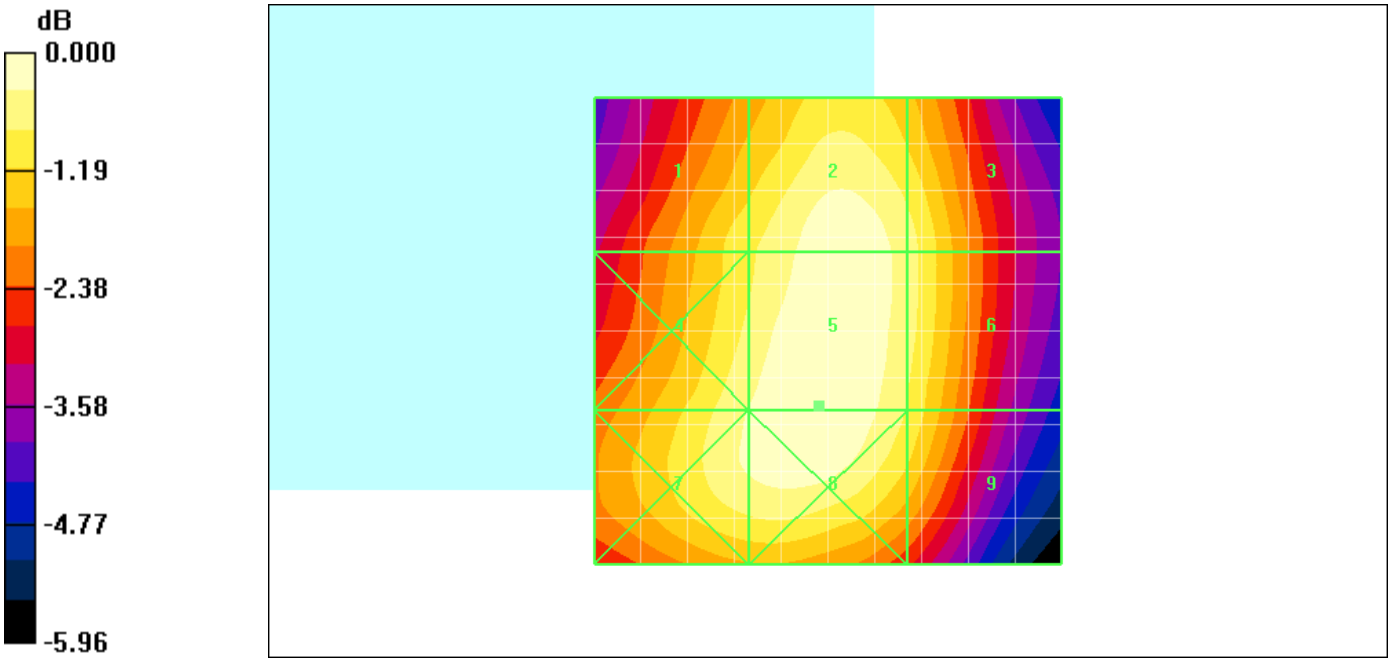
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 99.8 V/m; Power Drift = 0.042 dB

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

Peak E-field in V/m

Grid 1 **206.3 M3**	Grid 2 **225.5 M3**	Grid 3 **212.7 M3**
Grid 4 **218.1 M3**	Grid 5 **228.0 M3**	Grid 6 **212.9 M3**
Grid 7 **219.8 M3**	Grid 8 **227.9 M3**	Grid 9 **207.2 M3**



0 dB = 228.0V/m

Date/Time: 6/30/2010 4:25:58 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_V_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 826.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 102.7 V/m; Power Drift = 0.019 dB

Maximum value of Total (measured) = 80.4 V/m

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 = 75.1 V/m

Probe Modulation Factor = 0.940

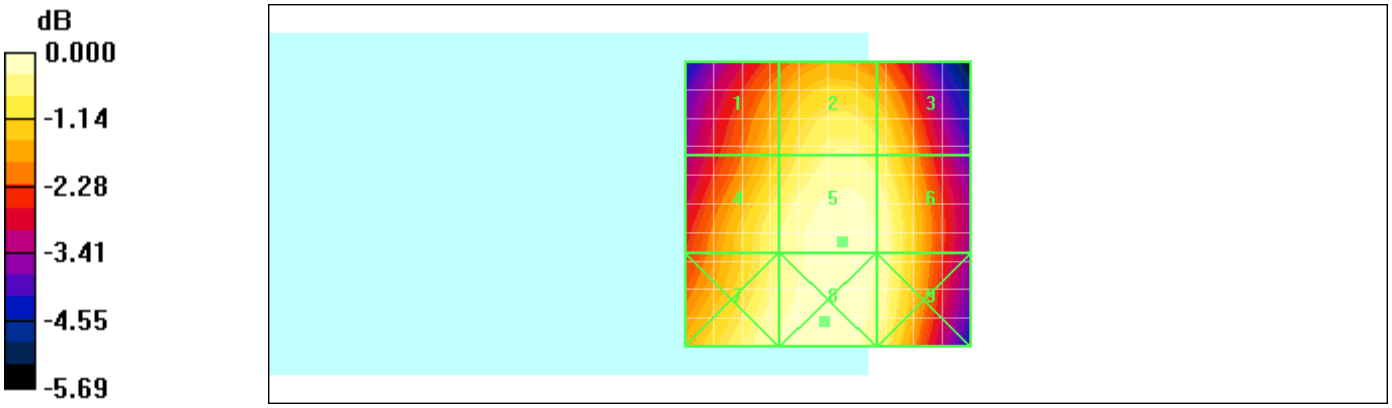
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 102.7 V/m; Power Drift = 0.019 dB

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

Peak E-field in V/m

Grid 1 **63.9 M4**	Grid 2 **69.8 M4**	Grid 3 **67.8 M4**
Grid 4 **69.3 M4**	Grid 5 **75.1 M4**	Grid 6 **72.3 M4**
Grid 7 **72.8 M4**	Grid 8 **75.6 M4**	Grid 9 **72.1 M4**



0 dB = 75.6V/m

Date/Time: 6/30/2010 4:31:14 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_V_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 119.3 V/m; Power Drift = -0.016 dB

Maximum value of Total (measured) = 94.4 V/m

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 = 88.0 V/m

Probe Modulation Factor = 0.940

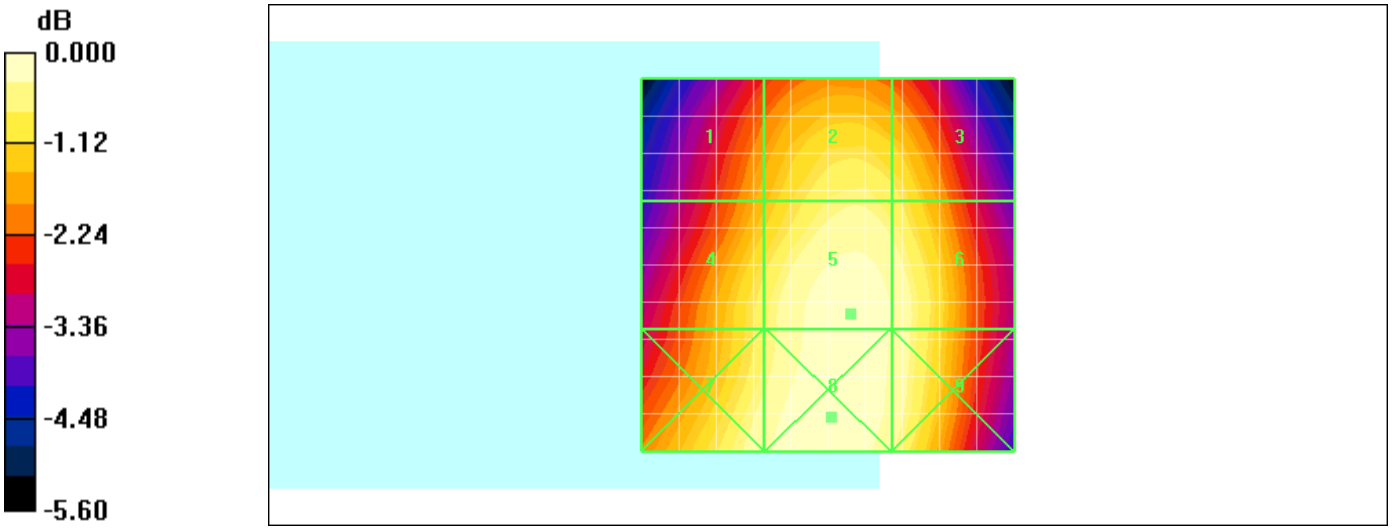
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 119.3 V/m; Power Drift = -0.016 dB

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

Peak E-field in V/m

Grid 1 **73.1 M4**	Grid 2 **81.2 M4**	Grid 3 **79.4 M4**
Grid 4 **79.6 M4**	Grid 5 **88.0 M4**	Grid 6 **84.9 M4**
Grid 7 **84.3 M4**	Grid 8 **88.7 M4**	Grid 9 **84.7 M4**



0 dB = 88.7V/m

Date/Time: 6/30/2010 4:36:36 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_V_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 846.6 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 117.6 V/m; Power Drift = 0.068 dB

Maximum value of Total (measured) = 92.4 V/m

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 = 87.0 V/m

Probe Modulation Factor = 0.940

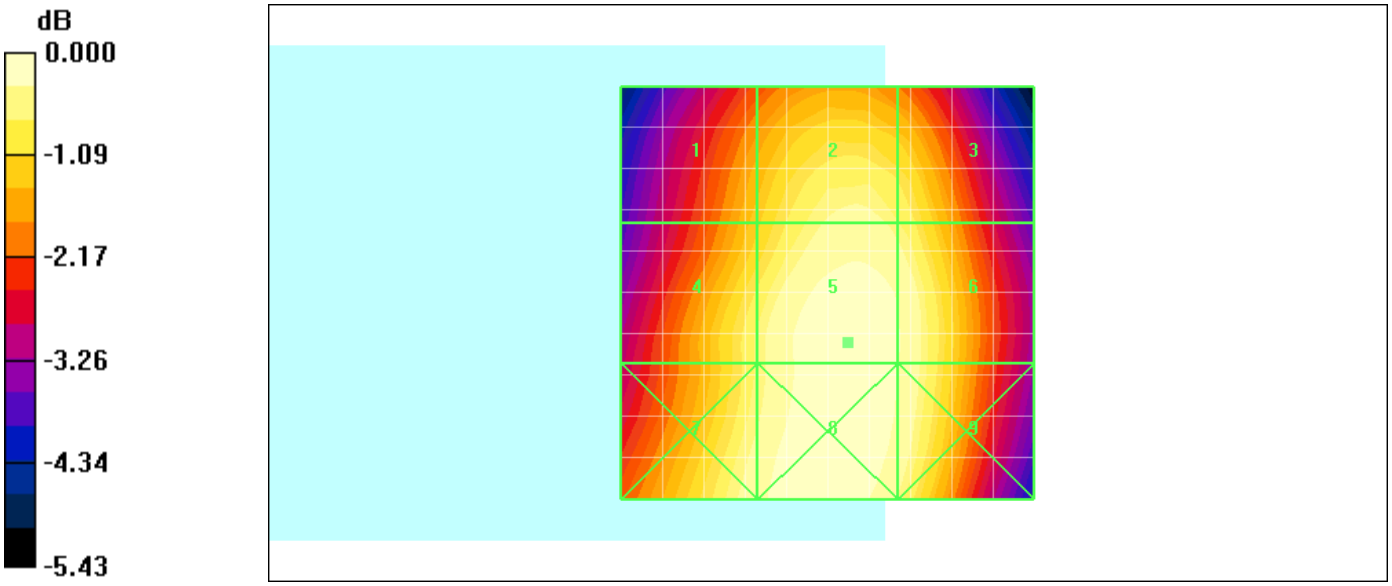
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 117.6 V/m; Power Drift = 0.068 dB

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

Peak E-field in V/m

Grid 1 **73.4 M4**	Grid 2 **81.2 M4**	Grid 3 **79.1 M4**
Grid 4 **79.1 M4**	Grid 5 **87.0 M4**	Grid 6 **83.7 M4**
Grid 7 **82.4 M4**	Grid 8 **86.9 M4**	Grid 9 **83.5 M4**



0 dB = 87.0V/m

Date/Time: 6/30/2010 4:43:30 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_V_mid_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 119.0 V/m; Power Drift = 0.003 dB

Maximum value of Total (measured) = 94.1 V/m

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 = 88.7 V/m

Probe Modulation Factor = 0.940

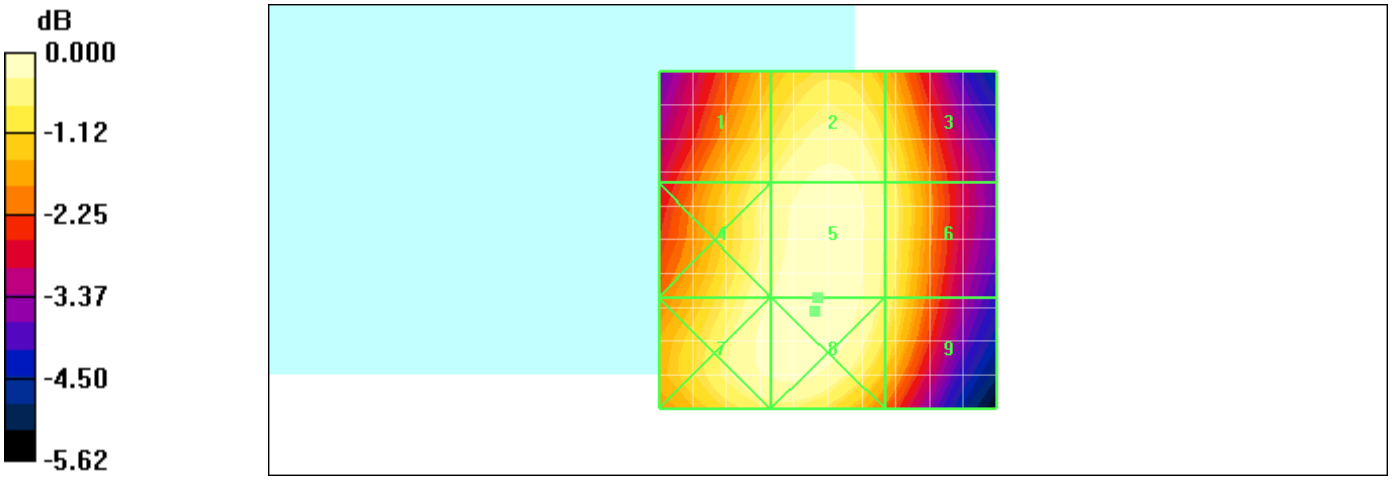
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 119.0 V/m; Power Drift = 0.003 dB

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

Peak E-field in V/m

Grid 1 **81.0 M4**	Grid 2 **86.4 M4**	Grid 3 **80.5 M4**
Grid 4 **85.1 M4**	Grid 5 **88.7 M4**	Grid 6 **81.4 M4**
Grid 7 **86.8 M4**	Grid 8 **88.8 M4**	Grid 9 **80.1 M4**



0 dB = 88.8V/m

Date/Time: 6/30/2010 4:56:25 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_1900_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 14.5 V/m; Power Drift = -0.076 dB

Maximum value of Total (measured) = 30.0 V/m

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 = 54.8 V/m

Probe Modulation Factor = 2.79

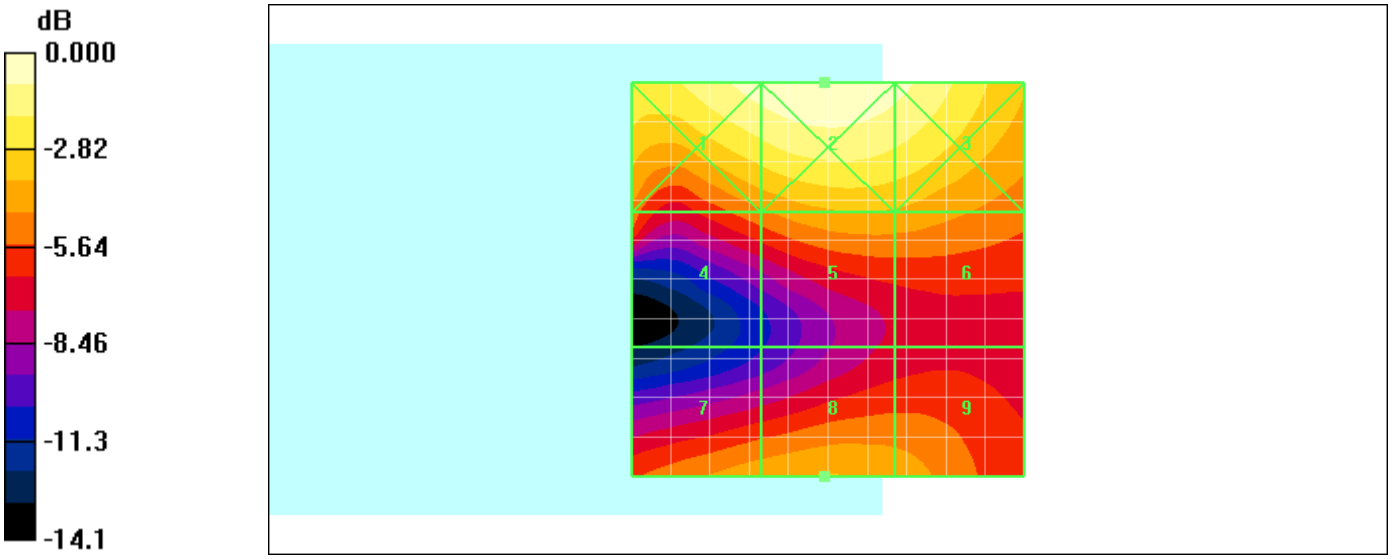
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 14.5 V/m; Power Drift = -0.076 dB

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

Peak E-field in V/m

Grid 1 **79.2 M3**	Grid 2 **83.7 M3**	Grid 3 **78.1 M3**
Grid 4 **47.6 M3**	Grid 5 **54.2 M3**	Grid 6 **53.4 M3**
Grid 7 **52.7 M3**	Grid 8 **54.8 M3**	Grid 9 **52.2 M3**



0 dB = 83.7V/m

Date/Time: 6/30/2010 5:01:46 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_1900_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 13.8 V/m; Power Drift = -0.115 dB

Maximum value of Total (measured) = 25.8 V/m

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 = 50.4 V/m

Probe Modulation Factor = 2.79

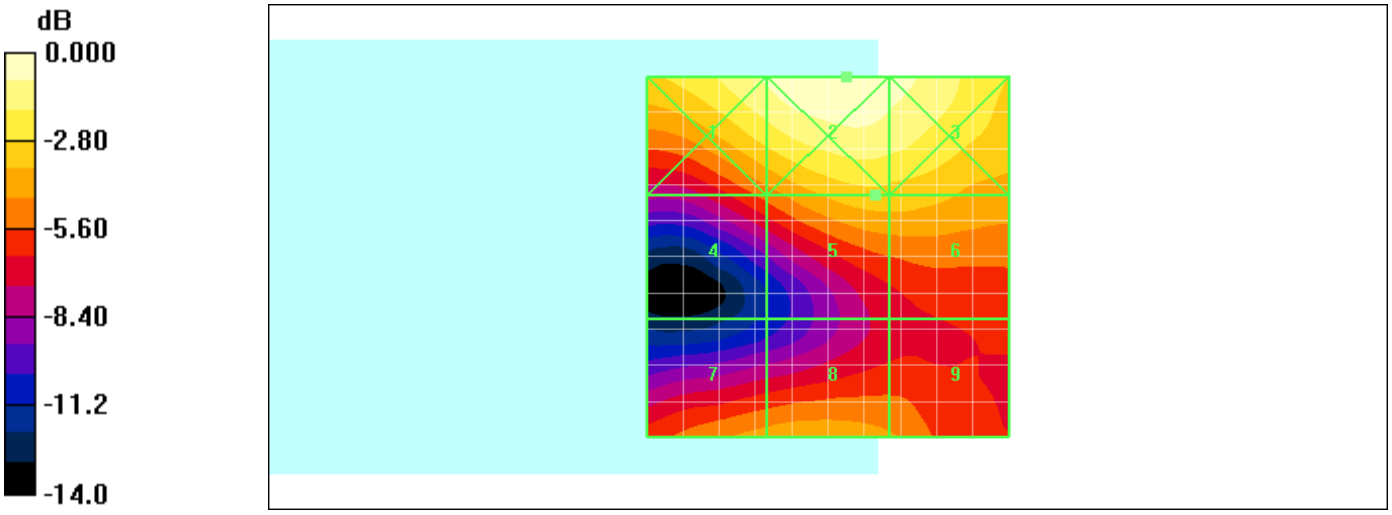
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 13.8 V/m; Power Drift = -0.115 dB

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

Peak E-field in V/m

Grid 1 **66.2 M3**	Grid 2 **72.2 M3**	Grid 3 **68.7 M3**
Grid 4 **39.6 M4**	Grid 5 **50.4 M3**	Grid 6 **50.0 M3**
Grid 7 **44.6 M4**	Grid 8 **45.9 M4**	Grid 9 **43.0 M4**



0 dB = 72.2V/m

Date/Time: 6/30/2010 5:07:15 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_1900_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 15.3 V/m; Power Drift = -0.003 dB

Maximum value of Total (measured) = 24.8 V/m

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 = 52.4 V/m

Probe Modulation Factor = 2.79

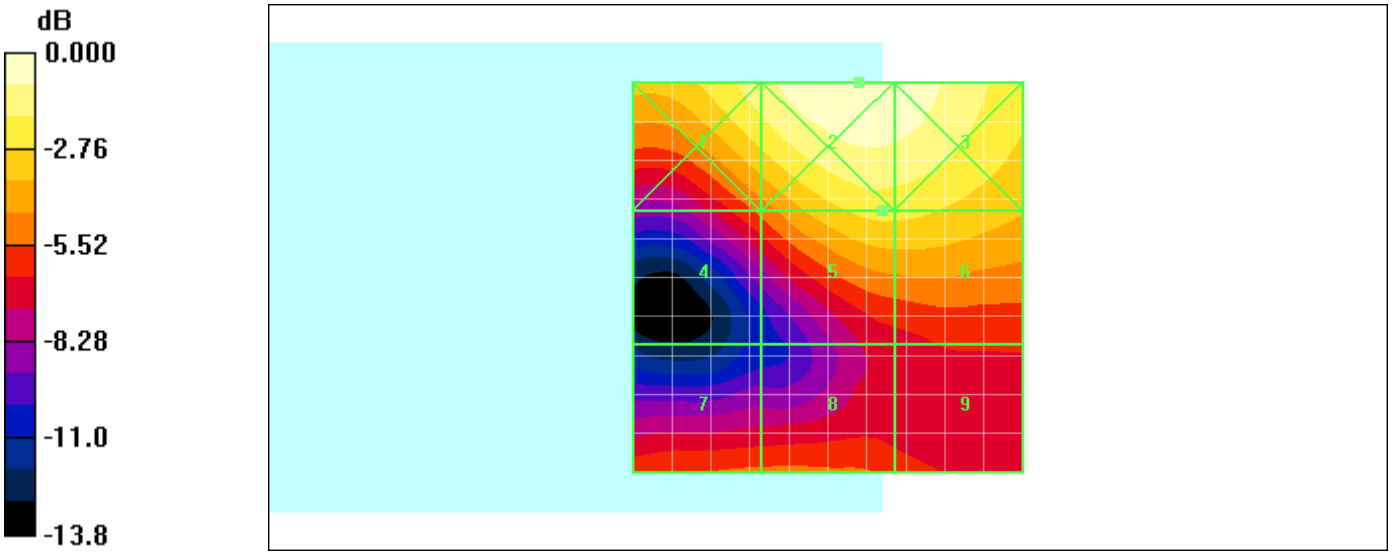
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 15.3 V/m; Power Drift = -0.003 dB

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

Peak E-field in V/m

Grid 1 **60.2 M3**	Grid 2 **69.4 M3**	Grid 3 **67.3 M3**
Grid 4 **38.3 M4**	Grid 5 **52.4 M3**	Grid 6 **52.2 M3**
Grid 7 **38.0 M4**	Grid 8 **38.0 M4**	Grid 9 **35.3 M4**



0 dB = 69.4V/m

Date/Time: 6/30/2010 5:13:00 PM

Test Laboratory: RIM Testing Services

HAC_E_GSM_1900_low_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 14.2 V/m; Power Drift = -0.138 dB

Maximum value of Total (measured) = 23.1 V/m

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 = 64.2 V/m

Probe Modulation Factor = 2.79

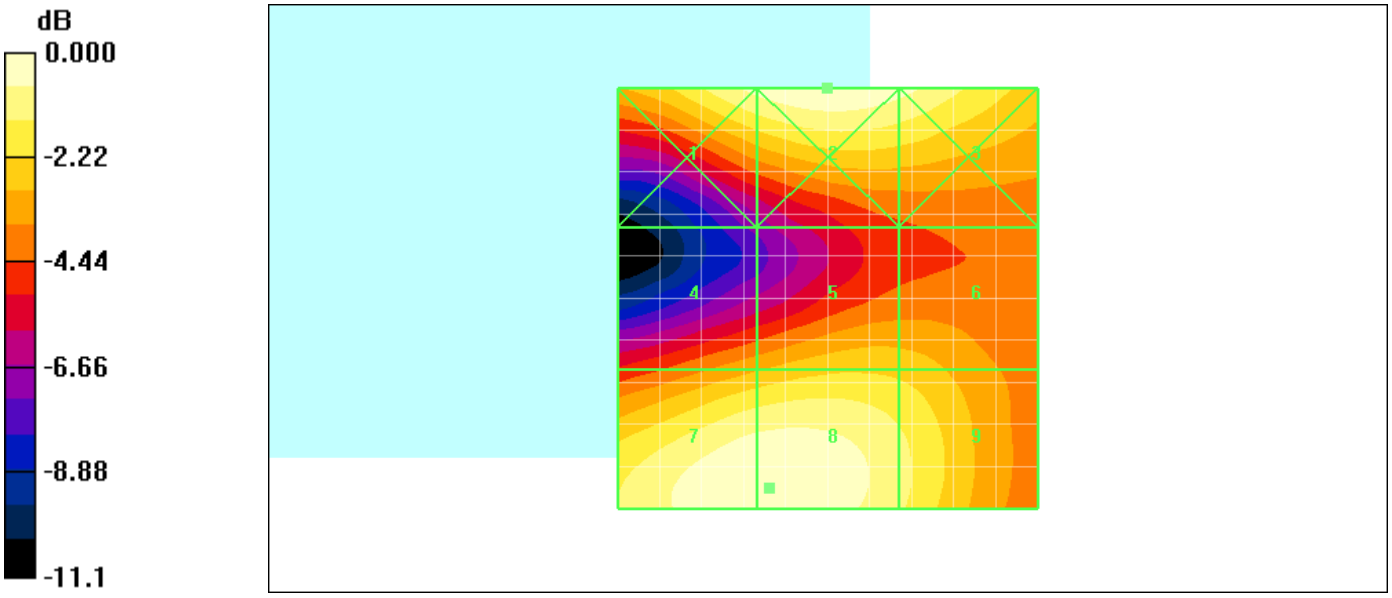
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 14.2 V/m; Power Drift = -0.138 dB

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

Peak E-field in V/m

Grid 1 **61.0 M3**	Grid 2 **64.5 M3**	Grid 3 **61.3 M3**
Grid 4 **45.7 M4**	Grid 5 **49.6 M3**	Grid 6 **48.8 M3**
Grid 7 **64.1 M3**	Grid 8 **64.2 M3**	Grid 9 **56.0 M3**



0 dB = 64.5V/m

Date/Time: 6/30/2010 5:20:18 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_II_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 18.5 V/m; Power Drift = -0.261 dB

Maximum value of Total (measured) = 38.3 V/m

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 = 24.8 V/m

Probe Modulation Factor = 0.910

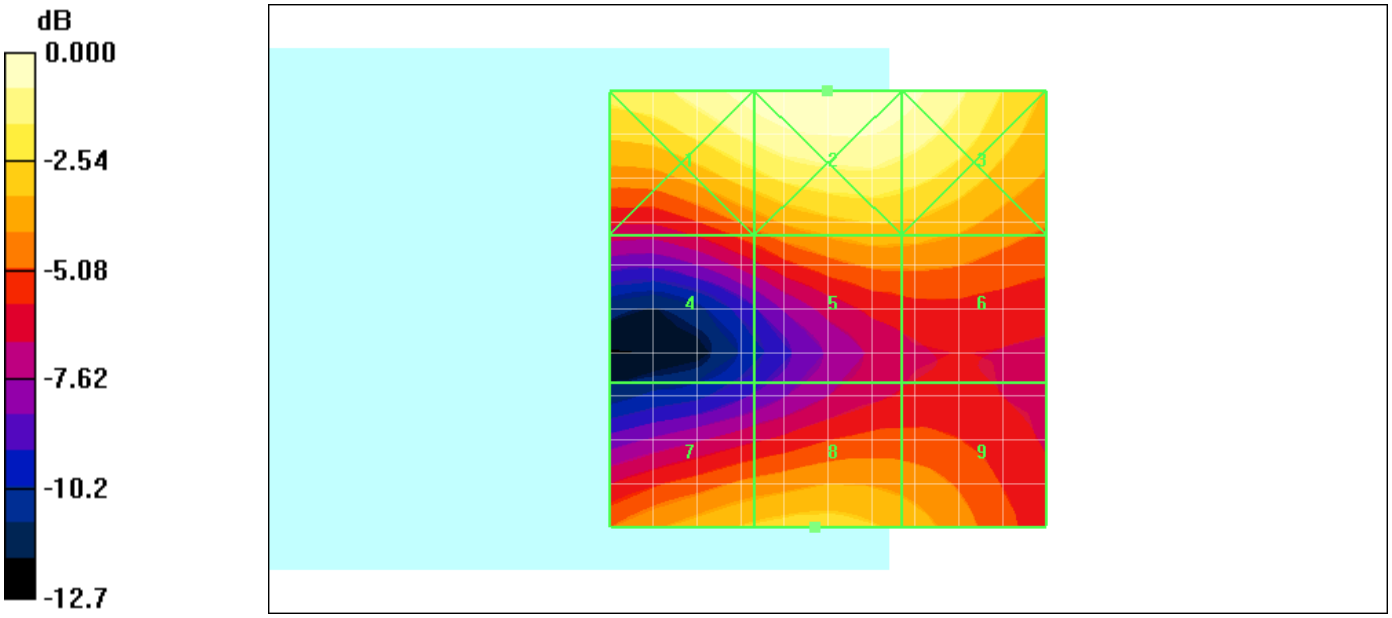
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 18.5 V/m; Power Drift = -0.261 dB

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

Peak E-field in V/m

Grid 1 **33.0 M4**	Grid 2 **34.8 M4**	Grid 3 **32.9 M4**
Grid 4 **18.9 M4**	Grid 5 **22.6 M4**	Grid 6 **22.5 M4**
Grid 7 **24.1 M4**	Grid 8 **24.8 M4**	Grid 9 **22.9 M4**



0 dB = 34.8V/m

Date/Time: 6/30/2010 5:25:57 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_II_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 19.6 V/m; Power Drift = 0.003 dB

Maximum value of Total (measured) = 37.1 V/m

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 = 23.9 V/m

Probe Modulation Factor = 0.910

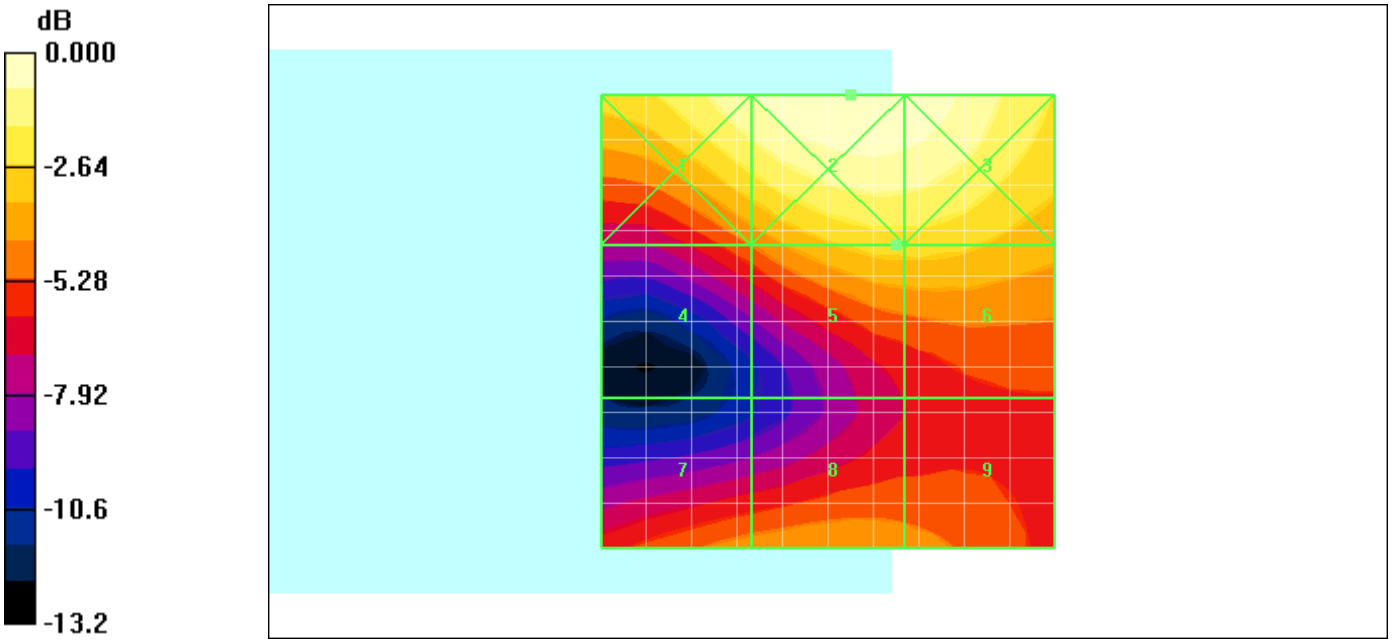
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 19.6 V/m; Power Drift = 0.003 dB

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

Peak E-field in V/m

Grid 1 **30.6 M4**	Grid 2 **33.9 M4**	Grid 3 **33.1 M4**
Grid 4 **18.7 M4**	Grid 5 **23.9 M4**	Grid 6 **23.9 M4**
Grid 7 **19.6 M4**	Grid 8 **20.4 M4**	Grid 9 **19.5 M4**



0 dB = 33.9V/m

Date/Time: 6/30/2010 5:31:02 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_II_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 21.9 V/m; Power Drift = -0.013 dB

Maximum value of Total (measured) = 36.3 V/m

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 = 24.7 V/m

Probe Modulation Factor = 0.910

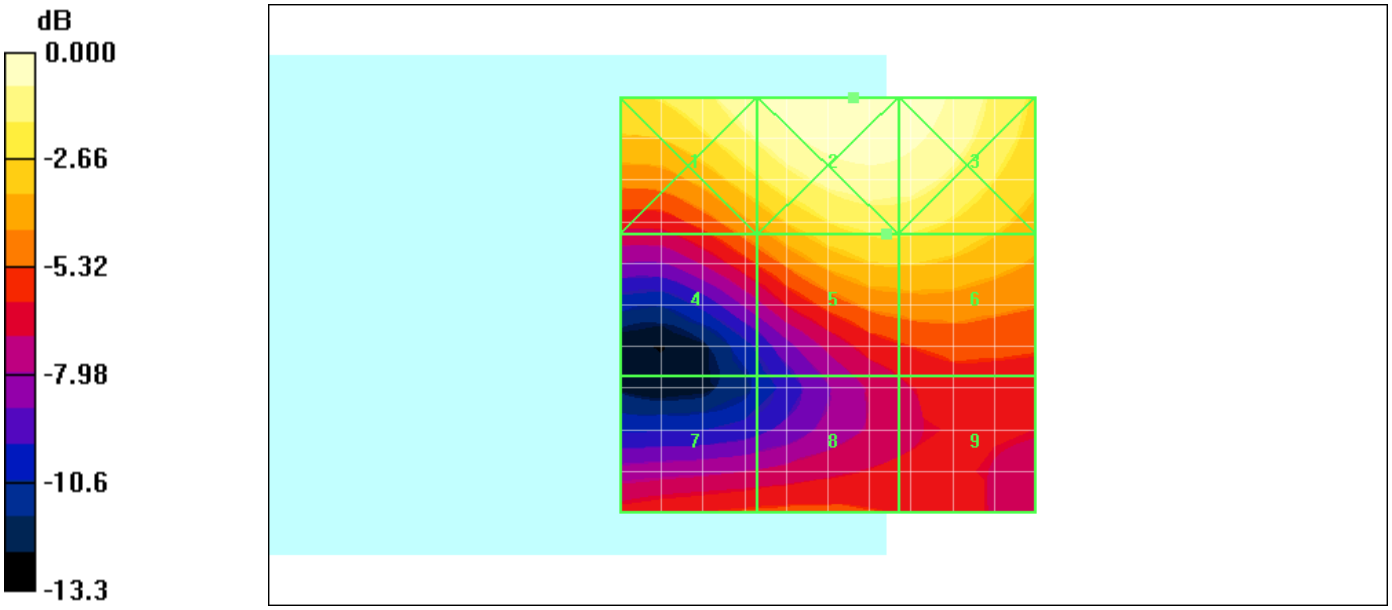
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 21.9 V/m; Power Drift = -0.013 dB

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

Peak E-field in V/m

Grid 1 **29.8 M4**	Grid 2 **33.1 M4**	Grid 3 **32.3 M4**
Grid 4 **19.2 M4**	Grid 5 **24.7 M4**	Grid 6 **24.7 M4**
Grid 7 **16.7 M4**	Grid 8 **16.9 M4**	Grid 9 **16.1 M4**



0 dB = 33.1V/m

Date/Time: 6/30/2010 5:36:57 PM

Test Laboratory: RIM Testing Services

HAC_E_UMTS_band_II_low_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1000 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/8/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

E Scan - ER3D - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 18.4 V/m; Power Drift = -0.026 dB

Maximum value of Total (measured) = 29.8 V/m

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 = 27.3 V/m

Probe Modulation Factor = 0.910

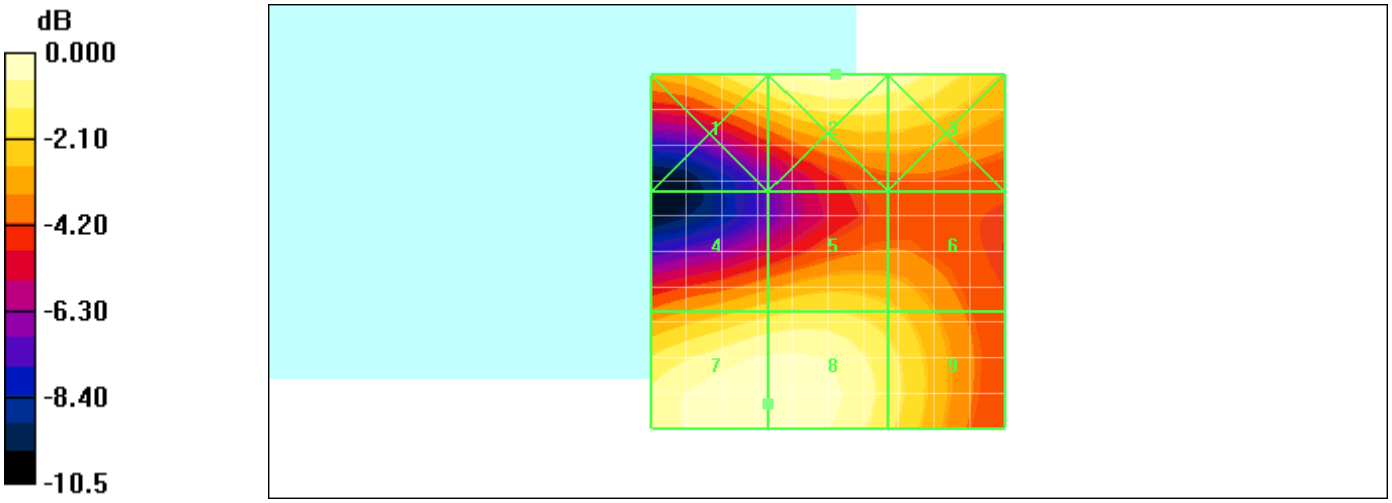
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 18.4 V/m; Power Drift = -0.026 dB

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

Peak E-field in V/m

Grid 1 **24.1 M4**	Grid 2 **25.9 M4**	Grid 3 **24.9 M4**
Grid 4 **20.7 M4**	Grid 5 **21.6 M4**	Grid 6 **20.2 M4**
Grid 7 **27.3 M4**	Grid 8 **27.3 M4**	Grid 9 **22.4 M4**



0 dB = 27.3V/m

Date/Time: 6/30/2010 10:53:45 AM

Test Laboratory: RIM Testing Services

HAC_H_GSM850_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.077 A/m; Power Drift = -0.004 dB

Maximum value of Total (measured) = 0.164 A/m

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 = 0.310 A/m

Probe Modulation Factor = 2.77

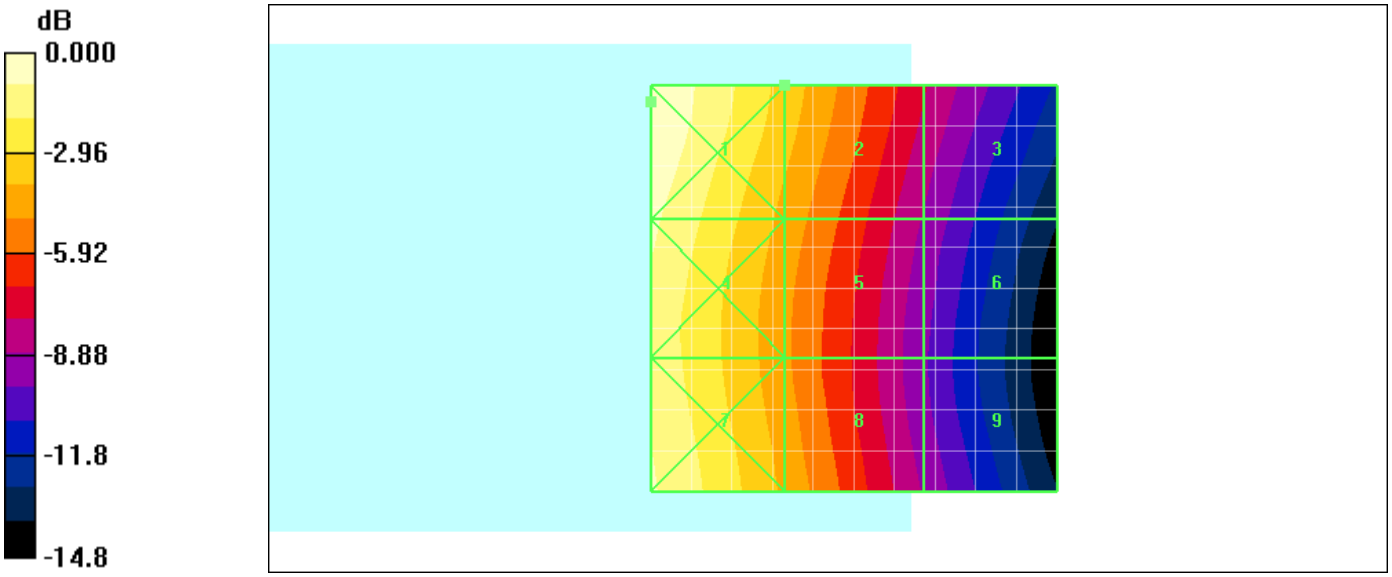
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.077 A/m; Power Drift = -0.004 dB

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

Peak H-field in A/m

Grid 1 **0.455 M3**	Grid 2 **0.310 M4**	Grid 3 **0.187 M4**
Grid 4 **0.417 M4**	Grid 5 **0.279 M4**	Grid 6 **0.163 M4**
Grid 7 **0.412 M4**	Grid 8 **0.282 M4**	Grid 9 **0.163 M4**



0 dB = 0.455A/m

Date/Time: 6/30/2010 11:03:34 AM

Test Laboratory: RIM Testing Services

HAC_H_GSM850_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 836.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.092 A/m; Power Drift = 0.006 dB

Maximum value of Total (measured) = 0.184 A/m

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 = 0.358 A/m

Probe Modulation Factor = 2.77

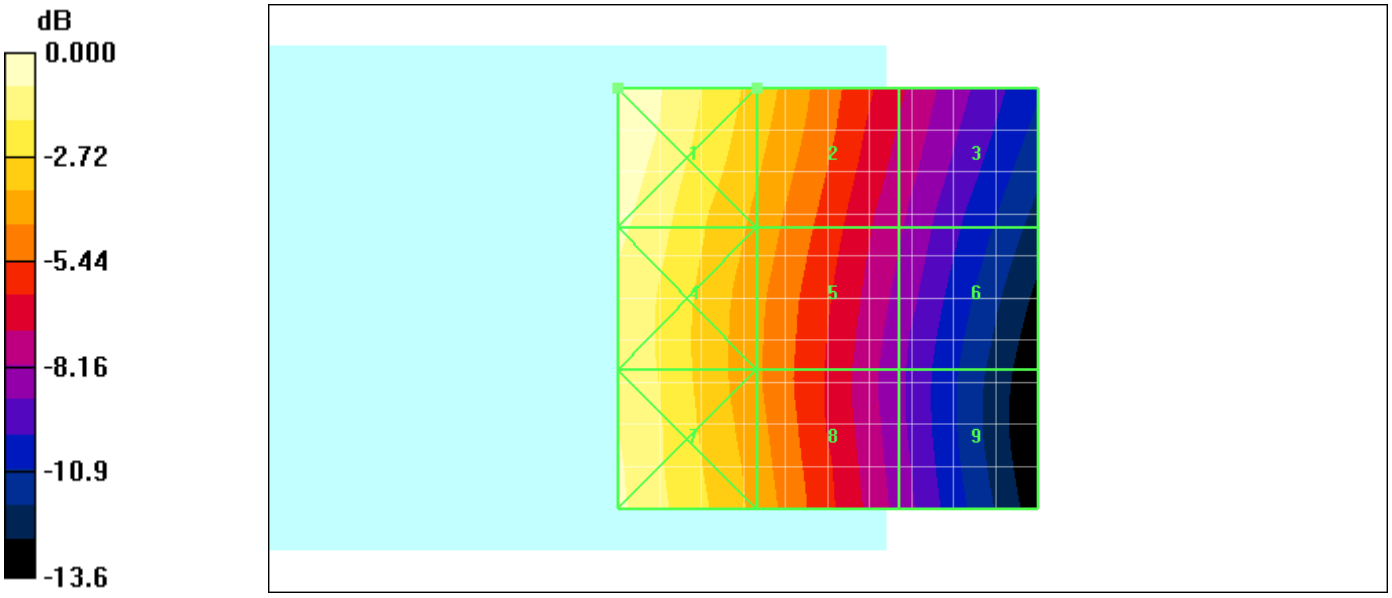
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.092 A/m; Power Drift = 0.006 dB

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

Peak H-field in A/m

Grid 1 **0.511 M3**	Grid 2 **0.358 M4**	Grid 3 **0.227 M4**
Grid 4 **0.472 M3**	Grid 5 **0.327 M4**	Grid 6 **0.203 M4**
Grid 7 **0.471 M3**	Grid 8 **0.326 M4**	Grid 9 **0.193 M4**



0 dB = 0.511A/m

Date/Time: 6/30/2010 11:09:26 AM

Test Laboratory: RIM Testing Services

HAC_H_GSM850_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.099 A/m; Power Drift = 0.371 dB

Maximum value of Total (measured) = 0.193 A/m

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 = 0.382 A/m

Probe Modulation Factor = 2.77

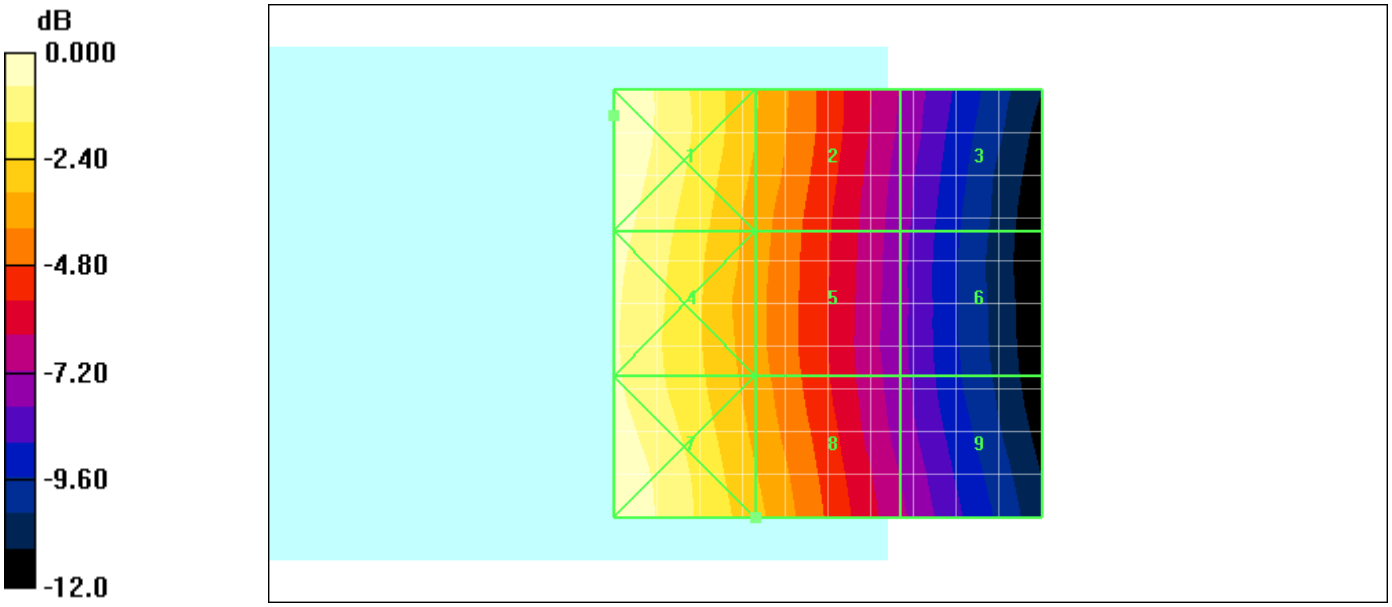
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.099 A/m; Power Drift = 0.371 dB

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

Peak H-field in A/m

Grid 1 **0.535 M3**	Grid 2 **0.373 M4**	Grid 3 **0.233 M4**
Grid 4 **0.507 M3**	Grid 5 **0.354 M4**	Grid 6 **0.221 M4**
Grid 7 **0.533 M3**	Grid 8 **0.382 M4**	Grid 9 **0.239 M4**



0 dB = 0.535A/m

Date/Time: 6/30/2010 11:19:23 AM

Test Laboratory: RIM Testing Services

HAC_H_GSM850_high_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.099 A/m; Power Drift = -0.010 dB

Maximum value of Total (measured) = 0.177 A/m

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 = 0.351 A/m

Probe Modulation Factor = 2.77

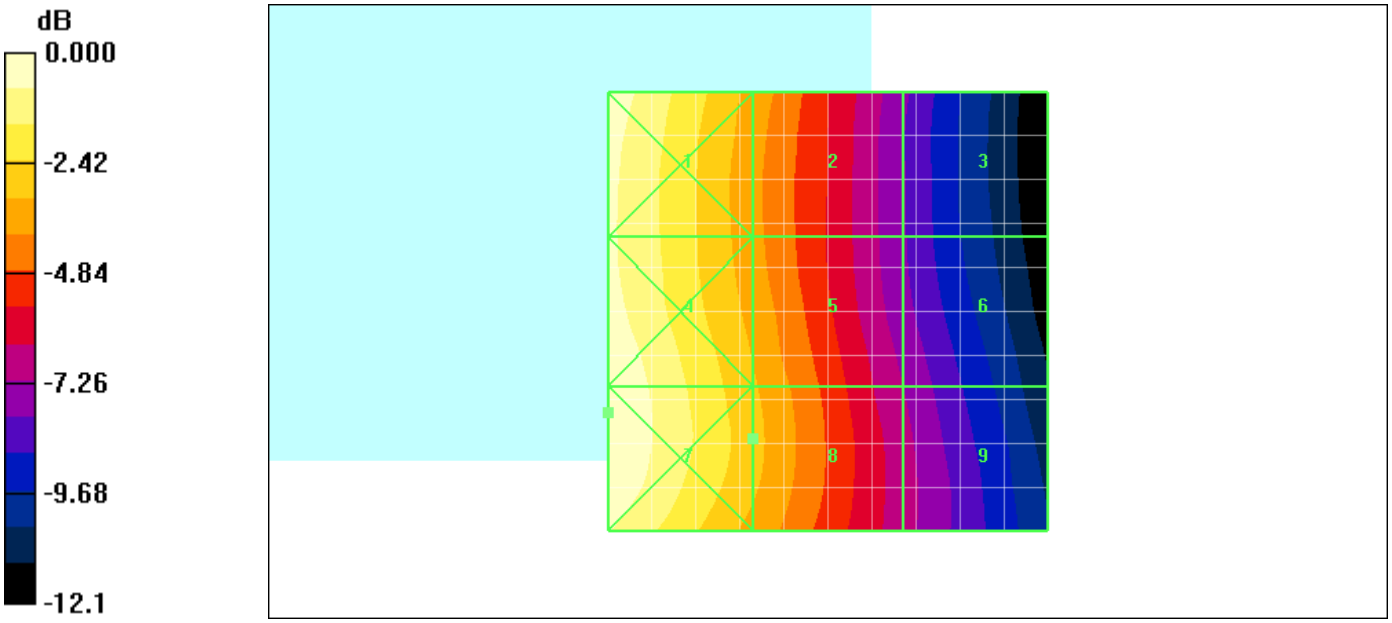
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.099 A/m; Power Drift = -0.010 dB

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

Peak H-field in A/m

Grid 1 **0.478 M3**	Grid 2 **0.328 M4**	Grid 3 **0.200 M4**
Grid 4 **0.488 M3**	Grid 5 **0.344 M4**	Grid 6 **0.214 M4**
Grid 7 **0.492 M3**	Grid 8 **0.351 M4**	Grid 9 **0.224 M4**



0 dB = 0.492A/m

Date/Time: 6/30/2010 11:30:11 AM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_V_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 826.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.085 A/m; Power Drift = 0.017 dB

Maximum value of Total (measured) = 0.172 A/m

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 = 0.135 A/m

Probe Modulation Factor = 1.11

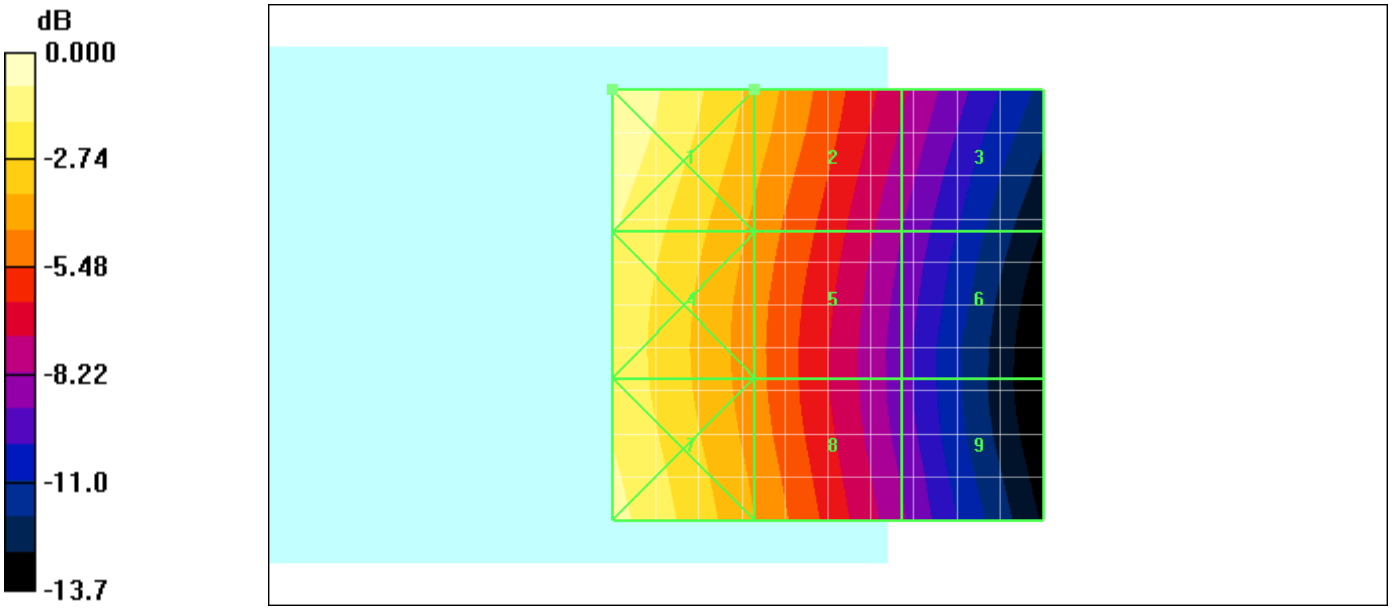
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.085 A/m; Power Drift = 0.017 dB

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

Peak H-field in A/m

Grid 1 **0.191 M4**	Grid 2 **0.135 M4**	Grid 3 **0.084 M4**
Grid 4 **0.173 M4**	Grid 5 **0.122 M4**	Grid 6 **0.075 M4**
Grid 7 **0.179 M4**	Grid 8 **0.126 M4**	Grid 9 **0.076 M4**



0 dB = 0.191A/m

Date/Time: 6/30/2010 11:35:49 AM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_V_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.104 A/m; Power Drift = 0.069 dB

Maximum value of Total (measured) = 0.202 A/m

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 = 0.161 A/m

Probe Modulation Factor = 1.11

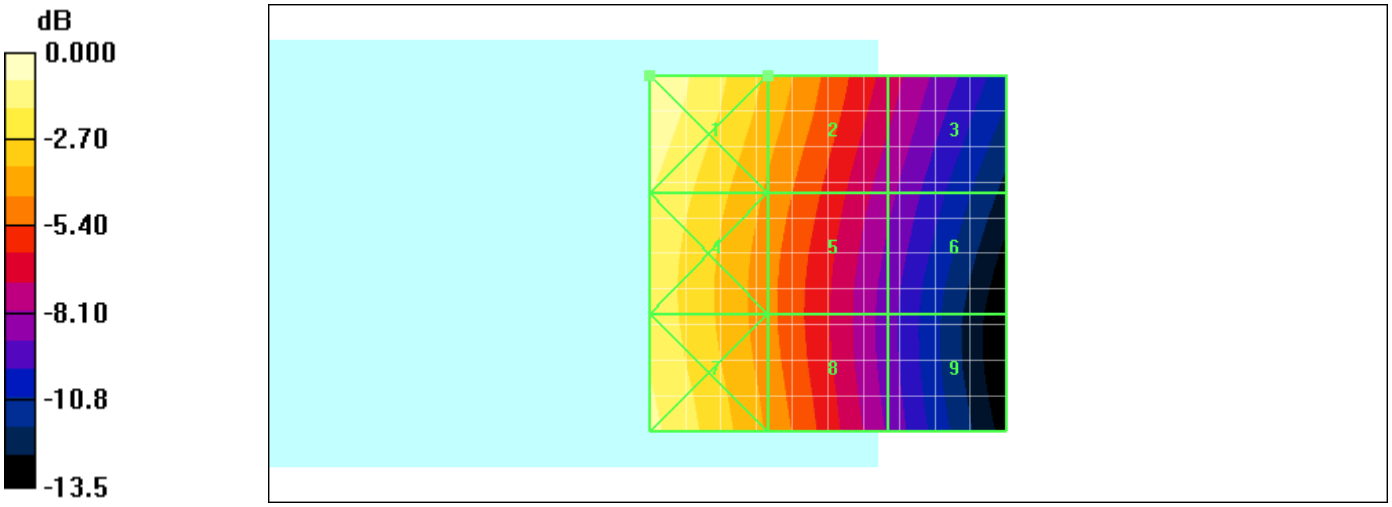
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.104 A/m; Power Drift = 0.069 dB

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

Peak H-field in A/m

Grid 1 **0.224 M4**	Grid 2 **0.161 M4**	Grid 3 **0.104 M4**
Grid 4 **0.203 M4**	Grid 5 **0.146 M4**	Grid 6 **0.091 M4**
Grid 7 **0.209 M4**	Grid 8 **0.147 M4**	Grid 9 **0.087 M4**



0 dB = 0.224A/m

Date/Time: 6/30/2010 11:40:46 AM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_V_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 846.6 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.109 A/m; Power Drift = 0.106 dB

Maximum value of Total (measured) = 0.200 A/m

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 = 0.161 A/m

Probe Modulation Factor = 1.11

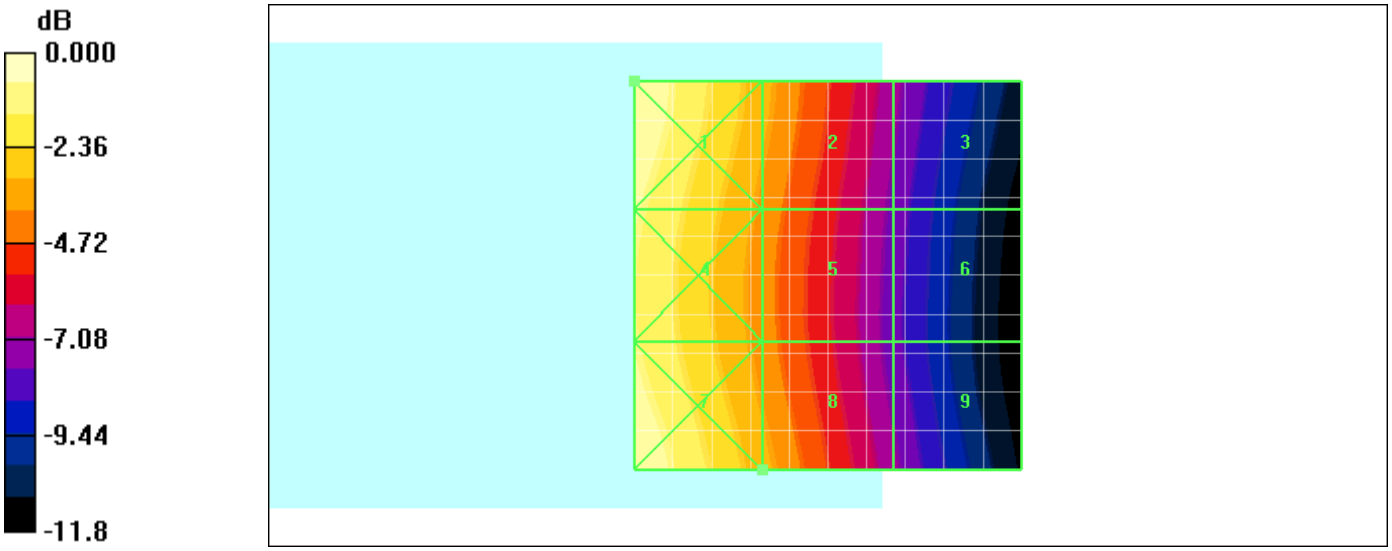
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.109 A/m; Power Drift = 0.106 dB

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

Peak H-field in A/m

Grid 1 **0.221 M4**	Grid 2 **0.161 M4**	Grid 3 **0.102 M4**
Grid 4 **0.207 M4**	Grid 5 **0.152 M4**	Grid 6 **0.096 M4**
Grid 7 **0.221 M4**	Grid 8 **0.161 M4**	Grid 9 **0.101 M4**



0 dB = 0.221A/m

Date/Time: 6/30/2010 11:47:27 AM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_V_high_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD V; Frequency: 846.6 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.110 A/m; Power Drift = -0.024 dB

Maximum value of Total (measured) = 0.190 A/m

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 = 0.151 A/m

Probe Modulation Factor = 1.11

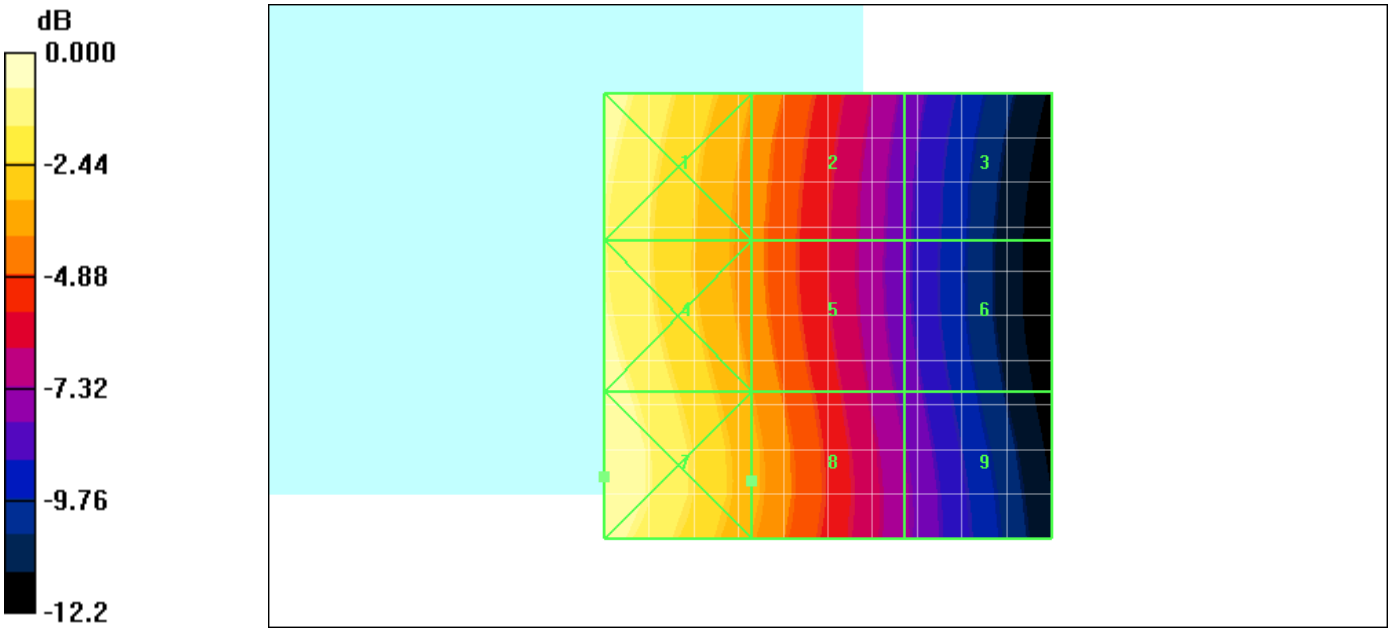
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.110 A/m; Power Drift = -0.024 dB

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

Peak H-field in A/m

Grid 1 **0.204 M4**	Grid 2 **0.147 M4**	Grid 3 **0.090 M4**
Grid 4 **0.204 M4**	Grid 5 **0.146 M4**	Grid 6 **0.089 M4**
Grid 7 **0.211 M4**	Grid 8 **0.151 M4**	Grid 9 **0.094 M4**



0 dB = 0.211A/m

Date/Time: 6/30/2010 11:54:16 AM

Test Laboratory: RIM Testing Services

HAC_H_GSM1900_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.082 A/m; Power Drift = -0.125 dB

Maximum value of Total (measured) = 0.104 A/m

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 = 0.183 A/m

Probe Modulation Factor = 2.52

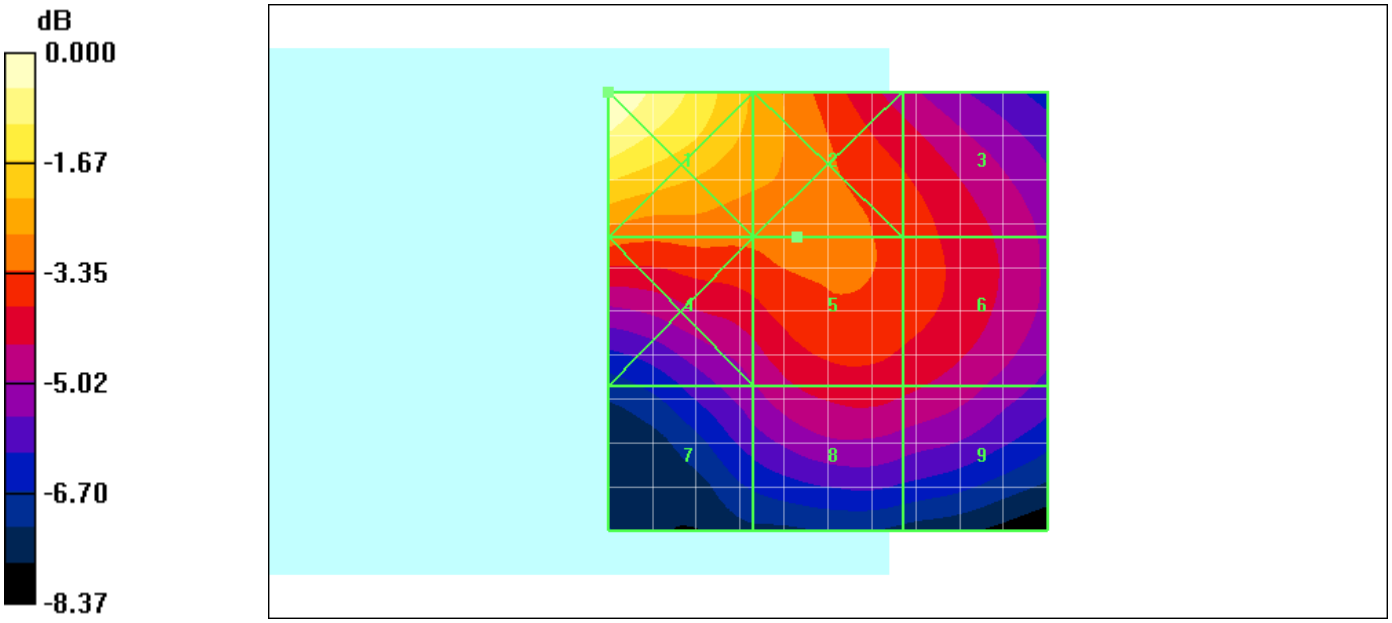
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.082 A/m; Power Drift = -0.125 dB

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

Peak H-field in A/m

Grid 1 **0.263 M2**	Grid 2 **0.202 M3**	Grid 3 **0.175 M3**
Grid 4 **0.185 M3**	Grid 5 **0.183 M3**	Grid 6 **0.175 M3**
Grid 7 **0.147 M3**	Grid 8 **0.164 M3**	Grid 9 **0.160 M3**



0 dB = 0.263A/m

Date/Time: 6/30/2010 11:59:47 AM

Test Laboratory: RIM Testing Services

HAC_H_GSM1900_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.070 A/m; Power Drift = 0.124 dB

Maximum value of Total (measured) = 0.093 A/m

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 = 0.165 A/m

Probe Modulation Factor = 2.52

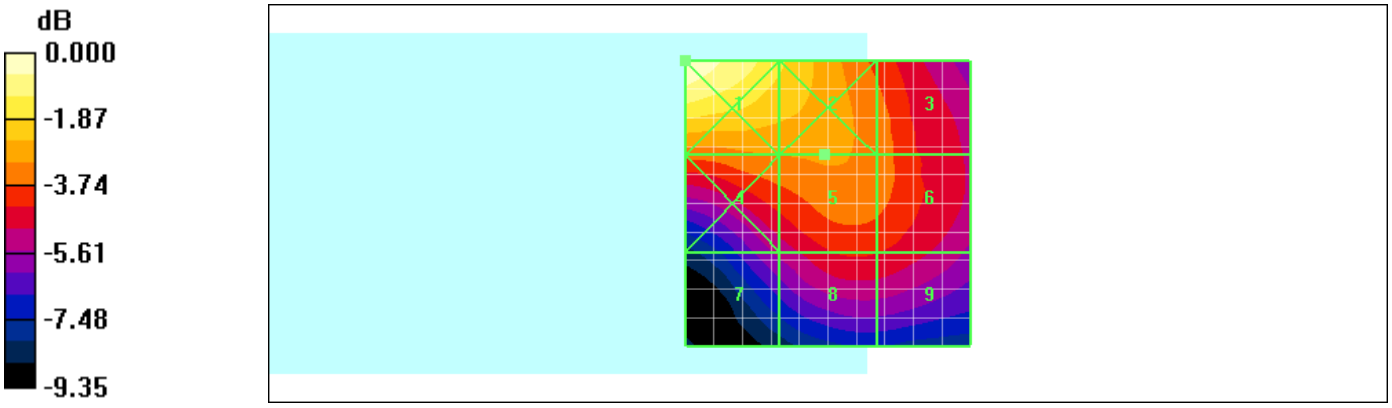
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.070 A/m; Power Drift = 0.124 dB

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

Peak H-field in A/m

Grid 1 **0.233 M3**	Grid 2 **0.191 M3**	Grid 3 **0.158 M3**
Grid 4 **0.163 M3**	Grid 5 **0.165 M3**	Grid 6 **0.159 M3**
Grid 7 **0.125 M4**	Grid 8 **0.143 M3**	Grid 9 **0.142 M3**



0 dB = 0.233A/m

Date/Time: 6/30/2010 12:05:15 PM

Test Laboratory: RIM Testing Services

HAC_H_GSM1900_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.062 A/m; Power Drift = 0.040 dB

Maximum value of Total (measured) = 0.092 A/m

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 = 0.153 A/m

Probe Modulation Factor = 2.52

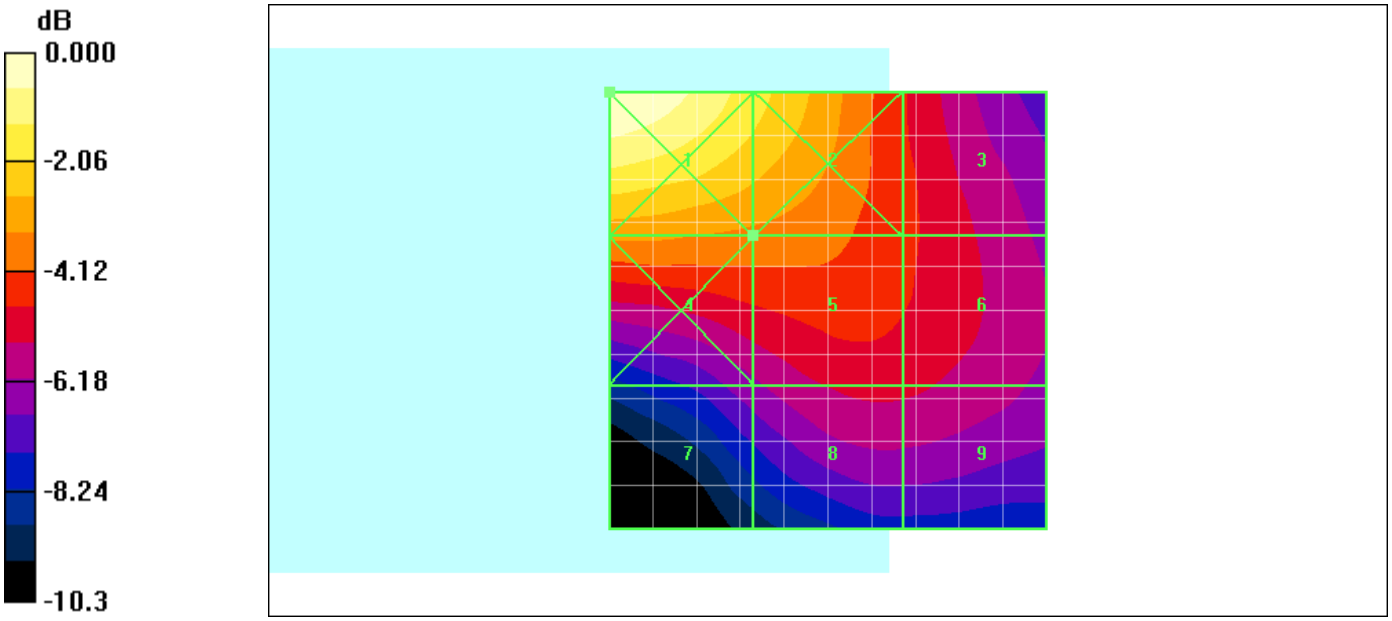
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.062 A/m; Power Drift = 0.040 dB

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

Peak H-field in A/m

Grid 1 **0.231 M3**	Grid 2 **0.189 M3**	Grid 3 **0.136 M4**
Grid 4 **0.159 M3**	Grid 5 **0.153 M3**	Grid 6 **0.136 M4**
Grid 7 **0.112 M4**	Grid 8 **0.126 M4**	Grid 9 **0.125 M4**



0 dB = 0.231A/m

Date/Time: 6/30/2010 12:11:33 PM

Test Laboratory: RIM Testing Services

HAC_H_GSM1900_low_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.081 A/m; Power Drift = -0.051 dB

Maximum value of Total (measured) = 0.084 A/m

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 = 0.174 A/m

Probe Modulation Factor = 2.52

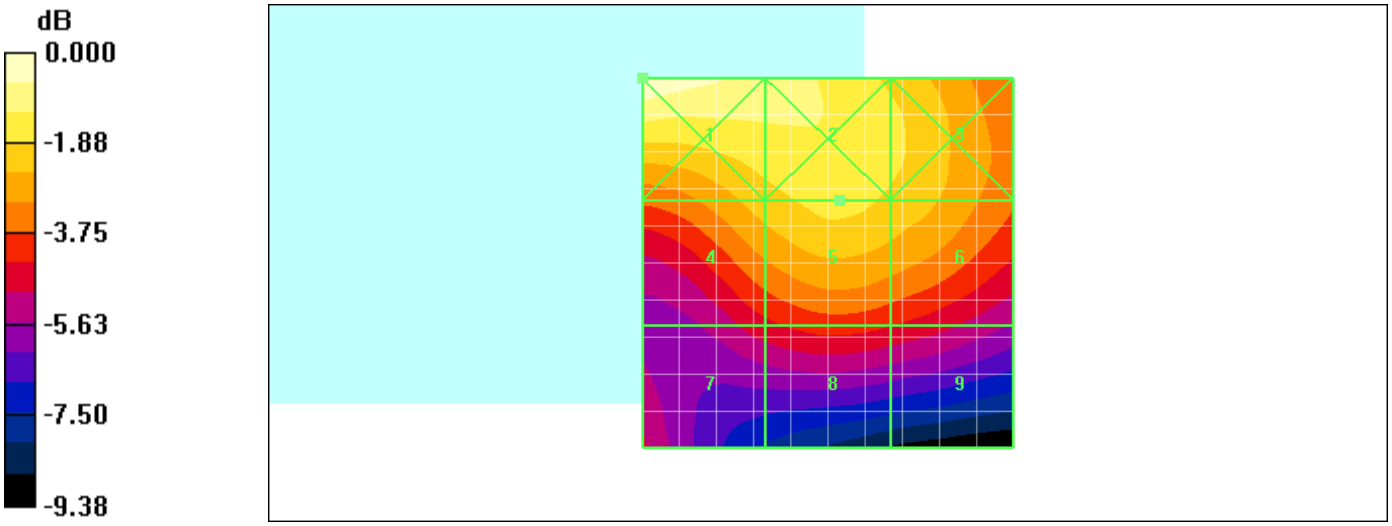
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.081 A/m; Power Drift = -0.051 dB

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

Peak H-field in A/m

Grid 1 **0.211 M3**	Grid 2 **0.191 M3**	Grid 3 **0.174 M3**
Grid 4 **0.165 M3**	Grid 5 **0.174 M3**	Grid 6 **0.168 M3**
Grid 7 **0.125 M4**	Grid 8 **0.132 M4**	Grid 9 **0.128 M4**



0 dB = 0.211A/m

Date/Time: 6/30/2010 12:20:12 PM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_II_low_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.103 A/m; Power Drift = -0.006 dB

Maximum value of Total (measured) = 0.131 A/m

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 = 0.089 A/m

Probe Modulation Factor = 0.920

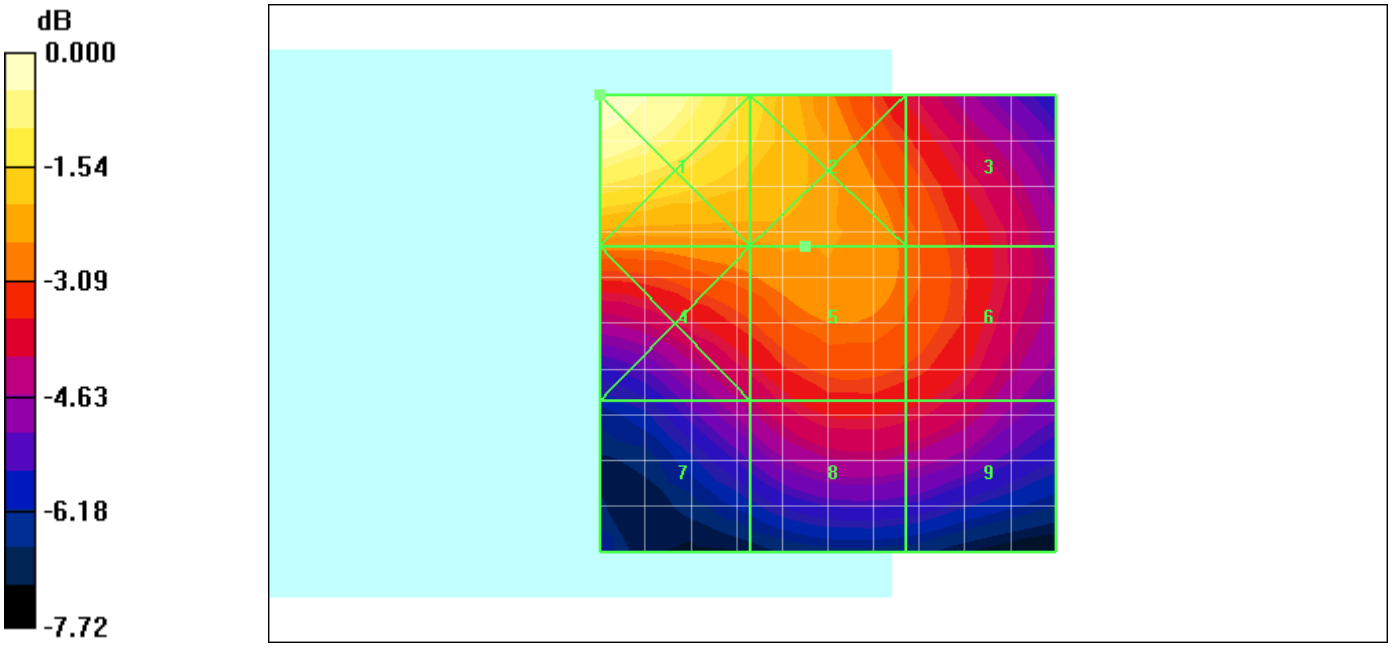
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.103 A/m; Power Drift = -0.006 dB

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

Peak H-field in A/m

Grid 1 **0.121 M4**	Grid 2 **0.098 M4**	Grid 3 **0.084 M4**
Grid 4 **0.088 M4**	Grid 5 **0.089 M4**	Grid 6 **0.084 M4**
Grid 7 **0.071 M4**	Grid 8 **0.078 M4**	Grid 9 **0.076 M4**



0 dB = 0.121A/m

Date/Time: 6/30/2010 12:26:18 PM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_II_mid_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.094 A/m; Power Drift = -0.039 dB

Maximum value of Total (measured) = 0.126 A/m

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 = 0.081 A/m

Probe Modulation Factor = 0.920

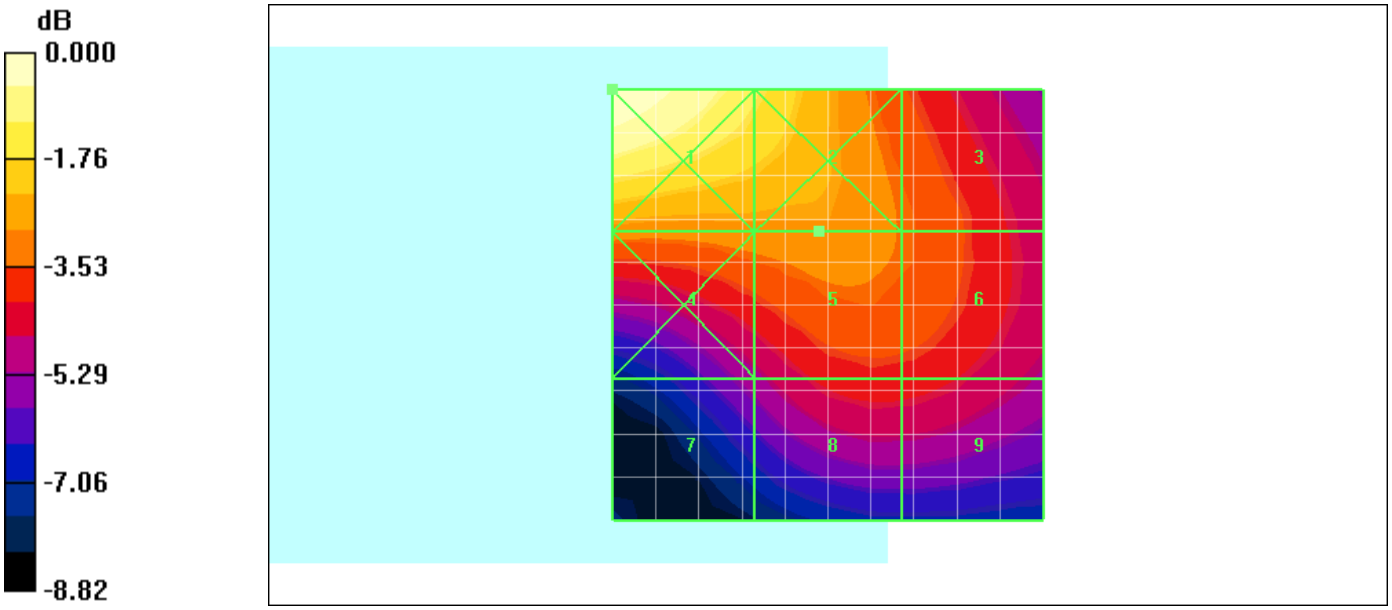
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.094 A/m; Power Drift = -0.039 dB

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

Peak H-field in A/m

Grid 1 **0.116 M4**	Grid 2 **0.096 M4**	Grid 3 **0.077 M4**
Grid 4 **0.080 M4**	Grid 5 **0.081 M4**	Grid 6 **0.077 M4**
Grid 7 **0.061 M4**	Grid 8 **0.070 M4**	Grid 9 **0.070 M4**



0 dB = 0.116A/m

Date/Time: 6/30/2010 12:31:24 PM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_II_high_chan

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.092 A/m; Power Drift = 0.003 dB

Maximum value of Total (measured) = 0.127 A/m

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 = 0.080 A/m

Probe Modulation Factor = 0.920

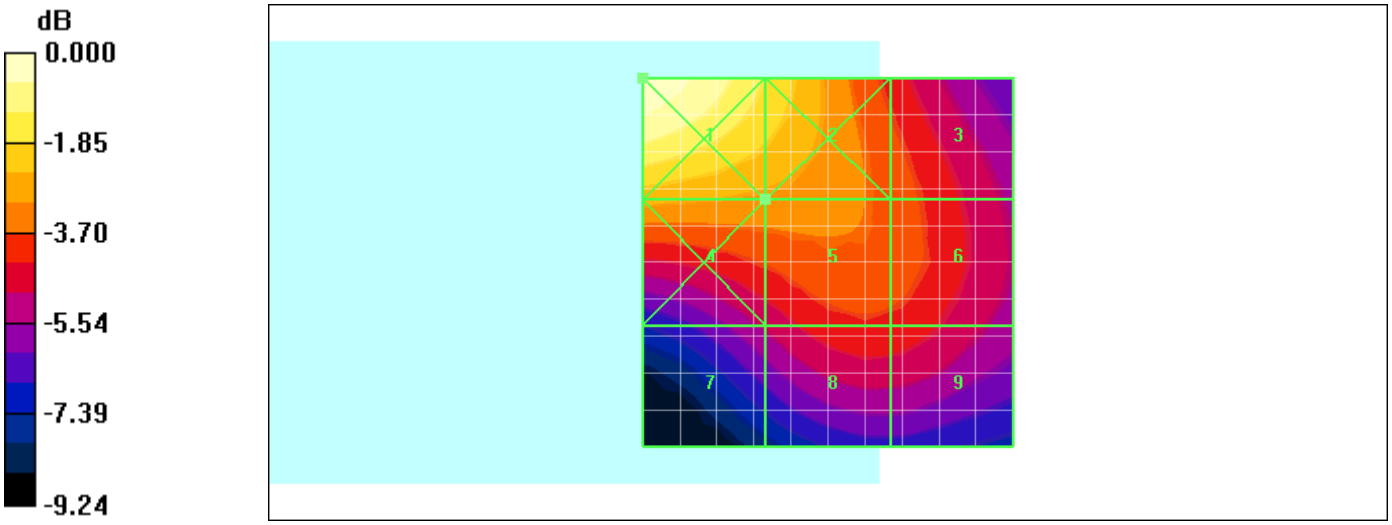
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.092 A/m; Power Drift = 0.003 dB

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

Peak H-field in A/m

Grid 1 **0.117 M4**	Grid 2 **0.094 M4**	Grid 3 **0.074 M4**
Grid 4 **0.084 M4**	Grid 5 **0.080 M4**	Grid 6 **0.074 M4**
Grid 7 **0.062 M4**	Grid 8 **0.070 M4**	Grid 9 **0.070 M4**



0 dB = 0.117A/m

Date/Time: 6/30/2010 12:37:14 PM

Test Laboratory: RIM Testing Services

HAC_H_UMTS_band_II_low_chan_Telecoil

DUT: BlackBerry Smartphone; Type: SAMPLE

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6168; ; Calibrated: 3/12/2010
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (11x11x1): Measurement grid: dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.102 A/m; Power Drift = 0.110 dB

Maximum value of Total (measured) = 0.101 A/m

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 = 0.081 A/m

Probe Modulation Factor = 0.920

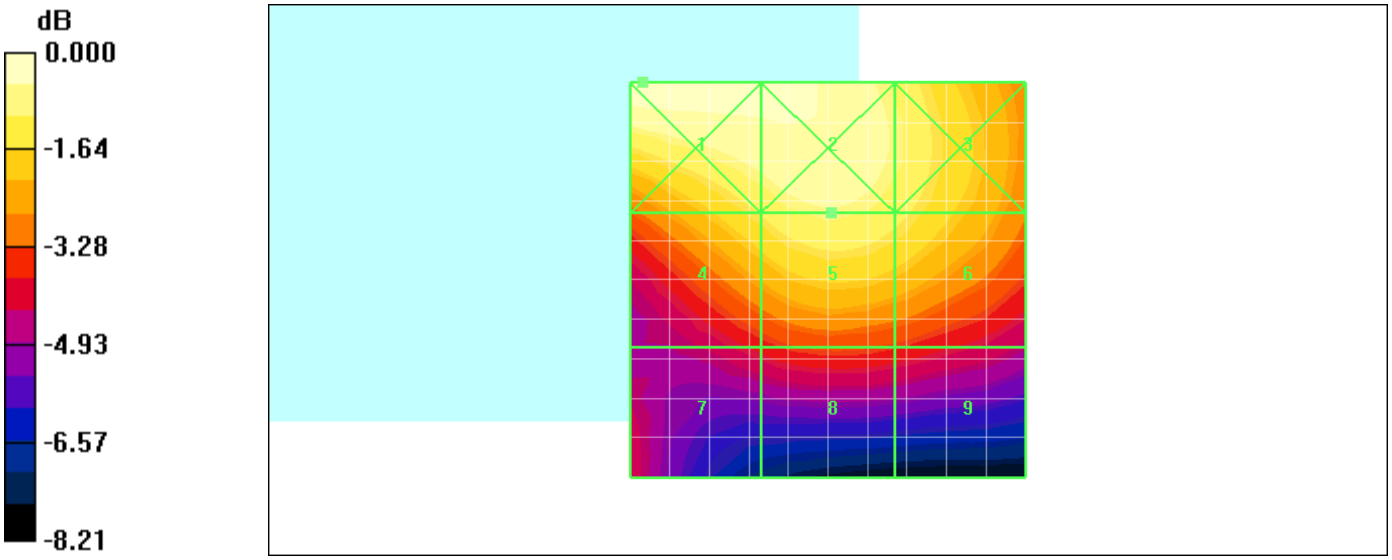
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.102 A/m; Power Drift = 0.110 dB

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

Peak H-field in A/m

Grid 1 **0.093 M4**	Grid 2 **0.090 M4**	Grid 3 **0.081 M4**
Grid 4 **0.077 M4**	Grid 5 **0.081 M4**	Grid 6 **0.078 M4**
Grid 7 **0.057 M4**	Grid 8 **0.061 M4**	Grid 9 **0.059 M4**



0 dB = 0.093A/m