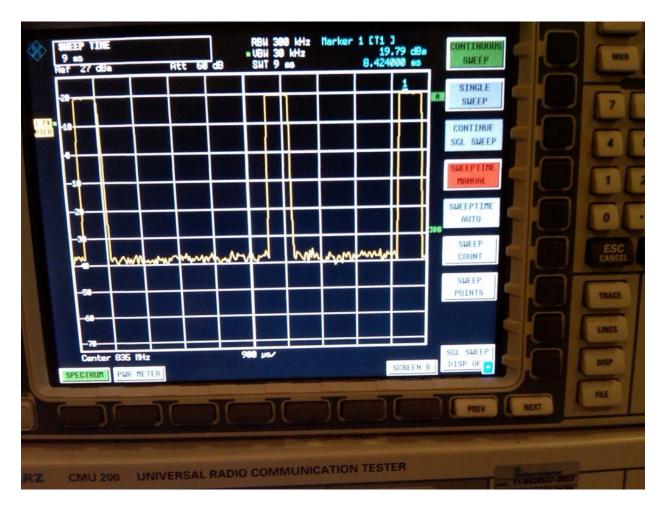
Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			
Author Data Daoud Attayi	Dates of Test April 07-08, 2010	Report No RTS-2341-1004-60	FCC ID L6ARCW400	GW

Annex A: Measurement data and plots

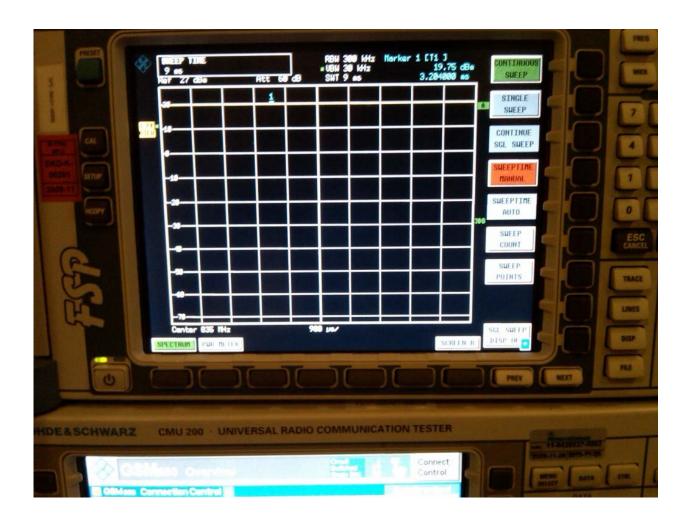
A.1 Spectrum analyser plots: GSM, CW and 80%AM ignals

Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			
Author Data Daoud Attayi	Dates of Test April 07-08, 2010	Report No RTS-2341-1004-60	FCC ID L6ARCW400	GW

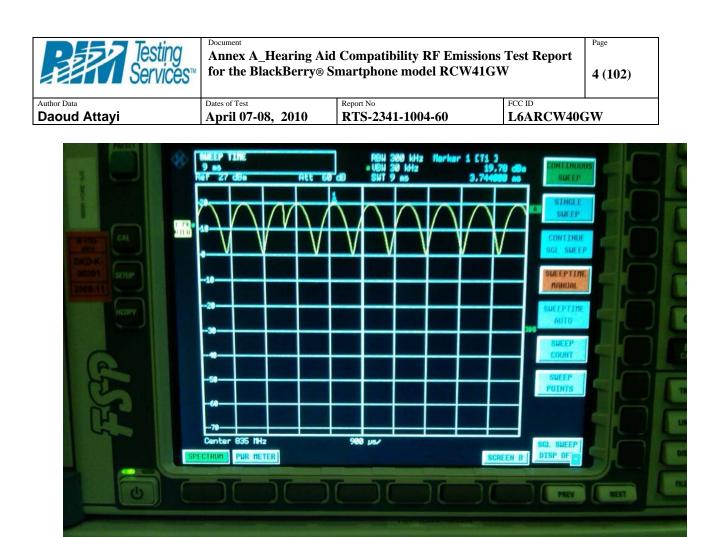


0 Hz Span GSM (835MHz)

Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW



0 Hz Span CW Plot (835MHz)



0 Hz Span 80% AM Plot (835MHz)

Circuit Switche Single S

F

Connect

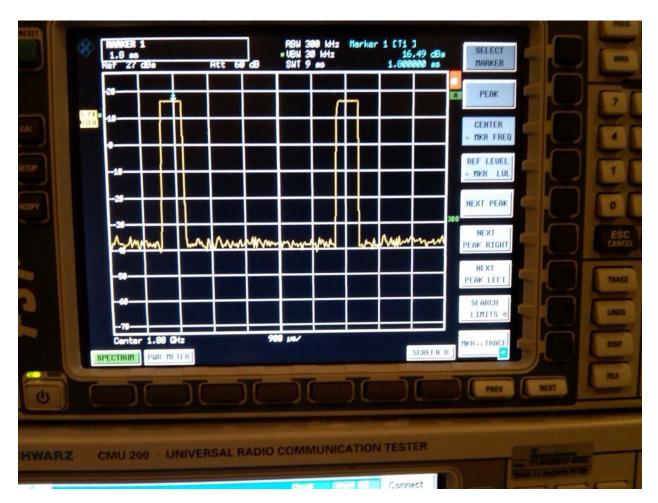
Control

CMU 200 · UNIVERSAL RADIO COMMUNICATION TESTER

E&SCHWARZ

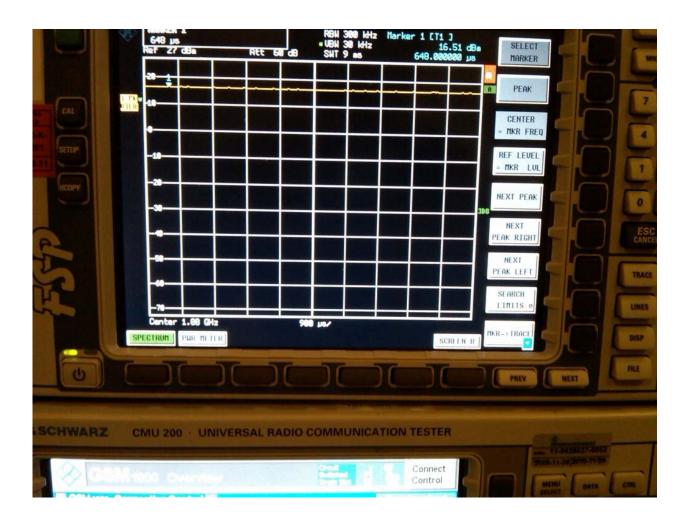
GSM850 Overview

Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			Page 5 (102)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW



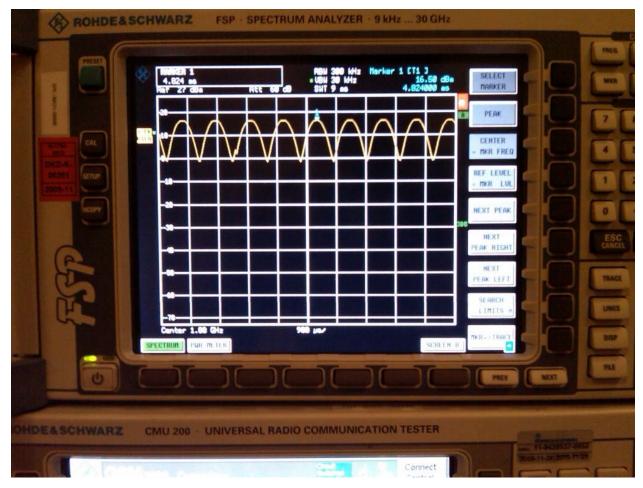
0 Hz Span GSM (1880 MHz)

Testing Services™	Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW



0 Hz Span CW Plot (1880 MHz)

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW400		GW	



0 Hz Span 80% AM Plot (1880 MHz)

Testing Services [™]	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW

A.2 Dipole validation and probe modulation factor plots

Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	ΰW

Date/Time: 4/7/2010 12:00:12 PM

File Name: HAC_E_Dipole_CW835_20.00dBm.da4

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

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 103.5 V/m; Power Drift = 0.021 dB

Maximum value of Total (measured) = 162.9 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 = 163.6 V/m

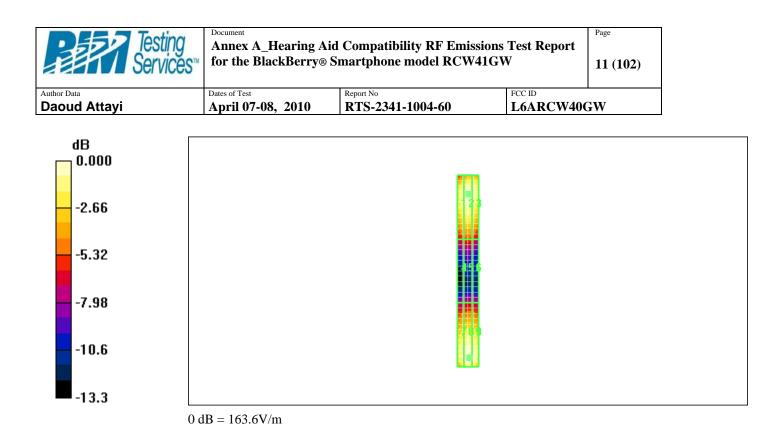
Probe Modulation Factor = 1.00

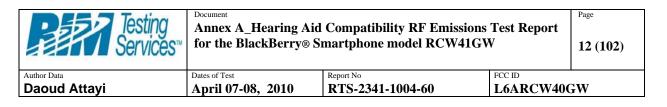
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 103.5 V/m; Power Drift = 0.021 dB

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

Grid 1	Grid 2	Grid 3
153.8 M4	160.3 M4	158.2 M4
Grid 4	Grid 5	Grid 6
85.8 M4	87.8 M4	85.2 M4
Grid 7	Grid 8	Grid 9





Date/Time: 4/8/2010 11:06:35 AM

File Name: HAC_E_Dipole_CW835_PMF_GSM.da4

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

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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)

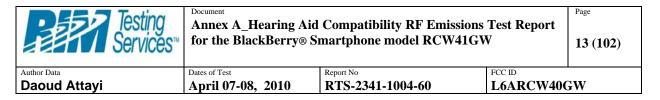
- Electronics: DAE3 Sn473; Calibrated: 1/4/2010

- 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 = 104.2 V/m; Power Drift = -0.140 dB Maximum value of Total (measured) = 163.7 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 = 165.5 V/m

Probe Modulation Factor = 1.00

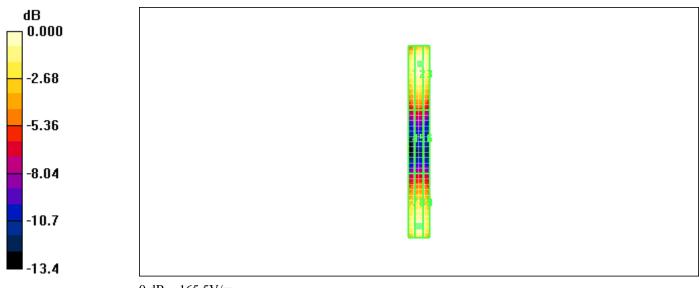
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 104.2 V/m; Power Drift = -0.140 dB

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

Grid 1	Grid 2	Grid 3
156.9 M4	165.5 M4	164.1 M4
Grid 4	Grid 5	Grid 6
85.2 M4	87.0 M4	84.0 M4
Grid 7	Grid 8	Grid 9
154.0 M4	158.5 M4	153.7 M4

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Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW



 $0 \ dB = 165.5 \ V/m$



Date/Time: 4/8/2010 10:55:31 AM

File Name: HAC_E_Dipole_GSM835.da4

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

Program Name: HAC RF E Dipole

Communication System: GSM 850; Frequency: 835 MHz; Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 35.6 V/m; Power Drift = -0.007 dB

Maximum value of Total (measured) = 56.5 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 = 57.1 V/m

Probe Modulation Factor = 1.00

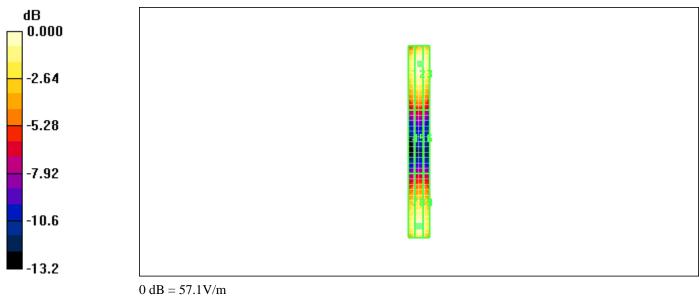
Device Reference Point: 0.000, 0.000, -6.30 mm

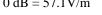
Reference Value = 35.6 V/m; Power Drift = -0.007 dB

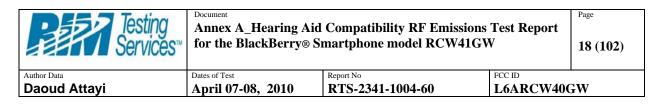
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Grid 1	Grid 2	Grid 3
53.7 M4	57.1 M4	56.7 M4
Grid 4	Grid 5	Grid 6
28.6 M4	29.2 M4	28.6 M4
Grid 7	Grid 8	Grid 9
53.0 M4	55.1 M4	53.2 M4

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW			GW







Date/Time: 4/8/2010 11:14:58 AM

File Name: HAC_E_Dipole_AM835_PMF_GSM.da4

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

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 65.5 V/m; Power Drift = -0.108 dB Maximum value of Total (measured) = 102.6 V/m

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

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW400			GW

dx=5mm, dy=5mm

Maximum value of peak Total field = 103.4 V/m

Probe Modulation Factor = 1.00

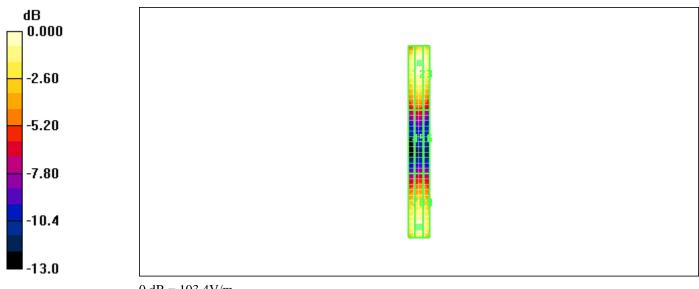
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 65.5 V/m; Power Drift = -0.108 dB

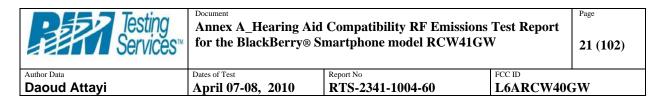
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
98.5 M4	103.4 M4	102.3 M4
Grid 4	Grid 5	Grid 6
54.2 M4	55.1 M4	52.5 M4
Grid 7	Grid 8	Grid 9
95.5 M4	98.9 M4	96.4 M4

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW			GW



 $0 \ dB = 103.4 V/m$



Date/Time: 4/7/2010 2:29:31 PM

File Name: HAC_E_Dipole_CW1880_20.00dBm.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 145.3 V/m; Power Drift = -0.198 dB

Maximum value of Total (measured) = 125.7 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 = 127.6 V/m

Probe Modulation Factor = 1.00

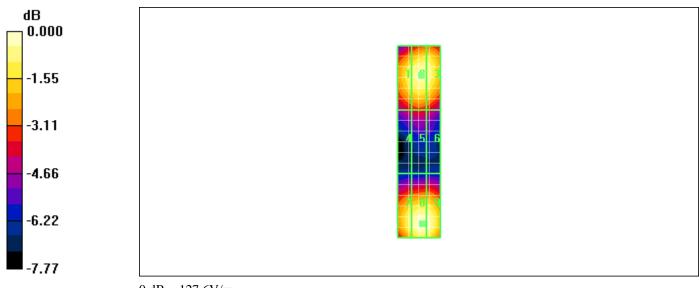
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 145.3 V/m; Power Drift = -0.198 dB

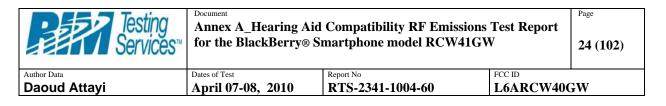
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
116.8 M2	123.1 M2	121.2 M2
Grid 4	Grid 5	Grid 6
83.5 M3	86.8 M3	84.5 M3
Grid 7	Grid 8	Grid 9
120.2 M2	127.6 M2	126.5 M2

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 $0 \ dB = 127.6 V/m$



Date/Time: 4/8/2010 10:25:59 AM

File Name: HAC_E_Dipole_GSM1880.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

Phantom section: TCoil 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 = 37.6 V/m; Power Drift = 0.003 dB

Maximum value of Total (measured) = 33.7 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 = 33.8 V/m

Probe Modulation Factor = 1.00

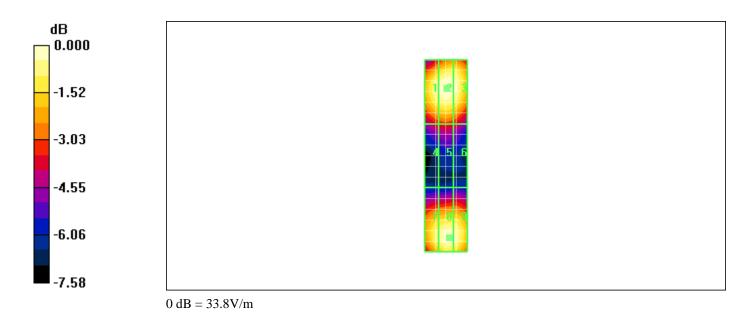
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 37.6 V/m; Power Drift = 0.003 dB

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

Grid 1	Grid 2	Grid 3
32.6 M4	33.8 M4	33.2 M4
Grid 4	Grid 5	Grid 6
22.8 M4	23.4 M4	22.7 M4
Grid 7	Grid 8	Grid 9
31.9 M4	33.5 M4	33.2 M4

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Author Data	Dates of Test	Report No	FCC ID	•
Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GV			GW

Date/Time: 4/8/2010 10:31:21 AM

File Name: HAC_E_Dipole_CW1880_PMF_GSM.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 97.4 V/m; Power Drift = -0.027 dB

Maximum value of Total (measured) = 88.8 V/m

E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:

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dx=5mm, dy=5mm

Maximum value of peak Total field = 89.1 V/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 97.4 V/m; Power Drift = -0.027 dB

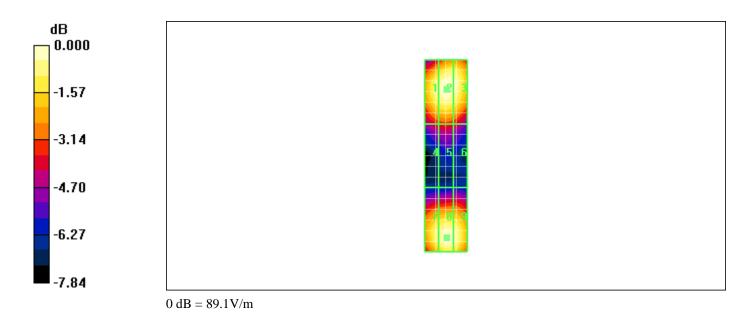
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

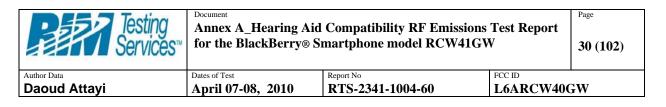
Peak E-field in V/m

Grid 1	Grid 2	Grid 3
85.3 M3	89.1 M3	87.5 M3
Grid 4	Grid 5	Grid 6
59.7 M4	61.1 M4	59.0 M4
Grid 7	Grid 8	Grid 9
84.4 M3	88.8 M3	87.3 M3

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW			GW





Date/Time: 4/8/2010 10:39:43 AM

File Name: HAC_E_Dipole_AM_1880_PMF_GSM.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF E Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 60.5 V/m; Power Drift = -0.005 dB

Maximum value of Total (measured) = 54.7 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

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Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW

Maximum value of peak Total field = 54.9 V/m

Probe Modulation Factor = 1.00

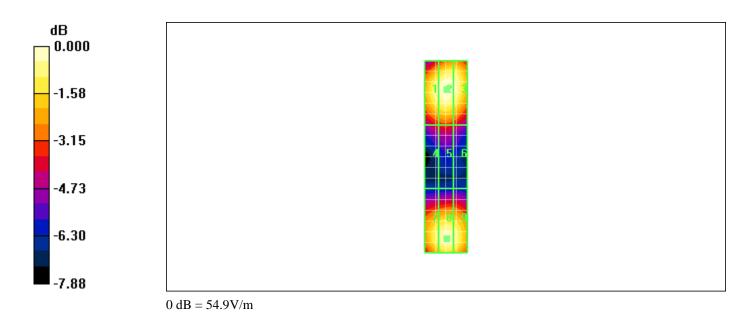
Device Reference Point: 0.000, 0.000, -6.30 mm

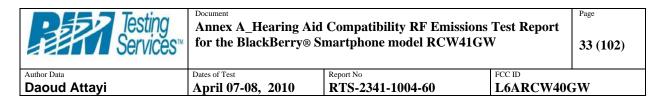
Reference Value = 60.5 V/m; Power Drift = -0.005 dB

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

Grid 1	Grid 2	Grid 3
52.9 M4	54.9 M4	53.7 M4
Grid 4	Grid 5	Grid 6
36.6 M4	37.7 M4	36.3 M4
Grid 7	Grid 8	Grid 9
51.3 M4	54.2 M4	52.6 M4

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Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW40GW	





Date/Time: 4/7/2010 4:14:31 PM

File Name: HAC_H_Dipole_CW835_20.00dBm.da4

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

Program Name: HAC RF H3DV6 Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 (5x11x1): Measurement grid:

dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.496 A/m; Power Drift = -0.123 dB

Maximum value of Total (measured) = 0.469 A/m

H Scan - measurement distance from the probe sensor center to CD835

Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm



Maximum value of peak Total field = 0.471 A/m

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

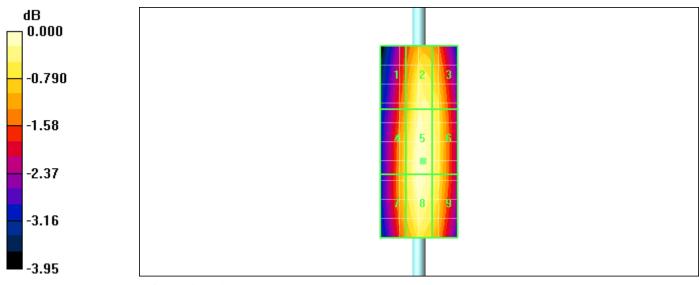
Reference Value = 0.496 A/m; Power Drift = -0.123 dB

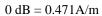
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

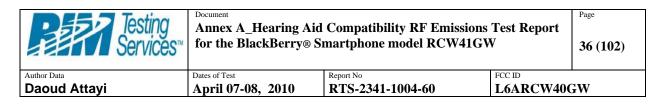
Grid 1	Grid 2	Grid 3
0.418 M4	0.461 M4	0.453 M4
Grid 4	Grid 5	Grid 6
0.437 M4	0.471 M4	0.459 M4
Grid 7	Grid 8	Grid 9
0.438 M4	0.469 M4	0.457 M4

Peak H-field in A/m

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Date/Time: 4/8/2010 9:32:08 AM

File Name: HAC_H_Dipole_GSM835.da4

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

Program Name: HAC RF H3DV6 Dipole

Communication System: GSM 850; Frequency: 835 MHz; Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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

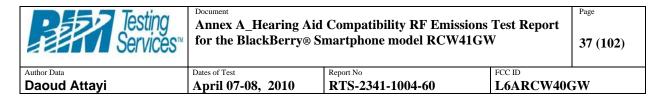
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.180 A/m; Power Drift = 0.132 dB

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

Probe Modulation Factor = 1.00

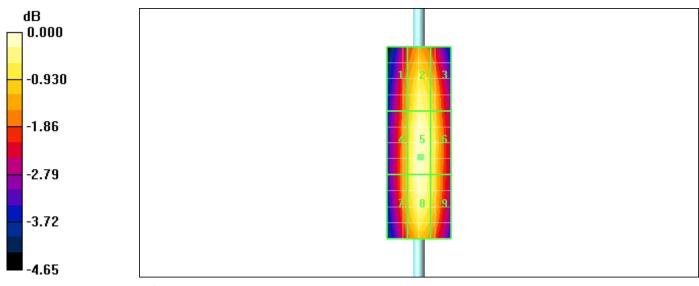
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.180 A/m; Power Drift = 0.132 dB

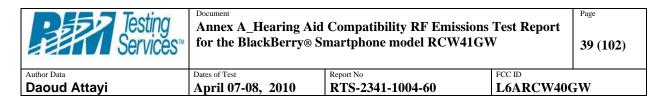
Hearing Aid Near-Field Category: M4 (AWF -5 dB)

Grid 1	Grid 2	Grid 3
0.151 M4	0.166 M4	0.159 M4
Grid 4	Grid 5	Grid 6
0.156 M4	0.172 M4	0.165 M4
Grid 7	Grid 8	Grid 9
0.156 M4	0.172 M4	0.162 M4

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 $0 \ dB = 0.172 A/m$



Date/Time: 4/8/2010 9:39:07 AM

File Name: HAC_H_Dipole_CW835_PMF_GSM.da4

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

Program Name: HAC RF H3DV6 Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 (5x11x1): Measurement grid:

dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.506 A/m; Power Drift = -0.023 dB

Maximum value of Total (measured) = 0.477 A/m

H Scan - measurement distance from the probe sensor center to CD835

Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm



Maximum value of peak Total field = 0.479 A/m

Probe Modulation Factor = 1.00

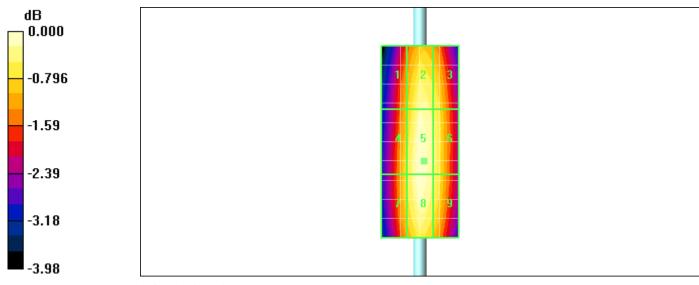
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.506 A/m; Power Drift = -0.023 dB

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

Grid 1	Grid 2	Grid 3
0.432 M4	0.468 M4	0.457 M4
Grid 4	Grid 5	Grid 6
0.446 M4	0.479 M4	0.464 M4
Grid 7	Grid 8	Grid 9
0.447 M4	0.479 M4	0.463 M4

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 $0 \ dB = 0.479 \mbox{A/m}$



Date/Time: 4/8/2010 9:43:56 AM

File Name: HAC_H_Dipole_AM835_PMF_GSM.da4

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

Program Name: HAC RF H3DV6 Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = 0.325 A/m; Power Drift = -0.013 dB

Maximum value of Total (measured) = 0.306 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 = 0.307 A/m

Probe Modulation Factor = 1.00

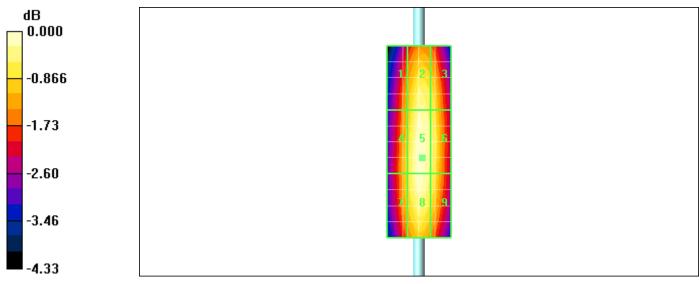
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.325 A/m; Power Drift = -0.013 dB

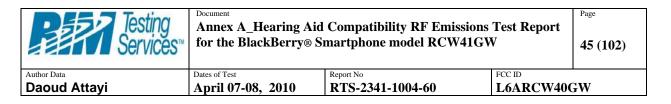
Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
0.274 M4	0.299 M4	0.291 M4
Grid 4	Grid 5	Grid 6
0.283 M4	0.307 M4	0.298 M4
Grid 7	Grid 8	Grid 9
0.283 M4	0.306 M4	0.295 M4

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0 dB = 0.307 A/m



Date/Time: 4/7/2010 2:42:18 PM

File Name: HAC_H_Dipole_CW1880_20.00dBm.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF H3DV6 Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 (5x11x1): Measurement grid:

dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

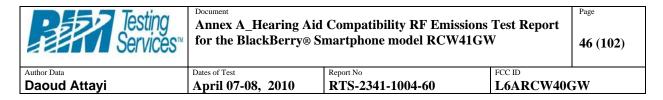
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.476 A/m; Power Drift = -0.041 dB

Maximum value of Total (measured) = 0.448 A/m

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 = 0.449 A/m

Probe Modulation Factor = 1.00

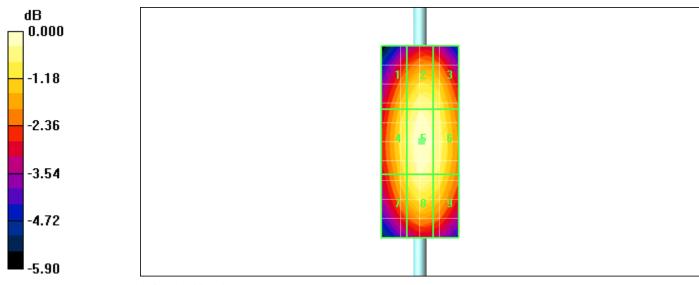
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.476 A/m; Power Drift = -0.041 dB

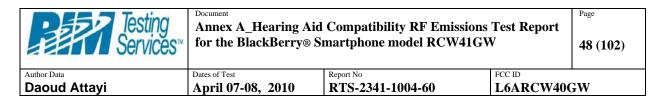
Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
0.402 M2	0.430 M2	0.422 M2
Grid 4	Grid 5	Grid 6
0.421 M2	0.449 M2	0.435 M2
Grid 7	Grid 8	Grid 9
0.405 M2	0.433 M2	0.420 M2

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 $0 \ dB = 0.449 \ A/m$



Date/Time: 4/8/2010 9:50:31 AM

File Name: HAC_H_Dipole_GSM1880.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF H3DV6 Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 (5x11x1): Measurement grid:

dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.152 A/m; Power Drift = -0.086 dB

Maximum value of Total (measured) = 0.141 A/m

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 = 0.141 A/m

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Probe Modulation Factor = 1.00

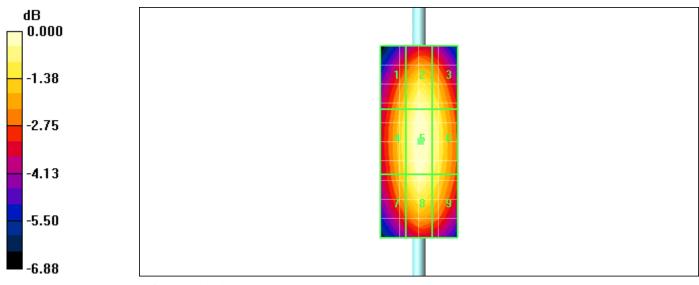
Device Reference Point: 0.000, 0.000, -6.30 mm

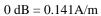
Reference Value = 0.152 A/m; Power Drift = -0.086 dB

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

Grid 1	Grid 2	Grid 3
0.122 M4	0.136 M4	0.129 M4
Grid 4	Grid 5	Grid 6
0.127 M4	0.141 M3	0.134 M4
Grid 7	Grid 8	Grid 9
0.123 M4	0.137 M4	0.129 M4

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Date/Time: 4/8/2010 10:10:42 AM

File Name: HAC_H_Dipole_CW1880_PMF_GSM_.da4

DUT: HAC Dipole 1880 MHz; Type: CD1880V3;

Program Name: HAC RF H3DV6 Dipole

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 (5x11x1): Measurement grid:

dx=5mm, dy=5mm

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

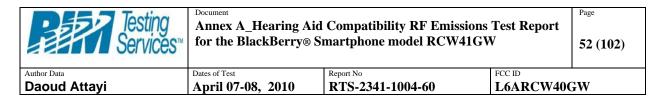
Reference Value = 0.337 A/m; Power Drift = 0.048 dB

Maximum value of Total (measured) = 0.317 A/m

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 = 0.318 A/m

Probe Modulation Factor = 1.00

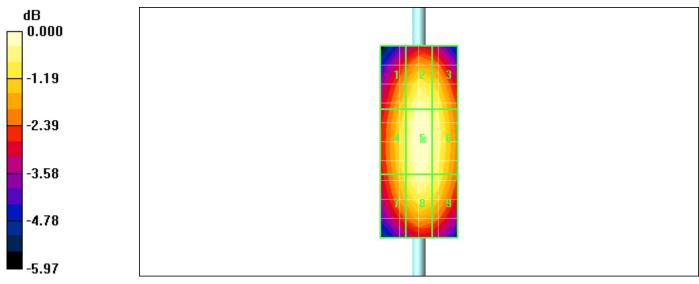
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.337 A/m; Power Drift = 0.048 dB

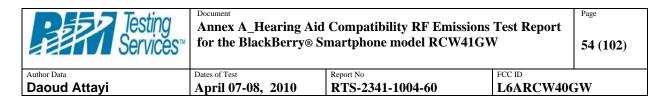
Hearing Aid Near-Field Category: M3 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
0.282 M3	0.310 M3	0.301 M3
Grid 4	Grid 5	Grid 6
0.294 M3	0.318 M3	0.308 M3
Grid 7	Grid 8	Grid 9
0.286 M3	0.309 M3	0.299 M3

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0 dB = 0.318 A/m



Date/Time: 4/8/2010 10:15:29 AM

HAC_H_Dipole_AM1880_PMF_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/13/2009
- 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

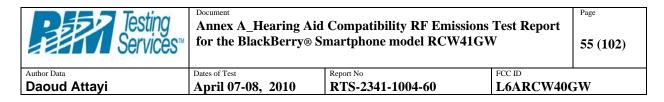
Dipole = 10mm/Hearing Aid Compatibility Test (5x11x1): Measurement grid:

dx=5mm, dy=5mm Probe Modulation Factor = 1.00 Device Reference Point: 0.000, 0.000, -6.30 mm Reference Value = 0.212 A/m; Power Drift = -0.169 dB Maximum value of Total (measured) = 0.198 A/m

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 = 0.199 A/m

Probe Modulation Factor = 1.00

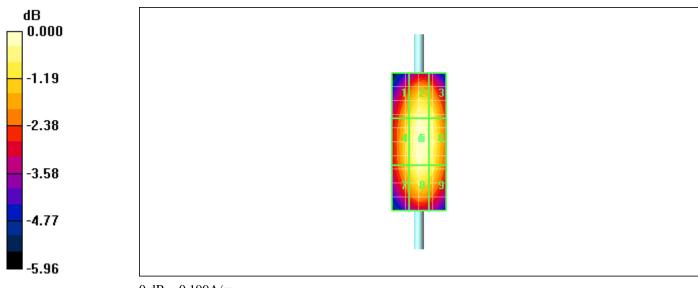
Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 0.212 A/m; Power Drift = -0.169 dB

Hearing Aid Near-Field Category: M3 (AWF 0 dB)

Grid 1	Grid 2	Grid 3
0.176 M4	0.193 M3	0.188 M4
Grid 4	Grid 5	Grid 6
0.182 M4	0.199 M3	0.194 M3
Grid 7	Grid 8	Grid 9
0.177 M4	0.192 M3	0.186 M4

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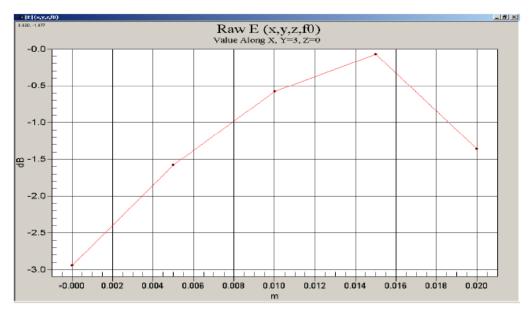


0 dB = 0.199 A/m

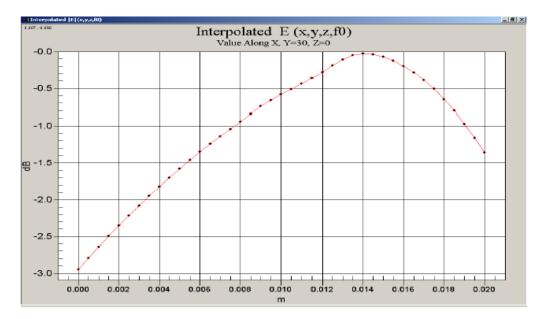
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Justification of Step Size and Interpolation

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.

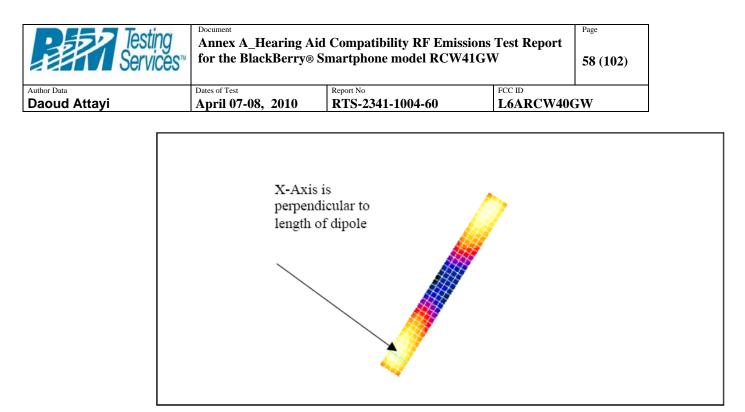


The figure above shows the raw measured field strength perpendicular to the length of the validation dipole. The TCB guidance slides require the 3dB width to be much larger than the step size. The width between -3dB points is > 21 mm, at least 4 times the step size.



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

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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

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

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1 Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m³ 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)

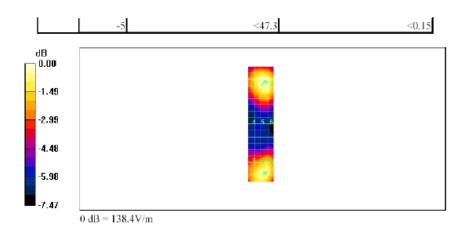
E in V/m (Time averaged) E in V/m (Slot averaged)

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

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

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

Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			Page 60 (102)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW		
Date/Time: 14/07/2	2005 11:35:24 AM		Page 2 of 2	



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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: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1000$ kg/m³ 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) E in V/m (Slot averaged)

	Grid 2 138.6				Grid 3 1 38.6
Grid 4	Grid 5 92.1	Grid 6		Grid 5	Grid 6
01.4	74.1		 01.4		
Grid 7	Grid 8				Grid 9

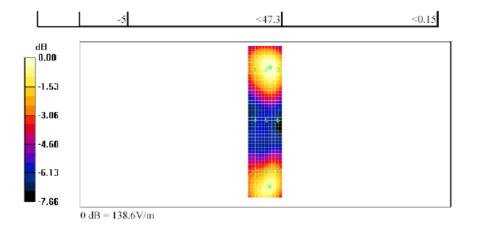
Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
M1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

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

Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			Page 62 (102)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40G			GW
Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW

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

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

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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/m³ 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) H in A/m (Slot averaged)

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

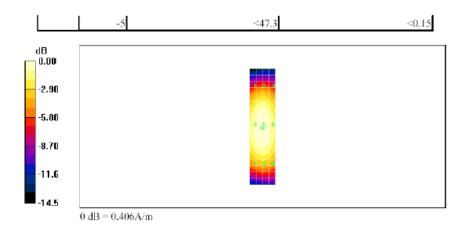
Catego	ry AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
М1	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

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Testing Services™	Document Annex A_Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RCW41GW			Page 64 (102)
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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW			GW

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



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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: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m³ 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)

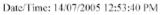
H in A/m (Time averaged) H in A/m (Slot averaged)

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

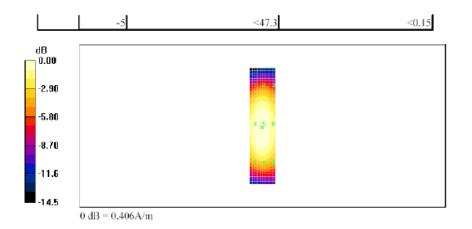
Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
MI	0	199.5 - 354.8	0.6 - 1.07
	-5	149.6 - 266.1	0.45 - 0.8
M2	0	112.2 - 199.5	0.34 - 0.6
	-5	84.1 - 149.6	0.25 - 0.45
M3	0	63.1 - 112.2	0.19 - 0.34
	-5	47.3 - 84.1	0.15 - 0.25
M4	0	<63.1	<0.19

file://C:\Program%20Files\DASY4\Print_Templates\HAC_H_Dipole_CW%201880_2%... 14/07/2005

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Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW400	GW
Duoud Allayi	April 07-00, 2010	K15-2341-1004-00	Lonkewite	J 11

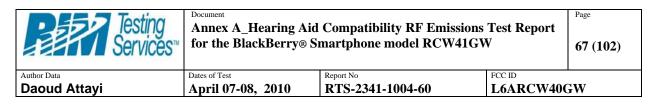


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Date/Time: 4/8/2010 2:14:53 PM

File Name: <u>HAC_E_GSM850_low_Chan.da4</u>

DUT: BlackBerry Smartphone; Type: Sample; Program Name: HAC RF ER3D Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 102.0 V/m; Power Drift = -0.013 dB

Maximum value of Total (measured) = 81.3 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 = 237.4 V/m

Probe Modulation Factor = 2.90

Device Reference Point: 0.000, 0.000, -6.30 mm

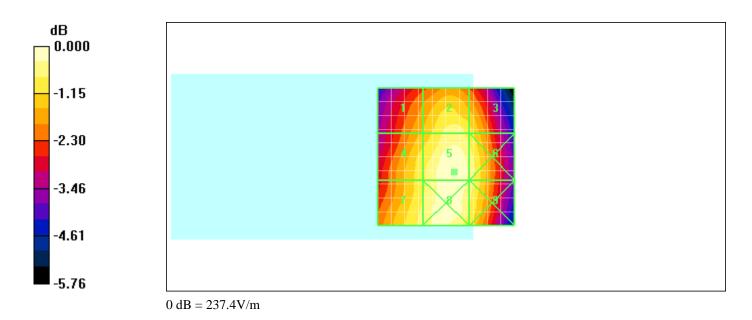
Reference Value = 102.0 V/m; Power Drift = -0.013 dB

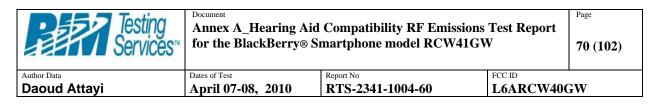
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Grid 1	Grid 2	Grid 3
201.0 M3	223.0 M3	213.2 M3
Grid 4	Grid 5	Grid 6
215.5 M3	237.4 M3	225.0 M3
Grid 7	Grid 8	Grid 9
221.5 M3	236.8 M3	223.8 M3

Peak E-field in V/m

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Daoud Attayi	April 07-08, 2010	RTS-2341-1004-60	L6ARCW40GW	





Date/Time: 4/8/2010 2:37:15 PM

File Name: <u>HAC_E_GSM850_mid_Chan.da4</u>

DUT: BlackBerry Smartphone; Type: Sample ;

Program Name: HAC RF ER3D Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 107.8 V/m; Power Drift = 0.025 dB

Maximum value of Total (measured) = 85.8 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

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Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW			GW

Maximum value of peak Total field = 247.9 V/m

Probe Modulation Factor = 2.90

Device Reference Point: 0.000, 0.000, -6.30 mm

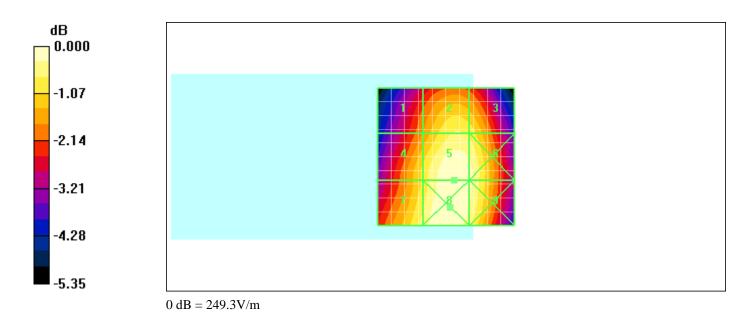
Reference Value = 107.8 V/m; Power Drift = 0.025 dB

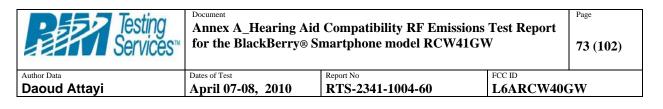
Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Grid 1	Grid 2	Grid 3
204.0 M3	231.0 M3	227.1 M3
Grid 4	Grid 5	Grid 6
223.5 M3	247.9 M3	242.2 M3
Grid 7	Grid 8	Grid 9
234.2 M3	249.3 M3	242.0 M3

Peak E-field in V/m

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40GW		GW	





Date/Time: 4/8/2010 2:47:08 PM

File Name: <u>HAC_E_GSM850_high_Chan.da4</u>

DUT: BlackBerry Smartphone; Type: Sample ; Program Name: HAC RF ER3D Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 104.2 V/m; Power Drift = -0.002 dB

Maximum value of Total (measured) = 82.4 V/m



Maximum value of peak Total field = 240.3 V/m

Probe Modulation Factor = 2.90

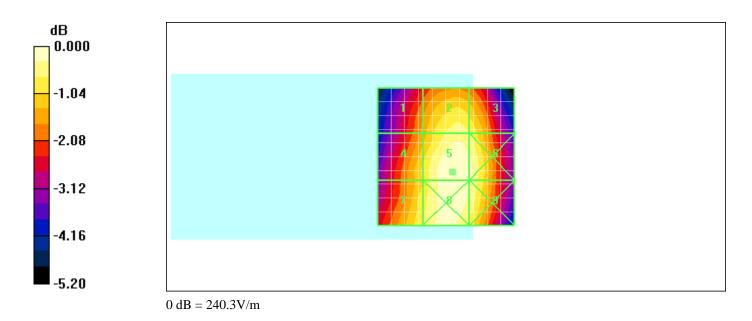
Device Reference Point: 0.000, 0.000, -6.30 mm

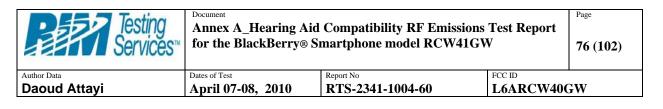
Reference Value = 104.2 V/m; Power Drift = -0.002 dB

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

Grid 1	Grid 2	Grid 3
200.7 M3	227.5 M3	222.3 M3
Grid 4	Grid 5	Grid 6
215.3 M3	240.3 M3	234.2 M3
Grid 7	Grid 8	Grid 9
221.5 M3	239.8 M3	232.2 M3

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Daoud Attayi	April 07-08, 2010			





Date/Time: 4/8/2010 3:11:57 PM

File Name: <u>HAC_E_GSM1900_low_Chan.da4</u>

DUT: BlackBerry Smartphone; Type: Sample ; Program Name: HAC RF ER3D Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 11.8 V/m; Power Drift = 0.048 dB

Maximum value of Total (measured) = 26.2 V/m

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Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	April 07-08, 2010	<u>r</u>		

Maximum value of peak Total field = 52.2 V/m

Probe Modulation Factor = 2.64

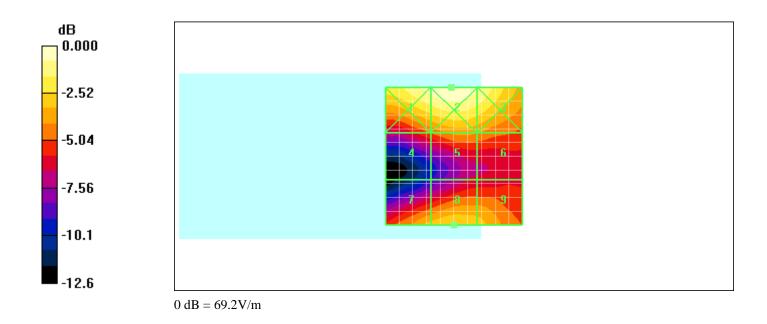
Device Reference Point: 0.000, 0.000, -6.30 mm

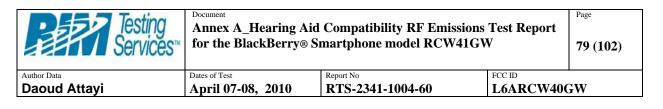
Reference Value = 11.8 V/m; Power Drift = 0.048 dB

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

Grid 1	Grid 2	Grid 3
65.9 M3	69.2 M3	63.8 M3
Grid 4	Grid 5	Grid 6
39.0 M4	44.2 M4	42.9 M4
Grid 7	Grid 8	Grid 9

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Daoud Attayi	April 07-08, 2010 RTS-2341-1004-60 L6ARCW40			GW





Date/Time: 4/8/2010 3:19:53 PM

File Name: <u>HAC_E_GSM1900_mid_Chan.da4</u>

DUT: BlackBerry Smartphone; Type: Sample ; Program Name: HAC RF ER3D Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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

Compatibility rest (rixiix). Measurement grid. dx=5mm, dy-

Probe Modulation Factor = 1.00

Device Reference Point: 0.000, 0.000, -6.30 mm

Reference Value = 12.4 V/m; Power Drift = 0.037 dB

Maximum value of Total (measured) = 26.0 V/m

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Daoud Attayi	April 07-08, 2010	<u>r</u>		

Maximum value of peak Total field = 47.5 V/m

Probe Modulation Factor = 2.64

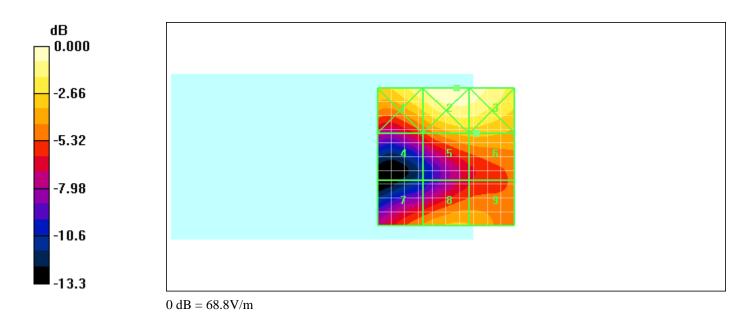
Device Reference Point: 0.000, 0.000, -6.30 mm

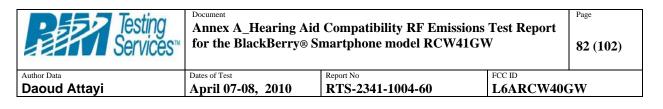
Reference Value = 12.4 V/m; Power Drift = 0.037 dB

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

Grid 1	Grid 2	Grid 3
61.6 M3	68.8 M3	67.2 M3
Grid 4	Grid 5	Grid 6
36.2 M4	47.4 M3	47.5 M3
Grid 7	Grid 8	Grid 9
41.8 M4	47.0 M4	46.2 M4

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Date/Time: 4/8/2010 3:25:47 PM

File Name: <u>HAC_E_GSM1900_high_Chan.da4</u>

DUT: BlackBerry Smartphone; Type: Sample ; Program Name: HAC RF ER3D Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1000$ kg/m³

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 = 13.9 V/m; Power Drift = -0.166 dB

Maximum value of Total (measured) = 24.2 V/m

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Maximum value of peak Total field = 47.7 V/m

Probe Modulation Factor = 2.64

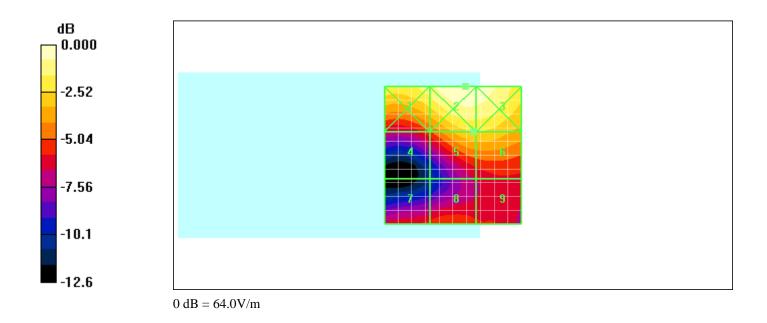
Device Reference Point: 0.000, 0.000, -6.30 mm

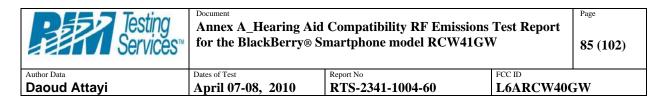
Reference Value = 13.9 V/m; Power Drift = -0.166 dB

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

Grid 1	Grid 2	Grid 3
56.3 M3	64.0 M3	62.9 M3
Grid 4	Grid 5	Grid 6
35.3 M4	47.7 M3	47.7 M3
Grid 7	Grid 8	Grid 9
34.0 M4	35.9 M4	33.5 M4

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Date/Time: 4/8/2010 4:00:35 PM

File Name: HAC_H_GSM_800_low_chan.da4

DUT: BlackBerry Smartphone; Type: Sample ;

Program Name: HAC RF H3DV6 Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = 0.087 A/m; Power Drift = -0.001 dB Maximum value of Total (measured) = 0.185 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 = 0.514 A/m

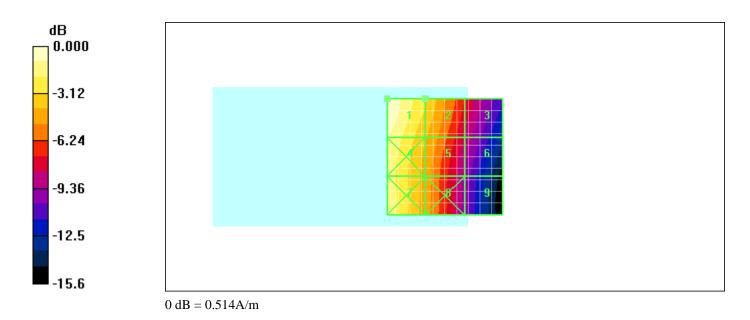


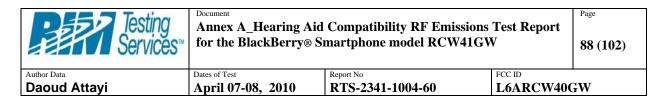
Device Reference Point: 0.000, 0.000, -6.30 mm Reference Value = 0.087 A/m; Power Drift = -0.001 dB

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

Grid 1	Grid 2	Grid 3
0.514 M3	0.362 M4	0.222 M4
Grid 4	Grid 5	Grid 6
0.467 M3	0.324 M4	0.196 M4
Grid 7	Grid 8	Grid 9
0.444 M4	0.304 M4	0.171 M4

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Date/Time: 4/8/2010 4:06:15 PM

File Name: HAC_H_GSM_800_mid_chan.da4

DUT: BlackBerry Smartphone; Type: Sample ;

Program Name: HAC RF H3DV6 Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = 0.009 dB

Maximum value of Total (measured) = 0.197 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 = 0.548 A/m

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Probe Modulation Factor = 2.78

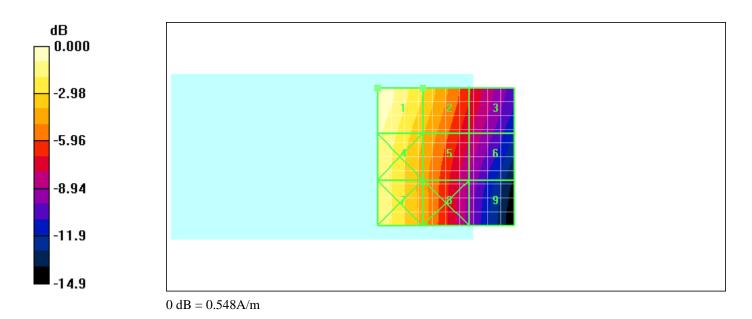
Device Reference Point: 0.000, 0.000, -6.30 mm

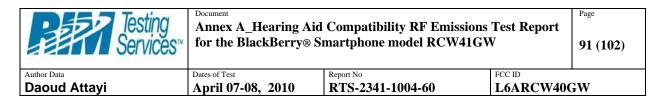
Reference Value = 0.099 A/m; Power Drift = 0.009 dB

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

Grid 1	Grid 2	Grid 3
0.548 M3	0.390 M4	0.251 M4
Grid 4	Grid 5	Grid 6
0.502 M3	0.352 M4	0.225 M4
Grid 7	Grid 8	Grid 9
0.483 M3	0.330 M4	0.195 M4

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Date/Time: 4/8/2010 4:18:14 PM

File Name: HAC_H_GSM_850_high_chan.da4

DUT: BlackBerry Smartphone; Type: Sample ;

Program Name: HAC RF H3DV6 Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = 0.111 A/m; Power Drift = -0.066 dB Maximum value of Total (measured) = 0.204 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 = 0.567 A/m

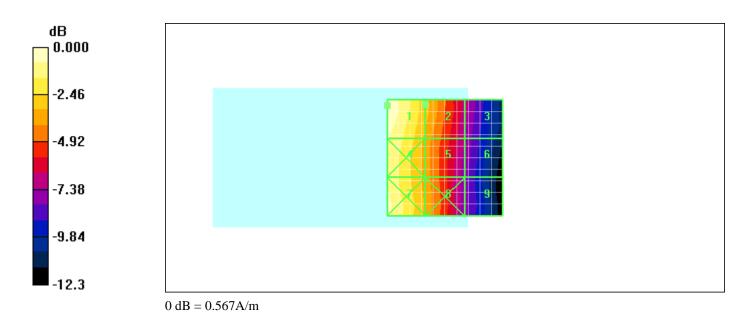
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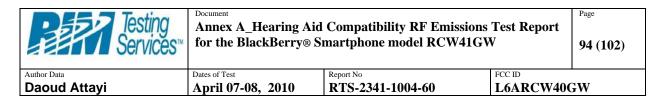
Device Reference Point: 0.000, 0.000, -6.30 mm Reference Value = 0.111 A/m; Power Drift = -0.066 dB

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

Grid 1	Grid 2	Grid 3
0.567 M3	0.405 M4	0.256 M4
Grid 4	Grid 5	Grid 6
0.526 M3	0.381 M4	0.243 M4
Grid 7	Grid 8	Grid 9
0.533 M3	0.383 M4	0.231 M4

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Date/Time: 4/8/2010 3:38:29 PM

File Name: HAC_H_GSM_1900_low_chan.da4

DUT: BlackBerry Smartphone; Type: Sample ; Program Name: HAC RF H3DV6 Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = -0.037 dB

Maximum value of Total (measured) = 0.091 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 = 0.158 A/m

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Probe Modulation Factor = 2.26

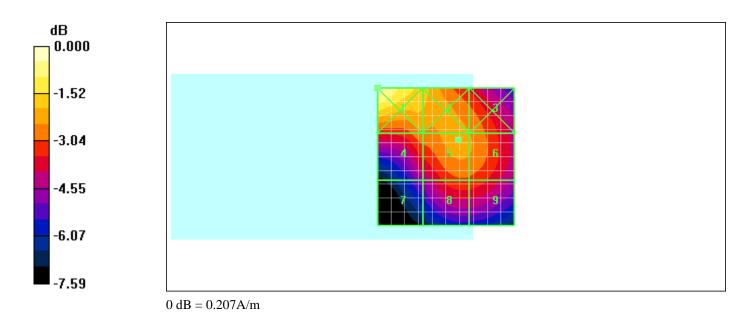
Device Reference Point: 0.000, 0.000, -6.30 mm

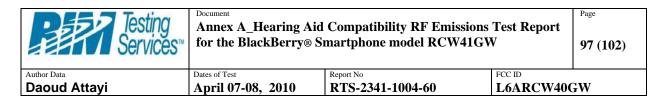
Reference Value = 0.077 A/m; Power Drift = -0.037 dB

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

Grid 1	Grid 2	Grid 3
0.207 M3	0.169 M3	0.155 M3
Grid 4	Grid 5	Grid 6
0.153 M3	0.158 M3	0.156 M3
Grid 7	Grid 8	Grid 9
0.121 M4	0.145 M3	0.144 M3

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Date/Time: 4/8/2010 3:44:57 PM

File Name: HAC_H_GSM_1900_mid_chan.da4

DUT: BlackBerry Smartphone; Type: Sample ; Program Name: HAC RF H3DV6 Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = 0.073 A/m; Power Drift = -0.015 dB Maximum value of Total (measured) = 0.091 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 = 0.155 A/m

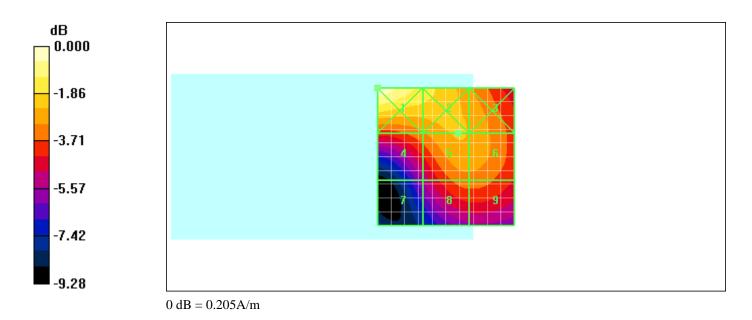
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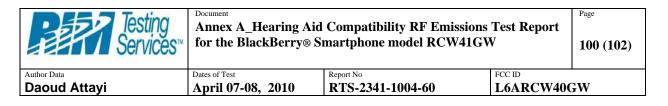
Device Reference Point: 0.000, 0.000, -6.30 mm Reference Value = 0.073 A/m; Power Drift = -0.015 dB

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

Grid 1	Grid 2	Grid 3
0.205 M3	0.173 M3	0.153 M3
Grid 4	Grid 5	Grid 6
0.142 M3	0.155 M3	0.154 M3
Grid 7	Grid 8	Grid 9
0.108 M4	0.139 M4	0.139 M4

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Date/Time: 4/8/2010 3:54:47 PM

File Name: HAC_H_GSM_1900_high_chan.da4

DUT: BlackBerry Smartphone; Type: Sample ;

Program Name: HAC RF H3DV6 Device

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

Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³

Phantom section: RF Section

DASY4 Configuration:

- Probe: H3DV6 - SN6105; ; Calibrated: 11/13/2009

- 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 = 0.063 A/m; Power Drift = 0.109 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 = 0.138 A/m

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Device Reference Point: 0.000, 0.000, -6.30 mm Reference Value = 0.063 A/m; Power Drift = 0.109 dB

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

Grid 1	Grid 2	Grid 3
0.208 M3	0.171 M3	0.132 M4
Grid 4	Grid 5	Grid 6
0.143 M3	0.138 M4	0.130 M4
Grid 7	Grid 8	Grid 9
0.100 M4	0.118 M4	0.118 M4

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