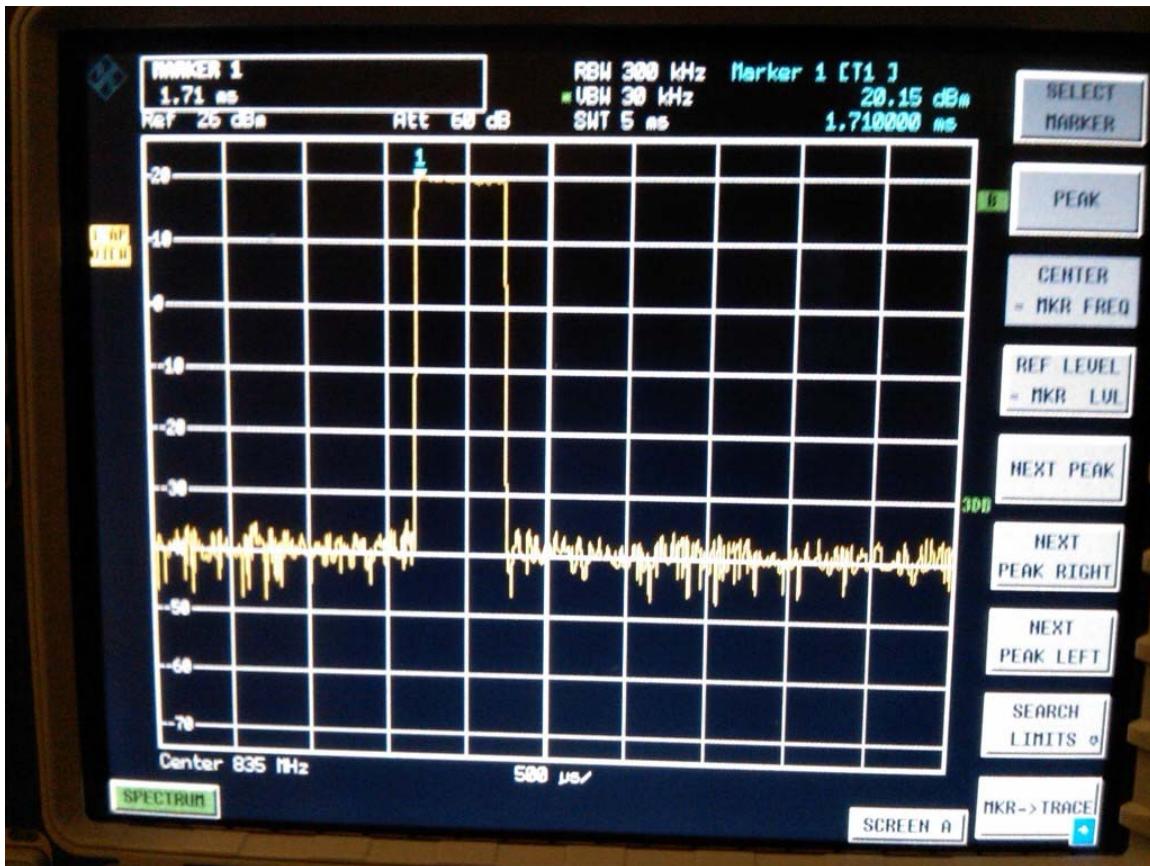


|                                    |   |                                      |
|------------------------------------|---|--------------------------------------|
| <b>RIM Testing Services™</b>       | Document<br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> | Page<br><b>1 (135)</b>               |
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

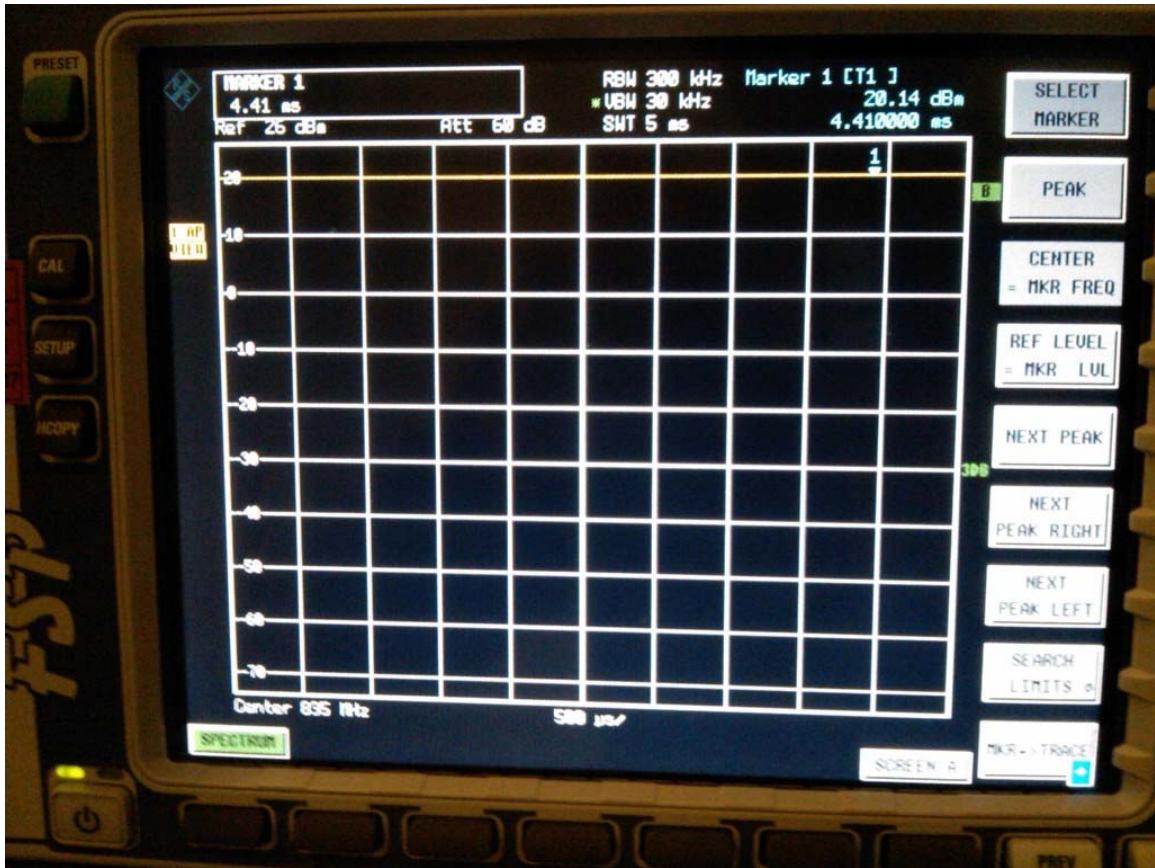
## Annex A: Measurement data and plots

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



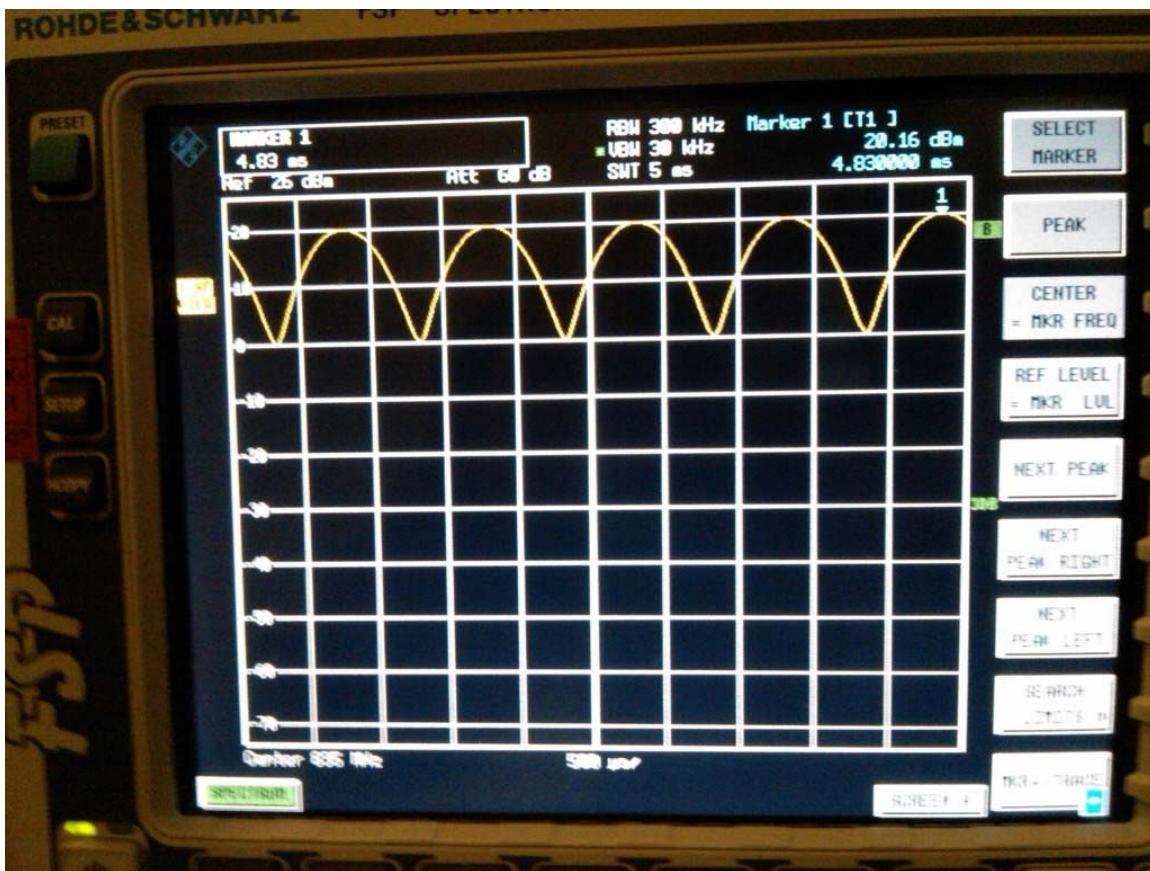
**GSM 835 MHz**

|   |  |   |                             |
|---|--|---|-----------------------------|
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| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b>  | FCC ID<br><b>L6ARDU70CW</b> |

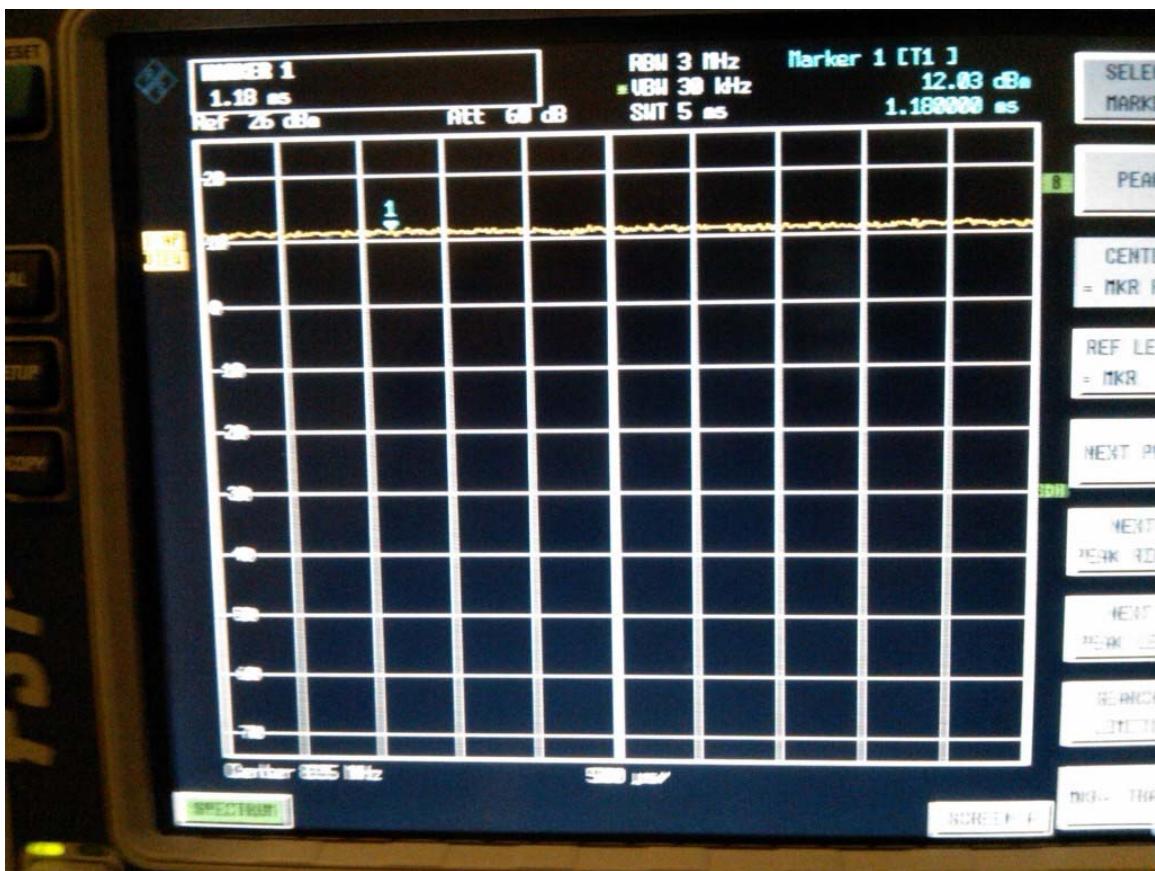


**CW 835 MHz**

|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

**AM 80% 835 MHz**

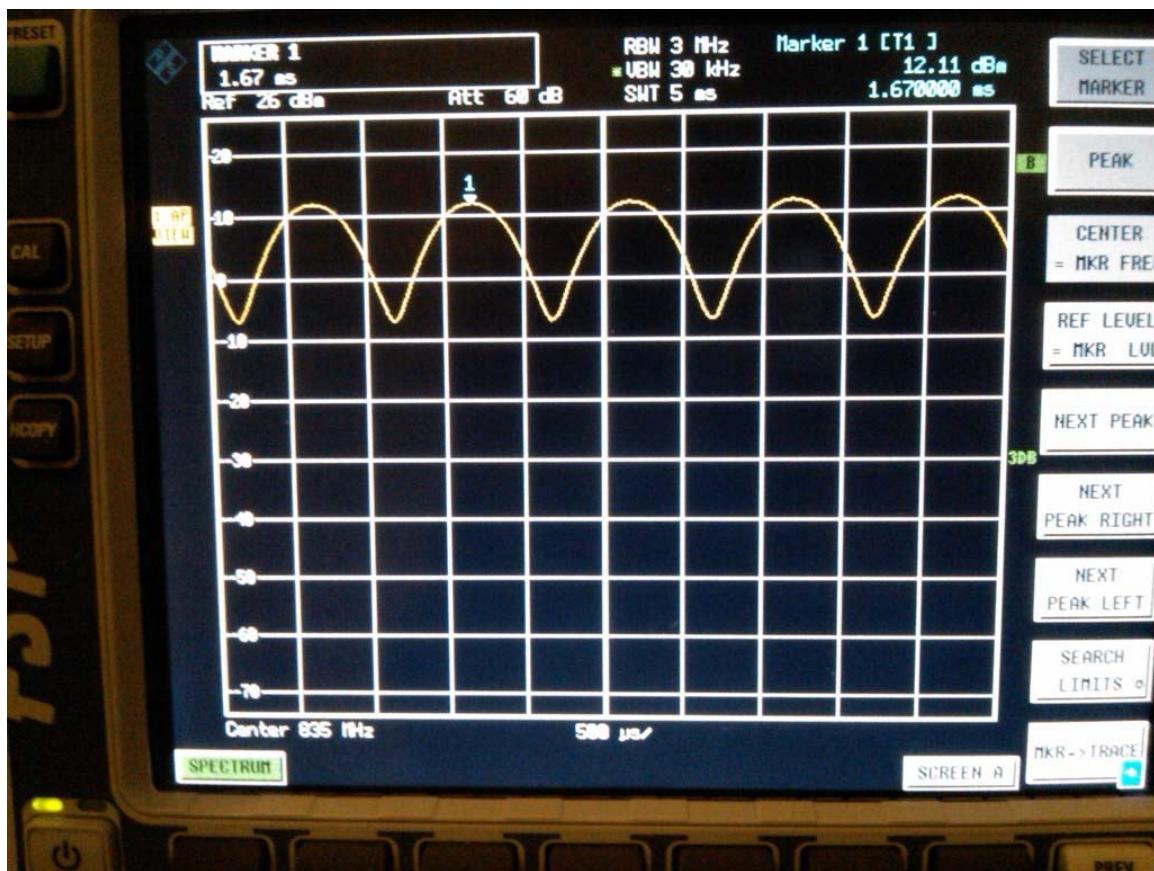
|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

**CDMA 835 MHz**

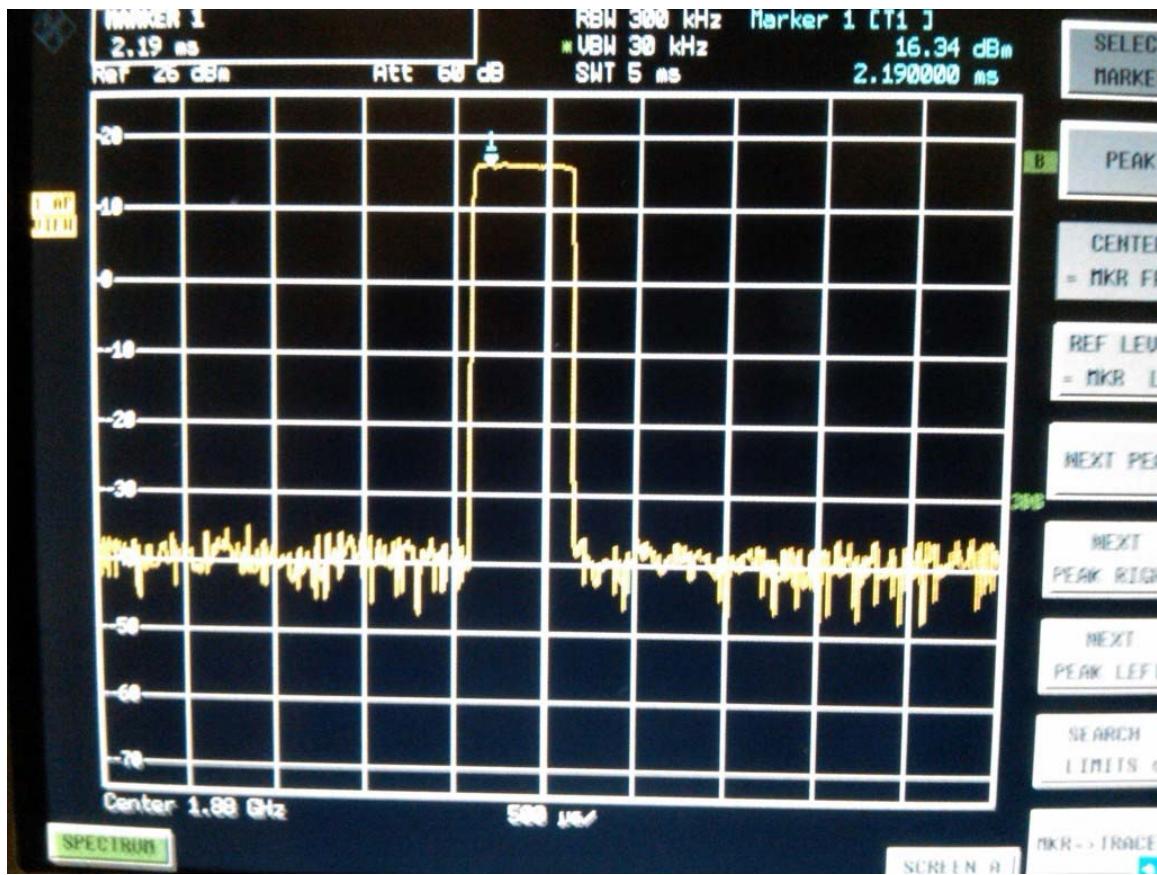
|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

**CW 835 MHz**

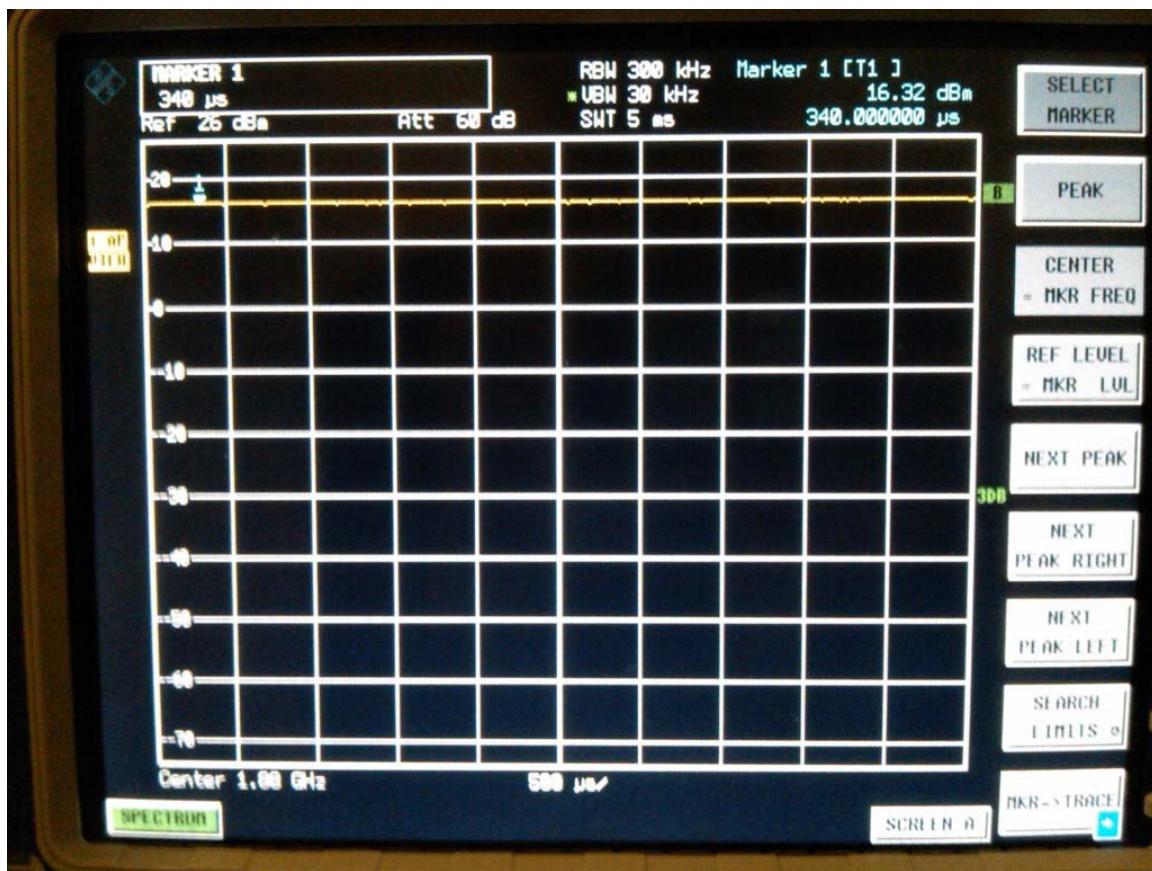
|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|


**AM 80% 835 MHz**

|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

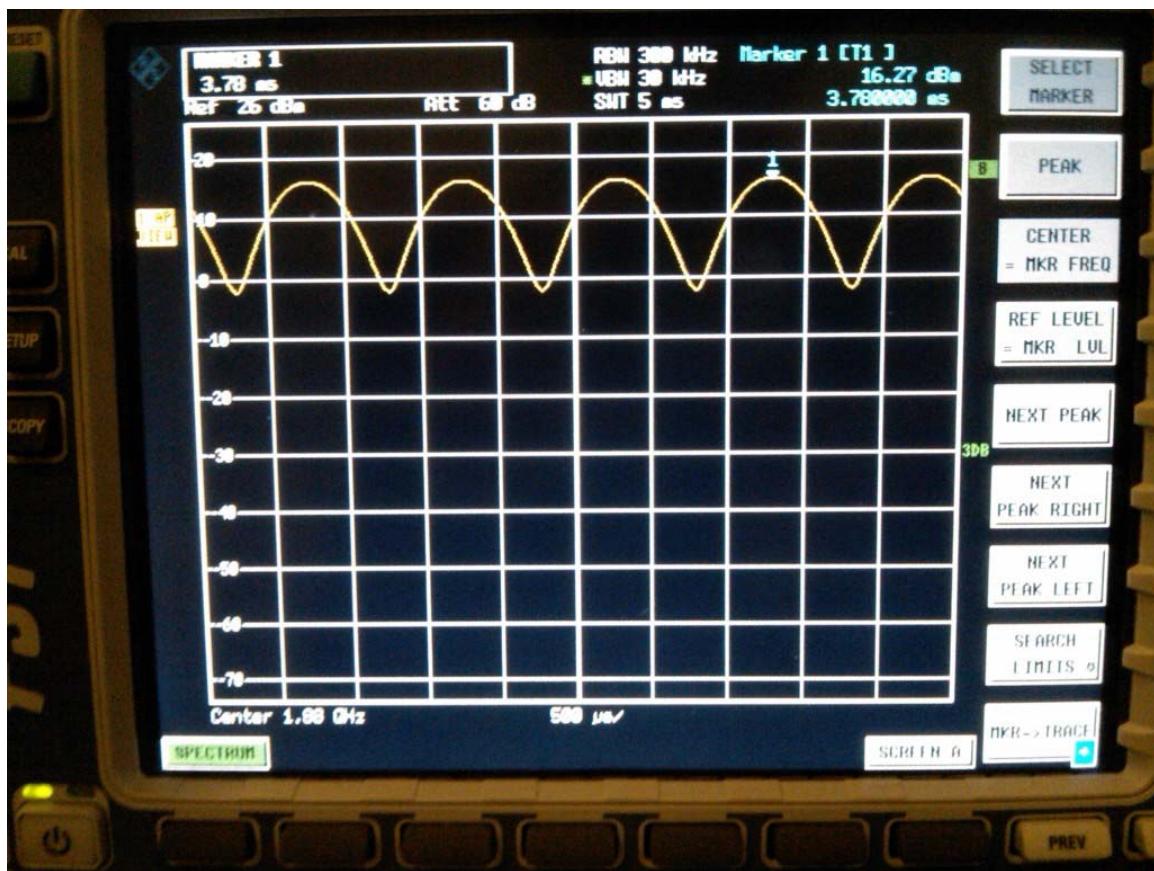
**GSM 1880 MHz**

|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|



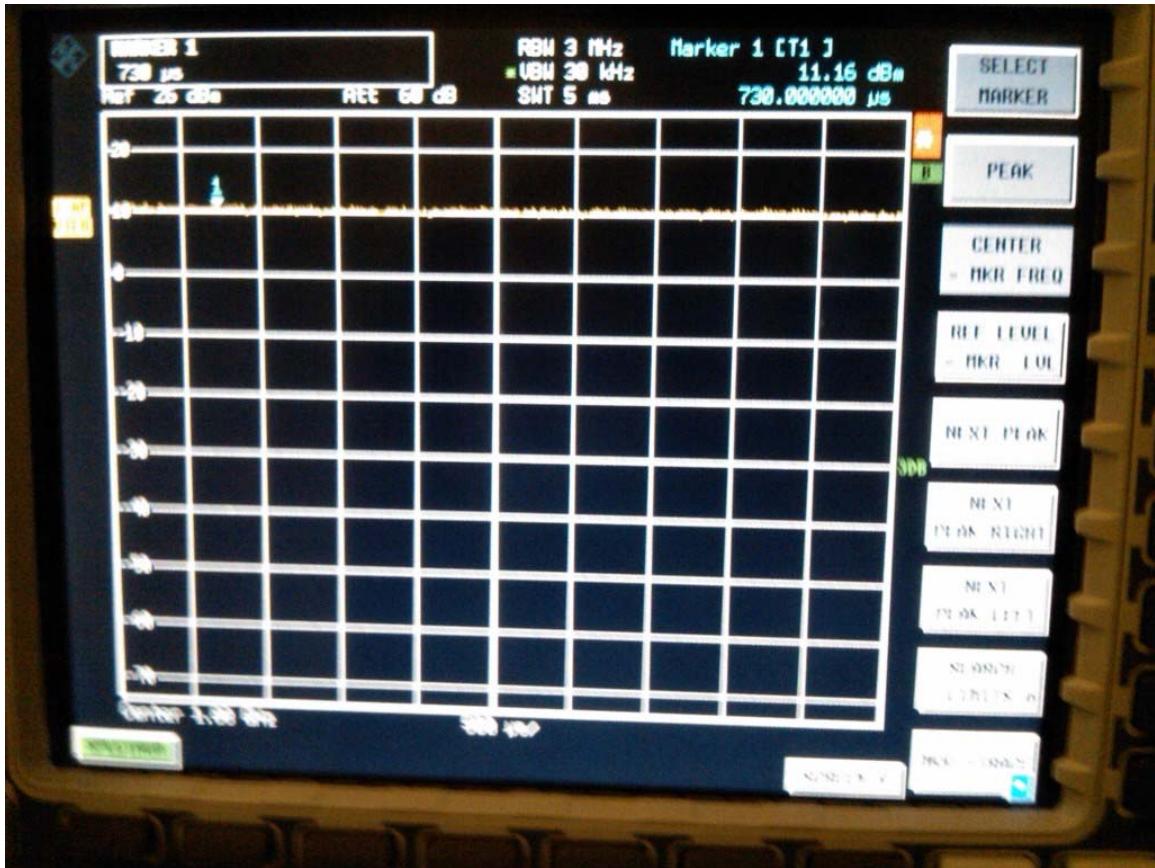
**CW 1880 MHz**

|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

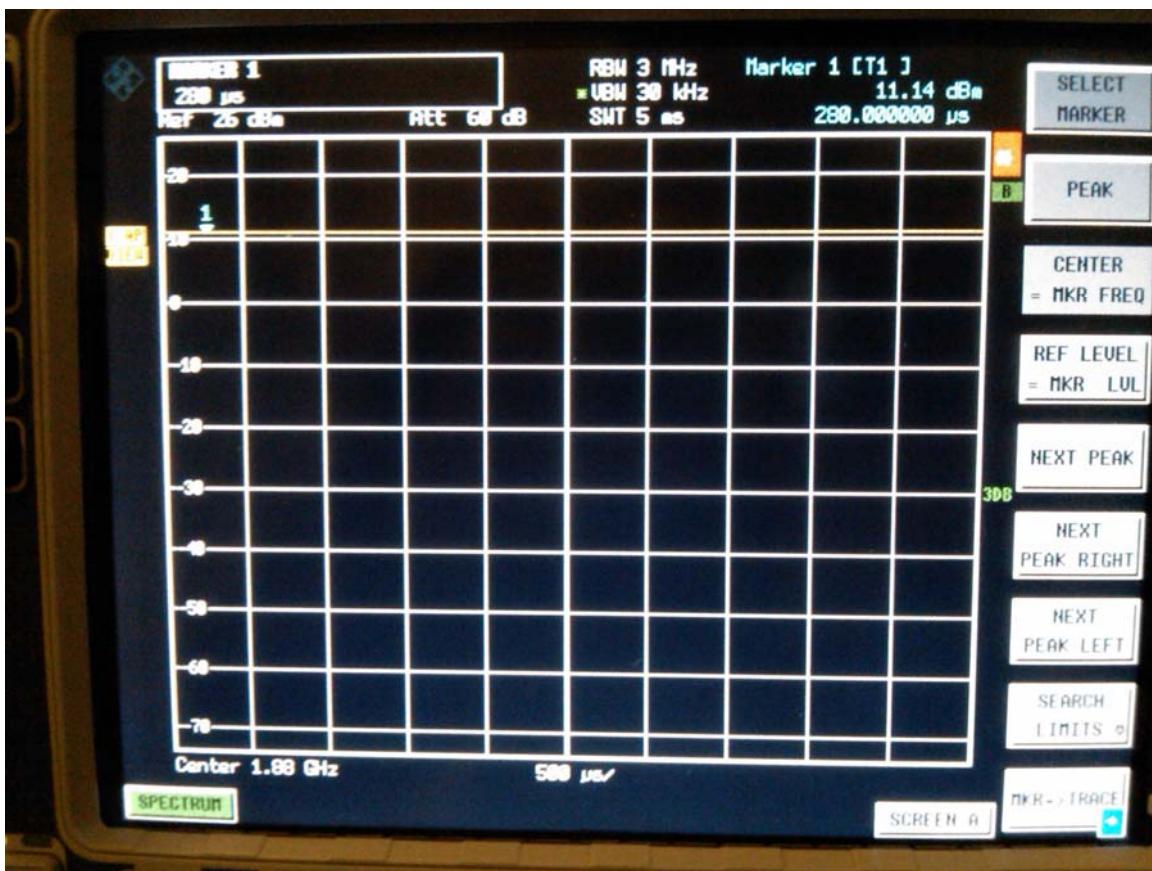


AM 80 % 1880 MHz

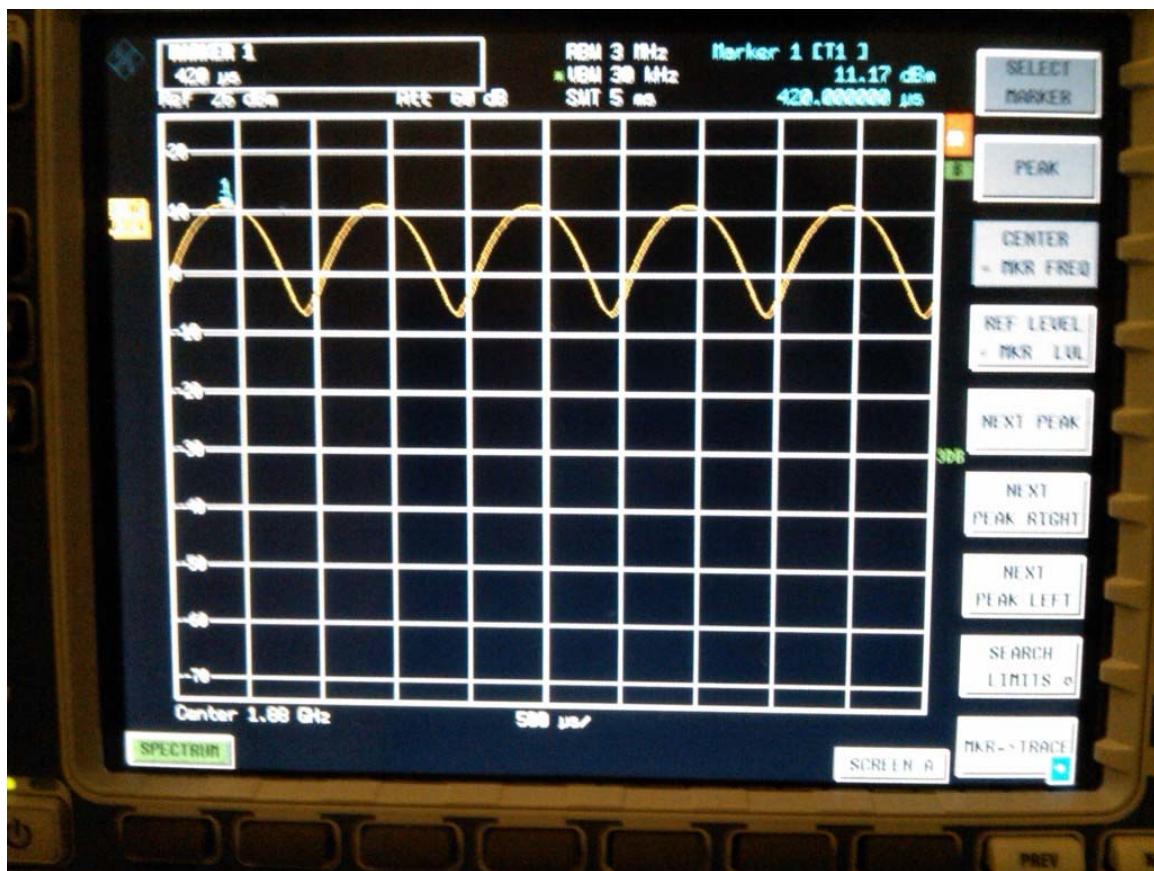
|                                    |   |                                      |
|------------------------------------|---|--------------------------------------|
| <b>RIM Testing Services™</b>       | Document<br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> | Page<br><b>10 (135)</b>              |
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |



|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

**CW 1880 MHz**

|                                    |  |                                      |                             |
|------------------------------------|--|--------------------------------------|-----------------------------|
| Author Data<br><b>Daoud Attayi</b> | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |
|------------------------------------|--|--------------------------------------|-----------------------------|

**AM 80 % 1880 MHz**

|   |   |                                      |
|---|---|--------------------------------------|
|  | Document<br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> | Page<br><b>13 (135)</b>              |
| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

## A.2 Dipole validation and probe modulation factor plots

|   |  |                                      |                             |
|---|--|--------------------------------------|-----------------------------|
| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |  | <b>Page</b><br><b>14 (135)</b>       |                             |
| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |

Date/Time: 3/22/2011 3:37:27 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_validation\_835 MHz

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

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 160.2 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 119.1 V/m; Power Drift = 0.28 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

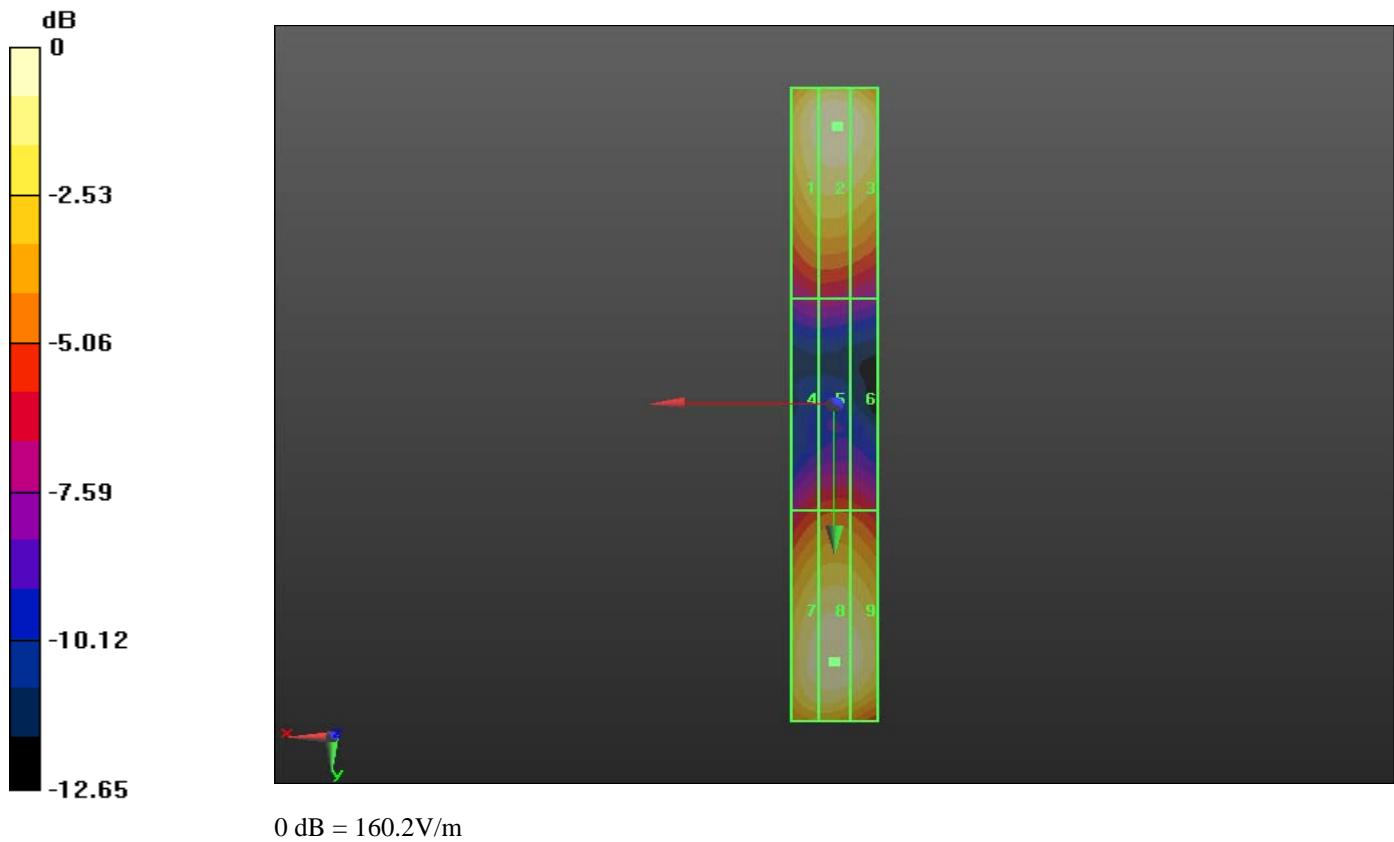
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>154.3 M4</b>  | <b>160.2 M4</b>  | <b>156.7 M4</b>  |
| Grid 4           | Grid 5           | Grid 6           |
| <b>85.253 M4</b> | <b>88.903 M4</b> | <b>87.202 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>155.3 M4</b>  | <b>158.9 M4</b>  | <b>155.3 M4</b>  |



|   |  |                                      |                             |
|---|--|--------------------------------------|-----------------------------|
| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |  | <b>Page</b><br><b>16 (135)</b>       |                             |
| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |

Date/Time: 3/22/2011 2:40:53 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_GSM\_835 MHz

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 54.142 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

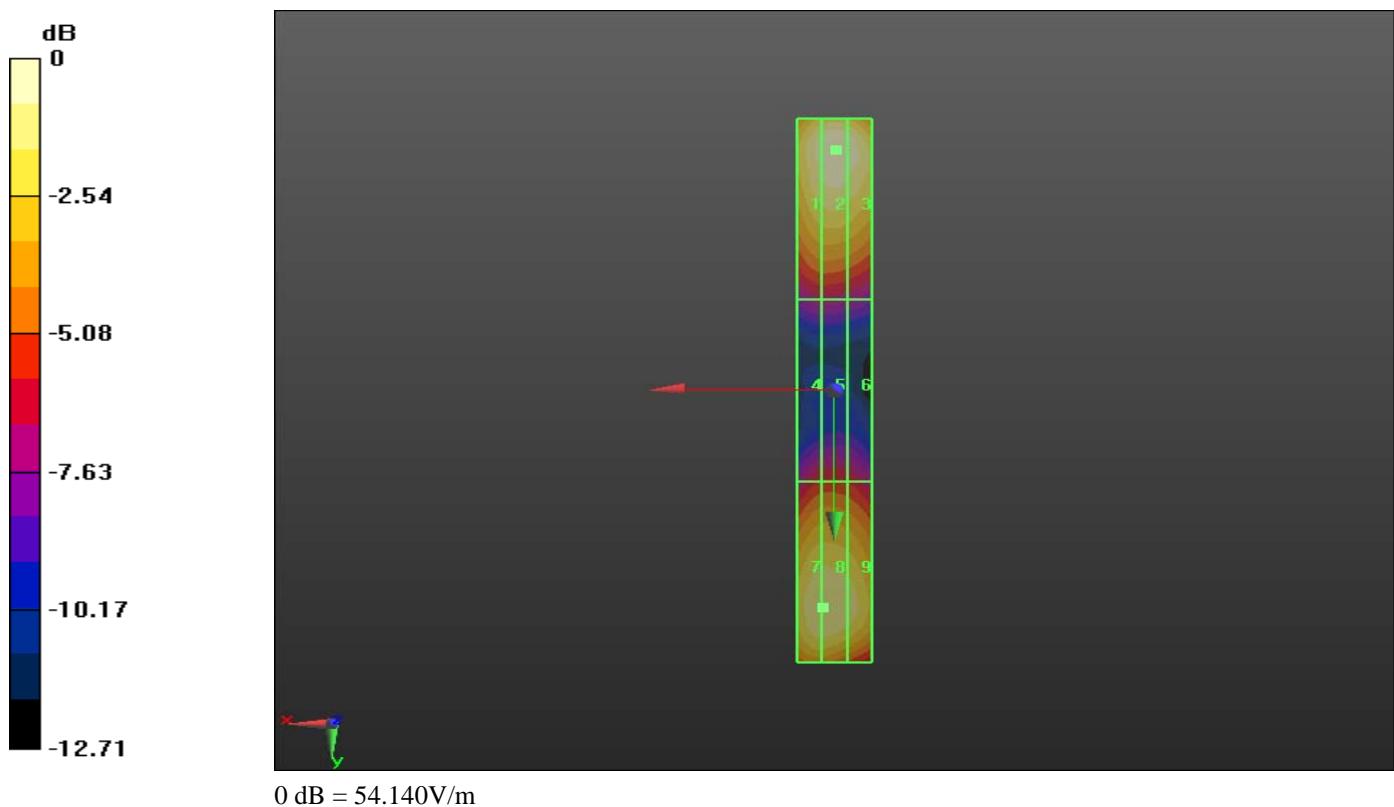
Reference Value = 38.642 V/m; Power Drift = -0.06 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>51.408 M4</b> | <b>54.142 M4</b> | <b>52.509 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>27.621 M4</b> | <b>27.841 M4</b> | <b>27.144 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>49.045 M4</b> | <b>49.106 M4</b> | <b>47.011 M4</b> |



|   |   |                                      |
|---|---|--------------------------------------|
|  | Document<br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> | Page<br><b>18 (135)</b>              |
| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

Date/Time: 3/22/2011 3:01:22 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_CW835 MHz\_GSM

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

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 159.3 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 120.6 V/m; Power Drift = -0.10 dB

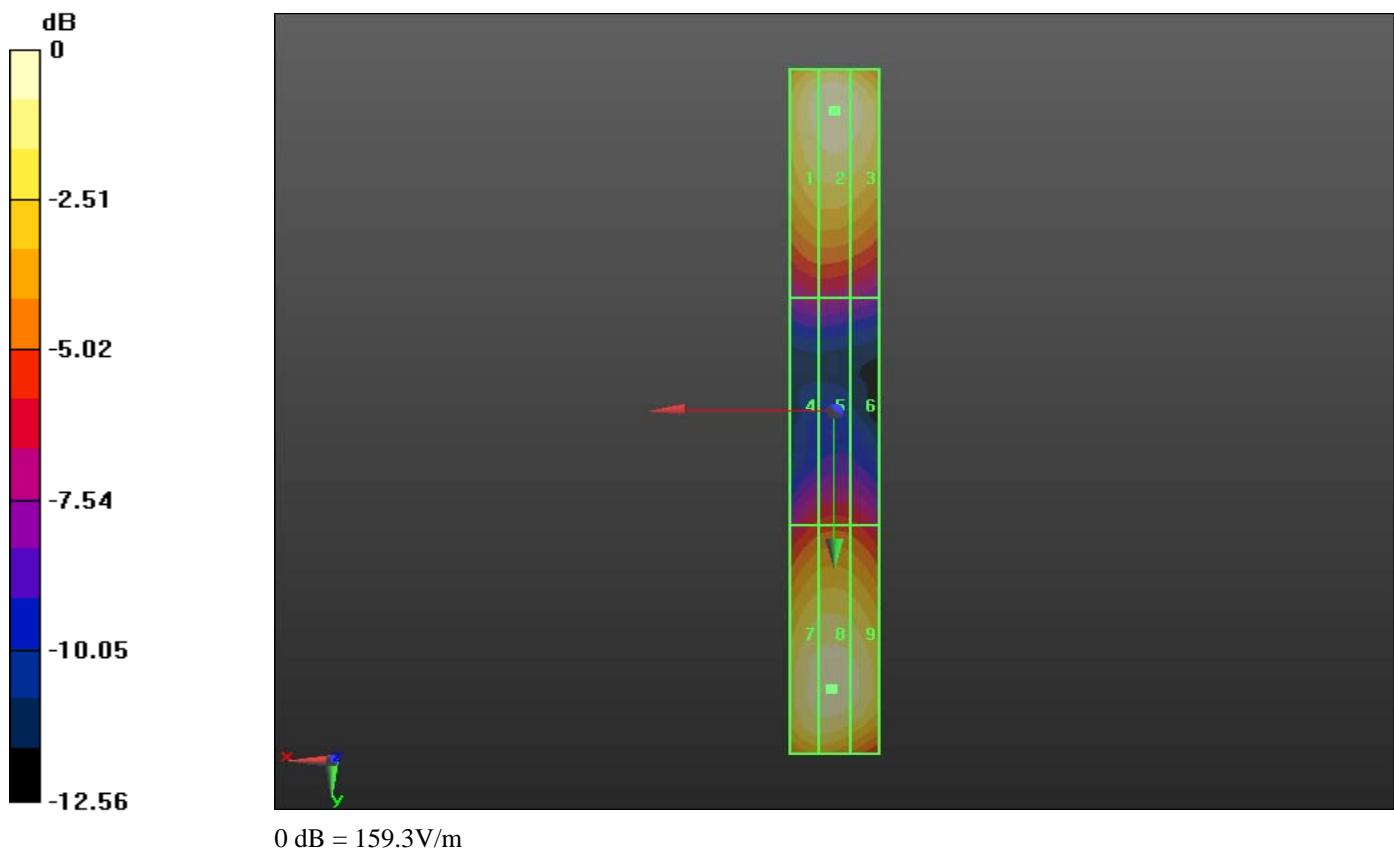
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

|        |        |        |
|--------|--------|--------|
| Grid 1 | Grid 2 | Grid 3 |
|--------|--------|--------|

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

|                            |                            |                            |
|----------------------------|----------------------------|----------------------------|
| <b>153.1 M4</b>            | <b>159.3 M4</b>            | <b>154.5 M4</b>            |
| Grid 4<br><b>84.666 M4</b> | Grid 5<br><b>86.943 M4</b> | Grid 6<br><b>84.863 M4</b> |
| Grid 7<br><b>153.2 M4</b>  | Grid 8<br><b>154.9 M4</b>  | Grid 9<br><b>151.1 M4</b>  |



|   |  |   |                             |
|---|--|---|-----------------------------|
|  |  | Document<br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> | Page<br><b>20 (135)</b>     |
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Date/Time: 3/22/2011 3:09:37 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_AM80%835 MHz\_GSM

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 99.820 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

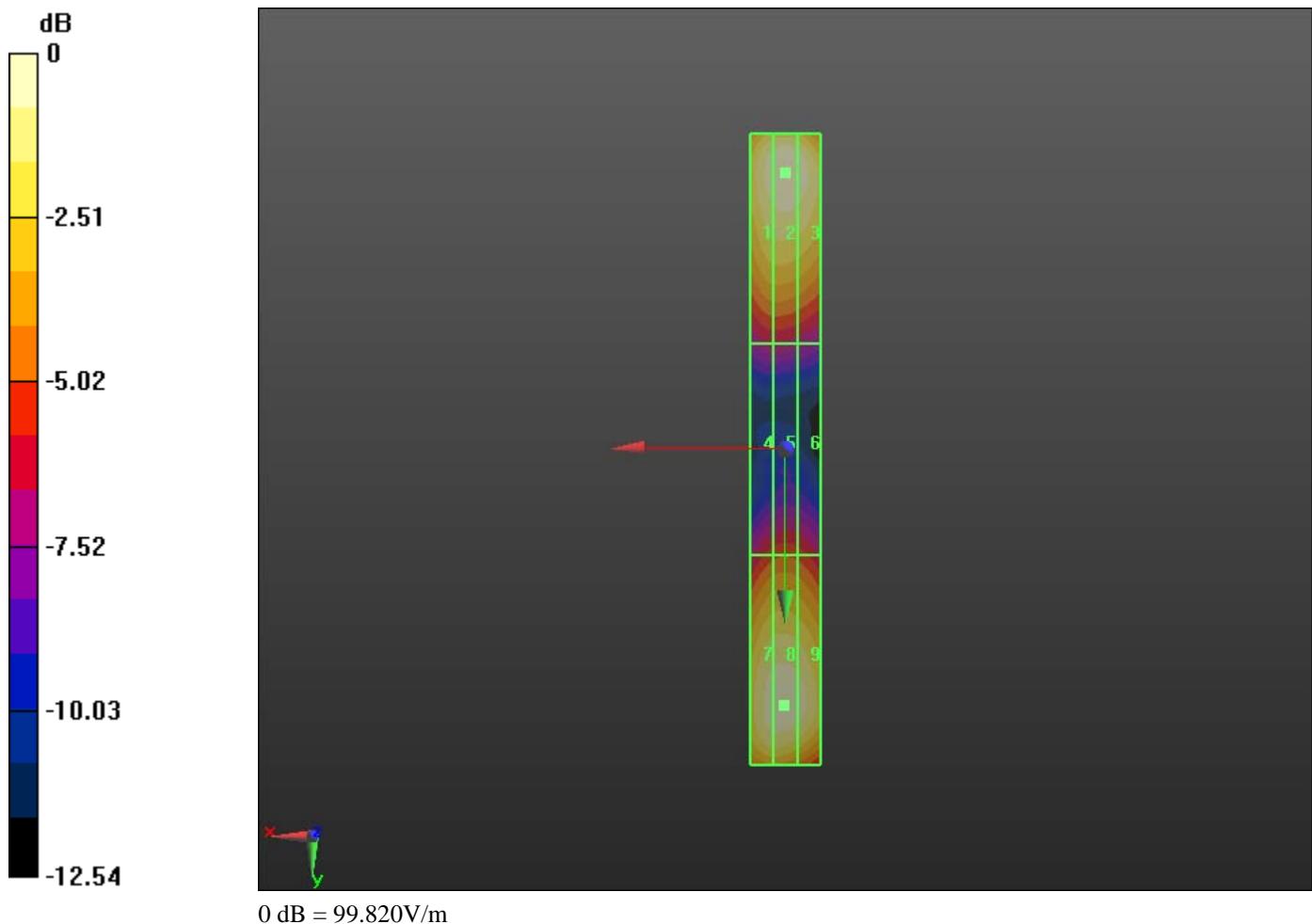
Reference Value = 74.981 V/m; Power Drift = -0.17 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>96.553 M4</b> | <b>99.820 M4</b> | <b>97.313 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>54.091 M4</b> | <b>55.431 M4</b> | <b>53.882 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>95.955 M4</b> | <b>97.176 M4</b> | <b>95.117 M4</b> |



|   |   |   |                                    |
|---|---|---|------------------------------------|
| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |   | <b>Page</b><br><b>22 (135)</b>              |                                    |
| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

Date/Time: 3/22/2011 2:51:34 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_CDMA\_835 MHz

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

Communication System: CDMA 800; Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 63.653 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

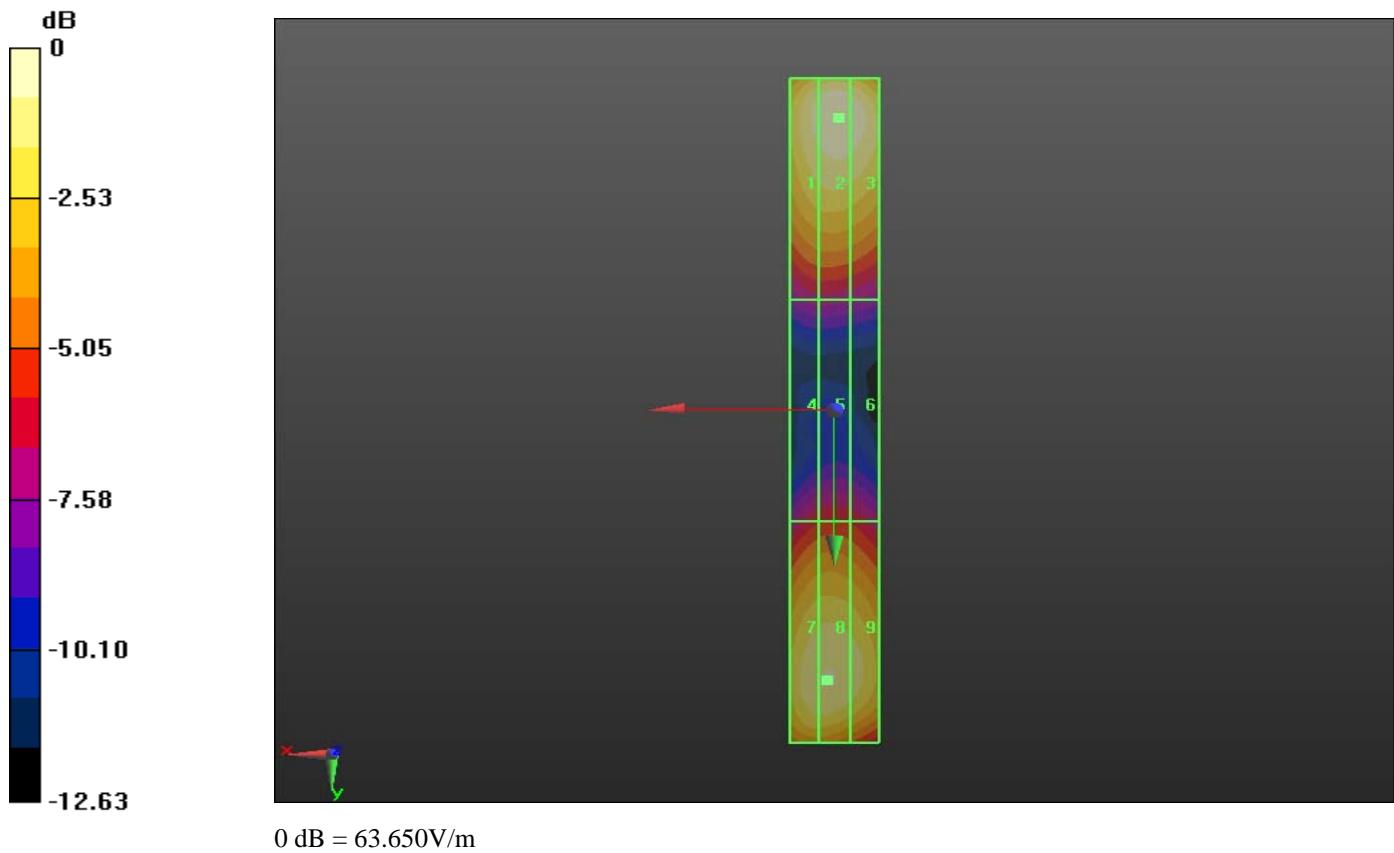
Reference Value = 45.492 V/m; Power Drift = 0.04 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>60.457 M4</b> | <b>63.653 M4</b> | <b>62.702 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>32.119 M4</b> | <b>32.806 M4</b> | <b>32.009 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>57.694 M4</b> | <b>58.081 M4</b> | <b>56.094 M4</b> |



|   |   |   |                                    |
|---|---|---|------------------------------------|
| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |   | <b>Page</b><br><b>24 (135)</b>              |                                    |
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Date/Time: 3/22/2011 3:23:33 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_CW835 MHz\_CDMA

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

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 62.994 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 48.064 V/m; Power Drift = 0.07 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

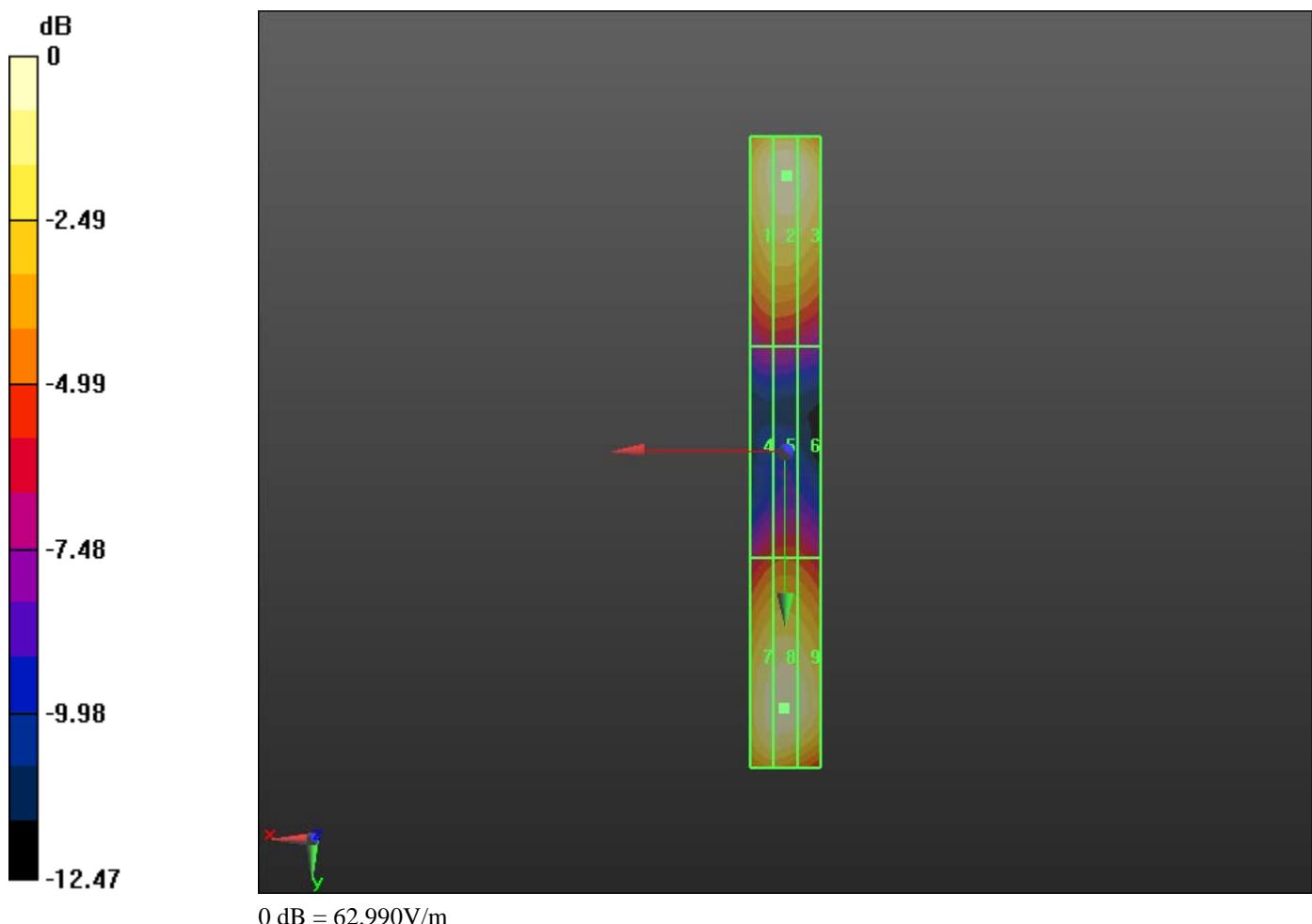
Report No

**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>60.423 M4</b> | <b>62.994 M4</b> | <b>61.497 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>33.852 M4</b> | <b>34.972 M4</b> | <b>34.054 M4</b> |



|  |  |                                      |
|--|--|--------------------------------------|
|  <p>Document<br/> <b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b></p> |  | Page<br><b>26 (135)</b>              |
| Author Data<br><b>Daoud Attayi</b>   | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> |

Date/Time: 3/22/2011 3:31:14 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_AM80%835 MHz\_CDMA

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x361x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 40.248 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 30.394 V/m; Power Drift = 0.02 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

**RTS-3933-1104-55**

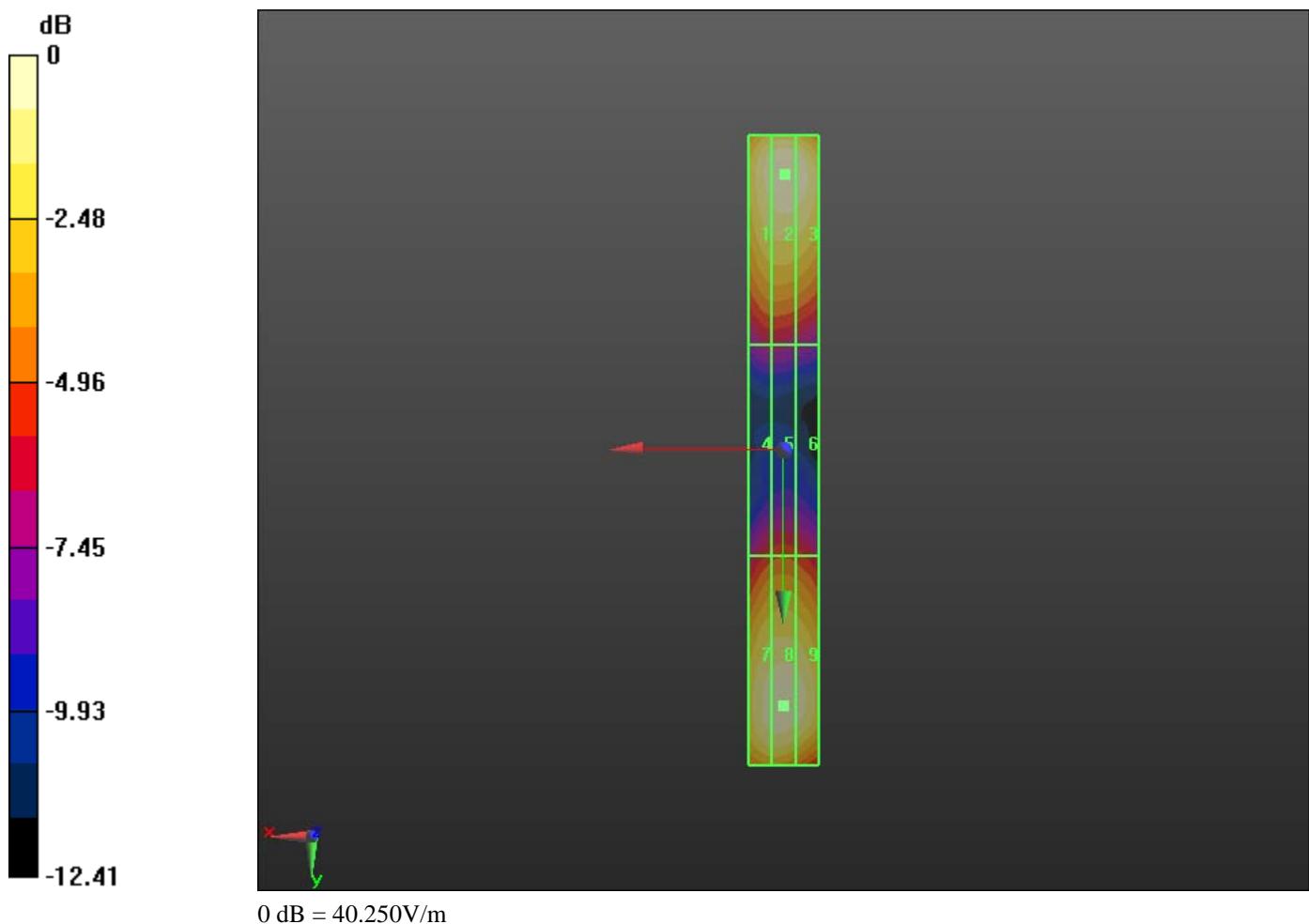
FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>38.736 M4</b> | <b>40.248 M4</b> | <b>39.607 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>21.813 M4</b> | <b>22.486 M4</b> | <b>21.734 M4</b> |

| Grid 7           | Grid 8           | Grid 9           |
|------------------|------------------|------------------|
| <b>38.792 M4</b> | <b>39.696 M4</b> | <b>38.886 M4</b> |



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| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |  | <b>Page</b><br><b>28 (135)</b>       |                             |
| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |

Date/Time: 3/22/2011 4:50:23 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_validation\_1880 MHz

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 133.2 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 124.8 V/m; Power Drift = -0.0086 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

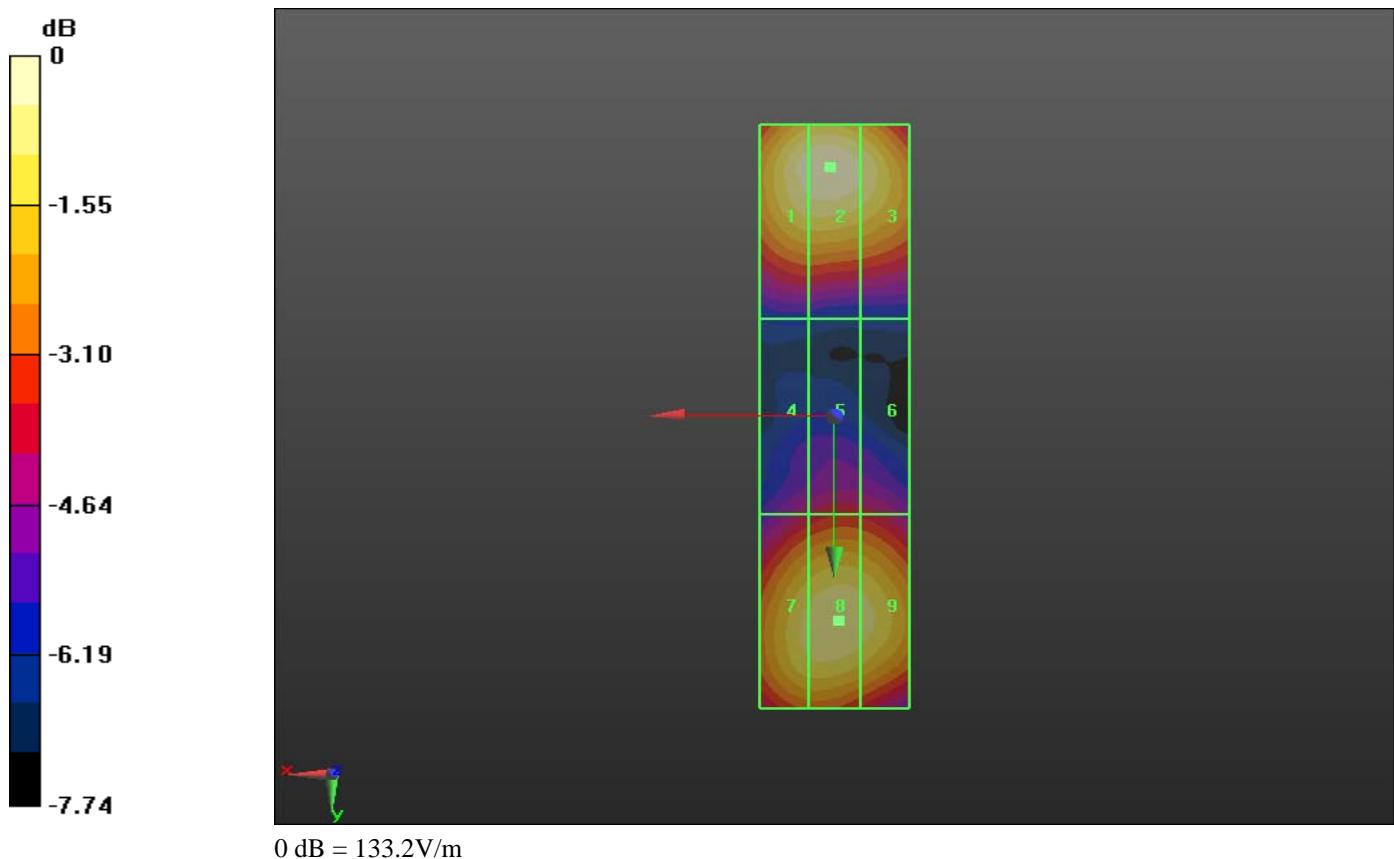
Report No

**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>130.6 M2</b>  | <b>133.2 M2</b>  | <b>126.2 M2</b>  |
| Grid 4           | Grid 5           | Grid 6           |
| <b>83.013 M3</b> | <b>87.500 M3</b> | <b>86.528 M3</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>121.2 M2</b>  | <b>124.7 M2</b>  | <b>122.2 M2</b>  |



|   |  |                                      |                             |
|---|--|--------------------------------------|-----------------------------|
| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |  | <b>Page</b><br><b>30 (135)</b>       |                             |
| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |

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

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_GSM\_1880 MHz

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 27.663 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 25.374 V/m; Power Drift = 0.02 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

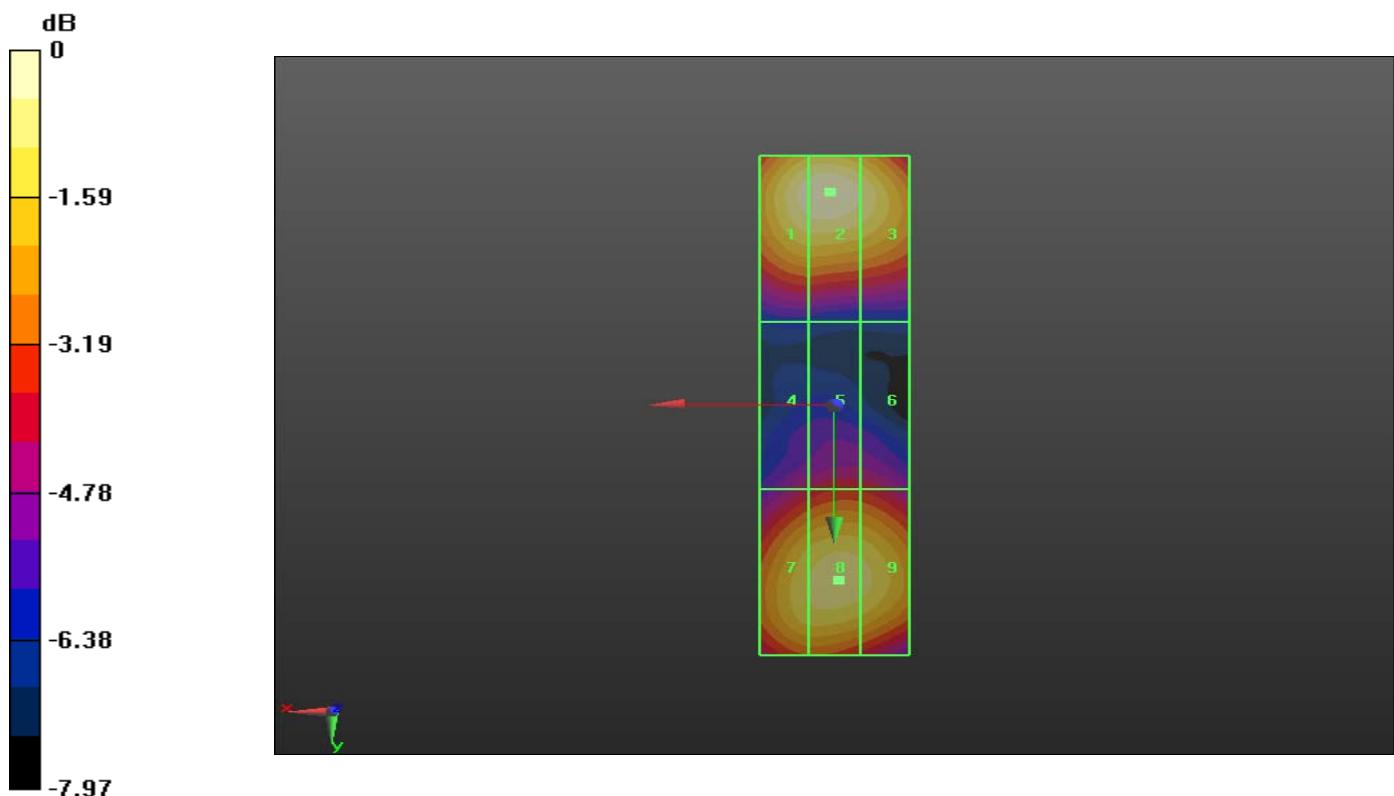
Report No

**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>27.050 M4</b> | <b>27.663 M4</b> | <b>26.052 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>17.031 M4</b> | <b>18.013 M4</b> | <b>17.833 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>24.636 M4</b> | <b>25.539 M4</b> | <b>25.116 M4</b> |



|   |   |   |                                    |
|---|---|---|------------------------------------|
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| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

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

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_CW1880 MHz\_GSM

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 82.216 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 78.932 V/m; Power Drift = 0.0039 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

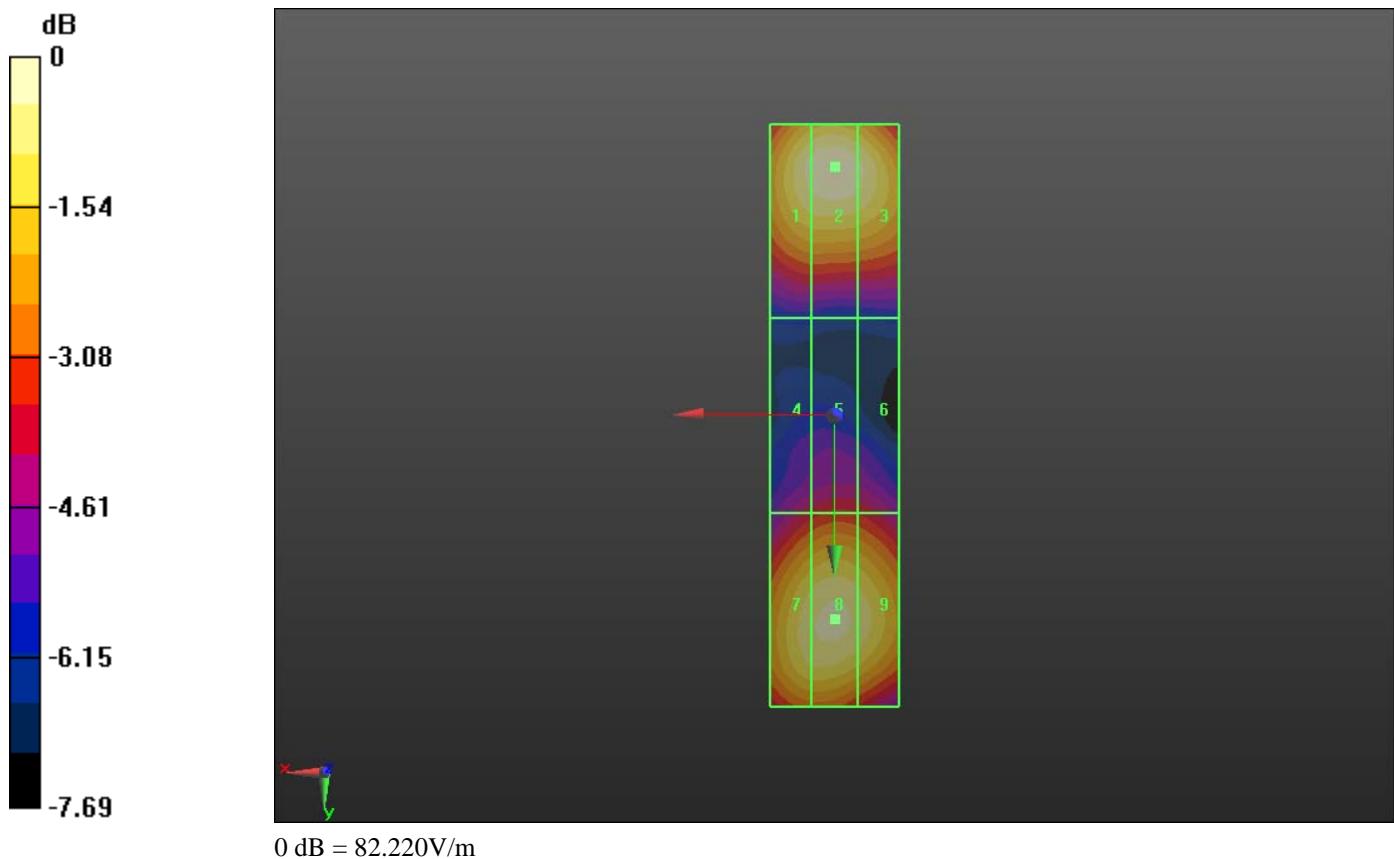
Report No

**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>79.692 M3</b> | <b>82.216 M3</b> | <b>79.228 M3</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>52.849 M4</b> | <b>55.292 M4</b> | <b>54.232 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>76.960 M3</b> | <b>78.815 M3</b> | <b>76.489 M3</b> |



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|---|---|---|------------------------------------|
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| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

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Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_AM80% 1880 MHz\_GSM

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 53.337 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 49.939 V/m; Power Drift = -0.09 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

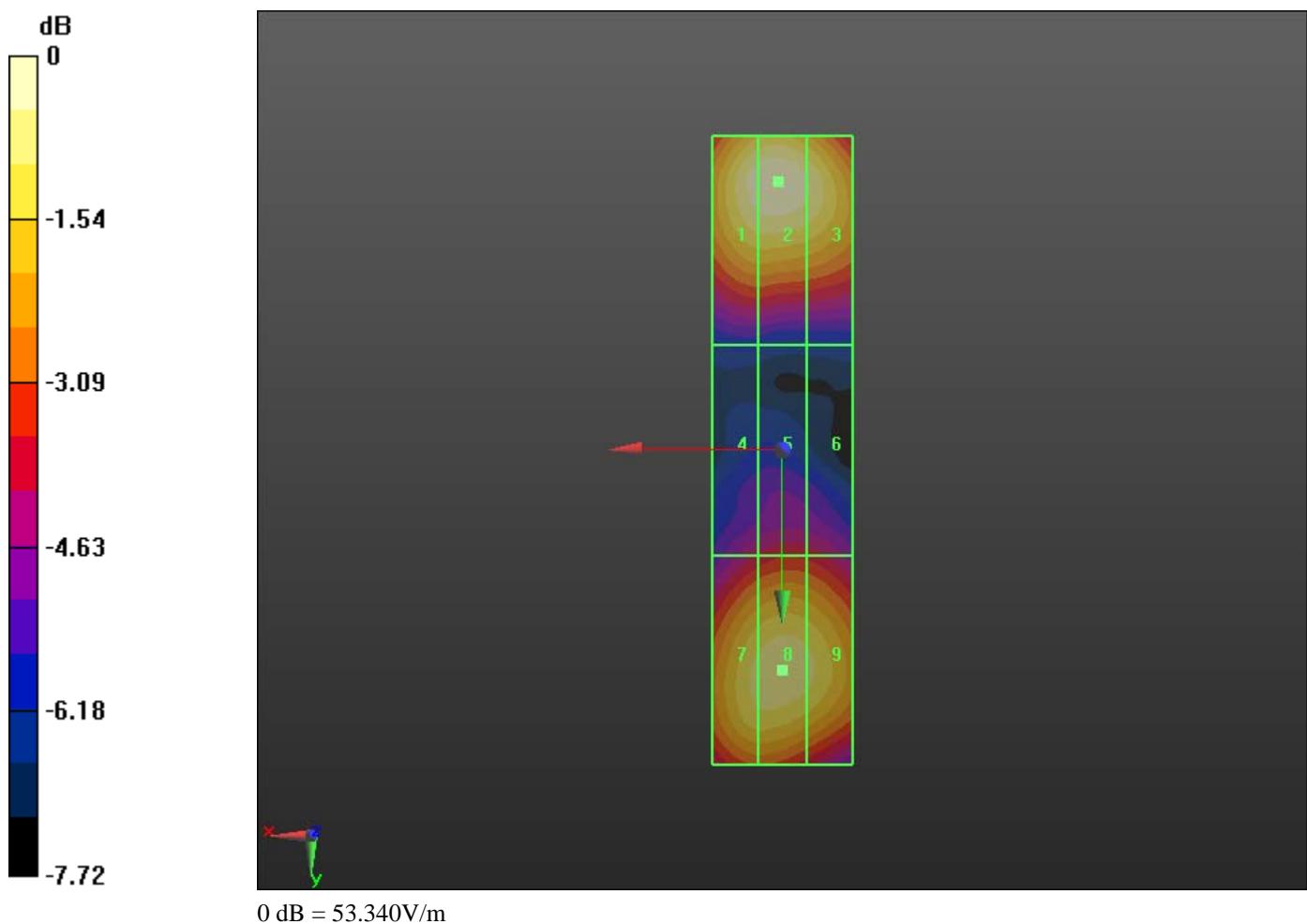
Report No

**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>52.377 M4</b> | <b>53.337 M4</b> | <b>50.671 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>33.462 M4</b> | <b>35.058 M4</b> | <b>34.643 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>48.429 M4</b> | <b>49.374 M4</b> | <b>48.243 M4</b> |



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|---|--|--------------------------------------|-----------------------------|
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Date/Time: 3/22/2011 3:54:49 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_CDMA\_1880 MHz

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

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

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 43.150 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

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

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>41.912 M4</b> | <b>43.150 M4</b> | <b>40.971 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>26.905 M4</b> | <b>28.223 M4</b> | <b>27.711 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>39.111 M4</b> | <b>40.205 M4</b> | <b>39.292 M4</b> |



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Date/Time: 3/23/2011 12:23:00 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_CW1880 MHz\_CDMA\_

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 45.598 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

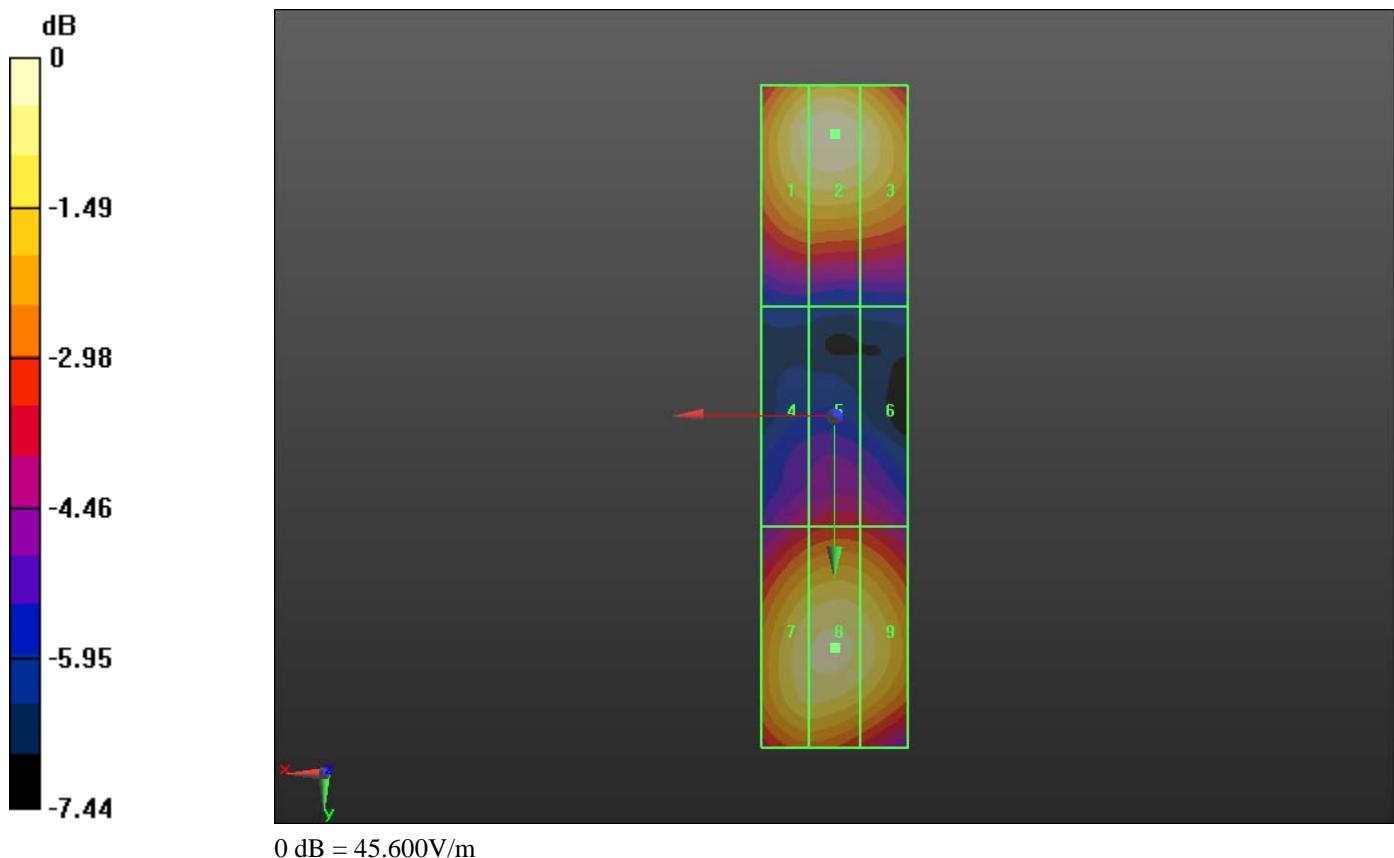
Reference Value = 43.399 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>44.340 M4</b> | <b>45.598 M4</b> | <b>43.792 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>29.598 M4</b> | <b>30.871 M4</b> | <b>30.339 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>42.981 M4</b> | <b>43.734 M4</b> | <b>42.515 M4</b> |



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Date/Time: 3/22/2011 4:34:04 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_PMF\_AM80% 1880 MHz\_CDMA

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid**

**Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 30.486 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 28.158 V/m; Power Drift = 0.06 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

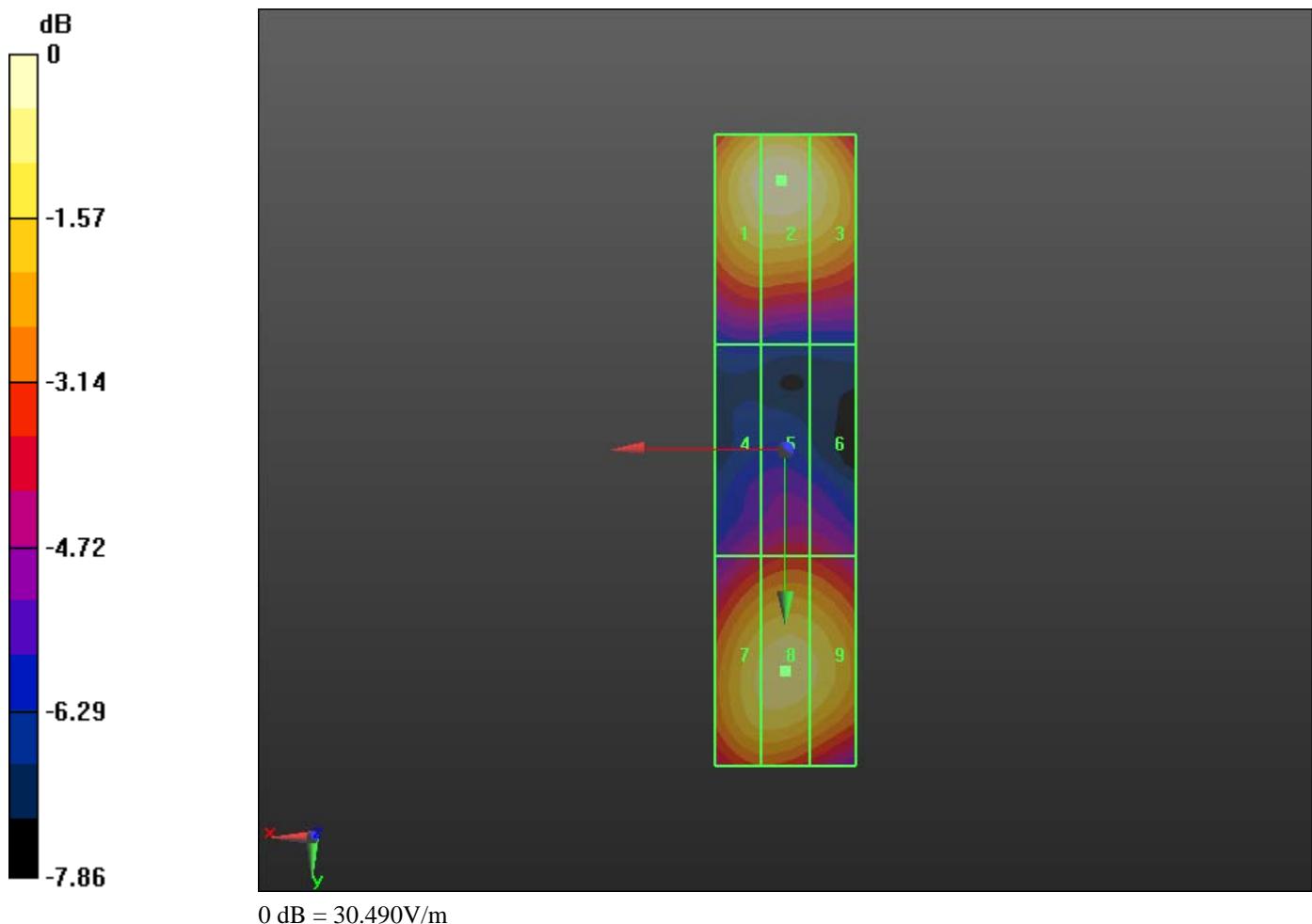
Report No

**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>29.713 M4</b> | <b>30.486 M4</b> | <b>29.090 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>18.962 M4</b> | <b>19.986 M4</b> | <b>19.699 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>27.492 M4</b> | <b>28.197 M4</b> | <b>27.513 M4</b> |



|   |   |                                      |
|---|---|--------------------------------------|
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Date/Time: 3/23/2011 3:19:30 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_validation\_835 MHz

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

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:**

**dx=5mm, dy=5mm**

Maximum value of peak Total field = 0.475 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Author Data  
**Daoud Attayi**

 Dates of Test  
**Mar. 22-23, Apr. 27 2011**

 Report No  
**RTS-3933-1104-55**

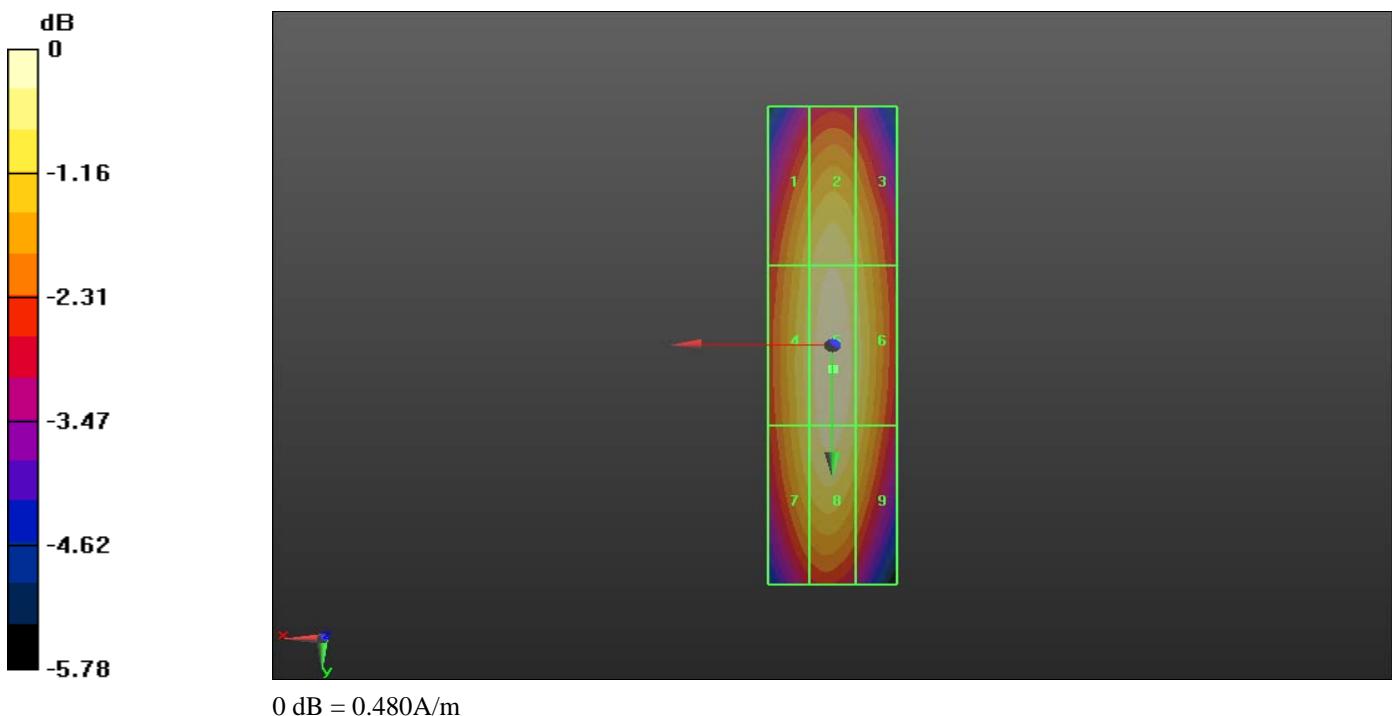
 FCC ID  
**L6ARDU70CW**

Reference Value = 0.514 A/m; Power Drift = -0.08 dB

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

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.437 M4</b> | <b>0.459 M4</b> | <b>0.437 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.453 M4</b> | <b>0.475 M4</b> | <b>0.453 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.447 M4</b> | <b>0.469 M4</b> | <b>0.442 M4</b> |



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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_GSM\_835 MHz

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

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

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:**

$dx=5\text{mm}$ ,  $dy=5\text{mm}$

Maximum value of peak Total field = 0.168 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.173 A/m; Power Drift = 0.43 dB

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

Author Data  
**Daoud Attayi**

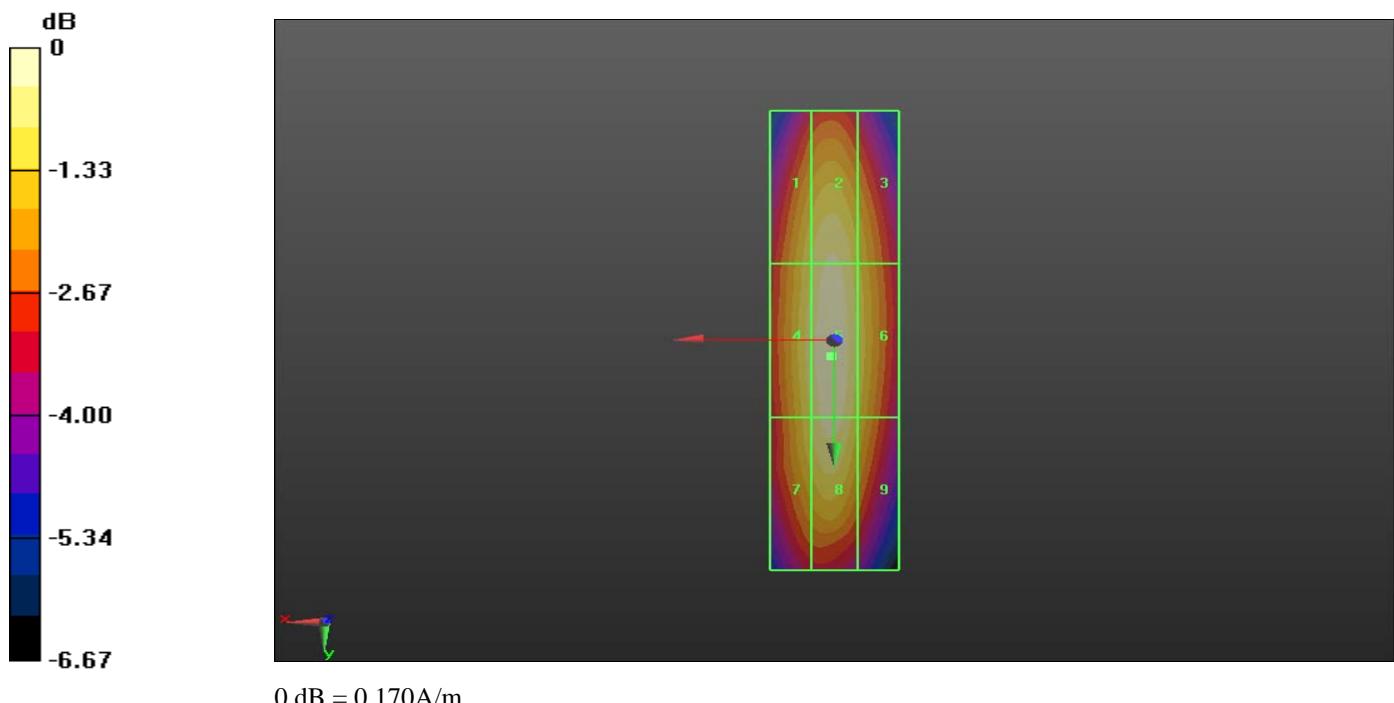
 Dates of Test  
**Mar. 22-23, Apr. 27 2011**

 Report No  
**RTS-3933-1104-55**

 FCC ID  
**L6ARDU70CW**

Peak H-field in A/m

| Grid 1                    | Grid 2                    | Grid 3                    |
|---------------------------|---------------------------|---------------------------|
| <b>0.154 M4</b>           | <b>0.163 M4</b>           | <b>0.148 M4</b>           |
| Grid 4<br><b>0.159 M4</b> | Grid 5<br><b>0.168 M4</b> | Grid 6<br><b>0.153 M4</b> |
| Grid 7<br><b>0.155 M4</b> | Grid 8<br><b>0.165 M4</b> | Grid 9<br><b>0.148 M4</b> |



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

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_CW835 MHz\_GSM

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

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:**

dx=5mm, dy=5mm

Maximum value of peak Total field = 0.482 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.503 A/m; Power Drift = -0.00099 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

**RTS-3933-1104-55**

FCC ID

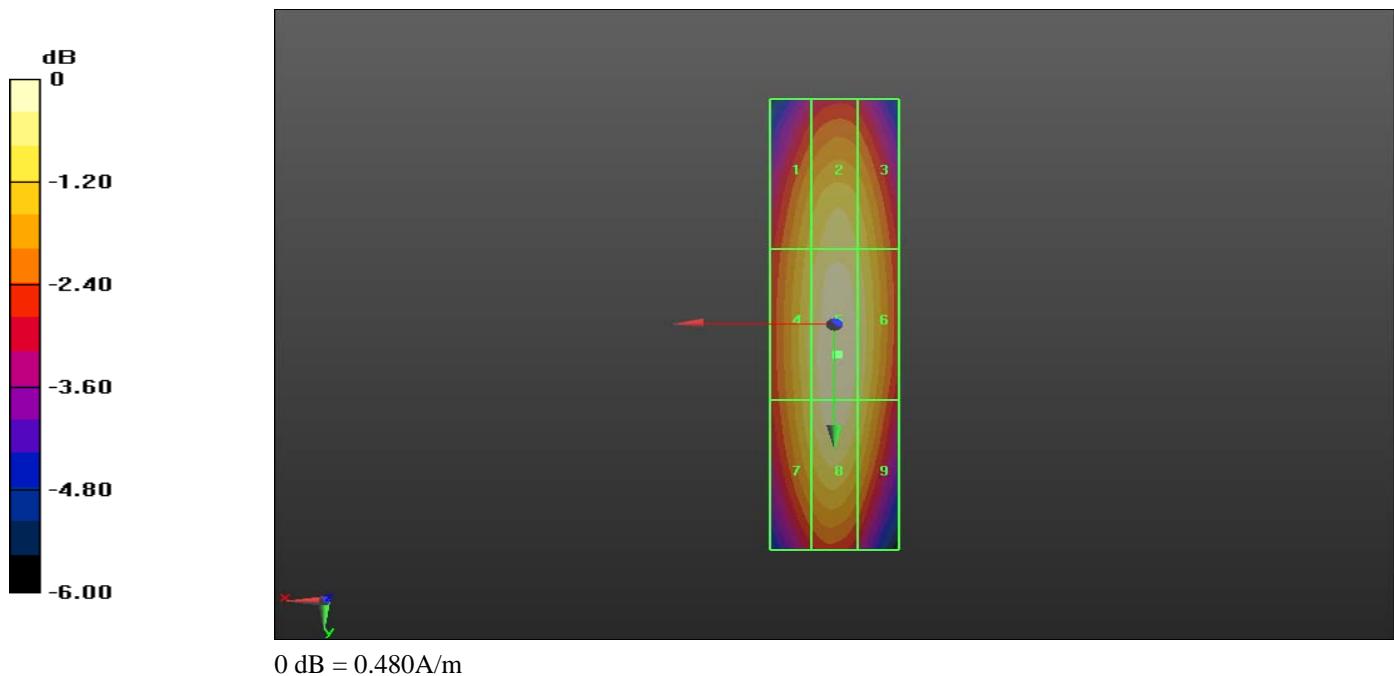
**L6ARDU70CW**

## Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.429 M4</b> | <b>0.450 M4</b> | <b>0.439 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.449 M4</b> | <b>0.482 M4</b> | <b>0.458 M4</b> |

| Grid 7          | Grid 8          | Grid 9          |
|-----------------|-----------------|-----------------|
| <b>0.441 M4</b> | <b>0.475 M4</b> | <b>0.448 M4</b> |



|   |   |   |                                    |
|---|---|---|------------------------------------|
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| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

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

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_AM80%835 MHz\_GSM

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

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

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:**

**dx=5mm, dy=5mm**

**Maximum value of peak Total field = 0.302 A/m**

**Probe Modulation Factor = 1.000**

**Device Reference Point: 0, 0, -6.3 mm**

**Reference Value = 0.326 A/m; Power Drift = -0.16 dB**

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

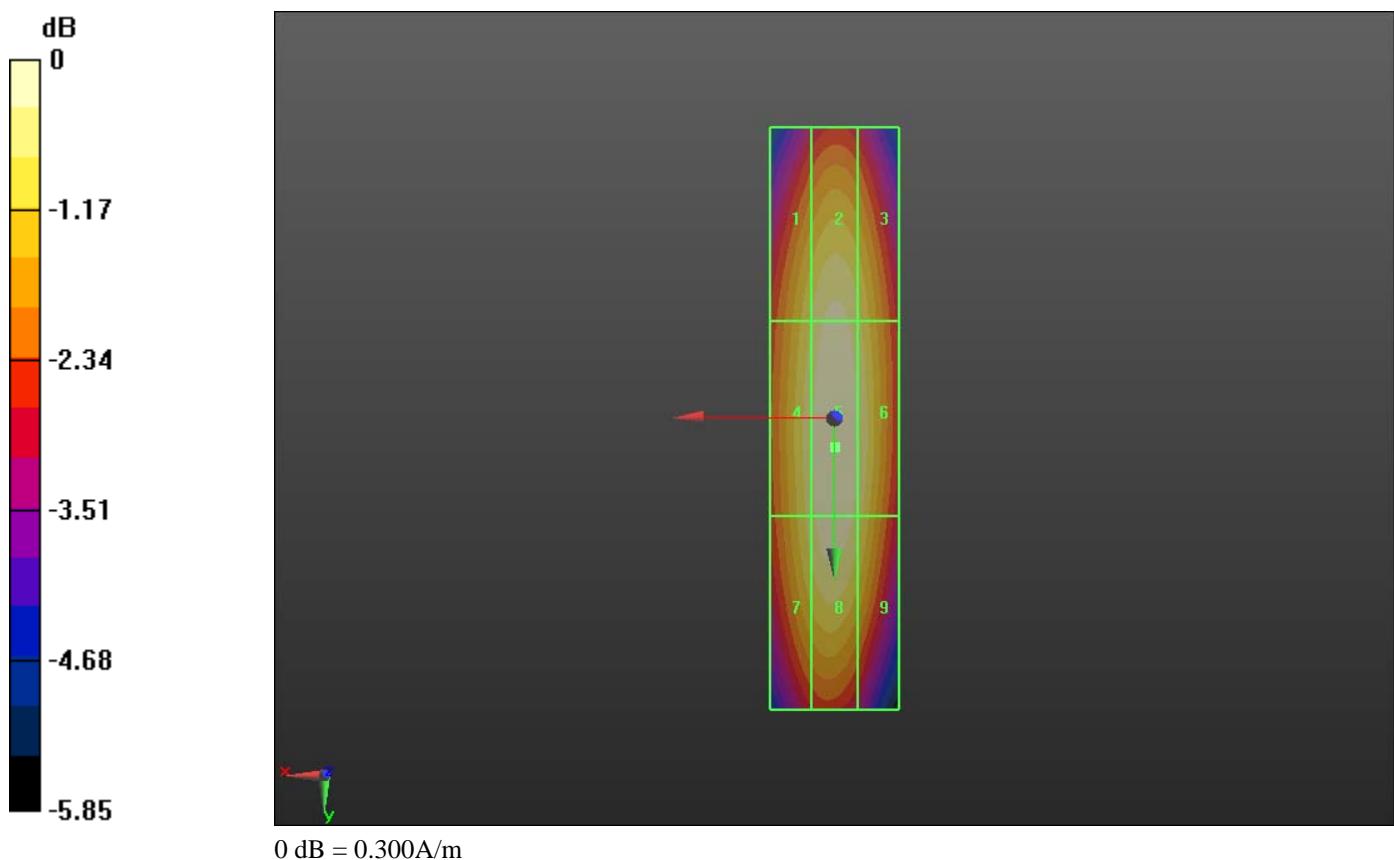
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.276 M4</b> | <b>0.292 M4</b> | <b>0.279 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.286 M4</b> | <b>0.302 M4</b> | <b>0.289 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.283 M4</b> | <b>0.299 M4</b> | <b>0.281 M4</b> |



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|---|---|---|------------------------------------|
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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_CDMA\_835 MHz

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

Communication System: CDMA 800; Frequency: 835 MHz; Communication System PAR: 0 dB; Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:  
 $dx=5mm$ ,  $dy=5mm$**

Maximum value of peak Total field = 0.183 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

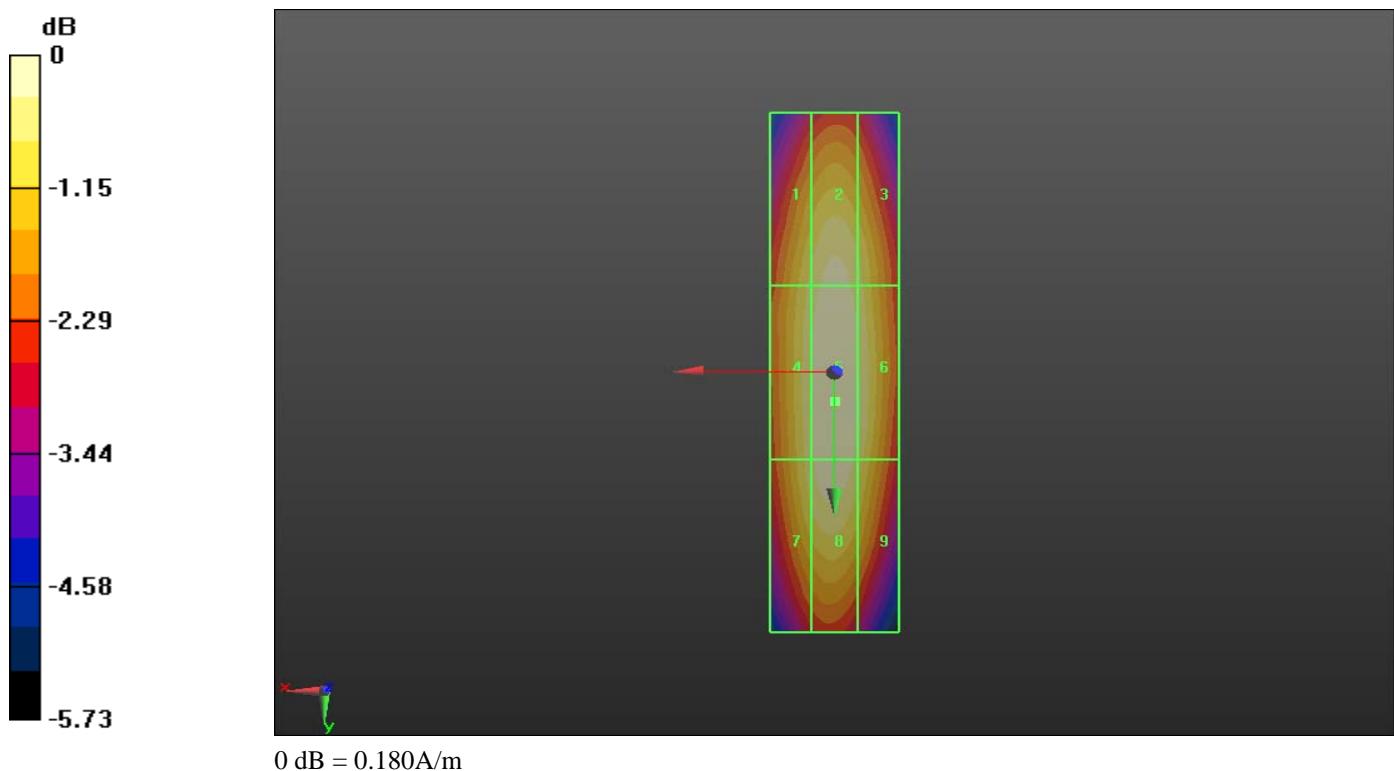
Reference Value = 0.196 A/m; Power Drift = 0.01 dB

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

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

## Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.168 M4</b> | <b>0.176 M4</b> | <b>0.169 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.173 M4</b> | <b>0.183 M4</b> | <b>0.175 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.171 M4</b> | <b>0.180 M4</b> | <b>0.169 M4</b> |



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Date/Time: 3/23/2011 3:28:48 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_CW835 MHz\_CDMA

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

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:**

dx=5mm, dy=5mm

Maximum value of peak Total field = 0.191 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

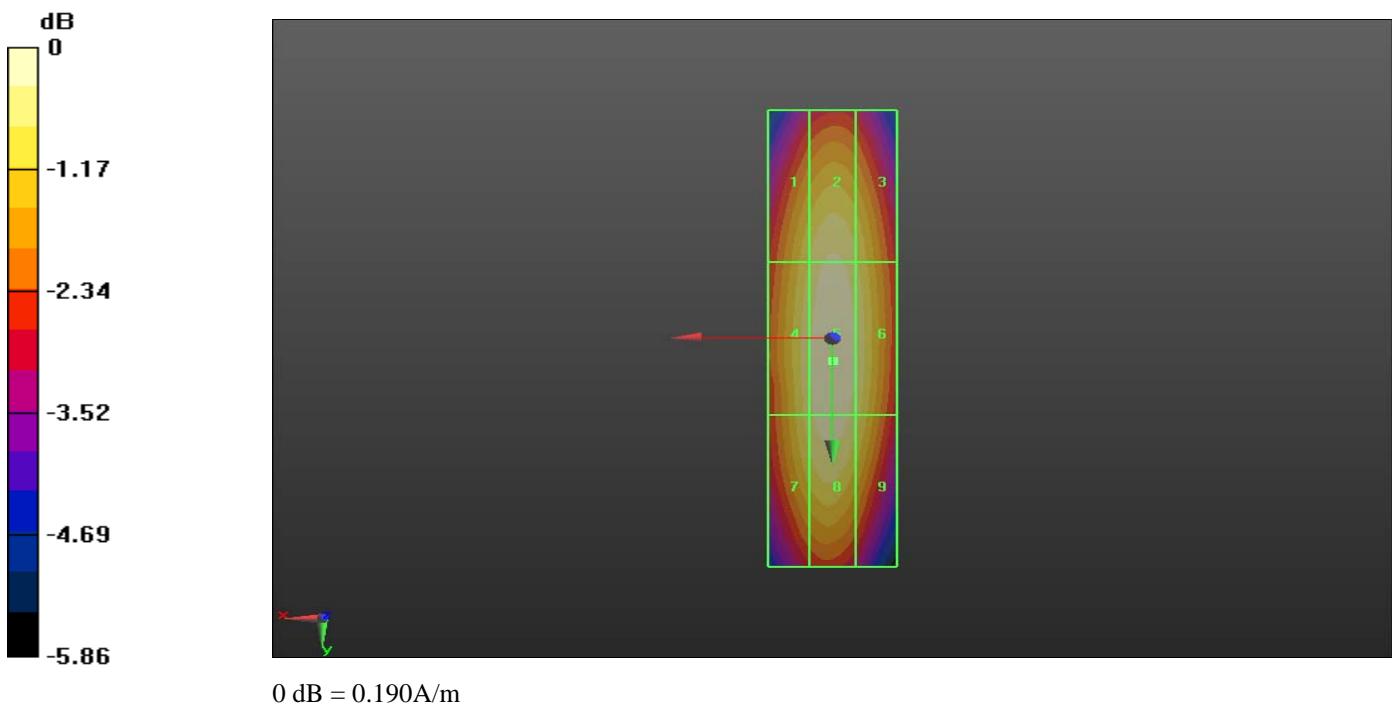
Reference Value = 0.202 A/m; Power Drift = -0.03 dB

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

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.175 M4</b> | <b>0.183 M4</b> | <b>0.176 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.182 M4</b> | <b>0.191 M4</b> | <b>0.182 M4</b> |



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Date/Time: 3/23/2011 3:38:43 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_AM80%835 MHz\_CDMA

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid:**

dx=5mm, dy=5mm

Maximum value of peak Total field = 0.121 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

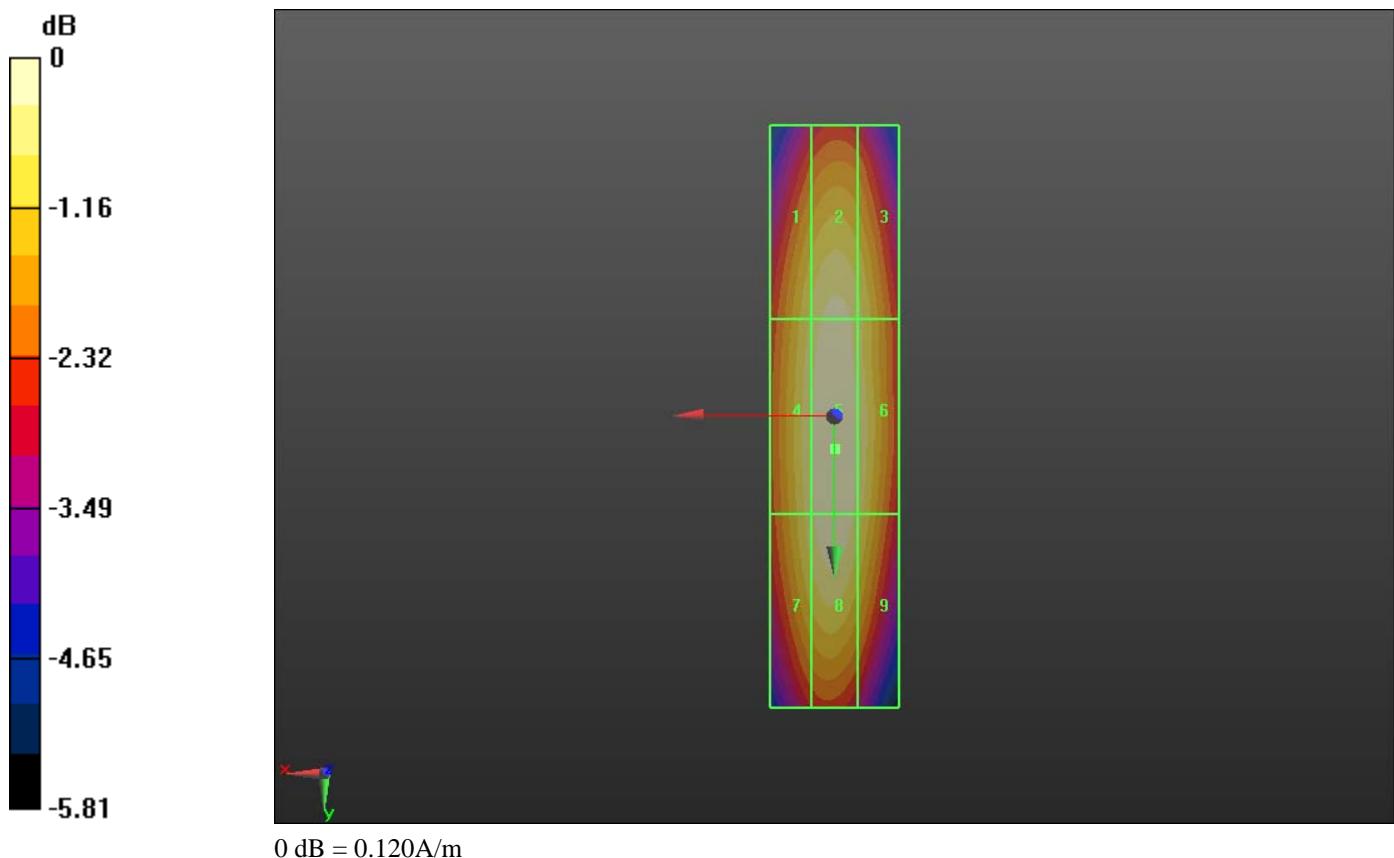
Reference Value = 0.129 A/m; Power Drift = -0.09 dB

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

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.111 M4</b> | <b>0.117 M4</b> | <b>0.113 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.115 M4</b> | <b>0.121 M4</b> | <b>0.116 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.114 M4</b> | <b>0.120 M4</b> | <b>0.113 M4</b> |



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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_validation\_1880 MHz

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

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

Maximum value of peak Total field = 0.451 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.479 A/m; Power Drift = -0.02 dB

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

Author Data  
**Daoud Attayi**

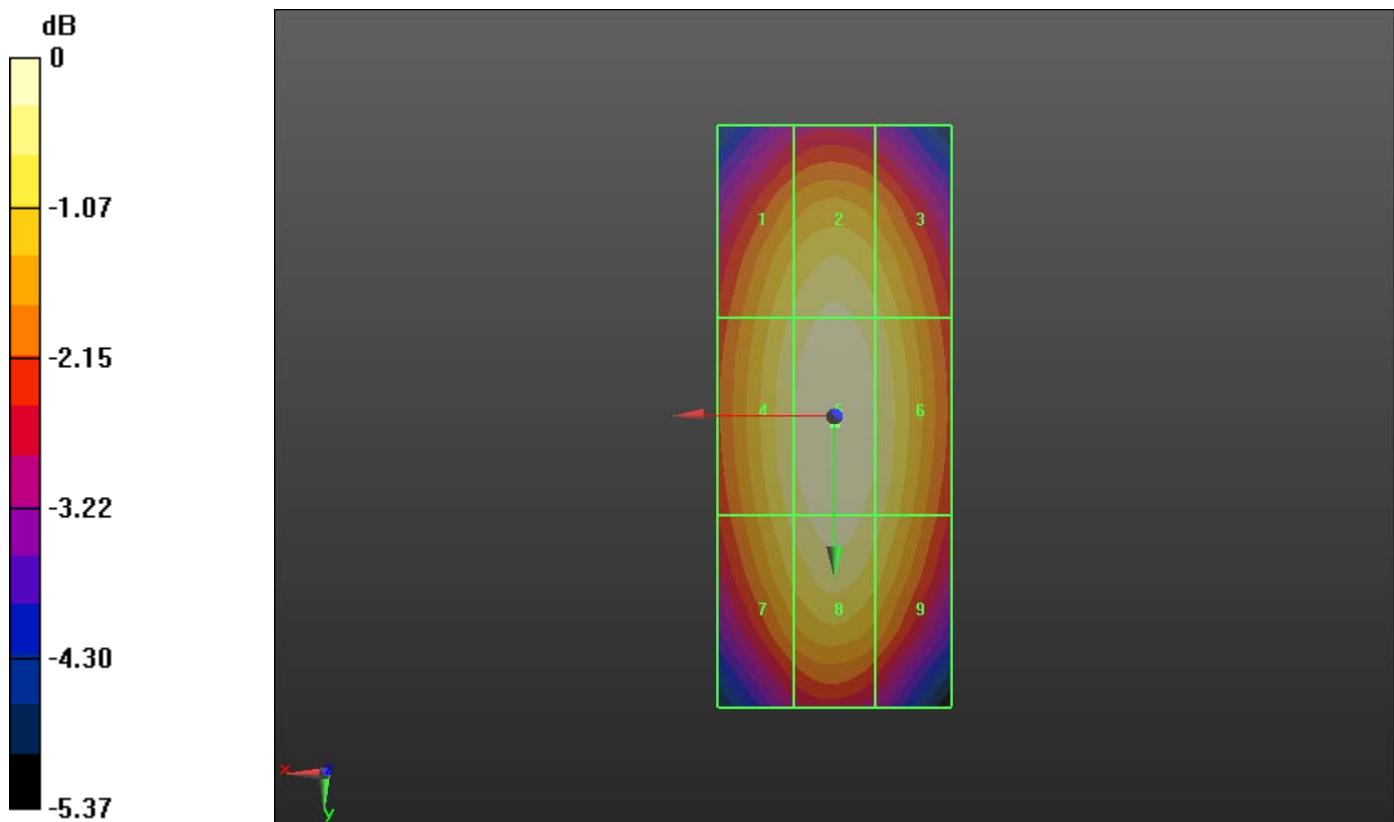
 Dates of Test  
**Mar. 22-23, Apr. 27 2011**

 Report No  
**RTS-3933-1104-55**

 FCC ID  
**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.419 M2</b> | <b>0.436 M2</b> | <b>0.420 M2</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.432 M2</b> | <b>0.451 M2</b> | <b>0.434 M2</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.421 M2</b> | <b>0.442 M2</b> | <b>0.423 M2</b> |



|   |   |                                      |
|---|---|--------------------------------------|
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0 dB = 0.450A/m

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

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_GSM\_1880 MHz

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid:**

**dx=5mm, dy=5mm**

Maximum value of peak Total field = 0.099 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.105 A/m; Power Drift = 0.04 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

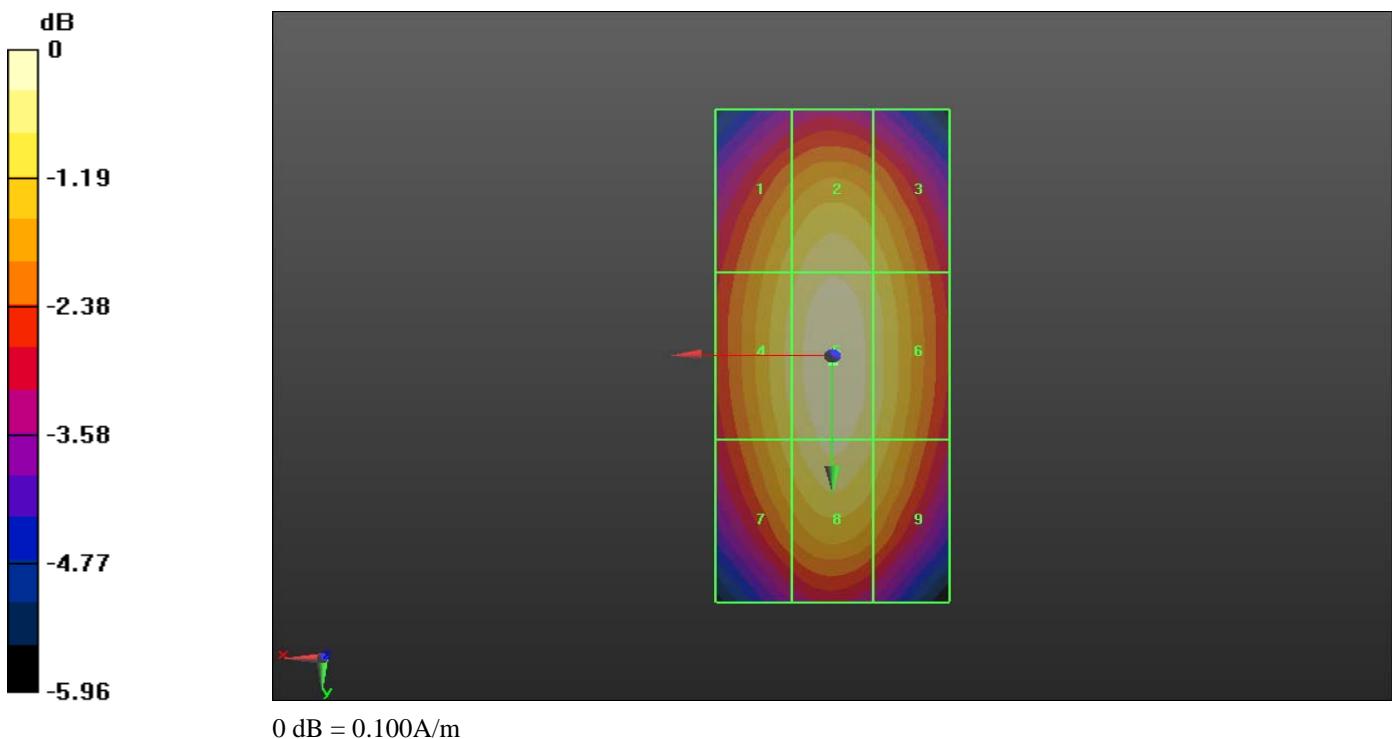
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.090 M4</b> | <b>0.095 M4</b> | <b>0.091 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.093 M4</b> | <b>0.099 M4</b> | <b>0.094 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.090 M4</b> | <b>0.097 M4</b> | <b>0.091 M4</b> |



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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_CW1880 MHz\_GSM

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid:**

dx=5mm, dy=5mm

Maximum value of peak Total field = 0.284 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

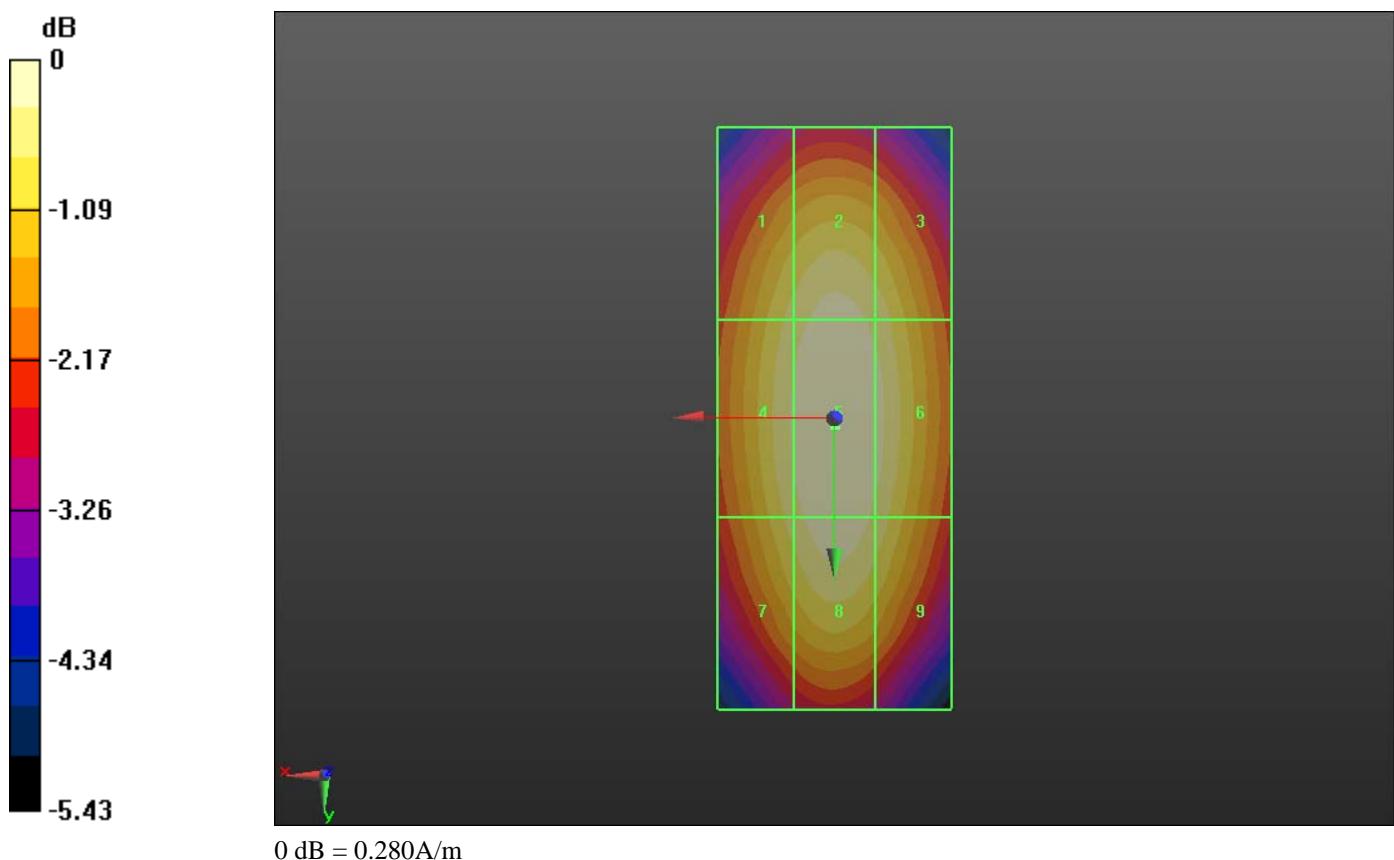
Reference Value = 0.302 A/m; Power Drift = -0.03 dB

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

Peak H-field in A/m

Author Data  
**Daoud Attayi**Dates of Test  
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| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.263 M3</b> | <b>0.274 M3</b> | <b>0.265 M3</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.271 M3</b> | <b>0.284 M3</b> | <b>0.274 M3</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.263 M3</b> | <b>0.278 M3</b> | <b>0.266 M3</b> |



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| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b> | Report No<br><b>RTS-3933-1104-55</b> | FCC ID<br><b>L6ARDU70CW</b> |

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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_AM80%1880 MHz\_GSM

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: TCoil Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid:**

**dx=5mm, dy=5mm**

Maximum value of peak Total field = 0.184 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

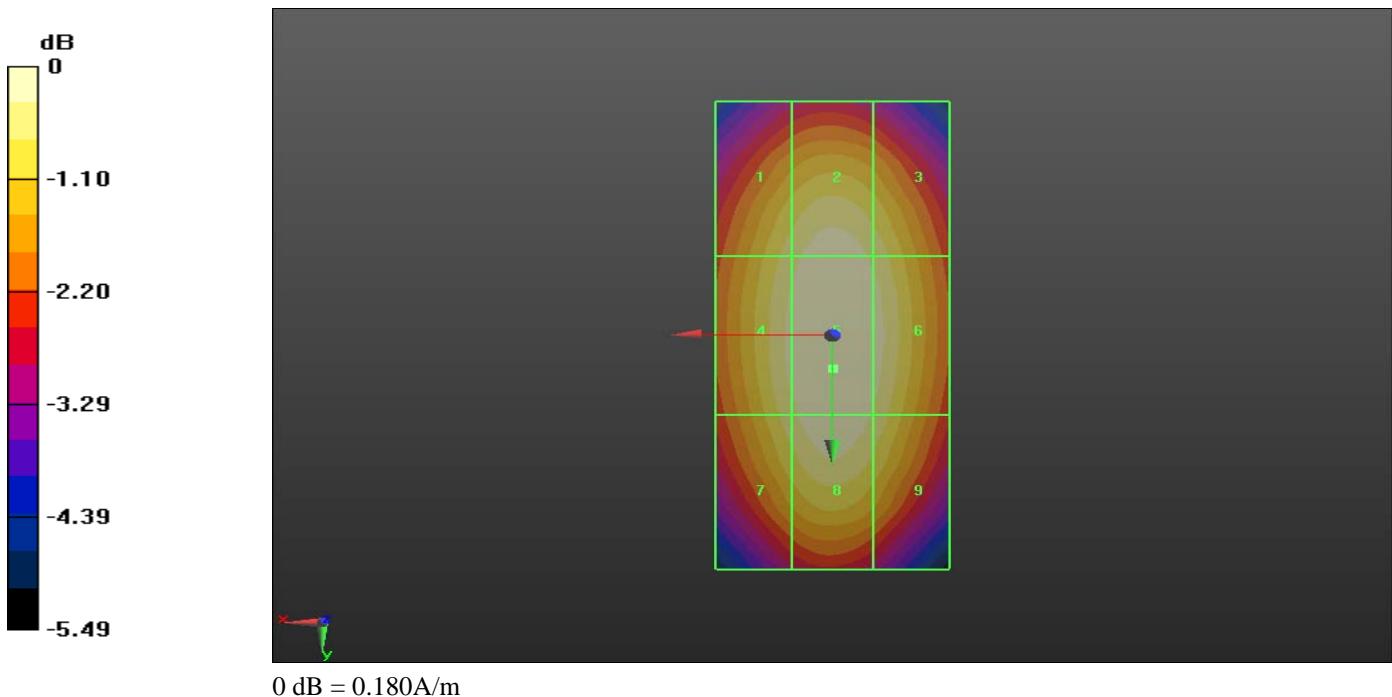
Reference Value = 0.196 A/m; Power Drift = -0.02 dB

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

Author Data  
**Daoud Attayi**Dates of Test  
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**L6ARDU70CW**

## Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.170 M4</b> | <b>0.178 M4</b> | <b>0.171 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.175 M4</b> | <b>0.184 M4</b> | <b>0.177 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.170 M4</b> | <b>0.180 M4</b> | <b>0.172 M4</b> |



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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_CDMA\_1880 MHz

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

Communication System: CDMA 1900; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid:**

$dx=5\text{mm}$ ,  $dy=5\text{mm}$

Maximum value of peak Total field = 0.154 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

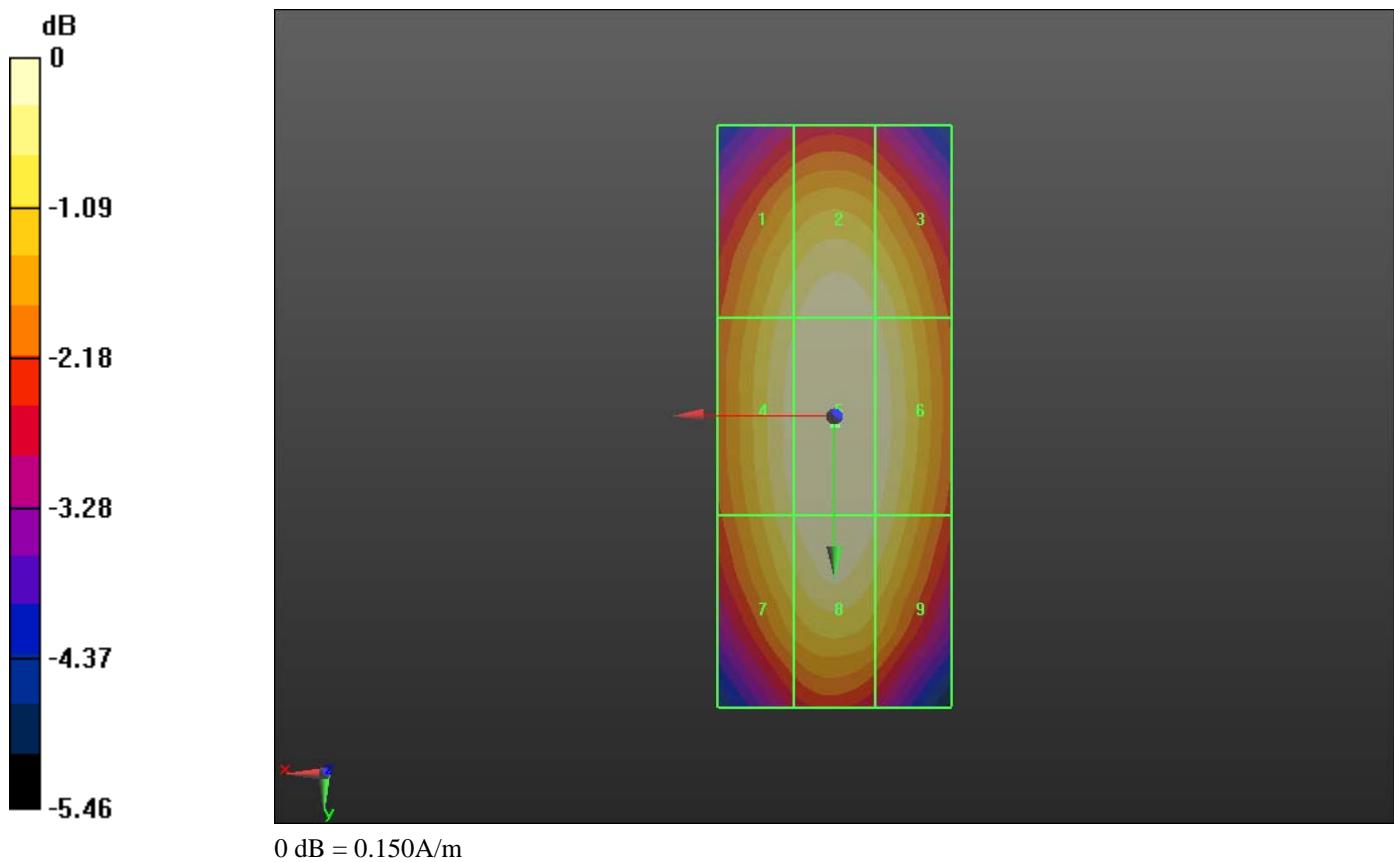
Reference Value = 0.165 A/m; Power Drift = -0.02 dB

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

Peak H-field in A/m

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**Daoud Attayi**Dates of Test  
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**L6ARDU70CW**

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.143 M4</b> | <b>0.150 M4</b> | <b>0.145 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.147 M4</b> | <b>0.154 M4</b> | <b>0.149 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.144 M4</b> | <b>0.152 M4</b> | <b>0.145 M4</b> |



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|---|---|--------------------------------------|
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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_CW1880 MHz\_CDMA

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

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

Maximum value of peak Total field = 0.161 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

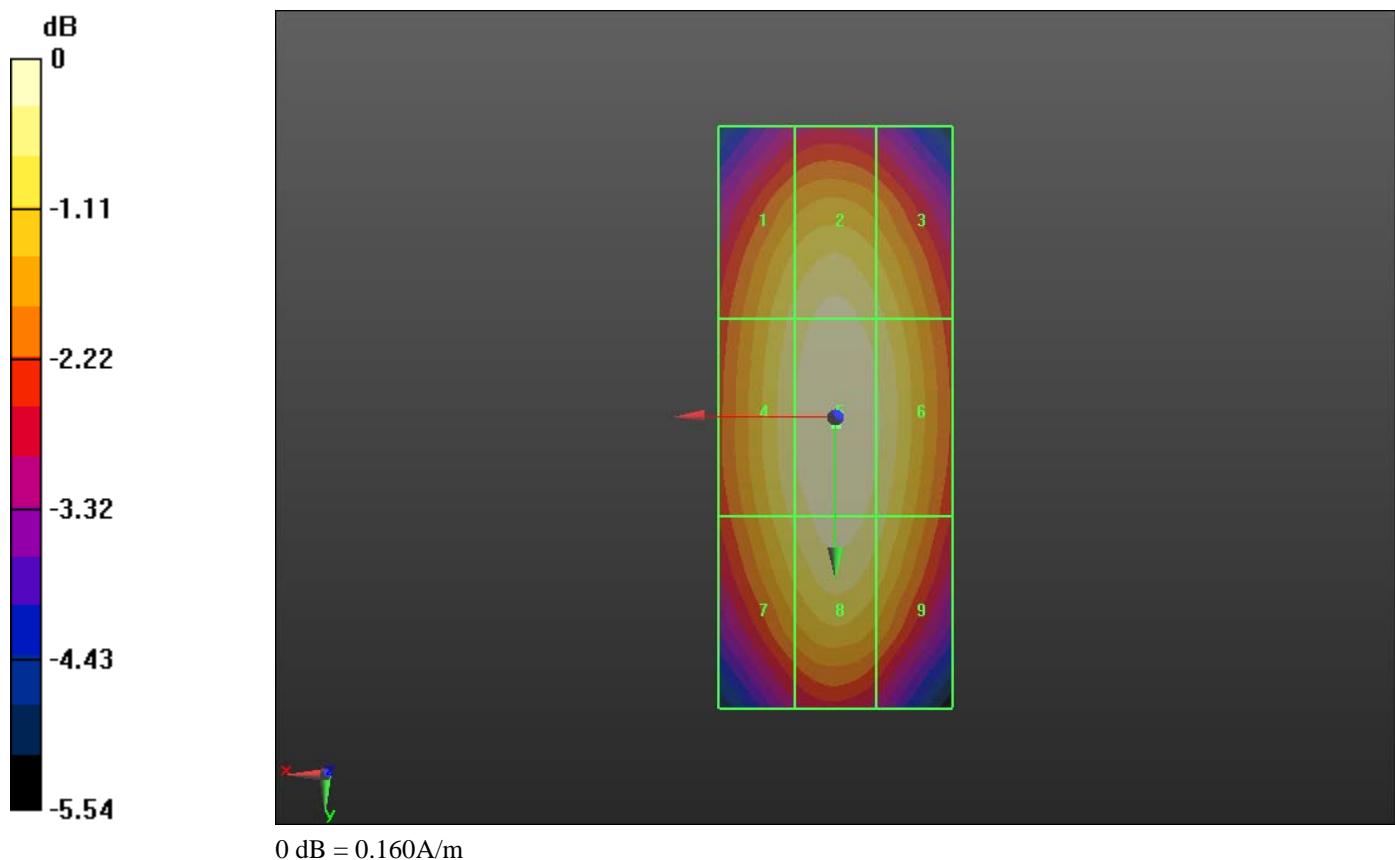
Reference Value = 0.170 A/m; Power Drift = 0.03 dB

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

Author Data  
**Daoud Attayi**Dates of Test  
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**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.149 M4</b> | <b>0.156 M4</b> | <b>0.149 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.153 M4</b> | <b>0.161 M4</b> | <b>0.155 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.149 M4</b> | <b>0.157 M4</b> | <b>0.150 M4</b> |



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|---|---|--------------------------------------|
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| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |   | <b>Page</b><br><b>71 (135)</b>              |                                    |
| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

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Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_PMF\_AM80% 1880 MHz\_CDMA

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

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: TCoil Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole =**

**10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid:**

**dx=5mm, dy=5mm**

Maximum value of peak Total field = 0.102 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

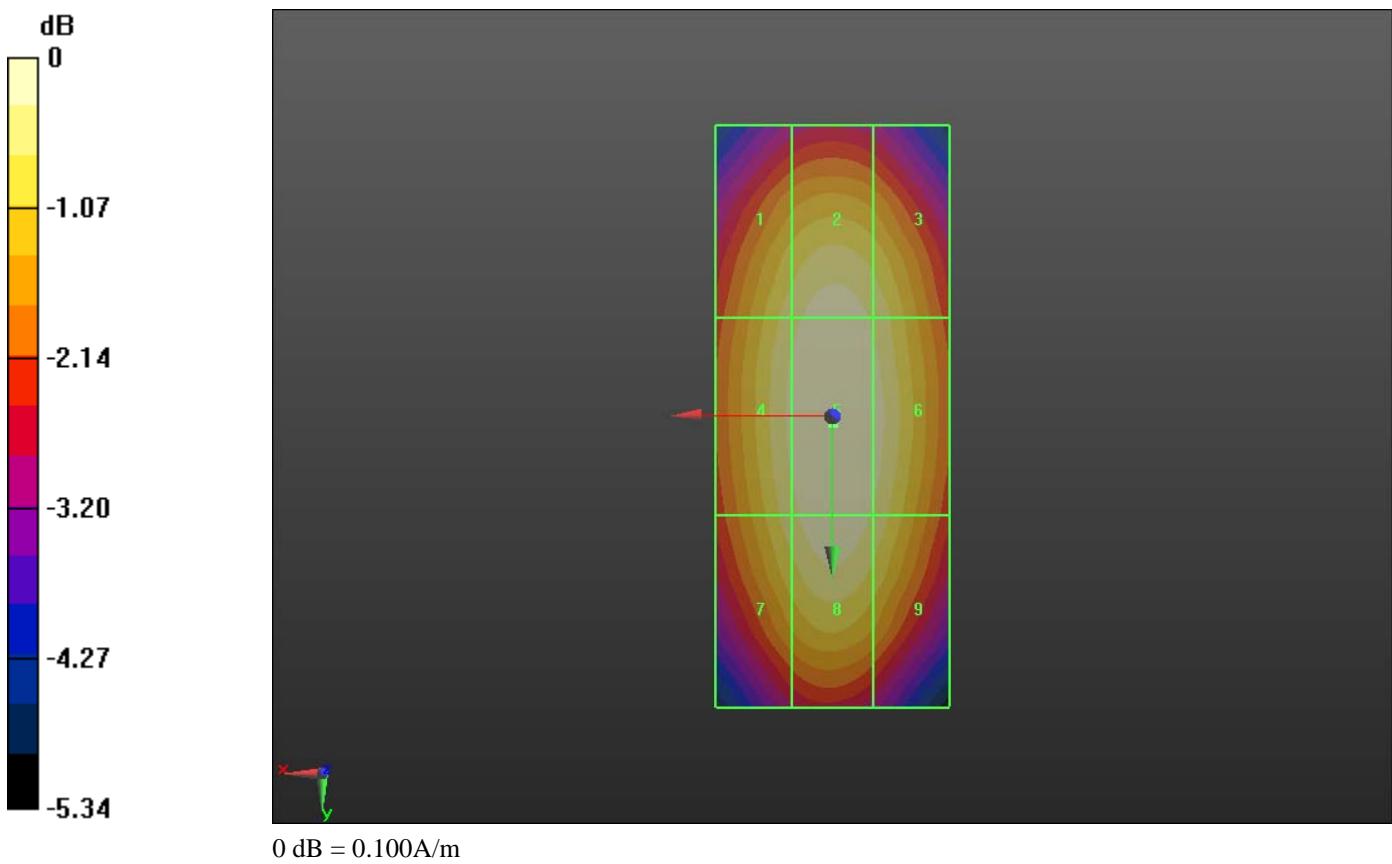
Reference Value = 0.108 A/m; Power Drift = 0.06 dB

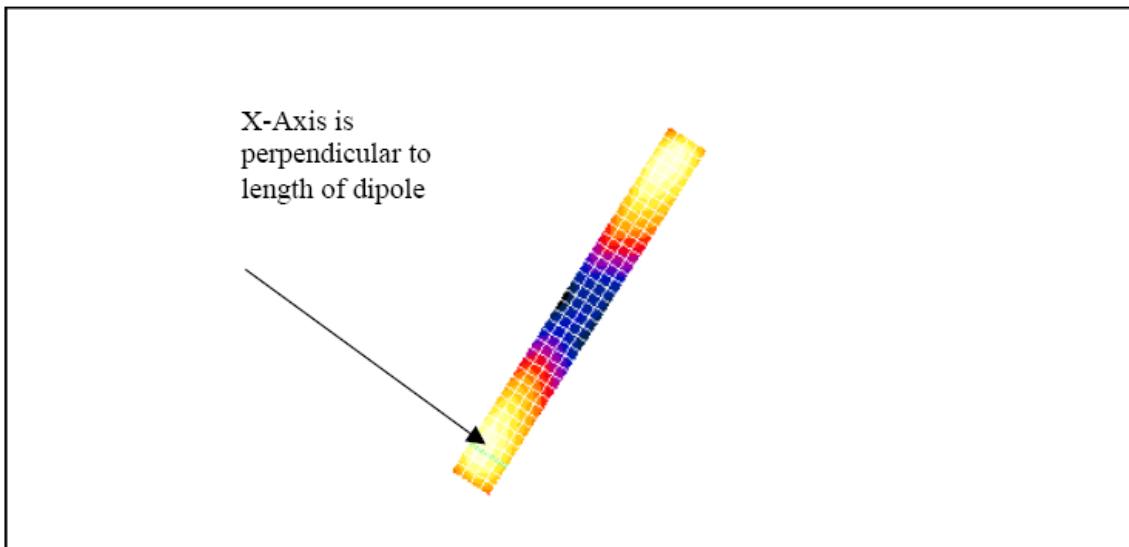
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Author Data  
**Daoud Attayi**Dates of Test  
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**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.094 M4</b> | <b>0.099 M4</b> | <b>0.095 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.097 M4</b> | <b>0.102 M4</b> | <b>0.098 M4</b> |





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.

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**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,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 2       | Grid 3       | Grid 1       | Grid 2       | Grid 3       |
|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>123.2</b> | <b>138.1</b> | <b>138.4</b> | <b>123.2</b> | <b>138.1</b> | <b>138.4</b> |
| Grid 4       | Grid 5       | Grid 6       | Grid 4       | Grid 5       | Grid 6       |
| <b>80.9</b>  | <b>92.3</b>  | <b>92.2</b>  | <b>80.9</b>  | <b>92.3</b>  | <b>92.2</b>  |
| Grid 7       | Grid 8       | Grid 9       | Grid 7       | Grid 8       | Grid 9       |
| <b>119.8</b> | <b>131.0</b> | <b>130.7</b> | <b>119.8</b> | <b>131.0</b> | <b>130.7</b> |

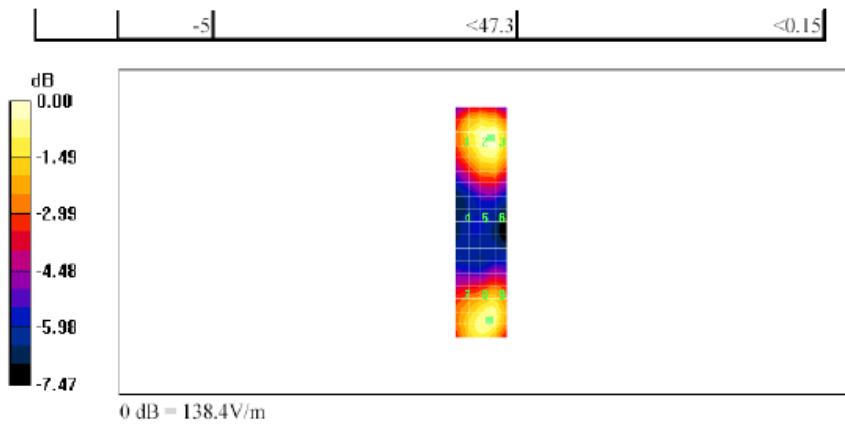
| Category | AWF (dB) | Limits for E-Field Emissions (V/m) | Limits for H-Field Emissions (A/m) |
|----------|----------|------------------------------------|------------------------------------|
| M1       | 0        | 199.5 - 354.8                      | 0.6 - 1.07                         |
|          | -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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| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

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**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,  $\epsilon_r = 1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 1       | Grid 2       | Grid 3       | Grid 1       | Grid 2       | Grid 3       |
|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>123.1</b> | <b>138.6</b> | <b>138.6</b> | <b>123.1</b> | <b>138.6</b> | <b>138.6</b> |
| <b>81.4</b>  | <b>92.1</b>  | <b>91.6</b>  | <b>81.4</b>  | <b>92.1</b>  | <b>91.6</b>  |
| <b>121.3</b> | <b>131.2</b> | <b>131.0</b> | <b>121.3</b> | <b>131.2</b> | <b>131.0</b> |

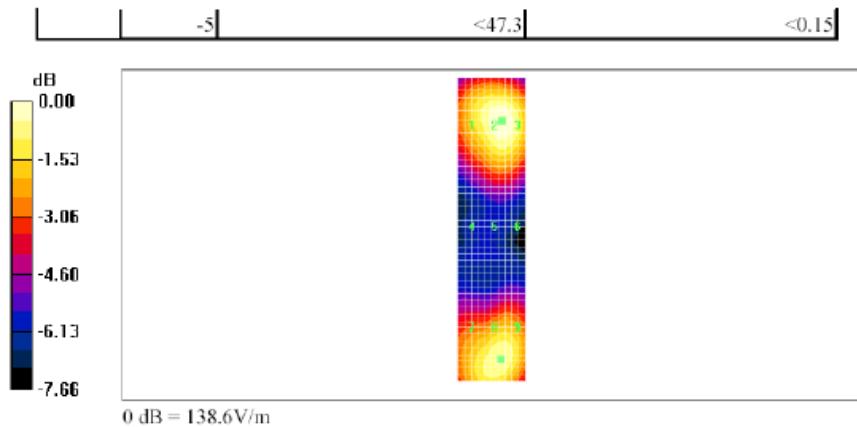
| Category | AWF (dB) | Limits for E-Field Emissions (V/m) | Limits for H-Field Emissions (A/m) |
|----------|----------|------------------------------------|------------------------------------|
| M1       | 0        | 199.5 - 354.8                      | 0.6 - 1.07                         |
|     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

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|   |   |                                      |
|---|---|--------------------------------------|
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| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

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**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,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

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       |
|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>0.342</b> | <b>0.359</b> | <b>0.344</b> | <b>0.342</b> | <b>0.359</b> | <b>0.344</b> |
| <b>0.389</b> | <b>0.406</b> | <b>0.389</b> | <b>0.389</b> | <b>0.406</b> | <b>0.389</b> |
| <b>0.363</b> | <b>0.378</b> | <b>0.363</b> | <b>0.363</b> | <b>0.378</b> | <b>0.363</b> |

| 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/HAC\_H\_Dipole\_CW%201880\_5%... 14/07/2005



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**79 (135)**Author Data  
**Daoud Attayi**

Dates of Test

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Report No

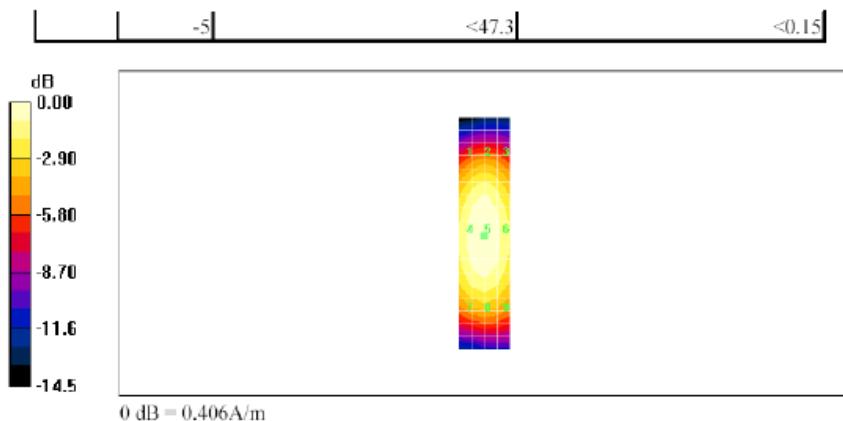
**RTS-3933-1104-55**

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**L6ARDU70CW**

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**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,  $\epsilon_r = 1$ ;  $\rho = 1$  kg/m<sup>3</sup>

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       |
|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>0.347</b> | <b>0.361</b> | <b>0.348</b> | <b>0.347</b> | <b>0.361</b> | <b>0.348</b> |
| <b>0.394</b> | <b>0.406</b> | <b>0.391</b> | <b>0.394</b> | <b>0.406</b> | <b>0.391</b> |
| <b>0.367</b> | <b>0.380</b> | <b>0.365</b> | <b>0.367</b> | <b>0.380</b> | <b>0.365</b> |

| 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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Document

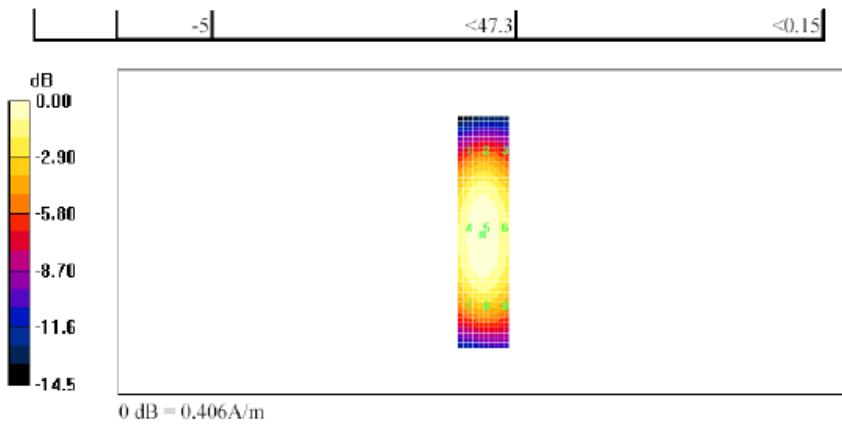
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**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

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### A.3 RF emissions plots

|  |  |                                      |                             |
|--|--|--------------------------------------|-----------------------------|
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Date/Time: 3/23/2011 4:33:26 PM, Date/Time: 3/23/2011 4:38:37 PM,  
 Date/Time: 3/23/2011 4:43:10 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_GSM 850

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 MHz; Communication System PAR: 9.191 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

Maximum value of peak Total field = 140.3 V/m

Probe Modulation Factor = 2.940

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 53.962 V/m; Power Drift = -0.12 dB

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

|  |   |                                      |
|--|---|--------------------------------------|
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Peak E-field in V/m

|                           |                           |                           |
|---------------------------|---------------------------|---------------------------|
| Grid 1<br><b>118.0 M4</b> | Grid 2<br><b>136.7 M4</b> | Grid 3<br><b>131.6 M4</b> |
| Grid 4<br><b>121.5 M4</b> | Grid 5<br><b>140.3 M4</b> | Grid 6<br><b>134.4 M4</b> |
| Grid 7<br><b>122.9 M4</b> | Grid 8<br><b>139.4 M4</b> | Grid 9<br><b>133.1 M4</b> |

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

Maximum value of peak Total field = 154.3 V/m

Probe Modulation Factor = 2.940

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 59.107 V/m; Power Drift = 0.19 dB

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

|   |   |                                      |
|---|---|--------------------------------------|
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Peak E-field in V/m

|                           |                           |                           |
|---------------------------|---------------------------|---------------------------|
| Grid 1<br><b>116.8 M4</b> | Grid 2<br><b>150.4 M3</b> | Grid 3<br><b>150.5 M3</b> |
| Grid 4<br><b>121.9 M4</b> | Grid 5<br><b>154.3 M3</b> | Grid 6<br><b>154.3 M3</b> |
| Grid 7<br><b>128.6 M4</b> | Grid 8<br><b>154.4 M3</b> | Grid 9<br><b>154.4 M3</b> |

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

Maximum value of peak Total field = 165.7 V/m

Probe Modulation Factor = 2.940

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 64.371 V/m; Power Drift = -0.34 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

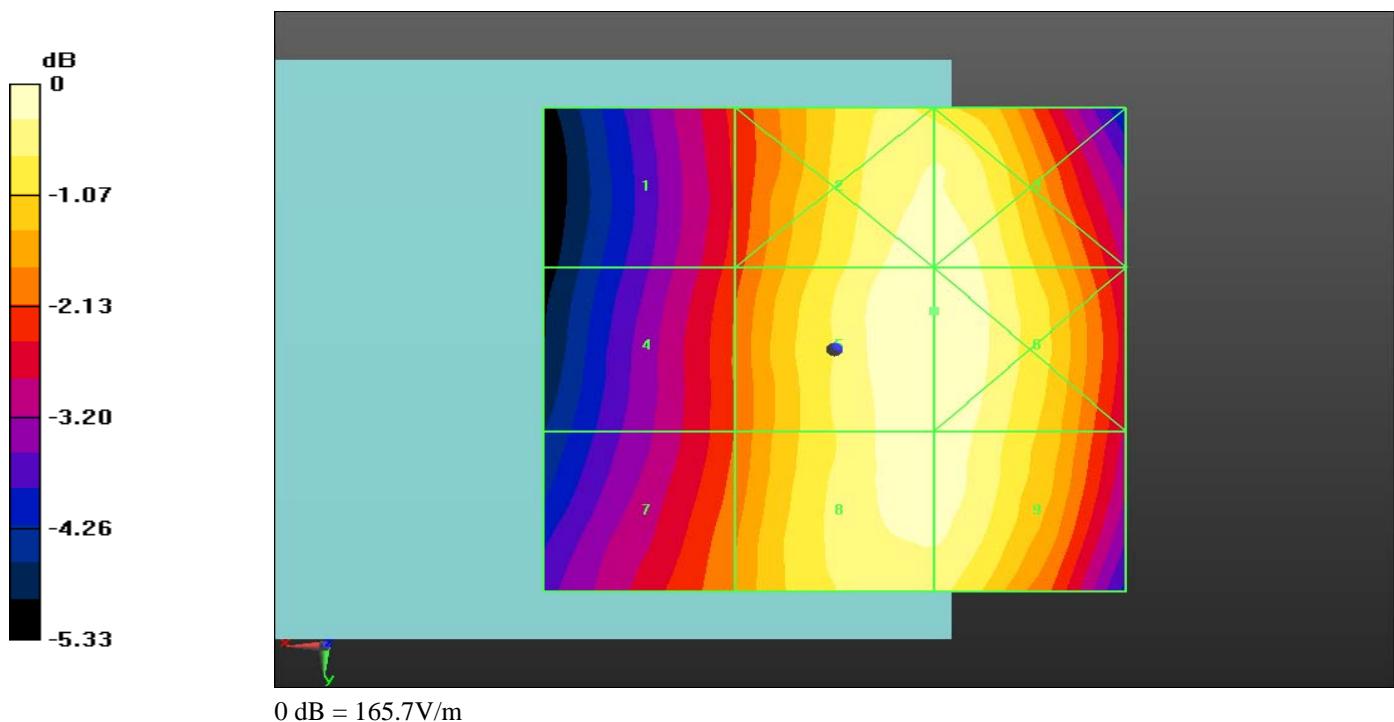
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak E-field in V/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>127.5 M4</b> | <b>164.1 M3</b> | <b>164.1 M3</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>130.7 M4</b> | <b>165.7 M3</b> | <b>165.7 M3</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>135.6 M4</b> | <b>162.9 M3</b> | <b>162.9 M3</b> |



|   |   |   |                                    |
|---|---|---|------------------------------------|
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| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

Date/Time: 3/23/2011 4:52:16 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_GSM 850\_high\_chan\_Telecoil

**DUT: BlackBerry Smartphone; Type: Sample ;**

Communication System: GSM 850; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 848.8

MHz;Communication System PAR: 9.191 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15**

**mm from Probe Center to the Device Telecoil cent/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 159.4 V/m

Probe Modulation Factor = 2.940

Device Reference Point: 0, 0, -6.3 mm

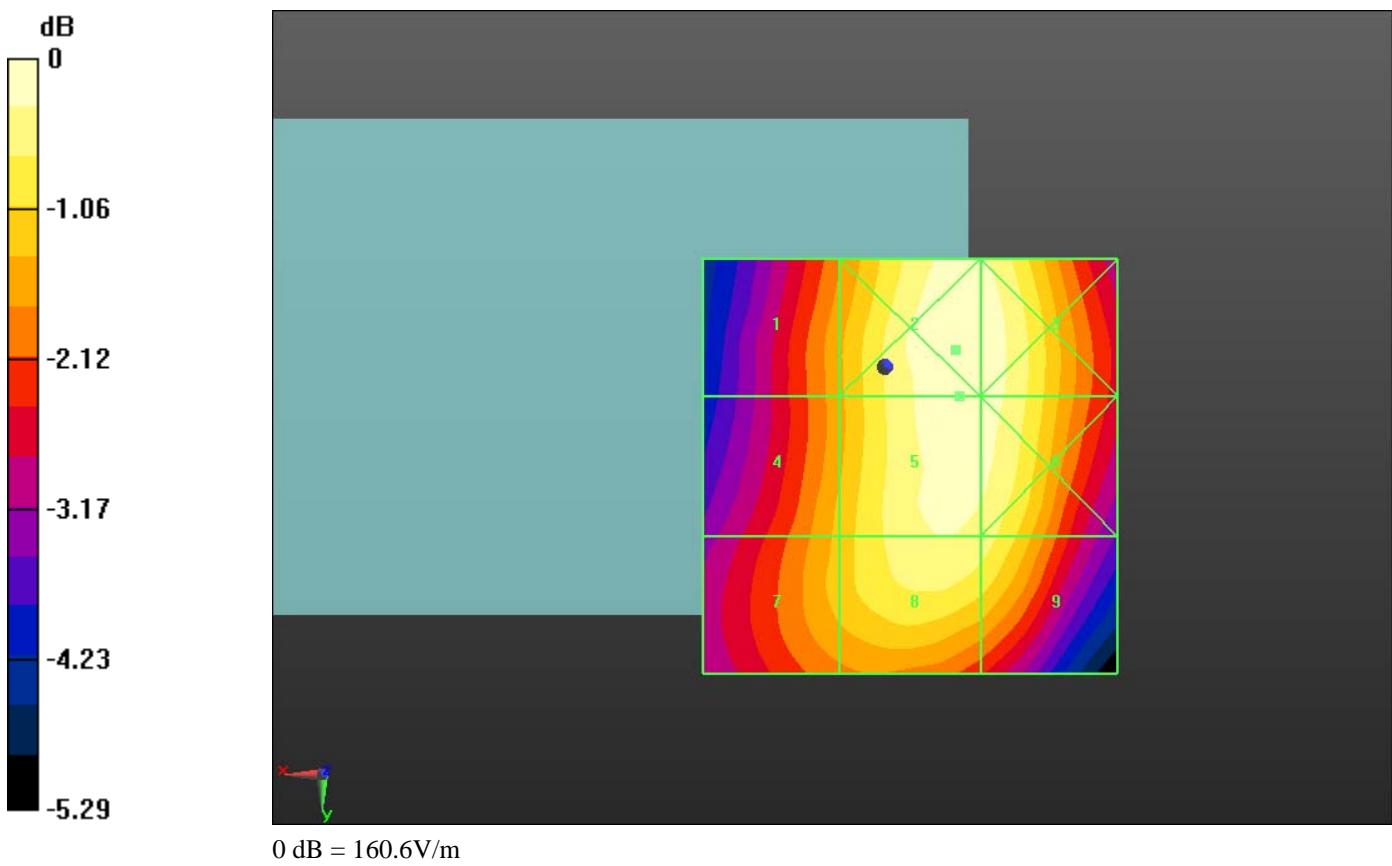
Reference Value = 64.183 V/m; Power Drift = -0.02 dB

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

| Author Data         | Dates of Test                   | Report No               | FCC ID            |
|---------------------|---------------------------------|-------------------------|-------------------|
| <b>Daoud Attayi</b> | <b>Mar. 22-23, Apr. 27 2011</b> | <b>RTS-3933-1104-55</b> | <b>L6ARDU70CW</b> |

### Peak E-field in V/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>135.7 M4</b> | <b>160.6 M3</b> | <b>159.1 M3</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>138.5 M4</b> | <b>159.4 M3</b> | <b>158.3 M3</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>139.4 M4</b> | <b>154.3 M3</b> | <b>151.6 M3</b> |



|   |   |                                      |
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|  |  |                                      |                             |
|--|--|--------------------------------------|-----------------------------|
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Date/Time: 3/23/2011 5:02:28 PM, Date/Time: 3/23/2011 5:06:54 PM,  
 Date/Time: 3/23/2011 5:10:57 PM

**Test Laboratory: RIM Testing Services**

**HAC RF\_E-Field\_GSM1900**

**DUT: BlackBerry Smartphone; Type: Sample**

**Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 MHz; Communication System PAR: 9.191 dB**

**Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$**

**Phantom section: RF Section**

**Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)**

**DASY5 Configuration:**

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

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

Maximum value of peak Total field = 73.806 V/m

Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.960 V/m; Power Drift = 0.19 dB

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

|   |   |                                      |
|---|---|--------------------------------------|
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Peak E-field in V/m

| Grid 1<br><b>71.549</b><br><b>M3</b> | Grid 2<br><b>58.794</b><br><b>M3</b> | Grid 3<br><b>62.906</b><br><b>M3</b> |
|--------------------------------------|--------------------------------------|--------------------------------------|
| Grid 4<br><b>63.524</b><br><b>M3</b> | Grid 5<br><b>73.806</b><br><b>M3</b> | Grid 6<br><b>77.966</b><br><b>M3</b> |
| Grid 7<br><b>60.542</b><br><b>M3</b> | Grid 8<br><b>83.257</b><br><b>M3</b> | Grid 9<br><b>84.405</b><br><b>M2</b> |

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 81.563 V/m

Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 21.360 V/m; Power Drift = 0.06 dB

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

|   |   |                                      |
|---|---|--------------------------------------|
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| Peak E-field in V/m |                  |                  |
|---------------------|------------------|------------------|
| Grid 1              | Grid 2           | Grid 3           |
| <b>68.321 M3</b>    | <b>62.046 M3</b> | <b>66.802 M3</b> |
| Grid 4              | Grid 5           | Grid 6           |
| <b>59.229 M3</b>    | <b>81.563 M3</b> | <b>82.987 M3</b> |
| Grid 7              | Grid 8           | Grid 9           |
| <b>64.252 M3</b>    | <b>91.201 M2</b> | <b>91.215 M2</b> |

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2 2/Hearing**

**Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 76.911 V/m

Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 22.361 V/m; Power Drift = 0.27 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

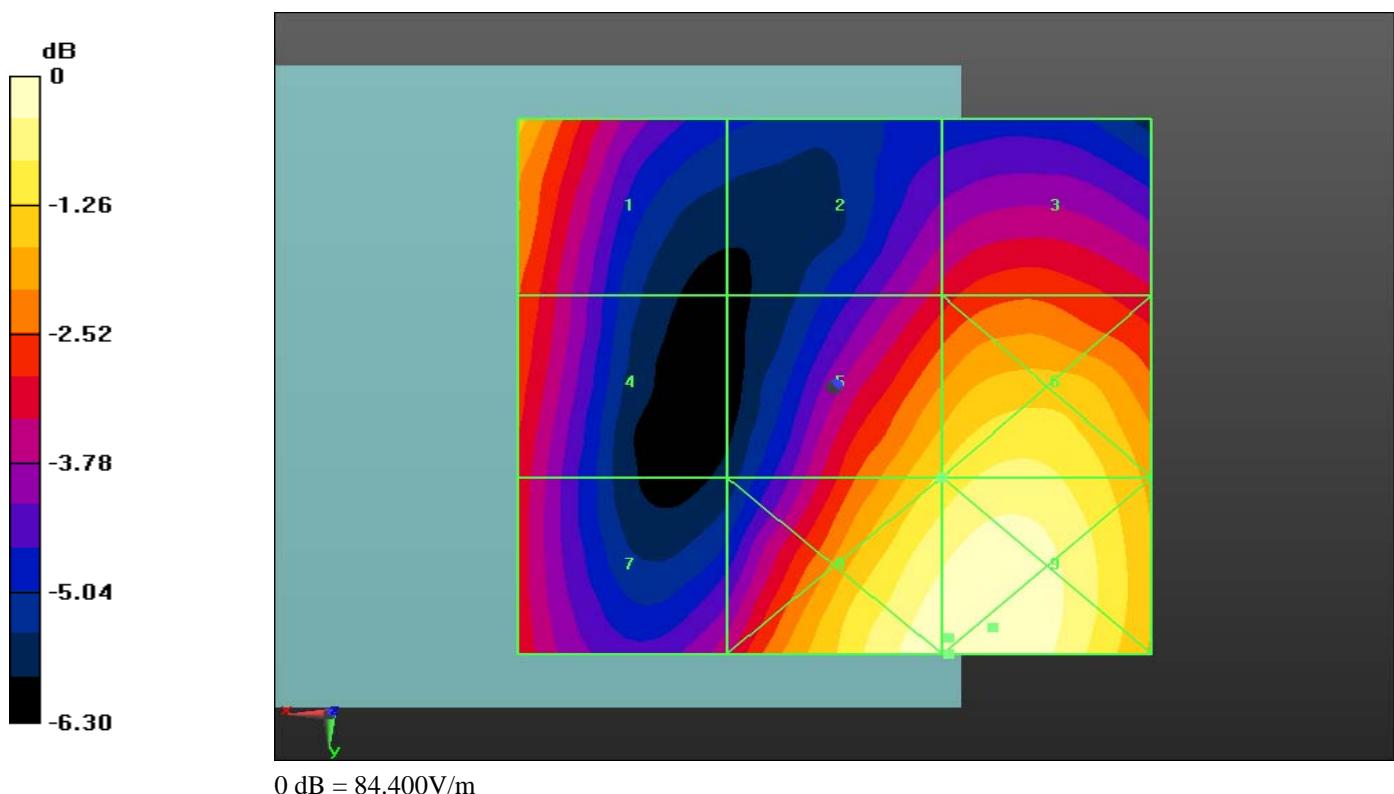
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>63.086 M3</b> | <b>55.906 M3</b> | <b>58.028 M3</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>59.991 M3</b> | <b>76.911 M3</b> | <b>79.327 M3</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>68.615 M3</b> | <b>90.494 M2</b> | <b>90.499 M2</b> |



|   |   |                                      |
|---|---|--------------------------------------|
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| Author Data<br><b>Daoud Attayi</b>  | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

Date/Time: 4/27/2011 2:32:34 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_GSM1900\_telecoil

**DUT: BlackBerry Smartphone; Type: Sample**

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

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

- Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/21/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device Telecoil cent/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 81.717 V/m

Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm

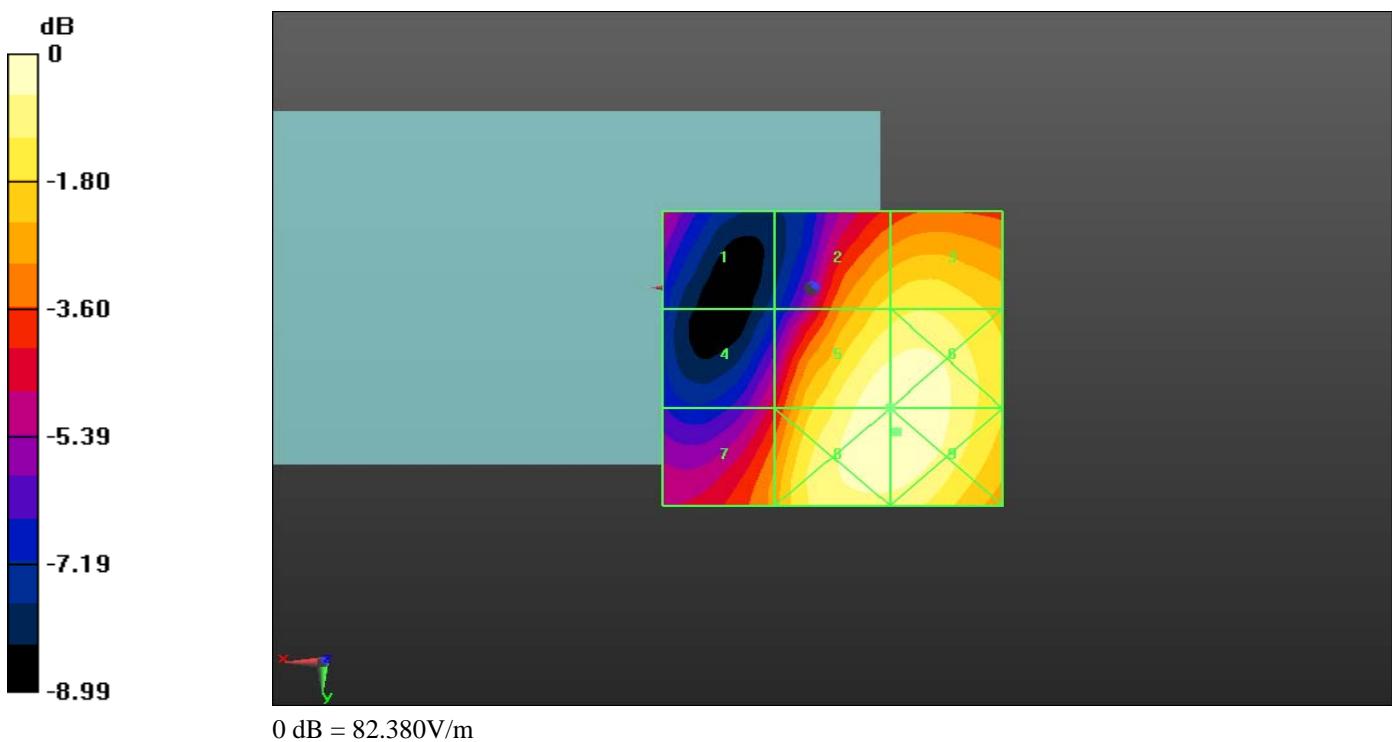
Reference Value = 16.233 V/m; Power Drift = 0.73 dB

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

Peak E-field in V/m

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| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>46.664 M4</b> | <b>69.198 M3</b> | <b>71.497 M3</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>50.027 M3</b> | <b>81.717 M3</b> | <b>82.056 M3</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>60.503 M3</b> | <b>82.292 M3</b> | <b>82.376 M3</b> |



|  |  |                                      |                             |
|--|--|--------------------------------------|-----------------------------|
|  <p>Document<br/> <b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b></p> |  |                                      | Page<br><b>96 (135)</b>     |
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 Date/Time: 3/23/2011 5:38:34 PM

**Test Laboratory: RIM Testing Services**

**HAC RF\_E-Field\_CDMA800**

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 800; Frequency: 824.7 MHz, Frequency: 836.52 MHz, Frequency: 848.52 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

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

Maximum value of peak Total field = 58.257 V/m

Probe Modulation Factor = 0.990

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 70.405 V/m; Power Drift = 0.08 dB

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

|   |   |                                      |
|---|---|--------------------------------------|
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Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>48.315 M4</b> | <b>57.299 M4</b> | <b>57.331 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>49.702 M4</b> | <b>58.257 M4</b> | <b>58.257 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>51.212 M4</b> | <b>57.631 M4</b> | <b>57.676 M4</b> |

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

Maximum value of peak Total field = 65.799 V/m

Probe Modulation Factor = 0.990

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 78.501 V/m; Power Drift = -0.02 dB

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

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|---|---|--------------------------------------|
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Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>50.455 M4</b> | <b>63.980 M4</b> | <b>64.048 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>52.894 M4</b> | <b>65.799 M4</b> | <b>65.842 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>56.196 M4</b> | <b>65.900 M4</b> | <b>65.942 M4</b> |

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

Maximum value of peak Total field = 66.716 V/m

Probe Modulation Factor = 0.990

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 82.434 V/m; Power Drift = -0.11 dB

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

Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>53.873 M4</b> | <b>65.647 M4</b> | <b>65.743 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>55.139 M4</b> | <b>66.716 M4</b> | <b>66.755 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>56.044 M4</b> | <b>65.974 M4</b> | <b>65.987 M4</b> |

Author Data  
**Daoud Attayi**

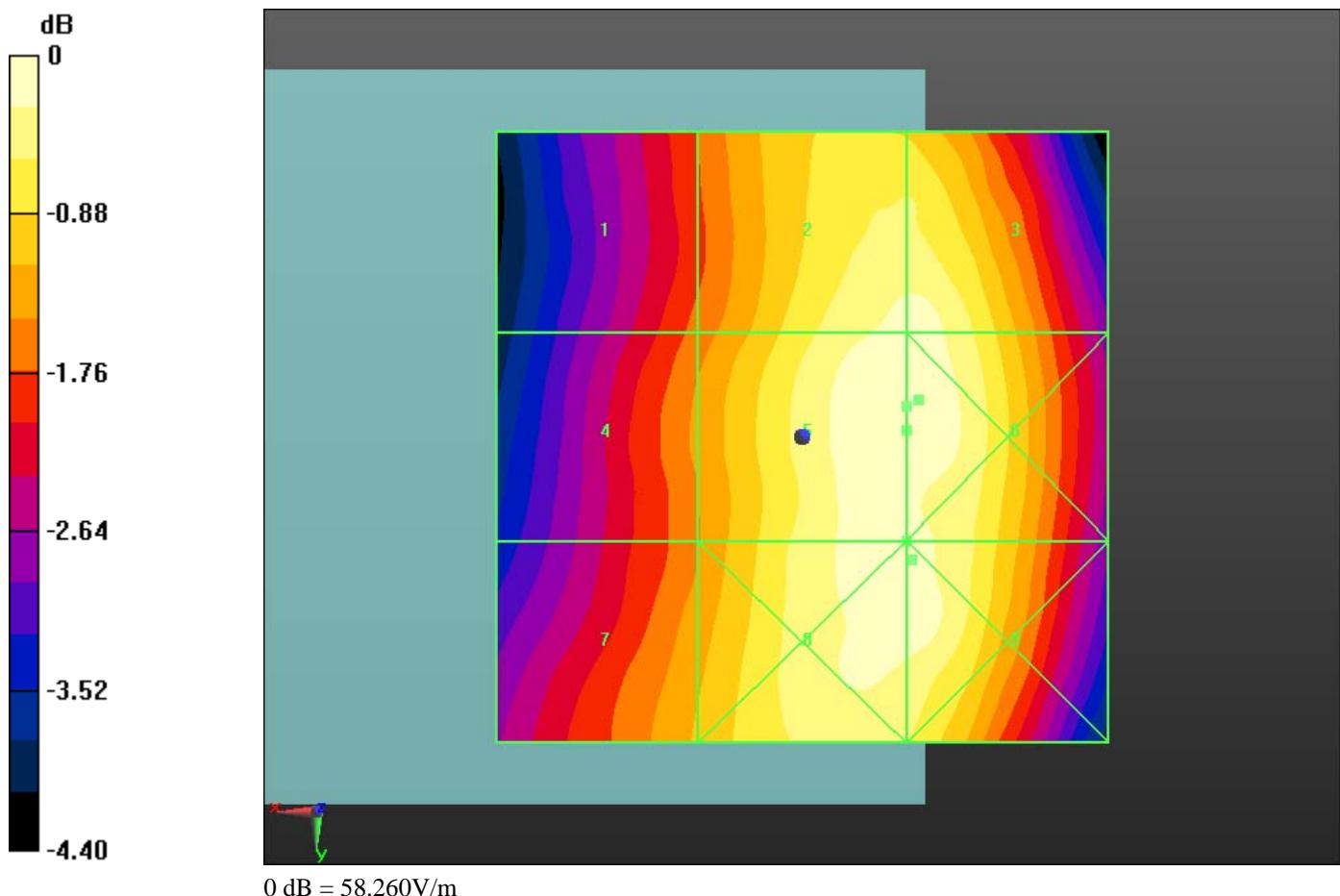
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Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_CDMA800\_high\_chan\_Telecoil\_Center

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 800;; Frequency: 848.52 MHz; Communication

System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device Telecoil cent/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 68.338 V/m

Probe Modulation Factor = 0.990

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 81.494 V/m; Power Drift = 0.08 dB

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

Peak E-field in V/m

Author Data  
**Daoud Attayi**

Dates of Test

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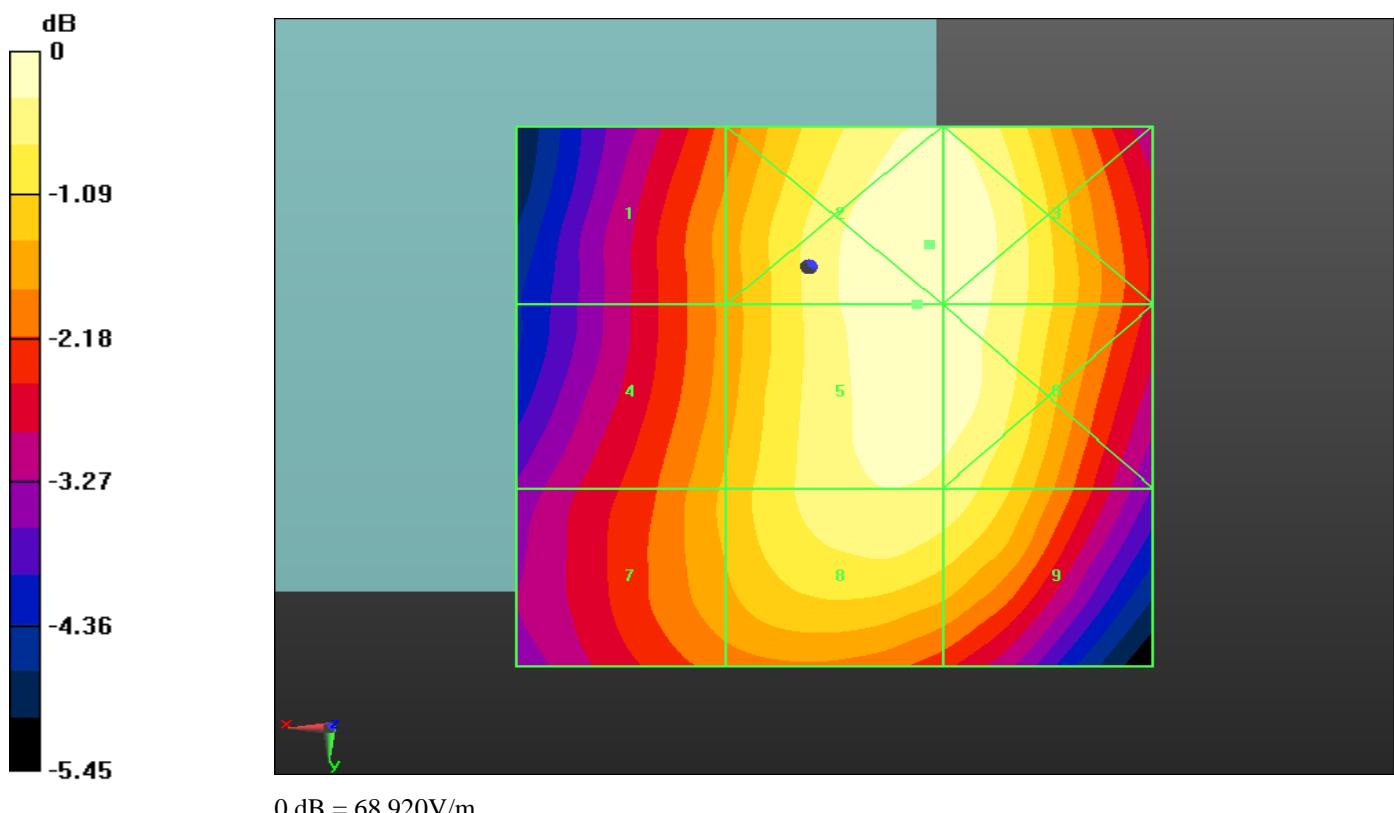
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| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>57.179 M4</b> | <b>68.919 M4</b> | <b>68.863 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>58.849 M4</b> | <b>68.338 M4</b> | <b>68.100 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>59.002 M4</b> | <b>66.118 M4</b> | <b>65.449 M4</b> |



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**Test Laboratory: RIM Testing Services**

**HAC RF\_E-Field\_CDMA1900**

**DUT: BlackBerry Smartphone; Type: Sample**

**Communication System: CDMA 1900; Frequency: 1851.25 MHz, Frequency: 1880 MHz, Frequency: 1908.5 MHz; Communication System PAR: 0 dB**

**Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$**

**Phantom section: RF Section**

**Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)**

**DASY5 Configuration:**

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

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

Maximum value of peak Total field = 38.833 V/m

Probe Modulation Factor = 1.060

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 31.653 V/m; Power Drift = -0.27 dB

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

|  |   |                                      |
|--|---|--------------------------------------|
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Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>34.416 M4</b> | <b>31.153 M4</b> | <b>33.214 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>31.627 M4</b> | <b>38.833 M4</b> | <b>40.747 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>32.684 M4</b> | <b>43.564 M4</b> | <b>43.739 M4</b> |

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device 2/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 39.926 V/m

Probe Modulation Factor = 1.060

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 30.557 V/m; Power Drift = 0.03 dB

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

|  |   |                                      |
|--|---|--------------------------------------|
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Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>34.963 M4</b> | <b>29.889 M4</b> | <b>32.594 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>29.385 M4</b> | <b>39.926 M4</b> | <b>41.342 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>32.233 M4</b> | <b>45.424 M4</b> | <b>45.533 M4</b> |

Location: -10, 24, 8.7 mm

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

Maximum value of peak Total field = 38.945 V/m

Probe Modulation Factor = 1.060

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 30.729 V/m; Power Drift = 0.28 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

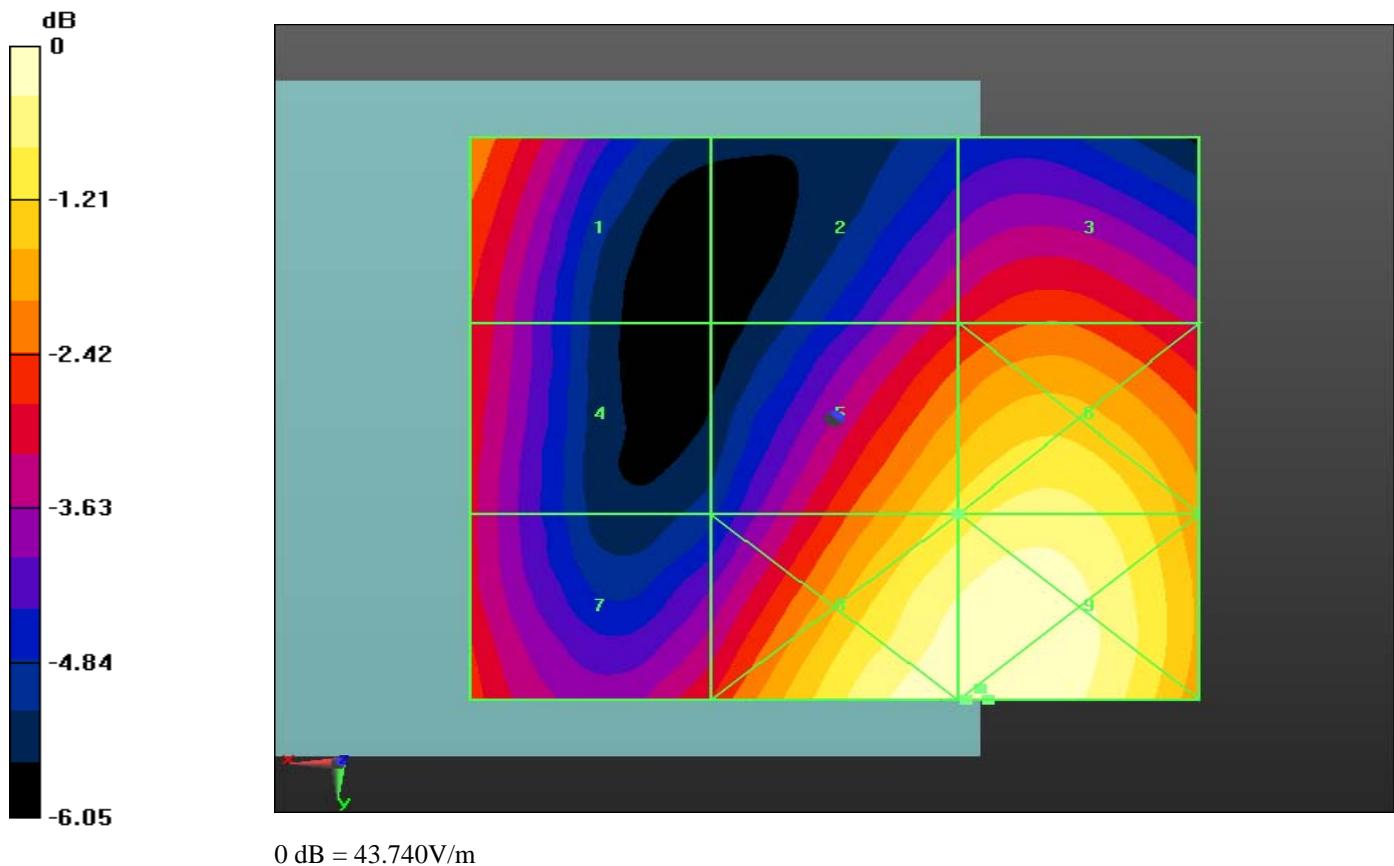
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak E-field in V/m

| Grid 1           | Grid 2           | Grid 3           |
|------------------|------------------|------------------|
| <b>34.127 M4</b> | <b>28.319 M4</b> | <b>28.934 M4</b> |
| Grid 4           | Grid 5           | Grid 6           |
| <b>32.603 M4</b> | <b>38.945 M4</b> | <b>39.630 M4</b> |
| Grid 7           | Grid 8           | Grid 9           |
| <b>33.799 M4</b> | <b>45.132 M4</b> | <b>45.137 M4</b> |



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Date/Time: 3/23/2011 6:37:00 PM

Test Laboratory: RIM Testing Services

HAC RF\_E-Field\_CDMA1900\_mid\_chan\_Telecoil\_Center

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 1900; Frequency: 1880 MHz; Communication

System PAR: 0 dB

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device Telecoil cent/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 46.042 V/m

Probe Modulation Factor = 1.060

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 30.894 V/m; Power Drift = -0.06 dB

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

Peak E-field in V/m



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|------------------------------------|--|--------------------------------------|-----------------------------|

|                            |                            |                            |
|----------------------------|----------------------------|----------------------------|
| Grid 1<br><b>27.846 M4</b> | Grid 2<br><b>38.794 M4</b> | Grid 3<br><b>39.000 M4</b> |
| Grid 4<br><b>34.722 M4</b> | Grid 5<br><b>46.042 M4</b> | Grid 6<br><b>45.978 M4</b> |
| Grid 7<br><b>40.119 M4</b> | Grid 8<br><b>46.442 M4</b> | Grid 9<br><b>46.234 M4</b> |

Author Data  
**Daoud Attayi**

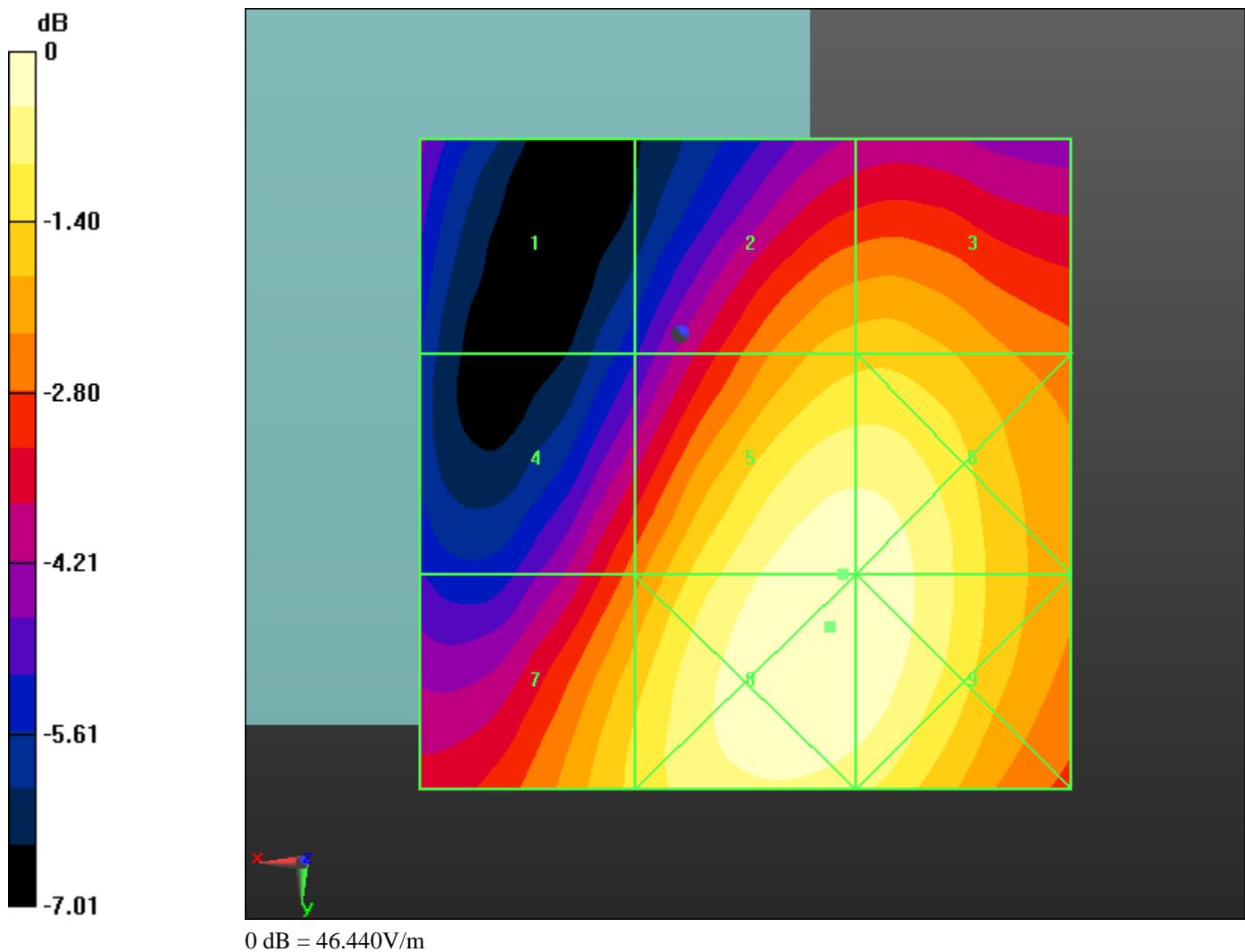
Dates of Test

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Date/Time: 3/23/2011 11:00:47 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_GSM850

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8

MHz, Frequency: 848.8 MHz; Communication System PAR: 9.191 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 -**

**2007: 15 mm from Probe Center to the Device/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.278 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.046 A/m; Power Drift = 0.21 dB

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

|   |   |                                      |
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Peak H-field in A/m

|                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| Grid 1<br><br><b>0.278 M4</b> | Grid 2<br><br><b>0.200 M4</b> | Grid 3<br><br><b>0.129 M4</b> |
| Grid 4<br><br><b>0.238 M4</b> | Grid 5<br><br><b>0.173 M4</b> | Grid 6<br><br><b>0.106 M4</b> |
| Grid 7<br><br><b>0.255 M4</b> | Grid 8<br><br><b>0.183 M4</b> | Grid 9<br><br><b>0.114 M4</b> |

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device**

**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
 $dx=5mm$ ,  $dy=5mm$

Maximum value of peak Total field = 0.332 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.058 A/m; Power Drift = 0.28 dB

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

|  |   |                                      |
|--|---|--------------------------------------|
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Peak H-field in A/m

|                           |                           |                           |
|---------------------------|---------------------------|---------------------------|
| Grid 1<br><b>0.332 M4</b> | Grid 2<br><b>0.252 M4</b> | Grid 3<br><b>0.167 M4</b> |
| Grid 4<br><b>0.286 M4</b> | Grid 5<br><b>0.220 M4</b> | Grid 6<br><b>0.141 M4</b> |
| Grid 7<br><b>0.310 M4</b> | Grid 8<br><b>0.233 M4</b> | Grid 9<br><b>0.146 M4</b> |

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2**

**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.387 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.071 A/m; Power Drift = -0.35 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

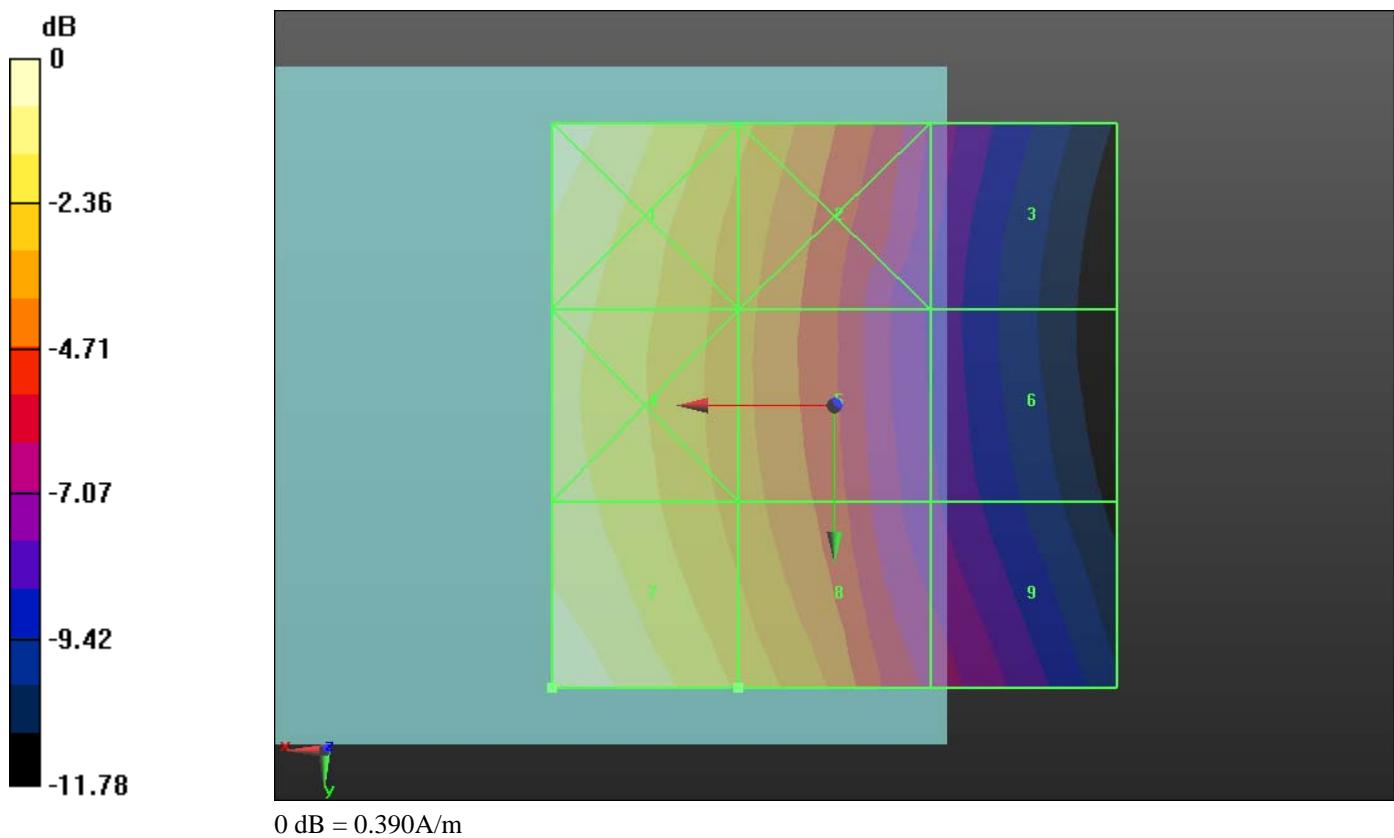
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.377 M4</b> | <b>0.281 M4</b> | <b>0.171 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.342 M4</b> | <b>0.262 M4</b> | <b>0.162 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.387 M4</b> | <b>0.294 M4</b> | <b>0.186 M4</b> |



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Date/Time: 3/23/2011 11:06:16 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_GSM850\_high\_chan\_Telecoil\_Center

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: GSM 850; Frequency: 848.8 MHz; Communication System PAR: 9.191 dB

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2 2/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$

Maximum value of peak Total field = 0.374 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.068 A/m; Power Drift = 0.17 dB

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

Peak H-field in A/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

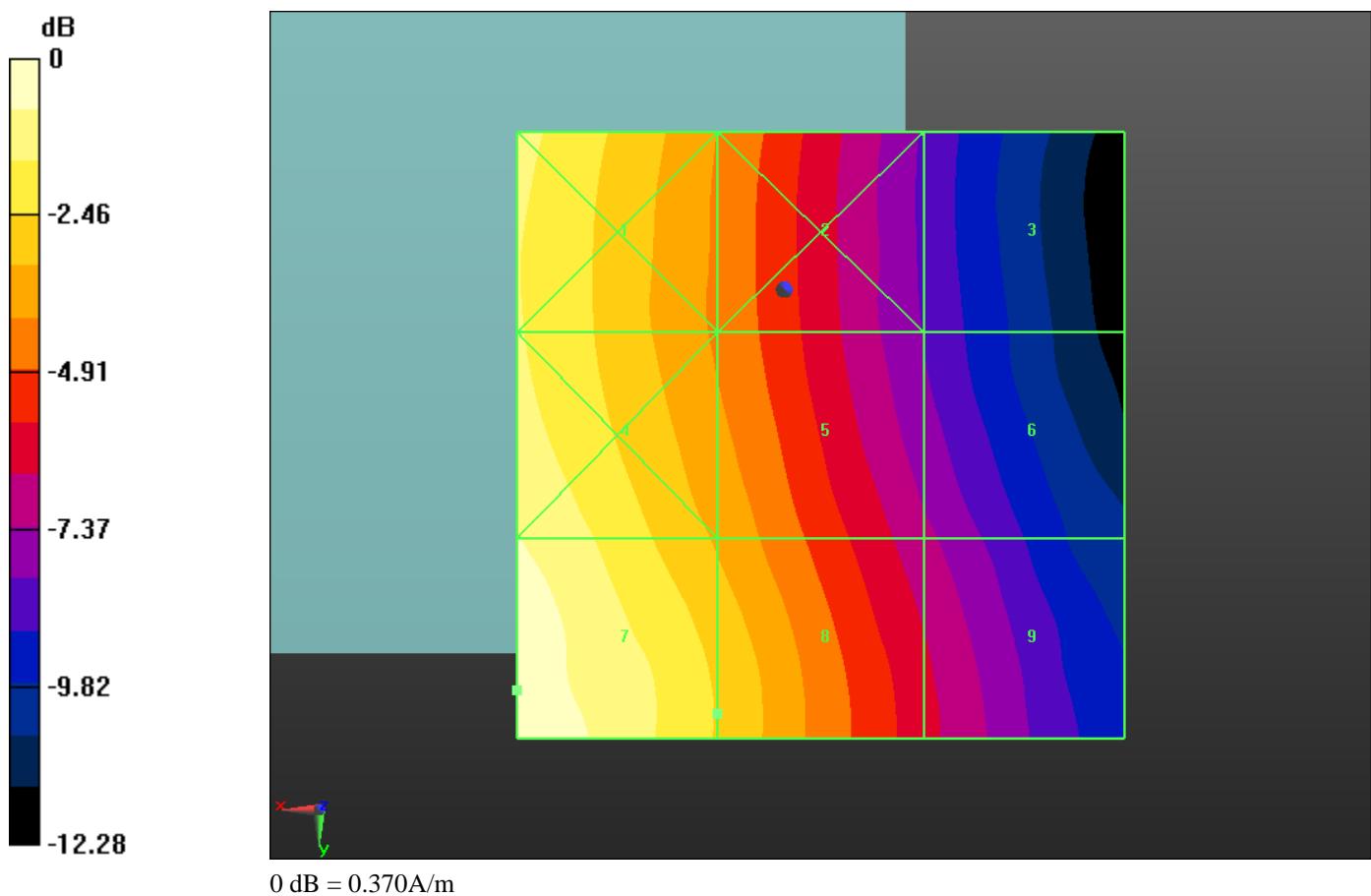
Report No

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FCC ID

**L6ARDU70CW**

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.318 M4</b> | <b>0.231 M4</b> | <b>0.144 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.338 M4</b> | <b>0.251 M4</b> | <b>0.163 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.374 M4</b> | <b>0.277 M4</b> | <b>0.181 M4</b> |



|   |   |                                      |
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Date/Time: 3/23/2011 11:13:00 PM, Date/Time: 3/23/2011 11:16:23 PM,

Date/Time: 3/23/2011 11:19:51 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_GSM1900

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 MHz; Communication System PAR: 9.191 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.200 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.061 A/m; Power Drift = 0.63 dB

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

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Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.197 M3</b> | <b>0.186 M3</b> | <b>0.163 M3</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.221 M3</b> | <b>0.200 M3</b> | <b>0.157 M3</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.261 M2</b> | <b>0.226 M3</b> | <b>0.160 M3</b> |

### **Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device**

**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.242 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.075 A/m; Power Drift = 0.15 dB

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

Peak H-field in A/m



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|                           |                           |                           |
|---------------------------|---------------------------|---------------------------|
| Grid 1<br><b>0.223 M3</b> | Grid 2<br><b>0.218 M3</b> | Grid 3<br><b>0.193 M3</b> |
| Grid 4<br><b>0.259 M2</b> | Grid 5<br><b>0.242 M3</b> | Grid 6<br><b>0.194 M3</b> |
| Grid 7<br><b>0.306 M2</b> | Grid 8<br><b>0.272 M2</b> | Grid 9<br><b>0.197 M3</b> |

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2**  
**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm  
Maximum value of peak Total field = 0.226 A/m  
Probe Modulation Factor = 2.870  
Device Reference Point: 0, 0, -6.3 mm  
Reference Value = 0.073 A/m; Power Drift = -0.14 dB  
**Hearing Aid Near-Field Category: M3 (AWF -5 dB)**

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

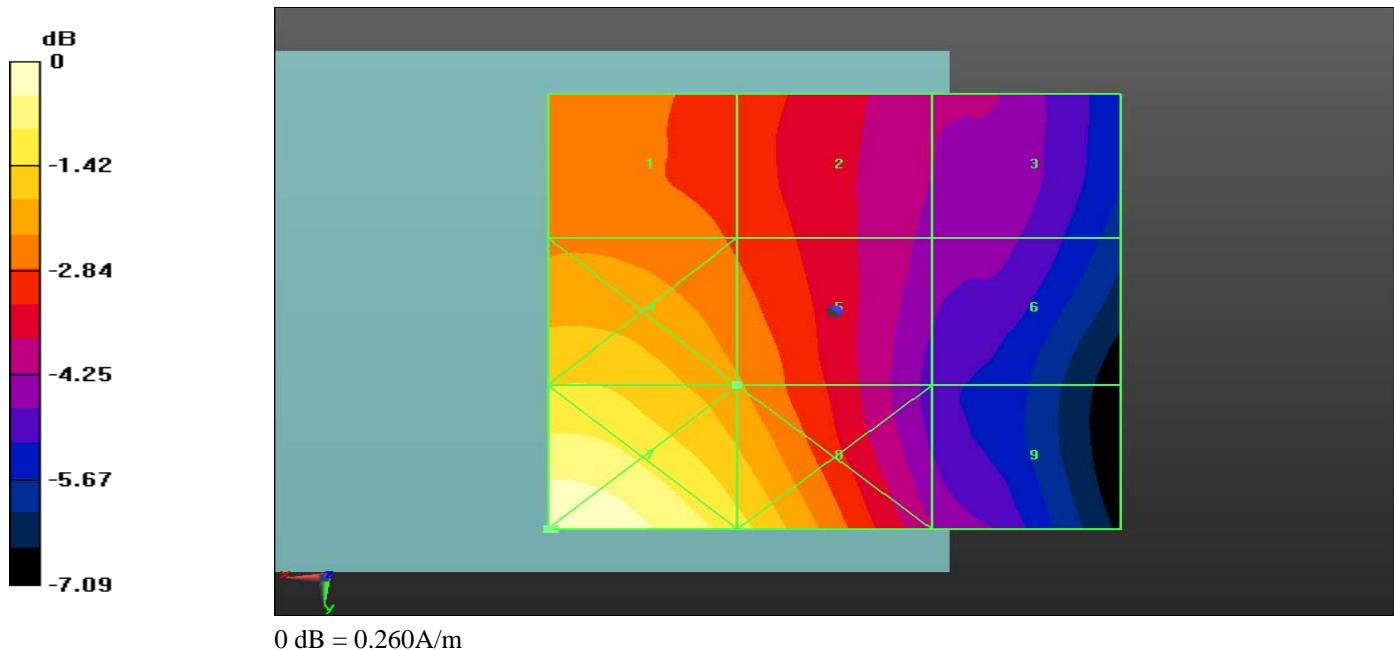
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.200 M3</b> | <b>0.197 M3</b> | <b>0.170 M3</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.240 M3</b> | <b>0.226 M3</b> | <b>0.172 M3</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.299 M2</b> | <b>0.264 M2</b> | <b>0.181 M3</b> |



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Date/Time: 4/27/2011 3:05:33 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_GSM1900\_telecoil

**DUT: BlackBerry Smartphone; Type: Sample**

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

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

- Probe: H3DV6 - SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn473; Calibrated: 1/21/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2 2/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.213 A/m

Probe Modulation Factor = 2.870

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.065 A/m; Power Drift = 0.10 dB

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

Peak H-field in A/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

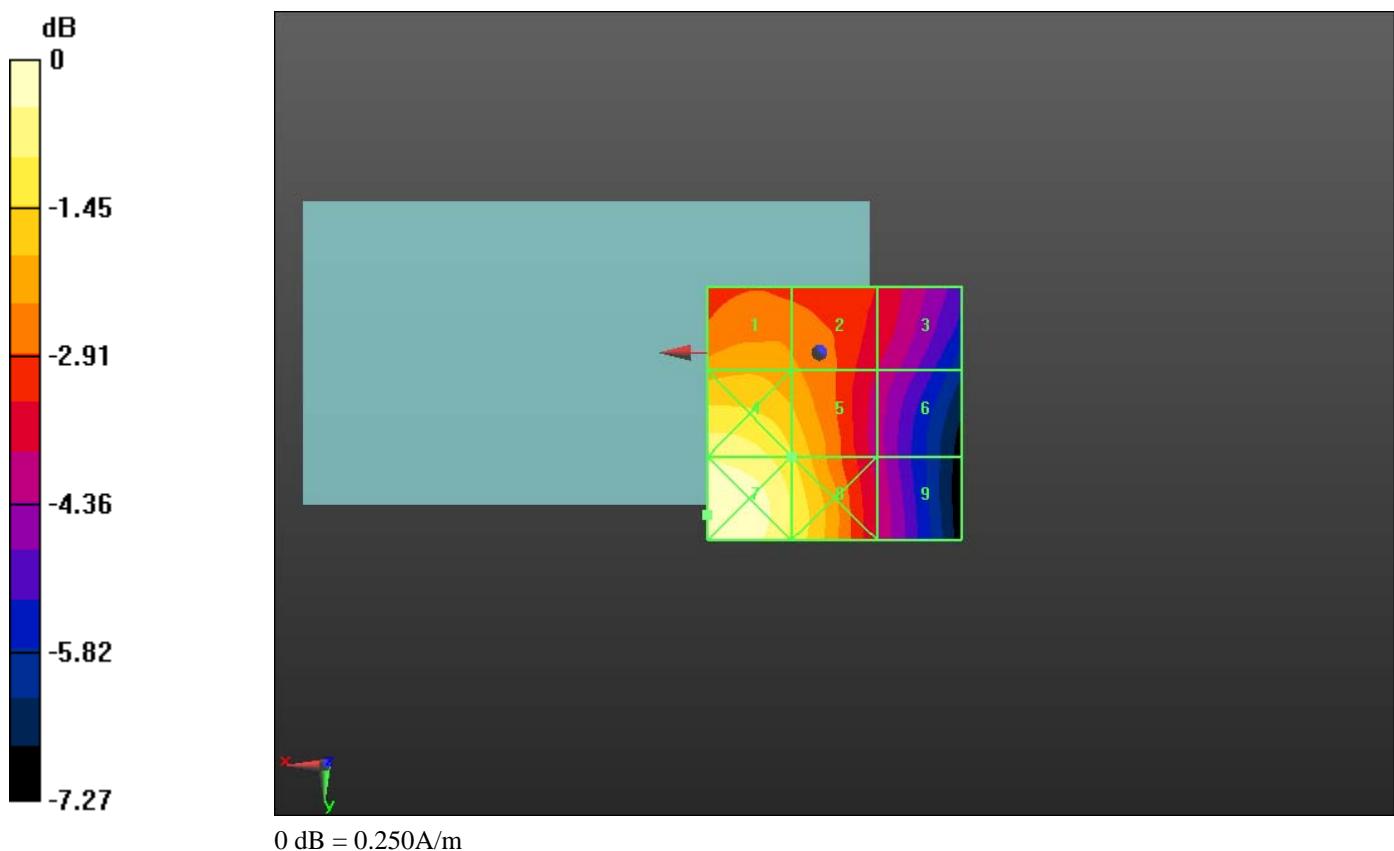
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FCC ID

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| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.199 M3</b> | <b>0.192 M3</b> | <b>0.169 M3</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.234 M3</b> | <b>0.213 M3</b> | <b>0.160 M3</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.254 M2</b> | <b>0.223 M3</b> | <b>0.161 M3</b> |



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Date/Time: 3/23/2011 9:54:08 PM, Date/Time: 3/23/2011 9:58:10 PM,

Date/Time: 3/23/2011 10:01:52 PM

**Test Laboratory: RIM Testing Services**

**HAC RF\_H-Field\_CDMA800**

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 800;; Frequency: 824.7 MHz, Frequency: 836.52 MHz, Frequency: 848.52 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 -**

**2007: 15 mm from Probe Center to the Device/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.049 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.019 A/m; Power Drift = 1.06 dB

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



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**L6ARDU70CW**

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.049 M4</b> | <b>0.034 M4</b> | <b>0.019 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.041 M4</b> | <b>0.028 M4</b> | <b>0.017 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.040 M4</b> | <b>0.030 M4</b> | <b>0.018 M4</b> |

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device****2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
dx=5mm, dy=5mm

Maximum value of peak Total field = 0.051 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.025 A/m; Power Drift = -0.16 dB

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

|   |   |                                      |
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Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.051 M4</b> | <b>0.041 M4</b> | <b>0.025 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.050 M4</b> | <b>0.036 M4</b> | <b>0.024 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.050 M4</b> | <b>0.037 M4</b> | <b>0.025 M4</b> |

**Device H-Field meausrement with H3DV6 probe/H Scan -  
H3DV6 - 2007: 15 mm from Probe Center to the Device 2**

**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
dx=5mm, dy=5mm

Maximum value of peak Total field = 0.047 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.030 A/m; Power Drift = 0.99 dB

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

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

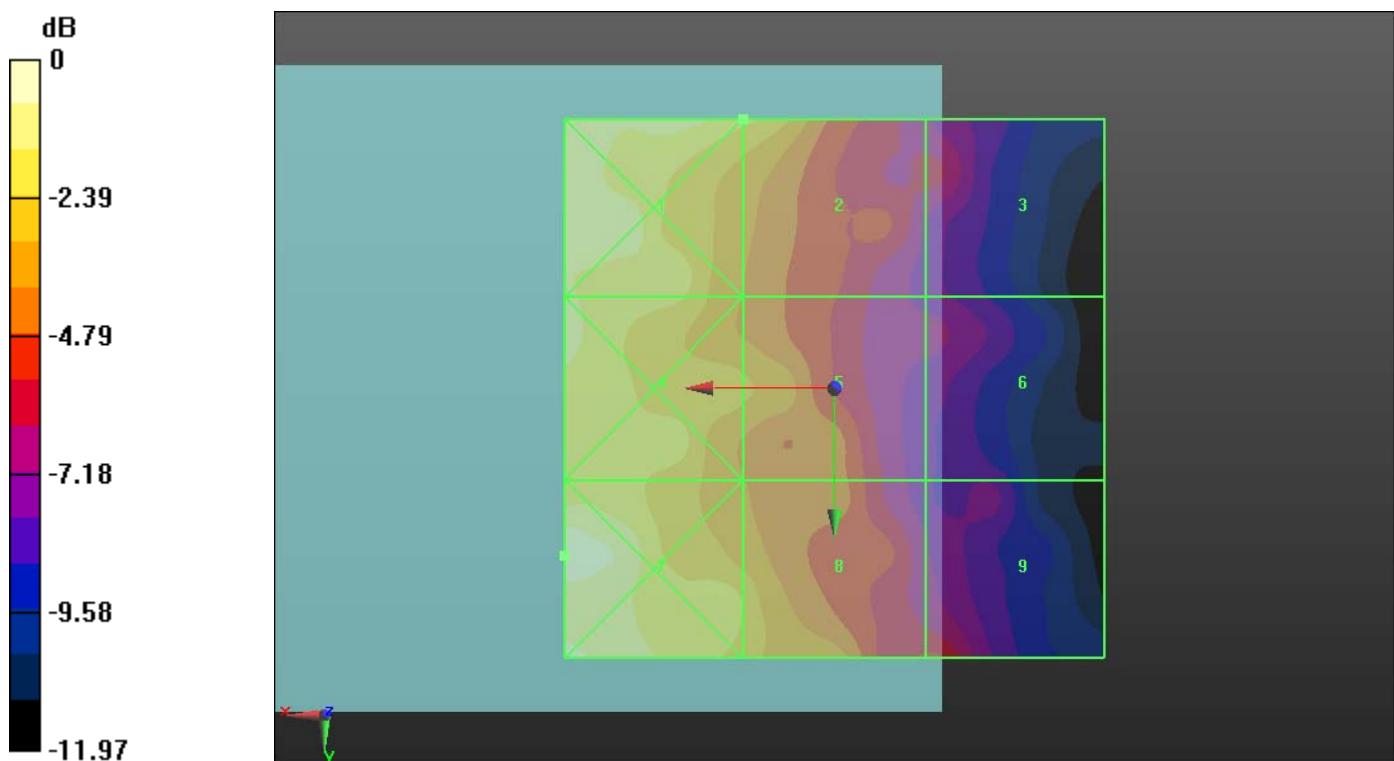
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak H-field in A/m

| Grid 1<br><b>0.055 M4</b> | Grid 2<br><b>0.047 M4</b> | Grid 3<br><b>0.030 M4</b> |
|---------------------------|---------------------------|---------------------------|
| Grid 4<br><b>0.052 M4</b> | Grid 5<br><b>0.042 M4</b> | Grid 6<br><b>0.027 M4</b> |
| Grid 7<br><b>0.058 M4</b> | Grid 8<br><b>0.046 M4</b> | Grid 9<br><b>0.033 M4</b> |



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|--|---|--------------------------------------|
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0 dB = 0.060A/m

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Date/Time: 3/23/2011 10:07:55 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_CDMA800\_mid\_chan\_Telecoil\_Center

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 800; Frequency: 836.52 MHz; Communication

System PAR: 0 dB

Medium parameters used:  $\sigma = 0 \text{ mho/m}$ ,  $\epsilon_r = 1$ ;  $\rho = 0 \text{ kg/m}^3$

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 -**

**2007: 15 mm from Probe Center to the Device 2 2 2/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$

Maximum value of peak Total field = 0.052 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.024 A/m; Power Drift = 1.07 dB

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

Peak H-field in A/m

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

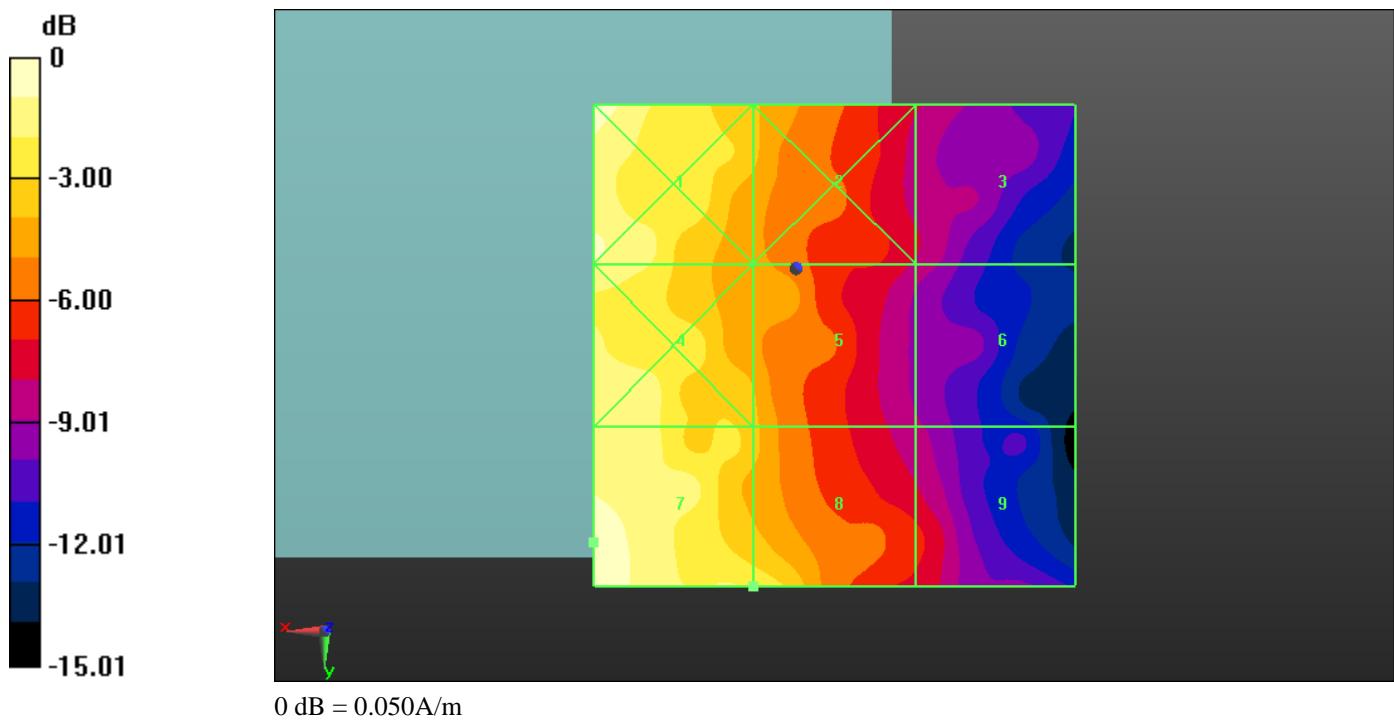
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FCC ID

**L6ARDU70CW**

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.050 M4</b> | <b>0.033 M4</b> | <b>0.020 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.044 M4</b> | <b>0.033 M4</b> | <b>0.020 M4</b> |
| Grid 7          | Grid 8          | Grid 9          |
| <b>0.052 M4</b> | <b>0.039 M4</b> | <b>0.023 M4</b> |



|  |  |                                      |                             |
|--|--|--------------------------------------|-----------------------------|
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Date/Time: 3/23/2011 10:15:39 PM, Date/Time: 3/23/2011 10:28:50 PM,

Date/Time: 3/23/2011 10:34:20 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_CDMA1900

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 1900; Frequency: 1851.25 MHz, Frequency: 1880 MHz, Frequency: 1908.5 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 -**

**2007: 15 mm from Probe Center to the Device/Hearing Aid**

**Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.037 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.031 A/m; Power Drift = -0.02 dB

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

|  |   |                                      |
|--|---|--------------------------------------|
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Peak H-field in A/m

| Grid 1                    | Grid 2                    | Grid 3                    |
|---------------------------|---------------------------|---------------------------|
| <b>0.036 M4</b>           | <b>0.035 M4</b>           | <b>0.031 M4</b>           |
| Grid 4<br><b>0.041 M4</b> | Grid 5<br><b>0.037 M4</b> | Grid 6<br><b>0.030 M4</b> |
| Grid 7<br><b>0.047 M4</b> | Grid 8<br><b>0.042 M4</b> | Grid 9<br><b>0.029 M4</b> |

**Device H-Field measurement with H3DV6 probe/H Scan -  
H3DV6 - 2007: 15 mm from Probe Center to the Device**

**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid:  
dx=5mm, dy=5mm

Maximum value of peak Total field = 0.121 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.105 A/m; Power Drift = -0.02 dB

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

|  |   |                                      |
|--|---|--------------------------------------|
|  | Document<br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> | Page<br><b>132 (135)</b>             |
| Author Data<br><b>Daoud Attayi</b>   | Dates of Test<br><b>Mar. 22-23, Apr. 27 2011</b>  | Report No<br><b>RTS-3933-1104-55</b> |

Peak H-field in A/m

|                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| Grid 1<br><br><b>0.111 M4</b> | Grid 2<br><br><b>0.108 M4</b> | Grid 3<br><br><b>0.094 M4</b> |
| Grid 4<br><br><b>0.130 M4</b> | Grid 5<br><br><b>0.121 M4</b> | Grid 6<br><br><b>0.094 M4</b> |
| Grid 7<br><br><b>0.152 M4</b> | Grid 8<br><br><b>0.135 M4</b> | Grid 9<br><br><b>0.096 M4</b> |

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2**  
**2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm  
 Maximum value of peak Total field = 0.120 A/m  
 Probe Modulation Factor = 1.040  
 Device Reference Point: 0, 0, -6.3 mm  
 Reference Value = 0.104 A/m; Power Drift = 0.03 dB  
**Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Author Data  
**Daoud Attayi**

Dates of Test

**Mar. 22-23, Apr. 27 2011**

Report No

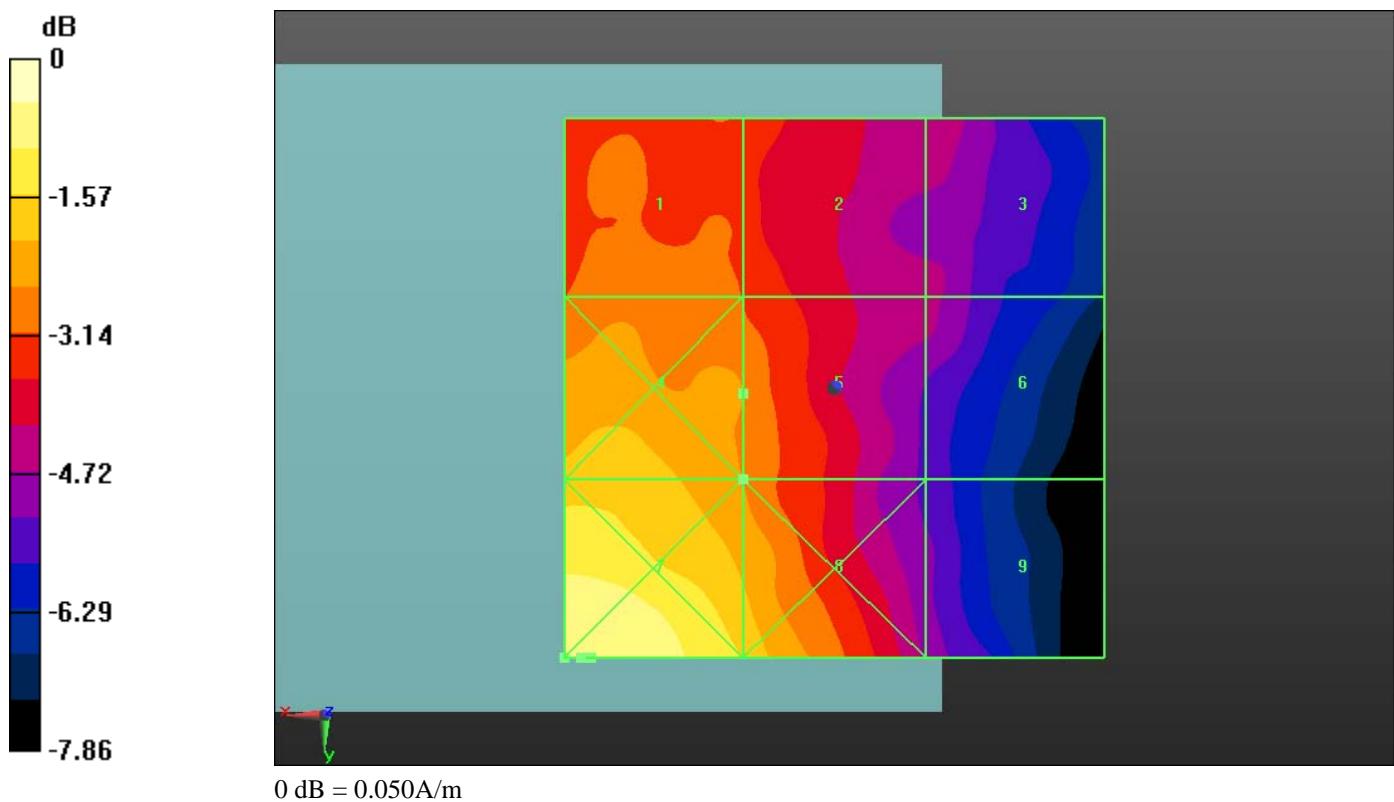
**RTS-3933-1104-55**

FCC ID

**L6ARDU70CW**

Peak H-field in A/m

| Grid 1<br><b>0.103 M4</b> | Grid 2<br><b>0.103 M4</b> | Grid 3<br><b>0.092 M4</b> |
|---------------------------|---------------------------|---------------------------|
| Grid 4<br><b>0.127 M4</b> | Grid 5<br><b>0.120 M4</b> | Grid 6<br><b>0.094 M4</b> |
| Grid 7<br><b>0.156 M4</b> | Grid 8<br><b>0.139 M4</b> | Grid 9<br><b>0.097 M4</b> |



|   |   |   |                                    |
|---|---|---|------------------------------------|
| <br><b>Document</b><br><b>Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RDU71CW</b> |   | <b>Page</b><br><b>134 (135)</b>             |                                    |
| <b>Author Data</b><br><b>Daoud Attayi</b>   | <b>Dates of Test</b><br><b>Mar. 22-23, Apr. 27 2011</b> | <b>Report No</b><br><b>RTS-3933-1104-55</b> | <b>FCC ID</b><br><b>L6ARDU70CW</b> |

Date/Time: 3/23/2011 10:40:20 PM

Test Laboratory: RIM Testing Services

HAC RF\_H-Field\_CDMA1900\_mid\_chan\_Telecoil\_Center

**DUT: BlackBerry Smartphone; Type: Sample**

Communication System: CDMA 1900; Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used:  $\sigma = 0$  mho/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5 Configuration:**

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

**Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device 2 2 2/Hearing Aid Compatibility Test (101x101x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.105 A/m

Probe Modulation Factor = 1.040

Device Reference Point: 0, 0, -6.3 mm

Author Data  
**Daoud Attayi**Dates of Test  
**Mar. 22-23, Apr. 27 2011**Report No  
**RTS-3933-1104-55**FCC ID  
**L6ARDU70CW**

Reference Value = 0.100 A/m; Power Drift = 0.08 dB

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

Peak H-field in A/m

| Grid 1          | Grid 2          | Grid 3          |
|-----------------|-----------------|-----------------|
| <b>0.100 M4</b> | <b>0.097 M4</b> | <b>0.086 M4</b> |
| Grid 4          | Grid 5          | Grid 6          |
| <b>0.113 M4</b> | <b>0.105 M4</b> | <b>0.087 M4</b> |

