

Annex A: Measurement data and plots

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



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

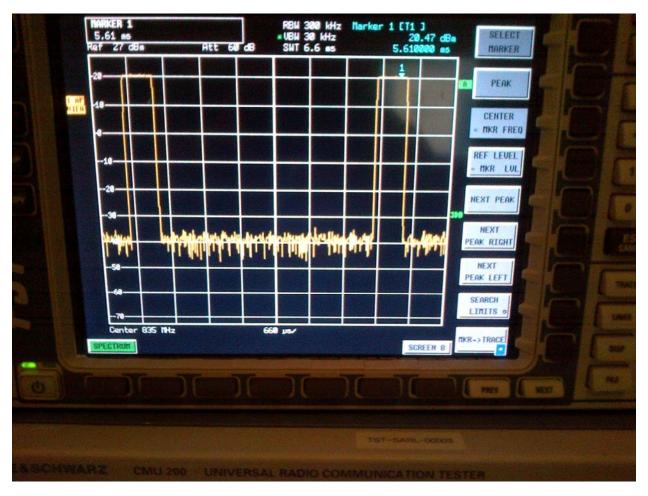
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**



GSM 835 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

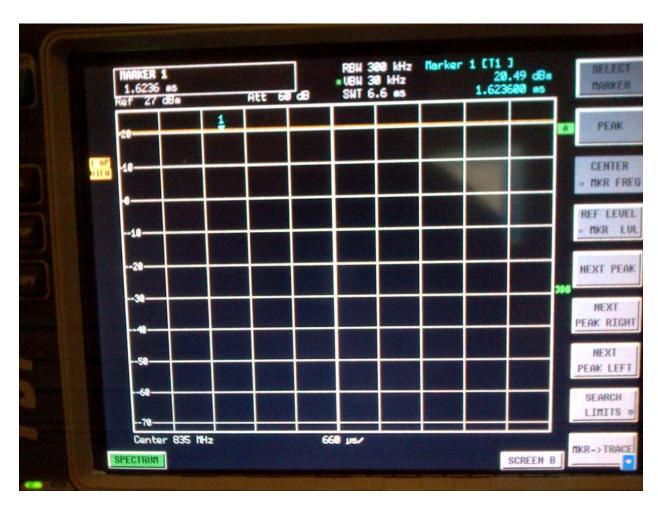
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**



CW 835 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

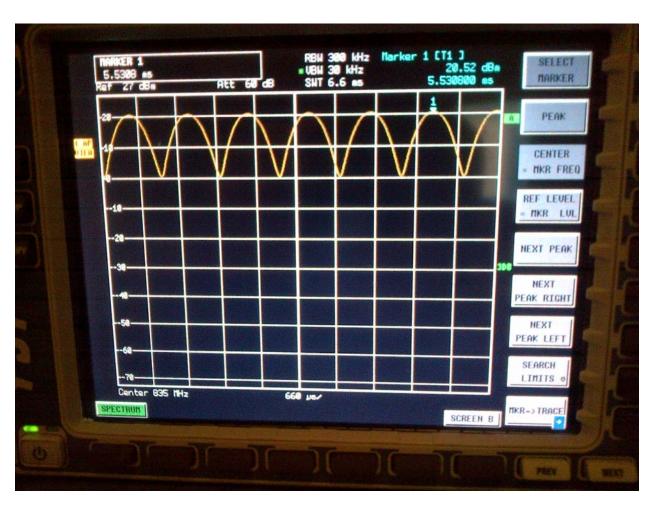
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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AM 80% 835 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**



UMTS 835 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

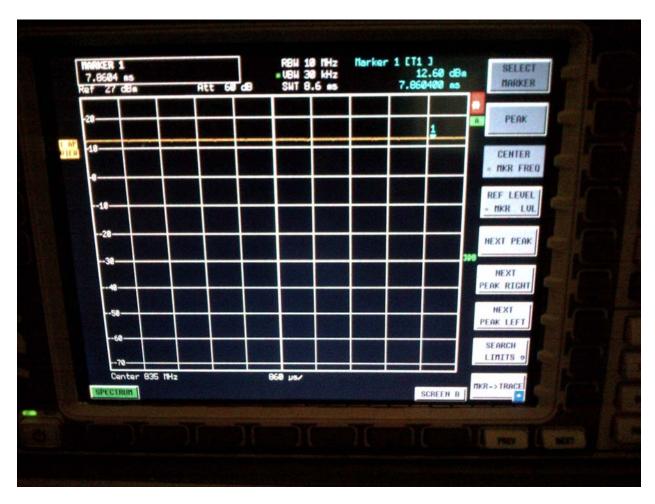
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CW 835 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

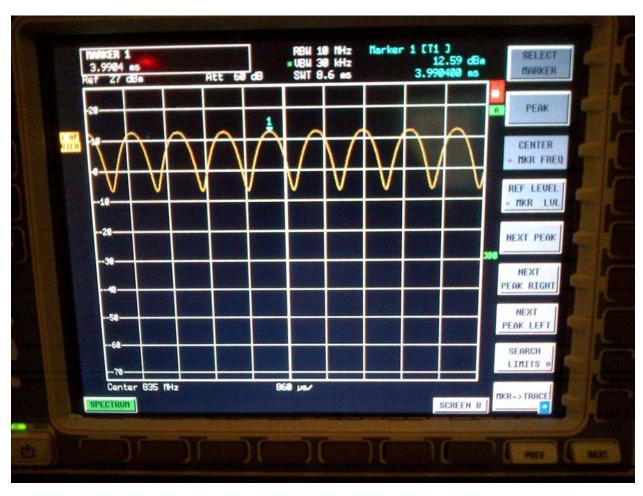
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AM 80% 835 MHz



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Author Data

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FCC ID L6ARFL110LW L6ARFP120LW



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UMTS 1733 MHz



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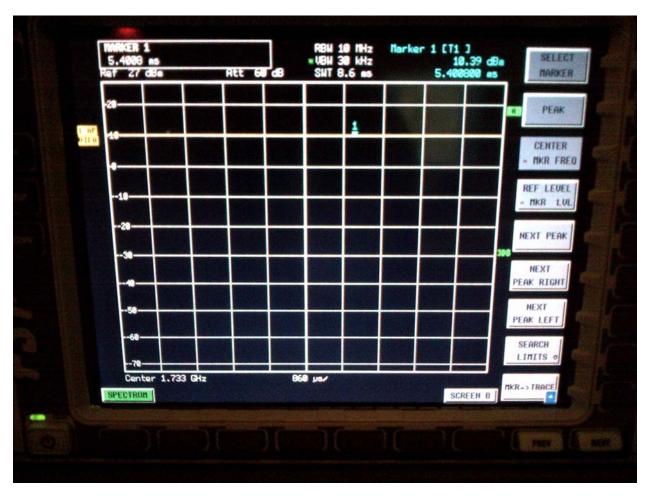
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CW 1733 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

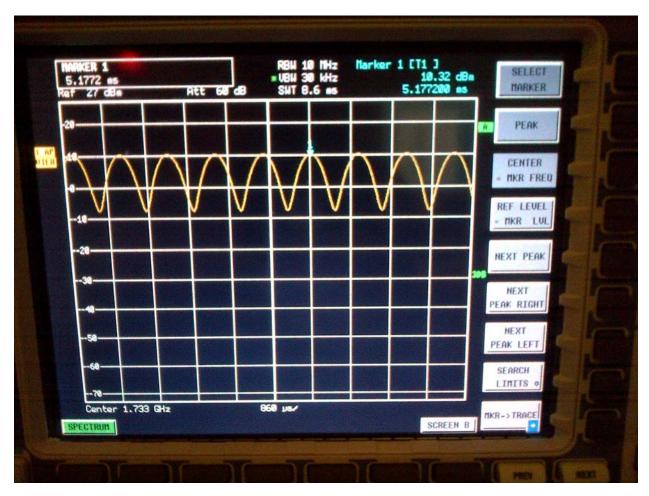
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AM80% 1733 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

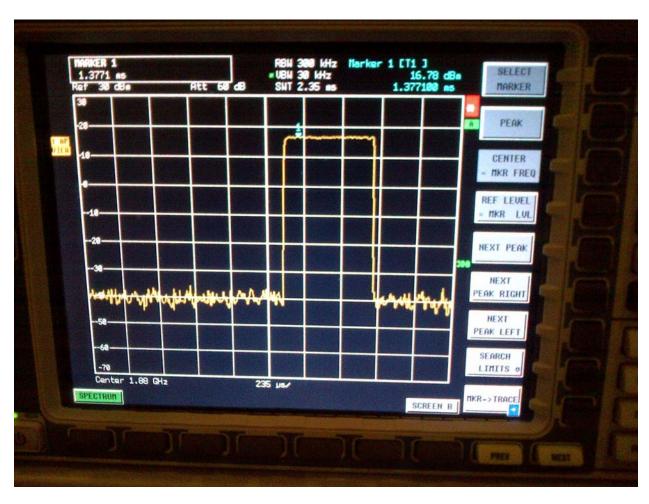
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Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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GSM 1880 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

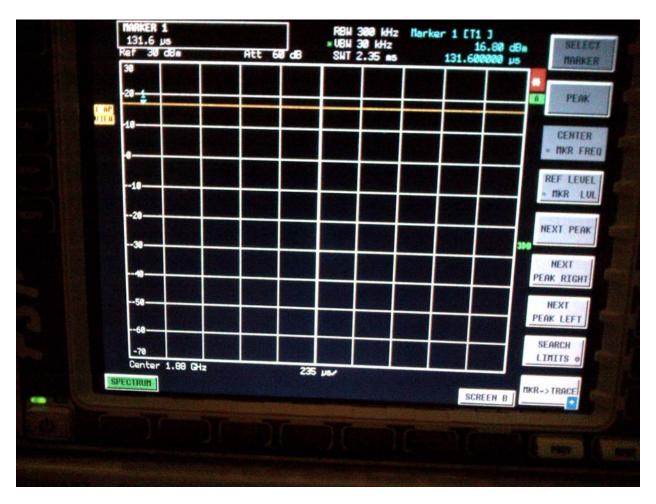
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Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**



CW 1880 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

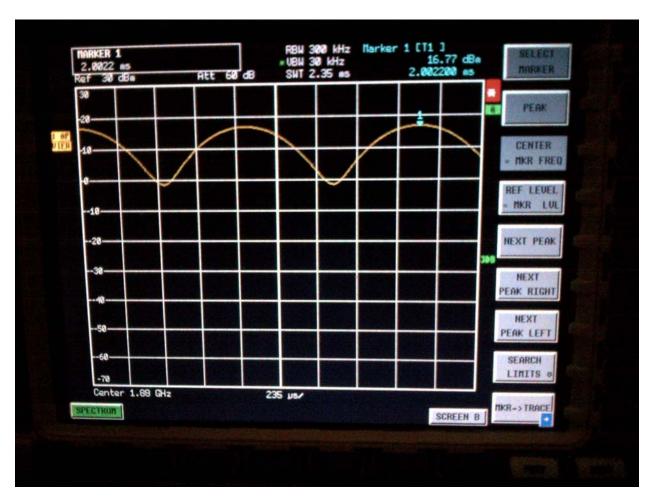
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AM 80 % 1880 MHz



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Author Data **Daoud Attayi**

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UMTS 1880 MHz



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

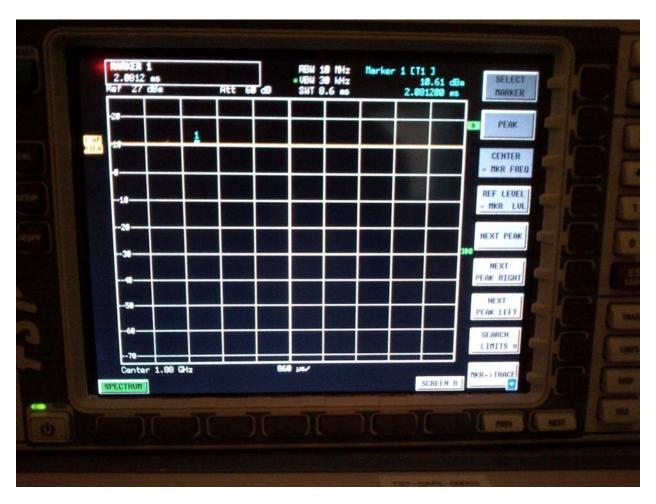
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CW 1880 MHz



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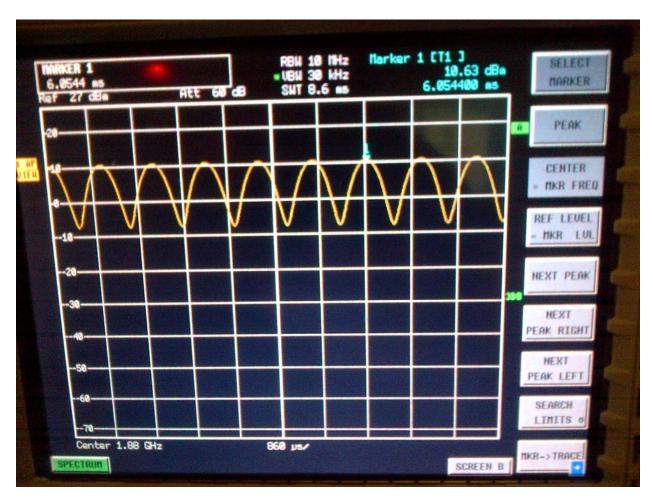
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Author Data **Daoud Attayi**

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AM 80 % 1880 MHz



A.2 Dipole validation and probe modulation factor plots



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Author Data

Daoud Attayi

Dates of Tes

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 12/17/2012 11:31:29 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_835 MHz_12_17_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: CW; Frequency: 835 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 106.6 V/m; Power Drift = -0.02 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 168.4 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4 144.2 V/m	Grid 2 M4 1 54.3 V/m	Grid 3 M4 154.2 V/m
Grid 4 M4 80.47 V/m	Grid 5 M4 83.31 V/m	Grid 6 M4
Grid 7 M4	Grid 8 M4	Grid 9 M4

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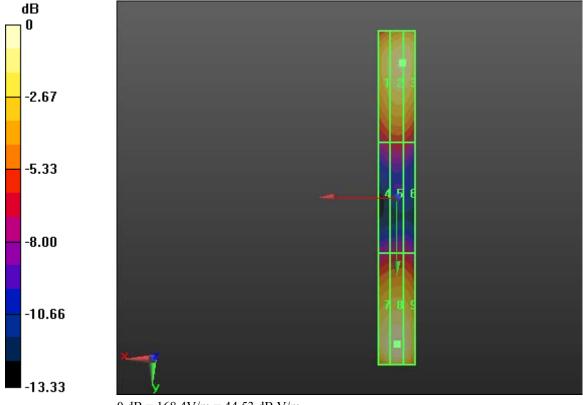
Report No **RTS-6026-1302-07**

FCC ID L6ARFL110LW L6ARFP120LW

162.8 V/m 168.4 V/m 161.7 V/m

Cursor:

Total = 168.4 V/mE Category: M4 Location: 0, 79, 4.7 mm



0 dB = 168.4 V/m = 44.53 dB V/m



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Author Data Daoud Attayi

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RTS-6026-1302-07

FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 6/28/2012 1:13:34 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM835 MHz_06_28_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: GSM 835 PMF, Communication System: CW, Communication

System: AM 80%; Frequency: 835 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - GSM 835_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 34.76 V/m; Power Drift = -0.00 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 54.25 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
49.26 V/m	51.48 V/m	51.48 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
27.95 V/m	28.56 V/m	28.13 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
51.48 V/m	54.25 V/m	53.95 V/m

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Dates of Tes

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Cursor:

Total = 54.247 V/m E Category: M4

Location: -2.5, 80.5, 4.7 mm

Dipole E-Field measurement/E Scan - CW 835_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 103.0 V/m; Power Drift = -0.02 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 162.8 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
148.5 V/m	160.5 V/m	160.4 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
82.74 V/m	86.24 V/m	84.62 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
158.1 V/m	162.8 V/m	155.2 V/m

Cursor:

Total = 162.8 V/m E Category: M4

Location: 0.5, 79.5, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 835_PMF/Hearing

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 64.73 V/m; Power Drift = 0.02 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 102.0 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
93.30 V/m	100.3 V/m	100.3 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4



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Author Data

Daoud Attayi

Pates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 Report No **RTS-6026-1302-07**

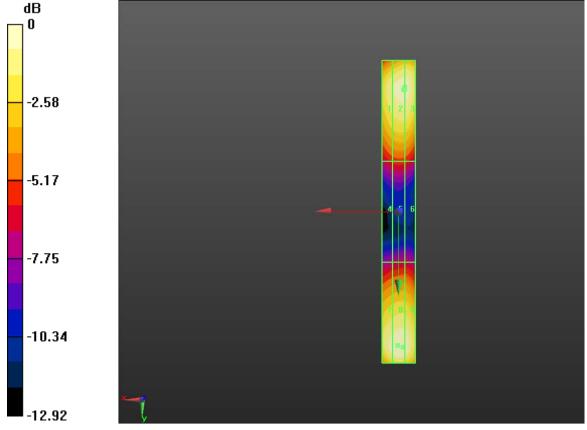
L6ARFL110LW L6ARFP120LW

52.75 V/m	54.62 V/m	53.83 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
99.38 V/m	102.0 V/m	97.92 V/m

Cursor:

Total = 102.0 V/m E Category: M4

Location: 0.5, 79.5, 4.7 mm



0 dB = 54.250 V/m = 34.69 dB V/m



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Author Data

Daoud Attayi

Dates of Te

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 2/17/2012 12:24:15 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS835 MHz_02_17_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: WCDMA FDD V, Communication System: CW, Communication

System: AM 80%; Frequency: 835 MHz

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

Phantom section: RF Section

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

DASY Configuration:

Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 4.7

• Electronics: DAE3 Sn472; Calibrated: 3/7/2011

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - UMTS 835_PMF/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 41.08 V/m; Power Drift = 0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 64.41 V/m

Near-field category: M4 (AWF 0 dB)



Feb. 13-14, 2013

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Author Data

Daoud Attayi

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RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

FCC ID

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
53.11 V/m	55.59 V/m	55.40 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
29.72 V/m	30.66 V/m	29.79 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
61.55 V/m	64.41 V/m	63.22 V/m

Cursor:

Total = 64.412 V/m E Category: M4

Location: -0.5, 79, 4.7 mm

Dipole E-Field measurement/E Scan - CW 835_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 43.11 V/m; Power Drift = -0.14 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 68.64 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
58.55 V/m	59.20 V/m	57.13 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
32.35 V/m	32.63 V/m	31.24 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
61.85 V/m	68.64 V/m	68.56 V/m



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Author Data Daoud Attayi Dates of Test

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FCC ID L6ARFL110LW L6ARFP120LW

Cursor:

Total = 68.635 V/mE Category: M4

Location: -3, 79.5, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 835_PMF/Hearing

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 28.41 V/m; Power Drift = 0.09 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 45.21 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
38.28 V/m	38.73 V/m	37.25 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
21.72 V/m	21.89 V/m	20.80 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
40.90 V/m	45.21 V/m	45.16 V/m

Cursor:

Total = 45.209 V/mE Category: M4

Location: -3, 79.5, 4.7 mm



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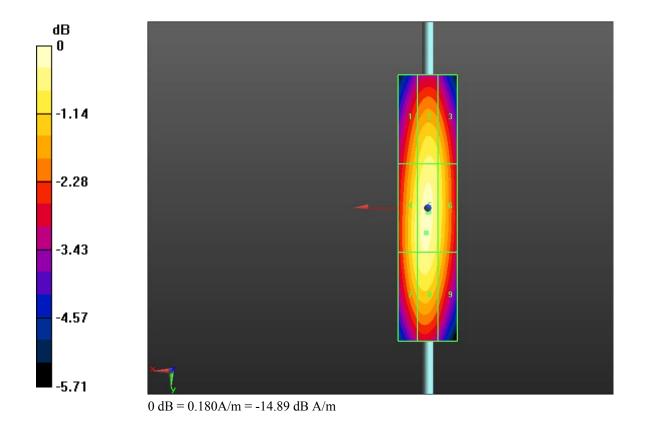
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Author Data **Daoud Attayi**

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Report No **RTS-6026-1302-07**

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Author Data Daoud Attayi

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 2/13/2013 3:44:13 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_02_13_13

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: CW; Frequency: 1880 MHz Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

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

(41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 128.1 V/m; Power Drift = 0.09 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 124.4 V/m

Near-field category: M2 (AWF 0 dB)

PMF scaled E-field

Grid 1 M2 115.9 V/m	Grid 2 M2 124.4 V/m	Grid 3 M2 124.3 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
78.98 V/m	83.18 V/m	82.53 V/m
Grid 7 M3	Grid 8 M2	Grid 9 M2

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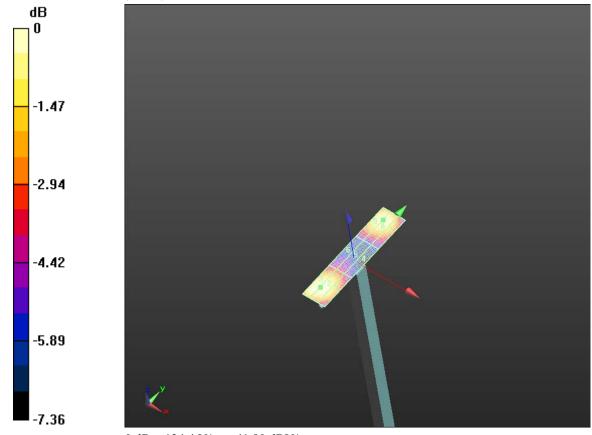
FCC ID L6ARFL110LW L6ARFP120LW

111.0 V/m 122.5 V/m 122.3 V/m

Cursor:

Total = 124.4 V/mE Category: M2

Location: -3, -33.5, 4.7 mm



0 dB = 124.4 V/m = 41.90 dBV/m



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

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Date/Time: 12/17/2012 11:54:55 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_12_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: CW; Frequency: 1880 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 145.2 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 128.6 V/m

Near-field category: M2 (AWF 0 dB)

PMF scaled E-field

Grid 1 M2	Grid 2 M2	Grid 3 M2
117.2 V/m	123.0 V/m	122.0 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
87.82 V/m	90.83 V/m	89.07 V/m
Grid 7 M2	Grid 8 M2	Grid 9 M2



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**

FCC ID

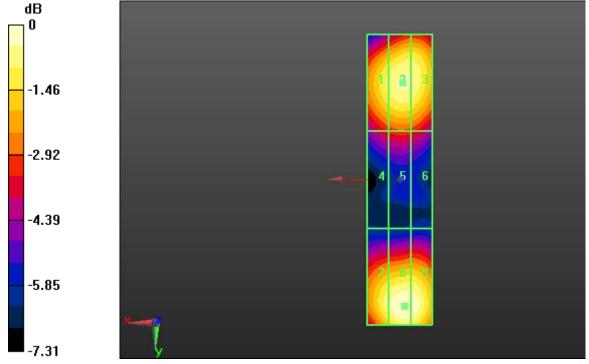
L6ARFL110LW L6ARFP120LW

120.5 V/m 128.6 V/m 127.6 V/m

Cursor:

Total = 128.6 V/mE Category: M2

Location: -1.5, 39, 4.7 mm



0 dB = 128.6 V/m = 42.18 dB V/m



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Author Data Daoud Attayi

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FCC ID L6ARFL110LW

L6ARFP120LW

Date/Time: 2/17/2012 3:04:25 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS1733 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD IV, Communication System: CW, Communication

System: AM 80%; Frequency: 1732.6 MHz, Frequency: 1733 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - UMTS 1733_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 50.62 V/m; Power Drift = -0.07 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 45.31 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
38.99 V/m	40.35 V/m	39.86 V/m
Grid 4 M4 28.58 V/m	Grid 5 M4 29.21 V/m	Grid 6 M4 28.30 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
42.57 V/m	45.31 V/m	44.53 V/m

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L6ARFL110LW L6ARFP120LW

Cursor:

Total = 45.306 V/m E Category: M4 Location: -1, 38, 4.7 mm

Dipole E-Field measurement/E Scan- CW 1733_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 50.63 V/m; Power Drift = 0.07 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 46.45 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
40.60 V/m	41.81 V/m	41.04 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
29.57 V/m	30.18 V/m	29.29 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
44.02 V/m	46.45 V/m	45.54 V/m

Cursor:

Total = 46.446 V/m E Category: M4

Location: -1, 38, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 1733_PMF/Hearing

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 32.26 V/m; Power Drift = 0.12 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 29.45 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
25.68 V/m	26.42 V/m	25.96 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4



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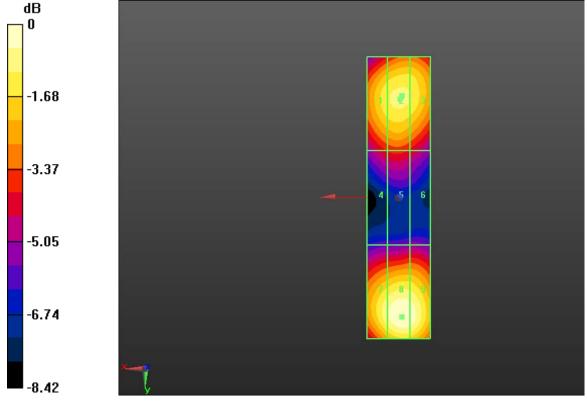
L6ARFL110LW L6ARFP120LW

FCC ID

18.91 V/m	19.39 V/m	18.52 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
27.45 V/m	29.45 V/m	28.94 V/m

Cursor:

Total = 29.451 V/m E Category: M4 Location: -1, 38, 4.7 mm



0 dB = 45.310V/m = 33.12 dB V/m



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Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 6/28/2012 12:54:33 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM1880 MHz_06_28_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: GSM 1880, Communication System: CW, Communication System:

AM 80%; Frequency: 1880 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 4.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - GSM 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 33.26 V/m; Power Drift = 0.00 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 29.81 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
27.34 V/m	28.65 V/m	28.59 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
19.83 V/m	20.51 V/m	20.10 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4

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28.20 V/m 29.81 V/m 29.37 V/m

Cursor:

Total = 29.810 V/m E Category: M4

Location: -1, 38.5, 4.7 mm

Dipole E-Field measurement/E Scan- CW 1800_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 95.34 V/m; Power Drift = 0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 84.88 V/m

Near-field category: M3 (AWF 0 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
78.80 V/m	82.95 V/m	82.43 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
56.84 V/m	58.53 V/m	56.53 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
80.11 V/m	84.88 V/m	83.31 V/m

Cursor:

Total = 84.885 V/m E Category: M3

Location: -0.5, 38.5, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 1880_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 60.62 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 53.60 V/m

Near-field category: M4 (AWF 0 dB)



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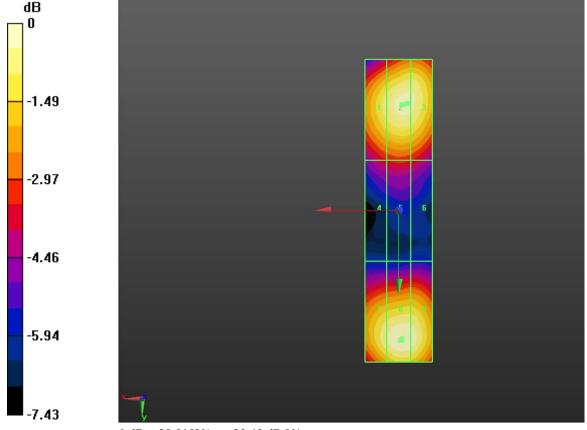
Report No RTS-6026-1302-07 FCC ID L6ARFL110LW L6ARFP120LW

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
49.75 V/m	52.55 V/m	52.06 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
35.78 V/m	36.92 V/m	36.02 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
50.66 V/m	53.60 V/m	52.63 V/m

Cursor:

Total = 53.599 V/mE Category: M4 Location: -1, 38, 4.7 mm



0 dB = 29.810V/m = 29.49 dB V/m



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L6ARFL110LW L6ARFP120LW

Date/Time: 2/17/2012 2:20:23 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS1880 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD II, Communication System: CW, Communication

System: AM 80%; Frequency: 1880 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole E-Field measurement/E Scan - UMTS 1880_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 47.02 V/m; Power Drift = 0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 42.43 V/m

Near-field category: M4 (AWF 0 dB)



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Feb. 13-14, 2013

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L6ARFL110LW L6ARFP120LW

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
37.98 V/m	39.42 V/m	39.04 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
26.86 V/m	27.50 V/m	26.70 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
39.63 V/m	42.43 V/m	41.87 V/m

Cursor:

Total = 42.427 V/m E Category: M4

Location: -1, 38, 4.7 mm

Dipole E-Field measurement/E Scan- CW 1800_PMF/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 47.33 V/m; Power Drift = -0.05 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 42.41 V/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
38.23 V/m	39.51 V/m	39.41 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
26.94 V/m	27.41 V/m	26.77 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
40.02 V/m	42.41 V/m	41.99 V/m



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L6ARFL110LW L6ARFP120LW

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Cursor:

Total = 42.409 V/m E Category: M4

Location: -1.5, 38, 4.7 mm

Dipole E-Field measurement/E Scan - AM80%_ 1880_PMF/Hearing Aid Compatibility Tost (41x181x1): Massurement grid due 5mm due 5mm

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 30.18 V/m; Power Drift = 0.06 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 27.40 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
24.40 V/m	25.26 V/m	24.95 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
17.20 V/m	17.65 V/m	1 7.12 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
25.54 V/m	27.40 V/m	27.02 V/m

Cursor:

Total = 27.402 V/m E Category: M4

Location: -1, 38, 4.7 mm



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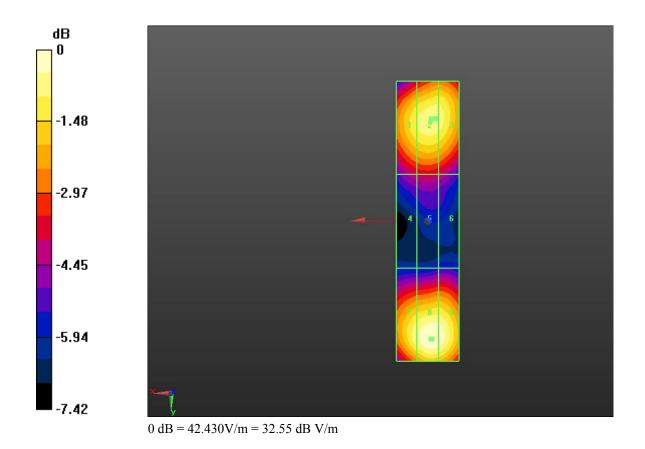
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**

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Daoud Attavi

Dates of Tes

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 12:59:09 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_835 MHz_12_18_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: CW; Frequency: 835 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 4.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.47 V/m; Power Drift = 0.10 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.44 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.40 A/m	0.42 A/m	0.41 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.42 A/m	0.44 A/m	0.43 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4



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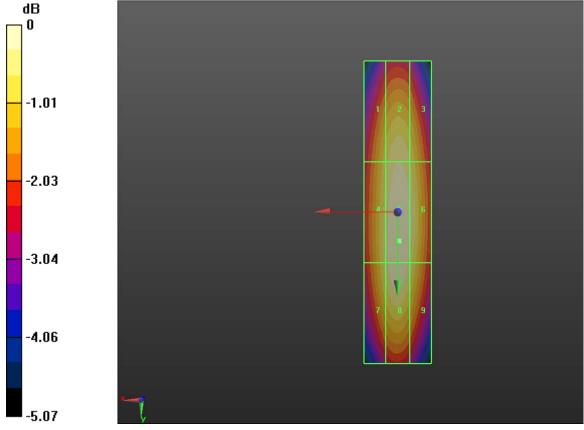
FCC ID L6ARFL110LW L6ARFP120LW

0.42 A/m 0.44 A/m 0.42 A/m

Cursor:

Total = 0.444 A/mH Category: M4

Location: -0.5, 8.5, 4.7 mm



0 dB = 0.440 A/m = -7.13 dB A/m



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Feb. 13-14, 2013

Date/Time: 6/28/2012 11:48:13 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM835 MHz_06_28_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: GSM 835 PMF, Communication System: CW, Communication

System: AM 80%; Frequency: 835 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan - GSM 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm,

dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.17 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.16 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.15 A/m	0.16 A/m	0.15 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4



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L6ARFL110LW L6ARFP120LW

FCC ID

0.16 A/m	0.16 A/m	0.16 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.15 A/m	0.16 A/m	0.15 A/m

Cursor:

Total = 0.163 A/m H Category: M4 Location: 0, 8.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid:

dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.28 V/m; Power Drift = 0.08 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.47 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.44 A/m	0.46 A/m	0.44 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.45 A/m	0.47 A/m	0.45 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.45 A/m	0.47 A/m	0.44 A/m

Cursor:

Total = 0.471 A/m H Category: M4 Location: 0, 8, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_PMF/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.32 V/m; Power Drift = 0.12 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.30 A/m

Near-field category: M4 (AWF 0 dB)



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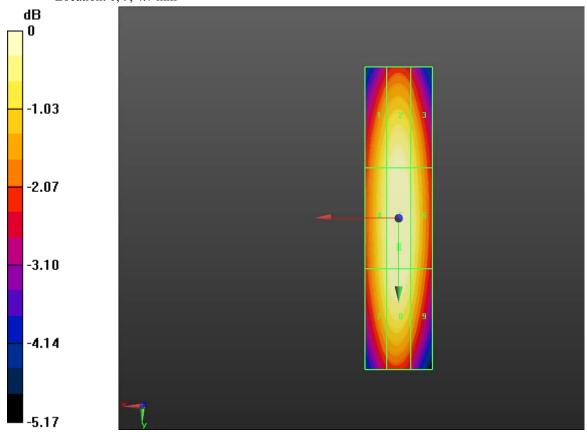
L6ARFL110LW L6ARFP120LW

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.28 A/m	0.29 A/m	0.28 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.29 A/m	0.30 A/m	0.29 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.29 A/m	0.30 A/m	0.28 A/m

Cursor:

Total = 0.304 A/m H Category: M4 Location: 0, 9, 4.7 mm



0 dB = 0.160 A/m = -15.92 dB A/m



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RTS-6026-1302-07

FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 2/17/2012 4:08:25 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS835 MHz_02_17_12

DUT: HAC-Dipole 835 MHz; Type: D835V3; Serial: 1011

Communication System: WCDMA FDD V, Communication System: CW, Communication

System: AM 80%; Frequency: 835 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/8/2011

• Sensor-Surface: (Fix Surface), z = 4.7

• Electronics: DAE3 Sn472; Calibrated: 3/7/2011

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan - UMTS 835 PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm,

dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.19 V/m; Power Drift = 0.05 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.18 A/m

Near-field category: M4 (AWF 0 dB)



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Daoud Attayi

Dates of Test

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.16 A/m	0.17 A/m	0.16 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.17 A/m	0.18 A/m	0.17 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.17 A/m	0.18 A/m	0.17 A/m

Cursor:

Total = 0.181 A/m H Category: M4

Location: 0.5, 8.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 835_PMF/Hearing Aid Compatibility Test (41x181x1): Measurement grid:

dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.11 V/m; Power Drift = 0.08 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.20 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.17 A/m	0.19 A/m	0.18 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.18 A/m	0.20 A/m	0.19 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.18 A/m	0.19 A/m	0.18 A/m



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Cursor:

Total = 0.197 A/m H Category: M4

Location: -0.5, 1, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_PMF/Hearing Aid Compatibility Test (41x181x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.14 V/m; Power Drift = 0.10 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.13 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.11 A/m	0.12 A/m	0.12 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.12 A/m	0.13 A/m	0.12 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.12 A/m	0.12 A/m	0.12 A/m

Cursor:

Total = 0.127 A/m H Category: M4

Location: 0, 1.5, 4.7 mm



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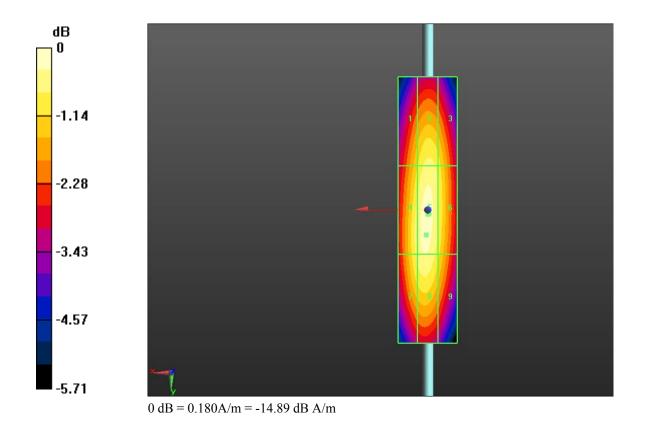
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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L6ARFL110LW L6ARFP120LW

FCC ID

HAC RF_H-Field_validation_1880 MHz_02_14_13

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): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.4750 A/m; Power Drift = -0.09 dB PMR not calibrated. PMF = 0.00001122 is applied.

H-field emissions = 0.000004985 A/m Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.000 A/m	0.000 A/m	0.000 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.000 A/m	0.000 A/m	0.000 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.000 A/m	0.000 A/m	0.000 A/m

Cursor:

Total = 0.000004985 A/m

H Category: M4 Location: -1, 1, 4.7 mm



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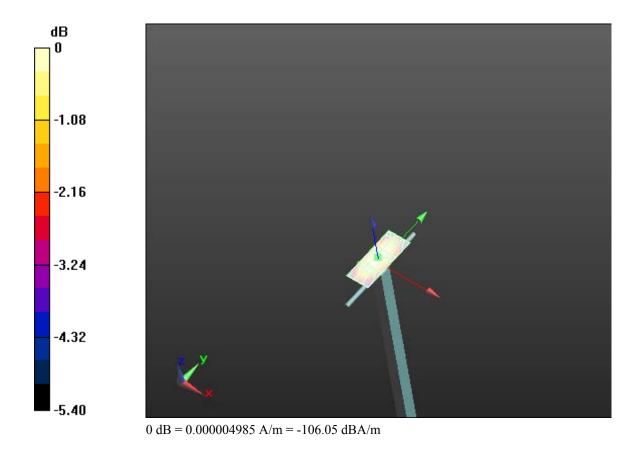
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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SEMCAD X Version 14.6.8 (7028)



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L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 1:06:37 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_12_18_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: CW; Frequency: 1880 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.47 V/m; Power Drift = -0.04 dB

PMF = 1.00 is applied.

H-field emissions = 0.446 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.411 A/m	0.429 A/m	0.420 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.429 A/m	0.446 A/m	0.429 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4



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0.420 A/m

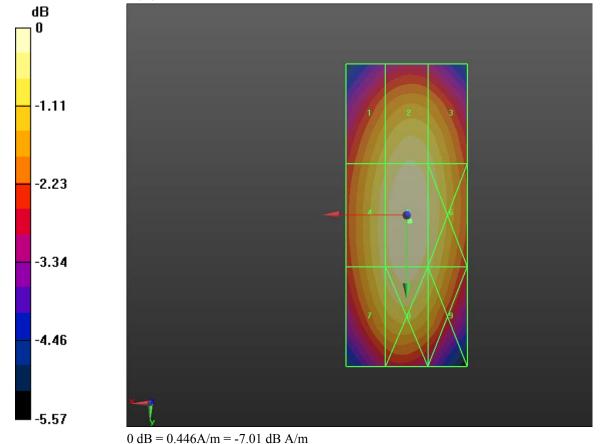
0.438 A/m

0.420 A/m

Cursor:

Total = 0.446 A/mH Category: M4

Location: -0.5, 1, 4.7 mm





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L6ARFL110LW L6ARFP120LW

Date/Time: 2/17/2012 3:27:55 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS1733 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD IV, Communication System: CW, Communication

System: AM 80%; Frequency: 1732.6 MHz, Frequency: 1733 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan -UMTS 1733_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm,

dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.17 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.16 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.14 A/m	0.15 A/m	0.14 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.15 A/m	0.16 A/m	0.15 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4



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0.14 A/m 0.15 A/m 0.14 A/m

Cursor:

Total = 0.157 A/m H Category: M4 Location: 0, 0, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 1733_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.17 V/m; Power Drift = -0.16 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.16 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.14 A/m	0.15 A/m	0.14 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.15 A/m	0.16 A/m	0.15 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.14 A/m	0.15 A/m	0.14 A/m

Cursor:

Total = 0.157 A/m H Category: M4

Location: -0.5, 0.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1733_PMF/Hearing Aid Compatibility Test (41x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.11 V/m; Power Drift = -0.14 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.10 A/m

Near-field category: M4 (AWF 0 dB)



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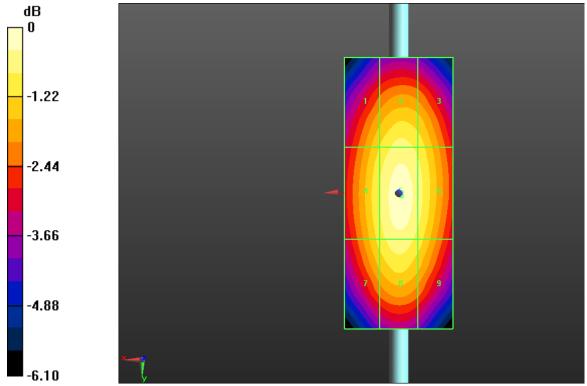
Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 Report No RTS-6026-1302-07 L6ARFL110LW L6ARFP120LW

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.09 A/m	0.10 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.09 A/m	0.10 A/m	0.10 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.09 A/m	0.10 A/m	0.09 A/m

Cursor:

Total = 0.100 A/m H Category: M4

Location: -0.5, 0, 4.7 mm



0 dB = 0.160 A/m = -15.92 dB A/m



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L6ARFL110LW L6ARFP120LW

Date/Time: 6/28/2012 12:25:06 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM1880 MHz_06_28_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: GSM 1880 PMF, Communication System: CW, Communication

System: AM 80%; Frequency: 1880 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan -GSM **1880_PMF/Hearing Aid Compatibility Test (41x101x1):** Measurement grid: dx=5mm,

dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.11 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.11 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.10 A/m	0.10 A/m	0.10 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4



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0.10 A/m	0.11 A/m	0.10 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.10 A/m	0.10 A/m	0.10 A/m

Cursor:

Total = 0.105 A/m H Category: M4 Location: 0, 0.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 1800_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.32 V/m; Power Drift = 0.00 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.30 A/m

Near-field category: M3 (AWF 0 dB)

PMF scaled H-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
0.28 A/m	0.29 A/m	0.28 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.29 A/m	0.30 A/m	0.29 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
0.28 A/m	0.29 A/m	0.28 A/m

Cursor:

Total = 0.300 A/m H Category: M3 Location: 0, 1, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1880_PMF/Hearing Aid Compatibility Test (41x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.21 V/m; Power Drift = 0.02 dB PMR not calibrated. PMF = 1.000 is applied. H-field emissions = 0.19 A/m

Near-field category: M3 (AWF 0 dB)

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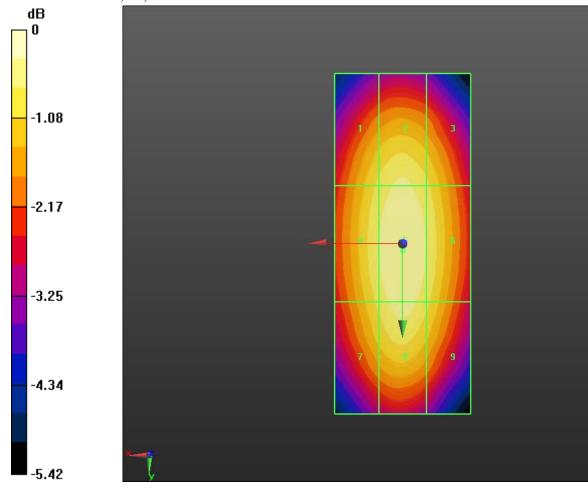
PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.18 A/m	0.19 A/m	0.18 A/m
Grid 4 M4	Grid 5 M3	Grid 6 M4
0.19 A/m	0.19 A/m	0.19 A/m
Grid 7 M4	Grid 8 M3	Grid 9 M4
0.18 A/m	0.19 A/m	0.18 A/m

Cursor:

Total = 0.194 A/mH Category: M3

Location: 0, 0.5, 4.7 mm



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L6ARFL110LW

0 dB = 0.110 A/m = -19.17 dB A/m

Date/Time: 2/17/2012 3:56:44 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS1880 MHz_02_17_12

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: 1008

Communication System: WCDMA FDD II, Communication System: CW, Communication

System: AM 80%; Frequency: 1880 MHz

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

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/8/2011
- Sensor-Surface: (Fix Surface), z = 4.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Dipole H-Field measurement with H3DV6 probe/H Scan -UMTS 1880_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm,

dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.16 V/m; Power Drift = 0.06 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.15 A/m

Near-field category: M4 (AWF 0 dB)



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L6ARFL110LW L6ARFP120LW

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.14 A/m	0.14 A/m	0.14 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.14 A/m	0.15 A/m	0.14 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.14 A/m	0.15 A/m	0.14 A/m

Cursor:

Total = 0.150 A/m H Category: M4 Location: 0, 0.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - CW 1880_PMF/Hearing Aid Compatibility Test (41x101x1): Measurement

grid: dx=5mm, dy=5mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.16 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.15 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.14 A/m	0.14 A/m	0.14 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.14 A/m	0.15 A/m	0.14 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.14 A/m	0.15 A/m	0.14 A/m



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L6ARFL110LW L6ARFP120LW

Cursor:

Total = 0.149 A/m H Category: M4 Location: 0, 0.5, 4.7 mm

Dipole H-Field measurement with H3DV6 probe/H Scan - AM80%_1880_PMF/Hearing Aid Compatibility Test (41x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.10 V/m; Power Drift = -0.07 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.10 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.09 A/m	0.09 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.09 A/m	0.10 A/m	0.09 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.09 A/m	0.09 A/m	0.09 A/m

Cursor:

Total = 0.096 A/m H Category: M4 Location: 0, 0, 4.7 mm



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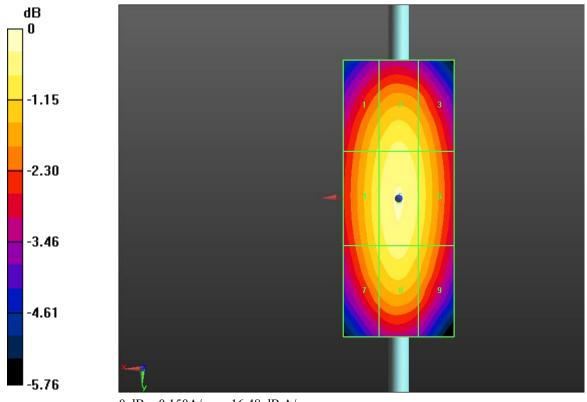
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0 dB = 0.150 A/m = -16.48 dB A/m



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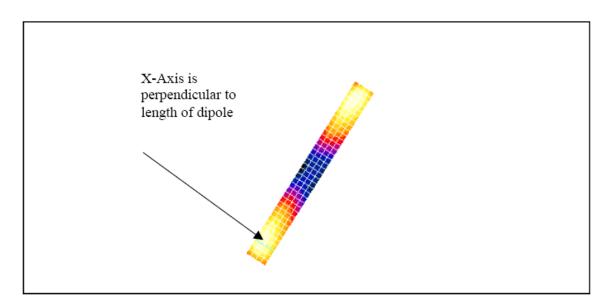
Daoud Attayi

Dates of Te

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L6ARFL110LW L6ARFP120LW



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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L6ARFL110LW L6ARFP120LW

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

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

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System; CW; Frequency: 1880 MHz; Duty Cycle: 1:1 Medium: Air Medium parameters used: σ = 0 mho/m, $\varepsilon_{\rm f}$ = 1; ρ = 1000 kg/m³

Phantom section: H Device Section

DASY4 Configuration:

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

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (5x19x1):

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

Maximum value of Total (measured) = 134.8 V/m

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):

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

Maximum value of Total field (slot averaged) = 131.0 V/m

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

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

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

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

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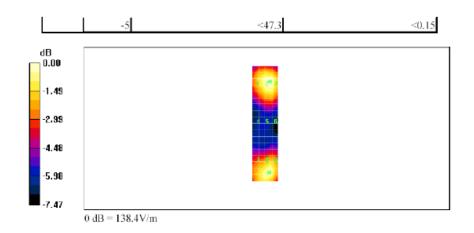
Report No **RTS-6026-1302-07**

L6ARFL110LW L6ARFP120LW

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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: σ = 0 mho/m, $\varepsilon_{\rm f}$ = 1; ρ = 1000 kg/m³

Phantom section: H Device Section

DASY4 Configuration:

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

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (11x46x1):

Measurement grid: dx=2mm, dy=2mm

Maximum value of Total (measured) = 138.0 V/m

E Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (101x451x1):

Measurement grid: dx=2mm, dy=2mm

Maximum value of Total field (slot averaged) = 131.2 V/m

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

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

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

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

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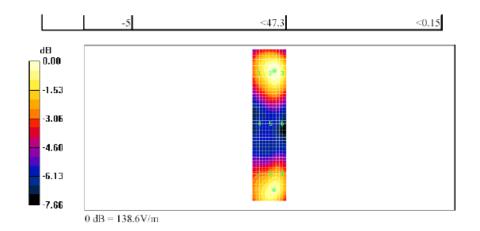
Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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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/m³

Phantom section: H Dipole Section

DASY4 Configuration:

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

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (5x19x1):

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

Maximum value of Total (measured) = 0.406 A/m

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (41x181x1):

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

Maximum value of Total field (slot averaged) = 0.406 A/m Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

Grid 1	Grid 2	Grid 3	ΙI	Grid 1	Grid 2
0.342	0.359	0.344	l	0.342	0.359
Grid 4	Grid 5	Grid 6	ll	Grid 4	Grid 5
0.389	0.406	0.389	l	0.389	0.406
Grid 7	Grid 8	Grid 9	l	Grid 7	Grid 8
0.363	0.378	0.363	H	0.363	0.378

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
М3	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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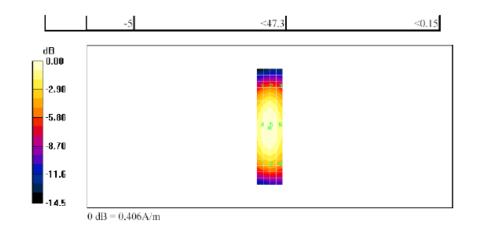
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Date/Time: 14/07/2005 12:53:40 PM

Lab: RIM Testing Services (RTS)

HAC_H_Dipole_CW 1880_2 mm step_07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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

Phantom section: H Dipole Section

DASY4 Configuration:

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

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (11x46x1):

Measurement grid: dx=2mm, dy=2mm

Maximum value of Total (measured) = 0.406 A/m

H Scan 10mm above CD 1880 MHz/Hearing Aid Compatibility Test (101x451x1):

Measurement grid: dx=2mm, dy=2mm

Maximum value of Total field (slot averaged) = 0.406 A/m

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

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

Grid 1	Grid 2	Grid 3	Gt	id 1	Grid 2	Gr
0.347	0.361	0.348	0.	347	0.361	0.3
Grid 4	Grid 5	Grid 6	Gı	rid 4	Grid 5	Gr
0.394	0.406	0.391	0.	394	0.406	0.3
Grid 7	Grid 8	Grid 9	Gı	rid 7	Grid 8	Gr
0.367	0.380	0.365	0.	367	0.380	0.3

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
М3	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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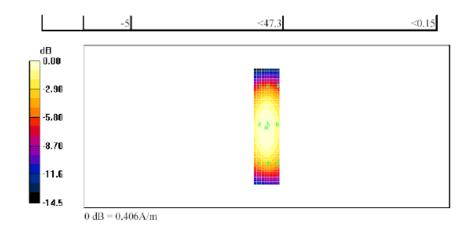
Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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A.3 RF emission field plots



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Date/Time: 12/18/2012 2:22:34 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

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

848.8 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/Hearing Aid Compatibility Test

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 90.20 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 226.1 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
194.7 V/m	219.1 V/m	218.1 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
196.9 V/m	226.1 V/m	225.1 V/m

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Grid 7 M3	Grid 8 M3	Grid 9 M3
196.0 V/m	223.9 V/m	222.0 V/m

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 89.43 V/m; Power Drift = 0.03 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 230.7 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
184.5 V/m	219.1 V/m	218.9 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
192.4 V/m	230.7 V/m	230.4 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
198.6 V/m	230.4 V/m	230.0 V/m

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 84.58 V/m; Power Drift = -0.08 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 212.9 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M3	Grid 3 M3
174.6 V/m	205.9 V/m	205.9 V/m



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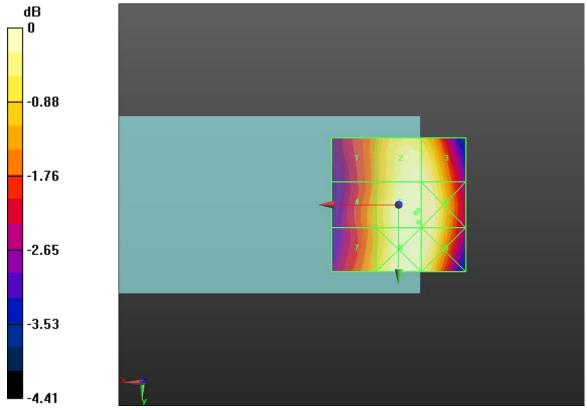
Daoud Attayi

Pates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 Report No RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

FCC ID

Grid 4 M3	Grid 5 M3	Grid 6 M3
179.4 V/m	212.9 V/m	212.7 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
182.2 V/m	211.9 V/m	211.2 V/m



0 dB = 217.1V/m = 46.73 dB V/m



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Date/Time: 12/18/2012 9:57:48 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 850; Frequency: 836.8 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 85.88 V/m; Power Drift = -0.08 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 217.7 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
164.6 V/m	203.7 V/m	204.8 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
172.6 V/m	217.7 V/m	220.7 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3

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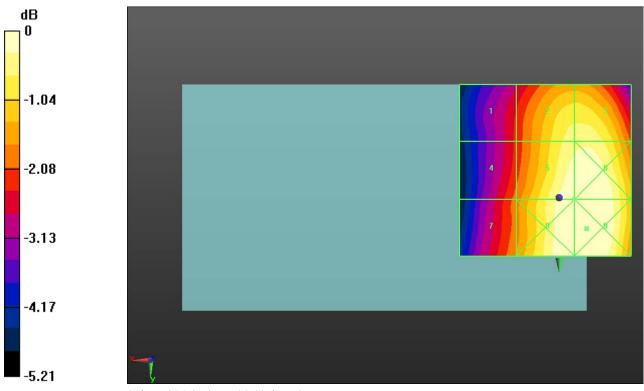
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177.1 V/m 221.6 V/m 223.6 V/m



0 dB = 214.8 V/m = 46.64 dB V/m



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Date/Time: 12/18/2012 3:13:16 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_V

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz,

Frequency: 846.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan/Hearing Aid Compatibility Test

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 74.08 V/m; Power Drift = 0.09 dB

PMR not calibrated. PMF = 1.070 is applied.

E-field emissions = 66.01 V/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
58.85 V/m	65.32 V/m	65.33 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
57.72 V/m	66.01 V/m	66.01 V/m



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Grid 7 M4	Grid 8 M4	Grid 9 M4
56.79 V/m	64.64 V/m	64.64 V/m

Cursor:

Total = 66.014 V/m E Category: M4

Location: -8.5, -0.5, 8.7 mm

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 80.46 V/m; Power Drift = -0.07 dB

PMR not calibrated. PMF = 1.070 is applied.

E-field emissions = 72.82 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
61.67 V/m	70.80 V/m	70.74 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
61.29 V/m	72.82 V/m	72.75 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
60.71 V/m	72.25 V/m	72.16 V/m

Cursor:

Total = 72.817 V/m E Category: M4

Location: -7.5, 3, 8.7 mm

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 91.96 V/m; Power Drift = -0.06 dB

PMR not calibrated. PMF = 1.070 is applied.

E-field emissions = 82.86 V/m

Near-field category: M4 (AWF 0 dB)



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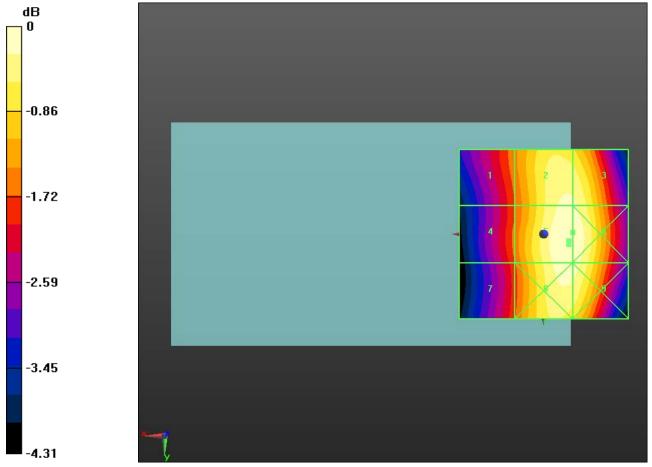
PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
70.14 V/m	80.95 V/m	80.84 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
69.50 V/m	82.86 V/m	82.79 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
68.39 V/m	81.91 V/m	81.74 V/m

Cursor:

Total = 82.860 V/m E Category: M4

Location: -7.5, 2, 8.7 mm



0 dB = 66.010V/m = 36.39 dB V/m



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Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz,

Frequency: 1909.8 MHz

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

Phantom section: RF Section

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

DASY Configuration:

Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device Low Chan/Hearing Aid Compatibility Test

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.55 V/m; Power Drift = 0.09 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 75.53 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
73.08 V/m	75.53 V/m	71.21 V/m
Grid 4 M4	Grid 5 M3	Grid 6 M3

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L6ARFL110LW L6ARFP120LW

FCC ID

39.39 V/m	57.24 V/m	62.08 V/m
Grid 7 M3 71.64 V/m	Grid 8 M2 91.79 V/m	Grid 9 M2 91.66 V/m

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 10.82 V/m; Power Drift = 0.00 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 72.72 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
69.84 V/m	72.72 V/m	70.39 V/m
Grid 4 M4	Grid 5 M3	Grid 6 M3
41.04 V/m	48.81 V/m	57.10 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
60.61 V/m	83.50 V/m	83.49 V/m

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 15.42 V/m; Power Drift = -0.04 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 71.79 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3 Grid 2 M3 Grid 3 M3
--



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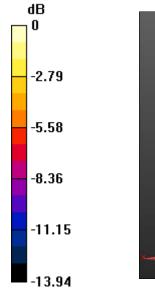
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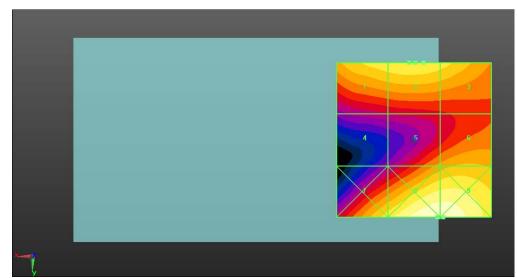
Daoud Attayi

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65.76 V/m	71.79 V/m	70.47 V/m
Grid 4 M4	Grid 5 M3	Grid 6 M3
45.63 V/m	48.56 V/m	48.98 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
52.28 V/m	72.69 V/m	72.77 V/m





0 dB = 92.790V/m = 39.35 dB V/m



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FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 9:33:03 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 1900; Frequency: 1850.2 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.32 V/m: Power Drift = 0.11 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 75.93 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M2	Grid 3 M3
80.76 V/m	86.22 V/m	83.62 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
52.85 V/m	56.62 V/m	55.54 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3



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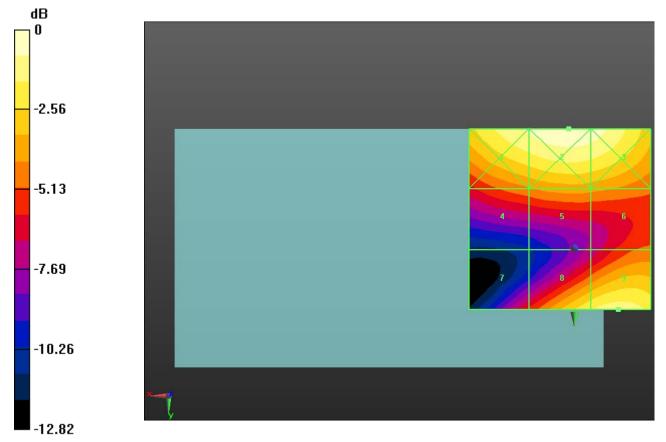
Author Data **Daoud Attayi**

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45.36 V/m 71.55 V/m 75.93 V/m



0 dB = 87.160 V/m = 38.81 dB V/m



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Date/Time: 12/19/2012 12:14:23 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM_1900_Telecoil_2100_Battery

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 1900; Frequency: 1850.2 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan_telecoil_2100_Battery/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.84 V/m; Power Drift = 0.15 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 77.92 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M2	Grid 2 M2	Grid 3 M3
84.17 V/m	86.39 V/m	82.54 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
54.21 V/m	55.50 V/m	54.43 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3

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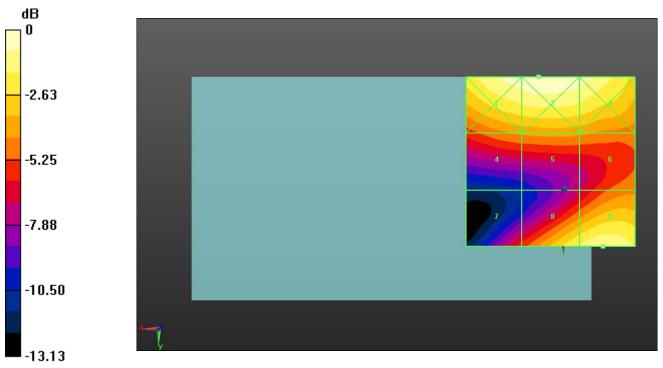
Author Data **Daoud Attayi**

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72.64 V/m 77.92 V/m 46.09 V/m



0 dB = 87.330V/m = 38.82 dB V/m



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FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 3:34:29 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_II

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz,

Frequency: 1907.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device Low Chan/Hearing Aid Compatibility Test

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 10.50 V/m; Power Drift = 0.15 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 30.64 V/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
29.21 V/m	30.64 V/m	28.46 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
15.54 V/m	20.94 V/m	22.58 V/m



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Grid 7 M4	Grid 8 M4	Grid 9 M4
27.17 V/m	34.59 V/m	34.44 V/m

Cursor:

Total = 34.586 V/m E Category: M4

Location: -6.5, 25, 8.7 mm

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 13.75 V/m; Power Drift = 0.04 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 32.04 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4 30.18 V/m	Grid 2 M4 32.04 V/m	Grid 3 M4 30.66 V/m
Grid 4 M4 17.83 V/m	Grid 5 M4 19.86 V/m	Grid 6 M4 23.27 V/m
Grid 7 M4 24.29 V/m	Grid 8 M4	Grid 9 M4 34.52 V/m

Cursor:

Total = 34.517 V/m E Category: M4

Location: -8.5, 25, 8.7 mm

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.16 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 31.28 V/m

Near-field category: M4 (AWF 0 dB)



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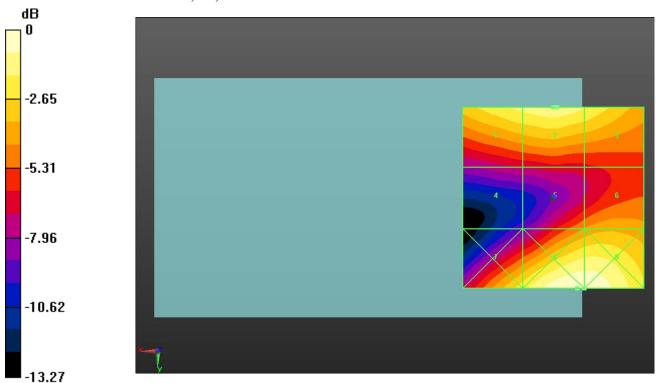
PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
29.05 V/m	31.28 V/m	30.39 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
18.78 V/m	20.45 V/m	20.17 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
20.43 V/m	29.32 V/m	29.32 V/m

Cursor:

Total = 31.277 V/m E Category: M4

Location: -1, -25, 8.7 mm



0 dB = 34.590 V/m = 30.78 dB V/m



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Date/Time: 12/19/2012 1:48:10 AM

FCC ID

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2641D6A8

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

848.8 MHz

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

Phantom section: RF Section

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

DASY Configuration:

Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field GSM850 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid Compatibility

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 73.14 V/m; Power Drift = -0.09 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 187.0 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
154.2 V/m	179.0 V/m	179.0 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
160.7 V/m	187.0 V/m	186.9 V/m

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Grid 7 M3	Grid 8 M3	Grid 9 M3
165.0 V/m	185.8 V/m	185.5 V/m

Cursor:

Total = 187.0 V/m E Category: M3 Location: -8, 5, 8.7 mm

Device E-Field GSM850 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device Mid Chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 75.07 V/m; Power Drift = -0.06 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 203.9 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M3	Grid 3 M3
151.9 V/m	189.0 V/m	189.1 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
163.8 V/m	203.9 V/m	204.0 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
177.4 V/m	206.6 V/m	205.8 V/m



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Cursor:

Total = 206.6 V/m E Category: M3

Location: -5, 25, 8.7 mm

Device E-Field GSM850 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device High Chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 70.25 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 184.7 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M3	Grid 3 M3
144.0 V/m	177.0 V/m	177.2 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
151.4 V/m	184.7 V/m	184.7 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
159.6 V/m	184.4 V/m	1 84.6 V/m

Cursor:

Total = 184.7 V/m E Category: M3 Location: -9, 2, 8.7 mm



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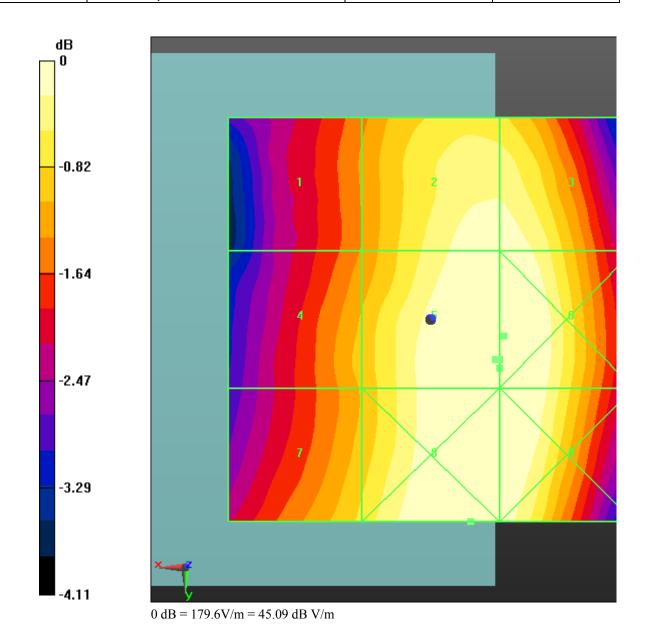
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Date/Time: 12/19/2012 2:07:46 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2641D6A8

Communication System: GSM 850; Frequency: 836.8 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field GSM850 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 75.12 V/m; Power Drift = -0.05 dB

PMR not calibrated. PMF = 3.000 is applied.

E-field emissions = 193.0 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M4	Grid 2 M3	Grid 3 M3
136.5 V/m	174.6 V/m	177.2 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
150.0 V/m	193.0 V/m	200.0 V/m
Grid 7 M3	Grid 8 M3	Grid 9 M3



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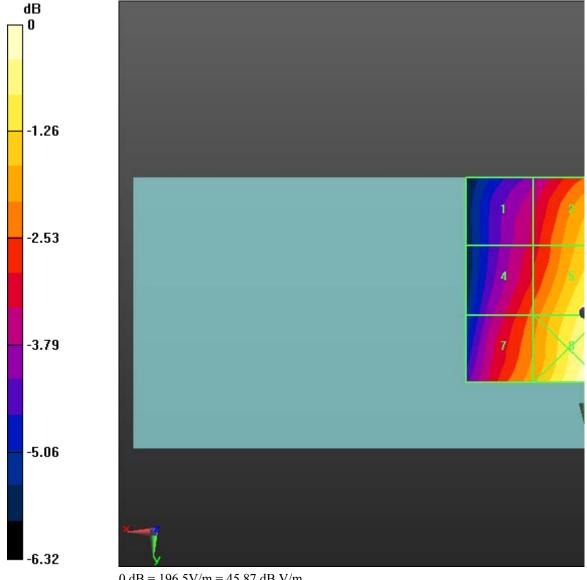
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FCC ID L6ARFL110LW L6ARFP120LW

160.1 V/m 201.8 V/m 204.6 V/m

Cursor:

Total = 204.6 V/mE Category: M3 Location: -9, 17, 8.7 mm



0 dB = 196.5 V/m = 45.87 dB V/m



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Date/Time: 12/19/2012 2:32:23 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_V

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2641D6A8

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz,

Frequency: 846.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field UMTS band V measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 81.12 V/m; Power Drift = 0.08 dB

PMR not calibrated. PMF = 1.070 is applied.

E-field emissions = 74.30 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
62.11 V/m	72.52 V/m	72.52 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
62.92 V/m	74.30 V/m	74.30 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4

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62.70 V/m 73.42 V/m 73.38 V/m

Cursor:

Total = 74.297 V/m E Category: M4

Location: -8, 1.5, 8.7 mm

Device E-Field UMTS band V measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the

Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 81.58 V/m; Power Drift = 0.09 dB

PMR not calibrated. PMF = 1.070 is applied.

E-field emissions = 76.91 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
61.39 V/m	74.07 V/m	74.08 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
62.65 V/m	76.91 V/m	76.91 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
63.75 V/m	76.50 V/m	76.50 V/m

Cursor:

Total = 76.909 V/m E Category: M4

Location: -8.5, 3.5, 8.7 mm

Device E-Field UMTS band V measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the

Device_High_Chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 86.79 V/m; Power Drift = -0.03 dB

PMR not calibrated. PMF = 1.070 is applied.

E-field emissions = 80.50 V/m

Near-field category: M4 (AWF 0 dB)



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L6ARFL110LW L6ARFP120LW

FCC ID

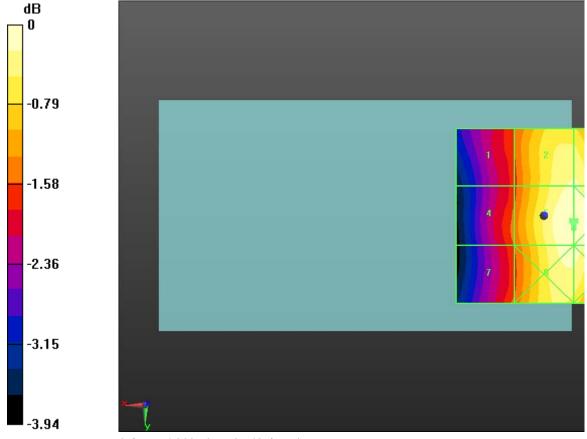
PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
65.30 V/m	78.12 V/m	78.15 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
66.38 V/m	80.50 V/m	80.53 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
66.66 V/m	79.70 V/m	79.70 V/m

Cursor:

Total = 80.526 V/mE Category: M4

Location: -9, 1.5, 8.7 mm



0 dB = 74.300 V/m = 37.42 dB V/m



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FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 12/19/2012 2:54:54 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_IV

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2641D6A8

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz, Frequency: 1732.6 MHz,

Frequency: 1752.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field UMTS band IV measurement with ER probe/E Scan - ER3D -2007: 15 mm from Probe Center to the Device Low Chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 16.96 V/m: Power Drift = -0.02 dB

PMR not calibrated. PMF = 1.030 is applied.

E-field emissions = 35.60 V/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
35.60 V/m	30.32 V/m	27.25 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
21.40 V/m	27.73 V/m	29.99 V/m



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Grid 7 M4	Grid 8 M4	Grid 9 M4
26.57 V/m	37.25 V/m	37.25 V/m

Cursor:

Total = 37.246 V/m E Category: M4

Location: -8.5, 25, 8.7 mm

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

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 14.74 V/m; Power Drift = -0.15 dB

PMR not calibrated. PMF = 1.030 is applied.

E-field emissions = 36.00 V/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
36.00 V/m	31.36 V/m	25.75 V/m
Grid 4 M4 22.38 V/m	Grid 5 M4 27.46 V/m	Grid 6 M4 30.37 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
27.95 V/m	39.78 V/m	39.80 V/m



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L6ARFP120LW

Cursor:

Total = 39.797 V/m E Category: M4 Location: -9, 25, 8.7 mm

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

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 15.68 V/m; Power Drift = 0.02 dB

PMR not calibrated. PMF = 1.030 is applied.

E-field emissions = 36.02 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
36.02 V/m	33.05 V/m	28.27 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
22.27 V/m	25.63 V/m	29.11 V/m
Grid 7 M4 28.75 V/m	Grid 8 M4 40.43 V/m	Grid 9 M4 40.50 V/m

Cursor:

Total = 40.495 V/m E Category: M4

Location: -9.5, 25, 8.7 mm



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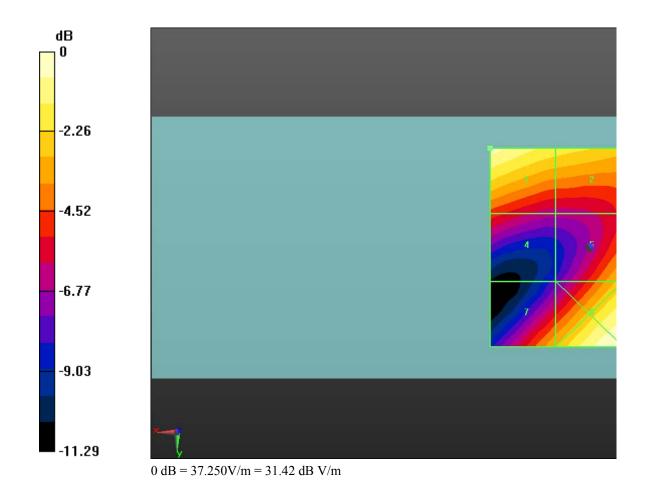
Author Data

Daoud Attayi

Dates of Te

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L6ARFL110LW L6ARFP120LW



Date/Time: 2/13/2013 4:17:29 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_02_13_13_Rev 2_speaker

DUT: BlackBerry Smartphone; Type: Sample; Serial: 26703205

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz,

Frequency: 1909.8 MHz

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

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Phantom section: RF Section

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

DASY Configuration:

• Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn472; Calibrated: 3/7/2012

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field GSM 1900 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid Compatibility

Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 25.39 V/m; Power Drift = -0.04 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 64.02 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M3	Grid 3 M3
65.28 V/m	71.59 V/m	69.76 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
50.68 V/m	64.02 V/m	64.02 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3
38.75 V/m	57.91 V/m	58.45 V/m



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FCC ID

Cursor:

Total = 71.59 V/m E Category: M3

Location: -2, -25, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the

Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 20.52 V/m; Power Drift = -0.17 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 57.87 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
52.88 V/m	54.89 V/m	52.37 V/m
Grid 4 M4	Grid 5 M3	Grid 6 M3
37.22 V/m	54.52 V/m	54.95 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3
39.63 V/m	57.81 V/m	57.87 V/m

Cursor:

Total = 57.87 V/m E Category: M3

Location: -9.5, 22.5, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the

Device_High_Chan/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 17.15 V/m; Power Drift = 0.21 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 62.02 V/m

Near-field category: M3 (AWF -5 dB)



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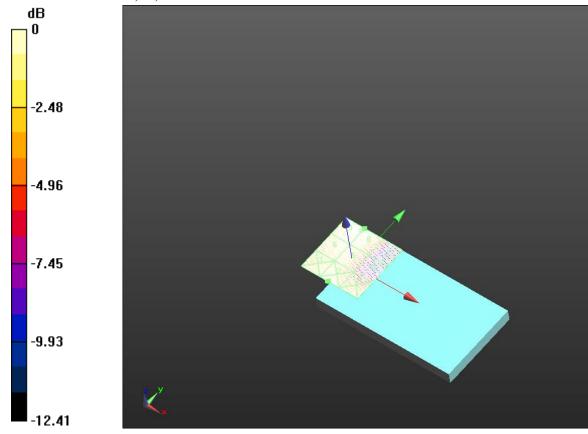
PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
47.38 V/m	50.53 V/m	49.05 V/m
Grid 4 M4	Grid 5 M3	Grid 6 M3
34.56 V/m	50.09 V/m	50.52 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3
44.42 V/m	62.02 V/m	62.02 V/m

Cursor:

Total = 62.02 V/mE Category: M3

Location: -8.5, 25, 8.7 mm



0 dB = 72.37 V/m = 37.19 dBV/m



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Date/Time: 2/13/2013 4:33:03 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_02_13_13_Rev 2_telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 26703205

Communication System: GSM 1900; Frequency: 1850.2 MHz Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/11/2013;
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn472; Calibrated: 3/7/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.4(1052); SEMCAD X 14.6.8(7028)

Device E-Field GSM 1900 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_telecoil/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 24.33 V/m; Power Drift = 0.25 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 66.89 V/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M3	Grid 3 M3
66.56 V/m	73.38 V/m	72.47 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
52.02 V/m	66.73 V/m	66.89 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3



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38.28 V/m 59.90 V/m 61.17 V/m

Cursor:

Total = 73.38 V/m E Category: M3

Location: -1, -33, 8.7 mm

Device E-Field GSM 1900 measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to Device_Low_Chan_2100 Battery_center of telecoil/Hearing Aid Compatibility Test

(101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 26.09 V/m; Power Drift = -0.17 dB

PMR not calibrated. PMF = 2.850 is applied.

E-field emissions = 68.07 V/m

Near-field category: M3 (AWF -5 dB)

PMF scaled E-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
67.61 V/m	74.52 V/m	73.49 V/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
53.85 V/m	67.98 V/m	68.07 V/m
Grid 7 M4	Grid 8 M3	Grid 9 M3
39.95 V/m	60.24 V/m	61.48 V/m

Cursor:

Total = 74.52 V/m E Category: M3

Location: 0.5, -33, 8.7 mm



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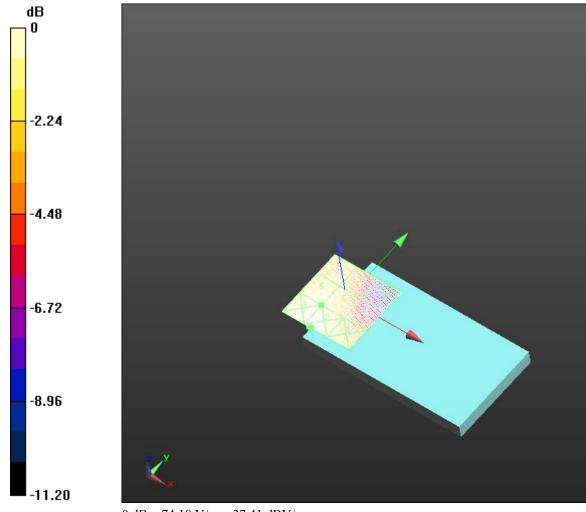
Author Data

Daoud Attayi

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012

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0 dB = 74.18 V/m = 37.41 dBV/m



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Date/Time: 12/19/2012 2:16:05 AM

FCC ID

Test Laboratory: RIM Testing Services

HAC RF_E-Field_UMTS_Band_II

DUT: BlackBerry Smartphone; Type: Sample; Serial: 2641D6A8

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz,

Frequency: 1907.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: ER3DV6 - SN2286; ConvF(1, 1, 1); Calibrated: 1/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device E-Field UMTS band II measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the Device_Low_Chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 22.50 V/m; Power Drift = -0.15 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 31.17 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
33.89 V/m	37.76 V/m	36.50 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
20.46 V/m	25.26 V/m	24.95 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4

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24.53 V/m	31.17 V/m	31.16 V/m
-----------	-----------	-----------

Cursor:

Total = 37.755 V/m E Category: M4

Location: -4, -25, 8.7 mm

Device E-Field UMTS band II measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the

Device_Mid_Chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 22.72 V/m; Power Drift = -0.11 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 30.47 V/m

Near-field category: M4 (AWF 0 dB)

PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
33.15 V/m	37.88 V/m	37.86 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
20.34 V/m	27.29 V/m	27.34 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
21.98 V/m	30.44 V/m	30.47 V/m

Cursor:

Total = 37.884 V/m E Category: M4

Location: -8, -25, 8.7 mm

Device E-Field UMTS band II measurement with ER probe/E Scan - ER3D - 2007: 15 mm from Probe Center to the

Device_High_Chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 26.24 V/m; Power Drift = -0.02 dB

PMR not calibrated. PMF = 1.000 is applied.

E-field emissions = 29.56 V/m

Near-field category: M4 (AWF 0 dB)



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FCC ID

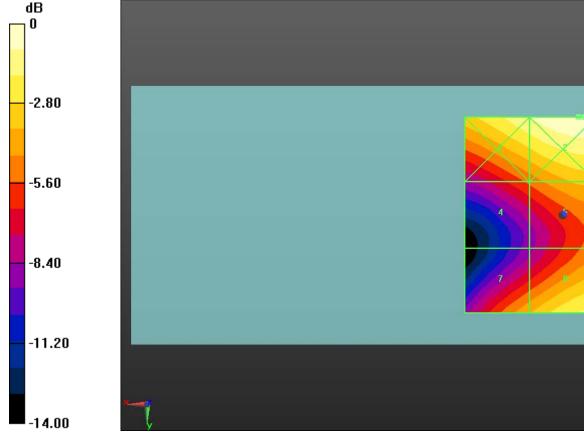
PMF scaled E-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
32.44 V/m	37.78 V/m	37.49 V/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
22.00 V/m	29.56 V/m	29.56 V/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
15.11 V/m	22.81 V/m	23.10 V/m

Cursor:

Total = 37.779 V/mE Category: M4

Location: -5.5, -25, 8.7 mm



0 dB = 37.760 V/m = 31.54 dB V/m



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Date/Time: 12/18/2012 11:17:23 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_850

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

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

848.8 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m; Power Drift = 0.43 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.49 A/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M4	Grid 3 M4
0.49 A/m	0.34 A/m	0.23 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.41 A/m	0.29 A/m	0.19 A/m



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Grid 7 M4	Grid 8 M4	Grid 9 M4
0.40 A/m	0.29 A/m	0.19 A/m

Cursor:

Total = 0.487 A/m H Category: M3

Location: 25, -25, 8.7 mm

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = -0.11 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.52 A/m

Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 M3	Grid 2 M4	Grid 3 M4
0.52 A/m	0.38 A/m	0.26 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.44 A/m	0.33 A/m	0.21 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.43 A/m	0.32 A/m	0.19 A/m

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = 0.06 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.51 A/m

Near-field category: M3 (AWF -5 dB)



Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model RFL111LW, RFP121LW

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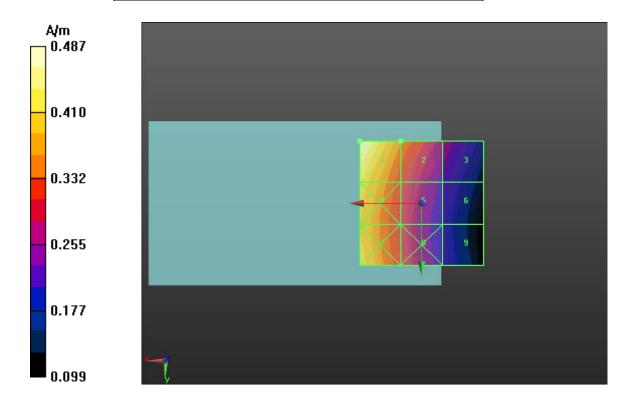
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Author Data **Daoud Attayi** Dates of Test Feb. 17, June 28, Dec. 17-19, 2012

Report No RTS-6026-1302-07 Feb. 13-14, 2013

FCC ID L6ARFL110LW L6ARFP120LW

Grid 1 M3	Grid 2 M4	Grid 3 M4
0.51 A/m	0.37 A/m	0.25 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.44 A/m	0.33 A/m	0.22 A/m
Grid 7 M3	Grid 8 M4	Grid 9 M4
0.45 A/m	0.33 A/m	0.22 A/m





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Author Data

Daoud Attavi

Dates of Tes

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 8:13:49 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_850_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 850; Frequency: 836.8 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = 0.06 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.56 A/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3 0.56 A/m	Grid 2 M4 0.43 A/m	Grid 3 M4 0.30 A/m
Grid 4 M3	Grid 5 M4	Grid 6 M4
0.48 A/m	0.37 A/m	0.26 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4



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Author Data **Daoud Attayi**

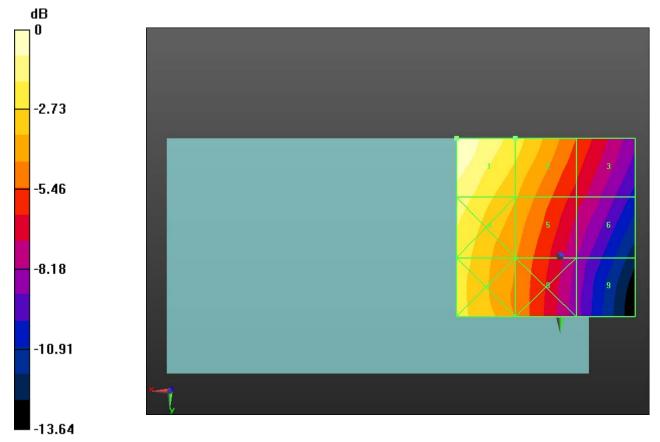
Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**

FCC ID

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0.22 A/m 0.44 A/m 0.33 A/m



0 dB = 0.560 A/m = -5.04 dB A/m



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Dates of Tes

Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 12:06:44 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_V

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz,

Frequency: 846.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m; Power Drift = 0.11 dB

PMR not calibrated. PMF = 1.070 is applied.

H-field emissions = 0.15 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.15 A/m	0.11 A/m	0.07 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.13 A/m	0.10 A/m	0.06 A/m



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Grid 7 M4	Grid 8 M4	Grid 9 M4
0.12 A/m	0.09 A/m	0.05 A/m

Cursor:

Total = 0.153 A/m H Category: M4

Location: 25, -25, 8.7 mm

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m; Power Drift = -0.04 dB

PMR not calibrated. PMF = 1.070 is applied.

H-field emissions = 0.17 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.17 A/m	0.12 A/m	0.08 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.14 A/m	0.11 A/m	0.07 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.14 A/m	0.10 A/m	0.06 A/m

Cursor:

Total = 0.167 A/m H Category: M4

Location: 25, -25, 8.7 mm

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = 0.06 dB

PMR not calibrated. PMF = 1.070 is applied.

H-field emissions = 0.19 A/m

Near-field category: M4 (AWF 0 dB)



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Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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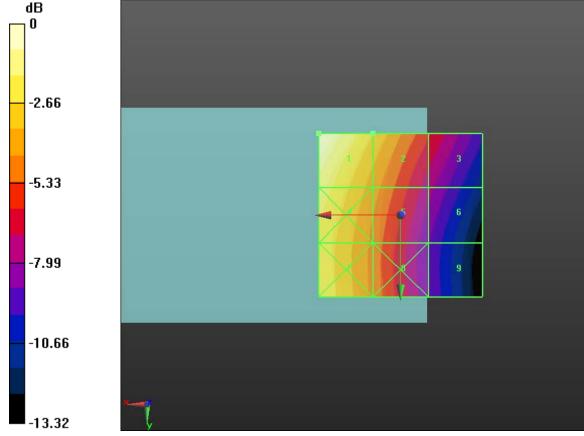
PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.19 A/m	0.14 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.16 A/m	0.12 A/m	0.08 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.17 A/m	0.13 A/m	0.08 A/m

Cursor:

Total = 0.186 A/mH Category: M4

Location: 25, -25, 8.7 mm



0 dB = 0.150 A/m = -16.48 dB A/m



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Date/Time: 12/18/2012 11:34:14 AM

FCC ID

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz,

Frequency: 1909.8 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m: Power Drift = 0.19 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.22 A/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3	Grid 2 M3	Grid 3 M3
0.21 A/m	0.21 A/m	0.22 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.16 A/m	0.22 A/m	0.22 A/m



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FCC ID

Grid 7 M3	Grid 8 M3	Grid 9 M3
0.20 A/m	0.20 A/m	0.20 A/m

Cursor:

Total = 0.218 A/m H Category: M3

Location: -11, -5.5, 8.7 mm

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m; Power Drift = -0.14 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.21 A/m

Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 M3 0.20 A/m	Grid 2 M3 0.20 A/m	Grid 3 M3 0.21 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.16 A/m	0.21 A/m	0.21 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
0.20 A/m	0.20 A/m	0.20 A/m

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

Device Reference Point: 0, 0, -6.3 mm

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

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.21 A/m

Near-field category: M3 (AWF -5 dB)



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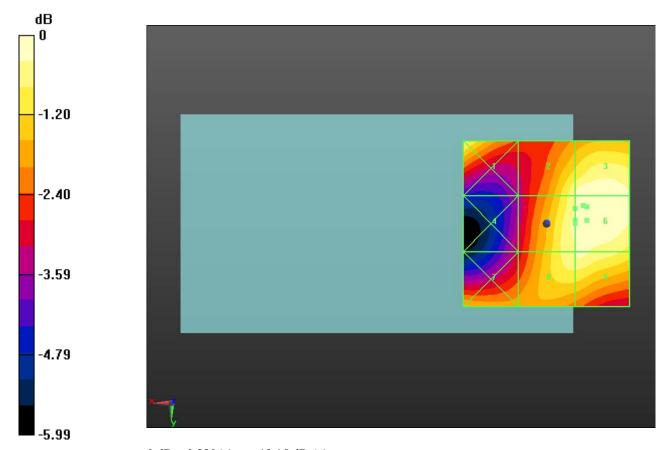
Author Data **Daoud Attayi** Dates of Test Feb. 17, June 28, Dec. 17-19, 2012

Report No **RTS-6026-1302-07** Feb. 13-14, 2013

L6ARFL110LW L6ARFP120LW

FCC ID

Grid 1 M3	Grid 2 M3	Grid 3 M3
0.20 A/m	0.20 A/m	0.21 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.14 A/m	0.20 A/m	0.21 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
0.17 A/m	0.20 A/m	0.20 A/m



0 dB = 0.220 A/m = -13.15 dB A/m



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L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 8:33:13 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900_Telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 1900; Frequency: 1850.2 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Device Reference Point: 0, 0, -6.3 mm

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

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.22 A/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M2 0.27 A/m	Grid 2 M3 0.21 A/m	Grid 3 M3 0.21 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.17 A/m	0.22 A/m	0.22 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3



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Author Data **Daoud Attayi**

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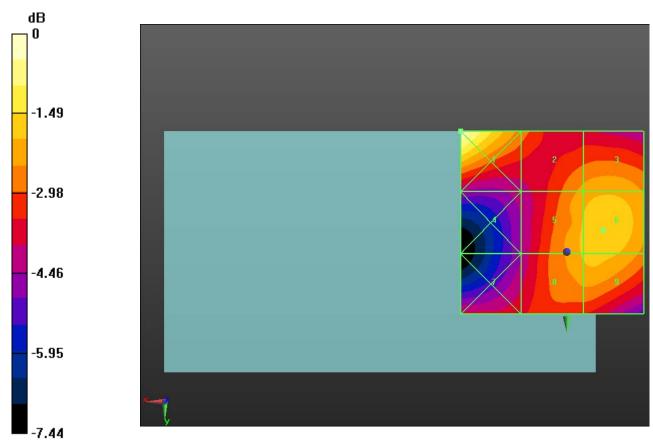
Report No **RTS-6026-1302-07**

FCC ID L6ARFL110LW L6ARFP120LW

0.18 A/m

0.22 A/m

0.22 A/m



0 dB = 0.270 A/m = -11.37 dB A/m



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Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 11:45:55 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM_1900_Telecoil_2100_Battery

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: GSM 1900; Frequency: 1850.2 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil_2100_Battery/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m; Power Drift = -0.06 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.22 A/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M2 0.27 A/m	Grid 2 M3 0.20 A/m	Grid 3 M3 0.21 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.16 A/m	0.21 A/m	0.22 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3



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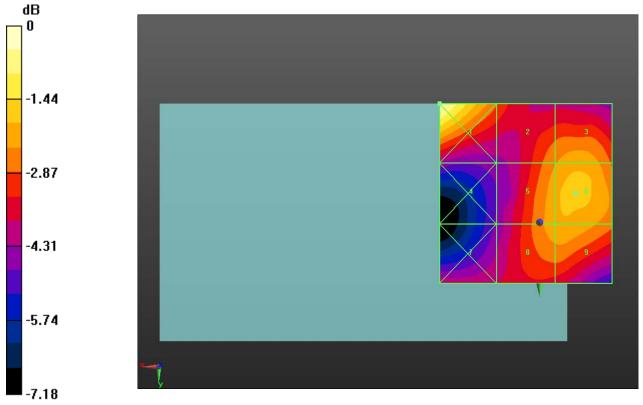
Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**

FCC ID L6ARFL110LW L6ARFP120LW

0.22 A/m 0.17 A/m 0.21 A/m



0 dB = 0.270 A/m = -11.37 dB A/m



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FCC ID L6ARFL110LW L6ARFP120LW

Date/Time: 12/18/2012 11:49:35 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS_Band_II

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0AD9

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz,

Frequency: 1907.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

• Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

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

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m: Power Drift = 0.06 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.09 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.08 A/m	0.08 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.07 A/m	0.09 A/m	0.09 A/m



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FCC ID

Grid 7 M4	Grid 8 M4	Grid 9 M4
0.08 A/m	0.08 A/m	0.08 A/m

Cursor:

Total = 0.087 A/m H Category: M4

Location: -12, -5, 8.7 mm

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

Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.08 V/m; Power Drift = 0.06 dB PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.09 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.08 A/m	0.09 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.07 A/m	0.09 A/m	0.09 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.09 A/m	0.08 A/m	0.08 A/m

Cursor:

Total = 0.090 A/m H Category: M4

Location: -12, -4, 8.7 mm

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m; Power Drift = 0.23 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.09 A/m

Near-field category: M4 (AWF 0 dB)



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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**

FCC ID L6ARFL110LW L6ARFP120LW

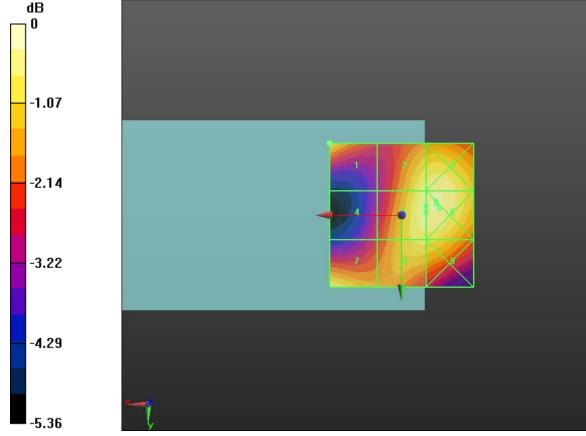
PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.09 A/m	0.08 A/m	0.08 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.06 A/m	0.08 A/m	0.09 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.07 A/m	0.08 A/m	0.08 A/m

Cursor:

Total = 0.086 A/mH Category: M4

Location: -13, -2.5, 8.7 mm



0 dB = 0.090 A/m = -20.92 dB A/m



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Dates of Te

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L6ARFL110LW L6ARFP120LW

FCC ID

Date/Time: 12/19/2012 10:36:06 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM 850

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0BA5

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

848.8 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field GSM 850_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m: Power Drift = 0.08 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.42 A/m

Near-field category: M4 (AWF -5 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.42 A/m	0.30 A/m	0.19 A/m
Grid 4 M4 0.36 A/m	Grid 5 M4	Grid 6 M4



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Grid 7 M4	Grid 8 M4	Grid 9 M4
0.35 A/m	0.25 A/m	0.15 A/m

Cursor:

Total = 0.419 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field GSM 850_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device mid chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m; Power Drift = -0.04 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.44 A/m

Near-field category: M4 (AWF -5 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.44 A/m	0.33 A/m	0.23 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.38 A/m	0.28 A/m	0.19 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.37 A/m	0.26 A/m	0.16 A/m



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L6ARFL110LW L6ARFP120LW

Cursor:

Total = 0.439 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field GSM 850_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.08 V/m; Power Drift = 0.10 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.43 A/m

Near-field category: M4 (AWF -5 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.43 A/m	0.32 A/m	0.22 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.38 A/m	0.28 A/m	0.19 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.38 A/m	0.28 A/m	0.18 A/m

Cursor:

Total = 0.431 A/m H Category: M4

Location: 25, -25, 8.7 mm



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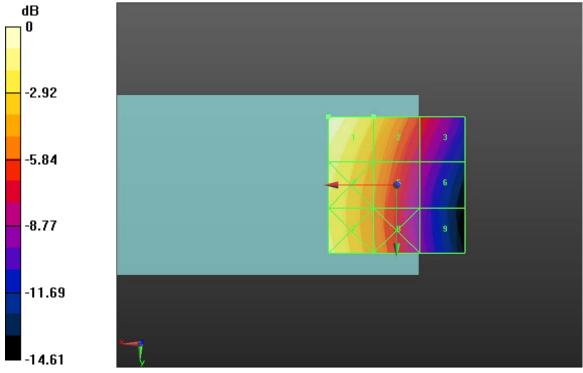
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Author Data **Daoud Attayi**

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0 dB = 0.420 A/m = -7.54 dB A/m



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Date/Time: 12/19/2012 10:49:32 AM

FCC ID

Test Laboratory: RIM Testing Services

HAC RF_H-Field_GSM 850_center of telecoil

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0BA5

Communication System: GSM 850; Frequency: 836.8 MHz Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/9/2012
- Sensor-Surface: (Fix Surface), z = 8.7
- Electronics: DAE3 Sn473; Calibrated: 1/13/2012
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified
- DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field GSM 850_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m; Power Drift = -0.06 dB

PMR not calibrated. PMF = 2.890 is applied.

H-field emissions = 0.49 A/m

Near-field category: M3 (AWF -5 dB)

Grid 1 M3 0.49 A/m	Grid 2 M4 0.38 A/m	Grid 3 M4 0.26 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.42 A/m	0.32 A/m	0.22 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4



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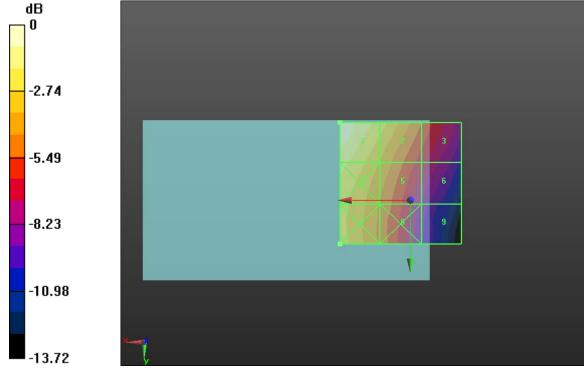
FCC ID L6ARFL110LW L6ARFP120LW

0.19 A/m 0.38 A/m0.29 A/m

Cursor:

Total = 0.489 A/mH Category: M3

Location: 29, -32, 8.7 mm



0 dB = 0.490 A/m = -6.20 dB A/m



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Date/Time: 12/19/2012 11:17:46 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS band V

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0BA5

Communication System: WCDMA FDD V; Frequency: 826.4 MHz, Frequency: 836.4 MHz,

Frequency: 846.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field UMTS band V_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m; Power Drift = 0.11 dB

PMR not calibrated. PMF = 1.090 is applied.

H-field emissions = 0.16 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.16 A/m	0.11 A/m	0.07 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.14 A/m	0.10 A/m	0.06 A/m



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Grid 7 M4		
0.14 A/m	0.10 A/m	0.06 A/m

Cursor:

Total = 0.157 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field UMTS band V_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device mid chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.07 V/m; Power Drift = -0.02 dB

PMR not calibrated. PMF = 1.090 is applied.

H-field emissions = 0.17 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.17 A/m	0.12 A/m	0.08 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.14 A/m	0.11 A/m	0.07 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.15 A/m	0.11 A/m	0.07 A/m



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Cursor:

Total = 0.166 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field UMTS band V_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

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

PMR not calibrated. PMF = 1.090 is applied.

H-field emissions = 0.18 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.18 A/m	0.14 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.16 A/m	0.12 A/m	0.08 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.17 A/m	0.13 A/m	0.09 A/m

Cursor:

Total = 0.184 A/m H Category: M4

Location: 25, -25, 8.7 mm



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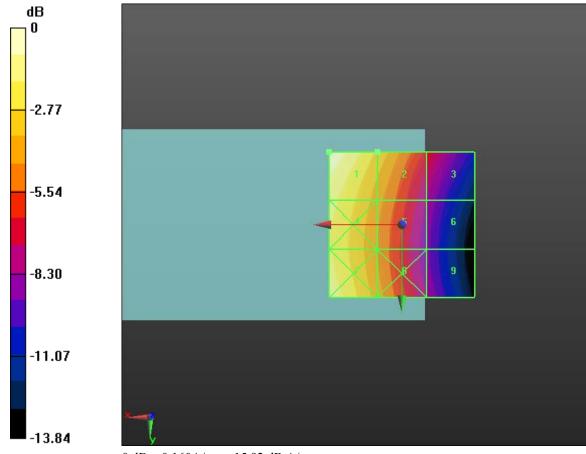
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Author Data **Daoud Attayi**

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0 dB = 0.160 A/m = -15.92 dB A/m



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L6ARFL110LW L6ARFP120LW

Date/Time: 12/19/2012 11:32:58 AM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS band IV

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0BA5

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz, Frequency: 1732.6 MHz,

Frequency: 1752.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field UMTS band IV_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = -0.04 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.10 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.10 A/m	0.09 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.08 A/m	0.09 A/m	0.09 A/m



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Grid 7 M4	Grid 8 M4	Grid 9 M4
0.08 A/m	0.08 A/m	0.08 A/m

Cursor:

Total = 0.097 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field UMTS band IV_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device mid chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.10 A/m

Near-field category: M4 (AWF 0 dB)

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.09 A/m	0.10 A/m	0.10 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.09 A/m	0.10 A/m	0.10 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.09 A/m	0.09 A/m	0.09 A/m



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Cursor:

Total = 0.100 A/m H Category: M4

Location: -11, -14.5, 8.7 mm

Device H-Field UMTS band IV_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.10 V/m; Power Drift = -0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.10 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.09 A/m	0.11 A/m	0.11 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.09 A/m	0.10 A/m	0.11 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.09 A/m	0.10 A/m	0.09 A/m

Cursor:

Total = 0.106 A/m H Category: M4

Location: -11.5, -13, 8.7 mm



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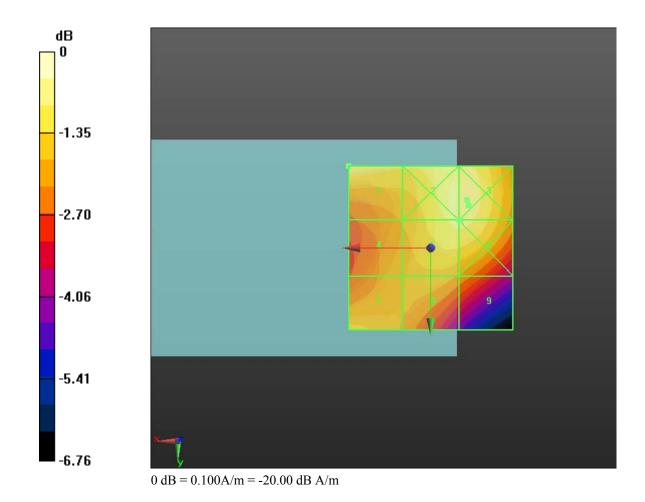
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Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

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HAC RF_H-Field_02_14_13_Rev 2_speaker

Device H-Field GSM 1900_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.06400 A/m; Power Drift = -0.13 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.1812 A/m

Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
0.249 A/m	0.204 A/m	0.162 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.190 A/m	0.181 A/m	0.162 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
0.147 A/m	0.150 A/m	0.141 A/m

Cursor:

Total = 0.2486 A/m H Category: M3

Location: 25, -25, 8.7 mm

Device H-Field GSM 1900_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.06000 A/m; Power Drift = -0.13 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.1658 A/m

Near-field category: M3 (AWF -5 dB)



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Grid 1 M3	Grid 2 M3	Grid 3 M3
0.199 A/m	0.173 A/m	0.152 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.168 A/m	0.166 A/m	0.152 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M4
0.149 A/m	0.148 A/m	0.136 A/m

Cursor:

Total = 0.1994 A/m H Category: M3

Location: 25, -25, 8.7 mm

Device H-Field GSM 1900_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.05600 A/m; Power Drift = -0.08 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.1521 A/m

Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 M3	Grid 2 M3	Grid 3 M3
0.152 A/m	0.143 A/m	0.142 A/m
Grid 4 M3 0.141 A/m	Grid 5 M3	Grid 6 M3 0.144 A/m
Grid 7 M3	Grid 8 M4	Grid 9 M4
0.152 A/m	0.136 A/m	0.132 A/m

Cursor:

Total = 0.1523 A/m H Category: M3

Location: 25, -25, 8.7 mm



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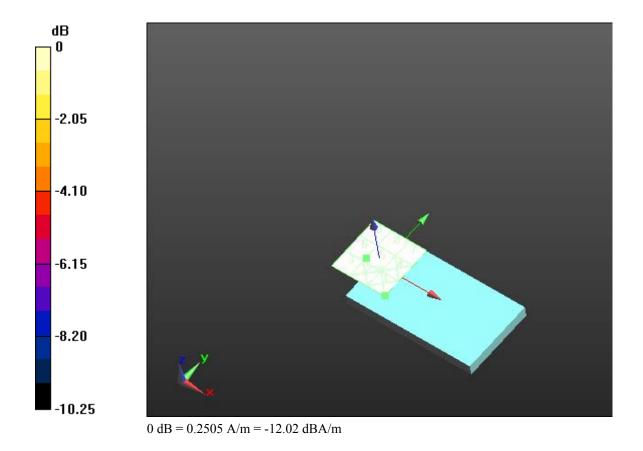
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HAC RF_H-Field_02_14_13_Rev 2_telecoil

Device H-Field GSM 1900_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil/Hearing Aid

Compatibility Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.06300 A/m; Power Drift = 0.01 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.1939 A/m

Near-field category: M3 (AWF -5 dB)

PMF scaled H-field

Grid 1 M2	Grid 2 M3	Grid 3 M3
0.271 A/m	0.225 A/m	0.168 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.217 A/m	0.194 A/m	0.167 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
0.160 A/m	0.163 A/m	0.158 A/m

Cursor:

Total = 0.2710 A/m H Category: M2

Location: 29, -32, 8.7 mm

Device H-Field GSM 1900_meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_Centre_Telecoil_2100_Battery/Hearing Aid Compatibility

Test (101x101x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.06300 A/m; Power Drift = 0.15 dB

PMR not calibrated. PMF = 2.860 is applied.

H-field emissions = 0.1945 A/m

Near-field category: M3 (AWF -5 dB)



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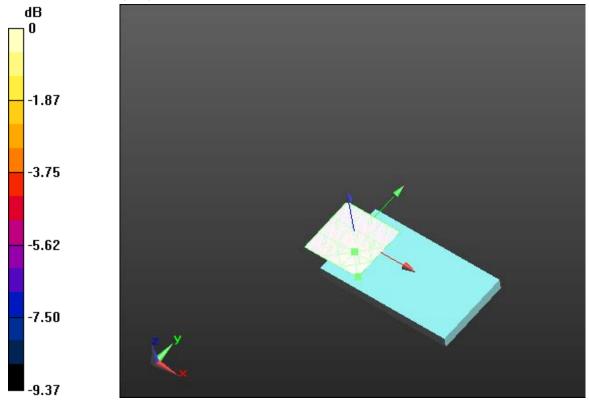
FCC ID L6ARFL110LW L6ARFP120LW

0.272 A/m	0.226 A/m	0.167 A/m
Grid 4 M3	Grid 5 M3	Grid 6 M3
0.211 A/m	0.195 A/m	0.167 A/m
Grid 7 M3	Grid 8 M3	Grid 9 M3
0.157 A/m	0.159 A/m	0.155 A/m

Cursor:

Total = 0.2721 A/mH Category: M2

Location: 29, -32, 8.7 mm



0 dB = 0.2730 A/m = -11.28 dBA/m

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Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013 RTS-6026-1302-07

L6ARFL110LW L6ARFP120LW

Date/Time: 12/19/2012 11:52:50 AM

FCC ID

Test Laboratory: RIM Testing Services

HAC RF_H-Field_UMTS band II

DUT: BlackBerry Smartphone; Type: Sample; Serial: 25CF0BA5

Communication System: WCDMA FDD II; Frequency: 1852.4 MHz, Frequency: 1880 MHz,

Frequency: 1907.6 MHz

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

Phantom section: RF Section

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

DASY Configuration:

• Probe: H3DV6 - SN6105; ; Calibrated: 11/9/2012

• Sensor-Surface: (Fix Surface), z = 8.7

• Electronics: DAE3 Sn473; Calibrated: 1/13/2012

Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA; Serial: Not Specified

• DASY52 52.8.0(692); SEMCAD X 14.6.4(4989)

Device H-Field UMTS band II_meausrement with H3DV6 probe 2/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_low_chan/Hearing Aid

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

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.10 V/m; Power Drift = 0.03 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.09 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4 0.11 A/m	Grid 2 M4 0.09 A/m	Grid 3 M4 0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.08 A/m	0.09 A/m	0.09 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4

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Author Data

Daoud Attavi

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0.07 A/m	0.09 A/m	0.09 A/m
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Cursor:

Total = 0.106 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field UMTS band II_meausrement with H3DV6 probe 2/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_mid_chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.10 V/m; Power Drift = -0.02 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.10 A/m

Near-field category: M4 (AWF 0 dB)

PMF scaled H-field

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.11 A/m	0.10 A/m	0.10 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.08 A/m	0.10 A/m	0.10 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.07 A/m	0.09 A/m	0.09 A/m

Cursor:

Total = 0.113 A/m H Category: M4

Location: 25, -25, 8.7 mm

Device H-Field UMTS band II_meausrement with H3DV6 probe 2/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device_high_chan/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mm Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.09 V/m; Power Drift = 0.01 dB

PMR not calibrated. PMF = 1.000 is applied.

H-field emissions = 0.09 A/m

Near-field category: M4 (AWF 0 dB)



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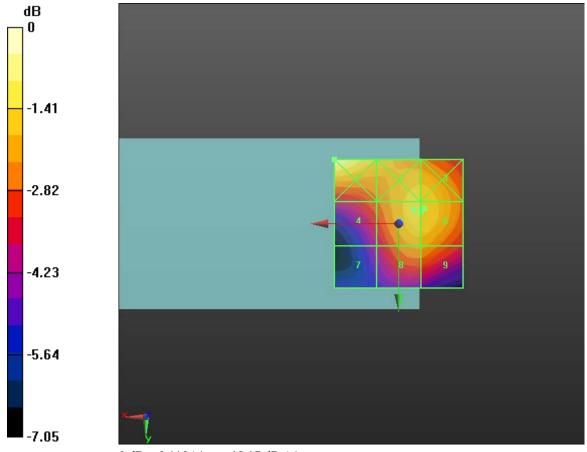
Author Data **Daoud Attayi**

Dates of Test Feb. 17, June 28, Dec. 17-19, 2012 Feb. 13-14, 2013

Report No **RTS-6026-1302-07**

FCC ID L6ARFL110LW L6ARFP120LW

Grid 1 M4	Grid 2 M4	Grid 3 M4
0.11 A/m	0.10 A/m	0.09 A/m
Grid 4 M4	Grid 5 M4	Grid 6 M4
0.08 A/m	0.09 A/m	0.09 A/m
Grid 7 M4	Grid 8 M4	Grid 9 M4
0.07 A/m	0.08 A/m	0.08 A/m



0 dB = 0.110A/m = -19.17 dB A/m