Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 1 (140)
Author Data Daoud Attayi	Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	Report No RTS-5316-1109-55A	FCC ID L6AREA L6AREE	A70UW 370UW

Annex A: Measurement data and plots

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

Testing Services™	Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 2 (140)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW



GSM 835 MHz

Testing Services™	Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 3 (140)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW



CW 835 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 4 (140)
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Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW 370UW



AM 80% 835 MHz

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Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREH	A70UW B70UW



GSM 1880 MHz

Testing Services™	Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 6 (140)
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Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW

All Andread An	Att 60 dB	RBW 3800 kHz M *UBW 390 kHz SWT 5 ms	larker 1 [T1] 16.32 dBm 340.000000 µs	SELI
28				B PE
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-18				REF L = MKR
-3				NEXT
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				NEX PEAK 1
				SE ARU
Center 1.88 GH	2 5	10 yar		IIKR->IR

CW 1880 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 7 (140)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREH	A70UW B70UW



AM 80 % 1880 MHz

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Author Data	Dates of Test Feb 28 Mar 22 23 Apr 05 Aug	Report No DTS 5316 1100 554	FCC ID	701132
Daoud Allayi	09-31, 2011	K15-5510-1109-55A	LOAREA L6AREA	870UW



UMTS 1733 MHz

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NNCER 1 1.49 ms 2F 17 dBm	Att 58 dB	RBN 10 HHz * UBN 30 kHz SNT 2.5 ms	Marker 1 [T1] 10.51 dB/ 1.490000 ms	SELECT MARKER
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				CENTER = MKR FREQ
-10				REF LEVEL = MKR LVL
38				NEXT PEAK
-54				NEXT PEAK RIGHT
68				NEXT PEAK LEFT
-70				SEARCH LIMITS 0
Center 1.733 GHz PECTRUM		258 µs/	SCREEN	B

CW 1733 MHz

Testing Services™	Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 10 (140)
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREH	A70UW B70UW



AM 80% 1733 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW



UMTS 835 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREH	A70UW B70UW

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A						NEXT PEAK LEFT SEARCH
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0					\Box	PREV NEXT

CW 835 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREE	A70UW B70UW



AM 80% 835 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW



UMTS 1880 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW

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CW 1880 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREE	A70UW B70UW



AM 80 % 1880 MHz

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data Daoud Attayi	Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	Report No RTS-5316-1109-55A	FCC ID L6AREA L6AREH	A70UW 370UW

A.2 Dipole validation and probe modulation factor plots

Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data Daoud Attayi	Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	Report No RTS-5316-1109-55A	FCC ID L6AREA L6AREA	A70UW 370UW

Date/Time: 9/6/2011 12:21:44 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_835 MHz_09_06_11

DUT: HAC-Dipole 835 MHz; Type: D835V3

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)

DASY5 Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

(41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 157.2 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 118.2 V/m; Power Drift = 0.003 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in	V/m	
Grid 1	Grid 2	Grid 3
154.0 M4	157.2 M4	152.8 M4
Grid 4	Grid 5	Grid 6
83.638 M4	85.844 M4	83.612 M4
Grid 7	Grid 8	Grid 9

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Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data Daoud Attayi	Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	Report No RTS-5316-1109-55A	FCC ID L6AREA L6AREA	A70UW 370UW





0 dB = 157.2 V/m

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Date/Time: 7/28/2011 2:17:53 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_835 MHz_07_28_11

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

(41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 164.3 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 119.3 V/m; Power Drift = 0.03 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

	v / III	
Grid 1	Grid 2	Grid 3
160.2 M4	164.3 M4	160.1 M4
Grid 4	Grid 5	Grid 6
83.918 M4	88.015 M4	86.156 M4

Peak E-field in V/m

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Grid 7	Grid 8	Grid 9
151.5 M4	158.5 M4	156.7 M4

Cursor:

Total = 164.3 V/m E Category: M4 Location: 0, -78.5, 4.7 mm



0 dB = 164.3 V/m

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

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: GSM 850;; Frequency: 835 MHz;Communication System PAR: 9.191 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 54.142 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 38.642 V/m; Power Drift = -0.06 dB Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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	09-31, 2011		LOAKEE	370U W

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
51.408 M4	54.142 M4	52.509 M4
Grid 4	Grid 5	Grid 6
27.621 M4	27.841 M4	27.144 M4
Grid 7	Grid 8	Grid 9
49.045 M4	49.106 M4	47.011 M4

Cursor:

Total = 54.142 V/m E Category: M4 Location: -0.5, -79.5, 4.7 mm

Testing Services™	Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			Page 24 (140)
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Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	470UW 870UW



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

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CW835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 159.3 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 120.6 V/m; Power Drift = -0.10 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
153.1 M4	159.3 M4	154.5 M4
Grid 4	Grid 5	Grid 6
8066 M4	86.943 M4	84.863 M4
Grid 7	Grid 8	Grid 9
153.2 M4	154.9 M4	151.1 M4

Cursor:

Total = 159.3 V/m E Category: M4 Location: 0, -79, 4.7 mm

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0 dB = 159.3 V/m

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Date/Time: 3/22/2011 3:09:37 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_AM80%835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 99.820 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 74.981 V/m; Power Drift = -0.17 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
96.553 M4	99.820 M4	97.313 M4
Grid 4	Grid 5	Grid 6
54.091 M4	55.431 M4	53.882 M4
Grid 7	Grid 8	Grid 9
95.955 M4	97.176 M4	95.117 M4

Cursor:

Total = 99.821 V/m E Category: M4 Location: 0, -79, 4.7 mm

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	09-31, 2011		L6AREI	370UW



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Date/Time: 9/6/2011 12:38:29 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_09_06_11

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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)

DASY5 Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 132.7 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 121.7 V/m; Power Drift = 0.01 dB Hearing Aid Near-Field Category: M2 (AWF 0 dB)

Peak E-field in	V/m	
Grid 1	Grid 2	Grid 3
129.0 M2	132.7 M2	126.6 M2
Grid 4	Grid 5	Grid 6
84.974 M3	89.583 M3	88.503 M3
Grid 7	Grid 8	Grid 9

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0 dB = 132.7 V/m

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Date/Time: 7/28/2011 2:35:18 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_validation_1880 MHz_07_28_11

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 129.3 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 121.3 V/m; Power Drift = 0.03 dB Hearing Aid Near-Field Category: M2 (AWF 0 dB)

	v / III	
Grid 1	Grid 2	Grid 3
126.4 M2	129.3 M2	123.2 M2
Grid 4	Grid 5	Grid 6
82.402 M3	86.640 M3	85.561 M3

Peak E-field in V/m

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

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_GSM_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: GSM 1900; Frequency: 1880 MHz;Communication System PAR: 9.191 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 27.663 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 25.374 V/m; Power Drift = 0.02 dB Hearing Aid Near-Field Category: M4 (AWF -5 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
27.050 M4	27.663 M4	26.052 M4
Grid 4	Grid 5	Grid 6
17.031 M4	18.013 M4	17.833 M4
Grid 7	Grid 8	Grid 9
2036 M4	25.539 M4	25.116 M4

Cursor:

Total = 27.663 V/m E Category: M4 Location: 0.5, -38.5, 4.7 mm
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Date/Time: 3/23/2011 12:08:40 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_CW1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 82.216 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 78.932 V/m; Power Drift = 0.0039 dB Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
79.692 M3	82.216 M3	79.228 M3
Grid 4	Grid 5	Grid 6
52.849 M4	55.292 M4	54.232 M4
Grid 7	Grid 8	Grid 9
76.960 M3	78.815 M3	76.489 M3

Total = 82.216 V/m E Category: M3 Location: 0, -38.5, 4.7 mm



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Date/Time: 3/22/2011 4:12:07 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_AM80%1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 53.337 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 49.939 V/m; Power Drift = -0.09 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
52.377 M4	53.337 M4	50.671 M4
Grid 4	Grid 5	Grid 6
3062 M4	35.058 M4	3043 M4
Grid 7	Grid 8	Grid 9
48.429 M4	49.374 M4	48.243 M4

Total = 53.337 V/m E Category: M4 Location: 0.5, -38.5, 4.7 mm

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0 dB = 53.340 V/m

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Date/Time: 9/6/2011 1:07:00 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_835 MHz_09_06_11

DUT: HAC-Dipole 835 MHz; Type: D835V3

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)

DASY5 Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid

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

Maximum value of peak Total field = 0.474 A/mProbe Modulation Factor = 1.000Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.499 A/m; Power Drift = 0.0095 dB

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

Peak H-field in	n A/m	
Grid 1	Grid 2	Grid 3
0.437 M4	0.450 M4	0.422 M4
Grid 4	Grid 5	Grid 6
0.451 M4	0.474 M4	0.444 M4
Grid 7	Grid 8	Grid 9

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Date/Time: 7/28/2011 4:42:32 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_835 MHz_07_28_11

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/18/2010
 - o Modulation Compensation: Not calibrated
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid **Compatibility Test (41x181x1):** Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.486 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.518 A/m; Power Drift = 0.0044 dB

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

Peak H-field in	n A/m
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Grid 1	Grid 2	Grid 3
0.444 M4	0.460 M4	0.445 M4
Grid 4	Grid 5	Grid 6

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0.467 M4	0.486 M4	0.462 M4
Grid 7	Grid 8	Grid 9
0.466 M4	0.481 M4	0.448 M4



0 dB = 0.490 A/m

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Date/Time: 3/23/2011 3:06:50 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: GSM 850; Frequency: 835 MHz;Communication System PAR: 9.191 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid

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

Maximum value of peak Total field = 0.168 A/m Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

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

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

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Peak H-field in

Grid 1	Grid 2	Grid 3
0.154 M4	0.163 M4	0.148 M4
Grid 4	Grid 5	Grid 6
0.159 M4	0.168 M4	0.153 M4
Grid 7	Grid 8	Grid 9
0.155 M4	0.165 M4	0.148 M4



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

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.482 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.503 A/m; Power Drift = -0.00099 dB

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

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	09-31, 2011		L6AREF	870UW

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.429 M4	0.450 M4	0.439 M4
Grid 4	Grid 5	Grid 6
0.449 M4	0.482 M4	0.458 M4
Grid 7	Grid 8	Grid 9
0.441 M4	0.475 M4	0.448 M4

Total = 0.482 A/m H Category: M4 Location: -0.5, 6, 4.7 mm



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

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%835 MHz_GSM

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.302 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.326 A/m; Power Drift = -0.16 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.276 M4	0.292 M4	0.279 M4
Grid 4	Grid 5	Grid 6
0.286 M4	0.302 M4	0.289 M4
Grid 7	Grid 8	Grid 9
0.283 M4	0.299 M4	0.281 M4

Total = 0.302 A/m H Category: M4 Location: 0, 4.5, 4.7 mm



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Date/Time: 9/6/2011 12:58:12 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_09_06_11

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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)

DASY5 Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid

Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.471 A/mProbe Modulation Factor = 1.000Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.501 A/m; Power Drift = -0.01 dB

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

Peak H-field in	n A/m	
Grid 1	Grid 2	Grid 3
0.440 M2	0.456 M2	0.435 M2
Grid 4	Grid 5	Grid 6
0.452 M2	0.471 M2	0.449 M2
Grid 7	Grid 8	Grid 9

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0 dB = 0.470 A/m

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Date/Time: 7/28/2011 4:53:10 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_validation_1880 MHz_07_28_11

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 11/18/2010
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

Dipole H-Field 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

Dook I field in A/m

Maximum value of peak Total field = 0.461 A/m Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.489 A/m; Power Drift = 0.04 dB

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

Feak H-Heid II	I A/III	
Grid 1	Grid 2	Grid 3
0.425 M2	0.442 M2	0.425 M2
Grid 4	Grid 5	Grid 6
0.441 M2	0.461 M2	0.440 M2

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0 dB = 0.460 A/m

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

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_GSM_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: GSM 1900; Frequency: 1880 MHz;Communication System PAR: 9.191 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid

Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.099 A/m Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

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

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

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	09-31, 2011		L6AREE	870UW

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.090 M4	0.095 M4	0.091 M4
Grid 4	Grid 5	Grid 6
0.093 M4	0.099 M4	0.094 M4
Grid 7	Grid 8	Grid 9
0.090 M4	0.097 M4	0.091 M4

Total = 0.099 A/m H Category: M4 Location: 0, 0.5, 4.7 mm



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Date/Time: 3/23/2011 12:41:56 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.284 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.302 A/m; Power Drift = -0.03 dB Hearing Aid Near-Field Category: M3 (AWF 0 dB)

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	09-31, 2011		LOAREE	370U W

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.263 M3	0.274 M3	0.265 M3
Grid 4	Grid 5	Grid 6
0.271 M3	0.284 M3	0.274 M3
Grid 7	Grid 8	Grid 9
0.263 M3	0.278 M3	0.266 M3

Total = 0.284 A/mH Category: M3 Location: 0, 0.5, 4.7 mm



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Date/Time: 3/23/2011 12:51:39 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%1880 MHz_GSM

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: TCoil Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.184 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.196 A/m; Power Drift = -0.02 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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

Grid 1	Grid 2	Grid 3
0.170 M4	0.178 M4	0.171 M4
Grid 4	Grid 5	Grid 6
0.175 M4	0.184 M4	0.177 M4
Grid 7	Grid 8	Grid 9
0.170 M4	0.180 M4	0.172 M4



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Test Laboratory: RIM Testing Services

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: WCDMA FDD V; Communication System Band:; Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 56.944 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 42.995 V/m; Power Drift = 0.01 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

> Peak E-field in V/m Grid 1 Grid 2 Grid 3 53.505 M4 56.944 M4 56.718 M4 Grid 4 Grid 6 Grid 5 31.039 M4 30.245 M4 30.372 M4 Grid 7 Grid 8 Grid 9 54.971 M4 56.115 M4 54.501 M4

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Date/Time: 2/28/2011 12:43:40 PM

Test Laboratory: RIM Testing Services

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x361x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 57.608 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm

Reference Value = 42.622 V/m; Power Drift = -0.06 dB

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

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
54.388 M4	57.608 M4	56.620 M4
Grid 4	Grid 5	Grid 6
30.355 M4	30.943 M4	30.261 M4
Grid 7	Grid 8	Grid 9
54.334 M4	55.102 M4	5076 M4





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Date/Time: 2/28/2011 12:54:03 PM

Test Laboratory: RIM Testing Services

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x361x1): Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 37.106 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 26.469 V/m; Power Drift = 0.17 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
35.158 M4	37.106 M4	36.227 M4
Grid 4	Grid 5	Grid 6
19.445 M4	19.878 M4	19.259 M4
Grid 7	Grid 8	Grid 9
34.812 M4	35.203 M4	34.158 M4

Cursor:

Total = 37.106 V/m E Category: M4 Location: -0.5, -79, 4.7 mm



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Date/Time: 2/28/2011 2:07:15 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_PMF_UMTS_band_II_1880 MHz

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

Communication System: WCDMA FDD II;.; Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 38.483 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 35.028 V/m; Power Drift = 0.10 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
36.706 M4	38.483 M4	37.337 M4
Grid 4	Grid 5	Grid 6
24.878 M4	25.643 M4	25.076 M4
Grid 7	Grid 8	Grid 9
35.871 M4	35.988 M4	34.479 M4

Cursor:



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Date/Time: 2/28/2011 2:16:59 PM

Test Laboratory: RIM Testing Services

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 43.024 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 38.861 V/m; Power Drift = 0.02 dB

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

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
40.897 M4	43.024 M4	41.671 M4
Grid 4	Grid 5	Grid 6
27.919 M4	28.886 M4	28.274 M4
Grid 7	Grid 8	Grid 9
39.759 M4	40.082 M4	38.641 M4

Total = 43.024 V/m E Category: M4 Location: -0.5, -38.5, 4.7 mm


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Date/Time: 2/28/2011 2:21:55 PM

Test Laboratory: RIM Testing Services

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

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

(41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 27.543 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 25.024 V/m; Power Drift = -0.0069 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak E-field in V/m

Grid 1	Grid 2	Grid 3
26.151 M4	27.543 M4	26.639 M4
Grid 4	Grid 5	Grid 6
17.904 M4	18.574 M4	18.189 M4
Grid 7	Grid 8	Grid 9
25.506 M4	25.701 M4	24.770 M4

Cursor:

Total = 27.543 V/m E Category: M4 Location: -0.5, -38.5, 4.7 mm



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Date/Time: 4/5/2011 3:15:31 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_1733 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: WCDMA FDD IV, Communication System: CW, Communication System: AM80%; Communication System Band: 1733; Frequency: 1732.6 MHz, Frequency: 1733 MHz;Communication System PAR: 0 dB 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)

DASY5 Configuration:

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

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

(**41x181x1**): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 45.953 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 45.671 V/m; Power Drift = 0.0022 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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	09-31, 2011		LOAREE	\$70UW

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
44.309 M4	45.897 M4	43.942 M4
Grid 4	Grid 5	Grid 6
32.194 M4	33.381 M4	32.650 M4
Grid 7	Grid 8	Grid 9
45.541 M4	45.953 M4	44.163 M4

Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2/Hearing Aid

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

Maximum value of peak Total field = 44.684 V/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm

Reference Value = 44.777 V/m; Power Drift = -0.03 dB

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

Grid 1	Grid 2	Grid 3
42.576 M4	44.154 M4	42.558 M4
Grid 4	Grid 5	Grid 6
31.220 M4	32.494 M4	31.749 M4
Grid 7	Grid 8	Grid 9
44.140 M4	44.684 M4	42.994 M4

Peak E-field in V/m

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Dipole E-Field measurement/E Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2 2/Hearing Aid

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

Maximum value of peak Total field = 28.697 V/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 28.666 V/m; Power Drift = -0.03 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
27.579 M4	28.576 M4	27.503 M4
Grid 4	Grid 5	Grid 6
20.034 M4	20.866 M4	20.402 M4
Grid 7	Grid 8	Grid 9
28.387 M4	28.697 M4	27.712 M4

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0 dB = 45.950 V/m

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Date/Time: 2/28/2011 3:32:16 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS_band V_835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: WCDMA FDD V; Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.168 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.178 A/m; Power Drift = 0.23 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.153 M4	0.160 M4	0.154 M4
Grid 4	Grid 5	Grid 6
0.160 M4	0.168 M4	0.161 M4
Grid 7	Grid 8	Grid 9
0.159 M4	0.166 M4	0.157 M4

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0 dB = 0.170 A/m

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.166 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.177 A/m; Power Drift = -0.10 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field	in	A/m
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Grid 1	Grid 2	Grid 3
0.151 M4	0.158 M4	0.151 M4
Grid 4	Grid 5	Grid 6
0.157 M4	0.166 M4	0.159 M4
Grid 7	Grid 8	Grid 9
0.156 M4	0.164 M4	0.155 M4

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%835 MHz

DUT: HAC-Dipole 835 MHz; Type: D835V3

Communication System: AM 80%; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD835 Dipole = 10mm/Hearing Aid Compatibility Test (41x181x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.106 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.113 A/m; Power Drift = 0.0097 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.096 M4	0.100 M4	0.096 M4
Grid 4	Grid 5	Grid 6
0.100 M4	0.106 M4	0.101 M4
Grid 7	Grid 8	Grid 9
0.100 M4	0.104 M4	0.098 M4

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 $0 \, dB = 0.110 \, A/m$

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_UMTS_band II_1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: WCDMA FDD II; Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.138 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.147 A/m; Power Drift = 0.04 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field in	n A/m
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Grid 1	Grid 2	Grid 3
0.127 M4	0.134 M4	0.128 M4
Grid 4	Grid 5	Grid 6
0.132 M4	0.138 M4	0.132 M4
Grid 7	Grid 8	Grid 9
0.129 M4	0.136 M4	0.127 M4

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0 dB = 0.140 A/m

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Date/Time: 2/28/2011 2:40:44 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_CW1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: TCoil Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.155 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.163 A/m; Power Drift = 0.06 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field	in A/m
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Grid 1	Grid 2	Grid 3
0.142 M4	0.149 M4	0.144 M4
Grid 4	Grid 5	Grid 6
0.147 M4	0.155 M4	0.148 M4
Grid 7	Grid 8	Grid 9
0.143 M4	0.151 M4	0.143 M4

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Test Laboratory: RIM Testing Services

HAC RF_H-Field_PMF_AM80%1880 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: AM 80%; Communication System Band: D1900 (1900.0 MHz); Frequency: 1880 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: TCoil Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field measurement with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.099 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.106 A/m; Power Drift = 0.0091 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.091 M4	0.096 M4	0.092 M4
Grid 4	Grid 5	Grid 6
0.094 M4	0.099 M4	0.095 M4
Grid 7	Grid 8	Grid 9
0.092 M4	0.097 M4	0.091 M4

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0 dB = 0.100 A/m

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Date/Time: 4/5/2011 4:22:30 PM

Test Laboratory: RIM Testing Services

HAC RF_H-Field_1733 MHz

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: WCDMA FDD IV, Communication System: CW, Communication System: AM80%; Communication System Band: D1800 (1800.0 MHz); Frequency: 1732.6 MHz, Frequency: 1733 MHz;Communication System PAR: 0 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

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

Dipole H-Field with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm/Hearing Aid Compatibility Test (41x101x1): Measurement grid: dx=5mm, dy=5mm

Maximum value of peak Total field = 0.165 A/m Probe Modulation Factor = 1.000 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.175 A/m; Power Drift = -0.0064 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

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Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.156 M4 0.151 M4 0.148 M4 Grid 4 Grid 5 Grid 6 0.156 M4 0.159 M4 0.165 M4 Grid 7 Grid 8 Grid 9 0.151 M4 0.160 M4 0.153 M4

Dipole H-Field with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2/Hearing

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

Maximum value of peak Total field = 0.160 A/mProbe Modulation Factor = 1.000Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.172 A/m; Power Drift = -0.08 dB

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

	1 7 8/111	
Grid 1	Grid 2	Grid 3
0.144 M4	0.151 M4	0.147 M4
Grid 4	Grid 5	Grid 6
0.152 M4	0.160 M4	0.155 M4
Grid 7	Grid 8	Grid 9
0.148 M4	0.156 M4	0.149 M4

Peak H-field in A/m

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Dipole H-Field with H3DV6 probe/H Scan - measurement distance from the probe sensor center to CD1880 Dipole = 10mm 2 2/Hearing

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

Maximum value of peak Total field = 0.102 A/m

Probe Modulation Factor = 1.000

Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.110 A/m; Power Drift = -0.04 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.091 M4	0.097 M4	0.093 M4
Grid 4	Grid 5	Grid 6
0.096 M4	0.102 M4	0.098 M4
Grid 7	Grid 8	Grid 9
0.093 M4	0.099 M4	0.094 M4

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0 dB = 0.160 A/m

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The green line in this figure shows the axis along which the points lie.

Comparison of 5mm and 2mm step sizes

An additional set of measurements was taken: dipole validations were performed using 5mm and 2mm step sizes. The delta between the two readings is insignificant for both field types (< 0.4% for E and 0% for H), demonstrating that 5mm is sufficient. The plots follow.

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

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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

DASY4 Configuration:

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

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

Measurement grid: dx=5mm, dy=5mm Maximum value of Total (measured) = 134.8 V/m

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

Measurement grid: dx=5mm, dy=5mm Maximum value of Total field (slot averaged) = 131.0 V/m Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

Grid 1	Grid 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 8	Grid 9	Grid 7	Grid 8	Grid 9
119.8	131.0	130.7	119.8	131.0	130.7

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

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

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

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	09-31, 2011		L6AREF	870UW

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

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

Lab: RIM Testing Services (RTS)

Dipole Validation 1880 MHz_2mm step_E-Field 07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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

DASY4 Configuration:

- Probe: ER3DV6 SN2285; ConvF(1, 1, 1); Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: HAC Test Arch; Type: SD HAC P01 BA;

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Measurement grid: dx=2mm, dy=2mm Maximum value of Total (measured) = 138.0 V/m

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

Measurement grid: dx=2mm, dy=2mm Maximum value of Total field (slot averaged) = 131.2 V/m Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

Grid 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	Grid 8	Grid 9
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

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

Testing Services™	Document Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW			
Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	A70UW B70UW

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

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Author Data	Dates of Test	Report No	FCC ID	
Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREA	A70UW B70UW

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

Lab: RIM Testing Services (RTS)

HAC_H_Dipole_CW 1880_5 mm step_07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

Communication System: CW; Frequency: 1880 MHz;Duty Cycle: 1:1 Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ 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
0.342	0.359	0.344
Grid 4	Grid 5	Grid 6
0.389	0.406	0.389
Grid 7	Grid 8	Grid 9
0.363	0.378	0.363

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

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

Lab: RIM Testing Services (RTS)

HAC_H_Dipole_CW 1880_2 mm step_07_14_05

DUT: HAC Dipole 1880 MHz; Type: CD1880V3

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

DASY4 Configuration:

- Probe: H3DV6 SN6105; ; Calibrated: 10/12/2004
- Sensor-Surface: 0mm (Fix Surface)Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005

- Phantom: HAC Test Arch; Type: SD HAC P01 BA;

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Measurement grid: dx=2mm, dy=2mm Maximum value of Total (measured) = 0.406 A/m

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

Measurement grid: dx=2mm, dy=2mm Maximum value of Total field (slot averaged) = 0.406 A/m Hearing Aid Near-Field Category: M2 (AWF 0 dB)

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

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

Category	AWF (dB)	Limits for E-Field Emissions (V/m)	Limits for H-Field Emissions (A/m)
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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Testing Services™	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW		Page 109 (140)	
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Daoud Attayi	Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	RTS-5316-1109-55A	L6AREA L6AREI	470UW 870UW

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

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	Annex A to Hearing Aid Compatil Report for the BlackBerry® Smart REA71UW/REB71UW Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011	Annex A to Hearing Aid Compatibility RF Emissions Tes Report for the BlackBerry® Smartphone model REA71UW/REB71UW Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011 Report No RTS-5316-1109-55A	Annex A to Hearing Aid Compatibility RF Emissions Test Report for the BlackBerry® Smartphone model REA71UW/REB71UW Dates of Test Feb 28, Mar. 22-23, Apr. 05, Aug. 09-31, 2011

A.3 RF emission field plots

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Date/Time: 8/9/2011 3:56:05 PM, Date/Time: 8/9/2011 4:00:16 PM, Date/Time: 8/9/2011 4:04:32 PM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM850

DUT: BlackBerry Smartphone; Type: Sample

Communication System: GSM 850; Frequency: 824.2 MHz, Frequency: 836.8 MHz, Frequency: 848.8 MHz; Communication System PAR: 9.191 dB Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 177.9 V/m Probe Modulation Factor = 2.940 Device Reference Point: 0, 0, -6.3 mm Reference Value = 77.957 V/m; Power Drift = -0.10 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
162.1 M3	174.4 M3	171.2 M3
Grid 4	Grid 5	Grid 6

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164.4 M3	177.9 M3	174.5 M3
Grid 7	Grid 8	Grid 9
158.0 M3	172.4 M3	169.0 M3

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

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

Maximum value of peak Total field = 203.8 V/m

Probe Modulation Factor = 2.940Device Reference Point: 0, 0, -6.3 mm

Reference Value = 87.957 V/m; Power Drift = -0.16 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
181.7 M3	200.8 M3	199.4 M3
Grid 4	Grid 5	Grid 6
183.4 M3	203.8 M3	203.0 M3
Grid 7	Grid 8	Grid 9
174.4 M3	196.6 M3	195.7 M3

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

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

Maximum value of peak Total field = 197.2 V/m Probe Modulation Factor = 2.940 Device Reference Point: 0, 0, -6.3 mm

Reference Value = 83.666 V/m; Power Drift = 0.20 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
175.5 M3	195.6 M3	194.6 M3
Grid 4	Grid 5	Grid 6

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173.4 M3	197.2 M3	194.6 M3
Grid 7	Grid 8	Grid 9
165.1 M3	187.3 M3	185.3 M3



0 dB = 177.9 V/m

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Date/Time: 9/6/2011 11:50:02 AM, Date/Time: 9/6/2011 11:55:58 AM, Date/Time: 9/6/2011 11:59:46 AM

Test Laboratory: RIM Testing Services

HAC RF_E-Field_GSM1900_

DUT: BlackBerry Smartphone; Type: Sample

Communication System: GSM 1900; Frequency: 1850.2 MHz, Frequency: 1880 MHz, Frequency: 1909.8 MHz 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)

DASY5 Configuration:

- Probe: ER3DV6 SN2286; ConvF(1, 1, 1); Calibrated: 1/14/2011
- Sensor-Surface: (Fix Surface)
- Electronics: DAE3 Sn472; Calibrated: 3/7/2011
- Phantom: HAC RF Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.4 (2829)

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

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 77.490 V/m Probe Modulation Factor = 2.970 Device Reference Point: 0, 0, -6.3 mm Reference Value = 19.337 V/m; Power Drift = -0.02 dB Hearing Aid Near-Field Category: M3 (AWF -5 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
76.947 M3	68.465 M3	52.448 M3
Grid 4	Grid 5	Grid 6

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62.130 M3	77.472 M3	77.490 M3
Grid 7	Grid 8	Grid 9
89.204 M2	97.144 M2	94.403 M2

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

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

Maximum value of peak Total field = 73.436 V/m

Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm Reference Value = 18.994 V/m; Power Drift = -0.0047 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
70.284 M3	63.098 M3	54.870 M3
Grid 4	Grid 5	Grid 6
57.159 M3	73.181 M3	73.436 M3
Grid 7	Grid 8	Grid 9
81.394 M3	90.201 M2	88.141 M2

Location: -2, 25, 8.7 mm

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

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

Maximum value of peak Total field = 76.032 V/m Probe Modulation Factor = 2.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 19.080 V/m; Power Drift = 0.04 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
73.264 M3	66.811 M3	59.012 M3

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Grid 4	Grid 5	Grid 6
60.748 M3	75.796 M3	76.032 M3
Grid 7	Grid 8	Grid 9
85.915 M2	94.247 M2	92.059 M2



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HAC RF_E-Field_UMTS_band_V

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

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 61.622 V/m Probe Modulation Factor = 1.010 Device Reference Point: 0, 0, -6.3 mm Reference Value = 76.050 V/m; Power Drift = -0.04 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
55.162 M4	60.683 M4	60.063 M4
Grid 4	Grid 5	Grid 6
55.681 M4	61.622 M4	60.933 M4
Grid 7	Grid 8	Grid 9
53.601 M4	59.470 M4	58.867 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 71.929 V/m

Probe Modulation Factor = 1.010

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 87.609 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
63.292 M4	70.889 M4	70.459 M4
Grid 4	Grid 5	Grid 6
63.819 M4	71.929 M4	71.579 M4

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	09-31, 2011	K15-5510-1107-55A	L6AREH	370UW

61.187 M4	69.695 M4	69.272 M4
Grid 7	Grid 8	Grid 9

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

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

Maximum value of peak Total field = 78.870 V/m

Probe Modulation Factor = 1.010

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 94.988 V/m; Power Drift = 0.10 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
70.236 M4	78.109 M4	77.581 M4
Grid 4	Grid 5	Grid 6
69.926 M4	78.870 M4	78.283 M4
Grid 7	Grid 8	Grid 9
65.560 M4	74.794 M4	74.265 M4

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SEMCAD X Version 14.4.4 (2829)

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HAC RF_E-Field_UMTS_band_II

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

Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 44.399 V/m Probe Modulation Factor = 1.120 Device Reference Point: 0, 0, -6.3 mm Reference Value = 35.062 V/m; Power Drift = -0.0031 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
36.041 M4	29.349 M4	30.228 M4
Grid 4	Grid 5	Grid 6
31.747 M4	44.399 M4	44.399 M4
Grid 7	Grid 8	Grid 9
43.691 M4	49.885 M4	49.247 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 41.618 V/m Probe Modulation Factor = 1.120 Device Reference Point: 0, 0, -6.3 mm Reference Value = 33.159 V/m; Power Drift = -0.11 dB **Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V/m

Grid 1 34.860 M4	Grid 2 28.809 M4	Grid 3 28.462 M4
Grid 4	Grid 5	Grid 6
29.055 M4	41.618 M4	41.622 M4
Grid 7	Grid 8	Grid 9

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40.478 M4 47.144 M4 46.735 M4

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

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

Maximum value of peak Total field = 42.770 V/m Probe Modulation Factor = 1.120 Device Reference Point: 0, 0, -6.3 mm Reference Value = 32.346 V/m; Power Drift = 0.03 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
37.600 M4	32.468 M4	28.931 M4
Grid 4	Grid 5	Grid 6
29.710 M4	42.770 M4	42.774 M4
Grid 7	Grid 8	Grid 9
42.435 M4	49.228 M4	48.719 M4

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HAC RF_E-Field_UMTS_band_IV

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

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 45.830 V/m Probe Modulation Factor = 0.970 Device Reference Point: 0, 0, -6.3 mm Reference Value = 49.009 V/m; Power Drift = -0.14 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

Peak E-field in	V/m	
Grid 1	Grid 2	Grid 3
29.239 M4	35.755 M4	36.217 M4
Grid 4	Grid 5	Grid 6
34.133 M4	45.830 M4	45.798 M4
Grid 7	Grid 8	Grid 9
42.476 M4	47.670 M4	47.059 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 46.897 V/m Probe Modulation Factor = 0.970 Device Reference Point: 0, 0, -6.3 mm Reference Value = 46.699 V/m; Power Drift = 0.44 dB **Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak E-field in V	V/m	
Grid 1	Grid 2	Grid 3
32.397 M4	34.329 M4	34.733 M
Grid 4	Grid 5	Grid 6
34.578 M4	46.897 M4	46.849 M
Grid 7	Grid 8	Grid 9

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44.319 M4 50.159 M4 49.315 M4

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

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

Maximum value of peak Total field = 42.183 V/m Probe Modulation Factor = 0.970Device Reference Point: 0, 0, -6.3 mm

Reference Value = 43.709 V/m; Power Drift = -0.46 dB

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

Peak E-field in V/m

Grid 1	Grid 2	Grid 3
31.861 M4	28.711 M4	29.600 M4
Grid 4	Grid 5	Grid 6
30.887 M4	42.183 M4	42.162 M4
Grid 7	Grid 8	Grid 9
42.090 M4	46.403 M4	45.432 M4

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HAC RF_H-Field_GSM850

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 0.429 A/m Probe Modulation Factor = 2.870 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.078 A/m; Power Drift = 0.22 dB Hearing Aid Near-Field Category: M4 (AWF -5 dB)

> Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.256 M4 0.353 M4 0.147 M4 Grid 4 Grid 5 Grid 6 0.277 M4 0.382 M4 0.176 M4 Grid 7 Grid 8 Grid 9 0.429 M4 0.305 M4 0.193 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.458 A/m Probe Modulation Factor = 2.870 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.088 A/m; Power Drift = -0.05 dB **Hearing Aid Near-Field Category: M3 (AWF -5 dB)**

Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.291 M4 0.166 M4 0.404 M4 Grid 4 Grid 5 Grid 6 0.427 M4 0.310 M4 0.188 M4 Grid 9 Grid 7 Grid 8

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0.458 M3 0.334 M4 0.211 M4

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

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

Maximum value of peak Total field = 0.526 A/m Probe Modulation Factor = 2.870 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.109 A/m; Power Drift = -0.08 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.452 M3	0.345 M4	0.216 M4
Grid 4	Grid 5	Grid 6
0.475 M3	0.368 M4	0.246 M4
Grid 7	Grid 8	Grid 9
0.526 M3	0.399 M4	0.265 M4

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0 dB = 0.430 A/m

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HAC RF_H-Field_GSM1900

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 0.235 A/m Probe Modulation Factor = 2.870 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.089 A/m; Power Drift = -0.13 dB Hearing Aid Near-Field Category: M3 (AWF -5 dB)

> Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.212 M3 0.235 M3 0.228 M3 Grid 4 Grid 5 Grid 6 0.235 M3 0.235 M3 0.228 M3 Grid 8 Grid 9 Grid 7 0.334 M2 0.263 M2 0.192 M3

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.234 A/m Probe Modulation Factor = 2.870 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.090 A/m; Power Drift = 0.05 dB **Hearing Aid Near-Field Category: M3 (AWF -5 dB)**

Peak H-field in	n A/m	
Grid 1	Grid 2	Grid 3
0.220 M3	0.234 M3	0.229 M3
Grid 4	Grid 5	Grid 6
0.238 M3	0.234 M3	0.228 M3
Grid 7	Grid 8	Grid 9

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0.320 M2 0.253 M2 0.196 M3

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

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

Maximum value of peak Total field = 0.229 A/m Probe Modulation Factor = 2.870 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.090 A/m; Power Drift = -0.03 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.215 M3	0.227 M3	0.220 M3
Grid 4	Grid 5	Grid 6
0.236 M3	0.229 M3	0.219 M3
Grid 7	Grid 8	Grid 9
0.325 M2	0.259 M2	0.189 M3

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HAC RF_H-Field_UMTS_band V

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 0.145 A/m Probe Modulation Factor = 0.990 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.078 A/m; Power Drift = -0.01 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

> Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.089 M4 0.052 M4 0.123 M4 Grid 4 Grid 5 Grid 6 0.131 M4 0.096 M4 0.061 M4 Grid 7 Grid 8 Grid 9 0.145 M4 0.105 M4 0.068 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.164 A/m Probe Modulation Factor = 0.990 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.091 A/m; Power Drift = 0.06 dB **Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in	n A/m	
Grid 1	Grid 2	Grid 3
0.143 M4	0.104 M4	0.061 M4
Grid 4	Grid 5	Grid 6
0.151 M4	0.109 M4	0.069 M4
Grid 7	Grid 8	Grid 9

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0.164 M4 0.119 M4 0.075 M4

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

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

Maximum value of peak Total field = 0.192 A/m Probe Modulation Factor = 0.990Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.112 A/m; Power Drift = -0.03 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.163 M4	0.122 M4	0.076 M4
Grid 4	Grid 5	Grid 6
0.175 M4	0.133 M4	0.089 M4
Grid 7	Grid 8	Grid 9
0.192 M4	0.145 M4	0.097 M4

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0 dB = 0.140 A/m

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HAC RF_H-Field_UMTS_band II

Device H-Field measurement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 0.124 A/m Probe Modulation Factor = 1.120 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.116 A/m; Power Drift = 0.0021 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

> Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.116 M4 0.119 M4 0.114 M4 Grid 4 Grid 5 Grid 6 0.132 M4 0.124 M4 0.114 M4 Grid 7 Grid 8 Grid 9 **0.171 M4** 0.136 M4 0.097 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.120 A/m Probe Modulation Factor = 1.120 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.116 A/m; Power Drift = 0.21 dB **Hearing Aid Near-Field Category: M4 (AWF 0 dB)**

Peak H-field in	n A/m	
Grid 1	Grid 2	Grid 3
0.113 M4	0.120 M4	0.116 M4
Grid 4	Grid 5	Grid 6
0.123 M4	0.120 M4	0.116 M4
Grid 7	Grid 8	Grid 9

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0.159 M4 0.129 M4 0.099 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.127 A/m

Probe Modulation Factor = 1.120Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.125 A/m; Power Drift = -0.08 dB

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

Peak H-field in A/m

Grid 1	Grid 2	Grid 3
0.119 M4	0.127 M4	0.122 M4
Grid 4	Grid 5	Grid 6
0.127 M4	0.127 M4	0.122 M4
Grid 7	Grid 8	Grid 9
0.167 M4	0.136 M4	0.103 M4

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0 dB = 0.170 A/m

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HAC RF_H-Field_UMTS_band IV

Device H-Field meausrement with H3DV6 probe/H Scan - H3DV6 - 2007: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test (101x101x1):

Measurement grid: dx=5mm, dy=5mmMaximum value of peak Total field = 0.126 A/m Probe Modulation Factor = 0.970 Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.120 A/m; Power Drift = -0.04 dB Hearing Aid Near-Field Category: M4 (AWF 0 dB)

> Peak H-field in A/m Grid 1 Grid 2 Grid 3 0.126 M4 0.123 M4 0.102 M4 Grid 5 Grid 4 Grid 6 0.141 M4 0.124 M4 0.099 M4 Grid 7 Grid 8 Grid 9 0.163 M4 0.130 M4 0.085 M4

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

Compatibility Test (101x101x1): Measurement grid: dx=5mm, dy=5mm Maximum value of peak Total field = 0.125 A/m

Probe Modulation Factor = 0.970

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 0.126 A/m; Power Drift = -0.02 dB

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

Peak H-field ir	n A/m	
Grid 1	Grid 2	Grid 3
0.122 M4	0.122 M4	0.106 M4
Grid 4	Grid 5	Grid 6
0.139 M4	0.125 M4	0.105 M4

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Grid 7	Grid 8	Grid 9
0.167 M4	0.134 M4	0.090 M4

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

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

Maximum value of peak Total field = 0.121 A/m

Probe Modulation Factor = 0.970

Device Reference Point: 0, 0, -6.3 mm Reference Value = 0.126 A/m; Power Drift = 0.04 dB

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

Peak H-field in	n A/m	
Grid 1	Grid 2	Grid 3
0.121 M4	0.121 M4	0.108 M4
Grid 4	Grid 5	Grid 6
0.133 M4	0.121 M4	0.107 M4
Grid 7	Grid 8	Grid 9
0.157 M4	0.126 M4	0.089 M4

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