

# EMI Test Report

Tested in accordance with  
Federal Communications Commission (FCC)  
Personal Communications Services  
CFR 47, Parts 15, Subpart B  
&  
Industry Canada (IC), ICES-003



**A division of Research In Motion Limited**

**REPORT NO.:** RTS-5993-1202-28

**PRODUCT MODEL NO.:** REX41GW  
**TYPE NAME:** BlackBerry® smartphone  
**FCC ID:** L6AREX40GW  
**IC:** 2503A-REX40GW

**DATE:** February 15, 2012

		EMI Test Report for the BlackBerry® smartphone Model REX41GW	
<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012	<b>FCC ID:</b> L6AREX40GW <b>IC :</b> 2503A-REX40GW	

**Statement of Performance:**

The BlackBerry® smartphone, model REX41GW, part number CER-48922-001 Rev. 1 and accessories when configured and operated per RIM's operation instructions, and performs within the requirements of the test standards.

**Declaration:**

We hereby certify that:

The test data reported herein is an accurate record of the performance of the sample(s) tested.

The test results are valid for the tested unit (s) only.

The test equipment used was suitable for the tests performed and within manufacturer's published specifications and operating parameters.

The test methods were consistent with the methods described in the relevant standards.

Documented by:

Reviewed by:

Nielven Olis  
Regulatory Compliance Specialist  
Date: February 22, 2012

Shuo Wang  
Regulatory Compliance Specialist  
Date: February 22, 2012

Reviewed and Approved by:

Masud S. Attayi, P.Eng.  
Manager, Regulatory Compliance  
Date: February 24, 2012

	EMI Test Report for the BlackBerry® smartphone Model REX41GW	
<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012	<b>FCC ID:</b> L6AREX40GW <b>IC :</b> 2503A-REX40GW

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		EMI Test Report for the BlackBerry® smartphone Model REX41GW
<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012	<b>FCC ID:</b> L6AREX40GW <b>IC :</b> 2503A-REX40GW

## A. Scope

This report details the results of compliance tests that were performed in accordance with the requirements of:

- FCC CFR 47 Part 15, Subpart B, October, 2011 Class B Digital Devices, Unintentional Radiators
- IC ICES-003 Issue 4, February 2004, Class B Digital Devices, Unintentional Radiators

## B. Associated Documents

- N/A

## C. Product Identification

Manufactured by Research In Motion Limited whose headquarters is located at:

295 Phillip Street  
Waterloo, Ontario  
Canada, N2L 3W8  
Phone: 519 888 7465  
Fax: 519 888 6906

The equipment under test (EUT) was tested at the following locations:

RIM Testing Services EMI test facilities

305 Phillip Street  
Waterloo, Ontario  
Canada, N2L 3W8  
Phone: 519 888 7465  
Fax: 519 888 6906

440 Phillip Street  
Waterloo, Ontario  
Canada, N2L 5R9  
Phone: 519 888 7465  
Fax: 519 888 6906

The testing was performed from February 9 to February 14, 2012.

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The sample EUT included:

SAMPLE	MODEL	CER NUMBER	PIN	Software
1	REX41GW	CER-48922-001 Rev 1	293A70AB	V7.1.0.215 Bundle 696 Platform: 9.0.0.405

AC conducted testing was performed on sample 1.  
Radiated Emissions testing was performed on sample 1.

### BlackBerry® smartphone Accessories Tested

- 1) Cobra Fixed Blade, part number HDW-24481-001 (model number RIM-C-4ADUUS-001) with an output voltage of 5.0 volts dc.
- 2) Alt. Cobra Fixed Blade, part number HDW-24481-001 (model number PSM04A-050QRIM) with an output voltage of 5.0 volts dc.
- 3) LC Fixed Blade, part number HDW-44303-001 (model number PSM03A-050Q-1 RIM), with an output voltage of 5.0 volts dc.
- 4) Wired Stereo Headset, part number HDW-14322-005, 1.4 metres long.
- 5) Wired Headset Rev B, part number HDW-44306-001, with a lead length of 1.1 metres.
- 6) Wired Headset Rev D, part number HDW-44306-001, with a lead length of 1.1metres.
- 7) Legacy Micro-USB Cable, part number HDW-06610-009, 1.0 metre long.
- 8) Micro-USB Cable T, part number HDW-48415-001, 1.0 metre long.
- 9) Micro-USB Cable T, part number HDW-46740-001, 1.2 metre long.
- 10) Micro-USB Cable TCS, part number HDW-46740-001, 1.2 metre long.
- 11) Micro-USB Cable TCRS, part number HDW-46740-001, 1.2 metre long.
- 12) USB Y-Cable, part number HDW-19137-002, lead lengths of 11 cm and 26 cm.
- 13) External Battery Charger, part number HDW-24478-001.
- 14) JS1 Battery, part number BAT-44582-001
- 15) JS1 Battery, part number BAT-44582-002

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**D. Support Equipment Used for the Testing of the EUT**

- 1) IBM Thinkpad Lenovo T60p laptop, type 8742-C2U, product ID 8742C2U

**E. Summary of Results**

SPECIFICATION		TEST TYPE	Meets Requirement	Test Data APPENDIX
FCC CFR 47	IC			
Part 15, Subpart B	ICES-003	Conducted AC Line Emission	Yes	1
Part 15, Subpart B	ICES-003	Radiated Unintentional Spurious Emissions	Yes	2

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a) AC CONDUCTED EMISSIONS

The conducted emissions were measured using the test procedure outlined in CISPR Recommendation 22 through a 50 Ohm Line Impedance Stabilization Network (LISN), which was inserted in the power line to the equipment to provide the specified impedance for measurements. The EUT was placed on a nonconductive wooden table, 80 cm high that was positioned 40 cm from a vertical ground plane. The RF output of the network was connected to an EMI receiver system with characteristics that duplicate those of the receiver specified in CISPR Publication 16.

BlackBerry® smartphone was in battery charging mode. The input voltage was 120 V, 60 Hz.

The following test configurations were measured for model REX41GW:

Test Configuration	Operating Mode(s)	Charger + Accessories
1	GSM 850 Idle, Audio Playback	Cobra Fixed Blade, Wired Stereo Headset, 1.0m Legacy USB Cable
2	GSM 850 Idle	LC Fixed Blade, Wired Headset RevD, 1.2m USB Cable T
3	GSM1900 Idle, Video Playback	Alt. Cobra Fixed Blade, Wired Headset RevB, 1.0m USB Cable T
4	GSM1900 Idle	Cobra Fixed Blade, Wired Stereo Headset, 1.2m USB Cable TCRS, USB Y-Cable, external battery charger

The sample EUT's conducted emissions were compared with respect to the FCC CFR 47 Part 15, Subpart B, and IC ICES-003, Class B limit. The sample EUT had a worst test case margin of 5.37 dB below the AVG limit at 1.86 MHz using the QP detector in Test Configuration 2.

**Measurement Uncertainty ±3.0 dB**

To view the test data/plots, see APPENDIX 1.

	EMI Test Report for the BlackBerry® smartphone Model REX41GW	
Test Report No. RTS-5993-1202-28	Date of Test February 9- February 14, 2012	FCC ID: L6AREX40GW IC : 2503A-REX40GW

b) RADIATED EMISSIONS

The radiated emissions from the EUT were measured using the methods outlined in CISPR Recommendation 22. The EUT was placed on a nonconductive Styrofoam table, 80 cm high that was positioned on a remote controlled turntable. The test distance used between the EUT and the receiving antenna was three metres. The turntable was rotated to determine the azimuth of the peak emissions. Then the emissions were maximized by elevating the antenna in the range of 1 to 4 metres. The maximum emission level was recorded. The frequency range measured was from 30 MHz to 5.0 GHz. Both the horizontal and vertical polarizations of the emissions were measured.

The measurements were done in a semi-anechoic chamber. The FCC registration number is **778487** and the Industry Canada(IC) file number is **2503B-1**. The EUT was configured and operated to produce the maximum radiated emissions while still keeping within RIM's specifications.

The BlackBerry® smartphone was in battery charging mode for all configurations. The ac input voltage was 120V, 60Hz.

The following test configurations were measured for model REX41GW:

Test Configuration	Operating Mode(s)	Charger + Accessories
1	GSM 850 Idle, Audio Playback	Cobra Fixed Blade, Wired Stereo Headset, 1.0m Legacy USB Cable
2	PCS 1900 Idle, Video Playback	Alt. Cobra Fixed Blade, Wired Headset RevB, 1.0m USB Cable T
3	FM Idle	LC Fixed Blade, Wired Headset RevD, 1.2m USB Cable T
4	GSM 850 Idle	Wired Headset RevD, 1.2m USB Cable TCS, IBM Thinkpad Lenovo T60p laptop
5	PCS 1900 Idle,	Cobra Fixed Blade, Wired Stereo Headset, 1.2m USB Cable TCRS, USB Y-Cable, external battery charger

The system's radiated emission levels were compared with respect to the FCC CFR 47 Part 15, Subpart B, and IC ICES-003, Class B limit.

The system met the requirements with a worst test case emission margin of 1.52 dB below the QP limit at 240.25 MHz using quasi-peak detector in Test Configuration 4.

To view the test data see APPENDIX 2.



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**Sample Calculation:**

Field Strength (dBµV/m) is calculated as follows:

FS = Measured Level (dBµV) + A.F. (dB/m) + Cable Loss (dB) - Preamp (dB) + Filter Loss (dB)

**Measurement Uncertainty ±4.6 dB**

		EMI Test Report for the BlackBerry® smartphone Model REX41GW	
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## F. Compliance Test Equipment Used

<u>UNIT</u>	<u>MANUFACTURER</u>	<u>MODEL</u>	<u>SERIAL NUMBER</u>	<u>CAL DUE DATE</u> (YY MM DD)	<u>USE</u>
Preamplifier	Sonoma	310N/11909A	185831	12-10-17	Radiated Emissions
Preamplifier system	TDK RF Solutions	PA-02	080010	12-10-17	Radiated Emissions
EMC Analyzer	Rohde & Schwarz	ESIB 40	3942A00517	12-12-08	Radiated Emissions
Digital Multimeter	Hewlett Packard	34401A	US36042324	12-11-16	Conducted/Radiated Emissions
T/RH Meter	OMEGA	iTHX-SD	0380561	12-10-20	Radiated Emission
T/RH Meter	OMEGA	iTHX-SD	0380567	12-10-20	Radiated Emission
L.I.S.N.	Rohde & Schwarz	ENV216	100060	13-10-25	Conducted Emissions
Hybrid Log Antenna	EMC Automation	HLP-3003C	017401	13-08-23	Radiated Emissions
Horn Antenna	EMC Automation	HRN-0118	030101	12-07-20	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMU 200	112394	12-11-30	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMU 200	112395	12-11-21	Radiated/Conducted Emissions
EMI Test Receiver	Rohde & Schwarz	ESU 40	100162	12-12-07	Radiated/Conducted Emissions
Bluetooth Tester	Rohde & Schwarz	CBT	100368	12-12-01	Radiated Emissions
Bluetooth Tester	Rohde & Schwarz	CBT	100370	12-12-01	Radiated/Conducted Emissions



EMI Test Report for the BlackBerry® smartphone Model REX41GW  
**APPENDIX 1**

**Test Report No.**  
RTS-5993-1202-28

**Date of Test**  
February 9- February 14, 2012

**FCC ID:** L6AREX40GW  
**IC :** 2503A-REX40GW

APPENDIX 1 - AC CONDUCTED EMISSIONS TEST DATA

	EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 1</b>	
Test Report No. RTS-5993-1202-28	Date of Test February 9- February 14, 2012	FCC ID: L6AREX40GW IC : 2503A-REX40GW

### AC Conducted Emissions Test Results

The following test configurations were measured for model REX41GW.

The following tests were performed by Savtej Sandhu.

#### Test Configuration 1

Date of the test: February 10, 2011

The environmental conditions were: Temperature: 25.4 °C  
Humidity: 39.6 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.159	L1	36.71	11.14	47.85	65.50	55.50	-17.65
0.407	L1	30.31	10.00	40.31	57.70	47.70	-17.39
0.605	L1	24.08	9.85	33.94	56.00	46.00	-22.06
0.996	L1	21.33	9.80	31.13	56.00	46.00	-24.87
1.361	L1	23.41	9.80	33.22	56.00	46.00	-22.78
2.832	L1	24.72	9.87	34.59	56.00	46.00	-21.41
4.443	L1	26.09	9.90	36.00	56.00	46.00	-20.00
8.601	L1	26.47	9.98	36.45	60.00	50.00	-23.55
0.411	N	25.00	10.01	35.00	57.60	47.60	-22.60
0.911	N	21.25	9.81	31.06	56.00	46.00	-24.94
4.047	N	22.10	9.90	32.01	56.00	46.00	-23.99
4.812	N	23.97	9.91	33.88	56.00	46.00	-22.12

All emission levels had test margins of greater than 25 dB.  
Measurements were done with the quasi-peak detector.

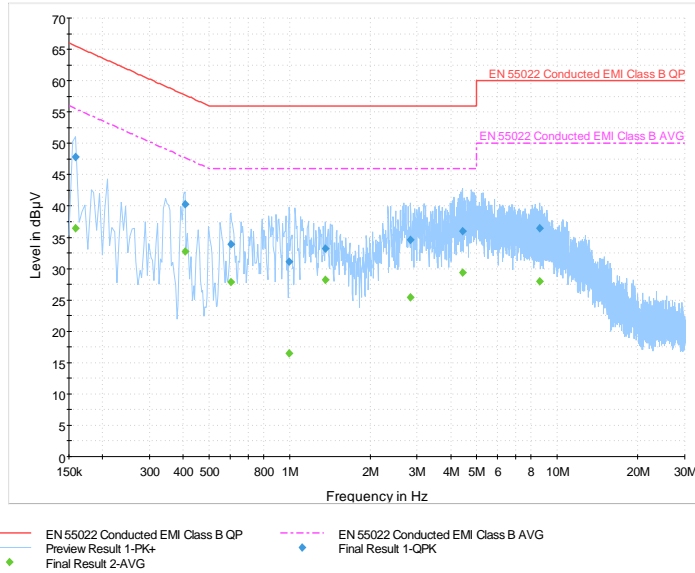
See figure 1-1 and figure 1-2 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

	EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 1</b>	
	<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012

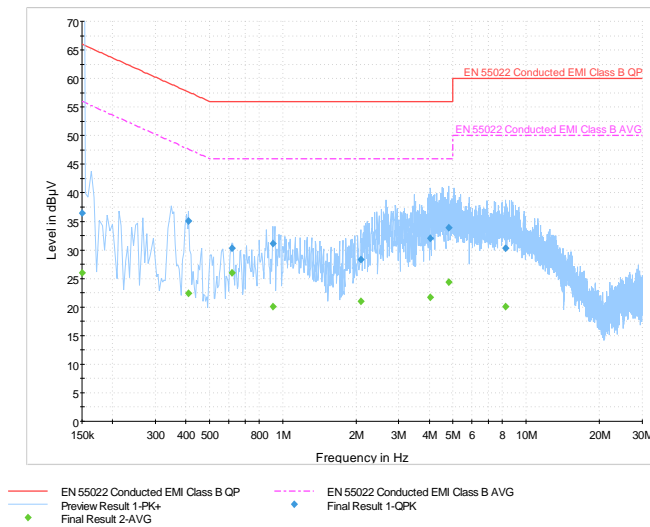
## AC Conducted Emissions Test Graphs

### Test Configuration 1

**Figure 1-1: L1 lines**



**Figure 1-2: N Lines**



	EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 1</b>	
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AC Conducted Emissions Test Results cont'd

Test Configuration 2

Date of the test: February 10, 2012

The environmental conditions were: Temperature: 25.4 °C  
Humidity: 39.6 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Margin (QP) Limits (dB)
0.150	L1	42.10	11.20	53.30	66.00	-12.70
0.272	L1	36.73	10.36	47.09	61.10	-14.01
0.677	L1	31.74	9.84	41.58	56.00	-14.42
1.046	L1	35.87	9.80	45.68	56.00	-10.32
1.752	L1	38.95	9.82	48.76	56.00	-7.24
1.860	L1	41.67	9.82	51.49	56.00	-4.51
2.103	L1	39.13	9.83	48.96	56.00	-7.04
2.171	L1	38.31	9.83	48.14	56.00	-7.86
2.211	L1	38.51	9.83	48.34	56.00	-7.66
3.656	L1	32.65	9.89	42.55	56.00	-13.45
0.155	N	40.09	11.20	51.29	65.80	-14.51
0.281	N	34.54	10.31	44.85	60.80	-15.95
0.677	N	33.62	9.85	43.47	56.00	-12.54
1.793	N	35.48	9.82	45.29	56.00	-10.71
1.946	N	34.08	9.83	43.91	56.00	-12.09
2.189	N	33.69	9.84	43.52	56.00	-12.48
2.351	N	33.83	9.84	43.67	56.00	-12.33

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Test Configuration 2 cont'd

Frequency (MHz)	Line	Reading (AVG) (dBµV)	Correction Factor (dB)	Corrected Reading (AVG) (dBµV)	Limit (AV) (dBµV)	Margin (AVG) Limits (dB)
0.150	L1	21.36	11.20	32.57	46.00	-23.44
0.272	L1	26.29	10.36	36.65	41.10	-14.45
0.677	L1	22.36	9.84	32.20	36.00	-13.80
1.046	L1	18.65	9.80	28.45	36.00	-17.55
1.752	L1	21.93	9.82	31.74	36.00	-14.26
1.860	L1	30.81	9.82	40.63	36.00	<b>-5.37</b>
2.103	L1	27.89	9.83	37.72	36.00	-8.28
2.171	L1	23.74	9.83	33.57	36.00	-12.43
2.211	L1	24.02	9.83	33.85	36.00	-12.15
3.656	L1	21.34	9.89	31.24	36.00	-14.76

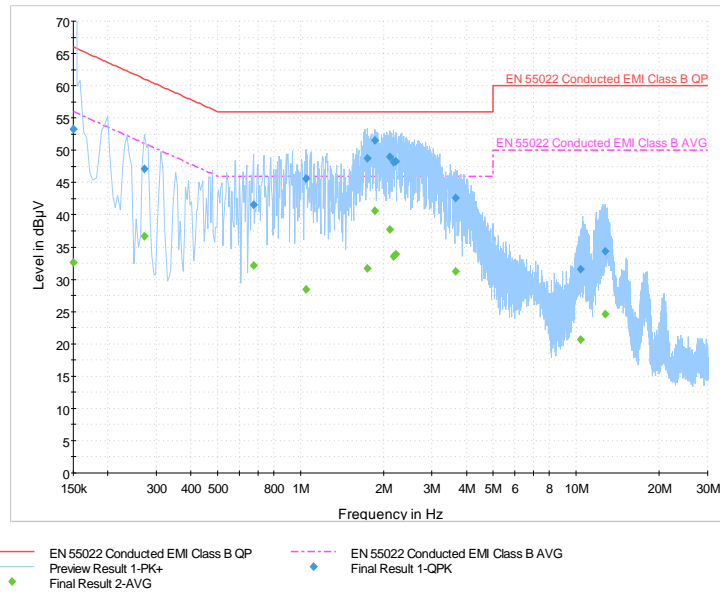
All emission levels had test margins of greater than 25 dB.  
Measurements were done with the quasi-peak an average detector.

See figure 1-3 and figure 1-4 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

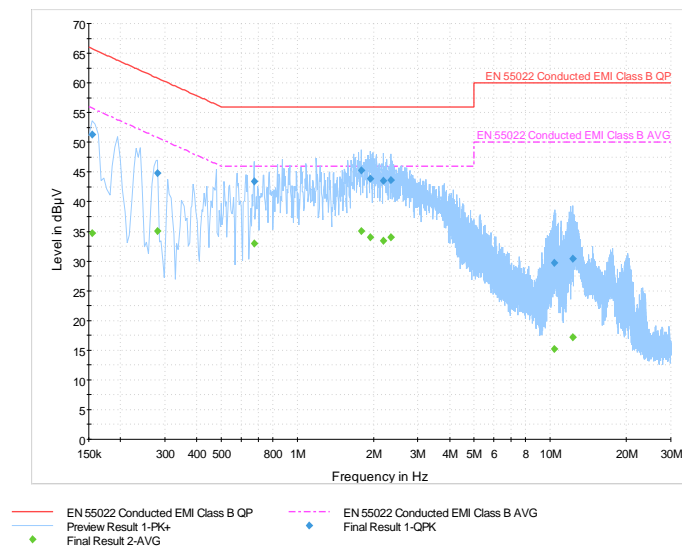
## AC Conducted Emissions Test Graphs

### Test Configuration 2


**Figure 1-3: L1 lines**



**Figure 1-4: N Lines**





		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 1</b>	
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AC Conducted Emissions Test Results cont'd

Test Configuration 3


Date of the test: February 10, 2012

The environmental conditions were: Temperature: 25.4 °C  
Humidity: 39.6 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.150	L1	41.63	11.20	52.84	66.00	56.00	-13.17
0.213	L1	38.32	10.77	49.08	63.10	53.10	-14.02
0.281	L1	33.64	10.29	43.93	60.80	50.80	-16.87
0.699	L1	29.11	9.84	38.94	56.00	46.00	-17.06
0.834	L1	29.12	9.82	38.93	56.00	46.00	-17.07
1.397	L1	25.57	9.80	35.37	56.00	46.00	-20.63
2.225	L1	23.81	9.83	33.64	56.00	46.00	-22.36
10.320	L1	31.97	9.97	41.94	60.00	50.00	-18.06
12.170	L1	31.98	10.03	42.01	60.00	50.00	-17.99
13.133	L1	30.07	10.07	40.14	60.00	50.00	-19.86
0.155	N	36.46	11.20	47.66	65.80	55.80	-18.14
0.276	N	29.16	10.34	39.50	60.90	50.90	-21.40
0.555	N	27.90	9.89	37.78	56.00	46.00	-18.22
0.848	N	26.26	9.82	36.08	56.00	46.00	-19.92
1.622	N	21.55	9.82	31.36	56.00	46.00	-24.64
10.320	N	27.27	9.98	37.25	60.00	50.00	-22.75
10.946	N	27.01	9.99	37.00	60.00	50.00	-23.00
11.022	N	27.59	9.99	37.58	60.00	50.00	-22.42

All other emission levels had test margins of greater than 25 dB.  
Measurements were done with the quasi-peak detector.

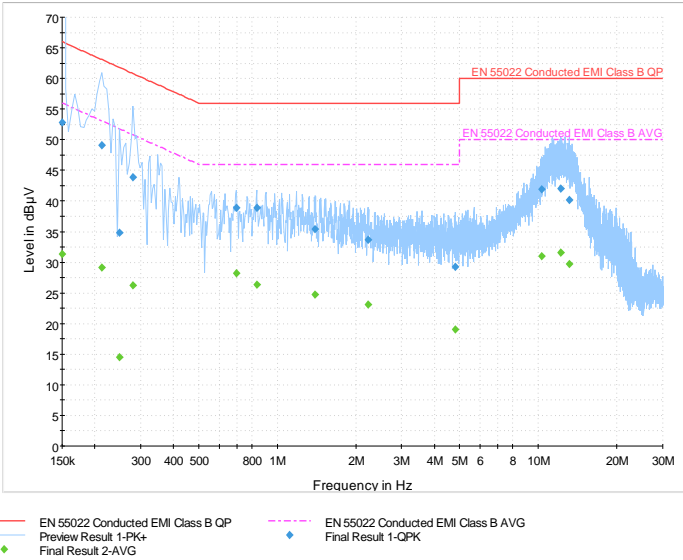
See figure 1-5 and figure 1-6 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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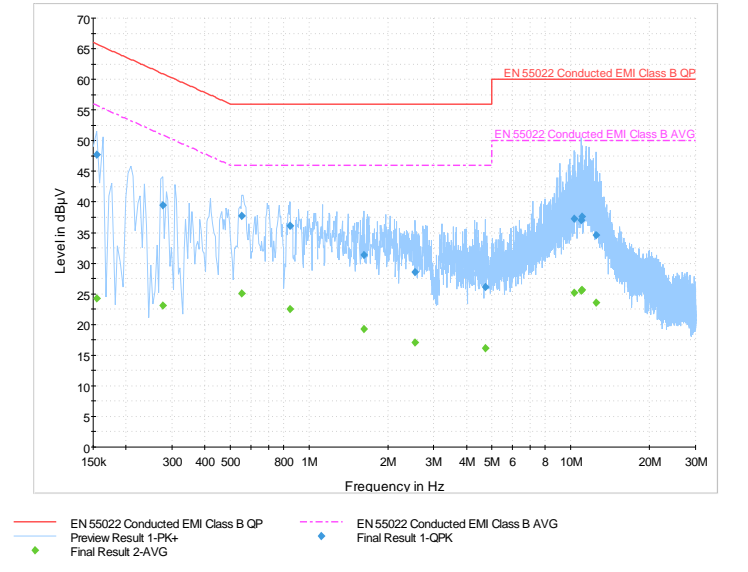
AC Conducted Emissions Test Graphs

Test Configuration 3

**Figure 1-5: L1 lines**



**Figure 1-6: N Lines**



		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 1</b>	
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### AC Conducted Emissions Test Results cont'd

#### Test Configuration 4


Date of the test: February 10, 2012

The environmental conditions were: Temperature: 25.4 °C  
Humidity: 39.6 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.411	L1	30.29	9.99	40.28	57.60	47.60	-17.32
0.614	L1	28.26	9.85	38.12	56.00	46.00	-17.88
0.803	L1	28.51	9.82	38.33	56.00	46.00	-17.67
1.257	L1	26.12	9.80	35.92	56.00	46.00	-20.08
2.832	L1	24.19	9.87	34.06	56.00	46.00	-21.94
4.142	L1	27.39	9.90	37.29	56.00	46.00	-18.71
4.758	L1	30.17	9.90	40.07	56.00	46.00	-15.93
8.741	L1	29.96	9.98	39.93	60.00	50.00	-20.07
0.159	N	31.15	11.17	42.32	65.50	55.50	-23.18
0.407	N	23.88	10.01	33.89	57.70	47.70	-23.81
0.920	N	23.56	9.81	33.37	56.00	46.00	-22.63
3.503	N	25.16	9.89	35.05	56.00	46.00	-20.95
4.533	N	27.26	9.91	37.17	56.00	46.00	-18.83
8.241	N	25.10	9.98	35.08	60.00	50.00	-24.92
28.658	N	27.98	10.40	38.37	60.00	50.00	-21.63

All other emission levels had test margins greater than 25 dB.  
Measurements were done with the quasi-peak and the average detector.

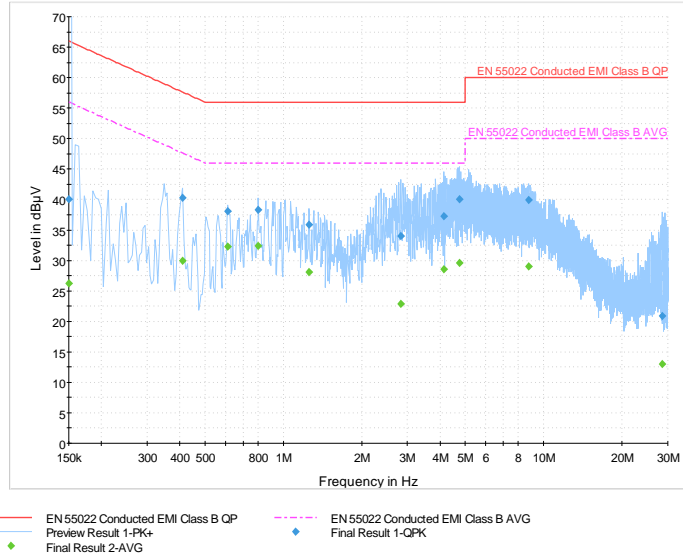
See figure 1-7 and figure 1-8 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

	EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 1</b>	
	<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012

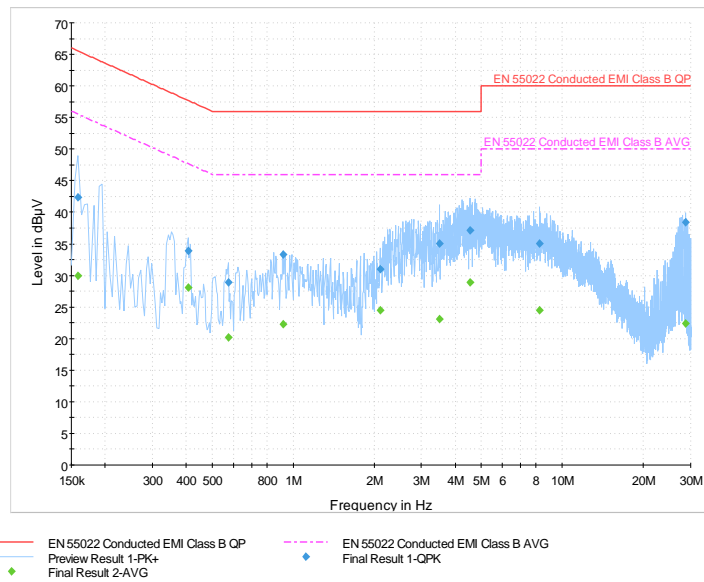
## AC Conducted Emissions Test Graphs

### Test Configuration 4

**Figure 1-7: L1 lines**



**Figure 1-8: N Lines**



	EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 2</b>	
<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012	<b>FCC ID:</b> L6AREX40GW <b>IC :</b> 2503A-REX40GW

## APPENDIX 2 - RADIATED EMISSIONS TEST DATA (REX41GW)

		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 2</b>	
Test Report No. RTS-5993-1202-28	Date of Test February 9- February 14, 2012	FCC ID: L6AREX40GW IC : 2503A-REX40GW	

Radiated Emissions Test Results

The following test configurations were measured for model REX41GW.

The following tests were performed by Ven Olis.

Test Configuration 1

Date of the test: February 10, 2011

The environmental conditions were: Temperature: 27.2 °C  
Humidity: 12.7 %

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading +corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
76.550	V	1.74	355.00	Q.P.	40.69	-14.98	25.71	40.00	-14.29
129.700	H	1.53	181.00	Q.P.	36.65	-12.14	24.51	43.50	-18.99

All other emission levels had test margins greater than 25 dB.

		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 2</b>	
<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012	<b>FCC ID:</b> L6AREX40GW <b>IC :</b> 2503A-REX40GW	

Radiated Emissions Test Results cont'd

Test Configuration 2

Date of the test: February 10, 2011

The environmental conditions were: Temperature: 27.2 °C  
Humidity: 12.7 %

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading +corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
87.200	H	3.06	208.00	Q.P.	29.15	-13.79	15.36	40.00	-24.64
259.700	H	1.00	354.00	Q.P.	34.99	-8.52	26.47	46.00	-19.53
457.350	H	2.22	339.00	Q.P.	24.86	-1.72	23.14	46.00	-22.86

All other emission levels had test margins greater than 25 dB.

		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 2</b>	
<b>Test Report No.</b> RTS-5993-1202-28	<b>Date of Test</b> February 9- February 14, 2012	<b>FCC ID:</b> L6AREX40GW <b>IC :</b> 2503A-REX40GW	

Radiated Emissions Test Results cont'd

Test Configuration 3


Date of the test: February 13, 2011

The environmental conditions were: Temperature: 26.0 °C  
 Humidity: 11.9 %

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
51.500	V	1.46	108.00	Q.P.	40.50	-16.92	23.58	40.00	-16.42
68.300	H	4.00	344.00	Q.P.	35.98	-16.20	19.78	40.00	-20.22
217.950	H	1.00	203.00	Q.P.	34.67	-9.48	25.19	46.00	-20.81
308.400	H	1.13	349.00	Q.P.	34.95	-6.26	28.69	46.00	-17.31
388.050	H	1.00	310.00	Q.P.	33.23	-4.30	28.93	46.00	-17.07
469.700	H	1.00	324.00	Q.P.	28.35	-1.32	27.03	46.00	-18.97

All other emission levels had test margins greater than 25 dB.



		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 2</b>	
Test Report No. RTS-5993-1202-28	Date of Test February 9- February 14, 2012	FCC ID: L6AREX40GW IC : 2503A-REX40GW	

Radiated Emissions Test Results cont'd

Test Configuration 4

Date of the test: February 14, 2011

The environmental conditions were: Temperature: 26.6 °C  
Humidity: 14.1 %

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
49.100	H	1.46	108.00	Q.P.	46.84	-16.48	30.36	40.00	-9.64
73.650	V	4.00	344.00	Q.P.	43.15	-15.42	27.73	40.00	-12.27
105.150	H	1.00	203.00	Q.P.	43.85	-11.96	31.89	43.50	-11.61
149.800	H	1.13	349.00	Q.P.	47.97	-11.79	36.18	43.50	-7.32
240.250	H	1.00	310.00	Q.P.	54.88	-10.40	44.48	46.00	<b>-1.52</b>
261.950	H	1.00	324.00	Q.P.	47.37	-8.49	38.88	46.00	-7.12
387.150	H	1.00	203.00	Q.P.	46.81	-4.33	42.48	46.00	-3.52
432.000	H	1.13	349.00	Q.P.	45.80	-3.09	42.71	46.00	-3.29

All other emission levels had test margins greater than 25 dB.

		EMI Test Report for the BlackBerry® smartphone Model REX41GW <b>APPENDIX 2</b>	
Test Report No. RTS-5993-1202-28	Date of Test February 9- February 14, 2012	FCC ID: L6AREX40GW IC : 2503A-REX40GW	

Radiated Emissions Test Results cont'd

Test Configuration 5

Date of the test: February 10, 2011

The environmental conditions were: Temperature: 27.2 °C  
Humidity: 12.2 %

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+c orr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
53.050	V	1.40	51.00	Q.P.	39.26	-16.88	22.38	40.00	-17.62
93.350	H	2.19	354.00	Q.P.	44.29	-13.07	31.22	43.50	-12.28
138.500	V	1.72	352.00	Q.P.	48.99	-12.05	36.94	43.50	-6.56
175.150	H	1.69	64.00	Q.P.	50.69	-11.04	39.65	43.50	-3.85
175.500	V	3.60	354.00	Q.P.	32.26	-11.03	21.23	43.50	-22.27
223.550	H	1.64	220.00	Q.P.	50.61	-9.81	40.80	46.00	-5.20
345.250	H	1.00	198.00	Q.P.	43.64	-2.22	41.42	46.00	-4.58

All other emission levels had test margins greater than 25 dB.