

EMI Test Report

Tested in accordance with
Federal Communications Commission (FCC)
Personal Communications Services
CFR 47, Parts 15, Subpart B




A division of Research In Motion Limited

REPORT NO.: RTS-2582-0912-21

PRODUCT MODEL NO.: RCT41GW
TYPE NAME: BlackBerry® smartphone
FCC ID: L6ARCT40GW
IC: 2503A-RCT40GW

DATE: December 12, 2009

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Test Report No. RTS-2582-0912-21	Dates of Test November 23 to November 30, 2009	Author Data Fahd Faisal

Statement of Performance:

The BlackBerry® smartphone, model RCT41GW, part number CER-27173-001 Rev. 1 and accessories performs within the requirements of the test standards when configured and operated per RIM's operation instructions.

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:



Fahd Faisal
Regulatory Compliance Associate
Date: 12 December, 2009

Reviewed by:



Michael Cino
Regulatory Compliance Associate
Date: 15 December, 2009

Reviewed and Approved by:



Masud S. Attayi, P.Eng.
Manager, Regulatory Compliance
Date: 16 December, 2009



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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 01, 2008 Class B Digital Devices, Unintentional Radiators

B. Associated Documents

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 November 23 to November 30, 2009.

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The sample EUT included:

SAMPLE	MODEL	CER NUMBER	PIN
1	RCT41GW	CER-27173-001 Rev. 1	2151BF6E
2	RCT41GW	CER-27173-001 Rev. 1	2151BEF0

AC conducted testing was performed on samples 1
Radiated Emissions testing was performed on sample 2

BlackBerry® smartphone Accessories Tested


- 1) Folding Blade Charger, part number HDW-17955-001 with an output voltage of 5.0 volts dc, 700 mA and attached USB cable with a lead length of 1.80 metres.
- 2) Captive Cable Charger, part number HDW-17957-003 with an output voltage of 5.0 volts dc, 700 mA and attached USB cable with a lead length of 1.80 metres.
- 3) Fixed Blade Charger, part number HDW-24481-001, with an output voltage of 5.0 volts dc.
- 4) D-X1 Sleeve External Battery Charger, (EBC), part number HDW-19137-001.
- 5) USB Y-Cable, part number HDW-19137-002, lead lengths of 26 cm and 11 cm.
- 6) Stereo Headset, part number HDW-14322-003 with a lead length of 1.3 metres.
- 7) Premium Stereo Headset, part number HDW-15766-005, 1.3 metres long.
- 8) USB Data Cable, part number HDW-06610-013, 0.30 metres long.
- 9) USB Data Cable, part number HDW-06610-009, 1.00 metre long.
- 10) USB Data Cable, part number HDW-06610-005, 1.50 metres long.
- 11) Charging POD, part number HDW-14390-001.
- 12) Bluetooth Headset, part number HDW-23439-001

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			
Part 15, Subpart B	Conducted AC Line Emission	Yes	1
Part 15, Subpart B	Radiated Unintentional Spurious Emissions	Yes	2

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a) CONDUCTED AC LINE 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 PIN 2151BF6E was in battery charging mode. The input voltage was 120 V, 60 Hz.


The following test configurations were measured:

1. The BlackBerry® smartphone, in GSM 850 idle mode and Audio Playback mode with the Stereo Headset attached, was connected to the Folding Blade Charger.
2. The BlackBerry® smartphone, in PCS idle mode and Video Playback mode, was placed in the Charging Pod with the Premium Stereo Headset attached. The Charging Pod was connected in parallel to the External Battery Charger via the USB Y-Cable. The USB Y-Cable was connected to the Folding Blade Charger.
3. The BlackBerry® smartphone, in GSM 850 idle mode and Audio Playback mode with the Stereo Headset attached, was connected to the Fixed Blade Charger via 1.5m USB Cable.

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 worse case test margin of 7.90 dB below the QP limit at 2.391 MHz using the quasi-peak detector, in test configuration 2.

Measurement Uncertainty ±3.0 dB

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

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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 PIN 2151BEF0 was in battery charging mode for all configurations. The ac input voltage was 120V, 60Hz.

The following test configurations were measured:

1. The BlackBerry® smartphone, in PCS idle mode with the Stereo Headset attached, was connected to a Laptop via 1.5m High Speed USB cable.
2. The BlackBerry® smartphone, in GSM 850 Idle mode was connected to the Laptop via the USB Y-cable and a 0.3m cable. The other end of the USB Y-cable was used to power the External Battery Charger.
3. The BlackBerry® smartphone, in GSM 850 Idle mode and Camera Operational mode, was connected to the Captive Cable Charger.
4. The BlackBerry® smartphone, in PCS idle mode with the Bluetooth Headset attached, was placed in the Charging Pod. The Charging Pod was connected to the Folding Blade Charger.
5. The BlackBerry® smartphone, in BT Tx mode was connected to the Folding Blade Charger.
6. The BlackBerry® smartphone, in GSM 850 Idle mode with the Stereo Headset attached was placed in the Charging Pod. The Charging Pod was connected to the Fixed Blade Charger via the 1.5m USB cable.
7. The BlackBerry® smartphone, in PCS Idle mode with the Premium Stereo Headset attached was connected in parallel to the External Battery Charger via the USB Y-Cable. The USB Y-Cable was connected to the Fixed Blade Charger via the 1.5m USB cable.
8. The BlackBerry® smartphone, in Bluetooth Tx mode with the Stereo Headset attached was connected in parallel to the External Battery Charger via the USB Y-Cable. The USB Y-Cable was connected to the Fixed Blade Charger via the 1.0m USB cable.

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The system's radiated emission levels were compared with respect to the FCC CFR 47 Part 15, Subpart B Class B limit.
The system met the requirements with a worse case emission test margin of 4.30 dB at 216.0 MHz using test configuration 1.

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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

To view the test data see APPENDIX 2.

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	10-11-14	Radiated Emissions
Preamplifier system	TDK RF Solutions	PA-02	080010	10-11-06	Radiated Emissions
EMC Analyzer	Rohde & Schwarz	ESIB 40	100255	10-11-30	Radiated Emissions
Digital Multimeter	Hewlett Packard	34401A	US36042324	10-10-08	Conducted/Radiated Emissions
Environment Monitor	Control Company	1870	230355190	10-01-30	Radiated Emissions
Environment Monitor	Control Company	1870	80117164	10-01-08	Conducted/Radiated Emissions
L.I.S.N.	Rohde & Schwarz	ENV216	100060	10-04-21	Conducted Emissions
Hybrid Log Antenna	EMC Automation	HLP-3003C	017301	10-02-02	Radiated Emissions
Horn Antenna	EMC Automation	HRN-0118	030101	10-07-22	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMU 200	837493/073	10-11-30	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMU 200	112394	10-11-30	Radiated/Conducted Emissions
EMI Test Receiver	Rohde & Schwarz	ESU 40	100162	10-04-22	Radiated/Conducted Emissions
Bluetooth Tester	Rohde & Schwarz	CBT	100368	10-11-26	Radiated Emissions
Bluetooth Tester	Rohde & Schwarz	CBT	100370	10-11-26	Radiated/Conducted Emissions

APPENDIX 1 - AC LINE CONDUCTED EMISSIONS TEST DATA

	EMI Test Report for the BlackBerry® smartphone Model RCT41GW APPENDIX 1	
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AC Conducted Emissions Test Results

The measurements were performed by Steven Wang.

Test Configuration 1

The BlackBerry® smartphone PIN 2151BF6E was tested on November 23, 2009.


The environmental test conditions were: Temperature: 24 °C
Pressure: 1021 mb
Relative Humidity: 22 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dB)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.155	L1	35.68	10.01	45.70	65.75	55.75	-20.06
0.231	N	29.26	9.81	39.06	62.41	52.41	-23.35
0.267	L1	28.51	9.85	38.36	61.21	51.21	-22.85
0.330	N	26.31	9.84	36.15	59.45	49.45	-23.30
0.429	N	23.51	9.87	33.38	57.27	47.27	-23.89
0.798	L1	26.20	9.57	35.77	56.00	46.00	-20.23
1.941	L1	28.83	9.54	38.37	56.00	46.00	-17.64
2.009	N	25.64	9.61	35.25	56.00	46.00	-20.75
2.310	L1	33.13	9.55	42.68	56.00	46.00	-13.32
3.251	L1	22.09	9.60	31.69	56.00	46.00	-24.31
4.488	L1	21.69	9.64	31.33	56.00	46.00	-24.67

All other emission levels had a test margin of greater than 25 dB.

Measurements were done with the quasi-peak detector.

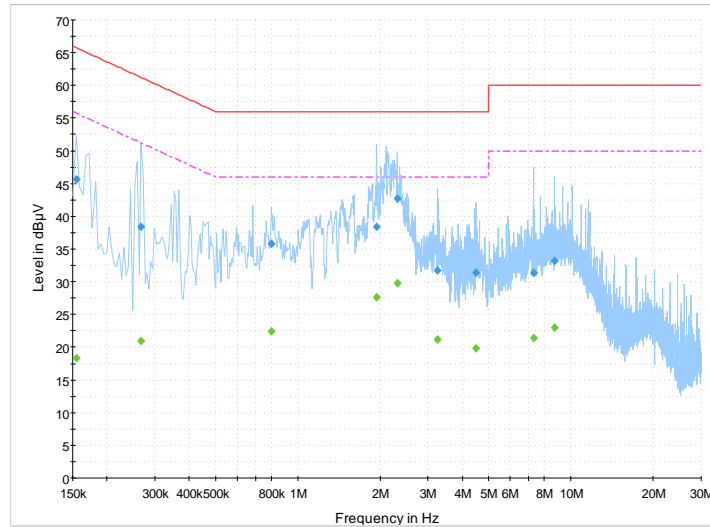
See figure 1-1 and figure 1-2 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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AC Conducted Emissions Test Graphs

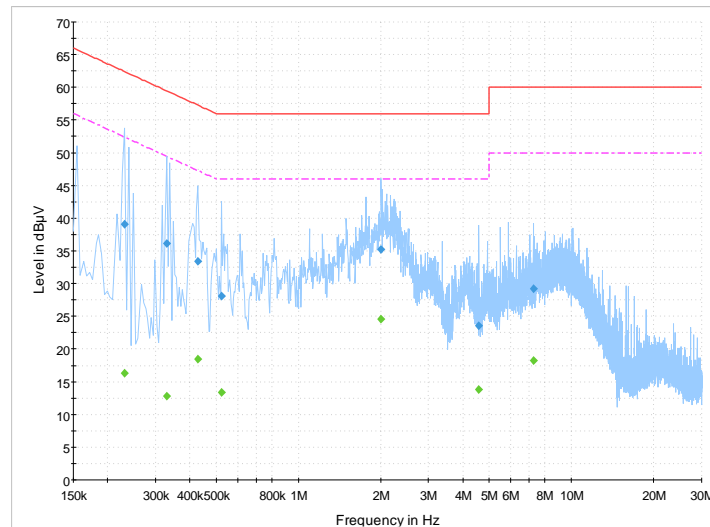
Test Configuration 1

Figure 1-1: L1 lines




— EN 55022 Conducted EMI Class B QP Limit Line
- - - EN 55022 Conducted EMI Class B AVG Limit Line
◆ Preview Result - PK Detector
◆ Final Result - QP Detector
◆ Final Result - AVG Detector

Figure 1-2: N Lines



— EN 55022 Conducted EMI Class B QP Limit Line
- - - EN 55022 Conducted EMI Class B AVG Limit Line
◆ Preview Result - PK Detector
◆ Final Result - QP Detector
◆ Final Result - AVG Detector

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AC Conducted Emissions Test Results cont'd

Test Configuration 2

The BlackBerry® smartphone PIN 2151BF6E was tested on November 23, 2009.


The environmental test conditions were: Temperature: 24 °C
Pressure: 1021 mb
Relative Humidity: 22 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dB)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.168	L1	32.65	9.94	42.59	65.06	55.06	-22.46
0.479	L1	30.12	9.69	39.81	56.37	46.37	-16.56
0.492	N	11.87	9.89	21.77	46.13	36.13	-24.37
0.735	N	12.10	9.76	21.86	46.00	36.00	-24.14
0.933	L1	27.41	9.53	36.94	56.00	46.00	-19.06
0.938	N	12.90	9.67	22.57	46.00	36.00	-23.43
2.054	N	22.75	9.62	32.37	46.00	36.00	-13.63
2.328	N	25.76	9.61	35.38	46.00	36.00	-10.63
2.391	L1	38.56	9.54	48.10	56.00	46.00	-7.90
3.453	N	16.11	9.61	25.71	46.00	36.00	-20.29
3.597	L1	27.60	9.62	37.22	56.00	46.00	-18.78
4.587	L1	27.95	9.65	37.60	56.00	46.00	-18.40
8.417	L1	28.29	9.76	38.06	60.00	50.00	-21.94
9.038	N	16.79	9.65	26.44	50.00	40.00	-23.56

All other emission levels had a test margin 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 2

Figure 1-3: L1 lines

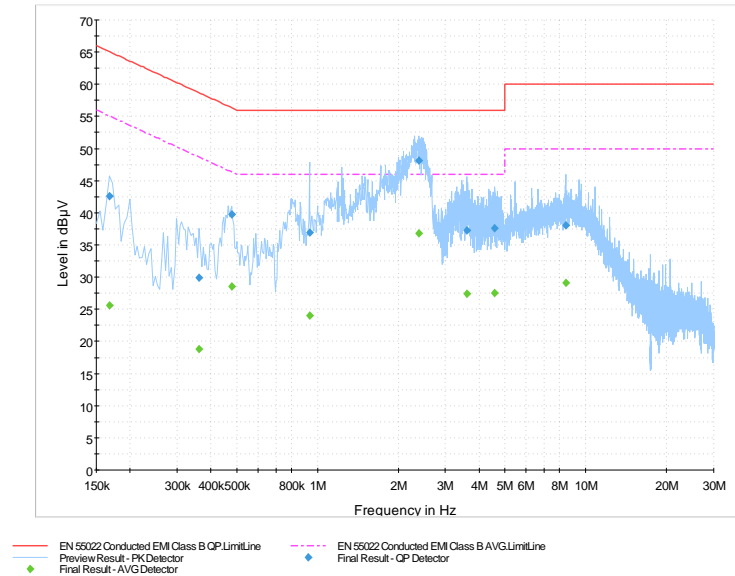
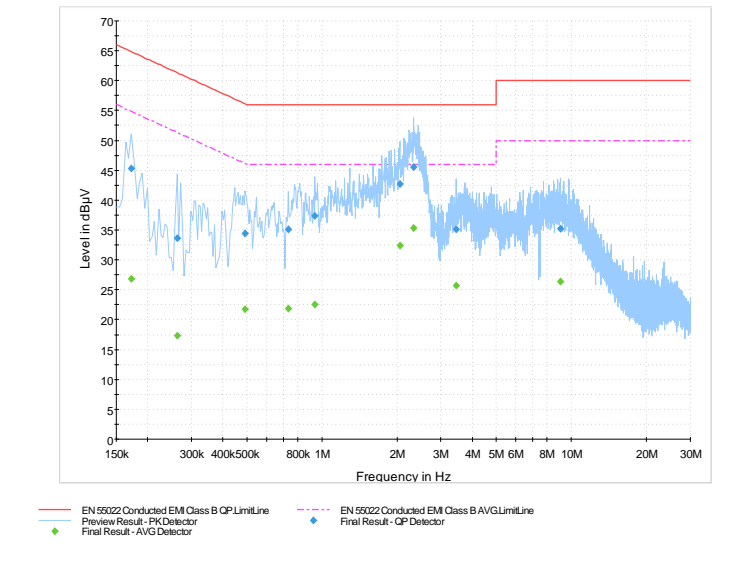



Figure 1-4: N Lines



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AC Conducted Emissions Test Results cont'd

Test Configuration 3

The BlackBerry® smartphone PIN 2151BF6E was tested on November 23, 2009.


The environmental test conditions were: Temperature: 24 °C
 Pressure: 1028 mb
 Relative Humidity: 21 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dB)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.528	L1	22.19	9.67	31.87	56.00	46.00	-24.14

All other emission levels had a test margin of greater than 25 dB.

Measurements were done with the quasi-peak 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.

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AC Conducted Emissions Test Graphs

Test Configuration 3

Figure 1-5: L1 lines

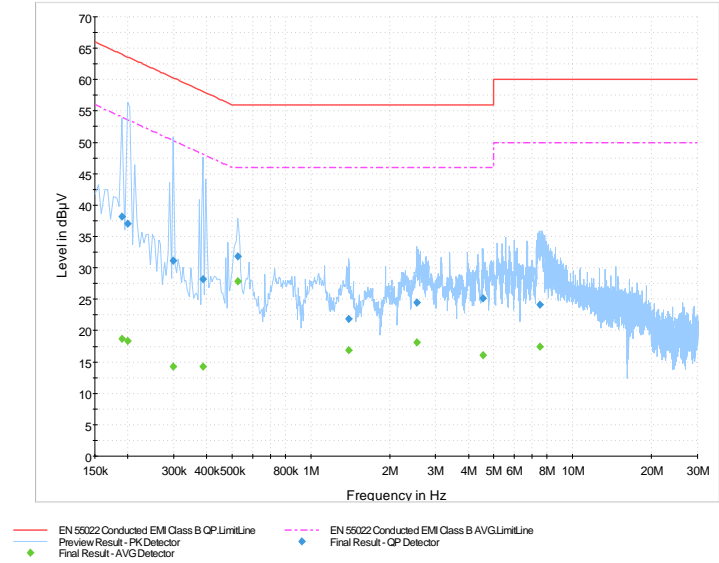
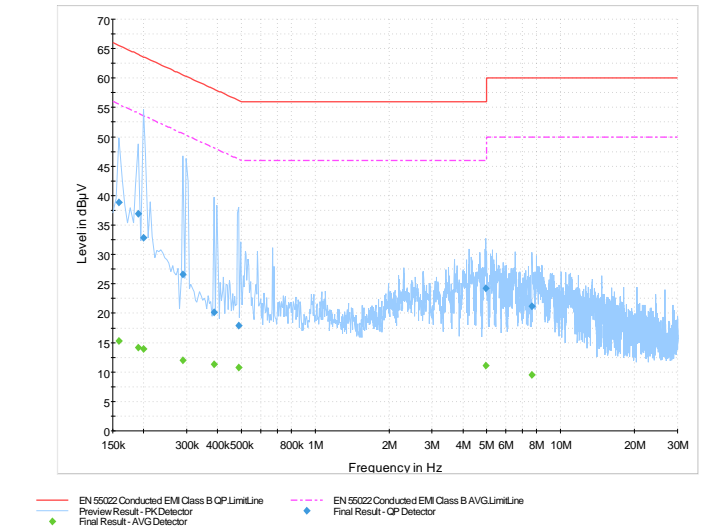



Figure 1-6: N Lines



APPENDIX 2 - RADIATED EMISSIONS TEST DATA

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Radiated Emissions Test Results

The measurements were performed by Fahd Faisal and Kevin Rose on BlackBerry® smartphone PIN 2151BEF0.

Test Configuration 1


The environmental test conditions were: Temperature: 25 °C
Pressure: 1012 mb
Relative Humidity: 24 %

The BlackBerry® smartphone was tested on November 23, 2009.

Test Distance was 3.0 metres.

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)							
165.850	V	1.57	330.00	Q.P.	42.94	-18.27	24.67	43.50	-18.83
216.000	H	1.31	248.00	Q.P.	55.49	-16.29	39.20	43.50	-4.30
298.750	H	1.19	121.00	Q.P.	39.39	-14.78	24.61	46.00	-21.39
431.350	H	2.21	252.00	Q.P.	39.14	-10.51	28.63	46.00	-17.37
528.000	H	1.95	262.00	Q.P.	42.89	-8.04	34.85	46.00	-11.15
719.900	H	1.08	191.00	Q.P.	41.95	-5.04	36.91	46.00	-9.09
864.000	V	2.12	295.00	Q.P.	44.02	-2.49	41.53	46.00	-4.47

All other emission levels had a test margin greater than 25 dB.

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Radiated Emissions Test Results cont'd

Test Configuration 2


The environmental test conditions were: Temperature: 26 °C
Pressure: 1012 mb
Relative Humidity: 24 %

The BlackBerry® smartphone was tested on November 23, 2009.

Test Distance was 3.0 metres.

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)							
70.900	V	1.41	334.00	Q.P.	51.59	-21.87	29.72	40.00	-10.28
165.750	H	1.11	243.00	Q.P.	45.70	-18.27	27.43	43.50	-16.07
216.000	H	1.66	301.00	Q.P.	53.78	-16.29	37.49	43.50	-6.01
233.200	H	1.42	261.00	Q.P.	46.74	-17.14	29.60	46.00	-16.40
244.500	H	1.53	192.00	Q.P.	49.98	-17.12	32.86	46.00	-13.14
366.400	V	1.47	160.00	Q.P.	46.21	-12.61	33.60	46.00	-12.40
528.000	H	1.93	105.00	Q.P.	42.44	-8.04	34.40	46.00	-11.60

All other emission levels had a test margin greater than 25 dB.

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Radiated Emissions Test Results cont'd

Test Configuration 3


The environmental test conditions were: Temperature: 26 °C
Pressure: 1012 mb
Relative Humidity: 24 %

The BlackBerry® smartphone was tested on November 23, 2009.

Test Distance was 3.0 metres.

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)							
55.400	V	1.58	307.00	Q.P.	41.74	-23.25	18.49	40.00	-21.51
56.750	V	3.95	226.00	Q.P.	48.71	-23.27	25.44	40.00	-14.56
69.000	V	2.44	212.00	Q.P.	37.95	-22.17	15.78	40.00	-24.22
244.650	H	1.08	341.00	Q.P.	45.35	-17.12	28.23	46.00	-17.77
336.900	H	1.24	155.00	Q.P.	41.48	-11.62	29.86	46.00	-16.14
341.650	H	1.43	142.00	Q.P.	45.33	-10.60	34.73	46.00	-11.27
353.150	H	1.00	154.00	Q.P.	49.50	-10.91	38.59	46.00	-7.41
380.950	H	2.43	196.00	Q.P.	41.76	-12.17	29.59	46.00	-16.41

All other emission levels had a test margin greater than 25 dB.

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Radiated Emissions Test Results cont'd

Test Configuration 4


The environmental test conditions were: Temperature: 24 °C
Pressure: 1016 mb
Relative Humidity: 25 %

The BlackBerry® smartphone was tested on November 24, 2009.

Test Distance was 3.0 metres.

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)							
56.000	V	1.66	264.00	Q.P.	41.95	-23.25	18.70	40.00	-21.30
196.450	H	2.12	43.00	Q.P.	34.74	-15.83	18.91	43.50	-24.59

All other emission levels had a test margin greater than 25 dB.

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Radiated Emissions Test Results cont'd

Test Configuration 5


The environmental test conditions were: Temperature: 25 °C
Pressure: 1012 mb
Relative Humidity: 27 %

The BlackBerry® smartphone was tested on November 24, 2009.

Test Distance was 3.0 metres.

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)							
47.500	V	1.58	81.00	Q.P.	44.56	-22.42	22.14	40.00	-17.86
50.250	V	1.43	51.00	Q.P.	46.02	-23.01	23.01	40.00	-16.99
112.900	H	2.85	171.00	Q.P.	45.69	-17.68	28.01	43.50	-15.49
124.200	H	2.84	346.00	Q.P.	45.47	-18.19	27.28	43.50	-16.22
157.950	V	1.41	12.00	Q.P.	46.45	-18.54	27.91	43.50	-15.59
239.900	V	1.57	341.00	Q.P.	39.91	-17.12	22.79	46.00	-23.21
327.500	H	2.91	141.00	Q.P.	38.64	-12.70	25.94	46.00	-20.06
332.000	V	1.89	101.00	Q.P.	46.79	-12.44	34.35	46.00	-11.65
350.100	V	2.06	96.00	Q.P.	32.81	-9.89	22.92	46.00	-23.08
355.550	H	2.30	161.00	Q.P.	41.24	-11.59	29.65	46.00	-16.35

All other emission levels had a test margin greater than 25 dB.

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Test Report No. RTS-2582-0912-21	Dates of Test November 23 to November 30, 2009	Author Data Fahd Faisal

Radiated Emissions Test Results cont'd

Test Configuration 6


The environmental test conditions were: Temperature: 26 °C
Pressure: 1012 mb
Relative Humidity: 24 %

The BlackBerry® smartphone was tested on November 24, 2009

Test Distance was 3.0 metres.

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)							
49.550	V	1.51	287.00	Q.P.	53.76	-22.89	30.87	40.00	-9.13
51.750	V	1.74	231.00	Q.P.	49.26	-23.05	26.21	40.00	-13.79
93.950	V	1.97	47.00	Q.P.	44.39	-19.01	25.38	43.50	-18.12
96.300	H	2.19	31.00	Q.P.	44.92	-18.74	26.18	43.50	-17.32
126.250	V	1.43	196.00	Q.P.	39.86	-18.33	21.53	43.50	-21.97

All other emission levels had a test margin greater than 25 dB.

	EMI Test Report for the BlackBerry® smartphone Model RCT41GW APPENDIX 2	
Test Report No. RTS-2582-0912-21	Dates of Test November 23 to November 30, 2009	Author Data Fahd Faisal

Radiated Emissions Test Results cont'd

Test Configuration 7


The environmental test conditions were: Temperature: 25 °C
Pressure: 1012 mb
Relative Humidity: 25 %

The BlackBerry® smartphone was tested on November 24, 2009

Test Distance was 3.0 metres.

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)							
46.550	V	2.45	87.00	Q.P.	40.79	-22.18	18.61	40.00	-21.39
66.900	V	2.04	115.00	Q.P.	40.14	-22.58	17.56	40.00	-22.44
80.350	V	2.30	27.00	Q.P.	37.35	-20.64	16.71	40.00	-23.29

All other emission levels had a test margin greater than 25 dB.

	EMI Test Report for the BlackBerry® smartphone Model RCT41GW APPENDIX 2	
Test Report No. RTS-2582-0912-21	Dates of Test November 23 to November 30, 2009	Author Data Fahd Faisal

Radiated Emissions Test Results cont'd

Test Configuration 8

The environmental test conditions were: Temperature: 26 °C
Pressure: 1012 mb
Relative Humidity: 24 %

The BlackBerry® smartphone was tested on November 30, 2009

Test Distance was 3.0 metres.

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)							
33.750	V	1.41	86.00	Q.P.	46.12	-18.92	27.20	40.00	-12.80
46.750	V	1.45	47.00	Q.P.	55.14	-22.22	32.92	40.00	-7.08
47.750	V	1.40	91.00	Q.P.	55.48	-22.48	33.00	40.00	-7.00
291.600	H	1.41	40.00	Q.P.	38.00	-15.55	22.45	46.00	-23.55
349.600	V	1.93	281.00	Q.P.	32.02	-9.87	22.15	46.00	-23.85
358.550	H	1.26	16.00	Q.P.	39.71	-12.08	27.63	46.00	-18.37

All other emission levels had a test margin greater than 25 dB.