

# **EMI Test Report**

For RBB10BW

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

## **RIM Testing Services (RTS)**

**REPORT NO.:** RTS-0223-0508-03

**PRODUCT MODEL NO.:** RBB10BW  
**TYPE NAME:** BlackBerry Smart Card Reader  
**FCC ID:** L6ARBB10BW  
**IC:** 2503A-RBB10BW

**Date:** \_\_\_\_\_August 03, 2005\_\_\_\_\_

# RTS

## RIM Testing Services

Report No. RTS-0223-0508-03

Test Date: July 21 to 28, 2005

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### Statement of Performance:

The BlackBerry Smart Card Reader, model RBB10BW ASY-09858-001 and accessories when configured and operated per RIM's operating instructions, performs within the requirements of the test standards.

### Declaration:

We hereby certify that:

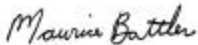
The test data reported herein is an accurate record of the performance of the sample(s) tested.

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.

Tested by:



Maurice Battler.  
Certification Specialist

Date: August 04, 2005

Reviewed by:



Masud S Attayi, P.Eng.  
Senior Compliance Engineer

Date: August 15, 2005

Reviewed and Approved by:



Paul G. Cardinal, Ph.D.  
Manager

Date: August 17, 2005

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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, Dec. 08, 2003, Class B Digital Devices, Unintentional Radiators  
IC ICES-003 Issue 3, Class B Digital Devices, Unintentional Radiators

### B) Product Identification

The equipment under test (EUT) was tested at the RIM Testing Services (RTS) EMI test facility, located at:

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

The testing began on July 21, 2005 and was completed on July 28, 2005. The sample EUT included:

1. BlackBerry Smart Card Reader, model number RBB10BW, ASY-09858-001, sample #6, FCC ID L6ARBB10BW, IC: 2503A-RBB10BW.
2. Captive Cable Travel Charger, model number PSM05R-050CH, part number ASY-07559-001 with an output voltage of 5.0 volts dc, 0.5 amps and attached USB cable with a lead length of 0.71 metres.
3. External Battery Charger model number BCM6720A, part number ASY-07042-002 with a dc output of 4.2 volts, 0.75 amps for charging the internal battery and 5.1 volts, 0.75 amps for charging an external battery.
4. North American Travel Charger, model number PSM04A-050RIM, part number ASY-07040-001 with an output voltage of 5.0 volts dc, 0.85 amps and attached USB cable with a lead length of 0.73 metres.
5. Rapid Battery Travel Charger, model number PSM08R-050RIM, part number ASY-07041-001 with an output voltage of 5.0 volts dc, 1.6 amps and attached USB cable with a lead length of 0.85 metres.
6. USB data cable model number HDW-06610-001, 1.45 metres long.

The transmit frequency band for the BlackBerry Smart Card Reader is Bluetooth 2402 to 2480 MHz.

### C) Support Equipment Used for the Testing of the EUT

- 1) PC System, Myraid, model EN-P3B-7, serial number CCC0004078
- 2) Monitor, ViewSonic, model number VCDTS23103-2M, serial number 24B022952648
- 3) Printer, H/P, model number C5884A, serial number US8251W0VQ
- 4) Smart Card, Datakey 330

### D) Test Voltage

The ac input voltage was 120 volts, 60 Hz where applicable. This configuration was per RIM's specifications.

### E) Test Results Chart

SPECIFICATION	Test Type	MEETS REQUIREMENTS	Performed By
FCC CFR 47 Part 15, Subpart B IC ICES-003 Conducted Emissions	Class B	Yes	Masud Attayi
FCC CFR 47 Part 15, Subpart B IC ICES-003 Radiated Emissions	Class B	Yes	Masud Attayi

### F) Modifications to EUT

No modifications were required on the EUT.

### G) Summary of Results

#### 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.

The following test configurations were measured:

1. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the Captive Cable Travel Charger, part number ASY-07559-001. The ac input to the Travel Charger was 120 volts, 60 Hz.
2. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected via the detachable USB cable to the External Battery Charger, part number ASY-07042-002. The ac input to the External Battery Charger was 120 volts, 60 Hz.
3. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the North American Travel Charger, part number ASY-07040-001. The ac input to the North American Travel Charger was 120 volts, 60 Hz.
4. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the Rapid Battery Travel Charger, part number ASY-07041-001. The ac input to the Rapid Battery Travel Charger was 120 volts, 60 Hz.

The sample EUT's conducted emissions were compared with respect to the FCC CFR 47 Part 15, Subpart B (CISPR 22) and IC ICES-003, Class B average limit. The sample EUT had a worse case test margin of 14.29 dB at 0.462 MHz using the average detector and 9.76 dB using the quasi peak detector with the North American Travel Charger test configuration.

#### Measurement Uncertainty $\pm 2.0$ dB

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

The environmental test conditions were:

- Temperature 21°C
- Pressure 1015 mb
- Relative Humidity 36%

### 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 remotely 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. At this point 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 1.0 GHz. Both the horizontal and vertical polarisations of the emissions were measured.

The measurements were done in a semi-anechoic chamber. The semi-anechoic chamber's FCC registration number is **778487** and the Industry Canada file number is **IC4240**.

The EUT was configured and operated to produce the maximum radiated emissions while still keeping within RIM's specifications.

The following test configurations were measured:

1. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the Captive Cable Travel Charger, part number ASY-07559-001.
2. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the External Battery Charger, part number ASY-07042-002 via the detachable USB cable model number HDW-06610-001.
3. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the North American Travel Charger, part number ASY-07040-001.
4. The BlackBerry Smart Card Reader in battery charging mode and in communication mode with the Smart Card was connected to the Rapid Battery Travel Charger, part number ASY-07041-001.
5. The BlackBerry Smart Card Reader in communication mode with the Smart Card was connected to the support PC via the USB data cable for charging and data link.

The system's radiated emission levels in idle mode 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 worse case emission test margin of 4.32 dB at 53.401 MHz with the BlackBerry Smart Card Reader connected to the Captive Cable Travel Charger test configuration.

### **Sample Calculation:**

Field Strength (dB $\mu$ V/m) is calculated as follows:

FS = Measured Level (dB $\mu$ V) + A.F. (dB/m) + Cable Loss (dB) - Preamp (dB) + Filter Loss (dB)

### **Measurement Uncertainty $\pm 4.0$ dB**

To view the test data see APPENDIX 2.

The environmental test conditions were:

- Temperature 21°C
- Pressure 1015 mb
- Relative Humidity 36%



### H) 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	05-11-26	Radiated Emissions
Preamplifier system	TDK RF Solutions	PA-02	080010	06-01-13	Radiated Emissions
EMI Receiver	Agilent	85462A	3942A00517	05-08-30	Conducted/Radiated Emissions
RF Filter Section	Agilent	85460A	3704A00481	05-08-30	Conducted/Radiated Emissions
Digital Multimeter	Hewlett Packard	34401A	US38042324	06-07-12	Conducted/Radiated Emissions
L.I.S.N.	Emco	3816/2	1120	05-08-18	Conducted Emissions
Impulse Limiter	Rohde & Schwarz	ESHS-Z2	836248/052	05-11-12	Conducted Emissions
Environment Monitor	Control Company	1870	230355190	06-01-11	Radiated Emissions
Hybrid Log Antenna	TDK	HLP-3003C	17301	06-07-21	Radiated Emissions

## APPENDIX 1

### AC CONDUCTED EMISSIONS TEST DATA/PLOTS

AC Conducted Emissions Test Results

July 28, 2005

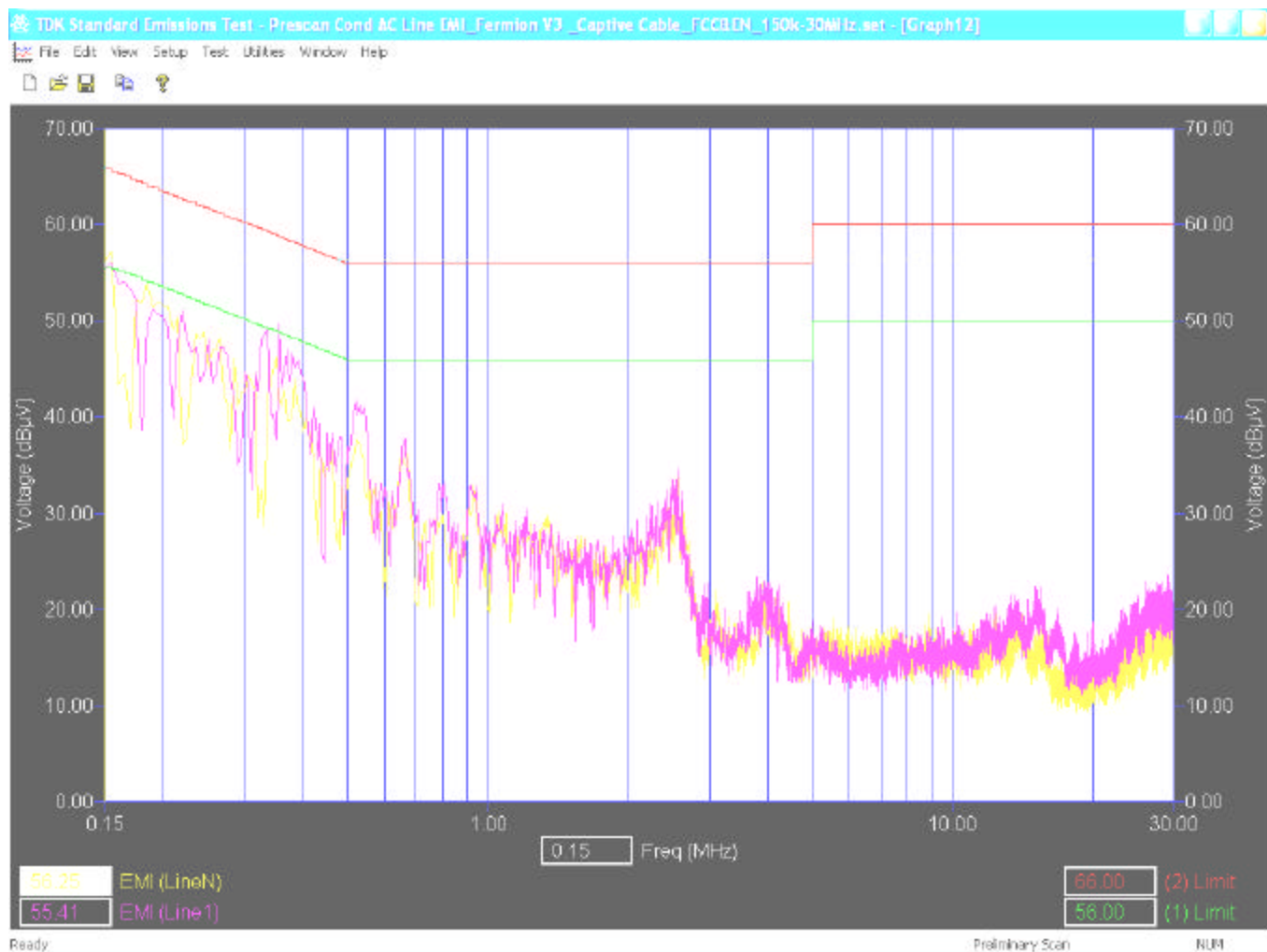
Test Configuration 1

FCC CFR 47 Part 15, Subpart B (CISPR 22), IC ICES-003, Class B

Frequency (MHz)	Line	Reading (QP) (dBμV)	Correction Factors for Impulse Limiter, LISN, Cable (dB)	QP Level (reading + Corr.Factor) (dB)	(QP) Limit (dBμV)	(AVG) Limit (dBμV)	Margin (QP) Limits (dB)	Margin (AVG) Limits (dB)
0.152	N	41.77	9.98	51.75	65.73	55.73	-13.98	-3.98
0.154	L1	41.65	9.98	51.63	65.73	55.73	-14.10	-4.10
0.172	N	39.20	9.98	49.18	64.26	54.26	-15.08	-5.08
0.176	L1	38.98	9.98	48.96	64.04	54.04	-15.08	-5.08
0.216	L1	34.44	9.98	44.42	62.82	52.82	-18.40	-8.40
0.239	N	31.98	9.98	41.96	61.92	51.92	-19.96	-9.96
0.261	L1	33.25	9.98	43.23	61.76	51.76	-18.53	-8.53
0.287	N	29.38	9.98	39.36	60.67	50.67	-21.31	-11.31
0.338	L1	33.59	9.98	43.57	59.33	49.33	-15.76	-5.76
0.342	N	28.71	9.97	38.68	58.96	48.96	-20.28	-10.28
0.349	L1	34.26	9.97	44.23	58.84	48.84	-14.61	-4.61
0.389	N	28.43	9.97	38.40	58.17	48.17	-19.77	-9.77

See graph 1 for the measurement plot.

### AC Conducted Emissions Test Graph 1



### Test Configuration 1

### AC Conducted Emissions Test Results cont'd

July 28, 2005

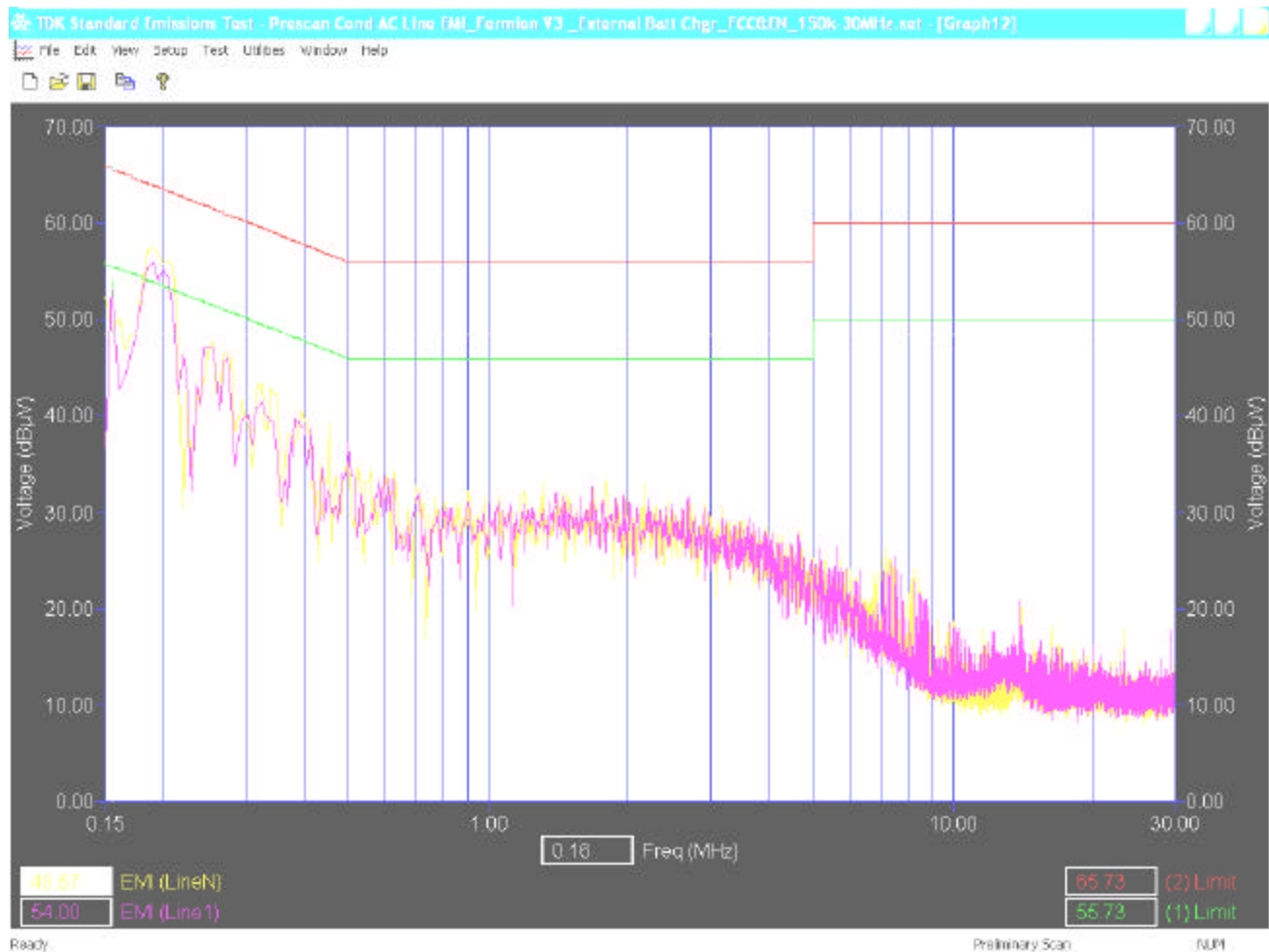
### Test Configuration 2

FCC CFR 47 Part 15, Subpart B (CISPR 22), IC ICES-003, Class B

Frequency (MHz)	Line	Reading (QP) (dBμV)	Correction Factors for Impulse Limiter, LISN, Cable (dB)	QP Level (reading + Corr.Factor) (dB)	(QP) Limit (dBμV)	(AVG) Limit (dBμV)	Margin (QP) Limits (dB)	Margin (AVG) Limits (dB)
0.153	L1	37.79	9.98	47.77	65.73	55.73	-17.96	-7.96
0.155	N	38.41	9.98	48.39	66.00	56.00	-17.61	-7.61
0.192	L1	42.27	9.98	52.25	64.04	54.04	-11.79	-1.79
0.193	N	41.76	9.98	51.74	64.04	54.04	-12.30	-2.30
0.208	L1	37.45	9.98	47.43	62.82	52.82	-15.39	-5.39
0.252	N	32.03	9.98	42.01	61.59	51.59	-19.58	-9.58
0.254	L1	33.26	9.98	43.24	61.76	51.76	-18.52	-8.52
0.261	L1	30.64	9.98	40.62	60.97	50.97	-20.35	-10.35
0.275	N	29.14	9.98	39.12	60.97	50.97	-21.85	-11.85
0.318	L1	27.76	9.98	37.74	59.58	49.58	-21.84	-11.84
0.318	N	28.77	9.98	38.75	59.58	49.58	-20.83	-10.83
0.330	N	25.92	9.98	35.90	59.20	49.20	-23.31	-13.31

See graph 2 for the measurement plot.

### AC Conducted Emissions Test Graph 2



### Test Configuration 2

### AC Conducted Emissions Test Results cont'd

July 28, 2005

### Test Configuration 3

FCC CFR 47 Part 15, Subpart B (CISPR 22), IC ICES-003, Class B

Frequency (MHz)	Line	Reading (QP) (dBμV)	Correction Factors for Impulse Limiter, LISN, Cable (dB)	Level (QP) (reading + Corr.Factor) (dB)	Limit (QP) (dBμV)	Margin (QP) Limits (dB)
0.467	L1	36.51	9.99	46.50	56.51	-10.01
0.469	N	36.67	9.99	46.66	56.43	-9.76
0.529	N	32.15	10.00	42.15	56.00	-13.85
0.746	L1	34.15	9.98	44.13	56.00	-11.87
0.843	L1	33.15	10.00	43.15	56.00	-12.85
1.009	N	27.73	10.02	37.75	56.00	-18.25
1.354	L1	29.54	10.03	39.57	56.00	-16.43
1.394	N	28.05	10.03	38.08	56.00	-17.92
1.473	L1	28.50	10.03	38.53	56.00	-17.47
1.746	N	27.23	10.05	37.28	56.00	-18.72
1.869	L1	28.36	10.05	38.41	56.00	-17.59
2.169	N	28.07	10.06	38.13	56.00	-17.87

Measurements were done with the quasi-peak detector.

See graph 3 for the measurement plot.

### AC Conducted Emissions Test Results cont'd

July 04, 2005

### Test Configuration 3

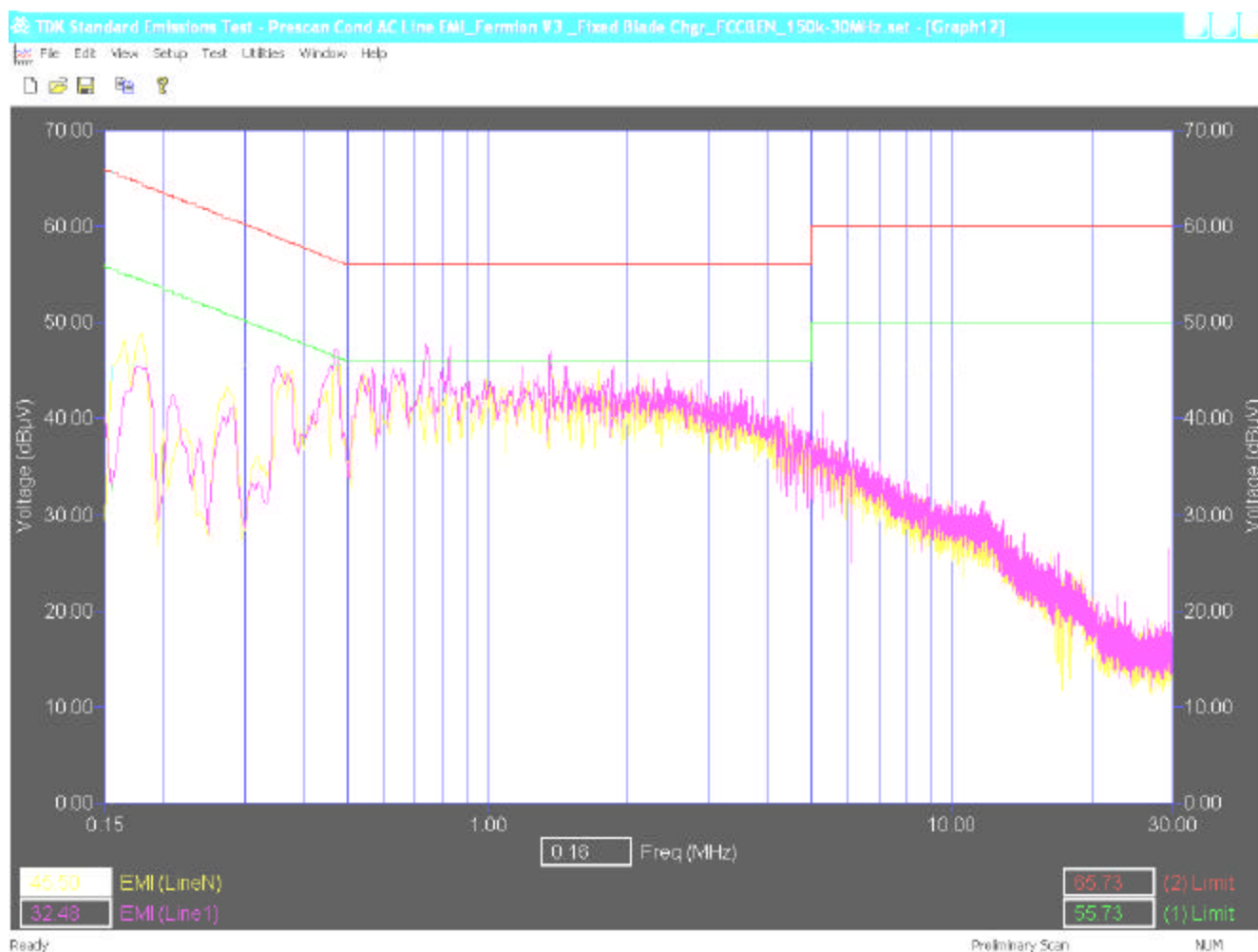
FCC CFR 47 Part 15, Subpart B (CISPR 22), IC ICES-003, Class B

Frequency (MHz)	Line	Reading (AVE.) (dBμV)	Correction Factors for Impulse Limiter, LISN, Cable (dB)	Level (AVE.) (reading + Corr.Factor) (dB)	Limit (AVE.) (dBμV)	Margin (AVE.) Limits (dB)
0.462	N	22.14	9.99	32.13	46.43	-14.29
0.463	L1	22.07	9.99	32.06	46.51	-14.45
0.538	N	13.88	10.00	23.88	46.00	-22.12
0.742	L1	19.02	9.98	29.00	46.00	-17.00
0.831	L1	20.08	10.00	30.08	46.00	-15.92
1.009	N	17.66	10.02	27.68	46.00	-18.32
1.363	L1	17.74	10.03	27.77	46.00	-18.23
1.379	N	18.61	10.03	28.64	46.00	-17.36
1.474	L1	19.89	10.03	29.92	46.00	-16.08
1.743	N	17.15	10.05	27.20	46.00	-18.80
1.865	L1	18.40	10.05	28.45	46.00	-17.55
2.152	N	16.63	10.06	26.69	46.00	-19.31

Measurements were done with the average detector.  
See graph 3 for the measurement plot.



### AC Conducted Emissions Test Graph 3



### Test Configuration 3

### AC Conducted Emissions Test Results cont'd

July 28, 2005

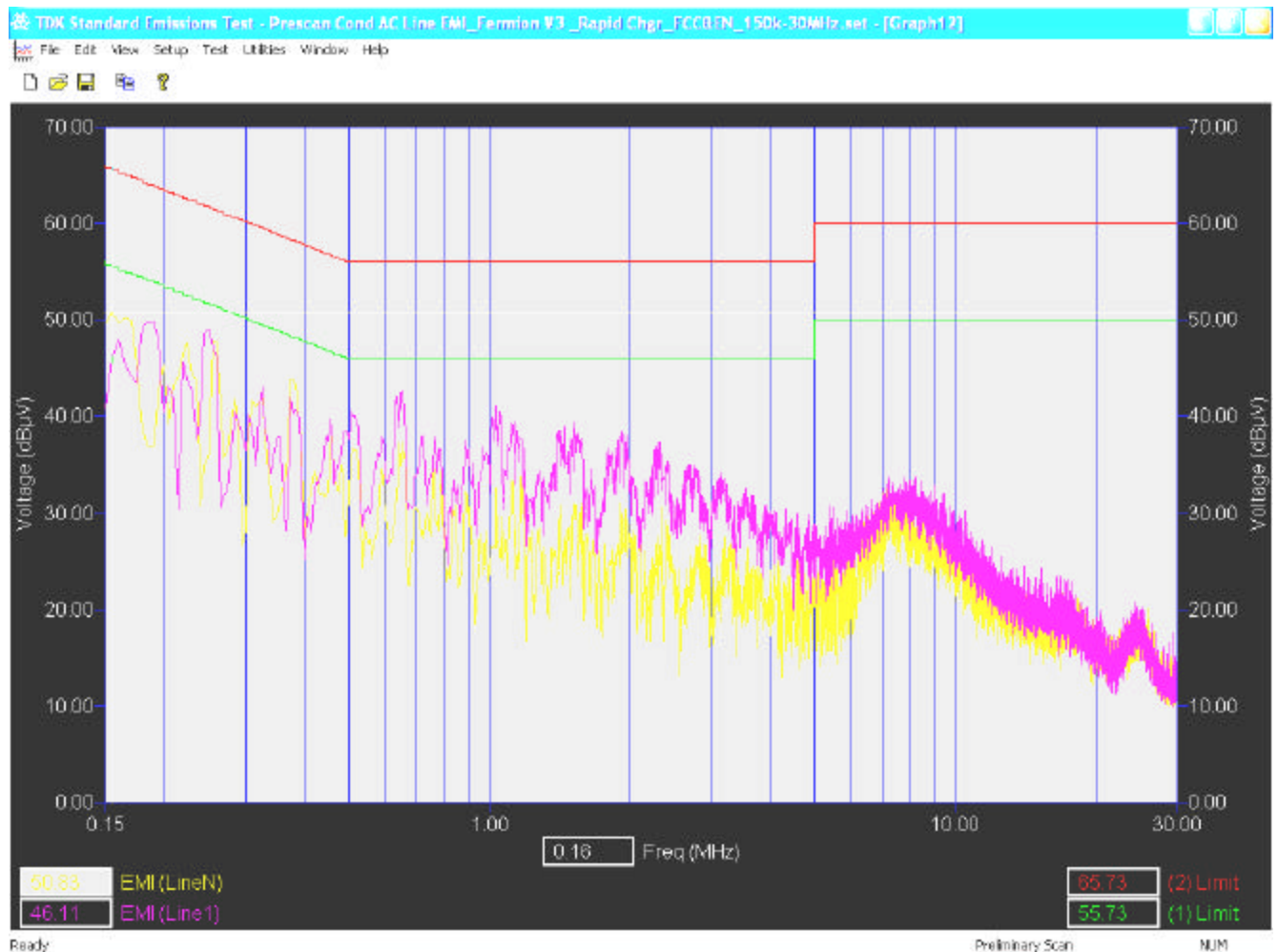
### Test Configuration 4

FCC CFR 47 Part 15, Subpart B (CISPR 22), IC ICES-003, Class B

Frequency (MHz)	Line	Reading (QP) (dBμV)	Correction Factors for Impulse Limiter, LISN, Cable (dB)	QP Level (reading + Corr.Factor) (dB)	(QP) Limit (dBμV)	(AVG) Limit (dBμV)	Margin (QP) Limits (dB)	Margin (AVG) Limits (dB)
0.161	N	9.98	35.33	45.31	65.73	55.73	-20.42	-10.42
0.195	L1	9.98	36.38	46.36	64.04	54.04	-17.68	-7.68
0.197	N	9.98	36.12	46.10	63.61	53.61	-17.51	-7.51
0.226	N	9.98	30.75	40.73	62.63	52.63	-21.90	-11.90
0.254	N	9.98	35.88	45.86	61.59	51.59	-15.73	-5.73
0.255	L1	9.98	35.74	45.72	61.76	51.76	-16.04	-6.04
0.329	N	9.98	26.10	36.08	59.58	49.58	-23.50	-13.50
0.380	L1	9.97	28.70	38.67	58.39	48.39	-19.72	-9.72
0.382	N	9.97	28.80	38.77	58.28	48.28	-19.51	-9.51
0.506	L1	10.00	28.93	38.93	56.00	46.00	-17.07	-7.07
0.648	L1	9.98	29.88	39.86	56.00	46.00	-16.14	-6.14
1.038	L1	10.00	27.19	37.19	56.00	46.00	-18.81	-8.81

See graph 4 for the measurement plot.

### AC Conducted Emissions Test Graph 4



### Test Configuration 4

AC Conducted Emission Test-Setup Photo

FCC CFR 47 Part 15, Subpart B, Class B



## APPENDIX 2

### RADIATED EMISSIONS TEST DATA

### Radiated Emissions Test Results

FCC CFR 47 Part 15, Subpart B, Class B

July 27, 2005

Operating Mode: The BlackBerry Smart Card Reader was connected to the Captive Cable Travel Charger, part number ASY-07559-001. The ac input to the Travel Charger was 120 volts, 60 Hz. The BlackBerry Smart Card Reader was operating in battery charging mode and in communication mode with the Smart Card.

Test distance was 3.0 metres.

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBμV)	Correction Factors 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)							
53.401	V	1.72	0	Q.P.	57.41	-21.73	35.68	40.00	-4.32
53.926	H	3.20	273	Q.P.	46.14	-21.69	24.45	40.00	-15.55
66.907	V	1.53	310	Q.P.	47.34	-21.80	25.54	40.00	-14.46
105.368	H	2.47	99	Q.P.	42.11	-18.98	23.13	43.50	-20.37
122.746	H	3.11	97	Q.P.	38.14	-18.42	19.72	43.50	-23.78
126.713	H	1.88	105	Q.P.	41.26	-18.21	23.05	43.50	-20.45
172.148	V	1.45	8	Q.P.	38.10	-17.86	20.24	43.50	-23.26
174.638	H	1.80	263	Q.P.	38.75	-17.78	20.97	43.50	-22.53
177.845	V	1.54	336	Q.P.	37.94	-17.63	20.31	43.50	-23.19
187.438	H	1.51	265	Q.P.	38.31	-16.98	21.33	43.50	-22.17
188.982	V	1.45	174	Q.P.	36.83	-16.77	20.06	43.50	-23.44

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

Radiated Emissions Test Results cont'd

FCC CFR 47 Part 15, Subpart B, Class B

July 27, 2005

Operating Mode: The BlackBerry Smart Card Reader was connected via the detachable USB cable model number HDW-06610-001, to the External Battery Charger part number ASY-07042-002. The ac input to the External Battery Charger was 120 volts, 60 Hz. The BlackBerry Smart Card Reader was operating in battery charging mode and in communication mode with the Smart Card.

Test Distance was 3.0 metres.

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dB $\mu$ V)	Correction Factors for preamp/antenna/cables/ filter (dB/m)	Field Strength Level (reading+corr.)	Limit @ 3.0 m	Test Margin
	Pol. (V/H)	Height (metres)					(dB $\mu$ V/m)	(dB $\mu$ V/m)	(dB)
55.353	V	1.65	23	Q.P.	46.43	-21.70	24.73	40.00	-15.27
59.915	V	1.44	168	Q.P	53.16	-22.49	30.67	40.00	-9.33
61.744	V	1.42	8	Q.P	49.38	-22.28	27.10	40.00	-12.90
64.499	V	1.47	327	Q.P	46.02	-21.94	24.08	40.00	-15.92

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

Radiated Emissions Test Results cont'd

FCC CFR 47 Part 15, Subpart B, Class B

July 27, 2005

Operating Mode: The BlackBerry Smart Card Reader was connected to the North American Travel Charger, part number ASY-07040-001. The ac input to the North American Travel Charger was 120 volts, 60 Hz. The BlackBerry Smart Card Reader was operating in battery charging mode and in communication mode with the Smart Card.

Test Distance was 3.0 metres.

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dB $\mu$ V)	Correction Factors for preamp/antenna/cables/ filter (dB/m)	Field Strength Level (reading+corr.) (dB $\mu$ V/m)	Limit @ 3.0 m (dB $\mu$ V/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
42.248	V	2.13	225	Q.P.	41.26	-20.99	20.27	40.00	-19.73
48.745	V	1.74	30	Q.P.	49.99	-21.95	28.04	40.00	-11.96
55.23	V	1.74	145	Q.P.	47.52	-21.65	25.87	40.00	-14.13
61.746	V	1.43	45	Q.P.	44.16	-22.27	21.89	40.00	-18.11
61.927	H	1.00	250	Q.P.	42.73	-22.27	20.46	40.00	-19.54
126.747	H	1.74	109	Q.P.	36.55	-18.22	18.33	43.50	-25.17
871.032	V	2.73	324	Q.P.	21.43	-0.97	20.46	46.00	-25.54

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



Radiated Emissions Test Results cont'd

FCC CFR 47 Part 15, Subpart B, Class B

July 27, 2005

Operating Mode: The BlackBerry Smart Card Reader was connected to the Rapid Battery Travel Charger, part number ASY-07041-001. The ac input to the Rapid Battery Travel Charger was 120 volts, 60 Hz. The BlackBerry Smart Card Reader was operating in battery charging mode and in communication mode with the Smart Card.

Test Distance was 3.0 metres.

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dB $\mu$ V)	Correction Factors for preamp/antenna/cables/ filter (dB/m)	Field Strength Level (reading+corr.) (dB $\mu$ V/m)	Limit @ 3.0 m (dB $\mu$ V/m)	Test Margin (dB)
	Pol. (V/H)	Height (metres)							
62.187	H	1.05	249	Q.P.	39.20	-22.23	16.97	40.00	-23.03
820.791	V	1.76	263	Q.P.	22.29	-1.97	20.32	46.00	-25.68
915.860	V	2.77	190	Q.P.	20.79	-0.19	20.60	46.00	-25.40
932.162	V	1.85	222	Q.P.	21.00	0.09	21.09	46.00	-24.91

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

### Radiated Emissions Test Results cont'd

FCC CFR 47 Part 15, Subpart B, Class B

July 28, 2005

Operating Mode: The BlackBerry Smart Card Reader in communication mode with the Smart Card was connected to the support PC via the detachable USB cable model number HDW-06610-001 for charging and data link. The ac input to the support PC was 120 volts, 60 Hz.

Test Distance was 3.0 metres.

Frequency (MHz)	Antenna		Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBμV)	Correction Factors for preamp/antenna/cables/ filter (dB/m)	Field Strength Level (reading+corr.)	Limit @ 3.0 m	Test Margin
	Pol. (V/H)	Height (metres)					(dBμV/m)	(dBμV/m)	(dB)
49.988	H	394	176	Q.P	53.04	-22.07	30.97	40.00	-9.03
54.017	H	274	193	Q.P	44.47	-21.68	22.79	40.00	-17.21
78.362	V	138	129	Q.P	46.43	-21.17	25.24	40.00	-14.76
601.058	H	117	209	Q.P	40.44	-5.66	34.78	46.00	-11.22
604.038	H	113	208	Q.P	40.70	-5.47	35.23	46.00	-10.77
637.722	V	138	46	Q.P	30.55	-5.58	24.97	46.00	-21.03
900.563	V	155	141	Q.P	33.10	-0.52	32.58	46.00	-13.42
901.323	V	213	146	Q.P	33.75	-0.50	33.25	46.00	-12.75
905.970	H	152	73	Q.P	28.96	-0.44	28.52	46.00	-17.48
906.336	V	144	145	Q.P	33.53	-0.42	33.11	46.00	-12.89
960.108	V	212	61		33.66	1.00	34.66	54.00	-19.34

### Radiated Emissions Test Photos

