EXHIBIT B(1)

DEVICE MEASURED

[FCC Ref. 2.983(e)]

APPLICANT:	Research In Motion Limited 295 Phillip Street Waterloo, Ontario N2L 3W8 CANADA
MANUFACTURER/VENDOR:	Same as applicant
FCC IDENTIFIER:	L6AR900-2
MODEL NUMBER:	R900-2
SERIAL NO.:	Not Marked

Marstech Limited
11 Kelfield Street
Etobicoke, Ontario
M9W 5A1 CANADA

TECHNICIANS:
Jim Sims-Com-Serve Corp.
Perry Jarmuszewski and
Mr. Lizhong Zhu - Rsearch In Motion

Robert Marshall
Robert G. Marshall, P. Eng.

Date: Oct 30 / 95

SUMMARY OF RESULTS

		COMPLIANCE (yes)	(no)
RF POWER OUTPUT			
Transmitter:	2.985, 90.205	(x)	( )
OCCUPIED BANDWIDTH			
Transmitter:	2.989	(x)	( )
SPURIOUS EMISSIONS AT THE ANTENNA TERMINALS			
Transmitter:	2.991	(x)	( )
FIELD STRENGTH OF SPURIOUS RADIATION			
Transmitter:	2.993	(x)	( )
FREQUENCY STABILITY			
Transmitter:	2.995, 90.213	(x)	( )
SPURIOUS RADIATED EMISSIONS			
Receiver:	15.109	(x)	( )
BANDWIDTH LIMITATIONS			
Transmitter:	90.209(h)	(x)	( )

SYSTEM DESCRIPTION

The Research In Motion Limited 900 MHz packet data radio is intended to facilitate wireless data communication. The R900-2 has a standard TTL level serial async interface allowing it to communicate directly with imbedded controllers. Radio evaluation and application development is facilitated by the radio monitor board (RIM Model 01585001). The Radio Monitor Board translates the TTL level serial interface signals to standard RS-232 level signals. The RS-232 level signals can be directly interfaced to a microcomputer serial port. The R900-2 radio is primarily intended for battery powered applications and a standard battery power connector is provided. To facilitate the required EMI tests, the Radio Monitor Board provided a regulated and filtered 7.8V power supply to the R900-2 radio. The Radio Monitor Board was also connected between the serial I/O (COM-1 of the Compaq laptop) and the R900-2 radio. The R900-2 radio, the Radio Monitor Board, the AC adapter, the 9123 cellular antenna and all required interface cables will be marketed as the "RIM900 Radio Evaluation and Development Kit".

Normal radio operation for live use is called burst packet activity. The radio is normally in receive mode listening to all network activity. When a data packet is received explicitly addressed to a particular radio, it then transmits a short acknowledgement packet. In order for data to be transmitted, the radio first receives system information from the network to determine when to transmit, and then the data is transmitted in packets up to one second in length.

For testing purposes, a Compaq Laptop computer was connected to the R900-2 radio along with the AC/DC power supply adapter. The laptop was also connected to the level shift PCB, or the Radio Monitor Board with an RS-232 DB-9 shielded 1.5 metre cable. A 25 foot RF antenna cable was used to connect the Eclipse II/9123 antenna to the R900-2 radio. Several test modes for transmitting continuous carrier without modulation and with modulation generated from scrambler sequence or fixed sequence data were used.

SYSTEM DESCRIPTION (CONTINUED)

TEST SETUP FOR:
SPURIOUS EMISSIONS AT THE ANTENNA TERMINALS
AND OCCUPIED BANDWIDTH/BANDWIDTH LIMITATIONS

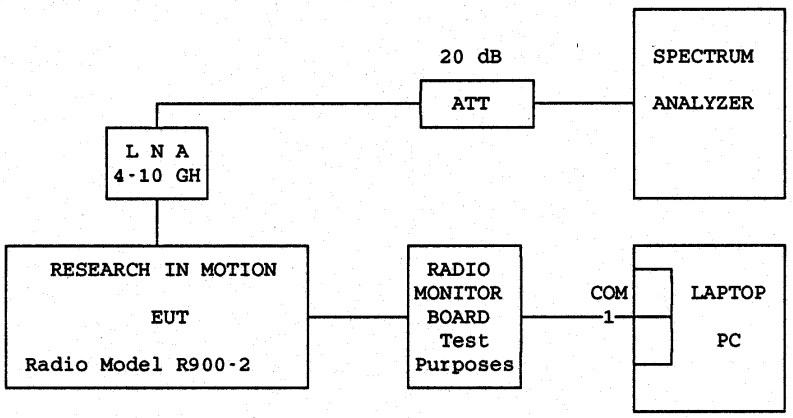


FIGURE # 1

SYSTEM DESCRIPTION (CONTINUED)

TEST SETUP FOR:
SPURIOUS RADIATED EMISSIONS

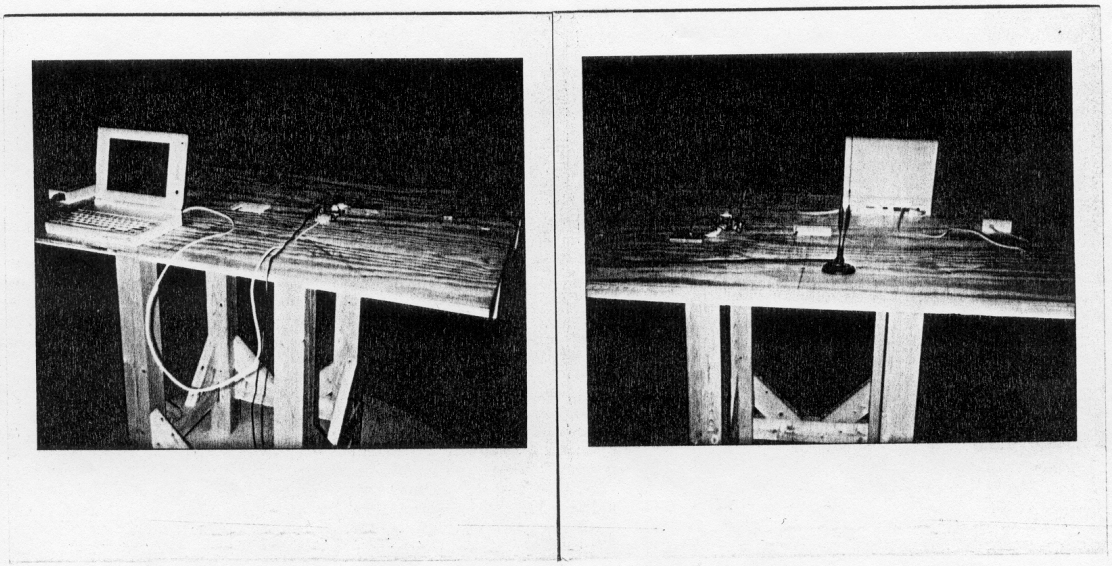


FIGURE # 2

TEST PROCEDURE: RADIATED EMISSIONS 15.109, & 2.993:

All tests were performed in accordance with FCC/MP-4, & ANSI C63.4.

The Research In Motion Limited 900 MHz Packet Data Radio Model R900-2, was connected together with a host laptop computer, radio monitor board, RIM Model 01585001, (the Radio Monitor Board translates TTL level serial interface signals to RS-232 level signals) as described on the "Title and System Description" pages. The system was arranged in a typical configuration of use and placed on top of a one meter non-conducting turntable as per ANSI C63.4. All of the system parts were connected together with cables that are sold with each piece or generic cables purchased for the specific connection involved. Several different equipment placements were tried so as to establish the worst normal case of equipment positioning. In this case the 01585001 Radio Monitor Board, laptop computer, RF radio and RF antenna were placed on top of the turntable. The power supply was placed at the bottom center of the test table. All of the cables and cords were moved about so as to create the highest level of EMI. The complete system was operating as it would be in normal use. Special software was employed in order that the RIM Radio Monitor Board was processing data in a worst case NORMAL manner. The turntable was rotated through 360 degrees.

A preliminary radio frequency scan was performed on the system to determine the worst case cable and equipment configuration. The attached results represent the system configuration maximized for worst case emissions in each frequency band. Please refer to the System Description.

The tests were conducted at a distance of three (3) meters with the receiving antennas in both the horizontal and vertical planes at each emission frequency. It should be noted that a preamplifier (LNA) was used between 3.5 GHz and 10 GHz.

EQUIPMENT:

	ADVANTEST R3261A Spectrum Analyzer and	
	H.P. 8563E Spectrum Analyzer	9.0 KHz - 26.5 GHz
Setting:	BW: 300 Hz, 100 KHz or 120 KHz (Q.P), as required.	
	CELERITEK LNA, Model CSA-903419	4.0 GHz - 18.0 GHz
	SPECTRA 20 dB attenuator, 5.0 W	0.0 Hz - 18.0 GHz
	A.H. Systems biconical antenna;	20 MHz - 330 MHz
	A.H. Systems log periodic antenna;	300 MHz - 1.8 GHz
	A.H. Systems log periodic antenna;	1.0 GHz - 12.4 GHz
	EATON dipole antennas; T1, T2, T3	25 MHz - 1.0 GHz
CDI	ROBERTS dipole antennas T1 T2 T3 T4	25 MHz - 1.0 GHz

NOTE: The three meter test range has been carefully evaluated to the ANSI C63.4, and will be remeasured for reflections and losses every three years. (ANSI C63.4/FCC OET-55)

RADIATED EMISSION RESULTS

BW: 100/120 KHz
Span: 05 to 50 MHz

PART 15 RECEIVER/DIGITAL RADIATED TESTS TO 1.0 G HZ

TEST #	FREQ. M HZ	LEVEL μV	ANT. TYPE (PZ)	ANT. FAC.	F.S. μV/M	LIMIT μV/M	DIFF. TO LIMIT; dB
01	36.57	08.3	B/C V	3.7	30.7	100	-10.25
02	47.10	07.7	B/C V	3.7	28.5	100	-10.91
03	50.43	08.9	B/C V	3.9	34.7	100	-9.19
04	57.70	08.5	B/C V	4.3	36.6	100	-8.74
05	72.31	08.9	B/C V	4.1	36.5	100	-8.76
06	78.82	11.8	B/C V	4.0	47.2	100	-6.52
07	182.51	08.4	B/C H	7.5	63.0	150	-7.54
08	201.77	10.7	B/C H	7.2	77.0	150	-5.79
09	220.83	08.3	B/C H	7.4	61.4	200	-10.25
10	224.31	08.8	B/C H	7.8	68.6	200	-9.29
11	343.70	10.0	L/P H	10.7	107.0	200	-5.43

PART 2/90 TRANSMITTER RADIATED TESTS TO 10 G HZ

TEST #	FREQ. G HZ	LEVEL μV	ANT. TYPE (PZ)	ANT. FAC.	F.S. μV/M	LIMIT μV/M	DIFF. TO LIMIT; dB
01	0.899	76400.0	RT.4 V	43.2	3.3 (V)	---	
02	1.092	103.3	L/P V	30.5	3150.7	7720	-7.78
03	1.798	108.0	L/P V	56.2	6069.6	7720	-2.09
04	2.700	50.0	L/P V	98.9	4945.0	7720	-3.87
05	3.596	25.0	L/P V	151.2	3780.0	7720	-6.20
06	4.495	300.0	L/P V	14.5	4350.0	7720	-4.98
07	5.394	600.0	L/P V	7.8	4680.0	7720	-4.35
08	6.293	250.0	L/P V	7.5	1875.0	7720	-12.29
09	7.192	130.0	L/P V	9.1	1183.0	7720	-16.29

OCCUPIED BANDWIDTH/BANDWIDTH LIMITATIONS

TEST PROCEDURE:

The Research In Motion Limited 900 MHz Packet Data Radio Model R900-2, was connected together with a host laptop computer, radio monitor board, RIM Model 01585001 and a 20 dB external attenuator as described on the "Title and System Description" pages. The RIM900-2V2 antenna output terminal was connected to the input of a 50 Ω spectrum analyzer through a matched 20 dB attenuator. The R900-2 transmitter was operating at full output power with and without internal data modulation.

TEST RESULTS:

UNMODULATED CARRIER LEVEL: **12.1 dBm** with a 20 dB external pad.

a) Internal Modulation: **-07 dBm at +4.23 KHz** Limit 00.0 dB

b) Internal Modulation: **-25 dBm at +6.23 KHz** Limit -08.9 dB

c) Internal Modulation: **-45 dBm at -9.49 KHz** Limit -40.0 dB

NOTE:

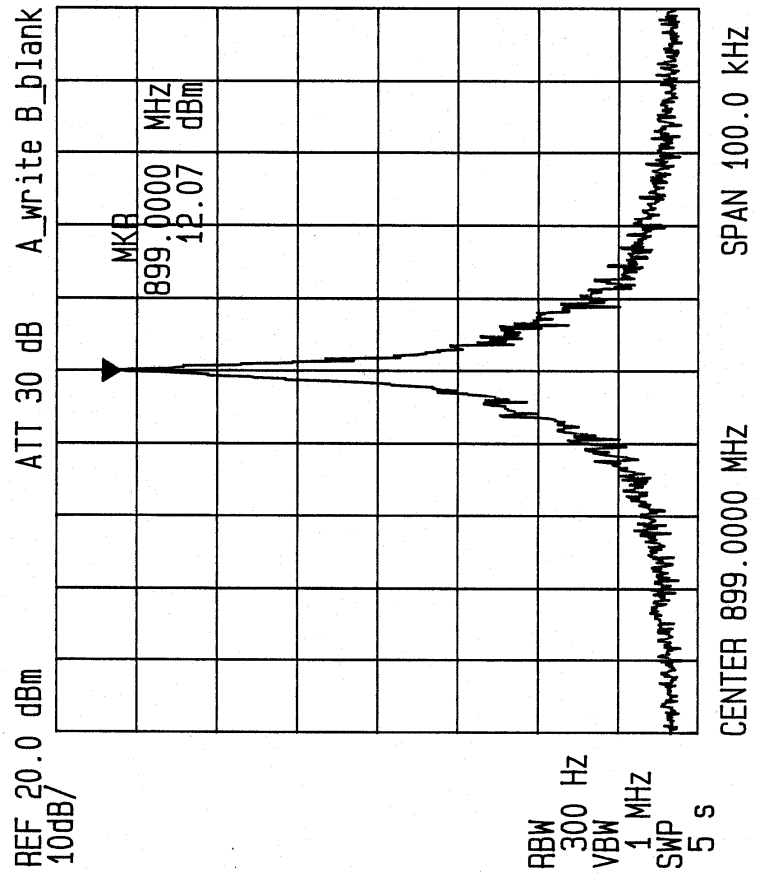
The above limits take into account the unmodulated carrier level of +12.1 dBm inclusive of the external attenuator. The actual limits are 12.1 dB, 21.0 dB and 52.6 dB based on an output power of 1.82 watts, respectively.

EQUIPMENT:

	ADVANTEST R3261A Spectrum Analyzer and	
	H.P. 8563E Spectrum Analyzer	9.0 KHz - 26.5 GHz
Setting:	BW: 300 Hz, 100 KHz or 120 KHz (Q.P), as required.	
	CELERITEK LNA, Model CSA-903419	4.0 GHz - 18.0 GHz
	SPECTRA 20 dB attenuator, 5.0 W	0.0 Hz - 18.0 GHz
	A.H. Systems biconical antenna;	20 MHz - 330 MHz
	A.H. Systems log periodic antenna;	300 MHz - 1.8 GHz
	A.H. Systems log periodic antenna;	1.0 GHz - 12.4 GHz
	EATON dipole antennas; T1, T2, T3	25 MHz - 1.0 GHz
CDI	ROBERTS dipole antennas T1 T2 T3 T4	25 MHz - 1.0 GHz

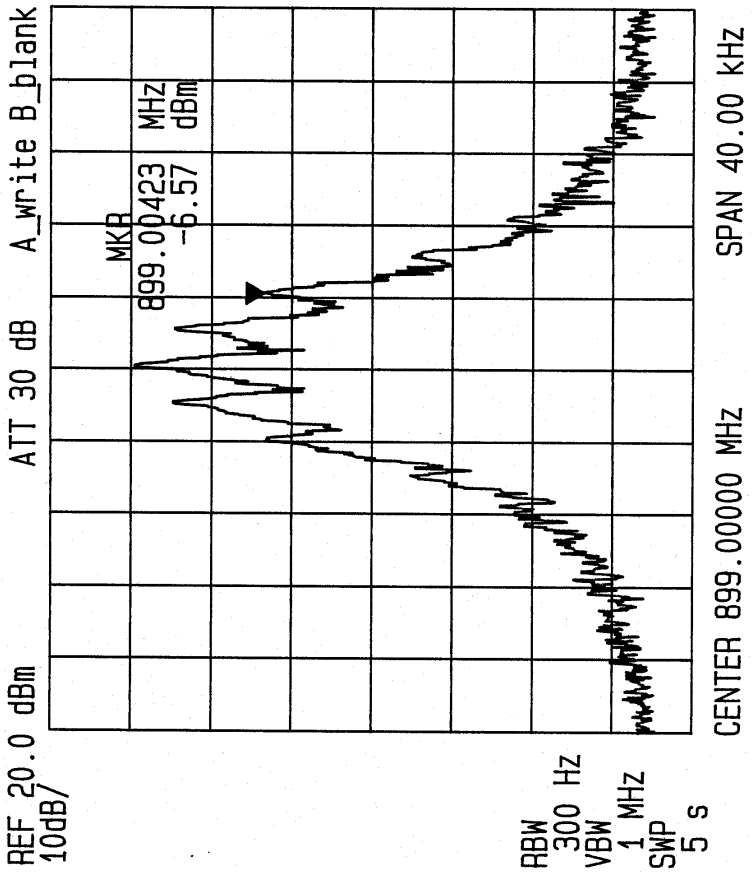
OCCUPIED BANDWIDTH/BANDWIDTH LIMITATIONS

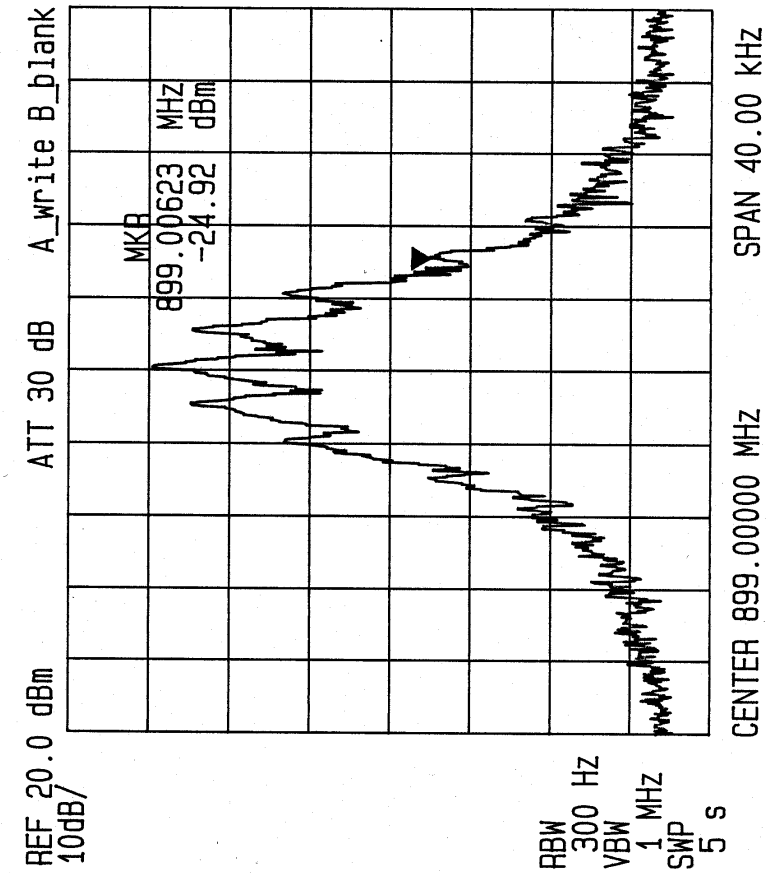
MODEL R900-2



OCCUPIED BANDWIDTH/BANDWIDTH LIMITATIONS

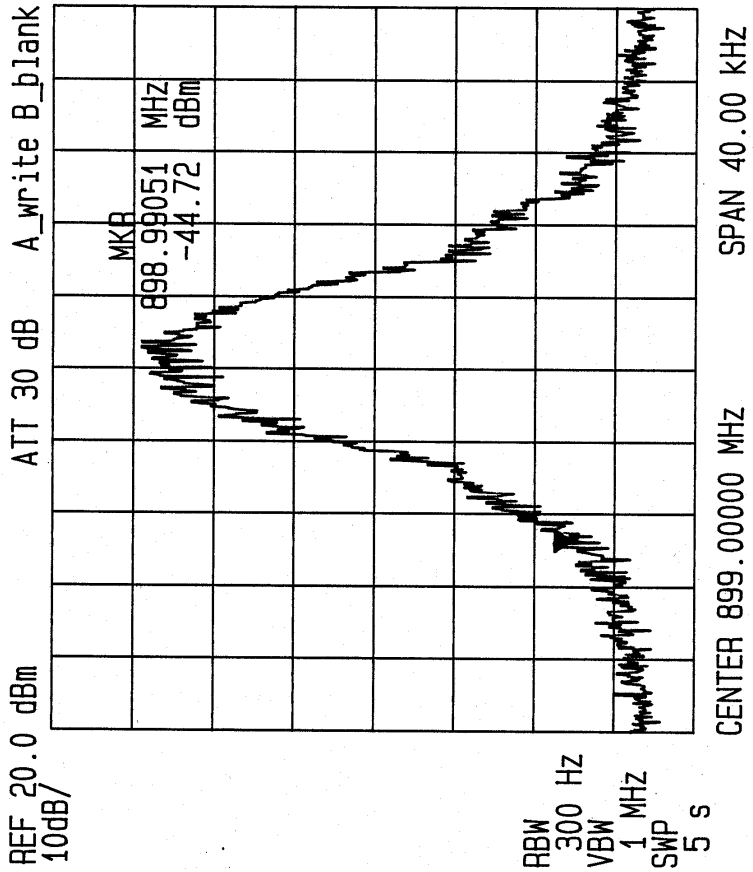
MODEL R900-2





OCUUPIED BANDWIDTH/BANDWIDTH LIMITATIONS

MODEL R900-2



SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST PROCEDURE:

The Research In Motion Limited 900 MHz Packet Data Radio model R900-2, was connected together with a host laptop computer, radio monitor board, RIM Model 01585001 and a 20 dB external attenuator as described on the "Title and System Description" pages. The R900-2 antenna output terminal was connected to the input of a 50 Ω spectrum analyzer through a matched 20 dB attenuator. The R900-2 transmitter was operating at full output power with internal data modulation. **The calculated limit below the unmodulated carrier power at 1.82 watts is 52.6 dB, minus the unmodulated carrier frequency level (12.1 dB).**

TEST RESULTS:

FREQUENCY MHZ	LEVEL dBm		LIMIT dBm
1,798	-50.0		-40
2,700	-54.0		-40
3,598	-65.0	at noise floor	-40
4,487	-60.0		-40
5,392	-64.0		-40
6,292	-57.0		-40

EQUIPMENT:

	ADVANTEST R3261A Spectrum Analyzer and H.P. 8563E Spectrum Analyzer	9.0 KHz - 26.5 GHz
Setting:	BW: 300 Hz, 100 KHz or 120 KHz (Q.P), as required.	
	CELERITEK LNA, Model CSA-903419	4.0 GHz - 18.0 GHz
	SPECTRA 20 dB attenuator, 5.0 W	0.0 Hz - 18.0 GHz
	A.H. Systems biconical antenna;	20 MHz - 330 MHz
	A.H. Systems log periodic antenna;	300 MHz - 1.8 GHz
	A.H. Systems log periodic antenna;	1.0 GHz - 12.4 GHz
	EATON dipole antennas; T1, T2, T3	25 MHz - 1.0 GHz
CDI	ROBERTS dipole antennas T1 T2 T3 T4	25 MHz - 1.0 GHz

RESULTS

RADIATED:

The Research In Motion Limited Radio Monitor Board model 01585001 **MEETS** the limits for a Class "A" Digital (Computing) Device Peripheral, pursuant to the rules and test procedures of the Federal Communications Commission and the Canadian "IC" Radio Interference Regulations, C.R.C., c 1374.

The highest emission found was 107 μV/M which was within the 200 μV/M limit.

LIMITS:	30 to 88 M Hz	.....	100 μV/M
	88 to 216 M Hz	.....	150 μV/M
3	216 to 960 M Hz	.....	200 μV/M
Metres	Above 960 M Hz	.....	500 μV/M

CONDUCTED:

The Research In Motion Limited Radio Monitor Board model 01585001 **MEETS** the limits for a Class "A" Digital (Computing) Device Peripheral, pursuant to the rules and test procedures of the Federal Communications Commission and the Canadian "IC" Radio Interference Regulations, C.R.C., c 1374.

The highest emission found was 87.8 μV which was within the 250 μV limit.

LIMITS:	450 K Hz to 1.705 M Hz	.....	250 μV
	1.705 M Hz to 30 M Hz	.....	250 μV

TEST PROCEDURE

RADIATED:

All tests were performed in accordance with FCC/MP-4, & ANSI C63.4.

The Research In Motion Limited Radio Monitor Board model 01585001, was connected together with a host laptop computer, RF radio, 900 MHz antenna and an AC/DC power supply as described on the "Title and System Description" pages. The system was arranged in a typical configuration of use and placed on top of a one meter non-conducting turntable as per ANSI C63.4. All of the system parts were connected together with cables that are sold with each piece or generic cables purchased for the specific connection involved. Several different equipment placements were tried so as to establish the worst normal case of equipment positioning. In this case the 01585001 Radio Monitor Board, laptop computer, RF radio and RF antenna were placed on top of the turntable. The power supply was placed at the bottom center of the test table. All of the cables and cords were moved about so as to create the highest level of EMI. The complete system was operating as it would be in normal use. Special software was employed in order that the RIM Radio Monitor Board was processing data in a worst case NORMAL manner. The turntable was rotated through 360 degrees.

A preliminary radio frequency scan was performed on the system to determine the worst case cable and equipment configuration. The attached results represent the system configuration maximized for worst case emissions in each frequency band. Please refer to the System Description.

The tests were conducted at a distance of three (3) meters with the receiving antennas in both the horizontal and vertical planes at each emission frequency.

EQUIPMENT:

Advantest R3261A Spectrum Analyzer
Anritsu 2601 A Spectrum Analyzer
Setting: BW: 100 KHz or 120 KHz (Q.P)
Hewlett-Packard RF generator Model 8640B (002) dblr.
A.H. Systems biconical antenna; ... 20 MHz - 330 MHz
A.H. Systems log periodic antenna; 300 MHz - 1.8 GHz
Eaton dipole antennas; T1, T2, T3.. 25 MHz - 1.0 GHz
CDI Roberts dipole antennas T1 T2 T3 T4 25 MHz - 1.0 GHz

NOTE: The Anritsu 2601 A spectrum analyzer and the Advantest R3261A spectrum analyzer are calibrated annually, and that calibration is directly traceable to the National Research Council of Canada. (NRC) This equipment is only used by qualified technicians and only for the purpose of EMI measurements. The three meter test range has been carefully evaluated to the ANSI C63.4, and will be remeasured for reflections and losses every three years. (FCC OET/55)

RADIATED EMISSION RESULTS

BW: 100/120 KHz
Span: 05 to 50 MHz

TEST #	FREQ. M HZ	LEVEL μV	ANT. TYPE (PZ)	ANT. FAC.	F.S. μV/M	LIMIT μV/M	DIFF. TO LIMIT; dB
01	36.57	08.3	B/C V	3.7	30.7	100	-10.25
02	47.10	07.7	B/C V	3.7	28.5	100	-10.91
03	50.43	08.9	B/C V	3.9	34.7	100	-9.19
04	57.70	08.5	B/C V	4.3	36.6	100	-8.74
05	72.31	08.9	B/C V	4.1	36.5	100	-8.76
06	78.82	11.8	B/C V	4.0	47.2	100	-6.52
07	182.51	08.4	B/C H	7.5	63.0	150	-7.54
08	201.77	10.7	B/C H	7.2	77.0	150	-5.79
09	220.83	08.3	B/C H	7.4	61.4	200	-10.25
10	224.31	08.8	B/C H	7.8	68.6	200	-9.29
11	343.70	10.0	L/P H	10.7	107.0	200	-5.43

TEST PROCEDURE

CONDUCTED:

All tests were performed in accordance with FCC/MP-4, & ANSI C63.4.

The Research In Motion Limited Radio Monitor Board model 01585001, was connected together with a host laptop computer, RF radio, 900 MHz antenna and an AC/DC power supply as described on the "Title and System Description" pages. The system was arranged in a typical configuration of use and placed on top of a non-conducting test table as per ANSI C63.4. All of the system parts were connected together with cables that are sold with each piece or generic cables purchased for the specific connection involved. Several different equipment placements were tried so as to establish the worst normal case of equipment positioning. In this case the 01585001 Radio Monitor Board, laptop computer, RF radio and RF antenna were placed on top of the test table. The power supply was placed at the bottom center of the test table. All of the cables and cords were moved about so as to create the highest level of EMI. The complete system was operating as it would be in normal use, both while in quiescent or receive mode and also in transmit mode. Special software was employed in order that the RIM Radio Monitor Board was processing data in a worst case NORMAL manner.

The power supply cord for the Radio Monitor Board model 01585001, was connected to a 50 micro-henry line impedance stabilization network. (LISN) The RF voltages on each side of the power line were coupled to the input of a spectrum analyzer and recorded. See the attached results.

All conducted measurements were performed with the LISN correctly grounded to the floor of the enclosure. The incoming power lines were filtered and stabilized.

EQUIPMENT:

Advantest R3261A Spectrum Analyzer
Anritsu 2601 A Spectrum Analyzer with an H.P. plotter.
Setting: BW: 10 K Hz or 9 K Hz (Q.P)
Hewlett-Packard RF generator # 8640 B with 002 dblr.

NOTE: The Advantest R3261A spectrum analyzer, 8640B RF signal generator and the Anritsu 2601 A spectrum analyzer are calibrated annually by Hewlett-Packard and Northern Telecom. This calibration is directly traceable to the National Research Council of Canada. (NRC) This equipment is only used by qualified technicians and only for the purpose of EMI measurements.

CFR 47 Chapter 1 - Federal Communication Commission Rules

Part 2 Required Measurement
2.985 (a,c) RF Power Output

Part 90 Subpart I : Technical Standards
90.205 RF Power Output
(a) Request no more power than neccessary for satisfactory operation.
(b) Maximum power output limit : reference to subpart S (896-901 MHz band).
(c) exced by no more than 20% manufacturer's rated output power.

Part 90 - Subpart S : Use of Frequencies in 896-901 MHz Band
90.635 Limitations on Output Power - 100W 20dbw
(d) Mobile station maximum output power is 100 W (20dBW)

We are requesting and rating the device as 2 W (33 dBm) output across a 50 ohm load. Limit on device output power would be 120% of 2 W which is 2.4 W (33.8 dBm).

Calibrated power measurement using the following equipment:

HP 437B Power Meter	S/N 3125U10666	Cal due 19/05/96
HP 8482A Power Sensor	S/N 3318A24237	Cal due 23/05/96
HP 4396A Network Analyzer	S/N 3241J00180	Cal due 23/05/96
HP 85046A S-Parameter Test Set	S/N 3033A06051	Cal due 23/05/96
HP 85033C Calibration Kit	S/N 2920A02997	Cal due 30/05/96
Omni Spectra 3082-6194-20 DC to 18 Ghz Coaxial Attenuator		

Procedure: These results were obtained using the test procedure described in document DOC-1547-013.

The 4396A and 85046A were calibrated using the 85033C. The cable assembly and microwave attenuator used for the measurements were calibrated using the 4396A and the 85046A. The 437B and 8482A were calibrated using the internal power reference. The radio was tuned by the procedure as provided for sections 2.983(d)(5) and 2.983(d)(9). At three transmit frequencies the maximum radio output power level was measured after 1 minute of continuous operation using the 437B and 8482A. Output levels were measured for both modulated and unmodulated carrier. The calibrated insertion loss measured for the attenuator and cable assembly was added to the calibrated power measurements which produced the following results:

Limit: 2.4 W (33.8 dBm)

Results:

Carrier Frequency	Measured Level	Calibrated Attenuation	Output Power	Output Power
896.000 MHz	7.32 dBm	25.67 dB	32.99 dBm	1.991 W
899.000 MHz	7.34 dBm	25.67 dB	33.01 dBm	2.000 W
902.000 MHz	7.32 dBm	25.67 dB	32.99 dBm	1.991 W

Identical output power levels were recorded for both modulated and unmodulated carrier

CFR 47 Chapter 1 - Federal Communication Commission Rules

Part 2 Required Measurement
2.983 Frequency Stability - Procedures
(a,c) Frequency Stability - Temperature Variation
(d) Frequency Stability - Voltage Variation

Part 90 Subpart I : Technical Standards
90.213 Frequency Tolerance
(a) Maintain the carrier frequency within 0.00015 % (1.5 ppm) of the assigned frequency.
(b) Maximum power output used for measurement

Frequency and power measurements were performed together with the same set up. Frequency and power data were both recorded across temperature and voltage. The set up used a cable assembly with a power splitter to allow concurrent measurements with the frequency counter and the power meter. The cable assembly was calibrated to allow compensation of the insertion loss between the transmitter and the power meter.

Calibration for the Cable and Attenuator Loss:

Place: RF Lab in RIM.
Date: 18th July 95
Time: 0800 Hrs.

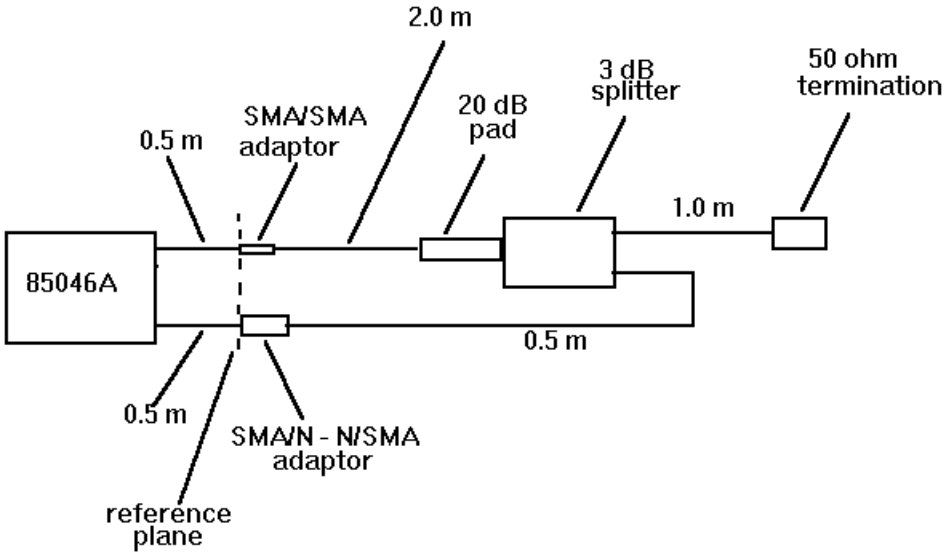
Equipment:

Instrument	Serial Number	Calibrated on
Network Analyzer HP 4396A	3241J00180	23.05.95
Calibration Kit HP85033C	2920A02997	30.05.95
S-Parameter Test set HP85046A	3033A06051	23.05.95

Procedure:
Full Two port Calibration of 4396A and 85046A using the 85033C was done.

An assembly of Cables, Attenuator, power splitter, and connectors was made as shown below for making RF power measurements.
Attenuator: 20dB, DC to 18 Ghz - Omni Spectra part no: 3082-6194-20

Power splitter: 3dB MCL part no: ZN2PD-920W 9401 02



The total loss of this cable assembly from the RF input to the RF output was measured to be 25.67 dB. at 899 +/- 3Mhz.

Power and frequency measurements of RIM 900 Radio at different temperatures:

Place: AIT Lab at COMDEV
Date: 18th July 95 to 20th July 95

Equipment:

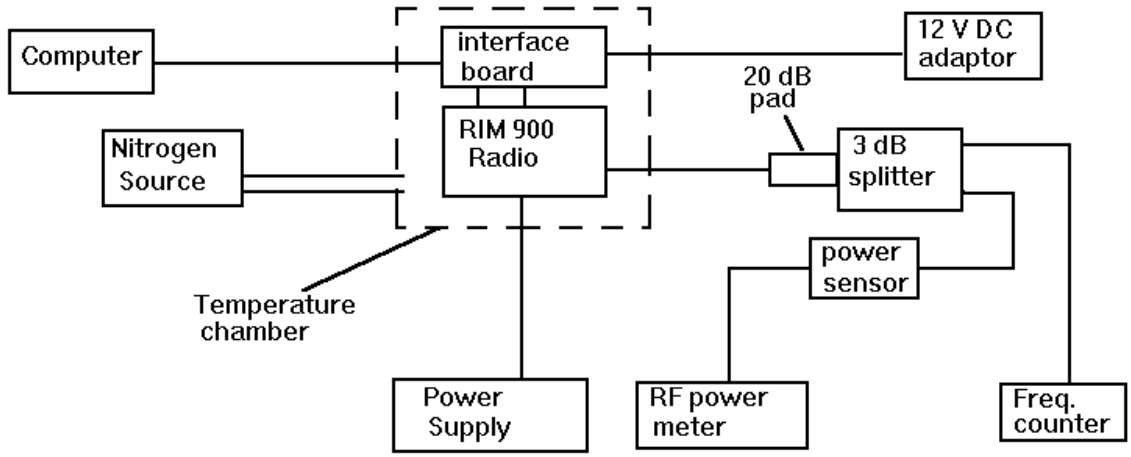
Instrument		Serial number	Calibrated on
DC Power supply	HP E3610A	KR30706270	
Frequency Counter	HP 5331A	3325A00988	19.05.95
RF Power meter	HP 437B	3125U10666	19.05.95
RF Power sensor	HP 8482A	3318A24237	23.05.95

Temperature Chamber:

Manufacturer: Cincinnati Subzero Products
Model: BZ-1.6-033-033-H/AC
Serial No: ZA9211523
Calibrated on: May 95.

Procedure:

The RIM 900 Radio and the Interface board were placed in the Temperature chamber and connected to the instruments outside as shown in the figure below. Dry nitrogen was pumped inside the temperature chamber to maintain a back pressure during the test. The Radio was kept in the off condition at all times except when the measurements were to be made.



The chamber was switched on and the temperature was set to +50 deg C. After the chamber stabilized at +50 deg C a 40 minute soak was given to ensure that all moisture is driven out. The temperature was then set to -30 deg C. After the temperature stabilized at -30 deg C a 2 Hr soak was given.
The Radio was switched on and Frequency and power measurements were made as follows:

The Power supply was adjusted to the required value. The RIM Radio test utility was run on the computer and the Type Testing Options window was used to set the frequency & power and to switch on / off the carrier. The software "gf" in the directory C:\01605 was run under DOS prompt to read the HP 5331A frequency counter using the HPIB Bus. The software timestamps the measurements for a period of 60 seconds and stores the data in a file. The RF power measurement was made manually. As the power varies with time, it was noted at the beginning and the end of each test

The software utility produces tab delimited data files numbered sequentially. All data from this test has been formatted from the initial files into a single Spreadsheet.

The temperature and soak times followed were as follows: After the soak of 2hrs at -30 deg C the measurements were made for 6.0 Volts operation at the 3

frequencies. Then a 15 minute soak was given and the measurements were repeated for 7.2 Volts. After a further 15 minute soak the measurements were made at 9.1Volts. The temperature was now raised to -20 deg C and allowed to stabilize. A 1hr soak was given after the stabilization before the measurements were made in the same way as above. In a similar way the measurements were made at each 10 deg C step with a 1 hr soak after stabilization initially followed by the measurements and a 15min soak between the measurements at different Voltages. The RF power level set was +33dBm for all temperatures from -30 deg C to +70 deg C. This was set to +30 dBm at +85 deg C, which was the last temperature at which measurements were made.

The actual sequence of steps followed to make the measurements at any one temperature are as follows:

1. switch on the Power supply and set the Voltage to 6.0 V.
2. Set the mid frequency, and power in the Type testing window but do not switch on the carrier
3. Go to the DOS prompt using the Alt Tab key
4. Run the "gf" software and input the file name and the duration of measurement (60 sec)
5. Go back to the Type testing window and start the carrier.
6. Note the power level in the HP 437B Power meter.
7. Go back to the DOS promt and check for proper frequency
8. Wait for the "gf" software to complete the data capture for 1 min.
9. Note the power level in the power meter again
10. Go to the type testing window and switch off the carrier.
11. Set the low frequency and follow steps 3 through 10
12. Set the high frequency and follow steps 3 through 10
13. Switch off the power supply and wait for the 15 min soak.
14. Follow steps 1 through 13 for the 7.2 V
15. Follow steps 1 through 12 for 9.1 V
16. Switch off the power supply for the Radio.
17. Set a different temperature and follow the same steps.

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Part 2 Required Measurement
2.983 Frequency Stability - Procedures
(a,c) Frequency Stability - Temperature Variation

Part 90 - Subpart I : Technical Standards
90.213 Frequency Tolerance
(a) Maintain the carrier frequency within 0.00015 % (1.5 ppm) of the assigned frequency.
(b) Maximum power output used for measurement

Procedure: These results were obtained using the test procedure described in document DOC-01547-013, nominal 7.2 Volts.

Results: 896 Mhz nominal transmitter

Ambient Temperature (degrees Celcius)	Initial Frequency Deviation [ppm]	Maximum Deviation [ppm]
-30.0	0.156	-0.325
-20.0	-0.184	-0.296
-10.0	-0.018	-0.126
0.0	0.097	0.141
10.0	0.167	0.209
20.0	0.121	0.157
30.0	0.009	0.060
40.0	0.071	0.138
50.0	0.196	0.289

Results: 899 Mhz nominal transmitter.

Ambient Temperature (degrees Celcius)	Initial Frequency Deviation [ppm]	Maximum Deviation [ppm]
-30.0	0.168	0.168
-20.0	-0.039	-0.379
-10.0	-0.089	-0.275
0.0	0.060	0.060
10.0	0.199	0.199
20.0	0.234	0.234
30.0	0.168	0.168
40.0	0.157	0.157
50.0	0.260	0.260

Results: 902 Mhz nominal transmitter.

Ambient Temperature (degrees Celcius)	Initial Frequency Deviation [ppm]	Maximum Deviation [ppm]
-30.0	-0.032	-0.315
-20.0	-0.102	-0.216
-10.0	0.049	-0.061
0.0	0.166	0.205
10.0	0.177	0.218
20.0	0.088	0.134
30.0	0.072	0.112
40.0	0.145	0.217
50.0	0.248	0.359

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Part 2 Required Measurement
2.983 Frequency Stability - Procedures
(d) Frequency Stability - Voltage Variation

Part 90 Subpart I : Technical Standards
90.213 Frequency Tolerance
(a) Maintain the carrier frequency within 0.00015 % (1.5 ppm) of the assigned frequency.
(b) Maximum power output used for measurement

Procedure: These results were obtained using the test procedure described in document DOC-01547-013

Results: 896 Mhz. nominal transmitter.

Ambient Temperature [degrees Celcius]	Device Supply Voltage [Volts]	Initial Frequency Deviation [ppm]	Maximum Deviation [ppm]
25.0	6.0	0.124	0.124
25.0	7.2	-0.063	-0.102
25.0	9.1	0.105	0.167

Results: 899 Mhz. nominal transmitter.

Ambient Temperature [degrees Celcius]	Device Supply Voltage [Volts]	Initial Frequency Deviation [ppm]	Maximum Deviation [ppm]
25.0	6.0	0.043	-0.067
25.0	7.2	0.056	-0.081
25.0	9.1	0.002	-0.095

Results: 902 Mhz. nominal transmitter.

Ambient Temperature [degrees Celcius]	Device Supply Voltage [Volts]	Initial Frequency Deviation [ppm]	Maximum Deviation [ppm]
25.0	6.0	0.057	0.082
25.0	7.2	0.078	0.084
25.0	9.1	0.108	0.121