

June 25, 2001

Federal Communications Commission
c/o Mellon Bank
Three Mellon Bank Center
525 William Penn Way
27th Floor, Room 153-2713
Pittsburgh, PA 15259-0001

Dear Sir/Madam:

Enclosed you will find a Certification application for a 2.4GHz Direct Sequence Spread Spectrum Transmitter, FCC ID: OIA-BR1200. This application is being filed by Retlif Testing Laboratories on behalf of Wireless Manufacturing Co., LLC.

I trust that you will find the enclosed application to be complete. However, should you have any questions or require any additional information, please feel free to contact us at 603-497-4600.

Very truly yours,

RETLIF TESTING LABORATORIES

Scott Wentworth
Manager

Enc. (as stated)

FEDERAL COMMUNICATIONS COMMISSION April 20, 1999
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Request for withholding from public disclosure the schematic diagrams and system block diagrams pursuant to an application for certification.

Applicant: Wireless Manufacturing Company, LLC
Product: WIRELESS LAN BRIDGE RADIO
Model: BR1200
FCC ID: OIA-BR1200

Dear Sir/Madam,

We at Wireless Manufacturing Company, LLC would like to request that the schematic diagrams and system block diagrams, submitted with this application for certification be withheld from public disclosure as per Section 0.459 of FCC Rules. This request is made under the provisions of Section 0.457 (d) of the Commission's Rules, and Section 552(b)(4) of the Freedom of Information Act. These sections authorize as a withholding from public inspection materials which would be privileged as a matter of law if regained by the person submitting them, and materials which would not customarily be released to the public by that person.

The detailed confidential materials are listed as follows.

NO.	Title
1.	WL201 PC CARD BLOCK DIAGRAM
2.	BILL OF MATERIAL
3.	CIRCUIT SCHEMATICS

If you have queries, please contact us by phone: 603-672-9336 or fax: 603-672-9228.

Yours truly ,

Lawrence E. Pihl
Wireless Manufacturing Company, LLC
PO Box 298
Milford, NH 03055-0298

REPORT OF MEASUREMENTS

The purpose of this testing program was to determine the compliance of the 2.4GHz Spread Spectrum Transceiver, FCC ID: OIA-BR1200, manufactured by Wireless Manufacturing Co., LLC, to the requirements of the **FCC Rules and Regulations Part 15, Subpart C, Section 15.247, for Direct Sequence Spread Spectrum Transmitters, 2400MHz-2483.5MHz.**

Testing was performed in accordance with **ANSI C63.4:1992** and **FCC Guidance on Measurements for Direct Sequence Spread Spectrum Systems.**

EUT DESCRIPTION

The EUT was a direct sequence spread spectrum transmitter portion of a transceiver, installed and operating in a wireless bridge portion of a Local Area Network (LAN). The PCMCIA card utilized by the test sample was previously certified with the FCC ID Number: MXF-WL201. Changes were made to the type and number of antennas usable with the EUT. The EUT now accesses two different antennas. The EUT has no direct connection to the MAINS input voltage lines. The EUT derives operational input voltage from the host device.

Conducted emissions testing was performed on the host device input voltage leads to determine if the EUT had any detrimental effect on the emission levels. The level of observed emissions required an input line filter to be installed inside the host device on the MAINS input voltage lines. The modification reduced the emissions to acceptable levels. Investigation proved that all emissions were from the host device. The EUT operation had no effect on the observable emissions.

Manufacturer:	Wireless Manufacturing Co., LLC PO Box 298 Milford, NH 03055
Model Number:	BR1200
FCC ID:	OIA-BR1200
Power Requirements:	24VDC from AC/DC Power Supply with an input voltage of 120VAC

TEST INFORMATION

FCC Rules Part 15, Subpart C

SECTION	TEST RESULTS
15.201 Equipment Authorization	Certification Required, See Section 2.1033
15.203 Antenna Requirement	Not applicable if EUT is installed by a professional.
15.205 Restricted Bands of Operation	No EUT emissions were observed in the restricted bands.
15.207 Conducted Limits	Explanation of Conducted Emission testing is included in the EUT DESCRIPTION portion of this report.*a
15.209 Radiated Emission Limits	No emissions were observed in restricted bands during RF (Antenna) Conducted testing, so Radiated Emission testing was not required.
15.247 Spread Spectrum Intentional Radiator Operation	The direct sequence spread spectrum intentional radiator operated within the band 2400MHz-2483.5MHz, specifically 2450MHz-2465MHz.
15.247 Bandwidth	The EUT minimum 6dB bandwidth was greater than 500kHz at 10MHz.*
15.247 Maximum Peak Output Power	The maximum peak output power measured from the EUT was 92.3mW.*
15.247 Directional Gain Antenna Effect	The effect of fixed point to point operating antenna gain on the maximum peak output power was investigated.*
15.247 RF (Antenna) Conducted	The EUT emissions were observed over the frequency range 30MHz to 25GHz. All out of band emissions were at least -20dB below the highest in band emission level.*
15.247 Power Spectral Density	In any 3kHz band, during any time interval of continuous transmission, the power spectral density from the EUT to the antenna was below 8dBm.*
15.247 Processing Gain	The EUT processing gain was at least 10dB.*

*For complete data presentation, see the corresponding electronic test data attachment.

EQUIPMENT LISTS

Conducted Emissions

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Dat	Due Date
3497	Transient Limiter	Hewlett Packard	9kHz - 200MHz	1947A	9/11/98	9/11/99
4027	LISN	Solar Electronics	10kHz - 30MHz	9252-50-R-24BNC	6/24/98	6/24/99
4028	Isolation Transformer	Acme	N/A	120x240	1/25/99	1/25/00
4895	Spectrum Analyzer	Hewlett Packard	9kHz - 22GHz	8593EM	9/18/98	9/18/99

Spurious Radiated Emissions

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Dat	Due Date
3107	Spectrum Analyzer	Advantest	10kHz - 3GHz	4131B	2/9/99	2/9/00
3118	Broadband Pre-Amp	Electro-Metrics	10kHz - 1GHz	BPA-1000	6/24/98	6/24/99
3258	Double Ridge Guide	EMCO	1GHz - 18GHz	3115	4/7/99	4/7/00
3430	Horn Antenna	MCS Corporation	18GHz - 26.5GHz	K-5039	12/9/98	12/9/99
3448	0-11DB Stepattenuator	Midwest Microwave	DC-18GHz	1092	2/17/99	2/17/00
4029	Open Area Test Site	Retlif	3 to 10 Meters	RNH	6/15/98	6/15/99
4202	Biconilog	EMCO	26MHz - 2GHz	3142	6/10/98	6/10/99
4895	Spectrum Analyzer	Hewlett Packard	9kHz - 22GHz	8593EM	9/18/98	9/18/99

Bandwidth

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Dat	Due Date
4895	Spectrum Analyzer	Hewlett Packard	9kHz - 22GHz	8593EM	9/18/98	9/18/99

Output Power

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Dat	Due Date
4895	Spectrum Analyzer	Hewlett Packard	9kHz - 22GHz	8593EM	9/18/98	9/18/99

Antenna Conducted

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Dat	Due Date
4895	Spectrum Analyzer	Hewlett Packard	9kHz - 22GHz	8593EM	9/18/98	9/18/99

Power Spectral Density

EN	Type	Manufacturer	Frequency Range	Model No.	Cal Dat	Due Date
4895	Spectrum Analyzer	Hewlett Packard	9kHz - 22GHz	8593EM	9/18/98	9/18/99