

FCC TEST REPORT
for
WIRELESS PCI ADAPTER
Model No.: WP81RL

of

Applicant: Pro-Nets Technology Corporation
Address: 7F, No.95, Lide St, Chung Ho City Taipei 235 Taiwan R.O.C

Tested and Prepared
by



ETS Product Service (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679

A2LA Accredited No.: 2300.01

PTCRB Accredited Type Certification Test House

FCC ID: RXZ-WP81RL

Report No.: W6M20706-8198-C-1

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Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

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1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has Passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.

The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the ETS Product Service (Taiwan) Co., Ltd.

Specific Conditions:

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

The test sample is able to work according IEEE 802.11 b/g/n.

This report is related to FCC Part 15 C (DSSS and OFDM device).

Tester:

July 13, 2007

Jay Chaing



Date

ETS-Lab.

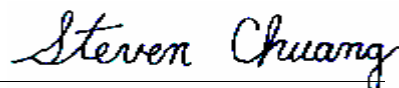
Name

Signature

Technical responsibility for area of testing:

July 13, 2007

Steven Chuang



Date

ETS

Name

Signature

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1.2 Testing laboratory

1.2.1 Location

OATS
No.5-1, Shuang Sing Village,
LiShuei Rd., Wanli Township,
Taipei County 207, Taiwan (R.O.C.)

Company
ETS Product Service (Taiwan) Co., Ltd.
6F, NO. 58, LANE 188, RUEY-KUANG RD.
NEIHU, TAIPEI 114, TAIWAN R.O.C.
Tel : 886-2-66068877
Fax : 886-2-66068879

1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2300.01

FCC filed test laboratory Reg. No. 930600

Industry Canada filed test laboratory Reg. No. IC 5679

PTCRB Accredited Type Certification Test House

1.3 Details of approval holder

Name	: Pro-Nets Technology Corporation
Street	: 7F, No.95,Lide St, Chung Ho City
Town	: Taipei 235
Country	: Taiwan R.O.C
Telephone	: +886-2-8221-8385
Fax	: +886-2-3234-5818

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1.4 Application details

Date of receipt of test item : June 26, 2007
 Date of test : from June 27, 2007 to July 12, 2007

1.5 General information of Test item

Type of test item : WIRELESS PCI ADAPTER
 Model Number : WP81RL
 Brand Name : PRO-NETS , Speed Com+ , Jet Com , Medilink, Encore
 Hardware : Ver:1.1
 Software : D-1.0.3.0_VA-1.0.3.0_RU-2.0.2.0_VA-1.0.11.0_AU_1.1.9.0_052107
 Multi-listing model number : ENLWI-N
 Photos : see Appendix

Technical data

Frequency band : 2.4 GHz – 2.4835 GHz

11b, 11g, 11n 20MHz

Frequency (ch 1 or A) : 2.412 GHz
 Frequency (ch 6 or B) : 2.437 GHz
 Frequency (ch 11 or C) : 2.462 GHz

11n 40MHz

Frequency (ch 1 or A) : 2.422 GHz
 Frequency (ch 4 or B) : 2.437 GHz
 Frequency (ch 7 or C) : 2.452 GHz

Number of Channels : 11b, 11g, 11n 20MHz: 11
 11n 40MHz: 7

Operation modes : duplex

Modulation Type : DSSS / OFDM

Fixed point-to-point operation: Yes / No

Type of Antenna : Reverse SMA Antenna

Antenna gain : 2.0dBi

Power supply : 110VAC / 3.3 VDC (Power on PC)

Emission designator : 11b: DSSS: 17M9G1D
 11g: OFDM: 18M7F7D
 11n 20MHz: OFDM: 19M1W7D
 11n 40MHz: OFDM: 37M1W7D

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Host device: none

Classification :

Fixed Device	<input checked="" type="checkbox"/>
Mobile Device (Human Body distance > 20cm)	<input type="checkbox"/>
Portable Device (Human Body distance < 20cm)	<input type="checkbox"/>

Transmitter

Unom

Mode A (DSSS)

Power (ch 1 or A) : Conducted: 15.71 dBm
 Power (ch 6 or B) : Conducted: 14.91 dBm
 Power (ch 11 or C) : Conducted: 14.49 dBm

Mode B (OFDM)

Power (ch 1 or A) : Conducted: 13.08 dBm
 Power (ch 6 or B) : Conducted: 12.54 dBm
 Power (ch 11 or C) : Conducted: 11.76 dBm

Mode C (OFDM)

Power (ch 1 or A) : Conducted: 15.43 dBm
 Power (ch 6 or B) : Conducted: 15.12 dBm
 Power (ch 11 or C) : Conducted: 14.67 dBm

Mode D (OFDM)

Power (ch 1 or A) : Conducted: 15.91 dBm
 Power (ch 4 or B) : Conducted: 15.71 dBm
 Power (ch 7 or C) : Conducted: 15.45 dBm

Manufacturer:

(if applicable)

Name : ./.
 Street : ./.
 Town : ./.
 Country : ./.

1.6 Test standards

Technical standard : FCC RULES PART 15 SUBPART B / SUBPART C § 15.247 (2007-05)

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2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.

or

The deviations as specified in 2.5 were ascertained in the course of the tests performed.

2.2 Test environment

Temperature : 23 °C
Relative humidity content : 20 ... 75 %
Air pressure : 86 ... 103 kPa

Power supply : 110VAC / 3.3VDC (Power on PC)

Extreme conditions parameters : --

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2.3 Test Equipment List

No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2006/10/16	2007/10/15
ETSTW-CE 002	PREREULATOR MODE DC POWER SUPPLY	None	None		Function Test	
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2006/10/16	2007/10/15
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	2006/10/16	2007/10/15
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	In House Certificate	
ETSTW-CE 008	ABSORBING CLAMP	MDS 21	3469	Schwarzbeck	2005/10/24	2007/10/23
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2006/8/17	2007/8/16
ETSTW-CE 013	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T4-02	20242	FCC	2005/12/8	2007/12/7
ETSTW-CE 014	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T2-02	20241	FCC	2005/12/7	2007/12/6
ETSTW-CE 015	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T8-02	20307	FCC	2006/11/7	2008/11/6
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2006/11/21	2007/11/20
ETSTW-RE 002	Function Generator	33220A	MY43004982	Agilent	2005/10/14	2007/10/13
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2006/10/20	2007/10/19
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2006/10/30	2007/10/29
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2006/10/12	2007/10/11
ETSTW-RE 010	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070181	MOTECH	Function Test	
ETSTW-RE 011	PROGRAMMABLE LINEAR POWER SUPPLY	LPS-305	30503070165	MOTECH	Function Test	
ETSTW-RE 017	Log-Periodic Antenna	HL025	352886/001	R&S	2006/5/4	2008/5/3
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2004/11/8	2007/11/7
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Function Test	
ETSTW-RE 021	SWEEP GENERATOR	SWM05	835130/010	R&S	2006/10/11	2007/10/10
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	EMCO	In House Certificate	
ETSTW-RE 028	Log-Periodic DipoleArray Antenna	3148	34429	EMCO	2006/5/26	2008/5/25
ETSTW-RE 029	Biconical Antenna	3109	33524	EMCO	2006/5/26	2008/5/25
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2006/5/3	2008/5/2
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	2006/10/11	2007/10/10

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ETSTW-RE 033	WaveRunner 6000A Serie Oscilloscope	WAVERUNNER 6100A	LCRY0604P14508	LeCroy	2006/7/27	2007/7/26
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	2005/10/17	2007/10/16
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2007/1/11	2009/1/10
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2006/5/8	2008/5/7
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2006/5/29	2008/5/28
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2005/3/22	2008/3/21
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2007/5/02	2009/5/01
ETSTW-RE 055	SPECTRUM ANALYZER	FSU-26	200074	R&S	2006/7/28	2007/7/27
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	

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2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2003 using a 50 μ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.4-2003 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB μ V) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

Freq (MHz) METER READING + ACF + CABLE LOSS (to the receiver) = FS
33 20 dB μ V + 10.36 dB + 6 dB = 36.36 dB μ V/m @3m

The UUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2000 Section 13.1.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by ETS Product Service (Taiwan) Co., Ltd. at the registered open field test site located at No.5-1, Shuang Sing Village, LiShuei Rd., Wanli Township, Taipei County 207, Taiwan (R.O.C.) The Registration Number: 930600.

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When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = $20 \log(\text{dwell time}/T)$

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

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3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)(3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Equivalent radiated Power	15.247(b)(3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spurious Emissions radiated – Transmitter operating	15.247(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Band Edge Measurement	15.247(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum 6 dB Bandwidth	15.247(a)(2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peak Power Spectral Density	15.247(d)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiated Emission from Digital Part	15.109	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power Line Conducted Emission	15.207	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Note:

1. This EUT incorporates a MIMO function with IEEE 802.11b, 802.11g, and 802.11n draft 2.0. Physically, this EUT includes two transmitters and three receivers with two incoherent streams. This device uses multiplexing and also employ cyclic delay diversity to improve range and throughput, and this device simultaneously operates on two adjacent channels.
2. This EUT is 2*3 spatial MIMO (2Tx&3Rx) without beam forming function. That operates dual chain configuration. The Pre-test was performed to determine the worst case mode from all possible combinations between all available modulations, data rates, bandwidths, and spatial stream modes.
3. The worst case mode was base on the investigations by measuring the peak and average power according to the description above. The detail of chosen mode for full testing are as below:

Mode	Available channel	Chosen Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1,6,11	DSSS	DBPSK	1
802.11g	1 to 11	1,6,11	OFDM	BPSK	6
Draft 802.11n (20MHz)	1 to 11	1,6,11	OFDM	BPSK	6.5
Draft 802.11n (40MHz)	1 to 7	1,4,7	OFDM	BPSK	13.5

4. Because both antennas operate simultaneously, when performed the relevant conducted measurement(ex. RF output power, peak power spectral density....and so on), we basically use a splitter to combine each antenna port in order to get the total measuring results.

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3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

Mode A

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}C$	$V_{nom} = 3.3 \text{ V}$	[dBm]	[dBm]	[dBm]
		15.71	14.91	14.49

Mode B

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}C$	$V_{nom} = 3.3 \text{ V}$	[dBm]	[dBm]	[dBm]
		13.08	12.54	11.76

Mode C

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}C$	$V_{nom} = 3.3 \text{ V}$	[dBm]	[dBm]	[dBm]
		15.43	15.12	14.67

Mode D

Test condition		Conducted Power		
		Channel A	Channel B	Channel C
$T_{nom} = 23^{\circ}C$	$V_{nom} = 3.3 \text{ V}$	[dBm]	[dBm]	[dBm]
		15.91	15.71	15.45

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Mode A

Test condition $T_{nom} = \text{-- } ^\circ\text{C}, V_{nom} = \text{-- } \text{V}$	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	--
--	--

Mode B

Test condition $T_{nom} = \text{-- } ^\circ\text{C}, V_{nom} = \text{-- } \text{V}$	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	--
--	--

Mode C

Test condition $T_{nom} = \text{-- } ^\circ\text{C}, V_{nom} = \text{-- } \text{V}$	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	--
--	--

Mode D

Test condition $T_{nom} = \text{-- } ^\circ\text{C}, V_{nom} = \text{-- } \text{V}$	Signal Field strength TX highest power mode dB μ V/m
Frequency [MHz]	--
--	--

Limits:

Frequency MHz	Power dBm
902 - 928	30
2400 – 2483.5	30
5725 – 5850	30

In case of employing transmitter antennas having antenna gain > 6 dBi and using fixed point-to-point operation consider §15.247 (b)(4)

Test equipment used: ETSTW-RE 073 ETSTW-RE 74

Explanation: The diagrams for the peak output power measurements are included in Appendix.

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3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain
 EIRP = 15.91 dBm + 2.0 dBi
 = 17.91 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 021
 ETSTW-RE 028 ETSTW-RE 030 ETSTW-RE 043 ETSTW-RE 044

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

$$S = \frac{PG}{4\pi R^2}$$

S – Power Density

P – Output power ERP

R – Distance

D – Cable Loss

AG – Antenna Gain G = AG-D

Item	Unit	Value	Remarks
P	mW	38.9942	Peak value
D	dB		
AG	dBi	2.0	
G		1.6	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.01	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm ²)
1500 – 100.000	1,0

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3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency \leq 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)

Frequency $>$ 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)

Frequency $>$ 1 GHz , RBW:1 MHz , VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

$$\text{Duty cycle correction} = 20 \log (\text{dwell time} / 100\text{ms})$$

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: see attached diagrams in Appendix.

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3.5 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = $20 \log(\text{dwell time}/100\text{ms})$

For frequencies above 1GHz (Peak measurements).

Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

Note: No duty cycle correction was added to the reading of EUT.

Test equipment used: ETSTW-RE 003 ETSTW-RE 004 ETSTW-RE 017 ETSTW-RE 028
ETSTW-RE 029 ETSTW-RE 030 ETSTW-RE 042 ETSTW-RE 043
ETSTW-RE 044

Explanation: see attached diagrams in Appendix.

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	401.0020	7.11	peak	20.87	27.98	46.00	104	190	-18.02	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	611.4228	0.16	peak	25.41	25.57	46.00	301	270	-20.43	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2292.585	52.20	peak	-5.62	46.58	74.00	138	160	-27.42	
	3214.429	46.67	peak	-2.20	44.47	74.00	145	70	-29.53	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2352.705	56.26	peak	-5.34	50.92	74.00	142	159	-23.08	
	3214.429	48.36	peak	-2.20	46.16	74.00	120	70	-27.84	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6436.874	47.88	peak	4.06	51.94	74.00	126	70	-22.06	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6436.874	53.23	peak	4.06	57.29	74.00	130	70	-16.71	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	125.2305	3.49	peak	17.96	21.45	43.50	309	262	-22.05	
*	257.7955	6.72	peak	22.80	29.52	46.00	321	302	-16.48	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	108.9980	10.98	peak	16.76	27.74	43.50	114	328	-15.76	
	265.9118	2.75	peak	23.40	26.15	46.00	152	142	-19.85	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	401.0020	6.68	peak	20.87	27.55	46.00	106	192	-18.45	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	610.0200	-0.23	peak	25.36	25.13	46.00	303	272	-20.87	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2292.585	52.50	peak	-5.62	46.88	74.00	140	162	-27.12	
	3250.501	44.51	peak	-1.95	42.56	74.00	147	70	-31.44	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2328.657	55.80	peak	-5.46	50.34	74.00	144	161	-23.66	
	3250.501	47.09	peak	-1.95	45.14	74.00	122	70	-28.86	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6501.002	50.72	peak	4.50	55.22	74.00	128	70	-18.78	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH6 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6501.002	49.11	peak	4.50	53.61	74.00	132	70	-20.39	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	117.6552	2.10	peak	17.50	19.60	43.50	306	259	-23.90	
*	270.2404	3.30	peak	23.77	27.07	46.00	318	299	-18.93	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	132.8054	4.13	peak	18.34	22.47	43.50	111	325	-21.03	
	265.9118	1.00	peak	23.40	24.40	46.00	149	139	-21.60	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	401.0020	6.24	peak	20.87	27.11	46.00	103	189	-18.89	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	612.8256	0.13	peak	25.46	25.59	46.00	300	269	-20.41	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2320.641	51.82	peak	-5.50	46.32	74.00	137	189	-27.68	
	3282.565	43.76	peak	-1.72	42.04	74.00	144	70	-31.96	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2368.738	55.80	peak	-5.26	50.54	74.00	141	158	-23.46	
	3282.565	45.33	peak	-1.72	43.61	74.00	119	70	-30.39	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6565.130	48.94	peak	4.70	53.64	74.00	125	70	-20.36	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11b CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6565.130	48.93	peak	4.70	53.63	74.00	129	70	-20.37	

Mode B

Temperature : 26°C Pressure : 921 hPa Rel. humidity : 60 % Date : 2007/7/3

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	136.5931	1.57	peak	18.53	20.10	43.50	310	263	-23.40	
*	257.7955	4.75	peak	22.80	27.55	46.00	322	303	-18.45	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	110.6212	5.38	peak	16.90	22.28	43.50	115	329	-21.22	
*	276.1923	0.96	peak	24.28	25.24	46.00	153	143	-20.76	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	401.0020	6.55	peak	20.87	27.42	46.00	107	193	-18.58	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	608.6172	0.91	peak	25.31	26.22	46.00	304	273	-19.78	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2292.585	51.91	peak	-5.62	46.29	74.00	141	163	-27.71	
	3218.437	45.96	peak	-2.17	43.79	74.00	148	70	-30.21	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2368.738	55.99	peak	-5.26	50.73	74.00	145	162	-23.27	
	3218.437	48.36	peak	-2.17	46.19	74.00	123	70	-27.81	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :
 Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6436.874	51.85	peak	4.06	55.91	74.00	129	70	-18.09	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH1 Tx Mode
 Note :
 Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6436.874	53.11	peak	4.06	57.17	74.00	133	70	-16.83	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :
 Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6501.002	48.93	peak	4.50	53.43	74.00	131	70	-20.57	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :
 Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	110.6212	5.89	peak	16.90	22.79	43.50	113	327	-20.71	
	265.9118	1.77	peak	23.40	25.17	46.00	151	141	-20.83	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	401.0020	6.68	peak	20.87	27.55	46.00	105	191	-18.45	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	608.6172	2.20	peak	25.31	27.51	46.00	302	271	-18.49	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2288.577	52.42	peak	-5.63	46.79	74.00	139	161	-27.21	
	3250.501	44.45	peak	-1.95	42.50	74.00	145	70	-31.50	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2368.738	55.49	peak	-5.26	50.23	74.00	143	160	-23.77	
	3250.501	46.91	peak	-1.95	44.96	74.00	121	70	-29.04	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6501.002	50.12	peak	4.50	54.62	74.00	127	70	-19.38	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH6 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	118.7374	1.61	peak	17.59	19.20	43.50	308	261	-24.30	
*	276.1923	2.88	peak	24.28	27.16	46.00	320	301	-18.84	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	130.1002	1.42	peak	18.21	19.63	43.50	305	258	-23.87	
*	270.2404	2.88	peak	23.77	26.65	46.00	317	298	-19.35	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	110.0802	5.42	peak	16.86	22.28	43.50	110	324	-21.22	
*	278.3566	2.43	peak	24.46	26.89	46.00	148	138	-19.11	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	401.0020	8.32	peak	20.87	29.19	46.00	102	188	-16.81	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	608.6172	1.05	peak	25.31	26.36	46.00	299	268	-19.64	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2320.641	52.07	peak	-5.50	46.57	74.00	136	158	-27.43	
	3282.565	43.47	peak	-1.72	41.75	74.00	143	70	-32.25	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2336.673	56.19	peak	-5.42	50.77	74.00	140	157	-23.23	
	3282.565	44.57	peak	-1.72	42.85	74.00	118	70	-31.15	

Registration number: W6M20706-8198-C-1
 FCC ID: RXZ-WP81RL

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6565.130	49.33	peak	4.70	54.03	74.00	124	70	-19.97	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11g CH11 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	6565.130	49.29	peak	4.70	53.99	74.00	128	70	-20.01	

Mode C

Temperature : 26°C Pressure : 921 hPa Rel. humidity : 60 % Date : 2007/7/3

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11n (20MHz) CH1 Tx Mode
 Note :

Polarization: *Horizontal*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	116.0320	0.47	peak	17.36	17.83	43.50	304	257	-25.67	
*	257.7955	4.04	peak	22.80	26.84	46.00	316	297	-19.16	

Site : site #1
 Condition : FCC_15.247
 Company : W6M20706-8198
 EUT Model: WP81RL
 Execute Program : 802.11n (20MHz) CH1 Tx Mode
 Note :

Polarization: *Vertical*
 Power : AC 110V/60Hz
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV/m)	Detector	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	110.6212	7.49	peak	16.90	24.39	43.50	109	323	-19.11	
	281.0620	1.14	peak	24.68	25.82	46.00	147	137	-20.18	