

RE: FCC ID: PHX-RSU2400A

1.) Could you please send powerline conducted and radiated test setup photos using ANSI C63.4 setup diagrams? The FCC requires this along with A2LA and NAVLAP certification bodies. When I receive these photos front and rear of both test setups, I can proceed with the application upload to the FCC.

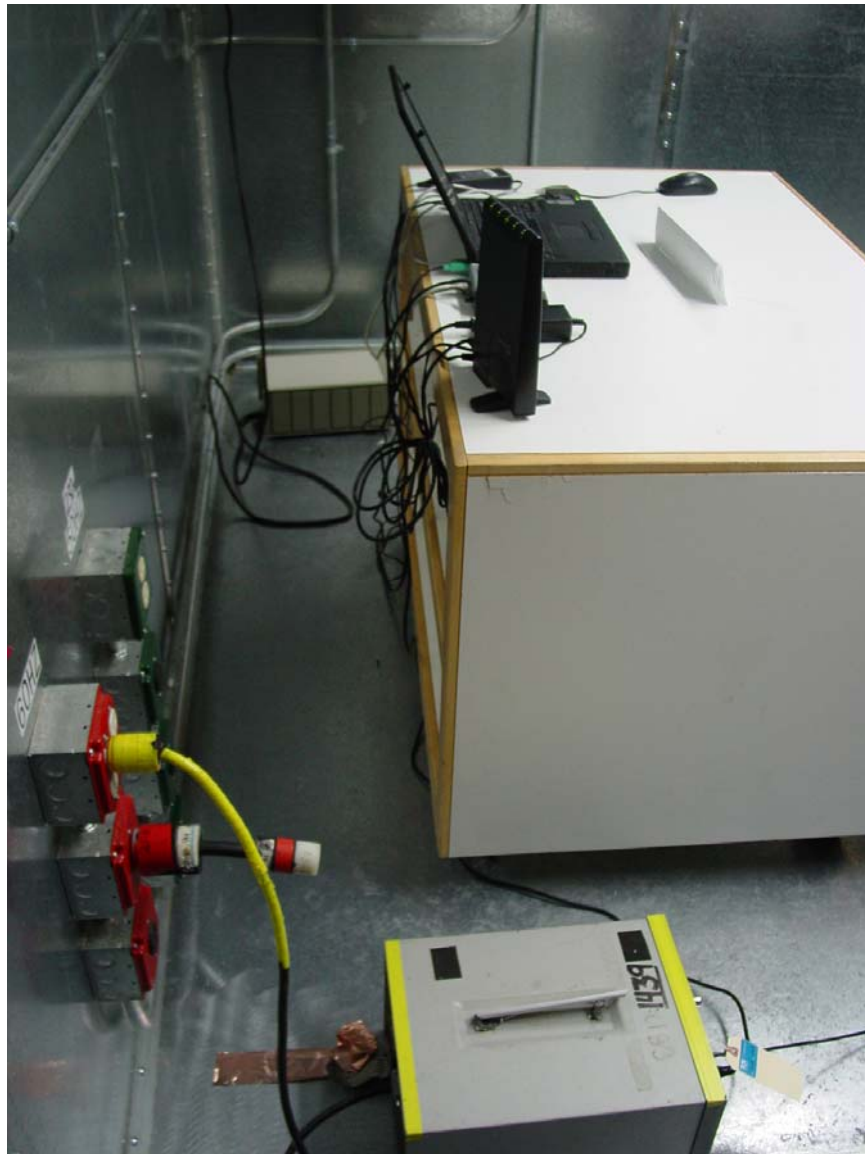
Reply: The PHX-RSU2400A wireless modem was setup for testing per the ANSI C63.4-2003 test arrangement for conducted and radiated emissions. A rescan was performed for conducted emissions with no changes to the original filed information. Photographs attached below. A rescan was performed for the radiated emissions with one spurious signal being slightly out of compliance. A ferrite bead was added to the Ethernet cable which brought the emission into compliance. The rescan information is attached below along with the pictures. Units will ship with a ferrite bead on the Ethernet cable.

Regards,
Tim Blom
NextNet Wireless, Inc.

10/11/2004



Conducted Emissions (front view)



Conducted Emissions (rear view)



Radiated Emissions (front view)



Radiated Emissions (rear view)

RADIATED EMISSIONS

Test Report #: WC403349 Run 12 Test Area: LTS

EUT Model #: RSU-2400A Date: 10/8/04

EUT Serial #: EUT Power: 60 Hz / 110 VAC Temperature: 23.0 °C

Test Method: FCC B Air Pressure: 99.0 kPa

Customer: Next Net Rel. Humidity: 65.0 %

EUT Description: 2.4 GHz TRx & Rcvr Residential Subscriber Unit

Notes: transmitter on

Data File Name: 3349.dat

Page: 1 of 4

List of measurements for run #: 12						
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2 FCC B >1GHz 3m
37.32 MHz	38.51 Qp	0.48 / 17.7 / 25.9 / 0.0	30.79	V / 1.00 / 0	-9.21	n/a
75.0 MHz	50.24 Qp	0.71 / 8.2 / 25.8 / 0.0	33.35	V / 1.00 / 0	-6.65	n/a
124.48 MHz	53.55 Qp	0.94 / 8.98 / 26.02 / 0.0	37.45	V / 1.00 / 0	-6.05	n/a
150.0 MHz	54.09 Qp	1.0 / 9.97 / 25.92 / 0.0	39.14	V / 1.00 / 0	-4.36	n/a
156.85 MHz	51.81 Qp	1.0 / 9.12 / 25.95 / 0.0	35.98	V / 1.00 / 0	-7.52	n/a
162.9 MHz	55.21 Qp	1.03 / 9.0 / 26.0 / 0.0	39.23	V / 1.00 / 0	-4.27	n/a
280.0 MHz	57.32 Qp	1.5 / 12.66 / 26.48 / 0.0	45.0	V / 1.00 / 0	-1.0	n/a
325.75 MHz	49.66 Qp	1.53 / 14.0 / 26.7 / 0.0	38.49	V / 1.00 / 0	-7.51	n/a
405.5 MHz	46.66 Qp	1.7 / 16.3 / 26.72 / 0.0	37.94	V / 1.00 / 0	-8.06	n/a
980.0 MHz	35.75 Qp	2.71 / 24.14 / 26.42 / 0.0	36.18	V / 1.00 / 0	-17.82	n/a
280.0 MHz	31.61 Qp	1.5 / 12.66 / 0.0 / 0.0	45.77	V / 1.80 / 100	-0.23	n/a
280.0 MHz	46.12 Qp	1.5 / 12.66 / 26.48 / 0.0	33.8	V / 1.80 / 100	-12.2	n/a
280.0 MHz	56.54 Qp	1.5 / 12.66 / 26.48 / 0.0	44.22	H / 3.00 / 0	-1.78	n/a
added ferrite on ethernet cable at the eut end						
added ferrite on router end of ethernet cable						
280.0 MHz	56.41 Qp	1.5 / 12.66 / 26.48 / 0.0	44.09	H / 1.00 / 70	-1.91	n/a
1.494 GHz	42.88 Av	3.42 / 26.7 / 26.3 / 0.0	46.7	V / 1.00 / 0	n/a	-7.3
2.335 GHz	41.43 Av	4.23 / 30.34 / 26.86 / 0.0	49.14	V / 1.00 / 0	n/a	-4.86

Tested by: J. T. Schneider
Printed Signature

Reviewed by:
Printed Signature

RADIATED EMISSIONS



Test Report #:	WC403349 Run 12	Test Area:	LTS	
EUT Model #:	RSU-2400A	Date:	10/8/04	
EUT Serial #:		EUT Power:	60 Hz / 110 VAC	Temperature: 23.0 °C
Test Method:	FCC B			Air Pressure: 99.0 kPa
Customer:	Next Net			Rel. Humidity: 65.0 %

EUT Description: 2.4 GHz TRx & Rcvr Residential Subscriber Unit

Notes: transmitter on

Data File Name: 3349.dat

Page: 2 of 4

Measurement summary for limit1: FCC-B <1GHz 3m (Qp)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m
280.0 MHz	31.61 Qp	1.5 / 12.66 / 0.0 / 0.0	45.77	V / 1.80 / 100	-0.23
162.9 MHz	55.21 Qp	1.03 / 9.0 / 26.0 / 0.0	39.23	V / 1.00 / 0	-4.27
150.0 MHz	54.09 Qp	1.0 / 9.97 / 25.92 / 0.0	39.14	V / 1.00 / 0	-4.36
124.48 MHz	53.55 Qp	0.94 / 8.98 / 26.02 / 0.0	37.45	V / 1.00 / 0	-6.05
75.0 MHz	50.24 Qp	0.71 / 8.2 / 25.8 / 0.0	33.35	V / 1.00 / 0	-6.65
325.75 MHz	49.66 Qp	1.53 / 14.0 / 26.7 / 0.0	38.49	V / 1.00 / 0	-7.51
156.85 MHz	51.81 Qp	1.0 / 9.12 / 25.95 / 0.0	35.98	V / 1.00 / 0	-7.52
405.5 MHz	46.66 Qp	1.7 / 16.3 / 26.72 / 0.0	37.94	V / 1.00 / 0	-8.06
37.32 MHz	38.51 Qp	0.48 / 17.7 / 25.9 / 0.0	30.79	V / 1.00 / 0	-9.21
980.0 MHz	35.75 Qp	2.71 / 24.14 / 26.42 / 0.0	36.18	V / 1.00 / 0	-17.82

Tested by: J. T. Schneider _____
Printed Signature

Reviewed
by: _____
Printed Signature

RADIATED EMISSIONS

Test Report #: WC403349 Run 12 Test Area: LTS
EUT Model #: RSU-2400A Date: 10/8/04
EUT Serial #: _____ EUT Power: 60 Hz / 110 VAC Temperature: 23.0 °C
Test Method: FCC B Air Pressure: 99.0 kPa
Customer: Next Net Rel. Humidity: 65.0 %
EUT Description: 2.4 GHz TRx & Rcvr Residential Subscriber Unit
Notes: transmitter on
Data File Name: 3349.dat Page: 3 of 4

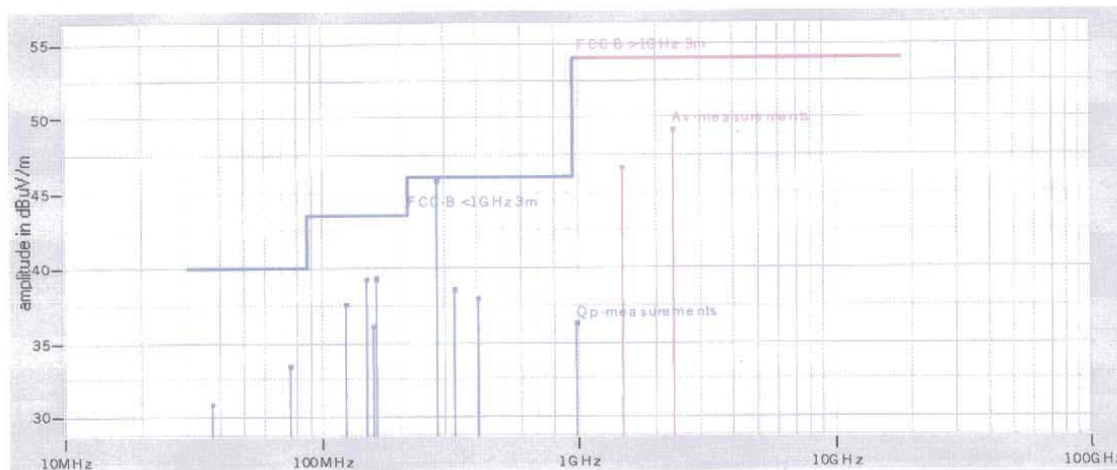
Measurement summary for limit2: FCC B >1GHz 3m (Av)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 FCC B >1GHz 3m
2.335 GHz	41.43 Av	4.23 / 30.34 / 26.86 / 0.0	49.14	V / 1.00 / 0	-4.86
1.494 GHz	42.88 Av	3.42 / 26.7 / 26.3 / 0.0	46.7	V / 1.00 / 0	-7.3

Tested by: J. T. Schneider _____
Printed Signature

Reviewed
by: _____
Printed Signature

RADIATED EMISSIONS

Test Report #: WC403349 Run 12 Test Area: LTS
EUT Model #: RSU-2400A Date: 10/8/04
EUT Serial #: _____ EUT Power: 60 Hz / 110 VAC Temperature: 23.0 °C
Test Method: FCC B Air Pressure: 99.0 kPa
Customer: Next Net Rel. Humidity: 65.0 %
EUT Description: 2.4 GHz TRx & Rcvr Residential Subscriber Unit
Notes: transmitter on
Data File Name: 3349.dat Page: 4 of 4

Graph:

Tested by: J. T. Schneider _____
Printed Signature
Reviewed by: _____
Printed Signature