

FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

NEXXT SOLUTIONS LLC

300Mbps Wireless N Gigabit Router

Model No.: ARN03304U1

FCC ID: X4YARN03304U1

Prepared for: NEXXT SOLUTIONS LLC

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Prepared By: Audix Technology (Shenzhen) Co., Ltd.

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Report Number : ACS-F12118

Date of Test : May.25~27, 2012

Date of Report : Jun.01, 2012



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D:X4YARN03304U

TEST REPORT CERTIFICATION

Applicant NEXXT SOLUTIONS LLC

Manufacturer NEXXT SOLUTIONS LLC

EUT Description 300Mbps Wireless N Gigabit Router

FCC ID X4YARN03304U1

> (A) MODEL NO. : ARN03304U1

(B) SERIAL NO. : N/A (C) POWER SUPPLY: DC 12V

(D) TEST VOLTAGE : DC 12V From Adapter Input

Tested for comply with:

FCC Rules and Regulations Part 15 Subpart C: 2008

Test procedure used: ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD, is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test: May.25 27, 2012 Report of date: Jun.01, 2012

Prepared by:

Approved & Authorized Signer:

Reviewed by

信奉科技(深圳 Sōnnŷ Lu/ Senior Assistant

Audix Technology (Shenzhen) Co., Ltd.

EMC部門報告専用章

Stamp only for EMC Dept Report

Signature:

Ken Lu / Manager



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1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION					
Description of Test Item	Standard	Results			
Power Line Conducted Emission	FCC Part 15: 15.207	PASS			
Fower Line Conducted Emission	ANSI C63.10: 2009	rass			
Radiated Emission	FCC Part 15: 15.209	PASS			
Radiated Emission	ANSI C63.10: 2009	rass			
Dand Edge Compliance	FCC Part 15: 15.247	PASS			
Band Edge Compliance	ANSI C63.10: 2009	rass			
Conducted annuious emissions	FCC Part 15: 15.247	PASS			
Conducted spurious emissions	ANSI C63.10: 2009	PASS			
6dB Bandwidth	FCC Part 15: 15.247	PASS			
odb Bandwidin	ANSI C63.10: 2009	rass			
Deale Ontract Decree	FCC Part 15: 15.247	PASS			
Peak Output Power	ANSI C63.10: 2009	PASS			
Decree Constant Description	FCC Part 15: 15.247	DACC			
Power Spectral Density	ANSI C63.10: 2009	PASS			
Antenna requirement	FCC Part 15: 15.203	PASS			



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2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : 300Mbps Wireless N Gigabit Router

Model Number : ARN03304U1

FCC ID : X4YARN03304U1

Operation Frequency : IEEE 802.11b: 2412MHz—2462MHz

IEEE 802.11g: 2412MHz—2462MHz

IEEE802.11n HT20: 2412MHz—2462MHz IEEE802.11n HT40: 2422MHz—2452MHz

Channel Number : IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels

IEEE 802.11n HT40: 7Channels

Modulation Technology: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)

IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,

QPSK,BPSK)

Antenna Assembly

Gain

MIMO 3X3 Dipole antenna, 3dBi gain

Applicant : NEXXT SOLUTIONS LLC

454 Holiday Drive, Hallandale, Florida, 33009 USA

Manufacturer : NEXXT SOLUTIONS LLC

454 Holiday Drive, Hallandale, Florida, 33009 USA

Power Adapter : Manufacturer: LEADER ELECTRONICS INC.

M/N: MU18-2120150-A1

Cable: Unshielded, Undetachable, 1.5m

Date of Test : May.25~27, 2012

Date of Receipt : May.24, 2012

Sample Type : Prototype production

2.2.Test Information

A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.



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Tested mode, channel, and data rate information						
Mode	data rate	Channel	Frequency			
	(Mpbs)(see Note)		(MHz)			
IEEE 802.11b	11	Low:CH1	2412			
	11	Middle: CH6	2437			
	11	High: CH11	2462			
IEEE 802.11g	54	Low:CH1	2412			
	54	Middle: CH6	2437			
	54	High: CH11	2462			
IEEE 802.11n HT20	6.5	Low:CH1	2412			
	6.5	Middle: CH6	2437			
	6.5	High: CH11	2462			
IEEE 802.11n HT40	13.5	Low:CH1	2422			
	13.5	Middle: CH4	2437			
	13.5	High: CH7	2452			

Note1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

Note2: This device use MIMO 3X3 antennas ,For 11n HT20 and HT40 Mode, all the radiated spurious emissions and band edge test were performed with three antennas transmit synchronous, For 11b/g Mode, choose chain 1 which have the maximum power level and worst radiated emission for radiated emission and band edge test.

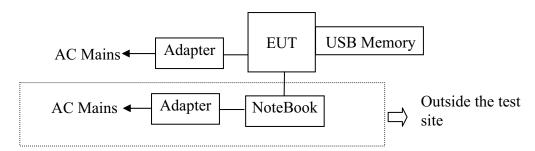


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2.3.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type	
1	Personal Computer	Test PC M	DELL	Studio 540	224XK2X	☑FCC DoC ☑BSMI ID:R33002	
	_	Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)					
2	USB Memory						

2.4. Block diagram of connection between the EUT and simulators



PC run test software to control EUT work in Continuous TX mode

(EUT: 300Mbps Wireless N Gigabit Router)



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2.5. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen

Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

3m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 90454 Valid Date: Feb.22, 2015

3m & 10m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 794232 Valid Date: Dec.30, 2012

EMC Lab. : Certificated by Industry Canada

Registration Number: IC 5183A-1

Valid Date: Jun.13, 2014

: Certificated by DAkkS, Germany Registration No: D-PL-12151-01-01

Valid Date: Feb.01, 2014

Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2013

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2.6.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty		
Uncertainty for Conduction emission test in No. 1 Conduction	3.2 dB(150kHz to 30MHz)		
Uncertainty for Radiation Emission test in 3m chamber	3.6 dB(30~200MHz, Polarize: H) 3.8 dB(30~200MHz, Polarize: V) 4.2 dB(200M~1GHz, Polarize: H) 3.8 dB(200M~1GHz, Polarize: V)		
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57dB		
Uncertainty for Conduction Spurious emission test	2.00 dB		
Uncertainty for Output power test	0.73 dB		
Uncertainty for Power density test	2.00 dB		
Uncertainty for Frequency range test	$7x10^{-8}$		
Uncertainty for Bandwidth test	83 kHz		
Uncertainty for DC power test	0.038 %		
Uncertainty for test site temperature and humidity	0.6°C 3%		

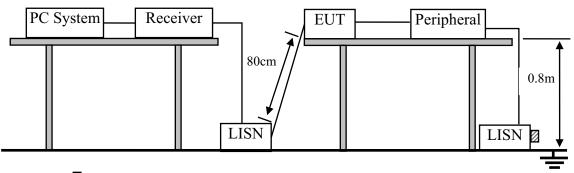


3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.31, 11	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Oct.31, 11	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 12	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 12	1 Year
5.	Terminator	Hubersuhner	50Ω	No. 2	May.08, 12	1 Year
6.	RF Cable	Fujikura	3D-2W	No.1	May.08, 12	1Year
7.	Coaxial Switch	Anritsu	MP59B	M50564	May.08, 12	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 12	1 Year
9.	Oscilloscope	Tektronix	TDS3052B	B026036	June.09, 11	1 Year

3.2.Block Diagram of Test Setup



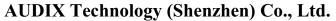
I :50Ω Terminator

3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	dB(µV)	$dB(\mu V)$		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
500kHz ~ 5MHz	56	46		
5MHz ~ 30MHz	60	50		

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.





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3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1.300Mbps Wireless N Gigabit Router (EUT)

Model Number : ARN03304U1

Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.3.

3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 2.4.
- 3.5.2. Turned on the power of all equipment.
- 3.5.3. Notebook run test software to control EUT work in Tx mode.

3.6. Test Procedure

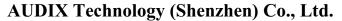
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

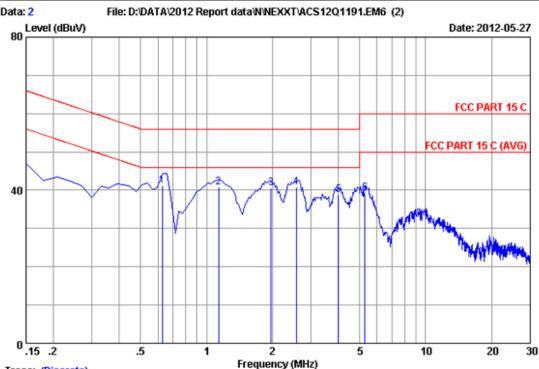
PASS. (All emissions not reported below are too low against the prescribed limits.)





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Trace: (Discrete)

Site no :1#conduction Data No :2

Dis./Ant. :** 2011 ESH2-Z5 LINE

Limit :FCC PART 15 C

Env./Ins. :29.5*C/55% Engineer :Leo-Li

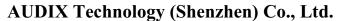
EUT :300Mbps Wireless N Gigabit Router Power Rating :DC 12V From Adapter Input AC 120V/60Hz

Test Mode :Tx Mode :ARN03304U1

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.62760	0.19	9.98	31.17	41.34	56.00	14.66	QP
2	1.135	0.24	9.98	30.47	40.69	56.00	15.31	QP
3	1.971	0.31	9.96	30.19	40.46	56.00	15.54	QP
4	2.568	0.32	9.95	30.52	40.79	56.00	15.21	QP
5	4.001	0.35	9.94	28.38	38.67	56.00	17.33	QP
6	5.284	0.38	9.93	28.96	39.27	60.00	20.73	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

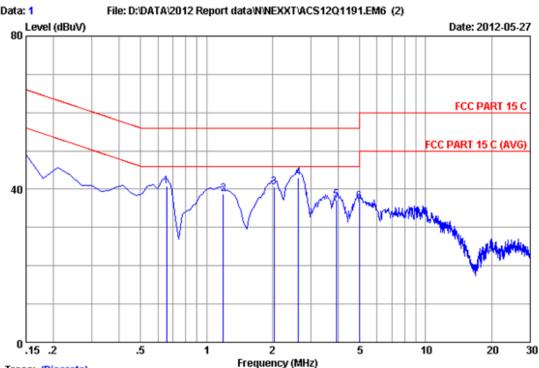
2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





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FCC ID:X4YARN03304U1



Trace: (Discrete)

Site no :1#conduction Data No :1

Dis./Ant. :** 2011 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 C

Env./Ins. :29.5*C/55% Engineer :Leo-Li

EUT :300Mbps Wireless N Gigabit Router Power Rating :DC 12V From Adapter Input AC 120V/60Hz

Test Mode :Tx Mode :ARN03304U1

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.65745	0.23	9.97	30.62	40.82	56.00	15.18	QP
2	1.195	0.25	9.97	28.60	38.82	56.00	17.18	QP
3	2.031	0.27	9.96	30.26	40.49	56.00	15.51	QP
4	2.628	0.28	9.95	32.86	43.09	56.00	12.91	QP
5	3.911	0.31	9.94	26.96	37.21	56.00	18.79	QP
6	4.986	0.33	9.93	26.50	36.76	56.00	19.24	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



4. RADIATED EMISSION TEST

4.1.Test Equipment

Frequency rang: 30~1000MHz

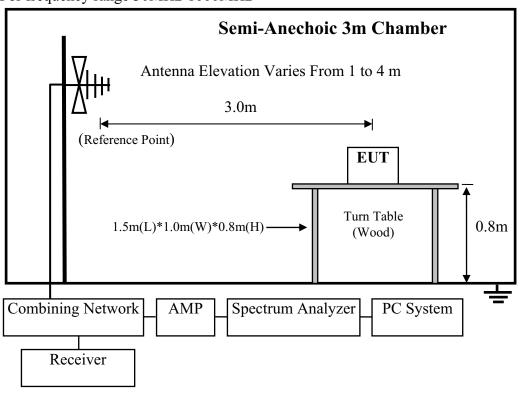
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.28,11	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 12	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 12	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 12	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	2.0 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	Dec.06, 11	0.5Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 12	1 Year

Frequency rang: above 1000MHz

- 1	<u> </u>					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 12	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	July.01, 11	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX10 6	77980/6	Dec.06, 11	0.5Year
5	RF Cable	Hubersuhner	SUCOFLEX10 6	77977/6	Dec.06, 11	0.5Year

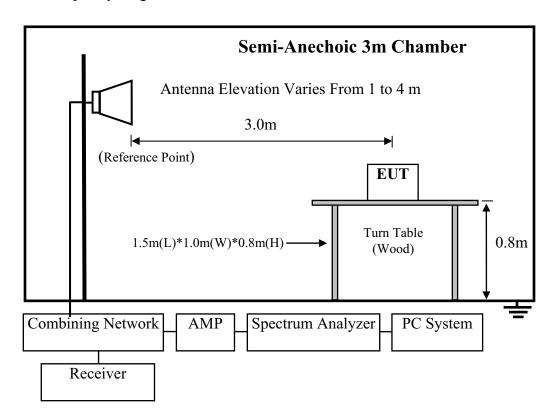
4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz





For frequency range 1GHz-25GHz



4.3. Radiated Emission Limit

4.3.1.15.209 limits

FREQUENCY	DISTANCE	FIELD STREN	NGTHS LIMIT
MHz	Meters	μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV	V)/m (Peak)
		54.0 dB(μV	V)/m (Average)

Remark : (1) Emission level $dB\mu V = 20 \log Emission level \mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



4.3.2.15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 4.2.

4.6.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

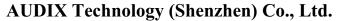
The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

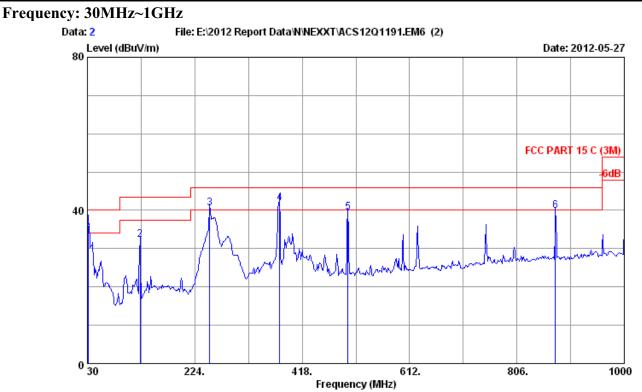
The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.



ECC ID VAVADNOSSO ALI	page	4-4	
FCC ID:X4YARN03304U1 4.7.Radiated Emission Test Results			
PASS.			
All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.			
Note: For emissions above 1GHz, if peak level comply with average average level is deemed to comply with average limit.	limit,	then	the



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 2

Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/56% Engineer : Leo_Li

: 300Mbps Wireless N Gigabit Router Power rating : DC 12V From Adapter Input AC 120V/60Hz

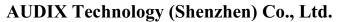
Test Mode : Tx Mode

: M/N:ARN03304U1

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.88	0.61	16.56	36.05	40.00	3.95	QP
2	125.060	12.10	1.34	18.78	32.22	43.50	11.28	QP
3	251.160	12.90	2.43	25.28	40.61	46.00	5.39	QP
4	377.260	15.64	3.25	23.04	41.93	46.00	4.07	QP
5	500.450	18.30	4.00	17.25	39.55	46.00	6.45	QP
6	875.840	22.80	5.62	11.41	39.83	46.00	6.17	QP

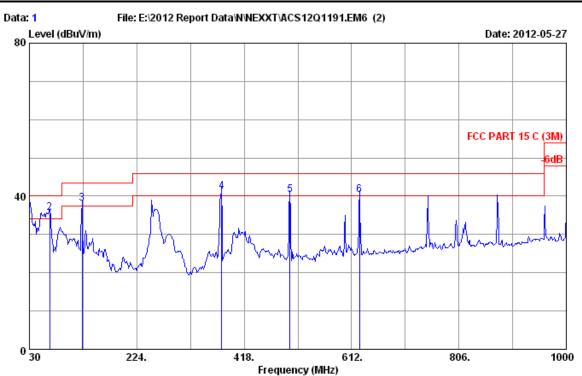
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 1

Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 C (3M) Env. / Ins. : 24*C/56% Engineer : Leo_Li

: 300Mbps Wireless N Gigabit Router Power rating : DC 12V From Adapter Input AC 120V/60Hz

Test Mode : Tx Mode

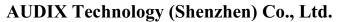
: M/N:ARN03304U1

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.58	15.98	36.56	40.00	3.44	QP
2	66.860	6.24	0.95	28.53	35.72	40.00	4.28	QP
3	125.060	12.10	1.34	24.63	38.07	43.50	5.43	QP
4	377.260	15.64	3.25	22.43	41.32	46.00	4.68	QP
5	500.450	18.30	4.00	18.09	40.39	46.00	5.61	QP
6	626.550	20.13	4.64	15.65	40.42	46.00	5.58	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

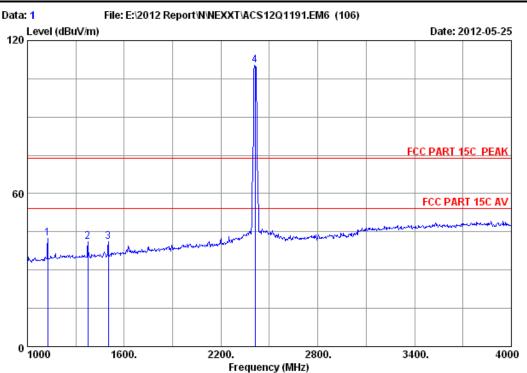
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 1 Ant. pol. : VERTICAL

Dis. / Ant. : 3m 3115(0905) Limit : FCC PART 15C PEAK

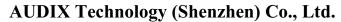
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply: DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx

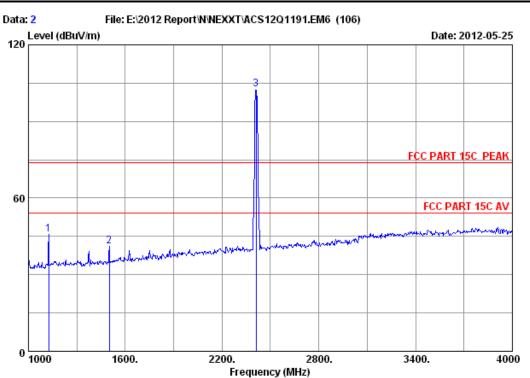
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
_	1126.000 1375.000			37.19 36.40	48.19 45.36	42.52 41.12	74.00 74.00	31.48 32.88	Peak Peak
3	1501.000 2412.000	25.90	6.77		44.93	41.03 110.24	74.00	32.97 -36.24	Peak Peak
•		20.10	0.00	00.50	105.11	110.01		00.21	1

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0905)

Data no. : 2 Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

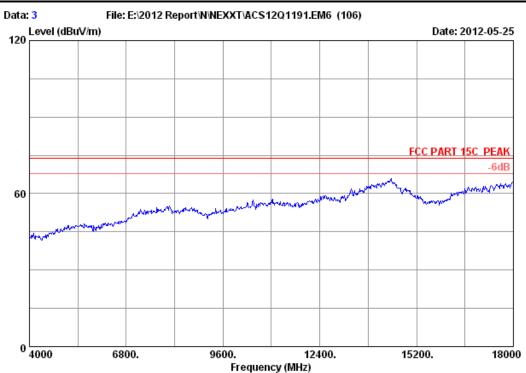
Test mode : IEEE802.11b CH1 2412MHz Tx

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Level (dBuV/m)	Limits	_	Remark	
2	1126.000 1501.000 2412.000	25.90	6.77	36.57	51.61 44.89 101.52	45.94 40.99 102.65	74.00 74.00 74.00	28.06 33.01 -28.65	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 3
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

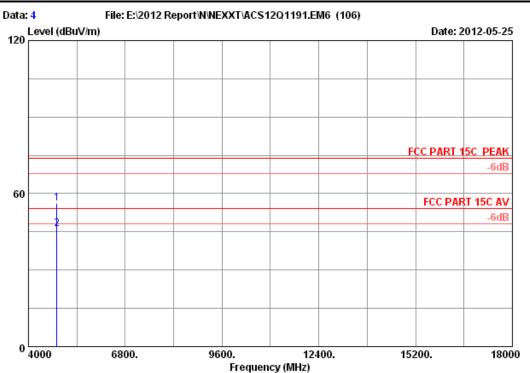
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx



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FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 4

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx

: ARNO3304U1

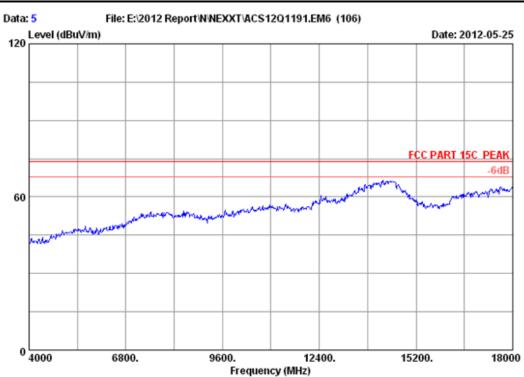
Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4824.000 4824.000	 12.58 12.58		44.38 34.23	56.18 46.03	74.00 54.00	17.82 7.97	Peak Average

Remarks:

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 5

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

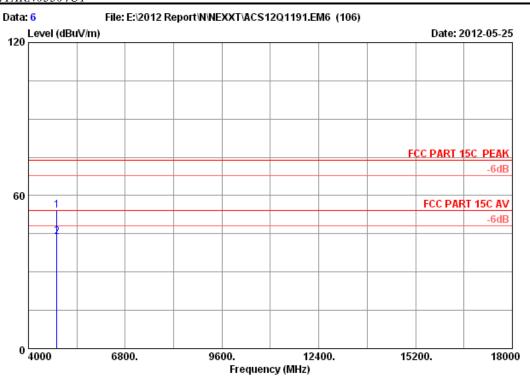
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz Tx



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 6

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

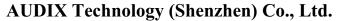
Test mode : IEEE802.11b CH1 2412MHz Tx

: ARNO3304U1

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	34.47	12.58	35.25	42.20	54.00	74.00	20.00	Peak
2	4824.000	34.47	12.58	35.25	32.08	43.88	54.00	10.12	Average

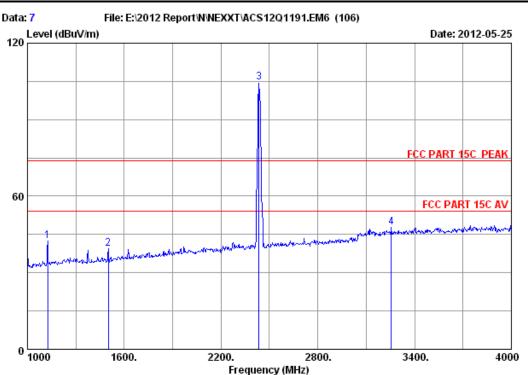
Remarks:

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 7

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

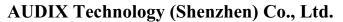
Test mode : IEEE802.11b CH6 2437MHz Tx

: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	1126.000	25.37	6.15	37.19	48.19	42.52	74.00	31.48	Peak
2	1501.000	25.90	6.77	36.57	43.46	39.56	74.00	34.44	Peak
3	2434.000	28.50	8.60	36.01	103.51	104.60	74.00	-30.60	Peak
4	3256.000	30.92	10.19	35.79	42.56	47.88	74.00	26.12	Peak

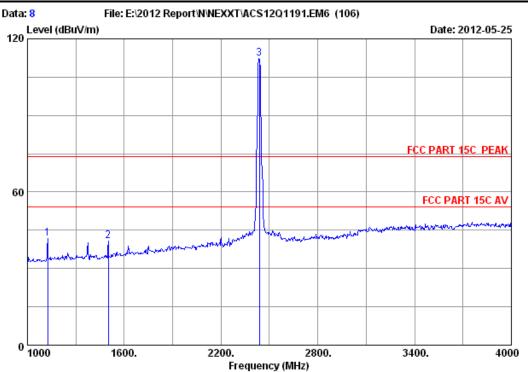
Remarks:

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 8

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz Tx

: ARN03304U1

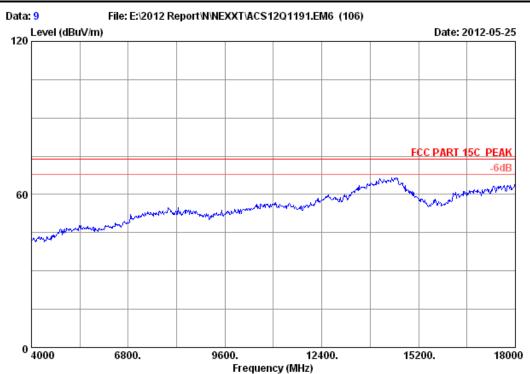
1 1126.000 25.37 6.15 37.19 47.47 41.80 74.00 32.20 Peak 2 1501.000 25.90 6.77 36.57 44.61 40.71 74.00 33.29 Peak 3 2437.000 28.53 8.60 36.06 111.13 112.20 74.00 -38.20 Peak		Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark	
	2	1501.000	25.90	6.77	36.57	44.61	40.71	74.00	33.29	Peak	-

Remarks

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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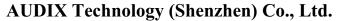
Site no. : 3m Chamber Data no. : 9

Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

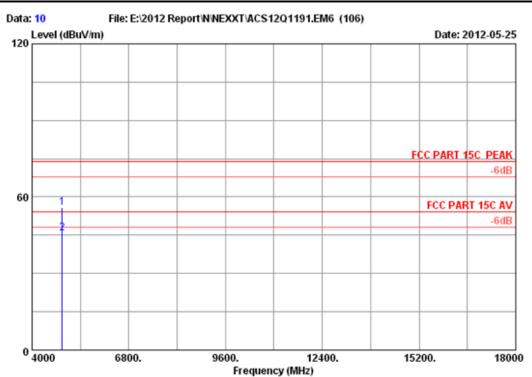
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz Tx

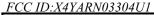
: ARNO3304U1

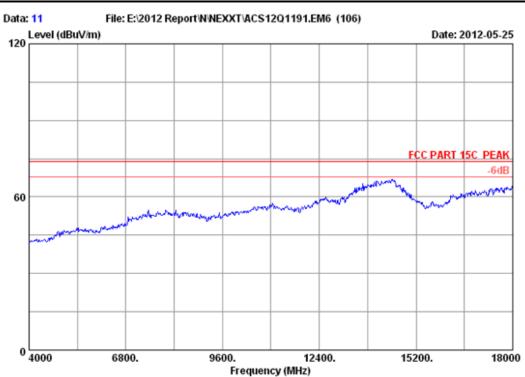
	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
1	4874.000	34.78	12.23	35.36	44.08	55.73	74.00	18.27	Peak
2	4874.000	34.78	12.23	35.36	34.28	45.93	54.00	8.07	Average

Remarks:

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 11

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

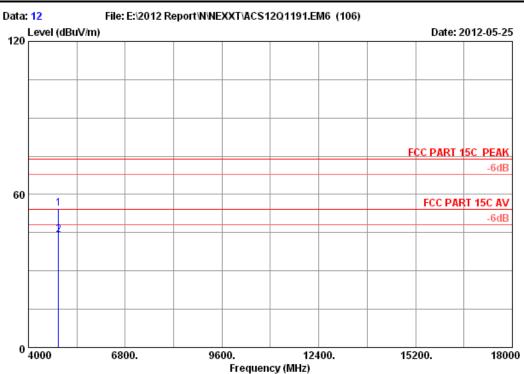
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz Tx



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FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 12

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0905)

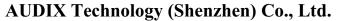
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz Tx

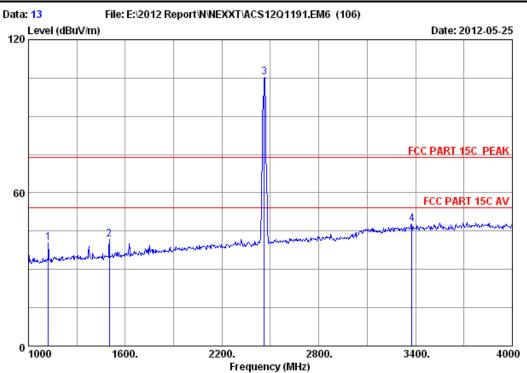
	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
_	4874.000 4874.000				42.95 32.57		74.00 54.00	19.40 9.78	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 13

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

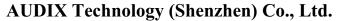
Test mode : IEEE802.11b CH11 2462MHz Tx

: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
2	2462.000	25.90 28.55	6.77 8.76	37.19 36.57 36.02	46.05 45.75 104.09	40.38 41.85 105.38		33.62 32.15 -31.38	Peak Peak Peak
4	3376.000	31.26	10.37	35.53	41.71	47.81	74.00	26.19	Peak

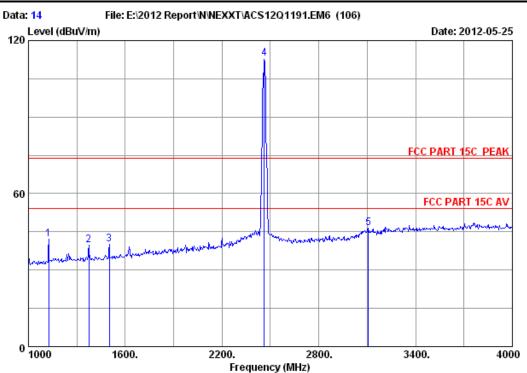
Remarks

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx

: ARNO3304U1

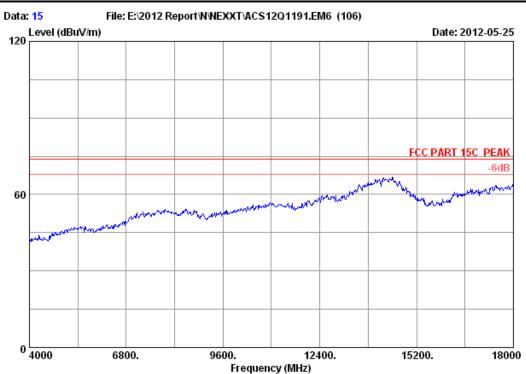
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark	_
1	1126.000	25.37	6.15	37.19	47.76	42.09	74.00	31.91	Peak	
2	1375.000	25.73	6.43	36.40	44.03	39.79	74.00	34.21	Peak	
3	1501.000	25.90	6.77	36.57	43.98	40.08	74.00	33.92	Peak	
4	2462.000	28.55	8.76	36.02	111.64	112.93	74.00	-38.93	Peak	
5	3106.000	30.49	9.98	35.73	41.71	46.45	74.00	27.55	Peak	

Remarks:

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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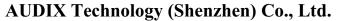
Site no. : 3m Chamber Data no. : 15

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

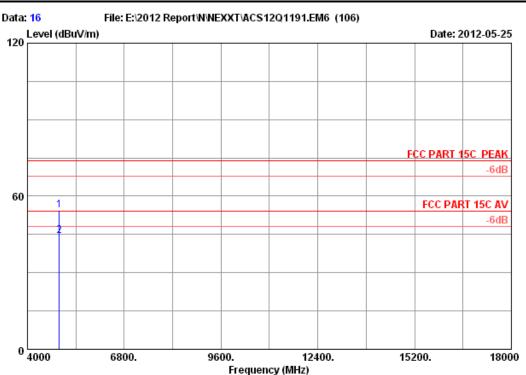
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 16

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx

: ARNO3304U1

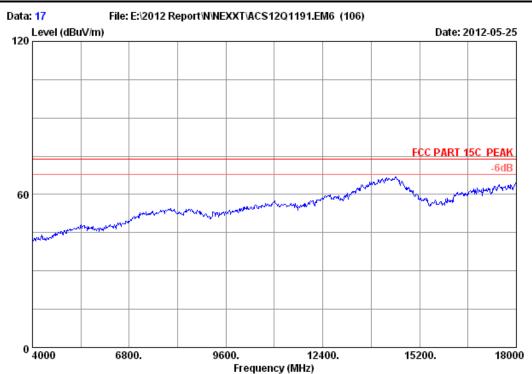
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)		Limits	Margin (dB)	Remark
_	4924.000 4924.000		12.58 12.58		42.18 32.08	54.51 44.41	74.00 54.00	19.49 9.59	Peak Average

Remarks:

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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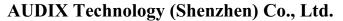


Data no. : 17 Site no. : 3m Chamber Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

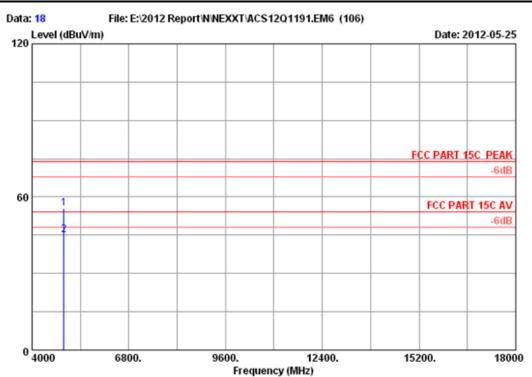
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

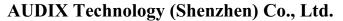
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz Tx

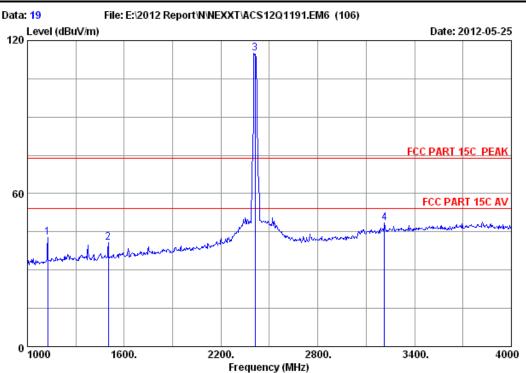
: ARNO3304U1

Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)			Remark
4924.000 4924.000			35.34 35.34	43.28 32.96	55.61 45.29	74.00 54.00	18.39 8.71	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 19
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

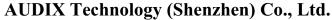
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz Tx

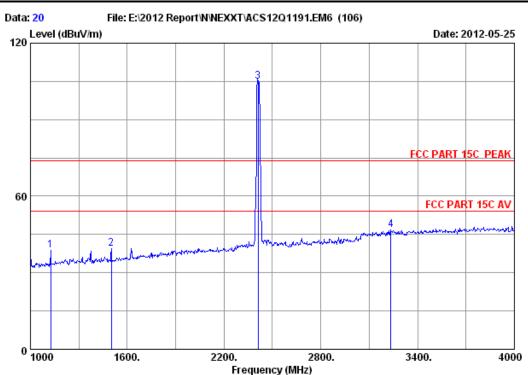
: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark	
2		25.90 28.48	6.77 8.60	35.95	48.60 44.62 113.88	42.93 40.72 115.01		31.07 33.28 -41.01	Peak Peak Peak	
4	3214.000	30.78	9.88	35.86	43.53	48.33	74.00	25.67	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 20

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

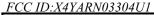
: 300Mbps Wireless N Gigabit Router Power supply: DC 12V From Adapter input AC 120V/60Hz

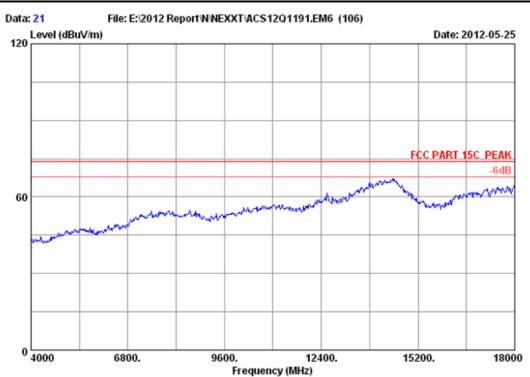
Test mode : IEEE802.11g CH1 2412MHz Tx

: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	1126.000			37.19	44.60	38.93	74.00	35.07	Peak
2	1501.000	25.90	6.77	36.57	43.47	39.57	74.00	34.43	Peak
3 4	2412.000 3235.000	28.48 30.83	8.60 10.04	35.95 35.77	103.77 41.55	104.90 46.65	74.00 74.00	-30.90 27.35	Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





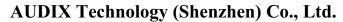
Site no. : 3m Chamber Data no. : 21
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

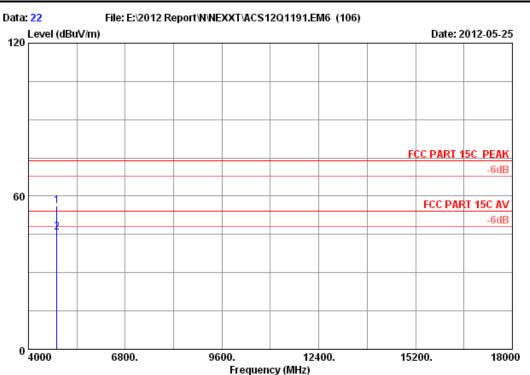
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz Tx

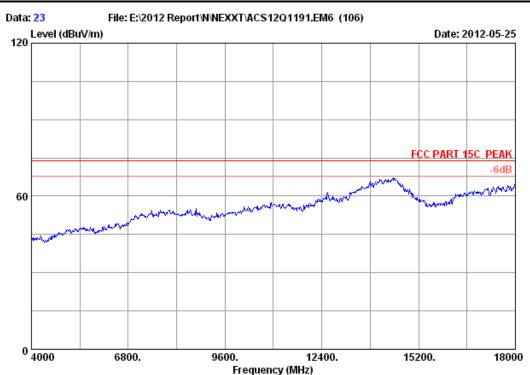
: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)		Limits	Margin (dB)	Remark
_	4824.000 4824.000		12.58 12.58		44.23 34.00	56.03 45.80	74.00 54.00	17.97 8.20	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 23

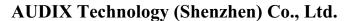
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

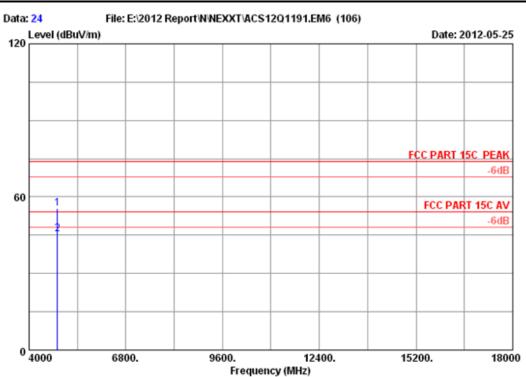
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 24

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz Tx

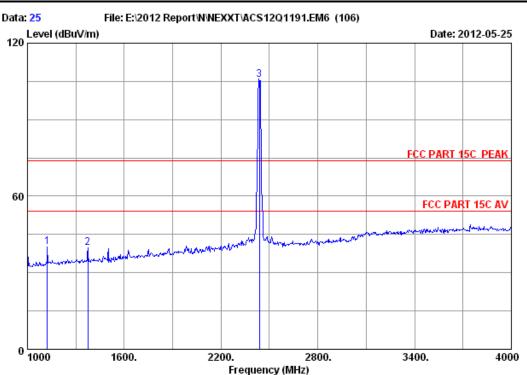
: ARNO3304U1

Freq.	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
4824.000 4824.000			35.25 35.25	43.67 33.53	55.47 45.33	74.00 54.00	18.53 8.67	Peak Àverage

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 25

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

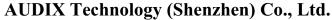
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz Tx

: ARNO3304U1

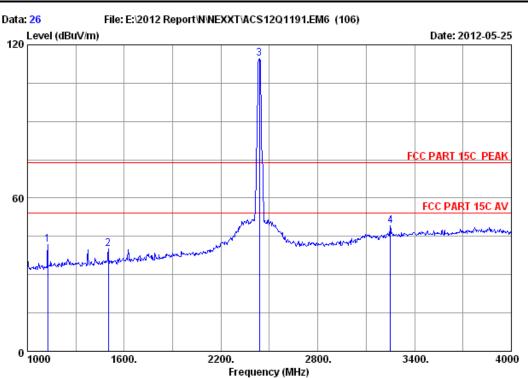
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark	
2	1123.000 1375.000 2437.000	25.73	6.43	37.19 36.40 36.06	45.78 43.98 104.47	40.11 39.74 105.54	74.00 74.00 74.00	33.89 34.26 -31.54	Peak Peak Peak	-

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 26
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz Tx

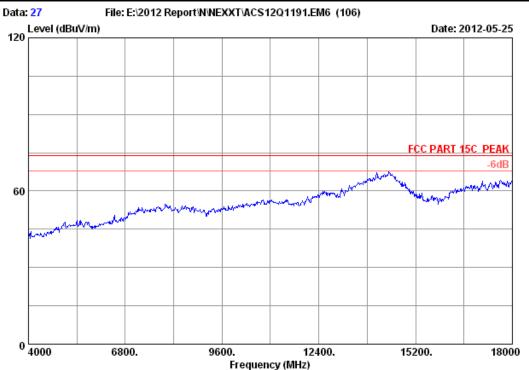
: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	_	Remark	
2	1126.000 1501.000 2437.000	25.90		37.19 36.57 36.06	47.34 44.10 113.57	41.67 40.20 114.64	74.00 74.00 74.00	32.33 33.80 -40.64	Peak Peak Peak	
-	3250.000		10.19		43.59	48.98	74.00	25.02	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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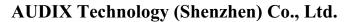
Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0 Data no. : 27 Ant. pol. : VERTICAL 3115 (0905)

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

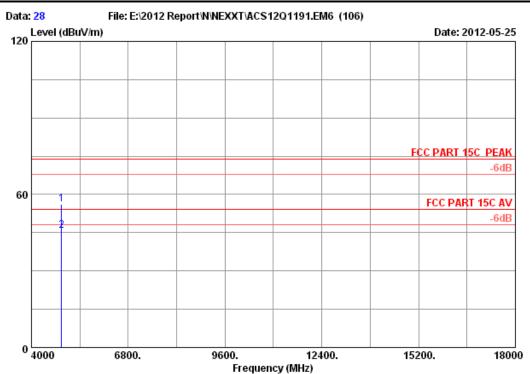
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 28 Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

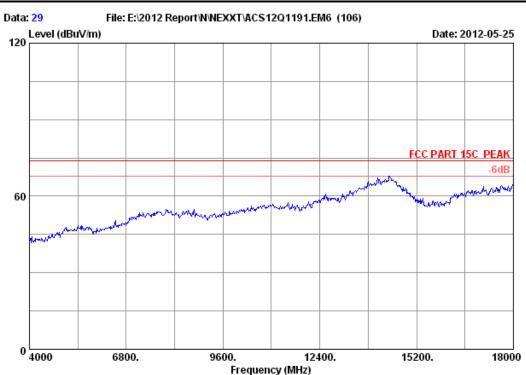
Test mode : IEEE802.11g CH6 2437MHz Tx

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4874.000 4874.000				44.57 34.26		74.00 54.00	17.78 8.09	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 29

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

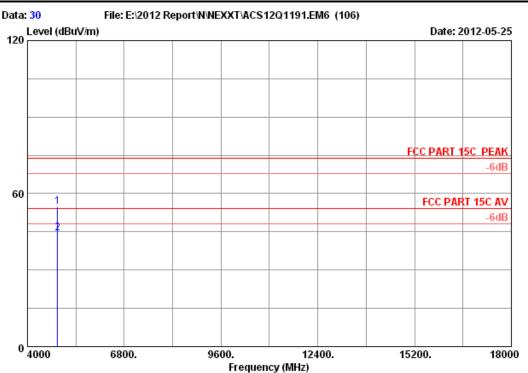
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz Tx



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FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 30

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

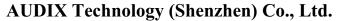
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz Tx

: ARN03304U1

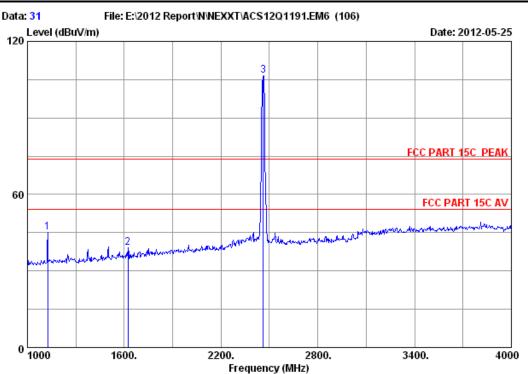
		Ant.	Cable	Amp.		Emission			
	Freq.				_			_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	34.78	12.23	35.36	43.24	54.89	74.00	19.11	Peak
2	4874.000	34.78	12.23	35.36	32.95	44.60	54.00	9.40	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 31

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

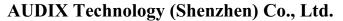
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx

: ARNO3304U1

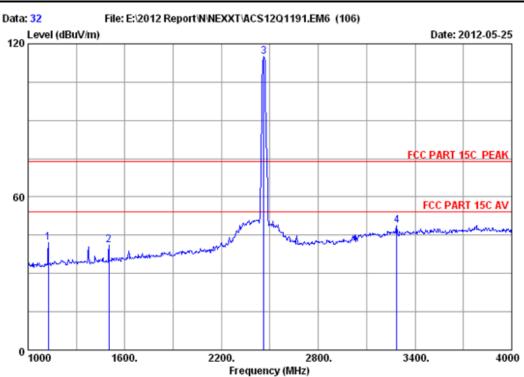
		Ant.	Cable	Amp.		Emission			
	Freq. (MHz)	Factor (dB/m)	loss (dB)		_	Level (dBuV/m)	Limits (dBuV/m)	_	Remark
1	1126.000	25.37	6.15	37.19	50.91	45.24	74.00	28.76	Peak
2	1624.000	26.43	7.15	36.26	41.90	39.22	74.00	34.78	Peak
3	2462.000	28.55	8.76	36.02	105.22	106.51	74.00	-32.51	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx

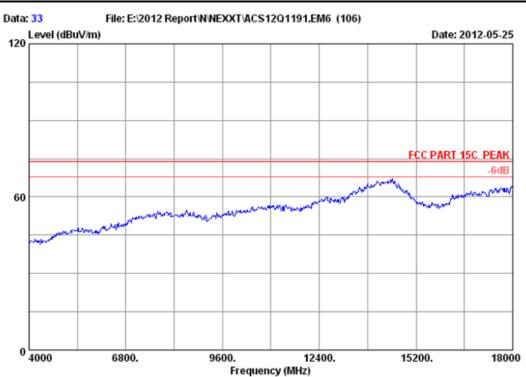
: ARN03304U1

	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2	1501.000 2462.000	25.37 25.90 28.55	6.77 8.76		113.78	42.04 41.03 115.07		31.96 32.97 -41.07	Peak Peak Peak Peak
_		28.55 30.97	8.76 10.26		113.78 43.41	115.07 48.85	74.00	-41.07 25.15	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 33

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

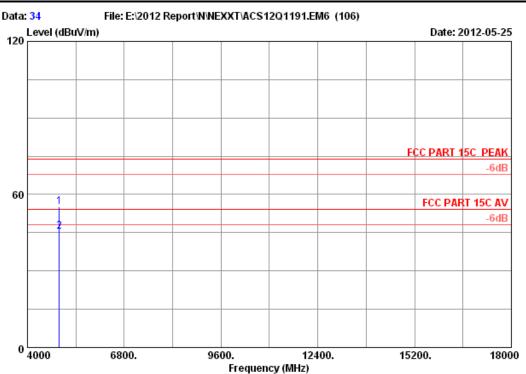
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx



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FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 34

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

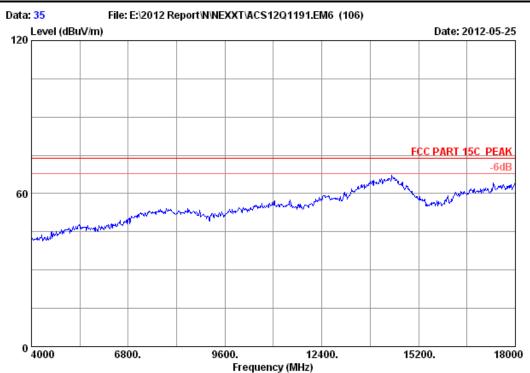
Test mode : IEEE802.11g CH11 2462MHz Tx

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4924.000 4924.000		12.58 12.58		42.98 33.12		74.00 54.00	18.69 8.55	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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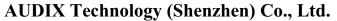
Site no. : 3m Chamber Data no. : 35
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

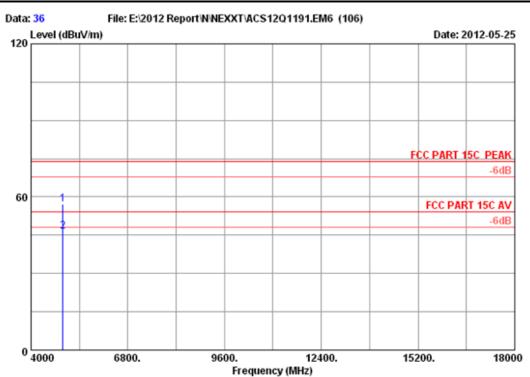
EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

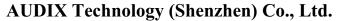
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx

: ARNO3304U1

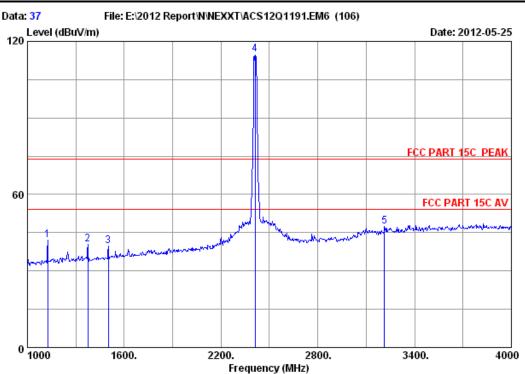
Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
4924.000 4924.000			35.34 35.34	44.98 34.01	57.31 46.34	74.00 54.00	16.69 7.66	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 37 Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

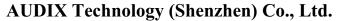
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

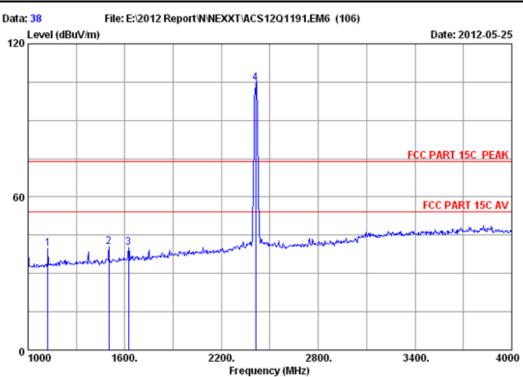
	Freq. (MHz)	Factor (dB/m)	loss (dB)	Factor	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark	_
1	1126.000	25.37	6.15	37.19	47.64	41.97	74.00	32.03	Peak	
2	1375.000	25.73	6.43	36.40	44.78	40.54	74.00	33.46	Peak	
3	1501.000	25.90	6.77	36.57	43.72	39.82	74.00	34.18	Peak	
4	2412.000	28.48	8.60	35.95	113.72	114.85	74.00	-40.85	Peak	
5	3214.000	30.78	9.88	35.86	42.60	47.40	74.00	26.60	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 38

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

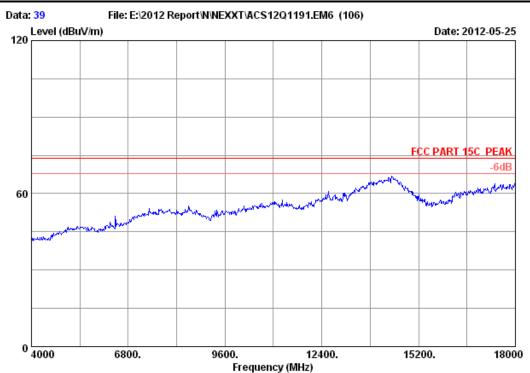
: ARN03304U1

Freq.	Factor (dB/m)	loss (dB)	Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 1123.000 2 1501.000 3 1624.000 4 2412.000	25.90	6.77 7.15	37.19 36.57 36.26 35.95	45.47 44.24 42.96 103.44	39.80 40.34 40.28 104.57	74.00 74.00 74.00 74.00	34.20 33.66 33.72 -30.57	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

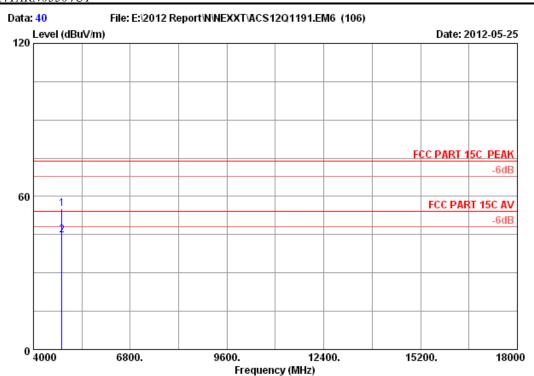
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 40 Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

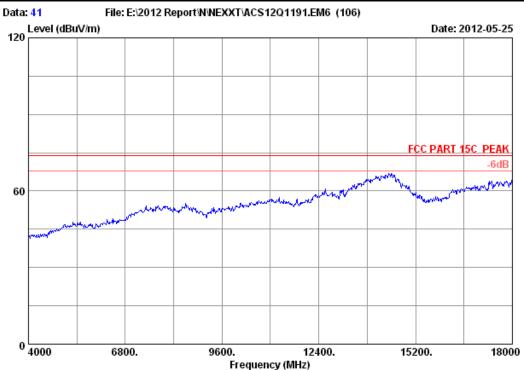
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4824.000 4824.000		12.58 12.58		43.27 32.84		74.00 54.00	18.93 9.36	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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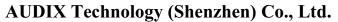
Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0 Data no. : 41 Ant. pol. : HORIZONTAL 3115 (0905)

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

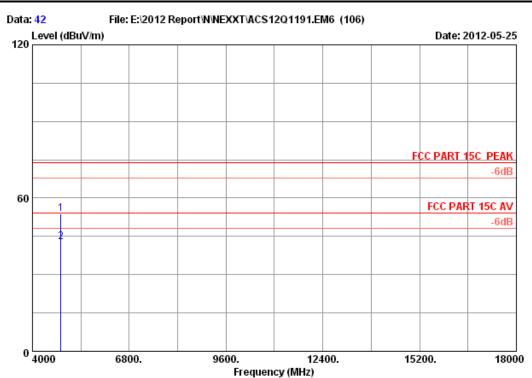
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0905)

Data no. : 42 Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

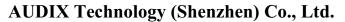
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz Tx

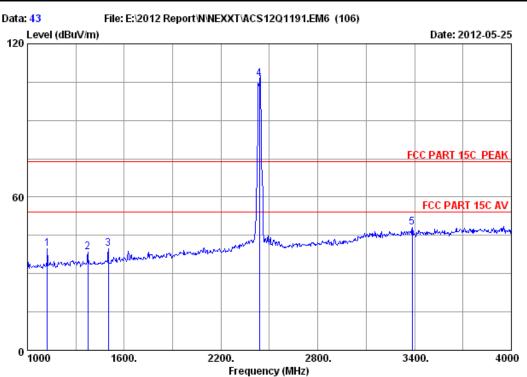
Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4824.000 4824.000		12.58 12.58		42.09 31.03	53.89 42.83	74.00 54.00	20.11 11.17	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



: 3m Chamber Site no.

Data no. : 43 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0905)

: FCC PART 15C PEAK Limit

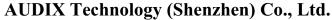
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH6 2437MHz Tx

: ARNO3304U1

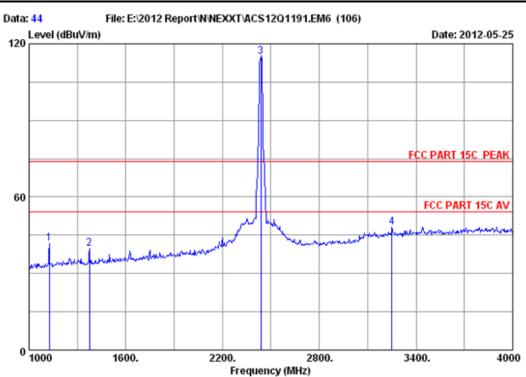
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1123.000	25.37	6.15	37.19	45.41	39.74	74.00	34.26	Peak
2	1375.000	25.73	6.43	36.40	42.55	38.31	74.00	35.69	Peak
3	1501.000	25.90	6.77	36.57	43.78	39.88	74.00	34.12	Peak
4	2437.000	28.53	8.60	36.06	105.35	106.42	74.00	-32.42	Peak
5	3385.000	31.26	10.39	35.53	42.07	48.19	74.00	25.81	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz Tx

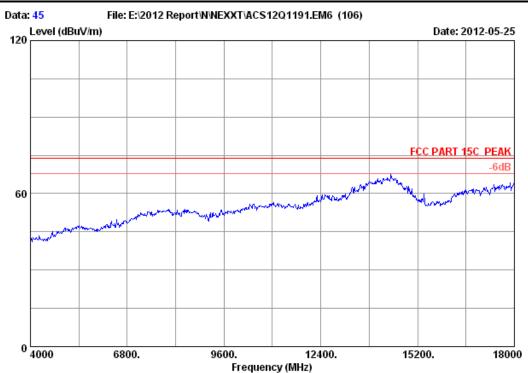
: ARN03304U1

_			Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
	 25.73 28.53	6.15 6.43 8.60 10.19	36.40 36.06	47.35 43.97 113.89 42.87	39.73 114.96	74.00 74.00 74.00 74.00	32.32 34.27 -40.96 25.74	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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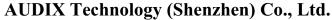
Site no. : 3m Chamber Data no. : 45
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

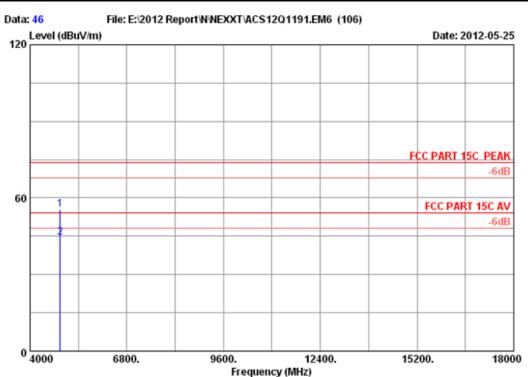
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz Tx







Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0 Data no. : 46 3115 (0905) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH6 2437MHz Tx

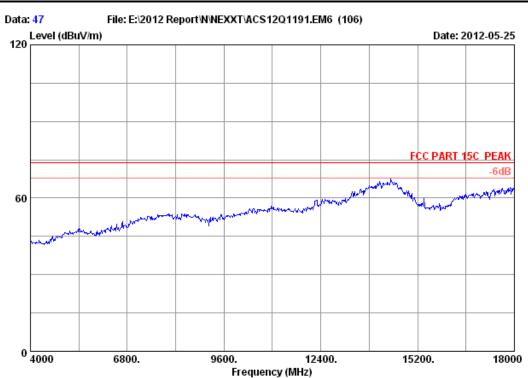
: ARNO3304U1

Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)		Limits (dBuV/m)		Remark
4874.000 4874.000			35.36 35.36	43.95 32.97	55.60 44.62	74.00 54.00	18.40 9.38	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0905)

Data no. : 47 Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

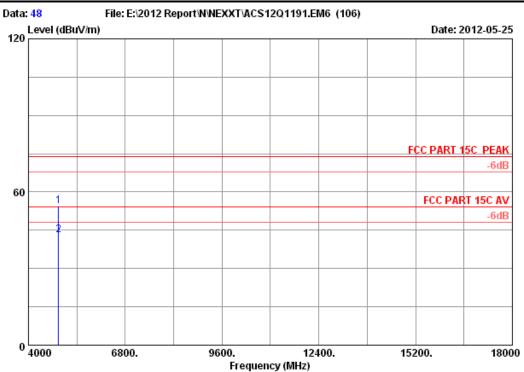
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz Tx



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FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 48

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

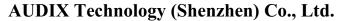
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz Tx

: ARN03304U1

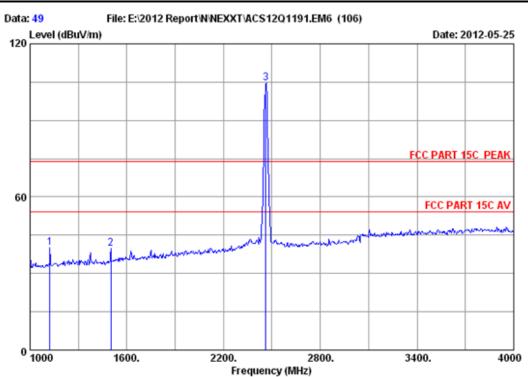
	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits		Remark
_	4874.000 4874.000	 12.23 12.23		42.67 31.56	54.32 43.21	74.00 54.00	19.68 10.79	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 49

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

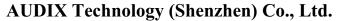
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

: ARN03304U1

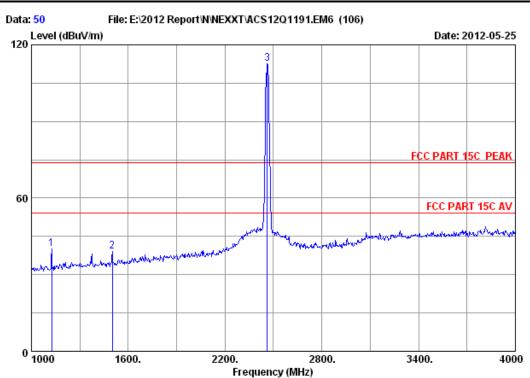
	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1123.000	25.37	6.15	37.19	45.62	39.95	74.00	34.05	Peak
2	1501.000	25.90	6.77	36.57	43.83	39.93	74.00	34.07	Peak
3	2462.000	28.55	8.76	36.02	103.23	104.52	74.00	-30.52	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

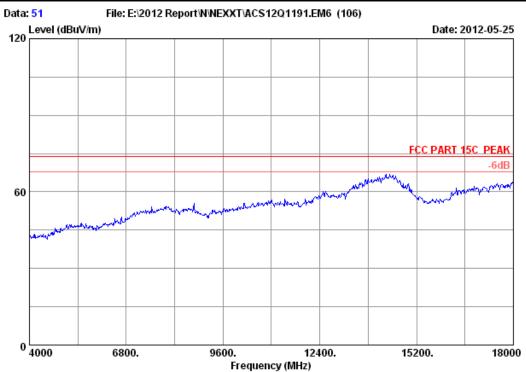
: ARNO3304U1

		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	Limits (dBuV/m)		Remark
2 150	6.000 1.000 2.000	25.90	6.15 6.77 8.76	36.57		39.08		34.05 34.92 -38.75	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 51

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router

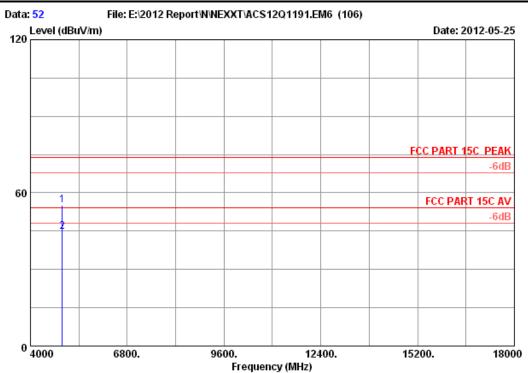
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH11 2462MHz Tx



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FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 52

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

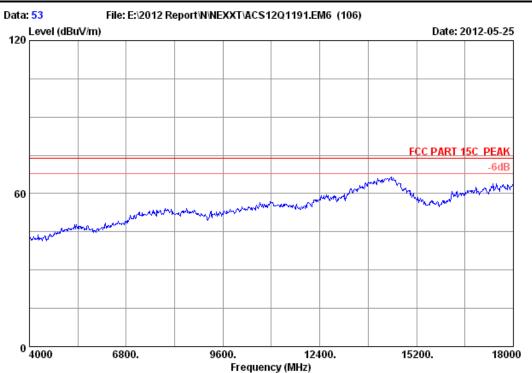
: ARNO3304U1

	Freq.	Factor	loss	Factor	_	Level	Limits		Remark
	(MHz)	(dB/m) 	(dB) 	(ub) 	(dbuv)	(GBUV/M)	(dBuV/m)	(ub) 	
_	4924.000 4924.000		12.58 12.58		42.96 32.48		74.00	18.71 9.19	Peak
4	4924.000	33.09	14.50	33.34	34.40	44.81	54.00	9.19	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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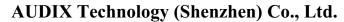


Site no. : 3m Chamber Data no. : 53
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

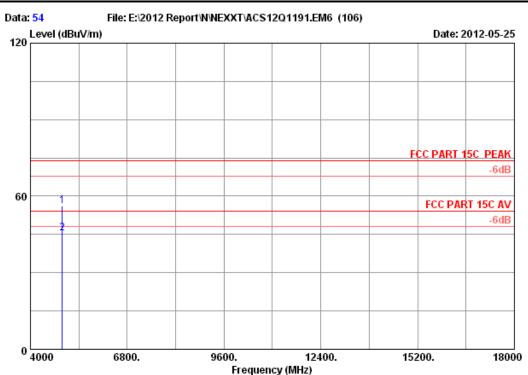
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

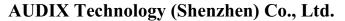
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx

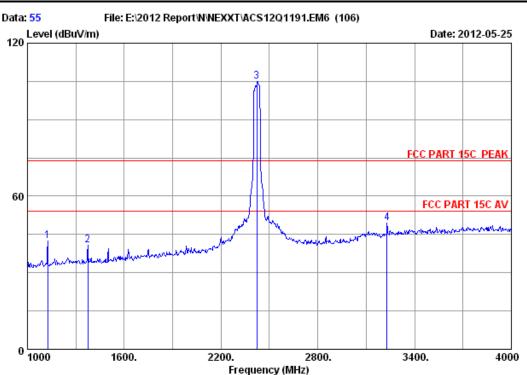
: ARNO3304U1

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4924.000 4924.000		12.58 12.58		43.96 33.24	56.29 45.57	74.00 54.00	17.71 8.43	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 55
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

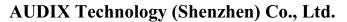
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

: IEEE002.IIN NI40 CHI 2422NA2 IX

: ARNO3304U1

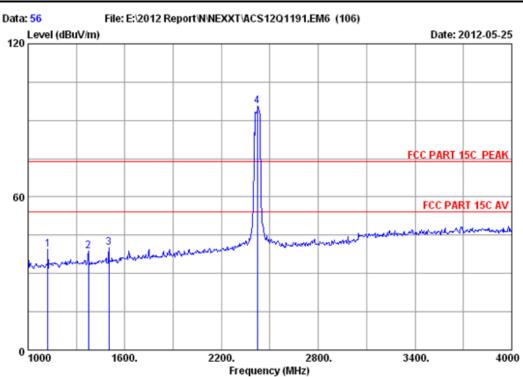
	Freq. (MHz)	Factor (dB/m)	loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	1126.000	25.37	6.15	37.19	48.18	42.51	74.00	31.49	Peak
2	1375.000	25.73	6.43	36.40	45.18	40.94	74.00	33.06	Peak
3	2422.000	28.50	8.60	36.01	103.98	105.07	74.00	-31.07	Peak
4	3229.000	30.83	10.04	35.77	44.23	49.33	74.00	24.67	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 56

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

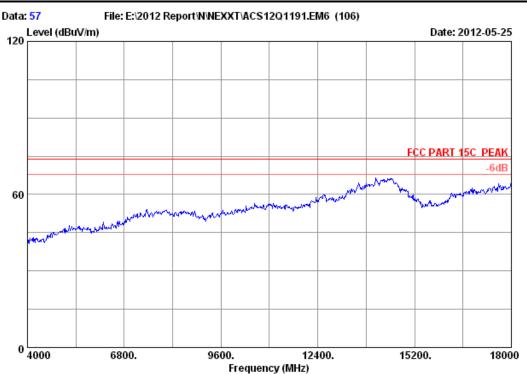
: ARN03304U1

	Freq.	Ant. Factor (dB/m)	loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)		Remark
2 3			6.43 6.77	37.19 36.40 36.57 36.01	45.27 42.96 43.98 94.43	39.60 38.72 40.08 95.52	74.00 74.00 74.00 74.00	34.40 35.28 33.92 -21.52	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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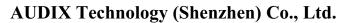


Site no. : 3m Chamber Data no. : 57 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

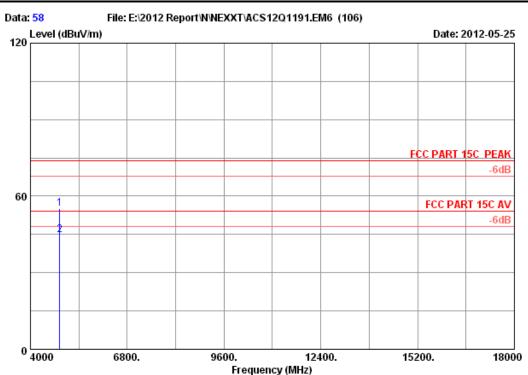
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH1 2422MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 58
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

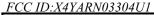
te : IEEE002.IIn hi40 Chi 242

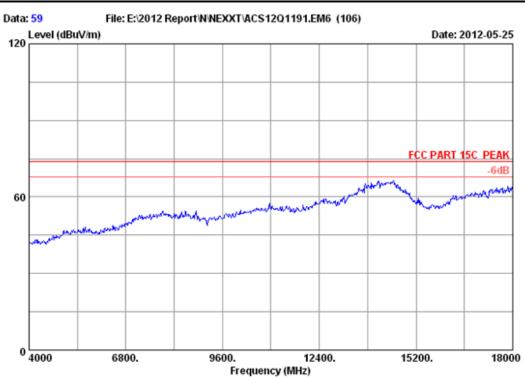
: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dBuV)		Limits (dBuV/m)		Remark
1 2	4844.000 4844.000		12.45 12.45		43.28 33.14	55.05 44.91	74.00 54.00	18.95 9.09	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 59

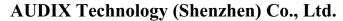
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

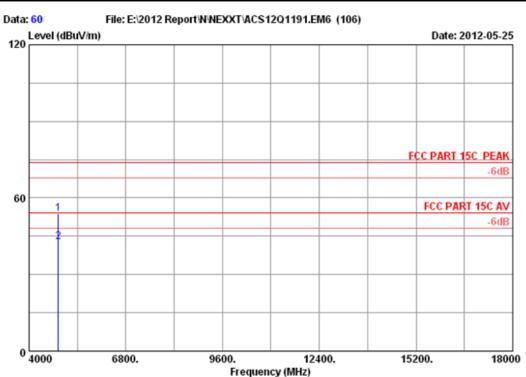
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH1 2422MHz Tx



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0

Data no. : 60 Ant. pol. : HORIZONTAL 3115 (0905)

: FCC PART 15C PEAK Limit

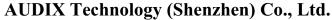
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH1 2422MHz Tx

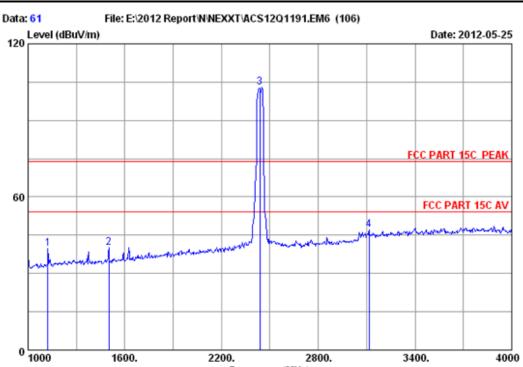
: ARNO3304U1

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)		Limits (dBuV/m)		Remark
1 2	4844.000 4844.000		12.45 12.45		42.04 31.05	53.81 42.82	74.00 54.00	20.19 11.18	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 61

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Frequency (MHz)

: FCC PART 15C PEAK

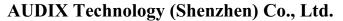
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply: DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH4 2437MHz Tx

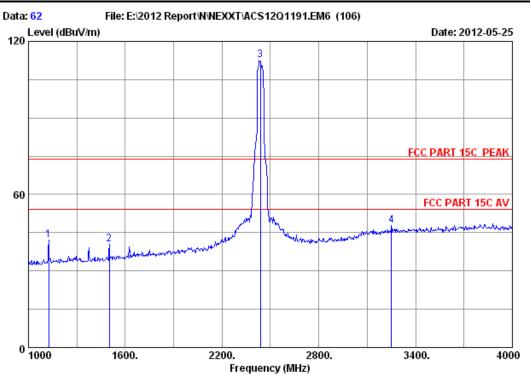
	Freq.	Ant. Factor (dB/m)	loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)		Remark
2 3	1123.000 1501.000 2437.000 3115.000		6.77 8.60	37.19 36.57 36.06 35.73	45.41 44.00 101.88 42.27	39.74 40.10 102.95 47.01	74.00 74.00 74.00 74.00	34.26 33.90 -28.95 26.99	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 62 Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH4 2437MHz Tx

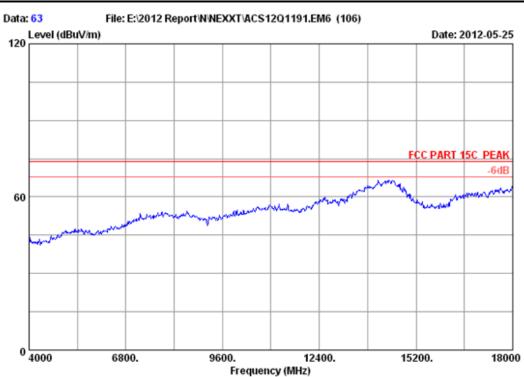
: ARNO3304U1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)			Remark
1	1126.000	25.37	6.15	37.19	47.82	42.15	74.00	31.85	Peak
2	1501.000	25.90	6.77	36.57	44.24	40.34	74.00	33.66	Peak
3	2437.000	28.53	8.60	36.06	111.45	112.52	74.00	-38.52	Peak
4	3250.000	30.88	10.19	35.68	42.54	47.93	74.00	26.07	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

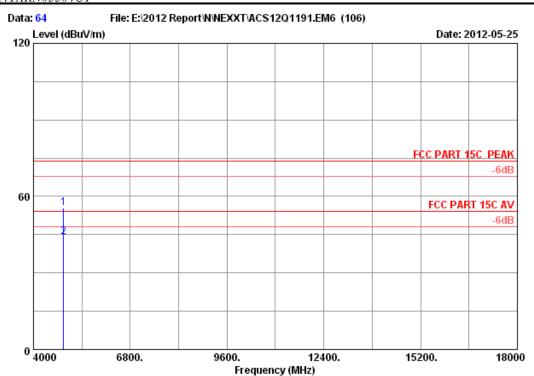
Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx



FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 64 Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

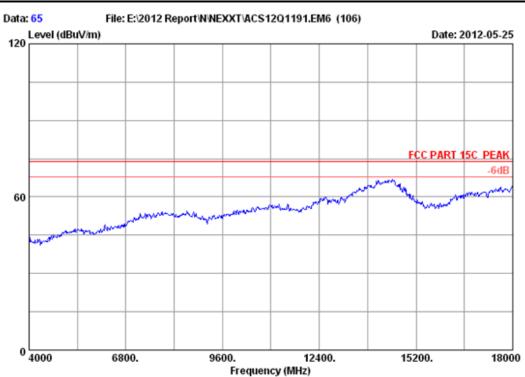
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4874.000 4874.000		12.23 12.23		43.88 32.57		74.00 54.00	18.47 9.78	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 65

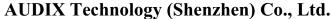
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

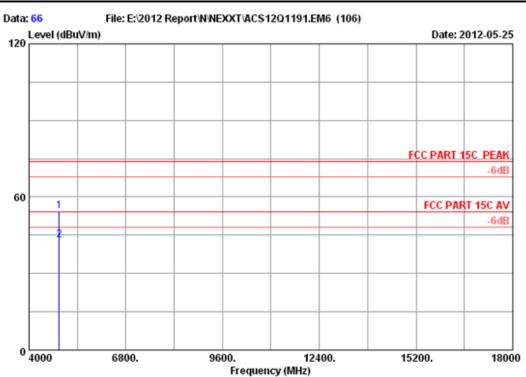
EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH4 2437MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 66

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

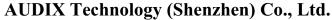
: 300Mbps Wireless N Gigabit Router Power supply: DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH4 2437MHz Tx

: ARNO3304U1

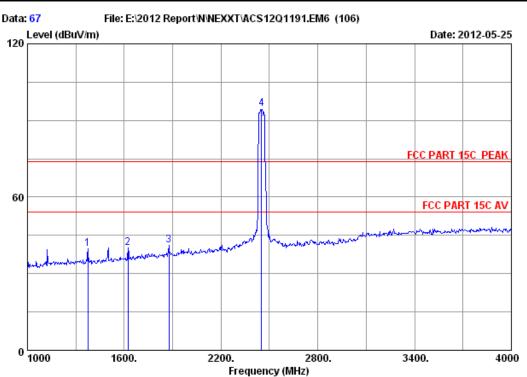
	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
1	4874.000	34.78	12.23	35.36	42.97	54.62	74.00	19.38	Peak
2	4874.000	34.78	12.23	35.36	31.57	43.22	54.00	10.78	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



: 3m Chamber Site no.

Data no. : 67 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0905)

: FCC PART 15C PEAK Limit

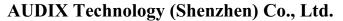
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH7 2452MHz Tx

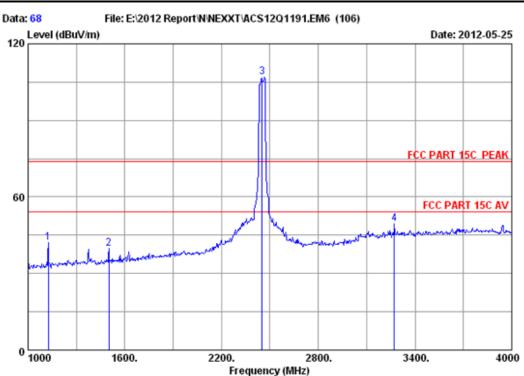
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits	Margin (dB)	Remark
1	1375.000	25.73	6.43	36.40	43.97	39.73	74.00	34.27	Peak
2	1624.000	26.43	7.15	36.26	42.66	39.98	74.00	34.02	Peak
3	1876.000	27.43	7.57	36.20	42.34	41.14	74.00	32.86	Peak
4	2452.000	28.53	8.48	36.06	93.49	94.44	74.00	-20.44	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 68
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router
Power supply : DC 12V From Adapter input AC 120V/60Hz

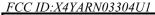
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx

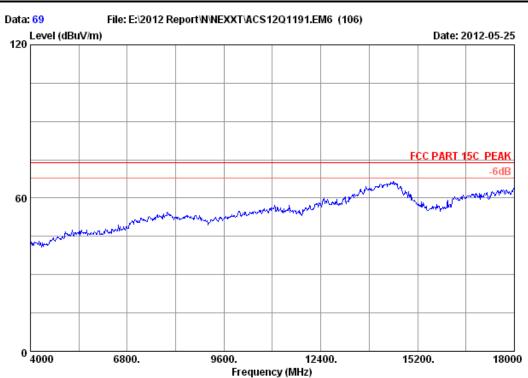
: ARN03304U1

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
	1126.000 1501.000			37.19 36.57	47.69 43.66	42.02 39.76	74.00 74.00	31.98 34.24	Peak Peak
	2452.000					106.83		-32.83	Peak
4	3271.000	30.97	10.26	35.79	43.94	49.38	74.00	24.62	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0905)

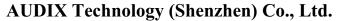
Data no. : 69 Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH7 2452MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0

Data no. : 70 Ant. pol. : HORIZONTAL 3115 (0905)

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz Tx

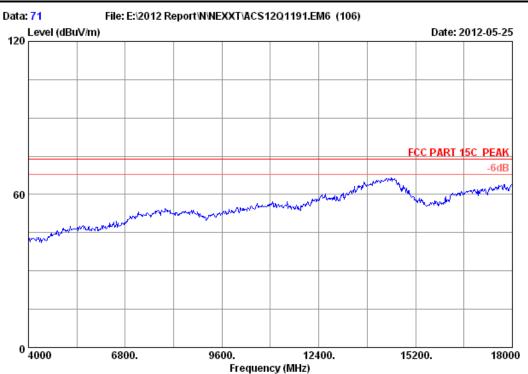
: ARNO3304U1

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)		Limits (dBuV/m)		Remark
1 2	4904.000 4904.000		12.43 12.43		42.40 31.88	54.54 44.02	74.00 54.00	19.46 9.98	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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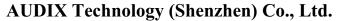


Site no. : 3m Chamber Data no. : 71 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

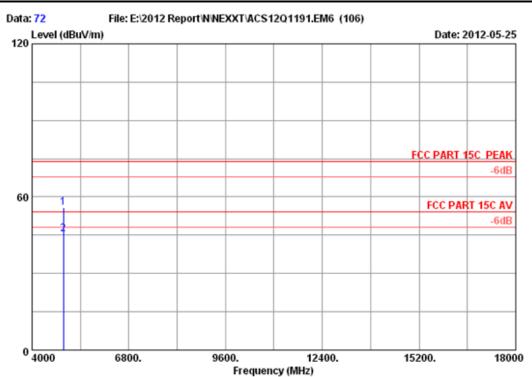
: 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH7 2452MHz Tx





FCC ID:X4YARN03304U1



Site no. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : 300Mbps Wireless N Gigabit Router Power supply : DC 12V From Adapter input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz Tx

: ARNO3304U1

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark	
1	4904.000	34.98	12.43	35.27	43.69	55.83	74.00	18.17	Peak	
2	4904.000	34.98	12.43	35.27	33.19	45.33	54.00	8.67	Average	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID:X4YARN03304U1

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5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,12	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,12	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,12	1Year

5.2.Limit

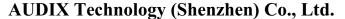
In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

5.4.Test result

PASS (The testing data was attached in the next pages.)





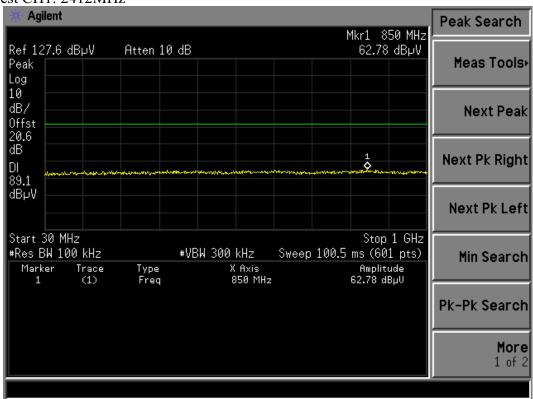
FCC ID:X4YARN03304U1

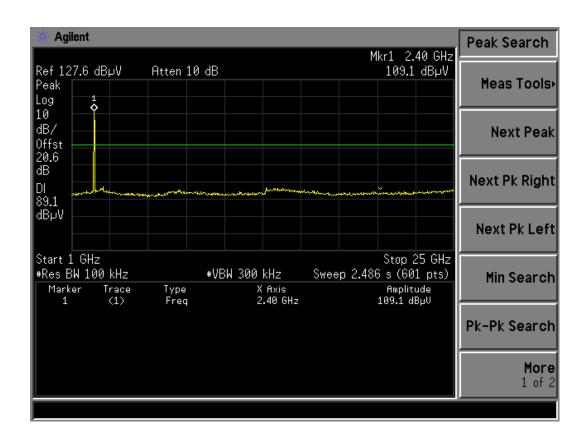
Conducted emission test data:

Chain 1:

Test Mode: IEEE 802.11b TX

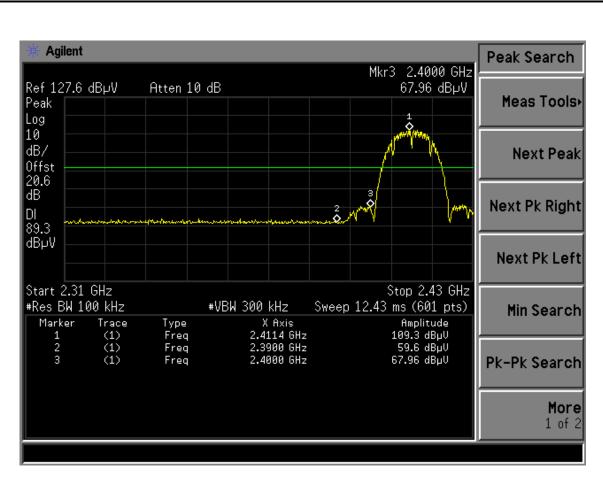
Test CH1: 2412MHz

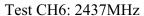


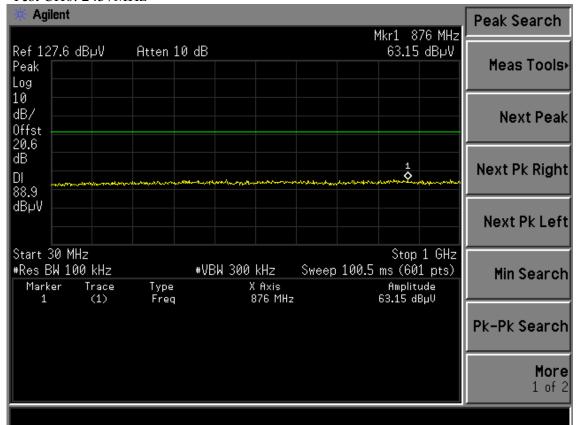


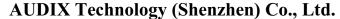


FCC ID:X4YARN03304U1

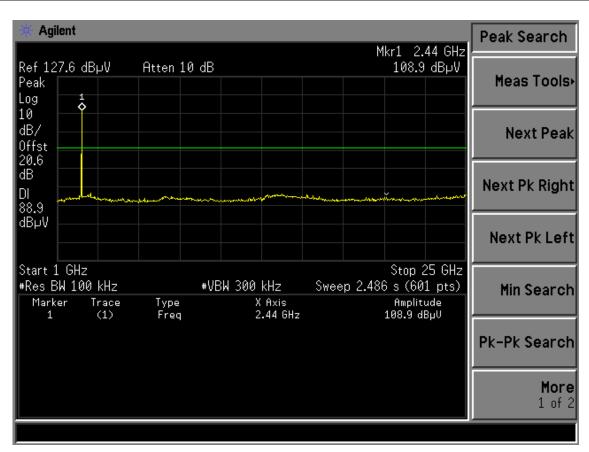




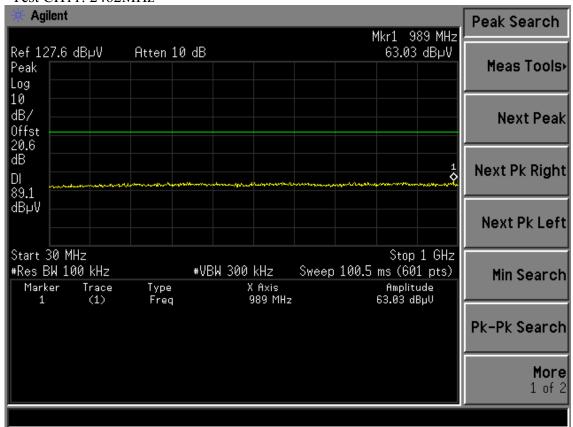




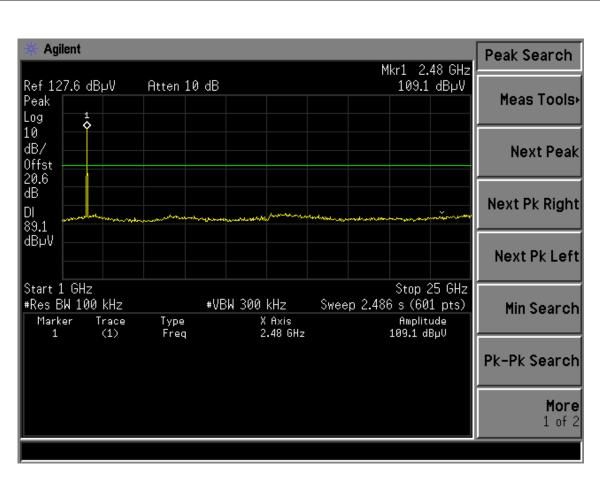


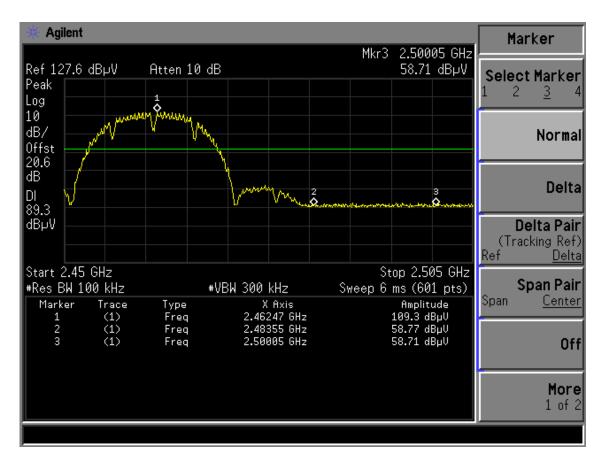


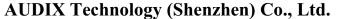
Test CH11: 2462MHz



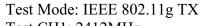


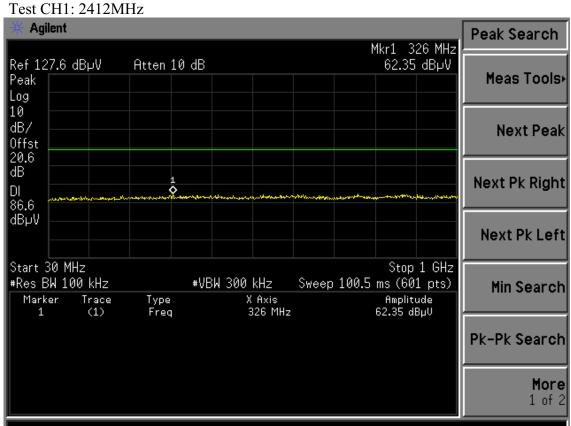


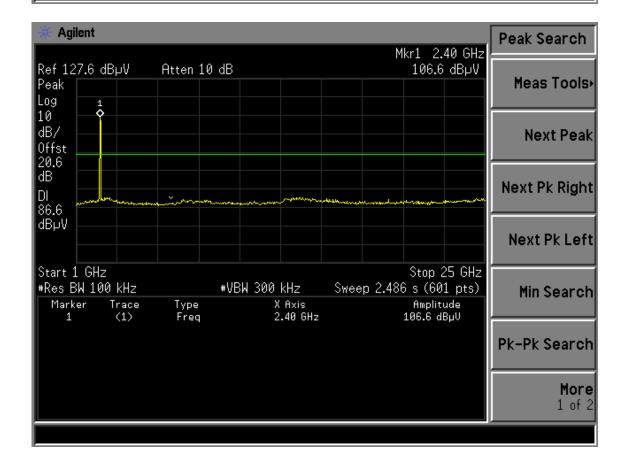




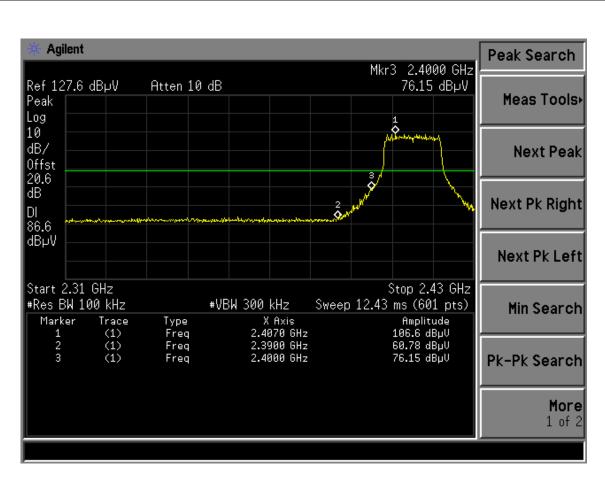




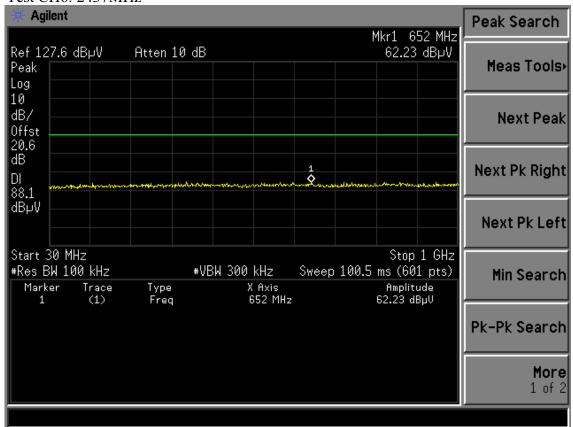




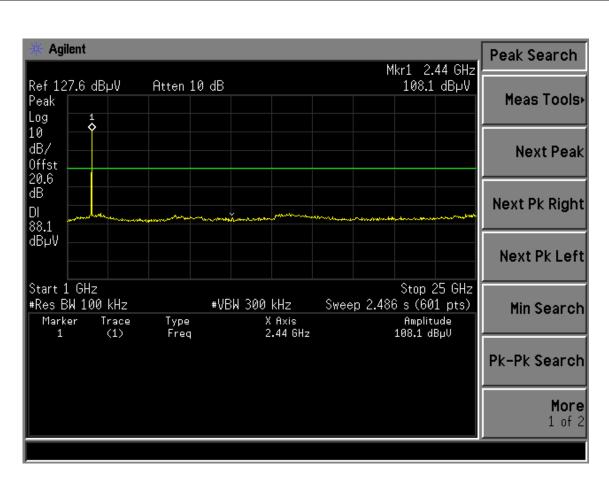




Test CH6: 2437MHz







Test CH11: 2462MHz

