FCC ID:X4YSAROS300

FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

NEXXT SOLUTIONS LLC

300Mbps Wireless N PCI Adapter

Model No.: APLDT300N1

FCC ID: X4YSAROS300

Prepared for: NEXXT SOLUTIONS LLC

454 Holiday Drive, Hallandale, Florida, 33009 USA

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

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Report Number : ACS-F13076

Date of Test : Mar.22~Apr.01, 2013

Date of Report : Apr.09, 2013

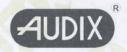
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TEST REPORT CERTIFICATION

Applicant

: NEXXT SOLUTIONS LLC

Manufacturer

NEXXT SOLUTIONS LLC

EUT Description

300Mbps Wireless N PCI Adapter

FCC ID

X4YSAROS300

(A) MODEL NO.

: APLDT300N1

(B) SERIAL NO.

: N/A

(C) POWER SUPPLY: DC 3.3V

(D) TEST VOLTAGE: DC 3.3V From PC Input AC 120V/60Hz

Tested for comply with:

FCC Rules and Regulations Part 15 Subpart C: 2011

Date of Test: Mar 22" Apr 01 2013 Penort of date:

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. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

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.	War.22 Apr.01, 2013	_ Report of date.	Арг.09, 2013
Prepared by : _	June Shao June Shao/ Assistant	Reviewed by :	22m
	June Shao/ Assistant		Sunny Lu / Assistant Manager
	AUDI	B 信奉科技(深圳)有 Audix Technology(FMC 部門 報告	(Shenzhen) Co., Ltd.

Approved & Authorized Signer:

Stamp only for EMC Dept. Report

Signature: Wa 12

Ken Lu / Manager

Apr 00 2013



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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 Effission	ANSI C63.10: 2009	rass			
Rand Edge Compliance	FCC Part 15: 15.247	PASS			
Band Edge Compliance	ANSI C63.10: 2009	rass			
Conducted anymique amissions	FCC Part 15: 15.247	PASS			
Conducted spurious emissions	ANSI C63.10: 2009	rass			
CdD Don don't like	FCC Part 15: 15.247	PASS			
6dB Bandwidth	ANSI C63.10: 2009	rass			
Pools Outmut Pours	FCC Part 15: 15.247	PASS			
Peak Output Power	ANSI C63.10: 2009	PASS			
Darrag Cractual Dancity	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 PCI Adapter

Model Number : APLDT300N1

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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 2X2 Dipole Antenna, 2dBi Gain

Applicant : NEXXT SOLUTIONS LLC

454 Holiday Drive, Hallandale, Florida, 33009 USA

Manufacturer : NEXXT SOLUTIONS LLC

454 Holiday Drive, Hallandale, Florida, 33009 USA

Date of Test : Mar.22~Apr.01, 2013

Date of Receipt : Mar.21, 2013

Sample Type : Prototype production



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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 informa	ation						
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 PK output power in those data rate, so those data rate were used for all test.

Note2: This device is MIMO2X2 device, Radiated emission and bandedge test in 11n mode with two antenna transmit simultaneously,in 11b/g mode, use chain0 which has worst case emission for radiated emission and bandedge test.

Note3: This device have two antenna and this two antenna work at the same frequency band,we measure the output Power,Power density,Radiated emission under the requirement of the KDB662911.

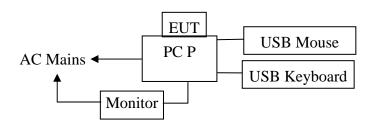


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2.3.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type		
1	Personal	Test PC P	DELL	Studio 540	124XK2X	☑FCC DoC ☑BSMI ID:R33002		
	_		ower Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)					
		ACS-EMC-LM01R	Viewsonic	VLCDS260 64-2W	A210521A0131	☑FCC DoC ☑BSMI ID: R31374		
2		Power Cord: Unshielded, Detachable, 1.8m DVI Cable: Shielded, Detachable, 2.0m (with two cores)						
3	USB Keyboard	ACS-EMC- K01R	DELL	SK-8115	CN-ODJ313-716 16-711-0J73	☑ FCC DoC ☑BSMI ID: T3A002		
		Power Cord: shielded,	Undetachable,	2.0m				
4	USB Mouse	ACS-EMC-M01R	DELL	M056UO	512022645	☑FCC DoC ☑BSMI ID: R41108		
		Power Cord: shielded,	Undetachable,	1.8m				

2.4.Block Diagram of Test Setup



(EUT: 300Mbps Wireless N PCI Adapter)



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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

Certificated by FCC, USA 3m Anechoic Chamber

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

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

Registration Number: 794232 Valid Date: Oct.31, 2015

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, 2014

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

Test Item	Uncertainty			
Uncertainty for Conduction emission test	3.48dB(9KHz to 150KHz)			
in No. 1 Conduction	3.06 dB(150kHz to 30MHz)			
	3.6 dB(30~200MHz, Polarize: H)			
Uncertainty for Radiation Emission test	3.8 dB(30~200MHz, Polarize: V)			
in 3m chamber	4.2 dB(200M~1GHz, Polarize: H)			
	3.8 dB(200M~1GHz, Polarize: V)			
Uncertainty for Radiation Emission test in	3.1dB (Distance: 3m Polarize: V)			
3m chamber (1GHz-18GHz)	3.7 dB (Distance: 3m Polarize: H)			
Uncertainty for Radiated Spurious	3.57 dB			
Emission test in RF chamber				
Uncertainty for Conduction Spurious	2.00 dB			
emission test	2100 02			
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	0.6℃			
humidity	3%			



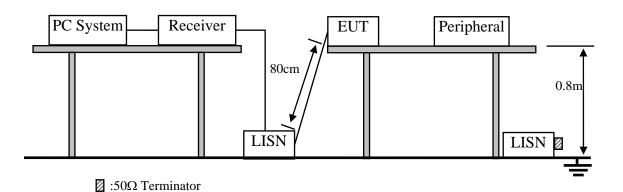
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3. POWER LINE CONDUCTED EMISSION TEST

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, 12	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Oct.31, 12	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

3.2.Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	$dB(\mu V)$	$dB(\mu V)$		
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 PCI Adapter (EUT)

Model Number : APLDT300N1

Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Details, in Section 2.2.

3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turned on the power of all equipment.
- 3.5.3. PC 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 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 9kHz.

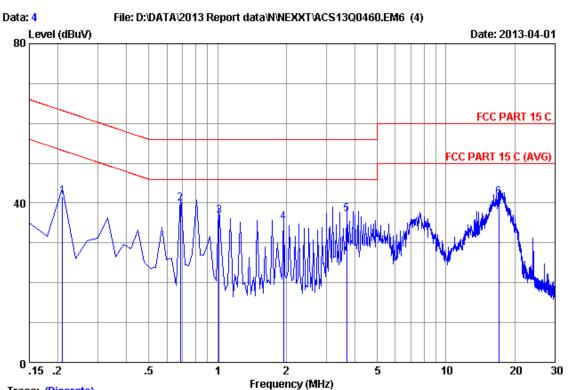
The frequency range from 150kHz to 30MHz is checked.

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 :4

Dis./Ant. :** 2012 ESH2-Z5 LINE

Limit :FCC PART 15 C

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

EUT :300Mbps Wireless N PCI Adapter Power Rating :DC 3.3V From PC Input AC 120V/60Hz

Test Mode :Tx Mode

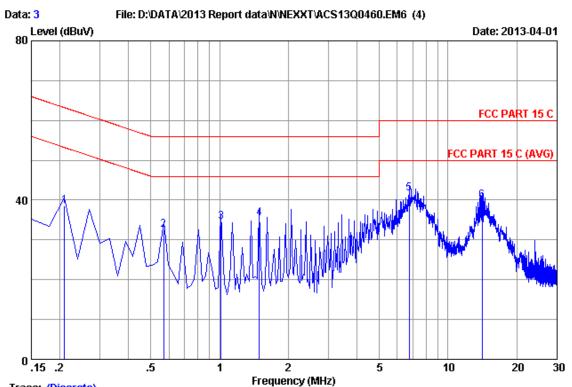
M/N:APLDT300N1

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.20970	0.15	9.86	31.66	41.67	63.22	21.55	QP
2	0.68730	0.16	9.87	29.91	39.94	56.00	16.06	QP
3	1.016	0.17	9.88	26.72	36.77	56.00	19.23	QP
4	1.941	0.20	9.92	25.01	35.13	56.00	20.87	QP
5	3.672	0.23	9.97	27.04	37.24	56.00	18.76	QP
6	16.985	0.47	10.11	30.97	41.55	60.00	18.45	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+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.





Trace: (Discrete)

Site no :1#conduction Data No :3

Dis./Ant. :** 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 C

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

EUT :300Mbps Wireless N PCI Adapter Power Rating :DC 3.3V From PC Input AC 120V/60Hz

Test Mode :Tx Mode

M/N:APLDT300N1

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissior Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark	
1	0.20970	0.14	9.86	28.57	38.57	63.22	24.65	QP	
2	0.56790	0.15	9.87	22.47	32.49	56.00	23.51	QP	
3	1.016	0.17	9.88	24.49	34.54	56.00	21.46	QP	
4	1.493	0.18	9.90	25.36	35.44	56.00	20.56	QP	
5	6.747	0.28	10.03	31.42	41.73	60.00	18.27	QP	
6	14.090	0.31	10.09	29.43	39.83	60.00	20.17	QP	

Remarks: 1.Emission Level=LISN Factor+Cable Loss+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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4. RADIATED EMISSION TEST

4.1.Test Equipment

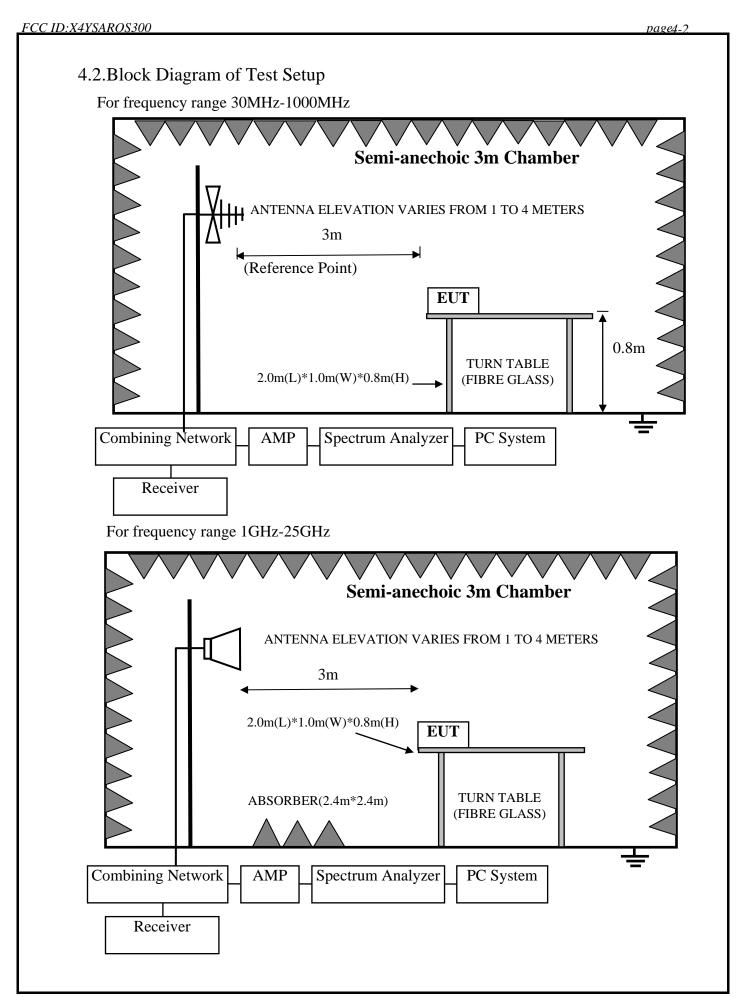
4.1.1. For frequency range 30MHz~1000MHz (At 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24,12	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	Trilog-Broadba	SCHWARZBECK	VULB	9168-429	Nov.27, 12	1.0 Year
	nd Antenna		9168			
6	RF Cable	MIYAZAKI	CFD400-N	3# Chamber No.1	May.08, 12	1 Year
			L			
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 12	1 Year

4.1.2. For frequency range 1GHz~25GHz (At 10m Anechoic Chamber)

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	9510-4580	June.05, 12	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 12	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	May.08, 12	1 Year
6	Horn Antenna	EMCO	3116	00060089	Nov.25,11	1.5 Year







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4.3. Radiated Emission Limit

4.3.1.15.209 limits

FREQUENCY	DISTANCE	FIELD STREN	NGTHS LIMIT
MHz	Meters	μV/m	$dB(\mu V)/m$
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)/m (Peak)	
		54.0 dB(μV	/)/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.

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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.

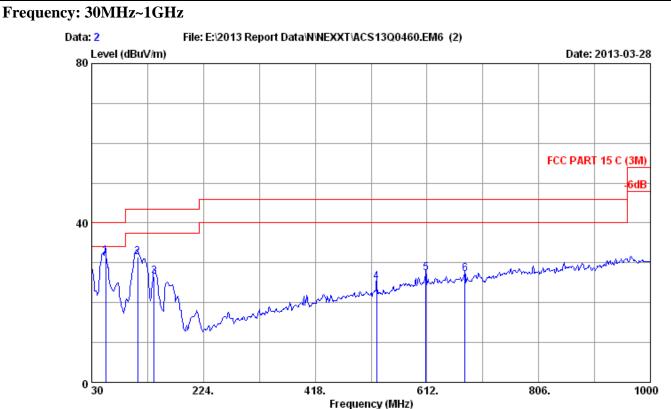
4.7. Radiated Emission Test Results

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 limit, then the average level is deemed to comply with average limit.





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

Dis. / Ant. : 3m 25237 FACTOR 3M Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/65% Engineer : Leo-Li

EUT : 300Mbps Wireless N PCI Adapter Power rating : DC 3.3V From PC Input AC 120V/60Hz

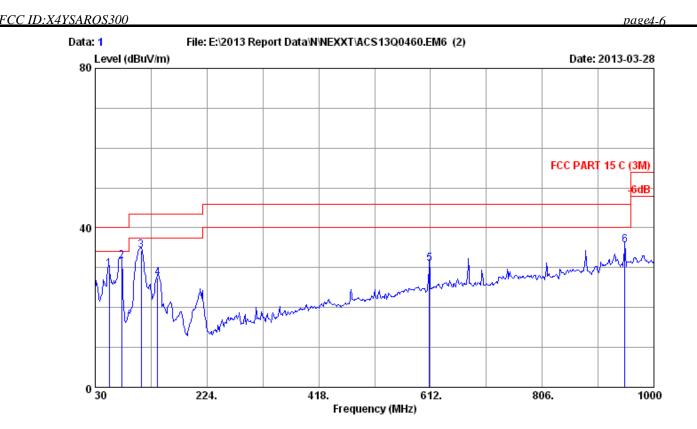
Test Mode : Tx Mode

M/N:APLDT300N1

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	54.250	8.00	0.70	22.95	31.65	40.00	8.35	QP
2	109.540	13.40	0.79	17.21	31.40	43.50	12.10	QP
3	138.640	13.10	0.85	12.60	26.55	43.50	16.95	QP
4	524.700	17.60	1.36	6.29	25.25	46.00	20.75	QP
5	610.060	18.20	1.40	7.71	27.31	46.00	18.69	QP
6	677.960	18.86	1.43	6.79	27.08	46.00	18.92	QP

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

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



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

Dis. / Ant. : 3m 25237 FACTOR 3M Ant. pol. : VERTICAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/65% Engineer : Leo-Li

EUT : 300Mbps Wireless N PCI Adapter Power rating : DC 3.3V From PC Input AC 120V/60Hz

Test Mode : Tx Mode

M/N:APLDT300N1

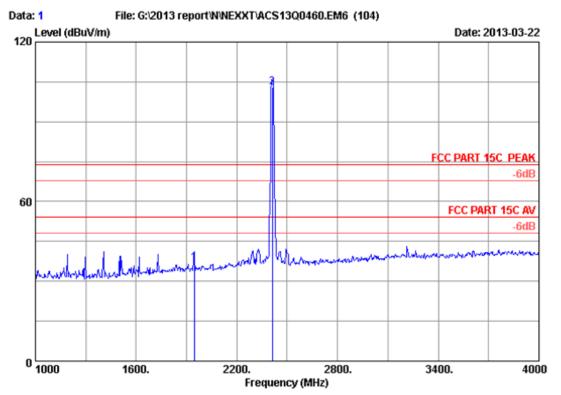
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	54.250	8.00	0.37	21.26	29.63	40.00	10.37	QP
2	75.590	8.40	0.55	22.75	31.70	40.00	8.30	QP
3	109.540	13.40	0.55	20.32	34.27	43.50	9.23	QP
4	138.640	13.10	0.79	13.41	27.30	43.50	16.20	QP
5	610.060	18.20	1.60	11.20	31.00	46.00	15.00	QP
6	949.560	21.40	2.20	11.98	35.58	46.00	10.42	QP

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



FCC ID:X4YSAROS300 page4-7

Frequency: 1GHz~18GHz



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

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

EUT : 300Mbps Wireless N PCI Adapter
Power supply : DC 3.3V From PC input AC 120V/60Hz
Test mode : IEEE802.11b CH1 2412MHz Tx

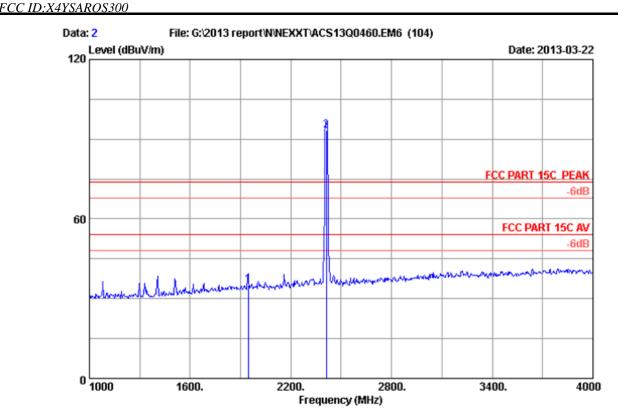
M/N : APLDT300N1

:

Freq.	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark	
1945.000 2412.000				43.20 106.12		74.00 74.00	37.22 -29.08	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. : 2

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

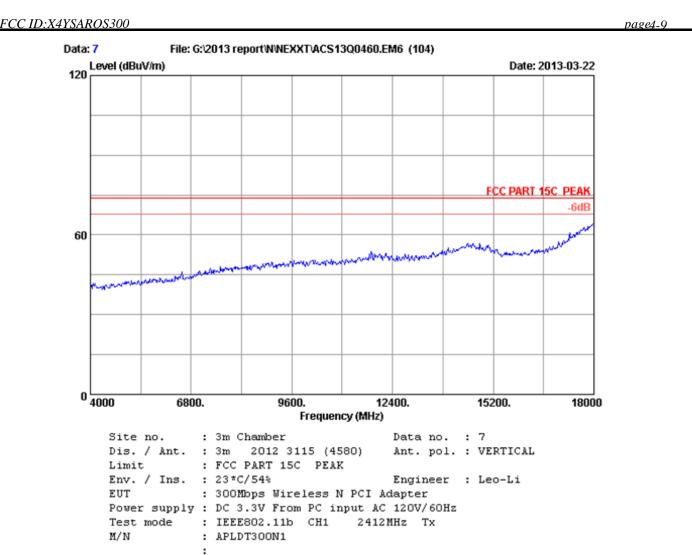
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : APLDT300N1

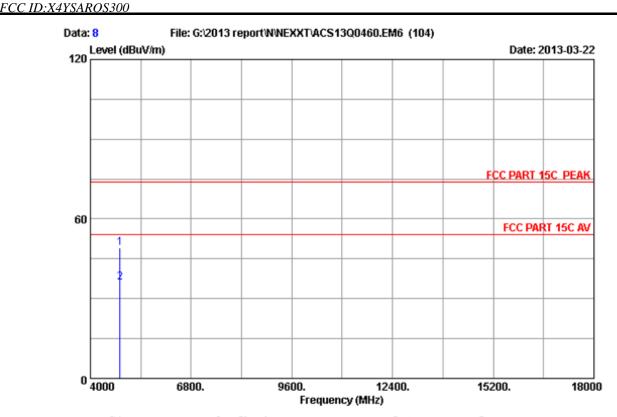
.

		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	1945.000	24.30	5.24	35.96	41.38	34.96	74.00	39.04	Peak
2	2412.000	26.84	6.04	35.92	96.17	93.13	74.00	-19.13	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.



pa**24**-10



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

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

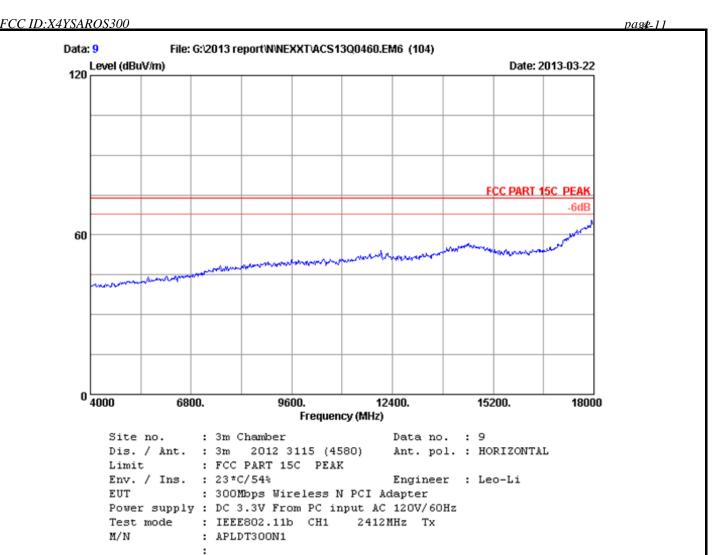
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : APLDT300N1

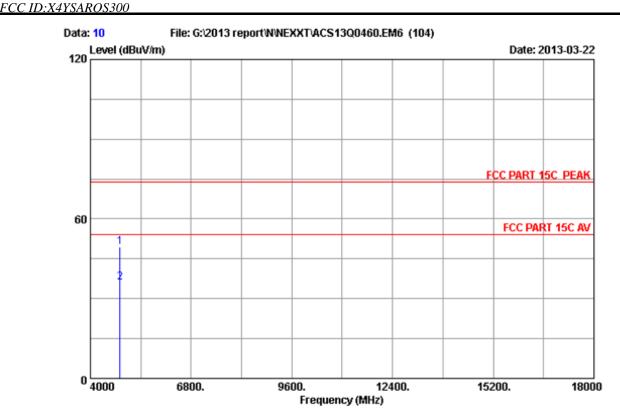
:

Freq.	Ant. Factor (dB/m)	Cable loss (dB)		_	Emission Level (dBuV/m)	Limits		Remark
4824.000 4824.000			35.71 35.71	43.60 30.54	49.09 36.03	74.00 54.00	24.91 17.97	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.



pa**24-1**2



Site no. : 3m Chamber Data no. : 10

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : APLDT300N1

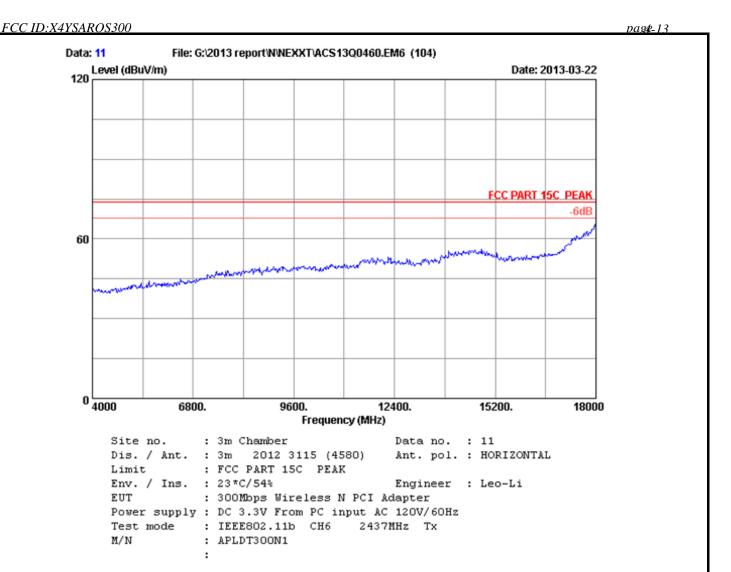
.

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Factor	_	Emission Level (dBuV/m)	Limits		Remark
1	4824.000	32.51	8.69	35.71	43.98	49.47	74.00	24.53	Peak
2	4824.000	32.51	8.69	35.71	30.65	36.14	54.00	17.86	Average

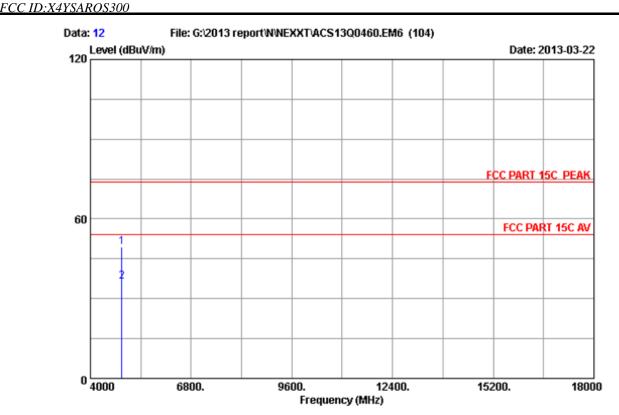
Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.

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



pa**24**-14



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

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

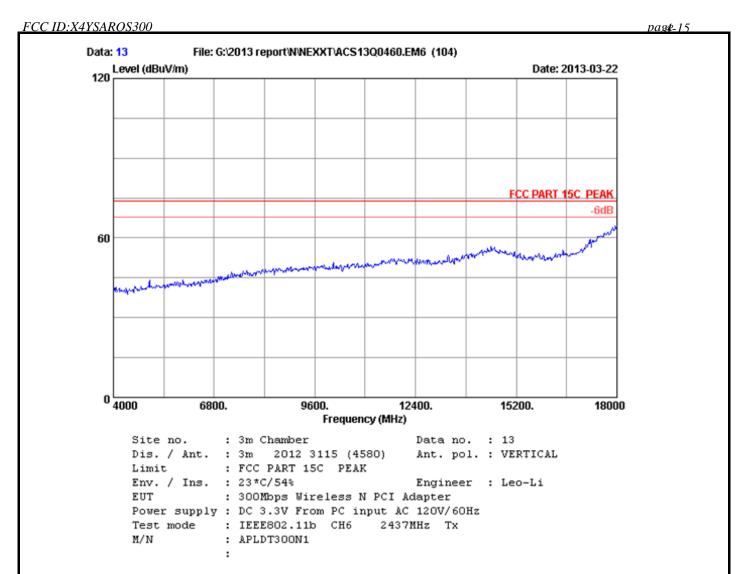
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH6 2437MHz Tx

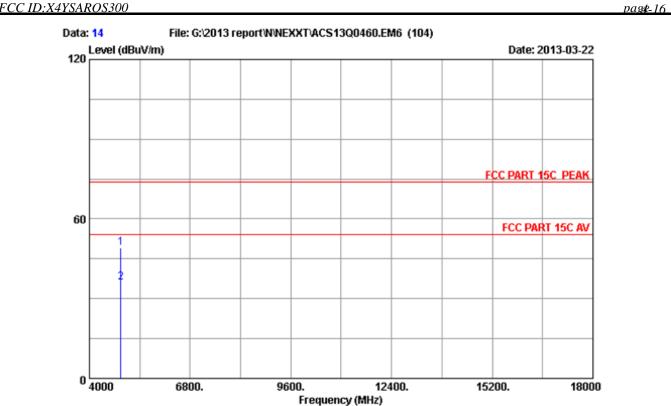
M/N : APLDT300N1

:

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)		Limits (dBuV/m)		Remark
1	4874.000 4874.000	32.62 32.62		35.69 35.69	43.88 30.74	49.54 36.40	74.00 54.00	24.46 17.60	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.





Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

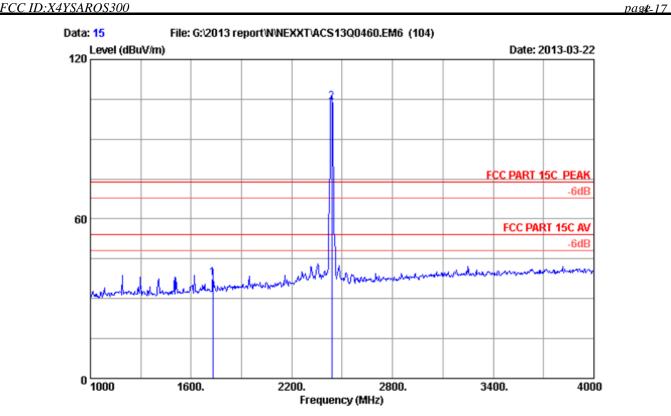
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : APLDT300N1

:

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)		Limits (dBuV/m)		Remark
1 2		32.62 32.62		35.69 35.69	43.44 30.29	49.10 35.95	74.00 54.00	24.90 18.05	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.



: 3m Chamber Site no. Data no. : 15 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL : FCC PART 15C PEAK Limit

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

: 300Mbps Wireless N PCI Adapter Power supply: DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH6 2437MHz Tx

M/N: APLDT300N1

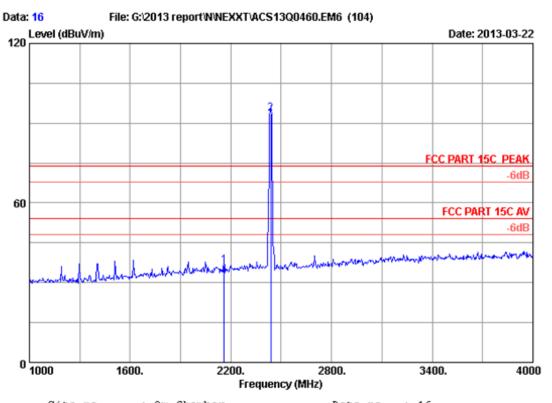
	Freq. (MHz)	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	1729.000 2437.000		 	44.36 106.85		74.00 74.00	36.28 -30.01	Peak Peak

- 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:X4YSAROS300

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pa**4-**18



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

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH6 2437MHz Tx

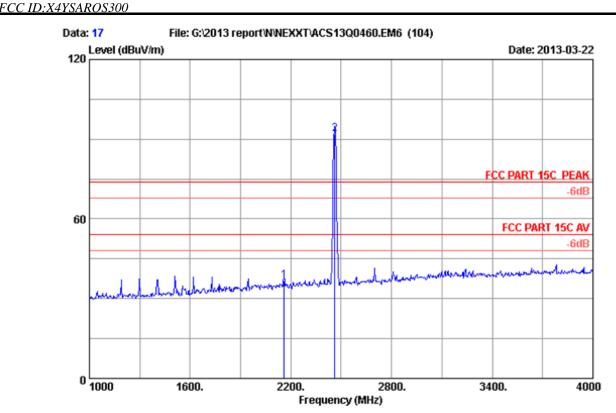
M/N : APLDT300N1

:

	Freq. (MHz)	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	2161.000 2437.000			41.42 96.44		74.00 74.00	37.65 -19.60	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.

pa**4-**19



Site no. : 3m Chamber Data no. : 17

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : APLDT300N1

:

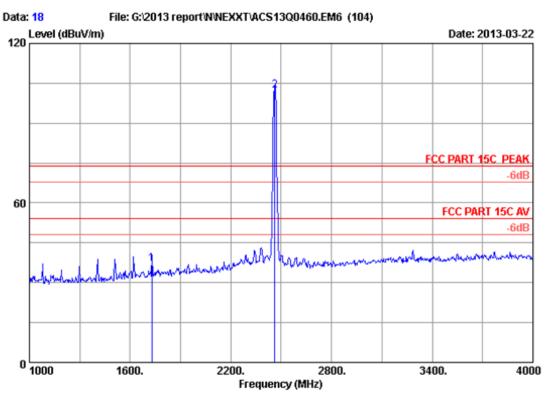
Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits		Remark
2161.000 2462.000			35.91 35.92	41.92 94.72	36.85 92.08	74.00 74.00	37.15 -18.08	Peak Peak

- 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:X4YSAROS300

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pa**4-**20



Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

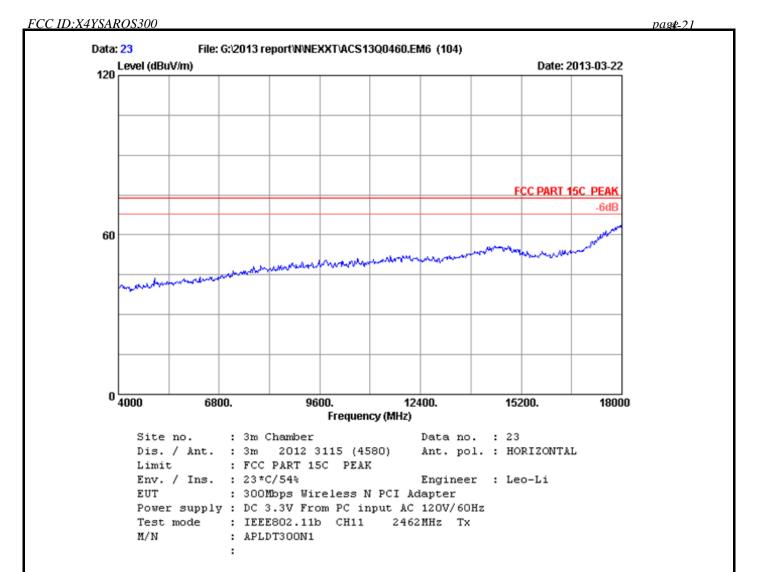
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH11 2462MHz Tx

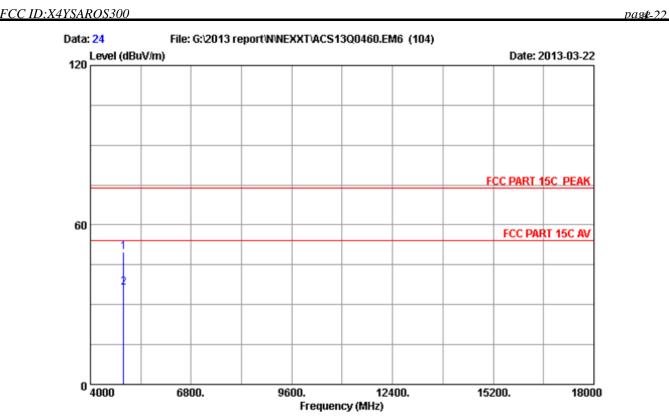
M/N : APLDT300N1

:

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	1729.000				43.90		74.00	36.74	Peak
2	2462.000	27.16	6.12	35.92	104.79	102.15	74.00	-28.15	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. : 24

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

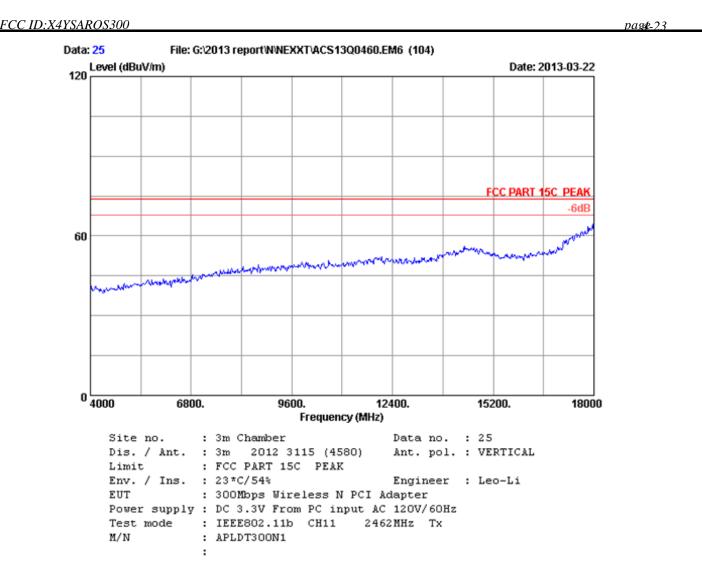
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : APLDT300N1

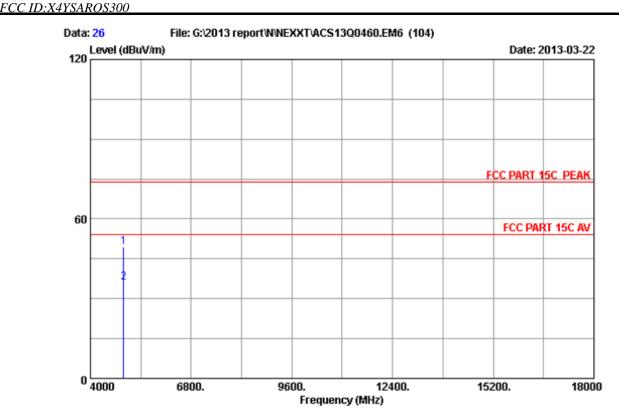
:

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Factor	_	Emission Level (dBuV/m)	Limits		Remark
4924.000 4924.000			35.68 35.68	43.92 30.67	49.75 36.50	74.00 54.00	24.25 17.50	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.



pa**24**-24



: 3m Chamber Site no. Data no. : 26 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

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

: 300Mbps Wireless N PCI Adapter Power supply: DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11b CH11 2462MHz Tx

M/N: APLDT300N1

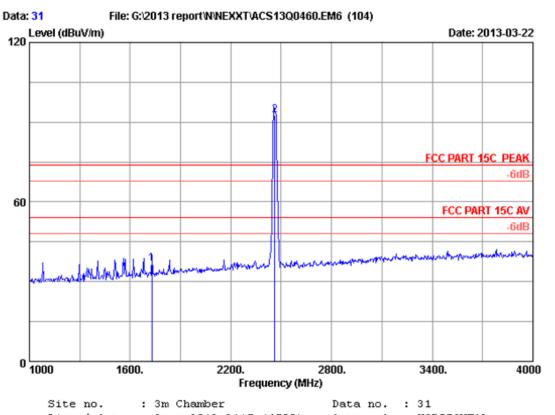
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)		_	Emission Level (dBuV/m)	Limits	_	Remark
1	4924.000	32.73	8.78	35.68	43.68	49.51	74.00	24.49	Peak
2	4924.000	32.73	8.78	35.68	30.39	36.22	54.00	17.78	Average

- 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:X4YSAROS300

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Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

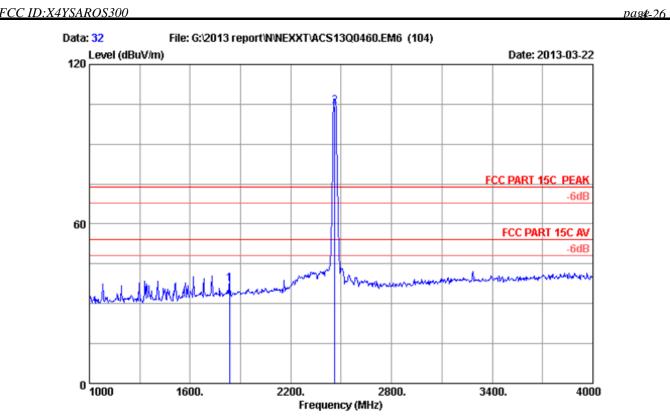
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : APLDT300N1

:

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Factor	_	Emission Level (dBuV/m)	Limits		Remark
_	1729.000 2462.000			36.20 35.92	43.32 95.12	36.68 92.48	74.00 74.00	37.32 -18.48	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.



: 3m Chamber Site no. Data no. : 32 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

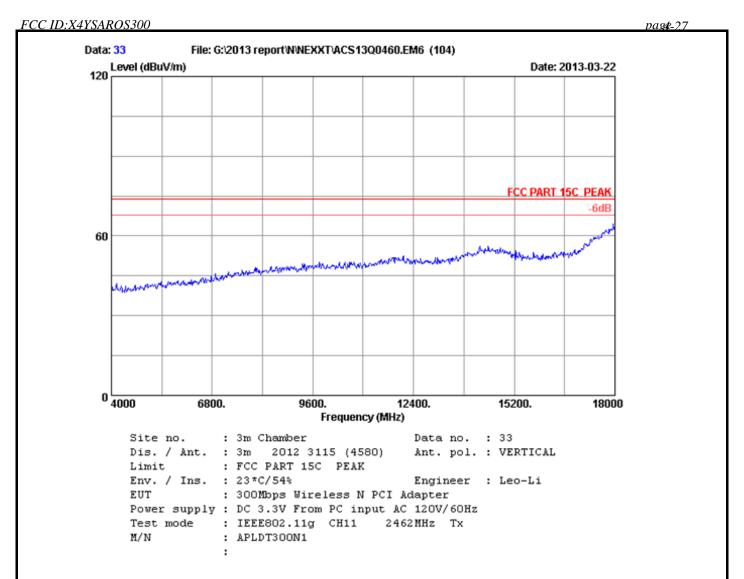
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N PCI Adapter Power supply: DC 3.3V From PC input AC 120V/60Hz : IEEE802.11g CH11 2462MHz Tx

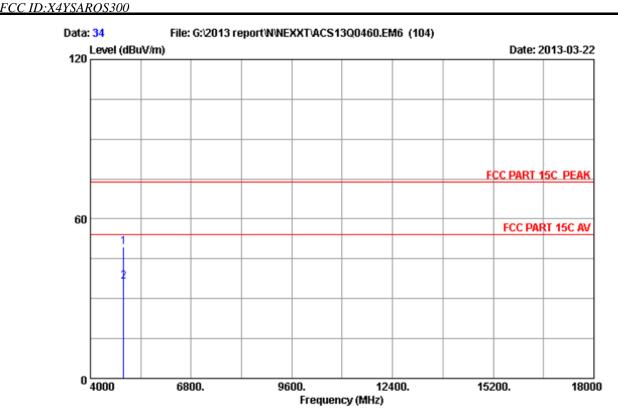
M/N: APLDT300N1

	Freq. (MHz)	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits		Remark
_	1834.000 2462.000		 36.08 35.92	44.02 106.98		74.00 74.00	36.51 -30.34	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.



pa**24**-28



: 3m Chamber Site no. Data no. : 34 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

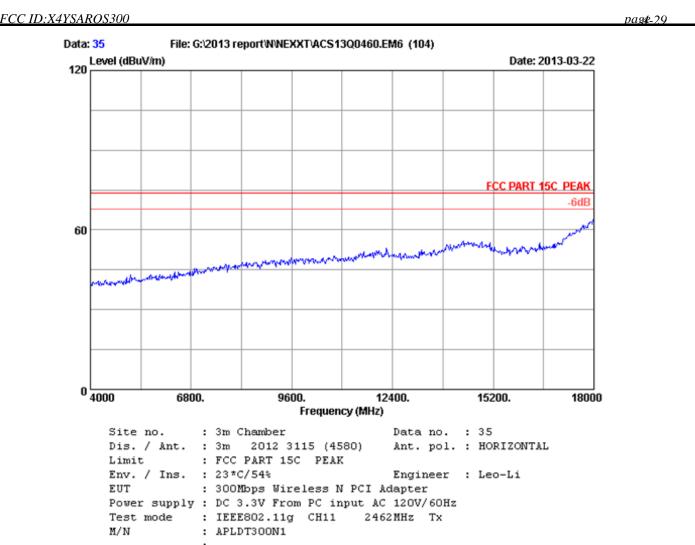
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N PCI Adapter Power supply: DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH11 2462MHz Tx

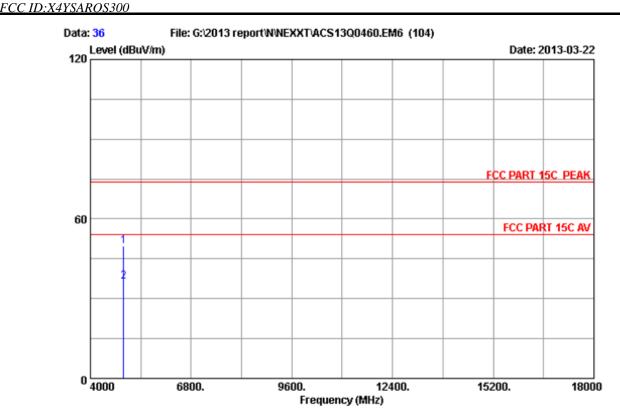
M/N: APLDT300N1

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	-		Emission Level (dBuV/m)	Limits	_	Remark
1	4924.000	32.73	8.78	35.68	43.66	49.49	74.00	24.51	Peak
2	4924.000	32.73	8.78	35.68	30.48	36.31	54.00	17.69	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.



pa**24**-30



Site no. : 3m Chamber Data no. : 36

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

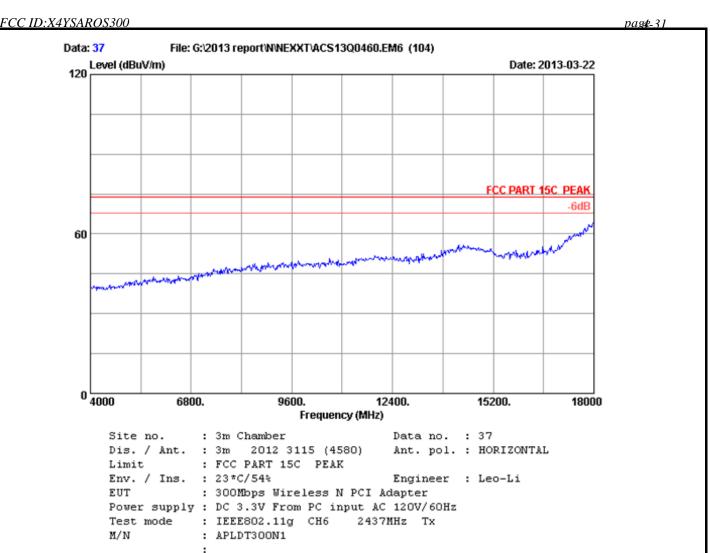
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH11 2462MHz Tx

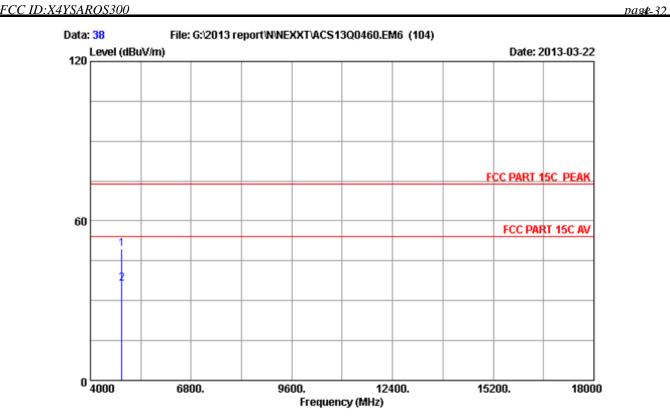
M/N : APLDT300N1

:

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits		Remark
4924.000 4924.000			35.68 35.68	43.87 30.59	49.70 36.42	74.00 54.00	24.30 17.58	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.





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

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

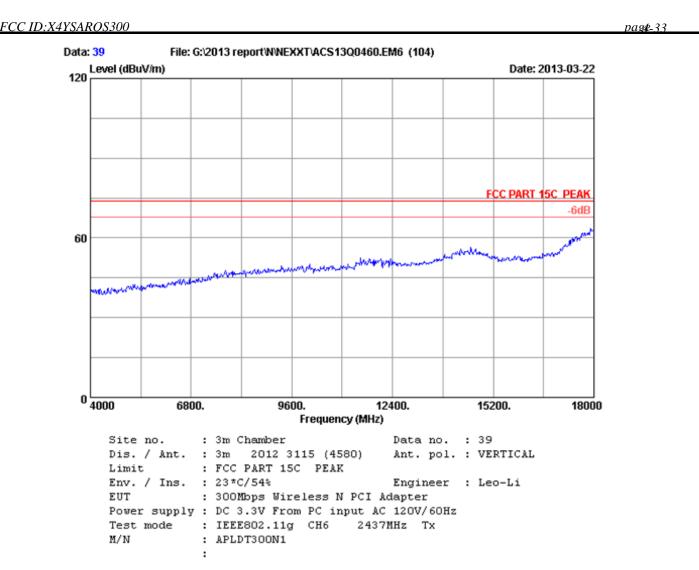
EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : APLDT300N1

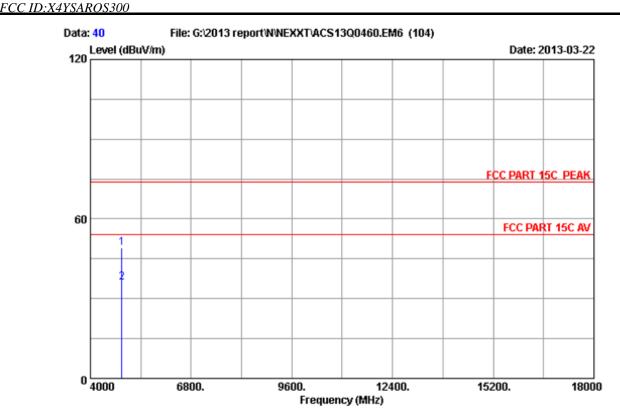
:

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits		Remark
4874.000 4874.000			35.69 35.69		49.54 36.38	74.00 54.00	24.46 17.62	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.



pa**24**-34



: 3m Chamber Site no. Data no. : 40 Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

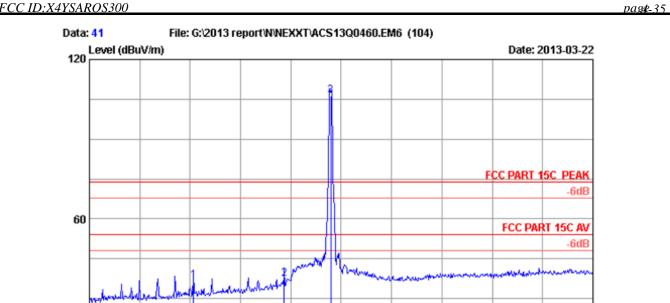
Env. / Ins. : 23*C/54% Engineer : Leo-Li

: 300Mbps Wireless N PCI Adapter Power supply: DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH6 2437MHz Tx

M/N: APLDT300N1

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		_	Emission Level (dBuV/m)	Limits		Remark
1	4874.000	32.62	8.73	35.69	43.55	49.21	74.00	24.79	Peak
2	4874.000	32.62	8.73	35.69	30.41	36.07	54.00	17.93	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.



Site no. : 3m Chamber Data no. : 41

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : VERTICAL

Frequency (MHz)

2800.

3400.

4000

Limit : FCC PART 15C PEAK

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

EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : APLDT300N1

1600.

:

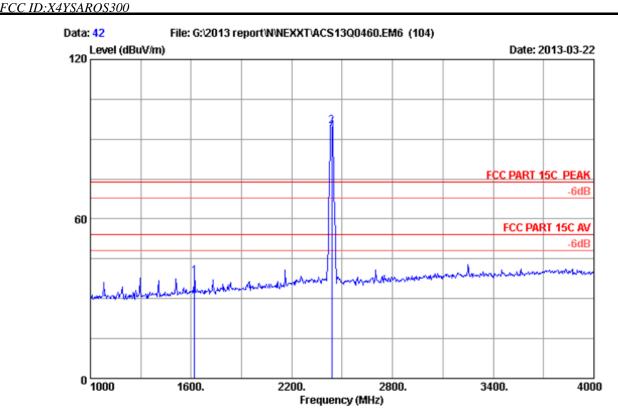
	Freq. (MHz)	Ant. Factor (dB/m)		Factor	_	Emission Level (dBuV/m)	Limits		Remark
2	1621.000 2161.000 2437.000	25.23	5.61	35.91	43.57 42.61 109.17	37.54	74.00 74.00 74.00	37.18 36.46 -32.33	Peak Peak Peak

Remarks:

0 1000

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

pa**24**-36



Site no. : 3m Chamber Data no. : 42

Dis. / Ant. : 3m 2012 3115 (4580) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

EUT : 300Mbps Wireless N PCI Adapter Power supply : DC 3.3V From PC input AC 120V/60Hz Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : APLDT300N1

:

	Freq.	Ant. Factor (dB/m)	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
_	1621.000 2437.000		 36.32 35.92	45.33 97.68		74.00 74.00	35.42 -20.84	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.

