# FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

#### **NEXXT SOLUTIONS LLC**

2.4GHz High Power Wireless Outdoor Access Point

Model No.: AELPLDR4U1

FCC ID: X4Y350U1

Prepared for: NEXXT SOLUTIONS LLC

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

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Report Number : ACS-F13047

Date of Test : Feb.20~25, 2013

Date of Report : Mar.06, 2012



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# AUDIX Technology (Shenzhen) Co., Ltd.

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#### TEST REPORT CERTIFICATION

Applicant

NEXXT SOLUTIONS LLC

Manufacturer

NEXXT SOLUTIONS LLC

**EUT Description** 

2.4GHz High Power Wireless Outdoor Access Point

FCC ID

X4Y350U1

(A) MODEL NO.

AELPLDR4U1

(B) SERIAL NO.

N/A

(C) POWER SUPPLY: DC 12V From Adapter

(D) TEST VOLTAGE: DC 12V From Adapter Input AC 120V/60Hz

Tested for comply with:

FCC Rules and Regulations Part 15 Subpart C: 2011

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.

Feb.20~25, 2013 Date of Test: Report of date: Mar.06, 2013

Prepared by: Reviewed by: June Shao/Assistant Sunny Lu / Assistant Manager

信華科技 (深圳) 有限公司 Audix Technology (Shenzhen) Co., Ltd. EMC部門報告專用章

Stamp only for EMC Dept. Report

on lu 3/6 12' Signature: \_ Approved & Authorized Signer:

Ken Lu / Manager

Audix Technology (Shenzhen) Co., Ltd. Report No. ACS-F13047



# 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			
Rand 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	rass			
CAD Don don't like	FCC Part 15: 15.247				
6dB Bandwidth	ANSI C63.10: 2009	PASS			
Deals Outmut Davies	FCC Part 15: 15.247	PASS			
Peak Output Power	ANSI C63.10: 2009	PASS			
Daving Connection Dangites	FCC Part 15: 15.247	PASS			
Power Spectral Density	ANSI C63.10: 2009	rass			
Antenna requirement	FCC Part 15: 15.203	PASS			



#### 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : 2.4GHz High Power Wireless Outdoor Access Point

Model Number : AELPLDR4U1

FCC ID : X4Y350U1

Operation Frequency: IEEE 802.11b/g: 2412MHz---2462MHz

Channel Number : IEEE 802.11b/g: 11Channels

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

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

Antenna Assembly : Internal integrated patch antenna, 12dBi

Gain External antenna, 9dBi

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: MU12-S120100-A1

Cable: Unshielded, Undetachable, 1.5m

Date of Test : Feb.20~25, 2013

Date of Receipt : Feb.19, 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.

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	12	Low:CH1	2412		
	12	Middle: CH6	2437		
	12	High: CH11	2462		

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

Note 2: This device have three types of antenna, external antenna, Internal integrated patch antenna with Horizontal and Vertical polarization. For radiated emissions from 30MHz to 1GHz, according exploratory test when test with external antenna will have worse emissions, so the final test were performed with external antenna, for radiated emissions from 1GHz to 25GHz were performed with each type of antenna, for all other conducted test were performed with each antenna type's connector.



# 2.3. Tested Supporting System Details

#### 2.3.1. Notebook

M/N : PP09S S/N : N/A Manufacturer : DELL

Power Adaptor : Manufacturer: DELL,

M/N: LA65NS1-00

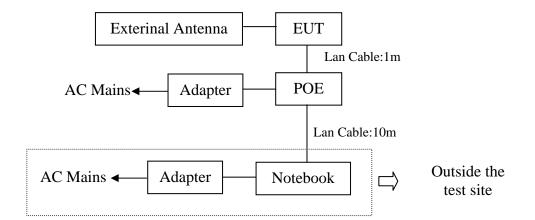
Cable: Unshielded, Detachabled, 4.0m

(Bond one ferrite core)

#### 2.3.2. Cables

LAN Cable #1 : Unshielded, Detachable 1m
LAN Cable #2 : Unshielded, Detachable 10m

# 2.4. Block Diagram of Test Setup



(EUT: 2.4GHz High Power Wireless Outdoor Access Point)



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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: 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, 2013

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

Test Item	Uncertainty
Uncertainty for Conduction emission test	3.6dB(9KHz to 150KHz)
in No. 1 Conduction	3.2dB (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	3.37 dB
Uncertainty for Conduction Spurious	2.00 dB
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	0.6°C
humidity	3%

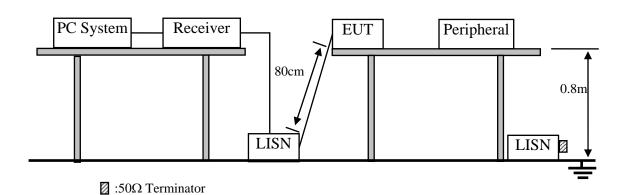


# 3. POWER LINE CONDUCTED EMISSION TEST

#### 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, 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	$50\Omega$	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.

#### 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.

3.4.1.2.4GHz High Power Wireless Outdoor Access Point (EUT)

Model Number : AELPLDR4U1

Serial Number : N/A

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

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#### 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

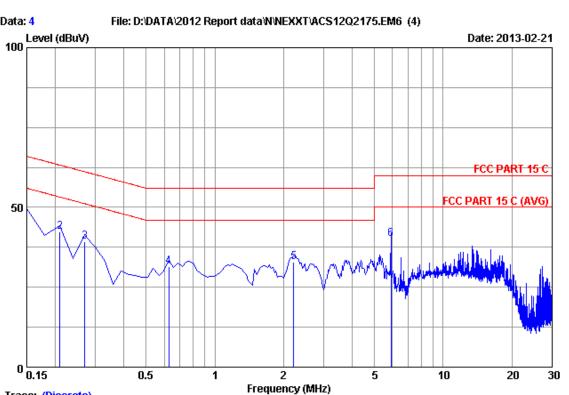
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The 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.)



Trace: (Discrete)

Site no :1#conduction Data No

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

Limit :FCC PART 15 C

Env./Ins. :26.2\*C/68% Engineer :Leo-Li :2.4GHz High Power Wireless Outdoor Access Point

Power Rating :DC 12V From Adapter Input AC 120V/60Hz

:Tx Mode Test Mode

:M/N:AELPLDR4U1

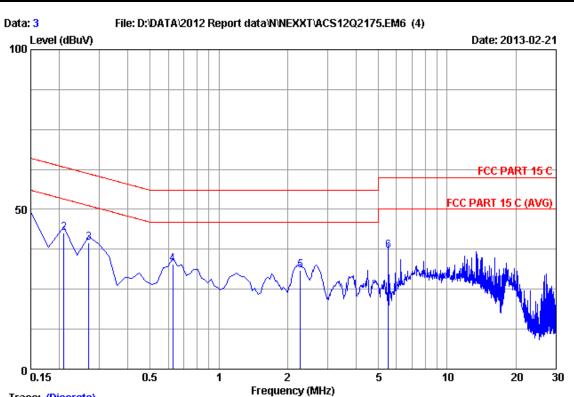
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.19	0.14	47.33	47.66	66.00	18.34	QP
2	0.20970	0.19	0.15	41.87	42.21	63.22	21.01	QP
3	0.26940	0.19	0.15	38.95	39.29	61.14	21.85	QP
4	0.62760	0.20	0.15	31.18	31.53	56.00	24.47	QP
5	2.210	0.24	0.14	32.45	32.83	56.00	23.17	QP
6	5.911	0.34	0.15	39.49	39.98	60.00	20.02	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.

FCC ID:X4Y350U1

page



Trace: (Discrete)

Site no :1#conduction Data No :3

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

Limit :FCC PART 15 C

Env./Ins. :26.2\*C/68% Engineer :Leo-Li

:2.4GHz High Power Wireless Outdoor Access Point

Power Rating :DC 12V From Adapter Input AC 120V/60Hz

:Tx Mode Test Mode

:M/N:AELPLDR4U1

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.21	0.14	46.78	47.13	66.00	18.87	QP
2	0.20970	0.21	0.15	42.34	42.70	63.22	20.52	QP
3	0.26940	0.22	0.15	39.15	39.52	61.14	21.62	QP
4	0.62760	0.24	0.15	32.37	32.76	56.00	23.24	QP
5	2.269	0.29	0.14	30.46	30.89	56.00	25.11	QP
6	5.523	0.36	0.15	36.55	37.06	60.00	22.94	QP

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

<sup>2.</sup>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

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

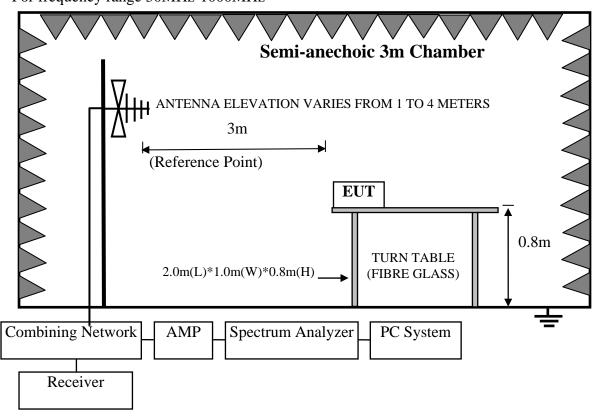
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24,12	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 12	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 12	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 12	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Dec.26, 10	2.0 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	May.08, 12	1 Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 12	1 Year

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

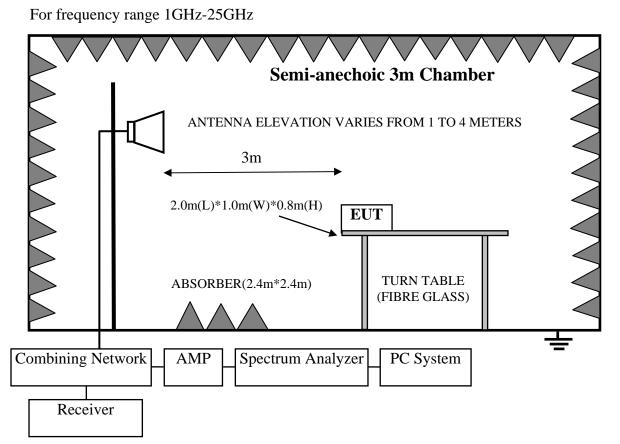
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 12	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	June.05, 12	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 12	1 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

# 4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz







#### 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
<sup>1</sup> 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	( <sup>2</sup> )

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.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

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 10<sup>th</sup> 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.



# Data: 3 File: E:12012 Report Data:NNEXXT\ACS12Q2175.EM6 (4) Date: 2013-02-20 FCC PART 15 C (3M) 6dB 0 30 224. 418. 612. 806. 1000

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

Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24\*C/56% Engineer : Leo\_Li
EUT : 2.4GHz High Power Wireless Outdoor Access Point

Power rating : DC 12V From Adapter Input AC 120V/60Hz

Test Mode : Tx Mode

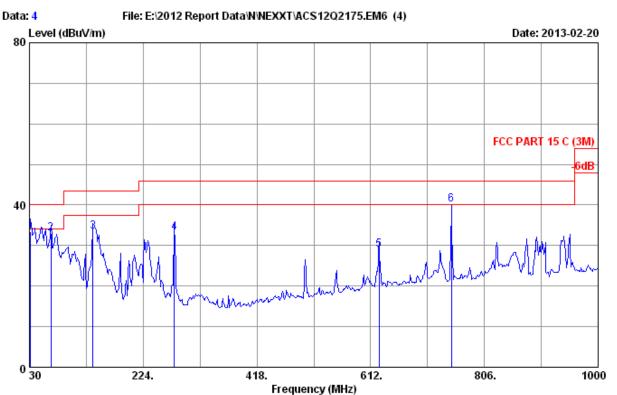
M/N: AELPLDR4U1

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	59.100	12.82	0.66	10.46	23.94	40.00	16.06	QP
2	138.640	13.41	0.93	10.40	24.74	43.50	18.76	QP
3	235.640	11.35	1.13	13.94	26.42	46.00	19.58	QP
4	275.350	12.24	1.23	20.68	34.15	46.00	11.85	QP
5	626.550	18.82	2.19	5.62	26.63	46.00	19.37	QP
6	749.740	20.27	2.56	15.71	38.54	46.00	7.46	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. : 4

Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24\*C/56% Engineer : Leo\_Li EUT : 2.4GHz High Power Wireless Outdoor Access Point

Power rating : DC 12V From Adapter Input AC 120V/60Hz

Test Mode : Tx Mode

M/N:AELPLDR4U1

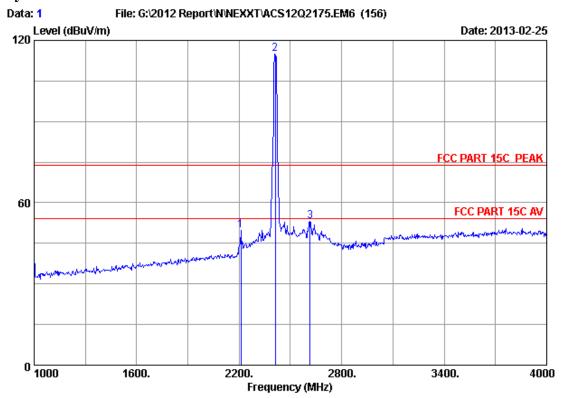
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	13.29	0.45	19.74	33.48	40.00	6.52	QP
2	66.860	11.43	0.69	20.84	32.96	40.00	7.04	QP
3	138.640	13.41	0.93	19.17	33.51	43.50	9.99	QP
4	277.350	12.30	1.23	19.65	33.18	46.00	12.82	QP
5	626.550	18.82	2.19	8.03	29.04	46.00	16.96	QP
6	749.740	20.27	2.56	17.20	40.03	46.00	5.97	QP

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

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



#### Frequency: 1GHz~18GHz



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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

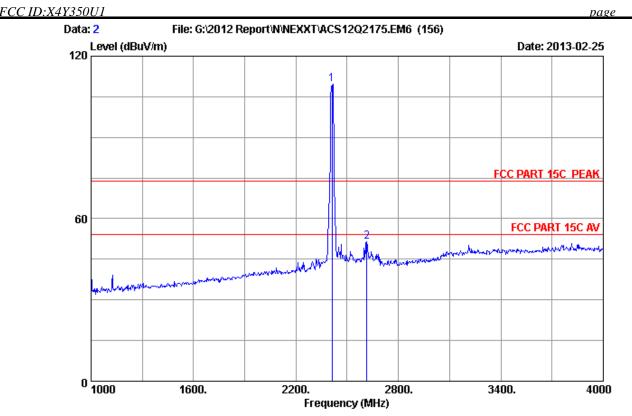
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2		29.32 29.45 30.08	8.72		48.15 112.74 49.85		74.00 74.00 74.00	24.23 -40.96 21.01	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.





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

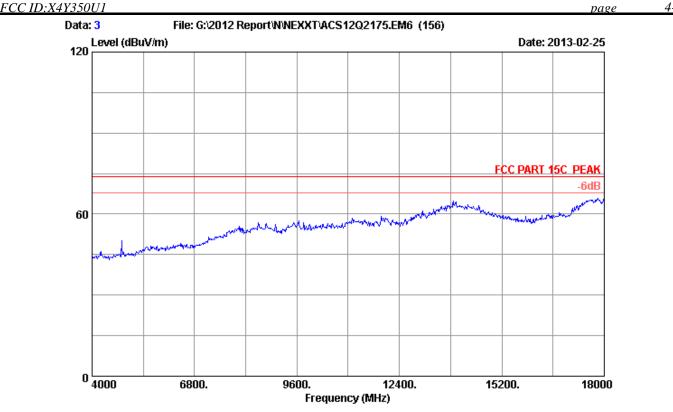
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark	
_	2412.000 2614.000				107.32 48.45			-35.54 22.41	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. : 3

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

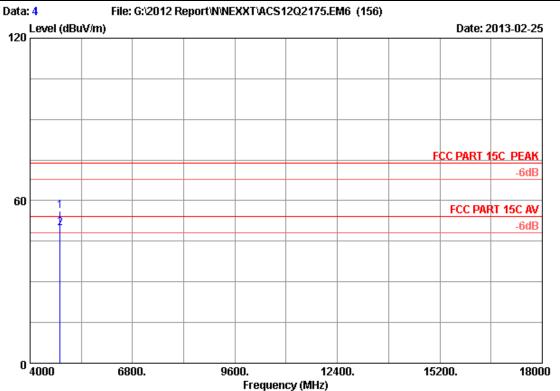
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

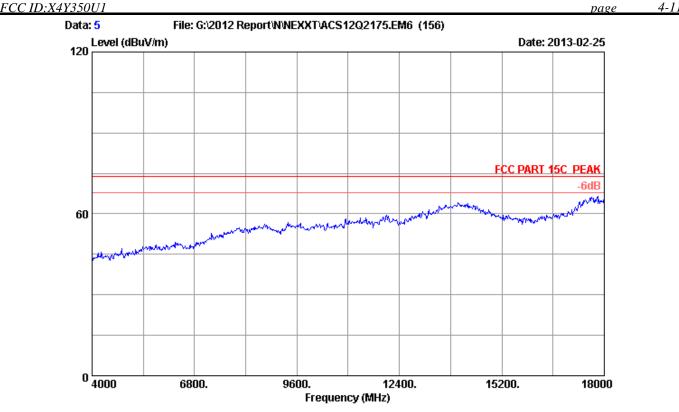
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)			Remark
4824.000 4824.000		12.38 12.38		44.86 38.39		74.00 54.00	17.69 4.16	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. : 5

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

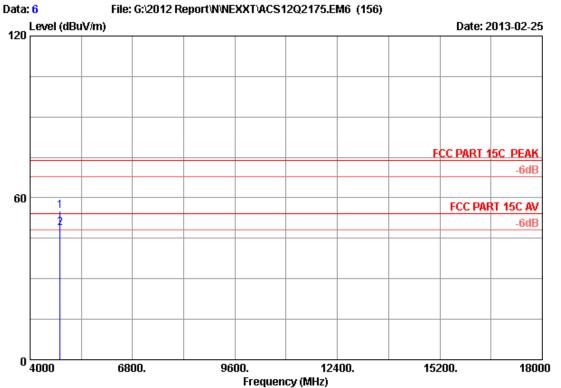
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

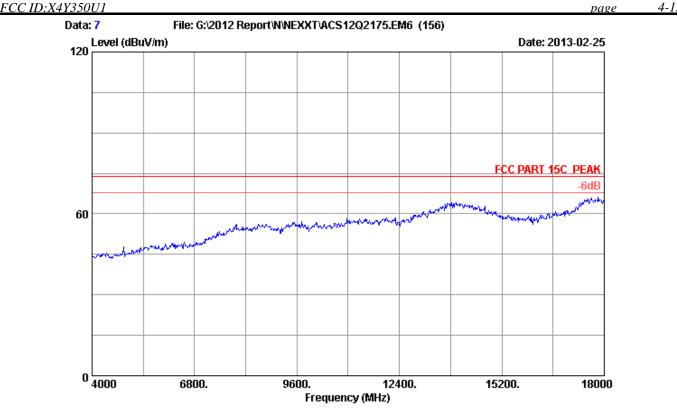
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4824.000 4824.000	 		43.61 37.24	55.06 48.69	74.00 54.00	18.94 5.31	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. : 7

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

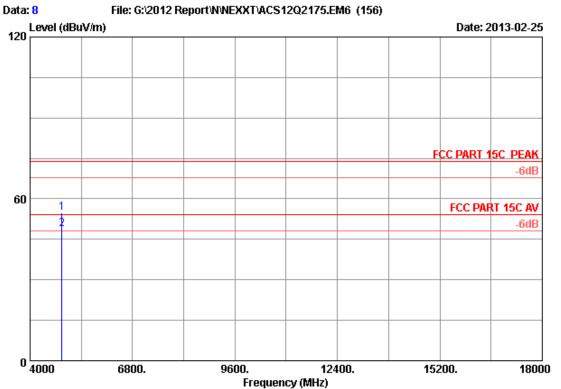
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

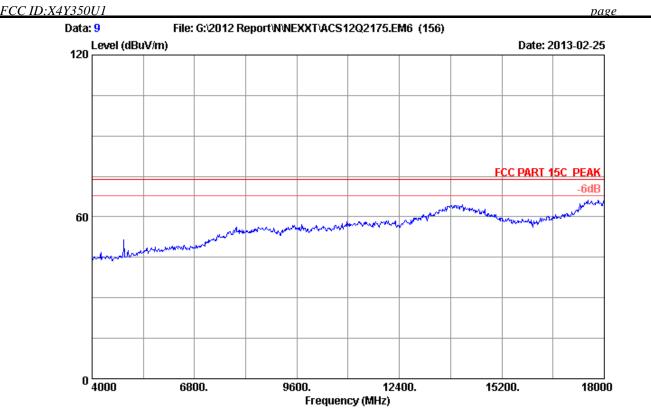
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000						74.00 54.00	19.14 5.07	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. : 9

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

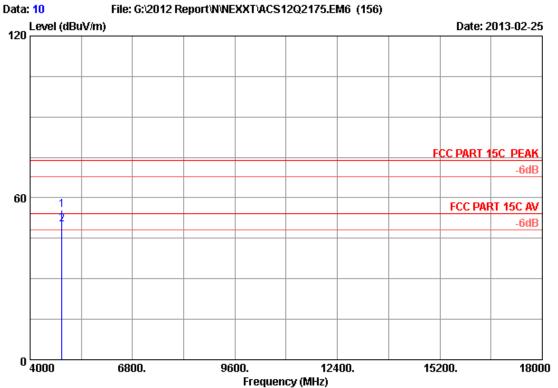
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

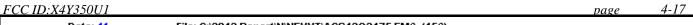
Test mode : IEEE802.11b CH6 2437MHz Tx

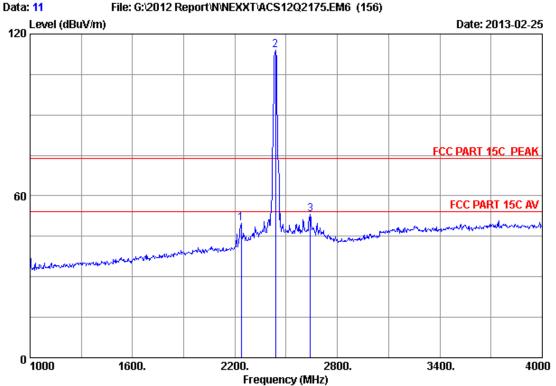
M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4874.000 4874.000	 12.44		44.15 38.73	55.64 50.22	74.00 54.00	18.36 3.78	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.







Site no. : 3m Chamber Data no. : 11
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

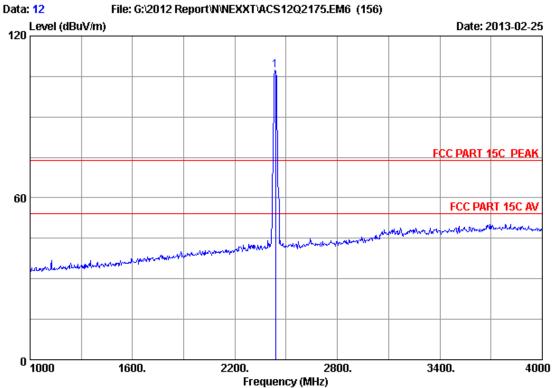
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	_	Remark
2		29.47	8.77		47.77 111.83 49.60	49.77 114.01 53.25	74.00 74.00 74.00	24.23 -40.01 20.75	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.





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

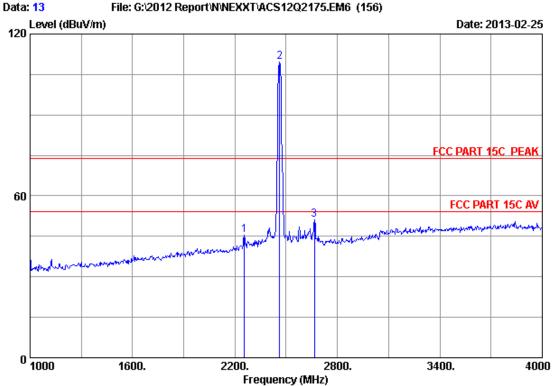
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	Reading	Emission Level (dBuV/m)	Limits	_	Remark
1	2437.000	29.47	8.77	36.06	105.14	107.32	74.00	-33.32	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. : 13

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

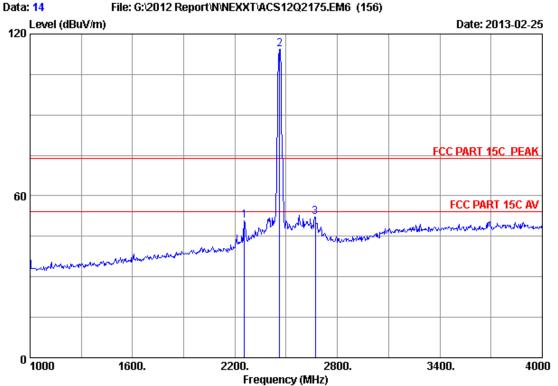
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2	2254.000 2462.000 2665.000	29.48	8.82	35.85 36.02 35.88	107.47	45.33 109.75 51.22	74.00 74.00 74.00	28.67 -35.75 22.78	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.







Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

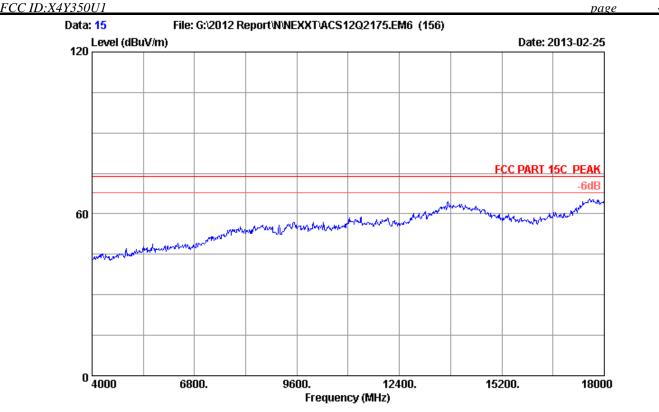
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
_	2254.000 2462.000 2671.000	29.36 29.48 30.33	8.82	35.85 36.02 35.88	49.03 112.14 48.59	50.96 114.42 52.25	74.00 74.00 74.00	23.04 -40.42 21.75	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.





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

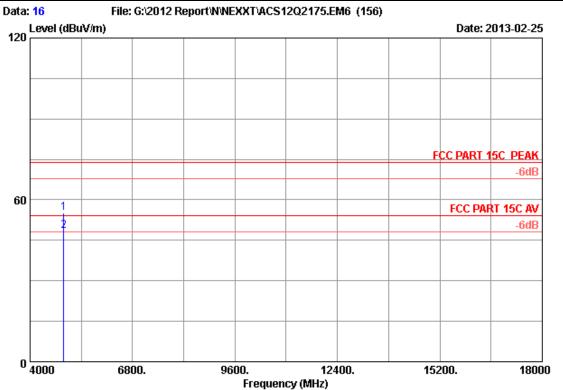
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

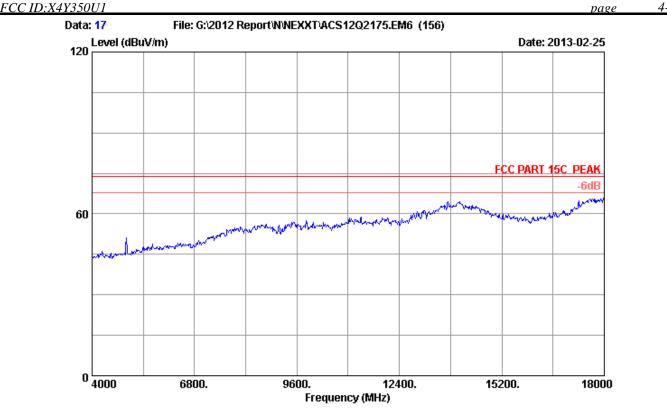
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000	 12.50 12.50		43.54 36.95		74.00 54.00	18.81 5.40	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. : 17
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

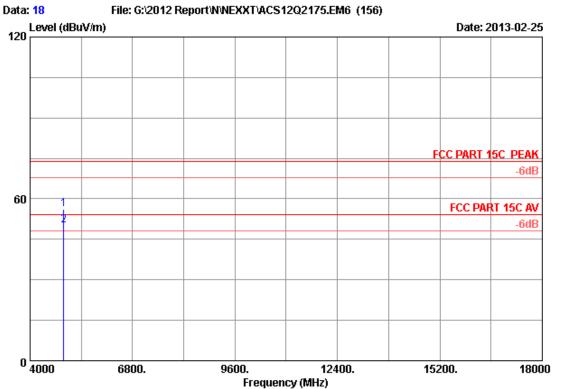
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

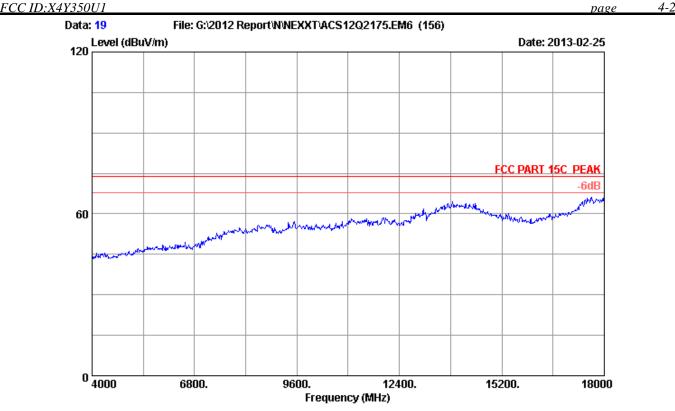
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000	 12.50 12.50		44.65 38.46		74.00 54.00	17.70 3.89	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. : 19
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

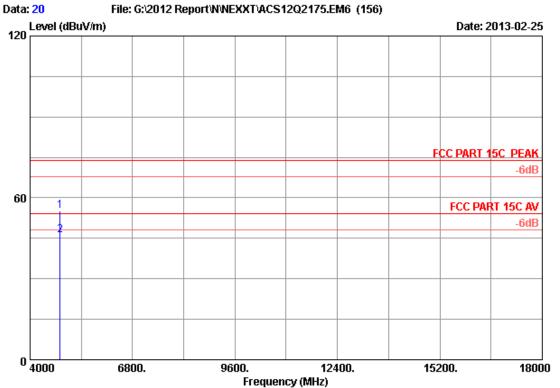
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

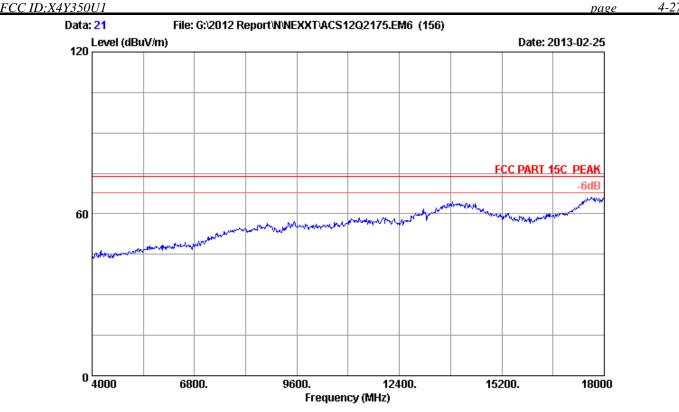
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4824.000 4824.000	 12.38 12.38		43.86 34.58		74.00 54.00	18.69 7.97	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

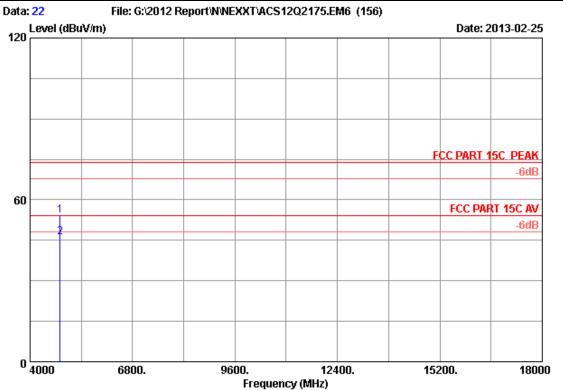
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 22

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

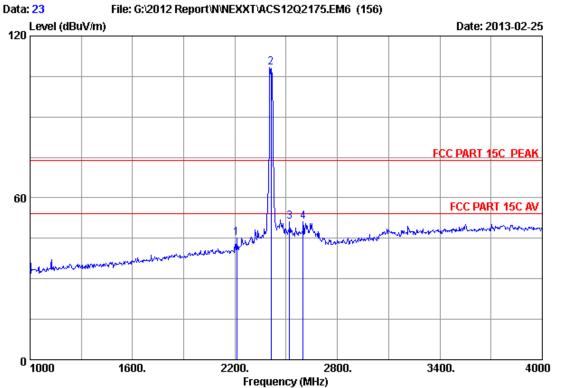
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4824.000 4824.000		12.38 12.38		42.86 34.62		74.00 54.00	19.69 7.93	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. : 23

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

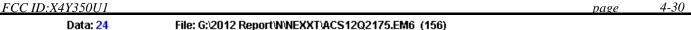
Test mode : IEEE802.11g CH1 2412MHz Tx

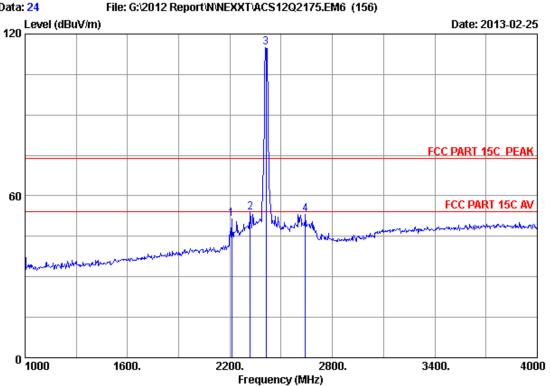
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
3	2209.000 2412.000 2521.000 2599.000	29.32 29.45 29.58 30.00	8.72 8.92	35.99	43.64 106.25 48.48 47.82	45.26 108.47 50.99 51.02	74.00 74.00 74.00 74.00	28.74 -34.47 23.01 22.98	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.







Site no. : 3m Chamber Data no. : 24
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

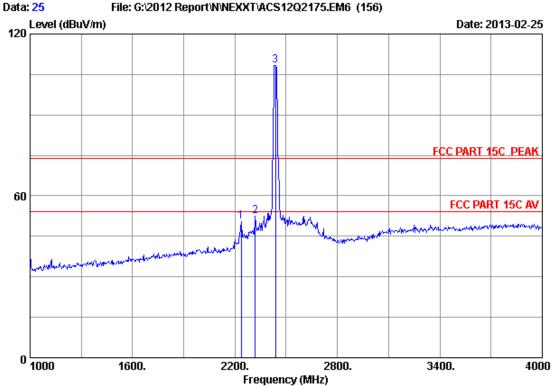
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	2209.000	29.32	8.32	36.02	49.89	51.51	74.00	22.49	Peak
2	2320.000	29.40	8.52	36.06	51.90	53.76	74.00	20.24	Peak
3	2412.000	29.45	8.72	35.95	112.71	114.93	74.00	-40.93	Peak
4	2641.000	30.25	9.17	35.77	49.57	53.22	74.00	20.78	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.







Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

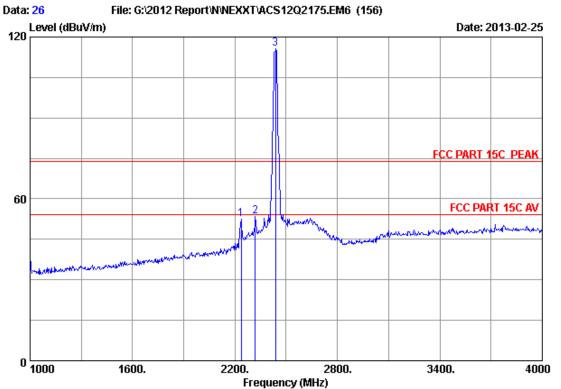
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)			Remark
_	2236.000			35.71	48.48	50.48	74.00	23.52	Peak
2	2320.000	29.40	8.52	36.06	50.46	52.32	74.00	21.68	Peak
3	2437.000	29.47	8.77	36.06	106.13	108.31	74.00	-34.31	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. : 26
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

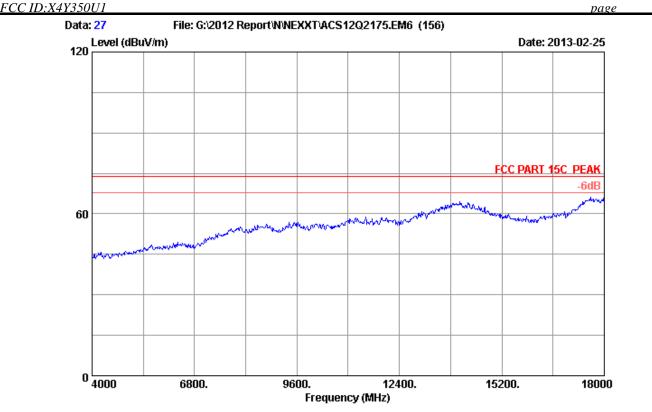
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Factor	loss		Reading	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark	_
2	2236.000	29.40	8.52			53.64	74.00 74.00	21.36	Peak Peak	
3	2437.000	29.47	8.77	36.06	113.34	115.52	74.00	-41.52	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.





Site no. : 3m Chamber Data no. : 27
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

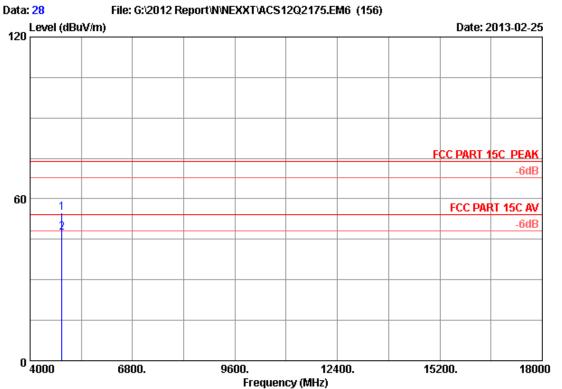
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 28
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

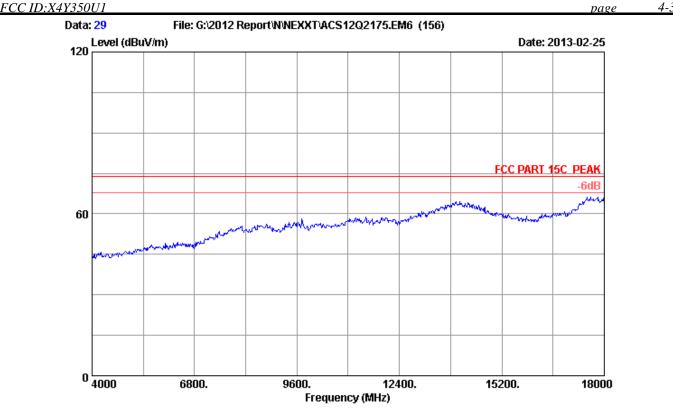
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4874.000 4874.000	 		43.34 36.13		74.00 54.00	19.17 6.38	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

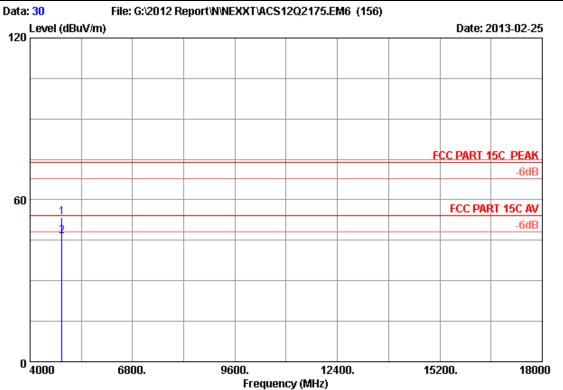
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

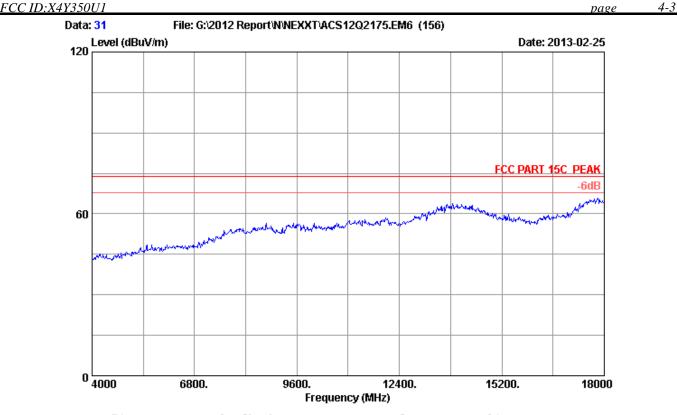
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)		Factor	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
4874.000 4874.000	 		42.09 34.94		74.00 54.00	20.42 7.57	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

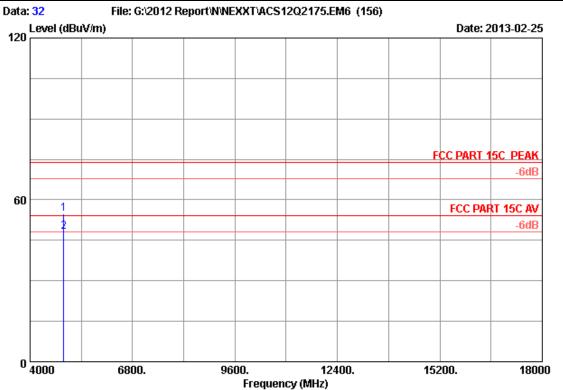
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 32

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

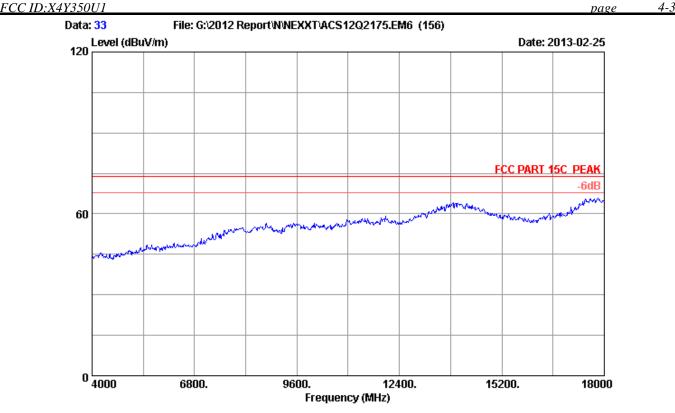
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000		12.50 12.50		43.12 36.52		74.00 54.00	19.23 5.83	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. : 33
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

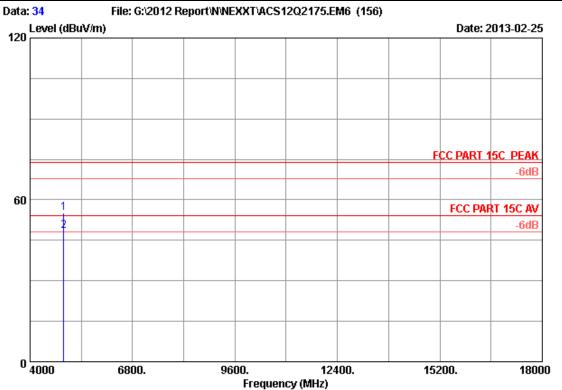
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL





Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

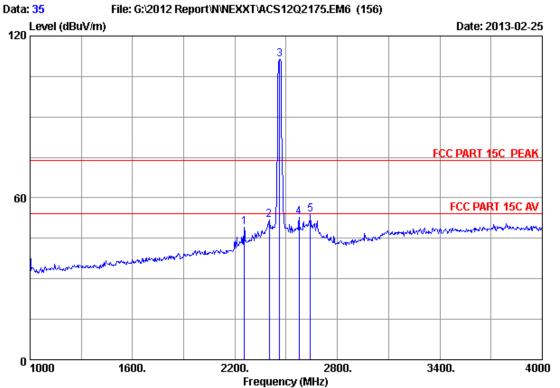
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4924.000 4924.000	 12.50 12.50		43.65 36.87	55.30 48.52	74.00 54.00	18.70 5.48	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. : 35
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

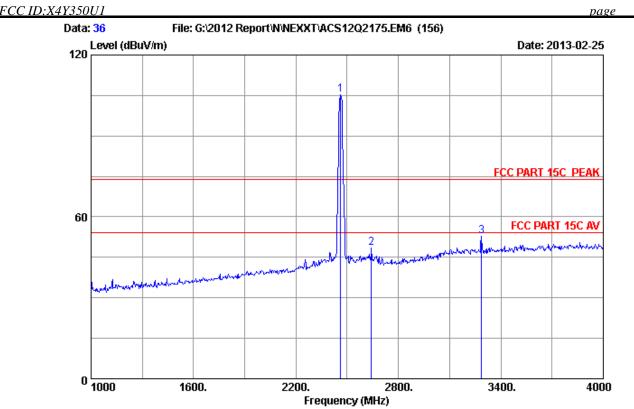
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	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	2254.000	29.36	8.42	35.85	47.21	49.14	74.00	24.86	Peak
2	2401.000	29.44	8.72	36.09	49.71	51.78	74.00	22.22	Peak
3	2462.000	29.48	8.82	36.02	109.16	111.44	74.00	-37.44	Peak
4	2575.000	29.92	9.07	35.78	49.60	52.81	74.00	21.19	Peak
5	2641.000	30.25	9.17	35.77	50.15	53.80	74.00	20.20	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

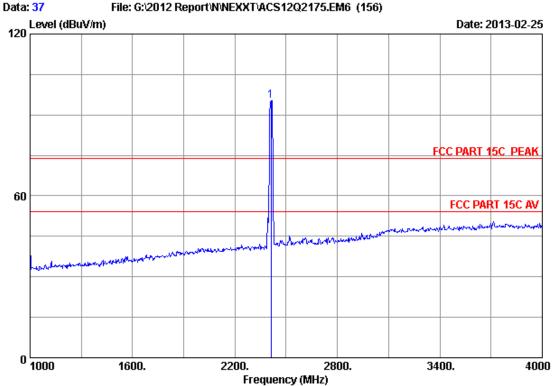
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
2	2462.000 2641.000 3286.000	30.25			103.15 44.88 45.64	105.43 48.53 52.89	74.00 74.00 74.00	-31.43 25.47 21.11	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.







Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

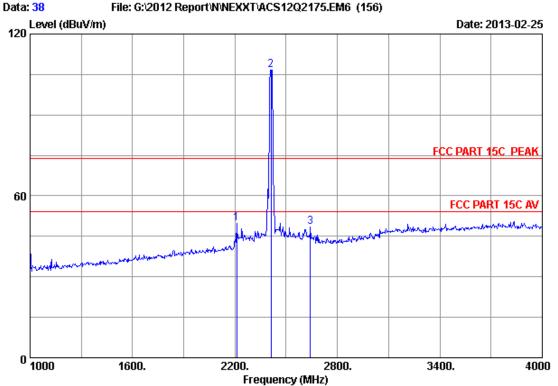
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

		Ant.	Cable	Amp.		Emission			
	Freq. (MHz)				_	Level (dBuV/m)		_	Remark
1	2412.000	29.45	8.72	35.95	93.19	95.41	74.00	-21.41	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. : 38

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

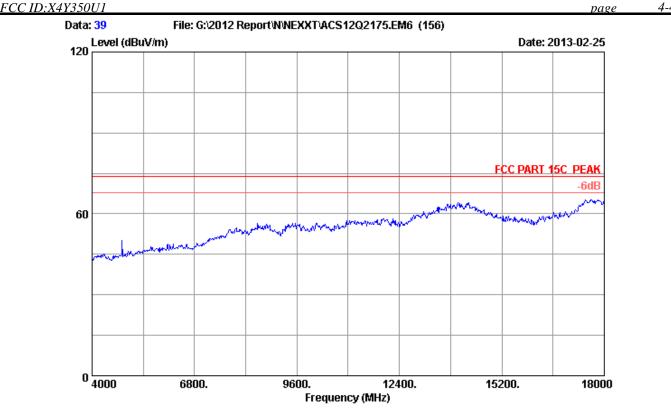
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)		loss		Reading	Emission Level (dBuV/m)	Limits	_	Remark	_
1 2209.000 2 2412.000 3 2641.000	29.45	8.72	35.95	48.08 104.49 44.78	106.71	74.00 74.00 74.00	24.30 -32.71 25.57	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.





Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

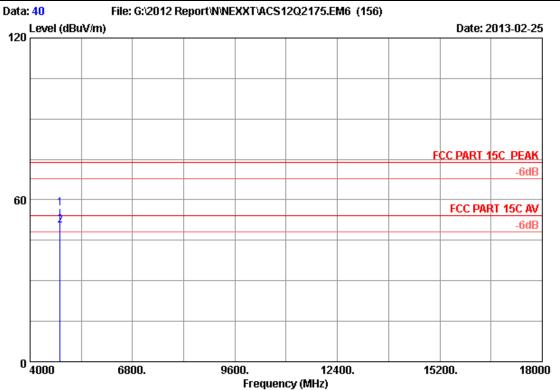
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

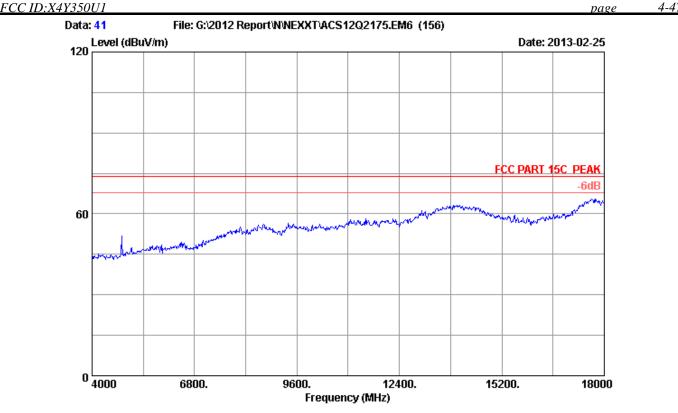
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
1	4824.000 4824.000		12.38 12.38		45.35 38.95	56.80 50.40	74.00 54.00	17.20 3.60	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

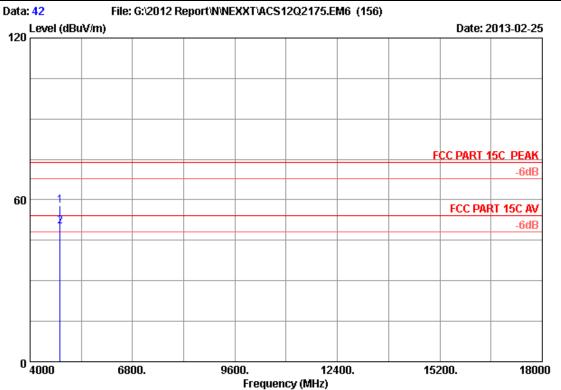
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

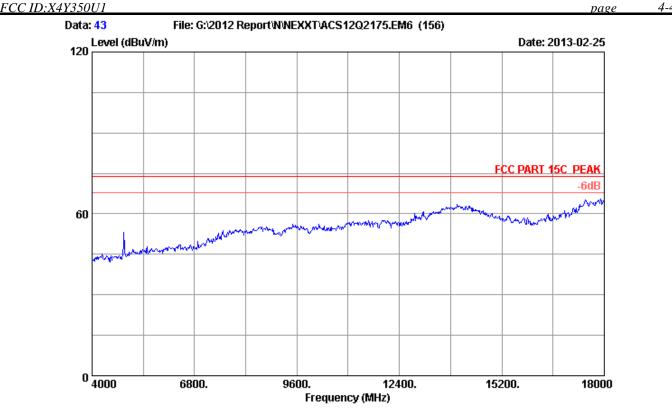
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
1	4824.000 4824.000		12.38 12.38		46.27 38.85		74.00 54.00	16.28 3.70	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

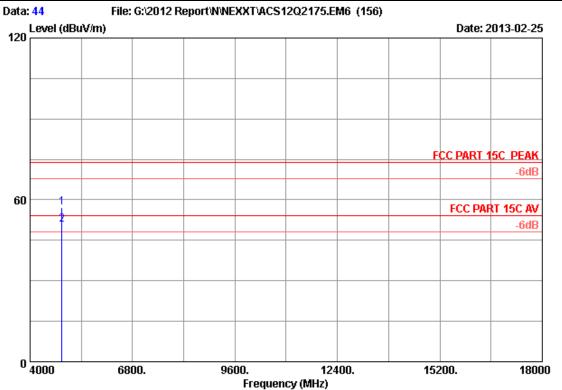
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 44

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

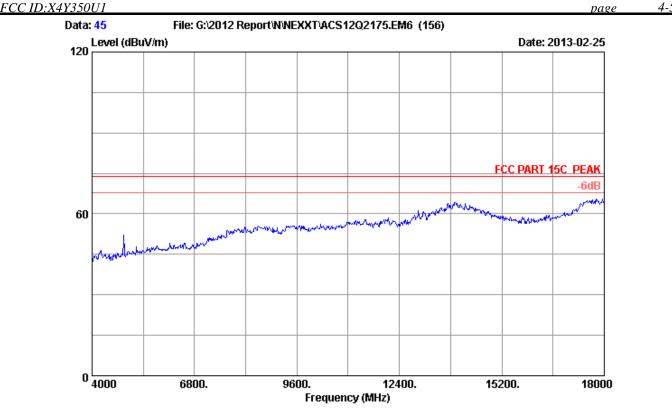
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000			35.36 35.36			74.00 54.00	16.97 3.24	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. : 45
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

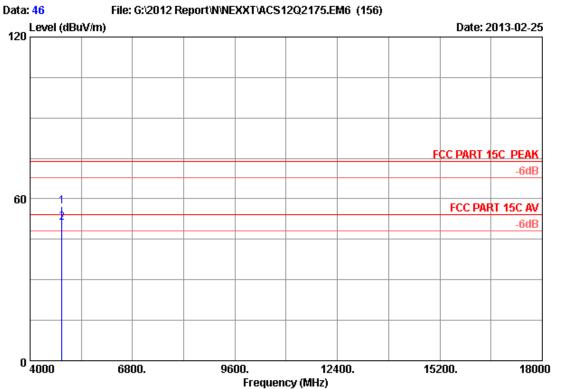
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 46
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

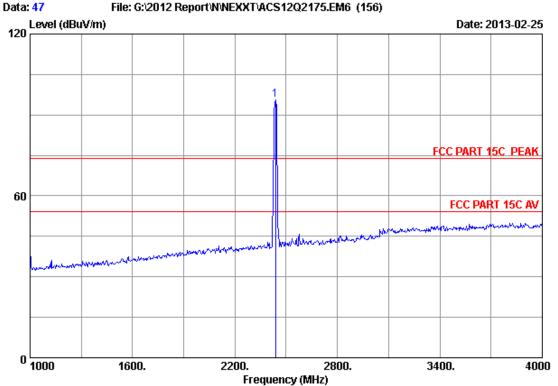
M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000						74.00 54.00	16.81 3.02	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. : 47
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

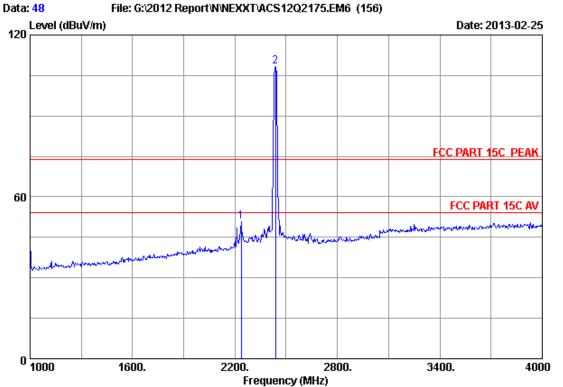
M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	Reading	Emission Level (dBuV/m)	Limits	_	Remark
1	2437.000	29.47	8.77	36.06	93.51	95.69	74.00	-21.69	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.







Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

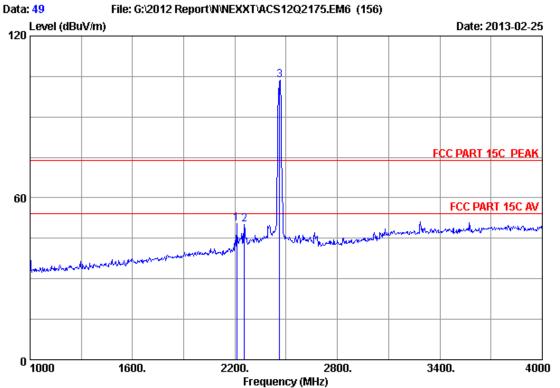
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark	
_	2236.000 2437.000				48.86 105.98		74.00 74.00	23.14 -34.16	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. : 49

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

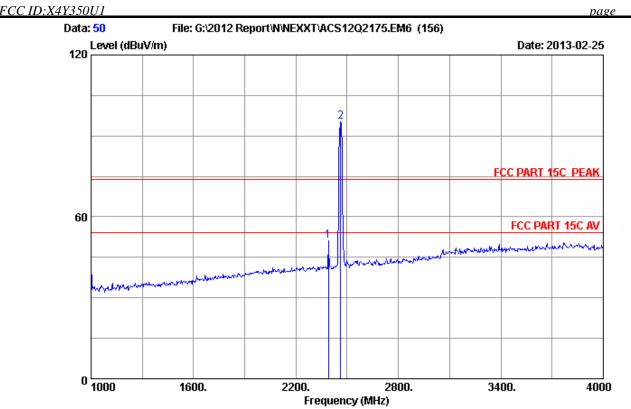
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
2	2209.000 2254.000 2462.000	29.36	8.42		48.74 48.07 101.25	50.36 50.00 103.53	74.00 74.00 74.00	23.64 24.00 -29.53	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.





Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

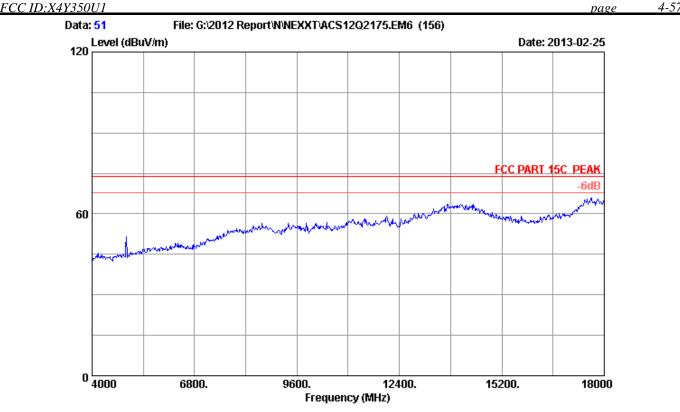
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark	
_	2389.000 2462.000		8.67 8.82	36.09 36.02	48.98 93.12		74.00 74.00	23.00 -21.40	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

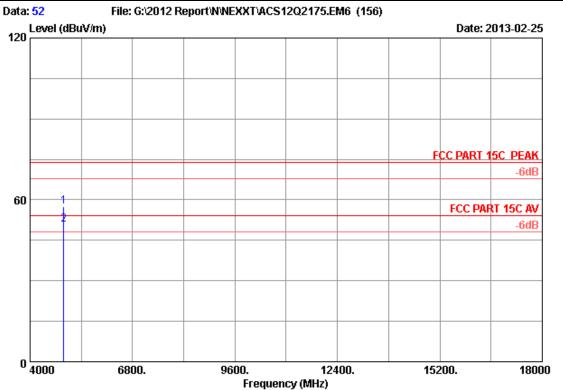
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

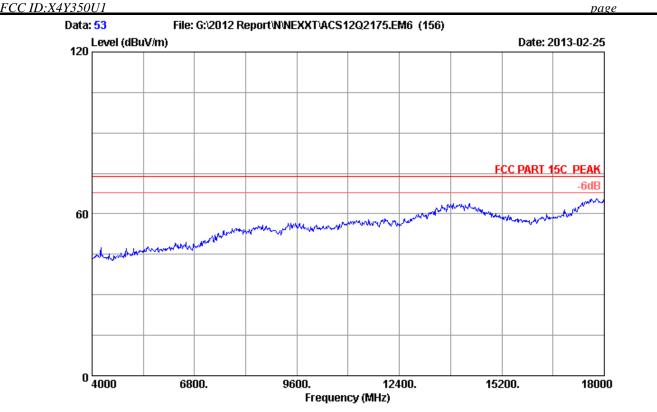
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
_	4924.000 4924.000	 12.50 12.50		45.90 39.29		74.00 54.00	16.45 3.06	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. : 53
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

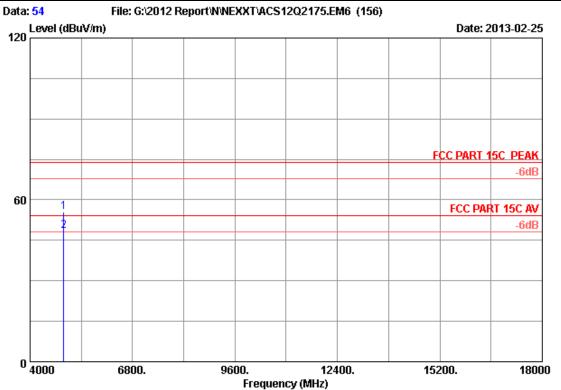
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

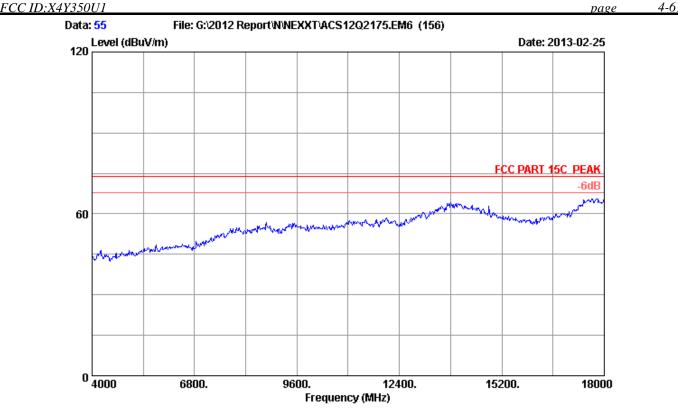
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000	 12.50 12.50		43.68 36.87	55.33 48.52	74.00 54.00	18.67 5.48	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. : 55
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

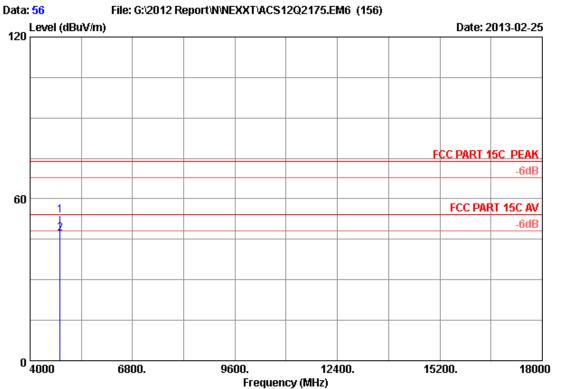
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 56
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

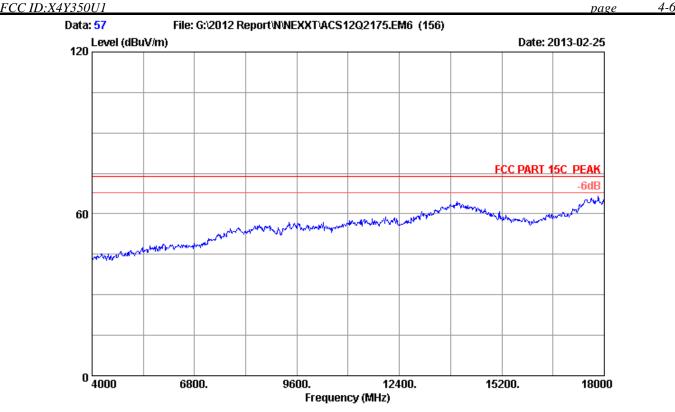
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)		Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	4824.000 4824.000	 12.38 12.38		42.35 35.62	53.80 47.07	74.00 54.00	20.20 6.93	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

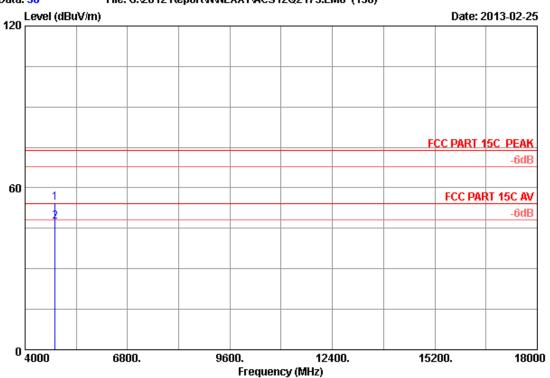
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL



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 Data: 58
 File: G:\2012 Report\N\NEXXT\ACS12Q2175.EM6 (156)



Site no. : 3m Chamber Data no. : 58

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

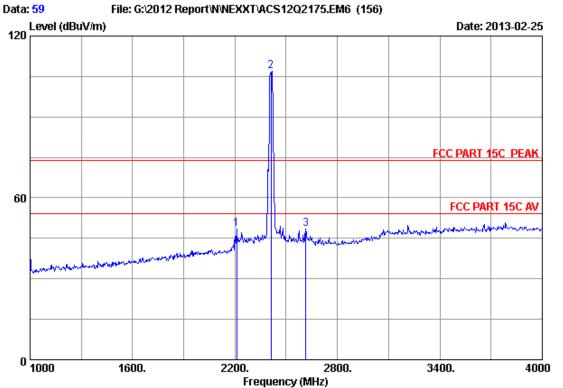
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
1	4824.000 4824.000		12.38 12.38		43.00 36.04	54.45 47.49	74.00 54.00	19.55 6.51	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. : 59

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

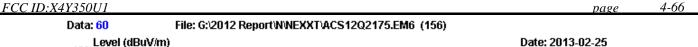
Test mode : IEEE802.11g CH1 2412MHz Tx

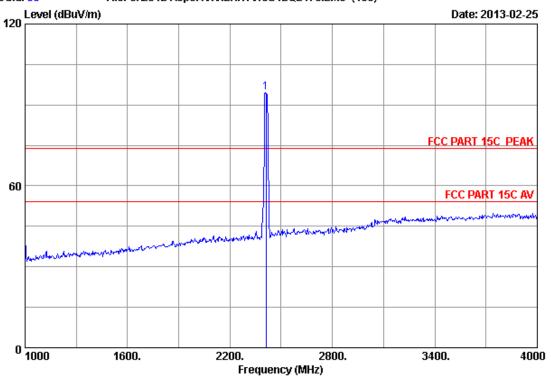
M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
_	2209.000 2412.000 2614.000	29.32 29.45 30.08	8.72	36.02 35.95 36.06	46.86 104.72 45.19	48.48 106.94 48.33	74.00 74.00 74.00	25.52 -32.94 25.67	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.







Site no. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

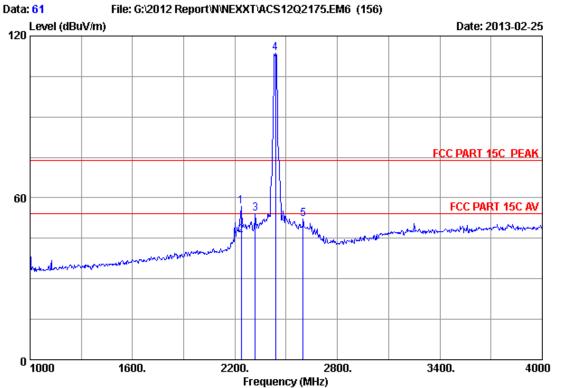
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

		Ant. Cable A		Amp. Emission			n			
	Freq. (MHz)				_	Level (dBuV/m)		_	Remark	
1	2412.000	29.45	8.72	35.95	92.45	94.67	74.00	-20.67	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.





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

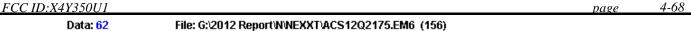
Test mode : IEEE802.11g CH6 2437MHz Tx

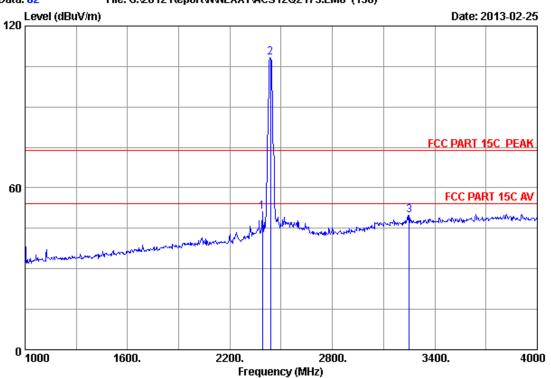
M/N : AELPLDR4U1 : ANT HORIZONTAL

	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	2236.000	29.34	8.37	35.71	54.72	56.72	74.00	17.28	Peak
2	2236.000	29.34	8.37	35.71	44.02	46.02	54.00	7.98	Average
3	2320.000	29.40	8.52	36.06	52.44	54.30	74.00	19.70	Peak
4	2437.000	29.47	8.77	36.06	111.37	113.55	74.00	-39.55	Peak
5	2599.000	30.00	9.12	35.92	49.03	52.23	74.00	21.77	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. : 62
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

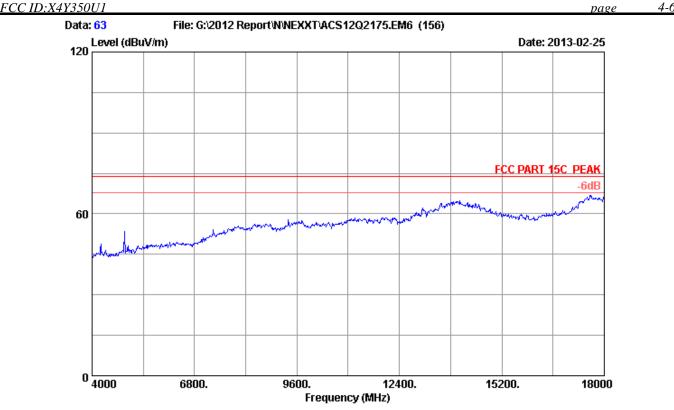
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
2		29.44 29.47 32.63	8.77	36.09 36.06 35.68	49.23 106.08 42.62	51.25 108.26 49.85	74.00 74.00 74.00	22.75 -34.26 24.15	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.





Site no. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

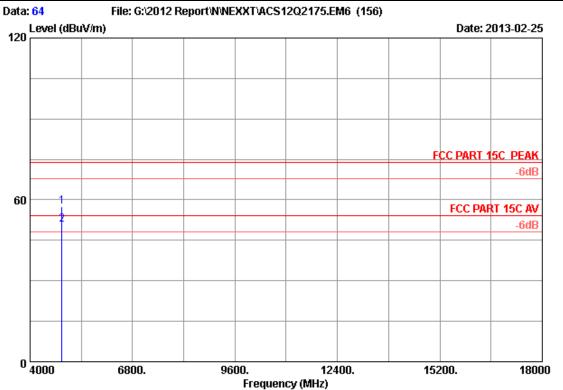
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

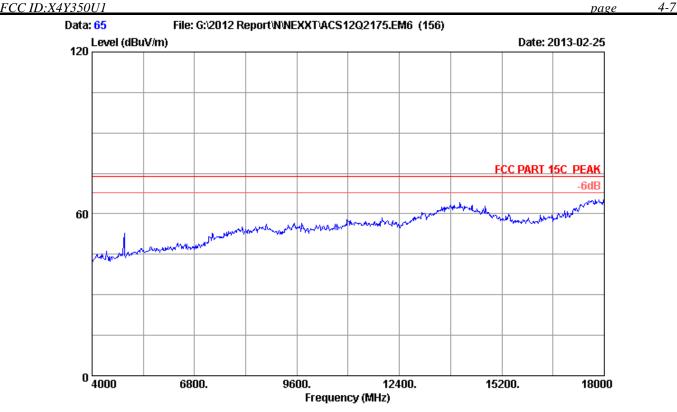
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000		12.44 12.44		46.16 39.21		74.00 54.00	16.35 3.30	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

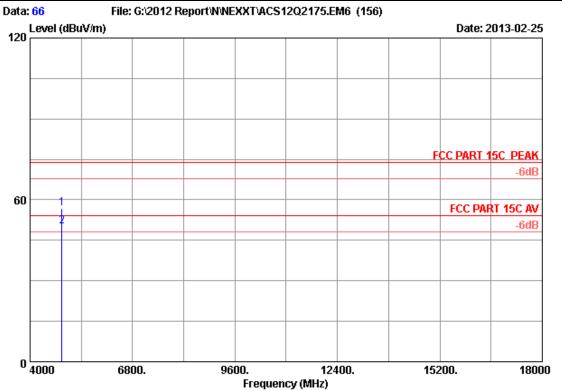
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





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

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

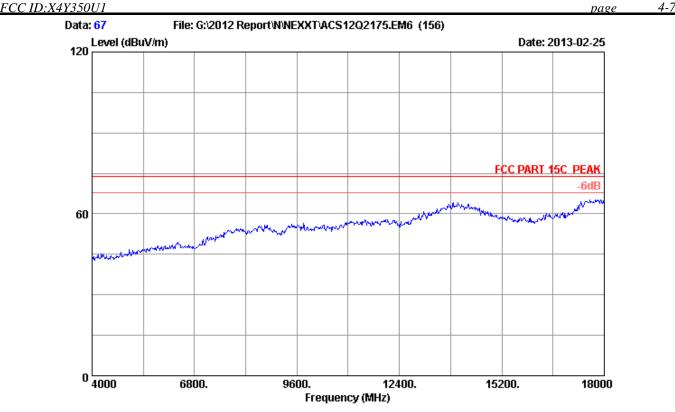
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000		12.44 12.44		45.37 38.52	56.86 50.01	74.00 54.00	17.14 3.99	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

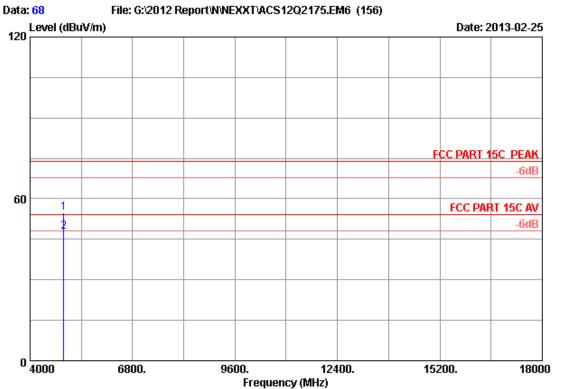
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 68

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

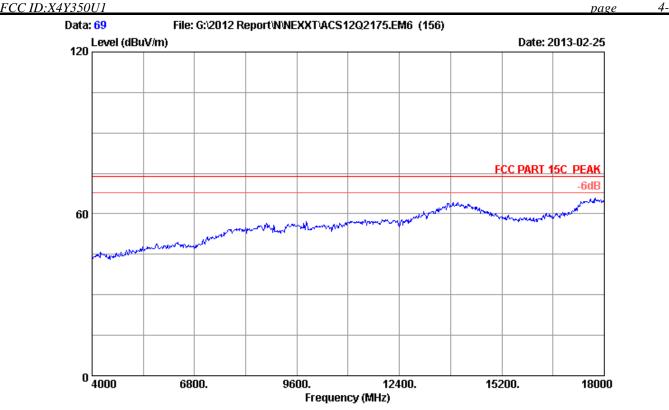
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
_	4924.000 4924.000	 12.50 12.50		43.25 36.21		74.00 54.00	19.10 6.14	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. : 69
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

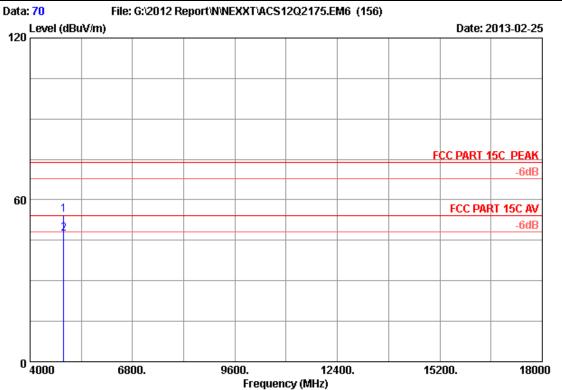
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL





Site no. : 3m Chamber Data no. : 70
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

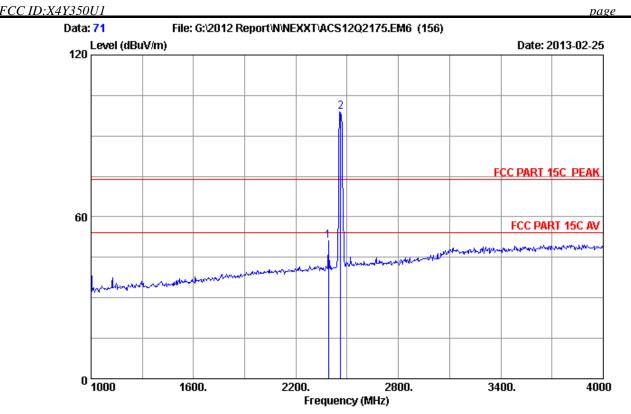
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000				42.96 35.84		74.00 54.00	19.39 6.51	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. : 71 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

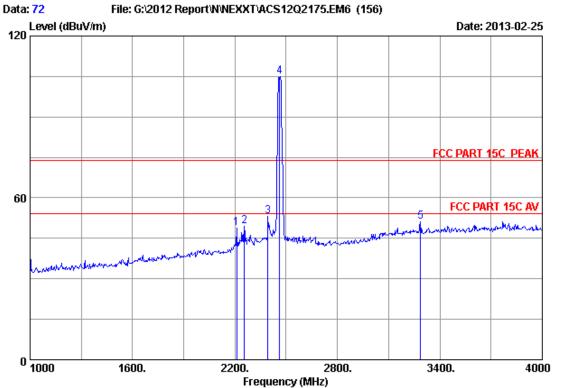
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	Freq.	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
								·	
1	2389.000	29.44	8.67	36.09	49.08	51.10	74.00	22.90	Peak
2	2462.000	29.48	8.82	36.02	96.67	98.95	74.00	-24.95	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. : 72

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

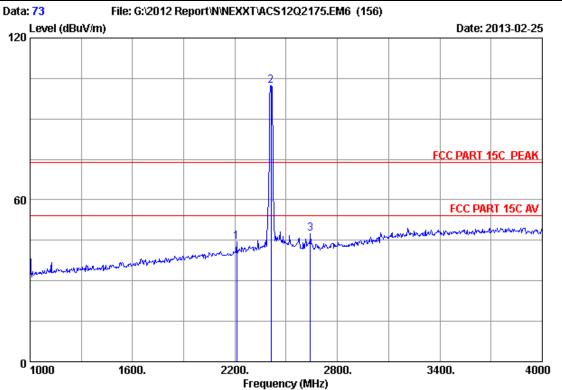
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	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	2209.000	29.32	8.32	36.02	47.33	48.95	74.00	25.05	Peak	
2	2254.000	29.36	8.42	35.85	47.60	49.53	74.00	24.47	Peak	
3	2392.000	29.44	8.67	36.09	51.29	53.31	74.00	20.69	Peak	
4	2462.000	29.48	8.82	36.02	102.82	105.10	74.00	-31.10	Peak	
5	3286.000	32.72	10.32	35.79	43.96	51.21	74.00	22.79	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. : 73
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

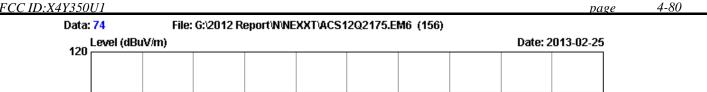
Test mode : IEEE802.11b CH1 2412MHz Tx

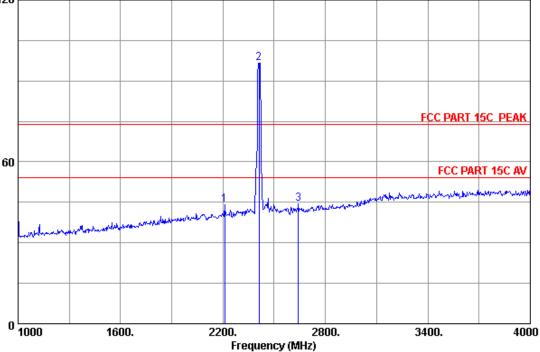
M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	2412.000	29.32 29.45 30.25	8.72	36.02 35.95 35.77	42.93 99.96 43.86	44.55 102.18 47.51	74.00 74.00 74.00	29.45 -28.18 26.49	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.







Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

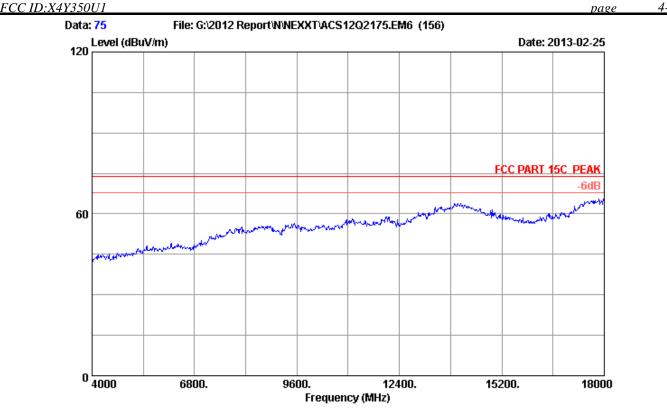
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

(MHz) (c	actor loss dB/m) (dB) 		(dBuV)	Level (dBuV/m)	Margin (dB)	
1 2209.000 29 2 2412.000 29 3 2641.000 30	9.45 8.7	36.02 2 35.95 .7 35.77		43.98 96.77 44.37	 30.02 -22.77 29.63	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.





Site no. : 3m Chamber Data no. : 75
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

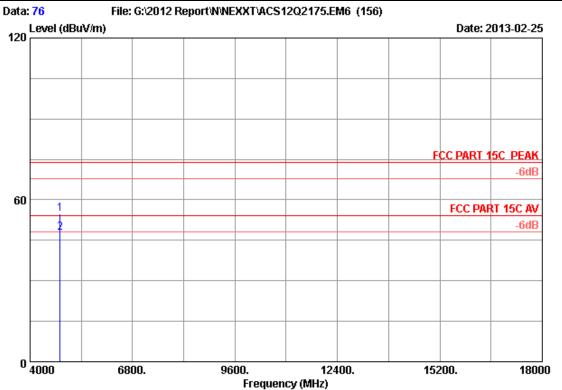
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

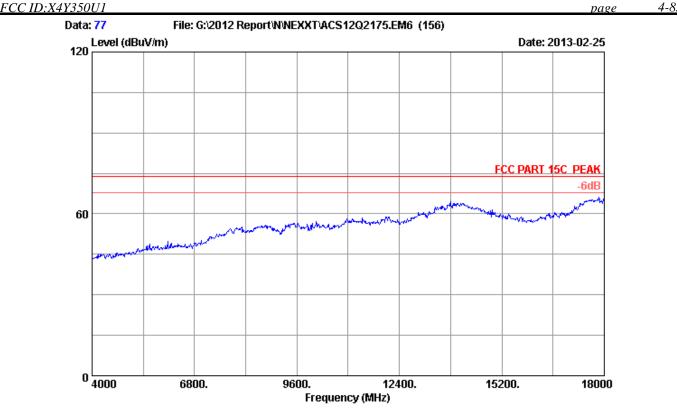
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4824.000 4824.000	 12.38 12.38		43.35 36.24		74.00 54.00	19.20 6.31	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

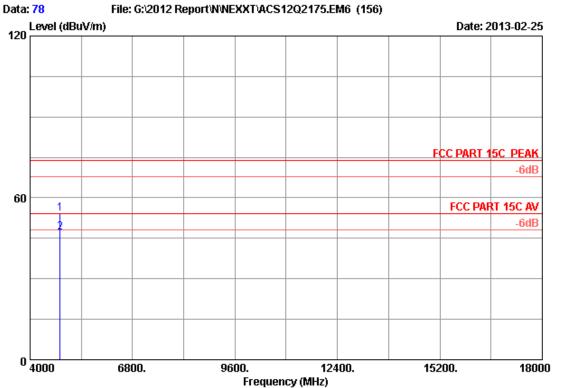
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 78

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

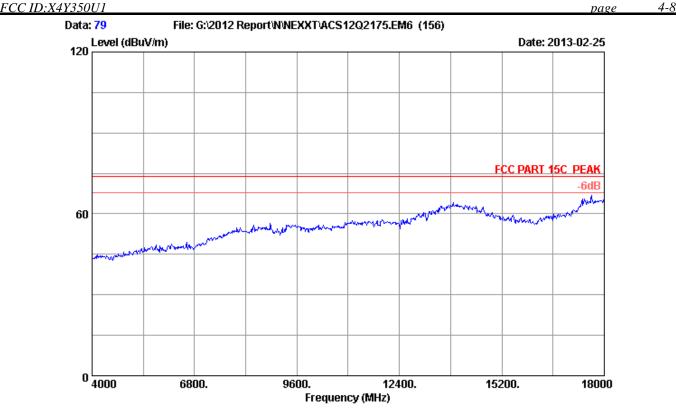
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4824.000 4824.000		12.38 12.38		42.54 35.84		74.00 54.00	20.01 6.71	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

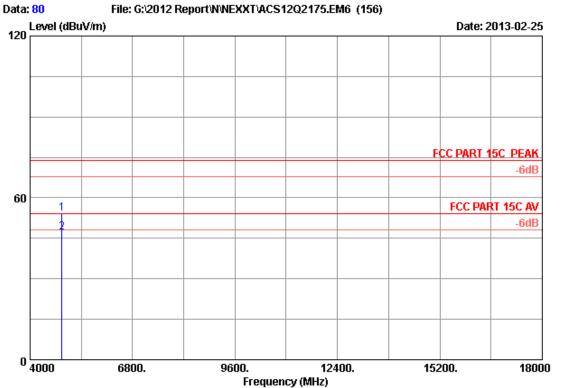
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 80

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

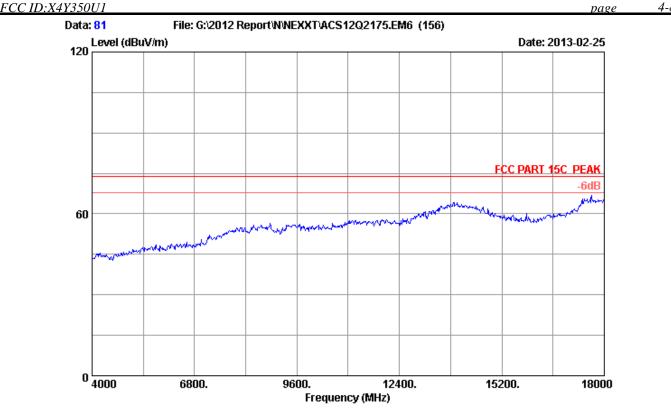
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000		12.44 12.44		42.57 35.61		74.00 54.00	19.94 6.90	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. : 81
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

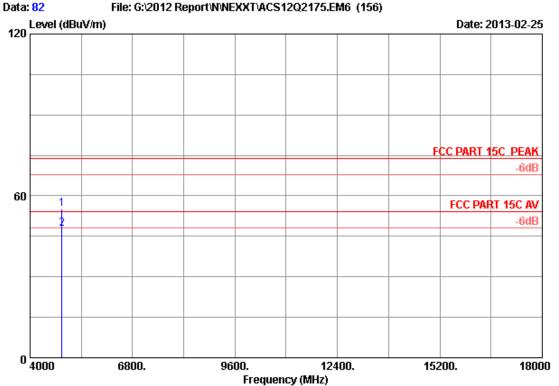
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 82
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

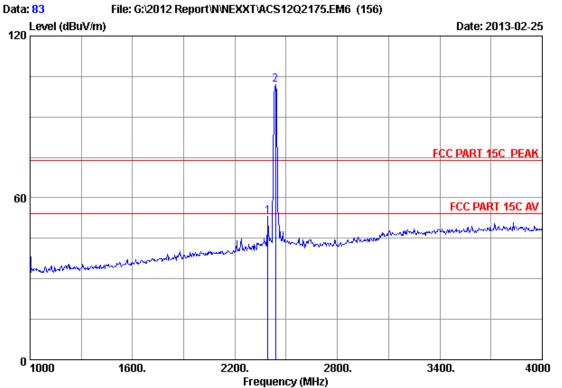
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4874.000 4874.000	 		43.58 36.17		74.00 54.00	18.93 6.34	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. : 83
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

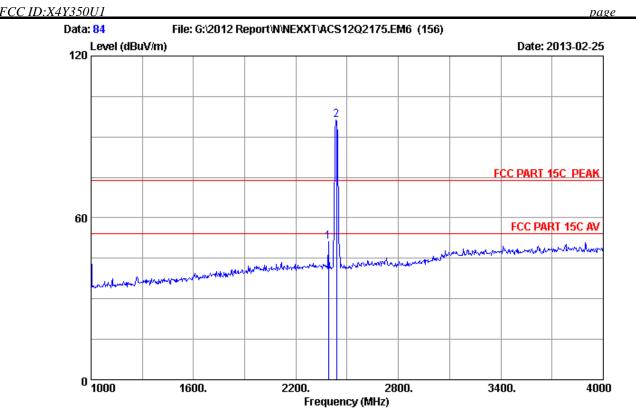
Test mode : IEEE802.11b CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	2392.000 2437.000		8.67 8.77		51.04 99.84		74.00 74.00	20.94 -28.02	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH6 2437MHz Tx

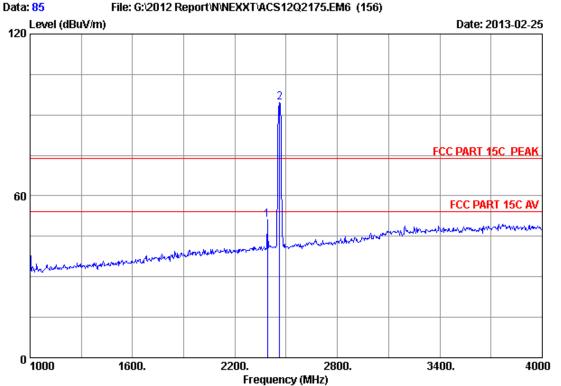
M/N : AELPLDR4U1 : ANT EXTERNAL

	Freq.	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	2389.000 2437.000		8.67 8.77	36.09 36.06	49.12 94.02	51.14 96.20	74.00 74.00	22.86 -22.20	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.







Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

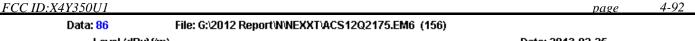
Test mode : IEEE802.11b CH11 2462MHz Tx

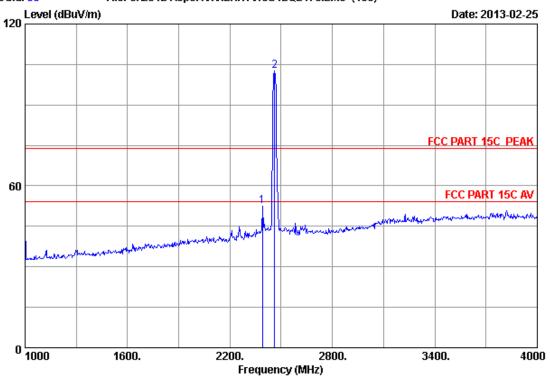
M/N : AELPLDR4U1 : ANT EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark	
_	2389.000 2462.000		8.67 8.82		49.10 92.21	51.12 94.49	74.00 74.00	22.88 -20.49	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. : 86
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

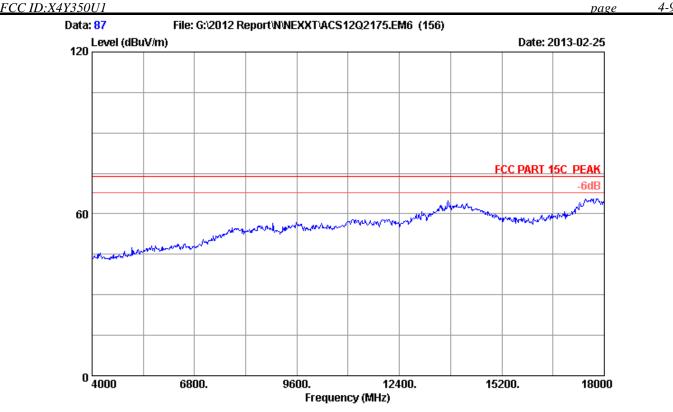
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

		Ant.	Cable	Amp.		Emission			
	Freq. (MHz)	Factor (dB/m)			_	Level (dBuV/m)		Margin (dB)	Remark
_	2389.000 2462.000		8.67 8.82		50.43 100.50		74.00 74.00	21.55 -28.78	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.





Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

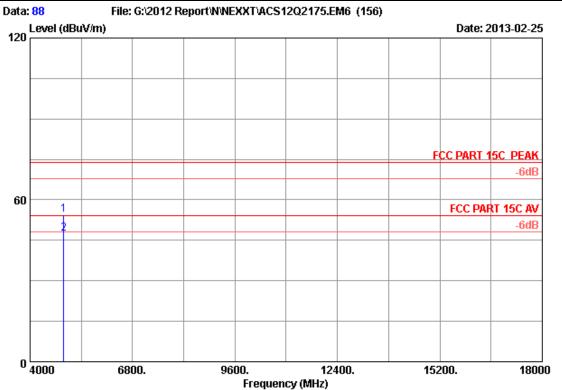
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 88

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

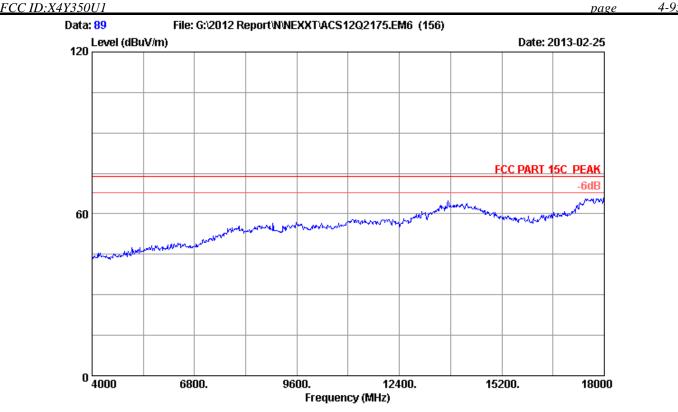
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000				42.69 35.85		74.00 54.00	19.66 6.50	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.





Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

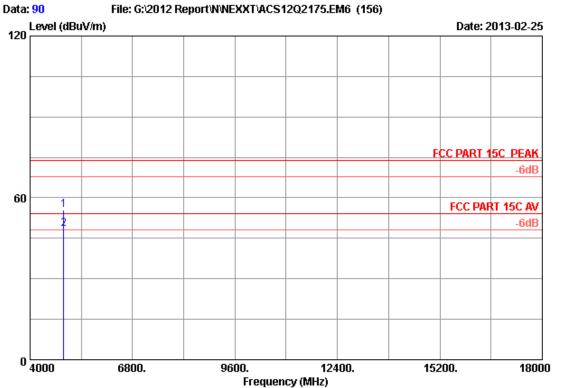
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

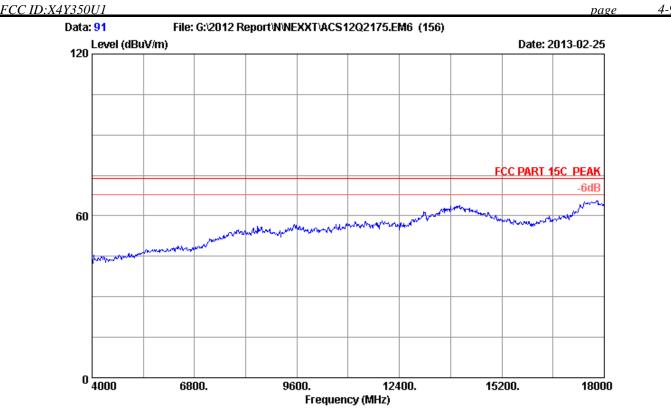
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
4924.000 4924.000		12.50 12.50		43.85 36.74		74.00 54.00	18.50 5.61	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. : 91
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

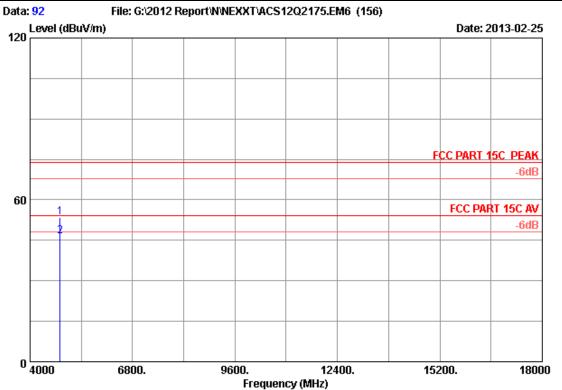
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

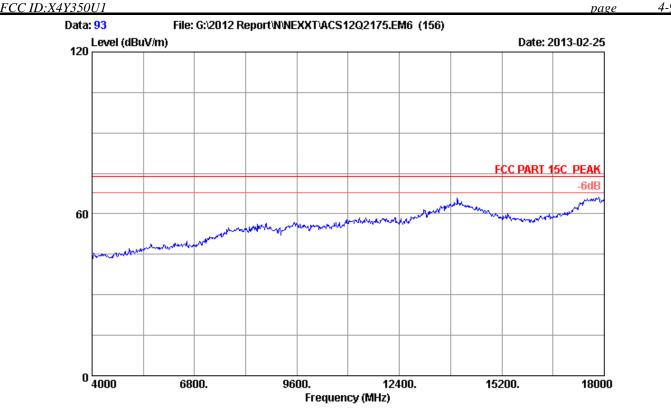
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)		Factor	_	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
_	4824.000 4824.000	 12.38 12.38		42.12 35.01		74.00 54.00	20.43 7.54	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. : 93

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

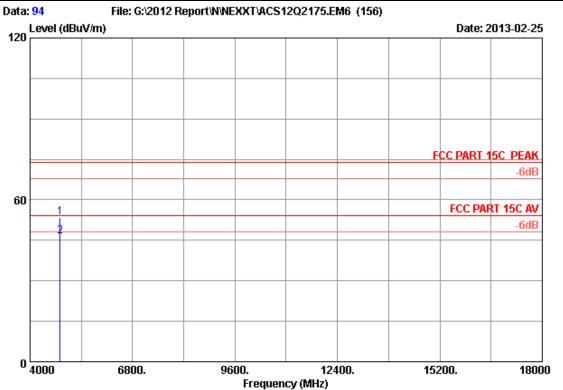
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 94

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

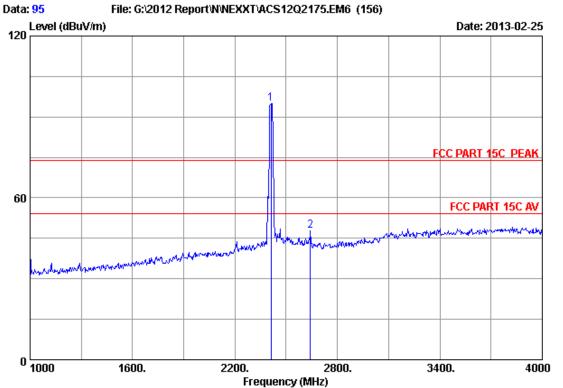
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)		Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	4824.000 4824.000	 12.38 12.38		42.03 35.00	53.48 46.45	74.00 54.00	20.52 7.55	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.





Site no. : 3m Chamber Data no. : 95

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

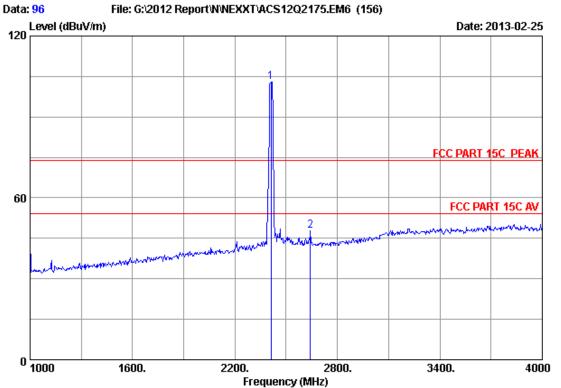
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark	
_	2412.000 2641.000			35.95 35.77	92.84 44.06			-21.06 26.29	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. : 96
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

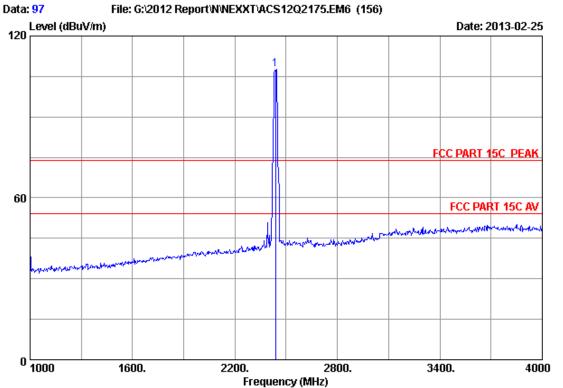
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq.	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	Margin	Remark
	(nnz)	(ub/m)	(ub)	(ub) 	(авау) 	(ubuv/m)	(ubuv/m)		
1	2412.000	29.45	8.72	35.95	100.84	103.06	74.00	-29.06	Peak
2	2641.000	30.25	9.17	35.77	44.06	47.71	74.00	26.29	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. : 97

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

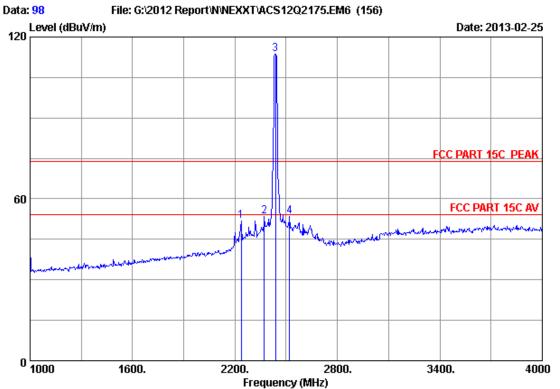
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
1	2437.000	29.47	8.77	36.06	105.54	107.72	74.00	-33.72	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. : 98
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

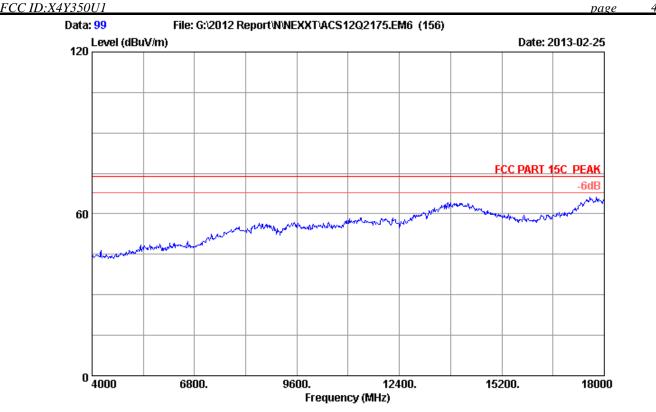
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
_	2236.000	29.34	8.37	35.71	49.75	51.75	74.00	22.25	Peak
	2371.000	29.43	8.62	36.00	51.30	53.35	74.00	20.65	Peak
	2437.000	29.47	8.77	36.06	111.62	113.80	74.00	-39.80	Peak
	2521.000	29.58	8.92	35.99	51.12	53.63	74.00	20.37	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. : 99
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

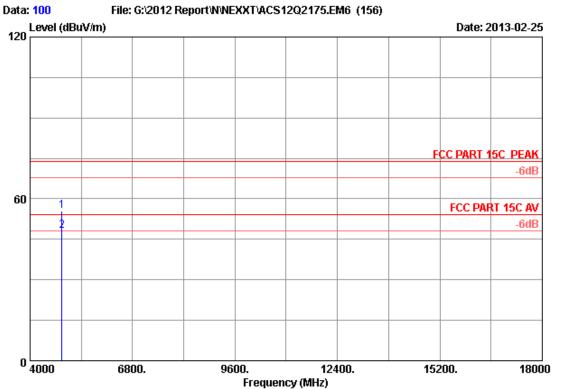
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

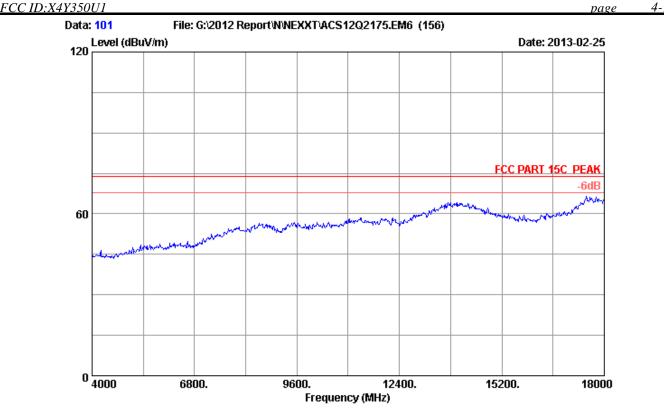
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000			35.36 35.36			74.00 54.00	18.56 5.94	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. : 101

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

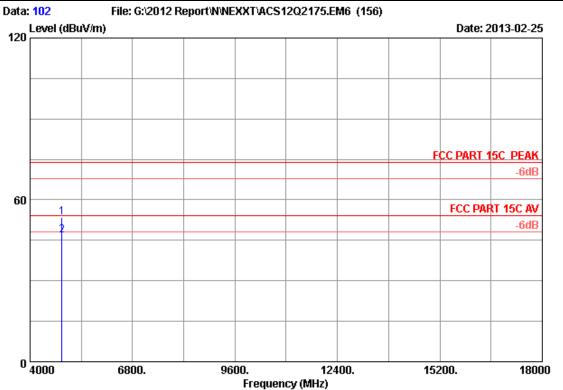
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 102

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

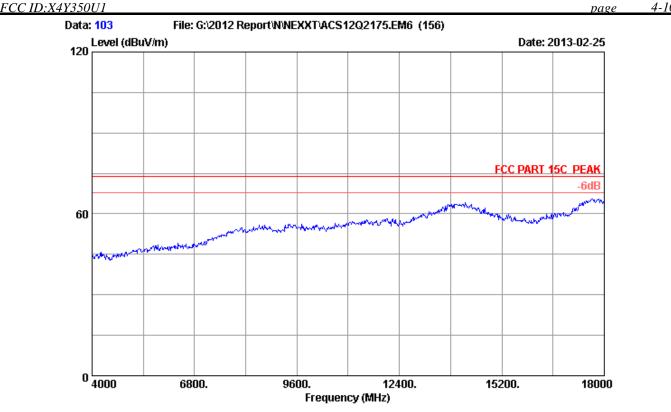
Test mode : IEEE802.11g CH6 2437MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4874.000 4874.000				42.09 35.28		74.00 54.00	20.42 7.23	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. : 103

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

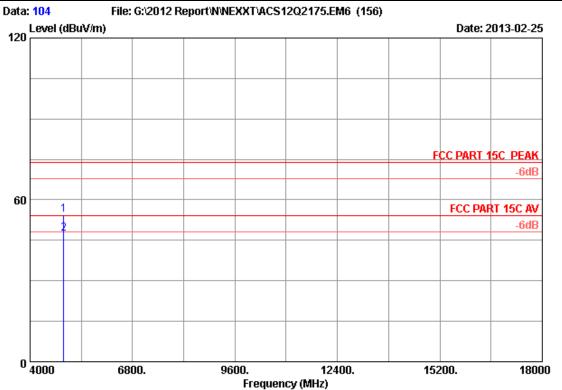
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL





Site no. : 3m Chamber Data no. : 104

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

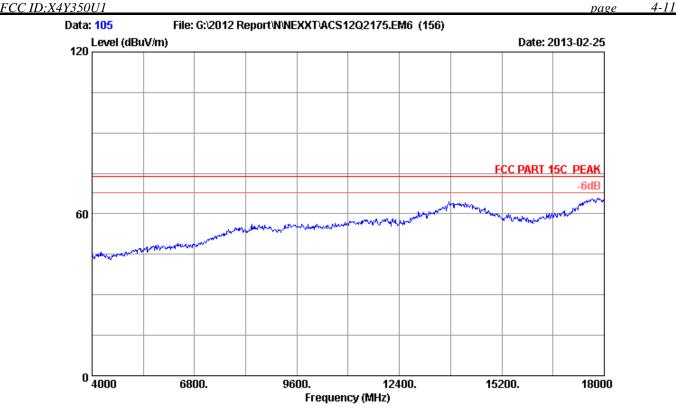
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000				42.96 35.98		74.00 54.00	19.39 6.37	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. : 105
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

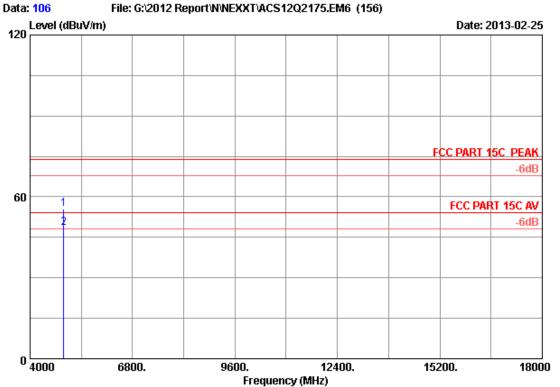
Power supply : DC 12V From Adapter Input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL







Site no. : 3m Chamber Data no. : 106 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

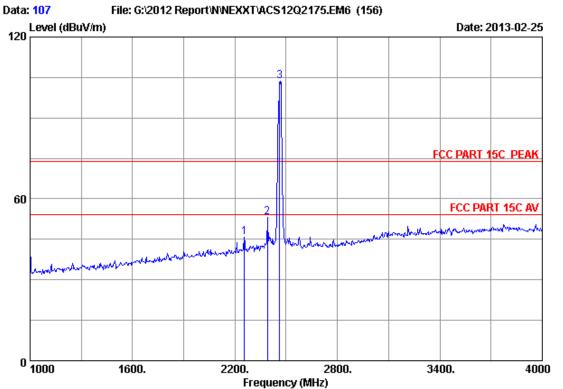
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
4924.000 4924.000		12.50 12.50		43.68 36.87	55.33 48.52	74.00 54.00	18.67 5.48	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. : 107
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

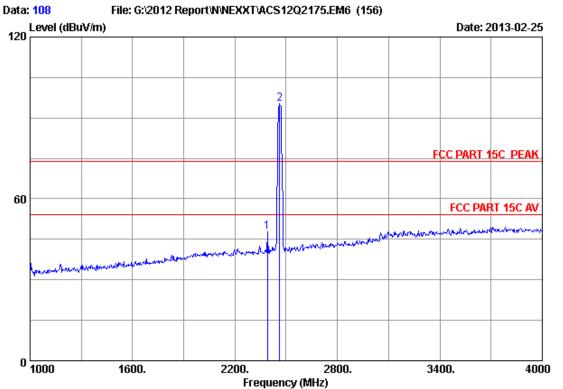
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
2	2254.000 2389.000 2462.000	29.44	8.67	35.85 36.09 36.02	43.78 51.02 101.31	45.71 53.04 103.59	74.00 74.00 74.00	28.29 20.96 -29.59	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.





Site no. : 3m Chamber Data no. : 108

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT EXTERNAL

Freq. (MHz)	Ant. Factor (dB/m)	loss	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
2389.000 2462.000		8.67 8.82	36.09 36.02	45.88 93.04		74.00 74.00	26.10 -21.32	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.



# 5. CONDUCTED SPURIOUS EMISSIONS

# 5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY5138022	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.)



EUT: 2.4GHz High Power Wireless Outdoor Access Point						
M/N: AELPLDR4U1						
Test date:2013-02-21	Pressure: 100.6±1kpa	Humidity: 56±3 %				
Tested by: Leo Li	Test site: RF site	Temperature: 25±0.6°C				

Cable loss: 0.	6dB	Attenuator loss: 20dI			
Antenna Gair	: Vertical& I	Horizontal antenna:12c	lBi Exter	nal anter	ına :9dBi
Test Mode	СН	Internal Antenna			External
Test Mode		Vertical	Horizoi	ntal	Antenna
	CH1	PASS	PASS		PASS
11b	CH6	PASS	PASS		PASS
	CH11	PASS	PASS		PASS
	CH1	PASS	PASS		PASS
11g	CH6	PASS	S PASS		PASS
	CH11	PASS	PASS		PASS
Note: See bel	CH11	PASS			

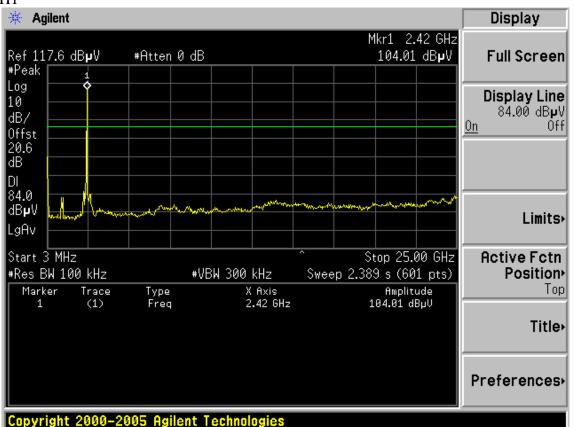


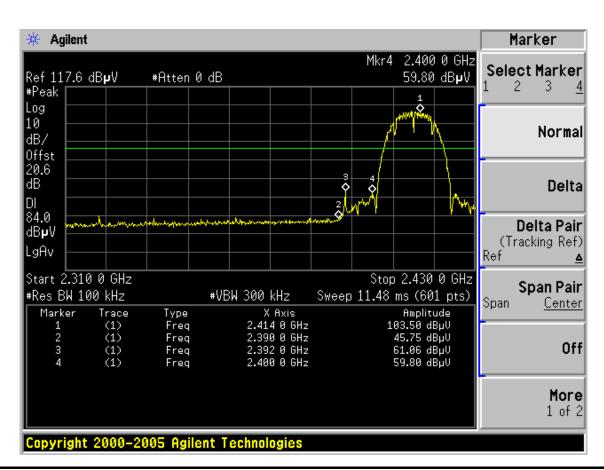
# **Conducted emission test data:**

External:

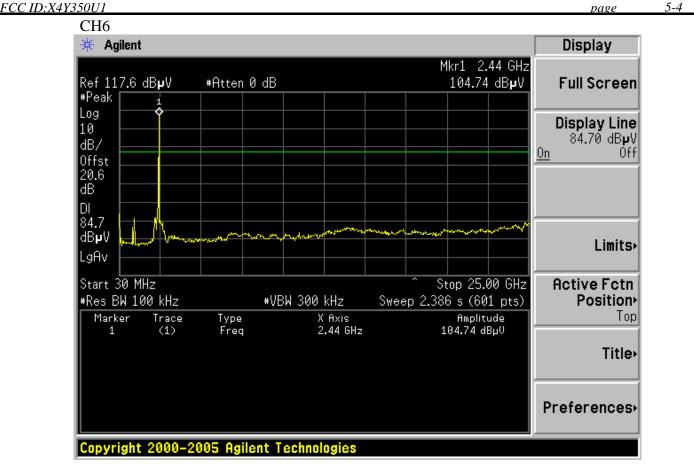
Test Mode: IEEE 802.11b TX

CH<sub>1</sub>

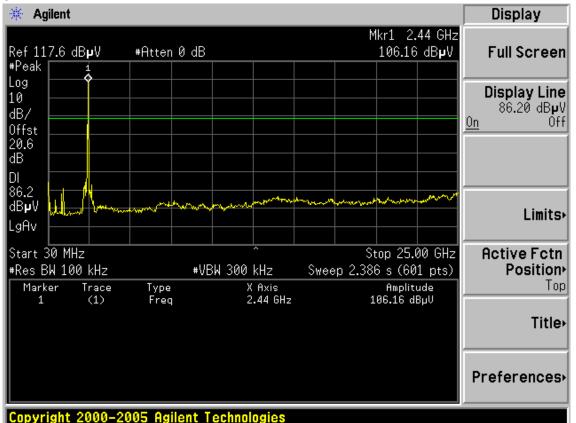












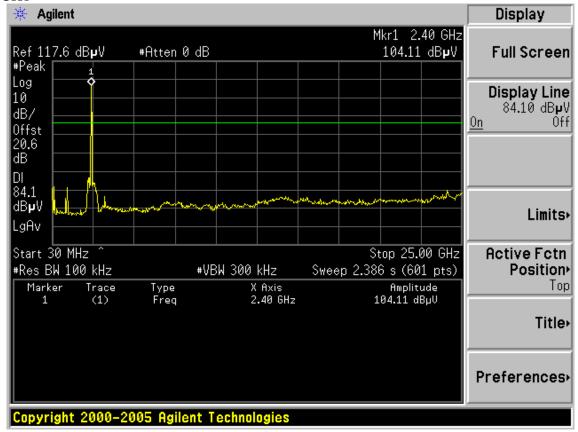


🔆 Agilent Display Mkr3 2.500 05 GHz 44.63 dB**µ**V Ref 117.6 dB**µ**V #Atten 0 dB **Full Screen** #Peak Log Display Line 10 85.70 dB**µ**V dB/ Öff Offst 20.6 dΒ DΙ 85.7 dB₽V Limits> LgAv Start 2.450 00 GHz Stop 2.505 00 GHz **Active Fctn** Sweep 5.28 ms (601 pts) #Res BW 100 kHz #VBW 300 kHz Position > Top X Axis 2.461 46 GHz 2.483 55 GHz 2.500 05 GHz Amplitude 105.70 dBµV 44.92 dBµV 44.63 dBµV Marker Trace Type (1) (1) Freq Freq Title> Freq Preferences+

Test Mode: IEEE 802.11g TX

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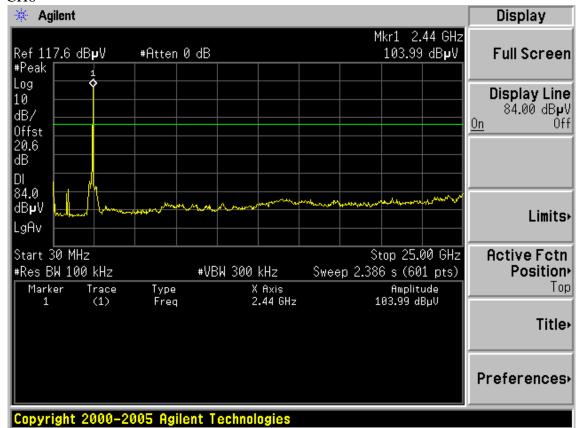
CH1





🔆 Agilent Marker Mkr4 2.400 0 GHz Select Marker #Atten 0 dB 72.66 dBpV Ref 117.6 dB**µ**V 2 3 4 #Peak Log ō 10 Normal dB/ Offst 20.6 dΒ Delta DΙ 84.1 Delta Pair dB₽V (Tracking Ref) LgAv Ref Δ Start 2.310 0 GHz Stop 2.430 0 GHz Span Pair #Res BW 100 kHz #VBW 300 kHz Sweep 11.48 ms (601 pts) Span Center X Axis 2.413 2 GHz 2.390 0 GHz 2.392 0 GHz Amplitude 104.05 dBµV Marker Trace Type (1) (1) Freq 1 2 3 51.51 dBµV 62.14 dBµV Freq Off (1) (1) Freq 2.400 0 GHz 72.66 dBµV Freq More 1 of 2 Copyright 2000-2005 Agilent Technologies

## CH6

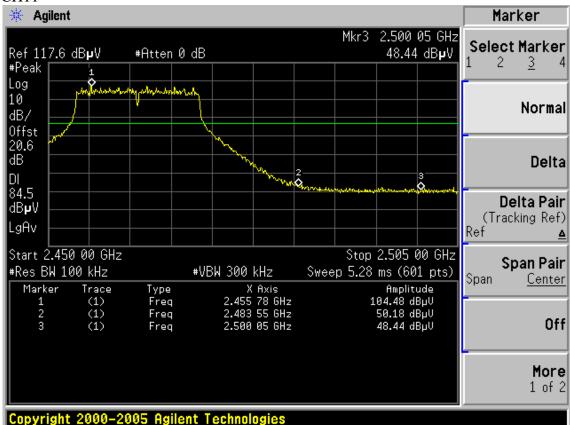




page FCC ID:X4Y350U1 Agilent Display Mkr1 2.44 GHz #Atten 0 dB 104.05 dBpV Ref 117.6 dB**µ**V **Full Screen** #Peak Log Display Line 10 84.10 dBµV dB/ Öff Offst 20.6 dΒ DΙ 84.1 dB₽V Limits> LgAv Start 30 MHz Stop 25.00 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Position > Sweep 2.386 s (601 pts) Top X Axis 2.44 GHz Amplitude 104.05 dBµV Marker Trace Type (1) Freq Title> Preferences+

## CH11

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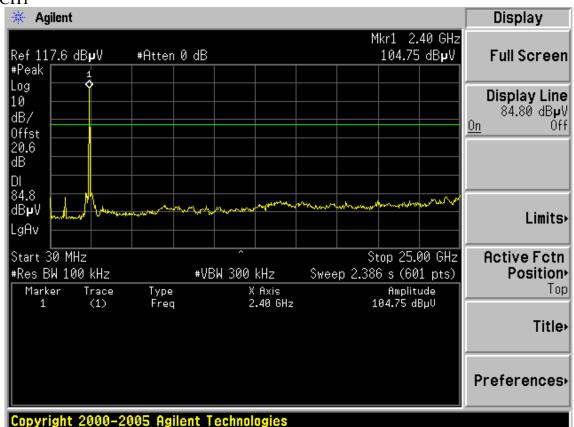


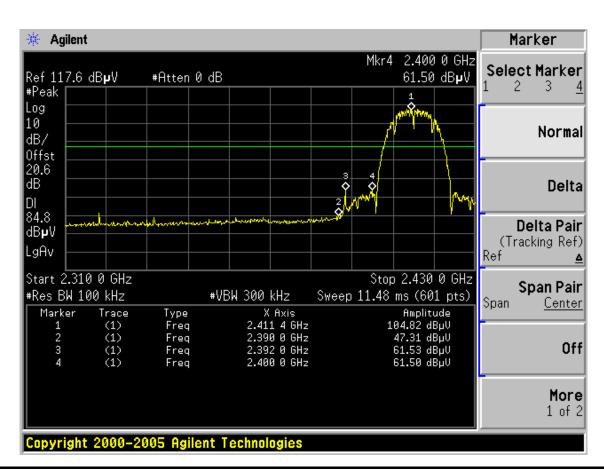


Horizontal:

Test Mode: IEEE 802.11b TX

CH<sub>1</sub>



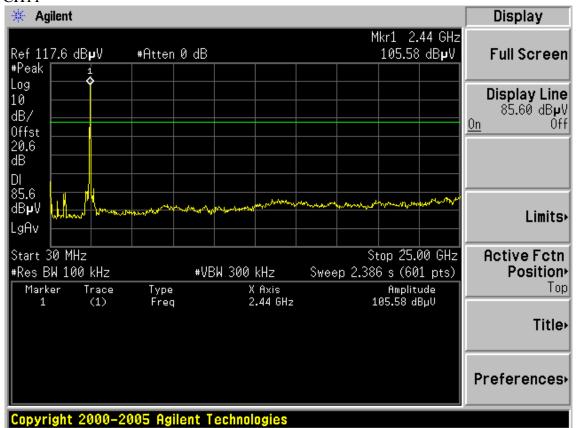




FCC ID:X4Y350U1

CH<sub>6</sub> Agilent Display Mkr1 2.44 GHz #Atten 0 dB 104.85 dB**µ**V Ref 117.6 dB**µ**V **Full Screen** #Peak Log Display Line 10 84.80 dBµV dB/ Öff Offst 20.6 dΒ DΙ 84.8 dB₽V Limits> LgAv Start 30 MHz Stop 25.00 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Position P Sweep 2.386 s (601 pts) X Axis 2.44 GHz Amplitude 104.85 dBµV Top Marker Type Freq Trace (1) 1 Title> Preferences+ Copyright 2000-2005 Agilent Technologies

## CH11





🔆 Agilent Display Mkr1 2.459 99 GHz 105.14 dBpV Ref 117.6 dB**µ**V #Atten 0 dB **Full Screen** #Peak Log MMMM Display Line 10 85.20 dBµV dB/ Öff Offst 20.6 dΒ dB₽V Limits> LgAv Start 2.450 00 GHz Stop 2.505 00 GHz **Active Fctn** Sweep 5.28 ms (601 pts) #Res BW 100 kHz #VBW 300 kHz Position > Amplitude 105.14 dBµV 43.37 dBµV 46.39 dBµV X Axis 2.459 99 GHz 2.483 55 GHz 2.500 05 GHz Top Marker Trace Type (1) (1) Freq Freq Title> Freq Preferences+

Test Mode: IEEE 802.11g TX

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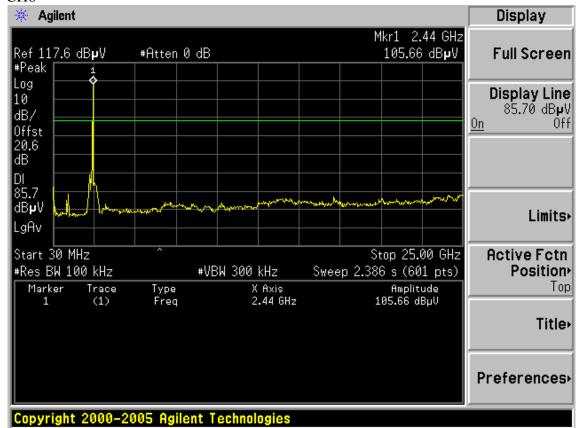
CH1 Agilent Display Mkr1 2.49 GHz Ref 117.6 dBpV 106.08 dB**µ**V #Atten 0 dB Full Screen #Peak Log Display Line 10 86.10 dB**µ**V dB/ 0n Ŏff Offst 20.6 dΒ DΙ 86.1 dB₽V Limits. LgAv Start 30 MHz Stop 25.00 GHz^ **Active Fctn** #Res BW 100 kHz Position > #VBW 300 kHz Sweep 2.386 s (601 pts) Marker X Axis 2.49 GHz Top Trace Amplitude Type (1) Freq 106.08 dBµV Title+ Preferences+ Copyright 2000-2005 Agilent Technologies



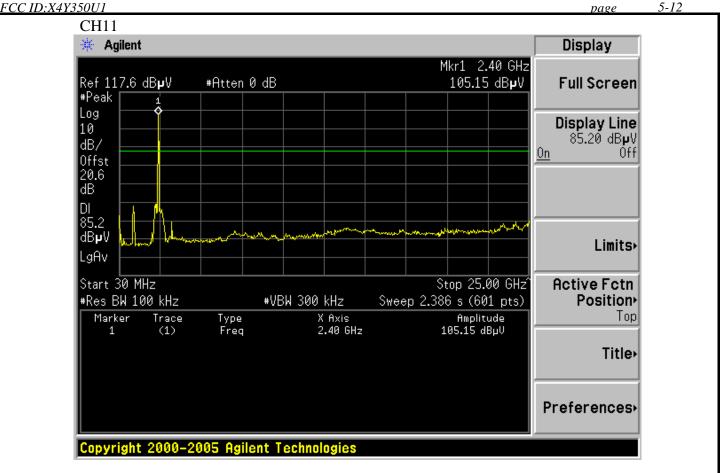
🔆 Agilent Display Mkr1 2.463 20 GHz 106.20 dBpV Ref 117.6 dB**µ**V #Atten 0 dB **Full Screen** #Peak Log Display Line 10 86.20 dBµV dB/ 0n Öff Offst 20.6 dΒ DΙ 86.2 dB⊭V Limits> LgAv Start 2.450 00 GHz Stop 2.505 00 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Sweep 5.28 ms (601 pts) Position > Amplitude 106.20 dBµV 52.05 dBµV 48.96 dBµV Top X Axis 2.463 20 GHz 2.483 55 GHz 2.500 05 GHz Marker Trace Type (1) (1) Freq Freq Title> (1) Freq Preferences+

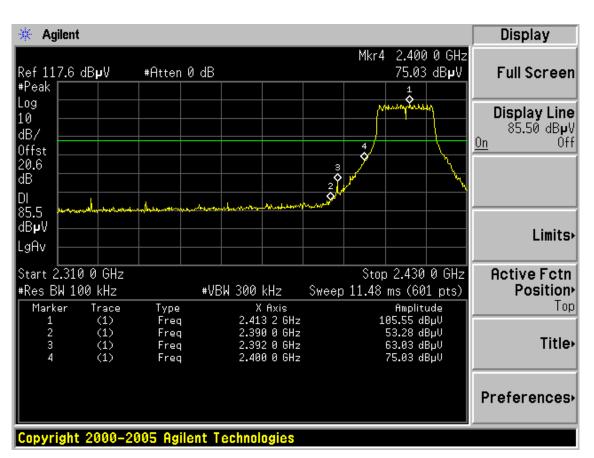
## CH6

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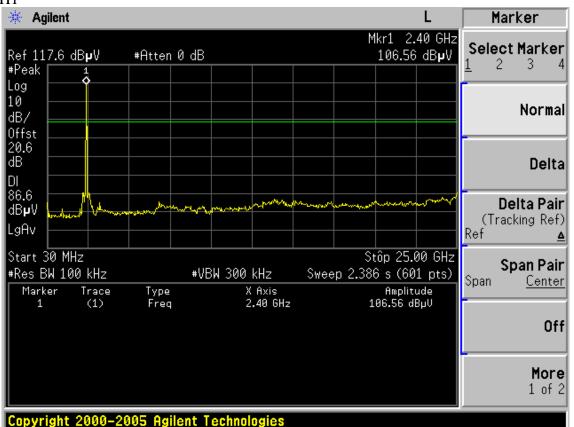


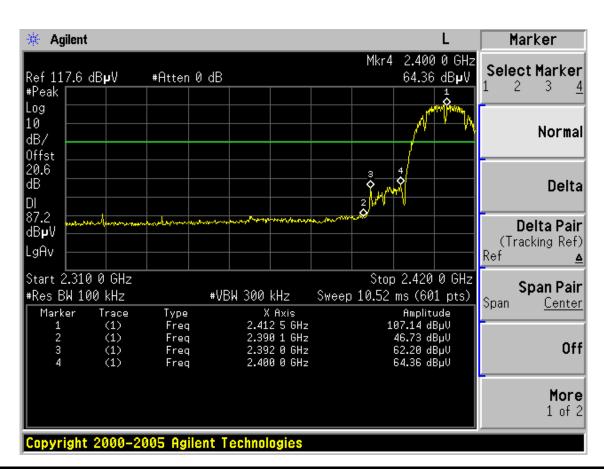


Vertical:

Test Mode: IEEE 802.11b TX

CH<sub>1</sub>



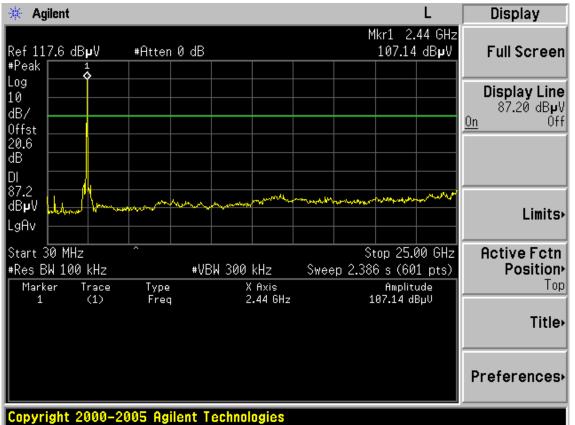




FCC ID:X4Y350U1

CH<sub>6</sub> Agilent Display Mkr1 2.44 GHz #Atten 0 dB 104.62 dBpV Ref 117.6 dB**µ**V **Full Screen** #Peak Log Display Line 10 84.60 dBµV dB/ 0n Öff Offst 20.6 dΒ 84.6 dB⊭V Limits> LgAv Start 30 MHz Stop 25.00 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Position > Sweep 2.386 s (601 pts) Top Type Freq X Axis 2.44 GHz Amplitude 104.62 dBµV Marker Trace (1) 1 Title> Preferences+ Copyright 2000-2005 Agilent Technologies



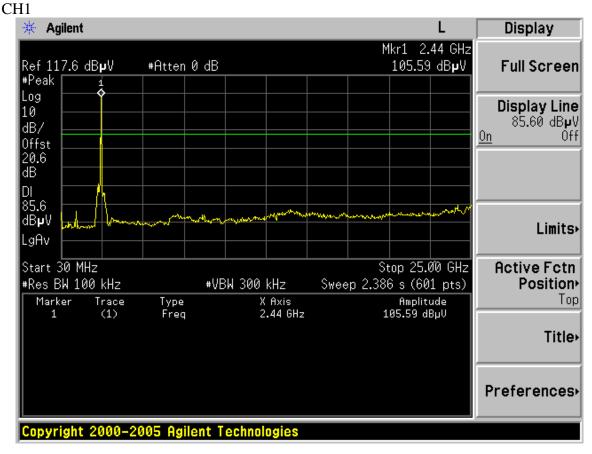




🔆 Agilent Marker Mkr3 2.500 05 GHz Select Marker 44.17 dBpV Ref 117.6 dB**µ**V #Atten 0 dB 2 3 #Peak Log 10 Normal dB/ Offst 20.6 dΒ Delta DΙ 87.1 dB**µ**V Delta Pair (Tracking Ref) LgAv Ref Start 2.450 00 GHz Stop 2.505 00 GHz Span Pair #Res BW 100 kHz #VBW 300 kHz Sweep 5.28 ms (601 pts) Span Center Amplitude 107.44 dBµV 44.63 dBµV 44.17 dBµV X Axis 2.463 48 GHz 2.483 55 GHz 2.500 05 GHz Type Freq Marker Trace (1) (1) Freq Off Freq More 1 of 2

Test Mode: IEEE 802.11g TX

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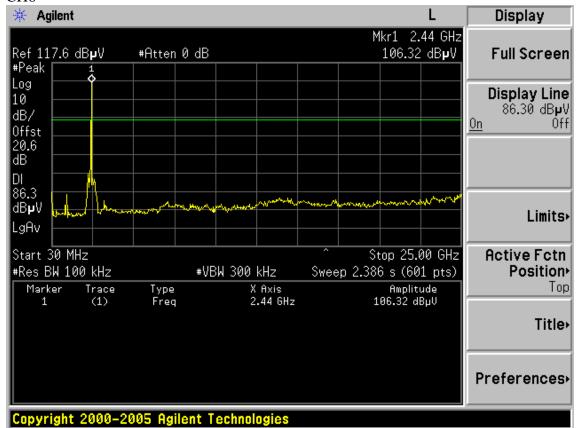




🔆 Agilent Display Mkr1 2.463 20 GHz 105.70 dBpV Ref 117.6 dB**µ**V #Atten 0 dB **Full Screen** #Peak Log Display Line 10 85.70 dB**µ**V dB/ 0n Öff Offst 20.6 dΒ DΙ 85.7 dB₽V Limits> LgAv Start 2.450 00 GHz Stop 2.505 00 GHz **Active Fctn** #Res BW 100 kHz #VBW 300 kHz Sweep 5.28 ms (601 pts) Position > Amplitude 105.70 dBµV 51.91 dBµV 49.06 dBµV Top X Axis 2.463 20 GHz 2.483 55 GHz 2.500 05 GHz Marker Trace Type (1) (1) Freq Freq Title> (1) Freq Preferences+

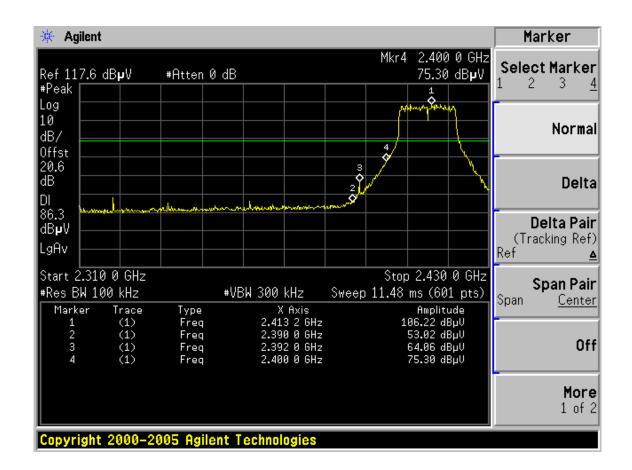
## CH6

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CH11 \* Agilent Peak Search Mkr1 2.40 GHz #Atten 0 dB 106.31 dBpV Ref 117.6 dB**µ**V Next Peak #Peak Log 10 Next Pk Right dB/ Offst 20.6 dΒ Next Pk Left DI 86.3 dB₽V Min Search LgAv Start 30 MHz Stop 25.00 GHz #Res BW 100 kHz #VBW 300 kHz Pk-Pk Search Sweep 2.386 s (601 pts) X Axis 2.40 GHz Amplitude 106.31 dBµV Type Freq Marker Trace (1) Mkr → CF More 1 of 2 Copyright 2000-2005 Agilent Technologies





# 6. BAND EDGE COMPLIANCE TEST

# 6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 12	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year

# 6.2.Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209 all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

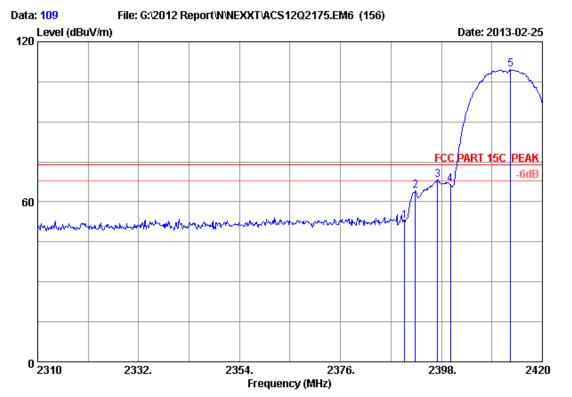
## 6.3. Test Produce

- 1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
- (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

# 6.4. Test Results

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





Site no. : 3m Chamber Data no. : 109

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

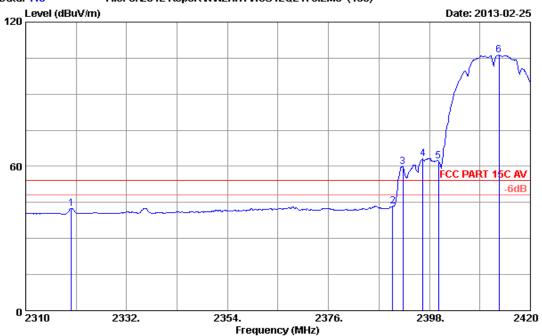
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	8.67	36.09	50.95	52.97	74.00	21.03	Peak
2	2392.280	29.44	8.67	36.09	62.12	64.14	74.00	9.86	Peak
3	2397.120	29.44	8.72	36.09	66.17	68.24	74.00	5.76	Peak
4	2400.000	29.44	8.72	36.09	64.52	66.59	74.00	7.41	Peak
5	2413.070	29.45	8.72	35.95	107.32	109.54	74.00	-35.54	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:X4Y350U1 page Data: 110 File: G:\2012 Report\N\NEXXT\ACS12Q2175.EM6 (156)



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

Data no. : 110 Ant. pol. : HORIZONTAL 3115(0911)

: FCC PART 15C AV Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

: AELPLDR4U1 M/N: ANT\_VERTICAL

	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	2319.900	29.40	8.52	36.06	40.62	42.48	54.00	11.52	Average
2	2390.000	29.44	8.67	36.09	41.31	43.33	54.00	10.67	Average
3	2392.170	29.44	8.67	36.09	57.89	59.91	54.00	-5.91	Average
4	2396.570	29.44	8.72	36.09	60.97	63.04	54.00	-9.04	Average
5	2400.000	29.44	8.72	36.09	60.10	62.17	54.00	-8.17	Average
6	2413.180	29.45	8.72	35.95	104.06	106.28	54.00	-52.28	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:X4Y350U1

Site no. : 3m Chamber Data no. : 111
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

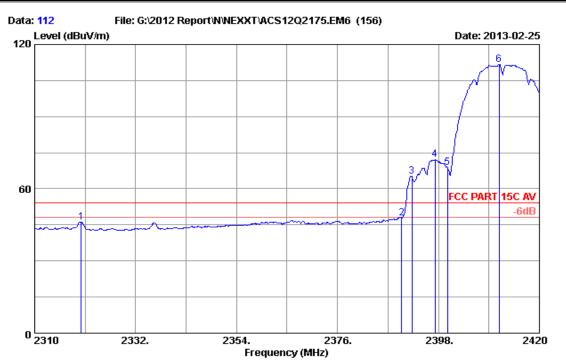
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2335.520	29.41	8.57	35.99	54.73	56.72	74.00	17.28	Peak
2	2390.000	29.44	8.67	36.09	55.79	57.81	74.00	16.19	Peak
3	2396.900	29.44	8.72	36.09	74.62	76.69	74.00	-2.69	Peak
4	2400.000	29.44	8.72	36.09	71.14	73.21	74.00	0.79	Peak
5	2413.070	29.45	8.72	35.95	112.49	114.71	74.00	-40.71	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:X4Y350U1



Site no. : 3m Chamber Data no. : 112
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

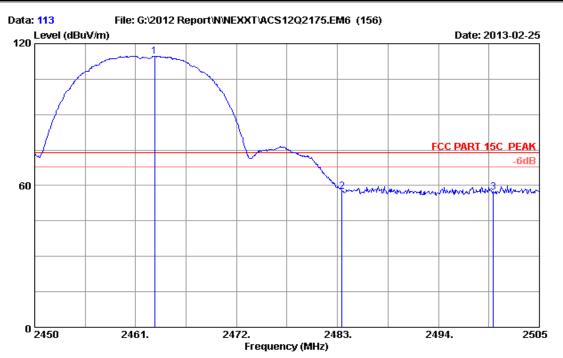
M/N : AELPLDR4U1 : ANT\_VERTICAL

	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	2320.120	29.40	8.52	36.06	44.30	46.16	54.00	7.84	Average
2	2390.000	29.44	8.67	36.09	45.91	47.93	54.00	6.07	Average
3	2392.170	29.44	8.67	36.09	63.09	65.11	54.00	-11.11	Average
4	2397.230	29.44	8.72	36.09	69.97	72.04	54.00	-18.04	Average
5	2400.000	29.44	8.72	36.09	66.82	68.89	54.00	-14.89	Average
6	2411.200	29.45	8.72	35.95	109.53	111.75	54.00	-57.75	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:X4Y350U1



Site no. : 3m Chamber Data no. : 113
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

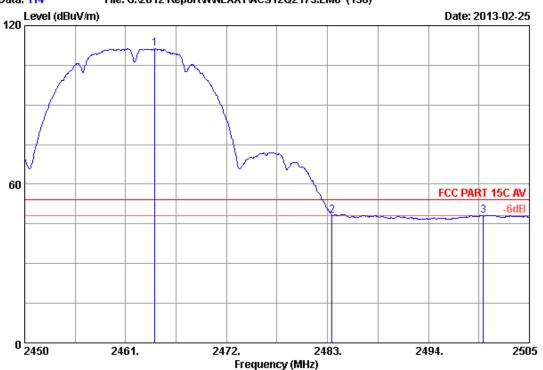
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 2 3		29.48 29.49 29.50		35.97	112.46 55.02 54.76	114.74 57.41 57.18	74.00 74.00 74.00	-40.74 16.59 16.82	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.





Site no. : 3m Chamber Data no. : 114
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

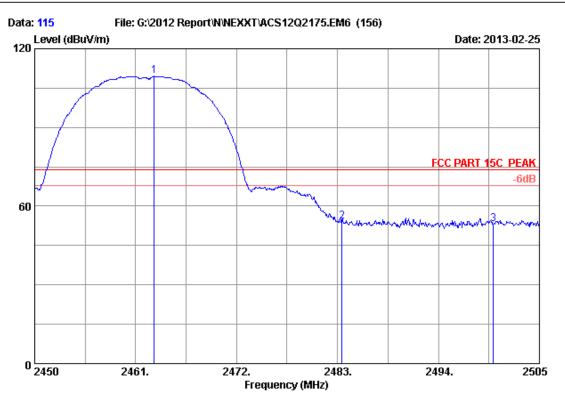
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
1	2464.190	29.48	8.82	36.02	109.05	111.33	54.00	-57.33	Average
2	2483.500	29.49	8.87	35.97	45.88	48.27	54.00	5.73	Average
3	2500.000	29.50	8.92	36.00	45.56	47.98	54.00	6.02	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
Dis. / Ant. : 3m 3115(0911)

Data no. : 115 Ant. pol. : HORIZONTAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

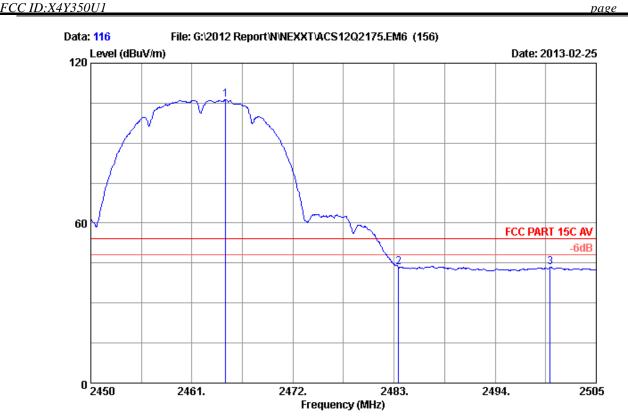
Test mode : IEEE802.11b CH11 2462MHz Tx

: AELPLDR4U1 M/N : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	2463.035	29.48	8.87	36.02	107.20	109.48	74.00	-35.48	Peak
2	2483.500	29.49		35.97	51.90	54.29	74.00	19.71	Peak
3	2500.000	29.50		36.00	50.64	53.06	74.00	20.94	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. : 116

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

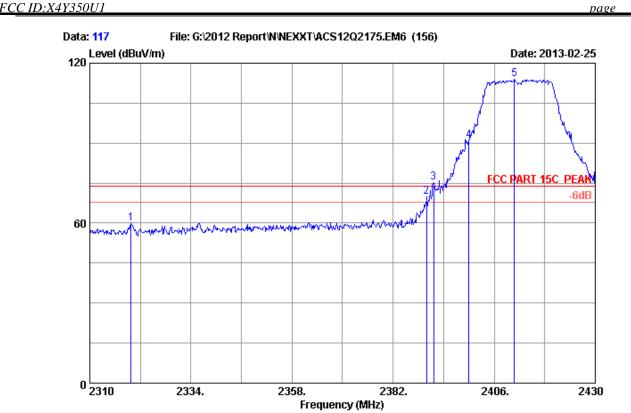
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	2464.685	29.48	8.82	36.02	103.97	106.25	54.00	-52.25	Average
2	2483.500	29.49	8.87	35.97	41.01	43.40	54.00	10.60	Average
3	2500.000	29.50	8.92	36.00	41.05	43.47	54.00	10.53	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. : 117

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

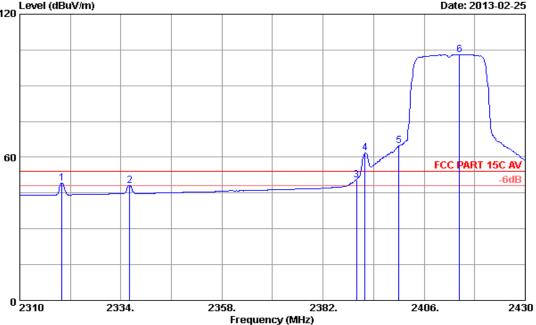
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	_
1	2319.840	29.40	8.52	36.06	57.93	59.79	74.00	14.21	Peak	
2	2390.000	29.44	8.67	36.09	67.87	69.89	74.00	4.11	Peak	
3	2391.600	29.44	8.67	36.09	73.34	75.36	74.00	-1.36	Peak	
4	2400.000	29.44	8.72	36.09	88.85	90.92	74.00	-16.92	Peak	
5	2410.800	29.45	8.72	35.95	111.75	113.97	74.00	-39.97	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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| Data: 118 | File: G:\2012 Report\N\NEXXT\ACS12Q2175.EM6 (156) | | Date: 2013-02-25 | | Date: 2013



Site no. : 3m Chamber Data no. : 118
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

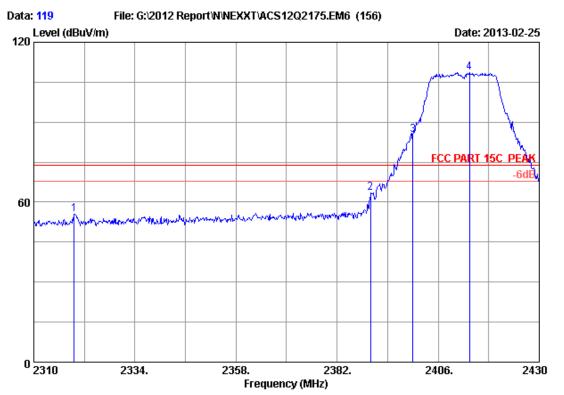
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	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	2319.960	29.40	8.52	36.06	47.26	49.12	54.00	4.88	Average
2	2336.040	29.41	8.57	35.99	46.24	48.23	54.00	5.77	Average
3	2390.000	29.44	8.67	36.09	48.56	50.58	54.00	3.42	Average
4	2391.960	29.44	8.67	36.09	59.82	61.84	54.00	-7.84	Average
5	2400.000	29.44	8.72	36.09	62.64	64.71	54.00	-10.71	Average
6	2414.400	29.45	8.72	35.95	100.79	103.01	54.00	-49.01	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. : 119

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

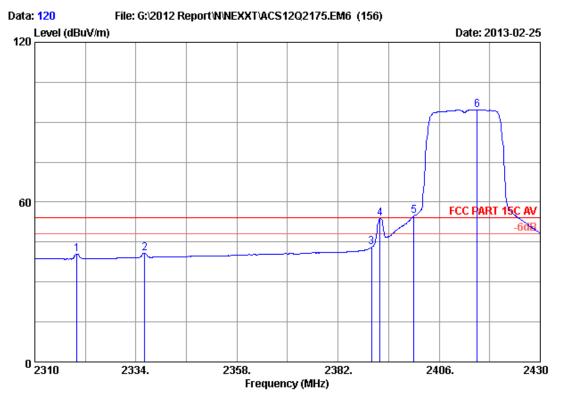
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 2	2319.600 2390.000	29.40 29.44	8.52 8.67	36.06 36.09	53.70 61.46	55.56 63.48	74.00 74.00	18.44 10.52	Peak Peak
3 4		29.44 29.45	8.72 8.72	36.09 35.95	83.05 106.31	85.12 108.53		-11.12 -34.53	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
Dis. / Ant. : 3m 3115(0911) Data no. : 120

Ant. pol. : HORIZONTAL

: FCC PART 15C AV Limit

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

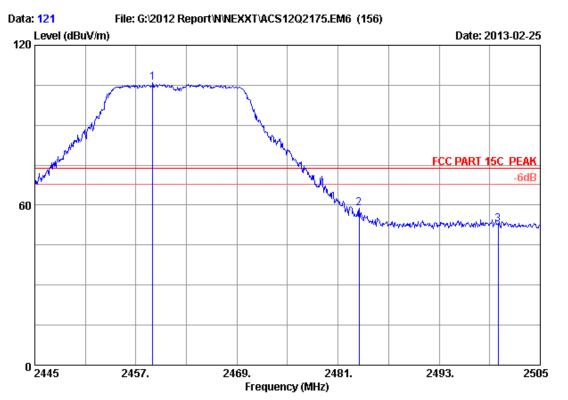
M/N: AELPLDR4U1 : ANT\_VERTICAL

	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	2319.960	29.40	8.52	36.06	38.69	40.55	54.00	13.45	Average
2	2336.040	29.41	8.57	35.99	38.83	40.82	54.00	13.18	Average
3	2390.000	29.44	8.67	36.09	41.06	43.08	54.00	10.92	Average
4	2391.960	29.44	8.67	36.09	51.90	53.92	54.00	0.08	Average
5	2400.000	29.44	8.72	36.09	52.91	54.98	54.00	-0.98	Average
6	2415.000	29.45	8.72	35.95	92.44	94.66	54.00	-40.66	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.



page FCC ID:X4Y350U1



Site no. : 3m Chamber Data no. : 121

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

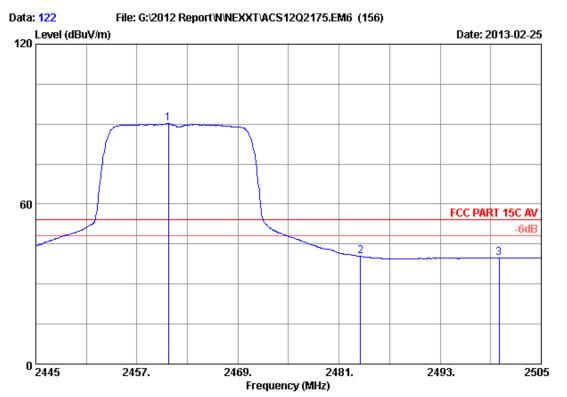
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)		Limits (dBuV/m)	_	Remark
2	2458.980 2483.500 2500.000	29.49	8.87	36.02 35.97 36.00	103.54 56.57 50.40	105.82 58.96 52.82	74.00 74.00 74.00	-31.82 15.04 21.18	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.





Site no. : 3m Chamber Data no. : 122

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

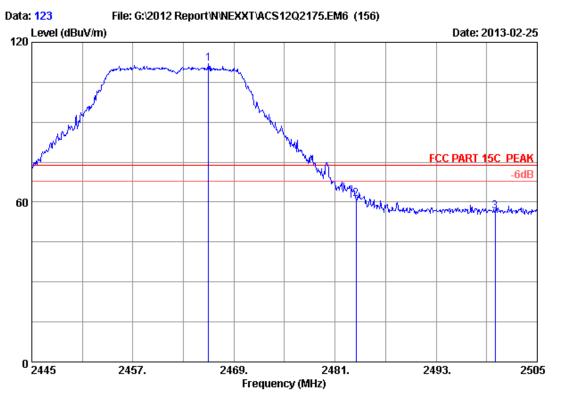
M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.720	29.48	8.82	36.02	88.00	90.28	54.00	-36.28	Average
2	2483.530	29.49	8.87	35.97	38.01	40.40	54.00	13.60	Average
3	2500.000	29.50	8.92	36.00	37.39	39.81	54.00	14.19	Average

### Demarks

- 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. : 123
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2466.000 2483.500 2500.000	29.49	8.87	36.02 35.97 36.00	109.53 58.73 54.15	111.81 61.12 56.57	74.00 74.00 74.00	-37.81 12.88 17.43	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.



<u>page</u> FCC ID:X4Y350U1



Site no. : 3m Chamber Data no. : 124 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C AV Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

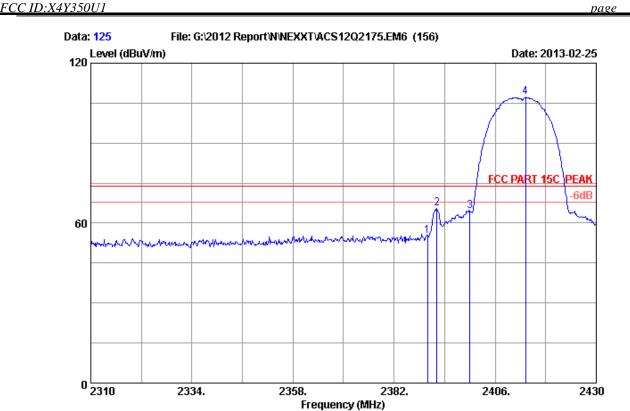
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_VERTICAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.780	29.48	8.82	36.02	99.71	101.99	54.00	-47.99	Average
2	2483.500	29.49	8.87	35.97	47.40	49.79	54.00	4.21	Average
3	2500.000	29.50	8.92	36.00	44.31	46.73	54.00	7.27	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. : 125

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

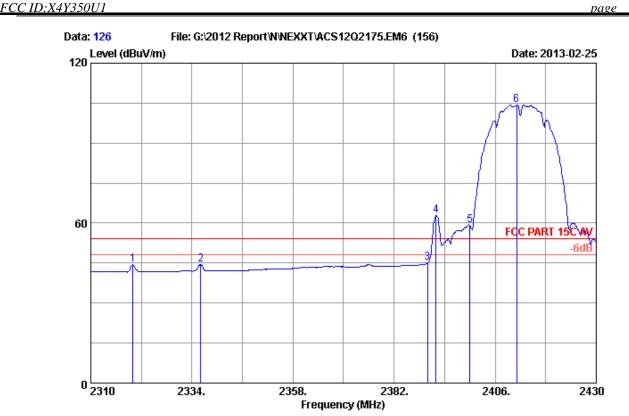
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	8.67	36.09	53.25	55.27	74.00	18.73	Peak
2	2392.200		8.67	36.09	63.57	65.59	74.00	8.41	Peak
3	2400.000		8.72	36.09	62.32	64.39	74.00	9.61	Peak
4	2413.200		8.72	35.95	104.92	107.14	74.00	-33.14	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. : 126

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

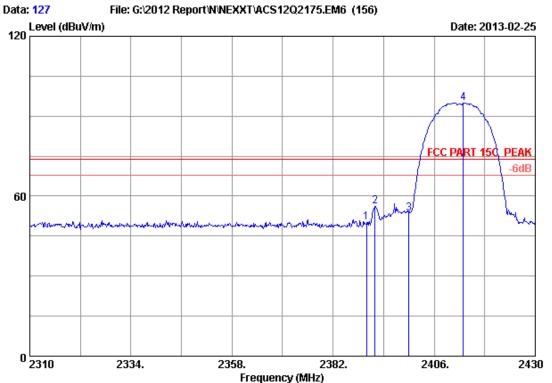
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	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	2319.960	29.40	8.52	36.06	42.43	44.29	54.00	9.71	Average
2	2336.040	29.41	8.57	35.99	42.50	44.49	54.00	9.51	Average
3	2390.000	29.44	8.67	36.09	42.96	44.98	54.00	9.02	Average
4	2391.960	29.44	8.67	36.09	60.75	62.77	54.00	-8.77	Average
5	2400.000	29.44	8.72	36.09	56.97	59.04	54.00	-5.04	Average
6	2411.160	29.45	8.72	35.95	102.17	104.39	54.00	-50.39	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. : 127 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point EUT

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

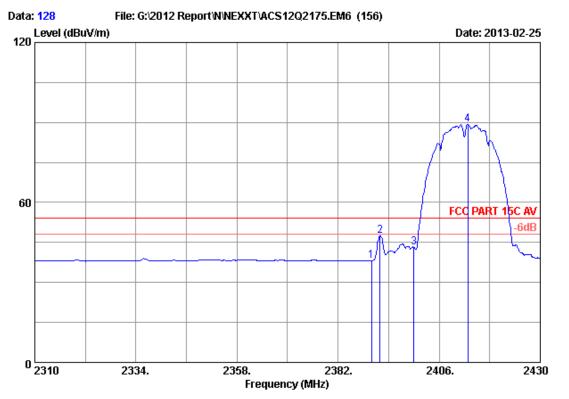
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits	Margin (dB)	Remark
	29.44	8.67	36.09	48.09	50.11	74.00	23.89	Peak
	29.44	8.67	36.09	54.15	56.17	74.00	17.83	Peak
2400.000	29.44	8.72	36.09	51.56	53.63	74.00	20.37	Peak
2412.960	29.45	8.72	35.95	92.82	95.04	74.00	-21.04	Peak
	(MHz)  2390.000 2391.960	Freq. Factor (MHz) (dB/m) 	Freq. Factor loss (MHz) (dB/m) (dB) 	Freq. Factor loss Factor (MHz) (dB/m) (dB) (dB) (2390.000 29.44 8.67 36.09 2391.960 29.44 8.72 36.09 2400.000 29.44 8.72 36.09	Freq. Factor loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBuV)  2390.000 29.44 8.67 36.09 48.09 2391.960 29.44 8.67 36.09 54.15 2400.000 29.44 8.72 36.09 51.56	Freq. Factor loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)  2390.000 29.44 8.67 36.09 48.09 50.11 2391.960 29.44 8.67 36.09 54.15 56.17 2400.000 29.44 8.72 36.09 51.56 53.63	Freq. Factor loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m)  2390.000 29.44 8.67 36.09 48.09 50.11 74.00 2391.960 29.44 8.67 36.09 54.15 56.17 74.00 2400.000 29.44 8.72 36.09 51.56 53.63 74.00	Freq. Factor loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB)  2390.000 29.44 8.67 36.09 48.09 50.11 74.00 23.89 2391.960 29.44 8.67 36.09 54.15 56.17 74.00 17.83 2400.000 29.44 8.72 36.09 51.56 53.63 74.00 20.37

- 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. : 128
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

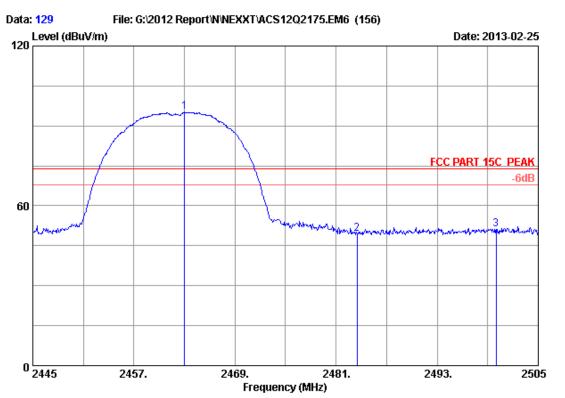
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

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 2390.000	29.44	8.67	36.09	36.10	38.12	54.00	15.88	Average
2 2391.960	29.44	8.67	36.09	45.45	47.47	54.00	6.53	Average
3 2400.000	29.44	8.72	36.09	41.19	43.26	54.00	10.74	Average
4 2412.840	29.45	8.72	35.95	87.00	89.22	54.00	-35.22	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. : 129
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

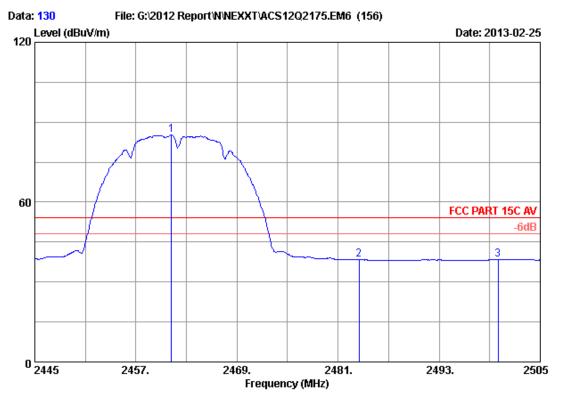
M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq. (MHz)	Ant. Factor (dB/m)		Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	2463.000	29.48	 36.02	92.82	95.10	74.00	-21.10	Peak
2	2483.500	29.49	35.97	47.25	49.64	74.00	24.36	Peak
3	2500.000	29.50	36.00	48.60	51.02	74.00	22.98	Peak

### Demarke.

- 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. : 130
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

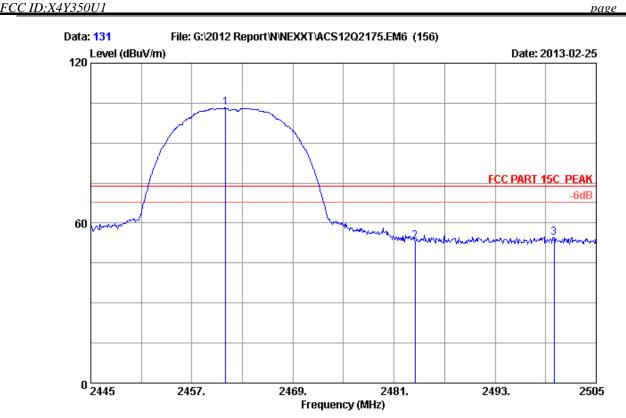
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	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	2461.200	29.48	8.82	36.02	82.87	85.15	54.00	-31.15	Average
2	2483.500	29.49	8.87	35.97	35.95	38.34	54.00	15.66	Average
3	2500.000	29.50	8.92	36.00	35.95	38.37	54.00	15.63	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. : 131

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

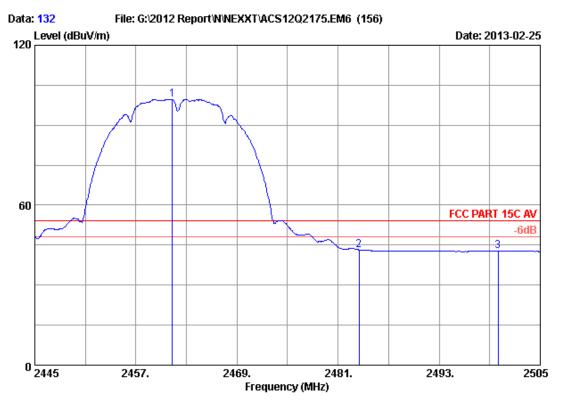
M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)		5	Remark
2		29.48 29.49 29.50	8.87	36.02 35.97 36.00	100.88 50.70 52.21	103.16 53.09 54.63	74.00 74.00 74.00	-29.16 20.91 19.37	Peak Peak Peak

### Demarks:

- 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. : 132

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C AV Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point EUT

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

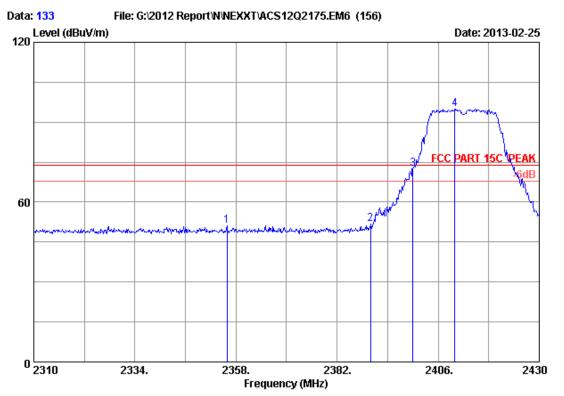
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	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	2461.320	29.48	8.82	36.02	97.41	99.69	54.00	-45.69	Average
2	2483.500	29.49	8.87	35.97	40.87	43.26	54.00	10.74	Average
3	2500.000	29.50	8.92	36.00	40.39	42.81	54.00	11.19	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.





Site no. : 3m Chamber Data no. : 133
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

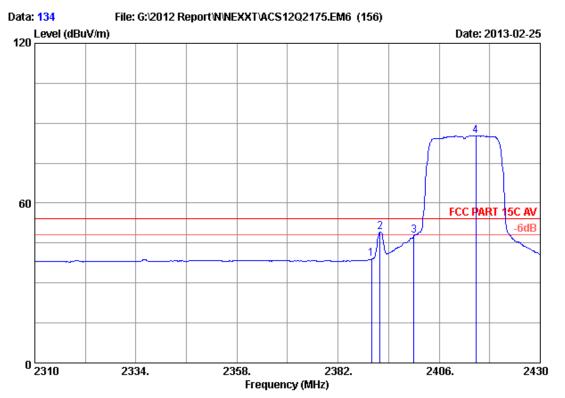
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 2355.840 2 2390.000 3 2400.000 4 2409.960	29.44 29.44	8.67 8.72	35.91 36.09 36.09 35.95	49.11 49.63 70.62 92.76	51.24 51.65 72.69 94.98	74.00 74.00 74.00 74.00	22.76 22.35 1.31 -20.98	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.





Site no. : 3m Chamber Data no. : 134
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

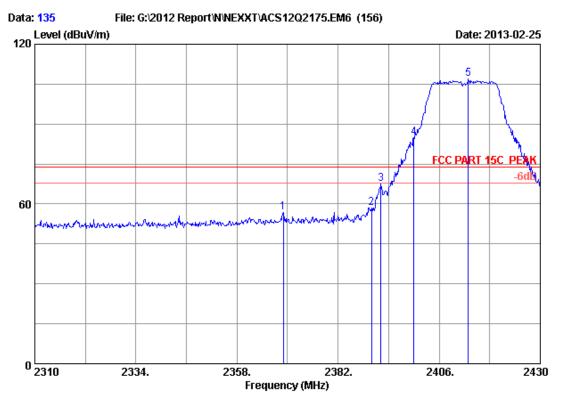
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Ant eq. Fact Hz) (dB,		Factor (dB)	Reading (dBuV)	Level (dBuV/n	Limits	Margin m) (dB)	Remark
1 2390 2 2391 3 2400 4 2414	.960 29.	44 8.67 44 8.72	36.09 36.09	36.95 47.20 45.67 83.18	38.97 49.22 47.74 85.40	54.00 54.00 54.00 54.00	15.03 4.78 6.26 -31.40	Average Average Average 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. : 135

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

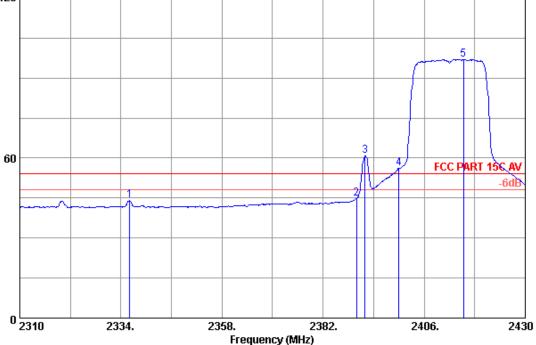
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT HORIZONTAL

	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 2 3 4	2369.040 2390.000 2392.200 2400.000 2412.960	29.43 29.44 29.44 29.44	8.62 8.67 8.67 8.72 8.72	36.00 36.09 36.09 36.09 35.95	54.71 56.62 65.43 82.76 104.66	56.76 58.64 67.45 84.83		17.24 15.36 6.55 -10.83	Peak 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.





Site no. : 3m Chamber Data no. : 136

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH1 2412MHz Tx

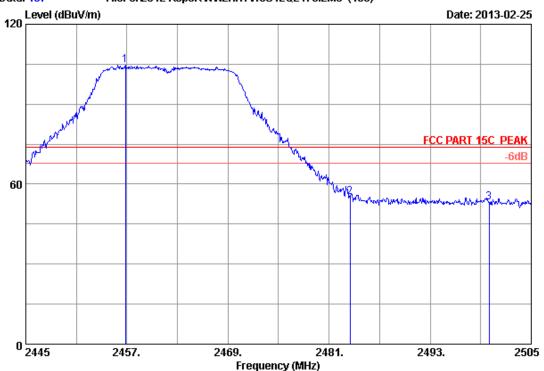
M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	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	2336.040	29.41	8.57	35.99	41.97	43.96	54.00	10.04	Average
2	2390.000	29.44	8.67	36.09	42.81	44.83	54.00	9.17	Average
3	2391.960	29.44	8.67	36.09	58.69	60.71	54.00	-6.71	Average
4	2400.000	29.44	8.72	36.09	54.16	56.23	54.00	-2.23	Average
5	2415.360	29.45	8.72	35.95	94.80	97.02	54.00	-43.02	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. : 137

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Factor	_	Emission Level (dBuV/m)	Limits	_	Remark
2	2456.820 2483.500 2500.000	29.49	8.87	36.02 35.97 36.00	102.44 52.74 50.74	104.72 55.13 53.16	74.00 74.00 74.00	-30.72 18.87 20.84	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.

2505



FCC ID:X4Y350U1

Site no. : 3m Chamber Data no. : 138

2469.

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Frequency (MHz)

2481.

2493.

Limit : FCC PART 15C AV

2457.

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

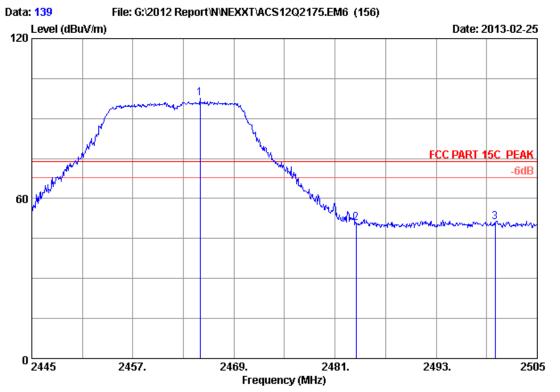
	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.380	29.48	8.82	36.02	92.83	95.11	54.00	-41.11	Average
2	2483.500	29.49	8.87	35.97	41.68	44.07	54.00	9.93	Average
3	2500.000	29.50	8.92	36.00	40.29	42.71	54.00	11.29	Average

### Remarks:

0 <u>2445</u>

- 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. : 139
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		5	Remark
2	2464.980 2483.500 2500.000	29.49	8.87	36.02 35.97 36.00	95.37 48.46 48.57	97.65 50.85 50.99	74.00 74.00 74.00	-23.65 23.15 23.01	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.



### Page | 6-33 | Page | Page



Site no. : 3m Chamber Data no. : 140
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

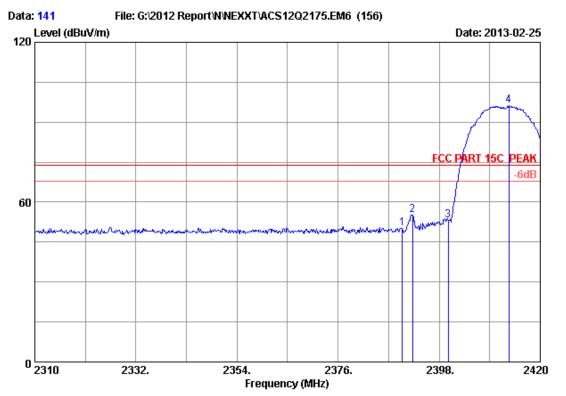
M/N : AELPLDR4U1 : ANT\_HORIZONTAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2464.200	29.48	8.82	36.02	84.87	87.15	54.00	-33.15	Average
2	2483.500	29.49	8.87	35.97	37.97	40.36	54.00	13.64	Average
3	2500.000	29.50	8.92	36.00	37.33	39.75	54.00	14.25	Average

### Demarka.

- 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
Dis. / Ant. : 3m 3115(0911) Data no. : 141

Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

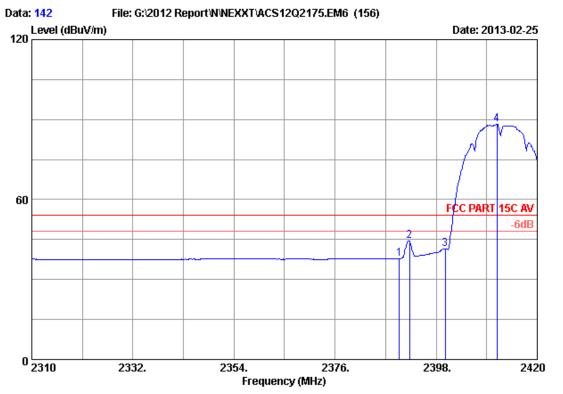
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N: AELPLDR4U1 : ANT\_EXTERNAL

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 2390.00 2 2392.17 3 2400.00 4 2413.18	0 29.44 0 29.44	8.67 8.67 8.72 8.72	36.09 36.09 36.09 35.95	48.02 53.15 51.22 93.96	50.04 55.17 53.29 96.18	74.00 74.00 74.00 74.00	23.96 18.83 20.71 -22.18	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.





Site no. : 3m Chamber Data no. : 142

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

Fre (MH	•		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2390. 2 2392. 3 2400. 4 2411.	170 29.44 000 29.44	8.67 8.72	36.09 36.09 36.09 35.95	35.87 42.55 39.39 85.98	37.89 44.57 41.46 88.20	54.00 54.00 54.00 54.00	16.11 9.43 12.54 -34.20	Average Average Average 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:X4Y350U1

Data: 143 File: G:2012 Report/NNEXXT/ACS12Q2175.EM6 (156)

Level (dBuV/m) Date: 2013-02-25

FCC PART 15C PEAK

60

0 2310 2332. 2354. 2376. 2398. 2420

Site no. : 3m Chamber Data no. : 143

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Frequency (MHz)

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

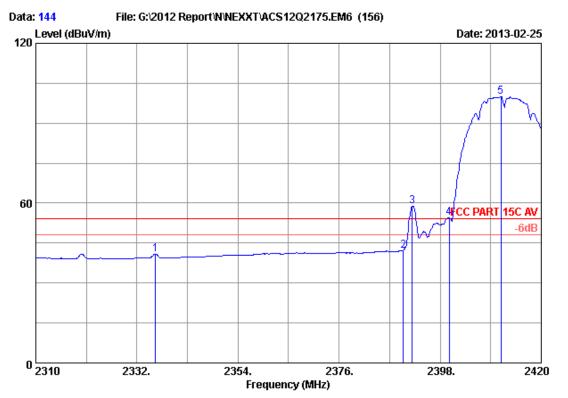
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	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	2349.270	29.41	8.62	35.99	51.43	53.47	74.00	20.53	Peak
2	2390.000	29.44	8.67	36.09	50.43	52.45	74.00	21.55	Peak
3	2392.170	29.44	8.67	36.09	59.92	61.94	74.00	12.06	Peak
4	2400.000	29.44	8.72	36.09	58.70	60.77	74.00	13.23	Peak
5	2413.070	29.45	8.72	35.95	100.60	102.82	74.00	-28.82	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. : 144
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

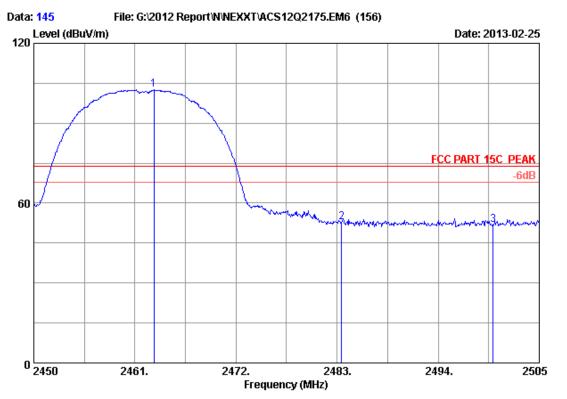
Test mode : IEEE802.11b CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	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 2 3 4 5	2336.070 2390.000 2391.950 2400.000 2411.200	29.41 29.44 29.44 29.44	8.57 8.67 8.67 8.72 8.72	35.99 36.09 36.09 36.09 35.95	38.92 40.25 56.82 52.41 97.83	40.91 42.27 58.84 54.48	54.00 54.00 54.00 54.00	13.09 11.73 -4.84 -0.48 -46.05	Average Average Average Average 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. : 145
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

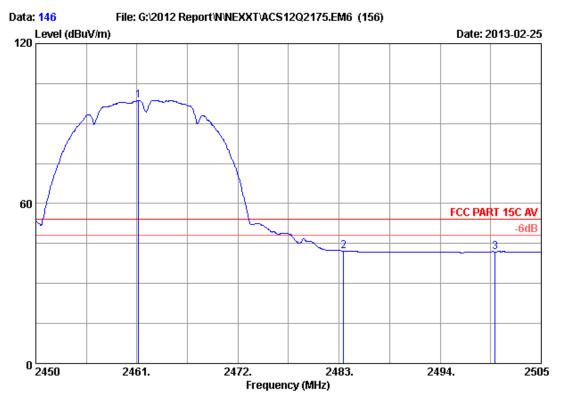
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2463.090 2483.500 2500.000	29.49	8.87	36.02 35.97 36.00	100.22 50.45 49.23	102.50 52.84 51.65	74.00 74.00 74.00	-28.50 21.16 22.35	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.





Site no. : 3m Chamber Data no. : 146
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1	2461.165	29.48	8.82	36.02	96.43	98.71	54.00	-44.71	Average
2	2483.500	29.49	8.87	35.97	39.80	42.19	54.00	11.81	Average
3	2500.000	29.50	8.92	36.00	39.49	41.91	54.00	12.09	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.

page



FCC ID:X4Y350U1

Data: 147 File: G:\2012 Report\NNEXXT\ACS12Q2175.EM6 (156)

Level (dBuV/m) Date: 2013-02-25

FCC PART 15C PEAK
60

0 2450 2461. 2472. 2483. 2494. 2505

Frequency (MHz)

Site no. : 3m Chamber Data no. : 147

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11b CH11 2462MHz Tx

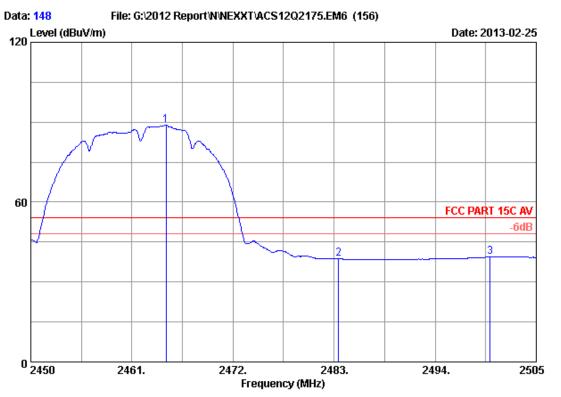
M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	 Reading (dBuV)	Emission Level (dBuV/m)			Remark
1 2 3	2463.035 2483.500 2500.000	29.48 29.49 29.50	8.87	 92.32 46.82 47.26	94.60 49.21 49.68	74.00 74.00 74.00	-20.60 24.79 24.32	Peak Peak Peak

### Demarka.

- 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 Dis. / Ant. : 3m 3115(0911) Data no. : 148

Ant. pol. : HORIZONTAL

: FCC PART 15C AV Limit

Env. / Ins. : 23 \*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

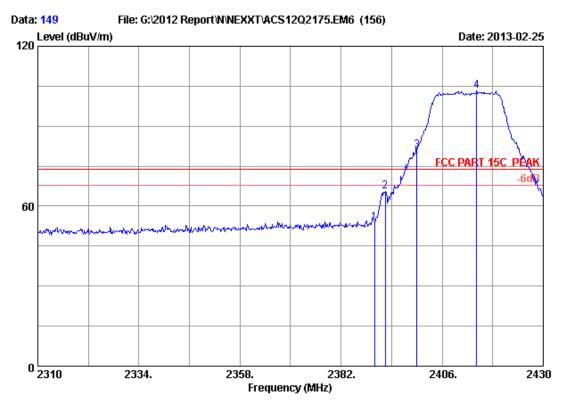
Test mode : IEEE802.11b CH11 2462MHz Tx

M/N: AELPLDR4U1 : ANT\_EXTERNAL

	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	2464.740	29.48	8.82	36.02	86.61	88.89	54.00	-34.89	Average
2	2483.500	29.49	8.87	35.97	36.27	38.66	54.00	15.34	Average
3	2500.000	29.50	8.92	36.00	36.91	39.33	54.00	14.67	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.





Site no. : 3m Chamber Data no. : 149 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

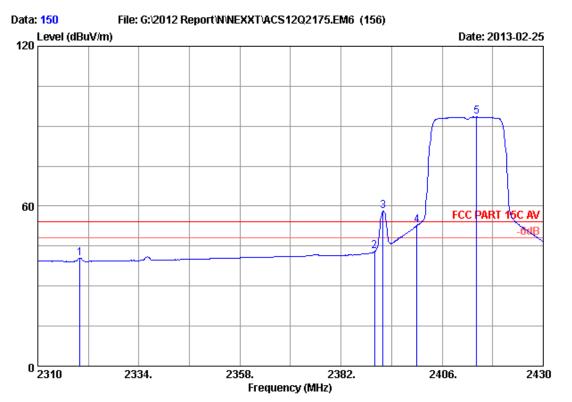
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark	
1 2390.000 2 2392.440 3 2400.000 4 2414.160	29.44	8.67 8.67 8.72 8.72	36.09 36.09 36.09 35.95	51.69 63.35 78.80 101.13	53.71 65.37 80.87 103.35	74.00 74.00 74.00 74.00	20.29 8.63 -6.87 -29.35	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.





Site no. : 3m Chamber Data no. : 150 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C AV Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

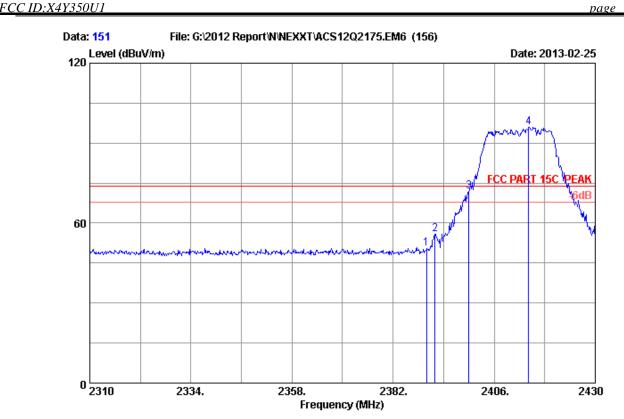
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2 23 3 23 4 24	19.960 90.000 91.960 00.000	29.40 29.44 29.44 29.44 29.45	8.52 8.67 8.67 8.72 8.72	36.06 36.09 36.09 36.09 35.95	38.67 40.93 56.10 50.74 91.22	40.53 42.95 58.12 52.81 93.44	54.00 54.00 54.00 54.00 54.00	13.47 11.05 -4.12 1.19 -39.44	Average Average Average Average 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. : 151

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

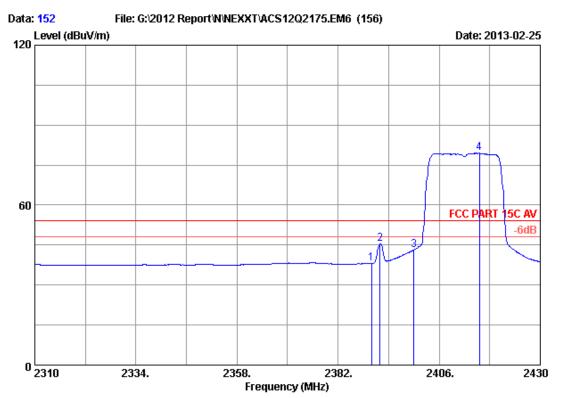
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	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	2390.000	29.44	8.67	36.09	48.44	50.46	74.00	23.54	Peak
2	2391.960	29.44	8.67	36.09	53.85	55.87	74.00	18.13	Peak
3	2400.000	29.44	8.72	36.09	69.83	71.90	74.00	2.10	Peak
4	2414.160	29.45	8.72	35.95	93.78	96.00	74.00	-22.00	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. : 152

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu
EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

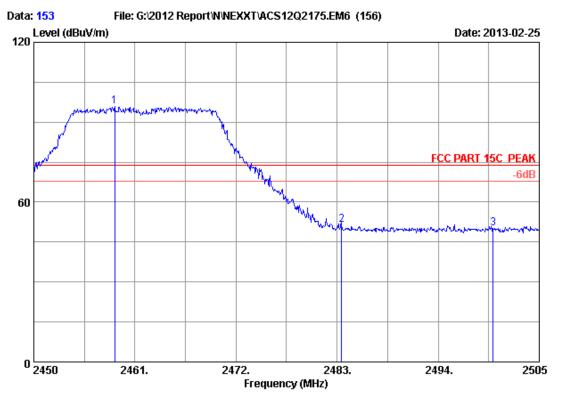
Test mode : IEEE802.11g CH1 2412MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	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	2390.000	29.44	8.67	36.09	36.06	38.08	54.00	15.92	Average
2	2391.960	29.44	8.67	36.09	43.44	45.46	54.00	8.54	Average
3	2400.000	29.44	8.72	36.09	41.15	43.22	54.00	10.78	Average
4	2415.600	29.45	8.72	35.95	77.20	79.42	54.00	-25.42	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
Dis. / Ant. : 3m 3115(0911) Data no. : 153

Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

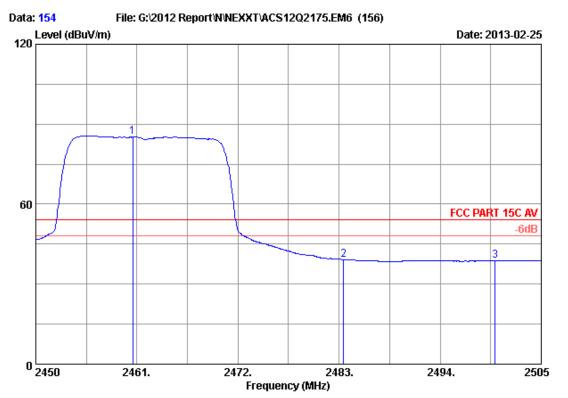
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2458.800 2483.500 2500.000		8.87	36.02 35.97 36.00	93.59 49.08 47.61	95.87 51.47 50.03	74.00 74.00 74.00	-21.87 22.53 23.97	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.





Site no. : 3m Chamber Data no. : 154

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115(0911)

Limit : FCC PART 15C AV Env. / Ins. : 23\*C/54% Engineer : Sunny-lu : 2.4GHz High Power Wireless Outdoor Access Point

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

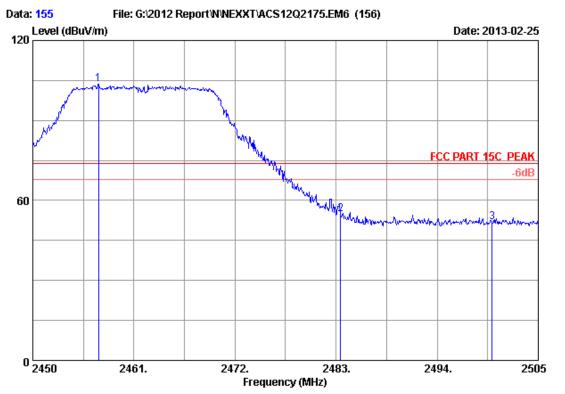
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
1	2460.560	29.48	8.82	36.02	83.00	85.28	54.00	-31.28	Average
2	2483.500	29.49	8.87	35.97	36.82	39.21	54.00	14.79	Average
3	2500.000	29.50	8.92	36.00	36.33	38.75	54.00	15.25	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. : 155
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

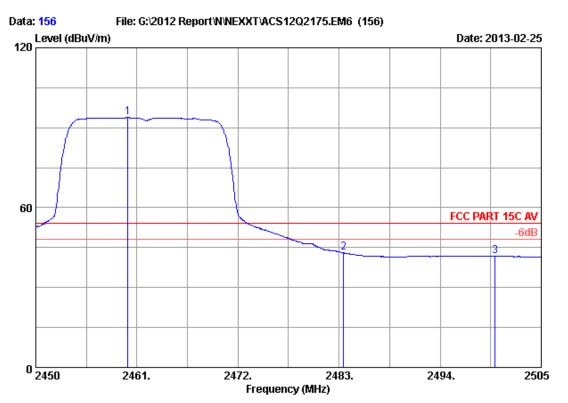
Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	 Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark	
2	2457.150 2483.500 2500.000	29.49	8.87	 101.32 52.29 49.31	103.60 54.68 51.73	74.00 74.00 74.00	-29.60 19.32 22.27	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.





Site no. : 3m Chamber Data no. : 156
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23\*C/54% Engineer : Sunny-lu EUT : 2.4GHz High Power Wireless Outdoor Access Point

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

Test mode : IEEE802.11g CH11 2462MHz Tx

M/N : AELPLDR4U1 : ANT\_EXTERNAL

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
2	2460.010	29.48	8.82	36.02	91.56	93.84	54.00	-39.84	Average
	2483.500	29.49	8.87	35.97	40.60	42.99	54.00	11.01	Average
	2500.000	29.50	8.92	36.00	39.34	41.76	54.00	12.24	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.



# 7. 6dB Bandwidth Test

# 7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY5138022	May.08, 12	1 Year
	Analyzer					
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 12	1Year
4.	HF Cable	Hubersuhner	Sucoflex104	-	May.08, 12	1 Year

## 7.2.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

## 7.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

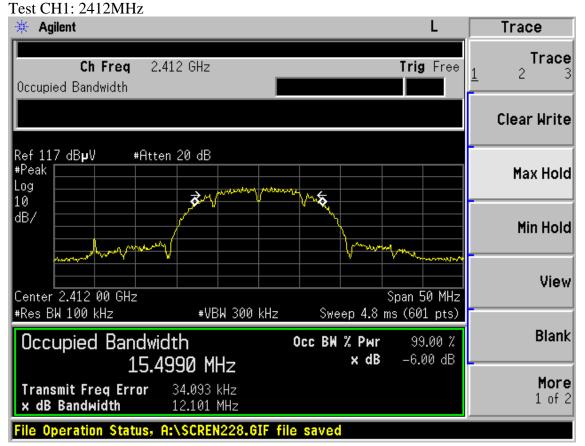


# 7.4.Test Results

EUT: 2.4GHz Hig	gh Power Wire	less Outdoor	Access Point N	M/N: AELPL	DR4U1
Test date:2013-02	2-20	Pressure: 1	00.6±1kpa	Humidity:	56±3%
Tested by: Leo Li		Test site: F	RF site	Temperature	e: 25±0.6°C
Cable loss: 0.6 dB	3	Attenuator lo	oss: 20 dB		
Antenna Gain	Vertical& Ho	orizontal :12d	Bi Externa	l :9dBi	
Antenna	Test Mode	СН	6dB bandwi ( MHz )	dth	Limit (KHz)
		CH1	12.128		>500
	11b	CH6	12.086		>500
Vertical		CH11	12.098		>500
verticai	11g	CH1	16.430		>500
		CH6	16.484		>500
		CH11	16.418		>500
		CH1	12.079		>500
	11b	CH6	12.111		>500
Horizontal		CH11	12.100		>500
Horizontai		CH1	16.445		>500
	11g	СН6	16.454		>500
		CH11	16.414		>500
		CH1	12.101		>500
	11b	СН6	12.166		>500
F / 1		CH11	12.120		>500
External		CH1	16.458		>500
	11g	СН6	16.453		>500
		CH11	16.416		>500
Conclusion: PAS	SS			•	







## Test CH6: 2437MHz



page

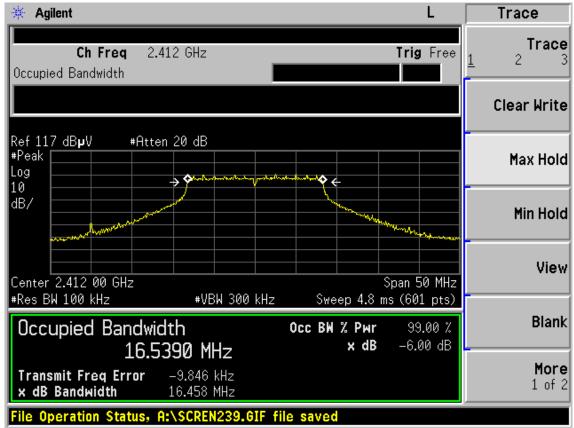


Test CH11: 2462MHz 🔆 Agilent Trace Trace Ch Freq 2.462 GHz Trig Free Occupied Bandwidth Clear Write Ref 117 dBpV #Atten 20 dB #Peak Max Hold Log ở∾√ 10 dB/ Min Hold Lyphony n Mil View Center 2.462 00 GHz Span 50 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts) Blank Occupied Bandwidth Occ BW % Pwr 99.00 % -6.00 dB x dB 15.3923 MHz More -58.376 kHz Transmit Freq Error 1 of 2 x dB Bandwidth 12.120 MHz

Test Mode: IEEE 802.11g TX

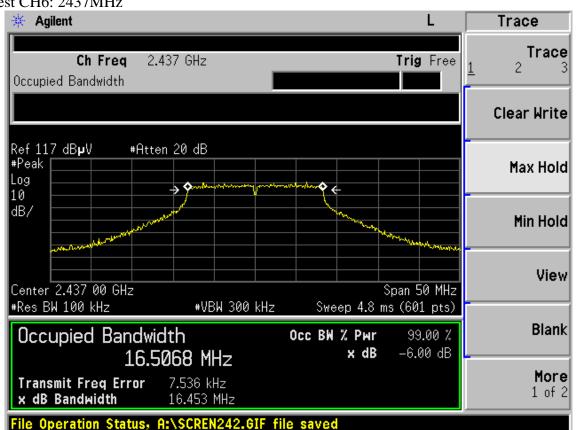
File Operation Status, A:\SCREN236.GIF file saved

Test CH1: 2412MHz

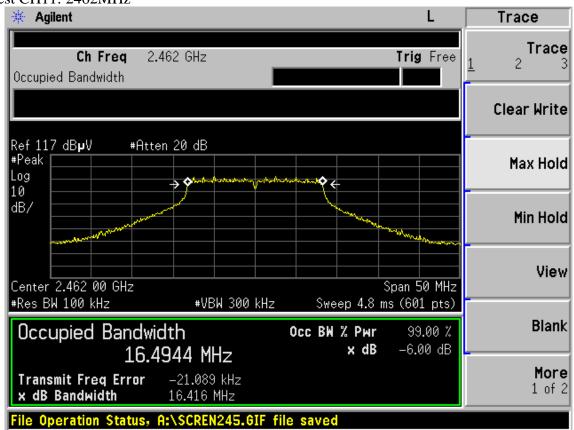




FCC ID:X4Y350U1 page 7-5
Test CH6: 2437MHz



## Test CH11: 2462MHz

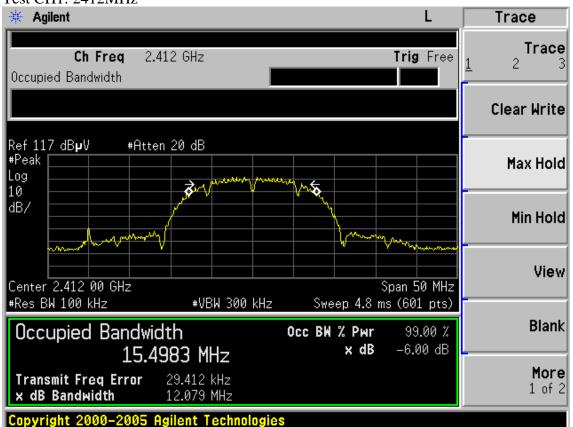




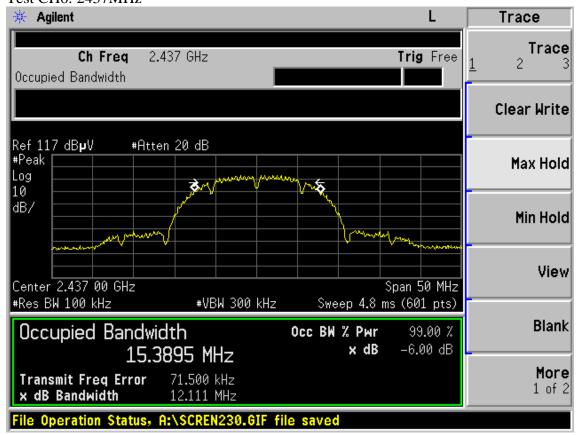
### Horizontal

Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz



Test CH6: 2437MHz



page

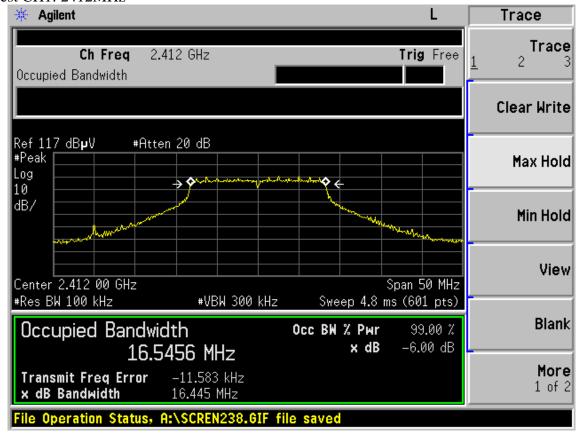


FCC ID:X4Y350U1

Test CH11: 2462MHz \* Agilent Trace Trace Ch Freq 2.462 GHz Trig Free 2 Occupied Bandwidth Clear Write Ref 117 dBpV #Atten 20 dB #Peak Max Hold Log ðΜ 10 dB/ Min Hold muning View Center 2.462 00 GHz Span 50 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 4.8 ms (601 pts) Blank Occupied Bandwidth Occ BW % Pwr 99.00 % x dB -6.00 dB 15.3660 MHz More Transmit Freg Error -47.636 kHz 1 of 2 x dB Bandwidth 12.100 MHz File Operation Status, A:\SCREN234.GIF file saved

Test Mode: IEEE 802.11g TX

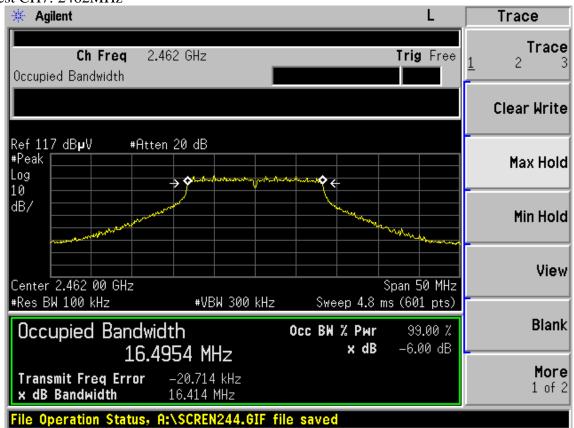
Test CH1: 2412MHz







Test CH7: 2462MHz

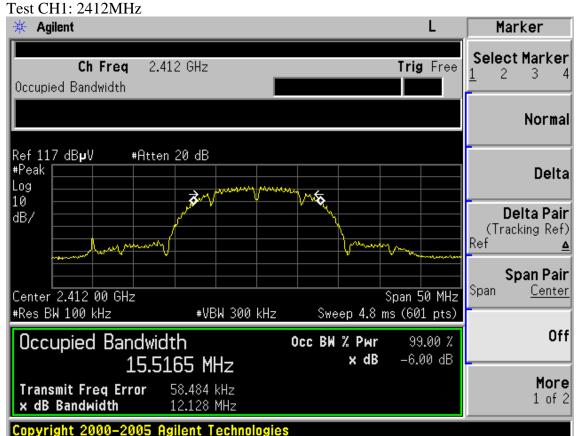




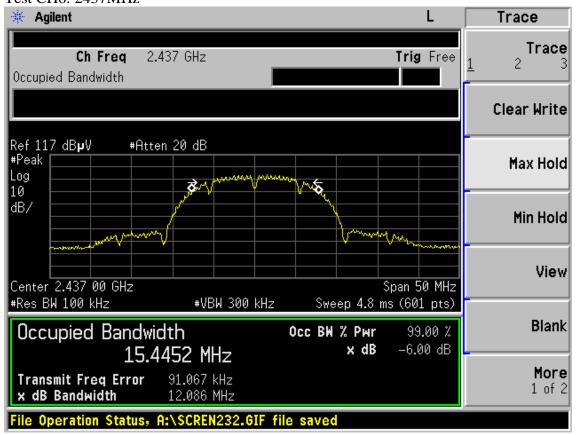
FCC ID:X4Y350U1 page 7-9

Vertical

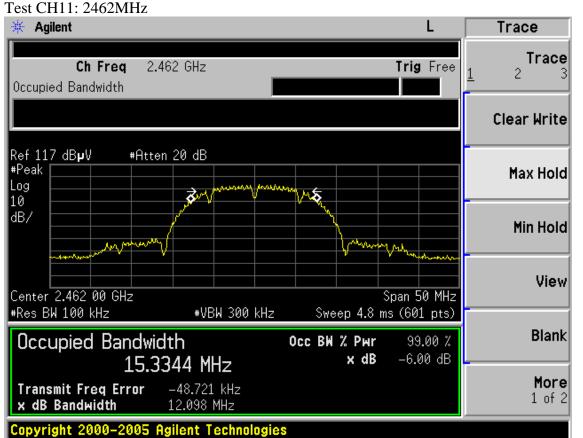
# Test Mode: IEEE 802.11b TX



Test CH6: 2437MHz

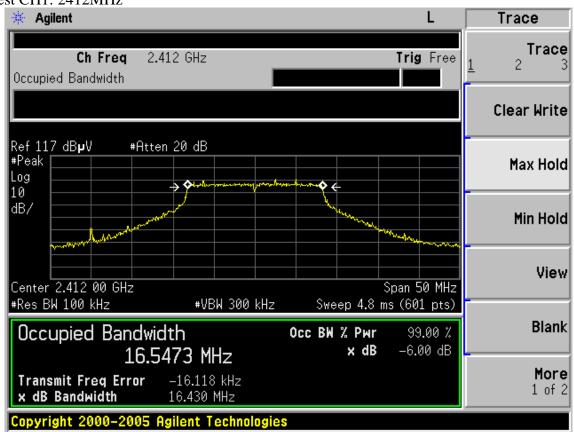




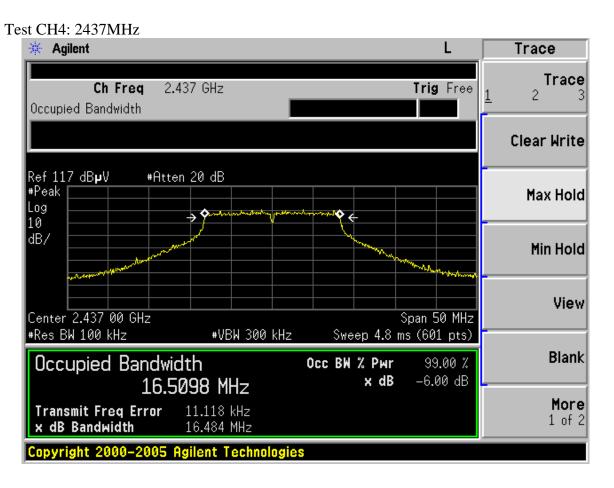


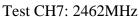
Test Mode: IEEE 802.11g TX

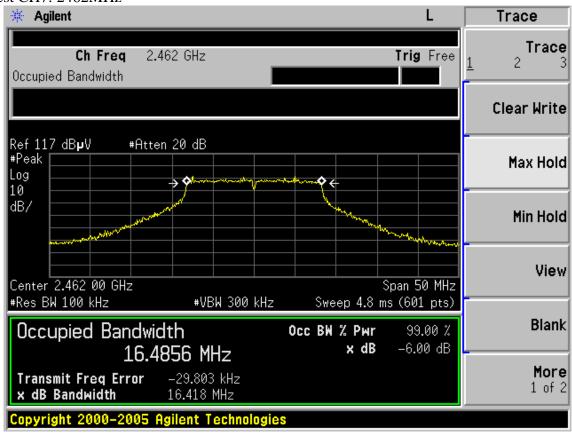
Test CH1: 2412MHz













## 8. OUTPUT POWER TEST

## 8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.
						Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 12	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year
5.	Power Meter	Anritsu	ML2487A	6K00002472	May.08, 12	1Year
6.	Power Sensor	Anritsu	MA2491A	033005	May.08, 12	1Year
7.	Spectrum Analyzer	Agilent	N9030A	MY5138022	May.08, 12	1 Year

## 8.2.Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

### 8.3.Test Procedure

- 1, Connected the EUT's antenna port to measure device by 26dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 26dB bandwidth of signal to measure out each test modes' PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
  - 1) Set the RBW=3MHz and VBW =8MHz
  - 2) Turn averaging off
  - 3) Set sweep to automatic
  - 4) Set the span just large enough to capture the emission
  - 5) Use a peak detector on max hold
  - 6) Record the measured power
  - 7) Calculate Output power of EUT use the formula:

Peak output power = measured power+ 10log[(26dB bandwidth of emission)/(analyzer RBW)]

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.



## 8.4. Test Results

EUT: 2.4GHz High Power Wireless Outdoor Access Point						
M/N: AELPLDR4U1						
Test date: 2013-02-20	Pressure: 100.6±1 kpa	Humidity: 60±3%				
Testd by: Leo Li	Test site: RF Site	Temperature : 26±0.6 °C				

Cable loss: 0.6	ó dB	Attenuator loss:	20 dB	
Antenna Gain	Vertical& H	Iorizontal 12dB	i External 90	lBi
Antenna Type Test Mode		СН	Peak output Power ( dBm )	Limit(Note) (dBm)
		CH1	25.30	28
	11b	CH6	25.40	28
Vertical		CH11	23.80	28
verticai		CH1	25.37	28
	11g	CH6	26.25	28
		CH11	24.02	28
		CH1	25.45	28
	11b	CH6	24.72	28
Horizontal		CH11	24.38	28
Horizoniai		CH1	25.72	28
	11g	CH6	25.90	28
		CH11	24.32	28
		CH1	24.27	29
	11b	CH6	24.79	29
External		CH11	23.58	29
External		CH1	25.81	29
	11g	СН6	26.04	29
		CH11	25.16	29

Conclusion: PASS

Note: For transmitter(P2P) employed antennas with directional gain greater than 6dBi, the maximum conducted output power should be reduced by 1dB for every 3dB that the directional gain of the antenna exceed 6dBi



## 9. POWER SPECTRAL DENSITY TEST

# 9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 12	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year
5.	Spectrum Analyzer	Agilent	N9030A	MY5138022	May.08, 12	1 Year

### 9.2.Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

## 9.3.Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
- 2 , Follow the test procedure as described in ANSI C.10: 2009 Clause 6.11.2.3 to measure out each test modes and chain's power density with 3KHz.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude



## 9.4. Test Results

EUT: 2.4GHz High Power Wireless Outdoor Access Point

M/N: AELPLDR4U1

Test date: 2013-02-20 Pressure: 100.6±1 kpa Humidity: 60±3%

Testd by: Leo li Test site: RF Site Temperature: 26±0.6 °C

Cable loss: 0	0.6 dB	Attenuator loss: 20 dB				
Antenna Gain	Vertical &F	Iorizontal Ante	nna : 12dBi Externa	al Antenna : 9dBi		
Antenna Type	Test Mode	СН	Power density (dBm/3KHz)	Limit (dBm/3KHz)		
		CH1	-4.82	6		
	11b	CH6	-4.46	6		
Vertical		CH11	-5.49	6		
vertical	11g	CH1	-6.94	6		
		CH6	-6.61	6		
		CH11	-9.38	6		
		CH1	-5.07	6		
	11b	CH6	-6.77	6		
Horizontal		CH11	-7.00	6		
Horizontai		CH1	-7.89	6		
		CH6	-8.27	6		
		CH11	-9.31	6		
		CH1	-5.96	7		
	11b	CH6	-5.83	7		
External		CH11	-8.44	7		
External		CH1	-7.54	7		
	11g	СН6	-8.30	7		
		CH11	-7.39	7		

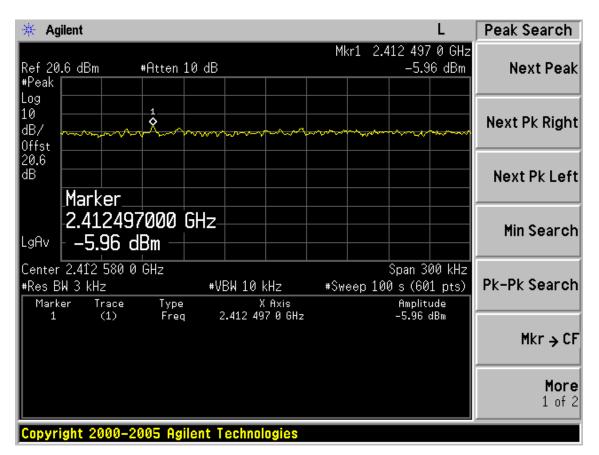
Conclusion: PASS

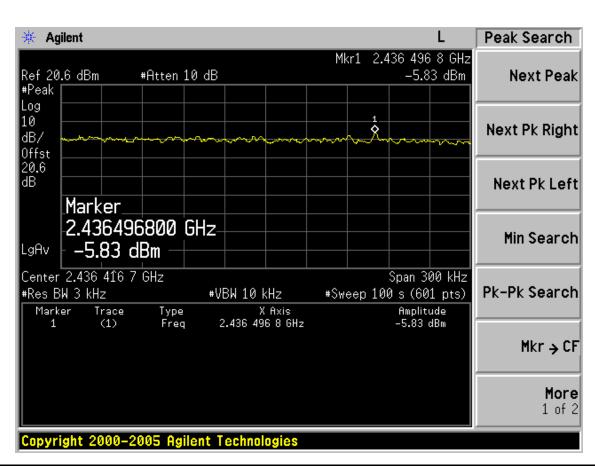
Note: For transmitter(P2P) employed antennas with directional gain greater than 6dBi, the maximum conducted output power should be reduced by 1dB for every 3dB that the directional gain of the antenna exceed 6dBi, also this method will be used to determine the power spectrum density.



### **External**

Test Mode: IEEE 802.11b TX





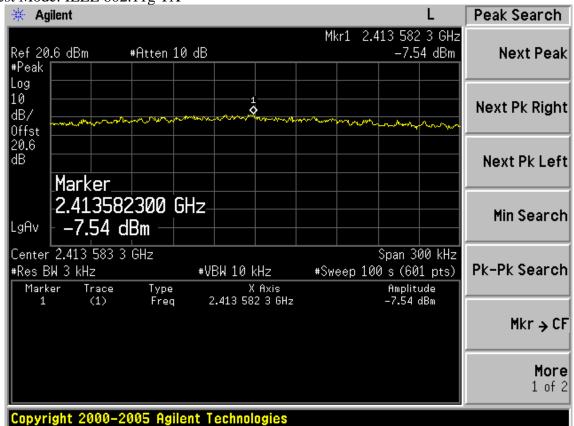
page



Peak Search \* Agilent Mkr1 2.463 887 1 GHz #Atten 10 dB Ref 20.6 dBm -8.44 dBm Next Peak #Peak Log 10 1 **Q** Next Pk Right dB/ Offst 20.6 dΒ Next Pk Left Marker 2.463887100 GHz Min Search -8.44 dBm LgAv Center 2.463 833 3 GHz Span 300 kHz Pk-Pk Search #Res BW 3 kHz #VBW 10 kHz #Sweep 100 s (601 pts) Type Freq X Axis 2.463 887 1 GHz Amplitude -8.44 dBm Trace Marker (1) 1 Mkr → CF More 1 of 2

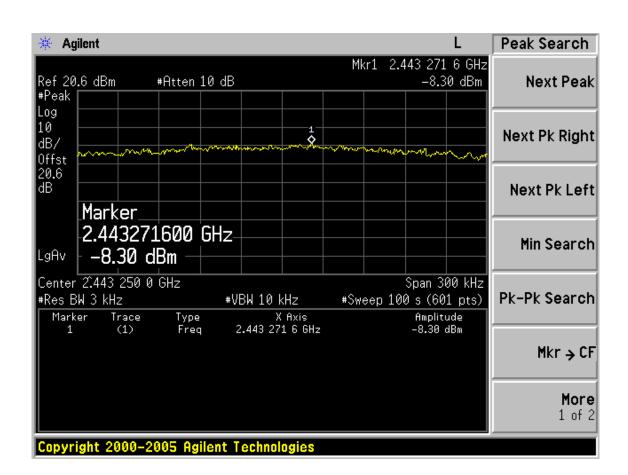


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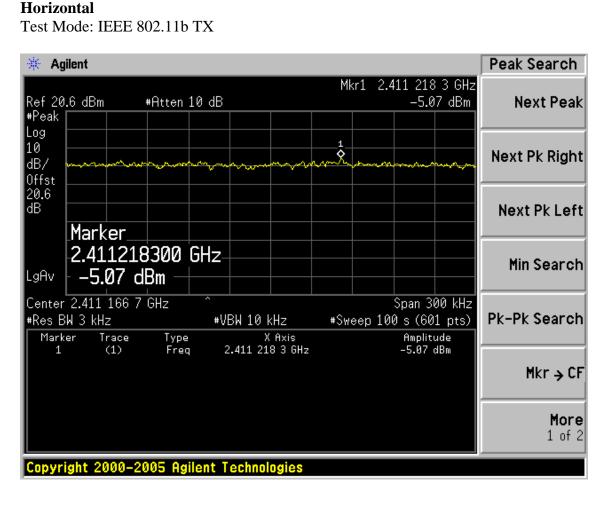


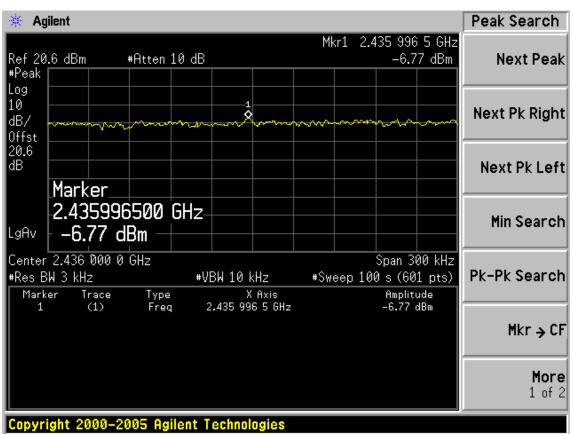
9-5 FCC ID:X4Y350U1 page Agilent Peak Search Mkr1 2.455 707 8 GHz Ref 20.6 dBm #Atten 10 dB -7.39 dBm Next Peak #Peak Log 10 -1-**♦** Next Pk Right dB/ Offst 20.6 dΒ Next Pk Left Marker. 2.455707800 GHz Min Search -7.39 dBm LgAv Center 2.455 750 0 GHz Span 300 kHz Pk-Pk Search #Res BW 3 kHz #VBW 10 kHz #Sweep 100 s (601 pts) Type Freq X Axis 2.455 707 8 GHz Amplitude -7.39 dBm Marker (1) Mkr → CF More 1 of 2



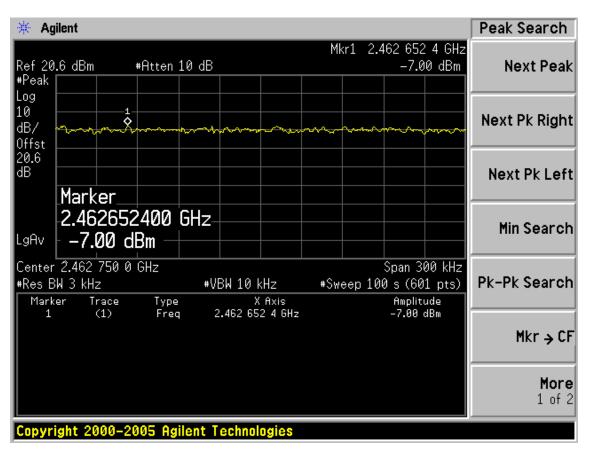
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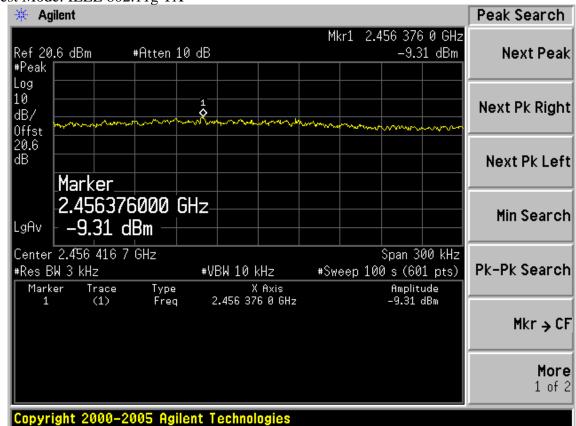




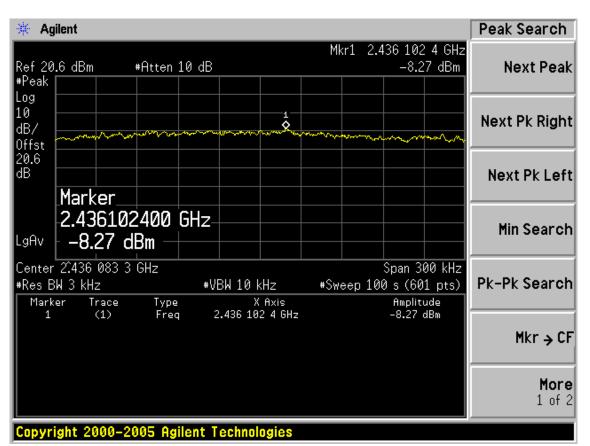


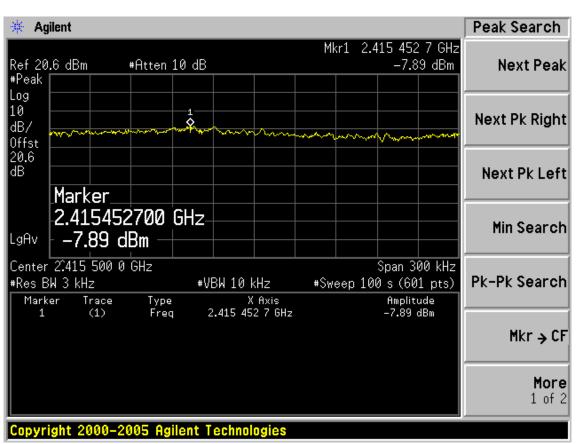


Test Mode: IEEE 802.11g TX

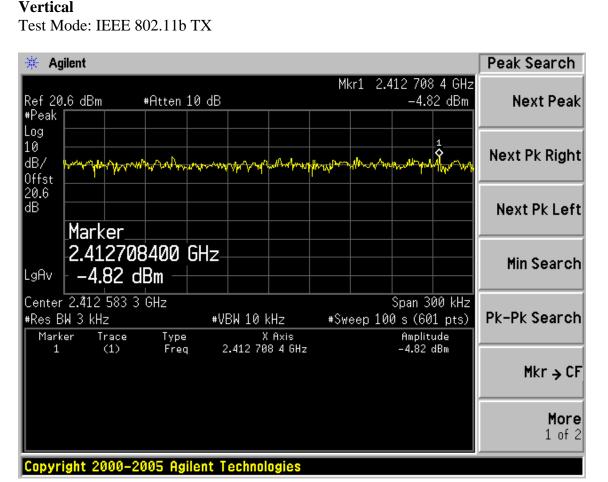


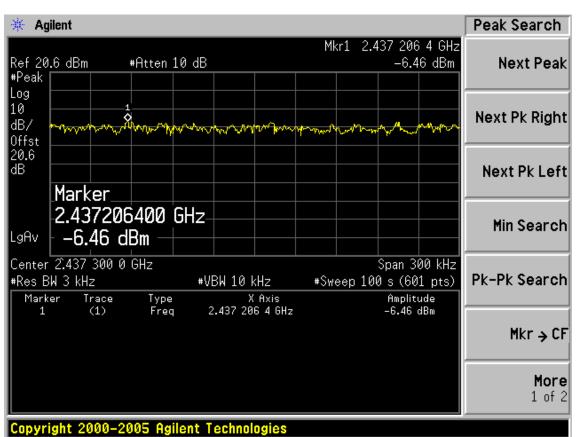




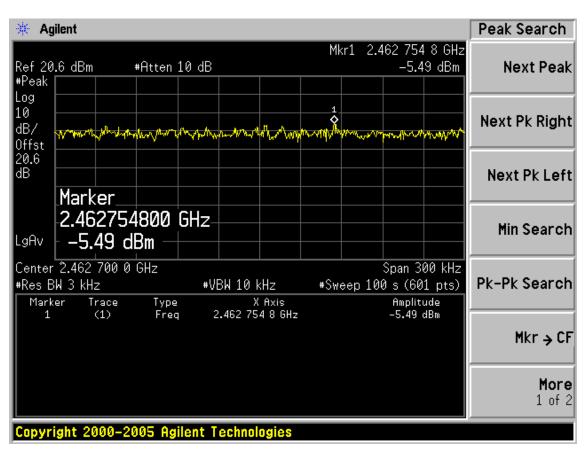




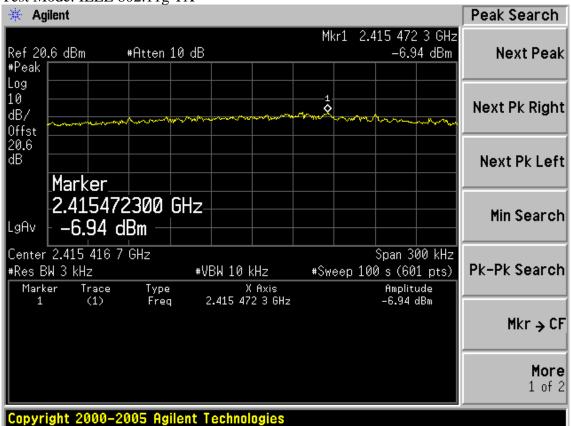




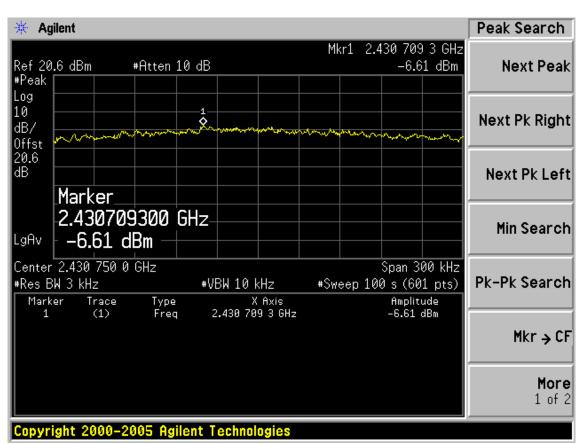


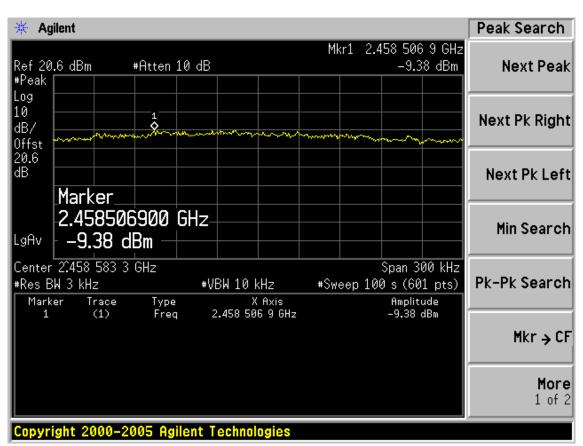














# 10. ANTENNA REQUIREMENT

## 10.1. STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 10.2. ANTENNA CONNECTED CONSTRUCTION

The transmit antennas used for this product are external dipole antenna with SMA-B connector and internal integrated patch antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the external antenna is 9dBi, and the maximum peak gain of internal antenna is 12dBi.



# 11.MPE ESTIMATION

# 11.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
300MHz1.5GHz	F/1500	30
1.5GHz100GHz	1.0	30

Frequency(MHz)	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

# 11.2.Estimation Method

Have the power(P), and the antenna Gain(G), then calculate the MPE with below formula:

 $MPE=(P*G)/4\prod R2$ 

Note:R=Estimation distance (R=20cm)



## 11.3. Estimation Result

EUT: 2.4GHz High Power Wireless Outdoor Access Point

M/N: AELPLDR4U1

Test date: 2013-02-20 Pressure: 100.6±1 kpa Humidity: 60±3%

Testd by: Leo Li Test site: RF Site Temperature: 26±0.6 °C

Antenna Type	Mode	СН	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE
		1	2412	25.30	338.84	12	15.85	0.4751
	11b	6	2437	25.40	346.74	12	15.85	0.4861
Vantical		11	2462	23.80	239.88	12	15.85	0.3363
Vertical		1	2412	25.37	344.35	12	15.85	0.4828
	11g	6	2437	26.25	421.70	12	15.85	0.5912
		11	2462	24.02	252.35	12	15.85	0.3538
	11b	1	2412	25.45	350.75	12	15.85	0.4918
		6	2437	24.72	296.48	12	15.85	0.4157
Homizontal		11	2462	24.38	274.16	12	15.85	0.3844
Horizontal	11g	1	2412	25.72	373.25	12	15.85	0.5233
		6	2437	25.90	389.05	12	15.85	0.5455
		11	2462	24.32	270.40	12	15.85	0.3791
		1	2412	24.27	267.30	9	7.94	0.1878
	11b	6	2437	24.79	301.30	9	7.94	0.2117
External		11	2462	23.58	228.03	9	7.94	0.1602
External		1	2412	25.81	381.07	9	7.94	0.2678
	11g	6	2437	26.04	401.79	9	7.94	0.2823
	-	11	2462	24.27	267.30	9	7.94	0.1878



FCC ID:X4Y350U1	раде	12-1
12.DEVIATION TO TEST SPECIFICATIONS		
[ NONE]		