



AUDIX Technology (Shenzhen) Co., Ltd.

FCC ID:UCC-WA801N-X

FCC PART 15C TEST REPORT FOR CERTIFICATION  
On Behalf of

Altai Technologies Limited

A8n Super WiFi Base Station

Model Number: WA8011N-X

FCC ID: UCC-WA8011N-X

Prepared for : Altai Technologies Limited  
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Report Number : ACS-F13302  
Date of Test : Mar.12,2013~ Aug.02, 2014  
Date of Report : Aug.04, 2014

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**TEST REPORT CERTIFICATION**

Applicant : Altai Technologies Limited  
 Manufacturer : Altai Technologies Limited  
 EUT Description : A8n Super WiFi Base Station  
 FCC ID : UCC-WA801N-X  
 (A) MODEL NO. : WA801N-X  
 (B) SERIAL NO. : N/A  
 (C) POWER SUPPLY : AC 100-240V, 50/60Hz  
 (D) TEST VOLTAGE : DC 56V From Adapter Input AC 120V/60Hz

Tested for comply with:  
 FCC Rules and Regulations Part 15 Subpart C: 2012

Test procedure used:  
 ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

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

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

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

Date of Test : Mar.12,2013~Aug.02, 2014 Report of date: Aug.04, 2014

Prepared by :

Selina Liu / Supervisor

Reviewed by :

Sunny Lu / Assistant Manager

**AUDIX**<sup>®</sup> 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

Signature:

David Jin 8.4

David Jin / Manager

Approved & Authorized Signer :

## 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 ANSI C63.10: 2009	PASS
Radiated Emission	FCC Part 15: 15.209 ANSI C63.10: 2009	PASS
Band Edge Compliance	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Conducted spurious emissions	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
6dB Bandwidth	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Peak Output Power	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Power Spectral Density	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

Product Name	: A8n Super WiFi Base Station
Model Number	: WA8011N-X
FCC ID	: UCC-WA8011N-X
Radio	: IEEE802.11 a/b/g/n
Operation Frequency	: IEEE 802.11a: 5745MHz—5825MHz IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11nHT20: 2412MHz—2462MHz, 5745MHz—5825MHz IEEE 802.11nHT40: 2422MHz—2452MHz, 5755MHz—5795MHz
Modulation Technology	: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11a/g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Antenna Assembly Gain	: 2.4GHz: Antenna type: External 2.4GHz 14dBi sector, dual slant +-45 degree Antenna gain (for per antenna and antenna panel): 14dBi  5GHz : Antenna type: 5GHz 20dBi panel, dual linear Antenna gain (for per antenna and antenna panel): 20dBi
Applicant	: Altai Technologies Limited Units 209, 2/F, Lakeside 2, 10 Science Park West Avenue, Hong Kong Science Park, Shatin, Hong Kong, China
Manufacturer	: Altai Technologies Limited Units 209, 2/F, Lakeside 2, 10 Science Park West Avenue, Hong Kong Science Park, Shatin, Hong Kong, China
AC Adapter	: Manufacturer: FSGREAT M/N: GRT-560110A S/N : 130840101
Date of Test	: Mar.12,2013~ Aug.02, 2014
Date of Receipt	: Mar.11, 2013
Sample Type	: Prototype production

## 2.2.Test Information

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

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low :CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452

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

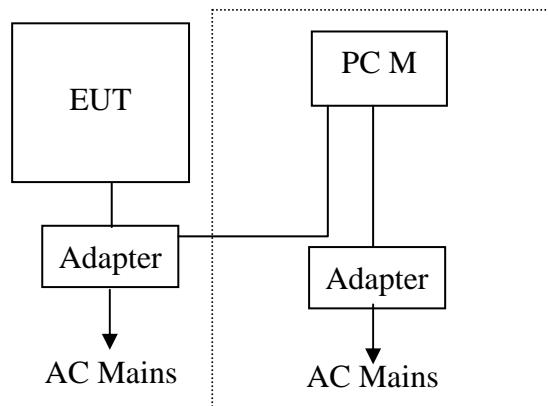
Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11a	6	Low :CH149	5745
	6	Middle: CH157	5785
	6	High: CH165	5825
IEEE 802.11n HT20	6.5	Low :CH149	5745
	6.5	Middle: CH157	5785
	6.5	High: CH165	5825
IEEE 802.11n HT40	13.5	Low :CH151	5755
	13.5	High : CH159	5795

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

### 2.3. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1	Personal Computer	Test PC M	DELL	Studio 540	224XK2X	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID:R33002
		Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)				
2	Monitor	ACS-EMC-LM04R	DELL	1907FPt	CN-009759-7161 8-6AP-ACPP	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R3A002
		Power Cord: Unshielded, Detachable, 1.8m VGA Cable: Shielded, Detachable, 2.0m (with two cores) DVI Cable: Shielded, Detachable, 2.0m (with two cores)				
3	USB Mouse	ACS-EMC-M04R	DELL	M0C5UO	512024282	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R41108
		Power Cord: shielded, Undetachable, 1.8m				
4	USB Keyboard	ACS-EMC- K04R	DELL	SK-8115	CN-ODJ313-716 16-6BB-049J	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: T3A002
		Power Cord: shielded, Undetachable, 2.0m				

### 2.4. Block Diagram of Test Setup



(EUT: A8n Super WiFi Base Station)

## 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, 2014

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

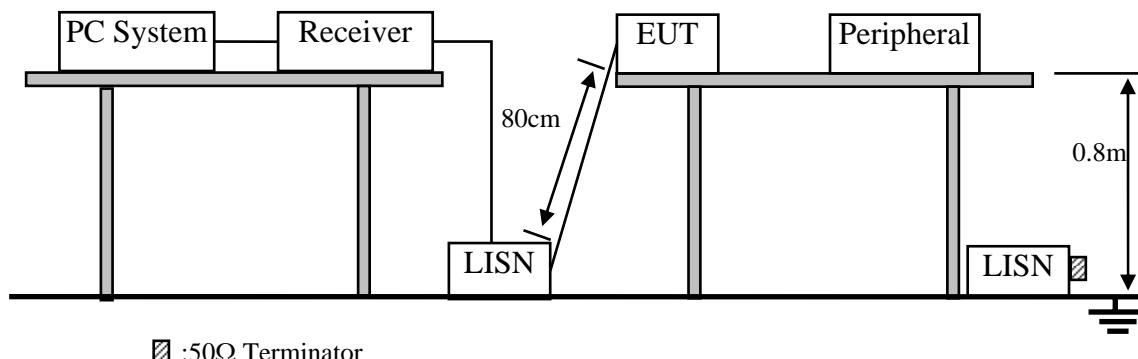
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.1 dB (150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.22 dB(30~200MHz, Polarize: H)
	3.23 dB(30~200MHz, Polarize: V)
	3.49 dB(200M~1GHz, Polarize: H)
	3.39 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz)	5.04dB (1~6GHz, Distance: 3m)
	5.06 dB (6~18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57 dB
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Power density test	2.00 dB
Uncertainty for Frequency range test	7x10 <sup>-8</sup>
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6°C
	3%

### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.31, 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, 13	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 13	1 Year
5.	Terminator	Hubersuhner	50Ω	No. 2	May.08, 13	1 Year
6.	RF Cable	Fujikura	3D-2W	No.1	May.08, 13	1 Year
7.	Coaxial Switch	Anritsu	MP59B	M50564	May.08, 13	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 13	1 Year

#### 3.2. Block Diagram of Test Setup



#### 3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB( $\mu$ V)	Average Level 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. A8n Super WiFi Base Station (EUT)

Model Number : WA8011N-X

Serial Number : N/A

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

### 3.5.Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software to control EUT work in Tx mode.

### 3.6.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC 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.

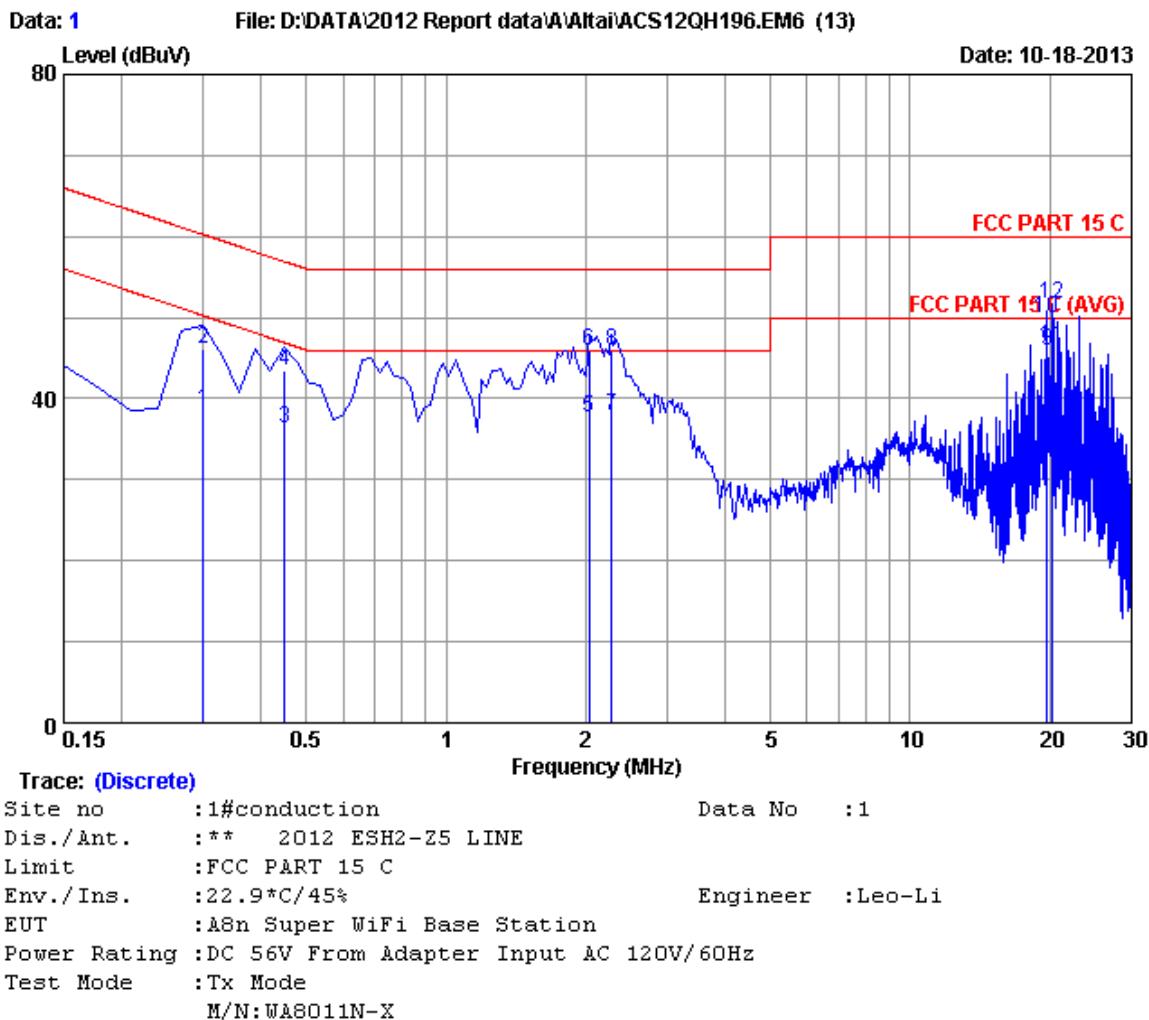
The bandwidth of test receiver (R & S ESHS10) is set at 9kHz.

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

### 3.7.Power Line Conducted Emission Test Results

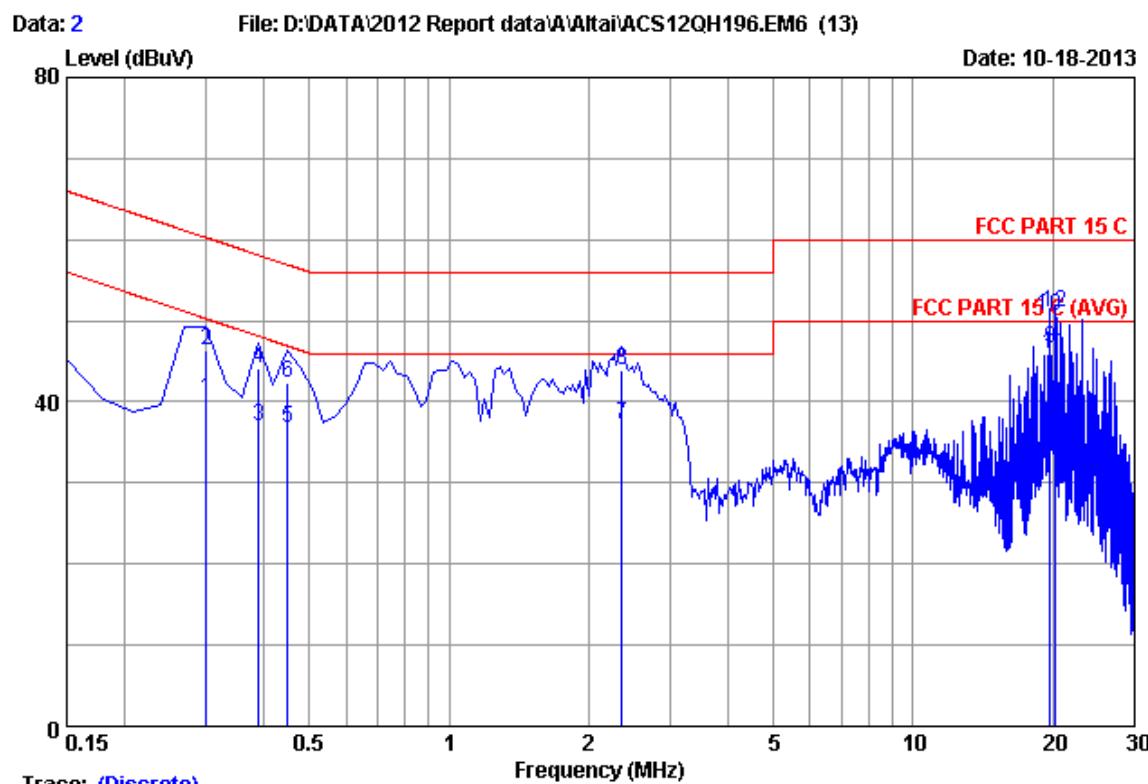
**PASS.** (All emissions not reported below are too low against the prescribed limits.)

## 2.4G:



No	Freq (MHz)	LISN	Cable	Emission				Margin (dB)	Remark
		Factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)			
1	0.29925	0.19	0.01	38.42	38.62	50.26	11.64	Average	
2	0.29925	0.19	0.01	45.83	46.03	60.26	14.23	QP	
3	0.44850	0.19	0.02	36.15	36.36	46.90	10.54	Average	
4	0.44850	0.19	0.02	43.18	43.39	56.90	13.51	QP	
5	2.031	0.24	0.04	37.28	37.56	46.00	8.44	Average	
6	2.031	0.24	0.04	45.67	45.95	56.00	10.05	QP	
7	2.269	0.25	0.04	37.52	37.81	46.00	8.19	Average	
8	2.269	0.25	0.04	45.67	45.96	56.00	10.04	QP	
9	19.702	1.14	0.14	44.52	45.80	50.00	4.20	Average	
10	19.702	1.14	0.14	48.53	49.81	60.00	10.19	QP	
11	20.269	1.18	0.14	45.13	46.45	50.00	3.55	Average	
12	20.269	1.18	0.14	50.29	51.61	60.00	8.39	QP	

Remarks: 1. Emission Level=LISN Factor+Cable Loss+Reading.  
 2. If the average limit is met when using a quasi-peak detector,  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



Site no : 1#conduction Data No : 2  
 Dis./Ant. : \*\* 2012 ESH2-Z5 NEUTRAL  
 Limit : FCC PART 15 C  
 Env./Ins. : 22.9\*C/45% Engineer : Leo-Li  
 EUT : ASN Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : Tx Mode  
 M/N: WA8011N-X

No	Freq (MHz)	LISN	Cable	Emission				Remark
		Factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)	Margin (dB)	
1	0.29925	0.22	0.01	40.13	40.36	50.26	9.90	Average
2	0.29925	0.22	0.01	46.01	46.24	60.26	14.02	QP
3	0.38880	0.22	0.02	36.64	36.88	48.09	11.21	Average
4	0.38880	0.22	0.02	43.99	44.23	58.09	13.86	QP
5	0.44850	0.23	0.02	36.44	36.69	46.90	10.21	Average
6	0.44850	0.23	0.02	42.10	42.35	56.90	14.55	QP
7	2.359	0.29	0.04	36.89	37.22	46.00	8.78	Average
8	2.359	0.29	0.04	43.54	43.87	56.00	12.13	QP
9	19.702	0.96	0.14	45.57	46.67	50.00	3.33	Average
10	19.702	0.96	0.14	49.38	50.48	60.00	9.52	QP
11	20.269	0.98	0.14	44.75	45.87	50.00	4.13	Average
12	20.269	0.98	0.14	49.81	50.93	60.00	9.07	QP

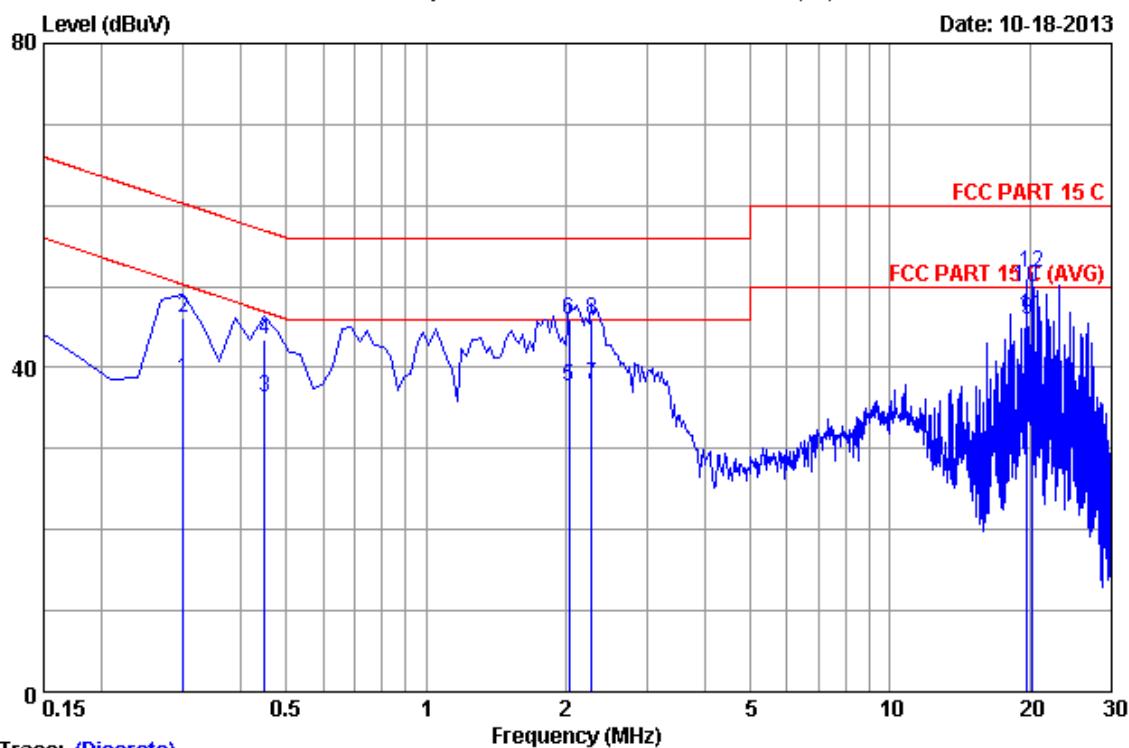
Remarks: 1. Emission Level=LISN Factor+Cable Loss+Reading.  
 2. If the average limit is met when using a quasi-peak detector,  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

**5.8G:**

Data: 1

File: D:\DATA\2012 Report data\A\Altai\ACS12QH196.EM6 (13)

Date: 10-18-2013



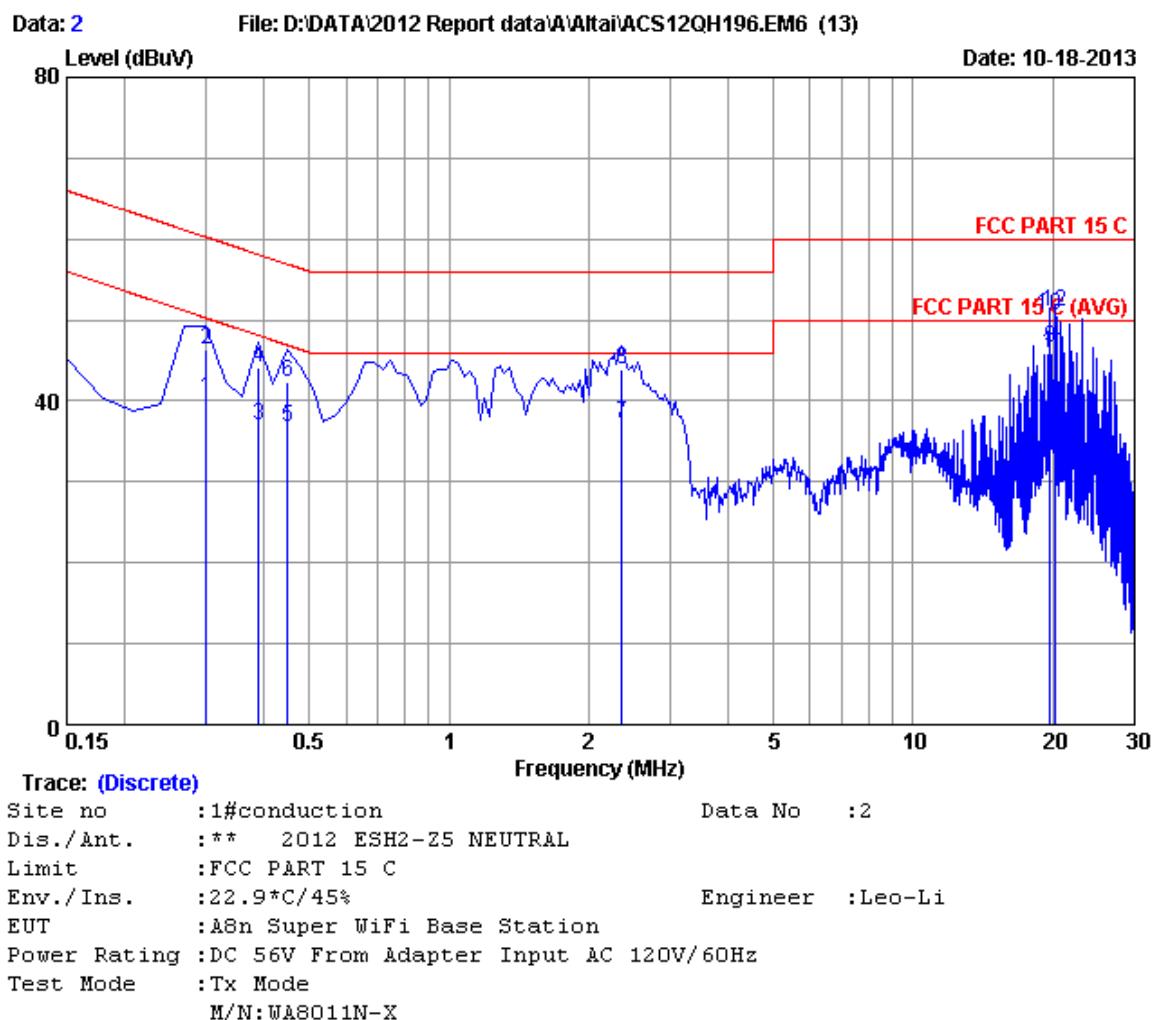
Trace: (Discrete)

Site no :1#conduction Data No :1  
 Dis./Ant. :\*\* 2012 ESH2-Z5 LINE  
 Limit :FCC PART 15 C  
 Env./Ins. :22.9°C/45% Engineer :Leo-Li  
 EUT :A8n Super WiFi Base Station  
 Power Rating :DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode :Tx Mode  
 M/N:WA8011N-X

No	Freq (MHz)	LISN	Cable	Emission				Margin (dB)	Remark
		Factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)			
1	0.29925	0.19	0.01	38.42	38.62	50.26	11.64	Average	
2	0.29925	0.19	0.01	45.83	46.03	60.26	14.23	QP	
3	0.44850	0.19	0.02	36.15	36.36	46.90	10.54	Average	
4	0.44850	0.19	0.02	43.18	43.39	56.90	13.51	QP	
5	2.031	0.24	0.04	37.28	37.56	46.00	8.44	Average	
6	2.031	0.24	0.04	45.67	45.95	56.00	10.05	QP	
7	2.269	0.25	0.04	37.52	37.81	46.00	8.19	Average	
8	2.269	0.25	0.04	45.67	45.96	56.00	10.04	QP	
9	19.702	1.14	0.14	44.52	45.80	50.00	4.20	Average	
10	19.702	1.14	0.14	48.53	49.81	60.00	10.19	QP	
11	20.269	1.18	0.14	45.13	46.45	50.00	3.55	Average	
12	20.269	1.18	0.14	50.29	51.61	60.00	8.39	QP	

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

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



No	Freq (MHz)	LISN	Cable	Emission				Remark
		Factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)	Margin (dB)	
1	0.29925	0.22	0.01	40.13	40.36	50.26	9.90	Average
2	0.29925	0.22	0.01	46.01	46.24	60.26	14.02	QP
3	0.38880	0.22	0.02	36.64	36.88	48.09	11.21	Average
4	0.38880	0.22	0.02	43.99	44.23	58.09	13.86	QP
5	0.44850	0.23	0.02	36.44	36.69	46.90	10.21	Average
6	0.44850	0.23	0.02	42.10	42.35	56.90	14.55	QP
7	2.359	0.29	0.04	36.89	37.22	46.00	8.78	Average
8	2.359	0.29	0.04	43.54	43.87	56.00	12.13	QP
9	19.702	0.96	0.14	45.57	46.67	50.00	3.33	Average
10	19.702	0.96	0.14	49.38	50.48	60.00	9.52	QP
11	20.269	0.98	0.14	44.75	45.87	50.00	4.13	Average
12	20.269	0.98	0.14	49.81	50.93	60.00	9.07	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss+Reading.  
 2. If the average limit is met when using 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, 13	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 13	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 13	1 Year
5	Bilog Antenna	TESEQ	CBL6112D	35375	May.30, 13	1 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	May.08, 13	1 Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 13	1 Year

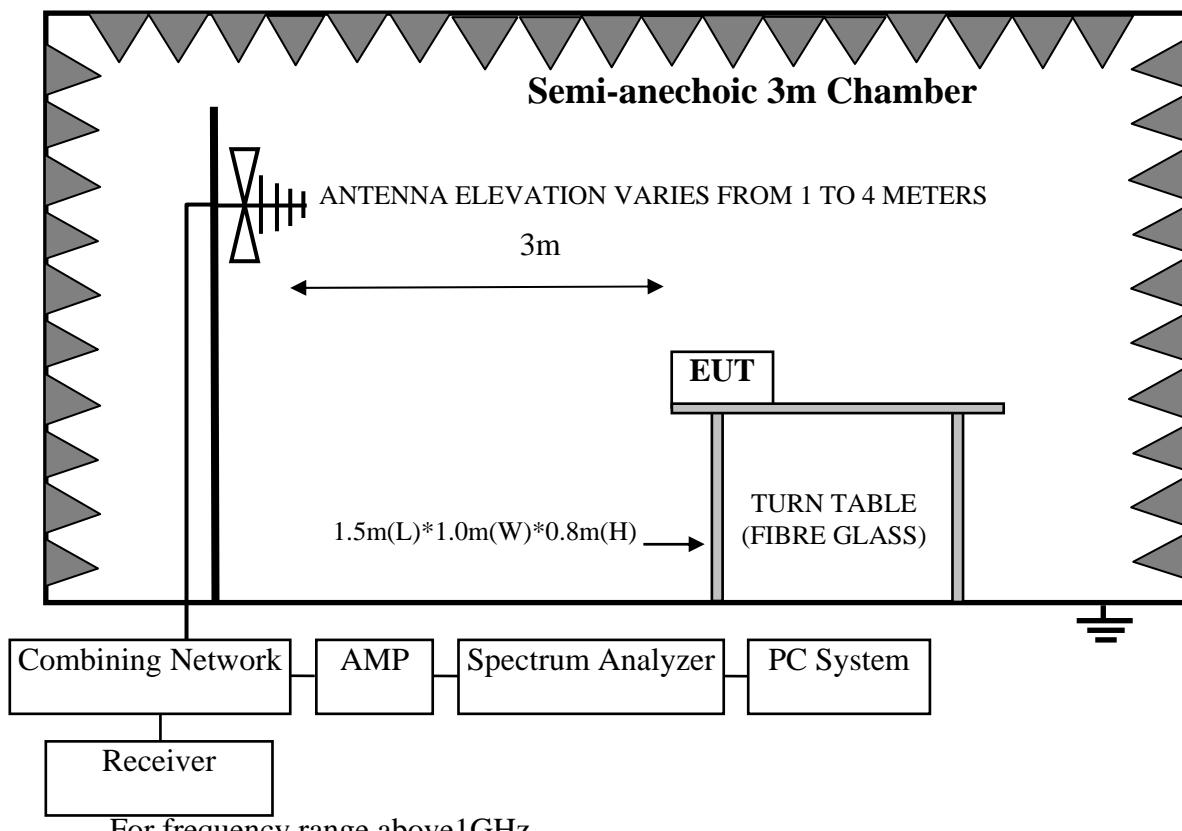
4.1.2. For frequency range 1GHz~40GHz (At Anechoic Chamber)

(For test date Mar.12, 2013)

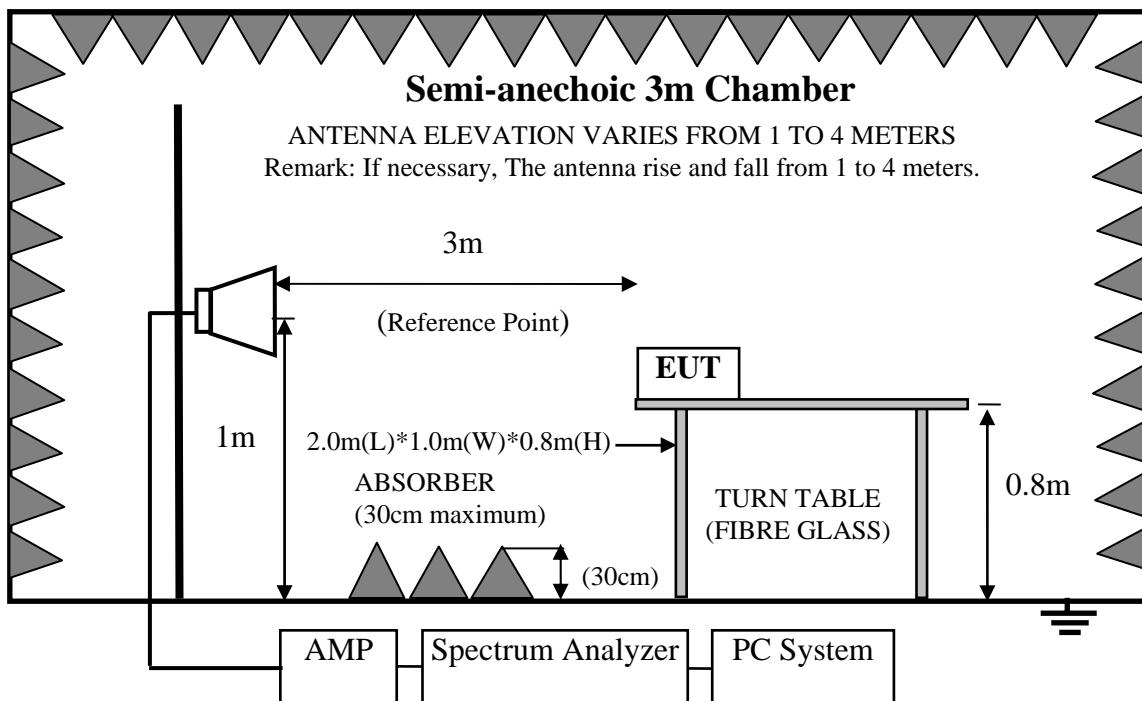
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 12	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	June.05, 12	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 12	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	May.08, 12	1 Year
6	Horn Antenna	EMCO	3116	00060089	June.05,12	1 Year

#### 4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range above 1GHz



### 4.3.Radiated Emission Limit

#### 4.3.1. 15.247&209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		µV/m	dB(µV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(µV)/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 3.4.

### 4.5.Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.5. 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 (40GHz) are checked. and no any emissions were found from 18GHz to 40 GHz, So the radiated emissions from 18GHz to 40GHz were not record

#### 4.7. Radiated Emission Test Results

**PASS.**

All the emissions from 30MHz to 40 GHz were comply with 15.209 limits.

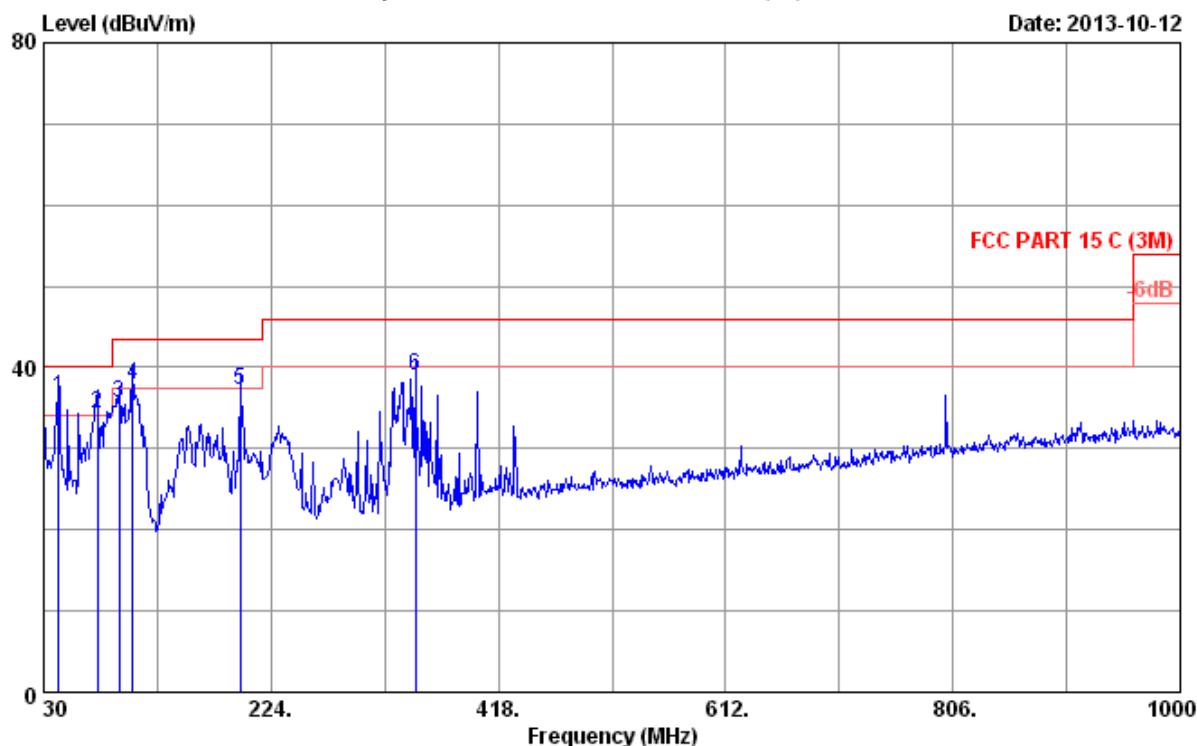
Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

**2.4G:****Frequency: 30MHz~1GHz**

Data: 2

File: E:\2012 Report Data\VALTAI\ACS12QH196.EM6 (10)

Date: 2013-10-12



Site no. : 3m Chamber Data no. : 2  
Dis. / Ant. : 3m 2013 CBL6112D 35375 Ant. pol. : HORIZONTAL  
Limit : FCC PART 15 C (3M)  
Env. / Ins. : 24°C/65% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power rating : DC 56V From Adapter Input AC 120V/60Hz  
Test Mode : Tx Mode  
M/N:WA8011N-X

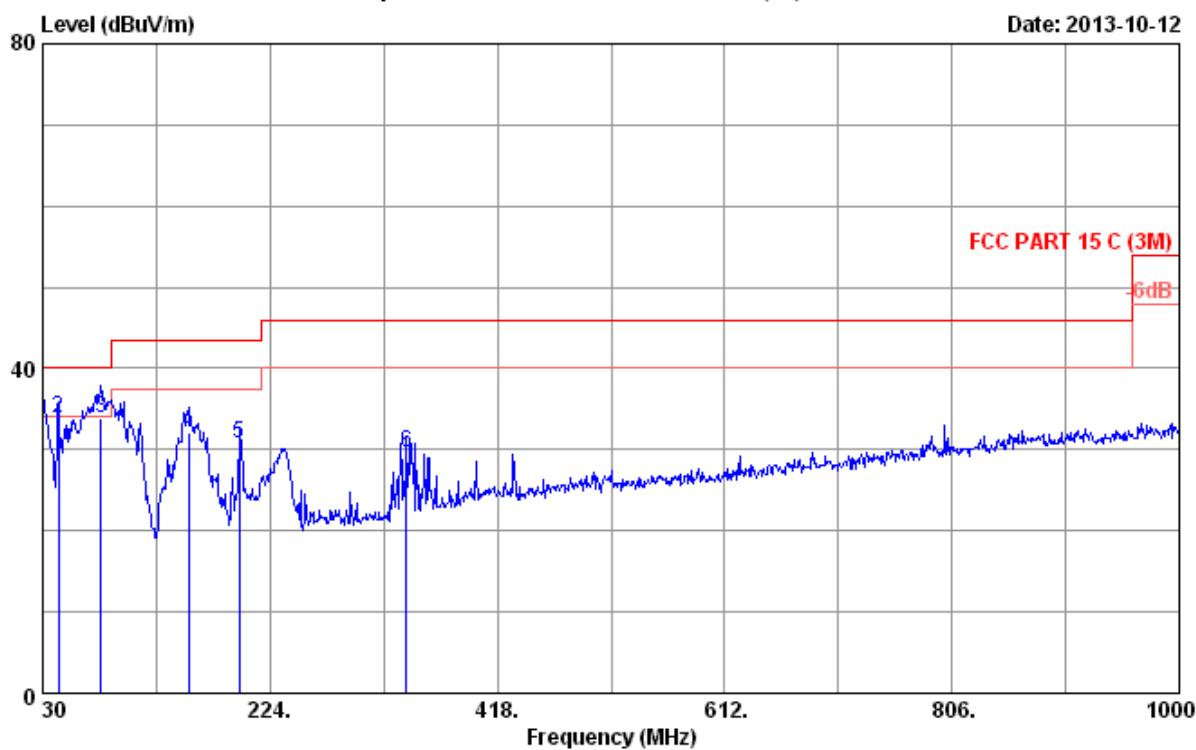
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	42.610	12.56	1.06	22.69	36.31	40.00	3.69	QP
2	75.590	7.18	1.30	25.78	34.26	40.00	5.74	QP
3	94.020	10.20	1.38	24.13	35.71	43.50	7.79	QP
4	105.660	11.97	1.43	24.41	37.81	43.50	5.69	QP
5	197.810	10.18	1.78	25.15	37.11	43.50	6.39	QP
6	347.190	15.23	2.31	21.52	39.06	46.00	6.94	QP

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

Data: 1

File: E:\2012 Report Data\VALTA\ACS12QH196.EM6 (10)

Date: 2013-10-12



Site no. : 3m Chamber Data no. : 1  
Dis. / Ant. : 3m 2013 CBL6112D 35375 Ant. pol. : VERTICAL  
Limit : FCC PART 15 C (3M)  
Env. / Ins. : 24°C/65% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power rating : DC 56V From Adapter Input AC 120V/60Hz  
Test Mode : Tx Mode  
M/N:WA8011N-X

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Emission		Remark
						Limits (dBuV/m)	Margin (dB)	
1	30.000	20.10	0.83	14.29	35.22	40.00	4.78	QP
2	43.580	12.03	1.07	20.88	33.98	40.00	6.02	QP
3	79.470	7.55	1.32	24.97	33.84	40.00	6.16	QP
4	154.160	11.09	1.62	19.39	32.10	43.50	11.40	QP
5	197.810	10.18	1.78	18.73	30.69	43.50	12.81	QP
6	340.400	15.01	2.29	12.26	29.56	46.00	16.44	QP

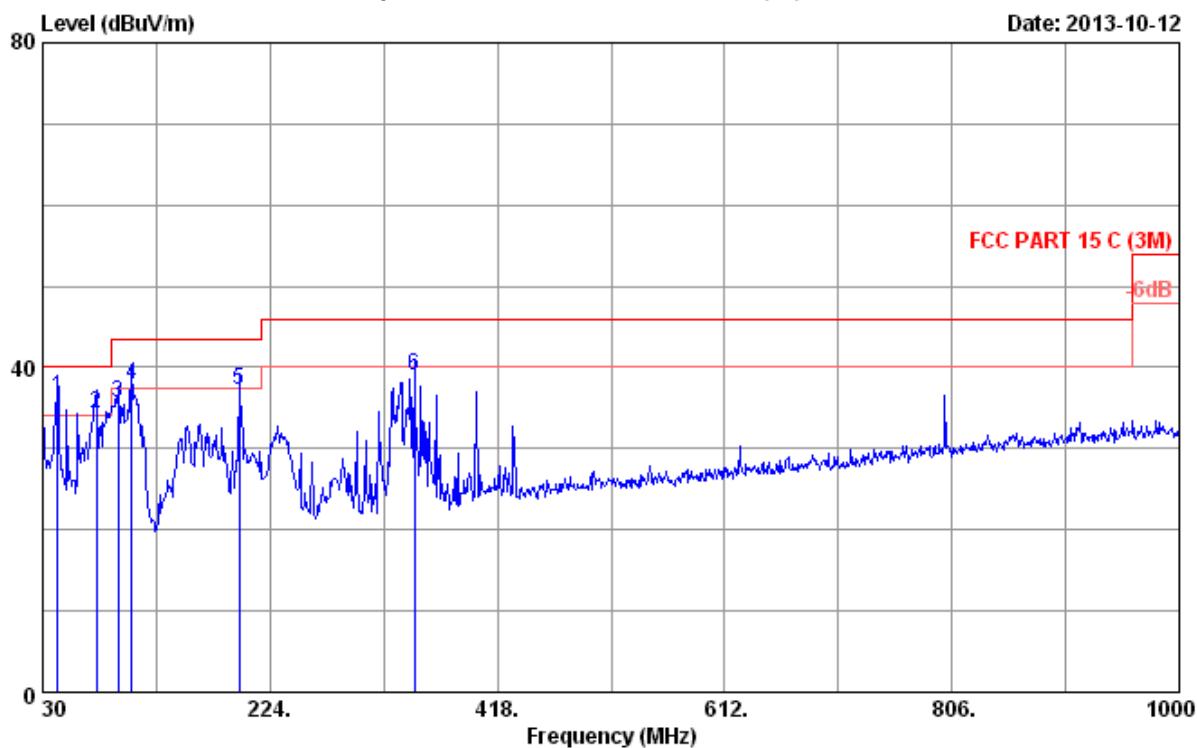
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

**5.8G:****Frequency: 30MHz~1GHz**

Data: 2

File: E:\2012 Report Data\VALTAI\ACS12QH196.EM6 (10)

Date: 2013-10-12



Site no. : 3m Chamber Data no. : 2  
Dis. / Ant. : 3m 2013 CBL6112D 35375 Ant. pol. : HORIZONTAL  
Limit : FCC PART 15 C (3M)  
Env. / Ins. : 24°C/65% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power rating : DC 56V From Adapter Input AC 120V/60Hz  
Test Mode : Tx Mode  
M/N:WA8011N-X

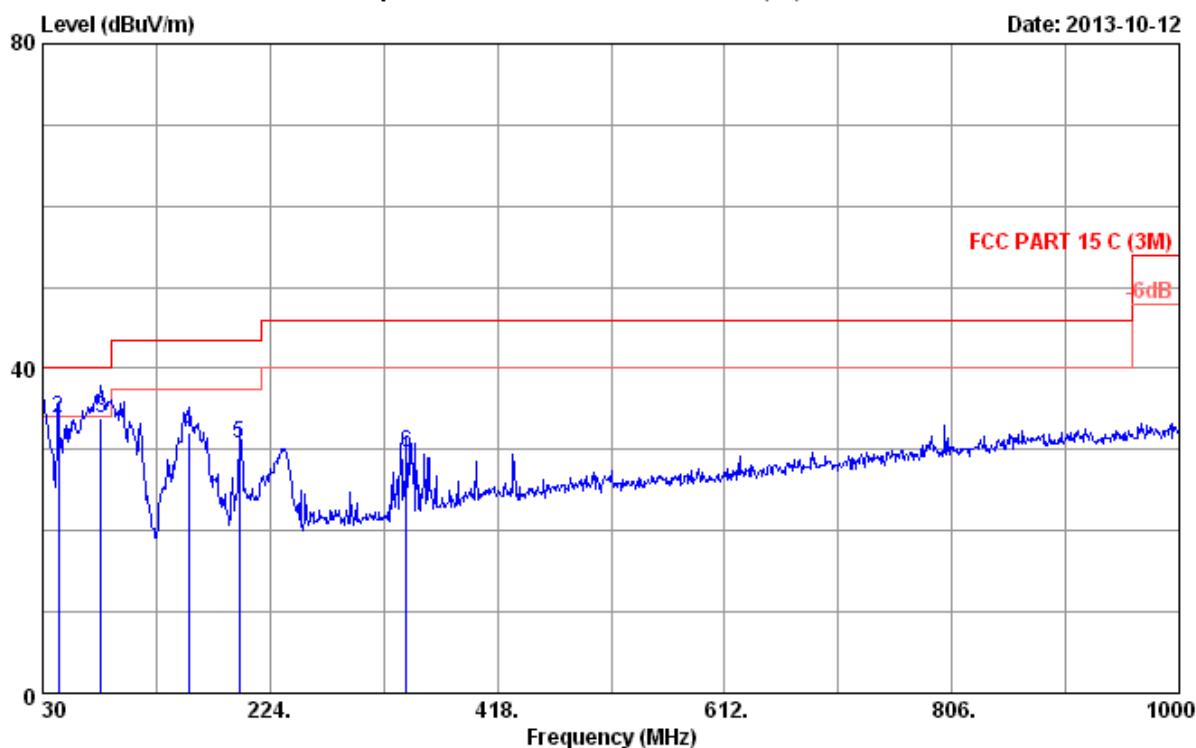
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	42.610	12.56	1.06	22.69	36.31	40.00	3.69	QP
2	75.590	7.18	1.30	25.78	34.26	40.00	5.74	QP
3	94.020	10.20	1.38	24.13	35.71	43.50	7.79	QP
4	105.660	11.97	1.43	24.41	37.81	43.50	5.69	QP
5	197.810	10.18	1.78	25.15	37.11	43.50	6.39	QP
6	347.190	15.23	2.31	21.52	39.06	46.00	6.94	QP

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

Data: 1

File: E:\2012 Report Data\VALTA\ACS12QH196.EM6 (10)

Date: 2013-10-12



Site no. : 3m Chamber Data no. : 1  
Dis. / Ant. : 3m 2013 CBL6112D 35375 Ant. pol. : VERTICAL  
Limit : FCC PART 15 C (3M)  
Env. / Ins. : 24°C/65% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power rating : DC 56V From Adapter Input AC 120V/60Hz  
Test Mode : Tx Mode  
M/N:WA8011N-X

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission			
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.000	20.10	0.83	14.29	35.22	40.00	4.78 QP
2	43.580	12.03	1.07	20.88	33.98	40.00	6.02 QP
3	79.470	7.55	1.32	24.97	33.84	40.00	6.16 QP
4	154.160	11.09	1.62	19.39	32.10	43.50	11.40 QP
5	197.810	10.18	1.78	18.73	30.69	43.50	12.81 QP
6	340.400	15.01	2.29	12.26	29.56	46.00	16.44 QP

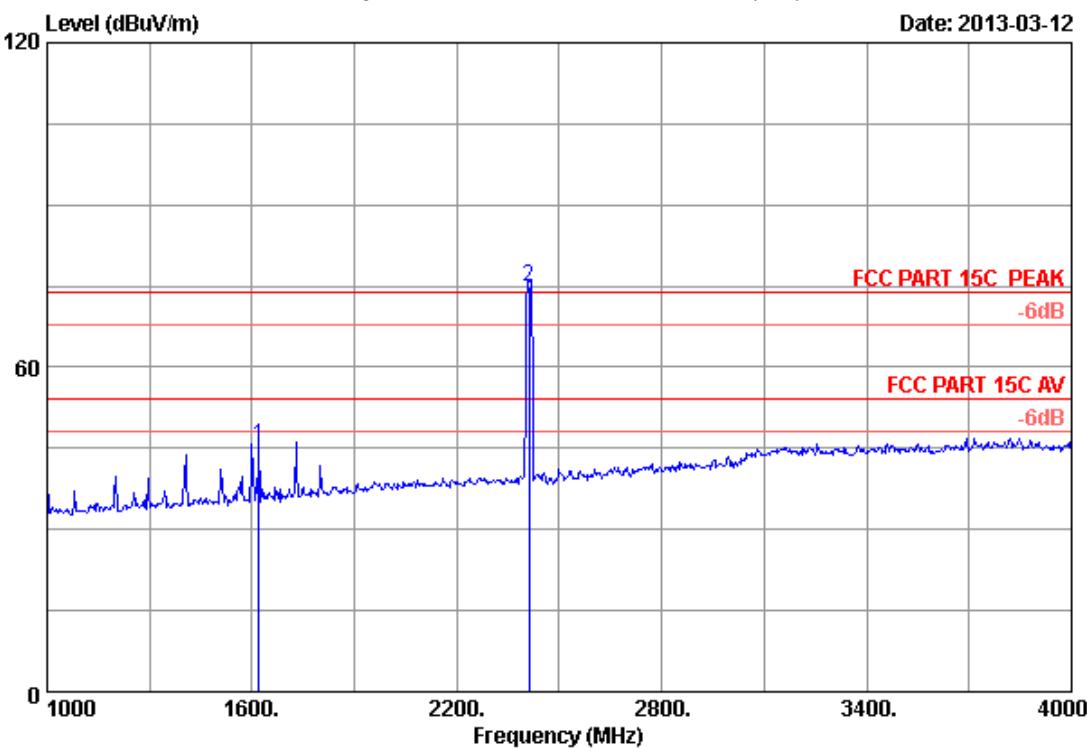
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

**2.4G:  
Frequency: 1GHz~18GHz**

Data: 1

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	51.16	45.41	74.00	28.59	Peak
2 2412.000	28.21	5.81	35.70	76.47	74.79	74.00	-0.79	Peak

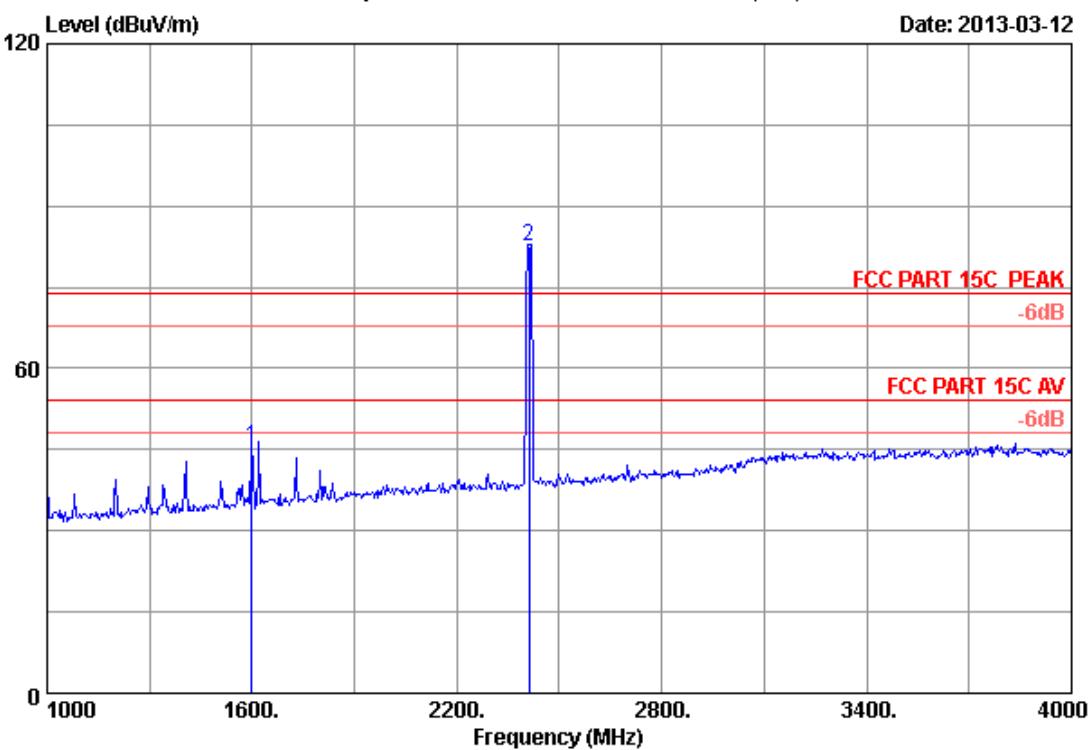
## Remarks:

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

Data: 2

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

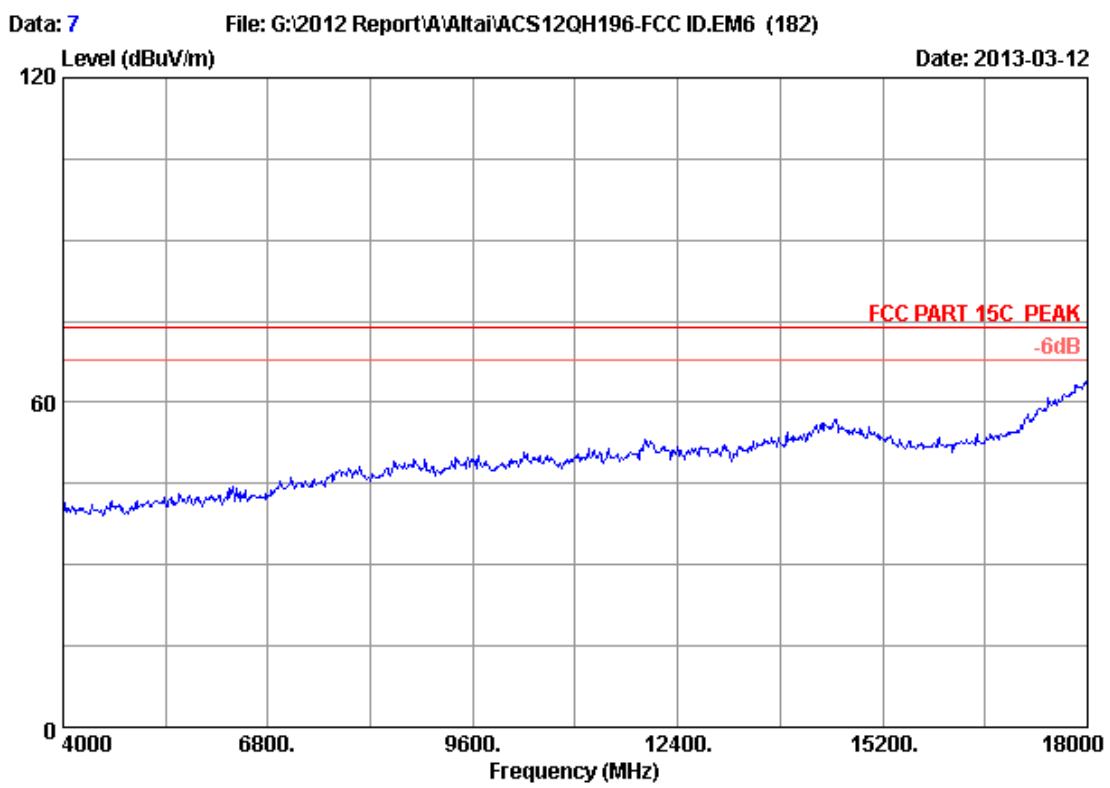


Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1600.000	25.62	4.63	36.14	51.49	45.60	74.00	28.40 Peak
2	2412.000	28.21	5.81	35.70	84.21	82.53	74.00	-8.53 Peak

## Remarks:

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

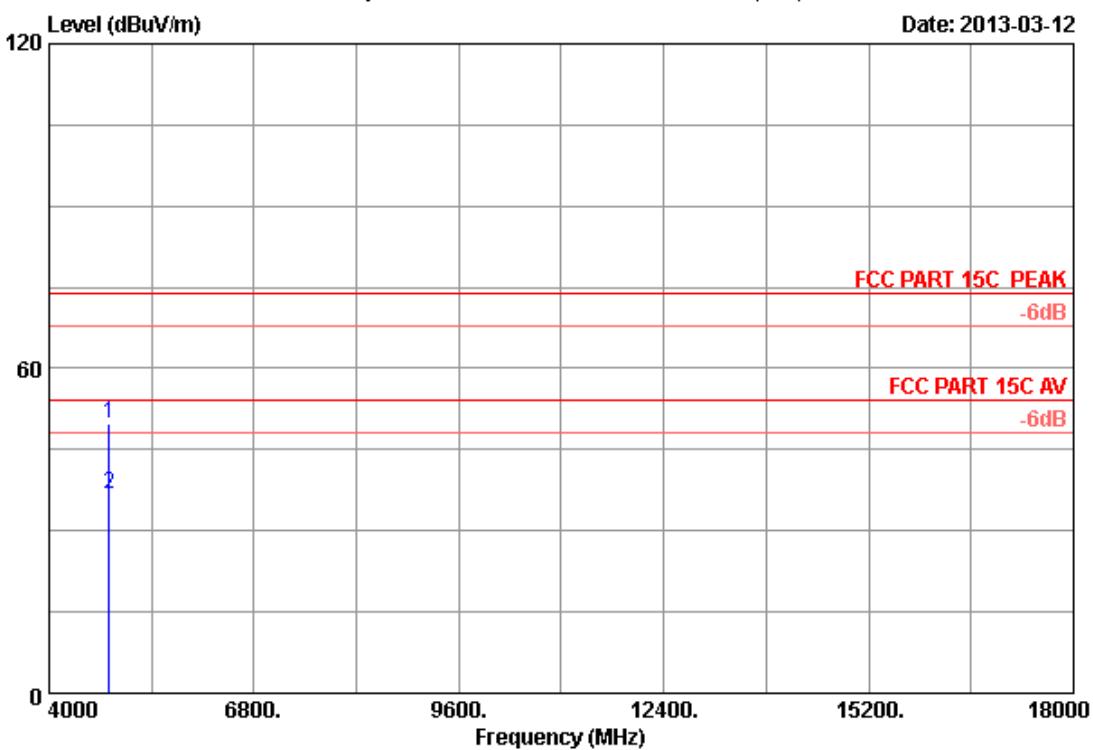


Site no. : 3m Chamber Data no. : 7  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH1 2412MHz Tx  
WA8011N-X

Data: 8

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

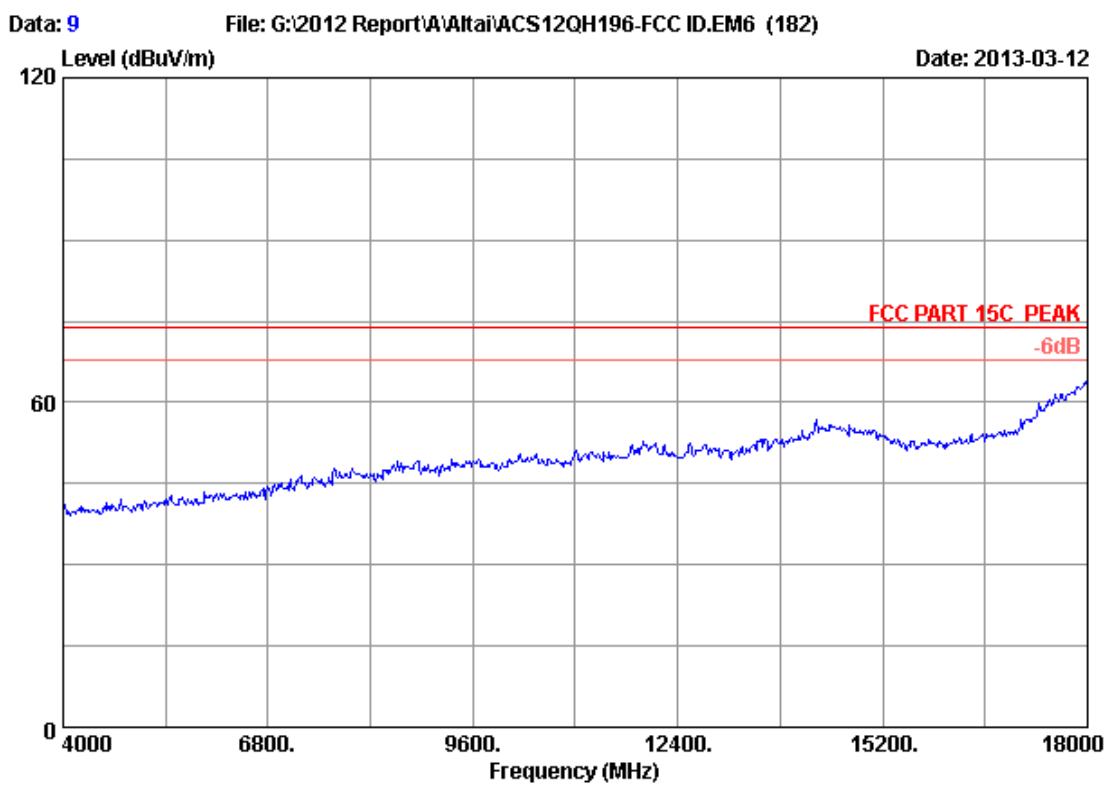


Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	32.88	8.58	35.70	44.12	49.88	74.00	24.12 Peak
2	4824.000	32.88	8.58	35.70	31.05	36.81	54.00	17.19 Average

## Remarks:

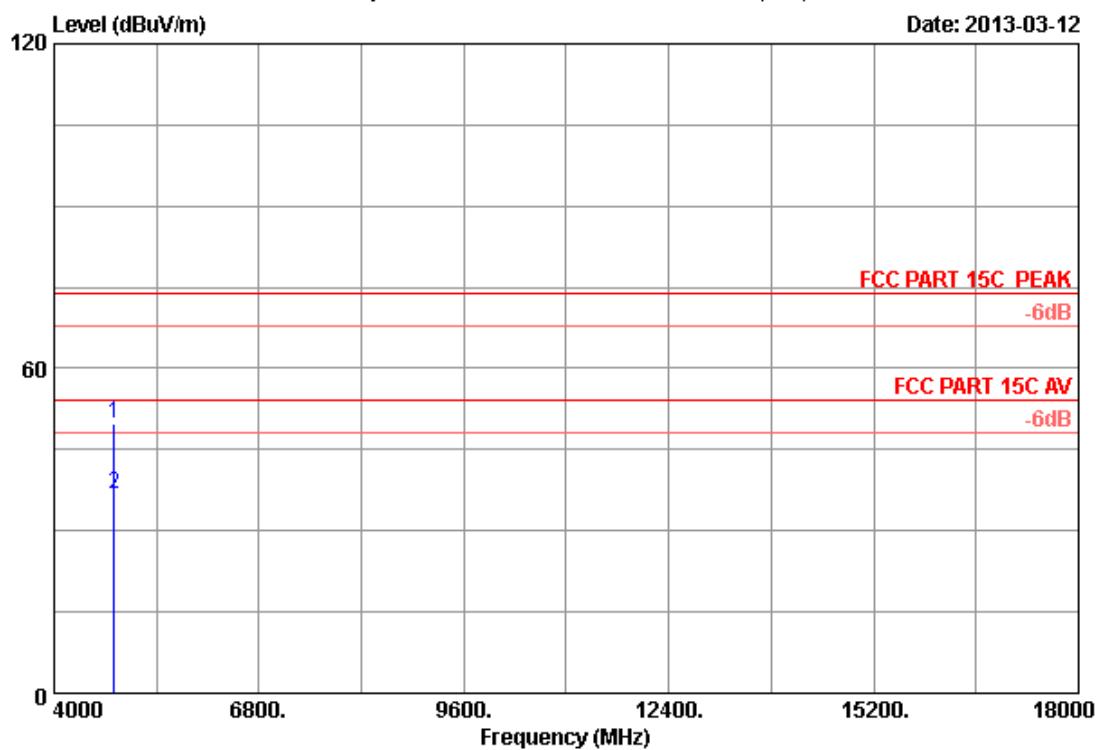
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH1 2412MHz Tx  
WA8011N-X

Data: 10

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

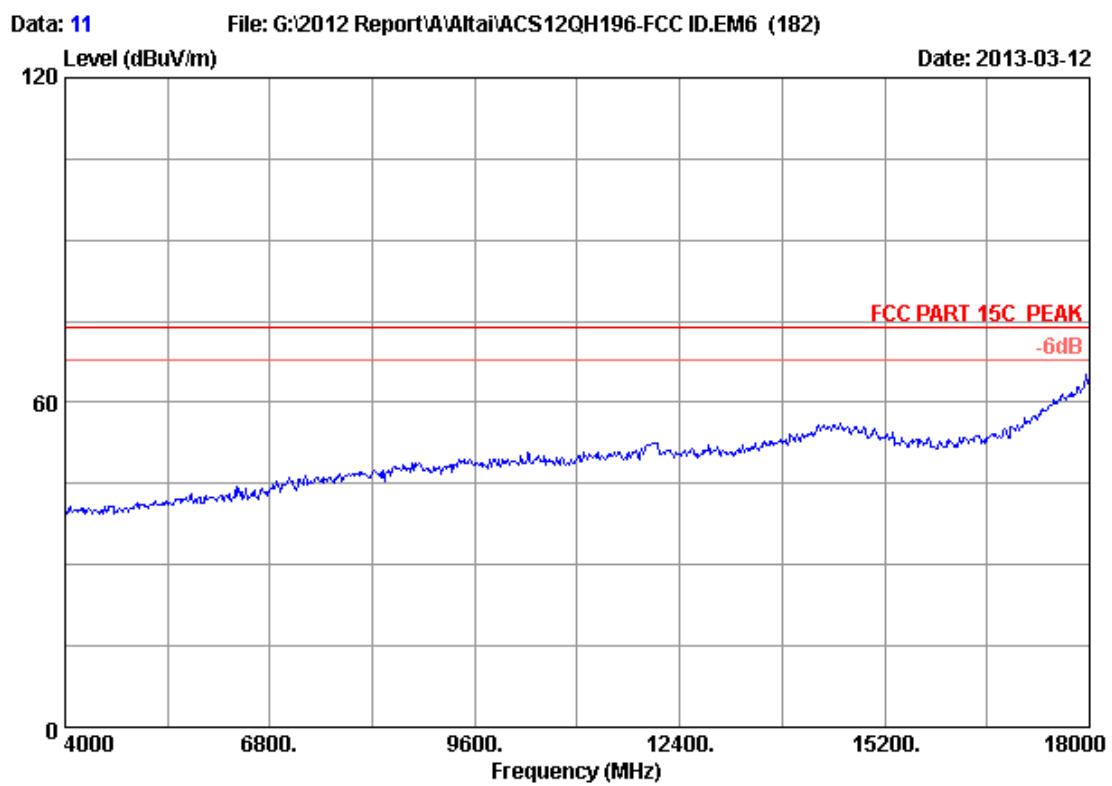


Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4824.000	32.88	8.58	35.70	44.01	49.77	74.00	24.23	Peak
2 4824.000	32.88	8.58	35.70	30.88	36.64	54.00	17.36	Average

## Remarks:

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

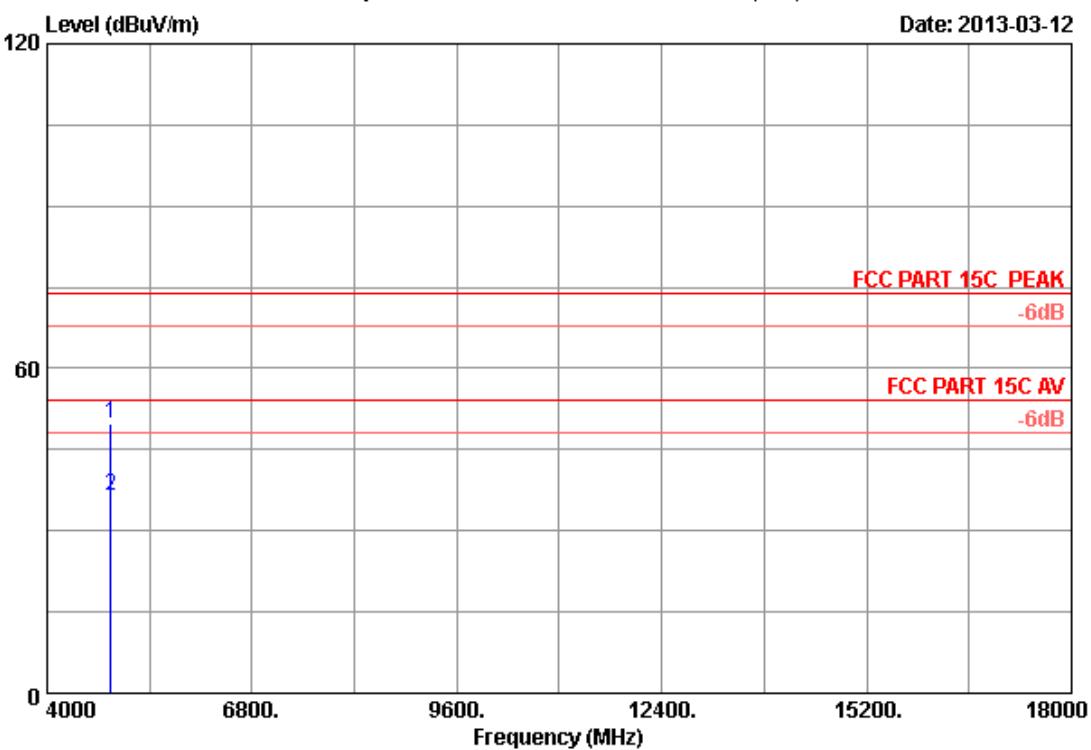


Site no. : 3m Chamber Data no. : 11  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH6 2437MHz Tx  
WA8011N-X

Data: 12

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

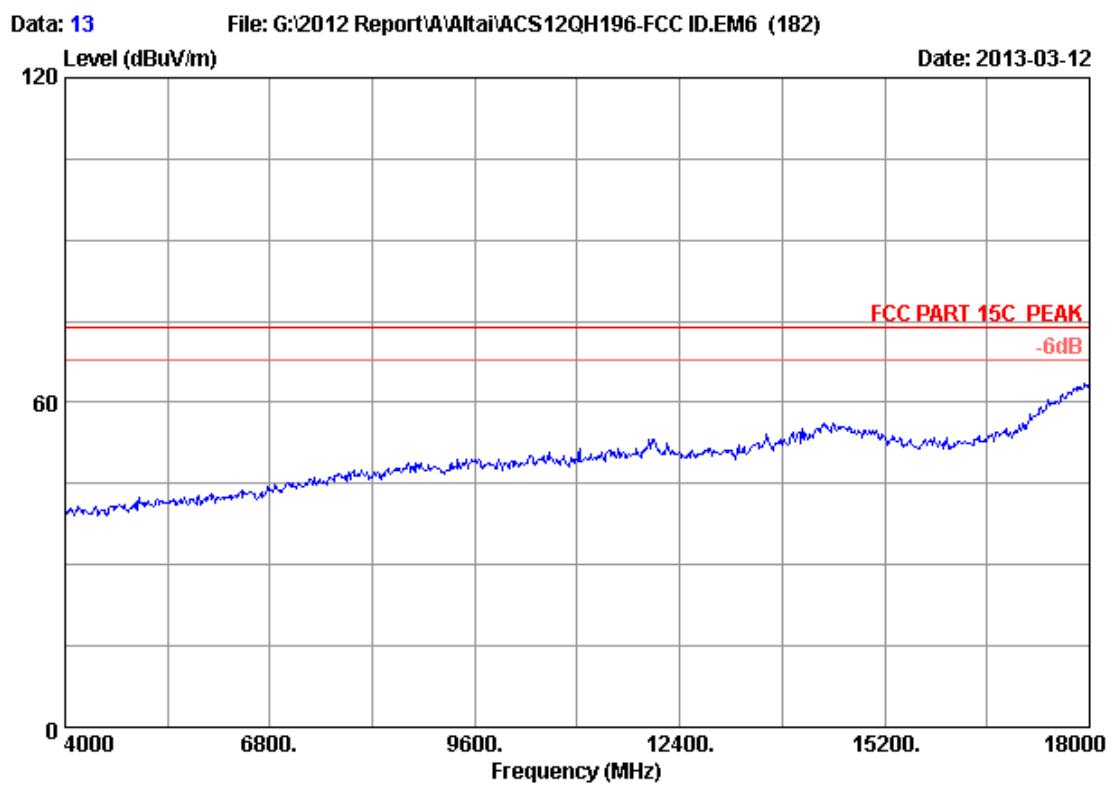


Site no. : 3m Chamber Data no. : 12  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	32.97	8.63	35.70	44.04	49.94	74.00	24.06 Peak
2	4874.000	32.97	8.63	35.70	30.70	36.60	54.00	17.40 Average

## Remarks:

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

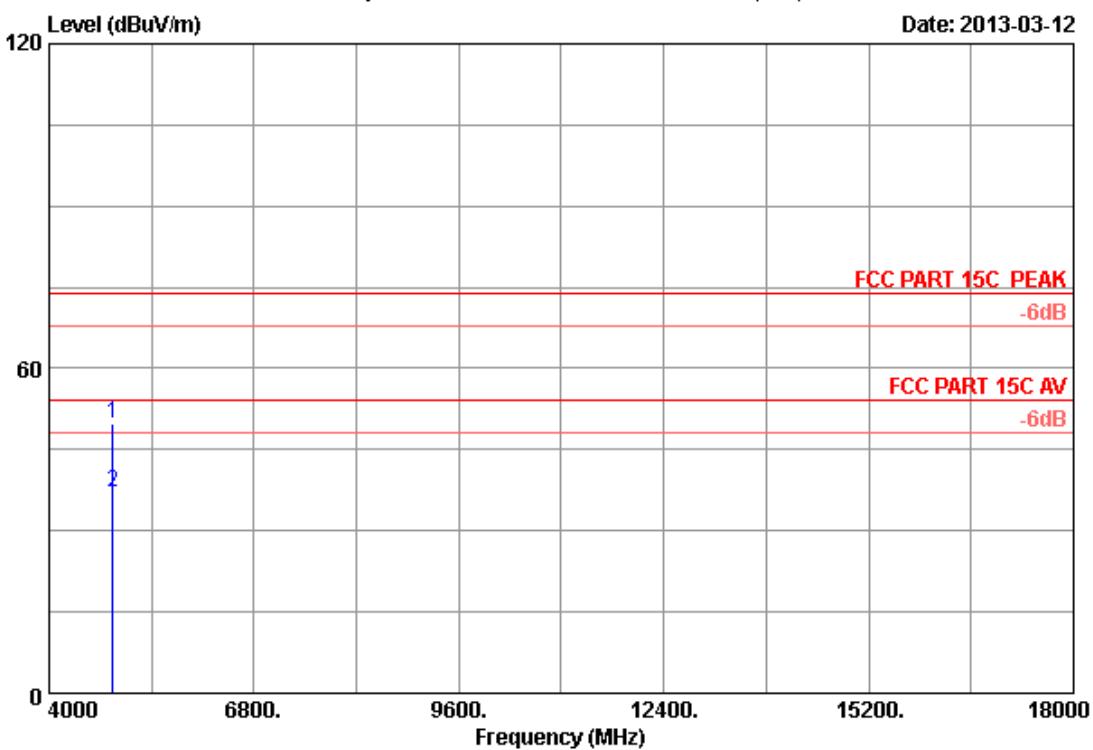


Site no. : 3m Chamber Data no. : 13  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH6 2437MHz Tx  
WA8011N-X

Data: 14

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 14  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4874.000	32.97	8.63	35.70	43.88	49.78	74.00	24.22	Peak
2 4874.000	32.97	8.63	35.70	31.13	37.03	54.00	16.97	Average

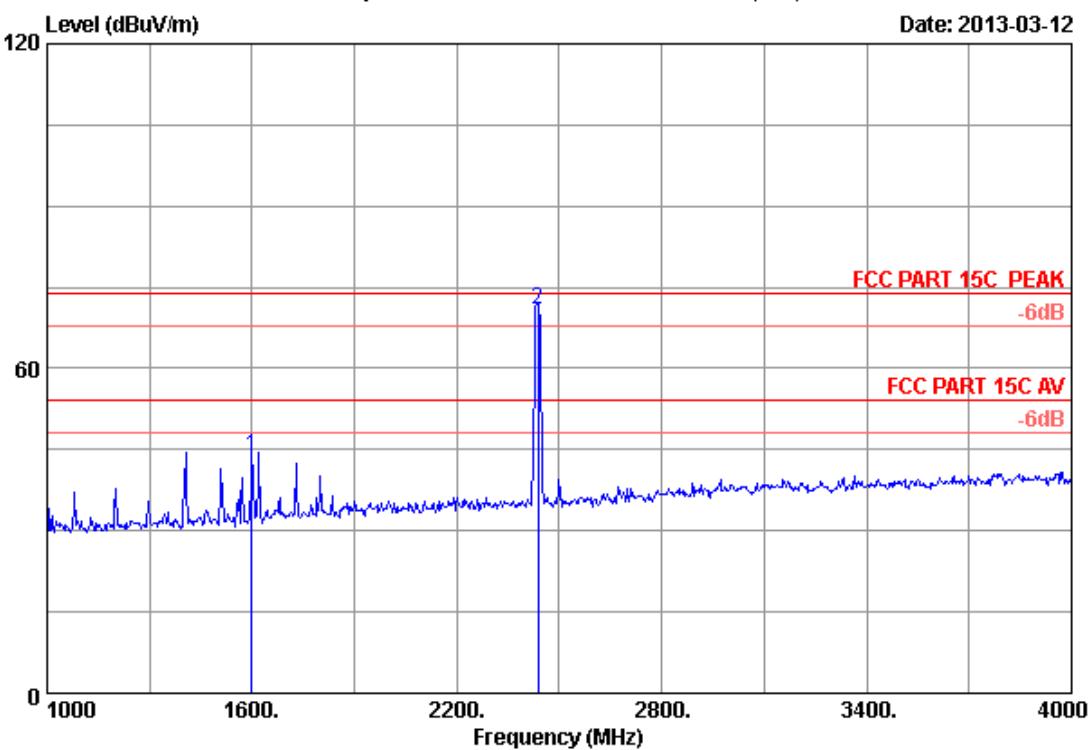
## Remarks:

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

Data: 15

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 15  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH6 2437MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	49.75	43.86	74.00	30.14	Peak
2 2437.000	28.26	5.85	35.70	72.37	70.78	74.00	3.22	Peak

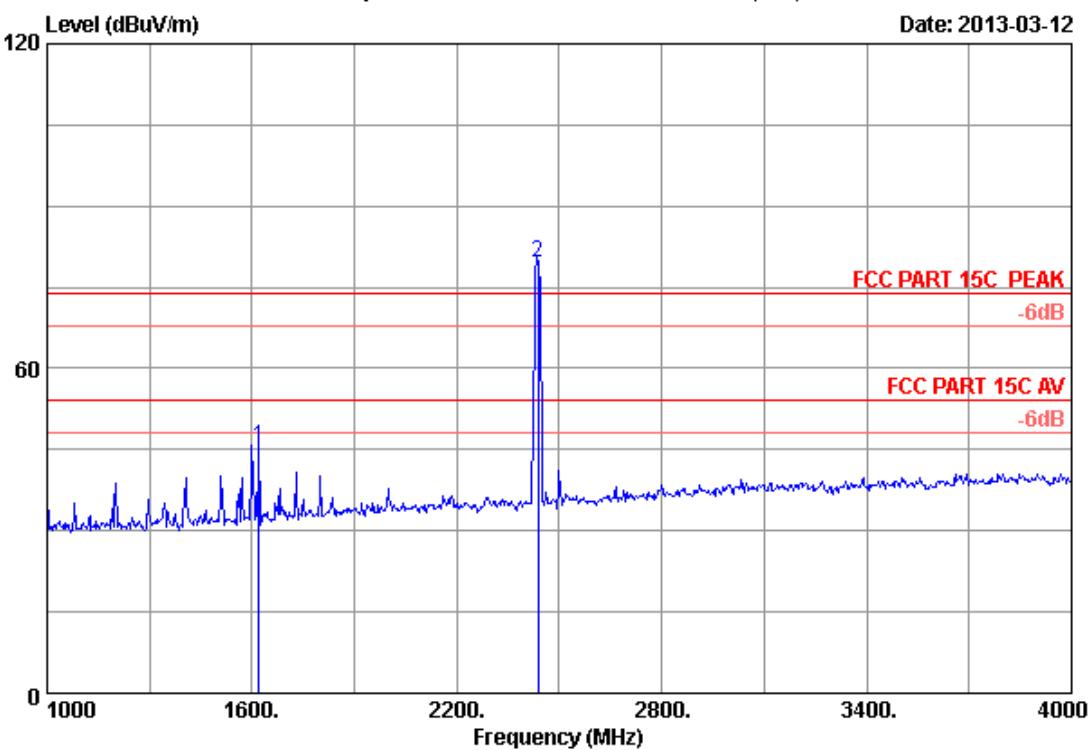
## Remarks:

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

Data: 16

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



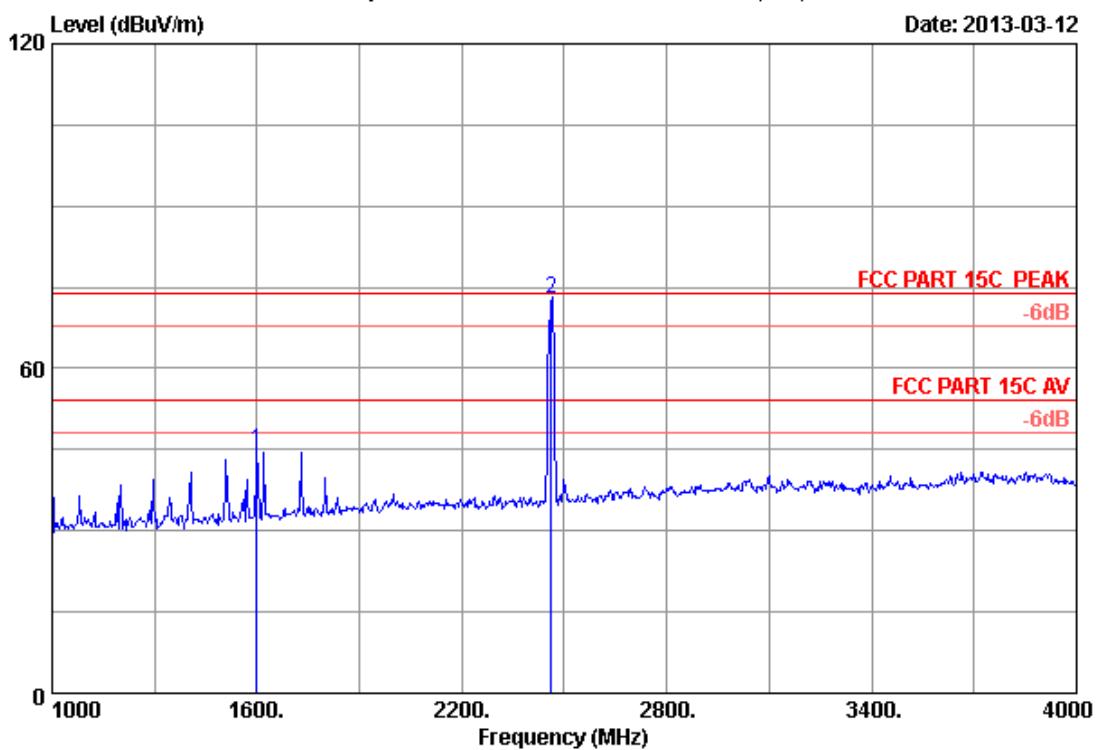
Site no. : 3m Chamber Data no. : 16  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	51.29	45.54	74.00	28.46	Peak
2 2437.000	28.26	5.85	35.70	81.13	79.54	74.00	-5.54	Peak

## Remarks:

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

Data: 17 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 17  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	50.75	44.86	74.00	29.14	Peak
2 2462.000	28.32	5.89	35.70	74.24	72.75	74.00	1.25	Peak

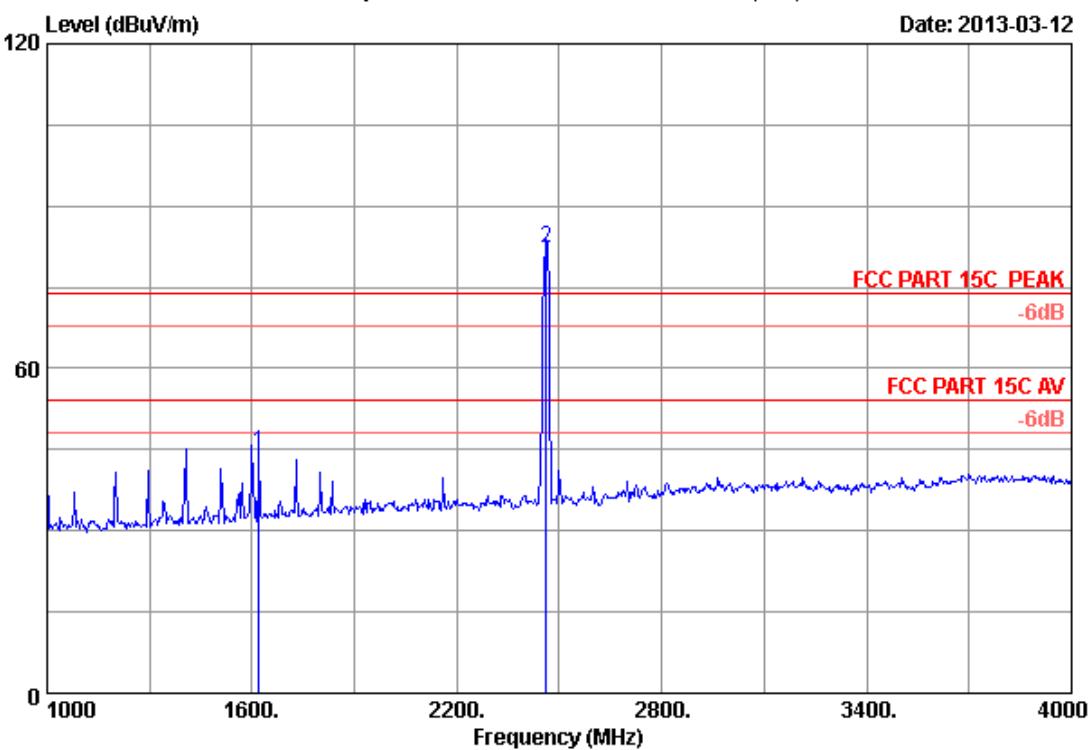
## Remarks:

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

Data: 18

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 18  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	50.32	44.57	74.00	29.43	Peak
2 2462.000	28.32	5.89	35.70	83.76	82.27	74.00	-8.27	Peak

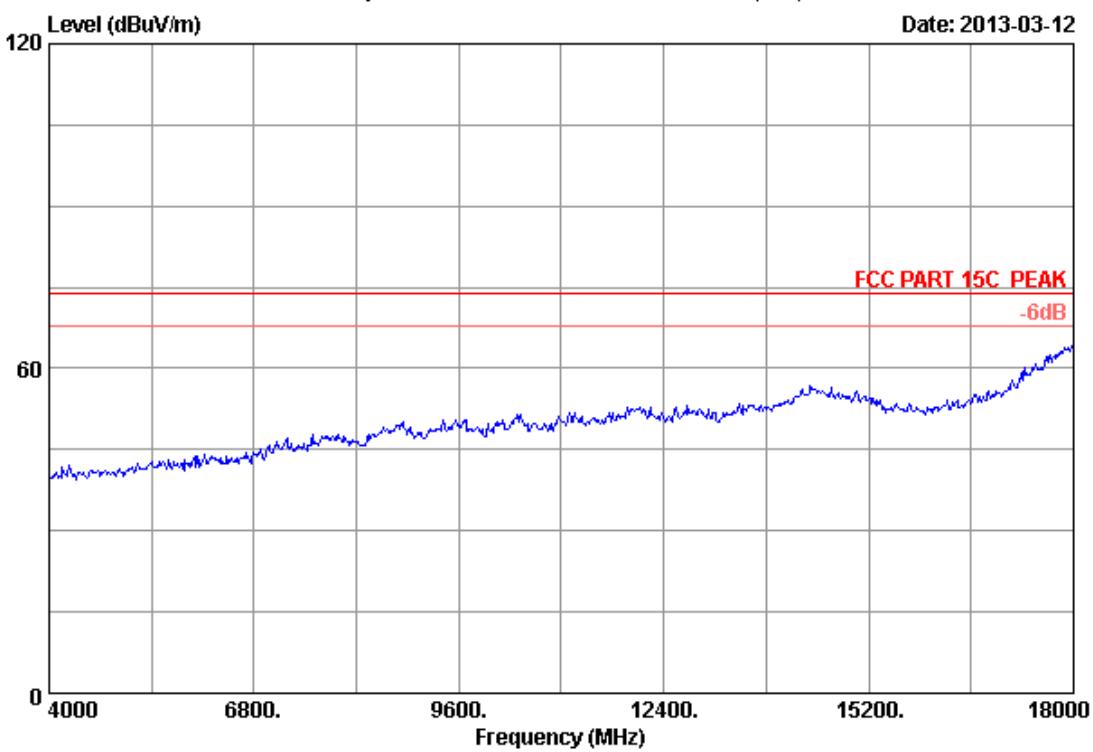
## Remarks:

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

Data: 23

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

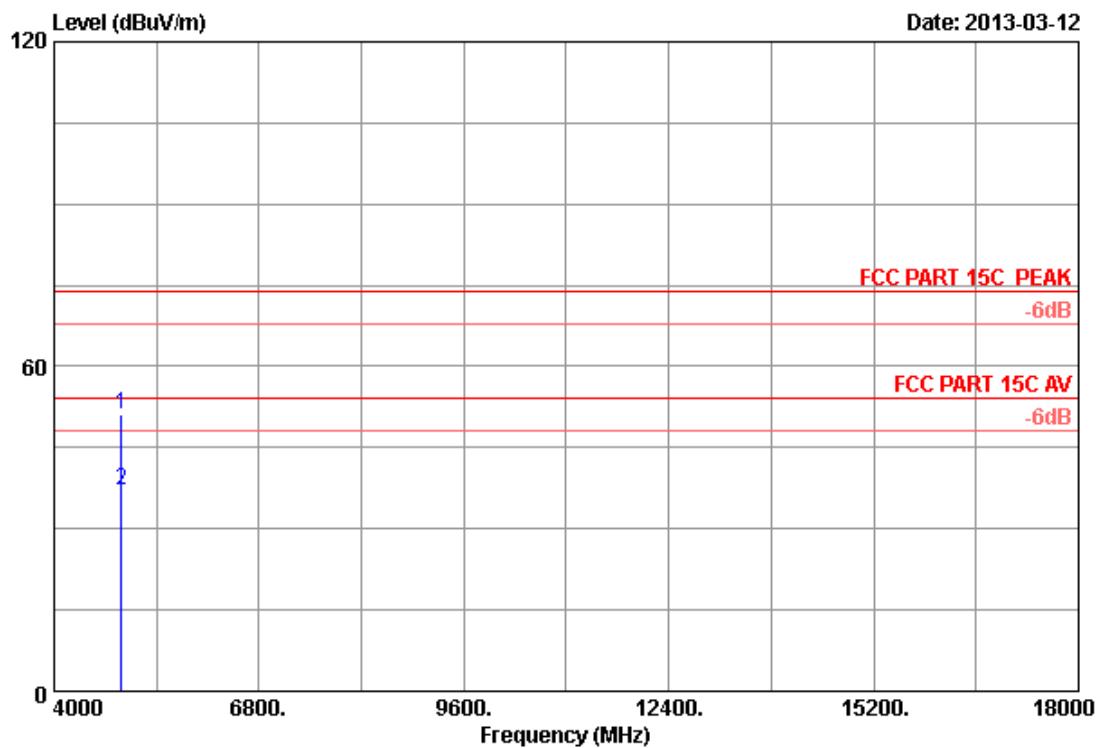
Date: 2013-03-12



Site no. : 3m Chamber Data no. : 23  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH11 2462MHz Tx  
WA8011N-X

Data: 24

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 24  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	33.06	8.69	35.70	44.96	51.01	74.00	22.99 Peak
2	4924.000	33.06	8.69	35.70	31.12	37.17	54.00	16.83 Average

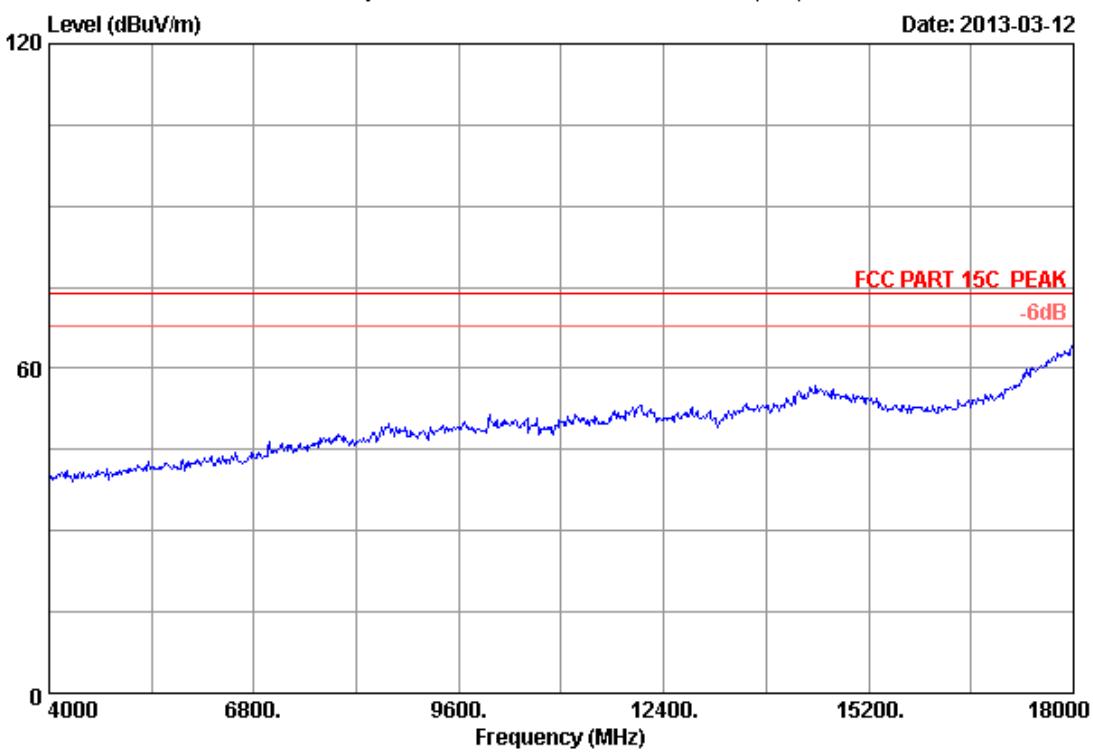
## Remarks:

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

Data: 25

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

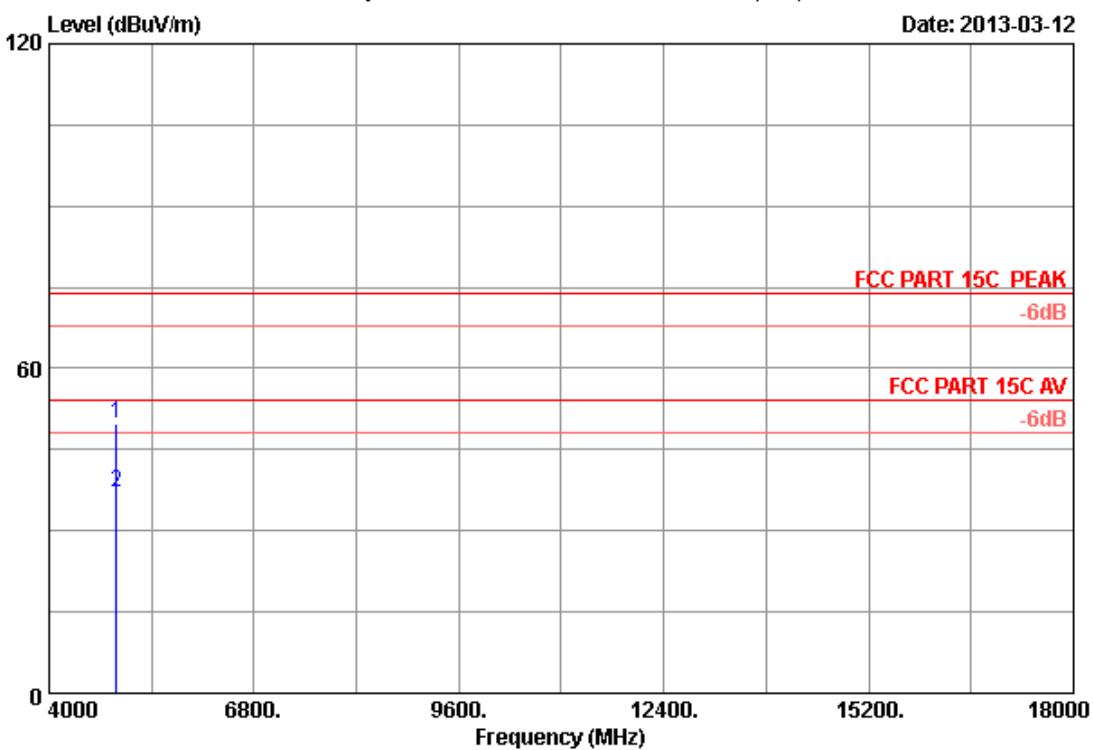


Site no. : 3m Chamber Data no. : 25  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH11 2462MHz Tx  
WA8011N-X

Data: 26

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 26  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	33.06	8.69	35.70	43.61	49.66	74.00	24.34 Peak
2	4924.000	33.06	8.69	35.70	30.92	36.97	54.00	17.03 Average

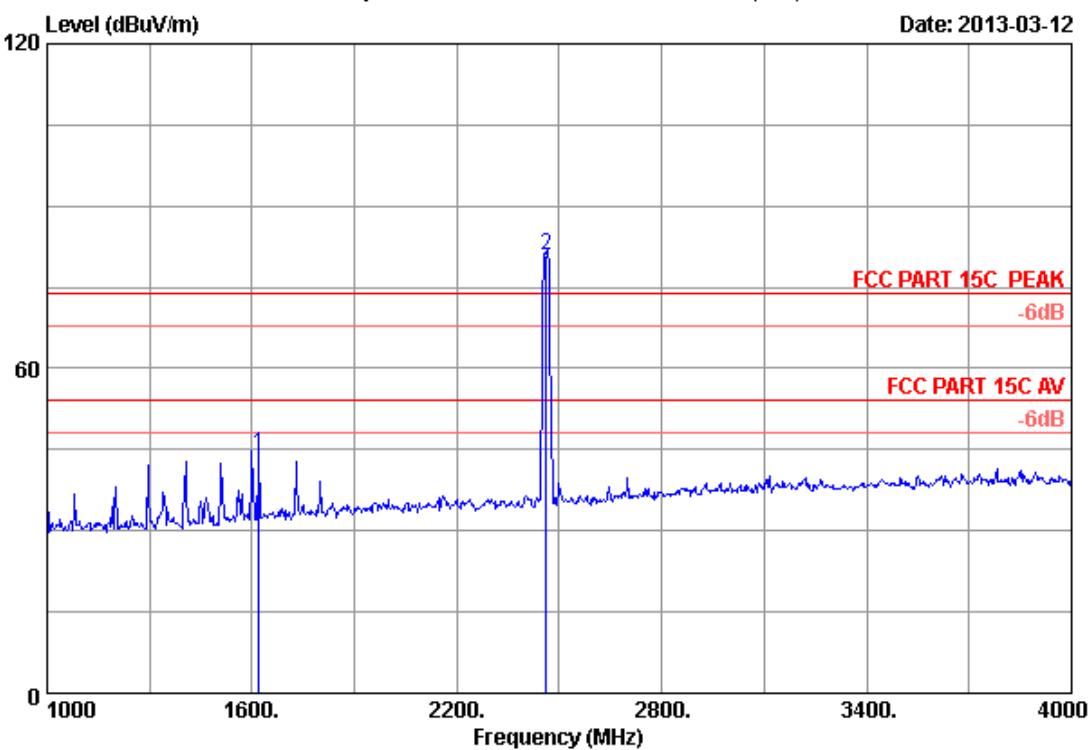
## Remarks:

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

Data: 31

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 31  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH11 2462MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	49.78	44.03	74.00	29.97	Peak
2 2462.000	28.32	5.89	35.70	82.53	81.04	74.00	-7.04	Peak

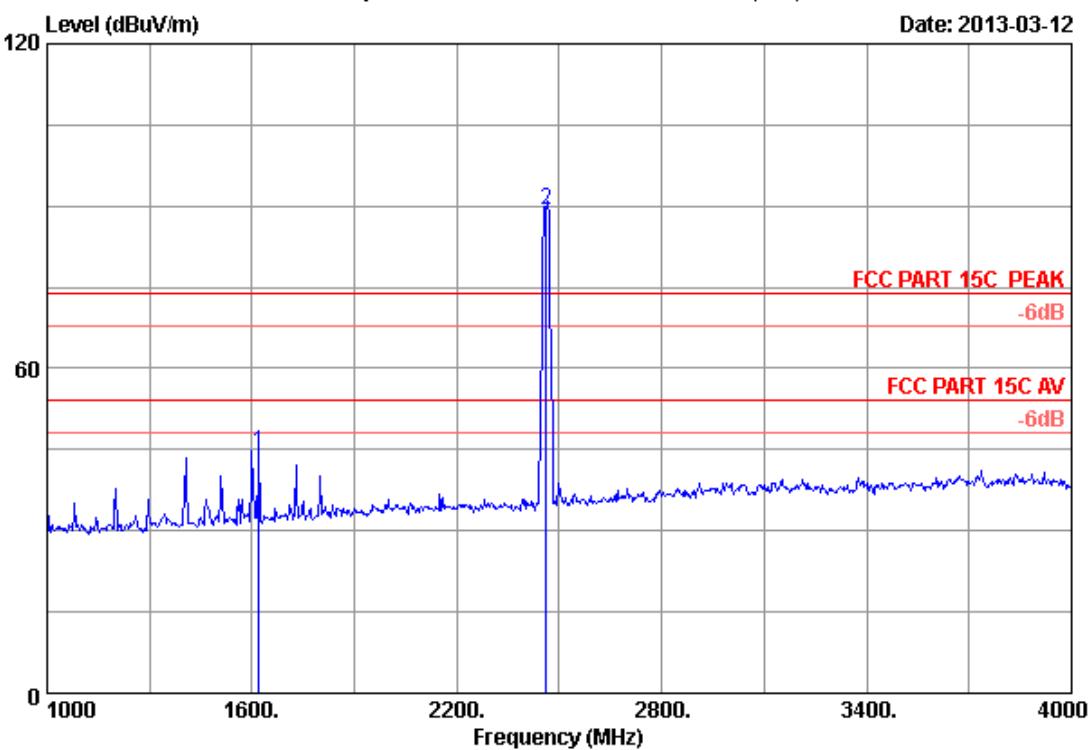
## Remarks:

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

Data: 32

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

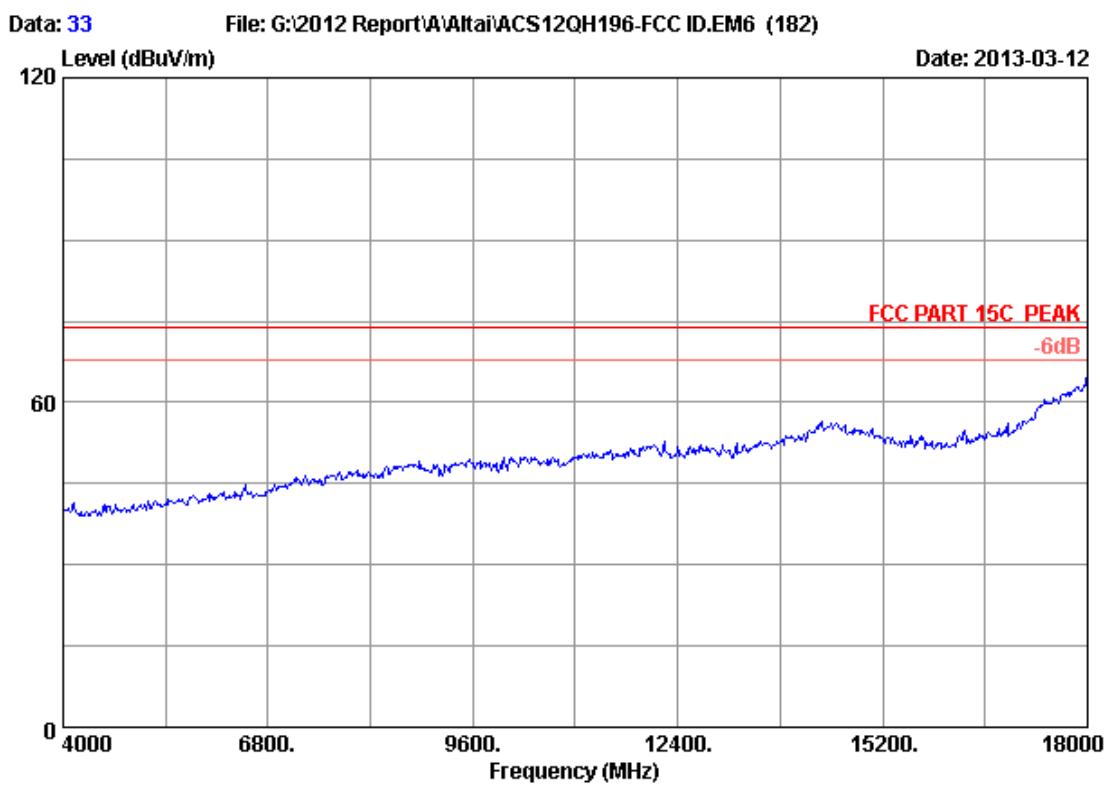


Site no. : 3m Chamber Data no. : 32  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1621.000	25.71	4.66	36.12	50.32	44.57	74.00	29.43 Peak
2	2462.000	28.32	5.89	35.70	90.86	89.37	74.00	-15.37 Peak

## Remarks:

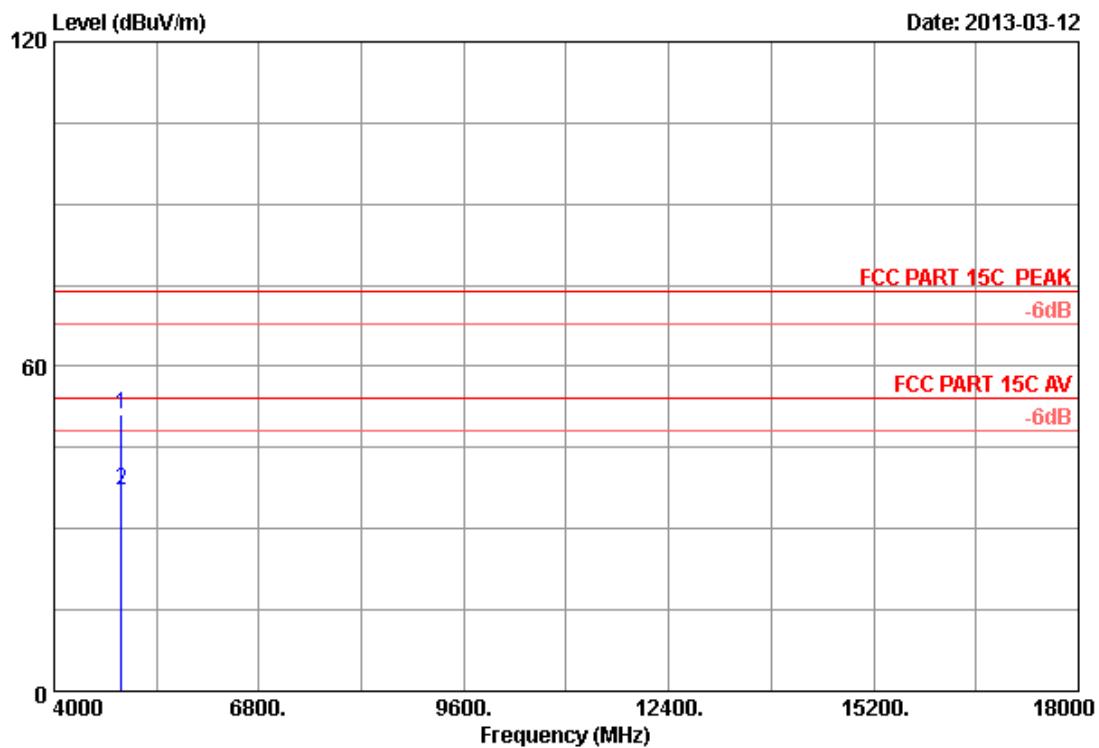
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 33  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH11 2462MHz Tx  
WA8011N-X

Data: 34

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

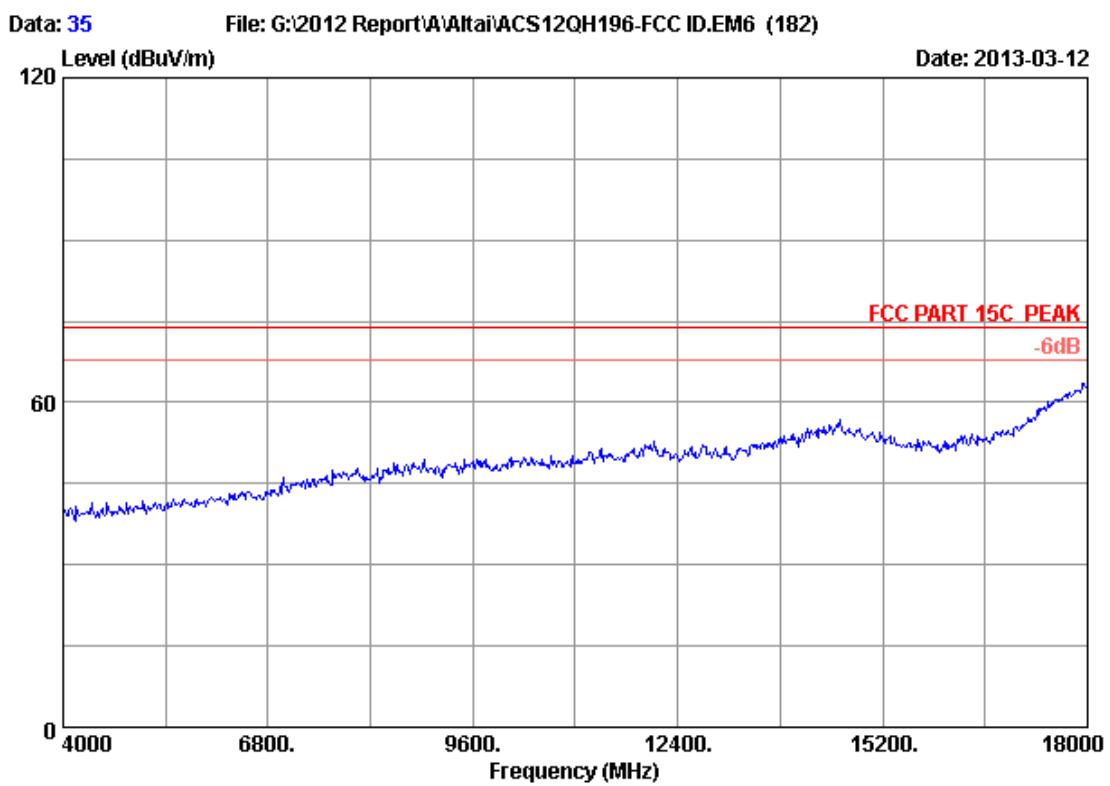


Site no. : 3m Chamber Data no. : 34  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	33.06	8.69	35.70	45.23	51.28	74.00	22.72 Peak
2	4924.000	33.06	8.69	35.70	31.02	37.07	54.00	16.93 Average

## Remarks:

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

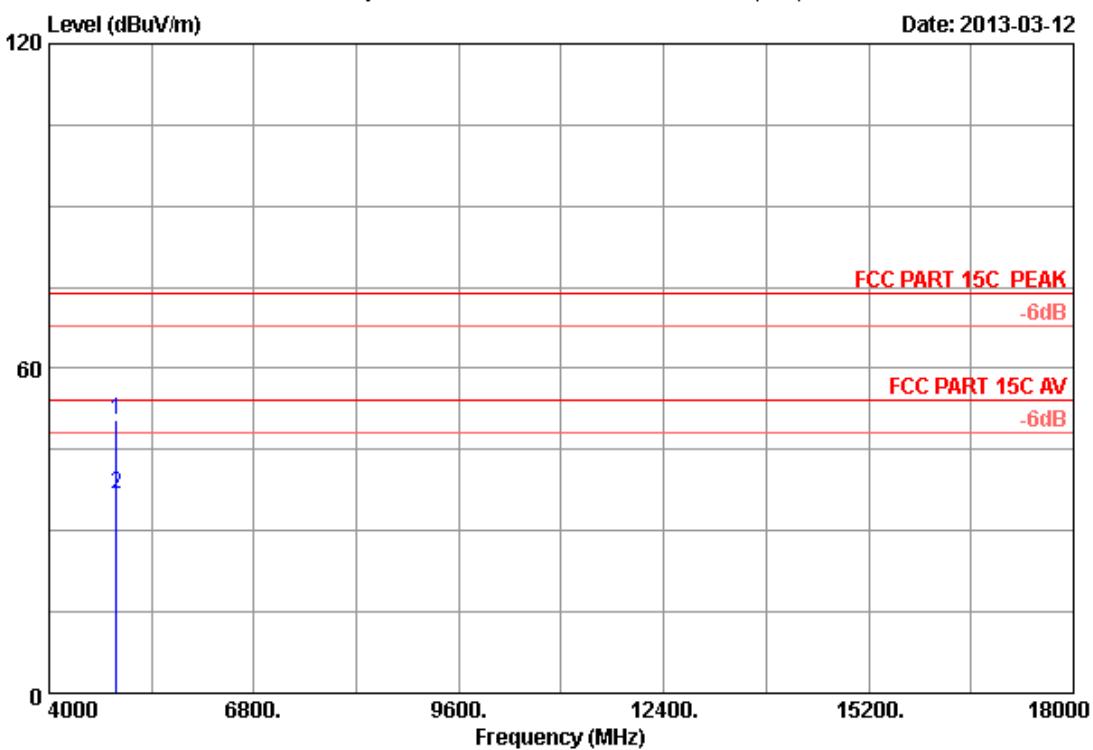


Site no. : 3m Chamber Data no. : 35  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH11 2462MHz Tx  
WA8011N-X

Data: 36

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 36  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4924.000	33.06	8.69	35.70	44.59	50.64	74.00	23.36	Peak
2 4924.000	33.06	8.69	35.70	30.71	36.76	54.00	17.24	Average

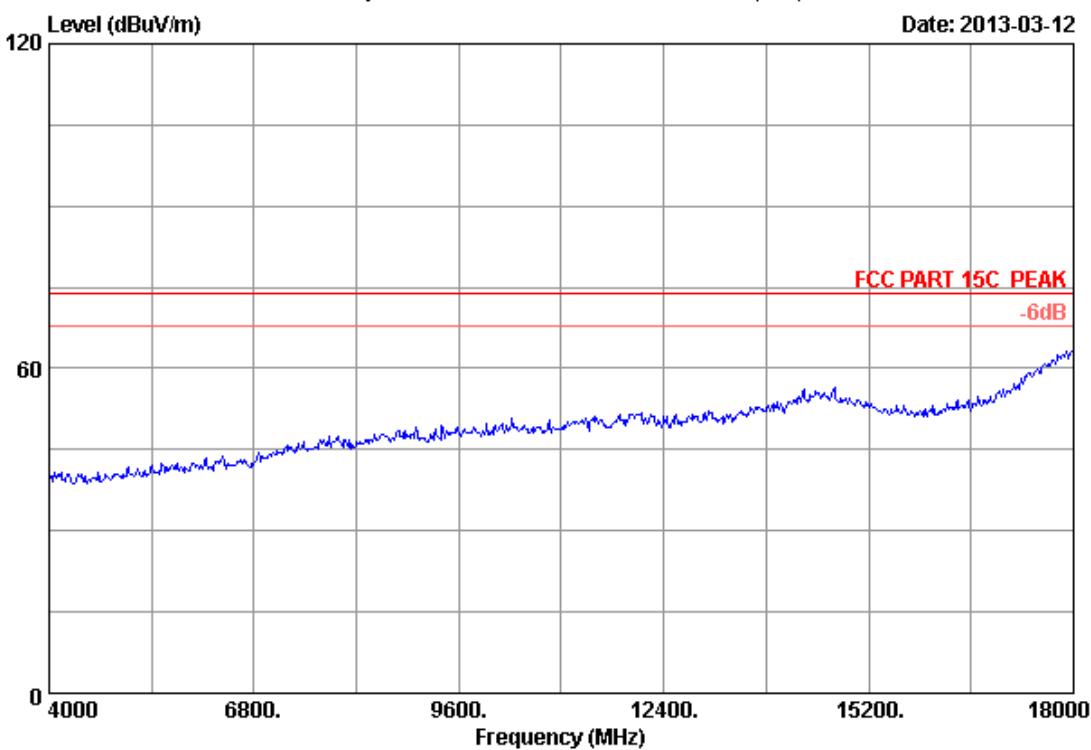
## Remarks:

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

Data: 37

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

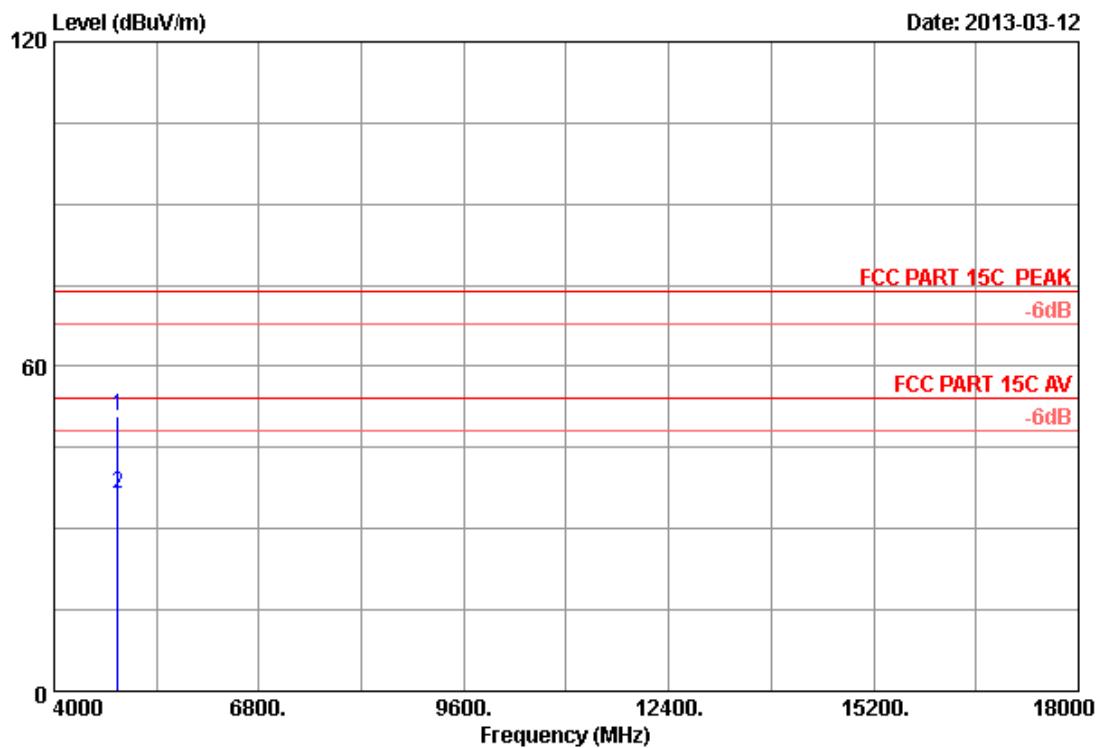
Date: 2013-03-12



Site no. : 3m Chamber Data no. : 37  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH6 2437MHz Tx  
WA8011N-X

Data: 38

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 38  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	32.97	8.63	35.70	44.96	50.86	74.00	23.14 Peak
2	4874.000	32.97	8.63	35.70	30.57	36.47	54.00	17.53 Average

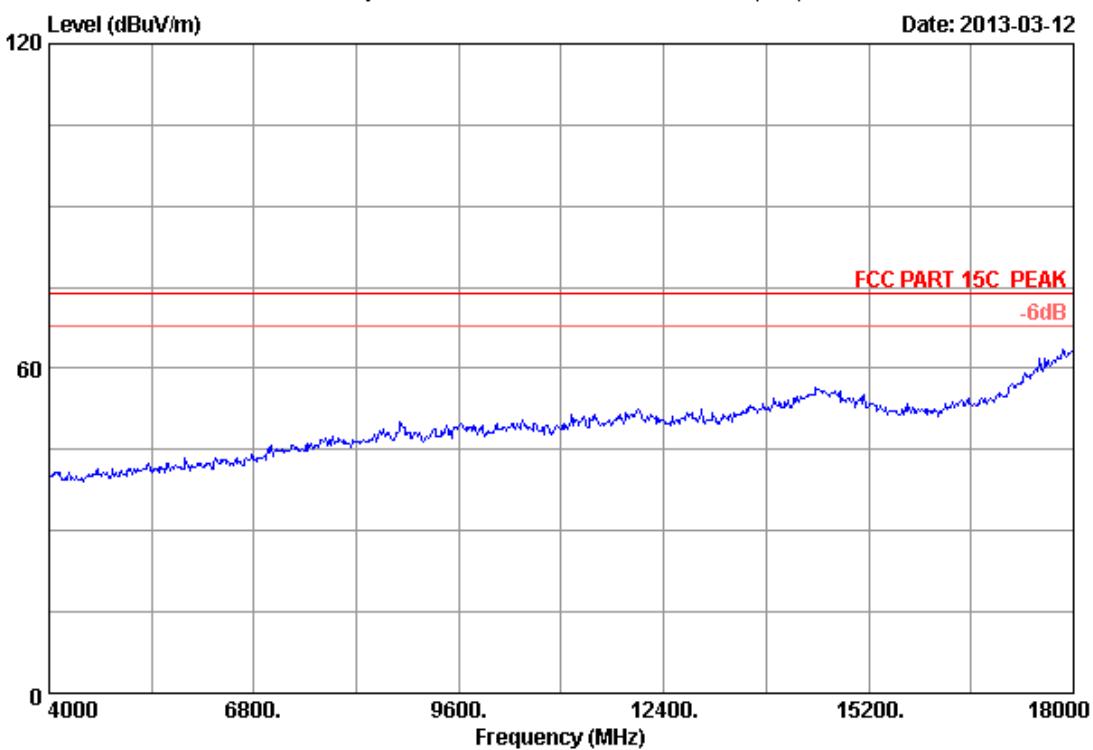
## Remarks:

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

Data: 39

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

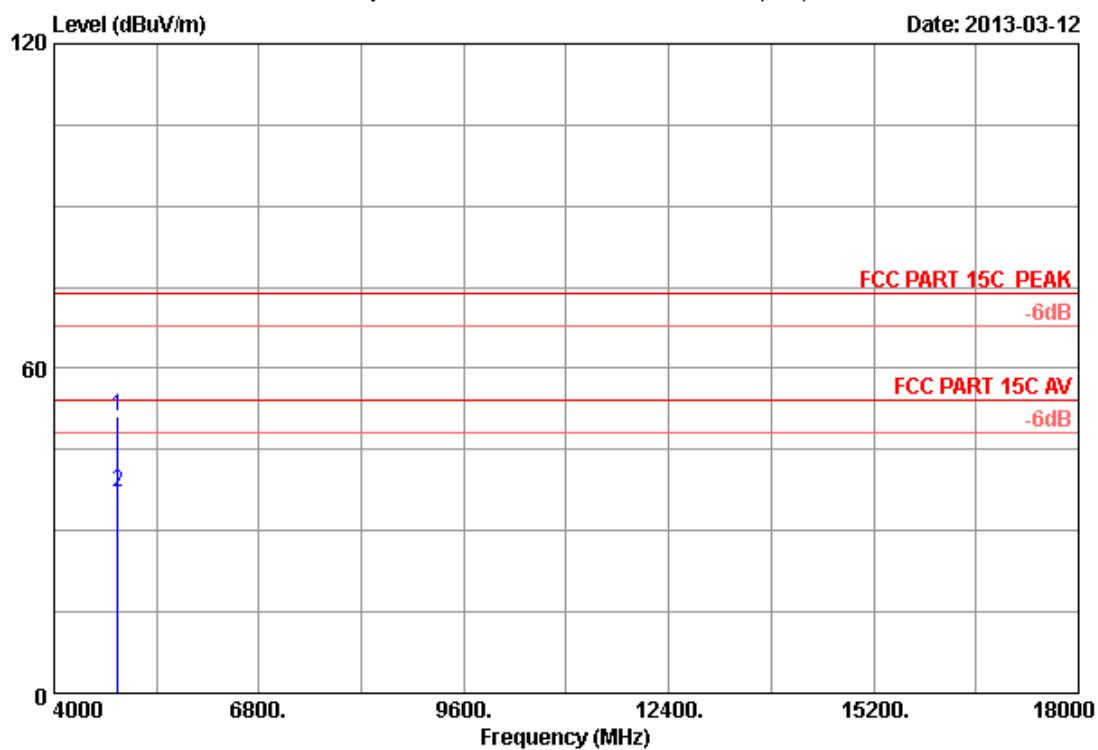
Date: 2013-03-12



Site no. : 3m Chamber Data no. : 39  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH6 2437MHz Tx  
WA8011N-X

Data: 40

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 40  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	32.97	8.63	35.70	45.29	51.19	74.00	22.81 Peak
2	4874.000	32.97	8.63	35.70	31.25	37.15	54.00	16.85 Average

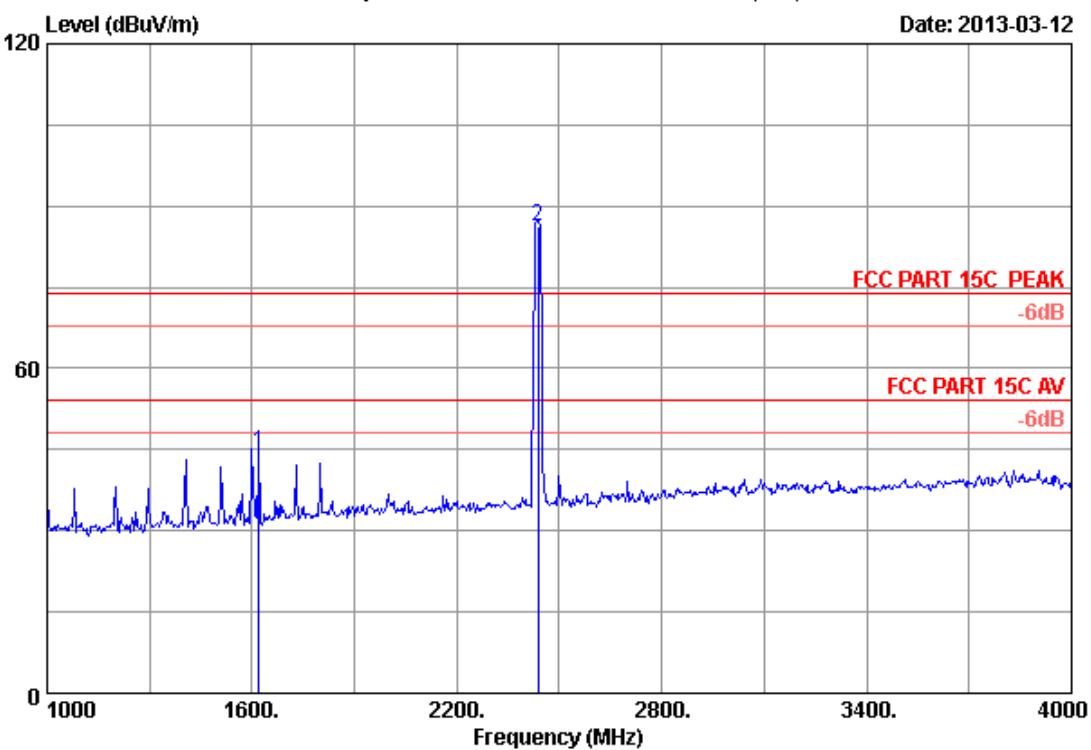
## Remarks:

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

Data: 41

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 41  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	50.37	44.62	74.00	29.38	Peak
2 2437.000	28.26	5.85	35.70	87.67	86.08	74.00	-12.08	Peak

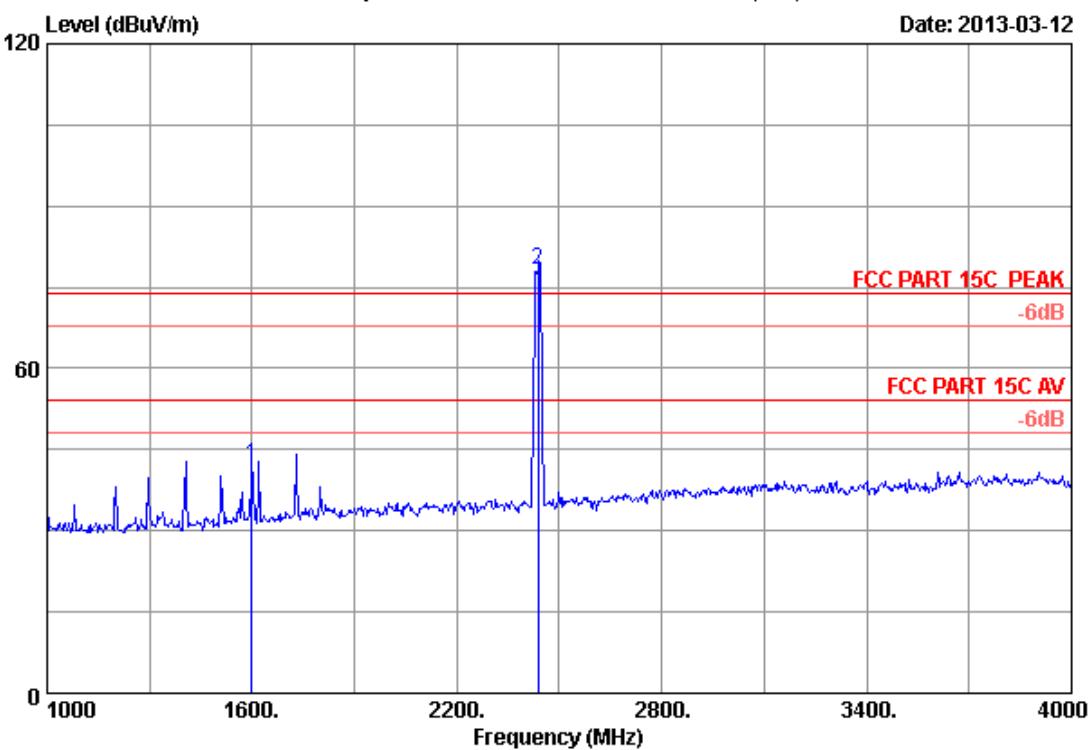
## Remarks:

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

Data: 42

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

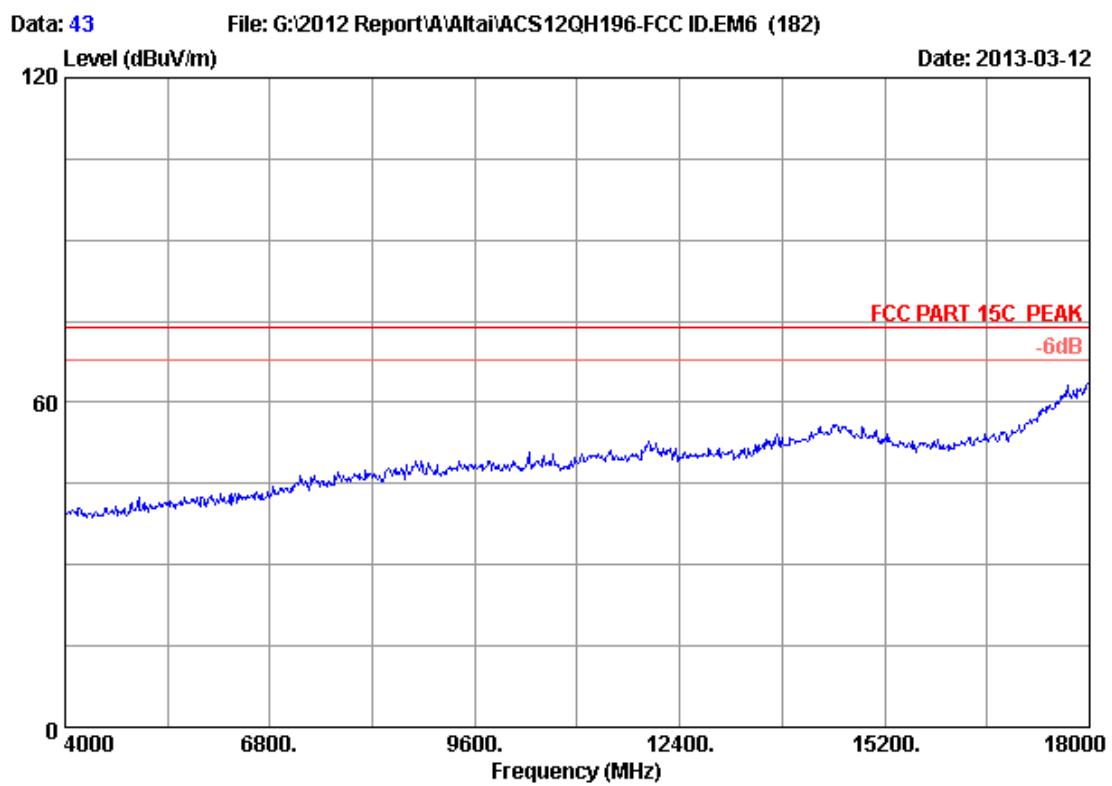


Site no. : 3m Chamber Data no. : 42  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH6 2437MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	48.11	42.22	74.00	31.78	Peak
2 2437.000	28.26	5.85	35.70	79.89	78.30	74.00	-4.30	Peak

## Remarks:

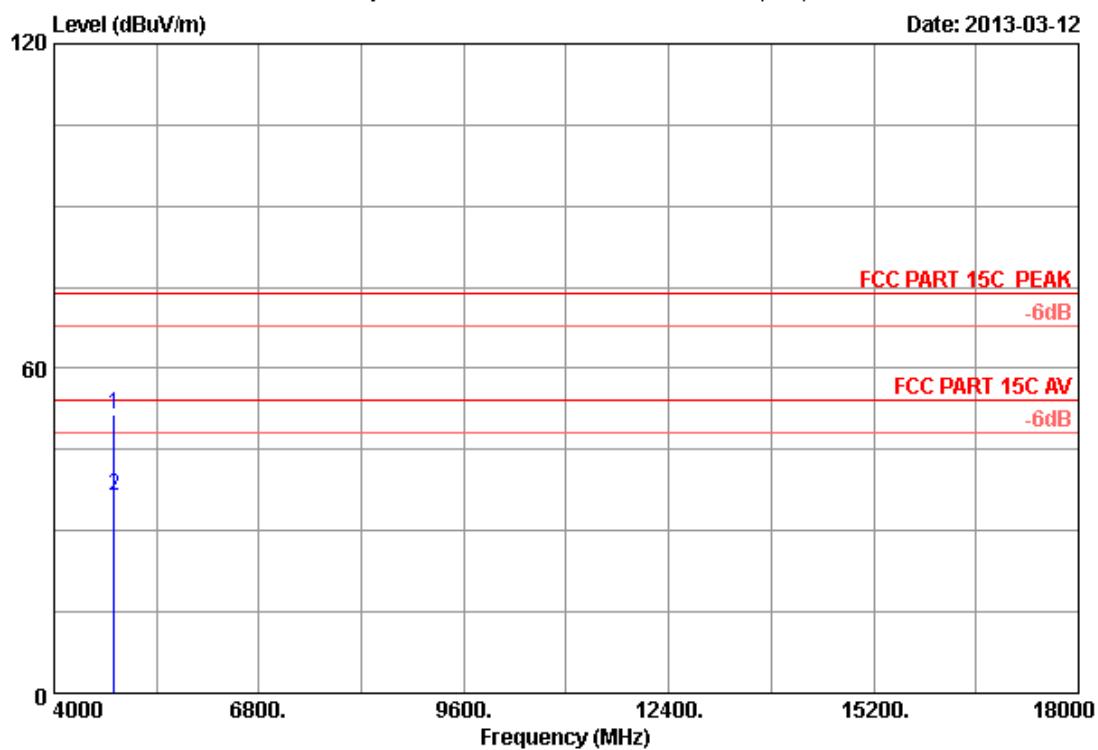
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 43  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH1 2412MHz Tx  
WA8011N-X

Data: 44

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

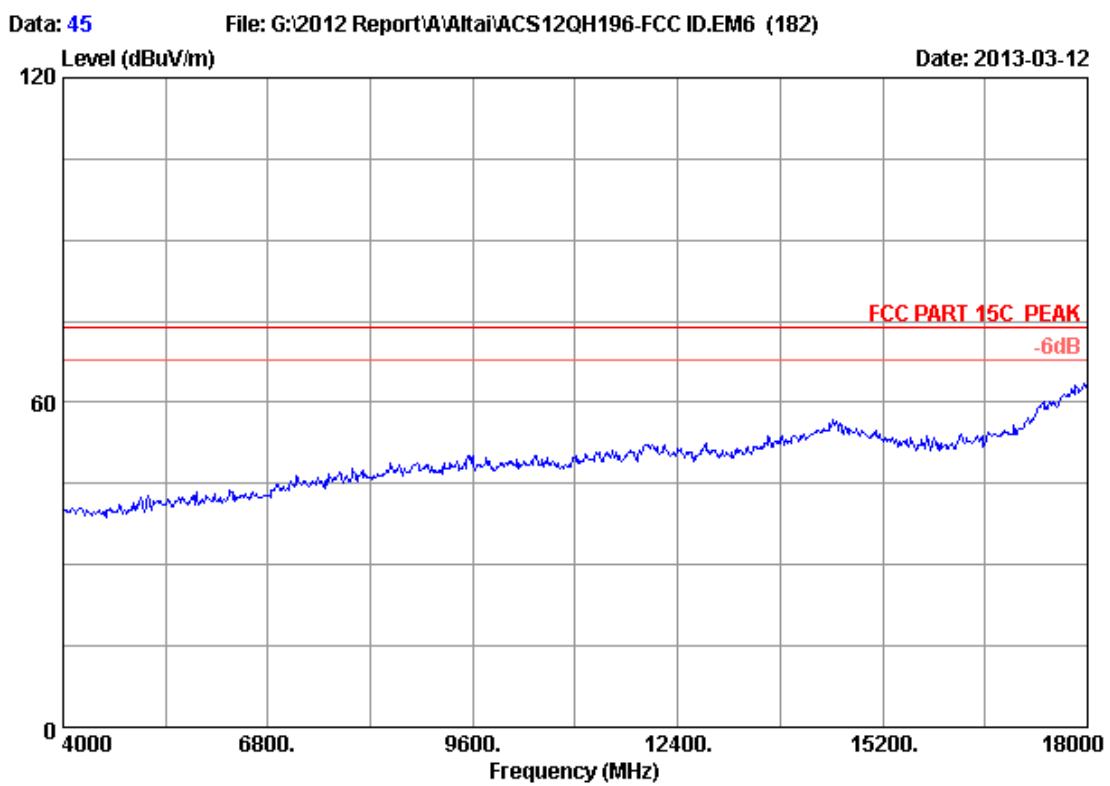


Site no. : 3m Chamber Data no. : 44  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4824.000	32.88	8.58	35.70	45.66	51.42	74.00	22.58	Peak
2 4824.000	32.88	8.58	35.70	30.78	36.54	54.00	17.46	Average

## Remarks:

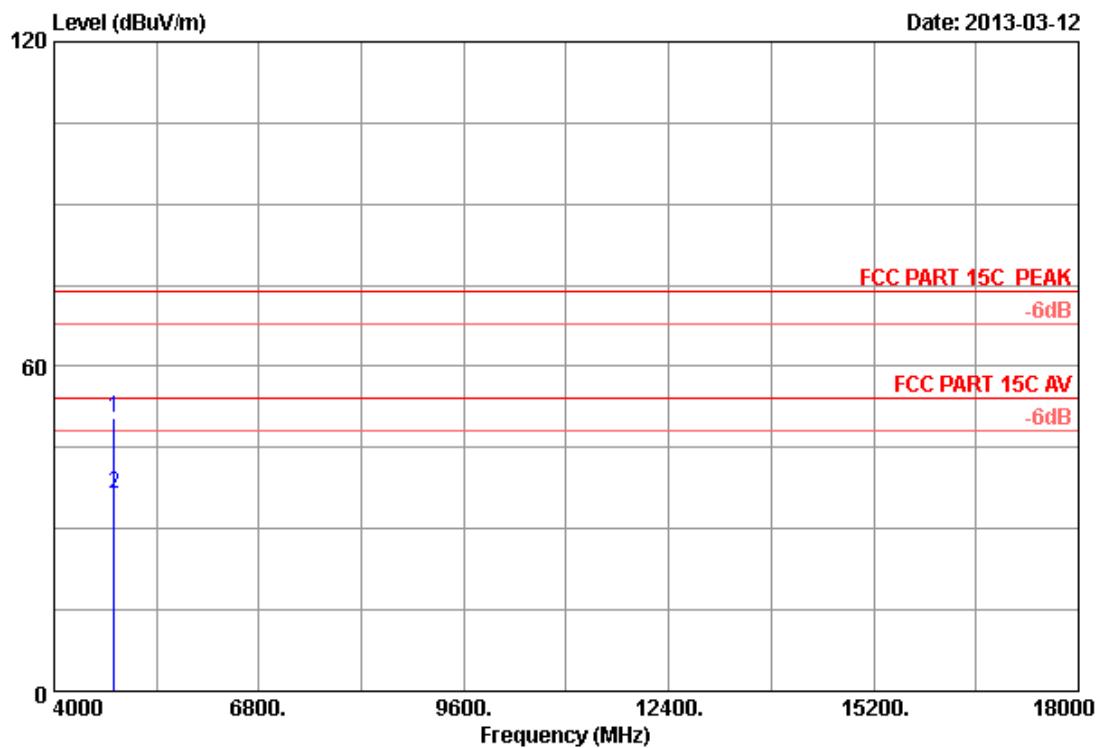
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 45  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH1 2412MHz Tx  
WA8011N-X

Data: 46

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



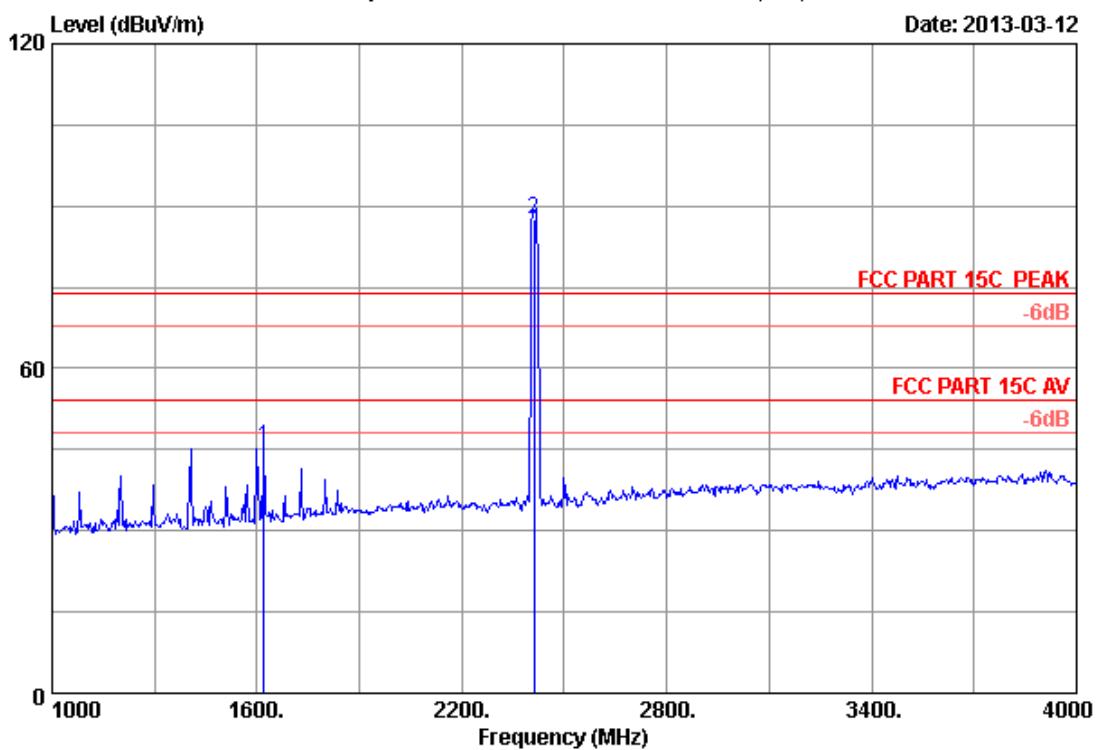
Site no. : 3m Chamber Data no. : 46  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	32.88	8.58	35.70	44.57	50.33	74.00	23.67 Peak
2	4824.000	32.88	8.58	35.70	30.52	36.28	54.00	17.72 Average

## Remarks:

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

Data: 47 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 47  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	51.32	45.57	74.00	28.43	Peak
2 2412.000	28.21	5.81	35.70	89.12	87.44	74.00	-13.44	Peak

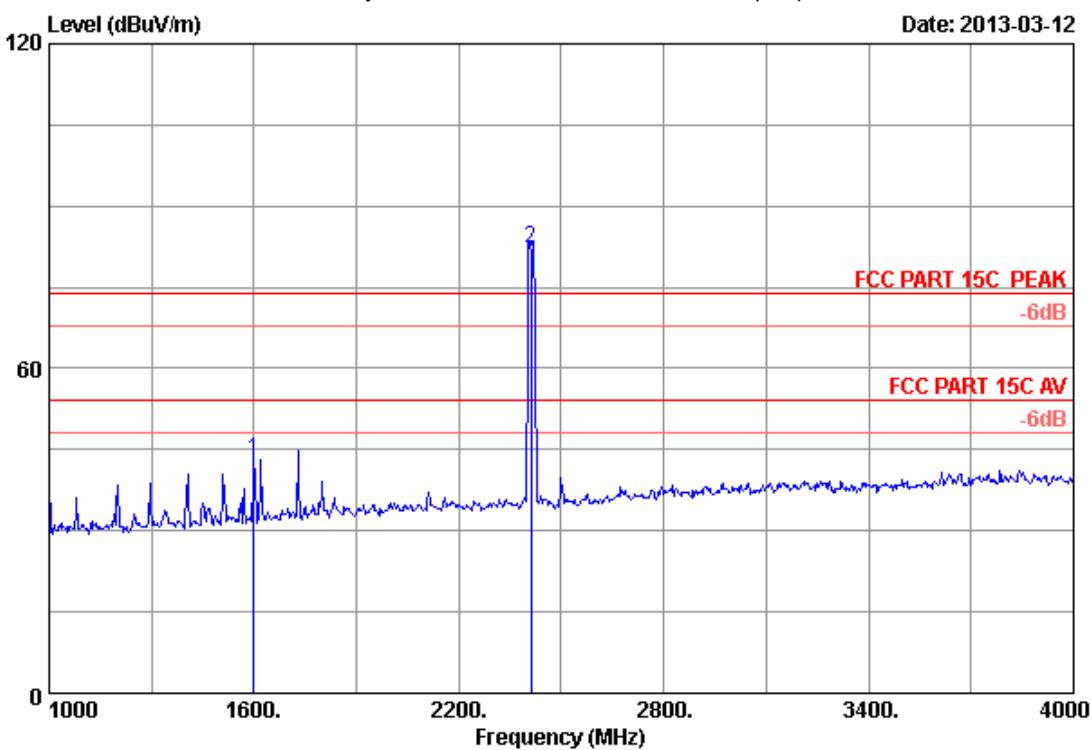
## Remarks:

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

Data: 48

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 48  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	49.06	43.17	74.00	30.83	Peak
2 2412.000	28.21	5.81	35.70	83.88	82.20	74.00	-8.20	Peak

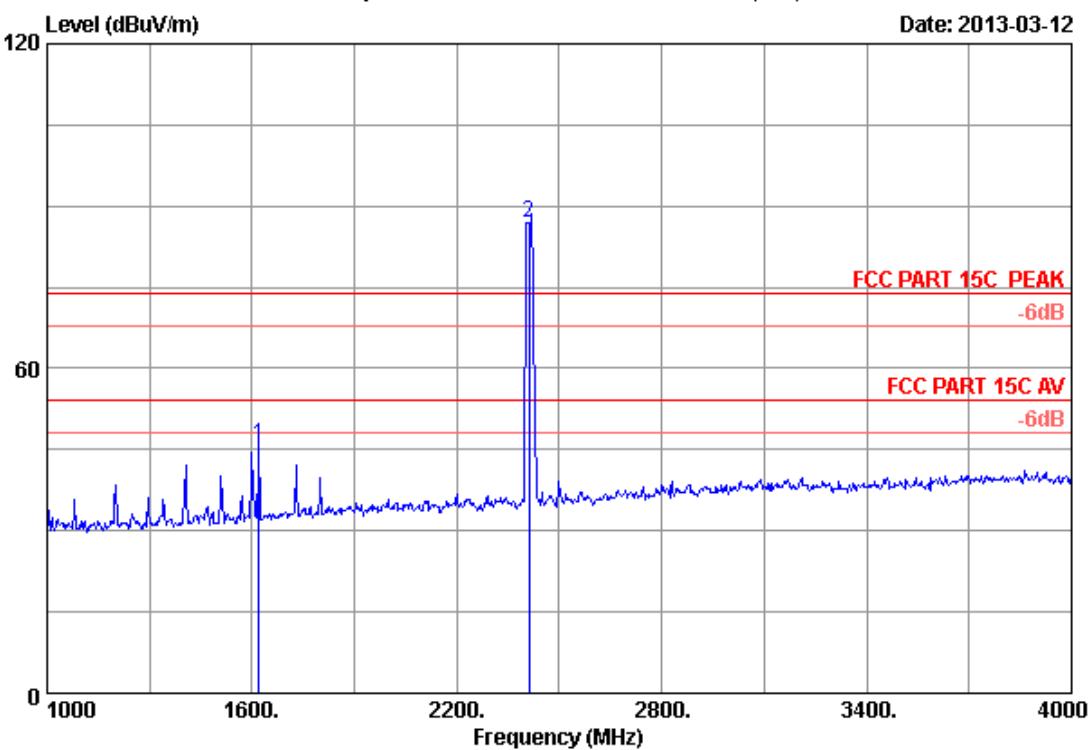
## Remarks:

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

Data: 57

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 57  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1621.000	25.71	4.66	36.12	51.68	45.93	74.00	28.07 Peak
2	2412.000	28.21	5.81	35.70	88.64	86.96	74.00	-12.96 Peak

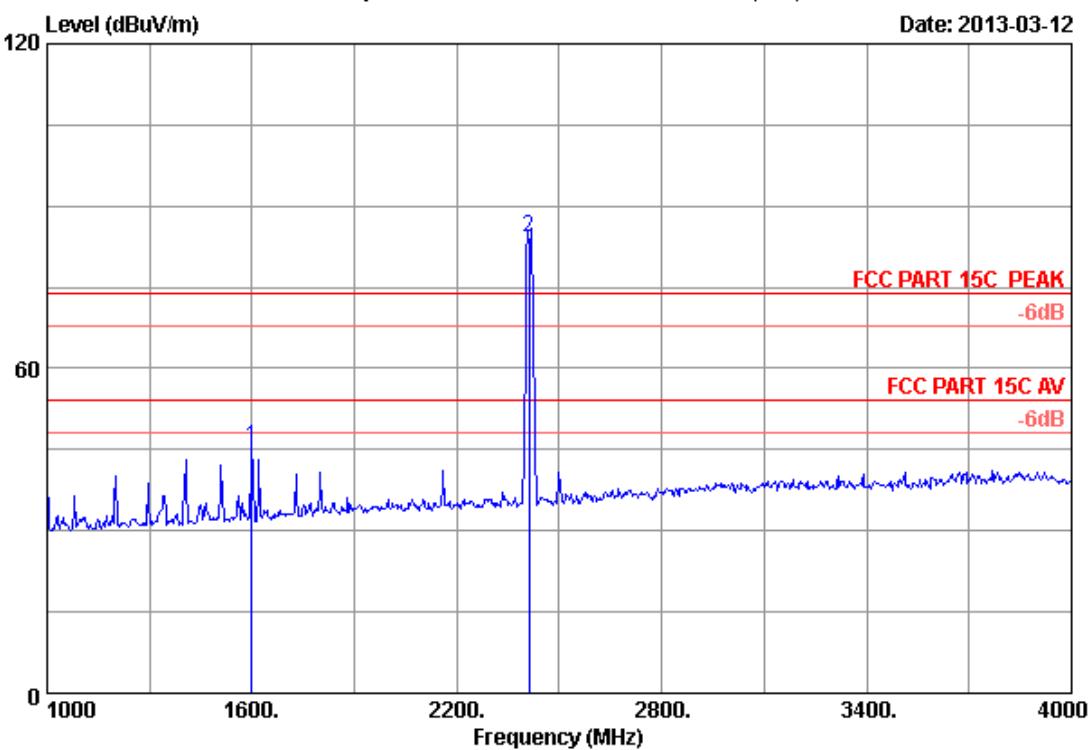
## Remarks:

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

Data: 58

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

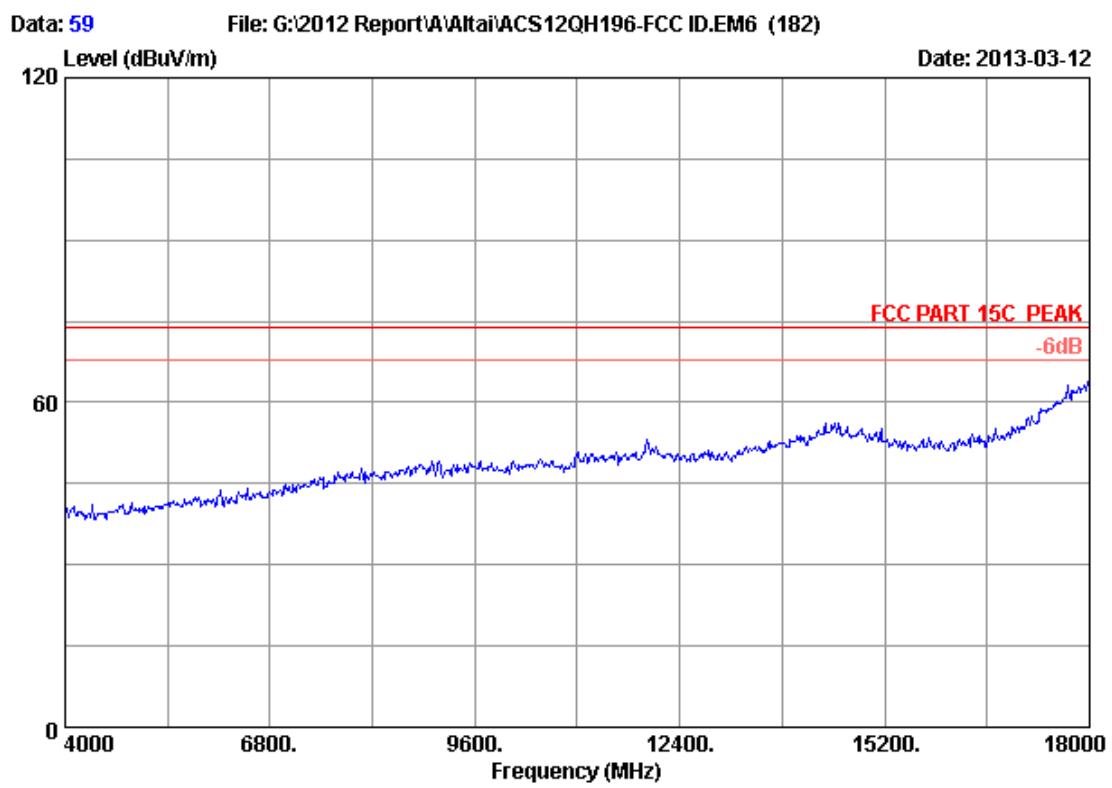


Site no. : 3m Chamber Data no. : 58  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	51.34	45.45	74.00	28.55	Peak
2 2412.000	28.21	5.81	35.70	85.95	84.27	74.00	-10.27	Peak

## Remarks:

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

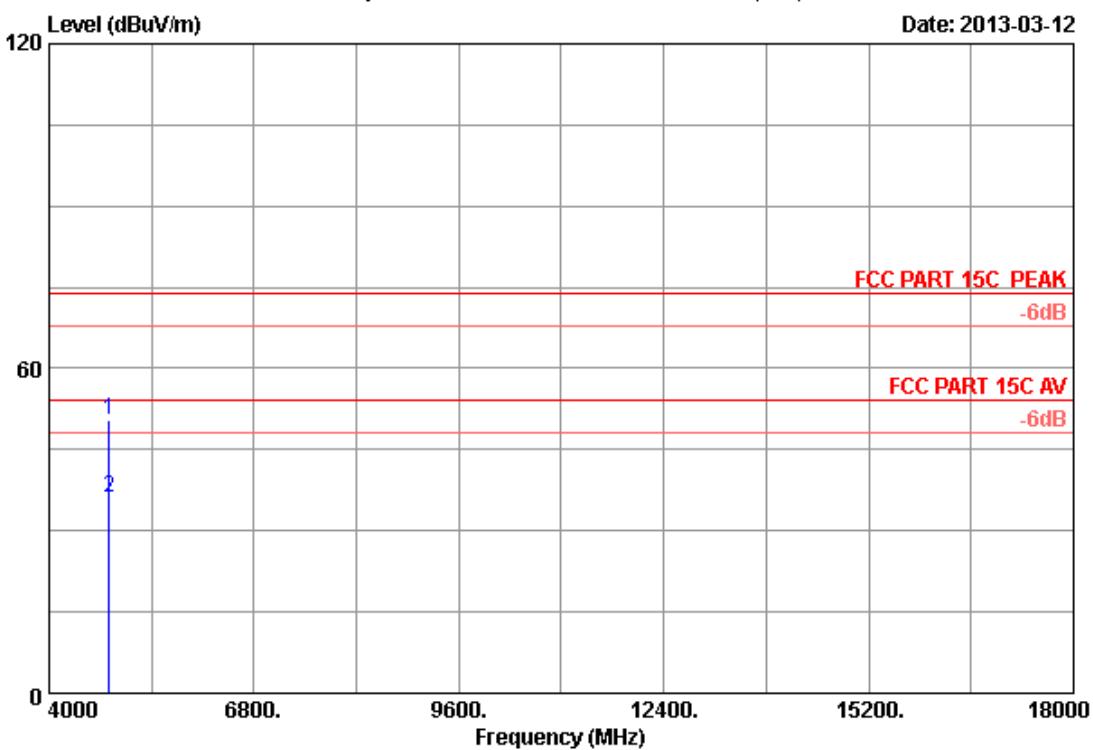


Site no. : 3m Chamber Data no. : 59  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
WA8011N-X

Data: 60

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 60  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4824.000	32.88	8.58	35.70	44.73	50.49	74.00	23.51	Peak
2 4824.000	32.88	8.58	35.70	30.41	36.17	54.00	17.83	Average

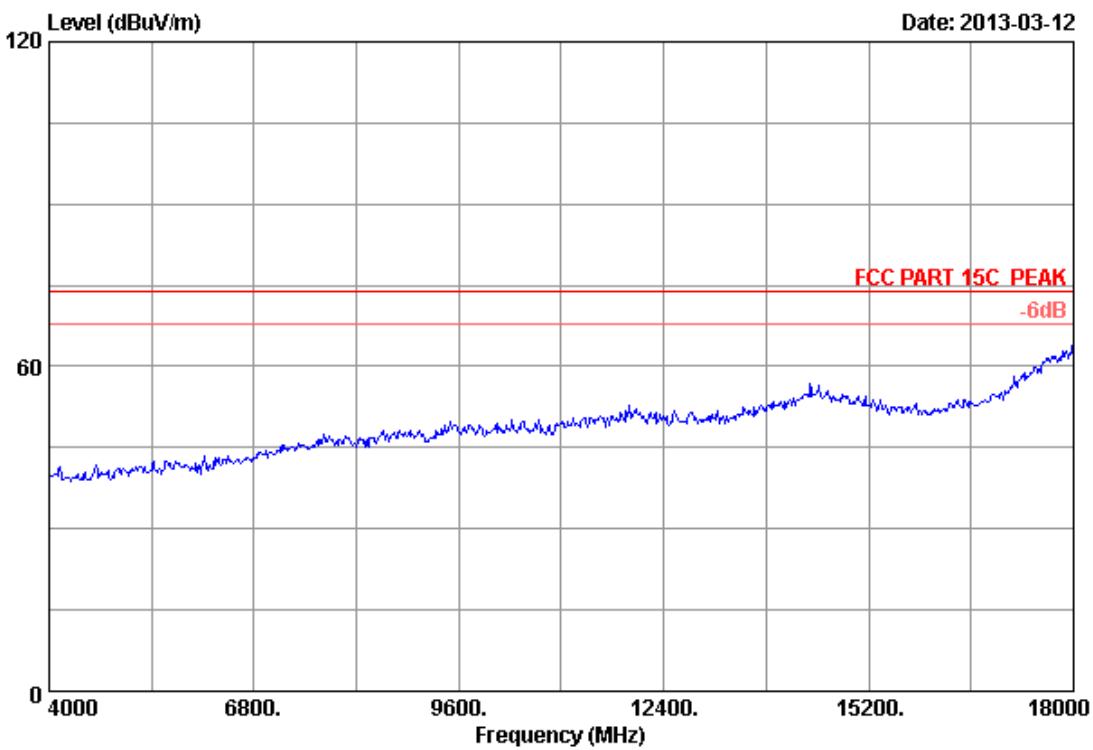
## Remarks:

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

Data: 61

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

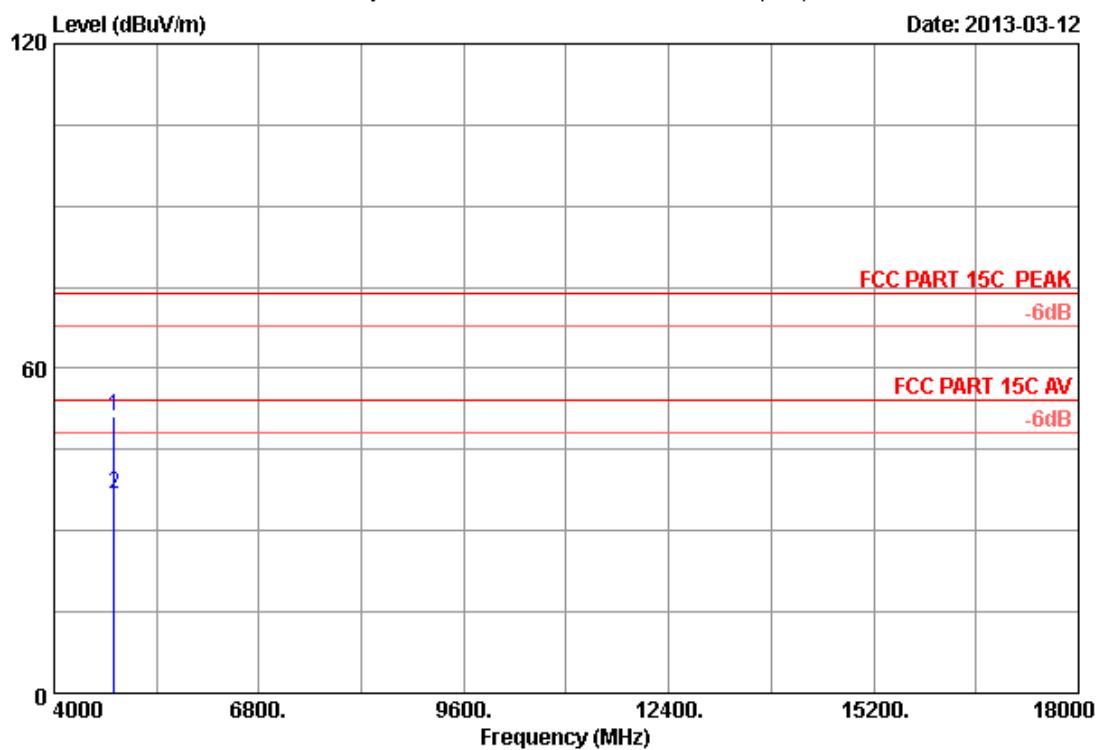
Date: 2013-03-12



Site no. : 3m Chamber Data no. : 61  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
WA8011N-X

Data: 62

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 62  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4824.000	32.88	8.58	35.70	45.33	51.09	74.00	22.91	Peak
2 4824.000	32.88	8.58	35.70	31.12	36.88	54.00	17.12	Average

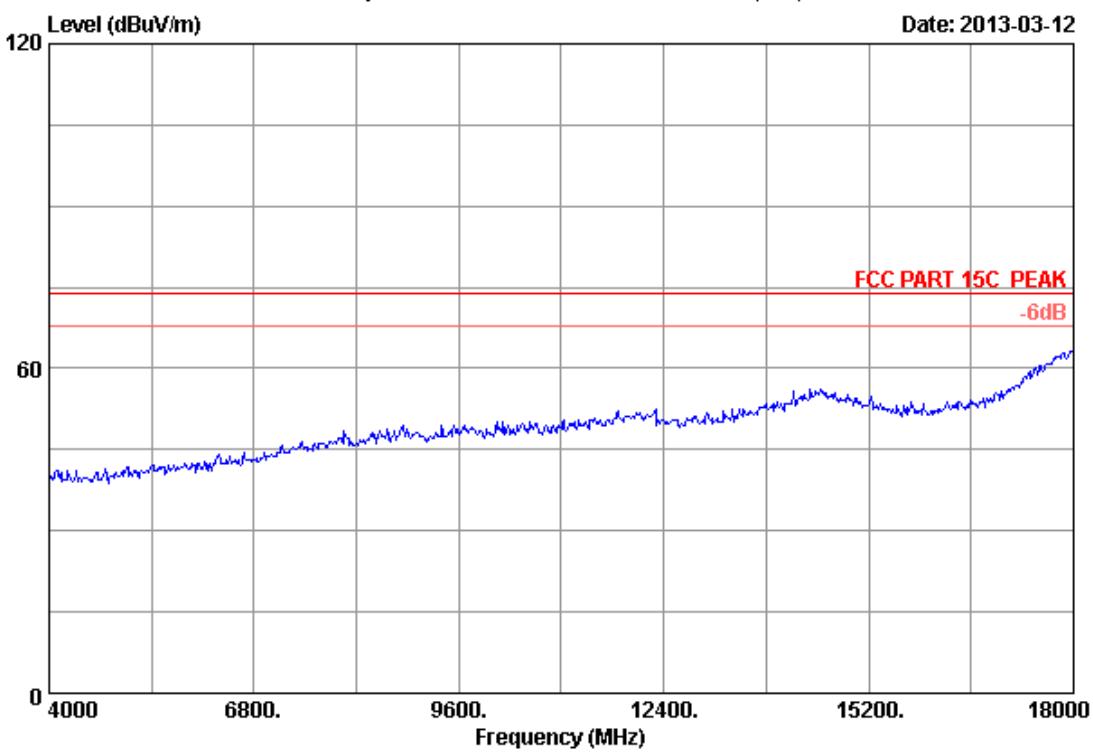
## Remarks:

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

Data: 63

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

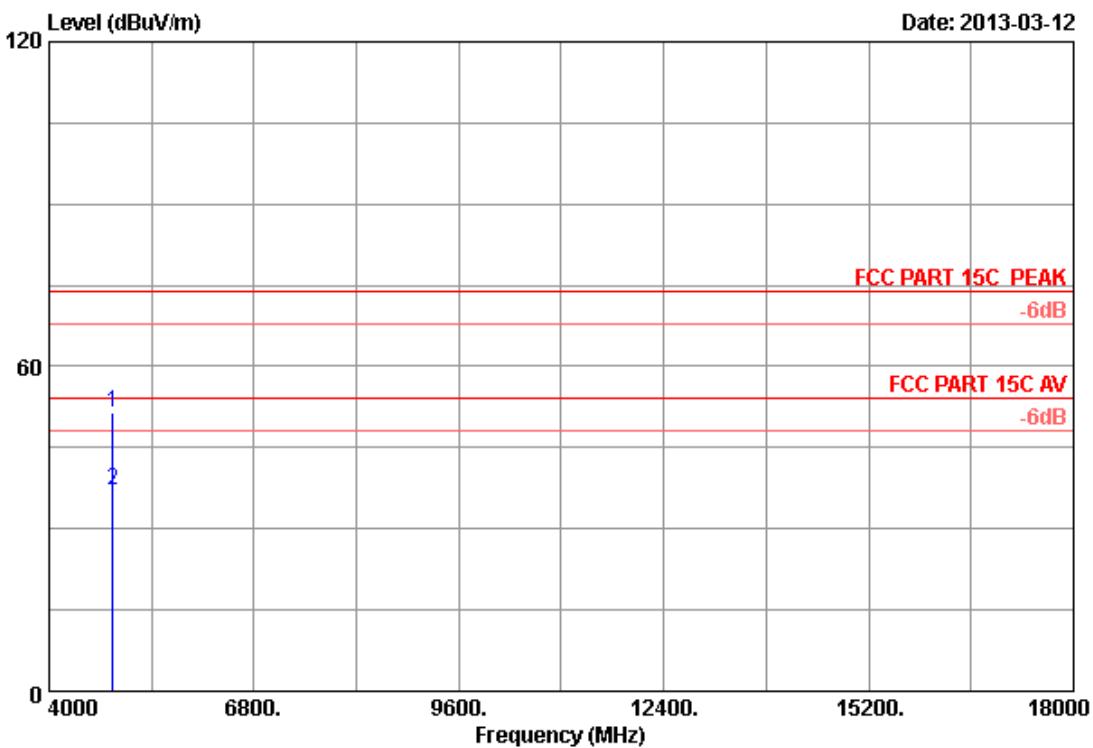


Site no. : 3m Chamber Data no. : 63  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
WA8011N-X

Data: 64

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 64  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4874.000	32.97	8.63	35.70	45.49	51.39	74.00	22.61	Peak
2 4874.000	32.97	8.63	35.70	31.10	37.00	54.00	17.00	Average

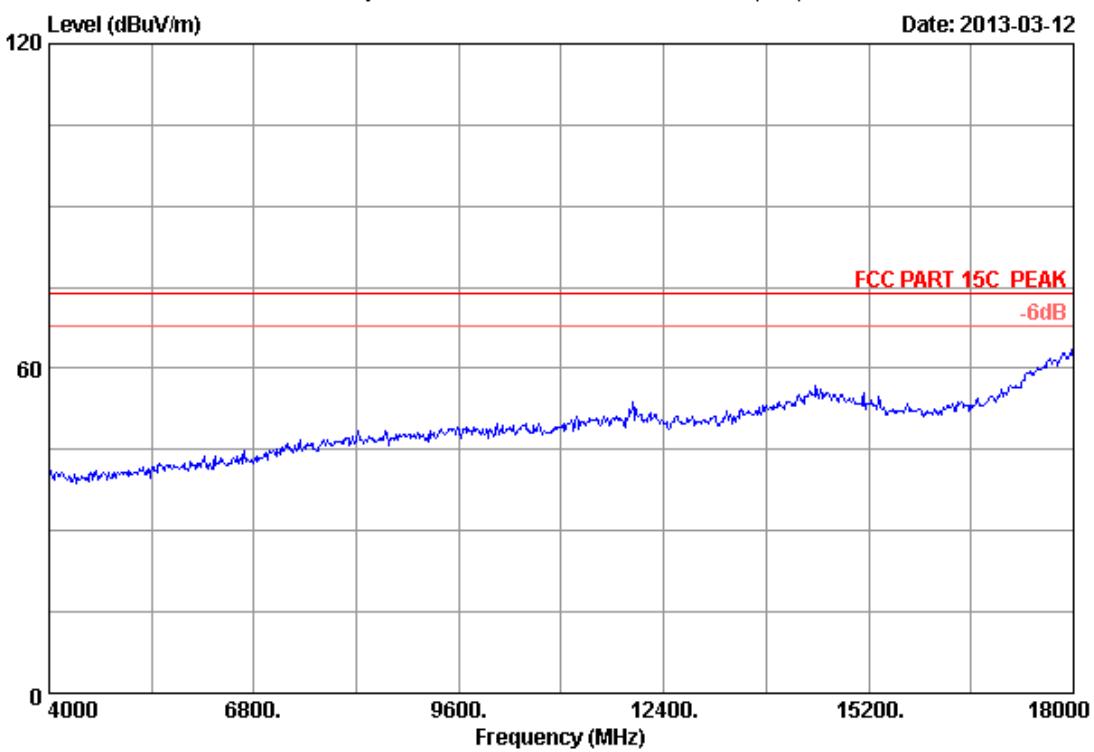
## Remarks:

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

Data: 65

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

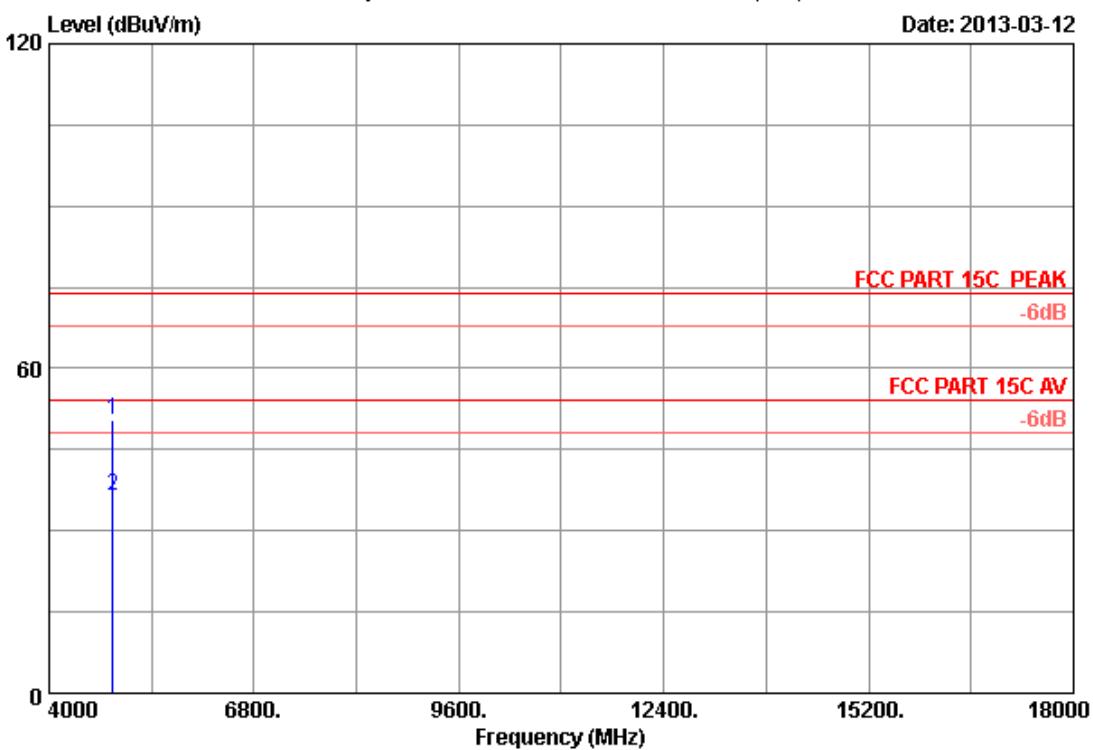


Site no. : 3m Chamber Data no. : 65  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
WA8011N-X

Data: 66

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



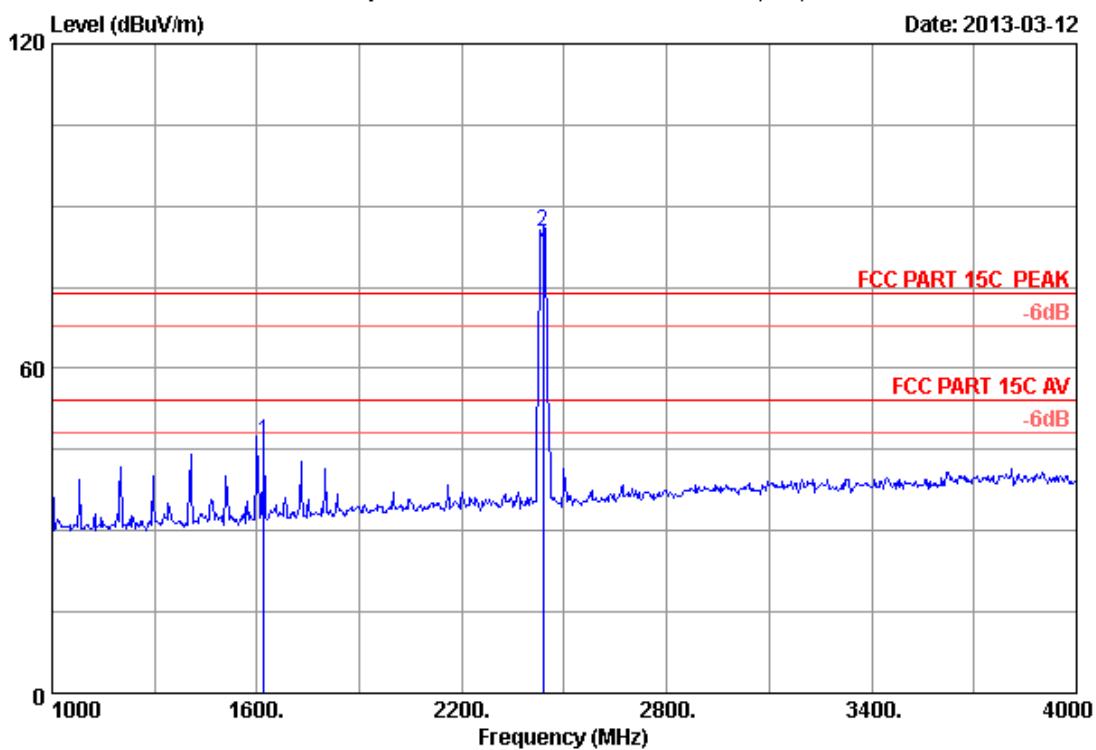
Site no. : 3m Chamber Data no. : 66  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4874.000	32.97	8.63	35.70	44.69	50.59	74.00	23.41	Peak
2 4874.000	32.97	8.63	35.70	30.48	36.38	54.00	17.62	Average

## Remarks:

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

Data: 67 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



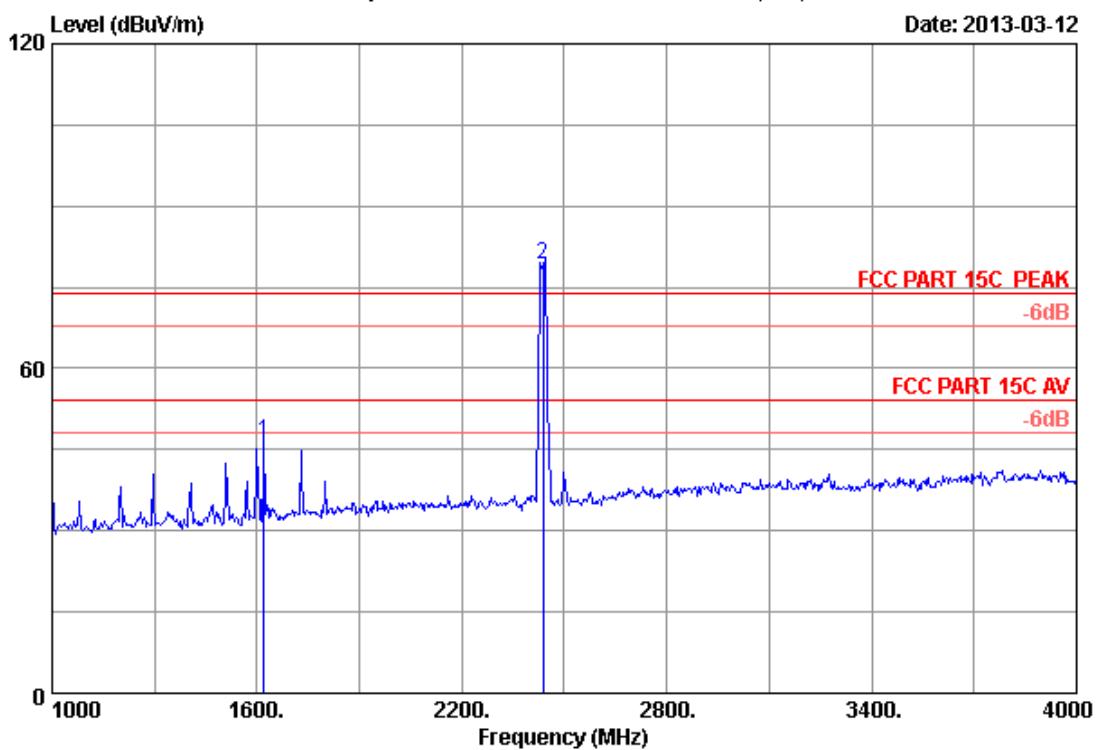
Site no. : 3m Chamber Data no. : 67  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	52.07	46.32	74.00	27.68	Peak
2 2437.000	28.26	5.85	35.70	86.67	85.08	74.00	-11.08	Peak

## Remarks:

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

Data: 68 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

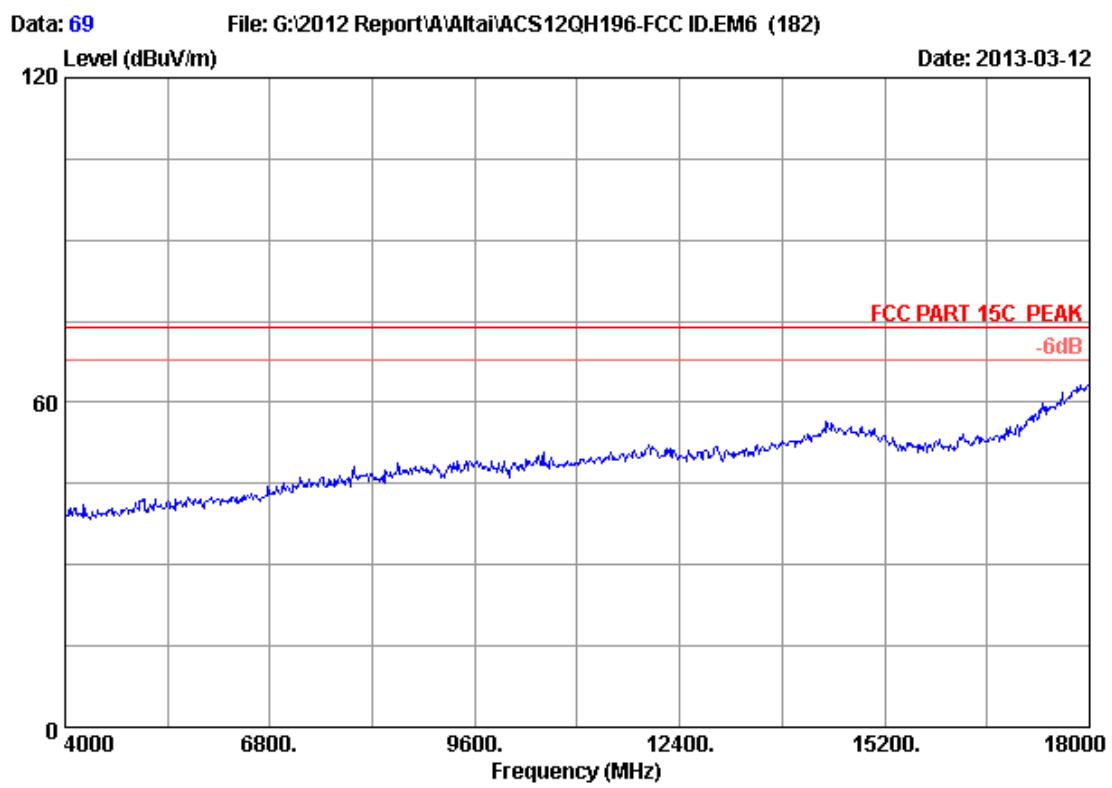


Site no. : 3m Chamber Data no. : 68  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	52.19	46.44	74.00	27.56	Peak
2 2437.000	28.26	5.85	35.70	80.73	79.14	74.00	-5.14	Peak

## Remarks:

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

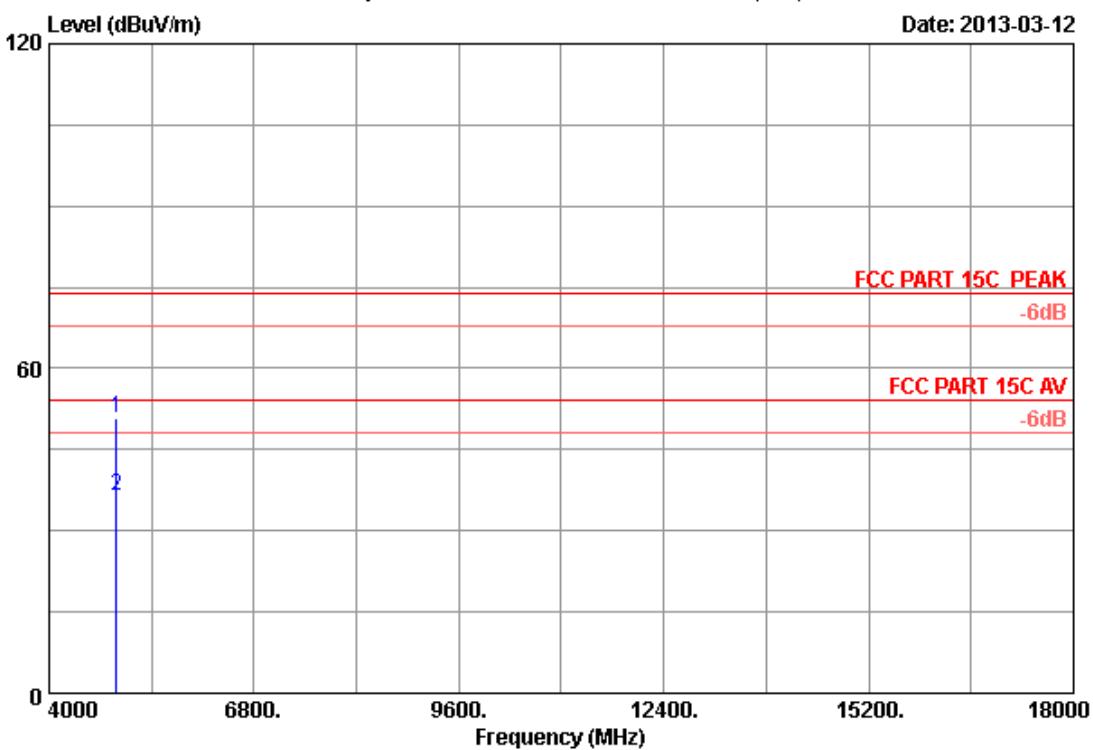


Site no. : 3m Chamber Data no. : 69  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
WA8011N-X

Data: 70

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

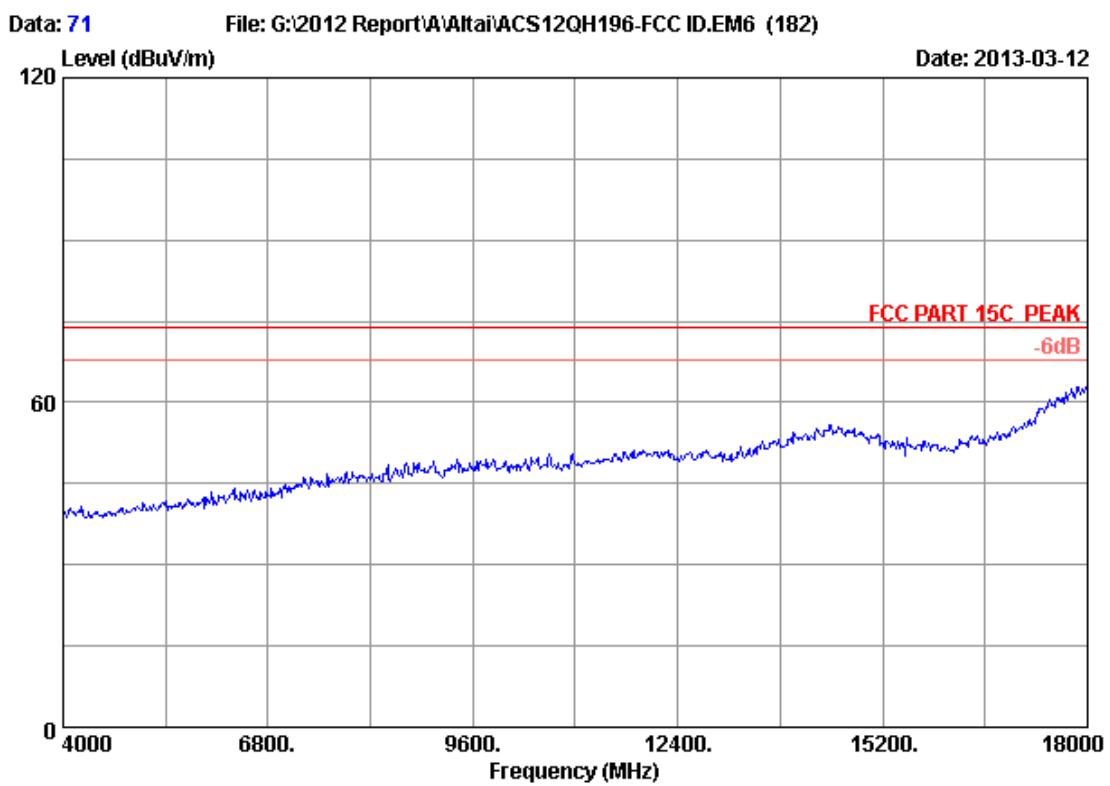


Site no. : 3m Chamber Data no. : 70  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4924.000	33.06	8.69	35.70	44.81	50.86	74.00	23.14	Peak
2 4924.000	33.06	8.69	35.70	30.55	36.60	54.00	17.40	Average

## Remarks:

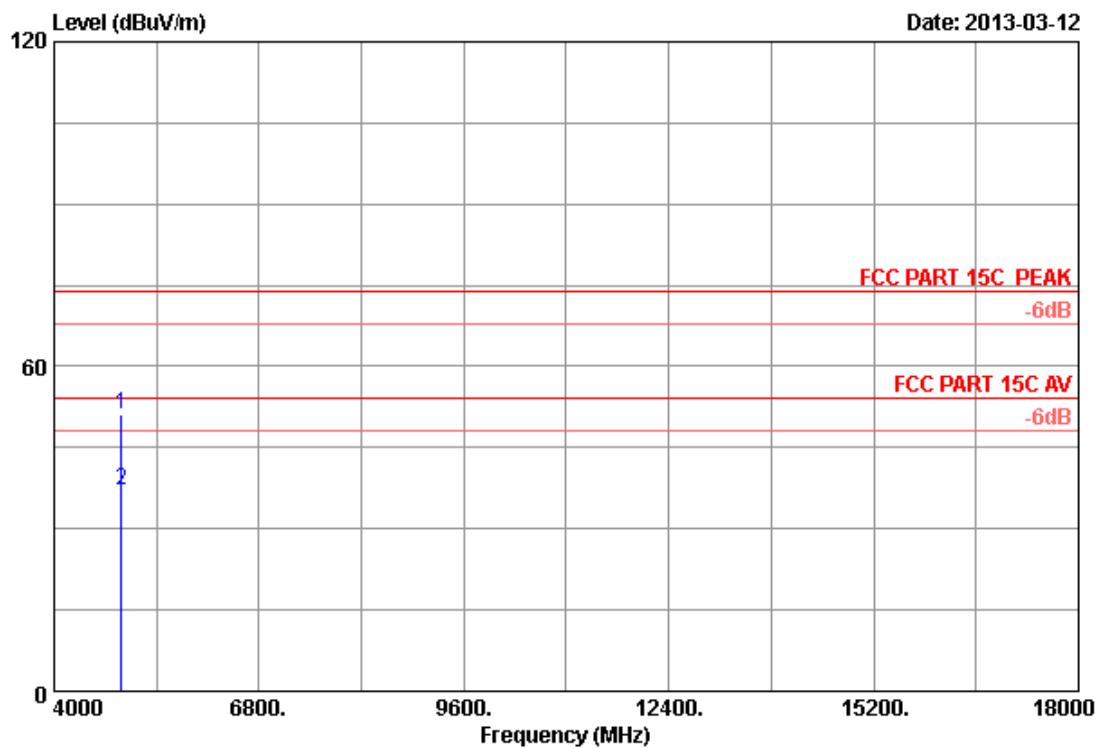
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 71  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
WA8011N-X

Data: 72

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 72  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	33.06	8.69	35.70	45.13	51.18	74.00	22.82 Peak
2	4924.000	33.06	8.69	35.70	30.98	37.03	54.00	16.97 Average

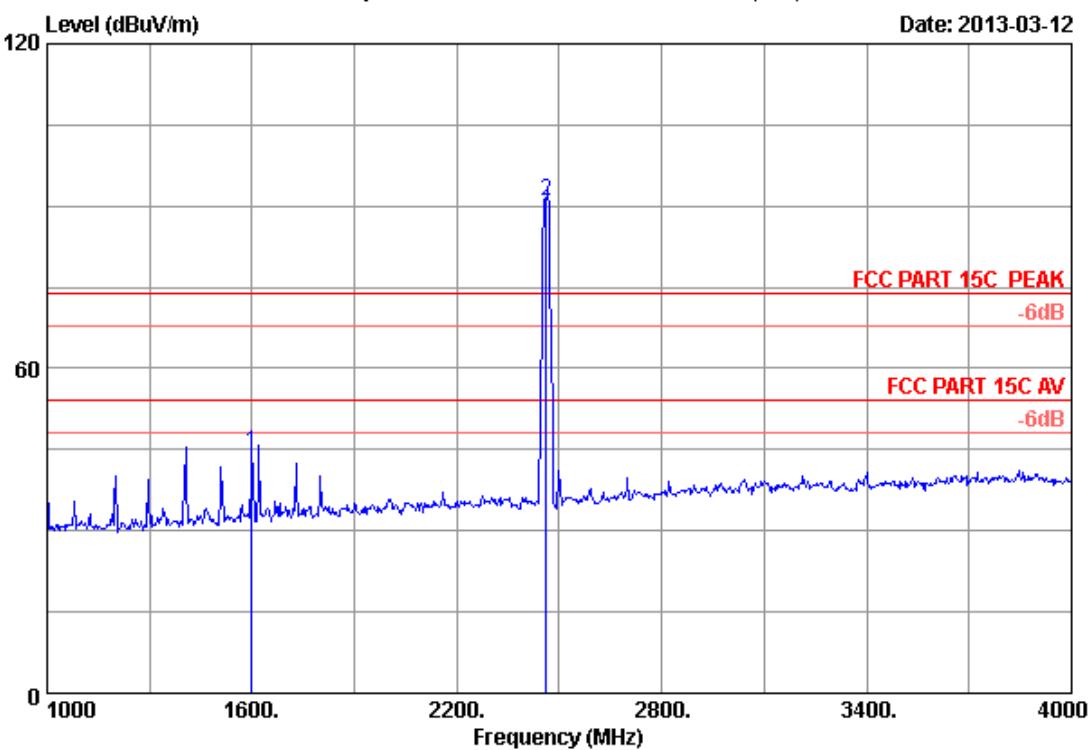
## Remarks:

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

Data: 73

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 73  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	50.21	44.32	74.00	29.68	Peak
2 2462.000	28.32	5.89	35.70	92.45	90.96	74.00	-16.96	Peak

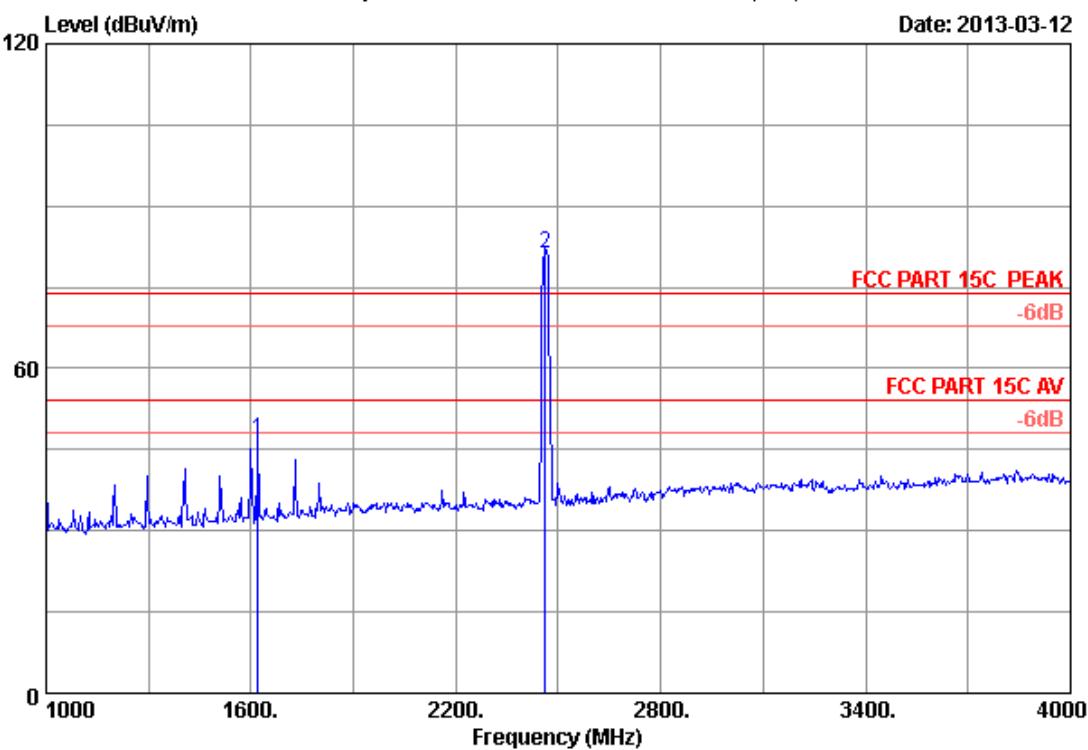
## Remarks:

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

Data: 74

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 74  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH11 2462MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	52.40	46.65	74.00	27.35	Peak
2 2462.000	28.32	5.89	35.70	82.77	81.28	74.00	-7.28	Peak

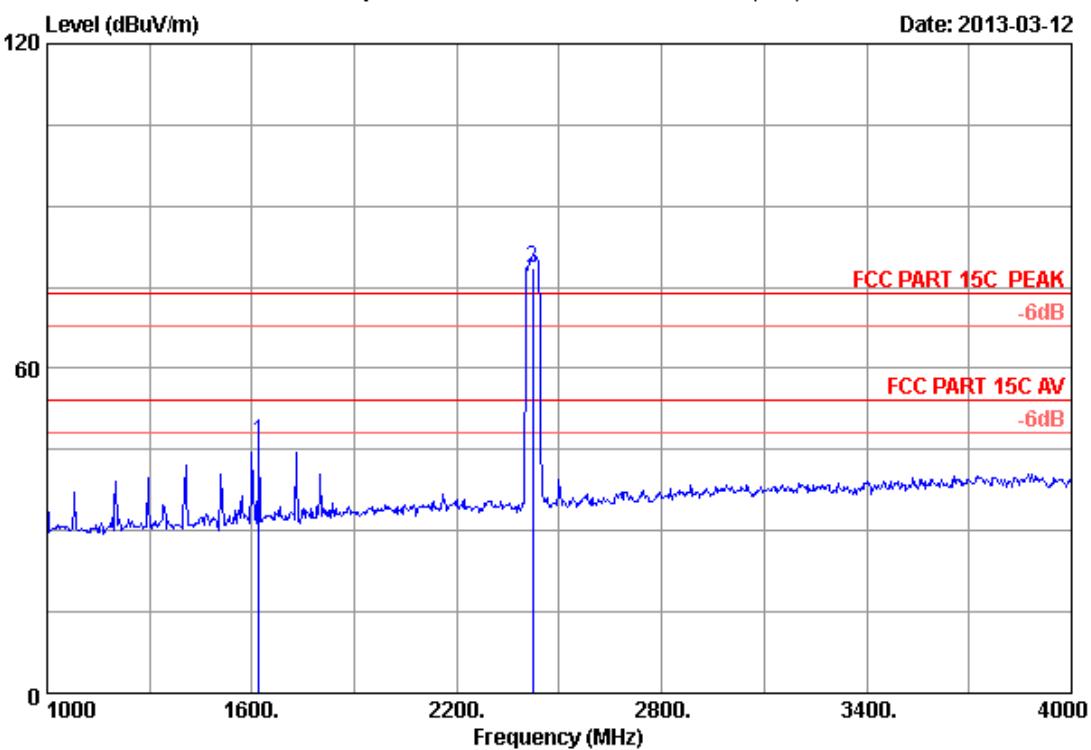
## Remarks:

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

Data: 83

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 83  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	52.09	46.34	74.00	27.66	Peak
2 2422.000	28.23	5.83	35.70	80.15	78.51	74.00	-4.51	Peak

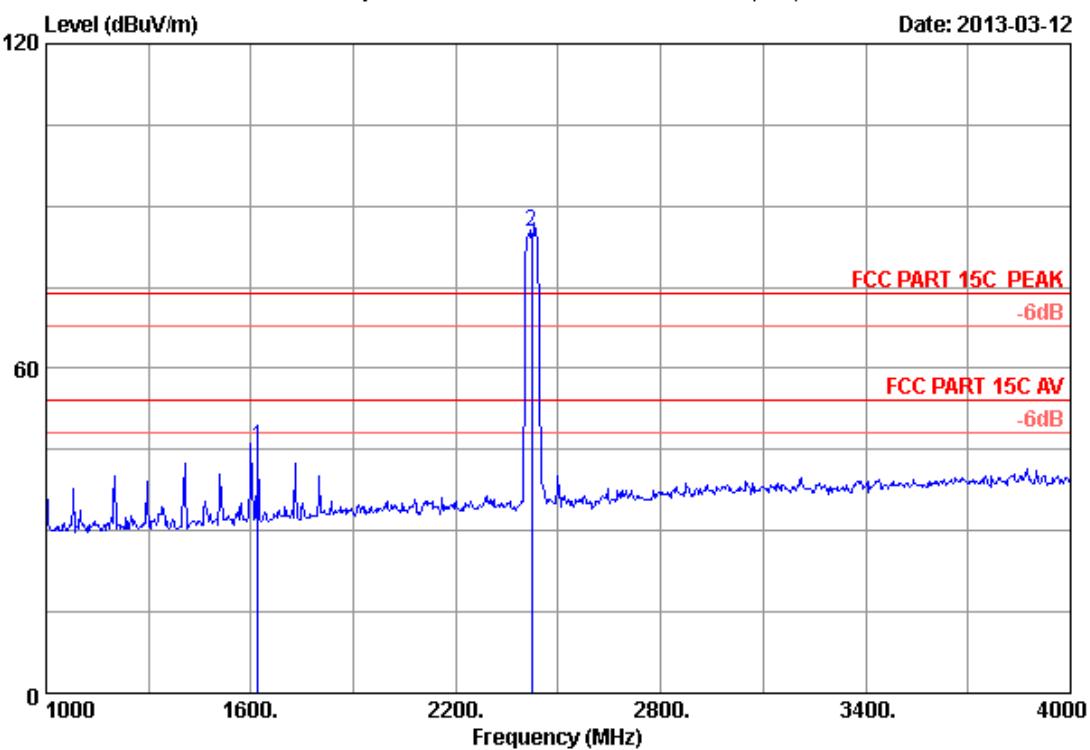
## Remarks:

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

Data: 84

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

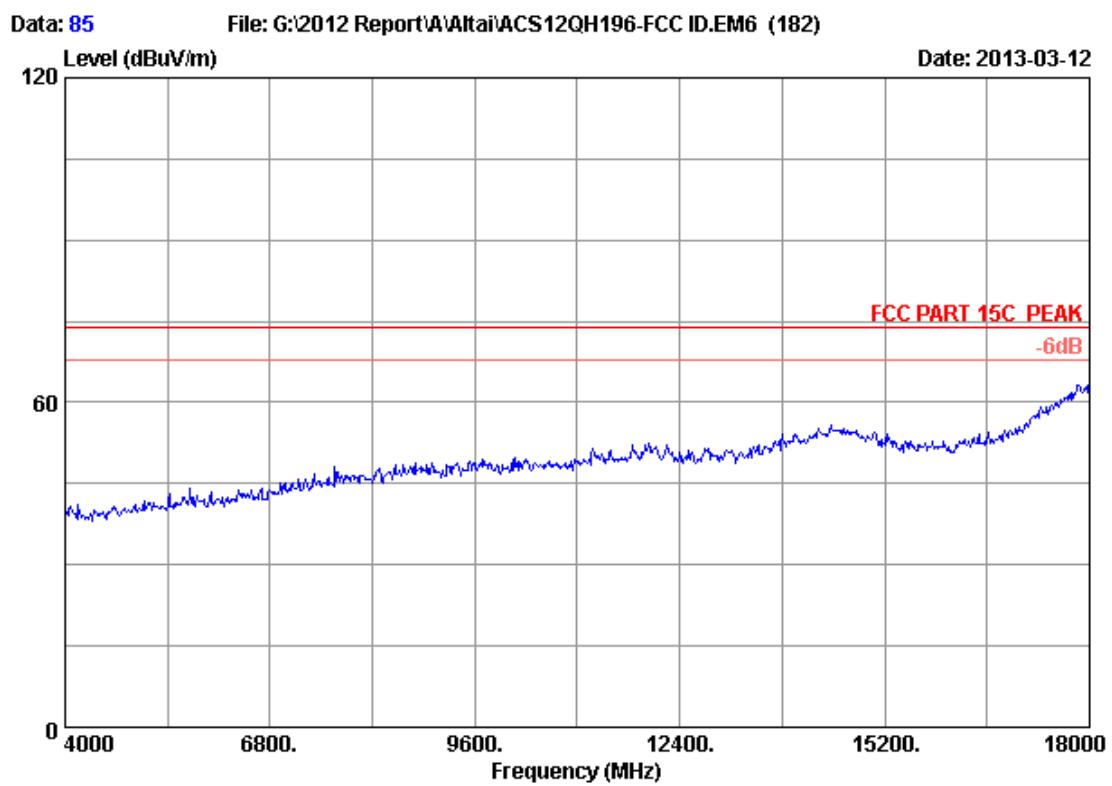


Site no. : 3m Chamber Data no. : 84  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	51.16	45.41	74.00	28.59	Peak
2 2422.000	28.23	5.83	35.70	86.81	85.17	74.00	-11.17	Peak

## Remarks:

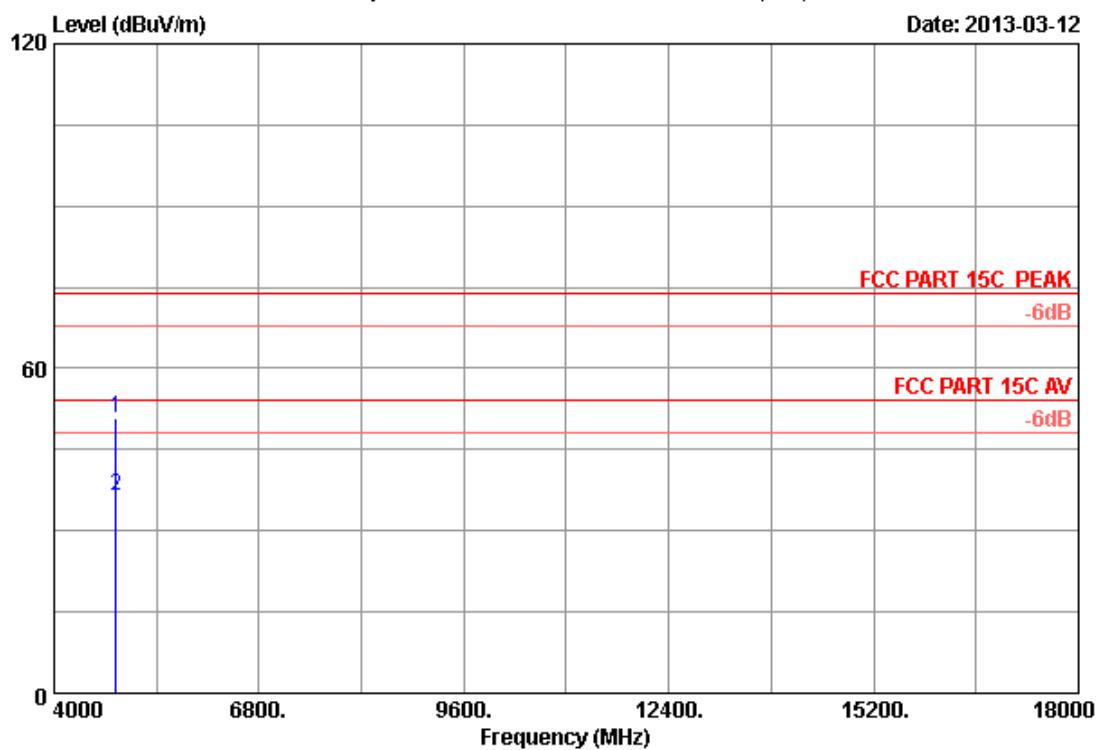
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 85  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
WA8011N-X

Data: 86

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 86  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4844.000	32.92	8.60	35.70	44.83	50.65	74.00	23.35	Peak
2 4844.000	32.92	8.60	35.70	30.75	36.57	54.00	17.43	Average

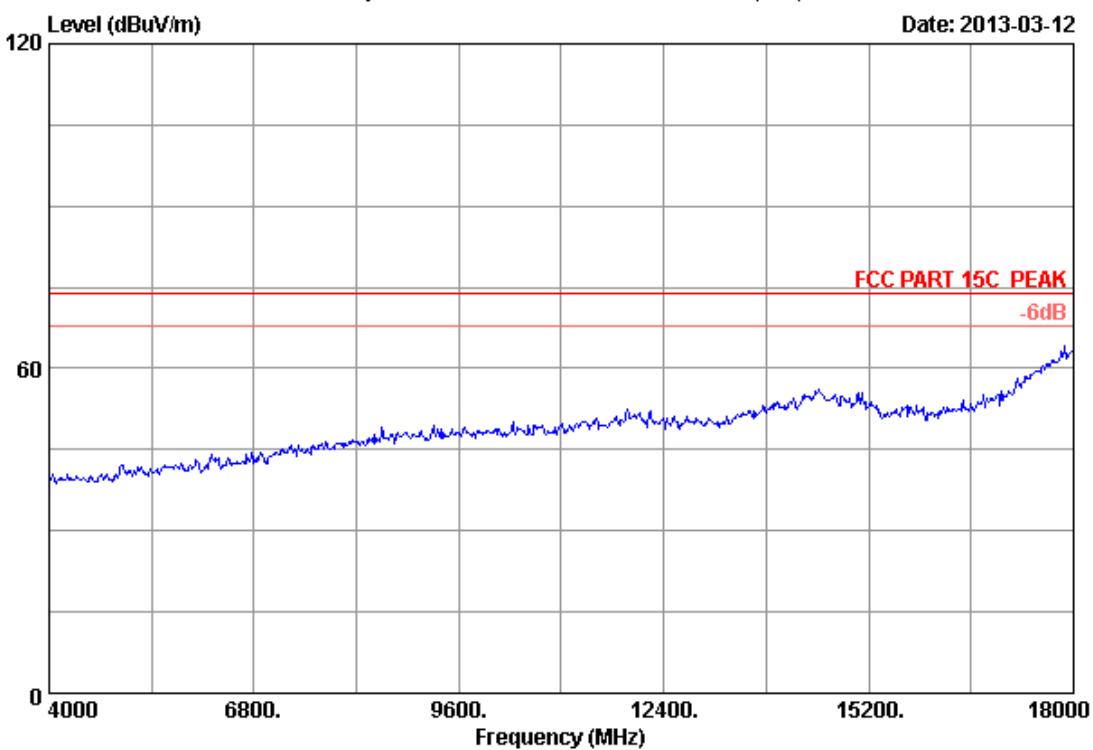
## Remarks:

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

Data: 87

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

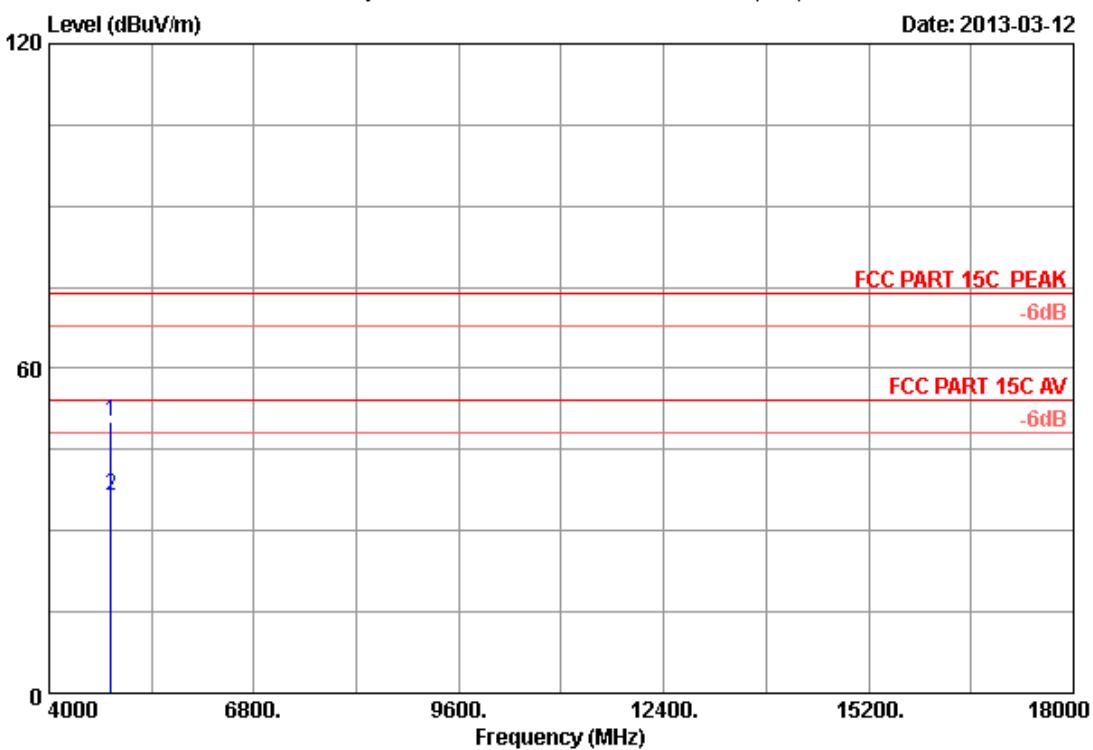


Site no. : 3m Chamber Data no. : 87  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
WA8011N-X

Data: 88

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



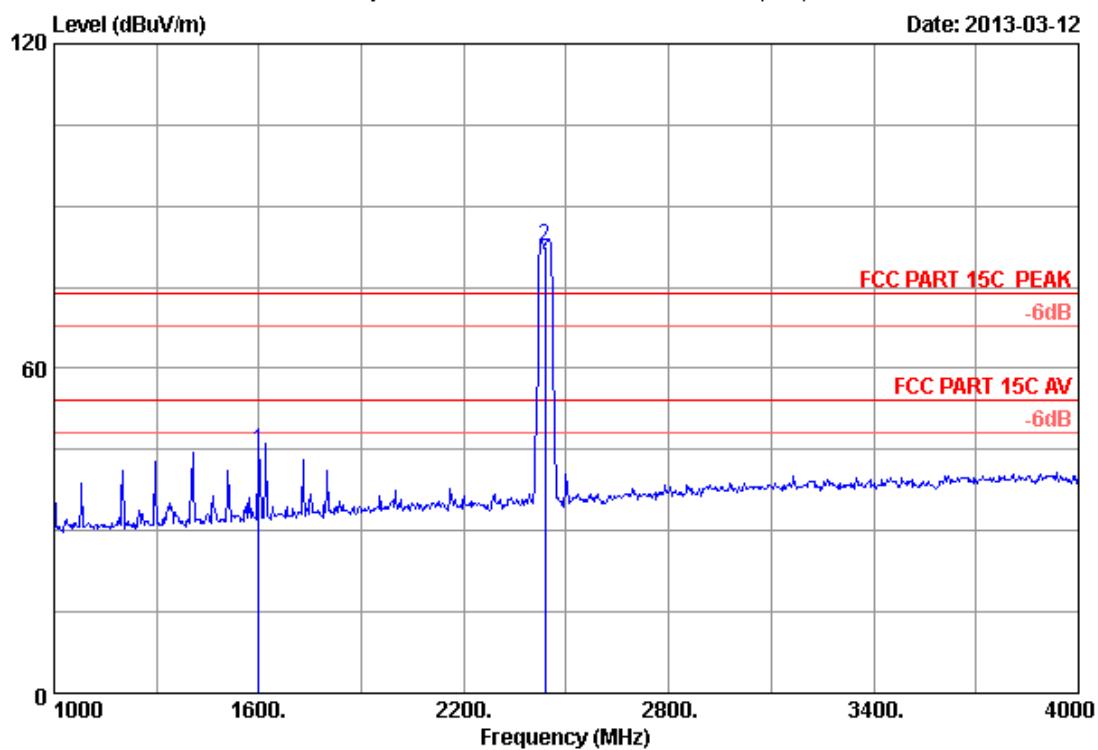
Site no. : 3m Chamber Data no. : 88  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4844.000	32.92	8.60	35.70	44.38	50.20	74.00	23.80	Peak
2 4844.000	32.92	8.60	35.70	30.51	36.33	54.00	17.67	Average

## Remarks:

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

Data: 89 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 89  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1600.000	25.62	4.63	36.14	50.82	44.93	74.00	29.07 Peak
2	2437.000	28.26	5.85	35.70	84.25	82.66	74.00	-8.66 Peak

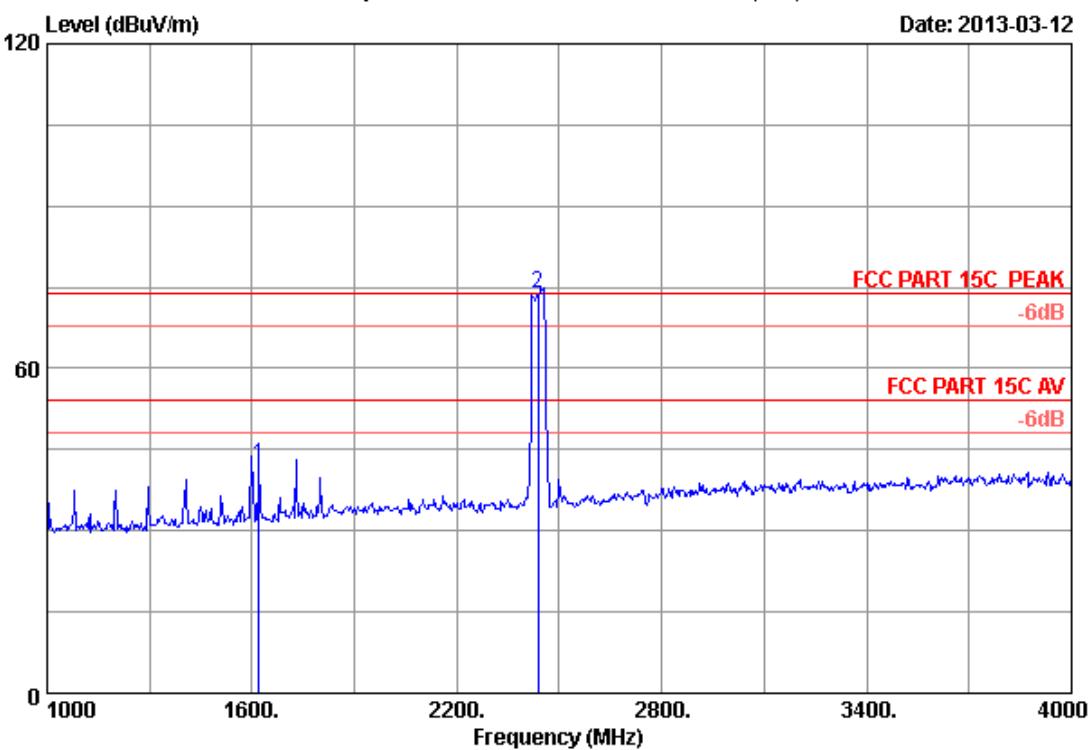
## Remarks:

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

Data: 90

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 90  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	47.76	42.01	74.00	31.99	Peak
2 2437.000	28.26	5.85	35.70	75.38	73.79	74.00	0.21	Peak

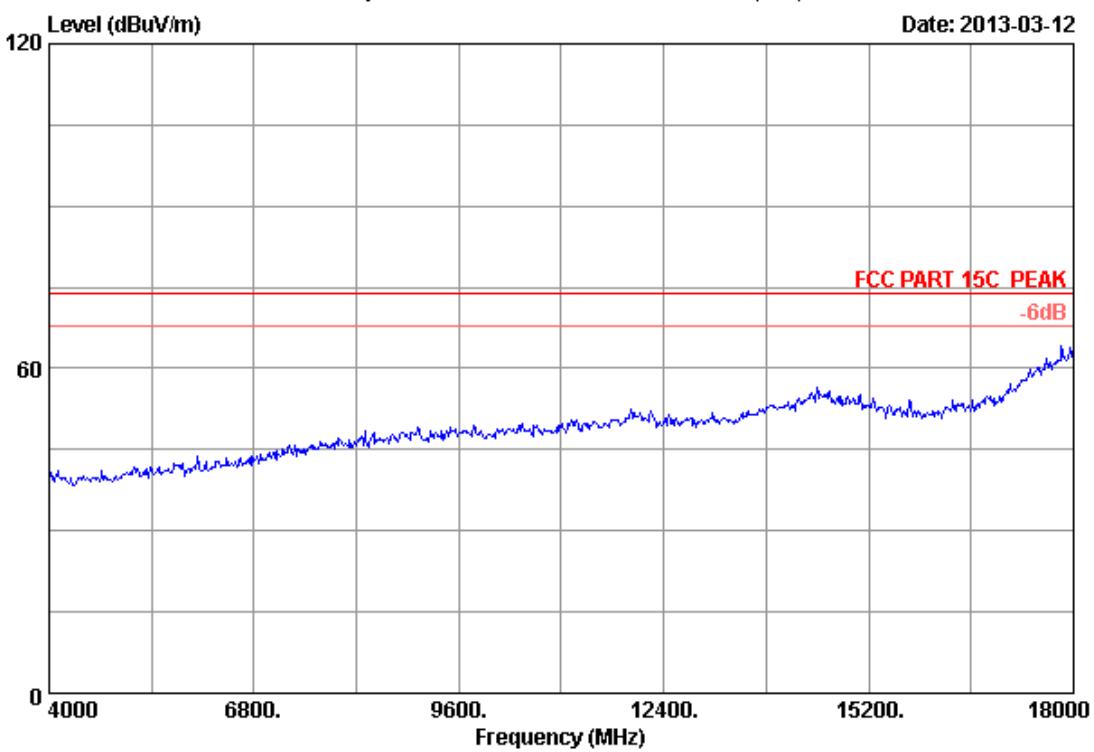
## Remarks:

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

Data: 91

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

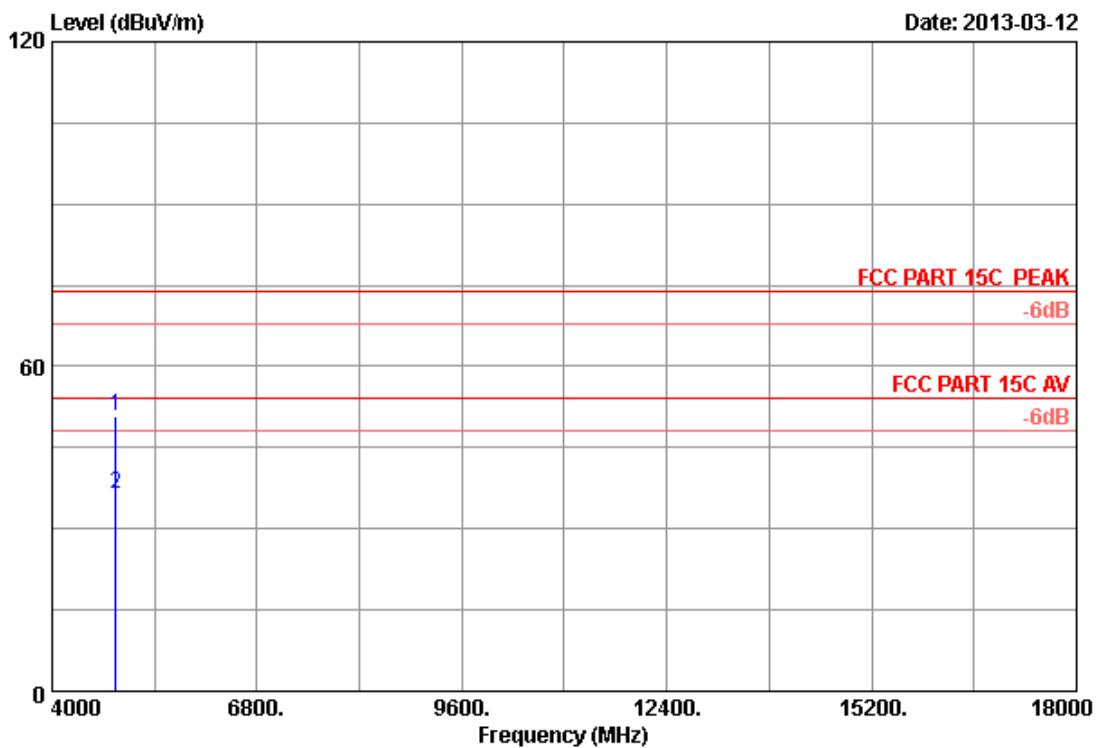
Date: 2013-03-12



Site no. : 3m Chamber Data no. : 91  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
WA8011N-X

Data: 92

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



Site no. : 3m Chamber Data no. : 92  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4874.000	32.97	8.63	35.70	44.79	50.69	74.00	23.31	Peak
2 4874.000	32.97	8.63	35.70	30.60	36.50	54.00	17.50	Average

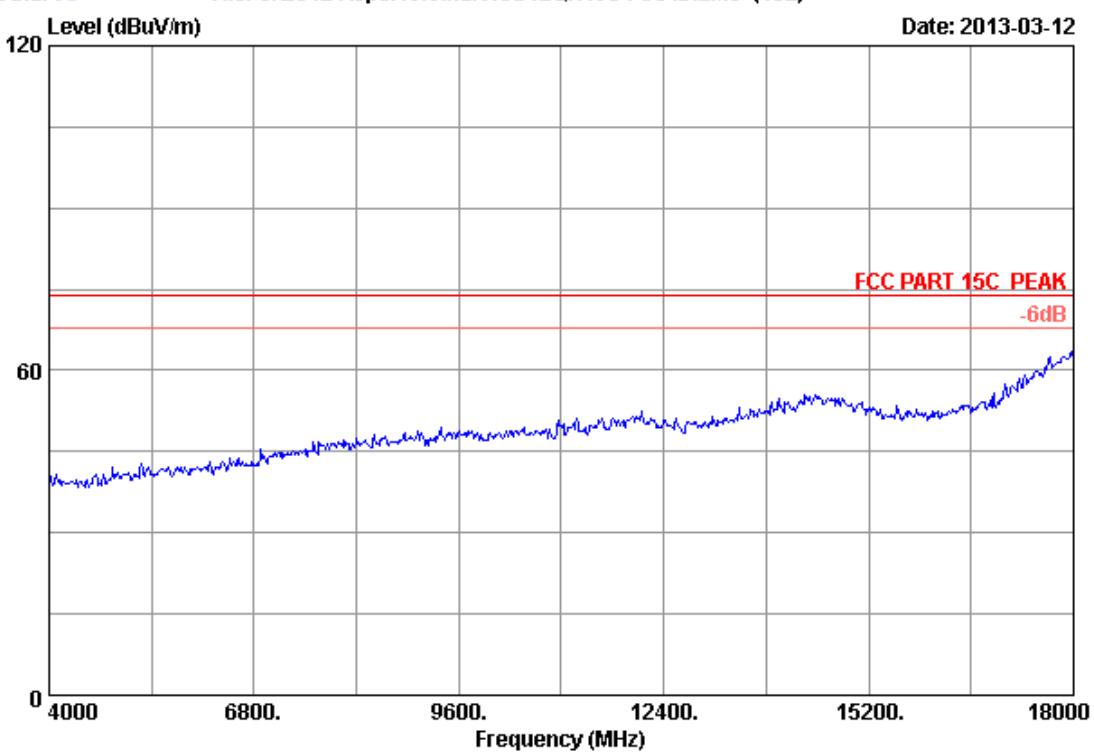
## Remarks:

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

Data: 93

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

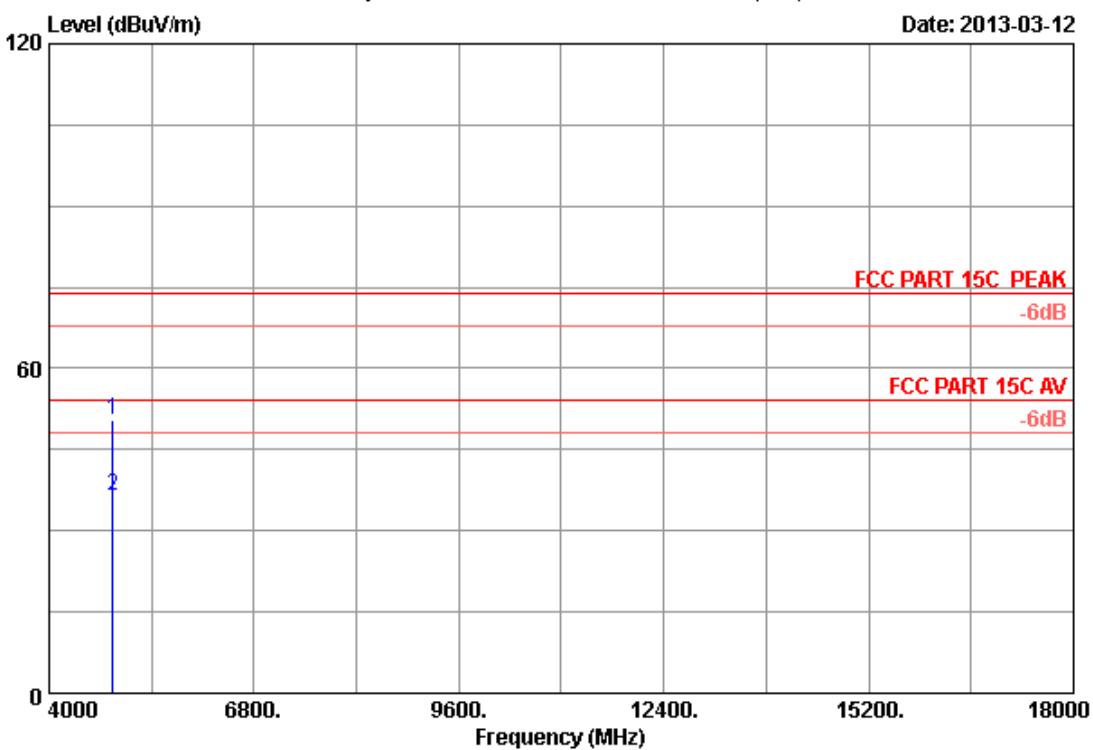


Site no. : 3m Chamber Data no. : 93  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
WA8011N-X

Data: 94

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 94  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4874.000	32.97	8.63	35.70	44.70	50.60	74.00	23.40	Peak
2 4874.000	32.97	8.63	35.70	30.52	36.42	54.00	17.58	Average

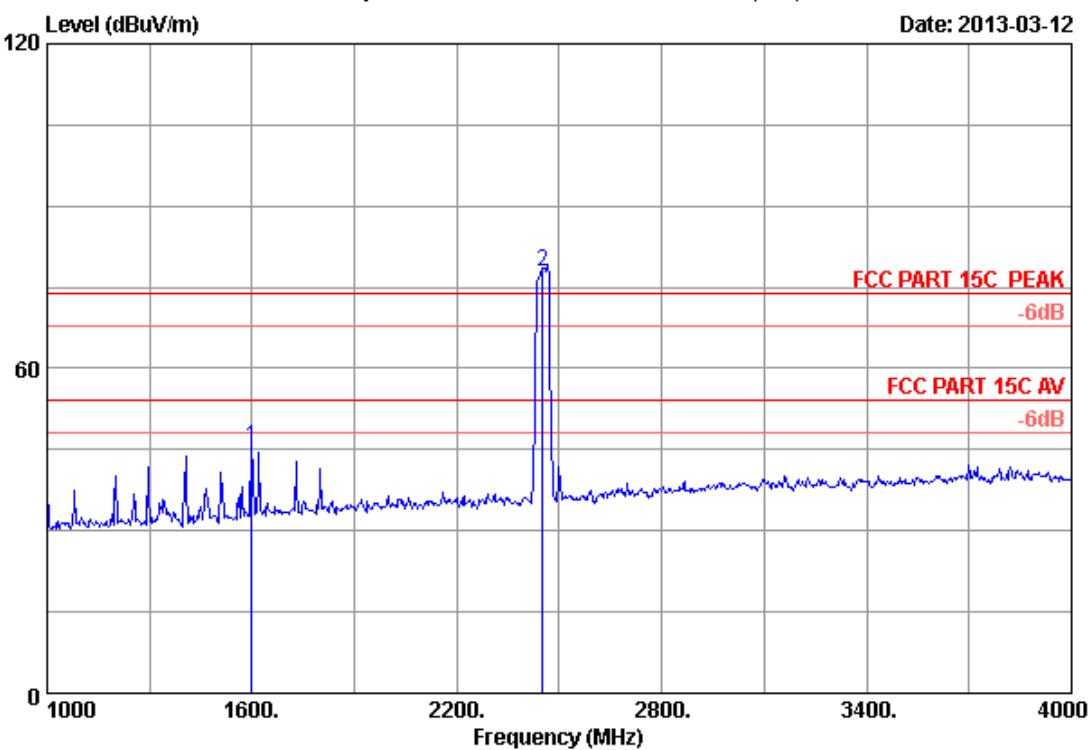
## Remarks:

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

Data: 95

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 95  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	51.23	45.34	74.00	28.66	Peak
2 2452.000	28.29	5.87	35.70	79.39	77.85	74.00	-3.85	Peak

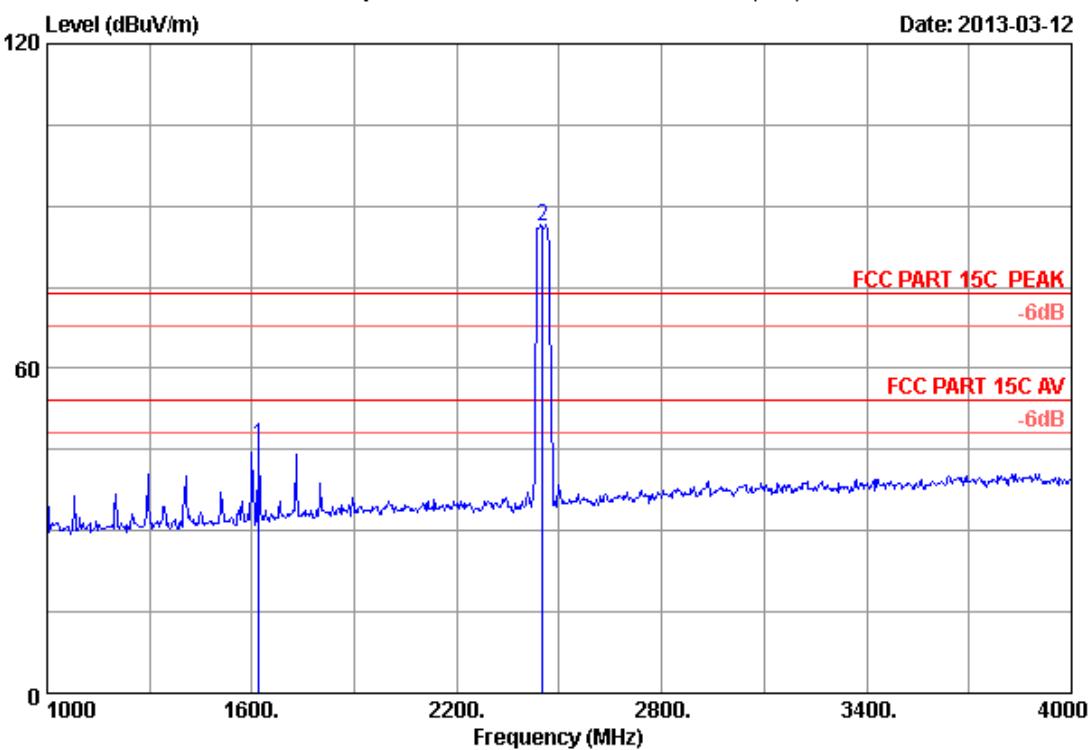
## Remarks:

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

Data: 96

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 96  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1621.000	25.71	4.66	36.12	51.44	45.69	74.00	28.31	Peak
2 2452.000	28.29	5.87	35.70	87.93	86.39	74.00	-12.39	Peak

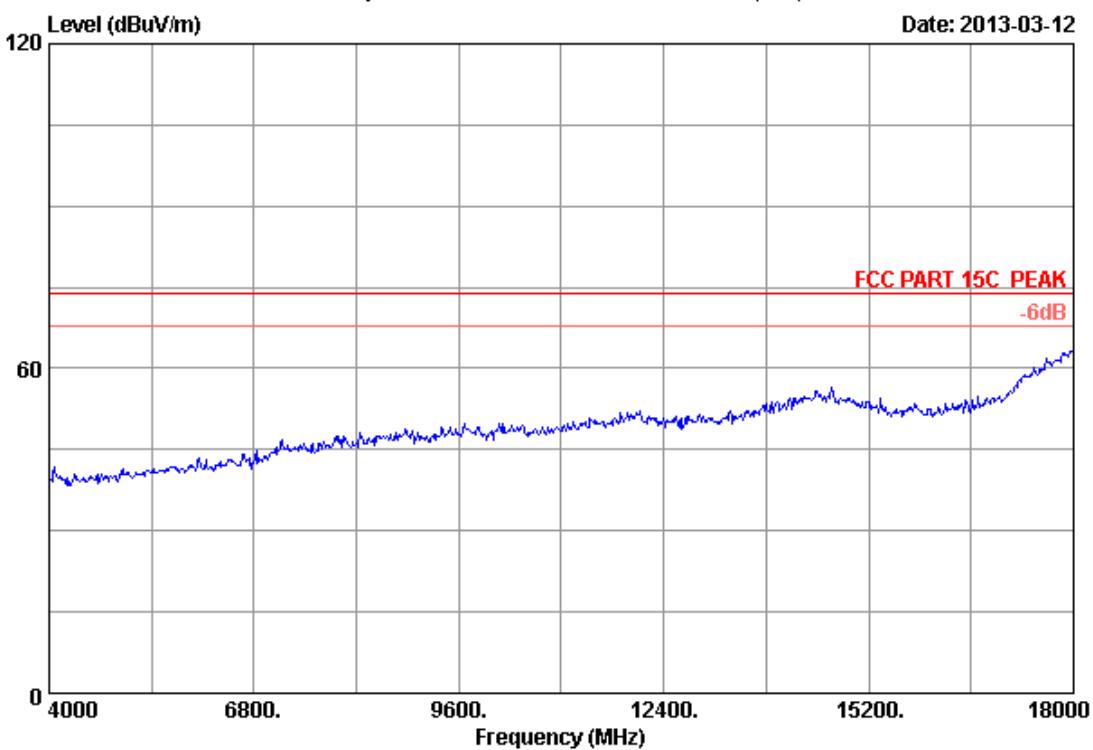
## Remarks:

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

Data: 101

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

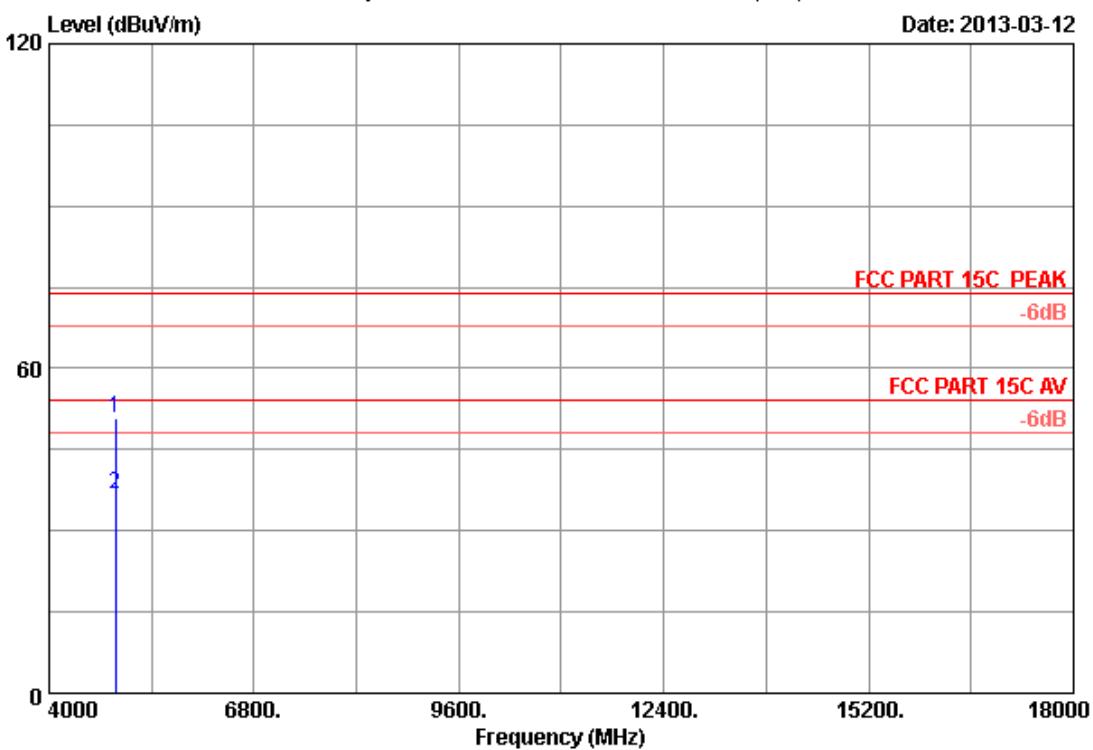


Site no. : 3m Chamber Data no. : 101  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
WA8011N-X

Data: 102

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 102  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 4904.000	33.03	8.66	35.70	44.75	50.74	74.00	23.26	Peak
2 4904.000	33.03	8.66	35.70	30.88	36.87	54.00	17.13	Average

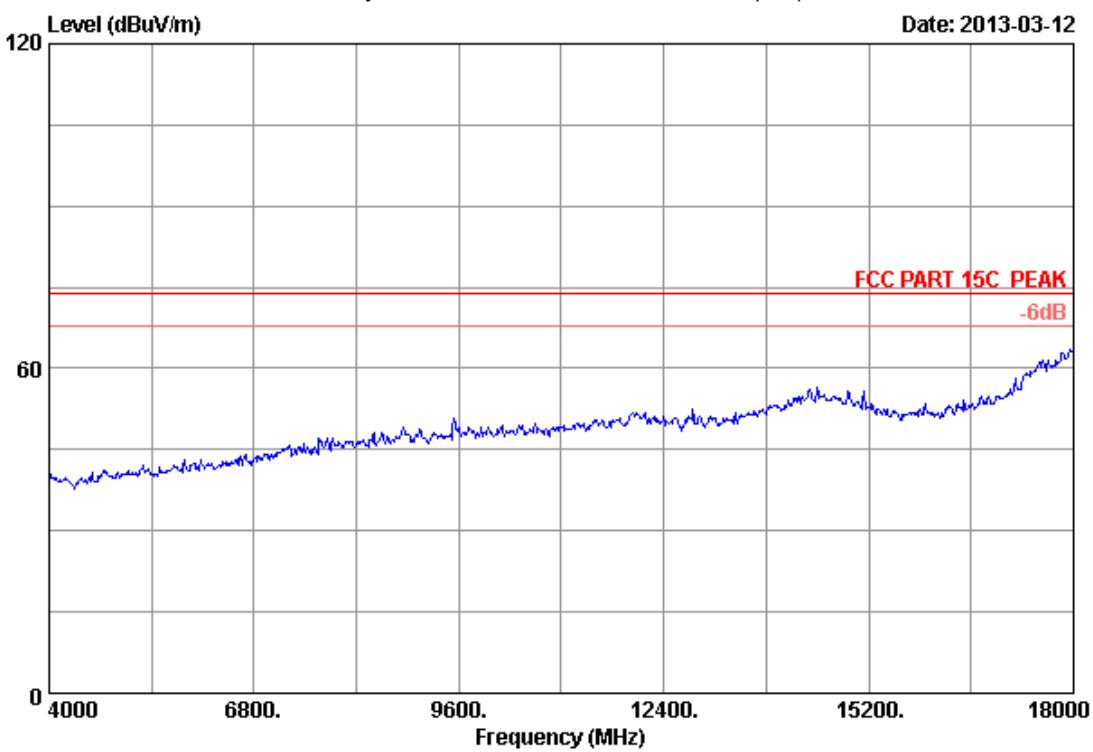
## Remarks:

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

Data: 103

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



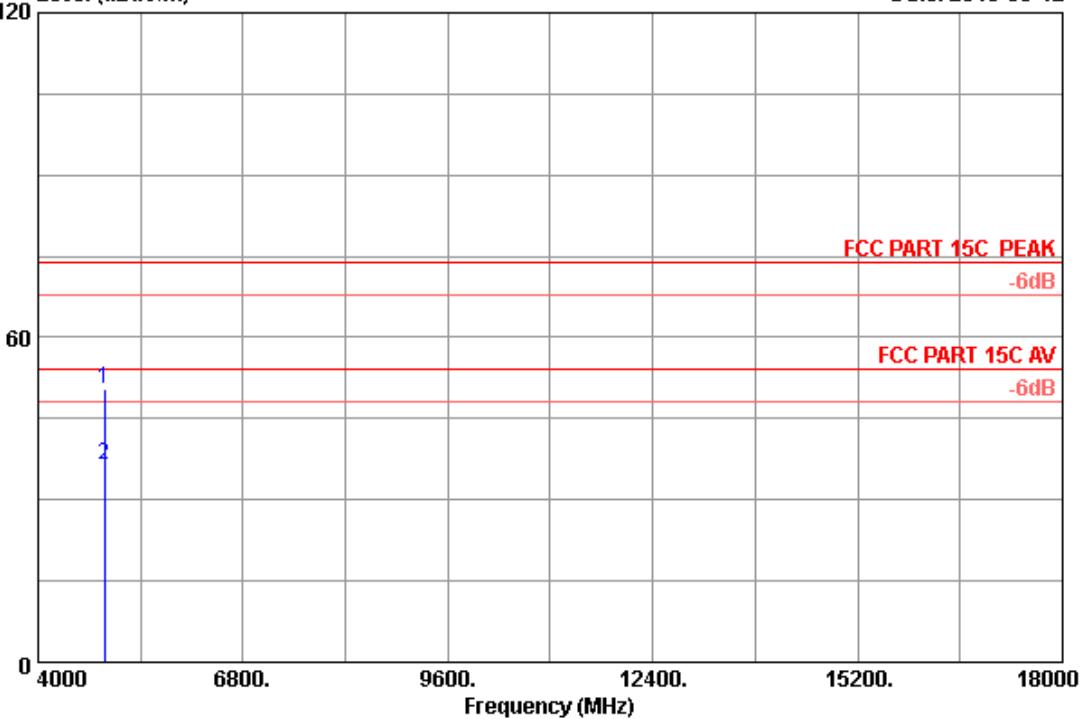
Site no. : 3m Chamber Data no. : 103  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
WA8011N-X

Data: 104

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Level (dBuV/m)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 104  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx  
 WA8011N-X

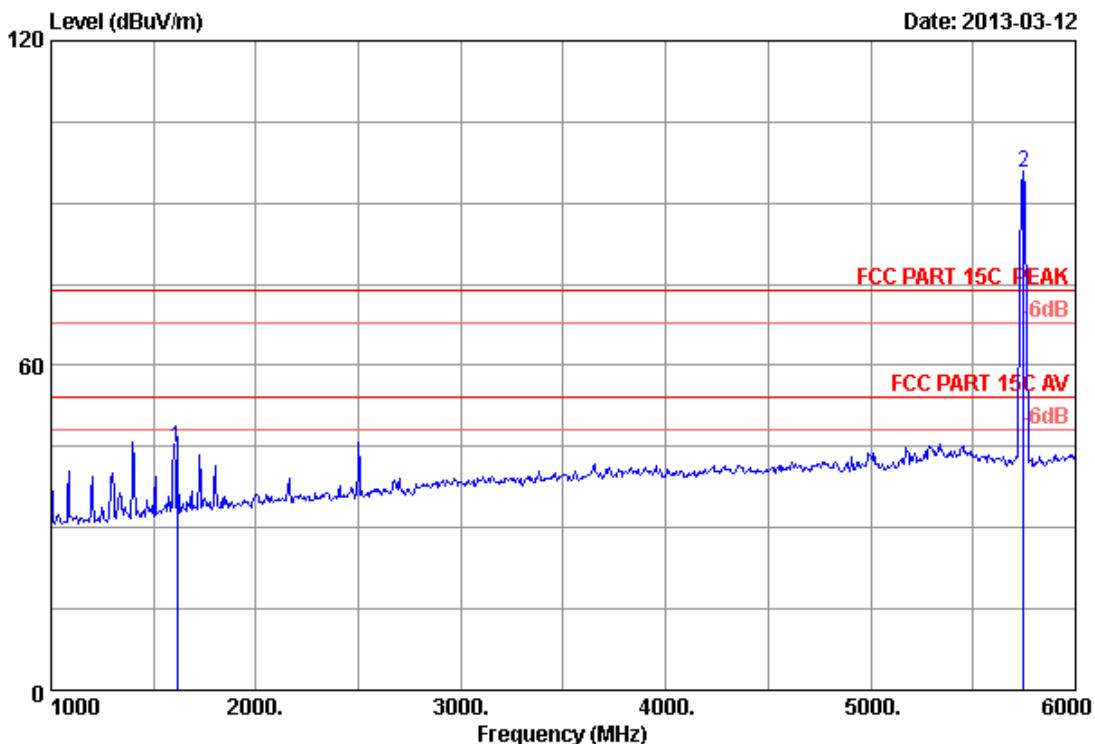
	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4904.000	33.03	8.66	35.70	44.62	50.61	74.00	23.39 Peak
2	4904.000	33.03	8.66	35.70	30.36	36.35	54.00	17.65 Average

## Remarks:

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

**5.8G:**
**Frequency: 1GHz~18GHz**

Data: 105 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)



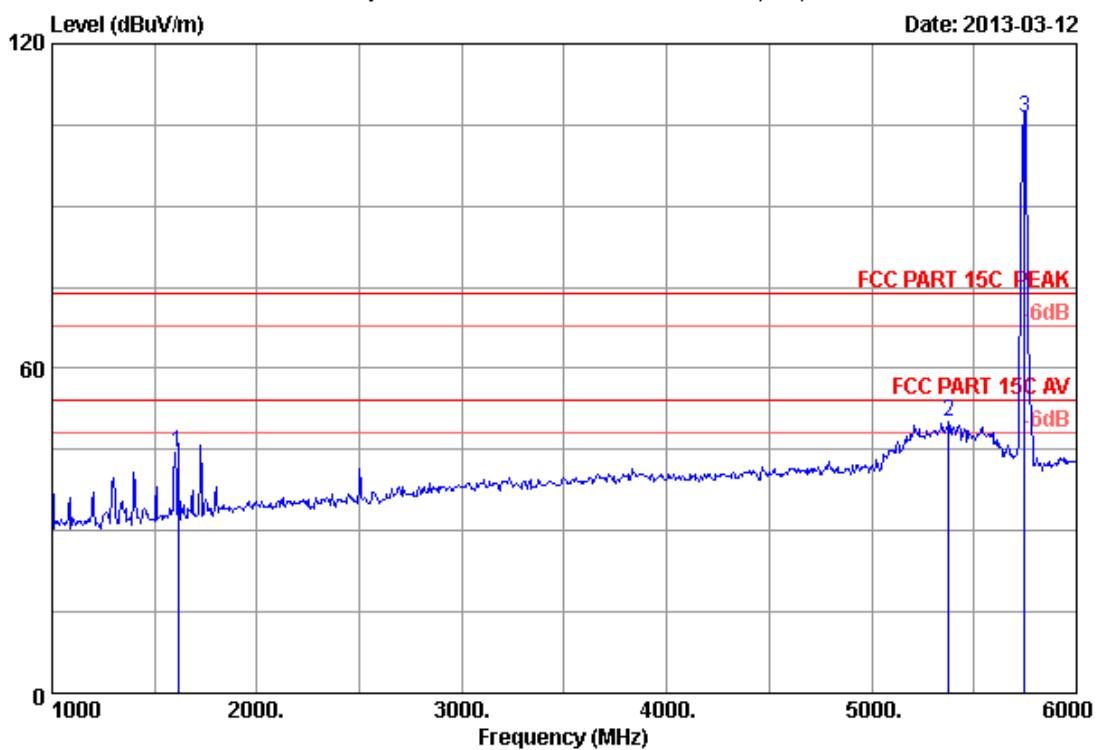
Site no. : 3m Chamber Data no. : 105  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 5.6V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH149 5745MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1615.000	25.68	4.65	36.12	50.43	44.64	74.00	29.36 Peak
2	5745.000	34.10	9.55	35.70	87.68	95.63	74.00	-21.63 Peak

**Remarks:**

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

Data: 106 File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

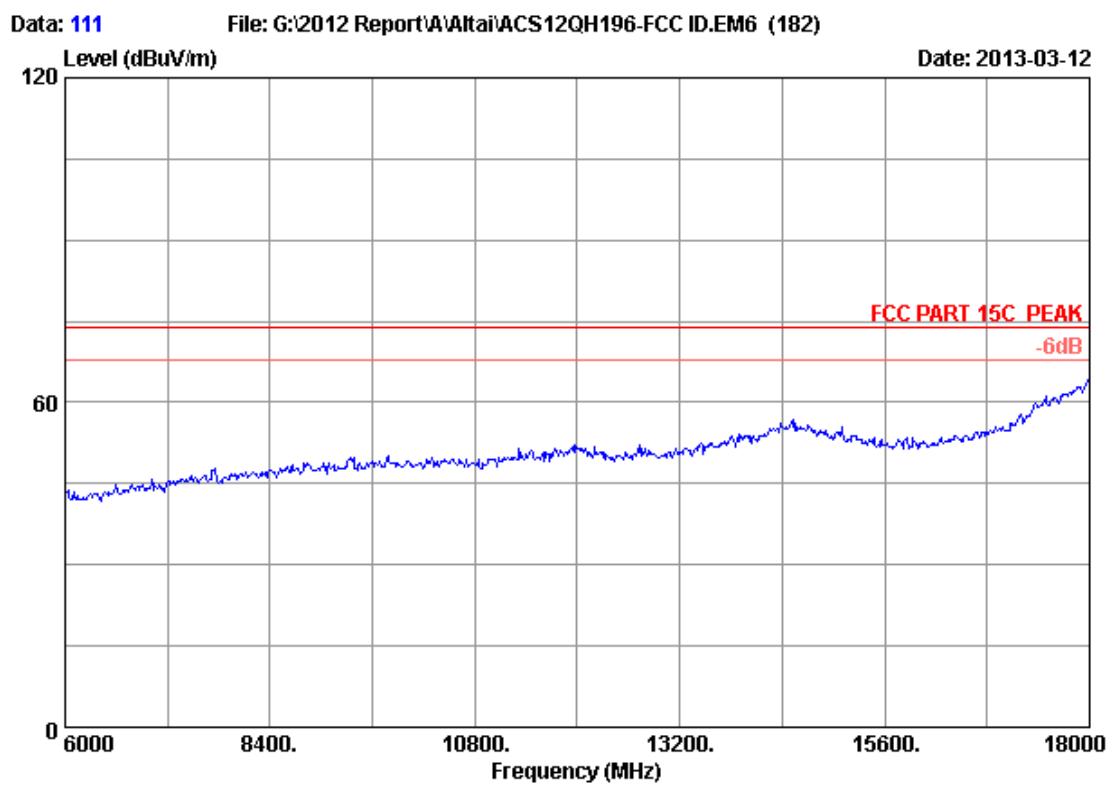


Site no. : 3m Chamber Data no. : 106  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH149 5745MHz Tx  
 WA8011N-X

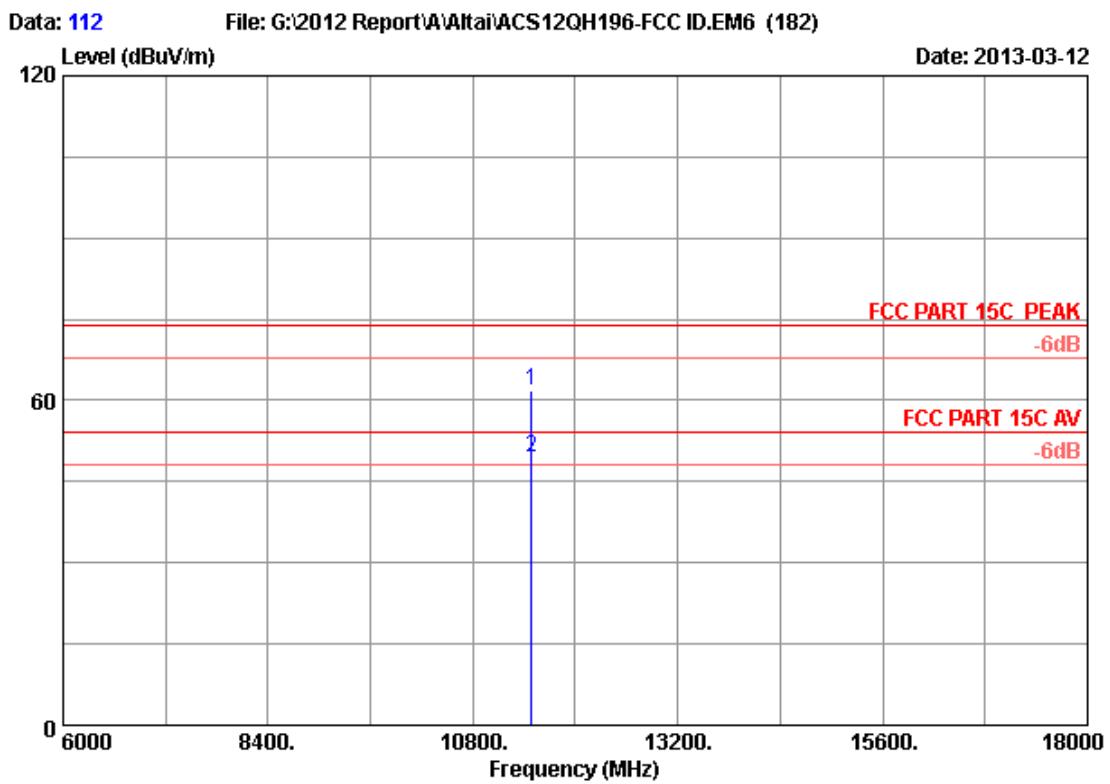
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission					
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
<hr/>									
1 1615.000	25.68	4.65	36.12	50.28	44.49	74.00	29.51	Peak	
2 5375.000	33.80	9.16	35.70	42.75	50.01	74.00	23.99	Peak	
3 5745.000	34.10	9.55	35.70	98.25	106.20	74.00	-32.20	Peak	
<hr/>									

**Remarks:**

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



Site no. : 3m Chamber Data no. : 111  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH149 5745MHz Tx  
WA8011N-X

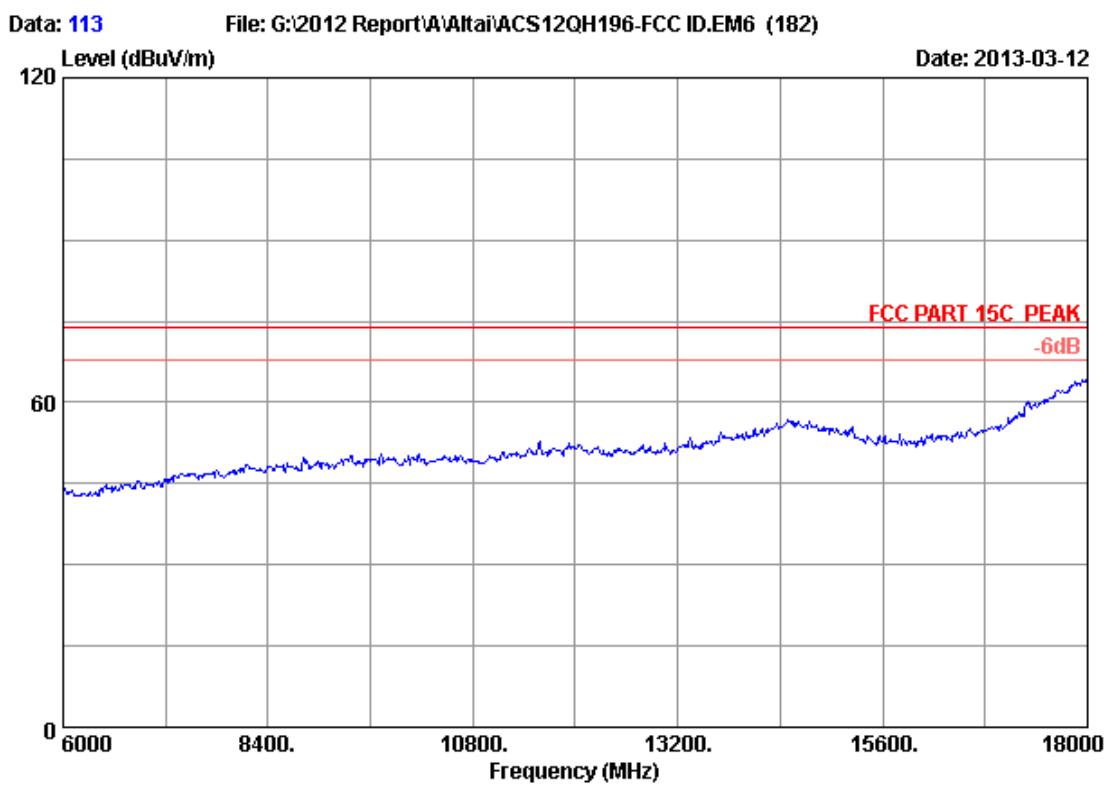


Site no. : 3m Chamber Data no. : 112  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH149 5745MHz Tx  
 WA8011N-X

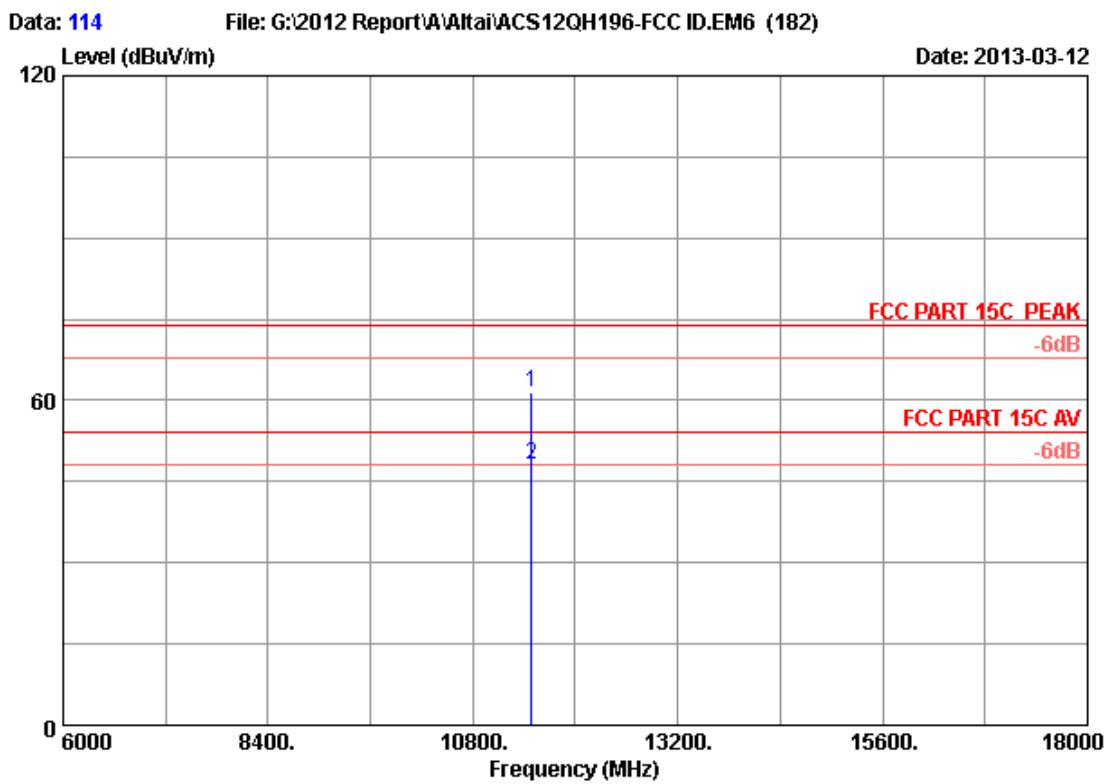
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11490.000	38.69	13.28	35.28	45.14	61.83	74.00	12.17	Peak
2 11490.000	38.69	13.28	35.28	32.67	49.36	54.00	4.64	Average

Remarks:

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



Site no. : 3m Chamber Data no. : 113  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH149 5745MHz Tx  
WA8011N-X



Site no. : 3m Chamber Data no. : 114  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH149 5745MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11490.000	38.69	13.28	35.28	44.82	61.51	74.00	12.49	Peak
2 11490.000	38.69	13.28	35.28	31.58	48.27	54.00	5.73	Average

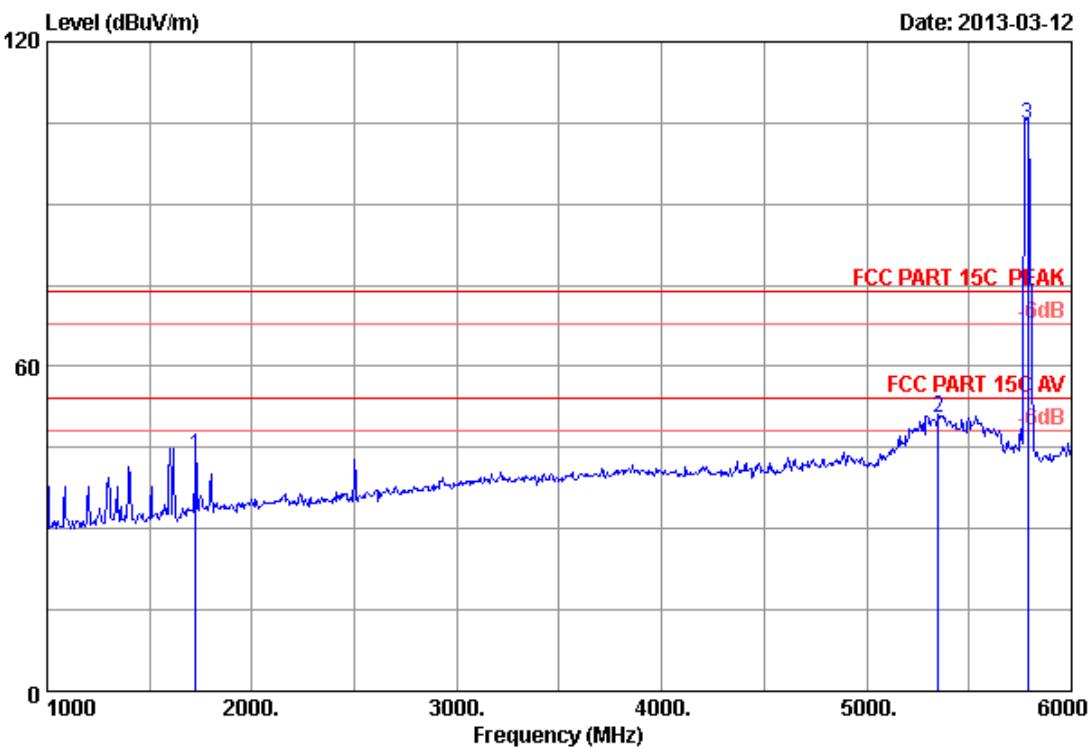
Remarks:

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

Data: 115

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 115  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission					
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
<hr/>									
1 1725.000	26.15	4.81	36.00	48.51	43.47	74.00	30.53	Peak	
2 5350.000	33.76	9.13	35.70	43.22	50.41	74.00	23.59	Peak	
3 5785.000	34.11	9.59	35.70	96.77	104.77	74.00	-30.77	Peak	
<hr/>									

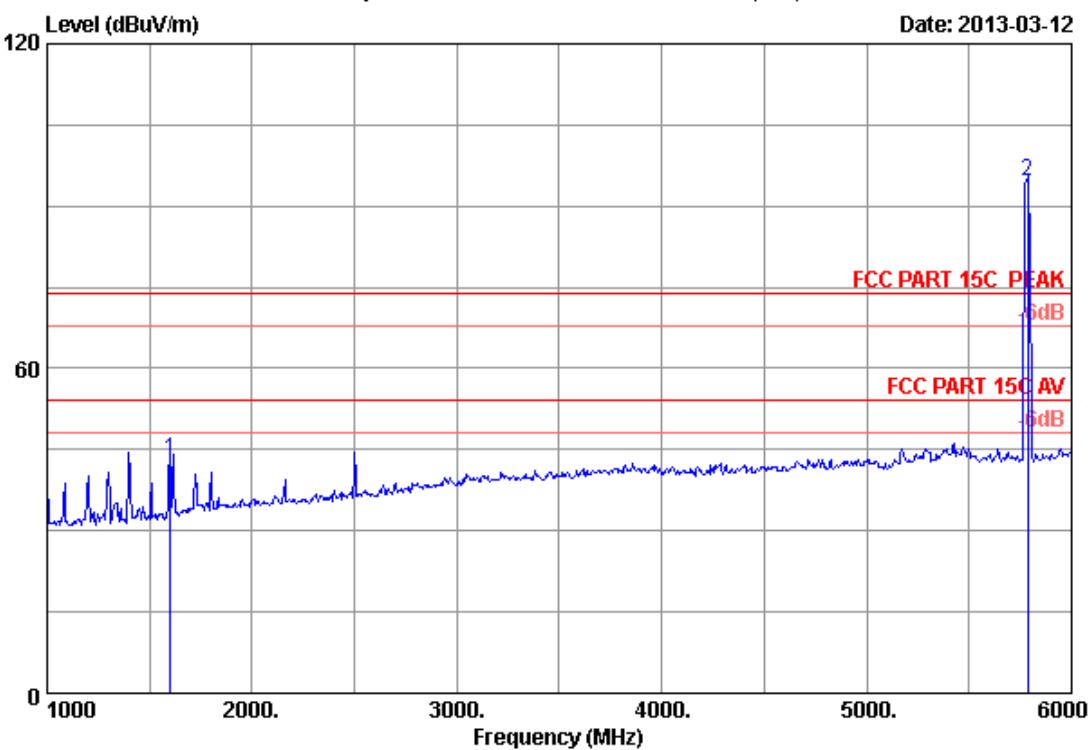
**Remarks:**

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

Data: 116

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 116  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	48.85	42.96	74.00	31.04	Peak
2 5785.000	34.11	9.59	35.70	86.66	94.66	74.00	-20.66	Peak

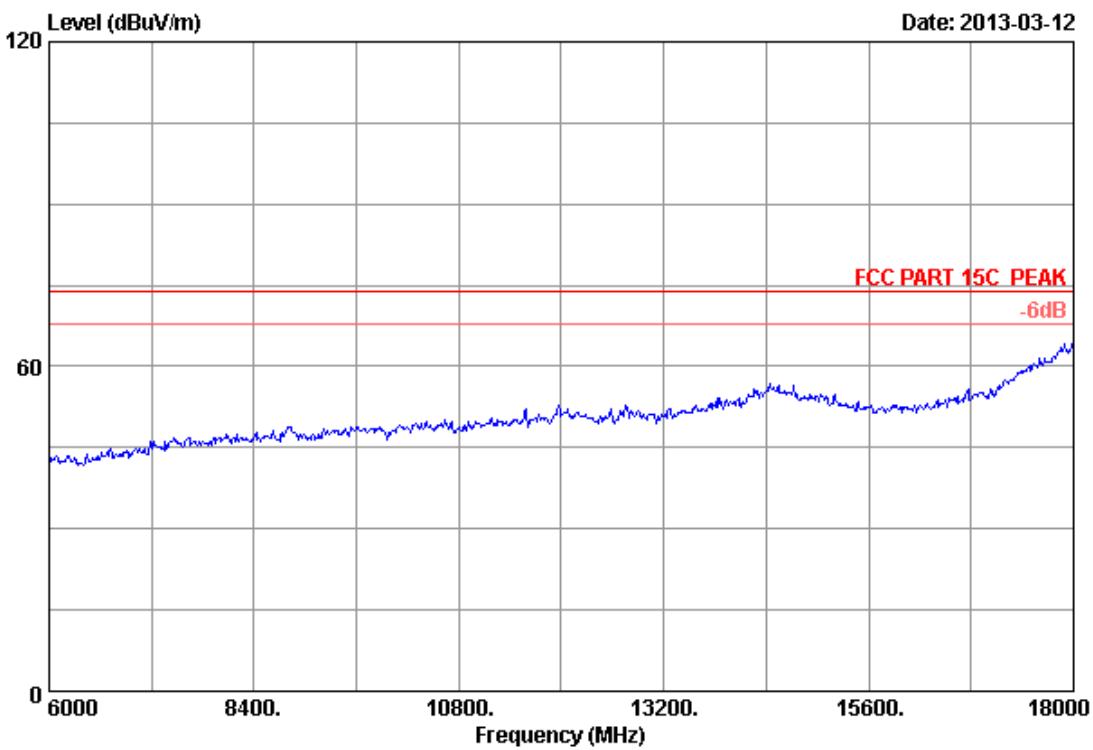
## Remarks:

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

Data: 117

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

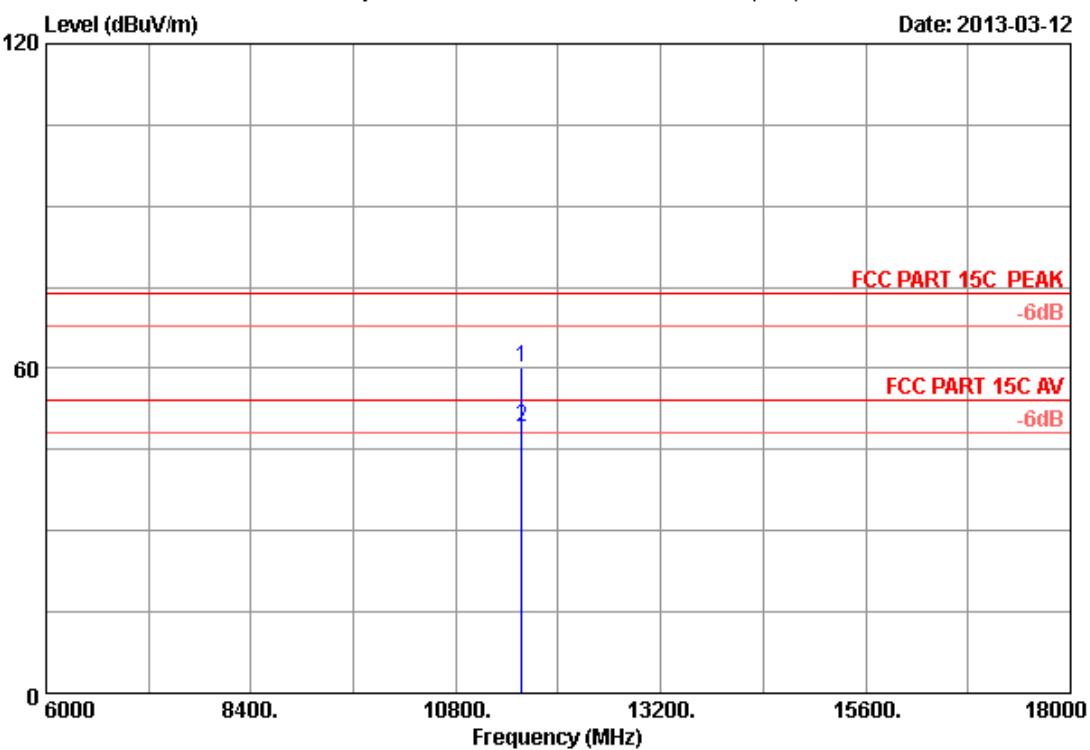


Site no. : 3m Chamber Data no. : 117  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH157 5785MHz Tx  
WA8011N-X

Data: 118

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 118  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11570.000	38.80	13.32	35.26	43.22	60.08	74.00	13.92	Peak
2 11570.000	38.80	13.32	35.26	32.27	49.13	54.00	4.87	Average

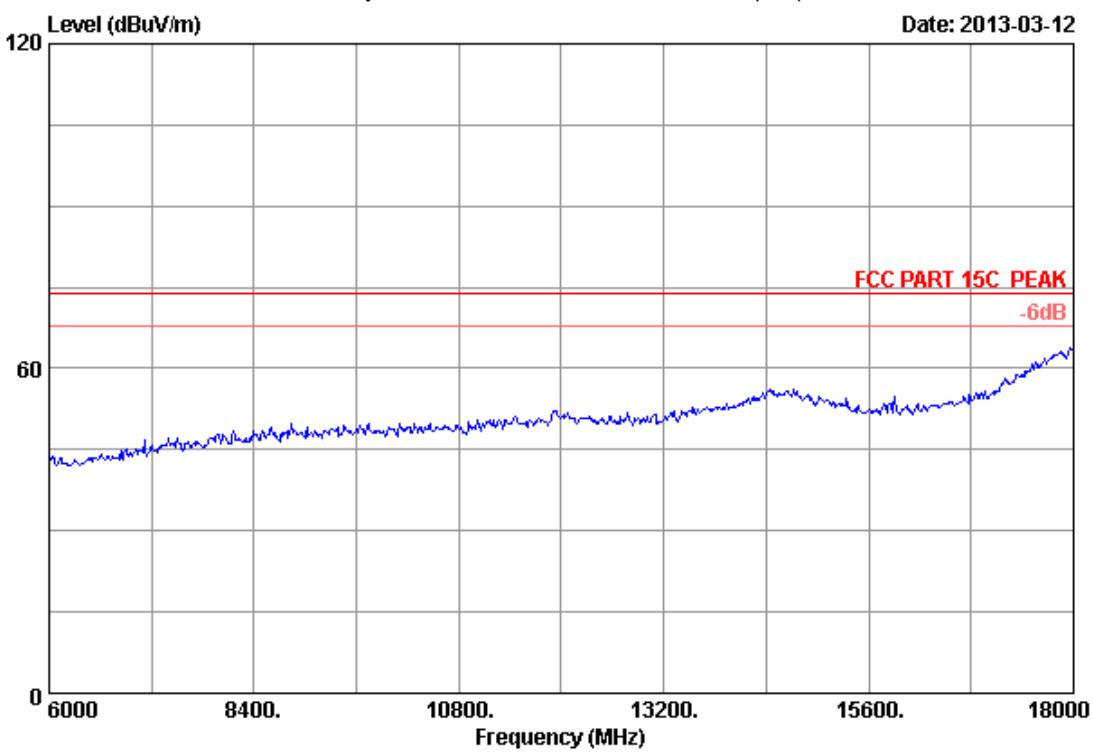
## Remarks:

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

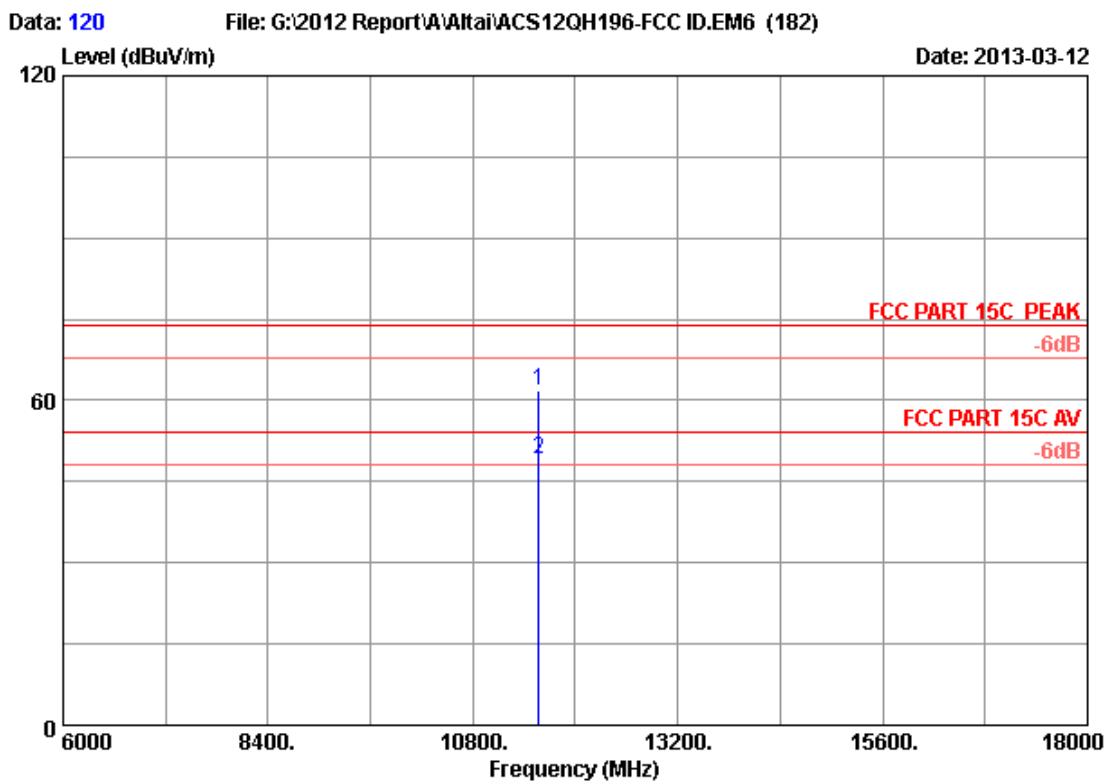
Data: 119

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 119  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH157 5785MHz Tx  
WA8011N-X



Site no. : 3m Chamber Data no. : 120  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11570.000	38.80	13.32	35.26	44.89	61.75	74.00	12.25	Peak
2 11570.000	38.80	13.32	35.26	32.14	49.00	54.00	5.00	Average

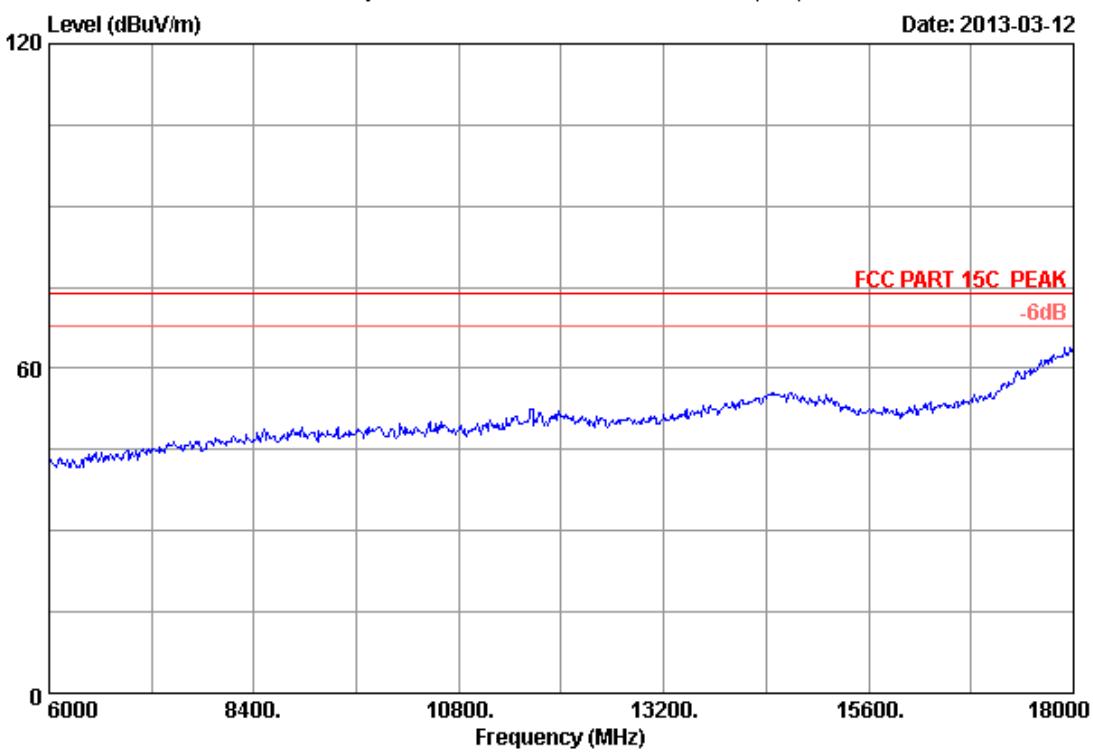
Remarks:

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

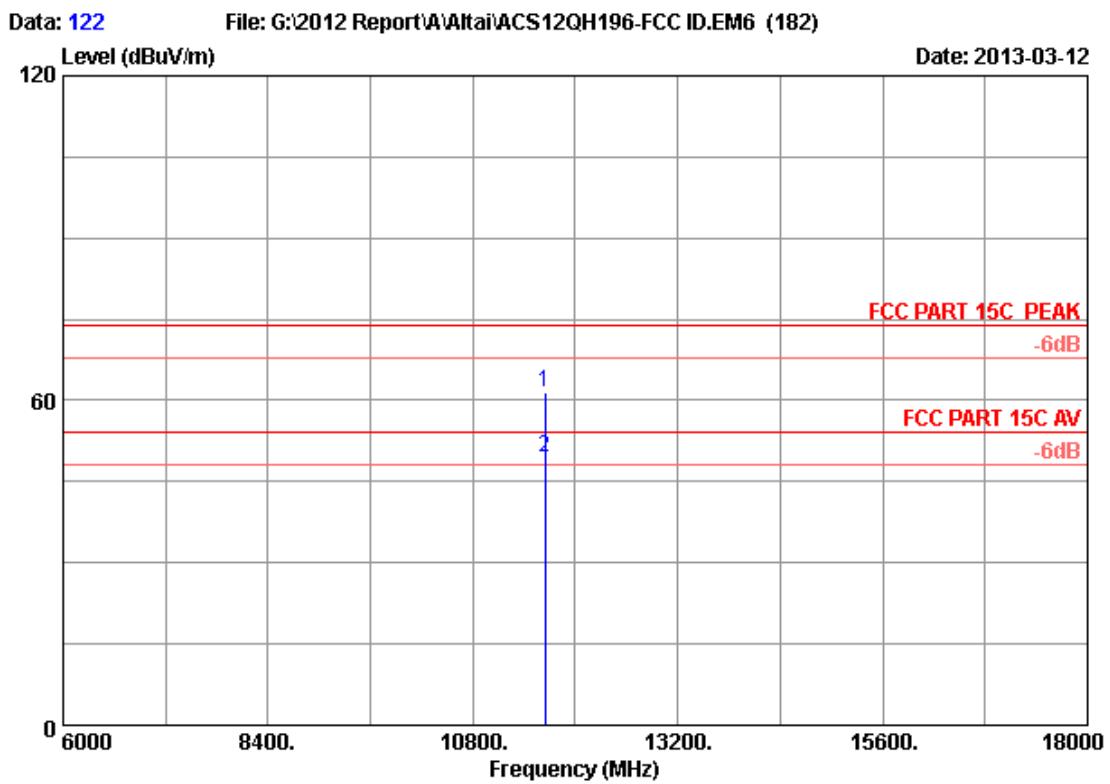
Data: 121

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 121  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH165 5825MHz Tx  
WA8011N-X



Site no. : 3m Chamber Data no. : 122  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH165 5825MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11650.000	38.91	13.37	35.25	44.58	61.61	74.00	12.39	Peak
2 11650.000	38.91	13.37	35.25	32.43	49.46	54.00	4.54	Average

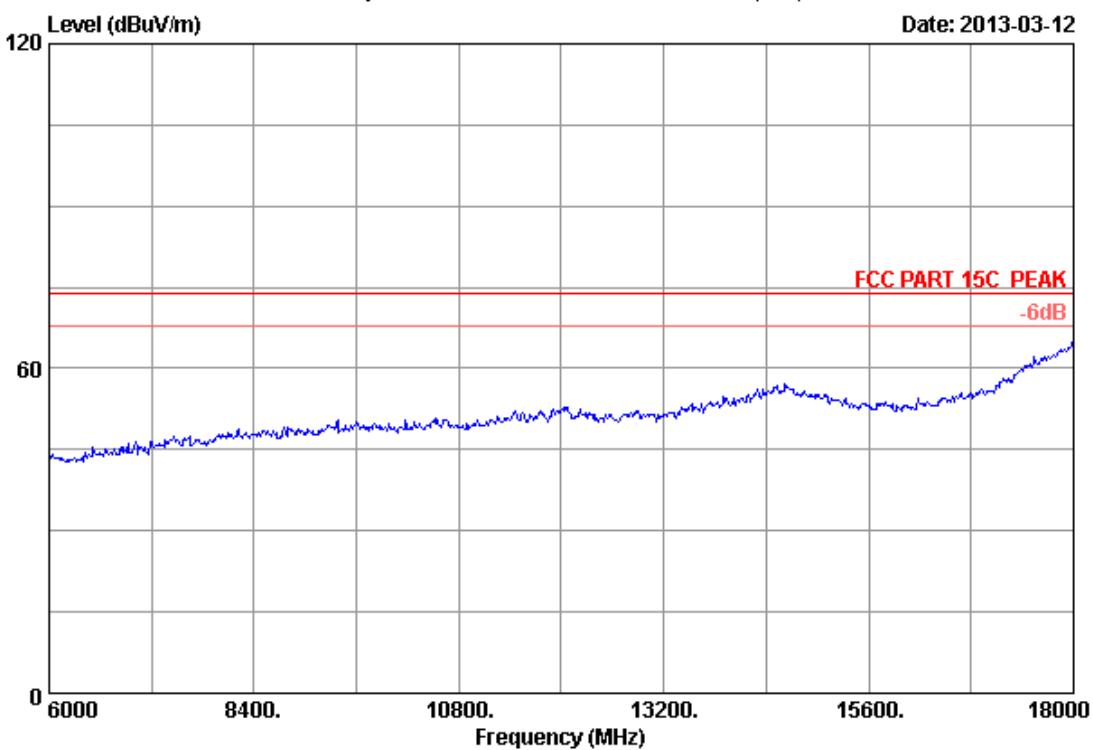
Remarks:

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

Data: 123

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

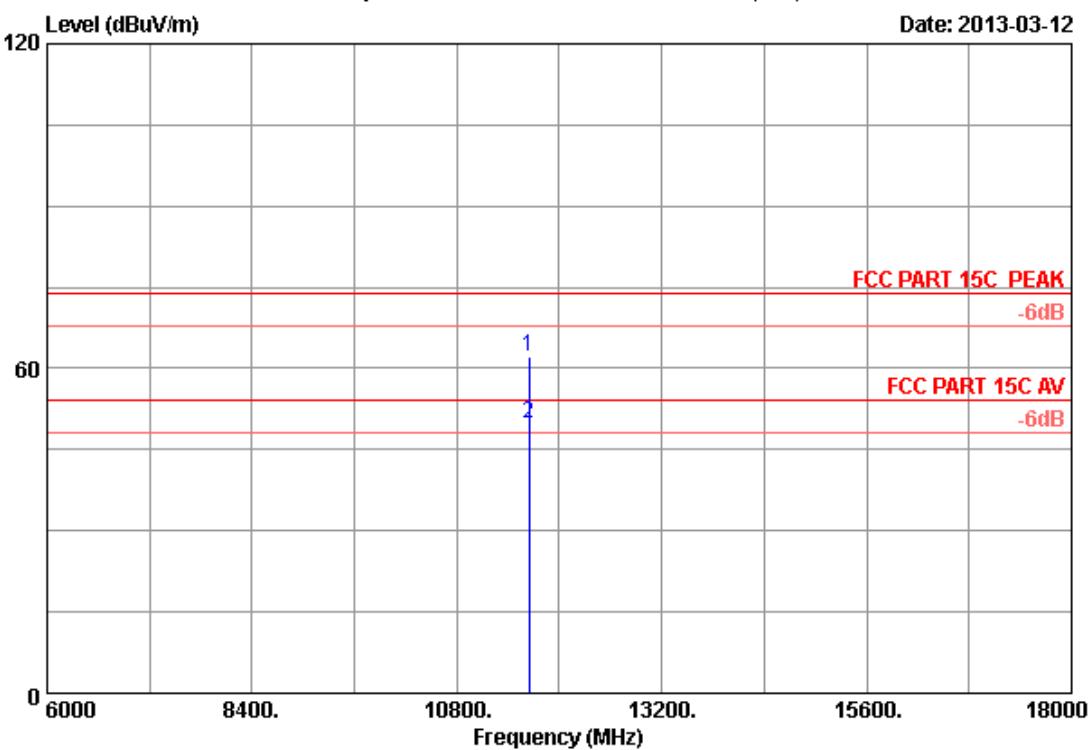


Site no. : 3m Chamber Data no. : 123  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH165 5825MHz Tx  
WA8011N-X

Data: 124

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 124  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11a CH165 5825MHz Tx  
WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
<hr/>								
1 11650.000	38.91	13.37	35.25	45.17	62.20	74.00	11.80	Peak
2 11650.000	38.91	13.37	35.25	32.84	49.87	54.00	4.13	Average

---

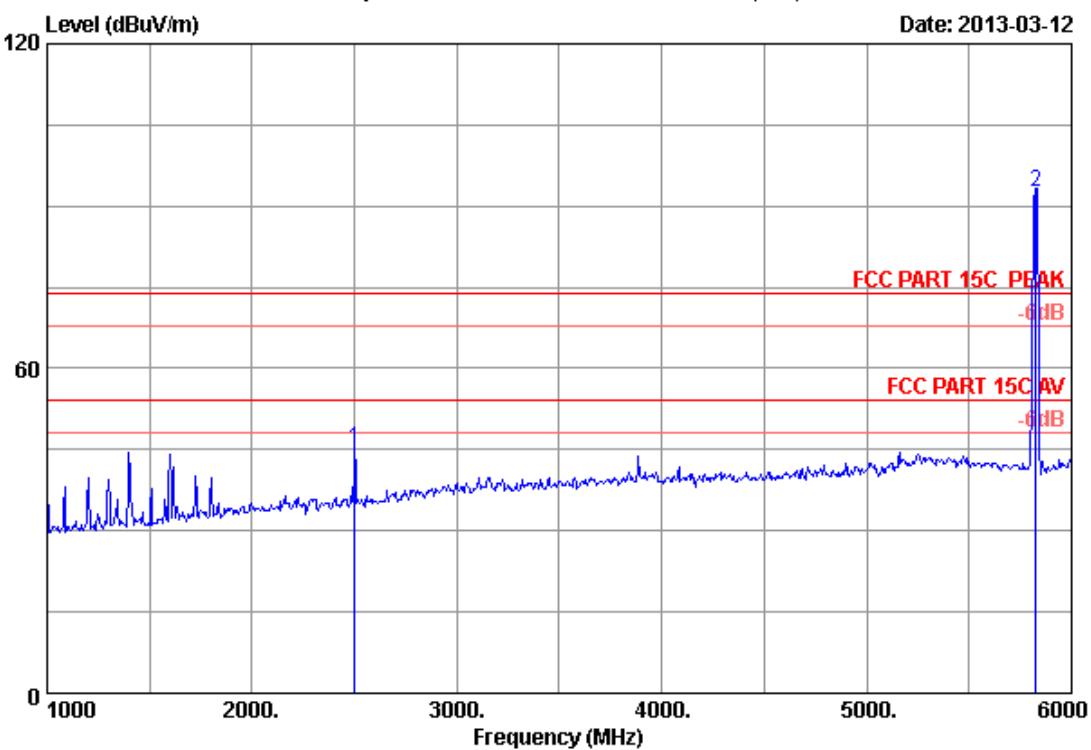
## Remarks:

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

Data: 125

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 125  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH165 5825MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2500.000	28.40	5.94	35.70	46.33	44.97	74.00	29.03 Peak
2	5825.000	34.13	9.63	35.70	84.45	92.51	74.00	-18.51 Peak

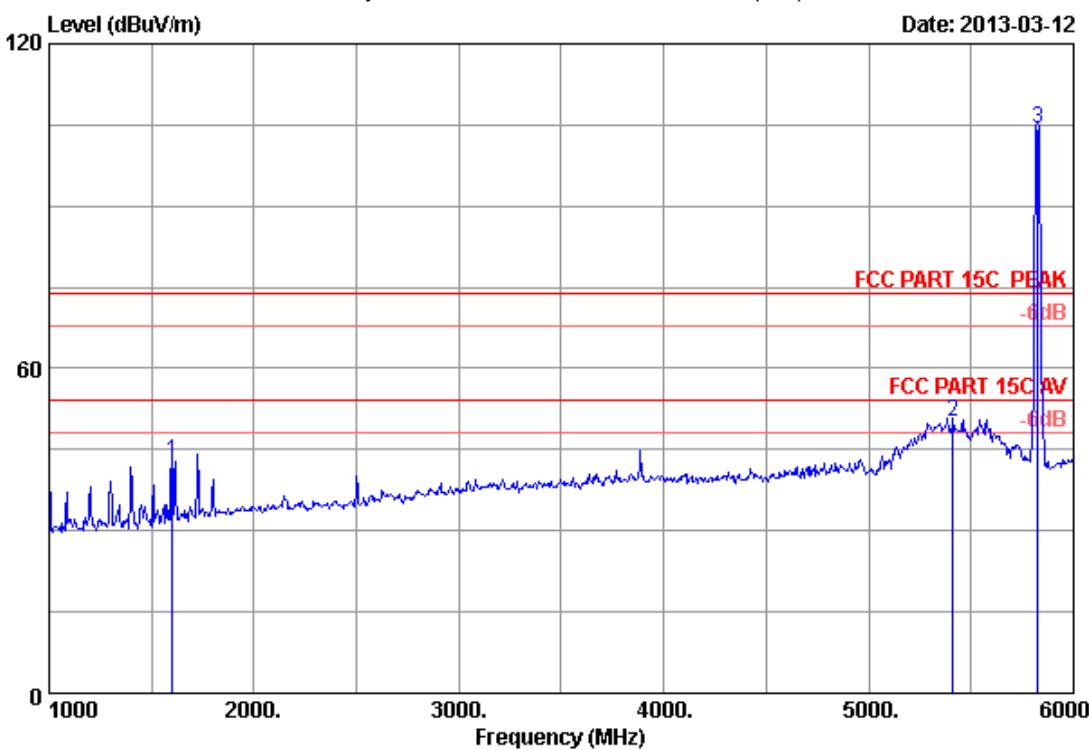
## Remarks:

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

Data: 126

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 126  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11a CH165 5825MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1600.000	25.62	4.63	36.14	48.55	42.66	74.00	31.34	Peak
2 5410.000	33.86	9.19	35.70	42.73	50.08	74.00	23.92	Peak
3 5825.000	34.13	9.63	35.70	96.32	104.38	74.00	-30.38	Peak

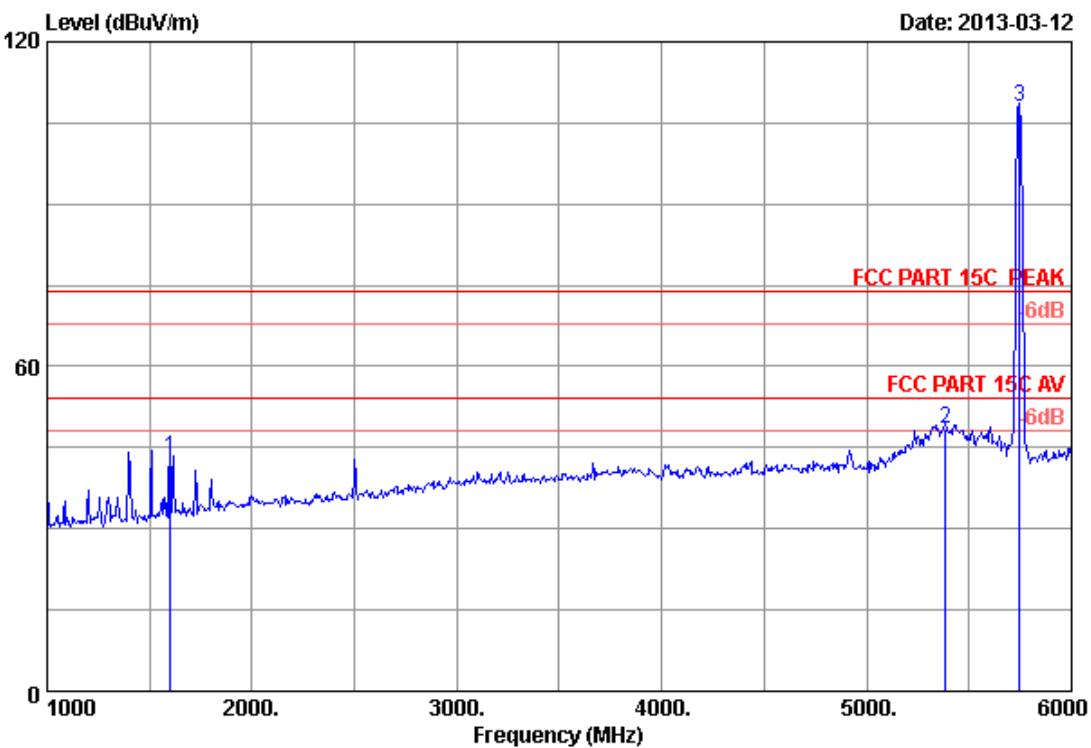
## Remarks:

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

Data: 131

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

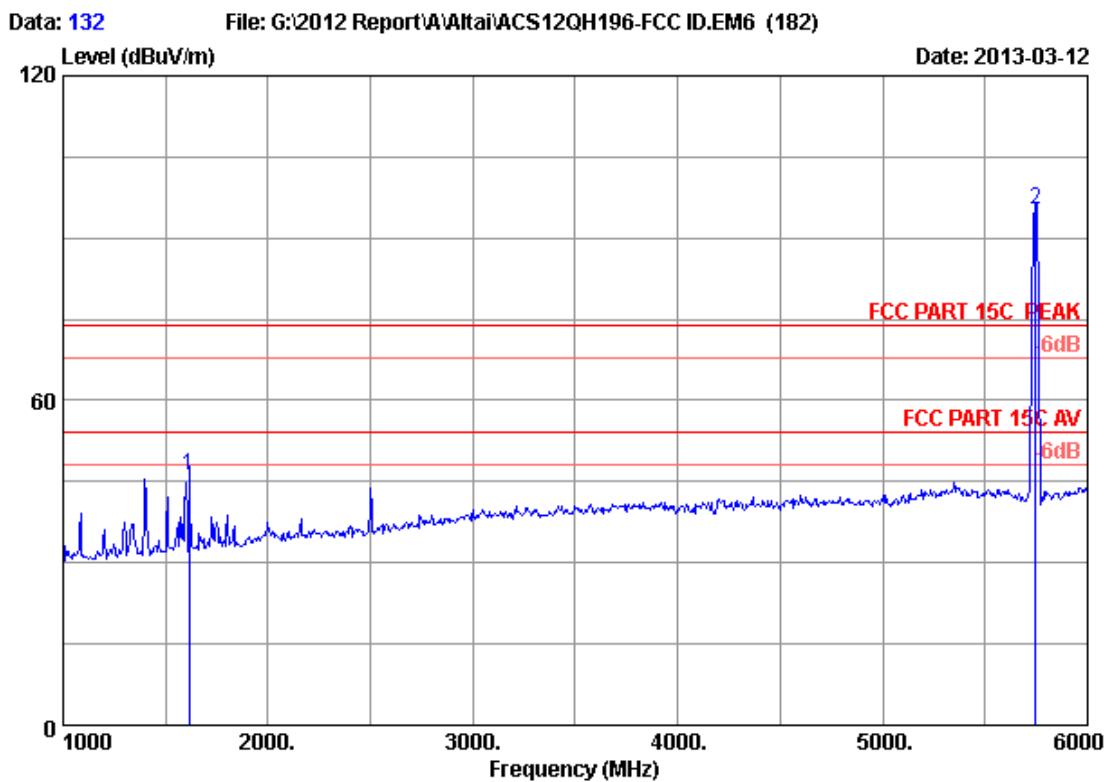


Site no. : 3m Chamber Data no. : 131  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1600.000	25.62	4.63	36.14	48.88	42.99	74.00	31.01 Peak
2	5385.000	33.82	9.17	35.70	41.25	48.54	74.00	25.46 Peak
3	5745.000	34.10	9.55	35.70	99.88	107.83	74.00	-33.83 Peak

**Remarks:**

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



Site no. : 3m Chamber Data no. : 132  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1615.000	25.68	4.65	36.12	51.98	46.19	74.00	27.81	Peak
2 5745.000	34.10	9.55	35.70	87.28	95.23	74.00	-21.23	Peak

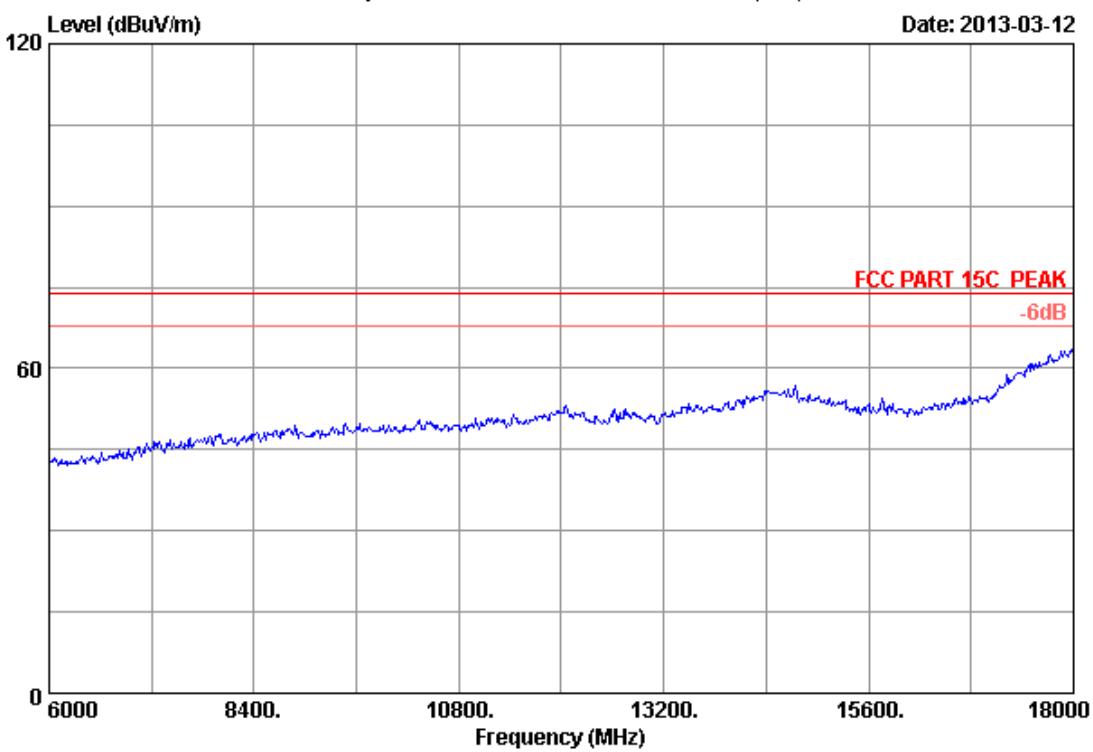
Remarks:

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

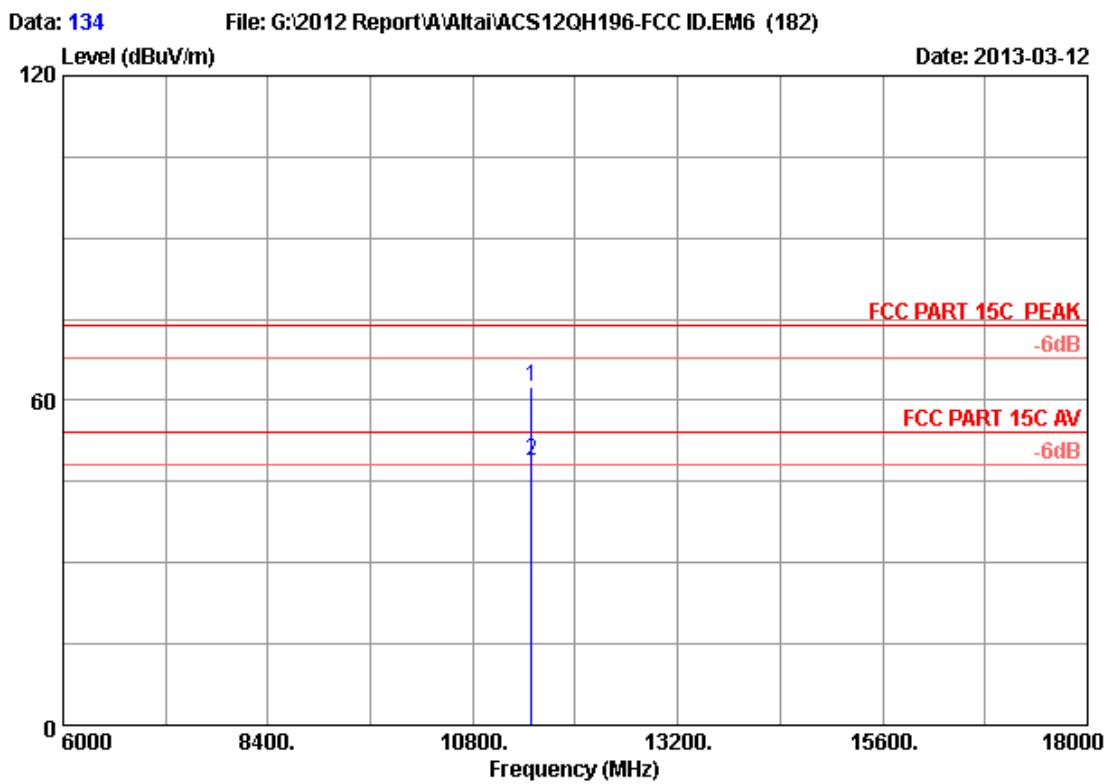
Data: 133

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 133  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH149 5745MHz Tx  
WA8011N-X



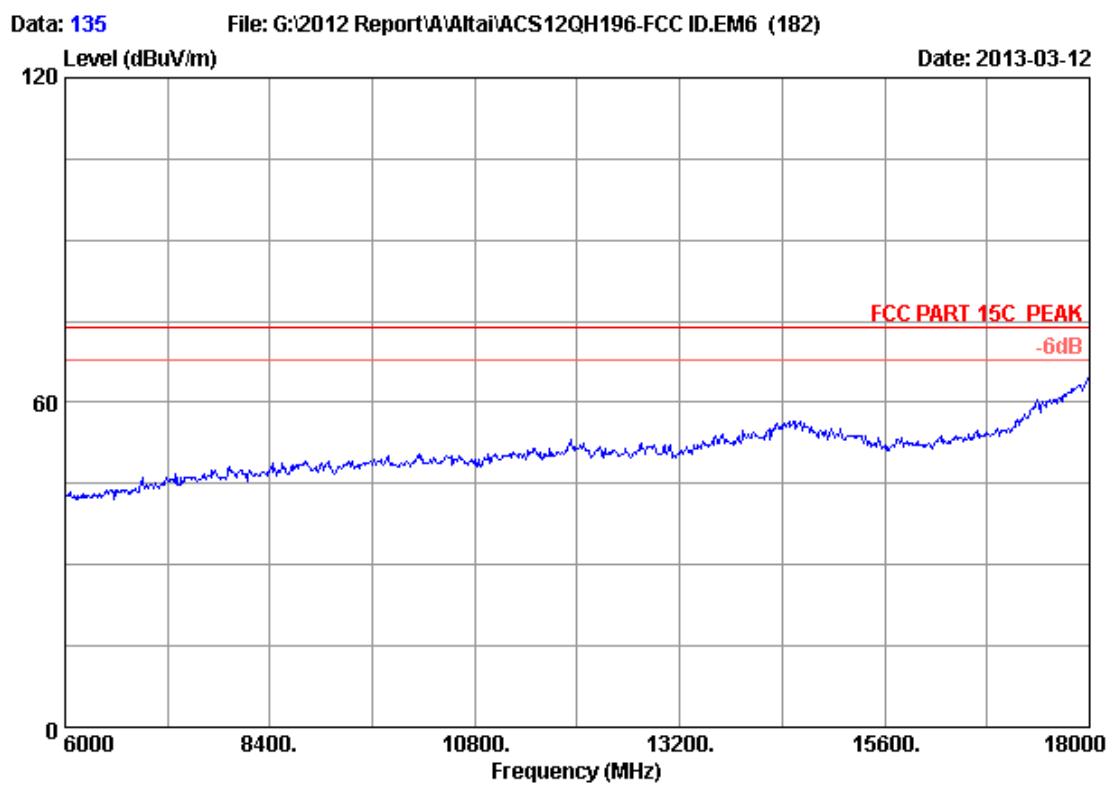
Site no. : 3m Chamber Data no. : 134  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission					
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
<hr/>									
1 11490.000	38.69	13.28	35.28	45.83	62.52	74.00	11.48	Peak	
2 11490.000	38.69	13.28	35.28	32.14	48.83	54.00	5.17	Average	

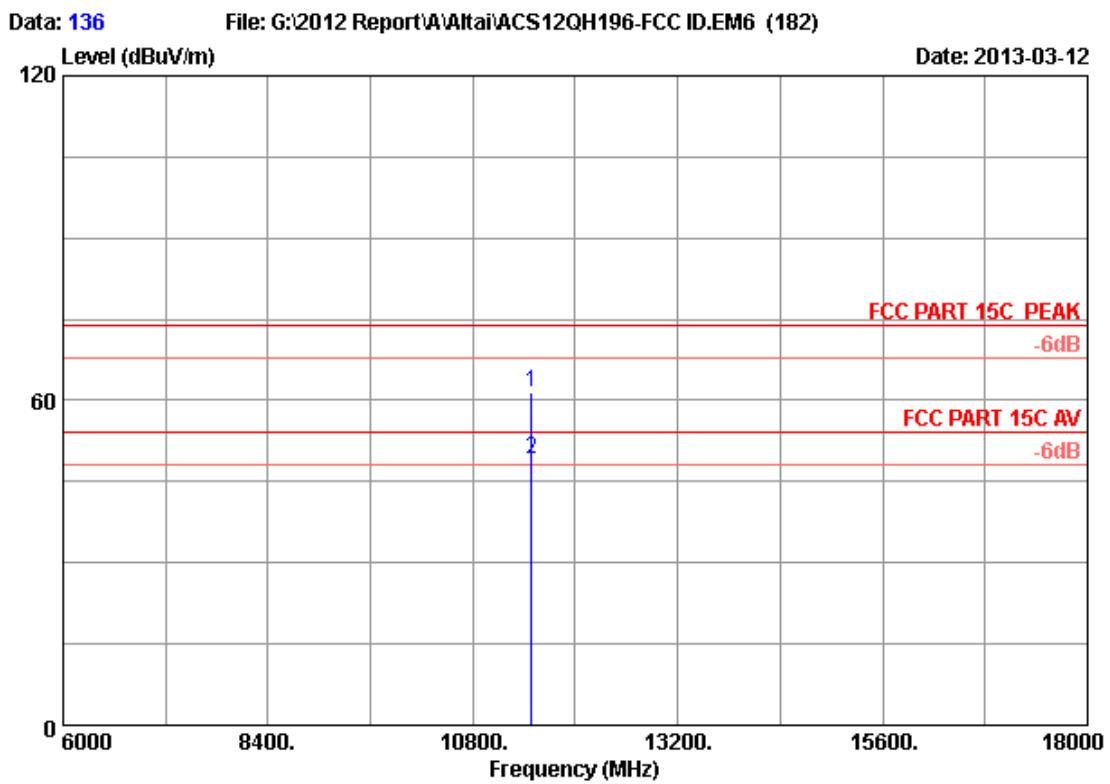
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Remarks:

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



Site no. : 3m Chamber Data no. : 135  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH149 5745MHz Tx  
WA8011N-X



Site no. : 3m Chamber Data no. : 136  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11490.000	38.69	13.28	35.28	44.88	61.57	74.00	12.43	Peak
2 11490.000	38.69	13.28	35.28	32.58	49.27	54.00	4.73	Average

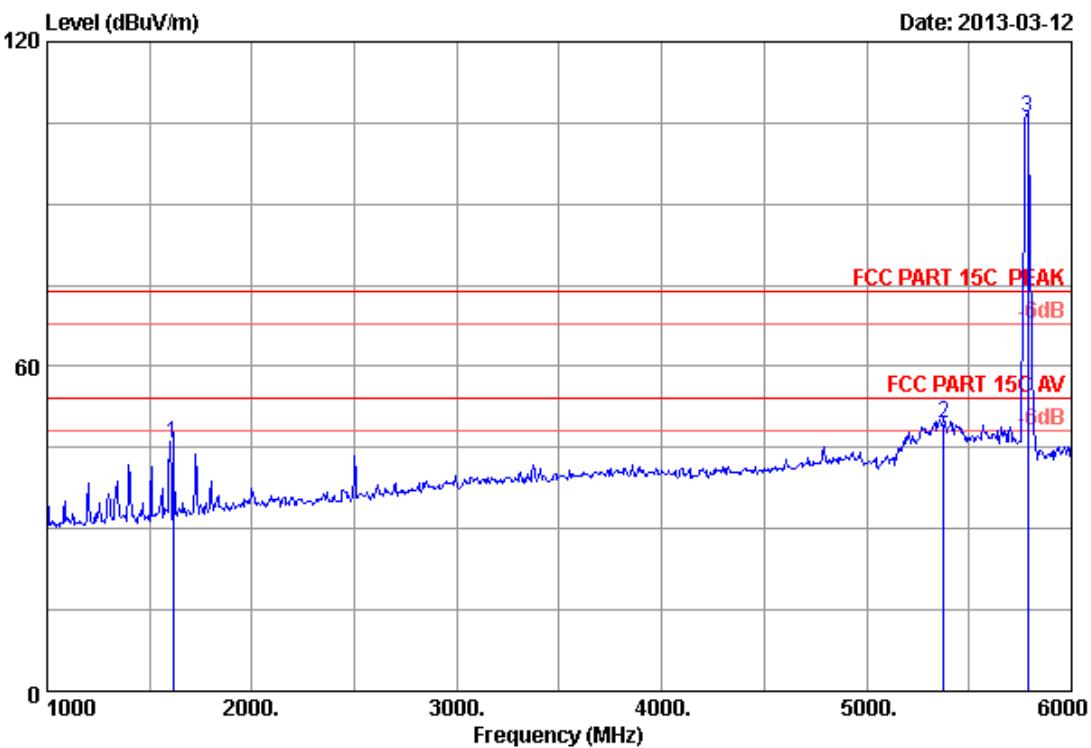
Remarks:

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

Data: 141

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12


**Remarks:**

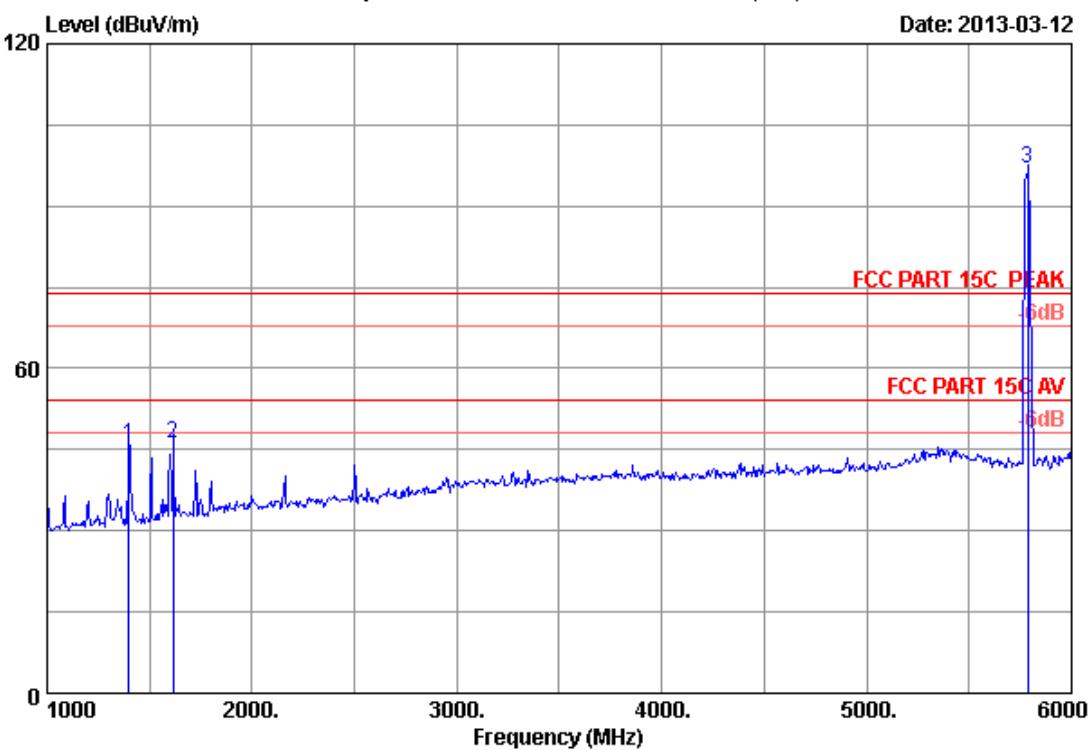
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.

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

Data: 142

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 142  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1400.000	24.84	4.34	36.36	53.07	45.89	74.00	28.11	Peak
2 1615.000	25.68	4.65	36.12	51.95	46.16	74.00	27.84	Peak
3 5785.000	34.11	9.59	35.70	88.99	96.99	74.00	-22.99	Peak

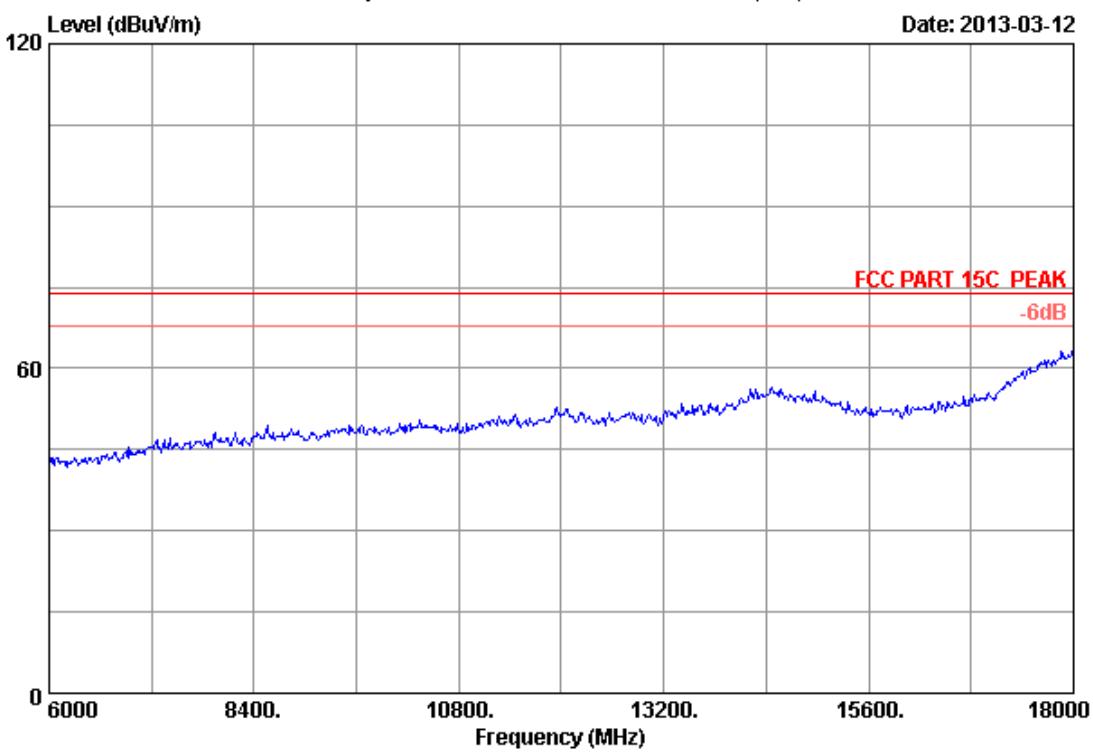
## Remarks:

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

Data: 143

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

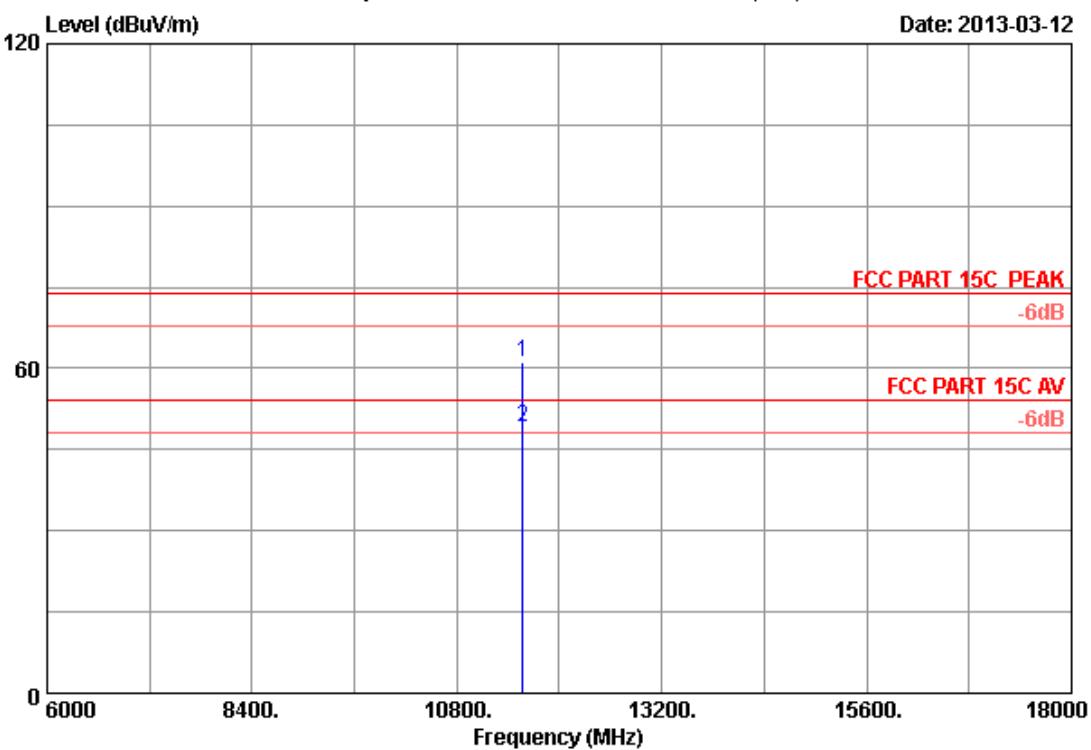


Site no. : 3m Chamber Data no. : 143  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH157 5785MHz Tx  
WA8011N-X

Data: 144

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 144  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11570.000	38.80	13.32	35.26	44.36	61.22	74.00	12.78	Peak
2 11570.000	38.80	13.32	35.26	32.15	49.01	54.00	4.99	Average

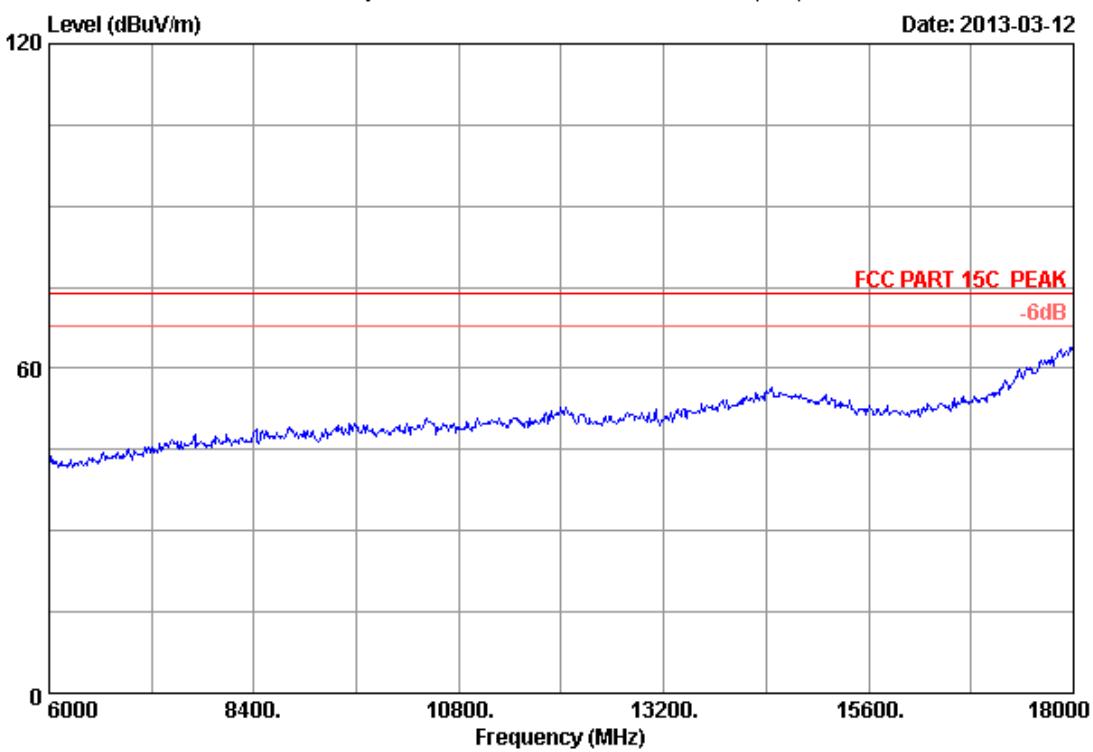
## Remarks:

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

Data: 145

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

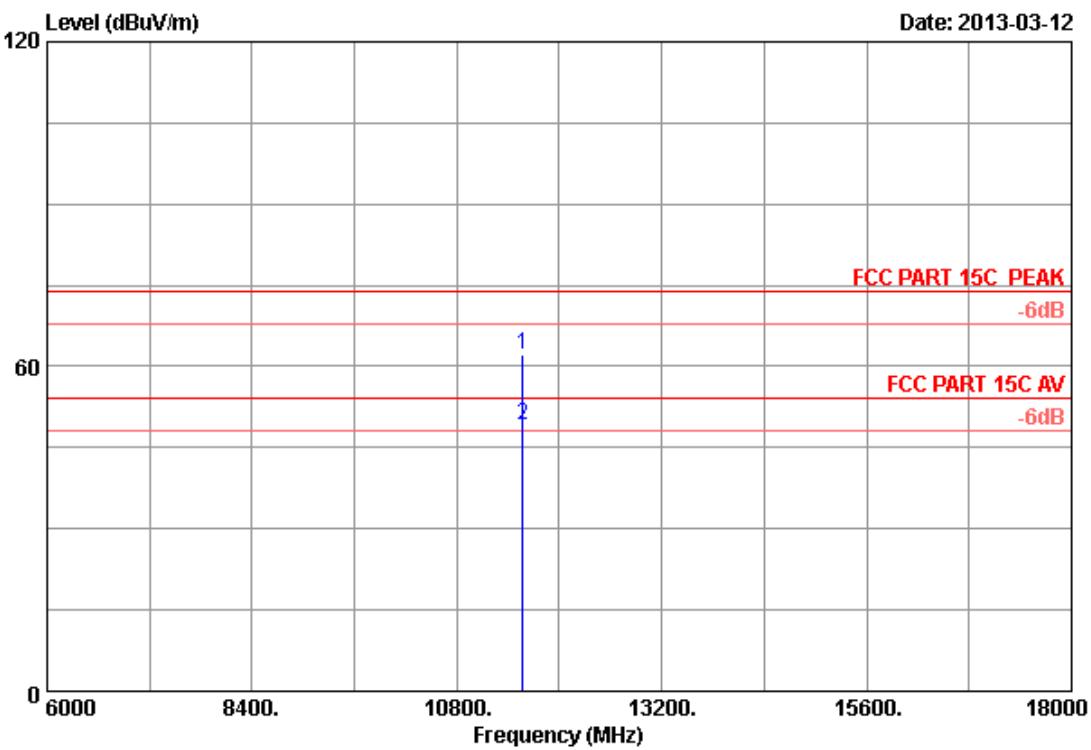


Site no. : 3m Chamber Data no. : 145  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH157 5785MHz Tx  
WA8011N-X

Data: 146

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 146  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH157 5785MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11570.000	38.80	13.32	35.26	45.35	62.21	74.00	11.79	Peak
2 11570.000	38.80	13.32	35.26	32.41	49.27	54.00	4.73	Average

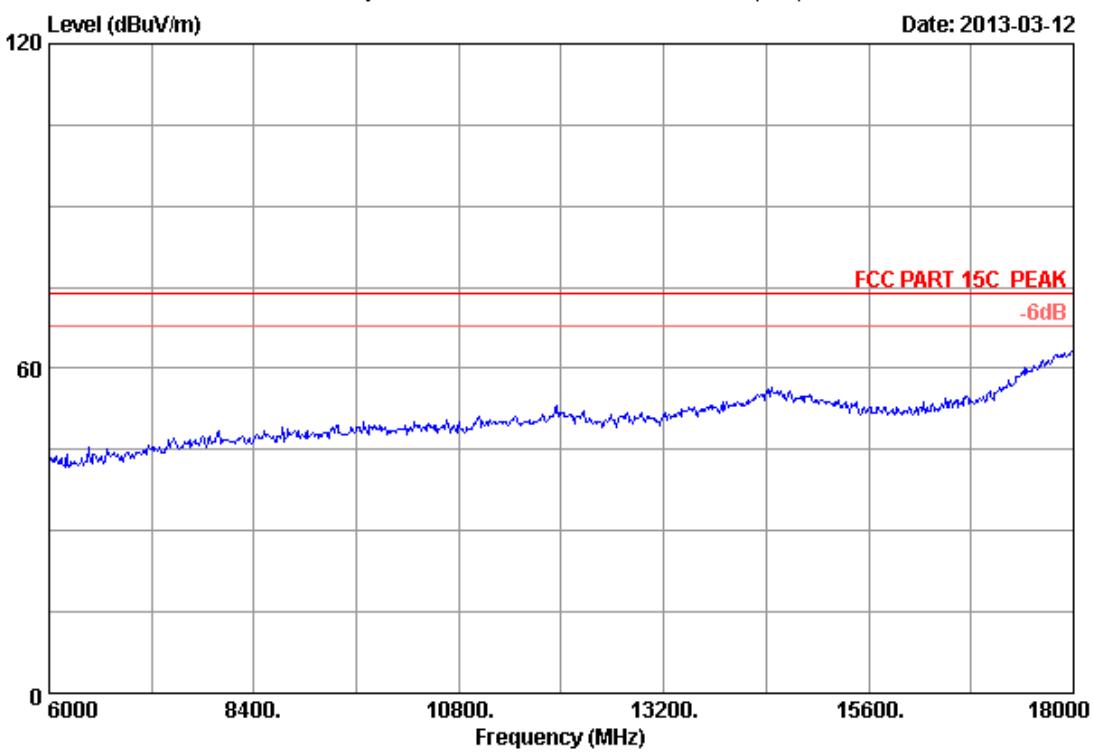
## Remarks:

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

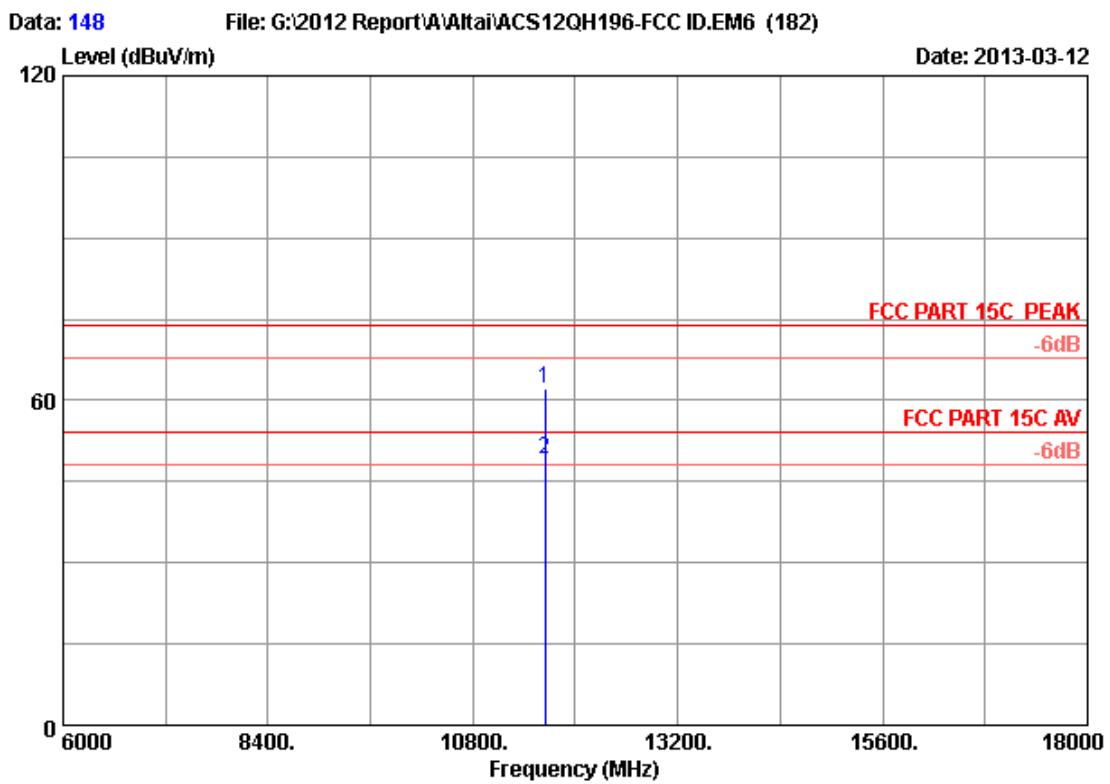
Data: 147

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 147  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH165 5825MHz Tx  
WA8011N-X



Site no. : 3m Chamber Data no. : 148  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11650.000	38.91	13.37	35.25	45.21	62.24	74.00	11.76	Peak
2 11650.000	38.91	13.37	35.25	32.03	49.06	54.00	4.94	Average

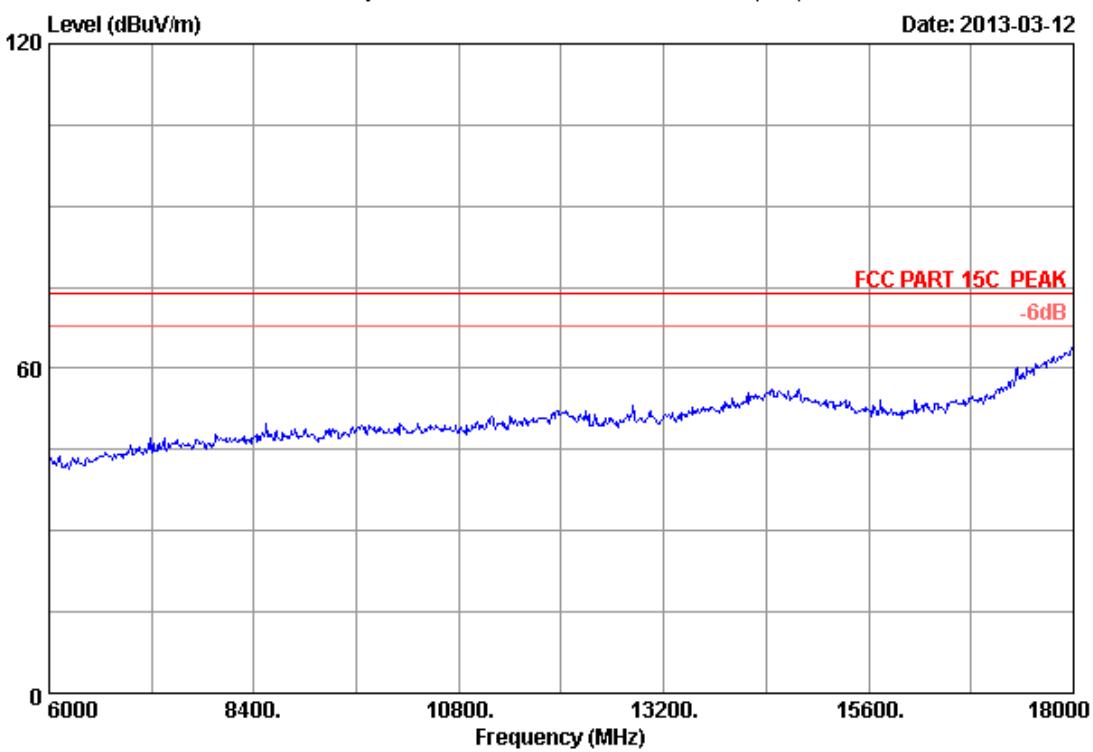
Remarks:

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

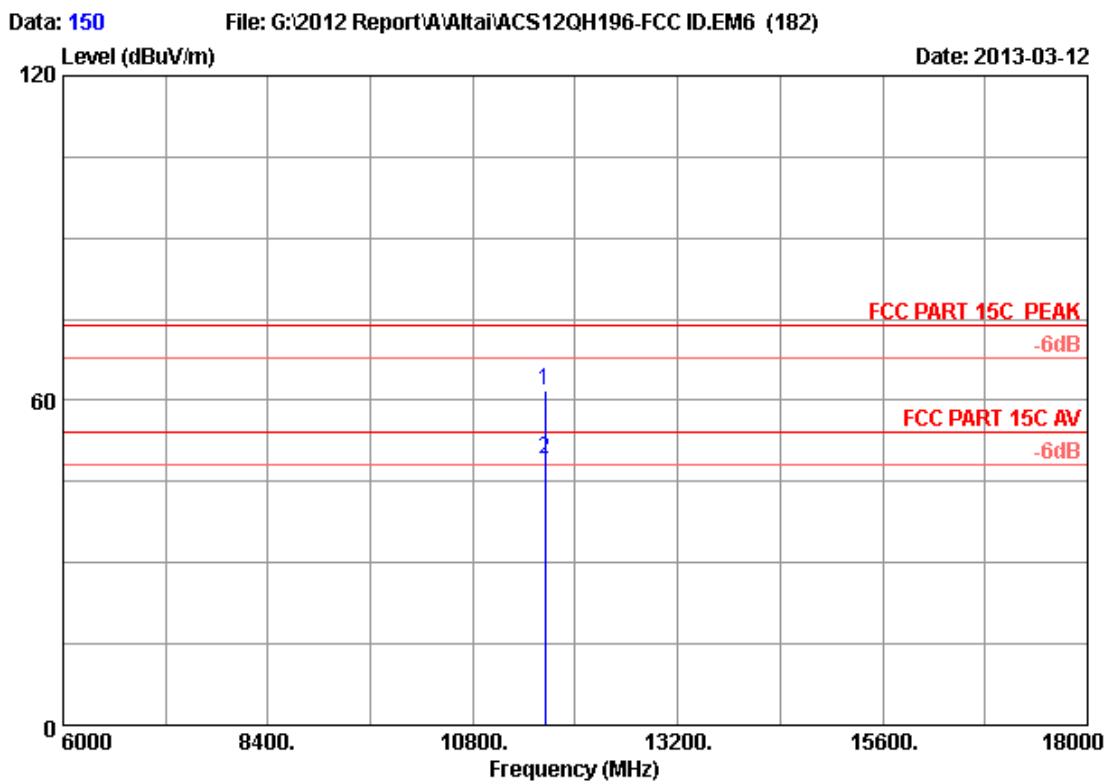
Data: 149

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 149  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT20 CH165 5825MHz Tx  
WA8011N-X



Site no. : 3m Chamber Data no. : 150  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11650.000	38.91	13.37	35.25	44.74	61.77	74.00	12.23	Peak
2 11650.000	38.91	13.37	35.25	32.16	49.19	54.00	4.81	Average

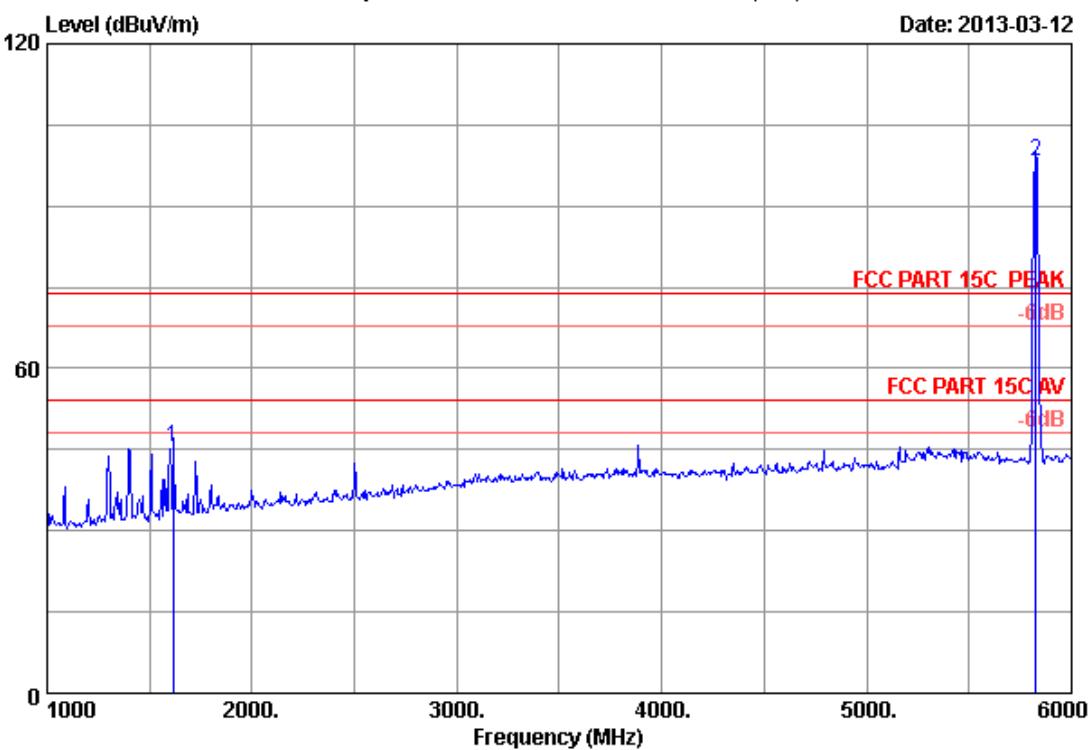
Remarks:

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

Data: 151

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

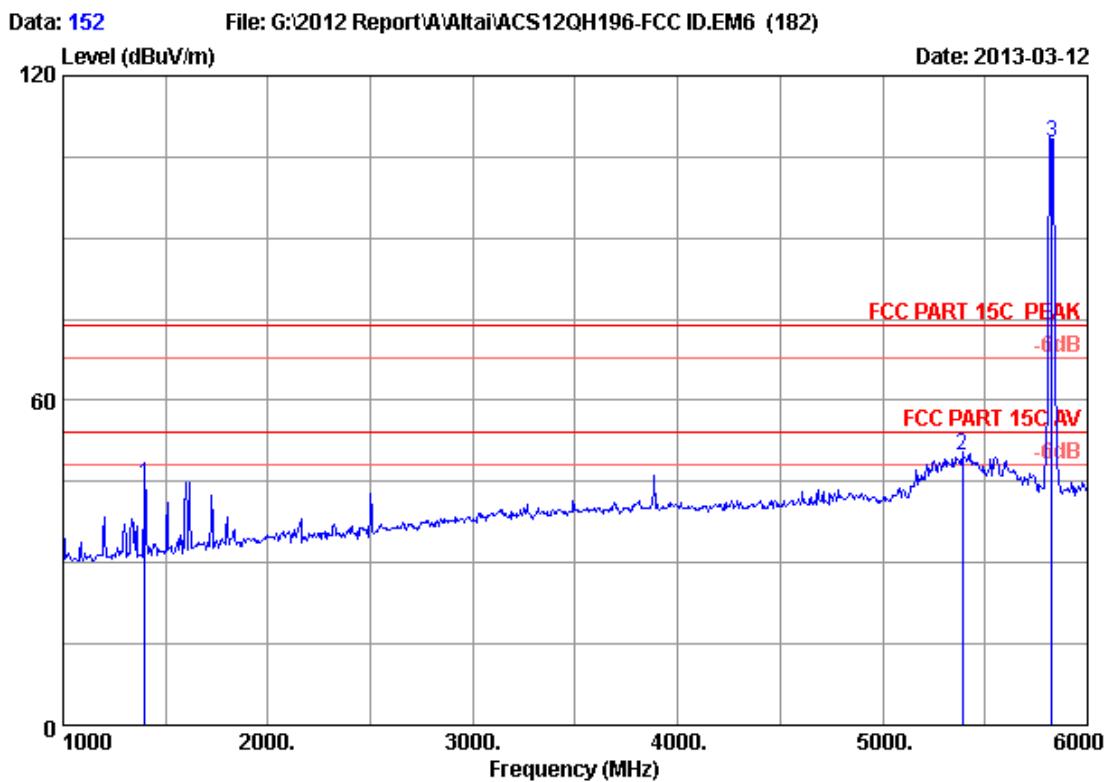


Site no. : 3m Chamber Data no. : 151  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1615.000	25.68	4.65	36.12	51.25	45.46	74.00	28.54	Peak
2 5825.000	34.13	9.63	35.70	90.12	98.18	74.00	-24.18	Peak

## Remarks:

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



Site no. : 3m Chamber Data no. : 152  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission					
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
<hr/>									
1 1400.000	24.84	4.34	36.36	51.61	44.43	74.00	29.57	Peak	
2 5390.000	33.82	9.17	35.70	42.36	49.65	74.00	24.35	Peak	
3 5825.000	34.13	9.63	35.70	99.48	107.54	74.00	-33.54	Peak	
<hr/>									

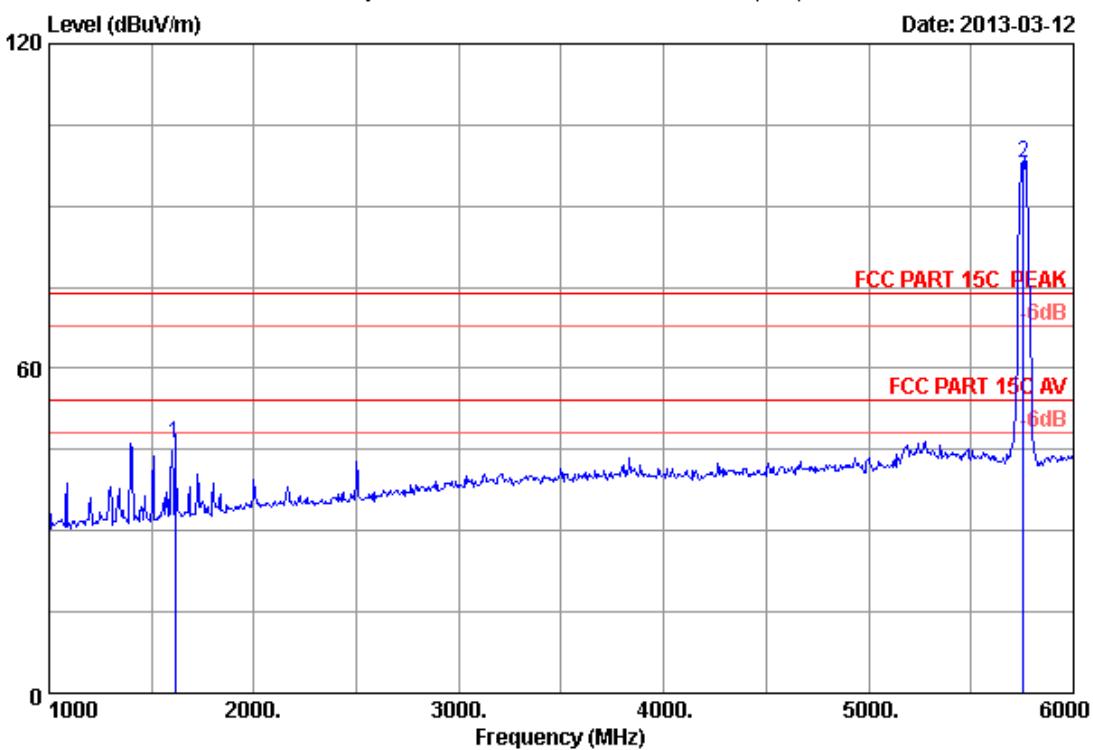
Remarks:

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

Data: 157

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 157  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1615.000	25.68	4.65	36.12	51.83	46.04	74.00	27.96 Peak
2	5755.000	34.10	9.56	35.70	89.94	97.90	74.00	-23.90 Peak

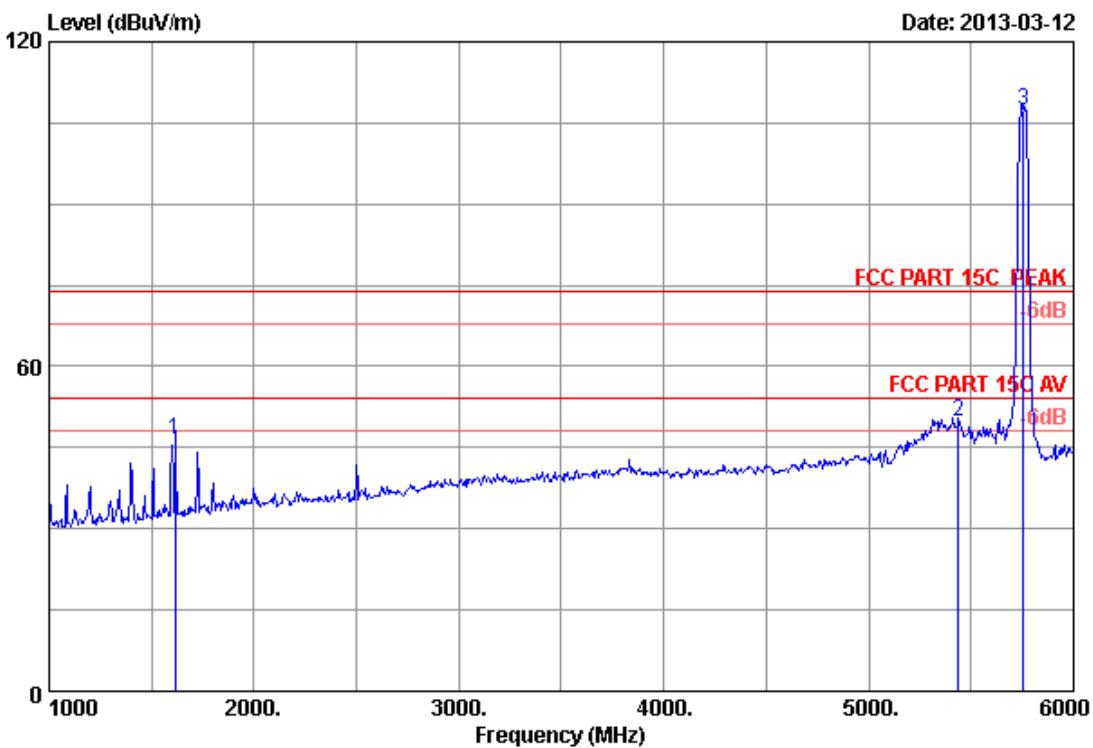
## Remarks:

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

Data: 158

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12

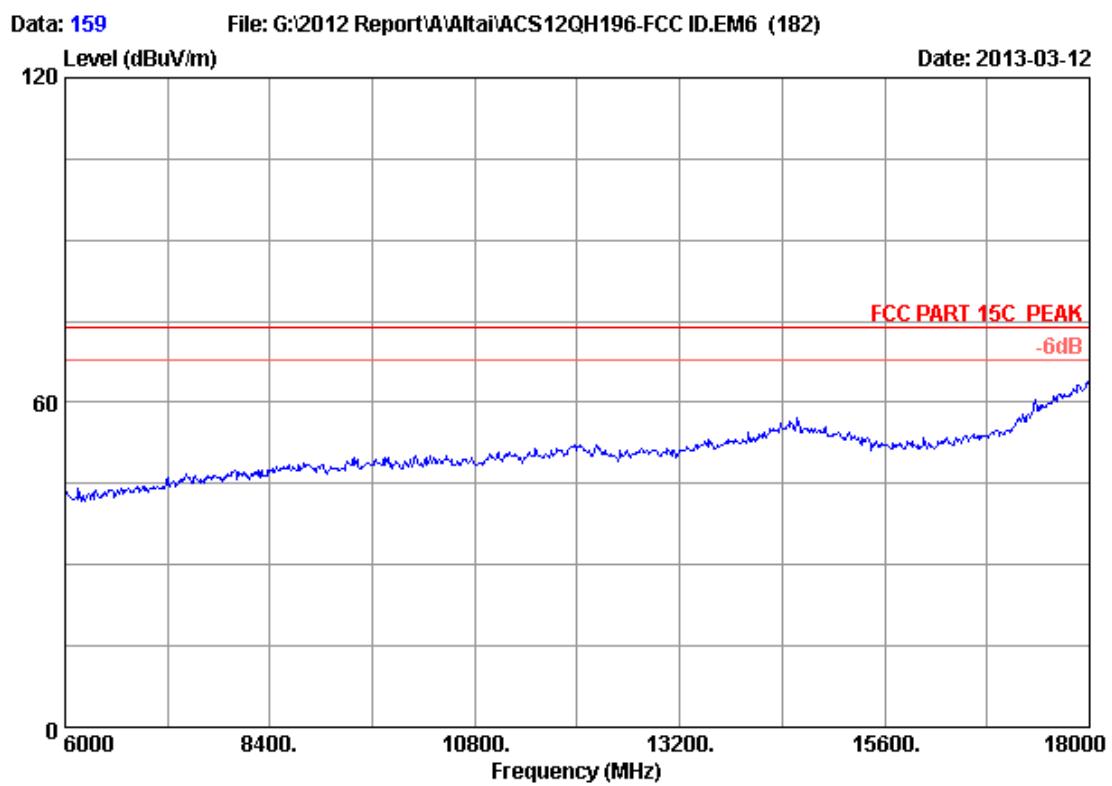


Site no. : 3m Chamber Data no. : 158  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 WA8011N-X

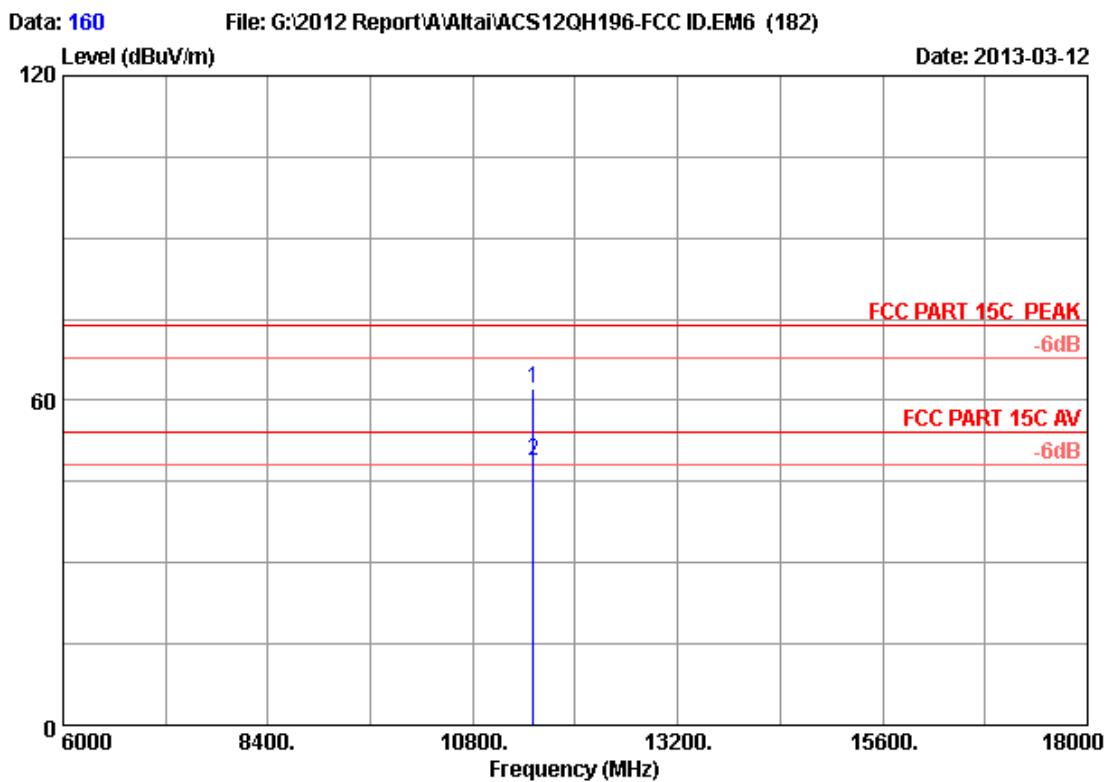
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1615.000	25.68	4.65	36.12	52.17	46.38	74.00	27.62	Peak
2 5440.000	33.90	9.23	35.70	42.36	49.79	74.00	24.21	Peak
3 5755.000	34.10	9.56	35.70	99.37	107.33	74.00	-33.33	Peak

## Remarks:

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



Site no. : 3m Chamber Data no. : 159  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH151 5755MHz Tx  
WA8011N-X

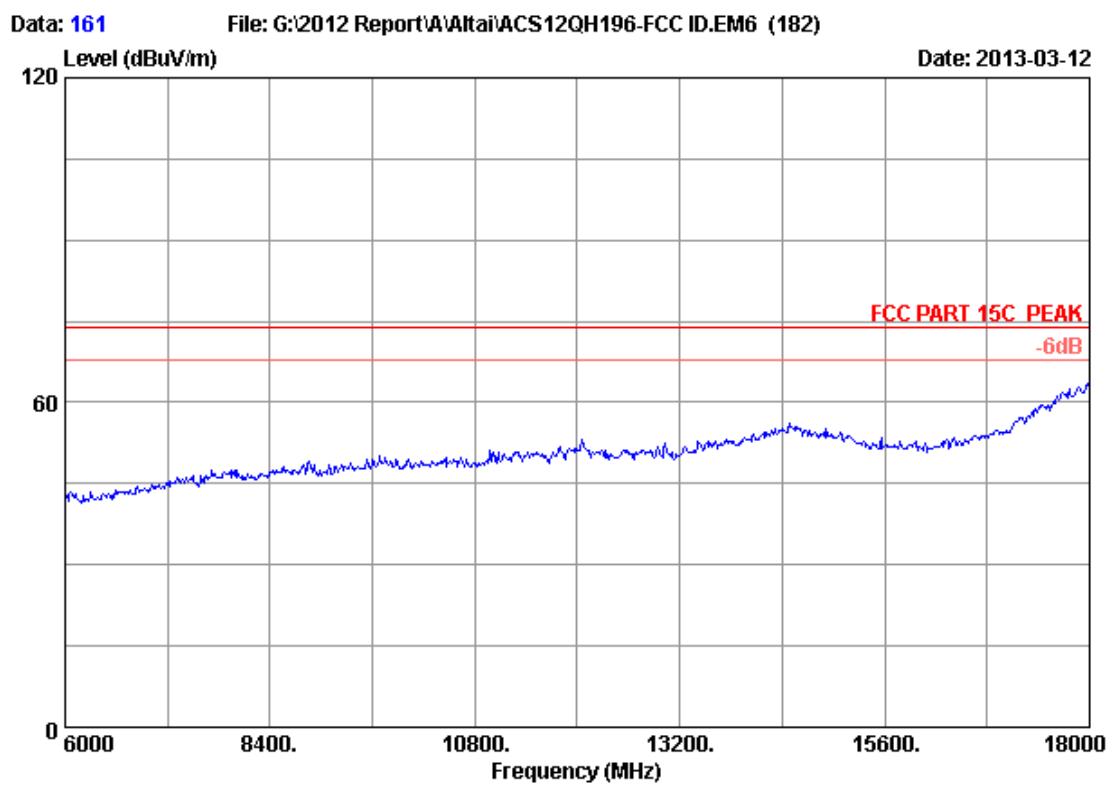


Site no. : 3m Chamber Data no. : 160  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 WA8011N-X

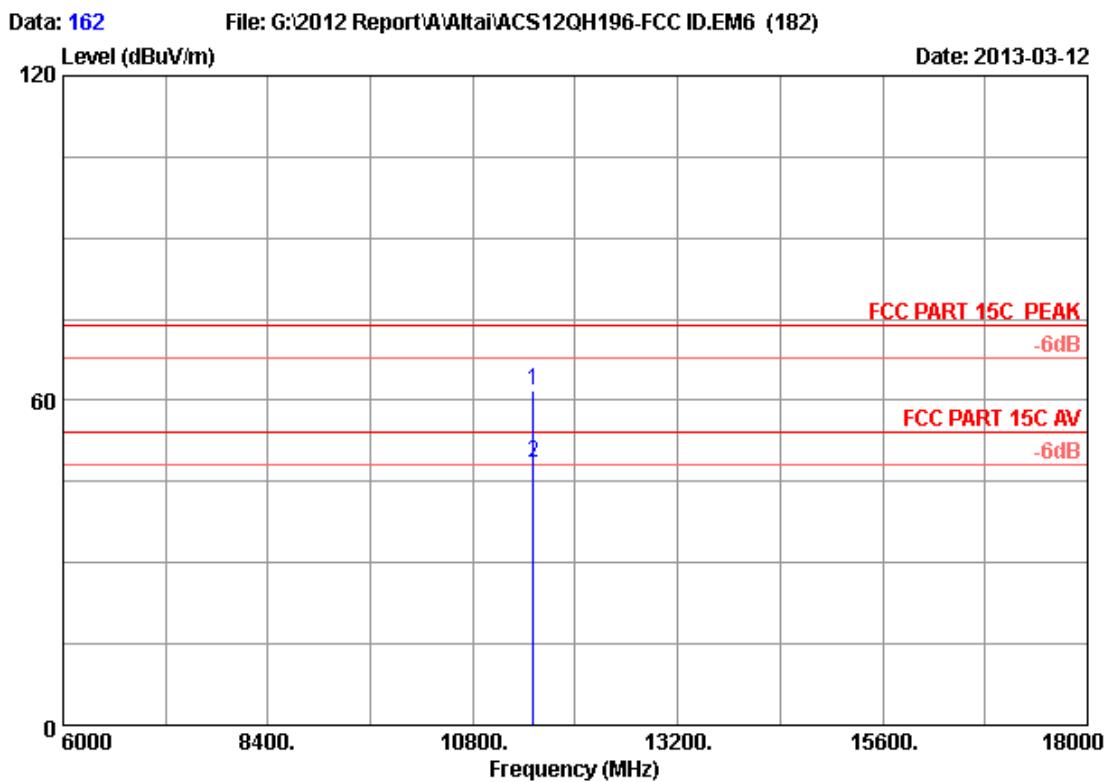
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11510.000	38.71	13.29	35.27	45.36	62.09	74.00	11.91	Peak
2 11510.000	38.71	13.29	35.27	32.17	48.90	54.00	5.10	Average

Remarks:

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



Site no. : 3m Chamber Data no. : 161  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH151 5755MHz Tx  
WA8011N-X

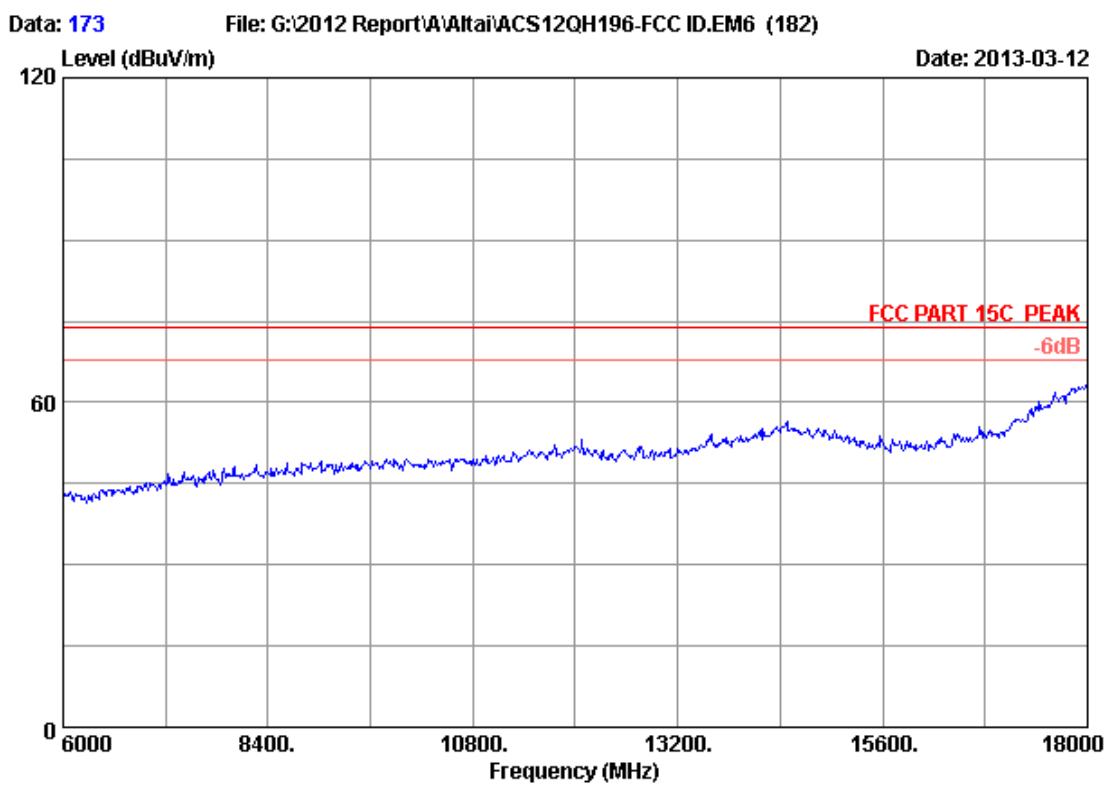


Site no. : 3m Chamber Data no. : 162  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 WA8011N-X

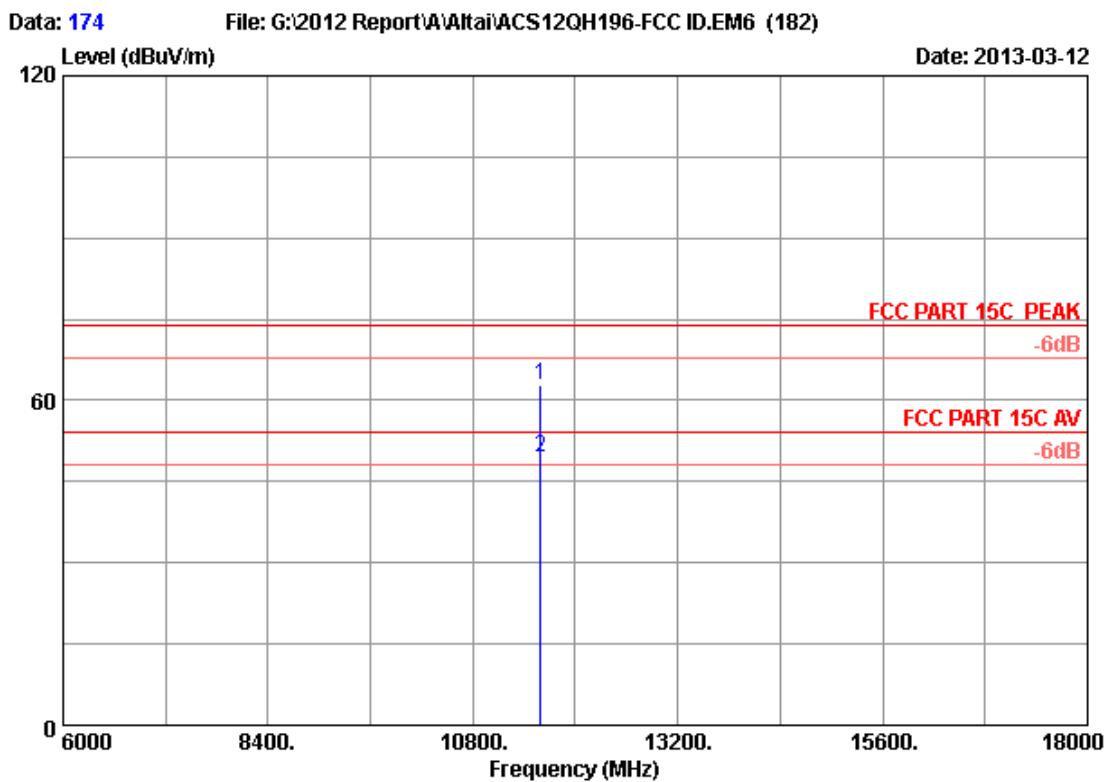
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11510.000	38.71	13.29	35.27	44.95	61.68	74.00	12.32	Peak
2 11510.000	38.71	13.29	35.27	31.78	48.51	54.00	5.49	Average

Remarks:

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



Site no. : 3m Chamber Data no. : 173  
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH159 5795MHz Tx  
WA8011N-X

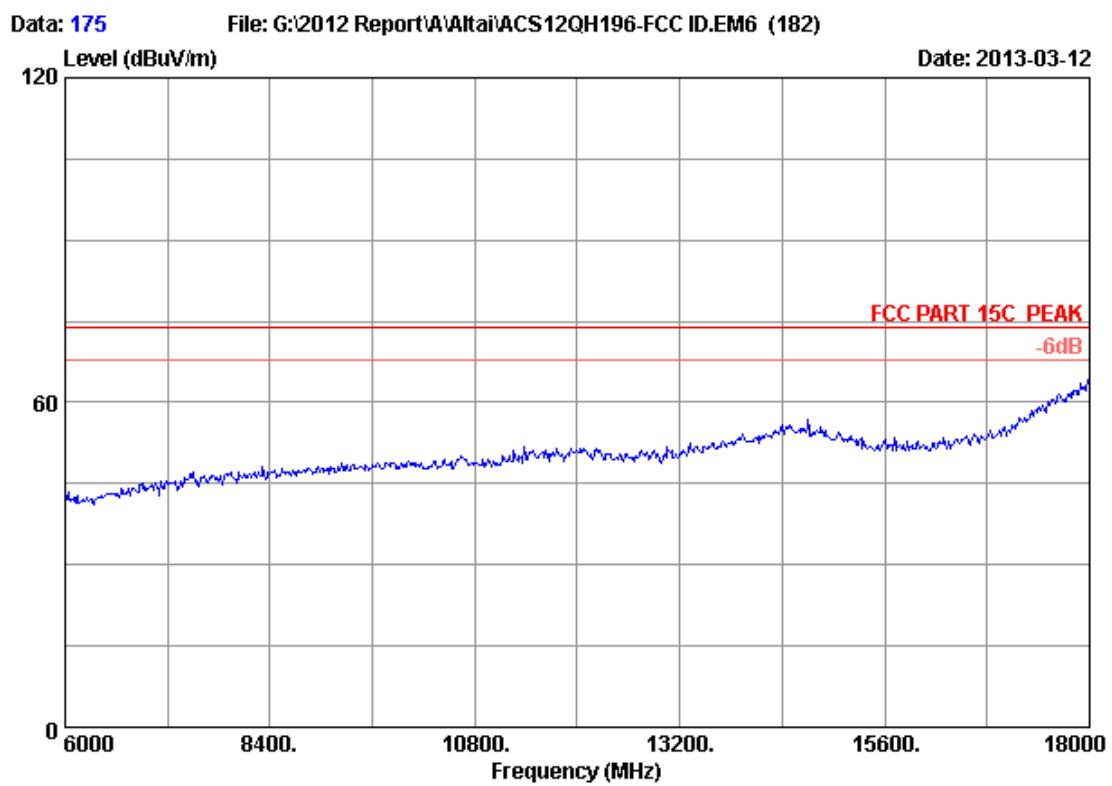


Site no. : 3m Chamber Data no. : 174  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 WA8011N-X

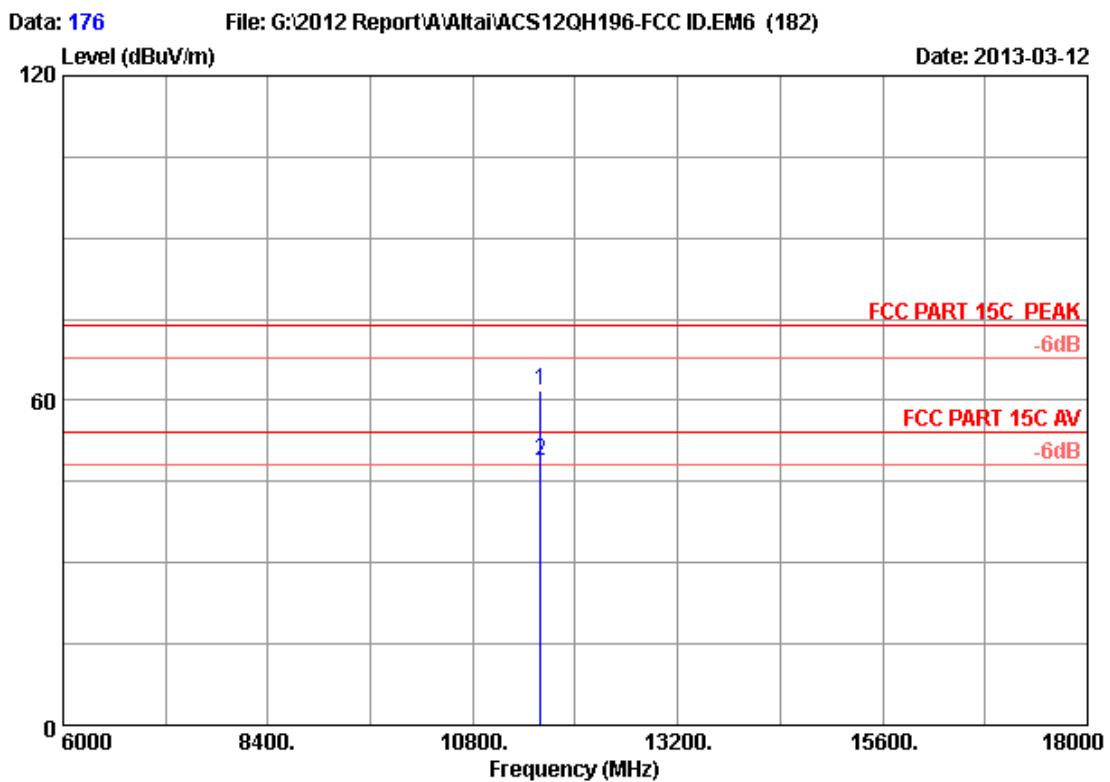
Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 11590.000	38.83	13.34	35.26	45.81	62.72	74.00	11.28	Peak
2 11590.000	38.83	13.34	35.26	32.62	49.53	54.00	4.47	Average

Remarks:

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



Site no. : 3m Chamber      Data no. : 175  
Dis. / Ant. : 3m 2013 3115 (4580)      Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54%      Engineer : Leo-Li  
EUT : A8n Super WiFi Base Station  
Power supply : DC 56V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11nHT40 CH159 5795MHz Tx  
WA8011N-X



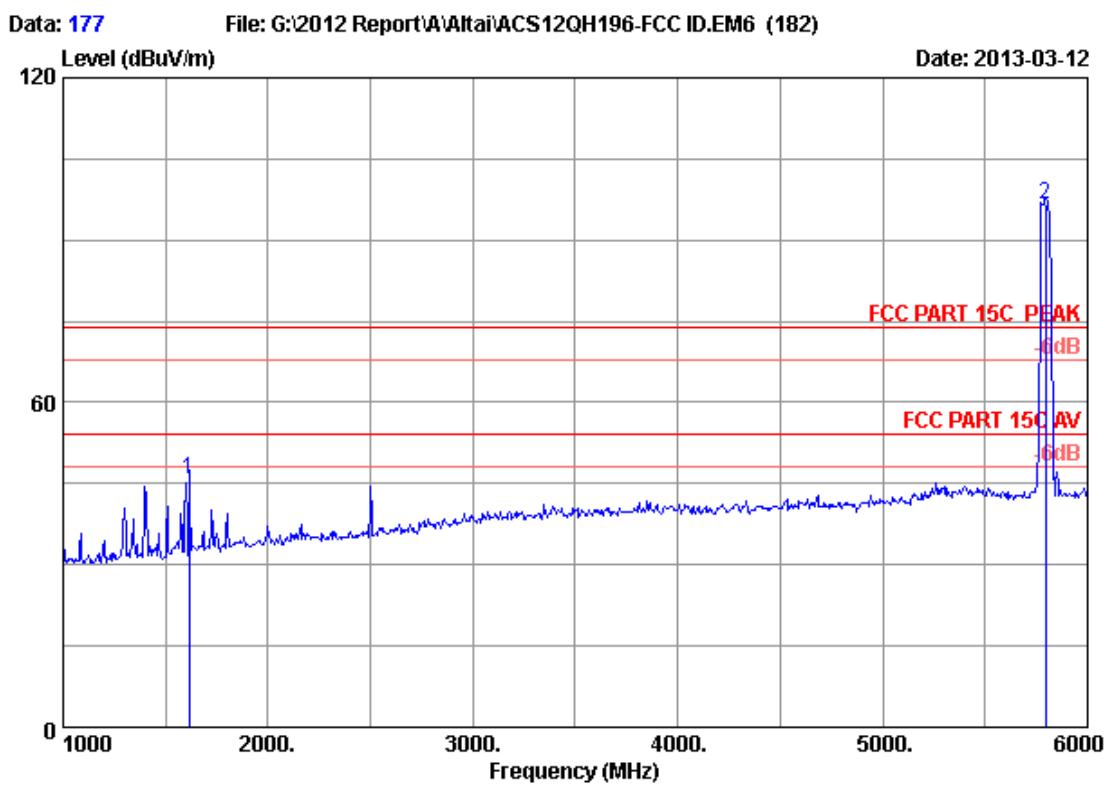
Site no. : 3m Chamber Data no. : 176  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission					
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
<hr/>									
1 11590.000	38.83	13.34	35.26	44.82	61.73	74.00	12.27	Peak	
2 11590.000	38.83	13.34	35.26	31.74	48.65	54.00	5.35	Average	

---

Remarks:

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



Site no. : 3m Chamber Data no. : 177  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 WA8011N-X

Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1615.000	25.68	4.65	36.12	51.73	45.94	74.00	28.06	Peak
2 5795.000	34.12	9.60	35.70	88.46	96.48	74.00	-22.48	Peak

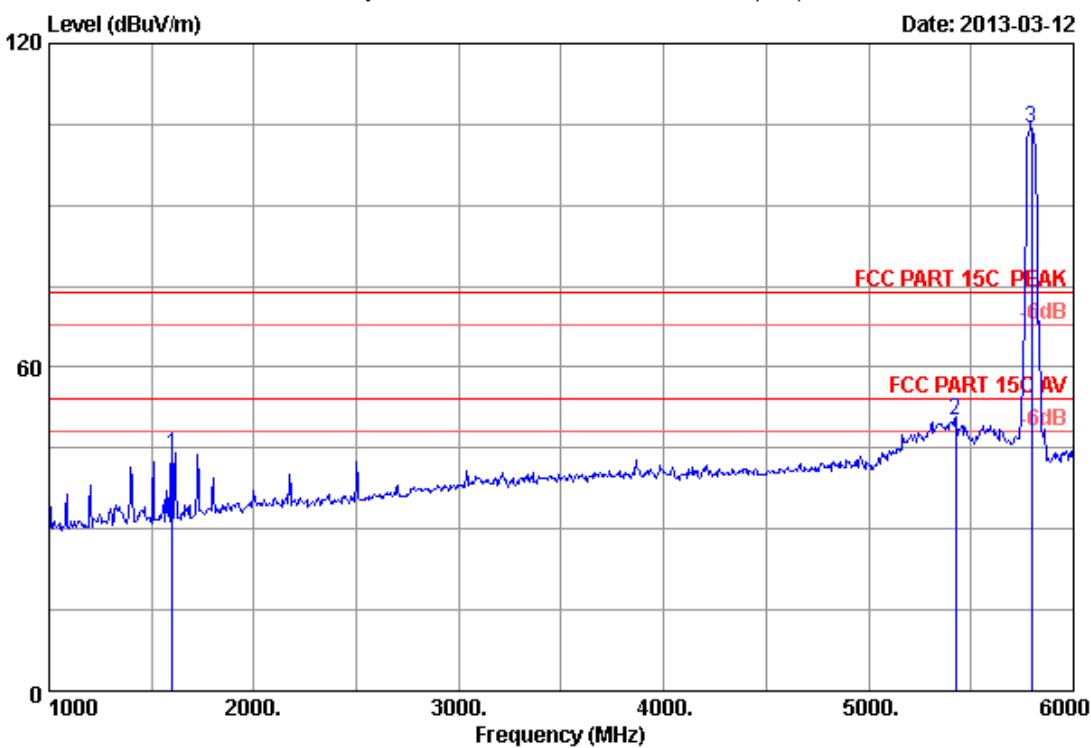
Remarks:

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

Data: 178

File: G:\2012 Report\A\Altai\ACS12QH196-FCC ID.EM6 (182)

Date: 2013-03-12



Site no. : 3m Chamber Data no. : 178  
 Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Leo-Li  
 EUT : A8n Super WiFi Base Station  
 Power supply : DC 56V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 WA8011N-X

	Ant.	Cable	Amp.	Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1600.000	25.62	4.63	36.14	49.58	43.69	74.00	30.31 Peak
2	5425.000	33.88	9.21	35.70	42.79	50.18	74.00	23.82 Peak
3	5795.000	34.12	9.60	35.70	96.32	104.34	74.00	-30.34 Peak

## Remarks:

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

## 5. CONDUCTED SPURIOUS EMISSIONS

### 5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Oct.31, 12	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,13	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,13	1 Year

### 5.2. Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is 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.

Note: The cable loss and attenuator loss were offset into spectrum analyzer as an amplitude offset.

The frequency range from 30MHz to 10<sup>th</sup> harmonic (40GHz) are checked. and no any emissions were found from 25GHz to 40 GHz, So the conducted spurious emissions from 25GHz to 40GHz were not record

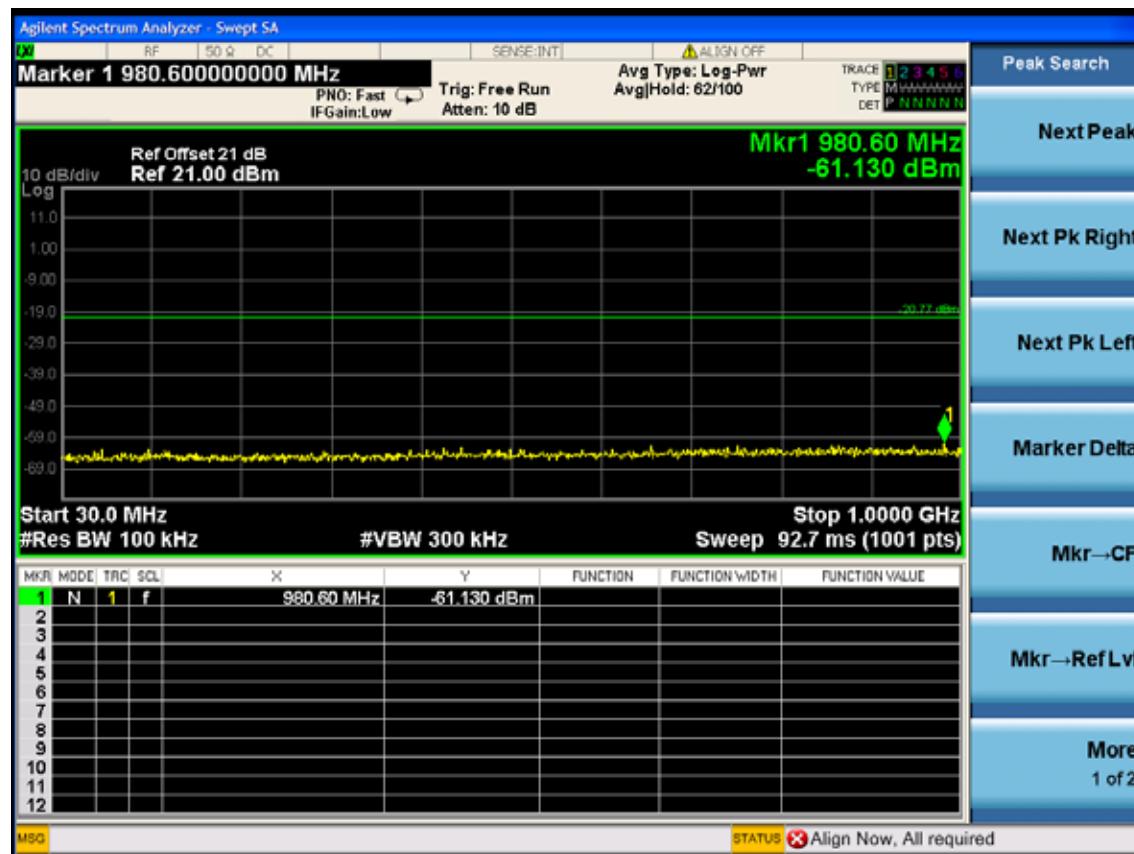
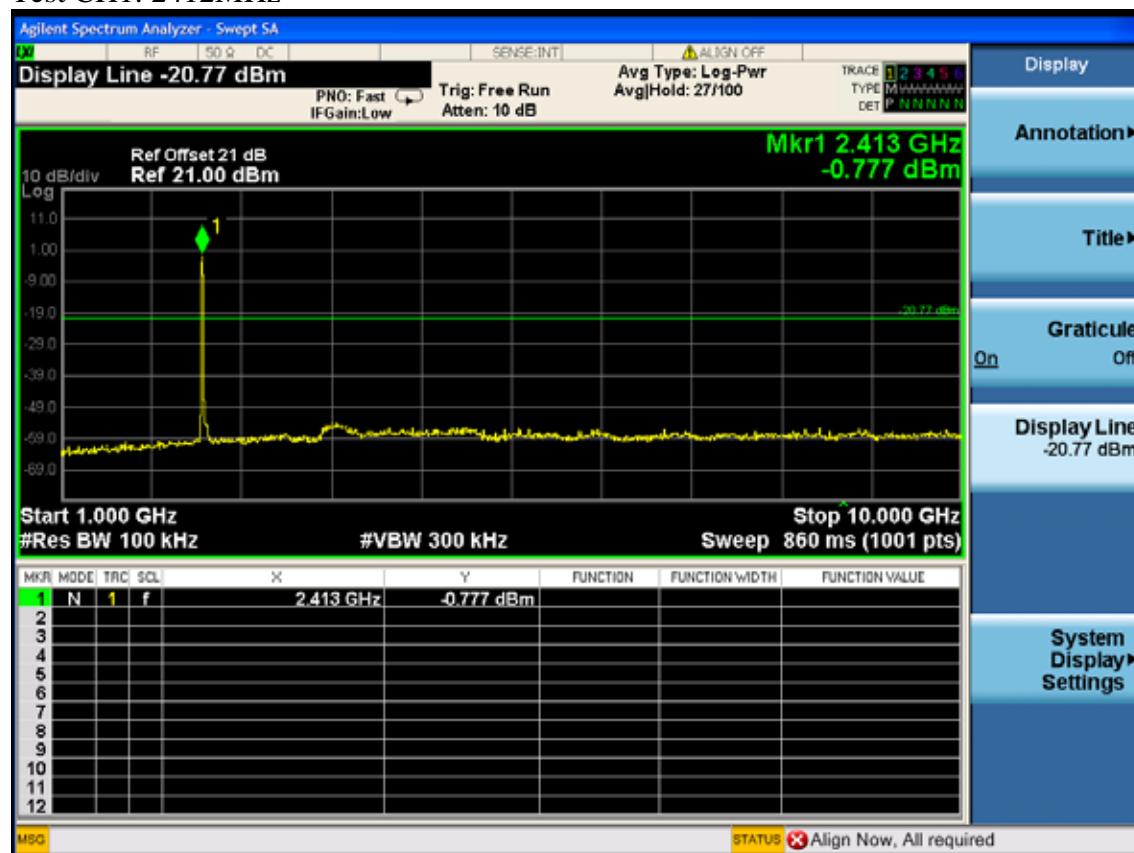
### 5.4. Test result

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

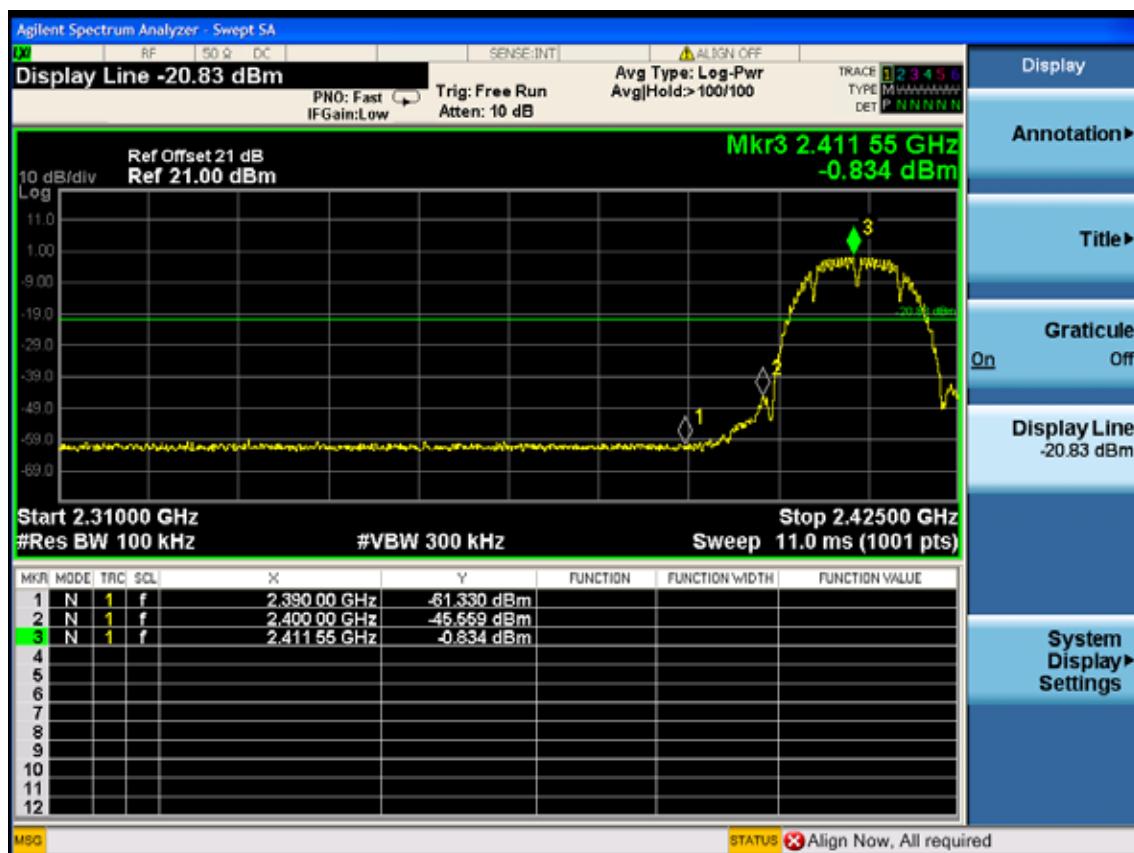
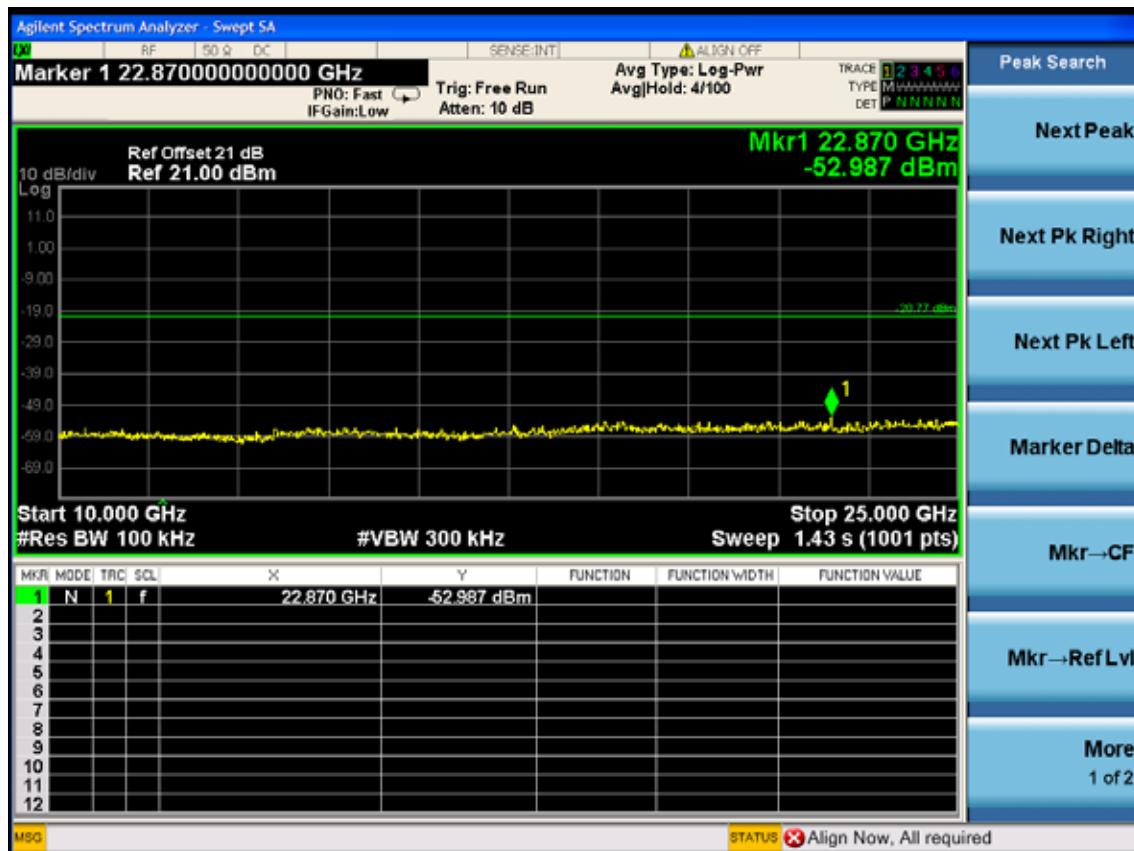
**2.4G:****Chain 1:**

Test Mode: IEEE 802.11b TX

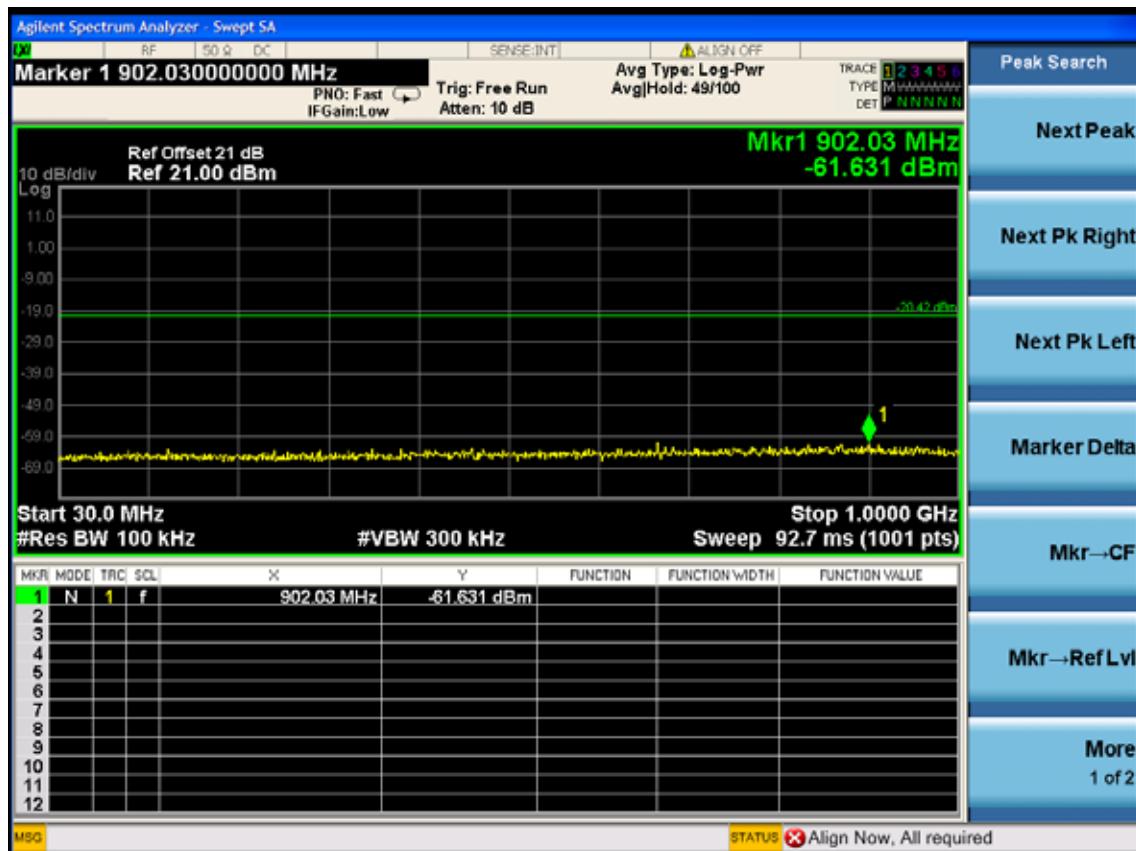
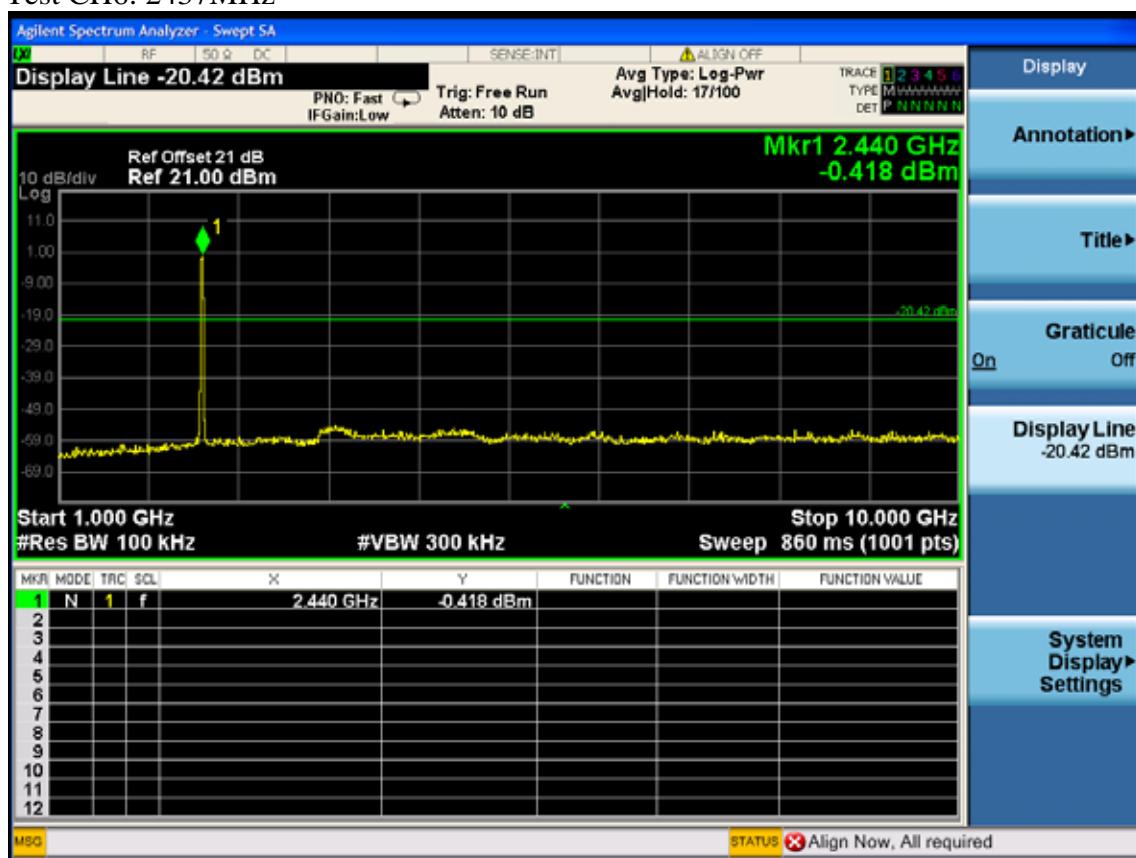
Test CH1: 2412MHz

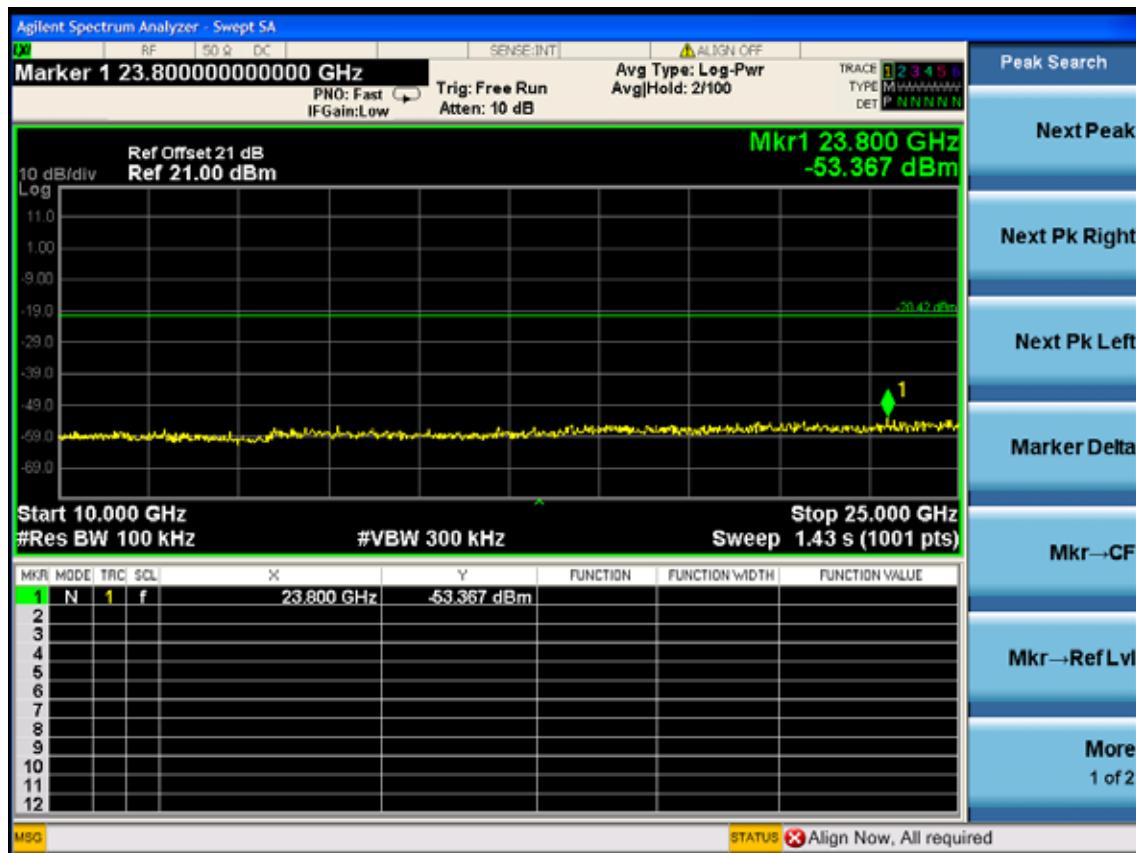


- Display
- Annotation
- Title
- Graticule
- On Off
- Display Line -20.77 dBm
- System Display Settings
- Peak Search
- Next Peak
- Next Pk Right
- Next Pk Left
- Marker Delta
- Mkr→CF
- Mkr→Ref Lvl
- More 1 of 2

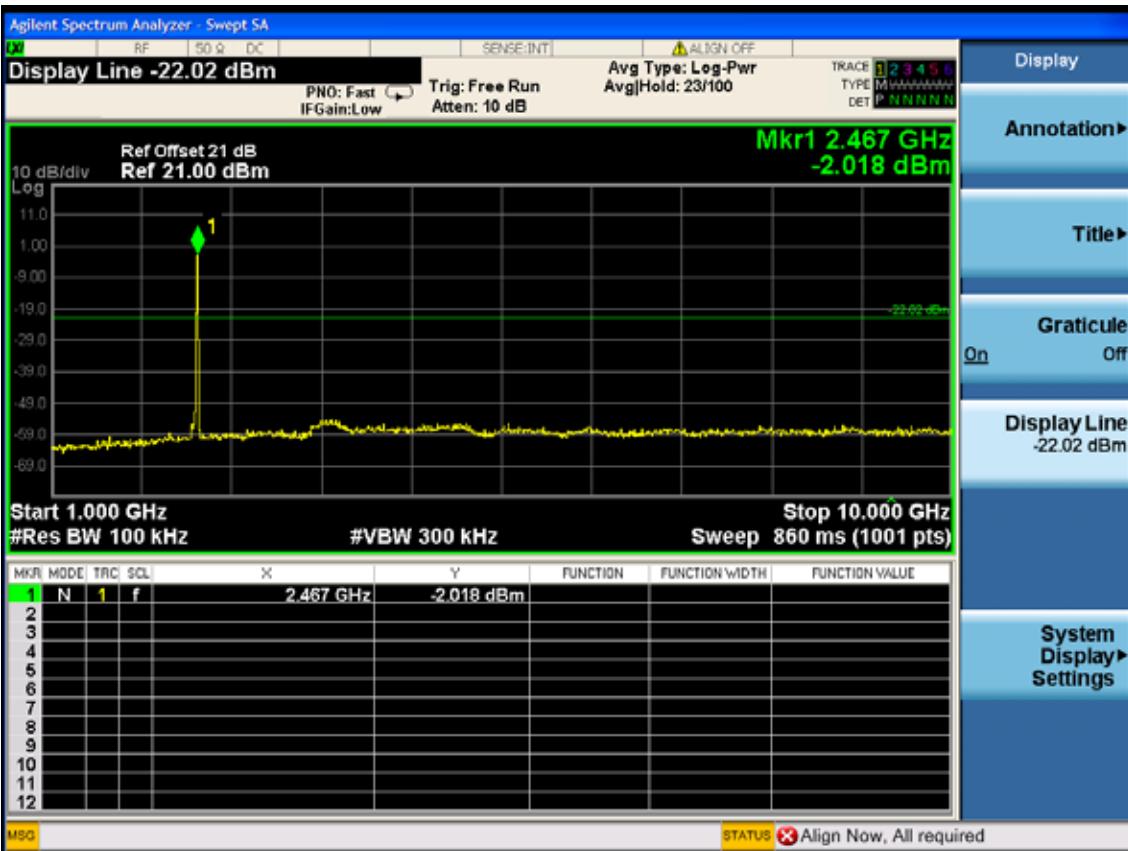


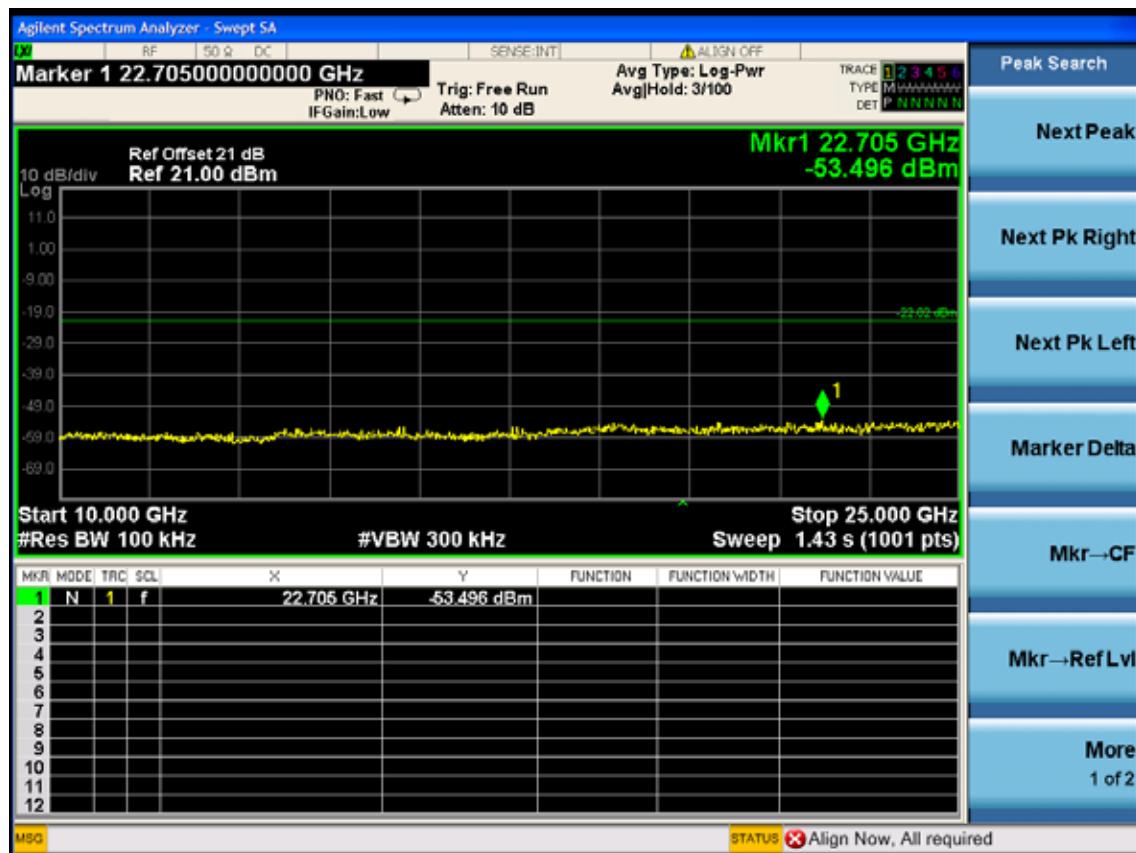
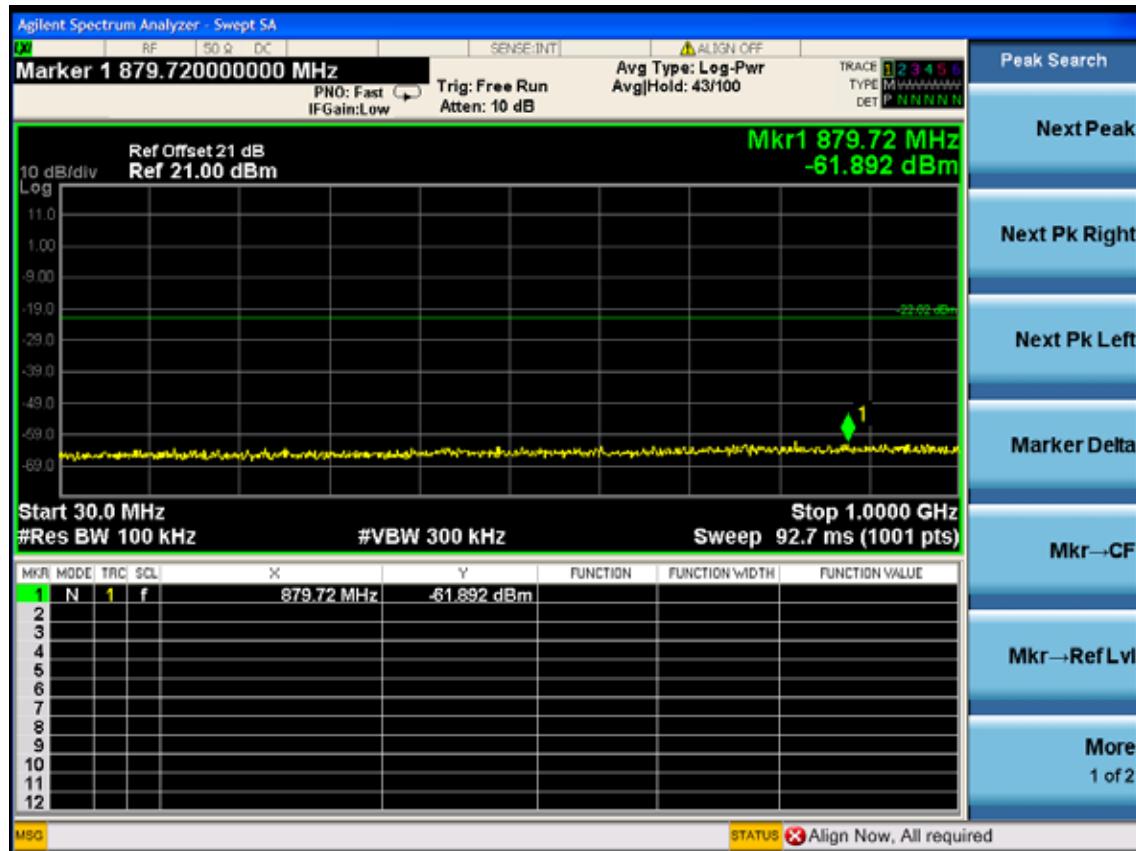
Test CH6: 2437MHz

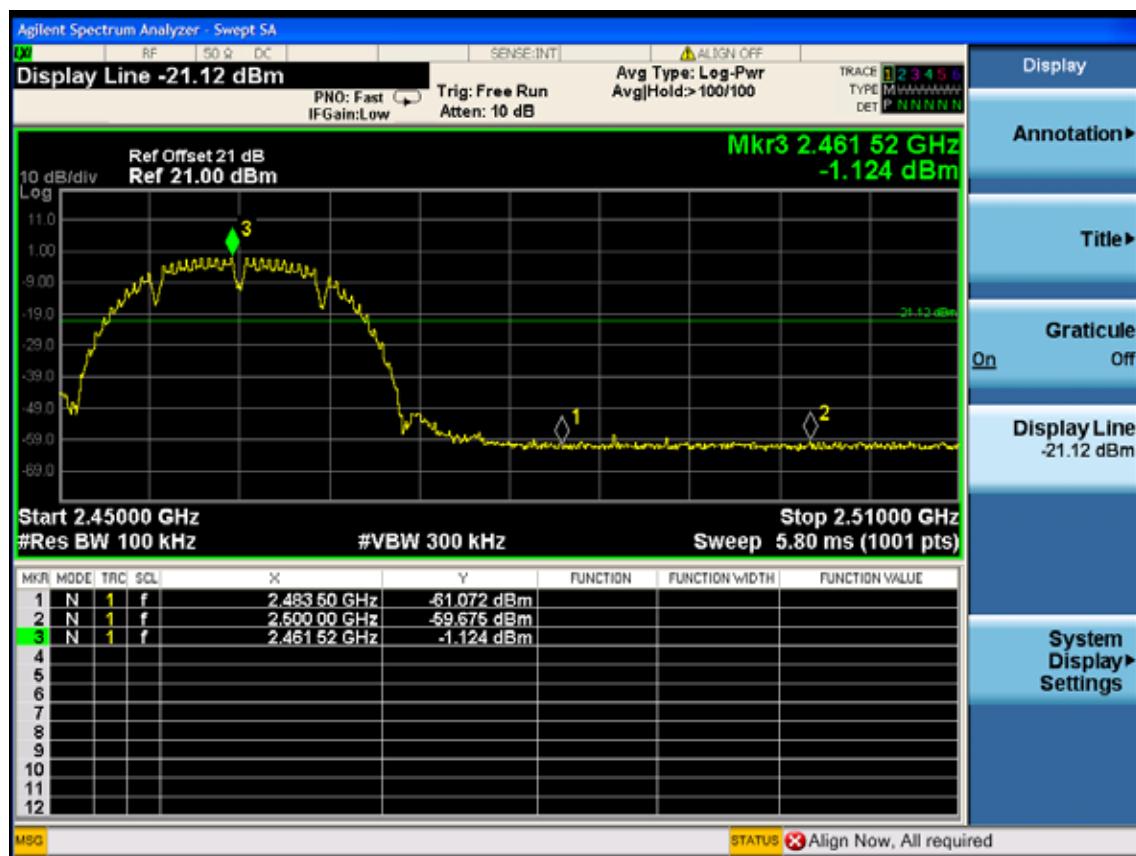




Test CH11: 2462MHz

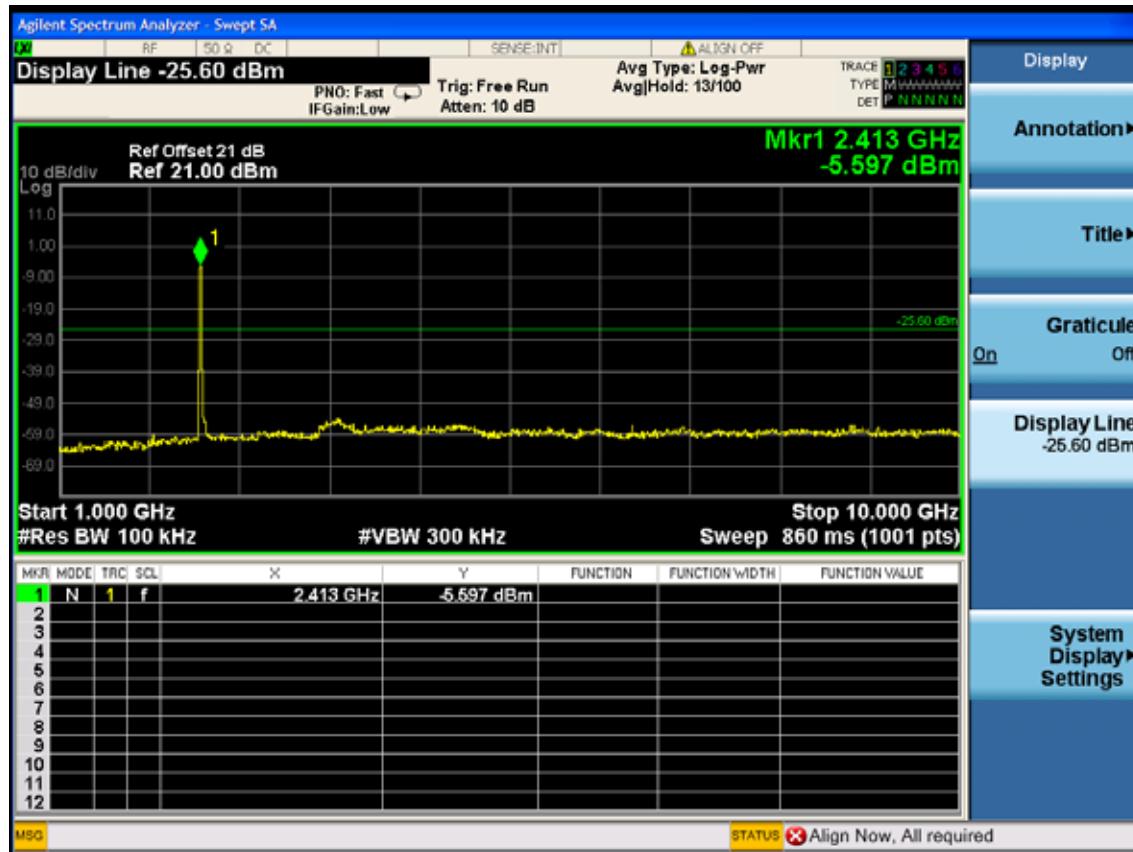


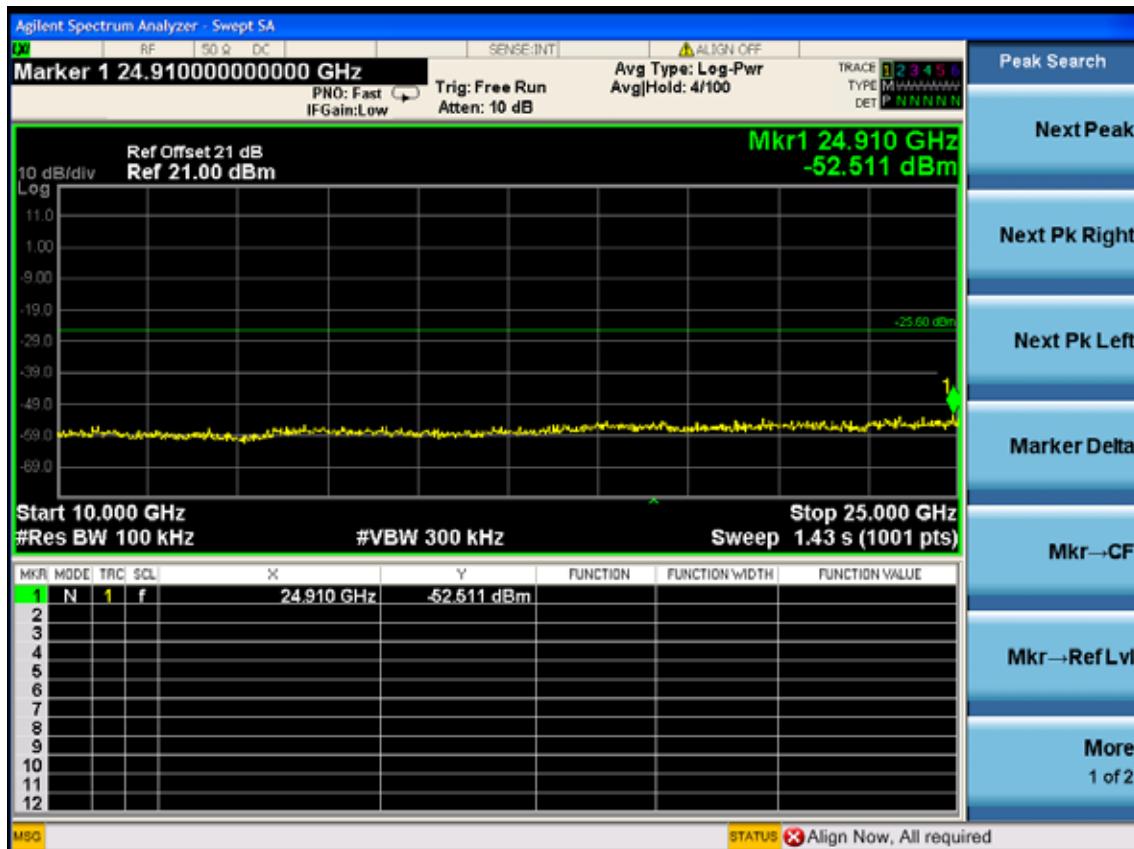
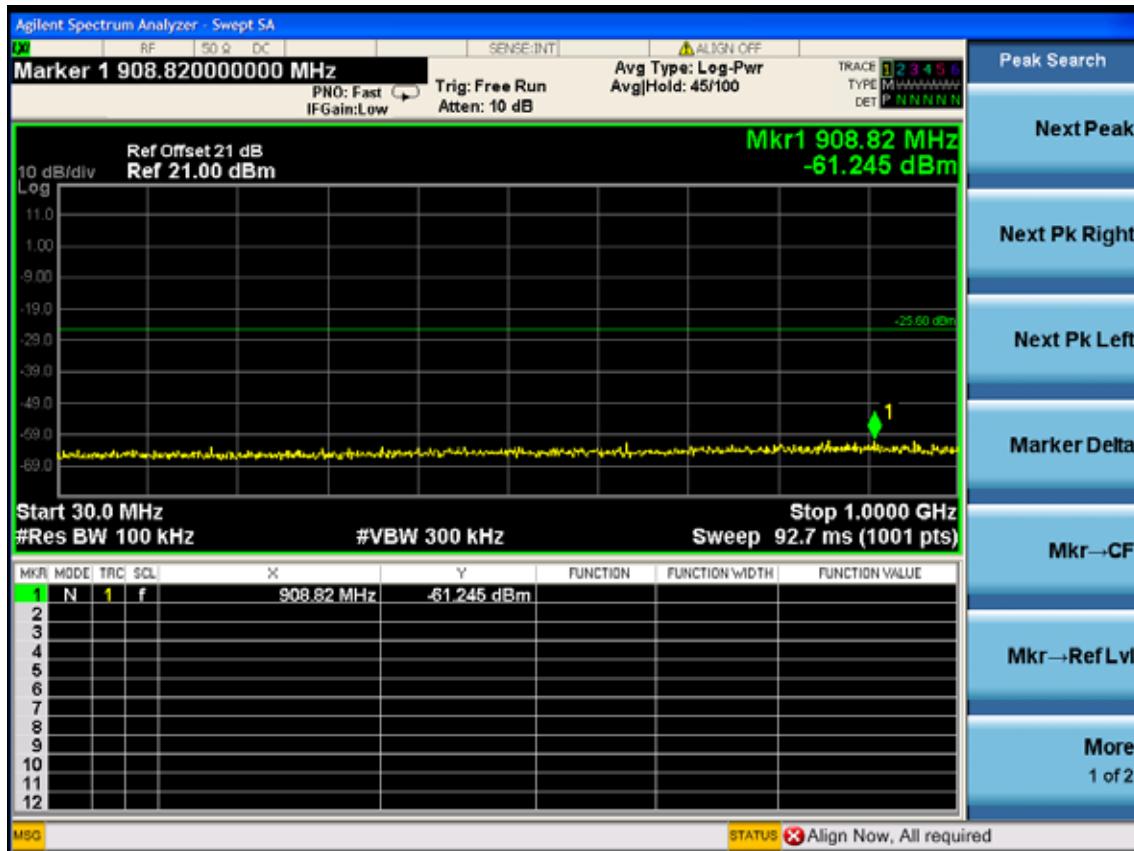


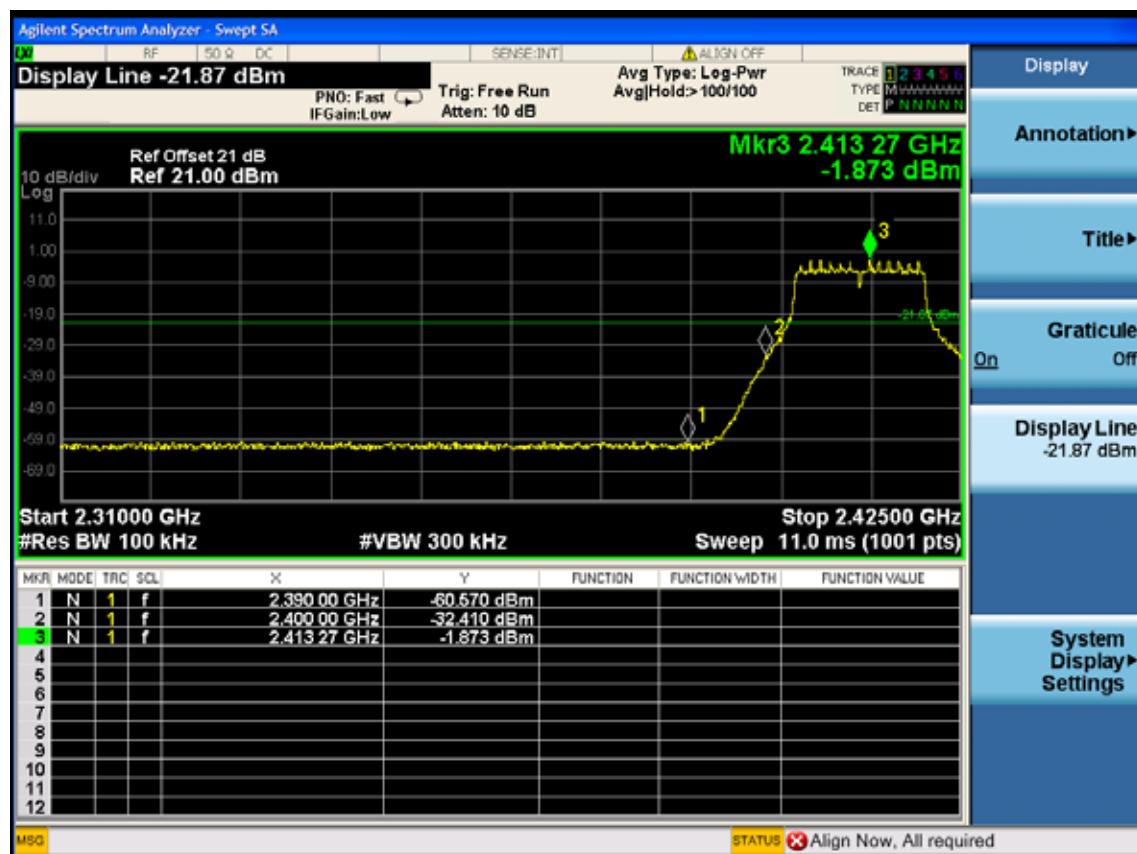


Test Mode: IEEE 802.11g TX

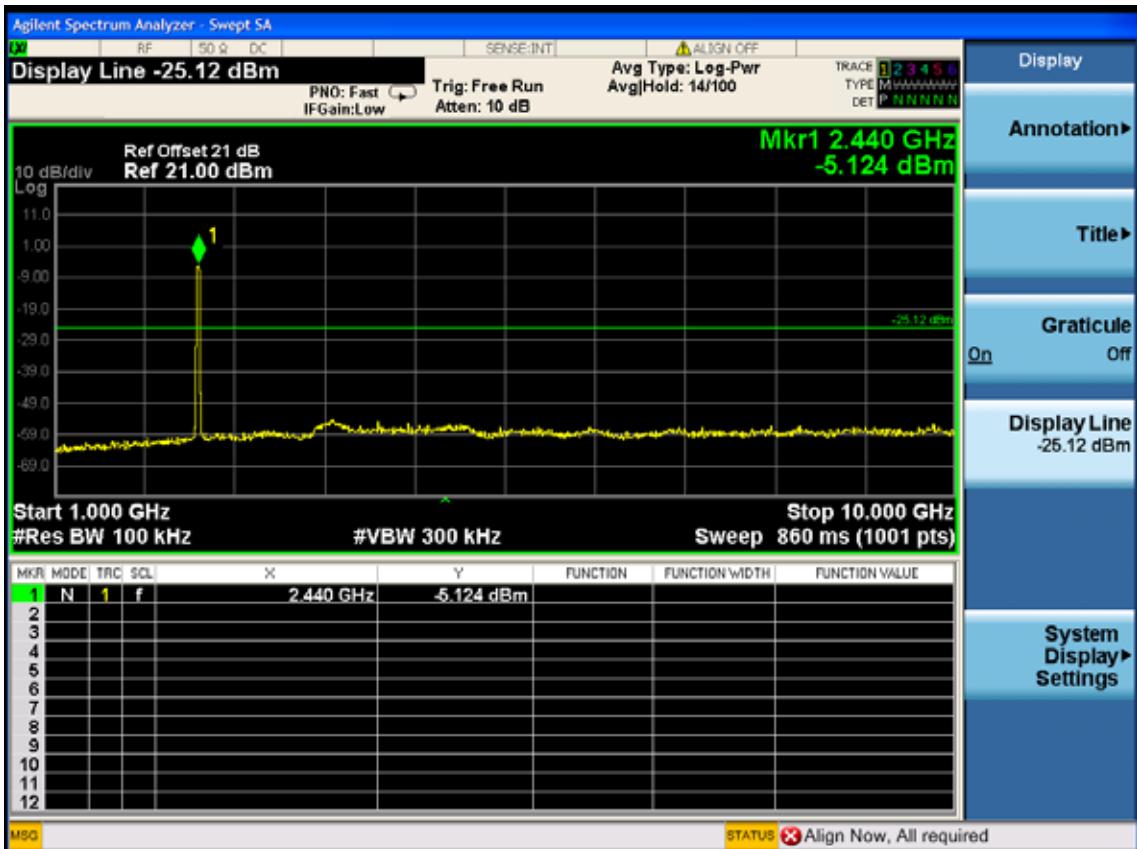
Test CH1: 2412MHz

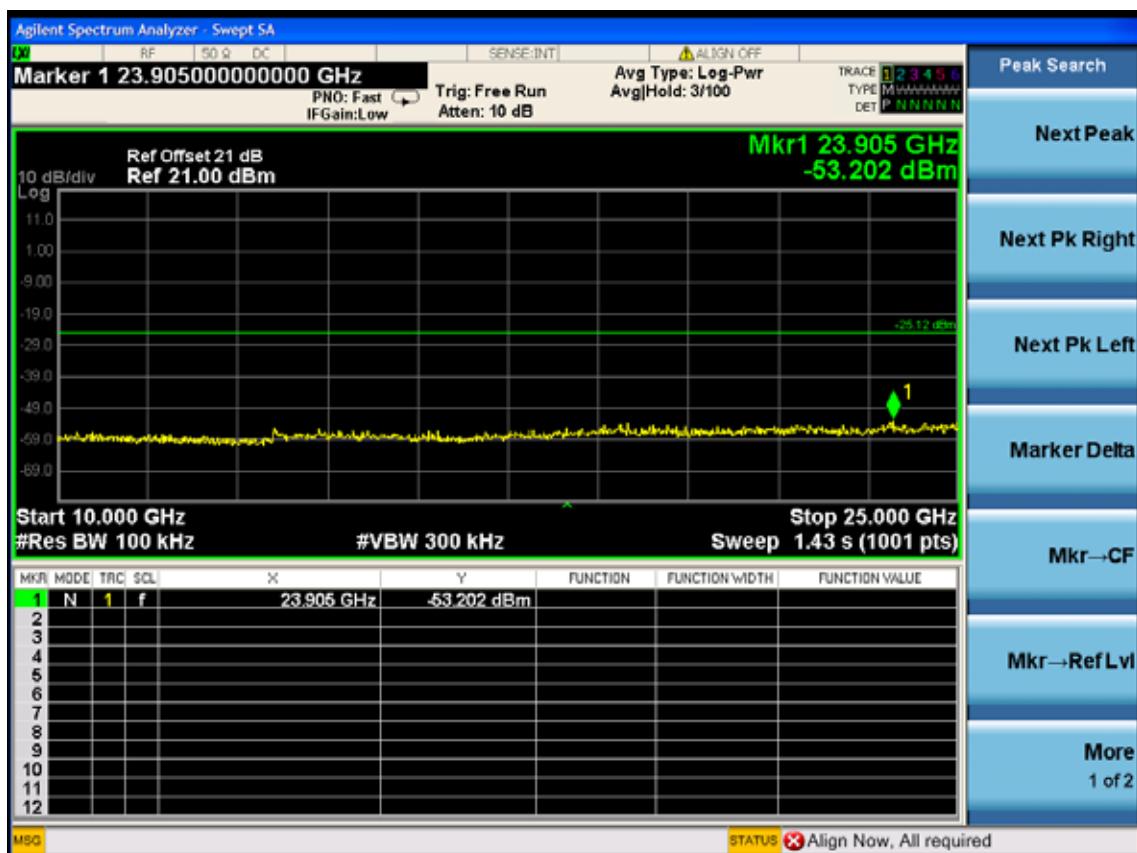
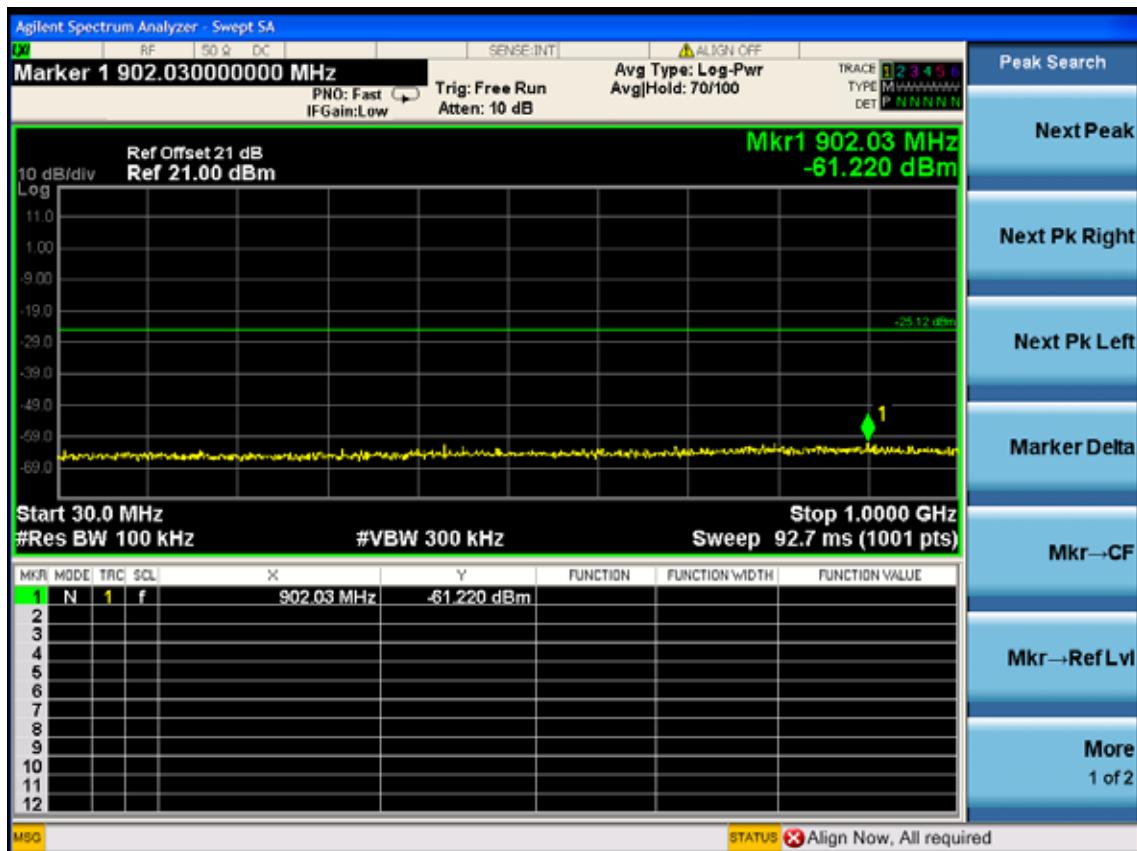




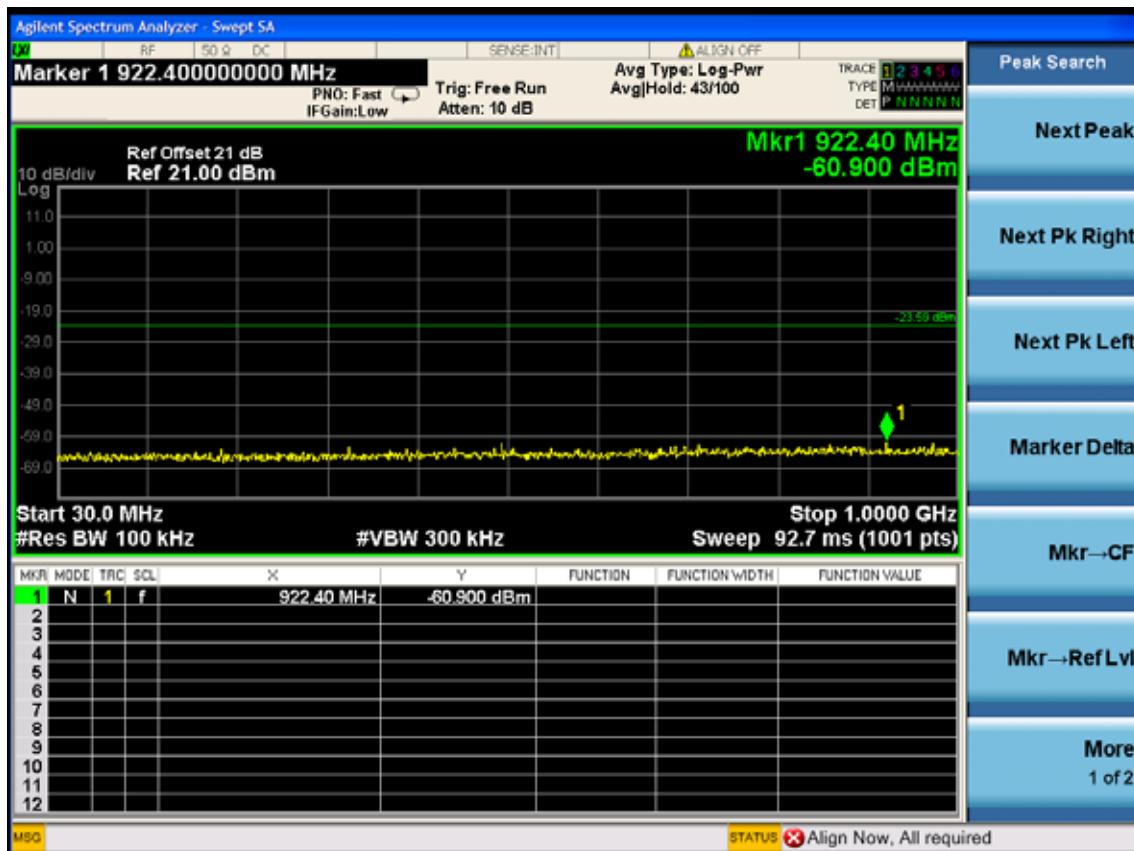
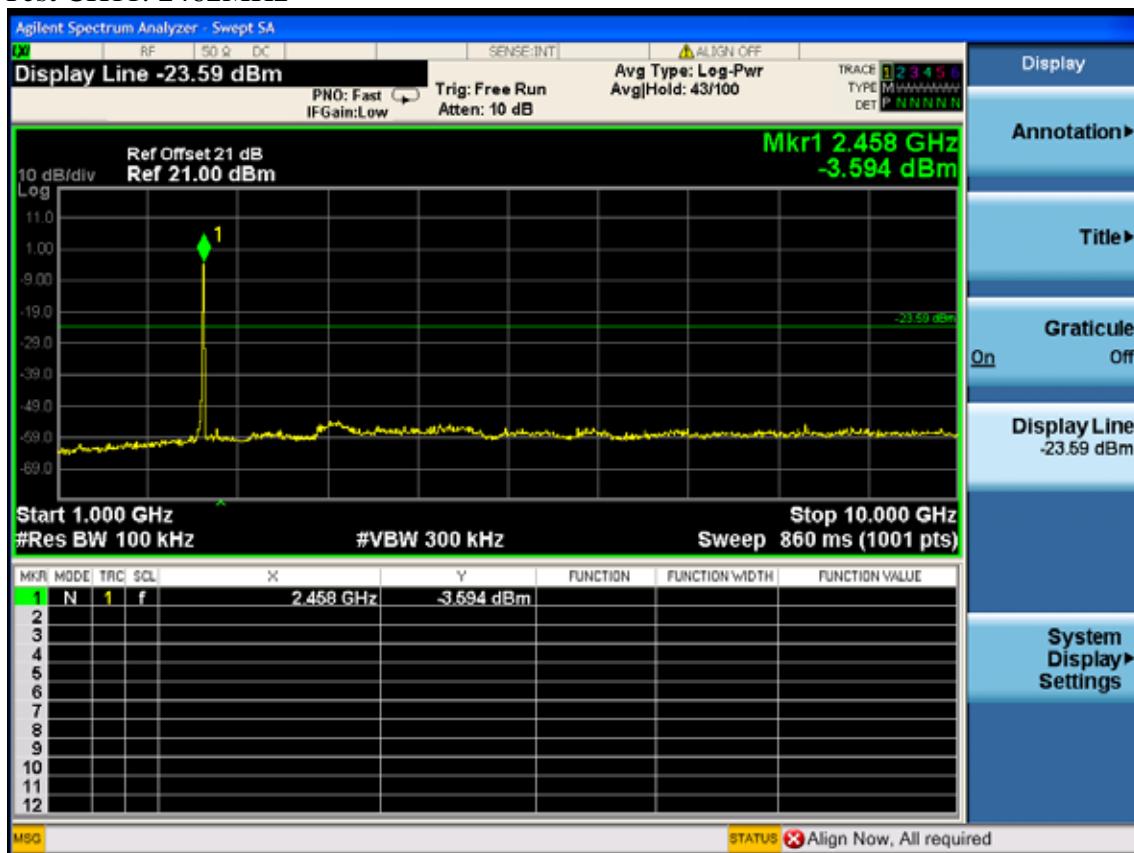


Test CH6: 2437MHz

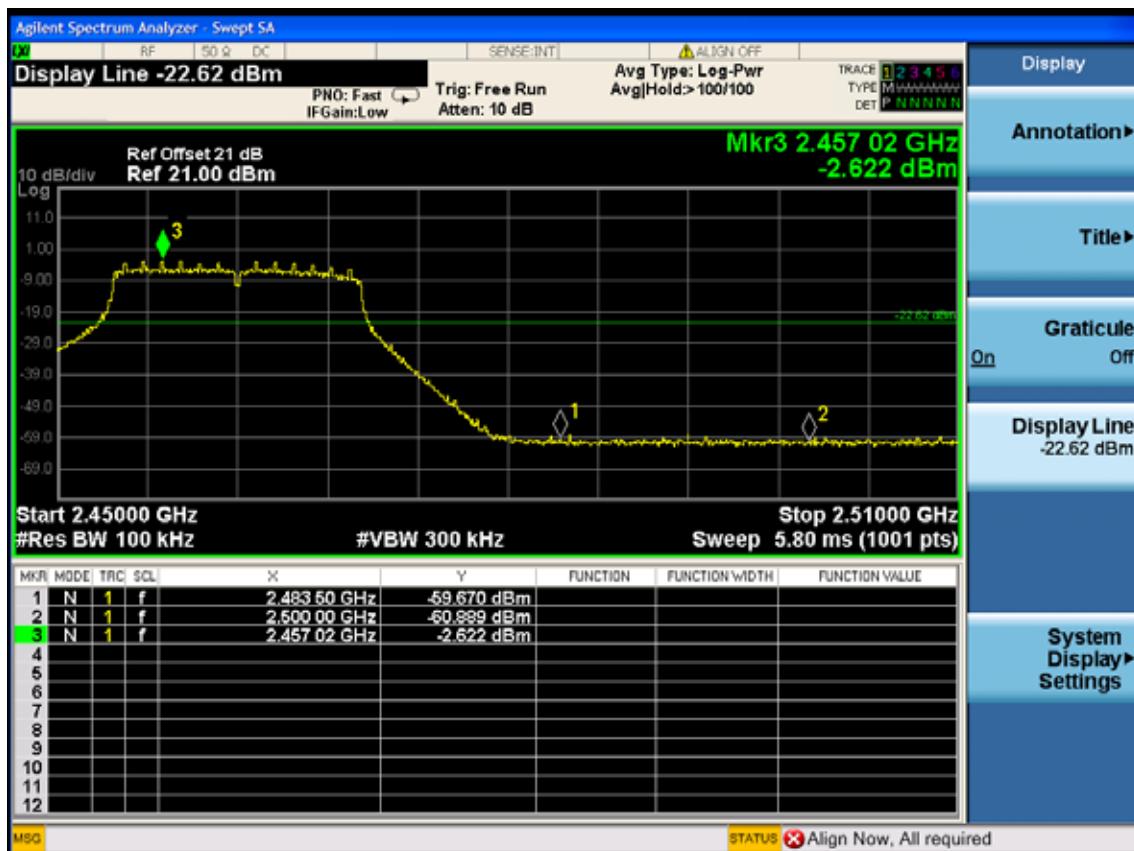
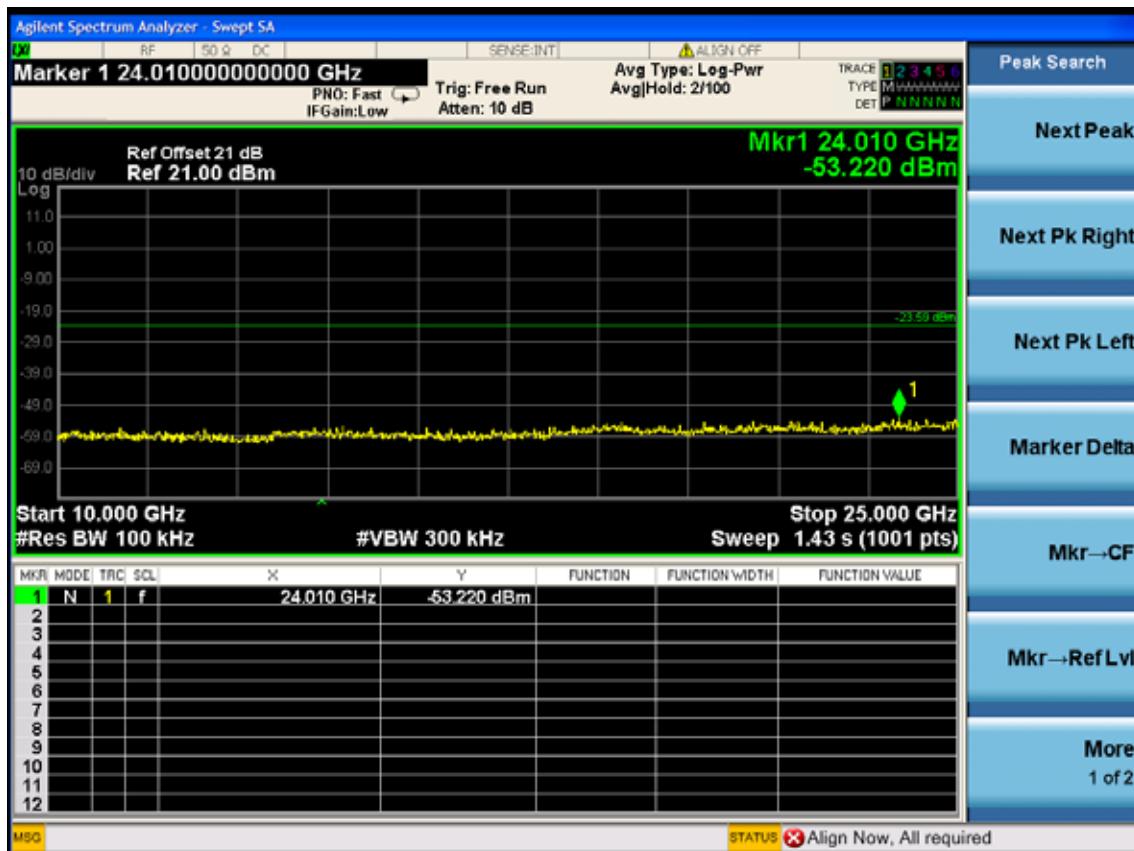




## Test CH11: 2462MHz

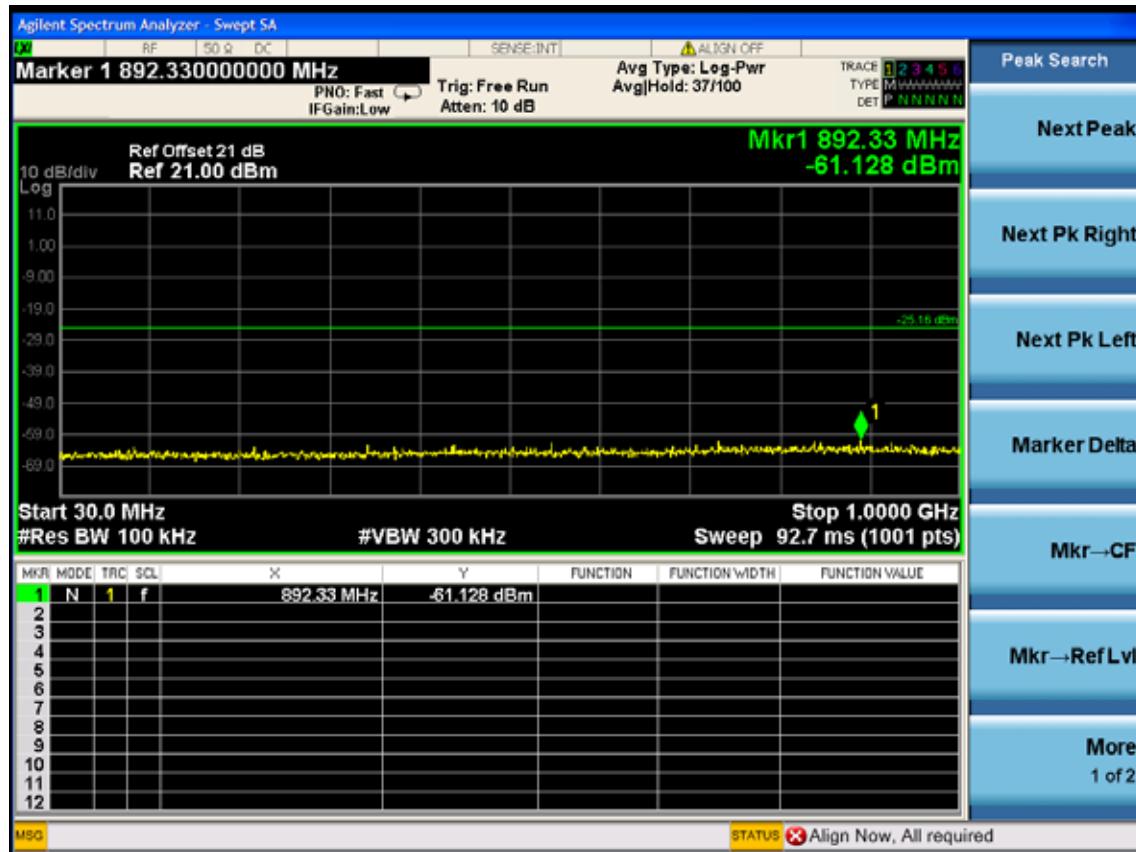
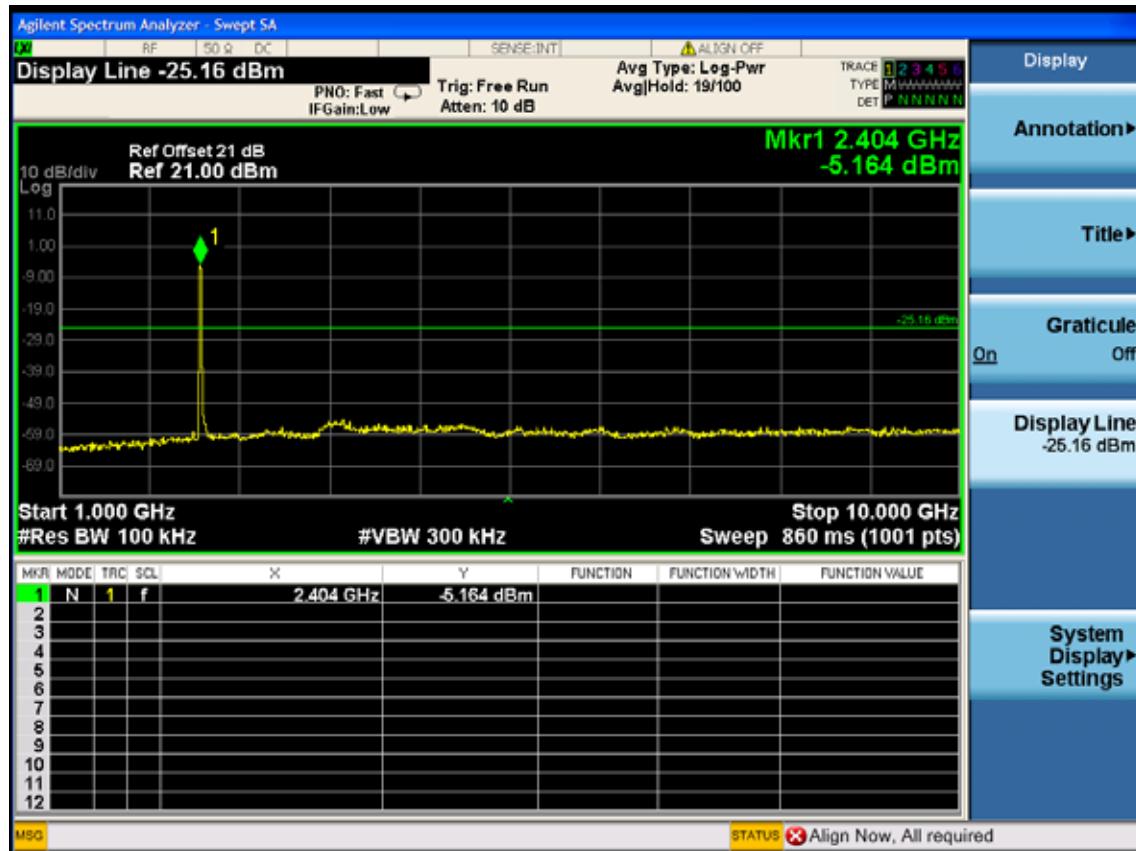


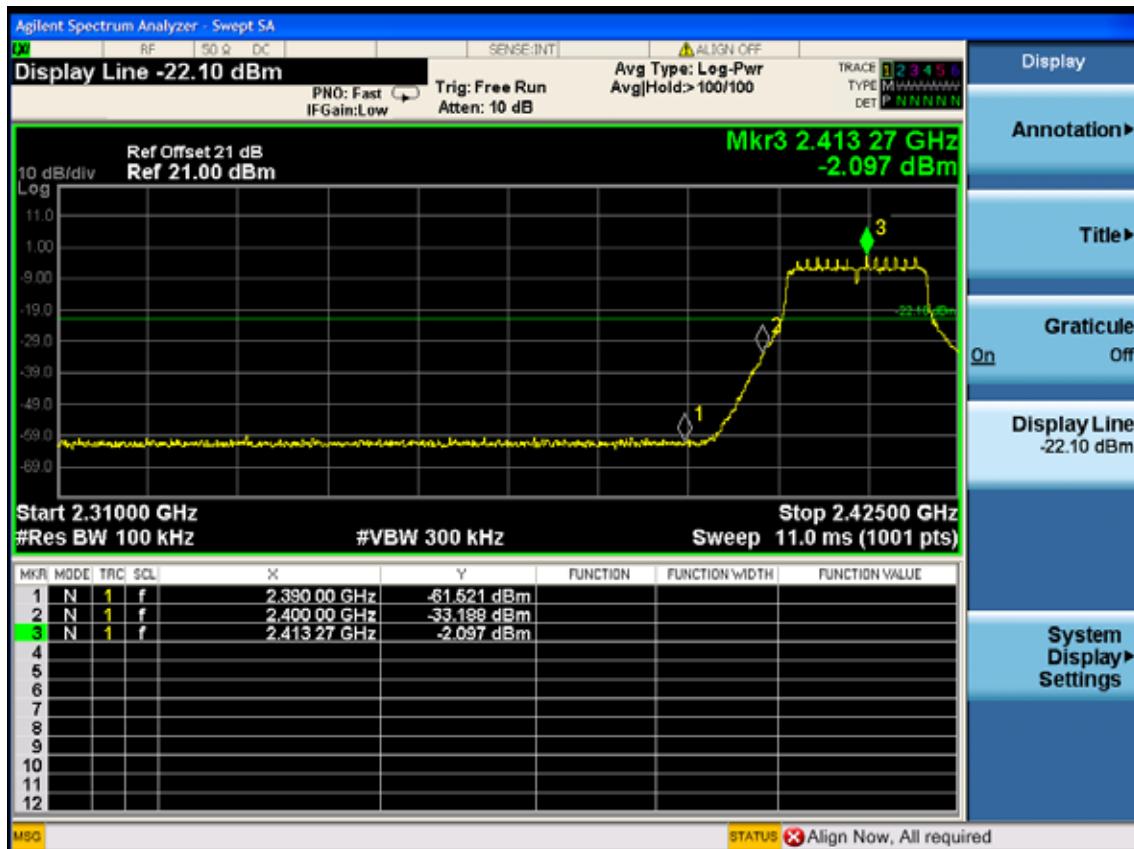
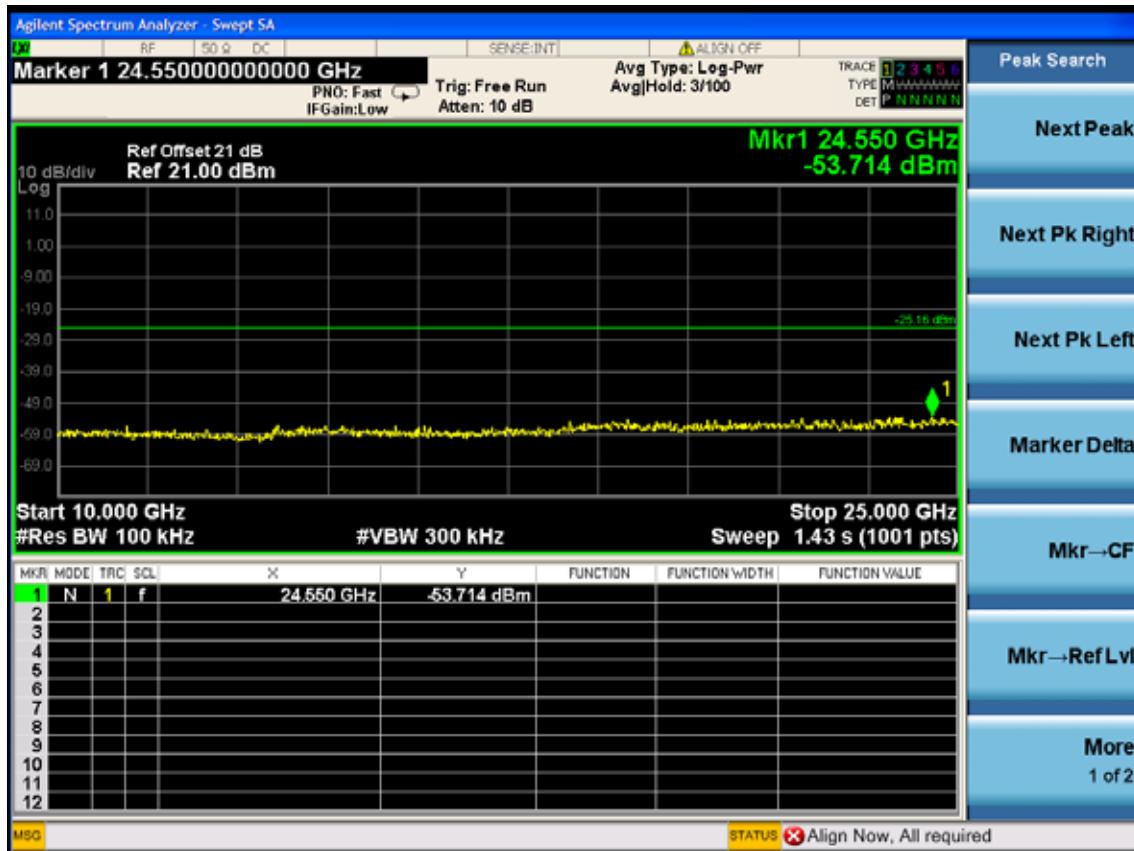
- Display
- Annotation▶
- Title▶
- Graticule
  - On
  - Off
- Display Line
  - 23.59 dBm
- System Display▶ Settings
- Peak Search
- Next Peak
- Next Pk Right
- Next Pk Left
- Marker Delta
- Mkr→CF
- Mkr→Ref Lvl
- More
  - 1 of 2



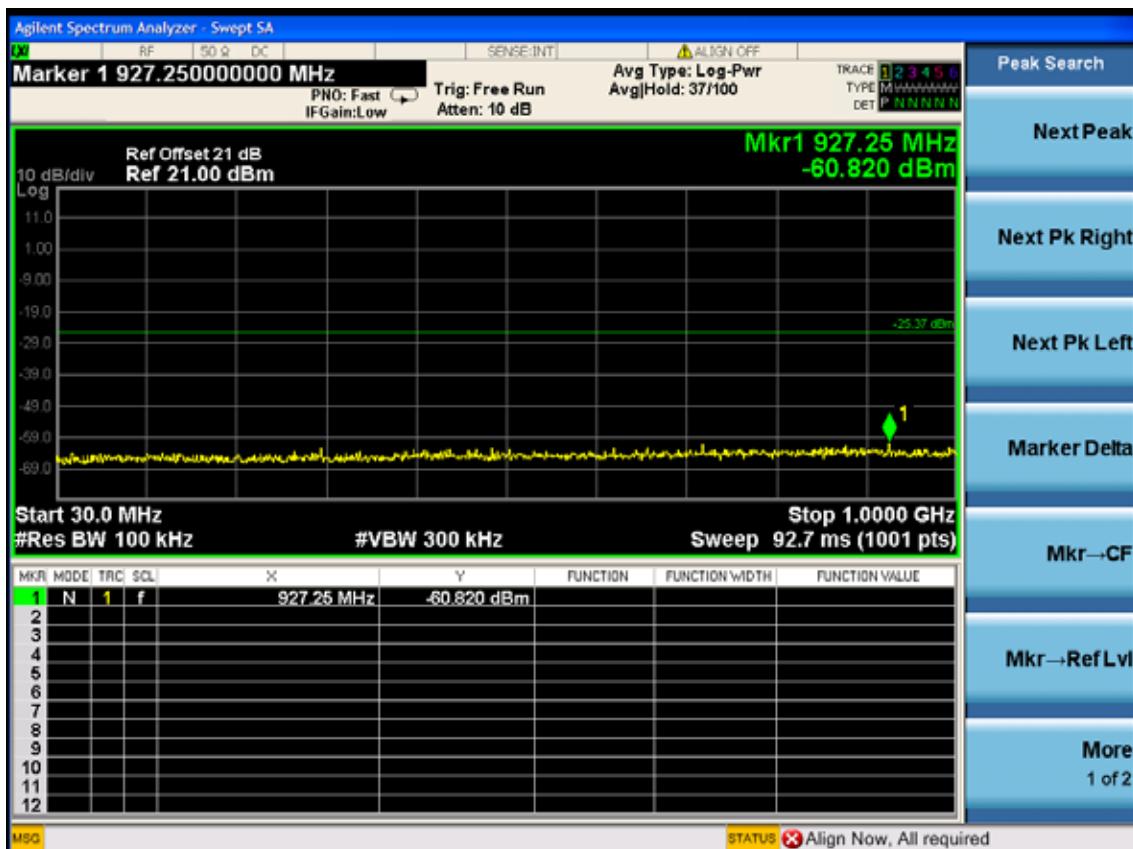
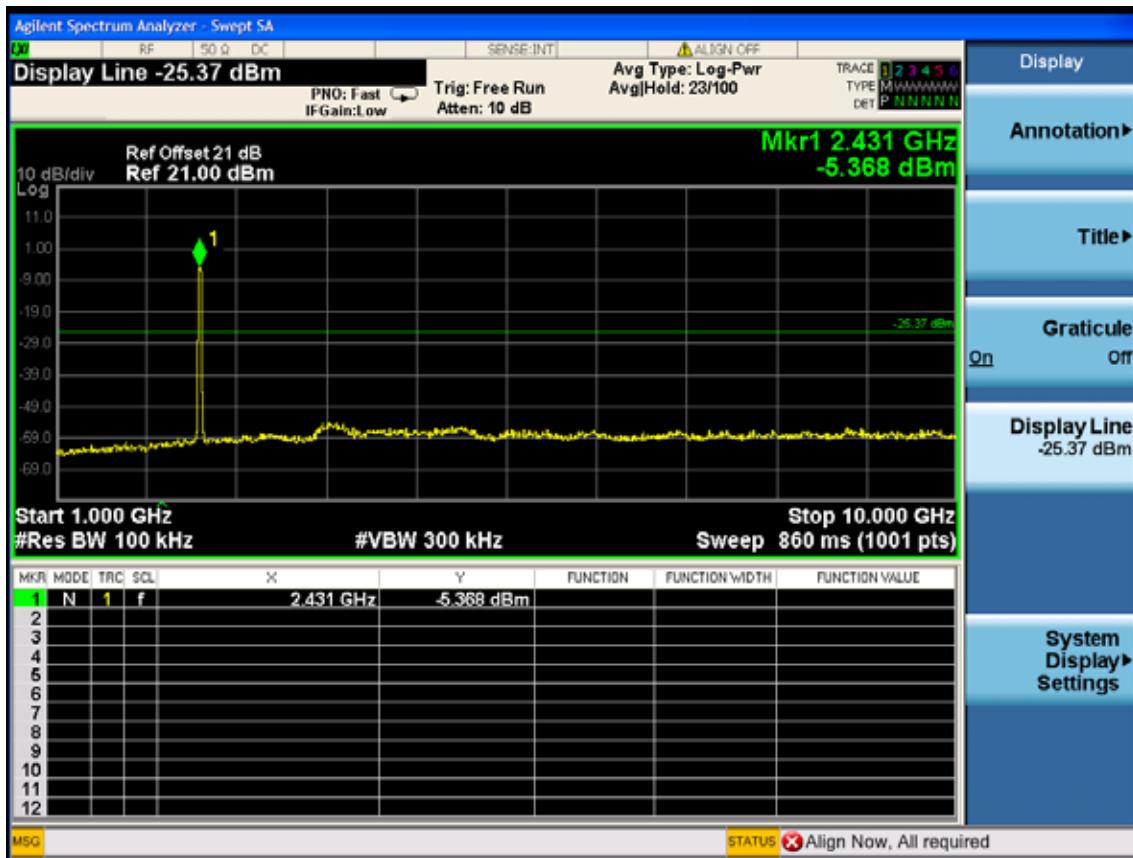
Test Mode: IEEE 802.11n HT20 TX

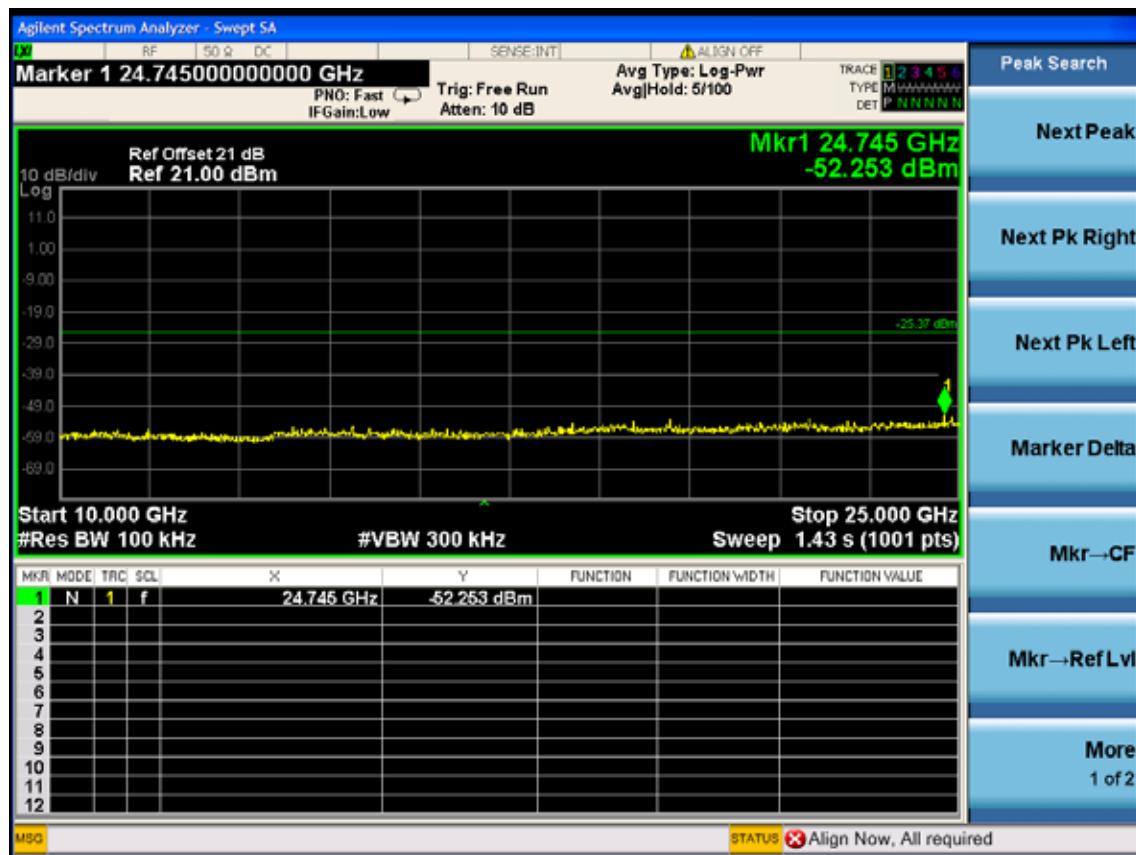
Test CH1: 2412MHz



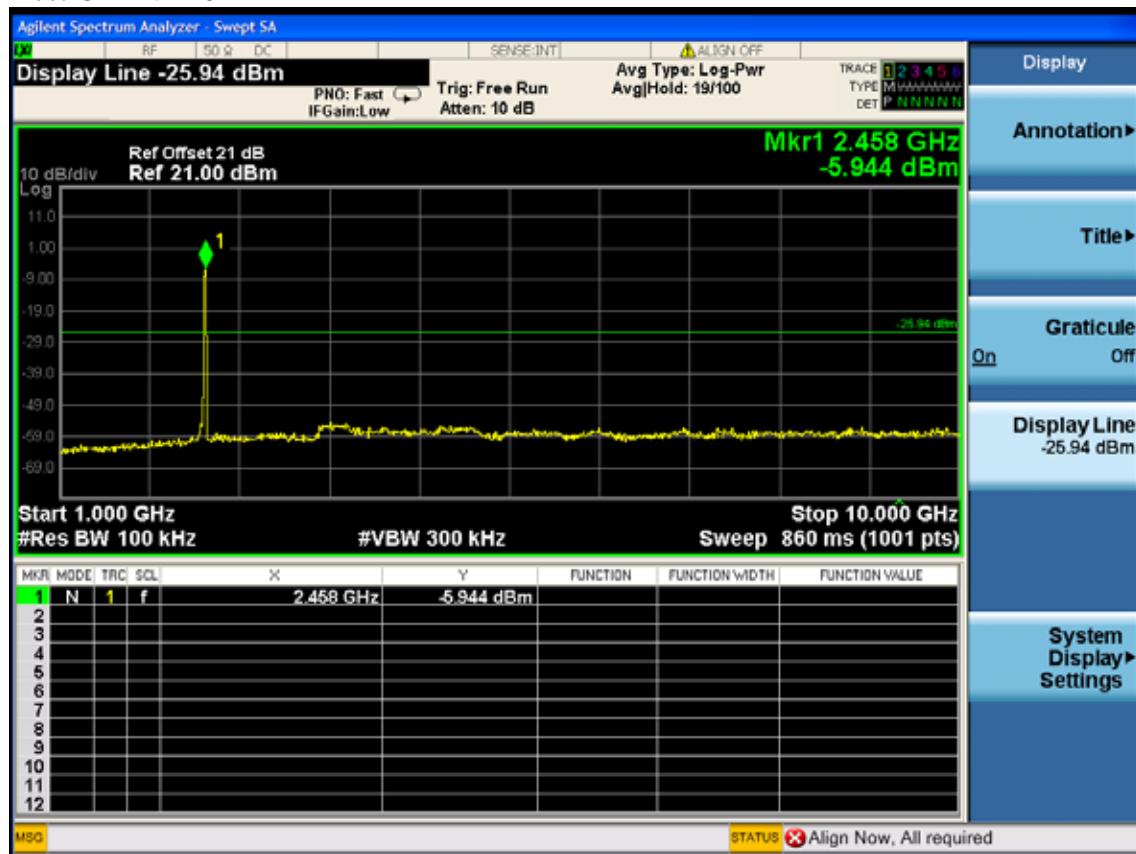


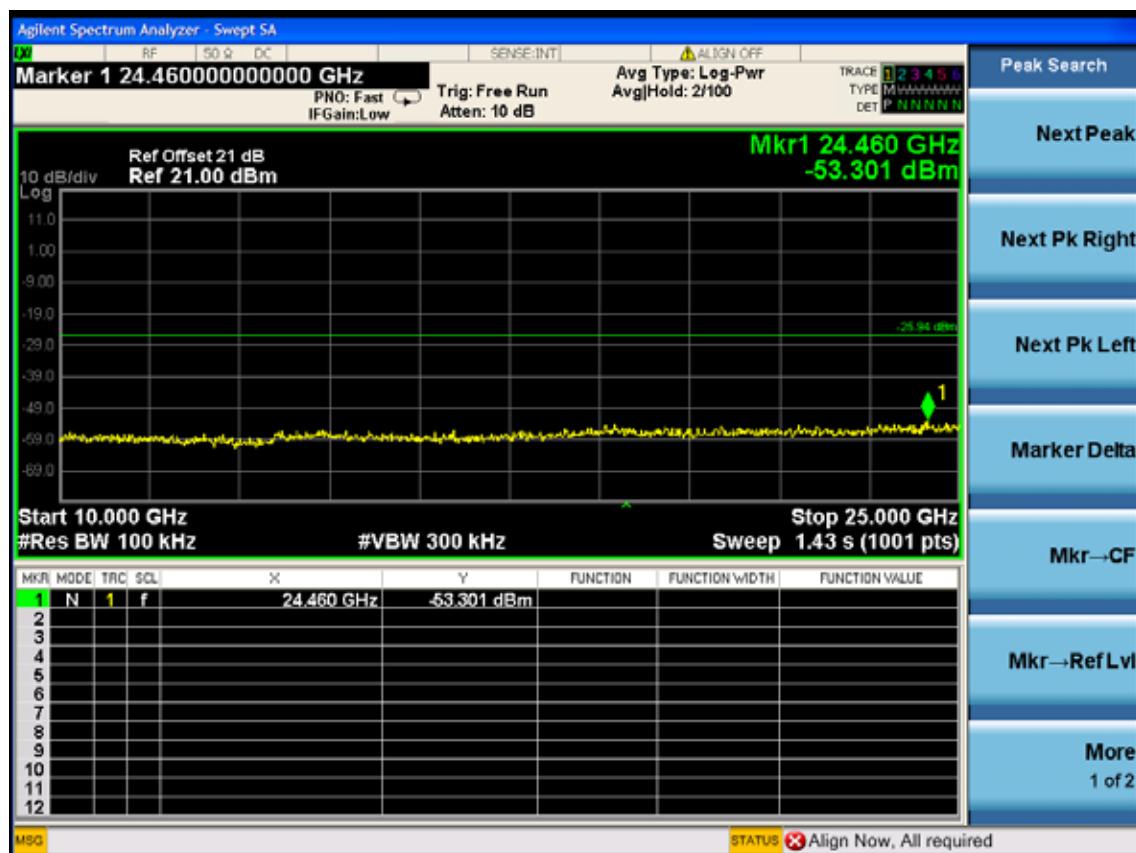
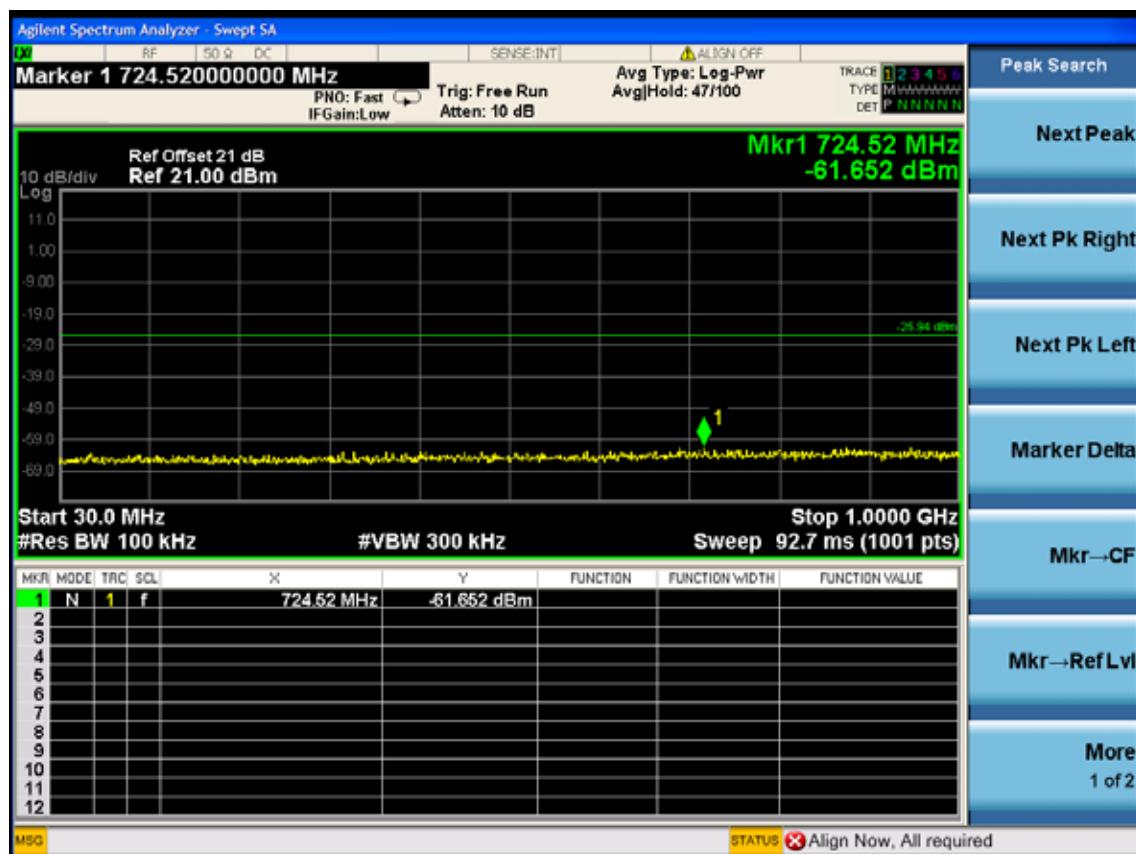
Test CH6: 2437MHz





Test CH11: 2462MHz

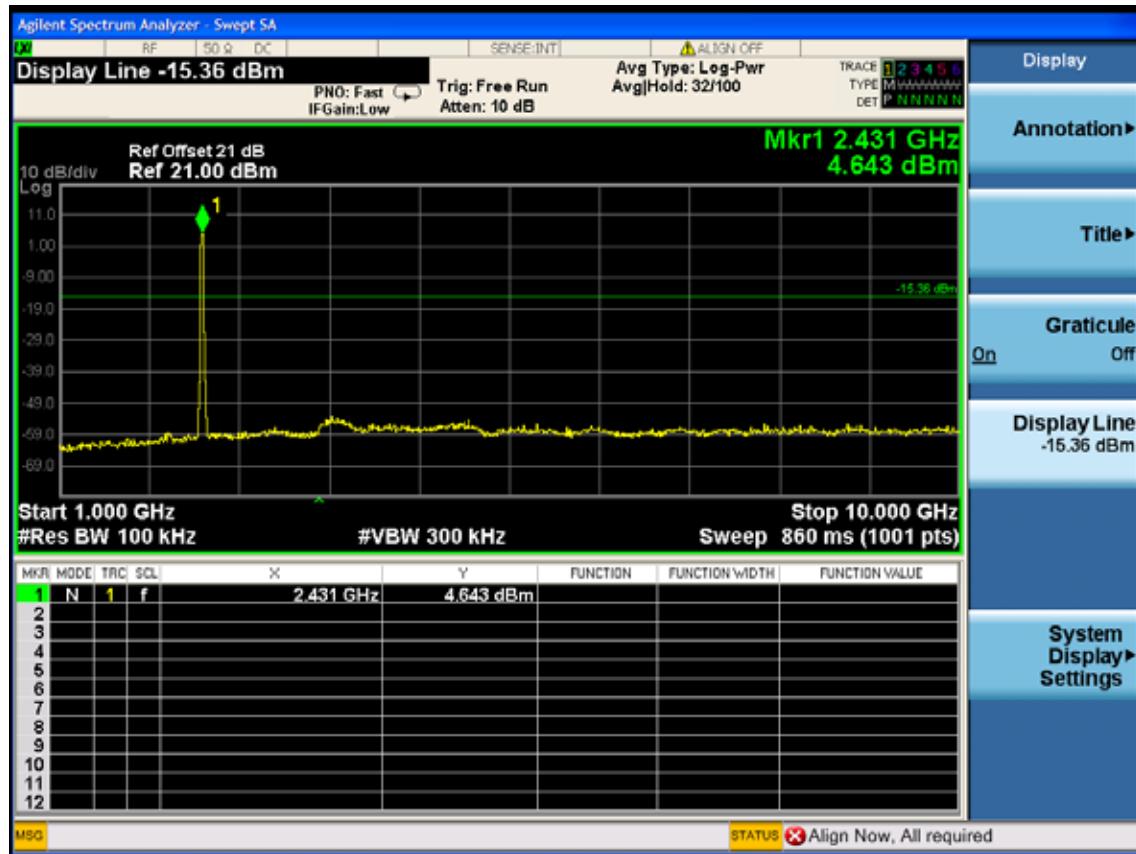


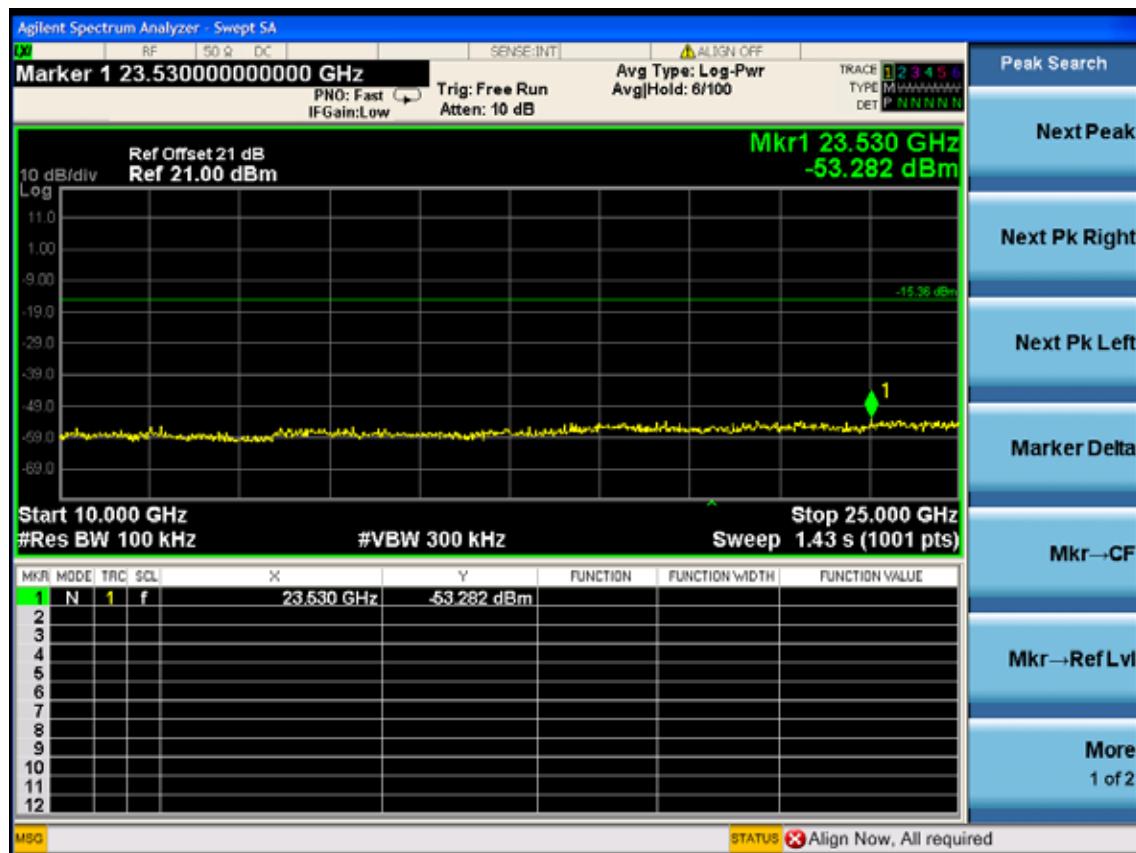
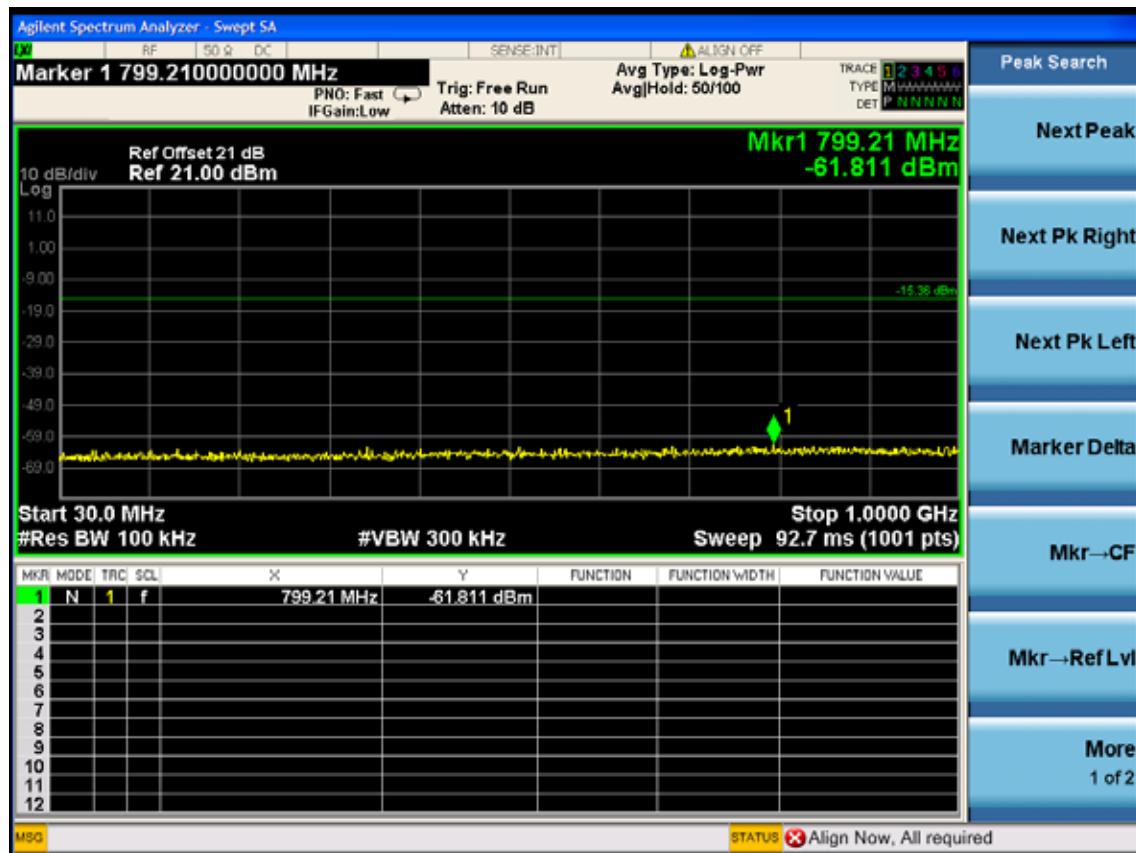


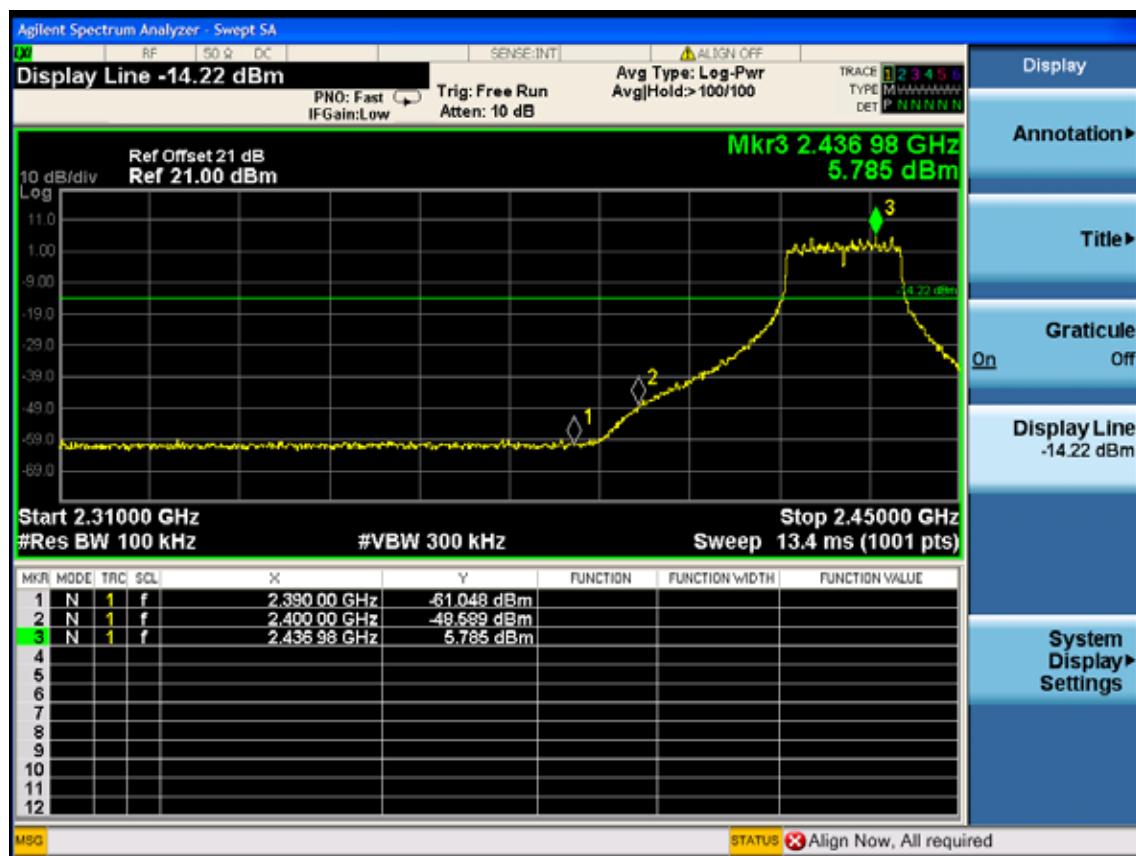


Test Mode: IEEE 802.11n HT40 TX

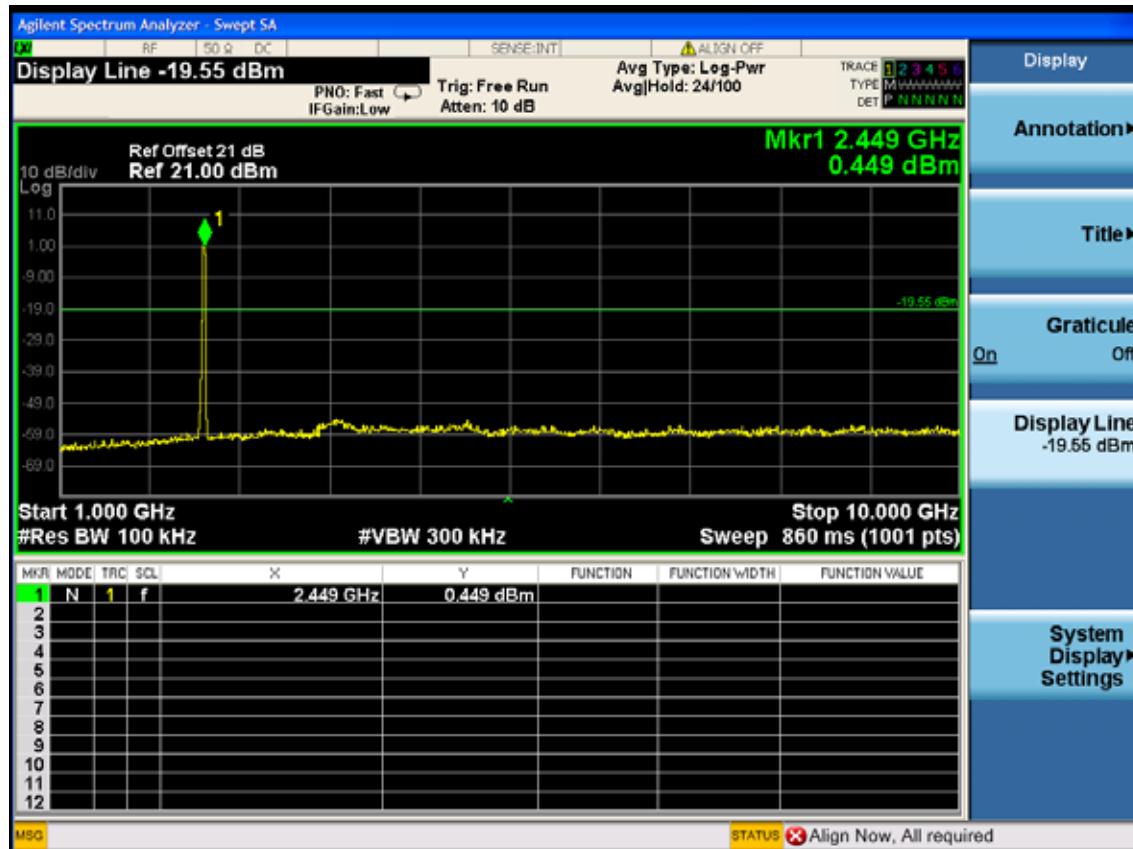
Test CH1: 2422MHz

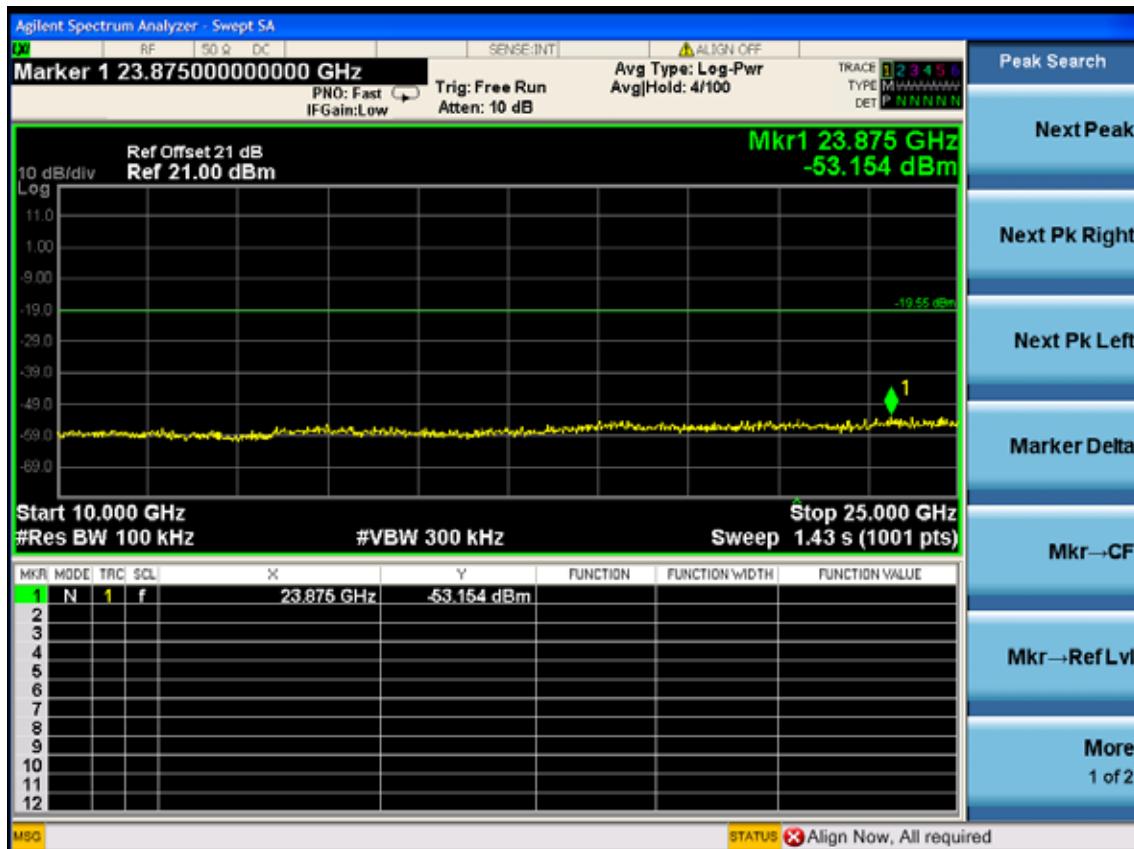
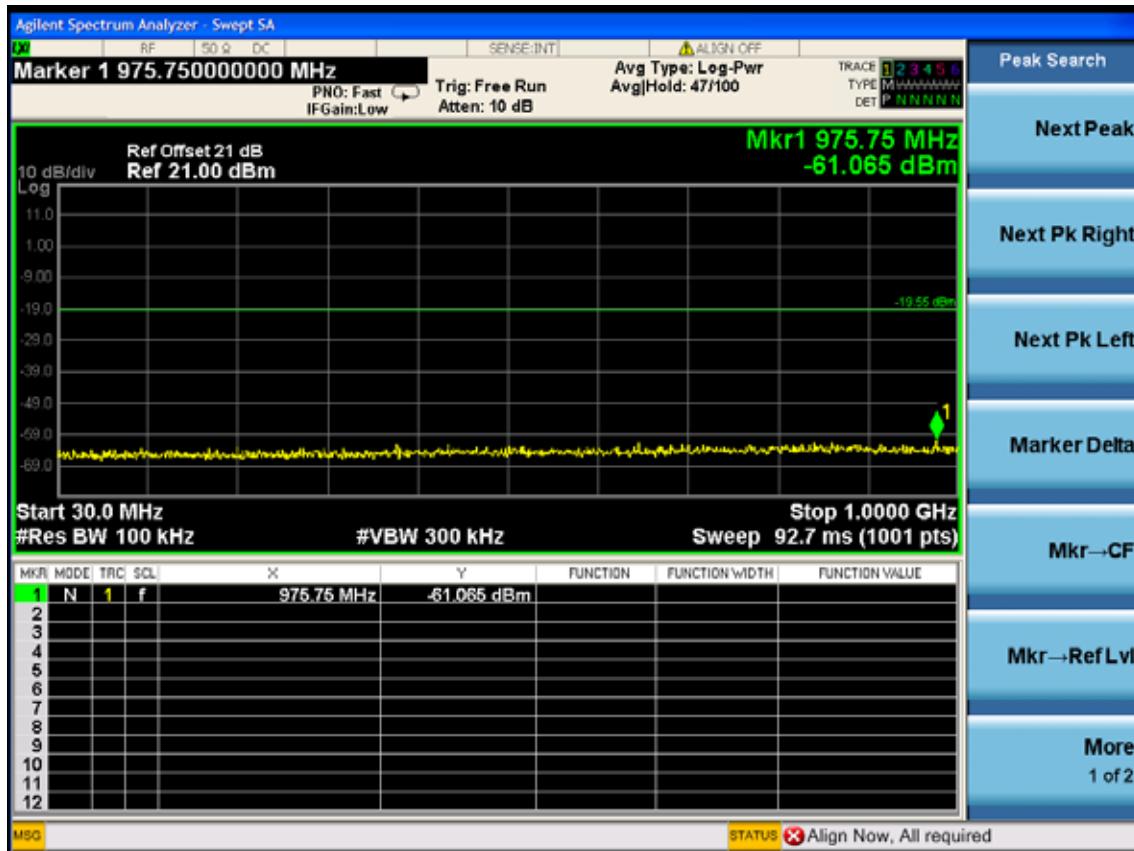




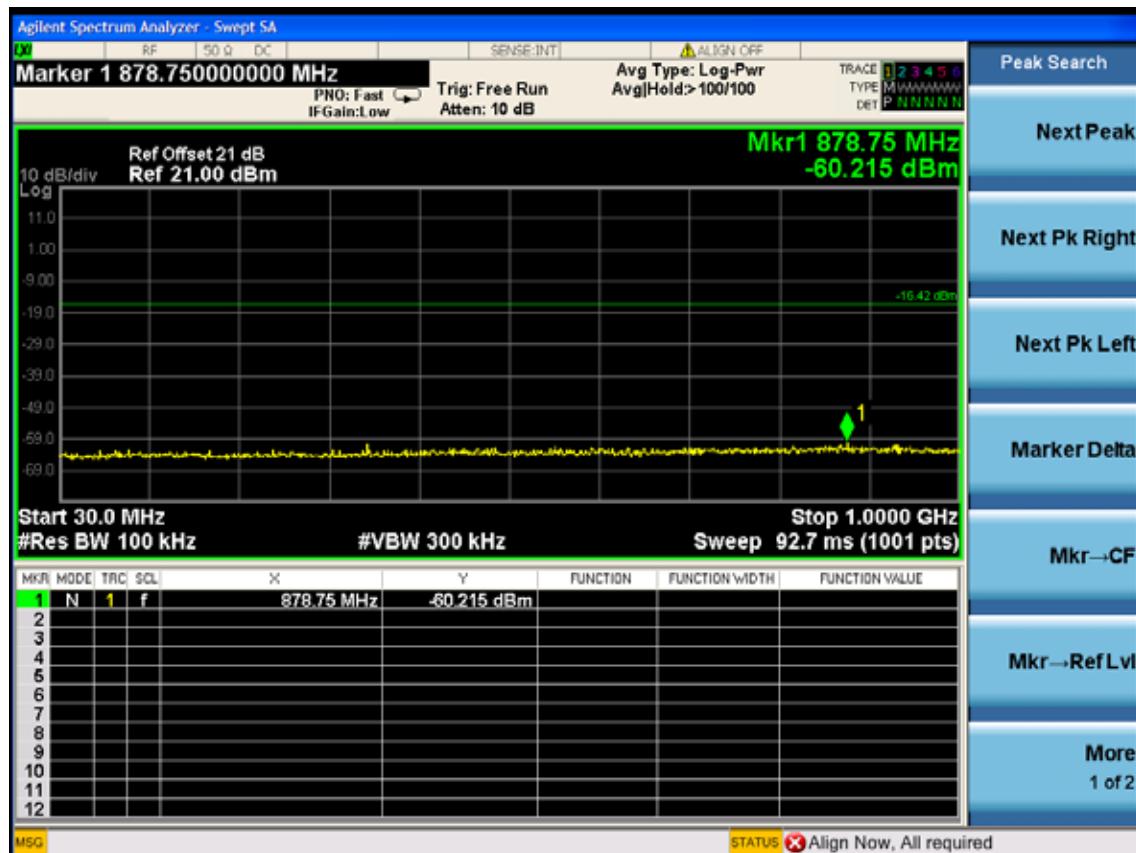
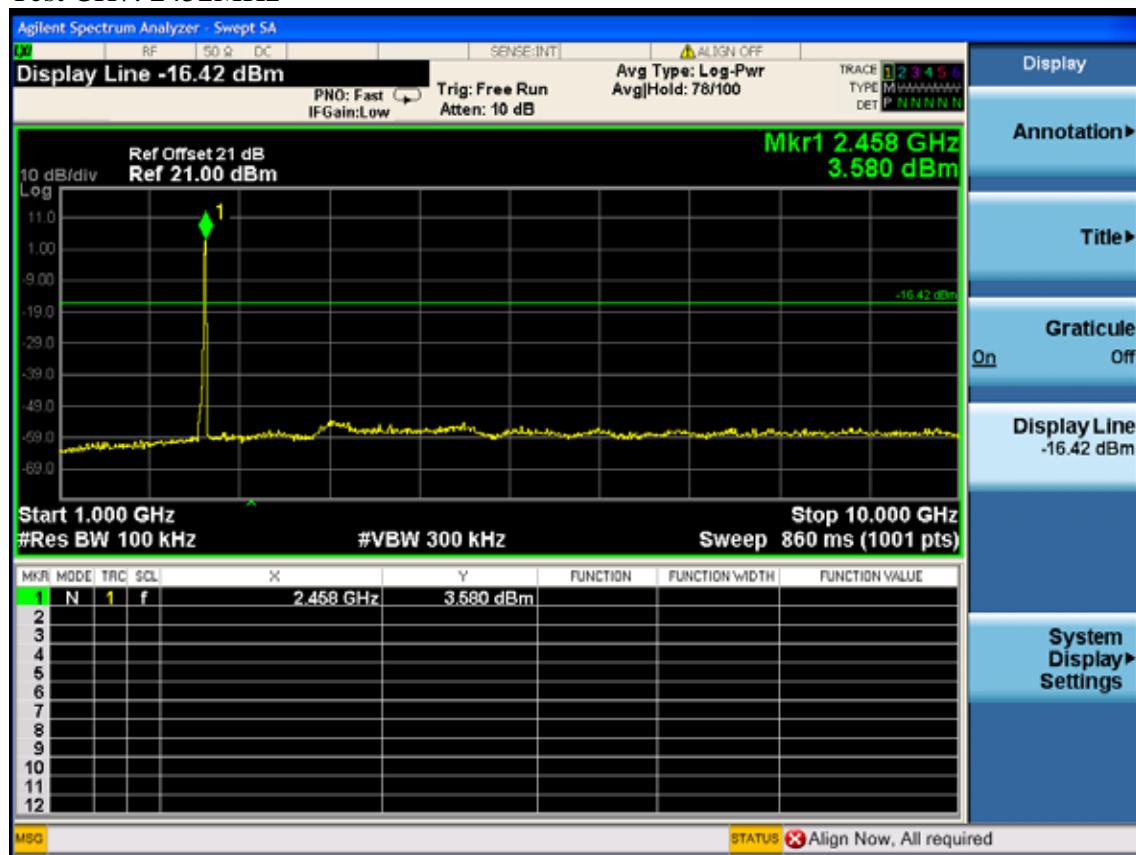


Test CH4: 2437MHz





Test CH7: 2452MHz



- Display
- Annotation▶
- Title▶
- Graticule On Off
- Display Line -16.42 dBm
- System Display▶ Settings
- Peak Search
- Next Peak
- Next Pk Right
- Next Pk Left
- Marker Delta
- Mkr→CF
- Mkr→Ref Lvl
- More 1 of 2