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

Altai Technologies Limited

A8-Ein Super WiFi Base Station

Model No.: WA8011N

FCC ID: UCC-WA8011N

Prepared for: Altai Technologies Limited

Units209, 2/F, Lakeside 2, 10 Science Park West Avenue, Hong

Kong Science Park, Shatin, Hong Kong, China

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

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

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

Tel: (0755) 26639496

Report Number : ACS-F12254

Date of Test : Aug.22~Nov.25, 2012

Date of Report : Jan.27, 2013



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## AUDIX Technology (Shenzhen) Co., Ltd.

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FCC ID: UCC-WA8011N

#### TEST REPORT CERTIFICATION

**Applicant** 

Altai Technologies Limited

Manufacturer

Altai Technologies Limited

**EUT Description** 

A8-Ein Super WiFi Base Station

FCC ID

UCC-WA8011N

(A) MODEL NO.

WA8011N

(B) SERIAL NO.

: N/A

(C) POWER SUPPLY: DC 56V

(D) TEST VOLTAGE: DC 56V From Adapter Input AC 120V/60Hz

Tested for comply with:

FCC Rules and Regulations Part 15 Subpart C: 2011

Test procedure used:

ANSI C63.10:2009

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

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

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

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

| Date of Test : _ | Aug.22~ Nov.25, 2012 | Report of date:    | Jan.27, 2013                 |
|------------------|----------------------|--------------------|------------------------------|
| Prepared by : _  | June shao            | Reviewed by :      | 4200                         |
|                  | June Shao/ Assistant | ® 信華科技 (深圳)        | Sunny Lu / Assistant Manager |
|                  | EU EU                | 107 S 107 _ VOM    | y (Shenzhen) Co., Ltd.       |
|                  |                      | EMC部門報告            |                              |
|                  |                      | Stamp only for EMC | Dept. Report                 |
| Approved & Au    | thorized Signer :    | Signature:         | n lu 1/9/13'                 |
|                  |                      | Ken Lu / N         | Manager                      |



## 1. SUMMARY OF STANDARDS AND RESULTS

## 1.1.Description of Standards and Results

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

| EMISSION                      |                     |         |  |  |  |
|-------------------------------|---------------------|---------|--|--|--|
| Description of Test Item      | Standard            | Results |  |  |  |
| Power Line Conducted Emission | FCC Part 15: 15.207 | PASS    |  |  |  |
| Fower Line Conducted Emission | ANSI C63.10: 2009   | rass    |  |  |  |
| Radiated Emission             | FCC Part 15: 15.209 | PASS    |  |  |  |
| Radiated Emission             | ANSI C63.10: 2009   | rass    |  |  |  |
| Rand Edge Compliance          | FCC Part 15: 15.247 | PASS    |  |  |  |
| Band Edge Compliance          | ANSI C63.10: 2009   | PASS    |  |  |  |
| Conducted annuious emissions  | FCC Part 15: 15.247 |         |  |  |  |
| Conducted spurious emissions  | ANSI C63.10: 2009   | PASS    |  |  |  |
| CAD Don duri 44h              | FCC Part 15: 15.247 |         |  |  |  |
| 6dB Bandwidth                 | ANSI C63.10: 2009   | PASS    |  |  |  |
| Dools Outmut Down             | FCC Part 15: 15.247 | PASS    |  |  |  |
| Peak Output Power             | ANSI C63.10: 2009   | PASS    |  |  |  |
| Decree Constant Decret        | FCC Part 15: 15.247 | PASS    |  |  |  |
| Power Spectral Density        | ANSI C63.10: 2009   | rass    |  |  |  |
| Antenna requirement           | FCC Part 15: 15.203 | PASS    |  |  |  |

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#### 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : A8-Ein Super WiFi Base Station

Model Number : WA8011N

FCC ID : UCC-WA8011N

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

IEEE 802.11g: 2412MHz—2462MHz IEEE802.11n HT20: 2412MHz—2462MHz IEEE802.11n HT40: 2422MHz—2452MHz

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

IEEE 802.11n HT40: 7Channels

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

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

QPSK,BPSK)

Antenna Assembly

Gain

: Dipole Antenna, PK gain 19dBi

Applicant : Altai Technologies Limited

Units209, 2/F, Lakeside 2, 10 Science Park West Avenue, Hong

Kong Science Park, Shatin, Hong Kong, China

Manufacturer : Altai Technologies Limited

Units209, 2/F, Lakeside 2, 10 Science Park West Avenue, Hong

Kong Science Park, Shatin, Hong Kong, China

Power Adapter : Manufacturer: FSGREAT

M/N: GRT-560110A S/N: 120940004

Date of Test : Aug.22~Nov.25, 2012

Date of Receipt : Aug.20, 2012

Sample Type : Prototype production



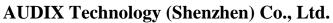
#### 2.2.Test Information

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

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

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

Note2: For 2.4GHz, This device have 4 Group Antenna, But those four group antenna can not transmit simultaneously, each group have two antenna total eight antenna. according to exploratory test group 1 have the maximum output level and the worst case emission so report group 1 in the report.



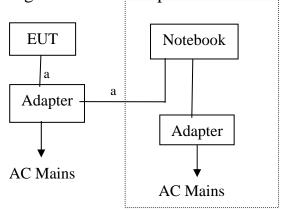


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## 2.3.Tested Supporting System Details

| No | Description | ACS No.   | Manufacturer | Model | Serial Number | Approved type |
|----|-------------|-----------|--------------|-------|---------------|---------------|
| 1  | Notebook    | Test PC R | DELL         | D430  | PP09S         | ☑FCC DoC      |

2.4. Block Diagram of Test Setup



a: LAN Cable

(EUT: A8-Ein 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, 2013

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

| Test Item  | Uncertainty                       |
|--|-----------------------------------|
| Uncertainty for Conduction emission test in No. 1 Conduction | 3.2 dB (150KHz to 30MHz)          |
|  | 3.6 dB(30~200MHz, Polarize: H)    |
| Uncertainty for Radiation Emission test                      | 3.8 dB(30~200MHz, Polarize: V)    |
| in 3m chamber  | 4.2 dB(200M~1GHz, Polarize: H)    |
|  | 3.8 dB(200M~1GHz, Polarize: V)    |
| Uncertainty for Radiation Emission test in                   | 3.1dB (Distance: 3m Polarize: V)  |
| 3m chamber (1GHz-18GHz)                                      | 3.7 dB (Distance: 3m Polarize: H) |
| Uncertainty for Radiated Spurious                            | 3.57 dB                           |
| Emission test in RF chamber                                  | 3.37 db                           |
| Uncertainty for Conduction Spurious emission test            | 2.00 dB                           |
| Uncertainty for Output power test                            | 0.73 dB                           |
| Uncertainty for Power density test                           | 2.00 dB                           |
| Uncertainty for Frequency range test                         | $7x10^{-8}$                       |
| Uncertainty for Bandwidth test                               | 83 kHz                            |
| Uncertainty for DC power test                                | 0.038 %                           |
| Uncertainty for test site temperature and                    | 0.6℃                              |
| humidity   | 3%                                |

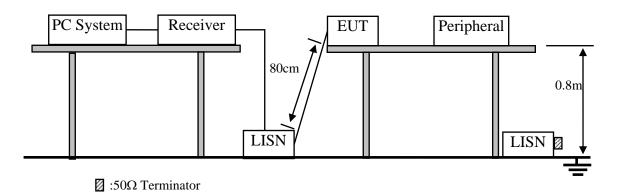


#### 3. POWER LINE CONDUCTED EMISSION TEST

## 3.1.Test Equipments

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

### 3.2.Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

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

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

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

#### 3.4. Configuration of EUT on Test

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

3.4.1. A8-Ein Super WiFi Base Station (EUT)

Model Number : WA8011N Serial Number : N/A

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



#### 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turned on the power of all equipment.
- 3.5.3. PC run test software to control EUT work in Tx mode.

#### 3.6.Test Procedure

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

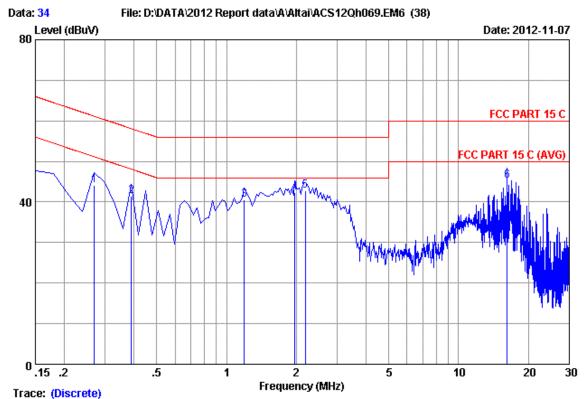
The bandwidth of test receiver (R & S ESHS10) is set at 9kHz.

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

#### 3.7. Power Line Conducted Emission Test Results

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





Site no :1#conduction Data No :34

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

Limit :FCC PART 15 C

Env./Ins. :22.9\*C/45% Engineer :Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating :DC 56V From Adapter Input AC 120V/60Hz

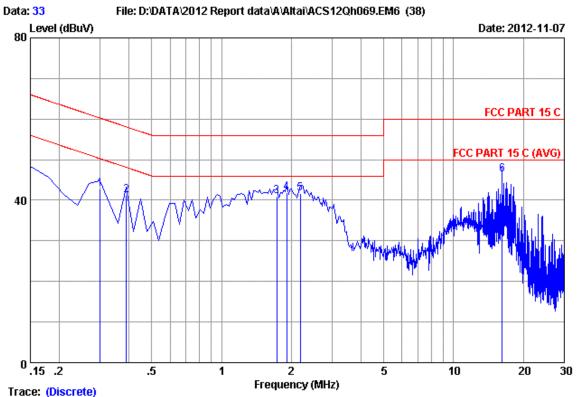
Test Mode :Tx Mode M/N:WA8011N

| No<br> | Freq<br>(MHz) | LISN<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV) | Limits<br>(dBuV) | Margin<br>(dB) | Remark |
|--------|---------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|--------|
| 1      | 0.26940       | 0.15                   | 9.95                  | 34.04             | 44.14                       | 61.14            | 17.00          | QP     |
| 2      | 0.38880       | 0.16                   | 9.95                  | 31.26             | 41.37                       | 58.09            | 16.72          | QP     |
| 3      | 1.195         | 0.18                   | 9.94                  | 30.35             | 40.47                       | 56.00            | 15.53          | QP     |
| 4      | 1.971         | 0.20                   | 9.94                  | 32.20             | 42.34                       | 56.00            | 13.66          | QP     |
| 5      | 2.180         | 0.20                   | 9.94                  | 32.61             | 42.75                       | 56.00            | 13.25          | QP     |
| 6      | 16.209        | 0.44                   | 10.00                 | 34.82             | 45.26                       | 60.00            | 14.74          | QP     |
|        |               |                        |                       |                   |                             |                  |                |        |

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

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





Site no :1#conduction Data No :33

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

Limit :FCC PART 15 C

Env./Ins. :22.9\*C/45% Engineer :Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating :DC 56V From Adapter Input AC 120V/60Hz

Test Mode :Tx Mode M/N:WA8011N

| No<br> | Freq<br>(MHz) | LISN<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV) | n<br>Limits<br>(dBuV) | Margin<br>(dB) | Remark |
|--------|---------------|------------------------|-----------------------|-------------------|-----------------------------|-----------------------|----------------|--------|
| 1      | 0.29925       | 0.14                   | 9.95                  | 32.65             | 42.74                       | 60.26                 | 17.52          | QP     |
| 2      | 0.38880       | 0.15                   | 9.95                  | 31.20             | 41.30                       | 58.09                 | 16.79          | QP     |
| 3      | 1.732         | 0.19                   | 9.94                  | 30.80             | 40.93                       | 56.00                 | 15.07          | QP     |
| 4      | 1.911         | 0.20                   | 9.94                  | 31.81             | 41.95                       | 56.00                 | 14.05          | QP     |
| 5      | 2.180         | 0.20                   | 9.94                  | 31.58             | 41.72                       | 56.00                 | 14.28          | QP     |
| 6      | 16.209        | 0.34                   | 10.00                 | 35.92             | 46.26                       | 60.00                 | 13.74          | QP     |
|        |               |                        |                       |                   |                             |                       |                |        |

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

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



#### 4. RADIATED EMISSION TEST

#### 4.1.Test Equipment

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

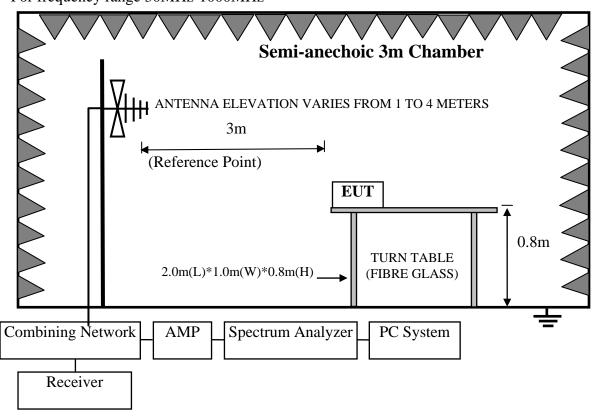
| Item | Equipment      | Manufacturer    | Model No. | Serial No.      | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|-----------------|------------|---------------|
| 1    | 3#Chamber      | AUDIX           | N/A       | N/A             | Nov.28,11  | 1 Year 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

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

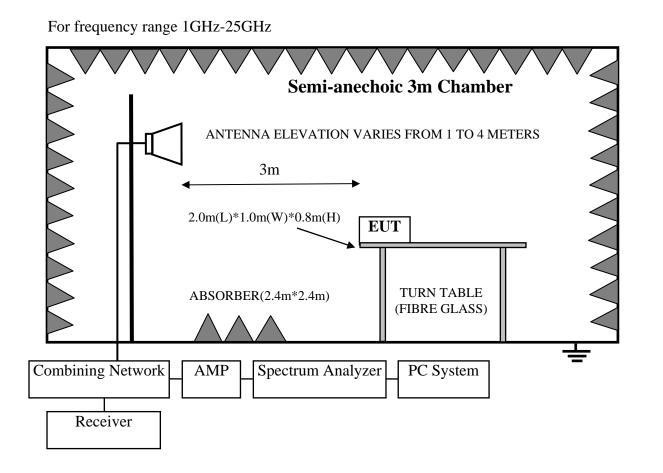
| Item | Equipment         | Manufacturer | Model No.   | Serial No. | Last Cal.   | Cal. Interval |
|------|-------------------|--------------|-------------|------------|-------------|---------------|
| 1    | Spectrum Analyzer | Agilent      | E4407B      | MY41440292 | May.08, 12  | 1 Year        |
| 2    | Horn Antenna      | EMCO         | 3115        | 9510-4580  | June.05, 12 | 1 Year        |
| 3    | Amplifier         | Agilent      | 8449B       | 3008A00863 | May.08, 12  | 1 Year        |
| 4    | RF Cable          | Hubersuhner  | SUCOFLEX106 | 77980/6    | May.08, 12  | 1 Year        |
| 5    | RF Cable          | Hubersuhner  | SUCOFLEX106 | 77977/6    | May.08, 12  | 1 Year        |
| 6    | Horn Antenna      | EMCO         | 3116        | 00060089   | May.08, 12  | 1.5Year       |

#### 4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz







#### 4.3. Radiated Emission Limit

#### 4.3.1.15.209 limits

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

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

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

#### 4.3.2.15.205 Restricted bands of operation

| MHz                        | MHz                   | MHz             | GHz           |
|----------------------------|-----------------------|-----------------|---------------|
| 0.090 - 0.110              | 16.42 - 16.423        | 399.9 - 410     | 4.5 - 5.15    |
| <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     | (2)           |

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

#### 4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

#### 4.5. Operating Condition of EUT

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

#### 4.6.Test Procedure

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

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

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

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



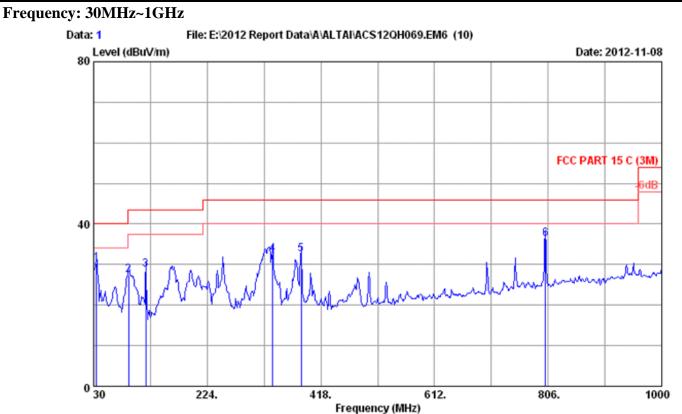
#### 4.7. Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

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





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

Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

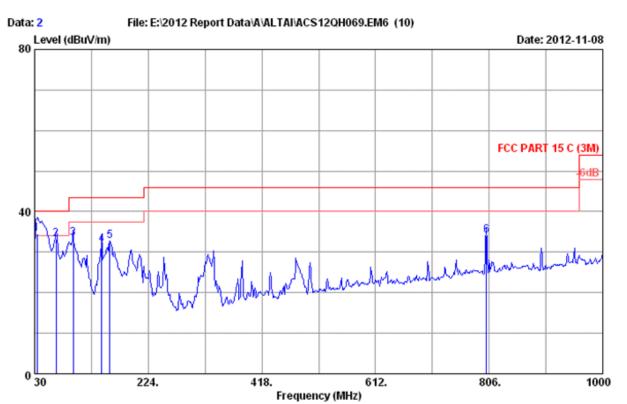
Power rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : Tx Mode M/N:WA8011N

| No. | Freq.   | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|-----|---------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1   | 34.850  | 16.01                    | 0.51                  | 13.84             | 30.36                         | 40.00              | 9.64           | OP     |
| 2   | 90.140  | 8.22                     | 0.79                  | 18.36             | 27.37                         | 43.50              | 16.13          | QP     |
| 3   | 119.240 | 11.07                    | 0.90                  | 16.88             | 28.85                         | 43.50              | 14.65          | QP     |
| 4   | 335.550 | 14.81                    | 1.39                  | 16.27             | 32.47                         | 46.00              | 13.53          | QP     |
| 5   | 384.050 | 16.08                    | 1.52                  | 14.88             | 32.48                         | 46.00              | 13.52          | QP     |
| 6   | 801.150 | 22.73                    | 2.70                  | 10.92             | 36.35                         | 46.00              | 9.65           | QP     |
|     |         |                          |                       |                   |                               |                    |                |        |

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





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

Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power rating : DC 56V From Adapter Input AC 120V/60Hz

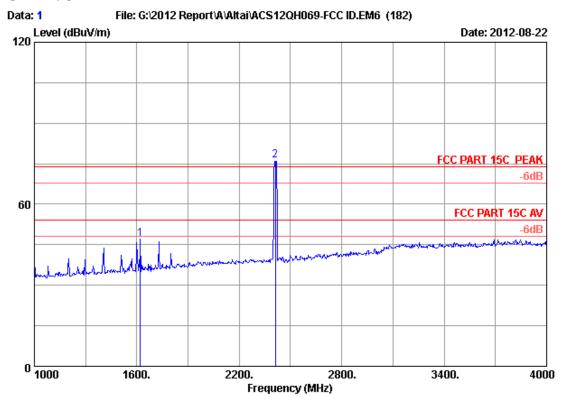
Test Mode : Tx Mode M/N:WA8011N

| No. | Freq.   | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|-----|---------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1   | 34.290  | 16.31                    | 0.45                  | 17.80             | 34.56                         | 40.00              | 5.44           | QP     |
| 2   | 66.860  | 5.50                     | 0.69                  | 27.01             | 33.20                         | 40.00              | 6.80           | QP     |
| 3   | 95.960  | 8.97                     | 0.82                  | 23.55             | 33.34                         | 43.50              | 10.16          | QP     |
| 4   | 144.460 | 11.17                    | 0.94                  | 19.66             | 31.77                         | 43.50              | 11.73          | QP     |
| 5   | 158.040 | 10.62                    | 0.97                  | 21.11             | 32.70                         | 43.50              | 10.80          | QP     |
| 6   | 801.150 | 22.73                    | 2.70                  | 8.58              | 34.01                         | 46.00              | 11.99          | QP     |
|     |         |                          |                       |                   |                               |                    |                |        |

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



#### Frequency: 1GHz~18GHz



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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

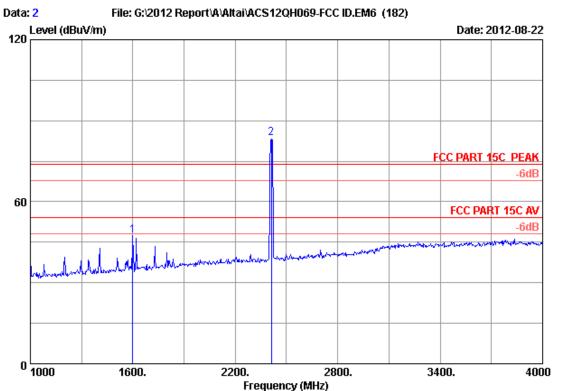
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark |
| _   | 1621.000<br>2412.000 | 25.86<br>27.98   | 4.78<br>6.03 | 34.59<br>34.44   | 51.16<br>76.48 | 47.21<br>76.05    | 74.00<br>74.00 | 26.79<br>-2.05 |        |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark |
| _   | 1600.000<br>2412.000 | 25.72<br>27.98   |              | 34.60<br>34.44   | 51.62<br>84.06 | 47.50<br>83.63    | 74.00<br>74.00 | 26.50<br>-9.63 |        |

\_\_\_\_\_\_

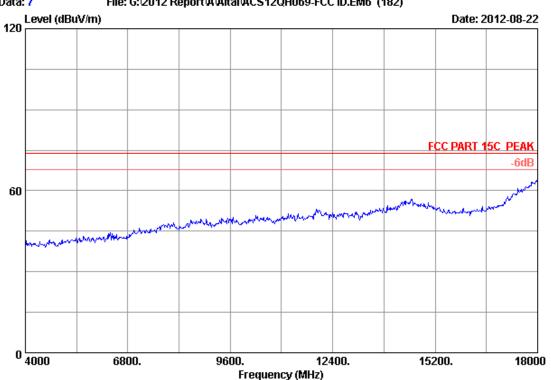
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading



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Data: 7 File: G:\2012 Report\A\Altai\AC\$12QH069-FCC ID.EM6 (182)

Level (dBu\V(m) Page 2012-08-22



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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

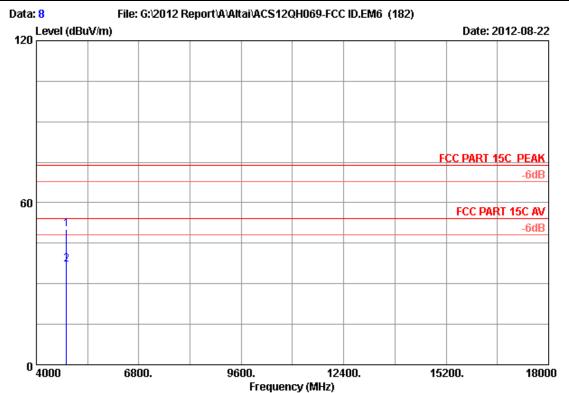
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

M/N : WA8011N





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

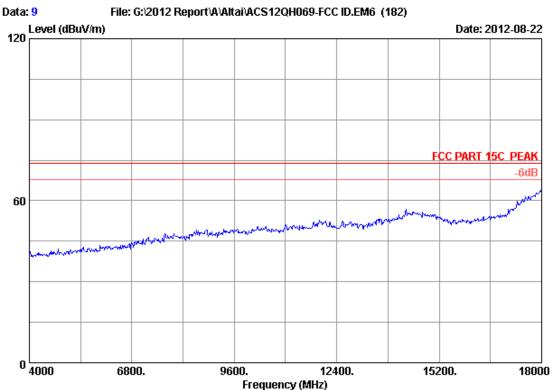
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4824.000<br>4824.000 | 32.89<br>32.89   | 8.53<br>8.53 | 34.60<br>34.60   | 43.28<br>30.34      | 50.10<br>37.16    | 74.00<br>54.00 | 23.90<br>16.84 | Peak<br>Average |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

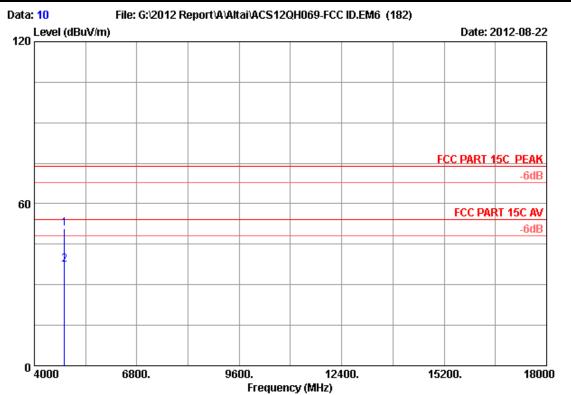
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 10
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

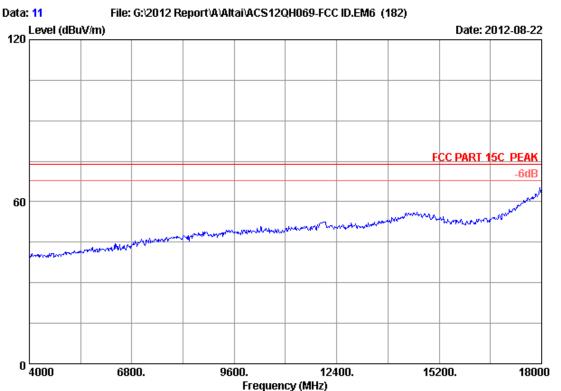
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4824.000<br>4824.000 | 32.89<br>32.89   | 8.53<br>8.53 | 34.60<br>34.60   | 43.92<br>30.75      | 50.74<br>37.57    |                | 23.26<br>16.43 | Peak<br>Average |

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





Site no. : 3# Chamber Data no. : 11
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

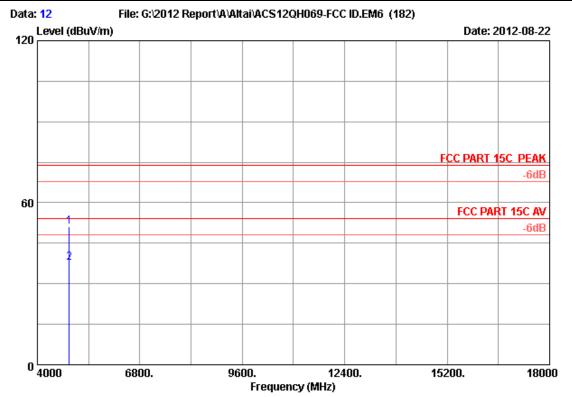
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH6 2437MHz Tx

M/N : WA8011N





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH6 2437MHz Tx

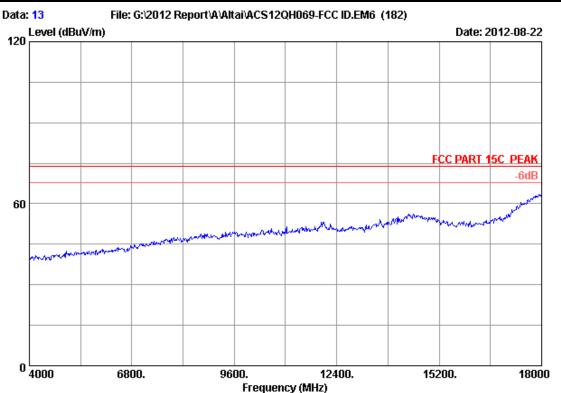
M/N : WA8011N

|    |    |                | Ant.             | Cable        | AMP              |                     | Emission          |                |                |         |
|----|----|----------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|---------|
| N: | o. | Freq.<br>(MHz) | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark  |
|    | 1  | 4874.000       | 32.98            | 8.58         | 34.60            | 44.03               | 50.99             | 74.00          | 23.01          | Peak    |
|    | 2  | 4874.000       | 32.98            | 8.58         | 34.60            | 30.69               | 37.65             | 54.00          | 16.35          | Average |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

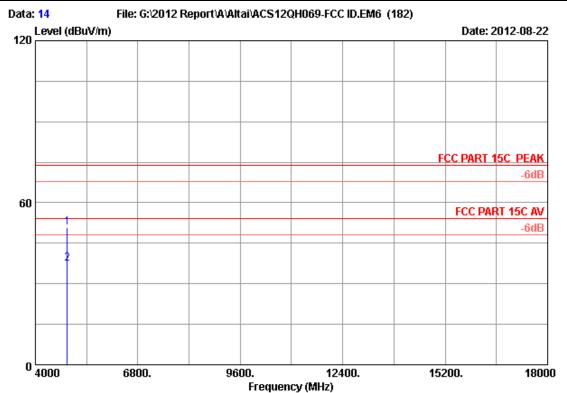
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH6 2437MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 14

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH6 2437MHz Tx

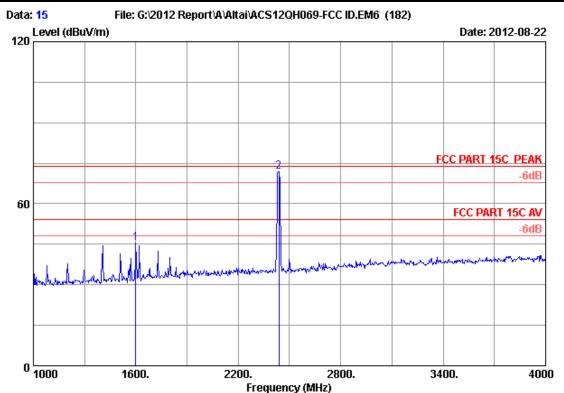
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4874.000<br>4874.000 | 32.98<br>32.98   | 8.58<br>8.58 | 34.60<br>34.60   | 43.85<br>30.56      | 50.81<br>37.52    | 74.00<br>54.00 | 23.19<br>16.48 | Peak<br>Average |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH6 2437MHz Tx

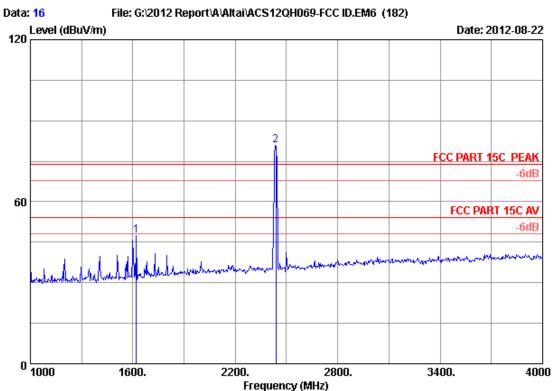
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |              |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark       |
| _   | 1600.000<br>2437.000 | 25.72<br>28.03   |              | 34.60<br>34.44   | 49.74<br>72.28 | 45.62<br>71.93    | 74.00<br>74.00 | 28.38<br>2.07  | Peak<br>Peak |

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





Site no. : 3# Chamber Data no. : 16
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH6 2437MHz Tx

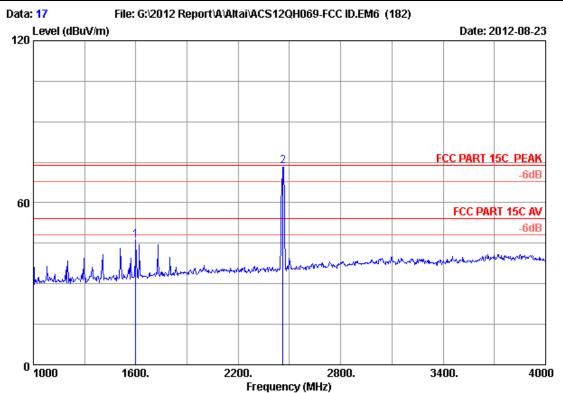
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark |
| _   | 1621.000<br>2437.000 | 25.86<br>28.03   |              | 34.59<br>34.44   | 51.29<br>81.13 | 47.34<br>80.78    | 74.00<br>74.00 | 26.66<br>-6.78 |        |

\_\_\_\_\_\_

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

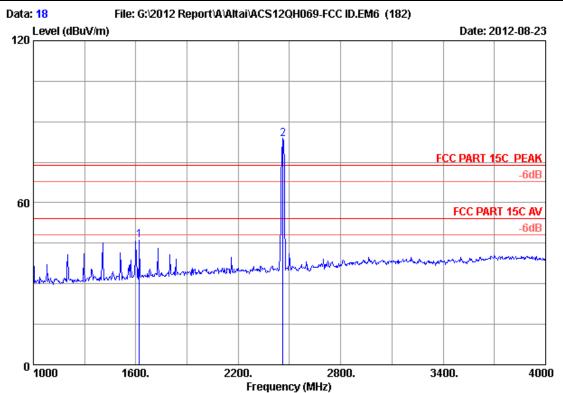
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              | Emission       |                   |                |                |              |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark       |
| _   | 1600.000<br>2462.000 | 25.72<br>28.05   |              | 34.60<br>34.44   | 50.40<br>73.68 | 46.28<br>73.41    | 74.00<br>74.00 | 27.72<br>0.59  | Peak<br>Peak |

\_\_\_\_\_\_

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





Site no. : 3# Chamber Data no. : 18
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

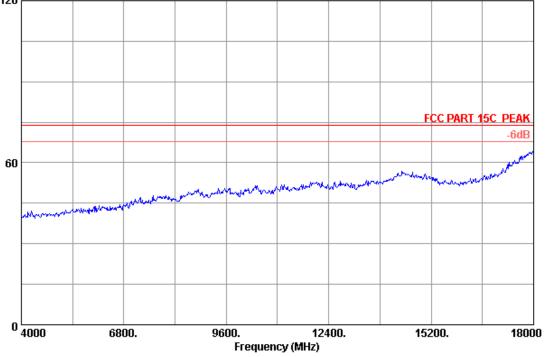
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              | Emission       |                   |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark |
| _   | 1621.000<br>2462.000 | 25.86<br>28.05   |              | 34.59<br>34.44   | 50.09<br>83.96 | 46.14<br>83.69    | 74.00<br>74.00 | 27.86<br>-9.69 |        |

\_\_\_\_\_\_

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

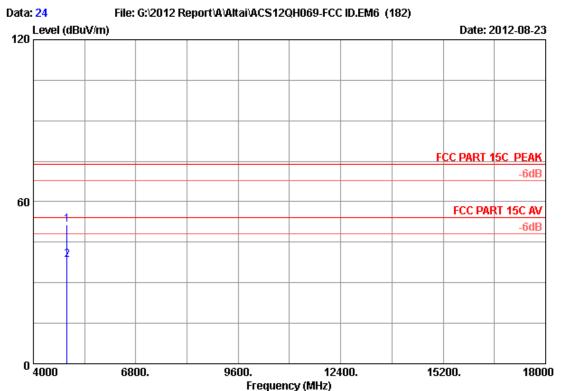
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

M/N : WA8011N





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

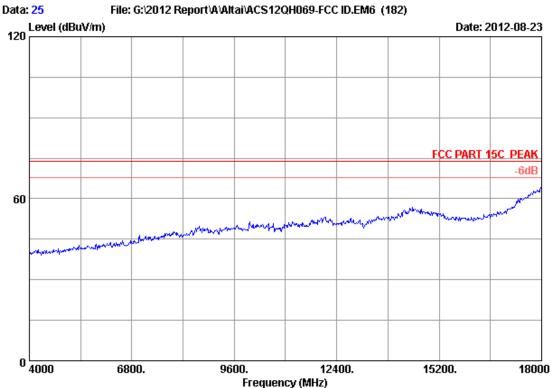
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     |                   |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4924.000<br>4924.000 | 33.08<br>33.08   | 8.62<br>8.62 | 34.60<br>34.60   | 44.32<br>31.25      | 51.42<br>38.35    |                | 22.58<br>15.65 | Peak<br>Average |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

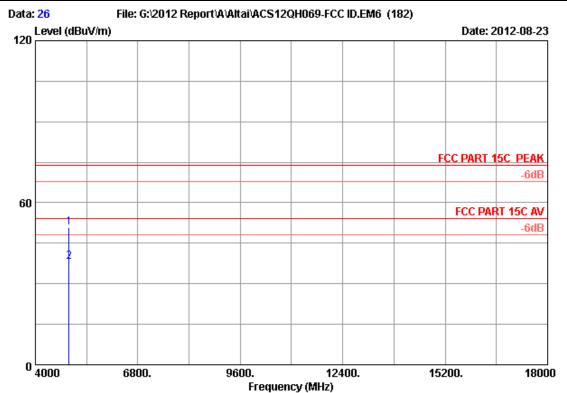
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 26
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

M/N : WA8011N

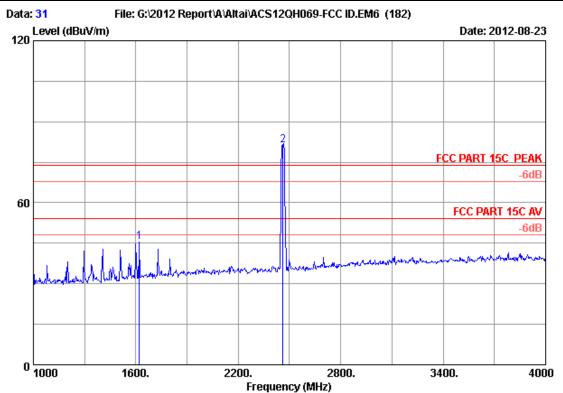
|    |          | Ant.             | Cable        | AMP              |                     | Emission          |                |                |         |
|----|----------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|---------|
| No | . Freq.  | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark  |
| 1  | 4924.000 | 33.08            | 8.62         | 34.60            | 43.79               | 50.89             | 74.00          | 23.11          | Peak    |
| 2  | 4924.000 | 33.08            | 8.62         | 34.60            | 30.87               | 37.97             | 54.00          | 16.03          | Average |

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

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH11 2462MHz Tx

M/N : WA8011N

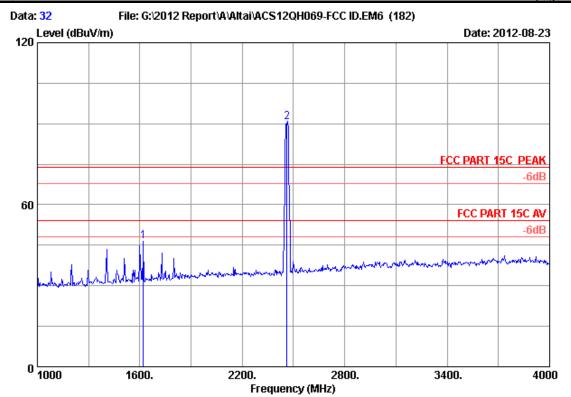
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark |
| _   | 1621.000<br>2462.000 | 25.86<br>28.05   | 4.78<br>6.12 | 34.59<br>34.44   | 49.50<br>81.45 | 45.55<br>81.18    |                | 28.45<br>-7.18 |        |

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

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





Site no. : 3# Chamber Data no. : 32
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH11 2462MHz Tx

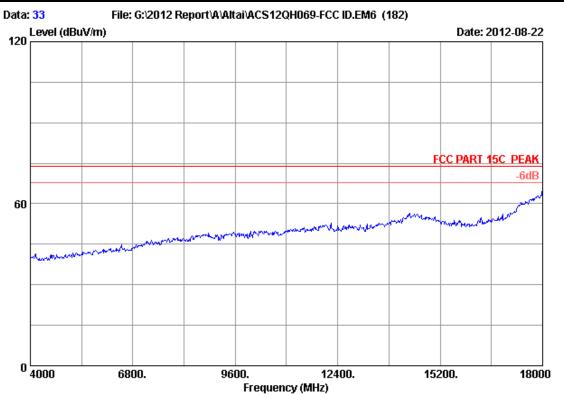
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2462.000 | 25.86<br>28.05   | 4.78<br>6.12 | 34.59<br>34.44   | 50.32<br>90.87 | 46.37<br>90.60    |                | 27.63<br>-16.60 |        |

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





Site no. : 3# Chamber Data no. : 33
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

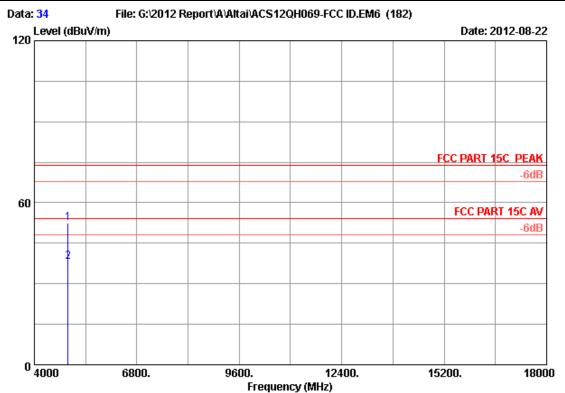
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH11 2462MHz Tx





Site no. : 3# Chamber Data no. : 34
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH11 2462MHz Tx

M/N : WA8011N

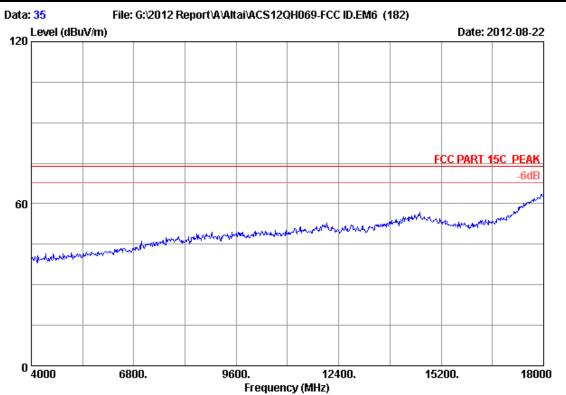
| No. | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | AMP<br>factor<br>(dBuV) | Reading<br>(dBuV/m) | Emission<br>Level<br>(dBuV/m) |       | Margin<br>(dB) | Remark  |
|-----|----------------|--------------------------|-----------------------|-------------------------|---------------------|-------------------------------|-------|----------------|---------|
| _   | 4924.000       | 33.08                    | 8.62                  | 34.60                   | 45.23               | 52.33                         |       | 21.67          |         |
| 2   | 4924.000       | 33.08                    | 8.62                  | 34.60                   | 31.02               | 38.12                         | 54.00 | 15.88          | Average |

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

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





Site no. : 3# Chamber Data no. : 35

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

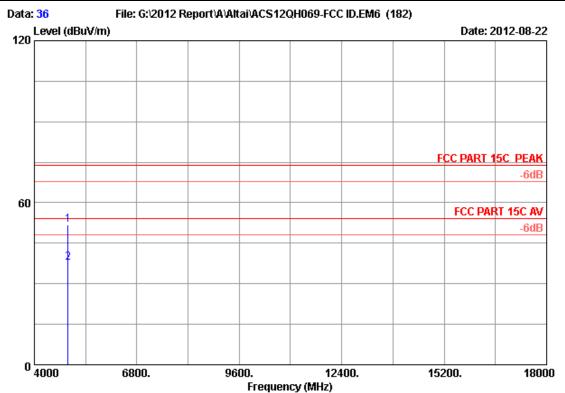
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH11 2462MHz Tx





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH11 2462MHz Tx

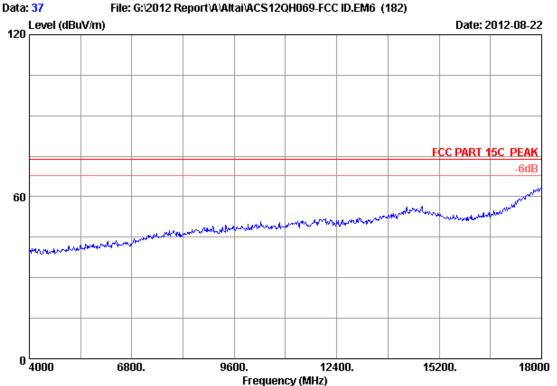
M/N : WA8011N

|   |       |                | Ant.             | Cable        | AMP              |                     | Emission          |                |                |         |
|---|-------|----------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|---------|
| N | · · · | Freq.<br>(MHz) | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark  |
|   | 1     | 4924.000       | 33.08            | 8.62         | 34.60            | 44.59               | 51.69             | 74.00          | 22.31          | Peak    |
|   | 2     | 4924.000       | 33.08            | 8.62         | 34.60            | 30.71               | 37.81             | 54.00          | 16.19          | Average |

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





Site no. : 3# Chamber Data no. : 37

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

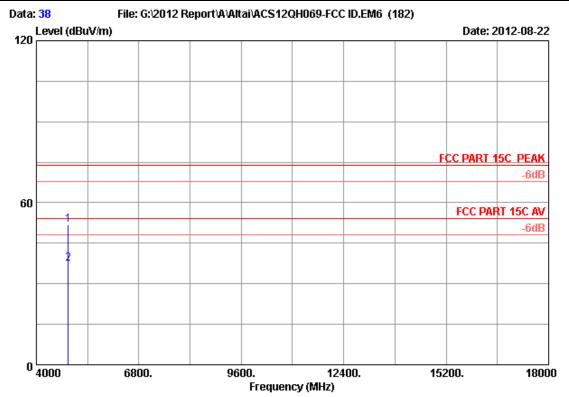
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH6 2437MHz Tx





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH6 2437MHz Tx

M/N : WA8011N

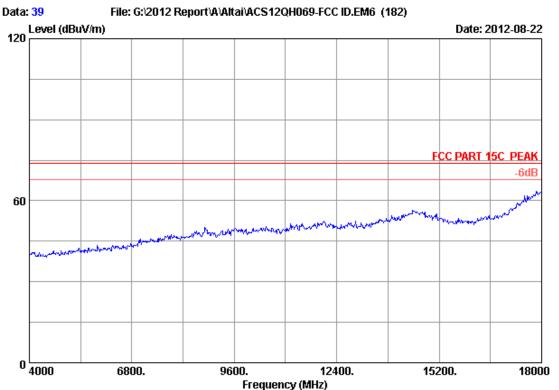
|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4874.000<br>4874.000 | 32.98<br>32.98   | 8.58<br>8.58 | 34.60<br>34.60   | 44.95<br>30.56      | 51.91<br>37.52    | 74.00<br>54.00 | 22.09<br>16.48 | Peak<br>Average |

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

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





Site no. : 3# Chamber Data no. : 39
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

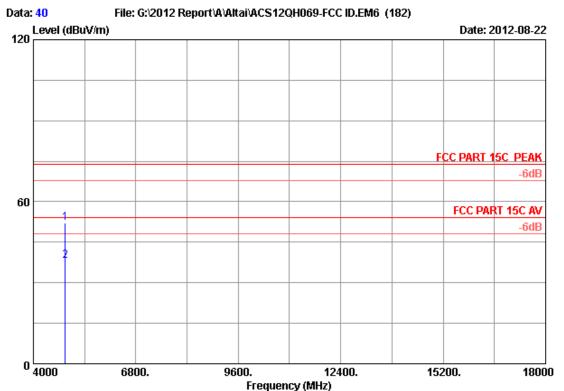
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH6 2437MHz Tx





Site no. : 3# Chamber Data no. : 40
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH6 2437MHz Tx

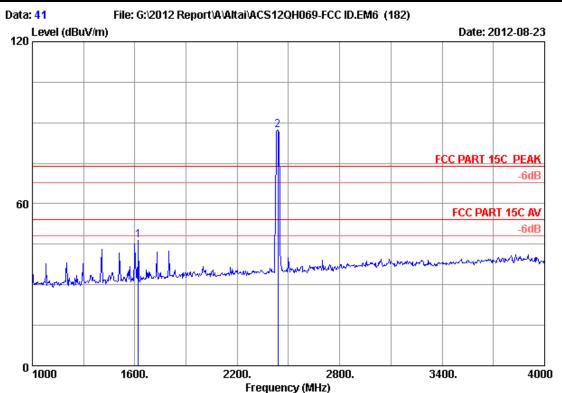
M/N : WA8011N

|     |                | Ant.             | Cable        | AMP              |       | Emission          |                |                |         |
|-----|----------------|------------------|--------------|------------------|-------|-------------------|----------------|----------------|---------|
| No. | Freq.<br>(MHz) | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _     | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark  |
| _   | 4874.000       | 32.98            |              | 34.60            | 45.28 | 52.24             |                | 21.76          |         |
| 2   | 4874.000       | 32.98            | 8.58         | 34.60            | 31.24 | 38.20             | 54.00          | 15.80          | Average |

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





Site no. : 3# Chamber Data no. : 41
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH6 2437MHz Tx

M/N : WA8011N

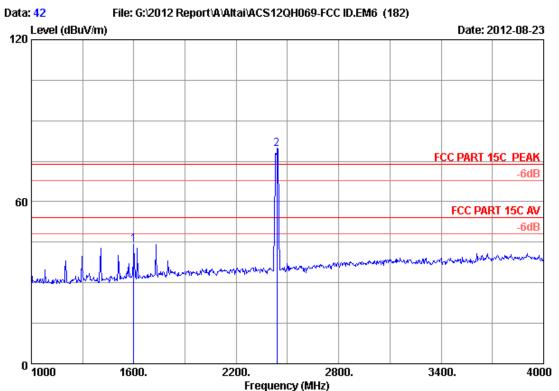
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2437.000 | 25.86<br>28.03   |              | 34.59<br>34.44   | 50.37<br>87.67 | 46.42<br>87.32    | 74.00<br>74.00 | 27.58<br>-13.32 |        |

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

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH6 2437MHz Tx

M/N : WA8011N

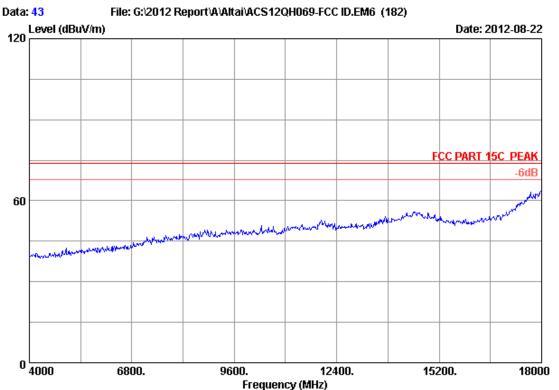
|     |                      | Ant.           | Cable        | AMP              |                | Emission          |                |                |              |
|-----|----------------------|----------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------------|
| No. | Freq.<br>(MHz)       |                | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark       |
| _   | 1600.000<br>2437.000 | 25.72<br>28.03 |              | 34.60<br>34.44   | 48.10<br>79.89 | 43.98<br>79.54    | 74.00<br>74.00 | 30.02<br>-5.54 | Peak<br>Peak |

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

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





Site no. : 3# Chamber Data no. : 43

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

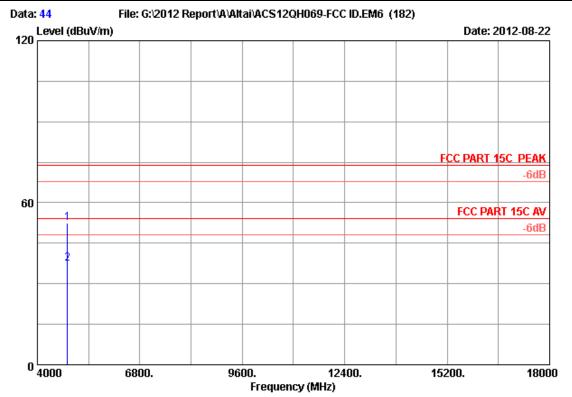
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH1 2412MHz Tx





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH1 2412MHz Tx

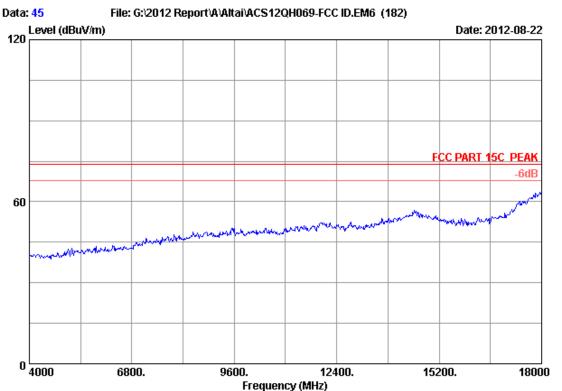
M/N : WA8011N

|    |        |               | Ant.             | Cable        | AMP              |                     | Emission          |                |                |         |
|----|--------|---------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|---------|
| No | _      | req.<br>(MHz) | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark  |
| 1  | . 4824 | 1.000         | 32.89            | 8.53         | 34.60            | 45.66               | 52.48             | 74.00          | 21.52          | Peak    |
| 2  | 4824   | 1.000         | 32.89            | 8.53         | 34.60            | 30.78               | 37.60             | 54.00          | 16.40          | Average |

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





Site no. : 3# Chamber Data no. : 45

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

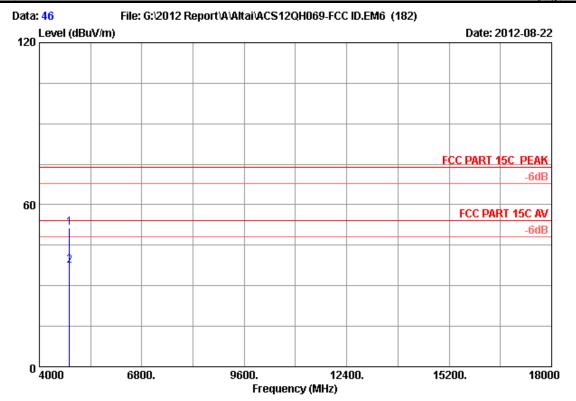
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH1 2412MHz Tx





Site no. : 3# Chamber Data no. : 46

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH1 2412MHz Tx

M/N : WA8011N

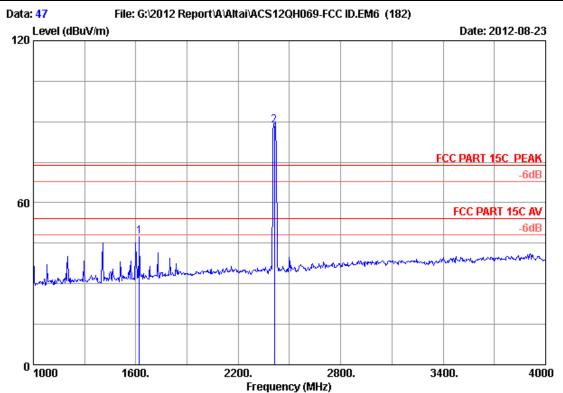
|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4824.000<br>4824.000 | 32.89<br>32.89   | 8.53<br>8.53 | 34.60<br>34.60   | 44.57<br>30.52      | 51.39<br>37.34    | 74.00<br>54.00 | 22.61<br>16.66 | Peak<br>Average |

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

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





Site no. : 3# Chamber Data no. : 47
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH1 2412MHz Tx

M/N : WA8011N

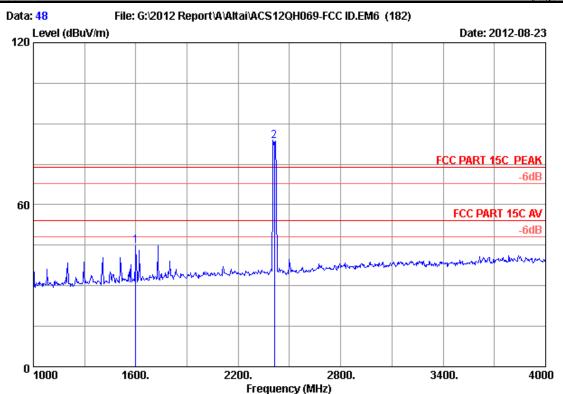
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2412.000 | 25.86<br>27.98   |              | 34.59<br>34.44   | 51.32<br>89.12 | 47.37<br>88.69    | 74.00<br>74.00 | 26.63<br>-14.69 |        |

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

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11g CH1 2412MHz Tx

M/N : WA8011N

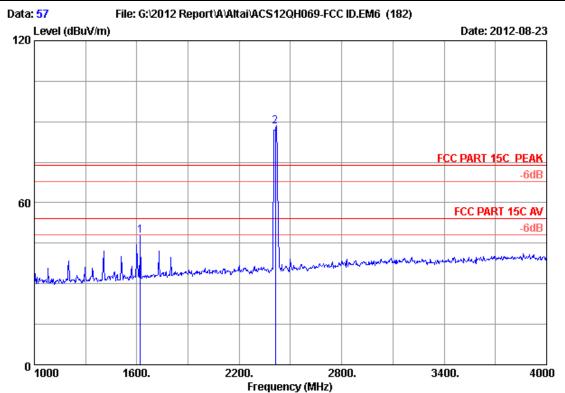
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                    |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|--------------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) | Margin<br>(dB)     | Remark |
| _   | 1600.000<br>2412.000 | 25.72<br>27.98   |              | 34.60<br>34.44   | 49.05<br>83.88 | 44.93<br>83.45    | <br>29.07<br>-9.45 |        |

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

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





Site no. : 3# Chamber Data no. : 57

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH1 2412MHz Tx

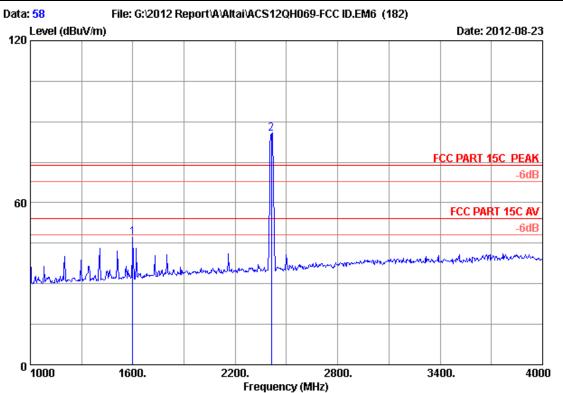
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2412.000 |                  | 4.78<br>6.03 | 34.59<br>34.44   | 51.69<br>88.64      | 47.74<br>88.21    | 74.00<br>74.00 | 26.26<br>-14.21 |        |

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





Site no. : 3# Chamber Data no. : 58
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH1 2412MHz Tx

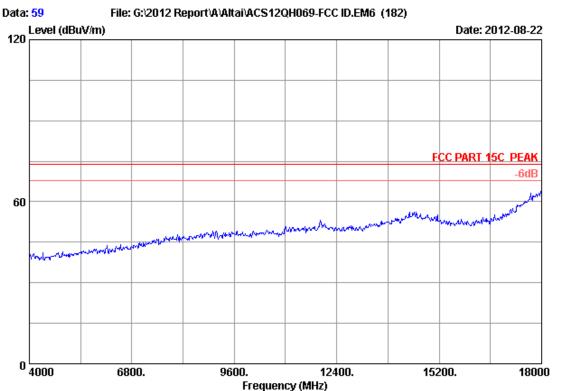
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |   | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|---|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) |              | factor<br>(dBuV) | _ | Level<br>(dBuV/m) |                | Margin<br>(dB)  | Remark |
| _   | 1600.000<br>2412.000 | 25.72<br>27.98   | 4.76<br>6.03 | 34.60<br>34.44   |   | 47.22<br>85.52    | 74.00<br>74.00 | 26.78<br>-11.52 |        |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

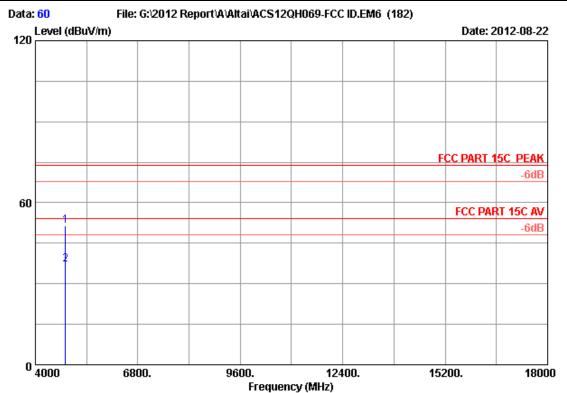
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH1 2412MHz Tx





Site no. : 3# Chamber Data no. : 60

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH1 2412MHz Tx

M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4824.000<br>4824.000 | 32.89<br>32.89   | 8.53<br>8.53 | 34.60<br>34.60   | 44.73<br>30.41      | 51.55<br>37.23    |                | 22.45<br>16.77 | Peak<br>Average |

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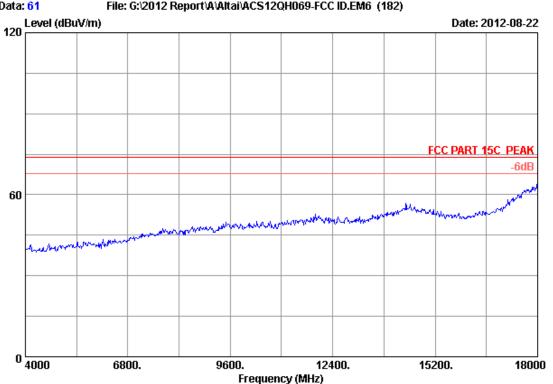
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

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



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 Data: 61
 File: G:\2012 Report\A\Alta\Alta\ACS12QH069-FCC ID.EM6 (182)



Site no. : 3# Chamber Data no. : 61
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

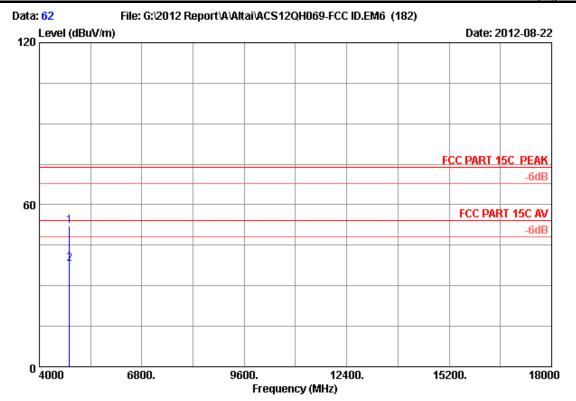
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH1 2412MHz Tx





Site no. : 3# Chamber Data no. : 62

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH1 2412MHz Tx

M/N : WA8011N

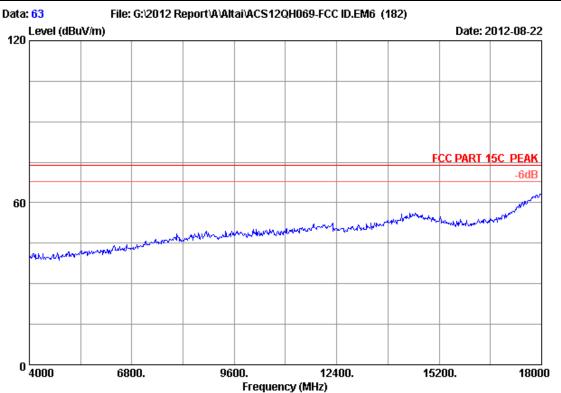
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) |                | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4824.000<br>4824.000 | 32.89<br>32.89   | 8.53<br>8.53 | 34.60<br>34.60   | 45.33<br>31.12 | 52.15<br>37.94    | 74.00<br>54.00 | 21.85<br>16.06 | Peak<br>Average |

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

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





Site no. : 3# Chamber Data no. : 63

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

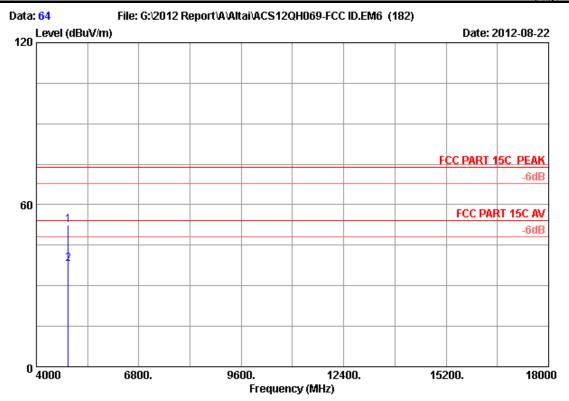
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH6 2437MHz Tx





Site no. : 3# Chamber Data no. : 64

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH6 2437MHz Tx

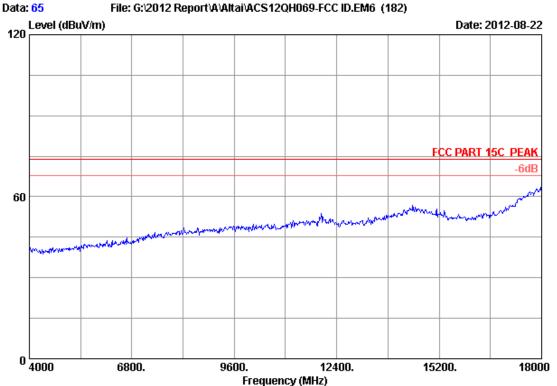
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4874.000<br>4874.000 | 32.98<br>32.98   |              | 34.60<br>34.60   | 45.48<br>31.09      | 52.44<br>38.05    |                | 21.56<br>15.95 | Peak<br>Average |
| -   | 4074.000             | 34.50            | 0.50         | 34.00            | 31.05               | 30.03             | 34.00          | 10.50          | Average         |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

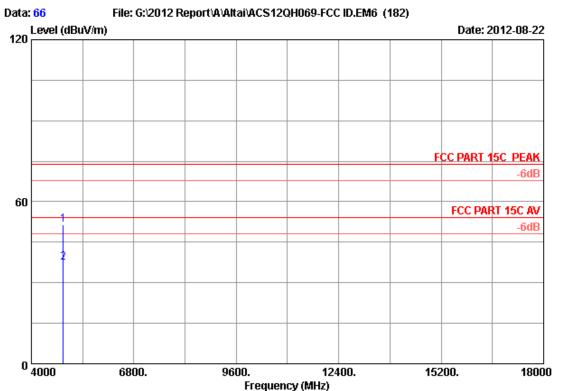
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH6 2437MHz Tx





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH6 2437MHz Tx

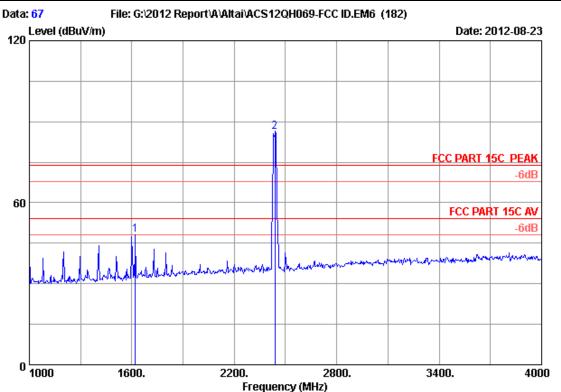
M/N : WA8011N

|         |                | Ant.             | Cable        | AMP              |                     | Emission          |                |                |         |
|---------|----------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|---------|
| <br>No. | Freq.<br>(MHz) | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark  |
| 1       | 4874.000       | 32.98            | 8.58         | 34.60            | 44.68               | 51.64             | 74.00          | 22.36          | Peak    |
| 2       | 4874.000       | 32.98            | 8.58         | 34.60            | 30.47               | 37.43             | 54.00          | 16.57          | Average |

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





Site no. : 3# Chamber Data no. : 67
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH6 2437MHz Tx

M/N : WA8011N

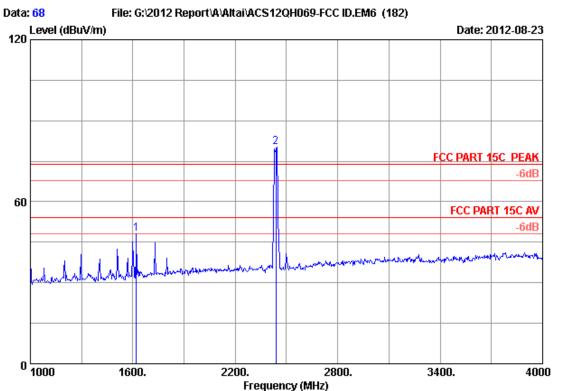
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2437.000 | 25.86<br>28.03   |              | 34.59<br>34.44   | 52.07<br>86.67 | 48.12<br>86.32    | 74.00<br>74.00 | 25.88<br>-12.32 |        |

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

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH6 2437MHz Tx

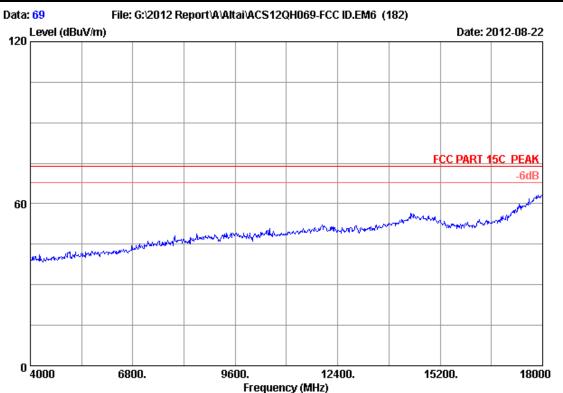
M/N : WA8011N

| No. | Freq.<br>(MHz)       | Ant.<br>Factor<br>(dB/m) | AMP<br>factor<br>(dBuV) | _              | Emission<br>Level<br>(dBuV/m) | Limits         | Margin<br>(dB) | Remark |
|-----|----------------------|--------------------------|-------------------------|----------------|-------------------------------|----------------|----------------|--------|
| _   | 1621.000<br>2437.000 | 25.86<br>28.03           | <br>34.59<br>34.44      | 52.19<br>80.73 | 48.24<br>80.38                | 74.00<br>74.00 | 25.76<br>-6.38 |        |

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





Site no. : 3# Chamber Data no. : 69

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

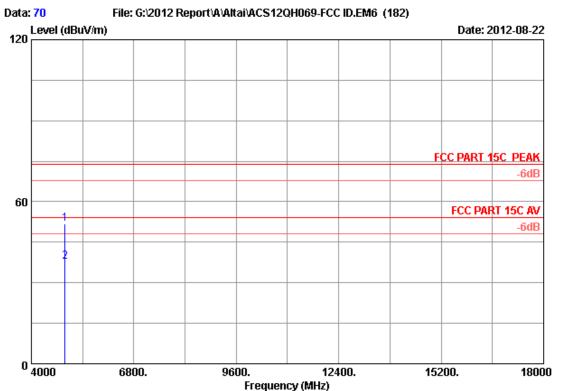
Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT20 CH11 2462MHz Tx





Site no. : 3# Chamber Data no. : 70

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH11 2462MHz Tx

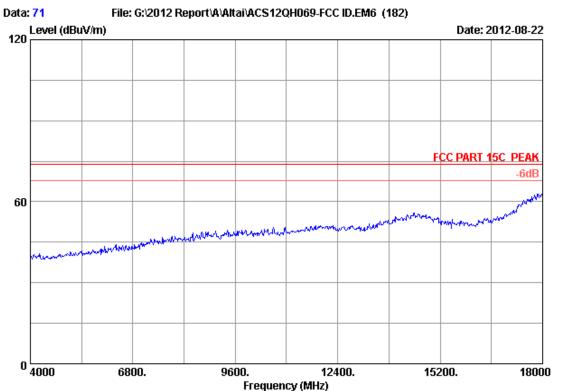
M/N : WASO11N

| No. | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | AMP<br>factor<br>(dBuV) | Reading<br>(dBuV/m) | Emission<br>Level<br>(dBuV/m) |       | Margin<br>(dB) | Remark  |
|-----|----------------|--------------------------|-----------------------|-------------------------|---------------------|-------------------------------|-------|----------------|---------|
| 1   | 4924.000       | 33.08                    | 8.62                  | 34.60                   | 44.81               | 51.91                         | 74.00 | 22.09          | Peak    |
| 2   | 4924.000       | 33.08                    | 8.62                  | 34.60                   | 30.55               | 37.65                         | 54.00 | 16.35          | Average |

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





Site no. : 3# Chamber Data no. : 71
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

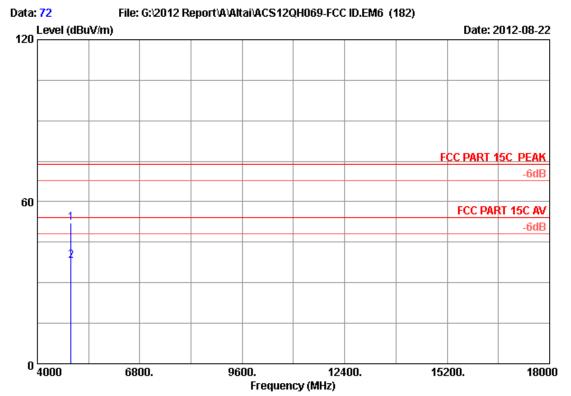
Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH11 2462MHz Tx





Site no. : 3# Chamber Data no. : 72

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH11 2462MHz Tx

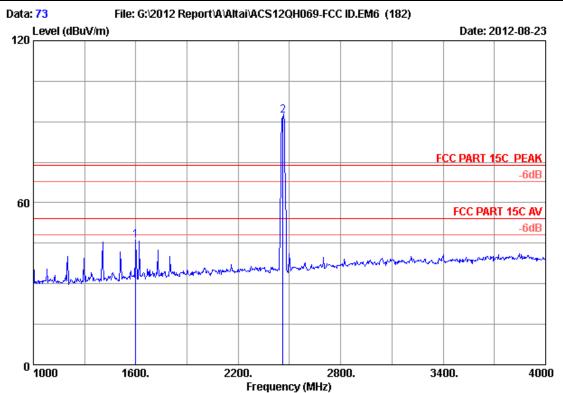
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4924.000<br>4924.000 | 33.08<br>33.08   | 8.62<br>8.62 | 34.60<br>34.60   | 45.13<br>30.98      | 52.23<br>38.08    |                | 21.77<br>15.92 | Peak<br>Average |

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





Site no. : 3# Chamber Data no. : 73

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH11 2462MHz Tx

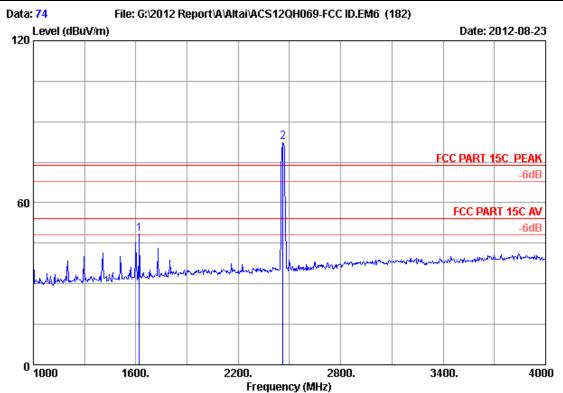
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB)  | Remark |
| _   | 1600.000<br>2462.000 | 25.72<br>28.05   |              | 34.60<br>34.44   | 50.20<br>92.46 | 46.08<br>92.19    | 74.00<br>74.00 | 27.92<br>-18.19 |        |

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





Site no. : 3# Chamber Data no. : 74

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT20 CH11 2462MHz Tx

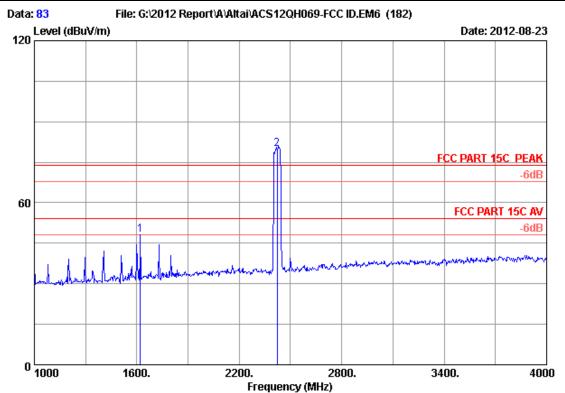
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark |
| _   | 1621.000<br>2462.000 | 25.86<br>28.05   | 4.78<br>6.12 | 34.59<br>34.44   | 52.40<br>82.78 | 48.45<br>82.51    | 74.00<br>74.00 | 25.55<br>-8.51 |        |

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





Site no. : 3# Chamber Data no. : 83

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT40 CH1 2422MHz Tx

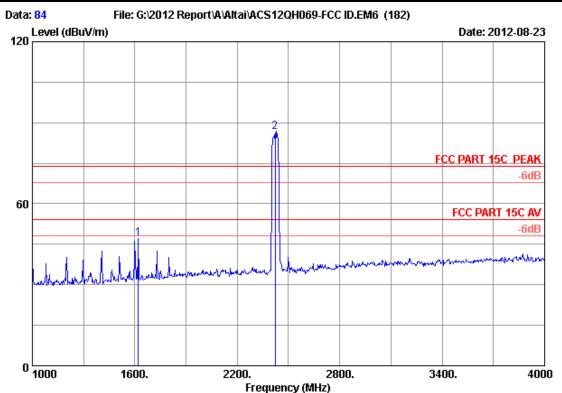
M/N : WA8011N

|     |                | Ant.             | Cable        | AMP              |       | Emission          |       |                |        |
|-----|----------------|------------------|--------------|------------------|-------|-------------------|-------|----------------|--------|
| No. | Freq.<br>(MHz) | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _     | Level<br>(dBuV/m) |       | Margin<br>(dB) | Remark |
| 1   | 1621.000       | 25.86            | 4.78         | 34.59            | 52.09 | 48.14             | 74.00 | 25.86          | Peak   |
| 2   | 2422.000       | 28.00            | 6.06         | 34.44            | 80.15 | 79.77             | 74.00 | -5.77          | Peak   |

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





Site no. : 3# Chamber Data no. : 84
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2422.000 | 25.86<br>28.00   |              | 34.59<br>34.44   | 51.16<br>86.81 | 47.21<br>86.43    | 74.00<br>74.00 | 26.79<br>-12.43 |        |

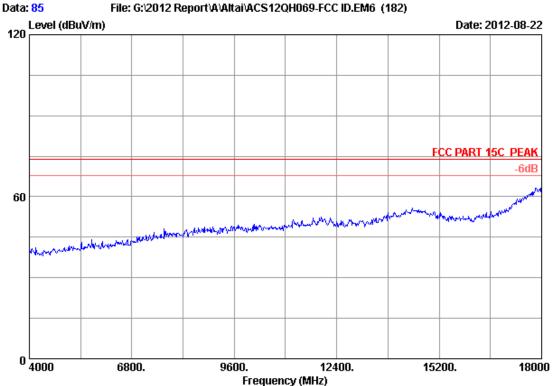
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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

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







Site no. : 3# Chamber Data no. : 85
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

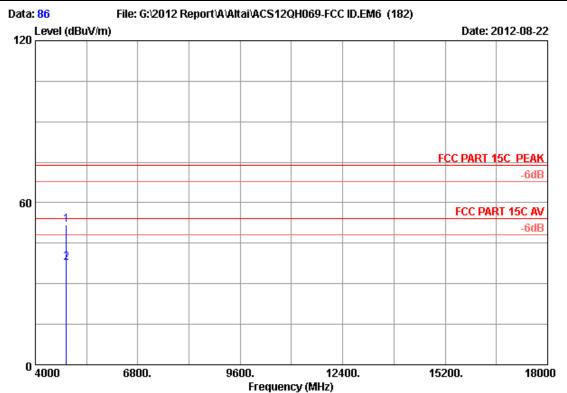
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 86
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : WA8011N

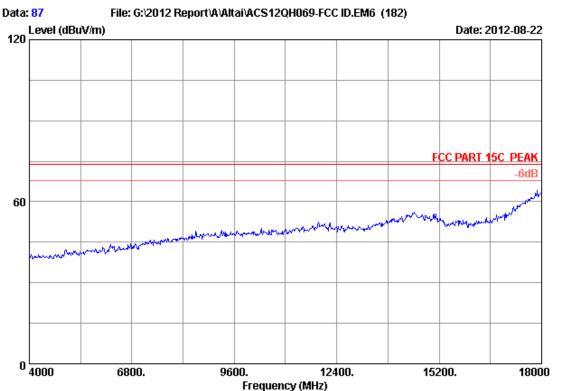
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) |                | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4844.000<br>4844.000 | 32.92<br>32.92   | 8.55<br>8.55 | 34.60<br>34.60   | 44.83<br>30.75 | 51.70<br>37.62    | 74.00<br>54.00 | 22.30<br>16.38 | Peak<br>Average |

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

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





Site no. : 3# Chamber Data no. : 87

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

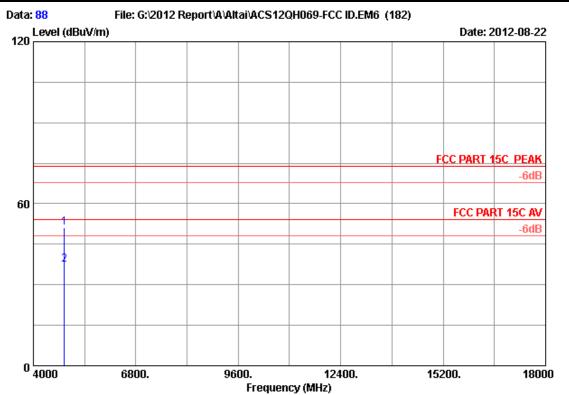
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH1 2422MHz Tx

M/N : WA8011N





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH1 2422MHz Tx

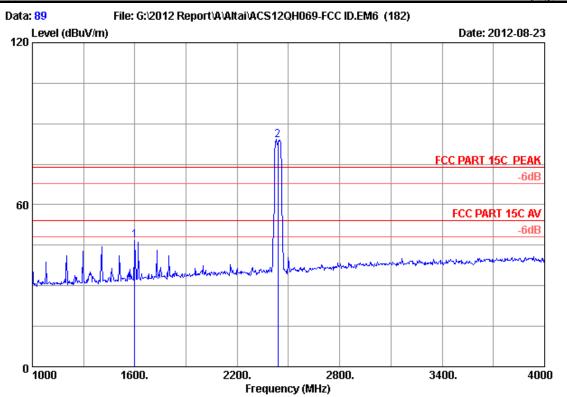
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4844.000<br>4844.000 | 32.92<br>32.92   | 8.55<br>8.55 | 34.60<br>34.60   | 44.38<br>30.51      | 51.25<br>37.38    | 74.00<br>54.00 | 22.75<br>16.62 | Peak<br>Average |

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





Site no. : 3# Chamber Data no. : 89
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT40 CH4 2437MHz Tx

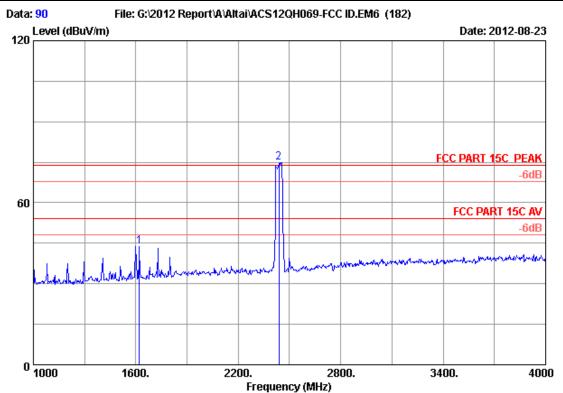
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |              |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) |                | Margin<br>(dB) | Remark       |
| _   | 1600.000<br>2437.000 | 25.72<br>28.03   |              | 34.60<br>34.44   | 50.81<br>84.25 | 46.69<br>83.90    | 74.00<br>74.00 | 27.31<br>-9.90 | Peak<br>Peak |

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





Site no. : 3# Chamber Data no. : 90

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating: DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : WA8011N

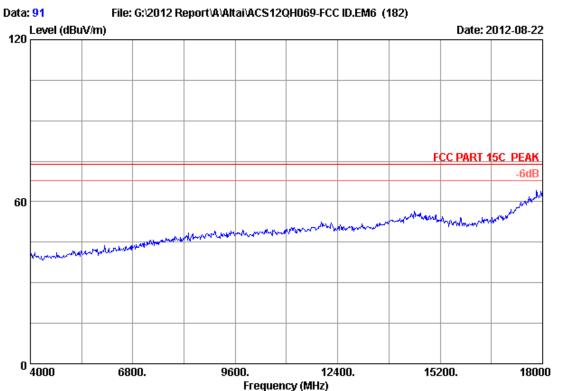
| No. | Frea.                | Ant.<br>Factor | Cable<br>Loss | AMP<br>factor  | Reading        | Emission<br>Level |                | Margin         | Remark |
|-----|----------------------|----------------|---------------|----------------|----------------|-------------------|----------------|----------------|--------|
|     | (MHz)                | (dB/m)         |               | (dBuV)         | _              | (dBuV/m)          |                | (dB)           |        |
| _   | 1621.000<br>2437.000 | 25.86<br>28.03 |               | 34.59<br>34.44 | 47.76<br>75.38 | 43.81<br>75.03    | 74.00<br>74.00 | 30.19<br>-1.03 |        |

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

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





Site no. : 3# Chamber Data no. : 91

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

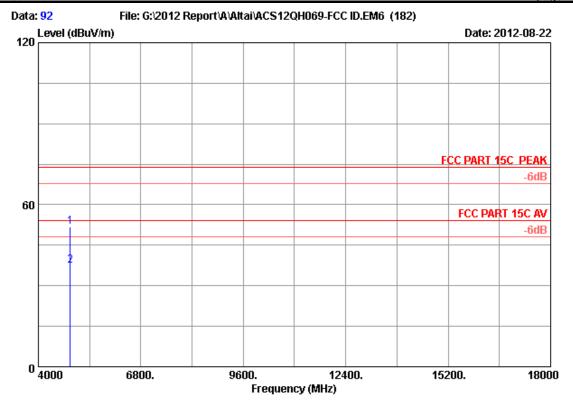
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 92

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH4 2437MHz Tx

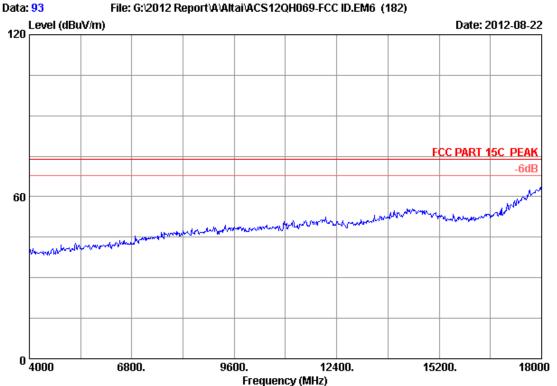
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4874.000<br>4874.000 | 32.98<br>32.98   | 8.58<br>8.58 | 34.60<br>34.60   | 44.78<br>30.59      | 51.74<br>37.55    |                | 22.26<br>16.45 | Peak<br>Average |

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





Site no. : 3# Chamber Data no. : 93
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

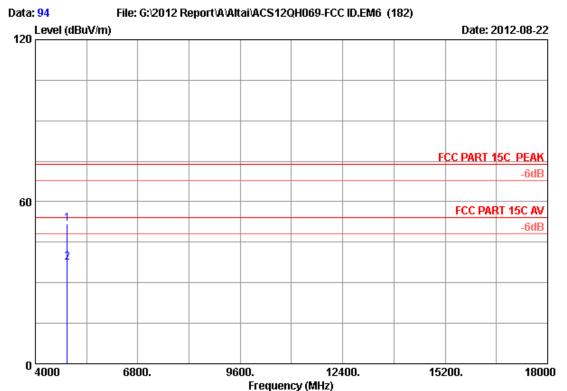
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH4 2437MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 94
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH4 2437MHz Tx

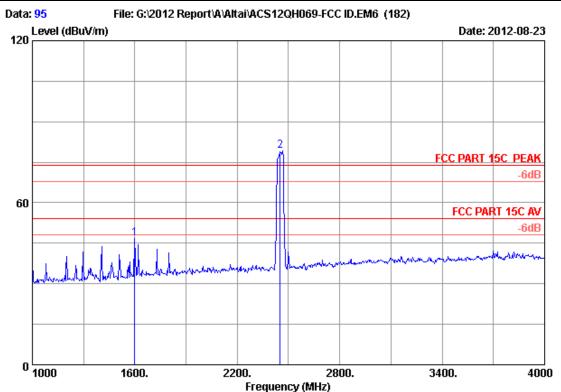
M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4874.000<br>4874.000 | 32.98<br>32.98   | 8.58<br>8.58 | 34.60<br>34.60   | 44.69<br>30.51      | 51.65<br>37.47    | 74.00<br>54.00 | 22.35<br>16.53 | Peak<br>Average |

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





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : WA8011N

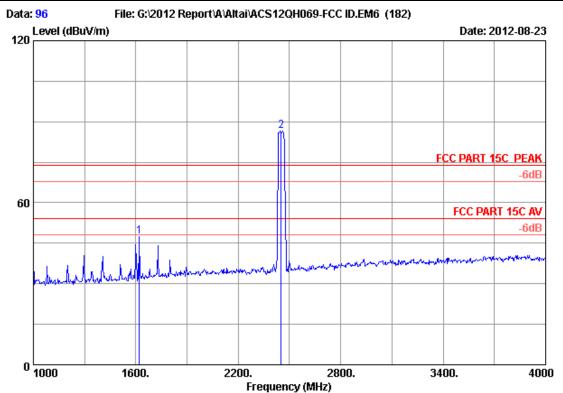
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark |
| _   | 1600.000<br>2452.000 | 25.72<br>28.03   | 4.76<br>6.09 | 34.60<br>34.44   | 51.00<br>79.58 | 46.88<br>79.26    |                | 27.12<br>-5.26 |        |

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

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





Site no. : 3# Chamber Data no. : 96
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz Test Mode : IEEE802.11nHT40 CH7 2452MHz Tx

W/M . WAGGIIM

M/N : WA8011N

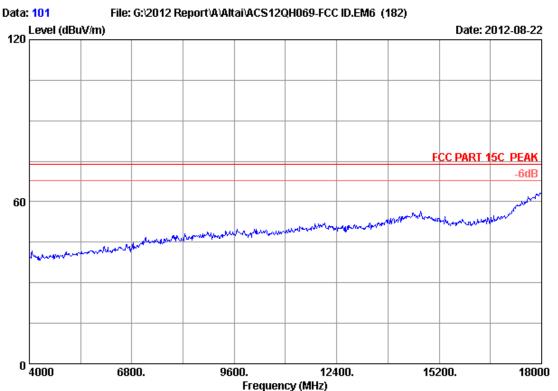
|     |                      | Ant.             | Cable        | AMP              |                | Emission          |                |                 |        |
|-----|----------------------|------------------|--------------|------------------|----------------|-------------------|----------------|-----------------|--------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | _              | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB)  | Remark |
| _   | 1621.000<br>2452.000 | 25.86<br>28.03   | 4.78<br>6.09 | 34.59<br>34.44   | 51.34<br>86.87 | 47.39<br>86.55    | 74.00<br>74.00 | 26.61<br>-12.55 |        |

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

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





Site no. : 3# Chamber Data no. : 101
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

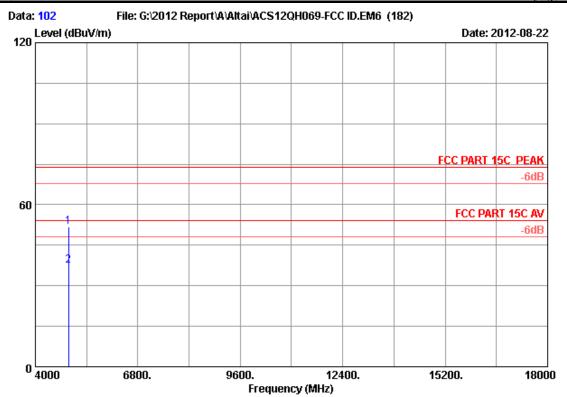
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : WA8011N





Site no. : 3# Chamber Data no. : 102
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : WA8011N

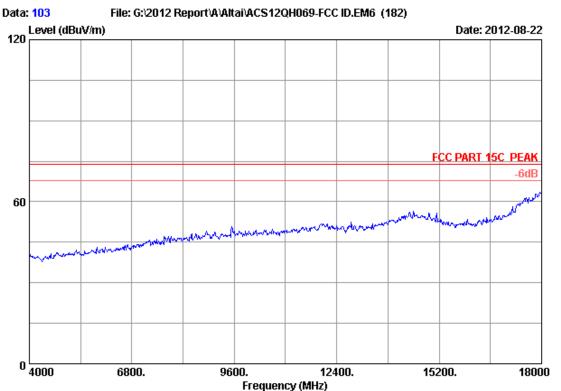
|     |                      | Ant.             | Cable        | AMP              |                     | Emission          |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4904.000<br>4904.000 | 33.04<br>33.04   | 8.61<br>8.61 | 34.60<br>34.60   | 44.73<br>30.37      | 51.78<br>37.42    | 74.00<br>54.00 | 22.22<br>16.58 | Peak<br>Average |

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

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





Site no. : 3# Chamber Data no. : 103

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

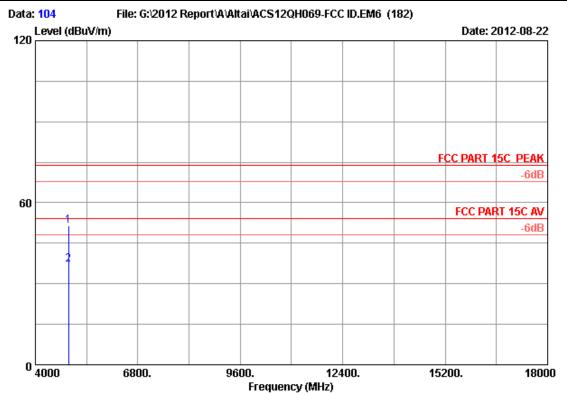
EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : WA8011N





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

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11nHT40 CH7 2452MHz Tx

M/N : WA8011N

|     |                      | Ant.             | Cable        | AMP              |                     |                   |                |                |                 |
|-----|----------------------|------------------|--------------|------------------|---------------------|-------------------|----------------|----------------|-----------------|
| No. | Freq.<br>(MHz)       | Factor<br>(dB/m) | Loss<br>(dB) | factor<br>(dBuV) | Reading<br>(dBuV/m) | Level<br>(dBuV/m) | Limits<br>(dB) | Margin<br>(dB) | Remark          |
| _   | 4904.000<br>4904.000 | 33.04<br>33.04   | 8.61<br>8.61 | 34.60<br>34.60   | 44.36<br>30.19      | 51.41<br>37.24    | 74.00<br>54.00 | 22.59<br>16.76 | Peak<br>Average |

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



# 5. CONDUCTED SPURIOUS EMISSIONS

# 5.1.Test Equipment

| Item | Equipment              | Manufacturer | Model No.   | Serial No. | Last Cal. | Cal. Interval |
|------|------------------------|--------------|-------------|------------|-----------|---------------|
| 1.   | PXA Signal<br>Analyzer | Agilent      | N9030A      | MY51380221 | Dct.31.12 | 1 Year        |
| 2.   | Attenuator             | Agilent      | 8491B       | MY39262165 | May.08,12 | 1 Year        |
| 3.   | RF Cable               | Hubersuhner  | SUCOFLEX102 | 28618/2    | May.08,12 | 1Year         |

## 5.2.Limit

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

### 5.3.Test Procedure

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

## 5.4. Test result

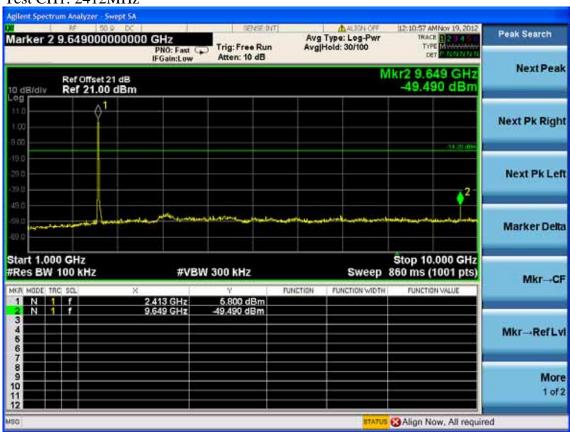
**PASS** (The testing data was attached in the next pages.)



#### ANT 0

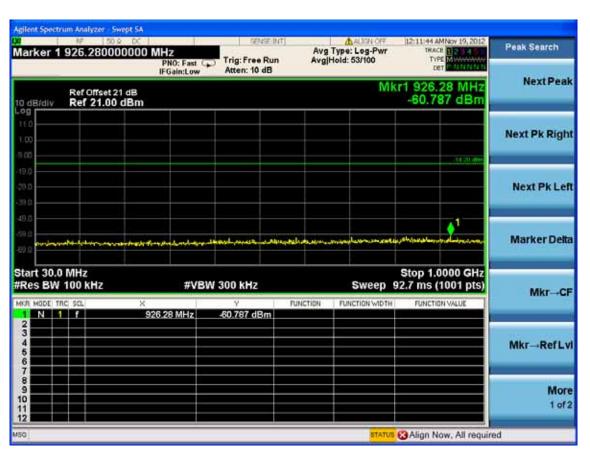
Test Mode: IEEE 802.11b TX

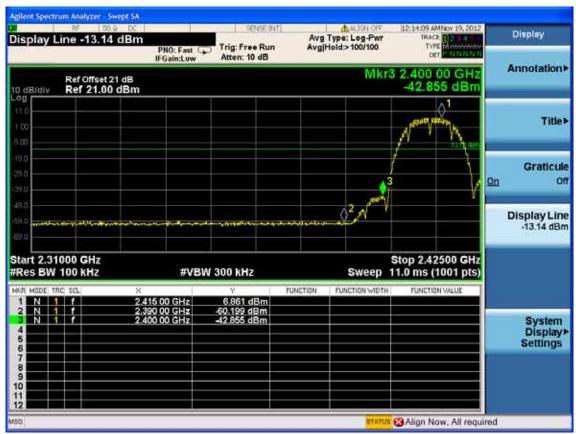
Test CH1: 2412MHz



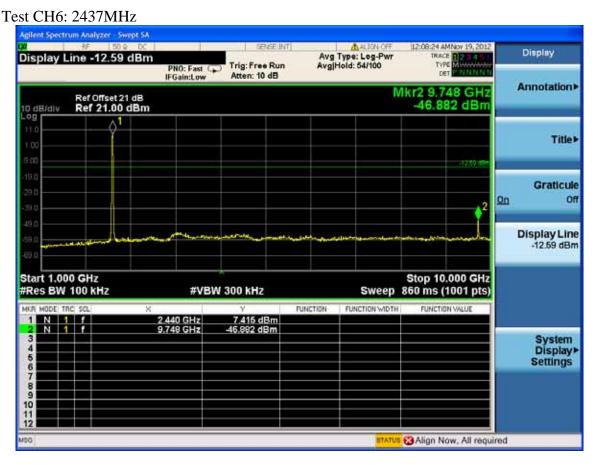






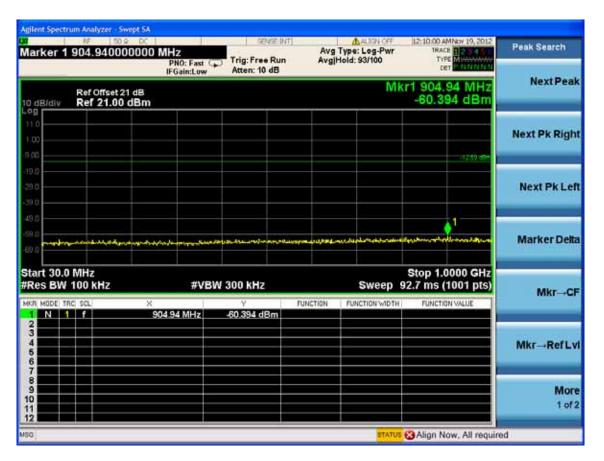












#### Test CH11: 2462MHz

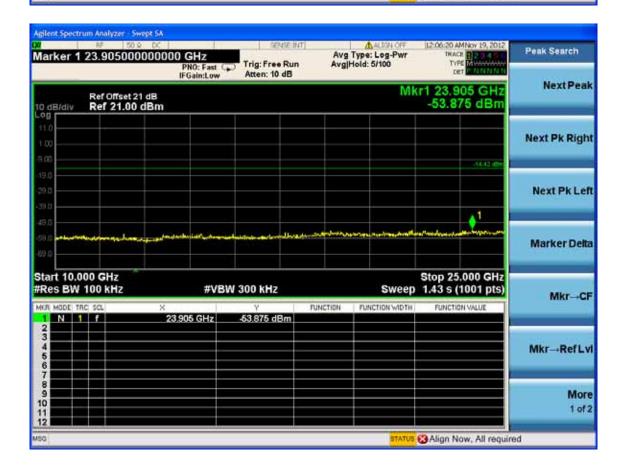


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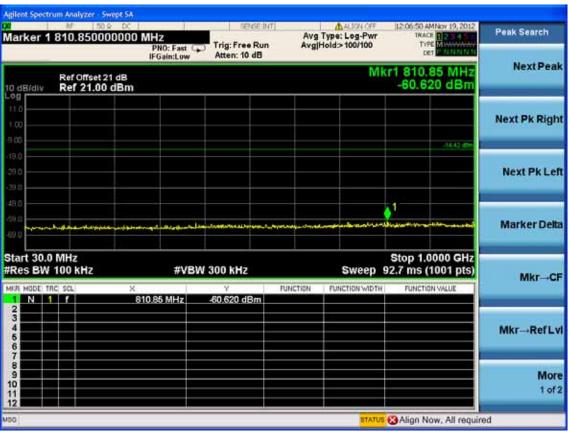


FCC ID:UCC-WA8011N

Agilent Spectrum Analyzer - Swept SA 12:06:00 AMNov 19, 2012 TRACE 17:04 4 500 TYPE 12:04 500 DET 12:06:00 AMNov 19, 2012 Avg Type: Log-Pwr Avg|Hold: 38/100 Display Display Line -14.42 dBm Trig: Free Run Atten: 10 dB Annotation> Mkr1 2.467 GHz 5.581 dBm Ref Offset 21 dB Ref 21.00 dBm 10 dB/div Title> Graticule On Display Line -14.42 dBm Start 1.000 GHz #Res BW 100 kHz Stop 10,000 GHz Sweep 860 ms (1001 pts) **#VBW 300 kHz** FUNCTION FUNCTION WIDTH 2.467 GHz 5.581 dBm System Display> Settings 10 STATUS Align Now, All required

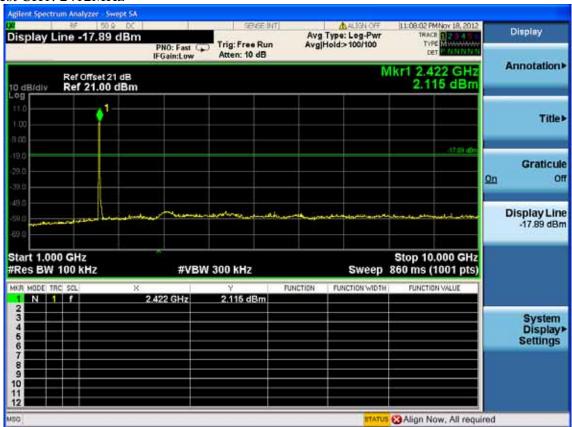






Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

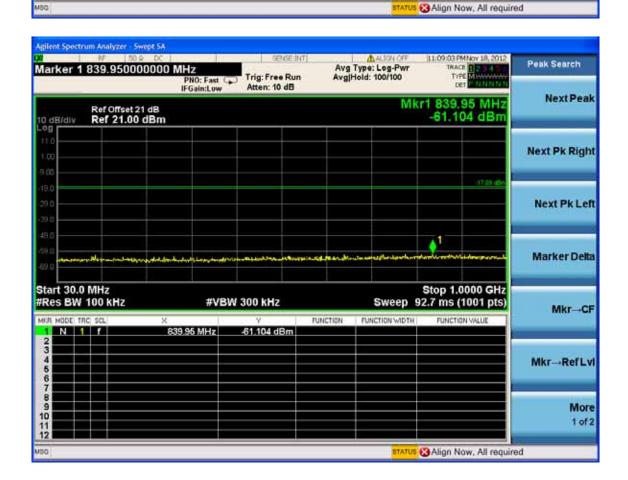


<u>page 5</u>-8



FCC ID:UCC-WA8011N

Agilent Spectrum Analyzer - Swept SA I 1.108:39 PMNov 18, 2012 TRACE 12 14 15 TYPE DET Avg Type: Log-Pwr Avg|Hold: 15/100 Peak Search Marker 1 23.845000000000 GHz Trig: Free Run Atten: 10 dB **NextPeak** Mkr1 23.845 GHz -53.227 dBm Ref Offset 21 dB Ref 21.00 dBm 10 dB/div **Next Pk Right** 17:59 d **Next Pk Left** Marker Delta Start 10.000 GHz #Res BW 100 kHz Stop 25,000 GHz 1.43 s (1001 pts) **#VBW 300 kHz** Sweep Mkr→CF FUNCTION FUNCTION WIDTH 23,845 GHz -53.227 dBm Mkr---Ref Lvl More 10 1 of 2



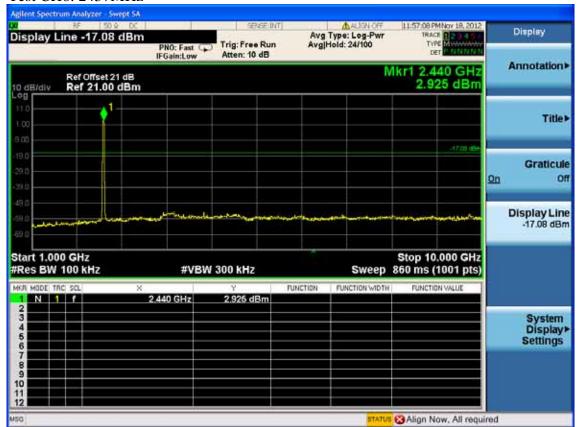


FCC ID: UCC-WA8011N page 5-9

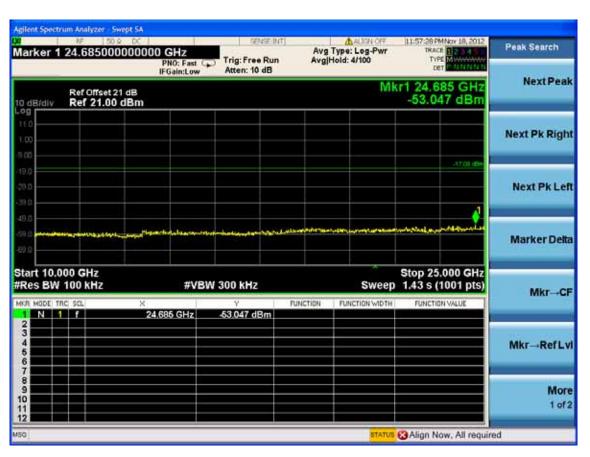
Agilent Spectrum Analyzer - Swept SA

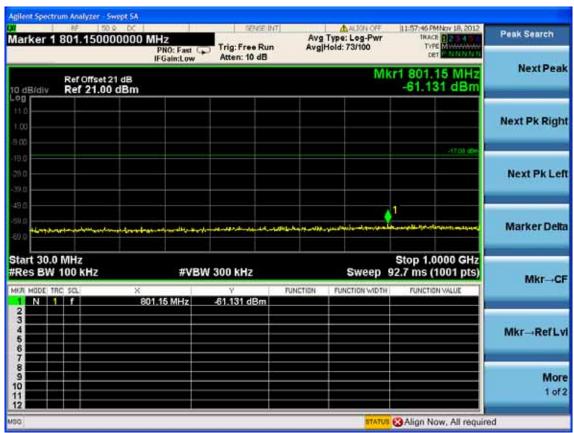


#### Test CH6: 2437MHz







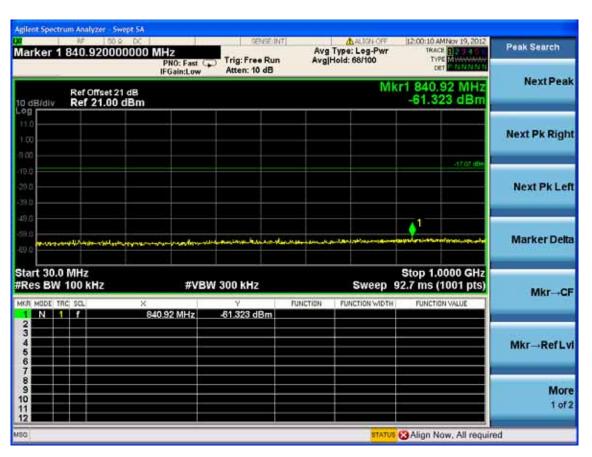




#### Test CH11: 2462MHz ALIGN OFF 11:59:34 PMNov 18, 2012 Display Display Line -17.07 dBm Avg Type: Log-Pwr Avg|Hold: 88/100 Trig: Free Run PNO: Fast F IFGain:Low Atten: 10 dB Annotation> Mkr1 2.458 GHz Ref Offset 21 dB Ref 21.00 dBm 2.930 dBm 10 dB/div Title> Graticule On Off Display Line -17.07 dBm Start 1.000 GHz Stop 10,000 GHz #Res BW 100 kHz **#VBW 300 kHz** Sweep 860 ms (1001 pts) FUNCTION FUNCTION WIDTH 2.458 GHz 2.930 dBm System Display> Settings 10





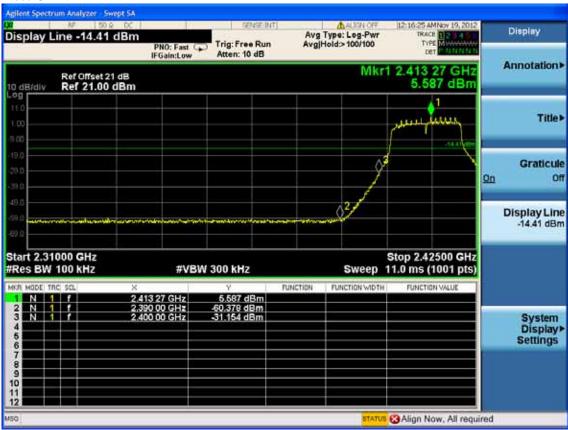


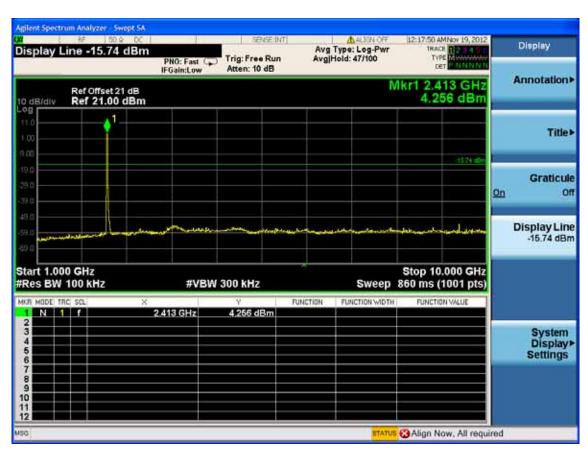




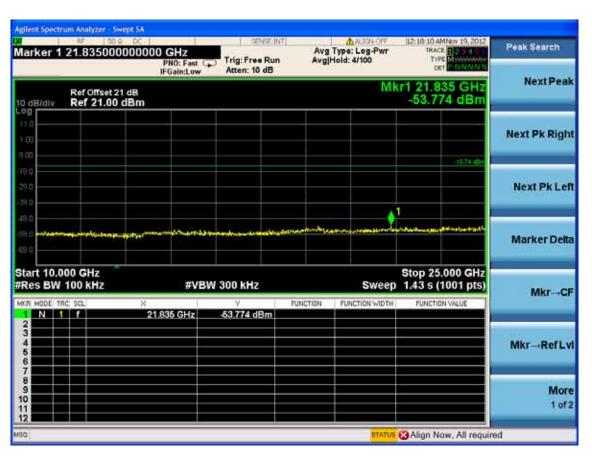
Test Mode: IEEE 802.11n HT20 TX

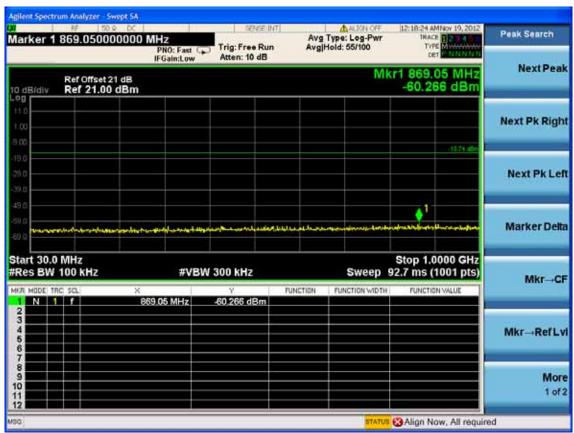
Test CH1: 2412MHz



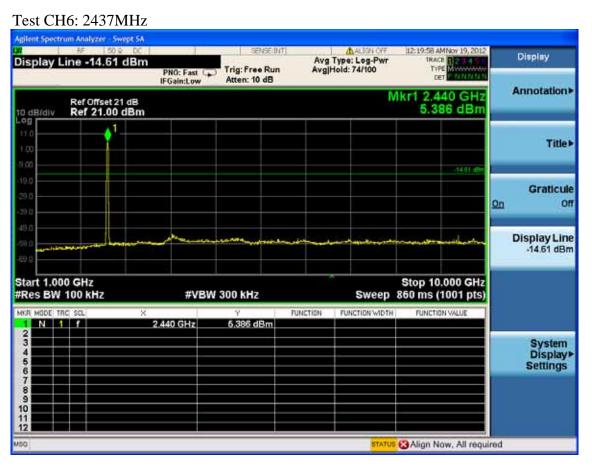






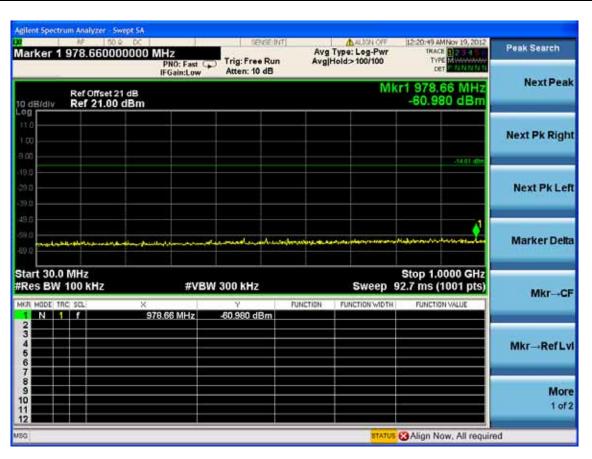




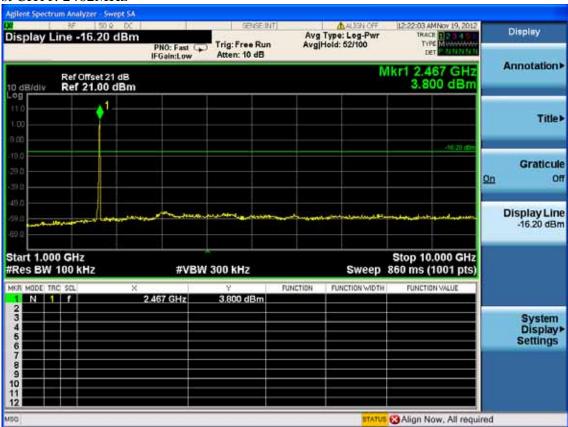




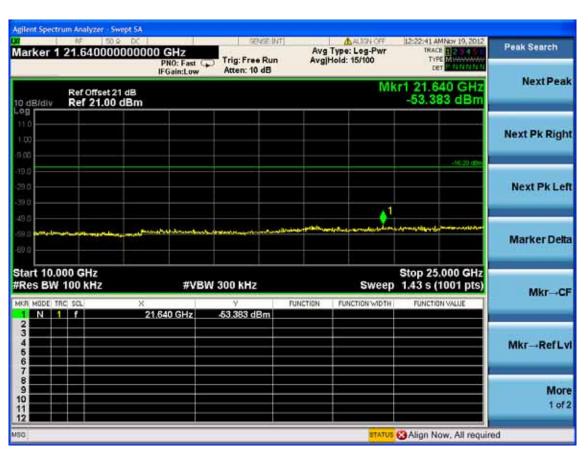


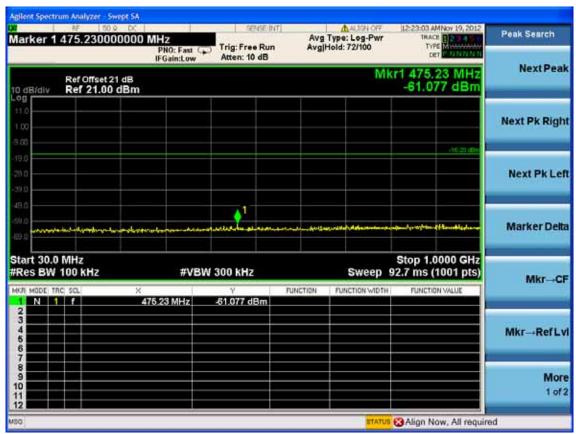


### Test CH11: 2462MHz













Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz





