# APPLICATION FOR CERTIFICATION On Behalf of

### ALTAI TECHNOLOGIES LIMITED

Altai A3 Smart WiFi

Model Number: WA3011N

FCC ID: UCC-WA3011N

Prepared for: ALTAI TECHNOLOGIES LIMITED

2/F, East Wing, Lakeside 2, Hong Kong Science Park,

Shatin, Hong Kong, China.

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

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Report Number : ACS-F09122
Date of Test : Jun.04~15, 2009
Date of Report : Jun.16, 2009

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## TEST REPORT CERTIFICATION

ALTAI TECHNOLOGIES LIMITED

Applicant

:

Manufacturer	:	Transystem Inc.	
EUT Description	:	Altai A3 Smart Wi	Fi
FCC ID	:	UCC-WA3011N	
		<ul><li>(A) Model No.</li><li>(B) Serial No.</li><li>(C) Power Supply</li><li>(D) Test Voltage</li></ul>	: WA3011N : N/A : DC 56V : DC 56V From Adapter Input AC 120V/60Hz
Test Procedure Us	ed:		
FCC Rules and Re	gulatio	ns Part 15 Subpart (	C 2008
to determine the emission levels a conducted emissio. The test results are CO., LTD. is assu	maxim re com ns. e contai med fu hows the	um emission level pared to the FCC ned in this test reposit ll responsibility for at the Equipment U	DIX TECHNOLOGY (SHENZHEN) CO., LTD. s emanating from the device. The maximum Part 15 Subpart C limits both radiated and ort and AUDIX TECHNOLOGY (SHENZHEN) or the accuracy and completeness of these tests. Under Test (EUT) is to be technically compliant
			nly. This report shall not be reproduced in part DLOGY (SHENZHEN) CO., LTD.
Date of Test:			Jun.04~15, 2009
Prepared by :			Edie Huang / Assistant
Reviewer:			
			Jamy Yu / Senior Engineer
	, ,	a.	
Approved & Authorized	orized S	Signer:	Ken Lu / 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			
	FCC Part 15: 15.207				
Power Line Conducted Emission Test	ANSI C63.4: 2003	PASS			
	KDB558074				
	FCC Part 15: 15.209				
Radiated Emission Test	ANSI C63.4: 2003	PASS			
	KDB558074				
	FCC Part 15: 15.247				
Band Edge Compliance Test	ANSI C63.4: 2003	PASS			
	KDB558074				
	FCC Part 15: 15.247				
Conducted spurious emissions test	KDB558074	PASS			
	FCC Part 15: 15.247	DACC			
6dB Bandwidth Test	KDB558074	PASS			
	FCC Part 15: 15.247	DACC			
Output Power Test	KDB558074	PASS			
	FCC Part 15: 15.247	DAGG			
Power Spectral Density Test	KDB558074	PASS			
Antenna requirement	FCC Part 15: 15.203	PASS			

#### 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : Altai A3 Smart WiFi

Model Number : WA3011N

Power supply DC 56V From Adapter Input AC 120V/60Hz by LAN line.

FCC ID : UCC-WA3011N

Radio technology : IEEE802.11b;IEEE802.11g;IEEE802.11n;IEEE802.11a

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

IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20:2412MHz—2462MHz IEEE 802.11n HT20: 5745MHz—5825MHz IEEE 802.11n HT40: 2422MHz—2452MHz

IEEE 802.11n HT40: 5755MHz—5795MHz IEEE 802.11a: 5.745GHz—5.825GHz

Channel Number : IEEE 802.11b/g: 11 Channels

IEEE 802.11n HT20 2.4GHz: 11 Channels IEEE 802.11n HT40 2.4GHz band: 7Channels IEEE 802.11n HT20 5.7GHz band: 5Channels IEEE 802.11n HT40 5.7GHz band: 2Channels IEEE 802.11a 5.7GHz band: 5Channels

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

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

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

Data Rate : IEEE 802.11b: 11/5.5/2/1Mbps.

IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps. IEEE 802.11a: 54/48/36/24/18/12/9/6Mbps

IEEE 802.11n HT20: 130, 117, 104, 78, 65, 58.5, 52, 39, 26,

19.5,13, 6.5 Mbps

IEEE 802.11n HT40: 270, 243, 216, 162, 135, 121.5, 108,

81,54,40.5, 27, 13.5Mbps

PK Output Power : IEEE 802.11b: 26.96dBm

IEEE 802.11g: 27.00dBm

IEEE 802.11n HT20: 26.96dBm IEEE 802.11n HT40: 27.00dBm

IEEE 802.11a: 26.98dBm

Antenna Assembly : Patch antenna, MIMO 3x3

Gain: 6dBi for 2.4GHz

8dBi for 5GHz

Applicant : ALTAI TECHNOLOGIES LIMITED

2/F, East Wing, Lakeside 2, Hong Kong Science Park,

Shatin, Hong Kong, China.

Manufacturer : Transystem Inc.

No. 1-2, Li-Hsin Rd. I, Science-Based Industrial Park,

Hsinchu, Taiwan R.O.C.

Date of Test : Jun.04~15, 2009

Date of Receipt : Jun.03, 2009

Sample Type : Prototype production

### 2.2.Test Information

The test software "art.exe" was used to control EUT work in Continuous TX mode, and select test channel, wireless mode and data rate.

Tested mode, channel,			<u> </u>
Mode	data rate	Channel	Frequency
	(Mpbs)(see Note)		(MHz)
IEEE 802.11b	1	CH1	2412
	1	CH6	2437
	1	CH11	2462
IEEE 802.11g	6	CH1	2412
	6	CH6	2437
	6	CH11	2462
	6.5	CH1	2412
	6.5	CH6	2437
IEEE 802.11n HT20	6.5	CH11	2462
IEEE 802.11II H120	6.5	CH149	5745
	6.5	CH157	5785
	6.5	CH165	5825
	13.5	CH3	2422
	13.5	СН6	2437
IEEE 802.11n HT40	13.5	CH9	2452
	13.5	CH151	5755
	13.5	CH159	5795
	6	CH149	5745
IEEE 802.11a	6	CH157	5785
	6	CH165	5825

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

#### 2.3. Power vs data rate

Mada	Data rate	CH	Measured level	Limit
Mode	(Mbps)	СН	(dBm)	(dBm)
	1	CH6	26.96	30
IEEE 802.11b	5.5	CH6	26.56	30
	11	CH6	25.89	30
	6	CH6	26.97	30
IEEE 802.11g	24	CH6	25.87	30
	54	CH6	26.10	30
	6	CH6	26.46	30
IEEE 802.11a	24	CH6	25.25	30
	54	CH6	25.78	30
	6.5	CH6	26.93	30
	65	CH6	26.12	30
IEEE 802.11n	130	CH6	26.32	30
HT20	6.5	CH 157	26.85	28
	65	CH 157	26.09	28
	130	CH 157	26.75	28
	13.5	CH 6	26.99	30
	135	CH 6	26.32	30
IEEE 802.11n	270	CH 6	26.11	30
HT 40	13.5	CH 151	26.34	28
	135	CH 151	26.10	28
	270	CH 151	25.86	28

Based on technology theory of IEEE 802.11 and actual exploratory test, lower data rate will lead to higher output power, so all the tests were performed with lowest data rate.

### 2.4. Tested Supporting System Details

#### 2.4.1. NOTEBOOK

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

Power Adaptor : Manufacturer: DELL,

M/N: LA65NS1-00

Cable: Unshielded, Detachabled, 4.0m

(Bond one ferrite core)

### 2.5. 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 : Mar.31, 2009 File on Federal

Communication Commission Registration Number: 90454

3m & 10m Anechoic Chamber : Jan. 31, 2007 File on Federal

Communication Commission Registration Number: 794232

EMC Lab. : Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Feb. 02, 2009

Accredited by NVLAP, USA NVLAP Code: 200372-0

Apr. 01, 2009

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

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.88dB	
Uncertainty for Radiation Emission test in 3m chamber	3.86dB	Polarize: V
(30MHz to 1GHz)	4.3dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber	2.78dB	Polarize: H
(1GHz to 25GHz)	2.82dB	Polarize: V
Uncertainty for radio frequency	1×10 <sup>-9</sup>	
Uncertainty for conducted RF Power	0.34dB	
Uncertainty for temperature	0.2℃	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

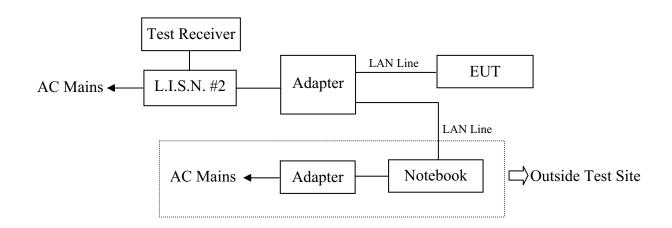
### 3. POWER LINE CONDUCTED EMISSION TEST

### 3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Jan.10, 09	1 Year
2	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	May.08, 09	1 Year
3	Terminator	Hubersuhner	50Ω	No. 1	May.08, 09	1 Year
4	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 09	1Year
5	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 09	1 Year
6	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 09	1 Year

### 3.2.Block Diagram of Test Setup

3.2.1. Block diagram of connection between the EUT and Supporting System



(EUT: Altai A3 Smart WiFi)

### 3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	dB(μV)	dB(μV)		
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. Altai A3 Smart WiFi (EUT)

Model Number : WA3011N

Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.4

### 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. Notebook run test software to control the EUT worked in test mode (Tx Mode) and measured it.

#### 3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via Adapter connected to the power mains through a line impedance stabilization network (L.I.S.N. 2#). 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 C63.4: 2003 on Conducted Emission Test.

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

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

The test result are reported on Section 3.7.,

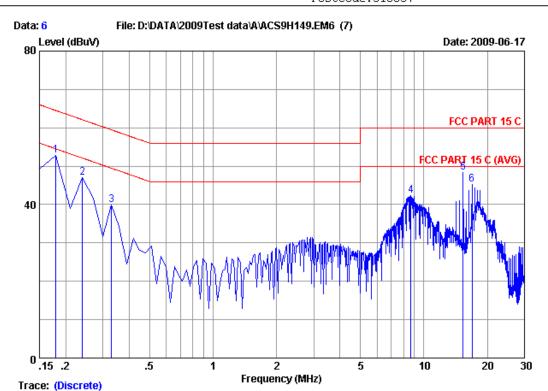
#### 3.7. Power Line Conducted Emission Test Results

PASS.



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:Audix No.1 Conduction :\*\* 2009 KNW407 VA Site no Data no :6

Dis./Ant.

Limit :FCC PART 15 C

Env./Ins. :Temp:23'C Humi:54% Engineer :Sunny-lu

EUT :Altai A3 Smart WiFi M/N:WA3011N

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

:Tx Mode Test Mode

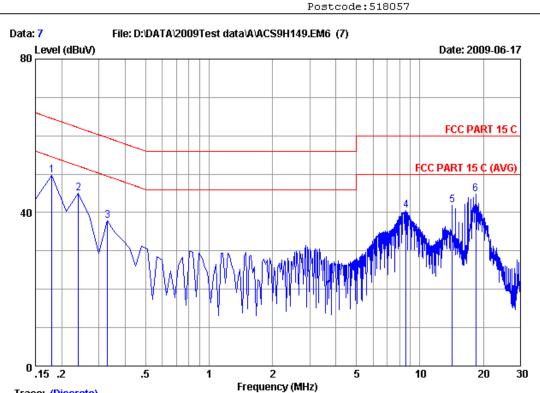
No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17985	0.43	9.88	42.49	52.80	64.49	11.69	QP
2	0.23955	0.41	9.88	36.70	46.99	62.11	15.12	QP
3	0.32910	0.37	9.89	29.73	39.99	59.47	19.48	QP
4	8.687	0.42	9.94	31.90	42.26	60.00	17.74	QP
5	15.374	0.49	9.97	37.82	48.28	60.00	11.72	QP
6	16.896	0.52	9.98	34.73	45.23	60.00	14.77	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading 2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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Trace: (Discrete)

:Audix No.1 Conduction :\*\* 2009 KNW407 VB Data no :7

Site no Dis./Ant.

Limit :FCC PART 15 C

Env./Ins. :Temp:23'C Humi:54%

Engineer :Sunny-lu

EUT :Altai A3 Smart WiFi M/N:WA3011N

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

Test Mode :Tx Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17985	0.45	9.88	39.47	49.80	64.49	14.69	QP
2	0.23955	0.43	9.88	34.70	45.01	62.11	17.10	QP
3	0.32910	0.38	9.89	27.65	37.92	59.47	21.55	QP
4	8.598	0.43	9.94	30.10	40.47	60.00	19.53	QP
5	14.239	0.48	9.97	31.52	41.97	60.00	18.03	QP
6	18.448	0.55	10.00	34.13	44.68	60.00	15.32	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading 2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

### 4. RADIATED EMISSION TEST

## 4.1.Test Equipment

Frequency rang: 30~1000MHz

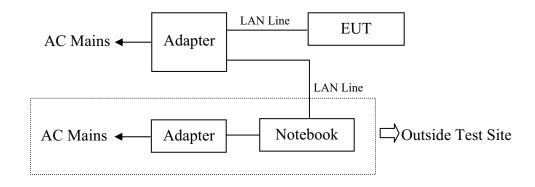
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.05,08	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 09	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 09	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 09	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Nov.10, 08	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 09	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 09	1 Year

Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 09	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May.27, 08	1.5 Year
3	Amplifier	Agilent	8449B	3008A02495	Nov.24,08	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 09	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	271471/4	May.08, 09	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	29086/2	May.08, 09	1 Year

## 4.2.Block Diagram of Test Setup

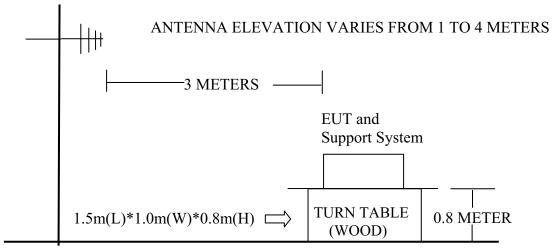
### 4.2.1. Block diagram of connection between the EUT and Supporting System



(EUT: Altai A3 Smart WiFi)

#### 4.2.2. In Anechoic Chamber

#### ANTENNA TOWER



**GROUND PLANE** 

#### 4.3. Radiated Emission Limit

#### 4.3.1. 15.209 limits

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

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

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

4.3.2.	15.205	Restricted	bands	of operation

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

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

### 4.4.EUT Configuration on Test

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

4.4.1. Altai A3 Smart WiFi (EUT)

Model Number : WA3011N Serial Number : N/A

4.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.4

### 4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT and simulator as shown as Section 4.2.
- 4.5.2. Turned on the power of all equipment.
- 4.5.3. Notebook run test software to control the EUT worked in test mode (Tx Mode) and measured it.

#### 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 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

For 2.4GHz band, the frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked, and for 5.7GHz band, the frequency range from 30MHz to 40GHz are checked, and no any emission were found from 18GHz to 40GHz, and the radiated emission from 18GHz to 40GHz were not record.

#### 4.7. Radiated Emission Test Results

#### PASS.

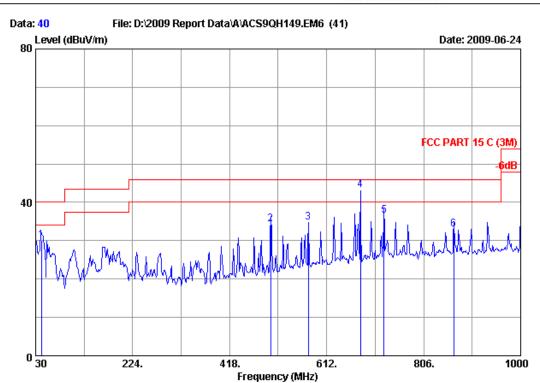
All the emissions from 30MHz to 40 GHz were comply with 15.209 limits.

#### Frequency: 30MHz~1GHz



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Tel:+86-755-26639495 Fax:+86-755-26632877 Postcode:518057



Site no. : 3m Chamber Data no. : 40 Dis. / Ant. : 3m CBL6111C Ant. pol. : VERTICAL

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

: Altai A3 Smart WiFi M/N:WA3011N Power Rating : DC 56V From adapter input AC 120V/60Hz

Test Mode : Tx Mode

	_	Ant.	Cable		Emission			
	Freq.	Factor	Loss	Reading		Limits		Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
-								
1	41.640	13.33	0.60	16.05	29.98	40.00	10.02	QP
2	500.450	18.04	2.25	14.06	34.35	46.00	11.65	QP
3	575.140	19.37	2.43	13.07	34.87	46.00	11.13	QP
4	680.000	20.41	2.74	20.10	43.25	46.00	2.75	QP
5	726.460	21.03	2.87	12.74	36.64	46.00	9.36	QP
6	866.140	22.56	3.14	7.18	32.88	46.00	13.12	QP

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

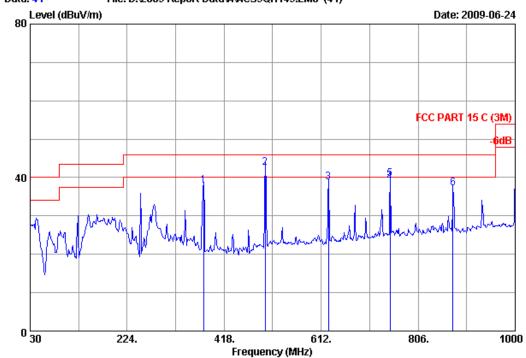
2. The emission levels that are 20dB below the official limit are not reported.



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Postcode:518057





Site no. : 3m Chamber

Data no. : 41 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m CBL6111C

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary

: Altai A3 Smart WiFi M/N:WA3011N Power Rating: DC 56V From adapter input AC 120V/60Hz

: Tx Mode Test Mode

1 377.260 15.57 1.88 47.44 37.86 46.00 8.14 QP 2 500.000 18.04 2.25 22.20 42.49 46.00 3.51 QP 3 626.550 19.92 2.57 43.31 38.71 46.00 7.29 QP 4 749.740 21.53 2.92 41.30 38.69 46.00 7.31 QP 5 749.740 21.53 2.92 42.30 39.69 46.00 6.31 QP 6 875.840 22.55 3.15 38.50 37.17 46.00 8.83 QP		Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
3 626.550 19.92 2.57 43.31 38.71 46.00 7.29 QP 4 749.740 21.53 2.92 41.30 38.69 46.00 7.31 QP 5 749.740 21.53 2.92 42.30 39.69 46.00 6.31 QP	1	377.260	15.57	1.88	47.44	37.86	46.00	8.14	QP
4 749.740 21.53 2.92 41.30 38.69 46.00 7.31 QP 5 749.740 21.53 2.92 42.30 39.69 46.00 6.31 QP	2	500.000	18.04	2.25	22.20	42.49	46.00	3.51	QP
5 749.740 21.53 2.92 42.30 39.69 46.00 6.31 QP	3	626.550	19.92	2.57	43.31	38.71	46.00	7.29	QP
- · · · · · · · · · · · · · · · · · · ·	4	749.740	21.53	2.92	41.30	38.69	46.00	7.31	QP
6 875.840 22.55 3.15 38.50 37.17 46.00 8.83 QP	5	749.740	21.53	2.92	42.30	39.69	46.00	6.31	QP
	6	875.840	22.55	3.15	38.50	37.17	46.00	8.83	QP

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

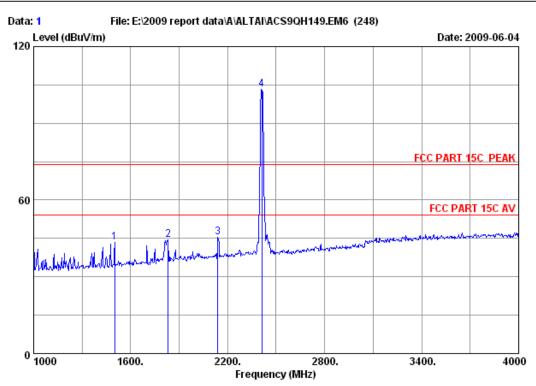
2. The emission levels that are 20dB below the official limit are not reported.

#### Frequency: Above 1GHz IEEE 802.11b mode



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Postcode: 518057



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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

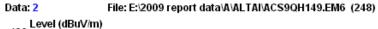
Test mode : IEEE802.11b CH1 2412MHz

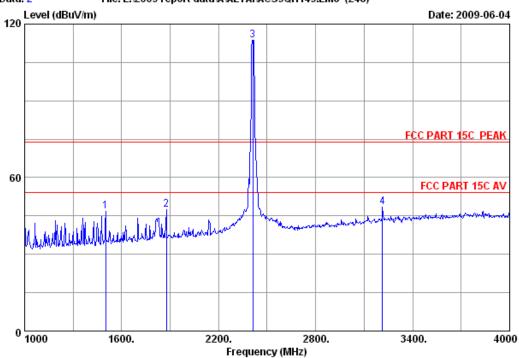
M/N

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	48.12	43.60	74.00	30.40	Peak	
2	1831.000	27.23	5.86	35.37	46.60	44.32	74.00	29.68	Peak	
3	2140.000	28.09	6.38	35.17	46.10	45.40	74.00	28.60	Peak	
4	2412.000	28.48	6.73	35.12	103.06	103.15	74.00	-29.15	Peak	

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







Site no. : 3m Chamber Data no. : 2 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

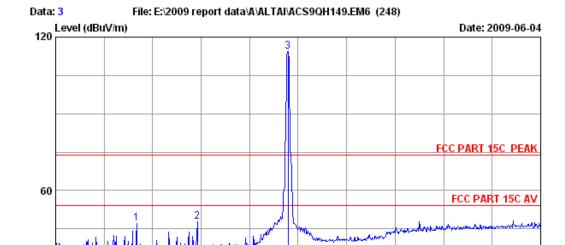
Test mode : IEEE802.11b CH1 2412MHz

M/N

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	51.42	46.90	74.00	27.10	Peak	
2	1876.000	27.43	5.92	35.34	49.55	47.56	74.00	26.44	Peak	
3	2412.000	28.48	6.73	35.12	113.48	113.57	74.00	-39.57	Peak	
4	3214.000	30.78	8.13	34.96	44.45	48.40	74.00	25.60	Peak	

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





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

Frequency (MHz)

2800.

3400.

4000

Limit : FCC PART 15C PEAK

1600.

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

2200.

Test mode : IEEE802.11b CH6 2437MHz

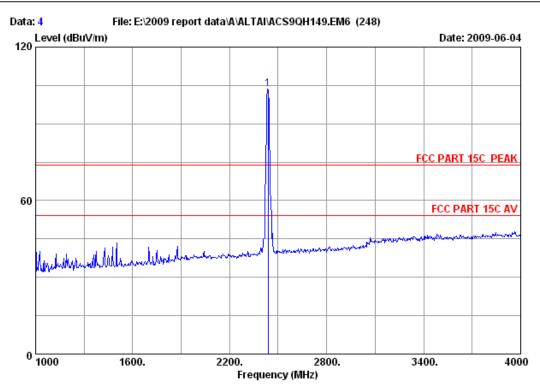
M/N :

0 1000

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	51.50	46.98	74.00	27.02	Peak	
2	1876.000	27.43	5.92	35.34	49.81	47.82	74.00	26.18	Peak	
3	2437.000	28.53	6.80	35.11	114.19	114.41	74.00	-40.41	Peak	

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

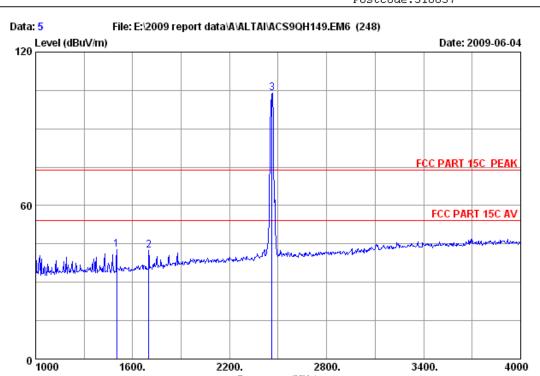
Test mode : IEEE802.11b CH6 2437MHz

M/N :

	Ant.	Cable	Amp.		Emissio	n			
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
2437.000	28.53	6.80	35.11	103.25	103.47	74.00	-29.47	Peak	

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





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

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

Frequency (MHz)

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

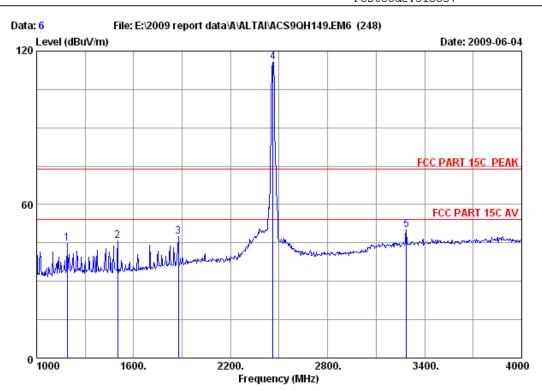
Test mode : IEEE802.11b CH11 2462MHz

M/N :

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	47.14	42.62	74.00	31.38	Peak	
2	1699.000	26.70	5.64	35.54	45.68	42.48	74.00	31.52	Peak	
3	2462.000	28.55	6.84	35.11	103.74	104.02	74.00	-30.02	Peak	

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





Site no. : 3m Chamber Data no. : 6 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL : FCC PART 15C PEAK

Limit

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

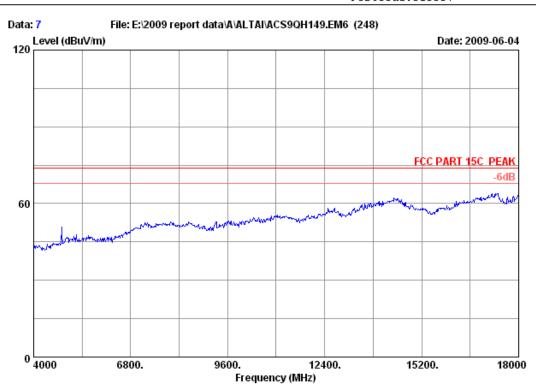
Test mode : IEEE802.11b CH11 2462MHz

M/N

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1189.000	25.47	4.74	36.10	50.64	44.75	74.00	29.25	Peak	
2	1501.000	25.90	5.32	35.74	50.31	45.79	74.00	28.21	Peak	
3	1876.000	27.43	5.92	35.34	49.57	47.58	74.00	26.42	Peak	
4	2462.000	28.55	6.84	35.11	115.25	115.53	74.00	-41.53	Peak	
5	3286.000	30.97	8.33	34.94	45.66	50.02	74.00	23.98	Peak	

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

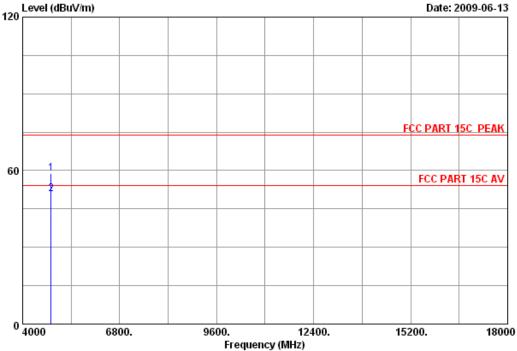
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N :







Site no. : 3m Chamber Data no. : 8 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N

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

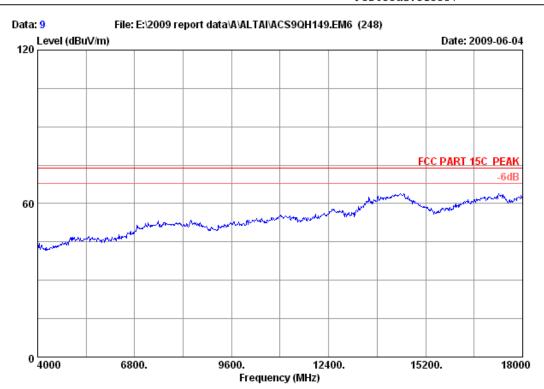
Test mode : IEEE802.11b CH1 2412MHz

M/N

		Factor	Factor	Reading (dbuv)		Limits	_	Remark	
_	4824.000 4824.000		 	48.34 40.38	58.77 50.81	74.00 54.00		Peak Average	

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

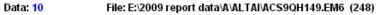
EUT : Altai A3 Smart WiFi M/N:WA3011N

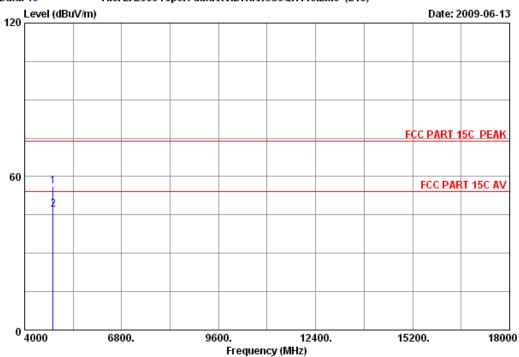
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N :







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

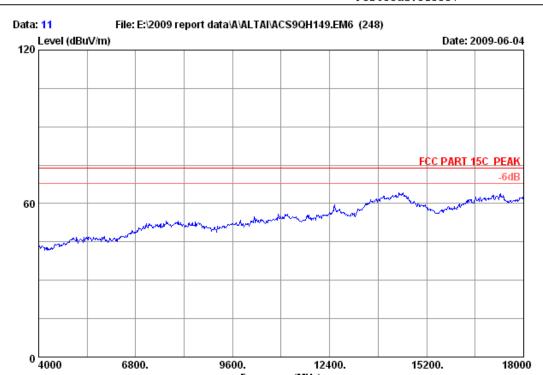
Test mode : IEEE802.11b CH1 2412MHz

M/N :

		Factor	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark	
_	4824.000 4824.000				45.68 36.69	56.11 47.12	74.00 54.00	17.89 6.88		

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





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

9600.

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

Frequency (MHz)

12400.

15200.

18000

Limit : FCC PART 15C PEAK

6800.

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

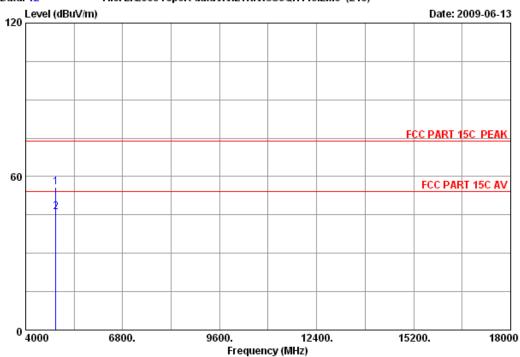
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz

M/N







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

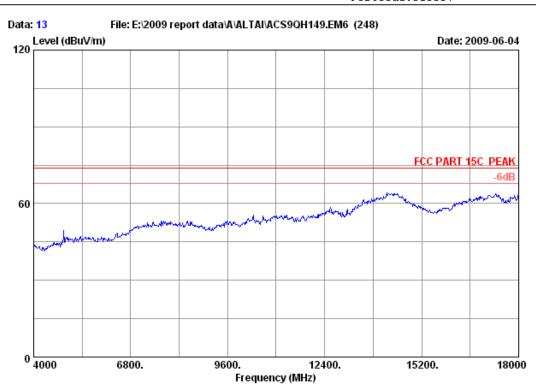
Test mode : IEEE802.11b CH6 2437MHz

M/N :

		Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4874.000 4874.000				44.98 35.28	55.74 46.04	74.00 54.00	18.26 7.96	Peak Average

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





Site no. : 3m Chamber Data no. : 13
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

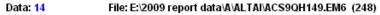
EUT : Altai A3 Smart WiFi M/N:WA3011N

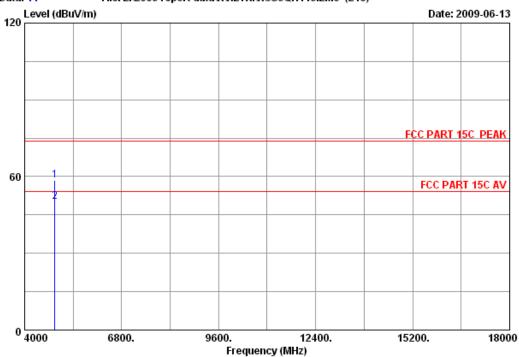
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz

M/N :







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

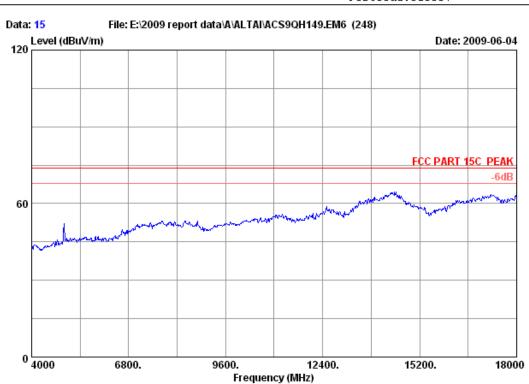
Test mode : IEEE802.11b CH6 2437MHz

M/N :

		Factor	Factor	Reading (dbuv)		Limits	_	Remark	
_	4874.000 4874.000		 	47.59 39.24	58.35 50.00	74.00 54.00	15.65 4.00		

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

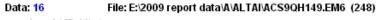
EUT : Altai A3 Smart WiFi M/N:WA3011N

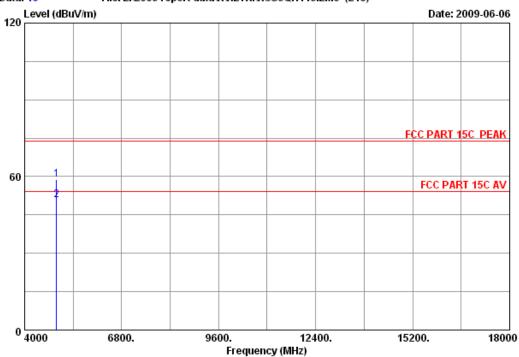
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N :







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

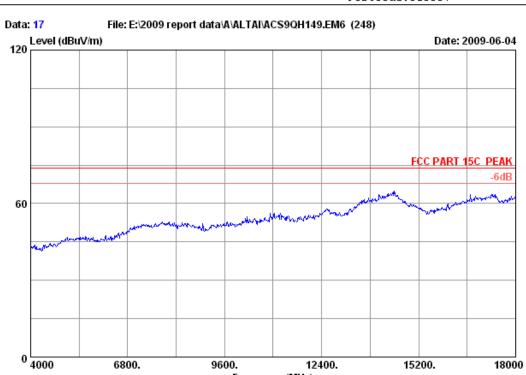
Test mode : IEEE802.11b CH11 2462MHz

M/N :

		Ant. Factor (dB/m)	Factor	Reading (dbuv)		Limits	_	Remark	
_	4924.000 4924.000		 	47.82 39.66	58.92 50.76	74.00 54.00	15.08 3.24	Peak Average	

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





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

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

Frequency (MHz)

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

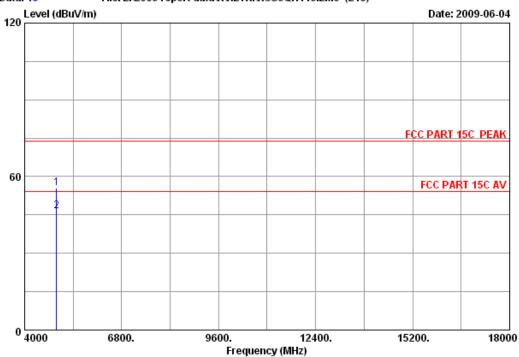
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11b CH11 2462MHz







Site no. : 3m Chamber Data no. : 18

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11b CH11 2462MHz

M/N :

		Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4924.000 4924.000				44.25 35.46	55.35 46.56	74.00 54.00	18.65 7.44	Peak Average

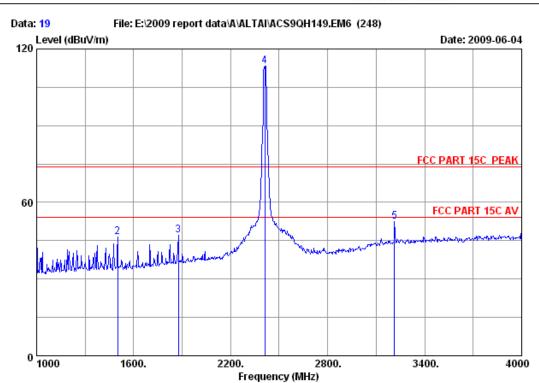
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

# Frequency: Above 1GHz IEEE 802.11g mode



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Fax:+86-755-26632877 Postcode:518057



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

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N EUT : DC 56V From Adapter input AC 120V/60Hz

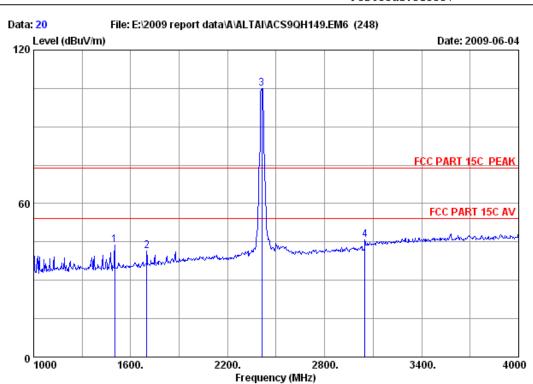
Test mode : IEEE802.11g CH1 2412MHz

M/N

		Ant.	Cable	Amp.					
	Freq. (MHz)		loss (dB)		Reading (dbuv)	Level (dBuV/m)		_	Remark
1	1000.000	25.20	4.35	36.30	52.66	45.91	74.00	28.09	Peak
2	1501.000	25.90	5.32	35.74	51.05	46.53	74.00	27.47	Peak
3	1876.000	27.43	5.92	35.34	49.12	47.13	74.00	26.87	Peak
4	2412.000	28.48	6.73	35.12	113.12	113.21	74.00	-39.21	Peak
5	3214.000	30.78	8.13	34.96	48.46	52.41	74.00	21.59	Peak

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

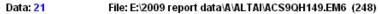
Test mode : IEEE802.11g CH1 2412MHz

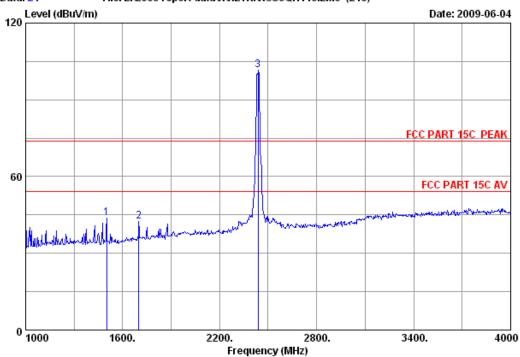
M/N :

				e Amp. Emission						
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	48.34	43.82	74.00	30.18	Peak	
2	1699.000	26.70	5.64	35.54	44.58	41.38	74.00	32.62	Peak	
3	2412.000	28.48	6.73	35.12	104.93	105.02	74.00	-31.02	Peak	
4	3049.000	30.34	7.78	34.99	42.54	45.67	74.00	28.33	Peak	

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







Site no. : 3m Chamber Data no. : 21

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

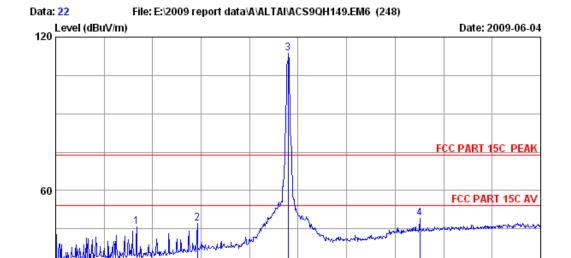
Test mode : IEEE802.11g CH6 2437MHz

M/N :

	Freq.	Factor			Reading (dbuv)		Limits	_	Remark	
2	1501.000 1699.000 2437.000	26.70	5.64	35.54	48.16 45.59 101.29	43.64 42.39 101.51		30.36 31.61 -27.51	Peak	

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





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

Frequency (MHz)

2800.

3400.

4000

Limit : FCC PART 15C PEAK

1600.

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

2200.

Test mode : IEEE802.11g CH6 2437MHz

M/N :

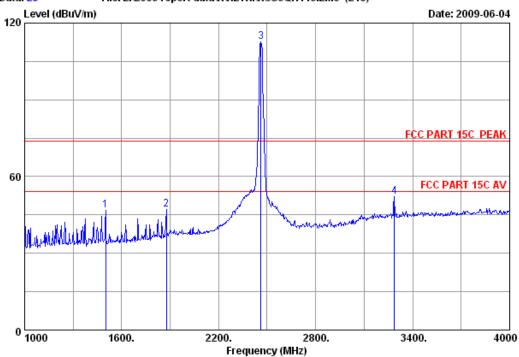
0 1000

			Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	50.18	45.66	74.00	28.34	Peak	
2	1876.000	27.43	5.92	35.34	49.20	47.21	74.00	26.79	Peak	
3	2437.000	28.53	6.80	35.11	113.45	113.67	74.00	-39.67	Peak	
4	3253.000	30.92	8.23	34.95	45.07	49.27	74.00	24.73	Peak	

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







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

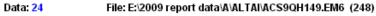
Test mode : IEEE802.11g CH11 2462MHz

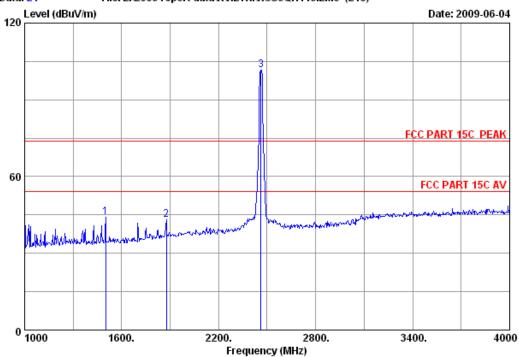
M/N :

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dbuv)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark	
1	1501.000	25.90	5.32	35.74	51.48	46.96	74.00	27.04	Peak	
2	1876.000	27.43	5.92	35.34	48.99	47.00	74.00	27.00	Peak	
3	2462.000	28.55	6.84	35.11	112.34	112.62	74.00	-38.62	Peak	
4	3286.000	30.97	8.33	34.94	47.67	52.03	74.00	21.97	Peak	

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







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

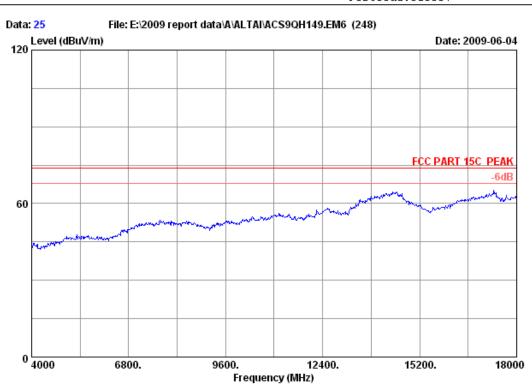
Test mode : IEEE802.11g CH11 2462MHz

M/N :

		Factor	loss		Reading (dbuv)		Limits	_	Remark	
2	1501.000 1876.000 2462.000	27.43	5.92	35.34	45.27	44.16 43.28 101.51	74.00	29.84 30.72 -27.51	Peak	

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





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

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

Limit : FCC PART 15C PEAK

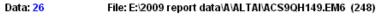
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

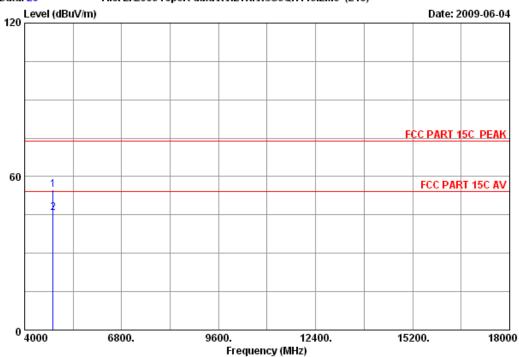
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH1 2412MHz







Site no. : 3m Chamber Data no. : 26

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH1 2412MHz

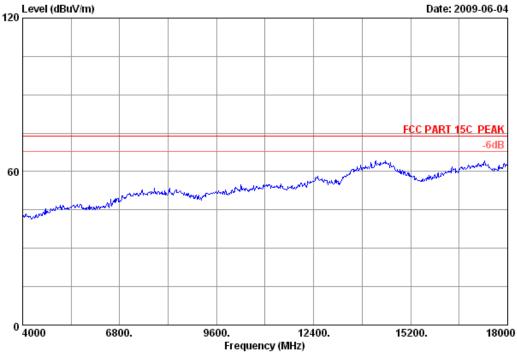
M/N :

		Factor	Factor	Reading (dbuv)		Limits	_	Remark	
_	4824.000 4824.000		 	44.49 35.24	54.92 45.67	74.00 54.00	19.08 8.33		

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







Site no. : 3m Chamber Data no. : 27 Ant. pol. : VERTICAL

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

Env. / Ins. : 23\*C/54%

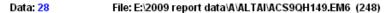
Engineer :Sunny-lu

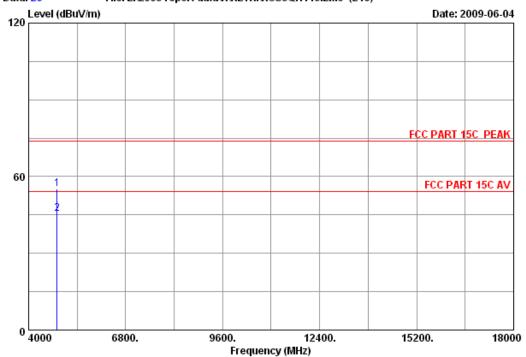
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH1 2412MHz







Site no. : 3m Chamber Data no. : 28 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

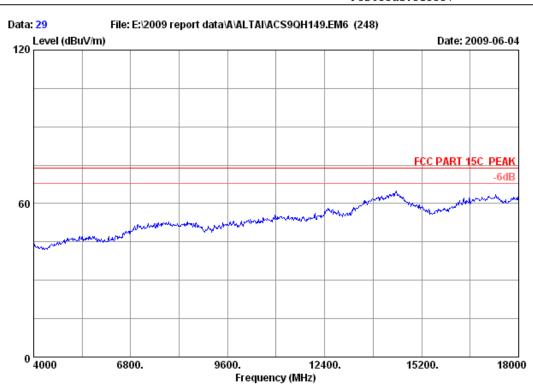
: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz M/N

	Freq.	Factor	Factor	Reading (dbuv)		Limits	_	Remark	
_	4824.000 4824.000		 	44.68 34.97	55.11 45.40	74.00 54.00		Peak Average	

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

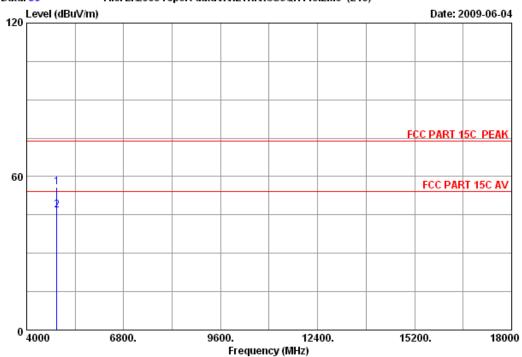
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH6 2437MHz







Site no. : 3m Chamber Data no. : 30 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N

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

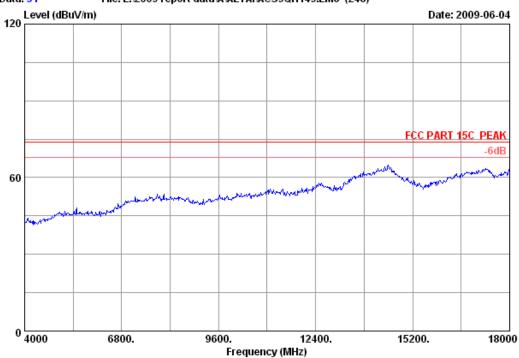
Test mode : IEEE802.11g CH6 2437MHz

	Factor	Factor	Reading (dbuv)		Limits	_	Remark	
4874.000 4874.000		 	45.12 36.20	55.88 46.96	74.00 54.00		Peak Average	

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







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

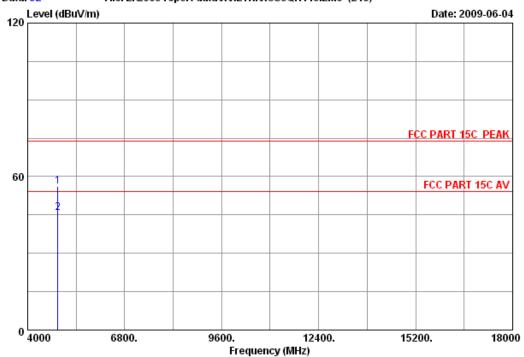
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH6 2437MHz







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N

Power
Test mode : : DC 56V From Adapter input AC 120V/60Hz

: IEEE802.11g CH6 2437MHz

		Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4874.000 4874.000				45.39 35.17	56.15 45.93	74.00 54.00	17.85 8.07	Peak Average

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





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

9600.

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

Frequency (MHz)

12400.

15200.

18000

Limit : FCC PART 15C PEAK

6800.

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

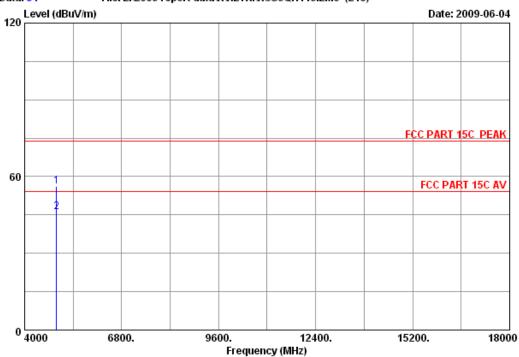
Test mode : IEEE802.11g CH11 2462MHz

M/N :

0 4000







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

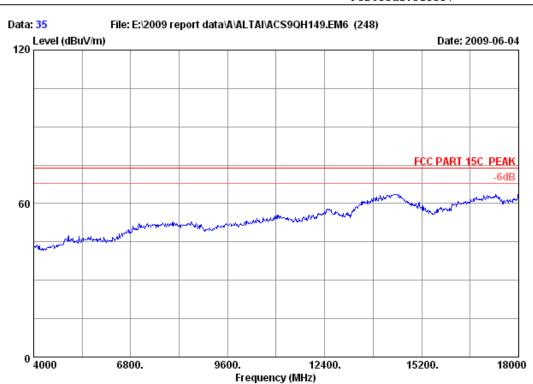
Test mode : IEEE802.11g CH11 2462MHz

M/N :

		Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark	
_	4924.000 4924.000				45.10 35.08	56.20 46.18	74.00 54.00	17.80 7.82		

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

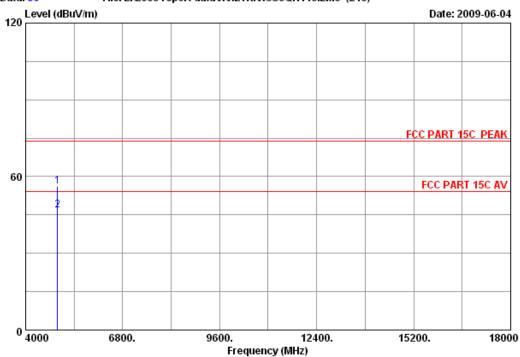
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH11 2462MHz







Site no. : 3m Chamber Data no. : 36 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL : FCC PART 15C PEAK

Limit

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11g CH11 2462MHz

		Factor	Factor	Reading (dbuv)		Limits	_	Remark	
_	4924.000 4924.000		 	45.01 35.68	56.11 46.78	74.00 54.00	17.89 7.22	Peak Average	

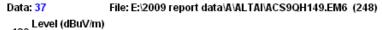
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

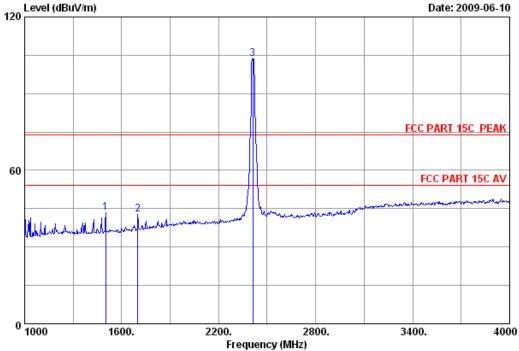
# Frequency: Above 1GHz IEEE 802.11n HT20 2.4G mode



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Postcode:518057





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

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

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N EUT : DC 56V From Adapter input AC 120V/60Hz

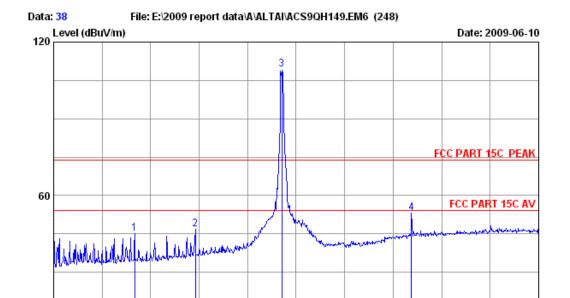
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	47.89	43.37	74.00	30.63	Peak	
2	1699.000	26.70	5.64	35.54	45.93	42.73	74.00	31.27	Peak	
3	2412.000	28.48	6.73	35.12	103.61	103.70	74.00	-29.70	Peak	

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





Site no. : 3m Chamber Data no. : 38 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Frequency (MHz)

2800.

3400.

4000

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

2200.

Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N

1600.

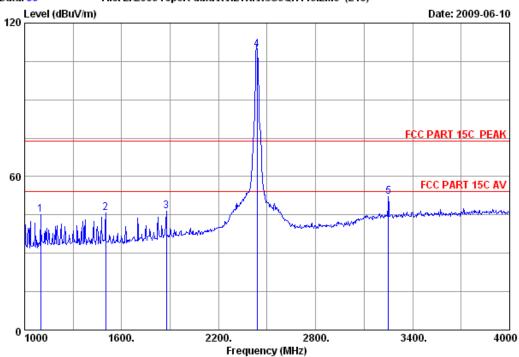
0 1000

		Ant.	Cable	Amp.		Emissio:	n			
	-	Factor (dB/m)			Reading (dbuv)			_	Remark	
1	1501.000	25.90	5.32	35.74	49.81	45.29	74.00	28.71	Peak	
2	1876.000	27.43	5.92	35.34	48.67	46.68	74.00	27.32	Peak	
3	2412.000	28.48	6.73	35.12	109.25	109.34	74.00	-35.34	Peak	
4	3214.000	30.78	8.13	34.96	49.24	53.19	74.00	20.81	Peak	

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







Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

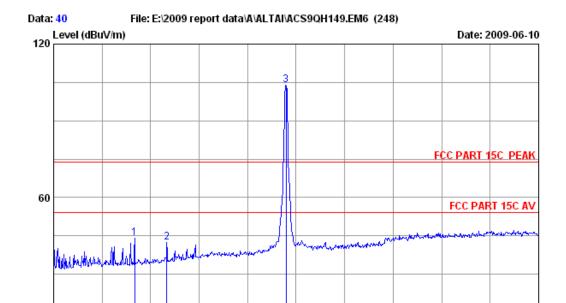
Test mode : IEEE802.11n HT20 CH6 2437MHz

M/N :

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1099.000	25.34	4.56	36.19	51.27	44.98	74.00	29.02	Peak	
2	1501.000	25.90	5.32	35.74	50.30	45.78	74.00	28.22	Peak	
3	1876.000	27.43	5.92	35.34	48.62	46.63	74.00	27.37	Peak	
4	2437.000	28.53	6.80	35.11	109.39	109.61	74.00	-35.61	Peak	
5	3250.000	30.88	8.23	34.95	48.07	52.23	74.00	21.77	Peak	

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





Site no. : 3m Chamber Data no. : 40

2200.

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

Frequency (MHz)

2800.

3400.

4000

Limit : FCC PART 15C PEAK

1600.

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT20 CH6 2437MHz

M/N :

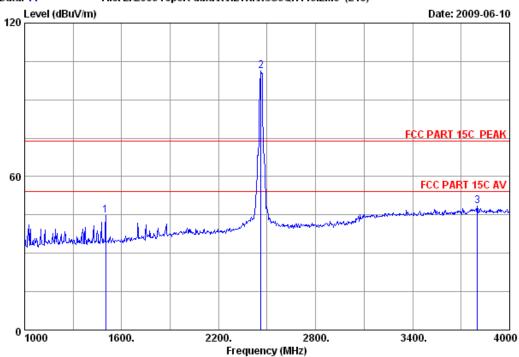
0 1000

			loss	Factor	Reading (dbuv)		Limits	_	Remark
2	1501.000 1699.000 2437.000	26.70	5.64	35.54	45.65	44.25 42.45 103.83		29.75 31.55 -29.83	Peak

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







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

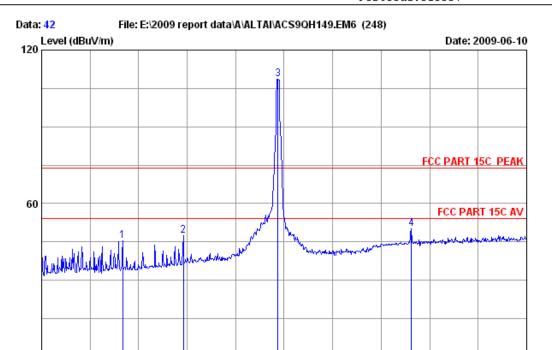
Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N :

	Freq.	Factor		Factor	Reading (dbuv)		Limits	_	Remark	
2	1501.000 2462.000 3799.000	28.55	6.84	35.11		44.65 101.29 48.38	74.00	29.35 -27.29 25.62	Peak	

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





Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Frequency (MHz)

2800.

3400.

4000

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu
EUT : Altai A3 Smart WiFi M/N:WA3011N

2200.

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

Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N :

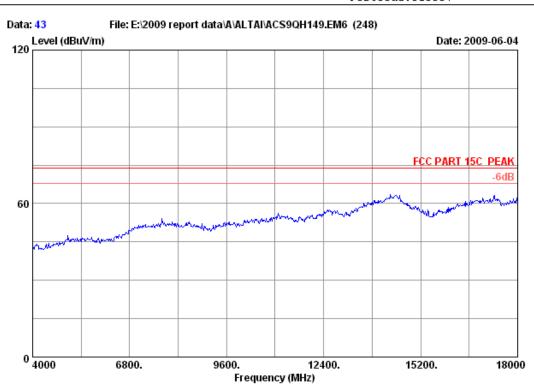
1600.

0 1000

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	50.08	45.56	74.00	28.44	Peak	
2	1876.000	27.43	5.92	35.34	49.61	47.62	74.00	26.38	Peak	
3	2462.000	28.55	6.84	35.11	108.37	108.65	74.00	-34.65	Peak	
4	3286.000	30.97	8.33	34.94	45.66	50.02	74.00	23.98	Peak	

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





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

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

Limit : FCC PART 15C PEAK

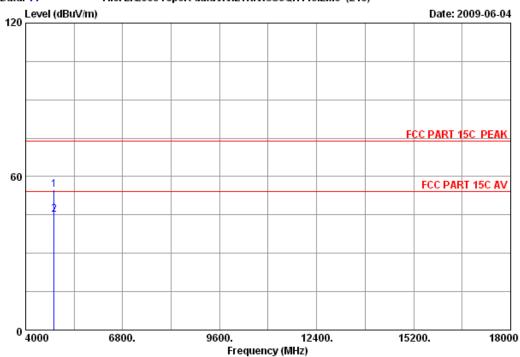
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz







Site no. : 3m Chamber Data no. : 44 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power

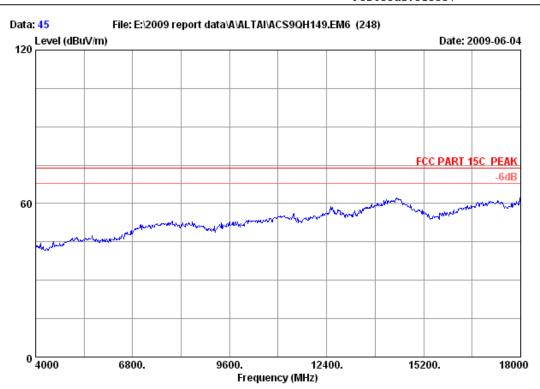
: DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH1 2412MHz

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4824.000 4824.000				44.52 34.65	54.95 45.08	74.00 54.00	19.05 8.92	Peak Average

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





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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

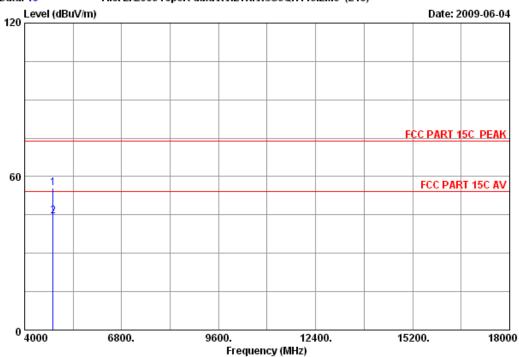
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT20 CH1 2412MHz







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

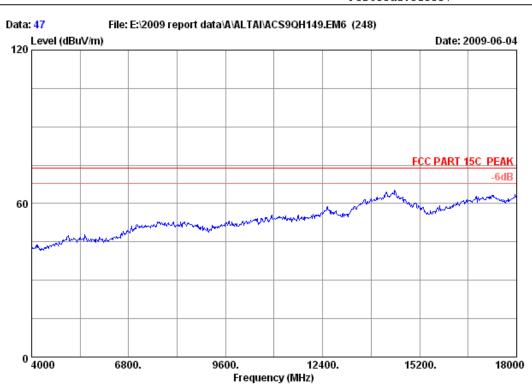
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N :

		Factor	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark	
_	4824.000 4824.000				45.08 34.04	55.51 44.47	74.00 54.00	18.49 9.53	Peak Average	

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





Site no. : 3m Chamber Data no. : 47

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

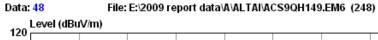
Limit : FCC PART 15C PEAK

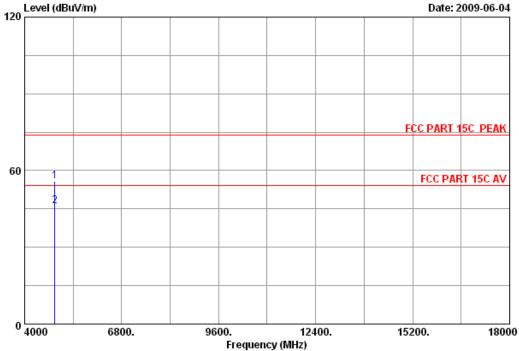
Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

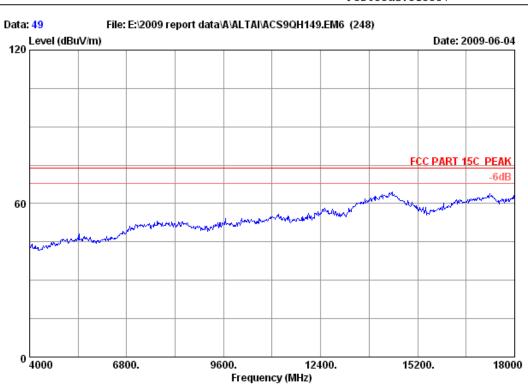
: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz

		Ant.	Cable	Amp.		Emissio	n		
	-				Reading			_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)	
	4874.000	24 70	10 56		45 16	55.92	74.00	18.08	Deel-
Т	40/4.000	34.70	10.56	34.30	45.10	55.94	74.00	10.00	reak
2	4874.000	34.78	10.56	34.58	35.26	46.02	54.00	7.98	Average

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





Site no. : 3m Chamber Data no. : 49
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

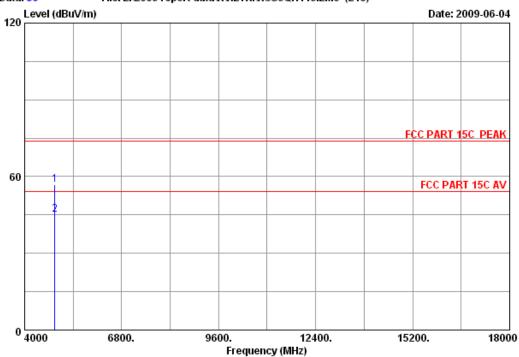
Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz







Site no. : 3m Chamber Data no. : 50 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

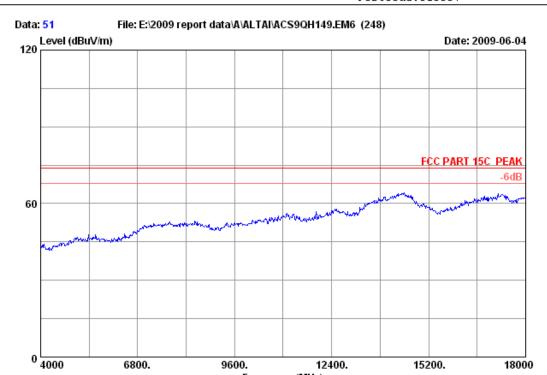
: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH6 2437MHz

		Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4874.000 4874.000				45.98 34.28	56.74 45.04	74.00 54.00	17.26 8.96	Peak Average

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





Site no. : 3m Chamber Data no. : 51
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Frequency (MHz)

Limit : FCC PART 15C PEAK

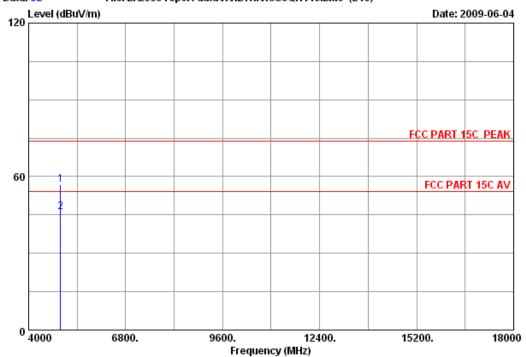
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH11 2462MHz







Site no. : 3m Chamber Data no. : 52 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

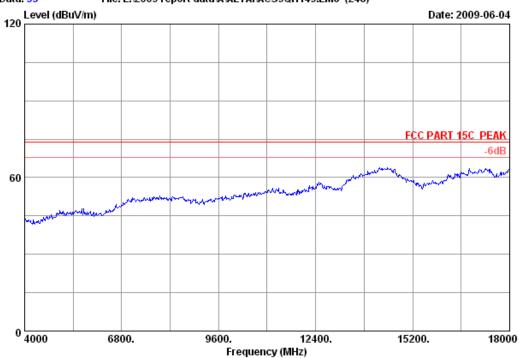
Test mode : IEEE802.11n HT20 CH11 2462MHz

	Freq. (MHz)		Factor	Reading (dbuv)		Limits	_	Remark	
_	4924.000 4924.000	 		45.69 34.87	56.79 45.97	74.00 54.00		Peak Average	

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







Site no. : 3m Chamber Data no. : 53

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

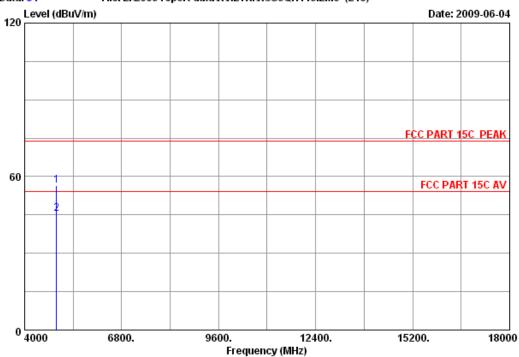
EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

The work TEFFOOD 11 DTO CH11 2462MU

Test mode : IEEE802.11n HT20 CH11 2462MHz







Site no. : 3m Chamber Data no. : 54

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N :

		_	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4924.000 4924.000				45.26 34.24	56.36 45.34	74.00 54.00	17.64 8.66	Peak Average

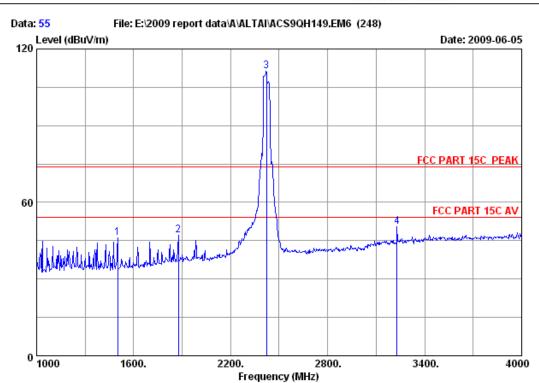
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

# Frequency: Above 1GHz IEEE 802.11n HT40 2.4G mode



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Fax:+86-755-26632877 Postcode:518057



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

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N EUT : DC 56V From Adapter input AC 120V/60Hz

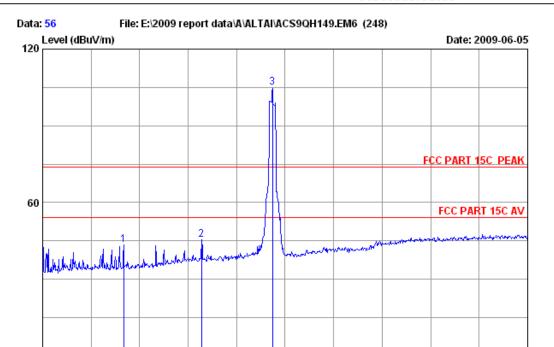
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dbuv)	Emission Level (dBuV/m)	Limits	_	Remark
1	1501.000	25.90	5.32	35.74	50.50	45.98	74.00	28.02	Peak
2	1876.000	27.43	5.92	35.34	49.28	47.29	74.00	26.71	Peak
3	2422.000	28.50	6.77	35.11	111.10	111.26	74.00	-37.26	Peak
4	3229.000	30.83	8.18	34.96	46.44	50.49	74.00	23.51	Peak

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





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

2200.

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

Frequency (MHz)

2800.

3400.

4000

Limit : FCC PART 15C PEAK

1600.

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N

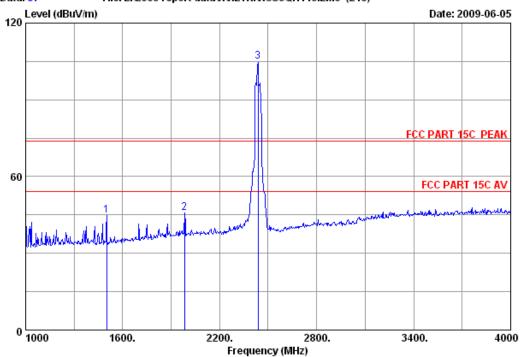
0 1000

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1501.000	25.90	5.32	35.74	48.02	43.50	74.00	30.50	Peak	
2	1984.000	27.83	6.16	35.20	46.74	45.53	74.00	28.47	Peak	
3	2422.000	28.50	6.77	35.11	104.91	105.07	74.00	-31.07	Peak	

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







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

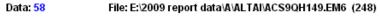
Test mode : IEEE802.11n HT40 CH4 2437MHz

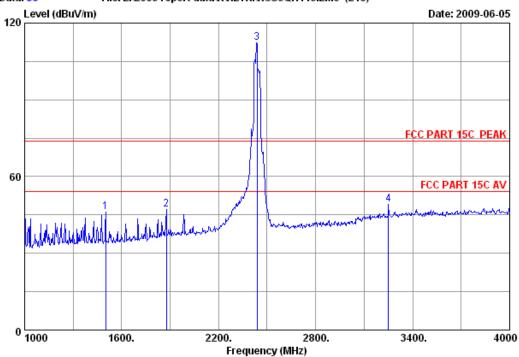
M/N :

	Freq.	Factor	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark	
2	1501.000 1984.000 2437.000	27.83	6.16	35.20	49.18 47.09 104.67	44.66 45.88 104.89	74.00 74.00 74.00	29.34 28.12 -30.89	Peak	

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







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH4 2437MHz

M/N

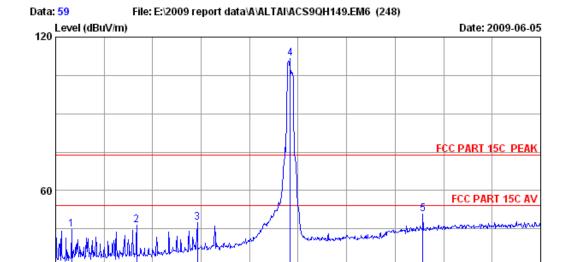
			Amp.		Emissio:	n			
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1501.000	25.90	5.32	35.74	50.77	46.25	74.00	27.75	Peak	
1876.000	27.43	5.92	35.34	48.97	46.98	74.00	27.02	Peak	
2437.000	28.53	6.80	35.11	112.08	112.30	74.00	-38.30	Peak	
3250.000	30.88	8.23	34.95	44.83	48.99	74.00	25.01	Peak	
	(MHz)  1501.000 1876.000 2437.000	Freq. Factor (MHz) (dB/m) 1501.000 25.90 1876.000 27.43 2437.000 28.53	Freq. Factor loss (MHz) (dB/m) (dB) 	Freq. Factor loss Factor (MHz) (dB/m) (dB) (dB)  1501.000 25.90 5.32 35.74 1876.000 27.43 5.92 35.34 2437.000 28.53 6.80 35.11	(MHz) (dB/m) (dB) (dB) (dbuv)	Freq. Factor loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m)	Freq. Factor loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m) (dBuV/m)  1501.000 25.90 5.32 35.74 50.77 46.25 74.00 1876.000 27.43 5.92 35.34 48.97 46.98 74.00 2437.000 28.53 6.80 35.11 112.08 112.30 74.00	Freq. Factor loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m) (dBuV/m) (dB)  1501.000 25.90 5.32 35.74 50.77 46.25 74.00 27.75 1876.000 27.43 5.92 35.34 48.97 46.98 74.00 27.02 2437.000 28.53 6.80 35.11 112.08 112.30 74.00 -38.30	Freq. Factor loss Factor Reading Level Limits Margin Remark (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m) (dBuV/m) (dB)  1501.000 25.90 5.32 35.74 50.77 46.25 74.00 27.75 Peak 1876.000 27.43 5.92 35.34 48.97 46.98 74.00 27.02 Peak 2437.000 28.53 6.80 35.11 112.08 112.30 74.00 -38.30 Peak

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



0 1000

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Site no. : 3m Chamber Data no. : 59
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Frequency (MHz)

2800.

3400.

4000

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

2200.

Test mode : IEEE802.11n HT40 CH7 2452MHz

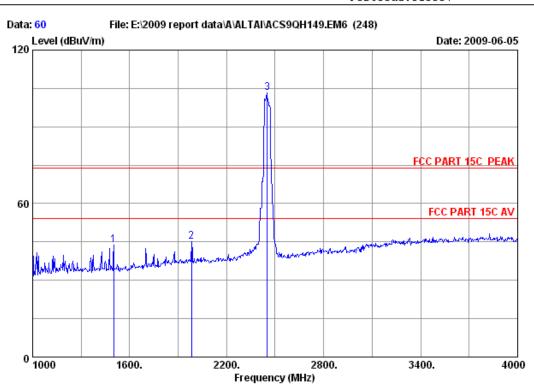
M/N :

1600.

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dbuv)	Emissio: Level (dBuV/m)	Limits	_	Remark
1	1099.000	25.34	4.56	36.19	51.06	44.77	74.00	29.23	Peak
2	1501.000	25.90	5.32	35.74	50.82	46.30	74.00	27.70	Peak
3	1876.000	27.43	5.92	35.34	49.53	47.54	74.00	26.46	Peak
4	2452.000	28.53	6.84	35.11	111.22	111.48	74.00	-37.48	Peak
5	3271.000	30.97	8.28	34.95	46.53	50.83	74.00	23.17	Peak

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





Site no. : 3m Chamber Data no. : 60 Dis. / Ant. : 3m 3115

Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

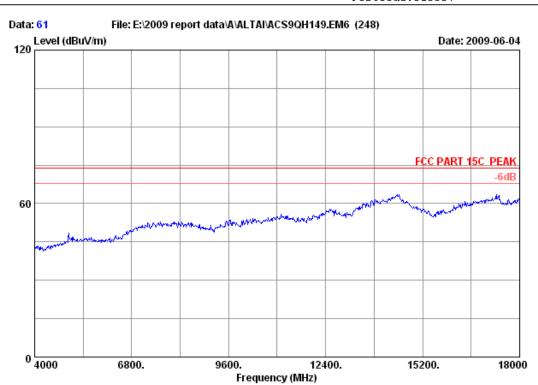
Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N

		Ant.	Cable	Amp.		Emissio:	n			
	-				Reading (dbuv)			_	Remark	
1	1501.000	25.90	5.32	35.74	48.36	43.84	74.00	30.16	Peak	
2	1984.000	27.83	6.16	35.20	46.41	45.20	74.00	28.80	Peak	
3	2452.000	28.53	6.84	35.11	103.17	103.43	74.00	-29.43	Peak	

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





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

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

Limit : FCC PART 15C PEAK

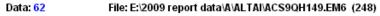
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

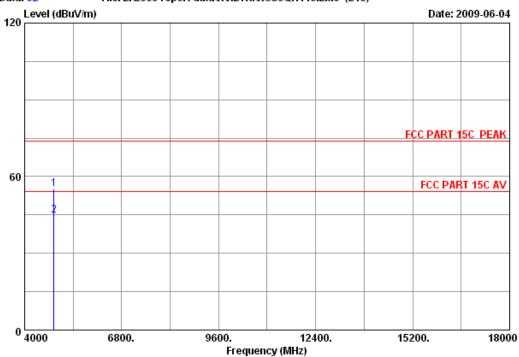
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT40 CH1 2422MHz







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

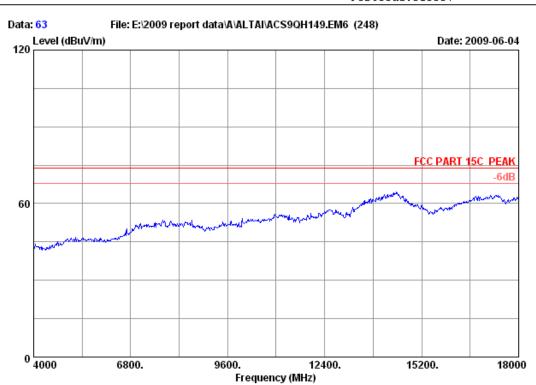
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N :

		Ant.	Cable	Amp.		Emissio	n		
	-				Reading (dbuv)			_	Remark
1	4844.000	34.57	10.56	34.59	44.68	55.22	74.00	18.78	Peak
2	4844.000	34.57	10.56	34.59	34.10	44.64	54.00	9.36	Average

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





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

Limit : FCC PART 15C PEAK

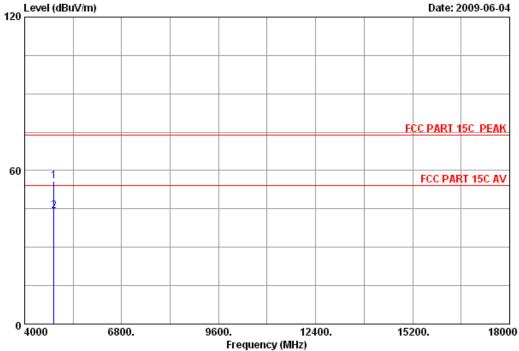
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH1 2422MHz







Site no. : 3m Chamber Data no. : 64 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

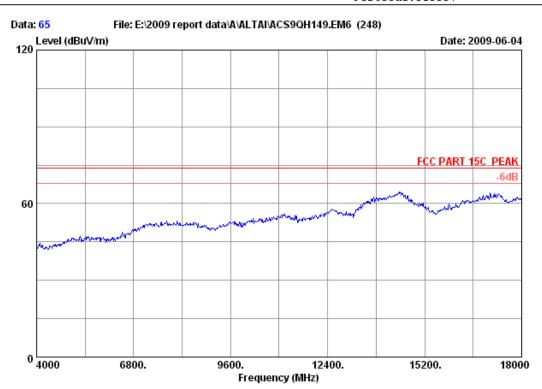
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N

		Ant. Factor (dB/m)	Factor	Reading (dbuv)		Limits	_	Remark
_	4844.000 4844.000		 	45.27 33.52	55.81 44.06		18.19 9.94	Peak Average

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





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

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

Limit : FCC PART 15C PEAK

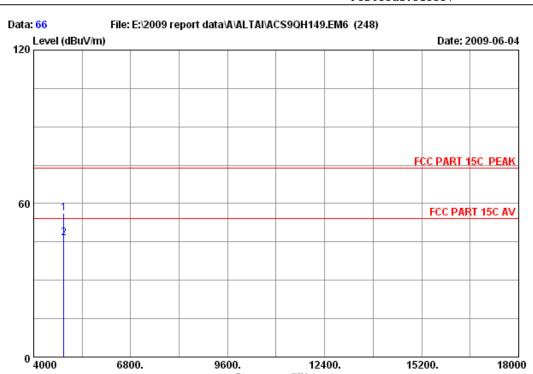
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT40 CH4 2437MHz





Site no. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Frequency (MHz)

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

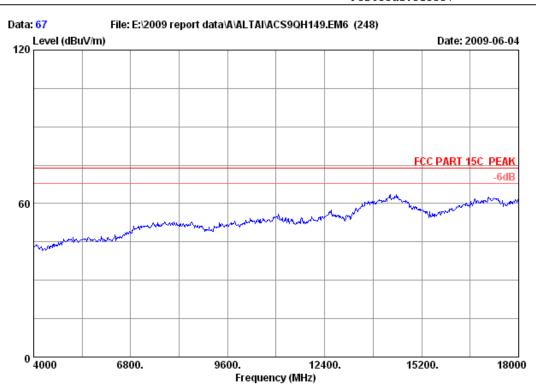
Test mode : IEEE802.11n HT40 CH4 2437MHz

M/N :

	Freq.	Ant. Factor (dB/m)	Factor	Reading (dbuv)		Limits	_	Remark
_	4874.000 4874.000		 	45.34 35.58	56.10 46.34		17.90 7.66	Peak Average

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





Site no. : 3m Chamber Data no. : 67

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

Limit : FCC PART 15C PEAK

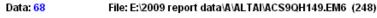
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

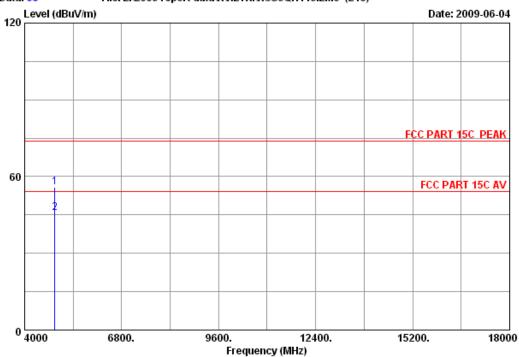
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT40 CH4 2437MHz







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

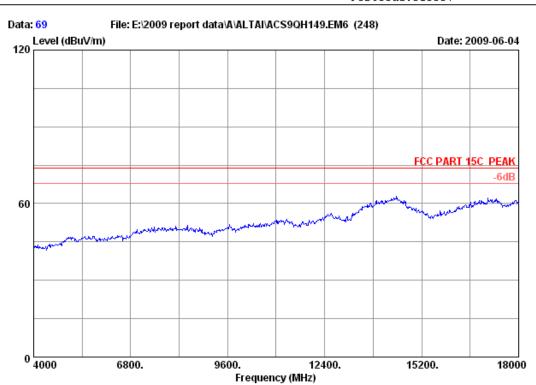
Test mode : IEEE802.11n HT40 CH4 2437MHz

M/N :

		Ant. Factor (dB/m)	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4874.000 4874.000				45.21 35.03	55.97 45.79	74.00 54.00		Peak Average

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





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

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

Limit : FCC PART 15C PEAK

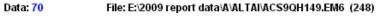
Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

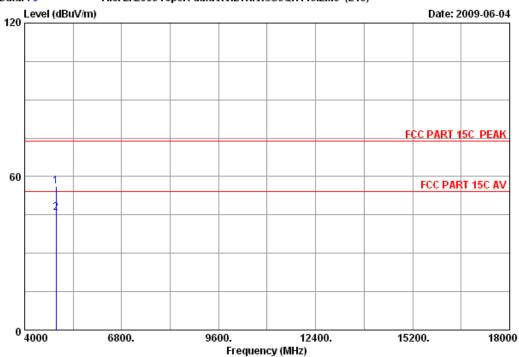
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT40 CH7 2452MHz







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

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N :

	Freq.	Factor	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark	
_	4904.000 4904.000				45.22 34.90	56.20 45.88	74.00 54.00	17.80 8.12		

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





Site no. : 3m Chamber Data no. : 71 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Frequency (MHz)

12400.

15200.

18000

6800.

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

9600.

EUT : Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

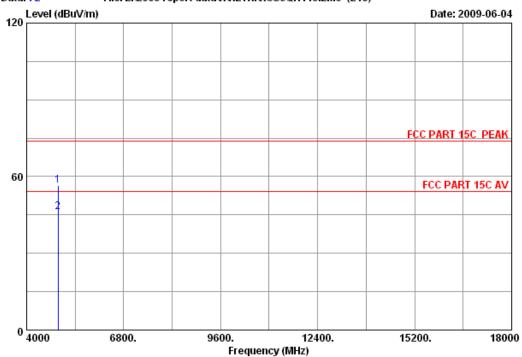
Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N

0 4000







Site no. : 3m Chamber Data no. : 72 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N

		_	Cable loss (dB)	Factor	Reading (dbuv)		Limits	_	Remark
_	4904.000 4904.000				45.39 35.05	56.37 46.03	74.00 54.00	17.63 7.97	

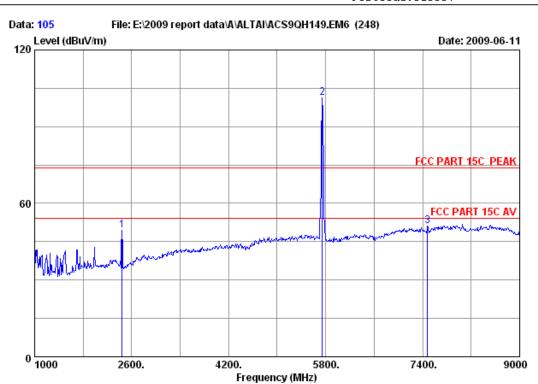
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

# Frequency: Above 1GHz IEEE 802.11a mode



No.6 Ke Feng Road, Block 52, ShenZhen Science & Industry Park Noutou, ShenZhen, GuangDong, China Tel:+86-755-26639495-7

Fax:+86-755-26632877 Postcode:518057



Site no. : 3m Chamber Data no. : 105

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

Limit : FCC PART 15C PEAK Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N EUT : DC 56V From Adapter input AC 120V/60Hz

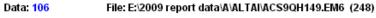
Test mode : IEEE802.11a CH149 5745MHz

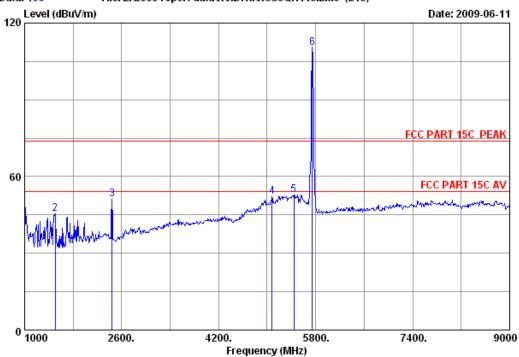
M/N

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	2440.000	28.53	6.80	35.11	49.30	49.52	74.00	24.48	Peak	
2	5745.000	35.42	10.96	34.36	89.41	101.43	74.00	-27.43	Peak	
3	7480.000	38.96	12.31	34.52	34.37	51.12	74.00	22.88	Peak	

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







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH149 5745MHz

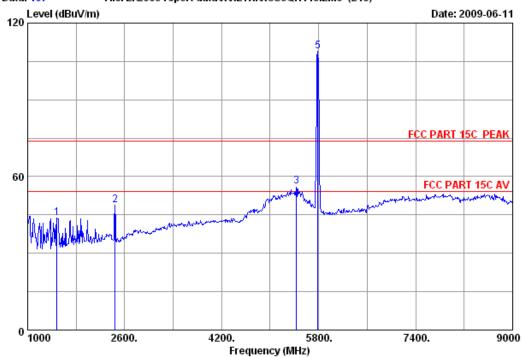
M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dbuv)	Emissio: Level (dBuV/m)	Limits	_	Remark
1	1000.000	25.20	4.35	36.30	56.73	49.98	74.00	24.02	Peak
2	1504.000	25.97	5.32	35.74	49.77	45.32	74.00	28.68	Peak
3	2440.000	28.53	6.80	35.11	50.89	51.11	74.00	22.89	Peak
4	5080.000	35.57	10.51	34.53	40.54	52.09	74.00	21.91	Peak
5	5440.000	35.85	10.68	34.44	40.83	52.92	74.00	21.08	Peak
6	5745.000	35.42	10.96	34.36	98.32	110.34	74.00	-36.34	Peak

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







Site no. : 3m Chamber Data no. : 107
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu
EUT : Altai A3 Smart WiFi M/N:WA3011N

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

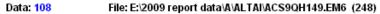
Test mode : IEEE802.11a CH157 5785MHz

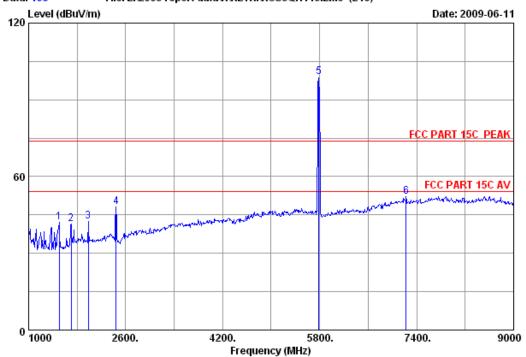
M/N :

		Ant.	Cable	Amp.		Emissio	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)	
1	1480.000	25.88	5.25	35.76	48.31	43.68	74.00	30.32	Peak
2	2440.000	28.53	6.80	35.11	48.69	48.91	74.00	25.09	Peak
3	5430.700	35.85	10.67	34.44	44.20	56.28	74.00	17.72	Peak
4	5430.700	35.85	10.67	34.44	38.74	50.82	54.00	3.18	Average
5	5785.000	35.35	10.93	34.35	97.09	109.02	74.00	-35.02	Peak

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







Site no. : 3m Chamber Data no. : 108
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH157 5785MHz

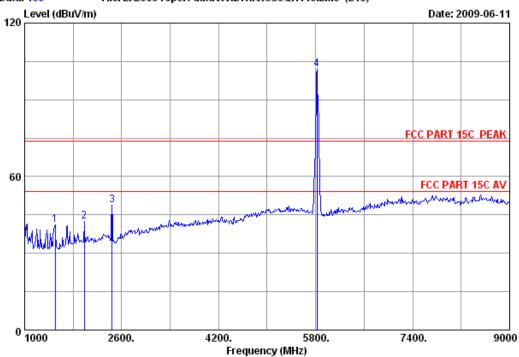
M/N :

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dbuv)	Emissio: Level (dBuV/m)	n Limits (dBuV/m)	Margin	Remark	
1	1504.000	25.97	5.32	35.74	46.42	41.97	74.00	32.03	Peak	
2	1704.000	26.70	5.64	35.51	44.52	41.35	74.00	32.65	Peak	
3	1984.000	27.83	6.16	35.20	43.57	42.36	74.00	31.64	Peak	
4	2440.000	28.53	6.80	35.11	48.00	48.22	74.00	25.78	Peak	
5	5784.000	35.35	10.93	34.35	86.86	98.79	74.00	-24.79	Peak	
6	7224.000	38.39	12.16	34.48	35.96	52.03	74.00	21.97	Peak	

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







Site no. : 3m Chamber Data no. : 109
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH165 5825MHz

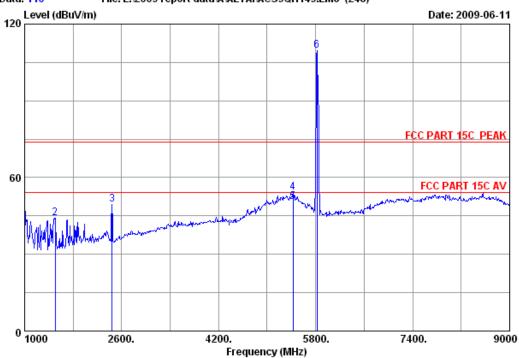
M/N :

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1504.000	25.97	5.32	35.74	45.61	41.16	74.00	32.84	Peak	
2	1984.000	27.83	6.16	35.20	43.70	42.49	74.00	31.51	Peak	
3	2440.000	28.53	6.80	35.11	48.49	48.71	74.00	25.29	Peak	
4	5825.000	35.24	10.93	34.34	90.23	102.06	74.00	-28.06	Peak	

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







Site no. : 3m Chamber Data no. : 110
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH165 5825MHz

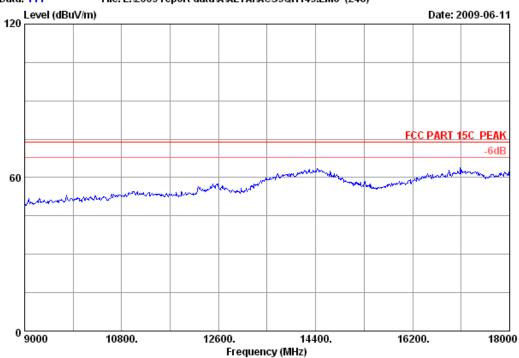
M/N :

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dbuv)			Margin (dB)	Remark
1	1000.000	25.20	4.35	36.30	55.88	49.13	74.00	24.87	Peak
2	1504.000	25.97	5.32	35.74	48.69	44.24	74.00	29.76	Peak
3	2440.000	28.53	6.80	35.11	49.17	49.39	74.00	24.61	Peak
4	5424.000	35.83	10.67	34.45	41.96	54.01	74.00	19.99	Peak
5	5424.000	35.83	10.67	34.45	38.27	50.32	54.00	3.68	Average
6	5825.000	35.24	10.93	34.34	97.68	109.51	74.00	-35.51	Peak

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







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

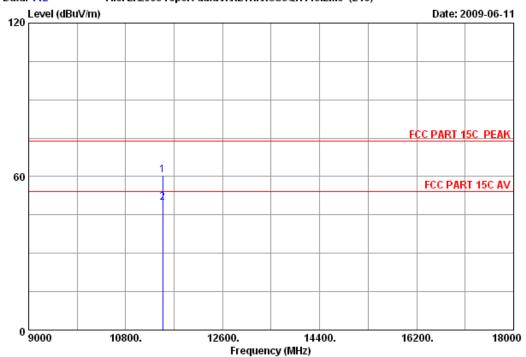
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH149 5745MHz







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11a CH149 5745MHz

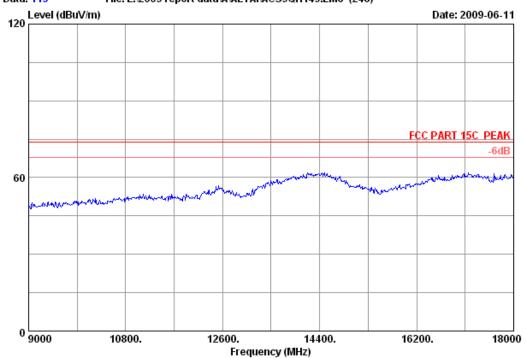
M/N

		Ant.	Cable	Amp.		Emissio	n		
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)	
4	11400 000	27 56	15 00			60.38	74 00	12 62	D1-
Т	11490.000	37.30	13.09	34.51	41.44	00.30	74.00	13.62	reak
2	11490.000	37.56	15.89	34.51	30.78	49.72	54.00	4.28	Average

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







Site no. : 3m Chamber Data no. : 113
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

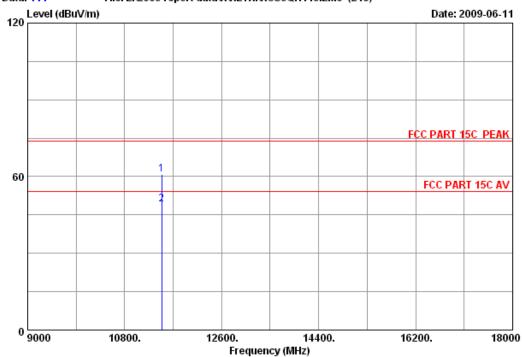
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH149 5745MHz







Site no. : 3m Chamber Data no. : 114
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH149 5745MHz

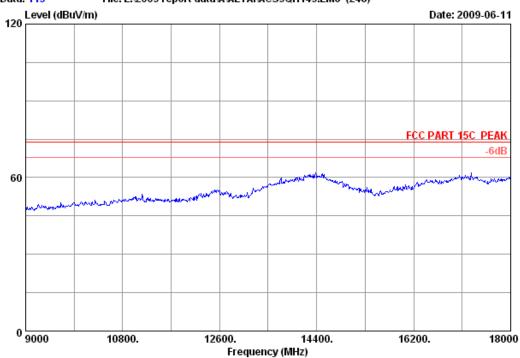
M/N :

		Ant.	Cable	Amp.		Emissio	n			
	-				Reading (dbuv)			_	Remark	_
_	11490.000 11490.000					60.90 49.22		13.10 4.78	Peak Average	

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







Site no. : 3m Chamber Data no. : 115
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

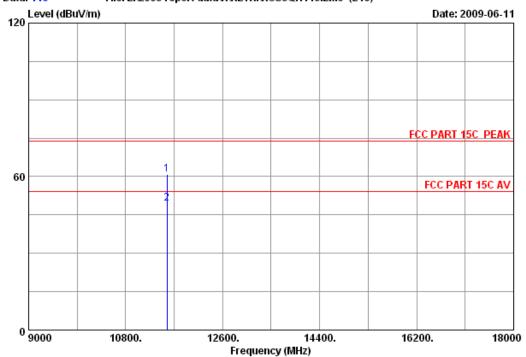
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH157 5785MHz







Site no. : 3m Chamber Data no. : 116
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH157 5785MHz

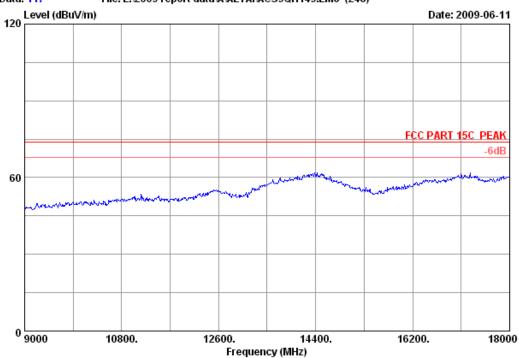
M/N :

		Ant.	Cable	Amp.		Emission	n			
	-				Reading (dbuv)			_	Remark	
_	11570.000 11570.000					60.92 49.32		13.08 4.68	Peak Average	

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







Site no. : 3m Chamber Data no. : 117
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

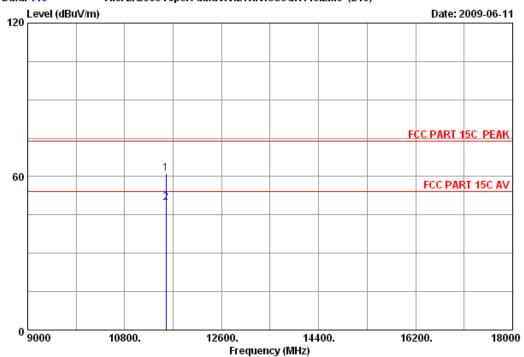
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH157 5785MHz







Site no. : 3m Chamber Data no. : 118

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH157 5785MHz

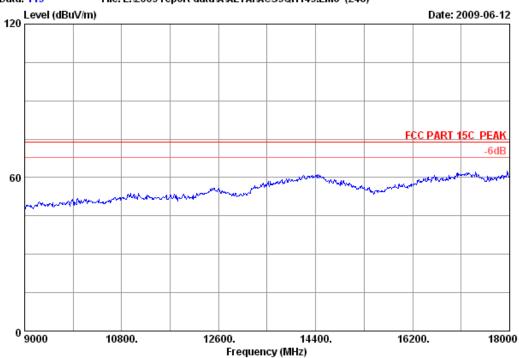
M/N :

		Ant.	Cable	Amp.		Emissio	n			
	-				Reading (dbuv)			_	Remark	_
_	11570.000 11570.000					61.30 49.76		12.70 4.24	Peak Average	

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







Site no. : 3m Chamber Data no. : 119
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

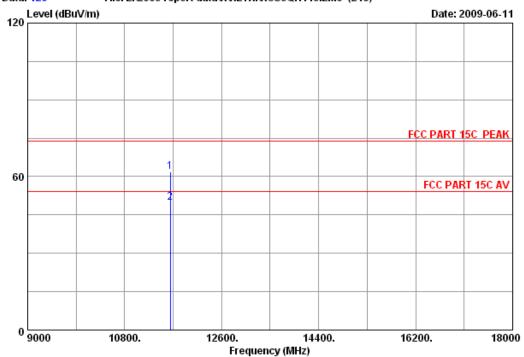
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH165 5825MHz







Site no. : 3m Chamber Data no. : 120
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH165 5825MHz

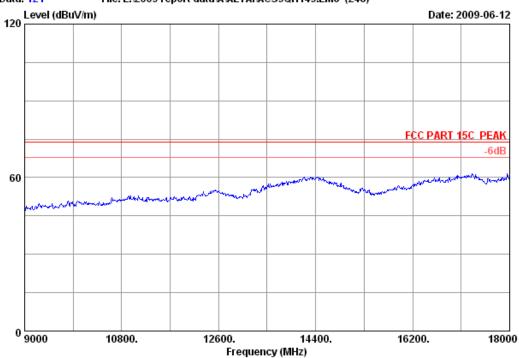
M/N :

		Ant.	Cable	Amp.		Emissio	n			
	-				Reading (dbuv)			_	Remark	
_	11650.000 11650.000				42.89 30.98	61.79 49.88		12.21 4.12	Peak Average	

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







Site no. : 3m Chamber Data no. : 121
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

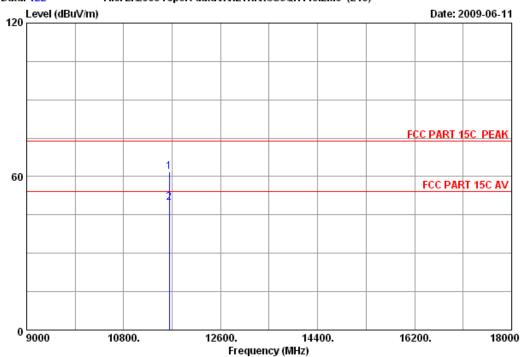
EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH165 5825MHz







Site no. : 3m Chamber Data no. : 122
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N

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

Test mode : IEEE802.11a CH165 5825MHz

M/N :

		Ant.	Cable	Amp.		Emission	n			
	-				Reading (dbuv)			_	Remark	
_	11650.000 11650.000				43.01 31.05	61.91 49.95		12.09 4.05	Peak Average	

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

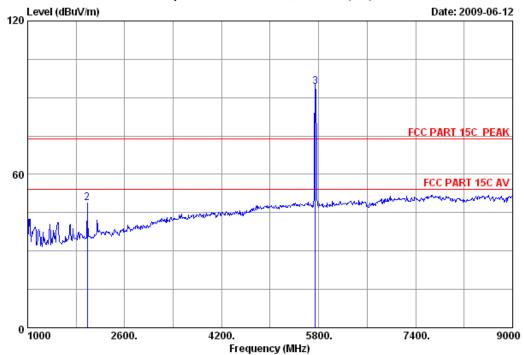
# Frequency: Above 1GHz IEEE 802.11n HT20 5G mode



No.6 Ke Feng Road, Block 52, ShenZhen Science & Industry Park Noutou, ShenZhen, GuangDong, China Tel:+86-755-26639495-7

Fax:+86-755-26632877 Postcode:518057

## Data: 131 File: E:\2009 report data\A\ALTA\ACS9QH149.EM6 (248)



Site no. : 3m Chamber Data no. : 131

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

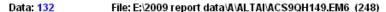
Test mode : IEEE802.11n HT20 CH149 5745MHz

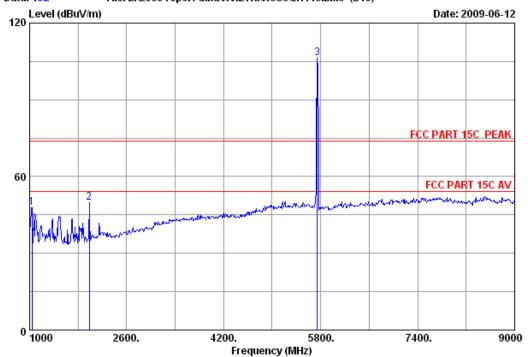
M/N :

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1000.000	25.20	4.35	36.30	51.62	44.87	74.00	29.13	Peak	
2	1984.000	27.83	6.16	35.20	49.86	48.65	74.00	25.35	Peak	
3	5745.000	35.42	10.96	34.36	82.35	94.37	74.00	-20.37	Peak	

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







Site no. : 3m Chamber Data no. : 132
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH149 5745MHz

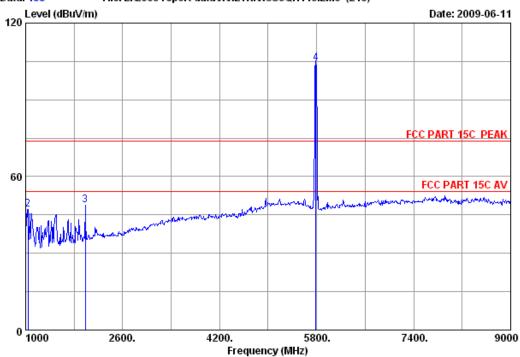
M/N :

					Reading (dbuv)		Limits	_	Remark	
2	1040.000 1984.000 5745.000	27.83	6.16	35.20	54.31 50.87 94.21	47.75 49.66 106.23	74.00	26.25 24.34 -32.23	Peak	

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







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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH157 5785MHz

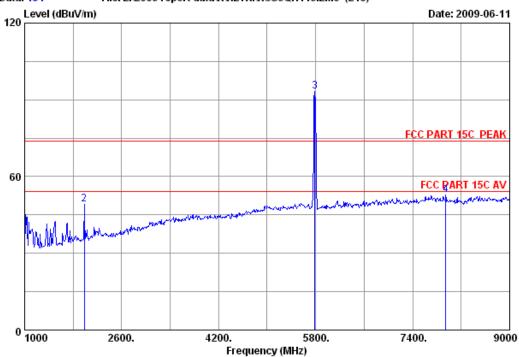
M/N

		Ant.	Cable	Amp.		Emissio:	n			
	-	Factor (dB/m)			Reading (dbuv)			_	Remark	
1	1000.000	25.20	4.35	36.30	53.97	47.22	74.00	26.78	Peak	
2	1040.000	25.25	4.43	36.24	53.60	47.04	74.00	26.96	Peak	
3	1984.000	27.83	6.16	35.20	49.98	48.77	74.00	25.23	Peak	
4	5785.000	35.35	10.93	34.35	92.44	104.37	74.00	-30.37	Peak	

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







Site no. : 3m Chamber Data no. : 134
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

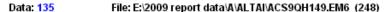
Test mode : IEEE802.11n HT20 CH157 5785MHz

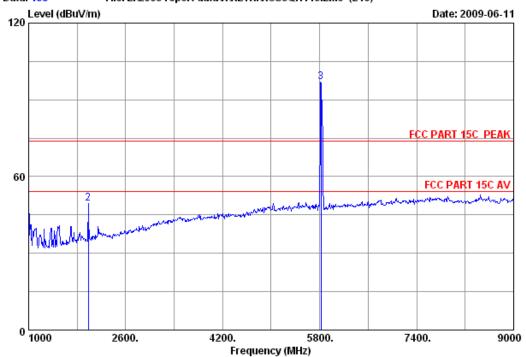
M/N :

	Ant.	Cable	Amp.		Emissio	n			
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1000.000	25.20	4.35	36.30	54.94	48.19	74.00	25.81	Peak	
1984.000	27.83	6.16	35.20	50.31	49.10	74.00	24.90	Peak	
5785.000	35.35	10.93	34.35	81.41	93.34	74.00	-19.34	Peak	
7944.000	38.74	12.73	34.59	35.84	52.72	74.00	21.28	Peak	
	(MHz)  LOOO.OOO L984.OOO	Freq. Factor (MHz) (dB/m) 	Freq. Factor loss (MHz) (dB/m) (dB) 	Freq. Factor loss Factor (MHz) (dB/m) (dB) (dB)	(MHz) (dB/m) (dB) (dB) (dbuv) 1000.000 25.20 4.35 36.30 54.94 1984.000 27.83 6.16 35.20 50.31 15785.000 35.35 10.93 34.35 81.41	Freq. Factor loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m)  1000.000 25.20 4.35 36.30 54.94 48.19 1984.000 27.83 6.16 35.20 50.31 49.10 19785.000 35.35 10.93 34.35 81.41 93.34	Freq. Factor loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m) (dBuV/m)  1000.000 25.20 4.35 36.30 54.94 48.19 74.00 1984.000 27.83 6.16 35.20 50.31 49.10 74.00 19785.000 35.35 10.93 34.35 81.41 93.34 74.00	Freq. Factor loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m) (dBuV/m) (dB)	Freq. Factor loss Factor Reading Level Limits Margin Remark (MHz) (dB/m) (dB) (dB) (dbuv) (dBuV/m) (dBuV/m) (dB)  L000.000 25.20 4.35 36.30 54.94 48.19 74.00 25.81 Peak 1984.000 27.83 6.16 35.20 50.31 49.10 74.00 24.90 Peak 1985.000 35.35 10.93 34.35 81.41 93.34 74.00 -19.34 Peak

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







Site no. : 3m Chamber Data no. : 135
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH165 5825MHz

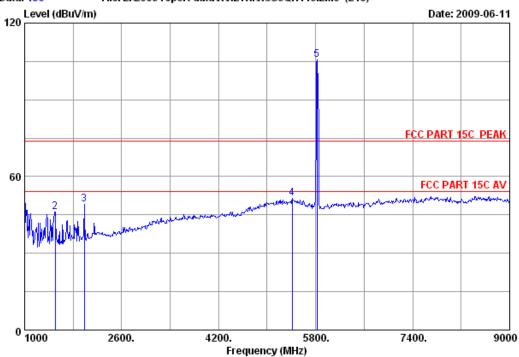
M/N :

					Reading (dbuv)		Limits	_	Remark	
2	1000.000 1984.000 5825.000	27.83	6.16	35.20	55.48 50.82 85.06	48.73 49.61 96.89	74.00	25.27 24.39 -22.89	Peak	

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







Site no. : 3m Chamber Data no. : 136 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH165 5825MHz

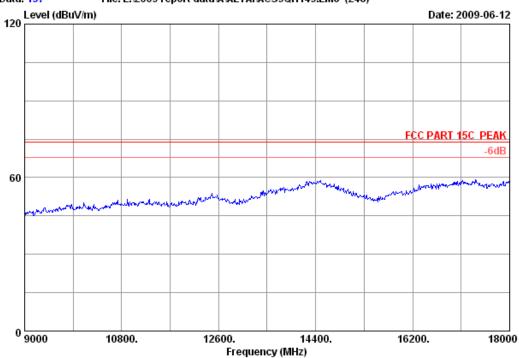
M/N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dbuv)	Emissio: Level (dBuV/m)	Limits	_	Remark
1	1000.000	25.20	4.35	36.30	58.77	52.02	74.00	21.98	Peak
2	1504.000	25.97	5.32	35.74	50.62	46.17	74.00	27.83	Peak
3	1984.000	27.83	6.16	35.20	50.48	49.27	74.00	24.73	Peak
4	5416.000	35.83	10.67	34.45	39.34	51.39	74.00	22.61	Peak
5	5825.000	35.24	10.93	34.34	93.84	105.67	74.00	-31.67	Peak

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







Site no. : 3m Chamber Data no. : 137
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

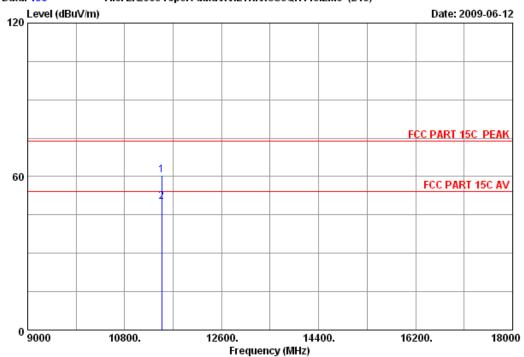
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH149 5745MHz







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

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

 Ant. pol. : VERTICAL
 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH149 5745MHz

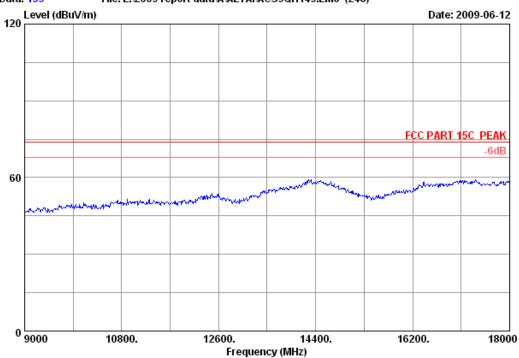
M/N :

		Ant.	Cable	Amp.		Emission	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	11490.000	37.56	15.89	34.51	41.63	60.57	74.00	13.43	Peak	
2	11490.000	37.56	15.89	34.51	31.05	49.99	54.00	4.01	Average	

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







Site no. : 3m Chamber Data no. : 139
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

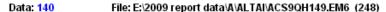
Limit : FCC PART 15C PEAK

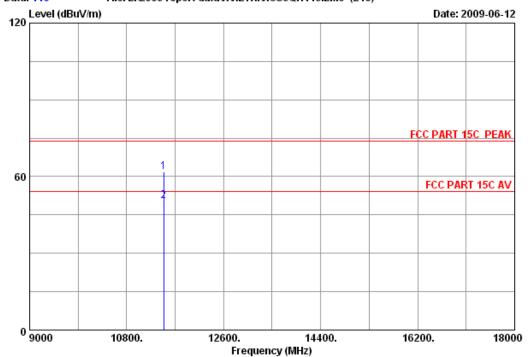
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH149 5745MHz







Site no. : 3m Chamber Data no. : 140
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH149 5745MHz

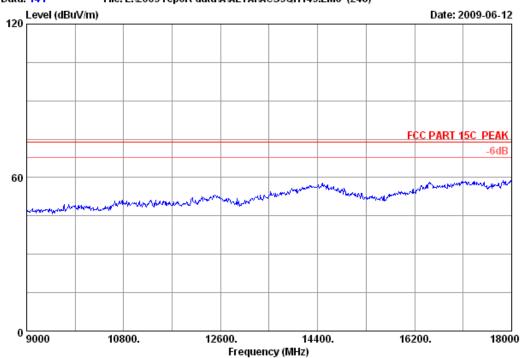
M/N :

		Ant.	Cable	Amp.		Emission	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	11490.000	37.56	15.89	34.51	42.89	61.83	74.00	12.17	Peak	
2	11490.000	37.56	15.89	34.51	31.58	50.52	54.00	3.48	Average	

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







Site no. : 3m Chamber Data no. : 141
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

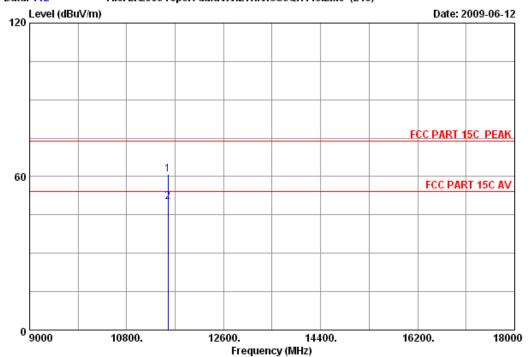
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH157 5785MHz







Site no. : 3m Chamber Data no. : 142
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH157 5785MHz

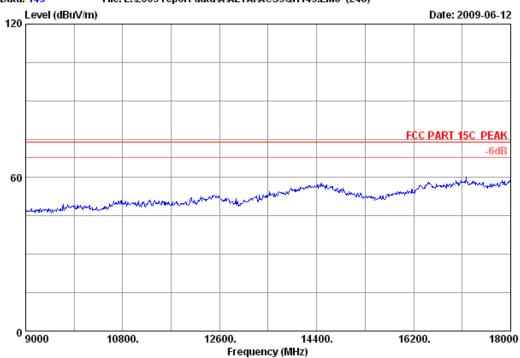
M/N :

		Ant.	Cable	Amp.		Emission	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	$(\mathtt{MHz})$	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	11570.000	37.44	15.93	34.46	41.98	60.89	74.00	13.11	Peak	
2	11570.000	37.44	15.93	34.46	31.08	49.99	54.00	4.01	Average	

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







Site no. : 3m Chamber Data no. : 143 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

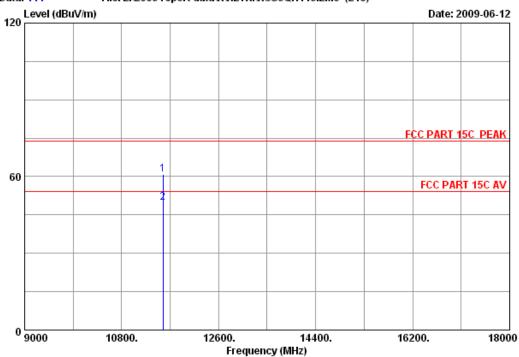
EUT : Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH157 5785MHz

M/N







Site no. : 3m Chamber Data no. : 144
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH157 5785MHz

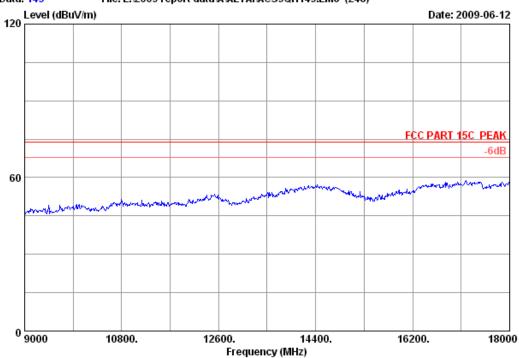
M/N :

		Ant.	Cable	Amp.		Emission	n			
	-				Reading (dbuv)			_	Remark	_
_	11570.000 11570.000					60.98 49.78		13.02 4.22	Peak Average	-

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







Site no. : 3m Chamber Data no. : 145
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

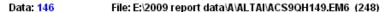
Limit : FCC PART 15C PEAK

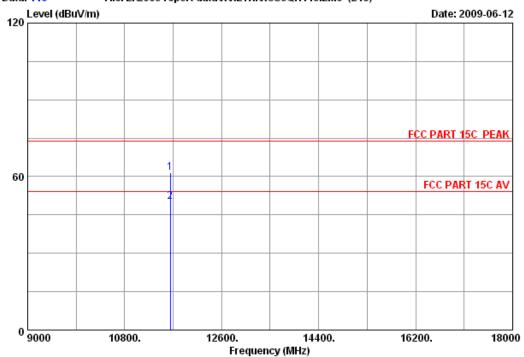
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH165 5825MHz







Site no. : 3m Chamber Data no. : 146 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH165 5825MHz

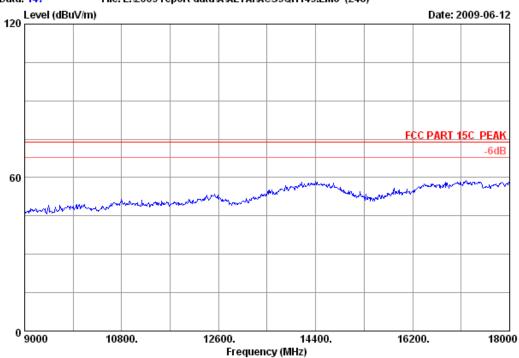
M/N

		Ant.	Cable	Amp.		Emissio	n			
	-				Reading (dbuv)			_	Remark	
_	11650.000 11650.000				42.57 31.25	61.47 50.15		12.53 3.85	Peak Average	

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







Site no. : 3m Chamber Data no. : 147
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

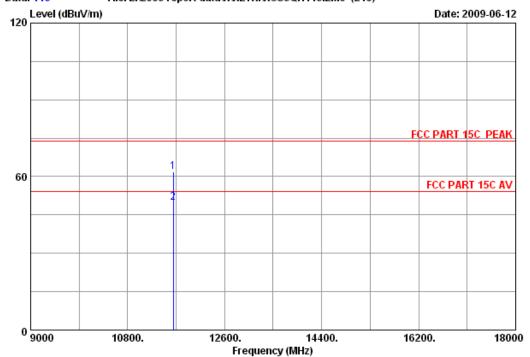
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH165 5825MHz







Site no. : 3m Chamber Data no. : 148
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT20 CH165 5825MHz

M/N :

		Ant.	Cable	Amp.		Emission	n			
	-				Reading (dbuv)			_	Remark	
_	11650.000 11650.000				42.98 30.83	61.88 49.73		12.12 4.27	Peak Average	

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

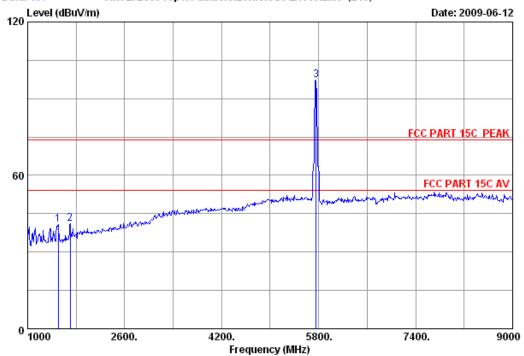
# Frequency: Above 1GHz IEEE 802.11n HT40 5G mode



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Fax:+86-755-26632877 Postcode:518057





Site no. : 3m Chamber Data no. : 157

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH151 5755MHz

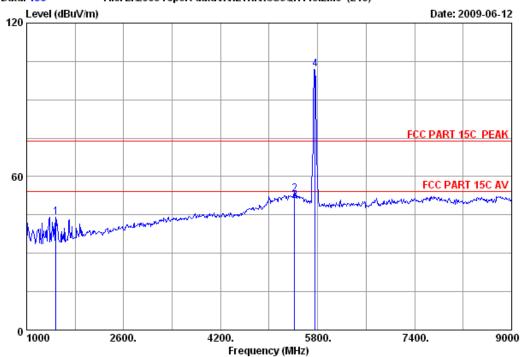
M/N

		Ant.	Cable	Amp.		Emissio:	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	1504.000	25.97	5.32	35.74	45.19	40.74	74.00	33.26	Peak	
2	1704.000	26.70	5.64	35.51	44.44	41.27	74.00	32.73	Peak	
3	5755.000	35.38	10.94	34.36	85.20	97.16	74.00	-23.16	Peak	

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







Site no. : 3m Chamber Data no. : 158
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH151 5755MHz

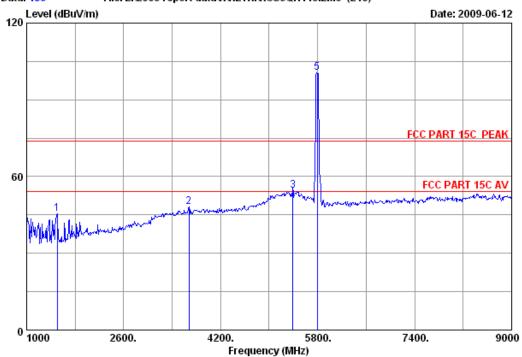
M/N :

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dbuv)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
1	1480.000	25.88	5.25	35.76	48.89	44.26	74.00	29.74	Peak
2	5416.670	35.83	10.67	34.45	40.99	53.04	74.00	20.96	Peak
3	5416.670	35.83	10.67	34.45	38.45	50.50	54.00	3.50	Average
4	5755.000	35.38	10.94	34.36	89.94	101.90	74.00	-27.90	Peak

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







Site no. : 3m Chamber Data no. : 159
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH159 5795MHz

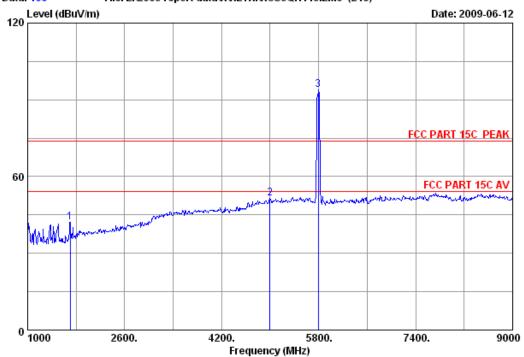
M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dbuv)	Emissio: Level (dBuV/m)	n Limits (dBuV/m)	_	Remark
1	1504.000	25.97	5.32	35.74	49.91	45.46	74.00	28.54	Peak
2	3680.000	31.87	9.16	34.87	41.93	48.09	74.00	25.91	Peak
3	5393.430	35.81	10.63	34.45	42.51	54.50	74.00	19.50	Peak
4	5393.430	35.81	10.63	34.45	38.41	50.40	54.00	3.60	Average
5	5795.000	35.31	10.91	34.35	88.72	100.59	74.00	-26.59	Peak

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







Site no. : 3m Chamber Data no. : 160
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH159 5795MHz

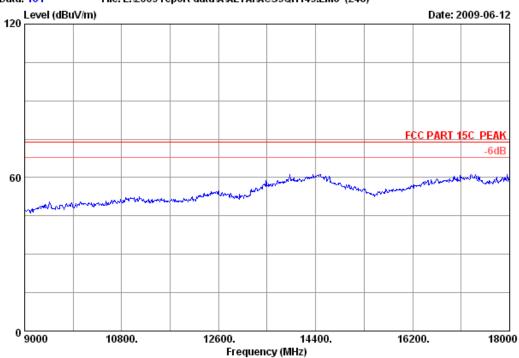
M/N :

	Freq.	Factor		Factor	Reading (dbuv)		Limits	_	Remark	
2	1704.000 5000.000 5795.000	35.50	10.59	34.55	45.45 39.87 81.92	42.28 51.41 93.79	74.00	31.72 22.59 -19.79	Peak	

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







Site no. : 3m Chamber Data no. : 161
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

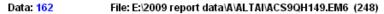
Limit : FCC PART 15C PEAK

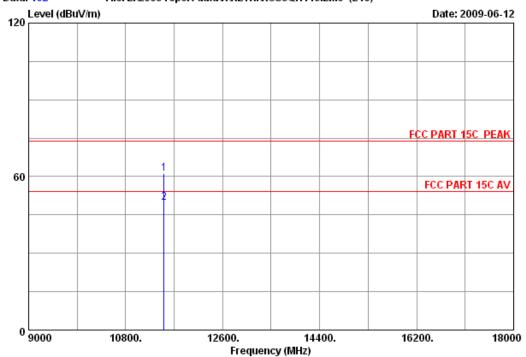
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH151 5755MHz







Site no. : 3m Chamber Data no. : 162
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH151 5755MHz

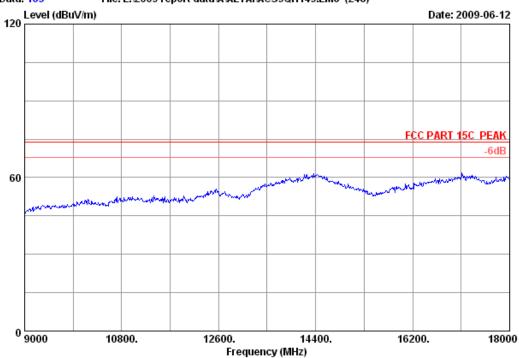
M/N :

		Ant.	Cable	Amp.		Emission	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	$(\mathtt{MHz})$	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
1	11510.000	37.50	15.90	34.49	42.15	61.06	74.00	12.94	Peak	
2	11510.000	37.50	15.90	34.49	30.85	49.76	54.00	4.24	Average	

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







Site no. : 3m Chamber Data no. : 163
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

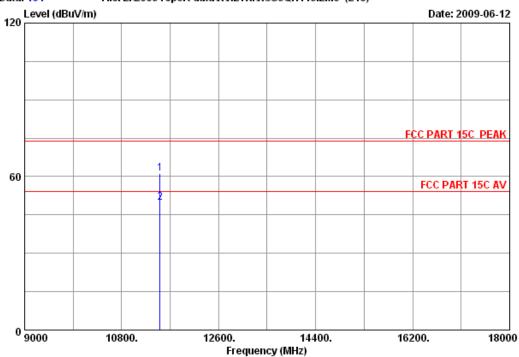
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH151 5755MHz







Site no. : 3m Chamber Data no. : 164 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH151 5755MHz

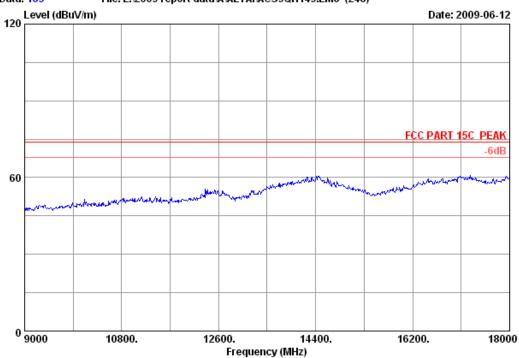
M/N

		Ant.	Cable	Amp.		Emissio	n			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dbuv)	(dBuV/m)	(dBuV/m)	(dB)		
4	11510.000	27 50	15 00	24 40	42.12	61.03	74.00	12.97	Doolt	-
т	11310.000	37.30	13.90	34.49	44.14	01.03	74.00	14.97	reak	
2	11510.000	37.50	15.90	34.49	31.05	49.96	54.00	4.04	Average	

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







Site no. : 3m Chamber Data no. : 165
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

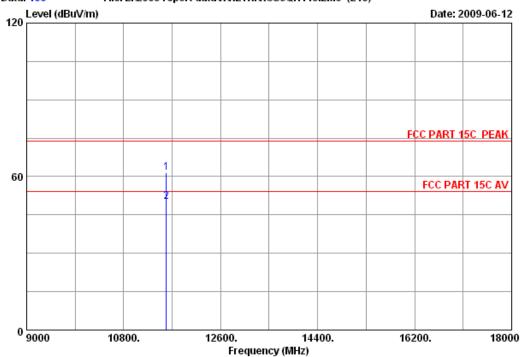
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH159 5795MHz







Site no. : 3m Chamber Data no. : 166 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

: Altai A3 Smart WiFi M/N:WA3011N Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH159 5795MHz

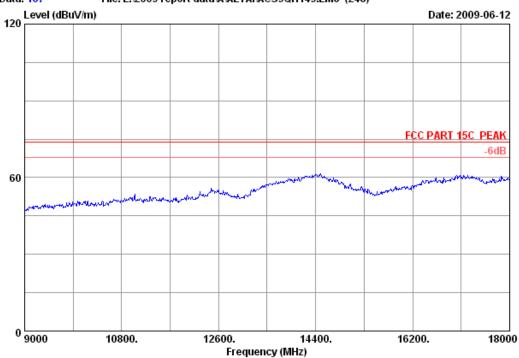
M/N

		Ant.	Cable	Amp.		Emissio	n			
	-				Reading (dbuv)			_	Remark	
_	11590.000 11590.000					61.56 50.12		12.44 3.88	Peak Average	

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







Site no. : 3m Chamber Data no. : 167
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

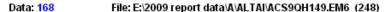
Limit : FCC PART 15C PEAK

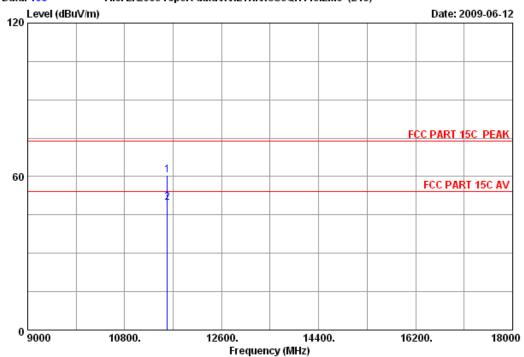
Env. / Ins. : 23 \*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH159 5795MHz







Site no. : 3m Chamber Data no. : 168
Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23\*C/54% Engineer :Sunny-lu

EUT : Altai A3 Smart WiFi M/N:WA3011N
Power : DC 56V From Adapter input AC 120V/60Hz

Test mode : IEEE802.11n HT40 CH159 5795MHz

M/N :

		Ant.	Cable	Amp.		Emission	n		
	-				Reading (dbuv)			_	Remark
_	11590.000 11590.000					60.49 49.78		13.51 4.22	Peak Average

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

# 5. CONDUCTED SPURIOUS EMISSIONS

# 5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May,08, 09	1 Year
2	RF Cable	Hubersuhner	SUCOFLEX	182768/4	May,08, 09	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, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

# 5.3.Test Procedure

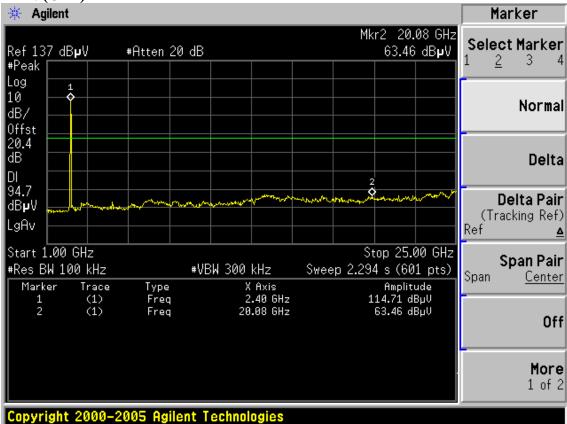
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz.

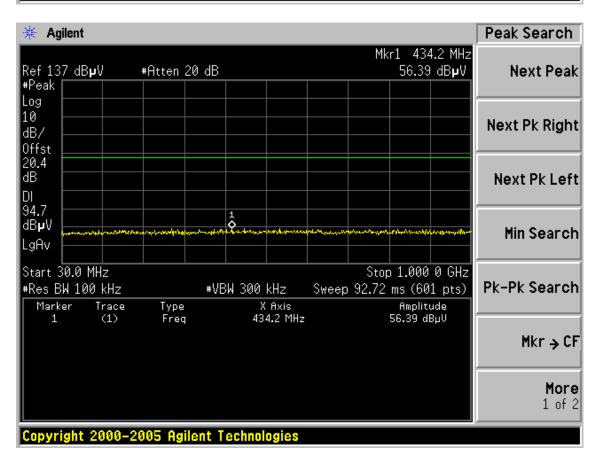
# 5.4. Test result

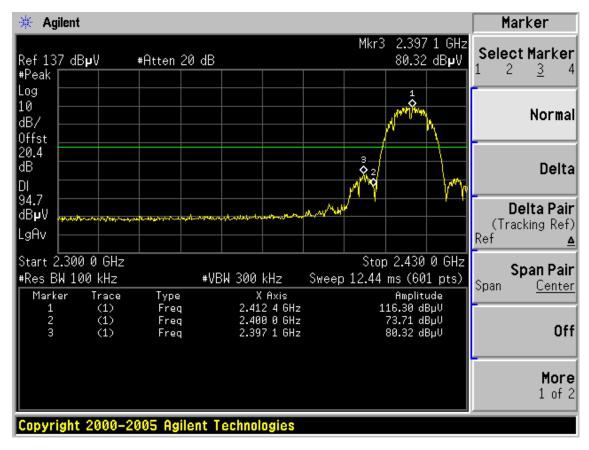
**PASS** (The testing data was attached in the next pages.)

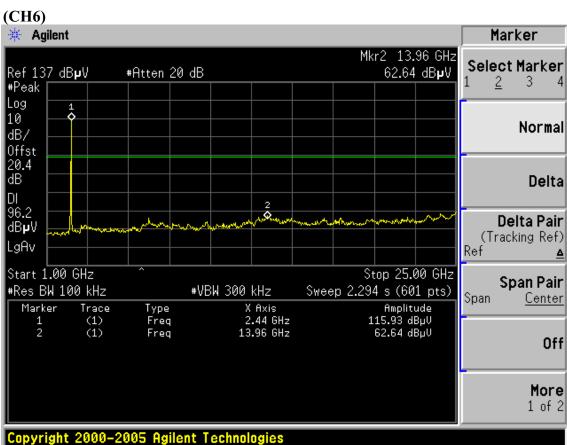
Conducted emission test data: Test Mode: IEEE 802.11b TX

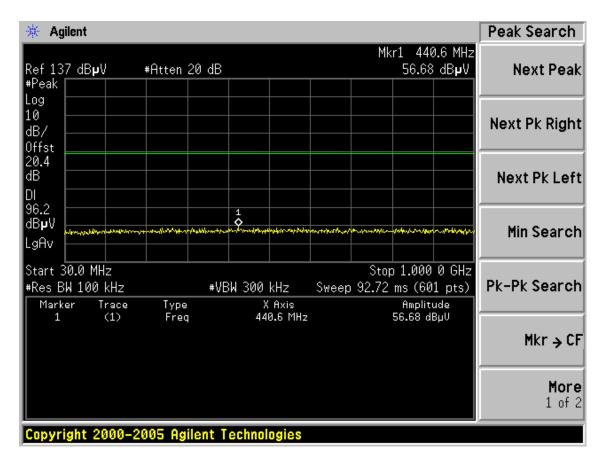
AT1: (CH1)

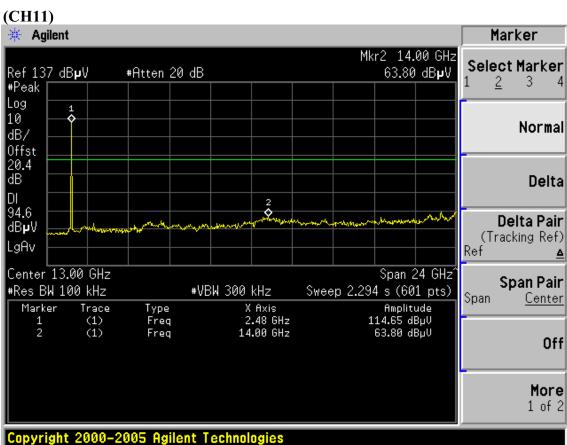


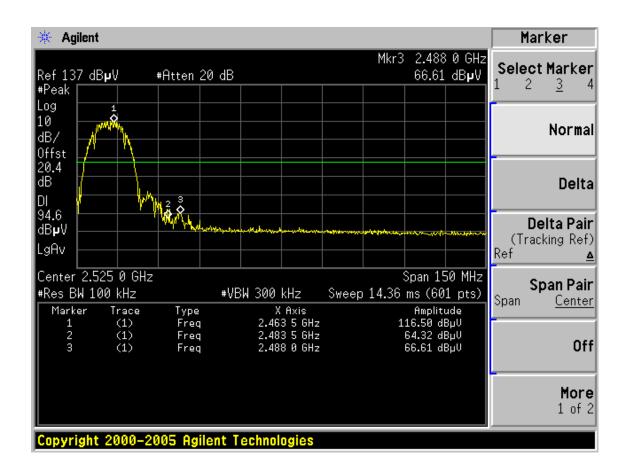


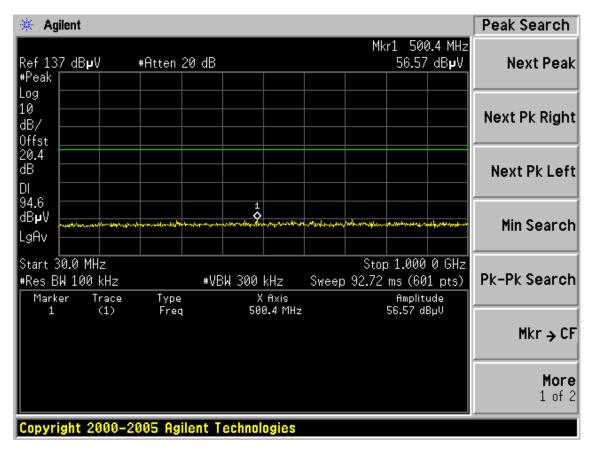






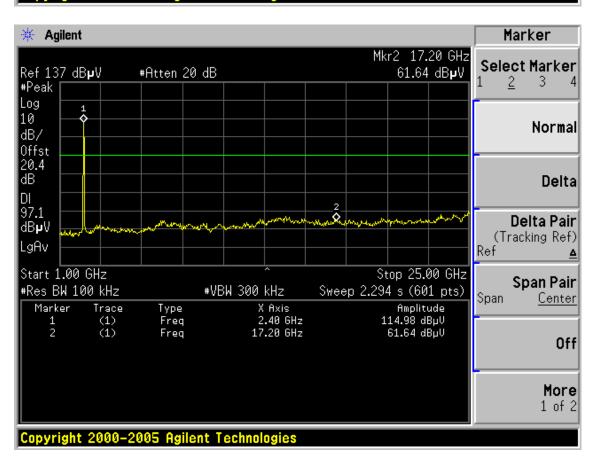


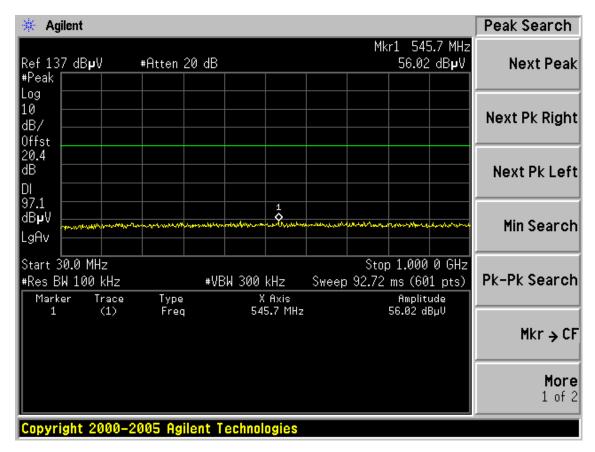


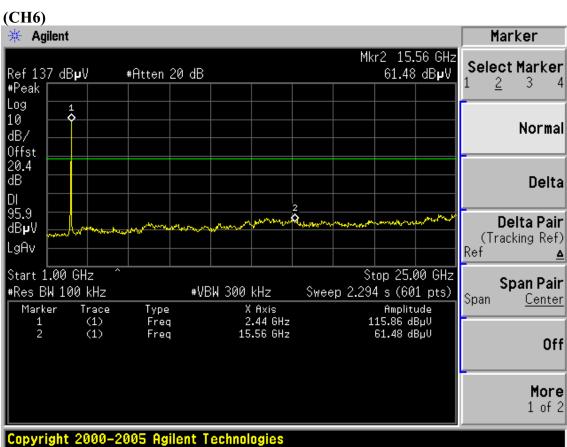


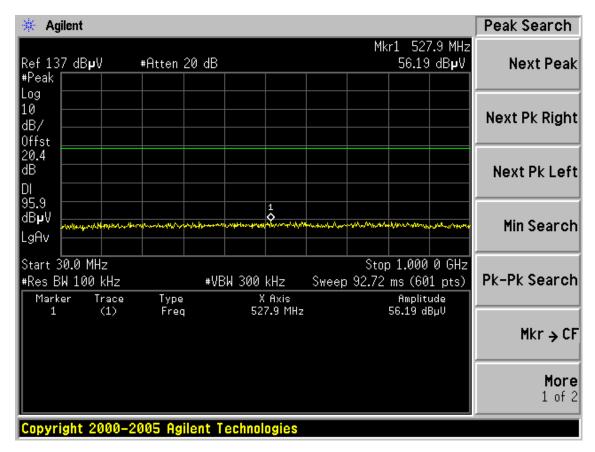


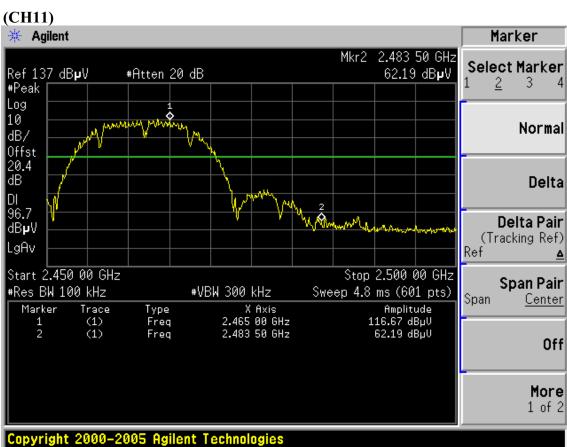


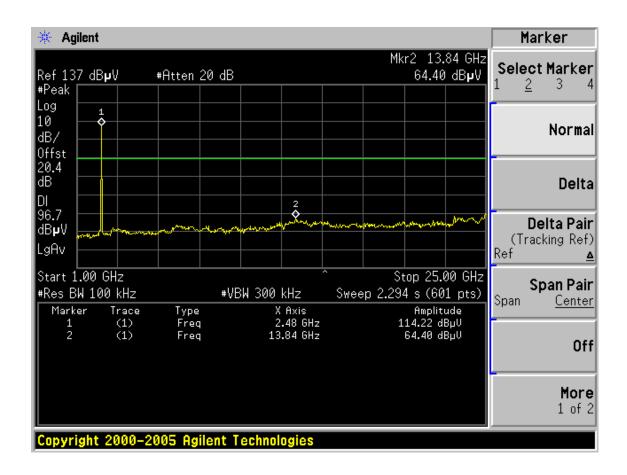


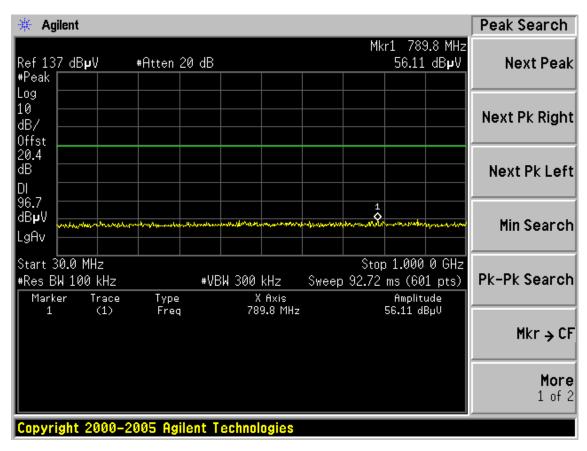






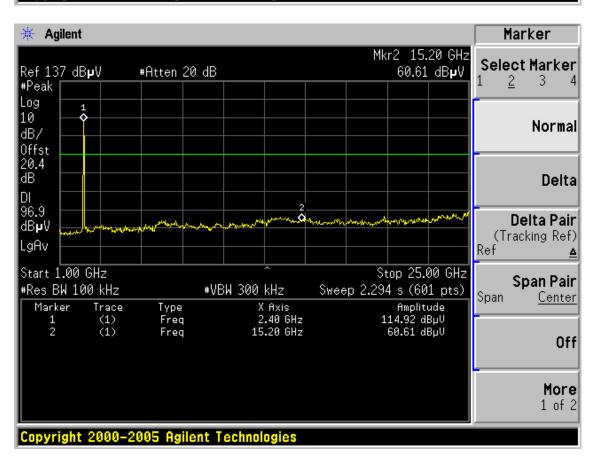


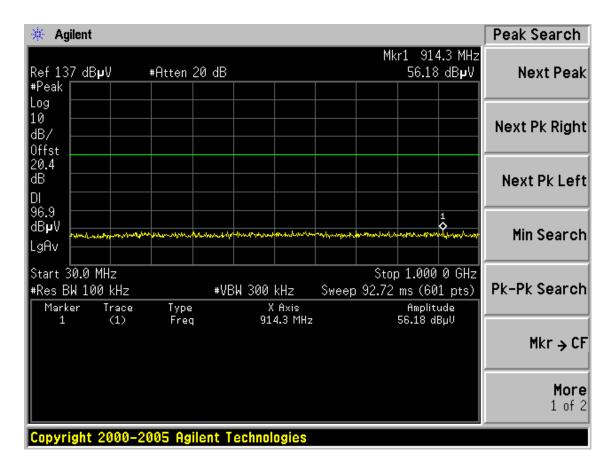


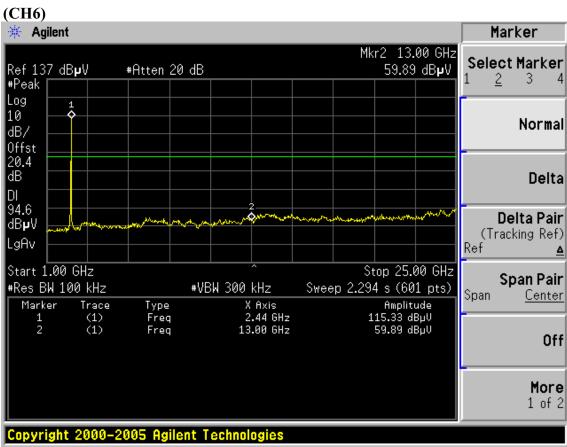


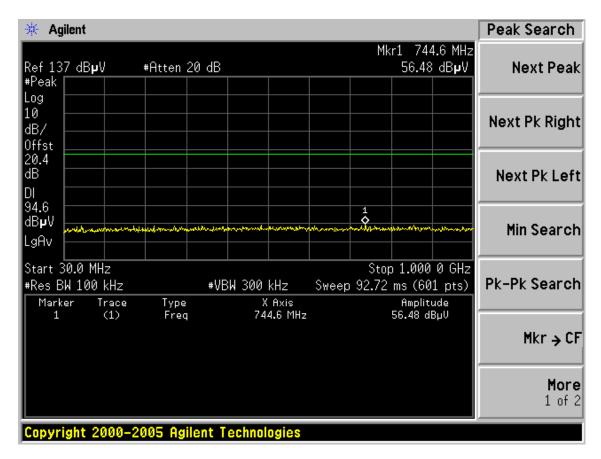


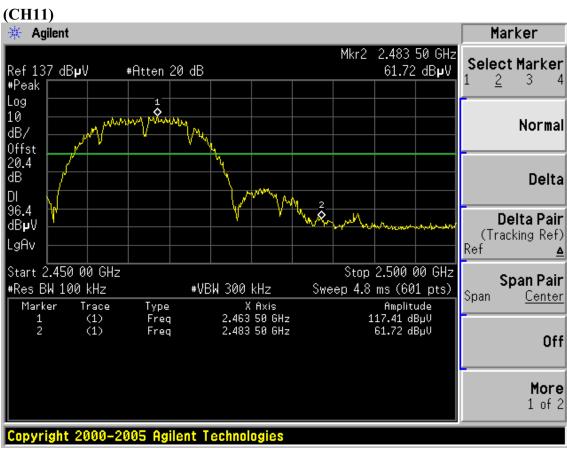


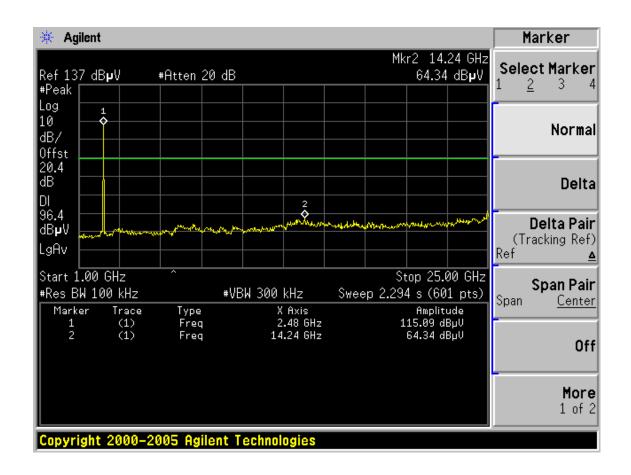


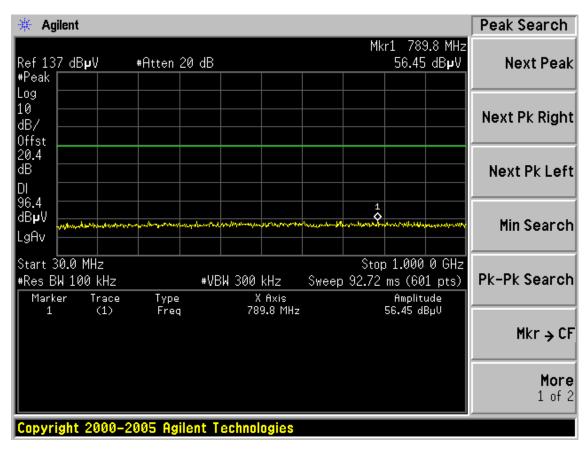






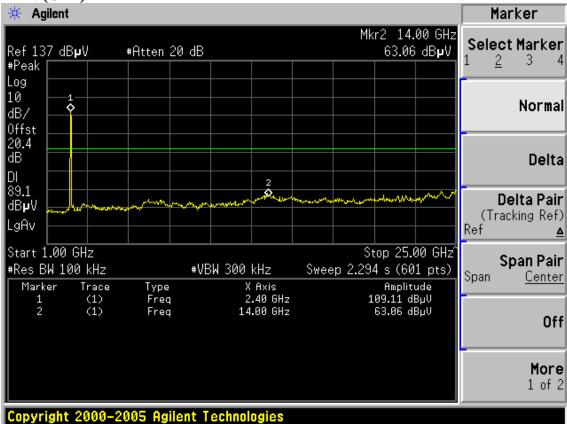


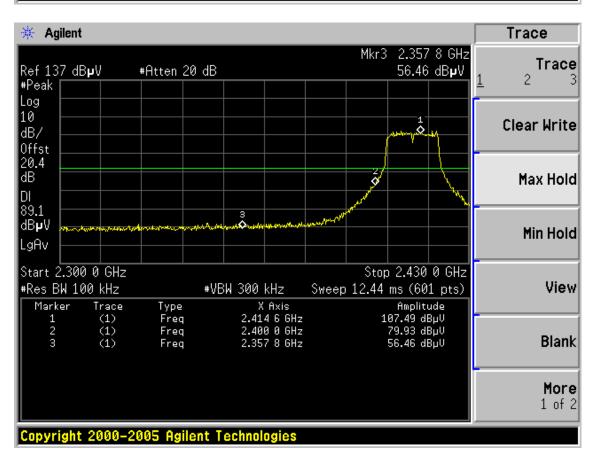


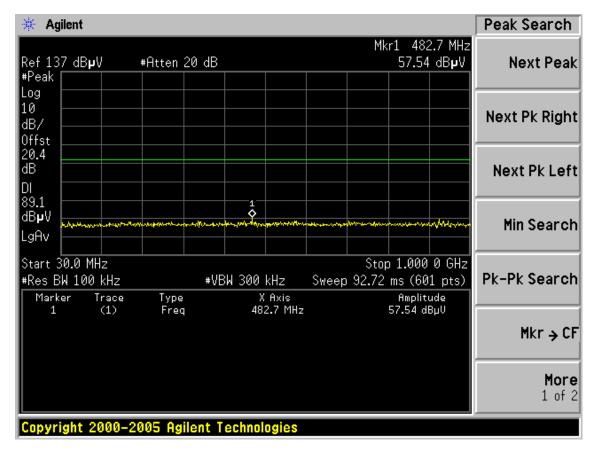


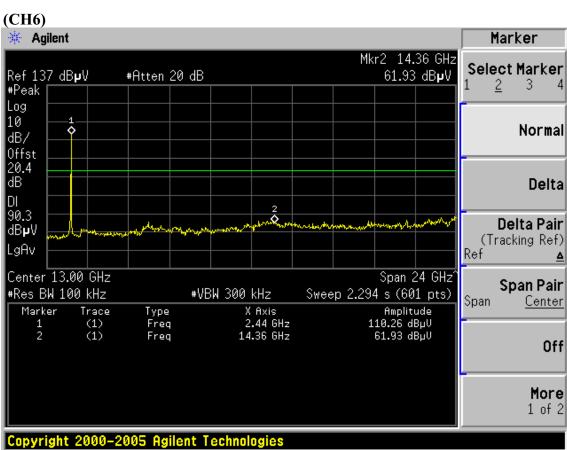
Test Mode: IEEE 802.11g TX

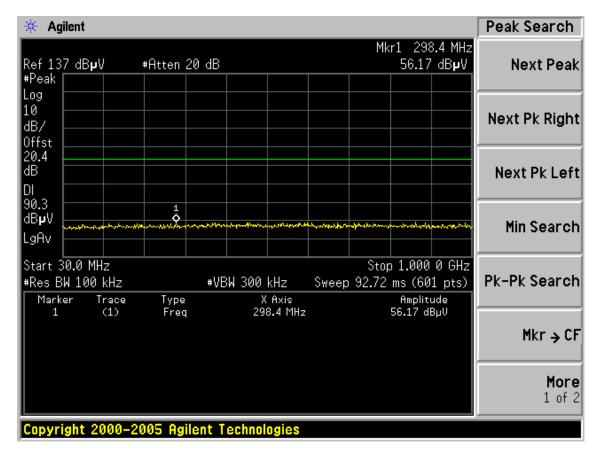
AT1: (CH1)

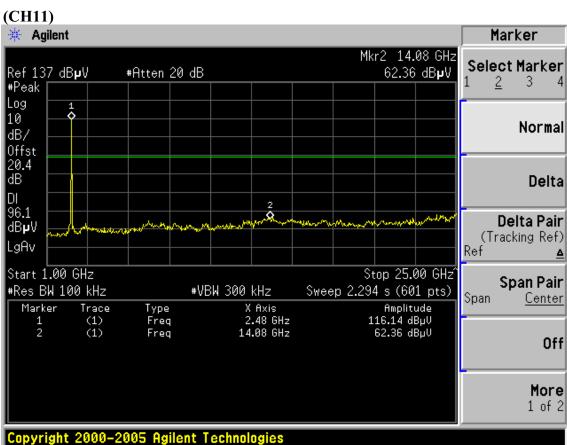


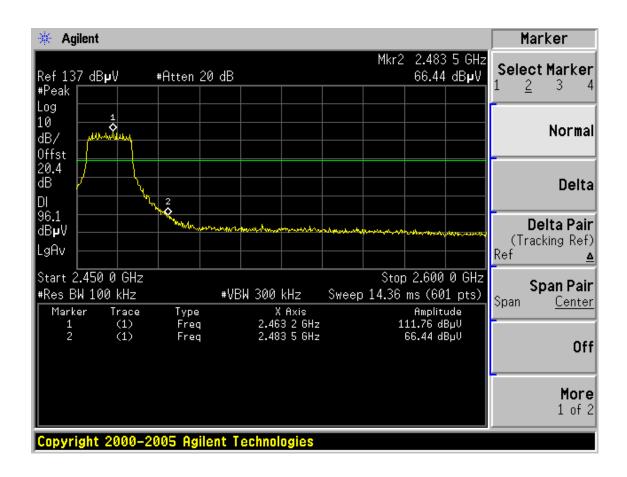


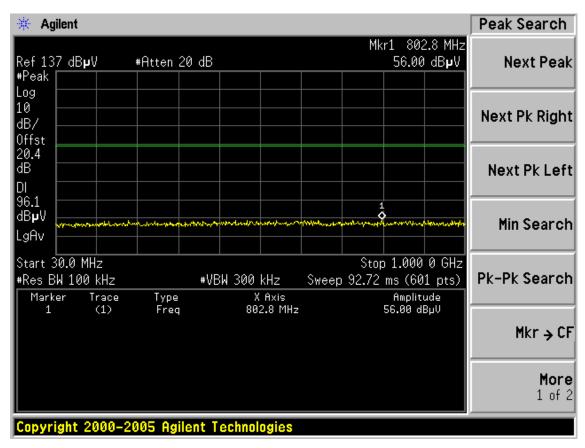




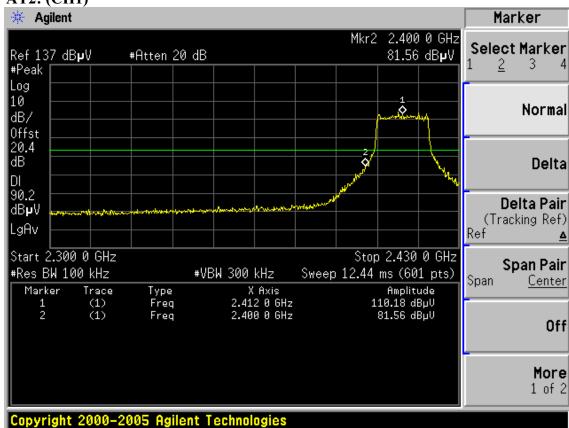


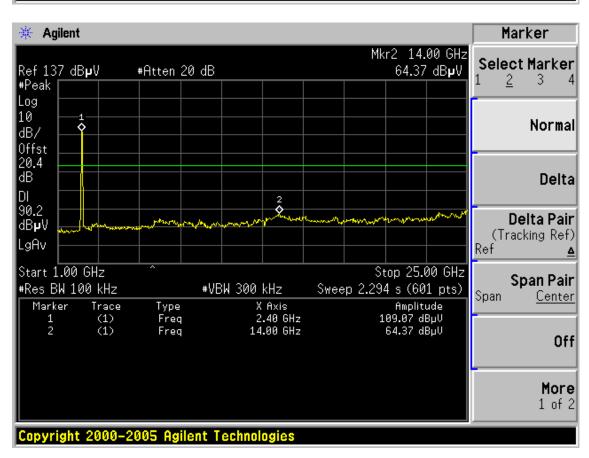


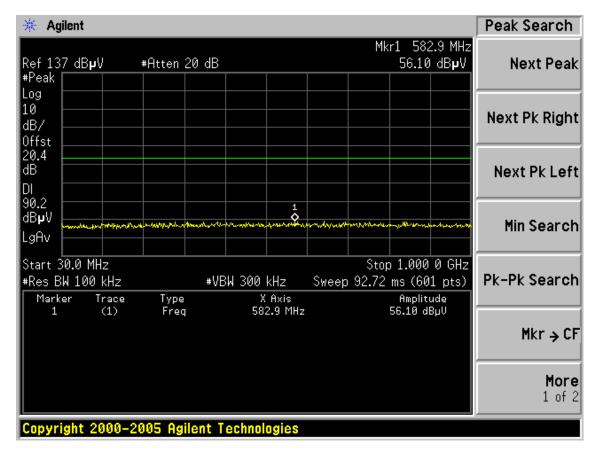


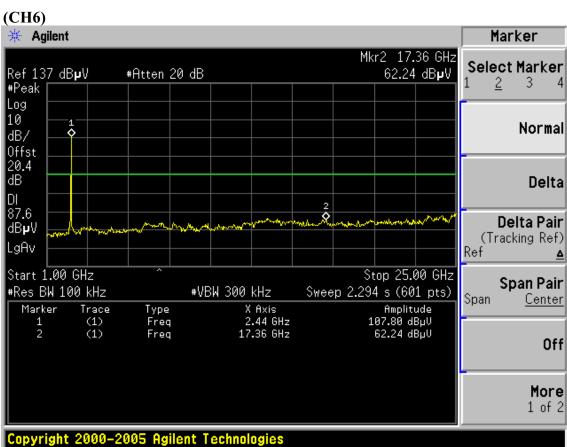


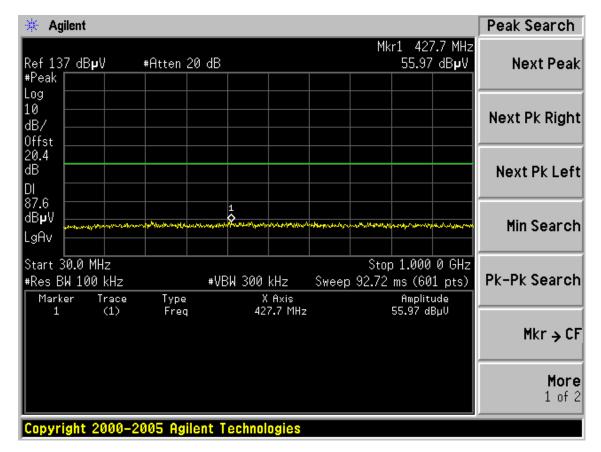


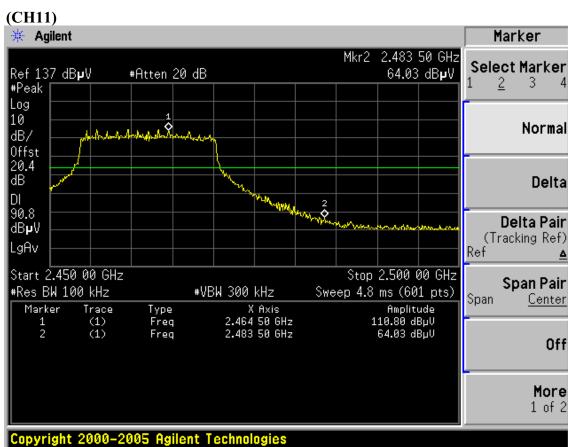


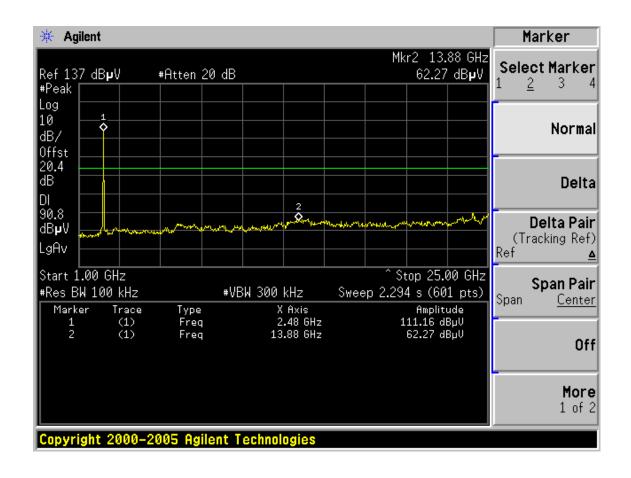


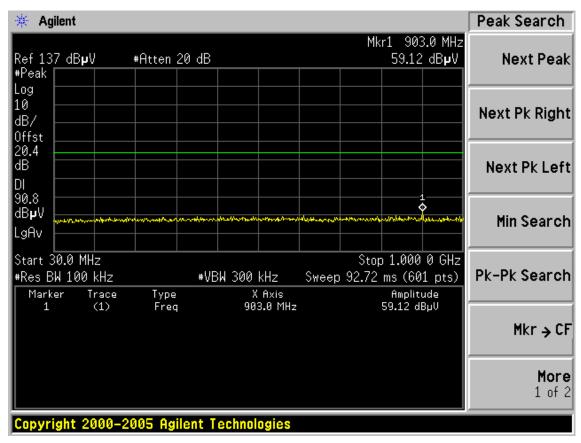




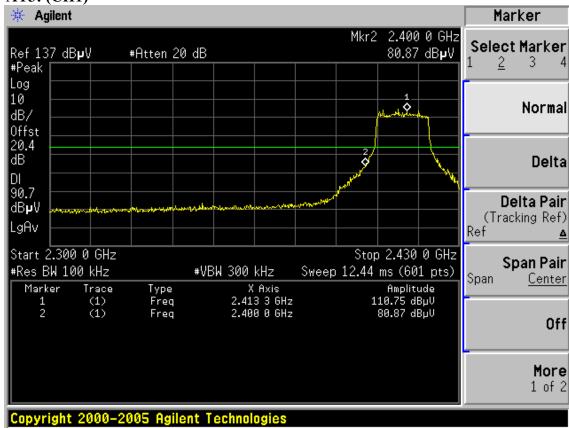


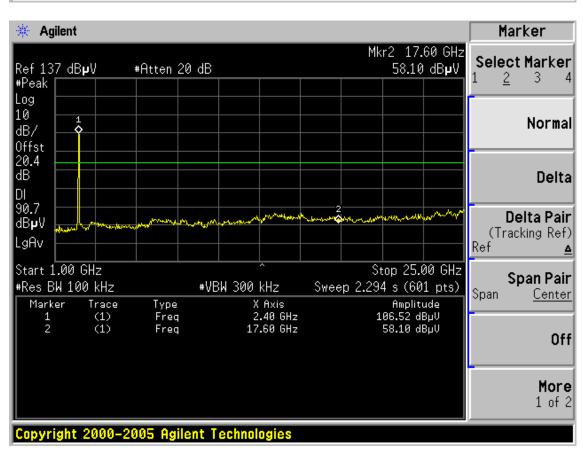


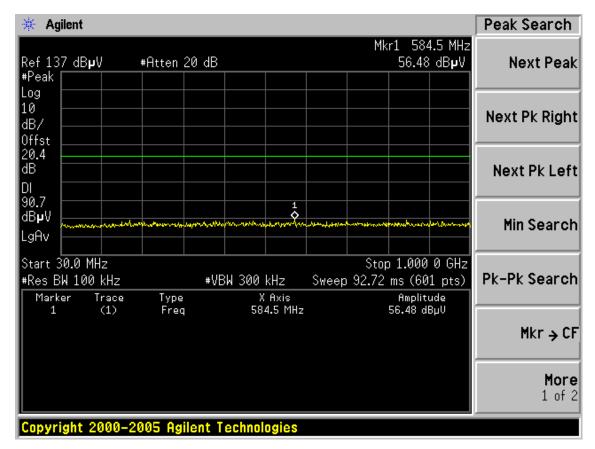


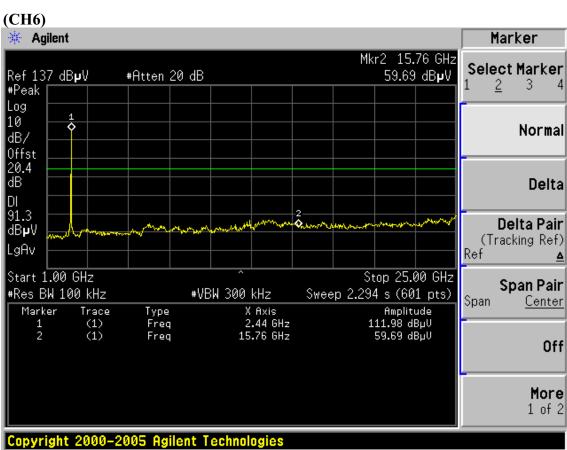


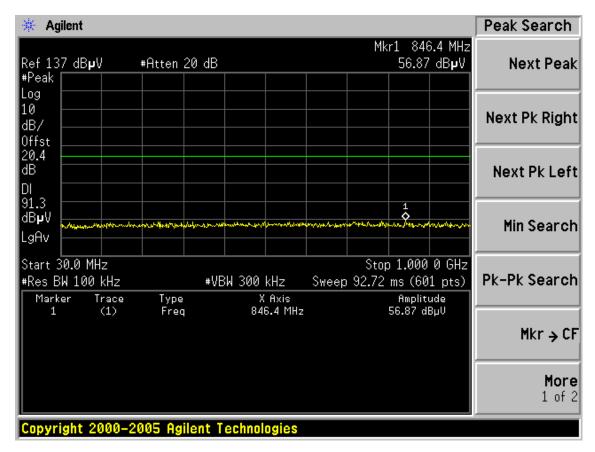


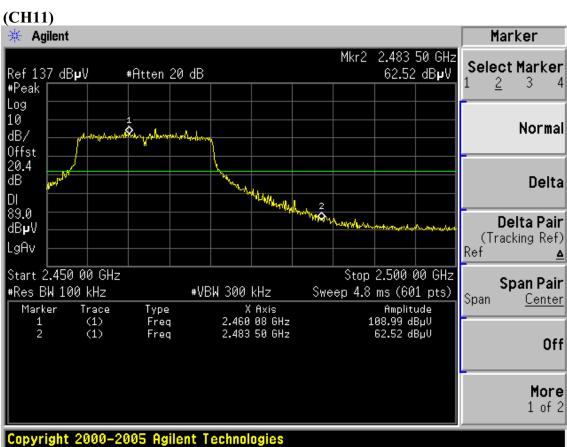


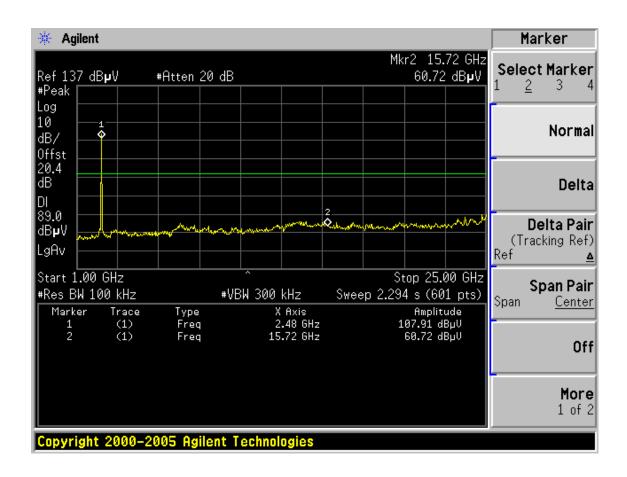


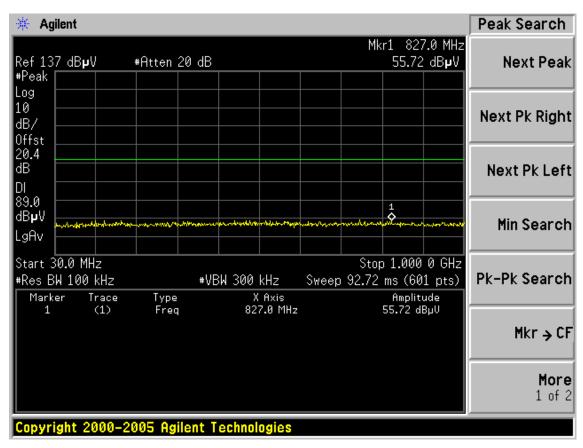












**Test Mode: IEEE 802.11n HT20 TX (2.4G)** 

AT1: (CH1)

