### FCC PART 15 SUBPART C TEST REPORT

for

#### **UHF RFID READER/WRITER MODULE**

Model No.: UM800

FCC ID: WXAUM800

of

Applicant: GIGA-TMS INC.
Address: 8F, NO.31, LANE 169, KANG-NING ST.,HSI-CHIH,
NEW TAIPEI CITY, 22180 TAIWAN

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1

A2LA Accredited No.: 2732.01





Report No.: W6M21308-13473-C-1

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C. TEL: 886-2-66068877 FAX: 886-2-66068879 E-mail: wts@wts-lab.com



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

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#### 1 General Information

#### 1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that is performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.

**Tester:** 

July 15, 2014 Rick Chen Rick Chen.

Date WTS-Lab. Name Signature

**Technical responsibility for area of testing:** 

July 15, 2014 Kevin Wang

Date WTS Name Signature



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#### 1.2 Testing laboratory

#### 1.2.1 Location

**OATS** 

No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207,

Taiwan (R.O.C.)

3 meter semi-anechoic chamber

No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

TEL:886-2-6613-0228 FAX:886-2-2791-5046

#### Company

Worldwide Testing Services(Taiwan) Co., Ltd. 6F, NO. 58, LANE 188, RUEY-KUANG RD. NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877 Fax : 886-2-66068879

#### 1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

FCC filed test laboratory Reg. No. 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1





#### Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd.:

Name:	./.
Accredited number:	./.
Street:	./.
Town:	./,
Country:	./.
Telephone:	./.
Fax:	./.

#### 1.3 Details of approval holder

Name: GIGA-TMS INC.

Street: 8F, NO.31, LANE 169, KANG-NING ST., HSI-CHIH,

Town: NEW TAIPEI CITY, 22180

Country: TAIWAN
Telephone: 02-2695-4214
Fax: 02-2695-4213

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### 1.4 Application details

Date of receipt of test item: April 30, 2014

Date of test: from May 02, 2014 to July 15, 2014

#### 1.5 General information of Test item

Type of test item: UHF RFID READER/WRITER MODULE

Model Number: UM800

Multi-listing model number: ./.

Brand Name: PROMAGE, GIGATEK, ProxData

Photos: see Annex

**Technical data** 

 Frequency band:
 902 – 928 MHz

 Frequency ( ch A):
 902.75 MHz

 Frequency ( ch B):
 914.75 MHz

 Frequency ( ch C):
 927.25 MHz

<u>Transmitter</u> <u>Unom</u>

Power (ch 1): Conducted: 24.60 dBm Power (ch 25): Conducted: 24.69 dBm Power (ch 50): Conducted: 24.60 dBm

Power supply: 5 VDC (Regulated down from 5.3 VDC Power source from the

testing board)

Operation modes: Half-duplex

Modulation Type: PRSK

Antenna Type: ANT1: ANT570(US): Ceramic Patch Antenna

ANT2: PCB-T2487B: UHF RFID ANTENNA ANT3: ANT-T025: Ceramic Patch Antenna

Antenna gain: ANT1: ANT570(US): 5.0 dBi

ANT2: PCB-T2487B: 3 dBi +/- 0.5 dBi

ANT3: ANT-T025: 5.0 dBi

Host device: none



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#### Classification:

Fixed Device	
Mobile Device (Human Body distance > 20cm)	
Portable Device (Human Body distance < 20cm)	
Modular Radio Device	

### **Manufacturer:** (if applicable)

Name: GIGATEK INC.

Street: No.47, Hsiang Ho Road, Tan-Tzu,

Town: Taichung CITY, Country: Taiwan R.O.C

Additional information: ./.

#### 1.6 Test standards

Technical standard: FCC RULES PART 15 SUBPART C § 15.247 (2013-10)

FCC ID: WXAUM800 **2** Technical test

### 2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.				
or				
The deviations as specified in 3 were ascertained in the course of the tests performed.				

#### 2.2 Test environment

Temperature: 23 °C

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Details of power supply 5 VDC (Regulated down from 5.3 VDC Poser source on the testing

peripheral board)

Extreme conditions parameters: test voltage : -- extreme

min : -- V max : -- V



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### 2.3 Test Equipment List

No. Test equipment		Туре	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2013/9/2	2014/9/1
ETSTW-CE 003	TSTW-CE 003 AC POWER SOURCE		D161137	GW	Functi	on Test
ETSTW-CE 008	HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Functi	on Test
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2014/7/9	2015/7/8
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2013/10/28	2014/10/27
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2013/9/2	2014/9/1
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2013/9/2	2014/9/1
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Functi	on Test
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Functi	on Test
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2013/10/15	2014/10/14
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2014/7/01	2015/6/30
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	EMCO	2014/2/25	2015/2/24
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-te	st Use
ETSTW-RE 049	TRILOG Super Broadband test Antenna	VULB 9160	9160-3185	Schwarzbeck	2014/2/18	2015/2/17
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2014/3/3	2015/3/2
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2014/3/3	2015/3/2
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2014/3/3	2015/3/2
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2014/6/05	2015/6/04
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2014/3/3	2015/3/2
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2013/11/27	2014/11/26
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Functi	on Test
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	EMCO	Functi	on Test
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2013/10/7	2014/10/6
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2013/10/11	2014/10/10
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2014/3/3	2015/3/2
ETSTW-RE 106	Humidity Temperature Meter	TES-1366	091011113	TES	2013/12/04	2014/12/03
ETSTW-RE 111	TRILOG Super Broadband test Antenna	VULB 9160	9160-3309	Schwarz beck	2013/12/27	2014/12/26
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	None	T-Power	Functi	on test
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2014/1/10	2015/1/09
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Functi	on test
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2014/6/11	2015/6/10



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ETSTW-RE 125	5GHz Notch filter	5NSL11- 5200/E221.3-O/O	1	K&L Microwave	2013/8/16	2014/8/15
ETSTW-RE 126	ETSTW-RE 126 5GHz Notch filter		1	K&L Microwave	2013/8/16	2014/8/15
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2014/3/3	2015/3/2
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circits	2013/8/13	2014/8/12
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circits	2013/8/13	2014/8/12
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-te	st Use
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2013/10/7	2014/10/6
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849- 822/851-40 /12+9SS	3	WI	2014/1/10	2015/1/09
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748- 1743/1752-32/5SS	1	WI	2014/1/10	2015/1/09
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5 -1875.5/1884.5- 32/5SS	3	WI	2014/1/10	2015/1/09
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1- 904.25-50/8SS	1	WI	2014/1/10	2015/1/09
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2013/9/18	2014/9/17
ETSTW-Cable 010	BNC Cable	5 M BNC Cable	None	JYE BAO CO.,LTD.	2014/2/27	2015/2/26
ETSTW-Cable 011	BNC Cable	BNC Cable 1	None	JYE BAO CO.,LTD.	Pre-test Use NCR	
ETSTW-Cable 012	N TYPE To SMA Cable	Cable 012	None	JYE BAO CO.,LTD.	2014/2/27	2015/2/26
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2014/2/27	2015/2/26
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2014/2/27	2015/2/26
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2014/2/27	2015/2/26
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2014/2/27	2015/2/26
ETSTW-Cable 022	N TYPE Cable	5006	0002	JYE BAO CO.,LTD.	2014/2/19	2015/2/18
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2014/3/3	2015/3/2
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2014/3/3	2015/3/2
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2013/10/11	2014/10/10
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2013/10/11	2014/10/10
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S_Cable 9)	279067	HUBER+SUHNER	2014/3/3	2015/3/2
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S Cable 10)	238092	HUBER+SUHNER	2013/11/27	2014/11/26
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2013/11/27	2014/11/26
ETSTW-Cable 047	Microwave Cable	SUCOFLEX 104	325518	HUBER+SUHNER	2013/11/27	2014/11/26
ETSTW-Cable 053	N TYPE To SMA Cable	RG142	None	JYE BAO CO.,LTD.	2014/2/19	2015/2/18
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2014/2/19	2015/2/18
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version I	ETS-03A1

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#### 2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2009 5.2 using a  $50\mu H$  LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.4-2009 6.4 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient, temperature of the UUT was 23°C with a humidity of 40 %.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of  $dB\mu V$ ) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

Freq (MHz) METER READING + ACF + CABLE LOSS (to the receiver) = FS

33  $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ (a)3m}$ 

The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2009 6.3.1. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by Worldwide Testing Services(Taiwan) Co., Ltd. at the registered open field test site located No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207, Taiwan (R.O.C.). The Registration Number: **930600**.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.



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When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = 20 log (dwell time/T)

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANSI STANDARD C63.4-2009 10.2.7: Any measurements that utilize special test software shall be indicated and referenced in the test report. During testing, test software 'EZ EMC' was used for setting up different operation modes.



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### 3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)	×	×	
Equivalent radiated Power	15.247(b)	×	×	
Spurious Emissions radiated – Transmitter operating	15.247(c)	×	×	
Spurious Emissions conducted – Transmitter operating	15.247			
Carrier Frequency Separation	15.247(a) (1)	×	×	
Number of Hopping Frequencies	15.247(a) (1)(i)	×	×	
Time of Occupancy (Dwell Time)	15.247(a) (1)(i)	×	×	
20 dB Bandwidth	15.247(a) (1)(i)	×	×	
Band-edge Compliance of RF Emission	15.247(c)	×	×	
Radiated Emission from Receiver Part	15.109	×	×	
Power Line Conducted Emission	15.207(a)			

The follows is intended to leave blank.



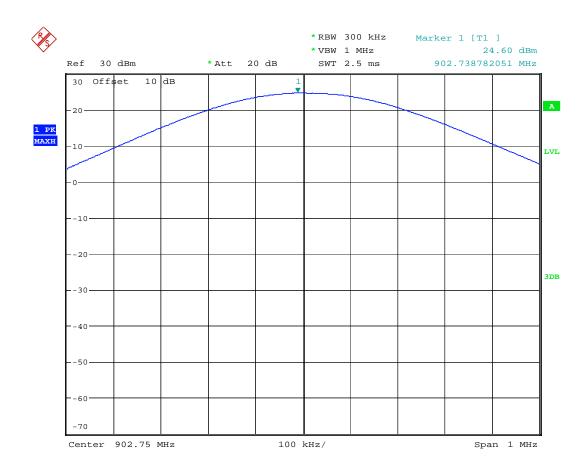
FCC ID: WXAUM800

### 3.1 Peak Output Power (transmitter)

FCC Rule: 15.247

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

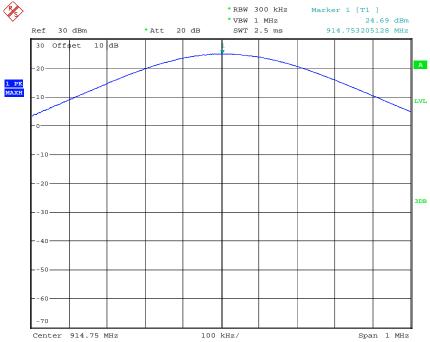


MAX OUTPUT POWER 902.75MHZ Date: 8.JUL.2014 11:09:40

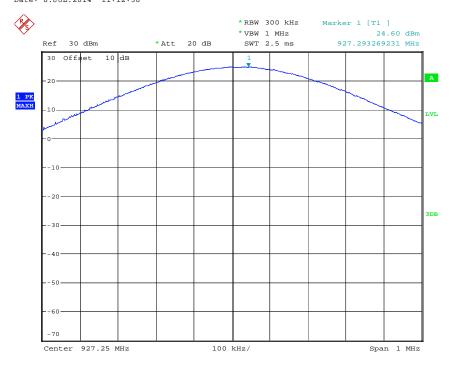


Registration number: W6M21308-13473-C-1

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MAX OUTPUT POWER 914.75MHZ Date: 8.JUL.2014 11:12:38



MAX OUTPUT POWER 927.25MHZ Date: 8.JUL.2014 11:13:45



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

## **Maximum Peak Output Power**

Limits:

Frequency	Number of hopping channels						
MHz	≥ 75	≥ 50	49 ≥ 25	74 ≥ 15			
902-928		30 dBm	24 dBm				
2400-2483.5 MHz	-2483.5 MHz 30 dBm			21 dBm			
5725-5850 MHz	30 dBm						

In case of employing transmitter antennas having antenna gain >dBi and using fixed poin-to point operation consider §15.247 (b)(4).

Test equipment used: ETSTW-RE 055, ETSTW-RE 050, ETSTW-RE 064

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#### 3.2 RF Exposure Compliance Requirements

According to Supplement C, Edition 01-01 to OET Bulletin 65, Edition 97-01 this spread spectrum transmitter is categorically excluded from routine environmental evaluation because of the low power level, where there is a high likelihood of compliance with RF exposure standards.

The antenna used for this Bluetooth transceiver module must not be co-located or operating in conjunction with any other antenna or transmitter.

#### 3.3 Out of Band Radiated Emissions

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement. Limits:

For frequencies below 1GHz:

Max. reading – 20 dB

Guidance on Measurement of FHSS Systems:

"If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation." Here the correction was added to the limit instead subtracted from the reading.

Duty Cycle correction = 20 log (dwell time/100ms)
For frequencies above 1GHz (Peak measurements).
Limit = max. aver. reading-20dB +20dB(because Peak detector is used)

For frequencies above 1GHz (Average measurements).

Max. reading – 20 dB - duty cycle correction:

No duty cycle correction was added to the reading

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 111, ETSTW-RE 030, ETSTW-RE 064

Explanation: See attached diagrams in appendix.



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#### 3.4 Transmitter Radiated Emissions in restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26000 MHz.

For radiated emission tests, the analyzer setting was as followings:

**RES BW VID BW** 

Frequency <1 GHz 100 kHz 100 kHz (Peak measurements) Frequency >1 GHz 1 MHz 1 MHz (Peak measurements)

1 MHz 1 MHz (Average measurements)

Limits:

For frequencies below 1GHz:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of FHSS Systems:

"If the emission is pulsed, modify the unit for continues operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation." Here the correction was added to the limit instead subtracted from the reading.

Duty cycle correction =  $20 \log (dwell time/100ms)$ 

For frequencies above 1GHz (Average measurements).

Limit – duty cycle correction

No duty cycle correction was added to the reading.

 $54.0dB\mu V/m$ 

For frequencies above 1GHz (Peak measurements).

Limit + 20dB

 $54.0 dB \mu V/m + 20 dB = 74 dB \mu V/m$ 

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 111, ETSTW-RE 064

Explanation: See attached diagrams in appendix.

Worldwide Testing Services(Taiwan) Co., Ltd.



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#### 3.5 Spurious emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. 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) (see § 15.205(c))

SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance to point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value an exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Marker-Delta-Method" or the "Duty-Cycle Correction Factor".

#### Summary table with radiated data of the test plots

**ANT1: ANT570 (US)** 

826.9940

Model: UM800				Date:	2014/5/20~2	014/6/17			
Mode: TX 902.75 MHz			7_	Temperature:	24	°C	Engineer:	Ken	
	Polarization:	Horizontal			Humidity:	60	%	_	
	Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	632.6052	21.45	QP	23.45	44.90	46.00	-1.10	320	100

26.06

44.90

46.00

-1.10

240

				1						
Frequency	Reading		Factor			Limit		Margin	Table	Ant.
	(dB	uV)	(dB)	Result	(dBuV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1805.6110	58.48		-6.95	51.53		74.00	54.00	-22.47	300	100
2708.3250	63.17	54.96	-4.07	59.10	50.89	74.00	54.00	-3.11	310	100
3615.2310	53.45		-2.26	51.19		74.00	54.00	-22.81	275	100
4513.8360	55.00	48.58	-0.04	54.96	48.54	74.00	54.00	-5.46	133	100
5418.8380	46.10		1.56	47.66		74.00	54.00	-26.34	225	100
6319.3300	50.50	44.69	3.42	53.92	48.11	74.00	54.00	-5.89	216	100
7222.4450	44.68		3.81	48.49		74.00	54.00	-25.51	170	100

18.84

100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Polarization: Vertifcal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
41.6633	22.53	peak	13.93	36.46	40.00	-3.54	70	100
924.1884	16.13	QP	27.56	43.69	46.00	-2.31	50	100

Frequency		Reading (dBuV)		Result	(dBuV/m)		mit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2708.2970	59.61	52.12	-4.07	55.54	48.05	74.00	54.00	-5.95	180	100
3611.0410	55.95	48.33	-2.27	53.68	46.06	74.00	54.00	-7.94	240	100
4513.8140	57.47	52.03	-0.04	57.43	51.99	74.00	54.00	-2.01	235	100
5418.8380	48.71		1.56	50.27		74.00	54.00	-23.73	215	100
6319.3340	55.75	48.55	3.42	59.17	51.97	74.00	54.00	-2.03	196	100
7222.0640	49.33	45.25	3.81	53.14	49.06	74.00	54.00	-4.94	208	100

Mode: TX 914.75MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
632.6052	21.40	QP	23.45	44.85	46.00	-1.15	300	100
826.9940	18.23	QP	26.06	44.29	46.00	-1.71	235	100

Frequency		Reading (dBuV)		Result	(dBuV/m)		mit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	(dB) Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2744.2990	61.74	54.57	-3.93	57.81	50.64	74.00	54.00	-3.36	310	100
3663.3270	52.43		-2.10	50.33		74.00	54.00	-23.67	275	100
4573.8150	58.13	51.84	-0.23	57.90	51.61	74.00	54.00	-2.39	153	100
5488.6170	50.45	44.72	1.69	52.14	46.41	74.00	54.00	-7.59	225	100
6404.8100	46.60		3.66	50.26		74.00	54.00	-23.74	180	100
7318.0760	52.91	46.12	3.64	56.55	49.76	74.00	54.00	-4.24	150	100

Polarization: Vertifcal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
41.6633	23.33	QP	13.93	37.26	40.00	-2.74	80	100
924.1884	17.20	QP	27.56	44.76	46.00	-1.24	50	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Frequency		Reading (dBuV)		Docult (dDu\//m)		Limit (dBuV/m)		Margin	Table	Ant.
	(aB	uv)	(dB)	Result	(dBuV/m)	(aBu	v/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2744.3530	57.30	52.65	-3.93	53.37	48.72	74.00	54.00	-5.28	190	100
3659.0910	56.07	52.66	-2.11	53.96	50.55	74.00	54.00	-3.45	283	100
4573.8150	63.50	52.73	-0.23	63.27	52.50	74.00	54.00	-1.50	127	100
5488.5930	52.36	47.55	1.69	54.05	49.24	74.00	54.00	-4.76	104	100
6403.3750	53.13	45.76	3.66	56.79	49.42	74.00	54.00	-4.58	213	100
7318.0720	52.84	48.15	3.64	56.48	51.79	74.00	54.00	-2.21	225	100
8232.8820	46.80	41.84	6.19	52.99	48.03	74.00	54.00	-5.97	212	100

Mode: TX 927.25MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
727.8555	19.41	QP	24.96	44.37	46.00	-1.63	160	100
825.5015	18.30	QP	26.04	44.34	46.00	-1.66	220	100

Frequency	Reading (dBuV)		Factor (dB)	Result	Result (dBuV/m)		mit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	` Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2781.8440	63.52	56.05	-3.79	59.73	52.26	74.00	54.00	-1.74	310	100
3709.0900	56.88	49.70	-1.98	54.90	47.72	74.00	54.00	-6.28	270	100
4636.3210	52.74	47.26	-0.31	52.43	46.95	74.00	54.00	-7.05	254	100
5563.1260	44.87		1.59	46.46		74.00	54.00	-27.54	290	100
6490.8420	48.76	44.02	3.63	52.39	47.65	74.00	54.00	-6.35	168	100
7418.1210	53.87	48.66	3.91	57.78	52.57	74.00	54.00	-1.43	203	100

Polarization: Vertifcal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
41.6633	22.62	peak	13.93	36.55	40.00	-3.45	75	100
922.5591	16.55	QP	27.53	44.08	46.00	-1.92	40	100

Frequency		Reading (dBuV)					Limit		Table	Ant.
	(dB	uV)	(dB)	Result	(dBuV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2781.8360	61.59	53.95	-3.79	57.80	50.16	74.00	54.00	-3.84	190	100
3709.0980	62.11	53.70	-1.98	60.13	51.72	74.00	54.00	-2.28	285	100
4636.3410	56.14	49.92	-0.31	55.83	49.61	74.00	54.00	-4.39	153	100
5563.1260	50.37		1.59	51.96		74.00	54.00	-22.04	230	100
6490.8460	53.01	46.33	3.63	56.64	49.96	74.00	54.00	-4.04	290	100
7418.1320	57.61	49.20	3.91	61.52	53.11	74.00	54.00	-0.89	226	100
8342.6850	46.25		5.83	52.08		74.00	54.00	-21.92	290	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

ANT2: PCB-T2487B

Mode: TX 902.75 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	24.54	peak	17.01	41.55	46.00	-4.45	175	100
959.1784	13.68	peak	28.11	41.79	46.00	-4.21	150	100

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Frequency	Rea	ding	Factor			Lir	mit	Margin	Table	Ant.
	(dB	uV)	(dB)	Result	(dBuV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1805.6110	50.22		-6.95	43.27		74.00	54.00	-30.73	180	100
2707.4150	50.68		-4.07	46.61		74.00	54.00	-27.39	210	100
3615.2310	49.28		-2.26	47.02		74.00	54.00	-26.98	200	100
4513.8040	58.74	49.75	-0.04	58.70	49.71	74.00	54.00	-4.29	340	100
5416.6140	50.84	44.55	1.56	52.40	46.11	74.00	54.00	-7.89	208	100
6319.3500	54.54	45.72	3.42	57.96	49.14	74.00	54.00	-4.86	200	100

Polarization: Vertifcal

	Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
Ī	31.9438	23.40	peak	13.26	36.66	40.00	-3.34	160	100
	959.1784	11.47	peak	28.11	39.58	46.00	-6.42	230	100

Frequency		Reading (dBuV)		Result	esult (dBuV/m)		nit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak			Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1805.6110	52.79		-6.95	45.84		74.00	54.00	-28.16	150	100
2707.4150	52.11		-4.07	48.04		74.00	54.00	-25.96	230	100
3615.2310	51.76		-2.26	49.50		74.00	54.00	-24.50	175	100
4513.8200	63.11	52.89	-0.04	63.07	52.85	74.00	54.00	-1.15	225	100
5416.5530	55.57	47.40	1.56	57.13	48.96	74.00	54.00	-5.04	137	100
6319.3420	56.29	47.96	3.42	59.71	51.38	74.00	54.00	-2.62	160	100
7222.1080	47.03	41.48	3.81	50.84	45.29	74.00	54.00	-8.71	225	100

Mode: TX 914.75MHz

Polarization: Horizontal

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Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	24.57	peak	17.01	41.58	46.00	-4.42	130	100
959.1784	13.66	peak	28.11	41.77	46.00	-4.23	160	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Frequency	Rea	Reading				Limit		Margin	Table	Ant.
	(dB	uV)	(dB)	Result	(dBuV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	1		Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1829.6590	48.81		-6.71	42.10		74.00	54.00	-31.90	230	100
2743.4870	52.22		-3.93	48.29		74.00	54.00	-25.71	185	100
3663.3270	49.80		-2.10	47.70		74.00	54.00	-26.30	225	100
4573.8190	57.75	50.45	-0.23	57.52	50.22	74.00	54.00	-3.78	245	100
5490.9820	47.41		1.69	49.10		74.00	54.00	-24.90	210	100
6403.2990	52.29	46.46	3.66	55.95	50.12	74.00	54.00	-3.88	195	100
7318.0760	49.45	44.39	3.64	53.09	48.03	74.00	54.00	-5.97	190	100

Polarization: Vertifcal

F	requency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	33.8878	22.73	peak	13.32	36.05	40.00	-3.95	190	100
	959.1784	12.33	peak	28.11	40.44	46.00	-5.56	125	100

Frequency		Reading (dBuV)		Result	(dBuV/m)	Limit (dBuV/m)		Margin	Table Degree	Ant. High
(MHz)	Peak	1		Peak	` Ave.	Peak	Äve.	(dB)	(Deg.)	(cm)
1829.6590	51.01		-6.71	44.30		74.00	54.00	-29.70	165	100
2743.4870	53.83		-3.93	49.90		74.00	54.00	-24.10	170	100
3663.3270	53.73		-2.10	51.63		74.00	54.00	-22.37	230	100
4573.8670	62.63	51.39	-0.23	62.40	51.16	74.00	54.00	-2.84	225	100
5488.5210	56.04	46.69	1.69	57.73	48.38	74.00	54.00	-5.62	201	100
6403.3430	55.54	47.85	3.66	59.20	51.51	74.00	54.00	-2.49	155	100
7318.1200	54.38	46.45	3.64	58.02	50.09	74.00	54.00	-3.91	162	100

Mode: TX 927.25MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	24.60	peak	17.01	41.61	46.00	-4.39	200	100
959.1784	13.59	peak	28.11	41.70	46.00	-4.30	130	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Frequency	Rea	Reading				Limit		Margin	Table	Ant.
		(dBuV)		Result	(dBuV/m)	(dBu	V/m)	Ü	Degree	High
(MHz)	Peak			Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1853.7070	49.55		-6.47	43.08		74.00	54.00	-30.92	155	100
2779.5590	48.85		-3.80	45.05		74.00	54.00	-28.95	235	100
3711.4230	47.88		-1.98	45.90		74.00	54.00	-28.10	165	100
4636.3210	52.76	45.92	-0.31	52.45	45.61	74.00	54.00	-8.39	245	100
5563.1260	42.51		1.59	44.10		74.00	54.00	-29.90	195	100
6490.8300	51.15	42.22	3.63	54.78	45.85	74.00	54.00	-8.15	223	100
7418.2850	49.94	43.80	3.91	53.85	47.71	74.00	54.00	-6.29	137	100

Polarization: Vertifcal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
31.9440	22.83	peak	13.26	36.09	40.00	-3.91	205	100
959.1784	11.20	peak	28.11	39.31	46.00	-6.69	170	100

Frequency	Reading (dBuV)		Factor (dB)	Result	esult (dBuV/m)		Limit (dBuV/m)		Table Degree	Ant. High
(MHz)	Peak	Peak Ave.		Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1853.7070	56.33		-6.47	49.86		74.00	54.00	-24.14	170	100
2779.5590	54.01		-3.80	50.21		74.00	54.00	-23.79	225	100
3711.4230	50.58		-1.98	48.60		74.00	54.00	-25.40	215	100
4636.4810	55.82	48.32	-0.31	55.51	48.01	74.00	54.00	-5.99	228	100
5563.1260	44.79		1.59	46.38		74.00	54.00	-27.62	195	100
6490.8380	49.03	43.58	3.63	52.66	47.21	74.00	54.00	-6.79	241	100
7418.1690	56.69	46.58	3.91	60.60	50.49	74.00	54.00	-3.51	170	100

ANT3: ANT-T025

Mode: TX 902.75 MHz

Polarization: Horizontal

F	requency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	339.0781	21.68	peak	17.01	38.69	46.00	-7.31	170	100
,	959.1784	14.86	peak	28.11	42.97	46.00	-3.03	225	100

Worldwide Testing Services(Taiwan) Co., Ltd.



Registration number: W6M21308-13473-C-1

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Frequency	Reading (dBuV)		Factor (dB)	Result	(dBuV/m)		Limit (dBuV/m)		Table Degree	Ant. High
(MHz)	Peak	` '		Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1805.6110	53.95		-6.95	47.00		74.00	54.00	-27.00	205	100
2708.2330	55.77	48.41	-4.07	51.70	44.34	74.00	54.00	-9.66	170	100
3615.2310	47.78		-2.26	45.52		74.00	54.00	-28.48	230	100
4513.0260	46.36		-0.03	46.33		74.00	54.00	-27.67	235	100
6316.6330	44.94		3.41	48.35		74.00	54.00	-25.65	245	100
7222.1640	48.68	44.35	3.81	52.49	48.16	74.00	54.00	-5.84	182	100

Polarization: Vertifcal

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Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
39.9650	21.57	QP	13.82	35.39	40.00	-4.61	200	100
92.2044	26.56	peak	9.29	35.85	43.50	-7.65	70	100

Frequency	Rea	ding	Factor			Lir	mit	Margin	Table	Ant.
	(dB	uV)	(dB)	Result	(dBuV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1805.6110	54.40		-6.95	47.45		74.00	54.00	-26.55	230	100
2707.4150	55.24		-4.07	51.17		74.00	54.00	-22.83	245	100
3615.2310	53.60		-2.26	51.34		74.00	54.00	-22.66	175	100
4488.9780	50.10		-0.09	50.01		74.00	54.00	-23.99	205	100
5418.8380	44.00		1.56	45.56		74.00	54.00	-28.44	190	100
6319.3660	50.97	44.06	3.42	54.39	47.48	74.00	54.00	-6.52	235	100
7222.1400	54.05	46.63	3.81	57.86	50.44	74.00	54.00	-3.56	145	100
8124.7580	48.13	43.88	6.20	54.33	50.08	74.00	54.00	-3.92	220	100

Mode: TX 914.75MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	21.59	peak	17.01	38.60	46.00	-7.40	170	100
959.1784	15.16	peak	28.11	43.27	46.00	-2.73	255	100



Registration number: W6M21308-13473-C-1

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Frequency		ding aV)	Factor (dB)	Result	(dBuV/m)		mit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	` Ave.	Peak	Äve.	(dB)	(Deg.)	(cm)
1829.6590	49.21		-6.71	42.50		74.00	54.00	-31.50	240	100
2743.4870	48.80		-3.93	44.87		74.00	54.00	-29.13	190	100
3663.3270	46.43		-2.10	44.33		74.00	54.00	-29.67	225	100
4573.8590	57.40	51.35	-0.23	57.17	51.12	74.00	54.00	-2.88	245	100
5488.6010	50.52	44.36	1.69	52.21	46.05	74.00	54.00	-7.95	240	100
6403.1910	55.32	46.74	3.66	58.98	50.40	74.00	54.00	-3.60	199	100
7318.0040	52.98	45.21	3.64	56.62	48.85	74.00	54.00	-5.15	187	100

Polarization: Vertifcal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
38.5572	21.76	QP	13.69	35.45	40.00	-4.55	210	100
92.2044	25.83	peak	9.29	35.12	43.50	-8.38	110	100

Frequency		ding uV)	Factor (dB)	Result	(dBuV/m)		mit V/m)	Margin	Table	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	Degree (Deg.)	. • .
_ ,		Ave.		+	Ave.			. ,	·	(cm)
1829.6590	52.43		-6.71	45.72		74.00	54.00	-28.28	225	100
2743.4870	52.26		-3.93	48.33		74.00	54.00	-25.67	195	100
3663.3270	49.65		-2.10	47.55		74.00	54.00	-26.45	230	100
4573.9560	63.83	53.48	-0.23	63.60	53.25	74.00	54.00	-0.75	227	100
5488.6810	55.62	47.92	1.69	57.31	49.61	74.00	54.00	-4.39	202	100
6403.1830	57.41	48.75	3.66	61.07	52.41	74.00	54.00	-1.59	152	100
7317.9240	50.90	45.01	3.64	54.54	48.65	74.00	54.00	-5.35	175	100

Mode: TX 927.25MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	21.09	peak	17.01	38.10	46.00	-7.90	175	100
959.1784	14.84	peak	28.11	42.95	46.00	-3.05	205	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Frequency		ding uV)	Factor (dB)	Result	(dBuV/m)		nit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1853.7070	56.32		-6.47	49.85		74.00	54.00	-24.15	220	100
2779.5590	49.58		-3.80	45.78		74.00	54.00	-28.22	230	100
3711.4230	49.30		-1.98	47.32		74.00	54.00	-26.68	175	100
4636.2730	53.66	44.82	-0.31	53.35	44.51	74.00	54.00	-9.49	205	100
6492.9860	43.06		3.63	46.69		74.00	54.00	-27.31	220	100
7418.0840	52.21	44.10	3.91	56.12	48.01	74.00	54.00	-5.99	195	100

Polarization: Vertifcal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
37.7756	22.23	QP	13.62	35.85	40.00	-4.15	220	100
92.2044	26.22	peak	9.29	35.51	43.50	-7.99	115	100

Frequency		ding	Factor				nit	Margin	Table	Ant.
	(dB	uV)	(dB)	Result	(dBuV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1853.7070	48.78		-6.47	42.31		74.00	54.00	-31.69	165	100
2781.8360	54.78	45.35	-3.79	50.99	41.56	74.00	54.00	-12.44	172	100
3708.9700	53.59	43.36	-1.98	51.61	41.38	74.00	54.00	-12.62	243	100
4636.3850	53.56	47.70	-0.31	53.25	47.39	74.00	54.00	-6.61	228	100
6490.9500	48.68	41.56	3.63	52.31	45.19	74.00	54.00	-8.81	150	100
7418.2210	56.91	46.58	3.91	60.82	50.49	74.00	54.00	-3.51	169	100

#### Note 1. Correction Factor = Antenna factor + Cable loss - Preamplifier

- 2. The formula of measured value as: Test Result = Reading + Correction Factor
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty above 1GHz:  $30-1000 \text{ MHz} = \pm 3.68 \text{ dB}$ ,  $1-18 \text{ GHz} = \pm 5.37 \text{ dB}$ ,  $18-40 \text{ GHz} = \pm 3.43 \text{ dB}$ ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 6. See attached diagrams in appendix.

All other not noted test plots do not contain significant test results in relation to the limits.

**TEST RESULT** (**Transmitter**): The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 111,ETSTW-RE 064 ETSTW-RE 088, ETSTW-RE 018

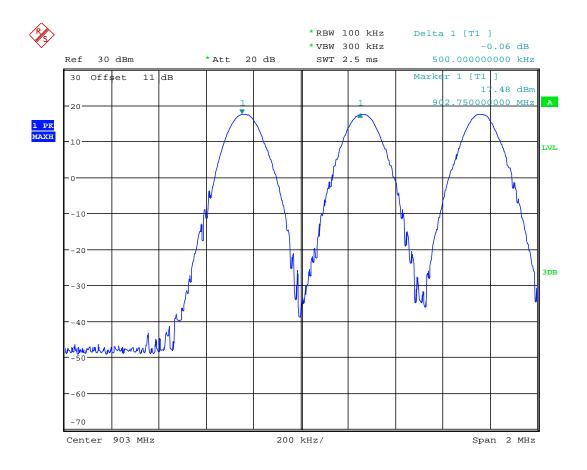
Worldwide Testing Services(Taiwan) Co., Ltd.

FCC ID: WXAUM800

#### 3.6 Carrier Frequency Separation

Carrier Frequency Separation was measured with modulation (declared by manufacturer).

According to FCC rules part 15 subpart C §15.247 frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or 20 dB bandwidth of the hopping channel, whichever is greater.

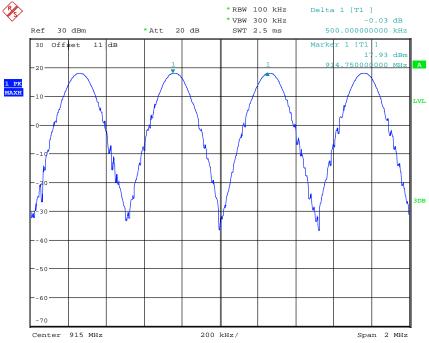


FREQUENCY SEPARATION 902.75MHz Date: 13.MAY.2014 10:19:21

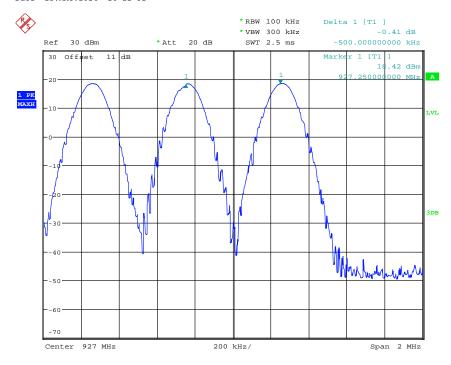


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



FREQUENCY SEPARATION 914.75MHz Date: 13.MAY.2014 10:21:31



FREQUENCY SEPARATION 927.25MHz Date: 13.MAY.2014 10:22:08



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### **Limits:**

Frequency Range	Lin	nits
MHz	20 dB bandwidth < 25 kHz	20 dB bandwidth > 25 kHz
902-928	25 kHz	20 dB bandwidth
2400-2483.5 5725-5850.0	25 kHz	20 dB bandwidth

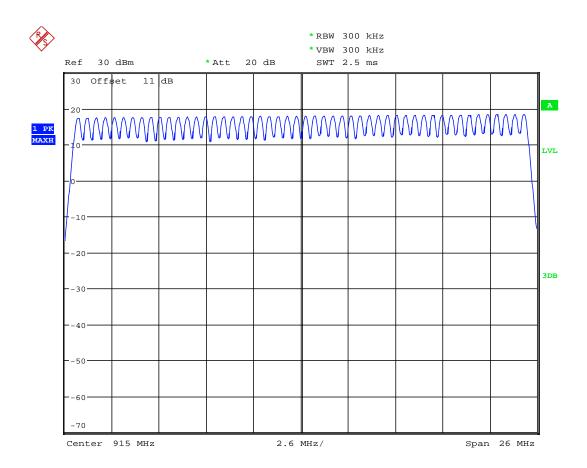
Test equipment used: ETSTW-RE 055, ETSTW-RE 064

FCC ID: WXAUM800

### 3.7 Number of Hopping Frequencies

According to FCC rules part 15 subpart C §15.247 frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies. Frequency hopping systems in 5725-5850 MHz bands shall use least 75 hopping frequencies.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies; if the 20dB bandwidth of the hopping channel 250 kHz or greater, the system shall use at least 25 hopping frequencies.



NUMBER OF HOPPING

Date: 13.MAY.2014 10:25:17



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### **Limits:**

Frequency Range	Limit	
MHz	20dB Bandwidth	Number of Channels
902-928 MHz	Bandwidth < 250 kHz	≥ 50
902-928 WITZ	Bandwidth ≥ 250 kHz	≥ 25
2400-2483.5	not defined	15
5725-5850.0 MHz	1 MHz	75

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

### 3.7.1 Pseudorandom Frequency Hopping Sequence

Channel	MHz	Channel	MHz
Ch1	902.75	Ch26	915.25
Ch2	903.25	Ch27	915.75
Ch3	903.75	Ch28	916.25
Ch4	904.25	Ch29	916.75
Ch5	904.75	Ch30	917.25
Ch6	905.25	Ch31	917.75
Ch7	905.75	Ch32	918.25
Ch8	906.25	Ch33	918.75
Ch9	906.75	Ch34	919.25
Ch10	907.25	Ch35	919.75
Ch11	907.75	Ch36	920.25
Ch12	908.25	Ch37	920.75
Ch13	908.75	Ch38	921.25
Ch14	909.25	Ch39	921.75
Ch15	909.75	Ch40	922.25
Ch16	910.25	Ch41	922.75
Ch17	910.75	Ch42	923.25
Ch18	911.25	Ch43	923.75
Ch19	911.75	Ch44	924.25
Ch20	912.25	Ch45	924.75
Ch21	912.75	Ch46	925.25
Ch22	913.25	Ch47	925.75
Ch23	913.75	Ch48	926.25
Ch24	914.25	Ch49	926.75
Ch25	914.75	Ch50	927.25

FCC ID: WXAUM800

#### 3.7.2 Coordination of hopping sequences to other transmitters

This transmitter does not have the ability of being coordinated with other FHSS system for as soon as the transmitter is in operation, the hopping frequency will follow the selected hopping sequence to transmit independently and no coordination is possible. Especially, this transmitter is used as a UHF RFID READER, so no coordination of hopping frequency is required.

#### 3.7.3 Equal Hopping Frequency Use

Due to each hopping frequency will be transmitted in accordance to the frequency tables described above, there is no any frequency will be able to hop more times than others. Therefore each frequency will be used equally.



Registration number: W6M21308-13473-C-1

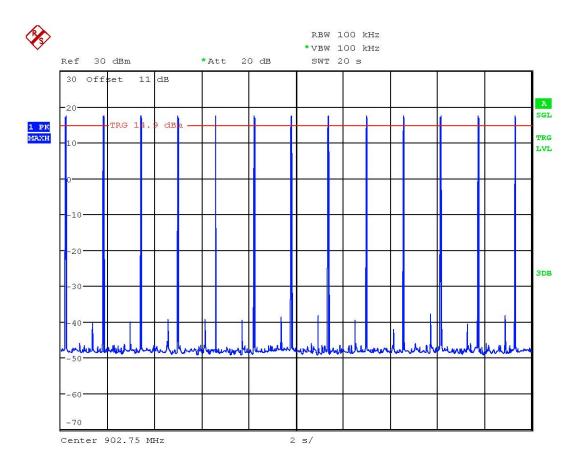
FCC ID: WXAUM800

### 3.8 Time of Occupancy (Dwell Time)

Frequency hopping systems operating in the 5725-5850 MHz band shall use an average time of occupancy on any frequency not greater than 0.4 seconds within a 30 second period.

In 2400-2483.5 MHz band the average time of occupancy on any channel shall not be greater than 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not greater than 0.4 seconds within a 20 second period; if the 20dB bandwidth of the hopping channel is 250 kHz or greater, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.



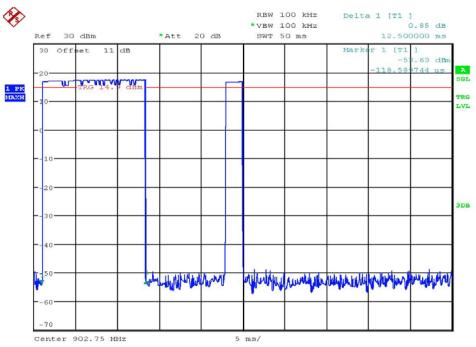
DWELL TIME 902.75MHz

Date: 13.MAY.2014 10:29:28

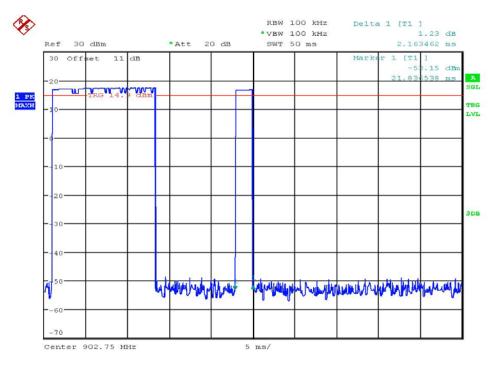


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



DWELL TIME 902.75MHz
Date: 13.MAY.2014 10:34:56

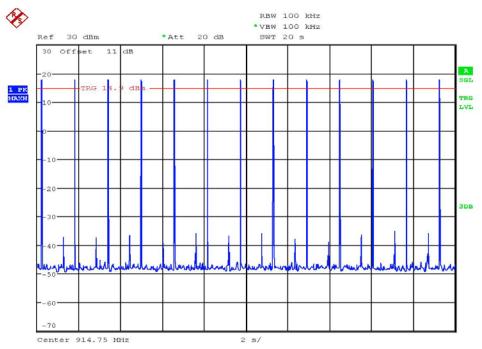


DWELL TIME 902.75MHz((12.5+2.163)ms \* 13events = 190.619ms)
Date: 13.MAY.2014 10:39:02

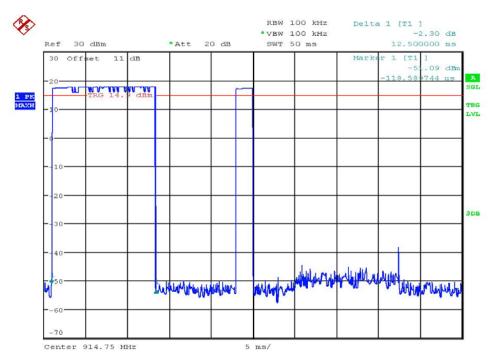


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



DWELL TIME 914.75MHz
Date: 13.MAY.2014 10:30:07



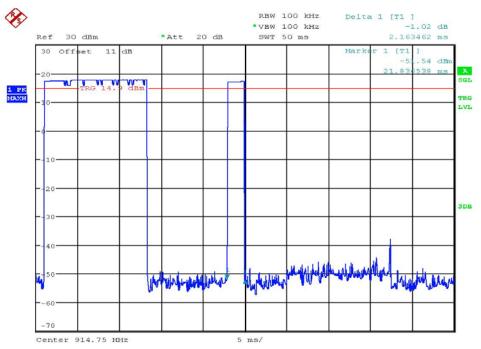
DWELL TIME 914.75MHz

Date: 13.MAY.2014 10:34:22

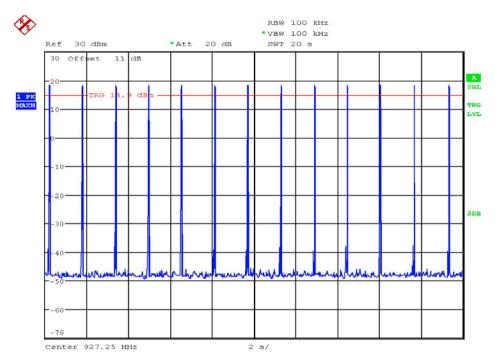


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



DWELL TIME 914.75MHz((12.5+2.163)ms \* 13events = 190.619ms)
Date: 13.MAY.2014 10:39:38



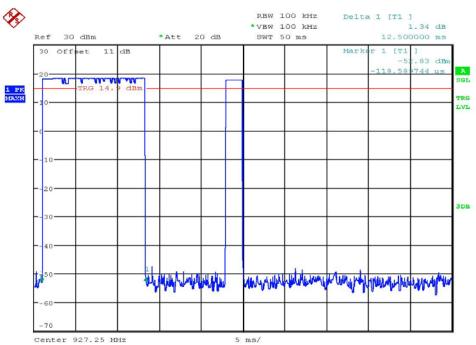
DWELL TIME 927.25MHz

Date: 13.MAY.2014 10:30:42

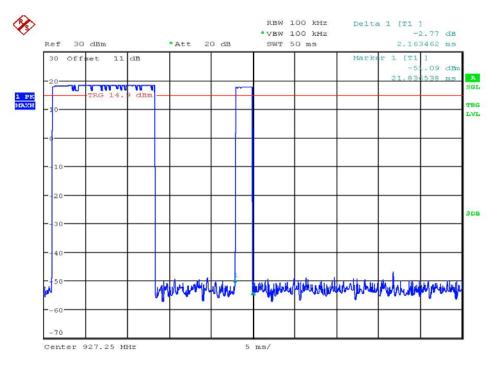


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



DWELL TIME 927.25MHz
Date: 13.MAY.2014 10:33:34



DWELL TIME 927.25MHz((12.5+2.163)ms \* 13events = 190.619ms)

Date: 13.MAY.2014 10:40:08



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### Limits and measurement periods:

Frequency MHz	Number of channels	Measurement Periode	Limit
902 – 928	≥50	20 s	0.4 s
902 – 928	49 ≥ 25	10 s	0.4 s
2400 – 2483.5	≥ 15	0.4 s * number of used channels	0.4 s
5725- 5850	≥ 75	30 s	0.4s

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

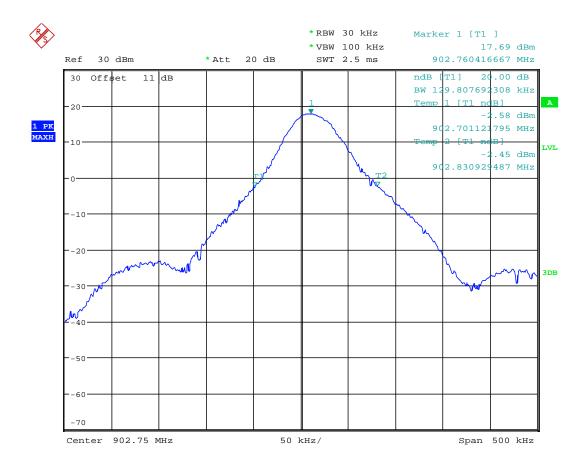
Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 **3.9 20dB Bandwidth** 

Frequency hopping systems operating in the 5725-5850 MHz bands shall use a maximum 20dB bandwidth of 1 MHz.

The 20dB bandwidth is measured on the lowest, middle and highest hopping channel.

For frequency hopping systems operating in the 902-928 MHz band the maximum 20dB bandwidth of the hopping channel is 500 kHz.

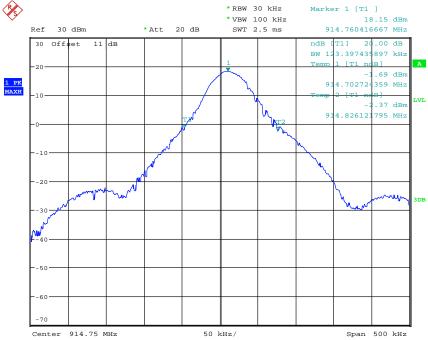


20DB BANDWIDTH 902.75MHz Date: 13.MAY.2014 10:11:28

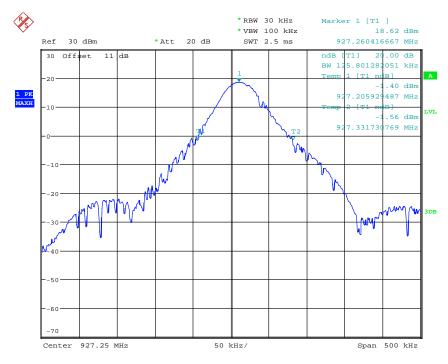


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



20DB BANDWIDTH 914.75MHz Date: 13.MAY.2014 10:06:19



20DB BANDWIDTH 927.25MHz Date: 13.MAY.2014 10:01:16



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

**Limits:** 

Frequency Range / MHz	Limit
902-928	≤ 500 kHz
2400-2483.5	not defined
5725-5850	≤ 1 MHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

Worldwide Testing Services(Taiwan) Co., Ltd.

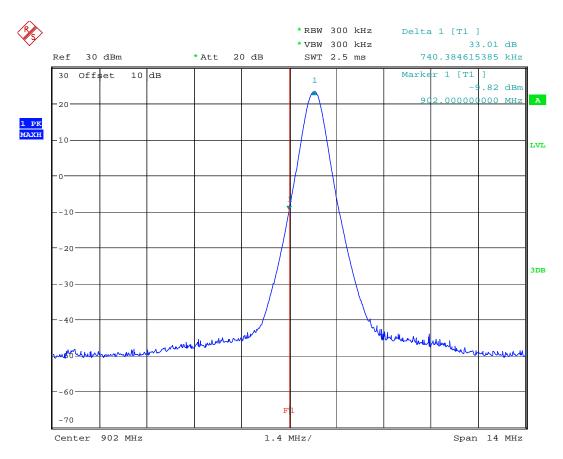
Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### 3.10 Band-edge Compliance of RF Emissions

According to FCC rules part 15 subpart C §15.247(c) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.



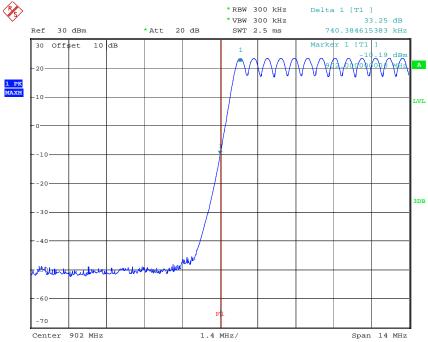
BANDEDGE 902.75MHz

Date: 15.JUL.2014 17:48:59

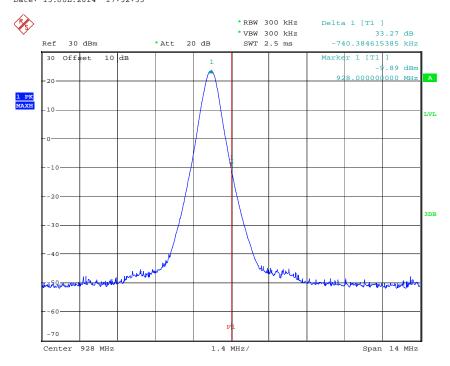


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



BANDEDGE HOPPING MODE 902.75MHz Date: 15.JUL.2014 17:52:35



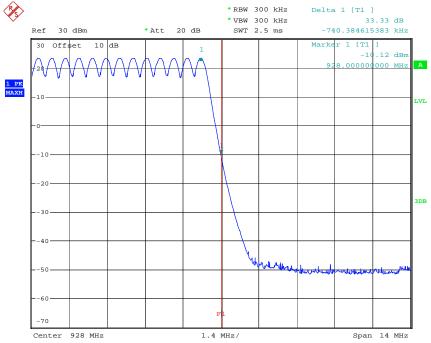
BANDEDGE 927.25MHz

Date: 15.JUL.2014 17:50:13



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



BANDEDGE HOPPING MODE 927.25MHz Date: 15.JUL.2014 17:51:39

#### **Limits:**

Frequency Range / MHz	Limit
902 –928	
2400 – 2483.5	- 20 dB
5725 - 5850	

Test equipment used: ETSTW-RE 055, ETSTW-RE 064



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### 3.11 Radiated Emissions from Receiver Part

FCC Rule: 15.109

Summary table with radiated data of the test plots

ANT1: ANT570 (US)

Model: UM800 Date: 2014/5/20~2014/6/17

Mode: Rx 902.75 MHz Temperature: 24 °C Engineer: Ken

Polarization: Horizontal Humidity: 60 %

1 Glarizationi	TTOTILOTICAL			Trairinanty:	- 00	70		
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
630.1548	21.25	QP	23.44	44.69	46.00	-1.31	180	100
727.8557	17.73	peak	24.96	42.69	46.00	-3.31	160	100
823.9474	18.36	QP	26.01	44.37	46.00	-1.63	230	100
873.6473	12.86	peak	26.76	39.62	46.00	-6.38	195	100

Frequency	Reading (dBuV)		Factor (dB)		sult ıV/m)	Limit (dBuV/m)		Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1112.2240	51.52		-9.00	42.52		74.00	54.00	-31.48	230	100
2402.8060	45.78		-4.66	41.12		74.00	54.00	-32.88	205	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
39.7194	22.36	peak	13.79	36.15	40.00	-3.85	65	100
86.3726	23.45	peak	9.20	32.65	40.00	-7.35	110	100
630.6613	18.45	peak	23.44	41.89	46.00	-4.11	205	100
825.0501	14.97	peak	26.03	41.00	46.00	-5.00	295	100

Frequency	Rea	ding	Factor	Re	Result		Limit		Table	Ant.
	(dB	uV)	(dB)	(dB) (dBuV/m)		(dBuV/m)			Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2388.7780	53.72		-4.73	48.99		74.00	54.00	-25.01	165	100
2991.9840	47.28		-3.58	43.70		74.00	54.00	-30.30	140	100

Mode: RX 914.75 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
630.6613	22.29	QP	23.44	45.73	46.00	-0.27	175	100
727.8557	18.05	peak	24.96	43.01	46.00	-2.99	160	100
825.0501	17.72	peak	26.03	43.75	46.00	-2.25	205	100
922.2445	11.15	peak	27.52	38.67	46.00	-7.33	270	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

	Frequency	Rea	ding	Factor	Re	Result		Limit		Table	Ant.
		(dB	uV)	(dB)	(dBı	ıV/m)	(dBu	V/m)		Degree	High
	(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	1112.2240	51.10		-9.00	42.10		74.00	54.00	-31.90	220	100
I	2641.2830	43.13		-4.12	39.01		74.00	54.00	-34.99	240	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
41.6633	22.35	peak	13.93	36.28	40.00	-3.72	80	100
630.6613	17.97	peak	23.44	41.41	46.00	-4.59	200	100
727.8557	12.78	peak	24.96	37.74	46.00	-8.26	260	100
825.0501	14.50	peak	26.03	40.53	46.00	-5.47	290	100

Frequency	Reading (dBuV)		Factor (dB)		Result (dBuV/m)		Limit (dBuV/m)		Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2388.7780	53.52		-4.73	48.79		74.00	54.00	-25.21	170	100
2991.9840	47.26		-3.58	43.68		74.00	54.00	-30.32	145	100

Mode: RX 927.25 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
630.6613	22.13	QP	23.44	45.57	46.00	-0.43	170	100
727.8557	18.23	peak	24.96	43.19	46.00	-2.81	165	100
825.0501	17.30	peak	26.03	43.33	46.00	-2.67	230	100
873.6473	12.52	peak	26.76	39.28	46.00	-6.72	210	100

	Frequency	Reading (dBuV)		Factor (dB)		sult uV/m)	Lir (dBu	nit V/m)	Margin	Table Degree	Ant. High
	(MHz)	Peak	Áve.	Corr.	Peak	Ave.	Peak	Áve.	(dB)	(Deg.)	(cm)
	1112.2240	50.82		-9.00	41.82		74.00	54.00	-32.18	200	100
ĺ	2416.8340	43.57		-4.61	38.96		74.00	54.00	-35.04	225	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
41.6633	22.62	peak	13.93	36.55	40.00	-3.45	90	100
630.6613	18.65	peak	23.44	42.09	46.00	-3.91	220	100
727.8557	12.29	peak	24.96	37.25	46.00	-8.75	255	100
825.0501	15.20	peak	26.03	41.23	46.00	-4.77	310	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Frequency	Rea	ding	Factor	Re	sult	Lir	mit	Margin	Table	Ant.
	(dB	uV)	(dB)	(dBu	ıV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
2388.7780	52.97		-4.73	48.24		74.00	54.00	-25.76	150	100
2991.9840	48.14		-3.58	44.56		74.00	54.00	-29.44	135	100

ANT2: PCB-T2487B

Mode: Rx 902.75 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	24.08	peak	17.01	41.09	46.00	-4.91	140	100
813.3867	14.33	peak	25.85	40.18	46.00	-5.82	200	100
825.0501	15.60	peak	26.03	41.63	46.00	-4.37	160	100
959.1784	12.79	peak	28.11	40.90	46.00	-5.10	235	100

	Frequency		ding uV)	Factor (dB)		sult ıV/m)	Limit (dBuV/m)		Margin	Table Degree	Ant. High
	(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	1028.0560	41.96		-7.73	34.23		74.00	54.00	-39.77	205	100
ĺ	1490.9820	43.04		-9.08	33.96		74.00	54.00	-40.04	160	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
33.8878	19.14	peak	13.32	32.46	40.00	-7.54	80	100
64.9900	17.05	peak	12.41	29.46	40.00	-10.54	130	100
825.0501	11.40	peak	26.03	37.43	46.00	-8.57	200	100
959.1784	12.47	peak	28.11	40.58	46.00	-5.42	180	100

Frequency	Rea	ding	Factor	Re	sult	Lir	nit	Margin	Table	Ant.
	(dB	uV)	(dB)	(dBu	ıV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1028.0560	41.79	-	-7.73	34.06		74.00	54.00	-39.94	210	100
1771.5430	43.11		-7.08	36.03		74.00	54.00	-37.97	180	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Mode: RX 914.75 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	23.88	peak	17.01	40.89	46.00	-5.11	145	100
813.3867	14.33	peak	25.85	40.18	46.00	-5.82	155	100
825.0501	14.21	peak	26.03	40.24	46.00	-5.76	170	100
959.1784	14.01	peak	28.11	42.12	46.00	-3.88	215	100

Frequency		ding uV)	Factor (dB)		sult uV/m)		nit V/m)	Margin	Table Degree	Ant. High
(MHz)	Peak	Áve.	Corr.	Peak	Áve.	Peak	Áve.	(dB)	(Deg.)	(cm)
1028.0560	41.75		-7.73	34.02		74.00	54.00	-39.98	230	100
1490.9820	44.71		-9.08	35.63		74.00	54.00	-38.37	225	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
31.9440	19.31	peak	13.26	32.57	40.00	-7.43	85	100
66.9340	17.53	peak	12.02	29.55	40.00	-10.45	145	100
825.0501	10.23	peak	26.03	36.26	46.00	-9.74	230	100
959.1784	11.00	peak	28.11	39.11	46.00	-6.89	175	100

Frequency	Reading		Factor	Result		Limit		Margin	Table	Ant.
	(dB	uV)	(dB)	(dBu	ıV/m)	(dBu)	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1028.0560	41.35		-7.73	33.62		74.00	54.00	-40.38	170	100
1561.1220	43.39		-8.61	34.78		74.00	54.00	-39.22	220	100

Mode: RX 927.25 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	24.15	peak	17.01	41.16	46.00	-4.84	160	100
813.3867	14.67	peak	25.85	40.52	46.00	-5.48	240	100
825.0501	15.37	peak	26.03	41.40	46.00	-4.60	110	100
959.1784	14.19	peak	28.11	42.30	46.00	-3.70	200	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

	Frequency	Reading		Factor	Re	Result		Limit		Table	Ant.
		(dBuV)		(dB)	(dBuV/m)		(dBuV/m)			Degree	High
	(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	1042.0840	46.48		-7.96	38.52		74.00	54.00	-35.48	160	100
I	1434.8700	46.99		-9.25	37.74		74.00	54.00	-36.26	145	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
33.8878	19.32	peak	13.32	32.64	40.00	-7.36	80	100
64.9900	16.68	peak	12.41	29.09	40.00	-10.91	75	100
825.0501	10.71	peak	26.03	36.74	46.00	-9.26	125	100
959.1784	11.98	peak	28.11	40.09	46.00	-5.91	170	100

Frequency	Reading (dBuV)		Factor (dB)		Result (dBuV/m)		Limit (dBuV/m)		Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Äve.	Peak	Äve.	(dB)	(Deg.)	(cm)
1028.0560	42.10		-7.73	34.37		74.00	54.00	-39.63	175	100
1490.9820	44.82		-9.08	35.74		74.00	54.00	-38.26	120	100

ANT3: ANT-T025

Mode: Rx 902.75 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0782	22.49	peak	17.01	39.50	46.00	-6.50	170	100
350.7414	16.44	peak	17.23	33.67	46.00	-12.33	125	100
825.0501	10.53	peak	26.03	36.56	46.00	-9.44	200	100
959.1784	14.49	peak	28.11	42.60	46.00	-3.40	240	100

Frequency	Rea	Reading		Re	Result		Limit		Table	Ant.
	(dB	(dBuV)		(dBuV/m)		(dBuV/m)			Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1042.0840	45.88		-7.96	37.92		74.00	54.00	-36.08	125	100
1434.8700	51.05		-9.25	41.80		74.00	54.00	-32.20	140	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
38.5321	18.81	QP	13.68	32.49	40.00	-7.51	210	100
90.2605	27.02	peak	8.89	35.91	43.50	-7.59	155	100
825.0501	11.67	peak	26.03	37.70	46.00	-8.30	200	100
959.1784	11.00	peak	28.11	39.11	46.00	-6.89	250	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Frequency	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin	Table Degree	Ant. High
(MHz)	Peak	Áve.	Corr.	Peak	Äve.	Peak	Äve.	(dB)	(Deg.)	(cm)
1028.0560	42.63		-7.73	34.90		74.00	54.00	-39.10	190	100
1280.5610	42.33		-9.21	33.12		74.00	54.00	-40.88	165	100

Mode: RX 914.75 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	22.22	peak	17.01	39.23	46.00	-6.77	175	100
350.7414	16.13	peak	17.23	33.36	46.00	-12.64	160	100
825.0501	10.74	peak	26.03	36.77	46.00	-9.23	210	100
959.1784	14.55	peak	28.11	42.66	46.00	-3.34	205	100

Frequency	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1028.0560	41.46		-7.73	33.73		74.00	54.00	-40.27	165	100
1294.5890	42.59		-9.16	33.43		74.00	54.00	-40.57	150	100

Polarization: Vertical

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
33.3367	20.20	QP	13.31	33.51	40.00	-6.49	100	100
92.2044	25.61	peak	9.29	34.90	43.50	-8.60	125	100
825.0501	11.81	peak	26.03	37.84	46.00	-8.16	220	100
959.1784	11.31	peak	28.11	39.42	46.00	-6.58	245	100

Fre	equency	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin	Table Degree	Ant. High
	(MHz)	Peak	Áve.	Corr.	Peak	Áve.	Peak	Áve.	(dB)	(Deg.)	(cm)
10	56.1120	41.57		-8.20	33.37		74.00	54.00	-40.63	170	100
13	08.6170	42.42		-9.16	33.26		74.00	54.00	-40.74	210	100



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Mode: RX 927.25 MHz

Polarization: Horizontal

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
339.0781	22.33	peak	17.01	39.34	46.00	-6.66	170	100
350.7414	16.30	peak	17.23	33.53	46.00	-12.47	155	100
825.0501	10.54	peak	26.03	36.57	46.00	-9.43	230	100
959.1784	14.66	peak	28.11	42.77	46.00	-3.23	245	100

Frequency	Reading		Factor	Re	sult	Limit		Margin	Table	Ant.
	(dB	uV)	(dB)	(dBu	ıV/m)	(dBu	V/m)		Degree	High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
1028.0560	41.29		-7.73	33.56		74.00	54.00	-40.44	135	100
1561.1220	43.82		-8.61	35.21		74.00	54.00	-38.79	155	100

Polarization: Vertical

	Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
Ī	33.3417	20.59	QP	13.31	33.90	40.00	-6.10	359	100
	92.2044	25.62	peak	9.29	34.91	43.50	-8.59	120	100
	339.0782	18.25	peak	17.01	35.26	46.00	-10.74	160	100
Ī	825.0501	11.38	peak	26.03	37.41	46.00	-8.59	250	100

Frequency		ding uV)	Factor (dB)			Limit (dBuV/m)		Margin	Table Degree	Ant. High
(MHz)	Peak	Äve.	Corr.	Peak	Äve.	Peak	Äve.	(dB)	(Deg.)	(cm)
1042.0840	41.52		-7.96	33.56		74.00	54.00	-40.44	185	100
1771.5430	42.93		-7.08	35.85		74.00	54.00	-38.15	160	100

Note 1. Correction Factor = Antenna factor + Cable loss - Preamplifier

- 2. The formula of measured value as: Test Result = Reading + Correction Factor
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty above 1GHz: 30-1000 MHz =  $\pm$  3.68 dB, 1-18 GHz =  $\pm$  5.37 dB, 18-40 GHz =  $\pm$  3.43 dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. See attached diagrams in appendix.

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission	Field Strength	Field Strength
(MHz)	(microvolts/meter)	(dBmicrovolts/meter)
30 - 88	100	40.0
88 – 216	150	43.5
216 – 960	200	46.0
Above 960	500	54.0

Test equipment used: ETSTW-RE 055, ETSTW-RE 064, ETSTW-RE 003, ETSTW-RE 004, ETSTW-RE 030 ETSTW-RE 111



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### 3.12 Power Line Conducted Emission

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

Model: UM800 Date: -Mode: Temperature: -- °C Engineer: -Polarization: N Humidity: -- %

Frequency		ding aV)	Factor (dB)		sult BuV)		mit aV)	Margin	Position	Note
(MHz)	QP	Ave.	Corr.	QP	Ave.	QP	Ave.	(dB)	(cm)	
				1				-		1
				1				-		

Polarization: L1

Frequency		ding suV)	Factor (dB)		sult BuV)		mit suV)	Margin	Position	Note
(MHz)	QP	Äve.	Corr.	QΡ	Áve.	QΡ	Áve.	(dB)	(cm)	
				1						

#### Limits:

Frequency of Emission (MHz)	Conducted Limit (dBuV)			
	Quasi Peak	Average		
0.15-0.5	66 to 56	56 to 46		
0.5-5	56	46		
5-30	60	50		

Note: 1.The formula of measured value as: Test Result = Reading + Correction Factor

- 2.The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
- 3.Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4.All not in the table noted test results are more than 20 dB below the relevant limits.
- 5.Measurement uncertainty =  $\pm 1.41$  dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 6. This test is not required because there is no AC power line or signal line for this EUT.

Test equipment used: ETSTW-CE 001, ETSTW-CE 016, ETSTW-CE 006, ETSTW-RE 064

Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

#### **Appendix**

#### A. Measurement diagrams

Spurious Emissions radiated

#### B. Photos

- 1. EUT Photos
- 2. Set Up Photo of Radiated Emission



Registration number: W6M21308-13473-C-1

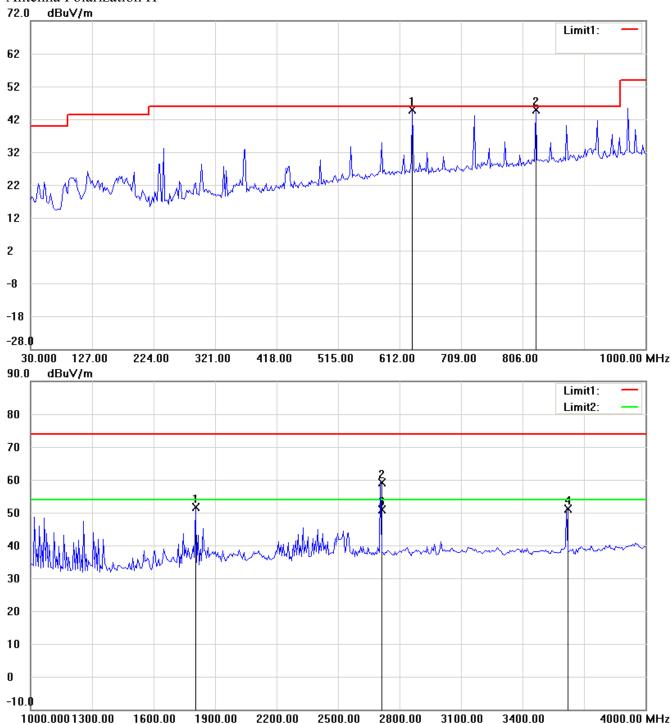
FCC ID: WXAUM800

Spurious Emissions radiated\_TX

ANT1: ANT570 (US)

902.75 MHz

Antenna Polarization H

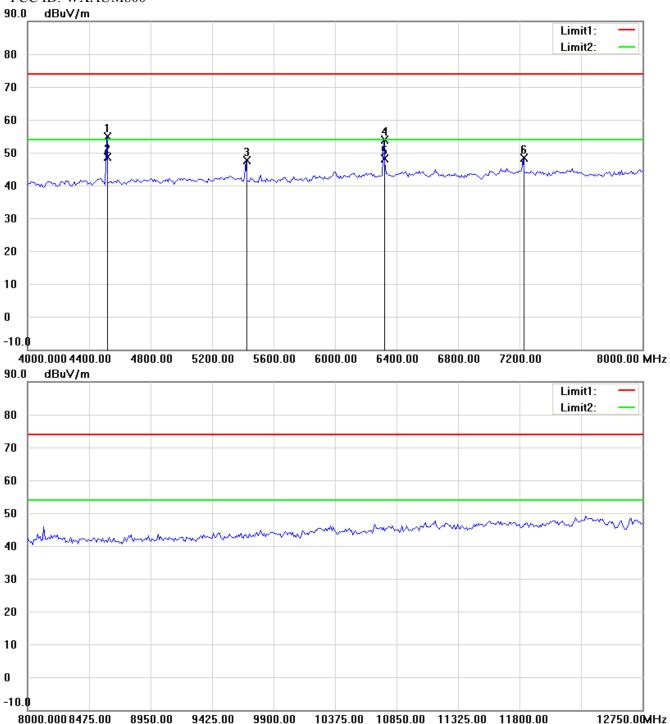


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



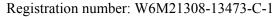
Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

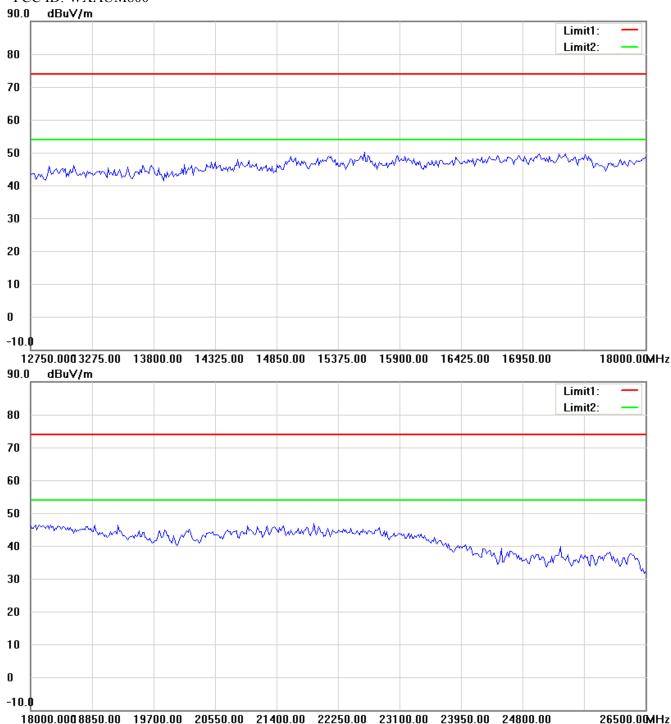


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.





FCC ID: WXAUM800

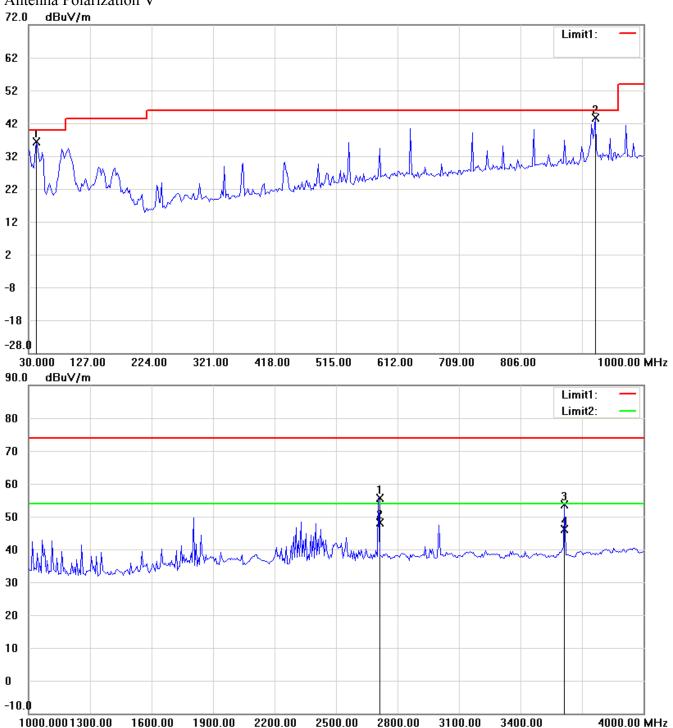


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

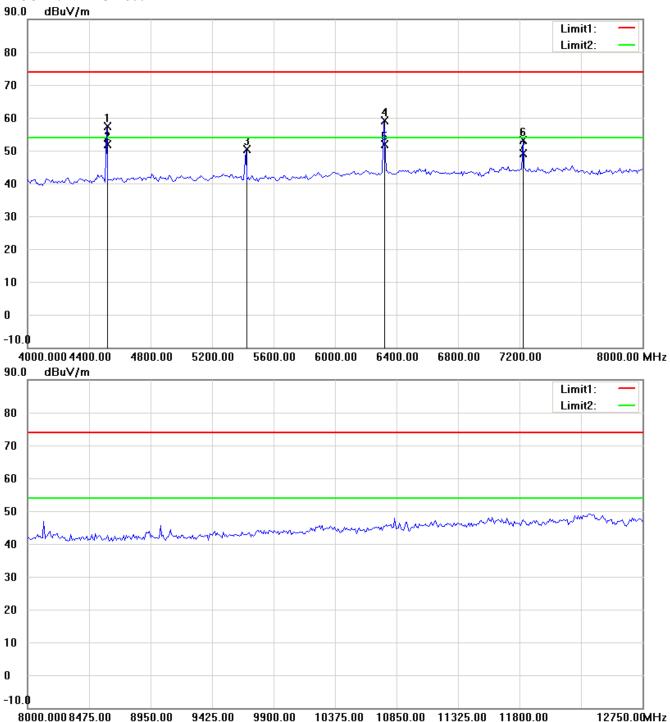


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



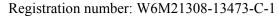
Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

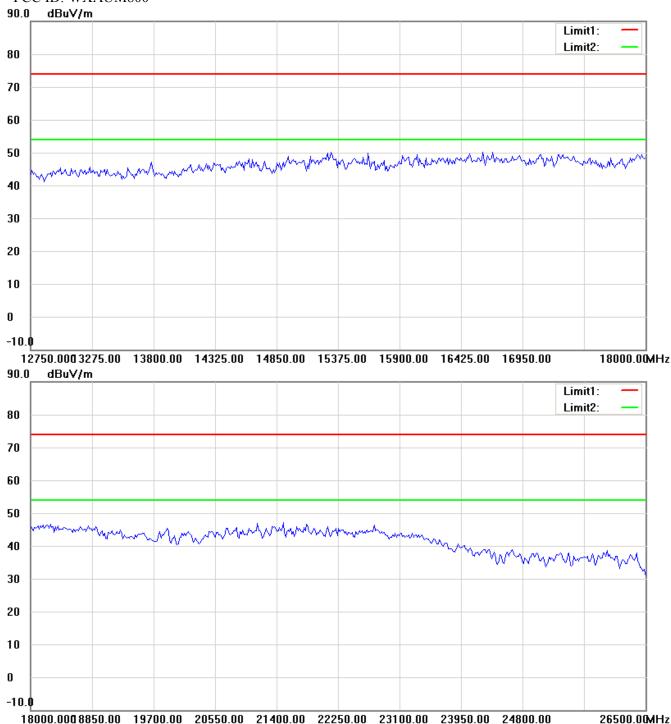


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.





FCC ID: WXAUM800



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

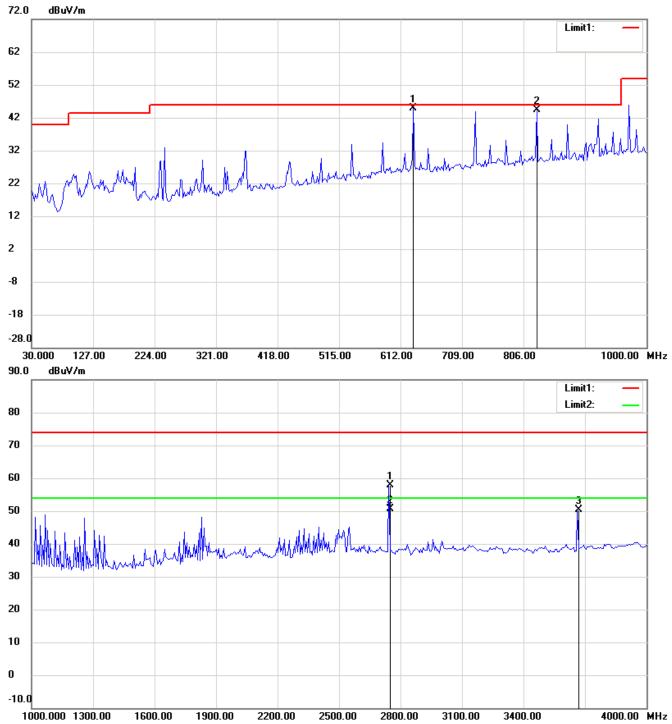


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

914.75 MHz

Antenna Polarization H

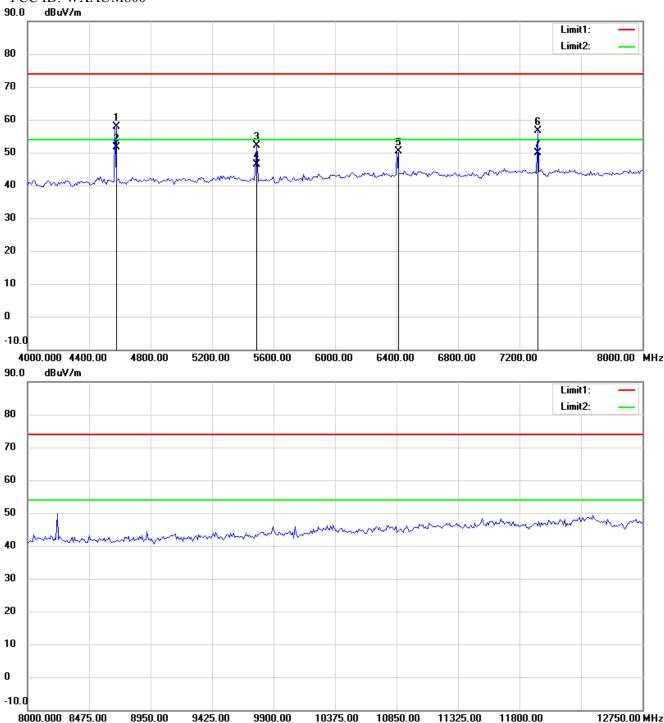


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

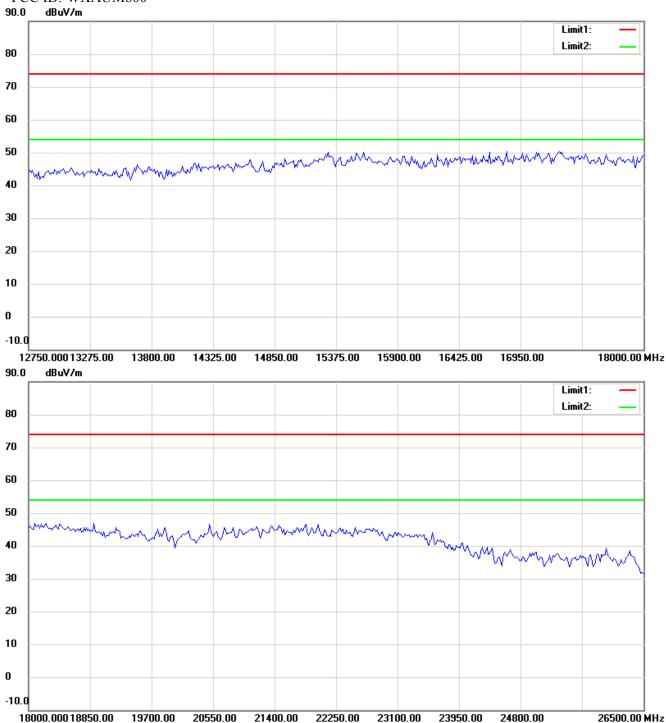


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

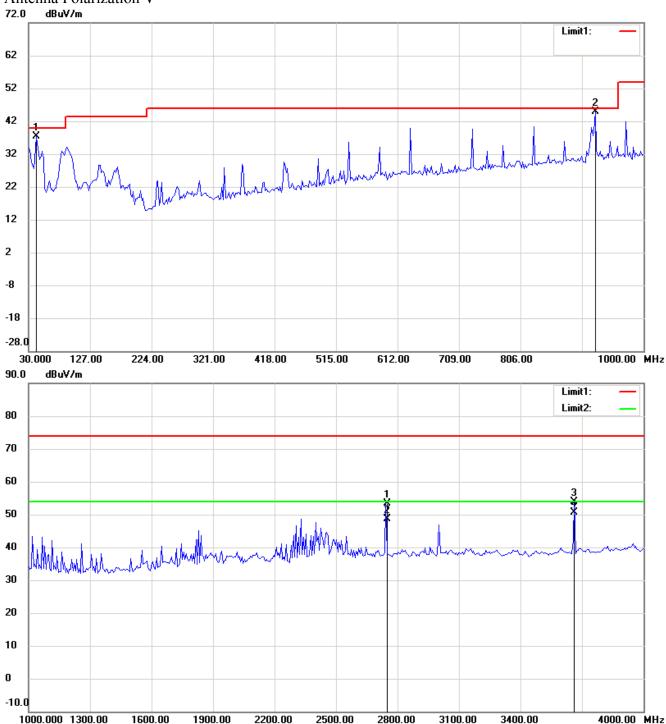


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

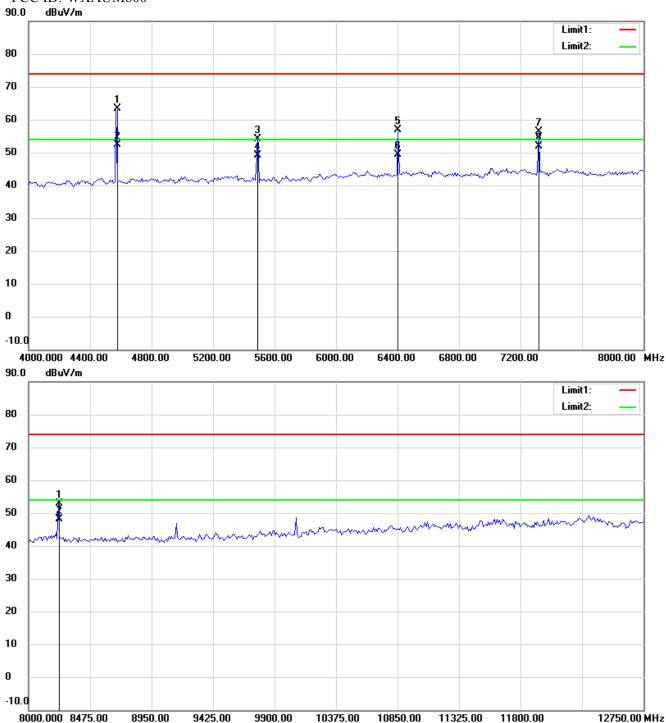


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

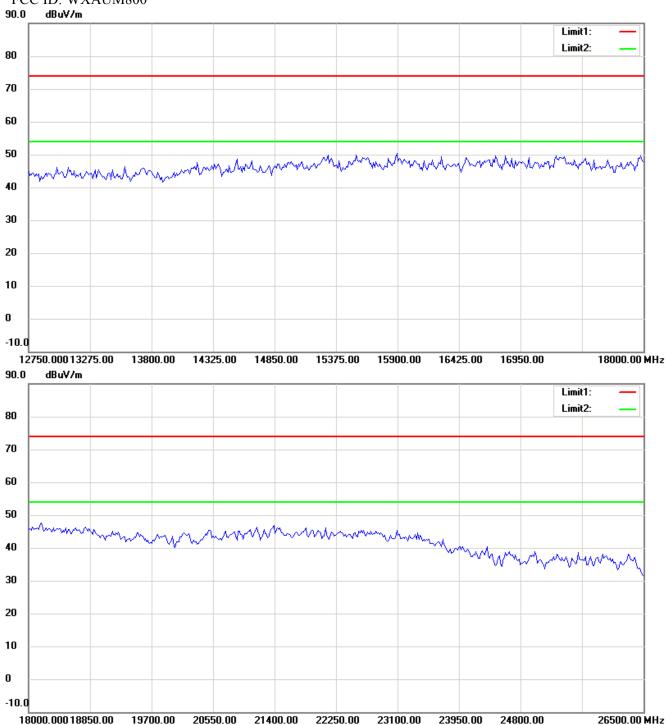


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

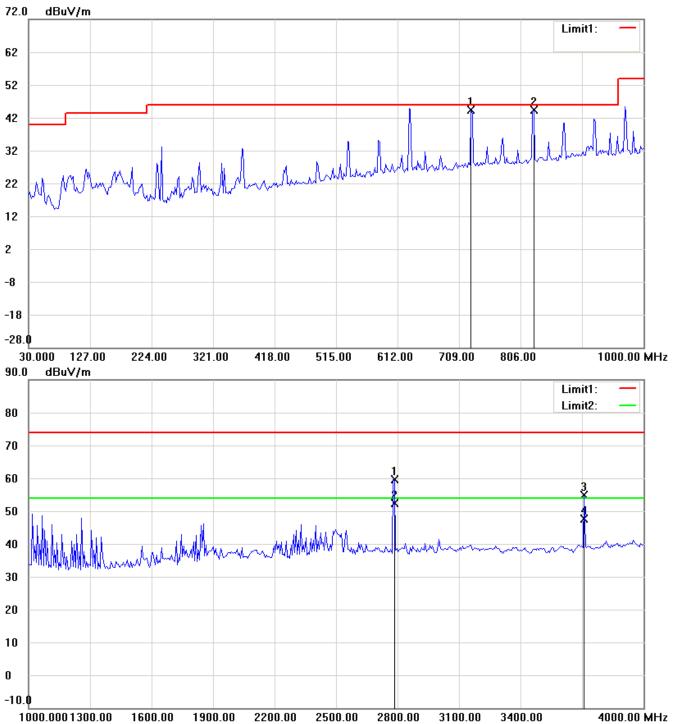


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

927.25 MHz

Antenna Polarization H

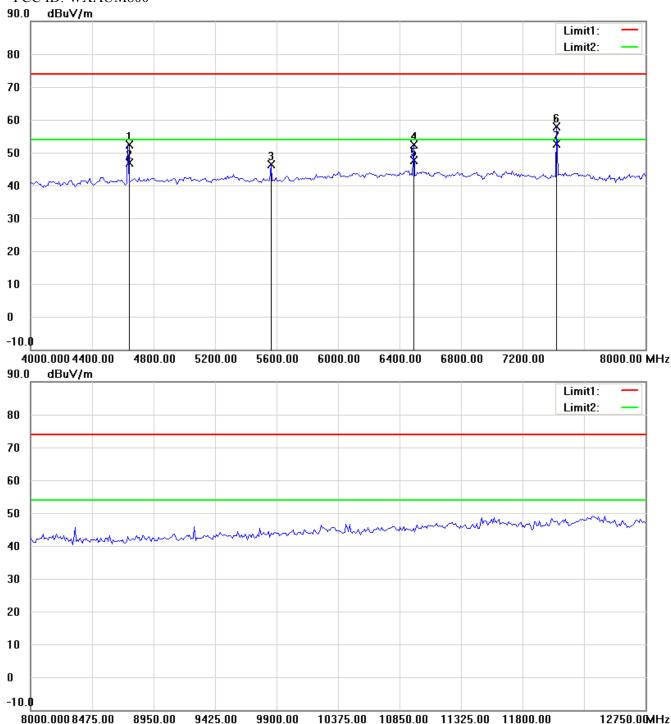


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



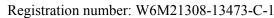
Registration number: W6M21308-13473-C-1

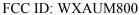
FCC ID: WXAUM800

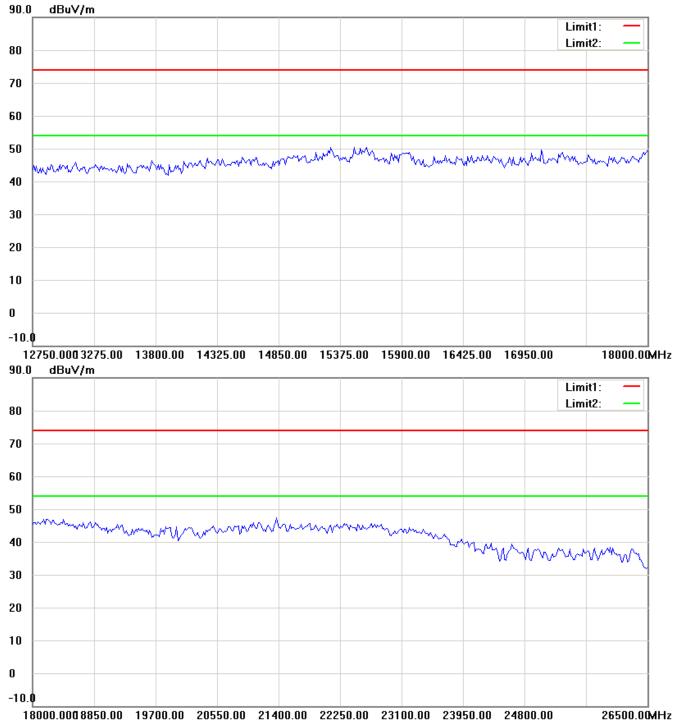


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.







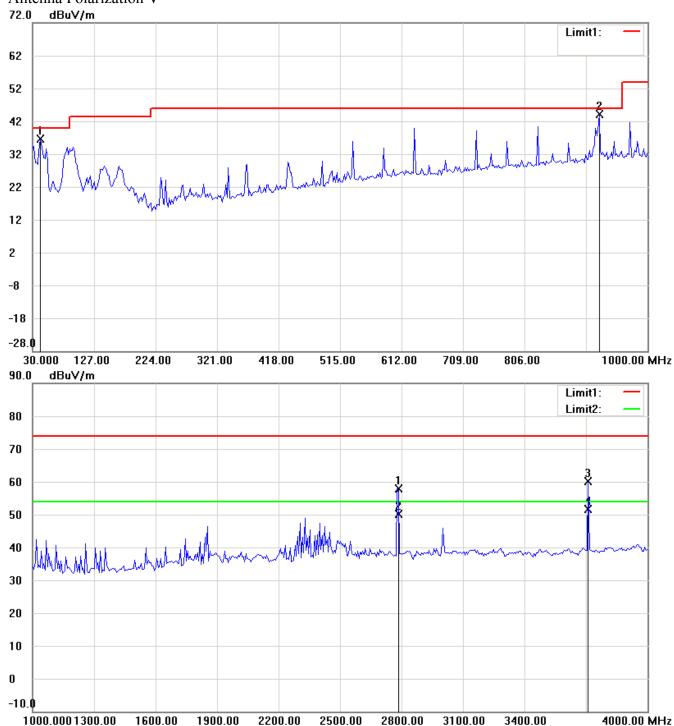


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

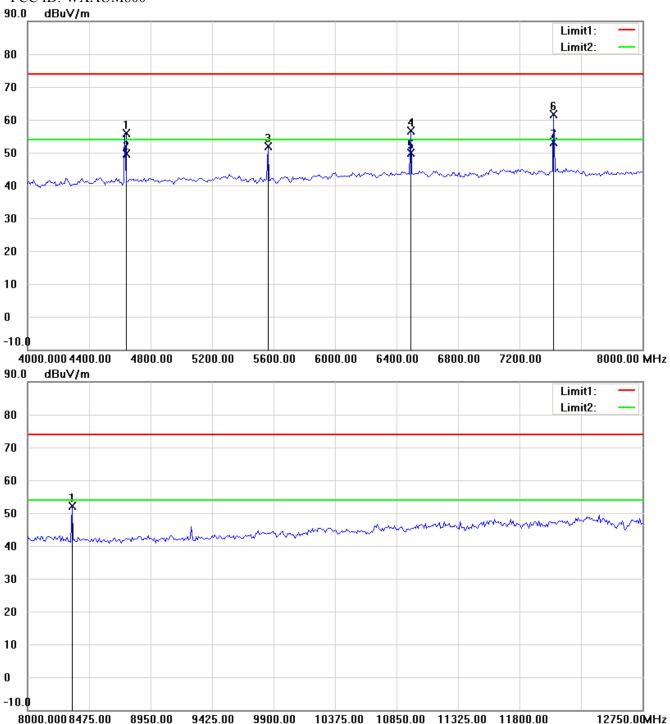


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



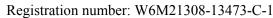
Registration number: W6M21308-13473-C-1

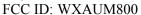
FCC ID: WXAUM800

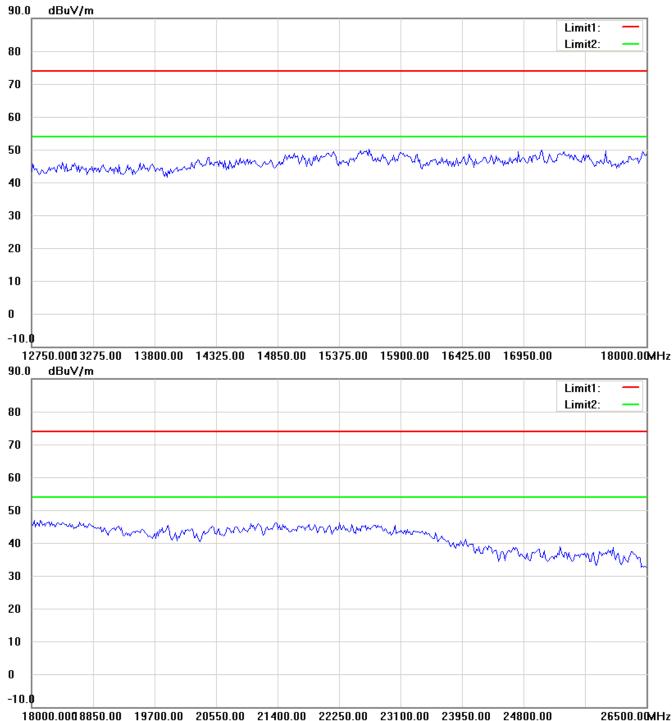


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.









#### Up Line: Peak Limit Line Down Line: Ave Limit Line Note:

20550.00

18000.0008850.00 19700.00

The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.

22250.00

- The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- For corrected test results are listed in the relevant table of radiated test data of this test report.

21400.00

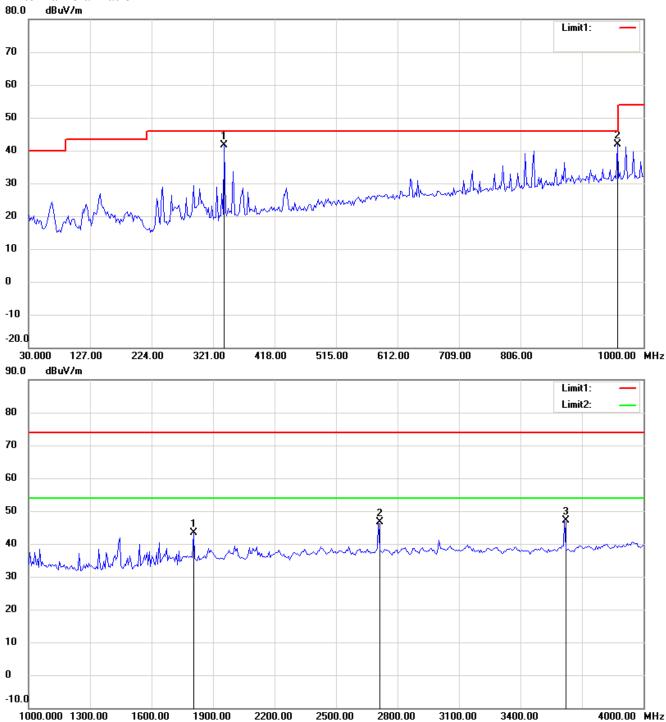


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT2: PCB-T2487B

902.75 MHz

Antenna Polarization H

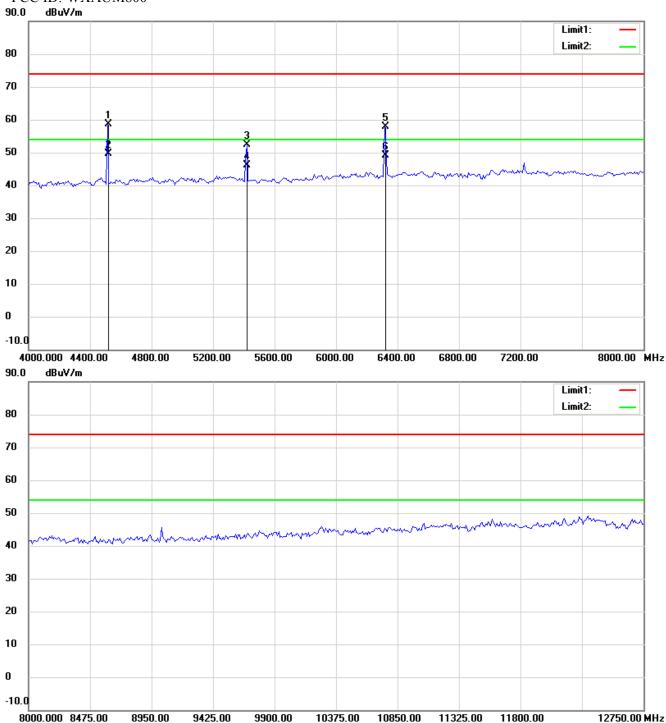


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

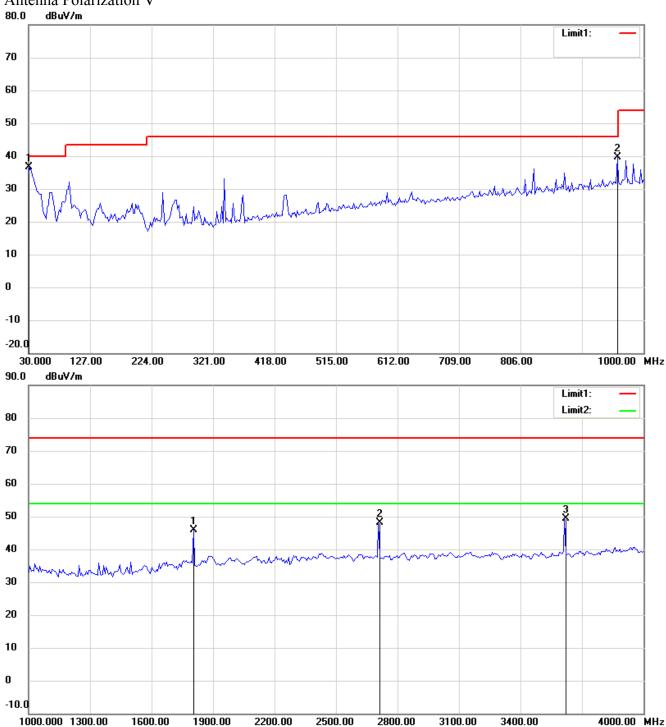


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

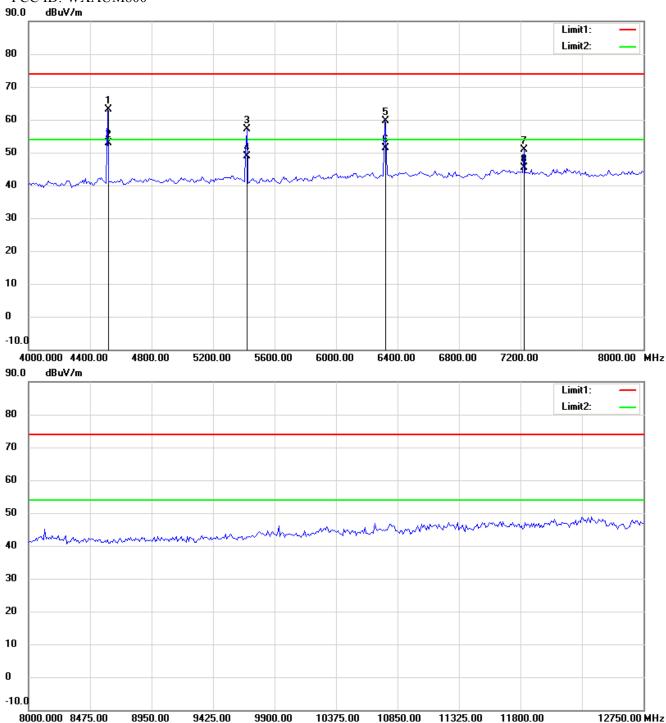


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

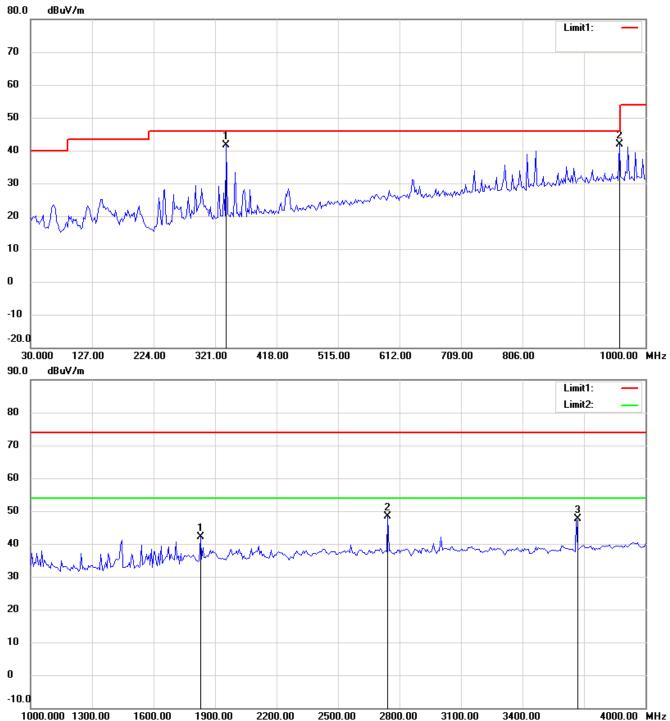


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

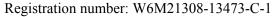
914.75 MHz

Antenna Polarization H

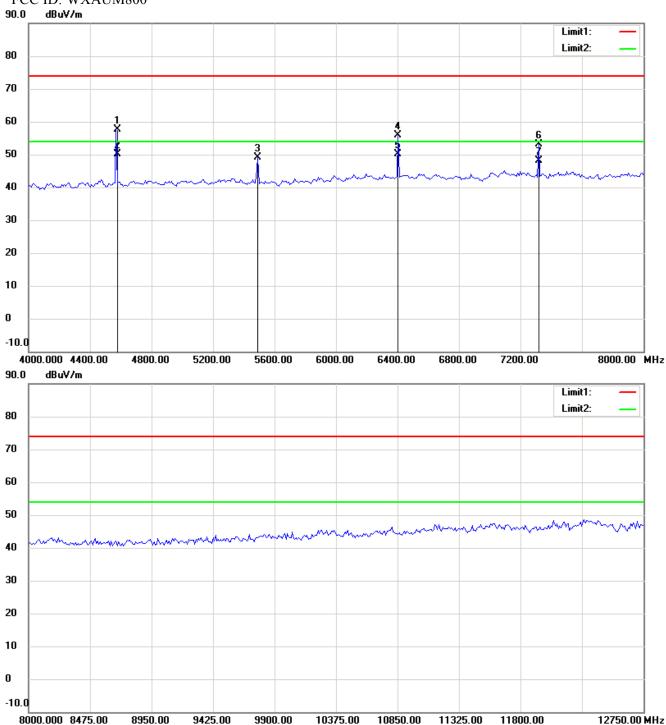


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.





FCC ID: WXAUM800

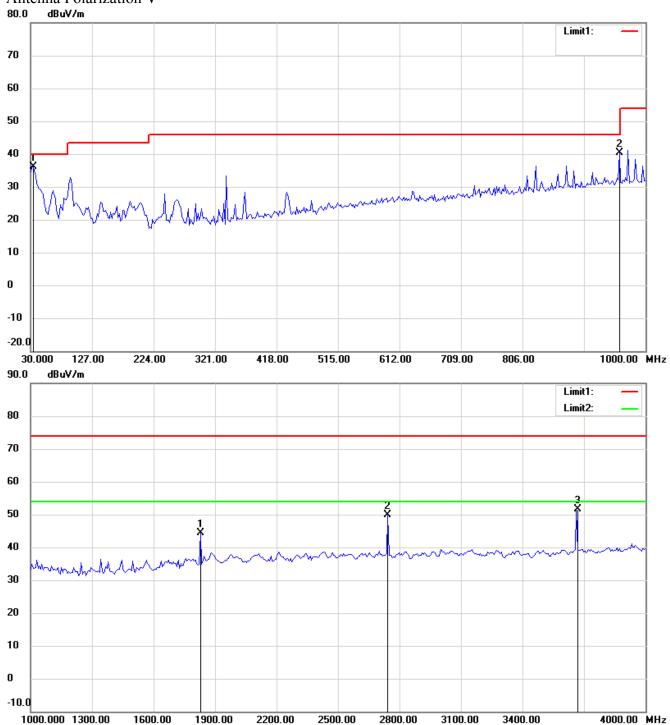


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

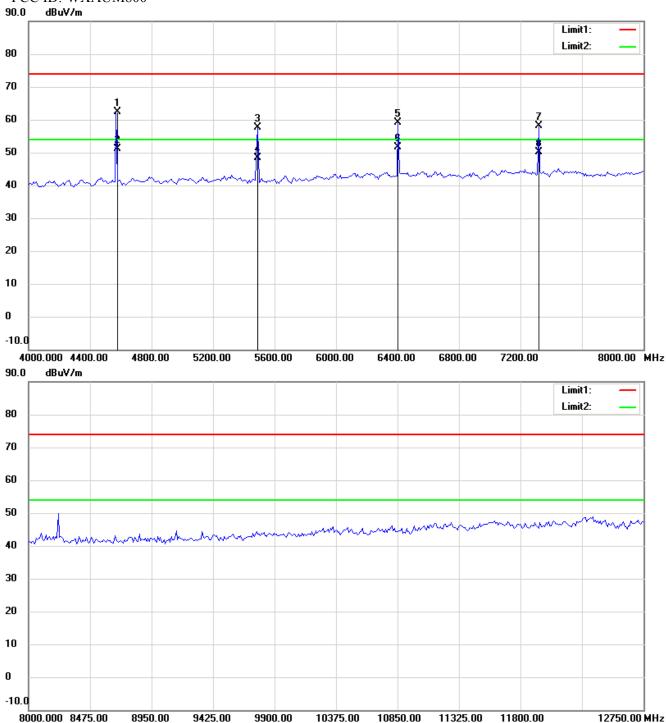


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

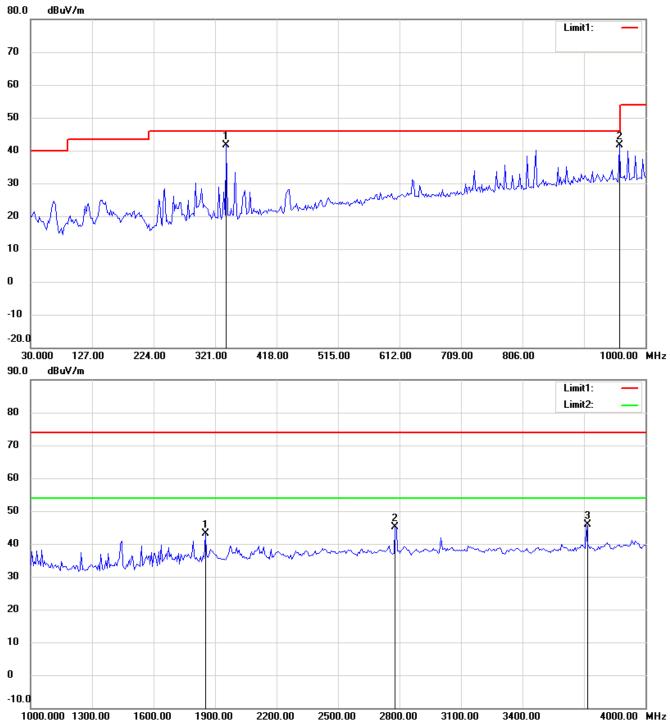


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

927.25 MHz

Antenna Polarization H

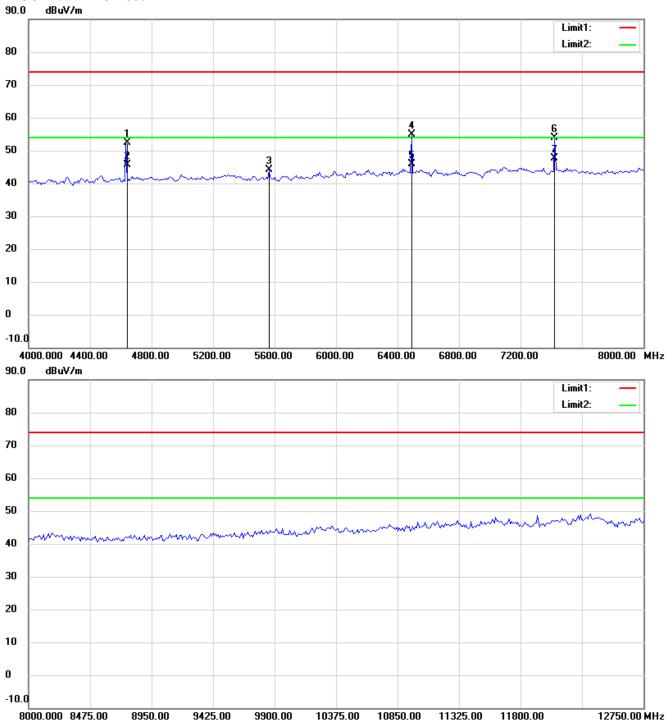


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

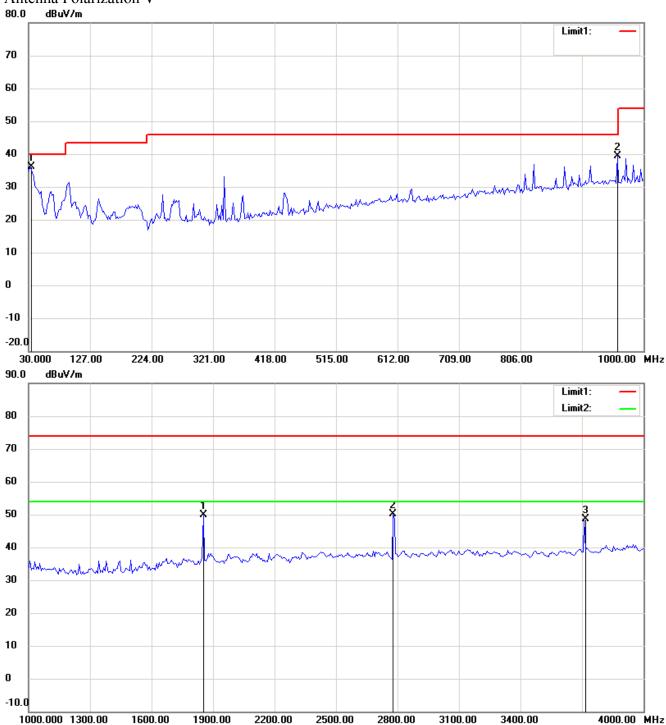


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

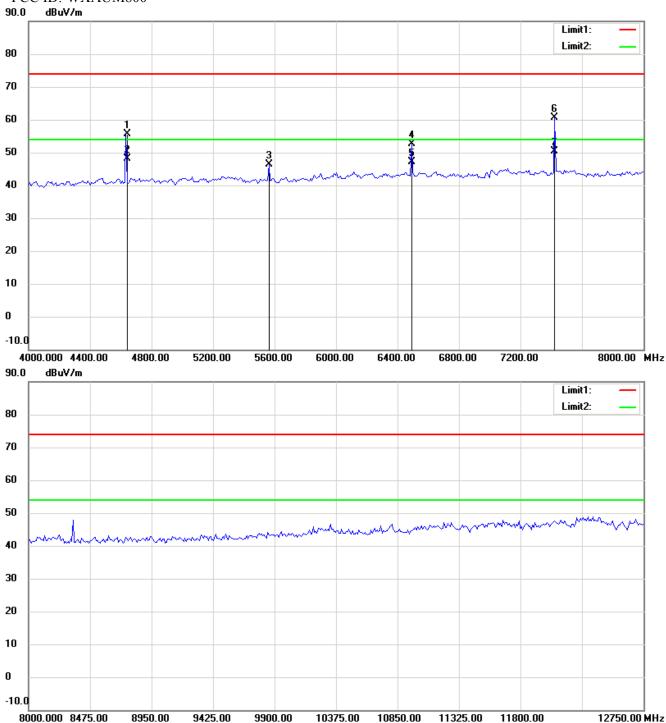


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



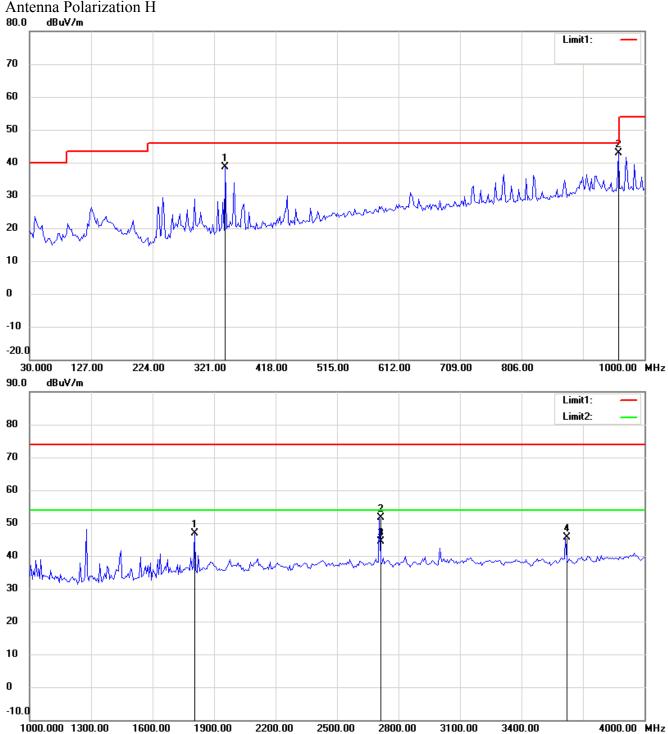
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT3: ANT-T025 902.75 MHz

702.75 WHIZ

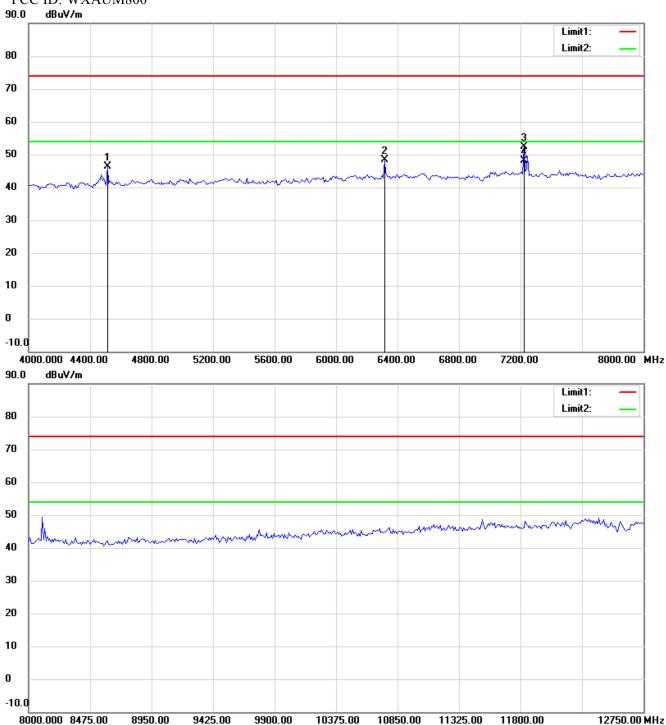


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

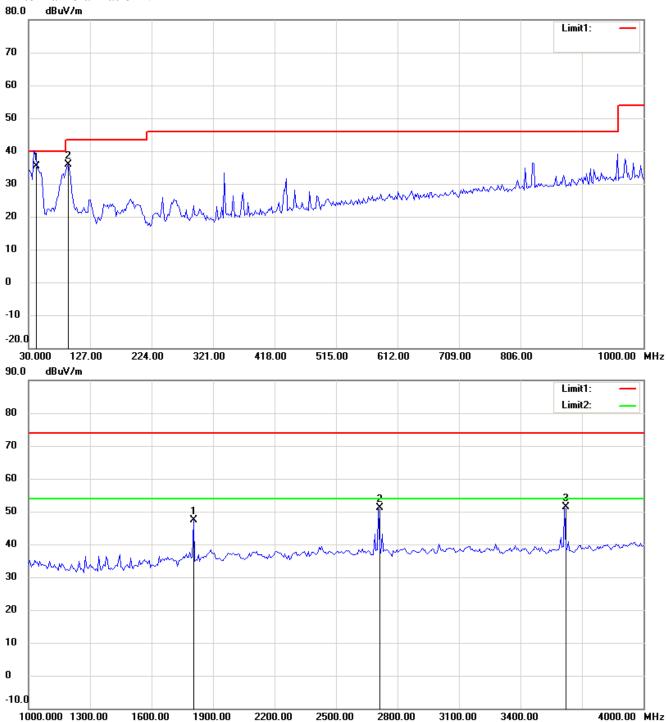


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

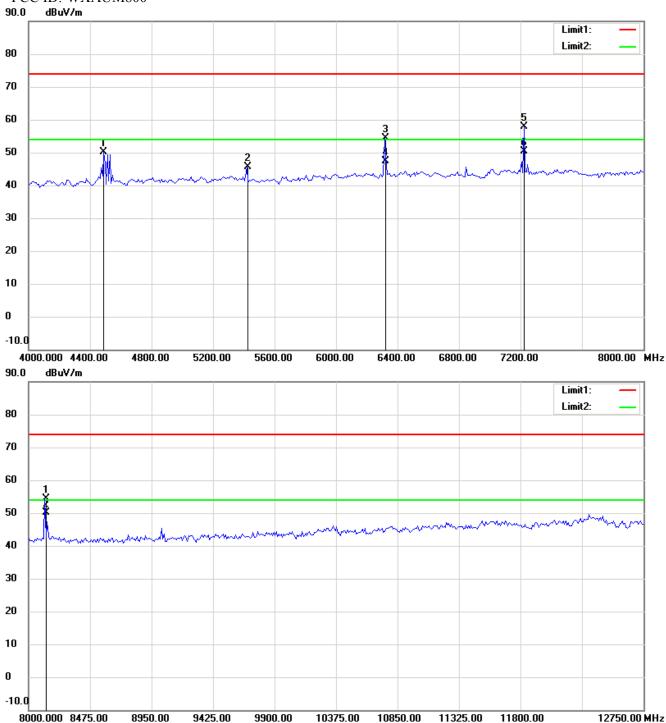


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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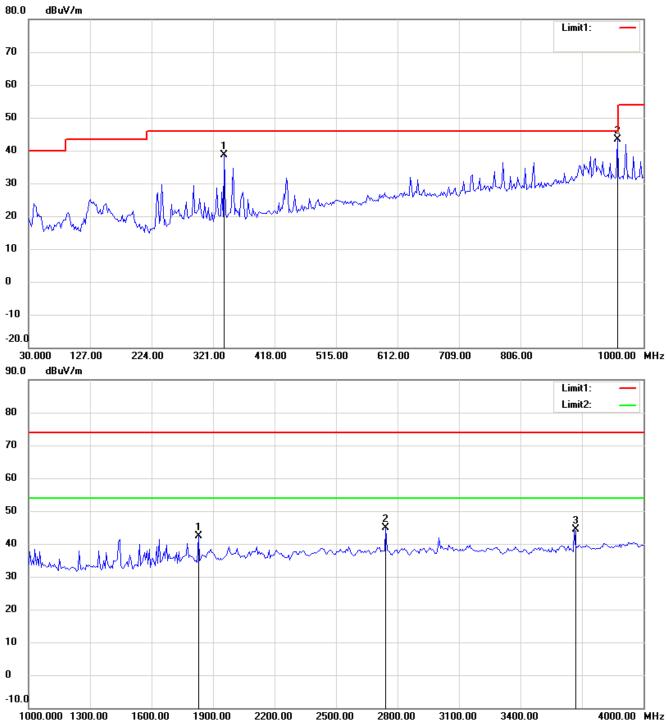


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

914.75 MHz

Antenna Polarization H

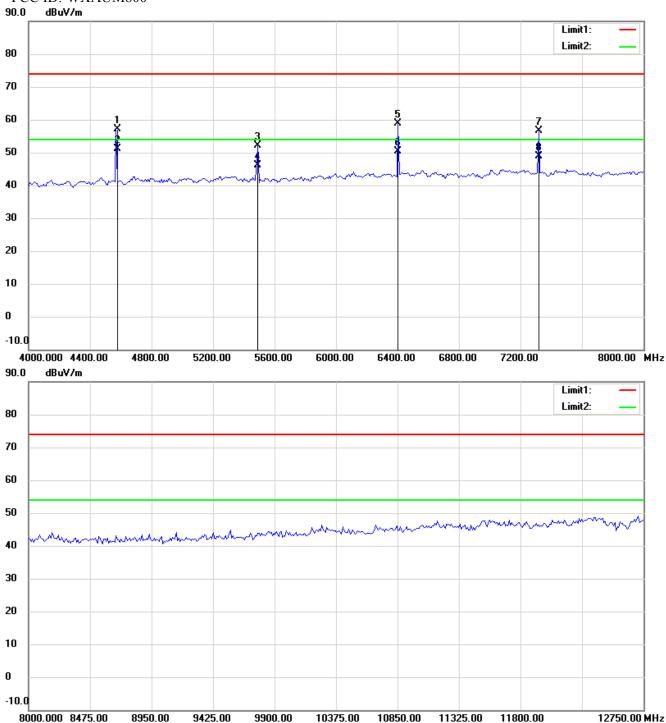


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

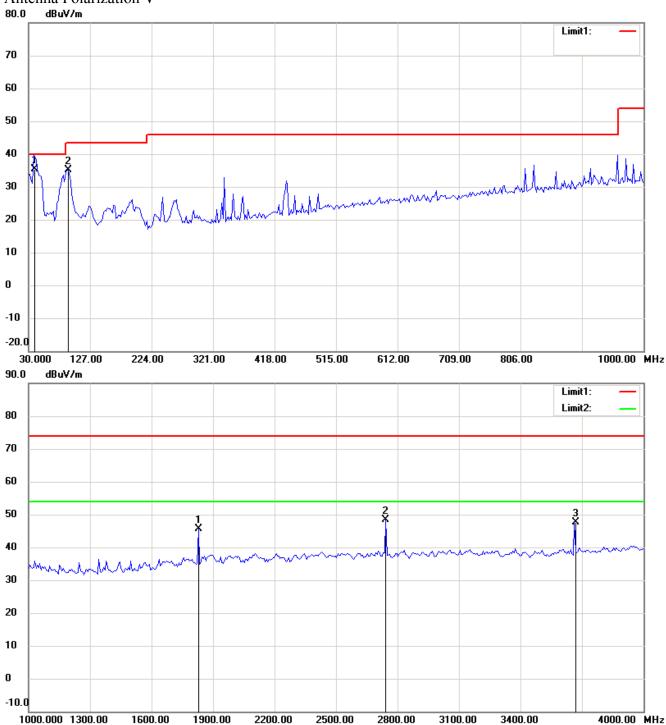


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

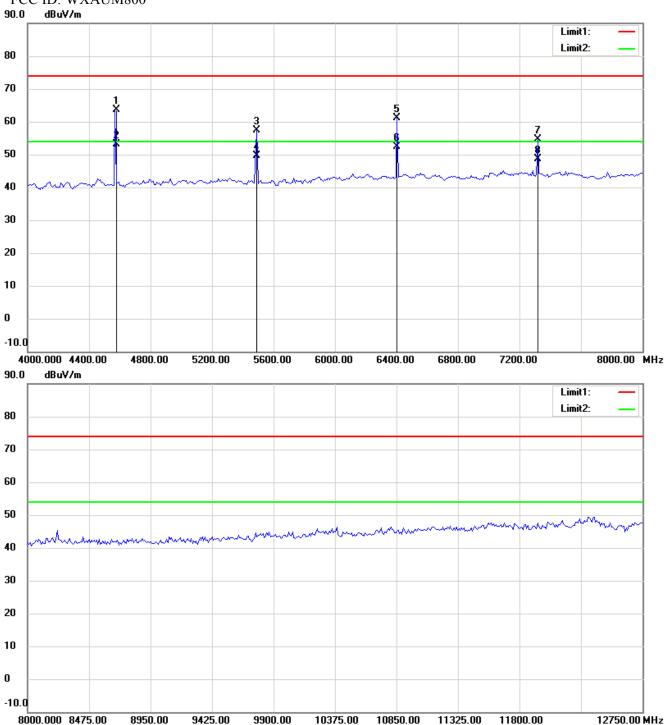


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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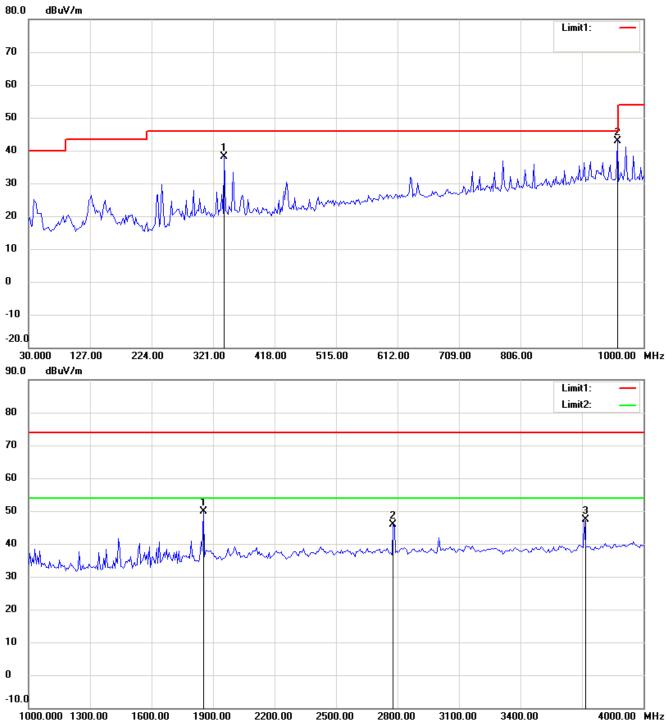


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

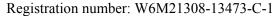
927.25 MHz

Antenna Polarization H

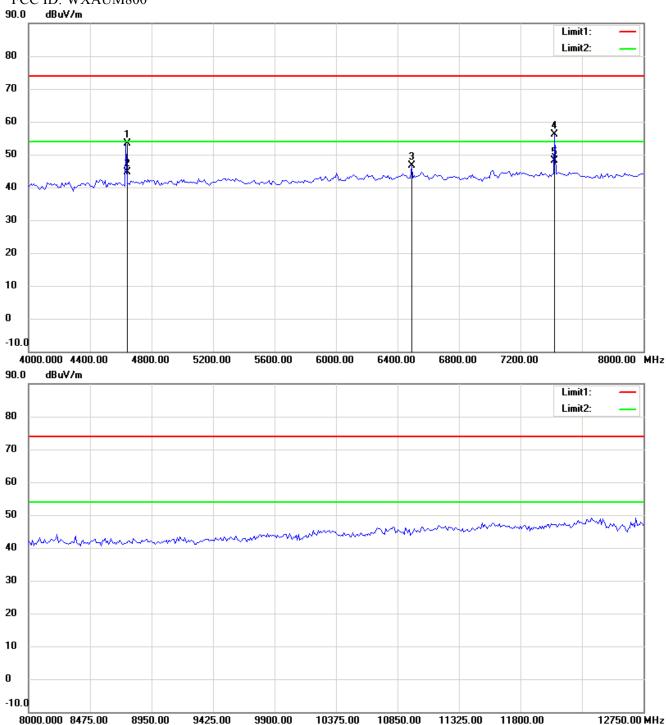


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.





FCC ID: WXAUM800

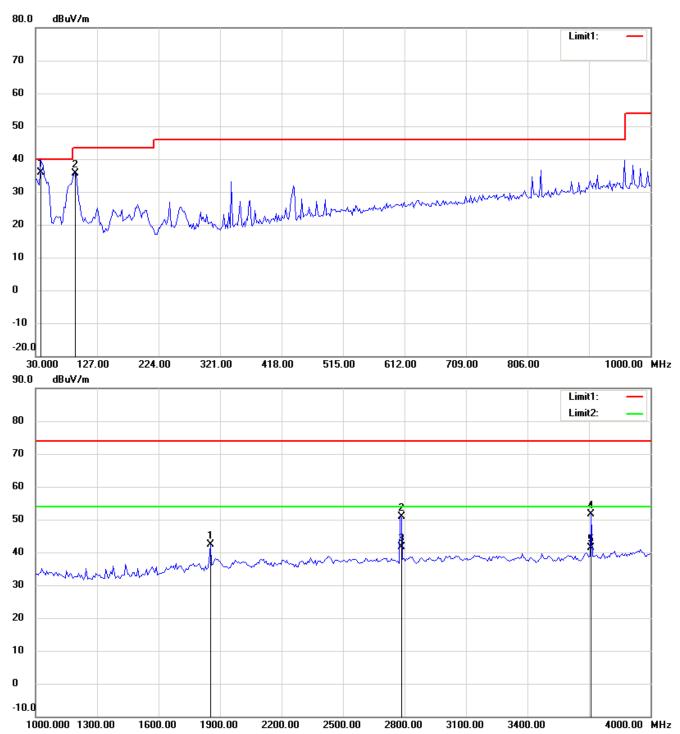


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 Antenna Polarization V

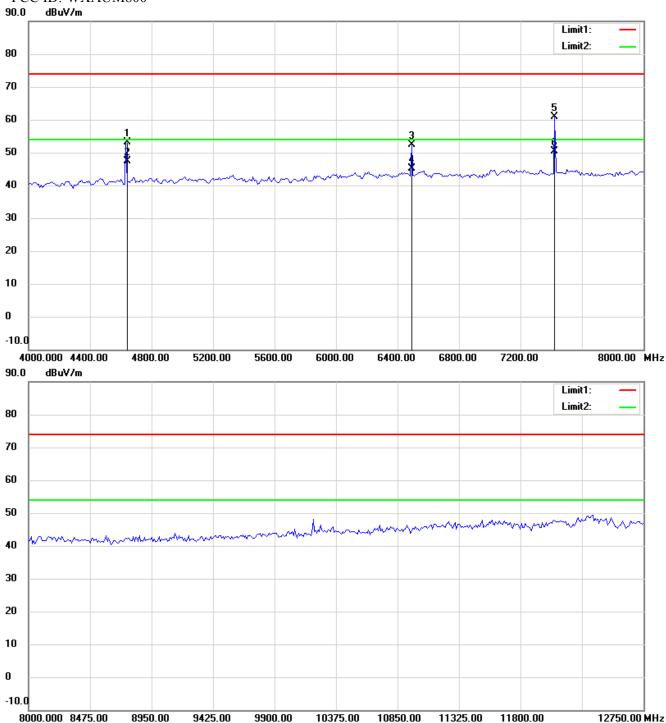


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

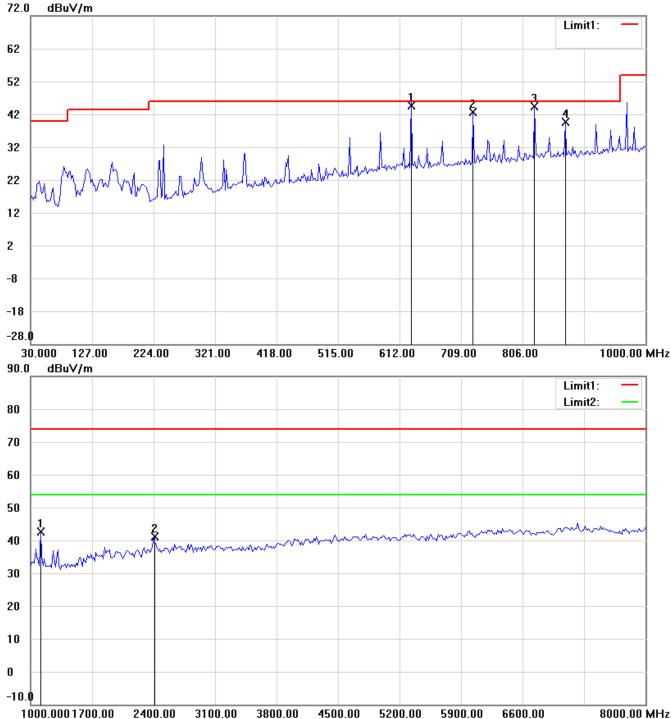
FCC ID: WXAUM800

Spurious Emissions radiated\_RX

ANT1: ANT570 (US)

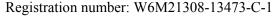
902.75 MHz

Antenna Polarization H

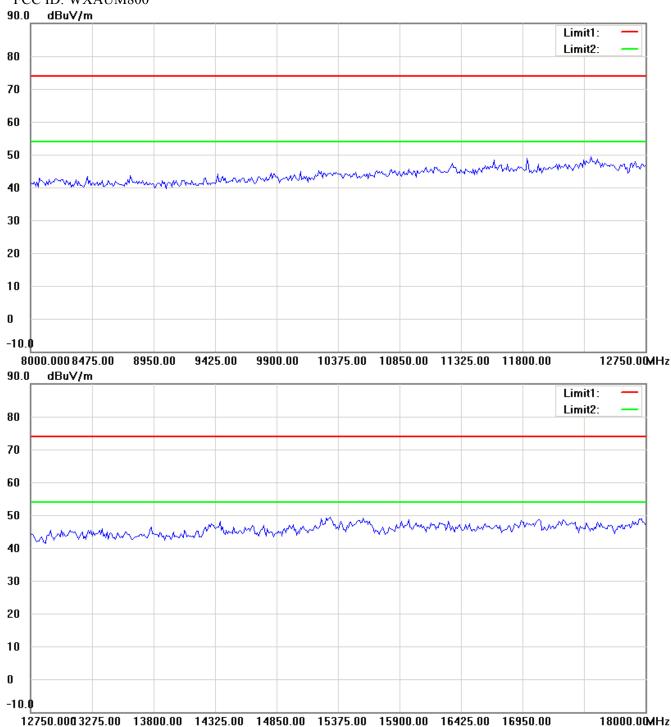


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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FCC ID: WXAUM800

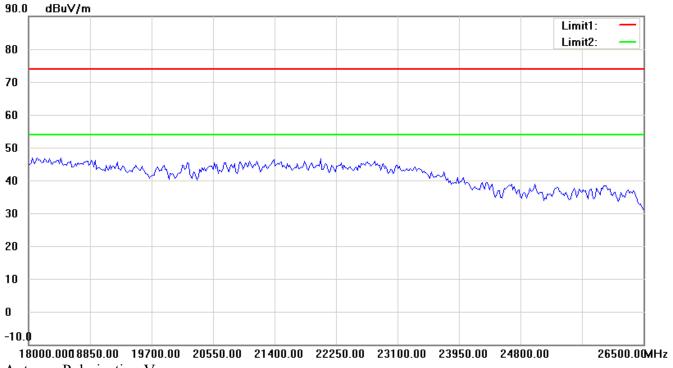


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

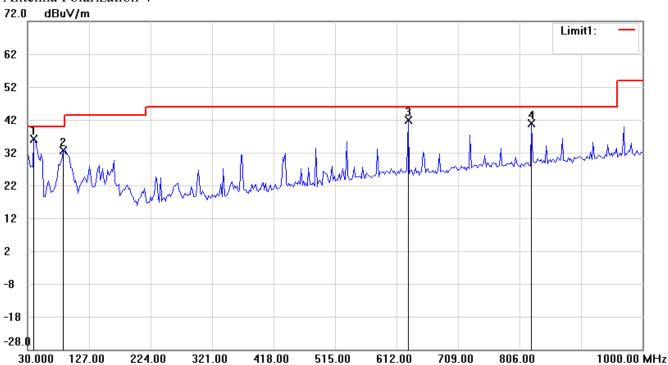


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

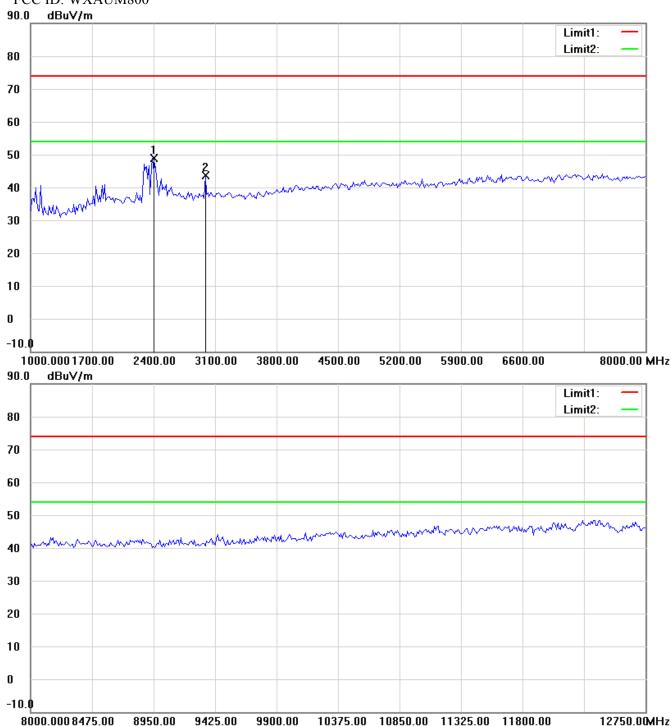


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

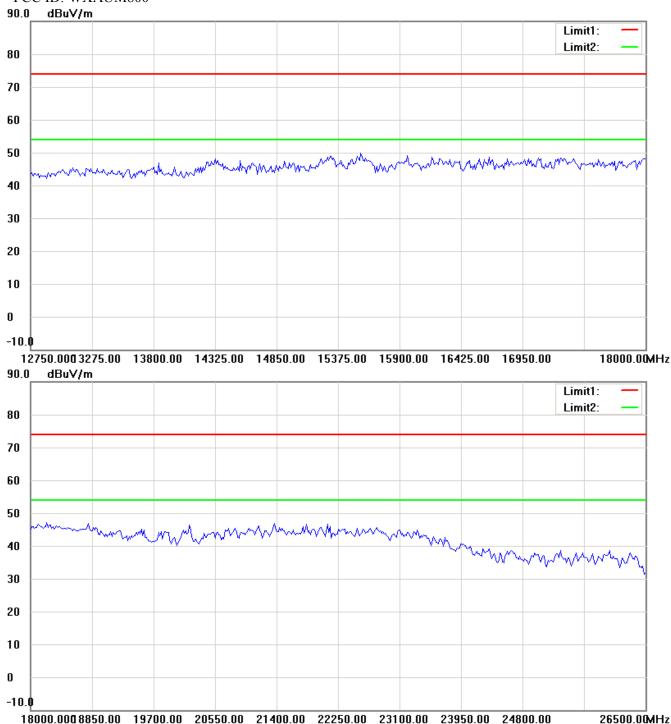


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

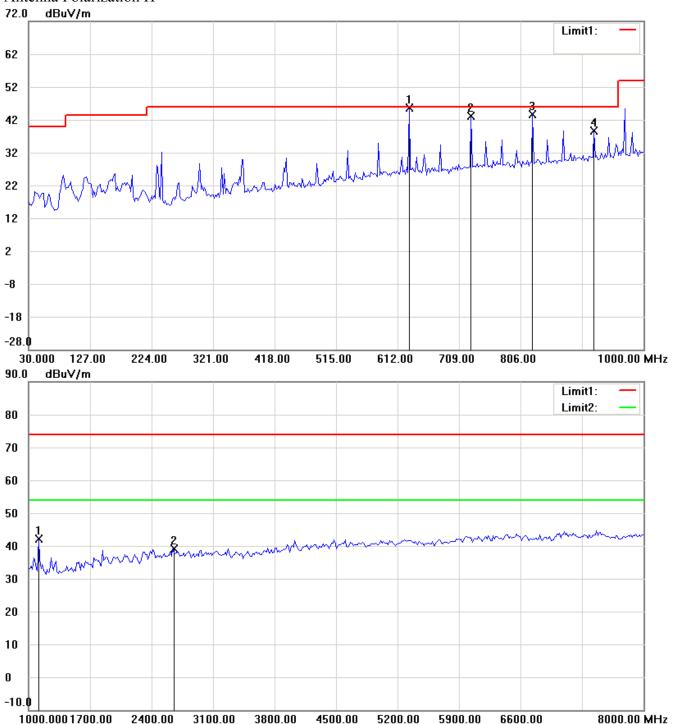


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

914.75 MHz

Antenna Polarization H

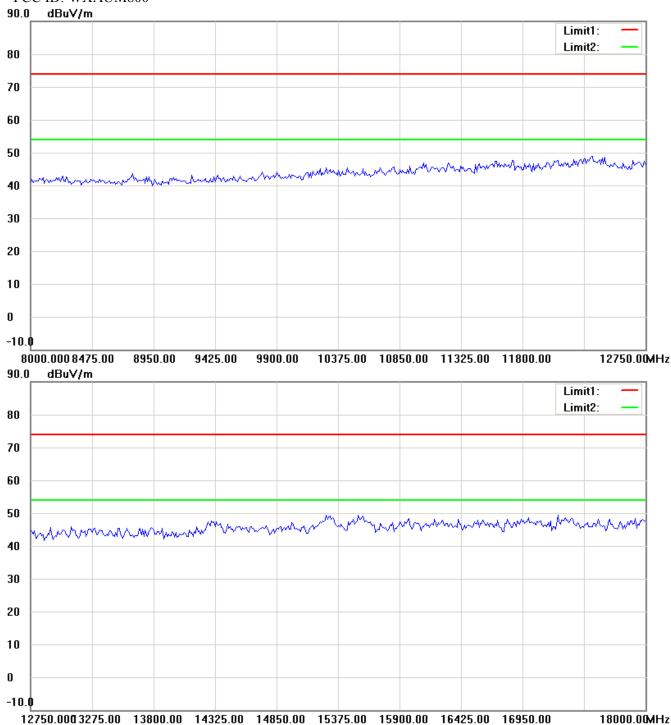


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

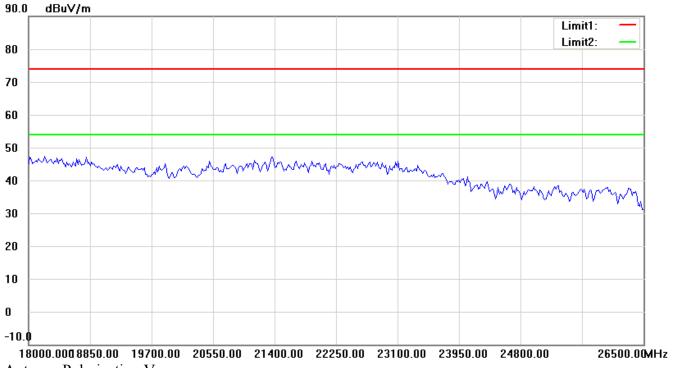


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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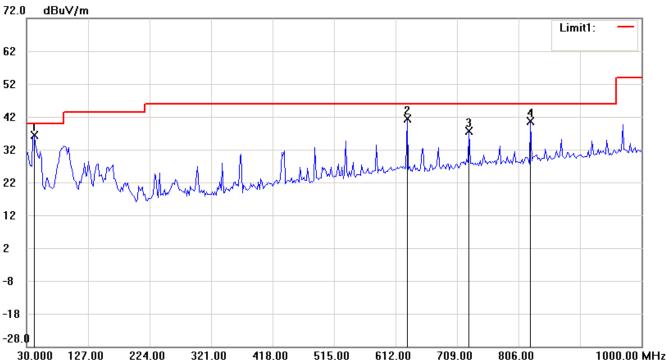


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

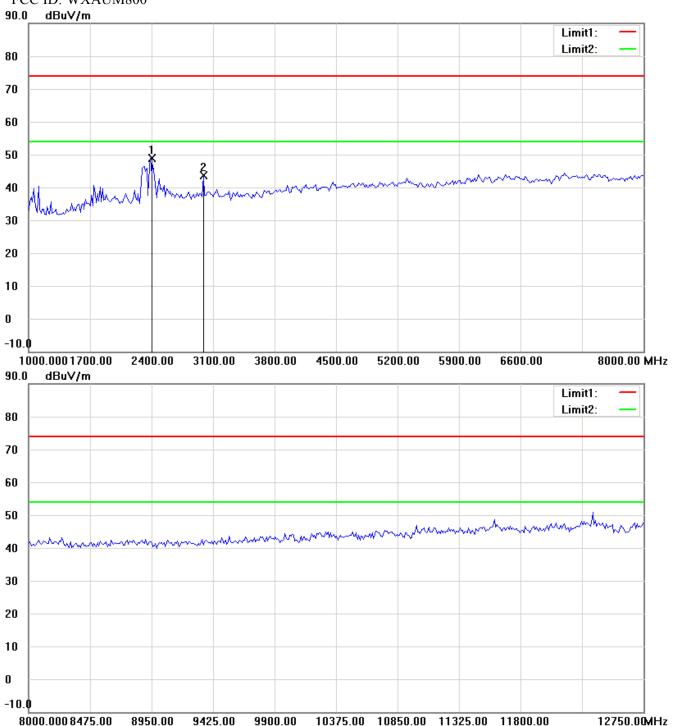


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



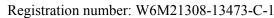
Registration number: W6M21308-13473-C-1

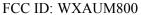
FCC ID: WXAUM800

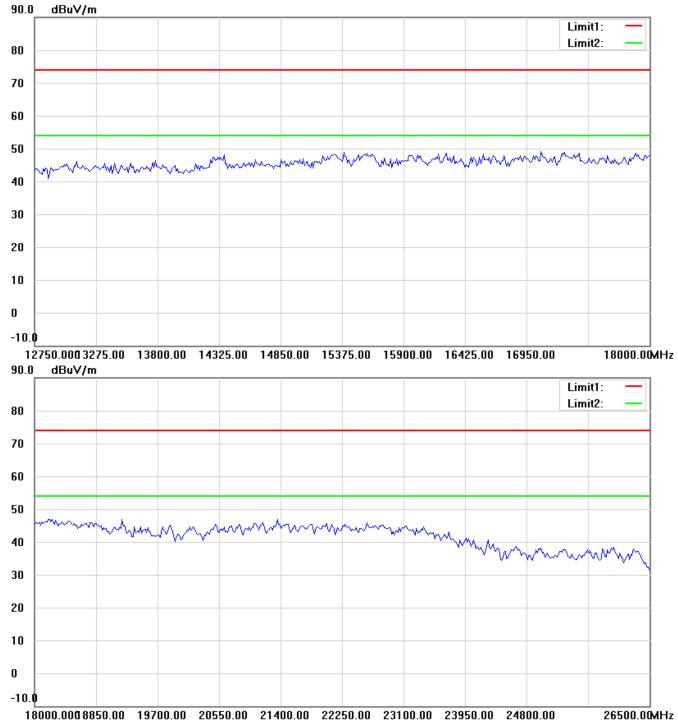


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

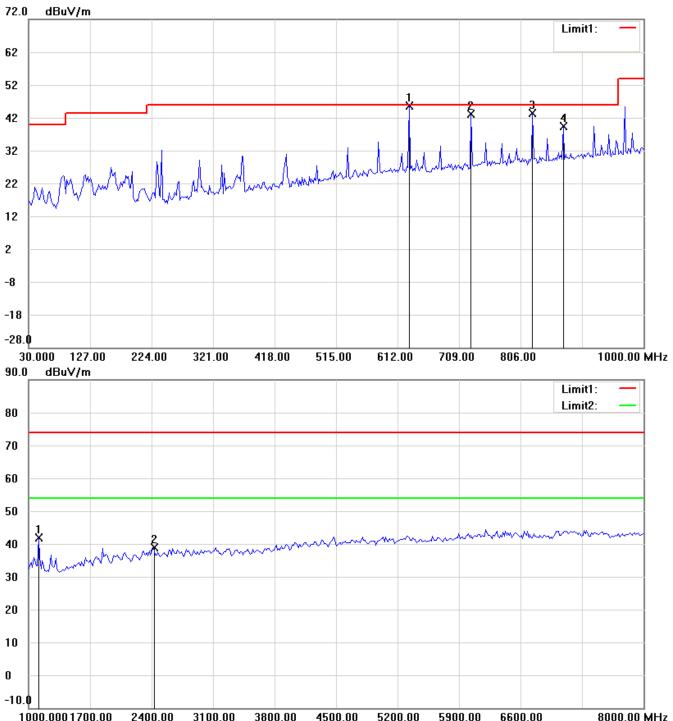


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

927.25 MHz

Antenna Polarization H

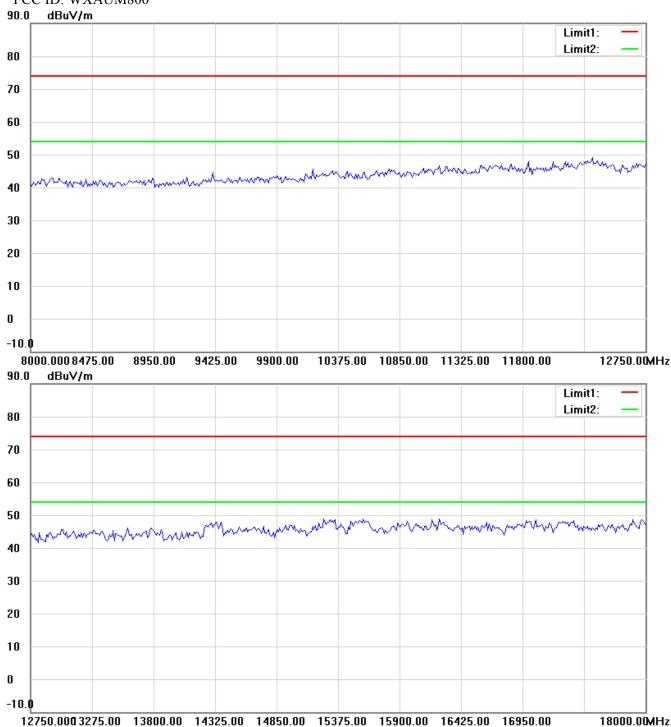


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

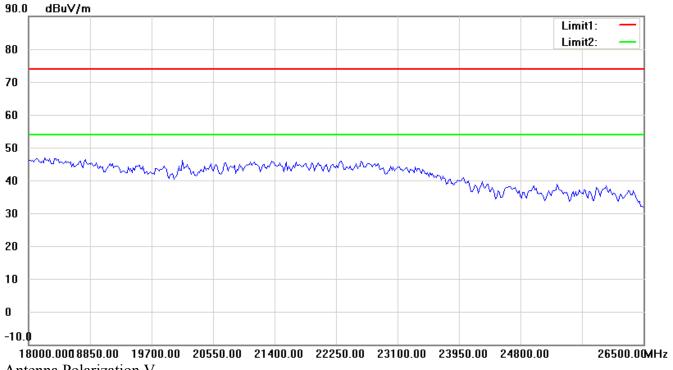


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

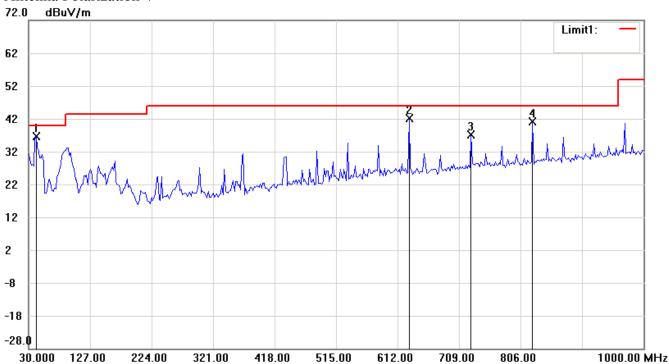


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

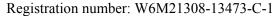


Antenna Polarization V

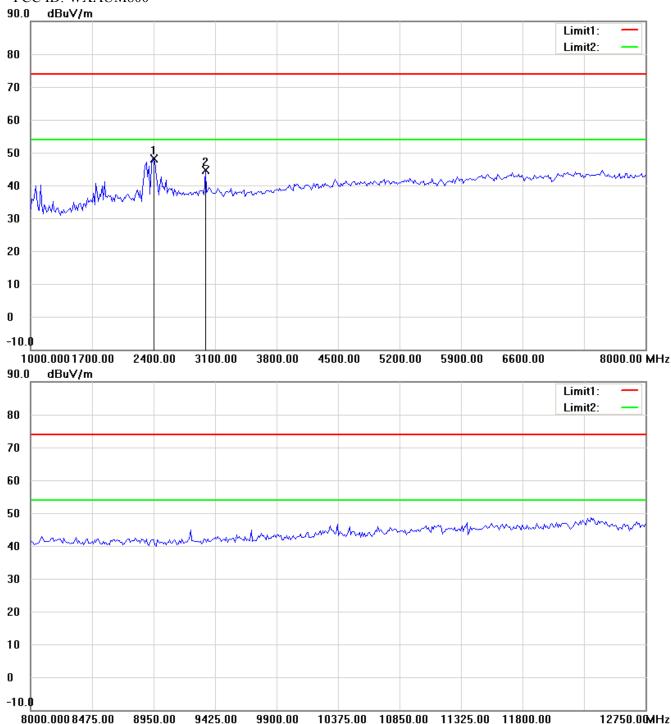


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



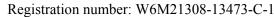


FCC ID: WXAUM800

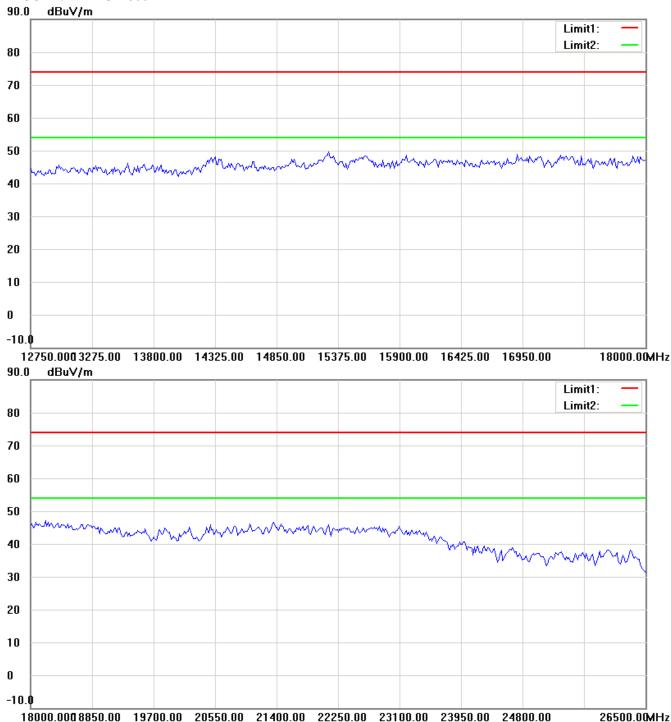


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.





FCC ID: WXAUM800



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- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

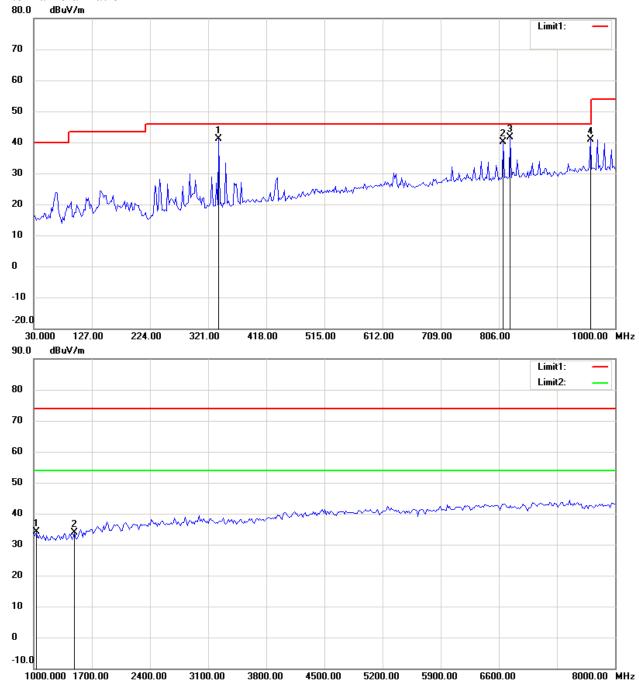


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT2: PCB-T2487B

902.75 MHz

Antenna Polarization H

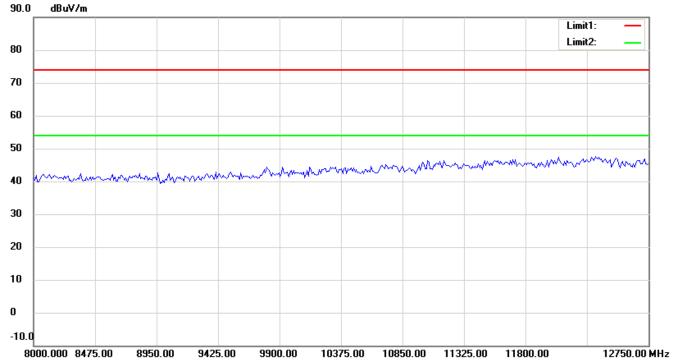


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

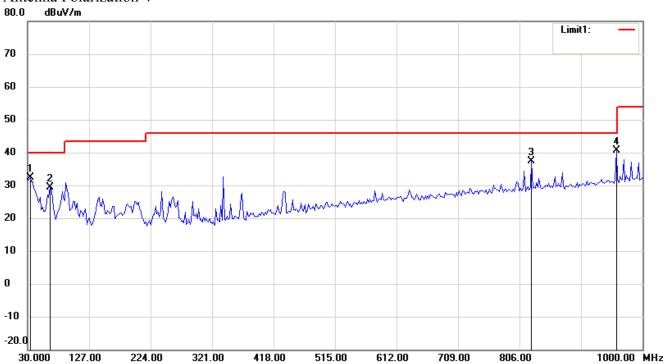


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

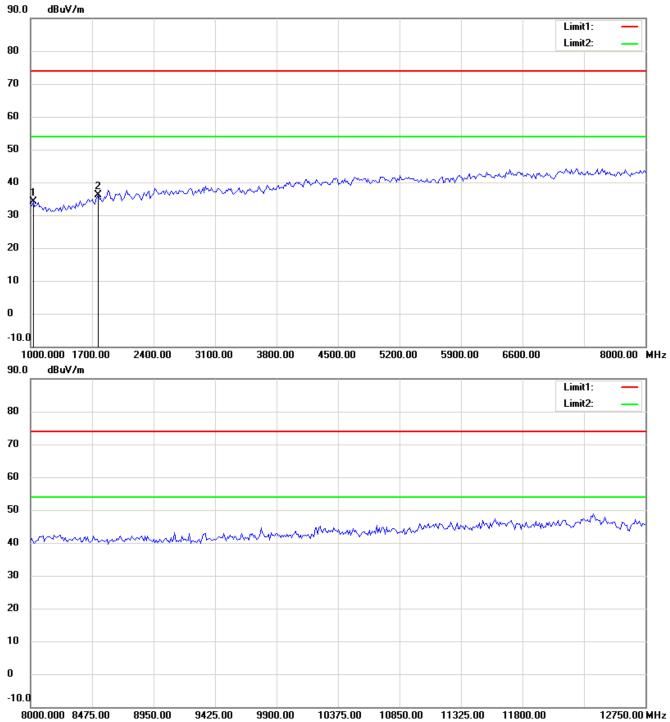


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

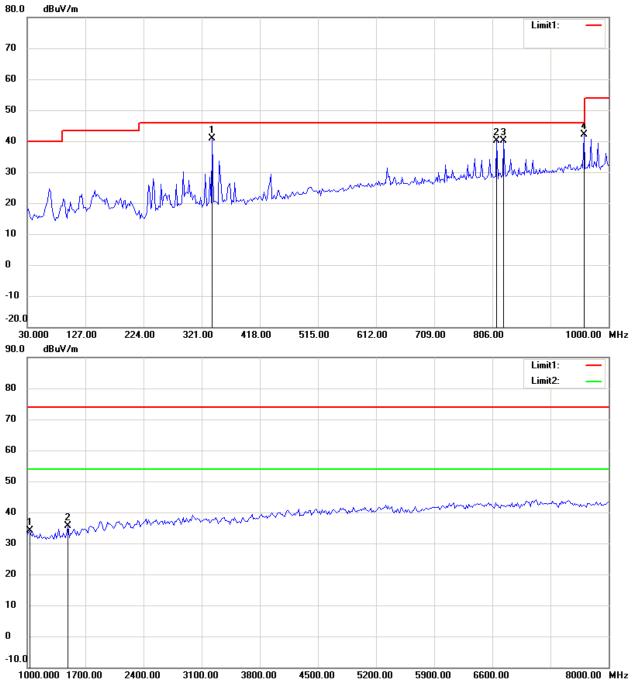


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

914.75 MHz

Antenna Polarization H

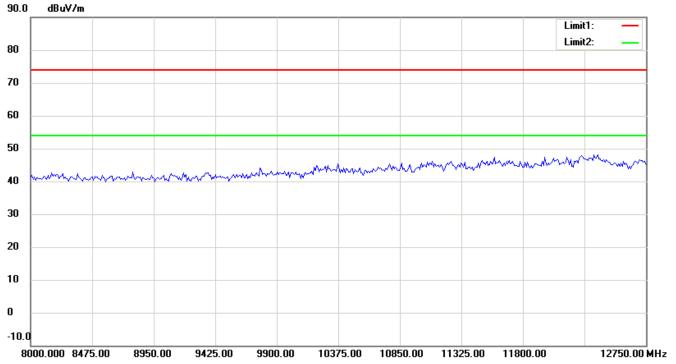


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

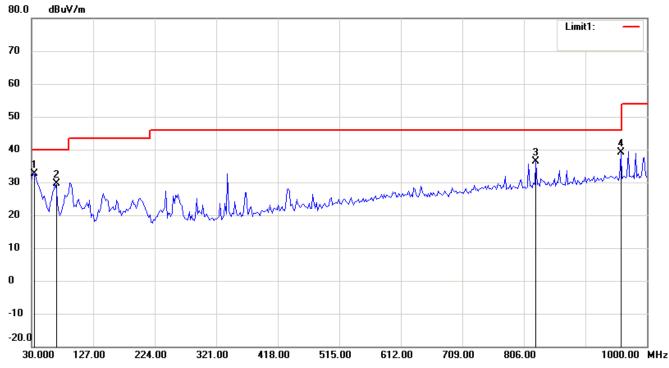


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

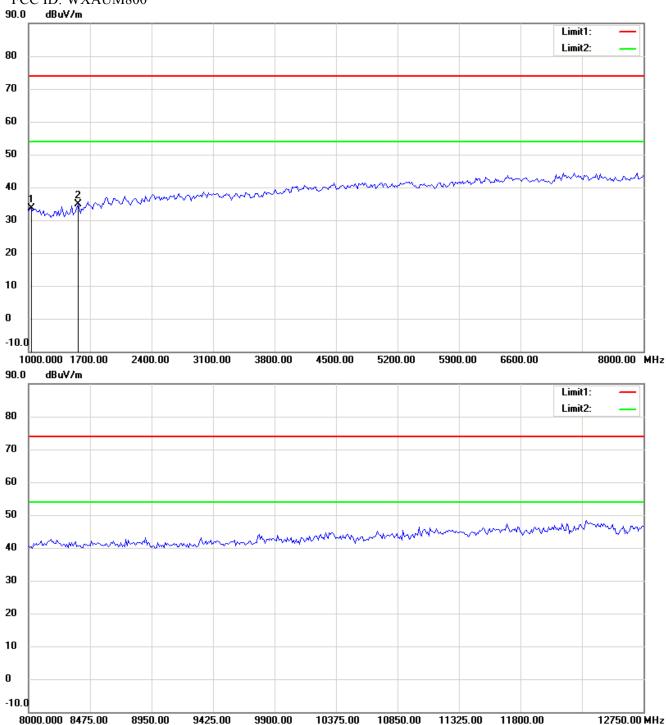


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

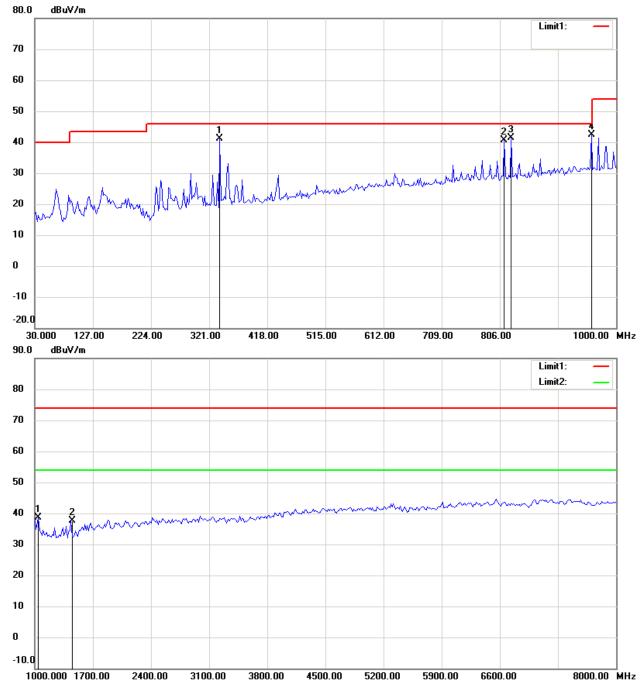


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

927.25 MHz

Antenna Polarization H

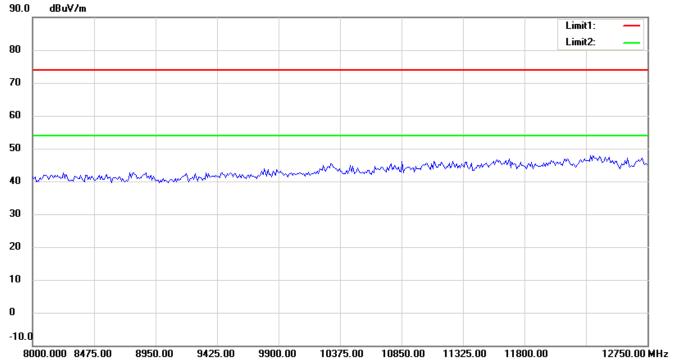


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

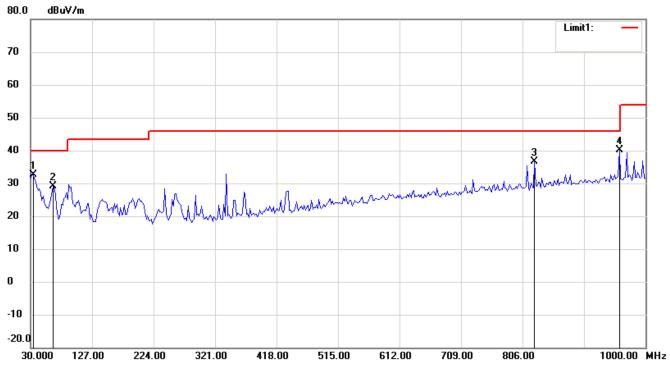


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

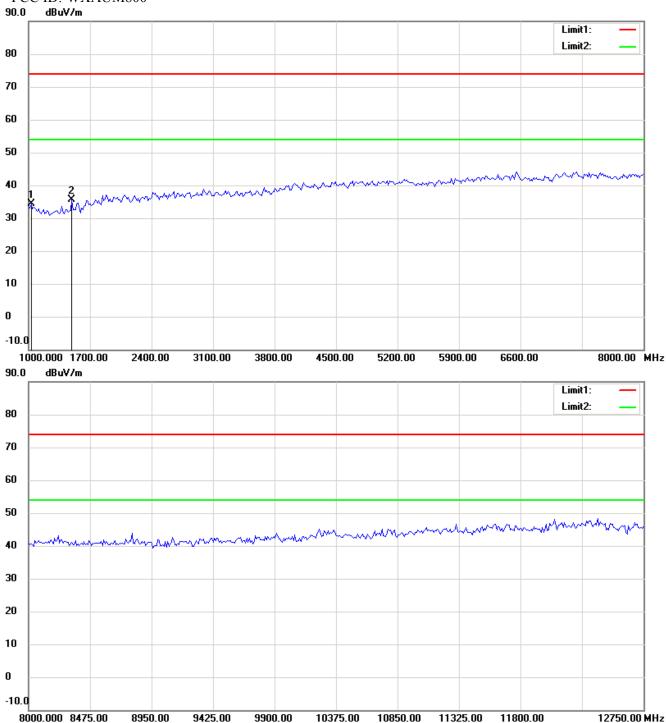


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

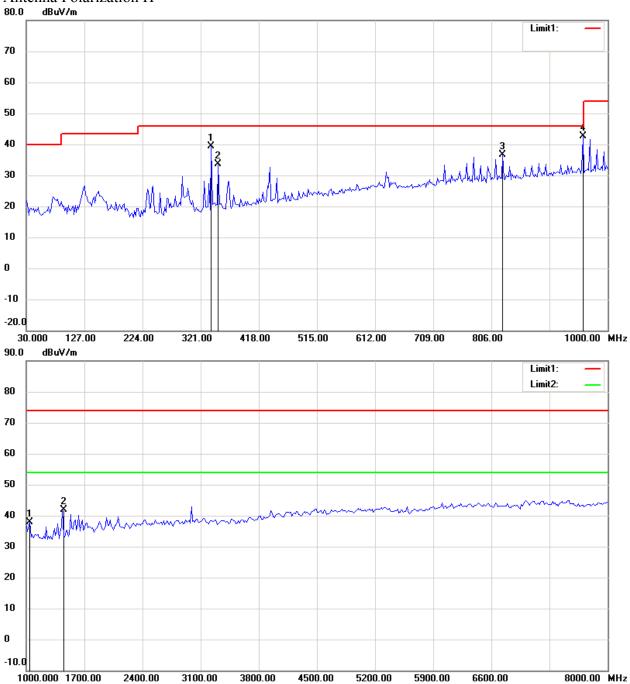


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT3: ANT-T025

902.75 MHz

Antenna Polarization H

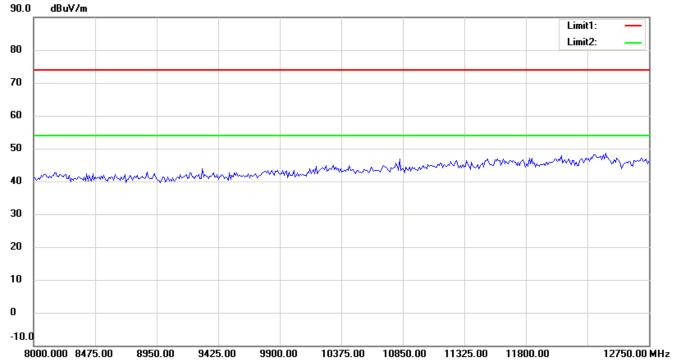


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

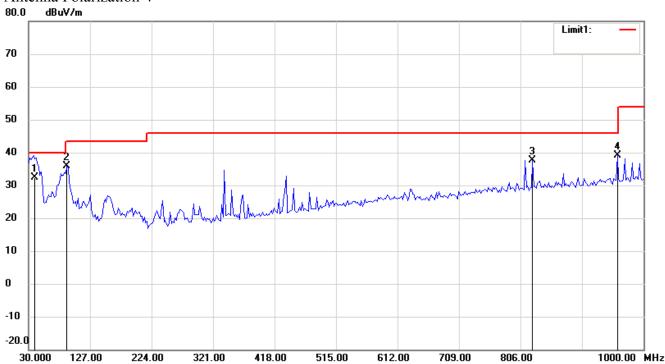


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

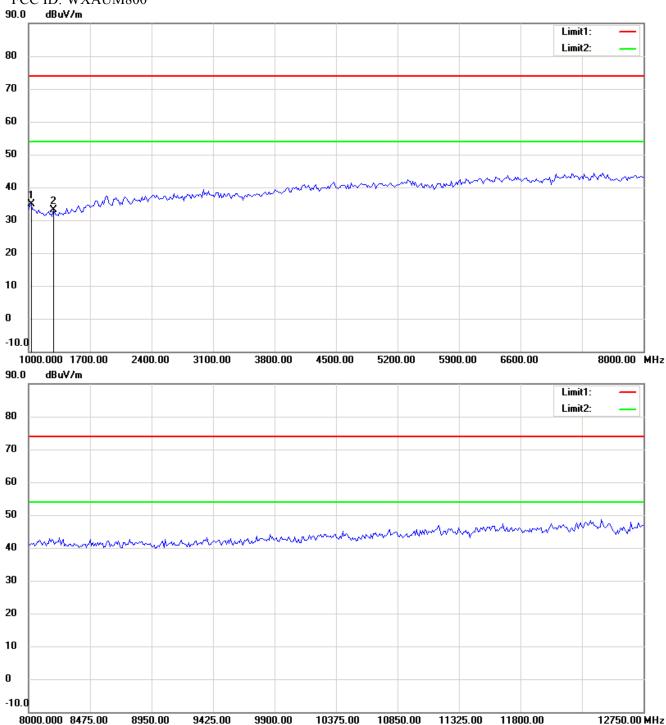


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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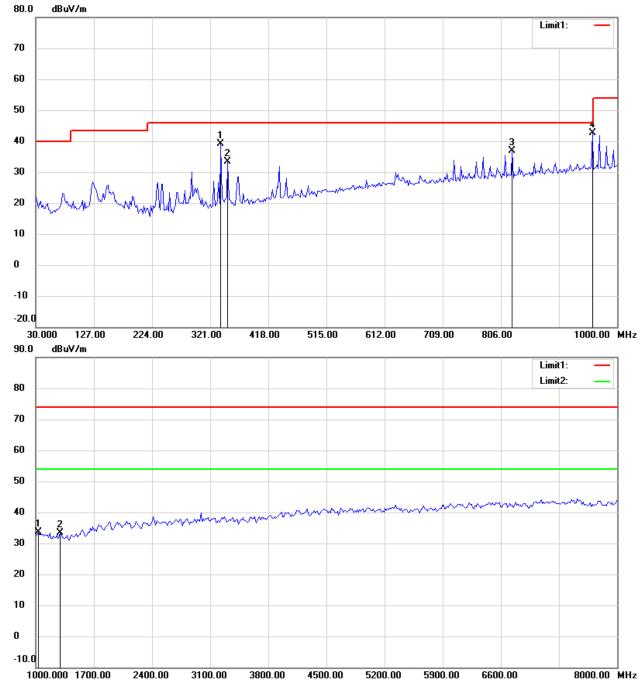


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

914.75 MHz

Antenna Polarization H

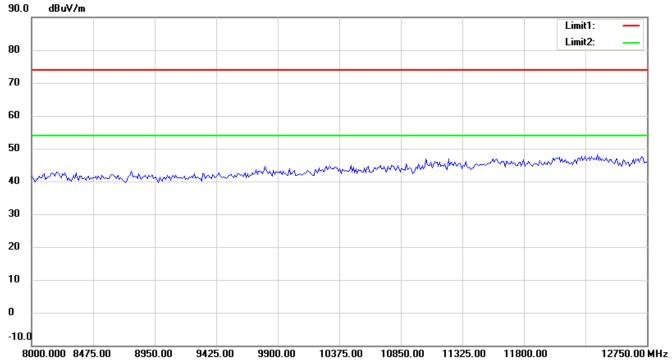


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

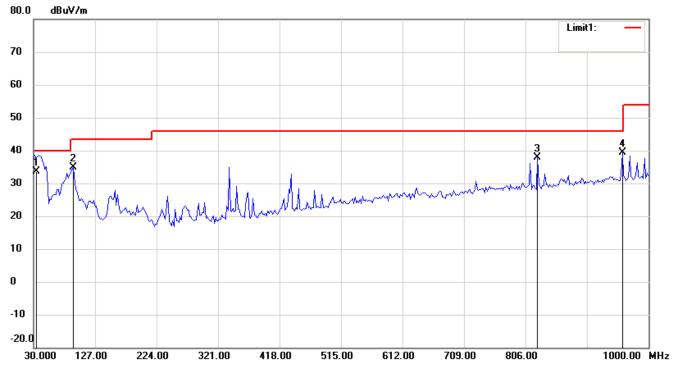


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

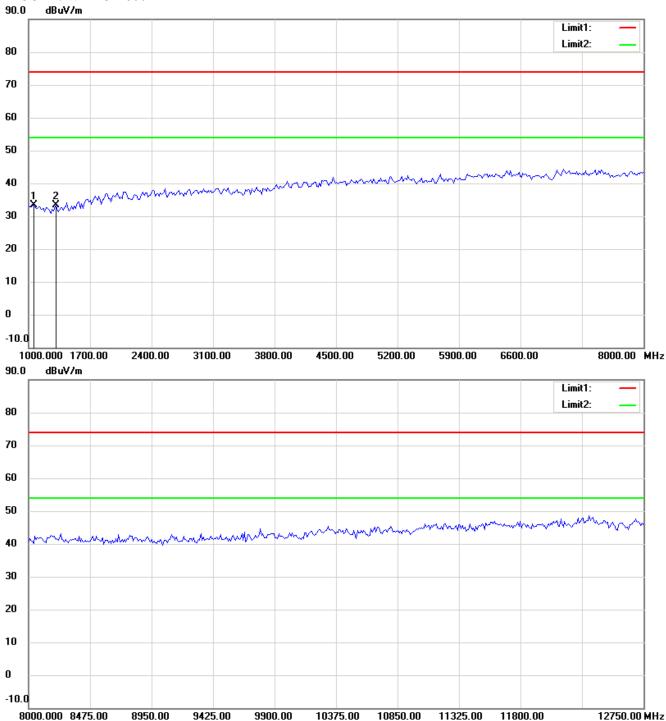


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



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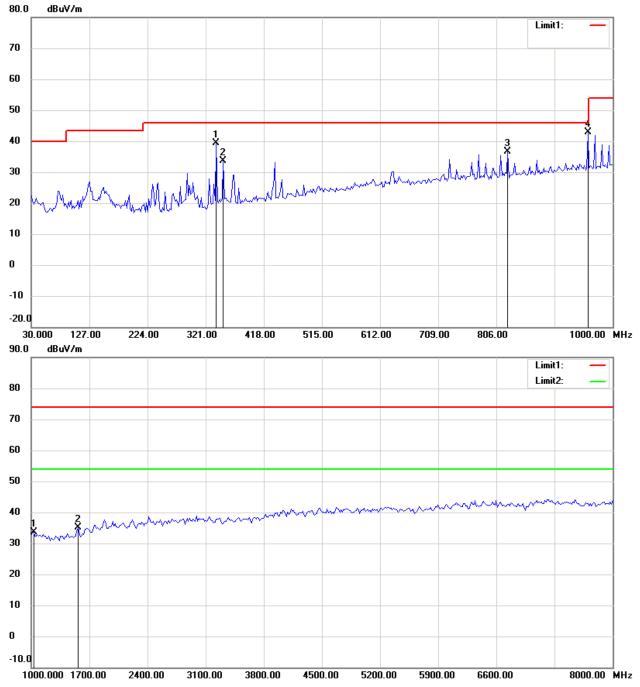


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

927.25 MHz

Antenna Polarization H

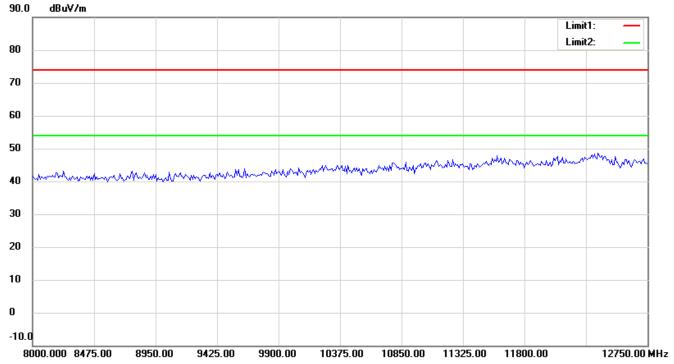


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.

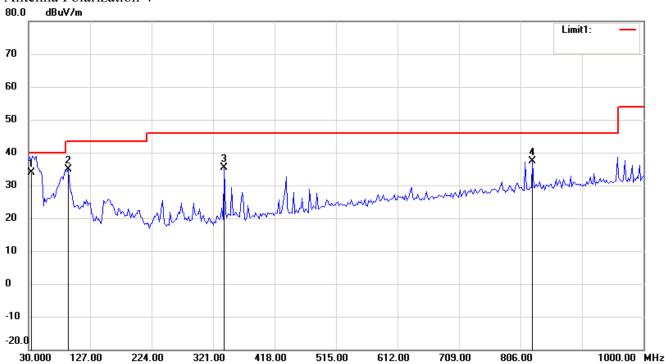


Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



Antenna Polarization V

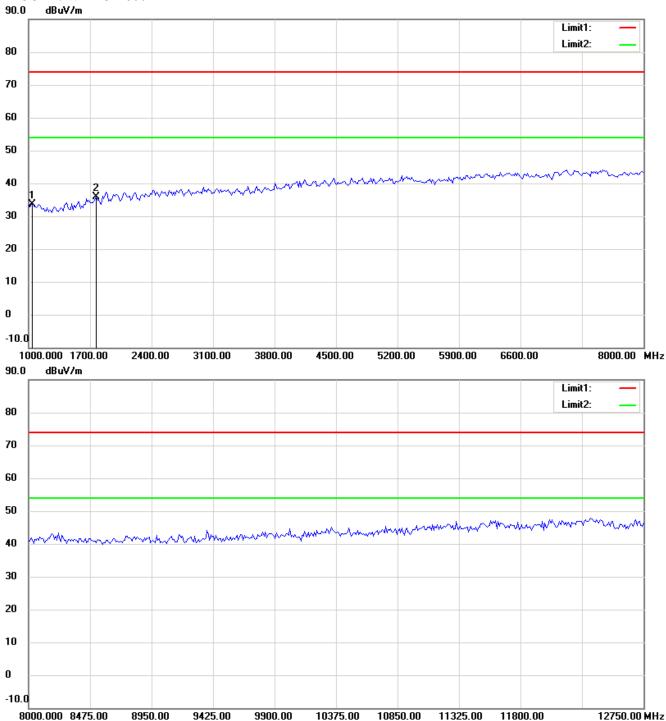


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800



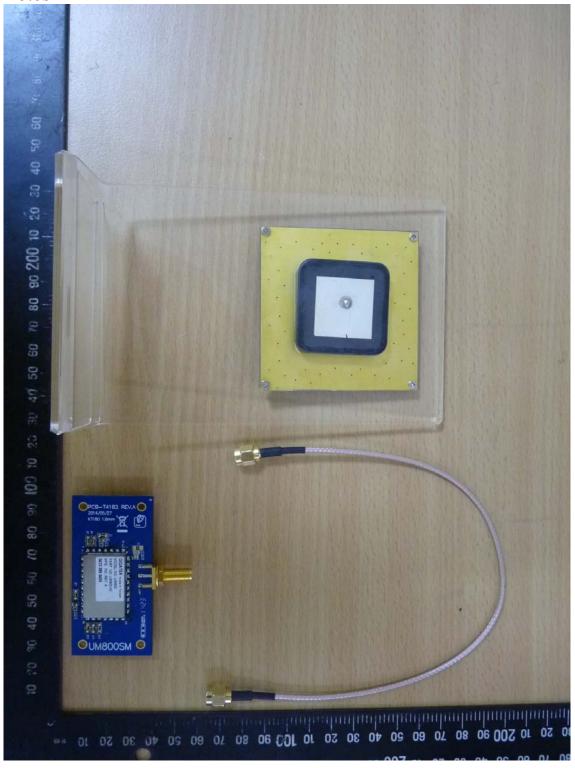
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

**EUT Photos** 





Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

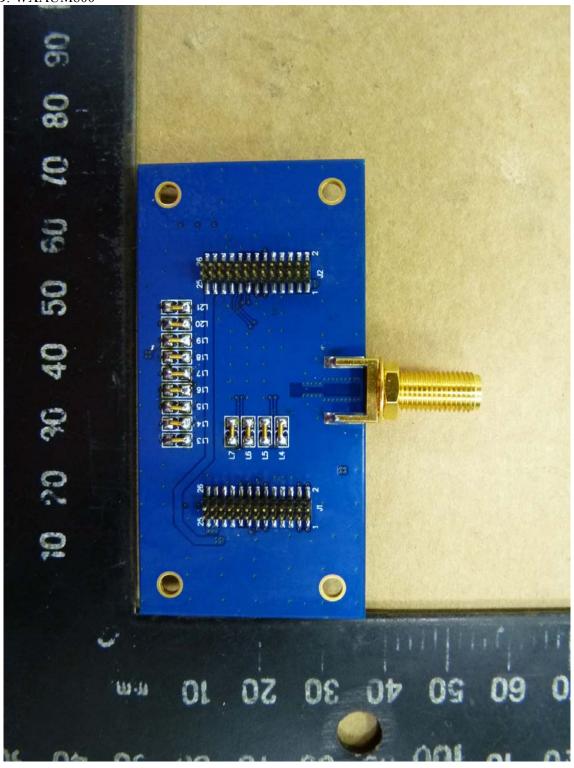


Worldwide Testing Services(Taiwan) Co., Ltd.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800





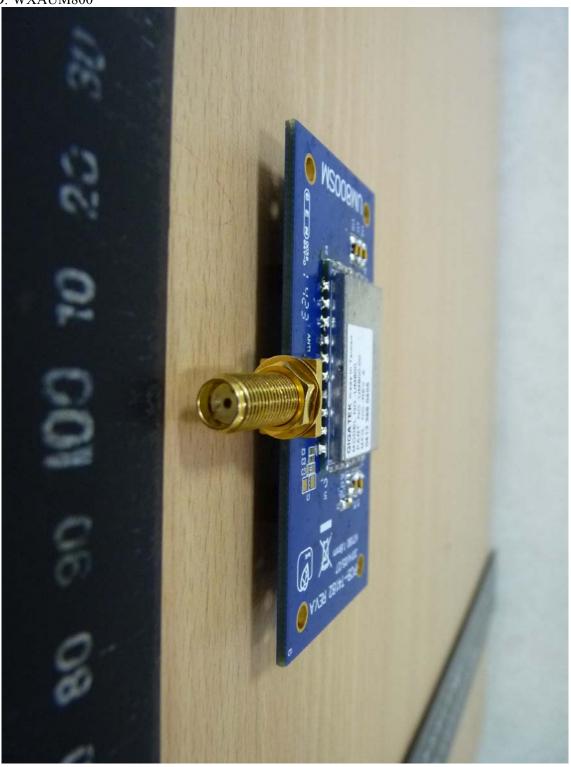
Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800





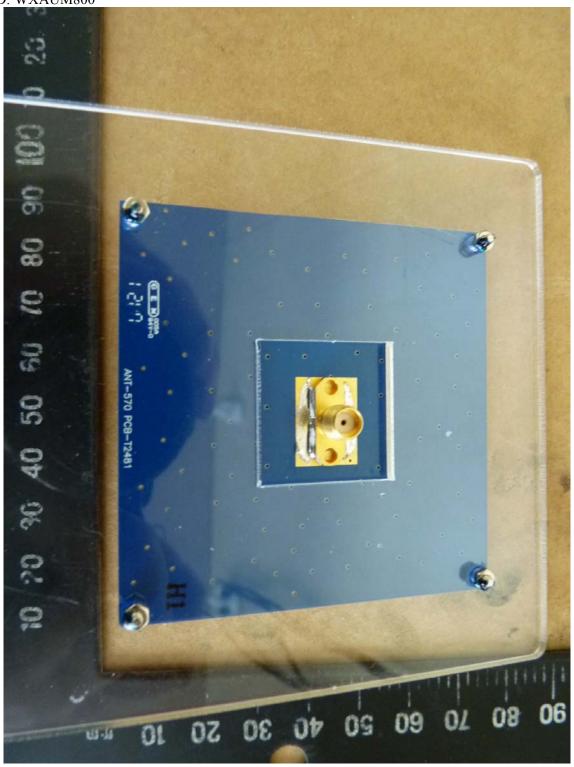
Registration number: W6M21308-13473-C-1 FCC ID: WXAUM800





Registration number: W6M21308-13473-C-1

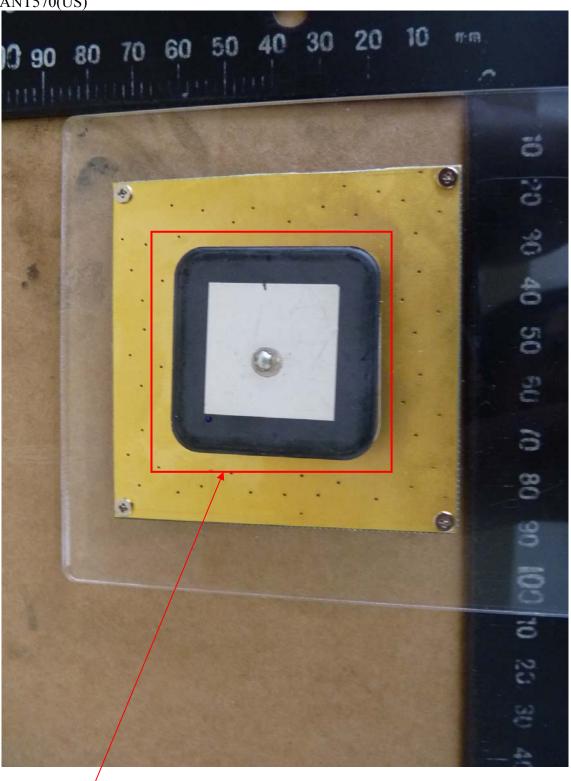
FCC ID: WXAUM800





Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT1: ANT570(US)



Ceramic Patch Antenna; Gain: 5.0 dBi



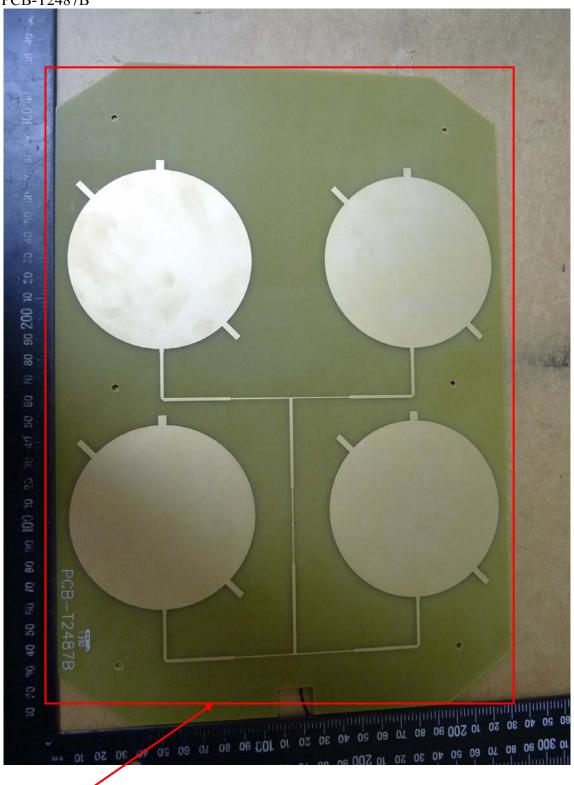
Registration number: W6M21308-13473-C-1 FCC ID: WXAUM800





Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT2: PCB-T2487B



UHF RFID Antenna: Gain: 3 dBi +/- 0.5



Registration number: W6M21308-13473-C-1

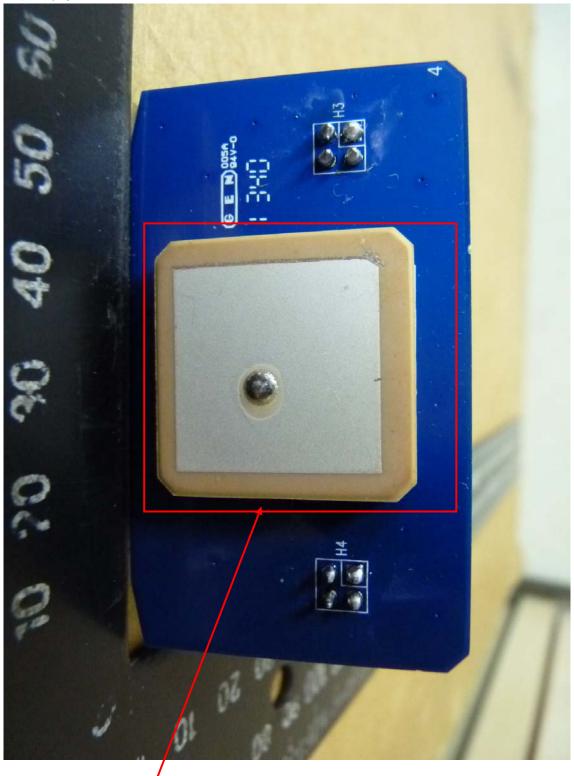
FCC ID: WXAUM800





Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT3: ANT-T025



Ceramic Patch Antenna; Gain: 5.0 dBi



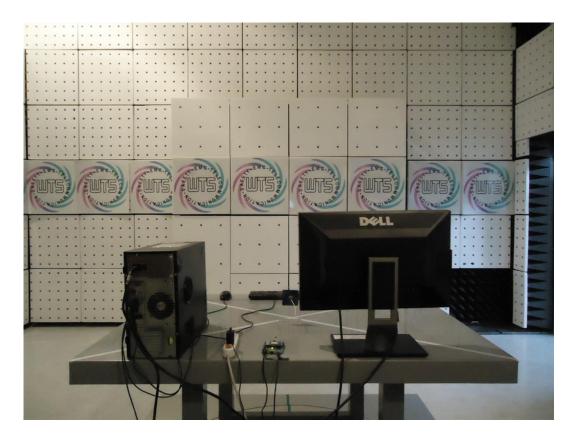
Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800

Set Up Photo of Radiated Emission

ANT 1: ANT570(US)

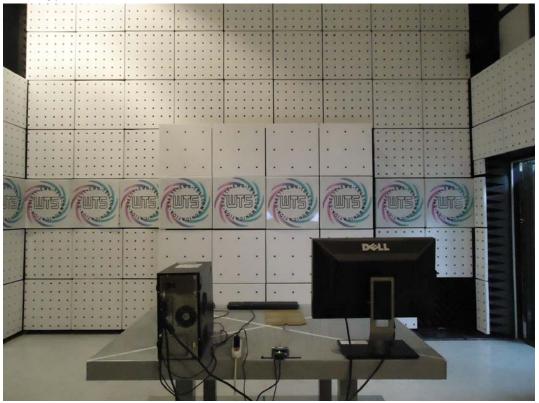






Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT2: PCB-T2487B





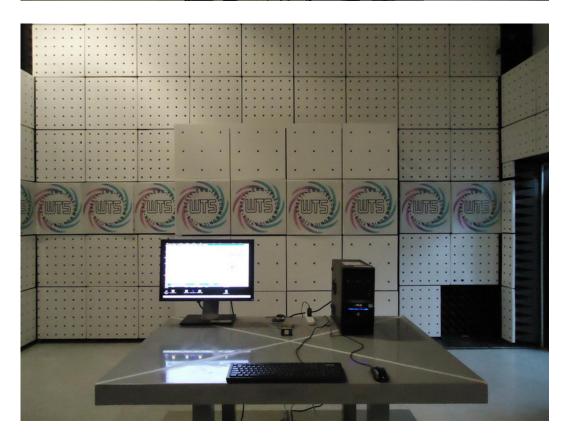
Worldwide Testing Services(Taiwan) Co., Ltd.



Registration number: W6M21308-13473-C-1

FCC ID: WXAUM800 ANT3: ANT-T025





Worldwide Testing Services(Taiwan) Co., Ltd.