

Report No: JYTSZB-R12-2101999

# FCC REPORT

Applicant:	Smartmatic International Corporation			
Address of Applicant:	Pine Lodge, #26 Pine Road St. Michael, W.I. BB Barbados			
Equipment Under Test (E	EUT)			
Product Name:	Voter Identification Unit			
Model No.:	VIU-500 Model 700			
Trade mark:	SMARTMATIC			
FCC ID:	2AGVK-VIU-500A70			
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.247			
Date of sample receipt:	28 Sep., 2021			
Date of Test:	29 Sep., to 20 Oct., 2021			
Date of report issued:	21 Oct., 2021			
Test Result:	PASS*			

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



#### Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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#### Version 2

Version No.	Date	Description
00	21 Oct., 2021	Original

Tested by:

Mike.OU Test Engineer

Date: 21 Oct., 2021

Winner Thang

Reviewed by:

**Project Engineer** 

Date: 21 Oct., 2021

Project No.: JYTSZE2109109



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## 4 Test Summary

Test Items	Section in CFR 47	Test Data	Result
Antenna requirement	15.203 & 15.247 (b)	See Section 6.1	Pass
AC Power Line Conducted Emission	15.207	See Section 6.2	Pass
Duty Cycle	ANSI C63.10-2013	Appendix A – 2.4G Wi-Fi	Pass
Conducted Peak Output Power	15.247 (b)(3)	Appendix A – 2.4G Wi-Fi	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2) Appendix A – 2.4G		Pass
Power Spectral Density	15.247 (e)	Appendix A – 2.4G Wi-Fi	Pass
Conducted Band Edge		Appendix A – 2.4G Wi-Fi	Pass
Radiated Band Edge	15.247 (d)	See Section 6.6.2	Pass
Conducted Spurious Emission		Appendix A – 2.4G Wi-Fi	Pass
Radiated Spurious Emission	15.205 & 15.209	See Section 6.7.2	Pass

1. Pass: The EUT complies with the essential requirements in the standard.

2. N/A: Not Applicable.

3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by the customer).

Test Method:

ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02





## 5 General Information

## 5.1 Client Information

Applicant:	Smartmatic International Corporation
Address:	Pine Lodge, #26 Pine Road St. Michael, W.I. BB Barbados
Manufacturer:	Aratek Biometrics Co., Ltd.
Address:	2F, T2-A Building, ShenZhen Software Park, South Area, Hi-Tech Park, Shenzhen, Guangdong, China
Factory:	Aratek Biometrics Co., Ltd.
Address:	4F, 2th building, Nangang first industrial park, Baimang Songbai Road #1029, Nanshan district, Shenzhen, Guangdong, China.

## 5.2 General Description of E.U.T.

Product Name:	Voter Identification Unit			
Model No.:	VIU-500 Model 700			
Operation Frequency:	2412MHz~2462MHz: 802.11b/802.11g/802.11n(HT20)			
	2422MHz~2452MHz: 802.11n(HT40)			
Channel numbers:	11: 802.11b/802.11g/802.11(HT20)			
	7: 802.11n(HT40)			
Channel separation:	5MHz			
Modulation technology:	Direct Sequence Spread Spectrum (DSSS)			
(IEEE 802.11b)				
Modulation technology:	Orthogonal Frequency Division Multiplexing(OFDM)			
(IEEE 802.11g/802.11n)				
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps			
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps			
Data speed (IEEE 802.11n):	Up to 150Mbps			
Antenna Type:	Internal Antenna			
Antenna gain:	1.59dBi			
Power supply:	Rechargeable Li-ion Battery DC3.7V, 10000mAh			
AC adapter:	Model: ES568U050200XYF			
	Input: AC100-240V, 50/60Hz, 0.15A			
	Output: DC 5.0V, 2000mA			
Test Sample Condition:	The test samples were provided in good working order with no visible			
	defects.			

Operation Frequency each of channel for 802.11b/g/n(HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3 2422MHz 6 2437MHz 9 2452MHz							

1. For 802.11n-HT40 mode, the channel number is from 3 to 9;

2. Channel 1, 6 & 11 selected for 802.11b/g/n-HT20 as Lowest, Middle and Highest channel. Channel 3, 6 & 9 selected for 802.11n-HT40 as Lowest, Middle and Highest Channel.



## 5.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Transmitting mode	Keep the EUT in continuous transmitting with modulation

Radiated Emission: The sample was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

<b>0</b> 1 <i>i</i>	•			
Per-scan all kind of data rate, the follow list were the worst case.				
Mode	Data rate			
802.11b	1Mbps			
802.11g	6Mbps			
802.11n(HT20)	6.5Mbps			
802.11n(HT40)	13.5Mbps			

## 5.4 Description of Support Units

The EUT has been tested as an independent unit.

## 5.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 150KHz) for V-AMN	3.11 dB
Conducted Emission (150kHz ~ 30MHz) for V-AMN	2.62 dB
Conducted Emission (150kHz ~ 30MHz) for AAN	3.54 dB
Radiated Emission (9kHz ~ 30MHz electric field) for 3m SAC	3.13 dB
Radiated Emission (9kHz ~ 30MHz magnetic field) for 3m SAC	3.13 dB
Radiated Emission (30MHz ~ 1GHz) for 3m SAC	4.45 dB
Radiated Emission (1GHz ~ 18GHz) for 3m SAC	5.34 dB
Radiated Emission (18GHz ~ 40GHz) for 3m SAC	5.34 dB

## 5.6 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • FCC - Designation No.: CN1211

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

#### • ISED – CAB identifier.: CN0021

The 3m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

#### • A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <u>https://portal.a2la.org/scopepdf/4346-01.pdf</u>



## 5.7 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd. Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China. Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: http://www.ccis-cb.com

## 5.8 Test Instruments list

Radiated Emission:						
Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
3m SAC	ETS	RFD-100	Q1984	04-14-2021	04-13-2024	
BiConiLog Antenna	SCHWARZBECK	VULB9163	9163-1246	03-07-2021	03-06-2022	
Biconical Antenna	SCHWARZBECK	VUBA 9117	9117#359	06-17-2021	06-17-2022	
Horn Antenna	SCHWARZBECK	BBHA9120D	912D-916	03-07-2021	03-06-2022	
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1067	04-02-2021	04-01-2022	
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1068	04-02-2021	04-01-2022	
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022	
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022	
Spectrum analyzer	Keysight	N9010B	MY60240202	11-27-2020	11-26-2021	
Low Pre-amplifier	SCHWARZBECK	BBV9743B	00305	03-07-2021	03-06-2022	
High Pre-amplifier	SKET	LNPA_0118G-50	MF280208233	03-07-2021	03-06-2022	
Cable	Qualwave	JYT3M-1G-NN-8M	JYT3M-1	03-07-2021	03-06-2022	
Cable	Qualwave	JYT3M-18G-NN-8M	JYT3M-2	03-07-2021	03-06-2022	
Cable	Qualwave	JYT3M-1G-BB-5M	JYT3M-3	03-07-2021	03-06-2022	
Cable	Bost	JYT3M-40G-SS-8M	JYT3M-4	04-02-2021	04-01-2022	
EMI Test Software	Tonscend	TS+	Version:3.0.0.1			

Conducted Emission:							
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)		
EMI Test Receiver	Rohde & Schwarz	ESCI 3	101189	03-03-2021	03-02-2022		
LISN	Rohde & Schwarz	ENV432	101602	04-06-2021	04-05-2022		
LISN	Rohde & Schwarz	ESH3-Z5	843862/010	06-18-2020	06-17-2022		
RF Switch	TOP PRECISION	RSU0301	N/A	03-03-2021	03-02-2022		
Cable	Bost	JYTCE-1G-NN-2M	JYTCE-1	03-03-2021	03-02-2022		
Cable	Bost	JYTCE-1G-BN-3M	JYTCE-2	03-03-2021	03-02-2022		
EMI Test Software	AUDIX	E3	Version: 6.110919b				

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Keysight	N9010B	MY60240202	11-27-2020	11-26-2021
Vector Signal Generator	Keysight	N5182B	MY59101009	11-27-2020	11-26-2021
Analog Signal Generator	Keysight	N5173B	MY59100765	11-27-2020	11-26-2021
Power Detector Box	MWRF-test	MW100-PSB	MW201020JYT	11-27-2020	11-26-2021
Simulated Station	Rohde & Schwarz	CMW270	102335	11-27-2020	11-26-2021
RF Control Box	MWRF-test	MW100-RFCB	MW200927JYT	N/A	N/A
PDU	MWRF-test	XY-G10	N/A	N/A	N/A
DC Power Supply	Keysight	E3642A	MY60296194	11-27-2020	11-26-2021
Temperature Humidity Chamber	ZhongZhi	CZ-C-150D	ZH16491	11-01-2020	10-31-2021
Test Software	MWRF-tes	MTS 8310		Version: 2.0.0.0	

Project No.: JYTSZE2109109



## 6 Test results and Measurement Data

## 6.1 Antenna requirement

Standard requirement:	FCC Part 15 C Section 15.203 /247(b)
responsible party shall be us antenna that uses a unique so that a broken antenna ca electrical connector is prohit 15.247(b) (4) requirement: (4) The conducted output po antennas with directional ga section, if transmitting anten power from the intentional ra	be designed to ensure that no antenna other than that furnished by the sed with the device. The use of a permanently attached antenna or of an coupling to the intentional radiator, the manufacturer may design the unit n be replaced by the user, but the use of a standard antenna jack or bited. wer limit specified in paragraph (b) of this section is based on the use of ins that do not exceed 6 dBi. Except as shown in paragraph (c) of this inas of directional gain greater than 6 dBi are used, the conducted output adiator shall be reduced below the stated values in paragraphs (b)(1), tion, as appropriate, by the amount in dB that the directional gain of the
E.U.T Antenna:	
The Wi-Fi antenna is an Inter antenna is 1.59 dBi.	nal antenna which cannot replace by end-user, the best case gain of the



## 6.2 Conducted Emission

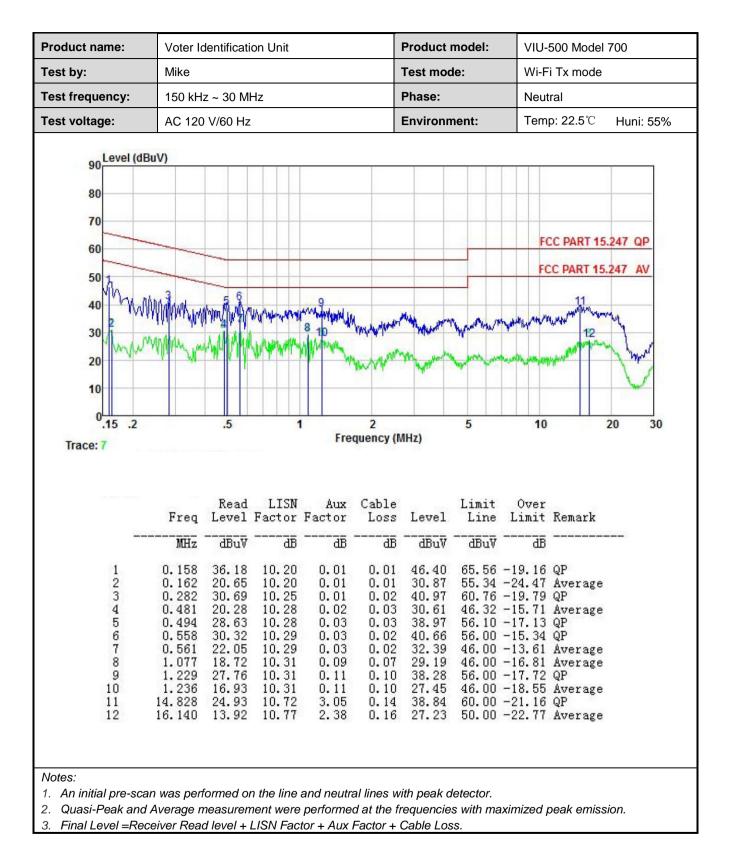
Test Requirement:	FCC Part 15 C Section 15.2	207	
Test Frequency Range:	150 kHz to 30 MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9 kHz, VBW=30 kHz		
Limit:	Frequency range (MHz)	Limit (c	dBuV)
	,	Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
	* Decreases with the logarit		
Test procedure	<ol> <li>line impedance stabiliza 50ohm/50uH coupling i</li> <li>The peripheral devices LISN that provides a 50 termination. (Please ref photographs).</li> <li>Both sides of A.C. line a interference. In order to positions of equipment</li> </ol>	brs are connected to the mation network (L.I.S.N.), with mpedance for the measure are also connected to the Dohm/50uH coupling imperferent to the block diagram of are checked for maximum of find the maximum emission and all of the interface call. 10(latest version) on control of the second control of the se	hich provides a ing equipment. main power through a dance with 500hm the test setup and conducted on, the relative oles must be changed
Test setup:		st	er — AC power
Test Instruments:	Refer to section 5.9 for deta	ils	
Test mode:	Refer to section 5.3 for deta	ils	
Test results:	Passed		



#### **Measurement Data:**

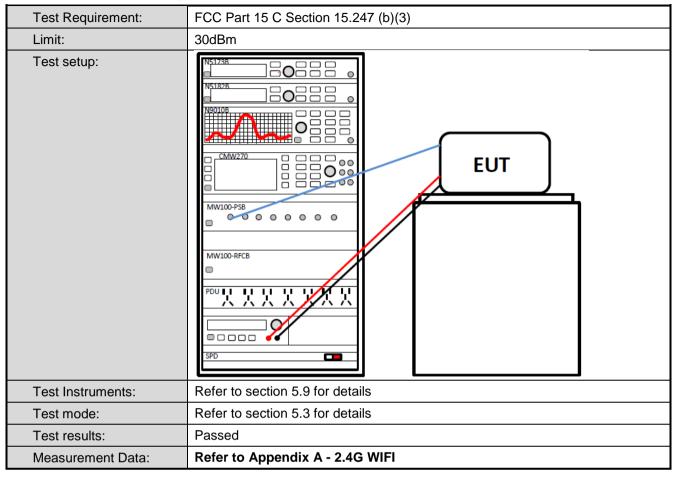
Test by:						Product r	nodel:		500 Model	
rest by.	Mike				-	Fest mod	e:	Wi-F	ï Tx mode	
Test frequency:	150 kH	z ~ 30 M	Hz			Phase:		Line		
Test voltage:	AC 120	) V/60 Hz			1	Environm	nent:	Tem	p: 22.5°C	Huni: 55%
90 Level (dl 80 70 60 50 40	BuV)	3.6		7	9				CC PART 15 CC PART 15	
30 20 10 0.15 .2 Trace: 5	un un and	.5	. MANNAN	1 Free	2 quency (N	~~~	5	10	A A A A A A A A A A A A A A A A A A A	20 30
20 10 0.15 .2		Read Level	LISN Factor	1 Fre Aux Factor	2 quency (N Cable Loss	IHZ) Level	5 Limit Line	10 Over Limit	Remark	20 30
20 10 0.15 .2 Trace: 5	MHz	Read Level dBuV	LISN Factor dB	1 Fre Aux Factor dB	2 quency (N Cable Loss dB	IHZ) Level	5 Limit Line dBuV	Over Limit dB	Remark	20 30
20 10 0.15 .2 Trace: 5	MHz 0.154 0.166	Read Level dBuV 38.51 21.84	LISN Factor dB 10.22 10.22	1 Fre Aux Factor 	2 quency (N Cable Loss dB 0.01 0.01	Hz) Level dBuV 48.68 31.98	5 Limit Line dBuV 65.78 55.16	0ver Limit 	Remark QP Average	
20 10 0.15 .2 Trace: 5	MHz 0.154 0.166 0.486	Read Level dBuV 38.51 21.84 29.42	LISN Factor dB 10.22 10.22 10.29	1 Fre Aux Factor 	2 quency (N Cable Loss dB 0.01 0.01 0.03	Hz) Level dBuV 48.68 31.98 39.48	5 Limit Line dBuV 65.78 55.16 56.23	0ver Limit 	Remark QP Average QP	
20 10 0.15 .2 Trace: 5	MHz 0.154 0.166 0.486 0.497	Read Level dBuV 38.51 21.84 29.42 20.95	LISN Factor dB 10.22 10.22 10.29 10.29	Aux Factor 	2 quency (N Cable Loss dB 0.01 0.01 0.03 0.03	Hz) Level dBuV 48.68 31.98 39.48 30.95	5 Limit Line dBuV 65.78 55.16 56.23 46.05	0ver Limit 	Remark QP Average QP Average	
20 10 0.15 .2 Trace: 5 	MHz 0.154 0.166 0.486 0.497 0.558 0.561	Read Level dBuV 38.51 21.84 29.42 20.95 21.23 29.46	LISN Factor dB 10.22 10.22 10.29 10.29 10.29 10.29 10.29 10.29	Aux Factor -0.06 -0.09 -0.26 -0.32 -0.37 -0.37	2 quency (N Cable Loss dB 0.01 0.03 0.03 0.03 0.02 0.02	Hz) Level dBuV 48.68 31.98 39.48 30.95 31.17 39.40	5 5 45.78 55.16 56.23 46.05 46.00 56.00	0ver Limit -17.10 -23.18 -16.75 -15.10 -14.83 -16.60	QP Average QP Average QP Average QP	
20 10 0.15 .2 Trace: 5	MHz 0.154 0.166 0.486 0.497 0.558 0.561 1.077	Read Level dBuV 38.51 21.84 29.42 20.95 21.23 29.46 27.45	LISN Factor dB 10.22 10.22 10.29 10.29 10.29 10.29 10.29 10.29 10.32	Aux Factor -0.06 -0.09 -0.26 -0.32 -0.37 -0.37 -0.37 0.38	2 quency (N Cable Loss dB 0.01 0.03 0.03 0.03 0.02 0.02 0.02 0.07	Hz) Level dBuV 48.68 31.98 39.48 30.95 31.17 39.40 38.22	5 5 45.78 55.16 56.23 46.05 46.00 56.00 56.00	Over Limit -17.10 -23.18 -16.75 -15.10 -14.83 -16.60 -17.78	QP Average QP Average QP Average QP QP	
20 10 0.15 .2 Trace: 5	MHz 0.154 0.166 0.486 0.497 0.558 0.561 1.077 1.077	Read Level dBuV 38.51 21.84 29.42 20.95 21.23 29.46 27.45 20.14	LISN Factor dB 10.22 10.29 10.29 10.29 10.29 10.29 10.29 10.32	Aux Factor -0.06 -0.09 -0.26 -0.32 -0.37 -0.37 -0.37 0.38 0.38	2 quency (N Cable Loss dB 0.01 0.03 0.03 0.03 0.02 0.02 0.02 0.07 0.07	Hz) Level dBuV 48.68 31.98 39.48 30.95 31.17 39.40 38.22 30.91	5 5 Limit Line dBuV 65.78 55.16 56.23 46.05 46.00 56.00 56.00 46.00	Over Limit -17.10 -23.18 -17.10 -23.18 -16.75 -15.10 -14.83 -16.60 -17.78 -15.09	Remark QP Average QP Average QP Average QP Average	
20 10 0.15 .2 Trace: 5 	MHz 0.154 0.166 0.486 0.497 0.558 0.561 1.077 1.077 2.664	Read Level dBuV 38.51 21.84 29.42 20.95 21.23 29.46 27.45 20.14 24.90	LISN Factor dB 10.22 10.29 10.29 10.29 10.29 10.29 10.32 10.32 10.32	Aux Factor -0.06 -0.09 -0.26 -0.32 -0.37 -0.37 -0.37 0.38 0.38 -0.24	2 quency (N Cable Loss dB 0.01 0.03 0.03 0.03 0.02 0.02 0.02 0.07 0.07 0.11	Hz) Level dBuV 48.68 31.98 39.48 30.95 31.17 39.40 38.22 30.91 35.11	5 Limit Line dBuV 65.78 55.16 56.23 46.05 46.00 56.00 56.00 56.00 56.00	Over Limit -17.10 -23.18 -17.10 -23.18 -16.75 -15.10 -14.83 -16.60 -17.78 -15.09 -20.89	Remark QP Average QP Average QP QP Average QP Average QP	
20 10 0.15 .2 Trace: 5	MHz 0.154 0.166 0.486 0.497 0.558 0.561 1.077 1.077	Read Level dBuV 38.51 21.84 29.42 20.95 21.23 29.46 27.45 20.14	LISN Factor dB 10.22 10.29 10.29 10.29 10.29 10.29 10.32 10.32 10.32	Aux Factor -0.06 -0.09 -0.26 -0.32 -0.37 -0.37 -0.37 0.38 0.38	2 quency (N Cable Loss dB 0.01 0.03 0.03 0.03 0.02 0.02 0.02 0.07 0.07	Hz) Level dBuV 48.68 31.98 39.48 30.95 31.17 39.40 38.22 30.91	5 Limit Line dBuV 65.78 55.16 56.23 46.05 46.00 56.00 56.00 56.00 56.00 50.00	Over Limit -17.10 -23.18 -17.10 -23.18 -16.75 -15.10 -14.83 -16.60 -17.78 -15.09 -20.89	Remark QP Average QP Average QP Average QP Average QP Average QP	





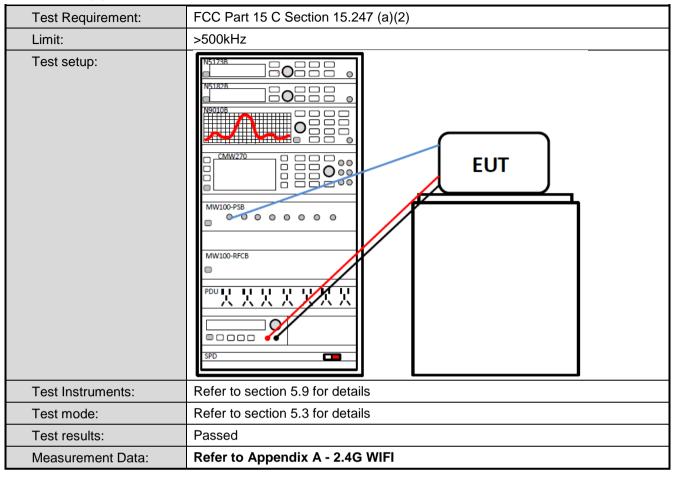


## 6.3 Conducted Output Power



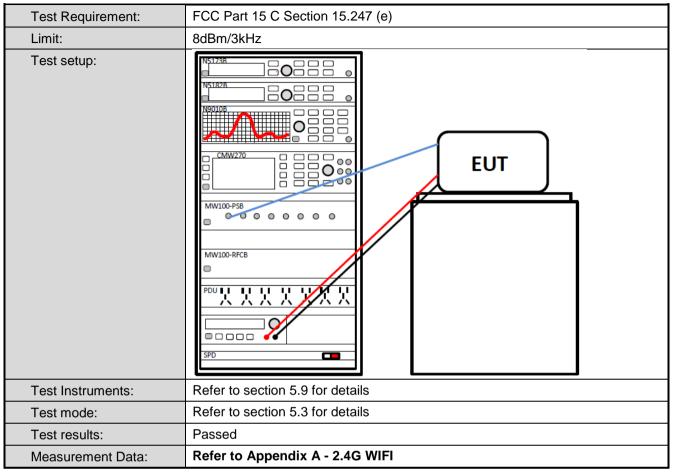


## 6.4 Occupy Bandwidth





## 6.5 Power Spectral Density





## 6.6 Band Edge

## 6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph(b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.
Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Measurement Data:	Refer to Appendix A - 2.4G WIFI



#### 6.6.2 Radiated Emission Method

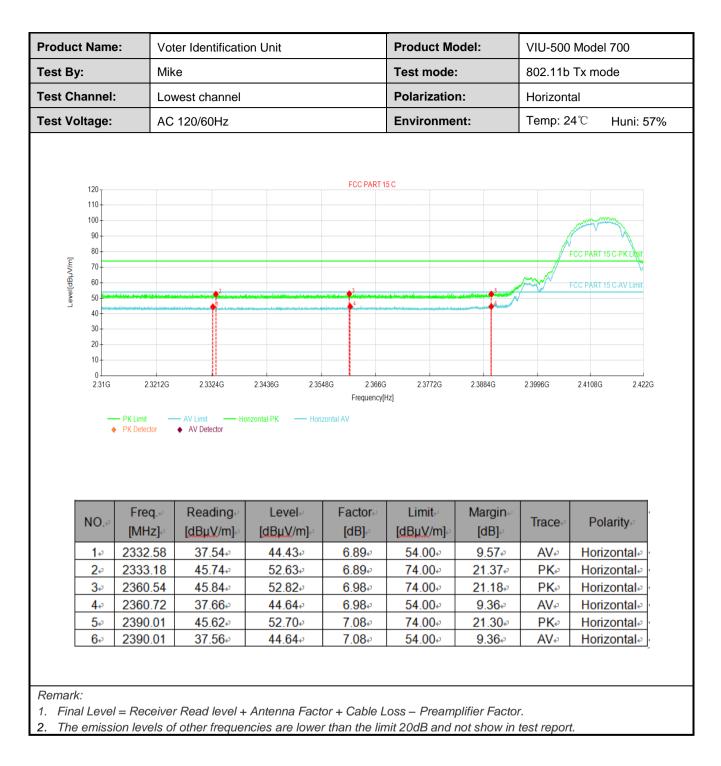
Test Requirement:	FCC Part 15 C Se	ection 15.209	and 15.205		
Test Frequency Range:	2310 MHz to 2390	) MHz and 24	83.5 MHz to 2	500 MHz	
Test Distance:	3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Limite	Frequency	RMS	1MHz nit (dBuV/m @	3MHz	Average Value Remark
Limit:			54.00	511)	Average Value
	Above 1GH		74.00		Peak Value
Test Procedure:	<ul> <li>the ground at determine the ground at determine the 2. The EUT was antenna, whit tower.</li> <li>3. The antenna ground to det horizontal an measuremen</li> <li>4. For each sus and then the and the rota t maximum rea</li> <li>5. The test-rece Specified Bar</li> <li>6. If the emission limit specified the EUT wou 10dB margin</li> </ul>	t a 3 meter ca e position of t s set 3 meters ch was moun height is vari termine the m d vertical pola t. pected emiss antenna was table was turr ading. viver system v ndwidth with l on level of the d, then testing ld be reported would be re-	amber. The tak he highest rad s away from the ted on the top ed from one m naximum value arizations of the sion, the EUT v tuned to heigh ned from 0 deg was set to Peal Maximum Holo EUT in peak r g could be stop d. Otherwise th	ole was rota iation. e interferen of a variabl eter to four of the field e antenna a vas arrange ths from 1 m prees to 360 k Detect Fu Mode. node was 1 ped and the ne emission one using p	e-height antenna meters above the strength. Both are set to make the ed to its worst case heter to 4 meters degrees to find the nction and OdB lower than the e peak values of s that did not have eak, quasi-peak or
Test setup:	150cm	AE EUT (Turntable)	Horr	Antenna	Tower
Test Instruments:	Refer to section 5	.9 for details			
Test mode:	Refer to section 5	.3 for details			
Test results:	Passed				



#### 802.11b mode:

			r Identificatior	n Unit		Product I	Model:	VIU-500	Model 700	
st By:		Mike				Test mod	le:	802.11b	Tx mode	
st Channe	el:	Lowe	est channel			Polarizat	ion:	Vertical		
st Voltage	e:	AC 1	20/60Hz			Environn	nent:	Temp: 24	4℃ Huni: 5	57%
120 - 110 - 100 - 90 - 80 - [E					FCC PART 1	C			CC PART 15 C-PRUMIT	
5 30 40 20 10 0 231	— РК		2.3324G AV Limit Ve AV Detector	2.3436G 2.354 ertical PK — Vertical	Frequency[H	2.3772G z]	23884G	2.3996G	2.4108G 2.422	2G
40 - 30 - 20 - 10 - 0 -	→ PK	Limit —	— AV Limit —— Ve		Frequency[H		23884G	2 3996G	2.4108G 2.422	2G
40 30 20 10 0 231	— PK ◆ PK	Climit Detector	AV Limit Ve AV Detector	ertical PK — Vertical	Frequency(H AV Factor⊷	z] Limit~	Margine			2G
40 30 20 10 0 231	→ PK	Elimit Detector Freq.e [MHz]	AV Limit Ve ♦ AV Detector Reading P [dBµV/m] P	ertical PK → Vertical Level [dBµV/m]+2	Frequency(H AV Factor⊷ [dB]⊷	Limit⊸ [dBµV/m]⊷	Margin⊮ [dB]∘	Trace	Polarity⇔	2G
40 30 20 10 0 231 231	→ PK	Freq.e [MHz] 332.84	AV Limit Ve AV Detector Ve Reading v [dBµV/m] v 45.40 v	Level [dBµV/m] 52.29₽	Frequency(H AV Factor	Limit-/ [dBµV/m]≁ 74.004	Margin⊮ [dB]∞ 21.71₽	Trace.₀ PK⊷	Polarity <i>₀</i> Vertical₊	2G
40 30 20 10 0 231 231		Elimit Detector Freq [MHz] 332.84 332.87	AV Limit Ve ♦ AV Detector Reading [dBµV/m] 45.40 37.83.+-	Eevel↔ [dBµV/m] 52.29↔ 44.72↔	Frequency(H AV Factor	Limit⊸ [dBµV/m]∘ 74.00₊ 54.00₊	Margin.∉ [dB]₂ 21.71.∉ 9.28.₽	Trace.₀ PK.₀ AV.₀	Polarity₽ Vertical₽ Vertical₽	2G
40 30 20 10- 0 231 231 8 NO. 14 24 34	→ PK → PK	Elimit Detector Freq.44 [MHz]49 332.84 332.87 357.30	AV Limit Ve ♦ AV Detector Reading [dBµV/m] 45.40 37.83 37.93 37.93	Level↔ [dBµV/m]↔ 52.29↔ 44.72↔ 44.90↔	Frequency(H AV [dB]= 6.89+3 6.89+3 6.97+3	Limit- [dBµV/m]↔ 74.00↔ 54.00↔ 54.00↔	Margin⊮ [dB]⊮ 21.71₽ 9.28₽ 9.10₽	Trace PKe AVe AVe	Polarity₀ Vertical₀ Vertical₀ Vertical₀	2G







			on Unit		Product I	Model:	VIU-500	Model 700	
est By:	Mik	e			Test mod	le:	802.11b	Tx mode	
est Channel	: Hig	hest channel			Polarizat	ion:	Vertical		
est Voltage:	AC	120/60Hz			Environm	nent:	Temp: 2	4℃ Huni:	57%
120 110 90 80 70			in the second se	FCC PART 1	5 C			FCC PART 15 C-PK Limit	
	2.4568G — PK Limit — — PK Detector	2.4616G — AV Limit — Vi AV Detector	2.4664G 2.471 ertical PK — Vertical	Frequency[ł	2.4808G Z]	2.4856G	2 4904G	2.4952G 2.5	5G
40 30 20 10 0	PK Limit - PK Detector -	AV Limit Vi AV Detector Vi	ertical PK Vertical	Frequency(F AV Factor-	z] Limit~	Margin≓	3		56
40 30 20 10 2.452G	PK Limit -	AV Limit V AV Detector V Reading V [dBµV/m]	ertical PK — Vertical	Frequency[ł AV Factor⊷ [dB]-∂	z] Limit.∘ [dBµV/m]⊷	Margin⊮ [dB]∘	2.4904G	24952G 2.5	5G
40 30 20 10 0 2.452G NO	PK Limit PK Detector Freq.↔ [MHz]↔ 2483.50	AV Limit Vi AV Detector Vi Reading (dBµV/m) 44.24	ertical PK — Vertical Level⊷ [dBµV/m]∞ 51.93⊷	Frequency(F AV Factor [dB] 7.69+	z] Limit-/ [dBµV/m]↔ 74.00↔	Margin.∉ [dB].₀ 22.07₊³	2.4904G	24952G 2.5 Polarity Vertical	5G
40 30 20 10 2.452G	PK Limit PK Detector Freq.≁ [MHZ]→ 2483.50 2483.50	AV Limit → Vi AV Detector → Vi Reading ← [dBµV/m] ← 44.24 ← 35.78 ←	ertical PK — Vertical Level [dBµV/m]. <sup>2</sup>	Frequency[# AV Factor [dB] 7.694 7.694	Limit-/ [dBµV/m]-/ 74.00+/ 54.00+/	Margin.∉ [dB].∘ 22.07.∗ 10.53.∗	2.4904G	24952G 25 Polarity- Vertical- Vertical-	5G
40 30 20 10 0 2.452G NO2 1-2 22 3-3	PK Limit PK Detector [MHz]. <sup>2</sup> 2483.50 2483.50 2491.33	AV Limit V AV Detector V Reading ( [dBµV/m] ( 44.24 ( 35.78 ( 37.15 ( )	Evele [dBµV/m]. 51.93↔ 43.47↔ 44.89↔	Frequency[+ AV Factor [dB] 7.69 7.69 7.74	z] Limit/ [dBµV/m]-/ 74.00/ 54.00/ 54.00/	Margin.∉ [dB].∘ 22.07.∉ 10.53.∉ 9.11.₽	2.4904G	249526 25 Polarity- Vertical- Vertical- Vertical-	5G
40 30 20 10 0 2.452G NO2 1+2 2+2	PK Limit PK Detector Freq.≁ [MHZ]→ 2483.50 2483.50	AV Limit → Vi AV Detector → Vi Reading ← [dBµV/m] ← 44.24 ← 35.78 ←	ertical РК — Vertical Level ↔ [dBµV/m] ↔ 51.93 ↔ 43.47 ↔	Frequency[i AV Factor [dB] 7.694 7.694	Limit-/ [dBµV/m]-/ 74.00+/ 54.00+/	Margin.∉ [dB].∘ 22.07.∗ 10.53.∗	2.4904G	24952G 25 Polarity- Vertical- Vertical-	5G



Product Nam	e: Vote	er Identificatio	n Unit		Product	Model:	VIU-500	) Model 700
Test By:	Mike	е			Test mod	de:	802.11b	Tx mode
Test Channel	: Higl	hest channel			Polarizat	ion:	Horizont	tal
Test Voltage:	AC	120/60Hz			Environm	nent:	Temp: 2	24℃ Huni: 57
120 110 100 90 80 70 70 60 60 50				FCC PART 1	50			FCC PART 15 C-PK Limit
40 30 20 10 0 2.452G		2.4616G — AV Limit — Ho ♦ AV Detector	2.4664G 2.471 vrizontal PK — Horiz	2G 2.476G Frequency[f	2.4808G Iz]	2.4856G	2.4904G	2.4952G 2.5G
40 30 20 10 0 2.452G	PK Limit - PK Detector	— AV Limit —— Ho		Frequency[H		2.4856G Margin⊮ [dB],∞	2.4904G	2.4952G 2.5G
40 30 20 10 0 2.4523	PK Limit PK Detector	AV Limit Ho ◆ AV Detector Ho Readinge	orizontal PK Horiz Level&	Frequency[* contal AV	Iz]	Margin∉		Polarity Horizontale
40 30 20 10 2.4520 NO0 14 <sup>3</sup> 2 <sub>4</sub> 3	PK Limit PK Detector	AV Limit Ho AV Detector Reading ℓ <sup>2</sup> [dBµV/m]ℓ <sup>3</sup>	nizontal PK — Horiz Level [dBµV/m]₊ <sup>2</sup>	Frequency[i contal AV Factor	Limit⊬ [dBµV/m]⊬	Margin.∉ [dB]∌	Trace₽	Polarity. Horizontal. Horizontal.
40 30 20 10 0 2.452G	PK Limit → PK Detector Freq.+ [MHz]- 2483.50	AV Limit Ho AV Detector Reading ( [dBµV/m] ( 44.15 (	Level [dBµV/m] 51.84	Frequency[* contal AV Factor⊮ [dB]⊮ 7.69₊	Limit.√ [dBµV/m]↔ 74.00↔	Margin⊮ [dB]⊮ 22.16⊷	Trace.₀ PK₀	Polarity Horizontale
40 30 20 10 2.4520 NO0 1-2 1-2 2.4520 1-2 2.4520 1-2 2.4520 1-2 1-2 2.4520 1-2 1-2 1-2 1-2 1-2 1-2 1-2 1-2	PK Limit → PK Detector Freq.* <sup>1</sup> [MHz]- <sup>2</sup> 2483.50 2483.50	AV Limit Ho AV Detector Reading/ [dBµV/m]/ 44.15/ 37.04/	Level [dBµV/m].₀ 51.84.₀ 44.73.₀	Frequency(F contal AV Factor [dB]. 7.69. 7.69.	Limit- [dBµV/m]- 74.00 54.00	Margin.∉ [dB].∉ 22.16.∉ 9.27.∉	Trace≠ PK≠ AV≠	Polarity. Horizontal. Horizontal.
40 30 20 10 0 2.452G NO.4 142 245 342 342 342 342 342 342 342 342	PK Limit PK Detector Freq.↔ [MHz]→ 2483.50 2483.50 2490.31	AV Limit Ho ♦ AV Detector Reading [dBµV/m] 44.15 37.04 45.42 2	Level↔ [dBµV/m]↔ 51.84↔ 44.73↔ 53.15↔	Frequency[#	Limit. [dBµV/m] 74.00. 54.00.	Margin.∉ [dB].¢ 22.16¢ 9.27¢ 20.85¢	Trace.₀ PK.₀ AV.₀ PK.₀	Polarity. Horizontal. Horizontal.



#### 802.11g mode:

	me:		er Identi	ificatio	on Unit		Product	Model:	VIU-500	Model 700	
st By:		Mik	e				Test mo	de:	802.11g	Tx mode	
st Chann	el:	Lov	vest cha	nnel			Polariza	tion:	Vertical		
st Voltag	e:	AC	120/60H	Hz			Environ	ment:	Temp: 2	24℃ Huni:	: 57%
120 - 110 - 100 - 90 - 80 - [Ly,TGP] 80 - [Ly,TGP] 80 - 50 - 30 - 30 - 30 - 30 - 30 - 30 - 30 - 3	petition are such as para					FCC PART 1:	5 C			CC PART 15 C-PK Lint CC PART 15 C-AV Limit	
40- 30- 20- 10- 0_ 23	1G 2 PK Limit PK Detec		2.33240 - AV Limit ♦ AV Detecto	Ver	2.3436G 2.354 tical PK — Vertical	Frequency[H	23772G Z]	2.3884G	2.3996G	2.4108G 2.42	22G
40 - 30 - 20 - 10 - 0 -	PK Limit PK Detec	or .	- AV Limit	Ver ng⇔		Frequency[H		2 3884G Margin.∉ [dB]-2	2.3996G	24108G 242	22G
40- 30- 20- 10- 0- 23	PK Limit PK Detec	or q.≁ z]₽	- AV Limit ♦ AV Detecto Readin	Ver or <b>ng</b> ₊≀ / <b>m]</b> ₊∂	tical PK — Vertical	Frequency(F AV Factor-	z] Limit~	Margin∉			226
40- 30- 20- 10- 01 23	PK Limit PK Detec	or q.≁ z]₽	AV Limit AV Detecto		tical PK — Vertical Level₊ [dBµV/m]₊₂	Frequency(F AV Factor⊌ [dB]-∂	z] Limit⊮ [dBµV/m]∾	Margin.⊎ [dB]∘	Trace	Polarity₀	226
40- 30- 20- 10- 0- 23 NO 1.	<ul> <li>PK Limit</li> <li>PK Detect</li> <li>PK Detect</li> <li>Free</li> <li>[MH</li> <li>2346</li> <li>2347</li> </ul>	or q z] .90 .64	AV Limit AV Detecto Readin [dBµV/ 37.50		tical PK — Vertical Level↔ [dBµV/m]↔ 44.43↔	Frequency(F AV Factor [dB] 6.93+3	د] Limit- [dBµV/m]↔ 54.00↔	Margin⊮ [dB]₂ 9.57₽	Trace AVe	Polarity <i>₀</i> Verticalℯ	226
40- 30- 20- 10- 0- 23 NO 1+ 2*	<ul> <li>PK Limit</li> <li>PK Detect</li> <li>PK Detect</li> <li>Free</li> <li>[MH</li> <li>2346</li> <li>2366</li> </ul>	or q z] .90 .64 .70	AV Limit AV Detecto Readin [dBµV/ 37.50 45.35		Level [dBµV/m] 44.43 52.29	Frequency(H AV Factor [dB] 6.934-3 6.944-3	z] Limit-/ [dBµV/m]-/ 54.00+/ 74.00+/	Margin.∉ [dB].∘ 9.57.¢ 21.71.¢	Trace AV PK	Polarity∘ Vertical₊ Vertical₊	22G
40- 30- 20- 10- 0- 2-3 2-3 NO 1- 2-4 3-	<ul> <li>PK Limit</li> <li>PK Detect</li> <li>PK Detect</li> <li>Free</li> <li>[MH</li> <li>2346</li> <li>2347</li> <li>2366</li> <li>2367</li> </ul>	or q z] .90 .64 .70 .35	- AV Limit	ver or /m]↔ 0+→ 5+→ 7,↔ 2+→	tical PK — Vertical Level↔ [dBµV/m]↔ 44.43↔ 52.29↔ 44.27↔	Frequency(H AV [dB]-2 6.93+2 6.94+2 7.00+2	z] Limit₊ [dBµV/m]↔ 54.00↔ 74.00↔ 54.00↔	Margin.√ [dB].∘ 9.57.∘ 21.71.∘ 9.73.∘	Trace∉ AV∉ PK∉ AV∉	Polarity∘ Vertical₊ Vertical₊ Vertical₊	22G



st By:			on Unit		Produc	t Model:	VIU-50	0 Model 700	)
ы ру.	Mil	ke			Test m	ode:	802.11	g Tx mode	
st Channel	: Lo	west channel			Polariz	ation:	Horizor	ntal	
st Voltage:	AC	120/60Hz			Enviror	nment:	Temp:	<b>24</b> ℃ Hui	ni: 57%
120 110 90 80 70 60 60 50				FCC PART 15				FCC PART 15 C-PK LI	7
40 30 20 10 2.31G	2.3212G PK Limit PK Detector	2.3324G — AV Limit — Ho AV Detector	2.3436G 2.354 prizontal PK — Horiz	Frequency[H	2.3772G z]	23884G	2.3996G	2.4108G 2	2.422G
40 30 20 10 2.31G	— PK Limit —	— AV Limit —— Ho		Frequency[H		23884G Margin⊮ [dB]⊋	2.3996G	2.4108G 2 Polarity	
40 30 20 10 2.31G	PK Limit PK Detector	AV Limit Ho ◆ AV Detector Ho Reading⊮	orizontal PK — Horiz	Frequency[H: zontal AV	z] Limit~	Margin∉			
40 30 20 10 0 2.31G	PK Limit PK Detector	AV Limit Ho ♦ AV Detector Reading Ho [dBµV/m] Ho	orizontal PK — Horiz Level₊ [dBµV/m]₊∂	Frequency(H: zontal AV	z] Limit⊮ [dBµV/m]⊬	Margin.∉ [dB]-∂	Trace	Polarity⊷	<b>4</b>
40 30 20 10 0 2.31G NO.43	PK Limit PK Detector [MHZ]-P 2344.09 2344.14 2367.24	AV Limit → Ho AV Detector Reading [dBµV/m] 46.39	Level↔ [dBµV/m]↔ 53.32↔	Frequency(H zontal AV Factor+- [dB] 6.93+-	z] Limit⊸ [dBµV/m]⊷ 74.00↔	Margin.≓ [dB]⊴ 20.68₽	Trace.⊧ PK⊷	Polarity Horizonta Horizonta Horizonta	- <mark> </mark>
40 30 20 10 0 2.31G	PK Limit PK Detector Freq.4 [MHZ].2 2344.09 2344.14	AV Limit Ho AV Detector Ho Reading. [dBµV/m]. 46.39. 37.54. 37.54.	Level↔ [dBµV/m]↔ 53.32↔ 44.47↔	Frequency(H: zontal AV Factor⊷ [dB]∘ 6.93₊₀ 6.93₊₀	z] Limit⊸ [dBµV/m]⊷ 74.00₊ 54.00₊	Margin.₄ [dB]₂ 20.68₊₂ 9.53₊₂	Trace.⊧ PK.₀ AV.₀	Polarity⊮ Horizonta Horizonta	- <mark> </mark>
40 30 20 10 0 2.31G 2.31G 10 0 2.31G 10 2.31G	PK Limit PK Detector [MHZ]-P 2344.09 2344.14 2367.24	AV Limit Ho AV Detector Ho AV Detector [dBµV/m]↔ 46.39↔ 37.54↔ 37.66↔	Level↔ [dBµV/m]↔ 53.32↔ 44.47↔ 44.66↔	Frequency(H2 zontal AV [dB]- 6.93+ <sup>2</sup> 6.93+ <sup>2</sup> 7.00+ <sup>3</sup>	z] Limit-/ [dBµV/m]↔ 74.00↔ 54.00↔ 54.00↔	Margin.⊮ [dB]∘ 20.68₽ 9.53₽ 9.34₽	Trace PK AV AV	Polarity Horizonta Horizonta Horizonta	



		tor raornanoad	on Unit		Product	Model:	VIU-50	00 Model 700	)
st By:	Mi	ke			Test mod	de:	802.11	lg Tx mode	
st Channel	: Hig	ghest channel			Polarizat	ion:	Vertica	al	
st Voltage:	AC	120/60Hz			Environm	nent:	Temp:	24℃ Hun	i: 57%
120 110 100 90 80 70 70 60 50				FCC PART 1				FCC PART 15 C-PK Lin	
40 30 20 10 2.452G	2.4568G PK Limit PK Detector	2.4616G — AV Limit — Ve AV Detector	2.4664G 2.471 ertical PK — Vertical	2G 2.476G Frequency[i	2.4808G	2 2.4856G	2.4904G	2 4952G	2.5G
40 30 20 10 2.452G	— PK Limit —	— AV Limit —— Ve		2G 2.476G Frequency[i	2.4808G	1 2 2.4856G Margin e [dB].₂		€ 5	2.5G
40 30 20 10 2.452G	PK Limit PK Detector	AV Limit ve ◆ AV Detector	ertical PK Vertical Level+	2G 2.476G Frequency[I AV	2.4808G Iz]	Margin∉	2.4904G	2.4952G	2.56
40 30 20 10 0 2.452G	PK Limit PK Detector	AV Limit Ve ♦ AV Detector Ve Readinge [dBµV/m]e	ertical PK — Vertical Level₊ [dBµV/m]₊⊃	2G 2.476G Frequency[I AV Factor.↓ [dB].₽	2.4808G 2.4808G [z]	Margin⊮ [dB]₽	2.4904G	24952G	2.5G
40 30 20 10 0 2.452G NO2 1+3	Freq.4 [MHz].2 2483.50	AV Limit → Ve AV Detector Reading 4 [dBµV/m] 4 43.51 4	Level⊮ [dBµV/m]⊮ 51.20₽	2G 2.476G Frequency[I AV Factor.↓ [dB].↓ 7.69.↓	2.4808G [2] Limit- [dBµV/m]= 74.00+3	Margin.∉ [dB].∉ 22.80.₽	2.4904G	2.4952G	2.5G
40 30 20 10 0 2.452G NO.~ 1+2 2+3	PK Limit PK Detector Freq.4 [MHZ].2 2483.50 2483.50	AV Limit Ve AV Detector Ve Reading [dBµV/m] 43.51+ 36.07+	Eevel⊮ [dBµV/m]⊮ 51.20₽ 43.76₽	2G 2.476G Frequency[] AV Factor [dB] 7.69 7.69	2.4808G z] Limit-/ [dBµV/m]-/ 74.00.43 54.00.43	Margin.₄ [dB].₄ 22.80.₄ 10.24.₄	2.4904G	2.4952G 2.4952G Polarity. Vertical. Vertical.	2.56
40 30 20 10 2.452G         	PK Limit PK Detector [MHz] 2483.50 2483.50 2489.95	AV Limit Ve ♦ AV Detector <b>Reading</b> [dBµV/m] 43.51+ <sup>3</sup> 36.07+ <sup>3</sup> 37.30+ <sup>3</sup>	Eevel [dBµV/m]↔ 51.20↔ 43.76↔ 45.03↔	2G 2.476G Frequency[I AV Factor [dB]= 7.69= 7.69= 7.69= 7.73=	2.4808G 2.4808G [2] Limit↓ [dBµV/m]↓ 74.00.↓ 54.00.↓ 54.00.↓	Margin.₀ [dB]₀ 22.80₀ 10.24₀ 8.97₀	2.4904G	2.4952G 2.4952G Vertical.4 Vertical.4 Vertical.4	2.56

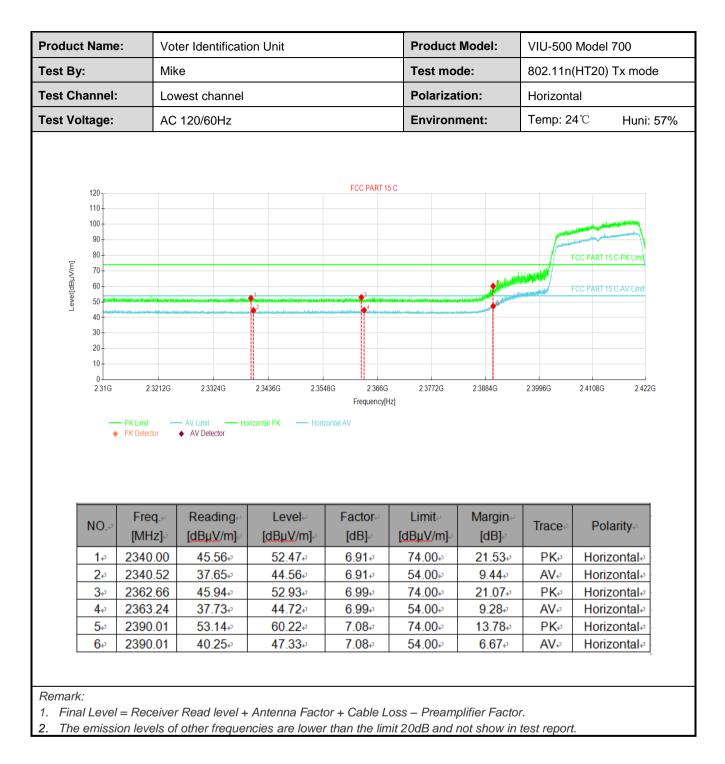


			on Unit		Produc	t wouer.			
est By:	М	ke			Test m	ode:	802.11	g Tx mode	
est Channe	el: Hi	ghest channel			Polariza	ation:	Horizor	ntal	
est Voltage	e: A0	C 120/60Hz			Enviror	nment:	Temp: 2	24℃ Hun	i: 57%
120	<u></u>			FCC PART 15				FCC PART 15 C-PK Limit	
Image: Control of the second secon	2G 2.4568C	2.4616G AV LimitHe	2.4664G 2.471 prizontal PK — Hori	2G 2.476G Frequency[H	2.4808G	2.4856G	2.4904G	ECC PART 15 C. AV Limit 24952G 2:	56
40 - 30 - 20 - 10 -	PK Limit PK Detector	AV Limit He		2G 2.476G Frequency[H	2.4808G	2.4856G Margin⊮ [dB]⊮		5	
40- 30- 20- 10- 2.452 NO. 1.*	Freq. [MHz] 2483.50	AV Limit He ◆ AV Detector He Reading (dBµV/m) 46.87.0	Level⊮ [dBµV/m]₽ 54.56₽	2G 2.476G Frequency[H zontal AV	2.4808G 2] Limit-/ [dBµV/m]-/ 74.00	Margin.∉ [dB].₀ 19.44⊷	2.4904G Trace. PK.∞	2.4952G 2: Polarity Horizontal	5G
40- 30- 20- 10- 0- 2.452 NO. 1 <i>e</i> 2 <i>e</i>	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>Freq</li> <li>[MHz]</li> <li>2483.50</li> <li>2483.50</li> </ul>	AV Limit He AV Detector He Reading ( [dBµV/m]-3 46.87.43 38.12.43	Level≁ [dBµV/m]↔ 54.56↔ 45.81↔	2G 2.476G Frequency(H zontal AV Factor [dB] 7.69+ 7.69+	2.4808G 2] Limit-/ [dBµV/m]-/ 74.00.e/ 54.00.e/	Margin.∉ [dB]∘ 19.44¢ 8.19¢	2.4904G 2.4904G Trace= PK+ <sup>2</sup> AV+ <sup>3</sup>	2.4952G 2: Polarity Horizontal Horizontal	5G
40- 30- 20- 10- 0- 2.452 NO. 1.4- 2.452 3.4-	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>Freq.</li> <li>[MHz]</li> <li>2483.50</li> <li>2489.60</li> </ul>	AV Limit He AV Detector He AV Detector [dBµV/m]= 46.87+ 38.12+ 38.22+ 38.22+	Level→ [dBµV/m]→ 54.56↔ 45.81↔ 45.95↔	2G 2.476G Frequency[H zontal AV Factor [dB] 7.69+3 7.69+3 7.69+3 7.73+3	2.4808G z] Limit- [dBµV/m]= 74.00. 54.00. 54.00.	Margin.∉ [dB].∮ 19.44.¢ 8.19.¢ 8.05.¢	2.4904G	24952G 23 Polarity Horizontal Horizontal	56 5
40- 30- 20- 10- 0- 2.452 NO. 1e <sup>2</sup> 2e <sup>2</sup> 3e <sup>2</sup>	<ul> <li>→ PK Limit</li> <li>→ PK Detector</li> <li>→ Freq.</li> <li>[MHz]</li> <li>→ 2483.50</li> <li>→ 2489.60</li> <li>→ 2489.60</li> <li>→ 2489.86</li> </ul>	AV Limit He AV Detector He AV Detector Reading ( [dBµV/m]-3 46.87+3 38.12+3 38.22+3 46.46+3	Level↓ [dBµV/m]≠ 54.56+ 45.81+ 45.95+ 54.19+	2G 2.476G Frequency(H zontal AV Factor₊↓ [dB]↓↓ 7.69₊↓ 7.69₊↓ 7.73₊↓ 7.73₊↓	2.4808G 2] 2.4808G 2] 74.00€ 54.00€ 54.00€ 54.00€ 74.00€	Margin.↓ [dB]↓ 19.44↓ 8.19↓ 8.05↓ 19.81↓	2.4904G 2.4904G Trace≠ PK+ <sup>2</sup> AV+ <sup>2</sup> AV+ <sup>2</sup> PK+ <sup>2</sup>	24952G 2: 24952G 2: Horizontal Horizontal Horizontal Horizontal	5G
40- 30- 20- 10- 0- 2.452 NO. 1.e 2.e 3.e	<ul> <li>→ PK Limit</li> <li>→ PK Detector</li> <li>→ Freq</li> <li>[MHz]</li> <li>→ 2483.50</li> <li>→ 2489.60</li> <li>→ 2489.86</li> <li>→ 2489.86</li> <li>→ 2489.14</li> </ul>	AV Limit He AV Detector He AV Detector [dBµV/m] 46.87¢ 38.12¢ 38.22¢ 46.46¢ 45.77¢	Level→ [dBµV/m]→ 54.56↔ 45.81↔ 45.95↔	2G 2.476G Frequency[H zontal AV Factor [dB] 7.69+3 7.69+3 7.69+3 7.73+3	2.4808G z] Limit- [dBµV/m]= 74.00. 54.00. 54.00.	Margin.∉ [dB].∮ 19.44.¢ 8.19.¢ 8.05.¢	2.4904G	24952G 23 Polarity Horizontal Horizontal	5G



#### 802.11n(HT20): **Product Name:** Voter Identification Unit **Product Model:** VIU-500 Model 700 Test By: Mike Test mode: 802.11n(HT20) Tx mode **Test Channel: Polarization:** Vertical Lowest channel **Test Voltage: Environment: Temp: 24°**C AC 120/60Hz Huni: 57% FCC PART 15 C 120 110. 100 90 80-CC PART 15 C-PK Level[dBµV/m] 70-60 50 40 30 20 10 2.31G 2.3212G 2.3324G 2.3436G 2.3548G 2.366G 2.3772G 2.3884G 2.3996G 2.4108G 2 422G Frequency[Hz] PK Limit Vertical PK PK Detector AV Detector **Reading Level**<sub>4</sub> Limit. Freq.+ **Factor** Margin NO. **Polarity** Trace [MHz] [dBuV/m] [dBµV/m] [dB] [dBµV/m] [dB] 45.20*₽* 74.00₽ 21.89 PK₽ **Vertical**<sub>e</sub> 2340.12 52.11e **6.91**₽ 1₽ 2₽ 2340.39 37.29₽ 44.20₽ **6.91**₽ 54.00₽ 9.80₽ AV₽ **Vertical**<sub>e</sub> 3₽ 2369.41 37.24+ 44.25₽ 7.01*₽* 54.00₽ 9.75 AV₽ Vertical. **4**₽ 2369.66 45.44 **52.45**₽ 7.01~ **74.00**₽ 21.55 PK₽ Vertical. 5₽ 2390.01 45.15₽ 52.23₽ 7.08₽ 74.00₽ 21.77 PK₽ Vertical. 7.08₽ 10.51*₽* 6₽ 2390.01 36.41 43.49₽ 54.00₽ AV₽ Vertical. Remark: Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor. 1.



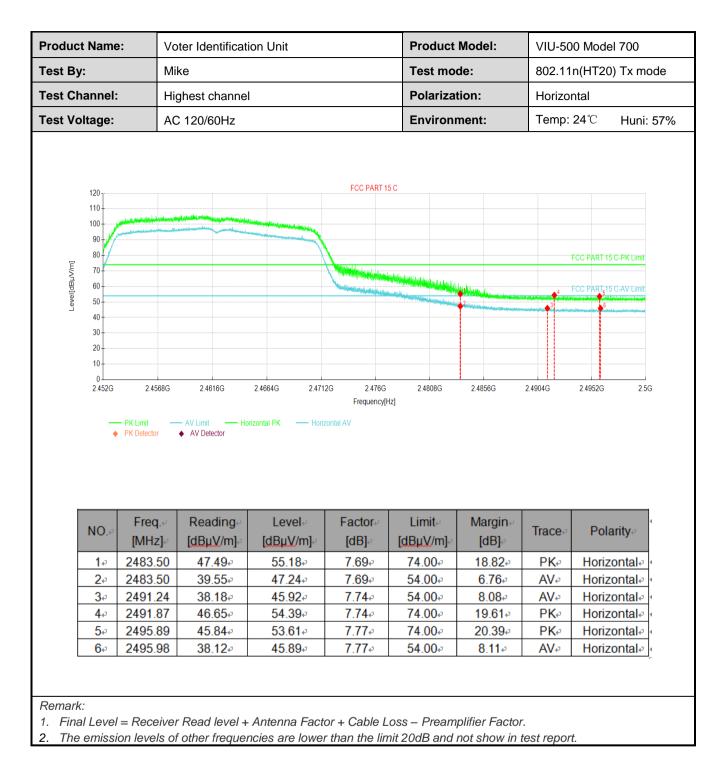




			ion Unit		Product	wodel:	VIU-500 Model 700			
est By:	N	ike			Test mo	ode:	802.11	n(HT20) Tx n	node	
est Chann	el: H	ighest channe	I		Polariza	ation:	Vertica	Vertical		
est Voltag	e: A	C 120/60Hz			Environ	ment:	Temp: 24°C Huni: 579		i: 57%	
120	<u></u>			FCC PART 1				FCC PART 15 C-PK Limi		
30 40 30 20 10 0 2.45	2G 2.4568G PK Limit PK Detector	2.4616G AV Limit Ve AV Detector	2.4664G 2.471 ertical PK — Vertical	2G 2476G Frequency[h	2.4808G	2.4856G	2 4904G	2 4952G 2	.5G	
40 - 30 - 20 - 10 - 0 -	PK Limit     PK Detector	— AV Limit — Ve		2G 2476G Frequency[h	2.4808G	2.4856G Margin e [dB].₂				
40- 30- 20- 10- 0- 2.45	→ PK Limit → PK Defector	AV Limit Va AV Detector	ertical PK Vertical	2G 2.476G Frequency[F AV	2.4808G Iz]	Margin⇔	2.4904G	2.4952G 2		
40- 30- 20- 10- 0- 245	<ul> <li>→ PK Limit</li> <li>→ PK Detector</li> <li>→ Freq</li> <li>→ [MHz]</li> <li>→ 2483.50</li> </ul>	AV Limit Ve ◆ AV Detector Ve Reading e [dBµV/m] ↔	ertical PK — Vertical Level⊷ [dBµV/m]₂	2G 2.476G Frequency(H AV	2.4808G Iz]	Margin.⊎ [dB].∂	2.4904G	2 4952G 2 Polarity		
40- 30- 20- 10- 0- 245 NO 1÷	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>Freq</li> <li>[MHz]</li> <li>2483.50</li> <li>2483.50</li> </ul>	AV Limit Va AV Detector Va Reading [dBµV/m] 44.51+ <sup>2</sup>	Level↔ [dBµV/m]↔ 52.20↔	2G 2476G Frequency[F AV Factor	2.4808G Iz] Limit.↓ [dBµV/m]↓ 74.00.↓	Margin.⊮ [dB]⊮ 21.80⊷	2.4904G	24952G 2 Polarity Vertical		
40- 30- 20- 10- 0- 245 NO 1+ 245	<ul> <li>→ PK Limit</li> <li>→ PK Detector</li> <li>→ PK Detector</li> <li>→ [MHz]→</li> <li>→ 2483.50</li> <li>→ 2483.50</li> <li>→ 2489.50</li> </ul>	AV Limit Va ◆ AV Detector Va ◆ AV Detector Reading [dBµV/m] • 44.51+ · 36.50+ ·	Eevel↔ [dBµV/m]↔ 52.20↔ 44.19↔	2G 2.476G Frequency[F AV Factor [dB] 7.69+ 7.69+	2.4808G [2] Limit-/ [dBµV/m]-/ 74.00.e <sup>3</sup> 54.00.e <sup>3</sup>	Margin.⊌ [dB].₀ 21.80.₀ 9.81.₀	2.4904G Trace+ PK+ AV+	2.4952G 2 Polarity Vertical+ Vertical-		
40- 30- 20- 10- 0- 245 NO 1+ 245	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>PK Detector</li> <li>[MHz]</li> <li>2483.50</li> <li>2489.50</li> <li>2489.57</li> </ul>	AV Limit Va AV Detector Va AV Detector Va (dBµV/m] 44.51+ <sup>3</sup> 36.50+ <sup>3</sup> 46.14+ <sup>3</sup>	Eevel↔ [dBµV/m]↔ 52.20↔ 44.19↔ 53.87↔	26 24766 Frequency[F AV Factor [dB] 7.69+ 7.69+ 7.73+	2.4808G IZ] Limit [dBµV/m] 74.00.e- 54.00.e- 74.00.e- 74.00.e-	Margin.∉ [dB].∘ 21.80.₅ 9.81.€ 20.13.₅	2.4904G 2.4904G Trace= PK= AV= PK=	2.4952G 2 Polarity Vertical Vertical Vertical		

Project No.: JYTSZE2109109



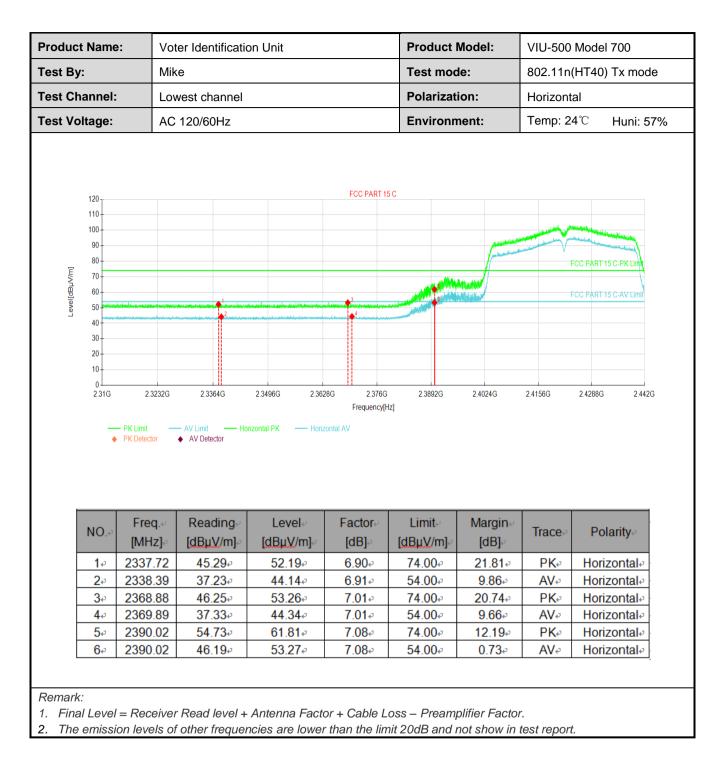




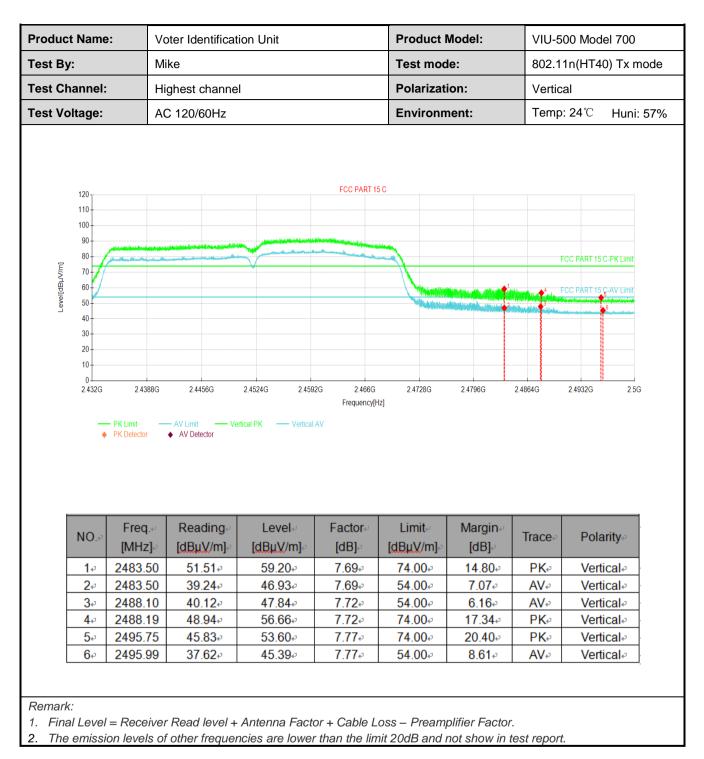
#### 802.11n(HT40):

					VIU-500 Model 700				
est By:	Mike	;			Test mo	de:	802.11n	n(HT40) Tx r	node
est Channel	: Low	est channel			Polariza	tion:	Vertical		
est Voltage:	AC	120/60Hz			Environ	ment:	Temp: 2	24℃ Hu	ni: 57%
120 110 100 90 80 80 60 60 50 80				FCC PART 15	C		V FC	CC PART 15 GPKLI	  
50 40 20 10 231G	2.3232G PK Limit PK Detector	2.3364G — AV Limit — Ve ♦ AV Detector	2 2 3496G 2 362 ertical PK — Vertical	Frequency[H	2.3892G 2]	2.4024G	2.4156G	2.4288G 2.	442G
40 30 20 10	PK Limit PK Detector	- AV Limit - Ve ◆ AV Detector	ertical PK — Vertical	Frequency(H: AV Factor≁	z] Limita	Margin∉			
40 30 20 10 0 2.31G	PK Limit -	— AV Limit → Ve	ertical PK — Vertical	Frequency[H:	2]		2.4156G	2.4288G 2.	
40 30 20 10 0 231G	PK Limit PK Detector	AV Limit Ve ♦ AV Detector	Level+ [dBµV/m]+ <sup>3</sup>	Frequency(H AV Factor [dB]↔	Limit√ [dBµV/m]⊬	Margin⊮ [dB]∘	2.4156G	2.4288G 2 Polarity+	
40 30 20 10 0 231G	PK Limit PK Detector Freq.4 [MHz],2 2344.61	AV Limit ve AV Detector ve Reading ℓ [dBµV/m] ℓ 46.35 ℓ	ertical PK — Vertical Level↔ [dBµV/m]↔ 53.28↔	Frequency(H AV Factor⊷ [dB]⊷ 6.93⊷	Limit⊮ [dBµV/m]⊮ 74.00∗	Margin⊮ [dB]∞ 20.72⊮	2.4156G	24288G 2 Polarity	
40 30 20 10 0 231G NO.4 1e <sup>3</sup> 24	PK Limit PK Detector [MHz]. <sup>2</sup> 2344.61 2344.71	AV Limit Ve ♦ AV Detector Reading ( [dBµV/m] = 46.35 = 37.34 =	Evel [dBµV/m], 53.28+ 44.27+	Frequency(H AV Factor↓ [dB]↓ 6.93↓ 6.93↓	Limit↓ [dBµV/m]↓ 74.00↓ 54.00↓	Margin.⊍ [dB].₀ 20.72.₀ 9.73.₀	2.4156G	2.4288G 2 Polarity- Vertical- Vertical-	
40 30 20 10 0 231G 231G	PK Limit PK Detector Freq [MHZ] 2344.61 2344.71 2374.16	AV Limit Ve ♦ AV Detector Reading [dBµV/m] € 46.35 € 37.34 € 37.21 €	Level [dBµV/m], 53.28+ 44.27+ 44.23+	Frequency(H AV Factor⊷ [dB]∘ 6.93₊∘ 6.93₊∘ 7.02₊∘	Limit- [dBµV/m]∘ 74.00↔ 54.00↔ 54.00↔	Margin.∉ [dB].₀ 20.72.€ 9.73.€ 9.77.€	2.4156G Trace PK AV AV AV	2.4288G 2 Polarity Vertical Vertical Vertical	











	e: Vo	oter Identificat	ion Unit		Product	Model:	VIU-5	00 Mode	el 700
est By:	М	ike			Test mo	de:	802.1	1n(HT40	)) Tx mode
est Channel	: Hi	ghest channe	I		Polariza	tion:	Horizo	ontal	
est Voltage:	A	C 120/60Hz			Environ	Environment:		Temp: 24℃ Huni: 5	
120 110 100 90 80 70 70 70 70 70 50		teren bitaleren et fan en de servede serveten en de serveten de servede		FCC PART 15				FCC PART 15	C-PK Limit
50 40 30 20 10 0 2.432G	2.4388G PK Limit – PK Detector	2.4456G AV Limit Hc AV Detector	2.4524G 2.458 prizontal PK — Horiz	Frequency[H	2.4728G Z]	2.4796G	2.4864G	2.4932G	2.5G
40 30 20 10	— PK Limit —	— AV Limit — Ho		Frequency[H		2.4796G Margin.√ [dB]-	2.4864G Trace≠		2.5G
40 30 20 10 0 2.432G	PK Limit - PK Detector -	AV Limit Ho AV Detector Ho Reading	orizontal PK Hori: Level+	Frequency[H zontal AV	z] Limit.	Margin∉		Pola	4
40 30 20 10 0 2.432G	PK Limit PK Detector Freq2 [MHz],2	AV Limit Ho AV Detector Ho Reading⊮ [dBµV/m]₽	orizontal PK — Horiz Level.↩ [dBµV/m].↩	Frequency[H zontal AV Factor+ [dB]+	z] Limit.√ [dBµV/m]≁	Margin.∉ [dB]-₂	Trace⊧	Pola	ırity∞
40 30 20 10 0 2.432G NO-4 <sup>2</sup>	Freq.** [MHz].* 2483.50	AV Limit → Ho AV Detector → Ho Reading [dBµV/m] 60.79	Level↔ [dBµV/m]↔ 68.48↔	Frequency[H zontal AV Factor [dB] 7.69	Limit. [dBµV/m]⊷ 74.00₊	Margin⊮ [dB]⊮ 5.52₄	Trace.₀ PK₀	Pola Horizo Horizo	ırity∉ ontal₽_⁴
40 30 20 10 0 2.432G	PK Limit PK Detector [MHz]= 2483.50 2483.50	AV Limit Ho AV Detector Reading [dBµV/m] 60.79+ 45.24+	Level↔ [dBµV/m]↔ 68.48↔ 52.93↔	Frequency[H zontal AV Factor⊷ [dB]⊷ 7.69⊷ 7.69⊷	Limit⊮ [dBµV/m]∘ 74.00₊² 54.00₊²	Margin.∉ [dB]₂ 5.52.₽ 1.07.₽	Trace. PK. AV.	Pola Horizo Horizo	rrity
40 30 20 10 0 2.432G NO.40 140 2.432G	PK Limit PK Detector [MHz] 2483.50 2483.50 2491.85	AV Limit Ho AV Detector Ho AV Detector [dBµV/m]e <sup>2</sup> 60.79e <sup>3</sup> 45.24e <sup>3</sup> 43.57e <sup>3</sup>	Level↔ [dBµV/m]↔ 68.48↔ 52.93↔ 51.31↔	Frequency[H zontal AV Factor [dB] 7.69 7.69 7.74	z] Limit-/ [dBµV/m]-/ 74.00/ 54.00/ 54.00/	Margin.∉ [dB]. 5.52.¢ 1.07.¢ 2.69.¢	Trace PK AV AV	Pola Horizo Horizo Horizo	rrity



## 6.7 Spurious Emission

## 6.7.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph(b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.
Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Measurement Data:	Refer to Appendix A - 2.4G WIFI



### 6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Se	ection 15.2	209 an	d 15.205				
Test Frequency Range:	9kHz to 25GHz							
Test Distance:	3m							
Receiver setup:	Frequency	Detec	tor	RBW	V	BW	Remark	
	30MHz-1GHz	Quasi-p	beak	120KHz	300KHz		Quasi-peak Value	
	Above 1GHz	Pea	k	1MHz	31	ЛНz	Peak Value	
	Above IGI12	RMS	VIS 1MHz 3N		ЛНz	Average Value		
Limit:	Frequency		Limi	t (dBuV/m @3	m)		Remark	
	30MHz-88MH			40.0			uasi-peak Value	
	88MHz-216MH			43.5			uasi-peak Value	
	216MHz-960M			46.0			uasi-peak Value	
	960MHz-1GH	12		54.0 54.0			uasi-peak Value	
	Above 1GHz	2		74.0			Average Value Peak Value	
Test Dresedure:	1. The EUT was	s placed o	n the		ina ta	hle 0.8		
Test Procedure:							eter chamber.	
							osition of the	
	highest radiat			5	-			
	2. The EUT was							
		ch was m	ounted	d on the top c	of a va	ariable	height antenna	
	tower.	haight ia	variad	from one me	tor to	fourm	atora abava tha	
	3. The antenna ground to det						neters above the	
							e set to make the	
	measuremen		p 0					
	4. For each sus	pected er	nissior	n, the EUT wa	as arr	anged	to its worst case	
							ter to 4 meters	
			turneo	d from 0 degr	ees to	o 360 c	legrees to find the	
	maximum rea				Data		ation and	
	5. The test-rece Specified Bar						ction and	
							dB lower than the	
							peak values of	
							that did not have	
							ak, quasi-peak or	
	average meth	nod as sp	ecified	and then rep	oorteo	d in a d	ata sheet.	
Test setup:	Below 1GHz							
					_			
			1	<u>_</u>	· ~	An	tenna Tower	
						5	Search	
	EUT _	····>> 3m ≺	v	1 4			ntenna	
	4m							
	<del>*</del>	1	<u>^</u>	<u> </u>		RF Tes Receive		
					~			
	Turn	1 V.6m	1m	<u> </u>				
	Table	e A	٨			``		
		<i></i>		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		7777		
			1					
	Ground I	Plane	-					
	Above 1GHz							

Project No.: JYTSZE2109109



## Report No: JYTSZB-R12-2101999

	Horn Antenna Tower Horn Antenna Tower Horn Antenna Tower Ground Reference Plane Test Receiver
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	<ol> <li>Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.</li> <li>9 kHz to 30MHz is lower than the limit 20dB, so only shows the data of above 30MHz in this report.</li> </ol>



#### Measurement Data (worst case):

#### Below 1GHz:

Product Name	: \	/oter Identificat	tion Unit		Product	t Model:	VIU-50	0 Model 700
Test By:	I	⁄like			Test mo	ode:	Wi-Fi T	x mode
Test Frequenc	y:	30 MHz ~ 1 GH	z		Polariza	ation:	Vertical	I
Test Voltage:	/	AC 120/60Hz			Environ	Environment:		24℃ Huni: 57%
60 50 40 [uu/\/Ingp] Ieve]				FCC PART 1	5.247			C PART 15 247-QP Limit
	wheeplagerheith	1 2 d/ 1 and man Man Man Man	100M	a a a a a a a a a a a a a a a a a a a		had a constant of the line	5	1G
•	– QP Limit QP Detector	- Vertical PK		Frequency				
NO.@	Freq.∉ [MHz]∉	Reading[d BµV/m]⊬	Level⊬ [dBµV/m]⊮	Factor⊬ [dB]∉	Limit⊭ [dBµV/m]∉	Margin⊭ [dB]∉	Trace	Polarity
1₽	51.1481		13.60	-17.08+	40.00*	26.40₽	PK₽	Vertical
2⊷	56.8717	₽ 26.68₽	9.64	-17.04	<b>40.00</b> €	30.36	PK₽	Vertical.

-19.61

-**15.86**₽

**-9.44**₽

-<mark>3.94</mark>₽

**43.50**₽

**46.00**₽

**46.00**₽

**46.00**₽

30.09

<mark>29.21</mark>₽

25.68<sub>0</sub>

25.03<sub>0</sub>

PK₽

PK₽

PK₽

PK₽

**Vertical**<sub>e</sub>

**Vertical**<sub>e</sub>

**Vertical**<sub>e</sub>

**Vertical**<sub>2</sub>

Remark:

3₽

4₽

**5**₽

**6**₽

134.285

240.026

514.951

902.020

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

13.41

**16.79**₽

20.32

**20.97**₽

- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.
- 3. The Aux Factor is a notch filter switch box loss, this item is not used.

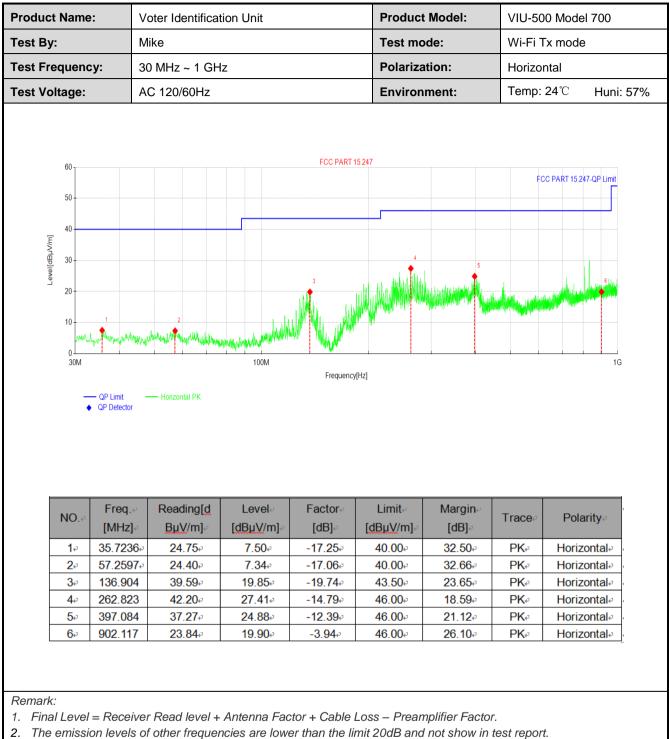
33.02

32.65<sub>°</sub>

29.76

<mark>24.91</mark>₽





3. The Aux Factor is a notch filter switch box loss, this item is not used.



#### Above 1GHz

			802.11b			
			annel: Lowest ch tector: Peak Valu			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4824.00	54.52	-9.46	45.06	74.00	28.94	Vertical
4824.00	54.44	-9.46	44.98	74.00	29.02	Horizonta
		Dete	ctor: Average Va	lue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4824.00	47.67	-9.46	38.21	54.00	15.79	Vertical
4824.00	48.35	-9.46	38.89	54.00	15.11	Horizonta
		Test ch	annel: Middle ch	annel		
		Det	tector: Peak Valu	le	1	
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	54.60	-9.11	45.49	74.00	28.51	Vertical
4874.00	54.20	-9.11	45.09	74.00	28.91	Horizonta
		Dete	ctor: Average Va	llue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	47.39	-9.11	38.28	54.00	15.72	Vertical
4874.00	48.76	-9.11	39.65	54.00	14.35	Horizonta
		Tost ch	annel: Highest cl	annel		
			tector: Peak Valu			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4924.00	54.25	-8.74	45.51	74.00	28.49	Vertical
4924.00	54.43	-8.74	45.69	74.00	28.31	Horizonta
		Dete	ctor: Average Va	llue	1	
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4924.00	47.32	-8.74	38.58	54.00	15.42	Vertical
4924.00		1	39.91	54.00	1	1



			802.11g			
			annel: Lowest ch			
_	I <b>-</b>	De	tector: Peak Valu		T	
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4824.00	54.06	-9.46	44.60	74.00	29.40	Vertical
4824.00	54.74	-9.46	45.28	74.00	28.72	Horizonta
		Dete	ctor: Average Va	alue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4824.00	47.65	-9.46	38.19	54.00	15.81	Vertical
4824.00	47.97	-9.46	38.51	54.00	15.49	Horizonta
		Test ch	annel: Middle ch	annel		
			tector: Peak Valu			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	53.73	-9.11	44.62	74.00	29.38	Vertical
4874.00	54.47	-9.11	45.36	74.00	23.50	Horizonta
407 4.00			ctor: Average Va		20.04	TIONZONIC
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	47.81	-9.11	38.70	54.00	15.30	Vertical
4874.00	48.18	-9.11	39.07	54.00	14.93	Horizonta
			annel: Highest cl tector: Peak Valı			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4924.00	54.01	-8.74	45.27	74.00	28.73	Vertical
4924.00	54.55	-8.74	45.81	74.00	28.19	Horizonta
		Dete	ctor: Average Va	alue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4924.00	47.70	-8.74	38.96	54.00	15.04	Vertical
4924.00	47.68	-8.74	38.94	54.00	15.06	Horizonta
	Receiver Read level levels of other freau		er than the limit 20	dB and not show in te	est report	



			802.11n(HT20) annel: Lowest ch	annol		
			tector: Peak Valu			
Frequency	Read Level	De	Level	Limit Line	Margin	
(MHz)	(dBuV)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	Polarizatio
4824.00	53.95	-9.46	44.49	74.00	29.51	Vertical
4824.00	54.57	-9.46	45.11	74.00	28.89	Horizonta
		Dete	ctor: Average Va	lue	1	
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4824.00	47.21	-9.46	37.75	54.00	16.25	Vertical
4824.00	48.35	-9.46	38.89	54.00	15.11	Horizonta
		Tost ch	annel: Middle ch	annal		
			tector: Peak Valu			
Fraguanay	Read Level	De	Level	Limit Line	Margin	
Frequency (MHz)	(dBuV)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	Polarizatio
4874.00	53.57	-9.11	44.46	74.00	29.54	Vertical
4874.00	54.08	-9.11	44.97	74.00	29.03	Horizonta
	T	Dete	ctor: Average Va	lue	1	
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	47.07	-9.11	37.96	54.00	16.04	Vertical
4874.00	48.21	-9.11	39.10	54.00	14.90	Horizonta
		Test cha	annel: Highest ch	nannel		
			tector: Peak Valu			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4924.00	53.58	-8.74	44.84	74.00	29.16	Vertical
4924.00	54.28	-8.74	45.54	74.00	28.46	Horizonta
		Dete	ctor: Average Va	lue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4924.00	47.38	-8.74	38.64	54.00	15.36	Vertical
4924.00	48.31	-8.74	39.57	54.00	14.43	Horizonta



			802.11n(HT40)			
			annel: Lowest ch			
_		Det	tector: Peak Valu			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4844.00	54.00	-9.32	44.68	74.00	29.32	Vertical
4844.00	54.58	-9.32	45.26	74.00	28.74	Horizonta
		Dete	ctor: Average Va	lue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4844.00	46.83	-9.32	37.51	54.00	16.49	Vertical
4844.00	48.19	-9.32	38.87	54.00	15.13	Horizonta
		Tost ch	annel: Middle ch	annal		
			ector: Peak Valu			
<b>F</b>	Des 11 a st	Del		-	Manain	
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	53.82	-9.11	44.71	74.00	29.29	Vertical
4874.00	54.52	-9.11	45.41	74.00	28.59	Horizonta
		Dete	ctor: Average Va	lue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4874.00	46.36	-9.11	37.25	54.00	16.75	Vertical
4874.00	48.11	-9.11	39.00	54.00	15.00	Horizonta
		Tost ch	annel: Highest ch	annal		
			ector: Peak Valu			
Fraguanay	Read Level	Del	Level	Limit Line	Margin	
Frequency (MHz)	(dBuV)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	Polarizatio
4904.00	53.66	-8.90	44.76	74.00	29.24	Vertical
4904.00	54.66	-8.90	45.76	74.00	28.24	Horizonta
	0.000	1	ctor: Average Va			1.1011201110
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4904.00	46.80	-8.90	37.90	54.00	16.10	Vertical
4904.00						