

Report No: JYTSZB-R01-2100620

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 B		
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:



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.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Version 2

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

Tested by:

Mike.OU Test Engineer Winner Mang Project Engineer

21 Oct., 2021 Date:

Date:

Reviewed by:

Project No.: JYTSZE2109109

21 Oct., 2021



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4 Test Summary

Test Item	Section in CFR 47	Result		
Conducted Emission	Part 15.107	Pass		
Radiated Emission	Part 15.109	Pass		
Remark: 1. Pass: The EUT complies with the essential requirements in the standard. 2. N/A: The EUT not applicable of the test item.				
Test Method: ANSI C63.4:2014				



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		
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.		

5.3 Test Mode

Detail description
Keep the EUT in Downloading mode(Worst case)
Keep the EUT in Charging+Recording mode
Keep the EUT in Charging+Playing mode
Keep the EUT in FM receiver mode
Keep the EUT in GPS receiver mode

The sample was placed 0.8m 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.

5.4 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



5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX7070	PTIPLEX7070 2J8XSZ2	
DELL	MONITOR	SE2018HR	3M7QPY2	DoC
DELL	KEYBOARD	KB216d	N/A	DoC
DELL	MOUSE	MS116t1	N/A	DoC
HP	Printer	HP LaserJet P1007	VNFP409729	DoC

5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

5.7 Description of Cable Used

Cable Type	Description	Length	From	То
Detached USB Cable	Shielding	1.0m	EUT	PC/Adapter

5.8 Additions to, deviations, or exclusions from the method

No

5.9 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>

5.10Laboratory 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



5.11 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	
ISN	Schwarzbeck	CAT3 8158	#96	03-03-2021	03-02-2022	
ISN	Schwarzbeck	CAT5 8158	#166	03-03-2021	03-02-2022	
ISN	Schwarzbeck	NTFM 8158	#126	03-03-2021	03-02-2022	
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			





6 Test results and Measurement Data

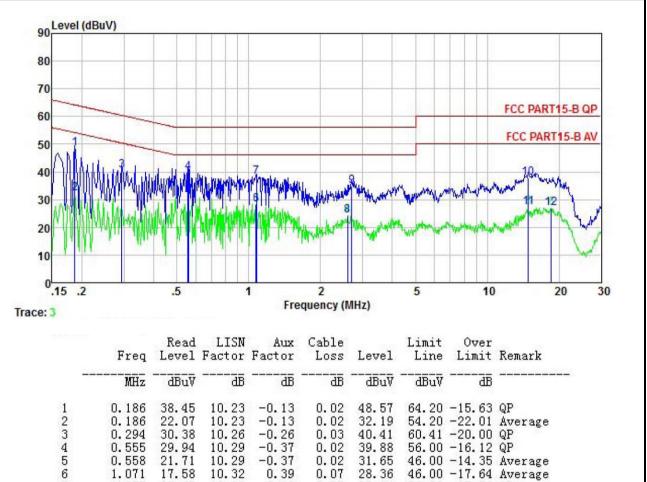
6.1 Conducted Emission

Test Requirement:	FCC Part 15 B Section 15.107		
Test Frequency Range:	150kHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	Frequency range (MHz)		(dBµV)
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5 0.5-30	56 60	46 50
	* Decreases with the logarithm		50
Test setup:	Reference Plane	or the frequency.	
Test procedure	Test table/Insulation plane Remarkc E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m	EMI Receiver	
Test procedure	 The E.U.T and simulators are impedance stabilization netw coupling impedance for the n The peripheral devices are a LISN that provides a 50ohm/ termination. (Please refers to photographs). Both sides of A.C. line are interference. In order to fin positions of equipment and according to ANSI C63.4(la) 	rork(L.I.S.N.). The prov neasuring equipment. Iso connected to the m 50uH coupling impeda the block diagram of t checked for maximum d the maximum emissi all of the interface cat	ide a 50ohm/50uH nain power through a nce with 50ohm the test setup and conducted on, the relative oles must be changed
Test Instruments:	Refer to section 5.11 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Pass		



Measurement data:

Product name:	Voter Identification Unit	Product model:	VIU-500 Model 700
Test by:	Mike	Test mode:	PC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



28.36

38.24

24.14

34.97

37.90

27.09

26.89

56.00 -17.76 QP

56.00 -21.03 QP

60.00 -22.10 QP

46.00 -21.86 Average

50.00 -22.91 Average

50.00 -23.11 Average

0.07

0.07

0.12

0.11

0.14

0.14

0.15

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.

10.32

10.32

10.34

10.34

10.76

10.76

10.87

2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.

0.38

-0.25

-0.24

3.54

3.54

1.59

Final Level =Receiver Read level + LISN Factor + Cable Loss. 3.

17.58

27.47

13.93

24.76

23.46

12.65

14.28

1.071

1.077

2.594

2.707

14.828

14.828

18.524

7

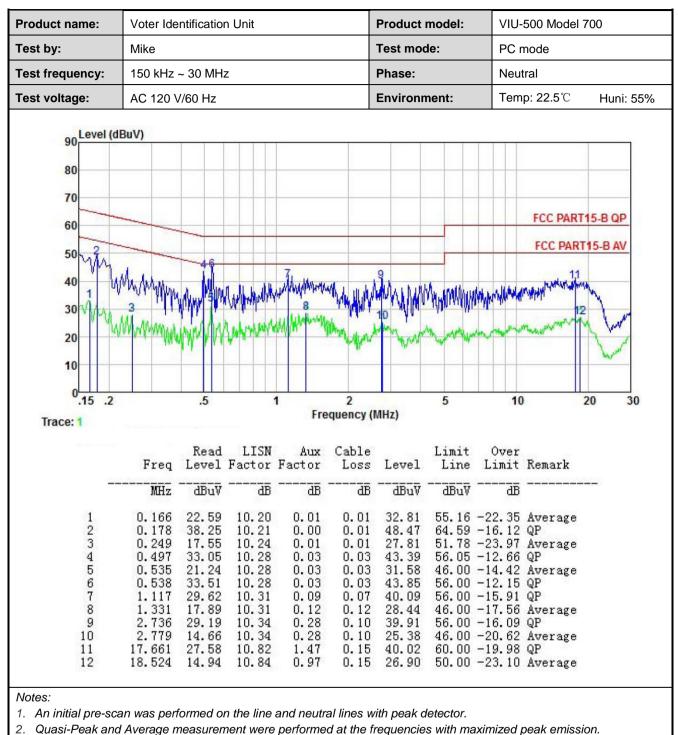
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9

10

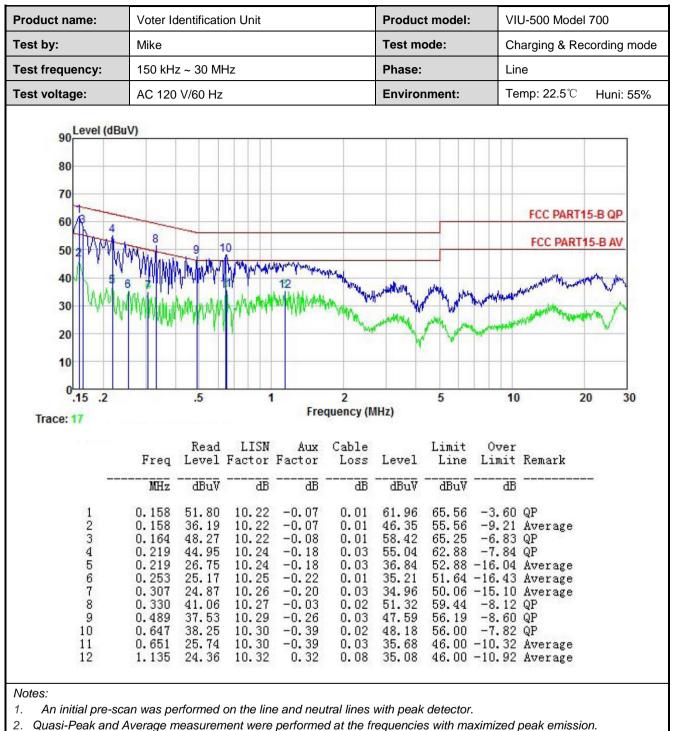
11 12





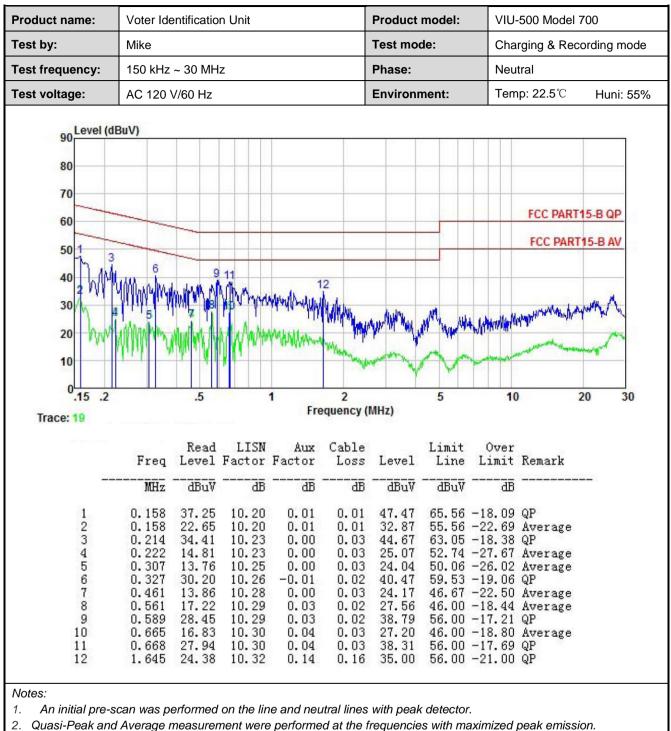
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.





3. Final Level =Receiver Read level + LISN Factor + Cable Loss.





3. Final Level =Receiver Read level + LISN Factor + Cable Loss.



6.2 Radiated Emission

Test Requirement:	FCC Part 15 B Se	ection 15.109	9			
Test Frequency Range:	30MHz to 6000MI	Hz				
Test site:	Measurement Dis	tance: 3m (S	Sem	i-Anechoic (Chamber)	
Receiver setup:	Frequency	Detector	r	RBW	VBW	Remark
	30MHz-1GHz	Quasi-pea	ak	120kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak		1MHz	3MHz	Peak Value
	Above IGHZ	RMS		1MHz	3MHz	Average Value
Limit:	Frequenc		Lim	nit (dBuV/m	@3m)	Remark
	30MHz-88M			40.0		Quasi-peak Value
	88MHz-216			43.5		Quasi-peak Value
	216MHz-960			46.0		Quasi-peak Value
	960MHz-1G	GHz		54.0		Quasi-peak Value
	Above 1GI	47		54.0		Average Value
	/	12		74.0		Peak Value
Test setup:	Below 1GHz	4m		Rece]
		EUT		Horn Antenna Horn Antenna erce Plane	Antenna Tower	
Test Procedure:	ground at a 3 n degrees to dete 2. The EUT was s which was mou 3. The antenna he ground to deter	neter semi-a ermine the p set 3 meters unted on the eight is varie rmine the ma	anecl oositi awa top ed fro axim	hoic camber on of the hig ay from the in of a variable om one mete um value of	The table ghest radiat nterference e-height an er to four m the field st	e-receiving antenna, tenna tower. neters above the

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	4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.11 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All of the observed value above 6GHz ware the niose floor , which were no recorded



Measurement Data:

	t Name	e:	Vote	er Identi	ficati	on Ui	nit			Produ	ct Model:	VIU-5	500 Mod	el 700
est By	/:		Mike)						Test n	node:	PC m	node	
est Fr	equen	cy:	30 N	/IHz ~ 1	GHz	2				Polari	zation:	Vertio	cal	
est Vo	oltage:		AC [·]	120/60H	łz					Enviro	onment:	Temp	⊳: 24 ℃	Huni: 57%
	120							FCC PART 15	B CLASS I	3				
	110													
	100													
	90 80													
[m]/	70													
Level[dBµV/m]	60											FCC PAF	RT 15 B CLASS	B-QP Limit
Level	50													
	40													⁶
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	10					"here	Marya	Willitshawile .	1	and the second s	Type: Market States			
	0							and and an an an and an an						
	30M						100M	Frequen						1G
									CVIHZI					
		OD Limit		Mediael DK				rioquori	cy[HZ]					
	-	QP Limit QP Detector		- Vertical PK					cy[HZ]					
	-			- Vertical PK				i equoi	cy[HZ]					
ľ	-	QP Detector	_		blu		evel			imit⊬	Margin			4
	NO.¢	QP Detector Freq.4	μ	Reading			evel⊮ uV/mì	Factor	L	imit⊭ uV/mla	Margin⊮ [dB]৶	Trace	Pola	rity <i>₀</i>
		QP Detector Freq.4 [MHz]	ц ф	Reading BµV/m	וייים ו∂	[dB	μV/m]	Factor∉]∉ [dB]∉	L [dB	<u>µV</u> /m]⊭	[dB]∂			
-	1 e	 QP Detector Freq. [MHz] 39.1189 	ب چ 9ب	Reading BuV/m 50.65	n]₽ ₩	[dB 3(µV/m] 6.09₽	Factor∉]∉ [dB]∉ -14.56¢	L [dB 4	µV/m]∞ 0.00₽	[dB]∉ 3.91∉	PK.₀	Verti	ical₽
-	1₽ 2₽	 QP Detector Freq. [MHz] 39.118 53.767 	μ φ 9φ 4φ	Reading BµV/m 50.65 51.31	η]ο ίο ο	[dB 3(3(µV/m] 6.09₽ 6.67₽	Factor (*) [dB] (*) -14.56 (*) -14.64 (*)	L [dB 4	µV/m]₽ 0.00₽ 0.00₽	[dB].₀ 3.91.₀ 3.33.₀	PK∘ PK∘	Verti Verti	icale (
-	1 e	 QP Detector Freq. [MHz] 39.1189 	2 92 42 5	Reading BuV/m 50.65	ח] הם הם הם	[dB 30 30 20	µV/m] 6.09₽	Factor∉]∉ [dB]∉ -14.56¢	L [dB 4 4 4	µV/m]∞ 0.00₽	[dB]∉ 3.91∉	PK.₀	Verti	icale icale
-	1₊ 2₽ 3₽	 QP Detector Freq. [MHz] 39.118 53.767 111.58 	900 400 40 40	Reading BuV/m 50.65 51.31 42.47	ו] הם הם הם הם	[dB 30 30 20 20	µV/m] 6.09₽ 6.67₽ 6.75₽	Factor [dB] -14.56 -14.64 -15.72	L [dB 4 4 4 4 4	µV/m]∘ 0.00₀ 0.00₀ 3.50₀	[dB]↓ 3.91↓ 3.33↓ 16.75↓	PK.₀ PK.₀ PK.₀	Verti Verti Verti	icale icale icale
-	1.0 2.0 3.0 4.0	 QP Detector Freq. [MHz] 39.118 53.767 111.58 301.72 	9.0 9.0 4.0 5 4 5	Reading BuV/m 50.65 51.31 42.47 42.03]]₽ ₽ ₽ ₽ ₽	[dB 30 30 20 20 20 20	µV/m] 6.09∉ 6.67∉ 6.75₽ 9.37₽	Factor ↓ [dB] −14.56 − −14.64 − −15.72 − −12.66 −	L [dB 4 4 4 4 4 4 4 4	µV/m]@ 0.00@ 0.00@ 3.50@ 6.00@	[dB]↓ 3.91↓ 3.33↓ 16.75↓ 16.63↓	РК» РК» РК» РК»	Verti Verti Verti Verti	icale icale icale icale icale
-	1.0 2.0 3.0 4.0 5.0	 QP Detector Freq. [MHz] 39.118 53.767 111.58 301.72 554.72 	9.0 9.0 4.0 5 4 5	Reading BuV/m 50.65 51.31 42.47 42.03 34.28]]₽ ₽ ₽ ₽ ₽	[dB 30 30 20 20 20 20	µV/m] 6.09¢ 6.67¢ 6.75¢ 9.37¢ 7.56¢	Factor.↓ [dB].↓ -14.56.↓ -14.64.↓ -15.72.↓ -12.66.↓ -6.72.↓	L [dB 4 4 4 4 4 4 4 4	µV/m]₽ 0.00₽ 0.00₽ 3.50₽ 6.00₽ 6.00₽	[dB]. 3.91. 3.33. 16.75. 16.63. 18.44.	PK PK PK PK PK PK	Verti Verti Verti Verti Verti	icale icale icale icale icale
	1+2 2+2 3+2 4+2 5+2 6+2	 QP Detector Freq. [MHz] 39.118 53.767 111.58 301.72 554.72 	9.0 9.0 4.0 5 4 5	Reading BuV/m 50.65 51.31 42.47 42.03 34.28]]₽ ₽ ₽ ₽ ₽	[dB 30 30 20 20 20 20	µV/m] 6.09¢ 6.67¢ 6.75¢ 9.37¢ 7.56¢	Factor.↓ [dB].↓ -14.56.↓ -14.64.↓ -15.72.↓ -12.66.↓ -6.72.↓	L [dB 4 4 4 4 4 4 4 4	µV/m]₽ 0.00₽ 0.00₽ 3.50₽ 6.00₽ 6.00₽	[dB]. 3.91. 3.33. 16.75. 16.63. 18.44.	PK PK PK PK PK PK	Verti Verti Verti Verti Verti	icale icale icale icale icale
Peemark Eine	1↔ 2↔ 3↔ 4↔ 5↔ 6↔	 QP Detector Freq [MHz] 39.1184 53.767 111.584 301.72 554.72 976.03 	990 940 5 4 4 5 5 8	Reading BuV/m 50.65 51.31 42.47 42.03 34.28 40.07	ון אין אין אין אין אין אין אין אין אין אי	[dB 34 24 25 25 35	µV/m] 6.09¢ 6.67¢ 6.75¢ 9.37¢ 7.56¢ 9.17¢	Factor [dB] -14.56 -14.64 -15.72 -12.66 -0.90	L [dB 4 4 4 4 4 4 4 5	µV/m]≠ 0.00↔ 0.00↔ 3.50↔ 6.00↔ 6.00↔ 4.00↔	[dB], 3.91, 3.33, 16.75, 16.63, 18.44, 14.83, 14.83,	PK+ PK+ PK+ PK+ PK+ PK+ PK+	Verti Verti Verti Verti Verti	icale icale icale icale icale
. Fina	1+ 2∞ 3∞ 4∞ 5∞ 6+ (;	 QP Detector Freq. [MHz] 39.118 53.767 111.58 301.72 554.72 976.03 	90 40 5 4 8	Reading BµV/m 50.65 51.31 42.47 42.03 34.28 40.07	ן בי בי בי בי בי בי בי בי בי בי בי בי בי	[dB 34 24 25 25 35 35	µV/mj 6.09.0 6.67.0 9.37.0 7.56.0 9.17.0 9.17.0	Factor.↓ [dB].↓ -14.56.↓ -14.64.↓ -15.72.↓ -12.66.↓ -6.72.↓	L [dB 4 4 4 4 4 4 5 <i>Loss</i>	µV/m] = 0.00¢ 0.00¢ 3.50¢ 6.00¢ 6.00¢ 4.00¢	[dB] 3.91.0 3.33.0 16.75.0 16.63.0 18.44.0 14.83.0 mplifier Factor	РК. РК. РК. РК. РК. РК.	Verti Verti Verti Verti Verti	icale icale icale icale icale



	t Name	e:	oter Iden	tincatio	n Unit		Pro	oduct Mod	el:	VIU-5	00 Mode	el 700
Test By	:	ſ	like				Те	st mode:		PC m	ode	
Test Fre	equen	cy: 3	0 MHz ~ ⁻	1 GHz			Ро	larization:		Horizo	ontal	
Test Vo	Itage:	ļ	C 120/60	Hz			En	vironment	-	Temp	: 24 ℃	Huni: 57
	120					FCC PART 15 E	CLASS B					
	110											
	100											
	90											
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		manna			100M							1G
	10	man M				Frequency	y[Hz]					1G
	10	- QP Limit		PK		Frequency	y[Hz]					16
	10			PK		Frequenc	y[Hz]					1G
	10	- QP Limit		PK		Frequenc	y[Hz]					16
	10	- QP Limit				Frequence	/[Hz]		ine			4
	10	QP Limit QP Detector	- Horizontal	ng[d	100M			Marg	in⊎ Tr	ace	Polar	4
	10	QP Limit ↓ QP Detector Freq	- Horizontal Readin BuV/I	ng[d_ m]⊬	100M	Factor∉	Limit	n]e [dB	in⊭ ∣∂ Tra	ace	Polar Horizo	ity. ²
-	10	OP Limit OP Detector Freq [MHz]	- Horizontal Readin BµV/r 3 37.0	ng[d m]@	100M Level-∞ [dBµV/m]-	Factor⊮ [dB]∘	Limit₊ [dBµV/n	Marg [dB 3 17.5	ine ∣e Tra 7e F			tity⊋ tal₽
-	10	— QP Limit QP Detector [MHz] 53.0883	- Horizontal Readin BµV/r 3 37.0	ng[d m].₀ m].₀ 18.₀	100M	Factor⊮ [dB]∞ -14.65⊮	Limit- [dBµV/n 40.004	n] → [dB → 17.5 → 10.0	in⊷ I⇔ Tra T₊ F D₊ F	۶K∘	Horizo	iity∞ ntal∞ ntal∞
	NO.**	QP Limit → QP Detector Freq		ng[d] m]-2 18-2 10-2 18-2	100M Level-/ [dBµV/m] 22.43-/ 30.00-/	Factor₊ [dB]- -14.65₊ -17.00₊	Limit- [dBµV/n 40.00- 40.00-	Marg [dB - 17.5 - 10.0 - 9.83	ine Tra le Tra 7e F 0e F 3e F	νK₀ νK₀	Horizo Horizo	rity⊋ ontal₽ ontal₽ ontal₽
	10 0 30M NO 1.e. 2.e. 3.e.	QP Limit → QP Detector Freq [MHz] 53.0883 71.8112 111.682	Horizontal Readin ВµV/и 3 37.0 3 47.0 49.3	ng[d] m].₀ 8.₀ 0.₀ 8.₀ 8.₀ 6.₀	100M Level	Factor [dB] -14.65 -17.00 -15.71	Limit- [dBuV/n 40.00- 40.00- 43.50-	Marg [dB] 2 17.5 2 10.0 2 9.83 2 8.12	in⊷ I⇔ Tra T₂ F 0∞ F 3₂ F 2₂ F	PK+ PK+ PK+	Horizo Horizo Horizo	rity⊋ Intal₽ Intal₽ Intal₽ Intal₽

2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Toduci	Name	۰: ۱	/oter Identificat	ion Unit		Produ	ct Model:	VIU-5	00 Model 700
Fest By:		I	Vike			Test n	node:	PC m	ode
Fest Free	quenc	;y:	30 MHz ~ 1 GH	Z		Polari	zation:	Vertic	al
Fest Vol	tage:		AC 120/60Hz			Enviro	Environment:		: 24°C Huni: 57
	120				FCC PART 15 B	CLASS B			
	110								
	100								
	90								
2	80								
Level[dBµV/m]	70								
el[dE	60							FCC PART	T 15 B CLASS B-QP Limit
Lev	50 40								
	30	Am	munhung			4			∲ ⁶
	20	where we	A	اللقو	^* **		M.	and the second se	Wheel also and the second second
	10			- Uningelikuster Vill	William	www.	Manager 1		
	0 30M			100M					1G
	30101			TUUM	Frequency	(Hz)			10
						([1]2]			
	_	- OP Limit				([12]			
	•	QP Limit QP Detector	Vertical PK			[i i 2]			
	•		Vertical PK			(i i £]			
-		QP Detector		Level	Factor⊮		Margina		4
	∙ NO.≉		Reading[d	Level⊮ [dBµV/m]∂	Factor⊮ [dB]₀	Limit [dBµV/m]∘	Margin.₀ [dB]₀	Trace	Polarity⇔
		QP Detector	Reading[d BµV/m].			Limite		Trace ²⁰ PK ²⁰	Polarity Vertical₀
	NO.₽	QP Detector	Reading[d ВµV/m]- Ф 50.73¢	[dBµV/m]∂	[dB]∂	Limit⊭ [dBµV/m]∘	[dB]@		
	NO.≁ 1₽	QP Detector Freq. 4 [MHz] 4 53.7674	Reading[d BμV/m] φ 50.73φ φ 51.30φ	[dBµV/m]⊮ 36.09₽	[dB]⊬ -14.64₽	Limit.₀ [dBµV/m]₀ 40.00,₀	[dB]₽ 3.91₽	PK.	Vertical.
	NO.≁ 1₽ 2₽	 QP Detector Freq [MHz] ← 53.7674 53.9614 	Reading[d BµV/m]₂ ∞ 50.73₂ ∞ 51.30₂ 42.97₂	[dBµV/m].₀ 36.09,₀ 36.67,₀	[dB]↓ -14.64↓ -14.63↓	Limit. [dBµV/m]- 40.00. 40.00.	[dB]∞ 3.91₽ 3.33₽	PK. PK.	Vertical a
	NO.∻ 1∻ 2∻ 3∻	Freq.* [MHz] 53.7674 53.9614 169.111	Reading[d BµV/m]₀ φ 50.73,₀ φ 51.30,₀ 42.97,₀ 46.80,₀	[dBµV/m]₀ 36.09₀ 36.67₀ 25.93₀	[dB]@ -14.64@ -14.63@ -17.04@	Limit. [dBµV/m]* 40.00¢ 40.00¢ 43.50¢	[dB]. 3.91. 3.33. 17.57.	PK₀ PK₀ PK₀	Vertical Vertical Vertical
	NO.* 1* 2* 3* 4*	 P Detector Freq. • [MHz] • 53.7674 53.9614 169.111 183.760 	Reading[d BµV/m]₀ φ 50.73₀ φ 51.30₀ 42.97₀ 46.80₀ 34.78₀	[dBµV/m]⇒ 36.09↔ 36.67↔ 25.93↔ 30.33↔	[dB] -14.64+ -14.63+ -17.04+ -16.47+	Limit- [dBµV/m]- 40.00+ 40.00+ 43.50+ 43.50+	[dB] 3.91+ 3.33+ 17.57+ 13.17+	PKe PKe PKe PKe	Verticale Verticale Verticale Verticale

2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product	Name	e: V	oter Identificati	ion Unit		Produ	ct Model:	VIU-5	00 Mode	1700
Test By	:	М	ike			Test n	node:	PC m	ode	
Test Fre	equenc	:y: 30) MHz ~ 1 GHz	Z		Polari	zation:	Horizo	ontal	
Test Vo	Itage:	A	C 120/60Hz			Enviro	onment:	Temp	: 24 ℃	Huni: 57%
Level[dBµV/m]	120 110 90 80 70 60 50 40				FCC PART 15 B	ICLASS B			T 15 B CLASS B	QP Limit ↓
	30 20 10 0 30M	- QP Limit QP Detector	- Horizontal PK	100M	Frequency	/[Hz]				16
[20 10	QP Limit QP Detector	Reading[d	100M	Frequency Frequency	Limite	Margine	A STATE OF A	Polar	
	20 10 30M	— QP Limit → QP Detector		100M	Frequency				Polar	ty،
-	20 10	QP Limit QP Detector Freq.↔ [MHz]2	Reading[d BuV/m]⊬	100M Level₊ [dBµV/m]₊	Frequency Factor⊷ [dB]⊷	Limit.₀ [dBµV/m].₀	Margin.⊭ [dB]₽	Trace		ity.≓ ntal.e
	20 10	QP Limit QP Detector Freq.↔ [MHz]→ 52.9913↔	Reading[d BuV/m]- 36.74⊷	100M Level⊷ [dBµV/m]⊷ 22.09⊷	Frequency Frequency [dB]= -14.65+	Limit⊮ [dBµV/m]⊮ 40.00₽	Margin.₀ [dB].₀ 17.91.₀	Trace- PK-	Horizo	ity⊭ ntal₽ ntal₽
	20 10 2044 0 30M NO.* 1e ² 2e ³	- QP Limit QP Detector Freq.↔ [MHz]→ 52.9913↔ 68.5129↔	Reading[d BµV/m]+ 36.74+ 45.32+	100M	Frequency Frequency [dB]- -14.65- -16.55-	Limit. [dBµV/m]- 40.00¢ 40.00¢	Margin [dB] 17.91 11.23	Trace. PKe PKe	Horizo Horizo	ity⊮ ntal⊮ ntal⊮ ntal⊮
	20 10 2044 0 30M NO.* 1.* 2.* 3.*	QP Limit QP Detector Freq. [MHz] 52.9913 68.5129 111.585	Reading[d BµV/m] 36.74+2 45.32+2 50.19+2	100M	Frequency Frequency [dB]= -14.65= -16.55= -15.72=	Limit。 [dBµV/m]。 40.00¢ 40.00¢ 43.50¢	Margin. [dB]. 17.91. 11.23. 9.03.	Trace PKe PKe PKe	Horizo Horizo Horizo	ity.∞ ntal.∞ ntal.∞ ntal.∞ ntal.∞



Above 1GHz:

	t Name	e:	Voter Identifica	ation Unit		Product	t Model:	VIU-50	0 Model	700
Гest By	/:		Mike			Test mo	ode:	PC mo	de	
Test Fre	equen	cy:	1 GHz ~ 6 GH	Z		Polariza	ation:	Vertica	I	
Test Vo	ltage:		AC 120/60Hz			Environ	ment:	Temp:	24 ℃	Huni: 57%
					FCC PART 1	5 B				
	120									
	100									
	90									
E,	80								FCC PART 151	B-PK Limit
Level[dBµV/m]	60								FCC PART 151	B-AV Limit
eve	50						2	3	No. of Concession	the Andrewski Andrewski
	40 30	And the second second		المراجع فالمواضية بالمراحة ليوارج والجامعة والمراجعة	المروطية المرومية ومناطقة المرومية ومناطقة المرومية والمرومية والمرومية والمرومية والمرومية والمرومية والمرومي المرومية		and a second	harrow descent and a standard	and the second	e pela professione de la construcción de la
	20	anti-eta-lana anti-eta-lana anti-eta dalaria	مەلەرىيىنى ئەسلىرىنى ھەرىيەر بىرىيەر بى	and a second and a second s	tin television and a second					
	20+									
	10									
				2G	Frequency[ł	3G Hz]	4	G	5G	6G
	10	PK Limit	AV Detector	Vertical PK Vertical	IAV	łz]		G	56	6G
	10	PK Detector	AV Detector Reading	Vertical PK — Vertical	IAV Factor⊎	tz] Limite	Margin.	G Trace⊮	5G Pola	
	10 0 1G	Freq.	AV Detector Reading [dBµV/m]	Vertical PK — Vertical Level- [dBuV/m]-	Factor [dB]	tz] Limit⊮ [dBµV/m]⊮	Margin∉ [dB]∘	Trace	Pola	rity⊬
	10 0 16 NO.*	Freq. [MHz] 3606.8	 AV Detector Reading [dBµV/m] 50.40. 	Vertical PK — Vertica	Factor [dB] -14.88	±z] Limit⊷ [dBµV/m]⊷ 54.00⊷	Margin.∉ [dB].₀ 18.48⊷	Trace≓ AV.∞	Pola Verti	rity⊭ cale
	10 0 1G NO.↔ 1↔ 2↔	 PK Detector Freq. [MHz] 3606.8 3634.3 		Vertical PK — Vertica Level- [dBµV/m] 35.52. 43.41.	Factor [dB] -14.88 -14.76	Limit [dBµV/m] 54.00 74.00	Margin⊮ [dB].₀ 18.48⊷ 30.59⊷	Trace⊧ AV∉ PK∉	Pola Verti Verti	rity∍ cal₊
	10 0 16 NO.* 2* 3*	 PK Detector Freq. [MHz] 3606.8 3634.3 4443.1 	 AV Detector Reading [dBµV/m] 50.40.0 58.17.0 57.68.0 	Vertical PK — Vertical 2 [dBµV/m] 3 35.52,2 4 3.41,2 4 6.66,2	Factor [dB] -14.88 -14.76 -11.02	Limit [dBµV/m] 54.00 74.00 74.00	Margin. [dB] 18.48 30.59 27.34	Trace AV PK PK	Pola Verti Verti Verti	rity∍ cal₊ cal₊
-	10 0 1G NO.≁ ² 1e ² 2e ² 3e ² 4e ²	 PK Detector Freq. [MHz] 3606.8 3634.3 4443.1 4504.3 	 AV Detector Reading [dBµV/m] 50.40 758.17 257.68 749.12 	Vertical PK — Vertical Develor (dBµV/m].o 35.52.o 43.41.o 46.66.o 38.33.o	Factor [dB].0 -14.88.0 -14.76.0 -11.02.0 -10.79.0	Limit [dBµV/m]• 54.00• 74.00• 74.00• 54.00•	Margin. [dB]. 18.48. 30.59. 27.34. 15.67.	Trace AV¢ PK¢ PK¢ AV¢	Pola Verti Verti Verti Verti	rity∍ cal₊ cal₊ cal₊ cal₊
	10 0 16 NO.* 2* 3*	 PK Detector Freq. [MHz] 3606.8 3634.3 4443.1 	 AV Detector Reading [dBµV/m] 50.40 758.17 257.68 749.12 56.88 	Vertical PK — Vertical 2 [dBµV/m] 3 35.52,2 4 3.41,2 4 6.66,2	Factor [dB] -14.88 -14.76 -11.02	Limit [dBµV/m] 54.00 74.00 74.00	Margin. [dB] 18.48 30.59 27.34	Trace AV PK PK	Pola Verti Verti Verti	rity∍ cal₂ cal₂ cal₂ cal₂ cal₂



Product	Name):	/oter Identificati	on Unit		Produc	t Model:	VIU-50	0 Model 700	
Test By	:	Ν	⁄like			Test m	ode:	PC mo	de	
Test Fre	equence	cy: 1	GHz ~ 6 GHz			Polariza	ation:	Horizontal		
Test Vo	Itage:	ŀ	AC 120/60Hz			Enviror	ment:	Temp:	24℃ Huni: 57	
	0									
	120 ₁				FCC PART 1	5 B				
	110									
	100									
	90 80									
[ɯ//	70								FCC PART 15 B-PK Limit	
Level[dBµV/m]	60								FCC PART 15 B-AV Limit	
Leve	50						1			
	40 30	ant-t		مليكة المركبة المركبين المركبة	ىرىنىلىلارىرىلىلىدىدىرىنىرىزىرىلىلارلىس مىزىنارلىلا	an de anticipation de la constantina d La constantina de la c	2 Contraction of the Wine	and a manufacture of the second s	And and the second s	
	20	ing from more thank the second s	มาตรีที่ชีญารีตารีกฎาสีของสมัครสารางการการการการการการสาราช	\$\$\$\$\$\$\$;~\$~~~~\$\$\$\$\$\$\$\$\$\$\$\$\$						
	10									
	0 1G			2G		3G	4	G	5G 6G	
	10			20	Frequency[H			0	30 00	
	_	 PK Limit PK Detector 	AV Limit Ho AV Detector	orizontal PK — Horiz	zontal AV					
	•	PK Delector	 Av Delector 							
		Freq.+		Level⊭	Factor.₀	Limit⊬	Margin⊮			
[NO.@		Reading	Level⊭ [dBµV/m]∉	Factor⊬ [dB]∉	Limit⊭ [dBµV/m]⊮	Margin⊮ [dB]∉	Trace	Polarity	
ļ		Freq.*	Reading⊮ [dBµV/m]₀				-	Trace.	Polarity₀ Horizontal₀	
-	NO.@	Freq.∉ [MHz]∉	Reading. [dBµV/m]. 58.93.	[dBµV/m]₀	[dB]∉	[dBµV/m]∂	[dB]∉			
	NO.* 1*	Freq [MHz] 3301.25	Reading [dBµV/m] 5 58.93.0 50.52.0	[dBµV/m]∉ 43.34∉	[dB] <i>₀</i> -15.59₽	[dBµV/m]⊮ 74.00₽	[dB]∉ 30.66₽	PK₽	Horizontal	
	NO.* 1* 2*	Freq.+ [MHz]+ 3301.25 3321.87	Reading [dBµV/m] 5 58.93.0 7 50.52.0 7	[dBµV/m]. 43.34. 34.99.	[dB]∂ -15.59₽ -15.53₽	[dBµV/m]. 74.00. 54.00.	[dB]∂ 30.66₽ 19.01₽	PK. AV.	Horizontal. Horizontal.	
	NO.~ 1~ 2~ 3~	Freq.+ [MHz]- 3301.25 3321.87 4239.37	Reading. [dBµV/m]. 5 58.93 7 50.52 7 50.07 2	[dBµV/m].₀ 43.34.₀ 34.99.₀ 38.27.₀	[dB].₀ -15.59.₀ -15.53.₀ -11.80.₀	[dBµV/m].₀ 74.00.₀ 54.00.₀ 54.00.₀	[dB] 30.66+ 19.01+ 15.73+	PK.a AV.a AV.a	Horizontal Horizontal Horizontal	

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

2. The emission levels of other frequencies are very lower than the limit and not show in test report.