

DUETECH

ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No. : E14DR-022

AGR No : A14NA-187

Applicant : iVue Pty Ltd.

Address : 59 Noonbinna Crescent, Northbridge, NSW 2063, Australia

Manufacturer : CHAHOO Limited

Address : Pangyo Technovalley B-4F, 631 Sampyeong-dong, Bundang-gu, Sungnam-si,

Gyeonggi-do 463400, South Korea

Type of Equipment : Personal Smart Tagging System

FCC ID. : 2ADQW-TAGOV1

Model Name : Tago V.1

Serial number : N/A

Total page of Report : 6 pages (including this page)

Date of Incoming : November 26, 2014

Date of issue : December 08, 2014

SUMMARY

The equipment complies with the regulation; FCC PART 15 SUBPART C Section 15.247

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Prepared by:

Ki-Hong, Nam / Senior Engineer ONETECH Corp. Approved by:

Gea-Won, Lee / Managing Director ONETECH Corp.

Report No.: E14DR-022

It should not be reproduced except in full, without the written approval of ONETECH Corp.

EMC-003 (Rev.2)

HEAD OFFICE: 301-14 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599) **EMC Testing Div.**: 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-765-8289, FAX: 82-31-766-2904)





CONTENTS

Report No.: E14DR-022

	PAGE	
1. VERIFICATION OF COMPLIANCE	4	
2. GENERAL INFORMATION	5	
2.1 PRODUCT DESCRIPTION	5	
2.2 ALTERNATIVE TYPE(S)/MODEL(S); ALSO COVERED BY THIS TEST REPORT.	5	
3. EUT MODIFICATIONS	5	
4. RADIO FREQUENCY EXPOSURE	6	
4.1 RF Exposure Limit	6	
4.2 EUT DESCRIPTION	6	
4.3 TEST RESULT	6	



Page 3 of 6 Report No.: E14DR-022

Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
E14DR-022	December 08, 2014	Initial Issue	All

HEAD OFFICE: 301-14 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599) **EMC Testing Div.**: 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-765-8289, FAX: 82-31-766-2904)



Page 4 of 6 Report No.: E14DR-022

1. VERIFICATION OF COMPLIANCE

Applicant : iVue Pty Ltd.

Address : 59 Noonbinna Crescent, Northbridge, NSW 2063, Australia

Contact Person : Sung Hyuk Kang / Director

Telephone No. : +61-400-111-117

FCC ID : 2ADQW-TAGOV1

Model Name : Tago V.1

Serial Number : N/A

Date : December 08, 2014

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Personal Smart Tagging System
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2009
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT	
AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED	FOG DART 15 SURDART OF CALL 15 247
UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve	N
Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

^{-.} The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

It should not be reproduced except in full, without the written approval of ONETECH Corp.

EMC-003 (Rev.2)

HEAD OFFICE : 301-14 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599) EMC Testing Div. : 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-765-8289, FAX: 82-31-766-2904)



Page 5 of 6 Report No.: E14DR-022

2. GENERAL INFORMATION

2.1 Product Description

The iVue Pty Ltd., Model Tago V.1 (referred to as the EUT in this report) is a Personal Smart Tagging System. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	Personal Smart Tagging System		
Temperature Range	-25 °C ~ +70 °C		
Operating Frequency	2 402 MHz ~ 2 480 MHz		
RF Output Power	-5.79 dBm		
Number of Channel	40 Channel		
Modulation Type	DSSS		
Antenna Type PCB Pattern Antenna			
USED RF CHIP	Marker: NORDIC Model Name: nRF8002		
Antenna Gain	2.5 dBi		
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	16 MHz		

2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3. EUT MODIFICATIONS

-. None

It should not be reproduced except in full, without the written approval of ONETECH Corp.

EMC-003 (Rev.2)

HEAD OFFICE : 301-14 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599) EMC Testing Div. : 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-765-8289, FAX: 82-31-766-2904)





4. RADIO FREQUENCY EXPOSURE

4.1 RF Exposure Limit

According to the FCC rule 1.1310 the limit for General Population/Uncontrolled exposure is 1 mW/cm^2 for the device operating $1 500 \sim 100 000 \text{ MHz}$.

4.2 EUT Description

4.2 ECT Description			
Kind of EUT	Main Control Unit		
	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz		
	and 498.200 MHz ~ 505.200 MHz		
Occupies Francisco Post	□ WLAN: 2 412 MHz ~ 2 462 MHz		
Operating Frequency Band	\Box WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz		
	□ WLAN: 5 745 MHz ~ 5 825 MHz		
	■ Bluetooth LE: 2 402 MHz ~ 2 480 MHz		
	■ Portable (< 20 cm separation)		
Device Category	☐ Mobile (> 20 cm separation)		
	□ Others		
Max. Output Power	-5.79 dBm		
Used Antenna	Blue Tooth PCB Pattern Antenna		
Used Antenna Gain	2.5 dBi		
	■ MPE		
Exposure Evaluation Applied	□ SAR		
	■ N/A		

4.3 Test Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is [(Max. Power of channel, including tune-up tolerance, mW)/(Mim. test separation distance, mm)] X [$\sqrt{f(GHz)}$] < 3 = [0.631/5)] X $\sqrt{2.402}$ = 0.196

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
Bluetooth LE	2 402	-6 ± 4.0	-2	0.631	5	0.196

It should not be reproduced except in full, without the written approval of ONETECH Corp.

EMC-003 (Rev.2)

Report No.: E14DR-022

HEAD OFFICE : 301-14 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

EMC Testing Div. : 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea (TEL: 82-31-765-8289, FAX: 82-31-766-2904)