

Report No.: FA730730

Project No: CB10604199

# RF Exposure Evaluation Report

Equipment

: V-JET

**Brand Name** 

: WISEJET

Model No.

: V-JET10-T

FCC ID

: 2ALI9V-JET10

Standard

: 47 CFR Part 2.1091

Applicant

: WiseJet Inc.

9F, Nano Fab Center, 291 Daehak-ro Yuseong-gu,

Daejun, South Korea

Manufacturer

: WiseJet Inc.

9F, Nano Fab Center, 291 Daehak-ro Yuseong-gu,

Daejun, South Korea

The product sample received on Mar. 08, 2017 and completely tested on Apr. 17, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with 47 CFR Part 2.1091, and pass the limit.

Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Cliff Chang

SPORTON INTERNATIONAL INC.

Testing Laboratory



### RF Exposure Evaluation Report

### **TABLE OF CONTENTS**

1	GENERAL DESCRIPTION	.4
	EUT General Information	
	Testing Location	
2	MAXIMUM PERMISSIBLE EXPOSURE	.5
2.1	Limit of Maximum Permissible Exposure	
	MPE Calculation Method	
	Calculated Result and Limit	
	OGRAPHS OF EUT V01	

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 FCC ID: 2ALI9V-JET10 Page No. : 2 of 6
Report Version : Rev. 01
Issued Date : Apr. 26, 2017



### **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA730730	Rev. 01	Initial issue of report	Apr. 26, 2017
	1		

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 FCC ID: 2ALI9V-JET10 Page No. : 3 of 6
Report Version : Rev. 01
Issued Date : Apr. 26, 2017



## 1 General Description

### 1.1 EUT General Information

The Channel Plan(s)						
Evaluation Mode Operating Frequency (GHz) Modulation Type						
Low-rate PHY (LRP) Band	Channel 2 LRP: 60.16-60.80	DDCK				
	Channel 3 LRP: 62.32-62.96	BPSK				
Middle-rate PHY (MRP) Band	Channel 2 MRP: 60.48	ODOK				
	Channel 3 MRP: 62.64	QPSK				

### 1.2 Testing Location

Testing Location							
HWA YA ADD: No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.							
	TEL	:	886-3-327-3456 FAX : 886-3-327-0973				
JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.				
	TEL	:	886-3-656-9065 FAX : 886-3-656-9085				

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 FCC ID: 2ALI9V-JET10 Page No. : 4 of 6
Report Version : Rev. 01
Issued Date : Apr. 26, 2017



### 2 Maximum Permissible Exposure

#### 2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz; \*Plane-wave equivalent power density

#### 2.2 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

E (V/m) = 
$$\frac{\sqrt{30 \times P \times G}}{d}$$
 Power Density:  $Pd$  (W/m²) =  $\frac{E^2}{377}$ 

E = Electric field (V/m)

P = RF output power (W)

**G** = EUT Antenna numeric gain (numeric)

**d** = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 FCC ID: 2ALI9V-JET10 Page No. : 5 of 6

Report Version : Rev. 01

Issued Date : Apr. 26, 2017



### RF Exposure Evaluation Report

### 2.3 Calculated Result and Limit

Exposure Environment	General Population / Uncontrolled Exposure						
Temp	<b>22</b> ℃		Humidity	54%			
Test Engineer	Steven Liang		Test Date	Mar. 24, 2017~Apr. 12, 2017			
Integral antenna gain	5 dBi for LRP						
integral antenna gain	9 dBi for MRP						
	Test results						
Maximum EIPR Power of Test Frequency (GHz)	Average EIRP Power (dBm)	Average EIRP Power (mW)	Power Density (S) (mW/cm²)	Separation Distance (cm)	Limit of Power Density (S) (mW/cm²)		
LRP 60.48 GHz	11.19	13.15	0.003	20	1.00		

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 FCC ID: 2ALI9V-JET10 Page No. : 6 of 6
Report Version : Rev. 01
Issued Date : Apr. 26, 2017