

# RF Exposure Evaluation Declaration

Product Name : E-GO  
Model No. : Cruiser  
FCC ID : 2ABB5YUNEECGSFKRX18  
IC : 11554A-Cruiser

Applicant : YUNEEC International (China) Co., Ltd.  
Address : No.388, Zhengwei Road, Jinxi Town, Kunshan,  
Jiangsu

Date of Receipt : Sep. 23, 2013  
Issued Date : Dec. 18, 2013  
Report No. : 139S058R-RF-US-P20V01  
Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, CNAS or any agency of the Government.

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# Test Report Certification

Issued Date : Dec. 18, 2013

Report No. : 139S058R-RF-US-P20V01



Product Name : E-GO  
 Applicant : YUNEEC International (China) Co., Ltd.  
 Address : No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu  
 Manufacturer : YUNEEC International (China) Co., Ltd.  
 Address : No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu  
 Model No. : Cruiser  
 FCC ID : 2ABB5YUNEECGSFKRX18  
 IC : 11554A-Cruiser  
 EUT Voltage : DC: 26.5V  
 Brand Name : YUNEEC  
 Applicable Standard : FCC OET 65  
 RSS-102: Issue 4, March, 2010  
 Test Result : Complied  
 Performed Location : Suzhou EMC Laboratory  
 No.99 Hongye Rd., Suzhou Industrial Park Loufeng  
 Hi-Tech Development Zone., Suzhou, China  
 TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
 FCC Registration Number: 800392; IC Lab Code: 4075B

Documented By : Alice Ni  
 Reviewed By : James Yuan  
 Approved By : Jeff Chen

## Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

<b>Taiwan R.O.C.</b>	<b>:</b>	<b>BSMI, NCC, TAF</b>
<b>Germany</b>	<b>:</b>	<b>TUV Rheinland</b>
<b>Norway</b>	<b>:</b>	<b>Nemko, DNV</b>
<b>USA</b>	<b>:</b>	<b>FCC</b>
<b>Japan</b>	<b>:</b>	<b>VCCI</b>
<b>China</b>	<b>:</b>	<b>CNAS</b>

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :  
<http://www.quietek.com/>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

### **HsinChu Testing Laboratory :**

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.  
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : [service@quietek.com](mailto:service@quietek.com)

### **Linkou Testing Laboratory :**

No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.  
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : [service@quietek.com](mailto:service@quietek.com)

### **Suzhou Testing Laboratory :**

No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China  
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : [service@quietek.com](mailto:service@quietek.com)

## 1. RF Exposure Evaluation

### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

R = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

## 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product	:	E-GO
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

### Antenna Gain:

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 5.4dBi for 2.4GHz and 3.0dBi for 5GHz in logarithm scale.

### Output Power into Antenna & RF Exposure Evaluation Distance:

Frequency Band (MHz)	Maximum Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )
2402- 2480 MHz	4.1305	0.002849

Note:

The power density Pd (4th column) at a distance of 20 cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm<sup>2</sup>.

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