

EN 62311:2008  
ASSESSMENT REPORT

For

**High-Flying Electronics Technology Co., Ltd.**

Room 1002, Building 1, No.3000, Longdong Avenue, Pudong New Area, Shanghai, China

**Tested Model: HF-LPT230**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Wi-Fi Module
<b>Test Engineer:</b> Edison Hu	<i>Edison.hu</i>
<b>Report Number:</b> RSHA170822002-00C	
<b>Report Date:</b> 2017-09-01	
<b>Reviewed By:</b> RF Leader	<i>Oscar.Ye</i>
<b>Prepared By:</b>	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu province, China Tel: +86-0512-86175000 Fax: +86-0512-88934268 <a href="http://www.baclcorp.com.cn">www.baclcorp.com.cn</a>

**Note:** This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

## **TABLE OF CONTENTS**

<b>GENERAL INFORMATION.....</b>	<b>3</b>
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) .....	3
OBJECTIVE .....	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY .....	3
TEST FACILITY .....	3
TECHNICAL REQUIREMENTS SPECIFICATION IN EN 62311.....	4
TEST DATA .....	5
<b>EXHIBIT B - EUT PHOTOGRAPHS .....</b>	<b>6</b>
EUT –TOP VIEW .....	6
EUT –BOTTOM VIEW.....	6
EUT – COVER OFF VIEW .....	7

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Applicant	High-Flying Electronics Technology Co., Ltd.
Tested Model	HF-LPT230
Product Type	Wi-Fi Module
Dimension	22.0mm(L)×13.5 mm(W)×3.0 mm(H)
Power Supply	DC 3.3V

*\*All measurement and test data in this report was gathered from production sample serial number: 20170822003. (Assigned by BACL, Kunshan). The EUT was received on 2017-08-22.*

### Objective

This report is prepared on behalf of High-Flying Electronics Technology Co., Ltd. in accordance with EN 62311:2008, Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz–300 GHz) is to demonstrate the compliance of apparatus with the basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields as well as induced and contact current.

The objective is to determine the compliance of EUT with EN 62311:2008.

### Related Submittal(s)/Grant(s)

No related submittal(s).

### Test Methodology

All measurements contained in this report were conducted with EN 62311:2008.

### Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01) and the FCC designation No. CN1185 under the FCC KDB 974614 D01. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 815570. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## Technical Requirements Specification in EN 62311

### General Description of Applied Standards

EN 62311 Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz–300 GHz) is to demonstrate the compliance of apparatus with the basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields as well as induced and contact current.

### RF Exposure Evaluation

#### Limit:

According to EN 62311, the criteria listed in the below table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified table 2 of Council Recommendation 1999/519/EC.

Reference levels for electric, magnetic and electromagnetic fields  
(0 Hz to 300 GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field ( $\mu$ T)	Equivalent plane wave power density $S_{eq}$ (W/m <sup>2</sup> )
0-1 Hz	—	$3,2 \times 10^4$	$4 \times 10^4$	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

#### Notes:

1.  $f$  as indicated in the frequency range column.

## Test method

The antenna of the product, under normal use condition is at least 20cm away from the body of the user. Warning statement of the user for keeping 20cm separation distance and the prohibition of operating to a person has been printed on the user manual. So, this product under normal use is located on electromagnetic far field between the human body.

### Far Field Calculation Formula

$$E = \frac{\sqrt{30PG(\theta, \phi)}}{r}$$

$G$  = antenna gain relative to an isotropic antenna  
 $\theta, \phi$  = elevation and azimuth angles to point of investigation  
 $r$  = distance from observation point to the antenna

## Test Data

### Environmental Conditions

<b>Temperature:</b>	24.2 °C
<b>Relative Humidity:</b>	51 %
<b>ATM Pressure:</b>	101.2kPa

The testing was performed by Edison Hu on 2017-08-29.

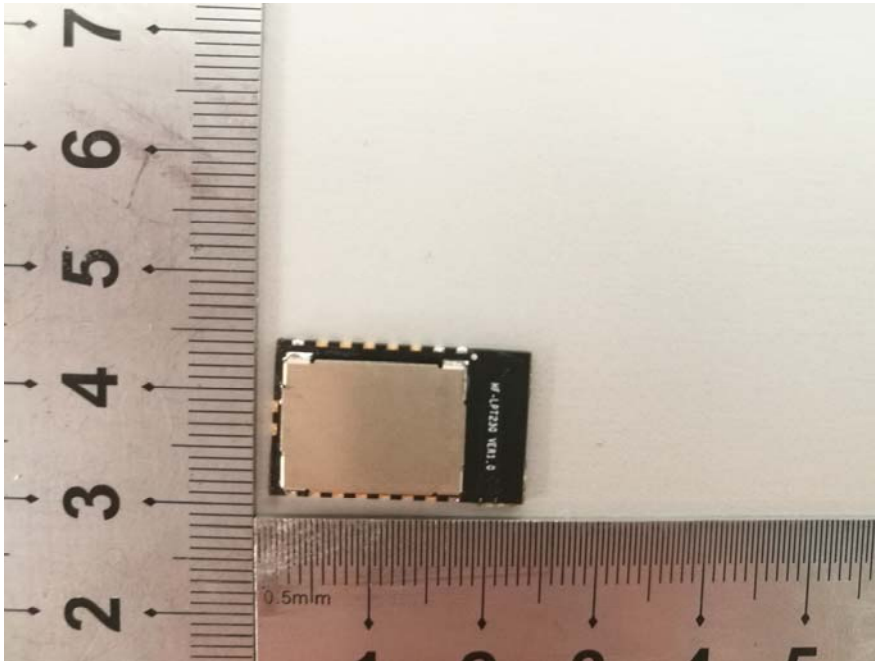
Function	Frequency Range (MHz)	EIRP (dBm)	EIRP (mW)	E-Field Strength (V/m)	E-Field Limit (V/m)	Result
Wi-Fi	2412-2472	16.54	45.08	5.58	61	Pass

Note:

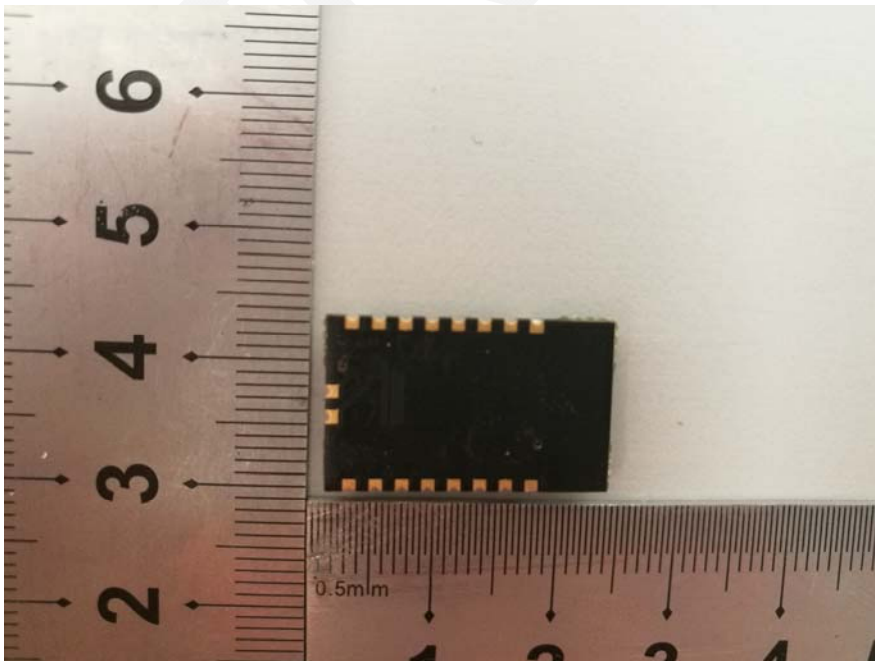
1. Antenna Gain (numeric): -0.35dBi (0.92) for Wi-Fi.
2. The distance from observation point to the antenna is 20cm.

**EXHIBIT B - EUT PHOTOGRAPHS**

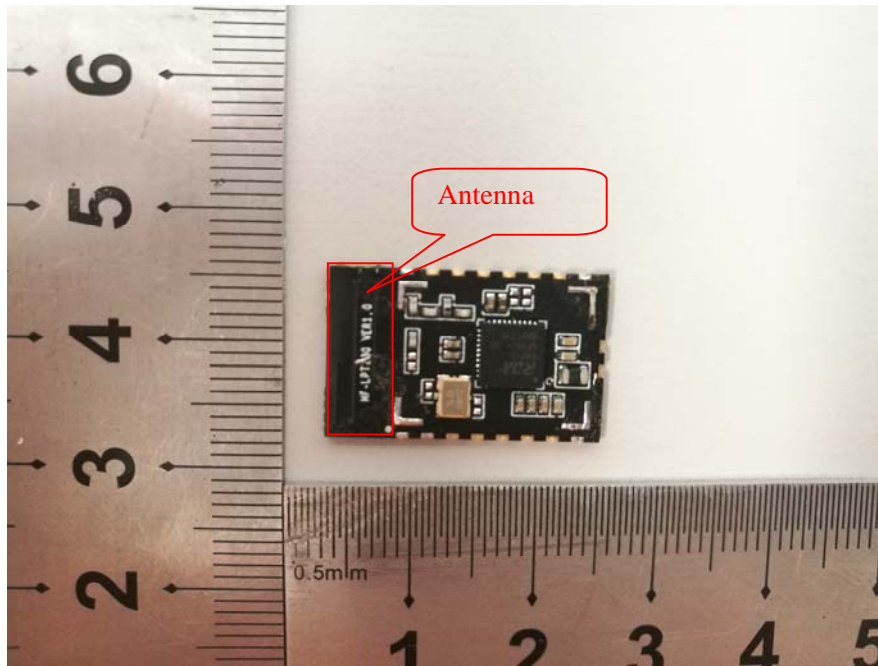
**EUT –Top View**



**EUT –Bottom View**



**EUT – Cover off View**



**\*\*\*\* END OF REPORT \*\*\*\***