

**Guangdong Meijiaxin Innovative Technology Co., Ltd.**

# **MPE ASSESSMENT REPORT**

**Report Type:**

FCC MPE assessment report

**Model:**

B7

**REPORT NUMBER:**

200602834SHA-003

**ISSUE DATE:**

August 31, 2020

**DOCUMENT CONTROL NUMBER:**

TTRFFCCMPE-01\_V1 © 2018 Intertek





Total Quality. Assured.

## TEST REPORT

Intertek Testing Services Shanghai  
Building No.86, 1198 Qinzhou Road (North)  
Caohejing Development Zone  
Shanghai 200233, China

Telephone: 86 21 6127 8200  
[www.intertek.com](http://www.intertek.com)

Report no.: 200602834SHA-003

**Applicant:** Guangdong Meijiaxin Innovative Technology Co., Ltd.  
Xingye South Road, Laimei Industrial Park, Chenghai, Shantou,  
Guangdong, China

**Manufacturer:** Guangdong Meijiaxin Innovative Technology Co., Ltd.  
Xingye South Road, Laimei Industrial Park, Chenghai, Shantou,  
Guangdong, China

**FCC ID:** 2AHV3KK21

### SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

KDB447498 D01 General RF Exposure Guidance v06  
FCC Part 2.1091, FCC Part 2.1093 FCC Part1.1307(b)

### PREPARED BY:

  
Project Engineer  
Wade Zang

### REVIEWED BY:

  
Reviewer  
Daniel Zhao

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

**TEST REPORT****Revision History**

<b>Report No.</b>	<b>Version</b>	<b>Description</b>	<b>Issued Date</b>
200602834SHA-003	Rev. 01	Initial issue of report	August 31, 2020

**TEST REPORT****1 GENERAL INFORMATION****1.1 Description of Equipment Under Test (EUT)**

Product name:	Quadcopter
Type/Model:	B7
Add Model:	V1,V2,V3,V4,V5,V6,V7,V8,V9,V10 , X103W,X104G,X105W,X106,X107,X108,X109,MEW4-1,MEW4-2,MEW4-3,MEW4-4 B2,B3,B3mini,B4W,B5W,B9,B10,B11,B12EIS,B16,B16Pro,B18,B18EIS. B19, B19EIS, B20EIS. B22pro, BX Pro,B21
Trade Mark	
Description of EUT:	The EUT is an aircraft with general 2.4G and 5G Wi-Fi (11a/11n) technology.
Rating:	DC 7.6V (Powered by a 7.6V Battery)
Sample received date:	June 23, 2020
Date of test:	May 15, 2020 ~ June 20, 2020

**1.2 Technical Specification**

General 2.4GHz	
Frequency Range:	2452~2474MHz
Channel Number:	23
Channel Separation:	1 MHz
Antenna Information:	Internal antenna, 2dBi Peak gain

5G Wi-Fi	
Frequency Range:	5180MHz
Support Standards:	802.11a, 802.11n (HT20)
Type of Modulation:	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Number:	For 5150MHz band: Channel 36
Antenna Information:	Internal antenna, 2dBi Peak gain

**TEST REPORT****1.3 Description of Test Facility**

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN1175
	IC Registration Lab Registration code No.: 2042B-1
	VCCI Registration Lab Registration No.: R-4243, G-845, C-4723, T-2252
	NVLAP Accreditation Lab NVLAP LAB CODE: 200849-0
	A2LA Accreditation Lab Certificate Number: 3309.02

Tests were sub-contracted.

Name:	Shenzhen UnionTrust Quality and Technology Co., Ltd.
Address:	16/F, Block A, Building 6, Baoneng Science and Technology Park, Qingxiang Road No.1, Longhua New District, Shenzhen, China
Telephone:	+86 (0) 755 2823 0888
Telefax:	+86 (0) 755 2823 0886

The test facility is recognized, certified, or accredited by these organizations:	Shenzhen UnionTrust Quality and Technology Co., Ltd.
	CNAS Accreditation Lab Registration No. CNAS L9069

**TEST REPORT****2 MPE Assessment****Test result:** Pass**2.1 MPE Assessment Limit**

Mobile device exposure for standalone operations:

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (uT)	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

Mobile device exposure for simultaneous transmission operations: **the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is  $\leq 1.0$**

**TEST REPORT****2.2 Assessment Results**

Power density (S) is calculated according to the formula:

$$S = P / (4\pi R^2)$$

Where S = power density in mW/cm<sup>2</sup>

P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report 200602834SHA-001 / 200602834SHA-002:

The maximum radiated power of General 2.4GHz <0dBm = 1 mW;

Here R is chosen to be 20cm,

$$S = P / (4\pi R^2) = 1 / (4 * 3.14 * 20 * 20) = 0.0002 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$$

The maximum radiated power of 5G Wi-Fi <20dBm = 100 mW;

Here R is chosen to be 20cm,

$$S = P / (4\pi R^2) = 100 / (4 * 3.14 * 20 * 20) = 0.0199 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$$

the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in the EUT is  $\leq 1.0$

**TEST REPORT**

**Appendix I**

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

\*\*\*\*\* END \*\*\*\*\*