intertek
Total Quality. Assured.

Guangdong Meijiaxin Innovative Technology Co., Ltd.

MPE ASSESSMENT REPORT

Report Type:
FCC MPE assessment report

Model:
MEW4-1

REPORT NUMBER:
191201777SHA-003

ISSUE DATE:
December 30, 2019

DOCUMENT CONTROL NUMBER:
TTRFFCCMPE-01_V1 © 2018 Intertek

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

Total Quality. Assured.

TEST REPORT

Report no.: 191201777SHA-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:	2AHV3KK20

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:
KDB447498 D01 General RF Exposure Guidance v06 FCC Part2.1091, FCC Part2.1093 FCC Part1.1307(b)

PREPARED BY:	**REVIEWED BY:**
Wade zhang	Daniel
Project Engineer Wade Zhang	Reviewer Daniel Zhao

TEST REPORT

Revision History

Report No.	Version	Description	Issued Date
191201777SHA-003	Rev. 01	Initial issue of report	December 30, 2019

TEST REPORT

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	R/C drone
Type/Model:	MEW4-1
Add Model:	B3, B3pro, B7, B9, B10, BX, B12, B14, B16, B18, B19, B20, B22, B23, B25 B2M, B2Pro, B2SE, B3P, B4W, B5W, X103W, X104G, MEW4-1, MEW4-2, MEW4-3, MEW4-4, V6, V7, V8, V9, M2, M3, M4, NY-BG57, V-6, E32HW, HS700D, HS720, DRC-LSX10, SP700 (Refer to Declaration of Difference for more details.)
Trade Mark	
Description of EUT:	The EUT is an aircraft with general 2.4G and 5G WiFi (11a/11n) technology.
Rating:	DC 7.6V (Powered by a 7.6V Battery)
Sample received date:	December 10, 2019
Date of test:	December 10, 2019 ~ December 21, 2019

1.2 Technical Specification

General 2.4GHz	
Frequency Range:	2420~2467MHz
Channel Number:	48
Channel Separation:	1MHz
Antenna Information:	Internal antenna, 2dBi Peak gain

5G WiFi	
Frequency Range:	5180MHz ,5745MHz
Support Standards:	802.11a, 802.11n (HT20)
Type of Modulation:	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Number:	For 5150MHz band: Channel 36 For 5745 ~ 5850MHz band: Channel 149
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

Total Quality. Assured.

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^2)
0-1 Hz	-	$3,2 \times 10^4$	4×10^4	-
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 ≤ 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^2

P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report 191201777SHA-001/191201777SHA-002:
The maximum radiated power of General 2.4GHz < 0dBm = 1 mW;
Here R is chosen to be 20cm,

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

The maximum radiated power of 5G WiFi <20dBm = 100 mW;
Here R is chosen to be 20cm,

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

the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in the EUT is ≤ 1.0

Total Quality. Assured.

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 **********