RF EXPOSURE REPORT

Applicant	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
Address	NO.2 West Xingye Road Laimei Industrial Area Chenghai Shantou Guangdong China

Manufacturer or Supplier	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
Address	NO.2 West Xingye Road Laimei Industrial Area Chenghai Shantou Guangdong China
Product	DRONE
Brand Name	Syma
Model	Z4W
Additional Model & Model Difference	Z5W
Date of tests	Apr. 29, 2023 ~ May 05, 2023

☒ **FCC Part 2 (Section 2.1091)**

☒ **KDB 447498 D01**

☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Eric Fang Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Jun. 14, 2023

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2303WDG0185-2	Original release	Jun. 14, 2023

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1. CERTIFICATION

FCC ID:	QV7-GC88752-88
PRODUCT:	DRONE
BRAND NAME:	Syma
MODEL NO.:	Z4W
ADDITIONAL NO.:	Z5W
TEST SAMPLE:	Engineering Sample
APPLICANT:	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

Note: Z4W and Z5W are the model sold in combination with airplane and remote control, and EUT refers to airplane in this report

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm^2)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = 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

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	2.0	Dimple Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
802.11b	2412	10	+-2	8	12
802.11g	2412	8	+-2	6	10
802.11n(HT20)	2412	8	+-2	6	10

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2412	11.47
802.11g	2412	9.64
802.11n(HT20)	2412	9.51

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
2412	12	2	20	0.004997	1.0

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