

# 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	X31
Additional Model & Model Difference	UK-F7MINI, DE-F7MINI, F11MINI2, F11MINI-3B, F11MINI-4B, UK-F11MINI, DE-F11MINI, W4; see items 1.1
Date of tests	May 25, 2023 ~ Jun. 20, 2023

**FCC Part 2 (Section 2.1091)**

**KDB 447498 D01 V06**

**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: Aug. 08, 2023

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## TABLE OF CONTENTS

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT .....	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION .....	5
5. ANTENNA GAIN .....	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



Test Report No.: FM2303WDG0183-2

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2303WDG0183-2	Original release	Aug. 08, 2023

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Test Report No.: FM2303WDG0183-2

## 1. CERTIFICATION

<b>FCC ID:</b>	QV7-GC88752-95
<b>PRODUCT:</b>	DRONE
<b>BRAND NAME:</b>	Syma
<b>MODEL NO.:</b>	X31
<b>ADDITIONAL NO.:</b>	UK-F7MINI, DE-F7MINI, F11MINI2, F11MINI-3B, F11MINI-4B, UK-F11MINI, DE-F11MINI, W4
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	GUANGDONG SYMA MODEL AIRCRAFT INDUSTRIAL CO., LTD
<b>STANDARDS:</b>	FCC Part 2 (Section 2.1091)
	KDB 447498 D01 V06
	IEEE C95.1

Note: X31 and the additional models (See above table) 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 <sup>2</sup> )	AVERAGE TIME (minutes)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

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

## 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	1.0	External 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)
802.11n(HT20)	5180	14	+2	12	16

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11n(HT20)	5180	14.83

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
5180	16	1	20	0.009971	1.0

--- END ---