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	N/A
Model	W1
Additional Model & Model Difference	X26, S107G, S109G, S111G, S5, S8, S39-1, X4, etc., see items 1
Date of tests	Dec. 25, 2018 ~ Apr. 15, 2019

☒ **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 Breeze Jiang Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: Apr. 19, 2019

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM181225N030	Original release	Apr. 19, 2019

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1. CERTIFICATION

FCC ID:	QV7-GC88752-31
PRODUCT:	DRONE
BRAND NAME:	N/A
MODEL NO.:	W1
ADDITIONALS NO.:	S107G, S107H, S109G, S111G, S5H, S8, S39-1, X4, X5, X5C, X5S, X5SC, X5SW, X5HC, X5HW, X5U, X5UC, X5UW, X5UW(720P), X5UW-D, X8C, X8W, X8G, X8HC, X8HG, X8HW(720P), X8SC, X8SW(720P), X8SW(720P)-D, X8PRO, X9, X9S, X11, X11C, X12S, X13, X14W(720P), X14, X15, X15C, X15-S, X15W, X15A, X18, X20, X20-S, X20W, X21, X21-S, X21W, X21W-1, X22, X22-S, X22S, X22SW, X22W, X22W-1, X23, X23W, X25W, X25PRO, X26, X26A, X27, X27W, X28, W1, Z1, Z2, Z3, X54HW, X56W, X56W-P, X57, X28W, X29, X29W, X30, X30W
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

Remarks: Additional models (see about table) are identical with the test model W1 except the model name for trading purpose.

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	Wire 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)
802.11a	5180	11	+-2	9	13
802.11n (20MHz)	5745	11	+-2	9	13

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11a	5180	12.69
802.11n (20MHz)	5180	12.86

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
5180, 5745	13	2	20	0.000298	1.0

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