

# 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                                | K6                                                                             |
| Additional Models & Model Difference | 6182-7XB, 6182-7XBH, 6182-3MX, 6182-3MXB                                       |
| Date of tests                        | Aug. 29, 2020 ~ Sep. 30, 2020                                                  |

☒ 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<br>Senior Project Engineer / EMC Department                  | Approved by Glyn He<br>Assistant Manager / EMC Department                             |
|  |  |

Date: Oct. 21, 2020

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Test Report No.: FM2008WDG0351

## RELEASE CONTROL RECORD

| ISSUE NO.     | REASON FOR CHANGE | DATE ISSUED   |
|---------------|-------------------|---------------|
| FM2008WDG0351 | Original release  | Oct. 21, 2020 |

## 1. CERTIFICATION

|                        |                                                       |
|------------------------|-------------------------------------------------------|
| <b>FCC ID:</b>         | QV7-GC88752-47                                        |
| <b>PRODUCT:</b>        | DRONE                                                 |
| <b>BRAND NAME:</b>     | Syma                                                  |
| <b>MODEL NO.:</b>      | K6                                                    |
| <b>ADDITIONAL NO.:</b> | 6182-7XB, 6182-7XBH, 6182-3MX, 6182-3MXB              |
| <b>TEST SAMPLE:</b>    | Engineering Sample                                    |
| <b>APPLICANT:</b>      | GUANGDONG SYMA MODEL AIRCRAFT<br>INDUSTRIAL CO., LTD. |
| <b>STANDARDS:</b>      | FCC Part 2 (Section 2.1091)                           |
|                        | KDB 447498 D01                                        |
|                        | IEEE C95.1                                            |

1. Additional models (see above table) are identical with the test model K6 except 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 <sup>2</sup> ) | 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

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

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             | 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) |
|---------------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| 802.11n(HT20) | 2412            | 14                 | + -1            | 13                    | 15                    |

The measured conducted Average Power

| Mode          | Frequency (MHz) | Averaged Power (dBm) |
|---------------|-----------------|----------------------|
| 802.11n(HT20) | 2412            | 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> ) |
|----------------------|-------------------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412                 | 15                      | 2                  | 20            | 0.01                                | 1.0                         |

--- END ---