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Report Template Version: V03
Report Template Revision Date: Mar.1st, 2017

RF Exposure Evaluation Report

Report No.:	CQASZ20180700002E-02
Applicant:	Weccan Industrial Limited
Address of Applicant:	Rm209, 2/F, Building W1-A, No.34 Gaoxin South 4th Street, Hi-Tech Industrial Park, Nanshan District, Shenzhen City, China
Manufacturer:	DONGGUAN ADOREE INDUSTRIAL LIMITED
Address of Manufacturer:	Building 10, Fuxing Industrial Area, Fucing Road, Xiagang Village, Changan Town, Dongguang City, Guangdong Province China.
Factory:	DONGGUAN ADOREE INDUSTRIAL LIMITED
Address of Factory:	Building 10, Fuxing Industrial Area, Fucing Road, Xiagang Village, Changan Town, Dongguang City, Guangdong Province China.

Equipment Under Test (EUT):

Product:	2.4G RC DRONE WITH WIFI CAMERA
Model No.:	DRW618
Added Model No.:	Please see page 2
Brand Name:	SKY RIDER, WECCAN
FCC ID:	Z3CDRW618F51
Standards:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Date of Test:	2018-06-28 to 2018-07-10
Date of Issue:	2018-07-10
Test Result :	**PASS***

Tested By: Aaron Ma
(Aaron Ma)

Reviewed By: Jack Ai
(Jack Ai)

Approved By: Jack Ai
(Jack Ai)

SHENZHEN HUAXIA TESTING TECHNOLOGY CO., LTD 华夏淮测 APPROVED

* In the configuration tested, the EUT complied with the standards specified above.

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20180700002E-02	Rev.01	Initial report	2018-07-10

All model: DRW618 SG-F51, SG-F1, SG-F2, SG-F3, SG-F4, SG-F5, SG-F6, SG-F7, SG-F8, SG-F9, SG-F10, SG-F11, SG-F12, SG-F13, SG-F14, SG-F15, SG-F16, SG-F17, SG-F18, SG-F19, SG-F20, SG-F21, SG-F22, SG-F23, SG-F24, SG-F25, SG-F26, SG-F27, SG-F28, SG-F29, SG-F30, SG-F31, SG-F32, SG-F33, SG-F34, SG-F35, SG-F36, SG-F37, SG-F38, SG-F39, SG-F40, SG-F41, SG-F42, SG-F43, SG-F44, SG-F45, SG-F46, SG-F47, SG-F48, SG-F49, SG-F50, SG-F52, SG-F53, SG-F54, SG-F55, SG-F56, SG-F57, SG-F58, SG-F59, SG-F60, SG-F61, SG-F62, SG-F63, SG-F64, SG-F65, SG-F66, SG-F67, SG-F68, SG-F69, SG-F70, SG-F71, SG-F72, SG-F73, SG-F74, SG-F75, SG-F76, SG-F77, SG-F78, SG-F79, SG-F80, SG-F81, SG-F82, SG-F83, SG-F84, SG-F85, SG-F86, SG-F87, SG-F88, SG-F89, SG-F90, SG-F91, SG-F92, SG-F93, SG-F94, SG-F95, SG-F96, SG-F97, SG-F98, SG-F99, SG-F100

Only the model DRW618 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance and model name.

2 Contents

3 General Information

3.1 Client Information

Applicant:	WECCAN INDUSTRIAL LIMITED
Address of Applicant:	Rm209, 2/F, Building W1-A, No.34 Gaoxin South 4th Street, Hi-Tech Industrial Park, Nanshan District, Shenzhen City, China
Manufacturer:	DONGGUAN ADOREE INDUSTRIAL LIMITED
Address of Manufacturer:	Building 10, Fuxing Industrial Area, Fucing Road, Xiagang Village, Changan Town, Dongguang City, Guangdong Province China.
Factory:	DONGGUAN ADOREE INDUSTRIAL LIMITED
Address of Factory:	Building 10, Fuxing Industrial Area, Fucing Road, Xiagang Village, Changan Town, Dongguang City, Guangdong Province China.

3.2 General Description of EUT

Product Name:	2.4G RC DRONE WITH WIFI CAMERA
Model No.:	Please see page 2
Trade Mark :	SKY RIDER, WECCAN
Hardware Version:	V1.0
Software Version:	V1.0
Frequency Range:	2447 MHz ~ 2477MHz
Modulation Type:	GFSK
Number of Channels:	15(declared by the client)
Sample Type:	Portable production
Test Software of EUT:	RF test (manufacturer declare)
Antenna Type:	Integral antenna
Antenna Gain:	1.3dBi
Power Supply:	6x AA battery, DC9V

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

4.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

☐ f(GHz) is the RF channel transmit frequency in GHz
☐ Power and distance are rounded to the nearest mW and mm before calculation[17]
☐ The result is rounded to one decimal place for comparison
The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

4.1.3 EUT RF Exposure

eirp = pt x gt = $(E \times d)^2/30$

where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, ---$10^{((dB\mu V/m)/20)}/10^6$,

d = measurement distance in meters (m)---3m,

So pt = $(E \times d)^2/30$ / gt

The worst case (refer to report CQASZ20180700002E-01) is below:

For 2.4G wireless:

Field strength = 89.73dBμV/m @3m

Ant. gain 1.3dBi; so Ant numeric gain=1.35

So pt={$[10^{(89.73/20)}/10^6 x3]^2/30$ /1.35}x1000mW =0.209mW

So (0.209mW/5mm)x √2.463GHz = 0.066,

0.066<3.0 for 1-g SAR

So the SAR report is not required.