

RF EXPOSURE REPORT

Applicant	SWANN COMMUNICATIONS LIMITED
Address	13D, Eton Building, No.288 Des Voeux Road Central, Sheung Wan, Hong Kong

Manufacturer or Supplier	SHENZHEN AONI ELECTRONIC CO., LTD
Address	building 5, Honghui Industrial Park, Baoan District, Shenzhen, China
Product	IP Camera
Brand Name	Swann
Model	SWIFI-SPOTCAM
Additional Model & Model Difference	E97D, See items 1
Date of tests	Jun. 24, 2019 ~ Jul. 18, 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 Ryan Lu Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: Sep. 05, 2019

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Test Report No.: FM190624N022

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM190624N022	Original release	Sep. 05, 2019

1. CERTIFICATION

FCC ID:	2AKPISPOTCAM
PRODUCT:	IP Camera
BRAND NAME:	Swann
MODEL NO.:	SWIFI-SPOTCAM
ADDITIONAL NO.:	E97D
TEST SAMPLE:	Engineering Sample
APPLICANT:	SWANN COMMUNICATIONS LIMITED
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

NOTES: 1. Additional model E97D is identical with the test model SWIFI-SPOTCAM except the model number for marketing 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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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	3	FPC 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	2412-2462	15	+/-2	13	17
802.11g	2412-2462	13	+/-2	11	15
802.11n(HT20)	2412-2462	12	+/-2	10	14
802.11n(HT40)	2422-2452	11	+/-2	9	13

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2412	15.45
802.11g	2412	13.14
802.11n(HT20)	2412	12.95
802.11n(HT40)	2422	11.31

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	17	3	20	0.019894	1.0

--- END ---