



Test Report No.: FM200721N007

# RF EXPOSURE REPORT

Applicant	Swann Communications PTY Ltd.
Address	Unit 5B, 706 Lorimer Street, Port Melbourne, Victoria 3207, Australia

Manufacturer or Supplier	Swann Communications PTY Ltd.
Address	Unit 5B, 706 Lorimer Street, Port Melbourne, Victoria 3207, Australia
Product	Xtreem Wire Free Security Camera
Brand Name	Swann
Model	SWIFI-XTRCAMW
Additional Model & Model Difference	N/A
Date of tests	Jul. 21, 2020 ~ Sep. 14, 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 Tom Chen  
Project Engineer / EMC Department

Approved by Glyn He  
Assistant Manager / EMC Department

Date: Sep. 23, 2020

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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



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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM200721N007	Original release	Sep. 23, 2020

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## 1. CERTIFICATION

<b>FCC ID:</b>	VMISWIFIXTRCAM
<b>PRODUCT:</b>	Xtreem Wire Free Security Camera
<b>BRAND NAME:</b>	Swann
<b>MODEL NO.:</b>	SWIFI-XTRCAMW
<b>ADDITIONAL NO.:</b>	N/A
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	Swann Communications PTY Ltd.
<b>STANDARDS:</b>	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

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## 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

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

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
ANT 1	3.3	FPCB Antenna
ANT 2	2.5	PIFA Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Upper Tolerance (dBm)
802.11b	2412-2462	21	+/-2	23
802.11g	2412-2462	20	+/-2	22
802.11n(HT20)	2412-2462	19	+/-2	21

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2437	21.87
802.11g	2437	20.67
802.11n(HT20)	2437	19.62

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> )
2412-2462	23	3.3	20	0.084865	1.0

### CONCLUSION:

Both of the Antenna can not transmit simultaneously

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