



Test Report No.:
FCC2023-0054-H

RF Test Report

FCC ID : **VMIMR4KCAM**
EUT : **MaxRanger4K™ Solar Wireless Security Camera**
MODEL : **NVW-MR4KCAM**
BRAND NAME : **Swann**
APPLICANT : **Swann Communications U.S.A. Inc**
Classification Of Test : **N/A**

CVC Testing Technology Co., Ltd.



Applicant	Name : Swann Communications U.S.A. Inc Address : 12636 Clark Street Santa Fe Springs California United States 90670		
Manufacturer	Name : Shenzhen Infinova Limited Address : Infinova Building, Guan Lan High Tech Park, Huan Guan Road South. Longhua New District , Shenzhen Guangdong		
Equipment Under Test	Name :MaxRanger4K™ Solar Wireless Security Camera Model/Type: NVW-MR4KCAM Additional Model: N/A Trade mark : Swann Serial NO.:N/A Sample NO.4-1		
Date of Receipt.	2023.08.25	Date of Testing	2023.08.25~2024.01.08
Test Specification		Test Result	
FCC Part 2 (Section 2.1091), KDB 447498 D04, IEEE C95.3		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: 2024.01.10		
Tested by:  Lu Wei Ji Name Signature	Tested by:  Xu Zhen Fei Name Signature	Approved by:  Chen Hua Wen Name Signature	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2023-0054-H	Original release	2024.01.10



1. GERTIFICATION

PRODUCT	MaxRanger4K™ Solar Wireless Security Camera
BRAND	Swann
MODEL	NVW-MR4KCAM
ADDITIONAL MODEL	N/A
POWER SUPPLY	DC 3.6V from Li-ion battery or DC 5V from USB host unit
STANDARDS	FCC Part 2 (Section 2.1091)
	KDB 447498 D04
	IEEE C95.3
Remark: 1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report. 3. EUT photo refer to the report (Report NO.: FCC2023-0054-E).	



2. LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (FCC)

(Option C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda / 2 \pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda / 4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF SOURCE FREQUENCY (MHZ)	THRESHOLD ERP(W)
0.3 -1.34	$1,920 R^2$
1.34 - 30	$3,450 R^2 F^2$
30 -300	$3.83 R^2$
300-1500	$0.0128 R^2 F$
1500-100,000	$19.2 R^2$



3. 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**.

4. MAXIMUM CONDUCTED AV POWER

The measured conducted Average Power

Mode	Averaged Power (dBm)
WiFi HaLow 1Mbps	12.81
WiFi HaLow 2Mbps	13.62
WiFi HaLow 4Mbps	14.67
WiFi HaLow 8Mbps	15.37

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
WiFi HaLow 1Mbps	903.5MHzMHz~926.5MHz	13	± 1	12	14
WiFi HaLow 2Mbps	905MHzMHz~925MHz	13	± 1	12	14
WiFi HaLow 4Mbps	906MHzMHz~922MHz	15	± 1	14	16
WiFi HaLow 8Mbps	908MHzMHz~916MHz	15	± 1	14	16



5. CALCULATION MAXIMUM PERMISSIBLE EXPOSURE

MAXIMUM PERMISSIBLE EXPOSURE (FCC)

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)
WiFi HaLow 1Mbps	14	2.92	20	16.92	14.77	0.03	0.46
WiFi HaLow 2Mbps	14	2.92	20	16.92	14.77	0.03	0.46
WiFi HaLow 4Mbps	16	2.92	20	18.92	16.77	0.0475	0.46
WiFi HaLow 8Mbps	16	2.92	20	18.92	16.77	0.0475	0.46

Conclusion:

Based on FCC 47 CFR § 1.1307, the analysis concludes that this product when transmitting in standalone within a host device, is compliant with the FCC RF exposure requirements.

----- End of the Report -----



Important

- (1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.
- (2) The test report is invalid if altered.
- (3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.
- (4) Objections to the test report must be submitted to the laboratory within 15 days.
- (5) Generally, commission test is responsible for the tested samples only.
- (6) Any photocopies or part photocopies of the test report are forbidden without the written permission from CVC;

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