RF Exposure Report

Report No.:	SABEIH-WTW-P21040843
FCC ID:	P27XHC3
Test Model:	XHC3
Series Model:	XHC3xxxxxxxx, SCHC3AExxxxxxxxx (the 1st x should be "blank" or "-"; the rest x could be 0 to 9, A to Z, a to z, "blank" or "-" , for marketing purpose)
Received Date:	Apr. 22, 2021
Test Date:	May 7 to 28, 2021
Issued Date:	Jun. 9, 2021
Applicant:	Sercomm Corp.
Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

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Release Control Record

Issue No.	Description	Date Issued
SABEIH-WTW-P21040843	Original release.	Jun. 9, 2021

1 Certificate of Conformity

Product:	Comcast Xfinity Low Cost Camera
Brand:	Sercomm, Comcast, Xfinity
Test Model:	XHC3
Series Model:	XHC3xxxxxxxx, SCHC3AExxxxxxxxx (the 1st x should be "blank" or "-"; the rest x could be 0 to 9, A to Z, a to z, "blank" or "-" , for marketing purpose)
Sample Status:	Engineering sample
Applicant:	Sercomm Corp.
Test Date:	May 7 to 28, 2021
Standards:	FCC Part 2 (Section 2.1091)
References Test Guidance:	KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Annie Chang , **Date:** Jun. 9, 2021

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Jun. 9, 2021

Rex Lai / Associate Technical Manager

2 RF Exposure

2.1 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				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

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

where

Pd = power density in mW/cm^2

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

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**.

2.4 Antenna Gain

Function	Frequency (MHz)	Ant 1 Peak Gain (dBi)	Ant 2 Peak Gain (dBi)	Antenna Type	Connector
WLAN	2400	2.65	2.02	Dipole	IPEX
WLAN	2450	2.02	2.05		
WLAN	2500	2.13	2.11		
WLAN	5150	4.62	4.12		
WLAN	5500	4.71	4.52		
WLAN	5850	4.63	4.65		
BT LE	2400	2.65	-		
BT LE	2450	2.02	-		
BT LE	2500	2.13	-		

Note: The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.5 Calculation Result Of Maximum Conducted Power

Function	Frequency Band (MHz)	Max AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN	2412-2462	23.02	5.66	20	0.1468	1
WLAN	5180-5240	18.04	7.72	20	0.0749	1
WLAN	5260-5320	18.02	7.72	20	0.0746	1
WLAN	5500-5700	23.04	7.72	20	0.2370	1
WLAN	5745-5825	23.11	7.72	20	0.2408	1
BT LE	2402-2480	3.54	2.65	20	0.0008	1

Note:
2.4GHz Directional gain = 2.65dBi + 10log(2) = 5.66dBi
5.0GHz Directional gain = 4.71dBi + 10log(2) = 7.72dBi

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. 2.4GHz & 5GHz WLAN technologies cannot transmit at same time.
   WLAN & Bluetooth technologies cannot transmit at same time.

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