RF Exposure Report

Report No.:	SA190225D05
FCC ID:	P27RC8335PRO
Test Model:	RC8335PRO
Received Date:	Feb. 25, 2019
Test Date:	Mar. 6 to 18, 2019
Issued Date:	Mar. 22, 2019
Applicant:	Sercomm Corp.
Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C. (NanKang Software Park)
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)
FCC Registration / Designation Number:	198487 / TW2021

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
SA190225D05	Original release.	Mar. 22, 2019

1 Certificate of Conformity

Product:	SmartThings Smart Camera, SmartThings Cam
Brand:	SmartThings, Sercomm
Test Model:	RC8335PRO
Sample Status:	Engineering sample
Applicant:	Sercomm Corp.
Test Date:	Mar. 6 to 18, 2019
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1-1992

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:** Mar. 22, 2019

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Mar. 22, 2019

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 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	28.65	5.63	20	0.5330	1
5180-5240	21.13	5.82	20	0.0986	1
5745-5825	21.17	7.09	20	0.1333	1

NOTE:
2.4GHz: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 5.63dBi
5.0GHz (5180-5240MHz): Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 5.82dBi
5.0GHz (5745-5825MHz): Directional gain =10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.09dBi
2.4GHz & 5GHz technologies cannot transmit at same time.

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