

# **RF Exposure Report**

Report No.: SA190524D09

FCC ID: P27BC950NA4

Test Model: BC950NA4

Series Model: BC950NA4yxxxxxxx, BC950NA4Cyxxxxxxx (y should be "blank" or "-"; x could be 0 to 9, A to Z,

a to z, "blank" or "-", for marketing purpose) (See section 2.4 for more details)

Received Date: May 24, 2019

Date of Evaluation: Jun. 17, 2019

**Issued Date:** Jun. 19, 2019

Applicant: Sercomm Corp.

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Software Park)

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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33383, Taiwan (R.O.C)

FCC Registration /

788550 / TW0003

**Designation Number:** 





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## **Release Control Record**

Issue No.	Description	Date Issued
SA190524D09	Original Release	Jun. 19, 2019



#### 1 Certificate of Conformity

Product: LTE Battery Camera

Brand: Sercomm

Test Model: BC950NA4

Series Model: BC950NA4yxxxxxxx, BC950NA4Cyxxxxxxx (y should be "blank" or "-"; x could be 0 to 9, A to Z, a to z,

"blank" or "-", for marketing purpose) (See section 3.2.1 for more details)

Sample Status: Engineering Sample

Applicant: Sercomm Corp.

Date of Evaluation: Jun. 17, 2019

Standards: FCC Part 2 (Section 2.1091)

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: Jun. 19, 2019

Rona Chen / Specialist

**Approved by:** , **Date:** Jun. 19, 2019

Dylan Chiou / Project Engineer



#### 2 RF Exposure

## 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Power Density Strength (A/m) (mW/cm²)		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 <sup>2</sup> )*	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<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

#### 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 Description of EUT

All models are listed as below.

Product	Brand	Model	Difference		
	Sercomm	BC950NA4yxxxxxxx	With GPS function		
LTE Battery Camera		BC950NA4Cyxxxxxxx	Without GPS function		
(y should be "blank" or "-"; x could be 0 to 9, A to Z, a to z, "blank" or "-", for marketing purpose)					

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## 2.5 Antenna Gain

	Gain (dBi)					
Antenna Type	WCDMA II /	LTE David 4	WCDMA V /	LTE D == 140	LTE Band 13	
	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 12		
PIFA	2.94	2.88	-0.98	-2.90	-0.14	

## 2.6 Calculation Result of Maximum Conducted Power

Band	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WCDMA II	1850-1910	23.52	2.94	20	0.088	1.00
WCDMA V	824-849	24.09	-0.98	20	0.041	0.55
LTE 2	1850-1910	22.75	2.94	20	0.074	1.00
LTE 4	1710-1755	22.75	2.88	20	0.073	1.00
LTE 5	824-849	23.11	-0.98	20	0.032	0.55
LTE 12	699-716	23.09	-2.90	20	0.021	0.47
LTE 13	777-787	22.94	-0.14	20	0.038	0.52

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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