

## CBSD-EUD Test Report

**Report No.:** RFBEIH-WTW-P22090270

**FCC ID:** P27BC950C

**Test Model:** BC950C

**Received Date:** Sep. 07, 2022

**Test Date:** Sep. 10, 2022

**Issued Date:** Oct. 17, 2022

**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

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, Taiwan

**FCC Registration/  
Designation Number:** 788550 / TW0003



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

## Table of Contents

<b>Release Control Record</b> .....	<b>3</b>
<b>1 Certificate of Conformity</b> .....	<b>4</b>
<b>2 Summary of Test Results</b> .....	<b>5</b>
2.1 Modification Record .....	5
<b>3 General Information</b> .....	<b>6</b>
3.1 General Description of EUT .....	6
<b>4 Measurement</b> .....	<b>7</b>
4.1 End User Device additional requirements .....	7
4.2 Test Procedure .....	7
4.3 Test Environment .....	8
4.4 Test Equipment .....	8
4.5 Test Setup .....	8
4.6 Test Result.....	9
<b>5 Pictures of Test Arrangements</b> .....	<b>12</b>
<b>Appendix – Information of the Testing Laboratories</b> .....	<b>13</b>

### Release Control Record

Issue No.	Description	Date Issued
RFBEIH-WTW-P22090270	Original release	Oct. 17, 2022

## 1 Certificate of Conformity

**Product:** CBRS Battery Camera

**Brand:** Sercomm, MosoLabs

**Test Model:** BC950C

**Sample Status:** Engineering sample

**Applicant:** Sercomm Corp.

**Test Date:** Sep. 10, 2022

**Standards:** FCC Part 96.47

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 :** Pettie Chen , **Date:** Oct. 17, 2022  
Pettie Chen / Senior Specialist

**Approved by :** Jeremy Lin , **Date:** Oct. 17, 2022  
Jeremy Lin / Project Engineer

## 2 Summary of Test Results

Applied Standard : FCC Part 96.47			
FCC Clause	Test Item	Result	Remarks
96.47(a)(1)	End User Device additional requirements	Pass	Meet the requirement

### 2.1 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

Product	CBRS Battery Camera
Brand	Sercomm, MosoLabs
Test Model	BC950C
Status of EUT	Engineering sample
Accessory Device	4.2Vdc from battery 5.0Vdc from adapter
Data Cable Supplied	1.0m shielded USB cable

Note:

1. The EUT uses following battery and adapters

Battery	
Brand	MosoLabs
Model	BC950C
Power Rating	4.2Vdc, 6140mAh

Adapter 1 (gray)	
Brand	PHIHONG
Model	PSAF10A-050Q
AC Input	100-240Vac, 50/60Hz, 0.28A
DC Output	5Vdc, 2A

Adapter 2 (white)	
Brand	PHIHONG
Model	PSAF10A-050Q
AC Input	100-240Vac, 50/60Hz, 0.28A
DC Output	5Vdc, 2A

2. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

## 4 Measurement

### 4.1 End User Device additional requirements

FCC Part 96.47

- (a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.
- (1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

### 4.2 Test Procedure

Following test procedure can be done by WINNF-TS-0122 CBRS CBSD Test Specification, use the certified CBSD(FCC ID: P27P208) as CBSD device to show compliance with FCC Part 96.47 requirements for End User Device(EUD):

Test #1:

- a) Setup WINNF.PT.C.HBT.1 with 3620 ~ 3630 MHz and MaxEIRP at 10 dBm/MHz.
- b) Enable CBSD service from EPC management.
- c) **Check** EUD Tx Frequency and connection successful.
- d) Disable AP service from EPC management.
- e) **Check** if EUT stop transmission within 10s.

Test #2:

- a) Setup WINNF.PT.C.HBT.1 with 3595 ~ 3605 MHz and MaxEIRP at 15 dBm/MHz.
- b) Enable CBSD service from EPC management.
- c) **Check** EUD Tx Frequency and connection successful.
- d) Change power to 10 dBm/MHz.
- e) **Check** EUD Tx output power.
- f) Disable AP service from EPC management.
- g) **Check** if EUT stop transmission within 10s.

Note : Test #1 and #2 to show compliance with the hadshake testing under Part 96.

### 4.3 Test Environment

#### Test Condition

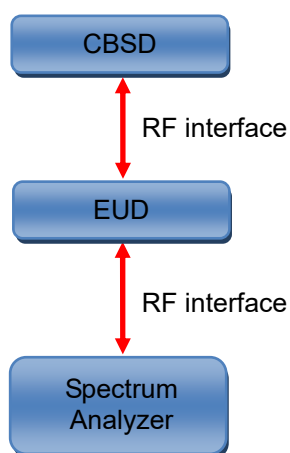
Test Item	Environmental Conditions	Input Power	Tested By
End User Device additional requirements	23deg. C, 68%RH	120Vac, 60Hz	Matthew Yang

### 4.4 Test Equipment

Description & Manufacturer	Model no.	Serial No.	Calibrated Date	Calibrated Until
CBSD Sercomm	P208-TP (FCCID:P27P208)	1801BVV000034	NA	NA
Laptop DELL	Inspiron 15 3000	D67MYN2	NA	NA
Spectrum Analyzer ROHDE & SCHWARZ	FSV	E2-010642	May 20, 2022	May 19, 2023

- NOTE:**
1. The test was performed in OVEN 4 Test Room
  2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
  3. Tested Date: Sep. 10, 2022

### 4.5 Test Setup



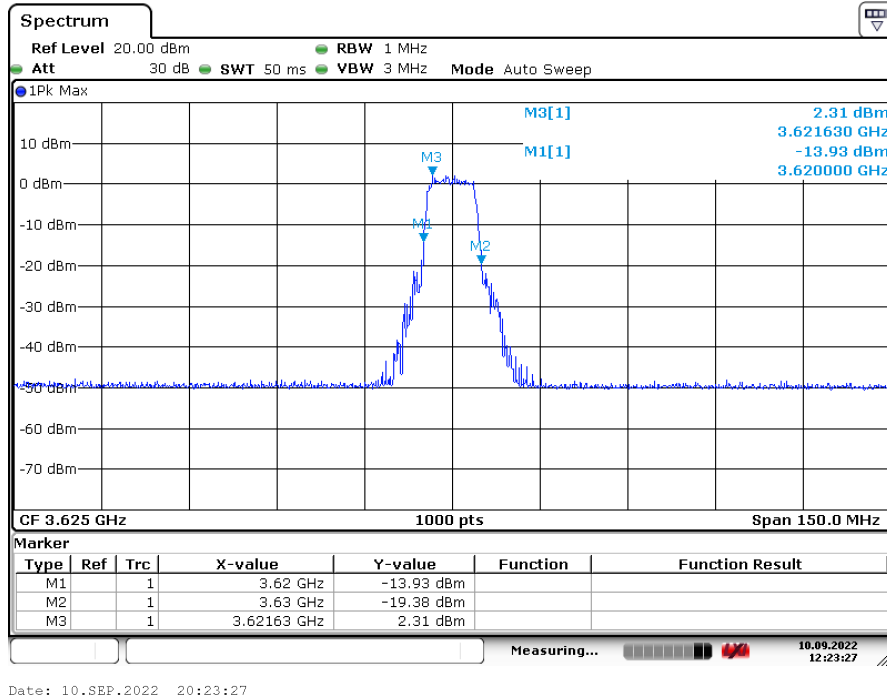
NOTE: The CBSD device is certified CBSD(FCC ID: P27P208). Where the CBSD device connection with EUD is by radiated method. The EUD device connection with Spectrum Analyzer is by conducted method.



## 4.6 Test Result

### Step Test #1-(c)

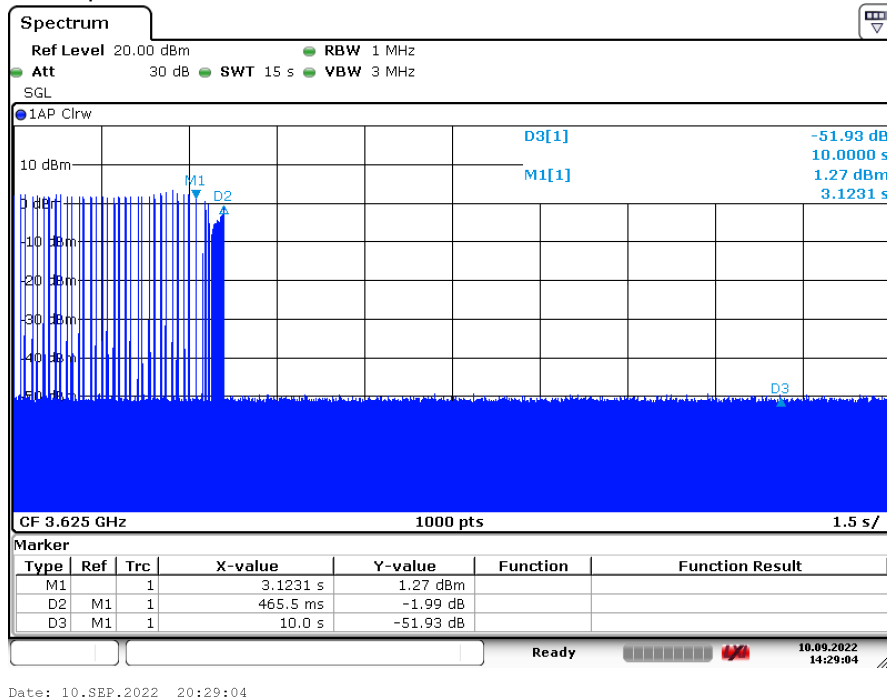
EUD follow instruction from associate CBSD and successfully operate at assigned 3620-3630MHz channel.



Plot 5-1 EUD frequency of operations

### Step Test #1(e)

EUD discontinues the operation within 10 seconds after CBSD terminates the service:



Plot 5-2 EUD discontinues operations within 10s

Note :

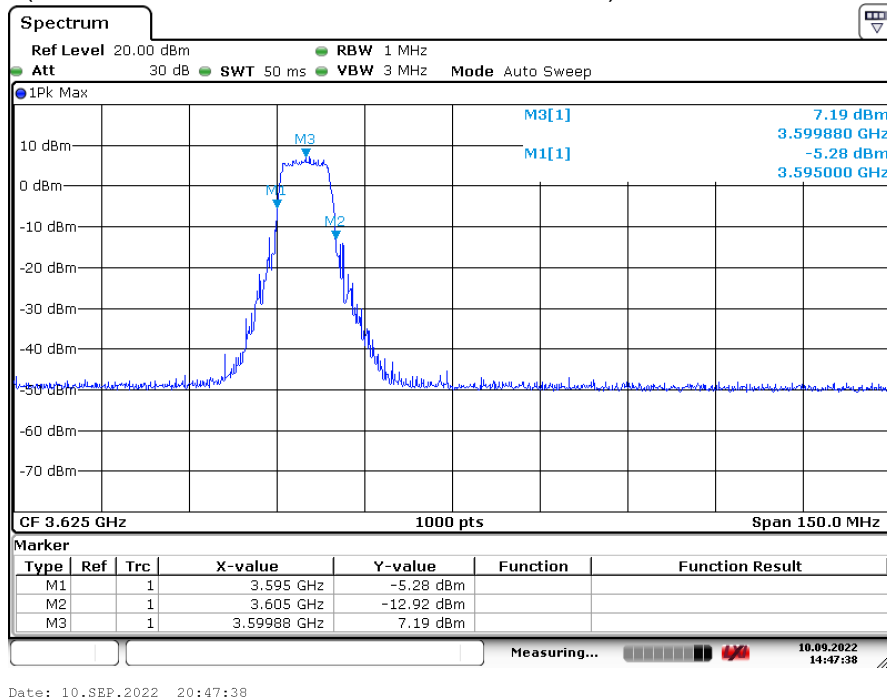
Marker 1: CBSD sends instructions to discontinues operations.

Marker 2: EUD discontinues operation.

Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUD.

### Test #2(c)

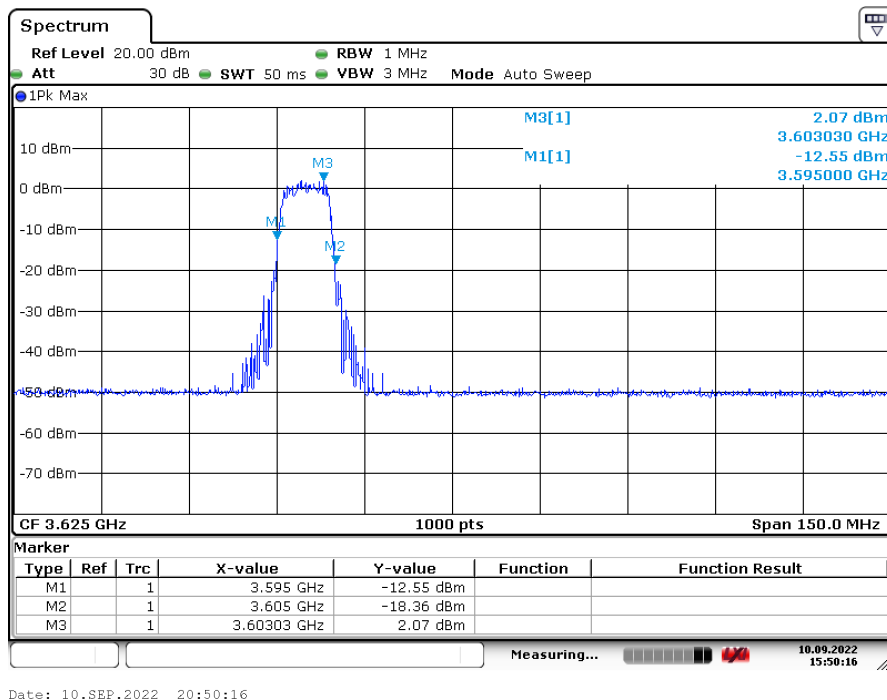
following plots demonstrate that EUD response to the associated CBSD instruction and operate at a new assigned channel (3595 ~ 3605 MHz and MaxEIRP at 15 dBm/MHz)



Plot 5-3 EUD frequency of operations

### Test #2(e)

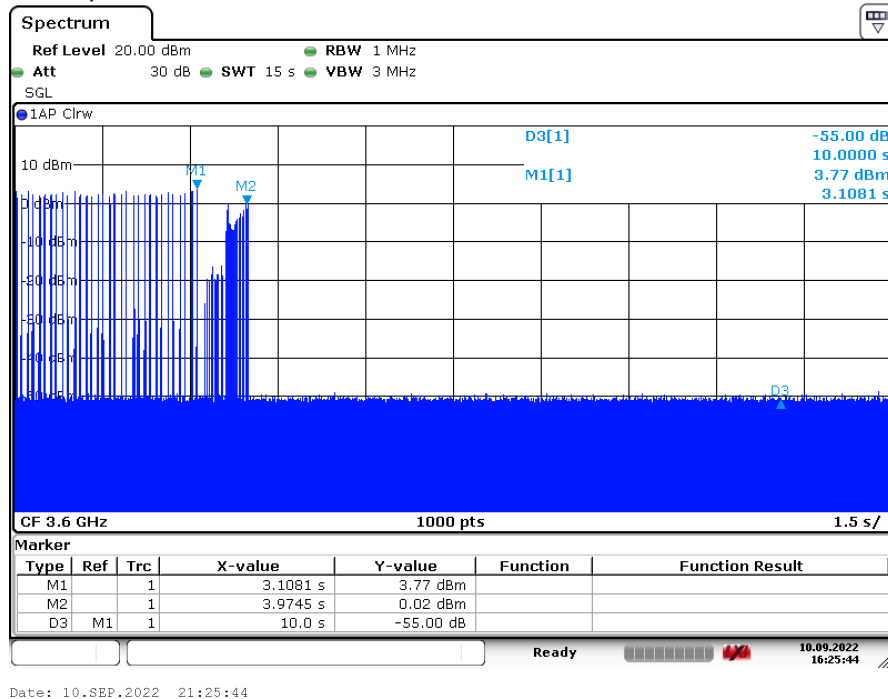
following plot demonstrates that EUD response to the associated CBSD power reduce instruction and reduce the power for 5 dB.



Plot 5-4 EUD changed output power

## Step Test #2(g)

EUD discontinues the operation within 10 seconds after CBSD terminates the service:



Plot 5-5 EUD discontinues operations within 10s.

Note :

Marker 1: CBSD sends instructions to discontinues operations.

Marker 2: EUD discontinues operation.

Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUD.

## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

## Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

**Lin Kou EMC/RF Lab**

Tel: 886-2-26052180

Fax: 886-2-26051924

**Hsin Chu EMC/RF Lab/Telecom Lab**

Tel: 886-3-6668565

Fax: 886-3-6668323

**Hwa Ya EMC/RF/Safety Lab**

Tel: 886-3-3183232

Fax: 886-3-3270892

**Email:** [service.adt@tw.bureauveritas.com](mailto:service.adt@tw.bureauveritas.com)

**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

The address and road map of all our labs can be found in our web site also.

--- END ---