



**MET Laboratories, Inc.** *Safety Certification - EMC - Telecom- Environmental Simulation*

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Batteroo  
310 De Duigne Drive  
Sunnyvale, CA 94085

June 9, 2017

Dear Mr. Peter Pietrangelo,

Enclosed is the test data and photographs obtained from the testing of the Batteroo, Batteroo AAA Size Sleeves. The Batteroo AAA Size Sleeves was subjected to Environmental Simulation testing in accordance with Batteroo Purchase Order Number 1035.

Thank you for using the services of MET Laboratories, Inc. If you have any questions regarding these results or if MET can be of further service to you, please feel free to contact me.

Sincerely yours,  
MET LABORATORIES, INC.

Mary Ann Salvatin  
Documentation Department

Reference: (\Batteroo\ESLU94327A-GEN)

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**Environmental Simulation Testing  
Test Report**

for the

**Batteroo  
Batteroo AAA Size Sleeves**

**Tested Under**

Batteroo Camera Test Guide

**MET Report: ESLU94327A-GEN**

June 9, 2017

**Prepared For:**

**Batteroo  
310 De Duigne Drive  
Sunnyvale, CA 94085**

**Prepared by:  
MET Laboratories, Inc.**  
33439 Western Avenue, Union City, CA 94544



Batteroo  
Batteroo AAA Size Sleeves

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## Environmental Simulation Testing Test Report

for the

**Batteroo**  
**Batteroo AAA Size Sleeves**

Tested Under

**Batteroo Camera Test Guide**

**Testing Performed By:**

Thomas Chan  
Project Engineer, Environmental Lab

**Report Prepared By:**

Mary Ann Salvatin  
Documentation Department

**Lab Manager:**

Edmund Aryee  
Environmental Simulation Lab



## Report Status Sheet

Revision	Report Date	Reason for Revision
Ø	June 9, 2017	Initial Issue.



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# I. Test Results



## Overview:

MET Laboratories, Inc. was contracted by Batteroo to perform testing in accordance with Batteroo Camera Test Guide on the Batteroo AAA Size Sleeves Equipment Under Test (EUT).

## Description of EUT:

The Batteroo AAA Size Sleeves, Equipment Under Test, are custom boost converters that are attached to an ED coated stainless steel sleeve. It fits over standard alkaline batteries.



Photograph 1. View of the Batteroo AAA Size Sleeves

### Test Setup:

The EUT was configured in accordance with the manufacturer’s instructions and to the extent possible operated in a manner representative of the typical usage of the equipment.

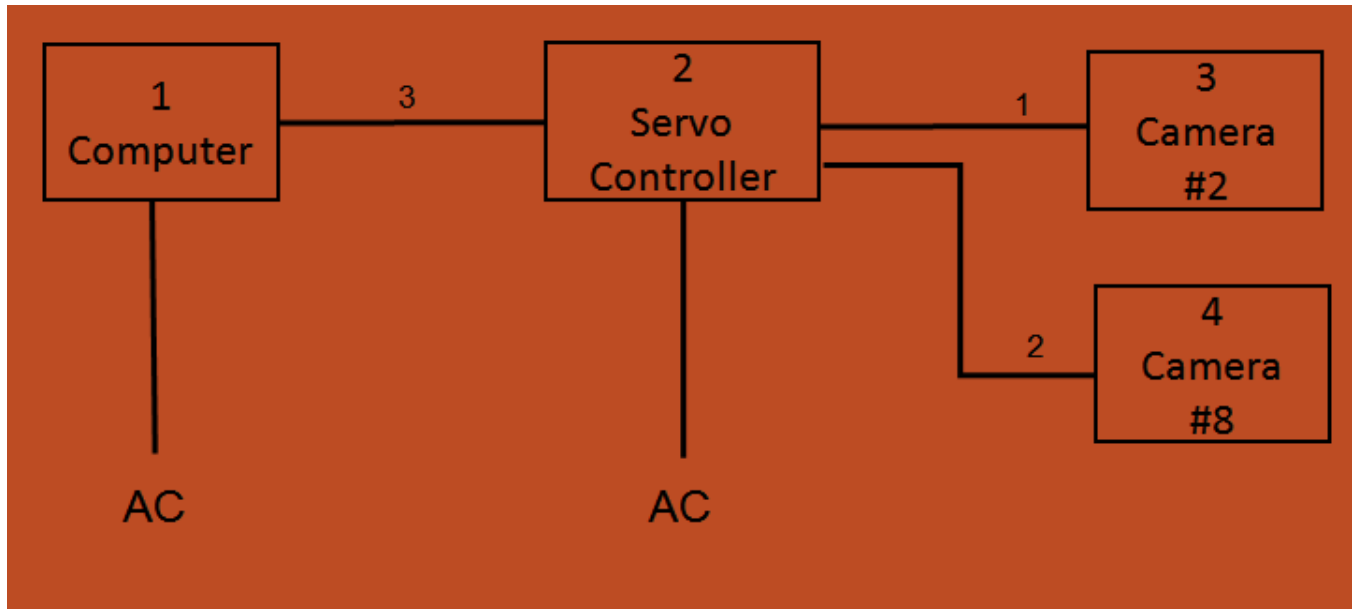


Figure 1. Block Diagram of Camera Flash Test Setup

Ref. ID	Name / Description	Manufacturer	*Customer Supplied Calibration Data
1	Laptop	HP	Not Required
2	Servo Controller	Polulo	Not Available
3	Batteroo camera jig	Batteroo	Not Required
4	Batteroo camera jig	Batteroo	Not Required

Table 1. Customer Supplied Support Equipment used during test

### Mode of Operation

The EUT manages how the power from the battery is used within the product it is installed in.

### Test purpose:

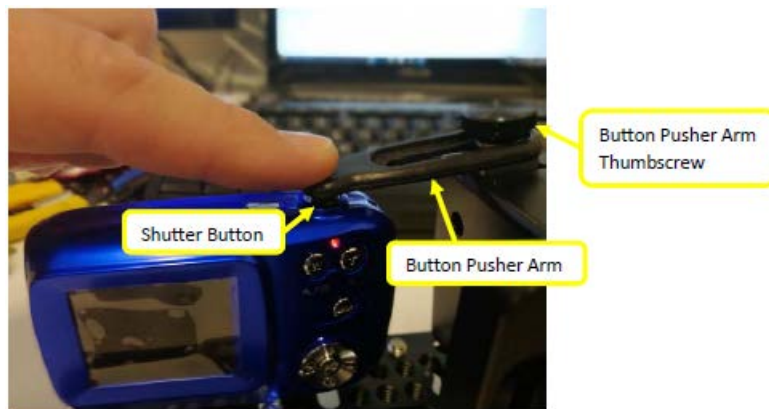
To see if the battery with the Batteroo sleeve produces more camera flashes than the standard battery use.



## Batteroo Camera Flash Test Method:

**Test Methods:** Testing in accordance with the Batteroo Camera Test Guide.

- Test Procedure:**
- A. Two cameras were positioned and mounted onto the camera test fixture provided by Batteroo. See Photograph 2. Two camera configurations were used for the test:
    - One camera with Batteroo AAA battery sleeve installed.
    - One camera without the Batteroo sleeve.
  - B. The camera shutter button was aligned with the automatic camera actuator arm on the camera fixture as shown in Figure 2 below:



**Figure 2. Automatic camera actuator alignment on fixture**

- C. The cameras were then turned on, and the flash settings were set to the “Fill Flash Symbol” setting.
- D. Both camera configurations were placed side by side for the test, and tested in a dark room. See Photograph 3.
- E. The test was started and monitored via the Servo Controller link to the laptop software that ran the camera test.
- F. Each camera configuration took flash pictures every 10 seconds continuously until both camera devices could no longer take pictures.
- G. The software was stopped once both devices stopped functioning, and the photo count was checked and recorded between the two camera configurations.



**Test Results:** The following was documented upon completion of the test:

- Camera with Batteroo sleeve took 751 photos
- Camera without Batteroo sleeve took 194 photos

**Test Engineer(s):** Thomas Chan

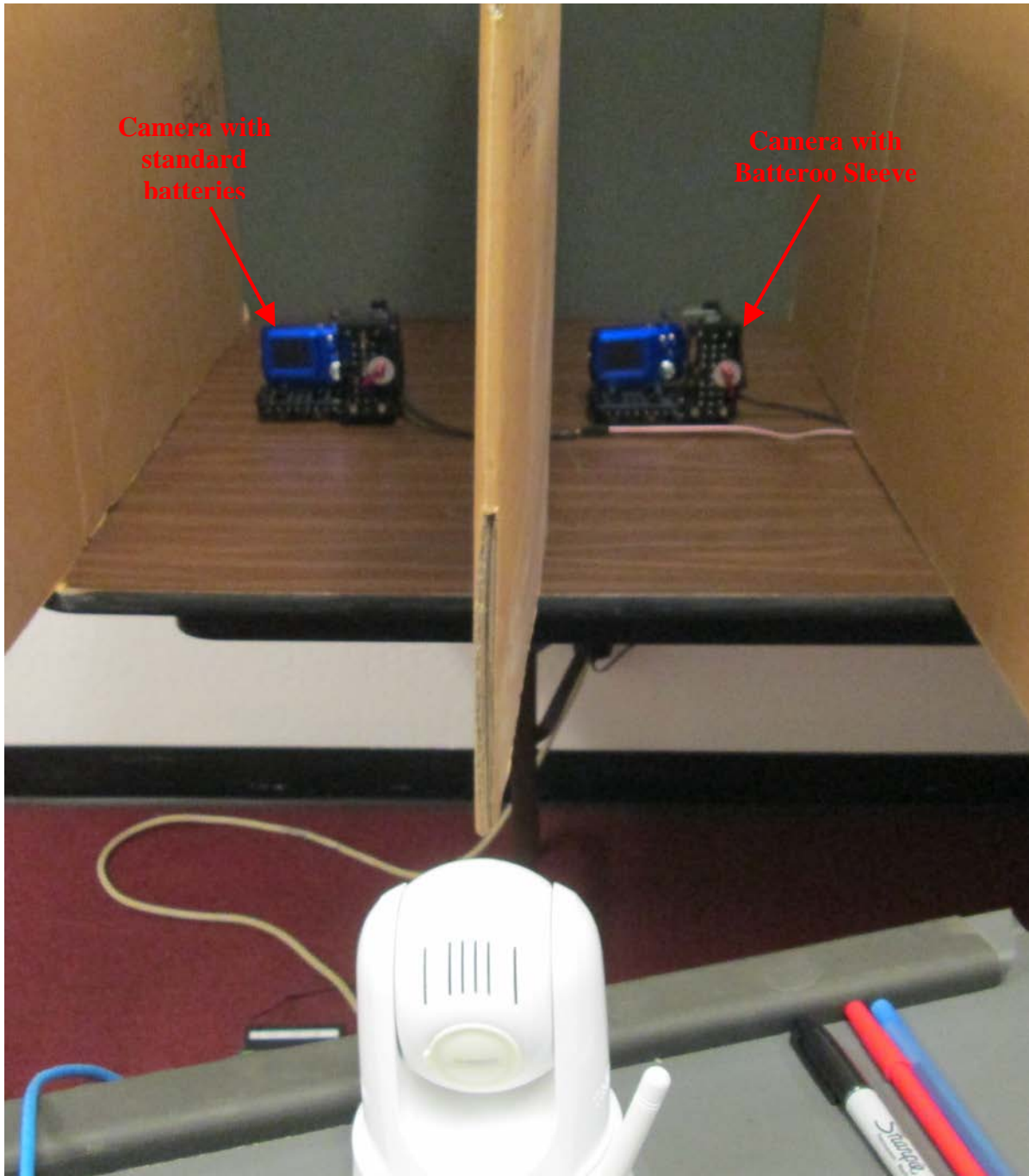
**Test Date(s):** 05/08/2017

## Test Photos



**Photograph 2. View of Camera Mount Test Fixture**

## Test Photos



**Photograph 3. View of Camera Test Setup**