

MSD II Testing – Battery Capacity

Team: P18347: Stroller with HVAC capability

Responsible Engineer: Ian

Purpose:

The purpose of this test is to test the battery life of a fully charged battery in a cold environment.

Engineering Requirement:

Requirement #	Importance	Metric	Unit	Ideal Value	Marginal Value
S3.a	9	Battery life of a single full charge	[hours]	4	0-4

Materials:

- a.) Closed stroller pod with heated seat
- b.) BME Cold Room
- c.) Stroller with components attached
- d.) Fully charged batteries
- e.) voltmeter

Test Procedure:

- 1.) Fully charge batteries and measure capacity using voltmeter
- 2.) Place stroller in cold room
- 3.) Turn on system, start timer and let run until batteries die
- 4.) Measure capacity of batteries with voltmeter

Pass/Fail Criteria:

Pass	Fail
Battery life = 4 hours	Battery life < 4 hours

Completion Date: