

## Preliminary Testing Plan

Old device testing and data collection: (week 2 – week 3)

- Do testing and take measurements for known samples

Test if there is light inside the enclosure (Week 6)

- Close the lens of the camera and take measurements while light source off
- Open the lens and take other measurements while light source off
- Compare data to ensure no differences

New Device Testing and data collection (week 6 – week 8):

- Do testing and take measurements for known samples
- Compare collected data to old device data

Test if the device orientation makes difference (Week 7)

- Put the device horizontally and take data
- Put the device vertically and take data
- Compare results to ensure no differences

Test the temperature effect on the results (Week 8)

- Leave device off for 24 hours
- Take data after turning ON the device
- Leave the device ON for 24 hrs to warm it up and re-take data
- Repeat
- Compare results to ensure no differences

Test the Vibration effect on the results (Week 8)

- Take data
- Move the device to another desk and back
- Take data again
- Compare results to ensure no differences

If no (or small) differences in the comparison for any test, combine tests to test for cumulative effects (Week 9)