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)