

## **COVER LETTER**

Primarily, authors would like to thank the comments and suggestions received by the reviewers. We have used "Track Changes" so that changes are easily visible to the reviewers. You can find the main points of the review and an explanation about the changes made.

## Reviewer 1

We agree that the experimental part where we used just one smartphone is poor. For that reason we have repeat the experiments with 2 more devices in order to compare the results. Furthermore, with those new measurements we have to change the calibration requirements to adapt it to each device, highlighting the need of performing a complete analysis of the sensors before of it use.

Among the two new experiments it has been performed an English analysis in order to check grammar mistakes.

## Reviewer 2

- 1-The paper has been checked in order to correct mistakes on the use of the language.
- 2-The figures have been also changed by word charts in order to give them as most quality as possible. Besides, the unit of each axis has been incorporated, and the sort of chat has been also changed deleting the lines between symbols.
- 3-We agree that the technology is continuously increasing and improving their capabilities. However, the resolution on elements as ambient light sensor which principal aim is to control the brightness of the screen.
- 3- We agree that the technology is continuously increasing and improving their capabilities. For that reason we have included in this new revision an additional devices for each of the measurement methodologies in order to compare the accuracy of different devices. Despite there are some differences on the accuracy they are not enough significant to discard the previous results. Maybe this minimal changes means that those sensors have not significant changes over the time because they are not an important part of the smartphone, and its use, in case of ambient light sensor, is related to adjust the brightness of the screen.
- 4- We have use this external device due to its easy integration with any smartphone thanks to a Bluetooth connection. Furthermore, the data obtained with the device can be used on real time by a smartphone application to use the data as user want. For that reason we had considered that the use of this sort of device can be useful to the comparison due to its capability to use the data collected as if it were another sensor incorporated on the device.
- 5- We agree that the use of digital camera it is complicated because it depends on the camera parameters as ISO, exposure time, etc. For this reason we have fixed along the experiment, as



it is explained on the paper. However, its use as a lighting measurement tool it is possible as we shown in the paper. Furthermore, in future a deeply analysis of this sensor can be performed in order to identify the influence of each camera parameter on the measurement.

6- We agree that the position of the ambient light sensor is an inconvenient when it want to be used as an ambient measurement tool. For that reason this sort of sensor is useful to measure light directly on sensor, as it is exposed on the paper. When the purpose of the measurement is to measure the ambient light the average error of the measurement can be higher.

7-The ranges used to recalibrate the sensors has been obtained through the data, searching the best option according to the measurement performed. However, in this new version of the paper, it is shown how those ranges of calibration are not always the most effective for all the devices, making necessary to perform a previous analysis to detect the best option.

8-We think that mobile devices can be used as a lighting measurement tool but their accuracy cannot be compared with an external dedicated device.