

## Precautions for Photodiode/Photocell Usages

1

The lux reading from Hytronik's products are based on the surrounding lux value around the physical location of the product, rather than the lux value on the floor/ground. In real applications, user's experience is based on the floor/ground, therefore user needs to adjust the lux setting parameters according to the real installation environment in order to avoid lux setting parameters not operating as expectation.

Please note that the photodiode/photocell operation is affected by localised environmental conditions to the device (typ. within 2 to 3m), including reflected light, furnishing and floor coverings, wall and surface colours etc.

2

Season and weather: In different seasons and different weathers, the location of sun and the spectrum of sun element are also different. As a result, the direct light element that goes to photodiode/photocell will be different, which could cause differences to the user experience.

3

In daylight harvesting applications, user needs to place the photodiode/photocell on a "moderate location" – it cannot be too close to the fixture (this is to prevent very strong feedback from fixture to photodiode/photocell when dimming), nor too far from the fixture (this is to prevent very weak feedback from fixture to photodiode/photocell when dimming). There is no standard answer as to "how far" would be most moderate, because it is highly associated with different fixture wattage power, different fixture structure design, and different reflections from ambient environment (typically reflected from floor/ground, window & wall etc, and the smoothness of the surface, color, reflection distance, and reflection angle will all make some differences). So, this has to be evaluated case by case.

4

Any dimming or lux switching applications must be fully completed and furnished where necessary before target lighting levels can be set. If the area is incomplete or unfurnished, the product or system will be demonstrated to be capable of dimming and/or lux switching, but additional attendance may be needed in order to set desired lighting levels.

**Kind Reminder:** Please always make sure that field testings are conducted before applying to mass installations, this is to make sure that the performance of the photodiode/photocell are tested ok on-site, otherwise if the installation environment is not friendly to photodiode/photocell, then the sensor may not work normally on the project site.