

Notes on EDS Sensor Applications

Question: How does the trim-pot adjustment affect the EDS sensor?

Answer: Regardless of the EDS potentiometer position, when there is no ambient light being sensed, the dimming

Turning the potentiometer counterclockwise (CCW) from full clockwise (CW) position will cause the EDS to begin dimming with less ambient light. In other words, the knee of the dimming curve is moved towards zero as shown in the graphs below.

Results from dynamic testing show that when the potentiometer is fully CW, the dimming point is $\sim 300\text{fc}$ and above. When the potentiometer is fully CCW, the dimming point is $\sim 30\text{fc}$ and above.

The existing design of the EDS sensor is such that the "bandwidth" for full dimming is small (less than 10% full range to go from no dimming to full dimming). Therefore, careful consideration of location, daylight exposure, and other operational conditions need to be considered for effective daylight management using the EDS sensor.

