Now that LED light sources are the status quo, it is easier to control lighting than ever before. Control strategies which used to be time consuming and cumbersome can now be implemented effectively and inexpensively.

1) **High-End Trim**, also called task tuning, is the method of adjusting the maximum luminaire output at the time of installation in an effort to set the target or recommended light level.

2) **Occupancy Sensing** is how lighting systems respond when occupants enter or leave a space. Configuring a space for tenant comfort and code compliance means paying attention to Occupancy Mode and Vacancy Mode.

Fixtures can be grouped to minimize disruptions and occupancy settings are easily adjusted to account for sensitivity to movement and duration.

3) **Daylight Harvesting** is how lighting systems detect and adjust to natural daylight in a workspace. As photosensors detect enough natural light, they can automatically reduce the luminaires’ light output.

**Fun Fact!**
To compensate for light loss and other design factors – spaces are routinely specified to provide more light than may be initially needed. This is where control strategies can help.

**Know the Difference...**
In Occupancy Mode, fixtures will automatically adjust light levels (or simply turn on or off) as occupancy is detected.

In Vacancy Mode, the user must physically turn the light source on.

**Real Talk**
Overlighting a space doesn’t just waste energy – it may cause tenant discomfort and hurt productivity!
Many manufacturers offer fixtures with ambient light and occupancy sensors built into the fixture. When these fixtures are networked and dimmable, they are known as Luminaire Level Lighting Controls.

Did You Know?
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How these control strategies work throughout the day

<table>
<thead>
<tr>
<th>Time</th>
<th>Lighting System Power Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>6AM</td>
<td>100%</td>
</tr>
<tr>
<td>9AM</td>
<td>75%</td>
</tr>
<tr>
<td>12PM</td>
<td>50%</td>
</tr>
<tr>
<td>3PM</td>
<td>25%</td>
</tr>
<tr>
<td>6PM</td>
<td>25%</td>
</tr>
<tr>
<td>9PM</td>
<td>25%</td>
</tr>
</tbody>
</table>

- **High end trim**: reduces light output to the target levels
- **Occupancy Sensing**: turns lights off when no one is present
- **Daylight Harvesting**: adjusts luminaire output to accommodate natural light

Also Consider...
Other control strategies that can save energy and add benefits are:

- **System scheduling**: can dim or turn lights off at certain times of day, such as after business hours
- **Manual dimming**: allows users to adjust the lighting to their own personal preference