

# Commercial LED Lighting Checklist for Growers



Learn more online at [biosgrowlights.com](https://biosgrowlights.com)

## 1. Durability: Is it Built for the Grow Room?

- IP Rating of IP65 or higher (resistant to dust and water)
- Corrosion-resistant materials (e.g., anodized aluminum)
- Sealed components for high-humidity environments

## 2. Spectrum: Does the Light Match Your Crop's Needs?

- Broad-spectrum suitability for cannabis cultivation
- Appropriate blue light (400–500 nm) for vegetative growth
- Balanced red light (600–700 nm) for flowering without photobleaching
- Consideration of far-red light (700–750 nm) for flowering speed, if needed

## 3. HPS to LED Transition: Are You Ready?

- HVAC adjustments for reduced radiant heat
- Modified dehumidification strategy (due to less plant transpiration)
- Revised nutrient schedules to align with LED-specific plant metabolism

## 4. Efficiency Metrics: Are You Maximizing Energy Use?

- PPE rating  $>2.5 \mu\text{mol}/\text{J}$
- Uniform light distribution across the canopy
- DLI (Daily Light Integral) aligned with crop needs

## 5. Heat Management: Are You Accounting for the Shift?

- HVAC recalibrated for new heat dynamics
- Monitoring of water and nutrient uptake changes
- Compatibility with existing cooling systems

## 6. Total Cost of Ownership (TCO): Are You Thinking Long-Term?

- Warranty coverage of 5–7 years
- Low maintenance requirements
- Long lifespan (50,000+ hours)
- Energy efficiency that offsets upfront costs over time

## 7. Purchase Readiness: Are You Prepared to Buy?

- Detailed site plan with canopy layout and infrastructure details
- Light plan from the manufacturer (photometric layout)
- Structural load assessment for fixture weight

## 8. Industry Trends: Are You Future-Proofing Your Grow?

- Integration with smart controls and automation systems
- Evaluation of newer, more efficient PPE ratings