

GE current

a Daintree company

LED HORTICULTURE LIGHTING SYSTEMS



Arize Element[®] R-Series

Enabling efficient growth at an industrial scale

Efficient

Efficacy levels surpassing 3.2 $\mu\text{mol}/\text{J}$ make the Element one of the most efficient, cost-effective grow lights in its class

Complete

The R-Series replaces and matches the light output of 400, 600 and 1000 Watt HPS fixtures, while consuming half the power.

Powerful

Produces the same light output as a 1000W HPS fixture while offering 40% energy savings, with multiple spectral offerings

Reliable

The most extensive reliability testing in the industry and a five-year warranty ensure consistent, predictable yields for years to come

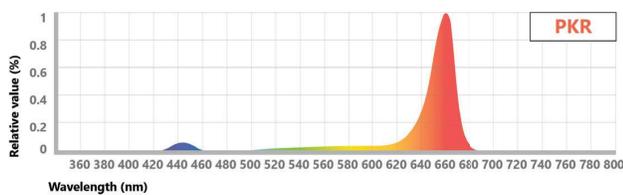
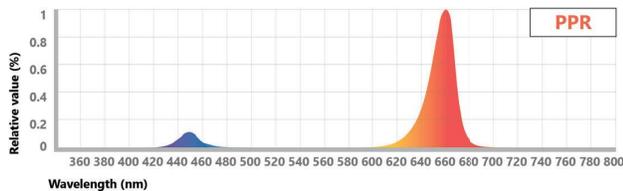
www.led.com for the latest in lighting innovations from the inventors of the LED

Arize Element[®] R-Series

Spectra

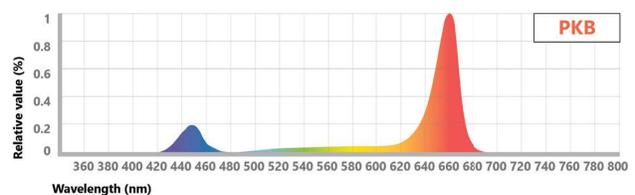
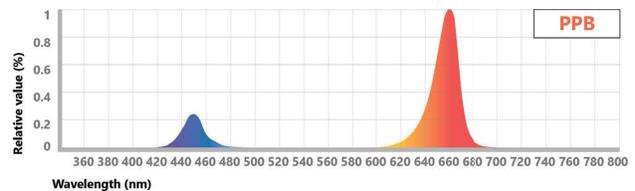
Type R

High red light to optimize plant growth and photosynthesis



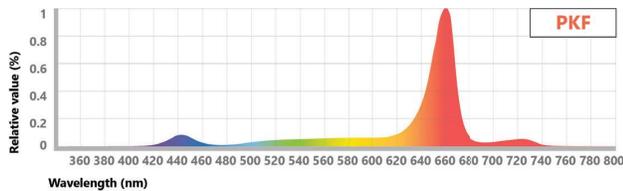
Type B

Light that supports biomass and secondary metabolite production



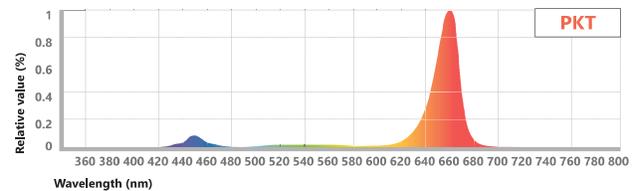
Type F

Encourages a stretching and expansion response for more robust growth



Type T

Increased blue and green ratios boost secondary metabolite production to promote crop quality and phytochemical profile



Spectrum Photon Distribution

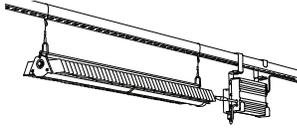
| Ratio | Blue PF | Green PF | Red PF | Far Red PF |
|-------|---------|----------|--------|------------|
| PPR | 10% | 0% | 90% | 0% |
| PPB | 20% | 0% | 80% | 0% |
| PKR | 8% | 15% | 77% | 0% |
| PKB | 16% | 15% | 69% | 0% |
| PKF | 8% | 15% | 72% | 5% |
| PKT | 6% | 6% | 88% | 0% |

Optical table

| Optical code | Spectrum | Typical photon flux ¹ (μmol/s) | Power ¹ (W) | Efficacy ¹ (μmol/J) | Model |
|--------------|----------|---|------------------------|--------------------------------|-------|
| R1000 PKR | PKR | 1670 | 545 | 3.1 | R1000 |
| R1000 PKB | PKB | 1630 | 553 | 2.9 | R1000 |
| R1000 PKT | PKT | 1753 | 554 | 3.2 | R1000 |
| R1000 PKF | PKF | 1716 | 588 | 2.9 | R1000 |
| R600 PKR | PKR | 1006 | 320 | 3.1 | R600 |
| R600 PKB | PKB | 964 | 325 | 3.0 | R600 |
| R400 PPR | PPR | 550 | 180 | 3.0 | R400 |
| R400 PPB | PPB | 525 | 187 | 2.8 | R400 |

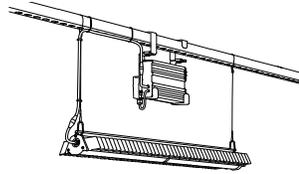
¹ Typical performance +/-10%

Installation options



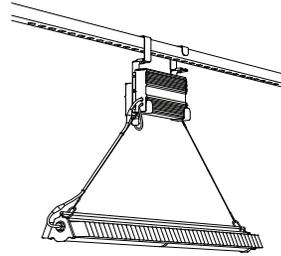
Standard mount

The out-of-the-box option, with 203mm support cables and 41.2 mm square brackets pre-installed on the power supply



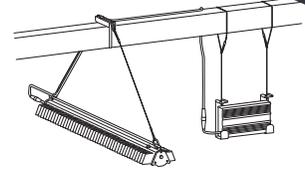
Suspension kits

609, 1524 & 3048 mm support cables reduce the distance from the fixture to the crop, for more intense, focused lighting



Combination mount

Pre-drilled holes in the power supply brackets allow the Element to be suspended from the power supply



90° bracket

This perpendicular bracket allows the Element to be installed in parallel with crop rows



1 Purpose-Built

A heat sink that doesn't accumulate debris and LEDs protected by a lens are just two of the ways we designed reliability into the L1000

2 Optimized Spectrums

Multiple broad, high- and low-blue spectrum offerings maximize year-round production for both sole source and supplemental applications

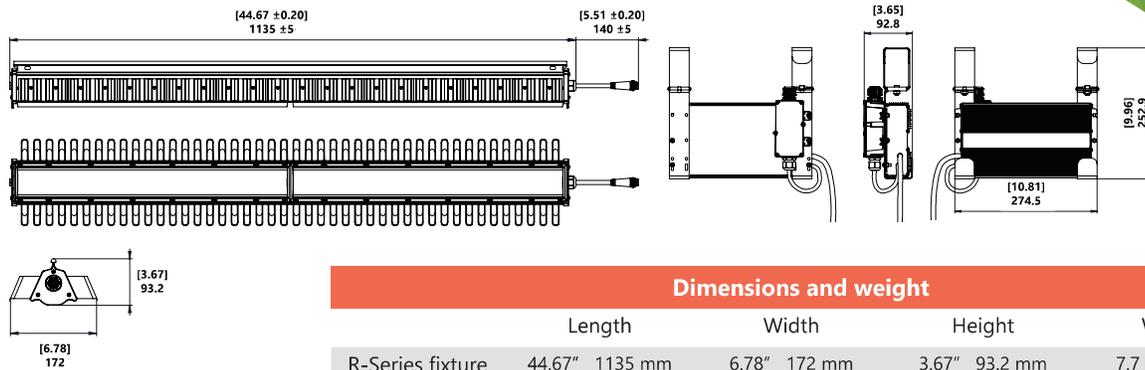
3 No Wiring Changes

Re-wiring and lighting layout changes are expensive and time consuming so we made sure it is one lamp out, one lamp in when retrofitting HPS lighting.

Accessories

| SKU | Order code | Description | Components |
|----------|----------------|---------------------------------------|--|
| 93121626 | GEHAK-NN-EB-N0 | L1000 609 mm suspension kit | 609 mm support cable + 914 mm DC cable |
| 93121628 | GEHAK-NN-AC-N0 | L1000 1524 mm suspension kit | 1524 mm support cable + 1829 mm DC cable |
| 93121630 | GEHAK-NN-BD-N0 | L1000 3048 mm suspension kit | 3048 mm support cable + 3658 mm DC cable |
| 93121632 | GEHAK-DN-DD-N0 | Power supply 70 mm square bracket kit | 70 mm square bracket extension + screw + nut |
| 93121633 | GEHAK-BN-DD-N0 | Power supply 70 mm pipe bracket kit | 70 mm pipe bracket extension + screw + nut |
| 93121634 | GEHAK-AN-DD-N0 | Power supply 35 mm pipe bracket kit | 35 mm pipe bracket extension + screw + nut |
| 93121635 | GEHAK-NN-NE-N0 | Power supply suspension kit | 305 mm loop to toggle support cable |
| 93121636 | GEHAK-NN-NN-J0 | Junction box for dimming | Junction box |
| 93122354 | GEHAK-NN-NN-D0 | Wall-mounted dimming switch | Dimming switch |
| 93139057 | GEHAK-NO-AG-N0 | 90° mounting kit | Bracket, clamp, support cables, 1829 mm DC cable |

Mechanical outline



Dimensions and weight

| | Length | Width | Height | Weight |
|------------------|-----------------|----------------|---------------|----------------|
| R-Series fixture | 44.67" 1135 mm | 6.78" 172 mm | 3.67" 93.2 mm | 7.7 lbs 3.5 kg |
| Power supply | 10.81" 274.5 mm | 9.96" 252.9 mm | 3.65" 92.8 mm | 7.7 lbs 3.5 kg |

Specifications

| | | | |
|---|---|----------------------------|---------------------------------|
| Dimming range | 0-10V | Power factor | >0.9 |
| Max source current | 450uA | Max. remote mount distance | 12 ft (3.6 m) |
| Dim-to-off ³ | Yes | Cooling | Passive |
| Dim off voltage | 0.35-0.65 V (typ. 0.5 V) | Light distribution | Standard 120° / XW XXX° |
| Dim on voltage | 0.55-0.85 V (typ. 0.7 V) | Operating environment | 0°C to 45°C (32°F to 113°F) |
| Dimming output range | 10%-100% | IP rating | IP66 |
| Absolute maximum dimming voltage | 20V | Lifetime | L90: >36,000 hours ⁵ |
| Maximum fixtures per dimmer ⁴ | 156 | Warranty | Five-year system warranty |
| Dimming control input is non-isolated from Class 1 driver output circuit. Use with sink dimmers only | ³ Refer to installation guide for dimming functionality details ⁴ For dimmer loading, please contact customer support ⁵ Tested at 45°C per TM-21 | System certifications | UL E492907, CE, DLC |

Order code table

| GEHTL _____ | | | | | |
|-------------|------------------------|---------------------------|--------------|----------|-----|
| Product ID | Optical code | Input voltage | Distribution | Options | Gen |
| GEHTL | See optical code table | 7 = 220-240V ⁶ | N = 120° | X = None | 1 |
| | | 8 = 380-415V ⁷ | | | |

⁶ Only available with E optical codes
⁷ Only available with M and H optical codes



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