

**GE current**  
a Daintree company

LED HORTICULTURE LIGHTING SYSTEMS



# Arize Element<sup>®</sup>

Enabling efficient growth at an industrial scale

## Efficient

Efficacy levels surpassing 3.1  $\mu\text{mol}/\text{J}$  make the Element one of the most efficient grow lights in its class

## Flexible

Universal bracket and cable options mean the Element can be installed on any existing structure in seconds

## 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

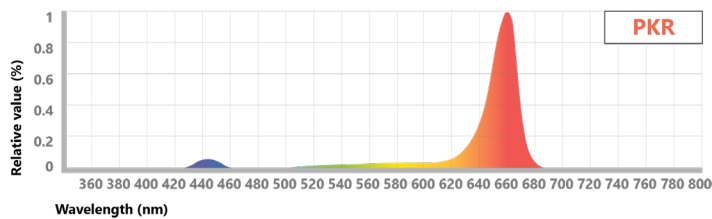
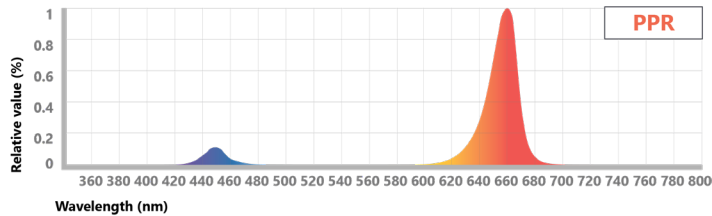
[www.led.com](http://www.led.com) for the latest in lighting innovations from the inventors of the LED

# Arize Element<sup>®</sup>

## Spectra

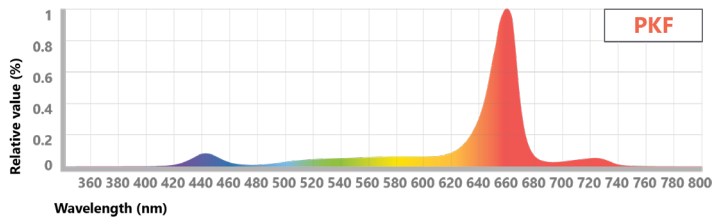
### Type R

High red light to optimize plant growth and photosynthesis



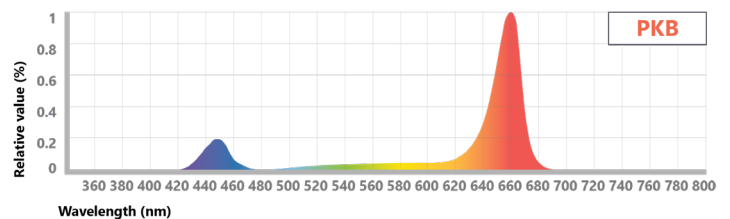
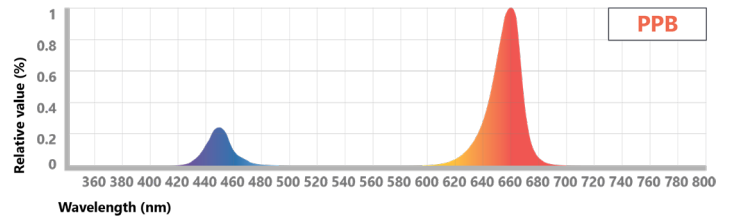
### Type F

Encourages a stretching and expansion response for more robust growth



### Type B

Light that supports biomass and secondary metabolite production



### Spectrum Photon Distribution

Ratio	Blue PF	Green PF	Red PF	Far Red PF
PPR	9.5%	0.0%	90.5%	0.0%
PPB	18.2%	0.0%	81.8%	0.0%
PKR	8.0%	15.0%	77.0%	0.0%
PKB	15.5%	15.0%	69.5%	0.0%
PKF	7.6%	15.0%	72.4%	5.0%

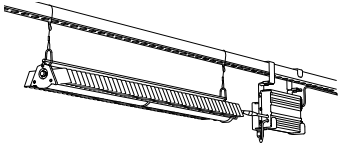
## Optical table

Optical code	Spectrum	Typical photon flux <sup>1</sup> (μmol/s)	Power <sup>1</sup> (W)	Efficacy <sup>1</sup> (μmol/J)	Model
EPPR4	PPR	623	178	3.5	L400
EPPB4	PPB	612	180	3.4	L400
MPPR4	PPR	1038	310	3.3	L600
MPPB4	PPB	1013	314	3.2	L600
MPKR4	PKR	1006	330	3.0	L600
MPKB4	PKB	964	330	2.9	L600
MPKF4	PKF	987	330	3.0	L600
HPPR4	PPR	1827	599	3.1	L1000
HPPB4	PPB	1761	601	2.9	L1000
HPKR4	PKR	1669	590	2.8	L1000
HPKB4	PKB	1631	597	2.7	L1000
HPKF4	PKF	1531	594	2.6	L1000

<sup>1</sup> Typical performance +/-10%

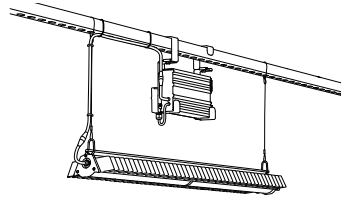


## Installation options



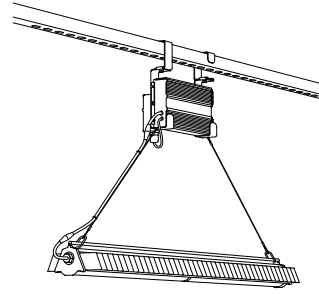
### Standard mount

The out-of-the-box option, with 8" support cables and 1 3/8" square brackets pre-installed on the power supply



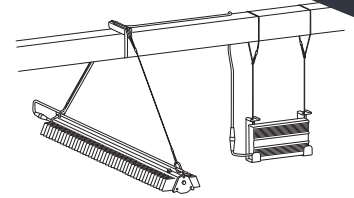
### Suspension kits

2', 5' & 10' 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 spectra

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

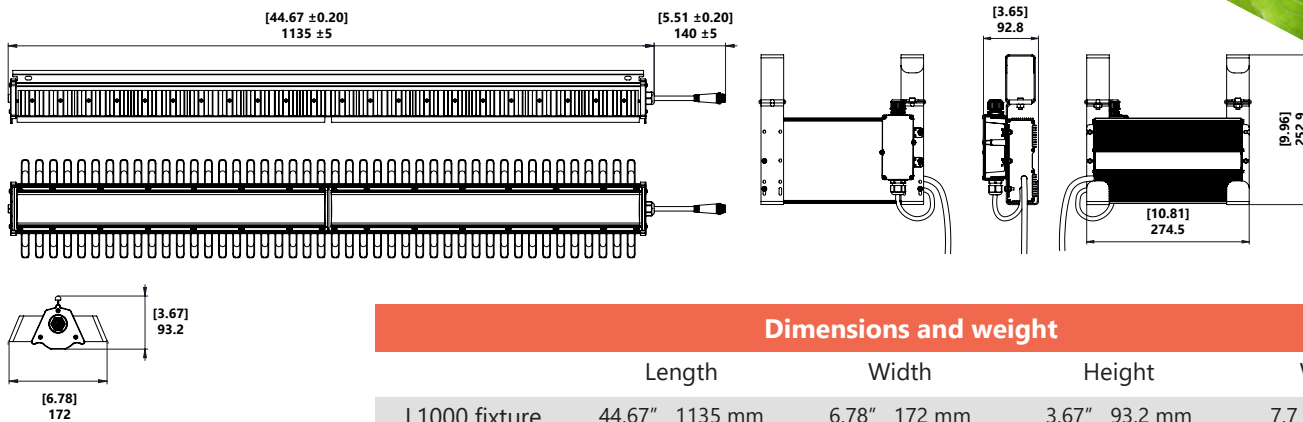
#### 3 Quality you can trust

We have the highest quality standards in the industry because we don't believe in leaving reliability testing up to our customers

## Accessories

SKU	Order code	Description	Components
93121626	GEHAK-NN-EB-N0	L1000 2' suspension kit	2 ft support cable + 3 ft DC cable
93121628	GEHAK-NN-AC-N0	L1000 5' suspension kit	5 ft support cable + 6 ft DC cable
93121630	GEHAK-NN-BD-N0	L1000 10' suspension kit	10 ft support cable + 12 ft DC cable
93121632	GEHAK-DN-DD-N0	Power supply 2 3/4" square bracket kit	2 3/4" square bracket extension + screw + nut
93121633	GEHAK-BN-DD-N0	Power supply 2 3/4" pipe bracket kit	2 3/4" pipe bracket extension + screw + nut
93121634	GEHAK-AN-DD-N0	Power supply 1 3/8" pipe bracket kit	1 3/8" pipe bracket extension + screw + nut
93121635	GEHAK-NN-NE-N0	Power supply suspension kit	1 ft 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 + 6 ft DC cable

# Mechanical outline



## Dimensions and weight

	Length	Width	Height	Weight
L1000 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	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 <sup>4</sup>
Maximum fixtures per dimmer <sup>3</sup>	156	Warranty	Five-year system warranty
Dimming control input is non-isolated from Class 1 driver output circuit.	<sup>3</sup> For dimmer loading, please contact customer support	System certifications	UL E492907, CE, DLC <sup>5</sup>
Use with sink dimmers only	<sup>4</sup> Tested at 45°C per TM-21		

# Order code table

GEHTL					
Product ID	Optical code	Input voltage	Distribution	Options	Gen
GEHTL	See optical code table	1 = 120-240V <sup>6</sup>	N = 120°	X = None	1
		2 = 120-277V <sup>7</sup>			
		3 = 277-480V <sup>7</sup>			

<sup>6</sup> Only available with E optical codes  
<sup>7</sup> Only available with M and H optical codes



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<sup>5</sup>Please refer to the DLC QPL website for the latest and most complete information: <http://www.designlights.org/horticultural-lighting/search/>