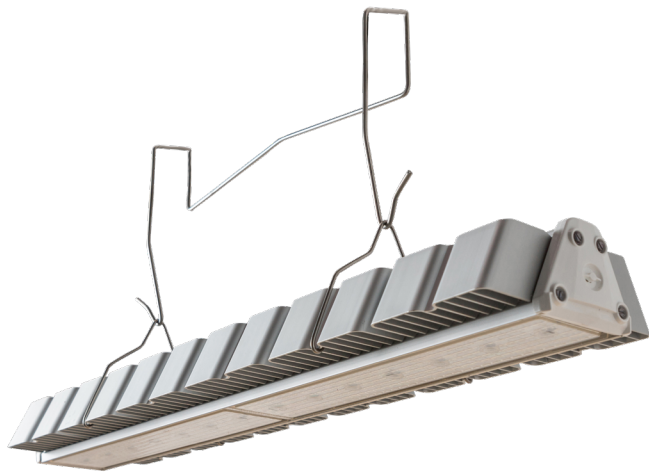


Arize Element® L1000

Enabling efficient growth at an industrial scale



Features

- The Arize Element is a family of super-efficient, robust, and reliable LED professional horticultural lighting fixtures for greenhouses and indoor farms.
- Available in a wide range of power and spectral options, the Element offers scalable solutions for maximum productivity and efficiency across a wide range of horticultural applications.
- Ultra-efficacious – up to 3.6 $\mu\text{mol}/\text{j}$
- Various spectral options for crop-specific applications
- Engineered optics for superior uniformity
- Easy to install brackets
- 6kV Surge Protection
- Applications include indoor non-stacked as well as greenhouse applications, top light, as sole source or supplemental lighting

PRODUCT SPECIFICATIONS

Light source	LED
Equivalent	Up to 1000W DE HPS
Wattage	See chart on page 3
Input voltage	120 - 480V
Spectrum	Various - see chart
Photosynthetic Photon Flux PPF (High Output)	1,750-2,200 $\mu\text{mol}/\text{s}$
Efficacy	2.6 to 3.6 $\mu\text{mol}/\text{j}$
Dimming	0-10V (dim to off)**
Dim Off Voltage	0.35-0.65 V (typ. 0.5 V)
Dim On Voltage	0.55-0.85 V (typ. 0.7 V)
Distribution	XWD Optic, WD Optic
Maximum remote distance	18 ft
Power Factor	>0.99***
THD	<10%
Q90	>50,000 hours****
Operating temperature	0°C to 40°C (32°F to 104°F)
Thermal Mgt	Passive
Listing	cULus, CE, UKCA, DLC, IP66
Lens	Polycarbonate
Mounting	Unistrut bracket or aircraft cable
Limited Warranty	Five-year warranty

* Average rated life based on industry standard measurements.

** Refer to installation guide for dimming functionality details.

*** Tested at minimum input voltage.

**** Test at 40° C per TM-21.

Warranty: 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

The product images shown are for illustration purposes only and may not be an exact representation of the product.

Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. [Click here for Acrylic-Polycarbonate Compatibility table](#) for suitable uses.

Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances](#) that may not be suitable for interaction with LEDs and other electronic components.

Lead times will vary depending on options selected.
Consult with your sales representative.

EXAMPLE: VAE1 PKR SAFY XVOLT GZ10 XWD MTBU1625 JP30

Series	Spectrum	Performance Package	Voltage	Driver
VAE1 Arize Element L1000	BRH White High Blue	HEFY High Efficacy	120 120V	L/DVR Less Driver GZ10 0-10V dimming driver
	BRI White Medium Blue	HO High Output	208 208V	
	PKB Pink Medium Blue	SEFY Standard Efficacy	240 240V	
	PKF Pink Far Red		277 277V	
	PKT Pink Extremely Low Blue		277X 277V utilizing XVOLT driver	
	PUB Purple Medium Blue		347X 347V utilizing XVOLT driver	
	PUR Purple Low Blue Spectrum		480X 480V utilizing XVOLT driver	
	PKR Pink Low Blue		MVOLT 120-277V XVOLT 277-480V	

Distribution	Cordsets ‡
WD Wide Distribution XWD Extra wide distribution	(blank) No power supply
	CNPQDWL4FT Cord with quick disconnect, no plug, 3-conductors, black, wet location, 4FT
	CNPQDWL Cord with quick disconnect, no plug, 3-conductor, black, wet location, 6FT
	CNPQDWL10FT Cord with quick disconnect, no plug, 3-conductor, black, wet location, 10FT
	CNPQDWL12FT Cord with quick disconnect, no plug, 3-conductor, black, wet location, 12FT
	CNPQDWL15FT Cord with quick disconnect, no plug, 3-conductor, black, wet location, 15FT
	CNPQDWL20FT Cord with quick disconnect, no plug, 3-conductor, black, wet location, 20FT
	CPQDTL4FT Cord with quick disconnect, NEMA twist-lock 15A plug, 3-conductor, white, damp location, 4FT
	CPQDSB4FT Cord with quick disconnect, NEMA straight blade 15A plug, 3-conductor, white, damp location, 4FT
	CPQDSB Cord with quick disconnect, NEMA straight blade 15A plug, 3-conductor, white, damp location, 6FT
	CPQDSB10FT Cord with quick disconnect, NEMA straight blade 15A plug, 3-conductor, white, damp location, 10FT
	CPQDSB12FT Cord with quick disconnect, NEMA straight blade 15A plug, 3-conductor, white, damp location, 12FT
	CPQDSB15FT Cord with quick disconnect, NEMA straight blade 15A plug, 3-conductor, white, damp location, 15FT
	CPQDSB20FT Cord with quick disconnect, NEMA straight blade 15A plug, 3-conductor, white, damp location, 20FT
	CPQDTL Cord with quick disconnect, NEMA twist-lock 15A plug, 3-conductor, white, damp location, 6FT
	CPQDTL10FT Cord with quick disconnect, NEMA twist-lock 15A plug, 3-conductor, white, damp location, 10FT
	CPQDTL12FT Cord with quick disconnect, NEMA twist-lock 15A plug, 3-conductor, white, damp location, 12FT
	CPQDTL15FT Cord with quick disconnect, NEMA twist-lock 15A plug, 3-conductor, white, damp location, 15FT
	CPQDTL20FT Cord with quick disconnect, NEMA twist-lock 15A plug, 3-conductor, white, damp location, 20FT
	CPQDTL20A4FT Cord with quick disconnect, NEMA twist-lock 20A plug, 3-conductor, white, damp location, 4FT
	CPQDTL20A Cord with quick disconnect, NEMA twist-lock 20A plug, 3-conductor, white, damp location, 6FT
	CPQDTL20A10FT Cord with quick disconnect, NEMA twist-lock 20A plug, 3-conductor, white, damp location, 10FT
	CPQDTL20A12FT Cord with quick disconnect, NEMA twist-lock 20A plug, 3-conductor, white, damp location, 12FT
	CPQDTL20A15FT Cord with quick disconnect, NEMA twist-lock 20A plug, 3-conductor, white, damp location, 15FT
	CPQDTL20A20FT Cord with quick disconnect, NEMA twist-lock 20A plug, 3-conductor, white, damp location, 20FT

Mounting	Packaging
(blank) No mounting option	(blank) Unit
MTBS275 Square mounting bracket, 2.75IN/70mm	JP30 Job package 30
MTBU1625 Unistrut mounting bracket, 1.625IN/40mm	
MTBUO1625 Unistrut mounting bracket, offset, 1.625IN	
VAAC18 Arize aircraft cable, 18IN	

‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart. Options are sorted alphanumerically

Accessories	
CNPQD4FT	AC Leader Cable, 4'/1219mm, UL
CPQDSB4FT 5-15P	AC Leader Cable, 4' NEMA 5-15, UL
CPQDTL4FT L7-15P	AC Leader Cable, 4' NEMA L7-15, UL
CPQDTL4FT L8-20P	AC Leader Cable, 4' NEMA L8-20, UL
VADCEX3FT	DC Interconnection Cable, 3'/914mm,UL/CE
VADCEX	DC Interconnection Cable, 6'/914mm,UL/CE
VACNPQDLV3FT	dimming Cable, 3 ft/ 914mm, UL/CE
VA1MTBU1625	1.625 in / 40 mm Unistrut mount
VA1MTBUO1625	1.625 in / 40 mm Unistrut offset mount
VA1MTBU275	2.75 in / 70 mm Unistrut square mount
VAAC18	18 in / 457 mm Universal Cable Mount
VAAC24	24 in / 609 mm Universal Cable Mount
VAAC36	36 in / 914 mm Universal Cable Mount
VAAC60	60 in / 1524 mm Universal Cable Mount
VA1MTP90	90° Perpendicular Mounting Kit

‡ Option Value Ordering Restrictions	
Option value	Restriction
Cordsets	CPQDTL20A options required with 347 and 480V. CPQDSB and CPQDTL options not available with MVOLT or HVOLT.
JP30	Available with GZ10 only.

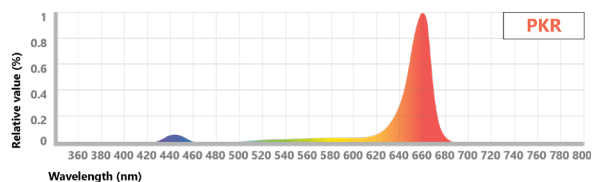
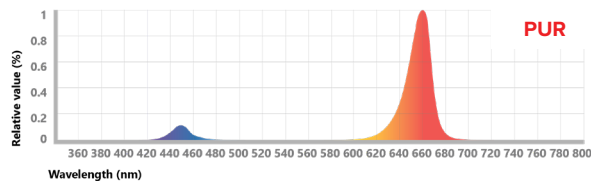
Spectrum Table				
Family	Spectrum	Typical photon flux ¹ (μmol/s)	Power ¹ (W)	Efficacy ¹ (μmol/J)
L1000 (SEFY)	PUR - Purple LB	1,900	584	3.3
	PUB - Purple MB	1,900	622	3.1
	PKT - Pink ELB	1,900	610	3.1
	PKR - Pink LB	1,900	627	3.0
	PKB - Pink MB	1,900	642	3.0
	PKF - Pink FR	1,900	644	3.0
	BRI - White MB	1,750	658	2.7
	BRH - White HB	1,750	683	2.6
L1000 High Efficacy (HEFY)	PUR - Purple LB	1,900	534	3.6
	PUB - Purple MB	1,900	566	3.4
	PKT - Pink ELB	1,900	542	3.5
	PKR - Pink LB	1,850	572	3.2
	PKB - Pink MB	1,850	593	3.1
	PKF - Pink FR	1,800	571	3.2
L1000 High Output (High Output)	PKT - Pink ELB	2,200	690	3.2
	PKR - Pink LB	2,050	690	3.0

¹ Tested at maximum input voltage. Typical performance +/-10%

Photometric Data

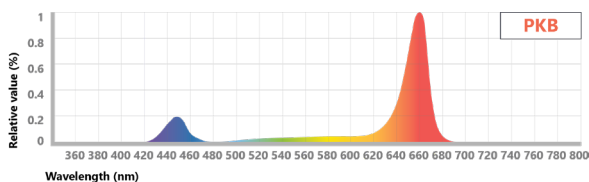
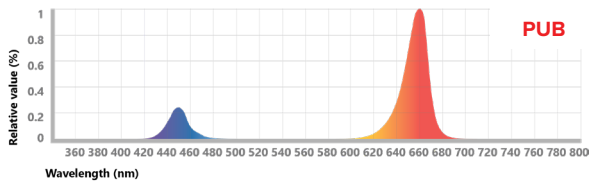
Type R

High red light to optimize plant growth and photosynthesis



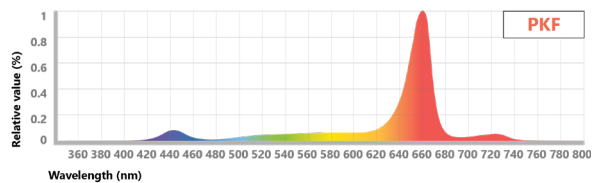
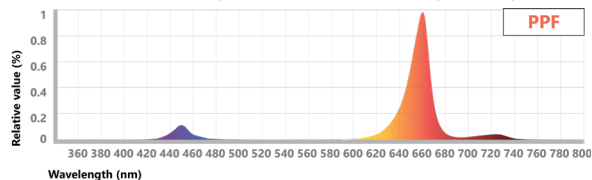
Type B

Light that supports biomass and secondary metabolite production



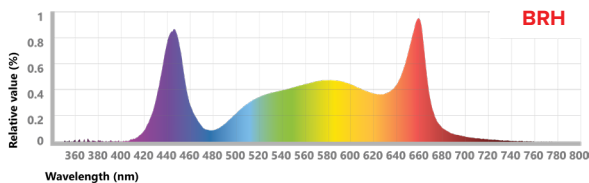
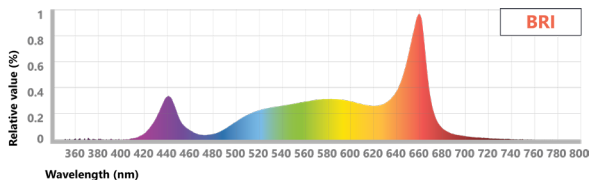
Type F

Full-Spectrum lighting with Far Red. Far red promotes extension growth. Although humans can barely see far-red radiation, it has a major effect on the size of leaves, the length of stems, and ultimately the height of plants.



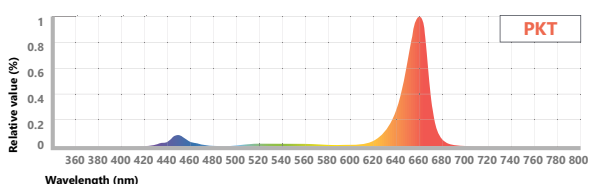
Type BR

Increased blue ratio boosts secondary metabolite production to promote crop quality and phytochemical profile

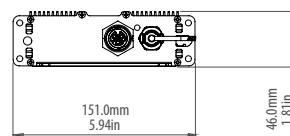
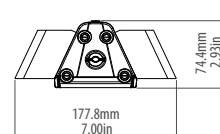
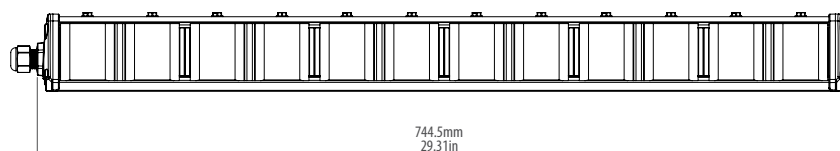


Type T

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



Dimensions and Weight				
	LENGTH	WIDTH	HEIGHT	WEIGHT
L1000 Fixture	29.31" 745 mm	7.00" 178 mm	2.93" 75 mm	9.0 lbs 4.1 kg
Power Supply	13.12" 333 mm	1.81" 46 mm	5.94" 151 mm	7.0 lbs 3.2 kg



Why Element?

1. Purpose-Built

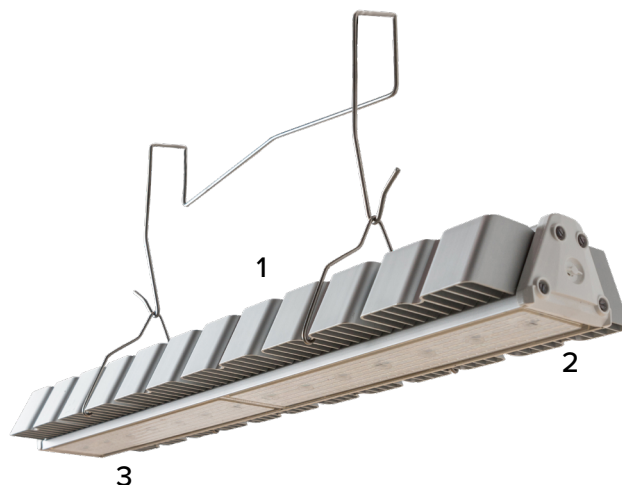
A heat sink that doesn't accumulate debris and LEDs protected by a lens are just two of the ways we designed reliability into the L1000. We've also designed all-new mounting brackets, further simplifying installation

2. Maximum Capability

We've simplified our language: broad white, broad pink and dual-band purple, all with high- and low-blue variants maximize year-round production for both sole-source and supplemental applications

3. Less Input. More Output

LED is more accessible than ever: Our XWD optic reduces the number of fixtures required (more on that below), while efficacy levels surpassing 3.6 $\mu\text{mol/J}$ enable direct replacement of 1000W HPS fixtures, reducing energy costs by over 40%. Did we mention no relamping?



Enabling efficient growth at an industrial scale

Sustainable

Efficacy levels surpassing 3.6 $\mu\text{mol/J}$ make the Element one of the most efficient grow lights in its class, lowering operating expenses

Precise

Our XWD Optic efficiently spreads light, reducing the number of fixtures by an average of 10 to 15% without sacrificing uniformity or crop quality

Complete

Four application-specific models and eight spectrums ranging from dual-band purple to broad white ensure there is an Element for every farm

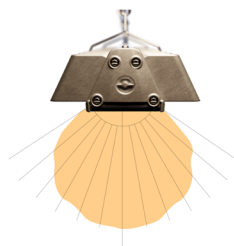
Assembled in the USA

Tried and true manufacturing, a standard five-year warranty and a >50,000 hour lifetime ensure consistent, predictable yields for years to come

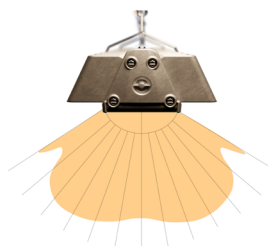
XWD Optic

Compared to the previous generation's Lambertian distribution, our new XWD Optic precisely controls light dispersion, resulting in wider coverage in low headspace applications. It further reduces the number of fixtures by 10 to 15%, without sacrificing uniformity or crop quality, lowering capital investment.

Lambertian Distribution



XWD Optic



Spectral Distribution				
Spectrum	Blue PF	Green PF	Red PF	Far Red PF
PUR	10.0%	0.0%	90.0%	0.0%
PUB	20.0%	0.0%	80.0%	0.0%
PKR	8.0%	15.0%	77.0%	0.0%
PKB	16.0%	15.0%	69.0%	0.0%
PKF	8.0%	15.0%	72.0%	5.0%
PKT	6.0%	6.0%	88.0%	0.0%
BRI	15.0%	38.0%	47.0%	0.0%
BRH	25.0%	38.0%	37.0%	0.0%