

Arize Element® L1000

HORT100

Enabling efficient growth at an industrial scale

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 family offers scalable solutions for maximum productivity and efficiency across a wide range of horticultural applications.



Optical System

Light Distribution	120°
Spectrums	PPR, PPB, PKR, PKB, PKF

Ambient Temperature

TYPE	TEMPERATURE RATING
Operating Temperature	0°C to 45°C (32°F to 113°F)

Electrical

Dimming range	0-10V
Max source current	450uA
Efficacy Range	2.6 to 3.5 µmol/j
Dim-to-off	Yes
Dim off voltage	0.35-0.65 V (typ. 0.5 V)
Dim on voltage	0.55-0.85 V (typ. 0.7 V)
Dimming output range	10%-100%
Absolute maximum dimming voltage	20V
Maximum fixtures per dimmer ³	156
Power factor	>0.9
Max. remote mount distance	12 ft (3.6 m)
Cooling	Passive

For input voltage option 3, 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 Tested at 30°C per TM-21

⁵ Not all product variations listed on this page are DLC qualified.

Visit qpl.designlights.org/horticulture to confirm qualification.

Rated Lifetime

L90: >36,000 hours⁴

Certifications & Warranty

Five-year system warranty
UL E492907, CE, DLC⁵



Order code table

GEHTL

PRODUCT ID	OPTICAL CODE	INPUT VOLTAGE	DISTRIBUTION	OPTIONS	GEN
GEHTL	See optical code table	1 = 120-240V ⁶ 2 = 120-277V ⁷ 3 = 277-480V ⁷	N = 120°	X = None	1

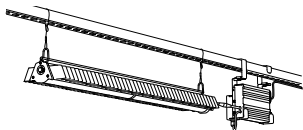
⁶ Only available with E optical codes⁷ Only available with M and H optical codes

Optical table

OPTICAL CODE	SPECTRUM	TYPICAL PHOTON FLUX ¹ (μMOL/S)	POWER ¹ (W)	EFFICACY ¹ (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

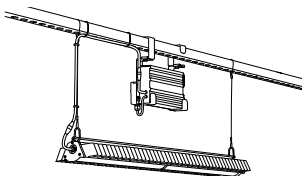
¹ Typical performance +/-10%

Installation options



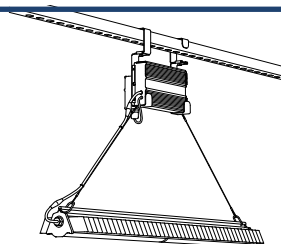
Standard Mount

The out-of-the-box option, with 8" support cables and 1 5/8" square brackets pre-installed on the power supply



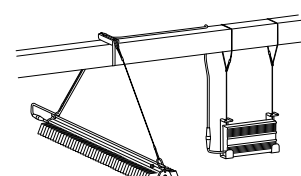
Suspension Kits

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

CUSTOMER NAME

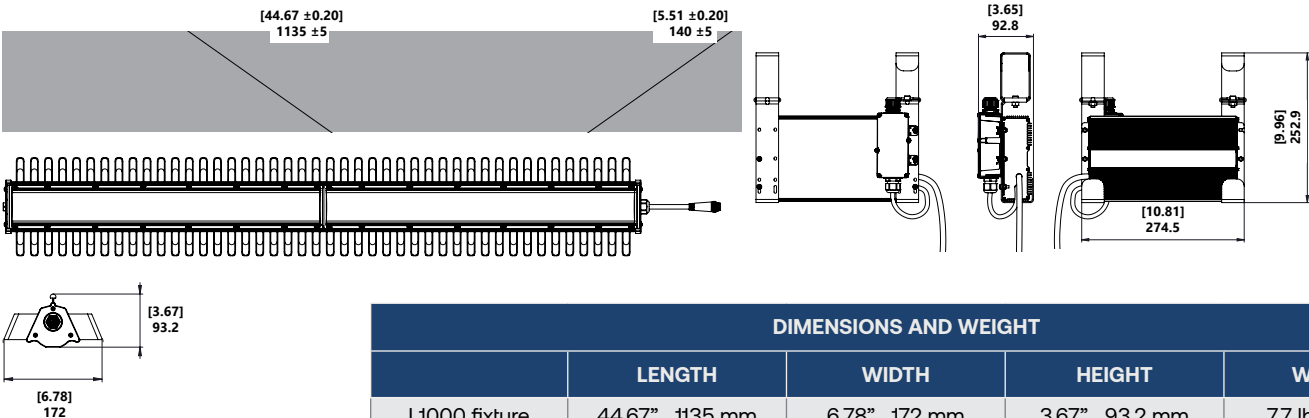
PROJECT NAME

DATE

TYPE

CATALOG NUMBER

Mechanical Outline

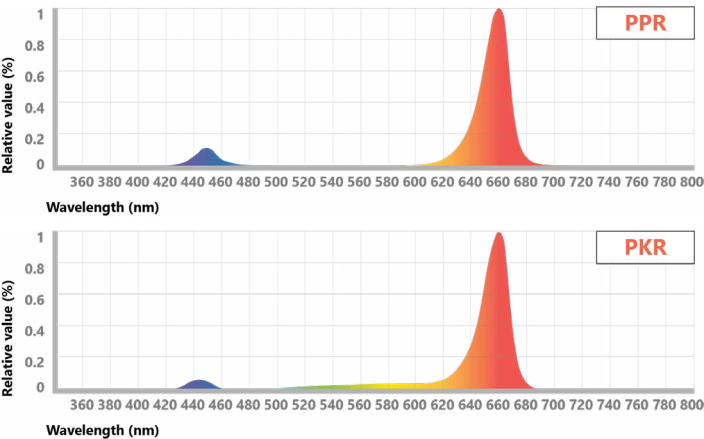


DIMENSIONS AND WEIGHT				
	LENGTH	WIDTH	HEIGHT	WEIGHT
L1000 fixture	44.67" 1135 mm	6.78" 172 mm	3.67" 93.2 mm	7.7 lbs 3.5 kg
Power supply	10.81" 274.5 mm	9.96" 252.9 mm	3.65" 92.8 mm	7.7 lbs 3.5 kg

Spectra

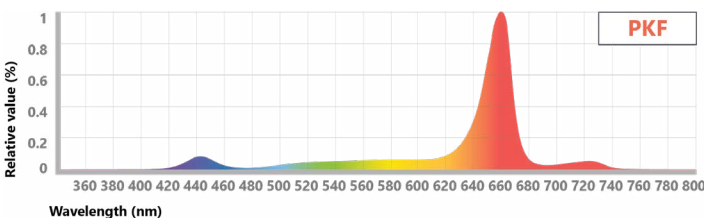
Type R

High red light to optimize plant growth and photosynthesis



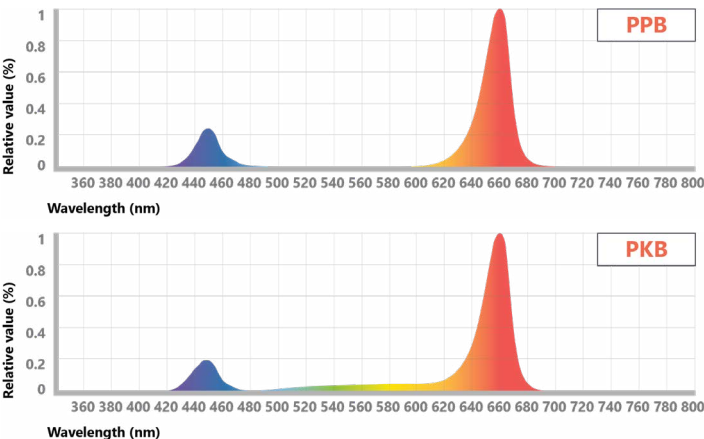
Type F

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	10.0%	0.0%	90.0%	0.0%
PPB	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%