Ærix LBR003 Data Sheet

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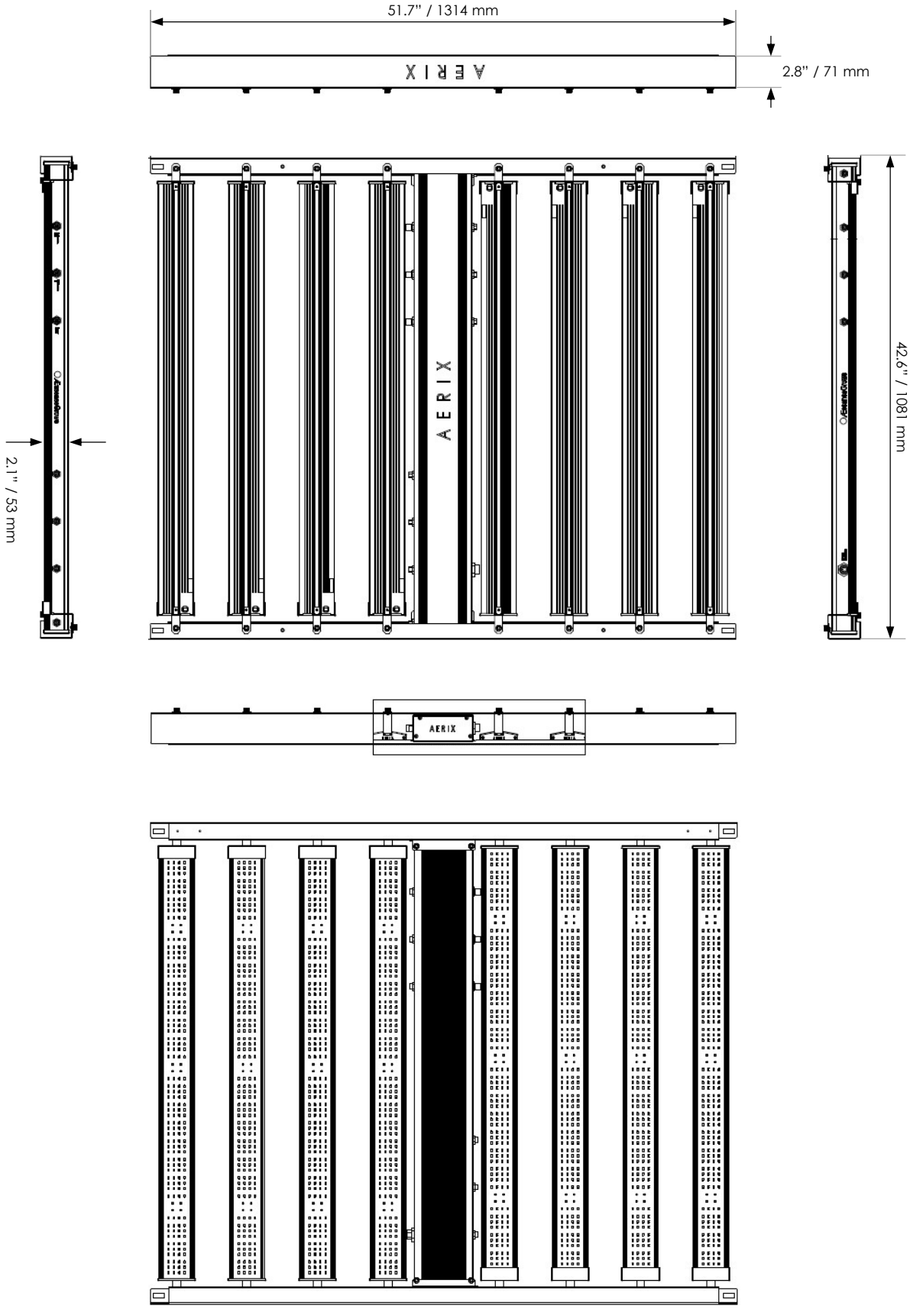
Grow Light, 120V/208V/230V/277V, 680W

Data Sheet


51.7" / 1314 mm
2.8" / 71 mm
AERIX
2.1" / 53 mm
AERIX
42.6" / 1081 mm
AERIX

LBR003 Specifications

	Min	Max
Input Voltage	120 V_{AC}	277 V_{AC}
Input Frequency	50 Hz	60 Hz
AC Power Draw [1]	670 W	720 W
Heat Output [1]	2,320 BTU/h	2,455 BTU/h
Operating Temperature	-4 °F (-20 °C)	104 °F (40 °C)
Storage Temperature	-40 °F (-40 °C)	140 °F (60 °C)
Power factor	0.95	–
Dimming	0% / 20%	100%
PPF	0 µmol/s	1,600 µmol/s

	Value
Avg. grouped PPFD at 12" [1, 2]	1,130 µmol/s/m²
Avg. grouped PPFD at 20" [1, 2]	950 µmol/s/m²
Avg. single PPFD at 6" [1, 3]	800 µmol/s/m²
Avg. single PPFD at 12" [1, 3]	530 µmol/s/m²
Light Uniformity at 20" [1, 4]	0.87
Light Variation (CV) at 20" [1, 5]	4%
Comm. Interface	AES Link [6]
Dimensions (L x W x H)	52" x 42" x 2.5" (1328 mm x 1083 mm x 64 mm)
Weight	46 lbs (21 kg)
Ingress Protection	IP65
L70 Rating [7]	180,000 hrs
L90 Rating [8]	58,000 hrs
UL 1598 Location Rating	Damp
ETL Certification [9]	UL 1598, UL 8750, UL 8800 CSA C22.2 No. 250.0-08 CSA C22.2 No. 250.13-14 IEC 62471
Warranty	5-year standard
Package Dimensions (L x W x H)	55" x 18" x 9" (1400 mm x 460 mm x 230 mm)
Package Weight	56 lbs (25.5 kg)

Compatible Cables

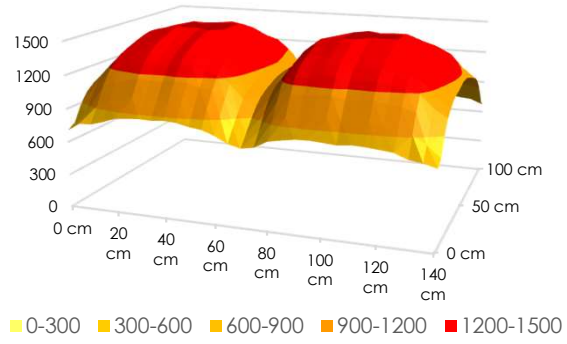
Part Nr.	Description
341-00110-01	6'-long power cord with NEMA L7-15P plug (277V)

1. At 100% light intensity
2. Average Photosynthetically Active Photon Flux Density (PPFD) over the AEtrium-4 grow tray (40"x50") in a typical large-scale cultivation setup, measured with adjacent grow lights of the same type
3. Average Photosynthetically Active Photon Flux Density (PPFD) over the AEtrium-4 grow tray (40"x50") in a typical evaluation setup, measured with no adjacent grow lights, no reflective walls
4. Uniformity expressed as the ratio of the lowest PPFD value and the average over a 40"x50" grow tray (100% intensity, measured with adjacent lights of the same type)
5. Coefficient of Variation over a 40"x50" grow tray (100% intensity, measured with adjacent lights of the same type); lower values represent more uniform light
6. Wired communication protocol used in the AEtrium System
7. Hours of normal operation before 30% degradation in maximum light intensity
8. Hours of normal operation before 10% degradation in maximum light intensity
9. ETL Control Number: 5013160

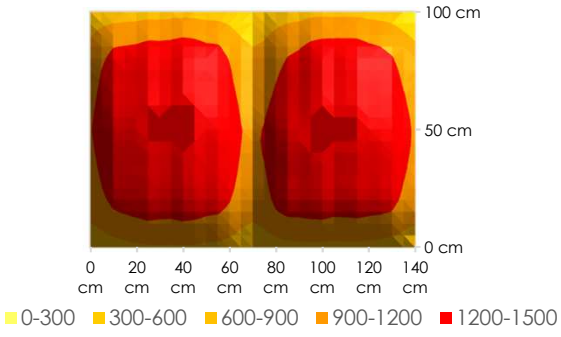
Grouped Photon Flux Distribution [1]

Measured at 100% light intensity with grow light centrally mounted at pre-determined height above a 40"x50" grow area, with adjacent illuminated grow areas (typical large scale cultivation).

PPFD (µmol/s/m²) @ 6"

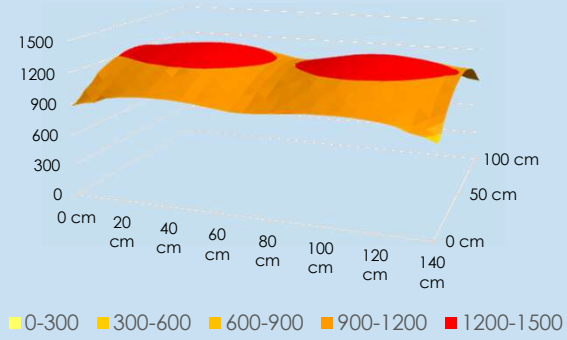


PPFD (µmol/s/m²) @ 6"



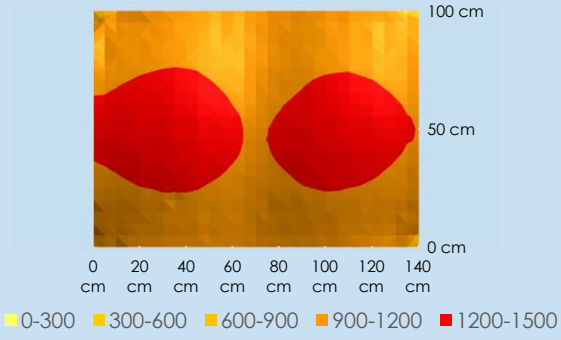
RECOMMENDED INSTALLATION HEIGHT

PPFD (µmol/s/m²) @ 12"



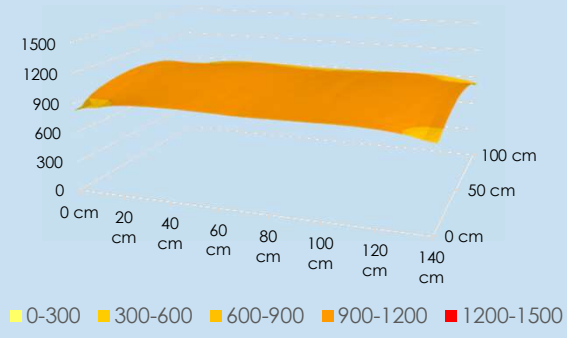
RECOMMENDED INSTALLATION HEIGHT

PPFD (µmol/s/m²) @ 12"



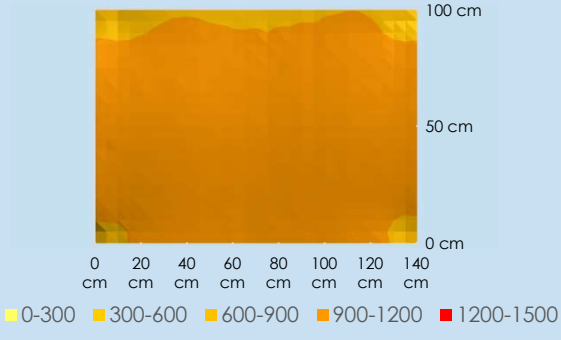
RECOMMENDED INSTALLATION HEIGHT

PPFD (µmol/s/m²) @ 20"



RECOMMENDED INSTALLATION HEIGHT

PPFD (µmol/s/m²) @ 20"



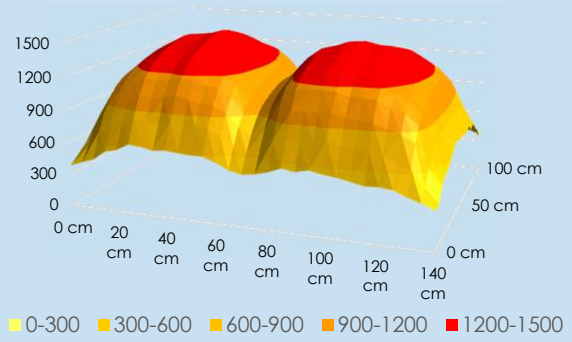
1. Average Photosynthetically Active Photon Flux Density (PPFD)

Stand-Alone Photon Flux Distribution [1]

Measured at 100% light intensity with grow light centrally mounted at pre-determined height above a 40"x50" grow area, in isolation (typical evaluation grow).

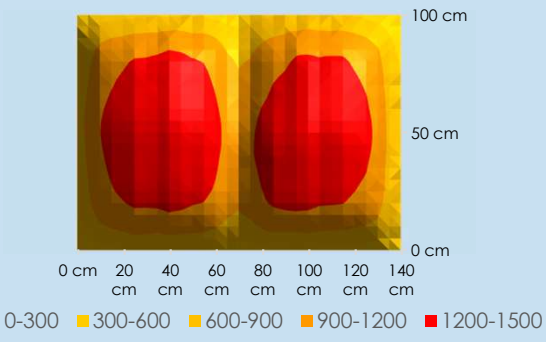
RECOMMENDED INSTALLATION HEIGHT

PPFD (µmol/s/m²) @ 6"

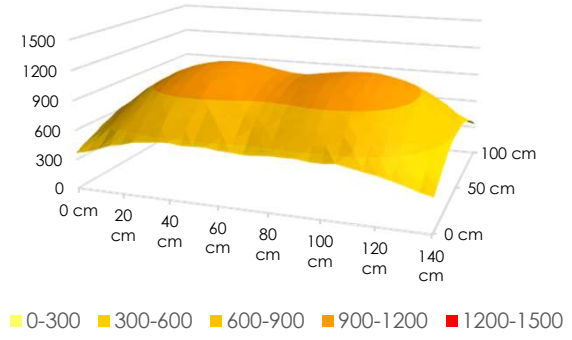


RECOMMENDED INSTALLATION HEIGHT

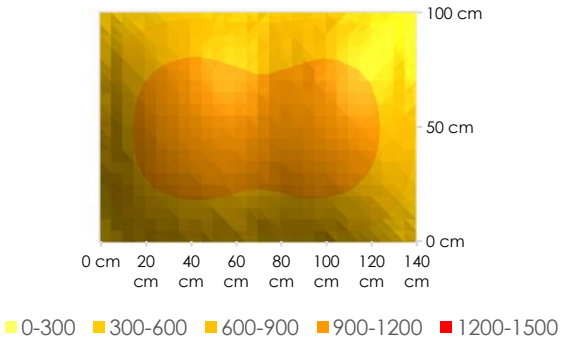
PPFD (µmol/s/m²) @ 6"



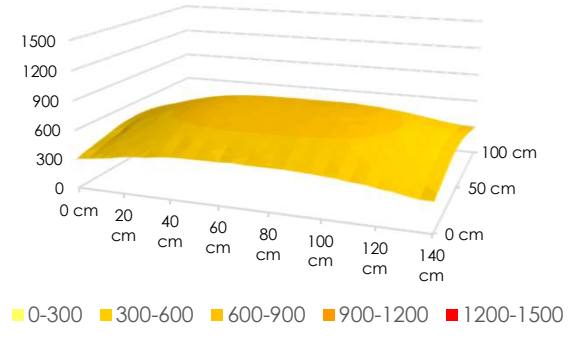
PPFD (µmol/s/m²) @ 12"



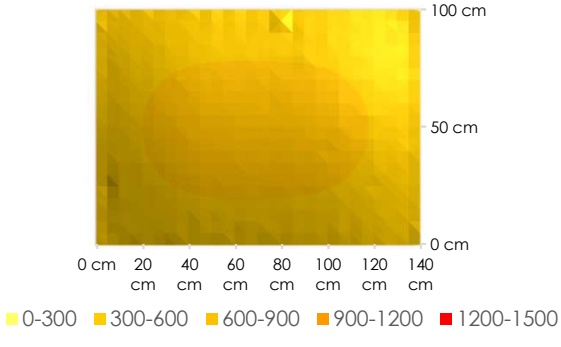
PPFD (µmol/s/m²) @ 12"



PPFD (µmol/s/m²) @ 20"



PPFD (µmol/s/m²) @ 20"

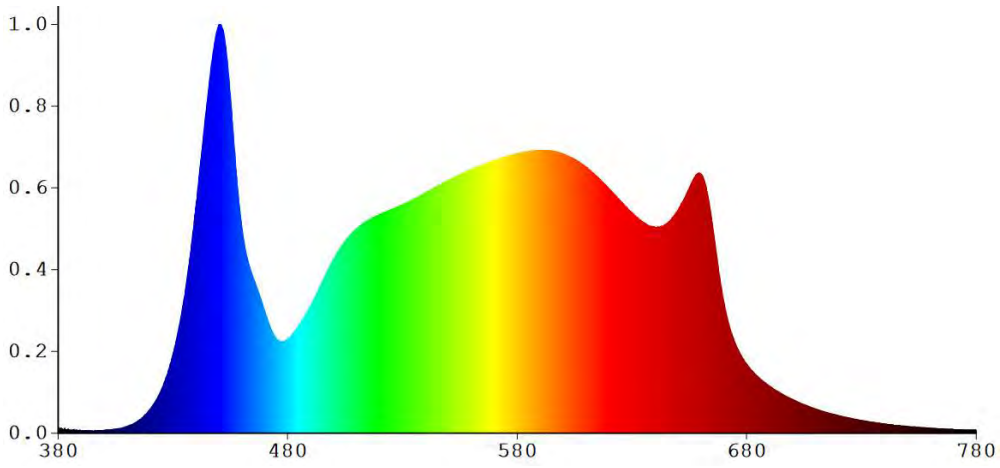


1. Average Photosynthetically Active Photon Flux Density (PPFD)

Light Intensity Characterization [1]

Guardian™ Setting [2]	Wattage	Heat Output	Light Output (PPF)	Efficacy	Light Intensity [3] (PPFD, large grow)	Light Intensity [4] (PPFD, eval. grow)
0%	10 W	34 BTU/h	0 µmol/s	NA	0 µmol/s/m^2	0 µmol/s/m^2
20%	110 W	375 BTU/h	268 µmol/s	2.44 µmol/J	195 µmol/s/m^2	135 µmol/s/m^2
30%	183 W	624 BTU/h	456 µmol/s	2.49 µmol/J	330 µmol/s/m^2	235 µmol/s/m^2
40%	254 W	866 BTU/h	629 µmol/s	2.48 µmol/J	455 µmol/s/m^2	320 µmol/s/m^2
50%	325 W	1,108 BTU/h	787 µmol/s	2.42 µmol/J	570 µmol/s/m^2	405 µmol/s/m^2
60%	395 W	1,347 BTU/h	941 µmol/s	2.38 µmol/J	685 µmol/s/m^2	485 µmol/s/m^2
70%	467 W	1,592 BTU/h	1,091 µmol/s	2.34 µmol/J	795 µmol/s/m^2	560 µmol/s/m^2
80%	543 W	1,851 BTU/h	1,252 µmol/s	2.32 µmol/J	905 µmol/s/m^2	640 µmol/s/m^2
90%	624 W	2,128 BTU/h	1,420 µmol/s	2.31 µmol/J	1,025 µmol/s/m^2	725 µmol/s/m^2
100%	690 W	2,355 BTU/h	1,591 µmol/s	2.30 µmol/J	1,130 µmol/s/m^2	800 µmol/s/m^2

Spectrum



1. Tested at 230V/50Hz
2. Light Intensity Setting in the Guardian™ Grow Manager
3. Average Photosynthetically Active Photon Flux Density (PPFD) over the plant canopy in the AEtrium-4 grow tray (40"x50") in a typical large-scale cultivation setup, measured at 12" mounting height over the canopy level with adjacent grow lights of the same type
4. Average Photosynthetically Active Photon Flux Density (PPFD) over the plant canopy in the AEtrium-4 grow tray (40"x50") in a typical evaluation grow setup, measured at 6" mounting height over the canopy level with no adjacent grow lights or reflective walls

L05-A0001-01: LBR003 for the US and Canada

- Plug type: NEMA L7-15P
- Separately orderable plugs: NEMA 5-15P and 6-15P
- 120V/60Hz, 208V/60Hz, and 277V/60Hz
- ETL certified

Contact Information

A 1281 Reamwood Ave.
Sunnyvale, CA 94089

P 1.800.369.8673

O 1.650.564.3058

E info@aessensegrows.com

AEssenseGrows.com