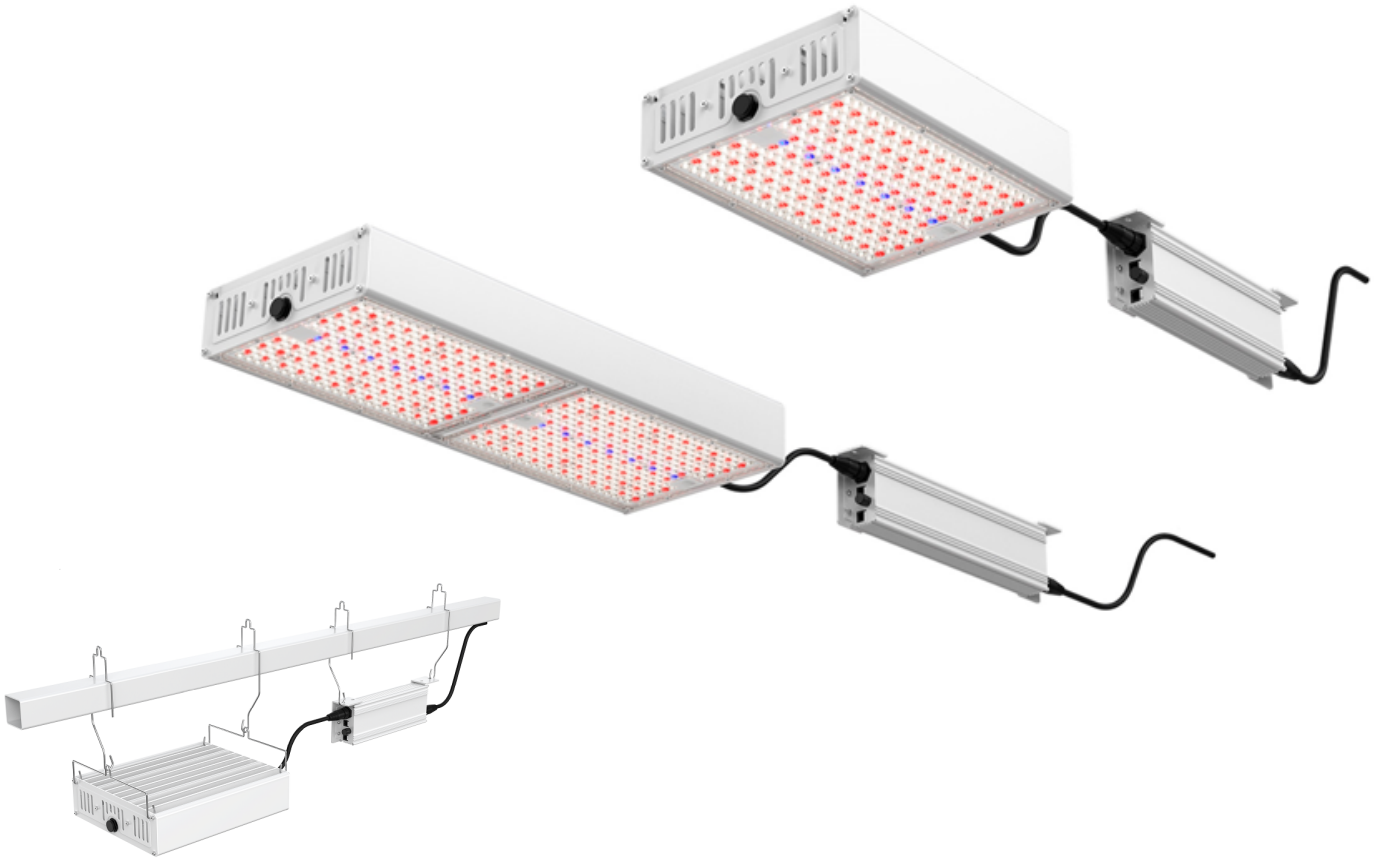
DIMON
TECHNOLOGY

Technical Datasheet

GARENA

LED GROW LIGHT



LED grow light GARENA is an innovative top lighting, 1:1 replacing 1000W HPS traditional lighting. The compact passively cooled LED topblighting fits seamlessly in existing HPS set-ups and trellis constructions, saving time and money on install ation.

- External power supply gets better heat dissipation.
- The lamp respirator can keep the pressure constant, which avoids led panel warping.
- Mounting brackets are suitable for various applications, and the two kinds of mounting brackets are designed for easier installationband less labor costs
- Smaller packaging volume can save transportation cost.
- IP65 optical lens for higher light utilization and resistance to water jetting.

GARENA
LED GROW LIGHT

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Technical Data

Power	• 400W • 800W
Control	• Remoted ON/OFF LED Driver • Remoted Dali 1-100% Dimming LED Driver • Remoted 1-10V Dimming LED Driver
PPF Output System efficacy	• 400W: 1040 umol/s 2.6 umol/J /W • 800W: 2160 umol/s 2.7 umol/J /W
PPFD (4' x 4') PPFD (1,2 m x 1,2 m) Height: 500mm	• 400W: Average 476 µmol/m2/s Maximum: 1063 µMol/m²/s Minimum: 130 µMol/m²/s • 800W: Average: 889 µMol/m²/s Maximum: 1450 µMol/m²/s Minimum: 328 µMol/m²/s
Distance from the plants	0.5 to 4.0m
AC Input Voltage	• 100-240Vac 50/60 Hz • 100-270Vac 50/60 Hz
Nominal Power Factor	• >0.9 for Built-in ON/OFF Control • >0.95 for Remoted LED Driver 0-10V or DALI Dimming • THD< 20%
Light Source	LED
Lifetime	> 60,000 hours
Spectrum	• DM-P06-02 Spectrum for enhancing vernalization process, flowering and stem elongation
Radiation angle	110° x 140°
Thermal Management	Passive • 400W: Heat BTU Generated 1364 BTU • 800W: Heat BTU Generated 2728 BTU
Operation Ambient Temperature/Humidity	0°C to 40°C / 32°F to 104°F (95% RH)
IP rating	IP65
Dimensions	• 400W: 340x260x79mm • 800W: 664x260x79mm
Net Weight	• 400W: 4.90±0.3kg/10.80±0.66lbs • 800W: 8.90±0.3kg/19.62±0.66lbs
Housing material Optics materials	Aluminum Conformal coating (transmission >98%) and Clear Polycarbonate
Certification-認證	UK DESIGN, CE, IK 08, IP65, LM 80, 0-10V, DALI, DALI 2

Project	Fixture#	Date
		Firm

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Ordering Information

Choose the option that suits your need and write its corresponding code on the appropriate line to form the product code.

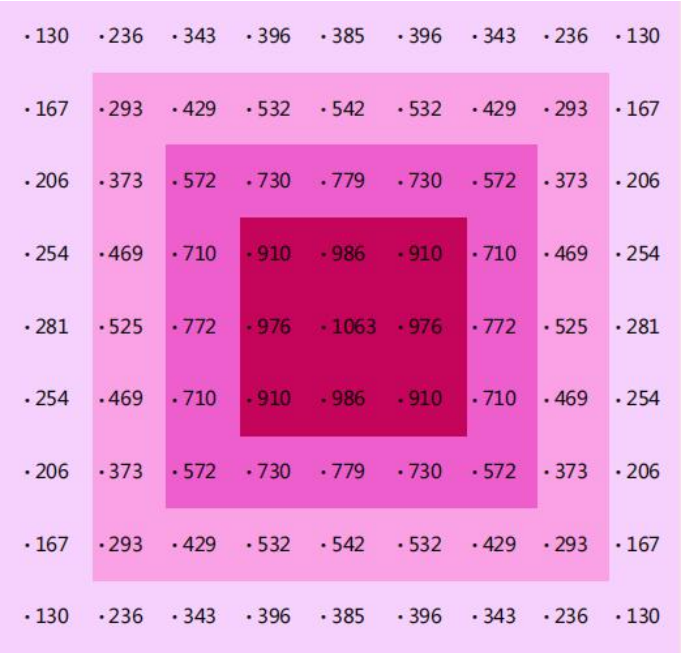
Example product code: GARENA -400W

GARENA - -

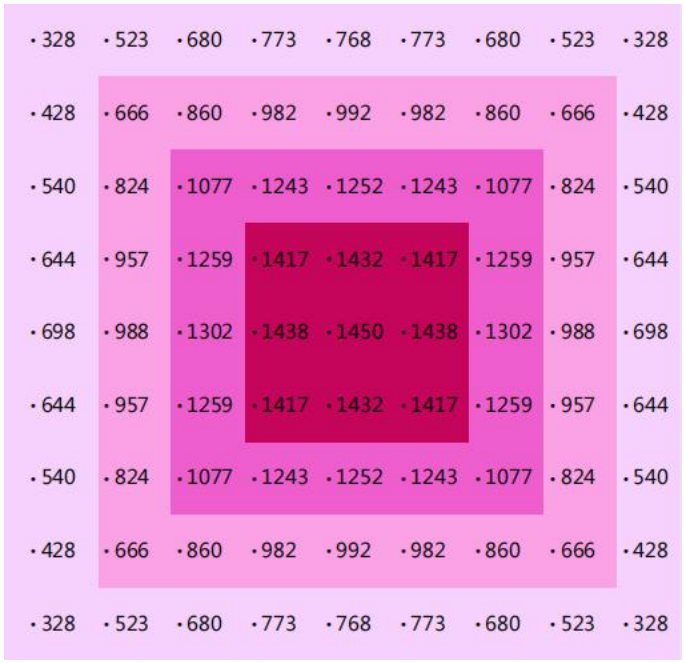
POWER

POWER	
Code	Description
800W	800W
400W	400W

400W 45cm/18”



800W 45cm/18”



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PPFD test result

Spectrum: GARENA

Cover area: 1.2m x 1.2 m / 4’ x 4’
Height fixture above canopy: 45cm/ 18”
1 fixture needed for: 1.44 m2 / 15.5 sqft

PPFD value:

400W 45cm/18”

Average: 476 µMol/m²/s
Maximum: 1063 µMol/m²/s
Minimum: 130 µMol/m²/s

800W 45cm/18”

Average: 889 µMol/m²/s
Maximum: 1450 µMol/m²/s
Minimum: 328 µMol/m²/s

Radiation Angle

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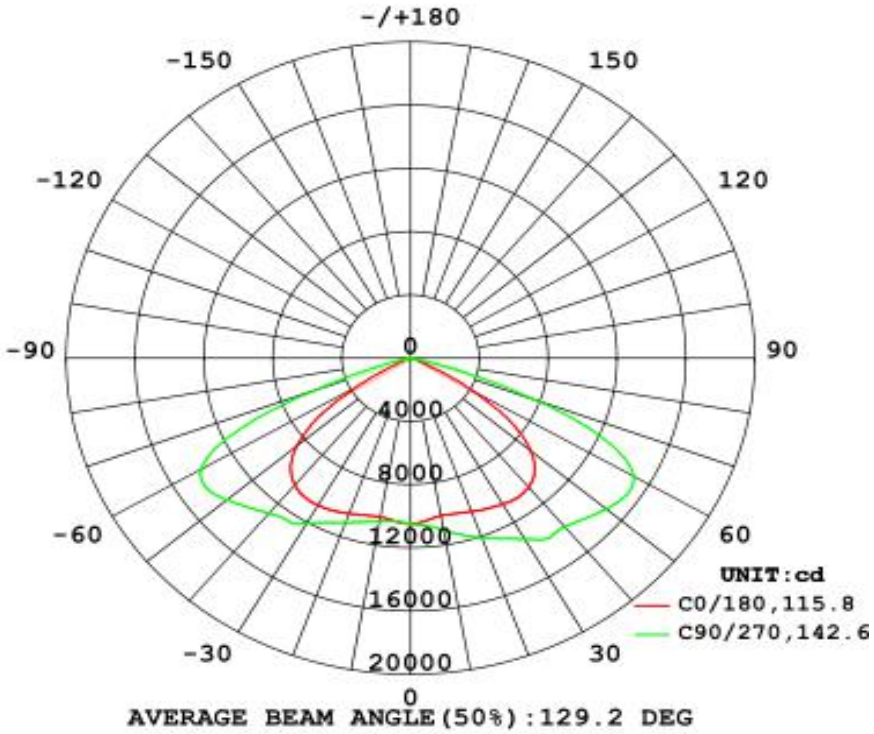

Full Spectrum For Plant-DM-P06-02

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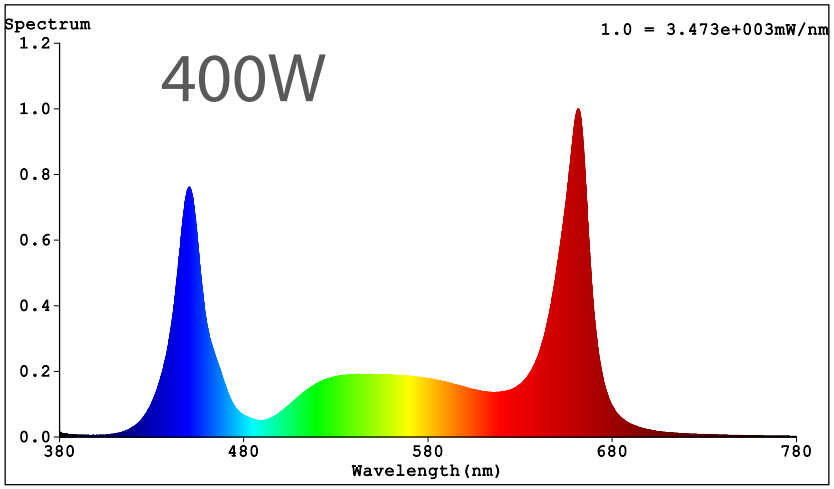
• Spectrum for enhancing verbalization process, flowering and stem elongation



Colorimetric Parameters

Chromaticity Coordinate: x = 0.3191 y = 0.2664 / u' = 0.2296 v' = 0.4313

(duv=-3.70e-02) Dx,Dy:0.0092,-0.0537

CCT= 6747K Prcp WL: Ld=-562.6nm Purity=24.5%

Peak WL: Lp=661nm FWHM: =18.9nm Ratio:R=20.3% G=74.4% B=5.3%

Render Index: Ra = 65.0 AvgR = 54.0

Photometric & Radiometric Parameters

Flux = 45081 lm Eff. : 111.62 lm/W Fe = 222.25 W

Scotopic:1.0183e+005 S/P:2.2589

Flux of emitted photons(μmol/s):1052.9

Fluo. and blue light ratio:2.536

Fluorescent eff.:393.2

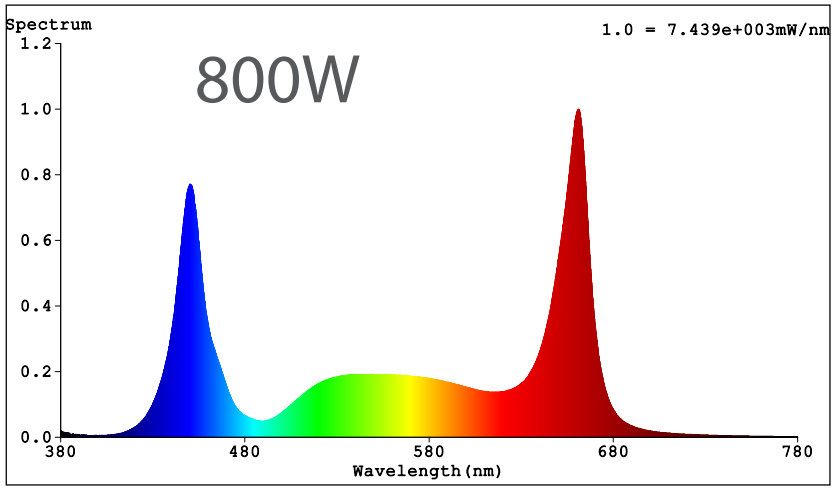
Photosynthetic:PPF(400-700nm):1039.1μmol/s

PRF(400-700nm):2.1976e+005mW

Eff(PPF) (400-700nm):2.57μmol/s/W

Electrical parameters

V = 118.96 V I = 3.408 A P = 403.9 W PF = 0.9962 F=49.99 Hz



Colorimetric Parameters

Chromaticity Coordinate: x = 0.3197 y = 0.2660 / u' = 0.2303 v' =0.4311

(duv=-3.77e-02) Dx,Dy:0.0090,-0.0549

CCT= 6686K Prcp WL: Ld=-562.2nm Purity=24.4%

Peak WL: Lp=661nm FWHM: =18.8nm Ratio:R=20.5% G=74.2%B=5.3%

Render Index: Ra = 64.6 AvgR = 53.5

Photometric & Radiometric Parameters

Flux = 97126 lm Eff. : 117.75 lm/W Fe = 475.89 W

Scotopic:2.1873e+005 S/P:2.2521

Flux of emitted photons(μmol/s):2251

Fluo. and blue light ratio:2.506

Fluorescent eff.:410.2

Photosynthetic:PPF(400-700nm):2223.8μmol/s

PRF(400-700nm):4.7081e+005mW

Eff(PPF) (400-700nm):2.70μmol/s/W

Electrical parameters

V = 118.24 V I = 7.014 A P = 824.8 W PF = 0.9946 F=49.99 Hz

Technical Drawing-400W

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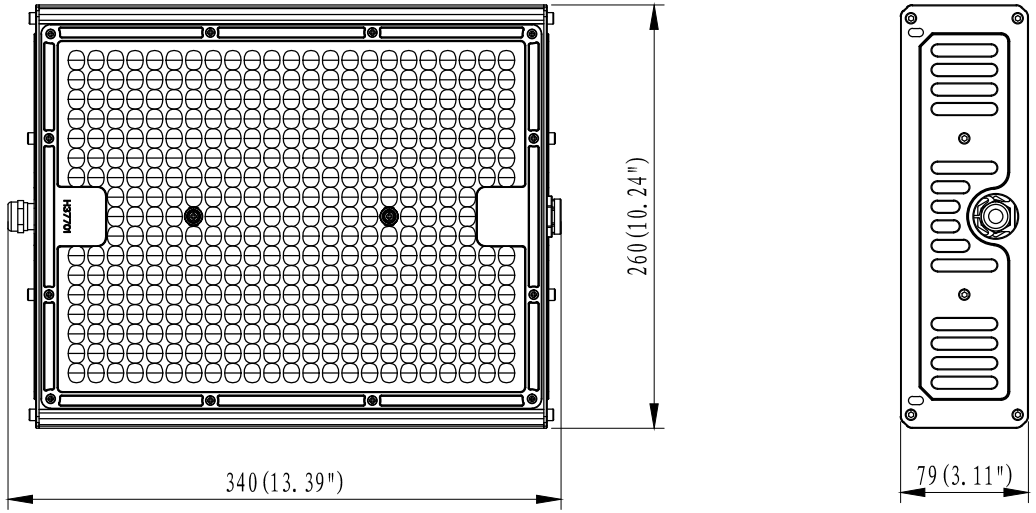

Unit: mm

Technical Drawing-800W

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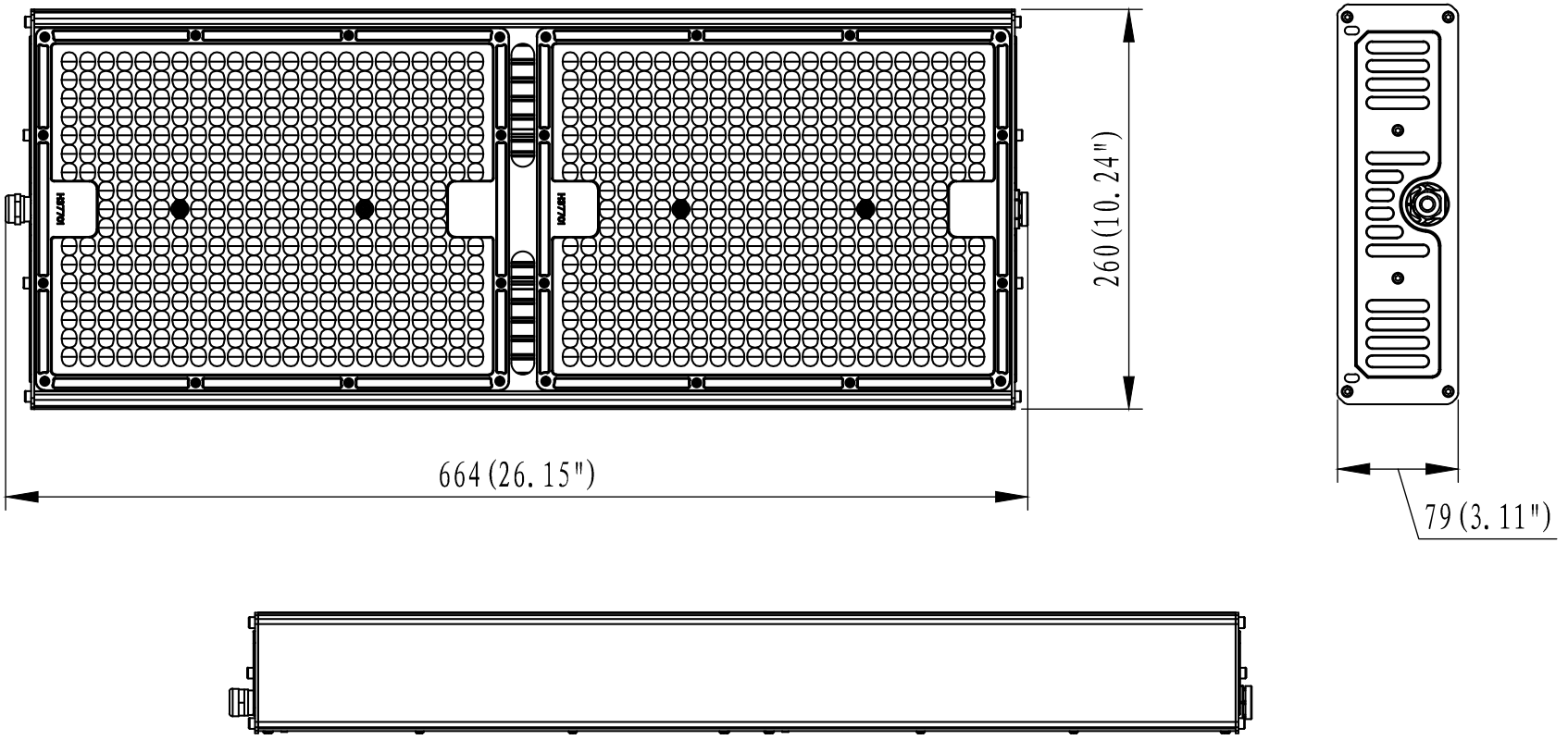
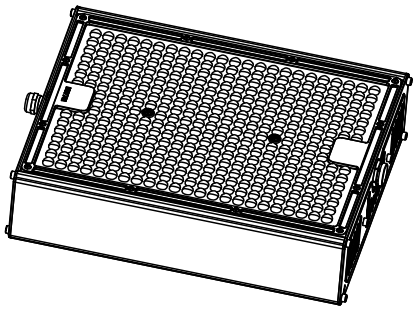
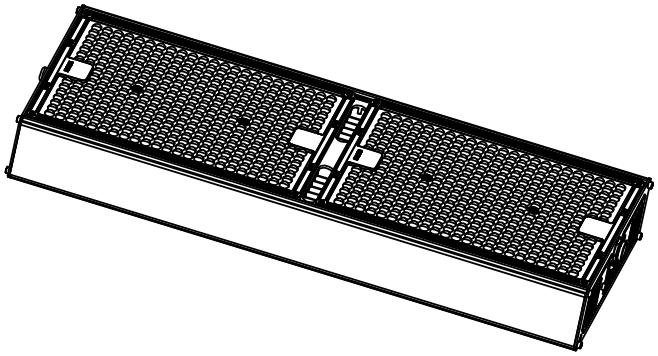


Unit: mm

Installation Instructions

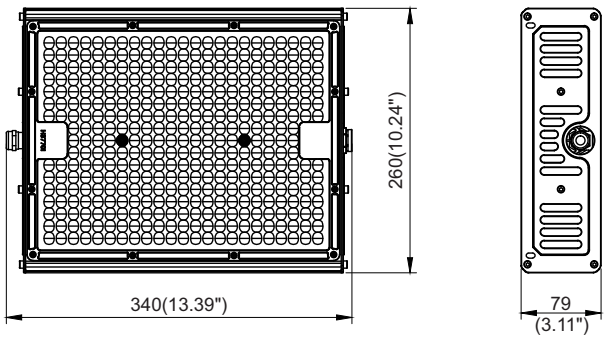


400W

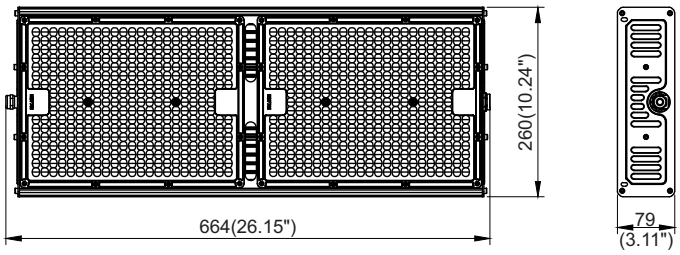


800W

Physical Dimensions(Unit: mm/inch)



400W

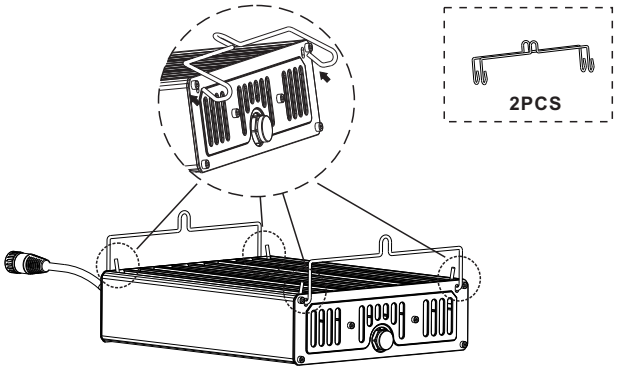


800W

Product Specifications	400W	800W
Input Voltage	120-277V AC/220-240V AC (Subject to the input voltage on nameplate)	
Power Frequency	50/60 Hz	
Outlook Dimensions	340x260x79mm (13.39"x10.24"x3.11")	664x260x79mm (26.15"x10.24"x3.11")
Luminaire Net Weight	4.9±0.3kg(10.80±0.66Lbs)	8.9±0.3kg(19.62±0.66Lbs)
Working Temperature	0℃ to +40℃(32°F to +104°F)	
Storing Temperature	-40℃ to +70℃(-40°F to +158°F)	

Installation Instructions

1.



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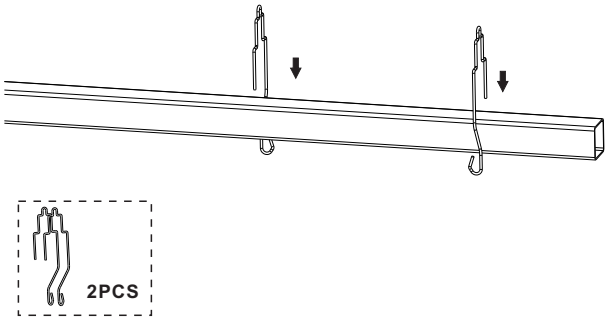

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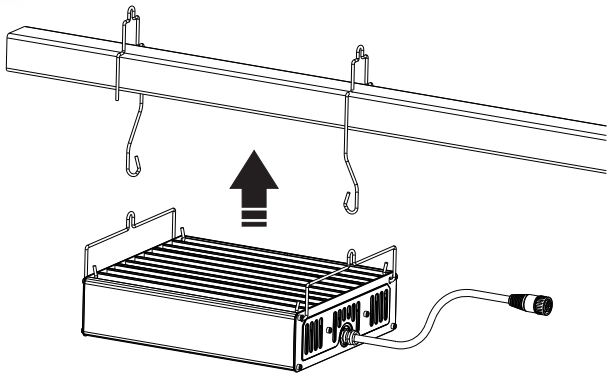

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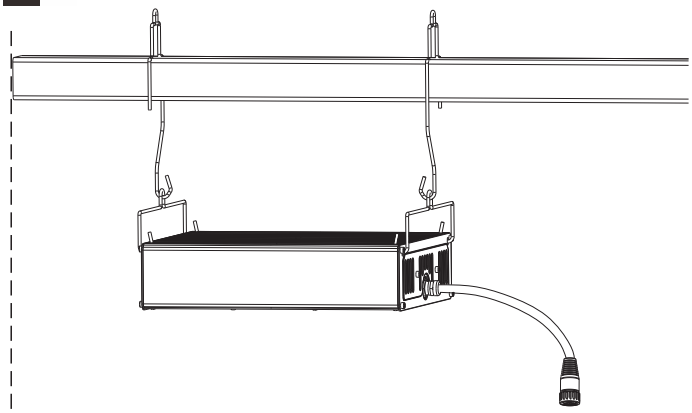

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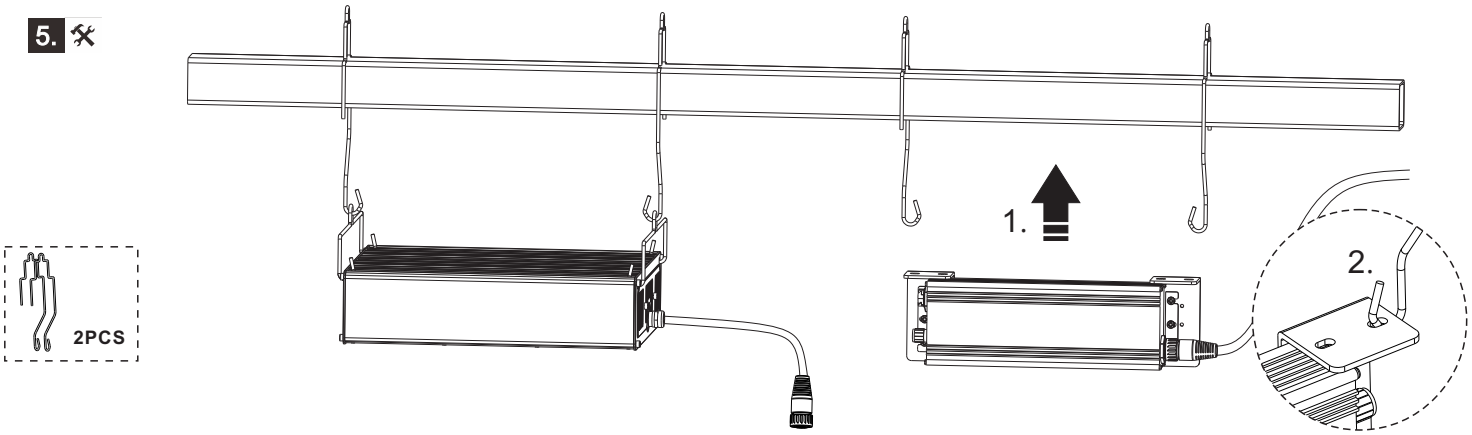

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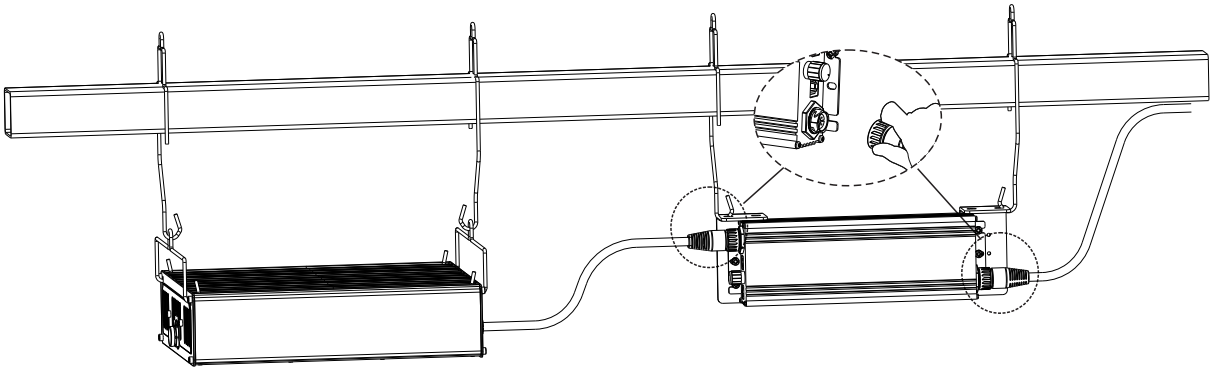

1.When taking, moving and installing the lamp, do not touch or use tools on the luminious surface. Please check the LED chip before use.
2.Warning: Please note that the assembly process must ensure the plug-play connector is tightly connected. After the installation is completed, please do a self-check for the confirmation of the connector to prevent poor wire connection and wire burn!

● The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
● For type Y attachments:
if the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.