Fidelux

Product Description

The Fidelux FRHB™ Premium High-Bay luminaire is designed to deliver high efficacy - up to 161 l/pw with high lumen packages with precise optical control to illuminate the most challenging applications.

Standard Nichia® LED Technology options offer 70& 80+ CRI solutions to enhance products at all levels of commercial and industrial uses requiring different levels of color rendering options.

The Fidelux FRHB™ High Efficacy High-Bay luminaire offers several industry standard mounting options allowing the product to be positioned for upgrade opportunities or new installations in a wide range of industrial applications.

Features & Benefits

- Excellent Glare Control with Uniform Light Distribution
- Powder Coated Aluminum cast profile
- IP67 Rated - Dust Tight, Water Resistant Plus
- IK10 Impact Resistant Rating
- L70 @ 262,000 Hrs, L80 @ 161,000 Hrs, L90 @ 72,000 Hrs
- Seal LED Light Engine
- Corrosion Resistant with 168 hours of salt spray testing per ASTM-B117-73
- 10 Years limited warranty

Applications

- Warehouse
- Indoor Pool, Tennis Court & Gymnasium Applications
- Manufacturing
- Food Handling
- Car Wash / High Pressure Wash
- Cold Storage & Freezer
- Indoor & Outdoor Canopy Apps

Mounting Options

- (SM) Surface Mount (Yoke & Chain Mount)STD
- (CM) Chain Mount
- (PM) Pendant Mount

Approval Listings

- ETL, DLC, Natatorium Standards
- Most of our products are DLC listed, qualifying them for the highest rebates. Please check individual product specs for DLC status.
  Refer to DLC website by clicking this link: https://www.designlights.org

Performance Summary

Efficacy up to: 161 l/pw

CRI: (low to High end)   76.8cri ~ 83.8cri

CCT: 3000K, 3500K, 4000K & 5000K

Dimming: 0-10v Standard

Operating Temp: -40℃ - +56.8℃ / (347/480v) -40℃ ~ +45℃

Input Voltage: 110-277vac / 347-480vac

TM21 Lifetime: L70 @ 262,000 , L80 @ 161,000 , L90 @ 72,000

Ingress Protection Rating: IP67

Beam Angles: 60°, 90°, 120° (Within 5% light output)

FRHB Series Specification Summary

DATA SOURCE	LM79	LM79	LM79
Product Number	FRHB-100W	FRHB-150W	FRHB-200W
Nominal Efficacy l/pw @ 5000k	139	161	140
Input Power: Watts @ 5000k	100.05	150.12	199.9
Lumens @ 3000K	13,200	24,000	27,900
Lumens @ 3500K	13,200	24,000	27,900
Lumens @ 4000K	13,876	24,000	27,911
Lumens @ 5000K	13,893	24,139	27,986
Beam Degree	60°, 90°, 120°		
IP RATING	IP67		
Qualifications	ETL, DLC Premium	ETL, DLC Premium	ETL, DLC Premium
CCT/Kelvin Temp Options	3000K / 3500K / 4000K / 5000K		
Dimming	0-10v		
Input Voltage Options	100-277vac / 347-480 vac		
Power Factor	>0.99		
CRI (Low End)	83.7	76.8	83.8
THD @ 120v	12.4%	12.5%	13.3%
L70 Lifespan	L70 @ 262,000 Hrs, L80 @ 161,000 Hrs, L90 @ 72,000 Hrs		
Ambient Working Temp	-40℃ - +56.8℃ / (347/480v) -40℃ ~ +45℃		
Max Dimensions (in)	11 7/8" x 7 1/8"	14 1/8" x 6 7/8"	14 1/8" x 6 7/8"
Total Weight	10 lbs	10.5 lbs	10.58 lbs
Limited Warranty	10 yrs		

Notes

Values are nominal unless noted +/- 5%
Specifications change without notice

347/480vac
(pending)

120/277vac

H

W

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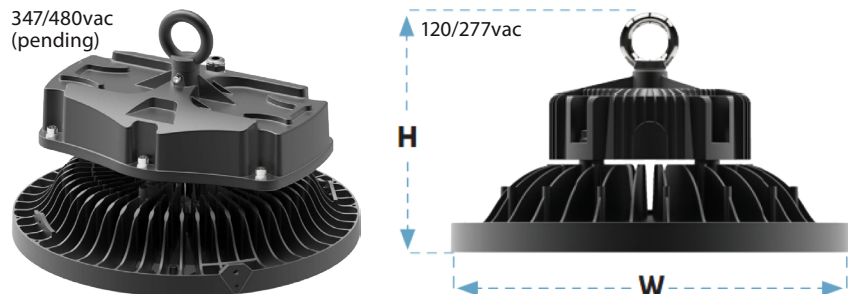
FRHB Series Product Ordering Guide

Example: FRHB-150W-50K-MSSD-HB -MSSSD-RC-120-PC6-SM

Product	CCT/Color Temp	Voltage	Controls & Dimming	Beam Angles	Power Cord	Mounting Options
FRHB-100W FRHB-150W FRHB-200W	30K (3000K) 35K (3500K) 40K (4000K) 50K (5000K)	Blank (100-277vac) H (347/480vac)*	Blank (0-10v)STD MSSD-HB (IP65,HB,SD occupancy sensor)* MSSD-RC (Hand-held Remote Control for MSSDHB programing)	60 (60 degree) 90 (90 degree) 120 (120 degree)	Blank (1ft -3 wire Power Cord & 6" 0-10v cable)STD PC6 (6ft, 3 wire Power Cord & 6ft 0-10v cable)	SM (Yoke & Chain Mount)STD CM (Chain Mount) PM (Pendant Mount)

*** = Special Order, Longer Lead time**

Factory Installed Sensors *(Part numbers included on ordering bar)*

MSSD-HB   IP65, high-bay ,PIR ,step dimming occupancy Sensor with daylight harvesting options , Round external Sensor attached to fixture.
No Dip Switches, Field Programmable only using MSSD-RC. *See MSSD & MSSD-RC spec sheets for programming and sensor specifications data.*

MSSD-RC   Hand Held Remote Control for MSSD-HB sensor. One per project only needed. *See MSSD-RC spec sheet for programming*

Field Installed Tubular EM Driver

(order as separate line item)

FEM-T25   Field Installed 25w tubular Emergency Driver,90 Min Battery Life (Recommended to use with 100w,150w & 200W) *See FEM-T Spec sheets*

FEM-T40   Field Installed 40w tubular Emergency Driver (200w) *See FEM-T Spec sheets*

Shade Options *(order as separate line item)*

ALD (100,150,200)   Aluminum Diffuser for 100W-150W-200W

PCD (100,150,200)   PC Diffuser for 100W-150W-200W **(no cover)**

PCD-**C** (100,150,200)   PC Diffuser **with Cover and fixing ring**   for 100W-150W-200W
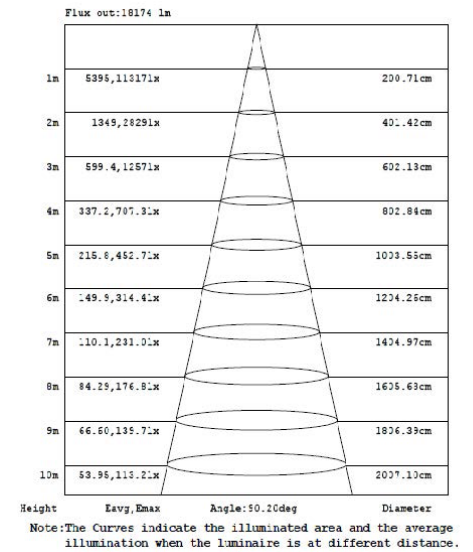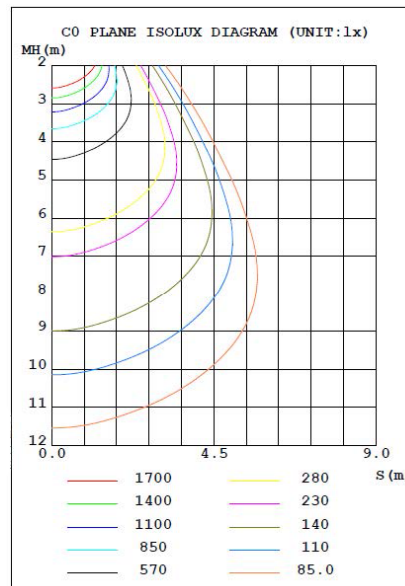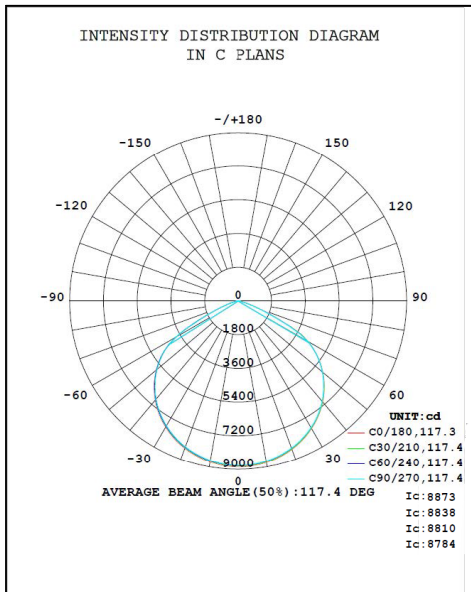
Steel Fixing Ring
304 stainless steel
Mean Well Driver
Aluminium Heatsink
MCPCBA / Nichia LED
Optics
Waterproof Silicon Ring
Security Ring

FRHB Series Design Details & Photometry

| Product | DIMENSIONS | | Weight |
	Width	Height (to top of eye hook)	
FRHB-100W	14 1/8"	7 1/8"	10 lbs
FRHB-150W	14 1/8"	7 7/8"	10.5 lbs
FRHB-200W	14 1/8"	7 7/8"	10.58 lbs
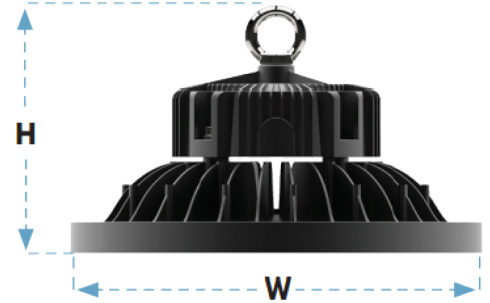
Photometric Test Data
FRHB-150W-50K

Zonal Lumen Summary		
Zone	Lumens	% Total
0-10	1192	4.58
10-20	3483	13.42
20-30	5423	20.8
30-40	6417	24.7
40-50	5507	21.1
50-60	2570	9.9
60-70	932.2	3.6
70-80	397.5	1.5
80-90	97.51	0.4
Total	**26019 Lumens**	**100%**

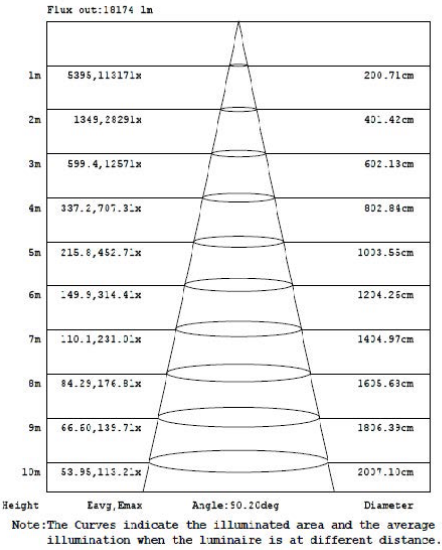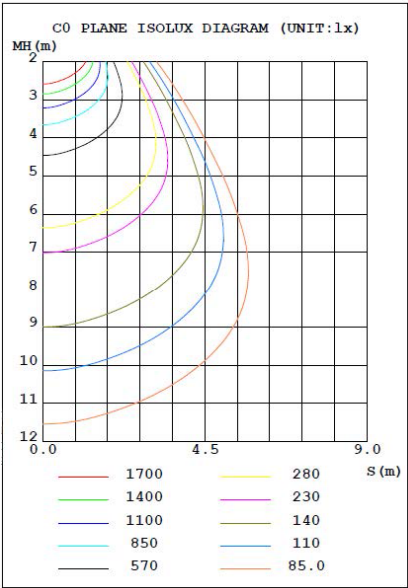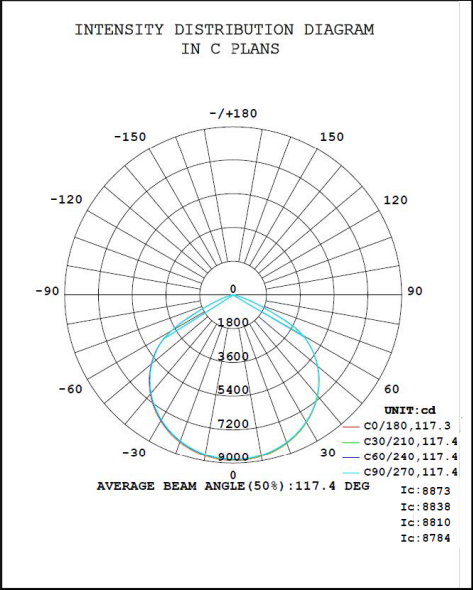| Zonal Lumen Summary		
Zone	Lumens	% Lamp / Luminaire
0-60	24592	94.6%
60-90	1427	5.4%
0-90	26019	100%
90-180	0	0%
0-180	26019	100%

FRHB Series Design Details & Photometry

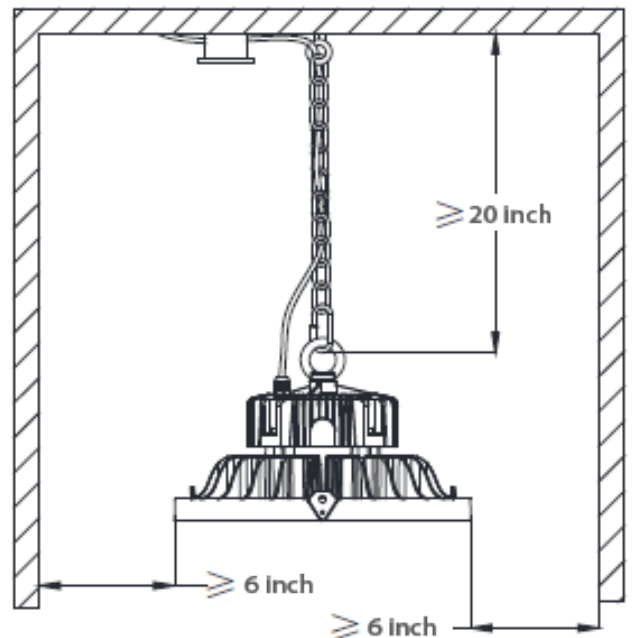## Photometric Test Data
FRHB-100W-50K
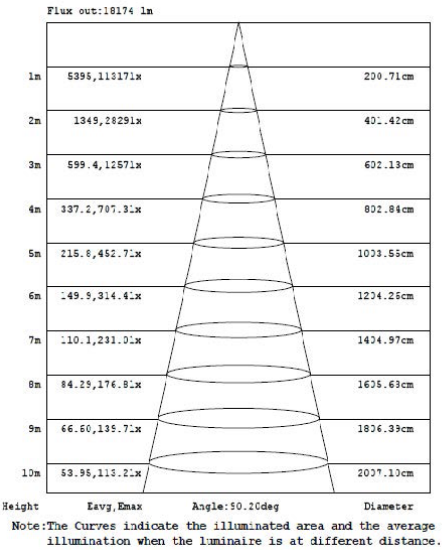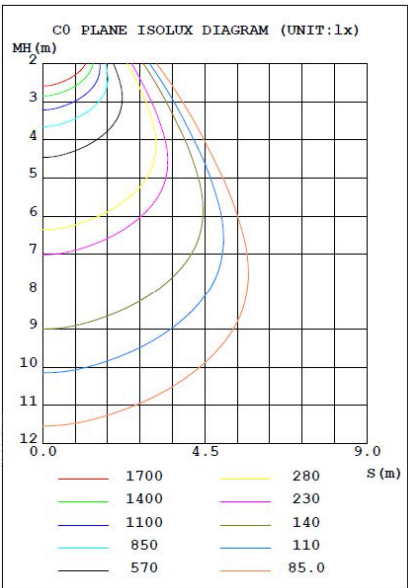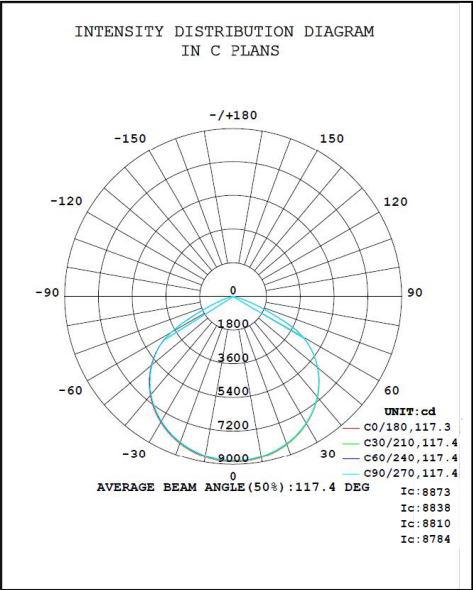
Photometric Test Data
FRHB-200W-50K

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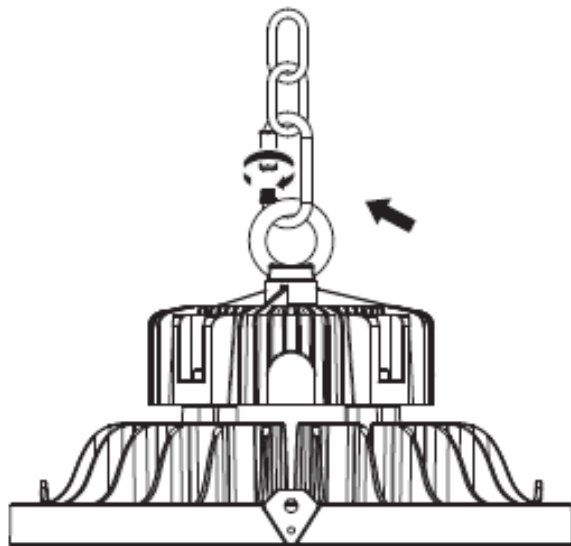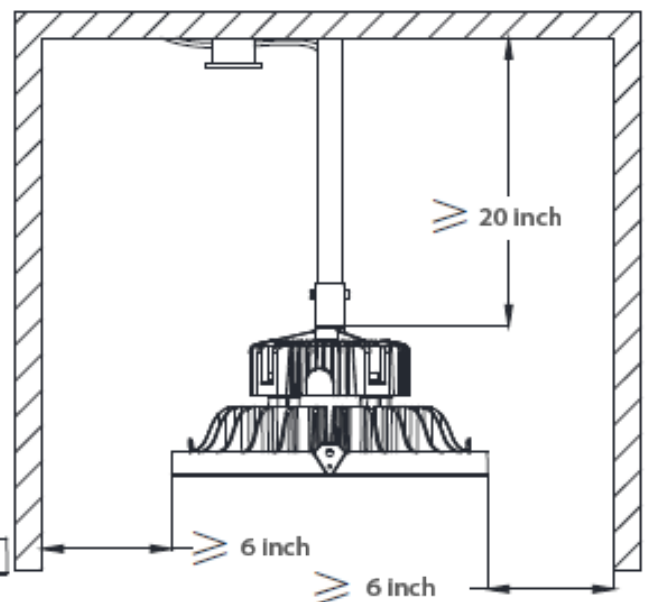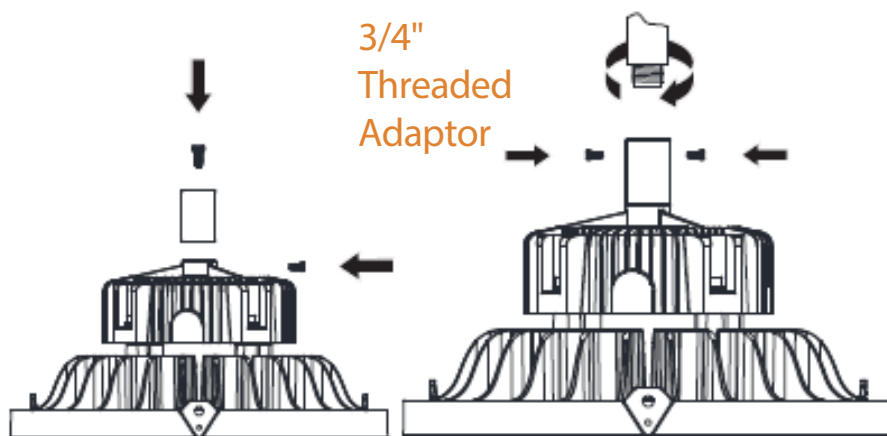
FRHB Series Installation Instructions
For all FRHB Series Mounting

Chain Mount (CM) Eye Hook

≥ 20 inch

≥ 6 inch

≥ 6 inch

Pendant Mount (PM)

3/4"
Threaded
Adaptor

≥ 20 inch

≥ 6 inch

≥ 6 inch
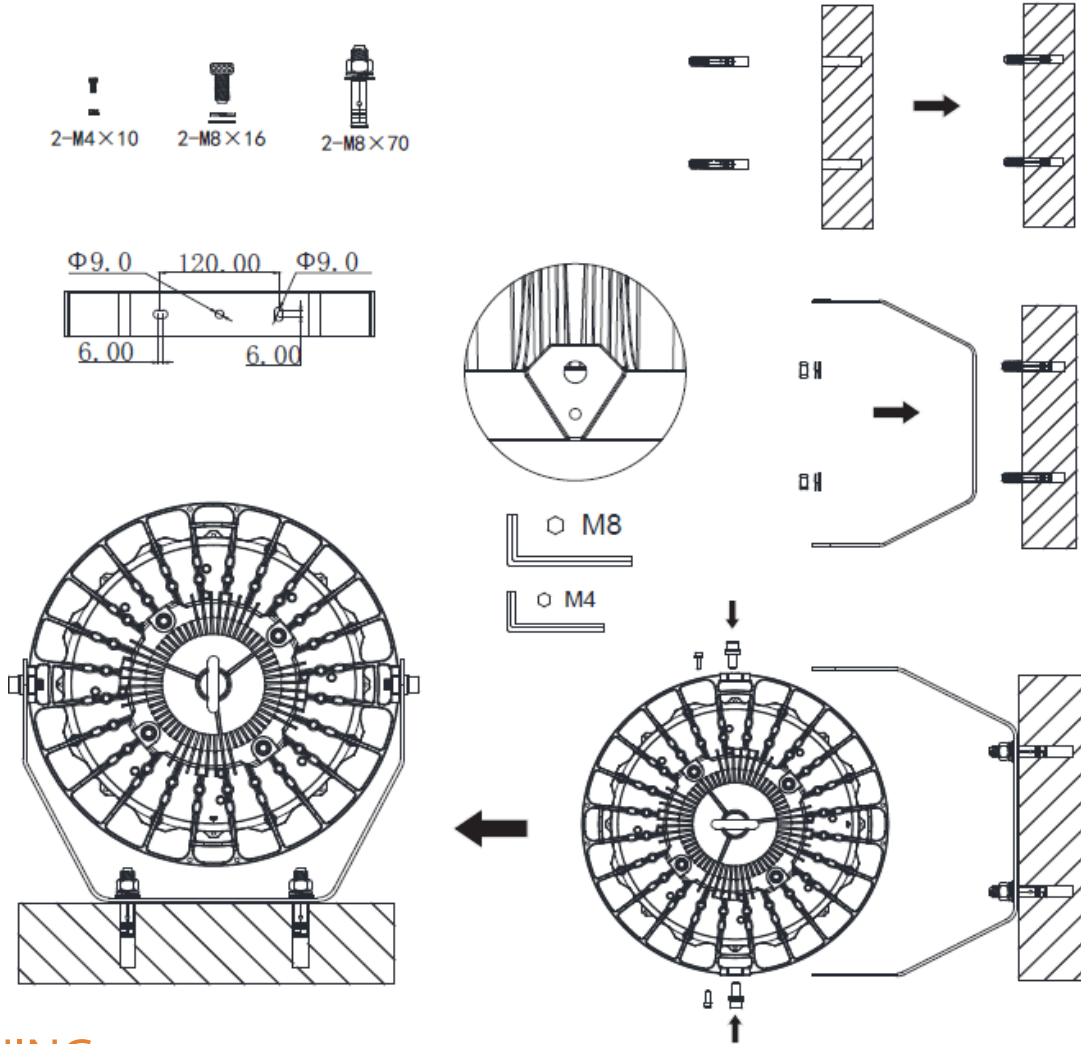
FRHB Series Installation Instructions
For all FRHB Series Mounting

Surface Mount (SM): Yoke Bracket and Eye Hook

2-M4×10   2-M8×16   2-M8×70

Φ9.0   120.00   Φ9.0
6.00   6.00
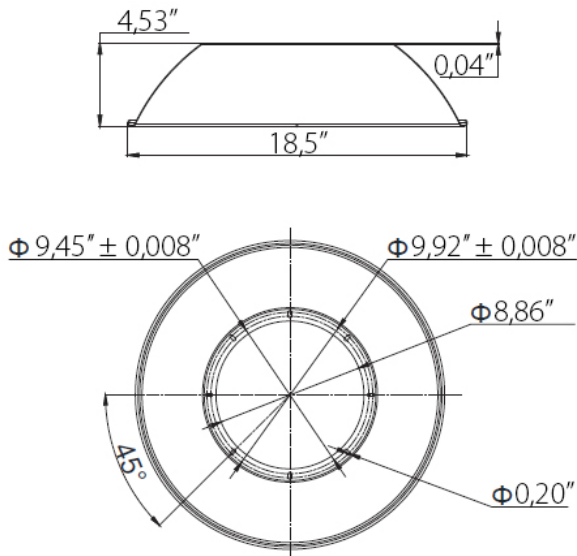
M8

M4

⚠ WARNING:

- Read through this manual before installation.
- Handle product with care.
- The product must be grounded.
- This product must be installed and maintained by certified electrician.
- Consult with the manufacturer before maintenance.
- Turn OFF the power before installation and maintenance.
- Make sure the products are securely installed.
- The housing might become hot after operation.
- Primary use: high-bay luminaires for commercial and industrial buildings.
- Make sure the construction is strong enough to support the products.
- The product will automatically shut down once the temperature goes too high; and will automatically turn on once it cools down.
- The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

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Wallingford, CT 06492
D: 203.774.5653 | F: 860.436.56.01
www.fidelux.com

	Material	Product size L x W x H (inch)	Pack size L x W x H (inch)
Reflector	Aluminium 1060	18,5 x 18,5 x 4,53	18,98 x 18,98 x 7,48
	Net Weight (lbs) ±0,22	Gross Weight (lbs) ±0,22	Quantity (pcs)
	8,82	11,46	10

Dimensions

4,53"
0,04"
18,5"

Φ9,45" ± 0,008"
Φ9,92" ± 0,008"
Φ8,86"
45°
Φ0,20"

⚠️
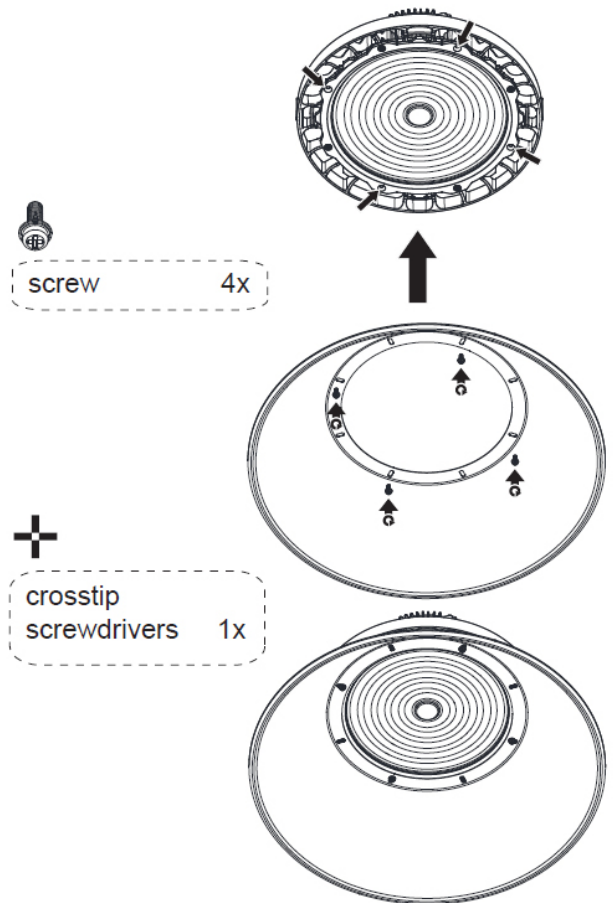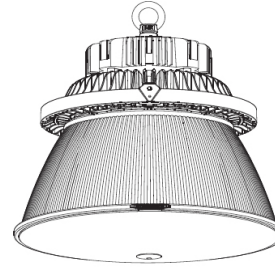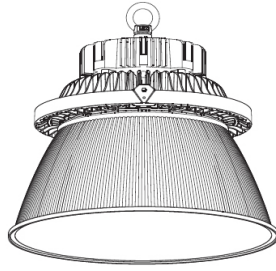
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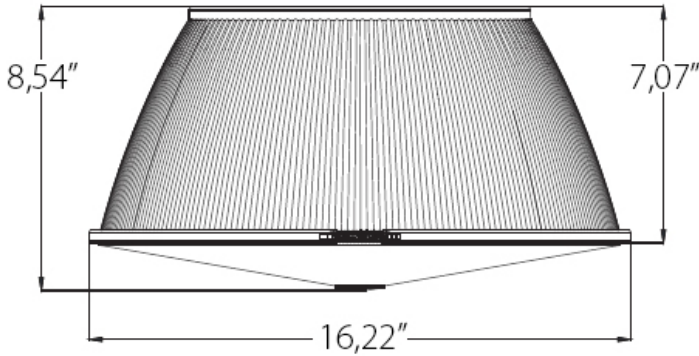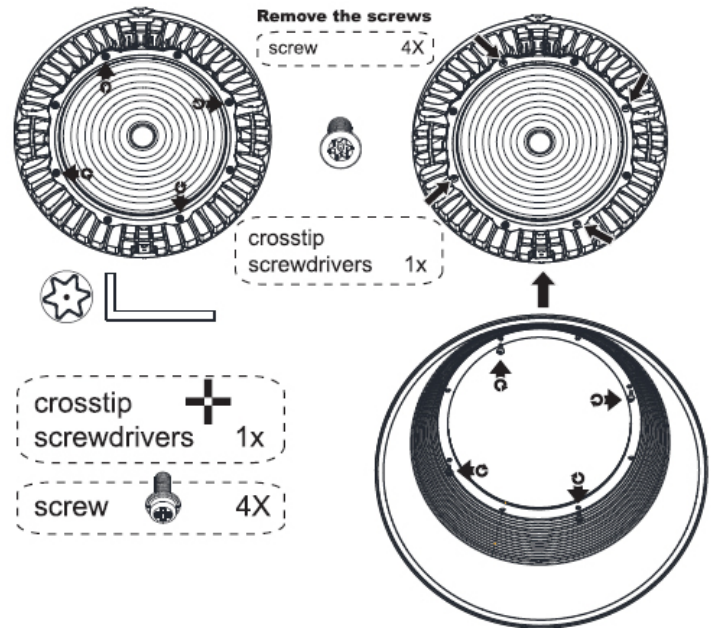
Mounting Instruction

screw   4x

+

crosstip
screwdrivers   1x

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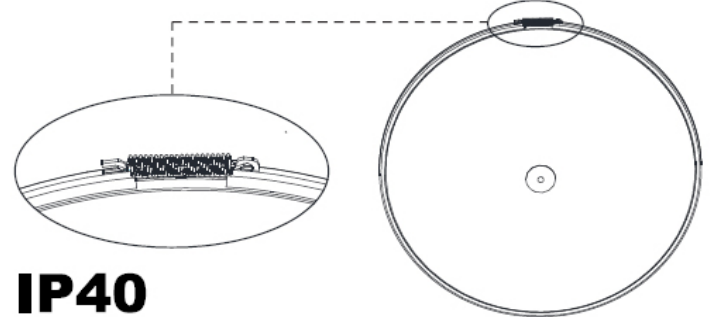| NAME	Product size L x W x H (inch)	Pack size L x W x H (inch)	Net Weight (lbs) ±0,22	Gross Weight (lbs) ±0,22	Material
PCD -C Cover	16,14 x 16,14 x 7,07	17,13 x 17,13 x 15,16	27,34	30,86	Polycarbonate
Bottom Cover	15,91 x 15,91 x 1,65	16,14 x 16,14 x 5,91	19,84	22,93	Polycarbonate
Bottom Cover Ring	16,22 x 16,22 x 0,39	16,93 x 16,93 x 9,84	15,43	17,64	Steel

Dimensions

8,54"
7,07"
16,22"

PCD-C PCD Cover Mounting Instruction

Remove the screws
screw 4X
crosstip screwdrivers 1x

crosstip screwdrivers 1x
screw 4X

PC Bottom Cover

IP40

⚠️
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