Metalux

F-BAY
FLUORESCENT HIGH-BAY

Micro-Bay

Luminaire

COOPER Lighting

F-BAY™
FLUORESCENT HIGH-BAY

Micro-Bay luminaire

The MB series (Micro-Bay) is a functional and multi-purpose low profile fluorescent high bay that incorporates premium performance and durable construction. Designed for T5 and T8 fluorescent technology, the MB series offers both high performance and application versatility.

Micro-Bay is designed for narrow or medium distributions in high mounting applications.

Row mounting of the Micro-bay is easily accomplished with an external rigid section connector that provides excellent row alignment through the entire length of the row. Suspension is convenient and flexible with the SS Aircraft Cable "Y" Toggle Mounting Kits. Adjustment for luminaire mounting height is provided at luminaire rather than structure height.

Energy Savings – Up to 70% energy reduction for comparable light levels.

Superior Lumen Maintenance and Longer Lamp Life – Rated at 25,000+ hours based on 10 hour starts.

Improved Color Rendering – Improves visual acuity for a more pleasant work environment.

Instant Ignition – Easy and inexpensive integration with emergency lighting requirements.

Increased Energy Savings – Programmed Rapid Start ballasts and pre-wired configuration allow for utilization of Occupancy Sensors with Photo Control ability, further reducing energy consumption.

1
Cable Mounting Kit
Suspension is convenient and flexible with the SS Aircraft Cable "Y" Toggle Mounting Kits. Adjustment for luminaire mounting height is provided at luminaire rather than structure.

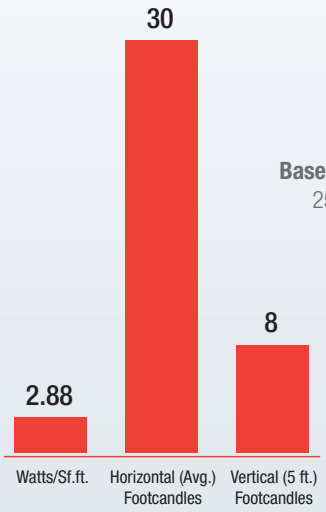
2
Occupancy Sensor
Integral occupancy sensor available and provides from 600 sq. ft. up to 1250 sq. ft. of coverage in a maximum mounting height of 40'.

3
Reflectors
Highly specular reflectors for precise light control. Three optical distribution patterns are available:
Focus - SC < .9
Task - .9 ≤ SC < 1.2
Normal - 1.2 ≤ SC ≤ 1.4

System Performance

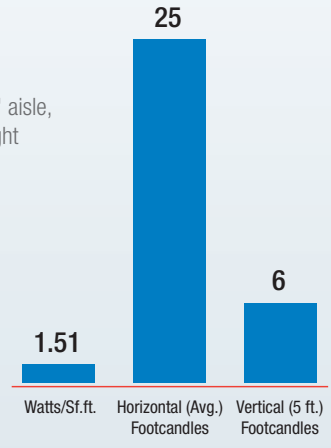
The Micro-Bay series delivers high performance in a streamlined package. The Micro-Bay's large assortment of optical distributions meet a wide range of mounting heights and aisle configurations – providing unmatched uniformity performance. The Micro-Bay is the solution to improving visibility while delivering the lowest watts/sq. ft.

PSMH
400 Watt

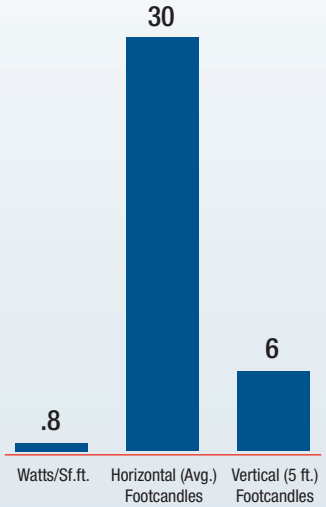


Based on: 120' x 10' aisle, 25' mounting height

I5
4 Lamp, T5HO



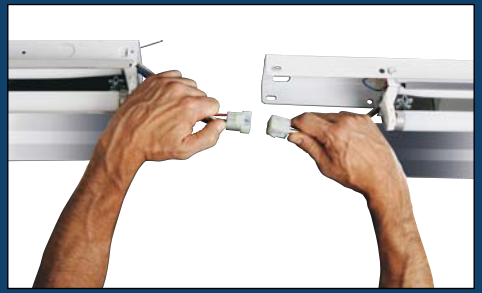
Micro-Bay
1 Lamp T8
Focus Beam



4

Rigid Exterior Connector

Rigid exterior connector/coupling with pre-punched holes facilitates easy installation of coupled sections up to 32' long.



5

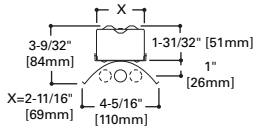
Plug-In Connectors

Optional pre-wired factory installed multiple circuit plug-in connectors.

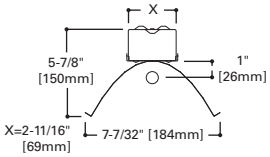
Dimensions

T5 Lamp Configurations

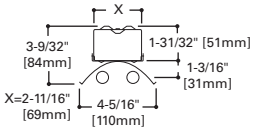
Focus Beam, 1 or 2 Lamp



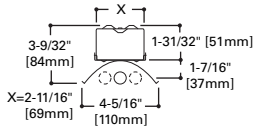
Task Beam, 1 Lamp



Task Beam, 2 Lamp

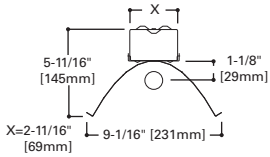


Normal Beam, 1 or 2 Lamp

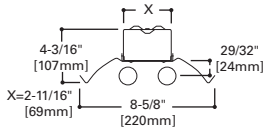


T8 Lamp Configurations

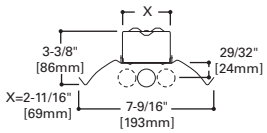
Focus Beam, 1 Lamp



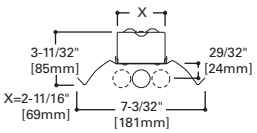
Focus Beam, 2 Lamp



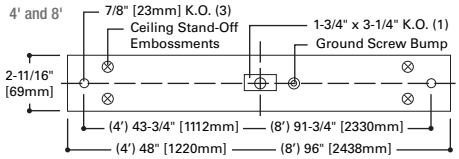
Task Beam, 1 or 2 Lamp



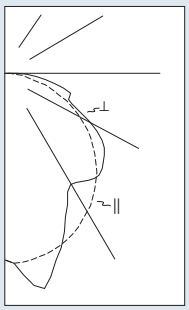
Normal Beam, 1 or 2 Lamp



Top View



Photometrics



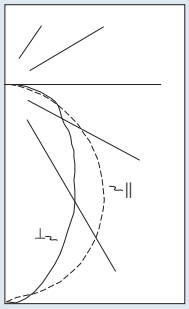
MB-132-NB-UNV-EB81
Electronic Ballast
(1) 32W T8 Lamp, 2850 lumens
Spacing criterion: (ll) 1.2 x mounting height, (⊥) 1.2 x mounting height
Efficiency 94.1%
Test Report: 10267

Coefficients of Utilization

Effective floor cavity reflectance	80%				50%			20%		
rc										
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	112	112	112	112	105	105	105	100	100	100
1	101	97	92	88	90	87	84	87	84	81
2	92	84	77	71	78	73	69	75	71	67
3	84	73	65	59	69	62	57	66	61	56
4	76	65	56	50	61	54	49	59	53	48
5	70	58	49	43	55	47	42	53	46	41
6	65	52	43	37	49	42	37	48	41	36
7	60	47	39	33	45	38	32	44	37	32
8	56	43	35	29	41	34	29	40	34	29
9	52	40	32	26	38	31	26	37	31	26
10	49	37	29	24	35	28	24	34	28	24

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	722	25.3	26.9
0-40	1133	39.8	42.3
0-60	2012	70.6	75.0
0-90	2679	94.0	99.9
0-180	2682	94.1	100.0



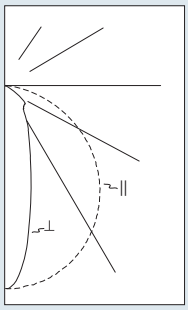
MB-132-TB-UNV-EB81
Electronic Ballast
(1) 32W T8 Lamp, 2850 lumens
Spacing criterion: (ll) 1.2 x mounting height, (⊥) 1.0 x mounting height
Efficiency 95.1%
Test Report: 10266

Coefficients of Utilization

Effective floor cavity reflectance	80%				50%			20%		
rc										
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	113	113	113	113	106	106	106	101	101	101
1	102	97	93	89	91	88	85	87	84	82
2	93	84	77	71	79	73	69	76	71	67
3	84	73	65	59	69	62	57	66	61	56
4	77	65	56	49	61	54	48	59	53	48
5	70	58	49	42	55	47	42	53	46	41
6	65	52	43	37	49	42	36	48	41	36
7	60	47	39	33	45	37	32	43	37	32
8	56	43	35	29	41	34	29	40	33	29
9	53	40	32	26	38	31	26	37	30	26
10	49	37	29	24	35	28	24	34	28	23

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	700	24.6	25.8
0-40	1104	38.7	40.7
0-60	2001	70.2	73.8
0-90	2707	95.0	99.9
0-180	2711	95.1	100.0



MB-132-FB-UNV-EBT1
Electronic Ballast
(1) 32W T8 Lamp, 2850 lumens
Spacing criterion: (ll) 1.2 x mounting height, (⊥) 0.5 x mounting height
Efficiency 96.8%
Test Report: 09363

Coefficients of Utilization

Effective floor cavity reflectance	80%				50%			20%		
rc										
rw	70	50	30	10	50	30	10	50	30	10
RCR										
0	115	115	115	115	108	108	108	103	103	103
1	108	105	102	99	99	97	95	95	94	92
2	101	96	91	87	91	87	84	88	85	82
3	95	87	81	76	83	78	75	81	77	73
4	88	79	73	68	76	71	66	74	69	66
5	82	72	65	60	69	64	59	68	63	59
6	77	66	59	54	64	58	53	62	57	53
7	72	61	64	49	59	53	48	57	52	48
8	67	56	49	44	54	48	43	53	47	43
9	62	51	44	39	49	43	39	48	43	39
10	58	47	40	36	46	40	35	45	39	35

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1251	43.9	45.3
0-40	1758	61.7	63.7
0-60	2535	88.9	91.9
0-90	2759	96.8	100.0
0-180	2759	96.8	100.0

Illuminance Estimator

Choose the spacing and mounting height to determine the average footcandle and watts per square foot values.

Micro-Bay

Illuminance Levels (FC) & Watts Per Sq. Ft. (LPD)
Based on 120 ft. x 10 ft. Aisle

	20 ft			25 ft			30 ft			35 ft			40 ft		
	Qty	FC	LPD	Qty	FC	LPD	Qty	FC	LPD	Qty	FC	LPD	Qty	FC	LPD
MB-132-NB	30	31	0.8	38	32	1.01	44	31	1.17	52	31	1.39	58	30	1.55
MB-154-NB	17	31	0.84	21	31	1.03	24	35	1.18	28	30	1.38	32	30	1.57
MB-232-FB	16	31	0.76	19	30	0.90	23	31	1.09	26	30	1.24	30	30	1.43
MB-254-FB	11	32	0.99	13	31	1.17	16	32	1.44	18	31	1.62	20	30	1.80

MB Ordering Information for T5 and T8

SAMPLE NUMBER: MB-154T5-FB-UNV-EBT1-U

Blank=4' Length
8T=8' Tandem Length

Series
MB= Micro-Bay

Number of Lamps
1=1 Lamp
2=2 Lamps

Lamp Types
32=32WT8 (48")
54T5=54WT5HO (48")

Reflector
FB=Focus Beam
TB=Task Beam (Medium)
NB=Normal Beam

Voltage
UNV=Universal 120-277 Voltage
UNC=Universal 347/480 Voltage [9]

Options
GL=Single Element Fuse
GM=Double Element Fuse
EL=Emergency Installed [2]

Ballast Type [1]

T5 Systems

EBT_=T5 Linear Electronic Program Rapid Start. Total Harmonic Distortion < 10% [5]
- No. of Ballast: 1 or 2

EHT_=T5 Linear Electronic Program Rapid Start High Ambient. Total Harmonic Distortion < 10% [5]
- No. of Ballast: 1 or 2

DIM=Dimming

T8 Systems [9]

EB8_=T8 Electronic Instant Start. [5] Total Harmonic Distortion < 10%
- No. of Ballast: 1 or 2

EB8_/PLUS= T8 Electronic Instant Start. [5] High Ballast Factor >1.15. Total Harmonic Distortion < 10%
- No. of Ballast: 1 or 2

ER8_=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%
- No. of Ballast: 1 or 2

ER8_/PLUS= T8 Electronic Program Start. High Ballast Factor >1.15. Total Harmonic Distortion < 10%
- No. of Ballast: 1 or 2

DIM=Dimming

Options
PI/CPI=Plug-In (1, 2 or 3) Specify Circuit (see PI Ordering Information Below)
C3=3' Power Cord [4]
C6=6' Power Cord [4]
PC3-=3' Power Cord & Plug [3], [4] (Specify Voltage)
PC6-=6' Power Cord & Plug [3], [4] (Specify Voltage)

Packaging
U=Unit Pack

Accessories (order separately)
AYC-CHAIN/SET/U=(2) Hooks, 36" Chain Sets w/S-Hooks [6]
GRIPPLE-Y-=Y Mounting Toggle, #2 Cable (Specify 10' or 30')
GRIPPLE-TOGGLE-=Single Toggle, #2 Cable (Specify 10' or 30')
MB-EXT-LONG-CONN-KIT-U= Rigid Connector Support for Continuous Channel Installation
MS=Aisle Coverage Motion Sensor [3], [7]
MSO=360˚ Coverage Motion Sensor [3], [7]
MB-SENSOR-KIT-CTR/MT-U=Aisle Coverage Motion Sensor, Center Mount Hardware, 120/277V
MB-SENSOR-KIT-END/MT-U=Aisle Coverage Motion Sensor, End Mount Hardware, 120/277V
MB-SENSOR-KIT-CTR/480V-U=Aisle Coverage Motion Sensor, Center Mount Hardware, 480V
MB-SENSOR-KIT-END/480V-U=Aisle Coverage Motion Sensor, End Mount Hardware, 480V
WG/MB-4FT-T5-NB-B=Wireguard for T5HO [8]

NOTES: [1] Products also available in non-US voltages and frequencies for international markets. [2] Voltage to be specified with emergency ballast option. [3] Voltage must be specified when ordered with plugs, motion or emergency ballasts. [4] Cannot be combined with PI/CPI option. See below. [5] 2 lamp ballast configurations only in UNC versions. [6] Not for use in high abuse applications such as gymnasiums. [7] Must ship as accessory separately. [8] For use with T5HO Focus, Normal or Wide Beam optics only. [9] UNC option available on select T8 ballast systems. Consult factory.

PI Ordering Information

Catalog Number Suffix	Number of Circuits	Circuit Wired To Ballast
PI 1 BLK	1	Black
PI 2 BLU	2	Blue
PI 2 BLK	2	Black
PI 3 RED	3	Red
PI 3 BLU	3	Blue
PI 3 BLK	3	Black

Catalog Numbering System

The PI System is available in sections up to 8' in length for continuous row wiring by simply plugging the sections together. Each PI section is factory wired to the ballast leads. Color coding of wires is as follows:

PI-1 = One Circuit - 2 Wires: one black, one white
PI-2 = Two Circuits - 3 Wires: one black, one blue, one white
PI-3 = Three Circuits - 4 wires: one black, one blue, one red, one white

When ordering the PI2/PI3 System it is necessary to specify the number of fixtures required for each circuit. Each circuit in fixture must be ordered as a separate line item, with a different hot wire color specified. All wiring to external feeds, using cord or cord & plug, are responsibility of installing licensed contractor. Cord and cord & plug sets must be ordered separately if PI option is chosen.

PI1 - Single Circuit Plug-In

SAMPLE NUMBER: PI1BLK-WG

PI1= Single Circuit
BLK=Black Hot

NG= No Ground (ground provided by fixture body)
WG= With Ground (separate ground wire in harness)

PI2 - Two Circuit Plug-In

SAMPLE NUMBER: PI2BLK-WG

PI2= Two Circuit
BLK=Black Hot
BLU=Blue Hot

Leave Blank=Single Neutral
/WHT=White Neutral
/GRY=Gray Neutral

Leave Blank=Single Neutral
2NEU=Two Neutrals

NG= No Ground (ground provided by fixture body)
WG= With Ground (separate ground wire in harness)

PI3 - Three Circuit Plug-In

SAMPLE NUMBER: PI3BLK-WG

PI3= Three Circuit
BLK=Black Hot
BLU=Blue Hot
RED=Red Hot

Leave Blank=Single Neutral
/WHT=White Neutral
/GRY=Gray Neutral

Leave Blank=Single Neutral
2NEU=Two Neutrals

NG= No Ground (ground provided by fixture body)
WG= With Ground (separate ground wire in harness)

For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

Cooper Lighting
Customer First Center
1121 Highway 74 South
Peachtree City, GA 30269

P: 770-486-4800
F: 770-486-4801

www.cooperlighting.com

International Sales, USA
Cooper Lighting
1121 Highway 74 South
Peachtree City, GA 30269

P: 770-486-4800
F: 770-486-4801

Canada
Cooper Lighting
5925 McLaughlin Road
Mississauga, Ontario L5R 1B8

P: 905-507-4000
F: 905-568-7049

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Calgary, Alberta T2E 7V9

Cooper Lighting
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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