

MHD2 / MHDO SERIES

M
H
D
2

Marine Heavy Duty Non-Metallic Fluorescent

- Class I, Division 2, Groups A, B, C & D
- Class II, Division 2, Groups F & G
- Class III
- Zone 2, Groups IIA, IIB & IIC
- UL 844 Hazardous Locations
- UL 924 Emergency Lighting
- UL 1598A Marine Outside Type
- CUL
- IP66
- 55° C Ambient Temperature



AZZ | R-A-L™
RIG-A-LITE

MHD2/MHDO SERIES

Marine Heavy Duty Outdoor Non-Metallic Fluorescent



Housing:

- Corrosion free high impact fiberglass housing
- Water tight gasket attached to the lens
- Captive SS latches
- Heavy duty aluminum ballast tray
- 3/4 in. NPT aluminum conduit hubs
- 4 ft. models with 1, 2, or 3 lamp versions

Diffuser:

- High Impact DR acrylic diffuser-polycarbonate option available

Mounting:

- Stainless steel mounting brackets standard

FLUORESCENT
MHD2/MHDO Series

Hazardous Locations • Class 1, Division 2 • Non-Metallic • UL 1598A Marine Outside Type • UL 844 • UL 924 • CUL

Catalog Number Logic

MHD2

1

2

3

4

5

6

- 1 BASIC SERIES**
MHD2 Non-Metallic Fluorescent Fixture
Class I, Division 2, Groups A, B, C and D
Class II, Division 2, Groups F & G
Class III
Zone 2, Groups IIA, IIB & IIC
UL 1598A Marine Outside Type
UL 844 Hazardous Locations
UL 924 Emergency Lighting
CUL
55° C Ambient Temperature

MHDO Non-Metallic Fluorescent Fixture
Marine Rated Only

- 2 LAMP CURRENT/LAMP WATTAGE**
800 = 800mA, 60 Watt²
430 = 430mA, 34/20 Watt (export only)
425 = 425mA, 40/20 Watt (Slimline)
265 = 265mA, 32/17 Watt (T8 Lamps)
T5HO = 54 Watt T5HO
T5 = 28 Watt T5
T8HO = 44 Watt T8HO (4 foot only)

- 3 NOMINAL FIXTURE LENGTH**
2 = 2 Foot¹
4 = 4 Foot

- 4 NUMBER OF LAMPS**
1 = 1 Lamp
2 = 2 Lamps
3 = 3 Lamps²

- 5 VOLTAGE/FREQUENCY**
E = 12V DC
F = 24V DC
G = 32V DC
H = 347V 60 HZ
N = 347 thru 480V 50/60 HZ
U = 120 thru 277V 50/60 HZ

- 6 OPTIONS⁴**
P = Polycarbonate Lens
EM = Emergency Battery Backup
EM NON = Non-Hazardous Emergency
Battery Backup. Marine Only
F = Single Fuse³
FB = Fuse Block³
TB = Terminal Block
TW = Thru Wire
Cable Installations Only
L = Lamps
HL = Hi-Lumen Ballast (T8 Only)
PM = Pendant Mount

¹2 ft. fixture not available in 3 lamp versions.

²800, 430, 425mA & T8HO fixtures not available in 1 or 3 lamp versions.

³Fuse option not available for marine listed fixtures.

⁴Consult factory for pricing.

Catalog logic is for explaining catalog number structure only. Not all combinations are possible; consult factory for catalog numbers not listed in charts.

FLUORESCENT MHD2/MHDO Series

Hazardous Locations • Class 1, Division 2 • Non-Metallic • UL 1598A Marine Outside Type • UL 844 • UL 924 • CUL



- Class I, Division 2, Groups A, B, C and D
- Class II, Division 2, Groups F and G
- Zone 2, Groups IIA, IIB and IIC
- UL 1598A Marine Outside Type
- UL 844 Hazardous Locations
- IP66
- Suitable for indoor use
- Non-metallic, impact resistant fiberglass housing
- Water tight gasket attached to lens
- High impact acrylic lens with stainless steel lens tethers
- Captive SS latches
- Heavy duty aluminum ballast tray
- Non-metallic terminal tube
- Stainless steel mounting brackets
- 2 ft. and 4 ft. models

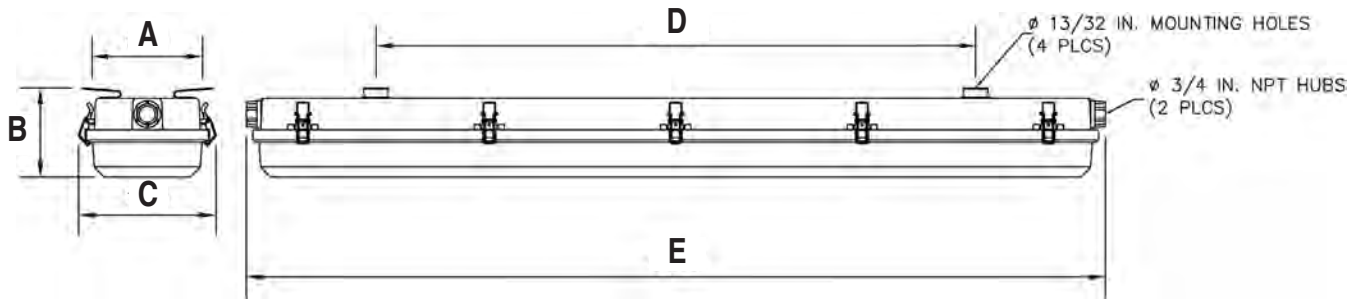
(Lamps not included)

	Description	Voltage	Catalog Number
Two Foot Fixture	20 Watt, Rapid Start, F20T12 Medium Bi-Pin, 430mA Lamps, 24" (export only)	120-277V 50/60 HZ	MHD2430-2-2-U
	17 Watt, Rapid Start, F17T8 Medium Bi-Pin, 265mA Lamps, 24"	120-277V 50/60 HZ	MHD2265-2-2-U
	20 Watt, Instant Start, F24T12 Slimline, Single Pin, 425mA, 24"	12V DC	MHD2425-2-2-E
		24V DC	MHD2425-2-2-F
		32V DC	MHD2425-2-2-G
Four Foot Fixture	34 Watt, Rapid Start F40T12, Medium Bi-Pin 430mA Lamps, 48" (export only)	120-277V 50/60 HZ	MHD2430-4-2-U
	20 Watt, Instant Start, F24T12 Slimline, Single Pin, 425mA, 48"	12V DC	MHD2425-2-2-E
		24V DC	MHD2425-2-2-F
		32V DC	MHD2425-2-2-G
	32 Watt, Rapid Start F32T8, Medium Bi-Pin 265mA Lamps, 48"	120-277V 50/60 HZ	MHD2265-4-2-U
54 Watt, T5HO Miniature Bi-Pin 2 Lamp, 48"	120-277V 50/60 HZ	MHD2T5HO-4-2-U	

FLUORESCENT MHD2/MHDO Series

Hazardous Locations • Class 1, Division 2 • Non-Metallic • UL 1598A Marine Outside Type • UL 844 • UL 924 • CUL

Fixture Dimension (inches)



Nominal Fixture Length	A	B	C	D	E	Boxed Weight	Shipping Volume (Boxed Fixture)
Two Foot Fixture	7.625	4.98	7.625	12.438	29	13.44 lbs.	1.1 cu. ft.
Four Foot Fixture	6.88	5.00	7.88	36.63	53.13	25.2 lbs.	2.0 cu. ft.

Certification Guide

Model	Ambient Temperature (°C)	Class I, Div. 2 Groups A, B, C & D	Class II, Div. 2, Groups F & G, Class III	Supply Wire Suitable Temp °C
MHD2 425, 430, 800	40	T4	T3C	90
MHD2 265	40	T4	T3C	90
MHD2 265	55	T4A	-	90
MHD2 T5, T5HO	40	T4	T3C	90
MHD2 T5, T5HO	55	T3C	-	90
MHD2 T8HO	40	T4	T3C	90
MHD2 T8HO	55	T4A	-	90

FLUORESCENT MHD2/MHDO Series

Hazardous Locations • Class 1, Divison 2 • Non-Metallic • UL 1598A Marine Outside Type • UL 844 • UL 924 • CUL

Candlepower Distribution

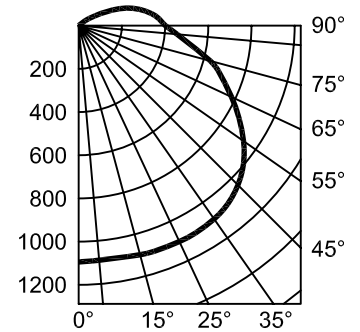
MHD2265-4-2

Deg.	Parl.	22.5	45.0	67.5	Norm
0	1094	1094	1094	1094	1094
5	1094	1092	1092	1088	1090
15	1057	1063	1077	1090	1098
25	978	1003	1040	1085	1103
35	867	912	991	1066	1093
45	718	789	906	1010	1043
55	531	632	780	899	932
65	316	440	610	747	781
75	140	268	463	598	631
85	38	147	314	432	458
90	16	102	261	365	402
95	16	78	230	331	373
105	10	41	159	249	292
115	4	16	70	134	172
125	0	2	20	37	57
135	0	0	7	14	16
145	0	0	0	5	8
155	0	0	0	0	1
165	0	0	0	0	0

Coefficients of Utilization

Room Cavity Ratio RCR	% Effective Ceiling Cavity Reflectance rcc			80			50			10		
	% Wall Reflectance rw			50	30	10	50	30	10	50	30	10
Effective Floor Cavity Reflectance 20%												
0	.93	.93	.93	.84	.84	.84	.74	.74	.74	.74	.74	.74
1	.76	.71	.66	.68	.64	.61	.59	.57	.54	.54	.54	.54
2	.64	.57	.51	.57	.52	.47	.49	.46	.43	.43	.43	.43
3	.55	.47	.41	.49	.43	.38	.42	.38	.34	.34	.34	.34
4	.48	.39	.33	.43	.36	.31	.37	.32	.28	.28	.28	.28
5	.42	.34	.28	.38	.31	.26	.33	.28	.24	.24	.24	.24
6	.37	.29	.23	.34	.27	.22	.29	.24	.20	.20	.20	.20
7	.33	.26	.20	.30	.24	.19	.26	.21	.18	.18	.18	.18
8	.30	.23	.17	.27	.21	.17	.24	.19	.15	.15	.15	.15
9	.27	.20	.15	.25	.19	.15	.22	.17	.13	.13	.13	.13
10	.25	.18	.14	.23	.17	.13	.20	.15	.12	.12	.12	.12

PhotometricData



Candlepower Distribution

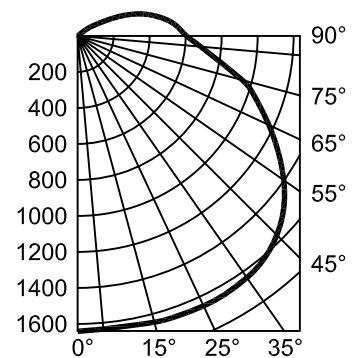
MHD2265-4-3

Deg.	Parl.	22.5	45.0	67.5	Norm
0	1641	1641	1641	1641	1641
5	1641	1638	1638	1632	1635
15	1585	1594	1616	1635	1647
25	1466	1504	1560	1627	1655
35	1301	1368	1487	1599	1640
45	1076	1184	1359	1515	1565
55	797	948	1170	1348	1398
65	474	660	916	1120	1172
75	211	402	694	987	947
85	58	220	471	647	686
90	23	153	392	548	604
95	23	117	345	496	560
105	16	61	239	373	438
115	6	23	105	201	257
125	0	3	30	56	86
135	0	0	11	20	23
145	0	0	3	8	12
155	0	0	0	0	2
165	0	0	0	0	0

Coefficients of Utilization

Room Cavity Ratio RCR	% Effective Ceiling Cavity Reflectance rcc			80			50			10		
	% Wall Reflectance rw			50	30	10	50	30	10	50	30	10
Effective Floor Cavity Reflectance 20%												
0	.93	.93	.93	.84	.84	.84	.74	.74	.74	.74	.74	.74
1	.76	.71	.66	.68	.64	.61	.59	.57	.54	.54	.54	.54
2	.64	.57	.51	.57	.52	.47	.49	.46	.43	.43	.43	.43
3	.55	.47	.41	.49	.43	.38	.42	.38	.34	.34	.34	.34
4	.48	.39	.33	.43	.36	.31	.37	.32	.28	.28	.28	.28
5	.42	.34	.28	.38	.31	.26	.33	.28	.24	.24	.24	.24
6	.37	.29	.23	.34	.27	.22	.29	.24	.20	.20	.20	.20
7	.33	.26	.20	.30	.24	.19	.26	.21	.18	.18	.18	.18
8	.30	.23	.17	.27	.21	.17	.24	.19	.15	.15	.15	.15
9	.27	.20	.15	.25	.19	.15	.22	.17	.13	.13	.13	.13
10	.25	.18	.14	.23	.17	.13	.20	.15	.12	.12	.12	.12

PhotometricData



FLUORESCENT
MHD2/MHDO Series

Hazardous Locations • Class 1, Division 2 • Non-Metallic • UL 1598A Marine Outside Type • UL 844 • UL 924 • CUL

Accessories



Fixed Mounting Kit

Stainless Steel Fixed 45°
Catalog Number: 53070
Shipping Weight: 2 lbs.

INSTALLATION DATA SHEET

MHD2 SERIES



WARNING!

1. TO PREVENT RISK OF ELECTRICAL SHOCK DEACTIVATE/DISCONNECT POWER SUPPLY BEFORE INSTALLING, MAINTAINING OR RELAMPING FIXTURE.
2. TO REDUCE RISK OF FIRE OR EXPLOSION, DO NOT INSTALL WHERE THE MARKED OPERATING TEMPERATURE EXCEEDS THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERE(S).
3. THIS FIXTURE SHOULD BE INSTALLED BY QUALIFIED TECHNICIANS IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ANY LOCAL REQUIREMENTS.

INSTALLATION

1. Install fixture to mounting surface at four mounting locations (mounting hardware supplied by other).
2. Remove lens and reflector.
3. For supply connections use conductors suitable for min. 90° C.
4. Connect internal wires per wiring diagram on ballast, and according to NEC requirements.
5. Install lamps.
6. Replace Reflector and lens.
7. When replacing ballast, use only Class P or Type HL ballast.



AZZ/RAL
8500 Hansen Rd
Houston, TX 77075

Tel: (713) 943-0340
Fax: (713) 943-8354
Email: info@rigalite.com

Visit us at:
<http://www.rigalite.com>