

# MHD2 / MHDO SERIES

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## 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

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- 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 Watt<sup>2</sup>  
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 Foot<sup>1</sup>  
4 = 4 Foot

- ④ NUMBER OF LAMPS**  
1 = 1 Lamp  
2 = 2 Lamps  
3 = 3 Lamps<sup>2</sup>

- 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 OPTIONS<sup>4</sup>**  
P = Polycarbonate Lens  
EM = Emergency Battery Backup  
EM NON = Non-Hazardous Emergency  
Battery Backup. Marine Only  
F = Single Fuse<sup>3</sup>  
FB = Fuse Block<sup>3</sup>  
TB = Terminal Block  
TW = Thru Wire  
Cable Installations Only  
L = Lamps  
HL = Hi-Lumen Ballast (T8 Only)  
PM = Pendant Mount

<sup>1</sup>2 ft. fixture not available in 3 lamp versions.

<sup>2</sup>800, 430, 425mA & T8HO fixtures not available in 1 or 3 lamp versions.

<sup>3</sup>Fuse option not available for marine listed fixtures.

<sup>4</sup>Consult 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.

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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

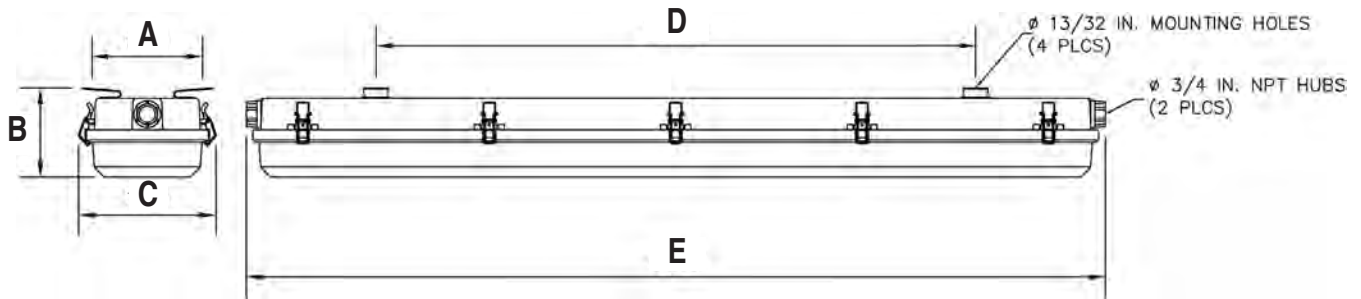
(Lamps not included)

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

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**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

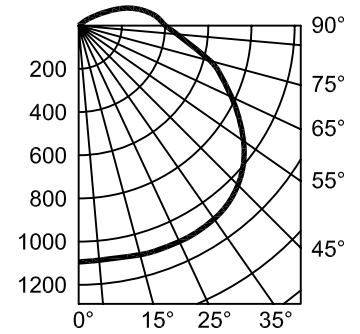
MHD2265-4-2

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

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

## PhotometricData



## Candlepower Distribution

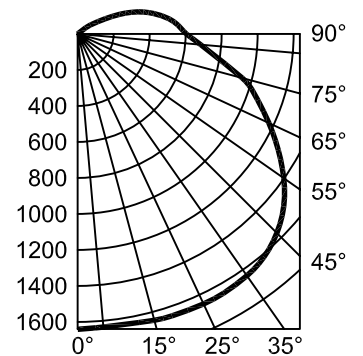
MHD2265-4-3

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

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

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## Accessories



### Fixed Mounting Kit

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

# NOTES