## **Turtle Friendly Downlighting System**

4" Round

Project:	Туре:
Product Code:	Date:

TF



Turtle Friendly Compliant with FWC guidelines to minimize lighting's impact on sea turtles

Quick Install Integrated driver and plugand-play connection require no wiring

**High Performance** Precise lighting control without sacrificing stellar efficiency

**Enhanced Dimming Smooth, flicker-free** dimming down to 1%

#### **OPTICAL**

#### Module

Fixed

#### **Delivered Lumens (Power)**

400 lm (12W)

#### Wavelength

> 560 nm

#### **Color Temperature**



Turtle Friendly

## Beam Spread

Narrow Spot (15°)



General (90°+)



Spot (25°)



Linear



Flood (40°)



Soft Focus



Wide Flood (60°)

# **PHYSICAL**

#### **Aperture**

4"

#### **Application**

New Construction, Remodel

#### Shape

Round

#### **Ceiling Thickness**

½" up to 1¾" (New Construction) 5/8" up to 11/4" (Remodel)

## **TRIMS**

#### **Aperture**

4"

#### Shape

Round, Square Conversion

#### Style

Beveled, Hyperbolic, Pinhole, Beveled Pinhole, Wall Wash, Decorative, Flangeless, Dead Front

#### **Finish**

White, Black, Bronze, Clear Diffused, Warm Diffused, Custom

#### **ELECTRICAL & CONTROLS**

#### **Input Voltage**

120/277V

#### 1% Dimming

TRIAC/ELV, 0-10V, EcoSystem

## **RATINGS**

#### Housing



IC (Insulation Contact) Rated



Code compliant for use in fire-rated assemblies up to a maximum of 2-hours

STC/IIC Sound Rated

Chicago Plenum

#### Module and Trim

UL Listed for Wet Location

















## PRODUCT BUILDER

## M SERIES HOUSING

PRO	DUCT CODE	APPL	LICATION	SH	APE	RATING		
M4	4" Housing	NC	New Construction	R	Round	S	Standard	
		RM	Remodel			F	Fire Rated	
		СР	Chicago Plenum 1					
		LT	Low Profile TRIAC (3" Plenum)					
		LO	Low Profile 0-10V (3" Plenum)					

#### **DRD MODULE**

PRODUCT	CODE	LUM	IENS	CR	II	ССТ		BEAM	M SPREAD	DIMMING	
DID2M	Fixed	04	400 lm	S	Specialty	TF	Turtle Friendly	GA	General Ambient (90°+)	Т	TRIAC/ELV
								NS	Narrow Spot (15°)	0	0-10V
								SP	Spot (25°)		
								FL	Flood (40°)		
								WF	Wide Flood (60°)		
								LS	Linear Spread		
								SF	Soft Focus		

## M SERIES TRIM

PROD	UCT CODE	SHA	PE	STY	LE	FINIS	FINISH		
M4T	4" Trim	R	Round	S	Beveled	WH	White	[Blank]	None
				Н	Hyperbolic <sup>2</sup>	ВК	Black	DOF	Decorative: Open, Frosted 3,4
				P	Pinhole <sup>2</sup>	BZ	Bronze	DCF	Decorative: Closed, Frosted 3,4
				В	Beveled Pinhole <sup>2</sup>	CW	Clear Diffused, White Flanged	DCC	Decorative: Closed, Clear, Frosted Side 3,4
				W	Wall Wash	ww	Warm Diffused, White Flanged	DCCF	Decorative: Closed, Clear, Frosted Inside 3,4
				С	Square Conversion <sup>3</sup>	СС	Custom Color	FL	Flangeless 2,5
								DF	Dead Front 3,4

M4XRMUD

Flangeless Mud Plate (Required for Flangeless Trim drywall installation)

<sup>&</sup>lt;sup>1</sup> Only available in Standard rating

<sup>&</sup>lt;sup>4</sup> Only available in Beveled style

<sup>&</sup>lt;sup>2</sup> Only available in White, Black, Bronze or Custom Color finish

<sup>&</sup>lt;sup>5</sup> Not available for Square Conversion

<sup>&</sup>lt;sup>3</sup> Only available in White or Custom Color finish



Turtle Friendly Downlighting System 4" Round

## **PRODUCT BUILDER**

## **OPTICS ACCESSORIES**

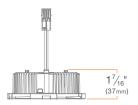
PRODUCT COD	E
DID2X-GA	Fixed Conversion Kit: DRD2 Module to General Ambient (90°+)
DID2X-NS	Fixed Narrow Spot (15°)
DID2X-SP	Fixed Spot (25°)
DID2X-FL	Fixed Flood (40°)
DID2X-WF	Fixed Wide Flood (60°)
DID2X-LS	Fixed Linear Spread (40° x 20°)
DID2X-SF	Fixed Soft Focus
DID2X-OP	Fixed Optics Kit: Narrow Spot (15°), Spot (25°), Flood (40°), Wide Flood (60°), Linear Spread (40° x 20°), Soft Focus

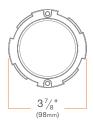




## **MODULE**







# DID2

Fixed Downlight

#### DID<sub>2</sub>M

#### **SUMMARY**

LED CHIP: Cree® Red-Orange LED (no color filter)

DELIVERED MODULE LUMENS: 400 lm (12W)

**WAVELENGTH:** > 560 nm

**BEAM SPREAD:** General Ambient (90°+), Narrow Spot (15°), Spot (25°), Flood (40°), Wide Flood (60°), Linear Spread (40° x 20°), Soft Focus

**CONNECTOR:** PowerPlug® Luminaire Disconnect Model 182

INPUT VOLTAGE: 120/277V, 50/60Hz

**DIMMING:** Down to less than 1% for TRIAC/ELV at 120V, 0-10V or Lutron

EcoSystem at 120/277V

**MAX INPUT CURRENT (120V):** 0.090 amps, 0.107 amps **MAX INPUT CURRENT (277V):** 0.042 amps, 0.050 amps

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

AMBIENT OPERATING TEMPERATURE: -20°C to 40°C

PHOTOMETRIC TESTING: Tested in accordance to IESNA LM-79-2008

LISTINGS: FWC Wildlife Lighting certified, UL Listed for Wet Location

(flanged trims only), cULus Listed

LIFETIME: 100,000 hours at 70% lumen maintenance

WARRANTY: 10 year limited warranty



Turtle Friendly Downlighting System
4" Round

## HOUSING



# **M** Series

**New Construction** 

#### **SUMMARY**

**JUNCTION BOX:** Equipped with 10 knockouts: two  $\frac{1}{2}$ " and two  $\frac{3}{4}$ " trade size knockouts on top, two  $\frac{1}{2}$ " trade size knockouts on side, four romex knockouts on top. Approved for 8 (four in, four out) #12 AWG 70°C.

**MOUNTING:** Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1 ½".

**CEILING:** 1/2" up to 1 3/4"

CUTOUT: 4" (102mm) round opening

**LISTINGS:** Metallic outlet box certified UL514A, code compliant for use in appropriate fire-rated assemblies for up to 2-hours (Fire Rated only), STC/IIC Sound Rated, ASTM E283 certified Air Tight, IC (Insulation Contact) rated

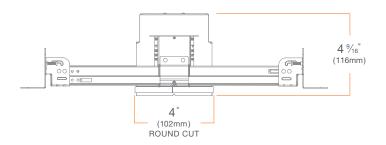
**WARRANTY:** 5 year limited warranty

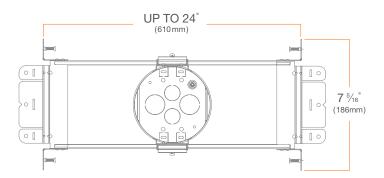


Turtle Friendly Downlighting System
4" Round

## **New Construction**

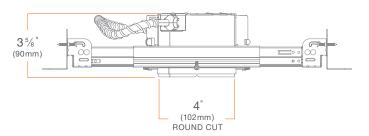
M4NCRS (Standard)
M4NCRF (Fire Rated)
M4CPRS (Chicago Plenum)

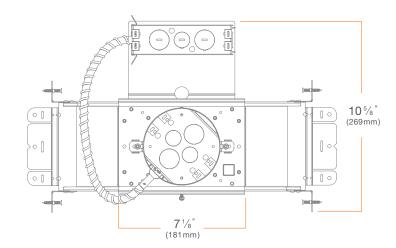




## Low-Profile

M4LTRS (Standard, TRIAC/ELV)
M4LTRF (Fire Rated, TRIAC/ELV)
M4LORS (Standard, 0-10V)
M4LORF (Fire Rated, 0-10V)







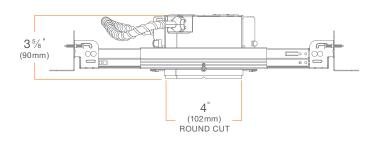
Turtle Friendly Downlighting System
4" Round

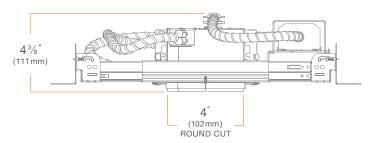
## **EcoSystem**

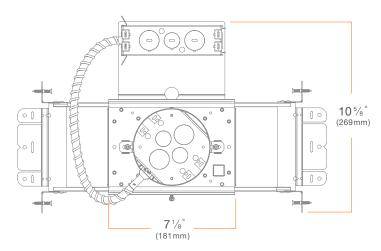
M4NCRSxxC (Standard)
M4NCRFxxC (Fire Rated)

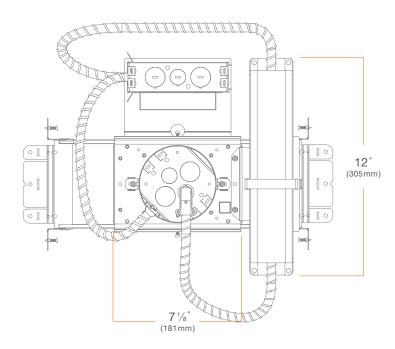
# **Emergency Lighting**

M4NCRSxxxEM (Standard)
M4NCRFxxxEM (Fire Rated)







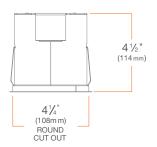


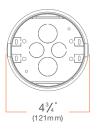




## **HOUSING**







# **M** Series

Remodel

M4RMRS (Standard) M4RMRF (Fire Rated)

## **SUMMARY**

**JUNCTION BOX:** Equipped with 8 knockouts: two  $\frac{1}{2}$ " and two  $\frac{3}{4}$ " trade size knockouts on top, four romex knockouts on top. Approved for 8 (four in, four out) #12 AWG 70°C.

**MOUNTING:** Pre-installed mounting spring clips

**CEILING:** 5/8" up to 1 1/4"

CUTOUT: 4 1/4" (108mm) round opening

**LISTINGS:** Metallic outlet box certified UL514A, code compliant for use in appropriate fire-rated assemblies for up to 2-hours (Fire Rated only), STC/IIC Sound Rated, ASTM E283 certified Air Tight, IC (Insulation Contact) rated

**WARRANTY:** 5 year limited warranty





## **TRIMS**



# **M** Series

4" Round Trims
M4TR

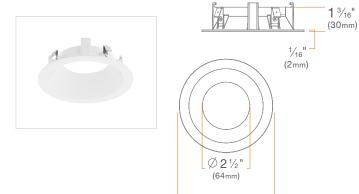
## **SUMMARY**

**CONSTRUCTION:** Die-cast aluminum

**INSTALLATION:** Twist & Lock

## **Beveled Trim**

#### **M4TRSWH**



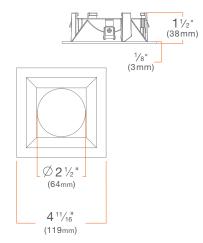
Ø5"

(126mm)

# **Square Conversion Trim**

#### **M4TRCWH**

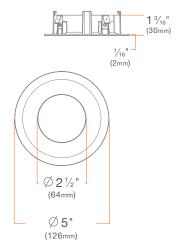




## **Hyperbolic Trim**

## **M4TRHWH**





# **Pinhole Trim**

## M4TRPWH



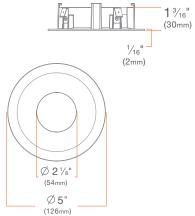


Turtle Friendly Downlighting System
4" Round

## **Beveled Pinhole Trim**

#### **M4TRBWH**

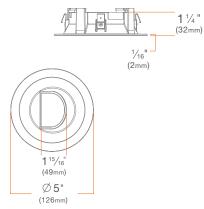




## **Wall Wash Trim**

Round: M4TRWWH



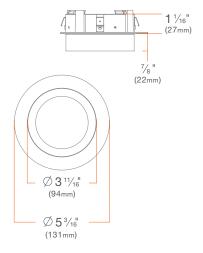


## **Decorative Closed Trim**

Frosted: M4TRSWHDCF

Clear, Frosted Inside: M4TRSWHDCC
Clear, Frosted Sides: M4TRSWHDCCF

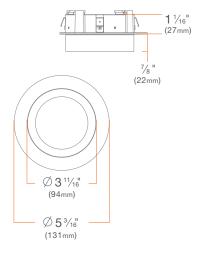




# **Decorative Open Trim**

Frosted: M4TRSWHDOF





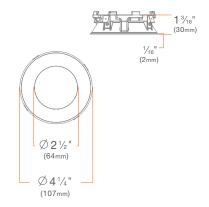


Turtle Friendly Downlighting System
4" Round

# **Beveled Flangeless Trim Insert**

## M4TRSWHFL

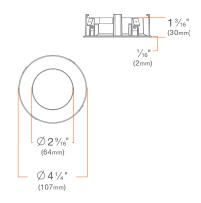




# **Hyperbolic Flangeless Trim Insert**

## **M4TRHWHFL**

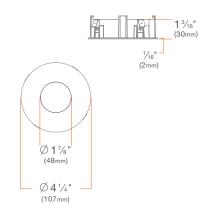




## **Pinhole Flangeless Trim Insert**

#### **M4TRPWHFL**

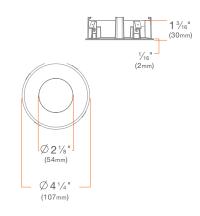




# **Beveled Pinhole Flangeless Trim Insert**

#### M4TRBWHFL

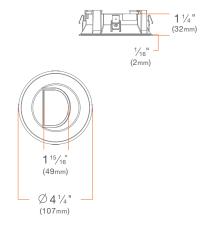




# **Wall Wash Flangeless Trim Insert**

## M4TRWWHFL





# **Flangeless Mud Plate**

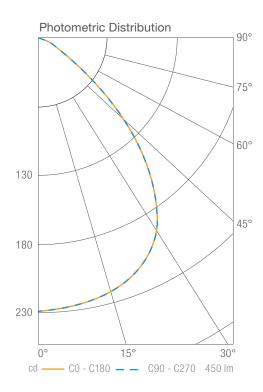
## M4XRMUD





## **PHOTOMETRY**

## DID2M049TFGAx

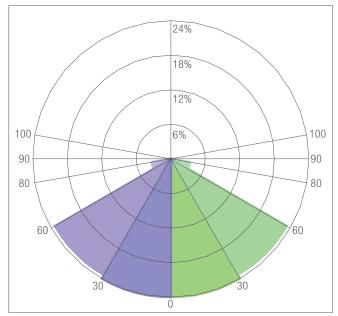


## Luminous Intensity

Gamma	C 0°
0°	292
5°	290
10°	285
15°	275
20°	258
25°	232
30°	198
35°	155
40°	113
45°	82
50°	63
55°	46
60°	31
65°	19
70°	13
75°	9
80°	5
85°	2
90°	0

Values in candela

## **BUG Classification**



Percent Luminaire Lumens

Front Low: 23.6%, Medium: 22.8%, High: 3.3%, Very High: 0.3% Back Low: 23.6%, Medium: 22.8%, High: 3.3%, Very High: 0.3%

Uplight Low: 0.0%, High: 0.0%

